Reflex

Last information update: April 2018

Round recessed luminaire - D=226 mm H=103 mm - neutral white - DALI ballast - general light optic with controlled luminance UGR<19

Product code
MB80

Technical description
Recessed fixed round luminaire designed to use a LED lamp. Version with rim for surface-mounting. Reflector vacuum-metallised with aluminium vapours with an anti-scratch protective layer. Die-cast aluminium body and passive dissipation system. Product complete with 3000 lm DALI LED unit in a neutral white tone 4000K and driver separate from the luminaire. Light distribution UGR<19 with controlled luminance.

Installation
Recessed using torsion springs which allow easy installation in false ceilings with thickness ranging from 1 mm to 25 mm.

Dimension (mm)
Ø226x100

Colour
White/Aluminium (39)

Weight (Kg)
1.88

Mounting
ceiling recessed

Wiring
Product complete with DALI electronic components

Complies with EN60598-1 and pertinent regulations

IP20   IP23   On the visible part of the product once installed

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Product configuration: MB80

Product characteristics
Total lighting output [Lm]: 2758.8
Total power [W]: 26.2
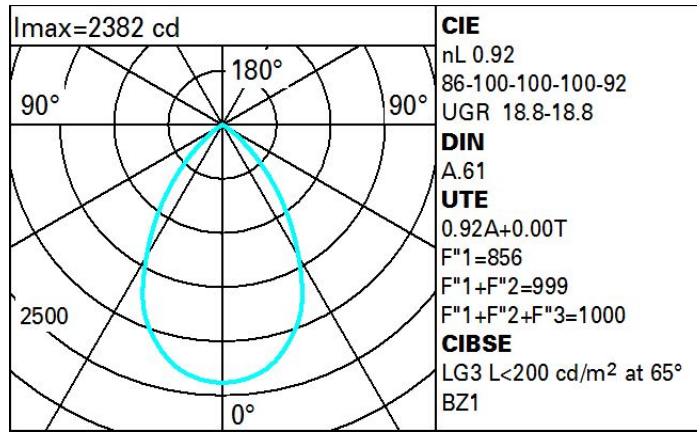Luminous efficacy [Lm/W]: 105.3
Life Time: 50,000h - L80 - B10 (Ta 25°C)

Total luminous flux at or above an angle of 90° [Lm]: 0
Emergency luminous flux [Lm]: /
Voltage [V]: -
Number of optical assemblies: 1

Optical assembly Characteristics Type 1
Light Output Ratio (L.O.R.) [%]: 92
Lamp code: LED
ZVEI Code: LED
Nominal power [W]: 23
Nominal luminous [Lm]: 3000
Lamp maximum intensity [cd]: /
Beam angle [°]: /

Number of lamps for optical assembly: 1
Socket: /
Ballast losses [W]: 3.2
Colour temperature [K]: 4000
CRI: 80
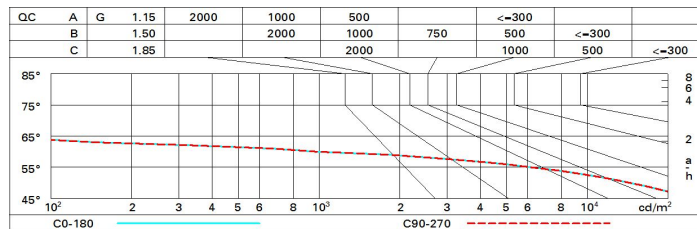Wavelength [Nm]: /
MacAdam Step: 3

Polar

Imax=2382 cd

180°

90°   90°

2500

0°

CIE
nL 0.92
86-100-100-100-92
UGR 18.8-18.8
DIN
A.61
UTE
0.92A+0.00T
F"1=856
F"1+F"2=999
F"1+F"2+F"3=1000
CIBSE
LG3 L<200 cd/m² at 65°
BZ1

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	77	71	67	64	70	67	66	62	68
1.0	82	77	73	70	75	72	72	68	74
1.5	88	84	81	78	83	80	79	76	82
2.0	91	89	86	84	87	85	84	81	88
2.5	93	91	89	88	90	88	87	84	91
3.0	95	93	92	90	91	90	89	86	94
4.0	96	95	94	93	93	92	91	88	96
5.0	97	96	95	94	94	93	92	89	97

Luminance curve limit

QC	A	G	1.15	2000	1000	500		<=300		
	B		1.50		2000	1000	750	500	<=300	
	C		1.85			2000		1000	500	<=300

85°
75°
65°
55°
45°

8
6
4

2

a
h

10²   2   3   4   5   6   8   10³   2   3   4   5   6   8   10⁴   cd/m²

C0-180	C90-270

UGR diagram

Corrected UGR values (at 3000 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				viewed					viewed		
x	y			crosswise					endwise		
2H	2H	19.3	20.0	19.6	20.3	20.5	19.3	20.0	19.6	20.3	20.5
	3H	19.2	19.8	19.5	20.1	20.4	19.2	19.9	19.5	20.1	20.4
	4H	19.1	19.7	19.4	20.0	20.3	19.1	19.7	19.5	20.0	20.3
	6H	19.0	19.6	19.4	19.9	20.2	19.1	19.6	19.4	19.9	20.3
	8H	19.0	19.5	19.4	19.9	20.2	19.0	19.5	19.4	19.9	20.2
	12H	19.0	19.5	19.3	19.8	20.2	19.0	19.5	19.4	19.8	20.2
4H	2H	19.1	19.7	19.5	20.0	20.3	19.1	19.7	19.4	20.0	20.3
	3H	19.0	19.5	19.4	19.8	20.2	19.0	19.5	19.4	19.8	20.2
	4H	18.9	19.3	19.3	19.7	20.1	18.9	19.3	19.3	19.7	20.1
	6H	18.8	19.2	19.2	19.6	20.0	18.8	19.2	19.2	19.6	20.0
	8H	18.8	19.1	19.2	19.5	20.0	18.8	19.1	19.2	19.5	20.0
	12H	18.7	19.0	19.2	19.5	19.9	18.7	19.0	19.2	19.5	19.9
8H	4H	18.8	19.1	19.2	19.5	20.0	18.8	19.1	19.2	19.5	20.0
	6H	18.7	19.0	19.1	19.4	19.9	18.7	19.0	19.1	19.4	19.9
	8H	18.6	18.9	19.1	19.3	19.8	18.6	18.9	19.1	19.3	19.8
	12H	18.6	18.8	19.1	19.3	19.8	18.6	18.8	19.1	19.3	19.8
12H	4H	18.7	19.0	19.2	19.5	19.9	18.7	19.0	19.2	19.5	19.9
	6H	18.6	18.9	19.1	19.3	19.8	18.6	18.9	19.1	19.3	19.8
	8H	18.6	18.8	19.1	19.3	19.8	18.6	18.8	19.1	19.3	19.8

Variations with the observer position at spacing:

S =			
1.0H	2.2 / -7.0	2.2 / -7.0
1.5H	4.6 / -30.0	4.6 / -30.0
2.0H	6.6 / -35.0	6.6 / -35.0