

Report No.: MSL-22-27

Test Time: 2019-08-22 14:06

Luminaire Property

Luminaire Manufacturer: Stand Iluminaciones S.A.S

Luminaire Category: Interior

Luminaire Description: Panel Stil Led Backlight Stil Led 60x60 40W

Luminous Length (mm): 558

Luminous Width (mm): 558

Voltage: 120.0 V

Current: 0.347 A

Power: 41.54 W

Power Factor: 0.995

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 4263.1 lm

Measurement Flux: 4263.1 lm

Efficiency: 100%

Downward Ratio: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 162.5, 163.6, 163.1, 163.2

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 114.3, 114.6, 114.4, 114.4

Luminaire Efficacy Rating (LER): 102.68

Central Intensity: 1456.9 cd

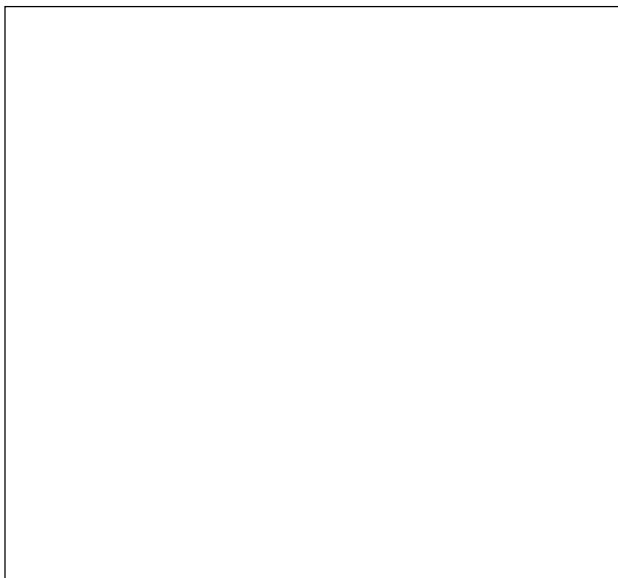
Max. Intensity: 1458.4 cd

Pos of Max. Intensity: H130 V0

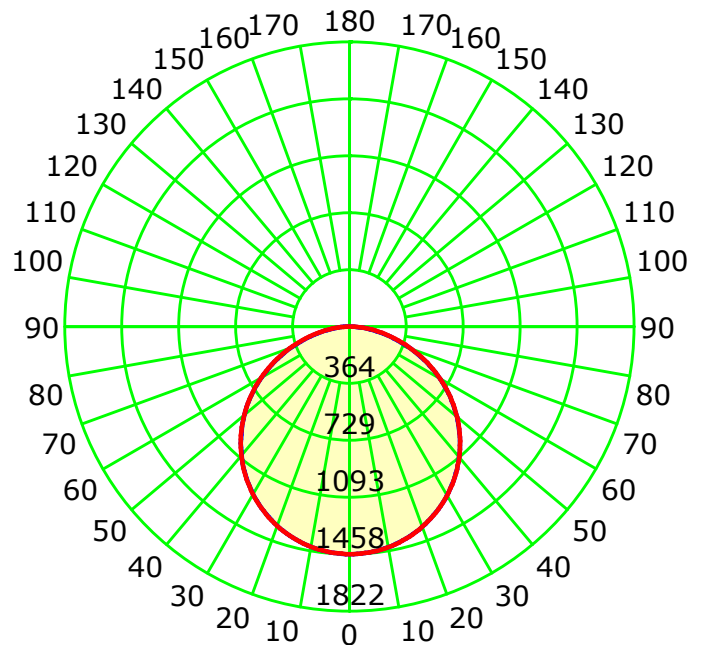
S/MH(C0/C180): 1.27

S/MH(C90/C270): 1.27

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

Average Diffuse Angle(50%): 114.4°

C Plane (°):0.0-360.0: 10.0

Gamma Plane (°):0.0-90.0:1.0

Test Lab: LABORATORIO STAND

Test Device: LSG-1700B C90-C270

Test Type: TYPE C

Distance: 11.700 m

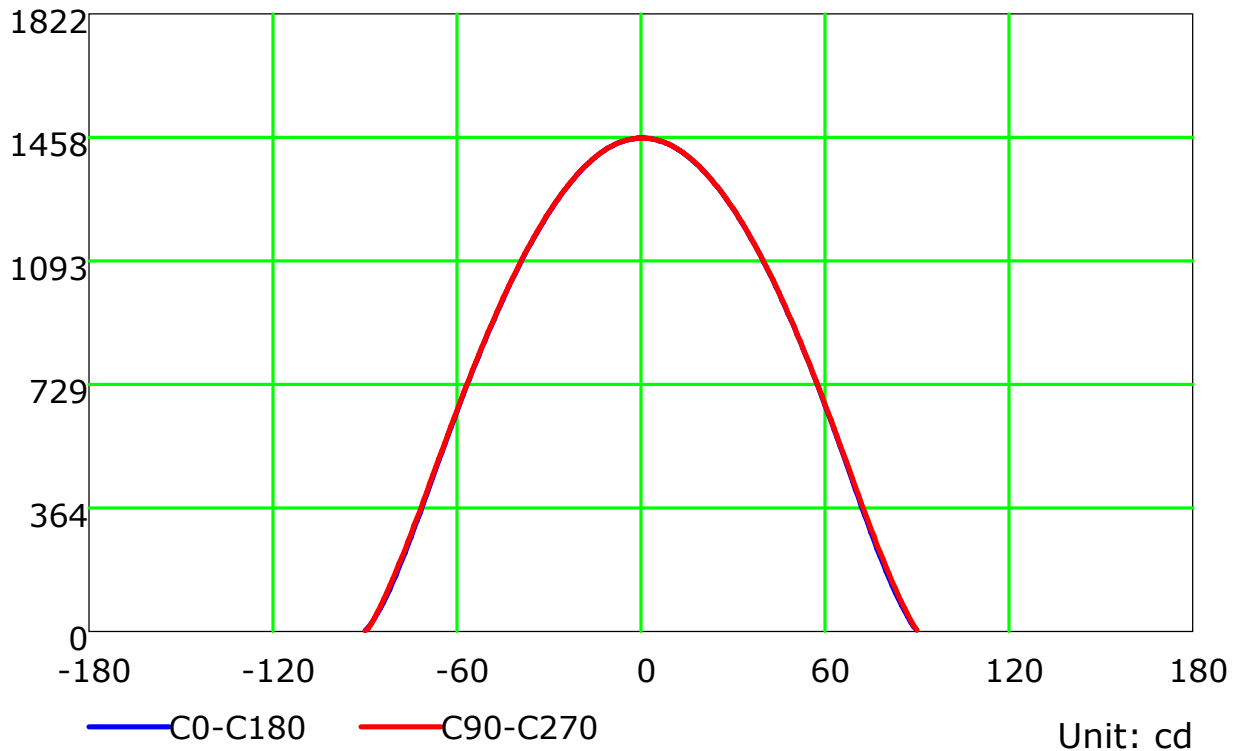
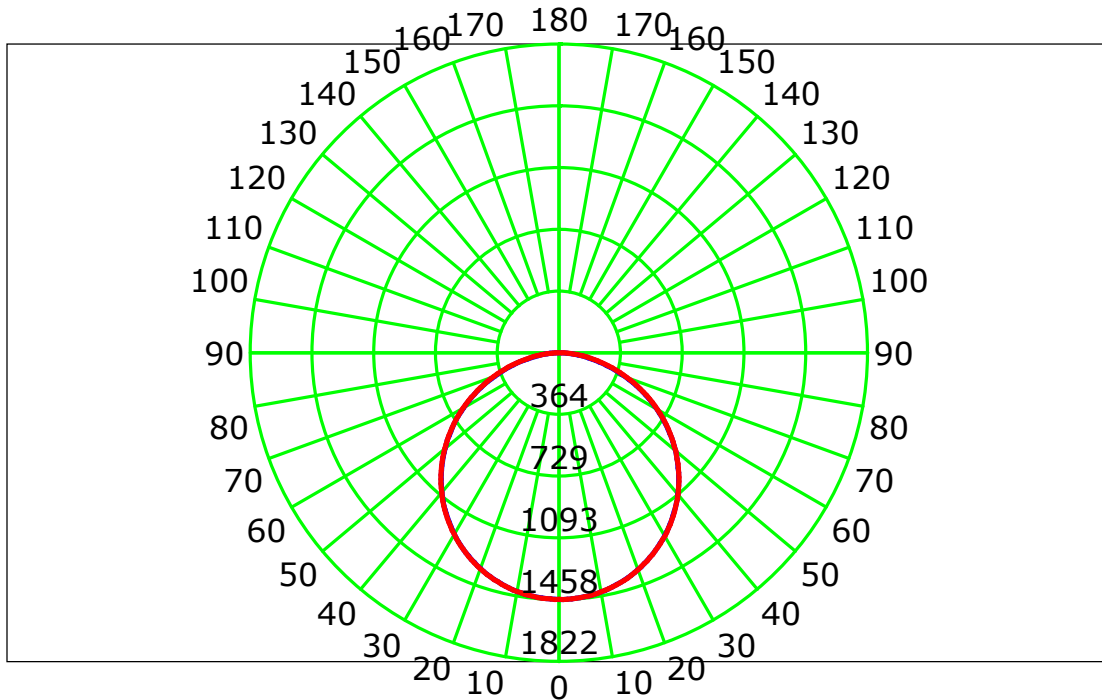
Temperature: 25.8

Humidity:

Operator: Cristian Herrera Arismendy

Inspector:

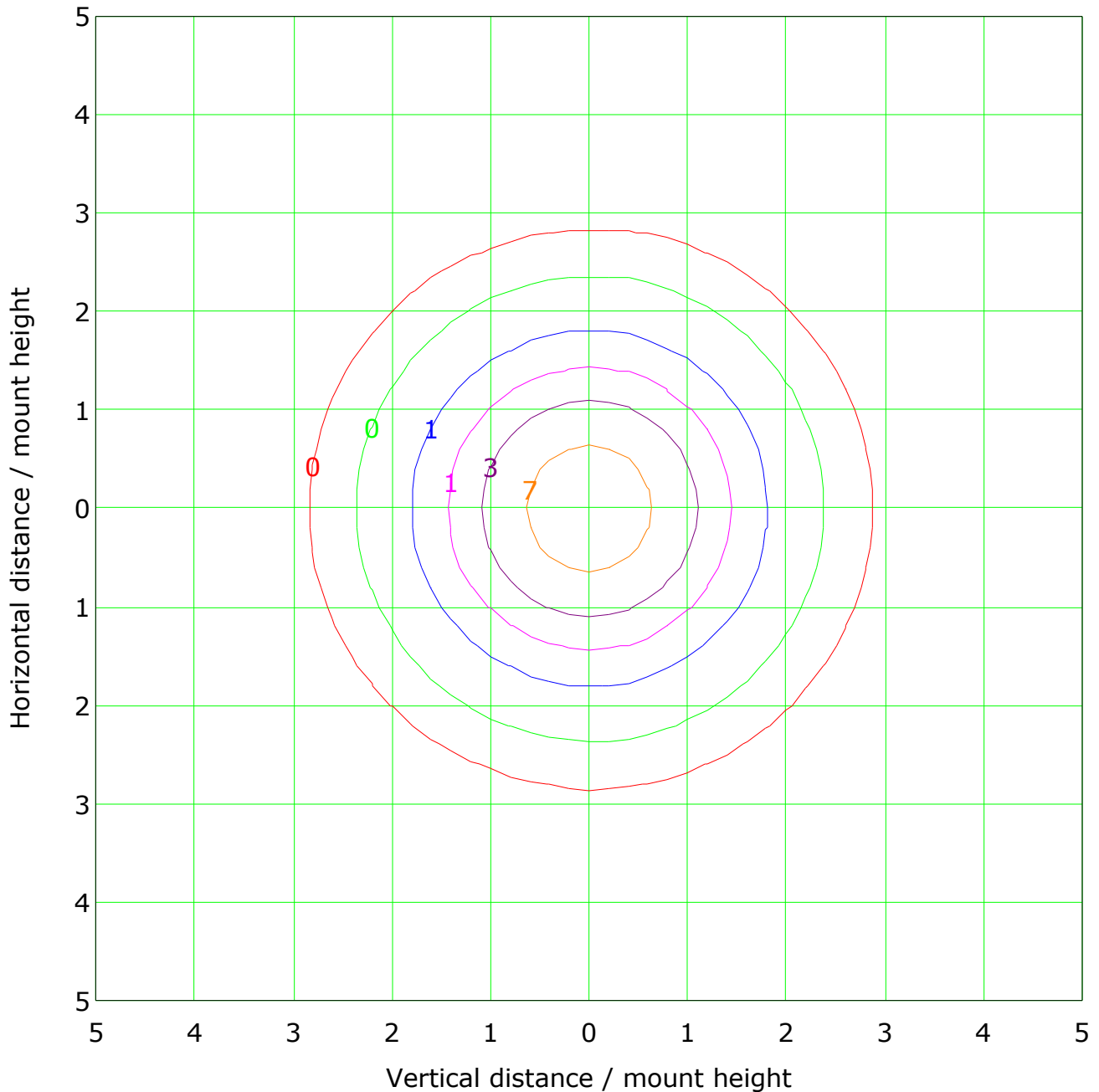
Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 10.0
 Test Lab: LABORATORIO STAND
 Test Type: TYPE C
 Temperature: 25.8
 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%): 14.6 lx

— (1%): 0.1 lx

— (2%): 0.3 lx

— (5%): 0.7 lx

— (10%): 1.5 lx

C Plane (°):0.0-360.0: 10.0, \, 2.9 lx

Gamma Plane (°):0.0-90.0:1.0

Test Lab: LABORATORIO STAND

Test Device: LSG-1700B IX

Test Type: TYPE C (100%): 14.6 lx

Distance: 11.700 m

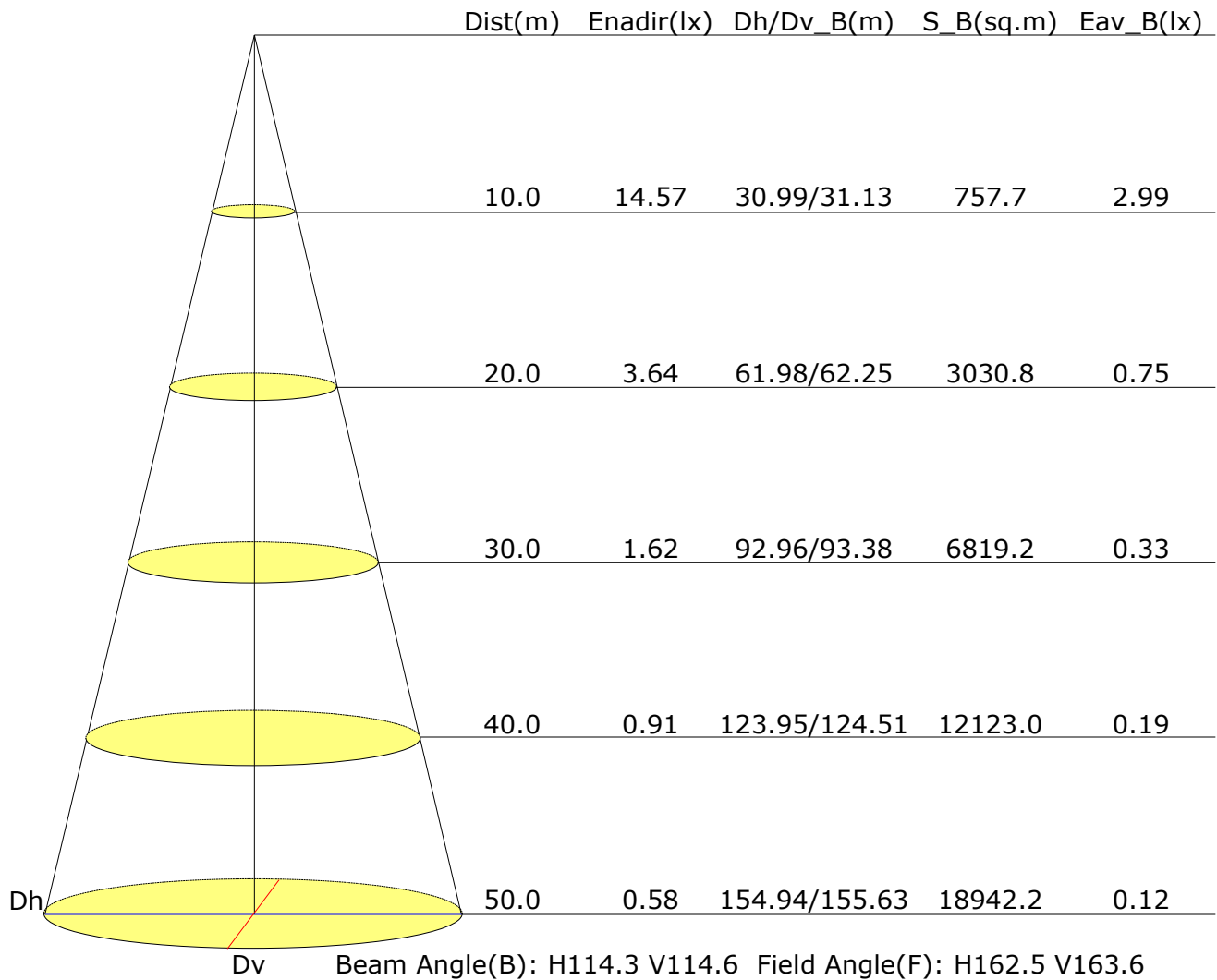
Temperature: 25.8

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	17.8	19.2	18.1	19.4	19.7	17.8	19.2	18.1	19.4	19.7
3H	19.4	20.6	19.7	20.9	21.2	19.4	20.7	19.7	20.9	21.2
4H	20.0	21.2	20.3	21.5	21.8	20.0	21.3	20.4	21.5	21.8
6H	20.5	21.6	20.8	21.9	22.2	20.5	21.7	20.9	22.0	22.3
8H	20.6	21.7	21.0	22.0	22.4	20.7	21.8	21.1	22.1	22.4
12H	20.7	21.8	21.1	22.1	22.4	20.8	21.9	21.2	22.2	22.5
X=4H Y=2H	18.5	19.7	18.8	20.0	20.3	18.5	19.7	18.8	20.0	20.3
3H	20.2	21.3	20.6	21.6	22.0	20.3	21.3	20.7	21.6	22.0
4H	21.0	21.9	21.4	22.3	22.7	21.1	22.0	21.5	22.3	22.7
6H	21.6	22.4	22.0	22.8	23.2	21.7	22.5	22.1	22.9	23.3
8H	21.8	22.6	22.2	23.0	23.4	21.9	22.7	22.3	23.1	23.5
12H	21.9	22.6	22.4	23.0	23.5	22.1	22.8	22.5	23.2	23.6
X=8H Y=4H	21.3	22.1	21.8	22.5	22.9	21.4	22.1	21.8	22.5	22.9
6H	22.1	22.7	22.5	23.1	23.6	22.1	22.8	22.6	23.2	23.7
8H	22.3	22.9	22.8	23.3	23.8	22.5	23.0	22.9	23.5	23.9
12H	22.6	23.0	23.1	23.5	24.0	22.7	23.2	23.2	23.6	24.1
X=12H Y=4H	21.3	22.0	21.8	22.5	22.9	21.4	22.1	21.8	22.5	22.9
6H	22.1	22.7	22.6	23.1	23.6	22.2	22.8	22.7	23.2	23.7
8H	22.5	22.9	23.0	23.4	23.9	22.6	23.0	23.1	23.5	24.0
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.1					+0.2/-0.2				
S=1.5H	+0.3/-0.4					+0.4/-0.5				
S=2.0H	+0.5/-0.8					+0.5/-0.9				

Calculate in accordance with CIE Pub.117. The table is revised with 4263lm ($8\log(F/F_0) = 5.0$).

Zonal Lumen

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	1457.0	1.4	1.4	0.03	0.03
1.0-2.0	1456.5	4.2	5.6	0.10	0.13
2.0-3.0	1455.5	7.0	12.5	0.16	0.29
3.0-4.0	1454.1	9.7	22.3	0.23	0.52
4.0-5.0	1452.2	12.5	34.8	0.29	0.82
5.0-6.0	1449.8	15.2	50.0	0.36	1.17
6.0-7.0	1446.9	18.0	68.0	0.42	1.59
7.0-8.0	1443.5	20.7	88.6	0.48	2.08
8.0-9.0	1439.6	23.3	112.0	0.55	2.63
9.0-10.0	1435.3	26.0	137.9	0.61	3.24
10.0-11.0	1430.4	28.6	166.5	0.67	3.91
11.0-12.0	1425.0	31.2	197.7	0.73	4.64
12.0-13.0	1419.4	33.7	231.4	0.79	5.43
13.0-14.0	1413.1	36.2	267.5	0.85	6.28
14.0-15.0	1406.3	38.6	306.2	0.91	7.18
15.0-16.0	1399.1	41.0	347.2	0.96	8.14
16.0-17.0	1391.4	43.3	390.5	1.02	9.16
17.0-18.0	1383.4	45.6	436.1	1.07	10.23
18.0-19.0	1374.7	47.8	484.0	1.12	11.35
19.0-20.0	1365.6	50.0	533.9	1.17	12.52
20.0-21.0	1356.4	52.1	586.0	1.22	13.75
21.0-22.0	1346.3	54.1	640.1	1.27	15.02
22.0-23.0	1335.9	56.1	696.2	1.32	16.33
23.0-24.0	1325.0	57.9	754.1	1.36	17.69
24.0-25.0	1313.7	59.7	813.9	1.40	19.09
25.0-26.0	1302.2	61.5	875.4	1.44	20.53
26.0-27.0	1289.8	63.1	938.5	1.48	22.01
27.0-28.0	1277.1	64.7	1003.1	1.52	23.53
28.0-29.0	1264.4	66.2	1069.3	1.55	25.08
29.0-30.0	1250.9	67.5	1136.8	1.58	26.67
30.0-31.0	1237.1	68.9	1205.7	1.62	28.28
31.0-32.0	1222.6	70.1	1275.7	1.64	29.93
32.0-33.0	1207.7	71.2	1346.9	1.67	31.59
33.0-34.0	1193.1	72.2	1419.1	1.69	33.29
34.0-35.0	1177.4	73.1	1492.2	1.72	35.00
35.0-36.0	1161.4	74.0	1566.2	1.73	36.74

C Plane (°):0.0-360.0: 10.0
 Test Lab: LABORATORIO STAND
 Test Type: TYPE C
 Temperature: 25.8
 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	1145.4	74.7	1640.9	1.75	38.49
37.0-38.0	1128.6	75.3	1716.3	1.77	40.26
38.0-39.0	1111.8	75.9	1792.2	1.78	42.04
39.0-40.0	1094.2	76.3	1868.5	1.79	43.83
40.0-41.0	1076.2	76.6	1945.1	1.80	45.63
41.0-42.0	1058.6	76.9	2022.0	1.80	47.43
42.0-43.0	1039.9	77.0	2099.1	1.81	49.24
43.0-44.0	1020.7	77.0	2176.1	1.81	51.05
44.0-45.0	1001.6	77.0	2253.1	1.81	52.85
45.0-46.0	981.8	76.8	2329.9	1.80	54.65
46.0-47.0	962.1	76.5	2406.4	1.80	56.45
47.0-48.0	941.7	76.1	2482.6	1.79	58.23
48.0-49.0	920.8	75.6	2558.2	1.77	60.01
49.0-50.0	900.6	75.1	2633.3	1.76	61.77
50.0-51.0	879.1	74.4	2707.7	1.74	63.51
51.0-52.0	857.3	73.6	2781.3	1.73	65.24
52.0-53.0	835.6	72.7	2854.0	1.71	66.95
53.0-54.0	813.1	71.7	2925.6	1.68	68.63
54.0-55.0	790.9	70.6	2996.2	1.66	70.28
55.0-56.0	768.0	69.4	3065.7	1.63	71.91
56.0-57.0	744.7	68.1	3133.8	1.60	73.51
57.0-58.0	722.3	66.8	3200.6	1.57	75.08
58.0-59.0	698.5	65.3	3265.9	1.53	76.61
59.0-60.0	674.3	63.7	3329.6	1.49	78.10
60.0-61.0	650.2	62.1	3391.6	1.46	79.56
61.0-62.0	625.8	60.3	3451.9	1.41	80.97
62.0-63.0	601.9	58.5	3510.5	1.37	82.35
63.0-64.0	577.1	56.6	3567.1	1.33	83.67
64.0-65.0	552.1	54.6	3621.8	1.28	84.96
65.0-66.0	527.9	52.7	3674.5	1.24	86.19
66.0-67.0	502.8	50.6	3725.0	1.19	87.38
67.0-68.0	477.8	48.4	3773.4	1.14	88.51
68.0-69.0	452.7	46.2	3819.6	1.08	89.60
69.0-70.0	427.5	43.9	3863.5	1.03	90.63
70.0-71.0	403.1	41.7	3905.2	0.98	91.60
71.0-72.0	378.1	39.3	3944.5	0.92	92.53

C Plane (°):0.0-360.0: 10.0
 Test Lab: LABORATORIO STAND
 Test Type: TYPE C
 Temperature: 25.8
 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	353.2	36.9	3981.5	0.87	93.39
73.0-74.0	329.3	34.6	4016.1	0.81	94.21
74.0-75.0	304.7	32.2	4048.3	0.76	94.96
75.0-76.0	280.8	29.8	4078.1	0.70	95.66
76.0-77.0	257.0	27.4	4105.5	0.64	96.30
77.0-78.0	233.6	25.0	4130.5	0.59	96.89
78.0-79.0	211.7	22.7	4153.2	0.53	97.42
79.0-80.0	189.3	20.4	4173.7	0.48	97.90
80.0-81.0	167.5	18.1	4191.8	0.42	98.33
81.0-82.0	146.8	15.9	4207.7	0.37	98.70
82.0-83.0	126.3	13.7	4221.4	0.32	99.02
83.0-84.0	107.0	11.7	4233.1	0.27	99.30
84.0-85.0	87.9	9.6	4242.7	0.23	99.52
85.0-86.0	69.4	7.6	4250.3	0.18	99.70
86.0-87.0	52.5	5.7	4256.0	0.13	99.83
87.0-88.0	35.7	3.9	4259.9	0.09	99.93
88.0-89.0	20.3	2.2	4262.1	0.05	99.98
89.0-90.0	8.8	1.0	4263.1	0.02	100.00