

Prelim External Lighting

Installation : Fallowfield Manchester

Project number :
Customer : Toolstation
Processed by : David Collier, Lighting Engineer, Dextra
Date : 11.10.2021

This project has been designed in accordance with British Standards and relevant lighting guides that were current at the time of the design/quote being proposed.

It is essential that all aspects relating to this proposal are checked and all aspects of the criteria used to compile the proposal are correct. If there are any deviations from the criteria Dextra Group need to be informed and proposals amended to suit. If there are assumptions or deviations that the Dextra design engineers have made and these are not in line with the specification or design intentions, then Dextra Group need to be informed and amendments advised.

All calculations within the Dextra Group proposal are based upon an open area without obstructions above the working plane. Ceiling/ Wall and floor reflectance's have been assumed unless stated. Any daylight from windows have not been factored into the calculations and all calculations are based around the specification supplied to Dextra before the lighting design is carried out.

All illuminance levels /unified glare ratios/ ceiling, wall and floor ratios have been made clear in order for the level of compliance to relevant Lighting guides/ British standards to be clear and obvious. These results should be checked and all aspects of compliance approved prior to an order.

If we have proposed an Emergency lighting scheme then it needs be checked and confirmed in order that it will satisfy the requirements of the person responsible for the building and or any local building control/fire officer. It is the responsibility of the building owner to ensure that a fully compliant emergency anti panic lighting scheme is installed. Emergency lighting scheme has been done in line with current British standards. If there are any high risks areas or areas that require specific illumination that are not made clear and not allowed for within the Dextra Group proposal, then these need to be highlighted and considered in order to achieve compliance.

The Dextra proposal will include exit signs by final exits and an emergency light outside final exits. Unless stated there has been no provision for emergency lighting to a safe place away from the building or to an assembly point.

Unless stated there will be no provision for fire tents on any of the products proposed, if however it is necessary for a fire barrier in line with current building regulations then Dextra Group offer a comprehensive range of fire tents that can be quoted upon request.

If there are any areas that need a ligature resistant luminaire then Dextra Group need to be notified so that an appropriate product can be proposed.

Any 'Protected zones' that are not obvious and clearly marked will need to be identified and changes will need to be made to the proposals as these areas require specialist lighting. Areas like firefighters stairwells and lifts are examples of these type of areas.

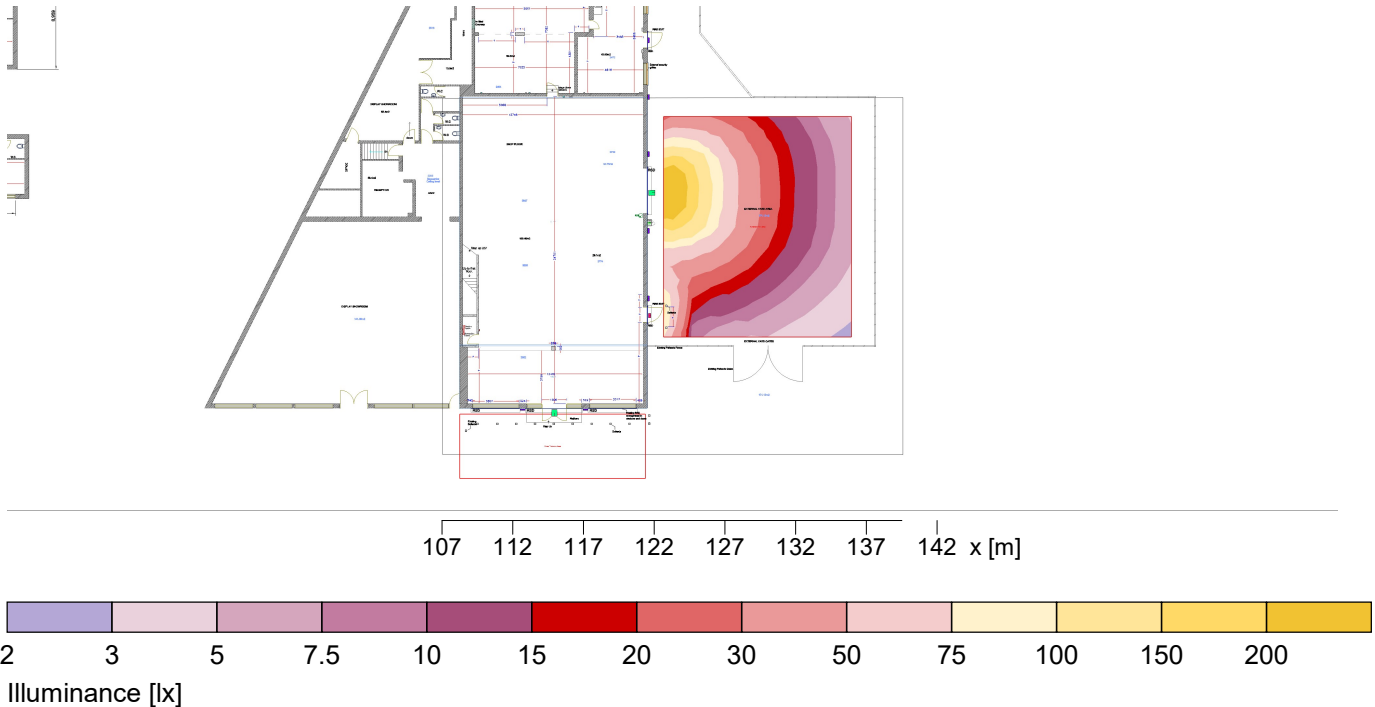
The following values are based on precise calculations performed on calibrated lamps and luminaires, and their configurations, whereby gradual, unavoidable deviations can occur in practice. All guarantee claims are excluded for the specified data.

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

1 Exterior 1

1.1 Summary, Exterior 1

1.1.1 Result overview, External Yard Area



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	0.90

Total luminous flux of all lamps	29884 lm
Total power	298.3 W
Total power per area (817.69 m ²)	0.36 W/m ²

Illuminance

Average illuminance	Em	37 lx
Minimum illuminance	Emin	3 lx
Maximum illuminance	Emax	262 lx
Uniformity Uo	Emin/Em	1:12.6 (0.08)
Diversity Ud	Emin/Emax	1:90.2 (0.01)

Type No. \ Make

Dextra Group PLC	
1	1
Order No. : IOPUWP L25 R25E AS PH	
Luminaire name : G1	
Equipment : 1 x Dextra 18.8 W / 2005 lm	
Dexretail Ltd	
2	2
Order No. : OPU3L L160 C74	
Luminaire name : F1	
Equipment : 1 x Dextra 119.1 W / 12991 lm	

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1 Exterior 1

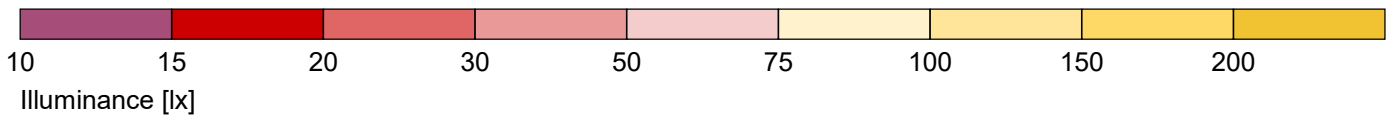
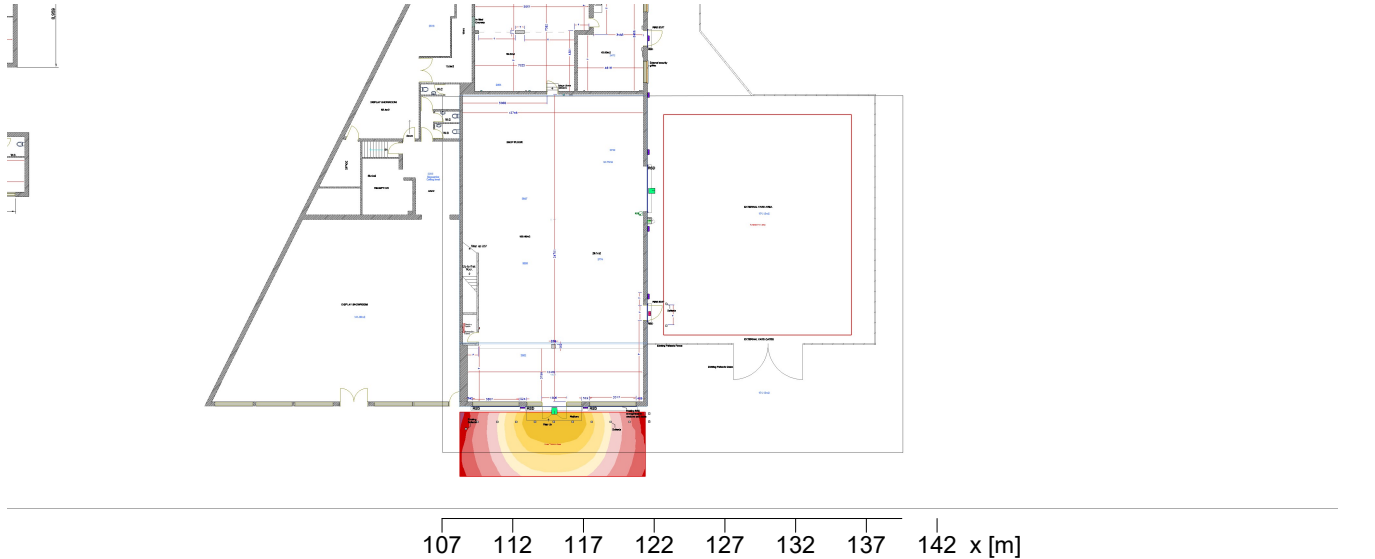
1.1 Summary, Exterior 1

1.1.1 Result overview, External Yard Area

3	7	Dexretail Ltd	
		Order No.	: IAME LED M3
		Luminaire name	: E3
		Equipment	: 1 x Dextra 1 W / 271 lm

1.1 Summary, Exterior 1

1.1.2 Result overview, Store Entrance Area



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	-0.00 m
Maintenance factor	0.90

Total luminous flux of all lamps	29884 lm
Total power	298.3 W
Total power per area (817.69 m ²)	0.36 W/m ²

Illuminance

Average illuminance	Em	100 lx
Minimum illuminance	Emin	14 lx
Maximum illuminance	Emax	284 lx
Uniformity Uo	Emin/Em	1:6.98 (0.14)
Diversity Ud	Emin/Emax	1:19.8 (0.05)

Type No. \ Make

1	1	Dextra Group PLC
		Order No. : IOPUWP L25 R25E AS PH
		Luminaire name : G1
		Equipment : 1 x Dextra 18.8 W / 2005 lm

2	2	Dexretail Ltd
		Order No. : OPU3L L160 C74
		Luminaire name : F1
		Equipment : 1 x Dextra 119.1 W / 12991 lm

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1.1 Summary, Exterior 1

1.1.2 Result overview, Store Entrance Area

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		Order No.	: !AME LED M3
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1 Exterior 1

1.2 Calculation results, Exterior 1

1.2.1 3D luminance, View 1

