

NEBULA

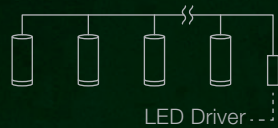
OUTDOOR TREE SPIKE SERIES

Landscape luminaires for illuminating trees and plants 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



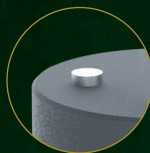
Constant Voltage
Multiple LED module driven by a single LED driver



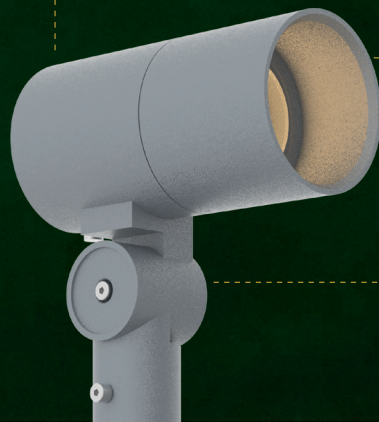
Constant Current
Single LED module driven by a single LED driver



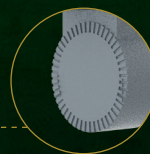
Breather Valve



Reduced Glare



Moulded Teething Lock



Future proof with upgradeable module



Accessory options

Fixture Features



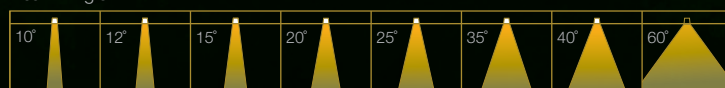
Module Colour Temperature Variation



Driver Dimming Variation



Beam Angle



NEBULA 2 TREE SPIKE

IP 66 IK08

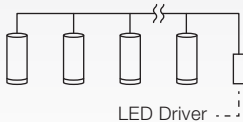
DC CONSTANT VOLTAGE / CONSTANT CURRENT
TREE SPIKE LUMINAIRE



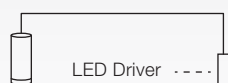
EXTERNAL DRIVER



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

<p>FIXTURE COLOUR OPTIONS</p>	<p>MATT GREY RAL7001 MATT BLACK RAL9011</p>				
<p>SPIKE / STRAP OPTIONS</p>	<p>UPVC SPIKE</p>	<p>ALUMINIUM SPIKE</p>	<p>TREE STRAP</p>		
<p>SNOOT OPTIONS</p>	<p>FULL SNOOT</p>	<p>45 DEGREE SNOOT</p>			
<p>ACCESSORIES</p>	<p>Honeycomb Anti-Glare Louvre</p>	<p>Soft Lens</p>	<p>Linear Spread Lens</p>		
<p>LED MODULE CONSTANT VOLTAGE</p>	<p>20PLE / 20CLE</p>	<p>2700K 3000K 3500K 4000K 5000K ProART ProART98</p>	<p>15°</p>	<p>25°</p>	<p>40°</p>
<p>CONSTANT CURRENT</p>	<p>20PLE / 20CLE</p>	<p>SINGLE CCT</p> <p>2700K 3000K 3500K 4000K 5000K ProART ProART98</p>	<p>15°</p>	<p>25°</p>	<p>40°</p>
<p><i>**tuneWHITE and flexiK are recommended to be paired with Soft Lens for better colour mixing effect.</i></p>	<p>WARM DIM </p> <hr/> <p>tuneWHITE </p> <hr/> <p>flexiK </p>	<p>20PLE / 20CLE</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>
<p>DRIVER DIMMING</p>	<p>(ND) (PH) (AN) (DA)</p>				



Class 3



Constant Voltage

NEBULA 2 TREE SPIKE

IP 66 IK08

SPECIFICATIONS

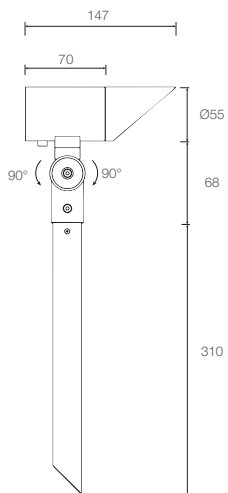
FIXTURE

Family Type	Nebula series
Fixture Colours	Matt grey, matt black
Fixture Materials	Aluminium
Accessories	Honeycomb anti-glare louvre, soft lens, linear spread lens
Ingress Protection	IP66
Safety Class	Class 3
Power Supply Cable	Supplied with 1m cable

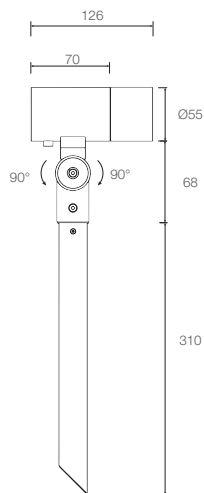
LED MODULE & DRIVER

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

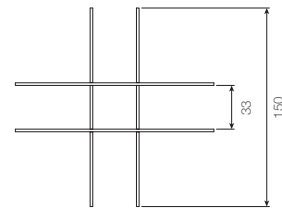
DIMENSIONS (MM)



(45 DEGREE
SNOOT)

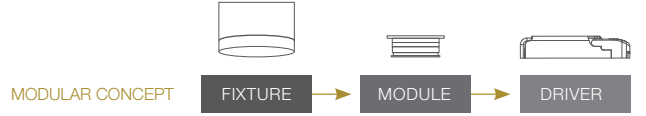


(FULL SNOOT)



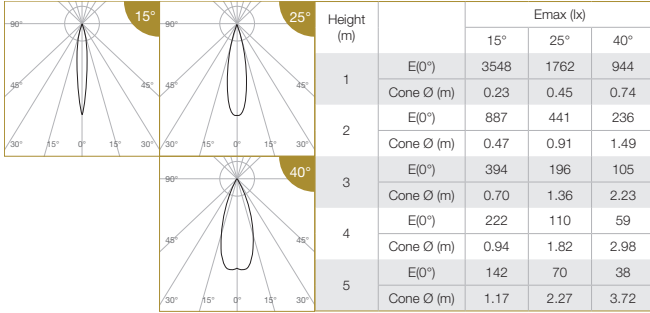
(STABILISER)

NEBULA 2 TREE SPIKE IP66 IK08



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)		
554	High Efficiency Ra-85	15°	ProART Ra-95	472	389	
			ProART98 Ra-98	388	320	
			High Efficiency Ra-85	548	452	
	466	ProART Ra-95	25°	ProART98 Ra-98	384	317
				High Efficiency Ra-85	542	447
				ProART Ra-95	461	380
379	ProART98 Ra-98	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					Accessories	
	Ingress Protection	Colour	Snoot	Spike / Strap			
NEBULA-2TS	IP66	GR	FS	USP	N	None	
	IP66	MB	45S	ASP	AGL	Anti-Glare Louvre	
				STR	SL	Soft Lens	
					LSL	Linear Spread Lens	

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

example: NEBULA-2TS.IP66.GR.45S.USP.N.ELR20PLE-24CV.25.30.PA

*Custom RAL colour options available.

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



Class 3



Constant Current

NEBULA 2 TREE SPIKE

IP 66 IK08

SPECIFICATIONS

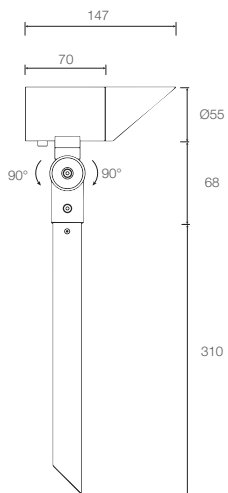
FIXTURE

Family Type	Nebula series
Fixture Colours	Matt grey, matt black
Fixture Materials	Aluminium
Accessories	Honeycomb anti-glare louvre, soft lens, linear spread lens
Ingress Protection	IP66
Safety Class	Class 3
Power Supply Cable	Supplied with 1m cable

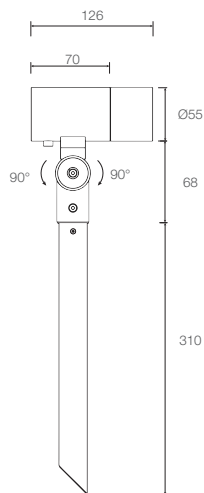
LED MODULE & DRIVER

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

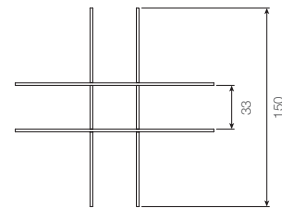
DIMENSIONS (MM)



(45 DEGREE
SNOOT)



(FULL SNOOT)

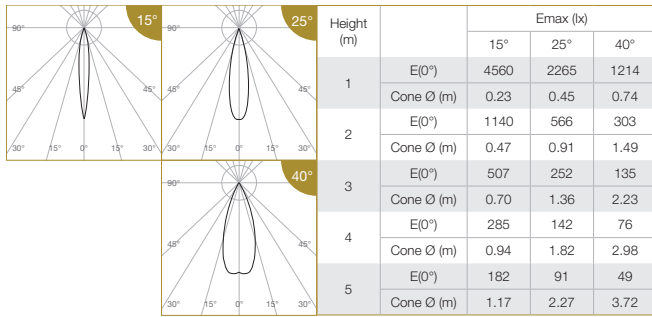


(STABILISER)

NEBULA 2 TREE SPIKE **IP 66 IK08**

PHOTOMETRICS

20 PLE



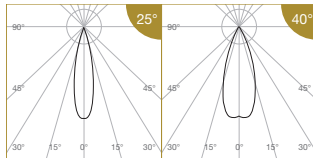
Correction Factor: 20PLE - f = 1.00
20CLE - f = 0.81

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 16% 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

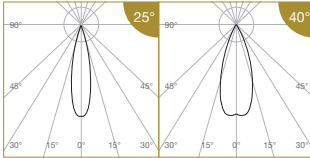
ELR LED Module				20PLE	20CLE	
LED Power				8W	6.2W	
System Power				10.5W	8.3W	
Luminous Flux (lm)	Type	Beam Angle	CRI			
	Warm Dim (3100K)	25°	ProART Ra-95	696	539	
				688	533	
		40°				

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

NEBULA 2 TREE SPIKE IP 66 IK08

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

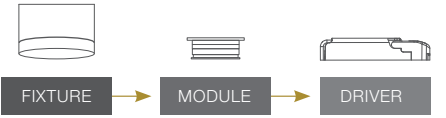
ELR LED Module				20PLE	20CLE
LED Power				8W	6.2W
System Power				10.5W	8.3W
Luminous Flux (lm)	Type	Beam Angle	CRI		
	tuneWHITE / flexiK (4000K / 6500K)	25° 40°	ProART Ra-95	566 559	439 434

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 TREE SPIKE 66 IK08

MODULAR CONCEPT



ORDERING MATRIX CHART

Type	Ingress Protection		Colour		Shoot		Spike / Strap		Accessories				
	IP66	IP66	GR	MB	FS	45S	USP	ASP	STR	N	AGL	SL	LSL
NEBULA-2TS			Matt Grey	Matt Black	Full Shoot	45 Degree Shoot	uPVC Spike	Aluminium Spike	Tree Strap	None	Anti-Glare Louvre	Soft Lens	Linear Spread Lens

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
ELR20CLE	6.2W	25	25°	30	3000K	PA	ProART	PH	Phase
		40	40°	35	3500K	PP	ProART98	AN	0-10V
				40	4000K			DA	DALI
				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°					AN	0-10V
								DA	DALI

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°	TW1840	tuneWHITE 1800K-4000K				
				TW2765	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°					AN	0-10V
								DA	DALI

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

example: NEBULA-2TS.IP66.GR.45S.USP.N.ELR20PLE.25.30.PA.DA

*Custom RAL colour options available.