

Obtrusive Light - Compliance Report

AS/NZS 4282:2019, A3 - Medium District Brightness, Non-Curfew L1
Filename: 9011 - St Columbas College - Netball Court Lighting_Rev1 - Obs Light
20/05/2022 11:27:07 AM

Illuminance

Maximum Allowable Value: 10 Lux

Calculations Tested (2):

<u>Calculation Label</u>	<u>Test Results</u>	<u>Max. Illum.</u>
Property line 1_ObtrusiveLight_Ill_Seg1	PASS	1.8
Property line 2_ObtrusiveLight_Ill_Seg1	PASS	0.7

Luminous Intensity (Cd) At Vertical Planes

Maximum Allowable Value: 12500 Cd

Calculations Tested (2):

<u>Calculation Label</u>	<u>Test Results</u>
Property line 1_ObtrusiveLight_Cd_Seg1	PASS
Property line 2_ObtrusiveLight_Cd_Seg1	PASS

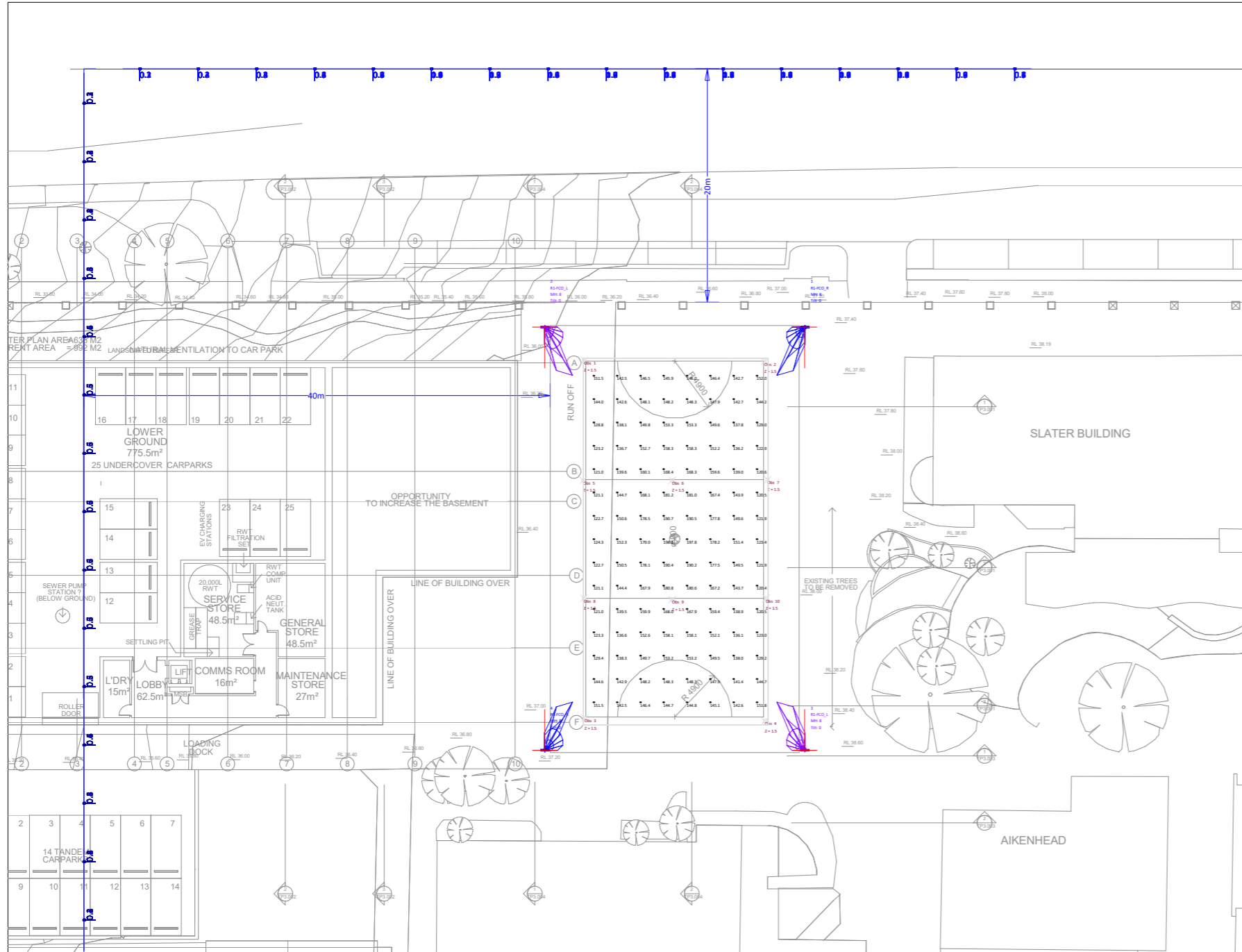
Upward Waste Light Ratio (UWLR)

Maximum Allowable Value: 2.0 %

Calculated UWLR: 0.0 %
Test Results: **PASS**



ewo R System R1



Symbol	Qty	Tag	Description	Lum. Watts	Lum. Lumens	MF
	2	R1-FCO_L	ewo_R-System R1-FCO_AP1604-L-FCO-128led 70CRI-4000K-700mA	272.6	35329	1.000
	2	R1-FCO_R	ewo_R-System R1-FCO_AP1604-R-FCO-128led 70CRI-4000K-700mA	272.6	35329	1.000

RESULTS :

Illuminance Calculation Summary					
Project: Illuminance					
Label	Units	Avg	Max	Min	Min/Avg
Court 1	Lux	149.240	198.2	120.4	0.81

Luminaire Location Summary				
LumNo	Label	Z	Orient	Tilt
1	ewo_R-System R1-FCO-R	8	270	0
2	ewo_R-System R1-FCO-L	8	270	0
3	ewo_R-System R1-FCO-L	8	90	0
4	ewo_R-System R1-FCO-R	8	90	0

Calculation Summary			
Project: Obs Light			
Label	CalcType	Max	Min
Property line 1_ObtusiveLight_C	Obtrusive Light - Cd	318	0
Property line 1_ObtusiveLight_I	Obtrusive Light - III	1.8	0.1
Property line 2_ObtusiveLight_C	Obtrusive Light - Cd	452	0
Property line 2_ObtusiveLight_I	Obtrusive Light - III	0.7	0.1

ILLUMINANCE CALCULATION
Reflectances used base in finished *Daylight not factored*

DESIGN COMPLIANCE & PARAMETERS :

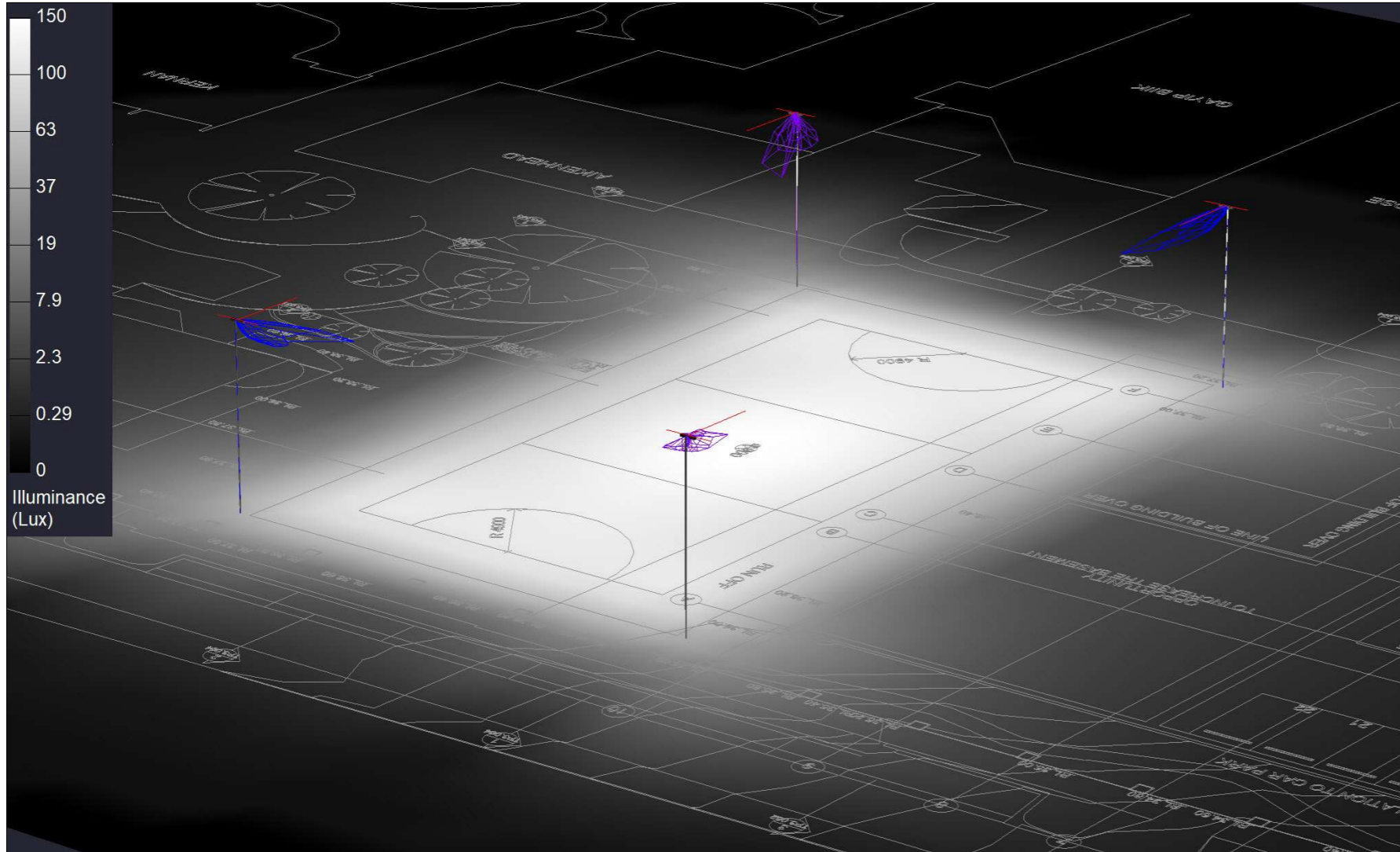
The Client must check drawings for compliance with site conditions.

PROJECT :
**St Columbas College
Netball Court Lighting - Obs light**

PROJECT REFERENCE :	9011	REV.	1
DESIGNER :	MG		
DATE :	20/05/2022	Pg No.	1



ewo R System R1



RESULTS :

Illuminance Calculation Summary

Project: Illuminance

Label	Units	Avg	Max	Min	Min/Avg
Court 1	Lux	149.240	198.2	120.4	0.81

Luminaire Location Summary

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Luminaire Schedule						
Symbol	Qty	Tag	Description	Lum. Watts	Lum. Lumens	MF
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ILLUMINANCE CALCULATION

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DESIGN COMPLIANCE & PARAMETERS :

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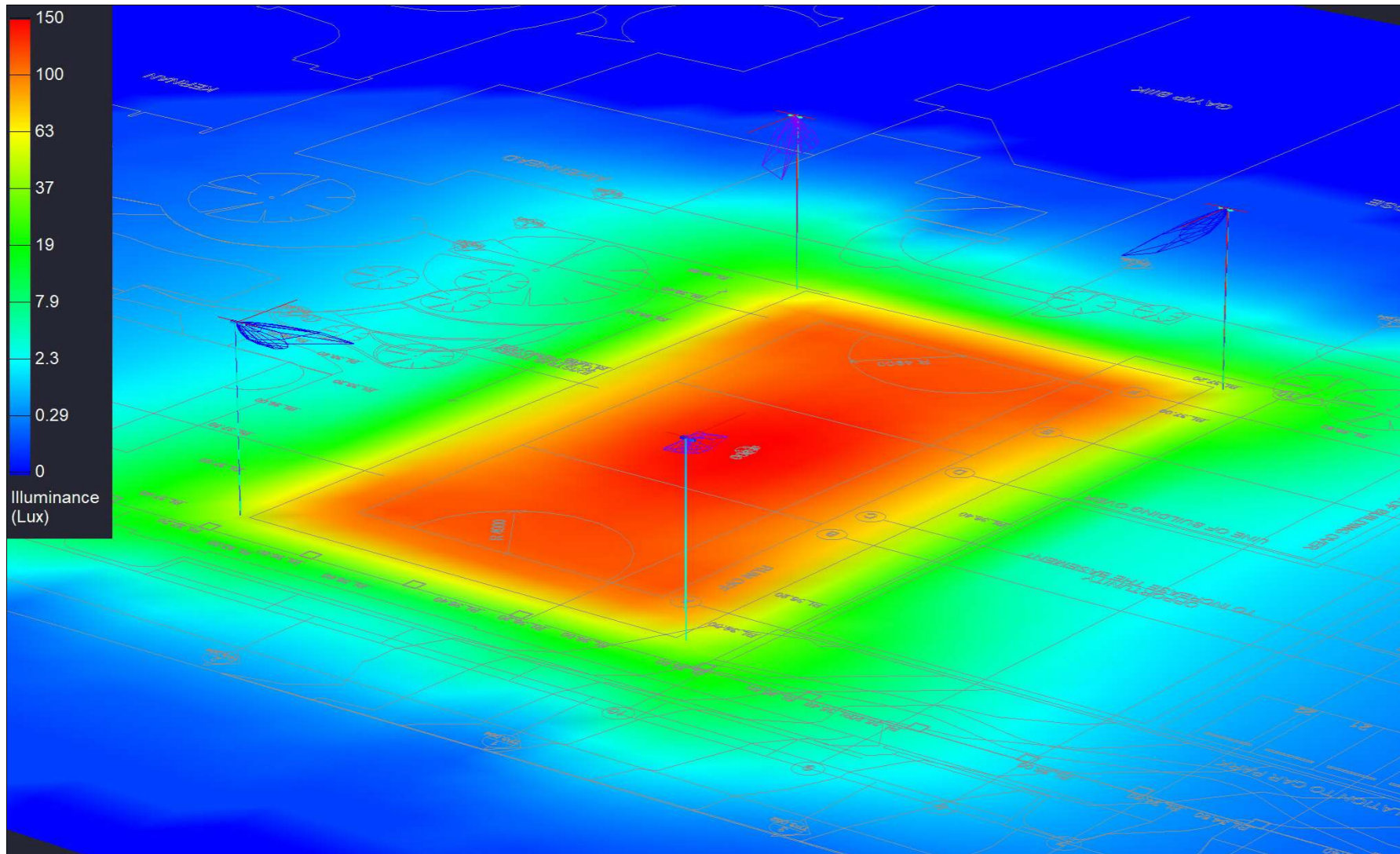
PROJECT :

**St Columbas College
Netball Court Lighting - Obs light**

PROJECT REFERENCE :	9011	REV.	1
DESIGNER :	MG		
DATE :	20/05/2022	Pg No.	2



ewo R System R1



RESULTS :

Illuminance Calculation Summary

Project: Illuminance

Label	Units	Avg	Max	Min	Min/Avg
Court 1	Lux	149.240	198.2	120.4	0.81

Luminaire Location Summary

LumNo	Label	Z	Orient	Tilt
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ILLUMINANCE CALCULATION

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DESIGN COMPLIANCE & PARAMETERS :

The Client must check drawings for compliance with site conditions.

PROJECT :

**St Columbas College
Netball Court Lighting - Obs light**

PROJECT REFERENCE :	9011	REV.	1
DESIGNER :	MG	Pg No.	3
DATE :	20/05/2022		

R-System R1

A-Series



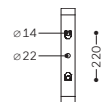
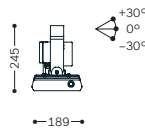
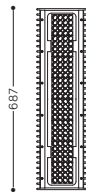
R1

R1

7.5 kg
+ 3 kg Driver

↓ $\textcircled{1}$ = 0.13

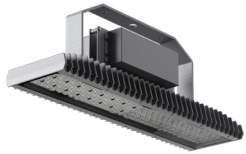
↔ $\textcircled{2}$ = 0.05* / 0.08**



Model	Luminous Flux [lm] $\textcircled{3}$	Max. Power [W]	Current Feed [mA]	LEDs
R1 (A-Series)	35,888	273	700	128

$\textcircled{1}$ Projected windage area [m²] $\textcircled{2}$ Lateral windage area [m²] *Tilt 0° **Tilt 30° $\textcircled{3}$ AP04 / 5,700 K / CRI ≥ 70

Models / Equipment Variations



R1 (driver installed)



R4 (driver external)

- System accommodates 1 panel
- Current feed: 400-700 mA, depending on ambient temperature
- Allowed ambient temperature range: -40 to +55 °C
- Lifetime: L90B10 > 60,000 h
- System efficacy: 110-145 lm/W
- Electronic operating device with DALI; each panel one DALI address
- Smart Lighting: control modules for different communication standards available upon request
- Various light distributions for large-area, high bay or street lighting
- Lens made from PMMA, cover in single-pane safety glass (ESG)
- Luminaire housing in die-cast aluminium
- Bracket made of hot-dip galvanised steel, holder made of aluminium
- Finish: polyester powder coating, white aluminium (RAL 9006 / DB 701)

⊕ IP66 RoHS IK08



Colour Temperatures

3,000 K 4,000 K 5,700 K

Standard CRI ≥ 70, CRI ≥ 80 upon request
≤ 5 SDCM (MacAdam ellipses)

Light Distributions (also available in satiné version – spot optics excluded)

