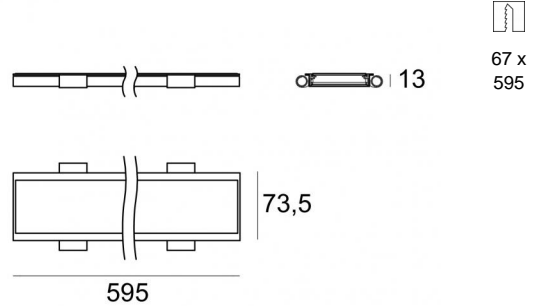




Systems - Lines | 156 topLED 12 W DC 24 V
Modular | CRI 90
65438N



Technical data	
Type	--- Frame
Installation position	Ceiling
Installation environment	Indoor
Light Source	LED
Circuit structure	topLED
Light emission direction	downward
Nominal power	12 W DC
Source lumens	1573 lm
Input voltage range	24V
CCT / Tone	4000 K
Colour rendering index	90 Ra
C.C. / C.V.	CV
Safety class	3
IP	IP40
Optical compartment IP	IP54
Glow wire test	850°
Direct mounting on normally flammable surfaces	Yes
CE	Yes
Driver included	No
Dimmable article	DALI - 1-10V
Directional	No
Tilting	No
Walk-over	No
Drive-over	No
Cable included	No
Resin potting	No
Type of light emission	Single emission
Net weight	0.43 Kg
Modularity	Modular
Electrostatic discharge protection	No
Surge protection	No
Optics technology	Dot free

Finishing casing

Material	Aluminium 6060
Colour	White
Processing	Powder coating

Electronics

	99331 On/Off Driver 198~264V AC / 176~275V DC 150 W (1 art.)
	99332 1-10V Controller (1 - 12 art.)
	99374 On/Off Driver 198~264V AC / 176~275V DC 75 W (1 - 6 art.)
	83333 Push and Simply Dim - DALI-2 Controller (1 - 12 art.)
	C-E400002 Push and Simply Dim - DALI-2 Controller (1 - 20 art.)



Systems - Lines | 156 topLED 12 W DC 24 V | Modular | CRI 90 | + 62461
65438N

Single emission systems, lines or lines for indoor application. The natural white LED light source is composed of 156 topLEDs with CCT of 4000 K and a CRI 90; the source luminous flux is 1573 lm, with a 131.1 lm/W nominal luminous efficacy.

The device body is made of aluminium 6060 and features a white finish, processed by means of powder coating. The ingress protection degree is IP40; the total weight is of 0.43 kg. The power supply driver is not provided and is to be ordered separately.

The total absorbed power is 12 W.

The device features protection class III and can be ceiling-mounted, with a 67 x 595 mm hole (in plasterboard).

Compliant with the EN 60598-1 standard and its specific provisions.

Energy efficiency class

This product contains 2.4 light sources of energy efficiency class E.

Illuminotechnical Features

Light Output Ratio (LOR)	43 %
Source lumens	1573 lm
Delivered lumens	680 lm
Consumption	12 W
Luminaire efficacy	56 lm/W
Colour temperature	4000 K
Standard Deviation of Colour Matching	3 Step MacAdam
Colour rendering index	90 Ra
Standard Operating Ambient Temperature	-20 / +50°C
Ordinary temperature on the glass	40°C

LED Life / Failure Ratio

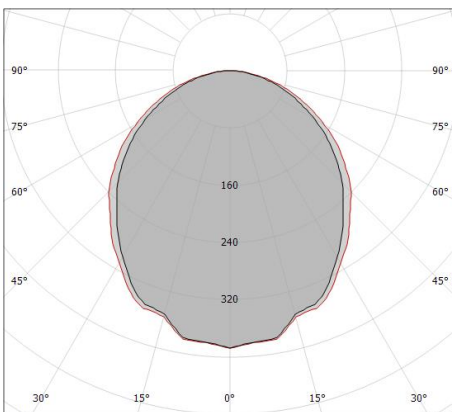
L70 B10 C0 145770h (at Tj 65 Ta 25)

UGR

UGR axial	22.2
UGR transversal	22.8
X=4H Y=8H	S=0.25H
Reflection factor	70/50/20

OPTICAL

C90/C270 optics	100°
C0/C180 optics	106°
Light distribution symmetry	Symmetrical 2 axis



Distance [m]	Cone diameter [m]	illuminance [lx]
0.5	1.19 1.33	E(0°) 1055 E(C90) 141 E(C0) 114
1.0	2.38 2.66	E(0°) 264 E(C90) 35 E(C0) 29
1.5	3.56 4.00	E(0°) 117 E(C90) 16 E(C0) 13
2.0	4.75 5.33	E(0°) 66 E(C90) 9 E(C0) 7
2.5	5.94 6.66	E(0°) 42 E(C90) 6 E(C0) 5
3.0	7.13 7.99	E(0°) 29 E(C90) 4 E(C0) 3

— C0/C180 (Half-peak divergence: 106.2°)
 - - C90/C270 (Half-peak divergence: 99.8°)

Systems - Lines | 156 topLED 12 W DC 24 V | Modular | CRI 90 | + 62464

65438N

Single emission systems, lines or lines for indoor application. The natural white LED light source is composed of 156 topLEDs with CCT of 4000 K and a CRI 90; the source luminous flux is 1573 lm, with a 131.1 lm/W nominal luminous efficacy.

The device body is made of aluminium 6060 and features a white finish, processed by means of powder coating. The ingress protection degree is IP40; the total weight is of 0.43 kg. The power supply driver is not provided and is to be ordered separately.

The total absorbed power is 12 W.

The device features protection class III and can be ceiling-mounted, with a 67 x 595 mm hole (in plasterboard).

Compliant with the EN 60598-1 standard and its specific provisions.

Energy efficiency class

This product contains 2.4 light sources of energy efficiency class E.

Illuminotechnical Features

Light Output Ratio (LOR)	35 %
Source lumens	1573 lm
Delivered lumens	556 lm
Consumption	12 W
Luminaire efficacy	46 lm/W
Colour temperature	4000 K
Standard Deviation of Colour Matching	3 Step MacAdam
Colour rendering index	90 Ra
Standard Operating Ambient Temperature	-20 / +50°C
Ordinary temperature on the glass	40°C

LED Life / Failure Ratio

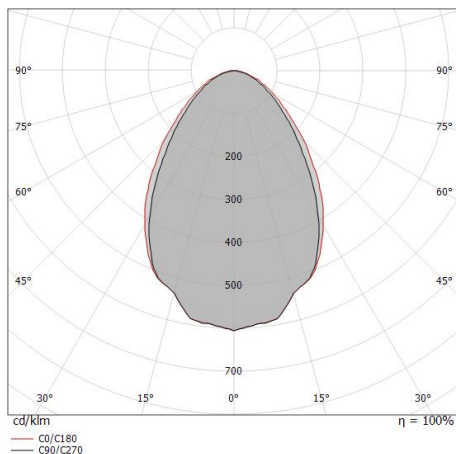
L70 B10 C0 145770h (at Tj 65 Ta 25)

UGR

UGR axial	17.7
UGR transversal	18.5
X=4H Y=8H	S=0.25H
Reflection factor	70/50/20

OPTICAL

C90/C270 optics	72°
C0/C180 optics	78°
Light distribution symmetry	Symmetrical 2 axis



Distance [m]	Cone diameter [m]	Illuminance [lx]	E(0°)	E(C90)	E(C0)
0.5	0.73 0.81	1344 355 317	36.1°	38.9°	317
1.0	1.46 1.61	336 89 79	36.1°	38.9°	79
1.5	2.19 2.42	149 39 35	36.1°	38.9°	35
2.0	2.92 3.23	84 22 20	36.1°	38.9°	20
2.5	3.65 4.03	54 14 13	36.1°	38.9°	13
3.0	4.38 4.84	37 10 9	36.1°	38.9°	9

Distance [m] Cone diameter [m] Illuminance [lx]

— C0/C180 (Half-peak divergence: 77.8°)
— C90/C270 (Half-peak divergence: 72.2°)

Systems - Lines | 156 topLED 12 W DC 24 V | Modular | CRI 90 | + 83356

65438N

Single emission systems, lines or lines for indoor application. The natural white LED light source is composed of 156 topLEDs with CCT of 4000 K and a CRI 90; the source luminous flux is 1573 lm, with a 131.1 lm/W nominal luminous efficacy.

The device body is made of aluminium 6060 and features a white finish, processed by means of powder coating. The ingress protection degree is IP40; the total weight is of 0.43 kg. The power supply driver is not provided and is to be ordered separately.

The total absorbed power is 12 W.

The device features protection class III and can be ceiling-mounted, with a 67 x 595 mm hole (in plasterboard).

Compliant with the EN 60598-1 standard and its specific provisions.

Energy efficiency class

This product contains 2.4 light sources of energy efficiency class E.

Illuminotechnical Features

Light Output Ratio (LOR)	46 %
Source lumens	1573 lm
Delivered lumens	725 lm
Consumption	12 W
Luminaire efficacy	60 lm/W
Colour temperature	4000 K
Standard Deviation of Colour Matching	3 Step MacAdam
Colour rendering index	90 Ra
Standard Operating Ambient Temperature	-20 / +50°C
Ordinary temperature on the glass	40°C

LED Life / Failure Ratio

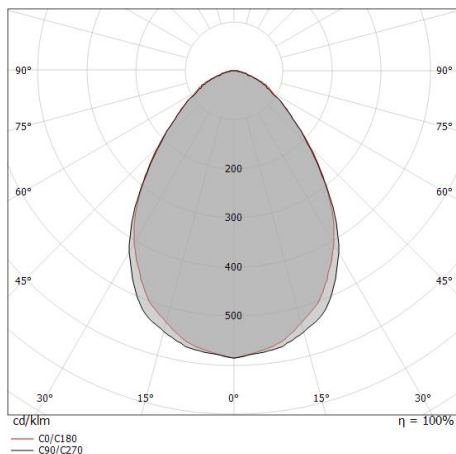
L70 B10 C0 145770h (at Tj 65 Ta 25)

UGR

UGR axial	18.4
UGR transversal	18.7
X=4H Y=8H	S=0.25H
Reflection factor	70/50/20

OPTICAL

C0/C180 optics	78°
Light distribution simmetry	Symmetrical



Distance [m]	Cone diameter [m]	Illuminance [lx]
0.5	0.82 0.81	E(0°) 1700 E(C90) 39.2° 396 E(C0) 39.1° 398
1.0	1.63 1.63	E(0°) 425 E(C90) 39.2° 99 E(C0) 39.1° 100
1.5	2.45 2.44	E(0°) 189 E(C90) 39.2° 44 E(C0) 39.1° 44
2.0	3.26 3.25	E(0°) 106 E(C90) 39.2° 25 E(C0) 39.1° 25
2.5	4.08 4.06	E(0°) 68 E(C90) 39.2° 16 E(C0) 39.1° 16
3.0	4.89 4.88	E(0°) 47 E(C90) 39.2° 11 E(C0) 39.1° 11

— C0/C180 (Half-peak divergence: 78.2°)
— C90/C270 (Half-peak divergence: 78.4°)

Systems - Lines | 156 topLED 12 W DC 24 V | Modular | CRI 90 | + 83407

65438N

Single emission systems, lines or lines for indoor application. The natural white LED light source is composed of 156 topLED LEDs with CCT of 4000 K and a CRI 90; the source luminous flux is 1573 lm, with a 131.1 lm/W nominal luminous efficacy.

The device body is made of aluminium 6060 and features a white finish, processed by means of powder coating. The ingress protection degree is IP40; the total weight is of 0.43 kg. The power supply driver is not provided and is to be ordered separately.

The total absorbed power is 12 W.

The device features protection class III and can be ceiling-mounted, with a 67 x 595 mm hole (in plasterboard).

Compliant with the EN 60598-1 standard and its specific provisions.

Energy efficiency class

This product contains 2.4 light sources of energy efficiency class E.

Illuminotechnical Features

Light Output Ratio (LOR)	52 %
Source lumens	1573 lm
Delivered lumens	818 lm
Consumption	12 W
Luminaire efficacy	68 lm/W
Colour temperature	4000 K
Standard Deviation of Colour Matching	3 Step MacAdam
Colour rendering index	90 Ra
Standard Operating Ambient Temperature	-20 / +50°C
Ordinary temperature on the glass	40°C

LED Life / Failure Ratio

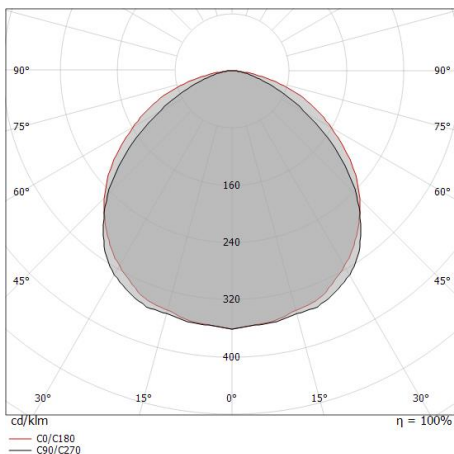
L70 B10 C0 145770h (at Tj 65 Ta 25)

UGR

UGR axial	21.1
UGR transversal	23.3
X=4H Y=8H	S=0.25H
Reflection factor	70/50/20

OPTICAL

C90/C270 optics	106°
C0/C180 optics	114°
Light distribution symmetry	Symmetrical 2 axis



Distance [m]	Cone diameter [m]	E(0°)	E(C90)	E(C0)
0.5	1.33 1.53	1181	53.0° 129	56.8° 97
1.0	2.65 3.06	295	53.0° 32	56.8° 24
1.5	3.98 4.58	131	53.0° 14	56.8° 11
2.0	5.31 6.11	74	53.0° 8	56.8° 6
2.5	6.64 7.64	47	53.0° 5	56.8° 4
3.0	7.96 9.17	33	53.0° 4	56.8° 3

Distance [m] Cone diameter [m] Illuminance [lx]

— C0/C180 (Half-peak divergence: 113.6°)
- - C90/C270 (Half-peak divergence: 106.0°)



		<p>Closing cap - Quartz glass Material: Die-cast Aluminium EN AB - 46100, colour: White, processing: Powder coating.</p>	<p>Code <u>62460</u></p>
		<p>Diffuser Diffuser Type: diffusore satinato anti glare - all white. Material: UV Resistant Polymethylmethacrylate, processing: Satin finishing.</p>	<p>Code <u>83356</u></p>
		<p>Diffuser Diffuser Type: diffusore satinato anti glare - all white. Material: UV Resistant Polymethylmethacrylate, processing: Satin finishing.</p>	<p>Code <u>83357</u></p>
		<p>Diffuser Diffuser Type: diffusore satinato - all white. Material: UV Resistant Polymethylmethacrylate, processing: Satin finishing.</p>	<p>Code <u>83407</u></p>
		<p>Diffuser Diffuser Type: diffusore satinato - all white. Material: UV Resistant Polymethylmethacrylate, processing: Satin finishing.</p>	<p>Code <u>83408</u></p>
		<p>Diffuser Diffuser Type: diffusore satinato - all white. Material: UV Resistant Polymethylmethacrylate, processing: Satin finishing.</p>	<p>Code <u>83409</u></p>