

First Street South, Block C

Mechanical & Electrical Services

AD Part L Report – RIBA Stage 3



Abacus Consult Limited

|                 |                          |
|-----------------|--------------------------|
| Project Number: | L1513                    |
| Document Ref:   | FSS-ABA-ZC-ZZ-RP-M-50001 |
| Engineer:       | P.Abel/ S. Boswarva      |
| Revision:       | T04                      |
| Issue Date:     | 25-02-2026               |

**Project:** First Street South, Block C, Student Accommodation, Manchester

**Subject:** Stage 3 Developed Design – AD Part L Report

**Prepared for:** Downing Living (Manchester South) Ltd Partnership Incorporated

| Revision | Issue/Revision Description                              | Prepared By | Approved By            | Issue Date |
|----------|---------------------------------------------------------|-------------|------------------------|------------|
| T01      | For Contract/Tender                                     | P. Abel     | P. Abel<br>S. Boswarva | 20/09/2024 |
| T02      | Revised to reduce AC installation                       | P. Abel     | P. Abel<br>S. Boswarva | 06/02/2026 |
| T03      | Revised to 3.0 air permeability                         | P. Abel     | P. Abel<br>S. Boswarva | 12/02/2026 |
| T04      | Level 00 non unitised façade details clarified (in red) | P. Abel     | P. Abel<br>S. Boswarva | 25/02/2026 |
|          |                                                         |             |                        |            |

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## 1.0 Introduction & Input Data

This report forms part of the full planning application for First Street Block C Student Accommodation development in Manchester City Centre. The report is intended to set out the principles of the building services systems in accordance with Building Regulations and Manchester City Council Plan Policy EN6.

Downing intend to submit planning for the erection of 1no. student accommodation block 28 storeys with associated amenity areas. The total number of beds will be 555, 56% of which will be studios with the remaining 44% cluster bedrooms.

This executive summary details the input data used and the results of the dynamic simulation and Part L2 calculations. These figures are used for assessment during RIBA Stage 3 and shall be updated by the mechanical sub-contractor during RIBA Stage 4 to account for the actual data issued by the Stage 4 designers. The key points are highlighted in the summary below: -

- The following U-Values have been used in the simulation/calculations: -

|                              |   |                         |
|------------------------------|---|-------------------------|
| Unitised Façade (non-vision) | = | 0.73 W/m <sup>2</sup> K |
| Unitised Façade (vision)     | = | 0.73 W/m <sup>2</sup> K |
| Solid Floor                  | = | 0.18 W/m <sup>2</sup> K |
| Roof                         | = | 0.18 W/m <sup>2</sup> K |
| Level 00 wall                | = | 0.16 W/m <sup>2</sup> K |
| Level 00 windows             | = | 1.2 W/m <sup>2</sup> K  |

Window Frames assumed 50mm

- Windows

|                     |   |                      |
|---------------------|---|----------------------|
| G Value             | = | 0.4                  |
| Light Transmittance | = | 0.7 (Part L default) |

- Weather data file used for calculations is CIBSE DSY1 2020s, high emissions 50<sup>th</sup> percentile for Manchester.
- Lighting Gains are based on Stage 3 calculations and will be finalised upon completion of Stage 4 calculations.
- Air Permeability is based on maximum 3.0 m<sup>3</sup>/m<sup>2</sup>.Hr at 50Pa.
- Ventilation is via MVHR systems as detailed in Abacus Consult Ventilation Strategy. Fan SFP's are currently based on worst case and will be finalised at as-built stage.
- Mechanical heating and cooling via VRF heat pump systems to management suites, amenity areas, limited clusters and studios on levels 01-04 and 24-27.
- Domestic hot water production via Mitsubishi Qton high temperature CO<sub>2</sub> air source heat pumps serving hot water storage vessels.
- Detailed dynamic simulation overheating analysis provides compliance to rooms shown to exceed solar gain in the BRUKL.

## 2.0 Results

The development meets the Manchester City Council's Plan (MCCP) requirement for at least 15% reduction in Part L 2010 carbon emissions from renewable and or low carbon technologies, as demonstrated below.

- Part L2 2021 CO<sub>2</sub> target emissions (TER) and predicted building emissions (BER) are as follows: -

Block C 18,438 m<sup>2</sup>

|                          |   |                                            |
|--------------------------|---|--------------------------------------------|
| Target Emissions Rate    | = | 3.1 kgCO <sub>2</sub> /m <sup>2</sup> /yr  |
| Building Emissions Rate  | = | 3.06 kgCO <sub>2</sub> /m <sup>2</sup> /yr |
| Project Carbon Reduction | = | 1.3 %                                      |

Part L 2021 (Volume 2 for non-domestic buildings) requires an average 35–40% reduction in carbon emissions compared to Part L 2010, depending on the specific building type.

Therefore, by passing Part L 2021, the building exceeds the MCCP requirement for at least 15% reduction in Part L 2010 carbon emissions

### Energy Consumption Relative to Occupancy

Energy consumption is detailed below

#### Energy Consumption by End Use [kWh/m<sup>2</sup>]

|                | Actual      | Notional     |
|----------------|-------------|--------------|
| Heating        | 7.84        | 6.76         |
| Cooling        | 0.83        | 1.07         |
| Auxiliary      | 4.02        | 2.5          |
| Lighting       | 4.32        | 6.89         |
| Hot water      | 4.39        | 5.56         |
| Equipment*     | 25.84       | 25.84        |
| <b>TOTAL**</b> | <b>21.4</b> | <b>22.77</b> |

\* Energy used by equipment does not count towards the total for consumption or calculating emissions.

\*\* Total is net of any electrical energy displaced by CHP generators, if applicable.

Occupancy for the building is set at 555people.

Therefore, energy consumption relative to occupancy is:

21.4 kWh/m<sup>2</sup> divide by 555people = 0.039 kWh/person/m<sup>2</sup>/annum

### **3.0 Block C 'As Designed' 2021 BRUKL**

## Project name

**First Street Block C****As designed****Date:** Mon Jan 05 16:00:30 2026**Administrative information****Building Details****Address:** Manchester,**Certifier details****Name:** Callan Abel**Telephone number:** 0151 480 6161**Address:** Unit 4 Paramount Business Park Wilson Road,  
Liverpool, L36 6AW**Certification tool****Calculation engine:** Apache**Calculation engine version:** 7.0.28**Interface to calculation engine:** IES Virtual Environment**Interface to calculation engine version:** 7.0.28**BRUKL compliance module version:** v6.1.e.1**Foundation area [m<sup>2</sup>]:** 658.51**The CO<sub>2</sub> emission and primary energy rates of the building must not exceed the targets**

|                                                                                        |                           |
|----------------------------------------------------------------------------------------|---------------------------|
| Target CO <sub>2</sub> emission rate (TER), kgCO <sub>2</sub> /m <sup>2</sup> .annum   | 3.1                       |
| Building CO <sub>2</sub> emission rate (BER), kgCO <sub>2</sub> /m <sup>2</sup> .annum | 3.06                      |
| Target primary energy rate (TPER), kWh <sub>PE</sub> /m <sup>2</sup> .annum            | 33.04                     |
| Building primary energy rate (BPER), kWh <sub>PE</sub> /m <sup>2</sup> .annum          | 32.41                     |
| Do the building's emission and primary energy rates exceed the targets?                | BER =< TER   BPER =< TPER |

**The performance of the building fabric and fixed building services should achieve reasonable overall standards of energy efficiency**

| Fabric element                       | U <sub>a-Limit</sub> | U <sub>a-Calc</sub> | U <sub>i-Calc</sub> | First surface with maximum value         |
|--------------------------------------|----------------------|---------------------|---------------------|------------------------------------------|
| Walls*                               | 0.26                 | 0.16                | 0.16                | LV0003FB:Surf[9]                         |
| Floors                               | 0.18                 | 0.18                | 0.18                | LV0003FB:Surf[0]                         |
| Pitched roofs                        | 0.16                 | -                   | -                   | No pitched roofs in building             |
| Flat roofs                           | 0.18                 | 0.18                | 0.18                | LV0003FB:Surf[1]                         |
| Windows** and roof windows           | 1.6                  | 0.74                | 1.2                 | LV0003FB:Surf[2]                         |
| Rooflights***                        | 2.2                  | -                   | -                   | No roof lights in building               |
| Personnel doors^                     | 1.6                  | 1.6                 | 1.6                 | LV0003F4:Surf[3]                         |
| Vehicle access & similar large doors | 1.3                  | -                   | -                   | No vehicle access doors in building      |
| High usage entrance doors            | 3                    | -                   | -                   | No high usage entrance doors in building |

U<sub>a-Limit</sub> = Limiting area-weighted average U-values [W/(m<sup>2</sup>K)]U<sub>i-Calc</sub> = Calculated maximum individual element U-values [W/(m<sup>2</sup>K)]U<sub>a-Calc</sub> = Calculated area-weighted average U-values [W/(m<sup>2</sup>K)]

\* Automatic U-value check by the tool does not apply to curtain walls whose limiting standard is similar to that for windows.

\*\* Display windows and similar glazing are excluded from the U-value check.

\*\*\* Values for rooflights refer to the horizontal position.

^ For fire doors, limiting U-value is 1.8 W/m<sup>2</sup>K

NB: Neither roof ventilators (inc. smoke vents) nor swimming pool basins are modelled or checked against the limiting standards by the tool.

| Air permeability                             | Limiting standard | This building |
|----------------------------------------------|-------------------|---------------|
| m <sup>3</sup> /(h.m <sup>2</sup> ) at 50 Pa | 8                 | 3             |

## Building services

For details on the standard values listed below, system-specific guidance, and additional regulatory requirements, refer to the Approved Documents.

|                                                                                              |             |
|----------------------------------------------------------------------------------------------|-------------|
| Whole building lighting automatic monitoring & targeting with alarms for out-of-range values | YES         |
| Whole building electric power factor achieved by power factor correction                     | 0.9 to 0.95 |

### 1- VRF MVHR

|                                                                                                      | Heating efficiency | Cooling efficiency | Radiant efficiency | SFP [W/(l/s)] | HR efficiency |
|------------------------------------------------------------------------------------------------------|--------------------|--------------------|--------------------|---------------|---------------|
| <b>This system</b>                                                                                   | 5.7                | 11.3               | 0                  | -             | 0.85          |
| <b>Standard value</b>                                                                                | 2.5*               | 5                  | N/A                | N/A           | N/A           |
| <b>Automatic monitoring &amp; targeting with alarms for out-of-range values for this HVAC system</b> |                    |                    |                    |               | NO            |
| * Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.        |                    |                    |                    |               |               |

### 2- Panel Heaters MVHR

|                                                                                                      | Heating efficiency | Cooling efficiency | Radiant efficiency | SFP [W/(l/s)] | HR efficiency |
|------------------------------------------------------------------------------------------------------|--------------------|--------------------|--------------------|---------------|---------------|
| <b>This system</b>                                                                                   | 1                  | -                  | 0.2                | -             | -             |
| <b>Standard value</b>                                                                                | N/A                | N/A                | N/A                | N/A           | N/A           |
| <b>Automatic monitoring &amp; targeting with alarms for out-of-range values for this HVAC system</b> |                    |                    |                    |               | NO            |

### 3- VRF MVHR (Heating Only)

|                                                                                                      | Heating efficiency | Cooling efficiency | Radiant efficiency | SFP [W/(l/s)] | HR efficiency |
|------------------------------------------------------------------------------------------------------|--------------------|--------------------|--------------------|---------------|---------------|
| <b>This system</b>                                                                                   | 5.7                | 11.3               | 0                  | -             | 0.85          |
| <b>Standard value</b>                                                                                | 2.5*               | 5                  | N/A                | N/A           | N/A           |
| <b>Automatic monitoring &amp; targeting with alarms for out-of-range values for this HVAC system</b> |                    |                    |                    |               | NO            |
| * Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.        |                    |                    |                    |               |               |

### 4- Panel Heaters MVHR (FH)

|                                                                                                      | Heating efficiency | Cooling efficiency | Radiant efficiency | SFP [W/(l/s)] | HR efficiency |
|------------------------------------------------------------------------------------------------------|--------------------|--------------------|--------------------|---------------|---------------|
| <b>This system</b>                                                                                   | 1                  | -                  | 0.2                | -             | 0.9           |
| <b>Standard value</b>                                                                                | N/A                | N/A                | N/A                | N/A           | N/A           |
| <b>Automatic monitoring &amp; targeting with alarms for out-of-range values for this HVAC system</b> |                    |                    |                    |               | NO            |

### 1- Mitsubishi QAHV DHW

|                                                                                | Water heating efficiency | Storage loss factor [kWh/litre per day] |
|--------------------------------------------------------------------------------|--------------------------|-----------------------------------------|
| <b>This building</b>                                                           | 3.3                      | 0.001                                   |
| <b>Standard value</b>                                                          | 2*                       | N/A                                     |
| * Standard shown is for all types except absorption and gas engine heat pumps. |                          |                                         |

## Zone-level mechanical ventilation, exhaust, and terminal units

| ID                                                                                                                                       | System type in the Approved Documents                                 |
|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| A                                                                                                                                        | Local supply or extract ventilation units                             |
| B                                                                                                                                        | Zonal supply system where the fan is remote from the zone             |
| C                                                                                                                                        | Zonal extract system where the fan is remote from the zone            |
| D                                                                                                                                        | Zonal balanced supply and extract ventilation system                  |
| E                                                                                                                                        | Local balanced supply and extract ventilation units                   |
| F                                                                                                                                        | Other local ventilation units                                         |
| G                                                                                                                                        | Fan assisted terminal variable air volume units                       |
| H                                                                                                                                        | Fan coil units                                                        |
| I                                                                                                                                        | Kitchen extract with the fan remote from the zone and a grease filter |
| NB: Limiting SFP may be increased by the amounts specified in the Approved Documents if the installation includes particular components. |                                                                       |

| Zone name                  | SFP [W/(l/s)]     |     |     |     |     |   |     |     |     |   | HR efficiency |          |
|----------------------------|-------------------|-----|-----|-----|-----|---|-----|-----|-----|---|---------------|----------|
|                            | ID of system type | A   | B   | C   | D   | E | F   | G   | H   | I |               |          |
|                            | Standard value    | 0.3 | 1.1 | 0.5 | 2.3 | 2 | 0.5 | 0.5 | 0.4 | 1 | Zone          | Standard |
| Level00_Amenity            |                   | -   | -   | -   | 2   | - | -   | -   | -   | - | -             | N/A      |
| Level00_BinStore           |                   | -   | -   | 0.4 | -   | - | -   | -   | -   | - | -             | N/A      |
| Level00_Gym                |                   | -   | -   | -   | 2   | - | -   | -   | -   | - | -             | N/A      |
| Level00_MeetingRoom        |                   | -   | -   | -   | 2   | - | -   | -   | -   | - | -             | N/A      |
| Level00_Office             |                   | -   | -   | -   | 2   | - | -   | -   | -   | - | -             | N/A      |
| Level00_ParcelRoom         |                   | -   | -   | -   | 2   | - | -   | -   | -   | - | -             | N/A      |
| Level00_PostRoom           |                   | -   | -   | -   | 2   | - | -   | -   | -   | - | -             | N/A      |
| Level00_Reception          |                   | -   | -   | -   | 2   | - | -   | -   | -   | - | -             | N/A      |
| Level00_Shower             |                   | -   | -   | 0.4 | -   | - | -   | -   | -   | - | -             | N/A      |
| Level00_StaffKitchen       |                   | -   | -   | -   | 2   | - | -   | -   | -   | - | -             | N/A      |
| Level00_StaffWC            |                   | -   | -   | 0.4 | -   | - | -   | -   | -   | - | -             | N/A      |
| Level00_WC                 |                   | -   | -   | 0.4 | -   | - | -   | -   | -   | - | -             | N/A      |
| Level01_Amenity            |                   | -   | -   | -   | 2   | - | -   | -   | -   | - | -             | N/A      |
| Level01_Amenity            |                   | -   | -   | -   | 2   | - | -   | -   | -   | - | -             | N/A      |
| Level01_Amenity            |                   | -   | -   | -   | 2   | - | -   | -   | -   | - | -             | N/A      |
| Level01_Amenity            |                   | -   | -   | -   | 2   | - | -   | -   | -   | - | -             | N/A      |
| Level01_Amenity            |                   | -   | -   | -   | 2   | - | -   | -   | -   | - | -             | N/A      |
| Level01_ClusterBedroom     |                   | -   | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level01_ClusterBedroom     |                   | -   | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level01_ClusterBedroom     |                   | -   | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level01_ClusterBedroom     |                   | -   | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level01_ClusterBedroom     |                   | -   | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level01_ClusterBedroom     |                   | -   | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level01_ClusterBedroom     |                   | -   | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level01_ClusterBedroom     |                   | -   | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level01_KLD                |                   | -   | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level01_KLD                |                   | -   | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level01_Studio             |                   | -   | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level01_Studio             |                   | -   | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom     |                   | -   | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom     |                   | -   | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom     |                   | -   | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom     |                   | -   | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom     |                   | -   | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom     |                   | -   | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom     |                   | -   | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom     |                   | -   | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom     |                   | -   | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (1) |                   | -   | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (1) |                   | -   | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (1) |                   | -   | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (1) |                   | -   | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (1) |                   | -   | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (1) |                   | -   | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |



| Zone name                   | SFP [W/(l/s)] |     |     |     |   |     |     |     |   |      | HR efficiency |  |
|-----------------------------|---------------|-----|-----|-----|---|-----|-----|-----|---|------|---------------|--|
| ID of system type           | A             | B   | C   | D   | E | F   | G   | H   | I |      |               |  |
| Standard value              | 0.3           | 1.1 | 0.5 | 2.3 | 2 | 0.5 | 0.5 | 0.4 | 1 | Zone | Standard      |  |
| Level02_ClusterBedroom (6)  | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (6)  | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (6)  | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (6)  | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (6)  | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (7)  | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (7)  | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (7)  | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (7)  | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (7)  | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (7)  | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (7)  | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (7)  | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (8)  | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (8)  | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (8)  | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (8)  | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (8)  | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (8)  | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (8)  | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (8)  | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (8)  | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (8)  | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (9)  | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (9)  | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (9)  | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (9)  | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (9)  | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (9)  | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (9)  | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (9)  | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (9)  | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (10) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (10) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (10) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (10) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (10) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (10) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (10) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (10) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (10) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (11) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (11) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |



| Zone name                   | SFP [W/(l/s)] |     |     |     |   |     |     |     |   | HR efficiency |          |
|-----------------------------|---------------|-----|-----|-----|---|-----|-----|-----|---|---------------|----------|
| ID of system type           | A             | B   | C   | D   | E | F   | G   | H   | I |               |          |
| Standard value              | 0.3           | 1.1 | 0.5 | 2.3 | 2 | 0.5 | 0.5 | 0.4 | 1 | Zone          | Standard |
| Level02_ClusterBedroom (16) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (16) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (16) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (16) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (16) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (16) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (16) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (16) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (16) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (17) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (17) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (17) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (17) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (17) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (17) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (17) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (17) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (17) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (18) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (18) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (18) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (18) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (18) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (18) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (18) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (18) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (18) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (19) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (19) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (19) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (19) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (19) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (19) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (19) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (19) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (20) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (20) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (20) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (20) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (20) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (20) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (20) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |

| Zone name                   | SFP [W/(l/s)] |     |     |     |   |     |     |     |   | HR efficiency |          |
|-----------------------------|---------------|-----|-----|-----|---|-----|-----|-----|---|---------------|----------|
| ID of system type           | A             | B   | C   | D   | E | F   | G   | H   | I |               |          |
| Standard value              | 0.3           | 1.1 | 0.5 | 2.3 | 2 | 0.5 | 0.5 | 0.4 | 1 | Zone          | Standard |
| Level02_ClusterBedroom (20) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (20) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (21) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (21) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (21) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (21) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (21) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (21) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (21) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (21) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (21) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (22) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (22) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (22) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (22) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (22) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (22) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (22) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (22) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (22) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (23) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (23) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (23) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (23) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (23) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (23) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (23) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (23) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (23) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (24) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (24) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (24) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (24) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (24) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (24) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (24) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (24) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (25) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (25) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (25) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (25) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_ClusterBedroom (25) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |

| Zone name                   | SFP [W/(l/s)] |     |     |     |   |     |     |     |   |      | HR efficiency |  |
|-----------------------------|---------------|-----|-----|-----|---|-----|-----|-----|---|------|---------------|--|
| ID of system type           | A             | B   | C   | D   | E | F   | G   | H   | I |      |               |  |
| Standard value              | 0.3           | 1.1 | 0.5 | 2.3 | 2 | 0.5 | 0.5 | 0.4 | 1 | Zone | Standard      |  |
| Level02_ClusterBedroom (25) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (25) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (25) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_ClusterBedroom (25) | -             | -   | -   | 0.6 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD                 | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD                 | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (1)             | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (1)             | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (2)             | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (2)             | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (3)             | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (3)             | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (4)             | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (4)             | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (5)             | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (5)             | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (6)             | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (6)             | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (7)             | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (7)             | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (8)             | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (8)             | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (9)             | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (9)             | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (10)            | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (10)            | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (11)            | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (11)            | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (12)            | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (12)            | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (13)            | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (13)            | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (14)            | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (14)            | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (15)            | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (15)            | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (16)            | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (16)            | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (17)            | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (17)            | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (18)            | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (18)            | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_KLD (19)            | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |



| Zone name          | SFP [W/(l/s)] |     |     |     |   |     |     |     |   |      | HR efficiency |  |
|--------------------|---------------|-----|-----|-----|---|-----|-----|-----|---|------|---------------|--|
| ID of system type  | A             | B   | C   | D   | E | F   | G   | H   | I |      |               |  |
| Standard value     | 0.3           | 1.1 | 0.5 | 2.3 | 2 | 0.5 | 0.5 | 0.4 | 1 | Zone | Standard      |  |
| Level02_Studio (2) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (2) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (2) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (2) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (2) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (2) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (3) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (3) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (3) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (3) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (3) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (3) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (3) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (3) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (3) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (3) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (3) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (3) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (3) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (3) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (4) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (4) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (4) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (4) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (4) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (4) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (4) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (4) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (4) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (4) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (4) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (4) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (4) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (4) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (5) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (5) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (5) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (5) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (5) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (5) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (5) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (5) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (5) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (5) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (5) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (5) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |
| Level02_Studio (6) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -    | N/A           |  |



[illegible]

| Zone name           | SFP [W/(l/s)] |     |     |     |   |     |     |     |   | HR efficiency |          |
|---------------------|---------------|-----|-----|-----|---|-----|-----|-----|---|---------------|----------|
| ID of system type   | A             | B   | C   | D   | E | F   | G   | H   | I |               |          |
| Standard value      | 0.3           | 1.1 | 0.5 | 2.3 | 2 | 0.5 | 0.5 | 0.4 | 1 | Zone          | Standard |
| Level02_Studio (13) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (13) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (13) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (13) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (13) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (13) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (13) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (13) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (13) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (14) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (14) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (14) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (14) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (14) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (14) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (14) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (14) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (14) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (14) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (14) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (14) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (15) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (15) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (15) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (15) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (15) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (15) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (15) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (15) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (15) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (15) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (15) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (15) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (15) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (15) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (15) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (16) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (16) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (16) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (16) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (16) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (16) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (16) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (16) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (16) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (16) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |
| Level02_Studio (16) | -             | -   | -   | 0.7 | - | -   | -   | -   | - | -             | N/A      |

[illegible]

[illegible]



| General lighting and display lighting |                | General luminaire | Display light source |                      |
|---------------------------------------|----------------|-------------------|----------------------|----------------------|
| Zone name                             |                | Efficacy [lm/W]   | Efficacy [lm/W]      | Power density [W/m²] |
|                                       | Standard value | 95                | 80                   | 0.3                  |
| Level00_MeetingRoom                   |                | 95                | -                    | -                    |
| Level00_Office                        |                | 95                | -                    | -                    |
| Level00_ParcelRoom                    |                | 95                | -                    | -                    |
| Level00_Plant                         |                | 95                | -                    | -                    |
| Level00_Plant                         |                | 95                | -                    | -                    |
| Level00_PostRoom                      |                | 95                | -                    | -                    |
| Level00_Reception                     |                | 95                | -                    | -                    |
| Level00_Shower                        |                | 95                | -                    | -                    |
| Level00_StaffKitchen                  |                | 95                | -                    | -                    |
| Level00_StaffWC                       |                | 95                | -                    | -                    |
| Level00_Stair                         |                | 95                | -                    | -                    |
| Level00_Stair                         |                | 95                | -                    | -                    |
| Level00_SubStation                    |                | 95                | -                    | -                    |
| Level00_WC                            |                | 95                | -                    | -                    |
| Level01_Amenity                       |                | 95                | -                    | -                    |
| Level01_Amenity                       |                | 95                | -                    | -                    |
| Level01_Amenity                       |                | 95                | -                    | -                    |
| Level01_Amenity                       |                | 95                | -                    | -                    |
| Level01_Amenity                       |                | 95                | -                    | -                    |
| Level01_ClusterBedroom                |                | 95                | -                    | -                    |
| Level01_ClusterBedroom                |                | 95                | -                    | -                    |
| Level01_ClusterBedroom                |                | 95                | -                    | -                    |
| Level01_ClusterBedroom                |                | 95                | -                    | -                    |
| Level01_ClusterBedroom                |                | 95                | -                    | -                    |
| Level01_ClusterBedroom                |                | 95                | -                    | -                    |
| Level01_ClusterBedroom                |                | 95                | -                    | -                    |
| Level01_ClusterCorridor               |                | 95                | -                    | -                    |
| Level01_ClusterCorridor               |                | 95                | -                    | -                    |
| Level01_Corridor                      |                | 95                | -                    | -                    |
| Level01_KLD                           |                | 95                | -                    | -                    |
| Level01_KLD                           |                | 95                | -                    | -                    |
| Level01_Lobby                         |                | 95                | -                    | -                    |
| Level01_Lobby                         |                | 95                | -                    | -                    |
| Level01_Lobby                         |                | 95                | -                    | -                    |
| Level01_Lobby                         |                | 95                | -                    | -                    |
| Level01_Stair                         |                | 95                | -                    | -                    |
| Level01_Stair                         |                | 95                | -                    | -                    |
| Level01_Studio                        |                | 95                | -                    | -                    |
| Level01_Studio                        |                | 95                | -                    | -                    |
| Level02_ClusterBedroom                |                | 95                | -                    | -                    |
| Level02_ClusterBedroom                |                | 95                | -                    | -                    |
| Level02_ClusterBedroom                |                | 95                | -                    | -                    |
| Level02_ClusterBedroom                |                | 95                | -                    | -                    |

| General lighting and display lighting |                | General luminaire | Display light source |                      |
|---------------------------------------|----------------|-------------------|----------------------|----------------------|
| Zone name                             |                | Efficacy [lm/W]   | Efficacy [lm/W]      | Power density [W/m²] |
|                                       | Standard value | 95                | 80                   | 0.3                  |
| Level02_ClusterBedroom                |                | 95                | -                    | -                    |
| Level02_ClusterBedroom                |                | 95                | -                    | -                    |
| Level02_ClusterBedroom                |                | 95                | -                    | -                    |
| Level02_ClusterBedroom                |                | 95                | -                    | -                    |
| Level02_ClusterBedroom                |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (1)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (1)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (1)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (1)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (1)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (1)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (1)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (1)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (1)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (2)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (2)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (2)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (2)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (2)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (2)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (2)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (2)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (2)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (2)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (3)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (3)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (3)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (3)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (3)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (3)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (3)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (3)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (3)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (3)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (4)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (4)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (4)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (4)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (4)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (4)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (4)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (4)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (4)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (5)            |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (5)            |                | 95                | -                    | -                    |



| General lighting and display lighting |                | General luminaire | Display light source |                      |
|---------------------------------------|----------------|-------------------|----------------------|----------------------|
| Zone name                             |                | Efficacy [lm/W]   | Efficacy [lm/W]      | Power density [W/m²] |
|                                       | Standard value | 95                | 80                   | 0.3                  |
| Level02_ClusterBedroom (10)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (10)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (10)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (10)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (10)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (10)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (10)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (10)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (10)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (11)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (11)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (11)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (11)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (11)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (11)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (11)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (11)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (11)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (11)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (12)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (12)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (12)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (12)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (12)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (12)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (12)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (12)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (12)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (12)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (13)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (13)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (13)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (13)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (13)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (13)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (13)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (13)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (13)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (14)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (14)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (14)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (14)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (14)           |                | 95                | -                    | -                    |
| Level02_ClusterBedroom (14)           |                | 95                | -                    | -                    |

| General lighting and display lighting | General luminaire | Display light source |                      |
|---------------------------------------|-------------------|----------------------|----------------------|
| Zone name                             | Efficacy [lm/W]   | Efficacy [lm/W]      | Power density [W/m²] |
| Standard value                        | 95                | 80                   | 0.3                  |
| Level02_ClusterBedroom (14)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (14)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (15)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (15)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (15)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (15)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (15)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (15)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (15)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (15)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (15)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (16)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (16)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (16)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (16)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (16)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (16)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (16)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (16)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (16)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (16)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (16)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (17)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (17)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (17)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (17)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (17)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (17)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (17)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (17)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (17)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (17)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (18)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (18)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (18)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (18)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (18)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (18)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (18)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (18)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (18)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (19)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (19)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (19)           | 95                | -                    | -                    |
| Level02_ClusterBedroom (19)           | 95                | -                    | -                    |



| General lighting and display lighting |  | General luminaire |                 | Display light source |  |
|---------------------------------------|--|-------------------|-----------------|----------------------|--|
| Zone name                             |  | Efficacy [lm/W]   | Efficacy [lm/W] | Power density [W/m²] |  |
| Standard value                        |  | 95                | 80              | 0.3                  |  |
| Level02_ClusterBedroom (24)           |  | 95                | -               | -                    |  |
| Level02_ClusterBedroom (24)           |  | 95                | -               | -                    |  |
| Level02_ClusterBedroom (24)           |  | 95                | -               | -                    |  |
| Level02_ClusterBedroom (24)           |  | 95                | -               | -                    |  |
| Level02_ClusterBedroom (24)           |  | 95                | -               | -                    |  |
| Level02_ClusterBedroom (24)           |  | 95                | -               | -                    |  |
| Level02_ClusterBedroom (25)           |  | 95                | -               | -                    |  |
| Level02_ClusterBedroom (25)           |  | 95                | -               | -                    |  |
| Level02_ClusterBedroom (25)           |  | 95                | -               | -                    |  |
| Level02_ClusterBedroom (25)           |  | 95                | -               | -                    |  |
| Level02_ClusterBedroom (25)           |  | 95                | -               | -                    |  |
| Level02_ClusterBedroom (25)           |  | 95                | -               | -                    |  |
| Level02_ClusterBedroom (25)           |  | 95                | -               | -                    |  |
| Level02_ClusterBedroom (25)           |  | 95                | -               | -                    |  |
| Level02_ClusterBedroom (25)           |  | 95                | -               | -                    |  |
| Level02_ClusterCorridor               |  | 95                | -               | -                    |  |
| Level02_ClusterCorridor               |  | 95                | -               | -                    |  |
| Level02_ClusterCorridor (1)           |  | 95                | -               | -                    |  |
| Level02_ClusterCorridor (1)           |  | 95                | -               | -                    |  |
| Level02_ClusterCorridor (2)           |  | 95                | -               | -                    |  |
| Level02_ClusterCorridor (2)           |  | 95                | -               | -                    |  |
| Level02_ClusterCorridor (3)           |  | 95                | -               | -                    |  |
| Level02_ClusterCorridor (3)           |  | 95                | -               | -                    |  |
| Level02_ClusterCorridor (4)           |  | 95                | -               | -                    |  |
| Level02_ClusterCorridor (4)           |  | 95                | -               | -                    |  |
| Level02_ClusterCorridor (5)           |  | 95                | -               | -                    |  |
| Level02_ClusterCorridor (5)           |  | 95                | -               | -                    |  |
| Level02_ClusterCorridor (6)           |  | 95                | -               | -                    |  |
| Level02_ClusterCorridor (6)           |  | 95                | -               | -                    |  |
| Level02_ClusterCorridor (7)           |  | 95                | -               | -                    |  |
| Level02_ClusterCorridor (7)           |  | 95                | -               | -                    |  |
| Level02_ClusterCorridor (8)           |  | 95                | -               | -                    |  |
| Level02_ClusterCorridor (8)           |  | 95                | -               | -                    |  |
| Level02_ClusterCorridor (9)           |  | 95                | -               | -                    |  |
| Level02_ClusterCorridor (9)           |  | 95                | -               | -                    |  |
| Level02_ClusterCorridor (10)          |  | 95                | -               | -                    |  |
| Level02_ClusterCorridor (10)          |  | 95                | -               | -                    |  |
| Level02_ClusterCorridor (11)          |  | 95                | -               | -                    |  |
| Level02_ClusterCorridor (11)          |  | 95                | -               | -                    |  |
| Level02_ClusterCorridor (12)          |  | 95                | -               | -                    |  |
| Level02_ClusterCorridor (12)          |  | 95                | -               | -                    |  |
| Level02_ClusterCorridor (13)          |  | 95                | -               | -                    |  |
| Level02_ClusterCorridor (13)          |  | 95                | -               | -                    |  |

| General lighting and display lighting |                | General luminaire | Display light source |                      |
|---------------------------------------|----------------|-------------------|----------------------|----------------------|
| Zone name                             |                | Efficacy [lm/W]   | Efficacy [lm/W]      | Power density [W/m²] |
|                                       | Standard value | 95                | 80                   | 0.3                  |
| Level02_ClusterCorridor (14)          |                | 95                | -                    | -                    |
| Level02_ClusterCorridor (14)          |                | 95                | -                    | -                    |
| Level02_ClusterCorridor (15)          |                | 95                | -                    | -                    |
| Level02_ClusterCorridor (15)          |                | 95                | -                    | -                    |
| Level02_ClusterCorridor (16)          |                | 95                | -                    | -                    |
| Level02_ClusterCorridor (16)          |                | 95                | -                    | -                    |
| Level02_ClusterCorridor (17)          |                | 95                | -                    | -                    |
| Level02_ClusterCorridor (17)          |                | 95                | -                    | -                    |
| Level02_ClusterCorridor (18)          |                | 95                | -                    | -                    |
| Level02_ClusterCorridor (18)          |                | 95                | -                    | -                    |
| Level02_ClusterCorridor (19)          |                | 95                | -                    | -                    |
| Level02_ClusterCorridor (19)          |                | 95                | -                    | -                    |
| Level02_ClusterCorridor (20)          |                | 95                | -                    | -                    |
| Level02_ClusterCorridor (20)          |                | 95                | -                    | -                    |
| Level02_ClusterCorridor (21)          |                | 95                | -                    | -                    |
| Level02_ClusterCorridor (21)          |                | 95                | -                    | -                    |
| Level02_ClusterCorridor (22)          |                | 95                | -                    | -                    |
| Level02_ClusterCorridor (22)          |                | 95                | -                    | -                    |
| Level02_ClusterCorridor (23)          |                | 95                | -                    | -                    |
| Level02_ClusterCorridor (23)          |                | 95                | -                    | -                    |
| Level02_ClusterCorridor (24)          |                | 95                | -                    | -                    |
| Level02_ClusterCorridor (24)          |                | 95                | -                    | -                    |
| Level02_ClusterCorridor (25)          |                | 95                | -                    | -                    |
| Level02_ClusterCorridor (25)          |                | 95                | -                    | -                    |
| Level02_Corridor                      |                | 95                | -                    | -                    |
| Level02_Corridor                      |                | 95                | -                    | -                    |
| Level02_Corridor (1)                  |                | 95                | -                    | -                    |
| Level02_Corridor (1)                  |                | 95                | -                    | -                    |
| Level02_Corridor (2)                  |                | 95                | -                    | -                    |
| Level02_Corridor (2)                  |                | 95                | -                    | -                    |
| Level02_Corridor (3)                  |                | 95                | -                    | -                    |
| Level02_Corridor (3)                  |                | 95                | -                    | -                    |
| Level02_Corridor (4)                  |                | 95                | -                    | -                    |
| Level02_Corridor (4)                  |                | 95                | -                    | -                    |
| Level02_Corridor (5)                  |                | 95                | -                    | -                    |
| Level02_Corridor (5)                  |                | 95                | -                    | -                    |
| Level02_Corridor (6)                  |                | 95                | -                    | -                    |
| Level02_Corridor (6)                  |                | 95                | -                    | -                    |
| Level02_Corridor (7)                  |                | 95                | -                    | -                    |
| Level02_Corridor (7)                  |                | 95                | -                    | -                    |
| Level02_Corridor (8)                  |                | 95                | -                    | -                    |
| Level02_Corridor (8)                  |                | 95                | -                    | -                    |
| Level02_Corridor (9)                  |                | 95                | -                    | -                    |

| General lighting and display lighting |                | General luminaire | Display light source |                      |
|---------------------------------------|----------------|-------------------|----------------------|----------------------|
| Zone name                             |                | Efficacy [lm/W]   | Efficacy [lm/W]      | Power density [W/m²] |
|                                       | Standard value | 95                | 80                   | 0.3                  |
| Level02_Corridor (9)                  |                | 95                | -                    | -                    |
| Level02_Corridor (10)                 |                | 95                | -                    | -                    |
| Level02_Corridor (10)                 |                | 95                | -                    | -                    |
| Level02_Corridor (11)                 |                | 95                | -                    | -                    |
| Level02_Corridor (11)                 |                | 95                | -                    | -                    |
| Level02_Corridor (12)                 |                | 95                | -                    | -                    |
| Level02_Corridor (12)                 |                | 95                | -                    | -                    |
| Level02_Corridor (13)                 |                | 95                | -                    | -                    |
| Level02_Corridor (13)                 |                | 95                | -                    | -                    |
| Level02_Corridor (14)                 |                | 95                | -                    | -                    |
| Level02_Corridor (14)                 |                | 95                | -                    | -                    |
| Level02_Corridor (15)                 |                | 95                | -                    | -                    |
| Level02_Corridor (15)                 |                | 95                | -                    | -                    |
| Level02_Corridor (16)                 |                | 95                | -                    | -                    |
| Level02_Corridor (16)                 |                | 95                | -                    | -                    |
| Level02_Corridor (17)                 |                | 95                | -                    | -                    |
| Level02_Corridor (17)                 |                | 95                | -                    | -                    |
| Level02_Corridor (18)                 |                | 95                | -                    | -                    |
| Level02_Corridor (18)                 |                | 95                | -                    | -                    |
| Level02_Corridor (19)                 |                | 95                | -                    | -                    |
| Level02_Corridor (19)                 |                | 95                | -                    | -                    |
| Level02_Corridor (20)                 |                | 95                | -                    | -                    |
| Level02_Corridor (20)                 |                | 95                | -                    | -                    |
| Level02_Corridor (21)                 |                | 95                | -                    | -                    |
| Level02_Corridor (21)                 |                | 95                | -                    | -                    |
| Level02_Corridor (22)                 |                | 95                | -                    | -                    |
| Level02_Corridor (22)                 |                | 95                | -                    | -                    |
| Level02_Corridor (23)                 |                | 95                | -                    | -                    |
| Level02_Corridor (23)                 |                | 95                | -                    | -                    |
| Level02_Corridor (24)                 |                | 95                | -                    | -                    |
| Level02_Corridor (24)                 |                | 95                | -                    | -                    |
| Level02_Corridor (25)                 |                | 95                | -                    | -                    |
| Level02_Corridor (25)                 |                | 95                | -                    | -                    |
| Level02_KLD                           |                | 95                | -                    | -                    |
| Level02_KLD                           |                | 95                | -                    | -                    |
| Level02_KLD (1)                       |                | 95                | -                    | -                    |
| Level02_KLD (1)                       |                | 95                | -                    | -                    |
| Level02_KLD (2)                       |                | 95                | -                    | -                    |
| Level02_KLD (2)                       |                | 95                | -                    | -                    |
| Level02_KLD (3)                       |                | 95                | -                    | -                    |
| Level02_KLD (3)                       |                | 95                | -                    | -                    |
| Level02_KLD (4)                       |                | 95                | -                    | -                    |
| Level02_KLD (4)                       |                | 95                | -                    | -                    |

| General lighting and display lighting |                | General luminaire | Display light source |                      |
|---------------------------------------|----------------|-------------------|----------------------|----------------------|
| Zone name                             |                | Efficacy [lm/W]   | Efficacy [lm/W]      | Power density [W/m²] |
|                                       | Standard value | 95                | 80                   | 0.3                  |
| Level02_KLD (5)                       |                | 95                | -                    | -                    |
| Level02_KLD (5)                       |                | 95                | -                    | -                    |
| Level02_KLD (6)                       |                | 95                | -                    | -                    |
| Level02_KLD (6)                       |                | 95                | -                    | -                    |
| Level02_KLD (7)                       |                | 95                | -                    | -                    |
| Level02_KLD (7)                       |                | 95                | -                    | -                    |
| Level02_KLD (8)                       |                | 95                | -                    | -                    |
| Level02_KLD (8)                       |                | 95                | -                    | -                    |
| Level02_KLD (9)                       |                | 95                | -                    | -                    |
| Level02_KLD (9)                       |                | 95                | -                    | -                    |
| Level02_KLD (10)                      |                | 95                | -                    | -                    |
| Level02_KLD (10)                      |                | 95                | -                    | -                    |
| Level02_KLD (11)                      |                | 95                | -                    | -                    |
| Level02_KLD (11)                      |                | 95                | -                    | -                    |
| Level02_KLD (12)                      |                | 95                | -                    | -                    |
| Level02_KLD (12)                      |                | 95                | -                    | -                    |
| Level02_KLD (13)                      |                | 95                | -                    | -                    |
| Level02_KLD (13)                      |                | 95                | -                    | -                    |
| Level02_KLD (14)                      |                | 95                | -                    | -                    |
| Level02_KLD (14)                      |                | 95                | -                    | -                    |
| Level02_KLD (15)                      |                | 95                | -                    | -                    |
| Level02_KLD (15)                      |                | 95                | -                    | -                    |
| Level02_KLD (16)                      |                | 95                | -                    | -                    |
| Level02_KLD (16)                      |                | 95                | -                    | -                    |
| Level02_KLD (17)                      |                | 95                | -                    | -                    |
| Level02_KLD (17)                      |                | 95                | -                    | -                    |
| Level02_KLD (18)                      |                | 95                | -                    | -                    |
| Level02_KLD (18)                      |                | 95                | -                    | -                    |
| Level02_KLD (19)                      |                | 95                | -                    | -                    |
| Level02_KLD (19)                      |                | 95                | -                    | -                    |
| Level02_KLD (20)                      |                | 95                | -                    | -                    |
| Level02_KLD (20)                      |                | 95                | -                    | -                    |
| Level02_KLD (21)                      |                | 95                | -                    | -                    |
| Level02_KLD (21)                      |                | 95                | -                    | -                    |
| Level02_KLD (22)                      |                | 95                | -                    | -                    |
| Level02_KLD (22)                      |                | 95                | -                    | -                    |
| Level02_KLD (23)                      |                | 95                | -                    | -                    |
| Level02_KLD (23)                      |                | 95                | -                    | -                    |
| Level02_KLD (24)                      |                | 95                | -                    | -                    |
| Level02_KLD (24)                      |                | 95                | -                    | -                    |
| Level02_KLD (25)                      |                | 95                | -                    | -                    |
| Level02_KLD (25)                      |                | 95                | -                    | -                    |
| Level02_Lobby                         |                | 95                | -                    | -                    |

| General lighting and display lighting |                | General luminaire | Display light source |                      |
|---------------------------------------|----------------|-------------------|----------------------|----------------------|
| Zone name                             |                | Efficacy [lm/W]   | Efficacy [lm/W]      | Power density [W/m²] |
|                                       | Standard value | 95                | 80                   | 0.3                  |
| Level02_Lobby                         |                | 95                | -                    | -                    |
| Level02_Lobby (1)                     |                | 95                | -                    | -                    |
| Level02_Lobby (1)                     |                | 95                | -                    | -                    |
| Level02_Lobby (2)                     |                | 95                | -                    | -                    |
| Level02_Lobby (2)                     |                | 95                | -                    | -                    |
| Level02_Lobby (3)                     |                | 95                | -                    | -                    |
| Level02_Lobby (3)                     |                | 95                | -                    | -                    |
| Level02_Lobby (4)                     |                | 95                | -                    | -                    |
| Level02_Lobby (4)                     |                | 95                | -                    | -                    |
| Level02_Lobby (5)                     |                | 95                | -                    | -                    |
| Level02_Lobby (5)                     |                | 95                | -                    | -                    |
| Level02_Lobby (6)                     |                | 95                | -                    | -                    |
| Level02_Lobby (6)                     |                | 95                | -                    | -                    |
| Level02_Lobby (7)                     |                | 95                | -                    | -                    |
| Level02_Lobby (7)                     |                | 95                | -                    | -                    |
| Level02_Lobby (8)                     |                | 95                | -                    | -                    |
| Level02_Lobby (8)                     |                | 95                | -                    | -                    |
| Level02_Lobby (9)                     |                | 95                | -                    | -                    |
| Level02_Lobby (9)                     |                | 95                | -                    | -                    |
| Level02_Lobby (10)                    |                | 95                | -                    | -                    |
| Level02_Lobby (10)                    |                | 95                | -                    | -                    |
| Level02_Lobby (11)                    |                | 95                | -                    | -                    |
| Level02_Lobby (11)                    |                | 95                | -                    | -                    |
| Level02_Lobby (12)                    |                | 95                | -                    | -                    |
| Level02_Lobby (12)                    |                | 95                | -                    | -                    |
| Level02_Lobby (13)                    |                | 95                | -                    | -                    |
| Level02_Lobby (13)                    |                | 95                | -                    | -                    |
| Level02_Lobby (14)                    |                | 95                | -                    | -                    |
| Level02_Lobby (14)                    |                | 95                | -                    | -                    |
| Level02_Lobby (15)                    |                | 95                | -                    | -                    |
| Level02_Lobby (15)                    |                | 95                | -                    | -                    |
| Level02_Lobby (16)                    |                | 95                | -                    | -                    |
| Level02_Lobby (16)                    |                | 95                | -                    | -                    |
| Level02_Lobby (17)                    |                | 95                | -                    | -                    |
| Level02_Lobby (17)                    |                | 95                | -                    | -                    |
| Level02_Lobby (18)                    |                | 95                | -                    | -                    |
| Level02_Lobby (18)                    |                | 95                | -                    | -                    |
| Level02_Lobby (19)                    |                | 95                | -                    | -                    |
| Level02_Lobby (19)                    |                | 95                | -                    | -                    |
| Level02_Lobby (20)                    |                | 95                | -                    | -                    |
| Level02_Lobby (20)                    |                | 95                | -                    | -                    |
| Level02_Lobby (21)                    |                | 95                | -                    | -                    |
| Level02_Lobby (21)                    |                | 95                | -                    | -                    |

| General lighting and display lighting |                | General luminaire | Display light source |                      |
|---------------------------------------|----------------|-------------------|----------------------|----------------------|
| Zone name                             |                | Efficacy [lm/W]   | Efficacy [lm/W]      | Power density [W/m²] |
|                                       | Standard value | 95                | 80                   | 0.3                  |
| Level02_Lobby (22)                    |                | 95                | -                    | -                    |
| Level02_Lobby (22)                    |                | 95                | -                    | -                    |
| Level02_Lobby (23)                    |                | 95                | -                    | -                    |
| Level02_Lobby (23)                    |                | 95                | -                    | -                    |
| Level02_Lobby (24)                    |                | 95                | -                    | -                    |
| Level02_Lobby (24)                    |                | 95                | -                    | -                    |
| Level02_Lobby (25)                    |                | 95                | -                    | -                    |
| Level02_Lobby (25)                    |                | 95                | -                    | -                    |
| Level02_Stair                         |                | 95                | -                    | -                    |
| Level02_Stair                         |                | 95                | -                    | -                    |
| Level02_Stair (1)                     |                | 95                | -                    | -                    |
| Level02_Stair (1)                     |                | 95                | -                    | -                    |
| Level02_Stair (2)                     |                | 95                | -                    | -                    |
| Level02_Stair (2)                     |                | 95                | -                    | -                    |
| Level02_Stair (3)                     |                | 95                | -                    | -                    |
| Level02_Stair (3)                     |                | 95                | -                    | -                    |
| Level02_Stair (4)                     |                | 95                | -                    | -                    |
| Level02_Stair (4)                     |                | 95                | -                    | -                    |
| Level02_Stair (5)                     |                | 95                | -                    | -                    |
| Level02_Stair (5)                     |                | 95                | -                    | -                    |
| Level02_Stair (6)                     |                | 95                | -                    | -                    |
| Level02_Stair (6)                     |                | 95                | -                    | -                    |
| Level02_Stair (7)                     |                | 95                | -                    | -                    |
| Level02_Stair (7)                     |                | 95                | -                    | -                    |
| Level02_Stair (8)                     |                | 95                | -                    | -                    |
| Level02_Stair (8)                     |                | 95                | -                    | -                    |
| Level02_Stair (9)                     |                | 95                | -                    | -                    |
| Level02_Stair (9)                     |                | 95                | -                    | -                    |
| Level02_Stair (10)                    |                | 95                | -                    | -                    |
| Level02_Stair (10)                    |                | 95                | -                    | -                    |
| Level02_Stair (11)                    |                | 95                | -                    | -                    |
| Level02_Stair (11)                    |                | 95                | -                    | -                    |
| Level02_Stair (12)                    |                | 95                | -                    | -                    |
| Level02_Stair (12)                    |                | 95                | -                    | -                    |
| Level02_Stair (13)                    |                | 95                | -                    | -                    |
| Level02_Stair (13)                    |                | 95                | -                    | -                    |
| Level02_Stair (14)                    |                | 95                | -                    | -                    |
| Level02_Stair (14)                    |                | 95                | -                    | -                    |
| Level02_Stair (15)                    |                | 95                | -                    | -                    |
| Level02_Stair (15)                    |                | 95                | -                    | -                    |
| Level02_Stair (16)                    |                | 95                | -                    | -                    |
| Level02_Stair (16)                    |                | 95                | -                    | -                    |
| Level02_Stair (17)                    |                | 95                | -                    | -                    |



| General lighting and display lighting |                | General luminaire | Display light source |                      |
|---------------------------------------|----------------|-------------------|----------------------|----------------------|
| Zone name                             |                | Efficacy [lm/W]   | Efficacy [lm/W]      | Power density [W/m²] |
|                                       | Standard value | 95                | 80                   | 0.3                  |
| Level02_Studio (2)                    |                | 95                | -                    | -                    |
| Level02_Studio (2)                    |                | 95                | -                    | -                    |
| Level02_Studio (2)                    |                | 95                | -                    | -                    |
| Level02_Studio (2)                    |                | 95                | -                    | -                    |
| Level02_Studio (2)                    |                | 95                | -                    | -                    |
| Level02_Studio (2)                    |                | 95                | -                    | -                    |
| Level02_Studio (2)                    |                | 95                | -                    | -                    |
| Level02_Studio (2)                    |                | 95                | -                    | -                    |
| Level02_Studio (2)                    |                | 95                | -                    | -                    |
| Level02_Studio (3)                    |                | 95                | -                    | -                    |
| Level02_Studio (3)                    |                | 95                | -                    | -                    |
| Level02_Studio (3)                    |                | 95                | -                    | -                    |
| Level02_Studio (3)                    |                | 95                | -                    | -                    |
| Level02_Studio (3)                    |                | 95                | -                    | -                    |
| Level02_Studio (3)                    |                | 95                | -                    | -                    |
| Level02_Studio (3)                    |                | 95                | -                    | -                    |
| Level02_Studio (3)                    |                | 95                | -                    | -                    |
| Level02_Studio (3)                    |                | 95                | -                    | -                    |
| Level02_Studio (3)                    |                | 95                | -                    | -                    |
| Level02_Studio (3)                    |                | 95                | -                    | -                    |
| Level02_Studio (3)                    |                | 95                | -                    | -                    |
| Level02_Studio (3)                    |                | 95                | -                    | -                    |
| Level02_Studio (3)                    |                | 95                | -                    | -                    |
| Level02_Studio (4)                    |                | 95                | -                    | -                    |
| Level02_Studio (4)                    |                | 95                | -                    | -                    |
| Level02_Studio (4)                    |                | 95                | -                    | -                    |
| Level02_Studio (4)                    |                | 95                | -                    | -                    |
| Level02_Studio (4)                    |                | 95                | -                    | -                    |
| Level02_Studio (4)                    |                | 95                | -                    | -                    |
| Level02_Studio (4)                    |                | 95                | -                    | -                    |
| Level02_Studio (4)                    |                | 95                | -                    | -                    |
| Level02_Studio (4)                    |                | 95                | -                    | -                    |
| Level02_Studio (4)                    |                | 95                | -                    | -                    |
| Level02_Studio (4)                    |                | 95                | -                    | -                    |
| Level02_Studio (4)                    |                | 95                | -                    | -                    |
| Level02_Studio (4)                    |                | 95                | -                    | -                    |
| Level02_Studio (4)                    |                | 95                | -                    | -                    |
| Level02_Studio (4)                    |                | 95                | -                    | -                    |
| Level02_Studio (5)                    |                | 95                | -                    | -                    |
| Level02_Studio (5)                    |                | 95                | -                    | -                    |
| Level02_Studio (5)                    |                | 95                | -                    | -                    |
| Level02_Studio (5)                    |                | 95                | -                    | -                    |
| Level02_Studio (5)                    |                | 95                | -                    | -                    |
| Level02_Studio (5)                    |                | 95                | -                    | -                    |
| Level02_Studio (5)                    |                | 95                | -                    | -                    |
| Level02_Studio (5)                    |                | 95                | -                    | -                    |
| Level02_Studio (5)                    |                | 95                | -                    | -                    |

| General lighting and display lighting | General luminaire | Display light source |                      |
|---------------------------------------|-------------------|----------------------|----------------------|
| Zone name                             | Efficacy [lm/W]   | Efficacy [lm/W]      | Power density [W/m²] |
| Standard value                        | 95                | 80                   | 0.3                  |
| Level02_Studio (5)                    | 95                | -                    | -                    |
| Level02_Studio (5)                    | 95                | -                    | -                    |
| Level02_Studio (5)                    | 95                | -                    | -                    |
| Level02_Studio (6)                    | 95                | -                    | -                    |
| Level02_Studio (6)                    | 95                | -                    | -                    |
| Level02_Studio (6)                    | 95                | -                    | -                    |
| Level02_Studio (6)                    | 95                | -                    | -                    |
| Level02_Studio (6)                    | 95                | -                    | -                    |
| Level02_Studio (6)                    | 95                | -                    | -                    |
| Level02_Studio (6)                    | 95                | -                    | -                    |
| Level02_Studio (6)                    | 95                | -                    | -                    |
| Level02_Studio (6)                    | 95                | -                    | -                    |
| Level02_Studio (6)                    | 95                | -                    | -                    |
| Level02_Studio (6)                    | 95                | -                    | -                    |
| Level02_Studio (6)                    | 95                | -                    | -                    |
| Level02_Studio (6)                    | 95                | -                    | -                    |
| Level02_Studio (7)                    | 95                | -                    | -                    |
| Level02_Studio (7)                    | 95                | -                    | -                    |
| Level02_Studio (7)                    | 95                | -                    | -                    |
| Level02_Studio (7)                    | 95                | -                    | -                    |
| Level02_Studio (7)                    | 95                | -                    | -                    |
| Level02_Studio (7)                    | 95                | -                    | -                    |
| Level02_Studio (7)                    | 95                | -                    | -                    |
| Level02_Studio (7)                    | 95                | -                    | -                    |
| Level02_Studio (7)                    | 95                | -                    | -                    |
| Level02_Studio (7)                    | 95                | -                    | -                    |
| Level02_Studio (7)                    | 95                | -                    | -                    |
| Level02_Studio (7)                    | 95                | -                    | -                    |
| Level02_Studio (7)                    | 95                | -                    | -                    |
| Level02_Studio (8)                    | 95                | -                    | -                    |
| Level02_Studio (8)                    | 95                | -                    | -                    |
| Level02_Studio (8)                    | 95                | -                    | -                    |
| Level02_Studio (8)                    | 95                | -                    | -                    |
| Level02_Studio (8)                    | 95                | -                    | -                    |
| Level02_Studio (8)                    | 95                | -                    | -                    |
| Level02_Studio (8)                    | 95                | -                    | -                    |
| Level02_Studio (8)                    | 95                | -                    | -                    |
| Level02_Studio (8)                    | 95                | -                    | -                    |
| Level02_Studio (8)                    | 95                | -                    | -                    |
| Level02_Studio (8)                    | 95                | -                    | -                    |
| Level02_Studio (8)                    | 95                | -                    | -                    |
| Level02_Studio (8)                    | 95                | -                    | -                    |
| Level02_Studio (9)                    | 95                | -                    | -                    |
| Level02_Studio (9)                    | 95                | -                    | -                    |
| Level02_Studio (9)                    | 95                | -                    | -                    |
| Level02_Studio (9)                    | 95                | -                    | -                    |





| General lighting and display lighting |                | General luminaire | Display light source |                      |
|---------------------------------------|----------------|-------------------|----------------------|----------------------|
| Zone name                             |                | Efficacy [lm/W]   | Efficacy [lm/W]      | Power density [W/m²] |
|                                       | Standard value | 95                | 80                   | 0.3                  |
| Level02_Studio (16)                   |                | 95                | -                    | -                    |
| Level02_Studio (16)                   |                | 95                | -                    | -                    |
| Level02_Studio (16)                   |                | 95                | -                    | -                    |
| Level02_Studio (16)                   |                | 95                | -                    | -                    |
| Level02_Studio (16)                   |                | 95                | -                    | -                    |
| Level02_Studio (16)                   |                | 95                | -                    | -                    |
| Level02_Studio (17)                   |                | 95                | -                    | -                    |
| Level02_Studio (17)                   |                | 95                | -                    | -                    |
| Level02_Studio (17)                   |                | 95                | -                    | -                    |
| Level02_Studio (17)                   |                | 95                | -                    | -                    |
| Level02_Studio (17)                   |                | 95                | -                    | -                    |
| Level02_Studio (17)                   |                | 95                | -                    | -                    |
| Level02_Studio (17)                   |                | 95                | -                    | -                    |
| Level02_Studio (17)                   |                | 95                | -                    | -                    |
| Level02_Studio (17)                   |                | 95                | -                    | -                    |
| Level02_Studio (17)                   |                | 95                | -                    | -                    |
| Level02_Studio (17)                   |                | 95                | -                    | -                    |
| Level02_Studio (17)                   |                | 95                | -                    | -                    |
| Level02_Studio (17)                   |                | 95                | -                    | -                    |
| Level02_Studio (18)                   |                | 95                | -                    | -                    |
| Level02_Studio (18)                   |                | 95                | -                    | -                    |
| Level02_Studio (18)                   |                | 95                | -                    | -                    |
| Level02_Studio (18)                   |                | 95                | -                    | -                    |
| Level02_Studio (18)                   |                | 95                | -                    | -                    |
| Level02_Studio (18)                   |                | 95                | -                    | -                    |
| Level02_Studio (18)                   |                | 95                | -                    | -                    |
| Level02_Studio (18)                   |                | 95                | -                    | -                    |
| Level02_Studio (18)                   |                | 95                | -                    | -                    |
| Level02_Studio (18)                   |                | 95                | -                    | -                    |
| Level02_Studio (18)                   |                | 95                | -                    | -                    |
| Level02_Studio (18)                   |                | 95                | -                    | -                    |
| Level02_Studio (18)                   |                | 95                | -                    | -                    |
| Level02_Studio (18)                   |                | 95                | -                    | -                    |
| Level02_Studio (19)                   |                | 95                | -                    | -                    |
| Level02_Studio (19)                   |                | 95                | -                    | -                    |
| Level02_Studio (19)                   |                | 95                | -                    | -                    |
| Level02_Studio (19)                   |                | 95                | -                    | -                    |
| Level02_Studio (19)                   |                | 95                | -                    | -                    |
| Level02_Studio (19)                   |                | 95                | -                    | -                    |
| Level02_Studio (19)                   |                | 95                | -                    | -                    |
| Level02_Studio (19)                   |                | 95                | -                    | -                    |
| Level02_Studio (19)                   |                | 95                | -                    | -                    |
| Level02_Studio (19)                   |                | 95                | -                    | -                    |
| Level02_Studio (19)                   |                | 95                | -                    | -                    |
| Level02_Studio (19)                   |                | 95                | -                    | -                    |
| Level02_Studio (20)                   |                | 95                | -                    | -                    |



[illegible]

**The spaces in the building should have appropriate passive control measures to limit solar gains in summer**

| Zone                 | Solar gain limit exceeded? (%) | Internal blinds used? |
|----------------------|--------------------------------|-----------------------|
| Level00_Amenity      | YES (+43.7%)                   | NO                    |
| Level00_Comms        | N/A                            | N/A                   |
| Level00_Gym          | YES (+53.5%)                   | NO                    |
| Level00_MeetingRoom  | NO (-100%)                     | NO                    |
| Level00_Office       | NO (-61.4%)                    | NO                    |
| Level00_ParcelRoom   | NO (-32.5%)                    | NO                    |
| Level00_PostRoom     | YES (+97.6%)                   | NO                    |
| Level00_Reception    | NO (-99.6%)                    | NO                    |
| Level00_StaffKitchen | NO (-48.9%)                    | NO                    |
| Level01_Amenity      | NO (-20.9%)                    | NO                    |
| Level01_Amenity      | NO (-23.9%)                    | NO                    |
| Level01_Amenity      | YES (+18.6%)                   | NO                    |

| Zone                       | Solar gain limit exceeded? (%) | Internal blinds used? |
|----------------------------|--------------------------------|-----------------------|
| Level01_Amenity            | YES (+46.7%)                   | NO                    |
| Level01_Amenity            | YES (+44.2%)                   | NO                    |
| Level01_ClusterBedroom     | YES (+30.5%)                   | NO                    |
| Level01_ClusterBedroom     | YES (+27.2%)                   | NO                    |
| Level01_ClusterBedroom     | YES (+28%)                     | NO                    |
| Level01_ClusterBedroom     | YES (+16.4%)                   | NO                    |
| Level01_ClusterBedroom     | YES (+14.2%)                   | NO                    |
| Level01_ClusterBedroom     | YES (+10.6%)                   | NO                    |
| Level01_ClusterBedroom     | YES (+9.7%)                    | NO                    |
| Level01_KLD                | NO (-35%)                      | NO                    |
| Level01_KLD                | NO (-38.4%)                    | NO                    |
| Level01_Studio             | YES (+11.5%)                   | NO                    |
| Level01_Studio             | NO (-44.9%)                    | NO                    |
| Level02_ClusterBedroom     | YES (+10.7%)                   | NO                    |
| Level02_ClusterBedroom     | YES (+14.2%)                   | NO                    |
| Level02_ClusterBedroom     | YES (+30.9%)                   | NO                    |
| Level02_ClusterBedroom     | YES (+27.7%)                   | NO                    |
| Level02_ClusterBedroom     | YES (+9.4%)                    | NO                    |
| Level02_ClusterBedroom     | YES (+16.2%)                   | NO                    |
| Level02_ClusterBedroom     | N/A                            | N/A                   |
| Level02_ClusterBedroom     | YES (+27%)                     | NO                    |
| Level02_ClusterBedroom     | NO (-45%)                      | NO                    |
| Level02_ClusterBedroom (1) | YES (+27.7%)                   | NO                    |
| Level02_ClusterBedroom (1) | NO (-46.2%)                    | NO                    |
| Level02_ClusterBedroom (1) | YES (+9.2%)                    | NO                    |
| Level02_ClusterBedroom (1) | YES (+10.7%)                   | NO                    |
| Level02_ClusterBedroom (1) | N/A                            | N/A                   |
| Level02_ClusterBedroom (1) | YES (+27%)                     | NO                    |
| Level02_ClusterBedroom (1) | YES (+16.2%)                   | NO                    |
| Level02_ClusterBedroom (1) | YES (+30.9%)                   | NO                    |
| Level02_ClusterBedroom (1) | YES (+14%)                     | NO                    |
| Level02_ClusterBedroom (2) | YES (+27.7%)                   | NO                    |
| Level02_ClusterBedroom (2) | YES (+16.2%)                   | NO                    |
| Level02_ClusterBedroom (2) | YES (+27%)                     | NO                    |
| Level02_ClusterBedroom (2) | N/A                            | N/A                   |
| Level02_ClusterBedroom (2) | YES (+30.9%)                   | NO                    |
| Level02_ClusterBedroom (2) | YES (+9.2%)                    | NO                    |
| Level02_ClusterBedroom (2) | YES (+10.7%)                   | NO                    |
| Level02_ClusterBedroom (2) | YES (+14%)                     | NO                    |
| Level02_ClusterBedroom (2) | NO (-45%)                      | NO                    |
| Level02_ClusterBedroom (3) | YES (+16.2%)                   | NO                    |
| Level02_ClusterBedroom (3) | NO (-45.9%)                    | NO                    |
| Level02_ClusterBedroom (3) | YES (+27%)                     | NO                    |
| Level02_ClusterBedroom (3) | YES (+10.7%)                   | NO                    |
| Level02_ClusterBedroom (3) | YES (+27.7%)                   | NO                    |
| Level02_ClusterBedroom (3) | YES (+30.9%)                   | NO                    |
| Level02_ClusterBedroom (3) | N/A                            | N/A                   |
| Level02_ClusterBedroom (3) | YES (+14%)                     | NO                    |
| Level02_ClusterBedroom (3) | YES (+9.8%)                    | NO                    |

| Zone                       | Solar gain limit exceeded? (%) | Internal blinds used? |
|----------------------------|--------------------------------|-----------------------|
| Level02_ClusterBedroom (4) | YES (+14%)                     | NO                    |
| Level02_ClusterBedroom (4) | YES (+16.2%)                   | NO                    |
| Level02_ClusterBedroom (4) | NO (-45.6%)                    | NO                    |
| Level02_ClusterBedroom (4) | YES (+27%)                     | NO                    |
| Level02_ClusterBedroom (4) | YES (+10.7%)                   | NO                    |
| Level02_ClusterBedroom (4) | N/A                            | N/A                   |
| Level02_ClusterBedroom (4) | YES (+9.8%)                    | NO                    |
| Level02_ClusterBedroom (4) | YES (+27.7%)                   | NO                    |
| Level02_ClusterBedroom (4) | YES (+30.9%)                   | NO                    |
| Level02_ClusterBedroom (5) | YES (+9%)                      | NO                    |
| Level02_ClusterBedroom (5) | N/A                            | N/A                   |
| Level02_ClusterBedroom (5) | NO (-45.9%)                    | NO                    |
| Level02_ClusterBedroom (5) | YES (+10.7%)                   | NO                    |
| Level02_ClusterBedroom (5) | YES (+16.2%)                   | NO                    |
| Level02_ClusterBedroom (5) | YES (+30.9%)                   | NO                    |
| Level02_ClusterBedroom (5) | YES (+27%)                     | NO                    |
| Level02_ClusterBedroom (5) | YES (+14%)                     | NO                    |
| Level02_ClusterBedroom (5) | YES (+27.7%)                   | NO                    |
| Level02_ClusterBedroom (6) | NO (-46.2%)                    | NO                    |
| Level02_ClusterBedroom (6) | YES (+14%)                     | NO                    |
| Level02_ClusterBedroom (6) | YES (+10.7%)                   | NO                    |
| Level02_ClusterBedroom (6) | YES (+9.6%)                    | NO                    |
| Level02_ClusterBedroom (6) | YES (+27.7%)                   | NO                    |
| Level02_ClusterBedroom (6) | YES (+16.2%)                   | NO                    |
| Level02_ClusterBedroom (6) | YES (+30.9%)                   | NO                    |
| Level02_ClusterBedroom (6) | N/A                            | N/A                   |
| Level02_ClusterBedroom (6) | YES (+27%)                     | NO                    |
| Level02_ClusterBedroom (7) | NO (-46.2%)                    | NO                    |
| Level02_ClusterBedroom (7) | YES (+9.2%)                    | NO                    |
| Level02_ClusterBedroom (7) | YES (+27.7%)                   | NO                    |
| Level02_ClusterBedroom (7) | YES (+14%)                     | NO                    |
| Level02_ClusterBedroom (7) | YES (+10.7%)                   | NO                    |
| Level02_ClusterBedroom (7) | YES (+16.2%)                   | NO                    |
| Level02_ClusterBedroom (7) | YES (+27%)                     | NO                    |
| Level02_ClusterBedroom (7) | YES (+30.9%)                   | NO                    |
| Level02_ClusterBedroom (7) | N/A                            | N/A                   |
| Level02_ClusterBedroom (8) | YES (+16.2%)                   | NO                    |
| Level02_ClusterBedroom (8) | N/A                            | N/A                   |
| Level02_ClusterBedroom (8) | YES (+9.2%)                    | NO                    |
| Level02_ClusterBedroom (8) | YES (+14%)                     | NO                    |
| Level02_ClusterBedroom (8) | YES (+27.7%)                   | NO                    |
| Level02_ClusterBedroom (8) | YES (+10.7%)                   | NO                    |
| Level02_ClusterBedroom (8) | YES (+30.9%)                   | NO                    |
| Level02_ClusterBedroom (8) | YES (+27%)                     | NO                    |
| Level02_ClusterBedroom (8) | NO (-45%)                      | NO                    |
| Level02_ClusterBedroom (9) | YES (+30.9%)                   | NO                    |
| Level02_ClusterBedroom (9) | YES (+27.7%)                   | NO                    |
| Level02_ClusterBedroom (9) | YES (+9%)                      | NO                    |
| Level02_ClusterBedroom (9) | YES (+16.2%)                   | NO                    |

| Zone                        | Solar gain limit exceeded? (%) | Internal blinds used? |
|-----------------------------|--------------------------------|-----------------------|
| Level02_ClusterBedroom (9)  | N/A                            | N/A                   |
| Level02_ClusterBedroom (9)  | YES (+14%)                     | NO                    |
| Level02_ClusterBedroom (9)  | NO (-45.3%)                    | NO                    |
| Level02_ClusterBedroom (9)  | YES (+10.7%)                   | NO                    |
| Level02_ClusterBedroom (9)  | YES (+27%)                     | NO                    |
| Level02_ClusterBedroom (10) | YES (+9%)                      | NO                    |
| Level02_ClusterBedroom (10) | YES (+16.2%)                   | NO                    |
| Level02_ClusterBedroom (10) | YES (+27.7%)                   | NO                    |
| Level02_ClusterBedroom (10) | YES (+30.9%)                   | NO                    |
| Level02_ClusterBedroom (10) | NO (-45.6%)                    | NO                    |
| Level02_ClusterBedroom (10) | YES (+27%)                     | NO                    |
| Level02_ClusterBedroom (10) | N/A                            | N/A                   |
| Level02_ClusterBedroom (10) | YES (+10.7%)                   | NO                    |
| Level02_ClusterBedroom (10) | YES (+14%)                     | NO                    |
| Level02_ClusterBedroom (11) | YES (+9%)                      | NO                    |
| Level02_ClusterBedroom (11) | YES (+16.2%)                   | NO                    |
| Level02_ClusterBedroom (11) | YES (+27%)                     | NO                    |
| Level02_ClusterBedroom (11) | YES (+27.7%)                   | NO                    |
| Level02_ClusterBedroom (11) | YES (+14%)                     | NO                    |
| Level02_ClusterBedroom (11) | YES (+10.7%)                   | NO                    |
| Level02_ClusterBedroom (11) | NO (-45%)                      | NO                    |
| Level02_ClusterBedroom (11) | YES (+30.9%)                   | NO                    |
| Level02_ClusterBedroom (11) | N/A                            | N/A                   |
| Level02_ClusterBedroom (12) | N/A                            | N/A                   |
| Level02_ClusterBedroom (12) | YES (+10.7%)                   | NO                    |
| Level02_ClusterBedroom (12) | YES (+9.2%)                    | NO                    |
| Level02_ClusterBedroom (12) | YES (+30.9%)                   | NO                    |
| Level02_ClusterBedroom (12) | YES (+16.2%)                   | NO                    |
| Level02_ClusterBedroom (12) | YES (+27.7%)                   | NO                    |
| Level02_ClusterBedroom (12) | YES (+27%)                     | NO                    |
| Level02_ClusterBedroom (12) | NO (-45.3%)                    | NO                    |
| Level02_ClusterBedroom (12) | YES (+14%)                     | NO                    |
| Level02_ClusterBedroom (13) | YES (+27.7%)                   | NO                    |
| Level02_ClusterBedroom (13) | YES (+30.9%)                   | NO                    |
| Level02_ClusterBedroom (13) | YES (+14%)                     | NO                    |
| Level02_ClusterBedroom (13) | YES (+10.7%)                   | NO                    |
| Level02_ClusterBedroom (13) | N/A                            | N/A                   |
| Level02_ClusterBedroom (13) | YES (+27%)                     | NO                    |
| Level02_ClusterBedroom (13) | NO (-45.6%)                    | NO                    |
| Level02_ClusterBedroom (13) | YES (+9.6%)                    | NO                    |
| Level02_ClusterBedroom (13) | YES (+16.2%)                   | NO                    |
| Level02_ClusterBedroom (14) | YES (+14%)                     | NO                    |
| Level02_ClusterBedroom (14) | YES (+10.7%)                   | NO                    |
| Level02_ClusterBedroom (14) | YES (+27.7%)                   | NO                    |
| Level02_ClusterBedroom (14) | YES (+30.9%)                   | NO                    |
| Level02_ClusterBedroom (14) | YES (+27%)                     | NO                    |
| Level02_ClusterBedroom (14) | YES (+9.4%)                    | NO                    |
| Level02_ClusterBedroom (14) | N/A                            | N/A                   |
| Level02_ClusterBedroom (14) | YES (+16.2%)                   | NO                    |

| Zone                        | Solar gain limit exceeded? (%) | Internal blinds used? |
|-----------------------------|--------------------------------|-----------------------|
| Level02_ClusterBedroom (14) | NO (-45%)                      | NO                    |
| Level02_ClusterBedroom (15) | YES (+9%)                      | NO                    |
| Level02_ClusterBedroom (15) | YES (+14%)                     | NO                    |
| Level02_ClusterBedroom (15) | YES (+30.9%)                   | NO                    |
| Level02_ClusterBedroom (15) | YES (+27%)                     | NO                    |
| Level02_ClusterBedroom (15) | YES (+16.2%)                   | NO                    |
| Level02_ClusterBedroom (15) | YES (+10.7%)                   | NO                    |
| Level02_ClusterBedroom (15) | YES (+27.7%)                   | NO                    |
| Level02_ClusterBedroom (15) | NO (-45%)                      | NO                    |
| Level02_ClusterBedroom (15) | N/A                            | N/A                   |
| Level02_ClusterBedroom (16) | YES (+27%)                     | NO                    |
| Level02_ClusterBedroom (16) | N/A                            | N/A                   |
| Level02_ClusterBedroom (16) | NO (-46.2%)                    | NO                    |
| Level02_ClusterBedroom (16) | YES (+27.7%)                   | NO                    |
| Level02_ClusterBedroom (16) | YES (+16.2%)                   | NO                    |
| Level02_ClusterBedroom (16) | YES (+9.4%)                    | NO                    |
| Level02_ClusterBedroom (16) | YES (+10.7%)                   | NO                    |
| Level02_ClusterBedroom (16) | YES (+30.9%)                   | NO                    |
| Level02_ClusterBedroom (16) | YES (+14%)                     | NO                    |
| Level02_ClusterBedroom (17) | YES (+14%)                     | NO                    |
| Level02_ClusterBedroom (17) | NO (-45.9%)                    | NO                    |
| Level02_ClusterBedroom (17) | YES (+30.9%)                   | NO                    |
| Level02_ClusterBedroom (17) | YES (+27.7%)                   | NO                    |
| Level02_ClusterBedroom (17) | YES (+27%)                     | NO                    |
| Level02_ClusterBedroom (17) | YES (+16.2%)                   | NO                    |
| Level02_ClusterBedroom (17) | N/A                            | N/A                   |
| Level02_ClusterBedroom (17) | YES (+10.7%)                   | NO                    |
| Level02_ClusterBedroom (17) | YES (+9.8%)                    | NO                    |
| Level02_ClusterBedroom (18) | YES (+30.9%)                   | NO                    |
| Level02_ClusterBedroom (18) | YES (+14%)                     | NO                    |
| Level02_ClusterBedroom (18) | YES (+9.2%)                    | NO                    |
| Level02_ClusterBedroom (18) | YES (+10.7%)                   | NO                    |
| Level02_ClusterBedroom (18) | N/A                            | N/A                   |
| Level02_ClusterBedroom (18) | YES (+27.7%)                   | NO                    |
| Level02_ClusterBedroom (18) | YES (+16.2%)                   | NO                    |
| Level02_ClusterBedroom (18) | NO (-45%)                      | NO                    |
| Level02_ClusterBedroom (18) | YES (+27%)                     | NO                    |
| Level02_ClusterBedroom (19) | YES (+27.7%)                   | NO                    |
| Level02_ClusterBedroom (19) | YES (+30.9%)                   | NO                    |
| Level02_ClusterBedroom (19) | YES (+10.7%)                   | NO                    |
| Level02_ClusterBedroom (19) | YES (+14%)                     | NO                    |
| Level02_ClusterBedroom (19) | YES (+9.4%)                    | NO                    |
| Level02_ClusterBedroom (19) | NO (-45.3%)                    | NO                    |
| Level02_ClusterBedroom (19) | N/A                            | N/A                   |
| Level02_ClusterBedroom (19) | YES (+27%)                     | NO                    |
| Level02_ClusterBedroom (19) | YES (+16.2%)                   | NO                    |
| Level02_ClusterBedroom (20) | YES (+30.9%)                   | NO                    |
| Level02_ClusterBedroom (20) | YES (+27%)                     | NO                    |
| Level02_ClusterBedroom (20) | YES (+10.7%)                   | NO                    |

| Zone                        | Solar gain limit exceeded? (%) | Internal blinds used? |
|-----------------------------|--------------------------------|-----------------------|
| Level02_ClusterBedroom (20) | N/A                            | N/A                   |
| Level02_ClusterBedroom (20) | YES (+16.2%)                   | NO                    |
| Level02_ClusterBedroom (20) | YES (+9.4%)                    | NO                    |
| Level02_ClusterBedroom (20) | NO (-45.3%)                    | NO                    |
| Level02_ClusterBedroom (20) | YES (+14%)                     | NO                    |
| Level02_ClusterBedroom (20) | YES (+27.7%)                   | NO                    |
| Level02_ClusterBedroom (21) | YES (+27.7%)                   | NO                    |
| Level02_ClusterBedroom (21) | YES (+9%)                      | NO                    |
| Level02_ClusterBedroom (21) | YES (+14%)                     | NO                    |
| Level02_ClusterBedroom (21) | YES (+30.9%)                   | NO                    |
| Level02_ClusterBedroom (21) | NO (-45.6%)                    | NO                    |
| Level02_ClusterBedroom (21) | YES (+27%)                     | NO                    |
| Level02_ClusterBedroom (21) | N/A                            | N/A                   |
| Level02_ClusterBedroom (21) | YES (+16.2%)                   | NO                    |
| Level02_ClusterBedroom (21) | YES (+10.7%)                   | NO                    |
| Level02_ClusterBedroom (22) | YES (+16.2%)                   | NO                    |
| Level02_ClusterBedroom (22) | NO (-45.9%)                    | NO                    |
| Level02_ClusterBedroom (22) | YES (+27.7%)                   | NO                    |
| Level02_ClusterBedroom (22) | YES (+14%)                     | NO                    |
| Level02_ClusterBedroom (22) | YES (+9.6%)                    | NO                    |
| Level02_ClusterBedroom (22) | N/A                            | N/A                   |
| Level02_ClusterBedroom (22) | YES (+30.9%)                   | NO                    |
| Level02_ClusterBedroom (22) | YES (+27%)                     | NO                    |
| Level02_ClusterBedroom (22) | YES (+10.7%)                   | NO                    |
| Level02_ClusterBedroom (22) | YES (+10.7%)                   | NO                    |
| Level02_ClusterBedroom (23) | YES (+10.7%)                   | NO                    |
| Level02_ClusterBedroom (23) | NO (-45.9%)                    | NO                    |
| Level02_ClusterBedroom (23) | YES (+27%)                     | NO                    |
| Level02_ClusterBedroom (23) | N/A                            | N/A                   |
| Level02_ClusterBedroom (23) | YES (+30.9%)                   | NO                    |
| Level02_ClusterBedroom (23) | YES (+16.2%)                   | NO                    |
| Level02_ClusterBedroom (23) | YES (+14%)                     | NO                    |
| Level02_ClusterBedroom (23) | YES (+27.7%)                   | NO                    |
| Level02_ClusterBedroom (23) | YES (+9.8%)                    | NO                    |
| Level02_ClusterBedroom (24) | YES (+27%)                     | NO                    |
| Level02_ClusterBedroom (24) | YES (+16.2%)                   | NO                    |
| Level02_ClusterBedroom (24) | YES (+30.9%)                   | NO                    |
| Level02_ClusterBedroom (24) | N/A                            | N/A                   |
| Level02_ClusterBedroom (24) | YES (+9.2%)                    | NO                    |
| Level02_ClusterBedroom (24) | YES (+14%)                     | NO                    |
| Level02_ClusterBedroom (24) | YES (+10.7%)                   | NO                    |
| Level02_ClusterBedroom (24) | NO (-45%)                      | NO                    |
| Level02_ClusterBedroom (24) | YES (+27.7%)                   | NO                    |
| Level02_ClusterBedroom (25) | NO (-46.2%)                    | NO                    |
| Level02_ClusterBedroom (25) | YES (+9.2%)                    | NO                    |
| Level02_ClusterBedroom (25) | N/A                            | N/A                   |
| Level02_ClusterBedroom (25) | YES (+14%)                     | NO                    |
| Level02_ClusterBedroom (25) | YES (+16.2%)                   | NO                    |
| Level02_ClusterBedroom (25) | YES (+27%)                     | NO                    |
| Level02_ClusterBedroom (25) | YES (+10.7%)                   | NO                    |

| Zone                        | Solar gain limit exceeded? (%) | Internal blinds used? |
|-----------------------------|--------------------------------|-----------------------|
| Level02_ClusterBedroom (25) | YES (+30.8%)                   | NO                    |
| Level02_ClusterBedroom (25) | YES (+27.7%)                   | NO                    |
| Level02_KLD                 | NO (-35.3%)                    | NO                    |
| Level02_KLD                 | NO (-38.6%)                    | NO                    |
| Level02_KLD (1)             | NO (-35.3%)                    | NO                    |
| Level02_KLD (1)             | NO (-38.5%)                    | NO                    |
| Level02_KLD (2)             | NO (-35.3%)                    | NO                    |
| Level02_KLD (2)             | NO (-38.5%)                    | NO                    |
| Level02_KLD (3)             | NO (-38.5%)                    | NO                    |
| Level02_KLD (3)             | NO (-35.3%)                    | NO                    |
| Level02_KLD (4)             | NO (-38.5%)                    | NO                    |
| Level02_KLD (4)             | NO (-35.3%)                    | NO                    |
| Level02_KLD (5)             | NO (-38.5%)                    | NO                    |
| Level02_KLD (5)             | NO (-35.3%)                    | NO                    |
| Level02_KLD (6)             | NO (-38.5%)                    | NO                    |
| Level02_KLD (6)             | NO (-35.3%)                    | NO                    |
| Level02_KLD (7)             | NO (-35.3%)                    | NO                    |
| Level02_KLD (7)             | NO (-38.5%)                    | NO                    |
| Level02_KLD (8)             | NO (-35.3%)                    | NO                    |
| Level02_KLD (8)             | NO (-38.5%)                    | NO                    |
| Level02_KLD (9)             | NO (-38.5%)                    | NO                    |
| Level02_KLD (9)             | NO (-35.3%)                    | NO                    |
| Level02_KLD (10)            | NO (-35.3%)                    | NO                    |
| Level02_KLD (10)            | NO (-38.5%)                    | NO                    |
| Level02_KLD (11)            | NO (-35.3%)                    | NO                    |
| Level02_KLD (11)            | NO (-38.5%)                    | NO                    |
| Level02_KLD (12)            | NO (-35.3%)                    | NO                    |
| Level02_KLD (12)            | NO (-38.5%)                    | NO                    |
| Level02_KLD (13)            | NO (-38.5%)                    | NO                    |
| Level02_KLD (13)            | NO (-35.3%)                    | NO                    |
| Level02_KLD (14)            | NO (-38.5%)                    | NO                    |
| Level02_KLD (14)            | NO (-35.3%)                    | NO                    |
| Level02_KLD (15)            | NO (-38.5%)                    | NO                    |
| Level02_KLD (15)            | NO (-35.3%)                    | NO                    |
| Level02_KLD (16)            | NO (-38.5%)                    | NO                    |
| Level02_KLD (16)            | NO (-35.3%)                    | NO                    |
| Level02_KLD (17)            | NO (-38.5%)                    | NO                    |
| Level02_KLD (17)            | NO (-35.3%)                    | NO                    |
| Level02_KLD (18)            | NO (-35.3%)                    | NO                    |
| Level02_KLD (18)            | NO (-38.5%)                    | NO                    |
| Level02_KLD (19)            | NO (-35.3%)                    | NO                    |
| Level02_KLD (19)            | NO (-38.5%)                    | NO                    |
| Level02_KLD (20)            | NO (-35.3%)                    | NO                    |
| Level02_KLD (20)            | NO (-38.5%)                    | NO                    |
| Level02_KLD (21)            | NO (-35.3%)                    | NO                    |
| Level02_KLD (21)            | NO (-38.5%)                    | NO                    |
| Level02_KLD (22)            | NO (-35.3%)                    | NO                    |
| Level02_KLD (22)            | NO (-38.5%)                    | NO                    |
| Level02_KLD (23)            | NO (-35.3%)                    | NO                    |

| Zone               | Solar gain limit exceeded? (%) | Internal blinds used? |
|--------------------|--------------------------------|-----------------------|
| Level02_KLD (23)   | NO (-38.5%)                    | NO                    |
| Level02_KLD (24)   | NO (-38.6%)                    | NO                    |
| Level02_KLD (24)   | NO (-35.3%)                    | NO                    |
| Level02_KLD (25)   | NO (-38.5%)                    | NO                    |
| Level02_KLD (25)   | NO (-35.3%)                    | NO                    |
| Level02_Studio     | NO (-25.3%)                    | NO                    |
| Level02_Studio     | NO (-22.8%)                    | NO                    |
| Level02_Studio     | NO (-32.2%)                    | NO                    |
| Level02_Studio     | NO (-75.9%)                    | NO                    |
| Level02_Studio     | NO (-24.1%)                    | NO                    |
| Level02_Studio     | NO (-24.3%)                    | NO                    |
| Level02_Studio     | NO (-27.9%)                    | NO                    |
| Level02_Studio     | NO (-77.8%)                    | NO                    |
| Level02_Studio     | NO (-24%)                      | NO                    |
| Level02_Studio     | NO (-9.3%)                     | NO                    |
| Level02_Studio     | NO (-25.4%)                    | NO                    |
| Level02_Studio     | NO (-25.5%)                    | NO                    |
| Level02_Studio (1) | NO (-9.3%)                     | NO                    |
| Level02_Studio (1) | NO (-77.8%)                    | NO                    |
| Level02_Studio (1) | NO (-24%)                      | NO                    |
| Level02_Studio (1) | NO (-22.8%)                    | NO                    |
| Level02_Studio (1) | NO (-25.3%)                    | NO                    |
| Level02_Studio (1) | NO (-32.2%)                    | NO                    |
| Level02_Studio (1) | NO (-27.9%)                    | NO                    |
| Level02_Studio (1) | NO (-25.5%)                    | NO                    |
| Level02_Studio (1) | NO (-24.3%)                    | NO                    |
| Level02_Studio (1) | NO (-25.4%)                    | NO                    |
| Level02_Studio (1) | NO (-75.9%)                    | NO                    |
| Level02_Studio (1) | NO (-24.1%)                    | NO                    |
| Level02_Studio (2) | NO (-22.8%)                    | NO                    |
| Level02_Studio (2) | NO (-25.3%)                    | NO                    |
| Level02_Studio (2) | NO (-9.3%)                     | NO                    |
| Level02_Studio (2) | NO (-25.5%)                    | NO                    |
| Level02_Studio (2) | NO (-24.3%)                    | NO                    |
| Level02_Studio (2) | NO (-32.2%)                    | NO                    |
| Level02_Studio (2) | NO (-27.9%)                    | NO                    |
| Level02_Studio (2) | NO (-24.1%)                    | NO                    |
| Level02_Studio (2) | NO (-77.8%)                    | NO                    |
| Level02_Studio (2) | NO (-25.4%)                    | NO                    |
| Level02_Studio (2) | NO (-75.9%)                    | NO                    |
| Level02_Studio (2) | NO (-24%)                      | NO                    |
| Level02_Studio (3) | NO (-25.4%)                    | NO                    |
| Level02_Studio (3) | NO (-25.5%)                    | NO                    |
| Level02_Studio (3) | NO (-32.2%)                    | NO                    |
| Level02_Studio (3) | NO (-77.8%)                    | NO                    |
| Level02_Studio (3) | NO (-24%)                      | NO                    |
| Level02_Studio (3) | NO (-9.3%)                     | NO                    |
| Level02_Studio (3) | NO (-27.9%)                    | NO                    |
| Level02_Studio (3) | NO (-25.3%)                    | NO                    |

| Zone               | Solar gain limit exceeded? (%) | Internal blinds used? |
|--------------------|--------------------------------|-----------------------|
| Level02_Studio (3) | NO (-75.9%)                    | NO                    |
| Level02_Studio (3) | NO (-24.3%)                    | NO                    |
| Level02_Studio (3) | NO (-24.1%)                    | NO                    |
| Level02_Studio (3) | NO (-22.2%)                    | NO                    |
| Level02_Studio (4) | NO (-75.9%)                    | NO                    |
| Level02_Studio (4) | NO (-32.2%)                    | NO                    |
| Level02_Studio (4) | NO (-9.3%)                     | NO                    |
| Level02_Studio (4) | NO (-77.8%)                    | NO                    |
| Level02_Studio (4) | NO (-25.5%)                    | NO                    |
| Level02_Studio (4) | NO (-25.4%)                    | NO                    |
| Level02_Studio (4) | NO (-27.9%)                    | NO                    |
| Level02_Studio (4) | NO (-22.8%)                    | NO                    |
| Level02_Studio (4) | NO (-24%)                      | NO                    |
| Level02_Studio (4) | NO (-25.3%)                    | NO                    |
| Level02_Studio (4) | NO (-24.1%)                    | NO                    |
| Level02_Studio (4) | NO (-24.3%)                    | NO                    |
| Level02_Studio (5) | NO (-24.3%)                    | NO                    |
| Level02_Studio (5) | NO (-25.3%)                    | NO                    |
| Level02_Studio (5) | NO (-25.4%)                    | NO                    |
| Level02_Studio (5) | NO (-27.9%)                    | NO                    |
| Level02_Studio (5) | NO (-22.8%)                    | NO                    |
| Level02_Studio (5) | NO (-77.8%)                    | NO                    |
| Level02_Studio (5) | NO (-9.3%)                     | NO                    |
| Level02_Studio (5) | NO (-24%)                      | NO                    |
| Level02_Studio (5) | NO (-24.1%)                    | NO                    |
| Level02_Studio (5) | NO (-75.9%)                    | NO                    |
| Level02_Studio (5) | NO (-32.2%)                    | NO                    |
| Level02_Studio (5) | NO (-25.5%)                    | NO                    |
| Level02_Studio (6) | NO (-9.3%)                     | NO                    |
| Level02_Studio (6) | NO (-77.8%)                    | NO                    |
| Level02_Studio (6) | NO (-27.9%)                    | NO                    |
| Level02_Studio (6) | NO (-25.3%)                    | NO                    |
| Level02_Studio (6) | NO (-75.9%)                    | NO                    |
| Level02_Studio (6) | NO (-22.8%)                    | NO                    |
| Level02_Studio (6) | NO (-25.4%)                    | NO                    |
| Level02_Studio (6) | NO (-24%)                      | NO                    |
| Level02_Studio (6) | NO (-25.5%)                    | NO                    |
| Level02_Studio (6) | NO (-24.3%)                    | NO                    |
| Level02_Studio (6) | NO (-32.2%)                    | NO                    |
| Level02_Studio (6) | NO (-24.1%)                    | NO                    |
| Level02_Studio (7) | NO (-24.1%)                    | NO                    |
| Level02_Studio (7) | NO (-32.2%)                    | NO                    |
| Level02_Studio (7) | NO (-9.3%)                     | NO                    |
| Level02_Studio (7) | NO (-24%)                      | NO                    |
| Level02_Studio (7) | NO (-77.8%)                    | NO                    |
| Level02_Studio (7) | NO (-27.9%)                    | NO                    |
| Level02_Studio (7) | NO (-22.2%)                    | NO                    |
| Level02_Studio (7) | NO (-25.5%)                    | NO                    |
| Level02_Studio (7) | NO (-24.3%)                    | NO                    |

| Zone                | Solar gain limit exceeded? (%) | Internal blinds used? |
|---------------------|--------------------------------|-----------------------|
| Level02_Studio (7)  | NO (-25.4%)                    | NO                    |
| Level02_Studio (7)  | NO (-75.9%)                    | NO                    |
| Level02_Studio (7)  | NO (-25.3%)                    | NO                    |
| Level02_Studio (8)  | NO (-32.2%)                    | NO                    |
| Level02_Studio (8)  | NO (-24.3%)                    | NO                    |
| Level02_Studio (8)  | NO (-25.3%)                    | NO                    |
| Level02_Studio (8)  | NO (-9.3%)                     | NO                    |
| Level02_Studio (8)  | NO (-27.9%)                    | NO                    |
| Level02_Studio (8)  | NO (-25.4%)                    | NO                    |
| Level02_Studio (8)  | NO (-24%)                      | NO                    |
| Level02_Studio (8)  | NO (-22.8%)                    | NO                    |
| Level02_Studio (8)  | NO (-75.9%)                    | NO                    |
| Level02_Studio (8)  | NO (-24.1%)                    | NO                    |
| Level02_Studio (8)  | NO (-25.5%)                    | NO                    |
| Level02_Studio (8)  | NO (-77.8%)                    | NO                    |
| Level02_Studio (9)  | NO (-25.4%)                    | NO                    |
| Level02_Studio (9)  | NO (-24.3%)                    | NO                    |
| Level02_Studio (9)  | NO (-9.3%)                     | NO                    |
| Level02_Studio (9)  | NO (-77.8%)                    | NO                    |
| Level02_Studio (9)  | NO (-27.9%)                    | NO                    |
| Level02_Studio (9)  | NO (-25.3%)                    | NO                    |
| Level02_Studio (9)  | NO (-25.5%)                    | NO                    |
| Level02_Studio (9)  | NO (-75.9%)                    | NO                    |
| Level02_Studio (9)  | NO (-24.1%)                    | NO                    |
| Level02_Studio (9)  | NO (-32.2%)                    | NO                    |
| Level02_Studio (9)  | NO (-22.2%)                    | NO                    |
| Level02_Studio (9)  | NO (-24%)                      | NO                    |
| Level02_Studio (10) | NO (-77.8%)                    | NO                    |
| Level02_Studio (10) | NO (-9.3%)                     | NO                    |
| Level02_Studio (10) | NO (-22.8%)                    | NO                    |
| Level02_Studio (10) | NO (-24.3%)                    | NO                    |
| Level02_Studio (10) | NO (-24%)                      | NO                    |
| Level02_Studio (10) | NO (-27.9%)                    | NO                    |
| Level02_Studio (10) | NO (-25.5%)                    | NO                    |
| Level02_Studio (10) | NO (-25.3%)                    | NO                    |
| Level02_Studio (10) | NO (-75.9%)                    | NO                    |
| Level02_Studio (10) | NO (-32.2%)                    | NO                    |
| Level02_Studio (10) | NO (-24.1%)                    | NO                    |
| Level02_Studio (10) | NO (-25.4%)                    | NO                    |
| Level02_Studio (11) | NO (-22.8%)                    | NO                    |
| Level02_Studio (11) | NO (-24.1%)                    | NO                    |
| Level02_Studio (11) | NO (-24%)                      | NO                    |
| Level02_Studio (11) | NO (-25.5%)                    | NO                    |
| Level02_Studio (11) | NO (-27.9%)                    | NO                    |
| Level02_Studio (11) | NO (-75.9%)                    | NO                    |
| Level02_Studio (11) | NO (-24.3%)                    | NO                    |
| Level02_Studio (11) | NO (-77.8%)                    | NO                    |
| Level02_Studio (11) | NO (-25.4%)                    | NO                    |
| Level02_Studio (11) | NO (-32.2%)                    | NO                    |

| Zone                | Solar gain limit exceeded? (%) | Internal blinds used? |
|---------------------|--------------------------------|-----------------------|
| Level02_Studio (11) | NO (-25.3%)                    | NO                    |
| Level02_Studio (11) | NO (-9.3%)                     | NO                    |
| Level02_Studio (12) | NO (-24%)                      | NO                    |
| Level02_Studio (12) | NO (-25.3%)                    | NO                    |
| Level02_Studio (12) | NO (-77.8%)                    | NO                    |
| Level02_Studio (12) | NO (-25.4%)                    | NO                    |
| Level02_Studio (12) | NO (-24.3%)                    | NO                    |
| Level02_Studio (12) | NO (-22.8%)                    | NO                    |
| Level02_Studio (12) | NO (-9.3%)                     | NO                    |
| Level02_Studio (12) | NO (-25.5%)                    | NO                    |
| Level02_Studio (12) | NO (-32.2%)                    | NO                    |
| Level02_Studio (12) | NO (-27.9%)                    | NO                    |
| Level02_Studio (12) | NO (-24.1%)                    | NO                    |
| Level02_Studio (12) | NO (-75.9%)                    | NO                    |
| Level02_Studio (13) | NO (-24.1%)                    | NO                    |
| Level02_Studio (13) | NO (-25.5%)                    | NO                    |
| Level02_Studio (13) | NO (-22.2%)                    | NO                    |
| Level02_Studio (13) | NO (-75.9%)                    | NO                    |
| Level02_Studio (13) | NO (-24.3%)                    | NO                    |
| Level02_Studio (13) | NO (-25.3%)                    | NO                    |
| Level02_Studio (13) | NO (-77.8%)                    | NO                    |
| Level02_Studio (13) | NO (-25.4%)                    | NO                    |
| Level02_Studio (13) | NO (-9.3%)                     | NO                    |
| Level02_Studio (13) | NO (-24%)                      | NO                    |
| Level02_Studio (13) | NO (-27.9%)                    | NO                    |
| Level02_Studio (13) | NO (-32.2%)                    | NO                    |
| Level02_Studio (14) | NO (-32.2%)                    | NO                    |
| Level02_Studio (14) | NO (-27.9%)                    | NO                    |
| Level02_Studio (14) | NO (-77.8%)                    | NO                    |
| Level02_Studio (14) | NO (-22.8%)                    | NO                    |
| Level02_Studio (14) | NO (-25.4%)                    | NO                    |
| Level02_Studio (14) | NO (-25.3%)                    | NO                    |
| Level02_Studio (14) | NO (-24.3%)                    | NO                    |
| Level02_Studio (14) | NO (-24%)                      | NO                    |
| Level02_Studio (14) | NO (-9.3%)                     | NO                    |
| Level02_Studio (14) | NO (-24.1%)                    | NO                    |
| Level02_Studio (14) | NO (-25.5%)                    | NO                    |
| Level02_Studio (14) | NO (-75.9%)                    | NO                    |
| Level02_Studio (15) | NO (-27.9%)                    | NO                    |
| Level02_Studio (15) | NO (-77.8%)                    | NO                    |
| Level02_Studio (15) | NO (-9.3%)                     | NO                    |
| Level02_Studio (15) | NO (-32.2%)                    | NO                    |
| Level02_Studio (15) | NO (-25.5%)                    | NO                    |
| Level02_Studio (15) | NO (-24%)                      | NO                    |
| Level02_Studio (15) | NO (-25.4%)                    | NO                    |
| Level02_Studio (15) | NO (-25.3%)                    | NO                    |
| Level02_Studio (15) | NO (-75.9%)                    | NO                    |
| Level02_Studio (15) | NO (-22.8%)                    | NO                    |
| Level02_Studio (15) | NO (-24.1%)                    | NO                    |

| Zone                | Solar gain limit exceeded? (%) | Internal blinds used? |
|---------------------|--------------------------------|-----------------------|
| Level02_Studio (15) | NO (-24.3%)                    | NO                    |
| Level02_Studio (16) | NO (-24.3%)                    | NO                    |
| Level02_Studio (16) | NO (-77.8%)                    | NO                    |
| Level02_Studio (16) | NO (-24%)                      | NO                    |
| Level02_Studio (16) | NO (-24.1%)                    | NO                    |
| Level02_Studio (16) | NO (-22.2%)                    | NO                    |
| Level02_Studio (16) | NO (-75.9%)                    | NO                    |
| Level02_Studio (16) | NO (-32.2%)                    | NO                    |
| Level02_Studio (16) | NO (-25.3%)                    | NO                    |
| Level02_Studio (16) | NO (-25.5%)                    | NO                    |
| Level02_Studio (16) | NO (-27.9%)                    | NO                    |
| Level02_Studio (16) | NO (-25.4%)                    | NO                    |
| Level02_Studio (16) | NO (-9.3%)                     | NO                    |
| Level02_Studio (17) | NO (-22.8%)                    | NO                    |
| Level02_Studio (17) | NO (-27.9%)                    | NO                    |
| Level02_Studio (17) | NO (-25.3%)                    | NO                    |
| Level02_Studio (17) | NO (-24%)                      | NO                    |
| Level02_Studio (17) | NO (-75.9%)                    | NO                    |
| Level02_Studio (17) | NO (-25.4%)                    | NO                    |
| Level02_Studio (17) | NO (-9.3%)                     | NO                    |
| Level02_Studio (17) | NO (-25.5%)                    | NO                    |
| Level02_Studio (17) | NO (-24.3%)                    | NO                    |
| Level02_Studio (17) | NO (-32.2%)                    | NO                    |
| Level02_Studio (17) | NO (-24.1%)                    | NO                    |
| Level02_Studio (17) | NO (-77.8%)                    | NO                    |
| Level02_Studio (18) | NO (-25.4%)                    | NO                    |
| Level02_Studio (18) | NO (-27.9%)                    | NO                    |
| Level02_Studio (18) | NO (-24.3%)                    | NO                    |
| Level02_Studio (18) | NO (-25.5%)                    | NO                    |
| Level02_Studio (18) | NO (-25.3%)                    | NO                    |
| Level02_Studio (18) | NO (-24%)                      | NO                    |
| Level02_Studio (18) | NO (-24.1%)                    | NO                    |
| Level02_Studio (18) | NO (-32.2%)                    | NO                    |
| Level02_Studio (18) | NO (-77.8%)                    | NO                    |
| Level02_Studio (18) | NO (-22.2%)                    | NO                    |
| Level02_Studio (18) | NO (-9.3%)                     | NO                    |
| Level02_Studio (18) | NO (-75.9%)                    | NO                    |
| Level02_Studio (19) | NO (-27.9%)                    | NO                    |
| Level02_Studio (19) | NO (-25.5%)                    | NO                    |
| Level02_Studio (19) | NO (-77.8%)                    | NO                    |
| Level02_Studio (19) | NO (-32.2%)                    | NO                    |
| Level02_Studio (19) | NO (-9.3%)                     | NO                    |
| Level02_Studio (19) | NO (-24.1%)                    | NO                    |
| Level02_Studio (19) | NO (-25.4%)                    | NO                    |
| Level02_Studio (19) | NO (-22.2%)                    | NO                    |
| Level02_Studio (19) | NO (-24.3%)                    | NO                    |
| Level02_Studio (19) | NO (-25.3%)                    | NO                    |
| Level02_Studio (19) | NO (-75.9%)                    | NO                    |
| Level02_Studio (19) | NO (-24%)                      | NO                    |

| Zone                | Solar gain limit exceeded? (%) | Internal blinds used? |
|---------------------|--------------------------------|-----------------------|
| Level02_Studio (20) | NO (-27.9%)                    | NO                    |
| Level02_Studio (20) | NO (-25.3%)                    | NO                    |
| Level02_Studio (20) | NO (-24%)                      | NO                    |
| Level02_Studio (20) | NO (-25.4%)                    | NO                    |
| Level02_Studio (20) | NO (-24.3%)                    | NO                    |
| Level02_Studio (20) | NO (-22.8%)                    | NO                    |
| Level02_Studio (20) | NO (-9.3%)                     | NO                    |
| Level02_Studio (20) | NO (-32.2%)                    | NO                    |
| Level02_Studio (20) | NO (-25.5%)                    | NO                    |
| Level02_Studio (20) | NO (-24.1%)                    | NO                    |
| Level02_Studio (20) | NO (-75.9%)                    | NO                    |
| Level02_Studio (20) | NO (-77.8%)                    | NO                    |
| Level02_Studio (21) | NO (-24.1%)                    | NO                    |
| Level02_Studio (21) | NO (-9.3%)                     | NO                    |
| Level02_Studio (21) | NO (-24.3%)                    | NO                    |
| Level02_Studio (21) | NO (-77.8%)                    | NO                    |
| Level02_Studio (21) | NO (-25.3%)                    | NO                    |
| Level02_Studio (21) | NO (-25.5%)                    | NO                    |
| Level02_Studio (21) | NO (-22.2%)                    | NO                    |
| Level02_Studio (21) | NO (-32.2%)                    | NO                    |
| Level02_Studio (21) | NO (-27.9%)                    | NO                    |
| Level02_Studio (21) | NO (-75.9%)                    | NO                    |
| Level02_Studio (21) | NO (-24%)                      | NO                    |
| Level02_Studio (21) | NO (-25.4%)                    | NO                    |
| Level02_Studio (22) | NO (-24.3%)                    | NO                    |
| Level02_Studio (22) | NO (-77.8%)                    | NO                    |
| Level02_Studio (22) | NO (-32.2%)                    | NO                    |
| Level02_Studio (22) | NO (-9.3%)                     | NO                    |
| Level02_Studio (22) | NO (-22.8%)                    | NO                    |
| Level02_Studio (22) | NO (-25.3%)                    | NO                    |
| Level02_Studio (22) | NO (-24.1%)                    | NO                    |
| Level02_Studio (22) | NO (-25.4%)                    | NO                    |
| Level02_Studio (22) | NO (-75.9%)                    | NO                    |
| Level02_Studio (22) | NO (-27.9%)                    | NO                    |
| Level02_Studio (22) | NO (-24%)                      | NO                    |
| Level02_Studio (22) | NO (-25.5%)                    | NO                    |
| Level02_Studio (23) | NO (-24.1%)                    | NO                    |
| Level02_Studio (23) | NO (-9.3%)                     | NO                    |
| Level02_Studio (23) | NO (-25.3%)                    | NO                    |
| Level02_Studio (23) | NO (-27.9%)                    | NO                    |
| Level02_Studio (23) | NO (-24%)                      | NO                    |
| Level02_Studio (23) | NO (-25.5%)                    | NO                    |
| Level02_Studio (23) | NO (-25.4%)                    | NO                    |
| Level02_Studio (23) | NO (-22.2%)                    | NO                    |
| Level02_Studio (23) | NO (-32.2%)                    | NO                    |
| Level02_Studio (23) | NO (-75.9%)                    | NO                    |
| Level02_Studio (23) | NO (-77.8%)                    | NO                    |
| Level02_Studio (23) | NO (-24.3%)                    | NO                    |
| Level02_Studio (24) | NO (-25.5%)                    | NO                    |

| Zone                | Solar gain limit exceeded? (%) | Internal blinds used? |
|---------------------|--------------------------------|-----------------------|
| Level02_Studio (24) | NO (-25.3%)                    | NO                    |
| Level02_Studio (24) | NO (-32.2%)                    | NO                    |
| Level02_Studio (24) | NO (-24.1%)                    | NO                    |
| Level02_Studio (24) | NO (-27.9%)                    | NO                    |
| Level02_Studio (24) | NO (-24.3%)                    | NO                    |
| Level02_Studio (24) | NO (-75.9%)                    | NO                    |
| Level02_Studio (24) | NO (-77.8%)                    | NO                    |
| Level02_Studio (24) | NO (-9.3%)                     | NO                    |
| Level02_Studio (24) | NO (-22.2%)                    | NO                    |
| Level02_Studio (24) | NO (-24%)                      | NO                    |
| Level02_Studio (24) | NO (-25.4%)                    | NO                    |
| Level02_Studio (25) | NO (-24%)                      | NO                    |
| Level02_Studio (25) | NO (-25.3%)                    | NO                    |
| Level02_Studio (25) | NO (-25.5%)                    | NO                    |
| Level02_Studio (25) | NO (-25.4%)                    | NO                    |
| Level02_Studio (25) | NO (-32.2%)                    | NO                    |
| Level02_Studio (25) | NO (-27.9%)                    | NO                    |
| Level02_Studio (25) | NO (-24.1%)                    | NO                    |
| Level02_Studio (25) | NO (-9.3%)                     | NO                    |
| Level02_Studio (25) | NO (-75.9%)                    | NO                    |
| Level02_Studio (25) | NO (-77.8%)                    | NO                    |
| Level02_Studio (25) | NO (-24.3%)                    | NO                    |
| Level02_Studio (25) | NO (-22.2%)                    | NO                    |

## Regulation 25A: Consideration of high efficiency alternative energy systems

|                                                                                               |            |
|-----------------------------------------------------------------------------------------------|------------|
| <b>Were alternative energy systems considered and analysed as part of the design process?</b> | <b>YES</b> |
| Is evidence of such assessment available as a separate submission?                            | YES        |
| Are any such measures included in the proposed design?                                        | YES        |

# Technical Data Sheet (Actual vs. Notional Building)

## Building Global Parameters

|                                                       | Actual  | Notional |
|-------------------------------------------------------|---------|----------|
| Floor area [m <sup>2</sup> ]                          | 18438.2 | 18438.2  |
| External area [m <sup>2</sup> ]                       | 10482.1 | 10482.1  |
| Weather                                               | MAN     | MAN      |
| Infiltration [m <sup>3</sup> /hm <sup>2</sup> @ 50Pa] | 3       | 3        |
| Average conductance [W/K]                             | 6510.13 | 5943.17  |
| Average U-value [W/m <sup>2</sup> K]                  | 0.62    | 0.57     |
| Alpha value* [%]                                      | 2.24    | 10       |

\* Percentage of the building's average heat transfer coefficient which is due to thermal bridging

## Building Use

### % Area Building Type

Retail/Financial and Professional Services  
 Restaurants and Cafes/Drinking Establishments/Takeaways  
 Offices and Workshop Businesses  
 General Industrial and Special Industrial Groups  
 Storage or Distribution  
 Hotels  
 Residential Institutions: Hospitals and Care Homes  
 Residential Institutions: Residential Schools

### 100 Residential Institutions: Universities and Colleges

Secure Residential Institutions  
 Residential Spaces  
 Non-residential Institutions: Community/Day Centre  
 Non-residential Institutions: Libraries, Museums, and Galleries  
 Non-residential Institutions: Education  
 Non-residential Institutions: Primary Health Care Building  
 Non-residential Institutions: Crown and County Courts  
 General Assembly and Leisure, Night Clubs, and Theatres  
 Others: Passenger Terminals  
 Others: Emergency Services  
 Others: Miscellaneous 24hr Activities  
 Others: Car Parks 24 hrs  
 Others: Stand Alone Utility Block

## Energy Consumption by End Use [kWh/m<sup>2</sup>]

|                | Actual      | Notional     |
|----------------|-------------|--------------|
| Heating        | 7.84        | 6.76         |
| Cooling        | 0.83        | 1.07         |
| Auxiliary      | 4.02        | 2.5          |
| Lighting       | 4.32        | 6.89         |
| Hot water      | 4.39        | 5.56         |
| Equipment*     | 25.84       | 25.84        |
| <b>TOTAL**</b> | <b>21.4</b> | <b>22.77</b> |

\* Energy used by equipment does not count towards the total for consumption or calculating emissions.

\*\* Total is net of any electrical energy displaced by CHP generators, if applicable.

## Energy Production by Technology [kWh/m<sup>2</sup>]

|                              | Actual      | Notional    |
|------------------------------|-------------|-------------|
| Photovoltaic systems         | 0.08        | 0.65        |
| Wind turbines                | 0           | 0           |
| CHP generators               | 0           | 0           |
| Solar thermal systems        | 0           | 0           |
| <i>Displaced electricity</i> | <i>0.08</i> | <i>0.65</i> |

## Energy & CO<sub>2</sub> Emissions Summary

|                                                     | Actual | Notional |
|-----------------------------------------------------|--------|----------|
| Heating + cooling demand [MJ/m <sup>2</sup> ]       | 68.43  | 61.51    |
| Primary energy [kWh <sub>PE</sub> /m <sup>2</sup> ] | 32.41  | 33.04    |
| Total emissions [kg/m <sup>2</sup> ]                | 3.06   | 3.1      |

| HVAC Systems Performance                                                                                              |                   |                   |                    |                    |                   |               |               |                  |                  |      |
|-----------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|--------------------|--------------------|-------------------|---------------|---------------|------------------|------------------|------|
| System Type                                                                                                           | Heat dem<br>MJ/m2 | Cool dem<br>MJ/m2 | Heat con<br>kWh/m2 | Cool con<br>kWh/m2 | Aux con<br>kWh/m2 | Heat<br>SSEFF | Cool<br>SSEER | Heat gen<br>SEFF | Cool gen<br>SEER |      |
| [ST] Other local room heater - unfanned, [HS] Direct or storage electric heater, [HFT] Electricity, [CFT] Electricity |                   |                   |                    |                    |                   |               |               |                  |                  |      |
|                                                                                                                       | Actual            | 86.5              | 0                  | 24                 | 0                 | 0             | 1             | 0                | 1                | 0    |
|                                                                                                                       | Notional          | 85.2              | 0                  | 16.8               | 0                 | 0             | 1.41          | 0                | ----             | ---- |
| [ST] Split or multi-split system, [HS] ASHP, [HFT] Electricity, [CFT] Electricity                                     |                   |                   |                    |                    |                   |               |               |                  |                  |      |
|                                                                                                                       | Actual            | 25.2              | 37.9               | 1.2                | 1.3               | 6             | 5.7           | 8.02             | 5.7              | 11.3 |
|                                                                                                                       | Notional          | 26.1              | 26.7               | 2.6                | 1.6               | 3.4           | 2.78          | 4.63             | ----             | ---- |
| [ST] Other local room heater - unfanned, [HS] Direct or storage electric heater, [HFT] Electricity, [CFT] Electricity |                   |                   |                    |                    |                   |               |               |                  |                  |      |
|                                                                                                                       | Actual            | 96.1              | 0                  | 26.7               | 0                 | 0             | 1             | 0                | 1                | 0    |
|                                                                                                                       | Notional          | 94.6              | 0                  | 18.6               | 0                 | 0             | 1.41          | 0                | ----             | ---- |
| [ST] Split or multi-split system, [HS] ASHP, [HFT] Electricity, [CFT] Electricity                                     |                   |                   |                    |                    |                   |               |               |                  |                  |      |
|                                                                                                                       | Actual            | 28.5              | 23.7               | 1.4                | 0.6               | 4.2           | 5.7           | 11.3             | 5.7              | 11.3 |
|                                                                                                                       | Notional          | 30                | 17.4               | 3                  | 1                 | 3.2           | 2.78          | 4.63             | ----             | ---- |

## Key to terms

|                   |                                                                                                       |
|-------------------|-------------------------------------------------------------------------------------------------------|
| Heat dem [MJ/m2]  | = Heating energy demand                                                                               |
| Cool dem [MJ/m2]  | = Cooling energy demand                                                                               |
| Heat con [kWh/m2] | = Heating energy consumption                                                                          |
| Cool con [kWh/m2] | = Cooling energy consumption                                                                          |
| Aux con [kWh/m2]  | = Auxiliary energy consumption                                                                        |
| Heat SSEFF        | = Heating system seasonal efficiency (for notional building, value depends on activity glazing class) |
| Cool SSEER        | = Cooling system seasonal energy efficiency ratio                                                     |
| Heat gen SSEFF    | = Heating generator seasonal efficiency                                                               |
| Cool gen SSEER    | = Cooling generator seasonal energy efficiency ratio                                                  |
| ST                | = System type                                                                                         |
| HS                | = Heat source                                                                                         |
| HFT               | = Heating fuel type                                                                                   |
| CFT               | = Cooling fuel type                                                                                   |