

# Solo 16 HE Surface

## PRODUCT OVERVIEW

## HIGH EFFICIENCY LIGHT ENGINE

### KEY FEATURES

- Beam Options: 12 | 14 | 24 | 36 | 47
- Light Engine Performance: 1377lm | 10.80W
- Movement: 360 Pan | 90 Tilt
- Tool-less field changeable optics
- Interchangeable accessories
- High CRI
- Part L1 / L2 (General & Display) Compliant
- Title 24 JA8 Certified



## OVERVIEW

Solo 16 HE Surface is a Constant Current single source LED spotlight that is machined from aerospace grade aluminium 6063-T6 and comes as standard in white, black and brushed aluminium along with three premium brass finishes. It has five site-changeable optics for flexible beam distribution and 360° lockable pan and 90° constant torque tilt. Our 1377lm | 10.80W light engine has a max peak intensity of 21542cd. An accessory holder is available separately that can accommodate 55mm (2.16") lenses and louvers. This product requires an external 0.6mA 18V Constant Current LED driver.

## PERFORMANCE

	High Efficiency				
	V. Narrow	Narrow	Medium	Wide	V. Wide
FWHM	12°	14°	24°	36°	47°
Luminous Flux	1377 lm	1361 lm	1336 lm	1181 lm	1187 lm
Peak Intensity	21542 cd	16838 cd	6630 cd	3066 cd	2076 cd
CCT	2700K   3000K				
CRI Min.	90   90				
LED Current	0.600 A				
Voltage	18 V				
Input Wattage	10.8 W				
Efficacy	127.5 lm/W				
Driver Type	Constant Current   Remote				
Class	SELV   Class III				

## ORDER CODE

Model	Type	Output	CCT	Beam Angle	Finish
SOL16 Solo 16	SP Surface Plate	HE High Efficiency	27K 2700K	VN Very Narrow 12°	WH White
			30K 3000K	NR Narrow 14°	BK Black
				ME Medium 24°	AL Br. Aluminium
				WD Wide 36°	RBZ Rubbed Bronze
				VW Very Wide 47°	BR Br. Brass
					PB Polished Brass

Example code: SOL16-SP-HE-27K-VN-WH

See Drivers, Power Supplies and Accessories sections for further order codes

# SOLO 16 HE SURFACE

## LIGHT ENGINE SELECTION

This product specification sheet references our HE light engine, this product is also available with Intense and Plus static white light engines, please refer to their separate sheets.

▸ intense ▸

Precision's signature intense light engines offer tight, surgical beams combined with the highest peak intensity values available.

- Ultra-tight beams
- High Peak Cd

plus<sup>+</sup>

Precision's plus light engines offer the best balance between delivered lumens, beam quality and outstanding colour rendition.

- Increased Lumen Output
- CRI 98 Typical

HE

Precision's high efficiency light engines deliver the highest possible lumen values as well as our outstanding energy efficiency

- Maximum Lumen Output
- Maximum Energy Efficiency

## LIFETIME & ENVIRONMENTAL

At Precision, we design and engineer our products with longevity in mind. Many of the components that make up our light fixtures are both modular and re-usable, making it possible to service and repair them throughout their life in service. Once our products reach the end of their useful life, it is possible to re-work and renew them in to a new product. We prioritise the use of recyclable materials in both our products and packaging, and encourage our customers to engage responsibly in the correct disposal of any materials we supply.

CIBSE TM65	16.05 Kg/CO2e
CIBSE TM66	2.4
RoHS Compliance	Yes
REACH Compliance	Yes
WEEE Compliance	Yes - Registered Producer
Declare	Declared
Lifetime	L90B10 50,000hrs
Warranty	5 Years

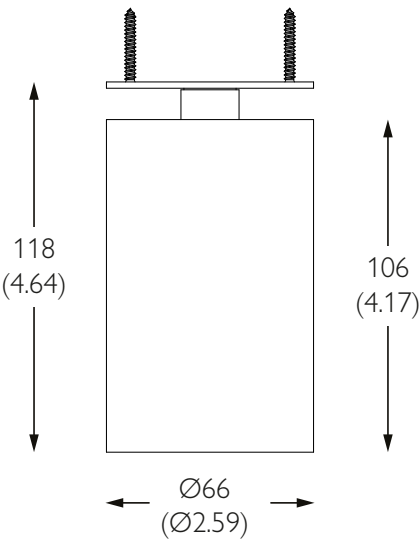
UK PART L	
Part L1A / L1B (Dwellings)	Compliant 154 lm/W Source lm (1663 lm) / Source W (10.80 W)
Part L2A (General)	Compliant 120 lm/W Delivered (1377 lm) / System W* (11.49 W)
Part L2A (Display)	Compliant 154 lm/W Source lm (1663 lm) / Source W (10.80 W)
*System W includes driver losses	

# SOLO 16 HE SURFACE

DIMENSIONS & FINISHES

HIGH EFFICIENCY LIGHT ENGINE

## DIMENSIONS



## MECHANICAL

Location	IP20   Indoor Dry Location Only	Cutout	N/A
Mounting	Surface mounting plate	Ceiling Thickness	N/A
Adjustability	360 Pan   90 Tilt	Product Class	SELV   Class III
Lockable	Pan	Material	Machined AL 6063-T6   Machined Brass
Accessories	Lenses   Louver	Weight	350g   0.77lb

## FINISHES



# SOLO 16 HE SURFACE

## 20W | 0-10V | Remote | Constant Current

Input Voltage	230VAC   50/60 Hz
Driver Type	Remote   Constant Current
Location	IP20   Indoor Location Only
Dimming Control	0-10V
Min. Dim Level	0.1%
Flicker	IEEE P1789 Compatible   No Observable Effect
Wiring Distance	16 AWG - 36m (118')   18 AWG 22m (72')



	All CCT's		L	W	H
Max. Lights	1 only	mm	160	41	30
Order Code	PSCC-RM-1050X-01A	in	6.3	1.61	1.18

## 20W | DALI-2 | Remote | Constant Current

Input Voltage	230VAC   50/60 Hz
Driver Type	Remote   Constant Current
Location	IP20   Indoor Location Only
Dimming Control	DALI-2
Min. Dim Level	0.1%
Flicker	IEEE P1789 Compatible   No Observable Effect
Wiring Distance	16 AWG - 36m (118')   18 AWG 22m (72')



	All CCT's		L	W	H
Max. Lights	1 only	mm	160	41	30
Order Code	PSCC-RM-1050X-01D	in	6.3	1.61	1.18

# SOLO 16 HE SURFACE

DRIVERS & POWER SUPPLIES – NORTH AMERICA

HIGH EFFICIENCY LIGHT ENGINE

## 30W | 0-10V | Remote | Constant Current

Input Voltage	120-277V   50/60 Hz
Driver Type	Remote   Constant Current
Location	IP20   Indoor Location Only
Dimming Control	0-10V
Min. Dim Level	0.1%
Flicker	IEEE P1789 Compatible   No Observable Effect
Wiring Distance	16 AWG - 36m (118')   18 AWG 22m (72')



	All CCT's		L	W	H
Max. Lights	1 only	mm	318	130	61
Order Code	USCC-RM-1050X-02A	in	12.52	5.12	2.4

## 30W | DALI-2 | Remote | Constant Current

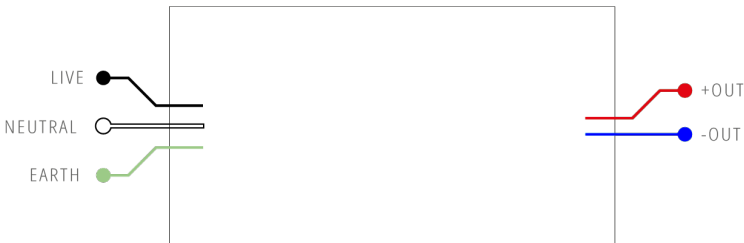
Input Voltage	120-277V   50/60 Hz
Driver Type	Remote   Constant Current
Location	IP20   Indoor Location Only
Dimming Control	DALI-2
Min. Dim Level	0.1%
Flicker	IEEE P1789 Compatible   No Observable Effect
Wiring Distance	16 AWG - 36m (118')   18 AWG 22m (72')



	All CCT's		L	W	H
Max. Lights	1 only	mm	318	130	61
Order Code	USCC-RM-1050X-02D	in	12.52	5.12	2.4

## 20W | Phase | Remote | Constant Current

Input Voltage	120V   50/60 Hz
Driver Type	Remote   Constant Current
Location	IP20   Indoor Location Only
Dimming Control	Phase
Min. Dim Level	1.0%
Flicker	IEEE P1789 Compatible   No Observable Effect
Wiring Distance	16 AWG - 14m (46')   18 AWG 9m (30')



	All CCT's		L	W	H
Max. Lights	1 only	mm	318	130	61
Order Code	USCC-RM-1050X-01M	in	12.52	5.12	2.4

# SOLO 16 HE SURFACE

PHOTOMETRY

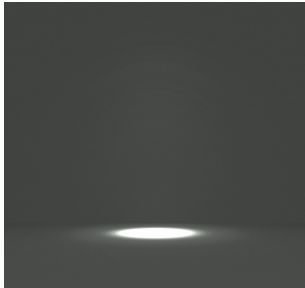
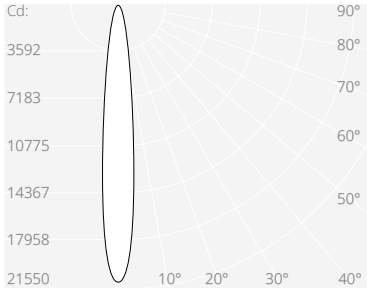
HIGH EFFICIENCY LIGHT ENGINE

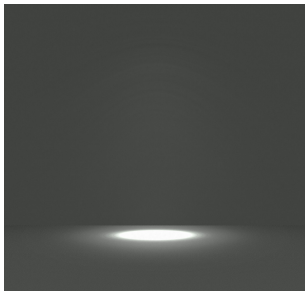
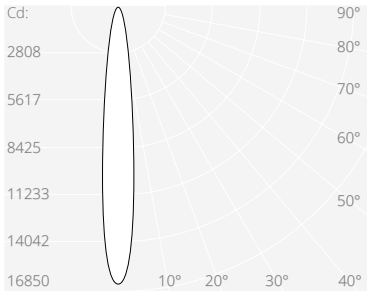
## OUTPUT SCALING


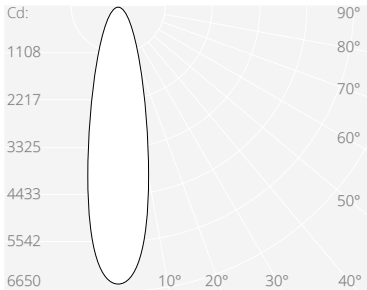
CCT	Output Multiplier	CRI	R9 Typ.	TM-30: Rf	TM-30: Rg	Max Lm
2400K	-	-	-	-	-	-
2700K	1.00	90	57	90	101	1377
3000K	1.00	90	57	90	101	1377
3500K	-	-	-	-	-	-
4000K	-	-	-	-	-	-

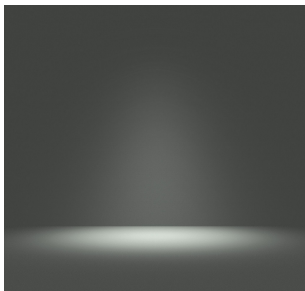
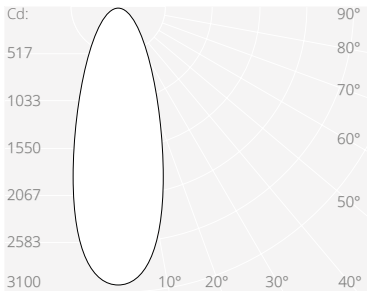
Colour Consistency: 2 SDCM

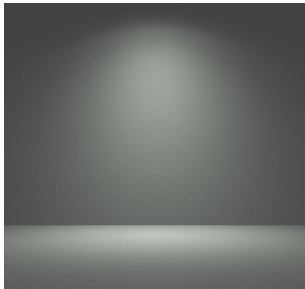
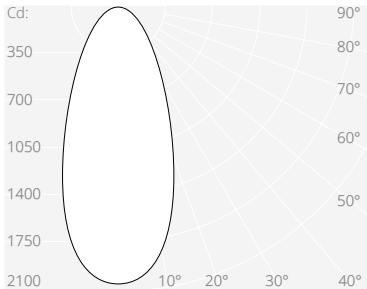
## PHOTOMETRY

VERY NARROW				<table><tr><td>0.21m</td><td>21542lx</td><td>2394fc</td><td>0.6'</td></tr><tr><td>1m</td><td></td><td>598fc</td><td>1.3'</td></tr><tr><td>0.42m</td><td>5386lx</td><td>266fc</td><td>1.9'</td></tr><tr><td>2m</td><td></td><td>150fc</td><td>2.5'</td></tr><tr><td>0.63m</td><td>2394lx</td><td>96fc</td><td>3.2'</td></tr><tr><td>3m</td><td></td><td>66fc</td><td>3.8'</td></tr><tr><td>0.84m</td><td>1346lx</td><td></td><td>12'</td></tr><tr><td>4m</td><td></td><td></td><td></td></tr><tr><td>1.05m</td><td>862lx</td><td></td><td>15'</td></tr><tr><td>5m</td><td></td><td></td><td>18'</td></tr></table>	0.21m	21542lx	2394fc	0.6'	1m		598fc	1.3'	0.42m	5386lx	266fc	1.9'	2m		150fc	2.5'	0.63m	2394lx	96fc	3.2'	3m		66fc	3.8'	0.84m	1346lx		12'	4m				1.05m	862lx		15'	5m			18'
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Peak Intensity	21542 cd																																											

NARROW				<table><tr><td>0.25m</td><td>16838lx</td><td>1871fc</td><td>0.7'</td></tr><tr><td>1m</td><td></td><td>468fc</td><td>1.5'</td></tr><tr><td>0.49m</td><td>4210lx</td><td>208fc</td><td>2.2'</td></tr><tr><td>2m</td><td></td><td>117fc</td><td>2.9'</td></tr><tr><td>0.74m</td><td>1871lx</td><td>75fc</td><td>3.7'</td></tr><tr><td>3m</td><td></td><td>52fc</td><td>4.4'</td></tr><tr><td>0.98m</td><td>1052lx</td><td></td><td>12'</td></tr><tr><td>4m</td><td></td><td></td><td></td></tr><tr><td>1.23m</td><td>674lx</td><td></td><td>15'</td></tr><tr><td>5m</td><td></td><td></td><td>18'</td></tr></table>	0.25m	16838lx	1871fc	0.7'	1m		468fc	1.5'	0.49m	4210lx	208fc	2.2'	2m		117fc	2.9'	0.74m	1871lx	75fc	3.7'	3m		52fc	4.4'	0.98m	1052lx		12'	4m				1.23m	674lx		15'	5m			18'
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MEDIUM				<table><tr><td>0.43m</td><td>6630lx</td><td>737fc</td><td>1.3'</td></tr><tr><td>1m</td><td></td><td>184fc</td><td>2.6'</td></tr><tr><td>0.85m</td><td>1658lx</td><td>82fc</td><td>3.8'</td></tr><tr><td>2m</td><td></td><td>46fc</td><td>5.1'</td></tr><tr><td>1.28m</td><td>737lx</td><td>29fc</td><td>6.4'</td></tr><tr><td>3m</td><td></td><td>20fc</td><td>7.7'</td></tr><tr><td>1.70m</td><td>414lx</td><td></td><td>12'</td></tr><tr><td>4m</td><td></td><td></td><td></td></tr><tr><td>2.13m</td><td>265lx</td><td></td><td>15'</td></tr><tr><td>5m</td><td></td><td></td><td>18'</td></tr></table>	0.43m	6630lx	737fc	1.3'	1m		184fc	2.6'	0.85m	1658lx	82fc	3.8'	2m		46fc	5.1'	1.28m	737lx	29fc	6.4'	3m		20fc	7.7'	1.70m	414lx		12'	4m				2.13m	265lx		15'	5m			18'
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WIDE				<table><tr><td>0.65m</td><td>3066lx</td><td>341fc</td><td>1.9'</td></tr><tr><td>1m</td><td></td><td>85fc</td><td>3.9'</td></tr><tr><td>1.30m</td><td>767lx</td><td>38fc</td><td>5.8'</td></tr><tr><td>2m</td><td></td><td>21fc</td><td>7.8'</td></tr><tr><td>1.95m</td><td>341lx</td><td>14fc</td><td>9.7'</td></tr><tr><td>3m</td><td></td><td>9fc</td><td>11.7'</td></tr><tr><td>2.60m</td><td>192lx</td><td></td><td>15'</td></tr><tr><td>4m</td><td></td><td></td><td></td></tr><tr><td>3.25m</td><td>123lx</td><td></td><td>18'</td></tr><tr><td>5m</td><td></td><td></td><td></td></tr></table>	0.65m	3066lx	341fc	1.9'	1m		85fc	3.9'	1.30m	767lx	38fc	5.8'	2m		21fc	7.8'	1.95m	341lx	14fc	9.7'	3m		9fc	11.7'	2.60m	192lx		15'	4m				3.25m	123lx		18'	5m			
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VERY WIDE				<table><tr><td>0.87m</td><td>2076lx</td><td>231fc</td><td>2.6'</td></tr><tr><td>1m</td><td></td><td>58fc</td><td>5.2'</td></tr><tr><td>1.74m</td><td>519lx</td><td>26fc</td><td>7.8'</td></tr><tr><td>2m</td><td></td><td>14fc</td><td>10.4'</td></tr><tr><td>2.61m</td><td>231lx</td><td>9fc</td><td>13.0'</td></tr><tr><td>3m</td><td></td><td>6fc</td><td>15.7'</td></tr><tr><td>3.48m</td><td>130lx</td><td></td><td>18'</td></tr><tr><td>4m</td><td></td><td></td><td></td></tr><tr><td>4.35m</td><td>83lx</td><td></td><td></td></tr><tr><td>5m</td><td></td><td></td><td></td></tr></table>	0.87m	2076lx	231fc	2.6'	1m		58fc	5.2'	1.74m	519lx	26fc	7.8'	2m		14fc	10.4'	2.61m	231lx	9fc	13.0'	3m		6fc	15.7'	3.48m	130lx		18'	4m				4.35m	83lx			5m			
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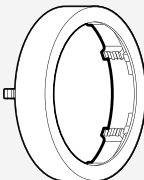
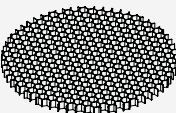
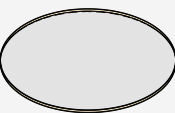
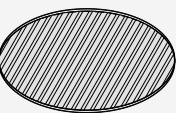
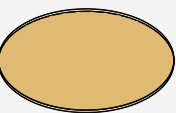
## OPTICS

There are 5 interchangeable optics


Optic	Optic	Optic	Optic	Optic
				
<b>Very Narrow TIR Optic</b> Molded ID 6686	<b>Narrow TIR Optic</b> Molded ID 6731	<b>Medium TIR Optic</b> Molded ID 6687	<b>Wide TIR Optic</b> Molded ID 6688	<b>Very Wide TIR Optic</b> Molded ID 7434
<b>Order Code</b> C16686-ILONA-RS	<b>Order Code</b> C16731-ILONA-SS	<b>Order Code</b> C16687-ILONA-M	<b>Order Code</b> C16688-ILONA-W	<b>Order Code</b> C17434-ILONA-WW

## ACCESSORIES

This product can hold 2 x accessories using the double accessory holder. Accessories are pre-installed unless otherwise requested.

Accessory Holder	Glare Control	Beam Shaping	Beam Shaping	Colour Change
				
<b>Double Accessory Holder</b> W63xH14mm   W2.48xH0.55"	<b>Honeycomb Louver</b> W55xH3.2mm   W2.17xH0.13"	<b>Softening Lens</b> W55xH3.2mm   W2.17xH0.13"	<b>Linear Lens</b> W55xH3.2mm   W2.17xH0.13"	<b>1/4 CTO</b> W55xH1.8mm   W2.17xH0.07"
<b>Order Code</b> 254-BK	<b>Order Code</b> 995-55-BK	<b>Order Code</b> 991-55	<b>Order Code</b> 992-55	<b>Order Code</b> 997-1/4CTO-55


Colour Change




**Custom Colour Filter**  
W55xH1.8mm | W2.17xH0.07"

**Order Code**  
Contact Sales Rep


Linear




Softening



1/4 CTO



Honeycomb



  
Clip  
Included with holder

  
Accessory

  
Double Accessory Holder  
Can hold 2 accessories