

LIGHTING DESIGNER: MUHSEEN ABDULLAHI

CONTACT NUMBER: 01925 940 575

PROJECT NUMBER: QUO-337581-VC5GVT

PROJECT TITLE: ARCH 77 WHITWORTH STREET

Designed to Deliver

Ansell Lighting Design Department

Ansell Electrical Products Ltd
Unit 6B, Stonecross Industrial Park
Yew Tree Way
Warrington
WA3 3JD

Lighting projects will be designed to meet European and UK based legislation, as well as CIBSE guidelines, applicable to the location in which the installation is to take place, in additions to any specific client requirements, where appropriate, and all stated illuminance values will have been calculated based upon overall average values, with acceptable uniformity for the individual room reference plane.

Emergency lighting designs will be calculated in accordance with the appropriate legislation applicable to the country of installation, whether that be the current BS EN 1838 and BS EN 50172 standards, the BS5266-1, Code of Practice, which takes the form of guidance and recommendations, or the Irish Standard, I.S.3217.

Consultation between the responsible person, the owner/developer, and/or the occupier of the premises, the architect, the installation contractor, and enforcing authorities, together with the lighting designer, should have been arranged at a very early stage to define the way in which the system is intended to operate, and plans should be made available, to assist with the consultation and the design process.

The UK legislation imposes a duty on persons, including employers and persons with control of the premises to carry out a risk assessment, and take such precautions as to ensure as far as reasonably practicable, the safety of the occupants, including a safe means of escape, along escape routes and through exits to a place of safety.

The emergency lighting needs to be checked and approved by a local fire control officer and approved by the building owner.

In the absence of appropriate criteria, the emergency lighting design does not include a calculation for certain emergency location requirements, such as for call points, fire alarm panels, firefighting equipment and fire extinguisher positions, first aid points, and push-bars, where these locations have not been included on the supplied drawings, resulting in the situation that if increased illumination levels are required, they will not have been included within the design.

In the absence of a Fire Strategy plan, certain assumptions have been made regarding providing the optimum routes to exit, based upon the shortest distances between locations and the final exit. These are to be reviewed on site to verify the accuracy prior to proceeding to order/installation.

As Ansell has not been issued with a risk assessment document, the company cannot accept responsibility or liability for any inaccuracies caused in the emergency lighting design or equipment offered, therefore the emergency design must be accurately checked and verified by a responsible person or building owner/building user to confirm that assumed risk assessments made are deemed to be correct.

All interior spaces of less than 60m2 will be assumed as being not of ‘high risk’, unless the company is in receipt of a copy of the appropriate risk assessment for the spaces under consideration, and therefore as such, the design of emergency lighting will not be included in these areas, at this design stage.

Following the verification process for the emergency lighting design with regard to the information contained within the design fully meeting the specification for the application, it is to be noted that in all circumstances where assumptions used in the emergency lighting calculations are deemed to be incorrect, Ansell must be made aware of this situation immediately, and definitely prior to any order being placed, allowing the company to amend the emergency calculations, based upon the issue of an amended or new risk assessment.

In respect of the content below, the term Ansell Lighting relates to Ansell Electrical Products Ltd, for both UK and International.

Ansell Lighting will at the request of the Purchaser, agree to supply lighting design services, either directly or to a Third Party, so, as to develop a lighting scheme for which Ansell Lighting will make no charge. Ansell Lighting is not under any obligation to provide such services. Where appropriate, the Purchaser shall make all suitable arrangements for Ansell Lighting to have access to the site and shall provide such other assistance as may be deemed necessary to enable the company to provide such lighting design services. Any drawings, plans, computer aided designs, survey reports, specifications & other material arising from the lighting scheme will remain the absolute property of Ansell Lighting.

It is the responsibility of the person specifying the requirements of the request for a lighting design to provide all the required information and detail for the lighting scheme to be undertaken, whether that be, the Architect, the Consulting Engineer, the Building Contractor, the Electrical Contractor, or the Purchaser. In failing to provide all such information, the completed lighting design may not meet the client's requirements or be unable to provide compliance with current legislation. Current legislation considered on lighting schemes, includes (but is not restricted to) Building Regulation Approved Documents, British Standard Publications, European Standards, European Directives, Statutory Instruments, Health & Safety Publications, CIBSE Lighting Guides and other appropriate documents as deemed necessary.

All design criteria used in the lighting project, unless otherwise specified by the Purchaser or Client will have been assumed by the designer. This relates to all information not supplied with the request, but which is required to undertake the calculations in order to achieve the resultant lighting design. This covers all aspects of the design process, including, (but not restricted to) the space(s) dimensions, height, reflectance(s), and maintenance factor, the LED light source(s) their types, wattage(s) and colour temperature(s), the types of luminaire(s) whether that be mains and/or integrated/stand-alone emergency, their mounting height(s), position(s), and orientation(s), the type(s) of LED driver(s), and any luminaire attachments, or other information required that the designer deems necessary for the design to be calculated.

The lighting scheme will be calculated, by computer aided design, (where applicable) and by other means, (where not) so as to achieve certain illumination criteria. Unless, otherwise specified, all values of illumination, uniformity and levels of glare achieved will be based upon those given within the relevant National and International Standards and/or Regulations as well as the CIBSE Lighting Guides. Consideration will be taken to determine an adequate value of illumination for a specific area, such as categorisation of the space, the facilitation of quick and accurate work, the contribution of safety to persons and in creating a good visual environment. Other information not specified will be assumed by the designer.

Ansell Lighting will undertake external lighting schemes for Purchasers which may require planning approval from the local authority in which a lighting scheme is to be installed. It is not the responsibility of Ansell Lighting to seek such planning approval for an installation, however Ansell Lighting can assist, where possible, in providing design information for such an application, in respect of the lighting equipment aspect of the project only. If subsequently, changes to the design are requested, then it is the responsibility of the Purchaser to inform the local authority of such changes and to seek approval of those changes to the planning application.

It is the full responsibility of the purchaser and/or installing electrical contractor to cross-reference all luminaire types and quantities against the relevant computer-generated design and/or layout drawings & supplied quotation to verify that the information supplied by Ansell Lighting is both correct in respect of achieving the solution which meets the received specification and that is acceptable to the person specifying the requirements. Errors and omissions excepted.

If the completed lighting scheme is deficient in any respect, then it is the responsibility of the Purchaser to inform Ansell Lighting at the earliest opportunity, and in all cases, prior to any installation. If, however, the lighting scheme has already been installed, prior to any deficiency being known, then the Purchaser has one month from the date of commencement of operation of the installation, to notify Ansell Lighting in writing of this deficiency, detailing the ways in which the lighting is deficient. If Ansell Lighting receives no such notification within the aforementioned time period, then Ansell Lighting shall be entitled to assume that the lighting scheme meets with the specified requirements. Ansell Lighting must upon receipt of the notification set out above, be allowed permitted access of the premises in question for the purposes of remedying the defect. Ansell Lighting shall be under no obligation to remedy defects in the lighting system which arises from its reliance on the information, specifications or data supplied to the Purchaser.

Ansell Lighting shall not be liable for any business interruption, loss of profits, contracts, goodwill or anticipated savings, loss arising from any Third Party claims or any special indirect or consequential loss (whether or not foreseeable) to the Purchaser / Third Party which may arise as a result of the lighting scheme failing to meet the Purchaser's / Third party's requirements or for problems arising or which may arise as a result of incorrect installation of the goods by or on behalf of the Purchaser / Third Party or arising or which may arise as a result of the Purchaser / Third Party failing to use the goods as specifically recommended by Ansell Lighting for the purposes of the lighting scheme. Save as expressly provided in these conditions all terms, conditions, representations, and warranties (whether implied or not) relating to the sale of goods and/or the supply of services are excluded to the fullest extent permitted by law. The supply of all services and goods to the Purchaser are undertaken within the Terms and Conditions of sale from Ansell Lighting, a copy of which is available upon request.

For and on behalf of Ansell Electrical Products Ltd.

Arch 77 Whitworth Street - Manchester

Installation : Proposed lighting

Project number	:	QUO-337581-VC5GVT
Customer	:	GO ELECTRICAL
Processed by	:	Muhseen Abdullahi
Date	:	11.05.2026

Project description:
All room/exterior area dimensions to be checked on-site prior to ordering.

Calculation based on standard reflectance as 70/50/20 and Maintenance Factor 0.8.

Lighting designed to CIBSE guidelines where applicable and/or client requirements; all stated lux values are foroverall averages across the room reference plane.

It is the responsibility of the customer to ensure any scheme provided by Ansell meets all requirements of the end user.

Note: The fittings are mounted at 3m height.

The following values are based on precise calculations performed on calibrated lamps and luminaires, and their configurations, whereby gradual, unavoidable deviations can occur in practice. All guarantee claims are excluded for the specified data.

This exclusion of liability applies irrespective of the legal grounds for both damages and consequential damages suffered by users and third parties.

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1 Luminaire data

1.1 Ansell, BULKHEADS - Wolf Black... (AWOLF/BLK (CW 19W))

1.1.1 Data sheet

Manufacturer: Ansell

AWOLF/BLK (CW 19W) **Ceiling mounted luminaire** **BULKHEADS - Wolf Black 4000K**
AWOLF/BLK
FLOODLIGHTING
Wolf CCT Wallpack

• Modern, robust die-cast aluminium low glare wall pack suitable for commercial and industrial applications
• Advanced lens technology offers wide distribution for optimum spacing and uniformity; whilst ensuring minimal uplight and light pollution
• Reduced light pollution with less than 2% upward light distribution
• Helps with compliance with Dark Skies recommendations
• Power selectable; offering a choice of 3 outputs, in one luminaire
• High efficiency up to 140 Lm/W
• Electrostatic paint finish for enhanced corrosion resistance
• Multiple conduit entry and BESA fixing points
• 20mm East and West side entry for surface conduit and through-wire
• Dimmable and Smart options available

Operating Temp -20°C to 40°C

• Suitable for external use
• 5 Year Product Warranty
• IP65

Luminaire data

Absolute Photometry		
Luminaire efficacy	:	123.24 lm/W
Classification	:	A30 ↓100% ↑0%
CIE Flux Codes	:	40 76 97 100 100
Glare	:	G*5 / D6
Control gear	:	Electronic ballast
Power	:	19.41 W
Luminous flux	:	2392 lm
Dimensions	:	240 mm x 340 mm x 200 mm

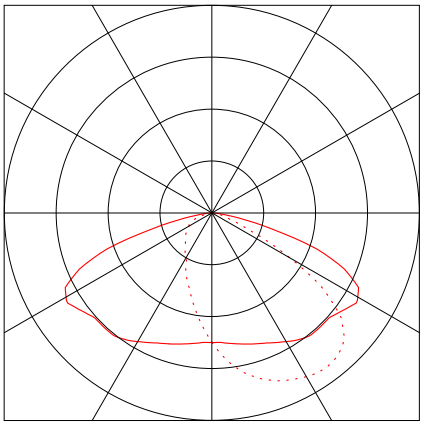
Equipped with

Quantity	:	1
Designation	:	LED single 840
Colour	:	4000K
Socket	:	--
Colour reproduction	:	--

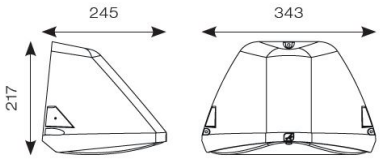
1 Luminaire data

1.1 Ansell, BULKHEADS - Wolf Black... (AWOLF/BLK (CW 19W))

1.1.1 Data sheet



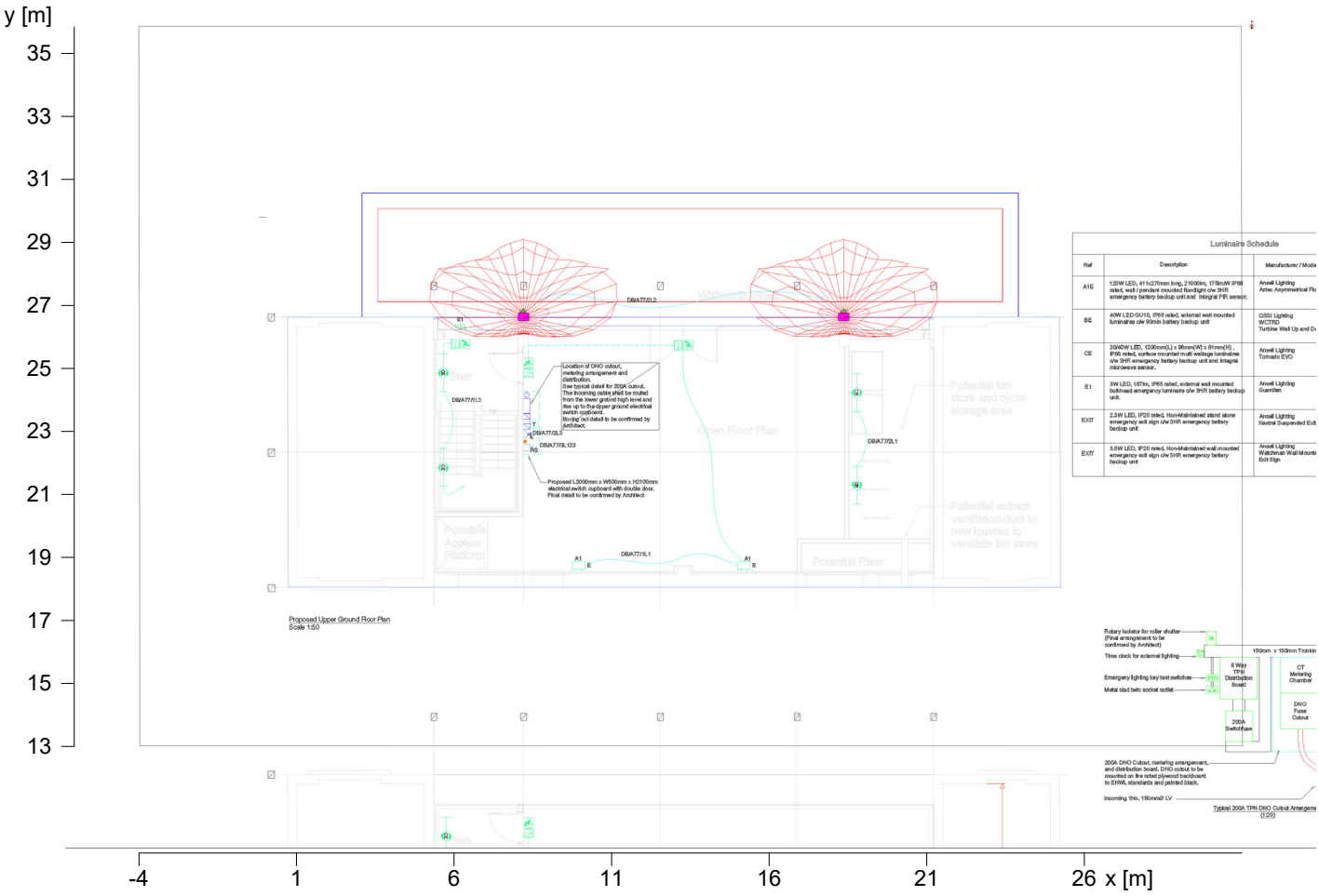




2 Exterior 1

2.1 Description, Exterior 1

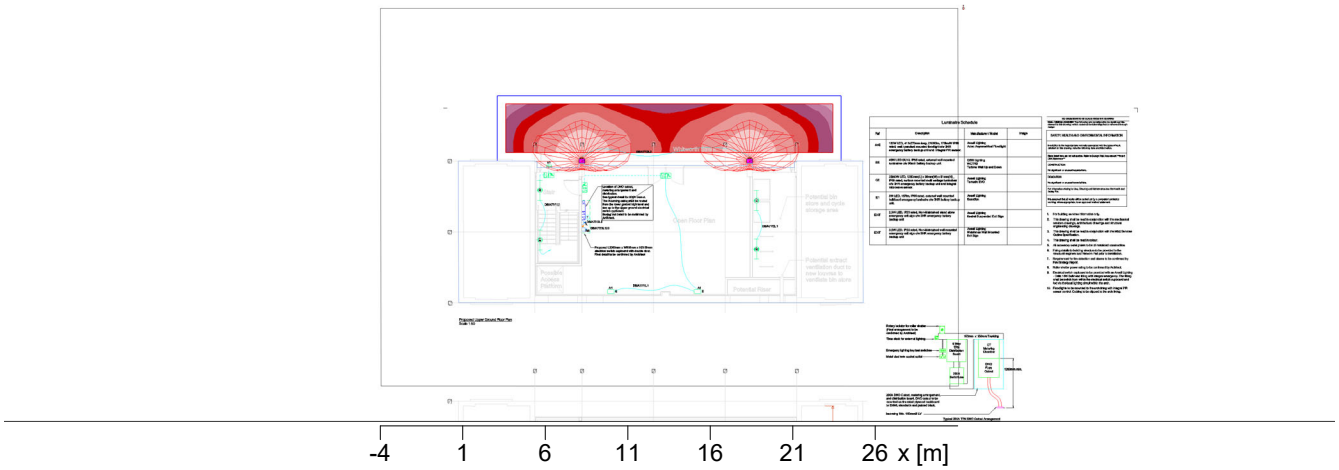
2.1.1 Floor plan



2 Exterior 1

2.2 Summary, Exterior 1

2.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height (phot.centre)	3.00 m
Maintenance factor	0.80
Luminaire luminous flux	4784.00 lm
Total power	38.8 W
Total power per area (82.21 m²)	0.47 W/m² (1.66 W/m²/100lx)

Evaluation area 1	**Reference plane 1.1**
	Horizontal
$\bar{E}_m$	28 lx
E_{min}	7.18 lx
$E_{min}/\bar{E}_m$ (U_o)	0.25
E_{min}/E_{max} (U_d)	0.11
Position	0.00 m

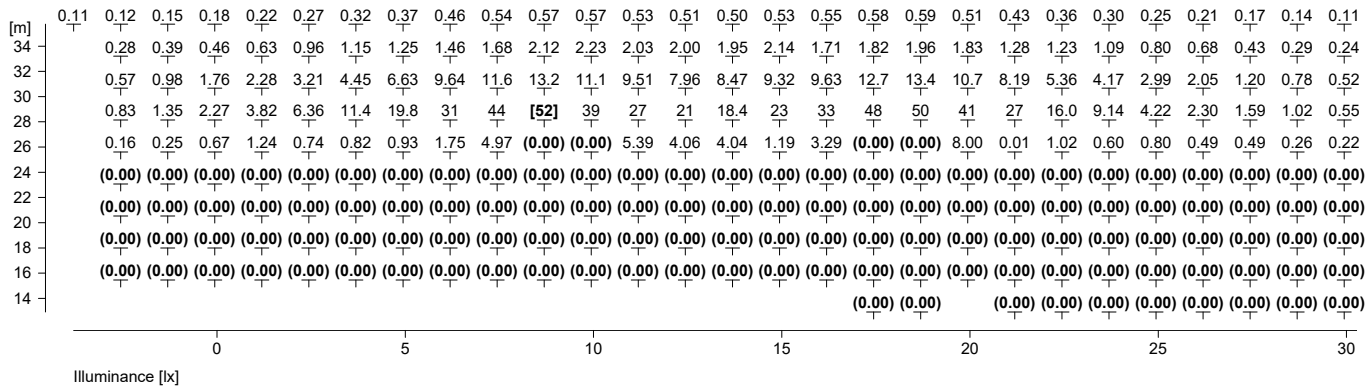
Type No.\Make

		Ansell	
1	2 x	Order No.	: AWOLF/BLK (CW 19W)
		Luminaire name	: BULKHEADS - Wolf Black 4000K
		Equipment	: 1 x LED single 840 19.41 W / 2392 lm

2 Exterior 1

2.3 Calculation results, Exterior 1

2.3.1 Table, Floor (E)





Part1

Average illuminance	$\bar{E}_m$	: 3.10 lx
Minimum illuminance	E_{min}	: 0.00 lx
Maximum illuminance	E_{max}	: 52 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	: ---

2 Exterior 1

2.3 Calculation results, Exterior 1

2.3.1 Table, Floor (E)

(0.00)

[m]



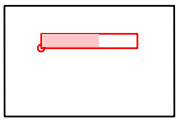
Part2

2.3 Calculation results, Exterior 1

2.3.2 Table, Reference plane 1.1 (E)

[m]																											
2.50	8.20	8.88	10.3	11.6	12.9	14.3	16.0	18.0	21	23	25	25	24	22	20	18.4	17.0	16.1	15.1	14.4	13.6	13.6	13.3	13.2	13.3	13.6	13.6	14.4	15.1
2.25	9.75	11.3	12.5	14.2	16.1	18.1	20	23	27	30	32	32	31	29	25	23	21	19.7	18.3	17.2	16.7	15.9	15.4	15.3	15.4	15.9	16.7	17.2	18.3
2.00	11.2	13.2	15.3	17.5	19.4	22	25	29	33	37	39	40	38	36	32	28	26	23	22	20	19.2	17.9	17.3	17.1	17.3	17.9	19.2	20	22
1.75																													
1.50	12.3	14.7	17.3	20	23	27	31	36	40	45	48	49	47	43	39	35	31	28	25	23	21	19.7	18.6	18.1	18.6	19.7	21	23	25
1.25																													
1.00	12.9	15.6	18.9	22	26	31	36	42	47	52	55	57	54	50	46	41	36	31	28	25	22	21	19.4	19.0	19.5	21	22	25	28
0.75	13.3	16.1	19.5	23	28	34	42	48	53	58	62	64	60	56	51	46	39	34	29	26	23	21	20	19.6	20	21	23	26	29
0.50																													
0.25	13.3	16.1	19.5	24	29	36	44	51	57	62	65	**[66]**	64	60	54	48	41	34	29	26	23	21	20	19.8	20	21	23	26	29
		2				4				6				8				10											

Illuminance [lx]



Part1

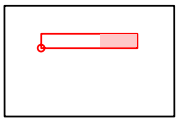
Height reference plane		: 0.00 m
Average illuminance	$\bar{E}_m$	: 28 lx
Minimum illuminance	E_{min}	: 7.18 lx
Maximum illuminance	E_{max}	: 66 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	: 1 : 3.97 (0.25)

2.3 Calculation results, Exterior 1

2.3.2 Table, Reference plane 1.1 (E)

16.1	17.0	18.4	20	22	24	25	25	23	21	18.0	16.0	14.3	12.9	11.6	10.3	8.89	8.20	**(7.18)**
19.7	21	23	25	29	31	32	32	30	27	23	20	18.1	16.1	14.2	12.5	11.3	9.75	8.41
23	26	28	32	36	38	40	39	37	33	29	25	22	19.4	17.5	15.3	13.2	11.2	9.48
28	31	35	39	43	47	49	48	45	40	36	31	27	23	20	17.3	14.7	12.3	10.1
31	36	41	46	50	54	57	56	52	47	42	36	31	26	22	18.9	15.6	12.9	10.6
34	39	46	51	56	60	64	62	58	53	48	42	34	28	23	19.5	16.1	13.4	11.0
34	41	48	54	60	64	**[66]**	65	62	57	51	44	36	29	24	19.5	16.1	13.3	11.0

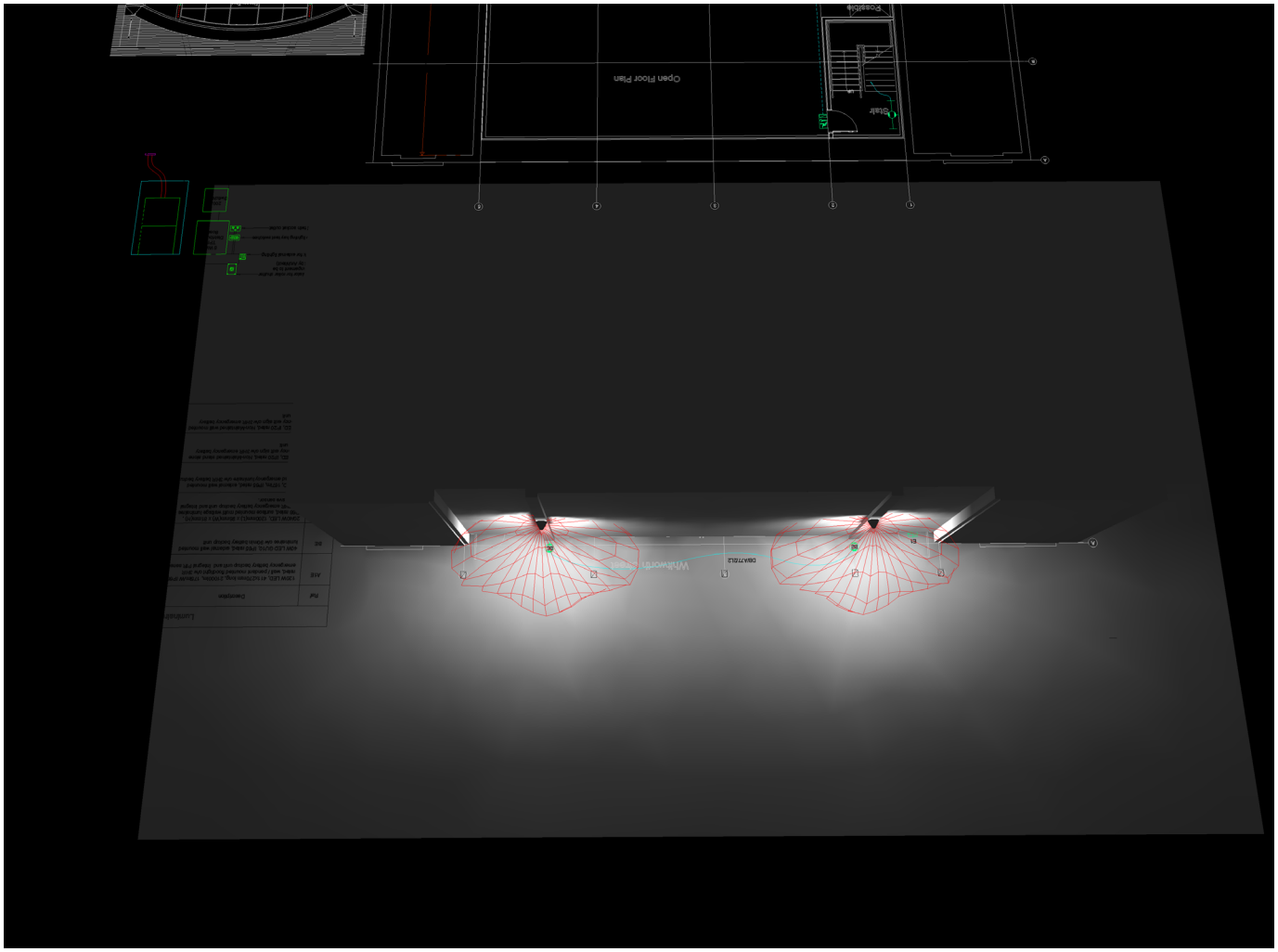
12 14 16 18 [m]



Part2

2.3 Calculation results, Exterior 1

2.3.3 3D luminance, View 1



Luminance in the scene
Minimum: : 0 cd/m²
Maximum: : 62.3 cd/m²

2.3 Calculation results, Exterior 1

2.3.4 3D pseudo colours, View 1 (E)

