Palco Low Voltage

Design Artec3 Studio **iGuzzini**

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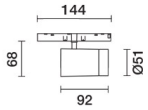
Palco LV spotlight Ø 51 - flood beam

Product code
Q638

Technical description
Miniaturised adjustable spotlight with adapter for installation on 48V low voltage track. Made of die-cast aluminium with passive dissipation system. The adapter made of a thermoplastic material includes the DC/DC driver circuit with a DALI dimmable function. Integrated «power line» technology allows each spotlight mounted on the track to be regulated separately. The swivel joints allow the spotlight to be rotated by 360° and tilted by 90°. The set back position of the optic unit guarantees a high level of visual comfort. Thermoplastic high definition lens with extra filter for variable optic. A rapid tool-free system for connecting the adapter electrically and mechanically to the track.

Installation
Mechanical fastening with adapter on track.



Dimension (mm)
Ø51

Colour
White (01) | Black (04)

Weight (Kg)
0.28

Mounting
Low voltage track

Wiring
Integrated DC/DC LED driver in adapter - direct connection on 48V track. Track power supply unit to be ordered separately.

Notes
Technical and anti-glare accessories available.

Complies with EN60598-1 and pertinent regulations

IP20

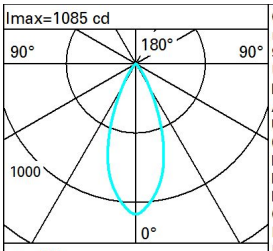
Product configuration: Q638

Product characteristics
Total lighting output [Lm]: 550.8
Total power [W]: 13.9
Luminous efficacy [Lm/W]: 39.6
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.) [%]: 68
Lamp code: LED
ZVEI Code: LED
Nominal power [W]: 12
Nominal luminous [Lm]: 810
Lamp maximum intensity [cd]: /
Beam angle [°]: 42°
Number of lamps for optical assembly: 1
Socket: /
Ballast losses [W]: 1.9
Colour temperature [K]: 3000
CRI: 90
Wavelength [Nm]: /
MacAdam Step: 3

Polar

Imax=1085 cd



α = 42°

CIE
nL 0.68
97-100-100-100-68
UGR 16.4-16.4
DIN
A.61
UTE
0.68A+0.00T
F"1=972
F"1+F"2=999
F"1+F"2+F"3=1000
CIBSE
LG3 L<1500 cd/m² at 65°
BZ1

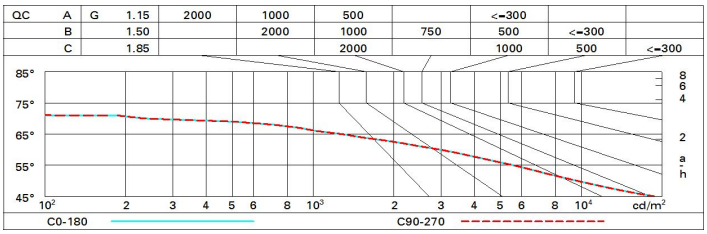
Lux

h	d	Em	Emax
1	0.8	814	1085
2	1.5	203	271
3	2.3	90	121
4	3.1	51	68

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	61	57	55	53	57	55	54	52	76
1.0	63	60	58	57	60	58	57	55	81
1.5	67	65	63	61	64	62	62	59	87
2.0	69	67	66	65	66	65	64	63	92
2.5	70	69	68	67	68	67	66	65	95
3.0	71	70	70	69	69	69	68	66	97
4.0	72	71	71	70	70	70	69	67	99
5.0	72	72	72	71	71	71	69	68	100

Luminance curve limit



UGR diagram

Corrected UGR values (at 810 lm bare lamp luminous flux)

Riflect.:											
ceil/cav		0.70	0.70	0.50	0.50	0.30	0.70	0.70	0.50	0.50	0.30
walls		0.50	0.30	0.50	0.30	0.30	0.50	0.30	0.50	0.30	0.30
work pl.		0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Room dim				viewed					viewed		
x	y			crosswise					endwise		
2H	2H	17.0	17.7	17.3	17.9	18.1	17.0	17.7	17.3	17.9	18.1
	3H	16.9	17.5	17.2	17.7	18.0	16.9	17.5	17.2	17.7	18.0
	4H	16.8	17.3	17.1	17.6	17.9	16.8	17.4	17.2	17.6	17.9
	6H	16.7	17.2	17.1	17.5	17.9	16.7	17.2	17.1	17.5	17.9
	8H	16.7	17.2	17.1	17.5	17.8	16.7	17.2	17.1	17.5	17.8
	12H	16.7	17.1	17.0	17.4	17.8	16.7	17.1	17.0	17.5	17.8
4H	2H	16.8	17.4	17.2	17.6	17.9	16.8	17.3	17.1	17.6	17.9
	3H	16.7	17.1	17.0	17.5	17.8	16.7	17.1	17.0	17.5	17.8
	4H	16.6	17.0	17.0	17.3	17.7	16.6	17.0	17.0	17.3	17.7
	6H	16.5	16.8	16.9	17.2	17.7	16.5	16.8	16.9	17.2	17.7
	8H	16.4	16.8	16.9	17.2	17.6	16.4	16.8	16.9	17.2	17.6
	12H	16.4	16.7	16.9	17.1	17.6	16.4	16.7	16.9	17.1	17.6
8H	4H	16.4	16.8	16.9	17.2	17.6	16.4	16.8	16.9	17.2	17.6
	6H	16.4	16.6	16.8	17.1	17.5	16.4	16.6	16.8	17.1	17.5
	8H	16.3	16.5	16.8	17.0	17.5	16.3	16.5	16.8	17.0	17.5
	12H	16.2	16.4	16.8	16.9	17.4	16.2	16.4	16.8	16.9	17.4
12H	4H	16.4	16.7	16.9	17.1	17.6	16.4	16.7	16.9	17.1	17.6
	6H	16.3	16.5	16.8	17.0	17.5	16.3	16.5	16.8	17.0	17.5
	8H	16.2	16.4	16.8	16.9	17.4	16.2	16.4	16.8	16.9	17.4

Variations with the observer position at spacing:

S =	1.0H	4.9 / -10.3	4.9 / -10.3
	1.5H	7.7 / -15.5	7.7 / -15.5
	2.0H	9.7 / -21.8	9.7 / -21.8