

Report No.: MSL-77

Test Time: 2021-02-10 10:19

## Luminaire Property

Luminaire Manufacturer: Stand Iluminaciones S.A.S

Luminaire Category: Exterior

Luminaire Description: High Bay IP66 2-G 80W 30°

Luminous Length (mm): 130

Luminous Width (mm): 240

Voltage: 219.9 V

Current: 0.375 A

Power: 80.36 W

Power Factor: 0.972

## Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 9748.8 lm

Measurement Flux: 9748.8 lm

Efficiency: 100%

Downward Ratio: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 36.8, 36.9, 37.6, 37.6

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 19.9, 20.1, 20.8, 20.6

Luminaire Efficacy Rating (LER): 121.36

Central Intensity: 43982.08 cd

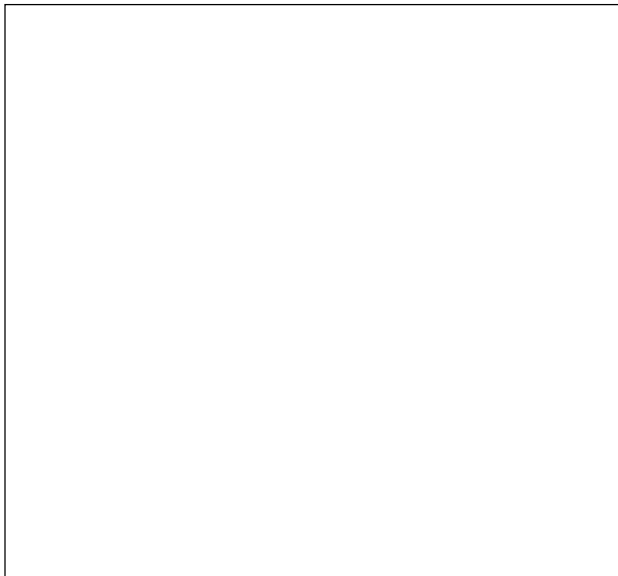
Max. Intensity: 46143.63 cd

Pos of Max. Intensity: H195 V3

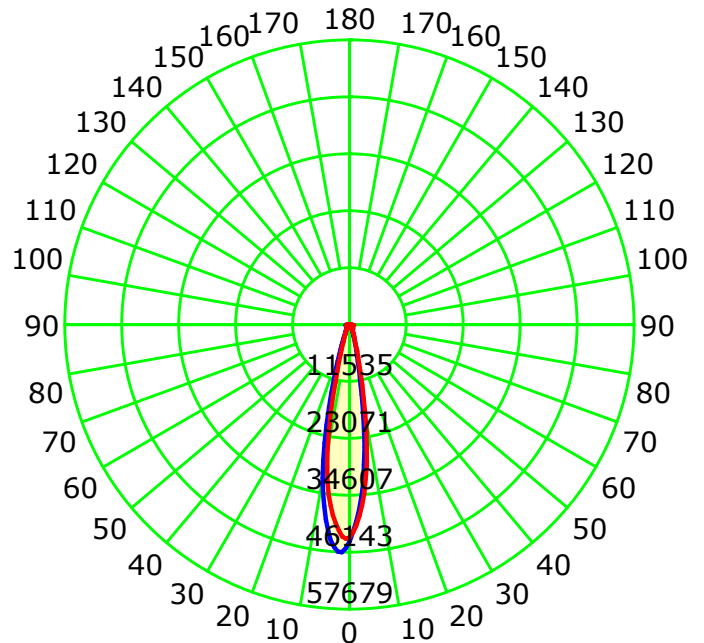
S/MH(C0/C180): 0.35

S/MH(C90/C270): 0.35

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

C Plane (°):0.0-360.0: 5.0

Test Lab:

Test Type: TYPE C

Temperature: 25.1

Operator: Cristian Herrera Arismendy

Average Diffuse Angle(50%): 20.0°

Gamma Plane (°):0.0-90.0:1.0

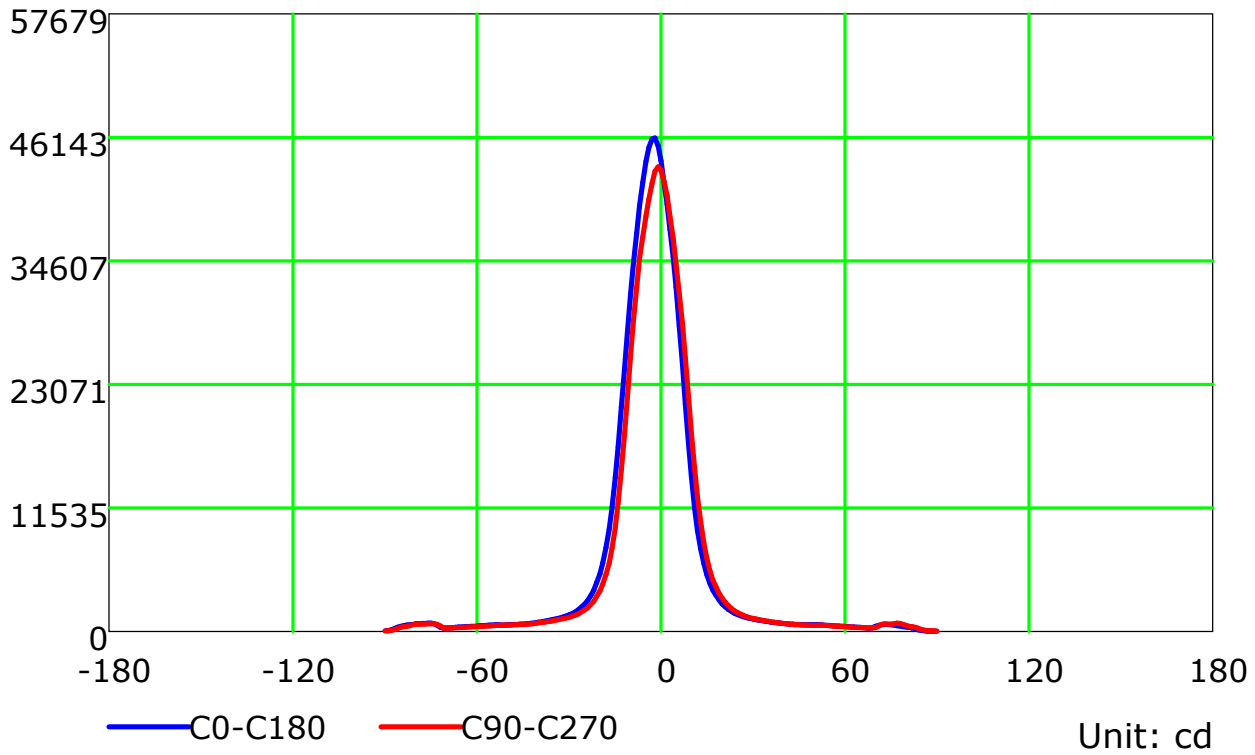
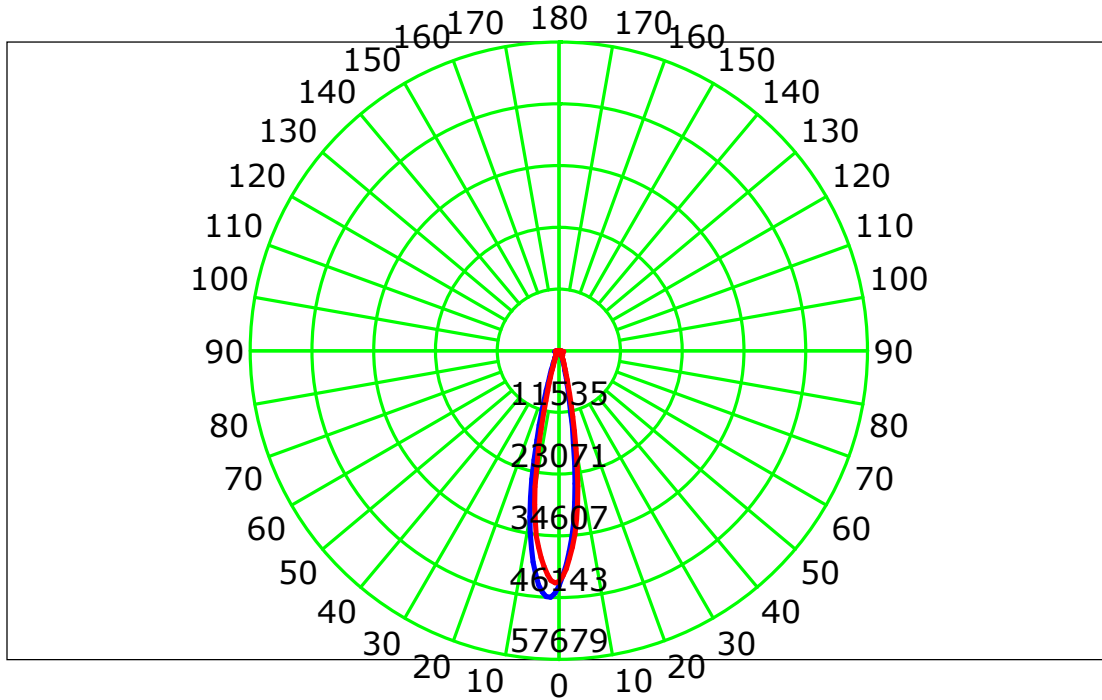
Test Device: LSG-1700B — C90-C270

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: 25.1

Operator: Cristian Herrera Arismendy

Gamma Plane (°):0.0-90.0:1.0

Test Device: LSG-1700B

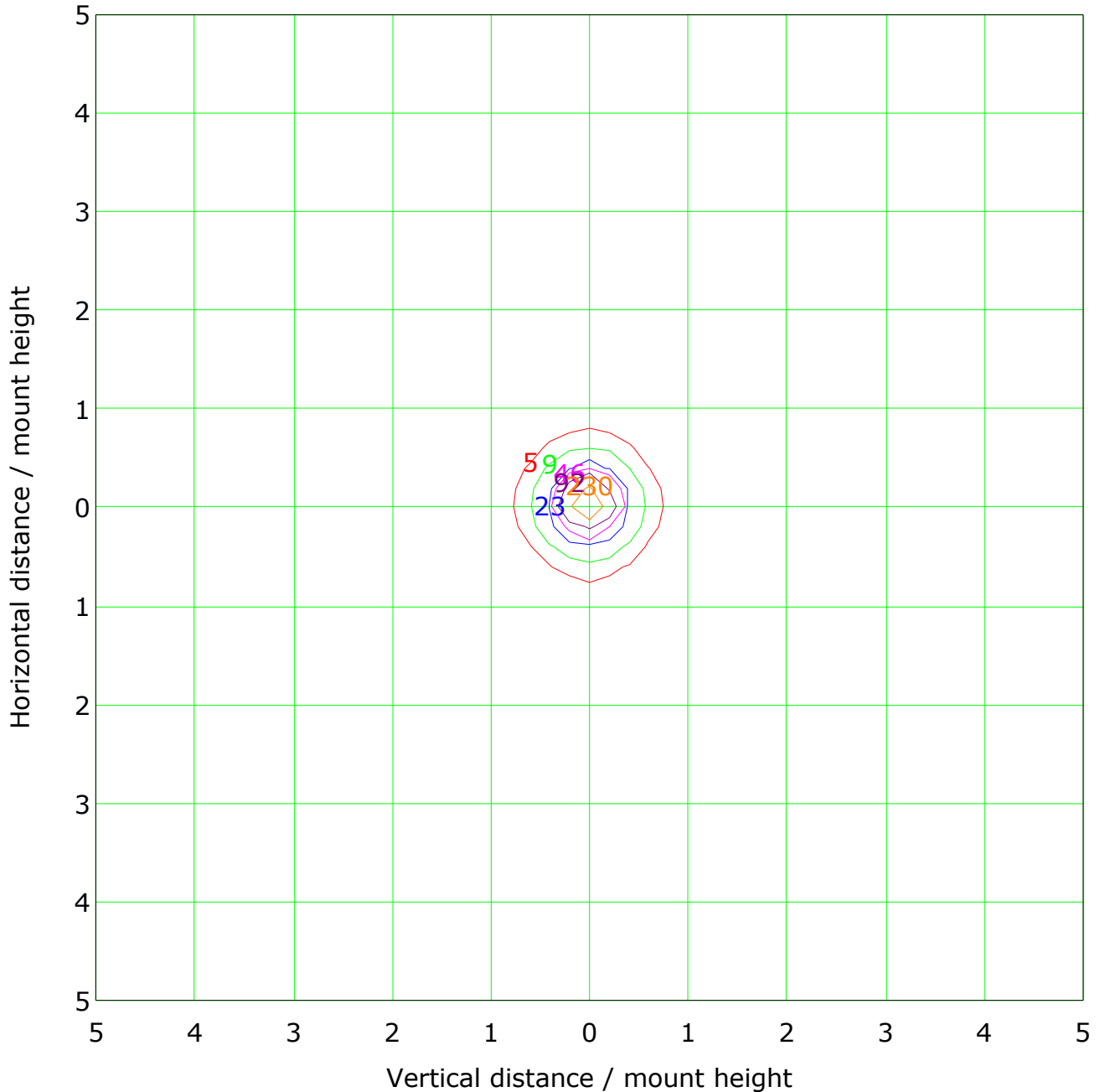
Distance: 11.700 m

Humidity:

Inspector:

Unit: cd

## IsoLux Plot



Mounting Height: 10.0m    Max Lux(100%): 460.4 lx

— ( 1%): 4.6 lx                      — ( 2%): 9.2 lx  
— ( 5%): 23.0 lx                      — ( 10%): 92.1 lx  
— (100%): 460.4 lx

C Plane (°):0.0-360.0: 5.0

Test Lab:

Test Type: TYPE C  
 Temperature: 25.1

Operator: Cristian Herrera Arismendy

Gamma Plane (°):0.0-90.0:1.0

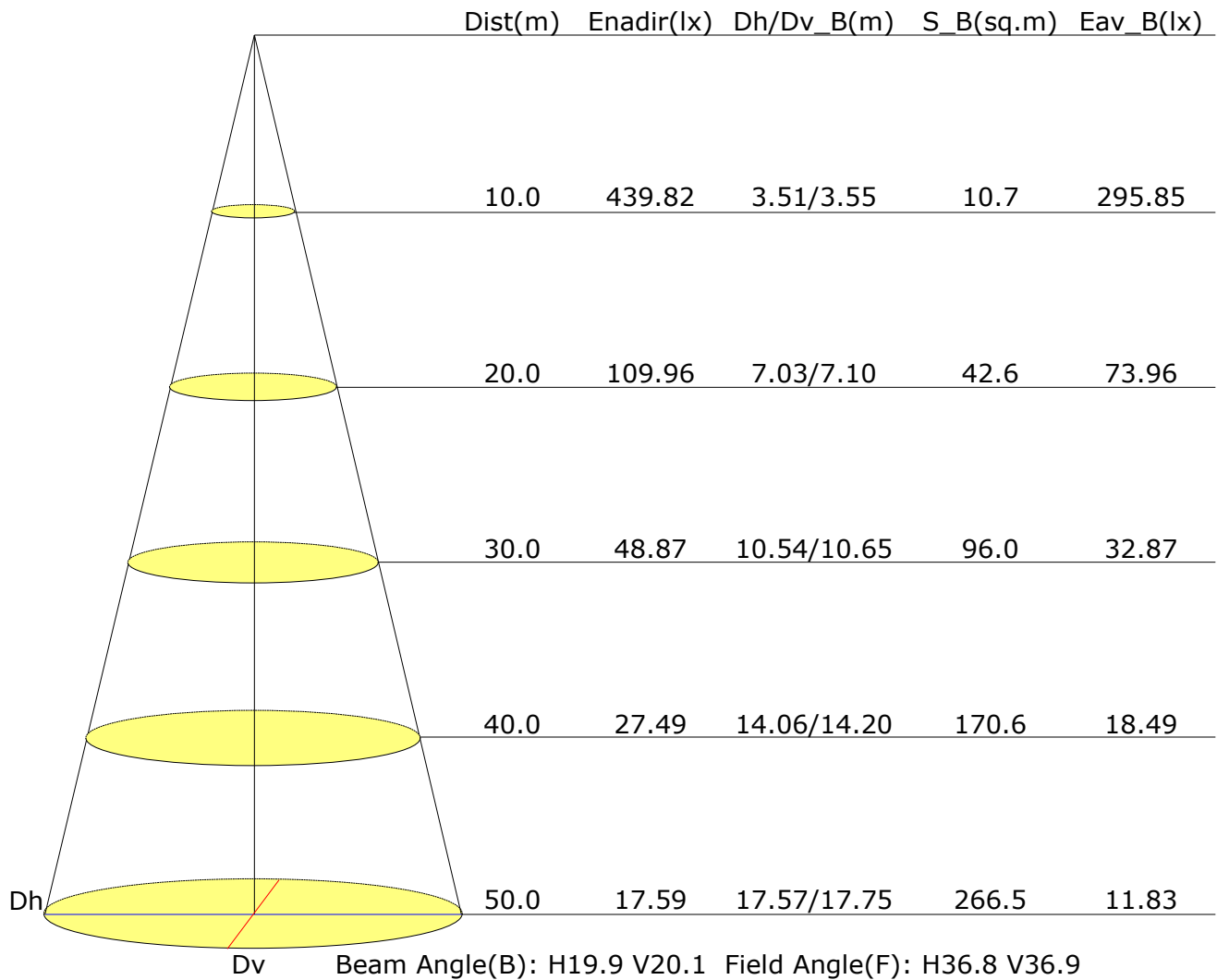
Test Device: LSG-1700B<sup>2</sup> lx

Distance: 11.700 m

Humidity:

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	19.8	20.7	20.1	20.9	21.1	19.8	20.7	20.0	20.9	21.1
3H	22.8	23.6	23.1	23.9	24.1	22.3	23.1	22.6	23.4	23.6
4H	25.9	26.7	26.2	27.0	27.3	26.1	26.9	26.4	27.1	27.4
6H	27.9	28.7	28.2	29.0	29.3	28.8	29.6	29.2	29.9	30.2
8H	28.5	29.3	28.9	29.6	29.9	29.8	30.5	30.1	30.8	31.1
12H	28.8	29.5	29.2	29.8	30.2	30.5	31.2	30.8	31.5	31.8
X=4H Y=2H	20.5	21.3	20.8	21.6	21.8	20.5	21.3	20.8	21.5	21.8
3H	24.3	25.0	24.7	25.4	25.7	24.0	24.7	24.3	25.0	25.3
4H	27.5	28.1	27.9	28.5	28.8	27.7	28.3	28.0	28.6	29.0
6H	29.6	30.2	30.0	30.6	30.9	30.4	31.0	30.8	31.4	31.8
8H	30.3	30.9	30.8	31.3	31.7	31.4	32.0	31.9	32.4	32.8
12H	30.7	31.2	31.2	31.7	32.1	32.2	32.7	32.7	33.1	33.6
X=8H Y=4H	28.4	29.0	28.9	29.4	29.8	28.6	29.1	29.0	29.5	29.9
6H	30.7	31.2	31.2	31.6	32.1	31.4	31.8	31.8	32.3	32.7
8H	31.6	32.0	32.1	32.5	33.0	32.6	33.0	33.0	33.4	33.9
12H	32.3	32.7	32.8	33.1	33.6	33.6	34.0	34.1	34.4	34.9
X=12H Y=4H	28.7	29.2	29.1	29.6	30.0	28.8	29.3	29.2	29.7	30.1
6H	31.0	31.4	31.5	31.9	32.4	31.6	32.0	32.1	32.5	33.0
8H	32.0	32.4	32.5	32.8	33.4	32.9	33.2	33.4	33.7	34.2
Variations with the observer position at spacings:										
S=1.0H	+0.3/-0.3					+0.3/-0.3				
S=1.5H	+0.5/-0.4					+0.5/-0.6				
S=2.0H	+0.5/-1.1					+0.7/-1.3				

Calculate in accordance with CIE Pub.117. The table is revised with 9749lm ( $8\log(F/F_0) = 7.9$ ).

## Zonal Lumen

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	43186.2	41.3	41.3	0.42	0.42
1.0-2.0	42676.4	122.5	163.8	1.26	1.68
2.0-3.0	41618.7	199.1	362.9	2.04	3.72
3.0-4.0	40098.0	268.4	631.4	2.75	6.48
4.0-5.0	38237.8	329.0	960.3	3.37	9.85
5.0-6.0	35935.9	377.7	1338.1	3.87	13.73
6.0-7.0	33344.5	413.9	1752.0	4.25	17.97
7.0-8.0	30555.0	437.4	2189.3	4.49	22.46
8.0-9.0	27513.2	446.0	2635.3	4.57	27.03
9.0-10.0	24436.0	442.3	3077.6	4.54	31.57
10.0-11.0	21261.3	424.9	3502.5	4.36	35.93
11.0-12.0	18180.1	397.5	3899.9	4.08	40.00
12.0-13.0	15418.8	366.0	4265.9	3.75	43.76
13.0-14.0	12803.9	327.8	4593.7	3.36	47.12
14.0-15.0	10527.1	289.0	4882.7	2.96	50.09
15.0-16.0	8651.8	253.5	5136.3	2.60	52.69
16.0-17.0	7086.5	220.7	5357.0	2.26	54.95
17.0-18.0	5872.2	193.6	5550.6	1.99	56.94
18.0-19.0	4894.0	170.3	5720.9	1.75	58.68
19.0-20.0	4116.0	150.7	5871.6	1.55	60.23
20.0-21.0	3528.0	135.5	6007.1	1.39	61.62
21.0-22.0	3043.6	122.3	6129.4	1.25	62.87
22.0-23.0	2654.2	111.4	6240.8	1.14	64.02
23.0-24.0	2343.5	102.5	6343.3	1.05	65.07
24.0-25.0	2086.9	94.9	6438.2	0.97	66.04
25.0-26.0	1881.9	88.8	6527.0	0.91	66.95
26.0-27.0	1706.6	83.5	6610.5	0.86	67.81
27.0-28.0	1558.7	78.9	6689.4	0.81	68.62
28.0-29.0	1440.6	75.4	6764.8	0.77	69.39
29.0-30.0	1337.0	72.2	6837.0	0.74	70.13
30.0-31.0	1246.4	69.4	6906.4	0.71	70.84
31.0-32.0	1167.8	66.9	6973.3	0.69	71.53
32.0-33.0	1097.9	64.7	7038.0	0.66	72.19
33.0-34.0	1036.6	62.7	7100.7	0.64	72.84
34.0-35.0	977.4	60.7	7161.4	0.62	73.46
35.0-36.0	922.9	58.8	7220.2	0.60	74.06

C Plane (°):0.0-360.0: 5.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature: 25.1  
 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	873.9	57.0	7277.2	0.58	74.65
37.0-38.0	828.0	55.3	7332.5	0.57	75.21
38.0-39.0	787.0	53.7	7386.2	0.55	75.76
39.0-40.0	749.5	52.3	7438.5	0.54	76.30
40.0-41.0	715.7	51.0	7489.5	0.52	76.82
41.0-42.0	686.6	49.9	7539.3	0.51	77.34
42.0-43.0	660.6	48.9	7588.3	0.50	77.84
43.0-44.0	638.1	48.2	7636.5	0.49	78.33
44.0-45.0	619.3	47.6	7684.1	0.49	78.82
45.0-46.0	602.9	47.2	7731.2	0.48	79.30
46.0-47.0	588.7	46.8	7778.0	0.48	79.78
47.0-48.0	576.1	46.6	7824.6	0.48	80.26
48.0-49.0	564.6	46.4	7871.0	0.48	80.74
49.0-50.0	554.7	46.3	7917.2	0.47	81.21
50.0-51.0	544.9	46.1	7963.4	0.47	81.69
51.0-52.0	535.2	45.9	8009.3	0.47	82.16
52.0-53.0	524.5	45.6	8054.9	0.47	82.62
53.0-54.0	511.9	45.1	8100.1	0.46	83.09
54.0-55.0	498.0	44.5	8144.5	0.46	83.54
55.0-56.0	483.4	43.7	8188.2	0.45	83.99
56.0-57.0	468.9	42.9	8231.1	0.44	84.43
57.0-58.0	455.0	42.1	8273.2	0.43	84.86
58.0-59.0	440.7	41.2	8314.4	0.42	85.29
59.0-60.0	426.8	40.3	8354.7	0.41	85.70
60.0-61.0	413.3	39.4	8394.1	0.40	86.10
61.0-62.0	399.8	38.5	8432.7	0.40	86.50
62.0-63.0	386.7	37.6	8470.3	0.39	86.89
63.0-64.0	372.9	36.6	8506.9	0.38	87.26
64.0-65.0	358.5	35.5	8542.4	0.36	87.62
65.0-66.0	344.3	34.4	8576.7	0.35	87.98
66.0-67.0	330.1	33.2	8609.9	0.34	88.32
67.0-68.0	317.1	32.1	8642.1	0.33	88.65
68.0-69.0	310.9	31.7	8673.8	0.33	88.97
69.0-70.0	328.8	33.8	8707.5	0.35	89.32
70.0-71.0	380.2	39.3	8746.8	0.40	89.72
71.0-72.0	461.9	48.0	8794.9	0.49	90.21

C Plane (°):0.0-360.0: 5.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature: 25.1  
 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	559.1	58.5	8853.4	0.60	90.81
73.0-74.0	635.8	66.9	8920.2	0.69	91.50
74.0-75.0	668.2	70.6	8990.8	0.72	92.22
75.0-76.0	667.1	70.8	9061.6	0.73	92.95
76.0-77.0	653.2	69.6	9131.3	0.71	93.67
77.0-78.0	634.9	68.0	9199.3	0.70	94.36
78.0-79.0	614.7	66.1	9265.3	0.68	95.04
79.0-80.0	591.0	63.7	9329.0	0.65	95.69
80.0-81.0	564.5	61.1	9390.1	0.63	96.32
81.0-82.0	535.8	58.1	9448.2	0.60	96.92
82.0-83.0	504.0	54.8	9503.0	0.56	97.48
83.0-84.0	469.8	51.2	9554.2	0.53	98.00
84.0-85.0	430.2	47.0	9601.2	0.48	98.49
85.0-86.0	384.3	42.0	9643.2	0.43	98.92
86.0-87.0	332.1	36.3	9679.5	0.37	99.29
87.0-88.0	270.3	29.6	9709.1	0.30	99.59
88.0-89.0	208.7	22.9	9732.0	0.23	99.83
89.0-90.0	153.6	16.8	9748.8	0.17	100.00

C Plane (°): 0.0-360.0: 5.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature: 25.1  
 Operator: Cristian Herrera Arismendy

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