

GL GONIOSPECTROMETER
Lighting Research & Measurement Center

Report Wizard Sample Description Lines

Client name: *LED line*[®]
Model name: *OPTO 3mod OSRAM 170st*
Item No: *243424*
Serial No.: *02412*
Made by: *Radosław Kośnik*

Eulumdat Fields

Dimensions of luminaire

Company: *LED line*[®]
Report number: *B270*
LuminaireName: *OPTO 3mod OSRAM 170st*
LuminaireNumber: *243424*
FileName: *B270_243424_02412_G_20190219_R_P*
Date: *2019-02-19*

Dimensions of luminaire

Length: *88 mm*
Width: *21 mm*
Height: *9 mm*

Dimensions of luminous area

Length: *70 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: | 238,20 lm |
| Color temperatur: | 6396.55 K |
| Color rendering index: | 83,29 |
| Wattage including ballast: | 2,48 W |

Utilization factors:

| | |
|----------|-------|
| k = 0.60 | 0,081 |
| k = 0.80 | 0,128 |
| k = 1.00 | 0,179 |
| k = 1.20 | 0,240 |
| k = 1.50 | 0,296 |
| k = 2.00 | 0,393 |
| k = 2.50 | 0,466 |
| k = 3.00 | 0,525 |
| k = 4.00 | 0,611 |
| k = 5.00 | 0,670 |

Electrical parameters

| | |
|---------------------|------------|
| <i>U</i> | = 11,999 V |
| <i>I</i> | = 0,207 A |
| <i>P</i> | = 2,485 W |
| <i>Power factor</i> | = 0,000 |

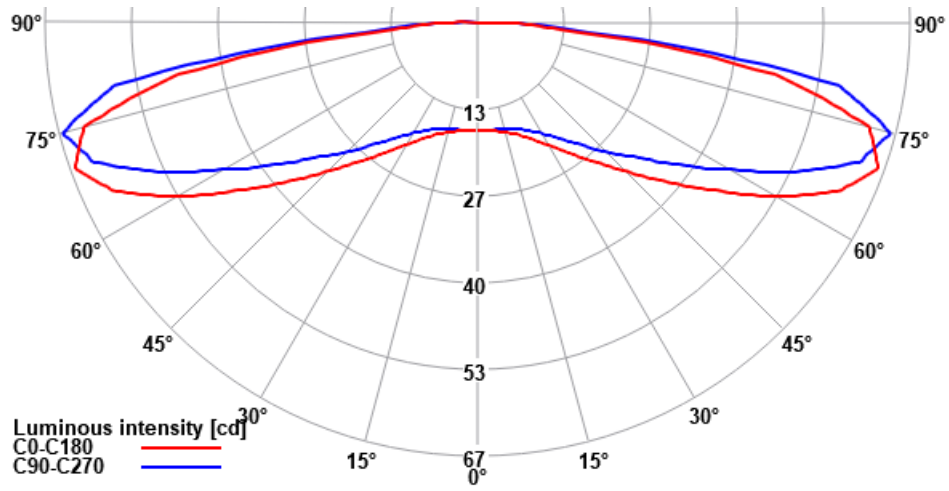
| | |
|--------------------------|-------------|
| <i>Power apparent</i> | = 0,000 VA |
| <i>Power Reactive</i> | = 0,000 var |
| <i>Frequency Voltage</i> | = 0,000 Hz |
| <i>THD</i> | = 0,000 % |

Temperature = 24,1 C

Goniometric measurement results

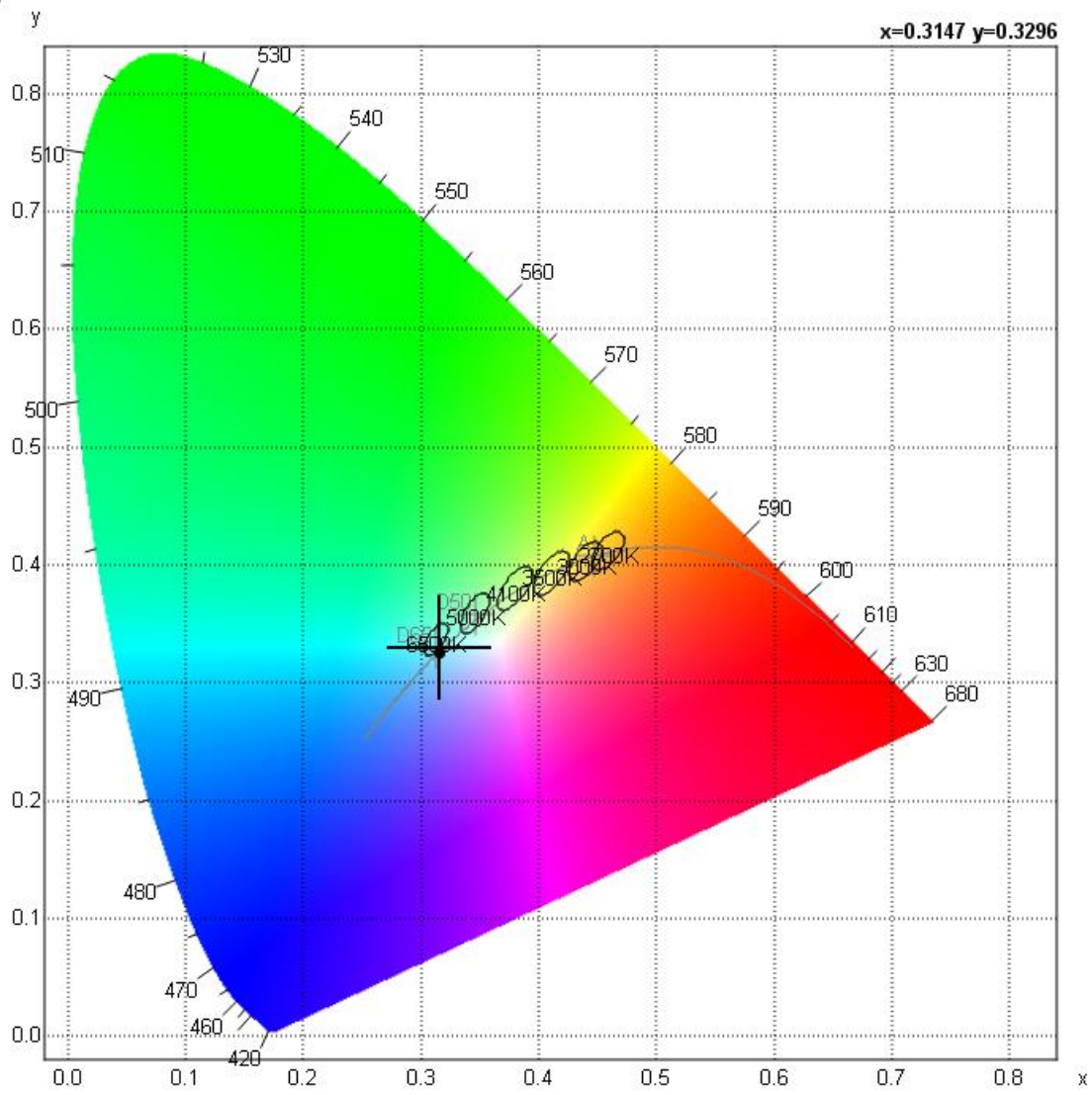
| | |
|--------------------------------------|-------------------|
| Total flux (utilized luminarie flux) | 238,20 <i>lm</i> |
| Flux in lower hemisphere | 100,00 % |
| Flux in upper hemisphere | -0,00 % |
| Maximum luminous intensity | 65,90 <i>cd</i> |
| Light output ratio (LOR) | 100,00 % |
| Luminous efficacy | 96,05 <i>lm/W</i> |

Light intensity distribution diagram



CIE 1931 diagram

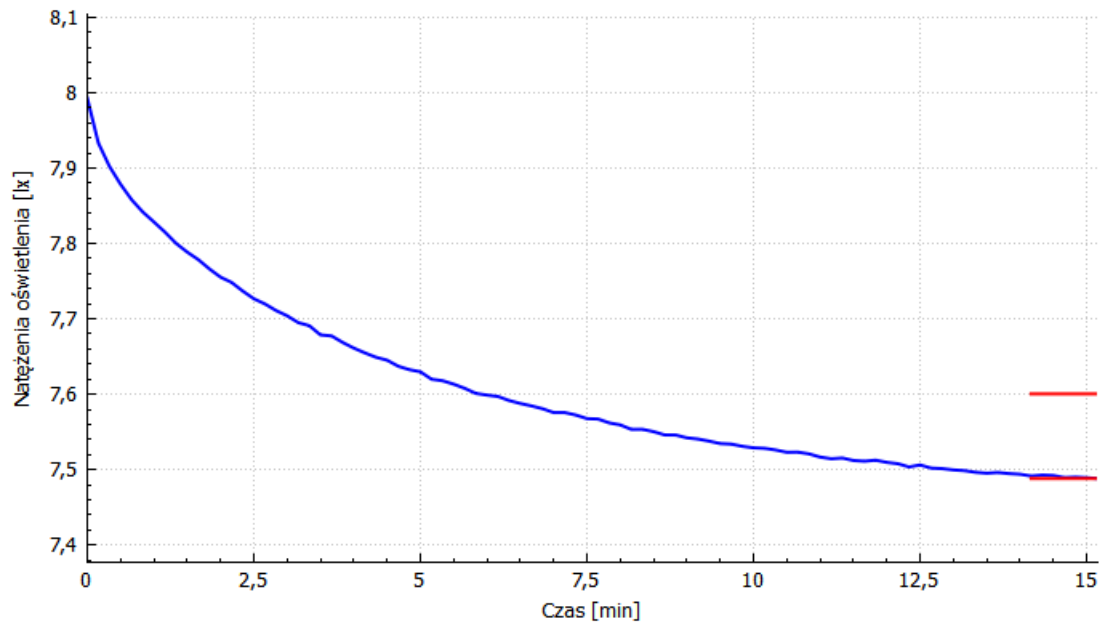
x 0,3147
y 0,3296
Angular Colour Uniformity 0,0000



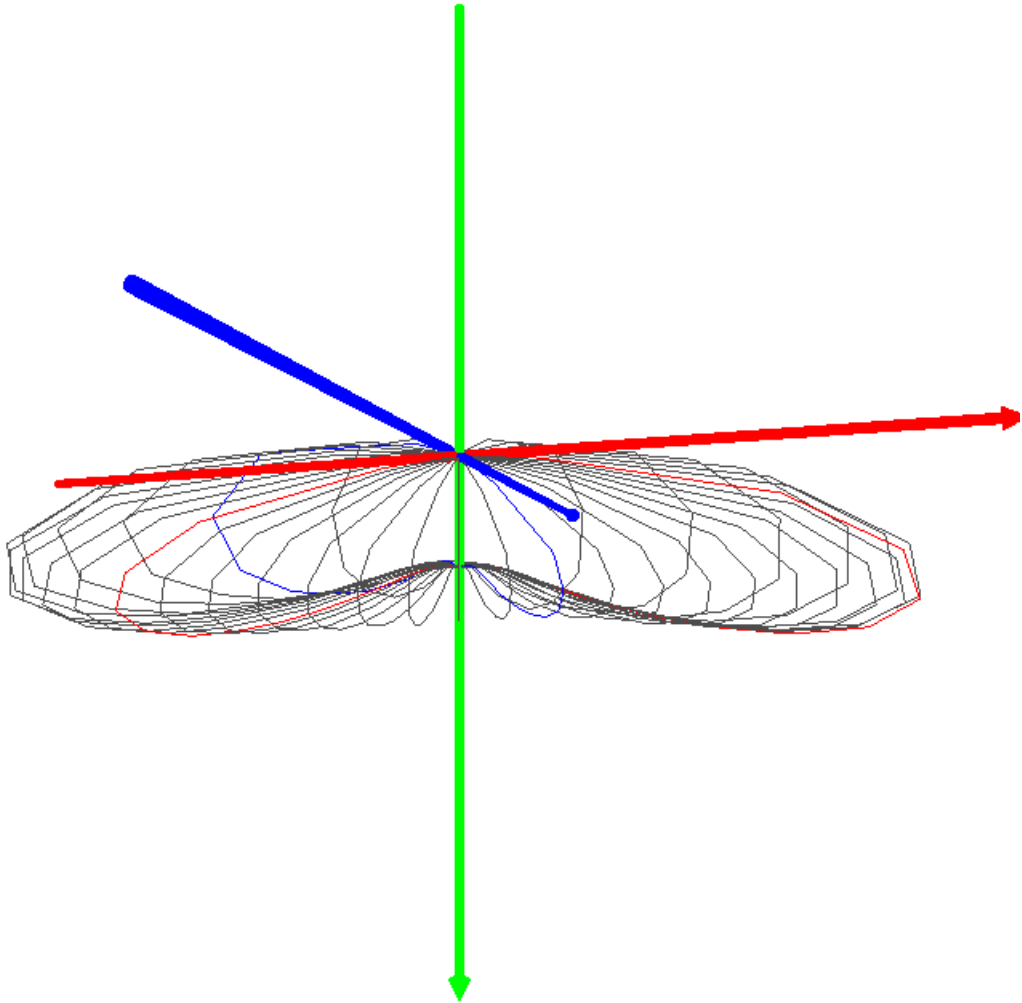
Beam cone

| Beam angle 0,0° | | |
|-----------------|------------------|--------------|
| Distance [m] | Illuminance [lx] | Diameter [m] |
| 1,0 | 65,90 | - |
| 2,0 | 16,47 | - |
| 3,0 | 7,32 | - |
| 4,0 | 4,12 | - |
| 5,0 | 2,64 | - |

Stabilization



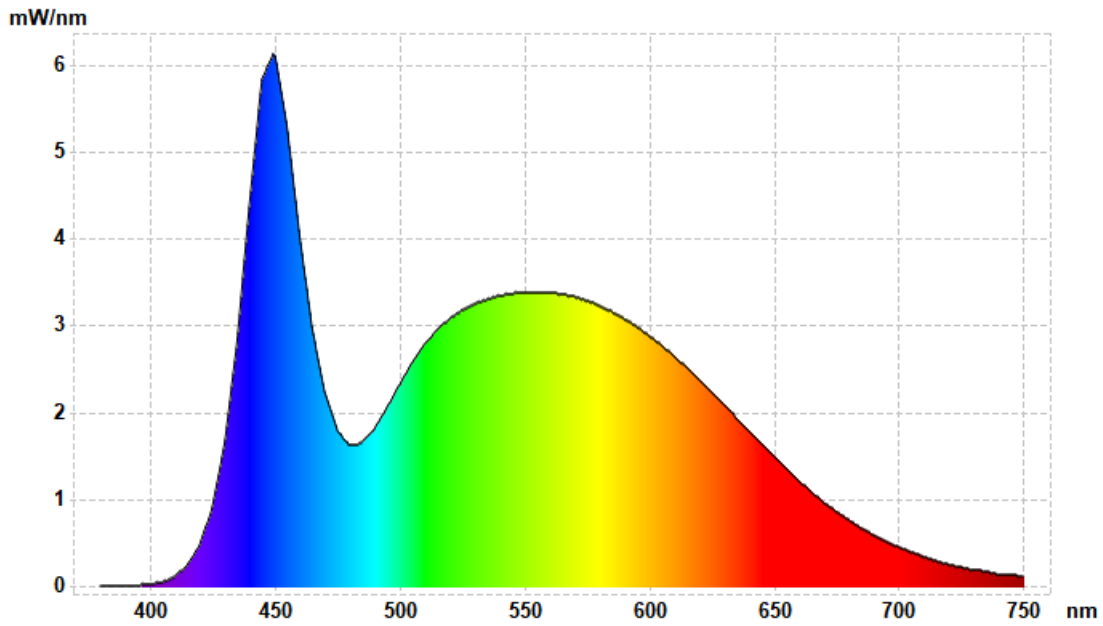
3D Chart



Legend

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

Spectral distribution



| Results | | | | | |
|----------------------|-----------|-----------------------|--------|--------------------|--------|
| CIE 1931 2° observer | | CIE 1964 10° observer | | Other | |
| x | 0,3147 | x | 0,3194 | CCT | 6397 |
| y | 0,3296 | y | 0,3283 | Chromaticity Error | 0,004 |
| Flux | 238,20 lm | u' | 0,2027 | Color Peak | 449,07 |
| | | v' | 0,4690 | Color Peak Value | 6,21 |
| | | L | 100,00 | Color Dominant | 489,1 |
| u' | 0,1990 | a | 4,29 | Luminous Intensity | 0,00 |
| v' | 0,4689 | b | 0,01 | Purity | |
| L | 100,00 | X | 229,42 | Radiometric | 0,7181 |
| a | 0,78 | Y | 235,86 | PAR | - |
| b | 0,57 | Z | 253,06 | PPFD | - |
| Rendering Indices | | | | Metamerism Indices | |
| Ra | 83,3 | Ra | 83,3 | Mivis | 1,5 |
| R1 | 82,1 | R8 | 74,0 | Miuv | 6,3 |
| R2 | 86,1 | R9 | 18,0 | Binning | |
| R3 | 87,8 | R10 | 66,1 | Binning | 6500K |
| R4 | 84,3 | R11 | 83,5 | Brightness | |
| R5 | 82,9 | R12 | 61,1 | | |
| R6 | 80,5 | R13 | 82,9 | | |
| R7 | 88,5 | R14 | 93,3 | | |