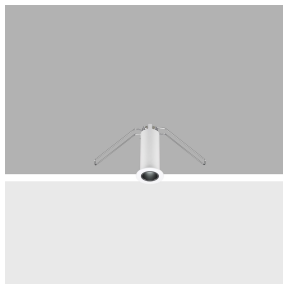# Laser

Last information update: November 2024

Product configuration: P304.47
P304.47: Fixed round mini-recessed luminaire - LED - spot - Black / White

Product code
P304.47: Fixed round mini-recessed luminaire - LED - spot - Black / White

Technical description
Fixed round mini-recessed luminaire with contact frame. The LED is set back to minimize direct glare. The recessed body is made of machined aluminium and the inside of the ring of thermoplastic available in a range of painted and metallised finishes. PMMA - spot (16°) high resolution optic lens. High color rendering index 2700K LED. Tool free assembly. Power unit available with a separate code no.

Installation
Recessed in a false ceiling by means of a steel wire spring - minimum thickness of false ceiling: 1 mm - preparation hole Ø 17 mm.

Colour	Weight (Kg)
Black / White (47)	0.03

Mounting
wall recessed|ceiling recessed

Wiring
Direct current ballasts are available with a separate code no.: ON-OFF / 1-10V dimmable / DALI dimmable / Trailing Edge dimmable
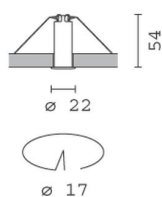
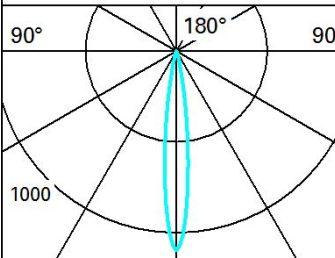Complies with EN60598-1 and pertinent regulations

IP20   IP43   On the visible part of the product once installed

Technical data

lm system:	74	CRI (minimum):	90
W system:	1.4	Colour temperature [K]:	2700
lm source:	140	MacAdam Step:	2
W source:	1.4	Life Time LED 1:	> 50,000h - L90 - B10 (Ta 25°C)
Luminous efficiency (lm/W, real value):	53	Lamp code:	LED
lm 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.) [%]:	53	Number of optical assemblies:	1
Beam angle [°]:	14°	LED current [mA]:	500

Polar

Imax=1098 cd	Lux			
	h	d	Em	Emax
	1	0.2	828	1098
	2	0.5	207	274
	3	0.7	92	122
	4	0.9	52	69

α=13°

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	48	45	44	42	45	43	43	42	78
1.0	50	48	46	45	47	46	46	44	83
1.5	52	51	49	48	50	49	48	47	89
2.0	54	53	52	51	52	51	51	49	93
2.5	55	54	53	53	53	53	52	51	96
3.0	56	55	55	54	54	54	53	52	98
4.0	56	56	56	55	55	55	54	53	99
5.0	57	56	56	56	55	55	54	53	100

Luminance curve limit

QC		G								
	A	1.15	2000	1000	500		<=300			
	B	1.50		2000	1000	750	500	<=300		
	C	1.85			2000		1000	500	<=300	

C0-180 ——————
C90-270 — — — — — — —