

GL GONIOSPECTROMETER  
**Lighting Research & Measurement Center**

**Report Wizard Sample Description Lines**

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Client name: *LED line®*  
Model name: *MR16 3W 273lm 2700K 36st*  
Item No: *247804*  
Serial No.: *13103*  
Made by: *Radosław Kośnik*

**Eulumdat Fields**

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Company: *LEDline®*  
Report number: *B542*  
LuminaireName: *MR16 3W 273lm 2700K 36st*  
LuminaireNumber: *247804*  
FileName: *B542\_247804\_13103\_G\_20190528\_R\_O*  
Date: *2019-05-28*

**Dimensions of luminaire**

Length: *50 mm*  
Width: *0 mm*  
Height: *50 mm*

**Dimensions of luminous area**

Length: *42 mm*  
Width: *0 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: 274,39 lm  
 Color temperatur: 2787.46 K  
 Color rendering index: 82,25  
 Wattage including ballast: 2,97 W

**Utilization factors:**

k = 0.60 0,589  
 k = 0.80 0,652  
 k = 1.00 0,713  
 k = 1.20 0,763  
 k = 1.50 0,800  
 k = 2.00 0,861  
 k = 2.50 0,880  
 k = 3.00 0,898  
 k = 4.00 0,924  
 k = 5.00 0,941

**Electrical parameters**

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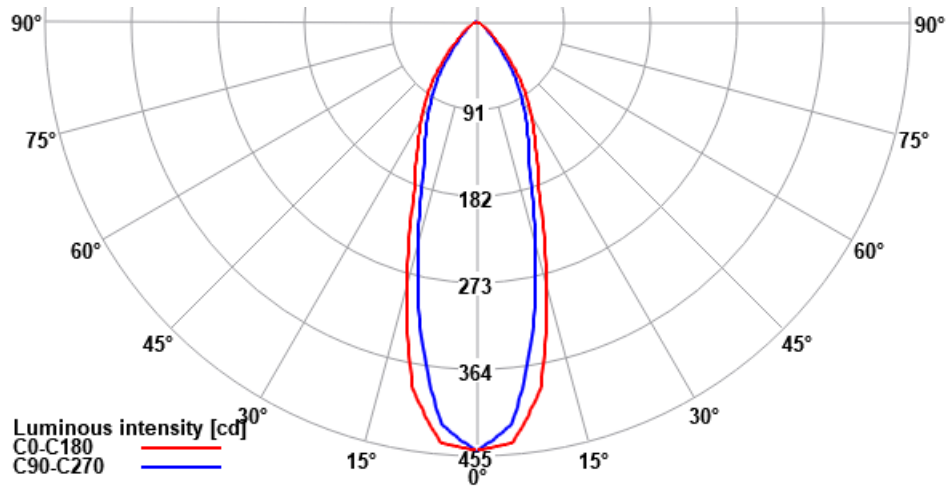
*U* = 11,999 V  
*I* = 0,248 A  
*P* = 2,971 W  
 Power factor = 0,000  
  
 Power apparent = 0,000 VA  
 Power Reactive = 0,000 var  
 Frequency Voltage = 0,000 Hz  
 THD = 0,000 %

Temperature = 22 C

## Goniometric measurement results

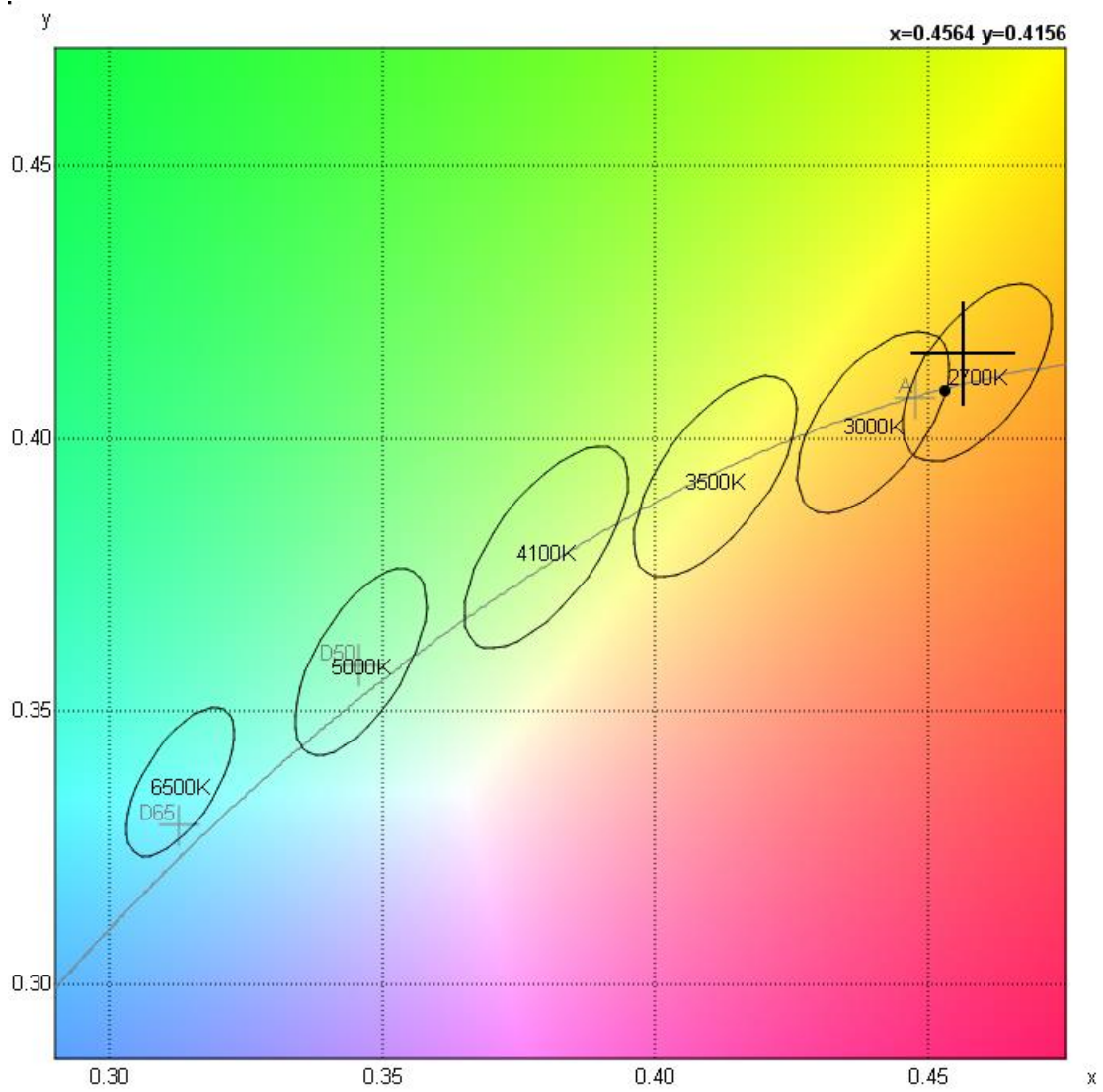
Total flux (utilized luminaire flux)	274,39 <i>lm</i>
Flux in lower hemisphere	100,00 %
Flux in upper hemisphere	0,00 %
Maximum luminous intensity	450,22 <i>cd</i>
Light output ratio (LOR)	100,00 %
Luminous efficacy	92,39 <i>lm/W</i>

**Light intensity distribution diagram**

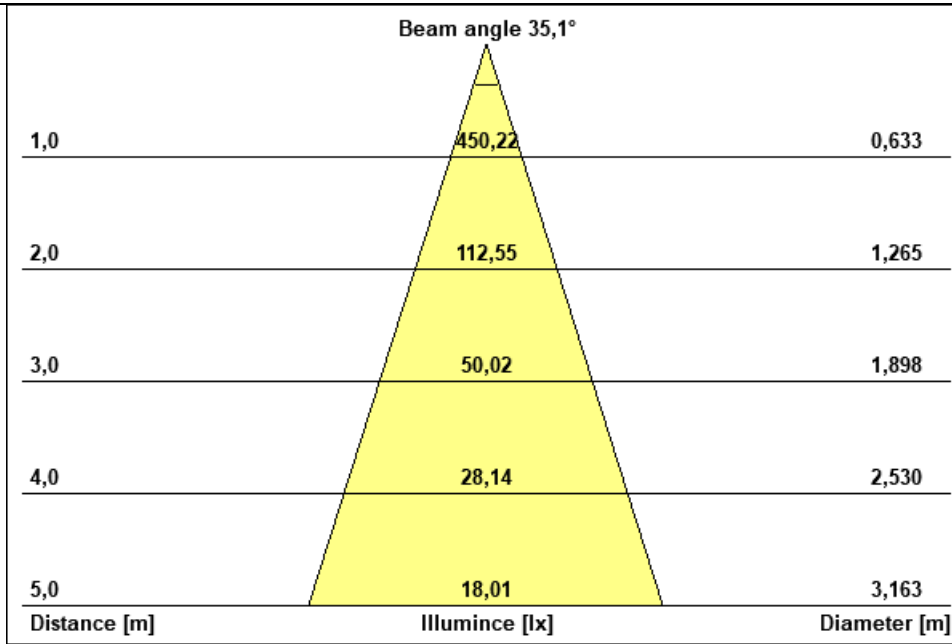


**CIE 1931 diagram**

x 0,4564  
 y 0,4156  
 Angular Colour Uniformity 0,0010  
 Binning 2700K



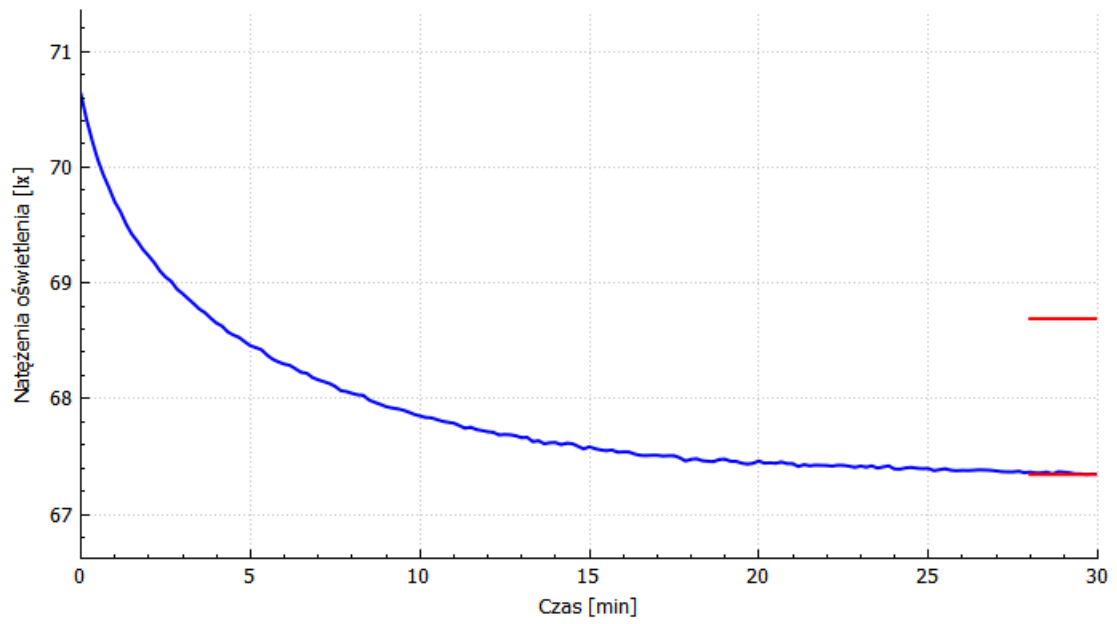
**Beam cone**



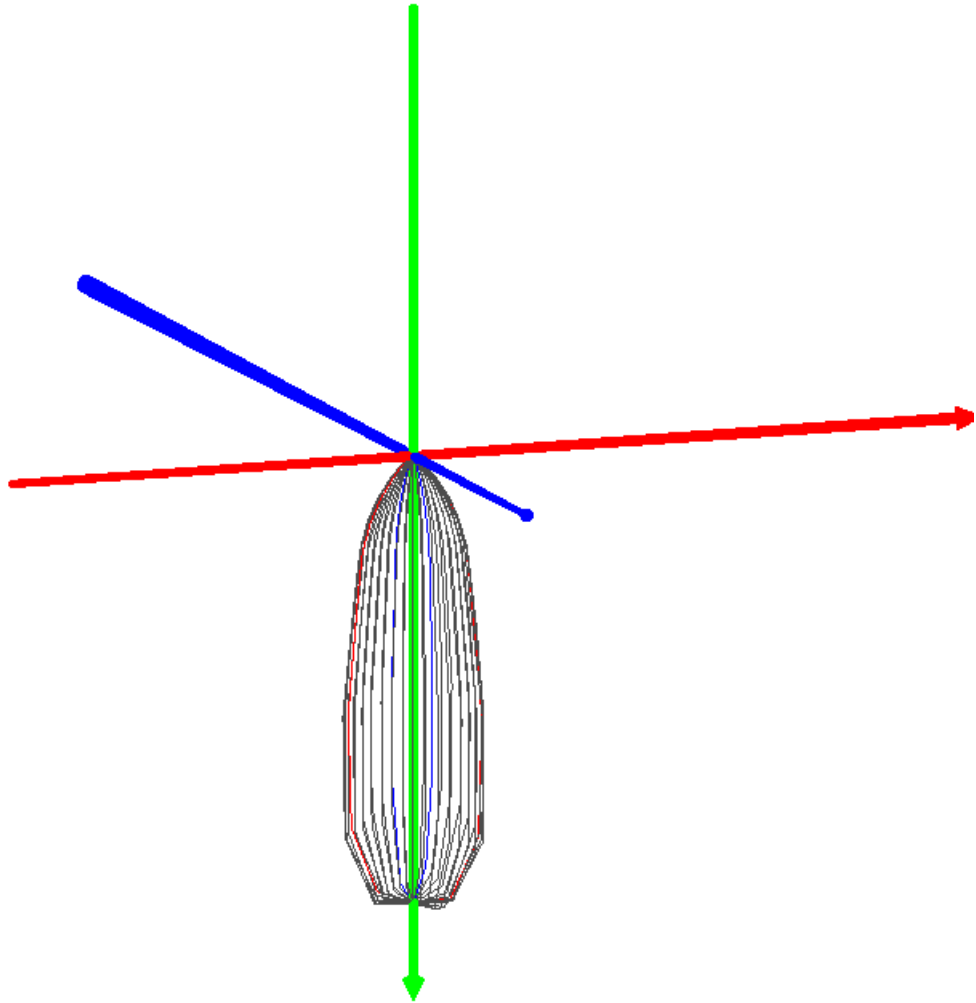
Distance [m]	Max illuminance [lx]	Diameter [m]
1	450,2192	0,633
2	112,5548	1,265
3	50,0244	1,898
4	28,1387	2,530
5	18,0088	3,163

C plane	Beam angle	Gamma max	Start [°]	Stop [°]
Average	35,1°	5,0°	-17,5°	17,5°
0-180°	36,7°	5,0°	-18,3°	18,3°
90-270°	33,1°	5,0°	-16,5°	16,5°




## Stabilization



### 3D Chart

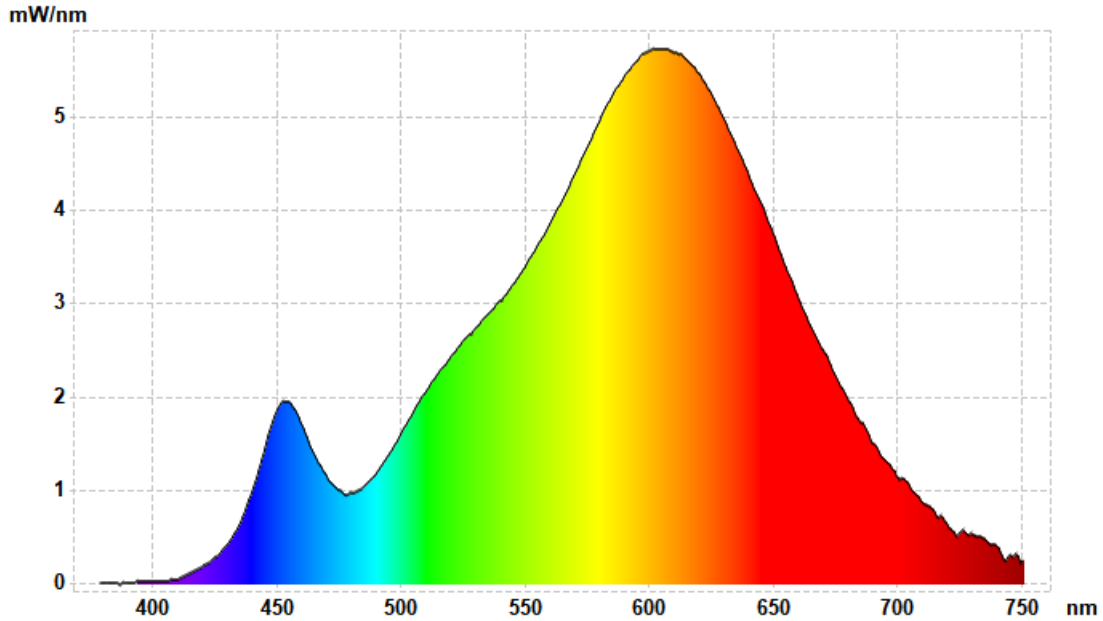


Legend

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



## Spectral distribution



Results					
CIE 1931 2° observer		CIE 1964 10° observer		Other	
x	0,4564	x	0,4637	CCT	2787
y	0,4156	y	0,4109	Chromaticity Error	0,003
Flux	274,39 lm	u'	0,2648	Color Peak	607,67
		v'	0,5280	Color Peak Value	5,73
		L	100,00	Color Dominant	583,1
u'	0,2581	a	29,89	Luminous Intensity	0,00
v'	0,5287	b	68,48	Purity	
L	100,00	X	324,00	Radiometric	0,8481
a	24,66	Y	287,11	PAR	-
b	68,74	Z	87,60	PPFD	-
Rendering Indices				Metamerism Indices	
Ra	82,2	Ra	82,2	Mivis	2,5
R1	80,1	R8	59,4	Miuv	3,9
R2	90,1	R9	9,4	<b>Binning</b>	
R3	97,4	R10	77,4	Binning	2700K
R4	79,7	R11	78,1	Brightness	
R5	79,8	R12	69,9		
R6	88,0	R13	82,1		
R7	83,7	R14	99,0		