



Ref	Type of area, task or activity	E_{in} (lux)	U_0	R_{CL}	R_g	Remarks
4.11.1	Short term handling of large units and raw materials; loading and unloading of solid bulk goods	20	0.25	55	20	
4.11.2	Continuous handling of large units and raw materials; loading and unloading of freight, lifting and descending location for cranes, open loading platforms	50	0.40	50	20	
4.11.3	Reading of addresses, covered loading platforms; use of tools, ordinary reinforcement and casting tasks in concrete plants	100	0.50	45	20	
4.11.4	Demanding electrical, machine and piping installations, inspection	200	0.50	45	60	Use local lighting

Yard lighting designed to 20 Lux as defined in BSEN 12464-2

Zone	Surrounding	Lighting environment	Examples
E0	Protected	Dark (SQM 20.5+)	Astronomical observable dark skies, UNESCO starlight reserves, IDA dark sky places
E1	Natural	Dark (SQM 20 to 20.5)	Relatively uninhabited rural areas, National Parks, Areas of Outstanding Natural Beauty, IDA buffer zones, etc.
E2	Rural	Low distinct brightness (SQM +15 to 20)	Sparsely populated areas, village or relatively dark outer suburban locations
E3	Suburban	Medium district brightness	Well inhabited rural and urban settlements, small towns centres of suburban locations
E4	Urban	High district brightness	Town/city centres with high levels of night-time activity

	External bracket mounted LED Floodlight c/w 4000k colour temperature output mounted approx 5500mm AFFL
	External wall mounted LED downlight c/w 2700k colour temperature output mounted approx 3000mm AFFL
	External wall mounted LED non-maintained emergency overdoor bulkhead c/w 4500k colour temperature output mounted approx 2500mm AFFL

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ISO 9001

1. Drawings are to be read in conjunction with all relevant specifications, engineers, architects & services drawings, including approved builders work drawings. Contractor to notify engineer of discrepancies between structural drawings & specifications or other drawings.
2. All dimensions are in millimeters unless noted otherwise.
3. Do not scale from the drawings or the computer digital data, only figured dimensions are to be used.
4. Refer to separate drawing J384-GLD-GF-DR-E-80000-003 for external lighting elevation layouts.
5. Perimeter lighting along sides of new warehouse have been designed in accordance with Guidance Note GN08/23 - Bats and Artificial Lighting at Night with a warm white 2700K LED light output proposed and Zero Upward Light Ratio.



Illumination results			
External circulation pathway RHS	Height reference plane Average illuminance Minimum illuminance Maximum illuminance Uniformity Uo Diversity Ud	Em Emin Emax Emin/Em Emin/Emax	0.00m 8.7 lux 2.4 lux 27.9 lux 1:3.63 (0.28) 1:11.6 (0.09)
External circulation pathway LHS	Illuminance Average illuminance Minimum illuminance Maximum illuminance Uniformity Uo Diversity Ud	Em Emin Emax Emin/Em Emin/Emax	12.6 lux 3.6 lux 38.3 lux 1:3.57 (0.28) 1:10.6 (0.09)
External loading area front	Illuminance Average illuminance Minimum illuminance Maximum illuminance Uniformity Uo Diversity Ud	Em Emin Emax Emin/Em Emin/Emax	26.1 lux 18.1 lux 34.2 lux 1:1.45 (0.69) 1:1.9 (0.53)
External loading area rear	Illuminance Average illuminance Minimum illuminance Maximum illuminance Uniformity Uo Diversity Ud	Em Emin Emax Emin/Em Emin/Emax	26.3 lux 15.3 lux 34 lux 1:1.72 (0.58) 1:2.22 (0.45)

Luminaire Reference	Luminaire Description	Lamp Type	Proposed Location	Proposed Luminaire
X1	IP66 IK10 rated 320mmx190mmx62mm LED bracket surface mounted wall luminaires, c/w die cast aluminium silver body; toughened glass lens; wide flood distribution; high frequency LED control gear. As LDL Lighting Cora range or accepted and equivalent	53w 4283 lm 4000K RA 80+ L90/B10	Front and rear loading areas	
X2	IP65 IK08 rated 230mmx220mmx 220mm LED surface mounted wall luminaires, c/w die cast aluminium graphite body; toughened glass lens; wide downlight distribution; high frequency LED control gear. As LDL Lighting Luna range or accepted and equivalent	14w 1205 lm 2700K RA 80+ L90/B10	Side elevation serving perimeter pathways	
E1	IP65 IK06 rated 350mm x 120mm x 90mm deep LED emergency bulkhead luminaire c/w 3 hour duration non- maintained integral battery; clear polycarbonate TP(a) opal lens, black body. As LDL AX range or accepted and equivalent	150 lm 4500K L90/B10	External Exits	

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Drawn By: JasW		Drawn Date: 04 Mar 2024	Scale: 1:200 @ A1		
Checked By: GD		Checked Date: 04 Mar 2024	xRef: 20240216-Existing-Site-Plan		



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Preliminary



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