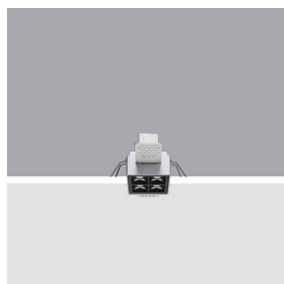


Last information update: June 2018

**Minimal 4 cells - Wideflood beam - LED****Product code**

Q541

**Technical description**

Square miniaturised recessed luminaire with 4 optical elements for LED lamps - fixed optic. Despite the ultracompact size of the product, the patented technology of the optic system guarantees an efficient flow and a high level of visual comfort. Main body with die-cast aluminium radiant surface, minimal (frameless) version for mounting flush with the ceiling. Metallised, thermoplastic, high definition Opti Beam reflectors, integrated in a set-back position in the anti-glare screen. Ballast not included, available with separate code.

**Installation**

Recessed with steel wire springs on the specific adapter (included) which allows flush-mounting with the ceiling. Adapter fixed to false ceiling (compatible thicknesses of 12.5 / 15 / 20 mm) with screws; subsequent filling and smoothing operations; insertion of luminaire body and aesthetic end finishing. A special protective sheath allows finishing operations on the plasterboard to be simplified and speeded up. Preparation hole 45 x 45.

**Dimension (mm)**

43x43x49

**Colour**

White (01) | Black (04) | Brass (14) | (E6)

**Weight (Kg)**

0.11

**Mounting**

wall recessed|ceiling recessed

**Wiring**

Direct current ballasts to be ordered separately: ON-OFF - code no. MXF9 (min 1 / max 2); dimmable DALI - code no. BZM4 (min 1 / max 5) - check the instruction sheet for the lengths and compatible cross-sections of the cables to be used.

**Notes**

The special steel wire spring provided is required to facilitate the eventual extraction of the recessed body once it has been inserted.

Complies with EN60598-1 and pertinent regulations

**Product configuration: Q541****Product characteristics**

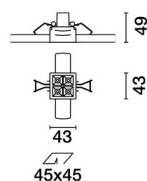
Total lighting output [Lm]: 481  
Total power [W]: 7.8  
Luminous efficacy [Lm/W]: 61.7  
Life Time: > 50,000h - L80 - B10 (Ta 25°C)

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.) [%]: 83  
Lamp code: LED  
ZVEI Code: LED  
Nominal power [W]: 7.8  
Nominal luminous [Lm]: 580  
Lamp maximum intensity [cd]: /  
Beam angle [°]: 58°

Number of lamps for optical assembly: 1  
Socket: /  
Ballast losses [W]: 0  
Colour temperature [K]: 2700  
CRI: 90  
Wavelength [Nm]: /  
MacAdam Step: 3



	<b>Imax=613 cd</b> <b>CIE</b> nL 0.83 100-100-100-100-83 UGR 15.5-15.5 <b>DIN</b> A.61 <b>UTE</b> 0.83A+0.00T F*1=996 F*1+F*2=1000 F*1+F*2+F*3=1000 <b>CIBSE</b> LG3 Lc500 cd/m² at 65°		<b>Lux</b>			
	<b>h</b>	<b>d</b>	<b>Em</b>	<b>Emax</b>		
	1	1.1	488	608		
	2	2.2	122	152		
	3	3.3	54	68		
4	4.4	30	38			

R	77	75	73	71	55	53	33	00	DRR
K0.8	75	71	68	66	70	68	68	65	78
1.0	78	75	72	70	74	72	71	69	83
1.5	82	79	77	76	78	77	76	73	89
2.0	85	83	81	80	82	80	79	77	93
2.5	86	85	84	83	84	83	82	79	96
3.0	87	86	85	85	85	84	83	81	98
4.0	88	87	87	86	86	86	84	82	99
5.0	89	88	88	88	87	86	85	83	100

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

The diagram illustrates the relationship between surface roughness ( $R_a$ ) and surface area ( $A$ ) for different surface conditions (QC, A, B, C). The y-axis represents  $R_a$  in  $\mu m$ , ranging from 45 to 85. The x-axis represents surface area  $A$  in  $cm^2$ , ranging from  $10^1$  to  $10^4$ . The diagram is divided into two sections: C0-180 and C90-270. The diagram shows that as  $R_a$  increases, the surface area  $A$  also increases, and the relationship is more pronounced for higher  $R_a$  values. The diagram is labeled with 'A' and 'h'.

# UGR diagram

Corrected UGR values (at 580 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	0.30
		0.50	0.30	0.50	0.30	0.30	0.50	0.30	0.50	0.30	0.30	0.30
		0.20	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	16.1	16.7	16.4	16.9	17.2	16.1	16.7	16.4	16.9	17.2	17.2
	3H	16.0	16.5	16.3	16.8	17.1	16.0	16.5	16.3	16.8	17.1	17.1
	4H	15.9	16.4	16.2	16.7	17.0	15.9	16.4	16.2	16.7	17.0	17.0
	6H	15.8	16.3	16.2	16.6	16.9	15.8	16.3	16.2	16.6	16.9	16.9
	8H	15.8	16.2	16.2	16.6	16.9	15.8	16.2	16.2	16.6	16.9	16.9
	12H	15.8	16.2	16.1	16.5	16.9	15.8	16.2	16.1	16.5	16.9	16.9
4H	2H	15.9	16.4	16.2	16.7	17.0	15.9	16.4	16.2	16.7	17.0	17.0
	3H	15.8	16.2	16.1	16.5	16.9	15.8	16.2	16.1	16.5	16.9	16.9
	4H	15.7	16.0	16.1	16.4	16.8	15.7	16.0	16.1	16.4	16.8	16.8
	6H	15.6	15.9	16.0	16.3	16.7	15.6	15.9	16.0	16.3	16.7	16.7
	8H	15.5	15.8	16.0	16.2	16.7	15.5	15.8	16.0	16.2	16.7	16.7
	12H	15.5	15.7	15.9	16.2	16.6	15.5	15.7	15.9	16.2	16.6	16.6
8H	4H	15.5	15.8	16.0	16.2	16.7	15.5	15.8	16.0	16.2	16.7	16.7
	6H	15.4	15.7	15.9	16.1	16.6	15.4	15.7	15.9	16.1	16.6	16.6
	8H	15.4	15.6	15.9	16.1	16.6	15.4	15.6	15.9	16.1	16.6	16.6
	12H	15.3	15.5	15.8	16.0	16.5	15.3	15.5	15.8	16.0	16.5	16.5
12H	4H	15.5	15.7	15.9	16.2	16.6	15.5	15.7	15.9	16.2	16.6	16.6
	6H	15.4	15.6	15.9	16.1	16.6	15.4	15.6	15.9	16.1	16.6	16.6
	8H	15.3	15.5	15.8	16.0	16.5	15.3	15.5	15.8	16.0	16.5	16.5
Variations with the observer position at spacing:												
S =		1.0H	6.5 / -24.9					6.5 / -24.9				
		1.5H	9.4 / -25.6					9.4 / -25.6				
		2.0H	11.4 / -25.8					11.4 / -25.8				