

Last information update: February 2025

**Product configuration: QW21.F6**

QW21.F6: Ø 163 mm - warm white - INVERTER - UGR&lt;19 - White/Transparent/Chrome

**Product code**

QW21.F6: Ø 163 mm - warm white - INVERTER - UGR&lt;19 - White/Transparent/Chrome

**Technical description**

Round fixed luminaire designed to use LED lamps with C.o.B. technology. Version with rim for surface-mounting. Prismatic thermoplastic reflector complete with flux enhancer and anti-glare screen located at the centre of the optic. The anti-glare screen is made of thermoplastic vacuum-metallised with aluminium vapours finished with a protective anti-scratch layer. Dissipater made of painted grey die-cast aluminium. Product complete with LED lamp in warm white colour tone (3000K). Light emission UGR<19 L<3000 cd/m<sup>2</sup> ideal for environments with video terminals. Luminaire complete with inverter for safety light.

**Installation**

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

**Colour**

White/Transparent/Chrome (F6)

**Weight (Kg)**

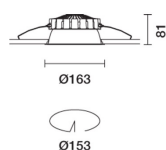
1.31

**Mounting**

ceiling surface

**Wiring**

product complete with INVERTER



Complies with EN60598-1 and pertinent regulations



IP20

IP54

On the visible part of the product once installed

**Technical data**

|  |      |  |  |
|--|------|--|--|
| lm system:   | 2822 | Life Time LED 1:   | > 50,000h - L90 - B10 (Ta 25°C)  |
| W system:  | 28.7 | Lamp code:   | LED  |
| lm source:   | 3400 | Number of lamps for optical assembly:                                    | 1  |
| W source:  | 21   | ZVEI Code:   | LED  |
| Luminous efficiency (lm/W, real value):            | 98.3 | Number of optical assemblies:  | 1  |
| lm in emergency mode:                              | -    | Power factor:  | See installation instructions  |
| Total light flux at or above an angle of 90° [Lm]: | 0    | Inrush current:  | 19.4 A / 250 µs  |
| Light Output Ratio (L.O.R.) [%]:                   | 83   | Maximum number of luminaires of this type per miniature circuit breaker: | B10A: 13 luminaires<br>B16A: 21 luminaires<br>C10A: 21 luminaires<br>C16A: 35 luminaires |
| CRI (minimum):                                     | 80   | Overvoltage protection:  | 2kV Common mode & 1kV Differential mode  |
| Colour temperature [K]:                            | 3000 | Control:   | On/off   |
| MacAdam Step:                                      | 2    |  |  |

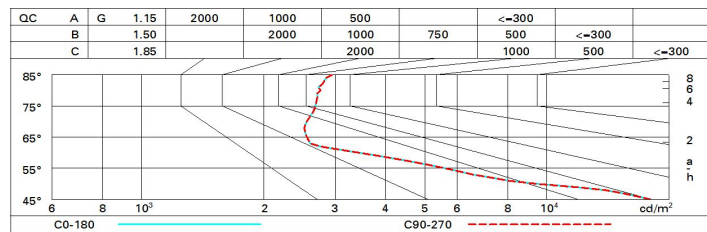
**Polar**

|       |   |     |     |      |     |  |  |  |
|-------|---|-----|-----|------|-----|--|--|--|
|       | <b>CIE</b><br>nL 0.83<br>90-98-100-100-83<br>UGR 17.3-17.1<br><b>DIN</b><br>A.61<br><b>UTE</b><br>0.83A+0.00T<br>F*1=903<br>F*1+F*2=984<br>F*1+F*2+F*3=996<br><b>CIBSE</b><br>LG3 L<3000 cd/m <sup>2</sup> at 65°<br>UGR<19   L<3000 cd/mq @65° |     |     |      | Lux |  |  |  |
|       | h   | d   | Em  | Emax |     |  |  |  |
|       | 2   | 2.1 | 614 | 797  |     |  |  |  |
|       | 4   | 4.3 | 153 | 199  |     |  |  |  |
|       | 6   | 6.4 | 68  | 89   |     |  |  |  |
| α=56° | 8   | 8.5 | 38  | 50   |     |  |  |  |

# Utilisation factors

| R    | 77 | 75 | 73 | 71 | 55 | 53 | 33 | 00 | DRR |
|------|----|----|----|----|----|----|----|----|-----|
| K0.8 | 71 | 66 | 63 | 61 | 66 | 63 | 62 | 59 | 71  |
| 1.0  | 75 | 71 | 68 | 65 | 70 | 67 | 67 | 64 | 77  |
| 1.5  | 80 | 77 | 74 | 72 | 76 | 73 | 73 | 70 | 84  |
| 2.0  | 83 | 81 | 79 | 77 | 79 | 78 | 77 | 74 | 89  |
| 2.5  | 85 | 83 | 81 | 80 | 82 | 80 | 79 | 77 | 92  |
| 3.0  | 86 | 85 | 83 | 82 | 83 | 82 | 81 | 79 | 95  |
| 4.0  | 87 | 86 | 85 | 84 | 85 | 84 | 83 | 80 | 97  |
| 5.0  | 88 | 87 | 86 | 86 | 85 | 85 | 83 | 81 | 98  |

# Luminance curve limit



# UGR diagram

| Corrected UGR values (at 3400 lm bare lamp luminous flux)             |      |                     |      |      |      |      |                   |      |      |      |      |
|---|------|---------------------|------|------|------|------|-------------------|------|------|------|------|
| Reflect.:<br>ceiling/cav<br>walls<br>work pl.<br>Room dim<br>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<br>crosswise |      |      |      |      | viewed<br>endwise |      |      |      |      |
| 2H  | 2H   | 17.3                | 18.0 | 17.6 | 18.2 | 18.5 | 17.3              | 18.0 | 17.6 | 18.2 | 18.5 |
|   | 3H   | 17.3                | 17.9 | 17.6 | 18.2 | 18.4 | 17.2              | 17.8 | 17.5 | 18.1 | 18.4 |
|   | 4H   | 17.3                | 17.9 | 17.6 | 18.1 | 18.5 | 17.2              | 17.7 | 17.5 | 18.0 | 18.3 |
|   | 6H   | 17.3                | 17.8 | 17.6 | 18.1 | 18.5 | 17.1              | 17.6 | 17.4 | 17.9 | 18.3 |
|   | 8H   | 17.3                | 17.8 | 17.6 | 18.1 | 18.5 | 17.1              | 17.6 | 17.4 | 17.9 | 18.2 |
|   | 12H  | 17.3                | 17.8 | 17.7 | 18.1 | 18.5 | 17.0              | 17.5 | 17.4 | 17.9 | 18.2 |
| 4H  | 2H   | 17.2                | 17.7 | 17.5 | 18.0 | 18.3 | 17.3              | 17.9 | 17.6 | 18.1 | 18.5 |
|   | 3H   | 17.2                | 17.7 | 17.5 | 18.0 | 18.4 | 17.2              | 17.7 | 17.6 | 18.1 | 18.4 |
|   | 4H   | 17.2                | 17.6 | 17.6 | 18.0 | 18.4 | 17.2              | 17.6 | 17.6 | 18.0 | 18.4 |
|   | 6H   | 17.3                | 17.6 | 17.7 | 18.0 | 18.5 | 17.2              | 17.6 | 17.6 | 17.9 | 18.4 |
|   | 8H   | 17.3                | 17.6 | 17.7 | 18.1 | 18.5 | 17.1              | 17.5 | 17.6 | 17.9 | 18.3 |
|   | 12H  | 17.3                | 17.6 | 17.8 | 18.1 | 18.5 | 17.1              | 17.4 | 17.6 | 17.9 | 18.3 |
| 8H  | 4H   | 17.1                | 17.5 | 17.6 | 17.9 | 18.3 | 17.3              | 17.6 | 17.7 | 18.1 | 18.5 |
|   | 6H   | 17.3                | 17.5 | 17.7 | 18.0 | 18.5 | 17.3              | 17.6 | 17.8 | 18.0 | 18.5 |
|   | 8H   | 17.3                | 17.6 | 17.8 | 18.0 | 18.5 | 17.3              | 17.6 | 17.8 | 18.0 | 18.5 |
|   | 12H  | 17.4                | 17.6 | 17.9 | 18.1 | 18.6 | 17.3              | 17.5 | 17.8 | 18.0 | 18.5 |
| 12H   | 4H   | 17.1                | 17.4 | 17.6 | 17.9 | 18.3 | 17.3              | 17.6 | 17.8 | 18.1 | 18.5 |
|   | 6H   | 17.2                | 17.5 | 17.7 | 17.9 | 18.4 | 17.3              | 17.6 | 17.8 | 18.1 | 18.6 |
|   | 8H   | 17.3                | 17.5 | 17.8 | 18.0 | 18.5 | 17.4              | 17.6 | 17.9 | 18.1 | 18.6 |
| Variations with the observer position at spacing:                     |      |                     |      |      |      |      |                   |      |      |      |      |
| S =   | 1.0H | 3.1 / -3.7          |      |      |      |      | 3.1 / -3.7        |      |      |      |      |
|   | 1.5H | 5.5 / -4.8          |      |      |      |      | 5.5 / -4.8        |      |      |      |      |
|   | 2.0H | 7.4 / -5.0          |      |      |      |      | 7.4 / -5.0        |      |      |      |      |