

Report No. : 201

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SELECTA Goniophotometer Test Report

Product Info

Luminaire Category : **MagLight**
Luminaire : **Top Spot d45мм 4000K**
Lamp Category : **MagLight**
Lamp : **Top Spot d45мм 4000K**
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**

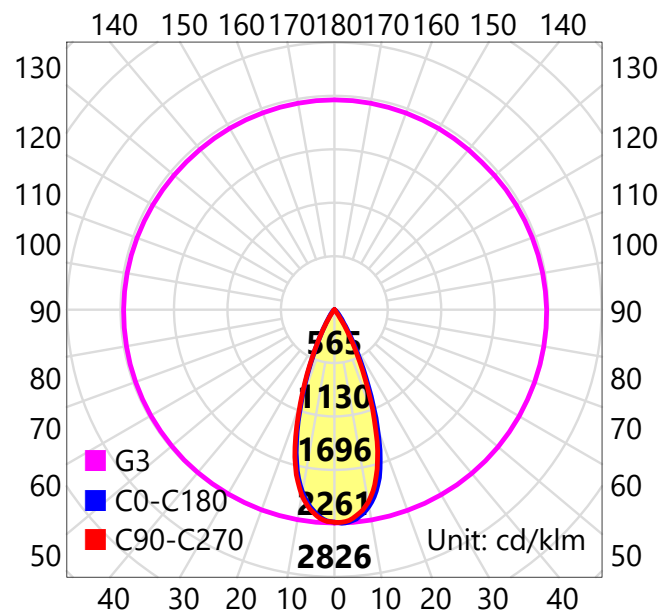
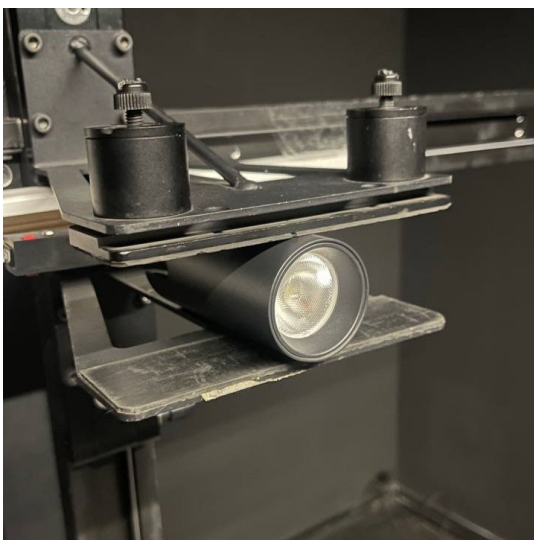
Electric Parameters

Voltage : **220.00 V** Current : **0.1000 A** Power : **9.20 W** Power Factor : **0.415** Frequency : **49.96 Hz**

Photometric Parameters

CIE Class : **Direct**
Measurement Flux : **853.5 lm**
Upward Ratio : **0.00 %**
Maximum Intensity : **2260.91 cd/klm**
Central Intensity : **2247.51 cd/klm**
Luminaire Efficacy Rating (LER) : **93**
Beam Angle (C0-C180,C90-C270) : **40.7 °, 40.4 °**
Field Angle (C0-C180,C90-C270) : **63.7 °, 61.9 °**

Total Rated Lamp Lumens : **853.5 lm**
Efficiency : **100.00 %**
Downward Ratio : **100.00 %**
Position Of Maximum Intensity : **C45° γ3°**
S/MH(C0-C180,C90-C270) : **0.68, 0.67**
Energy Efficiency Class : **F (EU 2019/2015 η_{TM}:108lm/W)**
Beam Angle (C45-C225,C135-C315) : **39.2 °, 39.8 °**
Field Angle (C45-C225,C135-C315) : **56.6 °, 58.7 °**



Average Beam Angle (50%): 40.0°

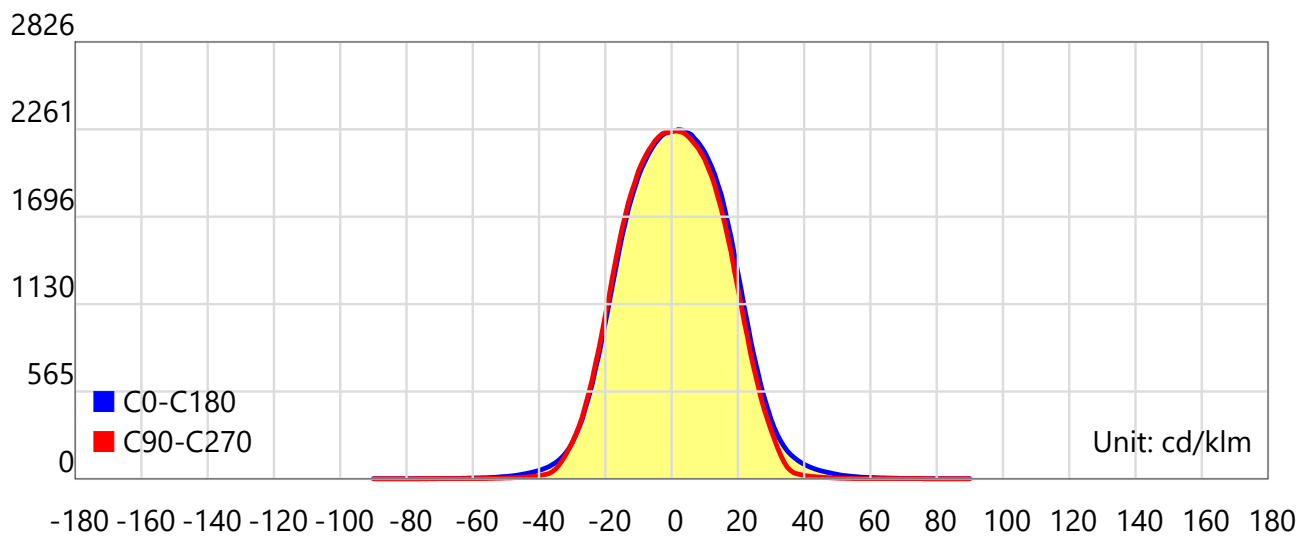
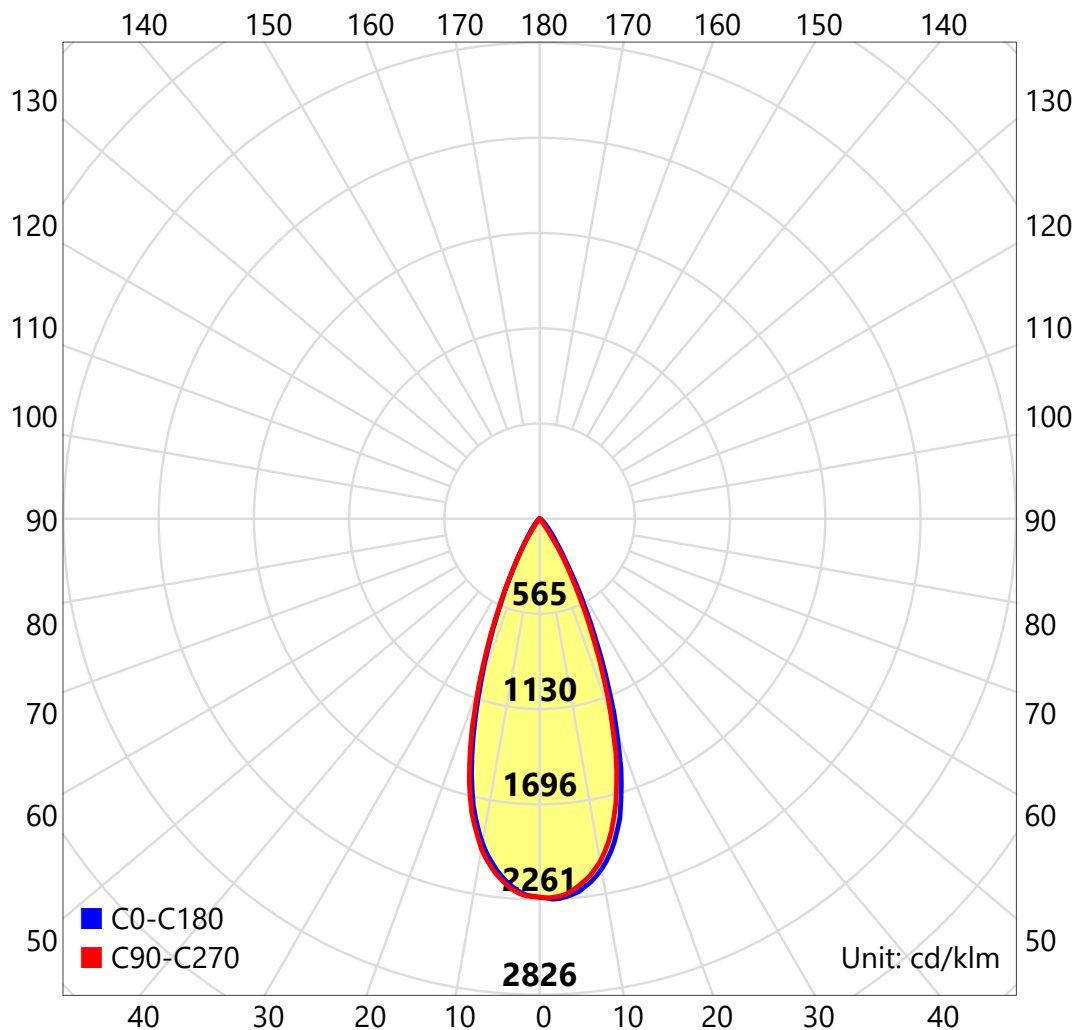
Test Type : Type C Test Distance : 7.922 m C Plane (°): 0.0-360.0:45.0 γ (°): 0.0-90.0:1.0
Test Device : Lisun LSG-1800A Temperature : 21.0°C Humidity : 22.0%
Test Lab :
Test By : Gubarev S. S. Review By :

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Light Distribution Curve

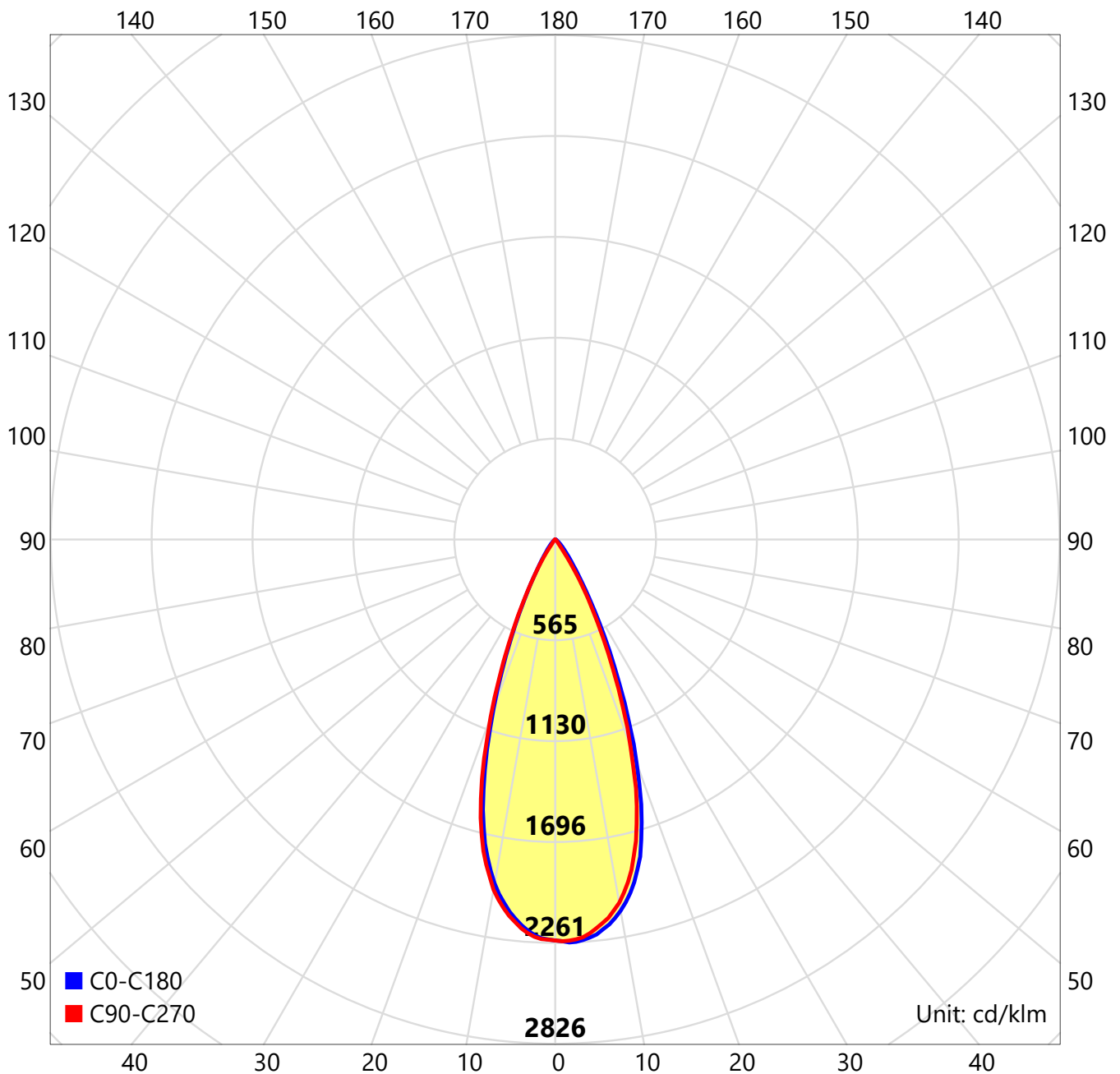


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Light Distribution Curve (cd/klm)



Top Spot d45мм 4000K/MagLight

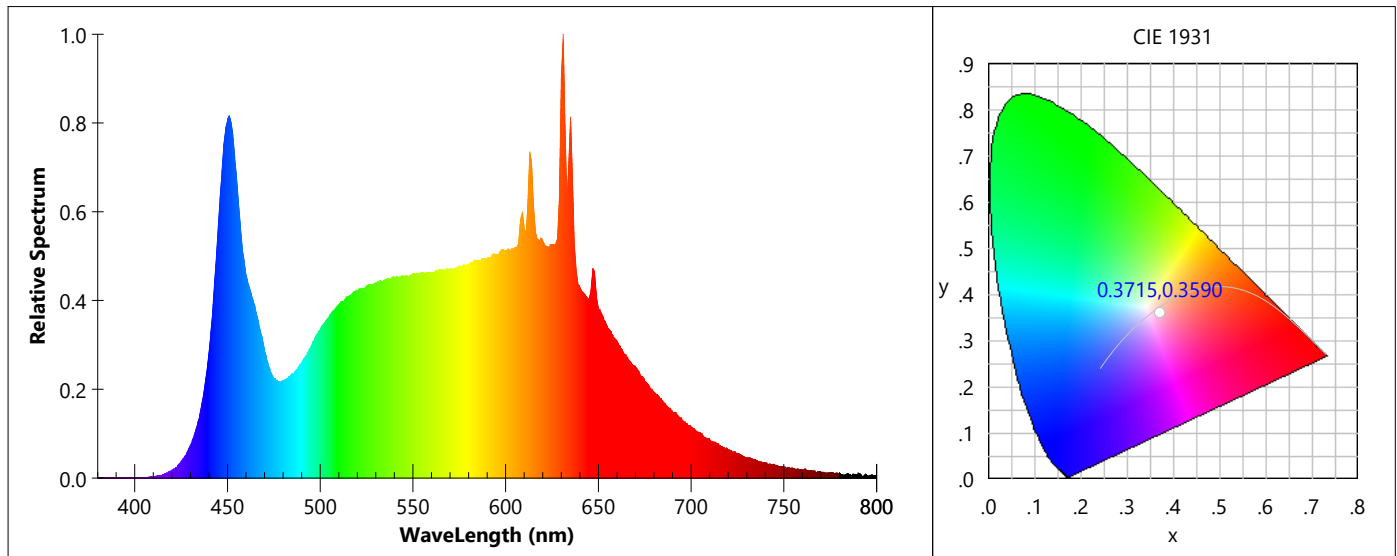
 $\eta=100\%$

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Color Properties



Colorimetric

CIE(x,y): 0.3715,0.3590 CIE(u,v): 0.2263,0.3281 CIE(u',v'): 0.2263,0.4922
 CCT: 4127 K (Duv=-0.005850) Dominant Wavelength: 602.3 nm Color Purity: 0.192
 Peak Wavelength: 630.8 nm Half Width: 45.0 nm Color Ratio: R:0.207, G:0.749, B:0.045

Color Render Index: Ra: 96.5

R1: 98	R2: 98	R3: 95	R4: 97	R5: 98	R6: 94	R7: 96	R8: 95
R9: 87	R10: 95	R11: 98	R12: 76	R13: 99	R14: 96	R15: 99	

Color Quality Scale: Qa: 93.8 , Qf: 91.8 , Qp: 97.6 , Qg: 103.8

Q1: 97	Q2: 99	Q3: 85	Q4: 88	Q5: 95	Q6: 96	Q7: 94	Q8: 98
Q9: 96	Q10: 94	Q11: 94	Q12: 95	Q13: 96	Q14: 96	Q15: 97	

TM-30-18: Rf: 92 , Rg: 102

Phyto-light Parameters

Photosynthetic Photon Flux (Фp): 13.115 umol/s	Photosynthetic Photon Efficacy (Kp): 1.426 umol/J
Photosynthetic Active Radiant Flux (Фe): 2.793 W	Photosynthetic Radiant Efficiency (ηe): 0.304
Photons Flux (400~500nm): 2.502 umol/s	Photons Flux (500~600nm): 5.268 umol/s
Photons Flux (600~700nm): 5.346 umol/s	Photons Flux (PFfr 700~800nm): 0.547 umol/s
Photons Flux (PFuv 280~400nm): 0.001 umol/s	Photons Flux (PF_PBAR): 13.663 umol/s
Radiant Flux (400~500nm): 0.649 W	Radiant Flux (500~600nm): 1.142 W
Radiant Flux (600~700nm): 1.003 W	Radiant Flux (700~800nm): 0.090 W
Radiant Flux (280~400nm): 0.000 W	R/B: 1.5 R/FR: 11.1
YPF (320~800nm): 11.536 umol/s	YPF (400~500nm): 1.813 umol/s
YPF (500~600nm): 4.568 umol/s	YPF (600~700nm): 5.041 umol/s
YPF (700~800nm): 0.114 umol/s	YPF (320~400nm): 0.000 umol/s
Radiant Flux (Chl-A): 0.203 W	Radiant Flux (Chl-B): 0.424 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 :