

Last information update: May 2018

**spotlight - warm white 50° optic****Product code**
P041**Technical description**

Adjustable spotlight with adapter for installation on a mains voltage track. Die-cast aluminium optical assembly and brackets, the back of the product is slightly rounded and made of a thermoplastic material. Spotlight double adjustability allows a 360° rotation about the vertical axis and 90° tilting relative to the horizontal plane. Mechanical aiming locks both for rotation about the vertical axis and tilting relative to the horizontal plane. Equipped with electronic ballast. Luminaire complete with C.O.B. technology LED unit in warm white colour 3000K CRI90. Option of installing a flat accessory that can be either an elliptical distribution refractor, a soft lens filter or a louver.

Installation

on an electrified track or special base

Dimension (mm)
Ø92x185**Colour**
White (01) | Black (04) | White/Chrome (E4)**Weight (Kg)**
0.95**Mounting**
three circuit track**Wiring**
product complete with electronic components

Complies with EN60598-1 and pertinent regulations

IP20 IP40 for optical assembly

**Product configuration: P041****Product characteristics**

Total lighting output [Lm]: 1420.7
Total power [W]: 15.4
Luminous efficacy [Lm/W]: 92.3
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.) [%]: 79
Lamp code: LED
ZVEI Code: LED
Nominal power [W]: 13
Nominal luminous [Lm]: 1800
Lamp maximum intensity [cd]: /
Beam angle [°]: 56°

Number of lamps for optical assembly: 1
Socket: /
Ballast losses [W]: 2.4
Colour temperature [K]: 3000
CRI: 90
Wavelength [Nm]: /
MacAdam Step: 2

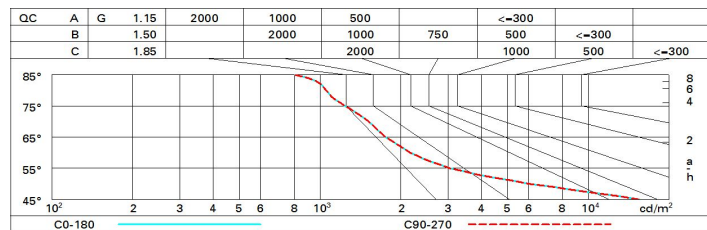
Polar

Imax=1826 cd		CIE		Lux			
		nL 0.79		h	d	Em	Emax
		98-100-100-100-79		2	2.1	362	453
		UGR 17.1-17.1		4	4.3	91	113
		DIN A.61		6	6.4	40	50
		UTE 0.79A+0.00T		8	8.5	23	28
		F*1=975					
		F*1+F*2=997					
		F*1+F*2+F*3=1000					
		CIBSE B21					

Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	70	67	64	62	66	63	63	61	77
1.0	74	70	68	66	69	67	67	64	81
1.5	78	75	73	71	74	72	72	69	88
2.0	80	78	77	75	77	76	75	73	92
2.5	82	80	79	78	79	78	77	75	95
3.0	83	82	81	80	80	80	79	77	97
4.0	84	83	82	82	82	81	80	78	99
5.0	84	84	83	83	82	82	81	79	100

Luminance curve limit



UGR diagram

Corrected UGR values (at 1800 lm bare lamp luminous flux)											
Reflect.:		viewed crosswise					viewed endwise				
ceiling/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 crosswise					viewed endwise				
x	y										
2H	2H	17.6	18.2	17.9	18.4	18.7	17.6	18.2	17.9	18.4	18.7
	3H	17.5	18.0	17.8	18.3	18.6	17.5	18.0	17.8	18.3	18.6
	4H	17.4	17.9	17.7	18.2	18.5	17.4	17.9	17.7	18.2	18.5
	6H	17.3	17.8	17.7	18.1	18.5	17.3	17.8	17.7	18.1	18.4
	8H	17.3	17.8	17.7	18.1	18.4	17.3	17.7	17.7	18.1	18.4
	12H	17.3	17.7	17.6	18.0	18.4	17.3	17.7	17.6	18.0	18.4
4H	2H	17.4	17.9	17.7	18.2	18.5	17.4	17.9	17.7	18.2	18.5
	3H	17.3	17.7	17.6	18.0	18.4	17.3	17.7	17.7	18.0	18.4
	4H	17.2	17.6	17.6	17.9	18.3	17.2	17.6	17.6	17.9	18.3
	6H	17.1	17.4	17.5	17.8	18.3	17.1	17.4	17.5	17.8	18.3
	8H	17.1	17.4	17.5	17.8	18.2	17.1	17.4	17.5	17.8	18.2
	12H	17.0	17.3	17.5	17.7	18.2	17.0	17.3	17.5	17.7	18.2
8H	4H	17.1	17.4	17.5	17.8	18.2	17.1	17.4	17.5	17.8	18.2
	6H	17.0	17.2	17.5	17.7	18.2	17.0	17.2	17.5	17.7	18.2
	8H	16.9	17.1	17.4	17.6	18.1	16.9	17.1	17.4	17.6	18.1
	12H	16.9	17.1	17.4	17.6	18.1	16.9	17.1	17.4	17.6	18.1
12H	4H	17.0	17.3	17.5	17.7	18.2	17.0	17.3	17.5	17.7	18.2
	6H	16.9	17.1	17.4	17.6	18.1	16.9	17.1	17.4	17.6	18.1
	8H	16.9	17.1	17.4	17.6	18.1	16.9	17.1	17.4	17.6	18.1
Variations with the observer position at spacing:											
S =		1.0H	5.6 / -11.9				5.6 / -11.9				
		1.5H	8.4 / -13.1				8.4 / -13.1				
		2.0H	10.4 / -13.6				10.4 / -13.6				