

Report No.: MSL-117

Test Time: 2021-02-11 12:16

Luminaire Property

Luminaire Manufacturer: Stand Iluminaciones S.A.S

Luminaire Category: Exterior

Luminaire Description: High Bay IP66 2-G 160W 30°

Luminous Length (mm): 260

Luminous Width (mm): 240

Voltage: 220.1 V

Current: 0.712 A

Power: 155.05 W

Power Factor: 0.988

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 21274.5 lm

Measurement Flux: 21274.5 lm

Efficiency: 100%

Downward Ratio: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 39.7, 39.5, 40.2, 40.1

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 21.0, 21.1, 22.3, 21.9

Luminaire Efficacy Rating (LER): 137.26

Central Intensity: 85803.75 cd

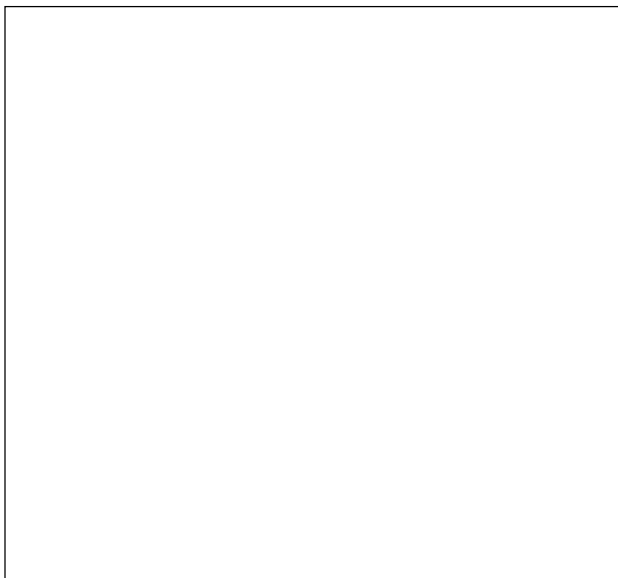
Max. Intensity: 87495.91 cd

Pos of Max. Intensity: H45 V1

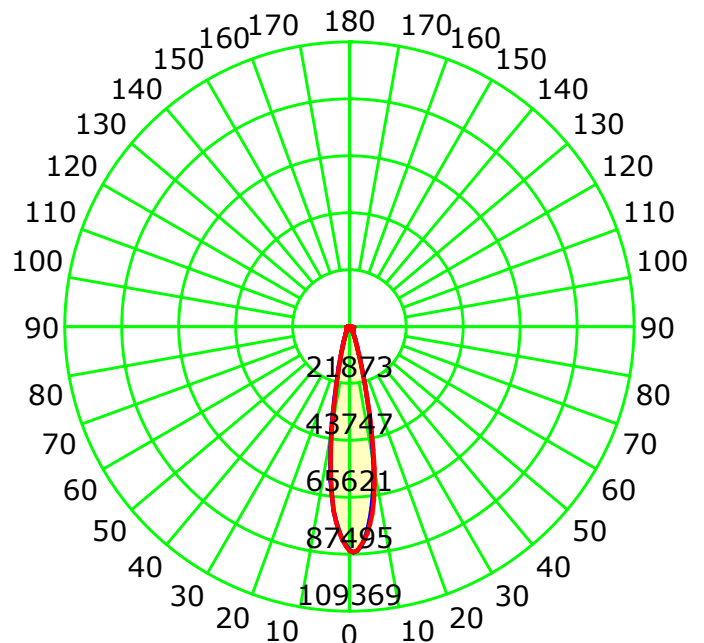
S/MH(C0/C180): 0.36

S/MH(C90/C270): 0.36

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

C Plane (°):0.0-360.0: 5.0

Test Lab:

Test Type: TYPE C

Temperature: 25.7

Operator: Cristian Herrera Arismendy

Average Diffuse Angle(50%): 21.0°

Gamma Plane (°):0.0-90.0:1.0

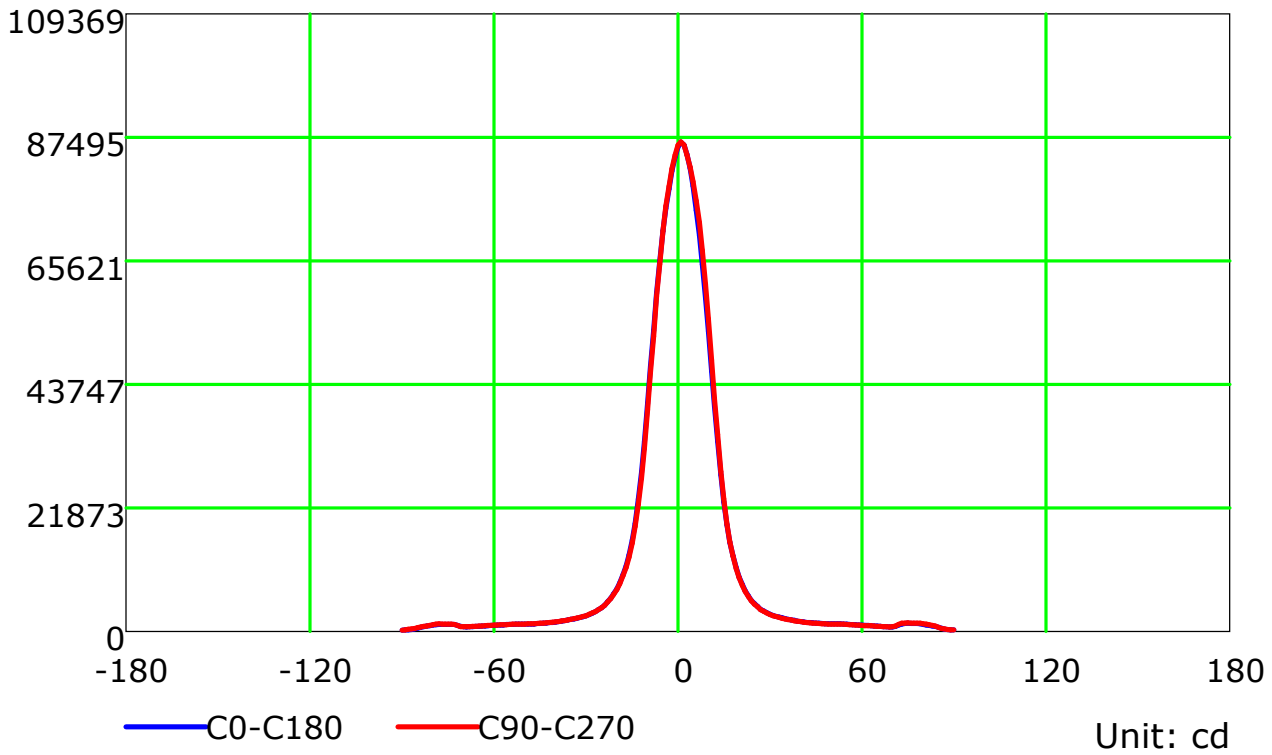
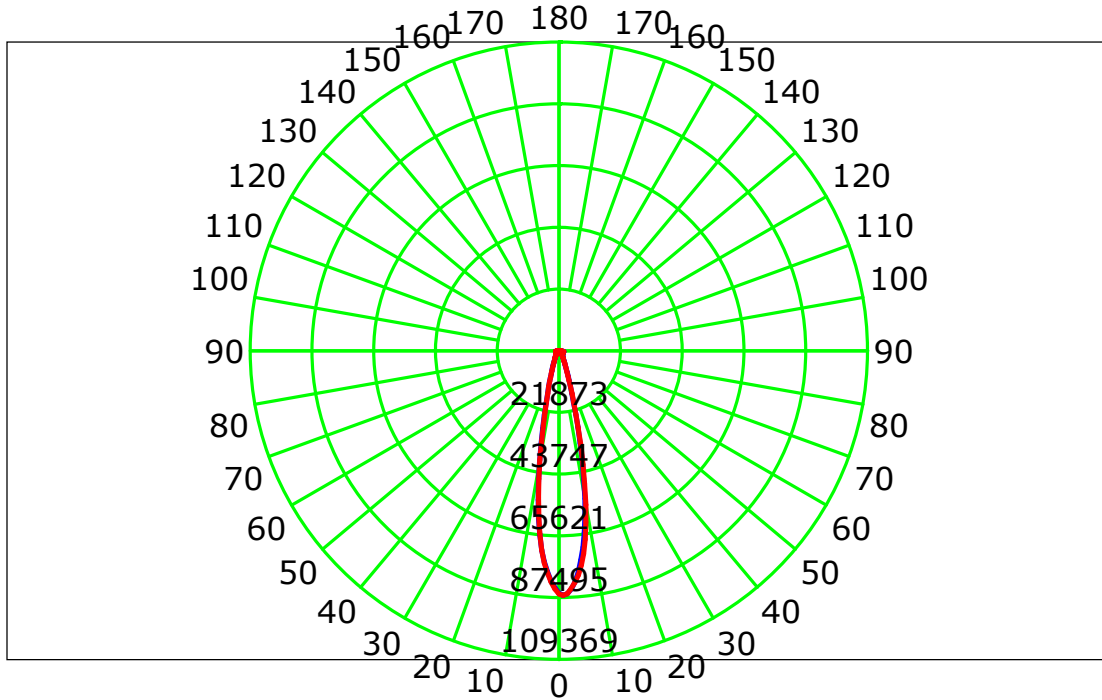
Test Device: LSG-1700B C90-C270

Distance: 11.700 m

Humidity:

Inspector:

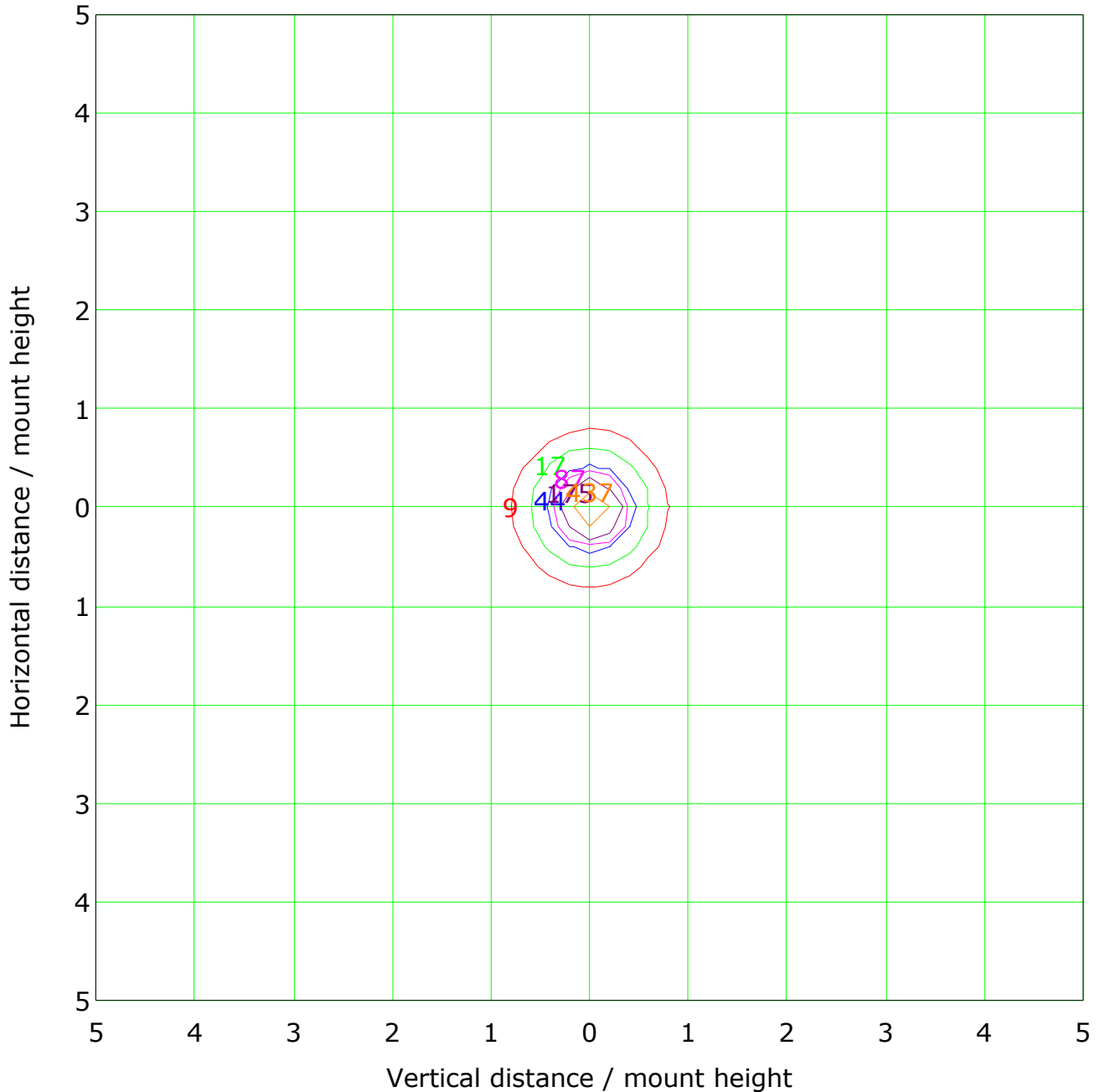
Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 5.0
 Test Lab:
 Test Type: TYPE C
 Temperature: 25.7
 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%): 874.6 lx

(1%): 8.7 lx

(2%): 17.5 lx

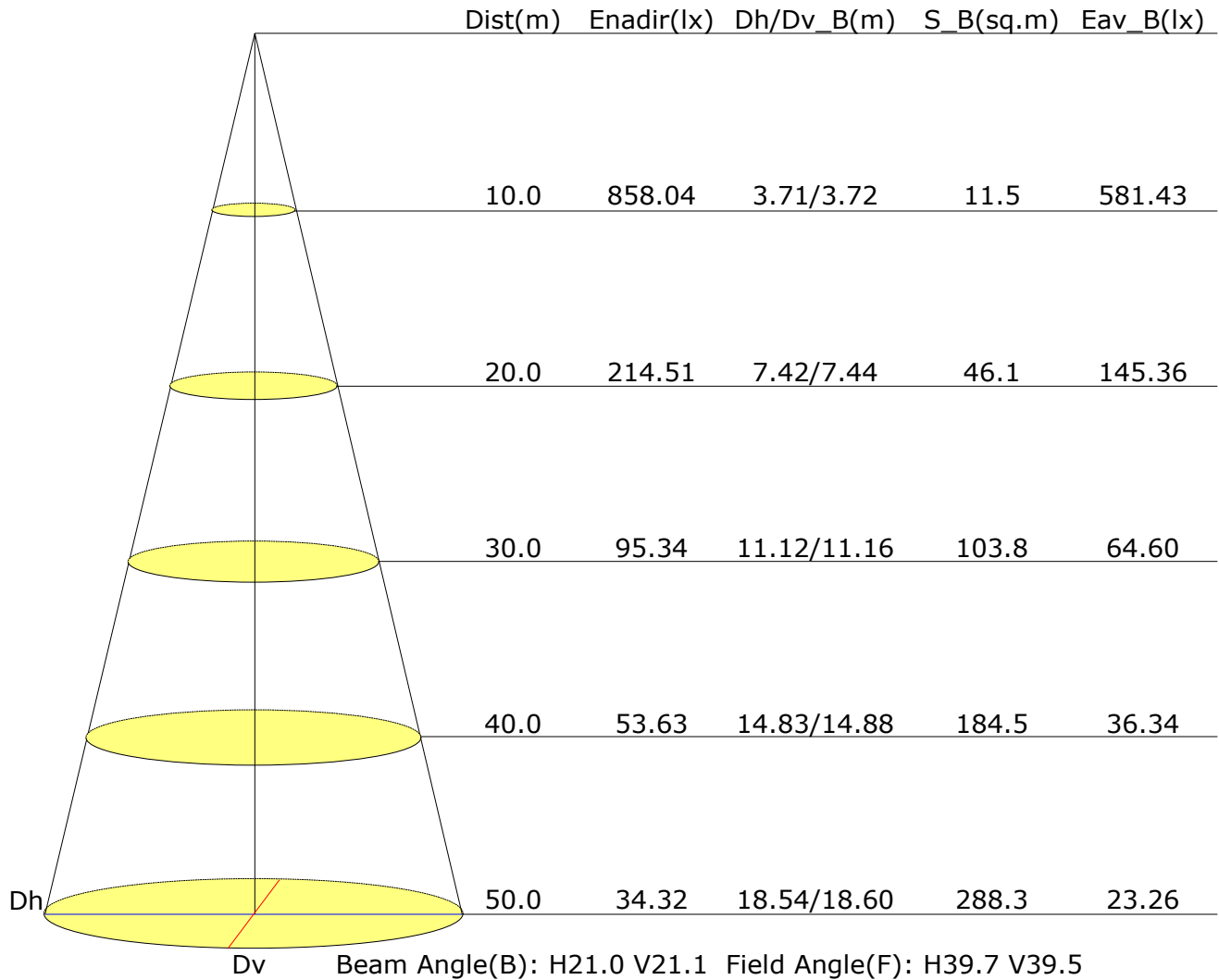
(5%): 43.7 lx

(100%): 874.6 lx

C Plane (°): 0.0-360.0: 5.0
Test Lab:
Test Type: TYPE C
Temperature: 25.7
Operator: Cristian Herrera Arismendy

Gamma Plane (°): 0.0-90.0: 1.0
Test Device: LSG-1700B³ lx
Distance: 11.700 m
Humidity:
Inspector:

Illuminance at a Distance



C Plane (°):0.0-360.0: 5.0
 Test Lab:
 Test Type: TYPE C
 Temperature: 25.7
 Operator: Cristian Herrera Arismendy

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

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	20.9	21.8	21.2	22.1	22.3	20.9	21.8	21.2	22.0	22.2
3H	23.3	24.1	23.6	24.4	24.6	23.3	24.2	23.6	24.4	24.7
4H	26.4	27.2	26.7	27.5	27.8	26.5	27.3	26.8	27.5	27.8
6H	29.1	29.8	29.4	30.1	30.4	29.1	29.9	29.4	30.2	30.5
8H	30.1	30.8	30.4	31.1	31.4	30.1	30.9	30.5	31.2	31.5
12H	30.9	31.6	31.2	31.9	32.2	30.9	31.6	31.3	31.9	32.3
X=4H Y=2H	21.7	22.5	22.0	22.8	23.1	21.7	22.5	22.0	22.8	23.1
3H	24.7	25.5	25.1	25.8	26.1	24.8	25.5	25.1	25.8	26.2
4H	28.1	28.7	28.5	29.1	29.4	28.1	28.8	28.5	29.1	29.5
6H	30.8	31.4	31.2	31.8	32.2	30.8	31.4	31.2	31.8	32.2
8H	31.9	32.5	32.3	32.9	33.3	31.9	32.5	32.3	32.9	33.3
12H	32.8	33.3	33.3	33.7	34.2	32.8	33.3	33.3	33.7	34.2
X=8H Y=4H	29.1	29.7	29.6	30.1	30.5	29.1	29.7	29.6	30.1	30.5
6H	32.0	32.5	32.5	32.9	33.4	32.0	32.4	32.4	32.9	33.3
8H	33.3	33.7	33.7	34.1	34.6	33.2	33.7	33.7	34.1	34.6
12H	34.4	34.8	34.9	35.3	35.8	34.4	34.8	34.9	35.2	35.7
X=12H Y=4H	29.4	29.9	29.9	30.3	30.8	29.4	29.9	29.9	30.4	30.8
6H	32.3	32.8	32.8	33.2	33.7	32.3	32.7	32.8	33.2	33.7
8H	33.7	34.1	34.2	34.5	35.0	33.7	34.1	34.2	34.5	35.0
Variations with the observer position at spacings:										
S=1.0H	+0.3/-0.4					+0.4/-0.4				
S=1.5H	+0.5/-0.6					+0.5/-0.6				
S=2.0H	+0.9/-1.2					+0.8/-1.3				

Calculate in accordance with CIE Pub.117. The table is revised with 21274lm ($8\log(F/F_0) = 10.6$).

Zonal Lumen

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	85902.1	82.2	82.2	0.39	0.39
1.0-2.0	84860.2	243.6	325.8	1.15	1.53
2.0-3.0	82828.4	396.2	722.0	1.86	3.39
3.0-4.0	80060.2	536.0	1258.0	2.52	5.91
4.0-5.0	76755.7	660.4	1918.4	3.10	9.02
5.0-6.0	72655.8	763.7	2682.0	3.59	12.61
6.0-7.0	67954.9	843.6	3525.6	3.97	16.57
7.0-8.0	62773.2	898.5	4424.1	4.22	20.80
8.0-9.0	57036.1	924.5	5348.6	4.35	25.14
9.0-10.0	51164.6	926.0	6274.7	4.35	29.49
10.0-11.0	44986.1	899.0	7173.7	4.23	33.72
11.0-12.0	38820.5	848.7	8022.4	3.99	37.71
12.0-13.0	33183.6	787.6	8810.0	3.70	41.41
13.0-14.0	27744.8	710.3	9520.3	3.34	44.75
14.0-15.0	22950.9	630.2	10150.4	2.96	47.71
15.0-16.0	19007.8	557.0	10707.5	2.62	50.33
16.0-17.0	15744.8	490.4	11197.8	2.30	52.64
17.0-18.0	13220.0	435.9	11633.8	2.05	54.68
18.0-19.0	11149.2	387.9	12021.7	1.82	56.51
19.0-20.0	9483.0	347.1	12368.9	1.63	58.14
20.0-21.0	8186.8	314.4	12683.3	1.48	59.62
21.0-22.0	7100.7	285.4	12968.6	1.34	60.96
22.0-23.0	6215.4	260.8	13229.5	1.23	62.18
23.0-24.0	5488.0	240.0	13469.5	1.13	63.31
24.0-25.0	4875.8	221.7	13691.2	1.04	64.35
25.0-26.0	4381.0	206.8	13898.0	0.97	65.33
26.0-27.0	3953.2	193.4	14091.4	0.91	66.24
27.0-28.0	3590.8	181.8	14273.3	0.85	67.09
28.0-29.0	3294.4	172.4	14445.6	0.81	67.90
29.0-30.0	3033.5	163.8	14609.4	0.77	68.67
30.0-31.0	2813.8	156.6	14766.1	0.74	69.41
31.0-32.0	2622.8	150.3	14916.3	0.71	70.11
32.0-33.0	2455.7	144.7	15061.0	0.68	70.79
33.0-34.0	2313.7	140.0	15201.1	0.66	71.45
34.0-35.0	2186.1	135.8	15336.9	0.64	72.09
35.0-36.0	2069.3	131.8	15468.6	0.62	72.71

C Plane (°):0.0-360.0: 5.0
 Test Lab:
 Test Type: TYPE C
 Temperature: 25.7
 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	1958.6	127.8	15596.4	0.60	73.31
37.0-38.0	1857.4	124.0	15720.4	0.58	73.89
38.0-39.0	1772.5	121.0	15841.4	0.57	74.46
39.0-40.0	1692.4	118.1	15959.4	0.55	75.02
40.0-41.0	1617.2	115.2	16074.6	0.54	75.56
41.0-42.0	1553.1	112.9	16187.5	0.53	76.09
42.0-43.0	1496.8	110.9	16298.4	0.52	76.61
43.0-44.0	1448.8	109.4	16407.7	0.51	77.12
44.0-45.0	1406.0	108.1	16515.8	0.51	77.63
45.0-46.0	1368.8	107.1	16622.8	0.50	78.14
46.0-47.0	1337.6	106.4	16729.2	0.50	78.64
47.0-48.0	1308.1	105.8	16835.0	0.50	79.13
48.0-49.0	1282.0	105.3	16940.3	0.49	79.63
49.0-50.0	1260.5	105.1	17045.4	0.49	80.12
50.0-51.0	1243.8	105.2	17150.6	0.49	80.62
51.0-52.0	1227.6	105.4	17256.0	0.50	81.11
52.0-53.0	1210.2	105.3	17361.3	0.49	81.61
53.0-54.0	1191.5	105.0	17466.3	0.49	82.10
54.0-55.0	1168.5	104.3	17570.6	0.49	82.59
55.0-56.0	1141.4	103.2	17673.8	0.48	83.08
56.0-57.0	1114.2	101.9	17775.7	0.48	83.55
57.0-58.0	1090.1	100.8	17876.5	0.47	84.03
58.0-59.0	1065.1	99.6	17976.1	0.47	84.50
59.0-60.0	1040.8	98.3	18074.4	0.46	84.96
60.0-61.0	1017.0	97.1	18171.5	0.46	85.41
61.0-62.0	991.0	95.5	18267.0	0.45	85.86
62.0-63.0	964.8	93.8	18360.8	0.44	86.30
63.0-64.0	939.0	92.2	18453.0	0.43	86.74
64.0-65.0	914.3	90.5	18543.5	0.43	87.16
65.0-66.0	889.3	88.7	18632.2	0.42	87.58
66.0-67.0	864.3	86.9	18719.1	0.41	87.99
67.0-68.0	841.1	85.2	18804.4	0.40	88.39
68.0-69.0	822.5	83.9	18888.3	0.39	88.78
69.0-70.0	821.6	84.4	18972.7	0.40	89.18
70.0-71.0	875.3	90.5	19063.2	0.43	89.61
71.0-72.0	1030.0	107.1	19170.3	0.50	90.11

C Plane (°):0.0-360.0: 5.0
 Test Lab:
 Test Type: TYPE C
 Temperature: 25.7
 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 [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
72.0-73.0	1215.4	127.1	19297.4	0.60	90.71
73.0-74.0	1328.7	139.7	19437.1	0.66	91.36
74.0-75.0	1372.4	145.0	19582.1	0.68	92.04
75.0-76.0	1373.3	145.8	19727.9	0.69	92.73
76.0-77.0	1355.1	144.5	19872.4	0.68	93.41
77.0-78.0	1333.7	142.8	20015.2	0.67	94.08
78.0-79.0	1307.2	140.5	20155.7	0.66	94.74
79.0-80.0	1270.4	137.0	20292.6	0.64	95.38
80.0-81.0	1225.9	132.6	20425.2	0.62	96.01
81.0-82.0	1175.7	127.5	20552.7	0.60	96.61
82.0-83.0	1121.1	121.9	20674.6	0.57	97.18
83.0-84.0	1061.6	115.7	20790.3	0.54	97.72
84.0-85.0	988.6	107.9	20898.2	0.51	98.23
85.0-86.0	906.3	99.1	20997.3	0.47	98.70
86.0-87.0	817.7	89.5	21086.8	0.42	99.12
87.0-88.0	705.3	77.3	21164.1	0.36	99.48
88.0-89.0	571.2	62.6	21226.7	0.29	99.78
89.0-90.0	436.0	47.8	21274.5	0.22	100.00

C Plane (°):0.0-360.0: 5.0
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Gamma Plane (°):0.0-90.0:1.0
 Test Device: LSG-1700B
 Distance: 11.700 m
 Humidity:
 Inspector: