SOLO 16

PRODUCT OVERVIEW

INTENSE LIGHT ENGINE



KEY FEATURES

Beam Options: 6 | 10 | 16 | 30 | 50
Light Engine Performance: 653lm | 8.40W
Movement: 360 Pan | 90 Tilt
Tool-less field changeable optics
Ultra narrow high intensity beams
Interchangeable accessories
UK Part L1 / L2 (Display) Compliant
Title 24 JA8 Certified

OVERVIEW

Solo 16 Intense 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 653lm | 8.40W light engine has a max peak intensity of 28223cd. An accessory holder is available separately that can accommodate 55mm (2.16") lenses and louvers. This product requires an external 0.7mA 12V Constant Current LED driver.

PERFORMANCE

	Intense				
	U. Narrow	Narrow	Medium	Flood	W. Flood
FWHM	6°	10°	16°	30°	50°
Luminous Flux	650 lm	653 lm	623 lm	637 lm	605 lm
Peak Intensity	28223 cd	15476 cd	5671 cd	1652 cd	633 cd
CCT	2700K | 3000K | 3500K | 4000K				
CRI Min.	92 | 92 | 92 | 90				
LED Current	0.700 A				
Voltage	12 V				
Input Wattage	8.4 W				
Efficacy	77.7 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*	**IO** *Intense Output*	**27K** *2700K*	**UN** *Ultra Narrow 6°*	**WH** *White*
			30K *3000K*	**NR** *Narrow 10°*	**BK** *Black*
			35K *3500K*	**ME** *Medium 16°*	**AL** *Br. Aluminium*
			40K *4000K*	**FL** *Flood 30°*	**RBZ** *Rubbed Bronze*
				WF *Wide Flood 50°*	**BR** *Br. Brass*
					PB *Polished Brass*

Example code: SOL16-SP-IO-27K-UN-WH

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

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LIGHT ENGINE SELECTION

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

▸ intense ◂

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

- Ultra-tight beams
- High Peak Cd

plus+

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

- Increased Lumen Output
- CRI 98 Typical

HE

Precisions high efficiency light engines deliver the highest possible lumen values as well as our outstanding energy efficiency

- Maximum Lumen Output
- Maximum Energy Efficiency

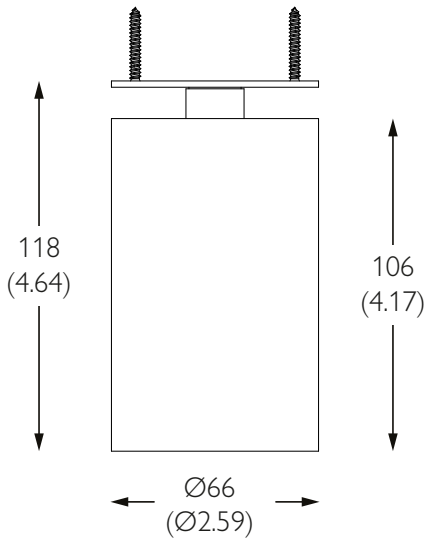
LIFETIME & ENVIRONMENTAL

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	16.1 Kg/CO2e
CIBSE TM66	2.4
RoHS Compliance	Yes
REACH Compliance	Yes
WEEE Compliance	Yes - Registered Producer
Declare	Declared
Lifetime	L90B10 100,000hrs
Warranty	5 Years

UK PART L	
Part L1A / L1B (Dwellings) *≥75 lm/W source lumens*	*Compliant 105 lm/W* *Source lm (882 lm) / Source W (8.40 W)*
Part L2A (General) *≥95lm/W delivered lumens*	-
Part L2A (Display) *≥80 lm/W source lumens*	*Compliant 105 lm/W* *Source lm (882 lm) / Source W (8.40 W)*

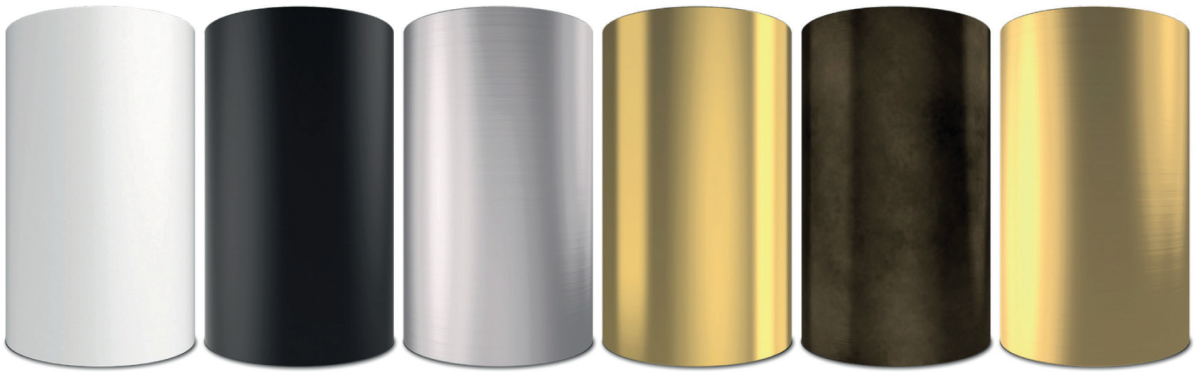
DIMENSIONS



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



White | Black | Brushed Aluminium | Polished Brass | Rubbed Bronze | Brushed Brass

SOLO 16

DRIVERS & POWER SUPPLIES – UK, EU, MIDDLE EAST, ASIA, PACIFIC

INTENSE LIGHT ENGINE

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 to 2 in series	**mm**	160	41	30
Order Code	PSCC-20-700-A-EL	**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 to 2 in series	**mm**	160	41	30
Order Code	PSCC-20-700-D-EL	**in**	6.3	1.61	1.18

14W | Phase | Remote | Constant Current

Input Voltage	230VAC | 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	18AWG - 2m (6.56')



	All CCT's		L	W	H
Max. Lights	1 only	**mm**	125	32	41
Order Code	PSCC-14-700-PHC-EL	**in**	4.92	1.26	1.61

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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 to 3 in series	mm	348	65	47
Order Code	USCC-30-700-A-EL-ENC	in	13.7	2.56	1.85

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 to 3 in series	mm	348	65	47
Order Code	USCC-30-700-D-EL-ENC	in	13.7	2.56	1.85

12W | Phase | Remote | Constant Current

Input Voltage	120V | 50/60Hz
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	247	65	47
Order Code	USCC-12-700-P-HT-ENC	in	9.72	2.56	1.85

SOLO 16

PHOTOMETRY

precision by luminii

INTENSE LIGHT ENGINE

OUTPUT SCALING

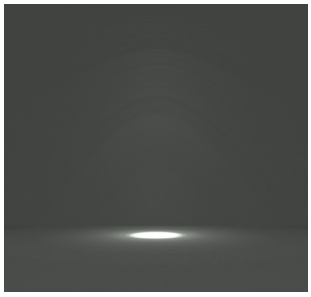
CCT	Output Multiplier	CRI	R9 Typ.	TM-30: Rf	TM-30: Rg	Max Lm
2400K	-	-	-	-	-	-
2700K	0.90	92	50	90	99	588
3000K	1.00	92	50	90	99	653
3500K	1.00	92	50	90	99	653
4000K	1.00	90	50	90	98	653

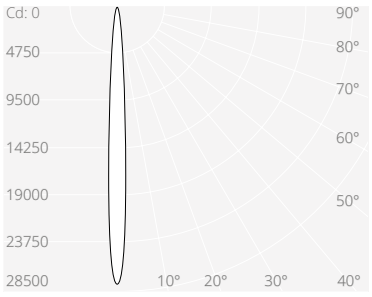
Colour Consistency: 2 SDCM at 2700K / 3000K, 3DCM at 3500 / 4000K

PHOTOMETRY

ULTRA NARROW

FWHM	6°
Delivered Flux	650 lm
Peak Intensity	28223 cd

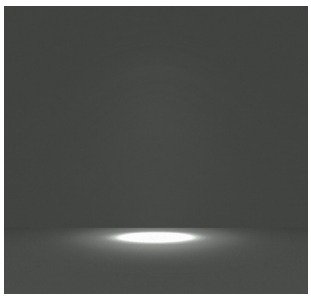


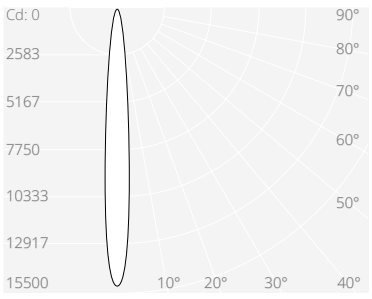


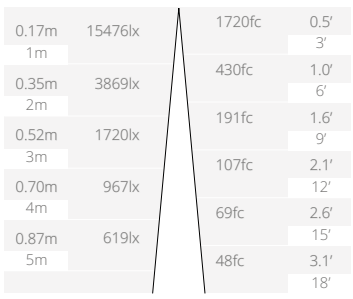


NARROW

FWHM	10°
Delivered Flux	653 lm
Peak Intensity	15476 cd



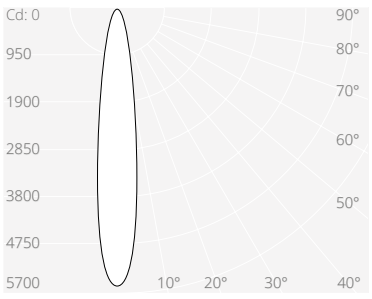


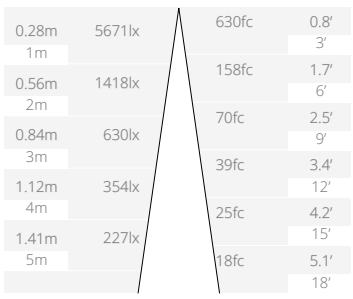


MEDIUM

FWHM	16°
Delivered Flux	623 lm
Peak Intensity	5671 cd

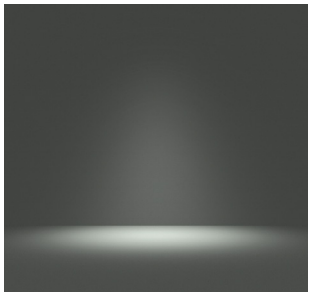


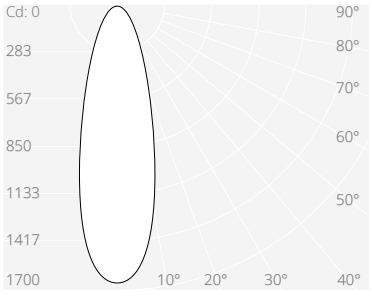


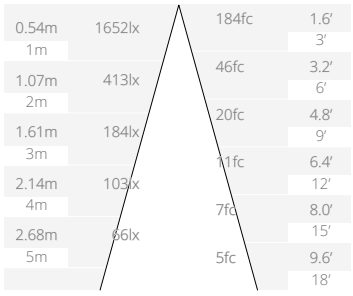


FLOOD

FWHM	30°
Delivered Flux	637 lm
Peak Intensity	1652 cd

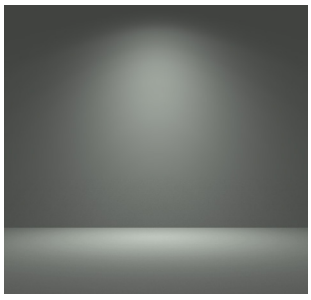


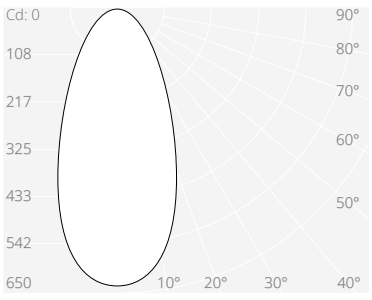


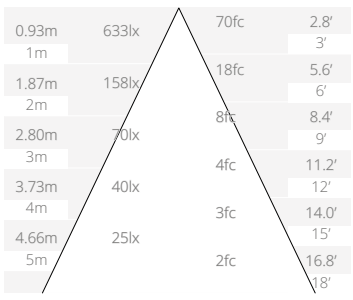


WIDE FLOOD

FWHM	50°
Delivered Flux	605 lm
Peak Intensity	633 cd

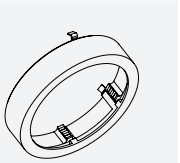






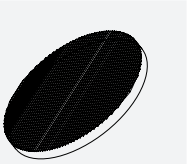
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Ø55MM LINEAR SPREAD LENS



254-BK

+



992-55

- The Linear Spread Lens **992-55** is a prismatic glass lens that can be used to create asymmetric linear beam effects
- It must be used in conjunction with the Single Accessory Holder **254-BK**
- Using narrower base optics will produce a longer, thinner beam
- The beam is spread widest perpendicular to the disc's vertical stripes (see *fig. 1*)

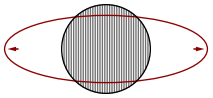
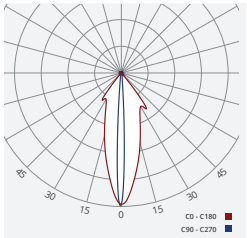
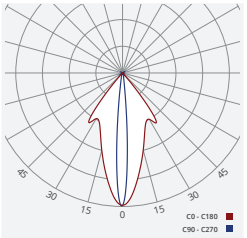
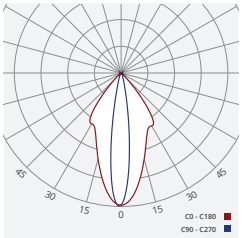
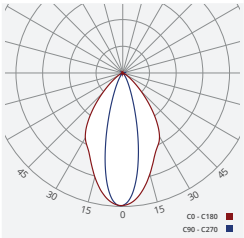
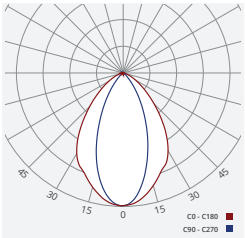


fig. 1

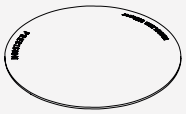
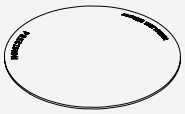
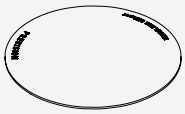
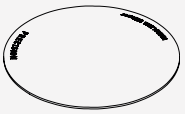
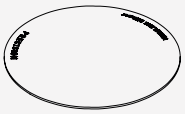


▸ intense ◂

	Ultra Narrow (6°)	Narrow (10°)	Medium (16°)	Flood (30°)	Wide Flood (50°)
					
Distribution Angle	6° x 32°	9° x 39°	16° x 46°	28° x 66°	44° x 77°
Delivered Flux	431 lm	432 lm	416 lm	373 lm	282 lm
Peak Intensity	3,808 Cd	2,552 Cd	1,389 Cd	618 Cd	263 Cd
Efficiency	51.3 lm/W	51.4 lm/W	49.5 lm/W	44.4 lm/W	33.6 lm/W
Efficiency Multiplier	x 0.66	x 0.66	x 0.66	x 0.59	x 0.47

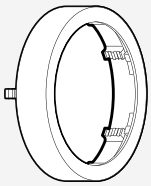
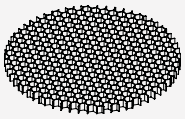
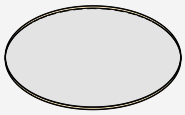
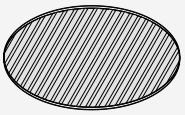
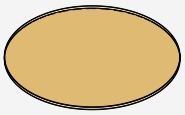
OPTICS

There are 5 tool-less interchangeable optics, cross reference the text on the optic disc for beam.

Optic Disc	Optic Disc	Optic Disc	Optic Disc	Optic Disc
				
Ultra Narrow Disc	**Narrow Disc**	**Medium Disc**	**Flood Disc**	**Wide Flood Disc**
FWHM 6 deg	FWHM 10 deg	FWHM 16 deg	FWHM 30 deg	FWHM 50 deg
Order Code	**Order Code**	**Order Code**	**Order Code**	**Order Code**
931-01	**931-02**	**931-03**	**931-04**	**931-05**

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
				
Double Accessory Holder	**Honeycomb Louver**	**Softening Lens**	**Linear Lens**	**1/4 CTO**
W63xH14mm | W2.48xH0.55"	W55xH3.2mm | W2.17xH0.13"	W55xH3.2mm | W2.17xH0.13"	W55xH3.2mm | W2.17xH0.13"	W55xH1.8mm | W2.17xH0.07"
Order Code	**Order Code**	**Order Code**	**Order Code**	**Order Code**
254-BK	**995-55-BK**	**991-55**	**992-55**	**997-1/4CTO-55**

Colour Change

Custom Colour Filter
W55xH1.8mm | W2.17xH0.07"
Order Code
Contact Sales Rep

The Double Accessory Holder (sold separately) greatly enhances Solo's optical accessory capacity providing space for up to two additional accessories. It snaps in and out of the fixture's snoot without the need for tools, making on-site adjustments quick and simple.

