

# AQUILA

## REDUCED GLARE SERIES

A series of downlight luminaires designed with a simplified modular concept. 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

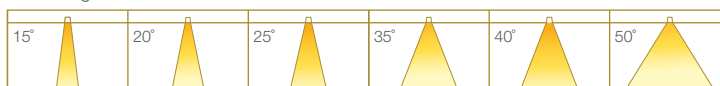
### Fixture Features



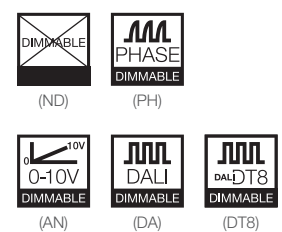
### Module Colour Temperature Variation



#### Beam Angle



### Driver Dimming Variation



# AQUILA 3

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



#ROUND  
#NARROWTRIM



#ROUND  
#TRIMLESS

## TECHNOLOGY AND FEATURES





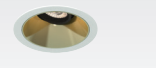








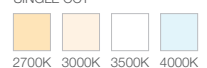







Converging Optical Lens  
Maximising LOR



Ceiling  
Safe

AVAILABLE OPTIONS

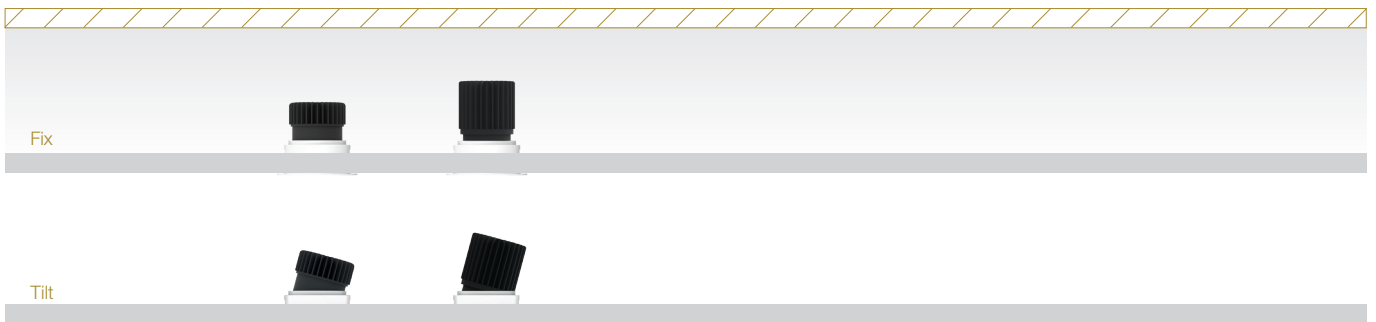
<p><b>FIXTURE COLOUR OPTIONS</b></p>	<p>Trim Colour Options</p>	<p>MATT WHITE RAL9003</p>	<p>MATT BLACK RAL9011</p>	<p>Reflector Colour Options</p>			<p>CHROME</p>	<p>CHROME BLACK</p>	<p>TITANIUM GOLD</p>		
<p>MATT WHITE RAL9003</p>											
<p>MATT BLACK RAL9011</p>											
<p><b>ACCESSORIES</b></p>		  <p>Honeycomb Anti-Glare Louvre    Soft Lens</p>									
<p><b>LED MODULE</b></p>		 <p>MS MODULE 3</p>		<p>SINGLE CCT</p>  <p>2700K 3000K 3500K 4000K</p>  <p>ProART    ProART98*</p>		<p>MS MODULE 3</p>					
<p>**ProART98 option is NOT available for 12W LED power.</p>		<p>WARM DIM</p> 		<p>MS MODULE 3 WD</p>		<p>✓    ✓    ✓    ✓</p>		<p>✓    ✓    ✓    ✓</p>			
<p>tuneWHITE</p> 		<p>MS MODULE 3 TW</p>		<p>✓    ✓    ✓    ✓</p>		<p>✓    ✓    ✓    ✓</p>					
<p><b>DRIVER DIMMING</b></p>		 <p>(ND)    (PH)    (AN)    (DA)    (DT8)</p>									

# AQUILA 3 REDUCED GLARE

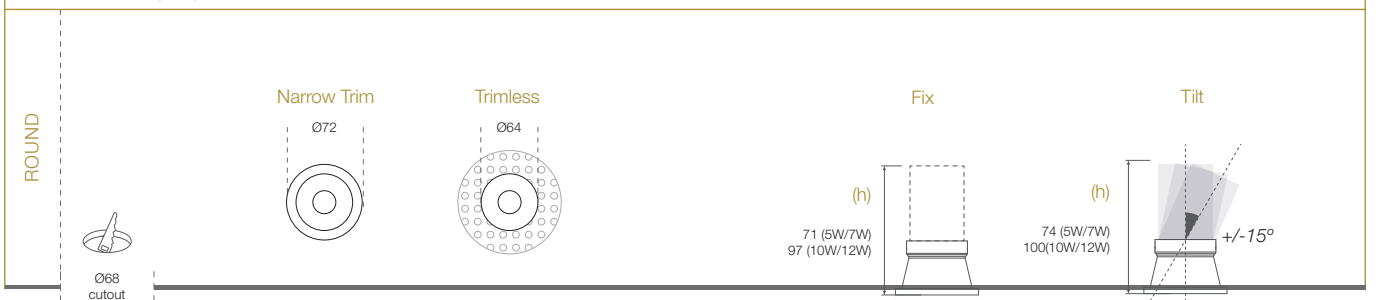
#ROUND  
#FIX  
#TILT  
#NARROWTRIM  
#TRIMLESS

5W/7W

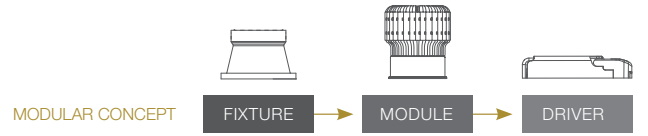
10W/12W



## DIMENSIONS (MM)



# AQUILA 3 REDUCED GLARE



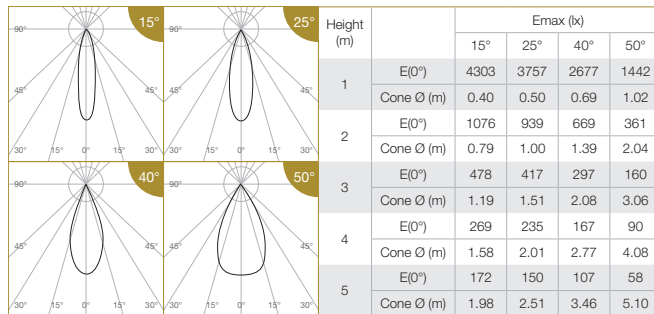
## SPECIFICATIONS

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	110g
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



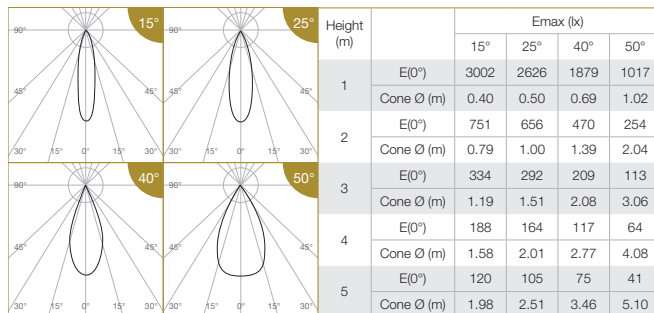
Correction Factor: MS MO 3 12W - f = 1.00  
MS MO 3 10W - f = 0.83  
MS MO 3 7W - f = 0.60  
MS MO 3 5W - f = 0.46

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		12W	10W	7W	5W
			Single CCT (3000K)	15°				
	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

ELR LED Module				MS MO 3		
LED Power				12W	10W	
System Power				15W	13W	
Luminous Flux (lm)	Type	Beam Angle	CRI		12W	10W
			Warm Dim (3100K)	ProART CRI-95		
	25°	780			690	
	40°	792			700	
	50°	804			710	

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

# AQUILA 3 REDUCED GLARE

## PHOTOMETRICS

### MS MODULE 3 TW

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

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-3RG	NT	Narrow Trim	RD	Round	FX	Fix	WH	Matt White	WH	Matt White
	X	Trimless			TL	Tilt	MB	Matt Black	MB	Matt Black
									CR	Chrome
									CB	Chrome Black
									TG	Titanium Gold

example: AQUILA-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

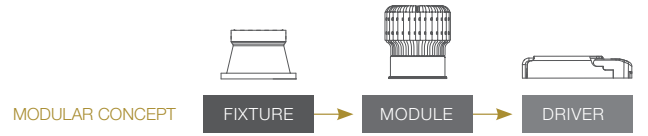
\*ProART98 option is NOT available for 12W LED power.  
 example: MS.MO-3.10.40.27.PA

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.

# AQUILA 3 REDUCED GLARE



## 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.