# PHOS
ENGINEERING LIGHT

# NANO OCCULAR SPRING PLATE

STANDARD

Project Ref.

Luminaire Ref.

Date

# NANO OCCULAR SPRING PLATE - STANDARD

The Nano Occular Spring Plate is a incredibly small spotlight featuring a ⌀24mm spring-mounted plate to enable the driver to be mounted in the ceiling void behind.

## PRODUCT FEATURES

Spotlight

Adjustable

Interior

LED

IP54

Available in all Phos finishes

Interchangeable optics & accessories (pre & post install)

## PHOS STANDARDS

UK designed, manufactured and assembled

5 year warranty

## OPTICS

Standard beam angles:
20°/ 30°/ 40°/ 55°

## PHYSICAL PROPERTIES

Diameter ⌀28.5mm

Height 79mm

Cut-out ⌀16mm

Tilt Max 90°

Rotation 360°

## PRODUCT VIEW



## DIMENSIONS

# PHOS
ENGINEERING LIGHT
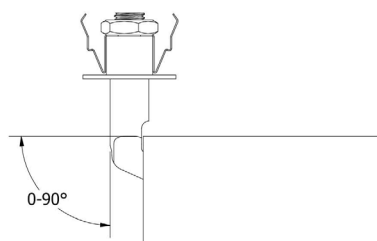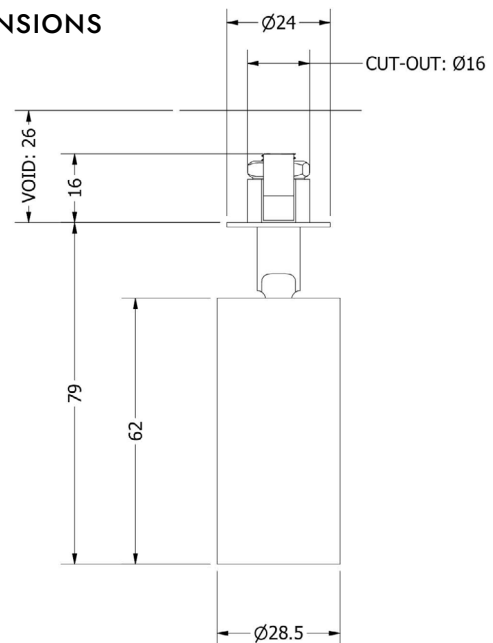
## TECHNICAL SPECIFICATIONS (Preliminary testing data)

| CCT | 2700K | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Wattage** | **1W** | | | | **3W** | | | |
| Beam Angles | 20° | 30° | 40° | 55° | 20° | 30° | 40° | 55° |
| Luminaire Lumens (lm) | 103 | 107 | 77.2 | 83 | 243 | 249 | 192 | 208 |
| Circuit Watts (c/W) | 2.6 | 2.7 | 2.6 | 2.6 | 5.7 | 5.8 | 5.8 | 5.7 |
| Luminaire Efficacy (l/cW) | 39 | 40 | 30 | 32 | 43 | 43 | 33 | 37 |
| Luminace (Cd) | 577 | 292 | 126 | 92.5 | 1395 | 717 | 316 | 232 |
| Forward Voltage (Vf) | 2.78 | | | | 2.97 | | | |
| Current (mA) | 350 | | | | 1050 | | | |

| CCT | 3000K | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Wattage** | **1W** | | | | **3W** | | | |
| Beam Angles | 20° | 30° | 40° | 55° | 20° | 30° | 40° | 55° |
| Luminaire Lumens (lm) | 113 | 115 | 86.2 | 89.8 | 263 | 273 | 209 | 222 |
| Circuit Watts (c/W) | 2.7 | 2.6 | 2.6 | 2.6 | 5.7 | 5.7 | 5.7 | 5.8 |
| Luminaire Efficacy (l/cW) | 42 | 43 | 33 | 34 | 46 | 48 | 37 | 39 |
| Luminance (Cd) | 593 | 307 | 138 | 102 | 1443 | 795 | 342 | 252 |
| Forward Voltage (Vf) | 2.78 | | | | 2.97 | | | |
| Current (mA) | 350 | | | | 1050 | | | |

| | |
|---|---|
| Binning | 2 step MacAdams |
| CRI | 90+ |
| TM-30-15 | Rg 96.87 Rf 91.58 |
| Lumen Maintenance | LM80 |
| Lifetime | 50,000 hours |

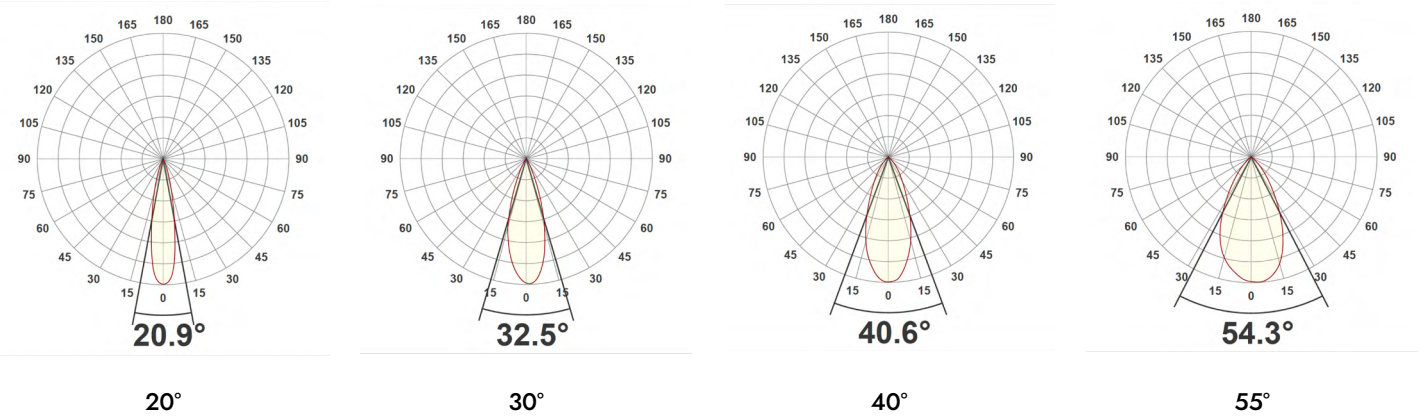| | |
|---|---|
| Dimming Options | Mains dim / Non-dim / 0-10V / DALI (dim to dark 0.01%) / Casambi |
| Flicker Index | 0 |
| SVM: (Visual Flicker) | 0.02 |

| | |
|---|---|
| Driver distance from fitting | Up to 10m (AWG 20)* |
| Wiring Type | Series |
| Accessories | Remote emergency (Maintained / Self Test) |

*If driver distance from fitting is +10m see driver configurator document for guidance

# LIGHT CONES

| | 20.9° | | | 32.5° | | | 40.6° | | | 54.3° | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Footcandles* Beam width (metres) | | Lux* Distance (metres) | Footcandles* Beam width (metres) | | Lux* Distance (metres) | Footcandles* Beam width (metres) | | Lux* Distance (metres) | Footcandles* Beam width (metres) | | Lux* Distance (metres) |
| 0.4m | 134 fcd · 1443 lx | 1m | 0.6m | 73 fcd · 789 lx | 1m | 0.7m | 32 fcd · 342 lx | 1m | 1m | 23 fcd · 251 lx | 1m |
| 0.7m | 34 fcd · 361 lx | 2m | 1.2m | 18 fcd · 197 lx | 2m | 1.5m | 8 fcd · 85 lx | 2m | 2.1m | 6 fcd · 63 lx | 2m |
| 1.1m | 15 fcd · 160 lx | 3m | 1.7m | 8 fcd · 88 lx | 3m | 2.2m | 4 fcd · 38 lx | 3m | 3.1m | 3 fcd · 28 lx | 3m |
| 1.5m | 8 fcd · 90 lx | 4m | 2.3m | 5 fcd · 49 lx | 4m | 3m | 2 fcd · 21 lx | 4m | 4.1m | 1 fcd · 16 lx | 4m |
| 1.8m | 5 fcd · 58 lx | 5m | 2.9m | 3 fcd · 32 lx | 5m | 3.7m | 1 fcd · 14 lx | 5m | 5.1m | 1 fcd · 10 lx | 5m |
| **20°** | | | **30°** | | | **40°** | | | **55°** | | |

# POLAR CURVES

| **20.9°** | **32.5°** | **40.6°** | **54.3°** |
|---|---|---|---|
| 20° | 30° | 40° | 55° |

# PARTCODE BUILDER

Example Code: **NA-OC-SPS-WT/WT/WT/WT-STD1-30-90-20-350**

| Family | Variant | Mount Finish | Arm Finish | Body Finish | Inner Baffle Finish | Engine | Power | CCT | CRI | Beam Angle | Driver Current |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **NA** Nano | **OC-SPS** Occular Spring Plate | **WT** White Textured | **WT** White Textured | **WT** White Textured | **WT** White Textured | **STD** Standard | **1** Watts | **27** 2700K | **90** | **20** | **350** |
| | | **B1** Anodised Black | **B1** Anodised Black | **B1** Anodised Black | **B1** Anodised Black | | | **30** 3000K | | **30** | |
| | | **\*C** Custom | **\*C** Custom | **\*C** Custom | **\*C** Custom | | **3** Watts | | | **40** | **1050** |
| | | | | | | | | | | **55** | |

*Codes for custom finishes can be found on the page 6.

# PHOS
ENGINEERING LIGHT

## ACCESSORIES (multiple inserts available per fitting)



**Commissioning Tool (Plastic)**
ACCS-TOOL-P-BAFFLE

**SNOOT**
ACCS-SNOOT

**Honeycomb Recessed**
ACCS-RECESSED-HCOMB

**Honeycomb Flush**
ACCS-FLUSH-HCOMB

**Softening Insert Recessed**
ACCS-RECESSED-SOFT

**Softening Insert Flush**
ACCS-FLUSH-SOFT

**Opal Insert Recessed**
ACCS-RECESSED-OPAL

**Opal Insert Flush**
ACCS-FLUSH-OPAL

**Elliptical Insert Recessed**
ACCS-RECESSED-10X60ELIPTICAL

**Elliptical Insert Flush**
ACCS-FLUSH-10X60ELIPTICAL

**Colour Change Insert Recessed**
ACCS-RECESSED-FILTER18K
ACCS-RECESSED-FILTER22K
ACCS-RECESSED-FILTER24K
ACCS-RECESSED-FILTER25K

**Colour Change Insert Flush**
ACCS-FLUSH-FILTER18K
ACCS-FLUSH-FILTER22K
ACCS-FLUSH-FILTER24K
ACCS-FLUSH-FILTER25K

# PHOS
ENGINEERING LIGHT

## FINISHES

Every element of your light can be finished in any of the options below:

### PLATED (Interior **ONLY**)

| | | | | |
|---|---|---|---|---|
| Antique Bronze **01** | Antique Brass **02** | Polished Chrome **03** | Satin Nickel **04** | Polished Copper **05** |
| Satin Copper **06** | Polished Brass **09** | | | |
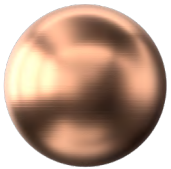
### ANODISED (Interior **ONLY**, except Orba Exteriors)
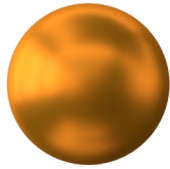
| | | | | |
|---|---|---|---|---|
| Tuba Brass **11** | Antique Gold **12** | Espresso Bronze **13** | Cocoa Bronze **14** | Ice Gold **15** |
| Mocha Bronze **16** | Taupe Bronze **17** | 24K Gold **18** | Champagne Gold **19** | Anodised Black (9005) **B1** |
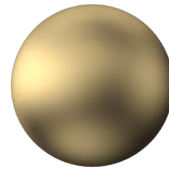
### POWDER COAT (Interior & Exterior)
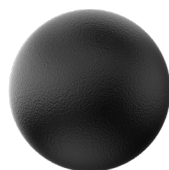
| | | | | |
|---|---|---|---|---|
| Pure White (9010) **W1** | Textured White (9010) **WT** | Textured Black (9005) **BT** | RAL Classic www.phos.co.uk/finishes | RAL Design price on application |