iPlan Easy

Last information update: May 2018

625x625 mm - neutral white LED - DALI control gear - opal screen general light optic

Product code
P178

Technical description
Recessed direct emission luminaire designed to use Neutral White 4,000K high colour rendering LEDs and be installed in modular false ceilings with a 625 x 625 mm step. The optical assembly consists of a white extruded frame, a satin methacrylate diffuser screen for general light emission and a sheet metal rear closing base. The LEDs are arranged inside the perimeter and the DALI driver is housed in the upper part of the product.

Installation
Recessed in modular false ceilings with a 625x625 mm step

Dimension (mm)
625x625x14

Colour
White (01)

Weight (Kg)
7.2

Mounting
ceiling recessed|wall surface|ceiling surface

Wiring
product complete with DALI components

Complies with EN60598-1 and pertinent regulations

IP20   IP43   On the visible part of the product once installed

Product configuration: P178

Product characteristics

Total lighting output [Lm]: 3449.5	Total luminous flux at or above an angle of 90° [Lm]: 0
Total power [W]: 38	Emergency luminous flux [Lm]: /
Luminous efficacy [Lm/W]: 90.8	Voltage [V]: -
Life Time: 50,000h - L70 - B10 (Ta 25°C)	Number of optical assemblies: 1

Optical assembly Characteristics Type 1

Light Output Ratio (L.O.R.) [%]: 75	Number of lamps for optical assembly: 1
Lamp code: LED	Socket: /
ZVEI Code: LED	Ballast losses [W]: 6
Nominal power [W]: 32	Colour temperature [K]: 4000
Nominal luminous [Lm]: 4600	CRI: 80
Lamp maximum intensity [cd]: /	Wavelength [Nm]: /
Beam angle [°]: /	MacAdam Step: 3

Polar

```
Imax=1225 cd
          180°
90°                      90°


1000

          0°
```

CIE
nL 0.75
47-79-95-100-75
UGR 21.1-20.6
DIN
A.41
UTE
0.75E+0.00T
F"1=474
F"1+F"2=787
F"1+F"2+F"3=954
CIBSE
BZ5
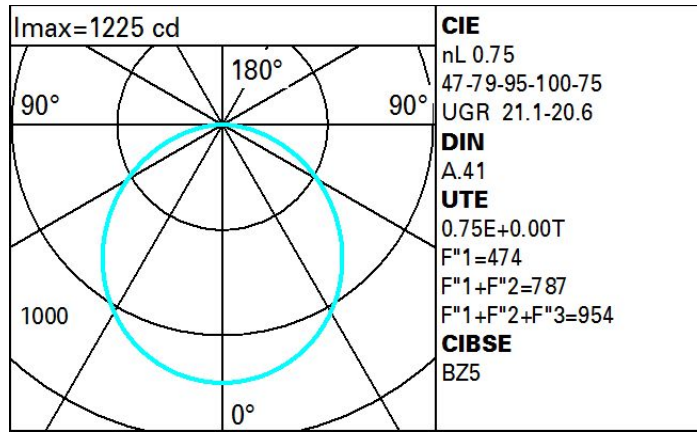
Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	49	41	36	31	40	35	35	29	39
1.0	54	47	41	37	46	41	40	35	47
1.5	62	56	51	47	54	50	49	45	59
2.0	67	62	57	54	60	56	55	51	68
2.5	69	65	62	59	64	60	60	55	74
3.0	71	68	65	62	66	63	62	58	78
4.0	74	71	68	66	69	67	66	62	83
5.0	75	73	71	69	71	69	68	64	86

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
75°                                              4

65°                                              2

55°                                              a
                                                 h
45°  6   8  10³    2   3   4  5  6   8  10⁴   cd/m²
     C0-180
```
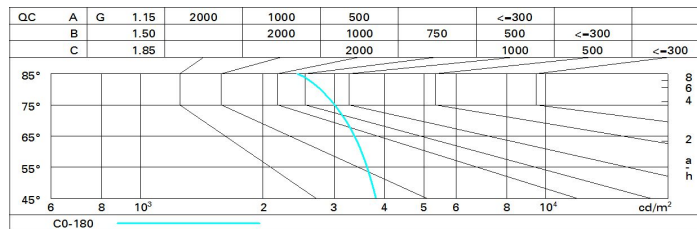
UGR diagram

Corrected UGR values (at 4600 lm bare lamp luminous flux)

Riflect.: ceil/cav	walls work pl.	0.70 0.50 0.20	0.70 0.30 0.20	0.50 0.50 0.20	0.50 0.30 0.20	0.30 0.30 0.20	0.70 0.50 0.20	0.70 0.30 0.20	0.50 0.50 0.20	0.50 0.30 0.20	0.30 0.30 0.20
Room dim x	y			viewed crosswise					viewed endwise		
2H	2H	17.1	18.4	17.5	18.6	18.9	17.1	18.4	17.5	18.6	18.9
	3H	18.7	19.8	19.1	20.1	20.4	17.6	18.7	18.0	19.0	19.3
	4H	19.3	20.4	19.7	20.7	21.0	17.8	18.9	18.2	19.2	19.5
	6H	19.8	20.8	20.2	21.1	21.5	17.9	18.9	18.3	19.2	19.5
	8H	20.0	20.9	20.4	21.3	21.6	17.9	18.8	18.3	19.2	19.5
	12H	20.1	21.0	20.5	21.3	21.7	17.9	18.8	18.3	19.1	19.5
4H	2H	17.8	18.9	18.2	19.2	19.5	19.3	20.4	19.7	20.7	21.0
	3H	19.6	20.5	20.0	20.8	21.2	20.0	20.9	20.4	21.2	21.6
	4H	20.3	21.1	20.7	21.5	21.9	20.3	21.1	20.7	21.5	21.9
	6H	20.9	21.6	21.4	22.0	22.5	20.5	21.2	21.0	21.6	22.1
	8H	21.1	21.8	21.6	22.2	22.7	20.6	21.2	21.1	21.7	22.1
	12H	21.3	21.9	21.8	22.3	22.8	20.6	21.2	21.1	21.6	22.1
8H	4H	20.6	21.2	21.1	21.7	22.1	21.1	21.8	21.6	22.2	22.7
	6H	21.4	21.9	21.8	22.4	22.8	21.5	22.0	22.0	22.5	23.0
	8H	21.7	22.1	22.2	22.6	23.1	21.7	22.1	22.2	22.6	23.1
	12H	21.9	22.3	22.4	22.8	23.3	21.8	22.2	22.3	22.7	23.2
12H	4H	20.6	21.2	21.1	21.6	22.1	21.3	21.9	21.8	22.3	22.8
	6H	21.4	21.9	21.9	22.4	22.9	21.7	22.2	22.2	22.6	23.1
	8H	21.8	22.2	22.3	22.7	23.2	21.9	22.3	22.4	22.8	23.3

Variations with the observer position at spacing:

S =			
1.0H	0.1 / -0.1	0.1 / -0.1
1.5H	0.2 / -0.3	0.2 / -0.3
2.0H	0.4 / -0.5	0.4 / -0.5