

Report No.: MSL-64-1

Test Time: 2019-05-13 16:23

Luminaire Property

Luminaire Manufacturer: Stand Iluminaciones S.A.S

Luminaire Category: Interior

Luminaire Description: Lum Stil Led Flat 28W Samsung

Luminous Length (mm): 1195

Luminous Width (mm): 70

Voltage: 119.9 V

Current: 0.230 A

Power: 26.84 W

Power Factor: 0.970

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 2651.4 lm

Measurement Flux: 2651.4 lm

Efficiency: 100%

Downward Ratio: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 163.7, 162.3, 162.9, 162.8

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 111.2, 111.1, 111.1, 111.0

Luminaire Efficacy Rating (LER): 98.83

Central Intensity: 916.59 cd

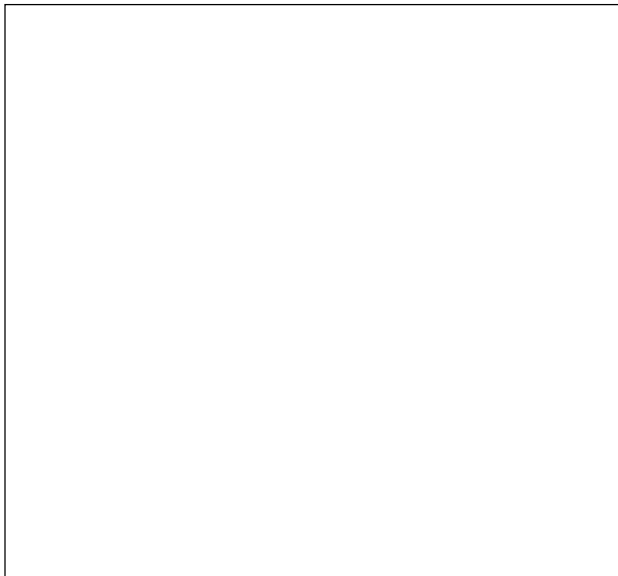
Max. Intensity: 941.55 cd

Pos of Max. Intensity: H130 V3

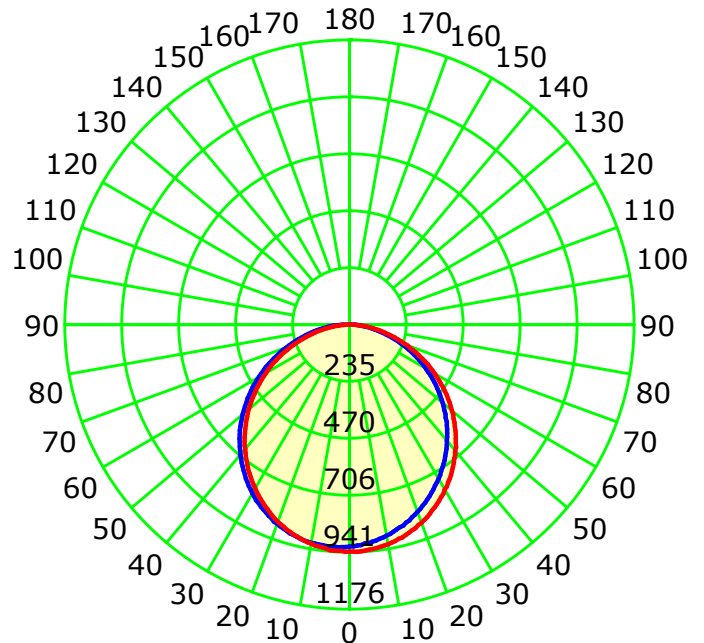
S/MH(C0/C180): 1.25

S/MH(C90/C270): 1.25

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

C Plane (°):0.0-360.0: 10.0

Test Lab: LABORATORIO STAND

Test Type: TYPE C

Temperature: 24.7

Operator: Cristian Herrera Arismendy

Gamma Plane (°):0.0-90.0:1.0

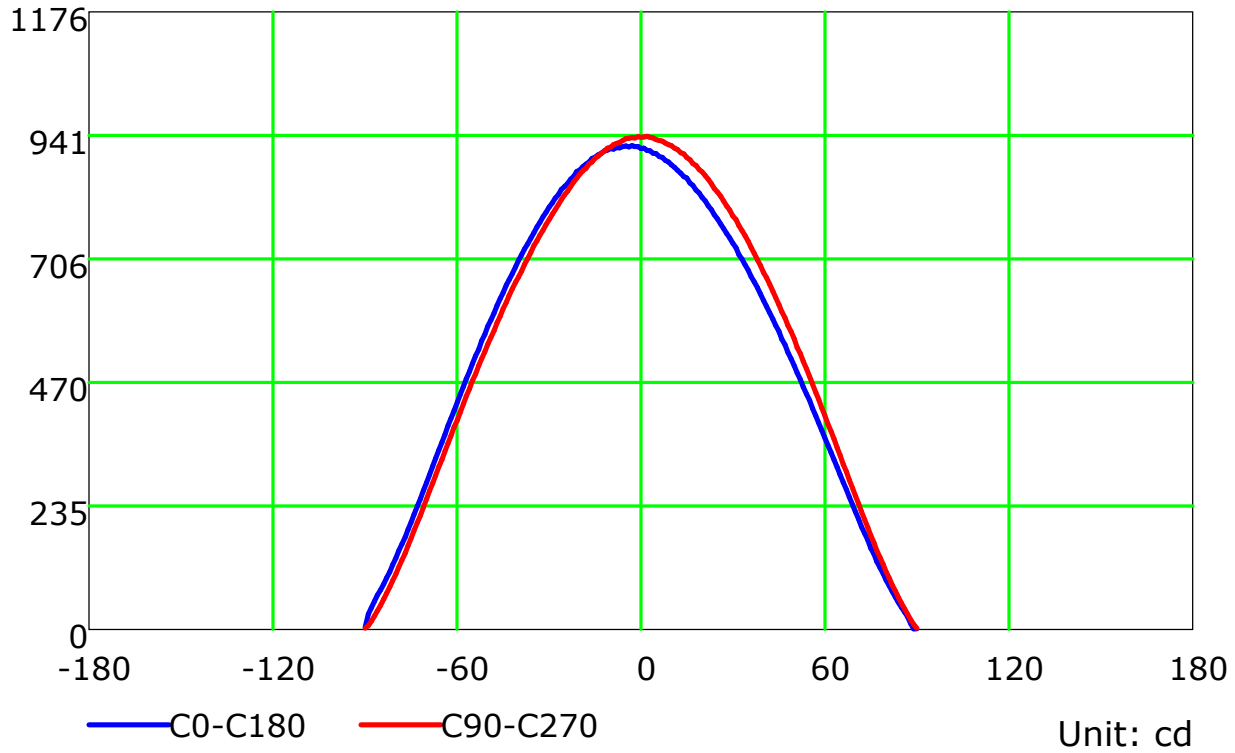
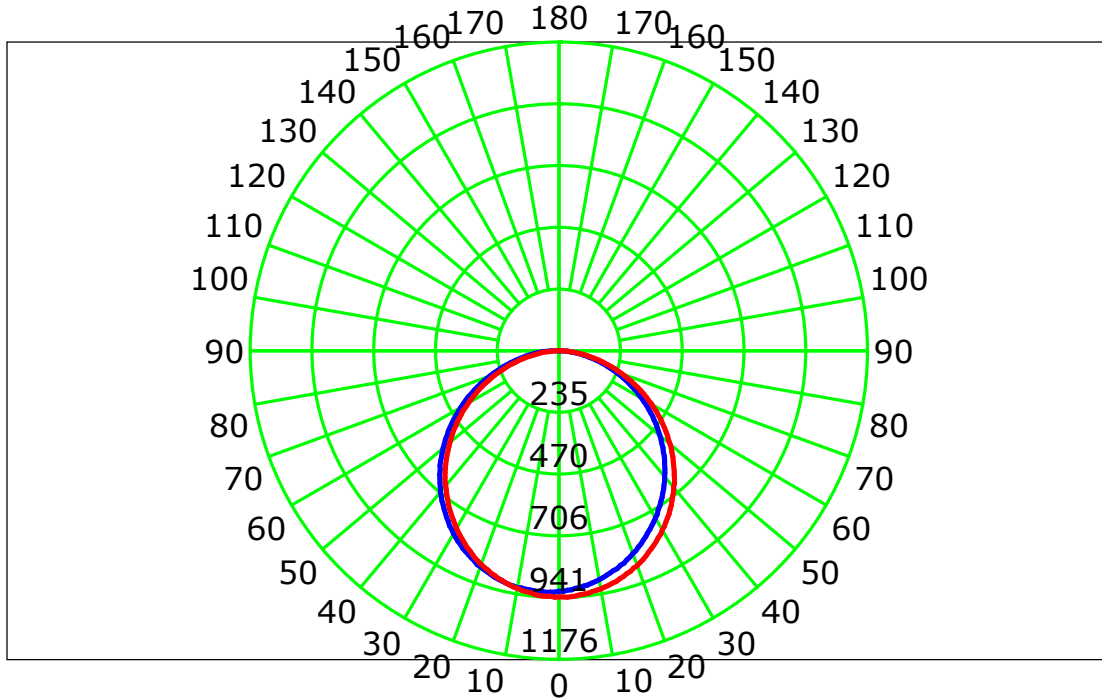
Test Device: LSG-1700B — C90-C270

Distance: 11.700 m

Humidity:

Inspector:

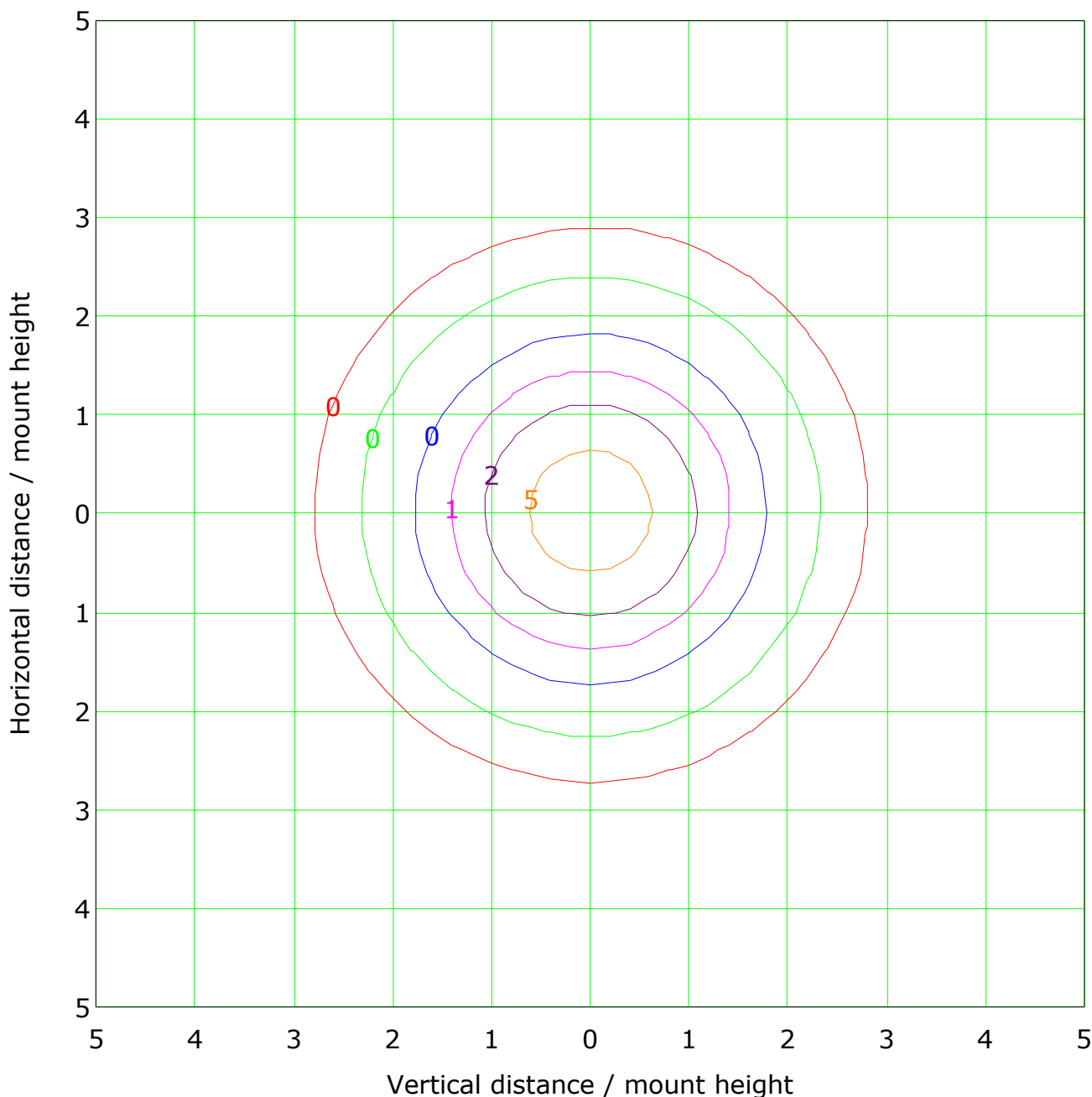
Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 10.0
 Test Lab: LABORATORIO STAND
 Test Type: TYPE C
 Temperature: 24.7
 Operator: Cristian Herrera Arismendy

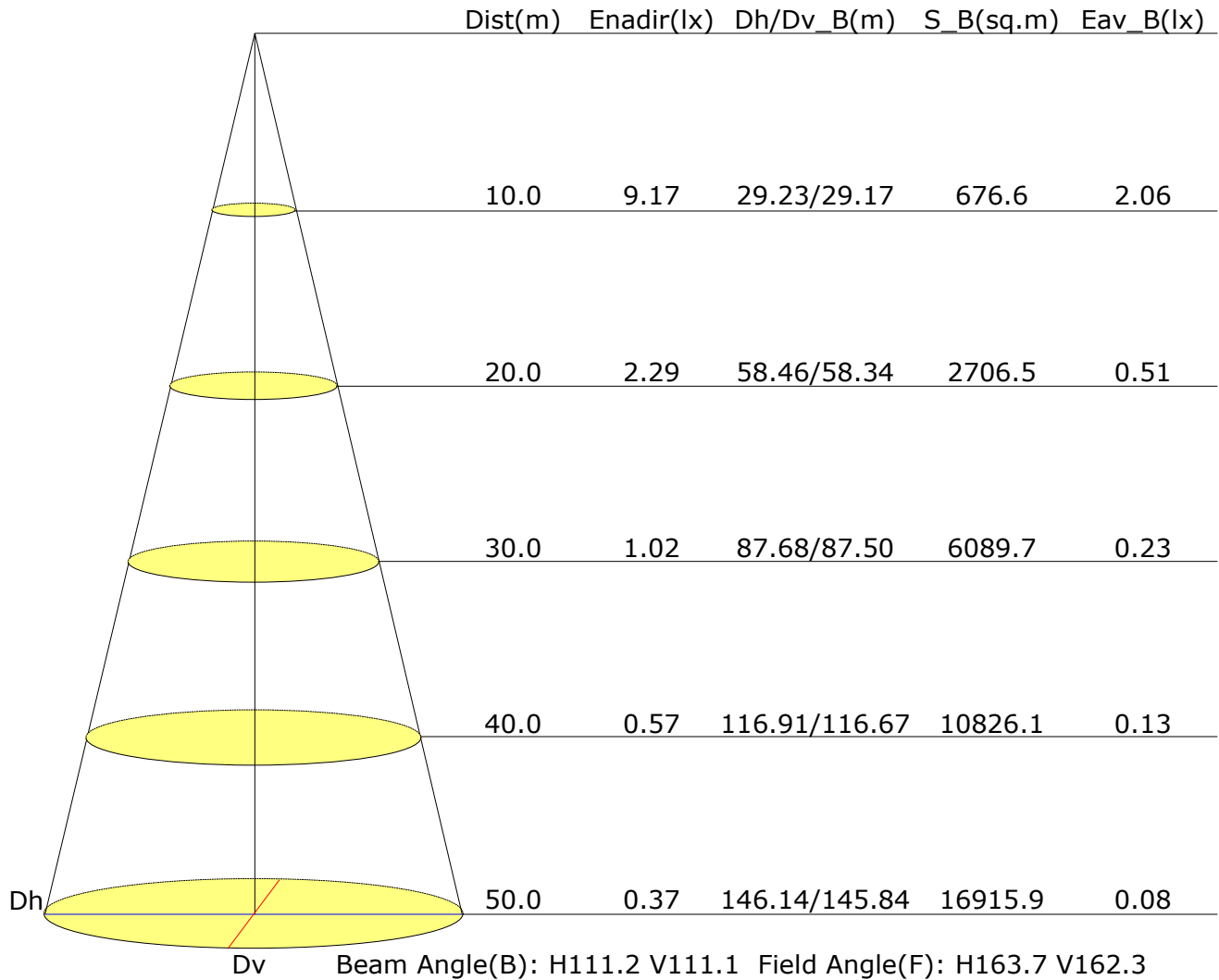
Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-1700B
 Distance: 11.700 m
 Humidity:
 Inspector:

IsoLux Plot



| | | | |
|--------------------------------------|---------------|------------------------------|----------------|
| Mounting Height: 10.0m | | Max Lux(100%): 9.4 lx | |
| — | (1%): 0.1 lx | — | (2%): 0.2 lx |
| — | (5%): 0.5 lx | — | (10%): 0.9 lx |
| C Plane (°):0.0-360.0: 10.0 | 1.9 lx | Gamma Plane (°):0.0-90.0:1.0 | 1.9 lx |
| Test Lab: LABORATORIO STAND | 9.4 lx | Test Device: LSG-1700B IX | |
| Test Type: TYPE C (100%) | 9.4 lx | Distance: 11.700 m | |
| Temperature: 24.7 | | Humidity: | |
| Operator: Cristian Herrera Arismendy | | Inspector: | |

Illuminance at a Distance



Zonal Lumen

| Gamma [°] | I _{mean} [cd] | Zonal Flux [lm] | Sum Zonal Flux [lm] | Rel Zonal Flux [%] | Sum Rel Zonal Flux [%] |
|--------------|---------------------------|--------------------|------------------------|-----------------------|---------------------------|
| 0.0-1.0 | 932.9 | 0.9 | 0.9 | 0.03 | 0.03 |
| 1.0-2.0 | 932.7 | 2.7 | 3.6 | 0.10 | 0.13 |
| 2.0-3.0 | 931.8 | 4.5 | 8.0 | 0.17 | 0.30 |
| 3.0-4.0 | 930.7 | 6.2 | 14.3 | 0.23 | 0.54 |
| 4.0-5.0 | 929.4 | 8.0 | 22.3 | 0.30 | 0.84 |
| 5.0-6.0 | 927.6 | 9.7 | 32.0 | 0.37 | 1.21 |
| 6.0-7.0 | 925.5 | 11.5 | 43.5 | 0.43 | 1.64 |
| 7.0-8.0 | 923.2 | 13.2 | 56.7 | 0.50 | 2.14 |
| 8.0-9.0 | 920.3 | 14.9 | 71.6 | 0.56 | 2.70 |
| 9.0-10.0 | 917.3 | 16.6 | 88.2 | 0.63 | 3.33 |
| 10.0-11.0 | 913.7 | 18.3 | 106.5 | 0.69 | 4.02 |
| 11.0-12.0 | 909.9 | 19.9 | 126.4 | 0.75 | 4.77 |
| 12.0-13.0 | 905.7 | 21.5 | 147.9 | 0.81 | 5.58 |
| 13.0-14.0 | 901.1 | 23.1 | 170.9 | 0.87 | 6.45 |
| 14.0-15.0 | 896.4 | 24.6 | 195.6 | 0.93 | 7.38 |
| 15.0-16.0 | 891.2 | 26.1 | 221.7 | 0.99 | 8.36 |
| 16.0-17.0 | 885.6 | 27.6 | 249.3 | 1.04 | 9.40 |
| 17.0-18.0 | 880.0 | 29.0 | 278.3 | 1.09 | 10.50 |
| 18.0-19.0 | 873.8 | 30.4 | 308.7 | 1.15 | 11.64 |
| 19.0-20.0 | 867.3 | 31.7 | 340.4 | 1.20 | 12.84 |
| 20.0-21.0 | 860.8 | 33.1 | 373.5 | 1.25 | 14.09 |
| 21.0-22.0 | 853.6 | 34.3 | 407.8 | 1.29 | 15.38 |
| 22.0-23.0 | 846.3 | 35.5 | 443.3 | 1.34 | 16.72 |
| 23.0-24.0 | 838.5 | 36.7 | 480.0 | 1.38 | 18.10 |
| 24.0-25.0 | 830.4 | 37.8 | 517.7 | 1.42 | 19.53 |
| 25.0-26.0 | 822.6 | 38.8 | 556.6 | 1.46 | 20.99 |
| 26.0-27.0 | 813.9 | 39.8 | 596.4 | 1.50 | 22.49 |
| 27.0-28.0 | 804.9 | 40.8 | 637.2 | 1.54 | 24.03 |
| 28.0-29.0 | 796.1 | 41.7 | 678.8 | 1.57 | 25.60 |
| 29.0-30.0 | 786.7 | 42.5 | 721.3 | 1.60 | 27.20 |
| 30.0-31.0 | 777.0 | 43.2 | 764.5 | 1.63 | 28.84 |
| 31.0-32.0 | 767.1 | 44.0 | 808.5 | 1.66 | 30.49 |
| 32.0-33.0 | 757.0 | 44.6 | 853.1 | 1.68 | 32.18 |
| 33.0-34.0 | 747.1 | 45.2 | 898.3 | 1.71 | 33.88 |
| 34.0-35.0 | 736.4 | 45.7 | 944.1 | 1.73 | 35.61 |
| 35.0-36.0 | 725.5 | 46.2 | 990.3 | 1.74 | 37.35 |

C Plane (°):0.0-360.0: 10.0
 Test Lab: LABORATORIO STAND
 Test Type: TYPE C
 Temperature: 24.7
 Operator: Cristian Herrera Arismendy

Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-1700B
 Distance: 11.700 m
 Humidity:
 Inspector:

Zonal Lumen (Continue 1)

| Gamma [°] | Imean [cd] | Zonal Flux [lm] | Sum Zonal Flux [lm] | Rel Zonal Flux [%] | Sum Rel Zonal Flux [%] |
|--------------|---------------|--------------------|------------------------|-----------------------|---------------------------|
| 36.0-37.0 | 714.4 | 46.6 | 1036.9 | 1.76 | 39.11 |
| 37.0-38.0 | 703.1 | 46.9 | 1083.8 | 1.77 | 40.88 |
| 38.0-39.0 | 691.9 | 47.2 | 1131.0 | 1.78 | 42.66 |
| 39.0-40.0 | 680.3 | 47.5 | 1178.5 | 1.79 | 44.45 |
| 40.0-41.0 | 668.5 | 47.6 | 1226.1 | 1.80 | 46.24 |
| 41.0-42.0 | 656.6 | 47.7 | 1273.8 | 1.80 | 48.04 |
| 42.0-43.0 | 644.2 | 47.7 | 1321.5 | 1.80 | 49.84 |
| 43.0-44.0 | 631.7 | 47.7 | 1369.2 | 1.80 | 51.64 |
| 44.0-45.0 | 619.2 | 47.6 | 1416.8 | 1.79 | 53.44 |
| 45.0-46.0 | 606.0 | 47.4 | 1464.2 | 1.79 | 55.22 |
| 46.0-47.0 | 593.2 | 47.2 | 1511.4 | 1.78 | 57.00 |
| 47.0-48.0 | 579.8 | 46.9 | 1558.3 | 1.77 | 58.77 |
| 48.0-49.0 | 566.4 | 46.5 | 1604.8 | 1.75 | 60.53 |
| 49.0-50.0 | 553.6 | 46.2 | 1651.0 | 1.74 | 62.27 |
| 50.0-51.0 | 539.7 | 45.7 | 1696.6 | 1.72 | 63.99 |
| 51.0-52.0 | 525.8 | 45.1 | 1741.7 | 1.70 | 65.69 |
| 52.0-53.0 | 511.9 | 44.5 | 1786.3 | 1.68 | 67.37 |
| 53.0-54.0 | 497.6 | 43.9 | 1830.1 | 1.65 | 69.03 |
| 54.0-55.0 | 483.5 | 43.2 | 1873.3 | 1.63 | 70.65 |
| 55.0-56.0 | 469.0 | 42.4 | 1915.7 | 1.60 | 72.25 |
| 56.0-57.0 | 454.5 | 41.6 | 1957.3 | 1.57 | 73.82 |
| 57.0-58.0 | 440.3 | 40.7 | 1998.0 | 1.54 | 75.36 |
| 58.0-59.0 | 425.5 | 39.8 | 2037.8 | 1.50 | 76.86 |
| 59.0-60.0 | 410.5 | 38.8 | 2076.6 | 1.46 | 78.32 |
| 60.0-61.0 | 395.7 | 37.8 | 2114.3 | 1.42 | 79.74 |
| 61.0-62.0 | 380.5 | 36.7 | 2151.0 | 1.38 | 81.13 |
| 62.0-63.0 | 365.9 | 35.6 | 2186.6 | 1.34 | 82.47 |
| 63.0-64.0 | 350.7 | 34.4 | 2221.0 | 1.30 | 83.77 |
| 64.0-65.0 | 335.4 | 33.2 | 2254.2 | 1.25 | 85.02 |
| 65.0-66.0 | 320.6 | 32.0 | 2286.2 | 1.21 | 86.23 |
| 66.0-67.0 | 305.3 | 30.7 | 2316.9 | 1.16 | 87.38 |
| 67.0-68.0 | 290.3 | 29.4 | 2346.3 | 1.11 | 88.49 |
| 68.0-69.0 | 275.1 | 28.1 | 2374.4 | 1.06 | 89.55 |
| 69.0-70.0 | 259.9 | 26.7 | 2401.1 | 1.01 | 90.56 |
| 70.0-71.0 | 245.3 | 25.4 | 2426.4 | 0.96 | 91.52 |
| 71.0-72.0 | 230.2 | 23.9 | 2450.3 | 0.90 | 92.42 |

C Plane (°):0.0-360.0: 10.0
 Test Lab: LABORATORIO STAND
 Test Type: TYPE C
 Temperature: 24.7
 Operator: Cristian Herrera Arismendy

Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-1700B
 Distance: 11.700 m
 Humidity:
 Inspector:

Zonal Lumen (Continue 2)

| Gamma [°] | Imean [cd] | Zonal Flux [lm] | Sum Zonal Flux [lm] | Rel Zonal Flux [%] | Sum Rel Zonal Flux [%] |
|-----------|------------|-----------------|---------------------|--------------------|------------------------|
| 72.0-73.0 | 215.3 | 22.5 | 2472.9 | 0.85 | 93.27 |
| 73.0-74.0 | 201.0 | 21.1 | 2494.0 | 0.80 | 94.06 |
| 74.0-75.0 | 186.4 | 19.7 | 2513.7 | 0.74 | 94.81 |
| 75.0-76.0 | 172.2 | 18.3 | 2532.0 | 0.69 | 95.50 |
| 76.0-77.0 | 158.2 | 16.9 | 2548.8 | 0.64 | 96.13 |
| 77.0-78.0 | 144.3 | 15.4 | 2564.3 | 0.58 | 96.72 |
| 78.0-79.0 | 131.4 | 14.1 | 2578.4 | 0.53 | 97.25 |
| 79.0-80.0 | 118.3 | 12.8 | 2591.2 | 0.48 | 97.73 |
| 80.0-81.0 | 105.5 | 11.4 | 2602.6 | 0.43 | 98.16 |
| 81.0-82.0 | 93.4 | 10.1 | 2612.7 | 0.38 | 98.54 |
| 82.0-83.0 | 81.5 | 8.9 | 2621.6 | 0.33 | 98.88 |
| 83.0-84.0 | 70.2 | 7.6 | 2629.2 | 0.29 | 99.16 |
| 84.0-85.0 | 59.2 | 6.5 | 2635.7 | 0.24 | 99.41 |
| 85.0-86.0 | 48.7 | 5.3 | 2641.0 | 0.20 | 99.61 |
| 86.0-87.0 | 38.9 | 4.3 | 2645.3 | 0.16 | 99.77 |
| 87.0-88.0 | 28.7 | 3.1 | 2648.4 | 0.12 | 99.89 |
| 88.0-89.0 | 18.3 | 2.0 | 2650.4 | 0.08 | 99.96 |
| 89.0-90.0 | 8.6 | 0.9 | 2651.4 | 0.04 | 100.00 |
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C Plane (°):0.0-360.0: 10.0
 Test Lab: LABORATORIO STAND
 Test Type: TYPE C
 Temperature: 24.7
 Operator: Cristian Herrera Arismendy

Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-1700B
 Distance: 11.700 m
 Humidity:
 Inspector: