

Report No.: 10

Test Time: 2019/7/27 09:29

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: LCL501-32W

Current: 0.252 A

Power Factor: 0.988

Voltage: 120.2 V

Power: 29.91 W

Photometric Results

CIE Class: Semi-Direct

Measurement Flux: 1633.1 lm

Downward Ratio: 86%

Horizontal Diffuse Angle(50%): H159.6

Vertical Diffuse Angle(50%): V159.6

Luminaire Efficacy Rating (LER): 54.65

Max. Intensity: 281.02 cd

S/MH(C0/C180): 1.58

Total Rated Lamp Lumens: 1633.1 lm

Efficiency: 100%

Upward Ratio: 14%

Central Intensity: 264.63 cd

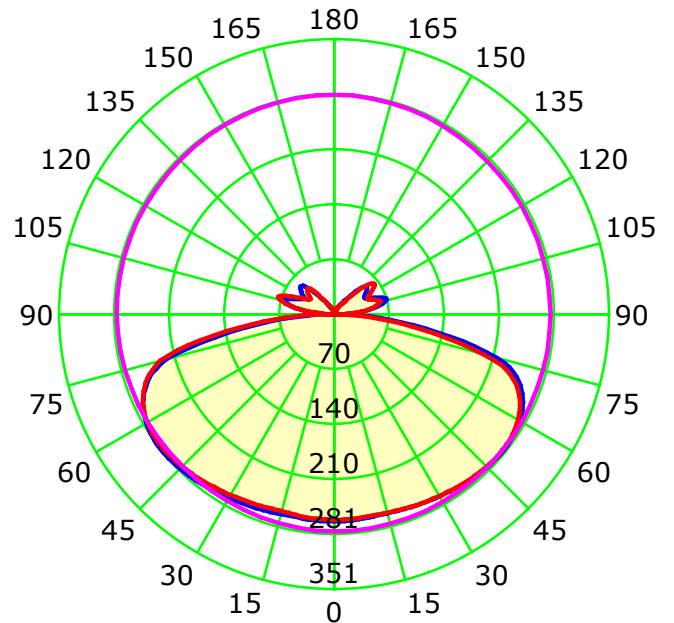
Pos of Max. Intensity: H180 V52

S/MH(C90/C270): 1.58

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

Average Diffuse Angle(50%): 159.5°

— C0-C180 — C90-C270 — G52

C Plane (°):0.0-360.0: 45.0

Test Lab: Inventfine instruments

Test Type: TYPE C

Temperature: 26

Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0

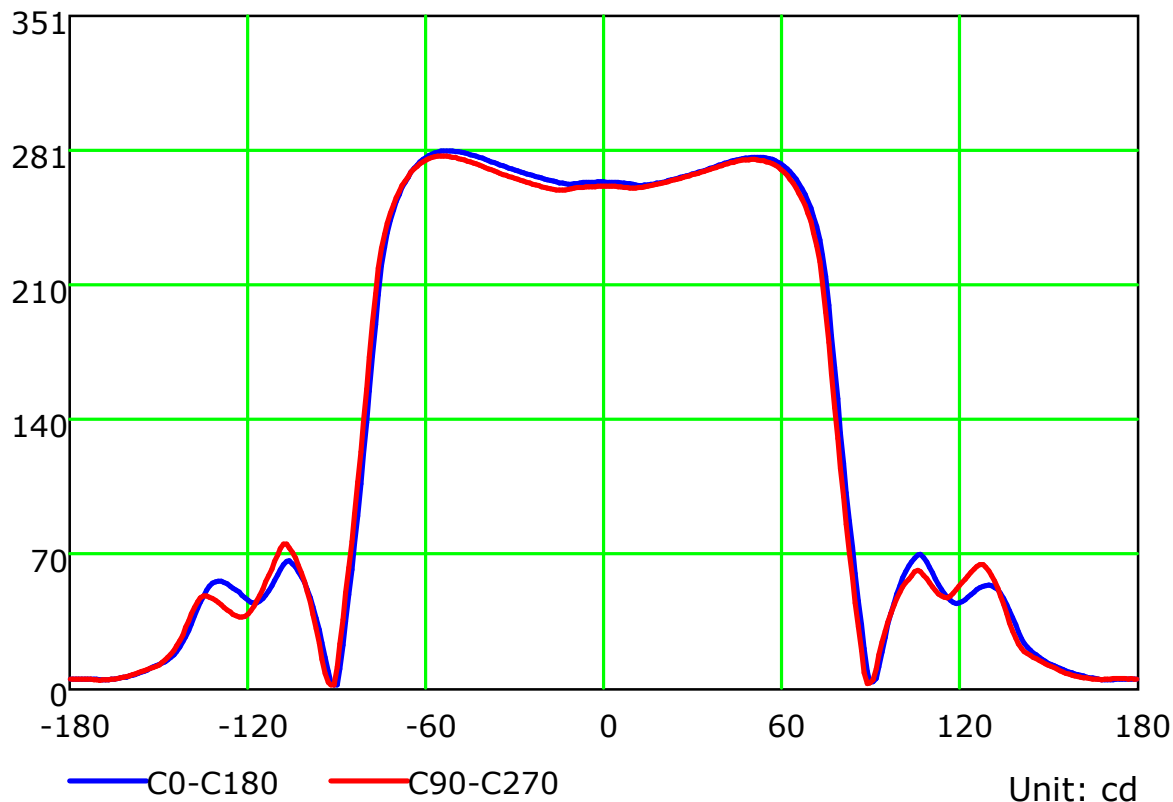
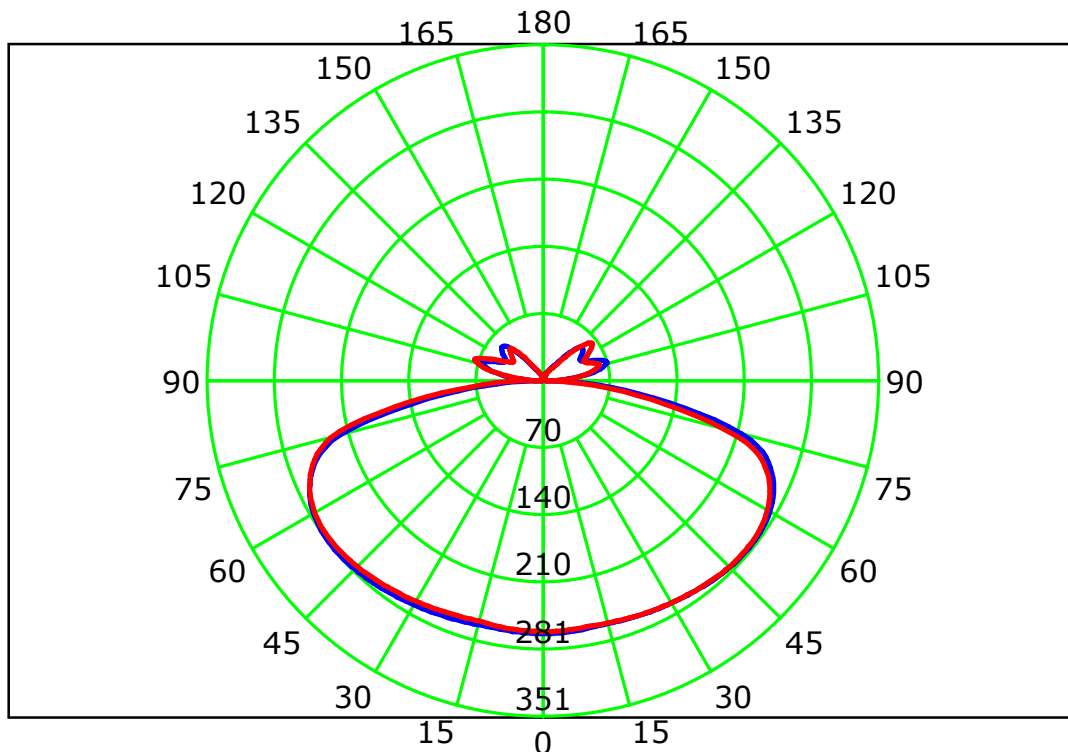
Test Device: GPM-1800B

Distance: 8.509 m

Humidity: 55

Inspector:

Luminous Intensity Distribution Curve



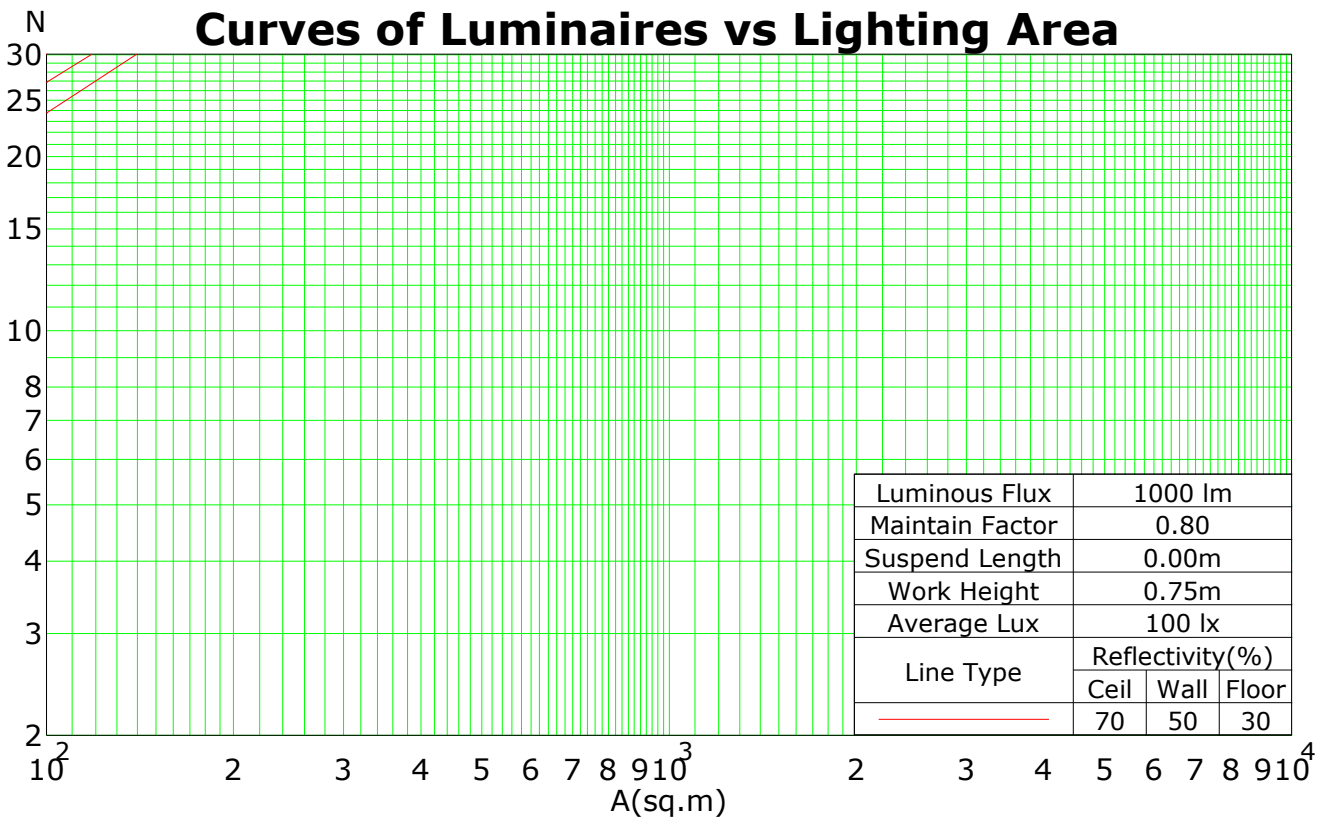
C Plane (°):0.0-360.0: 45.0
Test Lab: Inventfine instruments
Test Type: TYPE C
Temperature: 26
Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 8.509 m
Humidity: 55
Inspector:

Coefficients Of Utilization - Zonal Cavity Method

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	116	116	116	116	111	111	111	111	103	103	103	96	96	96	89	89	89	86
1	103	97	91	86	98	93	88	84	86	82	78	80	76	73	74	71	69	66
2	91	81	73	66	87	78	71	64	72	66	61	67	62	57	62	57	54	51
3	82	69	60	52	78	67	58	51	62	54	48	57	51	46	52	47	43	40
4	74	60	50	43	70	58	49	41	53	46	39	49	43	37	46	40	35	32
5	67	53	43	35	64	51	42	35	47	39	33	43	37	31	40	34	30	27
6	62	47	37	30	59	45	36	29	42	34	28	39	32	27	36	30	25	23
7	57	42	33	26	54	41	32	25	38	30	24	35	28	23	32	26	22	19
8	53	38	29	23	50	37	28	22	34	27	21	32	25	20	30	24	19	17
9	49	35	26	20	47	33	25	19	31	24	19	29	23	18	27	21	17	15
10	46	32	23	18	44	31	23	17	29	22	17	27	20	16	25	19	15	13

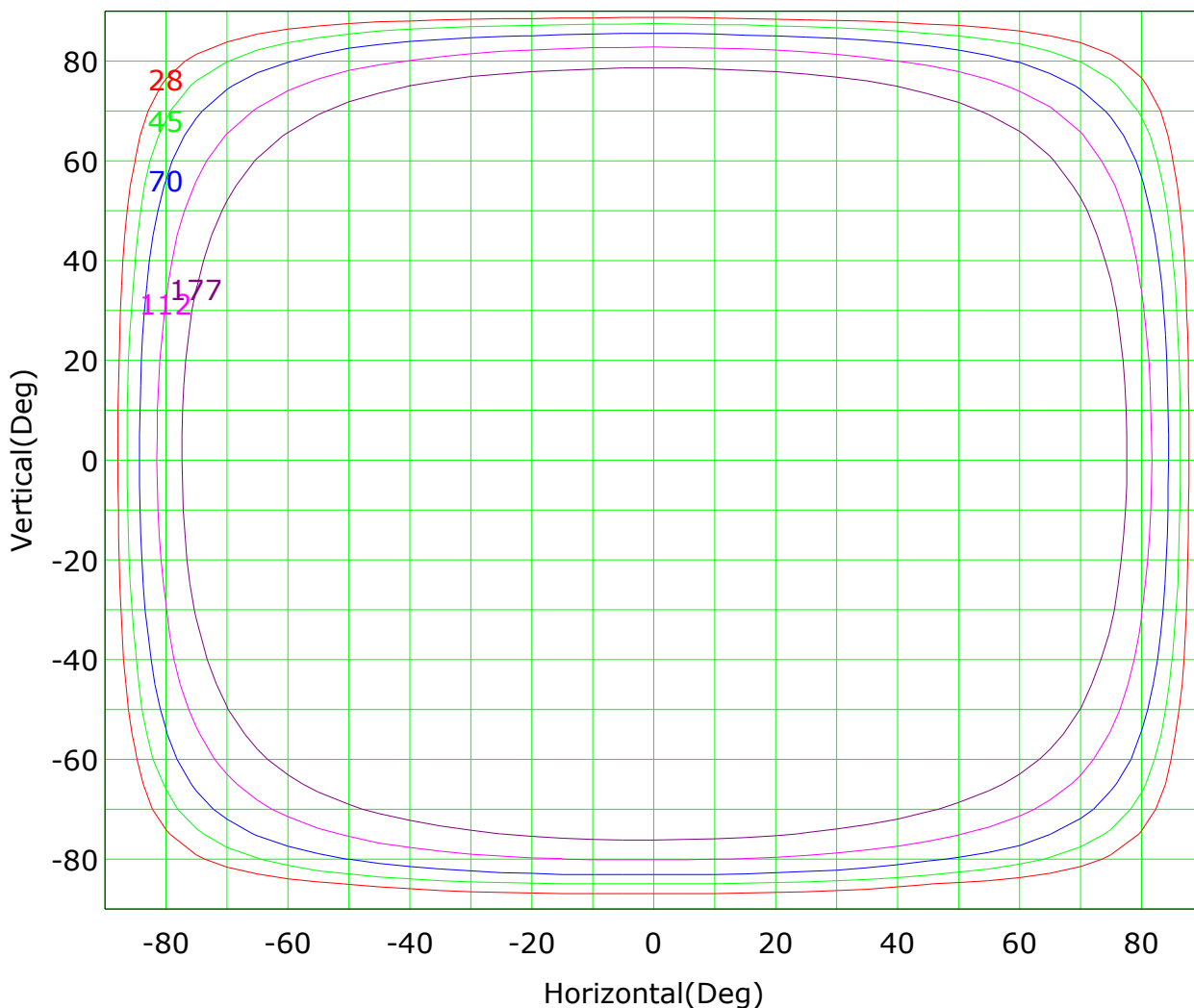
Spacing Criteria (0-180): 1.58
 Spacing Criteria (90-270): 1.58
 Spacing Criteria (Diagonal): 1.79



C Plane (°):0.0-360.0: 45.0
 Test Lab: Inventfine instruments
 Test Type: TYPE C
 Temperature: 26
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Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 8.509 m
 Humidity: 55
 Inspector:

Isocandela (rectangle)



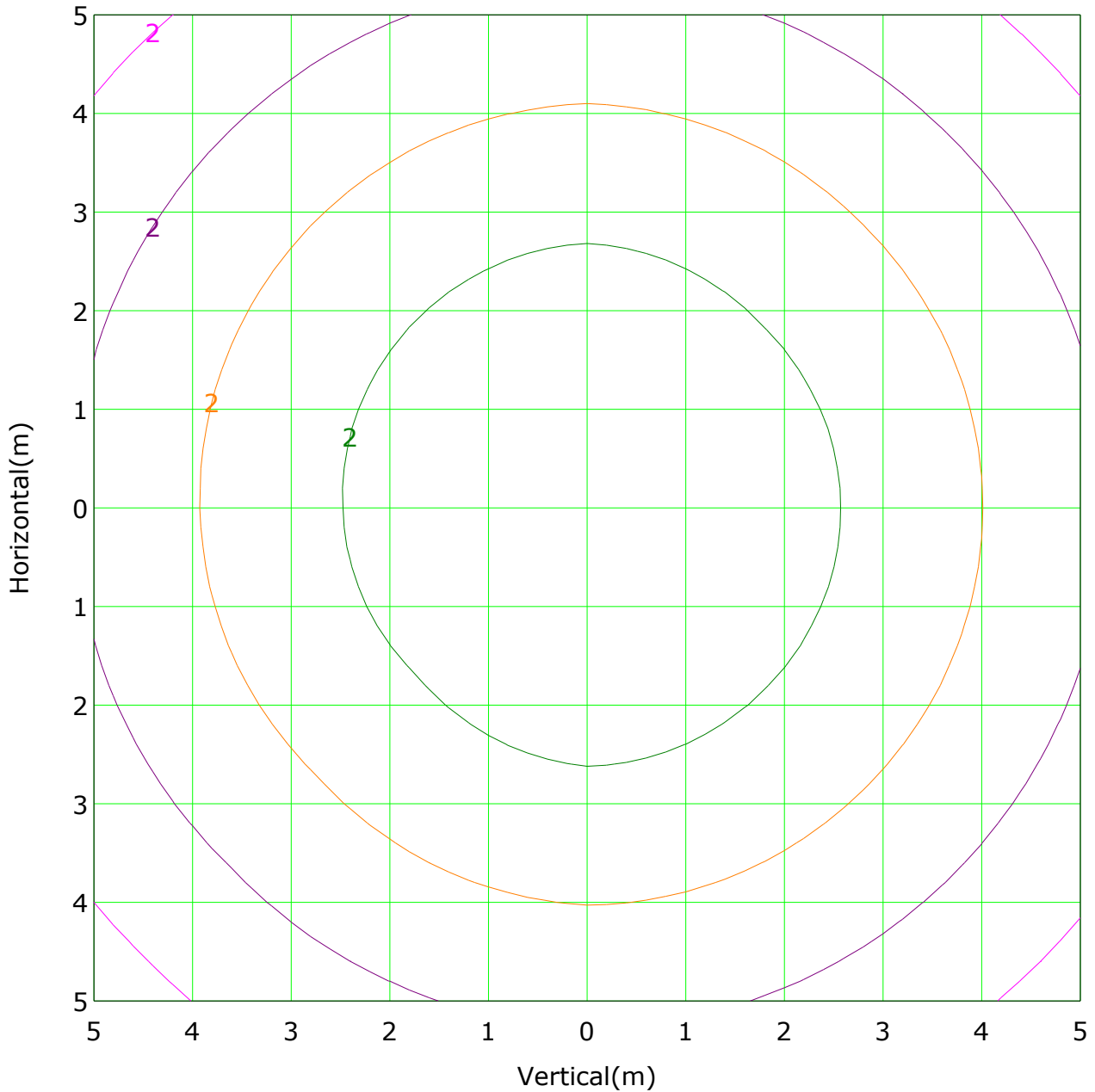
Imax (100%): 281 cd

— (10%): 28 cd	— (16%): 45 cd
— (25%): 70 cd	— (40%): 112 cd
— (63%): 177 cd	— (100%): 281 cd

C Plane (°):0.0-360.0: 45.0
Test Lab: Inventfine instruments
Test Type: TYPE C
Temperature: 26
Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 8.509 m
Humidity: 55
Inspector:

IsoLux Plot



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

(30%): 0.8 lx	(40%): 1.1 lx
(50%): 1.3 lx	(60%): 1.6 lx
(70%): 1.9 lx	(80%): 2.1 lx
(90%): 2.4 lx	(100%): 2.6 lx
(120%): 3.2 lx	(150%): 4.0 lx

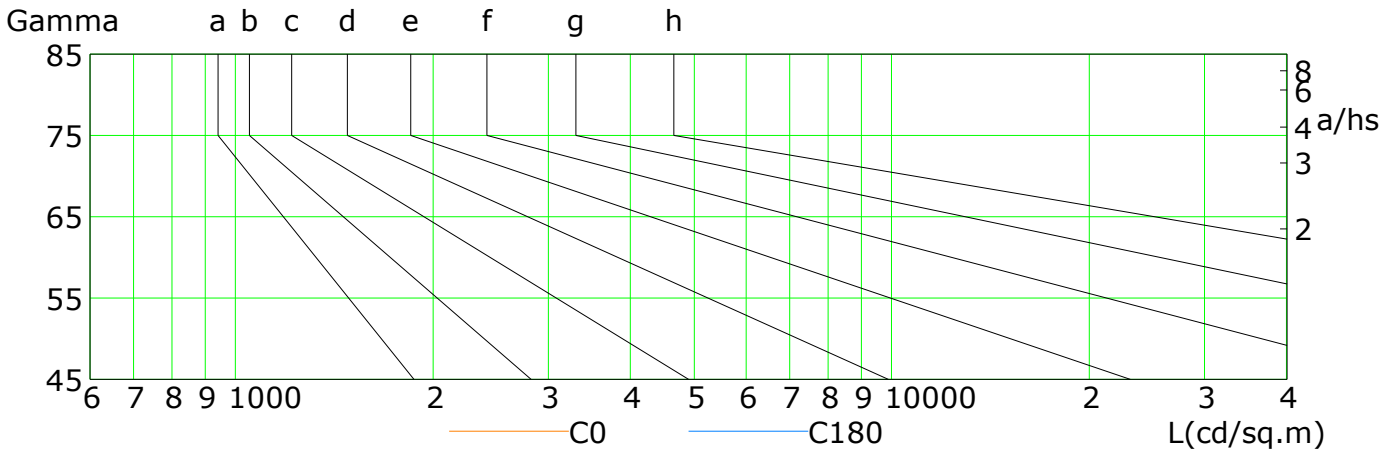
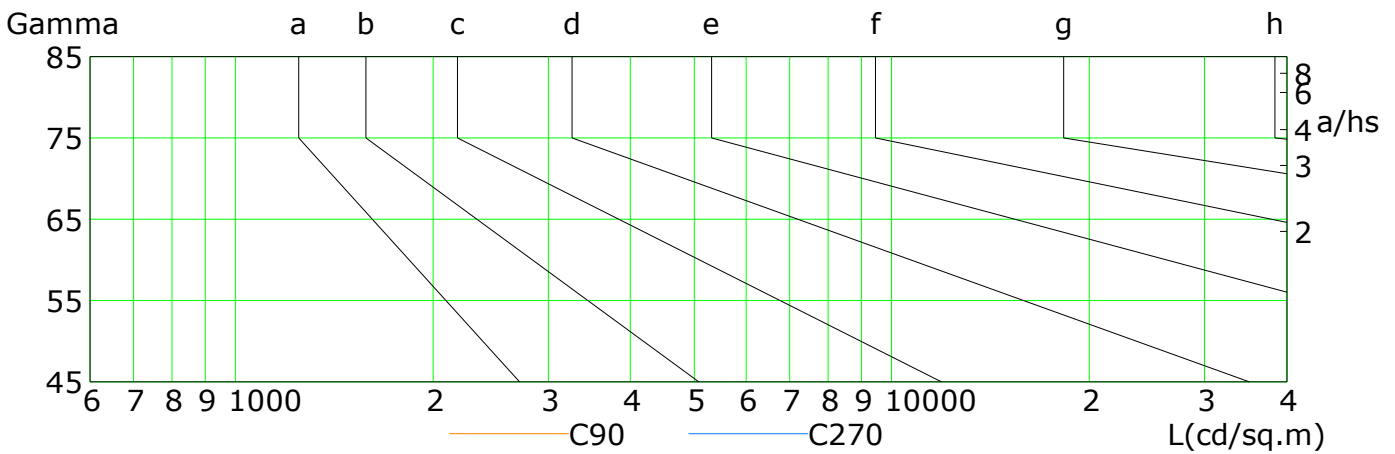
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Distance: 8.509 m
Humidity: 55
Inspector:

Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
		2000	1000	500	<=300				
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

a b c d e f g h

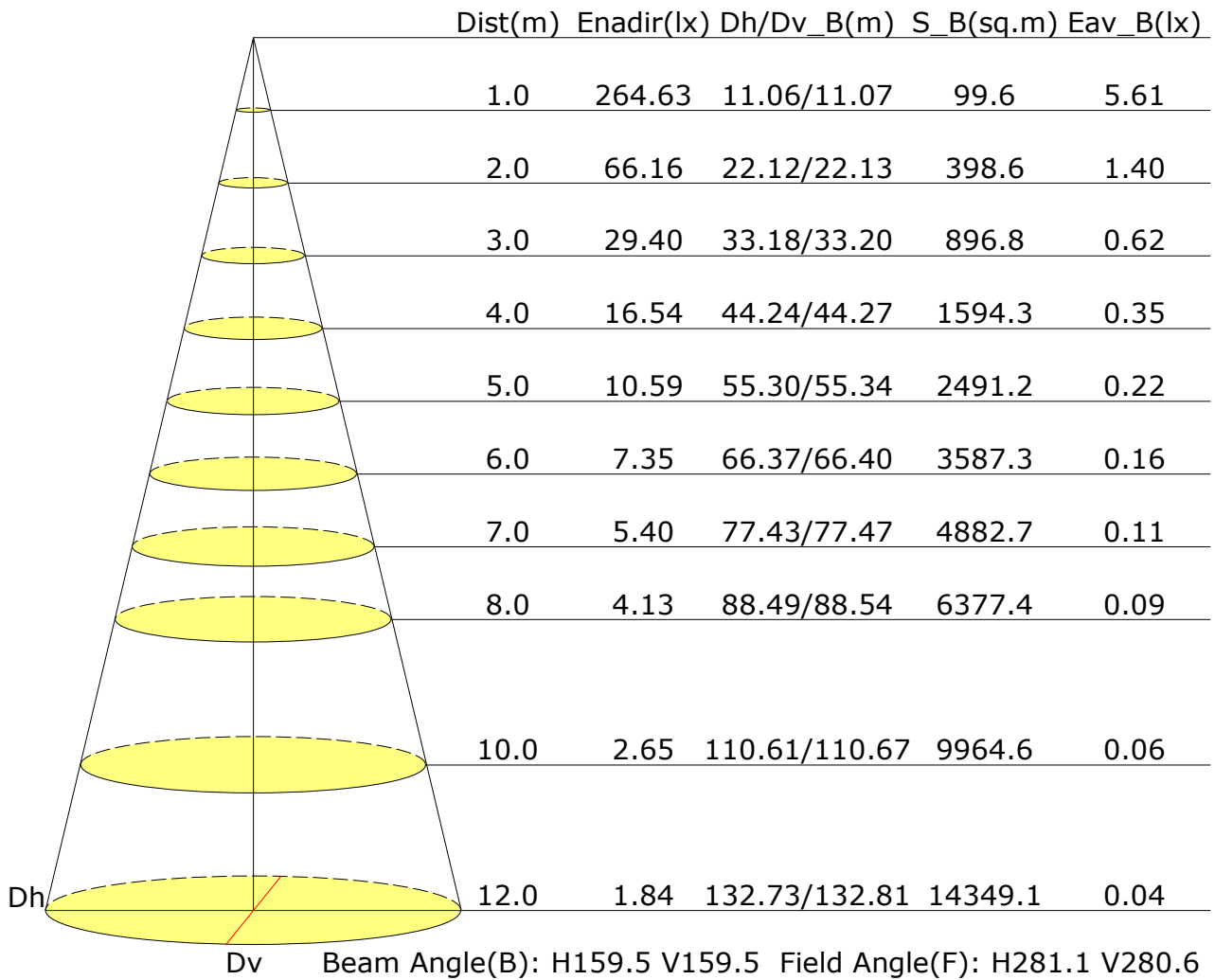


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	276	277	277	274	266	251	215	133	60
C90	275	276	275	271	262	244	196	115	45
C180	279	281	281	278	270	254	221	139	62
C270	275	277	278	276	270	257	230	156	77

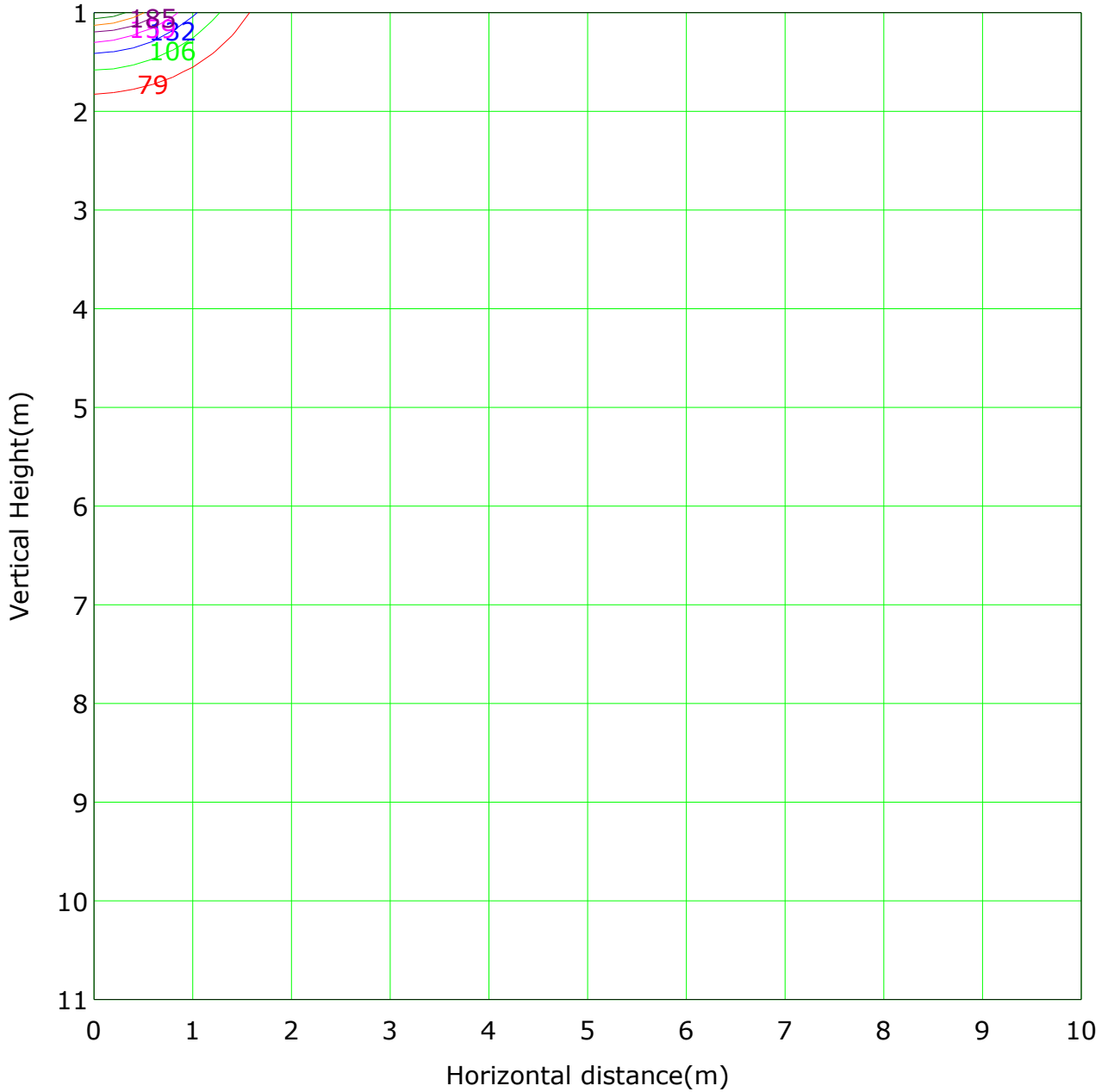
C Plane (°):0.0-360.0: 45.0
Test Lab: Inventfine instruments
Test Type: TYPE C
Temperature: 26
Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 8.509 m
Humidity: 55
Inspector:

Illuminance at a Distance



Vertical IsoLux Plot

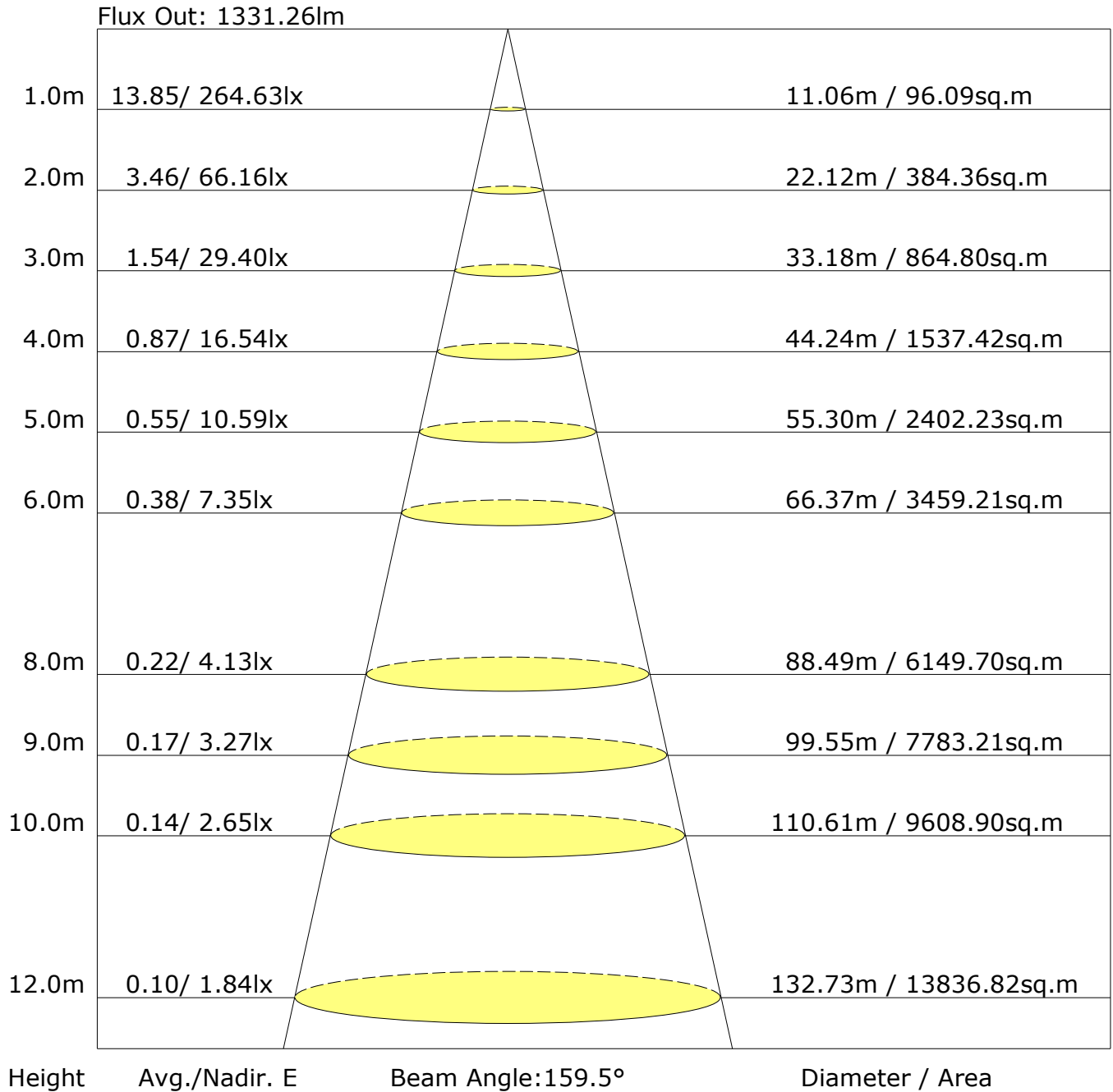


Lowest(m): 1.0m	Highest(m): 11.0m	Max Lux: 264.6 lx
— (30%): 79.4 lx	— (40%): 105.9 lx	
— (50%): 132.3 lx	— (60%): 158.8 lx	
— (70%): 185.2 lx	— (80%): 211.7 lx	
— (90%): 238.2 lx	— (100%): 264.6 lx	
— (120%): 317.6 lx	— (150%): 396.9 lx	

C Plane (°):0.0-360.0: 45.0
Test Lab: Inventfine instruments
Test Type: TYPE C
Temperature: 26
Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 8.509 m
Humidity: 55
Inspector:

The Average Illuminance Effective Figure



C Plane (°):0.0-360.0: 45.0
Test Lab: Inventfine instruments
Test Type: TYPE C
Temperature: 26
Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 8.509 m
Humidity: 55
Inspector:

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	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
3H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
4H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
6H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
8H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
12H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
X=4H Y=2H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
3H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
4H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
6H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
8H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
12H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
X=8H Y=4H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
6H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
8H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
12H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
X=12H Y=4H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
6H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
8H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$
Variations with the observer position at spacings:										
S=1.0H										
S=1.5H										
S=2.0H										

Calculate in accordance with CIE Pub.117. The table is revised with 1633lm ($8\log(F/F_0) = 1.7$).

Zonal Lumen

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	263.0	0.3	0.3	0.02	0.02
1.0-2.0	263.0	0.8	1.0	0.05	0.06
2.0-3.0	262.9	1.3	2.3	0.08	0.14
3.0-4.0	262.9	1.8	4.0	0.11	0.25
4.0-5.0	262.8	2.3	6.3	0.14	0.38
5.0-6.0	262.7	2.8	9.0	0.17	0.55
6.0-7.0	262.6	3.3	12.3	0.20	0.75
7.0-8.0	262.5	3.8	16.1	0.23	0.98
8.0-9.0	262.3	4.3	20.3	0.26	1.24
9.0-10.0	262.1	4.7	25.1	0.29	1.53
10.0-11.0	261.9	5.2	30.3	0.32	1.85
11.0-12.0	261.8	5.7	36.0	0.35	2.21
12.0-13.0	261.8	6.2	42.2	0.38	2.59
13.0-14.0	261.8	6.7	48.9	0.41	3.00
14.0-15.0	262.0	7.2	56.1	0.44	3.44
15.0-16.0	262.2	7.7	63.8	0.47	3.91
16.0-17.0	262.4	8.2	72.0	0.50	4.41
17.0-18.0	262.7	8.7	80.6	0.53	4.94
18.0-19.0	263.1	9.2	89.8	0.56	5.50
19.0-20.0	263.4	9.6	99.4	0.59	6.09
20.0-21.0	263.8	10.1	109.6	0.62	6.71
21.0-22.0	264.2	10.6	120.2	0.65	7.36
22.0-23.0	264.5	11.1	131.3	0.68	8.04
23.0-24.0	265.0	11.6	142.9	0.71	8.75
24.0-25.0	265.4	12.1	154.9	0.74	9.49
25.0-26.0	265.8	12.6	167.5	0.77	10.26
26.0-27.0	266.3	13.0	180.5	0.80	11.05
27.0-28.0	266.8	13.5	194.0	0.83	11.88
28.0-29.0	267.2	14.0	208.0	0.86	12.74
29.0-30.0	267.7	14.5	222.5	0.89	13.62
30.0-31.0	268.2	14.9	237.4	0.91	14.54
31.0-32.0	268.7	15.4	252.8	0.94	15.48
32.0-33.0	269.2	15.9	268.7	0.97	16.45
33.0-34.0	269.7	16.3	285.0	1.00	17.45
34.0-35.0	270.2	16.8	301.8	1.03	18.48
35.0-36.0	270.8	17.2	319.0	1.06	19.53

C Plane (°):0.0-360.0: 45.0
Test Lab: Inventfine instruments
Test Type: TYPE C
Temperature: 26
Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 8.509 m
Humidity: 55
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	271.3	17.7	336.7	1.08	20.62
37.0-38.0	271.9	18.2	354.9	1.11	21.73
38.0-39.0	272.4	18.6	373.5	1.14	22.87
39.0-40.0	273.0	19.0	392.5	1.17	24.03
40.0-41.0	273.6	19.5	412.0	1.19	25.23
41.0-42.0	274.1	19.9	431.9	1.22	26.45
42.0-43.0	274.6	20.3	452.2	1.25	27.69
43.0-44.0	275.1	20.8	473.0	1.27	28.96
44.0-45.0	275.5	21.2	494.2	1.30	30.26
45.0-46.0	275.9	21.6	515.8	1.32	31.58
46.0-47.0	276.3	22.0	537.7	1.35	32.93
47.0-48.0	276.6	22.4	560.1	1.37	34.30
48.0-49.0	276.9	22.7	582.8	1.39	35.69
49.0-50.0	277.1	23.1	606.0	1.41	37.10
50.0-51.0	277.3	23.5	629.4	1.44	38.54
51.0-52.0	277.4	23.8	653.2	1.46	40.00
52.0-53.0	277.5	24.1	677.4	1.48	41.48
53.0-54.0	277.4	24.5	701.8	1.50	42.97
54.0-55.0	277.2	24.8	726.6	1.52	44.49
55.0-56.0	277.0	25.0	751.6	1.53	46.02
56.0-57.0	276.6	25.3	776.9	1.55	47.57
57.0-58.0	276.1	25.5	802.4	1.56	49.14
58.0-59.0	275.5	25.8	828.2	1.58	50.71
59.0-60.0	274.6	25.9	854.1	1.59	52.30
60.0-61.0	273.6	26.1	880.2	1.60	53.90
61.0-62.0	272.4	26.3	906.5	1.61	55.51
62.0-63.0	271.0	26.4	932.9	1.61	57.12
63.0-64.0	269.3	26.4	959.3	1.62	58.74
64.0-65.0	267.3	26.5	985.7	1.62	60.36
65.0-66.0	265.1	26.5	1012.2	1.62	61.98
66.0-67.0	262.5	26.4	1038.6	1.62	63.60
67.0-68.0	259.7	26.3	1064.9	1.61	65.21
68.0-69.0	256.4	26.2	1091.1	1.60	66.81
69.0-70.0	252.7	26.0	1117.0	1.59	68.40
70.0-71.0	248.5	25.7	1142.7	1.57	69.97
71.0-72.0	243.6	25.3	1168.0	1.55	71.52

C Plane (°):0.0-360.0: 45.0
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Temperature: 26
Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 8.509 m
Humidity: 55
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	237.6	24.8	1192.9	1.52	73.05
73.0-74.0	230.0	24.2	1217.1	1.48	74.53
74.0-75.0	220.4	23.3	1240.4	1.43	75.95
75.0-76.0	208.1	22.1	1262.5	1.35	77.31
76.0-77.0	193.5	20.6	1283.1	1.26	78.57
77.0-78.0	177.7	19.0	1302.1	1.16	79.73
78.0-79.0	161.0	17.3	1319.4	1.06	80.79
79.0-80.0	144.2	15.6	1335.0	0.95	81.75
80.0-81.0	127.9	13.8	1348.8	0.85	82.59
81.0-82.0	112.0	12.1	1361.0	0.74	83.34
82.0-83.0	96.5	10.5	1371.5	0.64	83.98
83.0-84.0	81.6	8.9	1380.3	0.54	84.52
84.0-85.0	67.5	7.4	1387.7	0.45	84.97
85.0-86.0	53.8	5.9	1393.6	0.36	85.33
86.0-87.0	40.8	4.5	1398.1	0.27	85.61
87.0-88.0	28.1	3.1	1401.1	0.19	85.80
88.0-89.0	16.5	1.8	1402.9	0.11	85.91
89.0-90.0	7.9	0.9	1403.8	0.05	85.96
90.0-91.0	3.8	0.4	1404.2	0.03	85.99
91.0-92.0	4.2	0.5	1404.7	0.03	86.01
92.0-93.0	7.7	0.8	1405.5	0.05	86.07
93.0-94.0	12.8	1.4	1406.9	0.09	86.15
94.0-95.0	18.6	2.0	1409.0	0.12	86.28
95.0-96.0	24.1	2.6	1411.6	0.16	86.44
96.0-97.0	29.1	3.2	1414.8	0.19	86.63
97.0-98.0	33.9	3.7	1418.5	0.23	86.86
98.0-99.0	38.4	4.2	1422.6	0.26	87.11
99.0-100.0	42.8	4.6	1427.3	0.28	87.40
100.0-101.0	46.9	5.1	1432.3	0.31	87.71
101.0-102.0	50.8	5.5	1437.8	0.33	88.04
102.0-103.0	54.4	5.8	1443.6	0.36	88.40
103.0-104.0	57.8	6.2	1449.8	0.38	88.77
104.0-105.0	60.9	6.5	1456.2	0.40	89.17
105.0-106.0	63.6	6.7	1463.0	0.41	89.58
106.0-107.0	65.0	6.8	1469.8	0.42	90.00
107.0-108.0	64.8	6.8	1476.6	0.42	90.42

C Plane (°):0.0-360.0: 45.0
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Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 8.509 m
Humidity: 55
Inspector:

Zonal Lumen (Continue 3)

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
108.0-109.0	63.3	6.6	1483.2	0.40	90.82
109.0-110.0	61.1	6.3	1489.5	0.39	91.21
110.0-111.0	58.8	6.0	1495.5	0.37	91.58
111.0-112.0	56.8	5.8	1501.3	0.36	91.93
112.0-113.0	55.3	5.6	1506.9	0.34	92.27
113.0-114.0	54.3	5.5	1512.4	0.33	92.61
114.0-115.0	53.7	5.4	1517.7	0.33	92.94
115.0-116.0	53.3	5.3	1523.0	0.32	93.26
116.0-117.0	53.1	5.2	1528.2	0.32	93.58
117.0-118.0	52.9	5.1	1533.4	0.32	93.89
118.0-119.0	52.8	5.1	1538.4	0.31	94.20
119.0-120.0	52.6	5.0	1543.5	0.31	94.51
120.0-121.0	52.4	5.0	1548.4	0.30	94.82
121.0-122.0	52.2	4.9	1553.3	0.30	95.11
122.0-123.0	51.9	4.8	1558.1	0.29	95.41
123.0-124.0	51.5	4.7	1562.8	0.29	95.70
124.0-125.0	51.0	4.6	1567.4	0.28	95.98
125.0-126.0	50.6	4.5	1571.9	0.28	96.25
126.0-127.0	50.0	4.4	1576.3	0.27	96.52
127.0-128.0	49.2	4.3	1580.6	0.26	96.79
128.0-129.0	48.3	4.1	1584.8	0.25	97.04
129.0-130.0	47.1	4.0	1588.8	0.24	97.28
130.0-131.0	45.9	3.8	1592.6	0.23	97.52
131.0-132.0	44.4	3.6	1596.2	0.22	97.74
132.0-133.0	42.8	3.5	1599.7	0.21	97.95
133.0-134.0	40.9	3.3	1602.9	0.20	98.15
134.0-135.0	38.7	3.0	1606.0	0.19	98.34
135.0-136.0	36.1	2.8	1608.7	0.17	98.51
136.0-137.0	33.2	2.5	1611.2	0.15	98.66
137.0-138.0	30.3	2.2	1613.5	0.14	98.80
138.0-139.0	27.4	2.0	1615.5	0.12	98.92
139.0-140.0	24.7	1.8	1617.2	0.11	99.03
140.0-141.0	22.3	1.6	1618.8	0.10	99.12
141.0-142.0	20.2	1.4	1620.2	0.08	99.21
142.0-143.0	18.5	1.2	1621.4	0.08	99.28
143.0-144.0	17.0	1.1	1622.5	0.07	99.35

C Plane (°):0.0-360.0: 45.0
Test Lab: Inventfine instruments
Test Type: TYPE C
Temperature: 26
Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 8.509 m
Humidity: 55
Inspector:

Zonal Lumen (Continue 4)

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
144.0-145.0	15.6	1.0	1623.5	0.06	99.41
145.0-146.0	14.5	0.9	1624.4	0.06	99.47
146.0-147.0	13.5	0.8	1625.2	0.05	99.52
147.0-148.0	12.6	0.7	1626.0	0.05	99.56
148.0-149.0	11.9	0.7	1626.7	0.04	99.61
149.0-150.0	11.2	0.6	1627.3	0.04	99.64
150.0-151.0	10.5	0.6	1627.8	0.03	99.68
151.0-152.0	10.0	0.5	1628.4	0.03	99.71
152.0-153.0	9.5	0.5	1628.8	0.03	99.74
153.0-154.0	8.9	0.4	1629.3	0.03	99.77
154.0-155.0	8.4	0.4	1629.7	0.02	99.79
155.0-156.0	7.9	0.4	1630.0	0.02	99.81
156.0-157.0	7.5	0.3	1630.4	0.02	99.83
157.0-158.0	7.0	0.3	1630.7	0.02	99.85
158.0-159.0	6.7	0.3	1630.9	0.02	99.87
159.0-160.0	6.3	0.2	1631.2	0.01	99.88
160.0-161.0	6.0	0.2	1631.4	0.01	99.90
161.0-162.0	5.7	0.2	1631.6	0.01	99.91
162.0-163.0	5.5	0.2	1631.8	0.01	99.92
163.0-164.0	5.2	0.2	1631.9	0.01	99.93
164.0-165.0	5.1	0.1	1632.1	0.01	99.94
165.0-166.0	4.9	0.1	1632.2	0.01	99.95
166.0-167.0	4.7	0.1	1632.3	0.01	99.95
167.0-168.0	4.6	0.1	1632.4	0.01	99.96
168.0-169.0	4.6	0.1	1632.5	0.01	99.97
169.0-170.0	4.5	0.1	1632.6	0.01	99.97
170.0-171.0	4.6	0.1	1632.7	0.01	99.98
171.0-172.0	4.7	0.1	1632.8	0.00	99.98
172.0-173.0	4.8	0.1	1632.9	0.00	99.99
173.0-174.0	4.9	0.1	1632.9	0.00	99.99
174.0-175.0	4.9	0.1	1633.0	0.00	99.99
175.0-176.0	4.9	0.0	1633.0	0.00	100.00
176.0-177.0	4.9	0.0	1633.1	0.00	100.00
177.0-178.0	4.9	0.0	1633.1	0.00	100.00
178.0-179.0	4.9	0.0	1633.1	0.00	100.00
179.0-180.0	4.9	0.0	1633.1	0.00	100.00

C Plane (°):0.0-360.0: 45.0
Test Lab: Inventfine instruments
Test Type: TYPE C
Temperature: 26
Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 8.509 m
Humidity: 55
Inspector:

Candlepower Table

Unit: cd

G\C	C0.0	C45.0	C90.0	C135.0	C180.0	C225.0	C270.0	C315.0	C360.0	
G0.0	264.6	263.2	262.5	261.7	264.6	263.2	262.5	261.7	264.6	
G1.0	264.6	263.2	262.5	261.8	264.7	263.2	262.4	261.6	264.6	
G2.0	264.6	263.2	262.4	261.8	264.6	263.2	262.3	261.6	264.6	
G3.0	264.5	263.1	262.4	261.8	264.6	263.2	262.3	261.6	264.5	
G4.0	264.4	263.0	262.3	261.7	264.6	263.1	262.2	261.5	264.4	
G5.0	264.4	263.0	262.3	261.6	264.5	263.0	262.1	261.3	264.4	
G6.0	264.3	262.9	262.1	261.5	264.4	262.9	262.1	261.2	264.3	
G7.0	264.1	262.6	261.9	261.5	264.3	262.9	261.9	261.1	264.1	
G8.0	263.9	262.5	261.7	261.3	264.1	262.7	261.8	260.9	263.9	
G9.0	263.6	262.2	261.6	261.2	263.9	262.4	261.6	260.7	263.6	
G10.0	263.3	261.9	261.5	261.2	263.7	262.3	261.5	260.5	263.3	
G11.0	263.0	261.8	261.5	261.3	263.6	262.0	261.1	260.1	263.0	
G12.0	262.9	261.9	261.7	261.5	263.6	261.9	260.8	259.8	262.9	
G13.0	262.9	262.0	261.9	261.7	263.7	261.9	260.5	259.5	262.9	
G14.0	263.0	262.2	262.1	261.9	264.0	262.0	260.4	259.4	263.0	
G15.0	263.2	262.4	262.4	262.2	264.3	262.1	260.4	259.4	263.2	
G16.0	263.4	262.6	262.7	262.5	264.7	262.4	260.6	259.5	263.4	
G17.0	263.6	262.9	263.1	262.8	265.1	262.7	260.8	259.6	263.6	
G18.0	264.0	263.2	263.4	263.1	265.4	263.0	261.1	259.9	264.0	
G19.0	264.2	263.5	263.8	263.5	265.8	263.3	261.4	260.1	264.2	
G20.0	264.5	264.0	264.1	264.0	266.2	263.7	261.8	260.3	264.5	
G21.0	264.9	264.3	264.6	264.4	266.6	264.1	262.2	260.7	264.9	
G22.0	265.3	264.7	265.0	264.8	267.0	264.5	262.6	261.0	265.3	
G23.0	265.7	265.0	265.4	265.1	267.5	264.9	263.0	261.3	265.7	
G24.0	266.1	265.5	265.7	265.6	268.0	265.4	263.5	261.7	266.1	
G25.0	266.5	265.9	266.2	266.1	268.4	265.9	264.0	262.1	266.5	
G26.0	267.0	266.3	266.6	266.5	268.9	266.3	264.4	262.5	267.0	
G27.0	267.4	266.7	267.0	267.0	269.4	266.9	265.0	263.0	267.4	
G28.0	267.8	267.2	267.3	267.5	269.9	267.4	265.4	263.4	267.8	
G29.0	268.2	267.7	268.0	267.9	270.4	267.9	266.0	263.8	268.2	
G30.0	268.7	268.2	268.4	268.4	270.9	268.4	266.5	264.3	268.7	
G31.0	269.2	268.6	268.9	268.9	271.4	269.0	267.0	264.7	269.2	
G32.0	269.6	269.1	269.3	269.4	271.8	269.6	267.6	265.2	269.6	
G33.0	270.1	269.5	269.8	269.9	272.5	270.1	268.1	265.7	270.1	
G34.0	270.5	270.1	270.3	270.4	273.0	270.6	268.6	266.2	270.5	
G35.0	271.1	270.6	270.8	270.9	273.5	271.2	269.2	266.7	271.1	
G36.0	271.6	271.1	271.3	271.4	274.0	271.8	269.7	267.2	271.6	

C Plane (°):0.0-360.0: 45.0
Test Lab: Inventfine instruments
Test Type: TYPE C
Temperature: 26
Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 8.509 m
Humidity: 55
Inspector:

Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C45.0	C90.0	C135.0	C180.0	C225.0	C270.0	C315.0	C360.0	
G37.0	272.3	271.7	271.8	272.0	274.7	272.4	270.4	267.7	272.3	
G38.0	272.8	272.2	272.3	272.4	275.3	273.0	271.0	268.3	272.8	
G39.0	273.4	272.7	272.8	272.8	275.9	273.7	271.6	269.0	273.4	
G40.0	274.0	273.2	273.3	273.4	276.5	274.3	272.2	269.5	274.0	
G41.0	274.5	273.7	273.8	273.8	277.0	274.9	272.8	270.1	274.5	
G42.0	274.9	274.2	274.3	274.3	277.6	275.5	273.4	270.7	274.9	
G43.0	275.4	274.6	274.7	274.7	278.1	276.0	274.0	271.3	275.4	
G44.0	275.8	275.0	275.0	275.2	278.6	276.5	274.6	271.8	275.8	
G45.0	276.2	275.4	275.4	275.5	279.0	277.0	275.1	272.3	276.2	
G46.0	276.5	275.7	275.7	275.9	279.4	277.4	275.5	272.6	276.5	
G47.0	276.8	276.1	276.0	276.2	279.8	277.8	276.1	273.0	276.8	
G48.0	277.1	276.2	276.2	276.4	280.1	278.2	276.5	273.3	277.1	
G49.0	277.2	276.4	276.3	276.6	280.4	278.6	276.9	273.6	277.2	
G50.0	277.4	276.5	276.4	276.7	280.7	278.8	277.4	273.9	277.4	
G51.0	277.5	276.5	276.4	276.7	280.9	279.2	277.6	274.2	277.5	
G52.0	277.6	276.5	276.3	276.7	281.0	279.4	277.9	274.3	277.6	
G53.0	277.6	276.4	275.9	276.5	281.0	279.5	278.1	274.5	277.6	
G54.0	277.5	276.2	275.7	276.3	280.9	279.5	278.1	274.5	277.5	
G55.0	277.1	275.9	275.3	275.9	280.7	279.6	278.2	274.6	277.1	
G56.0	276.8	275.5	274.8	275.4	280.3	279.4	278.0	274.4	276.8	
G57.0	276.3	275.0	274.2	274.8	279.8	279.2	277.8	274.2	276.3	
G58.0	275.7	274.2	273.4	274.1	279.3	278.7	277.4	273.8	275.7	
G59.0	275.0	273.4	272.4	273.1	278.5	278.2	276.8	273.4	275.0	
G60.0	274.0	272.4	271.0	272.0	277.5	277.4	276.1	272.7	274.0	
G61.0	272.9	271.1	269.7	270.7	276.4	276.4	275.2	271.9	272.9	
G62.0	271.6	269.6	268.1	269.1	275.1	275.4	274.2	270.9	271.6	
G63.0	270.1	268.0	266.3	267.1	273.5	274.1	272.9	269.7	270.1	
G64.0	268.0	265.9	264.2	264.8	271.7	272.7	271.3	268.3	268.0	
G65.0	266.0	263.5	261.6	262.3	269.7	271.0	269.7	266.8	266.0	
G66.0	263.8	260.6	258.9	259.3	267.1	268.8	267.5	264.8	263.8	
G67.0	261.2	257.5	255.9	256.2	264.6	266.4	265.3	262.6	261.2	
G68.0	258.0	254.1	252.5	252.7	261.6	263.6	262.8	260.0	258.0	
G69.0	254.8	250.5	248.5	249.0	258.1	260.1	259.7	256.6	254.8	
G70.0	251.0	246.3	243.9	244.2	254.3	256.7	256.5	253.2	251.0	
G71.0	246.5	241.4	238.0	238.8	249.9	253.0	252.8	249.4	246.5	
G72.0	241.3	235.4	231.4	232.6	244.8	248.6	248.6	245.2	241.3	
G73.0	234.4	227.1	223.0	224.8	238.1	243.1	243.1	239.8	234.4	

C Plane (°):0.0-360.0: 45.0
 Test Lab: Inventfine instruments
 Test Type: TYPE C
 Temperature: 26
 Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 8.509 m
 Humidity: 55
 Inspector:

Candlepower Table (Continue 2)

Unit: cd

G\C	C0.0	C45.0	C90.0	C135.0	C180.0	C225.0	C270.0	C315.0	C360.0	
G74.0	226.3	216.9	211.4	214.2	230.6	236.8	237.3	234.0	226.3	
G75.0	215.2	202.8	196.5	198.3	220.8	228.9	230.1	226.7	215.2	
G76.0	200.4	187.4	180.8	182.6	205.7	216.8	219.7	216.4	200.4	
G77.0	184.3	171.1	164.5	166.4	190.1	201.6	206.2	202.8	184.3	
G78.0	167.9	154.8	146.7	150.2	173.9	185.7	191.2	185.9	167.9	
G79.0	151.3	138.6	130.7	134.2	155.5	167.1	173.1	169.5	151.3	
G80.0	133.3	122.7	115.1	118.4	138.8	150.2	156.4	152.8	133.3	
G81.0	117.5	106.2	100.2	102.0	122.7	133.6	139.7	136.3	117.5	
G82.0	102.3	91.6	85.8	87.6	106.8	117.3	123.4	118.6	102.3	
G83.0	87.6	77.6	70.7	73.8	90.3	100.1	107.8	103.2	87.6	
G84.0	73.6	64.2	57.6	59.3	75.8	85.2	91.2	88.3	73.6	
G85.0	60.0	49.9	44.7	46.5	62.1	71.0	76.8	72.9	60.0	
G86.0	45.8	37.5	32.3	34.2	48.9	56.1	63.1	59.5	45.8	
G87.0	33.2	25.2	20.1	21.9	34.9	43.0	49.9	46.5	33.2	
G88.0	20.9	13.0	8.2	9.9	22.5	30.4	35.9	34.0	20.9	
G89.0	8.7	3.1	2.7	3.2	10.2	17.7	23.4	20.6	8.7	
G90.0	3.2	2.7	2.9	3.0	1.9	4.3	11.1	8.4	3.2	
G91.0	3.5	3.8	4.5	4.4	1.9	1.8	2.0	2.0	3.5	
G92.0	5.1	8.5	10.4	10.5	3.1	2.3	2.0	2.0	5.1	
G93.0	11.3	15.1	17.5	15.6	8.8	4.8	3.0	3.5	11.3	
G94.0	18.9	18.1	24.2	18.6	16.3	11.5	7.8	10.1	18.9	
G95.0	26.6	21.2	29.9	21.8	24.0	17.0	15.2	16.6	26.6	
G96.0	33.7	24.0	34.7	25.2	30.6	21.3	23.5	20.8	33.7	
G97.0	39.3	26.3	39.4	28.3	36.6	26.1	31.3	25.0	39.3	
G98.0	44.6	29.5	43.5	31.8	42.5	30.0	38.8	28.8	44.6	
G99.0	49.5	33.8	47.2	35.8	47.3	33.9	45.1	32.6	49.5	
G100.0	53.8	38.2	50.4	40.1	51.5	37.6	50.7	36.4	53.8	
G101.0	57.8	42.5	53.0	44.3	55.5	42.1	55.7	40.3	57.8	
G102.0	61.0	46.6	55.2	48.6	58.5	46.2	60.5	44.9	61.0	
G103.0	63.9	50.5	57.1	52.5	61.0	50.4	64.6	49.2	63.9	
G104.0	66.2	54.6	58.8	56.2	63.3	54.9	67.9	53.4	66.2	
G105.0	68.1	58.9	60.9	59.7	65.0	58.8	71.1	57.3	68.1	
G106.0	69.8	60.9	61.8	60.6	66.8	62.6	73.5	61.7	69.8	
G107.0	69.9	60.2	60.9	59.3	66.6	65.2	75.4	65.1	69.9	
G108.0	68.5	59.1	59.2	57.1	64.6	65.0	75.5	65.4	68.5	
G109.0	66.1	57.0	57.4	54.9	62.1	63.3	73.1	64.1	66.1	
G110.0	63.3	55.3	55.3	53.6	59.3	60.8	69.9	61.8	63.3	

C Plane (°):0.0-360.0: 45.0
Test Lab: Inventfine instruments
Test Type: TYPE C
Temperature: 26
Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 8.509 m
Humidity: 55
Inspector:

Candlepower Table (Continue 3)

Unit: cd

G\C	C0.0	C45.0	C90.0	C135.0	C180.0	C225.0	C270.0	C315.0	C360.0	
G111.0	60.4	54.9	53.2	53.5	56.4	58.0	66.4	59.1	60.4	
G112.0	57.3	55.4	51.4	54.3	53.7	56.0	62.5	56.7	57.3	
G113.0	54.4	56.7	49.4	56.3	51.1	55.0	59.1	55.2	54.4	
G114.0	51.8	58.7	48.2	58.5	48.8	54.9	55.6	55.0	51.8	
G115.0	49.6	60.4	47.5	60.2	46.9	55.6	52.1	55.4	49.6	
G116.0	47.7	61.6	47.5	60.9	45.5	56.9	48.7	56.3	47.7	
G117.0	46.1	62.0	48.2	61.0	44.7	58.3	45.6	58.0	46.1	
G118.0	44.9	61.6	49.6	60.4	44.6	59.6	42.9	59.2	44.9	
G119.0	44.4	60.7	51.5	59.2	45.1	60.2	40.6	60.1	44.4	
G120.0	44.6	59.4	53.5	57.9	46.1	60.0	38.9	60.2	44.6	
G121.0	45.4	57.8	55.3	55.9	47.3	59.3	37.7	59.8	45.4	
G122.0	46.4	55.9	57.1	53.8	48.8	58.2	37.2	58.8	46.4	
G123.0	47.6	53.7	58.9	51.4	50.4	56.7	37.4	57.5	47.6	
G124.0	49.0	51.6	60.6	49.0	51.2	55.0	37.9	55.5	49.0	
G125.0	50.4	49.5	62.3	46.5	52.4	52.7	38.8	53.8	50.4	
G126.0	51.8	47.8	63.7	43.9	53.5	50.2	39.9	52.0	51.8	
G127.0	52.5	45.8	64.7	41.5	54.5	47.4	41.0	49.7	52.5	
G128.0	53.2	43.7	64.7	39.0	55.5	44.6	42.3	47.4	53.2	
G129.0	53.7	41.6	63.4	37.0	56.2	41.4	43.7	45.1	53.7	
G130.0	53.9	39.1	61.5	35.2	56.1	38.6	45.0	42.8	53.9	
G131.0	53.6	36.8	59.0	33.5	55.7	36.2	46.1	40.4	53.6	
G132.0	52.7	34.4	56.0	31.9	55.0	34.2	47.1	37.8	52.7	
G133.0	51.6	32.2	52.5	30.0	53.5	32.2	47.8	35.6	51.6	
G134.0	49.7	30.2	48.4	27.5	51.3	30.5	48.3	33.4	49.7	
G135.0	47.1	27.9	43.8	25.0	48.2	28.6	48.3	31.1	47.1	
G136.0	43.7	25.1	39.1	22.5	45.1	26.5	47.3	28.2	43.7	
G137.0	40.5	22.5	34.4	20.3	41.8	24.1	45.3	25.4	40.5	
G138.0	37.0	20.3	30.0	18.4	38.1	21.9	42.2	22.8	37.0	
G139.0	33.3	18.4	26.1	16.7	33.8	20.0	39.0	20.5	33.3	
G140.0	29.6	16.9	23.2	15.0	30.1	18.4	35.4	19.0	29.6	
G141.0	25.9	15.6	20.8	13.5	27.0	16.9	31.9	17.6	25.9	
G142.0	23.4	14.6	19.2	12.7	24.4	15.9	27.9	16.4	23.4	
G143.0	21.5	13.8	18.1	11.8	21.7	14.8	24.9	15.0	21.5	
G144.0	20.0	13.1	17.2	11.2	19.4	13.7	22.2	13.4	20.0	
G145.0	18.6	12.1	16.3	10.8	17.6	12.6	19.9	12.1	18.6	
G146.0	17.5	11.6	15.4	10.5	16.1	11.5	18.0	11.1	17.5	
G147.0	16.3	11.0	14.6	10.1	14.8	10.6	16.2	10.3	16.3	

C Plane (°):0.0-360.0: 45.0
Test Lab: Inventfine instruments
Test Type: TYPE C
Temperature: 26
Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 8.509 m
Humidity: 55
Inspector:

Candlepower Table (Continue 4)

Unit: cd

G\C	C0.0	C45.0	C90.0	C135.0	C180.0	C225.0	C270.0	C315.0	C360.0	
G148.0	15.3	10.4	13.8	9.7	14.0	9.9	14.8	9.8	15.3	
G149.0	14.3	10.0	13.0	9.2	13.3	9.3	13.6	9.4	14.3	
G150.0	13.4	9.6	12.2	8.8	12.6	8.8	12.4	8.9	13.4	
G151.0	12.5	9.3	11.5	8.4	11.8	8.4	11.6	8.4	12.5	
G152.0	11.8	8.9	10.8	8.1	11.1	8.1	11.0	8.1	11.8	
G153.0	11.1	8.5	10.1	7.7	10.4	7.8	10.4	7.7	11.1	
G154.0	10.4	8.1	9.3	7.2	9.7	7.5	9.7	7.3	10.4	
G155.0	9.8	7.8	8.6	6.8	9.0	7.2	9.2	6.8	9.8	
G156.0	9.3	7.4	8.0	6.5	8.4	6.9	8.8	6.3	9.3	
G157.0	8.7	6.9	7.5	6.2	7.9	6.6	8.3	6.0	8.7	
G158.0	8.1	6.6	7.0	6.0	7.3	6.3	7.6	5.7	8.1	
G159.0	7.6	6.3	6.7	5.9	6.9	6.0	7.1	5.4	7.6	
G160.0	7.2	6.0	6.3	5.7	6.4	5.7	6.6	5.2	7.2	
G161.0	6.8	5.8	6.0	5.6	6.0	5.4	6.2	5.1	6.8	
G162.0	6.4	5.6	5.7	5.4	5.7	5.2	5.8	4.9	6.4	
G163.0	6.0	5.3	5.4	5.3	5.4	5.1	5.5	4.8	6.0	
G164.0	5.7	5.2	5.2	5.2	5.2	4.9	5.2	4.7	5.7	
G165.0	5.4	5.0	5.0	5.0	4.9	4.8	4.9	4.6	5.4	
G166.0	5.1	4.9	4.8	4.9	4.8	4.7	4.7	4.5	5.1	
G167.0	4.9	4.8	4.7	4.8	4.6	4.5	4.6	4.5	4.9	
G168.0	4.7	4.7	4.7	4.8	4.5	4.4	4.4	4.5	4.7	
G169.0	4.5	4.6	4.7	4.8	4.5	4.4	4.4	4.5	4.5	
G170.0	4.4	4.6	4.7	4.8	4.5	4.4	4.3	4.5	4.4	
G171.0	4.4	4.7	4.9	4.9	4.7	4.4	4.4	4.6	4.4	
G172.0	4.5	4.9	5.1	5.1	4.8	4.6	4.5	4.7	4.5	
G173.0	4.8	4.9	5.1	5.1	4.8	4.8	4.8	4.8	4.8	
G174.0	4.8	4.9	5.1	5.1	4.9	4.7	4.8	4.8	4.8	
G175.0	4.8	4.9	5.1	5.1	4.9	4.7	4.8	4.8	4.8	
G176.0	4.8	5.0	5.0	5.0	4.9	4.7	4.9	4.8	4.8	
G177.0	4.8	4.9	5.0	5.0	4.9	4.7	4.9	4.8	4.8	
G178.0	4.8	4.9	5.1	5.0	4.9	4.8	4.9	4.8	4.8	
G179.0	4.8	4.9	5.0	4.9	4.9	4.8	4.9	4.9	4.8	
G180.0	4.8	4.8	5.0	4.9	4.9	4.9	5.0	4.9	4.8	

C Plane (°):0.0-360.0: 45.0
Test Lab: Inventfine instruments
Test Type: TYPE C
Temperature: 26
Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 8.509 m
Humidity: 55
Inspector: