

TECHNICAL SUBMISSION

From: Fusion Electrics	Tech 04
	Sub No. Date: 03/09/2025
To: Thomas Corbett	Project: Imagination Two-Knowsley

Approval of the Following Equipment is Required:

*Equipment: Lighting	Make: King Fisher
*Description/Location: External	

*ATTACHED DETAIL DOCUMENTS:

(Insert references within boxes identifying supporting documentation to be included within this submission – pdf filename).

(i)	Equipment Specifying Schedule	kingfisher-lighting_quarto-2-0_datasheet_2024 kingfisher-lighting_viva-city-pro_datasheet_2024 kingfisher-lighting_zactis_datasheet_2024 Photocell	(vi)		
(ii)	Panel & Distribution		(vii)	Assembly & Installation Details	As per technical data sheets provided.
(iii)	Design Check Calculations		(viii)	O & M Instructions	
(iv)	Certified Performance Levels		(ix)	List of Recommended Spares	
(v)	QA/QC Documents				

•Compliance		The enclosed documents are specification compliant: equal and approved)			
Schedule of Deviations		1. 2. 3.			
<u>REVIEWED & CHECKED:</u>		SIGNED Liam Prendergast		DATE: 03.09.25	
<u>OVERALL STATUS OF TECH SUBMISSION</u>					
Status A – Proceed no Comments					
Status B – Proceed including any comments.					
Status C – Do Not Proceed – Re-issue including comments.					

*Must be completed

Fusion Notes

Comments:



**Kingfisher
Lighting**

Part of the LUCECO group of companies

Datasheet

QUARTO 2.0



Specification Text

The QUARTO 2.0 shall be manufactured from high pressure die-cast aluminium and powder coated with a RAL 7016 Anthracite Grey marine grade finish. It shall have a power output ranging between 7.5 - 14.2W, with an efficacy of 93 - 121lm/W. The luminaire shall deliver 740 - 1,720 luminaire lumens. The QUARTO 2.0 has a range of different optics to suit narrow, medium and wide paths. Available in 2700K or 4000K, the luminaire shall be IK10 and IP66 rated with 3 hour integral emergency back-up and self-test options available.

Specification

Weight: 4 - 4.2 kg
Material: Die-cast Aluminium
Paint Finish: RAL7016 Anthracite Grey
Embodied Carbon: 77 kg CO₂e

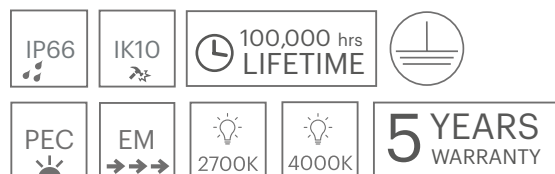
Product Description

The QUARTO is a stylish, modern bulkhead available with emergency and photocell options. This luminaire is perfect for building and perimeter lighting.

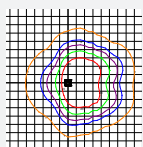
Key Features

- 7.5W - 14.2W
- 720 - 1,720 Luminaire Lumens
- Efficacy up to 121.0 lm/W
- 2700K, 4000K, CRI>70
- IP66, IK10
- Lifetime > 100,000hr L80
- 3 Hour Integral Emergency
- Colour Temperature Opportunities
- Motion Sensor Option

Available with integral 3 hour emergency using a 3.0W pack. Output range from 315 - 363 lm dependant on optic, CCT & accessories.

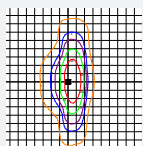


Optics



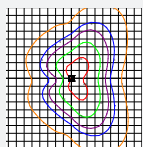
Flood Optic

Designed with excellent wide distribution for areas needing greater illumination such as car parks, children's areas and many more areas



Path Optic

Perfect for a variety of pedestrian areas in close proximity to buildings. E.g retail parks, façade lighting and offices.



Street Optic

Ideal for illuminating areas such as building perimeters and access areas. It would be best placed in areas such with high security needs.

Circular Economy Score

0 to 0.05	Very poor circular economy performance
0.5 to 1.5	Some circular economy functionality
1.5 to 2.5	Definite/substantial progress to circularity
2.5 to 4.0	Excellent circularity

Other Options Available

Contact for further details

- 3 Hour Integral Emergency
- Colour Temperature Opportunities
- Monitor Sensor Option

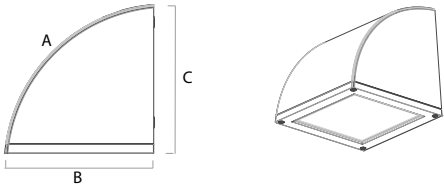
Mounting Options

- Wall Mount

Dimensions

Body Type	A	B	C	D
Standard	231	230	230	200x80

All measurements in mm



Code	Power (W)	Luminaire Lumens (lm)	Drive Current (mA)	Inrush Current (A pk)	Optic	CCT (K)	IP	IK	Weight (kg)	Driver Included	Driver Type
QUAFL08F	7.5	840	250	14.0	Asymmetrical Flood Optic FL	4000	IP66	IK10	4.2	Yes	Fixed
QUAFL15F	14.2	1,720	500	14.0		4000	IP66	IK10	4.2	Yes	Fixed
QUAFL08F27K	7.5	765	250	14.0		2700	IP66	IK10	4.2	Yes	Fixed
QUAFL15F27K	14.2	1,560	500	14.0		2700	IP66	IK10	4.2	Yes	Fixed
QUAOC08F	7.5	820	250	14.0	Asymmetrical Path Optic OC	4000	IP66	IK10	4.2	Yes	Fixed
QUAOC15F	14.2	1,675	500	14.0		4000	IP66	IK10	4.2	Yes	Fixed
QUAOC08F27K	7.5	740	250	14.0		2700	IP66	IK10	4.2	Yes	Fixed
QUAOC15F27K	14.2	1,510	500	14.0		2700	IP66	IK10	4.2	Yes	Fixed
QUAST08F	7.5	790	250	14.0	Asymmetrical Street Optic ST	4000	IP66	IK10	4.2	Yes	Fixed
QUAST15F	14.2	1,620	500	14.0		4000	IP66	IK10	4.2	Yes	Fixed
QUAST08F27K	7.5	720	250	14.0		2700	IP66	IK10	4.2	Yes	Fixed
QUAST15F27K	14.2	1,470	500	14.0		2700	IP66	IK10	4.2	Yes	Fixed



Kingfisher Lighting

Part of the LUCECO group of companies

Datasheet

VIVA-CITY Pro



Specification Text

The VIVA-CITY Pro shall be manufactured from die-cast aluminium and powder coated in RAL 7016 Marine Grade finish. It shall have a power output ranging between 10 - 180W, with an efficacy of 66 - 150lm/W. The luminaire shall deliver 662 - 24,840 luminaire lumens. It shall have a fully programmable DALI driver. Available in 2700K or 4000K, the luminaire shall be IK08 and IP66 rated. It shall have photocell options available.

For DarkSky Specifications, the luminaire shall produce a CCT of 2700K.



Specification

Weight:	4.5 - 9.1 kg
Windage:	0.06 - 0.09 m ²
Material:	Die-cast Aluminium
Paint Finish:	RAL7016 Anthracite Grey
Embodied Carbon:	89 - 182 kg CO ₂ e

Product Description

Designed and Engineered in the UK, the VIVA-CITY Pro is a slimline luminaire featuring innovative optical systems to reduce light pollution within projects.



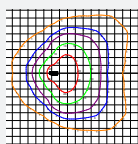
Kingfisher Lighting

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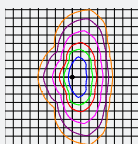
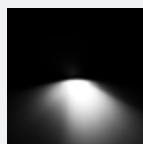
Key Features

- 10.0W - 180.0W
- 662 - 24,840 Luminaire Lumens
- Efficacy up to 150.0 lm/W
- 2700K, 4000K, CRI>70
- IP66, IK08
- Lifetime > 100,000hr, L80
- DarkSky Approved
- Photocell Option
- 3 Hour Integral Emergency

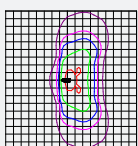
Optics



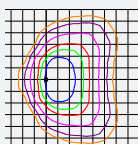
Forward Throw Optic 70°
Open areas perimeter lighting



Street Optic 70°
Roadways, pathways and narrow areas



Spill Shield Street Optic 70°
Roadways, pathways and narrow areas limiting obtrusive light



Spill Shield Forward Throw Optic 70°
Open areas perimeter lighting limiting obtrusive light



Circular Economy Score

0 to 0.05	Very poor circular economy performance
0.5 to 1.5	Some circular economy functionality
1.5 to 2.5	Definite/substantial progress to circularity
2.5 to 4.0	Excellent circularity

Other Options Available

Contact for further details

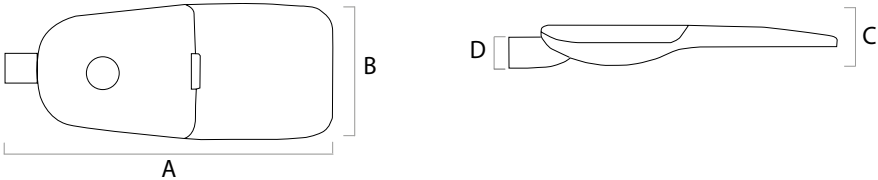
- Colour Temperatures: 2700K, 4000K
- Photocell
- Emergency
- Full Control Capabilities
- Dim to Warm

Body Type	A	B	C	D
Body Size 1 - 10, 20W	520	200	106	60/76
Body Size 3 - 40, 60, 80W	625	288	102	60/76
Body Size 4 - 120, 180W	775	320	102	60/76

All measurements in mm

Mounting Options

- Post Top 60/76mm, Side Entry 60/76mm



Code	Power	Luminaire Lumens	Drive Current mA	Inrush Current A pk	Optic	CCT(K)	IP	IK	Weight kg	Driver Included	Driver Type
VCYP-AY70-4.4-10D-02	10.0	1,177	400	9.2	Asymmetrical Street Optic 70°	4000	IP66	IK08	4.8	Yes	DALI
VCYP-AY70-27.4-10D-02	10.0	1,117	400	9.2		2700	IP66	IK08	4.8	Yes	DALI
VCYP-AY70-4.8-20D-02	20.0	2,699	840	14.9		4000	IP66	IK08	4.8	Yes	DALI
VCYP-AY70-27.8-20D-02	20.0	2,561	840	14.9		2700	IP66	IK08	4.8	Yes	DALI
VCYP-AY70-4.10-40D-02	40.0	5,880	1,050	24.9		4000	IP66	IK08	6.0	Yes	DALI
VCYP-AY70-27.10-40D-02	40.0	5,579	1,050	24.9		2700	IP66	IK08	6.0	Yes	DALI
VCYP-AY70-4.6-60D-02	60.0	8,844	610	32.0		4000	IP66	IK08	6.0	Yes	DALI
VCYP-AY70-27.6-60D-02	60.0	8,392	610	32.0		2700	IP66	IK08	6.0	Yes	DALI
VCYP-AY70-4.8-80D-02	80.0	11,120	800	41.6		4000	IP66	IK08	6.0	Yes	DALI
VCYP-AY70-27.8-80D-02	80.0	10,551	800	41.6		2700	IP66	IK08	6.0	Yes	DALI
VCYP-AY70-4.6-120D-02	120.0	17,828	620	65.0		4000	IP66	IK08	9.0	Yes	DALI
VCYP-AY70-27.6-120D-02	120.0	16,916	620	65.0		2700	IP66	IK08	9.0	Yes	DALI
VCYP-AY70-4.9-180D-02	180.0	24,840	900	80.0	Asymmetrical Forward Throw Optic 70°	4000	IP66	IK08	9.0	Yes	DALI
VCYP-AY70-27.9-180D-02	180.0	23,569	900	80.0		2700	IP66	IK08	9.0	Yes	DALI
VCYP-FW70-4.4-10D-02	10.0	1,149	400	9.2		4000	IP66	IK08	4.8	Yes	DALI
VCYP-FW70-27.4-10D-02	10.0	1,090	400	9.2		2700	IP66	IK08	4.8	Yes	DALI
VCYP-FW70-4.8-20D-02	20.0	2,655	840	14.9		4000	IP66	IK08	4.8	Yes	DALI
VCYP-FW70-27.8-20D-02	20.0	2,519	840	14.9		2700	IP66	IK08	4.8	Yes	DALI
VCYP-FW70-4.10-40D-02	40.0	5,532	1,050	24.9		4000	IP66	IK08	6.0	Yes	DALI
VCYP-FW70-27.10-40D-02	40.0	5,249	1,050	24.9		2700	IP66	IK08	6.0	Yes	DALI
VCYP-FW70-4.6-60D-02	60.0	8,760	610	32.0		4000	IP66	IK08	6.0	Yes	DALI
VCYP-FW70-27.6-60D-02	60.0	8,312	610	32.0		2700	IP66	IK08	6.0	Yes	DALI
VCYP-FW70-4.8-80D-02	80.0	11,040	800	41.6		4000	IP66	IK08	6.0	Yes	DALI
VCYP-FW70-27.8-80D-02	80.0	10,475	800	41.6		2700	IP66	IK08	6.0	Yes	DALI
VCYP-FW70-4.6-120D-02	120.0	17,760	620	65.0	Asymmetrical Spill Shield Street Optic 70°	4000	IP66	IK08	9.0	Yes	DALI
VCYP-FW70-27.6-120D-02	120.0	16,851	620	65.0		2700	IP66	IK08	9.0	Yes	DALI
VCYP-FW70-4.9-180D-02	180.0	24,660	900	80.0		4000	IP66	IK08	9.0	Yes	DALI
VCYP-FW70-27.9-180D-02	180.0	23,398	900	80.0		2700	IP66	IK08	9.0	Yes	DALI
VCYP-AYB70-4.4-10DSHIELD-02	10.0	698	400	9.2		4000	IP66	IK08	4.8	Yes	DALI
VCYP-AYB70-27.4-10DSHIELD-02	10.0	662	400	9.2		2700	IP66	IK08	4.8	Yes	DALI
VCYP-AYB70-4.8-20DSHIELD-02	20.0	1,601	840	14.9		4000	IP66	IK08	4.8	Yes	DALI
VCYP-AYB70-27.8-20DSHIELD-02	20.0	1,519	840	14.9		2700	IP66	IK08	4.8	Yes	DALI
VCYP-AYB70-4.10-40DSHIELD-02	40.0	3,487	1,050	24.9		4000	IP66	IK08	6.0	Yes	DALI
VCYP-AYB70-27.10-40DSHIELD-02	40.0	3,308	1,050	24.9		2700	IP66	IK08	6.0	Yes	DALI

Code	Power	Luminaire Lumens	Drive Current mA	Inrush Current A pk	Optic	CCT(K)	IP	IK	Weight kg	Driver Included	Driver Type
VCYP-AYB70-27.8-80DSHIELD-02	80.0	6,257	800	41.6	Asymmetrical Spill Shield Street Optic 70°	2700	IP66	IK08	6.0	Yes	DALI
VCYP-AYB70-4.6-120DSHIELD-02	120.0	10,572	620	65.0		4000	IP66	IK08	9.0	Yes	DALI
VCYP-AYB70-27.6-120DSHIELD-02	120.0	10,031	620	65.0		2700	IP66	IK08	9.0	Yes	DALI
VCYP-AYB70-4.9-180DSHIELD-02	180.0	14,730	900	80.0		4000	IP66	IK08	9.0	Yes	DALI
VCYP-AYB70-27.9-180DSHIELD-02	180.0	13,977	900	80.0		2700	IP66	IK08	9.0	Yes	DALI
VCYP-FWB70-4.4-10DSHIELD-02	10.0	892	400	9.2	Asymmetrical Spill Shield Forward Throw Optic 70°	4000	IP66	IK08	4.8	Yes	DALI
VCYP-FWB70-27.4-10DSHIELD-02	10.0	846	400	9.2		2700	IP66	IK08	4.8	Yes	DALI
VCYP-FWB70-4.8-20DSHIELD-02	20.0	2,060	840	14.9		4000	IP66	IK08	4.8	Yes	DALI
VCYP-FWB70-27.8-20DSHIELD-02	20.0	1,955	840	14.9		2700	IP66	IK08	4.8	Yes	DALI
VCYP-FWB70-4.10-40DSHIELD-02	40.0	4,293	1,050	24.9		4000	IP66	IK08	6.0	Yes	DALI
VCYP-FWB70-27.10-40DSHIELD-02	40.0	4,073	1,050	24.9		2700	IP66	IK08	6.0	Yes	DALI
VCYP-FWB70-4.6-60DSHIELD-02	60.0	6,798	610	32.0		4000	IP66	IK08	6.0	Yes	DALI
VCYP-FWB70-27.6-60DSHIELD-02	60.0	6,450	610	32.0		2700	IP66	IK08	6.0	Yes	DALI
VCYP-FWB70-4.8-80DSHIELD-02	80.0	8,567	800	41.6		4000	IP66	IK08	6.0	Yes	DALI
VCYP-FWB70-27.8-80DSHIELD-02	80.0	8,129	800	41.6		2700	IP66	IK08	6.0	Yes	DALI
VCYP-FWB70-4.6-120DSHIELD-02	120.0	13,782	620	65.0		4000	IP66	IK08	9.0	Yes	DALI
VCYP-FWB70-27.6-120DSHIELD-02	120.0	13,077	620	65.0		2700	IP66	IK08	9.0	Yes	DALI
VCYP-FWB70-4.9-180DSHIELD-02	180.0	19,136	900	80.0		4000	IP66	IK08	9.0	Yes	DALI
VCYP-FWB70-27.9-180DSHIELD-02	180.0	18,157	900	80.0		2700	IP66	IK08	9.0	Yes	DALI



Kingfisher Lighting

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Datasheet

ZACTIS



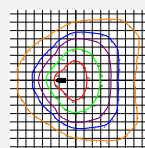
Specification Text

The ZACTIS shall be manufactured from die-cast aluminium and powder coated with a RAL 7016 Anthracite Grey marine grade finish. It shall have a power output ranging between 125 - 320W, with an efficacy from 126 - 138lm/W. It shall deliver 16,447 - 44,156 luminaire lumens. It shall have a fully programmable DALI driver. The ZACTIS shall have optics to suit pathway, road and open area applications. Available in 2700K or 4000K, the luminaire shall be IK08 and IP65 rated. It shall have photocell options available.

Specification

Weight: 15.0 - 16.5 kg
Windage: 0.04 m²
Material: Die-cast Aluminium
Paint Finish: RAL7016 Anthracite Grey
Embodied Carbon: 236 - 289 kg CO₂e

Optics



Forward Throw Optic 70°

Open areas perimeter lighting

Product Description

High performance, the ZACTIS flood is the flat-to-ground luminaire perfect for area, sports and high mast lighting.



Kingfisher
Lighting

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Key Features

- 125.0W - 320.0W
- 16,447 - 44,156 Luminaire Lumens
- Efficacy up to 138.0 lm/W
- 2700K, 4000K, CRI>70
- IP65, IK08
- Lifetime > 100,000hr, L80
- 0% ULOR
- Marine Grade Finish
- Flat-to-Ground Profile



Circular Economy Score

0 to 0.05	Very poor circular economy performance
0.5 to 1.5	Some circular economy functionality
1.5 to 2.5	Definite/substantial progress to circularity
2.5 to 4.0	Excellent circularity

Other Options Available

Contact for further details

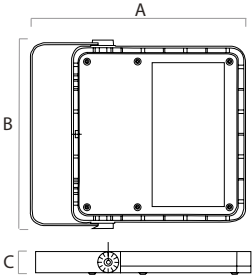
- Colour Temperature Options
- Photocell Options

Mounting Options

- Stirrup Mount

Body Type	A	B	C
Standard	610	540	65

All measurements in mm



Code	Power	Luminaire Lumens	Drive Current	Inrush Current A pk	Optic	CCT(K)	IP	IK	Weight kg	Driver Included	Driver Type
ZAC-FW70-4.6-125D-02	125.0	17,125	640	80.0	Asymmetrical Forward Throw Optic 70°	4000	IP65	IK08	15.0	Yes	DALI
ZAC-FW70-27.6-125D-02	125.0	16,447	640	80.0		2700	IP65	IK08	15.0	Yes	DALI
ZAC-FW70-4.8-160D-02	160.0	21,920	805	80.0		4000	IP65	IK08	15.0	Yes	DALI
ZAC-FW70-27.8-160D-02	160.0	20,166	805	80.0		2700	IP65	IK08	15.0	Yes	DALI
ZAC-FW70-4.6-250D-02	250.0	34,250	640	80.0		4000	IP65	IK08	16.5	Yes	DALI
ZAC-FW70-27.6-250D-02	250.0	33,327	640	80.0		2700	IP65	IK08	16.5	Yes	DALI
ZAC-FW70-4.8-320D-02	320.0	44,156	805	80.0		4000	IP65	IK08	16.5	Yes	DALI
ZAC-FW70-27.8-320D-02	320.0	43,026	805	80.0		2700	IP65	IK08	16.5	Yes	DALI

Order Code: XCPC
Photocell head and bracket



Features

- Suitable for switching exterior lighting circuits
- Wall mounted
- Two-piece unit with NEMA socket base and head unit [Head unit can be ordered as separate item]
- 10A Rating
- Load rating: Max 2000W [10A] incandescent, Max 2 x 400W [10A] HPS. Max 600W [2.2A] LED

Construction

- Low energy and maintenance free solution
- High quality polycarbonate construction

Technical Data

General	
Weight (kg)	0.17
Operating Temperature (ta °C)	-20° to 40°
Electrical	
Conductor Size (mm)	0.5 to 2.5
Terminal Type	Screw terminals

Dimensions	
A (mm)	133
B (mm)	87
Dia. (mm)	80

