Laser Blade

Design iGuzzini — **iGuzzini**

Last information update: May 2018

5 - cell Recessed luminaire - LED - Warm white Wide Flood optic

Product code
MK51

Technical description
rectangular miniaturised recessed luminaire with 5 optical elements with LED lamps - fixed optics - flood beam angle. Main body with die-cast aluminium radiant surface, version with perimeter surface frame. Metallised thermoplastic high definition optics, integrated in a rear position in the black anti-glare screen; the structure of the optical system prevents a pinpoint effect, allowing precise, circular light distribution and emission with controlled glare . Supplied with electronic control gear connected to the luminaire. Warm white LED.

Installation
recessed with steel wire springs for false ceilings from 1 to 25 mm thick - preparation hole 37 x 141

Dimension (mm)
148x44x54

Colour
White (01) | White/Brass (41) | Black/Black (43) | Black/White (47) | Grey/Black (74) | (E7)

Weight (Kg)
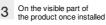0.29

Mounting
wall recessed|ceiling recessed

Wiring
on control gear box; screw connections with terminal block included

Complies with EN60598-1 and pertinent regulations

IP20   IP23   On the visible part of the product once installed

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Product configuration: MK51

Product characteristics

Total lighting output [Lm]: 763	Total luminous flux at or above an angle of 90° [Lm]: 0
Total power [W]: 12	Emergency luminous flux [Lm]: /
Luminous efficacy [Lm/W]: 63.6	Voltage [V]: -
Life Time: 50,000h - L90 - B10 (Ta 25°C)	Number of optical assemblies: 1

Optical assembly Characteristics Type 1

Light Output Ratio (L.O.R.) [%]: 83	Number of lamps for optical assembly: 1
Lamp code: LED	Socket: /
ZVEI Code: LED	Ballast losses [W]: 2
Nominal power [W]: 10	Colour temperature [K]: 3000
Nominal luminous [Lm]: 920	CRI: 90
Lamp maximum intensity [cd]: /	Wavelength [Nm]: /
Beam angle [°]: 48°	MacAdam Step: 3

Polar

Imax=1351 cd

90°   180°   90°

1500

0°

α=48°

CIE
nL 0.83
100-100-100-100-83
UGR <10-<10
DIN
A.61
UTE
0.83A+0.00T
F"1=999
F"1+F"2=1000
F"1+F"2+F"3=1000
CIBSE
LG3 L<200 cd/m² at 65°
BZ1

Lux

h	d	Em	Emax
1	0.9	1132	1348
2	1.8	283	337
3	2.7	126	150
4	3.6	71	84

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	75	71	68	66	70	68	68	65	78
1.0	78	75	72	70	74	72	71	69	83
1.5	82	79	77	76	79	77	76	74	89
2.0	85	83	81	80	82	80	79	77	93
2.5	86	85	84	83	84	83	82	79	96
3.0	87	86	85	85	85	84	83	81	98
4.0	88	87	87	86	86	86	84	82	99
5.0	89	88	88	88	87	86	85	83	100

UGR diagram

Corrected UGR values (at 920 lm bare lamp luminous flux)

Riflect.: ceil/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		viewed crosswise					viewed endwise			
2H	2H	1.5	2.1	1.8	2.3	2.5	1.5	2.1	1.8	2.3	2.5
	3H	1.3	1.9	1.7	2.1	2.4	1.3	1.9	1.7	2.1	2.4
	4H	1.3	1.8	1.6	2.1	2.4	1.3	1.8	1.6	2.1	2.4
	6H	1.2	1.7	1.5	2.0	2.3	1.2	1.6	1.5	2.0	2.3
	8H	1.2	1.6	1.5	1.9	2.3	1.2	1.6	1.5	1.9	2.3
	12H	1.1	1.5	1.5	1.9	2.2	1.1	1.5	1.5	1.9	2.2
4H	2H	1.3	1.8	1.6	2.1	2.4	1.3	1.8	1.6	2.1	2.4
	3H	1.1	1.5	1.5	1.9	2.2	1.1	1.5	1.5	1.9	2.2
	4H	1.0	1.4	1.4	1.8	2.2	1.0	1.4	1.4	1.8	2.2
	6H	1.0	1.3	1.4	1.7	2.1	0.9	1.3	1.4	1.7	2.1
	8H	0.9	1.2	1.3	1.6	2.0	0.9	1.2	1.3	1.6	2.0
	12H	0.9	1.1	1.3	1.6	2.0	0.9	1.1	1.3	1.5	2.0
8H	4H	0.9	1.2	1.3	1.6	2.0	0.9	1.2	1.3	1.6	2.0
	6H	0.8	1.1	1.3	1.5	2.0	0.8	1.1	1.3	1.5	2.0
	8H	0.8	1.0	1.2	1.4	1.9	0.8	1.0	1.2	1.4	1.9
	12H	0.7	0.9	1.2	1.4	1.9	0.7	0.9	1.2	1.4	1.9
12H	4H	0.9	1.1	1.3	1.5	2.0	0.9	1.1	1.3	1.6	2.0
	6H	0.8	1.0	1.2	1.4	1.9	0.8	1.0	1.2	1.4	1.9
	8H	0.7	0.9	1.2	1.4	1.9	0.7	0.9	1.2	1.4	1.9

Variations with the observer position at spacing:

S =	1.0H	6.9 / -18.0	6.9 / -18.0
	1.5H	9.7 / -18.3	9.7 / -18.3
	2.0H	11.7 / -18.4	11.7 / -18.4