

Report No.: 21

Test Time: 2019/6/25 10:23

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: VMW11636

Luminous Width (mm): 50

Current: 0.304 A

Power Factor: 0.991

Luminous Length (mm): 1010

Voltage: 120.2 V

Power: 36.24 W

Photometric Results

CIE Class: Semi-Direct

Measurement Flux: 2075.6 lm

Downward Ratio: 89%

Horizontal Diffuse Angle(50%): H103.1

Vertical Diffuse Angle(50%): V124.6

Luminaire Efficacy Rating (LER): 57.32

Max. Intensity: 589.55 cd

S/MH(C0/C180): 1.19

Total Rated Lamp Lumens: 2075.6 lm

Efficiency: 100%

Upward Ratio: 11%

Central Intensity: 588.46 cd

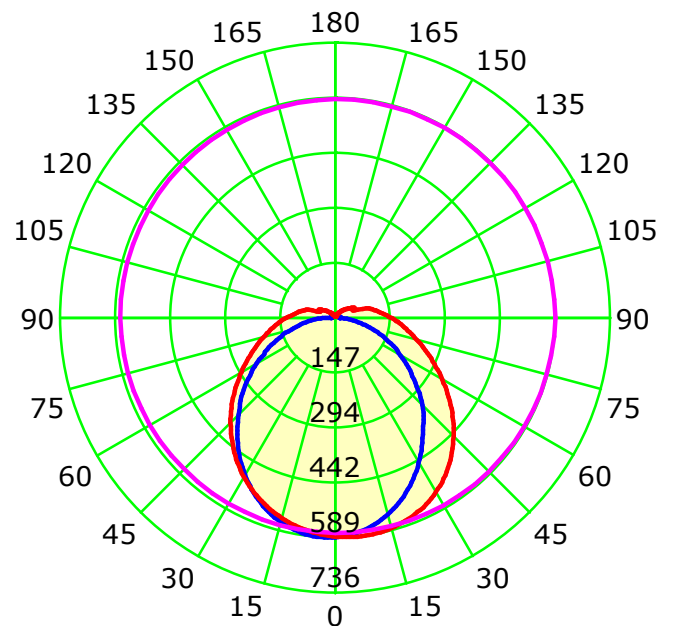
Pos of Max. Intensity: H90 V7

S/MH(C90/C270): 1.31

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

Average Diffuse Angle(50%): 113.7°

— C0-C180 — C90-C270 — G7

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

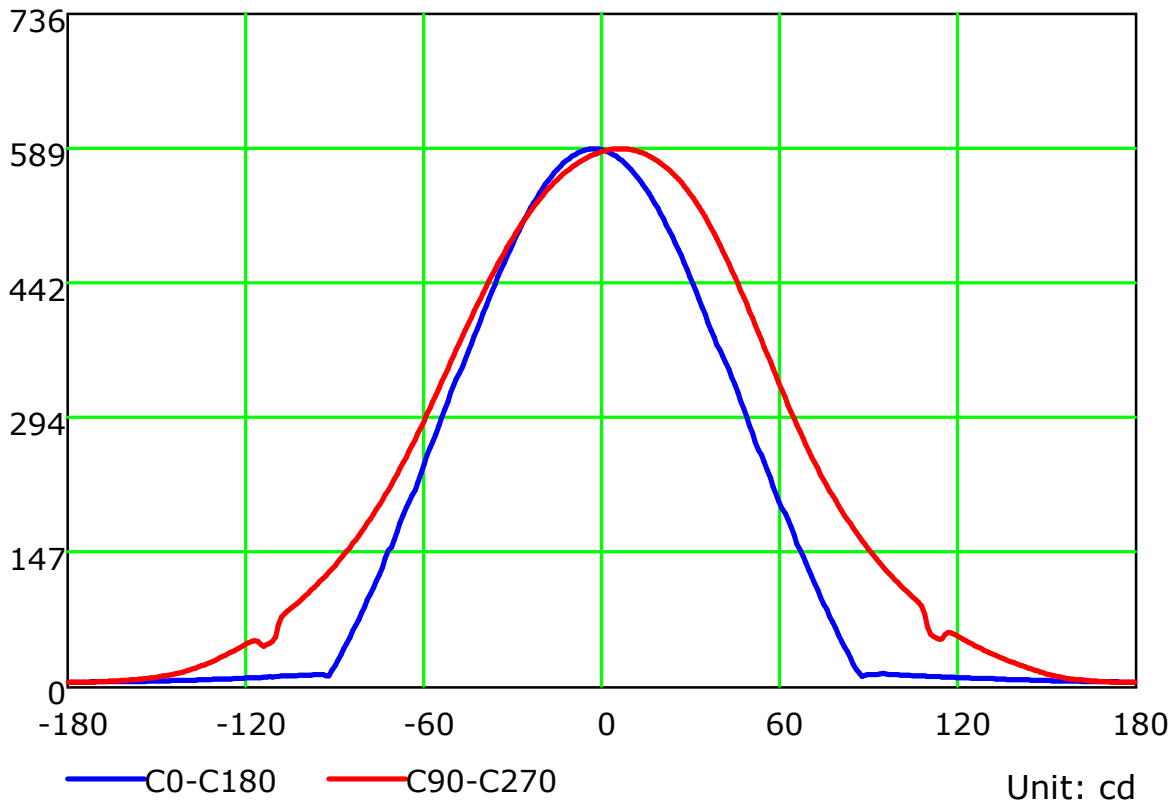
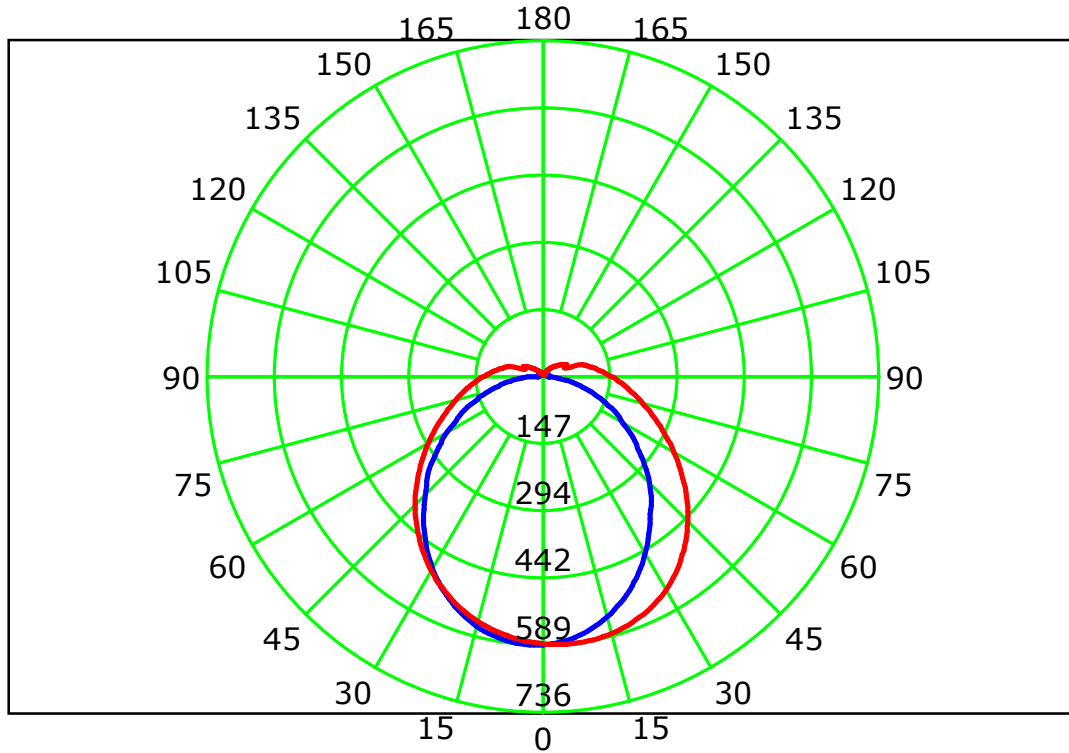
Test Device: GPM-1800B

Distance: 8.509 m

Humidity: 55

Inspector:

Luminous Intensity Distribution Curve



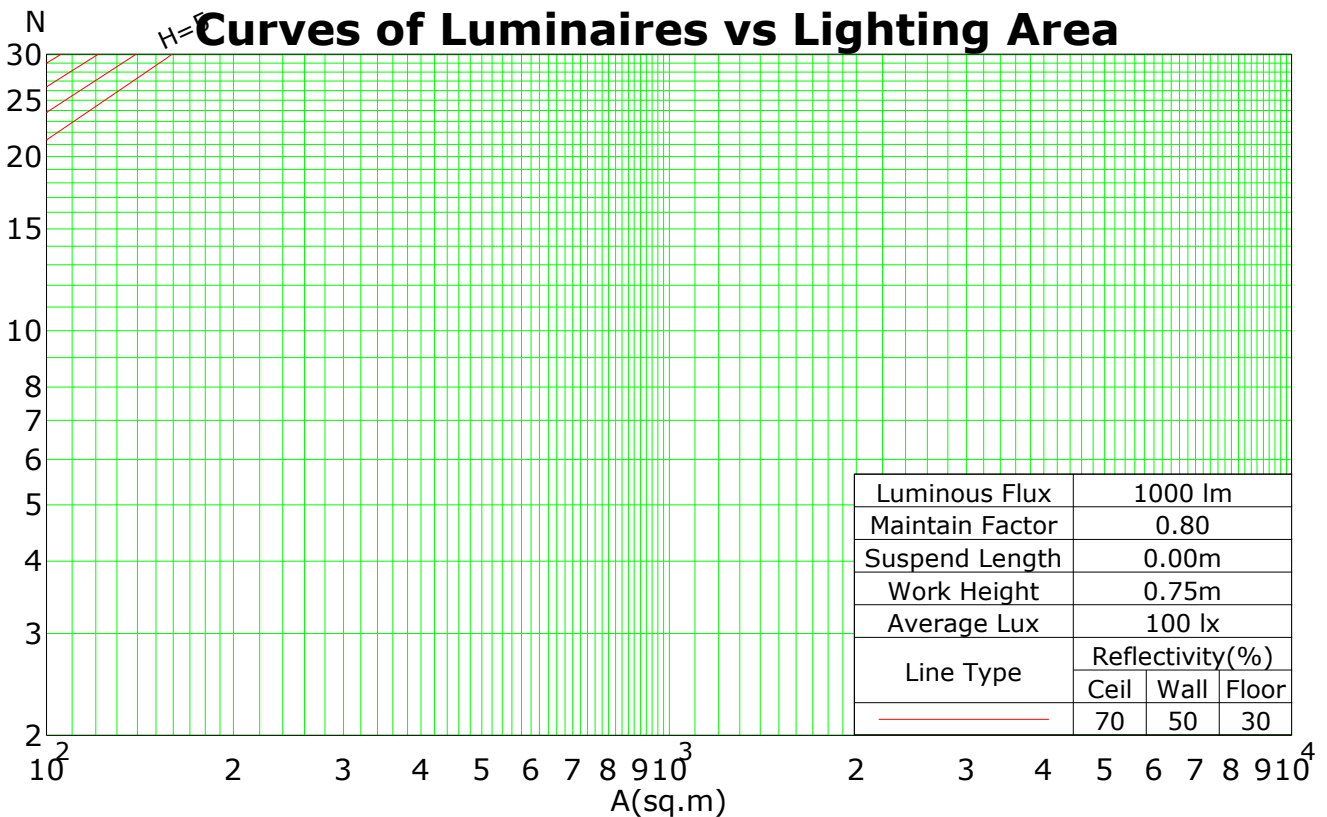
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Coefficients Of Utilization - Zonal Cavity Method

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	113	113	113	113	105	105	105	98	98	98	92	92	92	89
1	104	99	94	89	100	95	91	87	89	85	82	83	80	77	78	75	73	70
2	94	85	78	71	90	82	75	70	77	71	66	72	67	63	67	64	60	57
3	85	74	66	59	82	72	64	57	67	60	55	63	57	53	59	54	50	48
4	78	66	56	49	75	63	55	48	60	52	46	56	50	45	53	47	43	40
5	72	58	49	42	69	57	48	41	53	46	40	50	44	39	47	42	37	35
6	66	52	43	37	63	51	42	36	48	40	35	45	39	34	43	37	33	30
7	61	47	39	32	59	46	38	32	44	36	31	41	35	30	39	33	29	27
8	57	43	35	29	55	42	34	28	40	33	27	38	31	27	36	30	26	24
9	53	40	31	26	51	39	31	25	37	30	25	35	29	24	33	27	23	21
10	50	37	29	23	48	36	28	23	34	27	22	32	26	22	31	25	21	19

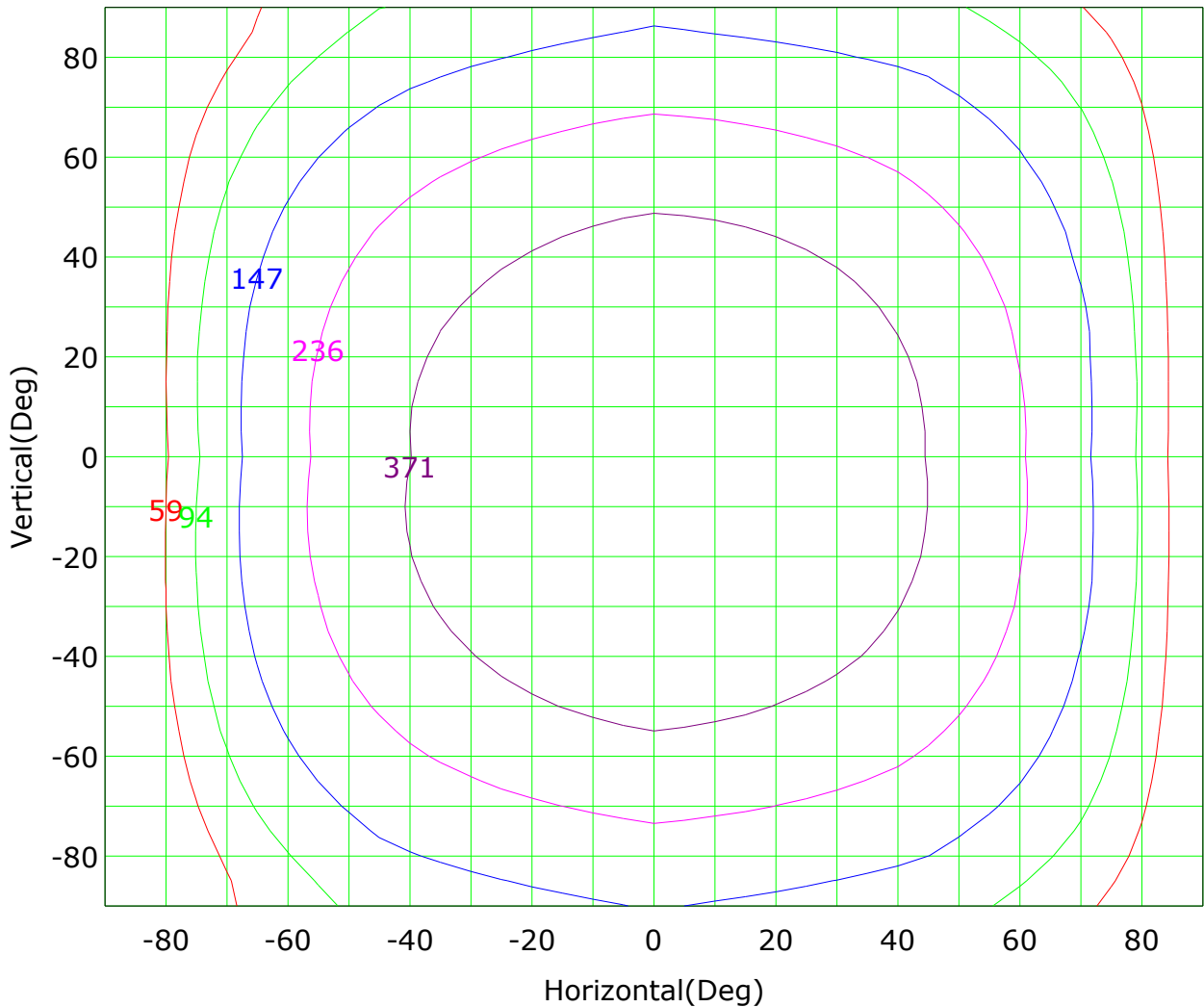
Spacing Criteria (0-180): 1.19
 Spacing Criteria (90-270): 1.31
 Spacing Criteria (Diagonal): 1.37



C Plane (°):0.0-360.0: 45.0
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 Test Device: GPM-1800B
 Distance: 8.509 m
 Humidity: 55
 Inspector:

Isocandela (rectangle)



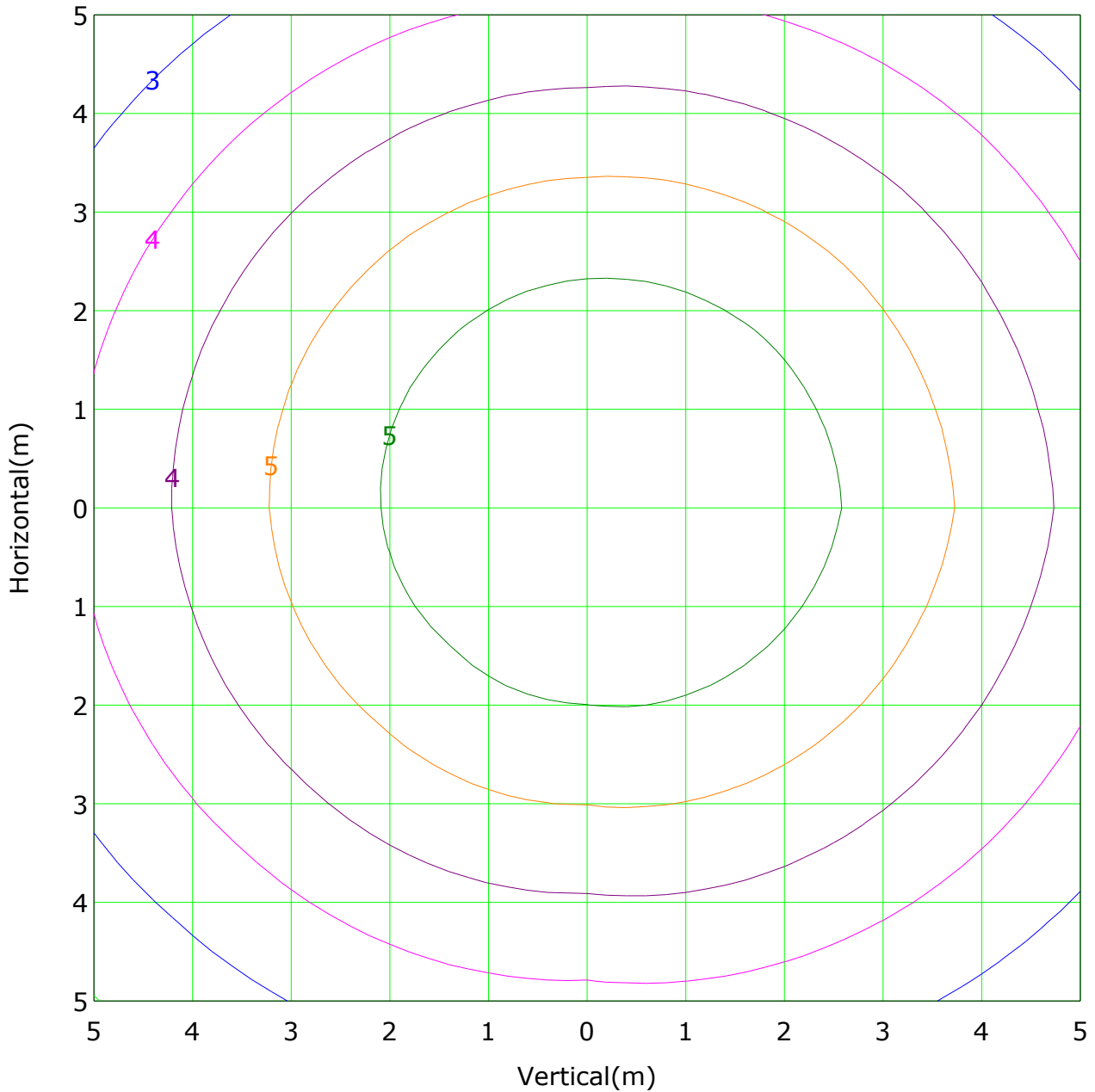
Imax (100%): 590 cd

- | | |
|------------------|------------------|
| — (10%): 59 cd | — (16%): 94 cd |
| — (25%): 147 cd | — (40%): 236 cd |
| — (63%): 371 cd | — (100%): 590 cd |

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 Test Device: GPM-1800B
 Distance: 8.509 m
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 Inspector:

IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 5.9 lx

(30%): 1.8 lx	(40%): 2.4 lx
(50%): 2.9 lx	(60%): 3.5 lx
(70%): 4.1 lx	(80%): 4.7 lx
(90%): 5.3 lx	(100%): 5.9 lx
(120%): 7.1 lx	(150%): 8.8 lx

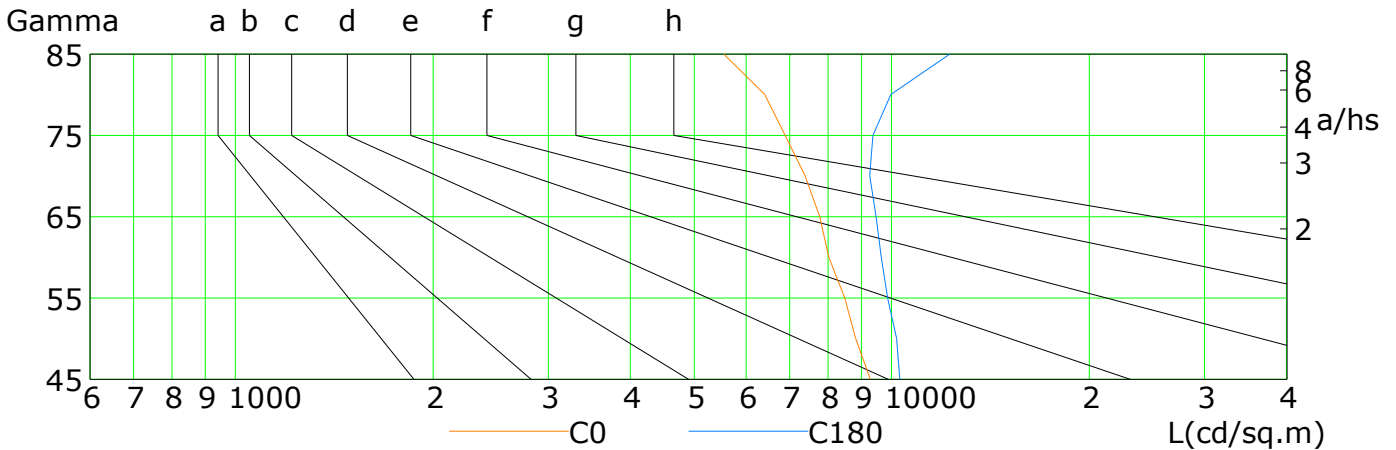
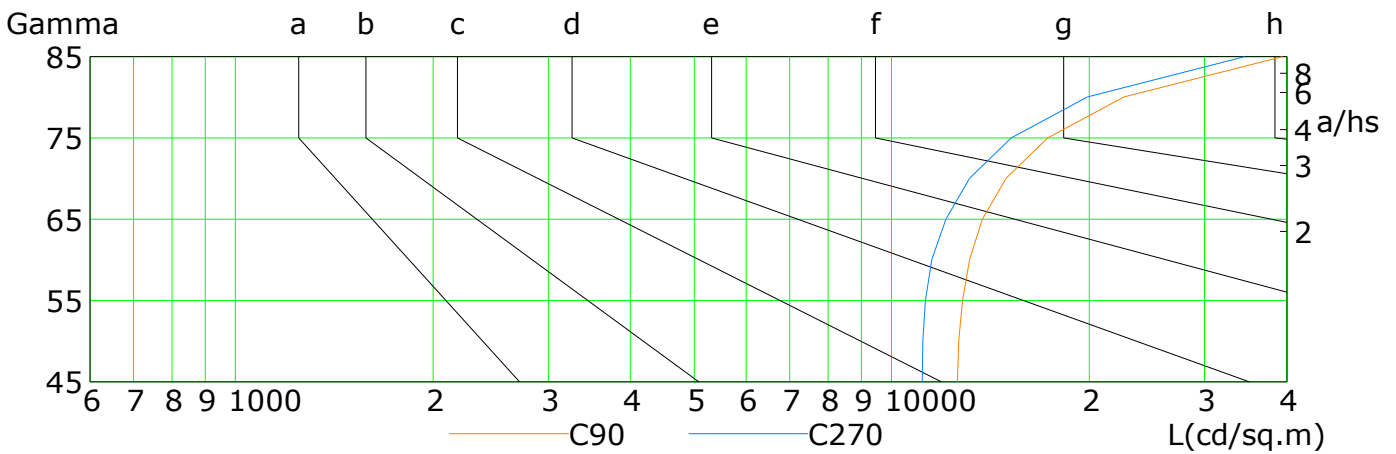
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 Test Type: TYPE C
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 Inspector:

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

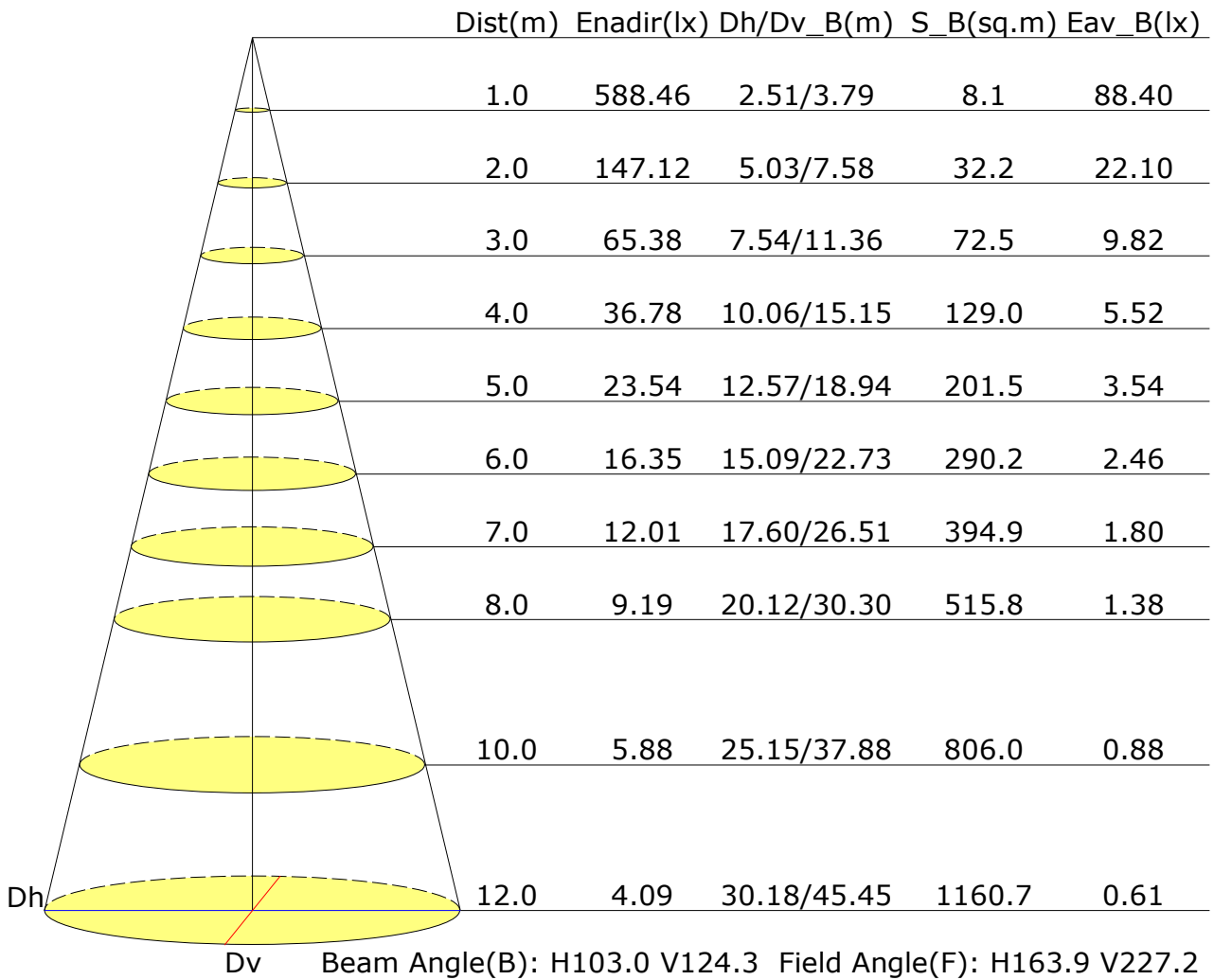


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	9280	8812	8492	8023	7773	7377	6892	6404	5544
C90	12584	12667	12822	13149	13761	14952	17296	22579	39438
C180	10281	10167	9866	9648	9465	9269	9361	9978	12271
C270	11137	11170	11269	11521	12087	13137	15218	19883	34555

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

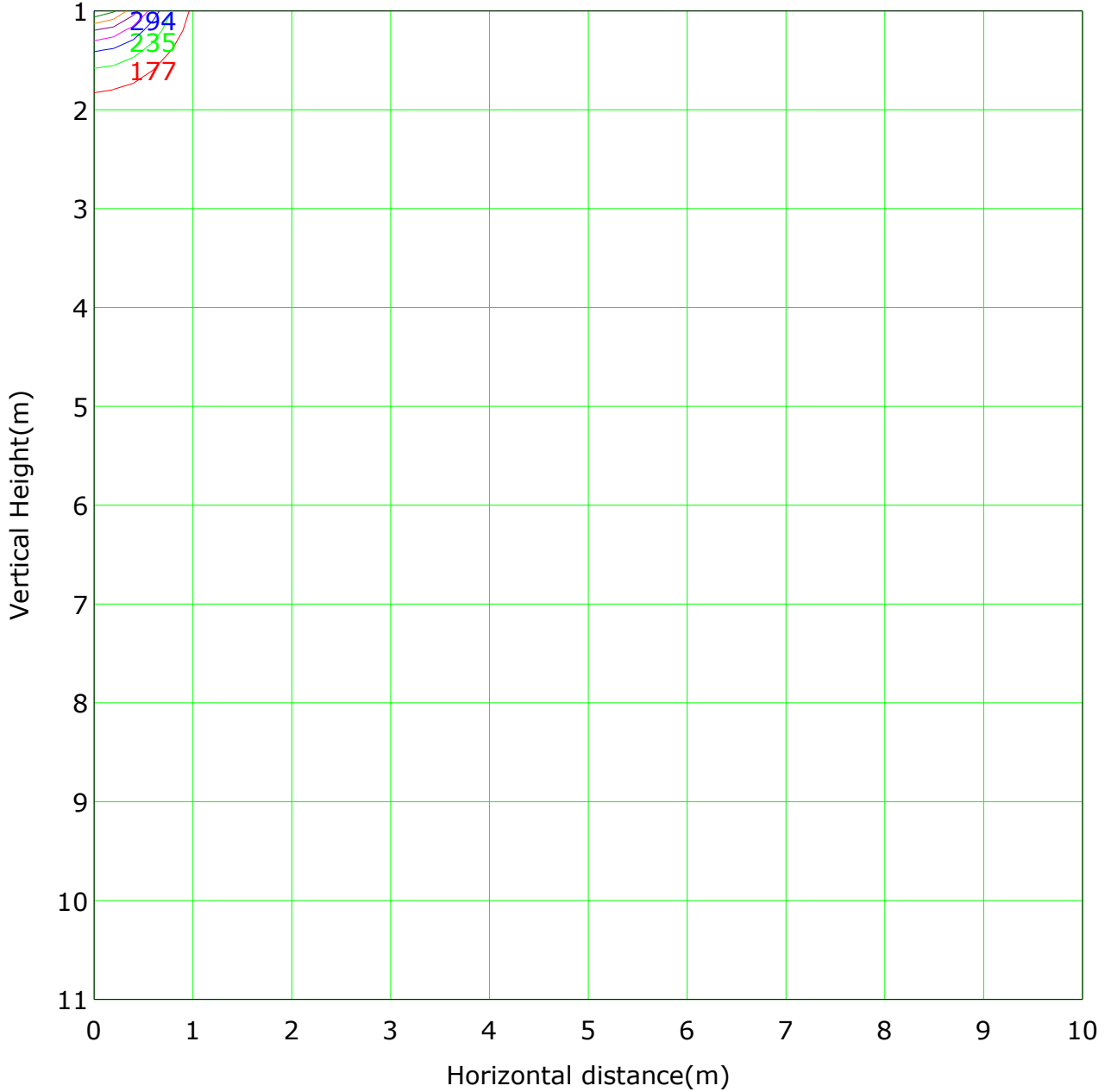
Illuminance at a Distance



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

Vertical IsoLux Plot

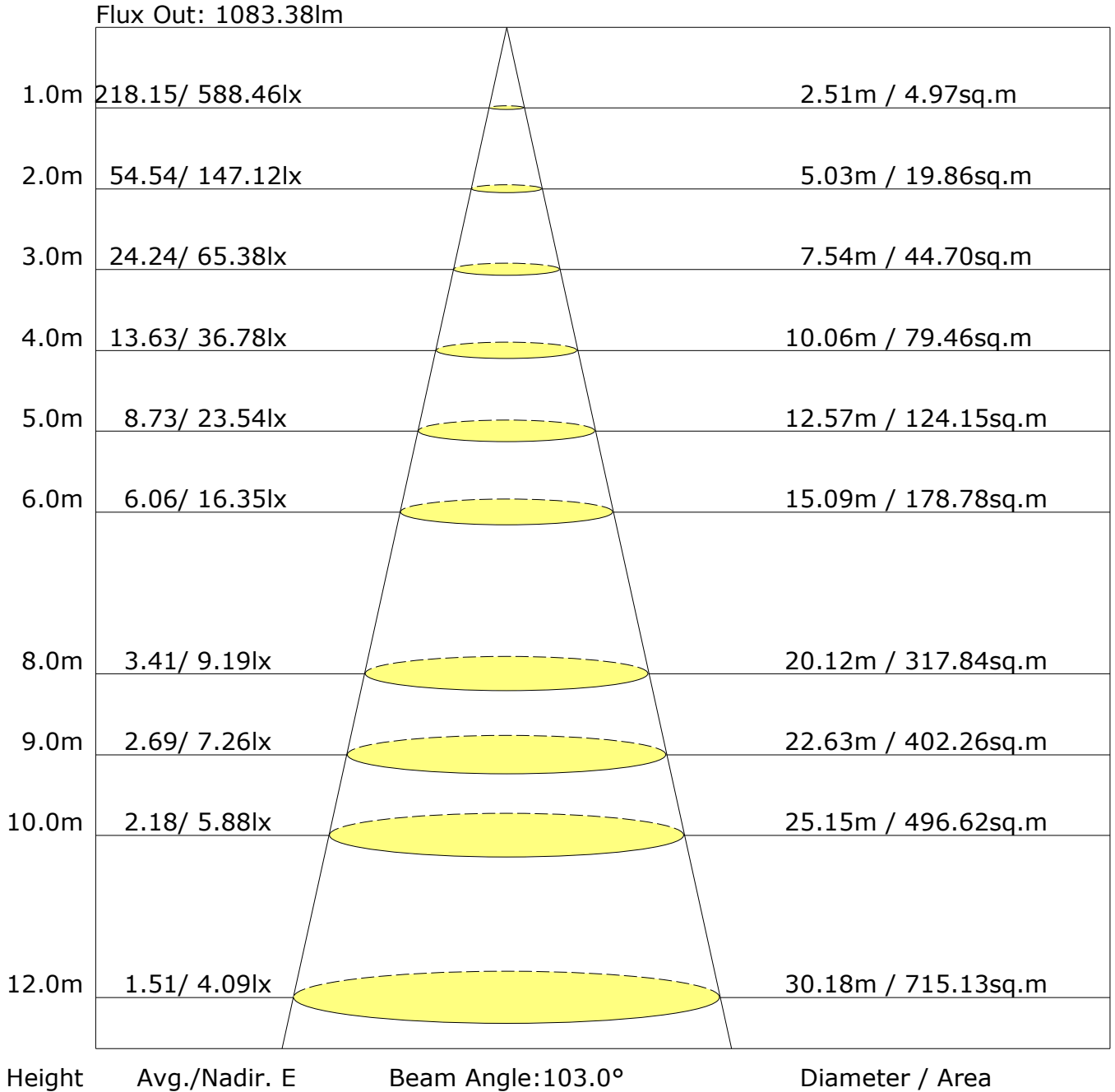


Lowest(m): 1.0m	Highest(m): 11.0m	Max Lux: 588.5 lx
— (30%): 176.5 lx	— (40%): 235.4 lx	
— (50%): 294.2 lx	— (60%): 353.1 lx	
— (70%): 411.9 lx	— (80%): 470.8 lx	
— (90%): 529.6 lx	— (100%): 588.5 lx	
— (120%): 706.2 lx	— (150%): 882.7 lx	

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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
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 Test Type: TYPE C
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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:

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	19.0	20.3	19.4	20.7	21.2	20.5	21.8	20.9	22.2	22.7					
3H	20.5	21.7	21.0	22.2	22.7	22.7	23.9	23.2	24.4	24.9					
4H	21.2	22.3	21.7	22.8	23.3	23.9	25.1	24.4	25.5	26.1					
6H	21.7	22.7	22.2	23.2	23.8	25.3	26.3	25.8	26.8	27.4					
8H	21.9	22.9	22.4	23.4	23.9	26.0	27.0	26.6	27.5	28.1					
12H	22.0	23.0	22.5	23.5	24.0	26.9	27.9	27.4	28.4	29.0					
X=4H Y=2H	20.0	21.1	20.5	21.6	22.1	21.1	22.2	21.6	22.7	23.2					
3H	21.8	22.7	22.3	23.3	23.8	23.5	24.5	24.1	25.0	25.6					
4H	22.6	23.5	23.2	24.0	24.6	24.9	25.8	25.5	26.4	27.0					
6H	23.3	24.1	23.9	24.7	25.3	26.5	27.3	27.1	27.8	28.5					
8H	23.6	24.3	24.2	24.9	25.6	27.4	28.1	28.0	28.7	29.3					
12H	23.8	24.5	24.4	25.1	25.7	28.4	29.1	29.0	29.6	30.3					
X=8H Y=4H	23.4	24.1	24.0	24.7	25.4	25.3	26.0	25.9	26.6	27.3					
6H	24.4	25.0	25.1	25.7	26.3	27.1	27.7	27.8	28.3	29.0					
8H	24.9	25.5	25.6	26.1	26.8	28.2	28.7	28.8	29.4	30.1					
12H	25.3	25.8	26.0	26.4	27.2	29.5	29.9	30.1	30.6	31.3					
X=12H Y=4H	23.6	24.3	24.2	24.9	25.5	25.4	26.0	26.0	26.6	27.3					
6H	24.8	25.4	25.5	26.0	26.7	27.3	27.8	27.9	28.4	29.1					
8H	25.5	25.9	26.1	26.6	27.3	28.4	28.9	29.1	29.6	30.3					
Variations with the observer position at spacings:															
S=1.0H						+0.3/-0.2					+0.3/-0.3				
S=1.5H						+0.4/-0.5					+0.6/-0.6				
S=2.0H						+0.5/-0.9					+0.7/-0.9				

Calculate in accordance with CIE Pub.117. The table is revised with 2076lm ($8\log(F/F_0) = 2.5$).

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

Zonal Lumen

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	586.9	0.6	0.6	0.03	0.03
1.0-2.0	586.7	1.7	2.2	0.08	0.11
2.0-3.0	586.2	2.8	5.0	0.14	0.24
3.0-4.0	585.6	3.9	9.0	0.19	0.43
4.0-5.0	584.7	5.0	14.0	0.24	0.67
5.0-6.0	583.7	6.1	20.1	0.30	0.97
6.0-7.0	582.4	7.2	27.4	0.35	1.32
7.0-8.0	580.8	8.3	35.7	0.40	1.72
8.0-9.0	579.1	9.4	45.1	0.45	2.17
9.0-10.0	577.2	10.4	55.5	0.50	2.67
10.0-11.0	575.0	11.5	67.0	0.55	3.23
11.0-12.0	572.6	12.5	79.5	0.60	3.83
12.0-13.0	570.0	13.5	93.1	0.65	4.48
13.0-14.0	567.2	14.5	107.6	0.70	5.18
14.0-15.0	564.1	15.5	123.1	0.75	5.93
15.0-16.0	560.9	16.4	139.5	0.79	6.72
16.0-17.0	557.5	17.4	156.9	0.84	7.56
17.0-18.0	553.8	18.3	175.1	0.88	8.44
18.0-19.0	549.9	19.1	194.3	0.92	9.36
19.0-20.0	545.9	20.0	214.2	0.96	10.32
20.0-21.0	541.6	20.8	235.0	1.00	11.32
21.0-22.0	537.2	21.6	256.6	1.04	12.36
22.0-23.0	532.5	22.3	279.0	1.08	13.44
23.0-24.0	527.7	23.1	302.1	1.11	14.55
24.0-25.0	522.7	23.8	325.8	1.15	15.70
25.0-26.0	517.5	24.4	350.3	1.18	16.88
26.0-27.0	512.0	25.1	375.3	1.21	18.08
27.0-28.0	506.5	25.6	401.0	1.24	19.32
28.0-29.0	500.8	26.2	427.2	1.26	20.58
29.0-30.0	494.8	26.7	453.9	1.29	21.87
30.0-31.0	488.7	27.2	481.1	1.31	23.18
31.0-32.0	482.5	27.6	508.7	1.33	24.51
32.0-33.0	476.1	28.1	536.8	1.35	25.86
33.0-34.0	469.5	28.4	565.2	1.37	27.23
34.0-35.0	462.8	28.7	593.9	1.38	28.62
35.0-36.0	456.0	29.0	623.0	1.40	30.01

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 [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	448.9	29.3	652.3	1.41	31.43
37.0-38.0	441.8	29.5	681.7	1.42	32.85
38.0-39.0	434.7	29.7	711.4	1.43	34.28
39.0-40.0	427.7	29.8	741.3	1.44	35.71
40.0-41.0	420.6	30.0	771.2	1.44	37.16
41.0-42.0	413.3	30.0	801.2	1.45	38.60
42.0-43.0	405.9	30.1	831.3	1.45	40.05
43.0-44.0	398.3	30.1	861.4	1.45	41.50
44.0-45.0	390.7	30.0	891.4	1.45	42.95
45.0-46.0	382.9	29.9	921.4	1.44	44.39
46.0-47.0	375.1	29.8	951.2	1.44	45.83
47.0-48.0	367.4	29.7	980.9	1.43	47.26
48.0-49.0	359.8	29.6	1010.5	1.42	48.68
49.0-50.0	352.1	29.4	1039.8	1.41	50.10
50.0-51.0	344.5	29.2	1069.0	1.40	51.50
51.0-52.0	336.8	28.9	1097.9	1.39	52.90
52.0-53.0	329.0	28.6	1126.5	1.38	54.27
53.0-54.0	321.4	28.3	1154.8	1.37	55.64
54.0-55.0	313.7	28.0	1182.8	1.35	56.99
55.0-56.0	305.8	27.6	1210.5	1.33	58.32
56.0-57.0	297.9	27.2	1237.7	1.31	59.63
57.0-58.0	290.4	26.9	1264.6	1.29	60.93
58.0-59.0	282.9	26.4	1291.0	1.27	62.20
59.0-60.0	275.2	26.0	1317.0	1.25	63.45
60.0-61.0	267.5	25.5	1342.6	1.23	64.68
61.0-62.0	260.0	25.1	1367.6	1.21	65.89
62.0-63.0	252.7	24.6	1392.2	1.18	67.08
63.0-64.0	245.6	24.1	1416.3	1.16	68.24
64.0-65.0	238.4	23.6	1439.9	1.14	69.37
65.0-66.0	231.2	23.1	1463.0	1.11	70.49
66.0-67.0	224.3	22.6	1485.5	1.09	71.57
67.0-68.0	217.3	22.0	1507.5	1.06	72.63
68.0-69.0	210.4	21.5	1529.0	1.03	73.67
69.0-70.0	203.5	20.9	1549.9	1.01	74.68
70.0-71.0	196.8	20.3	1570.3	0.98	75.66
71.0-72.0	190.6	19.8	1590.1	0.95	76.61

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 Test Device: GPM-1800B
 Distance: 8.509 m
 Humidity: 55
 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	184.3	19.3	1609.4	0.93	77.54
73.0-74.0	177.7	18.7	1628.0	0.90	78.44
74.0-75.0	171.1	18.1	1646.1	0.87	79.31
75.0-76.0	164.9	17.5	1663.6	0.84	80.15
76.0-77.0	159.0	17.0	1680.6	0.82	80.97
77.0-78.0	153.2	16.4	1697.0	0.79	81.76
78.0-79.0	147.6	15.9	1712.9	0.76	82.53
79.0-80.0	142.0	15.3	1728.2	0.74	83.26
80.0-81.0	136.4	14.8	1742.9	0.71	83.97
81.0-82.0	131.1	14.2	1757.1	0.68	84.66
82.0-83.0	126.0	13.7	1770.8	0.66	85.32
83.0-84.0	121.0	13.2	1784.0	0.64	85.95
84.0-85.0	116.0	12.7	1796.7	0.61	86.56
85.0-86.0	111.1	12.1	1808.8	0.59	87.15
86.0-87.0	106.5	11.7	1820.5	0.56	87.71
87.0-88.0	102.2	11.2	1831.7	0.54	88.25
88.0-89.0	98.2	10.8	1842.4	0.52	88.77
89.0-90.0	94.8	10.4	1852.8	0.50	89.27
90.0-91.0	91.2	10.0	1862.8	0.48	89.75
91.0-92.0	87.7	9.6	1872.5	0.46	90.21
92.0-93.0	84.7	9.3	1881.7	0.45	90.66
93.0-94.0	82.2	9.0	1890.7	0.43	91.10
94.0-95.0	79.8	8.7	1899.4	0.42	91.52
95.0-96.0	77.4	8.4	1907.9	0.41	91.92
96.0-97.0	74.9	8.2	1916.1	0.39	92.32
97.0-98.0	72.5	7.9	1923.9	0.38	92.70
98.0-99.0	70.2	7.6	1931.6	0.37	93.06
99.0-100.0	68.0	7.3	1938.9	0.35	93.42
100.0-101.0	65.8	7.1	1946.0	0.34	93.76
101.0-102.0	63.5	6.8	1952.8	0.33	94.09
102.0-103.0	60.4	6.5	1959.3	0.31	94.40
103.0-104.0	57.0	6.1	1965.4	0.29	94.69
104.0-105.0	53.6	5.7	1971.1	0.27	94.97
105.0-106.0	49.8	5.3	1976.3	0.25	95.22
106.0-107.0	46.8	4.9	1981.2	0.24	95.46
107.0-108.0	45.1	4.7	1986.0	0.23	95.68

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 3)

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
108.0-109.0	43.0	4.5	1990.4	0.22	95.90
109.0-110.0	40.0	4.1	1994.6	0.20	96.10
110.0-111.0	37.7	3.9	1998.4	0.19	96.28
111.0-112.0	36.2	3.7	2002.1	0.18	96.46
112.0-113.0	35.0	3.5	2005.7	0.17	96.63
113.0-114.0	33.7	3.4	2009.1	0.16	96.80
114.0-115.0	32.9	3.3	2012.3	0.16	96.95
115.0-116.0	32.9	3.3	2015.6	0.16	97.11
116.0-117.0	32.9	3.2	2018.8	0.16	97.27
117.0-118.0	32.3	3.1	2022.0	0.15	97.42
118.0-119.0	31.4	3.0	2025.0	0.15	97.56
119.0-120.0	30.4	2.9	2027.9	0.14	97.70
120.0-121.0	29.3	2.8	2030.7	0.13	97.84
121.0-122.0	28.3	2.6	2033.3	0.13	97.97
122.0-123.0	27.3	2.5	2035.8	0.12	98.09
123.0-124.0	26.3	2.4	2038.2	0.12	98.20
124.0-125.0	25.3	2.3	2040.5	0.11	98.31
125.0-126.0	24.3	2.2	2042.7	0.10	98.42
126.0-127.0	23.4	2.1	2044.8	0.10	98.52
127.0-128.0	22.5	2.0	2046.7	0.09	98.61
128.0-129.0	21.6	1.9	2048.6	0.09	98.70
129.0-130.0	20.7	1.8	2050.3	0.08	98.79
130.0-131.0	19.9	1.7	2052.0	0.08	98.87
131.0-132.0	19.1	1.6	2053.6	0.08	98.94
132.0-133.0	18.3	1.5	2055.0	0.07	99.01
133.0-134.0	17.5	1.4	2056.4	0.07	99.08
134.0-135.0	16.8	1.3	2057.7	0.06	99.14
135.0-136.0	16.1	1.2	2059.0	0.06	99.20
136.0-137.0	15.4	1.2	2060.1	0.06	99.26
137.0-138.0	14.8	1.1	2061.2	0.05	99.31
138.0-139.0	14.1	1.0	2062.3	0.05	99.36
139.0-140.0	13.5	1.0	2063.2	0.05	99.41
140.0-141.0	12.9	0.9	2064.1	0.04	99.45
141.0-142.0	12.4	0.8	2065.0	0.04	99.49
142.0-143.0	11.9	0.8	2065.8	0.04	99.53
143.0-144.0	11.4	0.7	2066.5	0.04	99.56

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	10.9	0.7	2067.2	0.03	99.60
145.0-146.0	10.5	0.6	2067.9	0.03	99.63
146.0-147.0	10.0	0.6	2068.5	0.03	99.66
147.0-148.0	9.6	0.6	2069.0	0.03	99.69
148.0-149.0	9.2	0.5	2069.6	0.03	99.71
149.0-150.0	8.8	0.5	2070.0	0.02	99.73
150.0-151.0	8.5	0.5	2070.5	0.02	99.76
151.0-152.0	8.2	0.4	2070.9	0.02	99.78
152.0-153.0	7.9	0.4	2071.3	0.02	99.80
153.0-154.0	7.6	0.4	2071.7	0.02	99.81
154.0-155.0	7.3	0.3	2072.0	0.02	99.83
155.0-156.0	7.1	0.3	2072.4	0.02	99.85
156.0-157.0	6.9	0.3	2072.7	0.01	99.86
157.0-158.0	6.7	0.3	2073.0	0.01	99.87
158.0-159.0	6.5	0.3	2073.2	0.01	99.89
159.0-160.0	6.4	0.2	2073.5	0.01	99.90
160.0-161.0	6.2	0.2	2073.7	0.01	99.91
161.0-162.0	6.1	0.2	2073.9	0.01	99.92
162.0-163.0	6.0	0.2	2074.1	0.01	99.93
163.0-164.0	5.8	0.2	2074.3	0.01	99.94
164.0-165.0	5.7	0.2	2074.4	0.01	99.95
165.0-166.0	5.6	0.2	2074.6	0.01	99.95
166.0-167.0	5.4	0.1	2074.7	0.01	99.96
167.0-168.0	5.3	0.1	2074.9	0.01	99.97
168.0-169.0	5.2	0.1	2075.0	0.01	99.97
169.0-170.0	5.1	0.1	2075.1	0.00	99.98
170.0-171.0	5.0	0.1	2075.2	0.00	99.98
171.0-172.0	4.9	0.1	2075.2	0.00	99.99
172.0-173.0	4.9	0.1	2075.3	0.00	99.99
173.0-174.0	4.9	0.1	2075.4	0.00	99.99
174.0-175.0	4.8	0.1	2075.4	0.00	99.99
175.0-176.0	4.8	0.0	2075.5	0.00	100.00
176.0-177.0	4.8	0.0	2075.5	0.00	100.00
177.0-178.0	4.8	0.0	2075.5	0.00	100.00
178.0-179.0	4.8	0.0	2075.5	0.00	100.00
179.0-180.0	4.8	0.0	2075.5	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	588.5	586.9	586.2	586.2	588.5	586.9	586.2	586.2	588.5	
G1.0	587.6	587.0	587.1	587.2	589.1	586.6	585.2	584.9	587.6	
G2.0	586.4	586.8	587.9	588.0	589.4	586.2	583.9	583.6	586.4	
G3.0	584.9	586.4	588.6	588.5	589.4	585.4	582.6	582.0	584.9	
G4.0	583.1	585.8	589.0	588.9	589.1	584.6	581.2	580.2	583.1	
G5.0	581.2	585.0	589.3	589.0	588.6	583.4	579.5	578.2	581.2	
G6.0	578.9	583.8	589.5	588.8	587.7	582.1	577.8	576.0	578.9	
G7.0	576.3	582.7	589.5	588.5	586.5	580.6	575.9	573.4	576.3	
G8.0	573.4	581.2	589.4	587.9	585.0	578.7	573.7	570.9	573.4	
G9.0	570.3	579.4	589.0	587.1	583.2	576.8	571.7	568.1	570.3	
G10.0	566.7	577.5	588.5	586.0	581.2	574.6	569.5	565.1	566.7	
G11.0	563.1	575.2	587.9	584.7	578.9	572.0	567.0	561.6	563.1	
G12.0	559.2	572.9	587.0	583.3	576.4	569.5	564.5	558.2	559.2	
G13.0	554.7	570.4	586.0	581.6	573.6	566.7	561.8	554.6	554.7	
G14.0	550.3	567.7	584.7	579.7	570.3	563.5	558.7	550.6	550.3	
G15.0	545.6	564.7	583.3	577.6	567.0	560.4	555.8	546.7	545.6	
G16.0	540.8	561.3	581.8	575.0	563.0	557.1	552.6	542.5	540.8	
G17.0	535.6	557.8	580.1	572.5	559.2	553.2	549.0	537.8	535.6	
G18.0	529.8	554.3	578.0	569.7	554.7	549.4	545.6	533.4	529.8	
G19.0	524.3	550.5	576.0	566.7	550.3	545.5	542.0	528.7	524.3	
G20.0	518.7	546.2	573.9	563.3	545.7	541.0	537.9	523.8	518.7	
G21.0	512.7	542.1	571.3	559.9	540.8	536.7	534.1	518.3	512.7	
G22.0	506.0	537.7	568.7	556.3	535.3	532.1	530.0	513.1	506.0	
G23.0	499.6	532.8	565.8	552.1	529.9	527.4	525.8	507.7	499.6	
G24.0	493.1	528.0	562.8	548.0	524.3	522.1	521.0	502.2	493.1	
G25.0	486.4	523.2	559.7	543.8	518.6	517.1	516.7	496.5	486.4	
G26.0	478.7	518.1	556.0	538.9	512.6	511.9	512.0	490.1	478.7	
G27.0	471.6	512.7	552.4	534.2	505.8	505.9	507.3	484.2	471.6	
G28.0	464.2	507.3	548.6	529.3	499.5	500.5	502.4	478.2	464.2	
G29.0	456.8	501.1	544.6	523.7	493.0	494.8	496.9	471.4	456.8	
G30.0	448.5	495.4	540.0	518.6	486.3	488.5	491.8	465.1	448.5	
G31.0	441.1	489.1	535.6	512.8	478.6	482.4	486.4	458.7	441.1	
G32.0	432.7	483.1	530.5	507.4	471.5	476.3	481.0	452.1	432.7	
G33.0	424.9	477.0	525.7	501.7	464.3	469.5	474.9	444.8	424.9	
G34.0	416.1	470.0	520.1	495.2	456.9	463.1	469.2	438.1	416.1	
G35.0	408.1	463.6	514.8	489.1	449.4	456.6	463.4	431.2	408.1	
G36.0	399.1	457.0	509.2	482.3	441.0	450.0	457.4	423.5	399.1	

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	390.9	450.2	502.8	475.8	433.2	442.6	450.8	416.5	390.9	
G38.0	382.7	442.6	496.9	468.6	425.2	435.8	444.5	409.4	382.7	
G39.0	374.8	435.7	490.8	462.0	417.4	428.9	438.3	402.3	374.8	
G40.0	369.1	428.7	483.9	455.2	409.4	421.4	431.4	394.5	369.1	
G41.0	362.5	420.7	477.3	447.5	401.2	414.4	425.0	387.3	362.5	
G42.0	354.6	413.4	470.7	440.4	392.3	407.3	418.5	380.1	354.6	
G43.0	347.5	406.1	463.3	432.5	383.9	400.1	411.8	372.1	347.5	
G44.0	339.4	397.9	456.4	425.2	375.5	392.2	404.5	364.7	339.4	
G45.0	331.4	390.5	449.4	417.1	367.1	384.9	397.7	357.4	331.4	
G46.0	322.1	382.1	441.5	409.7	358.0	377.6	390.9	349.3	322.1	
G47.0	313.4	374.6	434.3	401.4	350.4	369.6	384.0	342.0	313.4	
G48.0	304.7	366.2	426.9	393.8	343.9	362.3	376.4	334.7	304.7	
G49.0	294.9	358.6	419.5	386.0	337.5	354.9	369.5	327.0	294.9	
G50.0	286.0	351.4	411.2	377.6	330.0	346.9	362.6	320.5	286.0	
G51.0	277.3	343.9	403.6	369.8	321.8	339.5	355.6	314.7	277.3	
G52.0	267.7	337.5	396.0	361.3	312.2	332.2	348.0	308.2	267.7	
G53.0	259.6	330.7	387.5	353.5	303.3	324.2	341.0	301.4	259.6	
G54.0	253.8	322.8	379.9	345.8	294.5	316.9	333.4	294.4	253.8	
G55.0	246.0	315.4	371.4	337.3	285.8	309.6	326.4	286.5	246.0	
G56.0	237.2	307.6	363.6	329.7	276.2	301.7	318.8	279.3	237.2	
G57.0	228.3	300.0	355.8	322.8	267.8	294.5	312.0	271.5	228.3	
G58.0	218.7	291.8	348.2	316.4	261.6	287.2	305.1	264.4	218.7	
G59.0	210.3	284.2	339.7	309.8	253.3	279.5	298.3	257.5	210.3	
G60.0	202.6	276.8	332.0	301.6	243.6	272.4	290.9	250.6	202.6	
G61.0	195.0	269.3	324.4	294.4	233.3	265.4	284.2	243.1	195.0	
G62.0	189.5	262.1	316.8	287.0	223.4	258.0	277.7	236.4	189.5	
G63.0	183.4	254.9	308.5	279.5	215.4	251.5	270.6	229.3	183.4	
G64.0	175.2	247.1	301.1	271.3	209.8	245.1	264.3	222.8	175.2	
G65.0	165.9	240.1	293.7	263.9	202.0	238.2	258.0	216.4	165.9	
G66.0	156.2	233.4	286.5	256.7	195.9	231.6	251.2	209.6	156.2	
G67.0	149.7	226.9	279.5	249.5	187.7	224.9	245.1	203.5	149.7	
G68.0	142.8	220.7	271.8	241.7	179.1	218.1	239.1	197.5	142.8	
G69.0	136.1	214.1	265.0	234.8	170.3	212.3	232.7	190.9	136.1	
G70.0	127.4	208.0	258.3	227.9	160.1	206.3	226.9	185.1	127.4	
G71.0	120.9	202.0	251.7	221.1	152.7	200.2	221.3	179.4	120.9	
G72.0	112.5	195.8	245.2	214.5	149.4	194.4	215.1	173.3	112.5	
G73.0	105.8	189.7	238.9	208.0	140.4	187.8	209.9	168.0	105.8	

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:

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	98.0	183.8	232.2	201.6	131.2	180.9	204.5	162.7	98.0	
G75.0	90.1	178.0	226.1	194.7	122.3	175.4	198.9	156.7	90.1	
G76.0	84.4	172.4	220.3	188.6	115.2	170.2	193.9	151.1	84.4	
G77.0	77.1	166.4	214.7	182.6	108.3	164.5	189.0	146.1	77.1	
G78.0	70.4	161.2	209.2	176.6	101.4	159.5	183.7	141.1	70.4	
G79.0	63.8	156.1	203.8	169.9	94.8	154.4	179.0	136.6	63.8	
G80.0	56.2	150.9	198.0	164.2	87.5	149.5	174.4	132.2	56.2	
G81.0	49.7	146.3	193.0	158.4	80.5	144.2	169.8	127.5	49.7	
G82.0	43.7	141.4	188.0	153.3	73.4	139.5	165.0	123.3	43.7	
G83.0	37.9	136.9	183.1	148.2	66.9	135.0	160.7	119.3	37.9	
G84.0	31.1	132.6	178.3	143.3	60.8	130.5	156.5	115.4	31.1	
G85.0	24.4	128.4	173.6	138.6	54.0	125.8	152.1	111.2	24.4	
G86.0	18.7	124.3	168.5	133.4	47.5	121.7	148.1	107.6	18.7	
G87.0	14.1	120.3	164.1	128.9	41.0	117.7	144.2	104.0	14.1	
G88.0	10.7	116.0	159.7	124.6	34.9	113.8	140.4	100.1	10.7	
G89.0	12.6	112.3	155.5	120.4	28.5	109.6	136.3	96.7	12.6	
G90.0	13.0	108.6	151.3	116.3	23.0	106.0	132.6	93.4	13.0	
G91.0	12.8	105.1	146.9	112.0	17.6	102.3	129.0	89.9	12.8	
G92.0	12.8	101.6	142.9	108.1	11.4	98.5	125.2	86.9	12.8	
G93.0	13.2	98.0	139.0	104.5	11.5	95.1	121.8	83.9	13.2	
G94.0	13.5	94.8	135.3	100.9	12.7	91.8	118.4	81.0	13.5	
G95.0	14.1	91.6	131.2	97.4	12.8	88.6	115.2	77.9	14.1	
G96.0	13.8	88.7	127.6	94.0	12.7	85.2	111.7	75.2	13.8	
G97.0	13.3	85.7	124.0	90.4	12.7	82.3	108.6	72.6	13.3	
G98.0	13.1	82.5	120.6	87.2	12.6	79.3	105.5	70.0	13.1	
G99.0	13.2	79.7	117.2	84.1	12.5	76.4	102.2	67.3	13.2	
G100.0	12.7	77.0	113.8	81.2	12.3	73.4	99.3	64.8	12.7	
G101.0	12.6	74.4	110.6	78.3	12.2	70.8	96.4	62.5	12.6	
G102.0	12.4	71.2	107.2	75.5	12.0	68.2	93.3	58.3	12.4	
G103.0	12.1	62.2	104.1	72.9	11.8	65.4	90.5	49.5	12.1	
G104.0	12.3	53.1	101.1	69.8	11.8	63.0	87.8	44.7	12.3	
G105.0	11.9	49.8	98.1	59.4	11.7	56.7	85.1	41.7	11.9	
G106.0	11.9	47.0	94.9	50.8	11.5	45.2	82.2	39.1	11.9	
G107.0	11.6	45.1	92.0	47.4	11.3	40.8	79.6	38.8	11.6	
G108.0	11.5	46.7	87.9	44.5	11.3	38.0	75.9	39.8	11.5	
G109.0	11.3	46.6	78.6	42.6	11.0	35.7	67.0	39.1	11.3	
G110.0	11.2	45.7	65.6	45.7	10.7	36.7	54.3	38.0	11.2	

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	11.1	44.4	57.5	45.9	10.4	39.2	49.3	36.8	11.1	
G112.0	11.0	43.1	55.0	44.2	10.5	38.1	47.3	35.6	11.0	
G113.0	10.8	41.7	52.9	42.4	10.4	36.5	45.8	34.3	10.8	
G114.0	10.6	40.4	51.2	40.7	10.0	34.9	44.2	32.8	10.6	
G115.0	10.5	39.2	52.5	39.3	9.8	33.4	45.7	31.5	10.5	
G116.0	10.4	37.8	57.4	37.9	9.7	31.9	49.8	30.1	10.4	
G117.0	10.3	36.5	59.3	36.7	9.7	30.5	50.2	28.8	10.3	
G118.0	10.0	35.2	58.7	35.4	9.6	29.3	49.4	27.3	10.0	
G119.0	9.9	34.0	57.4	34.3	9.4	28.1	48.1	26.1	9.9	
G120.0	9.8	32.9	55.7	33.2	9.2	26.8	46.4	24.9	9.8	
G121.0	9.7	31.8	53.8	32.0	9.0	25.8	44.5	23.9	9.7	
G122.0	9.6	30.7	51.9	31.0	8.9	24.8	42.8	22.8	9.6	
G123.0	9.4	29.6	50.1	29.8	8.8	23.8	40.9	21.8	9.4	
G124.0	9.2	28.6	48.3	28.8	8.6	22.9	39.1	20.7	9.2	
G125.0	9.1	27.5	46.6	27.8	8.4	22.1	37.5	19.5	9.1	
G126.0	8.9	26.4	44.9	26.8	8.3	21.3	35.8	18.5	8.9	
G127.0	8.9	25.0	43.2	25.9	8.2	20.4	34.1	17.9	8.9	
G128.0	8.8	23.7	41.5	25.0	8.2	19.6	32.5	17.2	8.8	
G129.0	8.7	22.8	39.9	24.0	8.1	18.6	30.9	16.3	8.7	
G130.0	8.6	21.7	38.4	23.1	7.9	17.7	29.4	15.4	8.6	
G131.0	8.5	20.8	36.9	22.2	7.8	16.8	27.9	14.7	8.5	
G132.0	8.4	19.9	35.4	21.4	7.7	15.9	26.5	14.1	8.4	
G133.0	8.3	19.2	34.0	20.5	7.5	15.2	25.0	13.5	8.3	
G134.0	8.1	18.4	32.6	19.7	7.4	14.3	23.8	13.0	8.1	
G135.0	7.9	17.8	31.1	18.9	7.1	13.6	22.5	12.5	7.9	
G136.0	7.8	17.0	29.8	18.1	7.0	13.0	21.3	11.9	7.8	
G137.0	7.7	16.3	28.6	17.3	6.9	12.4	20.1	11.4	7.7	
G138.0	7.6	15.5	27.3	16.5	6.8	11.9	19.0	10.8	7.6	
G139.0	7.5	14.8	26.1	15.7	6.7	11.4	18.0	10.3	7.5	
G140.0	7.4	14.0	24.9	15.0	6.6	11.0	17.0	9.9	7.4	
G141.0	7.3	13.3	23.7	14.3	6.5	10.6	16.0	9.5	7.3	
G142.0	7.2	12.7	22.5	13.5	6.4	10.2	15.2	9.2	7.2	
G143.0	7.1	12.0	21.4	12.9	6.3	9.8	14.4	9.0	7.1	
G144.0	7.0	11.4	20.3	12.2	6.3	9.5	13.6	8.7	7.0	
G145.0	7.0	10.9	19.2	11.5	6.4	9.2	12.9	8.4	7.0	
G146.0	6.9	10.4	18.1	10.9	6.3	8.9	12.3	8.2	6.9	
G147.0	6.8	9.8	17.1	10.3	6.1	8.6	11.7	8.0	6.8	

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:

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	6.7	9.3	16.1	9.9	6.0	8.3	11.3	7.7	6.7	
G149.0	6.6	8.8	15.0	9.4	5.9	8.1	10.7	7.5	6.6	
G150.0	6.4	8.4	13.9	9.1	5.8	7.8	10.2	7.3	6.4	
G151.0	6.4	8.1	12.9	8.8	5.8	7.7	9.8	7.1	6.4	
G152.0	6.3	7.8	12.1	8.5	5.7	7.5	9.3	6.9	6.3	
G153.0	6.2	7.5	11.3	8.2	5.6	7.3	8.9	6.7	6.2	
G154.0	6.1	7.3	10.6	8.0	5.6	7.1	8.5	6.6	6.1	
G155.0	6.0	7.1	9.9	7.8	5.6	6.9	8.1	6.4	6.0	
G156.0	6.0	6.9	9.3	7.6	5.5	6.8	7.9	6.3	6.0	
G157.0	5.9	6.7	8.8	7.3	5.5	6.6	7.5	6.2	5.9	
G158.0	5.9	6.5	8.3	7.1	5.4	6.5	7.2	6.0	5.9	
G159.0	5.8	6.3	8.0	7.0	5.3	6.3	7.0	5.9	5.8	
G160.0	5.7	6.2	7.6	6.8	5.3	6.2	6.8	5.8	5.7	
G161.0	5.7	6.1	7.3	6.6	5.2	6.0	6.6	5.7	5.7	
G162.0	5.6	6.0	7.1	6.4	5.2	5.9	6.4	5.6	5.6	
G163.0	5.6	5.9	6.8	6.3	5.2	5.8	6.2	5.5	5.6	
G164.0	5.5	5.7	6.6	6.1	5.1	5.7	6.0	5.5	5.5	
G165.0	5.5	5.6	6.3	5.9	5.0	5.5	5.8	5.4	5.5	
G166.0	5.4	5.5	6.0	5.8	5.0	5.3	5.7	5.3	5.4	
G167.0	5.3	5.4	5.8	5.7	5.0	5.3	5.5	5.2	5.3	
G168.0	5.3	5.3	5.6	5.5	5.0	5.1	5.4	5.1	5.3	
G169.0	5.2	5.1	5.4	5.3	5.0	5.0	5.2	5.1	5.2	
G170.0	5.2	5.0	5.2	5.2	4.9	4.9	5.1	5.0	5.2	
G171.0	5.1	4.9	5.0	5.2	4.9	4.9	4.9	4.9	5.1	
G172.0	5.0	4.8	4.9	5.2	4.9	4.9	4.8	4.8	5.0	
G173.0	5.0	4.8	4.8	5.2	4.9	4.9	4.7	4.9	5.0	
G174.0	4.9	4.8	4.7	5.2	4.9	4.8	4.6	4.8	4.9	
G175.0	4.8	4.8	4.8	5.0	4.9	4.8	4.7	4.9	4.8	
G176.0	4.8	4.8	4.7	5.1	4.9	4.8	4.7	4.9	4.8	
G177.0	4.8	4.8	4.8	5.1	4.9	4.8	4.7	4.9	4.8	
G178.0	4.8	4.8	4.8	5.0	4.8	4.8	4.7	4.9	4.8	
G179.0	4.8	4.8	4.8	5.0	4.8	4.8	4.7	4.9	4.8	
G180.0	4.8	4.8	4.8	5.0	4.7	4.7	4.7	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: