

Report No.: 8

Test Time: 2018/10/18 17:26

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: VCC3628 (P17021-42W-A)

Voltage: 120.0 V

Current: 0.393 A

Power: 47.06 W

Power Factor: 0.997

Photometric Results

CIE Class: General Diffuse

Total Rated Lamp Lumens: 3020.0 lm

Measurement Flux: 3020 lm

Efficiency: 100%

Downward Ratio: 53%

Upward Ratio: 47%

Horizontal Diffuse Angle(50%): H113.2

Vertical Diffuse Angle(50%): V110.5

Luminaire Efficacy Rating (LER): 64.22

Central Intensity: 578.42 cd

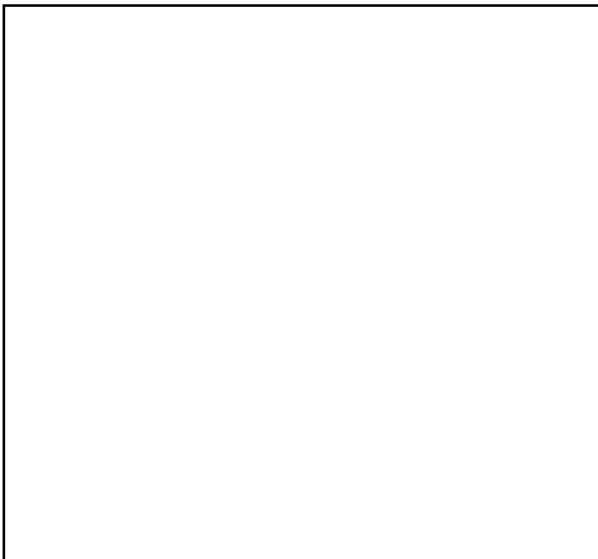
Max. Intensity: 579.23 cd

Pos of Max. Intensity: H180 V2

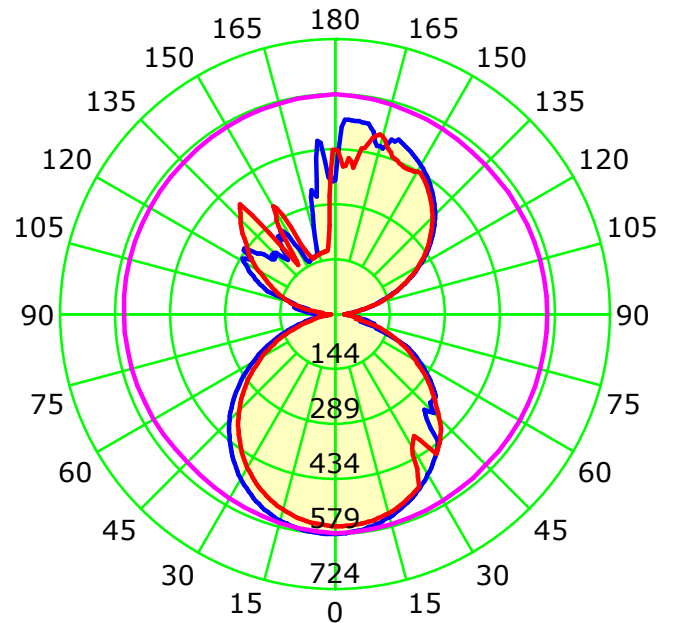
S/MH(C0/C180): 1.27

S/MH(C90/C270): 1.17

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

Average Diffuse Angle(50%): 360.0°

— C0-C180 — C90-C270 — G2

C Plane (°):0.0-360.0: 45.0

Gamma Plane (°):0.0-180.0:1.0

Test Lab: Inventfine instruments

Test Device: GPM-1800B

Test Type: TYPE C

Distance: 7.991 m

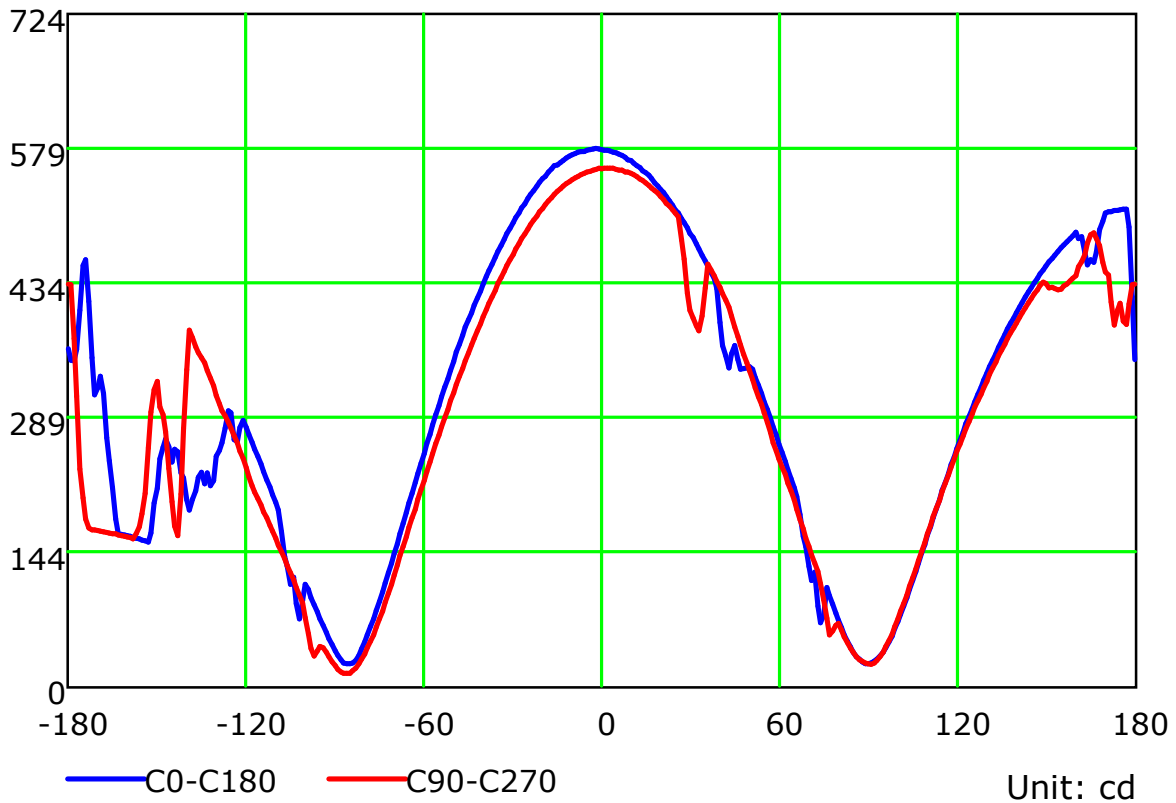
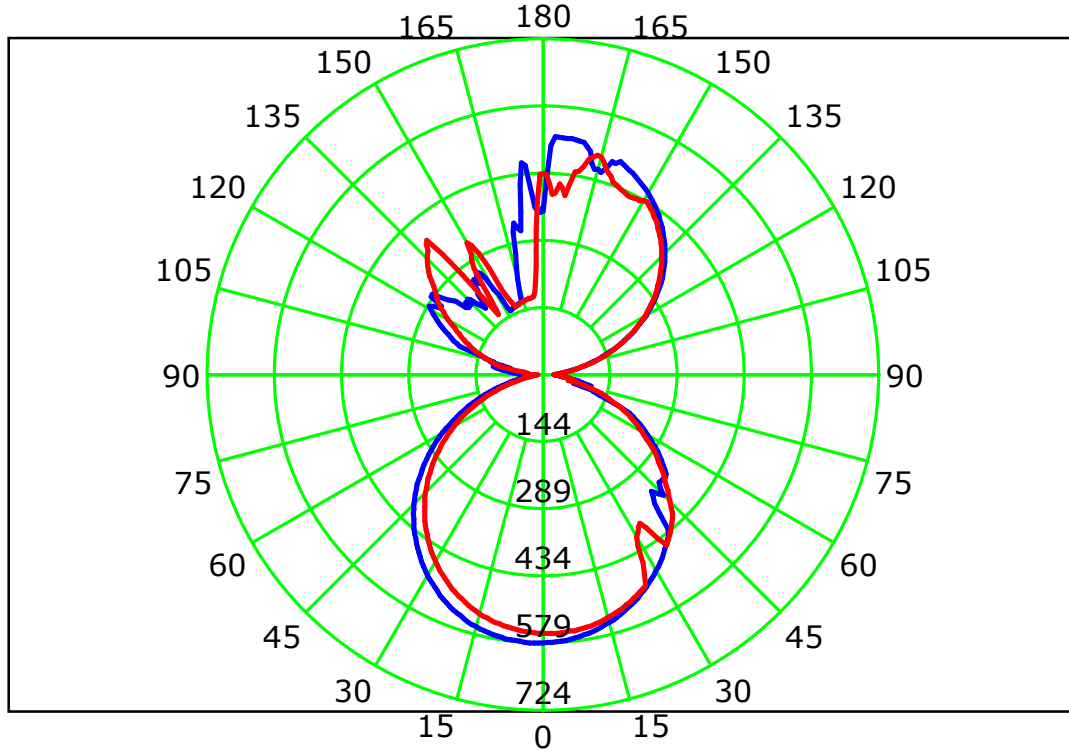
Temperature: 26

Humidity: 58

Operator: Jacky tang

Inspector:

Luminous Intensity Distribution Curve



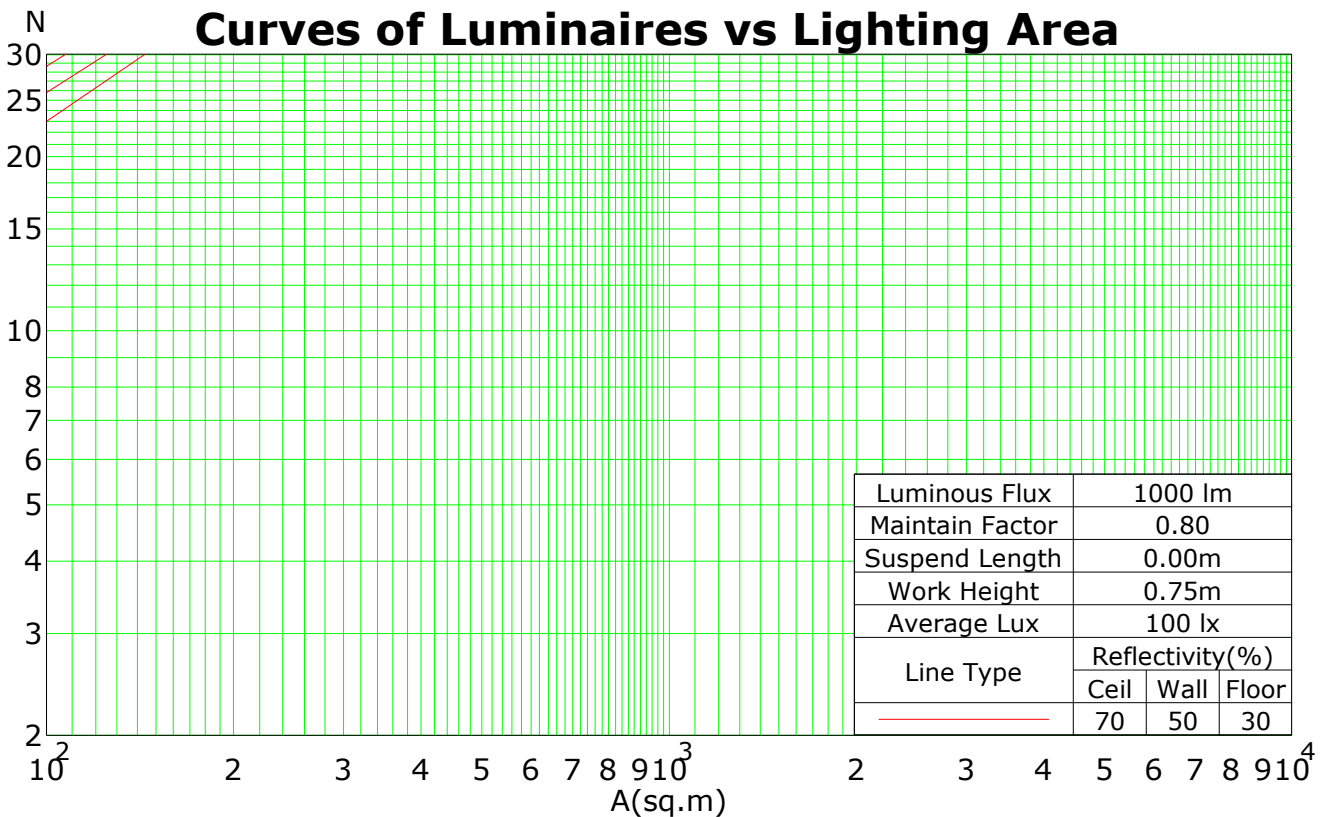
C Plane (°):0.0-360.0: 45.0
Test Lab: Inventfine instruments
Test Type: TYPE C
Temperature: 26
Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 7.991 m
Humidity: 58
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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59	53
1	98	94	90	86	91	87	84	80	74	72	69	63	61	59	52	50	49	44
2	89	82	75	70	82	76	70	66	65	61	57	55	52	49	45	43	41	37
3	81	72	64	58	75	67	60	55	57	52	48	48	45	41	40	37	35	31
4	74	63	55	49	69	59	52	46	51	45	41	43	39	35	36	33	30	26
5	68	56	48	42	63	53	45	40	45	39	35	38	34	30	32	29	26	23
6	63	50	42	36	58	47	40	34	41	35	30	35	30	27	29	26	23	20
7	58	45	37	32	54	42	35	30	37	31	27	31	27	23	26	23	20	18
8	54	41	33	28	50	39	31	27	34	28	24	29	24	21	24	21	18	16
9	50	38	30	25	46	35	28	24	31	25	21	26	22	19	22	19	16	14
10	47	34	27	22	43	32	26	21	28	23	19	24	20	17	21	17	15	13

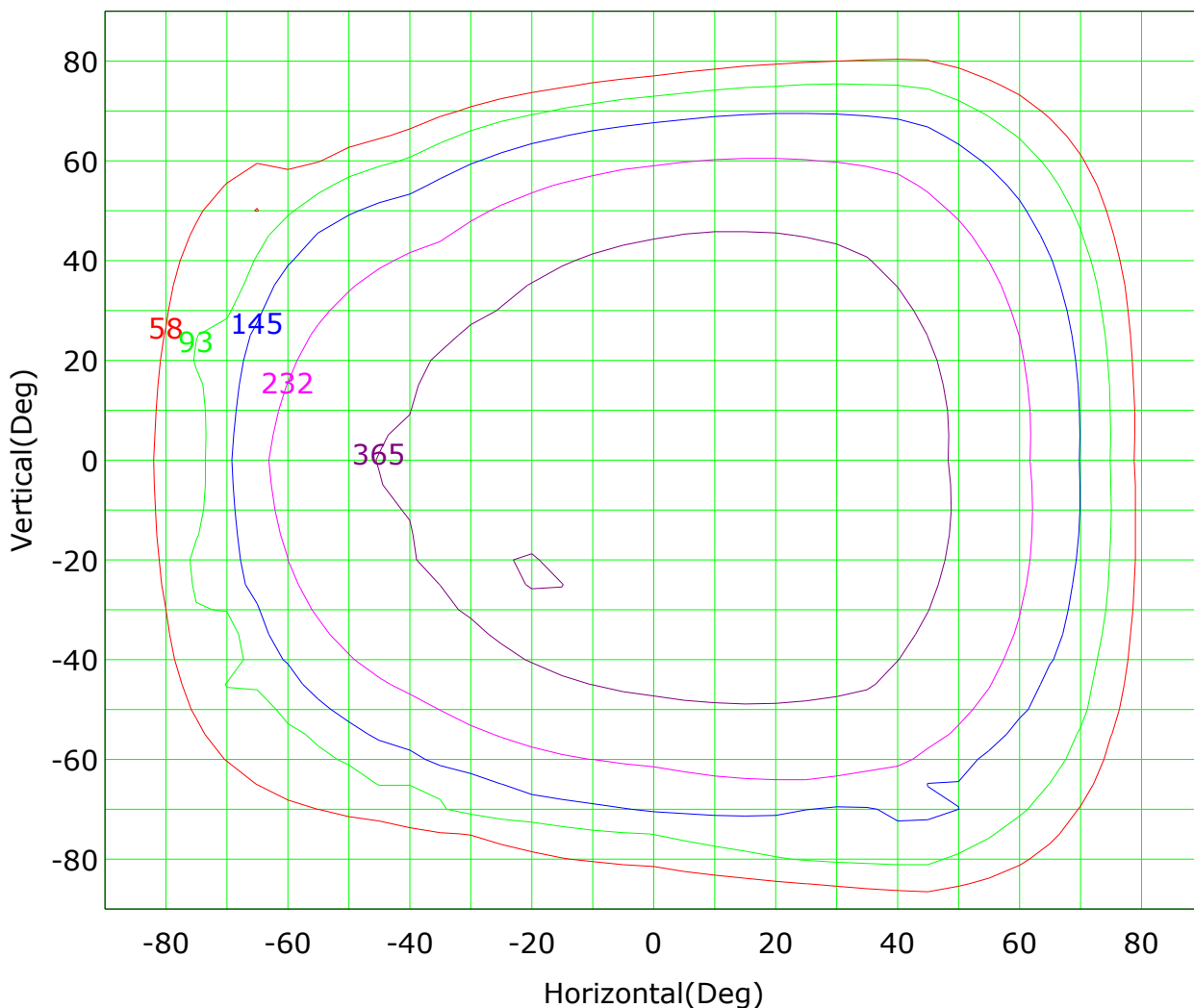
Spacing Criteria (0-180): 1.27
 Spacing Criteria (90-270): 1.17
 Spacing Criteria (Diagonal): 1.36



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: 7.991 m
 Humidity: 58
 Inspector:

Isocandela (rectangle)



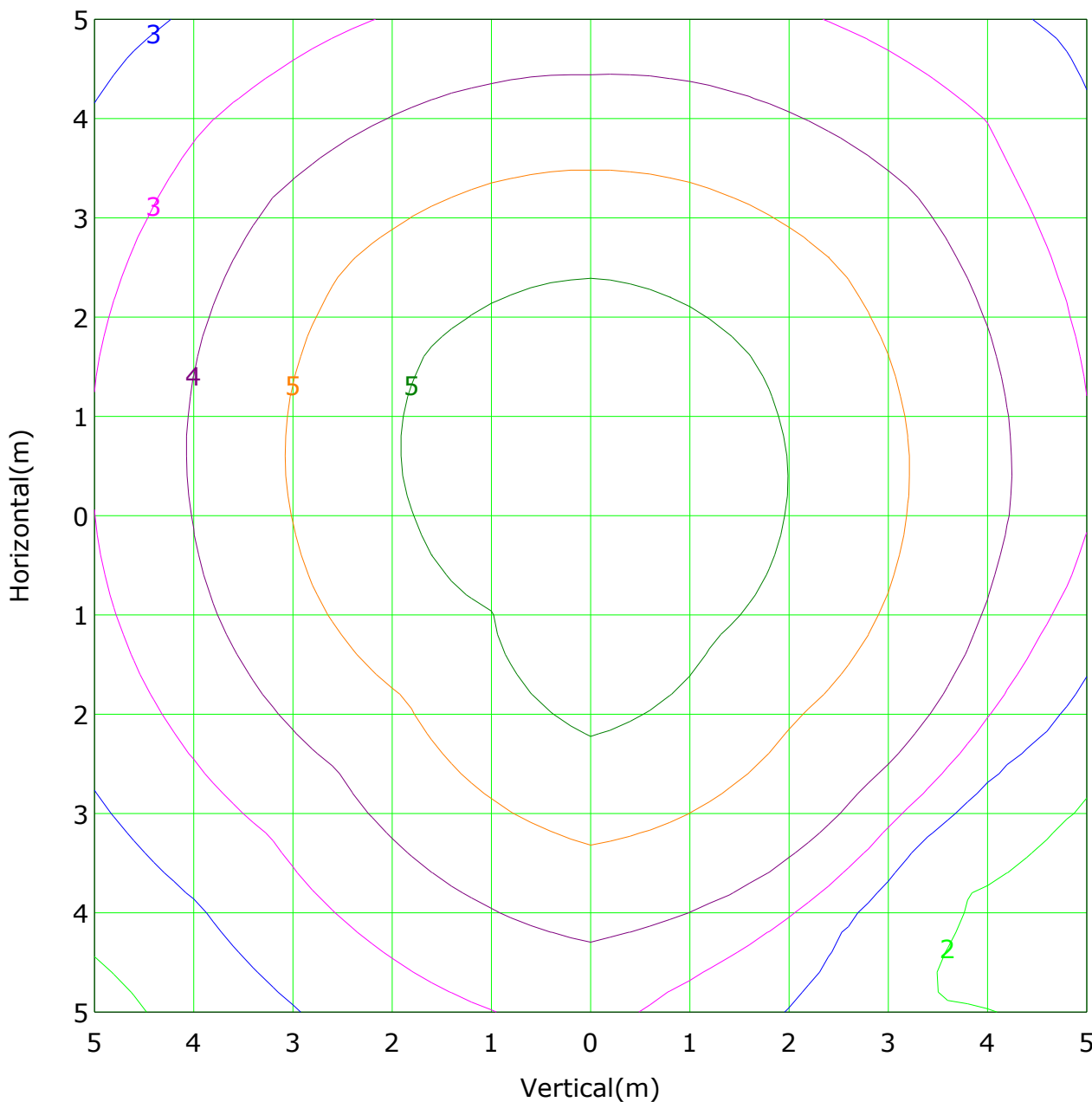
Imax (100%): 579 cd

— (10%): 58 cd	— (16%): 93 cd
— (25%): 145 cd	— (40%): 232 cd
— (63%): 365 cd	— (100%): 579 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: 7.991 m
Humidity: 58
Inspector:

IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 5.8 lx

(30%): 1.7 lx	(40%): 2.3 lx
(50%): 2.9 lx	(60%): 3.5 lx
(70%): 4.0 lx	(80%): 4.6 lx
(90%): 5.2 lx	(100%): 5.8 lx
(120%): 6.9 lx	(150%): 8.7 lx

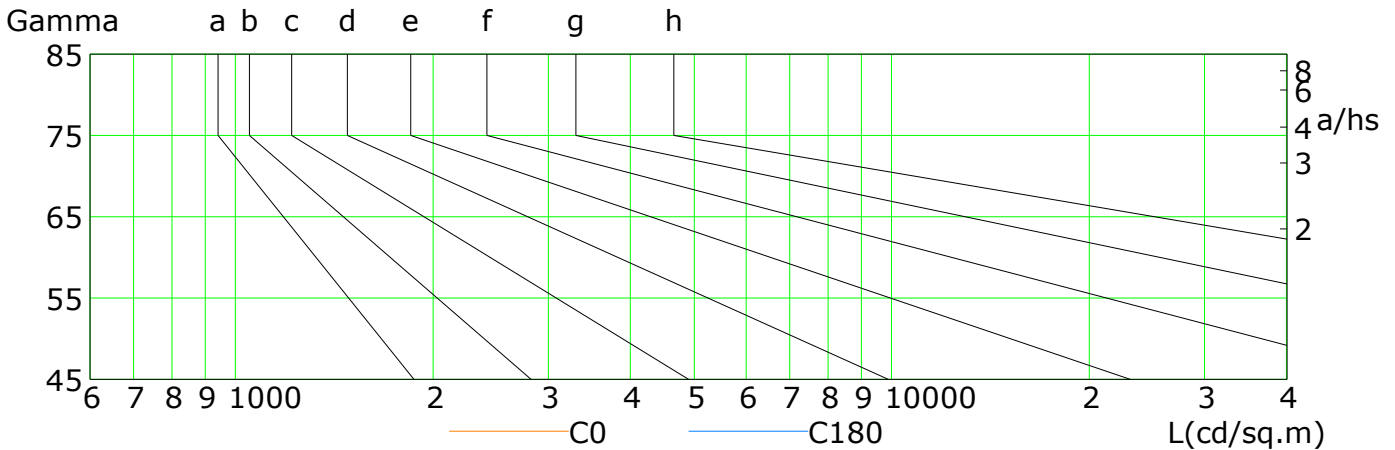
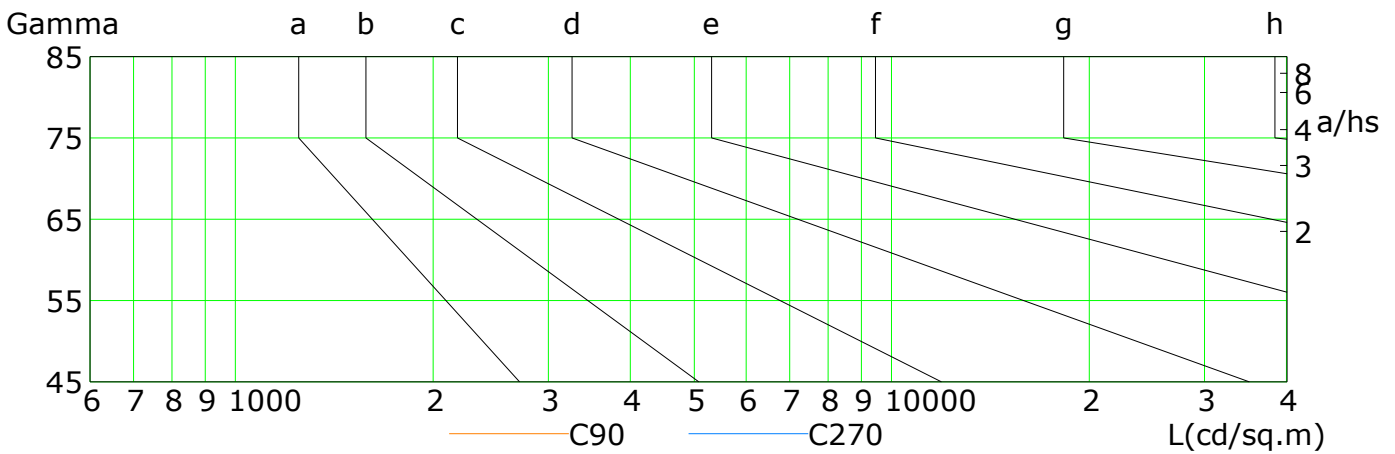
C Plane (°):0.0-360.0: 45.0
Test Lab: Inventfine instruments
Test Type: TYPE C
Temperature: 26
Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 7.991 m
Humidity: 58
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

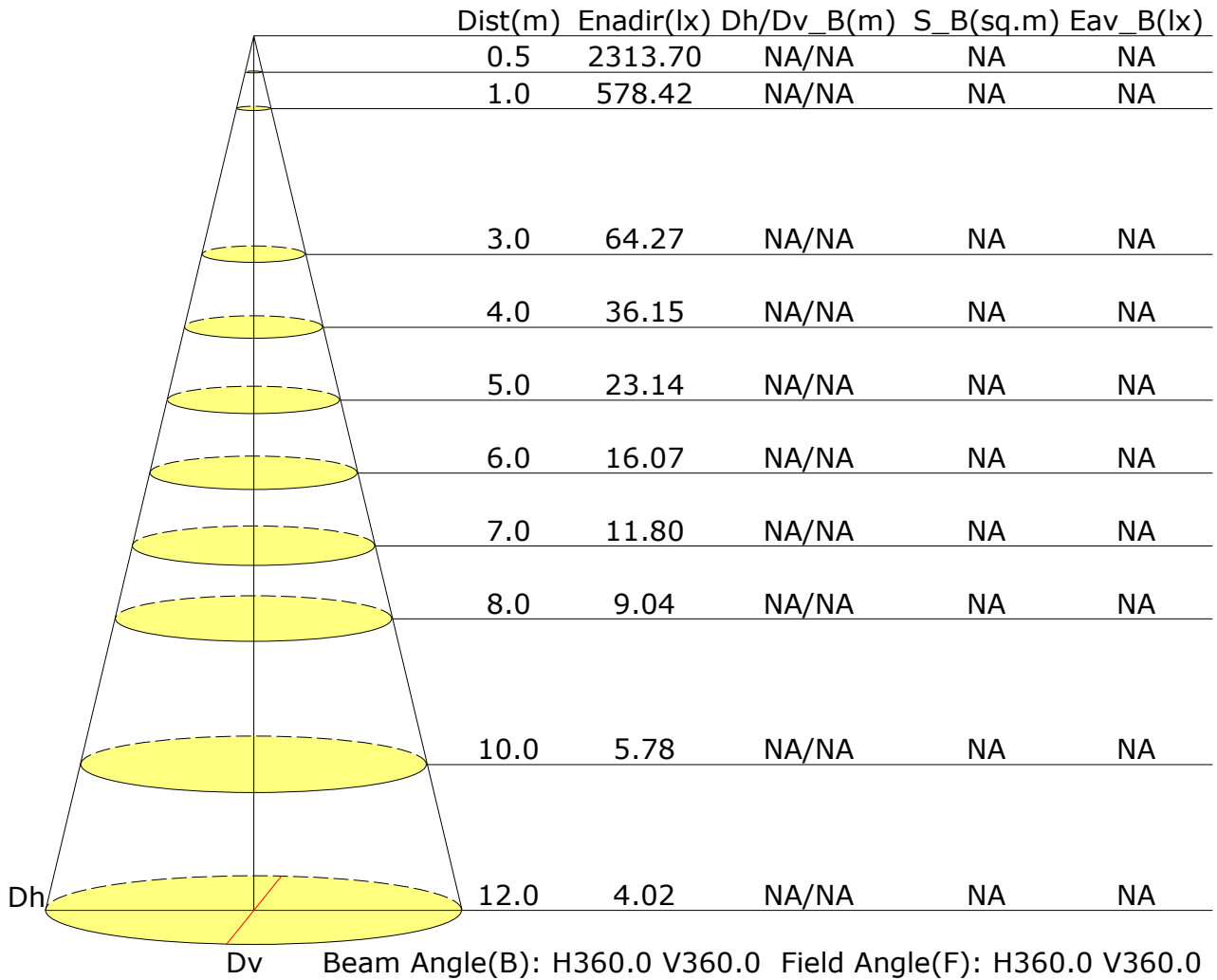


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	367	344	307	261	214	130	77	71	37
C90	387	340	295	245	201	151	93	68	37
C180	395	350	302	251	198	143	92	48	25
C270	359	316	271	222	171	120	72	35	14

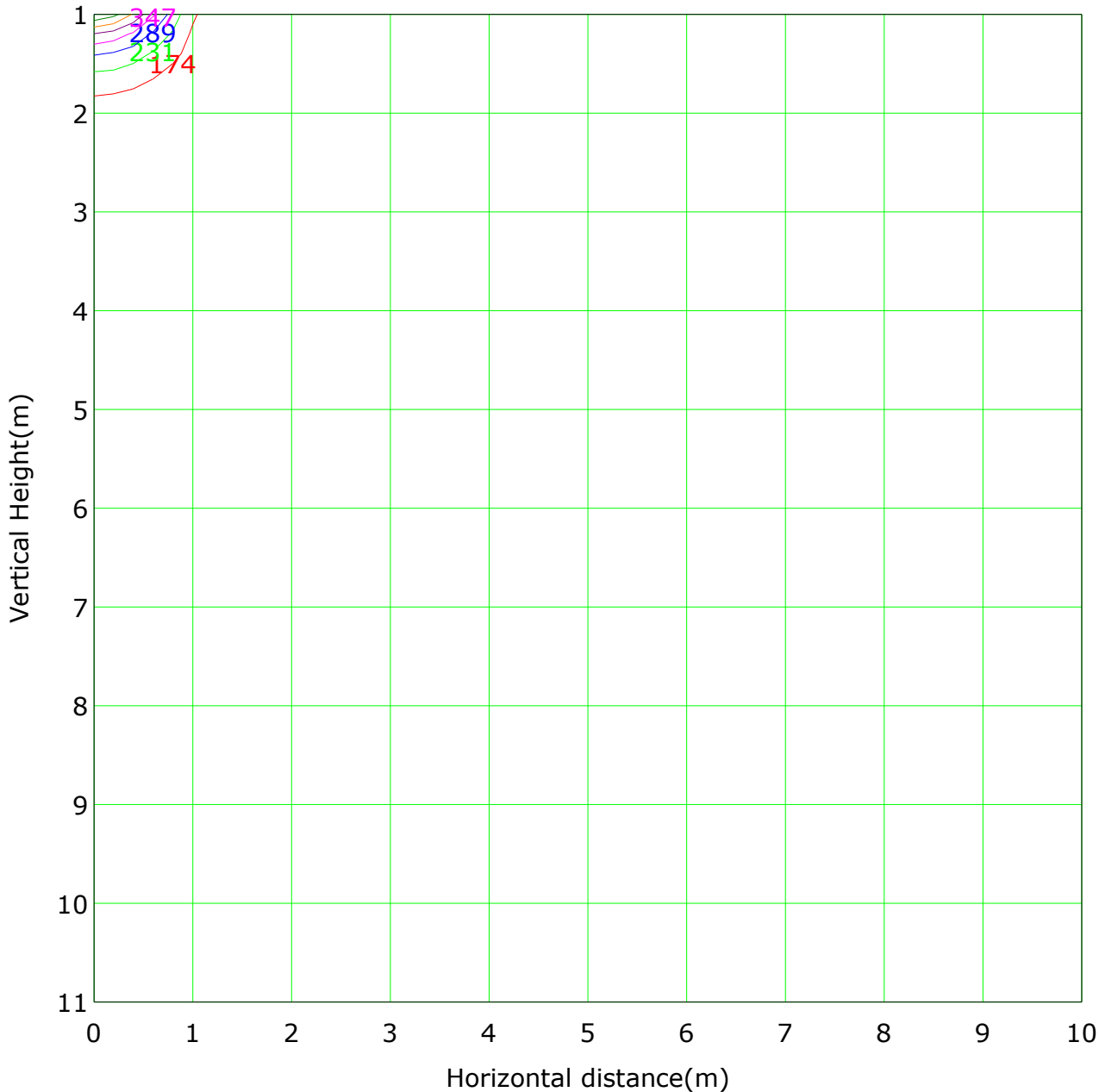
C Plane (°):0.0-360.0: 45.0
Test Lab: Inventfine instruments
Test Type: TYPE C
Temperature: 26
Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 7.991 m
Humidity: 58
Inspector:

Illuminance at a Distance



Vertical IsoLux Plot

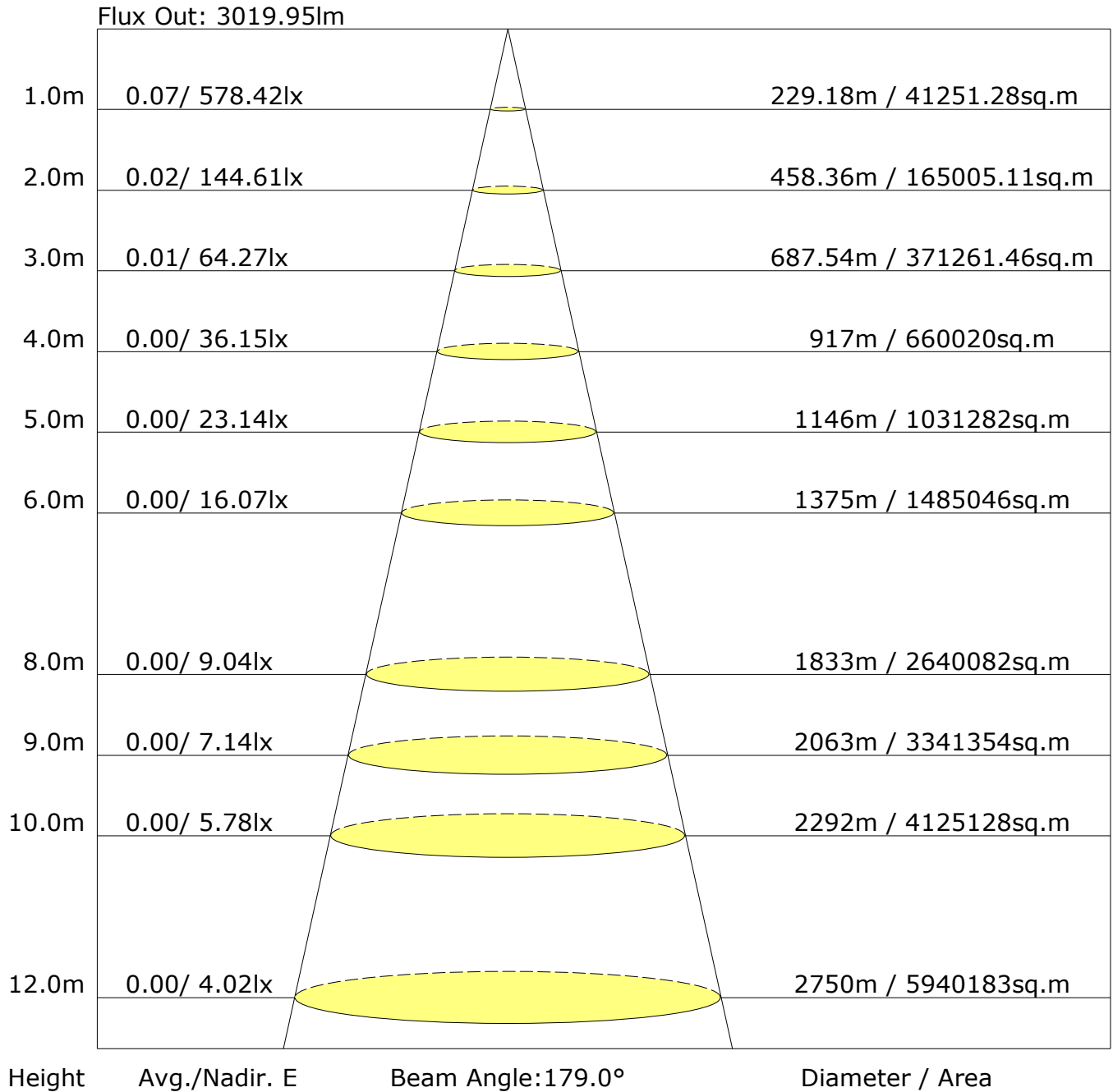


Lowest(m): 1.0m	Highest(m): 11.0m	Max Lux: 578.4 lx
— (30%): 173.5 lx	— (40%): 231.4 lx	
— (50%): 289.2 lx	— (60%): 347.1 lx	
— (70%): 404.9 lx	— (80%): 462.7 lx	
— (90%): 520.6 lx	— (100%): 578.4 lx	
— (120%): 694.1 lx	— (150%): 867.6 lx	

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: 7.991 m
Humidity: 58
Inspector:

The Average Illuminance Effective Figure



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	-1.\$/-1.\$					-1.\$/-1.\$				
S=1.5H	-1.\$/-1.\$					-1.\$/-1.\$				
S=2.0H	-1.\$/-1.\$					-1.\$/-1.\$				

Calculate in accordance with CIE Pub.117. The table is revised with 3020lm ($8\log(F/F_0) = 3.8$).

Zonal Lumen

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	563.8	0.5	0.5	0.02	0.02
1.0-2.0	563.7	1.6	2.2	0.05	0.07
2.0-3.0	563.4	2.7	4.9	0.09	0.16
3.0-4.0	562.8	3.8	8.6	0.12	0.29
4.0-5.0	561.9	4.8	13.5	0.16	0.45
5.0-6.0	560.9	5.9	19.4	0.20	0.64
6.0-7.0	560.1	7.0	26.3	0.23	0.87
7.0-8.0	559.0	8.0	34.3	0.26	1.14
8.0-9.0	557.4	9.0	43.3	0.30	1.44
9.0-10.0	556.0	10.1	53.4	0.33	1.77
10.0-11.0	554.1	11.1	64.5	0.37	2.14
11.0-12.0	552.2	12.1	76.6	0.40	2.53
12.0-13.0	549.9	13.1	89.6	0.43	2.97
13.0-14.0	547.4	14.0	103.6	0.46	3.43
14.0-15.0	544.8	15.0	118.6	0.50	3.93
15.0-16.0	542.2	15.9	134.5	0.53	4.45
16.0-17.0	539.4	16.8	151.3	0.56	5.01
17.0-18.0	536.1	17.7	168.9	0.59	5.59
18.0-19.0	532.6	18.5	187.5	0.61	6.21
19.0-20.0	529.2	19.4	206.8	0.64	6.85
20.0-21.0	525.7	20.2	227.0	0.67	7.52
21.0-22.0	521.4	21.0	248.0	0.69	8.21
22.0-23.0	515.8	21.6	269.6	0.72	8.93
23.0-24.0	508.1	22.2	291.9	0.74	9.66
24.0-25.0	499.7	22.7	314.6	0.75	10.42
25.0-26.0	490.9	23.2	337.8	0.77	11.18
26.0-27.0	483.0	23.6	361.4	0.78	11.97
27.0-28.0	475.9	24.1	385.5	0.80	12.76
28.0-29.0	467.6	24.5	410.0	0.81	13.57
29.0-30.0	459.3	24.8	434.8	0.82	14.40
30.0-31.0	453.6	25.2	460.0	0.84	15.23
31.0-32.0	450.7	25.8	485.8	0.86	16.09
32.0-33.0	448.3	26.4	512.2	0.87	16.96
33.0-34.0	446.9	27.0	539.3	0.90	17.86
34.0-35.0	446.2	27.7	567.0	0.92	18.78
35.0-36.0	444.5	28.3	595.3	0.94	19.71

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: 7.991 m
Humidity: 58
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	440.5	28.7	624.0	0.95	20.66
37.0-38.0	434.5	29.0	653.0	0.96	21.62
38.0-39.0	428.2	29.2	682.3	0.97	22.59
39.0-40.0	419.9	29.3	711.6	0.97	23.56
40.0-41.0	410.3	29.2	740.8	0.97	24.53
41.0-42.0	401.8	29.2	770.0	0.97	25.50
42.0-43.0	394.1	29.2	799.2	0.97	26.46
43.0-44.0	387.5	29.2	828.4	0.97	27.43
44.0-45.0	381.8	29.3	857.8	0.97	28.40
45.0-46.0	374.2	29.3	887.0	0.97	29.37
46.0-47.0	365.4	29.1	916.1	0.96	30.34
47.0-48.0	357.5	28.9	945.0	0.96	31.29
48.0-49.0	350.1	28.8	973.8	0.95	32.24
49.0-50.0	342.7	28.6	1002.3	0.95	33.19
50.0-51.0	334.9	28.3	1030.7	0.94	34.13
51.0-52.0	326.5	28.0	1058.7	0.93	35.06
52.0-53.0	317.7	27.6	1086.3	0.92	35.97
53.0-54.0	308.7	27.2	1113.5	0.90	36.87
54.0-55.0	299.7	26.8	1140.3	0.89	37.76
55.0-56.0	290.5	26.3	1166.6	0.87	38.63
56.0-57.0	280.9	25.7	1192.2	0.85	39.48
57.0-58.0	271.2	25.1	1217.3	0.83	40.31
58.0-59.0	261.7	24.5	1241.8	0.81	41.12
59.0-60.0	252.1	23.8	1265.6	0.79	41.91
60.0-61.0	242.5	23.1	1288.8	0.77	42.67
61.0-62.0	233.0	22.5	1311.2	0.74	43.42
62.0-63.0	223.4	21.7	1332.9	0.72	44.14
63.0-64.0	213.6	21.0	1353.9	0.69	44.83
64.0-65.0	203.8	20.2	1374.1	0.67	45.50
65.0-66.0	193.8	19.3	1393.4	0.64	46.14
66.0-67.0	182.5	18.4	1411.8	0.61	46.75
67.0-68.0	168.9	17.1	1428.9	0.57	47.31
68.0-69.0	155.0	15.8	1444.7	0.52	47.84
69.0-70.0	142.0	14.6	1459.3	0.48	48.32
70.0-71.0	131.1	13.6	1472.8	0.45	48.77
71.0-72.0	122.6	12.8	1485.6	0.42	49.19

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: 7.991 m
Humidity: 58
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	112.4	11.8	1497.3	0.39	49.58
73.0-74.0	101.7	10.7	1508.0	0.35	49.94
74.0-75.0	94.6	10.0	1518.0	0.33	50.27
75.0-76.0	89.7	9.5	1527.6	0.32	50.58
76.0-77.0	83.9	8.9	1536.5	0.30	50.88
77.0-78.0	76.9	8.2	1544.7	0.27	51.15
78.0-79.0	70.8	7.6	1552.4	0.25	51.40
79.0-80.0	64.7	7.0	1559.3	0.23	51.63
80.0-81.0	58.4	6.3	1565.6	0.21	51.84
81.0-82.0	52.1	5.7	1571.3	0.19	52.03
82.0-83.0	46.5	5.1	1576.4	0.17	52.20
83.0-84.0	41.8	4.6	1580.9	0.15	52.35
84.0-85.0	38.0	4.1	1585.1	0.14	52.49
85.0-86.0	35.0	3.8	1588.9	0.13	52.61
86.0-87.0	32.8	3.6	1592.5	0.12	52.73
87.0-88.0	31.8	3.5	1596.0	0.12	52.85
88.0-89.0	31.8	3.5	1599.4	0.12	52.96
89.0-90.0	32.5	3.6	1603.0	0.12	53.08
90.0-91.0	34.1	3.7	1606.8	0.12	53.20
91.0-92.0	36.9	4.0	1610.8	0.13	53.34
92.0-93.0	40.6	4.4	1615.2	0.15	53.49
93.0-94.0	44.8	4.9	1620.2	0.16	53.65
94.0-95.0	49.5	5.4	1625.6	0.18	53.83
95.0-96.0	54.3	5.9	1631.5	0.20	54.02
96.0-97.0	59.3	6.5	1638.0	0.21	54.24
97.0-98.0	65.6	7.1	1645.1	0.24	54.47
98.0-99.0	73.6	8.0	1653.1	0.26	54.74
99.0-100.0	82.2	8.9	1662.0	0.29	55.03
100.0-101.0	88.4	9.5	1671.5	0.32	55.35
101.0-102.0	92.2	9.9	1681.4	0.33	55.68
102.0-103.0	98.0	10.5	1691.9	0.35	56.02
103.0-104.0	107.6	11.5	1703.4	0.38	56.40
104.0-105.0	115.9	12.3	1715.7	0.41	56.81
105.0-106.0	123.7	13.1	1728.8	0.43	57.24
106.0-107.0	133.3	14.0	1742.8	0.46	57.71
107.0-108.0	143.8	15.0	1757.8	0.50	58.21

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: 7.991 m
Humidity: 58
Inspector:

Zonal Lumen (Continue 3)

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
108.0-109.0	155.4	16.2	1774.0	0.54	58.74
109.0-110.0	166.3	17.2	1791.2	0.57	59.31
110.0-111.0	176.7	18.2	1809.3	0.60	59.91
111.0-112.0	186.9	19.1	1828.4	0.63	60.54
112.0-113.0	196.4	19.9	1848.3	0.66	61.20
113.0-114.0	205.2	20.6	1868.9	0.68	61.89
114.0-115.0	213.9	21.3	1890.3	0.71	62.59
115.0-116.0	222.4	22.0	1912.3	0.73	63.32
116.0-117.0	230.6	22.6	1934.9	0.75	64.07
117.0-118.0	238.9	23.2	1958.2	0.77	64.84
118.0-119.0	247.2	23.8	1982.0	0.79	65.63
119.0-120.0	255.7	24.4	2006.4	0.81	66.44
120.0-121.0	264.1	25.0	2031.3	0.83	67.26
121.0-122.0	271.2	25.4	2056.7	0.84	68.10
122.0-123.0	276.6	25.6	2082.3	0.85	68.95
123.0-124.0	282.3	25.8	2108.1	0.85	69.81
124.0-125.0	289.5	26.2	2134.3	0.87	70.67
125.0-126.0	295.5	26.4	2160.6	0.87	71.55
126.0-127.0	298.3	26.3	2186.9	0.87	72.42
127.0-128.0	300.5	26.1	2213.1	0.87	73.28
128.0-129.0	303.3	26.0	2239.1	0.86	74.14
129.0-130.0	305.1	25.8	2264.9	0.85	75.00
130.0-131.0	305.5	25.5	2290.4	0.84	75.84
131.0-132.0	307.9	25.3	2315.7	0.84	76.68
132.0-133.0	316.0	25.5	2341.2	0.85	77.53
133.0-134.0	325.9	25.9	2367.2	0.86	78.38
134.0-135.0	334.0	26.1	2393.3	0.87	79.25
135.0-136.0	338.9	26.0	2419.3	0.86	80.11
136.0-137.0	339.9	25.7	2445.0	0.85	80.96
137.0-138.0	342.9	25.4	2470.4	0.84	81.80
138.0-139.0	349.3	25.4	2495.8	0.84	82.64
139.0-140.0	352.2	25.1	2520.9	0.83	83.47
140.0-141.0	351.6	24.5	2545.4	0.81	84.29
141.0-142.0	348.5	23.8	2569.2	0.79	85.07
142.0-143.0	341.3	22.8	2592.0	0.75	85.83
143.0-144.0	334.4	21.8	2613.8	0.72	86.55

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: 7.991 m
Humidity: 58
Inspector:

Zonal Lumen (Continue 4)

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
144.0-145.0	332.3	21.2	2634.9	0.70	87.25
145.0-146.0	334.8	20.8	2655.7	0.69	87.94
146.0-147.0	338.6	20.5	2676.2	0.68	88.62
147.0-148.0	340.7	20.1	2696.3	0.66	89.28
148.0-149.0	341.4	19.6	2715.8	0.65	89.93
149.0-150.0	342.1	19.0	2734.9	0.63	90.56
150.0-151.0	341.2	18.4	2753.3	0.61	91.17
151.0-152.0	338.6	17.7	2771.0	0.59	91.76
152.0-153.0	337.1	17.1	2788.1	0.57	92.32
153.0-154.0	337.8	16.5	2804.6	0.55	92.87
154.0-155.0	336.5	15.9	2820.5	0.53	93.40
155.0-156.0	334.4	15.2	2835.7	0.50	93.90
156.0-157.0	333.2	14.6	2850.3	0.48	94.38
157.0-158.0	333.1	14.0	2864.3	0.46	94.85
158.0-159.0	334.6	13.4	2877.7	0.45	95.29
159.0-160.0	335.1	12.9	2890.6	0.43	95.72
160.0-161.0	335.2	12.3	2902.9	0.41	96.12
161.0-162.0	335.0	11.7	2914.5	0.39	96.51
162.0-163.0	332.9	11.0	2925.5	0.36	96.87
163.0-164.0	332.5	10.4	2935.9	0.34	97.22
164.0-165.0	336.8	9.9	2945.7	0.33	97.54
165.0-166.0	341.6	9.4	2955.1	0.31	97.85
166.0-167.0	344.3	8.8	2963.9	0.29	98.14
167.0-168.0	349.1	8.3	2972.2	0.27	98.42
168.0-169.0	350.3	7.7	2979.9	0.25	98.67
169.0-170.0	343.8	6.9	2986.7	0.23	98.90
170.0-171.0	337.8	6.1	2992.8	0.20	99.10
171.0-172.0	334.0	5.4	2998.3	0.18	99.28
172.0-173.0	333.3	4.8	3003.0	0.16	99.44
173.0-174.0	341.3	4.2	3007.3	0.14	99.58
174.0-175.0	350.7	3.7	3011.0	0.12	99.70
175.0-176.0	354.0	3.0	3014.0	0.10	99.80
176.0-177.0	369.6	2.5	3016.5	0.08	99.88
177.0-178.0	396.3	1.9	3018.4	0.06	99.95
178.0-179.0	413.6	1.2	3019.6	0.04	99.99
179.0-180.0	416.7	0.4	3020.0	0.01	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: 7.991 m
Humidity: 58
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	578.4	564.6	557.7	554.7	578.4	564.6	557.7	554.7	578.4	
G1.0	577.8	563.1	558.3	556.8	578.7	566.5	558.0	551.6	577.8	
G2.0	577.2	561.7	558.1	557.9	579.2	566.6	557.1	550.5	577.2	
G3.0	577.1	560.1	558.0	559.4	578.7	567.2	556.4	548.5	577.1	
G4.0	575.3	558.5	558.0	559.9	578.4	567.8	554.9	546.0	575.3	
G5.0	574.6	556.6	556.9	561.3	577.2	568.4	554.0	543.2	574.6	
G6.0	573.3	554.1	555.9	561.8	576.4	568.2	552.6	540.4	573.3	
G7.0	572.1	552.4	556.4	562.5	576.4	569.3	551.4	539.0	572.1	
G8.0	569.9	549.6	554.3	562.9	575.8	567.9	549.5	535.0	569.9	
G9.0	567.3	548.2	553.9	562.7	573.8	568.1	547.8	532.2	567.3	
G10.0	566.1	545.7	552.7	563.1	572.7	567.3	545.6	528.1	566.1	
G11.0	564.0	541.8	551.1	561.7	571.0	566.4	544.0	524.8	564.0	
G12.0	561.2	538.4	548.9	562.6	569.3	566.6	541.7	521.3	561.2	
G13.0	558.6	535.4	546.8	561.5	566.5	563.6	538.8	517.5	558.6	
G14.0	555.1	532.0	544.8	560.3	564.6	562.8	536.1	514.1	555.1	
G15.0	553.1	528.0	542.5	559.0	561.7	560.6	533.1	509.6	553.1	
G16.0	550.4	524.1	539.6	558.3	560.6	559.5	529.9	505.3	550.4	
G17.0	546.9	520.5	537.1	556.7	557.2	556.9	526.5	500.4	546.9	
G18.0	542.5	516.2	534.0	556.0	553.8	554.7	523.0	495.8	542.5	
G19.0	539.0	511.1	531.3	553.3	549.4	552.0	519.0	491.0	539.0	
G20.0	535.7	507.0	527.8	551.9	547.0	550.0	514.7	486.3	535.7	
G21.0	531.7	502.4	524.6	549.4	543.1	546.6	511.3	481.0	531.7	
G22.0	527.8	491.0	520.2	547.5	538.9	544.4	506.4	475.5	527.8	
G23.0	523.3	468.5	517.6	544.6	534.4	540.5	502.4	470.2	523.3	
G24.0	518.5	425.8	513.0	541.7	530.1	537.4	497.2	464.4	518.5	
G25.0	513.5	393.5	509.7	540.2	525.7	532.7	492.6	458.6	513.5	
G26.0	509.6	347.2	505.4	536.5	519.8	529.6	487.5	452.9	509.6	
G27.0	504.0	351.3	481.3	533.3	515.3	525.4	482.2	446.0	504.0	
G28.0	499.3	340.9	460.4	529.7	509.9	519.7	476.7	439.2	499.3	
G29.0	494.1	336.7	423.5	526.3	505.1	516.2	471.4	432.9	494.1	
G30.0	487.8	326.0	405.0	522.0	499.6	510.7	465.2	426.5	487.8	
G31.0	483.6	337.7	397.1	518.7	493.7	505.5	459.4	419.0	483.6	
G32.0	476.7	362.3	388.4	514.2	487.6	501.4	453.1	412.5	476.7	
G33.0	471.3	380.9	382.8	510.1	481.5	496.9	447.5	405.3	471.3	
G34.0	464.7	401.9	398.6	505.5	475.0	490.1	440.0	398.0	464.7	
G35.0	458.4	398.0	429.6	501.1	468.8	484.4	433.8	391.0	458.4	
G36.0	452.7	392.4	454.5	496.7	462.0	478.9	426.8	383.6	452.7	

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: 7.991 m
Humidity: 58
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	445.9	390.3	448.9	492.0	454.5	472.7	419.4	376.5	445.9	
G38.0	439.8	386.8	442.4	487.2	447.7	466.7	412.7	368.7	439.8	
G39.0	428.8	384.8	436.2	481.2	441.3	460.4	405.7	360.7	428.8	
G40.0	392.2	383.4	429.7	475.7	433.5	454.3	398.0	353.1	392.2	
G41.0	367.3	377.3	422.9	468.9	425.9	447.1	391.0	344.7	367.3	
G42.0	355.8	370.1	416.4	463.7	418.1	440.3	382.9	337.2	355.8	
G43.0	343.3	363.5	408.5	457.9	410.7	434.1	375.0	327.9	343.3	
G44.0	357.9	354.7	398.8	450.2	402.7	426.0	367.8	320.4	357.9	
G45.0	367.3	347.7	387.2	444.1	395.0	419.1	358.9	310.8	367.3	
G46.0	351.7	338.5	376.9	437.1	387.2	412.3	350.7	302.2	351.7	
G47.0	341.7	330.7	367.9	430.4	378.3	404.1	342.6	293.7	341.7	
G48.0	342.4	322.1	357.3	423.7	368.9	396.7	334.4	284.9	342.4	
G49.0	342.7	314.3	348.6	416.4	360.1	388.6	325.0	275.3	342.7	
G50.0	344.4	305.2	340.4	409.0	349.9	380.2	316.2	266.2	344.4	
G51.0	341.8	297.0	330.7	401.5	340.5	371.6	307.6	256.4	341.8	
G52.0	332.6	288.2	321.4	394.3	331.6	363.2	298.4	247.8	332.6	
G53.0	324.2	279.4	312.3	386.1	322.3	354.2	289.4	237.6	324.2	
G54.0	315.8	269.9	303.5	378.1	311.9	346.2	279.5	228.7	315.8	
G55.0	306.6	261.1	294.8	369.9	302.4	336.7	270.6	218.7	306.6	
G56.0	298.0	251.6	284.8	361.7	292.7	327.1	261.6	208.9	298.0	
G57.0	288.6	242.1	273.3	353.7	281.8	318.2	250.9	199.2	288.6	
G58.0	279.6	233.3	262.4	345.4	271.7	309.2	241.6	188.9	279.6	
G59.0	270.6	223.1	253.1	336.6	261.6	299.6	231.6	179.4	270.6	
G60.0	261.0	213.4	245.4	327.8	250.7	289.0	221.9	168.9	261.0	
G61.0	251.8	204.4	236.3	319.0	240.0	279.0	211.9	159.2	251.8	
G62.0	242.5	195.4	228.6	309.7	229.4	269.3	201.9	149.2	242.5	
G63.0	233.1	185.4	219.3	300.9	219.3	259.3	191.0	139.6	233.1	
G64.0	223.5	176.2	210.9	291.2	208.1	249.2	181.6	129.5	223.5	
G65.0	213.8	166.0	201.2	281.7	197.6	239.6	171.0	120.1	213.8	
G66.0	204.3	155.9	190.7	272.3	187.2	229.4	160.8	109.6	204.3	
G67.0	185.4	136.4	179.9	262.9	175.4	219.0	150.6	100.1	185.4	
G68.0	161.4	111.9	169.8	245.5	164.8	207.9	141.1	91.0	161.4	
G69.0	150.5	90.0	159.4	223.1	153.6	198.1	130.6	81.0	150.5	
G70.0	129.6	84.7	150.7	199.2	143.4	186.2	120.0	72.1	129.6	
G71.0	114.2	90.3	141.6	182.1	132.9	176.7	110.1	63.5	114.2	
G72.0	123.1	98.0	132.6	153.7	122.5	165.1	100.3	55.5	123.1	
G73.0	86.6	90.4	123.6	140.8	111.7	155.2	91.0	48.1	86.6	

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: 7.991 m
Humidity: 58
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	68.8	82.4	110.4	150.2	102.0	144.3	81.3	40.8	68.8	
G75.0	76.8	74.6	93.1	156.8	91.7	134.3	72.5	34.2	76.8	
G76.0	106.7	67.6	73.4	156.2	81.9	123.9	63.8	28.2	106.7	
G77.0	97.5	60.4	55.8	161.1	72.6	113.9	55.6	24.0	97.5	
G78.0	88.5	53.9	59.4	151.4	64.2	103.3	48.3	20.7	88.5	
G79.0	79.3	47.7	65.9	140.7	55.4	93.9	41.5	17.9	79.3	
G80.0	71.2	42.1	67.7	130.0	48.1	83.7	34.8	15.8	71.2	
G81.0	63.2	37.4	60.6	120.1	40.3	75.4	29.2	14.7	63.2	
G82.0	55.8	33.9	53.7	109.9	33.3	66.7	24.2	15.4	55.8	
G83.0	48.4	31.6	47.4	100.2	27.9	58.5	19.9	17.6	48.4	
G84.0	42.5	30.3	41.3	90.7	25.1	50.9	16.7	19.9	42.5	
G85.0	36.8	30.1	36.9	80.6	24.6	43.1	14.4	23.6	36.8	
G86.0	32.3	30.4	31.8	71.2	24.3	37.2	14.0	28.0	32.3	
G87.0	29.0	30.8	28.7	63.0	25.5	32.1	13.9	33.2	29.0	
G88.0	26.3	33.3	26.9	53.3	28.9	28.6	15.4	39.7	26.3	
G89.0	24.4	37.2	25.5	45.4	33.6	25.2	18.1	46.8	24.4	
G90.0	24.2	41.4	24.7	37.8	38.5	21.4	22.2	54.1	24.2	
G91.0	25.2	46.8	24.0	32.1	44.9	20.3	26.7	62.0	25.2	
G92.0	27.0	53.2	24.9	27.9	51.2	22.3	31.8	70.3	27.0	
G93.0	29.2	59.8	27.9	24.7	58.2	25.5	36.8	78.8	29.2	
G94.0	32.6	66.6	31.9	22.1	65.6	28.5	41.9	87.4	32.6	
G95.0	36.6	74.8	36.9	21.9	72.8	32.9	42.9	96.5	36.6	
G96.0	41.9	83.1	42.8	23.3	80.4	38.5	38.3	105.7	41.9	
G97.0	47.7	91.0	49.2	25.8	88.2	45.1	33.0	115.4	47.7	
G98.0	54.0	100.7	56.4	30.0	95.6	51.1	41.4	124.5	54.0	
G99.0	62.1	109.6	64.7	34.8	104.2	58.4	56.7	133.6	62.1	
G100.0	69.9	118.6	72.6	40.7	110.0	62.7	74.1	143.0	69.9	
G101.0	77.8	128.1	81.0	47.4	92.6	54.0	90.2	152.3	77.8	
G102.0	86.7	137.6	89.5	54.8	72.7	50.0	97.9	162.3	86.7	
G103.0	95.5	147.9	98.4	62.3	89.5	44.8	106.5	171.0	95.5	
G104.0	104.2	157.2	107.9	69.7	117.7	66.8	114.9	167.7	104.2	
G105.0	114.1	166.4	117.1	78.4	110.0	86.3	122.6	154.2	114.1	
G106.0	123.9	176.2	126.4	86.8	129.4	105.9	130.1	151.4	123.9	
G107.0	132.9	185.1	135.6	94.6	139.8	121.6	137.4	155.8	132.9	
G108.0	143.6	195.4	145.1	104.1	166.2	129.9	145.0	168.5	143.6	
G109.0	152.8	204.8	155.0	112.4	189.8	139.0	152.3	182.9	152.8	
G110.0	163.0	213.7	164.3	121.8	198.2	147.6	159.7	203.9	163.0	

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: 7.991 m
Humidity: 58
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	171.9	222.5	173.5	130.7	206.8	155.9	166.9	227.2	171.9	
G112.0	181.6	232.0	182.9	140.0	214.9	164.4	173.7	245.7	181.6	
G113.0	191.2	240.7	191.8	148.8	222.7	172.5	181.4	258.7	191.2	
G114.0	200.9	249.7	200.6	157.1	231.3	180.7	187.9	267.1	200.9	
G115.0	211.2	258.2	210.3	166.6	239.5	189.7	195.4	275.5	211.2	
G116.0	219.7	266.8	219.0	175.4	247.8	197.7	202.3	282.9	219.7	
G117.0	228.9	275.5	227.8	184.1	255.5	206.3	209.0	290.9	228.9	
G118.0	238.6	284.4	236.3	192.5	263.1	214.0	216.2	299.2	238.6	
G119.0	247.2	291.9	244.9	201.6	271.4	222.4	226.1	306.3	247.2	
G120.0	256.5	300.3	253.3	209.7	279.2	231.4	235.7	314.0	256.5	
G121.0	265.2	307.8	261.2	218.4	286.7	239.0	245.7	321.4	265.2	
G122.0	274.1	315.4	269.8	227.0	278.7	246.6	253.4	328.1	274.1	
G123.0	282.7	322.8	277.5	235.2	263.7	254.0	262.1	334.7	282.7	
G124.0	290.7	330.3	284.9	237.6	266.1	263.1	270.3	341.7	290.7	
G125.0	299.0	337.3	293.2	226.3	294.7	270.3	278.1	348.4	299.0	
G126.0	306.8	344.6	300.7	214.4	296.5	277.4	284.6	355.0	306.8	
G127.0	314.5	352.0	308.1	202.1	278.2	285.2	291.3	360.8	314.5	
G128.0	322.4	359.1	314.9	200.5	262.5	292.5	296.8	367.2	322.4	
G129.0	330.1	365.2	321.9	203.6	254.4	283.3	304.5	373.2	330.1	
G130.0	337.5	371.0	328.8	207.6	247.6	259.7	313.4	379.3	337.5	
G131.0	344.7	377.9	335.9	212.8	221.8	242.0	323.5	385.1	344.7	
G132.0	351.6	383.9	342.8	235.5	216.5	229.1	332.3	391.2	351.6	
G133.0	358.4	390.1	349.2	268.0	229.9	241.3	340.1	396.4	358.4	
G134.0	365.3	395.9	356.3	302.2	218.2	252.9	348.3	402.2	365.3	
G135.0	371.8	401.7	362.4	324.8	230.6	250.2	354.1	407.2	371.8	
G136.0	378.8	406.7	368.8	330.6	225.1	237.5	359.4	412.3	378.8	
G137.0	385.1	412.2	374.5	329.9	210.5	223.4	365.6	417.3	385.1	
G138.0	391.1	417.1	381.0	334.8	201.4	246.2	375.3	421.7	391.1	
G139.0	396.5	422.3	386.8	325.8	190.1	287.9	383.9	426.4	396.5	
G140.0	402.5	427.8	391.4	321.5	201.0	318.2	341.0	411.9	402.5	
G141.0	408.6	432.0	397.2	314.1	224.5	360.6	277.3	396.2	408.6	
G142.0	413.5	436.7	402.2	305.9	229.8	363.9	207.0	405.6	413.5	
G143.0	419.3	441.3	407.9	290.5	252.9	342.3	162.5	379.7	419.3	
G144.0	424.8	446.2	413.1	283.3	255.6	322.2	173.1	335.7	424.8	
G145.0	429.3	450.0	417.3	271.3	242.0	317.0	198.8	337.0	429.3	
G146.0	434.7	454.0	423.1	274.9	258.5	295.3	234.8	318.5	434.7	
G147.0	439.3	458.3	427.5	278.5	266.2	265.4	274.0	314.9	439.3	

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: 7.991 m
Humidity: 58
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	444.1	462.0	431.7	281.3	257.5	239.9	293.0	317.1	444.1	
G149.0	448.5	465.3	435.8	284.8	245.0	236.5	300.9	319.5	448.5	
G150.0	452.8	469.0	434.1	287.5	213.1	230.6	328.7	321.5	452.8	
G151.0	457.3	472.8	429.5	290.8	197.5	231.5	319.9	323.3	457.3	
G152.0	461.0	475.1	429.8	293.5	165.3	245.3	295.7	329.2	461.0	
G153.0	464.6	478.7	428.6	295.6	155.7	265.8	257.1	353.0	464.6	
G154.0	468.5	481.7	427.2	298.2	156.6	285.7	207.9	379.2	468.5	
G155.0	472.4	484.0	427.9	300.8	157.7	288.4	185.6	362.6	472.4	
G156.0	475.8	487.6	431.0	303.3	158.7	290.9	172.2	352.1	475.8	
G157.0	478.9	490.3	433.5	305.9	159.7	293.4	164.8	332.6	478.9	
G158.0	482.1	492.7	437.0	308.4	160.7	296.5	159.1	334.0	482.1	
G159.0	485.4	494.9	439.8	310.8	161.4	295.5	160.0	335.3	485.4	
G160.0	489.3	495.5	442.2	312.1	162.2	280.8	161.0	335.8	489.3	
G161.0	482.5	497.7	452.2	314.9	162.8	275.2	161.8	337.0	482.5	
G162.0	484.2	499.6	457.5	316.5	163.8	253.5	162.5	337.7	484.2	
G163.0	467.2	500.8	465.4	318.5	164.6	232.3	163.2	338.7	467.2	
G164.0	454.3	502.6	477.7	320.3	180.2	230.2	164.2	339.9	454.3	
G165.0	459.6	503.9	486.3	322.5	214.3	228.0	164.8	340.3	459.6	
G166.0	456.8	504.8	488.7	324.0	242.8	221.5	165.4	341.1	456.8	
G167.0	467.8	506.4	482.3	313.8	268.2	217.6	166.1	341.5	467.8	
G168.0	492.2	507.5	474.9	295.9	315.4	227.3	166.6	341.6	492.2	
G169.0	500.7	507.9	457.1	274.5	334.0	199.6	167.3	342.3	500.7	
G170.0	509.6	508.5	446.2	266.4	321.9	171.0	167.6	326.7	509.6	
G171.0	511.0	507.7	443.0	259.7	314.4	170.5	168.3	312.8	511.0	
G172.0	511.6	492.3	413.8	275.8	354.1	142.8	168.8	298.0	511.6	
G173.0	512.7	483.9	389.5	279.3	415.1	134.4	170.5	289.6	512.7	
G174.0	513.0	459.7	405.4	323.7	459.7	135.4	180.6	308.4	513.0	
G175.0	513.2	460.6	412.9	338.1	453.7	145.6	203.1	298.7	513.2	
G176.0	513.8	442.6	393.1	370.6	404.9	180.8	234.2	298.6	513.8	
G177.0	513.9	448.0	390.2	399.2	363.0	306.4	312.7	341.9	513.9	
G178.0	494.6	467.6	412.1	430.0	350.6	381.7	374.6	354.3	494.6	
G179.0	419.9	456.1	432.7	430.5	351.1	422.5	433.0	405.6	419.9	
G180.0	352.1	434.6	433.1	434.7	363.7	438.7	433.1	425.1	352.1	

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: 7.991 m
 Humidity: 58
 Inspector: