

GL GONIOSPECTROMETER
Lighting Research & Measurement Center

Report Wizard Sample Description Lines

Client name: *LED line®*
Model name: *LED line Panel 36W 5040lm 4000K DIORA 1-10V*
Item No: *471260*
Serial No.: *00210*
Made by: *Radosław Kośnik*

Eulumdat Fields

Company: *LED line®*
Report number: *B1899*
LuminaireName: *LED line Panel 36W 5040lm 4000K DIORA 1-10V*
LuminaireNumber: *471260*
FileName: *B1899_471260_00210_G_20210223_R_P*
Date: *2021-02-23*

Dimensions of luminaire

Length: *596 mm*
Width: *596 mm*
Height: *50 mm*

Dimensions of luminous area

Length: *520 mm*
Width: *520 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: | 4988,66 lm |
| Color temperatur: | 3997 K |
| Color rendering index: | 83,77 |
| Wattage including ballast: | 34,24 W |

Utilization factors:

| | |
|----------|-------|
| k = 0.60 | 0,521 |
| k = 0.80 | 0,597 |
| k = 1.00 | 0,665 |
| k = 1.20 | 0,724 |
| k = 1.50 | 0,768 |
| k = 2.00 | 0,836 |
| k = 2.50 | 0,861 |
| k = 3.00 | 0,883 |
| k = 4.00 | 0,913 |
| k = 5.00 | 0,931 |

Electrical parameters

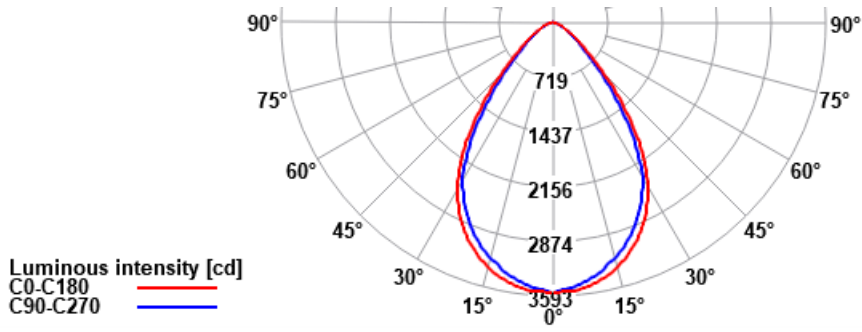
| | |
|---------------|--------------|
| Power source: | IT7321 300VA |
| U | = 229,984 V |
| I | = 0,153 A |
| P | = 34,241 W |
| Power factor | = 0,973 |

Temperature = 25.1 C

Goniometric measurement results

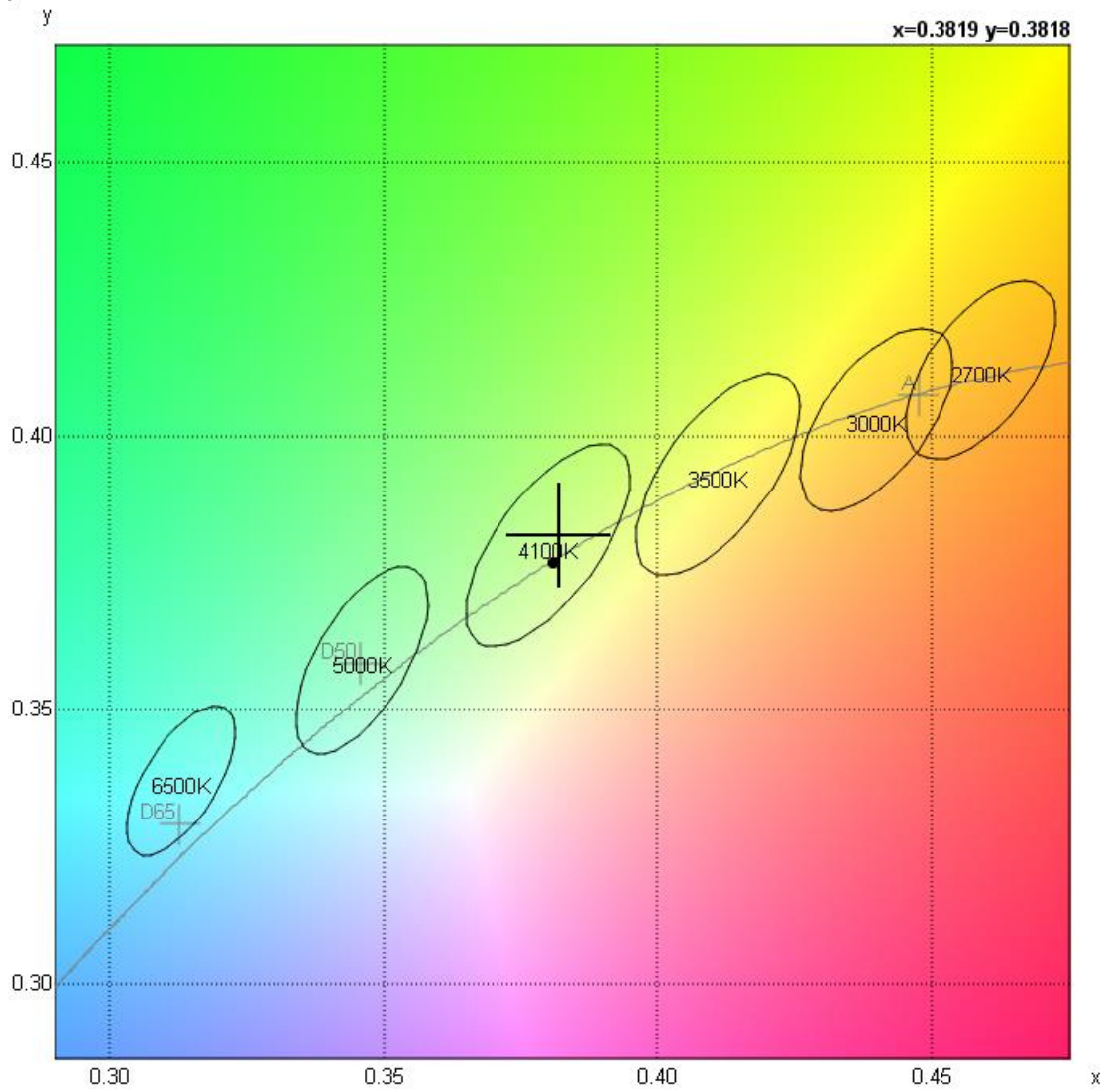
| | |
|--------------------------------------|--------------------|
| Total flux (utilized luminaire flux) | <i>4988,70 lm</i> |
| Flux in lower hemisphere | <i>100,00 %</i> |
| Flux in upper hemisphere | <i>-0,00 %</i> |
| Maximum luminous intensity | <i>3557,94 cd</i> |
| Light output ratio (LOR) | <i>100,00 %</i> |
| Luminous efficacy | <i>145,70 lm/W</i> |

Light intensity distribution diagram

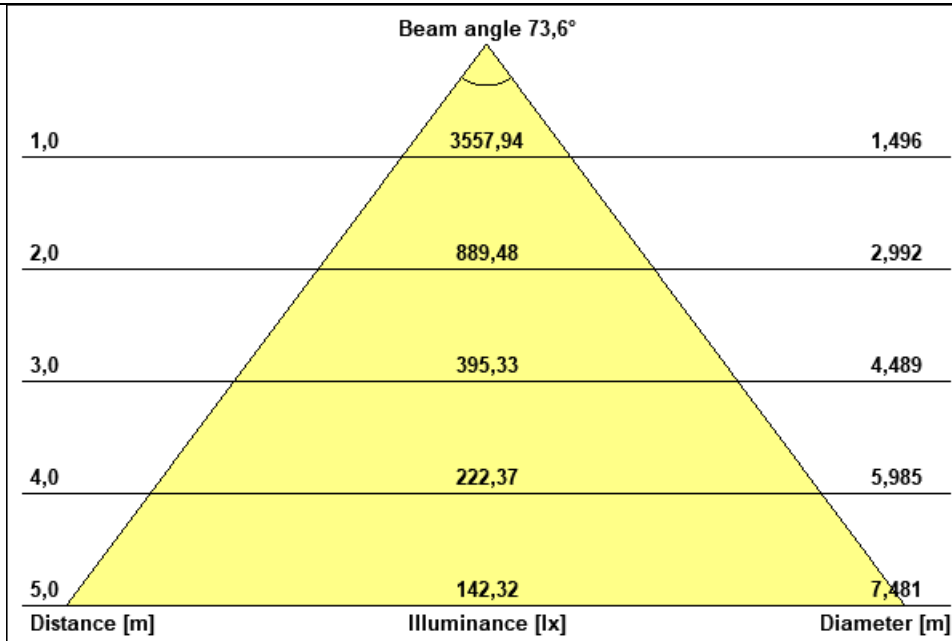


CIE 1931 diagram

x 0,3819
 y 0,3818
 Angular Colour Uniformity 0,0041
 Binning 4000K



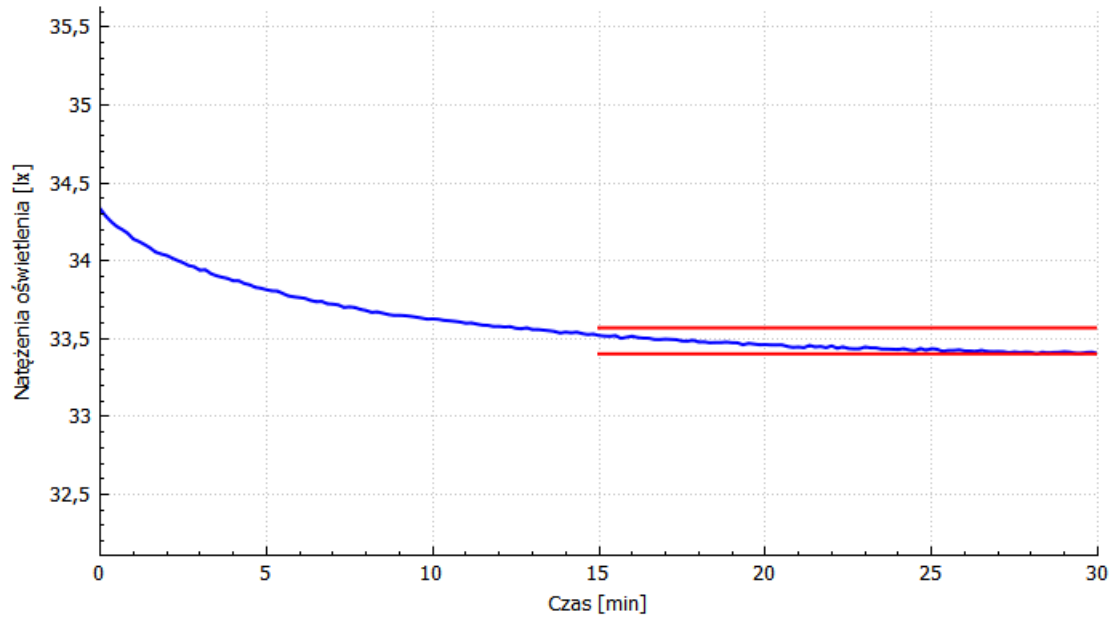
Beam cone



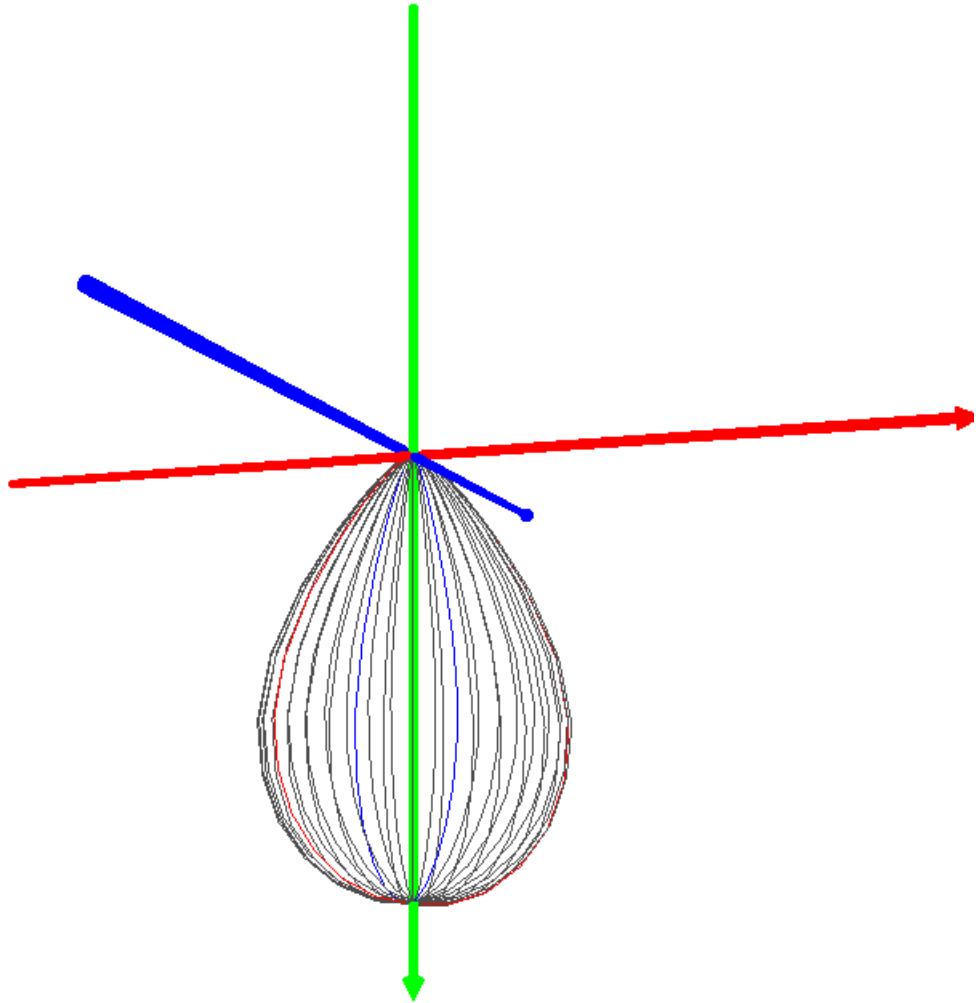
| Distance [m] | Max illuminance [lx] | Diameter [m] |
|--------------|----------------------|--------------|
| 1 | 3557,9359 | 1,496 |
| 2 | 889,4840 | 2,992 |
| 3 | 395,3262 | 4,489 |
| 4 | 222,3710 | 5,985 |
| 5 | 142,3174 | 7,481 |

| C plane | Beam angle | Gamma max | Start [°] | Stop [°] |
|---------|------------|-----------|-----------|----------|
| Average | 73,6° | 5,0° | -36,8° | 36,8° |
| 0-180° | 74,9° | 5,0° | -37,4° | 37,4° |
| 90-270° | 71,8° | 5,0° | -35,9° | 35,9° |

Stabilization



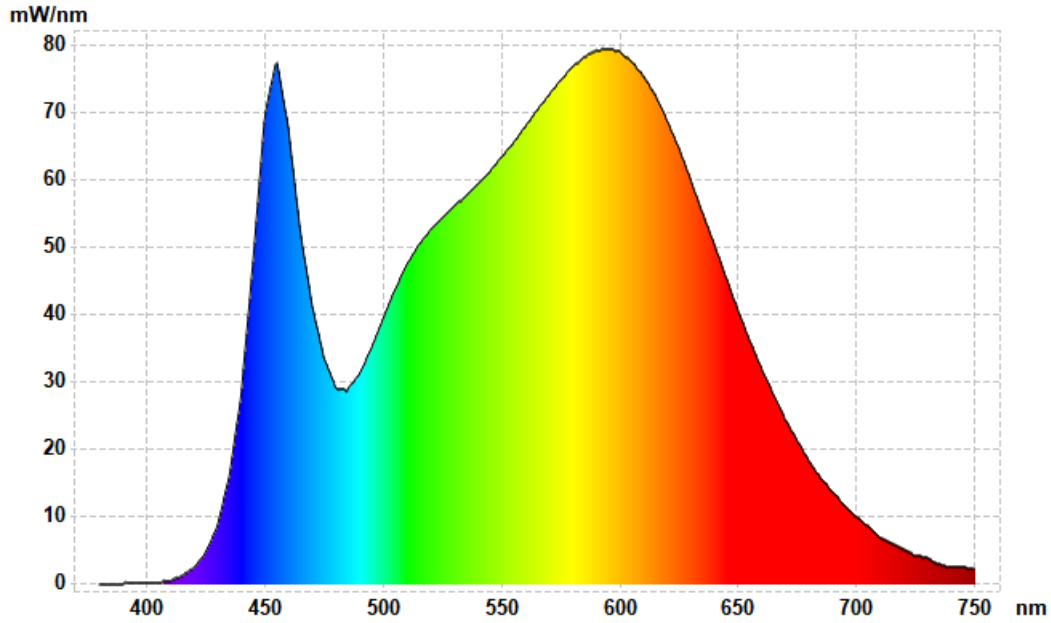
3D Chart



Legend

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

Spectral distribution



| Results | | | | | |
|----------------------|------------|-----------------------|---------|--------------------|---------|
| CIE 1931 2° observer | | CIE 1964 10° observer | | Other | |
| x | 0,3819 | x | 0,3885 | CCT | 3997 |
| y | 0,3818 | y | 0,3801 | Chromaticity Error | 0,003 |
| Flux | 4988,66 lm | u' | 0,2290 | Color Peak | 597,43 |
| | | v' | 0,5042 | Color Peak Value | 79,45 |
| | | L | 100,00 | Color Dominant | 0,0 |
| u' | 0,2241 | a | 12,67 | Luminous Intensity | 0,00 |
| v' | 0,5040 | b | 34,42 | Purity | 0,000 |
| L | 100,00 | X | 4987,52 | Radiometric | 13,8076 |
| a | 8,60 | Y | 4880,15 | PAR | - |
| b | 34,34 | Z | 2971,53 | PPFD | - |
| Rendering Indices | | | | Metamerism Indices | |
| Ra | 83,8 | Ra | 83,8 | Mivis | 2,2 |
| R1 | 82,2 | R8 | 64,2 | Miuv | 3,9 |
| R2 | 91,4 | R9 | 10,0 | Binning | |
| R3 | 96,3 | R10 | 79,2 | Binning | |
| R4 | 81,0 | R11 | 80,0 | Brightness | |
| R5 | 81,9 | R12 | 62,5 | | |
| R6 | 87,7 | R13 | 84,8 | | |
| R7 | 85,5 | R14 | 98,5 | | |