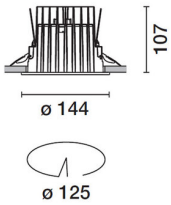**Reflex**

Last information update: May 2018

Fixed circular recessed luminaire - Ø 125 mm - neutral white - white optic

Product code
P512

Technical description
Fixed round luminaire designed to use a LED lamp with C.O.B. technology. Version with rim for surface-mounting. Reflector painted white with a layer of anti-scratch protection. Die-cast aluminium body and passive dissipation system. Product complete with LED lamp in neutral white colour tone (4,000K). General lighting beam.

Installation
Recessed using torsion springs which allow easy installation in false ceilings with thicknesses ranging from 1 mm to 20 mm.

Dimension (mm)
Ø144x107

Colour
White (01)

Weight (Kg)
1.02

Mounting
ceiling recessed

Wiring
product complete with an electronic ballast

Complies with EN60598-1 and pertinent regulations

IP20   IP54   On the visible part of
                the product once installed

CE   EHL   A++

Product configuration: P512

Product characteristics

Total lighting output [Lm]: 2249	Total luminous flux at or above an angle of 90° [Lm]: 0
Total power [W]: 23.7	Emergency luminous flux [Lm]: /
Luminous efficacy [Lm/W]: 94.9	Voltage [V]: -
Life Time: 50,000h - L80 - 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]: 2.7
Nominal power [W]: 21	Colour temperature [K]: 4000
Nominal luminous [Lm]: 3000	CRI: 80
Lamp maximum intensity [cd]: /	Wavelength [Nm]: /
Beam angle [°]: 78°	MacAdam Step: 2

Polar

Imax=1410 cd

CIE
nL 0.75
73-90-98-100-75
UGR 26.8-26.4
DIN
A.51
UTE
0.75B+0.00T
F"1=728
F"1+F"2=904
F"1+F"2+F"3=981

α=78°

Lux			
h	d	Em	Emax
1	1.6	977	1410
2	3.2	244	352
3	4.9	109	157
4	6.5	61	88
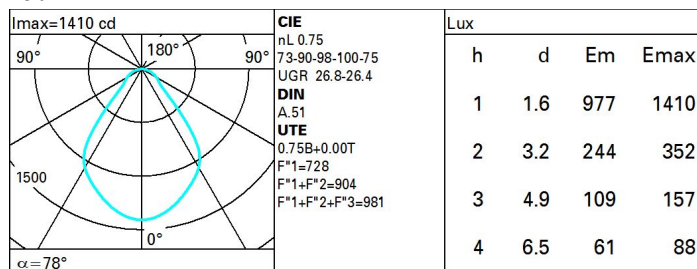
Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	58	52	48	45	52	48	47	44	58
1.0	62	57	53	50	56	52	52	48	64
1.5	68	64	61	58	63	60	59	55	74
2.0	72	68	66	63	67	65	64	60	81
2.5	74	71	69	67	70	68	67	64	85
3.0	75	73	71	69	71	70	69	66	88
4.0	77	75	74	72	73	72	71	68	91
5.0	78	76	75	74	75	74	72	70	93

UGR diagram

Corrected UGR values (at 3000 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	24.1	25.0	24.4	25.3	25.5	24.1	25.0	24.4	25.3	25.5
	3H	25.1	25.9	25.4	26.2	26.5	24.4	25.2	24.7	25.5	25.8
	4H	25.5	26.3	25.8	26.6	26.9	24.4	25.2	24.8	25.5	25.9
	6H	25.8	26.5	26.2	26.9	27.2	24.5	25.2	24.8	25.5	25.9
	8H	25.9	26.6	26.3	26.9	27.3	24.5	25.2	24.8	25.5	25.9
	12H	26.0	26.6	26.3	27.0	27.3	24.4	25.1	24.8	25.5	25.8
4H	2H	24.4	25.2	24.8	25.5	25.9	25.5	26.3	25.8	26.6	26.9
	3H	25.7	26.3	26.1	26.7	27.0	26.0	26.7	26.4	27.0	27.4
	4H	26.2	26.8	26.6	27.2	27.6	26.2	26.8	26.6	27.2	27.6
	6H	26.7	27.2	27.1	27.6	28.0	26.4	26.9	26.8	27.3	27.7
	8H	26.8	27.3	27.2	27.7	28.1	26.4	26.9	26.9	27.3	27.8
	12H	26.9	27.3	27.3	27.7	28.2	26.4	26.8	26.9	27.3	27.7
8H	4H	26.4	26.9	26.9	27.3	27.8	26.8	27.3	27.2	27.7	28.1
	6H	27.0	27.4	27.4	27.8	28.3	27.1	27.5	27.5	27.9	28.4
	8H	27.2	27.5	27.7	28.0	28.5	27.2	27.5	27.7	28.0	28.5
	12H	27.3	27.6	27.8	28.1	28.6	27.2	27.5	27.7	28.0	28.5
12H	4H	26.4	26.8	26.9	27.3	27.7	26.9	27.3	27.3	27.7	28.2
	6H	27.0	27.3	27.5	27.8	28.3	27.2	27.5	27.7	28.0	28.5
	8H	27.2	27.5	27.7	28.0	28.5	27.3	27.6	27.8	28.1	28.6

Variations with the observer position at spacing:

S =				
	1.0H	0.7 / -0.5		0.7 / -0.5
	1.5H	1.3 / -0.8		1.3 / -0.8
	2.0H	2.3 / -1.0		2.3 / -1.0