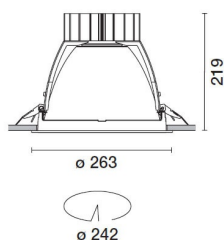
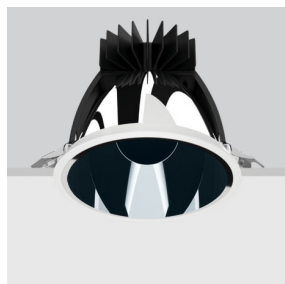


Product configuration: N020

N020: Fixed circular recessed luminaire - Ø242 mm - warm white - wide flood optic - UGR<19



N020: Fixed circular recessed luminaire - Ø242 mm - warm white - wide flood optic - UGR<19 **Attention! Code no longer in production**

Fixed round luminaire designed to use a LED lamp with C.O.B. technology. Version with rim for surface-mounting. Reflector vacuum-metallised with aluminium vapours with an anti-scratch protective layer. Structure with die-cast aluminium perimeter frame, black, zinc-plated sheet steel brackets and extruded aluminium dissipater painted black. Passive dissipation system. Product complete with LED lamp in warm white colour tone (3000K). General light emission, with controlled luminance $UGR < 19$ 1500 cd/m² $\alpha > 65^\circ$ wide flood optic.

Recessed using torsion springs which allow easy installation in false ceilings with thickness ranging from 1 mm to 25 mm.

Colour
White / Aluminium (39)

Weight (Kg)
2.46

ceiling recessed

product complete with an electronic ballast

TPa rated

Complies with EN60598-1 and pertinent regulations



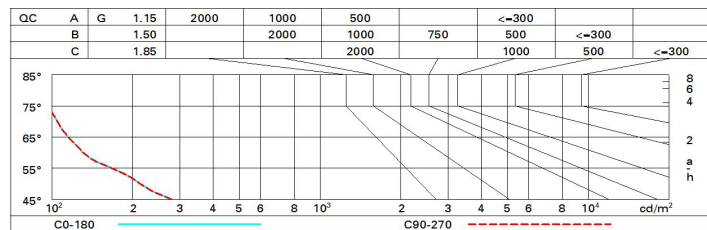
Im system:	6309	CRI (minimum):	80
W system:	57.6	Colour temperature [K]:	3000
Im source:	8200	MacAdam Step:	2
W source:	51	Life Time LED 1:	> 50,000h - L80 - B10 (Ta 25°C)
Luminous efficiency (lm/W, real value):	109.5	Lamp code:	LED
Im in emergency mode:	-	Number of lamps for optical assembly:	1
Total light flux at or above an angle of 90° [Lm]:	0	ZVEI Code:	LED
Light Output Ratio (L.O.R.) [%]:	77	Number of optical assemblies:	1
Beam angle [°]:	58°		

<p>$I_{max}=8058 \text{ cd}$</p> <p>90° 180° 90°</p> <p>9000</p> <p>0°</p> <p>$\alpha=58^\circ$</p>	CIE		Lux				
	nL 0.77						
	100-100-100-100-77						
	UGR 14.3-14.3						
	DIN						
	A.61						
UTE							
0.77A+0.00T							
F*1=997		h	d	Em	E _{max}		
F*1+F*2=999		2	2.2	1557	2014		
F*1+F*2+F*3=1000		4	4.4	389	504		
CIBSE		6	6.7	173	224		
LG3 L<1500 cd/m² at 65°		8	8.9	97	126		
UGR<16 L<1500 cd/mq @65°							

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	70	66	63	61	65	63	63	60	78
1.0	73	69	67	65	69	66	66	64	83
1.5	76	74	72	70	73	71	70	68	89
2.0	78	77	75	74	76	74	74	71	93
2.5	80	79	78	77	77	77	76	74	96
3.0	81	80	79	78	79	78	77	75	98
4.0	82	81	81	80	80	79	78	76	99
5.0	82	82	81	81	81	80	79	77	100

Luminance curve limit



UGR diagram

Corrected UGR values (at 8200 lm bare lamp luminous flux)											
Reflect.: ceiling/cav walls work pl. Room dim x y		0.70	0.70	0.50	0.50	0.30	0.70	0.70	0.50	0.50	0.30
		0.50	0.30	0.50	0.30	0.30	0.50	0.30	0.50	0.30	0.30
		0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
		viewed crosswise					viewed endwise				
2H	2H	14.9	15.5	15.1	15.7	15.9	14.9	15.5	15.1	15.7	15.9
	3H	14.7	15.3	15.0	15.5	15.8	14.7	15.3	15.0	15.5	15.8
	4H	14.7	15.2	15.0	15.4	15.7	14.7	15.2	15.0	15.4	15.7
	6H	14.6	15.0	14.9	15.3	15.7	14.6	15.0	14.9	15.3	15.7
	8H	14.5	15.0	14.9	15.3	15.6	14.5	15.0	14.9	15.3	15.6
	12H	14.5	14.9	14.9	15.3	15.6	14.5	14.9	14.9	15.3	15.6
4H	2H	14.7	15.2	15.0	15.4	15.7	14.7	15.2	15.0	15.4	15.7
	3H	14.5	14.9	14.9	15.3	15.6	14.5	14.9	14.9	15.3	15.6
	4H	14.4	14.8	14.8	15.2	15.5	14.4	14.8	14.8	15.2	15.5
	6H	14.3	14.6	14.7	15.0	15.5	14.3	14.6	14.7	15.0	15.5
	8H	14.3	14.6	14.7	15.0	15.4	14.3	14.6	14.7	15.0	15.4
	12H	14.2	14.5	14.7	14.9	15.4	14.2	14.5	14.7	14.9	15.4
8H	4H	14.3	14.6	14.7	15.0	15.4	14.3	14.6	14.7	15.0	15.4
	6H	14.2	14.4	14.6	14.9	15.3	14.2	14.4	14.6	14.9	15.3
	8H	14.1	14.3	14.6	14.8	15.3	14.1	14.3	14.6	14.8	15.3
	12H	14.1	14.3	14.6	14.7	15.3	14.1	14.3	14.6	14.7	15.3
12H	4H	14.2	14.5	14.7	14.9	15.4	14.2	14.5	14.7	14.9	15.4
	6H	14.1	14.3	14.6	14.8	15.3	14.1	14.3	14.6	14.8	15.3
	8H	14.1	14.3	14.6	14.7	15.3	14.1	14.3	14.6	14.7	15.3
Variations with the observer position at spacing:											
S =	1.0H	6.5 / -24.8					6.5 / -24.8				
	1.5H	9.4 / -25.4					9.4 / -25.4				
	2.0H	11.4 / -25.8					11.4 / -25.8				