

Report No. : 12

Test Time : 2024-11-14 11:30:41

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## Nuura Goniophotometer Test Report

### Product Info

Luminaire : **Miira 3 Circle / opal**

Lamp : **G9 E3light LED, 6W / 550 Lumen**

Manufacturer : **Nuura**

Nuber of Lamps : **3**

Lumens per Lamp : **0 lm**

Luminous Length : **540 mm**

Luminous Width : **0 mm**

Luminous Height : **245 mm**

### Electric Parameters

Voltage : **231.10 V** Current : **0.0870 A** Power : **18.02 W** Power Factor : **0.898** Frequency : **50.00 Hz**

### Photometric Parameters

CIE Class : **General Diffuse**

Measurement Flux : **1536.3 lm**

Upward Ratio : **48.40 %**

Maximum Intensity : **145.64 cd**

Central Intensity : **108.18 cd**

Luminaire Efficacy Rating (LER) : **85**

Beam Angle (C0-C180,C90-C270) : **360.0 °, 360.0 °**

Field Angle (C0-C180,C90-C270) : **360.0 °, 360.0 °**

Total Rated Lamp Lumens : **1536.3 lm**

Efficiency : **100.00 %**

Downward Ratio : **51.60 %**

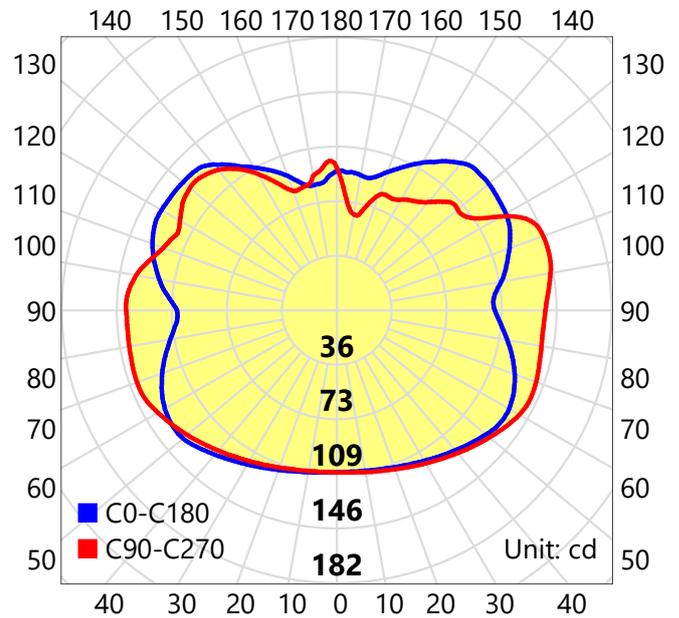
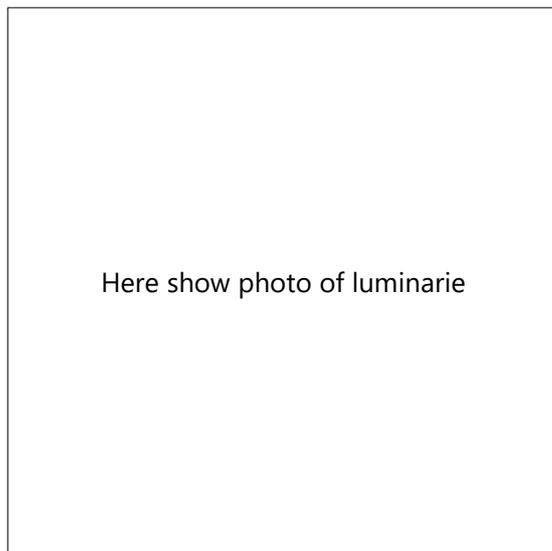
Position Of Maximum Intensity : **C90° γ107°**

S/MH(C0-C180,C90-C270) : **1.72, 1.72**

Energy Efficiency Class : **F (EU 2019/2015 η<sub>TM</sub>:85lm/W)**

Beam Angle (C45-C225,C135-C315) : **360.0 °, 360.0 °**

Field Angle (C45-C225,C135-C315) : **360.0 °, 360.0 °**



Average Beam Angle (50%): 360.0°

Test Type : Type C Test Distance : 6.119 m

Test Device : Lisun LSG-1700B

Test Lab :

Test By : P. Nellemose

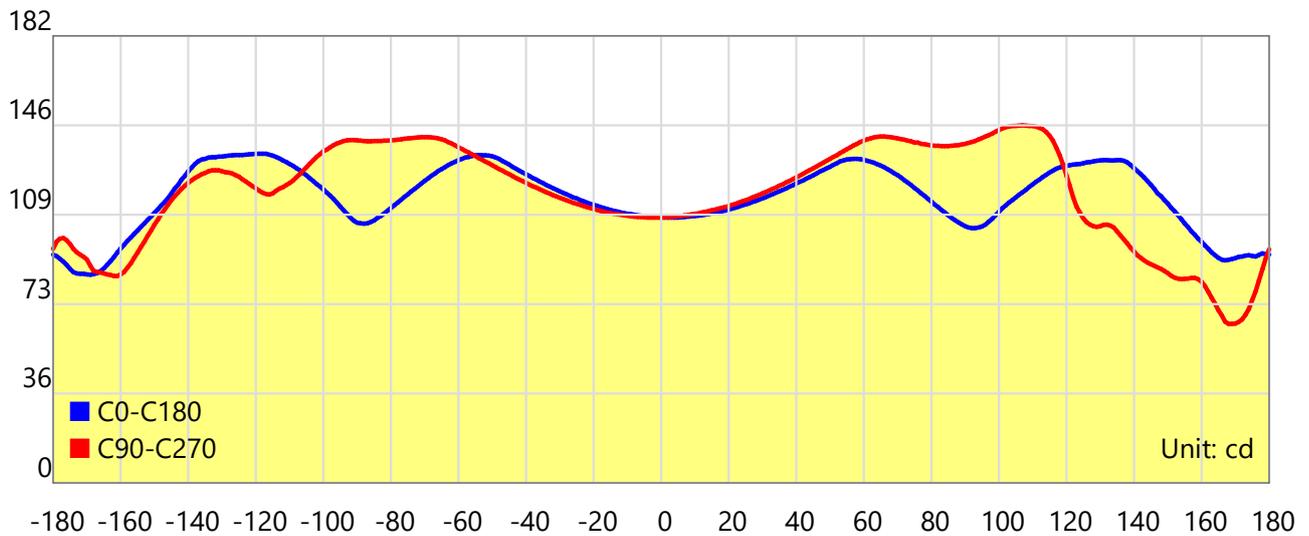
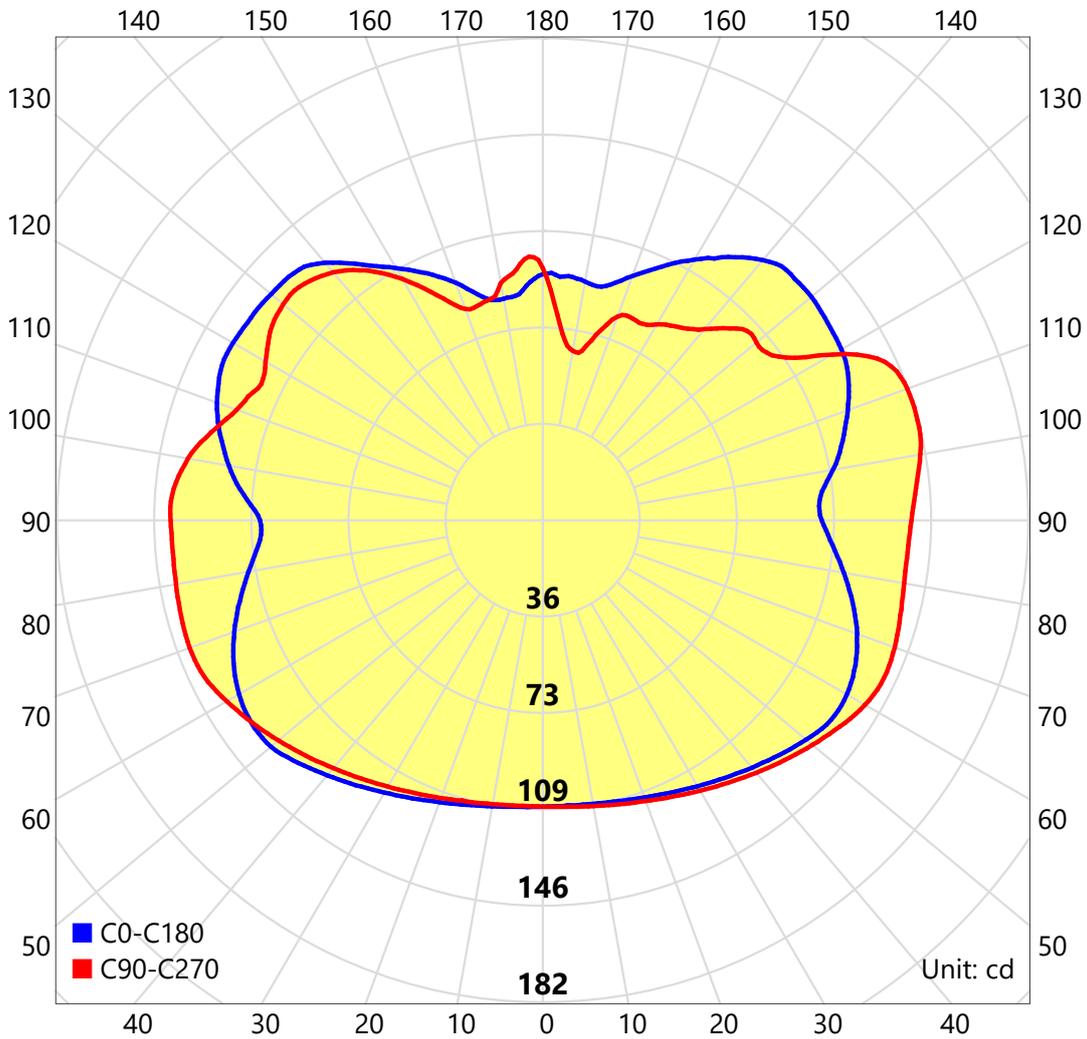
C Plane (°): 0.0-360.0:45.0 γ (°): 0.0-180.0:1.0

Temperature : 23.0°C

Humidity : 75.0%

Review By :

## Light Distribution Curve



Test Type : Type C

Test Distance : 6.119 m

C Plane (°): 0.0-360.0:45.0

$\gamma$  (°): 0.0-180.0:1.0

Test Device : Lisun LSG-1700B

Temperature : 23.0°C

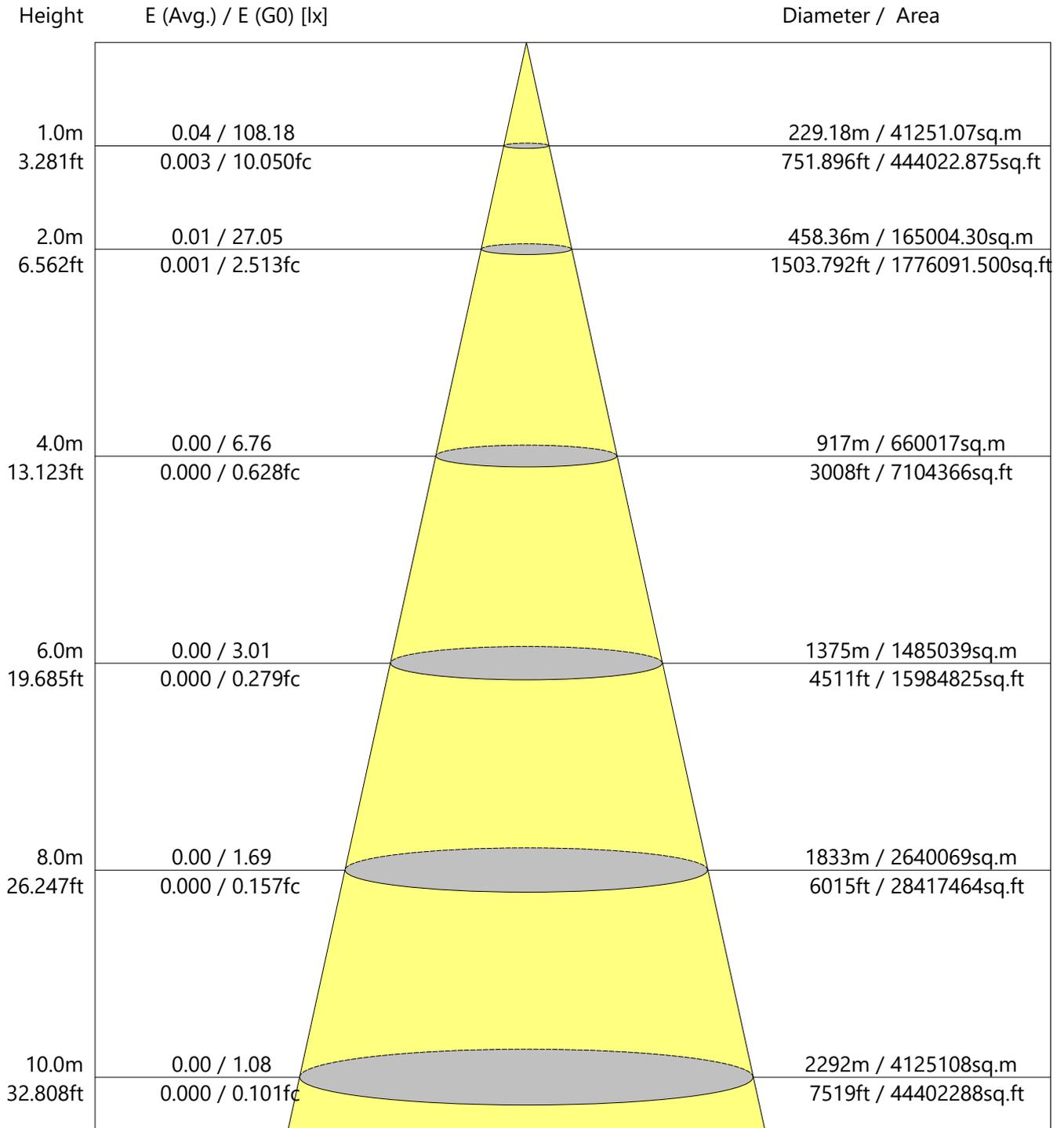
Humidity : 75.0%

Test Lab :

Test By : P. Nellemose

Review By :

## Average Illuminance Effective Figure



Beam Angle: 179° Flux Out: 1536.27lm

Test Type : Type C

Test Distance : 6.119 m

C Plane (°): 0.0-360.0:45.0

γ (°): 0.0-180.0:1.0

Test Device : Lisun LSG-1700B

Temperature : 23.0°C

Humidity : 75.0%

Test Lab :

Test By : P. Nellemose

Review By :

## Zonal Flux

Gamma °	lmean cd	Zonal Flux lm	Sum Zonal Flux lm	Rel Zonal Flux %	Sum Rel Zonal Flux %
0.0-1.0	108.2	0.1	0.1	0.01	0.01
1.0-2.0	108.2	0.3	0.4	0.02	0.03
2.0-3.0	108.2	0.5	0.9	0.03	0.06
3.0-4.0	108.3	0.7	1.7	0.05	0.11
4.0-5.0	108.4	0.9	2.6	0.06	0.17
5.0-6.0	108.5	1.1	3.7	0.07	0.24
6.0-7.0	108.6	1.3	5.1	0.09	0.33
7.0-8.0	108.8	1.6	6.6	0.10	0.43
8.0-9.0	109.0	1.8	8.4	0.11	0.55
9.0-10.0	109.1	2.0	10.4	0.13	0.68
10.0-11.0	109.3	2.2	12.6	0.14	0.82
11.0-12.0	109.6	2.4	15.0	0.16	0.97
12.0-13.0	109.8	2.6	17.6	0.17	1.14
13.0-14.0	110.1	2.8	20.4	0.18	1.33
14.0-15.0	110.4	3.0	23.4	0.20	1.52
15.0-16.0	110.7	3.2	26.7	0.21	1.74
16.0-17.0	111.0	3.5	30.1	0.22	1.96
17.0-18.0	111.3	3.7	33.8	0.24	2.20
18.0-19.0	111.7	3.9	37.7	0.25	2.45
19.0-20.0	112.1	4.1	41.8	0.27	2.72
20.0-21.0	112.5	4.3	46.1	0.28	3.00
21.0-22.0	112.9	4.5	50.6	0.30	3.30
22.0-23.0	113.3	4.8	55.4	0.31	3.61
23.0-24.0	113.8	5.0	60.4	0.32	3.93
24.0-25.0	114.3	5.2	65.6	0.34	4.27
25.0-26.0	114.8	5.4	71.0	0.35	4.62
26.0-27.0	115.3	5.6	76.6	0.37	4.99
27.0-28.0	115.8	5.9	82.5	0.38	5.37
28.0-29.0	116.4	6.1	88.6	0.40	5.77
29.0-30.0	116.9	6.3	94.9	0.41	6.18
30.0-31.0	117.5	6.5	101.4	0.43	6.60
31.0-32.0	118.1	6.8	108.2	0.44	7.04
32.0-33.0	118.7	7.0	115.2	0.46	7.50
33.0-34.0	119.3	7.2	122.4	0.47	7.97
34.0-35.0	120.0	7.5	129.9	0.49	8.45
35.0-36.0	120.6	7.7	137.5	0.50	8.95
36.0-37.0	121.3	7.9	145.5	0.51	9.47
37.0-38.0	121.9	8.1	153.6	0.53	10.00
38.0-39.0	122.6	8.4	162.0	0.54	10.54
39.0-40.0	123.3	8.6	170.6	0.56	11.10

Test Type : Type C      Test Distance : 6.119 m  
Test Device : Lisun LSG-1700B  
Test Lab :  
Test By : P. Nellemose

C Plane (°): 0.0-360.0:45.0    γ (°): 0.0-180.0:1.0  
Temperature : 23.0°C      Humidity : 75.0%  
Review By :

## Zonal Flux

Gamma °	lmean cd	Zonal Flux lm	Sum Zonal Flux lm	Rel Zonal Flux %	Sum Rel Zonal Flux %
40.0-41.0	124.0	8.8	179.4	0.57	11.68
41.0-42.0	124.7	9.1	188.5	0.59	12.27
42.0-43.0	125.4	9.3	197.7	0.60	12.87
43.0-44.0	126.2	9.5	207.3	0.62	13.49
44.0-45.0	126.9	9.8	217.0	0.63	14.13
45.0-46.0	127.6	10.0	227.0	0.65	14.78
46.0-47.0	128.4	10.2	237.2	0.66	15.44
47.0-48.0	129.1	10.4	247.7	0.68	16.12
48.0-49.0	129.8	10.7	258.3	0.69	16.81
49.0-50.0	130.5	10.9	269.2	0.71	17.52
50.0-51.0	131.2	11.1	280.3	0.72	18.25
51.0-52.0	131.9	11.3	291.6	0.74	18.98
52.0-53.0	132.5	11.5	303.2	0.75	19.73
53.0-54.0	133.1	11.7	314.9	0.76	20.50
54.0-55.0	133.5	11.9	326.8	0.78	21.27
55.0-56.0	133.9	12.1	338.9	0.79	22.06
56.0-57.0	134.2	12.3	351.2	0.80	22.86
57.0-58.0	134.4	12.4	363.6	0.81	23.67
58.0-59.0	134.6	12.6	376.2	0.82	24.49
59.0-60.0	134.6	12.7	388.9	0.83	25.32
60.0-61.0	134.6	12.8	401.8	0.84	26.15
61.0-62.0	134.6	13.0	414.7	0.84	27.00
62.0-63.0	134.5	13.1	427.8	0.85	27.85
63.0-64.0	134.3	13.2	441.0	0.86	28.71
64.0-65.0	134.0	13.3	454.3	0.86	29.57
65.0-66.0	133.7	13.3	467.6	0.87	30.44
66.0-67.0	133.3	13.4	481.0	0.87	31.31
67.0-68.0	132.9	13.5	494.5	0.88	32.19
68.0-69.0	132.4	13.5	508.0	0.88	33.07
69.0-70.0	131.9	13.5	521.5	0.88	33.95
70.0-71.0	131.4	13.6	535.1	0.88	34.83
71.0-72.0	130.8	13.6	548.7	0.89	35.72
72.0-73.0	130.2	13.6	562.3	0.89	36.60
73.0-74.0	129.6	13.6	576.0	0.89	37.49
74.0-75.0	129.0	13.6	589.6	0.89	38.38
75.0-76.0	128.4	13.6	603.2	0.89	39.26
76.0-77.0	127.8	13.6	616.8	0.89	40.15
77.0-78.0	127.2	13.6	630.4	0.89	41.04
78.0-79.0	126.6	13.6	644.0	0.89	41.92
79.0-80.0	126.0	13.6	657.6	0.88	42.81

## Zonal Flux

Gamma °	lmean cd	Zonal Flux lm	Sum Zonal Flux lm	Rel Zonal Flux %	Sum Rel Zonal Flux %
80.0-81.0	125.5	13.6	671.2	0.88	43.69
81.0-82.0	125.0	13.6	684.8	0.88	44.57
82.0-83.0	124.5	13.5	698.3	0.88	45.46
83.0-84.0	124.1	13.5	711.8	0.88	46.34
84.0-85.0	123.8	13.5	725.3	0.88	47.21
85.0-86.0	123.5	13.5	738.8	0.88	48.09
86.0-87.0	123.2	13.5	752.3	0.88	48.97
87.0-88.0	123.1	13.5	765.8	0.88	49.85
88.0-89.0	123.0	13.5	779.3	0.88	50.73
89.0-90.0	123.0	13.5	792.8	0.88	51.60
90.0-91.0	123.1	13.5	806.3	0.88	52.48
91.0-92.0	123.4	13.5	819.8	0.88	53.36
92.0-93.0	123.7	13.6	833.4	0.88	54.25
93.0-94.0	124.1	13.6	847.0	0.88	55.13
94.0-95.0	124.6	13.6	860.6	0.89	56.02
95.0-96.0	125.1	13.7	874.2	0.89	56.91
96.0-97.0	125.7	13.7	887.9	0.89	57.80
97.0-98.0	126.1	13.7	901.6	0.89	58.69
98.0-99.0	126.6	13.7	915.4	0.89	59.58
99.0-100.0	127.0	13.7	929.1	0.89	60.48
100.0-101.0	127.4	13.7	942.8	0.89	61.37
101.0-102.0	127.7	13.7	956.6	0.89	62.27
102.0-103.0	127.9	13.7	970.3	0.89	63.16
103.0-104.0	128.0	13.7	983.9	0.89	64.04
104.0-105.0	128.1	13.6	997.5	0.89	64.93
105.0-106.0	128.3	13.6	1011.1	0.88	65.81
106.0-107.0	128.4	13.5	1024.6	0.88	66.69
107.0-108.0	128.5	13.4	1038.0	0.87	67.57
108.0-109.0	128.6	13.4	1051.4	0.87	68.44
109.0-110.0	128.8	13.3	1064.7	0.87	69.30
110.0-111.0	128.9	13.2	1077.9	0.86	70.17
111.0-112.0	129.0	13.2	1091.1	0.86	71.02
112.0-113.0	129.1	13.1	1104.2	0.85	71.87
113.0-114.0	129.1	13.0	1117.2	0.85	72.72
114.0-115.0	129.1	12.9	1130.0	0.84	73.56
115.0-116.0	128.9	12.8	1142.8	0.83	74.39
116.0-117.0	128.8	12.6	1155.4	0.82	75.21
117.0-118.0	128.6	12.5	1167.9	0.81	76.02
118.0-119.0	128.2	12.4	1180.3	0.80	76.83
119.0-120.0	127.9	12.2	1192.5	0.79	77.62

Test Type : Type C      Test Distance : 6.119 m  
 Test Device : Lisun LSG-1700B  
 Test Lab :  
 Test By : P. Nellemose

C Plane (°): 0.0-360.0:45.0    γ (°): 0.0-180.0:1.0  
 Temperature : 23.0°C      Humidity : 75.0%  
 Review By :

## Zonal Flux

Gamma °	lmean cd	Zonal Flux lm	Sum Zonal Flux lm	Rel Zonal Flux %	Sum Rel Zonal Flux %
120.0-121.0	127.5	12.0	1204.6	0.78	78.41
121.0-122.0	127.1	11.9	1216.4	0.77	79.18
122.0-123.0	126.7	11.7	1228.2	0.76	79.94
123.0-124.0	126.5	11.6	1239.7	0.75	80.70
124.0-125.0	126.4	11.4	1251.1	0.74	81.44
125.0-126.0	126.3	11.3	1262.4	0.73	82.17
126.0-127.0	126.3	11.1	1273.6	0.72	82.90
127.0-128.0	126.1	11.0	1284.5	0.71	83.61
128.0-129.0	125.8	10.8	1295.3	0.70	84.32
129.0-130.0	125.3	10.6	1305.9	0.69	85.01
130.0-131.0	124.8	10.4	1316.3	0.68	85.68
131.0-132.0	124.1	10.2	1326.5	0.66	86.35
132.0-133.0	123.2	10.0	1336.5	0.65	87.00
133.0-134.0	122.2	9.7	1346.2	0.63	87.63
134.0-135.0	121.1	9.5	1355.7	0.62	88.24
135.0-136.0	119.7	9.2	1364.9	0.60	88.84
136.0-137.0	118.3	8.9	1373.8	0.58	89.42
137.0-138.0	116.8	8.7	1382.5	0.56	89.99
138.0-139.0	115.1	8.4	1390.8	0.54	90.53
139.0-140.0	113.4	8.1	1398.9	0.53	91.06
140.0-141.0	111.6	7.8	1406.7	0.51	91.56
141.0-142.0	109.8	7.5	1414.2	0.49	92.05
142.0-143.0	108.1	7.2	1421.4	0.47	92.52
143.0-144.0	106.4	6.9	1428.3	0.45	92.97
144.0-145.0	104.7	6.7	1435.0	0.43	93.41
145.0-146.0	103.0	6.4	1441.4	0.42	93.82
146.0-147.0	101.3	6.1	1447.5	0.40	94.22
147.0-148.0	99.6	5.9	1453.4	0.38	94.61
148.0-149.0	98.0	5.6	1459.0	0.37	94.97
149.0-150.0	96.3	5.4	1464.4	0.35	95.32
150.0-151.0	94.6	5.1	1469.5	0.33	95.65
151.0-152.0	92.9	4.9	1474.3	0.32	95.97
152.0-153.0	91.4	4.6	1479.0	0.30	96.27
153.0-154.0	89.9	4.4	1483.4	0.29	96.56
154.0-155.0	88.6	4.2	1487.6	0.27	96.83
155.0-156.0	87.4	4.0	1491.5	0.26	97.09
156.0-157.0	86.3	3.8	1495.3	0.25	97.33
157.0-158.0	85.3	3.6	1498.9	0.23	97.57
158.0-159.0	84.5	3.4	1502.3	0.22	97.79
159.0-160.0	83.6	3.2	1505.5	0.21	98.00

Test Type : Type C      Test Distance : 6.119 m  
Test Device : Lisun LSG-1700B  
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C Plane (°): 0.0-360.0:45.0    γ (°): 0.0-180.0:1.0  
Temperature : 23.0°C      Humidity : 75.0%  
Review By :

## Zonal Flux

Gamma °	I <sub>mean</sub> cd	Zonal Flux lm	Sum Zonal Flux lm	Rel Zonal Flux %	Sum Rel Zonal Flux %
160.0-161.0	82.8	3.0	1508.5	0.20	98.19
161.0-162.0	81.9	2.9	1511.4	0.19	98.38
162.0-163.0	81.2	2.7	1514.0	0.17	98.55
163.0-164.0	80.5	2.5	1516.5	0.16	98.72
164.0-165.0	79.7	2.3	1518.9	0.15	98.87
165.0-166.0	79.0	2.2	1521.1	0.14	99.01
166.0-167.0	78.6	2.0	1523.1	0.13	99.14
167.0-168.0	78.6	1.9	1524.9	0.12	99.26
168.0-169.0	79.1	1.7	1526.7	0.11	99.37
169.0-170.0	79.9	1.6	1528.3	0.10	99.48
170.0-171.0	80.7	1.5	1529.7	0.10	99.57
171.0-172.0	81.3	1.3	1531.0	0.09	99.66
172.0-173.0	82.2	1.2	1532.2	0.08	99.74
173.0-174.0	83.4	1.0	1533.2	0.07	99.80
174.0-175.0	84.9	0.9	1534.1	0.06	99.86
175.0-176.0	86.9	0.7	1534.9	0.05	99.91
176.0-177.0	88.9	0.6	1535.5	0.04	99.95
177.0-178.0	90.8	0.4	1535.9	0.03	99.98
178.0-179.0	92.2	0.3	1536.2	0.02	99.99
179.0-180.0	92.7	0.1	1536.3	0.01	100.00