

Report No. : 191

Test Time : 2025-02-15 19:39:46

Page 1 of 4

SELECTA Goniophotometer Test Report

Product Info

Luminaire Category : **MagLight**
Luminaire : **Top Spot d45мм 2700K**
Lamp Category : **MagLight**
Lamp : **Top Spot d45мм 2700K**
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**

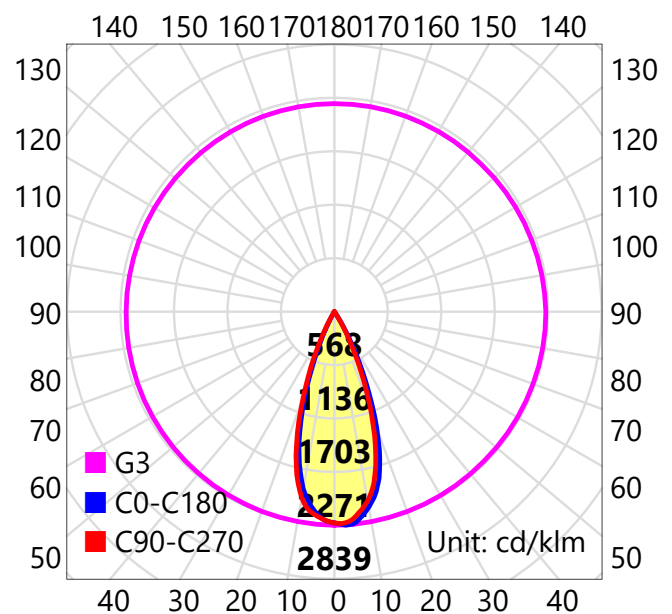
Electric Parameters

Voltage : **220.00 V** Current : **0.1020 A** Power : **9.41 W** Power Factor : **0.416** Frequency : **49.96 Hz**

Photometric Parameters

CIE Class : **Direct**
Measurement Flux : **689.9 lm**
Upward Ratio : **0.00 %**
Maximum Intensity : **2271.24 cd/klm**
Central Intensity : **2244.15 cd/klm**
Luminaire Efficacy Rating (LER) : **73**
Beam Angle (C0-C180,C90-C270) : **39.3 °, 39.0 °**
Field Angle (C0-C180,C90-C270) : **57.2 °, 57.2 °**

Total Rated Lamp Lumens : **689.9 lm**
Efficiency : **100.00 %**
Downward Ratio : **100.00 %**
Position Of Maximum Intensity : **C0° γ3°**
S/MH(C0-C180,C90-C270) : **0.66, 0.65**
Energy Efficiency Class : **G (EU 2019/2015 η_{TM}:85lm/W)**
Beam Angle (C45-C225,C135-C315) : **41.1 °, 40.4 °**
Field Angle (C45-C225,C135-C315) : **63.0 °, 62.2 °**



Average Beam Angle (50%): 39.9°

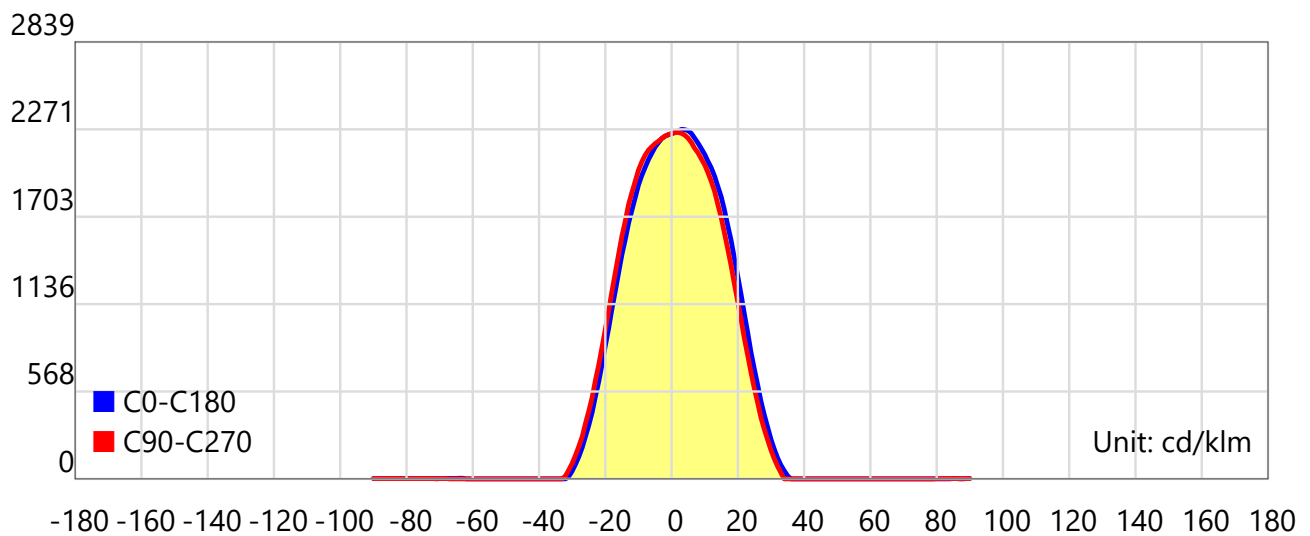
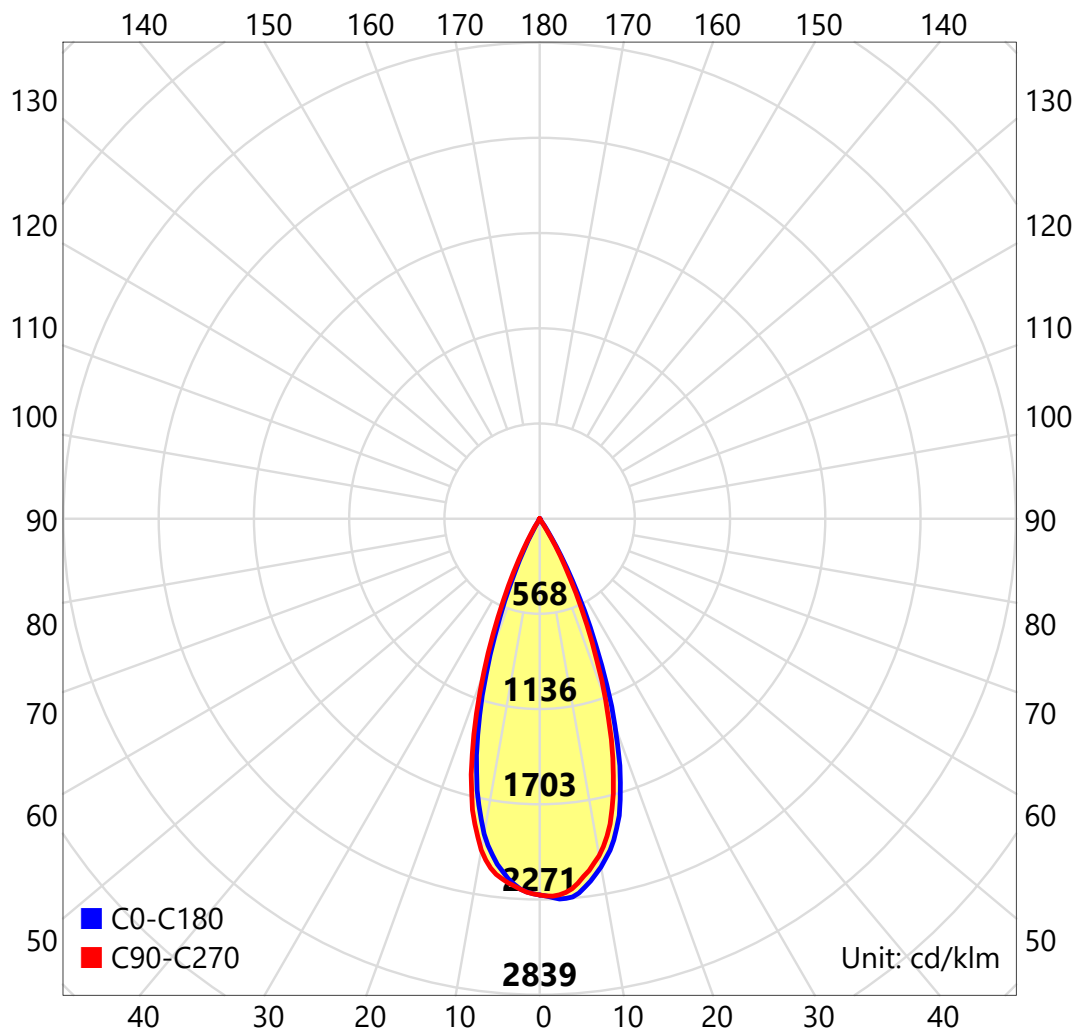
Test Type : Type C Test Distance : 7.922 m C Plane (°): 0.0-360.0:45.0 γ (°): 0.0-90.0:1.0
Test Device : Lisun LSG-1800A Temperature : 21.0°C Humidity : 22.0%
Test Lab :
Test By : Gubarev S. S. Review By :

Report No. : 191

Test Time : 2025-02-15 19:39:46

Page 2 of 4

Light Distribution Curve



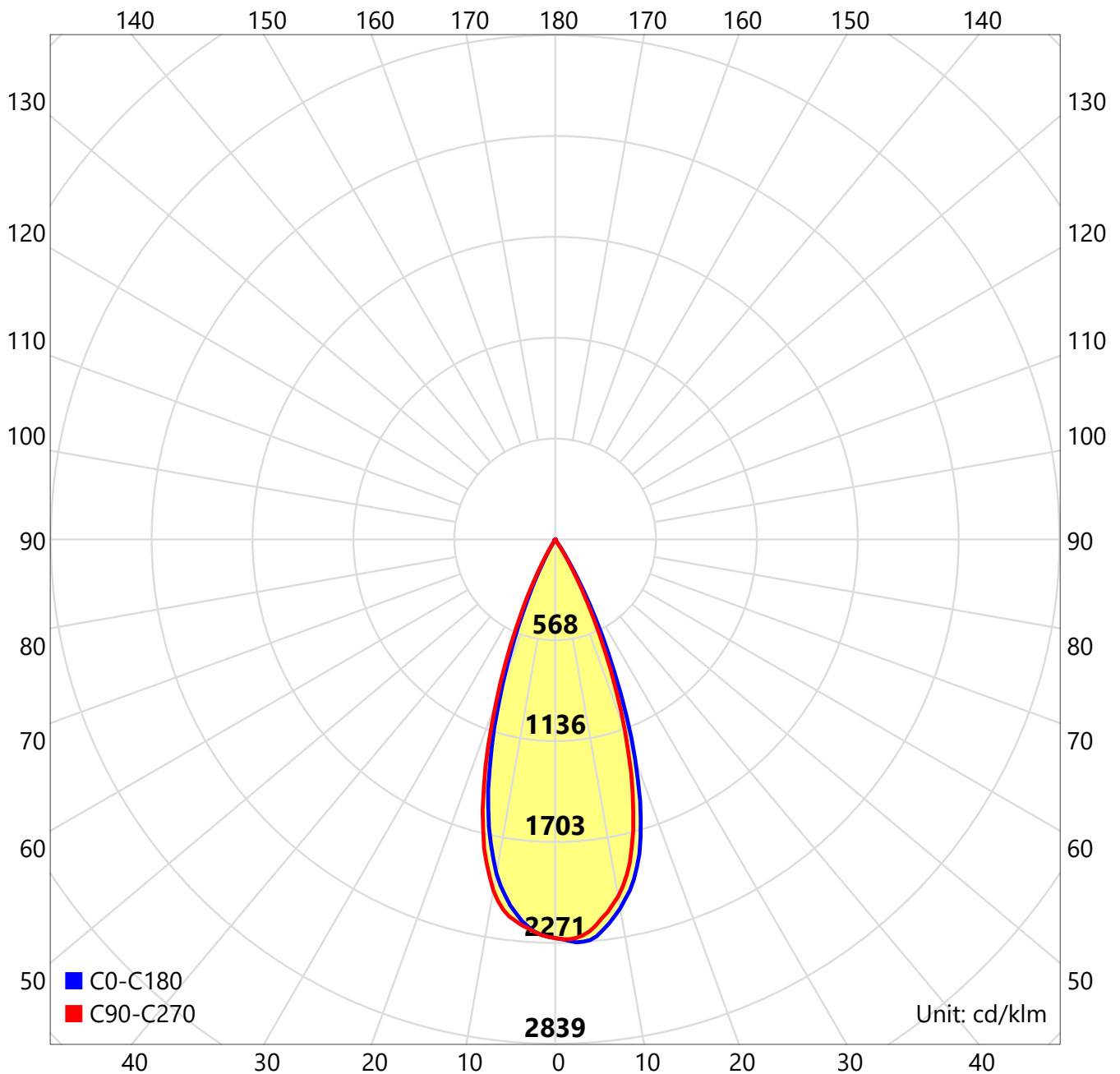
Test Type : Type C Test Distance : 7.922 m C Plane (°): 0.0-360.0:45.0γ (°): 0.0-90.0:1.0
Test Device : Lisun LSG-1800A Temperature : 21.0°C Humidity : 22.0%
Test Lab :
Test By : Gubarev S. S. Review By :

Report No. : 191

Test Time : 2025-02-15 19:39:46

Page 3 of 4

Light Distribution Curve (cd/klm)



Top Spot d45mm 2700K/MagLight

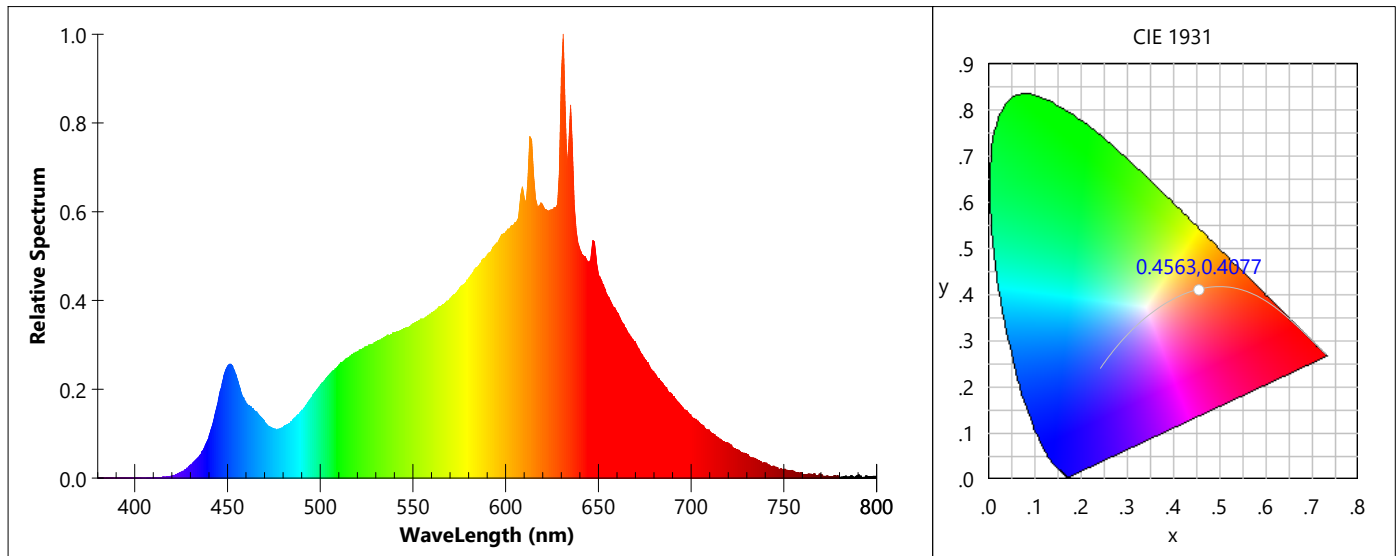
$\eta=100\%$

Report No. : 191

Test Time : 2025-02-15 19:39:46

Page 4 of 4

Color Properties



Colorimetric

CIE(x,y): 0.4563,0.4077

CIE(u,v): 0.2615,0.3505

CIE(u',v'): 0.2615,0.5257

CCT: 2727 K (Duv=-0.000771)

Dominant Wavelength: 584.3 nm

Color Purity: 0.594

Peak Wavelength: 630.9 nm

Half Width: 52.4 nm

Color Ratio: R:0.269, G:0.706, B:0.026

Color Render Index: Ra: 94.6

R1: 96	R2: 99	R3: 99	R4: 97	R5: 97	R6: 96	R7: 91	R8: 82
R9: 61	R10: 96	R11: 99	R12: 89	R13: 97	R14: 99	R15: 91	

Color Quality Scale: Qa: 92.3 , Qf: 91.8 , Qp: 96.2 , Qg: 97.6

Q1: 88	Q2: 94	Q3: 92	Q4: 93	Q5: 96	Q6: 94	Q7: 92	Q8: 93
Q9: 96	Q10: 95	Q11: 95	Q12: 95	Q13: 94	Q14: 89	Q15: 88	

TM-30-18: Rf: 93 , Rg: 100

Phyto-light Parameters

Photosynthetic Photon Flux (Фp): 10.760 umol/s
 Photosynthetic Active Radiant Flux (Фe): 2.194 W
 Photons Flux (400~500nm): 0.961 umol/s
 Photons Flux (600~700nm): 5.778 umol/s
 Photons Flux (PFuv 280~400nm): 0.000 umol/s
 Radiant Flux (400~500nm): 0.247 W
 Radiant Flux (600~700nm): 1.082 W
 Radiant Flux (280~400nm): 0.000 W
 YPF (320~800nm): 9.798 umol/s
 YPF (500~600nm): 3.549 umol/s
 YPF (700~800nm): 0.126 umol/s
 Radiant Flux (Chl-A): 0.182 W

Photosynthetic Photon Efficacy (Kp): 1.143 umol/J
 Photosynthetic Radiant Efficiency (ηe): 0.233
 Photons Flux (500~600nm): 4.021 umol/s
 Photons Flux (PFfr 700~800nm): 0.530 umol/s
 Photons Flux (PF_PBAR): 11.290 umol/s
 Radiant Flux (500~600nm): 0.864 W
 Radiant Flux (700~800nm): 0.088 W
 R/B: 4.4 R/FR: 12.3
 YPF (400~500nm): 0.691 umol/s
 YPF (600~700nm): 5.431 umol/s
 YPF (320~400nm): 0.000 umol/s
 Radiant Flux (Chl-B): 0.231 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 :