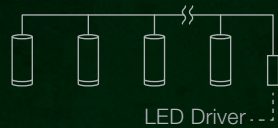


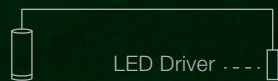
External Driver



Constant Voltage

Multiple LED module
driven by a single
LED driver

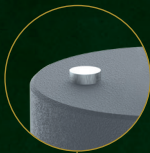
Constant Current

Single LED module
driven by a single
LED driver

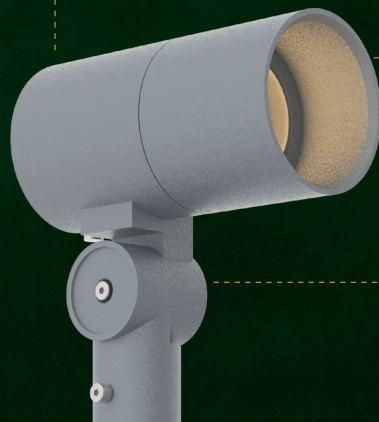
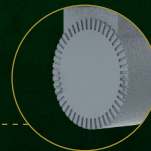
NEBULA

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.

Breather
Valve

Reduced Glare

Moulded
Teething LockFuture proof with
upgradeable module

Accessory options

Stabiliser

Fixture
Features

IP66 IK08



Class 3



ProART



ProART98



WARM DIM



tuneWHITE



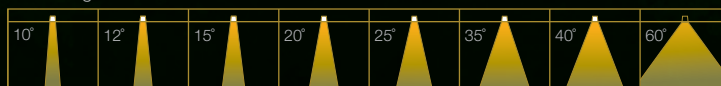
flexiK



RGBW

Module Colour Temperature Variation

Beam Angle



Driver Dimming Variation



(ND)



(PH)



(AN)



(DA)

NEBULA 2 TREE SPIKE

IP 66 IK08

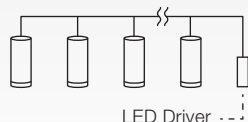
DC CONSTANT VOLTAGE / CONSTANT CURRENT
TREE SPIKE LUMINAIRE



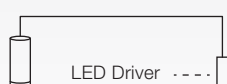
EXTERNAL DRIVER



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

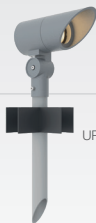






































Low Flicker,
No Risk
(IEEE 1789)



Converging Optical Lens
Maximising LOR

AVAILABLE OPTIONS

<div>FIXTURE</div> <div>COLOUR OPTIONS</div>	<div>MATT GREY RAL7001</div> <div>MATT BLACK RAL9011</div>
<div>SPIKE / STRAP</div> <div>OPTIONS</div>	<div><div></div><div>UPVC SPIKE</div><div></div><div>ALUMINIUM SPIKE</div><div></div><div>TREE STRAP</div></div>
<div>SNOOT OPTIONS</div>	<div><div></div><div>FULL SNOOT</div><div></div><div>45 DEGREE SNOOT</div></div>
<div>ACCESSORIES</div>	<div><div></div><div>Honeycomb Anti-Glare Louvre</div><div></div><div>Soft Lens</div><div></div><div>Linear Spread Lens</div></div>
<div>LED MODULE</div> <div>CONSTANT VOLTAGE</div>	<div><div></div><div>20PLE / 20CLE</div><div><div></div><div>2700K</div><div></div><div>3000K</div><div></div><div>3500K</div><div></div><div>4000K</div><div></div><div>5000K</div><div></div><div>ProART</div><div></div><div>ProART98</div></div><div><div></div><div>15°</div><div></div><div>25°</div><div></div><div>40°</div></div></div>
<div>CONSTANT CURRENT</div>	<div><div><div><div><div></div><div>20PLE / 20CLE</div></div><div><div><div>SINGLE CCT</div><div><div></div><div>2700K</div><div></div><div>3000K</div><div></div><div>3500K</div><div></div><div>4000K</div><div></div><div>5000K</div><div></div><div>ProART</div><div></div><div>ProART98</div></div></div><div><div>WARM DIM</div><div></div></div><div><div>tuneWHITE</div><div></div></div><div><div>flexiK</div><div></div></div></div><div><div>20PLE / 20CLE</div><div><div></div><div>15°</div><div></div><div>25°</div><div></div><div>40°</div></div></div></div></div></div>
<div><div><div><div>***tuneWHITE and flexiK are recommended to be paired with Soft Lens for better colour mixing effect.</div></div></div></div>	
<div>DRIVER</div> <div>DIMMING</div>	<div><div></div><div>DIMMABLE (ND)</div><div></div><div>PHASE DIMMABLE (PH)</div><div></div><div>0-10V DIMMABLE (AN)</div><div></div><div>DALI DIMMABLE (DA)</div></div>

**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 TREE SPIKE

IP 66 IK08

SPECIFICATIONS

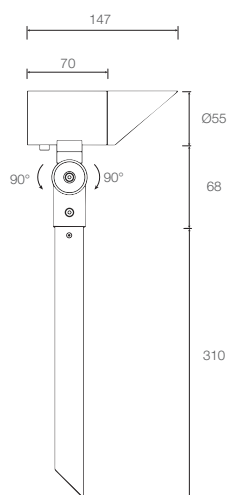
FIXTURE

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

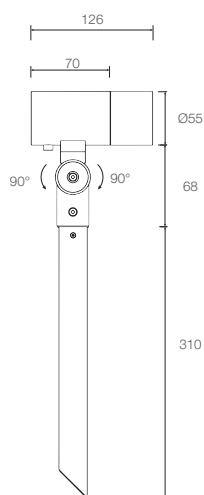
LED MODULE & DRIVER

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

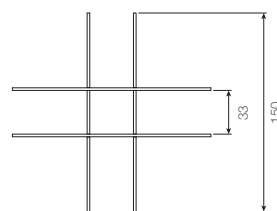
DIMENSIONS (MM)



(45 DEGREE
SNOOT)



(FULL SNOOT)



(STABILISER)

NEBULA 2 TREE SPIKE

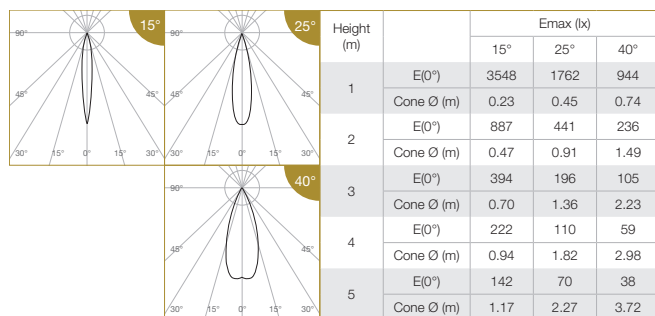
IP 66 IK08

MODULAR CONCEPT



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		
		15°	High Efficiency Ra-85	554	458
			ProART Ra-95	472	389
			ProART98 Ra-98	388	320
		25°	High Efficiency Ra-85	548	452
			ProART Ra-95	466	385
			ProART98 Ra-98	384	317
		40°	High Efficiency Ra-85	542	447
			ProART Ra-95	461	380
			ProART98 Ra-98	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

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

example: NEBULA-2TS.IP66.GR.45S.USP.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
		25 25°	30 3000K
ELR20CLE-24CV	6.2W	40 40°	35 3500K
			40 4000K
			50 5000K

*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

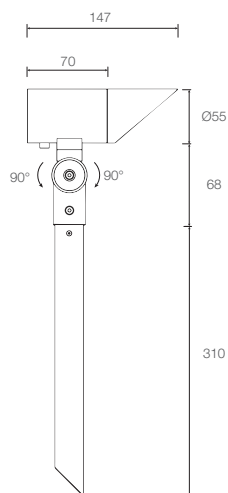
FIXTURE

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

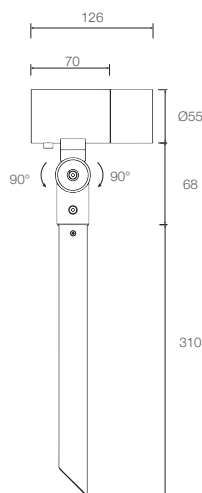
LED MODULE & DRIVER

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

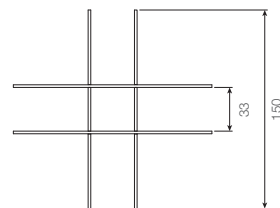
DIMENSIONS (MM)



(45 DEGREE
SNOOT)



(FULL SNOOT)

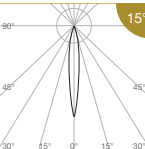
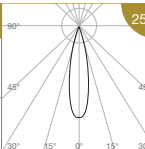
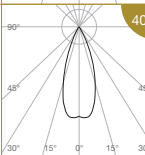


(STABILISER)

NEBULA 2 TREE SPIKE 66 IK08

PHOTOMETRICS

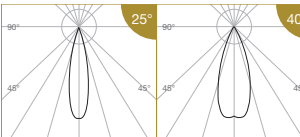
20 PLE

							
15°		25°		40°			
		Height (m)		E _{max} (lx)			
				15° 25° 40°			
		1		E(0°)	4560 2265 1214		
				Cone Ø (m)	0.23 0.45 0.74		
		2		E(0°)	1140 566 303		
				Cone Ø (m)	0.47 0.91 1.49		
		3		E(0°)	507 252 135		
				Cone Ø (m)	0.70 1.36 2.23		
		4		E(0°)	285 142 76		
				Cone Ø (m)	0.94 1.82 2.98		
		5		E(0°)	182 91 49		
				Cone Ø (m)	1.17 2.27 3.72		
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				
				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

		Height (m)	Emax (lx)		ELR LED Module			20PLE	20CLE
1	E(0°)	2632	1410	LED Power			8W	6.2W	
	Cone Ø (m)	0.45	0.74	System Power			10.5W	8.3W	
	E(0°)	658	353	Luminous Flux (lm)	Type	Beam Angle	CRI		
2	Cone Ø (m)	0.91	1.49		Warm Dim (3100K)	25°	ProART Ra-95	696	539
	E(0°)	292	157			40°		688	533
3	Cone Ø (m)	1.36	2.23		Data are based on maximum output at 3100K				
	E(0°)	165	88	Nominal CRI-95, equals to Ra>90-97, R9>50					
	Cone Ø (m)	1.82	2.98						
4	E(0°)	105	56						
	Cone Ø (m)	2.27	3.72						

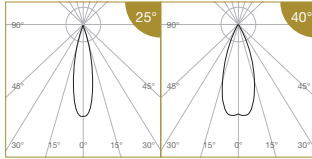
Data are based on maximum output at 3100K.

Nominal CRI~95, equals to Ra>90~97, R9>50

NEBULA 2 TREE SPIKE 66 IK08

PHOTOMETRICS

20 PLE tuneWHITE/flexiK



Height (m)		Emax (lx)		ELR LED Module				20PLE	20CLE
		25°	40°	LED Power		System Power			
1	E(0°)	2139	1146					8W	6.2W
	Cone Ø (m)	0.45	0.74					10.5W	8.3W
2	E(0°)	535	286	Luminous Flux (lm)	Type	25°	CRI		
	Cone Ø (m)	0.91	1.49			40°			
3	E(0°)	238	127	tuneWHITE / flexiK (4000K / 6500K)	ProART Ra-95				
	Cone Ø (m)	1.36	2.23			566	439		
4	E(0°)	134	72			559	434		
	Cone Ø (m)	1.82	2.98						
5	E(0°)	86	46						
	Cone Ø (m)	2.27	3.72						

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

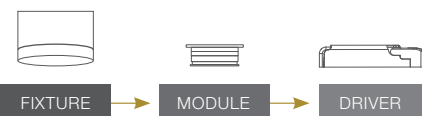
Data are based on maximum output at highest CCT (4000K / 6500K).
2700K will have a nominal data value of 10% lower than published. ($f = 0.90$)
1800K will have a nominal data value of 30% lower than published. ($f = 0.70$)
Nominal CRI-95, equals to Ra>90-97, R9>50

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

NEBULA 2 TREE SPIKE

IP66 IK08

MODULAR CONCEPT



ORDERING MATRIX CHART

Fixture										
Type	Ingress Protection		Colour		Snoot		Spike / Strap		Accessories	
NEBULA-2TS	IP66	IP66	GR	Matt Grey	FS	Full Snoot	USP	uPVC Spike	N	None
				Matt Black		45 Degree Snoot		ASP		Aluminium Spike
			MB		45S		STR	Tree Strap	SL	Soft Lens
										LSL

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.