

Fusion-MR 600x600 round

Fusion-M is a range of LED luminaires with modular sizes for use in false ceilings. The recessed modules are developed as an alternative for T8 and T5 fluorescent luminaires to apply in both refurbishment and new building projects. LED lighting provides advantages like excellent dimming, long lifecycle and maintenance free use. With the use of an ambient light sensor energy savings up to 85% can be achieved.

The luminaires are made of a light weight composite panel material consisting of two layers of painted aluminium skin with a thermoplastic core in between. The material has excellent thermal and fire rated values, acoustic isolation and is extremely flat. The luminaires are manufactured and assembled in the Netherlands. As a result of the unique production process custom luminaire sizes are available on demand, as well as fixtures including air extraction openings.

For the light emitting surface we offer an opal diffuser for architectural appearance (UGR<22) or a low-glare microprismatic lens (UGR<19). As a result the luminaires are highly suitable for the use in offices, schools and care centres.

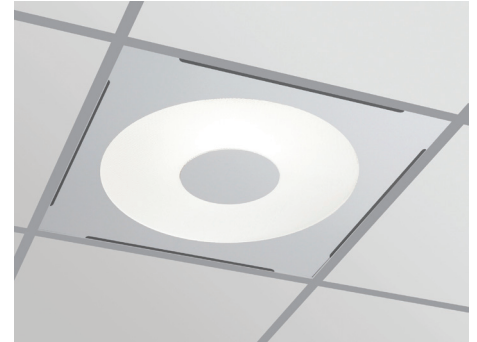
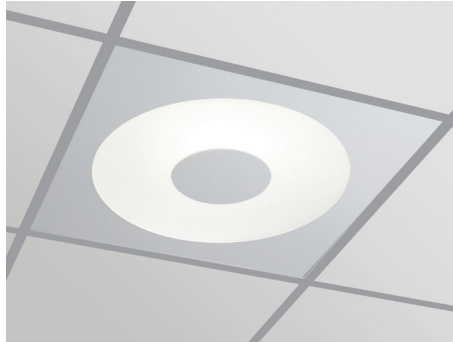
Fusion-MR Tunable White

Fusion-MR Tunable White features a new and innovative way to create any colour tone from comfortable warm white of 2700K to a clear pure white of 6500K. Depending on the application the user can adjust the colour temperature of the illumination in order to stimulate the human behaviour or well-being in retail, schools, offices, health or elderly care. In retail areas – food or fashion – colour temperature can be controlled depending of the product that is illuminated, the products' colour, the season or time of the day.

Design: Philip Feenstra, 2013



Fusion-MR 600x600 round



General information

Luminaire type	LED Recessed module
Color	White (RAL9016)*
Diffuser	Microprismatic / opal
Reflector	N/A
Driver	Separate on luminaire
Dimmable	Optional DALI, 1-10V
Lighting control system	Optional integrated daylight dimming sensor*
Air extraction	Optional
Emergency lighting	Optional, on luminaire
Operating temperature	-20°C / +40°C

Initial lighting performance

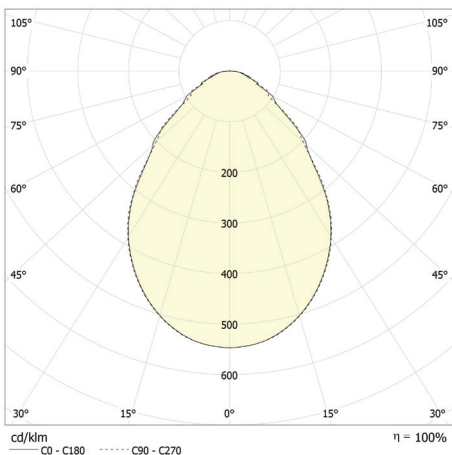
Color temperature (K)	3000/4000*/
	Tunable White
Gross flux (lm)	2200-4900*
System power (W)	16/29/36*
Efficacy (lm/W)	123-137
Light output ratio (%)	69
Color rendering (CRI)	>80*
Glare (UGR)	<19 (microprismatic) / <22 (opal)
Color consistency (SDCM)	3
Expected lifetime	L80B10@50,000h

Mechanical properties

Housing material	Aluminium, steel
Optic material	PMMA / PC
IP class	IP20 (top)/IP40 (bottom)
IK class	N/A
Dimensions (mm)	595x595x110
Cutting dimensions (mm)	600x600 module
Packaging dimensions (mm)	650x650x140
Weight (kg)	4.4

Electrical characteristics

Voltage / Frequency	220-240V*, 50/60Hz
Connector	Euro (CEE 7/16) with 2 meter cable*
Power factor	>0,9
Appliance class	Class II



f-waardering volgens UGR													
		70	70	50	50	30	70	70	50	50	30	30	
p. Plafond		50	30	50	30	30	50	30	50	30	30	30	
p. Muren		20	20	20	20	20	20	20	20	20	20	20	
p. Voer		20	20	20	20	20	20	20	20	20	20	20	
Ruimteafmeting		Perspectief dwars						Perspectief langs					
X	Y	t.o.v. lampen						t.o.v. lampen					
2H	2H	15.3	16.3	15.5	16.6	16.8	15.2	16.3	15.5	16.5	16.7	16.6	
	3H	16.1	17.1	16.4	17.4	17.6	16.1	17.1	16.4	17.3	17.6	17.6	
	4H	16.6	17.5	16.9	17.8	18.1	16.5	17.4	16.9	17.7	18.0	18.0	
	6H	17.0	17.8	17.3	18.1	18.4	16.9	17.8	17.3	18.1	18.4	18.4	
	8H	17.2	18.0	17.6	18.3	18.7	17.1	17.9	17.5	18.2	18.6	18.6	
	12H	17.4	18.2	17.8	18.5	18.8	17.3	18.1	17.6	18.4	18.7	18.7	
4H	2H	15.5	16.5	15.9	16.7	17.0	15.5	16.4	15.8	16.7	17.0	17.0	
	3H	16.6	17.4	17.0	17.7	18.1	16.6	17.4	17.0	17.7	18.0	18.0	
	4H	17.2	17.9	17.6	18.2	18.6	17.2	17.9	17.6	18.2	18.6	18.6	
	6H	17.8	18.4	18.2	18.7	19.1	17.7	18.3	18.2	18.7	19.1	19.1	
	8H	18.1	18.6	18.5	19.0	19.4	18.0	18.5	18.4	18.9	19.4	19.4	
	12H	18.4	18.8	18.8	19.3	19.7	18.2	18.7	18.7	19.1	19.6	19.6	
8H	4H	17.4	17.9	17.8	18.3	18.8	17.4	17.9	17.8	18.3	18.7	18.7	
	6H	18.1	18.5	18.6	19.0	19.4	18.1	18.5	18.5	18.9	19.4	19.4	
	8H	18.5	18.9	19.0	19.3	19.8	18.4	18.8	18.9	19.2	19.7	19.7	
	12H	18.8	19.2	19.3	19.7	20.2	18.7	19.0	19.2	19.5	20.0	20.0	
12H	4H	17.4	17.9	17.9	18.3	18.8	17.4	17.9	17.9	18.3	18.7	18.7	
	6H	18.2	18.5	18.6	19.0	19.5	18.1	18.5	18.6	19.0	19.4	19.4	
	8H	18.6	18.9	19.1	19.4	19.9	18.5	18.8	19.0	19.3	19.8	19.8	
Variatie op waarnemingspositie voor lampafstanden S													
S = 1.0H		+0.4 / -0.5			+0.3 / -0.4								
S = 1.5H		+0.5 / -0.8			+0.6 / -0.6								
S = 2.0H		+1.0 / -1.2			+1.2 / -1.2								
Standaardtabel		BK05			BK05								
Correctie-optieal		1.1			1.0								
Gecorrigeerde verblindingindicatie in relatie tot 1630lm Totale lichtstroom													

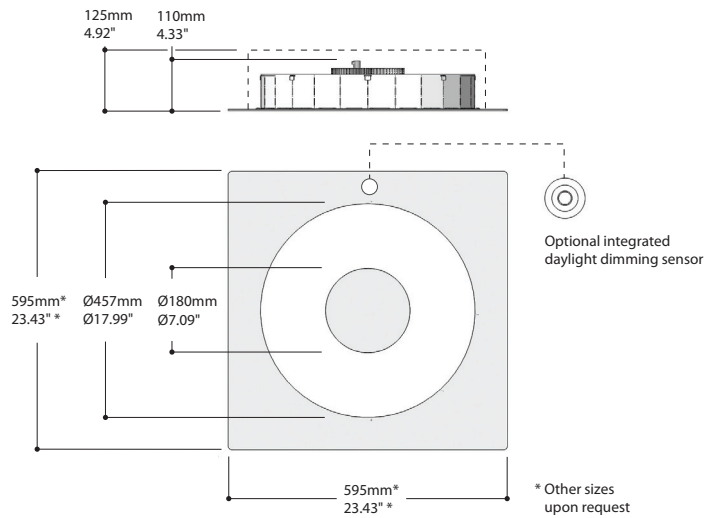
Warranty

5 years
following Atomis
warranty policy 2015

* = other options upon request

Fusion-MR 600x600 round

code	W	lm	K	optic
19.6-830O-MR600x600S-2200	16	2200	3000	opal
19.6-840O-MR600x600S-2200	16	2200	4000	opal
19.6-830O-MR600x600S-3600	29	3600	3000	opal
19.6-840O-MR600x600S-3600	29	3600	4000	opal
19.6-830O-MR600x600S-4900	36	4900	3000	opal
19.6-840O-MR600x600S-4900	36	4900	4000	opal
19.6-830P-MR600x600S-2200	16	2200	3000	microprismatic
19.6-840P-MR600x600S-2200	16	2200	4000	microprismatic
19.6-830P-MR600x600S-3600	29	3600	3000	microprismatic
19.6-840P-MR600x600S-3600	29	3600	4000	microprismatic
19.6-830P-MR600x600S-4900	36	4900	3000	microprismatic
19.6-840P-MR600x600S-4900	36	4900	4000	microprismatic
198100	1 hour emergency lighting			
198110	Dimmable version 1-10V			
198120	Dimmable version DALI			
198125	Integrated daylight dimming sensor			



Fusion-MR 600x600 round Tunable White

code	W	lm	K	optic
19.6-TWO-MR600x600S-3000	28	3000	2700-6500	opal
19.6-TWP-MR600x600S-3000	28	3000	2700-6500	prismatic

- ▶ Designed according to EN 12464-1 for lighting of work places
- ▶ Fire rated according to EN 13501
- ▶ 25dB acoustic isolation
- ▶ Opal diffuser (UGR<22) or microprismatic lens (UGR<19)
- ▶ Available with Tunable White
- ▶ Standard RAL9016, other finishes on demand
- ▶ Available with integrated daylight dimming sensor
- ▶ Available with air extraction openings for plenum exhaust