

Report No. : 200

Test Time : 2025-02-15 19:52:42

Page 1 of 4

## SELECTA Goniophotometer Test Report

### Product Info

Luminaire Category : **MagLight**  
Luminaire : **Top Spot d45мм 6500K**  
Lamp Category : **MagLight**  
Lamp : **Top Spot d45мм 6500K**  
Manufacturer : **Selecta**  
Submitter : **Gubarev S. S.**  
Nuber of Lamps : **1**  
Luminous Length : **45 mm**

Lumens per Lamp : **0 lm**  
Luminous Width : **45 mm**  
Luminous Height : **40 mm**

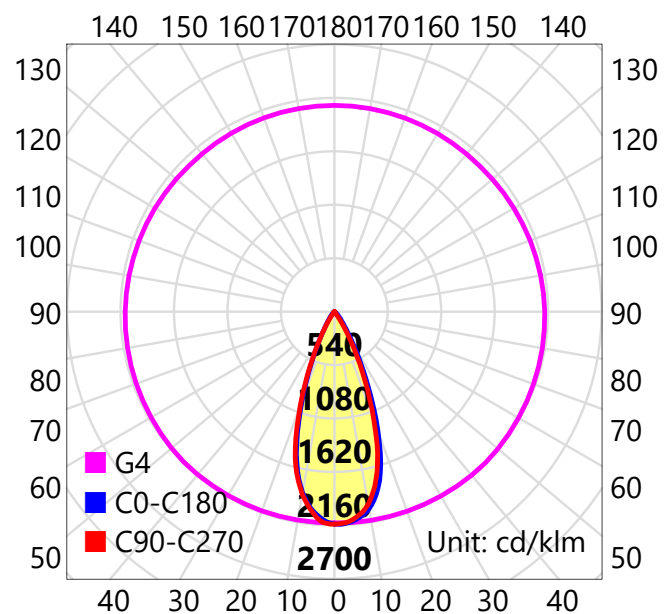
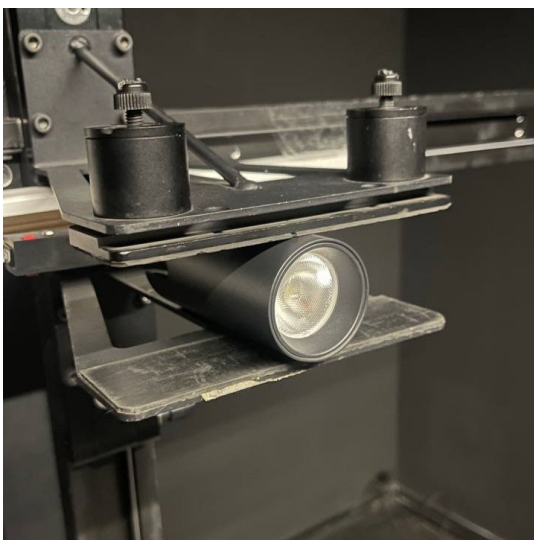
### Electric Parameters

Voltage : **220.00 V** Current : **0.1020 A** Power : **9.40 W** Power Factor : **0.416** Frequency : **49.96 Hz**

### Photometric Parameters

CIE Class : **Direct**  
Measurement Flux : **955.5 lm**  
Upward Ratio : **0.00 %**  
Maximum Intensity : **2160.02 cd/klm**  
Central Intensity : **2146.00 cd/klm**  
Luminaire Efficacy Rating (LER) : **102**  
Beam Angle (C0-C180,C90-C270) : **40.8 °, 40.3 °**  
Field Angle (C0-C180,C90-C270) : **64.2 °, 61.6 °**

Total Rated Lamp Lumens : **955.5 lm**  
Efficiency : **100.00 %**  
Downward Ratio : **100.00 %**  
Position Of Maximum Intensity : **C45° γ4°**  
S/MH(C0-C180,C90-C270) : **0.68, 0.67**  
Energy Efficiency Class : **E (EU 2019/2015 η<sub>TM</sub>:118lm/W)**  
Beam Angle (C45-C225,C135-C315) : **39.8 °, 41.4 °**  
Field Angle (C45-C225,C135-C315) : **57.8 °, 62.1 °**



Average Beam Angle (50%): 40.6°

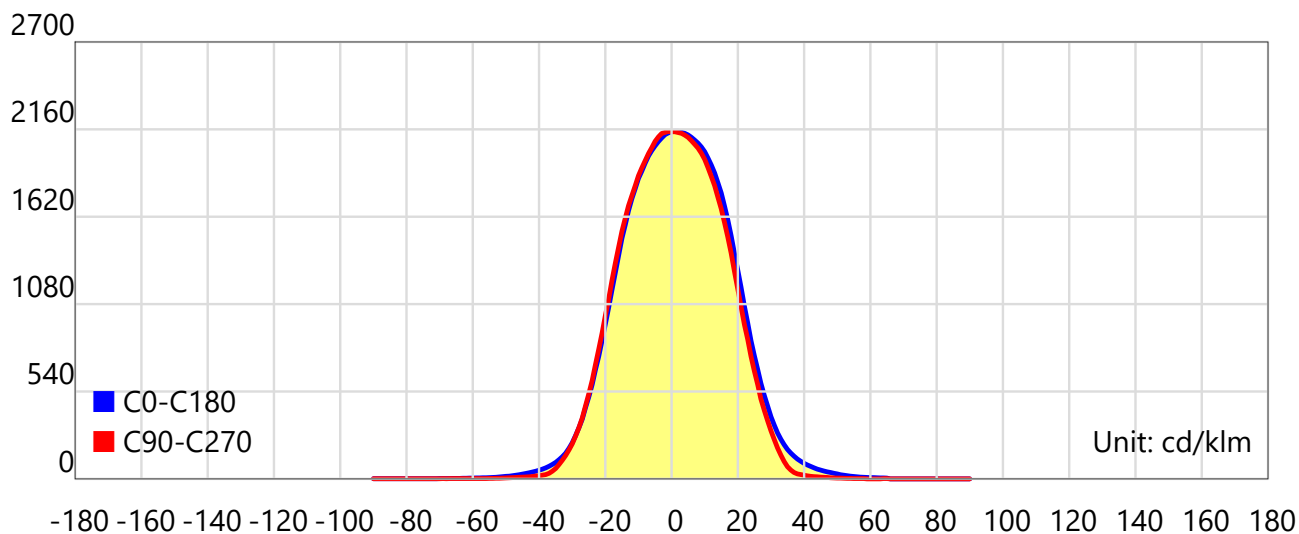
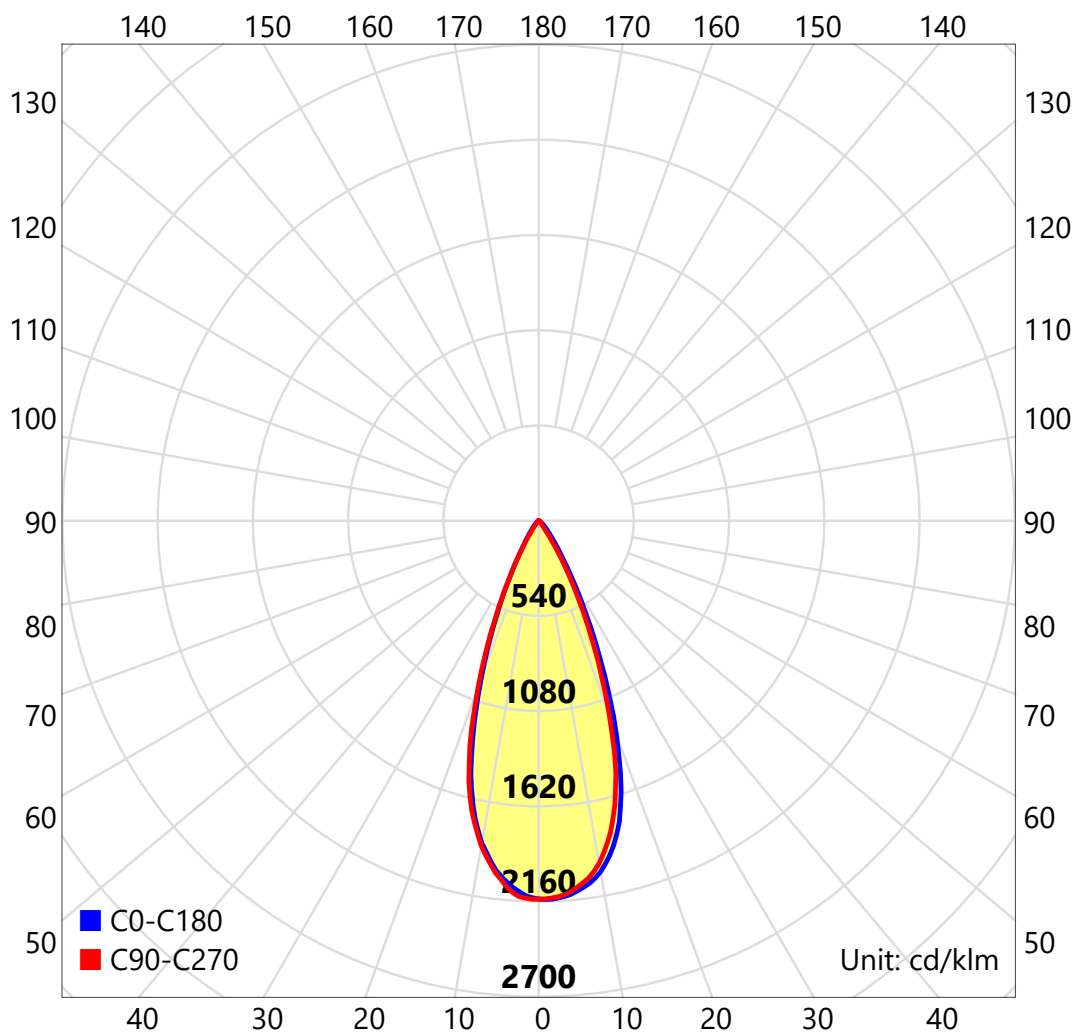
Test Type : Type C Test Distance : 7.922 m C Plane (°): 0.0-360.0:45.0 γ (°): 0.0-90.0:1.0  
Test Device : Lisun LSG-1800A Temperature : 21.0°C Humidity : 22.0%  
Test Lab :  
Test By : Gubarev S. S. Review By :

Report No. : 200

Test Time : 2025-02-15 19:52:42

Page 2 of 4

## Light Distribution Curve



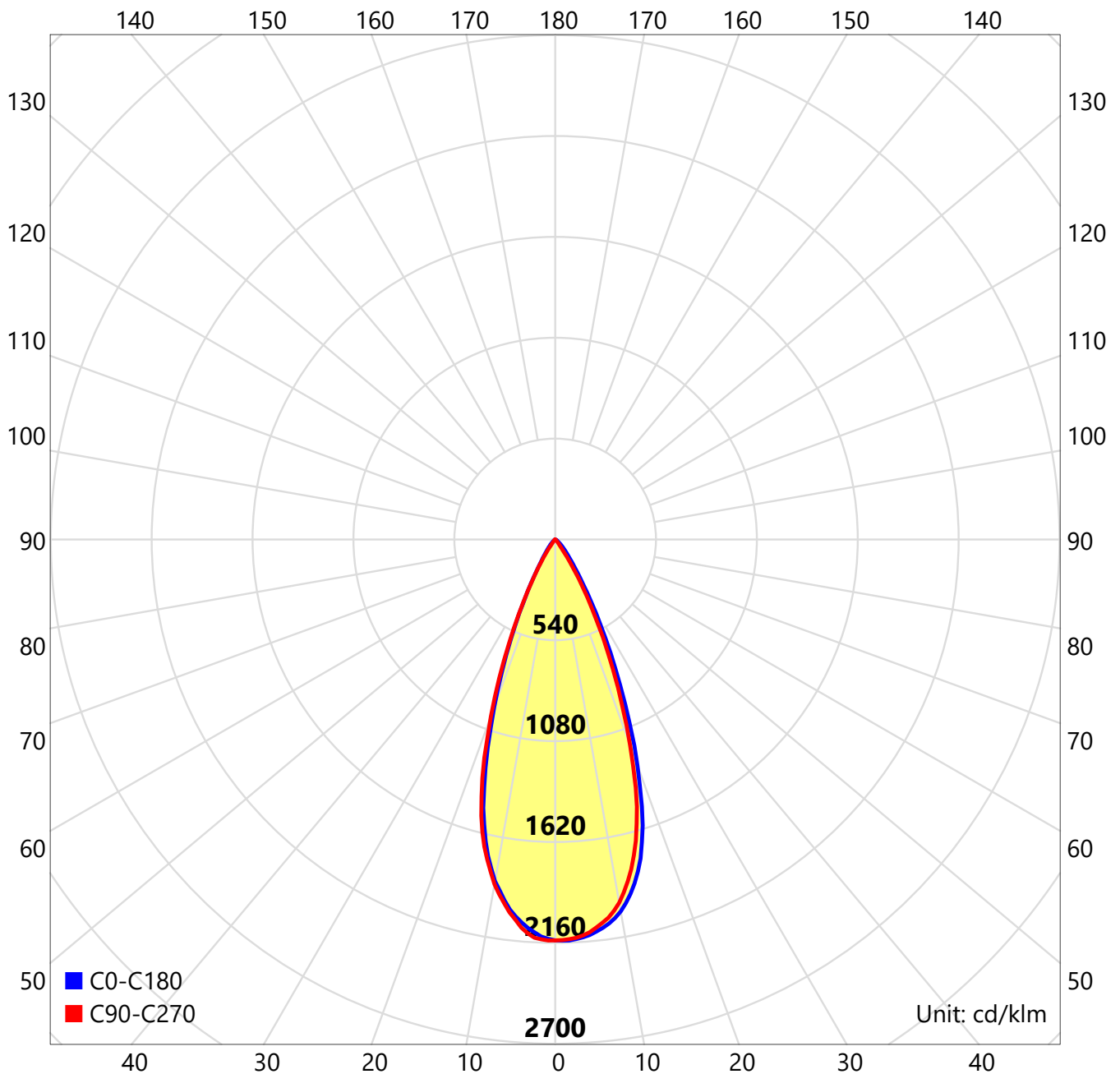
Test Type : Type C      Test Distance : 7.922 m      C Plane (°): 0.0-360.0:45.0γ (°): 0.0-90.0:1.0  
Test Device : Lisun LSG-1800A      Temperature : 21.0°C      Humidity : 22.0%  
Test Lab :  
Test By : Gubarev S. S.      Review By :

Report No. : 200

Test Time : 2025-02-15 19:52:42

Page 3 of 4

### Light Distribution Curve (cd/klm)



Top Spot d45mm 6500K/MagLight

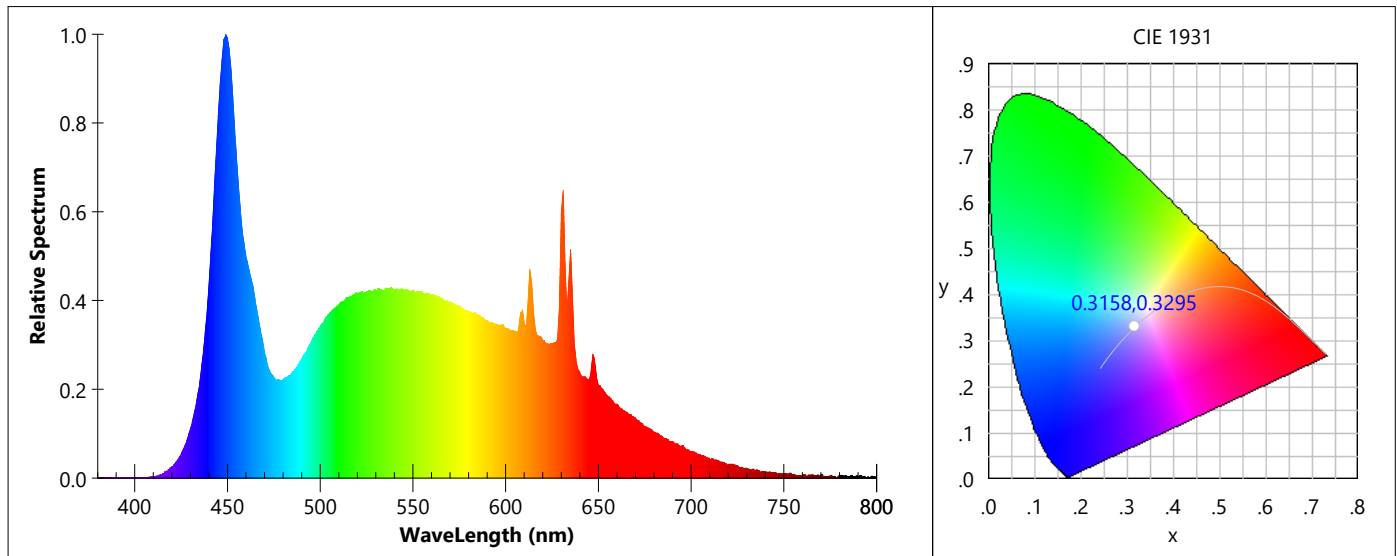
$\eta=100\%$

Report No. : 200

Test Time : 2025-02-15 19:52:42

Page 4 of 4

## Color Properties



### Colorimetric

CIE(x,y): 0.3158,0.3295

CIE(u,v): 0.1998,0.3127

CIE(u',v'): 0.1998,0.4691

CCT: 6334 K (Duv=0.001907)

Dominant Wavelength: 488.9 nm

Color Purity: 0.062

Peak Wavelength: 449.0 nm

Half Width: 19.0 nm

Color Ratio: R:0.152, G:0.791, B:0.058

Color Render Index: Ra: 91.5

R1: 93	R2: 92	R3: 90	R4: 93	R5: 92	R6: 88	R7: 94	R8: 91
R9: 70	R10: 80	R11: 92	R12: 66	R13: 93	R14: 94	R15: 92	

Color Quality Scale: Qa: 90.6 , Qf: 89.3 , Qp: 93.2 , Qg: 100.5

Q1: 96	Q2: 98	Q3: 81	Q4: 82	Q5: 90	Q6: 93	Q7: 93	Q8: 97
Q9: 94	Q10: 90	Q11: 90	Q12: 92	Q13: 94	Q14: 94	Q15: 95	

TM-30-18: Rf: 89 , Rg: 100

### Phyto-light Parameters

Photosynthetic Photon Flux (Фp): 14.336 umol/s  
 Photosynthetic Active Radiant Flux (Фe): 3.166 W  
 Photons Flux (400~500nm): 3.914 umol/s  
 Photons Flux (600~700nm): 4.201 umol/s  
 Photons Flux (PFuv 280~400nm): 0.001 umol/s  
 Radiant Flux (400~500nm): 1.019 W  
 Radiant Flux (600~700nm): 0.790 W  
 Radiant Flux (280~400nm): 0.000 W  
 YPF (320~800nm): 12.228 umol/s  
 YPF (500~600nm): 5.324 umol/s  
 YPF (700~800nm): 0.076 umol/s  
 Radiant Flux (Chl-A): 0.209 W

Photosynthetic Photon Efficacy (Kp): 1.525 umol/J  
 Photosynthetic Radiant Efficiency (ηe): 0.337  
 Photons Flux (500~600nm): 6.221 umol/s  
 Photons Flux (PFfr 700~800nm): 0.342 umol/s  
 Photons Flux (PF\_PBAR): 14.679 umol/s  
 Radiant Flux (500~600nm): 1.356 W  
 Radiant Flux (700~800nm): 0.056 W  
 R/B: 0.8      R/FR: 14.0  
 YPF (400~500nm): 2.848 umol/s  
 YPF (600~700nm): 3.980 umol/s  
 YPF (320~400nm): 0.000 umol/s  
 Radiant Flux (Chl-B): 0.584 W

Test Type : Type C

Test Distance : 7.922 m

C Plane (°): 0.0-360.0:45.0γ (°): 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 :