

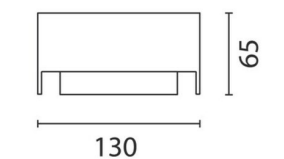
Action

Design Jean-Michel Wilmotte

Last information update: February 2023

Product configuration: MM49+L199

MM49: Dark-VDU module $L \leq 1000$ cd/m² $\alpha > 65^\circ$ with electronic control gear and permanent emergency light T162x35/49W



Product code

MM49: Dark-VDU module $L \leq 1000$ cd/m 2 $\alpha > 65^\circ$ with electronic control gear and permanent emergency light T162x35/49W
Attention! Code no longer in production

Technical description

Suspended, surface-mounted or recessed lighting system designed for fluorescent light sources with up/down light emission. The product permits downlight-only emission by means of a top cover (to be ordered separately) made of plastic material. The modules are complete with terminal boards and cables for through wiring. Ready for switch-on of 3 groups of fittings. The product has a controlled-luminance optic for 65° suitable to be used in environments with VDUs according to Standard EN 12464-1. The lamellar optic with bi-parabolic profile and its external surface are made of anodised specular superpure aluminium and are equipped with fall-prevention system. The specular optics can be removed without tools for ordinary maintenance operations. The structure of the fitting is made of painted extruded aluminium; the lamp-holding supports are made of galvanised painted sheet steel; and the end caps (to be ordered separately) of polycarbonate. The top protection screen (to be ordered separately) is made of transparent polycarbonate subjected to anti-UV treatment. The power-supply cable is transparent and the cables are subjected to antioxidant treatment. The modules can be combined by means of direct and corner 90° couplings as well as structural modules (to be ordered separately). The suspension system (to be ordered separately) has sheet-steel supporting plates with polycarbonate covering bases and steel suspension cables with a millimetric adjustment system (applied to the modules). Ceiling application by means of an aluminium structure (to be ordered separately). Recessed and semi-recessed installation system by means of a structure designed for application to false ceilings 12.5mm and 15mm thick, with concealed rim (to be ordered separately).

Installation

Suspended, surface-mounted, semi-recessed or recessed installation.

Colour

White (01) | Grey (15)

Mounting

ceiling recessed|ceiling surface|ceiling pendant

Wiring

Electronic control gear set up for emergency light, complete with inverter and rechargeable battery unit. Terminal blocks set up for REST MODE. Permanent emergency light; 1.5 hours autonomy with 12 hour recharging cycle - 3 hours autonomy with 24 hour recharging cycle. Conforms to EN60598-2-22.

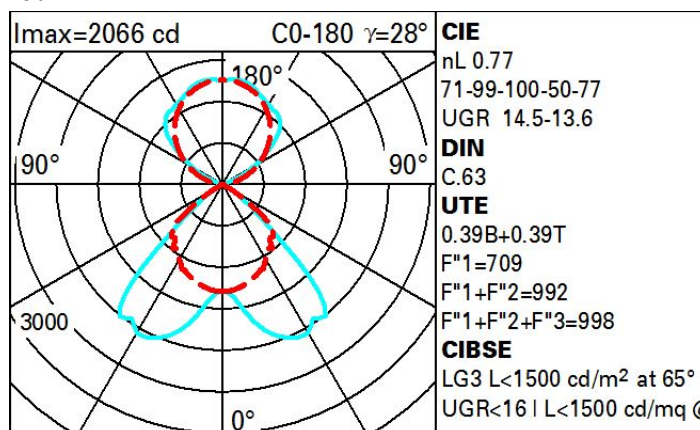
Complies with EN60598-1 and pertinent regulations



Technical data

Im system:	6665	Colour temperature [K]:	6500
W system:	112	Ballast losses [W]:	14
Im source:	4300	Voltage [Vin]:	230
W source:	49	Lamp code:	L199
Luminous efficiency (lm/W, real value):	59.5	Socket:	G5
Im in emergency mode:	-	Number of lamps for optical assembly:	2
Total light flux at or above an angle of 90° [Lm]:	3348	ZVEI Code:	T 16
Light Output Ratio (L.O.R.) [%]:	78	Number of optical assemblies:	1
CRI:	85		

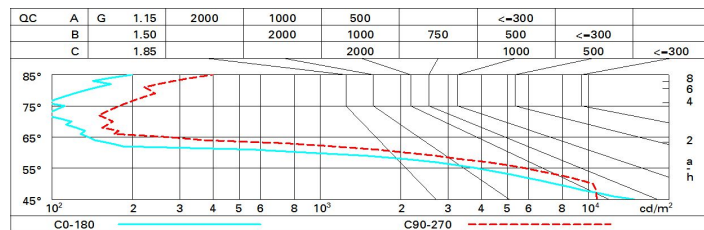
Polar



Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	47	40	36	33	36	32	29	22	57
1.0	51	45	41	38	40	37	33	25	64
1.5	57	53	49	46	46	44	38	29	76
2.0	61	57	54	52	50	48	42	32	83
2.5	63	60	57	55	52	50	44	33	87
3.0	64	62	59	57	54	52	45	34	89
4.0	66	64	62	60	55	54	47	35	92
5.0	67	65	63	62	56	55	47	36	93

Luminance curve limit



UGR diagram

Corrected UGR values (at 8000 lm bare lamp luminous flux)											
Reflect.:		viewed crosswise					viewed endwise				
ceiling/cav		0.70	0.70	0.50	0.50	0.30	0.70	0.70	0.50	0.50	0.30
walls		0.50	0.30	0.50	0.30	0.30	0.50	0.30	0.50	0.30	0.30
work pl.		0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Room dim											
x	y										
2H	2H	15.4	15.9	16.3	16.8	17.9	14.5	15.0	15.4	15.9	17.0
	3H	15.1	15.6	16.1	16.5	17.6	14.3	14.8	15.3	15.7	16.8
	4H	15.0	15.4	16.0	16.3	17.5	14.2	14.6	15.2	15.5	16.7
	6H	14.9	15.3	15.8	16.2	17.4	14.1	14.5	15.0	15.4	16.6
	8H	14.8	15.2	15.8	16.1	17.3	14.0	14.4	15.0	15.3	16.5
	12H	14.8	15.1	15.7	16.0	17.3	14.0	14.3	14.9	15.2	16.5
4H	2H	15.1	15.5	16.0	16.4	17.6	14.2	14.6	15.1	15.5	16.7
	3H	14.8	15.2	15.8	16.1	17.3	14.0	14.3	14.9	15.2	16.5
	4H	14.7	15.0	15.7	15.9	17.2	13.8	14.1	14.8	15.1	16.3
	6H	14.5	14.8	15.5	15.8	17.1	13.7	13.9	14.7	14.9	16.2
	8H	14.5	14.7	15.5	15.7	17.0	13.6	13.8	14.6	14.8	16.1
	12H	14.4	14.6	15.4	15.6	16.9	13.5	13.7	14.6	14.7	16.1
8H	4H	14.5	14.7	15.5	15.7	17.0	13.6	13.8	14.6	14.8	16.1
	6H	14.3	14.5	15.4	15.5	16.9	13.5	13.7	14.5	14.7	16.0
	8H	14.2	14.4	15.3	15.4	16.8	13.4	13.5	14.4	14.6	15.9
	12H	14.2	14.3	15.2	15.4	16.7	13.3	13.5	14.4	14.5	15.8
12H	4H	14.4	14.6	15.4	15.6	16.9	13.5	13.7	14.6	14.8	16.1
	6H	14.2	14.4	15.3	15.4	16.8	13.4	13.6	14.4	14.6	15.9
	8H	14.2	14.3	15.2	15.4	16.7	13.3	13.5	14.4	14.5	15.9
Variations with the observer position at spacing:											
S =		1.0H	2.7 / -5.5		1.3 / -2.3						
		1.5H	5.2 / -19.8		2.5 / -13.8						
		2.0H	7.1 / -20.6		4.5 / -17.4						