

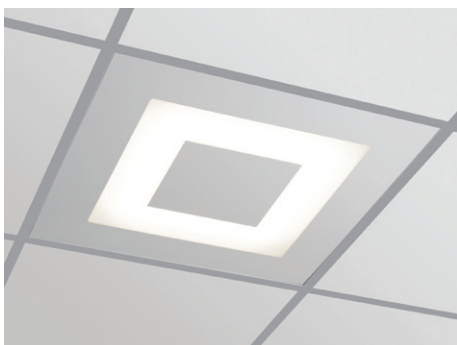
## Fusion-M 600x600 square

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.

Design: Philip Feenstra, 2013



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**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**

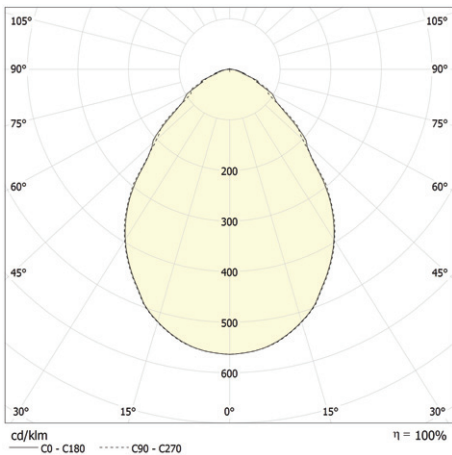
Color temperature (K)	3000/4000*
Gross flux (lm)	2600-4800*
System power (W)	15/19/23/27/32*
Efficacy (lm/W)	145-175
Light output ratio (%)	80
Color rendering (CRI)	>80*
Glare (UGR)	<19 (microprismatic) / <22 (opal)
Color consistency (SDCM)	3
Expected lifetime	L80B10@50,000h

**Mechanical properties**

Housing material	Aluminium, steel
Optic material	PMMA / PC
IP class	IP20 (top)/IP40 (bottom)
IK class	N/A
Dimensions (mm)	595x595x45
Cutting dimensions (mm)	600x600 module
Packaging dimensions (mm)	630x630x75
Weight (kg)	3.8

**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																
		p- Plafond					p- Muren					p- Vloer				
		70	70	50	50	30	70	70	50	50	30	70	70	50	50	30
		50	30	50	30	30	50	30	50	30	30	20	20	20	20	20
Ruimteafmeting X Y		Perspectief dwars L.o.v. lampen					Perspectief langs L.o.v. lampen									
2H	2H	16.6	17.7	16.9	17.9	18.2	16.6	17.6	16.8	17.9	18.1	16.6	17.6	16.8	17.9	18.1
	3H	17.5	18.5	17.8	18.7	19.0	17.5	18.4	17.8	18.7	19.0	17.5	18.4	17.8	18.7	19.0
	4H	17.9	18.9	18.3	19.1	19.4	17.9	18.8	18.2	19.1	19.4	17.9	18.8	18.2	19.1	19.4
	6H	18.4	19.2	18.7	19.5	19.8	18.3	19.2	18.7	19.5	19.8	18.3	19.2	18.7	19.5	19.8
	8H	18.6	19.4	18.9	19.7	20.0	18.5	19.3	18.8	19.6	19.9	18.5	19.3	18.8	19.6	19.9
4H	2H	16.9	17.8	17.2	18.1	18.4	16.8	17.8	17.2	18.0	18.3	16.8	17.8	17.2	18.0	18.3
	3H	18.0	18.8	18.4	19.1	19.4	18.0	18.7	18.3	19.1	19.4	18.0	18.7	18.3	19.1	19.4
	4H	18.6	19.3	19.0	19.6	20.0	18.6	19.2	19.0	19.6	20.0	18.6	19.2	19.0	19.6	20.0
	6H	19.1	19.7	19.6	20.1	20.5	19.1	19.7	19.5	20.1	20.5	19.1	19.7	19.5	20.1	20.5
	8H	19.4	20.0	19.9	20.4	20.8	19.4	19.9	19.8	20.3	20.7	19.4	19.9	19.8	20.3	20.7
8H	2H	19.7	20.2	20.2	20.6	21.1	19.6	20.1	20.0	20.5	20.9	19.6	20.1	20.0	20.5	20.9
	4H	18.8	19.3	19.2	19.7	20.1	18.8	19.3	19.2	19.7	20.1	18.8	19.3	19.2	19.7	20.1
	6H	19.5	19.9	19.9	20.4	20.8	19.4	19.9	19.9	20.3	20.8	19.4	19.9	19.9	20.3	20.8
	8H	19.9	20.2	20.3	20.7	21.2	19.8	20.2	20.3	20.6	21.1	19.8	20.2	20.3	20.6	21.1
	12H	20.2	20.6	20.7	21.0	21.5	20.1	20.4	20.6	20.9	21.4	20.1	20.4	20.6	20.9	21.4
12H	4H	18.8	19.3	19.2	19.7	20.1	18.8	19.3	19.2	19.7	20.1	18.8	19.3	19.2	19.7	20.1
	6H	19.5	19.9	20.0	20.4	20.9	19.5	19.9	20.0	20.3	20.8	19.5	19.9	20.0	20.3	20.8
	8H	19.9	20.3	20.4	20.7	21.3	19.9	20.2	20.4	20.7	21.2	19.9	20.2	20.4	20.7	21.2
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									
Standartaantal		BK05					BK05									
Correctie-optietal		2.5					2.4									
Gecorrigeerde verblindsingsindicatie in relatie tot 3082lm Totale lichtstroom																

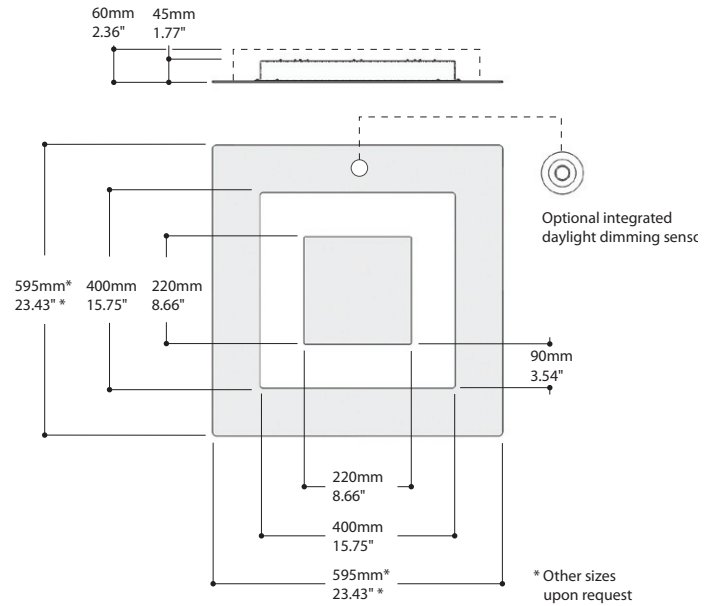
**Warranty**

5 years  
following Atomis  
warranty policy 2015

\* = other options upon request

Fusion-M 600x600 square

code	W	lm	K	optic
19.6-830O-M600x600S-2600	15	2600	3000	opal
19.6-840O-M600x600S-2700	15	2700	4000	opal
19.6-830O-M600x600S-3100	19	3100	3000	opal
19.6-840O-M600x600S-3200	19	3200	4000	opal
19.6-830O-M600x600S-3600	23	3600	3000	opal
19.6-840O-M600x600S-3700	23	3700	4000	opal
19.6-830O-M600x600S-4100	27	4100	3000	opal
19.6-840O-M600x600S-4300	27	4300	4000	opal
19.6-830O-M600x600S-4600	32	4600	3000	opal
19.6-840O-M600x600S-4800	32	4800	4000	opal
19.6-830P-M600x600S-2600	15	2600	3000	microprismatic
19.6-840P-M600x600S-2700	15	2700	4000	microprismatic
19.6-830P-M600x600S-3100	19	3100	3000	microprismatic
19.6-840P-M600x600S-3200	19	3200	4000	microprismatic
19.6-830P-M600x600S-3600	23	3600	3000	microprismatic
19.6-840P-M600x600S-3700	23	3700	4000	microprismatic
19.6-830P-M600x600S-4100	27	4100	3000	microprismatic
19.6-840P-M600x600S-4300	27	4300	4000	microprismatic
19.6-830P-M600x600S-4600	32	4600	3000	microprismatic
19.6-840P-M600x600S-4800	32	4800	4000	microprismatic
198100	1 hour emergency lighting			
198110	Dimmable version 1-10V			
198120	Dimmable version DALI			
198125	Integrated daylight dimming sensor			



- ▶ 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)
- ▶ Standard RAL9016, other finishes on demand
- ▶ Available with integrated daylight dimming sensor
- ▶ Available with air extraction openings for plenum exhaust

13-06-2018