

Report No.: MSL-43-2

Test Time: 2020-02-13 08:45

Luminaire Property

Luminaire Manufacturer: Stand Iluminaciones S.A.S

Luminaire Category: Interior

Luminaire Description: Lum Stil Linear Led Square 50W

Luminous Length (mm): 1190

Luminous Width (mm): 60

Voltage: 120.0 V

Current: 0.414 A

Power: 49.02 W

Power Factor: 0.984

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 4703.9 lm

Measurement Flux: 4703.9 lm

Efficiency: 100%

Downward Ratio: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 158.2, 159.1, 158.7, 158.6

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 105.4, 108.1, 106.7, 106.7

Luminaire Efficacy Rating (LER): 96.01

Central Intensity: 1765.52 cd

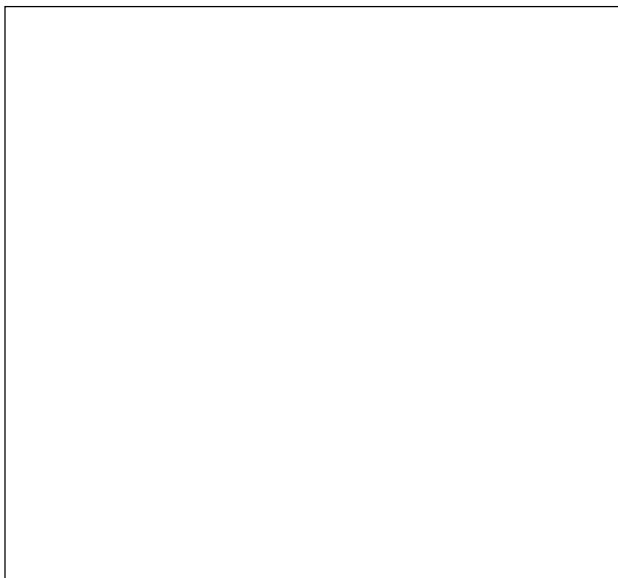
Max. Intensity: 1765.53 cd

Pos of Max. Intensity: H0 V0

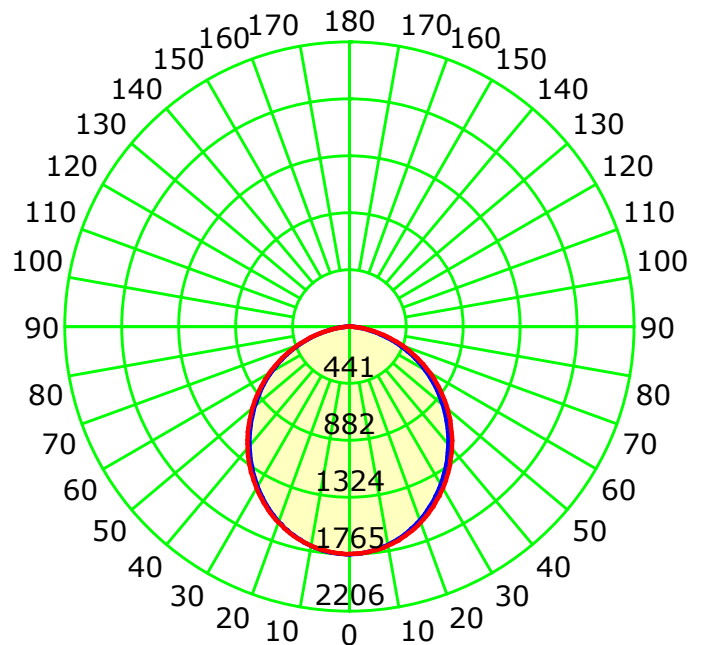
S/MH(C0/C180): 1.20

S/MH(C90/C270): 1.22

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: 25.5

Operator: Cristian Herrera Arismendy

Average Diffuse Angle(50%): 106.7°

Gamma Plane (°):0.0-90.0:1.0

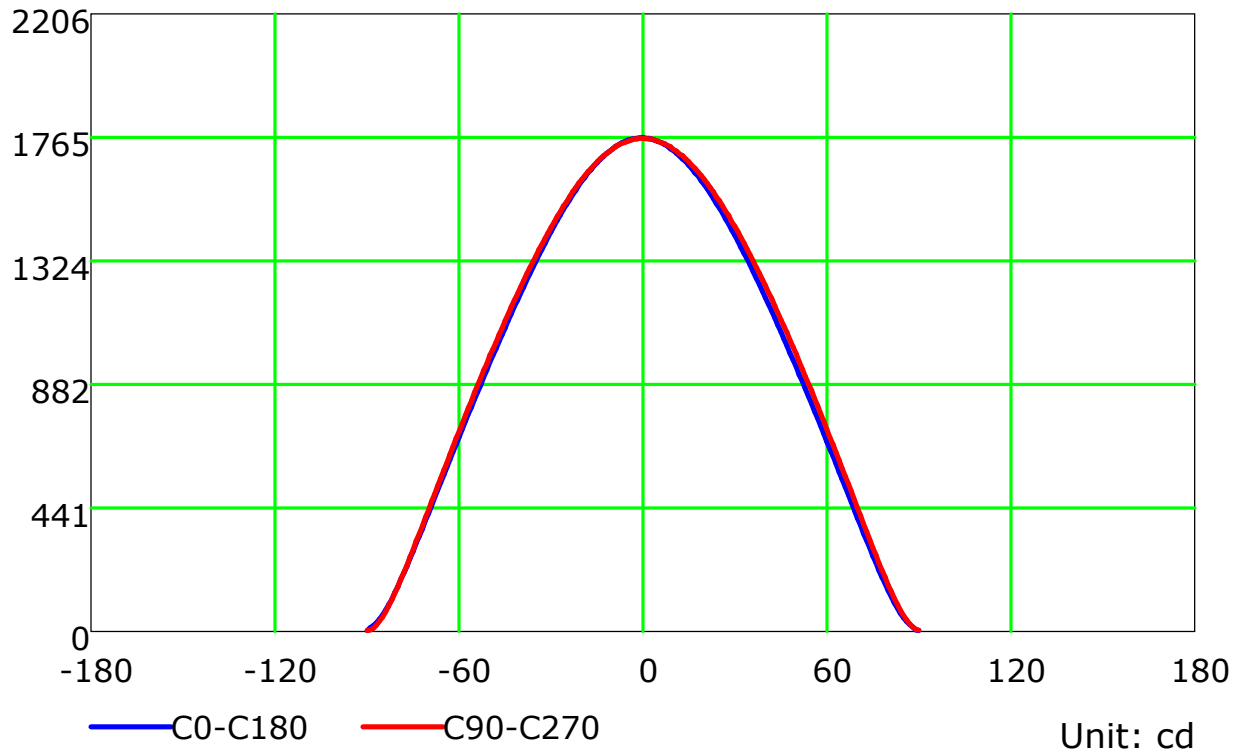
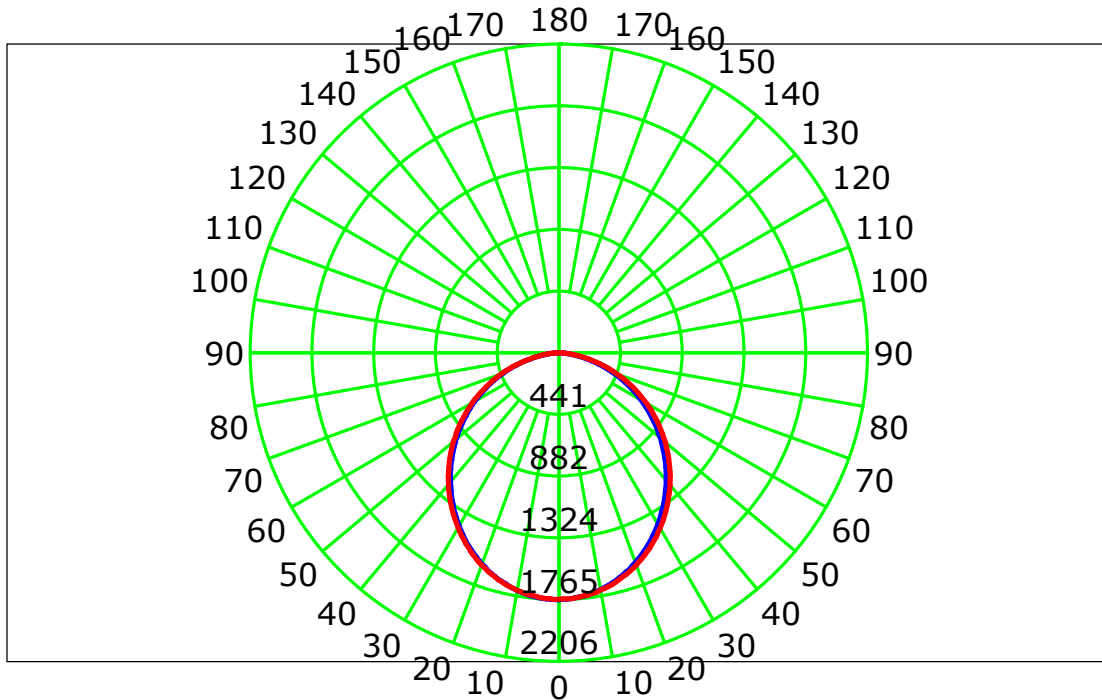
Test Device: LSG-1700B — C90-C270

Distance: 11.700 m

Humidity:

Inspector:

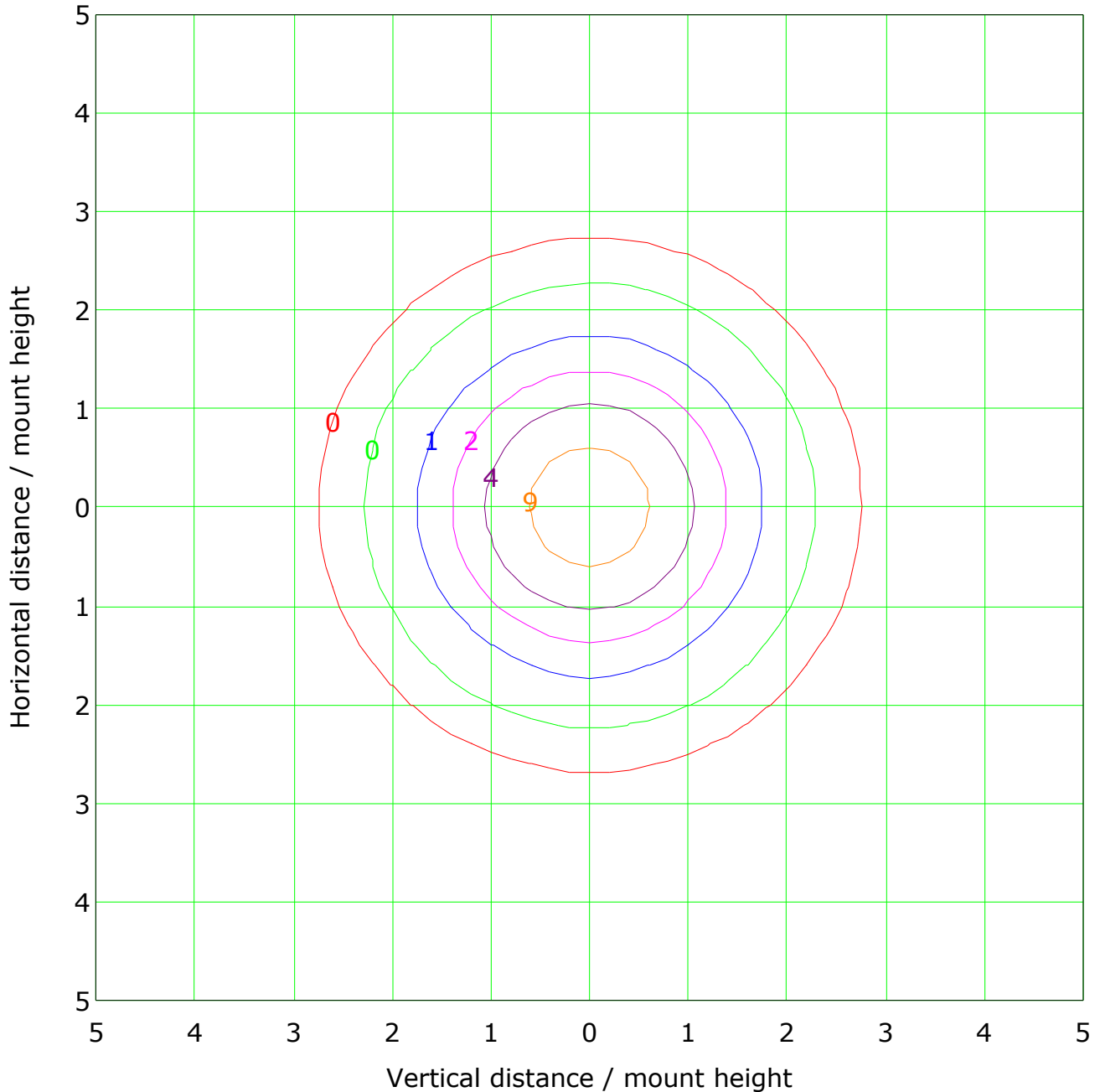
Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 10.0
 Test Lab: LABORATORIO STAND
 Test Type: TYPE C
 Temperature: 25.5
 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%): 17.7 lx

— (1%): 0.2 lx

— (2%): 0.4 lx

— (5%): 0.9 lx

— (10%): 1.8 lx

C Plane (°):0.0-360.0: 10.0, \, 3.5 lx

Gamma Plane (°):0.0-90.0:1.0

Test Lab: LABORATORIO STAND

Test Device: LSG-1700B lx

Test Type: TYPE C (100%): 17.7 lx

Distance: 11.700 m

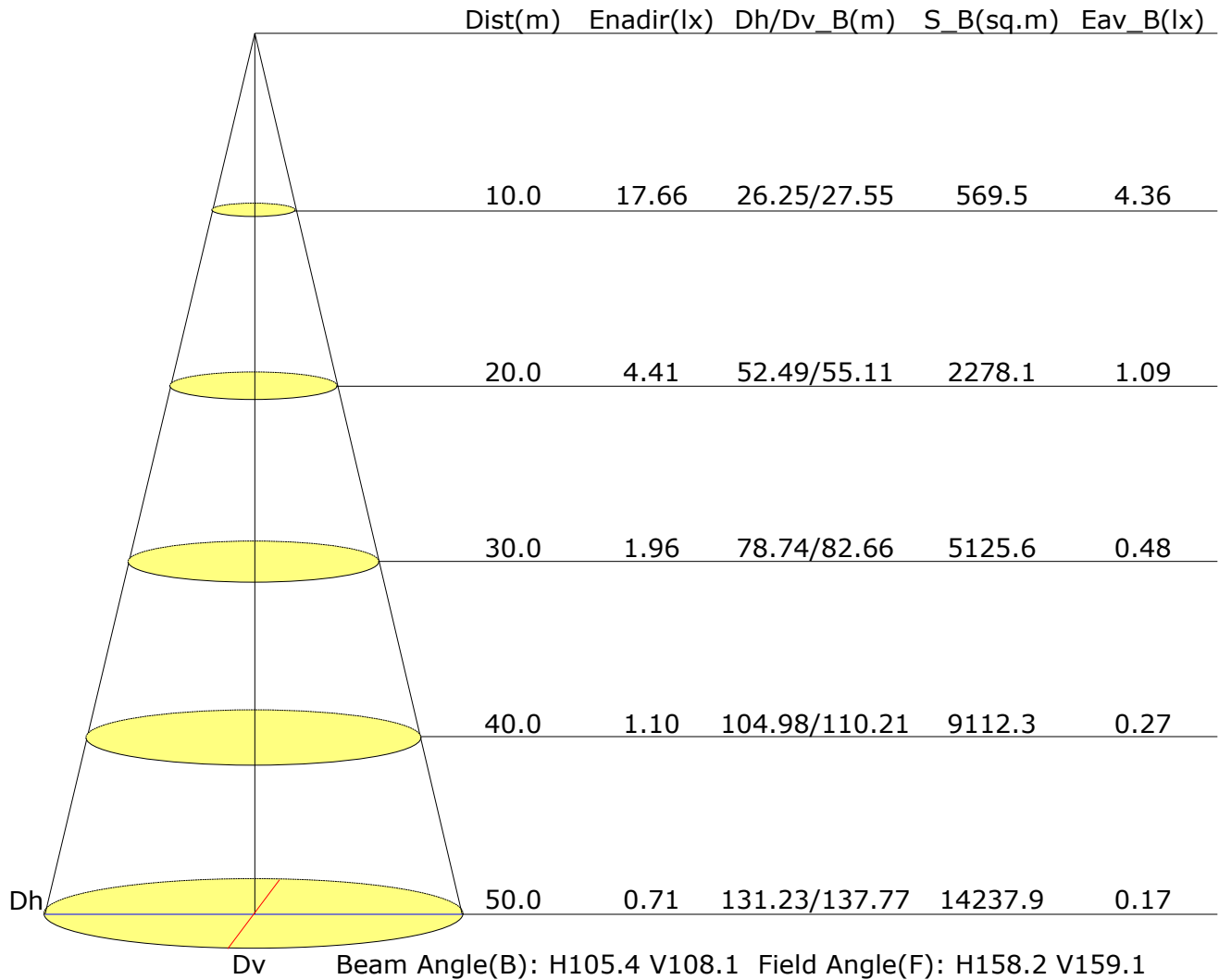
Temperature: 25.5

Humidity:

Operator: Cristian Herrera Arismendy

Inspector:

Illuminance at a Distance



UGR Table

Reflectance:										
Ceiling (cavity)	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
X=2H Y=2H	22.8	24.2	23.1	24.4	24.7	23.1	24.5	23.4	24.7	25.0
3H	24.3	25.5	24.6	25.8	26.1	24.6	25.9	25.0	26.1	26.4
4H	24.8	26.0	25.1	26.3	26.6	25.2	26.4	25.6	26.7	27.0
6H	25.1	26.2	25.5	26.5	26.8	25.6	26.7	25.9	27.0	27.3
8H	25.2	26.3	25.6	26.6	26.9	25.7	26.7	26.0	27.1	27.4
12H	25.2	26.2	25.6	26.6	26.9	25.7	26.7	26.1	27.1	27.4
X=4H Y=2H	23.5	24.7	23.9	25.0	25.3	23.7	24.9	24.1	25.2	25.5
3H	25.1	26.1	25.5	26.5	26.8	25.4	26.4	25.8	26.8	27.1
4H	25.8	26.7	26.2	27.0	27.4	26.1	27.0	26.5	27.4	27.8
6H	26.2	27.0	26.6	27.4	27.8	26.6	27.4	27.0	27.8	28.2
8H	26.3	27.0	26.7	27.4	27.9	26.7	27.5	27.2	27.9	28.3
12H	26.4	27.0	26.8	27.4	27.9	26.8	27.5	27.3	27.9	28.3
X=8H Y=4H	26.0	26.8	26.5	27.2	27.6	26.4	27.1	26.8	27.5	27.9
6H	26.6	27.2	27.0	27.6	28.1	27.0	27.5	27.4	28.0	28.4
8H	26.7	27.3	27.2	27.7	28.2	27.1	27.7	27.6	28.1	28.6
12H	26.8	27.3	27.3	27.8	28.3	27.3	27.7	27.8	28.2	28.7
X=12H Y=4H	26.0	26.7	26.5	27.1	27.6	26.4	27.0	26.8	27.4	27.9
6H	26.6	27.1	27.1	27.6	28.1	27.0	27.5	27.5	28.0	28.4
8H	26.8	27.3	27.3	27.7	28.2	27.2	27.7	27.7	28.1	28.6
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.2/-0.2				
S=1.5H	+0.3/-0.5					+0.3/-0.5				
S=2.0H	+0.6/-0.9					+0.5/-0.9				

Calculate in accordance with CIE Pub.117. The table is revised with 4704lm ($8\log(F/F_0) = 5.4$).

Zonal Lumen

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	1762.1	1.7	1.7	0.04	0.04
1.0-2.0	1761.3	5.1	6.7	0.11	0.14
2.0-3.0	1759.7	8.4	15.2	0.18	0.32
3.0-4.0	1757.4	11.8	26.9	0.25	0.57
4.0-5.0	1754.4	15.1	42.0	0.32	0.89
5.0-6.0	1750.1	18.4	60.4	0.39	1.28
6.0-7.0	1745.3	21.7	82.1	0.46	1.74
7.0-8.0	1739.9	24.9	107.0	0.53	2.27
8.0-9.0	1733.5	28.1	135.1	0.60	2.87
9.0-10.0	1726.5	31.2	166.3	0.66	3.54
10.0-11.0	1718.7	34.3	200.7	0.73	4.27
11.0-12.0	1710.0	37.4	238.1	0.79	5.06
12.0-13.0	1700.9	40.4	278.4	0.86	5.92
13.0-14.0	1690.7	43.3	321.7	0.92	6.84
14.0-15.0	1680.1	46.1	367.8	0.98	7.82
15.0-16.0	1668.4	48.9	416.7	1.04	8.86
16.0-17.0	1656.2	51.6	468.3	1.10	9.96
17.0-18.0	1643.8	54.2	522.5	1.15	11.11
18.0-19.0	1630.1	56.7	579.2	1.21	12.31
19.0-20.0	1616.0	59.2	638.4	1.26	13.57
20.0-21.0	1601.6	61.5	699.9	1.31	14.88
21.0-22.0	1586.2	63.8	763.7	1.36	16.23
22.0-23.0	1570.2	65.9	829.6	1.40	17.64
23.0-24.0	1553.5	67.9	897.5	1.44	19.08
24.0-25.0	1536.4	69.9	967.4	1.49	20.57
25.0-26.0	1519.3	71.7	1039.1	1.52	22.09
26.0-27.0	1501.0	73.4	1112.5	1.56	23.65
27.0-28.0	1482.3	75.1	1187.6	1.60	25.25
28.0-29.0	1463.9	76.6	1264.2	1.63	26.88
29.0-30.0	1444.1	78.0	1342.2	1.66	28.53
30.0-31.0	1424.2	79.3	1421.4	1.69	30.22
31.0-32.0	1403.6	80.4	1501.9	1.71	31.93
32.0-33.0	1382.6	81.5	1583.3	1.73	33.66
33.0-34.0	1362.1	82.4	1665.8	1.75	35.41
34.0-35.0	1340.4	83.3	1749.0	1.77	37.18
35.0-36.0	1318.3	83.9	1833.0	1.78	38.97

C Plane (°):0.0-360.0: 10.0
 Test Lab: LABORATORIO STAND
 Test Type: TYPE C
 Temperature: 25.5
 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	1296.3	84.6	1917.5	1.80	40.76
37.0-38.0	1273.5	85.0	2002.5	1.81	42.57
38.0-39.0	1251.0	85.4	2087.9	1.82	44.39
39.0-40.0	1227.7	85.6	2173.6	1.82	46.21
40.0-41.0	1204.2	85.8	2259.3	1.82	48.03
41.0-42.0	1181.3	85.8	2345.2	1.82	49.86
42.0-43.0	1157.0	85.7	2430.9	1.82	51.68
43.0-44.0	1132.4	85.5	2516.4	1.82	53.50
44.0-45.0	1108.3	85.2	2601.6	1.81	55.31
45.0-46.0	1083.4	84.7	2686.3	1.80	57.11
46.0-47.0	1058.5	84.2	2770.5	1.79	58.90
47.0-48.0	1033.1	83.5	2854.0	1.78	60.67
48.0-49.0	1007.6	82.8	2936.8	1.76	62.43
49.0-50.0	983.0	82.0	3018.8	1.74	64.18
50.0-51.0	957.0	81.0	3099.7	1.72	65.90
51.0-52.0	930.8	79.9	3179.6	1.70	67.60
52.0-53.0	905.0	78.7	3258.3	1.67	69.27
53.0-54.0	878.3	77.4	3335.8	1.65	70.92
54.0-55.0	852.2	76.1	3411.8	1.62	72.53
55.0-56.0	825.4	74.6	3486.4	1.59	74.12
56.0-57.0	798.4	73.0	3559.5	1.55	75.67
57.0-58.0	772.4	71.4	3630.9	1.52	77.19
58.0-59.0	745.0	69.7	3700.6	1.48	78.67
59.0-60.0	717.5	67.8	3768.3	1.44	80.11
60.0-61.0	690.0	65.9	3834.2	1.40	81.51
61.0-62.0	662.4	63.8	3898.0	1.36	82.87
62.0-63.0	635.5	61.8	3959.9	1.31	84.18
63.0-64.0	607.5	59.6	4019.5	1.27	85.45
64.0-65.0	579.5	57.4	4076.8	1.22	86.67
65.0-66.0	552.3	55.1	4131.9	1.17	87.84
66.0-67.0	524.1	52.7	4184.7	1.12	88.96
67.0-68.0	496.3	50.3	4234.9	1.07	90.03
68.0-69.0	468.1	47.8	4282.7	1.02	91.05
69.0-70.0	439.7	45.2	4327.9	0.96	92.01
70.0-71.0	412.4	42.6	4370.5	0.91	92.91
71.0-72.0	384.4	40.0	4410.5	0.85	93.76

C Plane (°):0.0-360.0: 10.0
 Test Lab: LABORATORIO STAND
 Test Type: TYPE C
 Temperature: 25.5
 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	356.4	37.3	4447.7	0.79	94.55
73.0-74.0	329.5	34.6	4482.4	0.74	95.29
74.0-75.0	301.9	31.9	4514.3	0.68	95.97
75.0-76.0	275.0	29.2	4543.5	0.62	96.59
76.0-77.0	248.0	26.4	4569.9	0.56	97.15
77.0-78.0	221.5	23.7	4593.6	0.50	97.66
78.0-79.0	196.8	21.1	4614.8	0.45	98.11
79.0-80.0	171.8	18.5	4633.3	0.39	98.50
80.0-81.0	147.6	16.0	4649.3	0.34	98.84
81.0-82.0	124.9	13.5	4662.8	0.29	99.13
82.0-83.0	103.0	11.2	4674.0	0.24	99.37
83.0-84.0	83.0	9.0	4683.1	0.19	99.56
84.0-85.0	64.4	7.0	4690.1	0.15	99.71
85.0-86.0	47.8	5.2	4695.3	0.11	99.82
86.0-87.0	34.3	3.8	4699.1	0.08	99.90
87.0-88.0	22.9	2.5	4701.6	0.05	99.95
88.0-89.0	13.7	1.5	4703.1	0.03	99.98
89.0-90.0	7.0	0.8	4703.9	0.02	100.00

C Plane (°):0.0-360.0: 10.0
 Test Lab: LABORATORIO STAND
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Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-1700B
 Distance: 11.700 m
 Humidity:
 Inspector: