

Reduced Glare

AQUILA ALPHA

REDUCED GLARE SERIES

An expansion to the Aquila downlight series that is designed with a simplified modular concept but is more versatile. Made to be efficient and durable to suit mass deployment applications with demanding conditions, especially in commercial and hospitality sectors.



Future proof with upgradeable module

Accessory options

Trim thickness < 2mm



30° tilt with $\text{N}\emptyset$ light leakage

Fixture Features



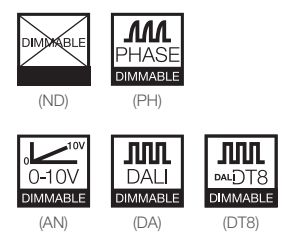
Module Colour Temperature Variation



Beam Angle



Driver Dimming Variation



AQUILA ALPHA 3 REDUCED GLARE

RECESSED ROUND FIX / TILT DOWNLIGHT LUMINAIRE
12W / 10W / 7W / 5W



#ROUND
#NARROWTRIM



#ROUND
#TRIMLESS

TECHNOLOGY AND FEATURES



































Converging Optical Lens
Maximising LOR



Ceiling
Safe

AVAILABLE OPTIONS

FIXTURE COLOUR OPTIONS	Trim Colour Options	Reflector Colour Options								
		MATT WHITE RAL9003	MATT BLACK RAL9011	CHROME	CHROME BLACK	TITANIUM GOLD				
MATT WHITE RAL9003										
MATT BLACK RAL9011										
ACCESSORIES	  Honeycomb Anti-Glare Louvre Soft Lens									
LED MODULE	 MS MODULE 3		   							
	SINGLE CCT     2700K 3000K 3500K 4000K		  ProART ProART98*		MS MODULE 3		✓	✓	✓	✓
	WARM DIM				MS MODULE 3 WD		✓	✓	✓	✓
	tuneWHITE				MS MODULE 3 TW		✓	✓	✓	✓
DRIVER DIMMING	     (ND) (PH) (AN) (DA) (DT8)									

AQUILA ALPHA 3 REDUCED GLARE

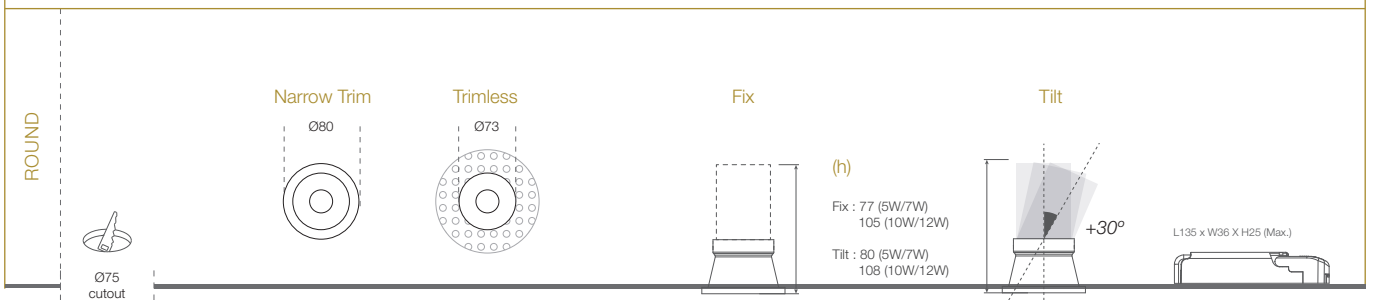
#ROUND
#FIX
#TILT
#NARROWTRIM
#TRIMLESS

5W/7W

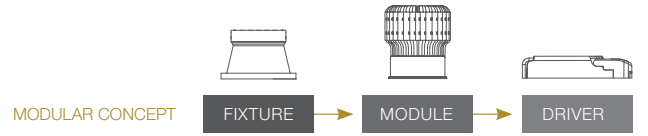
10W/12W



DIMENSIONS (MM)



AQUILA ALPHA 3 REDUCED GLARE



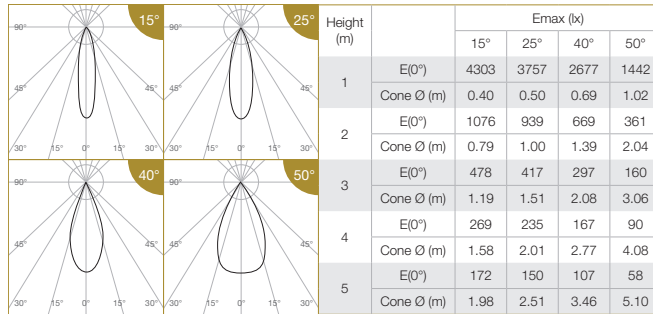
SPECIFICATIONS

FIXTURE	
Family Type	Aquila series
Fixture Colours	Matt white, matt black
Reflector Colours	Matt white, matt black, chrome, chrome black, titanium gold
Materials	Aluminium
Accessories	Honeycomb anti-glare louvre, soft lens
Ingress Protection	IP54
Weight	160g
LED MODULE & DRIVER	
Family Type	MS MO 3 Series
Typical Operating Voltage	35V
Typical Operating Current	350mA (12W), 300mA (10W), 200mA (7W), 150mA (5W)
System / Input Power	15W, 13W, 9W, 6.4W
Colour	Black
Materials	Aluminium, plastic
Compatibility	Compatible with ELR Modular Simplified size-3 fixtures
Lifetime	50,000 hours (80% lumen maintenance at Ta = 25°C), B10

Beam Angles	15°, 25°, 40°, 50°
Colour Temperatures	2700K, 3000K, 3500K, 4000K, Warm Dim, tuneWHITE
CRI	ProART (CRI-95), ProART98 (CRI-98)
SDCM	3 step MacAdam ellipse binning
Ingress Protection	IP40 (LED module only)
Weight	200g (12W/10W LED module only), 120g (7W/5W LED module only)
Dimming	Non-dim, phase (leading & trailing edge), 0-10V, DALI
Mains Connection	Push-pin or screw terminals for convenient connection
Mains Voltage	220-240V, 50Hz
Power Factor	>0.9
Fire Safety	Glow wire test 850°C, UL94V-0, VW-1
Flammability Mark	F
Safety Class	Class 2
Standards	IEC60598-1, IEC 61347-2-13
Regulatory Markings	CE, CCC, RoHS

PHOTOMETRICS

MS MODULE 3



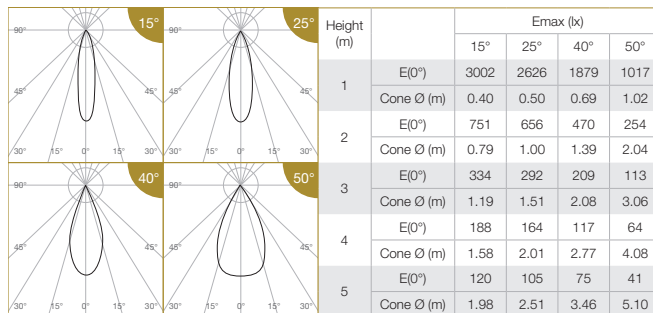
Correction Factor: MS MO 3 12W - f = 1.00
MS MO 3 10W - f = 0.83
MS MO 3 7W - f = 0.60
MS MO 3 5W - f = 0.46

ELR LED Module				MS MO 3			
LED Power				12W	10W	7W	5W
System Power				15W	13W	9W	6.4W
Luminous Flux (lm)	Type	Beam Angle	CRI				
				Single CCT (3000K)	15°	ProART CRI-95	1032
	ProART98 CRI-98		708			507	391
	ProART CRI-95	1116	930			665	510
	25°	ProART98 CRI-98			766	548	420
		ProART CRI-95	1128		940	672	515
		ProART98 CRI-98			774	553	424
	40°	ProART CRI-95	1140	950	679	520	
		ProART98 CRI-98		782	559	428	

Data are based on 3000K (ProART CRI-95). Nominal data of 2700K and 3500K are shared with 3000K. Higher CCT of 4000K will have a nominal data value of 5% higher than published. (f = 1.05)
ProART98 CRI-98 will have a nominal data value of 18% lower than published. (f = 0.82)

Nominal CRI-95, equals to Ra>90-97, R9>50
Nominal CRI-98, equals to Ra>97-99, R9>93

MS MODULE 3 WD



Correction Factor: MS MO 3 WD 12W - f = 1.00
MS MO 3 WD 10W - f = 0.88

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

ELR LED Module				MS MO 3		
LED Power				12W	10W	
System Power				15W	13W	
Luminous Flux (lm)	Type	Beam Angle	CRI			
				Warm Dim (3100K)	15°	ProART CRI-95
		780	690			
		792	700			
	25°		804		710	

AQUILA ALPHA 3 REDUCED GLARE

PHOTOMETRICS

MS MODULE 3 TW

Height (m)	E(0°)	E _{max} (lx)				ELR LED Module			MS MO 3							
		15°	25°	40°	50°	LED Power		System Power		Type	Beam Angle	CRI	Luminous Flux (lm)			
1	E(0°)	3603	3151	2250	1215	12W		10W		tuneWHITE (5500K)	15°	ProART CRI-95	864	770	567	435
	Cone Ø (m)	0.40	0.50	0.69	1.02	15W		13W					9W	6.4W		
2	E(0°)	901	788	562	304						25°		936	830	609	470
	Cone Ø (m)	0.79	1.00	1.39	2.04								948	840	616	475
3	E(0°)	400	350	250	135						40°		960	850	623	480
	Cone Ø (m)	1.19	1.51	2.08	3.06											
4	E(0°)	225	197	141	76						50°					
	Cone Ø (m)	1.58	2.01	2.77	4.08											
5	E(0°)	144	126	90	49											
	Cone Ø (m)	1.98	2.51	3.46	5.10											

Correction Factor: MS MO 3 TW 12W - f = 1.00
 MS MO 3 TW 10W - f = 0.89
 MS MO 3 TW 7W - f = 0.85
 MS MO 3 TW 5W - f = 0.50

Data are based on maximum output at 5000K - 5500K range.
 3500K - 5000K will have a nominal data value of 5% lower than published.
 2700K - 3500K will have a nominal data value of 10% lower than published.
 2400K - 2700K will have a nominal data value of 20% lower than published.
 1800K - 2400K will have a nominal data value of 30% lower than published.

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

FIXTURE & ACCESSORIES ORDERING MATRIX CHART

Fixture									
Type	Trim Options	Shape	Angle	Colour	Reflector Colour				
AQUILA-ALPHA-3RG	NT	RD	Round	FX	Fix	WH	Matt White	WH	Matt White
	X			Trimless	TL	Tilt	MB	Matt Black	MB
							CR	Chrome	
							CB	Chrome Black	
						TG	Titanium Gold		

example: AQUILA-ALPHA-3RG.NT.RD.TL.WH.CR

Accessories		
Type	Accessory	Fixture Size
MPACC		-3
AGL	Anti-Glare Louvre	
SL	Soft Lens	

example: MS.ACC.AGL-3

COMPATIBLE LED MODULES & DRIVERS ORDERING MATRIX CHART

LED Module			
LED Power	Beam Angle	Colour Temp	CRI
MS.MO-3.12	12W 15°	27 2700K	PA ProART
MS.MO-3.10	10W 25°	30 3000K	PP ProART98*
MS.MO-3.7	7W 40°	35 3500K	
MS.MO-3.5	5W 50°	40 4000K	

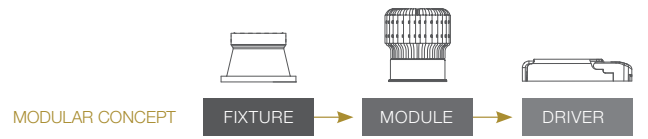
*ProART98 option is NOT available for 12W LED power.
 example: MS.MO-3.10.40.27.PA

Driver				
Type	Dimming	Output Power		
MS.DRN	Modular Simplified Driver	ND	Non-Dim	12W 12W
		PH	Phase	10W 10W
		AN	0-10V	7W 7W
		DA	DALI	5W 5W

example: MS.DRN.DA.10W

Note: Please ensure that LED Power of LED module matches the Output Power of driver when ordering.

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COMPATIBLE LED MODULES & DRIVERS ORDERING MATRIX CHART

LED Module							
LED Power		Beam Angle		Colour Temp		CRI	
MS.MO-3.12	12W	15	15°	WD	Warm Dim	PA	ProART
		25	25°				
MS.MO-3.10	10W	40	40°				
		50	50°				

example: MS.MO-3.10.40.WD.PA

Driver					
Type		Dimming		Output Power	
MS.DRN	Modular Simplified Driver	PH	Phase	12W	12W
		AN	0-10V	10W	10W
		DA	DALI		

example: MS.DRN.DA.10W

Note: Please ensure that LED Power of LED module matches the Output Power of driver when ordering.

LED Module							
LED Power		Beam Angle		Colour Temp		CRI	
MS.MO-3.12	12W	15	15°	TW2755	tuneWHITE 2700K-5500K	PA	ProART
MS.MO-3.10	10W	25	25°				
MS.MO-3.7	7W	40	40°				
MS.MO-3.5	5W	50	50°				

example: MS.MO-3.10.40.TW2755.PA

Driver					
Type		Dimming		Output Power	
MS.DRN	Modular Simplified Driver	DT8	DALI DT8	12W	12W
				10W	10W
				7W	7W
				5W	5W

example: MS.DRN.DT8.10W

Note: Please ensure that LED Power of LED module matches the Output Power of driver when ordering.