



Lighting Assessment for:

New Ev Charging Facility, Jet Wash Bays, Associated Electrical Compound and Parking Bays.

Shell Bude Service Station, Bencoolen Road, Bude EX23 8PJ

Exterior Lighting for New Works

(Please refer to drawing ref: SH96)

Lighting Description

New lighting locations are notated on illuminance drawing SH96 (A, B and C.) A product description for each new luminaire type is included within the key. All exterior lighting is specified with an LED beam control system enabling sharp cut off and control of beam direction (below 70 degrees), avoiding glare, trespass and night sky pollution. Lighting Product datasheets are included for reference.

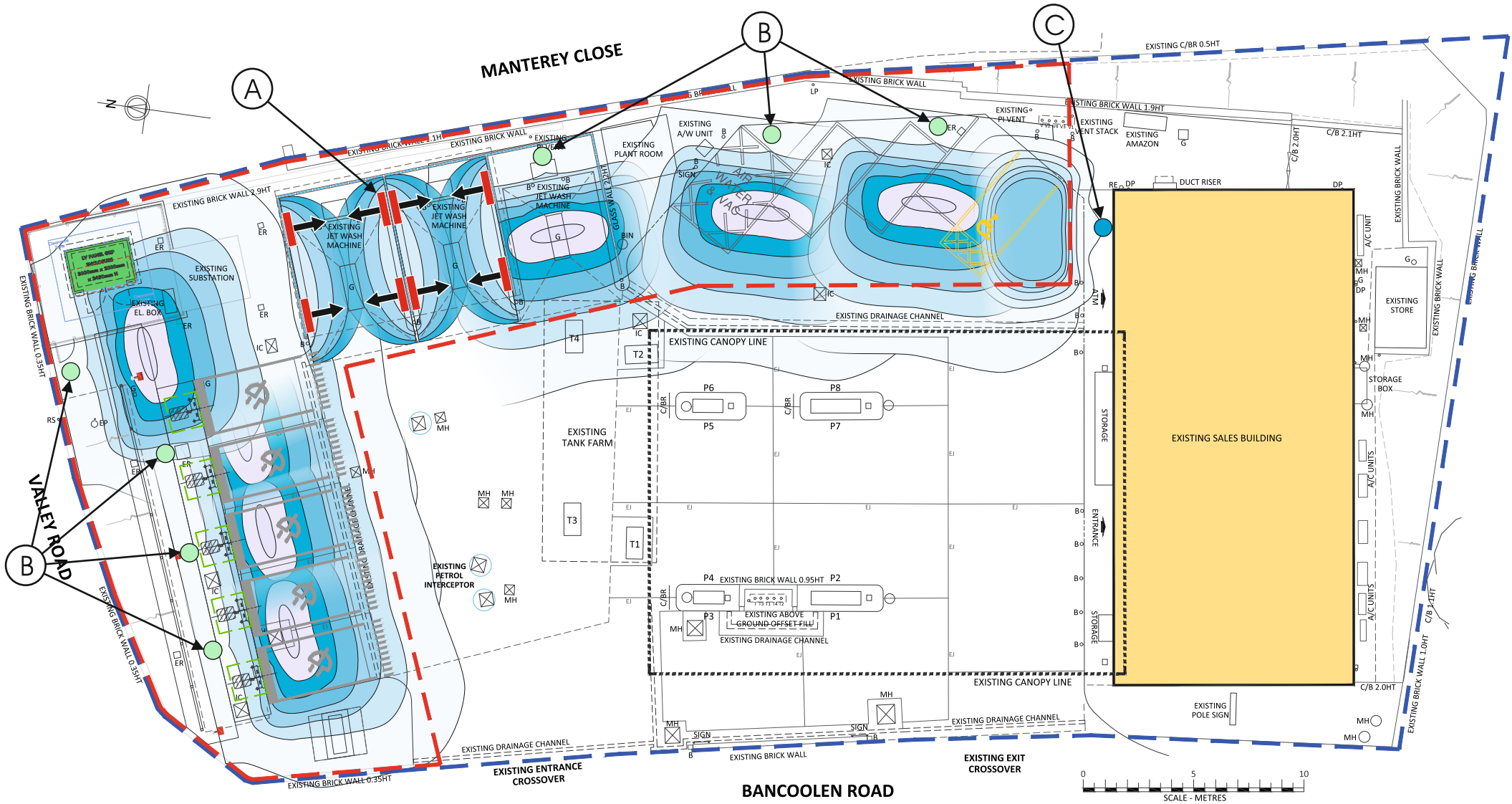
Impact on neighbouring property by the new scheme and compliance.

The exterior lighting details attached and here referred to confirm a compliant scheme to be installed and thereafter retained as agreed by the LPA.

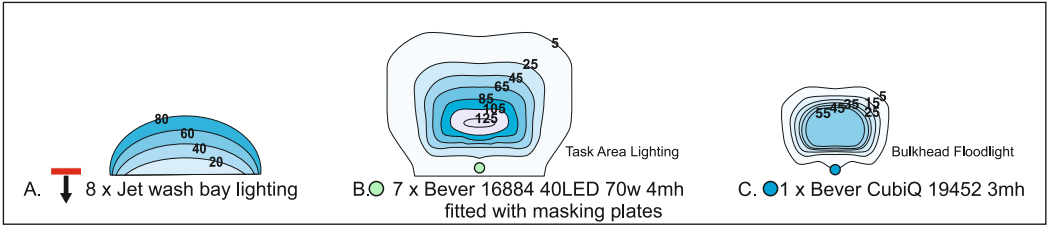
Illuminance contours for the new luminaires are shown on drawing SH96.

Particular attention has been given to the proximity of residential property to eliminate any light trespass and glare. Where appropriate, a reduction of floodlight column mounting heights and masking/shrouds fitted to the rear of floodlight lanterns has been implemented. Jet Wash Bays are within structures or suitably screened to eliminate light and noise trespass.

Existing and proposed boundary treatment to adjacent property along with the benefit of good lighting design with new LED technology will provide a high degree of control to restrict any boundary spillage of light and eliminate nuisance to neighbouring residents and adjacent wildlife habitats.



BANCOOLEN ROAD



The lighting information provided on this drawing is for planning purposes only. The specified product manufacturer must be contacted for a comprehensive design and limited warranty information prior to product procurement. Emergency and Escape Lighting (not shown) is to be installed and compliant with BS5266-1 and The Regulatory Reform (Fire Safety) Order 2005 respectively.

TITLE: PROPOSED LIGHTING PLAN - BUDE

FILE REF: SH96

CLIENT: JMS

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SKU: 16884

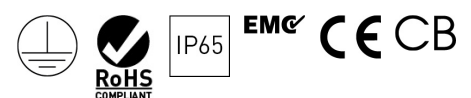
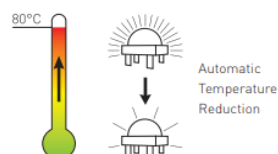
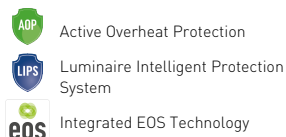
Ambiente. A-Symm. Wide Beam. 40LED - NO. 70W default. 5700K. CRI73+. EOS.

Features

Productgroup	Ambiente
Power supply	Integrated
Input voltage	90 - 305 Vac 127 - 431 VDC
Frequency	47 - 63 Hz
Input Power (default)	70 Watt
Maximum allowed power (EU directive 2019/2020)	77 Watt
Lumen output (up to)	8122 lm
Efficacy (default)	115 lm/W
Colour temperature (CCT)	5700 K
Colour rendering index (CRI)	73+
Colour consistency	5 Macadam Ellipses
Upward light ratio (ULR)	< 1%
LED-count	40
Optic	PMMA
Beam optics	Wide area
Housing	Diecast aluminium / tempered safety glass
Mounting	Suits straight and angled poles
Pole diameter	48 - 60 mm
Dimensions	644 x 303 x 132 mm
Adjustable angle	-5° to +10°, bended or straight poles
EOS wireless technology	Yes
Motion sensor (PIR)	Available
Ingress protection	IP65
Mechanical impact resistance	IK08
Max SCx	0.0432 m ²
IEC safety class	I
Power factor	0.96 typical
AC harmonics	Less than 10% THD compliant to EN55015
Inrush current	65 A 1.2 ms
B-16A fuse	10 pcs
C-16A fuse	14 pcs
Operating temperature	-40°C to +60°C
Rated life (L80B10)	100,000+ hours
Weight	7.20 kg

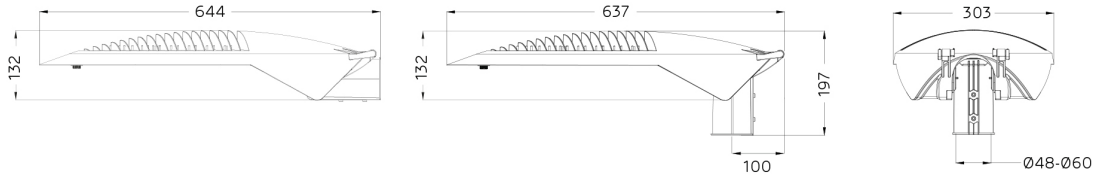
Benefits

- + Increases visibility and comfort
- + Most advanced LED-technology
- + High efficient design: up to 114 lm/W luminaire efficacy
- + Outdoor ambient resistant -40°C to +60°C
- + Integrated die cast aluminium housing ensures good thermal management maximizing life and LED performance
- + Protected on against moisture, power dips or surges
- + Same model for straight or bended poles, easy finetuning of angle
- + Easy to install by one person
- + Attractive design
- + Mounting height: max. 18 meter
- + Night-time dimming. Configurable dusk till dawn dimming schedule
- + Self-controlled operating conditions:
 - Luminaire Intelligent Protection System (LIPS)
 - Active Overheat Protection (AOP)
 - Light Normalizer - No Lumen drop during lifetime
- + Integrated EOS technology:
 - Plug-and-play self-organizing wireless network
 - Encrypted communication
 - Advised maximum spacing for network: 30 meter
- + Intuitive control and analysis with the EOS Manager app:
 - User authentication and data encryption
 - Visual representation of your EOS network
 - Extensive configuration, information, and usage statistics
 - Share sensor information between EOS devices

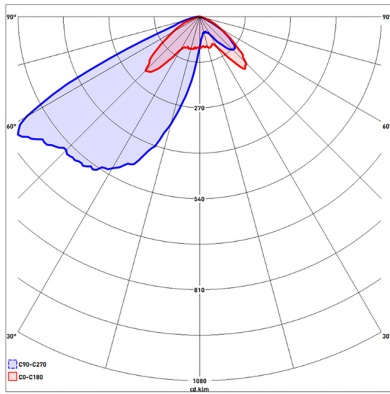


Bever_SPEC_Ambiente EOS2 Area_01-02-22

Dimensions



Optic



Ordering information

Name	SKU	Optic	Power	Lumen	Efficacy	CCT	CRI	Weight
Ambiente EOS2 Area 25 LED								
Ambiente 25LED 50W 3000K PIR	19381	Wide area	50 W	5527 lm	110 lm/W	3000 K	73+	7.20 kg
Ambiente 25LED 50W 4000K	16881	Wide area	50 W	5128 lm	102 lm/W	4000 K	83+	7.20 kg
Ambiente 25LED 50W 4000K PIR	19284	Wide area	50 W	5128 lm	102 lm/W	4000 K	83+	7.20 kg
Ambiente 25LED 50W 5700K	16882	Wide area	50 W	5527 lm	110 lm/W	5700 K	73+	7.20 kg
Ambiente 25LED 50W 5700K PIR	19380	Wide area	50 W	5527 lm	110 lm/W	5700 K	73+	7.20 kg
Ambiente EOS2 Area 40 LED								
Ambiente 40LED 70W 3000K	18609	Wide area	70 W	8122 lm	115 lm/W	3000 K	73+	7.20 kg
Ambiente 40LED 70W 3000K PIR	19379	Wide area	70 W	7558 lm	107 lm/W	3000 K	73+	7.20 kg
Ambiente 40LED 70W 4000K	16883	Wide area	70 W	7558 lm	107 lm/W	4000 K	83+	7.20 kg
Ambiente 40LED 70W 4000K PIR	19378	Wide area	70 W	7558 lm	107 lm/W	4000 K	83+	7.20 kg
Ambiente 40LED 70W 5700K	16884	Wide area	70 W	8122 lm	115 lm/W	5700 K	73+	7.20 kg
Ambiente 40LED 70W 5700K PIR	18626	Wide area	70 W	8122 lm	115 lm/W	5700 K	73+	7.20 kg

Accessoires



60 - 76 adapter

15354 Ambiente. Pole adapter 76=>60mm. Galvanised steel.



19376 Ambiente. Wall bracket. 110mm arm 0° angle. Steel (galvanized)

Compliances

IEC 60598-1

IEC 60598-2-3 +A1:2011

IEC 62471:2008

IEC 60068-2-52

EN 50102

EN 55015: 2013

EN 61000-3-2: 2014

EN 61000-3-3: 2013

Luminaires - Part 1: General requirements

Luminaires - Part 2-3: Particular requirements – Luminaires for road and street lighting

Photobiological safety of lamps and lamp systems

Environmental tests - Salt mist

Degree of protection by enclosures for electrical equipment against external mechanical impacts (IK Code)

Emission - Electrical lighting and similar equipment

Limits for harmonic currents emissions

Limitation of voltage fluctuations and flicker



Benefits

- + Modular lighting system.
- + Easy Installation with Plug & Play IP67 rated connectors.
- + Intelligent output level programming.
- + Self-controlled operating conditions:
 - Luminaire Intelligent Protection System (LIPS).
 - Active Overheat Protection (AOP).
 - Light Normalizer - No Lumen drop during lifetime.
- + Integrated EOS technology:
 - Plug-and-play self-organizing wireless network.
 - Encrypted communication.
 - Advised maximum spacing for network: 25 meter.
- + Intuitive control and analysis with the EOS Manager app:
 - User authentication and data encryption.
 - Visual representation of your EOS network.
 - Extensive configuration, information, and usage statistics.
 - Share sensor information between EOS devices.
- + Protected against dust and water intrusions.

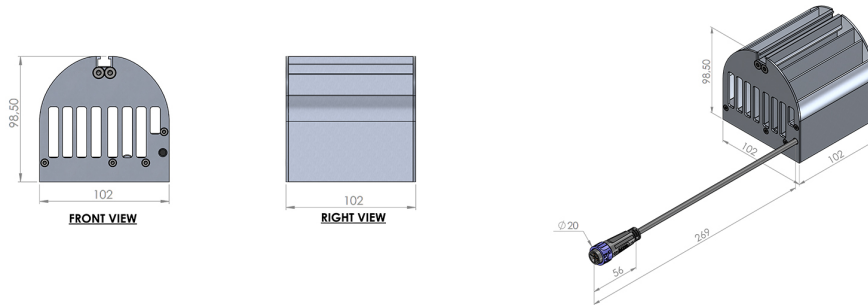
SKU: 19452

CubiQ led module. A-symm. 20W default. 13LED. Medium Beam. 5700K. CRI73. EOS

Features

Power supply	Need to be ordered separately
Input voltage	48 Vdc
Input power (max)	25 Watt
Input power (default)	20 Watt
Lumen output (up to)	2890 lm
Efficacy (default)	119 lm/W
Colour temperature (CCT)	5700 Kelvin
Colour rendering index (CRI)	73+
LED-count	13
Beam optics	A-Symmetrical
Housing	Aluminium
Optics	PMMA
Dimensions	102 x 102 x 99 mm
EOS wireless technology	Yes
Motion sensor (PIR)	Optional
Mounting	Recessed and surface mounted
Connection cable	269 mm including plug & play connector
IEC safety class	IK04
Ingress protection	IP67
Operating temperature	-30 °C to +60 °C**
Rated life (L80B10)	>100.000 hours
Weight	0.82 kg

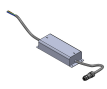
Dimensions



Ordering information

Name	SKU	Beam optic	Default power	Lumen (up-to)	Default efficacy	CCT	CRI	Weight
CubiQ Modular 13 LED								
CubiQ. 20W default. 13LED. 4000K A-Symm.	19451	A-Symm.	20 W	2898 lm	119 lm/W	4000 K	83+	0.82 kg
CubiQ. 20W default. 13LED. 4000K Symm.	19448	Symm.	20 W	2970 lm	122 lm/W	4000 K	83+	0.82 kg
CubiQ. 20W default. 13LED. 5700K A-Symm.	19452	A-Symm.	20 W	2890 lm	119 lm/W	5700 K	73+	0.82 kg
CubiQ. 20W default. 13LED. 5700K Symm.	19449	Symm.	20 W	2730 lm	111 lm/W	5700 K	73+	0.82 kg
CubiQ Modular 25 LED								
CubiQ. 60W default. 25 LED. Blue Symm.	19713	Symm.	60 W	- lm	- lm/W	Red, 3000K	-	0.82 kg
CubiQ. 60W default. 25 LED. Green Symm.	19516	Symm.	60 W	- lm	- lm/W	Red, 3000K	-	0.82 kg
CubiQ. 60W default. 25 LED. Red Symm.	19710	Symm.	60 W	- lm	- lm/W	Red, 3000K	-	0.82 kg
CubiQ. 60W default. 25LED. 3000K A-symm.	19387	A-Symm.	60 W	8189 lm	115 lm/W	3000 K	73+	0.82 kg
CubiQ. 60W default. 25LED. 3000K Symm.	19408	Symm.	60 W	8290 lm	116 lm/W	3000 K	73+	0.82 kg
CubiQ. 60W default. 25LED. 4000K A-symm.	19386	A-Symm.	60 W	7378 lm	101 lm/W	4000 K	83+	0.82 kg
CubiQ. 60W default. 25LED. 4000K Symm.	19384	Symm.	60 W	7544 lm	105 lm/W	4000 K	83+	0.82 kg
CubiQ. 60W default. 25LED. 5700K A-symm.	19385	A-Symm.	60 W	8189 lm	115 lm/W	5700 K	73+	0.82 kg
CubiQ. 60W default. 25LED. 5700K Symm.	19370	Symm.	60 W	8290 lm	116 lm/W	5700 K	73+	0.82 kg

Power supply



19439 Powersupply 50W - driver for 2pcs CubiQ led Module - 13LED



18536 Powersupply 75W - driver for 1pcs CubiQ led Module - 25LED



19509 Powersupply 225W - driver for 3pcs CubiQ led Module - 25LED



19510 Powersupply 375W - driver for 5pcs CubiQ led Module - 25LED

Accessoires



18388 CubiQ Connection Cable 1 meter (max. 2A)



18387 CubiQ Connection Cable 5 meter (max. 2A)



18386 CubiQ Connection Cable 7.5 meter (max. 2A)



18385 CubiQ Connection Cable 10 meter (max. 2A)



19565 Power Distribution Cable 0,5 meter (max. 10A)



19564 Power Distribution Cable 5 meter (max. 10A)



19563 Power Distribution Cable 10 meter (max. 10A)



19505 Power Distribution Cable 25 meter (max. 10A)



19614 CubiQ Power Distribution T-Splitter



18625 CubiQ Standard mounting bracket for wall and ceiling



18543 CubiQ Motion Sensor, Range 15m

Accessoires

18527 Cubiq coverplate. Outside dim 330x230. With PIR hole. White



19429 Cubiq coverplate. Outside dim 330x230. Without PIR hole. White

19233 Cubiq coverplate. Outside dim 420x420mm. With PIR hole. White



19739 Cubiq coverplate. Outside dim Diamer 250mm. Without PIR hole. White

19287 Cubiq coverplate. Outside dim Diamer 250mm. Without PIR hole. DarkGrey RAL 7016

19980 Cubiq coverplate. Outside dim 326x326. Without PIR hole. White

19981 Cubiq coverplate Inlay. Outside dim 326x326. fits in mini300frame. No PIR Ral 9003.