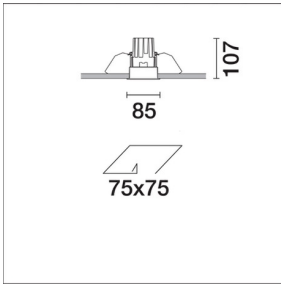
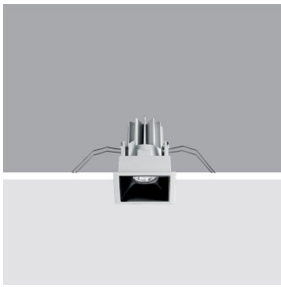


Last information update: May 2018



**Fixed, Recessed luminaire - Warm LED - Electronic control gear included - WideFlood optic Beam**

**Product code**  
N156

**Technical description**

Fixed optic, recessed luminaire for a warm white LED lamp with a high color rendering index. Passive heat dissipation system. Lamp body with die-cast aluminium radiant surface, version with perimeter surface frame. Metallised, thermoplastic, high definition optic, integrated in a rear position in the anti-glare screen. Glass cover for LED lamp. The structure of the optical system produces light emission with controlled luminance (UGR < 19). Equipped with an electronic ballast connected to the luminaire.

**Installation**

recessed with steel wire springs for false ceilings from 1 to 25 mm thick - preparation hole 75 x 75. Installation permitted in either a horizontal or vertical position.

**Dimension (mm)**  
85x85x107

**Colour**  
White (01) | Black/Black (43) | Black/White (47) | Grey/Black (74)

**Weight (Kg)**  
0.5

**Mounting**

wall recessed|ceiling recessed

**Wiring**

on the control gear box with quick-coupling connections.

**Notes**

The product with its white finish (01) includes an optic ring for limiting luminance; a feature that renders a performance of UGR < 19 and determines slight variations in the opening of the optic (52°) and yield (0.74).

Complies with EN60598-1 and pertinent regulations



**Product configuration: N156.01**

**Product characteristics**

Total lighting output [Lm]: 776.5  
Total power [W]: 11  
Luminous efficacy [Lm/W]: 70.6  
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]: 230  
Number of optical assemblies: 1

**Optical assembly Characteristics Type 1**

Light Output Ratio (L.O.R.) [%]: 74  
Lamp code: LED  
ZVEI Code: LED  
Nominal power [W]: 8.5  
Nominal luminous [Lm]: 1050  
Lamp maximum intensity [cd]: /  
Beam angle [°]: 52°

Number of lamps for optical assembly: 1  
Socket: /  
Ballast losses [W]: 2.5  
Colour temperature [K]: 3000  
CRI: 90  
Wavelength [Nm]: /  
MacAdam Step: 3

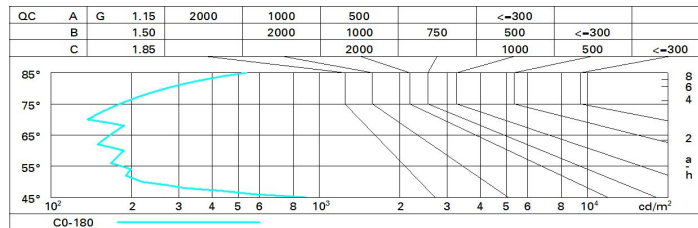
**Polar**

	$I_{max}=1162 \text{ cd}$	<b>CIE</b> nL 0.74 100-100-100-100-74 UGR 10.4-10.4 <b>DIN</b> A.61 <b>UTE</b> 0.74A+0.00T $F^*1=996$ $F^*1+F^*2=999$ $F^*1+F^*2+F^*3=1000$ <b>CIBSE</b> LG3 L<1000 cd/m <sup>2</sup> at 65° BZ1	<b>Lux</b>				
				<b>h</b>	<b>d</b>	<b>Em</b>	<b>Emax</b>
				1	1	936	1162
				2	2	234	291
				3	2.9	104	129
		4	3.9	58	73		

**Utilisation factors**

R	77	75	73	71	55	53	33	00	DRR
K0.8	67	63	61	59	63	61	60	58	78
1.0	70	67	64	63	66	64	64	61	83
1.5	73	71	69	67	70	68	68	65	88
2.0	75	74	72	71	73	71	71	69	93
2.5	77	75	74	74	74	73	73	71	96
3.0	78	77	76	75	76	75	74	72	98
4.0	79	78	77	77	77	76	75	73	99
5.0	79	79	78	78	77	77	76	74	100

**Luminance curve limit**



**UGR diagram**

Corrected UGR values (at 1050 lm bare lamp luminous flux)											
Reflect.:		0.70	0.70	0.50	0.50	0.30	0.70	0.70	0.50	0.50	0.30
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		viewed crosswise					viewed endwise				
x	y										
2H	2H	11.0	11.6	11.3	11.8	12.0	11.0	11.6	11.3	11.8	12.0
	3H	10.9	11.4	11.2	11.6	11.9	10.9	11.4	11.2	11.6	11.9
	4H	10.8	11.3	11.1	11.6	11.9	10.8	11.3	11.1	11.6	11.9
	6H	10.7	11.2	11.1	11.5	11.8	10.7	11.2	11.1	11.5	11.8
	8H	10.7	11.1	11.1	11.4	11.8	10.7	11.1	11.1	11.4	11.8
	12H	10.7	11.1	11.0	11.4	11.7	10.7	11.0	11.0	11.4	11.7
4H	2H	10.8	11.3	11.1	11.6	11.9	10.8	11.3	11.1	11.6	11.9
	3H	10.7	11.1	11.0	11.4	11.7	10.7	11.1	11.0	11.4	11.7
	4H	10.6	10.9	11.0	11.3	11.7	10.6	10.9	11.0	11.3	11.7
	6H	10.5	10.8	10.9	11.2	11.6	10.5	10.8	10.9	11.2	11.6
	8H	10.4	10.7	10.9	11.1	11.6	10.4	10.7	10.9	11.1	11.6
	12H	10.4	10.7	10.9	11.1	11.5	10.4	10.6	10.8	11.1	11.5
8H	4H	10.4	10.7	10.9	11.1	11.6	10.4	10.7	10.9	11.1	11.6
	6H	10.4	10.6	10.8	11.0	11.5	10.4	10.6	10.8	11.0	11.5
	8H	10.3	10.5	10.8	11.0	11.5	10.3	10.5	10.8	11.0	11.5
	12H	10.3	10.4	10.8	10.9	11.4	10.3	10.4	10.8	10.9	11.4
12H	4H	10.4	10.6	10.8	11.1	11.5	10.4	10.7	10.9	11.1	11.5
	6H	10.3	10.5	10.8	11.0	11.5	10.3	10.5	10.8	11.0	11.5
	8H	10.3	10.4	10.8	10.9	11.4	10.3	10.4	10.8	10.9	11.4
Variations with the observer position at spacing:											
S =	1.0H	6.5 / -14.3					6.5 / -14.3				
	1.5H	9.3 / -14.5					9.3 / -14.5				
	2.0H	11.3 / -14.6					11.3 / -14.6				