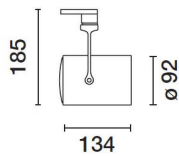


Last information update: May 2018

**spotlight- warm white - 50° optic****Product code**  
P038**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. 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: P038****Product characteristics**

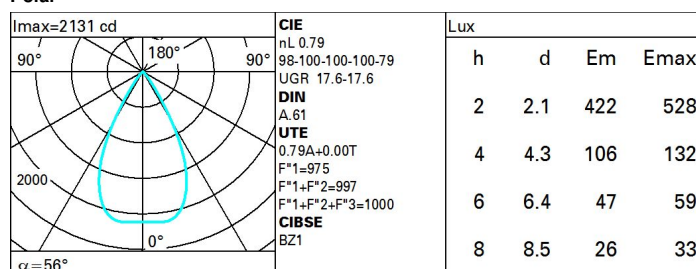
Total lighting output [Lm]: 1657.5  
Total power [W]: 15.4  
Luminous efficacy [Lm/W]: 107.7  
Life Time: > 50,000h - L80 - B10 (Ta 25°C)

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.) [%]: 79  
Lamp code: LED  
ZVEI Code: LED  
Nominal power [W]: 13  
Nominal luminous [Lm]: 2100  
Lamp maximum intensity [cd]: /  
Beam angle [°]: 56°

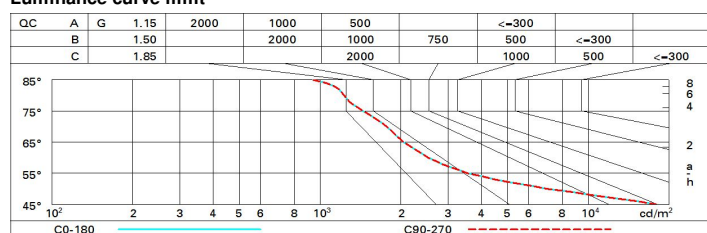
Number of lamps for optical assembly: 1  
Socket: /  
Ballast losses [W]: 2.4  
Colour temperature [K]: 3000  
CRI: 80  
Wavelength [nm]: /  
MacAdam Step: 2

**Polar**

# 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 2100 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	18.1	18.8	18.4	19.0	19.2	18.1	18.8	18.4	19.0	19.2
	3H	18.0	18.6	18.3	18.8	19.1	18.0	18.6	18.3	18.8	19.1
	4H	18.0	18.5	18.3	18.8	19.1	17.9	18.5	18.3	18.7	19.0
	6H	17.9	18.3	18.2	18.7	19.0	17.9	18.3	18.2	18.6	19.0
	8H	17.8	18.3	18.2	18.6	19.0	17.8	18.3	18.2	18.6	18.9
	12H	17.8	18.2	18.2	18.6	18.9	17.8	18.2	18.2	18.6	18.9
4H	2H	17.9	18.5	18.3	18.7	19.0	18.0	18.5	18.3	18.8	19.1
	3H	17.8	18.2	18.2	18.6	18.9	17.8	18.2	18.2	18.6	18.9
	4H	17.7	18.1	18.1	18.5	18.9	17.7	18.1	18.1	18.5	18.9
	6H	17.6	18.0	18.1	18.4	18.8	17.6	18.0	18.1	18.4	18.8
	8H	17.6	17.9	18.0	18.3	18.8	17.6	17.9	18.0	18.3	18.8
	12H	17.6	17.8	18.0	18.3	18.7	17.6	17.8	18.0	18.3	18.7
8H	4H	17.6	17.9	18.0	18.3	18.8	17.6	17.9	18.0	18.3	18.8
	6H	17.5	17.8	18.0	18.2	18.7	17.5	17.8	18.0	18.2	18.7
	8H	17.5	17.7	18.0	18.1	18.6	17.5	17.7	18.0	18.1	18.6
	12H	17.4	17.6	17.9	18.1	18.6	17.4	17.6	17.9	18.1	18.6
12H	4H	17.6	17.8	18.0	18.3	18.7	17.6	17.8	18.0	18.3	18.7
	6H	17.5	17.7	17.9	18.1	18.6	17.5	17.7	18.0	18.1	18.6
	8H	17.4	17.6	17.9	18.1	18.6	17.4	17.6	17.9	18.1	18.6
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				