

### Goniophotometers System Test Report

#### Product Info

Luminaire Category : LED Bulkhead Light

Luminaire : 4000K White

Lamp Category : SMD

Lamp : F9087

Manufacturer : FILUX

Submitter : HX-TB

Nuber of Lamps : 0

Lumens per Lamp : 0 lm

Luminous Length : 0 mm

Luminous Width : 0 mm

Luminous Height : 0 mm

#### Electric Parameters

Voltage : 229.96 V Current : 0.1213 A Power : 14.56 W Power Factor : 0.5220 Frequency : 50.00 Hz

#### Photometric Parameters

CIE Class : Direct

Measurement Flux : 1114.1 lm

Upward Ratio : 4.53 %

Maximum Intensity : 347.74 cd

Central Intensity : 346.68 cd

Luminaire Efficacy Rating (LER) : 77

Beam Angle (C0-C180,C90-C270) : 114.2 °, 118.0 °

Field Angle (C0-C180,C90-C270) : 168.6 °, 172.9 °

Total Rated Lamp Lumens : 1114.1 lm

Efficiency : 100.00 %

Downward Ratio : 95.47 %

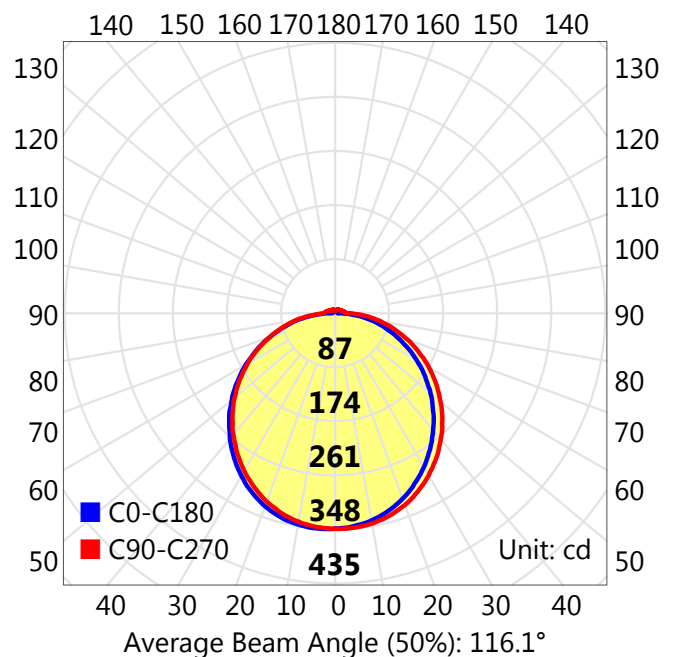
Position Of Maximum Intensity : C157.5° γ4°

S/MH(C0-C180,C90-C270) : 1.26, 1.27

Energy Efficiency Class : A (EU 874/2012 EEI:0.173)

Beam Angle (C45-C225,C135-C315) : 116.3 °, 115.8 °

Field Angle (C45-C225,C135-C315) : 170.9 °, 170.3 °



C Plane : 0.0-360.0:22.5

Test Lab : TB

Test Type : Type C

Test By : ZK

Test Distance : 5.751 m

Gamma : 0.0-180.0:1.0

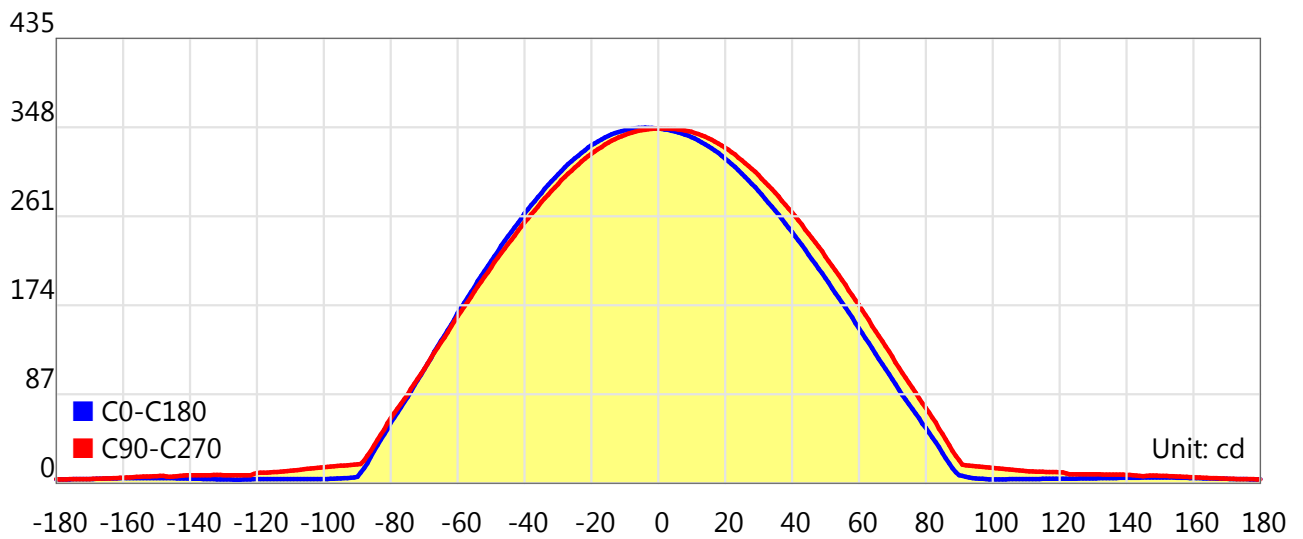
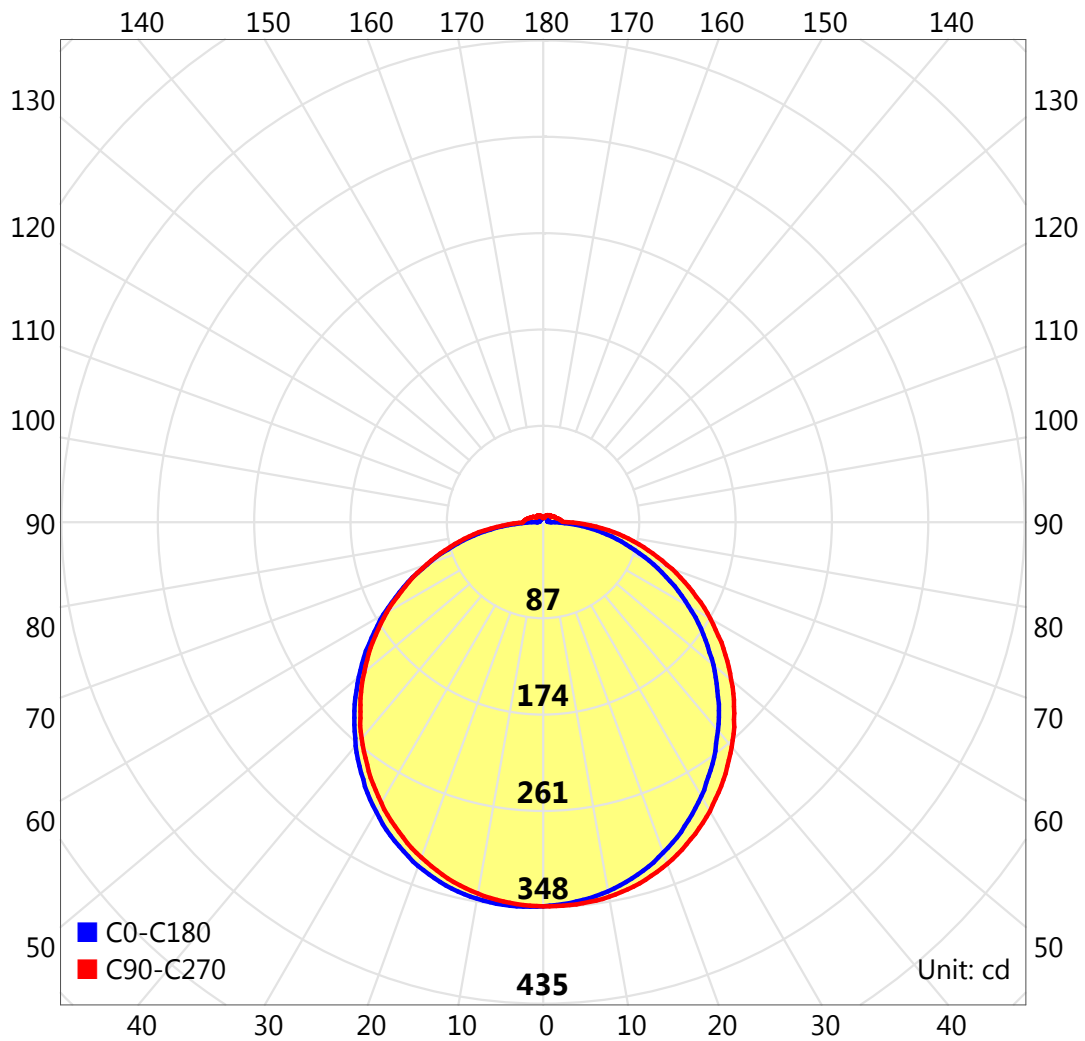
Measurement System : GMS-5000 (E412011U)

Temperature : 25.0°C

Humidity : 65.0%

Review By :TMI

### Light Distribution Curve



C Plane : 0.0-360.0:22.5

Test Lab : TB

Test Type : Type C

Test By : ZK

Test Distance : 5.751 m

Gamma : 0.0-180.0:1.0

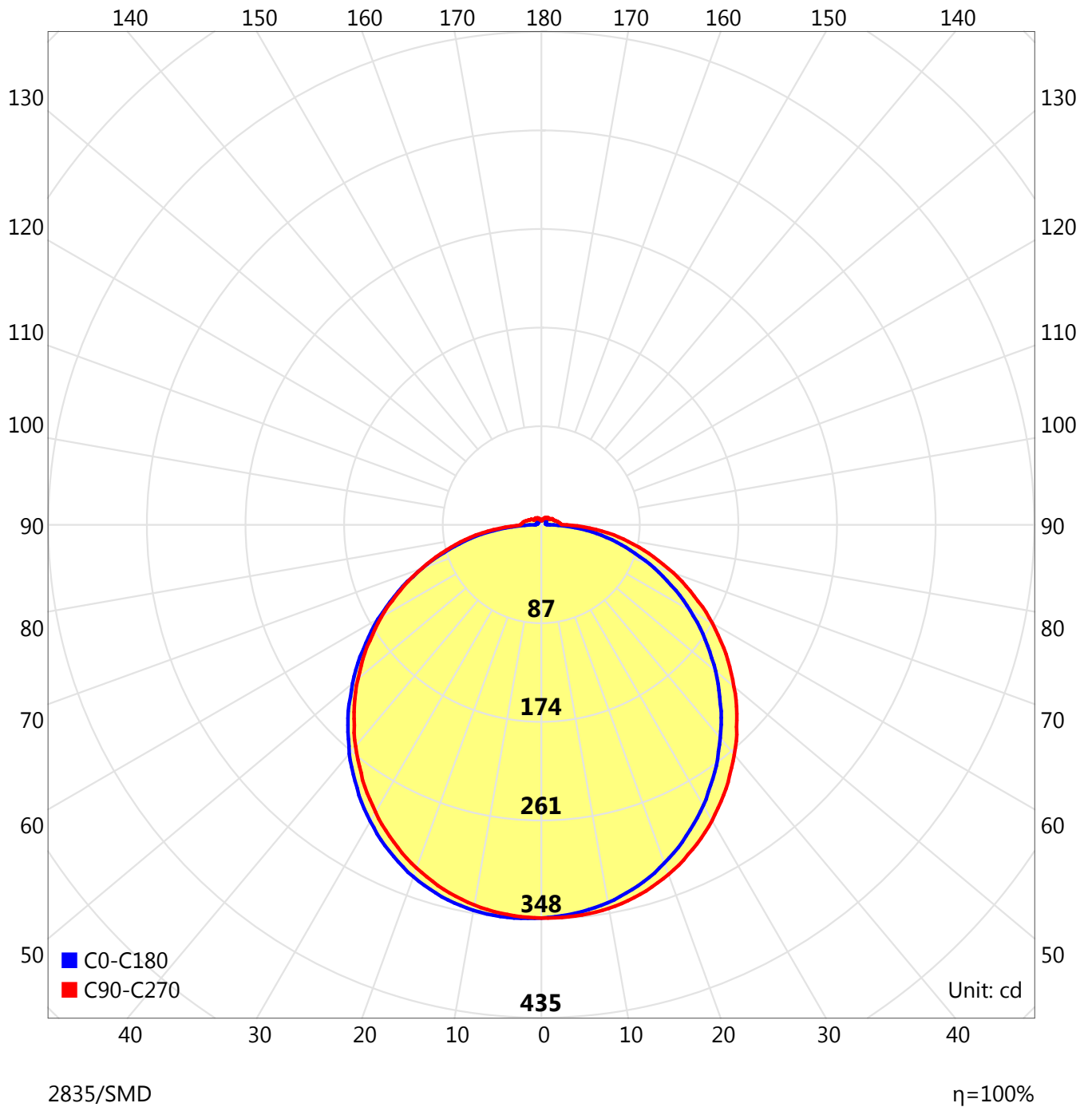
Measurement System : GMS-5000 (E412011U)

Temperature : 25.0°C

Review By :TMI

Humidity : 65.0%

### Light Distribution Curve (cd/klm)



C Plane : 0.0-360.0:22.5

Test Lab : TB

Test Type : Type C

Test By : ZK

Test Distance : 5.751 m

Gamma : 0.0-180.0:1.0

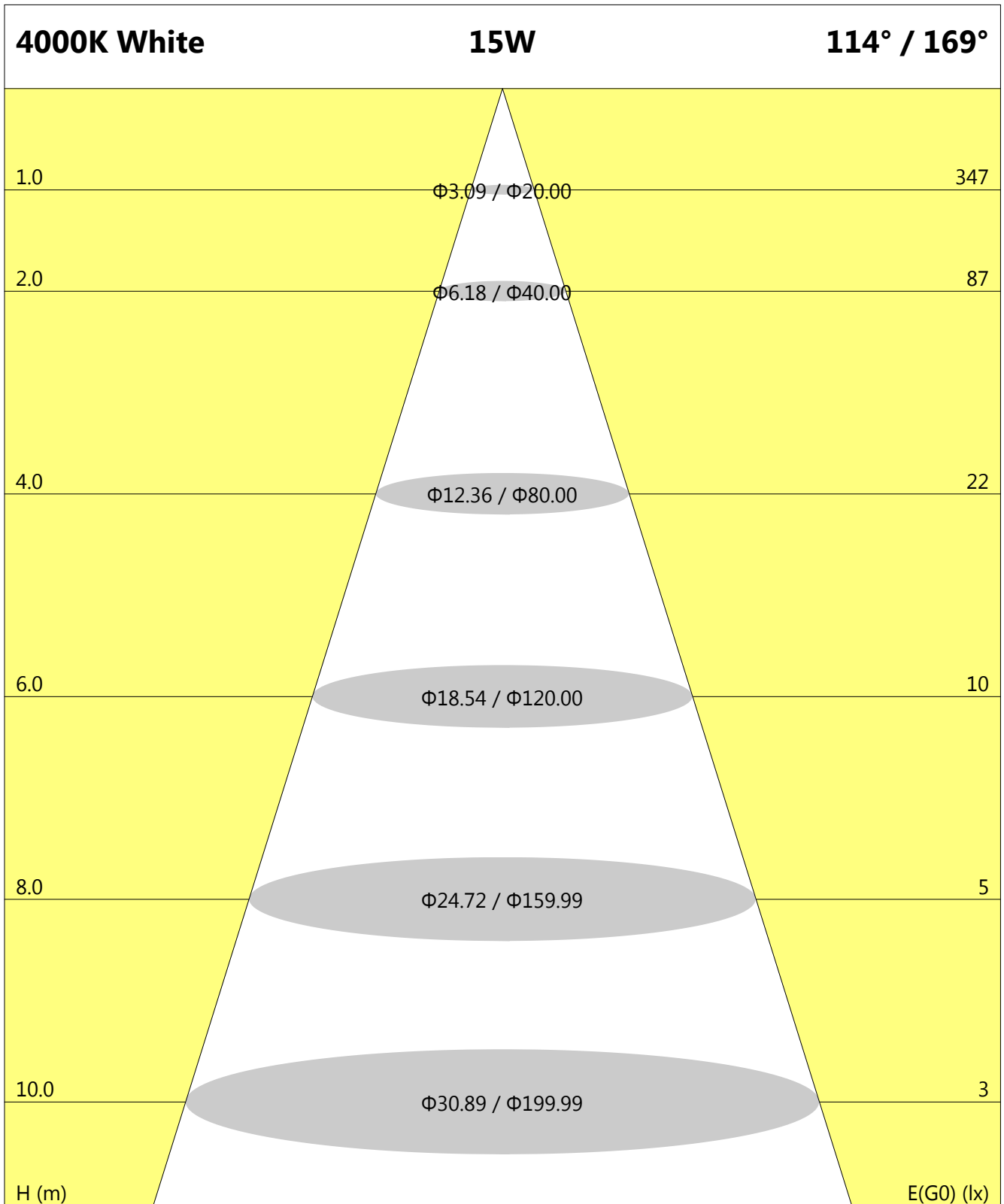
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Temperature : 25.0°C

Review By :TMI

Humidity : 65.0%

**Lux-Distance**



C Plane : 0.0-360.0:22.5

Test Lab : TB

Test Type : Type C

Test By : ZK

Test Distance : 5.751 m

Gamma : 0.0-180.0:1.0

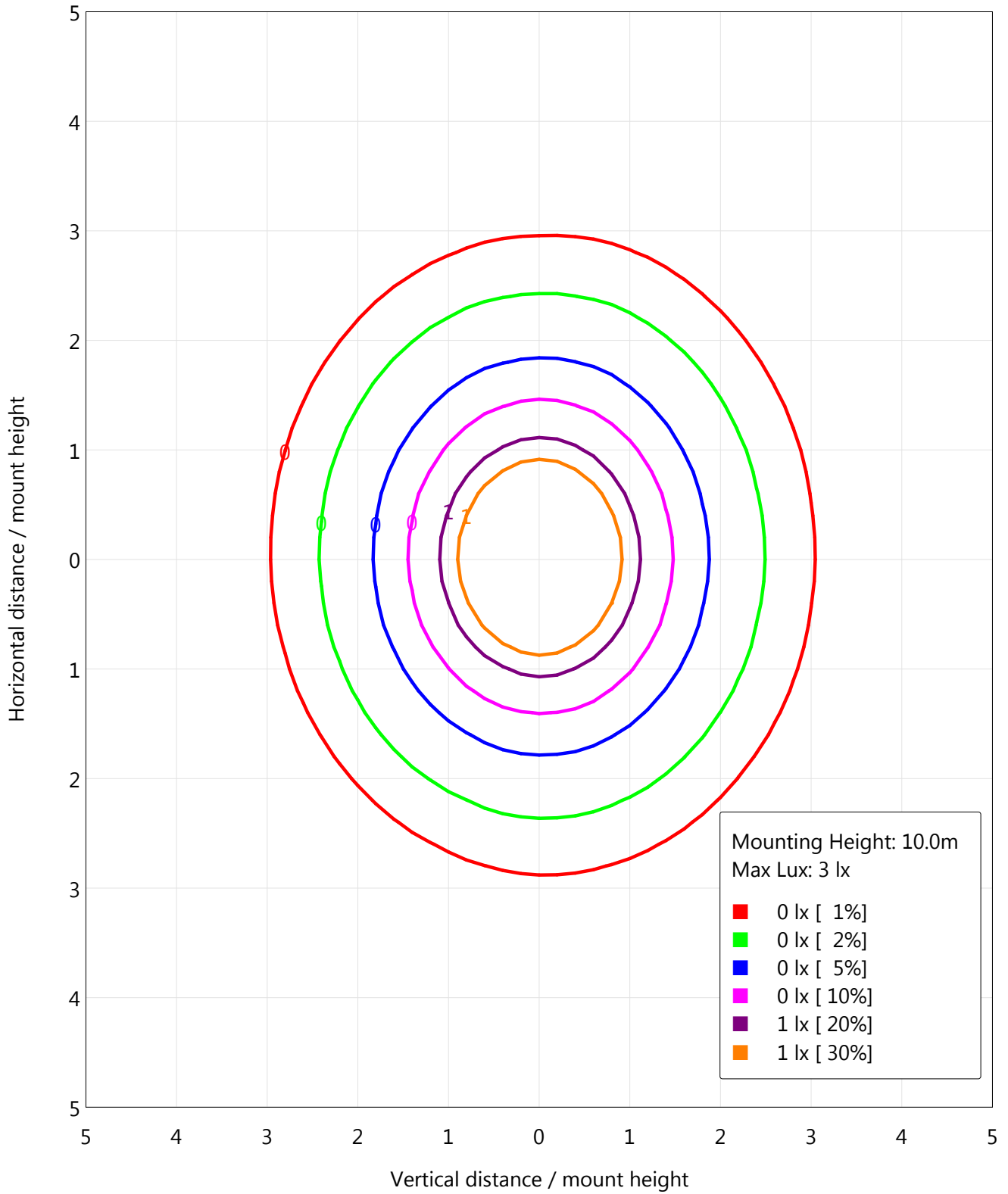
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Temperature : 25.0°C

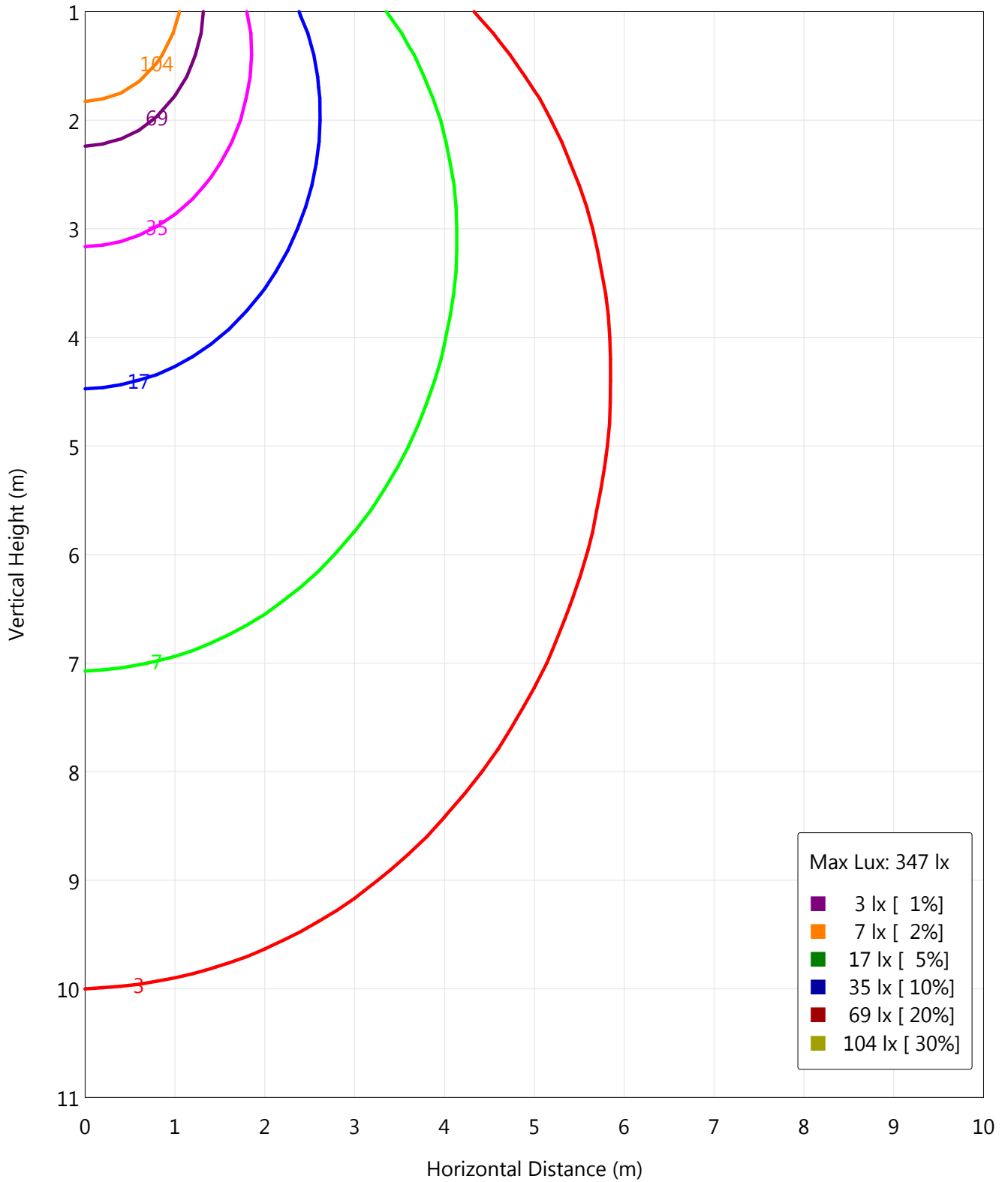
Humidity : 65.0%

Review By :TMI

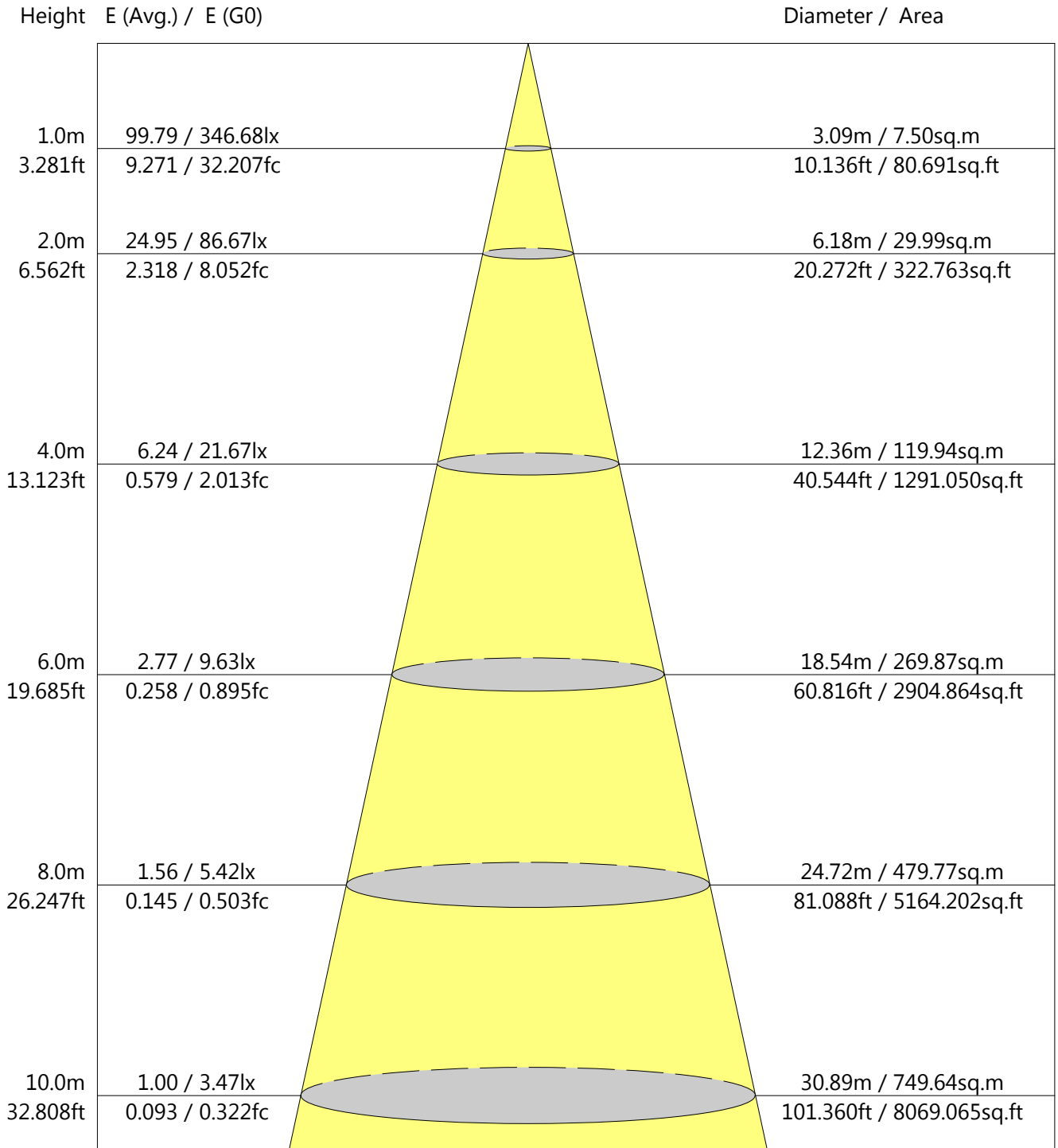
### IsoLux



### Vertical IsoLux Plot



### Average Illuminance Effective Figure

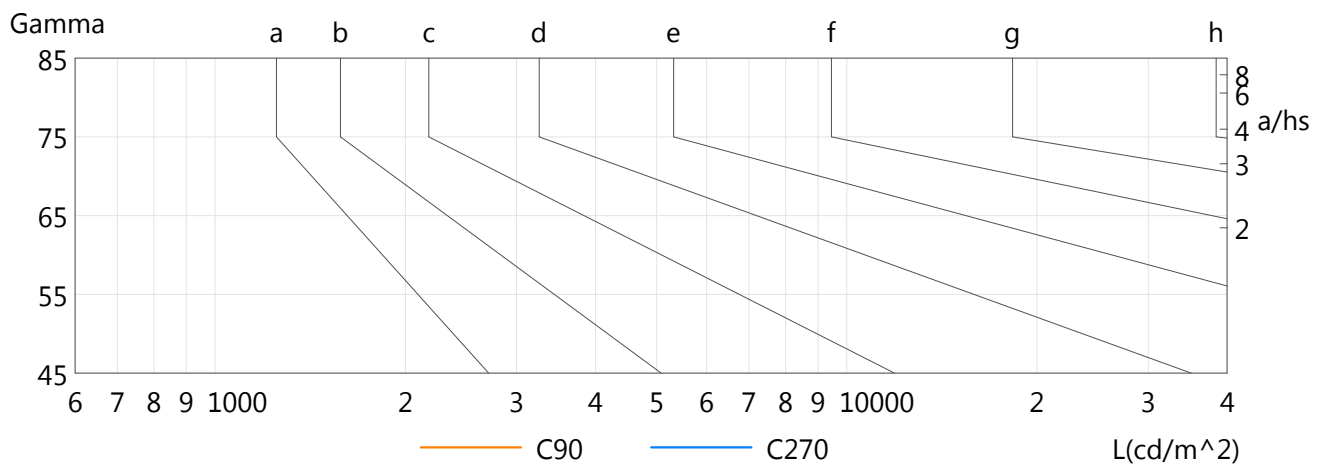
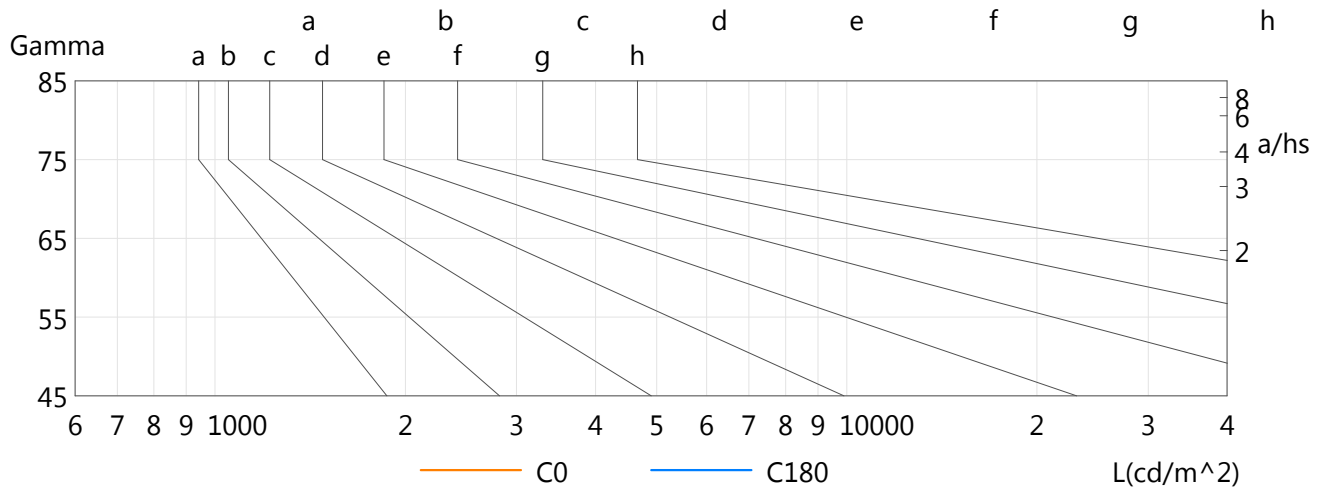


Beam Angle: 114.2° Flux Out: 748.09lm

### Lumen Limit Curve

L (cd/m <sup>2</sup> )	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	223	201	176	152	126	102	77	54	30
C90	244	222	199	174	149	124	98	74	48
C270	241	217	192	166	139	112	84	59	32
C90	234	211	188	163	138	112	87	64	37

Dazzle	Quality	Illuminance (lx)							
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300



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Measurement System : GMS-5000 (E412011U)

Temperature : 25.0°C Humidity : 65.0%

Review By :TMI



**TM5 UF Table**

Utilisation Factors UF (F)			SHR NOM = 1.25								
Room Reflectance			Room Index(RI)								
C	W	F	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
0.70	0.50	0.20	0.53	0.64	0.71	0.76	0.84	0.89	0.92	0.97	1.00
	0.30		0.45	0.56	0.63	0.69	0.77	0.83	0.87	0.93	0.96
	0.20		0.40	0.50	0.57	0.63	0.71	0.78	0.82	0.88	0.93
0.50	0.50	0.20	0.51	0.61	0.68	0.73	0.80	0.84	0.88	0.92	0.95
	0.30		0.44	0.54	0.61	0.66	0.74	0.79	0.83	0.88	0.92
	0.20		0.39	0.49	0.56	0.61	0.69	0.75	0.79	0.85	0.89
0.30	0.50	0.20	0.50	0.59	0.65	0.70	0.76	0.80	0.84	0.88	0.90
	0.30		0.43	0.52	0.59	0.64	0.71	0.76	0.80	0.85	0.88
	0.20		0.38	0.48	0.55	0.60	0.67	0.73	0.77	0.82	0.85
0.00	0.00	0.00	0.36	0.45	0.51	0.56	0.63	0.68	0.72	0.77	0.80

Utilisation Factors UF (W)			SHR NOM = 1.25								
Room Reflectance			Room Index(RI)								
C	W	F	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
0.70	0.50	0.20	1.02	0.85	0.73	0.64	0.52	0.44	0.38	0.29	0.24
	0.30		0.85	0.73	0.64	0.57	0.47	0.40	0.35	0.28	0.23
	0.20		0.73	0.64	0.57	0.51	0.43	0.37	0.32	0.26	0.22
0.50	0.50	0.20	0.98	0.81	0.70	0.61	0.49	0.44	0.36	0.28	0.23
	0.30		0.83	0.71	0.62	0.55	0.45	0.38	0.33	0.26	0.22
	0.20		0.72	0.62	0.55	0.50	0.42	0.36	0.31	0.25	0.21
0.30	0.50	0.20	0.94	0.78	0.67	0.58	0.47	0.39	0.34	0.26	0.22
	0.30		0.80	0.68	0.60	0.53	0.43	0.37	0.32	0.25	0.21
	0.20		0.70	0.61	0.54	0.48	0.40	0.34	0.30	0.24	0.20
0.00	0.00	0.00	0.60	0.51	0.45	0.40	0.33	0.28	0.24	0.19	0.16

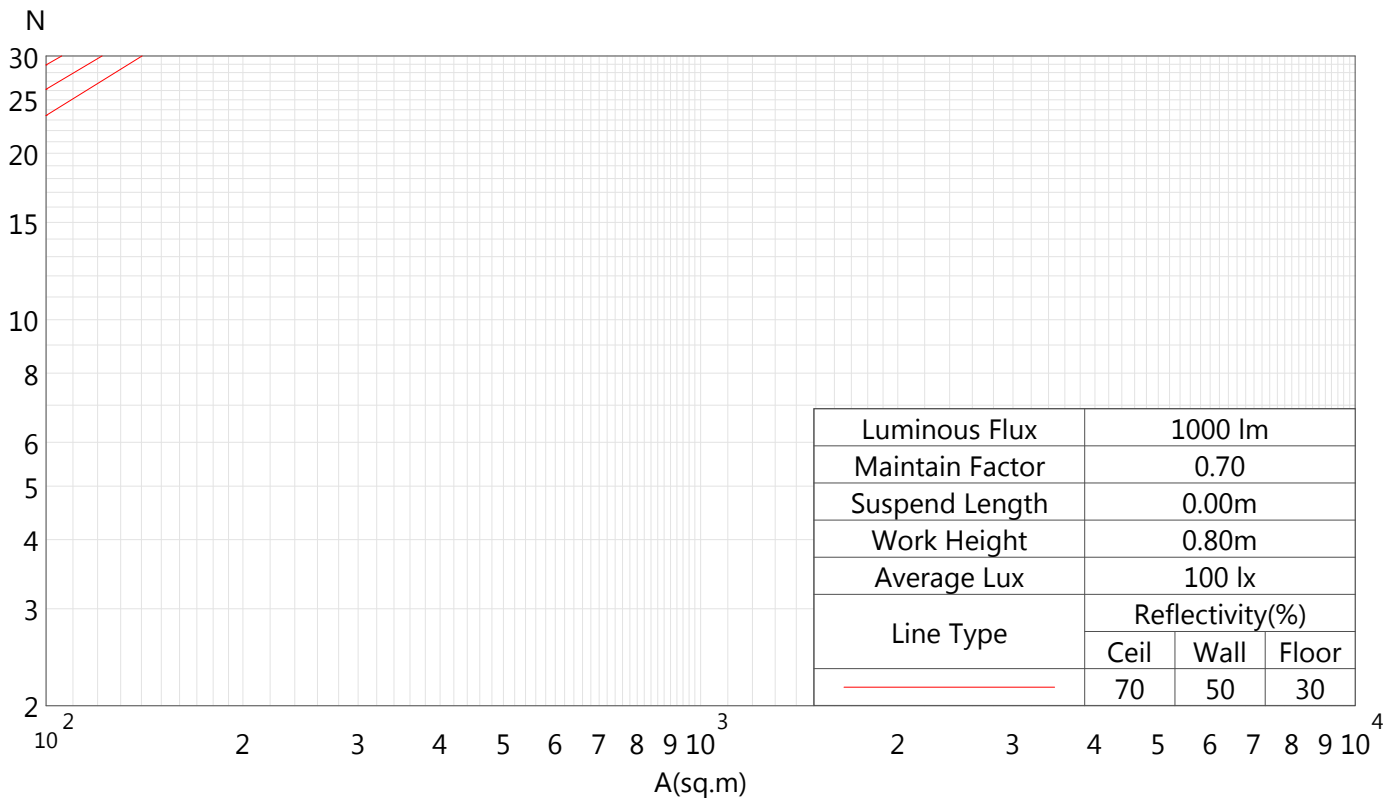
Utilisation Factors UF (C)			SHR NOM = 1.25								
Room Reflectance			Room Index(RI)								
C	W	F	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
0.70	0.50	0.20	0.21	0.22	0.23	0.24	0.25	0.25	0.25	0.26	0.26
	0.30		0.14	0.15	0.17	0.18	0.19	0.21	0.21	0.23	0.23
	0.20		0.09	0.10	0.12	0.13	0.15	0.17	0.18	0.20	0.21
0.50	0.50	0.20	0.20	0.21	0.22	0.23	0.24	0.24	0.24	0.25	0.25
	0.30		0.14	0.15	0.16	0.17	0.19	0.20	0.21	0.22	0.23
	0.20		0.09	0.10	0.12	0.13	0.15	0.16	0.17	0.19	0.20
0.30	0.50	0.20	0.20	0.21	0.21	0.22	0.23	0.23	0.24	0.24	0.24
	0.30		0.13	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22
	0.20		0.09	0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.20
0.00	0.00	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04

Rating: 15W Photometrically tested without ceiling board.  
 Multiply UF values by service correction factors  
 Calculate in accordance with CIBSE Technical Memorandum No.5/1980

### Indoor CU, Curves of Luminaires vs Lighting Area

RC	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.5	0.5	0.5	0.3	0.3	0.3	0.1	0.1	0.1	0
RW	0.7	0.5	0.3	0.1	0.7	0.5	0.3	0.1	0.5	0.3	0.1	0.5	0.3	0.1	0.5	0.3	0.1	0
RCR	RF = 0.2																	
0	118	118	118	118	115	115	115	115	109	109	109	103	103	103	98	98	98	95
1	107	101	97	93	103	99	94	91	94	90	87	89	86	83	85	82	80	78
2	97	88	81	74	93	85	79	73	81	76	71	77	73	68	73	70	66	64
3	88	77	68	61	85	75	67	61	71	64	59	68	62	57	65	60	56	53
4	80	68	59	52	77	66	58	51	63	56	50	60	54	49	57	52	48	45
5	74	60	51	44	71	59	50	44	56	49	43	54	47	42	52	46	41	39
6	68	54	45	39	66	53	44	38	51	43	37	49	42	37	47	41	36	34
7	63	49	40	34	61	48	40	34	46	39	33	44	38	33	43	37	32	30
8	59	45	36	30	57	44	36	30	42	35	29	41	34	29	39	33	29	27
9	55	41	33	27	53	40	32	27	39	32	26	37	31	26	36	30	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	28	24	33	28	23	22

Spacing Criteria: 1.26 (0-180), 1.27 (90-270), 1.39 (Diagonal)



C Plane : 0.0-360.0:22.5

Gamma : 0.0-180.0:1.0

Test Lab : TB

Measurement System : GMS-5000 (E412011U)

Test Type : Type C

Test Distance : 5.751 m

Temperature : 25.0°C

Humidity : 65.0%

Test By : ZK

Review By :TMI

**Zonal Flux**

Gamma °	Imean cd	Zonal Flux lm	Sum Zonal Flux lm	Rel Zonal Flux %	Sum Rel Zonal Flux %
0.0-1.0	346.7	0.3	0.3	0.03	0.03
1.0-2.0	346.6	1.0	1.3	0.09	0.12
2.0-3.0	346.4	1.7	3.0	0.15	0.27
3.0-4.0	346.1	2.3	5.3	0.21	0.48
4.0-5.0	345.8	3.0	8.3	0.27	0.74
5.0-6.0	345.3	3.6	11.9	0.33	1.07
6.0-7.0	344.8	4.3	16.2	0.38	1.45
7.0-8.0	344.1	4.9	21.1	0.44	1.89
8.0-9.0	343.2	5.6	26.7	0.50	2.39
9.0-10.0	342.3	6.2	32.9	0.56	2.95
10.0-11.0	341.2	6.8	39.7	0.61	3.56
11.0-12.0	340.0	7.4	47.1	0.67	4.23
12.0-13.0	338.7	8.0	55.2	0.72	4.95
13.0-14.0	337.2	8.6	63.8	0.77	5.73
14.0-15.0	335.6	9.2	73.0	0.83	6.55
15.0-16.0	333.9	9.8	82.8	0.88	7.43
16.0-17.0	332.0	10.3	93.1	0.93	8.36
17.0-18.0	330.0	10.9	104.0	0.98	9.34
18.0-19.0	327.9	11.4	115.4	1.02	10.36
19.0-20.0	325.6	11.9	127.3	1.07	11.43
20.0-21.0	323.2	12.4	139.8	1.11	12.54
21.0-22.0	320.8	12.9	152.6	1.16	13.70
22.0-23.0	318.2	13.4	166.0	1.20	14.90
23.0-24.0	315.5	13.8	179.8	1.24	16.14
24.0-25.0	312.6	14.2	194.0	1.28	17.41
25.0-26.0	309.7	14.6	208.6	1.31	18.73
26.0-27.0	306.7	15.0	223.6	1.35	20.07
27.0-28.0	303.6	15.4	239.0	1.38	21.45
28.0-29.0	300.3	15.7	254.7	1.41	22.86
29.0-30.0	297.1	16.0	270.8	1.44	24.30
30.0-31.0	293.6	16.3	287.1	1.47	25.77
31.0-32.0	290.1	16.6	303.7	1.49	27.26
32.0-33.0	286.5	16.9	320.6	1.52	28.78
33.0-34.0	282.9	17.1	337.7	1.54	30.32
34.0-35.0	279.1	17.3	355.1	1.56	31.87
35.0-36.0	275.3	17.5	372.6	1.57	33.44
36.0-37.0	271.4	17.7	390.3	1.59	35.03
37.0-38.0	267.4	17.9	408.2	1.60	36.64
38.0-39.0	263.4	18.0	426.1	1.61	38.25
39.0-40.0	259.3	18.1	444.2	1.62	39.87

C Plane : 0.0-360.0:22.5

Test Lab : TB

Test Type : Type C

Test By : ZK

Test Distance : 5.751 m

Gamma : 0.0-180.0:1.0

Measurement System : GMS-5000 (E412011U)

Temperature : 25.0°C Humidity : 65.0%

Review By :TMI

**Zonal Flux**

Gamma °	Imean cd	Zonal Flux lm	Sum Zonal Flux lm	Rel Zonal Flux %	Sum Rel Zonal Flux %
40.0-41.0	255.1	18.2	462.4	1.63	41.50
41.0-42.0	250.9	18.2	480.6	1.64	43.14
42.0-43.0	246.6	18.3	498.9	1.64	44.78
43.0-44.0	242.3	18.3	517.2	1.64	46.42
44.0-45.0	237.9	18.3	535.5	1.64	48.06
45.0-46.0	233.4	18.3	553.7	1.64	49.70
46.0-47.0	228.9	18.2	571.9	1.63	51.34
47.0-48.0	224.3	18.1	590.1	1.63	52.96
48.0-49.0	219.7	18.0	608.1	1.62	54.58
49.0-50.0	215.1	17.9	626.0	1.61	56.19
50.0-51.0	210.4	17.8	643.9	1.60	57.79
51.0-52.0	205.7	17.7	661.5	1.58	59.38
52.0-53.0	200.8	17.5	679.0	1.57	60.94
53.0-54.0	196.0	17.3	696.3	1.55	62.50
54.0-55.0	191.2	17.1	713.3	1.53	64.03
55.0-56.0	186.3	16.8	730.2	1.51	65.54
56.0-57.0	181.3	16.6	746.7	1.49	67.03
57.0-58.0	176.4	16.3	763.0	1.46	68.49
58.0-59.0	171.4	16.0	779.1	1.44	69.93
59.0-60.0	166.3	15.7	794.8	1.41	71.34
60.0-61.0	161.2	15.4	810.2	1.38	72.72
61.0-62.0	156.1	15.0	825.2	1.35	74.07
62.0-63.0	151.0	14.7	839.9	1.32	75.39
63.0-64.0	145.9	14.3	854.2	1.29	76.68
64.0-65.0	140.8	13.9	868.2	1.25	77.93
65.0-66.0	135.5	13.5	881.7	1.21	79.14
66.0-67.0	130.4	13.1	894.8	1.18	80.32
67.0-68.0	125.2	12.7	907.5	1.14	81.46
68.0-69.0	120.0	12.2	919.7	1.10	82.56
69.0-70.0	114.9	11.8	931.5	1.06	83.62
70.0-71.0	109.7	11.3	942.9	1.02	84.63
71.0-72.0	104.6	10.9	953.8	0.98	85.61
72.0-73.0	99.5	10.4	964.2	0.93	86.54
73.0-74.0	94.4	9.9	974.1	0.89	87.43
74.0-75.0	89.3	9.4	983.5	0.85	88.28
75.0-76.0	84.4	9.0	992.5	0.80	89.09
76.0-77.0	79.5	8.5	1001.0	0.76	89.85
77.0-78.0	74.7	8.0	1009.0	0.72	90.56
78.0-79.0	69.8	7.5	1016.5	0.67	91.24
79.0-80.0	64.9	7.0	1023.5	0.63	91.87

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**Zonal Flux**

Gamma °	I <sub>mean</sub> cd	Zonal Flux lm	Sum Zonal Flux lm	Rel Zonal Flux %	Sum Rel Zonal Flux %
80.0-81.0	60.0	6.5	1029.9	0.58	92.45
81.0-82.0	55.0	6.0	1035.9	0.54	92.98
82.0-83.0	49.9	5.4	1041.3	0.49	93.47
83.0-84.0	44.7	4.9	1046.2	0.44	93.91
84.0-85.0	39.3	4.3	1050.5	0.39	94.29
85.0-86.0	33.8	3.7	1054.2	0.33	94.62
86.0-87.0	28.5	3.1	1057.3	0.28	94.90
87.0-88.0	23.4	2.6	1059.9	0.23	95.13
88.0-89.0	18.8	2.1	1061.9	0.19	95.32
89.0-90.0	15.4	1.7	1063.6	0.15	95.47
90.0-91.0	13.2	1.4	1065.1	0.13	95.60
91.0-92.0	12.1	1.3	1066.4	0.12	95.72
92.0-93.0	11.6	1.3	1067.7	0.11	95.83
93.0-94.0	11.3	1.2	1068.9	0.11	95.94
94.0-95.0	11.0	1.2	1070.1	0.11	96.05
95.0-96.0	10.8	1.2	1071.3	0.11	96.16
96.0-97.0	10.6	1.2	1072.4	0.10	96.26
97.0-98.0	10.4	1.1	1073.6	0.10	96.36
98.0-99.0	10.3	1.1	1074.7	0.10	96.46
99.0-100.0	10.1	1.1	1075.8	0.10	96.56
100.0-101.0	9.9	1.1	1076.8	0.10	96.66
101.0-102.0	9.7	1.0	1077.9	0.09	96.75
102.0-103.0	9.5	1.0	1078.9	0.09	96.84
103.0-104.0	9.3	1.0	1079.9	0.09	96.93
104.0-105.0	9.2	1.0	1080.9	0.09	97.02
105.0-106.0	9.0	1.0	1081.8	0.09	97.10
106.0-107.0	8.9	0.9	1082.8	0.08	97.19
107.0-108.0	8.7	0.9	1083.7	0.08	97.27
108.0-109.0	8.6	0.9	1084.6	0.08	97.35
109.0-110.0	8.5	0.9	1085.4	0.08	97.43
110.0-111.0	8.4	0.9	1086.3	0.08	97.51
111.0-112.0	8.3	0.9	1087.2	0.08	97.58
112.0-113.0	8.3	0.8	1088.0	0.08	97.66
113.0-114.0	8.2	0.8	1088.8	0.07	97.73
114.0-115.0	8.2	0.8	1089.6	0.07	97.81
115.0-116.0	8.1	0.8	1090.4	0.07	97.88
116.0-117.0	8.1	0.8	1091.2	0.07	97.95
117.0-118.0	8.0	0.8	1092.0	0.07	98.02
118.0-119.0	8.0	0.8	1092.8	0.07	98.09
119.0-120.0	7.9	0.8	1093.5	0.07	98.16

C Plane : 0.0-360.0:22.5

Test Lab : TB

Test Type : Type C

Test By : ZK

Test Distance : 5.751 m

Gamma : 0.0-180.0:1.0

Measurement System : GMS-5000 (E412011U)

Temperature : 25.0°C

Humidity : 65.0%

Review By :TMI

**Zonal Flux**

Gamma °	I <sub>mean</sub> cd	Zonal Flux lm	Sum Zonal Flux lm	Rel Zonal Flux %	Sum Rel Zonal Flux %
120.0-121.0	7.9	0.7	1094.3	0.07	98.22
121.0-122.0	7.7	0.7	1095.0	0.06	98.29
122.0-123.0	7.6	0.7	1095.7	0.06	98.35
123.0-124.0	7.5	0.7	1096.4	0.06	98.41
124.0-125.0	7.5	0.7	1097.1	0.06	98.47
125.0-126.0	7.4	0.7	1097.7	0.06	98.53
126.0-127.0	7.3	0.6	1098.4	0.06	98.59
127.0-128.0	7.3	0.6	1099.0	0.06	98.65
128.0-129.0	7.2	0.6	1099.6	0.06	98.70
129.0-130.0	7.1	0.6	1100.2	0.05	98.76
130.0-131.0	7.1	0.6	1100.8	0.05	98.81
131.0-132.0	7.0	0.6	1101.4	0.05	98.86
132.0-133.0	7.0	0.6	1102.0	0.05	98.91
133.0-134.0	7.0	0.6	1102.5	0.05	98.96
134.0-135.0	6.9	0.5	1103.1	0.05	99.01
135.0-136.0	6.9	0.5	1103.6	0.05	99.06
136.0-137.0	6.8	0.5	1104.1	0.05	99.10
137.0-138.0	6.8	0.5	1104.6	0.05	99.15
138.0-139.0	6.7	0.5	1105.1	0.04	99.19
139.0-140.0	6.7	0.5	1105.6	0.04	99.24
140.0-141.0	6.6	0.5	1106.0	0.04	99.28
141.0-142.0	6.6	0.4	1106.5	0.04	99.32
142.0-143.0	6.5	0.4	1106.9	0.04	99.36
143.0-144.0	6.4	0.4	1107.3	0.04	99.39
144.0-145.0	6.4	0.4	1107.7	0.04	99.43
145.0-146.0	6.3	0.4	1108.1	0.04	99.47
146.0-147.0	6.3	0.4	1108.5	0.03	99.50
147.0-148.0	6.3	0.4	1108.9	0.03	99.53
148.0-149.0	6.2	0.4	1109.2	0.03	99.57
149.0-150.0	6.2	0.3	1109.6	0.03	99.60
150.0-151.0	6.1	0.3	1109.9	0.03	99.63
151.0-152.0	6.1	0.3	1110.2	0.03	99.65
152.0-153.0	6.0	0.3	1110.5	0.03	99.68
153.0-154.0	5.9	0.3	1110.8	0.03	99.71
154.0-155.0	5.8	0.3	1111.1	0.02	99.73
155.0-156.0	5.8	0.3	1111.4	0.02	99.76
156.0-157.0	5.7	0.2	1111.6	0.02	99.78
157.0-158.0	5.6	0.2	1111.9	0.02	99.80
158.0-159.0	5.5	0.2	1112.1	0.02	99.82
159.0-160.0	5.4	0.2	1112.3	0.02	99.84

C Plane : 0.0-360.0:22.5

Test Lab : TB

Test Type : Type C

Test By : ZK

Test Distance : 5.751 m

Gamma : 0.0-180.0:1.0

Measurement System : GMS-5000 (E412011U)

Temperature : 25.0°C

Humidity : 65.0%

Review By :TMI

**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	5.3	0.2	1112.5	0.02	99.86
161.0-162.0	5.2	0.2	1112.7	0.02	99.87
162.0-163.0	5.1	0.2	1112.8	0.02	99.89
163.0-164.0	5.0	0.2	1113.0	0.01	99.90
164.0-165.0	4.9	0.1	1113.1	0.01	99.91
165.0-166.0	4.8	0.1	1113.3	0.01	99.93
166.0-167.0	4.7	0.1	1113.4	0.01	99.94
167.0-168.0	4.6	0.1	1113.5	0.01	99.95
168.0-169.0	4.5	0.1	1113.6	0.01	99.96
169.0-170.0	4.4	0.1	1113.7	0.01	99.96
170.0-171.0	4.3	0.1	1113.8	0.01	99.97
171.0-172.0	4.3	0.1	1113.8	0.01	99.98
172.0-173.0	4.2	0.1	1113.9	0.01	99.98
173.0-174.0	4.2	0.1	1113.9	0.00	99.99
174.0-175.0	4.1	0.0	1114.0	0.00	99.99
175.0-176.0	4.1	0.0	1114.0	0.00	99.99
176.0-177.0	4.1	0.0	1114.0	0.00	100.00
177.0-178.0	4.1	0.0	1114.1	0.00	100.00
178.0-179.0	4.1	0.0	1114.1	0.00	100.00
179.0-180.0	4.1	0.0	1114.1	0.00	100.00

**Light Distribution Data**

Unit: cd

G\C	C0.0	C22.5	C45.0	C67.5	C90.0	C112.5	C135.0	C157.5
G0.0	346.7	346.7	346.7	346.7	346.7	346.7	346.7	346.7
G1.0	346.2	346.2	346.4	346.6	346.8	346.9	347.1	347.1
G2.0	345.8	345.8	346.1	346.4	346.8	347.1	347.3	347.4
G3.0	345.2	345.3	345.7	346.2	346.7	347.1	347.5	347.6
G4.0	344.6	344.7	345.1	345.8	346.4	347.1	347.6	347.7
G5.0	343.7	344.1	344.6	345.4	346.2	346.9	347.5	347.7
G6.0	342.9	343.3	344.0	345.0	345.8	346.7	347.4	347.6
G7.0	341.9	342.4	343.2	344.4	345.4	346.3	347.1	347.4
G8.0	340.8	341.3	342.3	343.5	344.9	345.9	346.8	347.1
G9.0	339.7	340.1	341.4	342.7	344.2	345.3	346.3	346.6
G10.0	338.3	338.9	340.3	341.8	343.4	344.6	345.5	346.0
G11.0	336.9	337.5	338.8	340.7	342.3	343.8	344.7	345.3
G12.0	335.0	336.0	337.4	339.5	341.3	342.9	343.9	344.4
G13.0	333.3	334.4	335.9	338.2	340.1	341.8	342.8	343.5
G14.0	331.4	332.7	334.3	336.4	338.8	340.4	341.7	342.1
G15.0	329.5	330.4	332.6	334.9	337.4	339.0	340.4	340.8
G16.0	327.4	328.4	330.8	333.2	335.8	337.6	338.7	339.4
G17.0	325.2	326.3	328.8	331.4	333.8	336.0	337.1	337.9
G18.0	322.9	324.1	326.3	329.4	332.0	334.2	335.5	336.2
G19.0	319.9	321.7	324.1	327.4	330.0	332.4	333.7	334.4
G20.0	317.4	319.3	321.8	325.2	328.0	330.0	331.7	332.1
G21.0	314.7	316.2	319.3	322.5	325.9	328.0	329.7	330.0
G22.0	311.9	313.5	316.8	320.1	323.6	325.7	327.5	327.8
G23.0	309.1	310.7	314.1	317.6	321.2	323.4	324.8	325.5
G24.0	306.1	307.8	310.8	314.9	318.3	321.0	322.3	323.0
G25.0	302.5	304.8	308.0	312.2	315.7	318.4	319.8	320.4
G26.0	299.3	301.8	305.1	309.5	313.0	315.8	317.2	317.3
G27.0	296.0	298.6	302.0	306.6	310.2	312.5	314.4	314.4
G28.0	292.7	294.7	298.9	303.0	307.3	309.6	311.5	311.5
G29.0	289.3	291.3	295.7	299.9	304.3	306.7	308.6	308.5
G30.0	285.8	287.9	292.4	296.8	301.3	303.7	304.9	305.4
G31.0	282.2	284.4	288.4	293.5	297.5	300.6	301.7	302.2
G32.0	277.8	280.9	284.9	290.2	294.2	297.3	298.5	298.1
G33.0	274.1	277.2	281.3	286.8	290.9	294.0	295.1	294.7
G34.0	270.3	273.5	277.8	282.6	287.5	289.9	291.7	291.2
G35.0	266.5	268.9	274.1	279.1	284.0	286.5	288.1	287.6
G36.0	262.5	265.1	270.4	275.4	280.5	282.9	283.8	283.9
G37.0	258.6	261.2	266.6	271.8	276.1	279.3	280.1	280.1
G38.0	253.7	257.2	261.9	268.0	272.4	275.6	276.3	276.2
G39.0	249.6	253.2	258.0	264.2	268.6	271.8	272.4	271.4

C Plane : 0.0-360.0:22.5

Test Lab : TB

Test Type : Type C

Test By : ZK

Test Distance : 5.751 m

Gamma : 0.0-180.0:1.0

Measurement System : GMS-5000 (E412011U)

Temperature : 25.0°C Humidity : 65.0%

Review By :TMI



**Light Distribution Data**

Unit: cd

G\C	C0.0	C22.5	C45.0	C67.5	C90.0	C112.5	C135.0	C157.5
G40.0	245.5	249.1	254.1	260.3	264.8	267.1	268.5	267.5
G41.0	241.3	244.2	250.0	255.6	260.9	263.2	264.5	263.4
G42.0	237.0	240.0	245.9	251.6	256.9	259.2	260.4	259.2
G43.0	232.7	235.7	241.8	247.5	252.9	255.1	255.4	254.9
G44.0	228.4	231.5	236.7	243.3	248.0	251.0	251.2	250.6
G45.0	223.2	227.1	232.5	239.2	243.9	246.8	246.9	246.3
G46.0	218.8	222.8	228.2	235.0	239.7	242.6	242.6	241.0
G47.0	214.3	218.4	223.9	229.9	235.4	237.5	238.2	236.5
G48.0	209.7	213.0	219.5	225.6	231.1	233.1	233.7	231.9
G49.0	205.2	208.5	215.1	221.2	226.7	228.7	229.2	227.3
G50.0	200.7	204.0	210.7	216.8	221.5	224.2	223.7	222.6
G51.0	196.1	199.5	205.3	212.4	217.1	219.8	219.1	218.0
G52.0	190.6	194.9	200.7	207.9	212.6	215.2	214.4	213.2
G53.0	185.9	190.3	196.1	203.4	208.0	210.6	209.7	207.4
G54.0	181.2	185.6	191.5	197.9	203.4	205.0	204.9	202.5
G55.0	176.5	180.0	186.9	193.3	198.9	200.3	200.1	197.7
G56.0	171.8	175.3	182.3	188.7	194.2	195.6	194.4	192.7
G57.0	167.0	170.5	177.5	184.0	188.6	190.8	189.4	187.7
G58.0	162.2	165.8	171.8	179.2	183.8	185.9	184.5	182.7
G59.0	156.4	161.0	167.1	174.5	179.0	181.1	179.5	177.7
G60.0	151.6	156.2	162.4	169.8	174.3	175.3	174.6	171.6
G61.0	146.8	151.4	157.6	164.0	169.4	170.3	169.5	166.4
G62.0	141.9	145.6	152.7	159.2	164.5	165.4	164.4	161.3
G63.0	137.1	140.7	147.9	154.3	159.7	160.3	159.3	156.1
G64.0	132.2	135.9	143.0	149.5	153.8	155.4	153.2	150.9
G65.0	126.4	131.0	137.2	144.6	148.8	150.4	148.1	145.7
G66.0	121.4	126.1	132.3	139.7	143.9	145.3	142.9	139.4
G67.0	116.6	121.2	127.5	134.8	138.9	139.3	137.8	134.1
G68.0	111.6	115.4	122.6	128.9	133.9	134.1	132.6	128.8
G69.0	106.8	110.6	117.7	124.0	128.9	129.1	127.4	123.6
G70.0	101.9	105.7	112.8	119.1	124.0	124.0	121.2	118.3
G71.0	97.1	100.9	107.0	114.2	118.0	118.9	116.0	113.0
G72.0	91.4	96.1	102.2	109.3	113.0	113.8	110.8	107.7
G73.0	86.6	91.3	97.3	104.4	108.1	108.7	105.6	101.4
G74.0	81.9	86.6	92.6	98.6	103.2	102.7	100.5	96.2
G75.0	77.3	81.0	87.9	93.8	98.3	97.7	95.5	91.0
G76.0	72.8	76.4	83.2	89.1	93.5	92.7	90.4	85.9
G77.0	68.2	71.8	78.6	84.4	88.7	87.8	84.4	80.8
G78.0	63.8	67.3	73.0	79.7	83.0	83.0	79.4	75.7
G79.0	58.5	62.8	68.5	75.2	78.4	78.2	74.5	70.7

C Plane : 0.0-360.0:22.5

Test Lab : TB

Test Type : Type C

Test By : ZK

Test Distance : 5.751 m

Gamma : 0.0-180.0:1.0

Measurement System : GMS-5000 (E412011U)

Temperature : 25.0°C

Humidity : 65.0%

Review By :TMI

**Light Distribution Data**

Unit: cd

G\C	C0.0	C22.5	C45.0	C67.5	C90.0	C112.5	C135.0	C157.5
G80.0	54.1	58.4	64.1	70.7	73.8	72.6	69.7	64.7
G81.0	49.5	53.8	59.5	65.2	69.2	67.8	64.8	59.8
G82.0	44.8	48.1	54.6	60.4	64.4	62.9	59.8	54.7
G83.0	40.1	43.3	49.8	55.5	59.4	57.9	54.6	49.4
G84.0	35.3	38.5	44.9	50.5	53.4	52.8	48.3	44.1
G85.0	29.6	33.7	38.9	45.4	48.3	47.5	43.0	38.8
G86.0	24.5	28.8	33.8	40.1	43.0	42.1	37.5	32.2
G87.0	19.5	23.7	28.6	34.7	37.3	36.3	31.7	26.3
G88.0	14.9	18.9	23.6	28.4	31.8	29.7	26.3	21.0
G89.0	10.9	13.9	19.0	23.7	26.9	24.8	21.4	16.3
G90.0	7.9	10.3	15.2	19.6	22.6	20.5	16.3	12.0
G91.0	7.4	9.6	12.7	16.4	18.2	16.7	12.4	7.9
G92.0	6.5	8.9	12.0	15.9	17.6	15.3	11.5	7.3
G93.0	5.8	8.5	11.5	15.5	17.3	15.0	11.3	7.3
G94.0	5.2	8.1	11.2	15.2	17.0	14.7	11.2	7.2
G95.0	4.8	7.8	10.9	15.0	16.7	14.4	11.0	7.2
G96.0	4.6	7.7	10.6	14.7	16.5	14.1	10.9	7.2
G97.0	4.4	7.7	10.4	14.4	16.2	13.8	10.7	7.2
G98.0	4.2	7.6	10.0	14.1	15.8	13.6	10.5	7.1
G99.0	4.0	7.6	9.7	13.8	15.6	13.3	10.3	7.1
G100.0	4.0	7.5	9.5	13.6	15.3	12.9	10.2	7.0
G101.0	4.0	7.4	9.2	13.2	15.0	12.6	10.0	7.0
G102.0	4.0	7.4	9.1	12.8	14.7	12.2	9.9	7.0
G103.0	4.0	7.4	8.9	12.5	14.3	11.8	9.7	6.9
G104.0	4.0	7.4	8.7	12.1	13.9	11.5	9.6	6.9
G105.0	4.1	7.4	8.5	11.7	13.6	11.3	9.4	6.9
G106.0	4.1	7.4	8.4	11.5	13.2	11.1	9.4	6.8
G107.0	4.1	7.4	8.3	11.2	12.9	10.9	9.3	6.8
G108.0	4.2	7.4	8.1	10.9	12.6	10.7	9.2	6.8
G109.0	4.2	7.4	8.0	10.7	12.4	10.6	9.2	6.8
G110.0	4.2	7.4	8.0	10.5	12.1	10.4	9.2	6.8
G111.0	4.3	7.5	8.0	10.3	11.9	10.3	9.1	6.8
G112.0	4.3	7.5	8.0	10.2	11.7	10.1	9.1	6.8
G113.0	4.4	7.5	8.0	10.1	11.5	10.0	9.1	6.8
G114.0	4.4	7.5	8.0	10.0	11.4	10.0	9.1	6.8
G115.0	4.4	7.5	8.0	9.9	11.3	9.9	9.1	6.8
G116.0	4.4	7.6	8.0	9.9	11.2	9.9	9.0	6.8
G117.0	4.4	7.6	8.0	9.8	11.1	9.8	9.0	6.8
G118.0	4.5	7.6	8.0	9.7	11.0	9.8	8.9	6.8
G119.0	4.5	7.6	8.0	9.7	11.0	9.7	8.9	6.8

C Plane : 0.0-360.0:22.5

Test Lab : TB

Test Type : Type C

Test By : ZK

Test Distance : 5.751 m

Gamma : 0.0-180.0:1.0

Measurement System : GMS-5000 (E412011U)

Temperature : 25.0°C Humidity : 65.0%

Review By :TMI

**Light Distribution Data**

Unit: cd

G\C	C0.0	C22.5	C45.0	C67.5	C90.0	C112.5	C135.0	C157.5
G120.0	4.5	7.6	8.0	9.6	10.9	9.7	8.9	6.7
G121.0	4.6	7.6	8.0	9.5	10.8	9.6	8.9	6.7
G122.0	4.6	7.6	7.9	9.4	9.9	9.6	8.9	6.6
G123.0	4.6	7.6	7.9	9.3	8.8	9.6	8.8	6.6
G124.0	4.6	7.5	7.9	9.0	8.8	9.5	8.8	6.4
G125.0	4.7	7.5	7.9	8.8	8.8	9.4	8.7	6.1
G126.0	4.7	7.5	7.8	8.6	8.8	9.4	8.7	5.7
G127.0	4.8	7.4	7.8	8.3	8.8	9.3	8.6	5.4
G128.0	4.8	7.4	7.8	8.2	8.8	9.2	8.6	5.2
G129.0	4.9	7.3	7.8	7.9	8.8	9.1	8.4	4.6
G130.0	4.9	7.3	7.7	7.7	8.8	9.1	8.2	4.3
G131.0	5.0	7.2	7.7	7.5	8.8	9.0	8.0	4.6
G132.0	5.0	7.2	7.6	7.3	8.8	8.9	7.9	4.8
G133.0	5.0	7.2	7.6	7.1	8.8	8.8	7.9	4.8
G134.0	5.1	7.2	7.5	6.9	8.8	8.6	7.9	4.7
G135.0	5.2	7.1	7.4	6.8	8.7	8.5	7.9	4.6
G136.0	5.2	7.0	7.4	6.6	8.7	8.5	7.9	4.6
G137.0	5.3	7.0	7.4	6.5	8.6	8.3	7.8	4.6
G138.0	5.4	6.9	7.3	6.5	8.6	8.1	7.6	4.7
G139.0	5.4	6.9	7.2	6.5	8.5	8.1	7.5	4.7
G140.0	5.5	6.8	7.1	6.5	8.4	7.9	7.4	4.8
G141.0	5.5	6.8	7.1	6.5	8.1	7.8	7.3	4.9
G142.0	5.6	6.7	7.0	6.5	7.8	7.8	7.2	4.9
G143.0	5.6	6.6	6.9	6.5	7.5	7.7	7.2	5.0
G144.0	5.6	6.6	6.7	6.5	7.3	7.6	7.1	5.1
G145.0	5.7	6.5	6.7	6.5	7.2	7.5	6.9	5.1
G146.0	5.7	6.4	6.5	6.4	7.5	7.4	6.8	5.2
G147.0	5.7	6.3	6.4	6.4	7.7	7.2	6.7	5.2
G148.0	5.7	6.2	6.3	6.4	7.7	7.1	6.6	5.2
G149.0	5.7	6.2	6.2	6.4	7.6	7.0	6.5	5.3
G150.0	5.7	6.1	6.1	6.4	7.4	6.9	6.4	5.3
G151.0	5.7	6.0	6.0	6.3	7.3	6.8	6.4	5.3
G152.0	5.7	5.8	6.0	6.2	7.2	6.7	6.4	5.4
G153.0	5.7	5.7	5.9	6.1	7.1	6.6	6.3	5.4
G154.0	5.7	5.7	5.8	6.1	7.0	6.5	6.2	5.4
G155.0	5.6	5.6	5.7	6.0	6.8	6.4	6.0	5.3
G156.0	5.5	5.6	5.7	6.0	6.6	6.4	5.9	5.3
G157.0	5.4	5.5	5.6	6.1	6.5	6.3	5.8	5.2
G158.0	5.4	5.5	5.6	6.1	6.3	6.2	5.7	5.1
G159.0	5.3	5.4	5.5	5.9	6.2	6.1	5.6	5.0

C Plane : 0.0-360.0:22.5

Test Lab : TB

Test Type : Type C

Test By : ZK

Test Distance : 5.751 m

Gamma : 0.0-180.0:1.0

Measurement System : GMS-5000 (E412011U)

Temperature : 25.0°C

Humidity : 65.0%

Review By :TMI

**Light Distribution Data**

Unit: cd

G\C	C0.0	C22.5	C45.0	C67.5	C90.0	C112.5	C135.0	C157.5
G160.0	5.2	5.3	5.3	5.8	6.0	6.0	5.4	5.0
G161.0	5.1	5.2	5.2	5.7	5.9	5.9	5.3	4.9
G162.0	5.0	5.2	5.1	5.6	5.7	5.8	5.2	4.9
G163.0	4.9	5.1	5.0	5.4	5.5	5.6	5.1	4.8
G164.0	4.9	5.0	4.9	5.3	5.4	5.5	5.0	4.8
G165.0	4.8	4.9	4.9	5.2	5.3	5.3	5.0	4.8
G166.0	4.7	4.8	4.8	5.1	5.1	5.2	4.9	4.7
G167.0	4.7	4.7	4.7	4.9	5.0	5.0	4.9	4.6
G168.0	4.5	4.5	4.6	4.8	4.8	4.8	4.7	4.6
G169.0	4.4	4.5	4.5	4.7	4.7	4.7	4.6	4.3
G170.0	4.4	4.4	4.4	4.6	4.6	4.6	4.3	4.3
G171.0	4.3	4.4	4.3	4.5	4.5	4.4	4.3	4.2
G172.0	4.3	4.3	4.3	4.4	4.4	4.4	4.2	4.2
G173.0	4.2	4.2	4.2	4.3	4.4	4.3	4.2	4.2
G174.0	4.2	4.2	4.2	4.3	4.3	4.3	4.2	4.2
G175.0	4.1	4.1	4.1	4.3	4.2	4.2	4.1	4.2
G176.0	4.1	4.1	4.1	4.2	4.2	4.2	4.1	4.1
G177.0	4.0	4.1	4.1	4.2	4.1	4.2	4.1	4.1
G178.0	4.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1
G179.0	4.0	4.1	4.0	4.1	4.0	4.1	4.0	4.0
G180.0	4.1	4.3	4.1	4.1	4.0	4.1	4.1	4.0

**Light Distribution Data**

Unit: cd

G\C	C180.0	C202.5	C225.0	C247.5	C270.0	C292.5	C315.0	C337.5
G0.0	346.7	346.7	346.7	346.7	346.7	346.7	346.7	346.7
G1.0	347.0	346.9	346.8	346.6	346.5	346.3	346.3	346.2
G2.0	347.2	347.1	346.9	346.5	346.2	345.9	345.8	345.6
G3.0	347.4	347.2	346.9	346.4	346.0	345.4	345.3	345.0
G4.0	347.5	347.2	346.7	346.2	345.5	344.9	344.6	344.3
G5.0	347.4	347.0	346.5	345.8	345.0	344.3	343.7	343.5
G6.0	347.2	346.7	346.2	345.3	344.3	343.5	342.8	342.6
G7.0	346.9	346.4	345.7	344.6	343.6	342.6	341.9	341.6
G8.0	346.5	345.8	345.1	343.9	342.7	341.4	340.7	340.1
G9.0	345.8	345.2	344.4	343.0	341.7	340.3	339.5	338.8
G10.0	345.1	344.5	343.4	342.0	340.4	339.0	338.2	337.4
G11.0	344.3	343.6	342.4	340.9	339.1	337.7	336.4	335.8
G12.0	343.3	342.6	341.3	339.7	337.7	336.2	334.7	334.1
G13.0	342.2	341.3	340.1	338.4	336.2	334.5	333.0	332.3
G14.0	340.9	340.0	338.8	336.6	334.6	332.8	331.1	330.4
G15.0	339.6	338.6	337.3	335.0	332.9	330.5	329.1	327.9
G16.0	337.8	337.0	335.7	333.3	331.0	328.5	327.0	325.7
G17.0	336.1	335.3	333.6	331.5	328.6	326.4	324.8	323.4
G18.0	334.3	333.5	331.7	329.5	326.5	324.2	322.0	321.0
G19.0	332.3	331.1	329.7	327.4	324.4	321.9	319.5	318.5
G20.0	330.3	329.0	327.6	324.9	322.0	319.5	317.0	315.9
G21.0	328.1	326.8	325.4	322.6	319.7	316.4	314.3	312.6
G22.0	325.3	324.4	323.0	320.2	317.1	313.7	311.5	309.7
G23.0	322.8	322.0	320.5	317.6	314.5	311.0	308.7	306.8
G24.0	320.2	319.4	317.5	315.0	311.3	308.1	305.1	303.7
G25.0	317.6	316.7	314.8	312.3	308.4	305.2	302.0	300.6
G26.0	314.7	313.3	312.0	308.9	305.5	302.2	298.9	297.4
G27.0	311.8	310.4	309.1	306.0	302.5	298.5	295.6	294.1
G28.0	308.8	307.3	306.0	302.9	299.4	295.2	292.3	290.0
G29.0	305.0	304.2	302.9	299.9	296.2	291.9	288.9	286.5
G30.0	301.8	301.0	299.1	296.7	292.3	288.6	285.5	283.0
G31.0	298.5	297.6	295.8	293.4	289.0	285.2	281.2	279.4
G32.0	295.0	293.5	292.4	290.0	285.6	281.6	277.5	275.6
G33.0	291.5	289.9	288.9	285.9	282.0	278.0	273.8	271.8
G34.0	287.9	286.3	285.3	282.3	278.5	273.7	270.1	267.3
G35.0	283.4	282.6	281.7	278.7	274.9	269.9	266.3	263.4
G36.0	279.6	278.9	277.2	275.0	270.4	266.1	262.4	259.4
G37.0	275.7	275.0	273.4	271.2	266.7	262.3	257.6	255.4
G38.0	271.8	271.0	269.5	267.4	262.8	258.3	253.6	251.3
G39.0	267.7	266.2	265.5	263.5	258.9	254.4	249.5	247.2

**Light Distribution Data**

Unit: cd

G\C	C180.0	C202.5	C225.0	C247.5	C270.0	C292.5	C315.0	C337.5
G40.0	263.7	262.1	261.6	258.8	255.0	249.6	245.4	243.0
G41.0	258.6	257.9	257.4	254.7	251.0	245.5	241.3	237.9
G42.0	254.4	253.7	253.3	250.6	246.9	241.3	237.1	233.6
G43.0	250.1	249.4	248.2	246.5	242.0	237.2	232.8	229.3
G44.0	245.7	245.1	243.9	242.3	237.8	232.9	227.6	225.0
G45.0	241.3	239.8	239.6	238.1	233.6	228.7	223.3	220.6
G46.0	236.8	235.3	235.1	232.9	229.3	223.5	218.9	216.1
G47.0	232.2	230.8	230.7	228.5	224.9	219.1	214.4	210.8
G48.0	226.6	226.1	226.2	224.1	220.6	214.7	210.0	206.2
G49.0	222.0	221.5	220.7	219.6	216.2	210.2	205.5	201.7
G50.0	217.3	216.8	216.1	215.1	210.9	205.8	200.0	197.1
G51.0	212.5	212.1	211.4	210.6	206.3	201.3	195.5	192.5
G52.0	207.6	206.3	206.7	205.0	201.8	196.7	190.8	187.9
G53.0	202.7	201.5	201.9	200.3	197.2	191.1	186.2	182.3
G54.0	197.8	196.6	197.1	195.7	192.6	186.5	181.6	177.6
G55.0	191.9	191.7	192.3	190.9	187.9	181.9	176.9	172.9
G56.0	186.9	186.8	186.4	186.2	182.3	177.2	172.1	168.1
G57.0	181.8	181.7	181.5	181.3	177.5	172.4	166.4	163.3
G58.0	176.7	176.6	176.5	176.5	172.7	167.6	161.6	158.5
G59.0	171.6	170.6	171.5	170.6	167.9	162.9	156.9	153.7
G60.0	166.4	165.5	166.5	165.7	163.1	157.1	152.1	147.9
G61.0	160.2	160.3	161.5	160.7	158.2	152.2	147.2	143.0
G62.0	154.9	155.1	155.4	155.7	153.4	147.4	142.4	138.1
G63.0	149.7	150.0	150.2	150.8	147.5	142.5	136.5	133.2
G64.0	144.5	144.8	145.2	145.8	142.6	137.7	131.7	128.4
G65.0	139.2	138.5	140.0	139.7	137.7	132.8	126.8	123.5
G66.0	133.9	133.3	134.9	134.7	132.7	126.9	121.9	117.5
G67.0	128.5	128.0	129.7	129.6	127.7	121.9	117.0	112.6
G68.0	122.1	122.7	124.6	124.5	122.7	117.1	112.1	107.8
G69.0	116.9	117.5	118.4	119.5	116.8	112.2	107.3	102.9
G70.0	111.6	112.3	113.3	114.4	111.9	107.4	101.5	98.1
G71.0	106.2	105.9	108.2	109.4	107.0	102.5	96.7	93.3
G72.0	100.9	100.7	103.0	103.4	102.1	97.7	91.9	88.5
G73.0	95.7	95.5	98.0	98.5	97.3	92.0	87.2	82.9
G74.0	89.5	90.4	93.0	93.5	92.5	87.3	82.6	78.2
G75.0	84.4	85.3	87.0	88.7	86.8	82.7	78.0	73.6
G76.0	79.2	80.2	82.1	83.8	82.2	78.1	72.5	69.0
G77.0	74.1	75.2	77.2	79.0	77.6	73.5	68.0	64.5
G78.0	69.1	69.3	72.3	74.4	73.0	69.0	63.5	60.1
G79.0	64.1	64.3	67.6	68.8	68.5	63.5	58.9	54.7

C Plane : 0.0-360.0:22.5

Test Lab : TB

Test Type : Type C

Test By : ZK

Test Distance : 5.751 m

Gamma : 0.0-180.0:1.0

Measurement System : GMS-5000 (E412011U)

Temperature : 25.0°C

Humidity : 65.0%

Review By :TMI

**Light Distribution Data**

Unit: cd

G\C	C180.0	C202.5	C225.0	C247.5	C270.0	C292.5	C315.0	C337.5
G80.0	59.2	59.3	62.7	64.0	63.7	58.7	54.2	50.0
G81.0	53.1	54.2	57.6	59.0	58.8	53.9	49.3	45.2
G82.0	47.9	48.9	51.3	53.9	52.8	48.9	44.5	40.5
G83.0	42.7	43.6	46.0	48.7	47.8	44.0	38.6	35.6
G84.0	37.3	38.2	40.6	43.5	42.6	38.9	33.8	30.8
G85.0	31.9	31.5	34.9	36.7	37.2	32.7	28.8	25.8
G86.0	26.0	25.7	29.3	31.3	31.9	27.7	23.7	19.7
G87.0	19.5	20.5	24.2	26.4	27.1	23.1	19.2	15.1
G88.0	14.7	15.9	19.0	22.1	22.2	19.2	15.3	11.1
G89.0	10.5	12.0	15.2	18.5	19.0	16.3	12.2	8.2
G90.0	6.3	8.4	13.1	17.3	18.7	16.0	11.9	7.9
G91.0	5.7	8.2	12.9	17.0	18.4	15.5	11.2	7.3
G92.0	5.5	8.1	12.7	16.8	18.1	14.8	10.6	6.7
G93.0	5.3	8.1	12.5	16.6	17.8	14.4	10.0	6.1
G94.0	5.1	8.0	12.3	16.3	17.5	14.1	9.6	5.8
G95.0	4.9	7.9	12.1	16.1	17.2	13.9	9.3	5.6
G96.0	4.7	7.9	11.9	15.8	16.9	13.6	9.1	5.6
G97.0	4.6	7.8	11.6	15.5	16.7	13.3	8.9	5.5
G98.0	4.4	7.8	11.5	15.2	16.5	13.0	8.7	5.5
G99.0	4.2	7.7	11.3	15.0	16.2	12.8	8.5	5.5
G100.0	4.1	7.7	11.0	14.7	15.9	12.5	8.3	5.4
G101.0	4.1	7.6	10.8	14.4	15.5	12.2	8.2	5.4
G102.0	4.1	7.6	10.6	14.0	15.2	11.8	8.0	5.4
G103.0	4.1	7.5	10.4	13.7	14.8	11.5	7.8	5.4
G104.0	4.1	7.5	10.2	13.3	14.5	11.1	7.7	5.3
G105.0	4.2	7.5	10.1	12.9	14.1	10.7	7.6	5.3
G106.0	4.2	7.5	9.9	12.5	13.8	10.4	7.5	5.4
G107.0	4.2	7.4	9.8	12.2	13.3	10.2	7.4	5.4
G108.0	4.3	7.4	9.6	11.9	12.9	10.0	7.2	5.4
G109.0	4.3	7.4	9.5	11.7	12.6	9.7	7.1	5.4
G110.0	4.3	7.4	9.3	11.5	12.4	9.6	7.1	5.5
G111.0	4.3	7.4	9.2	11.2	12.1	9.4	7.0	5.5
G112.0	4.3	7.4	9.1	11.1	11.8	9.2	6.9	5.5
G113.0	4.3	7.4	8.9	10.9	11.5	9.1	6.9	5.5
G114.0	4.3	7.3	8.8	10.8	11.2	8.9	6.9	5.6
G115.0	4.3	7.3	8.8	10.6	11.0	8.8	6.9	5.6
G116.0	4.3	7.3	8.8	10.4	10.8	8.6	6.9	5.6
G117.0	4.2	7.3	8.7	10.3	10.6	8.5	6.9	5.6
G118.0	4.2	7.2	8.7	10.1	10.5	8.4	6.9	5.6
G119.0	4.2	7.2	8.6	10.0	10.4	8.3	6.9	5.6

C Plane : 0.0-360.0:22.5

Test Lab : TB

Test Type : Type C

Test By : ZK

Test Distance : 5.751 m

Gamma : 0.0-180.0:1.0

Measurement System : GMS-5000 (E412011U)

Temperature : 25.0°C

Humidity : 65.0%

Review By :TMI

**Light Distribution Data**

Unit: cd

G\C	C180.0	C202.5	C225.0	C247.5	C270.0	C292.5	C315.0	C337.5
G120.0	4.1	7.2	8.6	9.8	10.3	8.3	6.9	5.6
G121.0	4.1	7.2	8.5	9.7	9.2	8.3	6.9	5.6
G122.0	4.0	7.1	8.5	9.7	7.9	8.2	6.9	5.6
G123.0	4.0	7.1	8.5	9.6	7.9	8.2	6.9	5.6
G124.0	4.0	7.0	8.4	9.5	7.9	8.1	6.8	5.6
G125.0	3.7	7.0	8.4	9.4	8.0	8.1	6.8	5.6
G126.0	3.7	6.9	8.3	9.2	8.1	8.0	6.8	5.6
G127.0	3.7	6.9	8.3	9.1	8.1	7.9	6.8	5.5
G128.0	3.9	6.9	8.2	9.0	8.1	7.8	6.8	5.5
G129.0	3.9	6.8	8.1	8.8	8.1	7.8	6.8	5.5
G130.0	3.9	6.7	8.1	8.6	8.1	7.6	6.8	5.5
G131.0	4.0	6.7	8.1	8.5	8.1	7.5	6.8	5.5
G132.0	4.0	6.6	8.0	8.3	8.1	7.4	6.7	5.4
G133.0	4.1	6.6	8.0	8.2	8.1	7.4	6.7	5.4
G134.0	4.2	6.5	7.9	8.0	8.1	7.3	6.7	5.4
G135.0	4.3	6.5	7.8	7.9	8.1	7.2	6.7	5.4
G136.0	4.4	6.4	7.8	7.8	8.1	7.0	6.6	5.4
G137.0	4.4	6.4	7.8	7.8	8.0	6.9	6.5	5.4
G138.0	4.5	6.3	7.7	7.7	8.0	6.8	6.4	5.4
G139.0	4.6	6.3	7.6	7.7	8.0	6.6	6.4	5.5
G140.0	4.7	6.2	7.5	7.6	7.9	6.4	6.3	5.5
G141.0	4.7	6.2	7.4	7.6	7.9	6.3	6.3	5.5
G142.0	4.8	6.2	7.3	7.6	7.8	6.1	6.2	5.6
G143.0	4.9	6.1	7.3	7.5	7.4	5.9	6.1	5.6
G144.0	4.9	6.1	7.2	7.5	7.0	5.9	6.1	5.6
G145.0	5.0	6.0	7.1	7.5	6.6	5.8	6.0	5.6
G146.0	5.0	5.9	7.0	7.4	6.4	5.7	5.9	5.5
G147.0	5.1	5.9	6.9	7.4	6.8	5.7	5.7	5.5
G148.0	5.1	5.9	6.8	7.2	7.2	5.7	5.6	5.5
G149.0	5.1	5.8	6.7	6.9	7.3	5.7	5.5	5.5
G150.0	5.1	5.7	6.6	6.8	7.2	5.7	5.4	5.4
G151.0	5.1	5.6	6.5	6.9	7.0	5.6	5.3	5.3
G152.0	5.1	5.6	6.4	6.9	6.9	5.5	5.3	5.3
G153.0	5.1	5.5	6.3	6.8	6.7	5.5	5.2	5.2
G154.0	5.1	5.5	6.2	6.6	6.6	5.4	5.2	5.2
G155.0	5.1	5.5	6.1	6.5	6.5	5.4	5.1	5.1
G156.0	5.1	5.4	6.0	6.3	6.3	5.3	5.1	5.1
G157.0	5.1	5.3	5.9	6.2	6.2	5.3	5.0	5.0
G158.0	5.1	5.3	5.8	6.1	5.9	5.2	5.0	5.0
G159.0	5.1	5.2	5.7	5.9	5.8	5.2	4.9	4.9

C Plane : 0.0-360.0:22.5

Test Lab : TB

Test Type : Type C

Test By : ZK

Test Distance : 5.751 m

Gamma : 0.0-180.0:1.0

Measurement System : GMS-5000 (E412011U)

Temperature : 25.0°C Humidity : 65.0%

Review By :TMI



**Light Distribution Data**

Unit: cd

G\C	C180.0	C202.5	C225.0	C247.5	C270.0	C292.5	C315.0	C337.5
G160.0	5.0	5.1	5.7	5.8	5.6	5.1	4.9	4.8
G161.0	5.0	5.1	5.6	5.6	5.4	5.0	4.8	4.8
G162.0	5.0	5.0	5.5	5.4	5.3	4.9	4.7	4.7
G163.0	4.9	4.9	5.3	5.3	5.1	4.8	4.7	4.6
G164.0	4.8	4.9	5.2	5.1	5.0	4.7	4.6	4.6
G165.0	4.7	4.8	5.0	5.0	4.8	4.6	4.5	4.5
G166.0	4.6	4.8	4.9	4.8	4.7	4.5	4.4	4.5
G167.0	4.5	4.6	4.7	4.7	4.6	4.4	4.3	4.4
G168.0	4.4	4.5	4.6	4.6	4.5	4.3	4.3	4.3
G169.0	4.4	4.3	4.4	4.4	4.4	4.3	4.2	4.3
G170.0	4.4	4.2	4.3	4.3	4.4	4.2	4.2	4.2
G171.0	4.3	4.1	4.2	4.3	4.3	4.2	4.1	4.2
G172.0	4.2	4.1	4.2	4.2	4.2	4.1	4.1	4.2
G173.0	4.2	4.1	4.2	4.1	4.2	4.1	4.1	4.1
G174.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
G175.0	4.1	4.1	4.1	4.0	4.1	4.1	4.1	4.1
G176.0	4.0	4.1	4.1	4.0	4.1	4.1	4.1	4.0
G177.0	4.0	4.0	4.1	4.0	4.0	4.0	4.1	4.0
G178.0	4.0	4.0	4.0	4.0	4.0	4.1	4.2	4.1
G179.0	4.0	4.0	4.2	4.1	4.0	4.1	4.3	4.1
G180.0	4.0	4.1	4.3	4.1	4.1	4.0	4.1	4.1