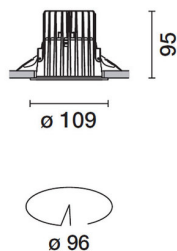


Last information update: May 2018

**Fixed circular recessed luminaire - Ø 96 mm - neutral white - white optic - DALI****Product code**  
P509**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)**  
Ø109x95**Colour**  
White (01)**Weight (Kg)**  
0.65**Mounting**  
ceiling recessed**Wiring**

product complete with DALI components

Complies with EN60598-1 and pertinent regulations



IP20



IP54

On the visible part of  
the product once installed

**Product configuration: P509****Product characteristics**

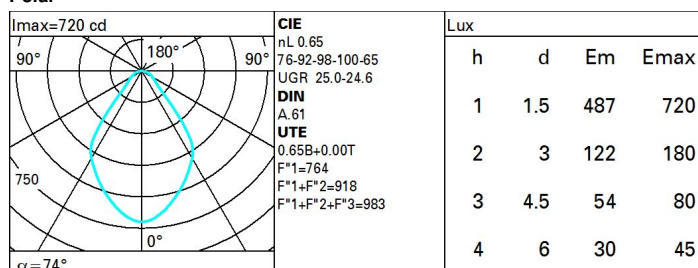
Total lighting output [Lm]: 982  
Total power [W]: 11.3  
Luminous efficacy [Lm/W]: 86.9  
Life Time: 50,000h - L80 - B10 (Ta 25°C)

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.) [%]: 65  
Lamp code: LED  
ZVEI Code: LED  
Nominal power [W]: 8.9  
Nominal luminous [Lm]: 1500  
Lamp maximum intensity [cd]: /  
Beam angle [°]: 74°

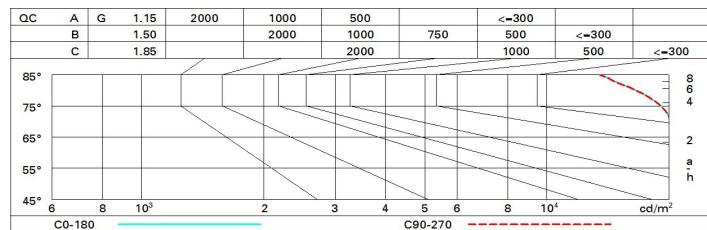
Number of lamps for optical assembly: 1  
Socket: /  
Ballast losses [W]: 2.4  
Colour temperature [K]: 4000  
CRI: 80  
Wavelength [nm]: /  
MacAdam Step: 2

**Polar**

# Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	52	47	44	41	46	43	43	40	61
1.0	55	51	48	45	50	47	47	44	67
1.5	60	57	54	52	56	53	53	50	76
2.0	63	60	58	56	59	57	57	54	82
2.5	65	63	61	59	61	60	59	57	86
3.0	66	64	63	61	63	62	61	58	89
4.0	67	66	65	64	65	64	63	60	92
5.0	68	67	66	65	66	65	64	62	94

# Luminance curve limit



# UGR diagram

Corrected UGR values (at 1500 lm bare lamp luminous flux)												
Reflect.:		viewed crosswise					viewed endwise					
ceiling	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											
2H	2H	22.5	23.4	22.8	23.6	23.9	22.5	23.4	22.8	23.6	23.9	
	3H	23.4	24.2	23.7	24.4	24.7	22.7	23.5	23.1	23.8	24.1	
	4H	23.8	24.5	24.1	24.8	25.1	22.8	23.5	23.1	23.8	24.2	
	6H	24.1	24.8	24.5	25.1	25.4	22.8	23.5	23.2	23.8	24.2	
	8H	24.2	24.8	24.6	25.2	25.5	22.8	23.5	23.2	23.8	24.2	
	12H	24.2	24.9	24.6	25.2	25.6	22.8	23.4	23.2	23.8	24.1	
4H	2H	22.8	23.5	23.1	23.8	24.2	23.8	24.5	24.1	24.8	25.1	
	3H	23.9	24.5	24.3	24.9	25.2	24.2	24.9	24.6	25.2	25.6	
	4H	24.4	25.0	24.9	25.4	25.8	24.4	25.0	24.9	25.4	25.8	
	6H	24.9	25.4	25.3	25.8	26.2	24.6	25.1	25.0	25.5	25.9	
	8H	25.0	25.5	25.5	25.9	26.3	24.6	25.1	25.1	25.5	25.9	
	12H	25.1	25.5	25.5	25.9	26.4	24.6	25.0	25.1	25.5	25.9	
8H	4H	24.6	25.1	25.1	25.5	25.9	25.0	25.5	25.5	25.9	26.3	
	6H	25.2	25.6	25.7	26.0	26.5	25.3	25.7	25.8	26.1	26.6	
	8H	25.4	25.7	25.9	26.2	26.7	25.4	25.7	25.9	26.2	26.7	
	12H	25.5	25.8	26.0	26.3	26.8	25.4	25.7	25.9	26.2	26.7	
12H	4H	24.6	25.0	25.1	25.5	25.9	25.1	25.5	25.5	25.9	26.4	
	6H	25.2	25.5	25.7	26.0	26.5	25.4	25.7	25.9	26.2	26.7	
	8H	25.4	25.7	25.9	26.2	26.7	25.5	25.8	26.0	26.3	26.8	
Variations with the observer position at spacing:												
S =		0.9 / -0.6					0.9 / -0.6					
		1.5H					1.8 / -0.9					
		2.0H					3.0 / -1.1					