Pixel Pro

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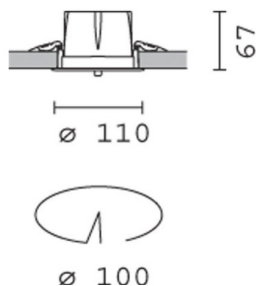
Last information update: May 2024

Product configuration: MD78
MD78: recessed luminaire Ø 110 - neutral white passive dissipation integrated electronic control gear - flood

Product code
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Technical description
recessed adjustable removable luminaire for LED lamp with passive heat dissipation system. Structure with die-cast aluminium frame and main body; shaped surface with high level radiant effect for effectively reducing the temperature and keeping the long-term LED lamp performance unchanged. Steel rotation hinge, chrome-plated aluminium body closing ring. Plastic reflector with high definition treatment - flood beam angle. Body adjusted using manually operated device: internal 30° - external 75° - rotation about axis 355°. Supplied with electronic control gear connected to the luminaire. Neutral white high efficiency LED

Installation
recessed using special steel springs in false ceilings with thicknesses starting at 1 mm; preparation hole Ø 100

Colour	Weight (Kg)
White / Aluminium (39) | Grey/Aluminium (78)	0.52

Mounting
ceiling recessed

Wiring
on control gear box with quick-coupling connections

Complies with EN60598-1 and pertinent regulations

IP20 CE EAC NOM pending

Technical data

lm system:	810	CRI (minimum):	80
W system:	13.2	Colour temperature [K]:	4000
lm source:	1000	MacAdam Step:	3
W source:	9.6	Life Time LED 1:	> 50,000h - L90 - B10 (Ta 25°C)
Luminous efficiency (lm/W, real value):	61.4	Lamp code:	LED
lm in emergency mode:	-	Number of lamps for optical assembly:	1
Total light flux at or above an angle of 90° [Lm]:	0	ZVEI Code:	LED
Light Output Ratio (L.O.R.) [%]:	81	Number of optical assemblies:	1
Beam angle [°]:	28°		

Polar

Imax=3087 cd
α=28°

CIE
nL 0.81
100-100-100-100-81
UGR 11.0-11.0
DIN
A.61
UTE
0.81A+0.00T
F"1=999
F"1+F"2=1000
F"1+F"2+F"3=1000
CIBSE
LG3 L<1500 cd/m² at 65°
UGR<16 | L<1500 cd/mq @65°

Lux			
h	d	Em	Emax
2	1	618	769
4	2	154	192
6	3	69	85
8	4	39	48

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	73	69	67	65	69	66	66	64	78
1.0	76	73	71	69	72	70	70	67	83
1.5	80	78	76	74	77	75	74	72	89
2.0	83	81	79	78	80	78	77	75	93
2.5	84	83	82	81	82	81	80	78	96
3.0	85	84	83	83	83	82	81	79	98
4.0	86	85	85	84	84	84	82	80	99
5.0	87	86	86	86	85	84	83	81	100

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°							8 / 6 / 4
75°							
65°							2
55°							a / h
45°	10²	2 3 4 5 6 8 10³	2 3 4 5 6 8 10⁴				cd/m²

C0-180 ────────── C90-270 ──────────────
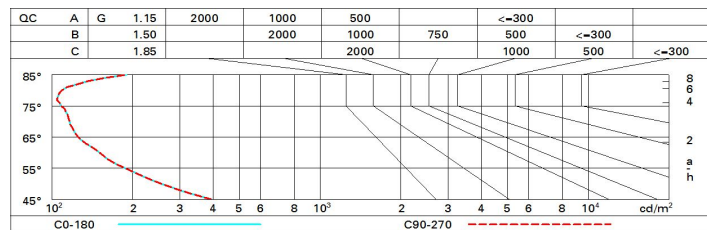
UGR diagram

Corrected UGR values (at 1000 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	11.9	14.0	12.3	14.3	14.6	11.9	14.0	12.3	14.3	14.6
	3H	11.8	13.3	12.2	13.7	14.0	11.8	13.3	12.2	13.7	14.0
	4H	11.7	13.0	12.1	13.4	13.7	11.7	13.0	12.1	13.4	13.7
	6H	11.7	12.8	12.0	13.1	13.5	11.7	12.8	12.0	13.1	13.5
	8H	11.6	12.7	12.0	13.0	13.4	11.6	12.7	12.0	13.0	13.4
	12H	11.6	12.6	12.0	13.0	13.4	11.6	12.6	12.0	13.0	13.4
4H	2H	11.7	13.0	12.1	13.4	13.7	11.7	13.0	12.1	13.4	13.7
	3H	11.6	12.6	12.0	13.0	13.4	11.6	12.6	12.0	13.0	13.4
	4H	11.5	12.5	11.9	12.8	13.2	11.5	12.5	11.9	12.8	13.2
	6H	11.1	12.7	11.6	13.1	13.6	11.1	12.7	11.6	13.1	13.6
	8H	11.0	12.8	11.5	13.2	13.7	11.0	12.8	11.5	13.2	13.7
	12H	10.9	12.8	11.4	13.2	13.8	10.9	12.8	11.4	13.2	13.8
8H	4H	11.0	12.8	11.5	13.2	13.7	11.0	12.8	11.5	13.2	13.7
	6H	10.9	12.6	11.4	13.1	13.6	10.9	12.6	11.4	13.1	13.6
	8H	10.8	12.4	11.4	12.9	13.4	10.8	12.4	11.4	12.9	13.4
	12H	11.0	12.0	11.5	12.5	13.0	11.0	12.0	11.5	12.5	13.0
12H	4H	10.9	12.8	11.4	13.2	13.8	10.9	12.8	11.4	13.2	13.8
	6H	10.8	12.4	11.4	12.9	13.4	10.8	12.4	11.4	12.9	13.4
	8H	11.0	12.0	11.5	12.5	13.0	11.0	12.0	11.5	12.5	13.0

Variations with the observer position at spacing:

S =				
	1.0H	7.0 / -22.7		7.0 / -22.7
	1.5H	9.8 / -23.2		9.8 / -23.2
	2.0H	11.8 / -23.5		11.8 / -23.5