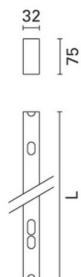


Last information update: May 2018

**High Contrast module L=1197 - direct emission with controlled glare - neutral white integrated DALI dimmable control gear****Product code**

N933

Technical description

direct emission modular lighting system. High Contrast module with 2 groups of 5 elements using fixed optic LED lamps - flood beam angle. The structure of the optical system produces light emission with controlled glare (UGR < 19). Minimal (frameless) version extruded aluminium profile; partial black methacrylate screens set up for connection to end caps on both sides. Installation can be surface-mounted (ceiling/wall), or pendant. The module must be completed with the accessories kit needed for the selected type of installation. DALI dimmable electronic control gear integrated in the luminaire. Neutral white high efficiency LED.

Installation

pendant: complete with power supply unit with cable (MWG5) and suspension cables (MWG6); surface-mounted: complete with supports (MWG7).

Dimension (mm)

1197x32x75

Colour

Aluminium (12)

Weight (Kg)

2.02

Mounting

ceiling recessed|ceiling surface|ceiling pendant

Wiring

the module is fitted with 5-pin terminal blocks for pass-through wiring at the ends. DALI dimmable control gear integrated in the module.

Notes

High Contrast modules may be completed with accessory end caps (code MX80) and used independently in the various applications. To make continuous lines, use accessory code MX81 with partial screen suitable for overlapping with other modules. Possibility of combined High Contrast / Low Contrast

Complies with EN60598-1 and pertinent regulations



IP20

**Product configuration: N933****Product characteristics**

Total lighting output [Lm]: 1575.7
Total power [W]: 28
Luminous efficacy [Lm/W]: 56.3
Life Time: 50,000h - L90 - 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: 2

Optical assembly Characteristics Type 1

Light Output Ratio (L.O.R.) [%]: 83
Lamp code: LED
ZVEI Code: LED
Nominal power [W]: 10
Nominal luminous [Lm]: 950
Lamp maximum intensity [cd]: /
Beam angle [°]: 48°

Number of lamps for optical assembly: 1
Socket: /
Ballast losses [W]: 4
Colour temperature [K]: 4000
CRI: 95
Wavelength [Nm]: /
MacAdam Step: 3

Polar

		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	1168	1392
			2	1.8	292	348
			3	2.7	130	155
			4	3.6	73	87

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 950 lm bare lamp luminous flux)											
Reflect.: ceiling/cav walls work pl. Room dim x y		0.70	0.70	0.50	0.50	0.30	0.70	0.70	0.50	0.50	0.30
		0.50	0.30	0.50	0.30	0.30	0.50	0.30	0.50	0.30	0.30
		0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
		viewed crosswise					viewed endwise				
2H	2H	1.6	2.0	1.8	2.3	2.5	1.6	2.0	1.8	2.3	2.5
	3H	1.4	1.9	1.7	2.1	2.4	1.4	1.9	1.7	2.1	2.4
	4H	1.4	1.8	1.7	2.0	2.3	1.4	1.8	1.7	2.0	2.3
	6H	1.3	1.7	1.6	2.0	2.3	1.3	1.7	1.6	2.0	2.3
	8H	1.2	1.6	1.6	1.9	2.3	1.2	1.6	1.6	1.9	2.3
	12H	1.2	1.6	1.6	1.9	2.2	1.2	1.6	1.6	1.9	2.2
4H	2H	1.4	1.8	1.7	2.0	2.3	1.4	1.8	1.7	2.0	2.3
	3H	1.2	1.6	1.6	1.9	2.2	1.2	1.6	1.6	1.9	2.2
	4H	1.1	1.4	1.5	1.8	2.2	1.1	1.4	1.5	1.8	2.2
	6H	1.0	1.3	1.5	1.7	2.1	1.0	1.3	1.5	1.7	2.1
	8H	1.0	1.2	1.4	1.6	2.1	1.0	1.2	1.4	1.6	2.1
	12H	0.9	1.2	1.4	1.6	2.0	0.9	1.2	1.4	1.6	2.0
8H	4H	1.0	1.2	1.4	1.6	2.1	1.0	1.2	1.4	1.6	2.1
	6H	0.9	1.1	1.4	1.5	2.0	0.9	1.1	1.4	1.5	2.0
	8H	0.8	1.0	1.3	1.5	2.0	0.8	1.0	1.3	1.5	2.0
	12H	0.8	0.9	1.3	1.4	1.9	0.8	0.9	1.3	1.4	1.9
12H	4H	0.9	1.2	1.4	1.6	2.0	0.9	1.2	1.4	1.6	2.0
	6H	0.8	1.0	1.3	1.5	2.0	0.8	1.0	1.3	1.5	2.0
	8H	0.8	0.9	1.3	1.4	1.9	0.8	0.9	1.3	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				