iPlan
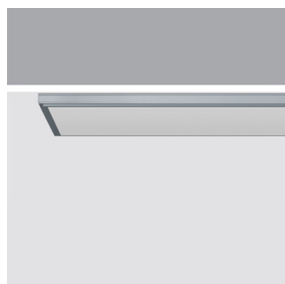
Last information update: June 2018

iplan - warm white - UGR<19 with L<3,000 cd/m2 for α≥65° - DALI

Product code
N272

Technical description
Direct emission recessed or ceiling-mounted luminaire designed to use warm white 3000K high colour rendering LEDs. Anodised aluminium perimeter profile. The micro-prismatic diffuser screen, combined with an inner screen and diffusing film, allows optimum diffusion of the direct light and controlled luminance UGR<19 with L<3,000 cd/m2 for α≥65° ideal for environments where video monitors are used. The LEDs are arranged inside the perimeter and the DALI driver is housed in the product.

Installation
Recessed in plasterboard false ceilings (using accessory frame), in false ceilings with frame. Possibility of ceiling-mounting using kit to be ordered separately as an accessory

Dimension (mm)
1200x300x26

Colour
Aluminium (12)

Weight (Kg)
8

Mounting
ceiling pendant

Wiring
Product complete with DALI electronic components

Complies with EN60598-1 and pertinent regulations

IP20   IP43   On the visible part of the product once installed

Product configuration: N272

Product characteristics
Total lighting output [Lm]: 3290
Total power [W]: 32.3
Luminous efficacy [Lm/W]: 101.9
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]: /
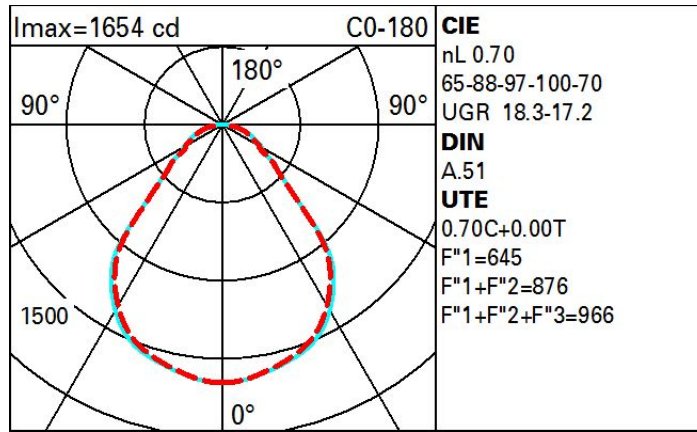Voltage [V]: -
Number of optical assemblies: 1

Optical assembly Characteristics Type 1
Light Output Ratio (L.O.R.) [%]: 70
Lamp code: LED
ZVEI Code: LED
Nominal power [W]: 28
Nominal luminous [Lm]: 4700
Lamp maximum intensity [cd]: /
Beam angle [°]: /

Number of lamps for optical assembly: 1
Socket: /
Ballast losses [W]: 4.3
Colour temperature [K]: 3000
CRI: 80
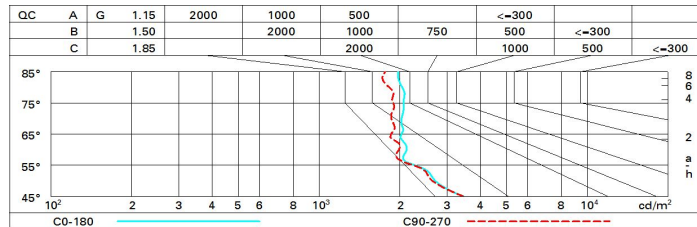Wavelength [Nm]: /
MacAdam Step: 3

Polar

Imax=1654 cd		C0-180

180°
90° | 90°
1500
0°

CIE
nL 0.70
65-88-97-100-70
UGR 18.3-17.2
DIN
A.51
UTE
0.70C+0.00T
F"1=645
F"1+F"2=876
F"1+F"2+F"3=966

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	52	45	41	38	45	41	40	36	52
1.0	56	50	46	43	49	45	45	41	59
1.5	62	57	54	51	56	53	52	49	69
2.0	65	62	59	56	60	58	57	54	77
2.5	67	64	62	60	63	61	60	57	81
3.0	69	66	64	62	65	63	62	59	84
4.0	71	68	67	65	67	66	64	62	88
5.0	71	70	68	67	68	67	66	63	90

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

10^2 2 3 4 5 6 8 10^3 2 3 4 5 6 8 10^4 cd/m²

C0-180 ——————   C90-270 --------------

UGR diagram

Corrected UGR values (at 4700 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 x	y			viewed crosswise					viewed endwise		
2H	2H	14.9	15.8	15.2	16.0	16.3	14.7	15.6	15.0	15.8	16.1
	3H	16.0	16.8	16.3	17.0	17.3	14.9	15.7	15.3	16.0	16.3
	4H	16.5	17.3	16.9	17.6	17.9	15.0	15.8	15.4	16.1	16.4
	6H	17.1	17.8	17.5	18.1	18.5	15.0	15.7	15.4	16.1	16.4
	8H	17.3	18.0	17.7	18.3	18.7	15.0	15.7	15.4	16.1	16.4
	12H	17.5	18.1	17.9	18.5	18.8	15.0	15.7	15.4	16.0	16.4
4H	2H	15.2	15.9	15.5	16.2	16.5	16.2	17.0	16.6	17.3	17.6
	3H	16.5	17.1	16.9	17.5	17.8	16.7	17.3	17.0	17.6	18.0
	4H	17.2	17.8	17.6	18.2	18.6	16.9	17.5	17.3	17.8	18.2
	6H	17.9	18.5	18.4	18.9	19.3	17.1	17.6	17.6	18.0	18.5
	8H	18.3	18.7	18.7	19.2	19.6	17.2	17.7	17.7	18.1	18.6
	12H	18.5	18.9	19.0	19.4	19.8	17.3	17.7	17.7	18.1	18.6
8H	4H	17.5	18.0	17.9	18.4	18.8	17.8	18.3	18.3	18.7	19.2
	6H	18.4	18.8	18.9	19.3	19.8	18.3	18.7	18.7	19.1	19.6
	8H	18.9	19.2	19.4	19.7	20.2	18.5	18.8	19.0	19.3	19.8
	12H	19.3	19.6	19.8	20.0	20.6	18.7	19.0	19.2	19.5	20.0
12H	4H	17.5	18.0	18.0	18.4	18.9	18.1	18.5	18.5	18.9	19.4
	6H	18.6	18.9	19.1	19.4	19.9	18.5	18.9	19.0	19.4	19.9
	8H	19.1	19.4	19.6	19.9	20.4	18.8	19.1	19.3	19.6	20.1

Variations with the observer position at spacing:

S =	1.0H	0.3 / -0.3	0.3 / -0.4
	1.5H	0.8 / -0.6	0.8 / -0.6
	2.0H	1.4 / -0.7	1.5 / -0.7