

GL GONIOSPECTROMETER  
**Lighting Research & Measurement Center**

### Report Wizard Sample Description Lines

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Client name: *LED line®*  
Model name: *Panel LED line kwadrat Easy Fix 12W 850lm 2700K*  
Item No: *246791*  
Serial No.: *48312*  
Made by: *Radosław Kośnik*

### Eulumdat Fields

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Company: *LED line®*  
Report number: *B573*  
LuminaireName: *Panel LED line kwadrat Easy Fix 12W 850lm 2700K*  
LuminaireNumber: *246791*  
FileName: *B573\_246791\_48312\_G\_20190708\_R\_P*  
Date: *2019-07-08*

### Dimensions of luminaire

Length: *163 mm*  
Width: *163 mm*  
Height: *14 mm*

### Dimensions of luminous area

Length: *122 mm*  
Width: *122 mm*  
C0-plane *0 mm*  
C90-plane *0 mm*  
C180-plane *0 mm*  
C270-plane *0 mm*

**Lamps:**

Number of lamps: 1  
 Type of lamps: 0  
 Total luminous flux: 895,46 lm  
 Color temperatur: 2931.38 K  
 Color rendering index: 80,60  
 Wattage including ballast: 12,59 W

**Utilization factors:**

k = 0.60 0,281  
 k = 0.80 0,369  
 k = 1.00 0,446  
 k = 1.20 0,522  
 k = 1.50 0,581  
 k = 2.00 0,670  
 k = 2.50 0,720  
 k = 3.00 0,759  
 k = 4.00 0,811  
 k = 5.00 0,843

**Electrical parameters**

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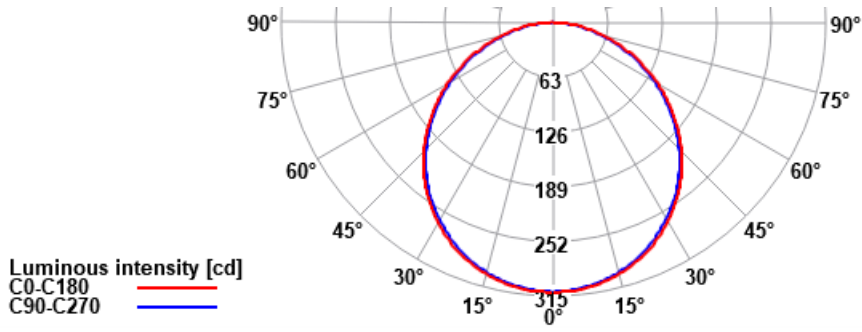
Power source: IT7321 300VA  
 U = 230,015 V  
 I = 0,108 A  
 P = 12,599 W  
 Power factor = 0,503

Temperature = 24.1 C

## Goniometric measurement results

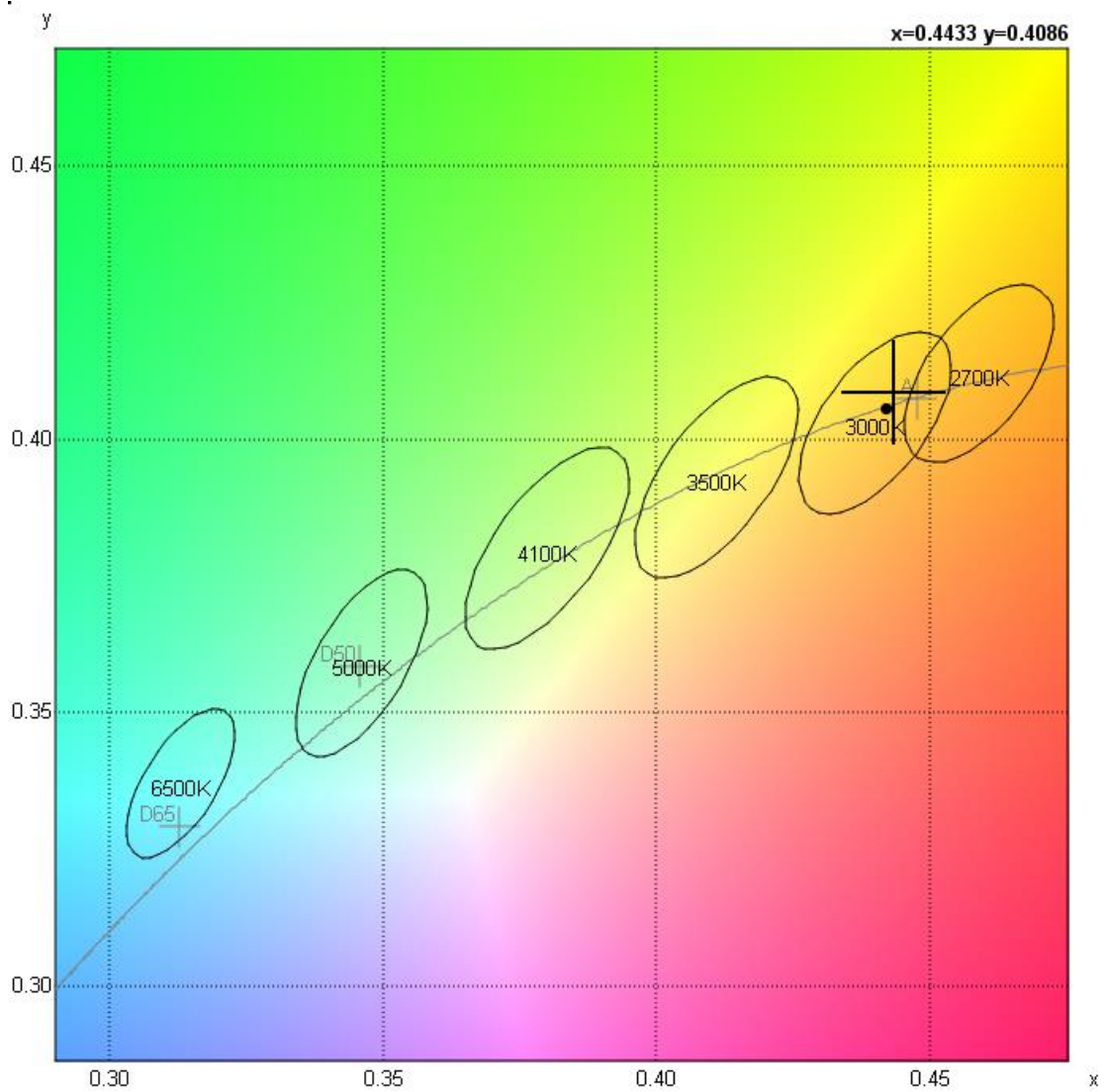
Total flux (utilized luminaire flux)	<i>895,46 lm</i>
Flux in lower hemisphere	<i>100,00 %</i>
Flux in upper hemisphere	<i>0,00 %</i>
Maximum luminous intensity	<i>312,29 cd</i>
Light output ratio (LOR)	<i>100,00 %</i>
Luminous efficacy	<i>71,12 lm/W</i>

**Light intensity distribution diagram**

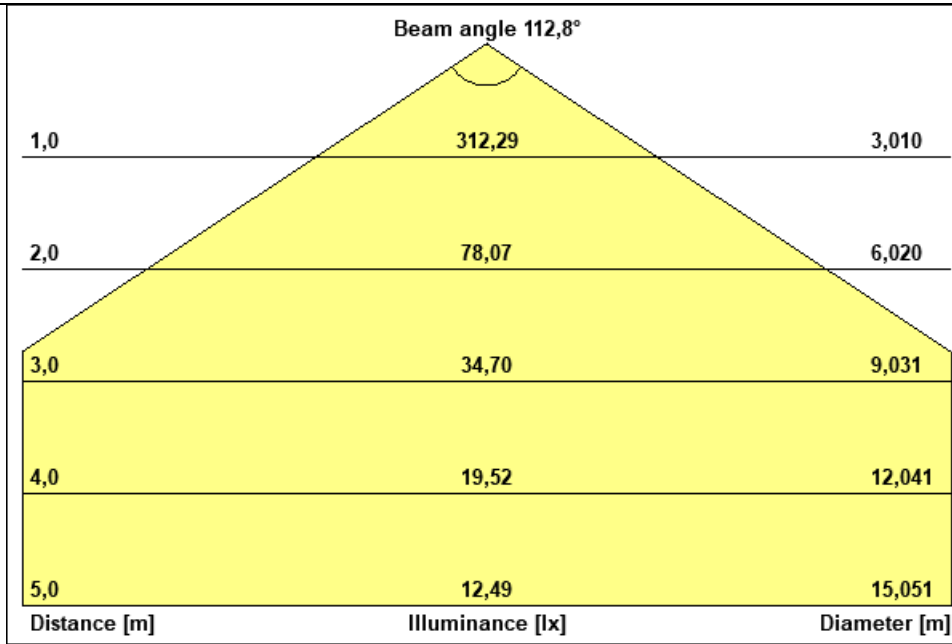


CIE 1931 diagram

x 0,4433  
 y 0,4086  
 Angular Colour Uniformity 0,0008  
 Binning 3000K



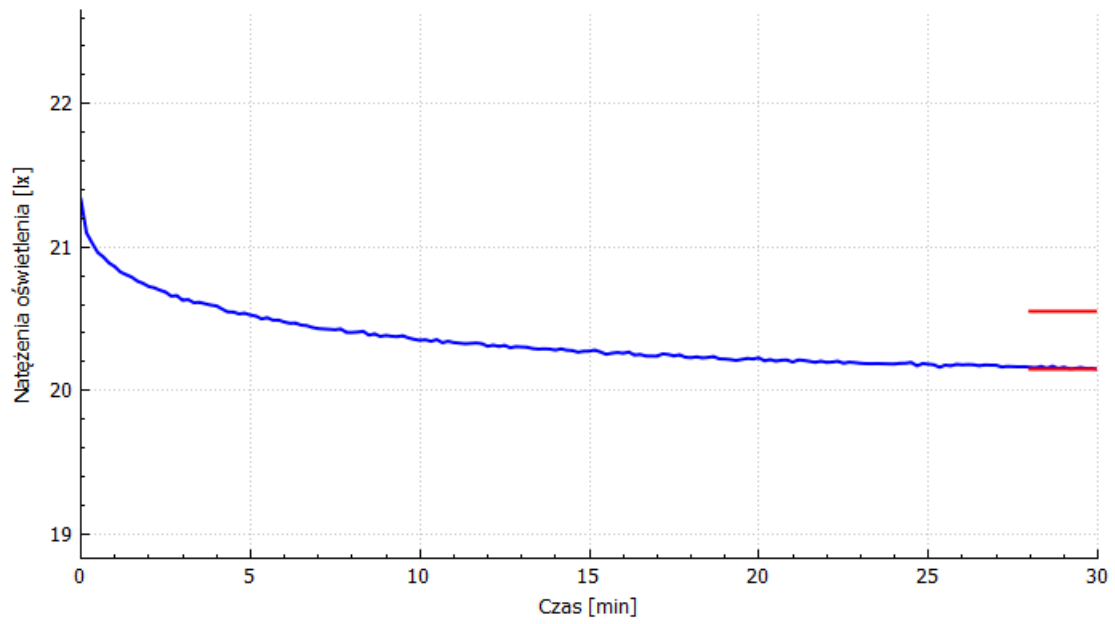
**Beam cone**



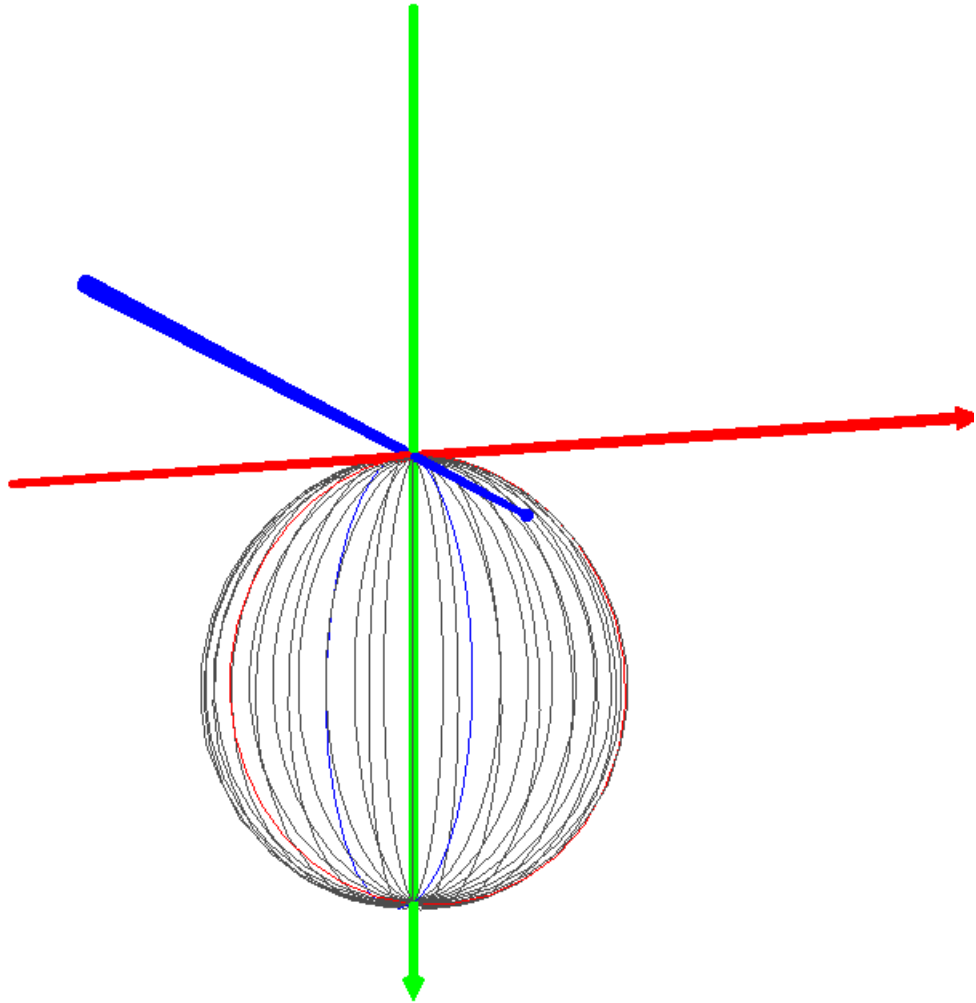
Distance [m]	Max illumince [lx]	Diameter [m]
1	312,2863	3,010
2	78,0716	6,020
3	34,6985	9,031
4	19,5179	12,041
5	12,4915	15,051

C plane	Beam angle	Gamma max	Start [°]	Stop [°]
Average	112,8°	5,0°	-56,4°	56,4°
0-180°	113,5°	5,0°	-56,7°	56,7°
90-270°	112,2°	5,0°	-56,1°	56,1°

## Stabilization



### 3D Chart

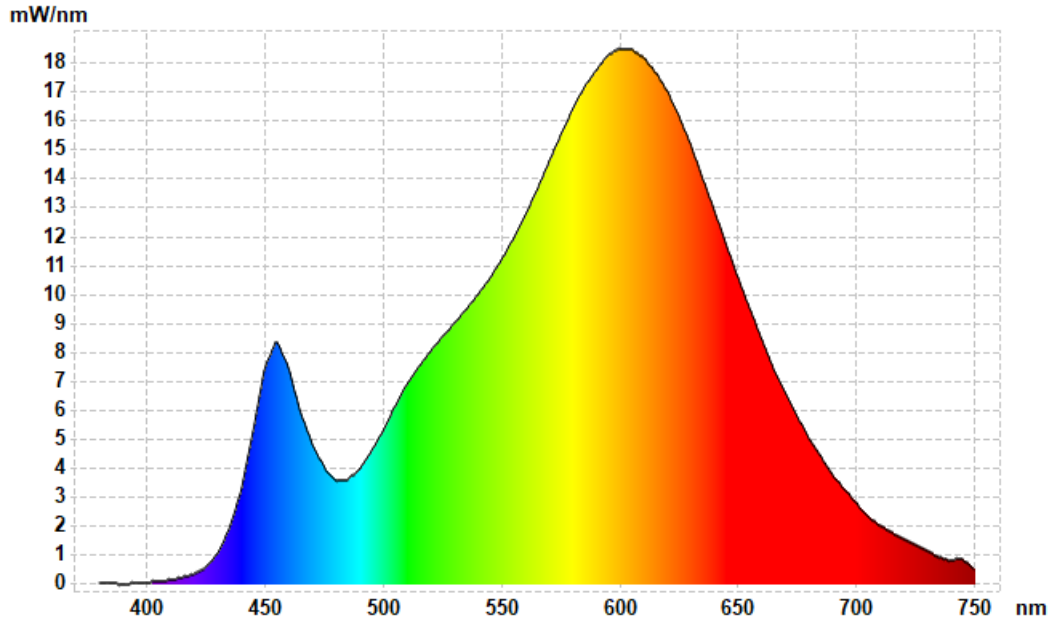


Legend

- - C0-C180
- - C90-C270
- - G0-G180



## Spectral distribution



Results					
CIE 1931 2° observer		CIE 1964 10° observer		Other	
x	0,4433	x	0,4506	CCT	2931
y	0,4086	y	0,4043	Chromaticity Error	0,003
Flux	895,46 lm	u'	0,2594	Color Peak	602,56
		v'	0,5235	Color Peak Value	18,54
		L	100,00	Color Dominant	582,8
u'	0,2527	a	27,71	Luminous Intensity	0,00
v'	0,5241	b	61,16	Purity	0,557
L	100,00	X	1047,10	Radiometric	2,6763
a	22,56	Y	939,39	PAR	-
b	61,38	Z	337,20	PPFD	-
Rendering Indices				Metamerism Indices	
Ra	80,6	Ra	80,6	Mivis	2,7
R1	78,6	R8	55,5	Miuv	3,9
R2	90,0	R9	0,1	Binning	
R3	96,0	R10	77,2	Binning	3000K
R4	77,2	R11	75,3	Brightness	
R5	78,4	R12	67,1		
R6	87,6	R13	81,2		
R7	81,5	R14	98,5		