

# ECLIO

## DOWNLIGHT SERIES

A series of pinhole downlights designed to meet budget driven requisites with absolute minimalism yet maintaining ELR's signature modular concept. LED modules are fully interchangeable with various choices to provide optimal illumination for all kinds of spaces.



Future proof with upgradeable module



Multiple accessories options



Trim thickness < 2mm

### Fixture Features



IP54

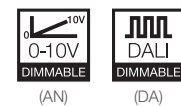
### Module Colour Temperature Variation



#### Beam Angle



### Driver Dimming Variation



# ECLIO 3

RECESSED ROUND FIX / TILT DOWNLIGHT LUMINAIRE



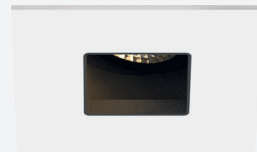
#ROUND  
#FIX  
#TRIM



#ROUND  
#TILT  
#TRIM



#SQUARE  
#FIX  
#TRIM



#SQUARE  
#TILT  
#TRIM

## TECHNOLOGY AND FEATURES



Advanced Thermal Protection System


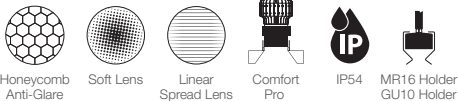
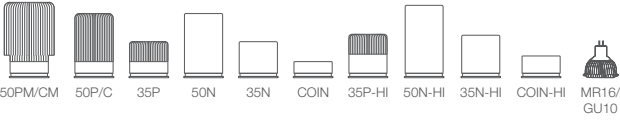





















Low Flicker, No Risk (IEEE 1789)



Converging Optical Lens Maximising LOR

## AVAILABLE OPTIONS

<p><b>FIXTURE COLOUR OPTIONS</b></p>	<p>Trim Colour Options</p> <p>MATT WHITE RAL9003      MATT BLACK RAL9011</p> <p>ROUND</p> <p>SQUARE</p> 																																													
<p><b>ACCESSORIES</b></p> <p><i>*IP54 seal accessory is valid for fix angle fixtures only.</i></p>	 <p>Honeycomb Anti-Glare Louvre    Soft Lens    Linear Spread Lens    Comfort Pro    IP54    MR16 Holder GU10 Holder</p>																																													
<p><b>LED MODULE</b></p> <p><i>*Drivers for 24CV LED modules are sold separately.</i></p> <p><i>**tuneWHITE and flexiK are recommended to be paired with Soft Lens for better colour mixing effect.</i></p> <p><i>*Drivers for RGBW LED modules are sold separately.</i></p>	 <table border="1"> <thead> <tr> <th></th> <th>10°</th> <th>20°</th> <th>35°</th> <th>60°</th> </tr> </thead> <tbody> <tr> <td> <p>SINGLE CCT</p>  <p>2700K    3000K    3500K    4000K    5000K    ProART    ProART98</p> </td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> <tr> <td> <p>50PM / 50CM / 50P / 50C / 35P / 50N / 35N / COIN</p> </td> <td>✓</td> <td></td> <td></td> <td></td> </tr> <tr> <td> <p>35P-HI / 50N-HI / 35N-HI / COIN-HI</p> </td> <td>✓</td> <td></td> <td></td> <td></td> </tr> <tr> <td> <p>ComfySHIFT</p>  <p>ComfySHIFT</p> </td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> <tr> <td> <p>WARM DIM</p>  <p>WARM DIM</p> </td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> <tr> <td> <p>tuneWHITE</p>  <p>tuneWHITE</p> </td> <td></td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> <tr> <td> <p>flexiK</p>  <p>flexiK</p> </td> <td></td> <td></td> <td>✓</td> <td>✓</td> </tr> <tr> <td> <p>RGBW</p>  <p>RGBW</p> </td> <td></td> <td></td> <td>✓</td> <td>✓</td> </tr> </tbody> </table>		10°	20°	35°	60°	<p>SINGLE CCT</p>  <p>2700K    3000K    3500K    4000K    5000K    ProART    ProART98</p>	✓	✓	✓	✓	<p>50PM / 50CM / 50P / 50C / 35P / 50N / 35N / COIN</p>	✓				<p>35P-HI / 50N-HI / 35N-HI / COIN-HI</p>	✓				<p>ComfySHIFT</p>  <p>ComfySHIFT</p>	✓	✓	✓	✓	<p>WARM DIM</p>  <p>WARM DIM</p>	✓	✓	✓	✓	<p>tuneWHITE</p>  <p>tuneWHITE</p>		✓	✓	✓	<p>flexiK</p>  <p>flexiK</p>			✓	✓	<p>RGBW</p>  <p>RGBW</p>			✓	✓
	10°	20°	35°	60°																																										
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<p>RGBW</p>  <p>RGBW</p>			✓	✓																																										
<p><b>DRIVER DIMMING</b></p>	 <p>(ND)    (PH)    (AN)    (DA)</p>																																													

# ECLIO 3

- #ROUND
- #SQUARE
- #FIX
- #TILT
- #TRIM

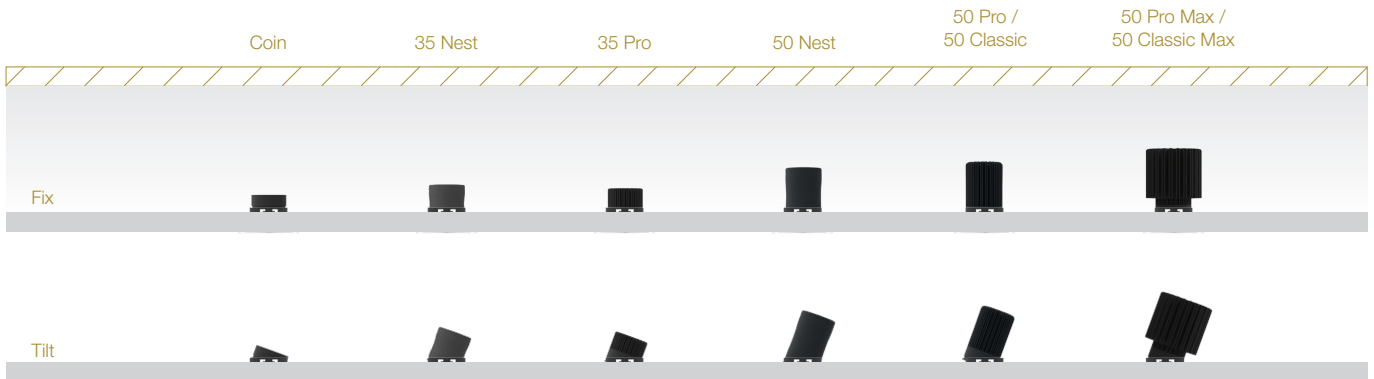
## SPECIFICATIONS

### FIXTURE

Family Type	Eclio series
Fixture Colours	Matt white, matt black
Fixture Materials	Aluminium
Accessories	Honeycomb anti-glare louvre, soft lens, linear spread lens, Comfort Pro, IP54 seal
Ingress Protection	IP40, IP54

### LED MODULE & DRIVER

Compatible LED Modules	50, 35, COIN series LED modules or MR16/GU10
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, ComfySHIFT, 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



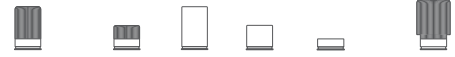
DIMENSIONS (MM)				Height (h)		
ROUND				Module	Fix	Tilt
				50PM / 50CM:	117	122
SQUARE				50P / 50C:	103	106
				50N:	100	103
				35P / 35N:	74	80
				COIN:	50	59
				50N-HI:	110	113
				35P-HI / 35N-HI:	84	90
				COIN-HI:	60	69
				MR16 / GU10:	74	80
				Module	Fix	Tilt
				50PM / 50CM:	117	122
				50P / 50C:	103	106
				50N:	100	103
35P / 35N:	74	80				
COIN:	50	59				
50N-HI:	110	113				
35P-HI / 35N-HI:	84	90				
COIN-HI:	60	69				
MR16 / GU10:	74	80				

Height increase with accessories:  
 Anti-Glare Louvre : Height +6  
 Soft Lens : Height +3  
 Linear Spread Lens : Height +3  
 Comfort Pro : Height +20

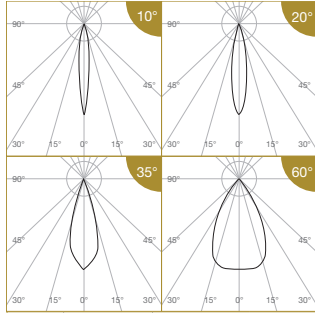
(refer to module driver dimensions)

# ECLIO 3

## PHOTOMETRICS



### 50 PRO



Height (m)		E <sub>max</sub> (lx)			
		10°	20°	35°	60°
1	E(0°)	8361	5418	3186	1232
	Cone Ø (m)	0.19	0.35	0.58	1.05
2	E(0°)	2090	1355	797	308
	Cone Ø (m)	0.37	0.69	1.17	2.11
3	E(0°)	929	602	354	137
	Cone Ø (m)	0.56	1.04	1.75	3.16
4	E(0°)	523	339	199	77
	Cone Ø (m)	0.74	1.38	2.34	4.22
5	E(0°)	334	217	127	49
	Cone Ø (m)	0.93	1.73	2.92	5.27

**Correction Factor:**

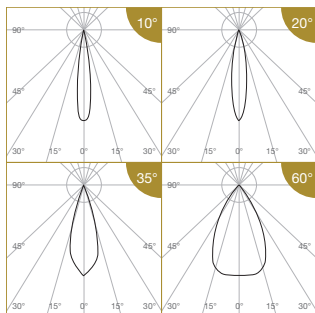
50P (10°) - f = 1.00	50P (20°, 35°, 60°) - f = 1.00
50C (10°) - f = 0.78	50C (20°, 35°, 60°) - f = 0.80
35P (10°) - f = 0.62	35P (20°, 35°, 60°) - f = 0.71
50N (10°) - f = 0.58	50N (20°, 35°, 60°) - f = 0.63
35N (10°) - f = 0.42	35N (20°, 35°, 60°) - f = 0.47
COIN (10°) - f = 0.35	COIN (20°, 35°, 60°) - f = 0.38
50PM (10°) - f = 1.69	50PM (20°, 35°, 60°) - f = 1.73
50CM (10°) - f = 1.37	50CM (20°, 35°, 60°) - f = 1.40
50P-24CV (10°) - f = 0.75	50P-24CV (20°, 35°, 60°) - f = 0.70
50C-24CV (10°) - f = 0.62	50C-24CV (20°, 35°, 60°) - f = 0.57
35P-24CV (10°) - f = 0.48	35P-24CV (20°, 35°, 60°) - f = 0.49
COIN-24CV (10°) - f = 0.28	COIN-24CV (20°, 35°, 60°) - f = 0.27

ELR LED Module				50P	50C	35P	50N	35N	COIN	50PM	50CM
LED Power				12W	10W	8W	7.5W	5.5W	4.5W	21W	17W
System Power				15.2W	12.8W	11W	10W	7.5W	6W	25W	21W
Luminous Flux (lm)	Type	Beam Angle	CRI								
	Single CCT (3000K)	10°	High Efficiency Ra-85	962	755	599	555	407	333	1628	1317
			ProART Ra-95	818	642	510	472	346	283	1384	1120
			ProART98 Ra-98	673	528	420	389	285	233	1140	922
		20°	High Efficiency Ra-85	1305	1044	931	827	609	496	2262	1827
			ProART Ra-95	1109	887	792	703	518	422	1923	1553
			ProART98 Ra-98	914	731	652	579	426	347	1583	1279
	35°	High Efficiency Ra-85	1320	1056	942	836	616	502	2288	1848	
		ProART Ra-95	1122	898	801	711	524	427	1945	1571	
		ProART98 Ra-98	924	739	659	585	431	351	1602	1294	
	60°	High Efficiency Ra-85	1230	984	877	779	574	467	2132	1722	
ProART Ra-95		1046	836	746	663	488	398	1812	1464		
ProART98 Ra-98		861	689	614	545	402	327	1492	1205		
Input Power (24CV)				12W	10W	8W			4.5W		
Luminous Flux (lm)	Type	Beam Angle	CRI								
	24CV Single CCT (3000K)	10°	High Efficiency Ra-85	718	592	466				274	
			ProART Ra-95	611	503	397				233	
			ProART98 Ra-98	502	414	326				192	
		20°	High Efficiency Ra-85	914	748	644				357	
			ProART Ra-95	777	636	547				304	
			ProART98 Ra-98	639	524	451				250	
	35°	High Efficiency Ra-85	924	757	651				361		
		ProART Ra-95	786	643	554				307		
		ProART98 Ra-98	647	530	456				253		
	60°	High Efficiency Ra-85	861	705	607				336		
ProART Ra-95		732	599	516				286			
ProART98 Ra-98		603	494	425				235			

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

### 35 PRO ComfySHIFT



Height (m)		E <sub>max</sub> (lx)			
		10°	20°	35°	60°
1	E(0°)	4388	3612	2124	821
	Cone Ø (m)	0.27	0.35	0.58	1.05
2	E(0°)	1097	903	531	205
	Cone Ø (m)	0.54	0.69	1.17	2.11
3	E(0°)	488	401	236	91
	Cone Ø (m)	0.81	1.04	1.75	3.16
4	E(0°)	274	226	133	51
	Cone Ø (m)	1.08	1.38	2.34	4.22
5	E(0°)	176	144	85	33
	Cone Ø (m)	1.35	1.73	2.92	5.27

Correction Factor: 35P CS - f = 1.00  
50N CS - f = 0.94

ELR LED Module				35P	50N
LED Power				8W	7.5W
System Power				11W	10W
Luminous Flux (lm)	Type	Beam Angle	CRI		
	ComfySHIFT (3100K)	10°	ProART Ra-95	621	584
		20°	ProART Ra-95	740	696
		35°	ProART Ra-95	748	704
	60°	ProART Ra-95	697	656	

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

# ECLIO 3

## PHOTOMETRICS

### 50 PRO WARM DIM

Height (m)	E(0°)	Emax (lx)				ELR LED Module															
		10°	20°	35°	60°	50P	35P	50N	35N	COIN											
1	E(0°)	6608	5439	3199	1237	LED Power															
	Cone Ø (m)	0.27	0.35	0.58	1.05	System Power															
2	E(0°)	1652	1360	800	309	Luminous Flux (lm)	Type	Beam Angle	CRI	50P	35P	50N	35N	COIN							
	Cone Ø (m)	0.54	0.69	1.17	2.11										Warm Dim (3100K)	10°	ProART Ra-95	934	621	584	431
E(0°)	734	604	355	137	1114													740	696	513	418
Cone Ø (m)	0.81	1.04	1.75	3.16	1126													748	704	519	422
E(0°)	413	340	200	77	1050													697	656	484	394
3	E(0°)	264	218	128	49	LED Power															
	Cone Ø (m)	1.35	1.73	2.92	5.27	System Power															
4	E(0°)	170	100	39		LED Power															
	Cone Ø (m)	1.73	2.92	5.27		System Power															
5	E(0°)	100	39			LED Power															
	Cone Ø (m)	2.92	5.27			System Power															

Correction Factor: 50P WD - f = 1.00  
35P WD - f = 0.66  
50N WD - f = 0.63  
35N WD - f = 0.46  
COIN WD - f = 0.38

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

### 50 PRO tuneWHITE/flexiK

Height (m)	E(0°)	Emax (lx)			ELR LED Module											
		20°	35°	60°	50P	50N	COIN									
1	E(0°)	4249	2499	966	LED Power											
	Cone Ø (m)	0.35	0.58	1.05	System Power											
2	E(0°)	1062	625	242	Luminous Flux (lm)	Type	Beam Angle	CRI	50P	50N	COIN					
	Cone Ø (m)	0.69	1.17	2.11								tuneWHITE / flexiK (4000K / 6500K)	20°	ProART Ra-95	870	522
E(0°)	472	278	107	880											528	317
Cone Ø (m)	1.04	1.75	3.16	820											492	295
E(0°)	266	156	60													
3	E(0°)	170	100	39	LED Power											
	Cone Ø (m)	1.73	2.92	5.27	System Power											
4	E(0°)	100	39		LED Power											
	Cone Ø (m)	2.92	5.27		System Power											
5	E(0°)	39			LED Power											
	Cone Ø (m)	5.27			System Power											

Correction Factor: 50P TW / FK - f = 1.00  
50N TW / FK - f = 0.60  
COIN TW / FK - f = 0.38

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

### 50 PRO RGBW

Height (m)	E(0°)	Emax (lx)		ELR LED Module									
		35°	60°	50P									
1	E(0°)	1512	585	LED Power									
	Cone Ø (m)	0.58	1.05	System Power									
2	E(0°)	378	146	LED Power									
	Cone Ø (m)	1.17	2.11	System Power									
3	E(0°)	168	65	LED Power									
	Cone Ø (m)	1.75	3.16	System Power									
4	E(0°)	94	37	Luminous Flux (lm)	Type	Beam Angle	CRI	50P					
	Cone Ø (m)	2.34	4.22						RGBW	35°	N/A	532	
E(0°)	60	23	60°									N/A	496
Cone Ø (m)	2.92	5.27											
E(0°)	23												
5	E(0°)	39		LED Power									
	Cone Ø (m)	5.27		System Power									

Data are based on maximum output of all 4 RGBW channels.

### 35 PRO HIGH INTENSITY

Height (m)	E(0°)	Emax (lx)		ELR LED Module														
		10°	35°	35P-HI	50N-HI	35N-HI	COIN-HI											
1	E(0°)	10417		LED Power														
	Cone Ø (m)	0.19		System Power														
2	E(0°)	2604		Luminous Flux (lm)	Type	Beam Angle	CRI	35P-HI	50N-HI	35N-HI	COIN-HI							
	Cone Ø (m)	0.37										Single CCT (3000K)	10°	High Efficiency Ra-85	568	533	391	318
E(0°)	1157		ProART Ra-95												482	453	333	271
Cone Ø (m)	0.56		ProART98 Ra-98												397	373	274	223
E(0°)	651																	
3	E(0°)	260		LED Power														
	Cone Ø (m)	0.74		System Power														
4	E(0°)	417		LED Power														
	Cone Ø (m)	0.93		System Power														
5	E(0°)	260		LED Power														
	Cone Ø (m)	0.93		System Power														

Correction Factor: 35P-HI - f = 1.00  
50N-HI - f = 0.94  
35N-HI - f = 0.69  
COIN-HI - f = 0.56

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

# ECLIO 3

## ORDERING MATRIX CHART

Fixture										
Type	Trim Options		Shape		Angle		Colour		Accessories	
ECLIO-3	T	Trim	RD	Round	FX	Fix	WH	Matt White	N	None
			SQ	Square	TL	Tilt	MB	Matt Black	AGL	Anti-Glare Louvre
									SL	Soft Lens
									LSL	Linear Spread Lens
								CP	Comfort Pro	
								IP	IP54**	
								CMB	COIN Module Bracket****	
								MR16	MR16 Holder	
								GU10	GU10 Holder	

\*\*IP54 seal accessory is valid for fix angle fixtures only.

\*\*\*\*COIN Module Bracket accessory is necessary when paired with COIN LED module variants.

Single CCT LED Module					Driver	
LED Power	Beam Angle		Colour Temp	CRI	Dimming	
ELR50PM	21W	10° 10°	27 2700K	HE Ra~85	ND	Non-Dim
ELR50CM	17W	20° 20°	30 3000K	PA ProART	PH	Phase
ELR50P	12W	35° 35°	35 3500K	PP ProART98	AN	0-10V
ELR50C	10W	60° 60°	40 4000K		DA	DALI
ELR35P	8W		50 5000K			
ELR50N	7.5W					
ELR35N	5.5W					
ELRCOIN	4.5W					
ELR35P-HI	8W	NS 10°	27 2700K	HE Ra~85	ND	Non-Dim
ELR50N-HI	7.5W		30 3000K	PA ProART	PH	Phase
ELR35N-HI	5.5W		35 3500K	PP ProART98	AN	0-10V
ELRCOIN-HI	4.5W		40 4000K		DA	DALI
			50 5000K			
ELR50P-24CV	12W	10° 10°	27 2700K	HE Ra~85		
ELR50C-24CV	10W	20° 20°	30 3000K	PA ProART		
ELR35P-24CV	8W	35° 35°	35 3500K	PP ProART98		
ELRCOIN-24CV	4.5W	60° 60°	40 4000K			
			50 5000K			

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

Warm Dim LED Module					Driver	
LED Power	Beam Angle		Colour Temp	CRI	Dimming	
ELR50P	12W	10° 10°	WD Warm Dim	PA ProART	PH	Phase
ELR35P	8W	20° 20°			AN	0-10V
ELR50N	7.5W	35° 35°			DA	DALI
ELR35N	5.5W	60° 60°				
ELRCOIN	4.5W					

tuneWHITE LED Module					Driver	
LED Power	Beam Angle		Colour Temp	CRI	Dimming	
ELR50P	12W	20° 20°	TW1831 tuneWHITE 1800K-3100K	PA ProART	DA	DALI
ELR50N	7.5W	35° 35°	TW1840 tuneWHITE 1800K-4000K			
ELRCOIN	4.5W	60° 60°	TW2765 tuneWHITE 2700K-6500K			

flexiK LED Module					Driver	
LED Power	Beam Angle		Colour Temp	CRI	Dimming	
ELR50P	12W	20° 20°	FK## flexiK	PA ProART	PH	Phase
ELR50N	7.5W	35° 35°			AN	0-10V
ELRCOIN	4.5W	60° 60°			DA	DALI

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

ComfySHIFT LED Module					Driver	
LED Power	Beam Angle		Colour Temp	CRI	Dimming	
ELR35P	8W	10° 10°	CS ComfySHIFT	PA ProART	ND	Non-Dim
ELR50N	7.5W	20° 20°				
		35° 35°				
		60° 60°				

RGBW LED Module				
LED Power	Beam Angle		Colour Temp	
ELR50P	12W	35° 35°	RGBW	Red, Green, Blue, White
		60° 60°		

\*Drivers for RGBW LED modules are sold separately.

example: ECLIO-3.T.RD.TL.WH.SL.ELR35N.20.27.PA.DA

\*Custom RAL colour options available.