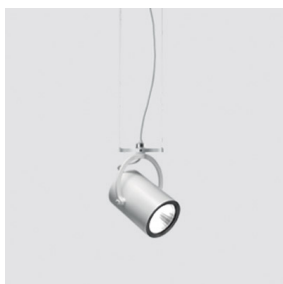# 4ward

Last information update: May 2018

spotlight- warm white - 26° optic

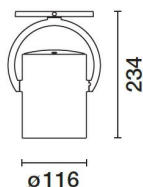**Product code**
P073

Technical description
Pendant luminaire equipped with a three-phase adapter for electrified tracks or a base, made of die-cast aluminium and thermoplastic material. The pendant system consists of steel cables L=2000 that provide a simple mechanical anchoring system. Having been rotated and tilted, the luminaire can be locked mechanically in position to ensure efficient light aiming (during maintenance operations too). 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 eliptical distribution refractor, a soft lens filter or a louver.

Installation
pendant on an electrified track or special base

Dimension (mm)
Ø116x234

Colour
White (01) | Black (04) | White/Chrome (E4)

Weight (Kg)
1.7

Mounting
three circuit track

Wiring
product complete with electronic components

Complies with EN60598-1 and pertinent regulations

IP20 IP40 for optical assembly

Product configuration: P073

Product characteristics

Total lighting output [Lm]: 2305	Total luminous flux at or above an angle of 90° [Lm]: 0
Total power [W]: 23.2	Emergency luminous flux [Lm]: /
Luminous efficacy [Lm/W]: 99.2	Voltage [V]: -
Life Time: > 50,000h - L80 - B10 (Ta 25°C)	Number of optical assemblies: 1

Optical assembly Characteristics Type 1

Light Output Ratio (L.O.R.) [%]: 77	Number of lamps for optical assembly: 1
Lamp code: LED	Socket: /
ZVEI Code: LED	Ballast losses [W]: 3.2
Nominal power [W]: 20	Colour temperature [K]: 3000
Nominal luminous [Lm]: 3000	CRI: 80
Lamp maximum intensity [cd]: /	Wavelength [Nm]: /
Beam angle [°]: 30°	MacAdam Step: 2

Polar

Imax=7031 cd			Lux			
			h	d	Em	Emax
			2	1.1	1312	1758
			4	2.1	328	439
7500			6	3.2	146	195
α=30°			8	4.3	82	110

Polar diagram: 90° — 180° — 90°, 0°

Isolux

Lux
h=5 m.
α=0°

LED / 23.2 W

166 67 9 1 0.5 0.2 0.1 0.1 0.0

-1 0 1 2 3 4 5 6 7 8 9 m
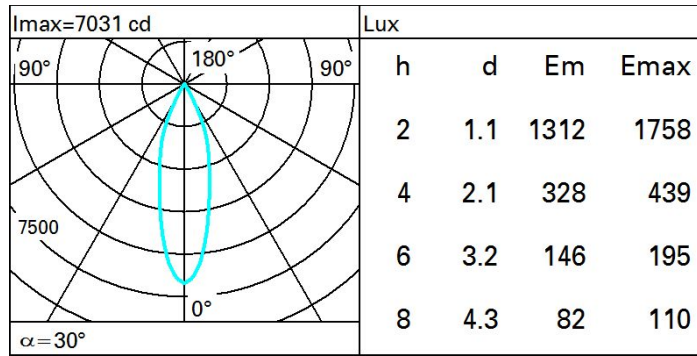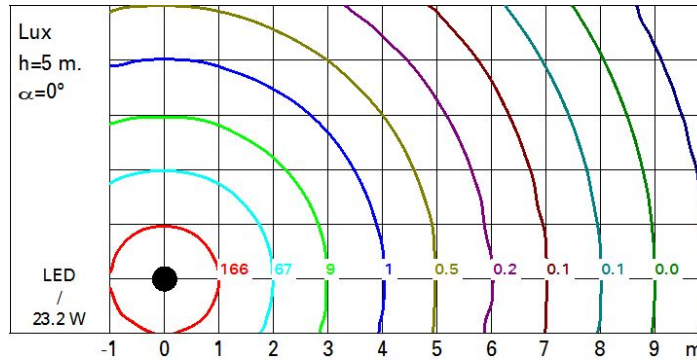
UGR diagram

Corrected UGR values (at 3000 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	10.4	11.0	10.7	11.2	11.5	10.4	11.0	10.7	11.2	11.5
	3H	10.5	11.0	10.8	11.2	11.5	10.4	10.9	10.7	11.2	11.4
	4H	10.5	10.9	10.8	11.2	11.5	10.3	10.8	10.7	11.1	11.4
	6H	10.4	10.9	10.8	11.2	11.5	10.3	10.7	10.6	11.0	11.4
	8H	10.4	10.9	10.8	11.2	11.5	10.2	10.7	10.6	11.0	11.3
	12H	10.4	10.8	10.8	11.2	11.5	10.2	10.6	10.6	11.0	11.3
4H	2H	10.3	10.8	10.7	11.1	11.4	10.5	10.9	10.8	11.2	11.5
	3H	10.4	10.8	10.8	11.2	11.5	10.5	10.9	10.8	11.2	11.6
	4H	10.4	10.8	10.8	11.2	11.5	10.4	10.8	10.8	11.2	11.5
	6H	10.5	10.8	10.9	11.2	11.6	10.4	10.7	10.8	11.1	11.5
	8H	10.5	10.7	10.9	11.2	11.6	10.4	10.7	10.8	11.1	11.5
	12H	10.4	10.7	10.9	11.1	11.6	10.3	10.6	10.8	11.0	11.5
8H	4H	10.4	10.7	10.8	11.1	11.5	10.5	10.7	10.9	11.2	11.6
	6H	10.4	10.7	10.9	11.1	11.6	10.5	10.7	10.9	11.1	11.6
	8H	10.4	10.6	10.9	11.1	11.6	10.4	10.6	10.9	11.1	11.6
	12H	10.5	10.6	11.0	11.1	11.6	10.4	10.6	10.9	11.1	11.6
12H	4H	10.3	10.6	10.8	11.0	11.5	10.4	10.7	10.9	11.1	11.6
	6H	10.4	10.6	10.9	11.1	11.6	10.5	10.7	10.9	11.1	11.6
	8H	10.4	10.6	10.9	11.1	11.6	10.5	10.6	11.0	11.1	11.6

Variations with the observer position at spacing:

S =	1.0H	4.2 / -3.7	4.2 / -3.7
	1.5H	6.8 / -4.6	6.8 / -4.6
	2.0H	8.7 / -5.1	8.7 / -5.1