

# NEBULA

## OUTDOOR SURFACE SERIES

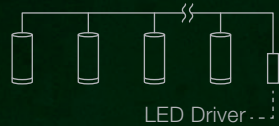
Surface mounted luminaires suitable for installation in areas without false ceiling that operate on constant voltage platform, allowing multiple luminaires to be powered by a single LED driver remotely. Incorporating ELR's signature modular concept design, LED engines are fully interchangeable with various 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



Reduced Glare

Future proof with upgradeable module



Accessory options

### Fixture Features



IP66 IK08



Class 3

### Module Colour Temperature Variation



ProART



ProART98



WARM DIM



tuneWHITE

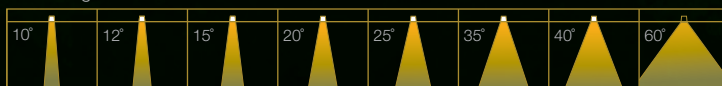


flexiK



RGBW

### Beam Angle



### Driver Dimming Variation



(ND)



(PH)



(AN)



(DA)

# NEBULA 2 SURFACE

**IP 66 IK08**

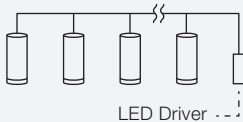
DC CONSTANT VOLTAGE / CONSTANT CURRENT  
OUTDOOR SURFACE MOUNTED LUMINAIRE



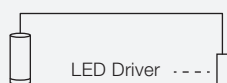
## EXTERNAL DRIVER



**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 COLOUR OPTIONS</b>	MATT GREY RAL7001	MATT BLACK RAL9011		
				
<b>ACCESSORIES</b>	 Honeycomb Anti-Glare Louvre  Soft Lens  Linear Spread Lens			
<b>LED MODULE CONSTANT VOLTAGE</b>	 20PLE / 20CLE  2700K  3000K  3500K  4000K  5000K  ProART  ProART98	 15°  25°  40°		
<b>CONSTANT CURRENT</b>  <i>**tuneWHITE and flexiK are recommended to be paired with Soft Lens for better colour mixing effect.</i>	 20PLE / 20CLE <b>SINGLE CCT</b>  2700K  3000K  3500K  4000K  5000K  ProART  ProART98	 15°  25°  40°		
	<b>WARM DIM</b> 	20PLE / 20CLE	✓	✓
	<b>tuneWHITE</b> 	20PLE / 20CLE		✓
	<b>flexiK</b> 			✓
<b>DRIVER DIMMING</b>  <i>*Drivers for 24CV LED modules are sold separately.</i>	 (ND)  (PH)  (AN)  (DA)			



Class 3



Constant Voltage

# NEBULA 2 SURFACE

**IP 66 IK08**

## SPECIFICATIONS

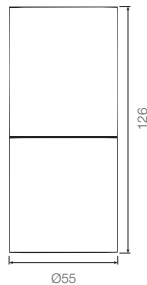
### FIXTURE

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
DC Input Cable	Supplied with 1m cable

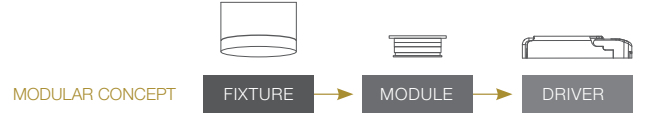
### LED MODULE & DRIVER

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)

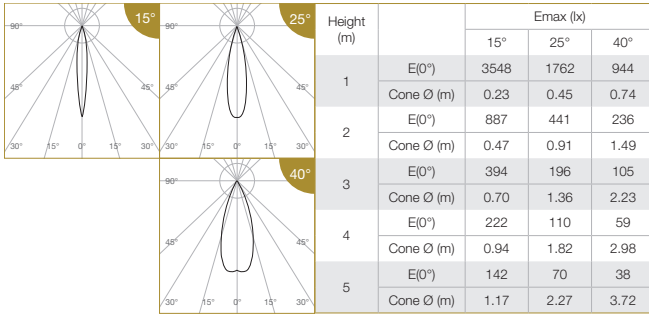


# NEBULA 2 SURFACE 66 IK08



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°	High Efficiency Ra-85	542	447	
			ProART Ra-95	461	380	

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-2SM	IP66	IP66	GR	Matt Grey	N	None
			MB	Matt Black	AGL	Anti-Glare Louvre
					SL	Soft Lens
					LSL	Linear Spread Lens

example: NEBULA-2SM.IP66.GR.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
				30	3000K	PA	ProART
ELR20CLE-24CV	6.2W	25°	25°	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 SURFACE

**IP 66 IK08**

## SPECIFICATIONS

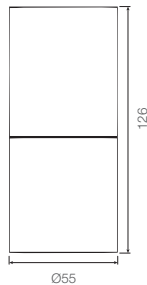
### FIXTURE

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
DC Input 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)



# NEBULA 2 SURFACE IP66 IK08

PHOTOMETRICS

20 PLE

Height (m)		Emax (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			
	Single CCT (3000K)	15°	High Efficiency Ra-85			
				ProART Ra-95	606	494
				ProART98 Ra-98	499	407
		25°	High Efficiency Ra-85			
				ProART Ra-95	705	574
				ProART98 Ra-98	599	488
	40°	High Efficiency Ra-85				
			ProART Ra-95	697	568	
ProART98 Ra-98			593	482		
				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

Height (m)		Emax (lx)	
		25°	40°
1	E(0°)	2632	1410
	Cone Ø (m)	0.45	0.74
2	E(0°)	658	353
	Cone Ø (m)	0.91	1.49
3	E(0°)	292	157
	Cone Ø (m)	1.36	2.23
4	E(0°)	165	88
	Cone Ø (m)	1.82	2.98
5	E(0°)	105	56
	Cone Ø (m)	2.27	3.72

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
		40°		688	533

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

# NEBULA 2 SURFACE IP66 IK08

PHOTOMETRICS

20 PLE tuneWHITE/flexiK



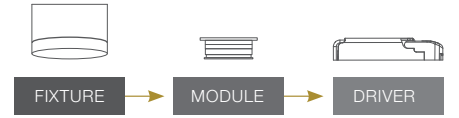
		E <sub>max</sub> (lx)		ELR LED Module			20PLE	20CLE
		25°	40°	LED Power				
1	E(0°)	2139	1146	System Power		8W	6.2W	
	Cone Ø (m)	0.45	0.74			10.5W	8.3W	
2	E(0°)	535	286	Luminous Flux (lm)	Type	Beam Angle		
	Cone Ø (m)	0.91	1.49		tuneWHITE / flexiK (4000K / 6500K)	25°	ProART Ra-95	566
3	E(0°)	238	127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

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



# NEBULA 2 SURFACE 66 IK08

MODULAR CONCEPT



## ORDERING MATRIX CHART

Fixture						
Type	Ingress Protection		Colour		Accessories	
NEBULA-2SM	IP66	IP66	GR	Matt Grey	N	None
			MB	Matt Black	AGL	Anti-Glare Louvre
					SL	Soft Lens
					LSL	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-2SM.IP66.GR.N.ELR20PLE.25.30.PA.DA

\*Custom RAL colour options available.