First Street South, Block C

Mechanical & Electrical Services

AD Part L Report

Project Number:	L1513
Document Ref:	L1513-ABA-ZC-ZZ-RP-M-57001
Engineer:	P.Abel/ S. Boswarva
Revision:	P02
Issue Date:	24-10-2023

Abacus Consult Limited

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

Subject: Stage 2 M&E Concept Design – AD Part L Report

Prepared for: Downing Living (Manchester South) Limited Partnership Incorporated

Revision	Issue/Revision Description	Prepared By	Approved By	Issue Date
P01	Issued for Planning Approval	P. Abel	P. Abel S. Boswarva	13/10/2023
P02	2010 BRUKL Results Included	P. Abel	P. Abel S. Boswarva	24/10/2023

CONTENTS

1.0 Introduction & Input Data

2.0 Results

3.0 Block C As Designed BRUKL

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. The key points are highlighted in the summary below: -

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

Unitised Façade (non-vision)	=	0.9 W/m^{2}K
Unitised Façade (vision)	=	0.9 W/m^{2}K
Solid Floor	=	0.18 W/m^{2}K
Roof	=	0.18 W/m^{2}K

  Window Frames assumed 50mm

- Windows

G Value	=	0.4

- Weather data file used for calculations is CIBSE DSY1 2020s, high emissions 50th percentile for Manchester.
- Lighting Gains are based on previous similar projects and will be finalised upon completion of calculations.
- Air Permeability is based on maximum 5.0 m^3/m^2.Hr at 50Pa.
- Ventilation is via MVHR and MEV 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, clusters and studios.
- Domestic hot water production via Mitsubishi QAHV high temperature CO2 air source heat pumps serving hot water storage vessels.

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_2 target emissions (TER) and predicted building emissions (BER) are as follows: -

Block C 19,212 m^2

Target Emissions Rate	=	10.44 $kgCO_2/m^2/yr$
Building Emissions Rate	=	9.68 $kgCO_2/m^2/yr$
Project Carbon Reduction	=	7 % (40% over Part L 2010)

AD Part L 2010 Result

BRUKL Output Document

HM Government

Compliance with England and Wales Building Regulations Part L 2010

Project name

First Street Block C — As designed

Date: Tue Oct 24 11:34:00 2023

Administrative information

Building Details

Address: Manchester,

Certification tool

Calculation engine: Apache

Calculation engine version: 6.4.0.16

Interface to calculation engine: IES Virtual Environment

Interface to calculation engine version: 6.4.0.16

BRUKL compliance check version: v4.1.h.0

Certifier details

Name:

Telephone number:

Address: , ,

Criterion 1: The calculated CO_2 emission rate for the building should not exceed the target

1.1	CO_2 emission rate from the notional building, $kgCO_2/m^2.annum$	58.4
1.2	Target CO_2 emission rate (TER), $kgCO_2/m^2.annum$	58.4
1.3	Building CO_2 emission rate (BER), $kgCO_2/m^2.annum$	35
1.4	Are emissions from the building less than or equal to the target?	BER =< TER
1.5	Are as built details the same as used in the BER calculations?	Separate submission

3.0 Block C 'As Designed' 2021 BRUKL

BRUKL Output Document

HM Government

Compliance with England Building Regulations Part L 2021

Project name

First Street Block C

As designed

Date: Wed Sep 13 09:21:36 2023

Administrative information

Building Details

Address: Manchester,

Certification tool

Calculation engine: Apache

Calculation engine version: 7.0.22

Interface to calculation engine: IES Virtual Environment

Interface to calculation engine version: 7.0.22

BRUKL compliance module version: v6.1.e.1

Certifier details

Name:

Telephone number:

Address: , ,

Foundation area [m²]: 404.02

The CO_2 emission and primary energy rates of the building must not exceed the targets

Target CO_2 emission rate (TER), $kgCO_2/m^2.annum$	10.44	
Building CO_2 emission rate (BER), $kgCO_2/m^2.annum$	9.68	
Target primary energy rate (TPER), $kWh_{PE}/m^2.annum$	113.93	
Building primary energy rate (BPER), $kWh_{PE}/m^2.annum$	105.02	
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	$U_{a\text{-Limit}}$	$U_{a\text{-Calc}}$	$U_{i\text{-Calc}}$	First surface with maximum value
Walls*	0.26	-	-	UNKNOWN
Floors	0.18	0.18	0.18	ST000000:Surf[0]
Pitched roofs	0.16	-	-	No pitched roofs in building
Flat roofs	0.18	0.18	0.18	ST000195:Surf[0]
Windows** and roof windows	1.6	0.9	0.9	ST000000:Surf[3]
Rooflights***	2.2	-	-	No roof lights in building
Personnel doors^	1.6	1.6	1.6	CY000000:Surf[1]
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

$U_{a\text{-Limit}}$ = Limiting area-weighted average U-values [W/(m²K)] $U_{i\text{-Calc}}$ = Calculated maximum individual element U-values [W/(m²K)]

$U_{a\text{-Calc}}$ = Calculated area-weighted average U-values [W/(m²K)]

* 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/m²K

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
$m^3/(h.m^2)$ at 50 Pa	8	5

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	NO
Whole building electric power factor achieved by power factor correction	<0.9

1- VRF - MEV

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	5.7	11.3	0	2	-
Standard value	2.5*	N/A	N/A	2^	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO

* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.

^ Limiting SFP may be increased by the amounts specified in the Approved Documents if the installation includes particular components.

2- VRF - MVHR

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	5.7	11.3	0	2	0.8
Standard value	2.5*	N/A	N/A	2^	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					NO

* Standard shown is for all types >12 kW output, except absorption and gas engine heat pumps.

^ Limiting SFP may be increased by the amounts specified in the Approved Documents if the installation includes particular components.

1- DHW

	Water heating efficiency	Storage loss factor [kWh/litre per day]
This building	3.33	0.002
Standard value	1	N/A

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
Studio 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 7	-	-	0.1	-	-	-	-	-	-	-	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
Studio 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 9	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Studio	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 10	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 11	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Cluster Bedroom	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 9	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Studio	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 10	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 11	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Cluster Bedroom	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 4	-	-	0.1	-	-	-	-	-	-	-	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
Studio 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 9	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Studio	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 10	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 11	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Cluster Bedroom	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 9	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Studio	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 10	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 11	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Cluster Bedroom	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 1	-	-	0.1	-	-	-	-	-	-	-	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
Cluster Bedroom 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 9	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Studio	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 10	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 11	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Cluster Bedroom	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 9	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Studio	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 10	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 11	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 4	-	-	0.1	-	-	-	-	-	-	-	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
Cluster Bedroom 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Cluster Bedroom	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 9	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Studio	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 10	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 11	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Cluster Bedroom	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 9	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Studio	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 10	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 11	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 5	-	-	0.1	-	-	-	-	-	-	-	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
Cluster Bedroom 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Cluster Bedroom	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 9	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Studio	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 10	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 11	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Cluster Bedroom	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 9	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Studio	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 10	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 11	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 8	-	-	0.1	-	-	-	-	-	-	-	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
Cluster Bedroom 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Cluster Bedroom	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 9	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Studio	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 10	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 11	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Cluster Bedroom	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 9	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Studio	-	-	0.1	-	-	-	-	-	-	-	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
Studio 10	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 11	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Cluster Bedroom	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 9	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Studio	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 10	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 11	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Cluster Bedroom	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 9	-	-	0.1	-	-	-	-	-	-	-	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
Studio 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Studio	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 10	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 11	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Cluster Bedroom	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 9	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Studio	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 10	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 11	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Cluster Bedroom	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 6	-	-	0.1	-	-	-	-	-	-	-	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
Studio 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 9	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Studio	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 10	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 11	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Cluster Bedroom	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 9	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Studio	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 10	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 11	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Cluster Bedroom	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 3	-	-	0.1	-	-	-	-	-	-	-	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
Studio 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 9	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Studio	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 10	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 11	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Cluster Bedroom	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 9	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Studio	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 10	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 11	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Cluster Bedroom	-	-	0.1	-	-	-	-	-	-	-	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
Cluster Kitchen 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 9	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Studio	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 10	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 11	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Cluster Bedroom	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 9	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Studio	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 10	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 11	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 2	-	-	0.1	-	-	-	-	-	-	-	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
Cluster Bedroom 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Cluster Bedroom	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 9	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Studio	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 10	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 11	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Cluster Bedroom	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 9	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Studio	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 10	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 11	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 6	-	-	0.1	-	-	-	-	-	-	-	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
Cluster Bedroom 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Cluster Bedroom	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 9	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Studio	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 10	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 11	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Cluster Bedroom	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 9	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Studio	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 10	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 11	-	-	0.1	-	-	-	-	-	-	-	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
Cluster Bedroom 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Cluster Bedroom	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 9	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Studio	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 10	-	-	0.1	-	-	-	-	-	-	-	N/A
Studio 11	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 8	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 7	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 6	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 5	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 2	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 4	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 3	-	-	0.1	-	-	-	-	-	-	-	N/A
Acc. Cluster Bedroom	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Kitchen 1	-	-	0.1	-	-	-	-	-	-	-	N/A
Cluster Bedroom 1	-	-	0.1	-	-	-	-	-	-	-	N/A

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
Studio 3	95	95	1.579
Studio 4	95	95	1.579
Studio 5	95	95	1.579
Studio 6	95	95	1.579
Studio 7	95	95	1.579

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
Studio 8	95	95	1.579
Studio 9	95	95	1.579
Store	95	-	-
Riser	95	-	-
Riser	95	-	-
Corridor	95	-	-
Lift	95	-	-
Lift	95	-	-
Riser	95	-	-
Riser	95	-	-
Stair	95	-	-
Studio 2	95	95	1.579
Studio 1	95	95	1.579
Acc. Studio	95	95	1.579
Studio 10	95	95	1.579
Studio 11	95	95	1.579
Cluster Bedroom 8	95	-	-
Cluster Bedroom 7	95	-	-
Cluster Bedroom 6	95	-	-
Cluster Bedroom 5	95	-	-
WC S1	95	-	-
WC S2	95	-	-
WC S3	95	-	-
WC S4	95	-	-
WC S5	95	-	-
WC S6	95	-	-
WC S7	95	-	-
WC S8	95	-	-
WC S9	95	-	-
WC AS	95	-	-
WC S10	95	-	-
WC S11	95	-	-
WC C8	95	-	-
WC C7	95	-	-
WC C6	95	-	-
WC C5	95	-	-
Store	95	-	-
Store	95	-	-
Lift	95	-	-
Stairs	95	-	-
Corridor	95	-	-
Cluster Bedroom 2	95	-	-
Cluster Kitchen 2	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
Cluster Bedroom 4	95	-	-
Cluster Bedroom 3	95	-	-
Acc. Cluster Bedroom	95	-	-
Cluster Kitchen 1	95	-	-
Cluster Bedroom 1	95	-	-
WC C1	95	-	-
WC C2	95	-	-
WC C3	95	-	-
WC C4	95	-	-
WC ACB	95	-	-
Corridor	95	-	-
Corridor	95	-	-
Studio 3	95	95	1.579
Studio 4	95	95	1.579
Studio 5	95	95	1.579
Studio 6	95	95	1.579
Studio 7	95	95	1.579
Studio 8	95	95	1.579
Studio 9	95	95	1.579
Store	95	-	-
Riser	95	-	-
Riser	95	-	-
Corridor	95	-	-
Lift	95	-	-
Lift	95	-	-
Riser	95	-	-
Riser	95	-	-
Stair	95	-	-
Studio 2	95	95	1.579
Studio 1	95	95	1.579
Acc. Studio	95	95	1.579
Studio 10	95	95	1.579
Studio 11	95	95	1.579
Cluster Bedroom 8	95	-	-
Cluster Bedroom 7	95	-	-
Cluster Bedroom 6	95	-	-
Cluster Bedroom 5	95	-	-
WC S1	95	-	-
WC S2	95	-	-
WC S3	95	-	-
WC S4	95	-	-
WC S5	95	-	-
WC S6	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
WC S7	95	-	-
WC S8	95	-	-
WC S9	95	-	-
WC AS	95	-	-
WC S10	95	-	-
WC S11	95	-	-
WC C8	95	-	-
WC C7	95	-	-
WC C6	95	-	-
WC C5	95	-	-
Store	95	-	-
Store	95	-	-
Lift	95	-	-
Stairs	95	-	-
Corridor	95	-	-
Cluster Bedroom 2	95	-	-
Cluster Kitchen 2	95	-	-
Cluster Bedroom 4	95	-	-
Cluster Bedroom 3	95	-	-
Acc. Cluster Bedroom	95	-	-
Cluster Kitchen 1	95	-	-
Cluster Bedroom 1	95	-	-
WC C1	95	-	-
WC C2	95	-	-
WC C3	95	-	-
WC C4	95	-	-
WC ACB	95	-	-
Corridor	95	-	-
Corridor	95	-	-
Studio 3	95	95	1.579
Studio 4	95	95	1.579
Studio 5	95	95	1.579
Studio 6	95	95	1.579
Studio 7	95	95	1.579
Studio 8	95	95	1.579
Studio 9	95	95	1.579
Store	95	-	-
Riser	95	-	-
Riser	95	-	-
Corridor	95	-	-
Lift	95	-	-
Lift	95	-	-
Riser	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
Riser	95	-	-
Stair	95	-	-
Studio 2	95	95	1.579
Studio 1	95	95	1.579
Acc. Studio	95	95	1.579
Studio 10	95	95	1.579
Studio 11	95	95	1.579
Cluster Bedroom 8	95	-	-
Cluster Bedroom 7	95	-	-
Cluster Bedroom 6	95	-	-
Cluster Bedroom 5	95	-	-
WC S1	95	-	-
WC S2	95	-	-
WC S3	95	-	-
WC S4	95	-	-
WC S5	95	-	-
WC S6	95	-	-
WC S7	95	-	-
WC S8	95	-	-
WC S9	95	-	-
WC AS	95	-	-
WC S10	95	-	-
WC S11	95	-	-
WC C8	95	-	-
WC C7	95	-	-
WC C6	95	-	-
WC C5	95	-	-
Store	95	-	-
Store	95	-	-
Lift	95	-	-
Stairs	95	-	-
Corridor	95	-	-
Cluster Bedroom 2	95	-	-
Cluster Kitchen 2	95	-	-
Cluster Bedroom 4	95	-	-
Cluster Bedroom 3	95	-	-
Acc. Cluster Bedroom	95	-	-
Cluster Kitchen 1	95	-	-
Cluster Bedroom 1	95	-	-
WC C1	95	-	-
WC C2	95	-	-
WC C3	95	-	-
WC C4	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
WC ACB	95	-	-
Corridor	95	-	-
Corridor	95	-	-
Studio 3	95	95	1.579
Studio 4	95	95	1.579
Studio 5	95	95	1.579
Studio 6	95	95	1.579
Studio 7	95	95	1.579
Studio 8	95	95	1.579
Studio 9	95	95	1.579
Store	95	-	-
Riser	95	-	-
Riser	95	-	-
Corridor	95	-	-
Lift	95	-	-
Lift	95	-	-
Riser	95	-	-
Riser	95	-	-
Stair	95	-	-
Studio 2	95	95	1.579
Studio 1	95	95	1.579
Acc. Studio	95	95	1.579
Studio 10	95	95	1.579
Studio 11	95	95	1.579
Cluster Bedroom 8	95	-	-
Cluster Bedroom 7	95	-	-
Cluster Bedroom 6	95	-	-
Cluster Bedroom 5	95	-	-
WC S1	95	-	-
WC S2	95	-	-
WC S3	95	-	-
WC S4	95	-	-
WC S5	95	-	-
WC S6	95	-	-
WC S7	95	-	-
WC S8	95	-	-
WC S9	95	-	-
WC AS	95	-	-
WC S10	95	-	-
WC S11	95	-	-
WC C8	95	-	-
WC C7	95	-	-
WC C6	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
WC C5	95	-	-
Store	95	-	-
Store	95	-	-
Lift	95	-	-
Stairs	95	-	-
Corridor	95	-	-
Cluster Bedroom 2	95	-	-
Cluster Kitchen 2	95	-	-
Cluster Bedroom 4	95	-	-
Cluster Bedroom 3	95	-	-
Acc. Cluster Bedroom	95	-	-
Cluster Kitchen 1	95	-	-
Cluster Bedroom 1	95	-	-
WC C1	95	-	-
WC C2	95	-	-
WC C3	95	-	-
WC C4	95	-	-
WC ACB	95	-	-
Corridor	95	-	-
Corridor	95	-	-
Studio 3	95	95	1.579
Studio 4	95	95	1.579
Studio 5	95	95	1.579
Studio 6	95	95	1.579
Studio 7	95	95	1.579
Studio 8	95	95	1.579
Studio 9	95	95	1.579
Store	95	-	-
Riser	95	-	-
Riser	95	-	-
Corridor	95	-	-
Lift	95	-	-
Lift	95	-	-
Riser	95	-	-
Riser	95	-	-
Stair	95	-	-
Studio 2	95	95	1.579
Studio 1	95	95	1.579
Acc. Studio	95	95	1.579
Studio 10	95	95	1.579
Studio 11	95	95	1.579
Cluster Bedroom 8	95	-	-
Cluster Bedroom 7	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
Cluster Bedroom 6	95	-	-
Cluster Bedroom 5	95	-	-
WC S1	95	-	-
WC S2	95	-	-
WC S3	95	-	-
WC S4	95	-	-
WC S5	95	-	-
WC S6	95	-	-
WC S7	95	-	-
WC S8	95	-	-
WC S9	95	-	-
WC AS	95	-	-
WC S10	95	-	-
WC S11	95	-	-
WC C8	95	-	-
WC C7	95	-	-
WC C6	95	-	-
WC C5	95	-	-
Store	95	-	-
Store	95	-	-
Lift	95	-	-
Stairs	95	-	-
Corridor	95	-	-
Cluster Bedroom 2	95	-	-
Cluster Kitchen 2	95	-	-
Cluster Bedroom 4	95	-	-
Cluster Bedroom 3	95	-	-
Acc. Cluster Bedroom	95	-	-
Cluster Kitchen 1	95	-	-
Cluster Bedroom 1	95	-	-
WC C1	95	-	-
WC C2	95	-	-
WC C3	95	-	-
WC C4	95	-	-
WC ACB	95	-	-
Corridor	95	-	-
Corridor	95	-	-
Studio 3	95	95	1.579
Studio 4	95	95	1.579
Studio 5	95	95	1.579
Studio 6	95	95	1.579
Studio 7	95	95	1.579
Studio 8	95	95	1.579

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
Studio 9	95	95	1.579
Store	95	-	-
Riser	95	-	-
Riser	95	-	-
Corridor	95	-	-
Lift	95	-	-
Lift	95	-	-
Riser	95	-	-
Riser	95	-	-
Stair	95	-	-
Studio 2	95	95	1.579
Studio 1	95	95	1.579
Acc. Studio	95	95	1.579
Studio 10	95	95	1.579
Studio 11	95	95	1.579
Cluster Bedroom 8	95	-	-
Cluster Bedroom 7	95	-	-
Cluster Bedroom 6	95	-	-
Cluster Bedroom 5	95	-	-
WC S1	95	-	-
WC S2	95	-	-
WC S3	95	-	-
WC S4	95	-	-
WC S5	95	-	-
WC S6	95	-	-
WC S7	95	-	-
WC S8	95	-	-
WC S9	95	-	-
WC AS	95	-	-
WC S10	95	-	-
WC S11	95	-	-
WC C8	95	-	-
WC C7	95	-	-
WC C6	95	-	-
WC C5	95	-	-
Store	95	-	-
Store	95	-	-
Lift	95	-	-
Stairs	95	-	-
Corridor	95	-	-
Cluster Bedroom 2	95	-	-
Cluster Kitchen 2	95	-	-
Cluster Bedroom 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
Cluster Bedroom 3	95	-	-
Acc. Cluster Bedroom	95	-	-
Cluster Kitchen 1	95	-	-
Cluster Bedroom 1	95	-	-
WC C1	95	-	-
WC C2	95	-	-
WC C3	95	-	-
WC C4	95	-	-
WC ACB	95	-	-
Corridor	95	-	-
Corridor	95	-	-
Studio 3	95	95	1.579
Studio 4	95	95	1.579
Studio 5	95	95	1.579
Studio 6	95	95	1.579
Studio 7	95	95	1.579
Studio 8	95	95	1.579
Studio 9	95	95	1.579
Store	95	-	-
Riser	95	-	-
Riser	95	-	-
Corridor	95	-	-
Lift	95	-	-
Lift	95	-	-
Riser	95	-	-
Riser	95	-	-
Stair	95	-	-
Studio 2	95	95	1.579
Studio 1	95	95	1.579
Acc. Studio	95	95	1.579
Studio 10	95	95	1.579
Studio 11	95	95	1.579
Cluster Bedroom 8	95	-	-
Cluster Bedroom 7	95	-	-
Cluster Bedroom 6	95	-	-
Cluster Bedroom 5	95	-	-
WC S1	95	-	-
WC S2	95	-	-
WC S3	95	-	-
WC S4	95	-	-
WC S5	95	-	-
WC S6	95	-	-
WC S7	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
WC S8	95	-	-
WC S9	95	-	-
WC AS	95	-	-
WC S10	95	-	-
WC S11	95	-	-
WC C8	95	-	-
WC C7	95	-	-
WC C6	95	-	-
WC C5	95	-	-
Store	95	-	-
Store	95	-	-
Lift	95	-	-
Stairs	95	-	-
Corridor	95	-	-
Cluster Bedroom 2	95	-	-
Cluster Kitchen 2	95	-	-
Cluster Bedroom 4	95	-	-
Cluster Bedroom 3	95	-	-
Acc. Cluster Bedroom	95	-	-
Cluster Kitchen 1	95	-	-
Cluster Bedroom 1	95	-	-
WC C1	95	-	-
WC C2	95	-	-
WC C3	95	-	-
WC C4	95	-	-
WC ACB	95	-	-
Corridor	95	-	-
Corridor	95	-	-
Studio 3	95	95	1.579
Studio 4	95	95	1.579
Studio 5	95	95	1.579
Studio 6	95	95	1.579
Studio 7	95	95	1.579
Studio 8	95	95	1.579
Studio 9	95	95	1.579
Store	95	-	-
Riser	95	-	-
Riser	95	-	-
Corridor	95	-	-
Lift	95	-	-
Lift	95	-	-
Riser	95	-	-
Riser	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
Stair	95	-	-
Studio 2	95	95	1.579
Studio 1	95	95	1.579
Acc. Studio	95	95	1.579
Studio 10	95	95	1.579
Studio 11	95	95	1.579
Cluster Bedroom 8	95	-	-
Cluster Bedroom 7	95	-	-
Cluster Bedroom 6	95	-	-
Cluster Bedroom 5	95	-	-
WC S1	95	-	-
WC S2	95	-	-
WC S3	95	-	-
WC S4	95	-	-
WC S5	95	-	-
WC S6	95	-	-
WC S7	95	-	-
WC S8	95	-	-
WC S9	95	-	-
WC AS	95	-	-
WC S10	95	-	-
WC S11	95	-	-
WC C8	95	-	-
WC C7	95	-	-
WC C6	95	-	-
WC C5	95	-	-
Store	95	-	-
Store	95	-	-
Lift	95	-	-
Stairs	95	-	-
Corridor	95	-	-
Cluster Bedroom 2	95	-	-
Cluster Kitchen 2	95	-	-
Cluster Bedroom 4	95	-	-
Cluster Bedroom 3	95	-	-
Acc. Cluster Bedroom	95	-	-
Cluster Kitchen 1	95	-	-
Cluster Bedroom 1	95	-	-
WC C1	95	-	-
WC C2	95	-	-
WC C3	95	-	-
WC C4	95	-	-
WC ACB	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
Corridor	95	-	-
Corridor	95	-	-
Studio 3	95	95	1.579
Studio 4	95	95	1.579
Studio 5	95	95	1.579
Studio 6	95	95	1.579
Studio 7	95	95	1.579
Studio 8	95	95	1.579
Studio 9	95	95	1.579
Store	95	-	-
Riser	95	-	-
Riser	95	-	-
Corridor	95	-	-
Lift	95	-	-
Lift	95	-	-
Riser	95	-	-
Riser	95	-	-
Stair	95	-	-
Studio 2	95	95	1.579
Studio 1	95	95	1.579
Acc. Studio	95	95	1.579
Studio 10	95	95	1.579
Studio 11	95	95	1.579
Cluster Bedroom 8	95	-	-
Cluster Bedroom 7	95	-	-
Cluster Bedroom 6	95	-	-
Cluster Bedroom 5	95	-	-
WC S1	95	-	-
WC S2	95	-	-
WC S3	95	-	-
WC S4	95	-	-
WC S5	95	-	-
WC S6	95	-	-
WC S7	95	-	-
WC S8	95	-	-
WC S9	95	-	-
WC AS	95	-	-
WC S10	95	-	-
WC S11	95	-	-
WC C8	95	-	-
WC C7	95	-	-
WC C6	95	-	-
WC C5	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
Store	95	-	-
Store	95	-	-
Lift	95	-	-
Stairs	95	-	-
Corridor	95	-	-
Cluster Bedroom 2	95	-	-
Cluster Kitchen 2	95	-	-
Cluster Bedroom 4	95	-	-
Cluster Bedroom 3	95	-	-
Acc. Cluster Bedroom	95	-	-
Cluster Kitchen 1	95	-	-
Cluster Bedroom 1	95	-	-
WC C1	95	-	-
WC C2	95	-	-
WC C3	95	-	-
WC C4	95	-	-
WC ACB	95	-	-
Corridor	95	-	-
Corridor	95	-	-
Studio 3	95	95	1.579
Studio 4	95	95	1.579
Studio 5	95	95	1.579
Studio 6	95	95	1.579
Studio 7	95	95	1.579
Studio 8	95	95	1.579
Studio 9	95	95	1.579
Store	95	-	-
Riser	95	-	-
Riser	95	-	-
Corridor	95	-	-
Lift	95	-	-
Lift	95	-	-
Riser	95	-	-
Riser	95	-	-
Stair	95	-	-
Studio 2	95	95	1.579
Studio 1	95	95	1.579
Acc. Studio	95	95	1.579
Studio 10	95	95	1.579
Studio 11	95	95	1.579
Cluster Bedroom 8	95	-	-
Cluster Bedroom 7	95	-	-
Cluster Bedroom 6	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
Cluster Bedroom 5	95	-	-
WC S1	95	-	-
WC S2	95	-	-
WC S3	95	-	-
WC S4	95	-	-
WC S5	95	-	-
WC S6	95	-	-
WC S7	95	-	-
WC S8	95	-	-
WC S9	95	-	-
WC AS	95	-	-
WC S10	95	-	-
WC S11	95	-	-
WC C8	95	-	-
WC C7	95	-	-
WC C6	95	-	-
WC C5	95	-	-
Store	95	-	-
Store	95	-	-
Lift	95	-	-
Stairs	95	-	-
Corridor	95	-	-
Cluster Bedroom 2	95	-	-
Cluster Kitchen 2	95	-	-
Cluster Bedroom 4	95	-	-
Cluster Bedroom 3	95	-	-
Acc. Cluster Bedroom	95	-	-
Cluster Kitchen 1	95	-	-
Cluster Bedroom 1	95	-	-
WC C1	95	-	-
WC C2	95	-	-
WC C3	95	-	-
WC C4	95	-	-
WC ACB	95	-	-
Corridor	95	-	-
Corridor	95	-	-
Studio 3	95	95	1.579
Studio 4	95	95	1.579
Studio 5	95	95	1.579
Studio 6	95	95	1.579
Studio 7	95	95	1.579
Studio 8	95	95	1.579
Studio 9	95	95	1.579

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
Store	95	-	-
Riser	95	-	-
Riser	95	-	-
Corridor	95	-	-
Lift	95	-	-
Lift	95	-	-
Riser	95	-	-
Riser	95	-	-
Stair	95	-	-
Studio 2	95	95	1.579
Studio 1	95	95	1.579
Acc. Studio	95	95	1.579
Studio 10	95	95	1.579
Studio 11	95	95	1.579
Cluster Bedroom 8	95	-	-
Cluster Bedroom 7	95	-	-
Cluster Bedroom 6	95	-	-
Cluster Bedroom 5	95	-	-
WC S1	95	-	-
WC S2	95	-	-
WC S3	95	-	-
WC S4	95	-	-
WC S5	95	-	-
WC S6	95	-	-
WC S7	95	-	-
WC S8	95	-	-
WC S9	95	-	-
WC AS	95	-	-
WC S10	95	-	-
WC S11	95	-	-
WC C8	95	-	-
WC C7	95	-	-
WC C6	95	-	-
WC C5	95	-	-
Store	95	-	-
Store	95	-	-
Lift	95	-	-
Stairs	95	-	-
Corridor	95	-	-
Cluster Bedroom 2	95	-	-
Cluster Kitchen 2	95	-	-
Cluster Bedroom 4	95	-	-
Cluster Bedroom 3	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
Acc. Cluster Bedroom	95	-	-
Cluster Kitchen 1	95	-	-
Cluster Bedroom 1	95	-	-
WC C1	95	-	-
WC C2	95	-	-
WC C3	95	-	-
WC C4	95	-	-
WC ACB	95	-	-
Corridor	95	-	-
Corridor	95	-	-
Studio 3	95	95	1.579
Studio 4	95	95	1.579
Studio 5	95	95	1.579
Studio 6	95	95	1.579
Studio 7	95	95	1.579
Studio 8	95	95	1.579
Studio 9	95	95	1.579
Store	95	-	-
Riser	95	-	-
Riser	95	-	-
Corridor	95	-	-
Lift	95	-	-
Lift	95	-	-
Riser	95	-	-
Riser	95	-	-
Stair	95	-	-
Studio 2	95	95	1.579
Studio 1	95	95	1.579
Acc. Studio	95	95	1.579
Studio 10	95	95	1.579
Studio 11	95	95	1.579
Cluster Bedroom 8	95	-	-
Cluster Bedroom 7	95	-	-
Cluster Bedroom 6	95	-	-
Cluster Bedroom 5	95	-	-
WC S1	95	-	-
WC S2	95	-	-
WC S3	95	-	-
WC S4	95	-	-
WC S5	95	-	-
WC S6	95	-	-
WC S7	95	-	-
WC S8	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
WC S9	95	-	-
WC AS	95	-	-
WC S10	95	-	-
WC S11	95	-	-
WC C8	95	-	-
WC C7	95	-	-
WC C6	95	-	-
WC C5	95	-	-
Store	95	-	-
Store	95	-	-
Lift	95	-	-
Stairs	95	-	-
Corridor	95	-	-
Cluster Bedroom 2	95	-	-
Cluster Kitchen 2	95	-	-
Cluster Bedroom 4	95	-	-
Cluster Bedroom 3	95	-	-
Acc. Cluster Bedroom	95	-	-
Cluster Kitchen 1	95	-	-
Cluster Bedroom 1	95	-	-
WC C1	95	-	-
WC C2	95	-	-
WC C3	95	-	-
WC C4	95	-	-
WC ACB	95	-	-
Corridor	95	-	-
Corridor	95	-	-
Studio 3	95	95	1.579
Studio 4	95	95	1.579
Studio 5	95	95	1.579
Studio 6	95	95	1.579
Studio 7	95	95	1.579
Studio 8	95	95	1.579
Studio 9	95	95	1.579
Store	95	-	-
Riser	95	-	-
Riser	95	-	-
Corridor	95	-	-
Lift	95	-	-
Lift	95	-	-
Riser	95	-	-
Riser	95	-	-
Stair	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
Studio 2	95	95	1.579
Studio 1	95	95	1.579
Acc. Studio	95	95	1.579
Studio 10	95	95	1.579
Studio 11	95	95	1.579
Cluster Bedroom 8	95	-	-
Cluster Bedroom 7	95	-	-
Cluster Bedroom 6	95	-	-
Cluster Bedroom 5	95	-	-
WC S1	95	-	-
WC S2	95	-	-
WC S3	95	-	-
WC S4	95	-	-
WC S5	95	-	-
WC S6	95	-	-
WC S7	95	-	-
WC S8	95	-	-
WC S9	95	-	-
WC AS	95	-	-
WC S10	95	-	-
WC S11	95	-	-
WC C8	95	-	-
WC C7	95	-	-
WC C6	95	-	-
WC C5	95	-	-
Store	95	-	-
Store	95	-	-
Lift	95	-	-
Stairs	95	-	-
Corridor	95	-	-
Cluster Bedroom 2	95	-	-
Cluster Kitchen 2	95	-	-
Cluster Bedroom 4	95	-	-
Cluster Bedroom 3	95	-	-
Acc. Cluster Bedroom	95	-	-
Cluster Kitchen 1	95	-	-
Cluster Bedroom 1	95	-	-
WC C1	95	-	-
WC C2	95	-	-
WC C3	95	-	-
WC C4	95	-	-
WC ACB	95	-	-
Corridor	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
Corridor	95	-	-
Studio 3	95	95	1.579
Studio 4	95	95	1.579
Studio 5	95	95	1.579
Studio 6	95	95	1.579
Studio 7	95	95	1.579
Studio 8	95	95	1.579
Studio 9	95	95	1.579
Store	95	-	-
Riser	95	-	-
Riser	95	-	-
Corridor	95	-	-
Lift	95	-	-
Lift	95	-	-
Riser	95	-	-
Riser	95	-	-
Stair	95	-	-
Studio 2	95	95	1.579
Studio 1	95	95	1.579
Acc. Studio	95	95	1.579
Studio 10	95	95	1.579
Studio 11	95	95	1.579
Cluster Bedroom 8	95	-	-
Cluster Bedroom 7	95	-	-
Cluster Bedroom 6	95	-	-
Cluster Bedroom 5	95	-	-
WC S1	95	-	-
WC S2	95	-	-
WC S3	95	-	-
WC S4	95	-	-
WC S5	95	-	-
WC S6	95	-	-
WC S7	95	-	-
WC S8	95	-	-
WC S9	95	-	-
WC AS	95	-	-
WC S10	95	-	-
WC S11	95	-	-
WC C8	95	-	-
WC C7	95	-	-
WC C6	95	-	-
WC C5	95	-	-
Store	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
Store	95	-	-
Lift	95	-	-
Stairs	95	-	-
Corridor	95	-	-
Cluster Bedroom 2	95	-	-
Cluster Kitchen 2	95	-	-
Cluster Bedroom 4	95	-	-
Cluster Bedroom 3	95	-	-
Acc. Cluster Bedroom	95	-	-
Cluster Kitchen 1	95	-	-
Cluster Bedroom 1	95	-	-
WC C1	95	-	-
WC C2	95	-	-
WC C3	95	-	-
WC C4	95	-	-
WC ACB	95	-	-
Corridor	95	-	-
Corridor	95	-	-
Studio 3	95	95	1.579
Studio 4	95	95	1.579
Studio 5	95	95	1.579
Studio 6	95	95	1.579
Studio 7	95	95	1.579
Studio 8	95	95	1.579
Studio 9	95	95	1.579
Store	95	-	-
Riser	95	-	-
Riser	95	-	-
Corridor	95	-	-
Lift	95	-	-
Lift	95	-	-
Riser	95	-	-
Riser	95	-	-
Stair	95	-	-
Studio 2	95	95	1.579
Studio 1	95	95	1.579
Acc. Studio	95	95	1.579
Studio 10	95	95	1.579
Studio 11	95	95	1.579
Cluster Bedroom 8	95	-	-
Cluster Bedroom 7	95	-	-
Cluster Bedroom 6	95	-	-
Cluster Bedroom 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
WC S1	95	-	-
WC S2	95	-	-
WC S3	95	-	-
WC S4	95	-	-
WC S5	95	-	-
WC S6	95	-	-
WC S7	95	-	-
WC S8	95	-	-
WC S9	95	-	-
WC AS	95	-	-
WC S10	95	-	-
WC S11	95	-	-
WC C8	95	-	-
WC C7	95	-	-
WC C6	95	-	-
WC C5	95	-	-
Store	95	-	-
Store	95	-	-
Lift	95	-	-
Stairs	95	-	-
Corridor	95	-	-
Cluster Bedroom 2	95	-	-
Cluster Kitchen 2	95	-	-
Cluster Bedroom 4	95	-	-
Cluster Bedroom 3	95	-	-
Acc. Cluster Bedroom	95	-	-
Cluster Kitchen 1	95	-	-
Cluster Bedroom 1	95	-	-
WC C1	95	-	-
WC C2	95	-	-
WC C3	95	-	-
WC C4	95	-	-
WC ACB	95	-	-
Corridor	95	-	-
Corridor	95	-	-
Studio 3	95	95	1.579
Studio 4	95	95	1.579
Studio 5	95	95	1.579
Studio 6	95	95	1.579
Studio 7	95	95	1.579
Studio 8	95	95	1.579
Studio 9	95	95	1.579
Store	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
Riser	95	-	-
Riser	95	-	-
Corridor	95	-	-
Lift	95	-	-
Lift	95	-	-
Riser	95	-	-
Riser	95	-	-
Stair	95	-	-
Studio 2	95	95	1.579
Studio 1	95	95	1.579
Acc. Studio	95	95	1.579
Studio 10	95	95	1.579
Studio 11	95	95	1.579
Cluster Bedroom 8	95	-	-
Cluster Bedroom 7	95	-	-
Cluster Bedroom 6	95	-	-
Cluster Bedroom 5	95	-	-
WC S1	95	-	-
WC S2	95	-	-
WC S3	95	-	-
WC S4	95	-	-
WC S5	95	-	-
WC S6	95	-	-
WC S7	95	-	-
WC S8	95	-	-
WC S9	95	-	-
WC AS	95	-	-
WC S10	95	-	-
WC S11	95	-	-
WC C8	95	-	-
WC C7	95	-	-
WC C6	95	-	-
WC C5	95	-	-
Store	95	-	-
Store	95	-	-
Lift	95	-	-
Stairs	95	-	-
Corridor	95	-	-
Cluster Bedroom 2	95	-	-
Cluster Kitchen 2	95	-	-
Cluster Bedroom 4	95	-	-
Cluster Bedroom 3	95	-	-
Acc. Cluster Bedroom	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
Cluster Kitchen 1	95	-	-
Cluster Bedroom 1	95	-	-
WC C1	95	-	-
WC C2	95	-	-
WC C3	95	-	-
WC C4	95	-	-
WC ACB	95	-	-
Corridor	95	-	-
Corridor	95	-	-
Studio 3	95	95	1.579
Studio 4	95	95	1.579
Studio 5	95	95	1.579
Studio 6	95	95	1.579
Studio 7	95	95	1.579
Studio 8	95	95	1.579
Studio 9	95	95	1.579
Store	95	-	-
Riser	95	-	-
Riser	95	-	-
Corridor	95	-	-
Lift	95	-	-
Lift	95	-	-
Riser	95	-	-
Riser	95	-	-
Stair	95	-	-
Studio 2	95	95	1.579
Studio 1	95	95	1.579
Acc. Studio	95	95	1.579
Studio 10	95	95	1.579
Studio 11	95	95	1.579
Cluster Bedroom 8	95	-	-
Cluster Bedroom 7	95	-	-
Cluster Bedroom 6	95	-	-
Cluster Bedroom 5	95	-	-
WC S1	95	-	-
WC S2	95	-	-
WC S3	95	-	-
WC S4	95	-	-
WC S5	95	-	-
WC S6	95	-	-
WC S7	95	-	-
WC S8	95	-	-
WC S9	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
WC AS	95	-	-
WC S10	95	-	-
WC S11	95	-	-
WC C8	95	-	-
WC C7	95	-	-
WC C6	95	-	-
WC C5	95	-	-
Store	95	-	-
Store	95	-	-
Lift	95	-	-
Stairs	95	-	-
Corridor	95	-	-
Cluster Bedroom 2	95	-	-
Cluster Kitchen 2	95	-	-
Cluster Bedroom 4	95	-	-
Cluster Bedroom 3	95	-	-
Acc. Cluster Bedroom	95	-	-
Cluster Kitchen 1	95	-	-
Cluster Bedroom 1	95	-	-
WC C1	95	-	-
WC C2	95	-	-
WC C3	95	-	-
WC C4	95	-	-
WC ACB	95	-	-
Corridor	95	-	-
Corridor	95	-	-
Studio 3	95	95	1.579
Studio 4	95	95	1.579
Studio 5	95	95	1.579
Studio 6	95	95	1.579
Studio 7	95	95	1.579
Studio 8	95	95	1.579
Studio 9	95	95	1.579
Store	95	-	-
Riser	95	-	-
Riser	95	-	-
Corridor	95	-	-
Lift	95	-	-
Lift	95	-	-
Riser	95	-	-
Riser	95	-	-
Stair	95	-	-
Studio 2	95	95	1.579

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
Studio 1	95	95	1.579
Acc. Studio	95	95	1.579
Studio 10	95	95	1.579
Studio 11	95	95	1.579
Cluster Bedroom 8	95	-	-
Cluster Bedroom 7	95	-	-
Cluster Bedroom 6	95	-	-
Cluster Bedroom 5	95	-	-
WC S1	95	-	-
WC S2	95	-	-
WC S3	95	-	-
WC S4	95	-	-
WC S5	95	-	-
WC S6	95	-	-
WC S7	95	-	-
WC S8	95	-	-
WC S9	95	-	-
WC AS	95	-	-
WC S10	95	-	-
WC S11	95	-	-
WC C8	95	-	-
WC C7	95	-	-
WC C6	95	-	-
WC C5	95	-	-
Store	95	-	-
Store	95	-	-
Lift	95	-	-
Stairs	95	-	-
Corridor	95	-	-
Cluster Bedroom 2	95	-	-
Cluster Kitchen 2	95	-	-
Cluster Bedroom 4	95	-	-
Cluster Bedroom 3	95	-	-
Acc. Cluster Bedroom	95	-	-
Cluster Kitchen 1	95	-	-
Cluster Bedroom 1	95	-	-
WC C1	95	-	-
WC C2	95	-	-
WC C3	95	-	-
WC C4	95	-	-
WC ACB	95	-	-
Corridor	95	-	-
Corridor	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
Studio 3	95	95	1.579
Studio 4	95	95	1.579
Studio 5	95	95	1.579
Studio 6	95	95	1.579
Studio 7	95	95	1.579
Studio 8	95	95	1.579
Studio 9	95	95	1.579
Store	95	-	-
Riser	95	-	-
Riser	95	-	-
Corridor	95	-	-
Lift	95	-	-
Lift	95	-	-
Riser	95	-	-
Riser	95	-	-
Stair	95	-	-
Studio 2	95	95	1.579
Studio 1	95	95	1.579
Acc. Studio	95	95	1.579
Studio 10	95	95	1.579
Studio 11	95	95	1.579
Cluster Bedroom 8	95	-	-
Cluster Bedroom 7	95	-	-
Cluster Bedroom 6	95	-	-
Cluster Bedroom 5	95	-	-
WC S1	95	-	-
WC S2	95	-	-
WC S3	95	-	-
WC S4	95	-	-
WC S5	95	-	-
WC S6	95	-	-
WC S7	95	-	-
WC S8	95	-	-
WC S9	95	-	-
WC AS	95	-	-
WC S10	95	-	-
WC S11	95	-	-
WC C8	95	-	-
WC C7	95	-	-
WC C6	95	-	-
WC C5	95	-	-
Store	95	-	-
Store	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
Lift	95	-	-
Stairs	95	-	-
Corridor	95	-	-
Cluster Bedroom 2	95	-	-
Cluster Kitchen 2	95	-	-
Cluster Bedroom 4	95	-	-
Cluster Bedroom 3	95	-	-
Acc. Cluster Bedroom	95	-	-
Cluster Kitchen 1	95	-	-
Cluster Bedroom 1	95	-	-
WC C1	95	-	-
WC C2	95	-	-
WC C3	95	-	-
WC C4	95	-	-
WC ACB	95	-	-
Corridor	95	-	-
Corridor	95	-	-
Studio 3	95	95	1.579
Studio 4	95	95	1.579
Studio 5	95	95	1.579
Studio 6	95	95	1.579
Studio 7	95	95	1.579
Studio 8	95	95	1.579
Studio 9	95	95	1.579
Store	95	-	-
Riser	95	-	-
Riser	95	-	-
Corridor	95	-	-
Lift	95	-	-
Lift	95	-	-
Riser	95	-	-
Riser	95	-	-
Stair	95	-	-
Studio 2	95	95	1.579
Studio 1	95	95	1.579
Acc. Studio	95	95	1.579
Studio 10	95	95	1.579
Studio 11	95	95	1.579
Cluster Bedroom 8	95	-	-
Cluster Bedroom 7	95	-	-
Cluster Bedroom 6	95	-	-
Cluster Bedroom 5	95	-	-
WC S1	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
WC S2	95	-	-
WC S3	95	-	-
WC S4	95	-	-
WC S5	95	-	-
WC S6	95	-	-
WC S7	95	-	-
WC S8	95	-	-
WC S9	95	-	-
WC AS	95	-	-
WC S10	95	-	-
WC S11	95	-	-
WC C8	95	-	-
WC C7	95	-	-
WC C6	95	-	-
WC C5	95	-	-
Store	95	-	-
Store	95	-	-
Lift	95	-	-
Stairs	95	-	-
Corridor	95	-	-
Cluster Bedroom 2	95	-	-
Cluster Kitchen 2	95	-	-
Cluster Bedroom 4	95	-	-
Cluster Bedroom 3	95	-	-
Acc. Cluster Bedroom	95	-	-
Cluster Kitchen 1	95	-	-
Cluster Bedroom 1	95	-	-
WC C1	95	-	-
WC C2	95	-	-
WC C3	95	-	-
WC C4	95	-	-
WC ACB	95	-	-
Corridor	95	-	-
Corridor	95	-	-
Studio 3	95	95	1.579
Studio 4	95	95	1.579
Studio 5	95	95	1.579
Studio 6	95	95	1.579
Studio 7	95	95	1.579
Studio 8	95	95	1.579
Studio 9	95	95	1.579
Store	95	-	-
Riser	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
Riser	95	-	-
Corridor	95	-	-
Lift	95	-	-
Lift	95	-	-
Riser	95	-	-
Riser	95	-	-
Stair	95	-	-
Studio 2	95	95	1.579
Studio 1	95	95	1.579
Acc. Studio	95	95	1.579
Studio 10	95	95	1.579
Studio 11	95	95	1.579
Cluster Bedroom 8	95	-	-
Cluster Bedroom 7	95	-	-
Cluster Bedroom 6	95	-	-
Cluster Bedroom 5	95	-	-
WC S1	95	-	-
WC S2	95	-	-
WC S3	95	-	-
WC S4	95	-	-
WC S5	95	-	-
WC S6	95	-	-
WC S7	95	-	-
WC S8	95	-	-
WC S9	95	-	-
WC AS	95	-	-
WC S10	95	-	-
WC S11	95	-	-
WC C8	95	-	-
WC C7	95	-	-
WC C6	95	-	-
WC C5	95	-	-
Store	95	-	-
Store	95	-	-
Lift	95	-	-
Stairs	95	-	-
Corridor	95	-	-
Cluster Bedroom 2	95	-	-
Cluster Kitchen 2	95	-	-
Cluster Bedroom 4	95	-	-
Cluster Bedroom 3	95	-	-
Acc. Cluster Bedroom	95	-	-
Cluster Kitchen 1	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
Cluster Bedroom 1	95	-	-
WC C1	95	-	-
WC C2	95	-	-
WC C3	95	-	-
WC C4	95	-	-
WC ACB	95	-	-
Corridor	95	-	-
Corridor	95	-	-
Studio 3	95	95	1.579
Studio 4	95	95	1.579
Studio 5	95	95	1.579
Studio 6	95	95	1.579
Studio 7	95	95	1.579
Studio 8	95	95	1.579
Studio 9	95	95	1.579
Store	95	-	-
Riser	95	-	-
Riser	95	-	-
Corridor	95	-	-
Lift	95	-	-
Lift	95	-	-
Riser	95	-	-
Riser	95	-	-
Stair	95	-	-
Studio 2	95	95	1.579
Studio 1	95	95	1.579
Acc. Studio	95	95	1.579
Studio 10	95	95	1.579
Studio 11	95	95	1.579
Cluster Bedroom 8	95	-	-
Cluster Bedroom 7	95	-	-
Cluster Bedroom 6	95	-	-
Cluster Bedroom 5	95	-	-
WC S1	95	-	-
WC S2	95	-	-
WC S3	95	-	-
WC S4	95	-	-
WC S5	95	-	-
WC S6	95	-	-
WC S7	95	-	-
WC S8	95	-	-
WC S9	95	-	-
WC AS	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
WC S10	95	-	-
WC S11	95	-	-
WC C8	95	-	-
WC C7	95	-	-
WC C6	95	-	-
WC C5	95	-	-
Store	95	-	-
Store	95	-	-
Lift	95	-	-
Stairs	95	-	-
Corridor	95	-	-
Cluster Bedroom 2	95	-	-
Cluster Kitchen 2	95	-	-
Cluster Bedroom 4	95	-	-
Cluster Bedroom 3	95	-	-
Acc. Cluster Bedroom	95	-	-
Cluster Kitchen 1	95	-	-
Cluster Bedroom 1	95	-	-
WC C1	95	-	-
WC C2	95	-	-
WC C3	95	-	-
WC C4	95	-	-
WC ACB	95	-	-
Corridor	95	-	-
Corridor	95	-	-
Studio 3	95	95	1.579
Studio 4	95	95	1.579
Studio 5	95	95	1.579
Studio 6	95	95	1.579
Studio 7	95	95	1.579
Studio 8	95	95	1.579
Studio 9	95	95	1.579
Store	95	-	-
Riser	95	-	-
Riser	95	-	-
Corridor	95	-	-
Lift	95	-	-
Lift	95	-	-
Riser	95	-	-
Riser	95	-	-
Stair	95	-	-
Studio 2	95	95	1.579
Studio 1	95	95	1.579

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
Acc. Studio	95	95	1.579
Studio 10	95	95	1.579
Studio 11	95	95	1.579
Cluster Bedroom 8	95	-	-
Cluster Bedroom 7	95	-	-
Cluster Bedroom 6	95	-	-
Cluster Bedroom 5	95	-	-
WC S1	95	-	-
WC S2	95	-	-
WC S3	95	-	-
WC S4	95	-	-
WC S5	95	-	-
WC S6	95	-	-
WC S7	95	-	-
WC S8	95	-	-
WC S9	95	-	-
WC AS	95	-	-
WC S10	95	-	-
WC S11	95	-	-
WC C8	95	-	-
WC C7	95	-	-
WC C6	95	-	-
WC C5	95	-	-
Store	95	-	-
Store	95	-	-
Lift	95	-	-
Stairs	95	-	-
Corridor	95	-	-
Cluster Bedroom 2	95	-	-
Cluster Kitchen 2	95	-	-
Cluster Bedroom 4	95	-	-
Cluster Bedroom 3	95	-	-
Acc. Cluster Bedroom	95	-	-
Cluster Kitchen 1	95	-	-
Cluster Bedroom 1	95	-	-
WC C1	95	-	-
WC C2	95	-	-
WC C3	95	-	-
WC C4	95	-	-
WC ACB	95	-	-
Corridor	95	-	-
Corridor	95	-	-
Studio 3	95	95	1.579

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
Studio 4	95	95	1.579
Studio 5	95	95	1.579
Studio 6	95	95	1.579
Studio 7	95	95	1.579
Studio 8	95	95	1.579
Studio 9	95	95	1.579
Store	95	-	-
Riser	95	-	-
Riser	95	-	-
Corridor	95	-	-
Lift	95	-	-
Lift	95	-	-
Riser	95	-	-
Riser	95	-	-
Stair	95	-	-
Studio 2	95	95	1.579
Studio 1	95	95	1.579
Acc. Studio	95	95	1.579
Studio 10	95	95	1.579
Studio 11	95	95	1.579
Cluster Bedroom 8	95	-	-
Cluster Bedroom 7	95	-	-
Cluster Bedroom 6	95	-	-
Cluster Bedroom 5	95	-	-
WC S1	95	-	-
WC S2	95	-	-
WC S3	95	-	-
WC S4	95	-	-
WC S5	95	-	-
WC S6	95	-	-
WC S7	95	-	-
WC S8	95	-	-
WC S9	95	-	-
WC AS	95	-	-
WC S10	95	-	-
WC S11	95	-	-
WC C8	95	-	-
WC C7	95	-	-
WC C6	95	-	-
WC C5	95	-	-
Store	95	-	-
Store	95	-	-
Lift	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
Stairs	95	-	-
Corridor	95	-	-
Cluster Bedroom 2	95	-	-
Cluster Kitchen 2	95	-	-
Cluster Bedroom 4	95	-	-
Cluster Bedroom 3	95	-	-
Acc. Cluster Bedroom	95	-	-
Cluster Kitchen 1	95	-	-
Cluster Bedroom 1	95	-	-
WC C1	95	-	-
WC C2	95	-	-
WC C3	95	-	-
WC C4	95	-	-
WC ACB	95	-	-
Corridor	95	-	-
Corridor	95	-	-
Studio 3	95	95	1.579
Studio 4	95	95	1.579
Studio 5	95	95	1.579
Studio 6	95	95	1.579
Studio 7	95	95	1.579
Studio 8	95	95	1.579
Studio 9	95	95	1.579
Store	95	-	-
Riser	95	-	-
Riser	95	-	-
Corridor	95	-	-
Lift	95	-	-
Lift	95	-	-
Riser	95	-	-
Riser	95	-	-
Stair	95	-	-
Studio 2	95	95	1.579
Studio 1	95	95	1.579
Acc. Studio	95	95	1.579
Studio 10	95	95	1.579
Studio 11	95	95	1.579
Cluster Bedroom 8	95	-	-
Cluster Bedroom 7	95	-	-
Cluster Bedroom 6	95	-	-
Cluster Bedroom 5	95	-	-
WC S1	95	-	-
WC S2	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
WC S3	95	-	-
WC S4	95	-	-
WC S5	95	-	-
WC S6	95	-	-
WC S7	95	-	-
WC S8	95	-	-
WC S9	95	-	-
WC AS	95	-	-
WC S10	95	-	-
WC S11	95	-	-
WC C8	95	-	-
WC C7	95	-	-
WC C6	95	-	-
WC C5	95	-	-
Store	95	-	-
Store	95	-	-
Lift	95	-	-
Stairs	95	-	-
Corridor	95	-	-
Cluster Bedroom 2	95	-	-
Cluster Kitchen 2	95	-	-
Cluster Bedroom 4	95	-	-
Cluster Bedroom 3	95	-	-
Acc. Cluster Bedroom	95	-	-
Cluster Kitchen 1	95	-	-
Cluster Bedroom 1	95	-	-
WC C1	95	-	-
WC C2	95	-	-
WC C3	95	-	-
WC C4	95	-	-
WC ACB	95	-	-
Corridor	95	-	-
Corridor	95	-	-
Studio 3	95	95	1.579
Studio 4	95	95	1.579
Studio 5	95	95	1.579
Studio 6	95	95	1.579
Studio 7	95	95	1.579
Studio 8	95	95	1.579
Studio 9	95	95	1.579
Store	95	-	-
Riser	95	-	-
Riser	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
Corridor	95	-	-
Lift	95	-	-
Lift	95	-	-
Riser	95	-	-
Riser	95	-	-
Stair	95	-	-
Studio 2	95	95	1.579
Studio 1	95	95	1.579
Acc. Studio	95	95	1.579
Studio 10	95	95	1.579
Studio 11	95	95	1.579
Cluster Bedroom 8	95	-	-
Cluster Bedroom 7	95	-	-
Cluster Bedroom 6	95	-	-
Cluster Bedroom 5	95	-	-
WC S1	95	-	-
WC S2	95	-	-
WC S3	95	-	-
WC S4	95	-	-
WC S5	95	-	-
WC S6	95	-	-
WC S7	95	-	-
WC S8	95	-	-
WC S9	95	-	-
WC AS	95	-	-
WC S10	95	-	-
WC S11	95	-	-
WC C8	95	-	-
WC C7	95	-	-
WC C6	95	-	-
WC C5	95	-	-
Store	95	-	-
Store	95	-	-
Lift	95	-	-
Stairs	95	-	-
Corridor	95	-	-
Cluster Bedroom 2	95	-	-
Cluster Kitchen 2	95	-	-
Cluster Bedroom 4	95	-	-
Cluster Bedroom 3	95	-	-
Acc. Cluster Bedroom	95	-	-
Cluster Kitchen 1	95	-	-
Cluster Bedroom 1	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
WC C1	95	-	-
WC C2	95	-	-
WC C3	95	-	-
WC C4	95	-	-
WC ACB	95	-	-
Corridor	95	-	-
Corridor	95	-	-
00 Amenity	95	95	1.421
00 Acc WC	95	-	-
00 Riser	95	-	-
00 Lift Lobby	95	-	-
00 Entrance / Reception	95	95	1.421
00 Parcel Room	95	-	-
00 Office	95	-	-
00 Staff Kitchen	95	-	-
00 Cycle Lift Lobby	95	-	-
00 Cycle Lift	95	-	-
00 Staff WC	95	-	-
00 Sub Station	95	-	-
00 LV	95	-	-
00 Stair / Escape Corridor	95	-	-
00 Lift	95	-	-
00 Plant Lobby	95	-	-
00 Plant	95	-	-
00 Plant	95	-	-
00 Refuse	95	-	-
00 Generator	95	-	-
00 Amenity	95	95	1.421
00 Escape Corridor / Stairs	95	-	-
00 Lobby	95	-	-
00 Lift	95	-	-
00 Lift	95	-	-
00 Lobby	95	-	-
00 Storage	95	-	-
00 Riser	95	-	-
01 Study	95	-	-
01 Study	95	-	-
01 Riser	95	-	-
01 Lift Lobby	95	-	-
01 Lift Lobby	95	-	-
01 Lift	95	-	-
01 Lift	95	-	-
01 Corridor	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
01 Riser	95	-	-
01 Store	95	-	-
01 Riser	95	-	-
01 Lift 3	95	-	-
01 Stairs	95	-	-
01 Store	95	-	-
01 Corridor	95	-	-
01 Cycle Store	95	-	-
01 Cycle Store	95	-	-
01 Fine Dining	95	95	1.579
01 Fine Dining	95	95	1.579
01 Cycle Store	95	-	-
01 Cycle Lift	95	-	-
01 Cycle Lift Lobby	95	-	-
01 Gym	95	-	-
01 Lounge	95	95	1.421
01 Laundry	95	-	-
01 Laundry	95	-	-
Stairs	95	-	-

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?
Studio 3	NO (-65.1%)	NO
Studio 4	YES (+18.1%)	NO
Studio 5	YES (+19.7%)	NO
Studio 6	YES (+20.2%)	NO
Studio 7	YES (+20.7%)	NO
Studio 8	YES (+23.3%)	NO
Studio 9	NO (-63.5%)	NO
Studio 2	YES (+12.3%)	NO
Studio 1	NO (-23.2%)	NO
Acc. Studio	YES (+17.4%)	NO
Studio 10	YES (+15.4%)	NO
Studio 11	YES (+40.8%)	NO
Cluster Bedroom 8	YES (+35.7%)	NO
Cluster Bedroom 7	YES (+31.2%)	NO
Cluster Bedroom 6	YES (+38%)	NO
Cluster Bedroom 5	YES (+28.8%)	NO
Cluster Bedroom 2	NO (-10.1%)	NO
Cluster Kitchen 2	NO (-9.5%)	NO
Cluster Bedroom 4	NO (-11.6%)	NO
Cluster Bedroom 3	NO (-10.1%)	NO
Acc. Cluster Bedroom	NO (-6.1%)	NO

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Cluster Kitchen 1	NO (-22.2%)	NO
Cluster Bedroom 1	NO (-7.5%)	NO
Studio 3	NO (-65.1%)	NO
Studio 4	YES (+18.1%)	NO
Studio 5	YES (+19.7%)	NO
Studio 6	YES (+20.2%)	NO
Studio 7	YES (+20.7%)	NO
Studio 8	YES (+23.3%)	NO
Studio 9	NO (-63.5%)	NO
Studio 2	YES (+12.3%)	NO
Studio 1	NO (-23.2%)	NO
Acc. Studio	YES (+17.4%)	NO
Studio 10	YES (+15.4%)	NO
Studio 11	YES (+40.8%)	NO
Cluster Bedroom 8	YES (+35.7%)	NO
Cluster Bedroom 7	YES (+31.2%)	NO
Cluster Bedroom 6	YES (+38%)	NO
Cluster Bedroom 5	YES (+28.8%)	NO
Cluster Bedroom 2	NO (-10.1%)	NO
Cluster Kitchen 2	NO (-9.5%)	NO
Cluster Bedroom 4	NO (-11.6%)	NO
Cluster Bedroom 3	NO (-10.1%)	NO
Acc. Cluster Bedroom	NO (-6.1%)	NO
Cluster Kitchen 1	NO (-22.2%)	NO
Cluster Bedroom 1	NO (-7.5%)	NO
Studio 3	NO (-65.1%)	NO
Studio 4	YES (+18.1%)	NO
Studio 5	YES (+19.7%)	NO
Studio 6	YES (+20.2%)	NO
Studio 7	YES (+20.7%)	NO
Studio 8	YES (+23.3%)	NO
Studio 9	NO (-63.5%)	NO
Studio 2	YES (+12.3%)	NO
Studio 1	NO (-23.2%)	NO
Acc. Studio	YES (+17.4%)	NO
Studio 10	YES (+15.4%)	NO
Studio 11	YES (+40.8%)	NO
Cluster Bedroom 8	YES (+35.7%)	NO
Cluster Bedroom 7	YES (+31.2%)	NO
Cluster Bedroom 6	YES (+38%)	NO
Cluster Bedroom 5	YES (+28.8%)	NO
Cluster Bedroom 2	NO (-10.1%)	NO
Cluster Kitchen 2	NO (-9.5%)	NO
Cluster Bedroom 4	NO (-11.6%)	NO
Cluster Bedroom 3	NO (-10.1%)	NO
Acc. Cluster Bedroom	NO (-6.1%)	NO
Cluster Kitchen 1	NO (-22.2%)	NO
Cluster Bedroom 1	NO (-7.5%)	NO
Studio 3	NO (-65.1%)	NO

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Studio 4	YES (+18.1%)	NO
Studio 5	YES (+19.7%)	NO
Studio 6	YES (+20.2%)	NO
Studio 7	YES (+20.7%)	NO
Studio 8	YES (+23.3%)	NO
Studio 9	NO (-63.5%)	NO
Studio 2	YES (+12.3%)	NO
Studio 1	NO (-23.2%)	NO
Acc. Studio	YES (+17.4%)	NO
Studio 10	YES (+15.4%)	NO
Studio 11	YES (+40.8%)	NO
Cluster Bedroom 8	YES (+35.7%)	NO
Cluster Bedroom 7	YES (+31.2%)	NO
Cluster Bedroom 6	YES (+38%)	NO
Cluster Bedroom 5	YES (+28.8%)	NO
Cluster Bedroom 2	NO (-10.1%)	NO
Cluster Kitchen 2	NO (-9.5%)	NO
Cluster Bedroom 4	NO (-11.6%)	NO
Cluster Bedroom 3	NO (-10.1%)	NO
Acc. Cluster Bedroom	NO (-6.1%)	NO
Cluster Kitchen 1	NO (-22.2%)	NO
Cluster Bedroom 1	NO (-7.5%)	NO
Studio 3	NO (-65.1%)	NO
Studio 4	YES (+18.1%)	NO
Studio 5	YES (+19.7%)	NO
Studio 6	YES (+20.2%)	NO
Studio 7	YES (+20.7%)	NO
Studio 8	YES (+23.3%)	NO
Studio 9	NO (-63.5%)	NO
Studio 2	YES (+12.3%)	NO
Studio 1	NO (-23.2%)	NO
Acc. Studio	YES (+17.4%)	NO
Studio 10	YES (+15.4%)	NO
Studio 11	YES (+40.8%)	NO
Cluster Bedroom 8	YES (+35.7%)	NO
Cluster Bedroom 7	YES (+31.2%)	NO
Cluster Bedroom 6	YES (+38%)	NO
Cluster Bedroom 5	YES (+28.8%)	NO
Cluster Bedroom 2	NO (-10.1%)	NO
Cluster Kitchen 2	NO (-9.5%)	NO
Cluster Bedroom 4	NO (-11.6%)	NO
Cluster Bedroom 3	NO (-10.1%)	NO
Acc. Cluster Bedroom	NO (-6.1%)	NO
Cluster Kitchen 1	NO (-22.2%)	NO
Cluster Bedroom 1	NO (-7.5%)	NO
Studio 3	NO (-65.1%)	NO
Studio 4	YES (+18.1%)	NO
Studio 5	YES (+19.7%)	NO
Studio 6	YES (+20.2%)	NO

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Studio 7	YES (+20.7%)	NO
Studio 8	YES (+23.3%)	NO
Studio 9	NO (-63.5%)	NO
Studio 2	YES (+12.3%)	NO
Studio 1	NO (-23.2%)	NO
Acc. Studio	YES (+17.4%)	NO
Studio 10	YES (+15.4%)	NO
Studio 11	YES (+40.8%)	NO
Cluster Bedroom 8	YES (+35.7%)	NO
Cluster Bedroom 7	YES (+31.2%)	NO
Cluster Bedroom 6	YES (+38%)	NO
Cluster Bedroom 5	YES (+28.8%)	NO
Cluster Bedroom 2	NO (-10.1%)	NO
Cluster Kitchen 2	NO (-9.5%)	NO
Cluster Bedroom 4	NO (-11.6%)	NO
Cluster Bedroom 3	NO (-10.1%)	NO
Acc. Cluster Bedroom	NO (-6.1%)	NO
Cluster Kitchen 1	NO (-22.2%)	NO
Cluster Bedroom 1	NO (-7.5%)	NO
Studio 3	NO (-65.1%)	NO
Studio 4	YES (+18.1%)	NO
Studio 5	YES (+19.7%)	NO
Studio 6	YES (+20.2%)	NO
Studio 7	YES (+20.7%)	NO
Studio 8	YES (+23.3%)	NO
Studio 9	NO (-63.5%)	NO
Studio 2	YES (+12.3%)	NO
Studio 1	NO (-23.2%)	NO
Acc. Studio	YES (+17.4%)	NO
Studio 10	YES (+15.4%)	NO
Studio 11	YES (+40.8%)	NO
Cluster Bedroom 8	YES (+35.7%)	NO
Cluster Bedroom 7	YES (+31.2%)	NO
Cluster Bedroom 6	YES (+38%)	NO
Cluster Bedroom 5	YES (+28.8%)	NO
Cluster Bedroom 2	NO (-10.1%)	NO
Cluster Kitchen 2	NO (-9.5%)	NO
Cluster Bedroom 4	NO (-11.6%)	NO
Cluster Bedroom 3	NO (-10.1%)	NO
Acc. Cluster Bedroom	NO (-6.1%)	NO
Cluster Kitchen 1	NO (-22.2%)	NO
Cluster Bedroom 1	NO (-7.5%)	NO
Studio 3	NO (-65.1%)	NO
Studio 4	YES (+18.1%)	NO
Studio 5	YES (+19.7%)	NO
Studio 6	YES (+20.2%)	NO
Studio 7	YES (+20.7%)	NO
Studio 8	YES (+23.3%)	NO
Studio 9	NO (-63.5%)	NO

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Studio 2	YES (+12.3%)	NO
Studio 1	NO (-23.2%)	NO
Acc. Studio	YES (+17.4%)	NO
Studio 10	YES (+15.4%)	NO
Studio 11	YES (+40.8%)	NO
Cluster Bedroom 8	YES (+35.7%)	NO
Cluster Bedroom 7	YES (+31.2%)	NO
Cluster Bedroom 6	YES (+38%)	NO
Cluster Bedroom 5	YES (+28.8%)	NO
Cluster Bedroom 2	NO (-10.1%)	NO
Cluster Kitchen 2	NO (-9.5%)	NO
Cluster Bedroom 4	NO (-11.6%)	NO
Cluster Bedroom 3	NO (-10.1%)	NO
Acc. Cluster Bedroom	NO (-6.1%)	NO
Cluster Kitchen 1	NO (-22.2%)	NO
Cluster Bedroom 1	NO (-7.5%)	NO
Studio 3	NO (-65.1%)	NO
Studio 4	YES (+18.1%)	NO
Studio 5	YES (+19.7%)	NO
Studio 6	YES (+20.2%)	NO
Studio 7	YES (+20.7%)	NO
Studio 8	YES (+23.3%)	NO
Studio 9	NO (-63.5%)	NO
Studio 2	YES (+12.3%)	NO
Studio 1	NO (-23.2%)	NO
Acc. Studio	YES (+17.4%)	NO
Studio 10	YES (+15.4%)	NO
Studio 11	YES (+40.8%)	NO
Cluster Bedroom 8	YES (+35.7%)	NO
Cluster Bedroom 7	YES (+31.2%)	NO
Cluster Bedroom 6	YES (+38%)	NO
Cluster Bedroom 5	YES (+28.8%)	NO
Cluster Bedroom 2	NO (-10.1%)	NO
Cluster Kitchen 2	NO (-9.5%)	NO
Cluster Bedroom 4	NO (-11.6%)	NO
Cluster Bedroom 3	NO (-10.1%)	NO
Acc. Cluster Bedroom	NO (-6.1%)	NO
Cluster Kitchen 1	NO (-22.2%)	NO
Cluster Bedroom 1	NO (-7.5%)	NO
Studio 3	NO (-65.1%)	NO
Studio 4	YES (+18.1%)	NO
Studio 5	YES (+19.7%)	NO
Studio 6	YES (+20.2%)	NO
Studio 7	YES (+20.7%)	NO
Studio 8	YES (+23.3%)	NO
Studio 9	NO (-63.5%)	NO
Studio 2	YES (+12.3%)	NO
Studio 1	NO (-23.2%)	NO
Acc. Studio	YES (+17.4%)	NO

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Studio 10	YES (+15.4%)	NO
Studio 11	YES (+40.8%)	NO
Cluster Bedroom 8	YES (+35.7%)	NO
Cluster Bedroom 7	YES (+31.2%)	NO
Cluster Bedroom 6	YES (+38%)	NO
Cluster Bedroom 5	YES (+28.8%)	NO
Cluster Bedroom 2	NO (-10.1%)	NO
Cluster Kitchen 2	NO (-9.5%)	NO
Cluster Bedroom 4	NO (-11.6%)	NO
Cluster Bedroom 3	NO (-10.1%)	NO
Acc. Cluster Bedroom	NO (-6.1%)	NO
Cluster Kitchen 1	NO (-22.2%)	NO
Cluster Bedroom 1	NO (-7.5%)	NO
Studio 3	NO (-65.1%)	NO
Studio 4	YES (+18.1%)	NO
Studio 5	YES (+19.7%)	NO
Studio 6	YES (+20.2%)	NO
Studio 7	YES (+20.7%)	NO
Studio 8	YES (+23.3%)	NO
Studio 9	NO (-63.5%)	NO
Studio 2	YES (+12.3%)	NO
Studio 1	NO (-23.2%)	NO
Acc. Studio	YES (+17.4%)	NO
Studio 10	YES (+15.4%)	NO
Studio 11	YES (+40.8%)	NO
Cluster Bedroom 8	YES (+35.7%)	NO
Cluster Bedroom 7	YES (+31.2%)	NO
Cluster Bedroom 6	YES (+38%)	NO
Cluster Bedroom 5	YES (+28.8%)	NO
Cluster Bedroom 2	NO (-10.1%)	NO
Cluster Kitchen 2	NO (-9.5%)	NO
Cluster Bedroom 4	NO (-11.6%)	NO
Cluster Bedroom 3	NO (-10.1%)	NO
Acc. Cluster Bedroom	NO (-6.1%)	NO
Cluster Kitchen 1	NO (-22.2%)	NO
Cluster Bedroom 1	NO (-7.5%)	NO
Studio 3	NO (-65.1%)	NO
Studio 4	YES (+18.1%)	NO
Studio 5	YES (+19.7%)	NO
Studio 6	YES (+20.2%)	NO
Studio 7	YES (+20.7%)	NO
Studio 8	YES (+23.3%)	NO
Studio 9	NO (-63.5%)	NO
Studio 2	YES (+12.3%)	NO
Studio 1	NO (-23.2%)	NO
Acc. Studio	YES (+17.4%)	NO
Studio 10	YES (+15.4%)	NO
Studio 11	YES (+40.8%)	NO
Cluster Bedroom 8	YES (+35.7%)	NO

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Cluster Bedroom 7	YES (+31.2%)	NO
Cluster Bedroom 6	YES (+38%)	NO
Cluster Bedroom 5	YES (+28.8%)	NO
Cluster Bedroom 2	NO (-10.1%)	NO
Cluster Kitchen 2	NO (-9.5%)	NO
Cluster Bedroom 4	NO (-11.6%)	NO
Cluster Bedroom 3	NO (-10.1%)	NO
Acc. Cluster Bedroom	NO (-6.1%)	NO
Cluster Kitchen 1	NO (-22.2%)	NO
Cluster Bedroom 1	NO (-7.5%)	NO
Studio 3	NO (-65.1%)	NO
Studio 4	YES (+18.1%)	NO
Studio 5	YES (+19.7%)	NO
Studio 6	YES (+20.2%)	NO
Studio 7	YES (+20.7%)	NO
Studio 8	YES (+23.3%)	NO
Studio 9	NO (-63.5%)	NO
Studio 2	YES (+12.3%)	NO
Studio 1	NO (-23.2%)	NO
Acc. Studio	YES (+17.4%)	NO
Studio 10	YES (+15.4%)	NO
Studio 11	YES (+40.8%)	NO
Cluster Bedroom 8	YES (+35.7%)	NO
Cluster Bedroom 7	YES (+31.2%)	NO
Cluster Bedroom 6	YES (+38%)	NO
Cluster Bedroom 5	YES (+28.8%)	NO
Cluster Bedroom 2	NO (-10.1%)	NO
Cluster Kitchen 2	NO (-9.5%)	NO
Cluster Bedroom 4	NO (-11.6%)	NO
Cluster Bedroom 3	NO (-10.1%)	NO
Acc. Cluster Bedroom	NO (-6.1%)	NO
Cluster Kitchen 1	NO (-22.2%)	NO
Cluster Bedroom 1	NO (-7.5%)	NO
Studio 3	NO (-65.1%)	NO
Studio 4	YES (+18.1%)	NO
Studio 5	YES (+19.7%)	NO
Studio 6	YES (+20.2%)	NO
Studio 7	YES (+20.7%)	NO
Studio 8	YES (+23.3%)	NO
Studio 9	NO (-63.5%)	NO
Studio 2	YES (+12.3%)	NO
Studio 1	NO (-23.2%)	NO
Acc. Studio	YES (+17.4%)	NO
Studio 10	YES (+15.4%)	NO
Studio 11	YES (+40.8%)	NO
Cluster Bedroom 8	YES (+35.7%)	NO
Cluster Bedroom 7	YES (+31.2%)	NO
Cluster Bedroom 6	YES (+38%)	NO
Cluster Bedroom 5	YES (+28.8%)	NO

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Cluster Bedroom 2	NO (-10.1%)	NO
Cluster Kitchen 2	NO (-9.5%)	NO
Cluster Bedroom 4	NO (-11.6%)	NO
Cluster Bedroom 3	NO (-10.1%)	NO
Acc. Cluster Bedroom	NO (-6.1%)	NO
Cluster Kitchen 1	NO (-22.2%)	NO
Cluster Bedroom 1	NO (-7.5%)	NO
Studio 3	NO (-65.1%)	NO
Studio 4	YES (+18.1%)	NO
Studio 5	YES (+19.7%)	NO
Studio 6	YES (+20.2%)	NO
Studio 7	YES (+20.7%)	NO
Studio 8	YES (+23.3%)	NO
Studio 9	NO (-63.5%)	NO
Studio 2	YES (+12.3%)	NO
Studio 1	NO (-23.2%)	NO
Acc. Studio	YES (+17.4%)	NO
Studio 10	YES (+15.4%)	NO
Studio 11	YES (+40.8%)	NO
Cluster Bedroom 8	YES (+35.7%)	NO
Cluster Bedroom 7	YES (+31.2%)	NO
Cluster Bedroom 6	YES (+38%)	NO
Cluster Bedroom 5	YES (+28.8%)	NO
Cluster Bedroom 2	NO (-10.1%)	NO
Cluster Kitchen 2	NO (-9.5%)	NO
Cluster Bedroom 4	NO (-11.6%)	NO
Cluster Bedroom 3	NO (-10.1%)	NO
Acc. Cluster Bedroom	NO (-6.1%)	NO
Cluster Kitchen 1	NO (-22.2%)	NO
Cluster Bedroom 1	NO (-7.5%)	NO
Studio 3	NO (-65.1%)	NO
Studio 4	YES (+18.1%)	NO
Studio 5	YES (+19.7%)	NO
Studio 6	YES (+20.2%)	NO
Studio 7	YES (+20.7%)	NO
Studio 8	YES (+23.3%)	NO
Studio 9	NO (-63.5%)	NO
Studio 2	YES (+12.3%)	NO
Studio 1	NO (-23.2%)	NO
Acc. Studio	YES (+17.4%)	NO
Studio 10	YES (+15.4%)	NO
Studio 11	YES (+40.8%)	NO
Cluster Bedroom 8	YES (+35.7%)	NO
Cluster Bedroom 7	YES (+31.2%)	NO
Cluster Bedroom 6	YES (+38%)	NO
Cluster Bedroom 5	YES (+28.8%)	NO
Cluster Bedroom 2	NO (-10.1%)	NO
Cluster Kitchen 2	NO (-9.5%)	NO
Cluster Bedroom 4	NO (-11.6%)	NO

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Cluster Bedroom 3	NO (-10.1%)	NO
Acc. Cluster Bedroom	NO (-6.1%)	NO
Cluster Kitchen 1	NO (-22.2%)	NO
Cluster Bedroom 1	NO (-7.5%)	NO
Studio 3	NO (-65.1%)	NO
Studio 4	YES (+18.1%)	NO
Studio 5	YES (+19.7%)	NO
Studio 6	YES (+20.2%)	NO
Studio 7	YES (+20.7%)	NO
Studio 8	YES (+23.3%)	NO
Studio 9	NO (-63.5%)	NO
Studio 2	YES (+12.3%)	NO
Studio 1	NO (-23.2%)	NO
Acc. Studio	YES (+17.4%)	NO
Studio 10	YES (+15.4%)	NO
Studio 11	YES (+40.8%)	NO
Cluster Bedroom 8	YES (+35.7%)	NO
Cluster Bedroom 7	YES (+31.2%)	NO
Cluster Bedroom 6	YES (+38%)	NO
Cluster Bedroom 5	YES (+28.8%)	NO
Cluster Bedroom 2	NO (-10.1%)	NO
Cluster Kitchen 2	NO (-9.5%)	NO
Cluster Bedroom 4	NO (-11.6%)	NO
Cluster Bedroom 3	NO (-10.1%)	NO
Acc. Cluster Bedroom	NO (-6.1%)	NO
Cluster Kitchen 1	NO (-22.2%)	NO
Cluster Bedroom 1	NO (-7.5%)	NO
Studio 3	NO (-65.1%)	NO
Studio 4	YES (+18.1%)	NO
Studio 5	YES (+19.7%)	NO
Studio 6	YES (+20.2%)	NO
Studio 7	YES (+20.7%)	NO
Studio 8	YES (+23.3%)	NO
Studio 9	NO (-63.5%)	NO
Studio 2	YES (+12.3%)	NO
Studio 1	NO (-23.2%)	NO
Acc. Studio	YES (+17.4%)	NO
Studio 10	YES (+15.4%)	NO
Studio 11	YES (+40.8%)	NO
Cluster Bedroom 8	YES (+35.7%)	NO
Cluster Bedroom 7	YES (+31.2%)	NO
Cluster Bedroom 6	YES (+38%)	NO
Cluster Bedroom 5	YES (+28.8%)	NO
Cluster Bedroom 2	NO (-10.1%)	NO
Cluster Kitchen 2	NO (-9.5%)	NO
Cluster Bedroom 4	NO (-11.6%)	NO
Cluster Bedroom 3	NO (-10.1%)	NO
Acc. Cluster Bedroom	NO (-6.1%)	NO
Cluster Kitchen 1	NO (-22.2%)	NO

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Cluster Bedroom 1	NO (-7.5%)	NO
Studio 3	NO (-65.1%)	NO
Studio 4	YES (+18.1%)	NO
Studio 5	YES (+19.7%)	NO
Studio 6	YES (+20.2%)	NO
Studio 7	YES (+20.7%)	NO
Studio 8	YES (+23.3%)	NO
Studio 9	NO (-63.5%)	NO
Studio 2	YES (+12.3%)	NO
Studio 1	NO (-23.2%)	NO
Acc. Studio	YES (+17.4%)	NO
Studio 10	YES (+15.4%)	NO
Studio 11	YES (+40.8%)	NO
Cluster Bedroom 8	YES (+35.7%)	NO
Cluster Bedroom 7	YES (+31.2%)	NO
Cluster Bedroom 6	YES (+38%)	NO
Cluster Bedroom 5	YES (+28.8%)	NO
Cluster Bedroom 2	NO (-10.1%)	NO
Cluster Kitchen 2	NO (-9.5%)	NO
Cluster Bedroom 4	NO (-11.6%)	NO
Cluster Bedroom 3	NO (-10.1%)	NO
Acc. Cluster Bedroom	NO (-6.1%)	NO
Cluster Kitchen 1	NO (-22.2%)	NO
Cluster Bedroom 1	NO (-7.5%)	NO
Studio 3	NO (-65.1%)	NO
Studio 4	YES (+18.1%)	NO
Studio 5	YES (+19.7%)	NO
Studio 6	YES (+20.2%)	NO
Studio 7	YES (+20.7%)	NO
Studio 8	YES (+23.3%)	NO
Studio 9	NO (-63.5%)	NO
Studio 2	YES (+12.3%)	NO
Studio 1	NO (-23.2%)	NO
Acc. Studio	YES (+17.4%)	NO
Studio 10	YES (+15.4%)	NO
Studio 11	YES (+40.8%)	NO
Cluster Bedroom 8	YES (+35.7%)	NO
Cluster Bedroom 7	YES (+31.2%)	NO
Cluster Bedroom 6	YES (+38%)	NO
Cluster Bedroom 5	YES (+28.8%)	NO
Cluster Bedroom 2	NO (-10.1%)	NO
Cluster Kitchen 2	NO (-9.5%)	NO
Cluster Bedroom 4	NO (-11.6%)	NO
Cluster Bedroom 3	NO (-10.1%)	NO
Acc. Cluster Bedroom	NO (-6.1%)	NO
Cluster Kitchen 1	NO (-22.2%)	NO
Cluster Bedroom 1	NO (-7.5%)	NO
Studio 3	NO (-65.1%)	NO
Studio 4	YES (+18.1%)	NO

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Studio 5	YES (+19.7%)	NO
Studio 6	YES (+20.2%)	NO
Studio 7	YES (+20.7%)	NO
Studio 8	YES (+23.3%)	NO
Studio 9	NO (-63.5%)	NO
Studio 2	YES (+12.3%)	NO
Studio 1	NO (-23.2%)	NO
Acc. Studio	YES (+17.4%)	NO
Studio 10	YES (+15.4%)	NO
Studio 11	YES (+40.8%)	NO
Cluster Bedroom 8	YES (+35.7%)	NO
Cluster Bedroom 7	YES (+31.2%)	NO
Cluster Bedroom 6	YES (+38%)	NO
Cluster Bedroom 5	YES (+28.8%)	NO
Cluster Bedroom 2	NO (-10.1%)	NO
Cluster Kitchen 2	NO (-9.5%)	NO
Cluster Bedroom 4	NO (-11.6%)	NO
Cluster Bedroom 3	NO (-10.1%)	NO
Acc. Cluster Bedroom	NO (-6.1%)	NO
Cluster Kitchen 1	NO (-22.2%)	NO
Cluster Bedroom 1	NO (-7.5%)	NO
Studio 3	NO (-65.1%)	NO
Studio 4	YES (+18.1%)	NO
Studio 5	YES (+19.7%)	NO
Studio 6	YES (+20.2%)	NO
Studio 7	YES (+20.7%)	NO
Studio 8	YES (+23.3%)	NO
Studio 9	NO (-63.5%)	NO
Studio 2	YES (+12.3%)	NO
Studio 1	NO (-23.2%)	NO
Acc. Studio	YES (+17.4%)	NO
Studio 10	YES (+15.4%)	NO
Studio 11	YES (+40.8%)	NO
Cluster Bedroom 8	YES (+35.7%)	NO
Cluster Bedroom 7	YES (+31.2%)	NO
Cluster Bedroom 6	YES (+38%)	NO
Cluster Bedroom 5	YES (+28.8%)	NO
Cluster Bedroom 2	NO (-10.1%)	NO
Cluster Kitchen 2	NO (-9.5%)	NO
Cluster Bedroom 4	NO (-11.6%)	NO
Cluster Bedroom 3	NO (-10.1%)	NO
Acc. Cluster Bedroom	NO (-6.1%)	NO
Cluster Kitchen 1	NO (-22.2%)	NO
Cluster Bedroom 1	NO (-7.5%)	NO
Studio 3	NO (-65.1%)	NO
Studio 4	YES (+18.1%)	NO
Studio 5	YES (+19.7%)	NO
Studio 6	YES (+20.2%)	NO
Studio 7	YES (+20.7%)	NO

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Studio 8	YES (+23.3%)	NO
Studio 9	NO (-63.5%)	NO
Studio 2	YES (+12.3%)	NO
Studio 1	NO (-23.2%)	NO
Acc. Studio	YES (+17.4%)	NO
Studio 10	YES (+15.4%)	NO
Studio 11	YES (+40.8%)	NO
Cluster Bedroom 8	YES (+35.7%)	NO
Cluster Bedroom 7	YES (+31.2%)	NO
Cluster Bedroom 6	YES (+38%)	NO
Cluster Bedroom 5	YES (+28.8%)	NO
Cluster Bedroom 2	NO (-10.1%)	NO
Cluster Kitchen 2	NO (-9.5%)	NO
Cluster Bedroom 4	NO (-11.6%)	NO
Cluster Bedroom 3	NO (-10.1%)	NO
Acc. Cluster Bedroom	NO (-6.1%)	NO
Cluster Kitchen 1	NO (-22.2%)	NO
Cluster Bedroom 1	NO (-7.5%)	NO
Studio 3	NO (-65.1%)	NO
Studio 4	YES (+18.1%)	NO
Studio 5	YES (+19.7%)	NO
Studio 6	YES (+20.2%)	NO
Studio 7	YES (+20.7%)	NO
Studio 8	YES (+23.3%)	NO
Studio 9	NO (-63.5%)	NO
Studio 2	YES (+12.3%)	NO
Studio 1	NO (-23.2%)	NO
Acc. Studio	YES (+17.4%)	NO
Studio 10	YES (+15.4%)	NO
Studio 11	YES (+40.8%)	NO
Cluster Bedroom 8	YES (+35.7%)	NO
Cluster Bedroom 7	YES (+31.2%)	NO
Cluster Bedroom 6	YES (+38%)	NO
Cluster Bedroom 5	YES (+28.8%)	NO
Cluster Bedroom 2	NO (-10.1%)	NO
Cluster Kitchen 2	NO (-9.5%)	NO
Cluster Bedroom 4	NO (-11.6%)	NO
Cluster Bedroom 3	NO (-10.1%)	NO
Acc. Cluster Bedroom	NO (-6.1%)	NO
Cluster Kitchen 1	NO (-22.2%)	NO
Cluster Bedroom 1	NO (-7.5%)	NO
Studio 3	NO (-65.1%)	NO
Studio 4	YES (+18.1%)	NO
Studio 5	YES (+19.7%)	NO
Studio 6	YES (+20.2%)	NO
Studio 7	YES (+20.7%)	NO
Studio 8	YES (+23.3%)	NO
Studio 9	NO (-63.5%)	NO
Studio 2	YES (+12.3%)	NO

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Studio 1	NO (-23.2%)	NO
Acc. Studio	YES (+17.4%)	NO
Studio 10	YES (+15.4%)	NO
Studio 11	YES (+40.8%)	NO
Cluster Bedroom 8	YES (+35.7%)	NO
Cluster Bedroom 7	YES (+31.2%)	NO
Cluster Bedroom 6	YES (+38%)	NO
Cluster Bedroom 5	YES (+28.8%)	NO
Cluster Bedroom 2	NO (-10.1%)	NO
Cluster Kitchen 2	NO (-9.5%)	NO
Cluster Bedroom 4	NO (-11.6%)	NO
Cluster Bedroom 3	NO (-10.1%)	NO
Acc. Cluster Bedroom	NO (-6.1%)	NO
Cluster Kitchen 1	NO (-22.2%)	NO
Cluster Bedroom 1	NO (-7.5%)	NO
Studio 3	NO (-65.1%)	NO
Studio 4	YES (+18.1%)	NO
Studio 5	YES (+19.7%)	NO
Studio 6	YES (+20.2%)	NO
Studio 7	YES (+20.7%)	NO
Studio 8	YES (+23.3%)	NO
Studio 9	NO (-63.5%)	NO
Studio 2	YES (+12.3%)	NO
Studio 1	NO (-23.2%)	NO
Acc. Studio	YES (+17.4%)	NO
Studio 10	YES (+15.4%)	NO
Studio 11	YES (+40.8%)	NO
Cluster Bedroom 8	YES (+35.7%)	NO
Cluster Bedroom 7	YES (+31.2%)	NO
Cluster Bedroom 6	YES (+38%)	NO
Cluster Bedroom 5	YES (+28.8%)	NO
Cluster Bedroom 2	NO (-10.1%)	NO
Cluster Kitchen 2	NO (-9.5%)	NO
Cluster Bedroom 4	NO (-11.6%)	NO
Cluster Bedroom 3	NO (-10.1%)	NO
Acc. Cluster Bedroom	NO (-6.1%)	NO
Cluster Kitchen 1	NO (-22.2%)	NO
Cluster Bedroom 1	NO (-7.5%)	NO
00 Amenity	YES (+170.8%)	NO
00 Acc WC	N/A	N/A
00 Riser	N/A	N/A
00 Lift Lobby	N/A	N/A
00 Entrance / Reception	YES (+132.5%)	NO
00 Parcel Room	YES (+123.6%)	NO
00 Office	YES (+126.4%)	NO
00 Staff Kitchen	YES (+121.4%)	NO
00 Cycle Lift Lobby	YES (+65.7%)	NO
00 Cycle Lift	N/A	N/A
00 Staff WC	N/A	N/A

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
00 Stair / Escape Corridor	YES (+134.6%)	NO
00 Lift	N/A	N/A
00 Plant Lobby	N/A	N/A
00 Refuse	YES (+171.7%)	NO
00 Amenity	YES (+234.7%)	NO
00 Escape Corridor / Stairs	YES (+139.3%)	NO
00 Lobby	N/A	N/A
00 Lift	N/A	N/A
00 Lift	N/A	N/A
00 Lobby	N/A	N/A
00 Storage	N/A	N/A
00 Riser	N/A	N/A
01 Study	YES (+132.1%)	NO
01 Study	YES (+198.2%)	NO
01 Riser	N/A	N/A
01 Lift Lobby	N/A	N/A
01 Lift Lobby	N/A	N/A
01 Lift	N/A	N/A
01 Lift	N/A	N/A
01 Corridor	N/A	N/A
01 Riser	N/A	N/A
01 Store	N/A	N/A
01 Riser	N/A	N/A
01 Lift 3	N/A	N/A
01 Stairs	N/A	N/A
01 Store	N/A	N/A
01 Corridor	N/A	N/A
01 Cycle Store	YES (+182.8%)	NO
01 Cycle Store	YES (+140.5%)	NO
01 Fine Dining	YES (+101%)	NO
01 Fine Dining	YES (+98.4%)	NO
01 Cycle Store	YES (+100.2%)	NO
01 Cycle Lift	N/A	N/A
01 Cycle Lift Lobby	YES (+93.5%)	NO
01 Gym	YES (+194.6%)	NO
01 Lounge	YES (+199.5%)	NO
01 Laundry	YES (+203.6%)	NO
01 Laundry	YES (+204.1%)	NO
Stairs	N/A	N/A

Regulation 25A: Consideration of high efficiency alternative energy systems

Were alternative energy systems considered and analysed as part of the design process?	NO
Is evidence of such assessment available as a separate submission?	NO
Are any such measures included in the proposed design?	NO

Technical Data Sheet (Actual vs. Notional Building)

Building Global Parameters

	Actual	Notional
Floor area [m^2]	19212.3	19212.3
External area [m^2]	10174.3	10174.3
Weather	MAN	MAN
Infiltration [m^3/hm^2@ 50Pa]	5	3
Average conductance [W/K]	8011.59	5863.95
Average U-value [W/m^2K]	0.79	0.58
Alpha value* [%]	12.49	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
99	**Hotels**
	Residential Institutions: Hospitals and Care Homes
	Residential Institutions: Residential Schools
	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^2]

	Actual	Notional
Heating	4.5	2.13
Cooling	1.72	3.58
Auxiliary	6.48	12.85
Lighting	16.23	17.53
Hot water	40.29	41.17
Equipment*	57.46	57.46
TOTAL**	**69.21**	**77.26**

* 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^2]

	Actual	Notional
Photovoltaic systems	0	0
Wind turbines	0	0
CHP generators	0	0
Solar thermal systems	0	0
Displaced electricity	*0*	*0*

Energy & CO_2 Emissions Summary

	Actual	Notional
Heating + cooling demand [MJ/m^2]	162.19	81.01
Primary energy [kWh_{PE}/m^2]	105.02	113.93
Total emissions [kg/m^2]	9.68	10.44

HVAC Systems Performance

System Type		Heat dem MJ/m2	Cool dem MJ/m2	Heat con kWh/m2	Cool con kWh/m2	Aux con kWh/m2	Heat SSEEF	Cool SSEER	Heat gen SEFF	Cool gen SEER
[ST] Variable refrigerant flow, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
	Actual	162.4	109.1	7.9	2.7	10.5	5.7	11.3	5.7	11.3
	Notional	37.1	98.4	3.7	5.9	21.6	2.78	4.63	----	----
[ST] Variable refrigerant flow, [HS] ASHP, [HFT] Electricity, [CFT] Electricity										
	Actual	51.1	296.2	2.5	7.3	20.4	5.7	11.3	5.7	11.3
	Notional	20	156.6	2	9.4	21.2	2.78	4.63	----	----
[ST] No Heating or Cooling										
	Actual	0	0	0	0	0	0	0	0	0
	Notional	0	0	0	0	0	0	0	----	----

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