

Report No.: MSL-9

Test Time: 2019-02-21 11:27

Luminaire Property

Luminaire Manufacturer: Stand Iluminaciones S.A.S

Luminaire Category: Interior

Luminaire Description: Aplique tortuga 9w Samsung

Number of Lamps: 1

Luminous Length (mm): 155

Luminous Width (mm): 75

Luminous Height (mm): 35

Voltage: 120.2 V

Current: 0.145 A

Power: 9.90 W

Power Factor: 0.567

Photometric Results

CIE Class: Semi-Direct

Total Rated Lamp Lumens: 947.0 lm

Measurement Flux: 947 lm

Efficiency: 100%

Downward Ratio: 89%

Upward Ratio: 11%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 227.6, 195.7, 217.0, 217.2

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 155.1, 124.2, 140.7, 140.6

Luminaire Efficacy Rating (LER): 95.71

Central Intensity: 217.91 cd

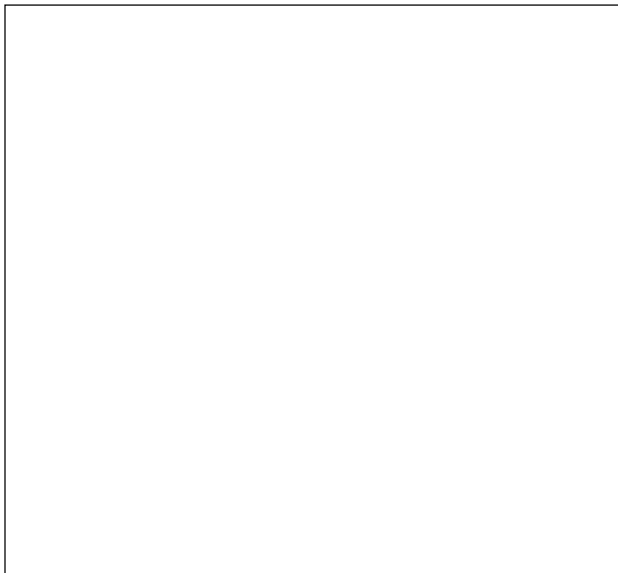
Max. Intensity: 219.14 cd

Pos of Max. Intensity: H100 V1

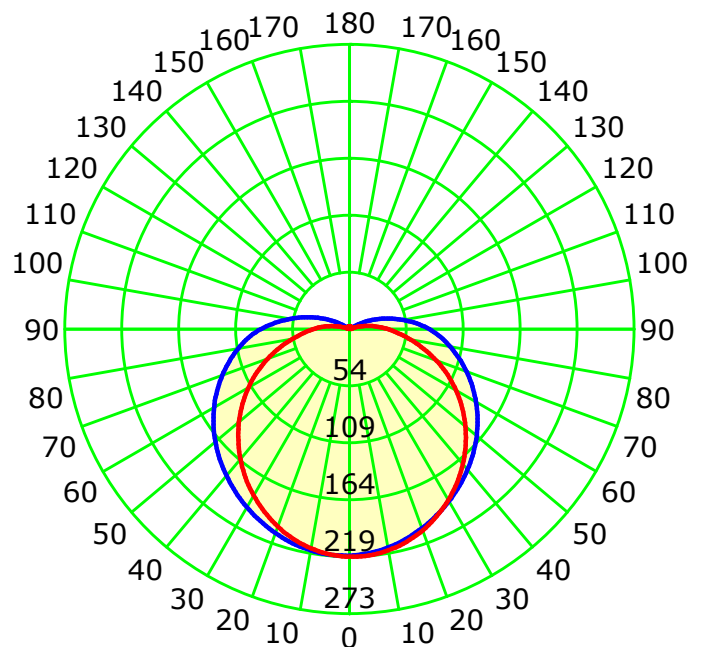
S/MH(C0/C180): 1.34

S/MH(C90/C270): 1.27

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

Test Lab: LABORATORIO STAND

Test Device: LSG-1700B

Test Type: TYPE C

Distance: 11.772 m — C90-C270

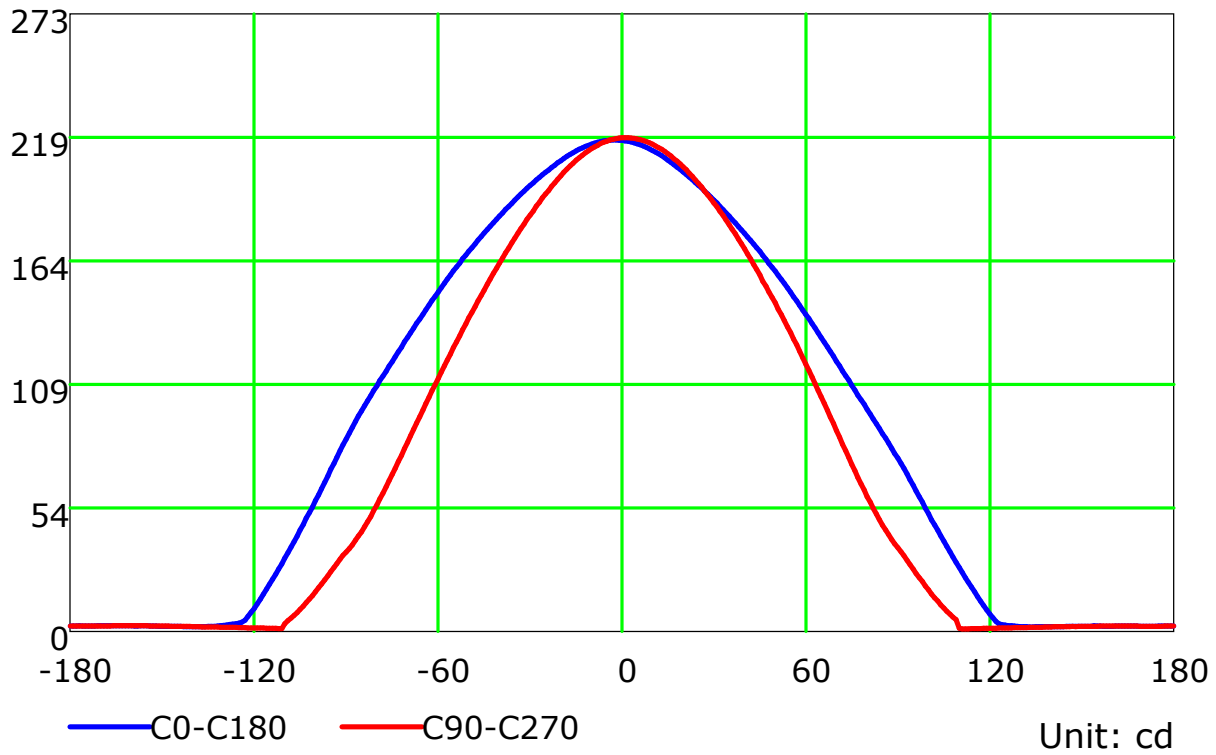
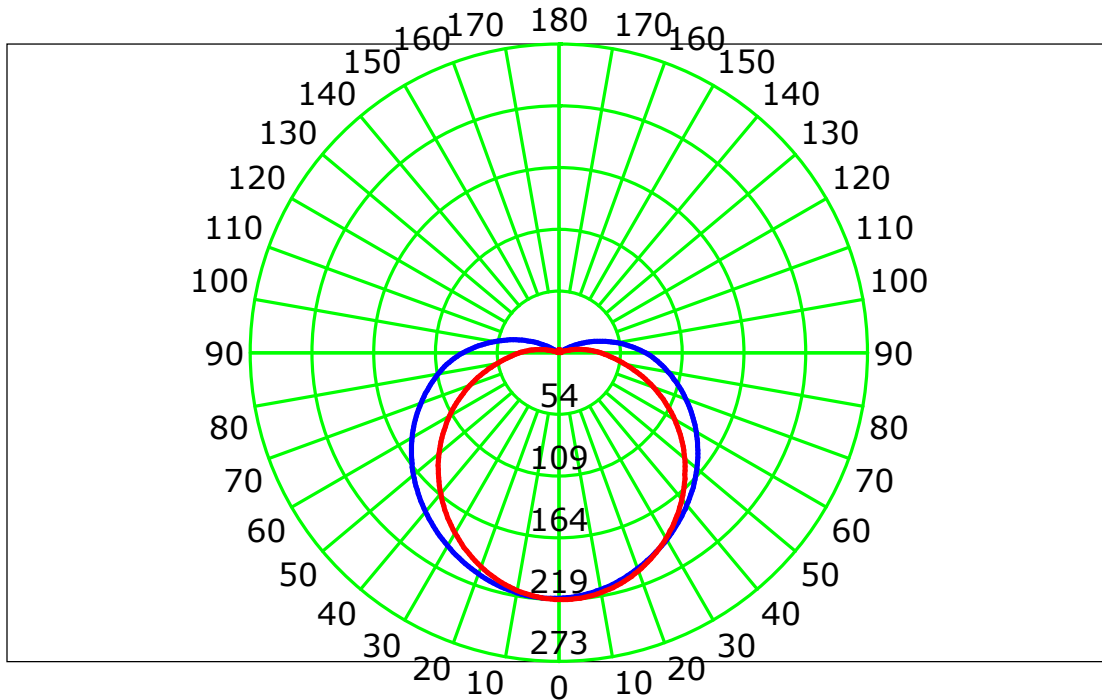
Temperature: 24,8

Humidity:

Operator: Cristian Herrera Arismendy

Inspector:

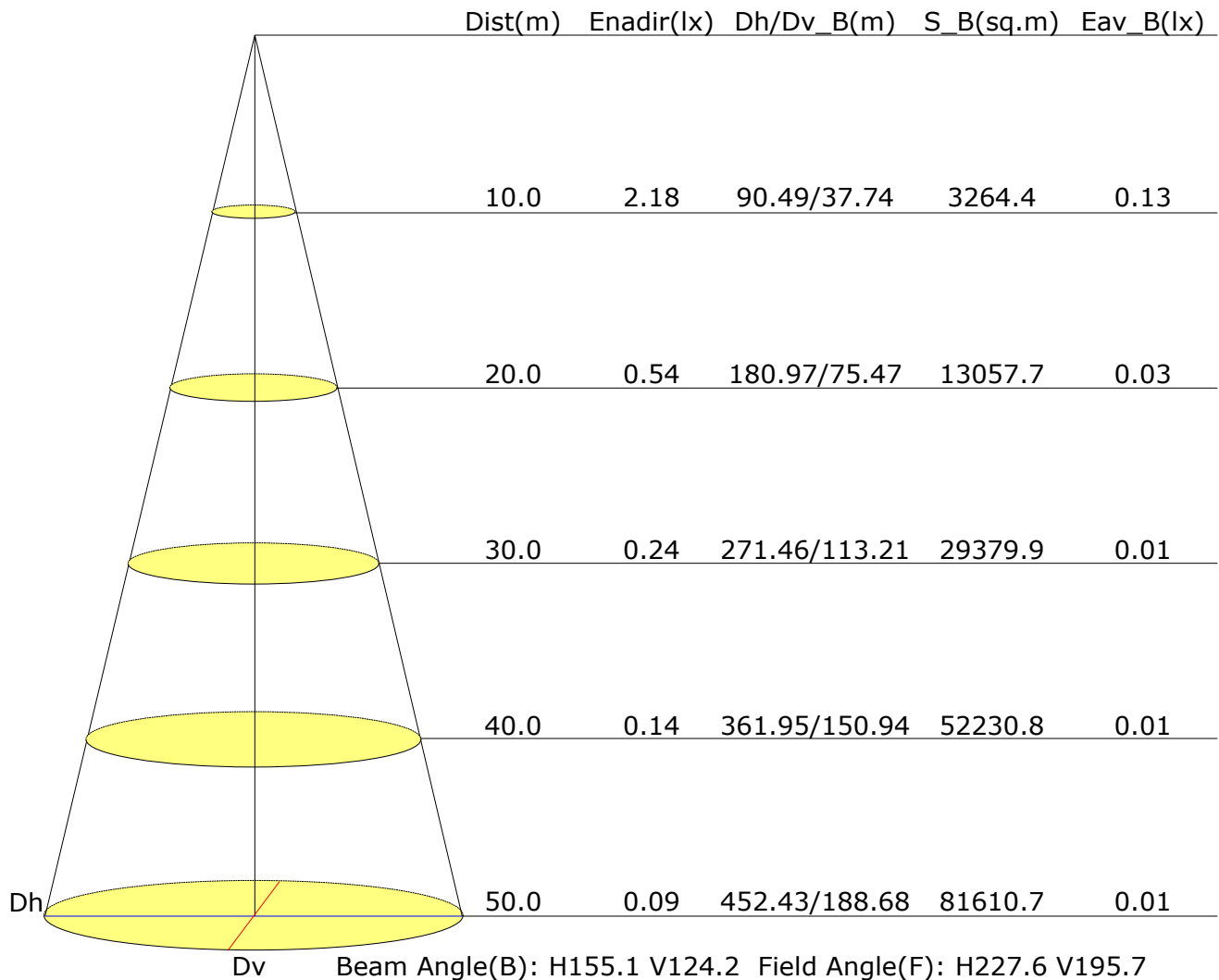
Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 10.0
 Test Lab: LABORATORIO STAND
 Test Type: TYPE C
 Temperature: 24,8
 Operator: Cristian Herrera Arismendy

Gamma Plane (°):0.0-180.0:1.0
 Test Device: LSG-1700B
 Distance: 11.772 m
 Humidity:
 Inspector:

Illuminance at a Distance



Zonal Lumen

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	218.5	0.2	0.2	0.02	0.02
1.0-2.0	218.4	0.6	0.8	0.07	0.09
2.0-3.0	218.3	1.0	1.9	0.11	0.20
3.0-4.0	218.1	1.5	3.3	0.15	0.35
4.0-5.0	217.8	1.9	5.2	0.20	0.55
5.0-6.0	217.5	2.3	7.5	0.24	0.79
6.0-7.0	217.1	2.7	10.2	0.28	1.08
7.0-8.0	216.6	3.1	13.3	0.33	1.40
8.0-9.0	216.0	3.5	16.8	0.37	1.77
9.0-10.0	215.4	3.9	20.7	0.41	2.19
10.0-11.0	214.7	4.3	25.0	0.45	2.64
11.0-12.0	214.0	4.7	29.7	0.49	3.13
12.0-13.0	213.2	5.1	34.7	0.53	3.67
13.0-14.0	212.3	5.4	40.2	0.57	4.24
14.0-15.0	211.4	5.8	46.0	0.61	4.85
15.0-16.0	210.4	6.2	52.1	0.65	5.50
16.0-17.0	209.3	6.5	58.6	0.69	6.19
17.0-18.0	208.3	6.9	65.5	0.73	6.92
18.0-19.0	207.1	7.2	72.7	0.76	7.68
19.0-20.0	205.9	7.5	80.3	0.80	8.47
20.0-21.0	204.6	7.9	88.1	0.83	9.30
21.0-22.0	203.3	8.2	96.3	0.86	10.17
22.0-23.0	202.0	8.5	104.8	0.90	11.06
23.0-24.0	200.7	8.8	113.5	0.93	11.99
24.0-25.0	199.3	9.1	122.6	0.96	12.95
25.0-26.0	197.8	9.3	131.9	0.99	13.93
26.0-27.0	196.4	9.6	141.5	1.01	14.95
27.0-28.0	194.8	9.9	151.4	1.04	15.99
28.0-29.0	193.3	10.1	161.5	1.07	17.06
29.0-30.0	191.7	10.4	171.9	1.09	18.15
30.0-31.0	190.1	10.6	182.5	1.12	19.27
31.0-32.0	188.5	10.8	193.3	1.14	20.41
32.0-33.0	186.8	11.0	204.3	1.16	21.57
33.0-34.0	185.1	11.2	215.5	1.18	22.75
34.0-35.0	183.4	11.4	226.9	1.20	23.96
35.0-36.0	181.6	11.6	238.4	1.22	25.18

C Plane (°):0.0-360.0: 10.0
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 Temperature: 24,8
 Operator: Cristian Herrera Arismendy

Gamma Plane (°):0.0-180.0:1.0
 Test Device: LSG-1700B
 Distance: 11.772 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	179.8	11.7	250.1	1.24	26.41
37.0-38.0	177.9	11.9	262.0	1.25	27.67
38.0-39.0	176.1	12.0	274.1	1.27	28.94
39.0-40.0	174.2	12.2	286.2	1.28	30.22
40.0-41.0	172.3	12.3	298.5	1.30	31.52
41.0-42.0	170.5	12.4	310.9	1.31	32.83
42.0-43.0	168.5	12.5	323.3	1.32	34.14
43.0-44.0	166.5	12.6	335.9	1.33	35.47
44.0-45.0	164.6	12.6	348.6	1.34	36.81
45.0-46.0	162.5	12.7	361.3	1.34	38.15
46.0-47.0	160.5	12.8	374.0	1.35	39.50
47.0-48.0	158.5	12.8	386.9	1.35	40.85
48.0-49.0	156.4	12.8	399.7	1.36	42.21
49.0-50.0	154.4	12.9	412.6	1.36	43.57
50.0-51.0	152.2	12.9	425.5	1.36	44.93
51.0-52.0	150.1	12.9	438.3	1.36	46.29
52.0-53.0	148.0	12.9	451.2	1.36	47.65
53.0-54.0	145.8	12.9	464.1	1.36	49.00
54.0-55.0	143.6	12.8	476.9	1.35	50.36
55.0-56.0	141.4	12.8	489.7	1.35	51.71
56.0-57.0	139.2	12.7	502.4	1.34	53.05
57.0-58.0	137.0	12.7	515.1	1.34	54.39
58.0-59.0	134.8	12.6	527.7	1.33	55.72
59.0-60.0	132.5	12.5	540.2	1.32	57.04
60.0-61.0	130.2	12.4	552.6	1.31	58.35
61.0-62.0	127.9	12.3	565.0	1.30	59.66
62.0-63.0	125.7	12.2	577.2	1.29	60.95
63.0-64.0	123.3	12.1	589.3	1.28	62.23
64.0-65.0	121.0	12.0	601.3	1.26	63.49
65.0-66.0	118.7	11.8	613.1	1.25	64.74
66.0-67.0	116.4	11.7	624.8	1.24	65.98
67.0-68.0	114.0	11.6	636.4	1.22	67.20
68.0-69.0	111.7	11.4	647.8	1.20	68.40
69.0-70.0	109.4	11.2	659.0	1.19	69.59
70.0-71.0	107.1	11.1	670.1	1.17	70.76
71.0-72.0	104.7	10.9	680.9	1.15	71.90

C Plane (°):0.0-360.0: 10.0
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 Test Type: TYPE C
 Temperature: 24,8
 Operator: Cristian Herrera Arismendy

Gamma Plane (°):0.0-180.0:1.0
 Test Device: LSG-1700B
 Distance: 11.772 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	102.4	10.7	691.7	1.13	73.04
73.0-74.0	100.1	10.5	702.2	1.11	74.15
74.0-75.0	97.7	10.3	712.5	1.09	75.24
75.0-76.0	95.4	10.1	722.6	1.07	76.31
76.0-77.0	93.1	9.9	732.6	1.05	77.35
77.0-78.0	90.8	9.7	742.3	1.03	78.38
78.0-79.0	88.6	9.5	751.8	1.01	79.39
79.0-80.0	86.3	9.3	761.1	0.98	80.37
80.0-81.0	84.1	9.1	770.2	0.96	81.33
81.0-82.0	81.9	8.9	779.1	0.94	82.27
82.0-83.0	79.7	8.7	787.7	0.91	83.18
83.0-84.0	77.5	8.4	796.2	0.89	84.07
84.0-85.0	75.3	8.2	804.4	0.87	84.94
85.0-86.0	73.1	8.0	812.4	0.84	85.79
86.0-87.0	71.0	7.8	820.2	0.82	86.61
87.0-88.0	68.8	7.5	827.7	0.80	87.40
88.0-89.0	66.5	7.3	835.0	0.77	88.17
89.0-90.0	64.2	7.0	842.1	0.74	88.92
90.0-91.0	61.9	6.8	848.8	0.72	89.63
91.0-92.0	59.5	6.5	855.4	0.69	90.32
92.0-93.0	57.0	6.2	861.6	0.66	90.98
93.0-94.0	54.5	6.0	867.6	0.63	91.61
94.0-95.0	52.1	5.7	873.3	0.60	92.21
95.0-96.0	49.5	5.4	878.7	0.57	92.78
96.0-97.0	47.0	5.1	883.8	0.54	93.33
97.0-98.0	44.6	4.8	888.7	0.51	93.84
98.0-99.0	42.1	4.6	893.2	0.48	94.32
99.0-100.0	39.8	4.3	897.5	0.45	94.77
100.0-101.0	37.4	4.0	901.6	0.43	95.20
101.0-102.0	35.1	3.8	905.3	0.40	95.60
102.0-103.0	32.9	3.5	908.8	0.37	95.97
103.0-104.0	30.7	3.3	912.1	0.35	96.32
104.0-105.0	28.5	3.0	915.1	0.32	96.63
105.0-106.0	26.4	2.8	917.9	0.30	96.93
106.0-107.0	24.4	2.6	920.5	0.27	97.20
107.0-108.0	22.5	2.3	922.9	0.25	97.45

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Gamma Plane (°):0.0-180.0:1.0
 Test Device: LSG-1700B
 Distance: 11.772 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	20.6	2.1	925.0	0.23	97.67
109.0-110.0	18.7	1.9	926.9	0.20	97.88
110.0-111.0	16.9	1.7	928.7	0.18	98.06
111.0-112.0	15.3	1.6	930.2	0.17	98.23
112.0-113.0	13.9	1.4	931.6	0.15	98.38
113.0-114.0	12.5	1.3	932.9	0.13	98.51
114.0-115.0	11.3	1.1	934.0	0.12	98.63
115.0-116.0	10.2	1.0	935.0	0.11	98.73
116.0-117.0	9.1	0.9	935.9	0.09	98.83
117.0-118.0	8.2	0.8	936.7	0.08	98.91
118.0-119.0	7.3	0.7	937.4	0.07	98.99
119.0-120.0	6.5	0.6	938.0	0.07	99.05
120.0-121.0	5.8	0.5	938.6	0.06	99.11
121.0-122.0	5.2	0.5	939.1	0.05	99.16
122.0-123.0	4.7	0.4	939.5	0.05	99.21
123.0-124.0	4.3	0.4	939.9	0.04	99.25
124.0-125.0	4.0	0.4	940.3	0.04	99.29
125.0-126.0	3.8	0.3	940.6	0.04	99.32
126.0-127.0	3.6	0.3	940.9	0.03	99.36
127.0-128.0	3.4	0.3	941.2	0.03	99.39
128.0-129.0	3.2	0.3	941.5	0.03	99.42
129.0-130.0	3.0	0.3	941.7	0.03	99.44
130.0-131.0	2.9	0.2	942.0	0.03	99.47
131.0-132.0	2.7	0.2	942.2	0.02	99.49
132.0-133.0	2.6	0.2	942.4	0.02	99.51
133.0-134.0	2.5	0.2	942.6	0.02	99.53
134.0-135.0	2.4	0.2	942.8	0.02	99.55
135.0-136.0	2.3	0.2	943.0	0.02	99.57
136.0-137.0	2.2	0.2	943.1	0.02	99.59
137.0-138.0	2.2	0.2	943.3	0.02	99.61
138.0-139.0	2.1	0.2	943.5	0.02	99.62
139.0-140.0	2.1	0.2	943.6	0.02	99.64
140.0-141.0	2.1	0.1	943.7	0.02	99.66
141.0-142.0	2.1	0.1	943.9	0.02	99.67
142.0-143.0	2.2	0.1	944.0	0.02	99.69
143.0-144.0	2.2	0.1	944.2	0.02	99.70

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Gamma Plane (°):0.0-180.0:1.0
 Test Device: LSG-1700B
 Distance: 11.772 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	2.2	0.1	944.3	0.01	99.72
145.0-146.0	2.2	0.1	944.5	0.01	99.73
146.0-147.0	2.2	0.1	944.6	0.01	99.74
147.0-148.0	2.3	0.1	944.7	0.01	99.76
148.0-149.0	2.3	0.1	944.9	0.01	99.77
149.0-150.0	2.3	0.1	945.0	0.01	99.79
150.0-151.0	2.3	0.1	945.1	0.01	99.80
151.0-152.0	2.3	0.1	945.2	0.01	99.81
152.0-153.0	2.3	0.1	945.3	0.01	99.82
153.0-154.0	2.4	0.1	945.5	0.01	99.84
154.0-155.0	2.4	0.1	945.6	0.01	99.85
155.0-156.0	2.4	0.1	945.7	0.01	99.86
156.0-157.0	2.4	0.1	945.8	0.01	99.87
157.0-158.0	2.4	0.1	945.9	0.01	99.88
158.0-159.0	2.4	0.1	946.0	0.01	99.89
159.0-160.0	2.4	0.1	946.1	0.01	99.90
160.0-161.0	2.4	0.1	946.2	0.01	99.91
161.0-162.0	2.4	0.1	946.3	0.01	99.92
162.0-163.0	2.4	0.1	946.3	0.01	99.93
163.0-164.0	2.5	0.1	946.4	0.01	99.94
164.0-165.0	2.5	0.1	946.5	0.01	99.94
165.0-166.0	2.5	0.1	946.6	0.01	99.95
166.0-167.0	2.5	0.1	946.6	0.01	99.96
167.0-168.0	2.5	0.1	946.7	0.01	99.96
168.0-169.0	2.5	0.1	946.7	0.01	99.97
169.0-170.0	2.5	0.0	946.8	0.01	99.98
170.0-171.0	2.5	0.0	946.8	0.00	99.98
171.0-172.0	2.5	0.0	946.9	0.00	99.98
172.0-173.0	2.4	0.0	946.9	0.00	99.99
173.0-174.0	2.4	0.0	946.9	0.00	99.99
174.0-175.0	2.4	0.0	947.0	0.00	99.99
175.0-176.0	2.4	0.0	947.0	0.00	100.00
176.0-177.0	2.4	0.0	947.0	0.00	100.00
177.0-178.0	2.4	0.0	947.0	0.00	100.00
178.0-179.0	2.4	0.0	947.0	0.00	100.00
179.0-180.0	2.4	0.0	947.0	0.00	100.00

C Plane (°):0.0-360.0: 10.0
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Gamma Plane (°):0.0-180.0:1.0
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