

NEBULA

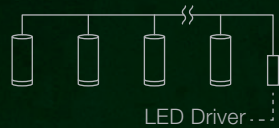
OUTDOOR INGROUND SERIES

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.

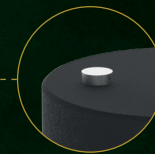
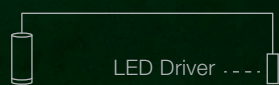
External Driver



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

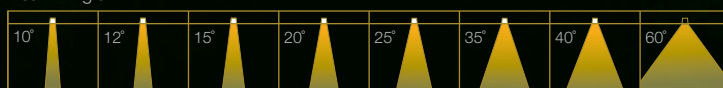
Fixture Features



Module Colour Temperature Variation



Beam Angle



Driver Dimming Variation



NEBULA 3 INGROUND

IP 68 IK10

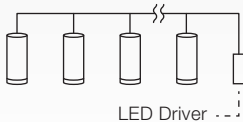
DC CONSTANT VOLTAGE / CONSTANT CURRENT
UPLIGHTER LUMINAIRE



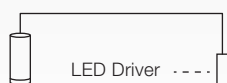
EXTERNAL DRIVER



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						
FIXTURE COLOUR OPTIONS	BRUSHED STAINLESS STEEL	BRUSHED COPPER				
ACCESSORIES	Honeycomb Anti-Glare Louvre Soft Lens Linear Spread Lens Half Moon Louvre					
LED MODULE CONSTANT VOLTAGE	50PLE / 50CLE / 50CLO 2700K 3000K 3500K 4000K 5000K ProART ProART98					
CONSTANT CURRENT	50PLE / 50CLE / 50CLO					
	SINGLE CCT 2700K 3000K 3500K 4000K 5000K ProART ProART98	50PLE / 50CLE / 50CLO	10°	20°	35°	60°
	WARM DIM 	50PLE	✓	✓	✓	✓
	tuneWHITE 	50PLE		✓	✓	✓
	flexiK 					
RGBW 	50PLE			✓	✓	
<i>**tuneWHITE and flexiK are recommended to be paired with Soft Lens for better colour mixing effect.</i> <i>*Drivers for RGBW LED modules are sold separately.</i>						
DRIVER DIMMING	(ND) (PH) (AN) (DA)					
<i>*Drivers for 24CV LED modules are sold separately.</i>						



Class 3



Constant Voltage

NEBULA 3 INGROUND

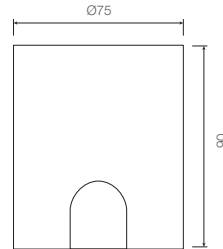
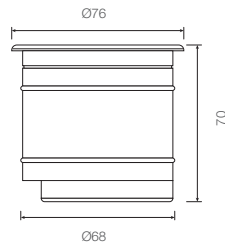
IP 68 IK10

SPECIFICATIONS

FIXTURE

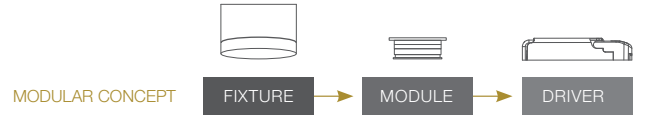
Family Type	Nebula series
Fixture Colours	Brushed stainless steel, brushed copper
Fixture Materials	Stainless steel / bronze and aluminium
Accessories	Honeycomb anti-glare louvre, soft lens, linear spread lens, half moon
Ingress Protection	IP68 (Not applicable for permanent submersion)
Safety Class	Class 3
DC Input Cable	Supplied with 1m cable
LED MODULE & DRIVER	
Compatible LED Modules	50 series 24CV LED engines
Lifetime	Up to 50,000 hours L80 lamp life with LM80 tested LED chip packages
Beam Angles	10°, 20°, 35°, 60°
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)



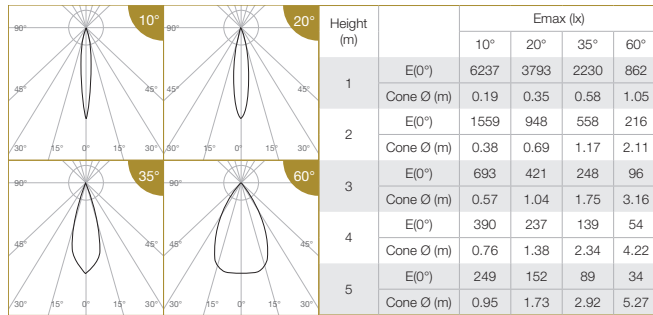
(Embedded Sleeve)

NEBULA 3 INGROUND 68 IK10



PHOTOMETRICS

50 PLE 24CV



Correction Factor:
 50PLE-24CV (10°) - f = 1.00
 50CLE-24CV (10°) - f = 0.82
 50CLO-24CV (10°) - f = 0.65
 50PLE-24CV (20°, 35°, 60°) - f = 1.00
 50CLE-24CV (20°, 35°, 60°) - f = 0.82
 50CLO-24CV (20°, 35°, 60°) - f = 0.70

ELR LED Module				50PLE	50CLE	50CLO
Input Power (24CV)				12W	10W	8W
Luminous Flux (lm)	Type	Beam Angle	CRI	24CV Single CCT (3000K)		
				10°	High Efficiency Ra~85	718
20°	ProART Ra-95	611	503	397		
	ProART98 Ra-98	502	414	326		
35°	High Efficiency Ra-85	914	748	644		
	ProART Ra-95	777	636	547		
60°	ProART98 Ra-98	639	524	451		
	High Efficiency Ra-85	924	757	651		
35°	ProART Ra-95	786	643	554		
	ProART98 Ra-98	647	530	456		
60°	High Efficiency Ra-85	861	705	607		
	ProART Ra-95	732	599	516		
60°	ProART98 Ra-98	603	494	425		

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				Accessories
	Ingress Protection		Colour		
NEBULA-3IG	IP68	IP68	BSS	Brushed Stainless Steel	N None
			BCP	Brushed Copper	AGL Anti-Glare Louvre
	IP68	IP68			SL Soft Lens
					LSL Linear Spread Lens
				HM Half Moon Louvre	

example: NEBULA-3IG.IP68.BSS.N.ELR50PLE-24CV.35.27.PA

*Custom RAL colour options available.

Single CCT LED Module							
Input Power		Beam Angle		Colour Temp		CRI	
ELR50PLE-24CV	12W	10	10°	27	2700K	HE	Ra~85
ELR50CLE-24CV	10W	20	20°	30	3000K	PA	ProART
ELR50CLO-24CV	8W	35	35°	35	3500K	PP	ProART98
		40	40°	40	4000K		
		50	50°	50	5000K		

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



Class 3



Constant Current

NEBULA 3 INGROUND

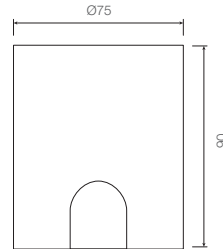
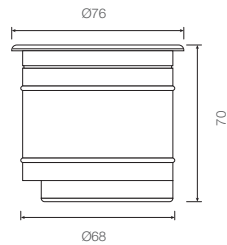
IP 68 IK10

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
LED MODULE & DRIVER	
Compatible LED Modules	50 series LED engines
Lifetime	Up to 50,000 hours L80 lamp life with LM80 tested LED chip packages
Beam Angles	10°, 20°, 35°, 60°
Colour Temperatures	2700K, 3000K, 3500K, 4000K, 5000K, Warm Dim, tuneWHITE, flexiK, RGBW
CRI	High Efficiency (CRI~85), ProART (CRI~95), ProART98 (CRI~98)
Driver (Dimming)	Non-dim, phase (leading & trailing edge), 0-10V, DALI

DIMENSIONS (MM)

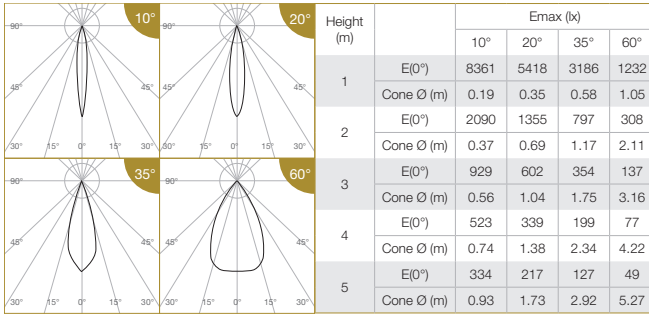


(Embedded Sleeve)

NEBULA 3 INGROUND 68 IK10

PHOTOMETRICS

50 PLE



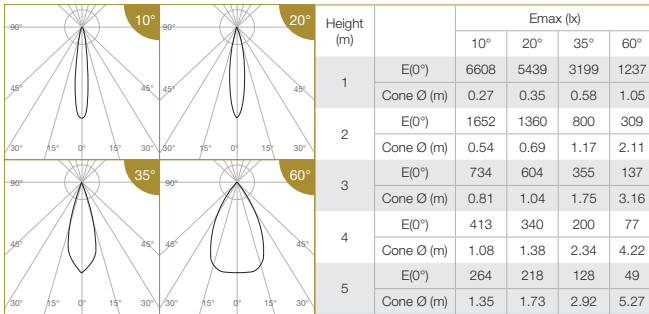
Correction Factor:
 50PLE (10°) - f = 1.00
 50CLE (10°) - f = 0.78
 50CLO (10°) - f = 0.62
 50PLE (20°, 35°, 60°) - f = 1.00
 50CLE (20°, 35°, 60°) - f = 0.80
 50CLO (20°, 35°, 60°) - f = 0.71

ELR LED Module				50PLE	50CLE	50CLO		
LED Power				12W	10W	8W		
System Power				15.2W	12.8W	11W		
Luminous Flux (lm)	Single CCT (3000K)	Type	Beam Angle	CRI				
				High Efficiency Ra-85	ProART Ra-95	ProART98 Ra-98		
		10°	High Efficiency Ra-85	962	755	599		
				ProART Ra-95	818	642	510	
				ProART98 Ra-98	673	528	420	
			20°	High Efficiency Ra-85	1305	1044	931	
					ProART Ra-95	1109	887	792
					ProART98 Ra-98	914	731	652
		35°	High Efficiency Ra-85	1320	1056	942		
				ProART Ra-95	1122	898	801	
				ProART98 Ra-98	924	739	659	
		60°	High Efficiency Ra-85	1230	984	877		
ProART Ra-95	1046			836	746			
ProART98 Ra-98	861			689	614			

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

50 PLE WARM DIM



ELR LED Module				50PLE
LED Power				12W
System Power				15.2W
Luminous Flux (lm)	Warm Dim (3100K)	Type	Beam Angle	CRI
		10°	934	
			20°	1114
				35°
60°	1050			

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

NEBULA 3 INGROUND IP 68 IK10

PHOTOMETRICS

50 PLE tuneWHITE/flexiK

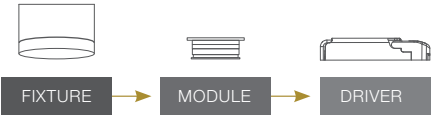
Height (m)		E _{max} (lx)			ELR LED Module			50PLE	
		20°	35°	60°	LED Power			12W	
1	E(0°)	4249	2499	966	System Power			15.2W	
	Cone Ø (m)	0.35	0.58	1.05	Luminous Flux (lm)	Type	Beam Angle	CRI	
2	E(0°)	1062	625	242		tuneWHITE / flexiK (4000K / 6500K)	20°	ProART Ra-95	870
	Cone Ø (m)	0.69	1.17	2.11		35°	880		
3	E(0°)	472	278	107		60°	820		
	Cone Ø (m)	1.04	1.75	3.16		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			
4	E(0°)	266	156	60					
	Cone Ø (m)	1.38	2.34	4.22					
5	E(0°)	170	100	39					
	Cone Ø (m)	1.73	2.92	5.27					

50 PLE RGBW

Height (m)		E _{max} (lx)		ELR LED Module			50PLE	
		35°	60°	LED Power			12W	
1	E(0°)	1512	585	System Power			15.2W	
	Cone Ø (m)	0.58	1.05	Luminous Flux (lm)	Type	Beam Angle	CRI	
2	E(0°)	378	146		RGBW	35°	N/A	532
	Cone Ø (m)	1.17	2.11		60°	496		
3	E(0°)	168	65		Data are based on maximum output of all 4 RGBW channels.			
	Cone Ø (m)	1.75	3.16					
4	E(0°)	94	37					
	Cone Ø (m)	2.34	4.22					
5	E(0°)	60	23					
	Cone Ø (m)	2.92	5.27					

NEBULA 3 INGROUND 68 IK10

MODULAR CONCEPT



ORDERING MATRIX CHART

Fixture					
Type	Ingress Protection		Colour		Accessories
NEBULA-3IG	IP68	IP68	BSS	Brushed Stainless Steel	N None
			BCP	Brushed Copper	AGL Anti-Glare Louvre
					SL Soft Lens
					LSL Linear Spread Lens
				HML Half Moon Louvre	

Single CCT LED Module						Driver			
Input Power		Beam Angle		Colour Temp		CRI		Dimming	
ELR50PLE	12W	10	10°	27	2700K	HE	Ra-85	ND	Non-Dim
		20	20°	30	3000K	PA	ProART	PH	Phase
ELR50CLE	10W	35	35°	35	3500K	PP	ProART98	AN	0-10V
		60	60°	40	4000K			DA	DALI
ELR50CLO	8W			50	5000K				

Warm Dim LED Module						Driver			
LED Power		Beam Angle		Colour Temp		CRI		Dimming	
ELR50PLE	12W	10	10°	WD	Warm Dim	PA	ProART	PH	Phase
		20	20°					AN	0-10V
		35	35°					DA	DALI
		60	60°						

tuneWHITE LED Module						Driver			
LED Power		Beam Angle		Colour Temp		CRI		Dimming	
ELR50PLE	12W	20	20°	TW1831	tuneWHITE 1800K-3100K	PA	ProART	DA	DALI
		35	35°	TW1840	tuneWHITE 1800K-4000K				
		60	60°	TW2765	tuneWHITE 2700K-6500K				

flexiK LED Module						Driver			
LED Power		Beam Angle		Colour Temp		CRI		Dimming	
ELR50PLE	12W	20	20°	FK##	flexiK	PA	ProART	PH	Phase
		35	35°					AN	0-10V
		60	60°					DA	DALI

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

RGBW LED Module					
LED Power		Beam Angle		Colour Temp	
ELR50PLE	12W	35	35°	RGBW	Red, Green, Blue, White
		60	60°		

*Drivers for RGBW LED modules are sold separately.

example: NEBULA-3IG.IP68.BSS.N.ELR50PLE.35.27.PA.DA

*Custom RAL colour options available.