

Last information update: June 2023

Product configuration: P298

P298: 600x600 - warm White - UGR<19

**Product code**P298: 600x600 - warm White - UGR<19 **Attention! Code no longer in production****Technical description**

Recessed direct emission luminaire designed to use Warm White colour 3000K LEDs and be installed in 600x600 modular false ceilings or in plasterboard ceilings using a frame to be ordered as an accessory. The optical assembly is made of a thermoplastic material for controlled luminance with a UGR<19 L<3000 cd/m² $\alpha \geq 65^\circ$ beam, ideal for environments with video terminals. Product complete with electronic ballast.

Installation

recessed in 600x600 modular false ceilings or in plasterboard ceilings using a frame to be ordered as an accessory.

Colour

White (01)

Mounting

ceiling surface

Wiring

product complete with electronic components

Complies with EN60598-1 and pertinent regulations



IP20

IP43

On the visible part of the product once installed

**Technical data**

Im system:	3648	Colour temperature [K]:	3000
W system:	34	MacAdam Step:	3
Im source:	4450	Life Time LED 1:	50,000h - L80 - B10 (Ta 25°C)
W source:	30	Ballast losses [W]:	4
Luminous efficiency (Im/W, real value):	107.3	Lamp code:	LED
Im 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.) [%]:	82	Number of optical assemblies:	1
CRI:	80		

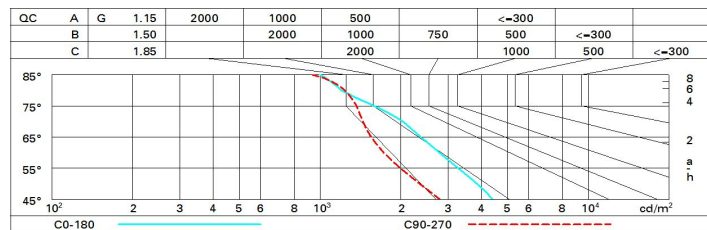
Polar

 $\alpha = 92^\circ / 72^\circ$	Imax=1933 cd C0-180 CIE nL 0.82 62-88-98-100-82 UGR 18.3-16.3 DIN A.51 UTE 0.82C+0.00T F*1=619 F*1+F*2=883 F*1+F*2+F*3=979 CIBSE LG3 L<3000 cd/m² at 65° UGR<19 L<3000 cd/mq @65°					Lux				
	h		d1	d2	Em	Emax				
	2		4.1	2.9	325	483				
	4		8.3	5.8	81	121				
	6		12.4	8.7	36	54				
	8		16.6	11.6	20	30				

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	59	52	47	43	51	46	46	41	50
1.0	65	58	53	49	57	52	52	47	57
1.5	72	67	62	59	65	62	61	56	69
2.0	76	72	69	66	71	68	67	63	76
2.5	79	75	73	70	74	71	70	67	81
3.0	81	78	75	73	76	74	73	69	85
4.0	83	80	78	77	79	77	76	72	88
5.0	84	82	80	79	80	79	77	74	91

Luminance curve limit



UGR diagram

Corrected UGR values (at 4450 lm bare lamp luminous flux)											
Reflect.: ceiling/cav walls work pl. Room dim x y		viewed crosswise					viewed endwise				
		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
2H	2H	16.4	17.4	16.7	17.7	18.0	14.1	15.1	14.4	15.4	15.6
	3H	17.3	18.2	17.6	18.5	18.8	14.5	15.4	14.8	15.7	16.0
	4H	17.5	18.4	17.9	18.7	19.0	14.7	15.5	15.0	15.8	16.2
	6H	17.7	18.5	18.1	18.8	19.2	14.7	15.5	15.1	15.8	16.2
	8H	17.7	18.5	18.1	18.8	19.2	14.7	15.5	15.1	15.8	16.2
	12H	17.7	18.5	18.1	18.8	19.2	14.7	15.4	15.1	15.8	16.1
4H	2H	16.6	17.5	17.0	17.8	18.1	15.3	16.2	15.6	16.5	16.8
	3H	17.7	18.4	18.1	18.8	19.1	15.9	16.6	16.3	17.0	17.3
	4H	18.0	18.7	18.4	19.1	19.5	16.1	16.8	16.5	17.2	17.5
	6H	18.3	18.8	18.7	19.2	19.7	16.3	16.9	16.7	17.3	17.7
	8H	18.3	18.9	18.8	19.3	19.7	16.3	16.9	16.8	17.3	17.7
	12H	18.4	18.8	18.8	19.3	19.7	16.3	16.8	16.8	17.2	17.7
8H	4H	18.1	18.6	18.5	19.0	19.5	16.7	17.2	17.1	17.6	18.1
	6H	18.4	18.9	18.9	19.3	19.8	16.9	17.4	17.4	17.8	18.3
	8H	18.5	18.9	19.0	19.4	19.9	17.0	17.4	17.5	17.9	18.4
	12H	18.6	18.9	19.1	19.4	19.9	17.1	17.4	17.6	17.9	18.4
12H	4H	18.1	18.6	18.5	19.0	19.5	16.7	17.2	17.2	17.7	18.1
	6H	18.4	18.8	18.9	19.3	19.8	17.1	17.4	17.5	17.9	18.4
	8H	18.6	18.9	19.1	19.4	19.9	17.2	17.5	17.7	18.0	18.5
Variations with the observer position at spacing:											
S =	1.0H	0.2 / -0.3					0.3 / -0.4				
	1.5H	0.6 / -0.9					0.5 / -0.9				
	2.0H	1.4 / -1.3					0.9 / -1.2				