

Report No.: MSL-55

Test Time: 2019-03-15 11:43

Luminaire Property

Luminaire Manufacturer: Stand Iluminaciones S.A.S

Luminaire Category: Interior

Luminaire Description: Lum Stil Led Linear Riel T5 50cm 8W Samsung

Luminous Length (mm): 485

Luminous Width (mm): 15

Luminous Height (mm): 10

Voltage: 120.0 V

Current: 0.075 A

Power: 8.53 W

Power Factor: 0.948

Photometric Results

CIE Class: Semi-Direct

Total Rated Lamp Lumens: 1028.6 lm

Measurement Flux: 1028.6 lm

Efficiency: 100%

Downward Ratio: 87%

Upward Ratio: 13%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 258.5, 158.3, 219.0, 217.6

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 152.2, 107.6, 127.8, 127.5

Luminaire Efficacy Rating (LER): 120.64

Central Intensity: 254.64 cd

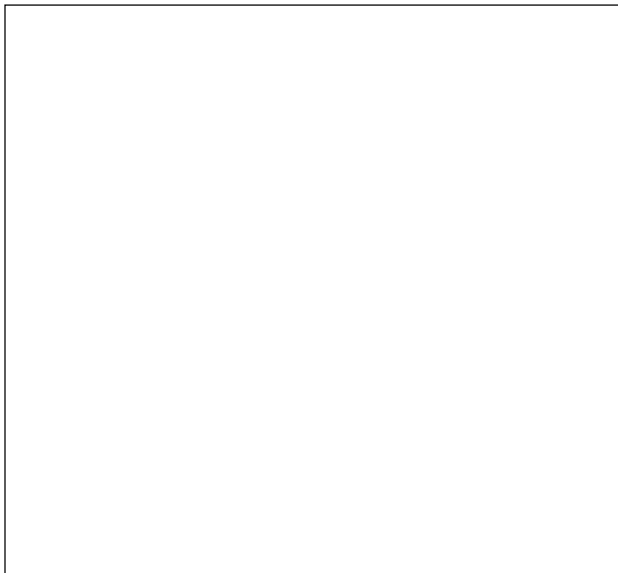
Max. Intensity: 255.39 cd

Pos of Max. Intensity: H190 V5

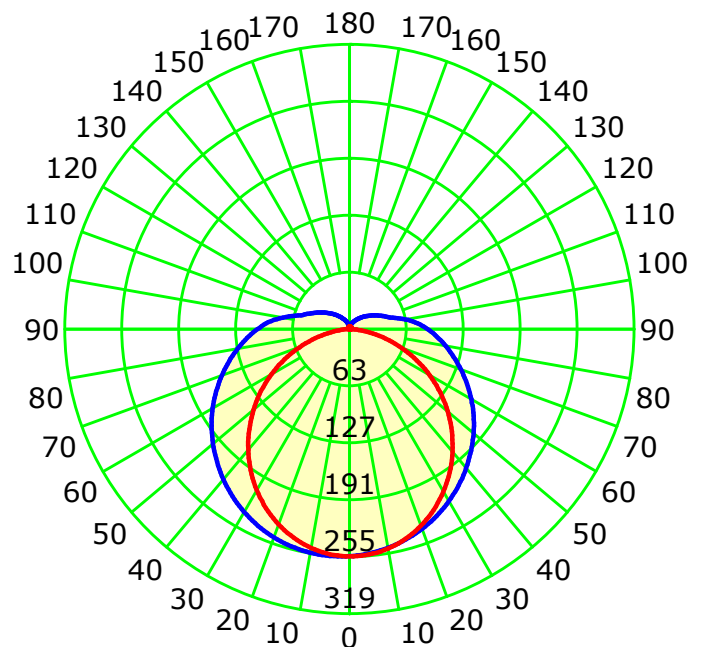
S/MH(C0/C180): 1.35

S/MH(C90/C270): 1.22

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

C Plane (°):0.0-360.0: 10.0

Gamma Plane (°):0.0-180.0:(1.0;50%): 129.9°

Test Lab: LABORATORIO STAND

Test Device: LSG-1700B

Test Type: TYPE C

Distance: 11.703 m — C90-C270

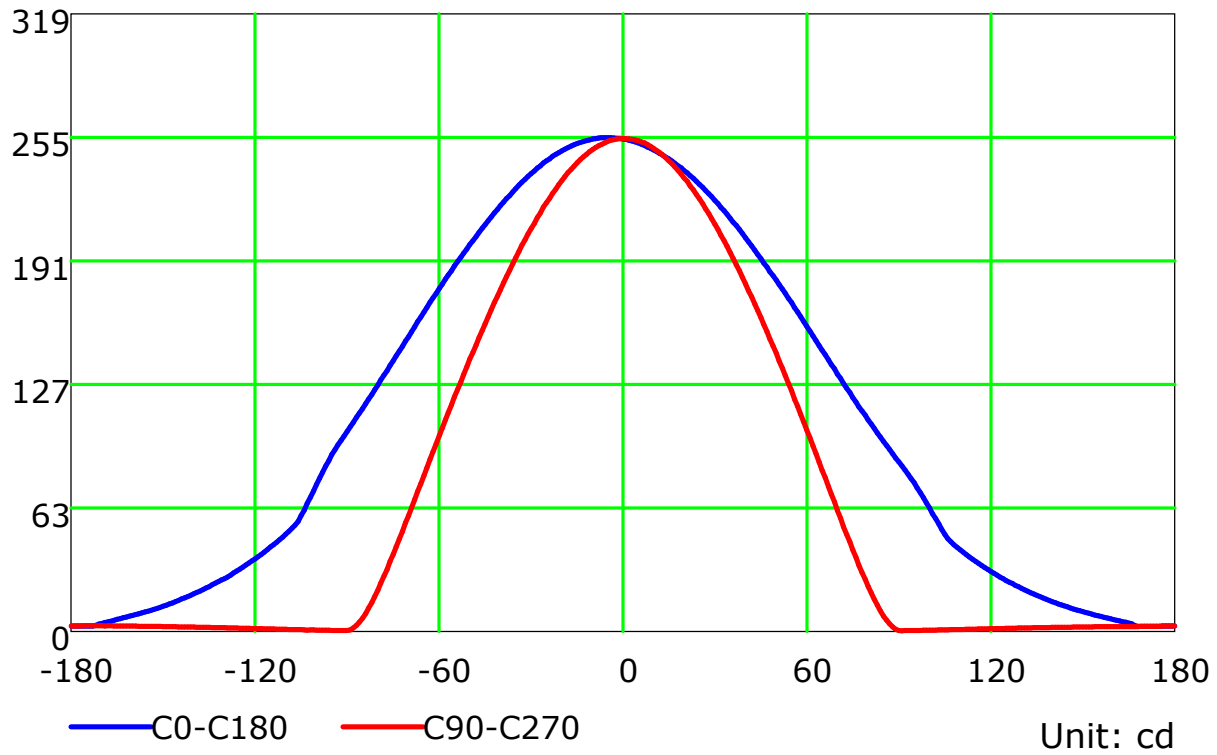
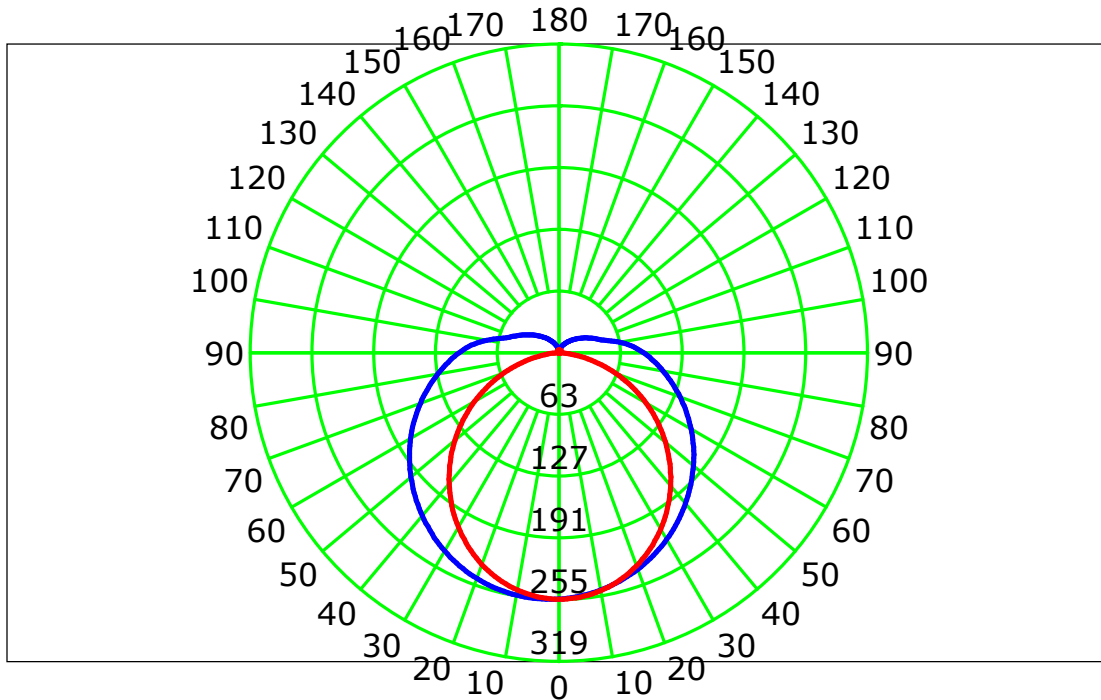
Temperature: 25.7

Humidity:

Operator: Cristian Herrera Arismendy

Inspector:

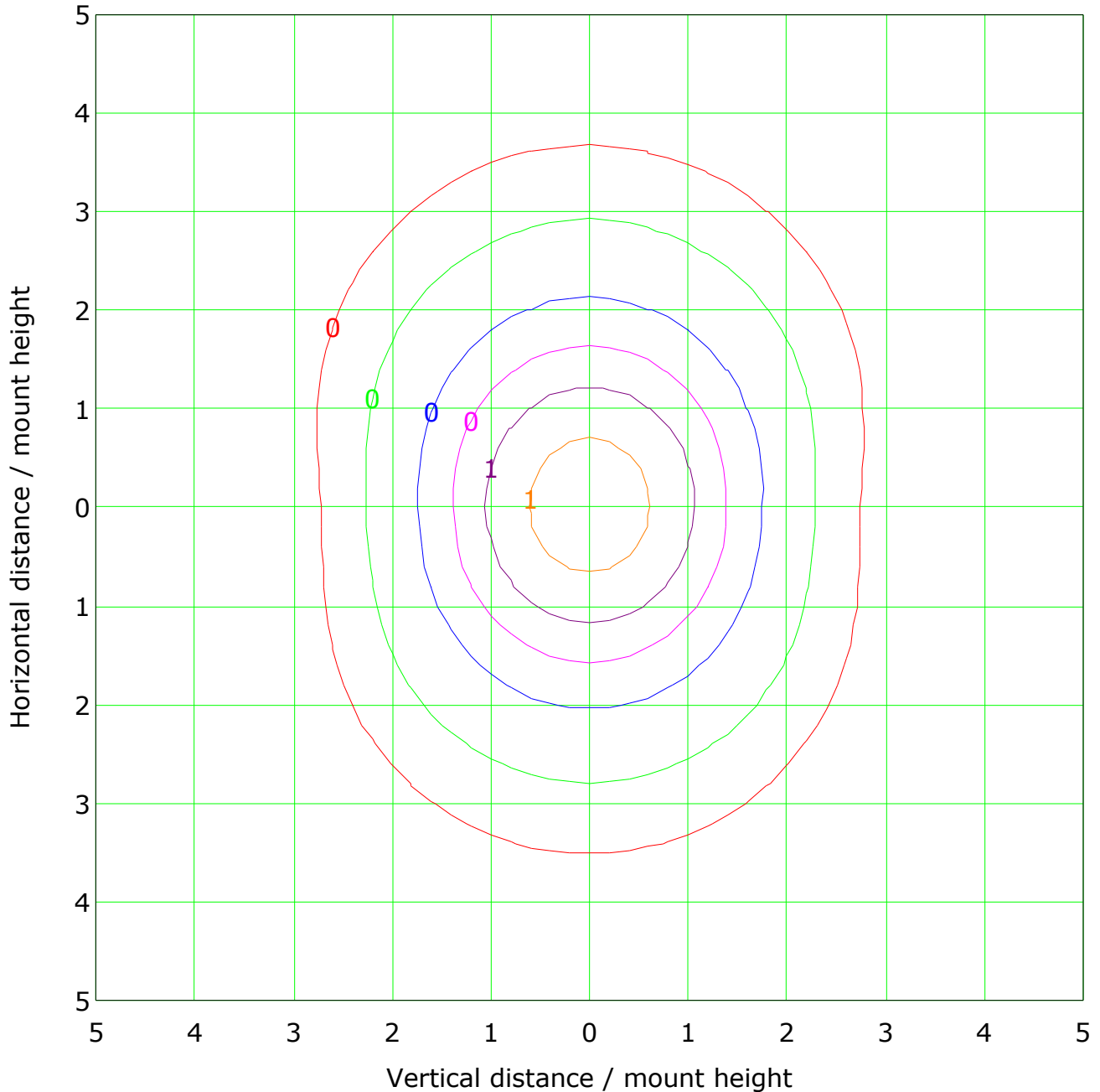
Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 10.0
 Test Lab: LABORATORIO STAND
 Test Type: TYPE C
 Temperature: 25.7
 Operator: Cristian Herrera Arismendy

Gamma Plane (°):0.0-180.0:1.0
 Test Device: LSG-1700B
 Distance: 11.703 m
 Humidity:
 Inspector:

IsoLux Plot



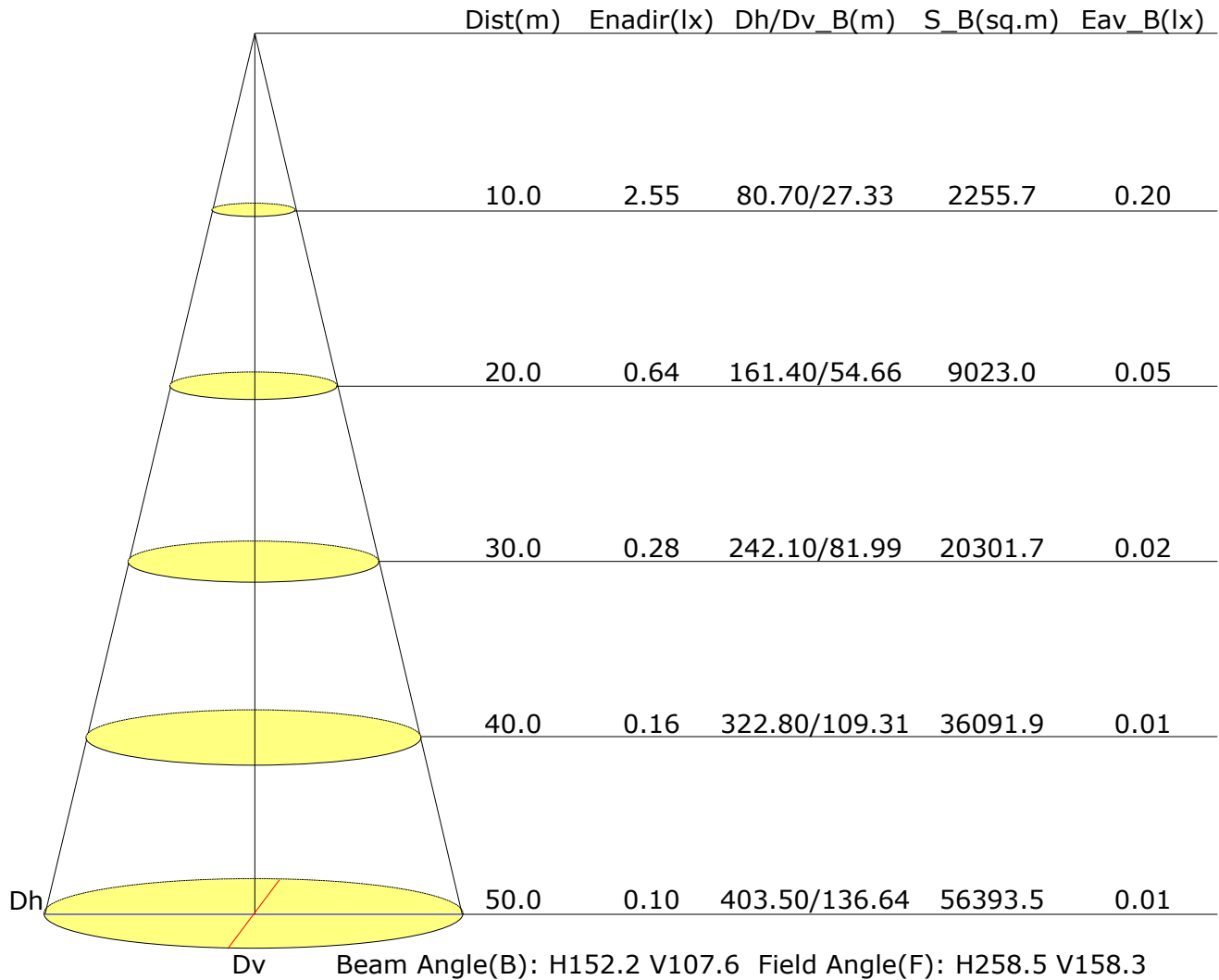
Mounting Height: 10.0m Max Lux(100%): 2.6 lx

— (1%): 0.0 lx — (2%): 0.1 lx
— (5%): 0.1 lx — (10%): 0.2 lx

C Plane (°):0.0-360.0: 10.0, \, 0.5 lx
 Test Lab: LABORATORIO STAND
 Test Type: TYPE C (100%): 2.6 lx
 Temperature: 25.7
 Operator: Cristian Herrera Arismendy

Gamma Plane (°):0.0-180.0:1.0
 Test Device: LSG-1700B lx
 Distance: 11.703 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	22.5	23.8	23.0	24.3	24.8	22.0	23.3	22.5	23.8	24.3
3H	24.5	25.7	25.1	26.2	26.8	23.4	24.6	23.9	25.1	25.6
4H	25.6	26.7	26.1	27.2	27.8	23.9	25.1	24.5	25.6	26.1
6H	26.5	27.6	27.1	28.1	28.7	24.3	25.3	24.8	25.9	26.4
8H	27.0	28.0	27.6	28.6	29.2	24.3	25.4	24.9	25.9	26.5
12H	27.5	28.4	28.0	29.0	29.6	24.4	25.4	24.9	25.9	26.5
X=4H Y=2H	23.1	24.3	23.6	24.8	25.3	22.7	23.8	23.2	24.3	24.9
3H	25.4	26.4	25.9	26.9	27.5	24.3	25.3	24.9	25.9	26.5
4H	26.5	27.4	27.1	28.0	28.7	25.0	25.9	25.6	26.5	27.1
6H	27.7	28.5	28.3	29.1	29.8	25.5	26.3	26.1	26.9	27.5
8H	28.3	29.0	28.9	29.6	30.3	25.6	26.4	26.2	27.0	27.7
12H	28.8	29.5	29.5	30.1	30.9	25.7	26.4	26.3	27.0	27.7
X=8H Y=4H	26.9	27.6	27.5	28.2	28.9	25.5	26.3	26.1	26.9	27.6
6H	28.3	28.9	28.9	29.5	30.3	26.3	26.9	26.9	27.5	28.2
8H	29.0	29.5	29.7	30.2	31.0	26.5	27.1	27.2	27.7	28.5
12H	29.7	30.2	30.4	30.9	31.7	26.7	27.2	27.4	27.9	28.6
X=12H Y=4H	26.9	27.5	27.5	28.2	28.9	25.6	26.3	26.3	26.9	27.7
6H	28.4	28.9	29.0	29.6	30.3	26.5	27.0	27.2	27.7	28.5
8H	29.2	29.6	29.8	30.3	31.1	26.9	27.4	27.5	28.0	28.8
Variations with the observer position at spacings:										
S=1.0H	+0.3/-0.3					+0.2/-0.1				
S=1.5H	+0.4/-0.5					+0.3/-0.3				
S=2.0H	+0.5/-0.8					+0.5/-0.7				

Calculate in accordance with CIE Pub.117. The table is revised with 1029lm ($8\log(F/F_0) = 0.1$).

Zonal Lumen

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	254.8	0.2	0.2	0.02	0.02
1.0-2.0	254.7	0.7	1.0	0.07	0.09
2.0-3.0	254.6	1.2	2.2	0.12	0.21
3.0-4.0	254.3	1.7	3.9	0.17	0.38
4.0-5.0	254.0	2.2	6.1	0.21	0.59
5.0-6.0	253.6	2.7	8.7	0.26	0.85
6.0-7.0	253.1	3.1	11.9	0.31	1.16
7.0-8.0	252.5	3.6	15.5	0.35	1.51
8.0-9.0	251.8	4.1	19.6	0.40	1.90
9.0-10.0	251.1	4.5	24.1	0.44	2.35
10.0-11.0	250.3	5.0	29.1	0.49	2.83
11.0-12.0	249.4	5.5	34.6	0.53	3.36
12.0-13.0	248.4	5.9	40.5	0.57	3.94
13.0-14.0	247.4	6.3	46.8	0.62	4.55
14.0-15.0	246.2	6.8	53.6	0.66	5.21
15.0-16.0	245.0	7.2	60.8	0.70	5.91
16.0-17.0	243.7	7.6	68.3	0.74	6.64
17.0-18.0	242.4	8.0	76.3	0.78	7.42
18.0-19.0	241.0	8.4	84.7	0.82	8.24
19.0-20.0	239.4	8.8	93.5	0.85	9.09
20.0-21.0	237.9	9.1	102.6	0.89	9.98
21.0-22.0	236.2	9.5	112.1	0.92	10.90
22.0-23.0	234.5	9.8	122.0	0.96	11.86
23.0-24.0	232.8	10.2	132.1	0.99	12.85
24.0-25.0	231.0	10.5	142.6	1.02	13.87
25.0-26.0	229.1	10.8	153.5	1.05	14.92
26.0-27.0	227.1	11.1	164.6	1.08	16.00
27.0-28.0	225.0	11.4	176.0	1.11	17.11
28.0-29.0	223.0	11.7	187.6	1.13	18.24
29.0-30.0	220.8	11.9	199.6	1.16	19.40
30.0-31.0	218.6	12.2	211.7	1.18	20.58
31.0-32.0	216.4	12.4	224.1	1.21	21.79
32.0-33.0	214.0	12.6	236.7	1.23	23.02
33.0-34.0	211.8	12.8	249.6	1.25	24.26
34.0-35.0	209.4	13.0	262.6	1.26	25.53
35.0-36.0	206.9	13.2	275.7	1.28	26.81

C Plane (°):0.0-360.0: 10.0
 Test Lab: LABORATORIO STAND
 Test Type: TYPE C
 Temperature: 25.7
 Operator: Cristian Herrera Arismendy

Gamma Plane (°):0.0-180.0:1.0
 Test Device: LSG-1700B
 Distance: 11.703 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	204.4	13.3	289.1	1.30	28.10
37.0-38.0	201.8	13.5	302.5	1.31	29.41
38.0-39.0	199.3	13.6	316.1	1.32	30.74
39.0-40.0	196.6	13.7	329.9	1.33	32.07
40.0-41.0	194.0	13.8	343.7	1.34	33.41
41.0-42.0	191.4	13.9	357.6	1.35	34.76
42.0-43.0	188.6	14.0	371.6	1.36	36.12
43.0-44.0	185.8	14.0	385.6	1.36	37.48
44.0-45.0	183.0	14.1	399.6	1.37	38.85
45.0-46.0	180.2	14.1	413.7	1.37	40.22
46.0-47.0	177.3	14.1	427.8	1.37	41.59
47.0-48.0	174.4	14.1	441.9	1.37	42.96
48.0-49.0	171.5	14.1	456.0	1.37	44.33
49.0-50.0	168.7	14.1	470.1	1.37	45.70
50.0-51.0	165.7	14.0	484.1	1.36	47.07
51.0-52.0	162.7	14.0	498.1	1.36	48.42
52.0-53.0	159.8	13.9	512.0	1.35	49.77
53.0-54.0	156.8	13.8	525.8	1.34	51.12
54.0-55.0	153.8	13.7	539.5	1.33	52.45
55.0-56.0	150.7	13.6	553.2	1.32	53.78
56.0-57.0	147.7	13.5	566.7	1.31	55.09
57.0-58.0	144.8	13.4	580.1	1.30	56.39
58.0-59.0	141.7	13.2	593.3	1.29	57.68
59.0-60.0	138.6	13.1	606.4	1.27	58.95
60.0-61.0	135.6	12.9	619.3	1.26	60.21
61.0-62.0	132.5	12.8	632.1	1.24	61.45
62.0-63.0	129.4	12.6	644.7	1.22	62.68
63.0-64.0	126.3	12.4	657.1	1.21	63.88
64.0-65.0	123.2	12.2	669.3	1.19	65.07
65.0-66.0	120.2	12.0	681.3	1.17	66.23
66.0-67.0	117.2	11.8	693.1	1.15	67.38
67.0-68.0	114.1	11.6	704.6	1.12	68.50
68.0-69.0	111.1	11.3	716.0	1.10	69.61
69.0-70.0	108.1	11.1	727.1	1.08	70.68
70.0-71.0	105.1	10.9	737.9	1.06	71.74
71.0-72.0	102.1	10.6	748.6	1.03	72.77

C Plane (°):0.0-360.0: 10.0
 Test Lab: LABORATORIO STAND
 Test Type: TYPE C
 Temperature: 25.7
 Operator: Cristian Herrera Arismendy

Gamma Plane (°):0.0-180.0:1.0
 Test Device: LSG-1700B
 Distance: 11.703 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	99.2	10.4	758.9	1.01	73.78
73.0-74.0	96.3	10.1	769.1	0.98	74.77
74.0-75.0	93.4	9.9	778.9	0.96	75.73
75.0-76.0	90.7	9.6	788.6	0.94	76.66
76.0-77.0	87.8	9.4	797.9	0.91	77.57
77.0-78.0	85.1	9.1	807.0	0.89	78.46
78.0-79.0	82.5	8.9	815.9	0.86	79.32
79.0-80.0	79.8	8.6	824.5	0.84	80.16
80.0-81.0	77.2	8.3	832.9	0.81	80.97
81.0-82.0	74.7	8.1	841.0	0.79	81.76
82.0-83.0	72.3	7.9	848.8	0.76	82.52
83.0-84.0	69.9	7.6	856.4	0.74	83.26
84.0-85.0	67.6	7.4	863.8	0.72	83.98
85.0-86.0	65.3	7.1	870.9	0.69	84.67
86.0-87.0	63.3	6.9	877.9	0.67	85.34
87.0-88.0	61.2	6.7	884.6	0.65	86.00
88.0-89.0	59.2	6.5	891.1	0.63	86.63
89.0-90.0	57.3	6.3	897.3	0.61	87.24
90.0-91.0	55.4	6.1	903.4	0.59	87.83
91.0-92.0	53.6	5.9	909.3	0.57	88.40
92.0-93.0	51.7	5.7	915.0	0.55	88.95
93.0-94.0	49.7	5.4	920.4	0.53	89.48
94.0-95.0	47.7	5.2	925.6	0.51	89.99
95.0-96.0	45.6	5.0	930.6	0.48	90.47
96.0-97.0	43.5	4.7	935.3	0.46	90.93
97.0-98.0	41.5	4.5	939.8	0.44	91.37
98.0-99.0	39.5	4.3	944.1	0.42	91.79
99.0-100.0	37.6	4.1	948.2	0.40	92.18
100.0-101.0	35.7	3.8	952.0	0.37	92.55
101.0-102.0	33.9	3.6	955.7	0.35	92.91
102.0-103.0	32.3	3.5	959.1	0.34	93.24
103.0-104.0	30.7	3.3	962.4	0.32	93.56
104.0-105.0	29.2	3.1	965.5	0.30	93.86
105.0-106.0	28.0	3.0	968.5	0.29	94.15
106.0-107.0	26.9	2.8	971.3	0.28	94.43
107.0-108.0	26.0	2.7	974.0	0.26	94.69

C Plane (°):0.0-360.0: 10.0
 Test Lab: LABORATORIO STAND
 Test Type: TYPE C
 Temperature: 25.7
 Operator: Cristian Herrera Arismendy

Gamma Plane (°):0.0-180.0:1.0
 Test Device: LSG-1700B
 Distance: 11.703 m
 Humidity:
 Inspector:

Zonal Lumen (Continue 3)

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
108.0-109.0	25.1	2.6	976.6	0.25	94.95
109.0-110.0	24.3	2.5	979.1	0.24	95.19
110.0-111.0	23.5	2.4	981.6	0.23	95.42
111.0-112.0	22.7	2.3	983.9	0.23	95.65
112.0-113.0	22.0	2.2	986.1	0.22	95.87
113.0-114.0	21.4	2.2	988.3	0.21	96.08
114.0-115.0	20.7	2.1	990.3	0.20	96.28
115.0-116.0	19.9	2.0	992.3	0.19	96.47
116.0-117.0	19.1	1.9	994.2	0.18	96.65
117.0-118.0	18.1	1.8	995.9	0.17	96.82
118.0-119.0	17.3	1.7	997.6	0.16	96.98
119.0-120.0	16.6	1.6	999.2	0.15	97.14
120.0-121.0	16.0	1.5	1000.7	0.15	97.28
121.0-122.0	15.5	1.4	1002.1	0.14	97.42
122.0-123.0	15.0	1.4	1003.5	0.13	97.56
123.0-124.0	14.5	1.3	1004.8	0.13	97.69
124.0-125.0	14.1	1.3	1006.1	0.12	97.81
125.0-126.0	13.6	1.2	1007.3	0.12	97.93
126.0-127.0	13.2	1.2	1008.5	0.11	98.04
127.0-128.0	12.8	1.1	1009.6	0.11	98.15
128.0-129.0	12.4	1.1	1010.7	0.10	98.26
129.0-130.0	12.0	1.0	1011.7	0.10	98.35
130.0-131.0	11.7	1.0	1012.7	0.09	98.45
131.0-132.0	11.3	0.9	1013.6	0.09	98.54
132.0-133.0	11.0	0.9	1014.5	0.09	98.63
133.0-134.0	10.7	0.9	1015.3	0.08	98.71
134.0-135.0	10.4	0.8	1016.2	0.08	98.79
135.0-136.0	10.1	0.8	1016.9	0.08	98.86
136.0-137.0	9.8	0.7	1017.7	0.07	98.94
137.0-138.0	9.6	0.7	1018.4	0.07	99.00
138.0-139.0	9.3	0.7	1019.1	0.07	99.07
139.0-140.0	9.0	0.6	1019.7	0.06	99.13
140.0-141.0	8.8	0.6	1020.3	0.06	99.19
141.0-142.0	8.5	0.6	1020.9	0.06	99.25
142.0-143.0	8.3	0.6	1021.5	0.05	99.30
143.0-144.0	8.1	0.5	1022.0	0.05	99.35

C Plane (°):0.0-360.0: 10.0
 Test Lab: LABORATORIO STAND
 Test Type: TYPE C
 Temperature: 25.7
 Operator: Cristian Herrera Arismendy

Gamma Plane (°):0.0-180.0:1.0
 Test Device: LSG-1700B
 Distance: 11.703 m
 Humidity:
 Inspector:

Zonal Lumen (Continue 4)

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
144.0-145.0	7.9	0.5	1022.5	0.05	99.40
145.0-146.0	7.7	0.5	1023.0	0.05	99.45
146.0-147.0	7.4	0.4	1023.4	0.04	99.49
147.0-148.0	7.2	0.4	1023.8	0.04	99.53
148.0-149.0	7.0	0.4	1024.2	0.04	99.57
149.0-150.0	6.8	0.4	1024.6	0.04	99.61
150.0-151.0	6.6	0.4	1025.0	0.03	99.65
151.0-152.0	6.4	0.3	1025.3	0.03	99.68
152.0-153.0	6.2	0.3	1025.6	0.03	99.71
153.0-154.0	6.0	0.3	1025.9	0.03	99.74
154.0-155.0	5.8	0.3	1026.2	0.03	99.76
155.0-156.0	5.6	0.3	1026.4	0.02	99.79
156.0-157.0	5.4	0.2	1026.7	0.02	99.81
157.0-158.0	5.2	0.2	1026.9	0.02	99.83
158.0-159.0	5.0	0.2	1027.1	0.02	99.85
159.0-160.0	4.8	0.2	1027.3	0.02	99.87
160.0-161.0	4.5	0.2	1027.4	0.02	99.89
161.0-162.0	4.3	0.2	1027.6	0.01	99.90
162.0-163.0	4.1	0.1	1027.7	0.01	99.91
163.0-164.0	3.9	0.1	1027.9	0.01	99.93
164.0-165.0	3.7	0.1	1028.0	0.01	99.94
165.0-166.0	3.5	0.1	1028.1	0.01	99.95
166.0-167.0	3.4	0.1	1028.1	0.01	99.95
167.0-168.0	3.2	0.1	1028.2	0.01	99.96
168.0-169.0	3.1	0.1	1028.3	0.01	99.97
169.0-170.0	3.0	0.1	1028.3	0.01	99.97
170.0-171.0	2.9	0.1	1028.4	0.01	99.98
171.0-172.0	2.8	0.0	1028.4	0.00	99.98
172.0-173.0	2.8	0.0	1028.5	0.00	99.99
173.0-174.0	2.8	0.0	1028.5	0.00	99.99
174.0-175.0	2.8	0.0	1028.5	0.00	99.99
175.0-176.0	2.8	0.0	1028.6	0.00	100.00
176.0-177.0	2.8	0.0	1028.6	0.00	100.00
177.0-178.0	2.8	0.0	1028.6	0.00	100.00
178.0-179.0	2.8	0.0	1028.6	0.00	100.00
179.0-180.0	2.8	0.0	1028.6	0.00	100.00

C Plane (°):0.0-360.0: 10.0
 Test Lab: LABORATORIO STAND
 Test Type: TYPE C
 Temperature: 25.7
 Operator: Cristian Herrera Arismendy

Gamma Plane (°):0.0-180.0:1.0
 Test Device: LSG-1700B
 Distance: 11.703 m
 Humidity:
 Inspector: