

Report No.: MSL-224

Test Time: 2019-11-28 11:53

Luminaire Property

Luminaire Manufacturer: Stand Iluminaciones S.A.S

Luminaire Category: Interior

Luminaire Description: Panel Stil Led Troffer 60x120 60W

Luminous Length (mm): 1150

Luminous Width (mm): 555

Voltage: 119.9 V

Current: 0.500 A

Power: 59.78 W

Power Factor: 0.995

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 6508.2 lm

Measurement Flux: 6508.2 lm

Efficiency: 100%

Downward Ratio: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 169.9, 159.8, 168.0, 168.1

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 123.1, 110.2, 115.8, 115.7

Luminaire Efficacy Rating (LER): 108.92

Central Intensity: 2167.88 cd

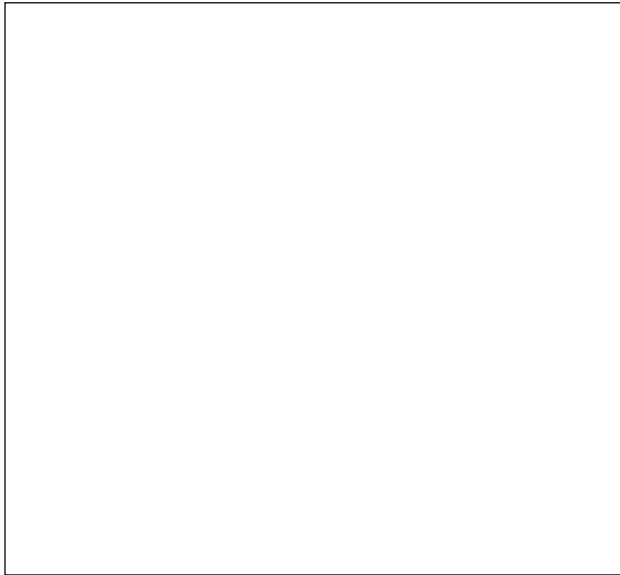
Max. Intensity: 2168.38 cd

Pos of Max. Intensity: H80 V0

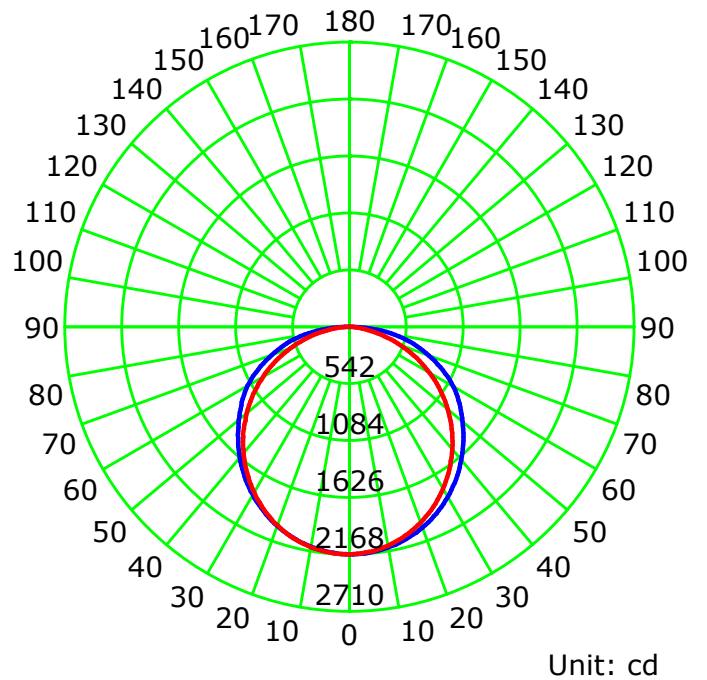
S/MH(C0/C180): 1.27

S/MH(C90/C270): 1.24

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 10.0

Test Lab: LABORATORIO STAND

Test Type: TYPE C

Temperature: 25

Operator: Cristian Herrera Arismendy

Gamma Plane (°):0.0-90.0:1.0

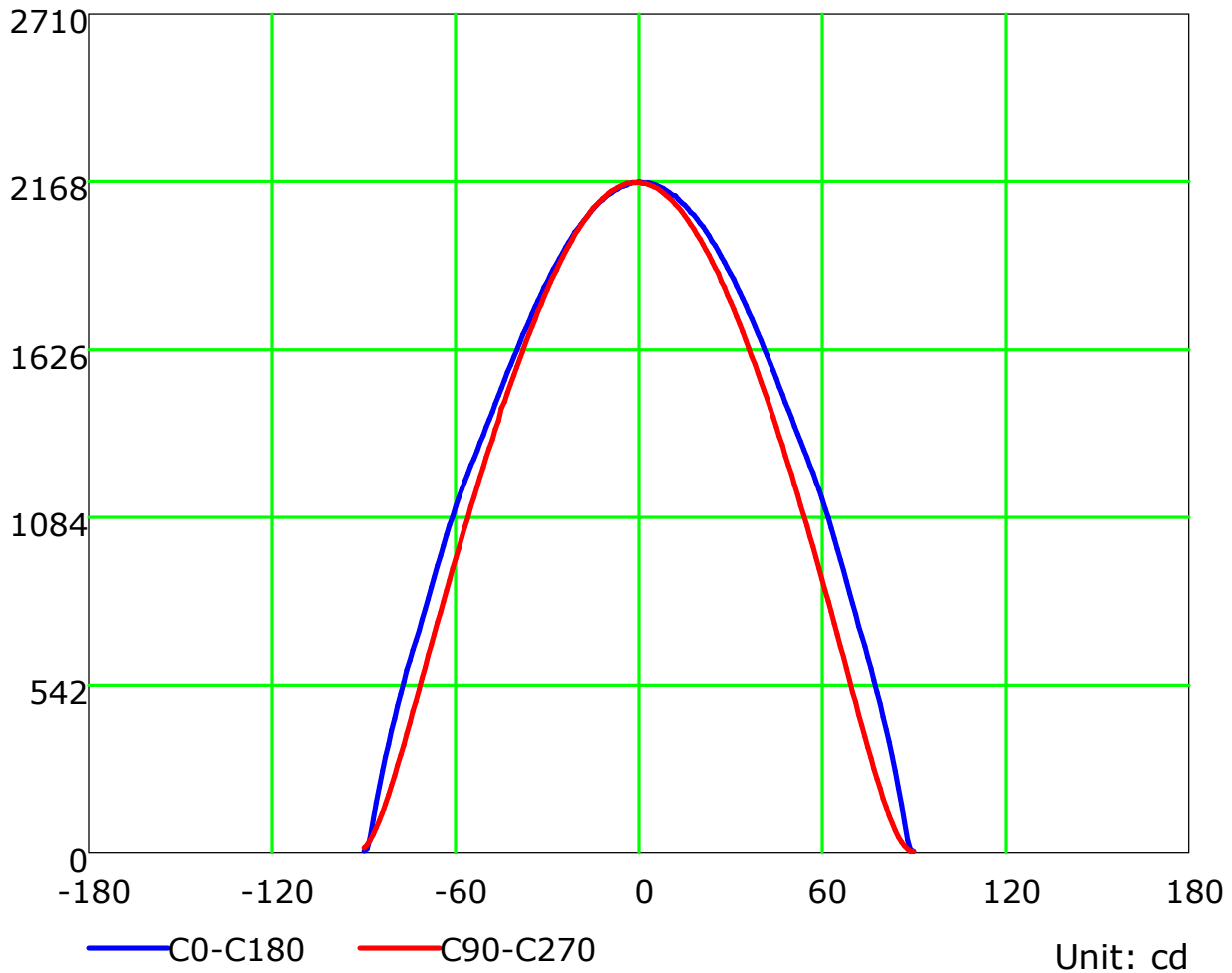
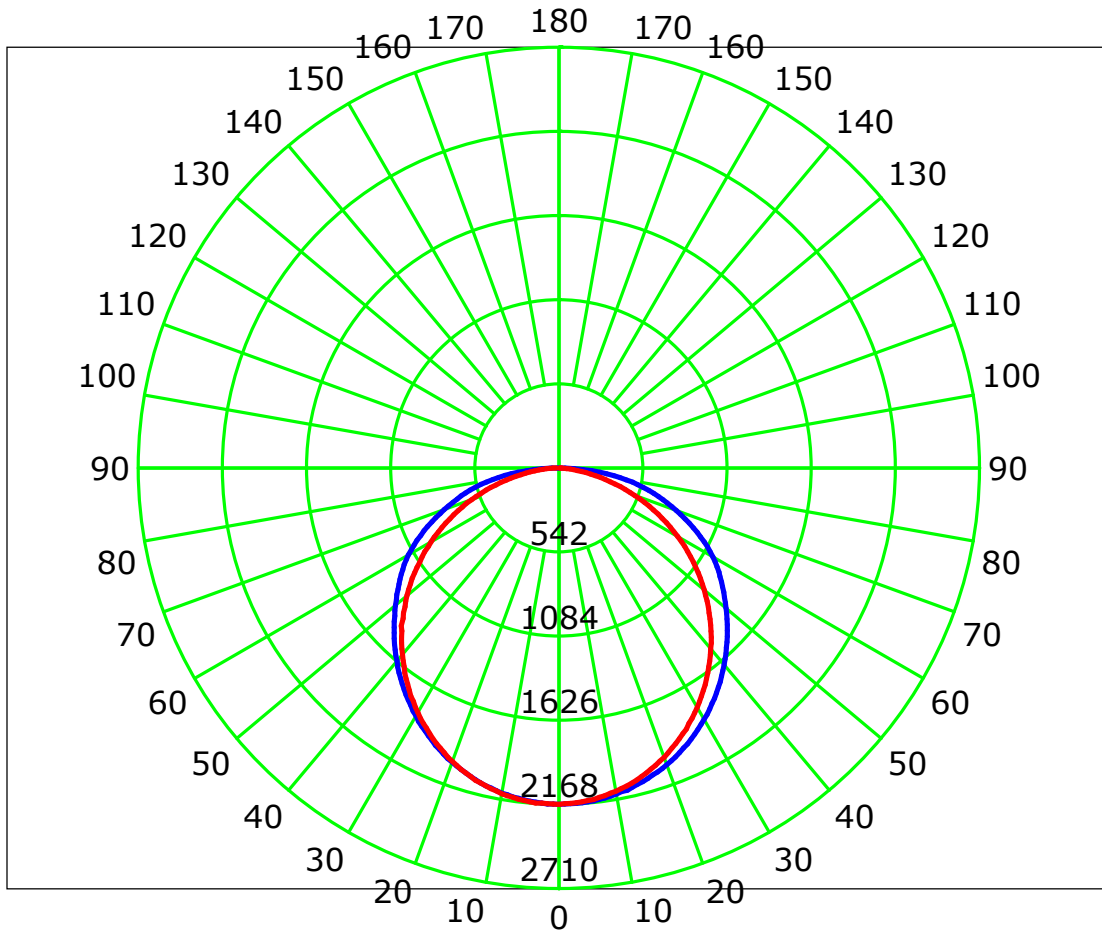
Test Device: LSG-1700B

Distance: 11.700 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve



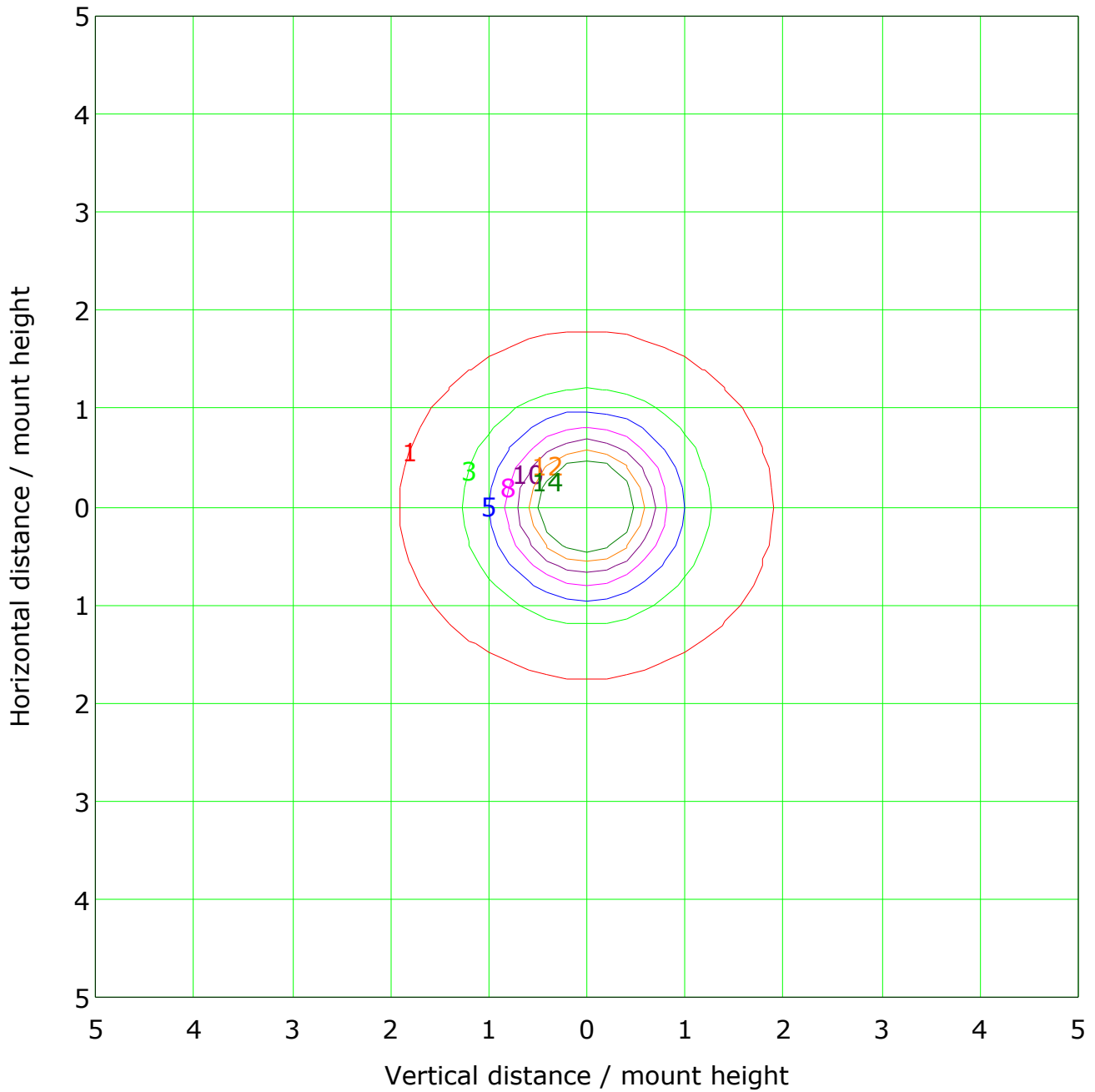
— C0-C180 — C90-C270

Unit: cd

C Plane (°):0.0-360.0: 10.0
Test Lab: LABORATORIO STAND
Test Type: TYPE C
Temperature: 25
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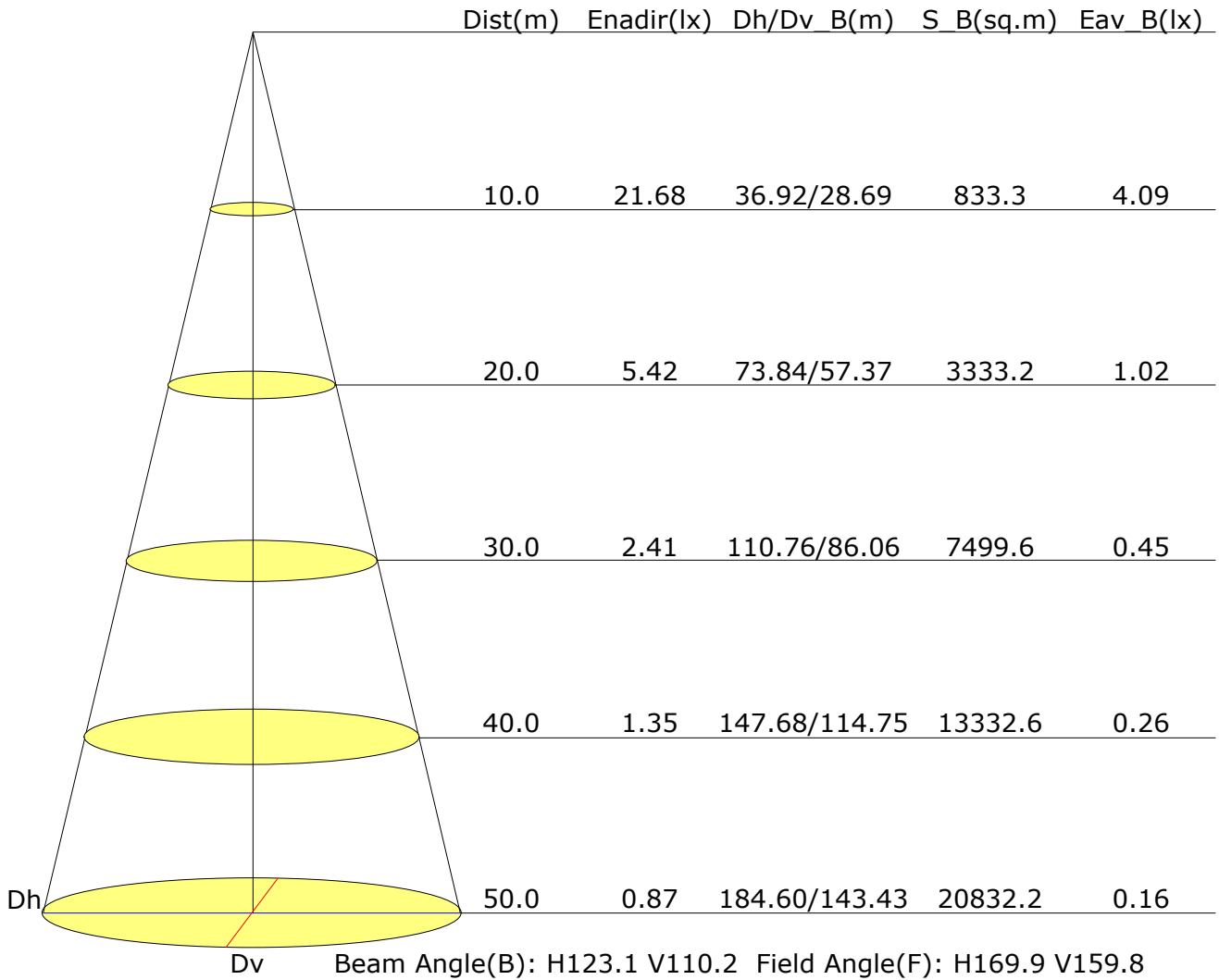
IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 21.7 lx

— (5%): 1.1 lx	— (15%): 3.3 lx
— (25%): 5.4 lx	— (35%): 7.6 lx
— (45%): 9.8 lx	— (55%): 11.9 lx
— (65%): 14.1 lx	

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	17.2	18.6	17.5	18.8	19.1	16.3	17.7	16.6	17.9	18.2
3H	19.2	20.5	19.5	20.7	21.0	17.8	19.1	18.1	19.4	19.7
4H	20.1	21.3	20.4	21.6	21.9	18.4	19.6	18.7	19.9	20.2
6H	20.9	22.0	21.3	22.4	22.7	18.8	19.9	19.2	20.3	20.6
8H	21.2	22.3	21.6	22.7	23.0	18.9	20.0	19.3	20.3	20.7
12H	21.4	22.5	21.8	22.8	23.2	19.0	20.0	19.3	20.4	20.7
X=4H Y=2H	17.8	19.1	18.2	19.4	19.7	17.1	18.4	17.5	18.7	19.0
3H	20.0	21.1	20.4	21.4	21.8	18.9	20.0	19.3	20.3	20.6
4H	21.1	22.1	21.5	22.4	22.8	19.6	20.6	20.0	20.9	21.3
6H	22.1	22.9	22.5	23.3	23.7	20.2	21.0	20.6	21.4	21.8
8H	22.5	23.3	22.9	23.7	24.1	20.3	21.1	20.8	21.5	21.9
12H	22.8	23.5	23.2	23.9	24.4	20.4	21.1	20.9	21.6	22.0
X=8H Y=4H	21.4	22.2	21.9	22.6	23.1	20.2	20.9	20.6	21.3	21.8
6H	22.6	23.2	23.1	23.7	24.1	20.9	21.5	21.4	22.0	22.4
8H	23.1	23.7	23.6	24.1	24.6	21.2	21.7	21.6	22.2	22.7
12H	23.5	24.0	24.0	24.5	25.0	21.3	21.8	21.8	22.3	22.8
X=12H Y=4H	21.5	22.2	21.9	22.6	23.0	20.2	21.0	20.7	21.4	21.8
6H	22.7	23.3	23.2	23.7	24.2	21.1	21.6	21.5	22.1	22.6
8H	23.3	23.8	23.8	24.2	24.7	21.4	21.9	21.9	22.4	22.9
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.2/-0.1				
S=1.5H	+0.4/-0.4					+0.3/-0.4				
S=2.0H	+0.5/-0.7					+0.5/-0.7				

Calculate in accordance with CIE Pub.117. The table is revised with 6508lm ($8\log(F/F_0) = 6.5$).

Zonal Lumen

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	2164.9	2.1	2.1	0.03	0.03
1.0-2.0	2164.0	6.2	8.3	0.10	0.13
2.0-3.0	2162.5	10.3	18.6	0.16	0.29
3.0-4.0	2160.1	14.5	33.1	0.22	0.51
4.0-5.0	2157.0	18.6	51.6	0.29	0.79
5.0-6.0	2153.0	22.6	74.3	0.35	1.14
6.0-7.0	2148.1	26.7	100.9	0.41	1.55
7.0-8.0	2142.6	30.7	131.6	0.47	2.02
8.0-9.0	2136.2	34.6	166.2	0.53	2.55
9.0-10.0	2129.4	38.5	204.8	0.59	3.15
10.0-11.0	2121.5	42.4	247.2	0.65	3.80
11.0-12.0	2113.0	46.2	293.4	0.71	4.51
12.0-13.0	2104.0	49.9	343.3	0.77	5.28
13.0-14.0	2093.8	53.6	396.9	0.82	6.10
14.0-15.0	2082.9	57.2	454.1	0.88	6.98
15.0-16.0	2071.4	60.7	514.8	0.93	7.91
16.0-17.0	2059.1	64.1	578.9	0.99	8.90
17.0-18.0	2046.6	67.5	646.4	1.04	9.93
18.0-19.0	2032.9	70.7	717.2	1.09	11.02
19.0-20.0	2018.6	73.9	791.1	1.14	12.15
20.0-21.0	2004.2	77.0	868.0	1.18	13.34
21.0-22.0	1988.2	79.9	947.9	1.23	14.57
22.0-23.0	1971.6	82.7	1030.7	1.27	15.84
23.0-24.0	1954.5	85.5	1116.1	1.31	17.15
24.0-25.0	1936.6	88.1	1204.2	1.35	18.50
25.0-26.0	1918.8	90.6	1294.8	1.39	19.89
26.0-27.0	1899.8	93.0	1387.7	1.43	21.32
27.0-28.0	1880.2	95.2	1482.9	1.46	22.79
28.0-29.0	1860.7	97.4	1580.3	1.50	24.28
29.0-30.0	1840.1	99.4	1679.7	1.53	25.81
30.0-31.0	1819.0	101.2	1780.9	1.56	27.36
31.0-32.0	1797.0	103.0	1883.9	1.58	28.95
32.0-33.0	1774.8	104.6	1988.4	1.61	30.55
33.0-34.0	1753.0	106.1	2094.5	1.63	32.18
34.0-35.0	1729.4	107.4	2202.0	1.65	33.83
35.0-36.0	1705.2	108.6	2310.6	1.67	35.50

C Plane (°):0.0-360.0: 10.0
Test Lab: LABORATORIO STAND
Test Type: TYPE C
Temperature: 25
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	1681.3	109.7	2420.2	1.69	37.19
37.0-38.0	1656.7	110.6	2530.8	1.70	38.89
38.0-39.0	1632.0	111.4	2642.2	1.71	40.60
39.0-40.0	1606.2	112.0	2754.3	1.72	42.32
40.0-41.0	1580.1	112.5	2866.8	1.73	44.05
41.0-42.0	1554.8	113.0	2979.8	1.74	45.79
42.0-43.0	1527.8	113.2	3093.0	1.74	47.52
43.0-44.0	1500.4	113.3	3206.2	1.74	49.26
44.0-45.0	1473.5	113.3	3319.5	1.74	51.00
45.0-46.0	1445.5	113.1	3432.5	1.74	52.74
46.0-47.0	1417.7	112.8	3545.3	1.73	54.47
47.0-48.0	1389.2	112.3	3657.6	1.73	56.20
48.0-49.0	1360.5	111.7	3769.4	1.72	57.92
49.0-50.0	1332.7	111.1	3880.5	1.71	59.62
50.0-51.0	1303.5	110.3	3990.8	1.69	61.32
51.0-52.0	1274.4	109.4	4100.2	1.68	63.00
52.0-53.0	1245.6	108.4	4208.5	1.67	64.67
53.0-54.0	1215.8	107.2	4315.7	1.65	66.31
54.0-55.0	1186.8	106.0	4421.7	1.63	67.94
55.0-56.0	1157.0	104.6	4526.2	1.61	69.55
56.0-57.0	1127.2	103.1	4629.3	1.58	71.13
57.0-58.0	1098.8	101.6	4730.9	1.56	72.69
58.0-59.0	1068.3	99.9	4830.8	1.53	74.23
59.0-60.0	1037.7	98.1	4928.9	1.51	75.73
60.0-61.0	1007.0	96.1	5025.0	1.48	77.21
61.0-62.0	975.2	94.0	5119.0	1.44	78.65
62.0-63.0	944.2	91.8	5210.8	1.41	80.07
63.0-64.0	911.5	89.5	5300.3	1.37	81.44
64.0-65.0	878.4	86.9	5387.2	1.34	82.78
65.0-66.0	845.9	84.4	5471.6	1.30	84.07
66.0-67.0	811.8	81.6	5553.2	1.25	85.33
67.0-68.0	777.8	78.8	5632.0	1.21	86.54
68.0-69.0	743.4	75.8	5707.9	1.17	87.70
69.0-70.0	708.2	72.7	5780.6	1.12	88.82
70.0-71.0	674.4	69.7	5850.3	1.07	89.89
71.0-72.0	639.4	66.5	5916.8	1.02	90.91

C Plane (°):0.0-360.0: 10.0
Test Lab: LABORATORIO STAND
Test Type: TYPE C
Temperature: 25
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 [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
72.0-73.0	604.4	63.2	5980.1	0.97	91.89
73.0-74.0	570.7	60.0	6040.1	0.92	92.81
74.0-75.0	536.1	56.7	6096.7	0.87	93.68
75.0-76.0	502.2	53.3	6150.0	0.82	94.50
76.0-77.0	467.7	49.9	6199.9	0.77	95.26
77.0-78.0	432.8	46.3	6246.2	0.71	95.98
78.0-79.0	398.9	42.9	6289.1	0.66	96.63
79.0-80.0	363.4	39.2	6328.3	0.60	97.24
80.0-81.0	327.8	35.5	6363.7	0.54	97.78
81.0-82.0	292.9	31.8	6395.5	0.49	98.27
82.0-83.0	257.1	27.9	6423.5	0.43	98.70
83.0-84.0	221.7	24.2	6447.6	0.37	99.07
84.0-85.0	184.6	20.1	6467.8	0.31	99.38
85.0-86.0	145.9	16.0	6483.7	0.25	99.62
86.0-87.0	107.6	11.8	6495.5	0.18	99.81
87.0-88.0	67.3	7.4	6502.9	0.11	99.92
88.0-89.0	33.6	3.7	6506.5	0.06	99.97
89.0-90.0	14.9	1.6	6508.2	0.03	100.00

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