

GL GONIOSPECTROMETER  
**Lighting Research & Measurement Center**

**Report Wizard Sample Description Lines**

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Client name: *LED line*<sup>®</sup>  
Model name: *Naświetlacz PHOTON RGB 50W - R*  
Item No: *470492*  
Serial No.: *63311*  
Made by: *Radosław Kośnik*

**Eulumdat Fields**

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Company: *LED line*<sup>®</sup>  
Report number: *B1300*  
LuminaireName: *Naświetlacz PHOTON RGB 50W - R*  
LuminaireNumber: *470492*  
FileName: *B1300\_470492\_63311\_G\_20200406\_R\_O\_R*  
Date: *2020-04-06*

**Dimensions of luminaire**

Length: *173 mm*  
Width: *235 mm*  
Height: *44 mm*

**Dimensions of luminous area**

Length: *130 mm*  
Width: *95 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: 563,49 lm  
 Color temperatur: 1041.66 K  
 Color rendering index: 48,56  
 Wattage including ballast: 19,39 W

**Utilization factors:**

k = 0.60 0,298  
 k = 0.80 0,391  
 k = 1.00 0,472  
 k = 1.20 0,551  
 k = 1.50 0,611  
 k = 2.00 0,702  
 k = 2.50 0,752  
 k = 3.00 0,789  
 k = 4.00 0,839  
 k = 5.00 0,869

**Electrical parameters**

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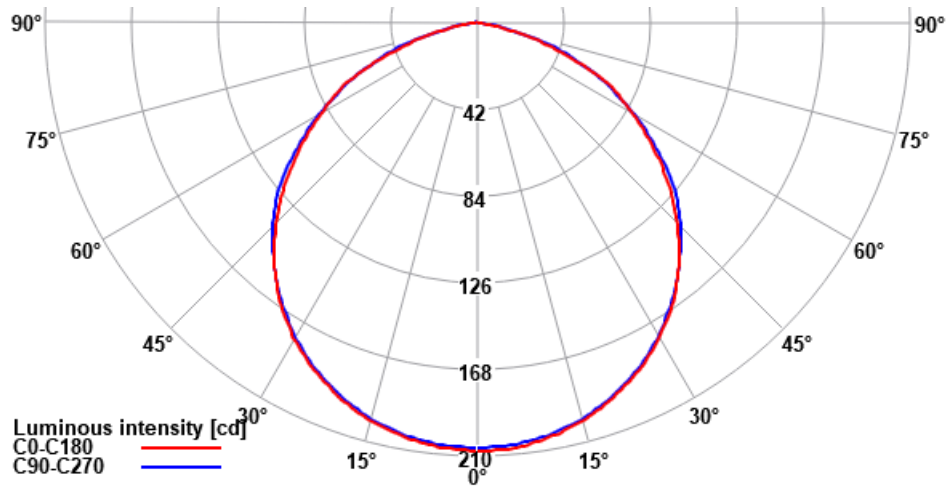
*U* = 229,973 V  
*I* = 0,125 A  
*P* = 19,386 W  
 Power factor = 0,676

*Temperature* = 23.6 C

## Goniometric measurement results

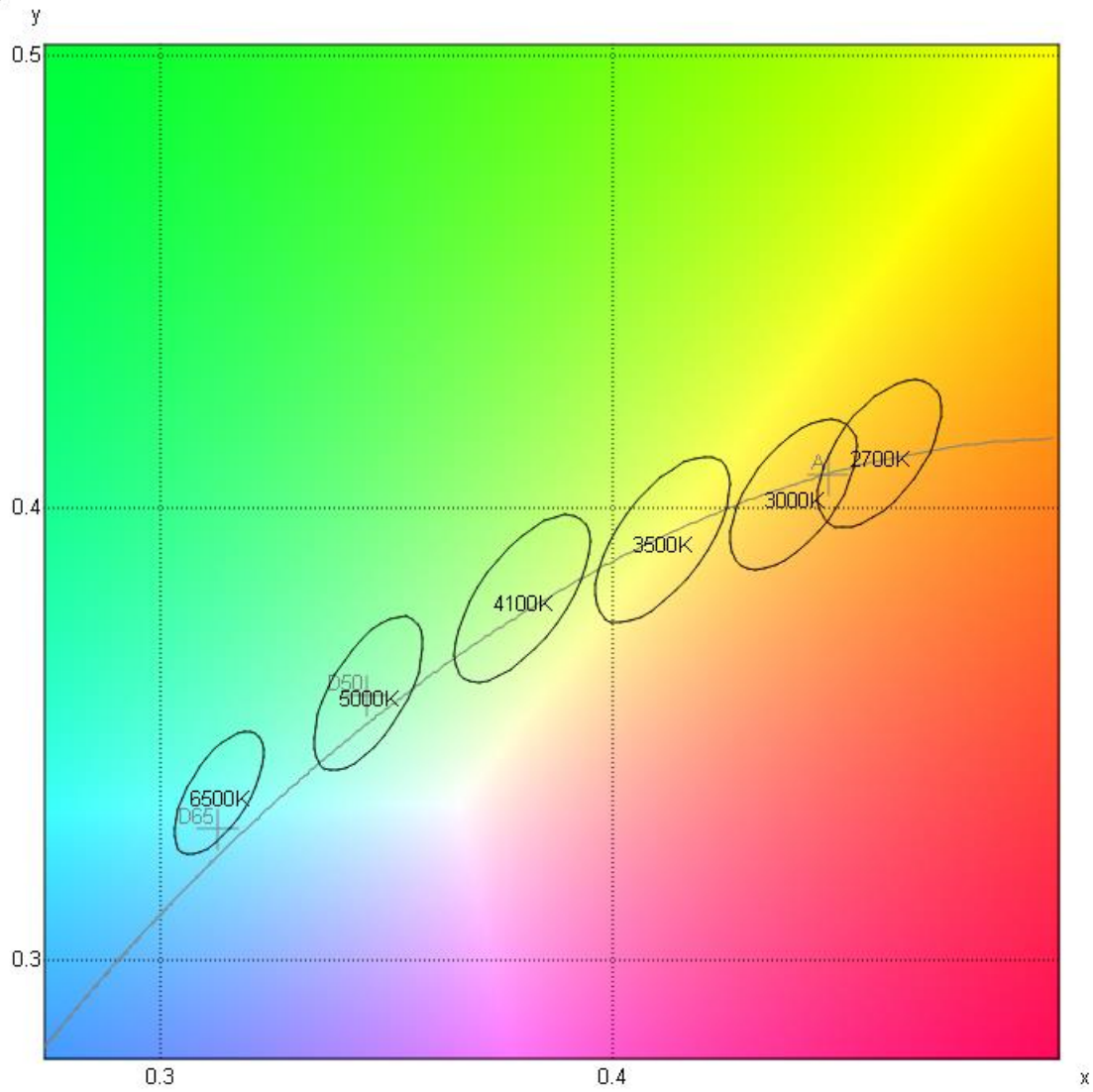
Total flux (utilized luminaire flux)	<i>563,49 lm</i>
Flux in lower hemisphere	<i>100,00 %</i>
Flux in upper hemisphere	<i>-0,00 %</i>
Maximum luminous intensity	<i>208,33 cd</i>
Light output ratio (LOR)	<i>100,00 %</i>
Luminous efficacy	<i>29,06 lm/W</i>

**Light intensity distribution diagram**

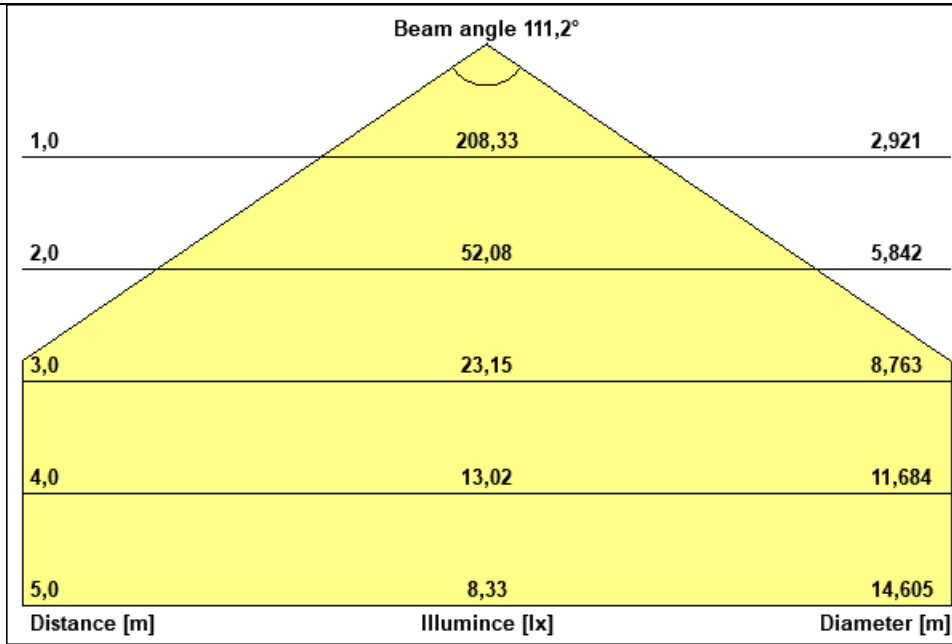


**CIE 1931 diagram**

x 0,6359  
 y 0,3399  
 Angular Colour Uniformity 0,0000  
 Binning



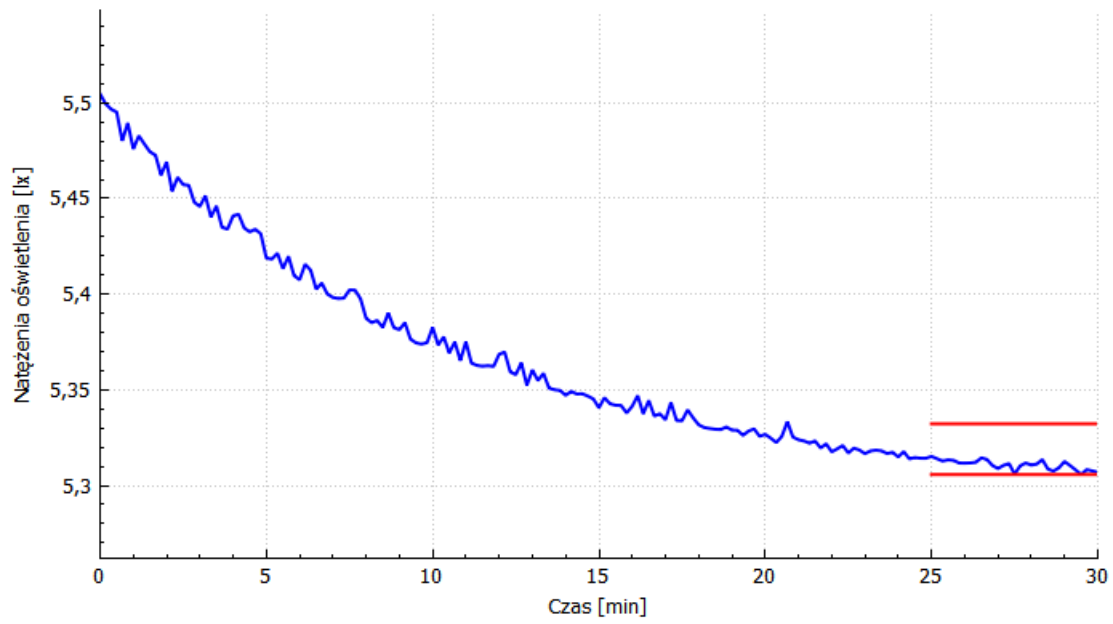
**Beam cone**



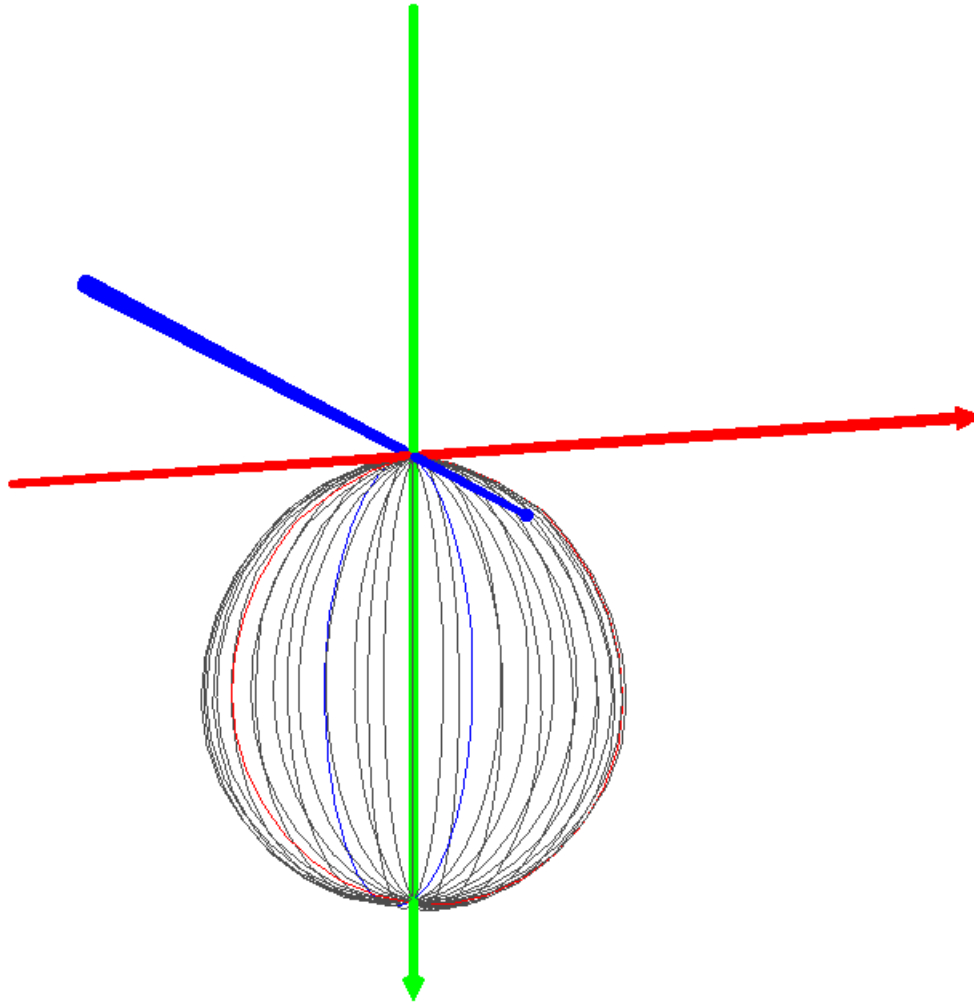
Distance [m]	Max illuminance [lx]	Diameter [m]
1	208,3296	2,921
2	52,0824	5,842
3	23,1477	8,763
4	13,0206	11,684
5	8,3332	14,605

C plane	Beam angle	Gamma max	Start [°]	Stop [°]
Average	111,2°	4,7°	-55,6°	55,6°
0-180°	110,0°	0,0°	-55,0°	55,0°
90-270°	111,8°	5,0°	-55,9°	55,9°




## Stabilization



### 3D Chart

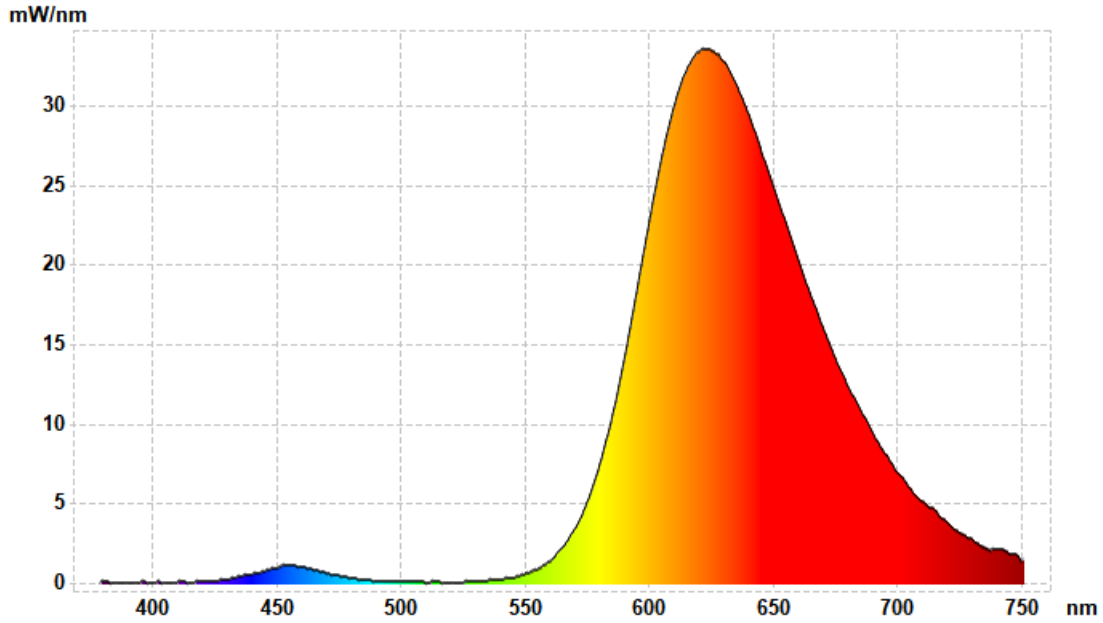


Legend

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



## Spectral distribution



Results					
CIE 1931 2° observer		CIE 1964 10° observer		Other	
x	0,6359	x	0,6322	CCT	1042
y	0,3399	y	0,3428	Chromaticity Error	0,007
Flux	563,49 lm	u'	0,4323	Color Peak	622,89
		v'	0,5275	Color Peak Value	33,55
		L	100,00	Color Dominant	608,0
u'	0,4380	a	124,11	Luminous Intensity	0,00
v'	0,5268	b	118,41	Purity	
L	100,00	X	1079,40	Radiometric	2,8361
a	126,60	Y	585,39	PAR	-
b	119,39	Z	42,65	PPFD	-
Rendering Indices				Metamerism Indices	
Ra	48,6	Ra	48,6	Mivis	3,7
R1	44,4	R8	3,4	Miuv	4,3
R2	85,6	R9	-63,5	Binning	
R3	58,4	R10	81,5	Binning	
R4	18,8	R11	18,5	Brightness	
R5	40,6	R12	73,2		
R6	92,8	R13	53,3		
R7	44,4	R14	79,1		

GL GONIOSPECTROMETER  
**Lighting Research & Measurement Center****Report Wizard Sample Description Lines**

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Client name: *LED line®*  
Model name: *Naświetlacz PHOTON RGB 50W - G*  
Item No: *470492*  
Serial No.: *63311*  
Made by: *Radosław Kośnik*

**Eulumdat Fields**

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Company: *LED line®*  
Report number: *B1300*  
LuminaireName: *Naświetlacz PHOTON RGB 50W - G*  
LuminaireNumber: *470492*  
FileName: *B1300\_470492\_63311\_G\_20200408\_R\_O\_G*  
Date: *2020-04-08*

**Dimensions of luminaire**

Length: *173 mm*  
Width: *235 mm*  
Height: *44 mm*

**Dimensions of luminous area**

Length: *130 mm*  
Width: *95 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: 1507,67 lm  
 Color temperatur: 6730 K  
 Color rendering index: 29,58  
 Wattage including ballast: 19,97 W

**Utilization factors:**

k = 0.60 0,299  
 k = 0.80 0,394  
 k = 1.00 0,475  
 k = 1.20 0,554  
 k = 1.50 0,615  
 k = 2.00 0,706  
 k = 2.50 0,755  
 k = 3.00 0,793  
 k = 4.00 0,842  
 k = 5.00 0,872

**Electrical parameters**

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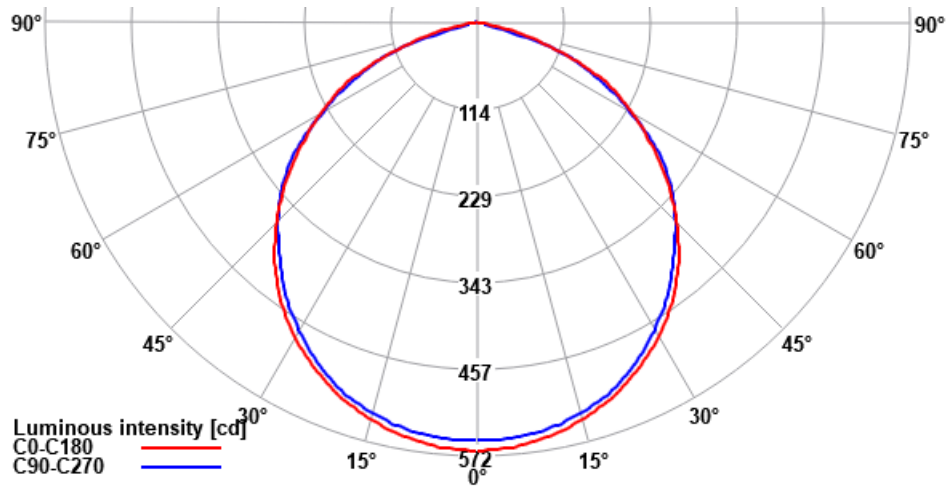
*U* = 229,982 V  
*I* = 0,127 A  
*P* = 19,974 W  
 Power factor = 0,682

Temperature = 23.6 C

## Goniometric measurement results

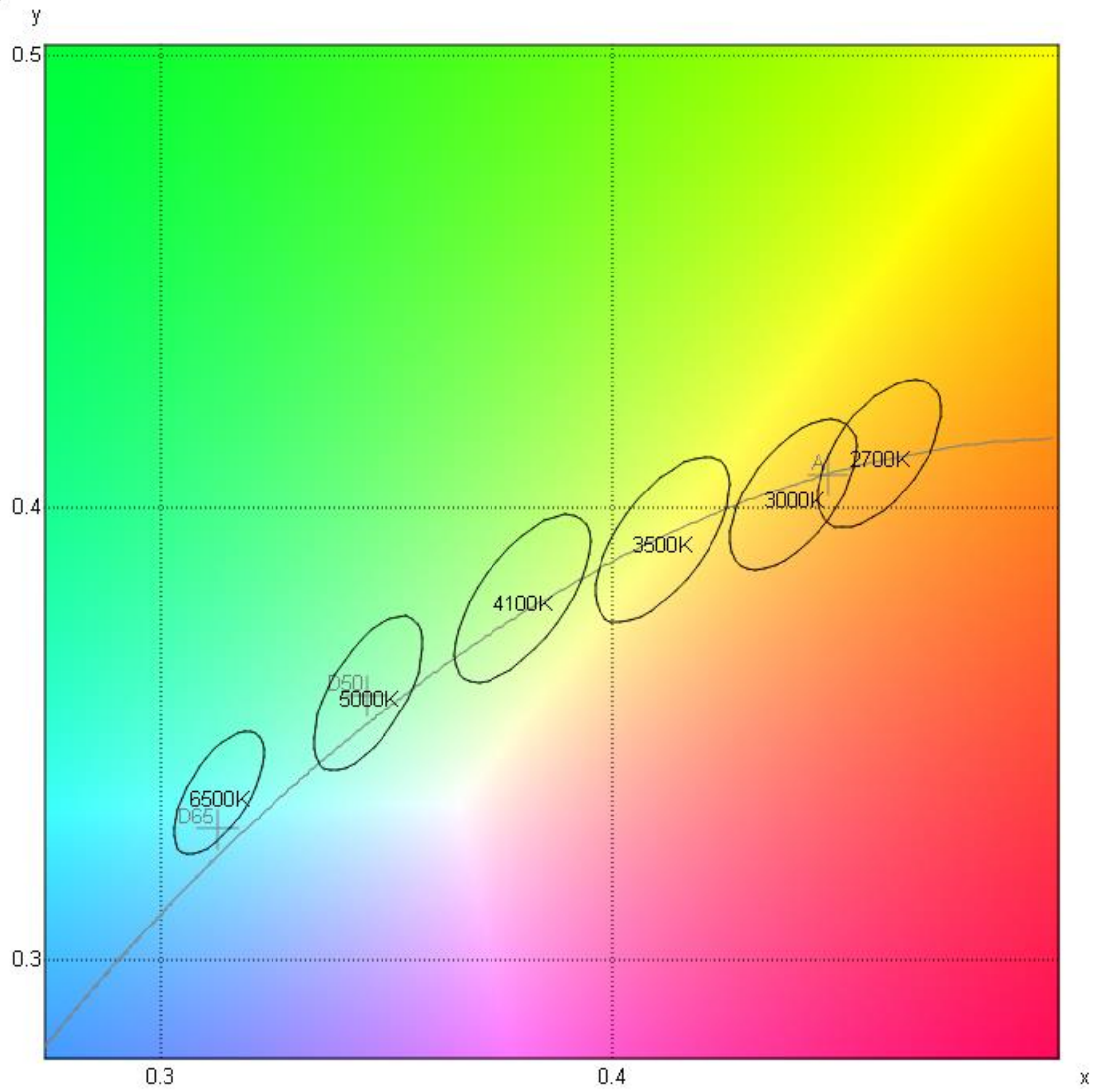
Total flux (utilized luminaire flux)	<i>1507,67 lm</i>
Flux in lower hemisphere	<i>100,00 %</i>
Flux in upper hemisphere	<i>0,00 %</i>
Maximum luminous intensity	<i>565,95 cd</i>
Light output ratio (LOR)	<i>100,00 %</i>
Luminous efficacy	<i>75,50 lm/W</i>

**Light intensity distribution diagram**

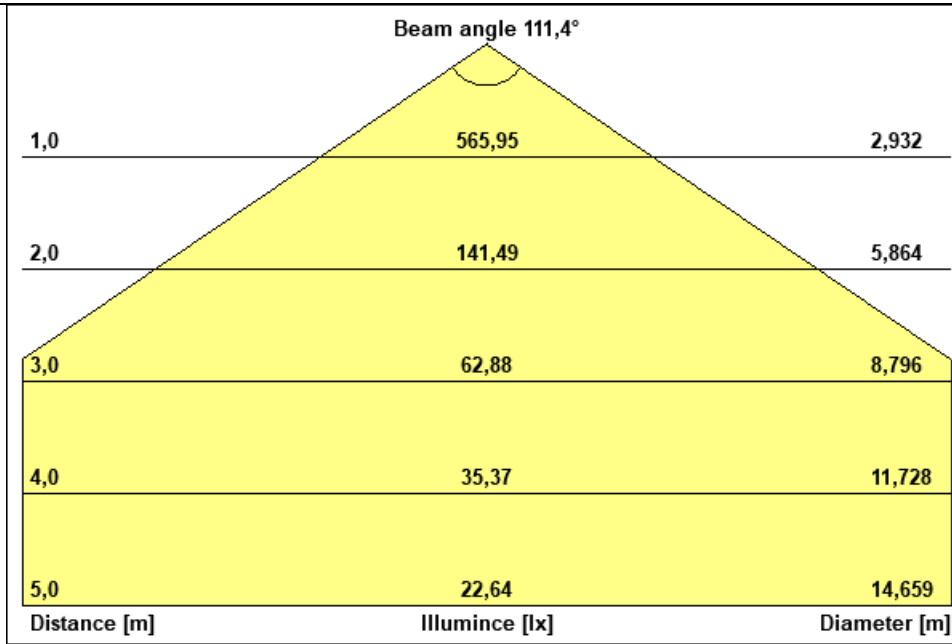


**CIE 1931 diagram**

x 0,2699  
 y 0,5580  
 Angular Colour Uniformity 0,0000  
 Binning



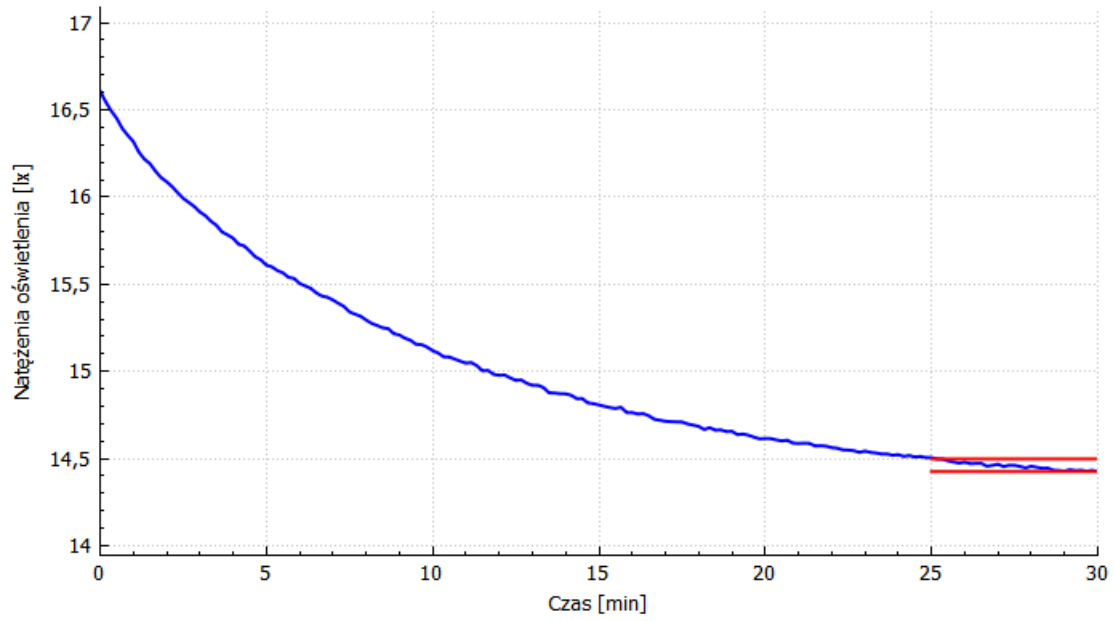
**Beam cone**



Distance [m]	Max illuminance [lx]	Diameter [m]
1	565,9549	2,932
2	141,4887	5,864
3	62,8839	8,796
4	35,3722	11,728
5	22,6382	14,659

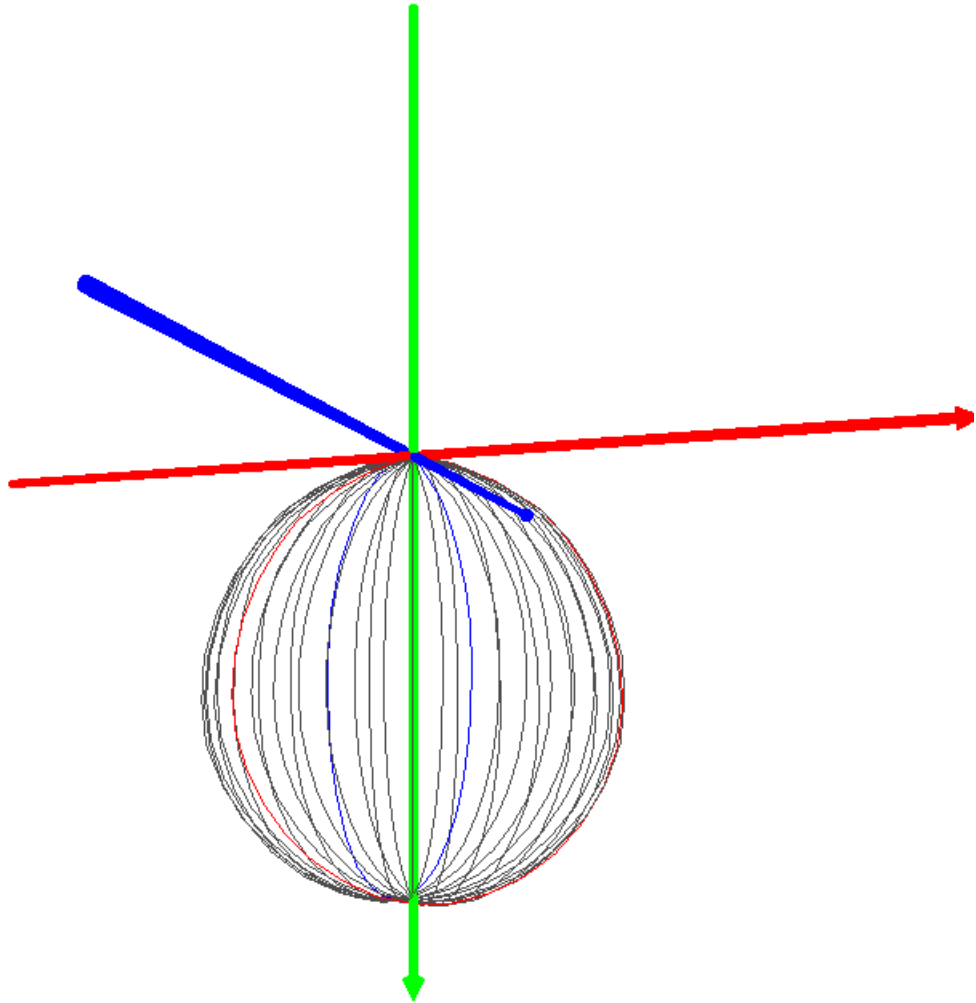
C plane	Beam angle	Gamma max	Start [°]	Stop [°]
Average	111,4°	5,0°	-55,7°	55,7°
0-180°	110,1°	5,0°	-55,0°	55,0°
90-270°	112,4°	5,0°	-56,2°	56,2°

## Stabilization





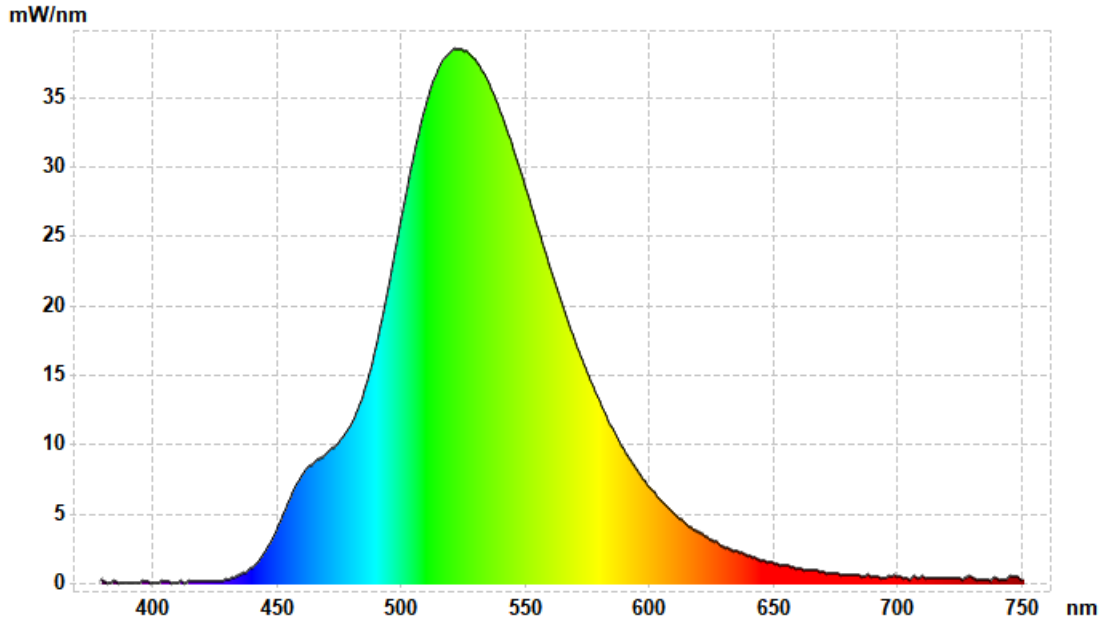
3D Chart



Legend

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

## Spectral distribution



Results					
CIE 1931 2° observer		CIE 1964 10° observer		Other	
x	0,2699	x	0,2943	CCT	6730
y	0,5580	y	0,5551	Chromaticity Error	0,106
Flux	1507,67 lm	u'	0,1297	Color Peak	523,71
		v'	0,5506	Color Peak Value	38,49
		L	100,00	Color Dominant	537,3
u'	0,1179	a	-88,08	Luminous Intensity	0,00
v'	0,5485	b	73,52	Purity	
L	100,00	X	855,68	Radiometric	3,3862
a	-100,82	Y	1614,16	PAR	-
b	68,63	Z	438,11	PPFD	-
Rendering Indices				Metamerism Indices	
Ra	29,6	Ra	29,6	Mivis	7,6
R1	6,6	R8	3,1	Miuv	3,3
R2	43,6	R9	-100,0	Binning	
R3	63,6	R10	-1,5	Binning	
R4	2,6	R11	-10,9	Brightness	
R5	20,8	R12	11,5		
R6	40,0	R13	10,8		
R7	56,2	R14	78,3		

GL GONIOSPECTROMETER  
Lighting Research & Measurement Center**Report Wizard Sample Description Lines**

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Client name: *LED line®*  
Model name: *Naświetlacz PHOTON RGB 50W - B*  
Item No: *470492*  
Serial No.: *63311*  
Made by: *Radosław Kośnik*

**Eulumdat Fields**

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Company: *LED line®*  
Report number: *B1300*  
LuminaireName: *Naświetlacz PHOTON RGB 50W - B*  
LuminaireNumber: *470492*  
FileName: *B1300\_470492\_63311\_G\_20200408\_R\_O\_B*  
Date: *2020-04-08*

**Dimensions of luminaire**

Length: *173 mm*  
Width: *235 mm*  
Height: *44 mm*

**Dimensions of luminous area**

Length: *130 mm*  
Width: *95 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: 218,31 lm  
 Color temperatur: 25100 K  
 Color rendering index: -58,91  
 Wattage including ballast: 19,48 W

**Utilization factors:**

k = 0.60 0,267  
 k = 0.80 0,361  
 k = 1.00 0,442  
 k = 1.20 0,523  
 k = 1.50 0,586  
 k = 2.00 0,681  
 k = 2.50 0,735  
 k = 3.00 0,776  
 k = 4.00 0,830  
 k = 5.00 0,863

**Electrical parameters**

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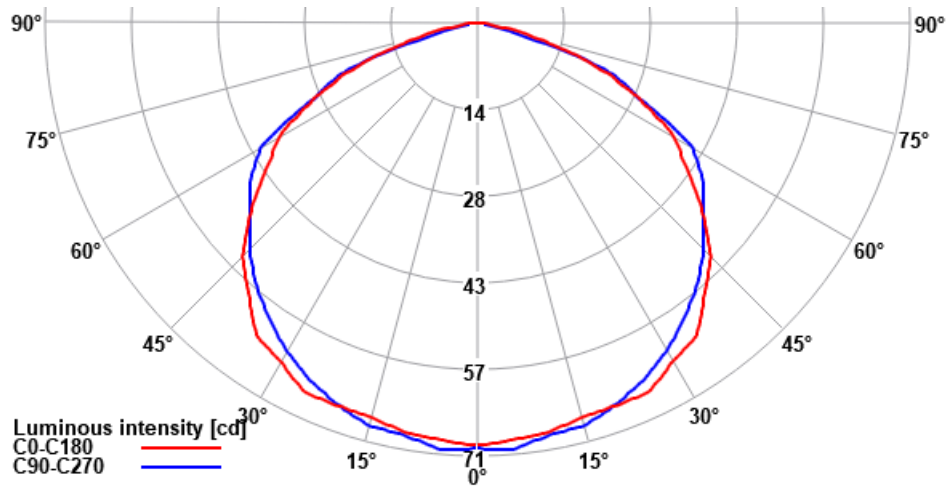
*U* = 229,947 V  
*I* = 0,125 A  
*P* = 19,482 W  
 Power factor = 0,679

Temperature = 23.8 C

## Goniometric measurement results

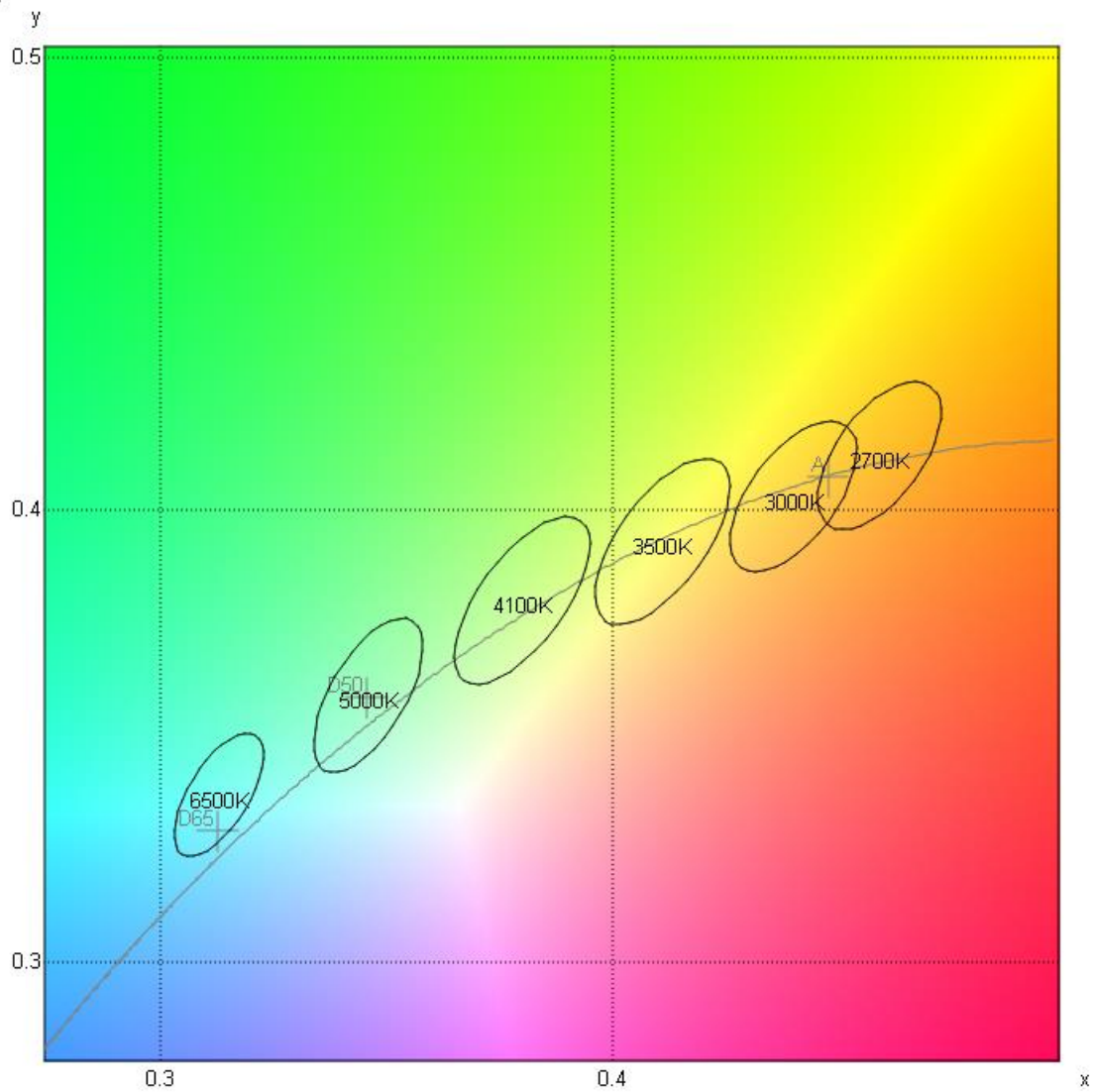
Total flux (utilized luminaire flux)	<i>218,31 lm</i>
Flux in lower hemisphere	<i>100,00 %</i>
Flux in upper hemisphere	<i>-0,00 %</i>
Maximum luminous intensity	<i>70,27 cd</i>
Light output ratio (LOR)	<i>100,00 %</i>
Luminous efficacy	<i>11,21 lm/W</i>

**Light intensity distribution diagram**

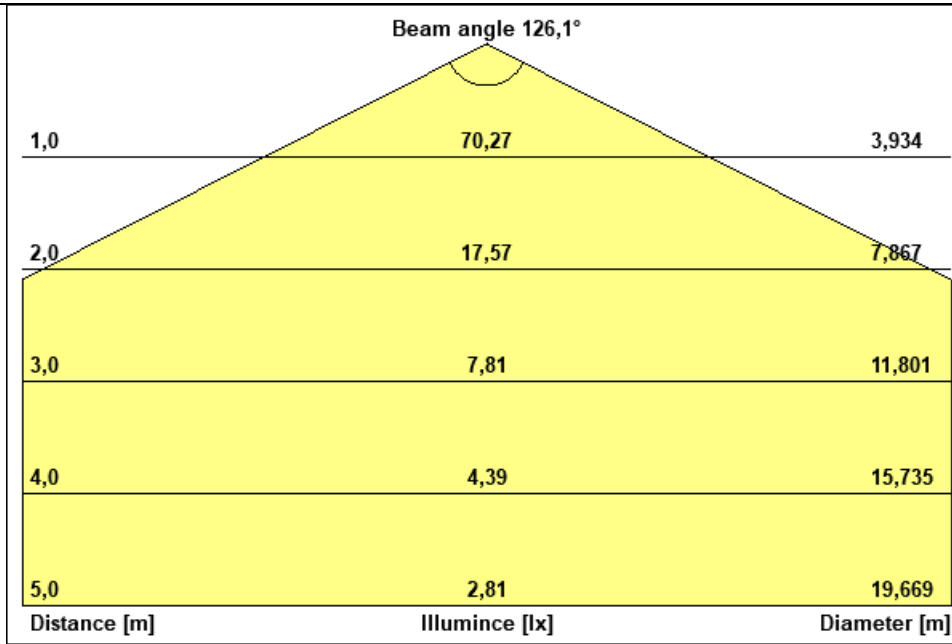


**CIE 1931 diagram**

x 0,1505  
 y 0,0303  
 Angular Colour Uniformity 0,0000  
 Binning



**Beam cone**

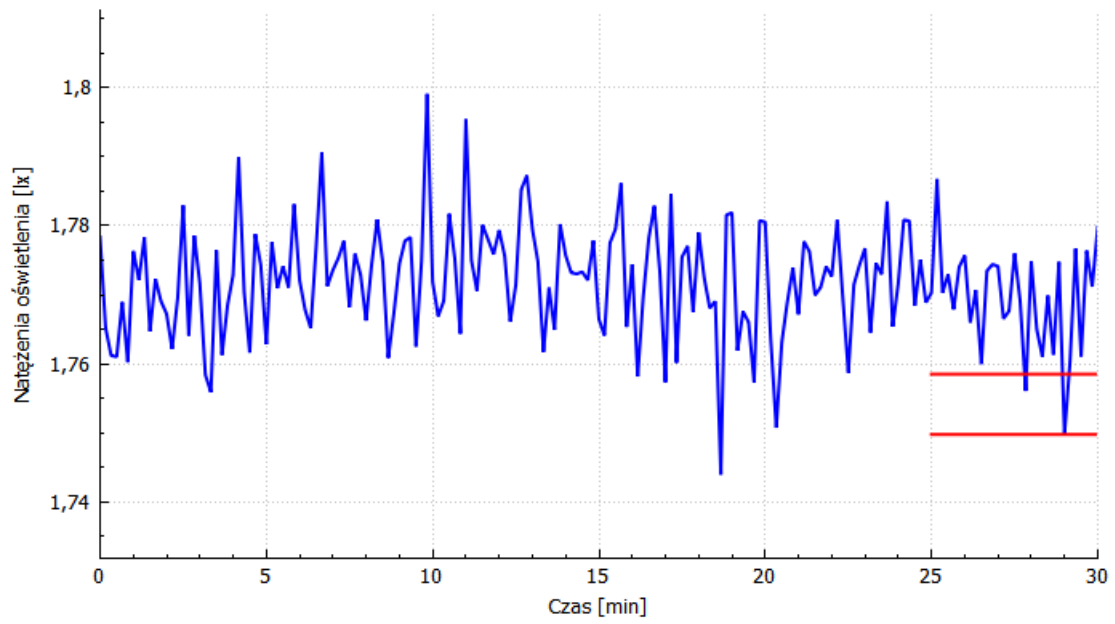


Distance [m]	Max illuminance [lx]	Diameter [m]
1	70,2708	3,934
2	17,5677	7,867
3	7,8079	11,801
4	4,3919	15,735
5	2,8108	19,669

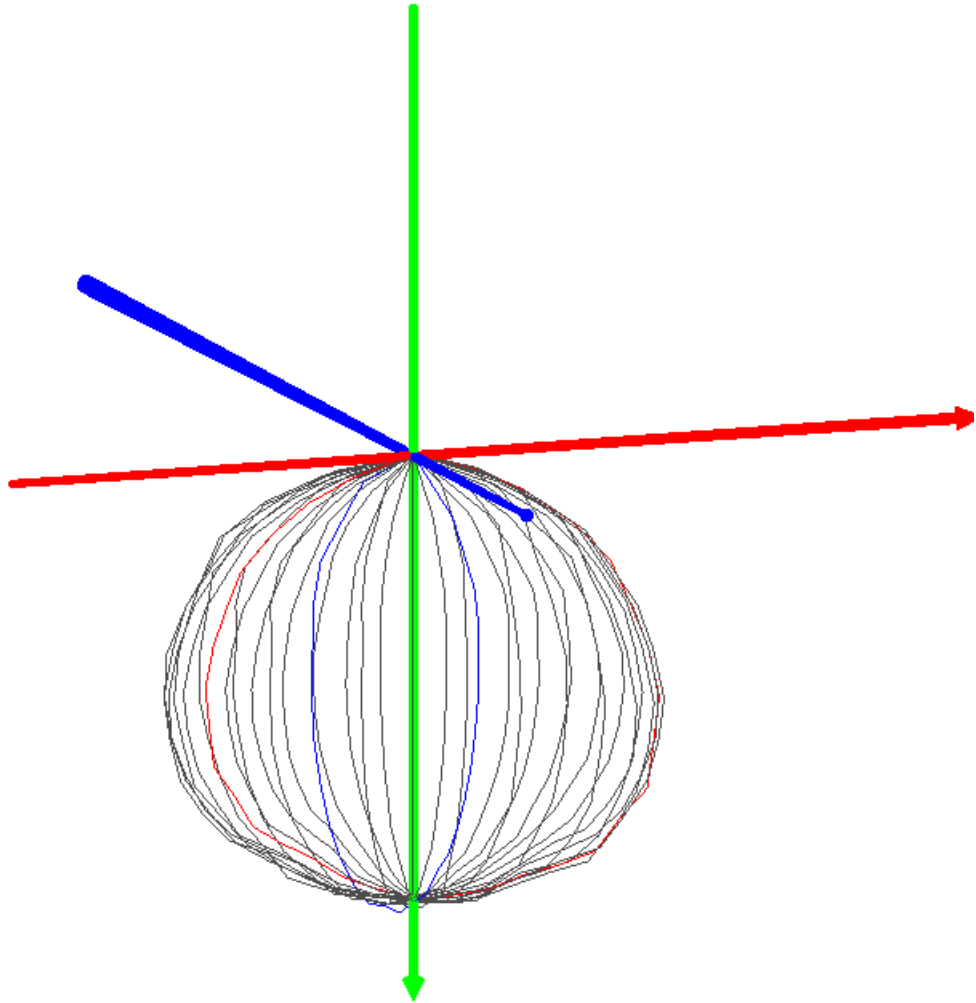
C plane	Beam angle	Gamma max	Start [°]	Stop [°]
Average	126,1°	5,0°	-63,0°	63,0°
0-180°	123,4°	5,0°	-61,7°	61,7°
90-270°	124,9°	5,0°	-62,5°	62,5°



## Stabilization



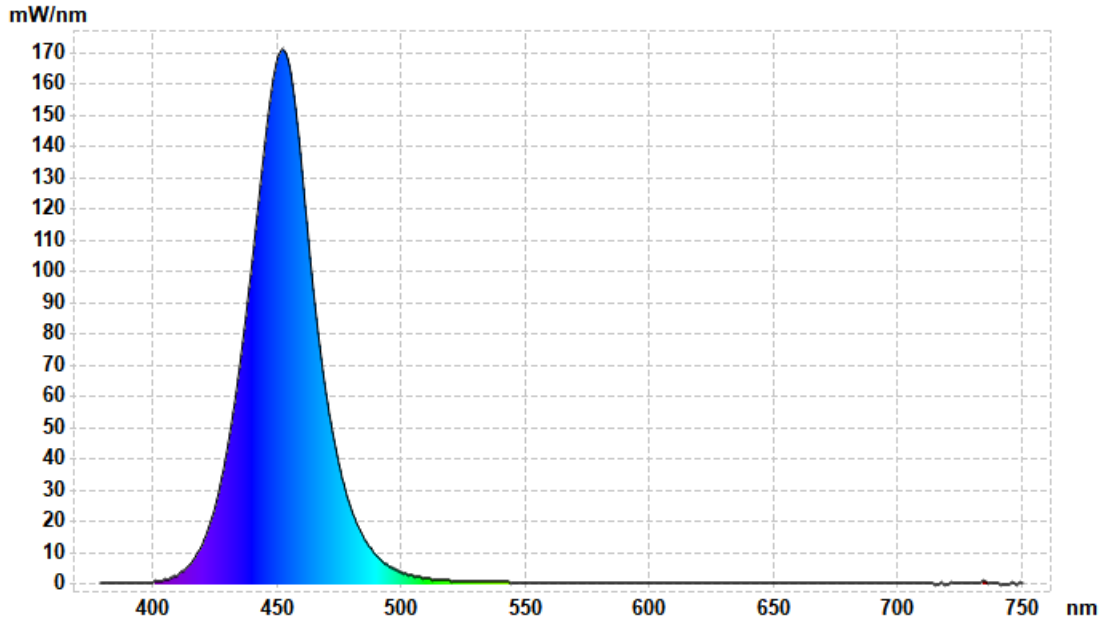
### 3D Chart



Legend

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

## Spectral distribution



Results					
CIE 1931 2° observer		CIE 1964 10° observer		Other	
x	0,1505	x	0,1452	CCT	-
y	0,0303	y	0,0554	Chromaticity Error	0,343
Flux	218,31 lm	u'	0,1721	Color Peak	452,76
		v'	0,1478	Color Peak Value	171,29
		L	100,00	Color Dominant	457,4
u'	0,1966	a	201,57	Luminous Intensity	0,00
v'	0,0891	b	-275,54	Purity	
L	100,00	X	1170,45	Radiometric	5,5772
a	367,69	Y	446,88	PAR	-
b	-383,45	Z	6445,78	PPFD	-
Rendering Indices				Metamerism Indices	
Ra	-58,9	Ra	-58,9	Mivis	9,5
R1	-60,3	R8	-87,5	Miuv	6,8
R2	-8,2	R9	-100,0	Binning	
R3	-90,2	R10	-100,0	Binning	
R4	-100,0	R11	-100,0	Brightness	
R5	-45,6	R12	-100,0		
R6	-47,1	R13	-47,1		
R7	-32,4	R14	-4,6		