

Report No. : 193

Test Time : 2025-01-29 19:38:27

Page 1 of 4

## SELECTA Goniophotometer Test Report

### Product Info

Luminaire Category : **MagLight**

Luminaire : **LINE UGR 220мм 4000K 48v**

Lamp Category : **MagLight**

Lamp : **LINE UGR 220мм 4000K 48v**

Manufacturer : **Selecta**

Submitter : **Gubarev S. S.**

Nuber of Lamps : **1**

Lumens per Lamp : **0 lm**

Luminous Length : **220 mm**

Luminous Width : **22 mm**

Luminous Height : **43 mm**

### Electric Parameters

Voltage : **219.80 V** Current : **0.1300 A** Power : **12.32 W** Power Factor : **0.430** Frequency : **49.99 Hz**

### Photometric Parameters

CIE Class : **Direct**

Measurement Flux : **1050.6 lm**

Upward Ratio : **0.00 %**

Maximum Intensity : **2480.63 cd/klm**

Central Intensity : **2478.73 cd/klm**

Luminaire Efficacy Rating (LER) : **85**

Beam Angle (C0-C180,C90-C270) : **35.9 °, 35.5 °**

Field Angle (C0-C180,C90-C270) : **60.8 °, 60.3 °**

Total Rated Lamp Lumens : **1050.6 lm**

Efficiency : **100.00 %**

Downward Ratio : **100.00 %**

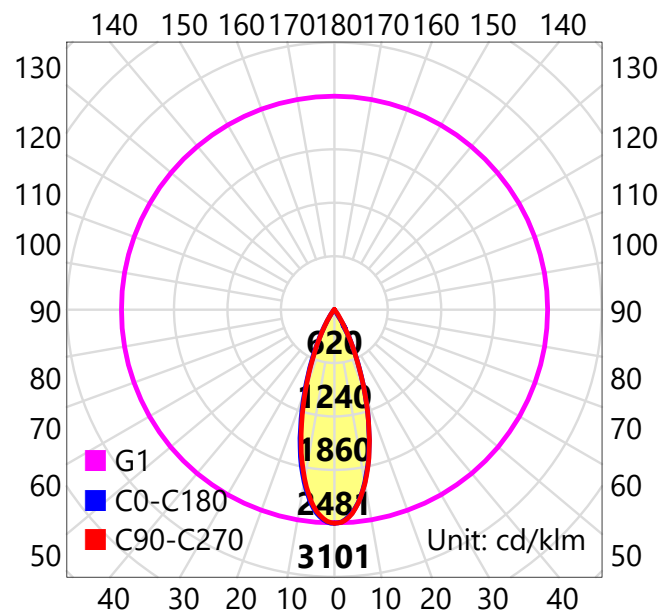
Position Of Maximum Intensity : **C315° γ1°**

S/MH(C0-C180,C90-C270) : **0.59, 0.58**

Energy Efficiency Class : **F (EU 2019/2015 η<sub>TM</sub>:99lm/W)**

Beam Angle (C45-C225,C135-C315) : **35.7 °, 35.6 °**

Field Angle (C45-C225,C135-C315) : **63.5 °, 63.5 °**



Test Type : Type C

Test Distance : 7.922 m

C Plane (°): 0.0-360.0:45.0 γ (°): 0.0-90.0:1.0

Test Device : Lisun LSG-1800A

Temperature : 21.0°C Humidity : 22.0%

Test Lab :

Test By : Gubarev S. S.

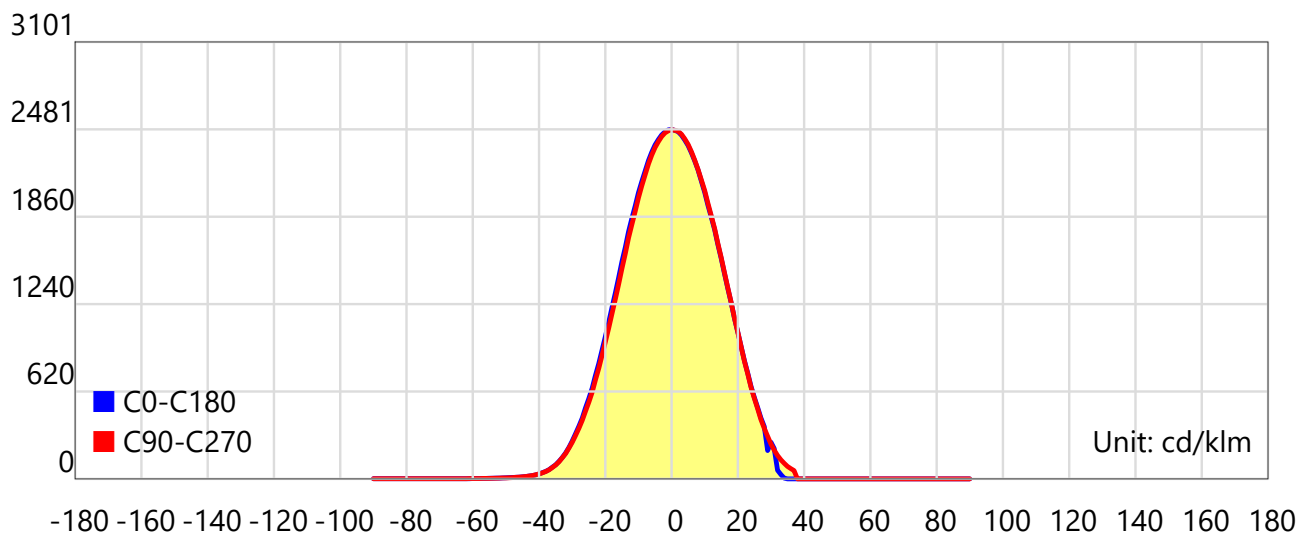
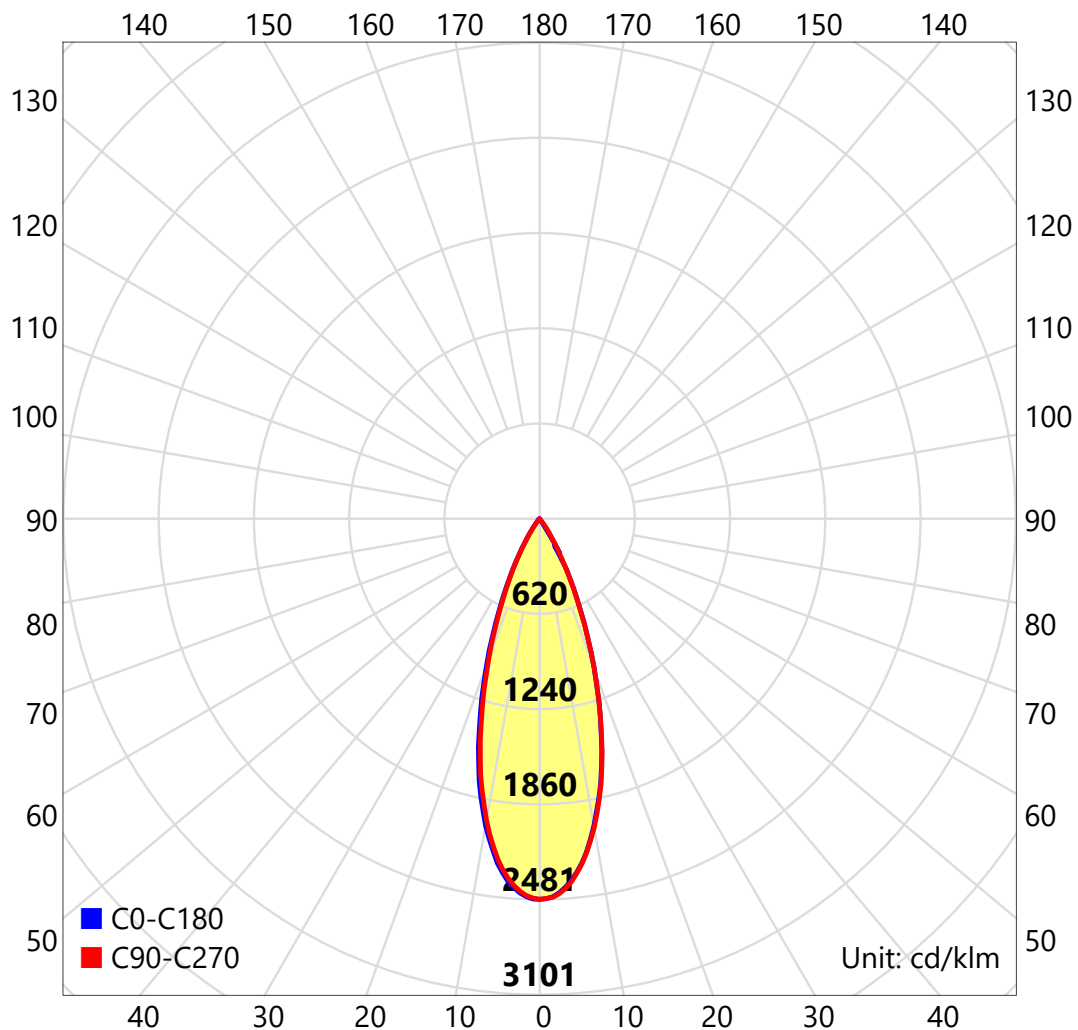
Review By :

Report No. : 193

Test Time : 2025-01-29 19:38:27

Page 2 of 4

## Light Distribution Curve

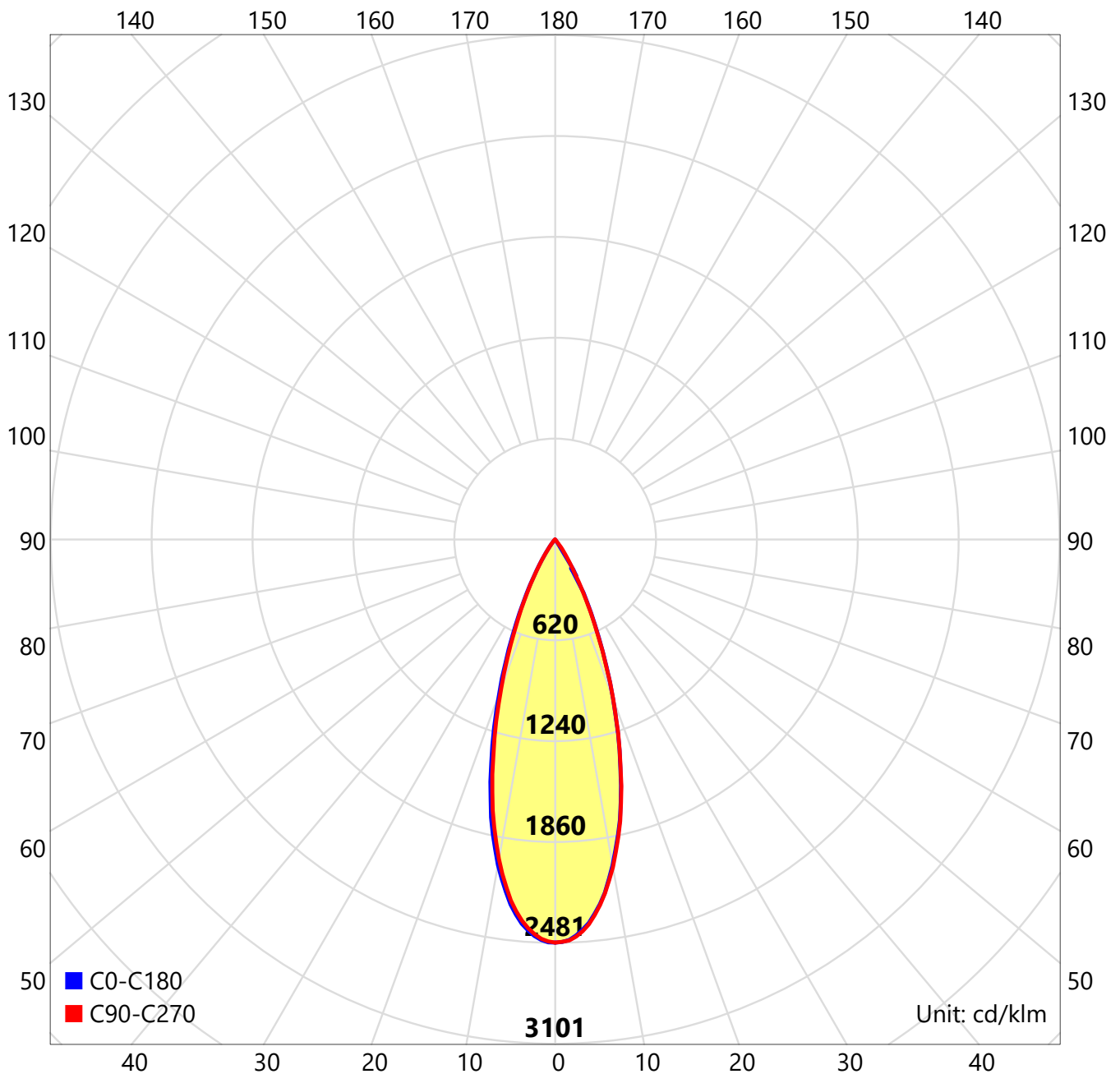


Report No. : 193

Test Time : 2025-01-29 19:38:27

Page 3 of 4

## Light Distribution Curve (cd/klm)



LINE UGR 220мм 4000K 48v/MagLight

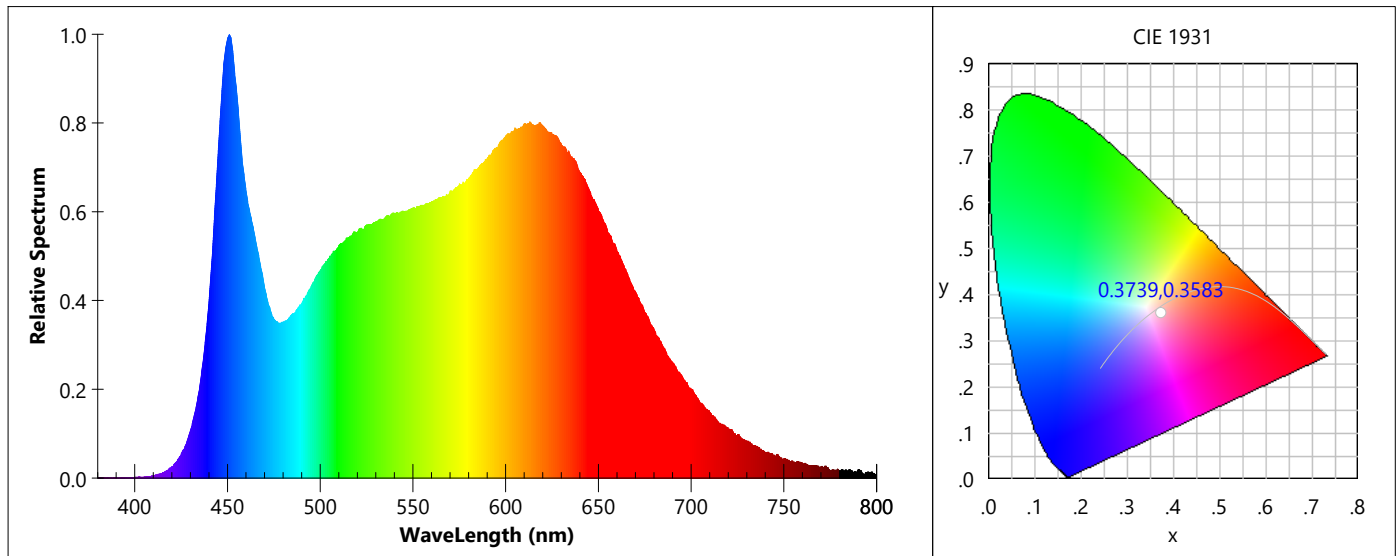
$\eta=100\%$

Report No. : 193

Test Time : 2025-01-29 19:38:27

Page 4 of 4

## Color Properties



### Colorimetric

CIE(x,y): 0.3739,0.3583

CIE(u,v): 0.2283,0.3281

CIE(u',v'): 0.2283,0.4922

CCT: 4046 K (Duv=-0.006950 )

Dominant Wavelength: 584.1 nm

Color Purity: 0.197

Peak Wavelength: 450.9 nm

Half Width: 25.1 nm

Color Ratio: R:0.208, G:0.745, B:0.047

Color Render Index: Ra: 95.8

R1: 98	R2: 98	R3: 98	R4: 98	R5: 98	R6: 94	R7: 94	R8: 91
R9: 80	R10: 97	R11: 98	R12: 79	R13: 98	R14: 99	R15: 98	

Color Quality Scale: Qa: 93.3 , Qf: 92.1 , Qp: 96.1 , Qg: 101.4

Q1: 94	Q2: 99	Q3: 87	Q4: 88	Q5: 94	Q6: 97	Q7: 95	Q8: 96
Q9: 99	Q10: 95	Q11: 94	Q12: 94	Q13: 94	Q14: 93	Q15: 93	

TM-30-18: Rf: 92 , Rg: 101

### Phyto-light Parameters

Photosynthetic Photon Flux (Фp): 16.584 umol/s  
 Photosynthetic Active Radiant Flux (Фe): 3.517 W  
 Photons Flux (400~500nm): 3.143 umol/s  
 Photons Flux (600~700nm): 6.967 umol/s  
 Photons Flux (PFuv 280~400nm): 0.001 umol/s  
 Radiant Flux (400~500nm): 0.813 W  
 Radiant Flux (600~700nm): 1.303 W  
 Radiant Flux (280~400nm): 0.000 W  
 YPF (320~800nm): 14.596 umol/s  
 YPF (500~600nm): 5.633 umol/s  
 YPF (700~800nm): 0.178 umol/s  
 Radiant Flux (Chl-A): 0.272 W

Photosynthetic Photon Efficacy (Kp): 1.346 umol/J  
 Photosynthetic Radiant Efficiency (ηe): 0.285  
 Photons Flux (500~600nm): 6.474 umol/s  
 Photons Flux (PFfr 700~800nm): 0.865 umol/s  
 Photons Flux (PF\_PBAR): 17.450 umol/s  
 Radiant Flux (500~600nm): 1.401 W  
 Radiant Flux (700~800nm): 0.142 W  
 R/B: 1.6      R/FR: 9.2  
 YPF (400~500nm): 2.271 umol/s  
 YPF (600~700nm): 6.514 umol/s  
 YPF (320~400nm): 0.001 umol/s  
 Radiant Flux (Chl-B): 0.513 W

Test Type : Type C      Test Distance : 7.922 m  
 Test Device : Lisun LSG-1800A  
 Test Lab :  
 Test By : Gubarev S. S.

C Plane (°): 0.0-360.0:45.0γ (°) : 0.0-90.0:1.0  
 Temperature : 21.0°C      Humidity : 22.0%  
 Review By :