

# NEBULA

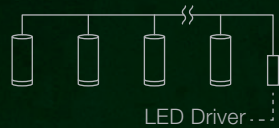
## OUTDOOR INGROUND SERIES

In-ground luminaires for upward illumination of walls and structural features that operate on constant voltage platform, allowing multiple luminaires to be powered by a single LED driver remotely. Incorporating ELR's signature modular concept design, LED engines are fully interchangeable with various choices for optimal illumination and ease of maintenance.

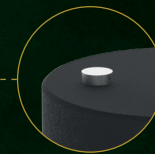
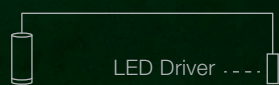
### External Driver



**Constant Voltage**  
Multiple LED module driven by a single LED driver



**Constant Current**  
Single LED module driven by a single LED driver



Breather Valve

Future proof with upgradeable module



Accessory options

### Fixture Features



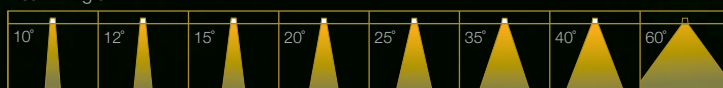
### Module Colour Temperature Variation



### Driver Dimming Variation



### Beam Angle



# NEBULA 2 INGROUND

**IP 68 IK10**

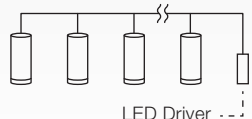
DC CONSTANT VOLTAGE / CONSTANT CURRENT  
UPLIGHTER LUMINAIRE



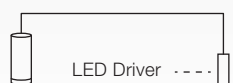
## EXTERNAL DRIVER



**Constant Voltage**  
Multiple LED module driven by a single LED driver



**Constant Current**  
Single LED module driven by a single LED driver



## TECHNOLOGY AND FEATURES



Advanced Thermal Protection System



Low Flicker, No Risk (IEEE 1789)



Converging Optical Lens Maximising LOR

AVAILABLE OPTIONS									
<b>FIXTURE</b> COLOUR OPTIONS	BRUSHED STAINLESS STEEL	BRUSHED COPPER							
<b>ACCESSORIES</b>	Honeycomb Anti-Glare Louvre Soft Lens Linear Spread Lens Half Moon Louvre								
<b>LED MODULE</b> CONSTANT VOLTAGE	20PLE / 20CLE 2700K 3000K 3500K 4000K 5000K ProART ProART98								
<b>CONSTANT CURRENT</b>	20PLE / 20CLE SINGLE CCT 2700K 3000K 3500K 4000K 5000K ProART ProART98								
	WARM DIM	20PLE / 20CLE	<table border="1"> <tr> <td>15°</td> <td>25°</td> <td>40°</td> </tr> <tr> <td>✓</td> <td>✓</td> <td>✓</td> </tr> </table>	15°	25°	40°	✓	✓	✓
	15°	25°	40°						
	✓	✓	✓						
tuneWHITE	20PLE / 20CLE	<table border="1"> <tr> <td>15°</td> <td>25°</td> <td>40°</td> </tr> <tr> <td></td> <td>✓</td> <td>✓</td> </tr> </table>	15°	25°	40°		✓	✓	
15°	25°	40°							
	✓	✓							
flexiK									
<b>DRIVER</b> DIMMING	(ND) (PH) (AN) (DA)								

*\*\*tuneWHITE and flexiK are recommended to be paired with Soft Lens for better colour mixing effect.*

*\*Drivers for 24CV LED modules are sold separately.*



Class 3



Constant Voltage

# NEBULA 2 INGROUND

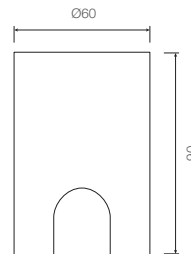
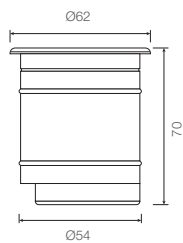
**IP 68 IK10**

## SPECIFICATIONS

### FIXTURE

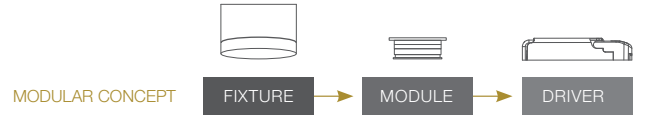
Family Type	Nebula series
Fixture Colours	Brushed stainless steel, brushed copper
Fixture Materials	Stainless steel / bronze and aluminium
Accessories	Honeycomb anti-glare louvre, soft lens, linear spread lens, half moon
Ingress Protection	IP68 (Not applicable for permanent submersion)
Safety Class	Class 3
DC Input Cable	Supplied with 1m cable
<b>LED MODULE &amp; DRIVER</b>	
Compatible LED Modules	20 series 24CV LED engines
Lifetime	Up to 50,000 hours L80 lamp life with LM80 tested LED chip packages
Beam Angles	15°, 25°, 40°
Colour Temperatures	2700K, 3000K, 3500K, 4000K, 5000K
CRI	High Efficiency (CRI~85), ProART (CRI~95), ProART98 (CRI~98)
Driver (Dimming)	24V DC constant voltage non-dim, phase-dim, 0-10V, DALI

## DIMENSIONS (MM)



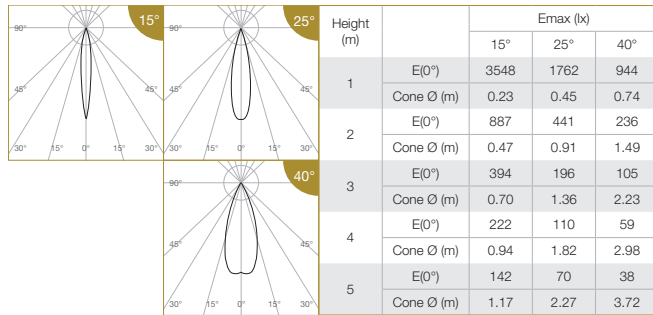
(Embedded Sleeve)

# NEBULA 2 INGROUND **IP 68 IK10**



PHOTOMETRICS

20 PLE 24CV



Correction Factor: 20PLE-24CV - f = 1.00  
20CLE-24CV - f = 0.83

ELR LED Module				20PLE	20CLE
Input Power (24CV)				8W	6.2W
Luminous Flux (lm)	Type	Beam Angle	CRI		
				24CV Single CCT (3000K)	
15°	High Efficiency Ra-85				
		ProART Ra-95	554	458	
		ProART98 Ra-98	472	389	
	ProART98 Ra-98				
		High Efficiency Ra-85	388	320	
		ProART Ra-95	548	452	
25°	High Efficiency Ra-85				
		ProART Ra-95	466	385	
		ProART98 Ra-98	384	317	
	ProART98 Ra-98				
		High Efficiency Ra-85	542	447	
		ProART Ra-95	461	380	
40°				379	313

Data are based on 3000K (ProART CRI-95). Nominal data of 2700K and 3500K are shared with 3000K. Higher CCT of 4000K and 5000K will have a nominal data value of 5% higher than published. (f = 1.05) High Efficiency CRI-85 will have a nominal data value of 15% higher than published. (f = 1.17) ProART98 CRI-98 will have a nominal data value of 18% lower than published. (f = 0.82)

Nominal CRI-85, equals to Ra>80-87, R9>0  
Nominal CRI-95, equals to Ra>90-97, R9>50  
Nominal CRI-98, equals to Ra>97-99, R9>93

ORDERING MATRIX CHART

Type	Fixture					
	Ingress Protection		Colour		Accessories	
NEBULA-2IG	IP68	IP68	BSS	Brushed Stainless Steel	N	None
			BCP	Brushed Copper	AGL	Anti-Glare Louvre
				SL	Soft Lens	
				LSL	Linear Spread Lens	
				HM	Half Moon Louvre	

example: NEBULA-2IG.IP68.BSS.N.ELR20PLE-24CV.25.30.PA

\*Custom RAL colour options available.

Single CCT LED Module							
Input Power		Beam Angle		Colour Temp		CRI	
ELR20PLE-24CV	8W	15	15°	27	2700K	HE	Ra-85
ELR20CLE-24CV	6.2W	25	25°	30	3000K	PA	ProART
		40	40°	35	3500K	PP	ProART98
				40	4000K		
				50	5000K		

\*Drivers for 24CV LED modules are sold separately, please refer to recommended driver list.



Class 3



Constant Current

# NEBULA 2 INGROUND

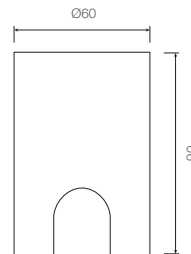
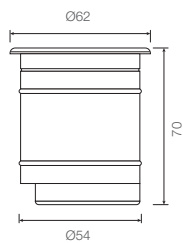
**IP 68 IK10**

## SPECIFICATIONS

### FIXTURE

Family Type	Nebula series
Fixture Colours	Brushed stainless steel, brushed copper
Fixture Materials	Stainless steel / bronze and aluminium
Accessories	Honeycomb anti-glare louvre, soft lens, linear spread lens, half moon
Ingress Protection	IP68 (Not applicable for permanent submersion)
Safety Class	Class 3
DC Input Cable	Supplied with 1m cable
<b>LED MODULE &amp; DRIVER</b>	
Compatible LED Modules	20 series LED engines
Lifetime	Up to 50,000 hours L80 lamp life with LM80 tested LED chip packages
Beam Angles	15°, 25°, 40°
Colour Temperatures	2700K, 3000K, 3500K, 4000K, 5000K, Warm Dim, tuneWHITE, flexiK
CRI	High Efficiency (CRI~85), ProART (CRI~95), ProART98 (CRI~98)
Driver (Dimming)	Non-dim, phase (leading & trailing edge), 0-10V, DALI

## DIMENSIONS (MM)

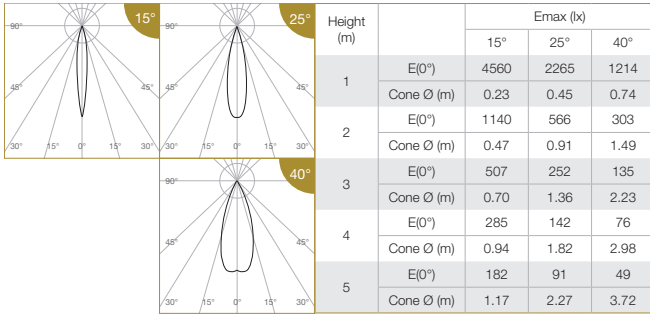


(Embedded Sleeve)

# NEBULA 2 INGROUND **IP 68 IK10**

PHOTOMETRICS

20 PLE



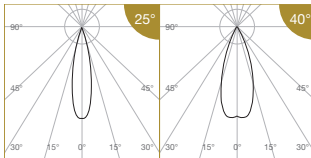
Correction Factor: 20PLE -  $f = 1.00$   
20CLE -  $f = 0.81$

ELR LED Module				20PLE	20CLE
LED Power				8W	6.2W
System Power				10.5W	8.3W
Luminous Flux (lm)	Type	Beam Angle	CRI		
	Single CCT (3000K)	15°	High Efficiency Ra-85	713	581
			ProART Ra-95	606	494
			ProART98 Ra-98	499	407
		25°	High Efficiency Ra-85	705	574
			ProART Ra-95	599	488
			ProART98 Ra-98	493	402
	40°	High Efficiency Ra-85	697	568	
		ProART Ra-95	593	482	
ProART98 Ra-98	488	397			

Data are based on 3000K (ProART CRI-95). Nominal data of 2700K and 3500K are shared with 3000K. Higher CCT of 4000K and 5000K will have a nominal data value of 5% higher than published. ( $f = 1.05$ ) High Efficiency CRI-85 will have a nominal data value of 15% higher than published. ( $f = 1.17$ ) ProART98 CRI-98 will have a nominal data value of 18% lower than published. ( $f = 0.82$ )

Nominal CRI-85, equals to Ra>80-87, R9>0  
Nominal CRI-95, equals to Ra>90-97, R9>50  
Nominal CRI-98, equals to Ra>97-98, R9>93

20 PLE WARM DIM



Correction Factor: 20PLE WD -  $f = 1.00$   
20CLE WD -  $f = 0.78$

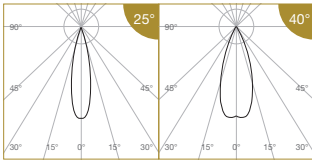
ELR LED Module				20PLE	20CLE
LED Power				8W	6.2W
System Power				10.5W	8.3W
Luminous Flux (lm)	Type	Beam Angle	CRI		
	Warm Dim (3100K)	25°	ProART Ra-95	696	539
				688	533
		40°			

Data are based on maximum output at 3100K  
Nominal CRI-95, equals to Ra>90-97, R9>50

# NEBULA 2 INGROUND 68 IK10

PHOTOMETRICS

20 PLE tuneWHITE/flexiK



Height (m)		Emax (lx)	
		25°	40°
1	E(0°)	2139	1146
	Cone Ø (m)	0.45	0.74
2	E(0°)	535	286
	Cone Ø (m)	0.91	1.49
3	E(0°)	238	127
	Cone Ø (m)	1.36	2.23
4	E(0°)	134	72
	Cone Ø (m)	1.82	2.98
5	E(0°)	86	46
	Cone Ø (m)	2.27	3.72

ELR LED Module				20PLE	20CLE
LED Power				8W	6.2W
System Power				10.5W	8.3W
Luminous Flux (lm)	Type	Beam Angle	CRI		
	tuneWHITE / flexiK (4000K / 6500K)	25° 40°	ProART Ra-95	566 559	439 434

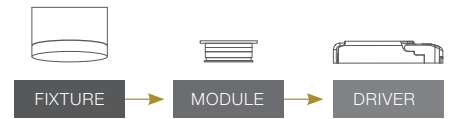
Data are based on maximum output at highest CCT (4000K / 6500K).  
2700K will have a nominal data value of 10% lower than published. (f = 0.90)  
1800K will have a nominal data value of 30% lower than published. (f = 0.70)  
Nominal CRI-95, equals to Ra>90-97, R9>50

Correction Factor: 20PLE WD - f = 1.00  
20CLE WD - f = 0.78



# NEBULA 2 INGROUND 68 IK10

MODULAR CONCEPT



ORDERING MATRIX CHART

Fixture					
Type	Ingress Protection		Colour		Accessories
NEBULA-2IG	IP68	IP68	<b>BSS</b>	Brushed Stainless Steel	<b>N</b> None
			<b>BCP</b>	Brushed Copper	<b>AGL</b> Anti-Glare Louvre
					<b>SL</b> Soft Lens
					<b>LSL</b> Linear Spread Lens
				<b>HML</b> Half Moon Louvre	

Single CCT LED Module							Driver		
Input Power		Beam Angle		Colour Temp		CRI		Dimming	
ELR20PLE	8W	15	15°	27	2700K	HE	Ra~85	ND	Non-Dim
		25	25°	30	3000K				
ELR20CLE	6.2W	40	40°	35	3500K	PP	ProART98	AN	0-10V
				40	4000K				
				50	5000K				

Warm Dim LED Module							Driver		
LED Power		Beam Angle		Colour Temp		CRI		Dimming	
ELR20PLE	8W	25	25°	WD	Warm Dim	PA	ProART	PH	Phase
ELR20CLE	6.2W	40	40°						

tuneWHITE LED Module							Driver		
LED Power		Beam Angle		Colour Temp		CRI		Dimming	
ELR20PLE	8W	25	25°	TW1831	tuneWHITE 1800K-3100K	PA	ProART	DA	DALI
ELR20CLE	6.2W	40	40°		tuneWHITE 1800K-4000K				
					tuneWHITE 2700K-6500K				

flexiK LED Module							Driver		
LED Power		Beam Angle		Colour Temp		CRI		Dimming	
ELR20PLE	8W	25	25°	FK##	flexiK	PA	ProART	PH	Phase
ELR20CLE	6.2W	40	40°						

## denotes the first two digits of preferred CCT ranging from 1800K to 6500K by increment of 100K.

example: NEBULA-2IG.IP68.BSS.N.ELR20PLE.25.30.PA.DA

\*Custom RAL colour options available.