

GL GONIOSPECTROMETER  
**Lighting Research & Measurement Center**

**Report Wizard Sample Description Lines**

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Client name: *LED line*<sup>®</sup>  
Model name: *OPTO 2mod OSRAM 170st*  
Item No: *243417*  
Serial No.: *02412*  
Made by: *Radosław Kośnik*

**Eulumdat Fields**

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**Dimensions of luminaire**

Company: *LED line*<sup>®</sup>  
Report number: *B271*  
LuminaireName: *OPTO 2mod OSRAM 170st*  
LuminaireNumber: *243417*  
FileName: *B271\_243417\_02412\_G\_20190220\_R\_P*  
Date: *2019-02-20*

**Dimensions of luminaire**

Length: *62 mm*  
Width: *21 mm*  
Height: *9 mm*

**Dimensions of luminous area**

Length: *45 mm*  
Width: *14 mm*  
C0-plane *2 mm*  
C90-plane *2 mm*  
C180-plane *2 mm*  
C270-plane *2 mm*

### Lamps:

Number of lamps: 1  
 Type of lamps: 0  
 Total luminous flux: 189,70 lm  
 Color temperatur: 6441.68 K  
 Color rendering index: 83,27  
 Wattage including ballast: 1,98 W

### Utilization factors:

k = 0.60 0,080  
 k = 0.80 0,128  
 k = 1.00 0,180  
 k = 1.20 0,242  
 k = 1.50 0,299  
 k = 2.00 0,396  
 k = 2.50 0,470  
 k = 3.00 0,529  
 k = 4.00 0,616  
 k = 5.00 0,676

### Electrical parameters

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*U* = 12,000 V  
*I* = 0,165 A  
*P* = 1,976 W  
 Power factor = 0,000

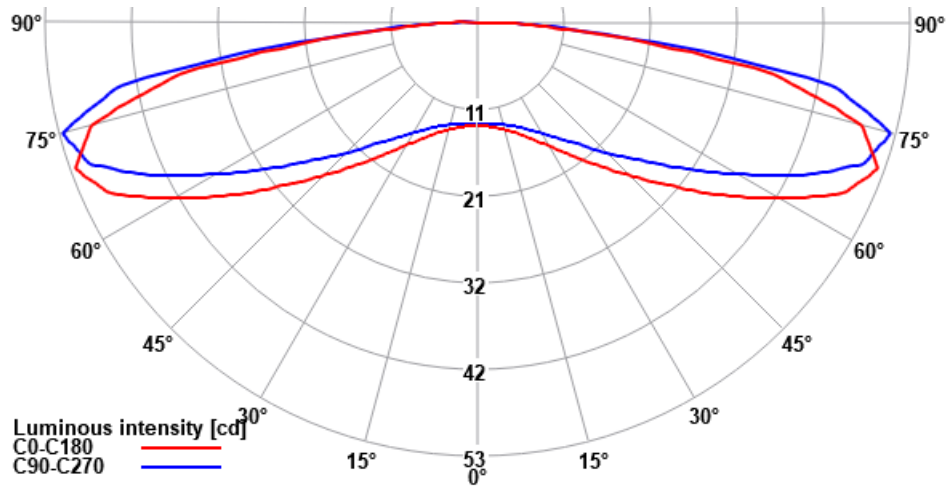
Power apparent = 0,000 VA  
 Power Reactive = 0,000 var  
 Frequency Voltage = 0,000 Hz  
 THD = 0,000 %

Temperature = 24,1 C

## Goniometric measurement results

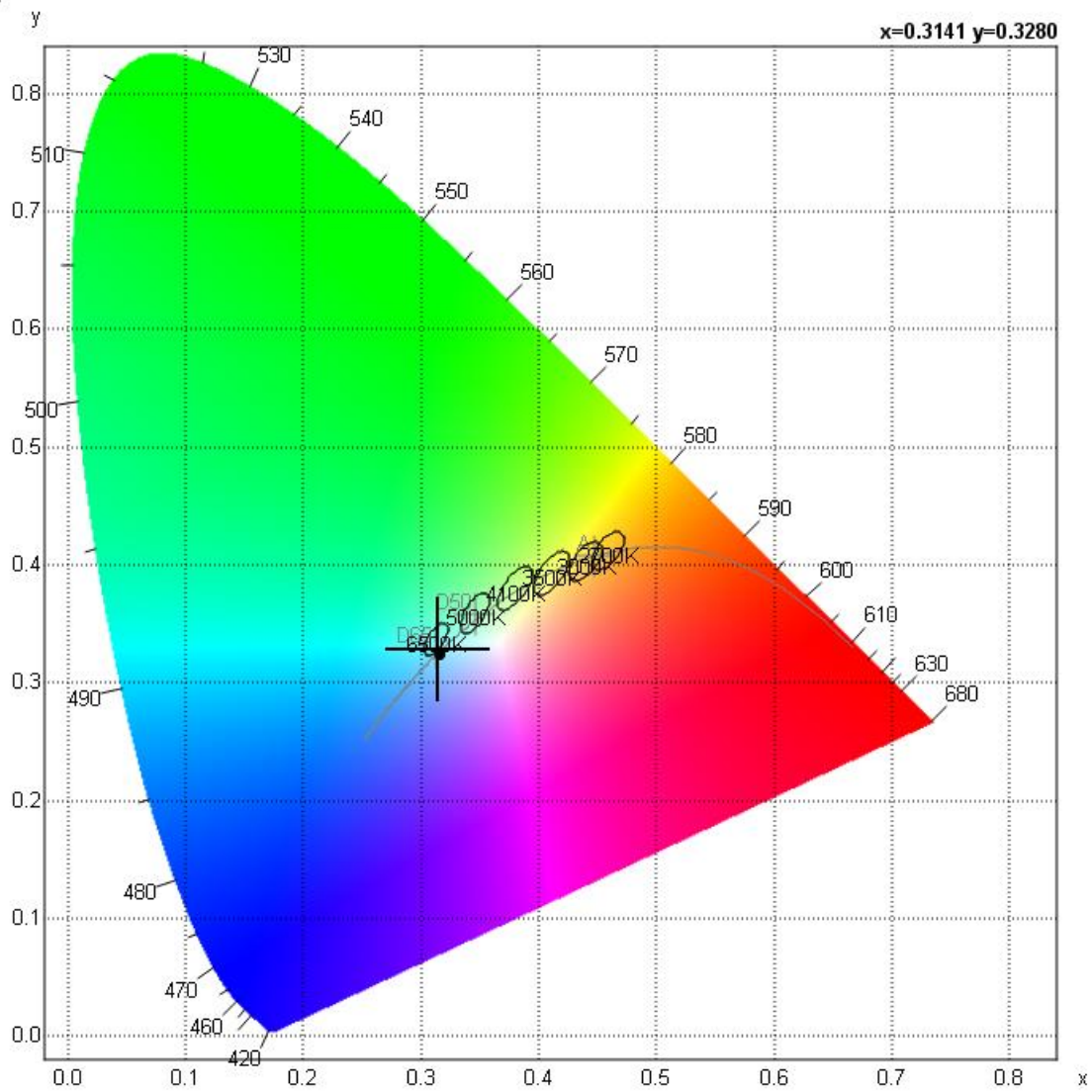
Total flux (utilized luminaire flux)	<i>189,70 lm</i>
Flux in lower hemisphere	<i>100,00 %</i>
Flux in upper hemisphere	<i>0,00 %</i>
Maximum luminous intensity	<i>52,54 cd</i>
Light output ratio (LOR)	<i>100,00 %</i>
Luminous efficacy	<i>95,81 lm/W</i>

**Light intensity distribution diagram**



CIE 1931 diagram

x 0,3141  
y 0,3280  
Angular Colour Uniformity 0,0000

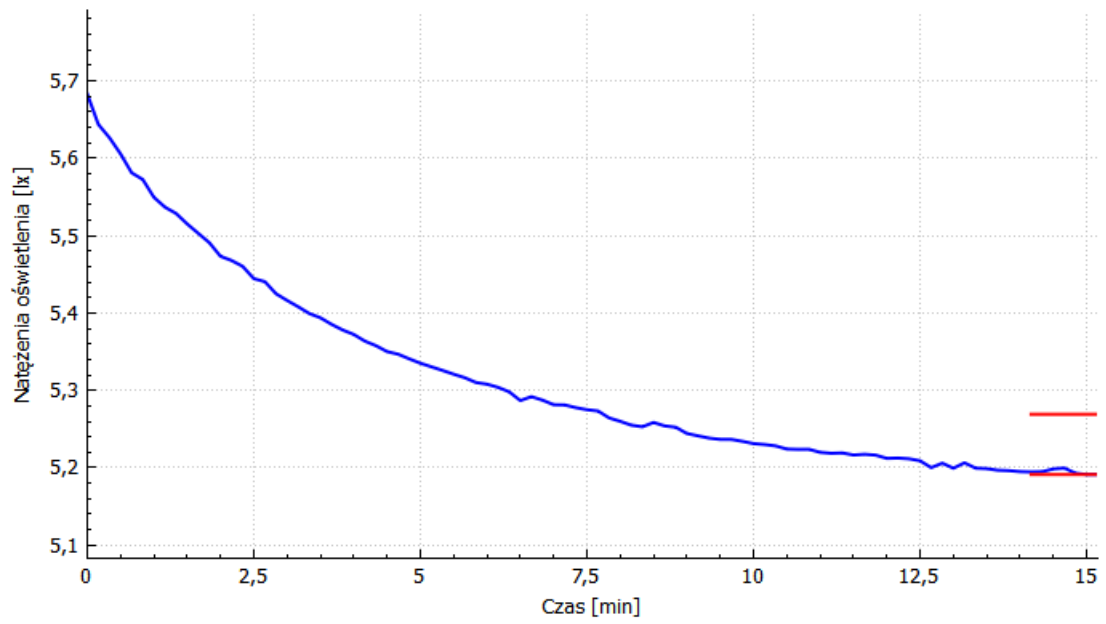


**Beam cone**

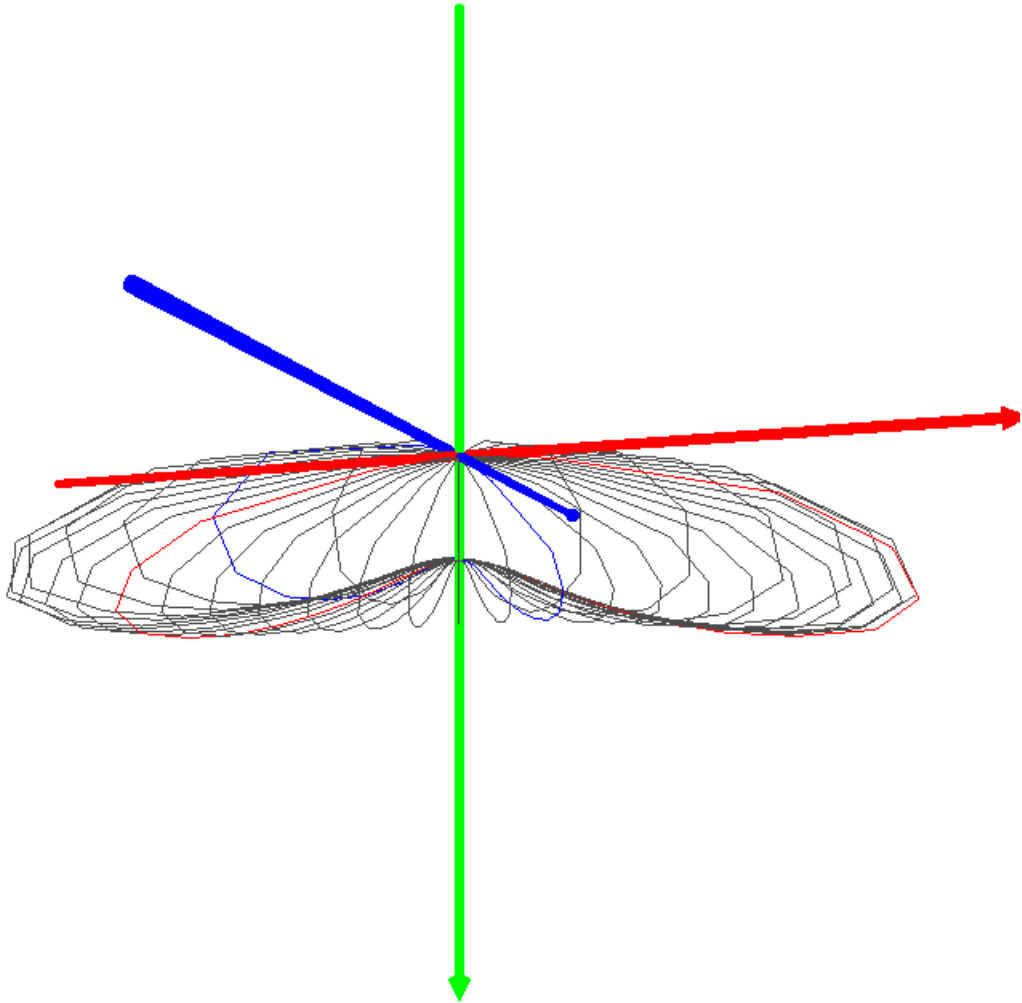
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Beam angle 0,0°		
Distance [m]	Illuminance [lx]	Diameter [m]
1,0	52,54	-
2,0	13,13	-
3,0	5,84	-
4,0	3,28	-
5,0	2,10	-

## Stabilization



### 3D Chart

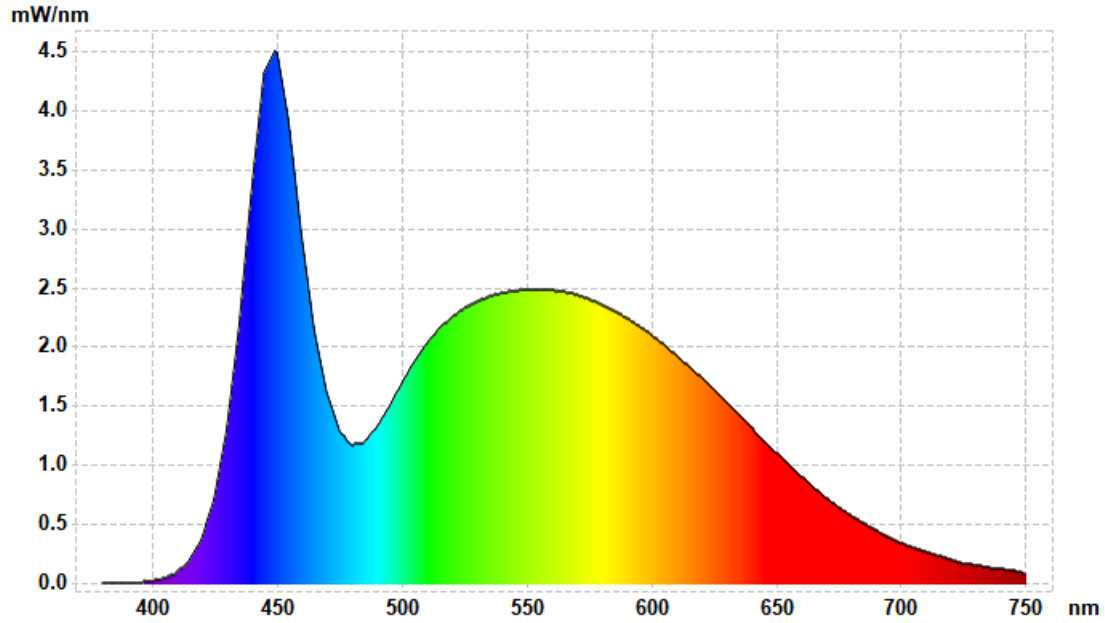


Legend

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



## Spectral distribution



Results					
CIE 1931 2° observer		CIE 1964 10° observer		Other	
x	0,3141	x	0,3186	CCT	6442
y	0,3280	y	0,3266	Chromaticity Error	0,005
Flux	189,70 lm	u'	0,2029	Color Peak	449,07
		v'	0,4679	Color Peak Value	4,57
		L	100,00	Color Dominant	488,1
u'	0,1992	a	4,78	Luminous Intensity	0,00
v'	0,4680	b	-0,81	Purity	
L	100,00	X	168,32	Radiometric	0,5288
a	1,24	Y	172,54	PAR	-
b	-0,15	Z	187,40	PPFD	-
Rendering Indices				Metamerism Indices	
Ra	83,3	Ra	83,3	Mivis	1,5
R1	82,3	R8	74,7	Miuv	6,4
R2	85,9	R9	19,9	Binning	
R3	87,1	R10	65,5	Binning	6500K
R4	84,5	R11	83,7	Brightness	
R5	83,1	R12	61,3		
R6	80,2	R13	83,0		
R7	88,4	R14	92,9		