

Report No.: TH-1539A

Test Time: 2020/7/28 16:10

Luminaire Property

Luminaire Manufacturer: HAVIT COMMERCIAL

Luminaire Description: HCP-88X1804-4K

Luminous Width (mm): -75

Current: 0.093 A

Power Factor: 0.872

Luminous Length (mm): -75

Voltage: 220.0 V

Power: 17.88 W

Photometric Results

CIE Class: Direct

Measurement Flux: 1600.4 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(50%): H45.4

Vertical Diffuse Angle(50%): V45.3

Luminaire Efficacy Rating (LER): 89.56

Max. Intensity: 2589.97 cd

S/MH(C0/C180): 0.70

Total Rated Lamp Lumens: 1600.4 lm

Efficiency: 100%

Upward Ratio: 1%

Central Intensity: 2586.58 cd

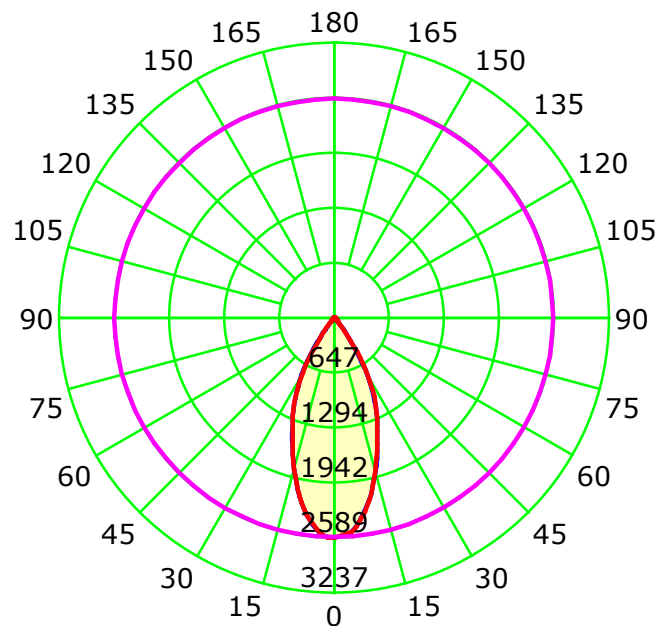
Pos of Max. Intensity: H270 V1

S/MH(C90/C270): 0.70

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

Average Diffuse Angle(50%): 45.3°

— C0-C180 — C90-C270 — G1

C Plane (°):0.0-360.0: 45.0

Test Lab: Inventfine instrument

Test Type: TYPE C

Temperature: 26

Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0

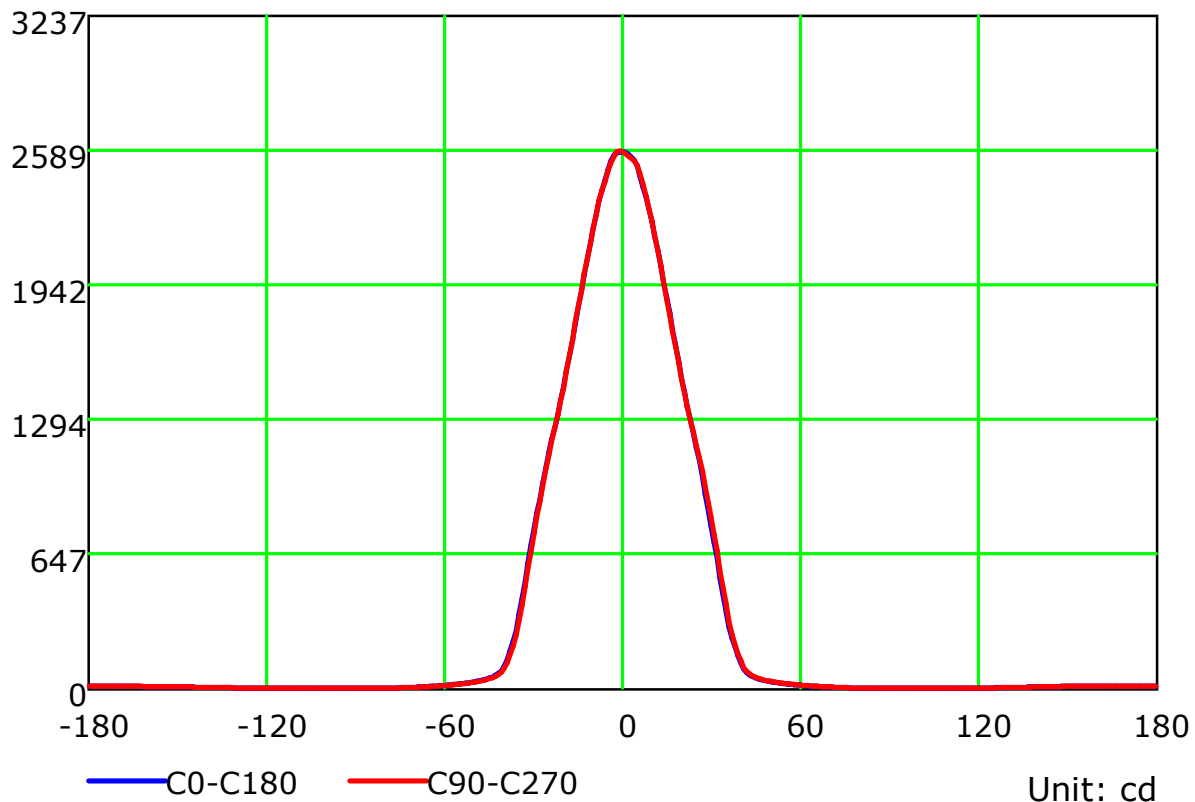
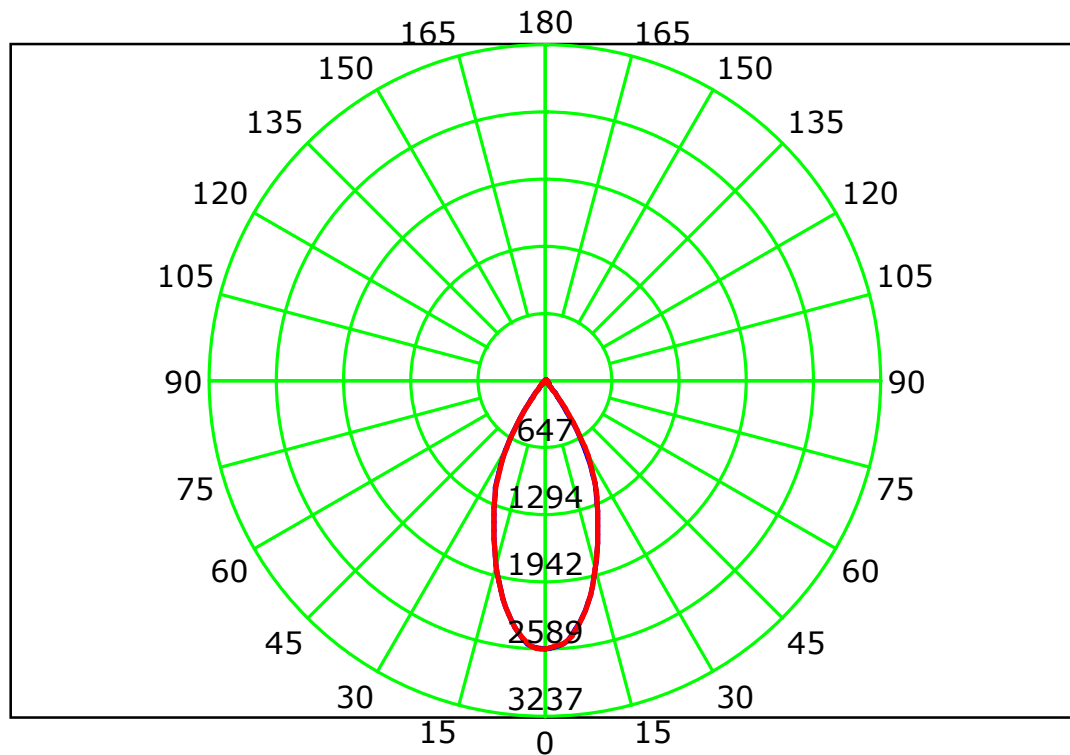
Test Device: GPM-1800B

Distance: 8.598 m

Humidity: 65

Inspector:

Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 45.0
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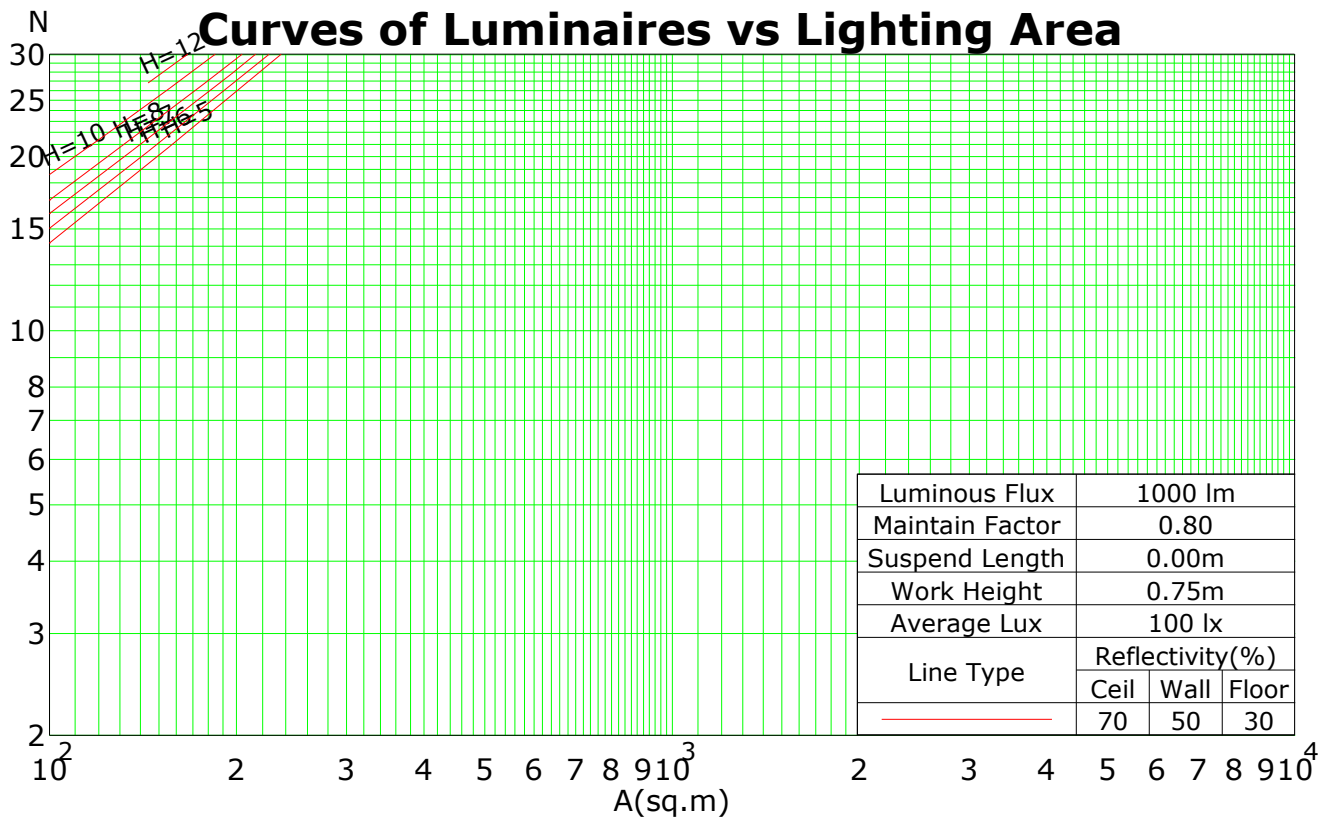
Coefficients Of Utilization - Zonal Cavity Method

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	119	119	119	119	116	116	116	116	110	110	110	105	105	105	101	101	101	99
1	113	111	108	106	111	109	106	105	104	103	101	100	99	98	97	96	95	93
2	108	104	100	97	106	102	98	95	98	96	93	95	93	91	92	91	89	87
3	103	97	93	89	101	96	91	88	93	89	86	90	87	85	88	86	84	82
4	98	91	86	82	97	90	85	82	88	84	81	86	82	80	84	81	79	77
5	94	86	81	77	92	85	80	76	83	79	76	82	78	75	80	77	74	73
6	90	81	76	72	88	81	75	72	79	74	71	78	74	70	76	73	70	68
7	86	77	72	68	84	76	71	67	75	70	67	74	70	67	73	69	66	65
8	82	73	68	64	81	73	67	64	71	67	63	70	66	63	69	65	63	61
9	79	70	64	60	77	69	64	60	68	63	60	67	63	60	66	62	59	58
10	75	66	61	57	74	66	61	57	65	60	57	64	60	57	63	59	57	55

Spacing Criteria (0-180): 0.70

Spacing Criteria (90-270): 0.70

Spacing Criteria (Diagonal): 0.75



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Test Lab: Inventfine instrument

Test Type: TYPE C

Temperature: 26

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Gamma Plane (°):0.0-180.0:1.0

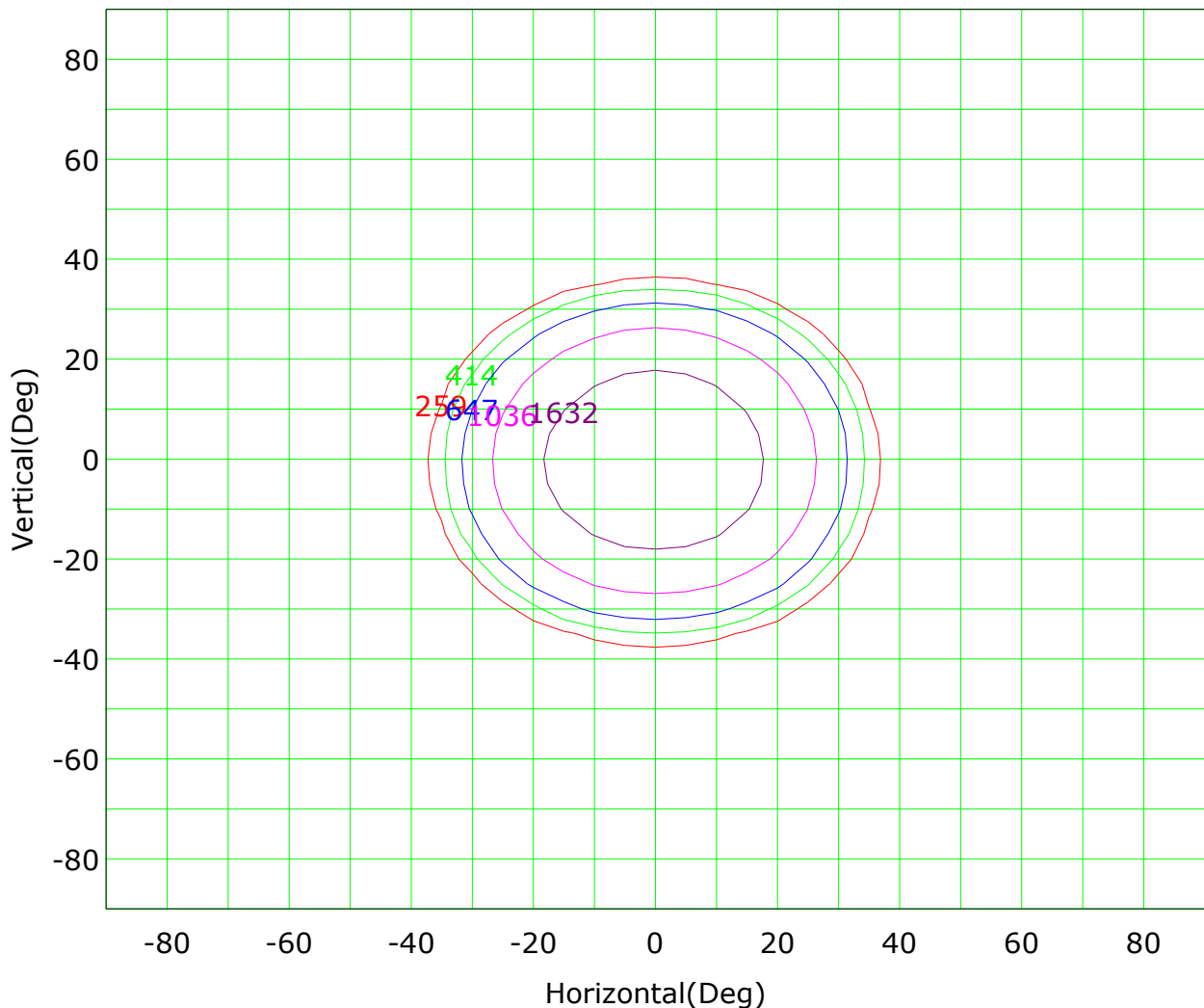
Test Device: GPM-1800B

Distance: 8.598 m

Humidity: 65

Inspector:

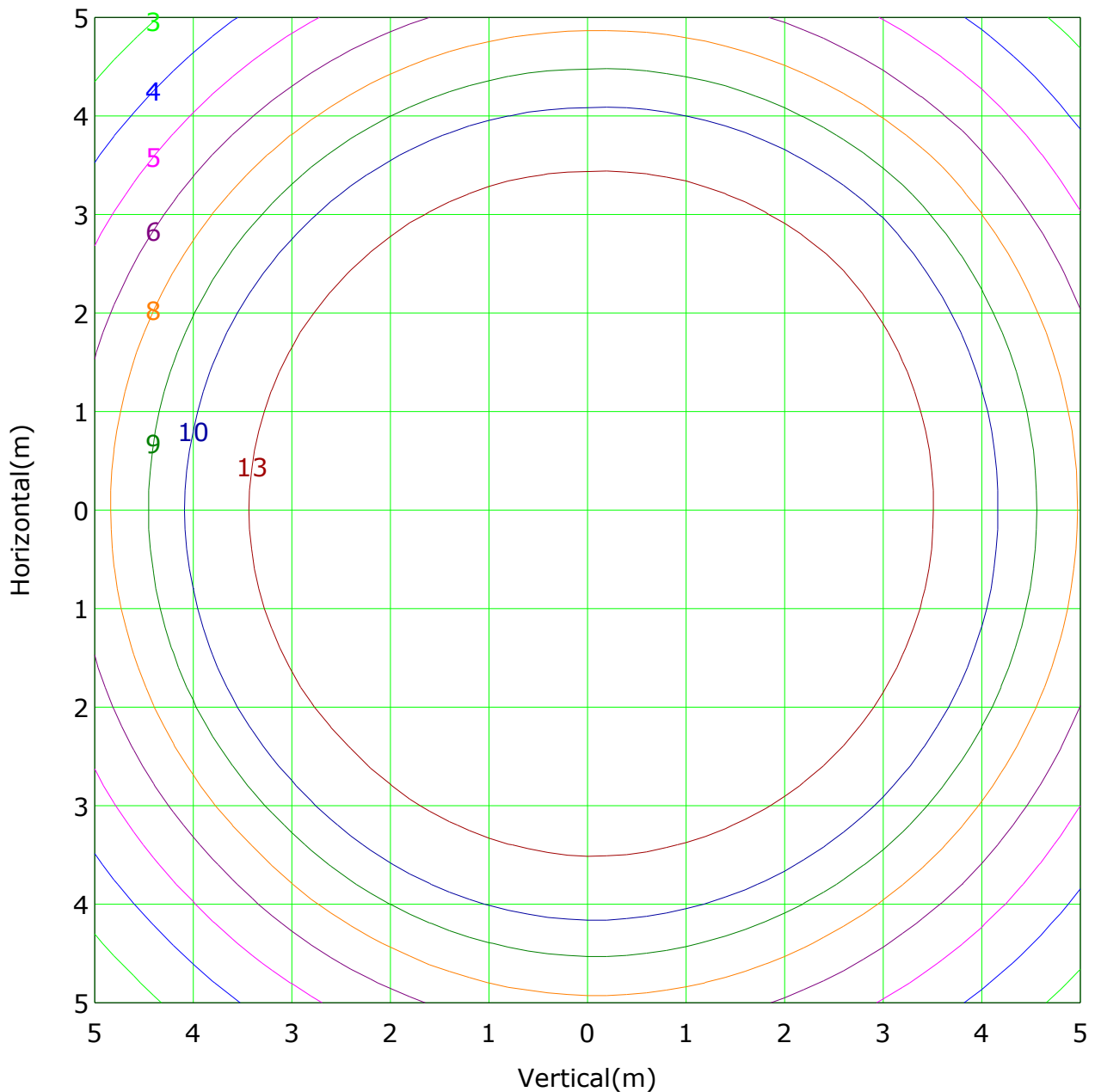
Isocandela (rectangle)



Imax (100%): 2590 cd

(10%): 259 cd	(16%): 414 cd
(25%): 647 cd	(40%): 1036 cd
(63%): 1632 cd	(100%): 2590 cd

IsoLux Plot



Mounting Height: 10.0m		Max Lux(100%): 25.9 lx	
(5%):	1.3 lx	(10%):	2.6 lx
(15%):	3.9 lx	(20%):	5.2 lx
(25%):	6.5 lx	(30%):	7.8 lx
(35%):	9.1 lx	(40%):	10.4 lx
(50%):	12.9 lx	(100%):	25.9 lx

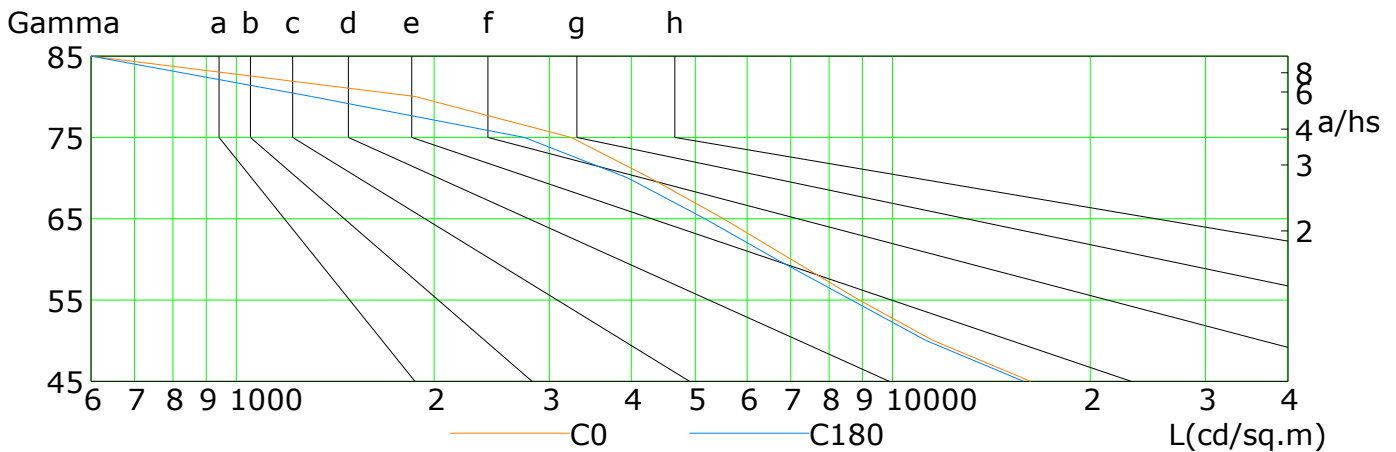
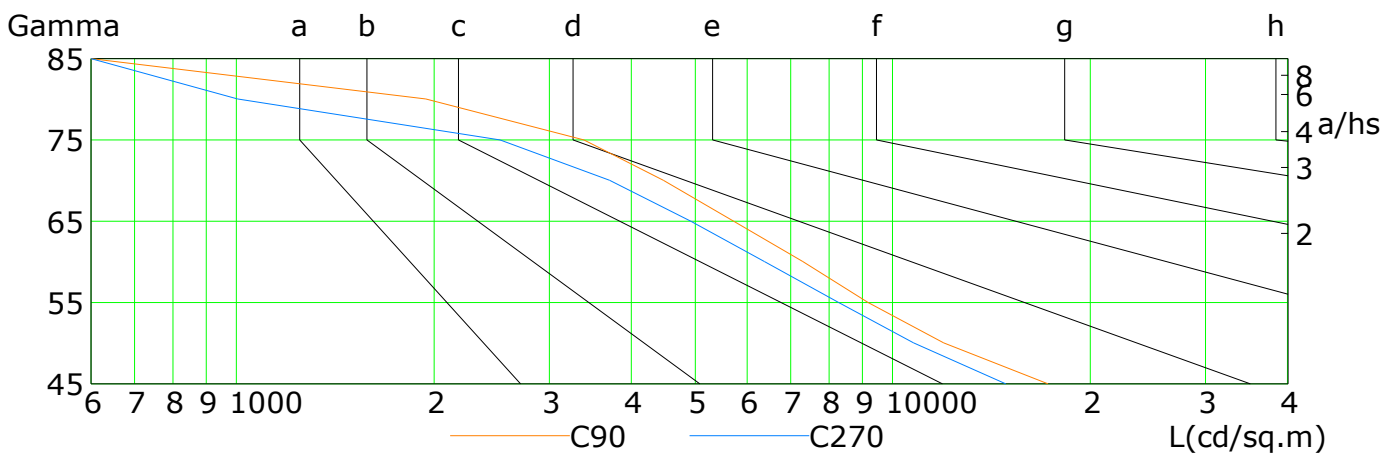
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Test Type: TYPE C
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Humidity: 65
Inspector:

Lum Limit Curve

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

a b c d e f g h

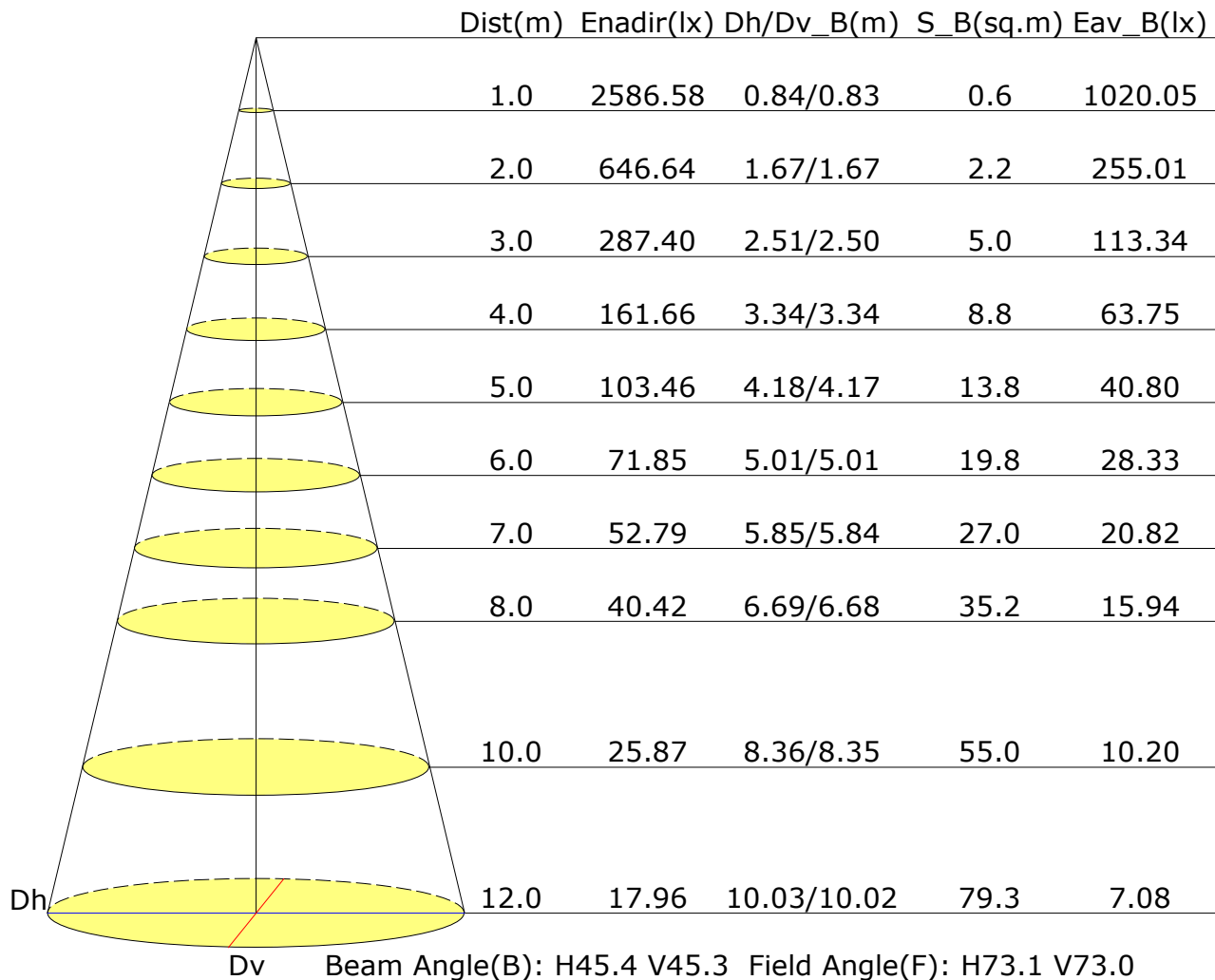


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	16222	11508	8889	6995	5530	4271	3237	1872	0
C90	17238	11958	9182	7297	5727	4473	3388	1945	0
C180	15852	11238	8649	6648	5172	3948	2748	1301	0
C270	14860	10770	8285	6372	4928	3704	2521	1005	0

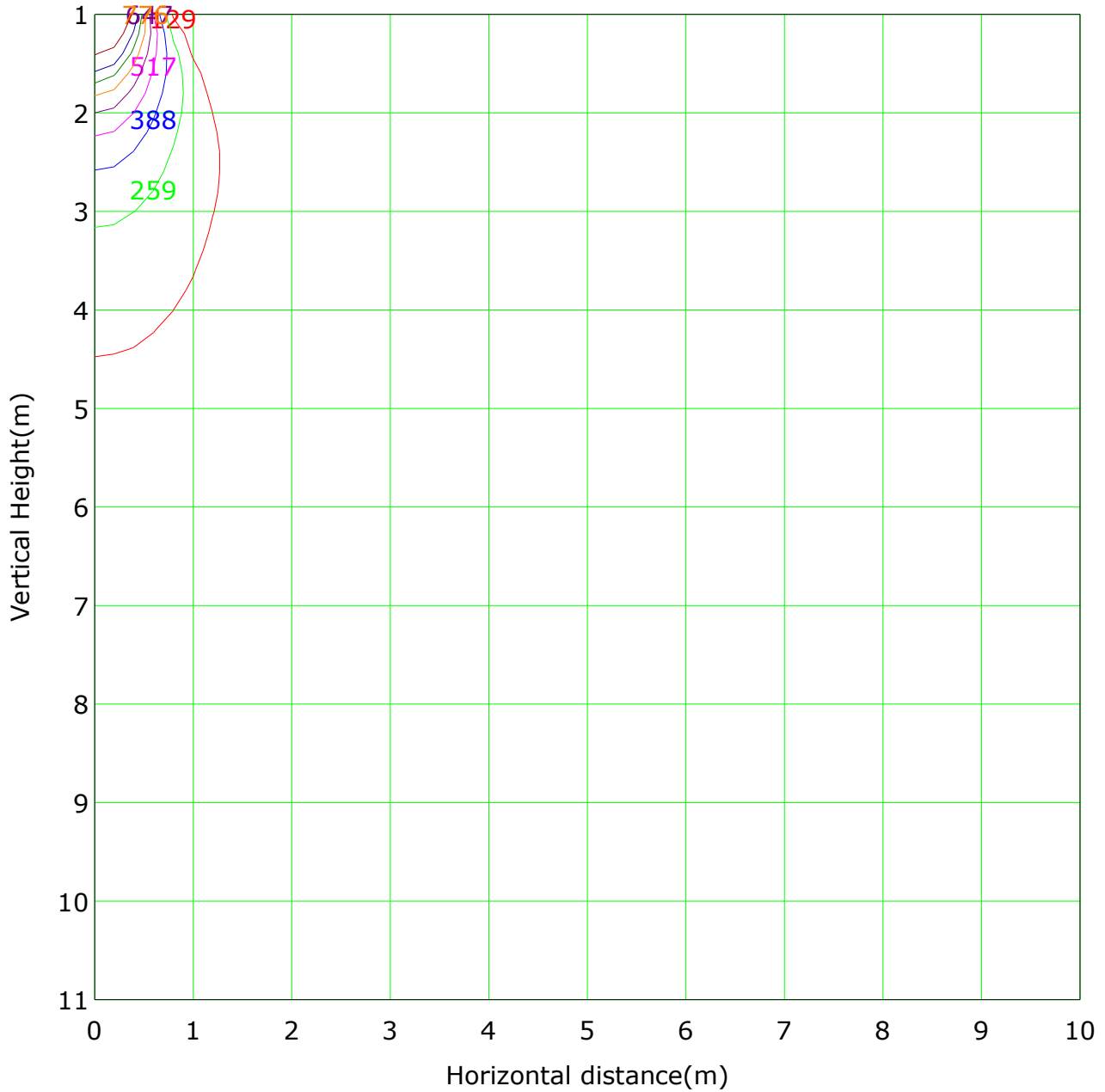
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Test Type: TYPE C
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Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 8.598 m
Humidity: 65
Inspector:

Illuminance at a Distance



Vertical IsoLux Plot

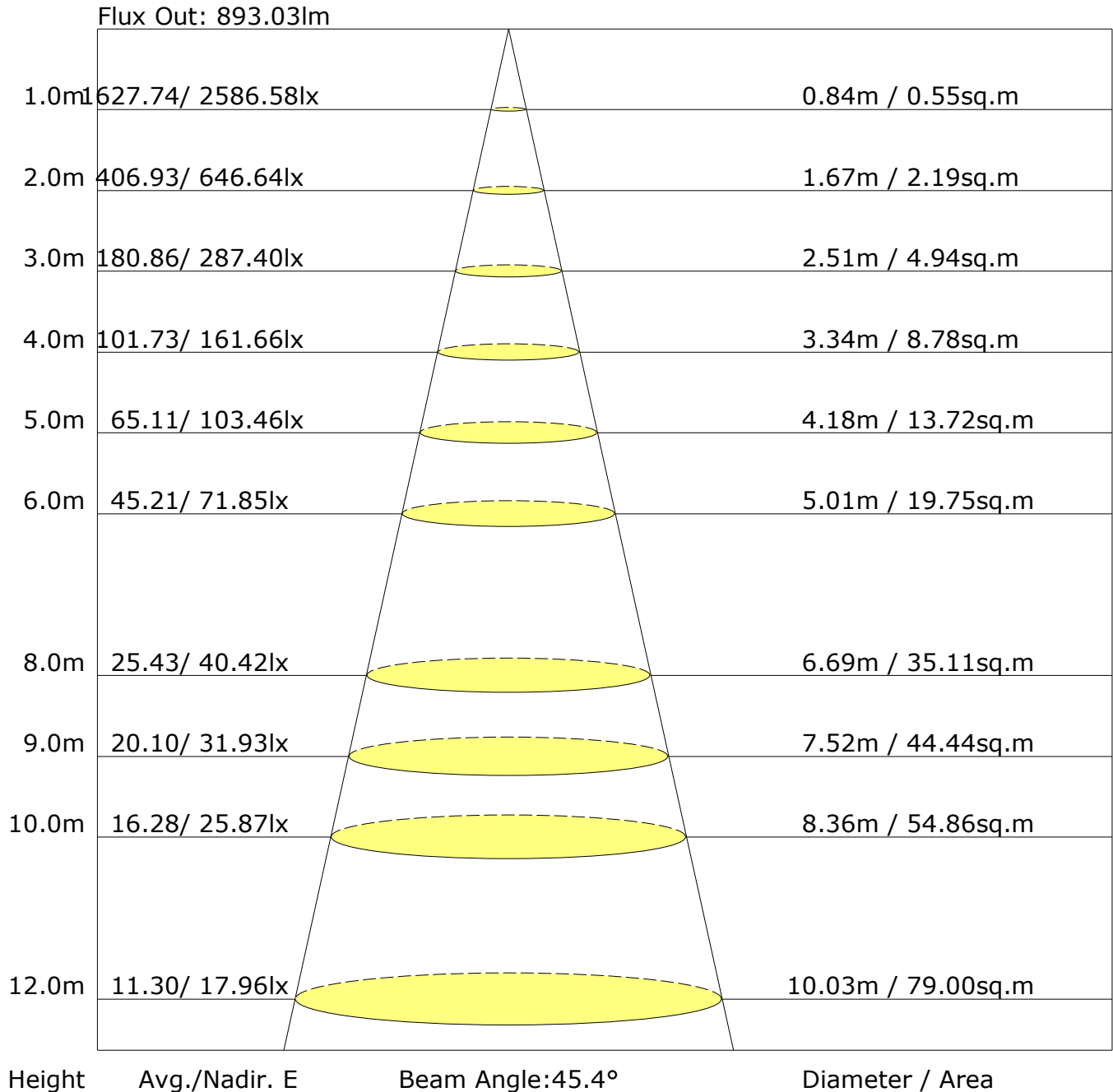


Lowest(m): 1.0m	Highest(m): 11.0m	Max Lux: 2586.6 lx
(5%): 129.3 lx	(10%): 258.7 lx	
(15%): 388.0 lx	(20%): 517.3 lx	
(25%): 646.6 lx	(30%): 776.0 lx	
(35%): 905.3 lx	(40%): 1034.6 lx	
(50%): 1293.3 lx	(100%): 2586.6 lx	

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 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	18.5	19.3	18.8	19.6	19.8	18.5	19.3	18.8	19.5	19.8
3H	18.5	19.2	18.8	19.5	19.7	18.5	19.2	18.8	19.4	19.7
4H	18.5	19.1	18.8	19.4	19.7	18.4	19.1	18.7	19.4	19.7
6H	18.4	19.0	18.7	19.3	19.6	18.4	19.0	18.7	19.3	19.6
8H	18.4	19.0	18.7	19.3	19.6	18.3	18.9	18.7	19.2	19.6
12H	18.3	18.9	18.7	19.2	19.6	18.3	18.8	18.6	19.2	19.5
X=4H Y=2H	18.4	19.1	18.7	19.3	19.6	18.4	19.0	18.7	19.3	19.6
3H	18.4	18.9	18.7	19.3	19.6	18.3	18.9	18.7	19.2	19.6
4H	18.3	18.8	18.7	19.2	19.6	18.3	18.8	18.7	19.2	19.5
6H	18.3	18.7	18.7	19.1	19.5	18.2	18.7	18.7	19.1	19.5
8H	18.2	18.7	18.7	19.1	19.5	18.2	18.6	18.6	19.0	19.4
12H	18.2	18.6	18.6	19.0	19.4	18.1	18.5	18.6	18.9	19.4
X=8H Y=4H	18.2	18.6	18.7	19.1	19.5	18.2	18.6	18.6	19.0	19.4
6H	18.2	18.5	18.6	19.0	19.4	18.1	18.5	18.6	18.9	19.4
8H	18.1	18.4	18.6	18.9	19.4	18.1	18.4	18.6	18.8	19.3
12H	18.1	18.3	18.6	18.8	19.3	18.0	18.3	18.5	18.8	19.3
X=12H Y=4H	18.2	18.6	18.6	19.0	19.4	18.1	18.5	18.6	18.9	19.4
6H	18.1	18.4	18.6	18.9	19.4	18.1	18.4	18.6	18.8	19.3
8H	18.1	18.3	18.6	18.8	19.4	18.0	18.3	18.6	18.8	19.3
Variations with the observer position at spacings:										
S=1.0H	+5.5/-6.1					+5.5/-5.7				
S=1.5H	+8.2/-7.2					+8.3/-6.9				
S=2.0H	+10.1/-8.1					+10.3/-8.0				

Calculate in accordance with CIE Pub.117. The table is revised with 1600lm ($8\log(F/F_0) = 1.6$).

Zonal Lumen

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	2584.5	2.5	2.5	0.15	0.15
1.0-2.0	2577.9	7.4	9.9	0.46	0.62
2.0-3.0	2567.2	12.3	22.2	0.77	1.38
3.0-4.0	2550.5	17.1	39.2	1.07	2.45
4.0-5.0	2522.9	21.7	60.9	1.36	3.81
5.0-6.0	2484.2	26.1	87.0	1.63	5.44
6.0-7.0	2437.3	30.3	117.3	1.89	7.33
7.0-8.0	2384.8	34.1	151.4	2.13	9.46
8.0-9.0	2327.3	37.7	189.2	2.36	11.82
9.0-10.0	2264.7	41.0	230.1	2.56	14.38
10.0-11.0	2197.4	43.9	274.1	2.74	17.12
11.0-12.0	2126.7	46.5	320.6	2.91	20.03
12.0-13.0	2052.2	48.7	369.3	3.04	23.07
13.0-14.0	1975.6	50.6	419.8	3.16	26.23
14.0-15.0	1899.6	52.2	472.0	3.26	29.49
15.0-16.0	1822.4	53.4	525.4	3.34	32.83
16.0-17.0	1743.6	54.3	579.7	3.39	36.22
17.0-18.0	1666.2	54.9	634.7	3.43	39.66
18.0-19.0	1588.3	55.3	689.9	3.45	43.11
19.0-20.0	1511.1	55.3	745.2	3.46	46.57
20.0-21.0	1439.7	55.3	800.5	3.45	50.02
21.0-22.0	1372.1	55.1	855.7	3.45	53.47
22.0-23.0	1307.1	54.9	910.5	3.43	56.89
23.0-24.0	1244.0	54.4	964.9	3.40	60.29
24.0-25.0	1182.0	53.8	1018.7	3.36	63.65
25.0-26.0	1116.9	52.7	1071.4	3.29	66.95
26.0-27.0	1044.9	51.1	1122.5	3.19	70.14
27.0-28.0	970.4	49.1	1171.7	3.07	73.21
28.0-29.0	895.8	46.9	1218.5	2.93	76.14
29.0-30.0	821.5	44.4	1262.9	2.77	78.91
30.0-31.0	744.1	41.4	1304.3	2.59	81.50
31.0-32.0	660.5	37.8	1342.2	2.36	83.86
32.0-33.0	573.1	33.8	1375.9	2.11	85.97
33.0-34.0	486.9	29.5	1405.4	1.84	87.82
34.0-35.0	405.3	25.2	1430.6	1.57	89.39
35.0-36.0	329.3	21.0	1451.5	1.31	90.70

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

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 8.598 m
Humidity: 65
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	263.9	17.2	1468.8	1.08	91.77
37.0-38.0	211.6	14.1	1482.9	0.88	92.66
38.0-39.0	168.3	11.5	1494.4	0.72	93.38
39.0-40.0	131.6	9.2	1503.5	0.57	93.95
40.0-41.0	102.4	7.3	1510.8	0.46	94.40
41.0-42.0	82.1	6.0	1516.8	0.37	94.78
42.0-43.0	68.6	5.1	1521.9	0.32	95.09
43.0-44.0	59.4	4.5	1526.4	0.28	95.37
44.0-45.0	52.9	4.1	1530.4	0.25	95.63
45.0-46.0	47.6	3.7	1534.2	0.23	95.86
46.0-47.0	43.1	3.4	1537.6	0.21	96.08
47.0-48.0	39.5	3.2	1540.8	0.20	96.27
48.0-49.0	36.3	3.0	1543.8	0.19	96.46
49.0-50.0	33.6	2.8	1546.6	0.18	96.64
50.0-51.0	31.1	2.6	1549.2	0.16	96.80
51.0-52.0	28.8	2.5	1551.7	0.15	96.96
52.0-53.0	26.9	2.3	1554.0	0.15	97.10
53.0-54.0	24.9	2.2	1556.2	0.14	97.24
54.0-55.0	23.1	2.1	1558.3	0.13	97.37
55.0-56.0	21.5	1.9	1560.2	0.12	97.49
56.0-57.0	19.9	1.8	1562.0	0.11	97.60
57.0-58.0	18.3	1.7	1563.7	0.11	97.71
58.0-59.0	17.0	1.6	1565.3	0.10	97.81
59.0-60.0	15.8	1.5	1566.8	0.09	97.90
60.0-61.0	14.5	1.4	1568.2	0.09	97.99
61.0-62.0	13.4	1.3	1569.5	0.08	98.07
62.0-63.0	12.4	1.2	1570.7	0.08	98.14
63.0-64.0	11.4	1.1	1571.8	0.07	98.21
64.0-65.0	10.5	1.0	1572.8	0.06	98.28
65.0-66.0	9.6	1.0	1573.8	0.06	98.34
66.0-67.0	8.8	0.9	1574.7	0.06	98.39
67.0-68.0	8.0	0.8	1575.5	0.05	98.44
68.0-69.0	7.3	0.7	1576.2	0.05	98.49
69.0-70.0	6.6	0.7	1576.9	0.04	98.53
70.0-71.0	6.0	0.6	1577.5	0.04	98.57
71.0-72.0	5.4	0.6	1578.1	0.03	98.61

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Distance: 8.598 m
Humidity: 65
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	4.8	0.5	1578.6	0.03	98.64
73.0-74.0	4.2	0.4	1579.0	0.03	98.67
74.0-75.0	3.7	0.4	1579.4	0.02	98.69
75.0-76.0	3.2	0.3	1579.8	0.02	98.71
76.0-77.0	2.7	0.3	1580.0	0.02	98.73
77.0-78.0	2.3	0.2	1580.3	0.02	98.74
78.0-79.0	1.8	0.2	1580.5	0.01	98.76
79.0-80.0	1.4	0.2	1580.6	0.01	98.77
80.0-81.0	1.0	0.1	1580.7	0.01	98.77
81.0-82.0	0.7	0.1	1580.8	0.00	98.78
82.0-83.0	0.4	0.0	1580.9	0.00	98.78
83.0-84.0	0.1	0.0	1580.9	0.00	98.78
84.0-85.0	0.0	0.0	1580.9	0.00	98.78
85.0-86.0	0.0	0.0	1580.9	0.00	98.78
86.0-87.0	0.0	0.0	1580.9	0.00	98.78
87.0-88.0	0.0	0.0	1580.9	0.00	98.78
88.0-89.0	0.0	0.0	1580.9	0.00	98.78
89.0-90.0	0.0	0.0	1580.9	0.00	98.78
90.0-91.0	0.0	0.0	1580.9	0.00	98.78
91.0-92.0	0.0	0.0	1580.9	0.00	98.78
92.0-93.0	0.0	0.0	1580.9	0.00	98.78
93.0-94.0	0.0	0.0	1580.9	0.00	98.78
94.0-95.0	0.0	0.0	1580.9	0.00	98.78
95.0-96.0	0.0	0.0	1580.9	0.00	98.78
96.0-97.0	0.0	0.0	1580.9	0.00	98.78
97.0-98.0	0.0	0.0	1580.9	0.00	98.78
98.0-99.0	0.0	0.0	1580.9	0.00	98.78
99.0-100.0	0.0	0.0	1580.9	0.00	98.78
100.0-101.0	0.0	0.0	1580.9	0.00	98.78
101.0-102.0	0.0	0.0	1580.9	0.00	98.78
102.0-103.0	0.0	0.0	1580.9	0.00	98.78
103.0-104.0	0.0	0.0	1580.9	0.00	98.78
104.0-105.0	0.0	0.0	1580.9	0.00	98.78
105.0-106.0	0.0	0.0	1580.9	0.00	98.78
106.0-107.0	0.1	0.0	1580.9	0.00	98.78
107.0-108.0	0.1	0.0	1580.9	0.00	98.78

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Humidity: 65
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	0.1	0.0	1580.9	0.00	98.78
109.0-110.0	0.2	0.0	1580.9	0.00	98.78
110.0-111.0	0.3	0.0	1581.0	0.00	98.79
111.0-112.0	0.4	0.0	1581.0	0.00	98.79
112.0-113.0	0.4	0.0	1581.1	0.00	98.79
113.0-114.0	0.5	0.1	1581.1	0.00	98.79
114.0-115.0	0.6	0.1	1581.2	0.00	98.80
115.0-116.0	0.7	0.1	1581.2	0.00	98.80
116.0-117.0	0.9	0.1	1581.3	0.01	98.81
117.0-118.0	1.0	0.1	1581.4	0.01	98.81
118.0-119.0	1.1	0.1	1581.5	0.01	98.82
119.0-120.0	1.3	0.1	1581.7	0.01	98.83
120.0-121.0	1.5	0.1	1581.8	0.01	98.84
121.0-122.0	1.6	0.2	1581.9	0.01	98.85
122.0-123.0	1.8	0.2	1582.1	0.01	98.86
123.0-124.0	2.0	0.2	1582.3	0.01	98.87
124.0-125.0	2.2	0.2	1582.5	0.01	98.88
125.0-126.0	2.4	0.2	1582.7	0.01	98.90
126.0-127.0	2.6	0.2	1582.9	0.01	98.91
127.0-128.0	2.9	0.2	1583.2	0.02	98.93
128.0-129.0	3.1	0.3	1583.5	0.02	98.94
129.0-130.0	3.3	0.3	1583.7	0.02	98.96
130.0-131.0	3.6	0.3	1584.0	0.02	98.98
131.0-132.0	3.8	0.3	1584.4	0.02	99.00
132.0-133.0	4.1	0.3	1584.7	0.02	99.02
133.0-134.0	4.3	0.3	1585.0	0.02	99.04
134.0-135.0	4.6	0.4	1585.4	0.02	99.06
135.0-136.0	4.9	0.4	1585.8	0.02	99.09
136.0-137.0	5.1	0.4	1586.1	0.02	99.11
137.0-138.0	5.4	0.4	1586.5	0.02	99.13
138.0-139.0	5.7	0.4	1587.0	0.03	99.16
139.0-140.0	5.9	0.4	1587.4	0.03	99.19
140.0-141.0	6.2	0.4	1587.8	0.03	99.21
141.0-142.0	6.5	0.4	1588.3	0.03	99.24
142.0-143.0	6.8	0.5	1588.7	0.03	99.27
143.0-144.0	7.0	0.5	1589.2	0.03	99.30

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

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 8.598 m
Humidity: 65
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	7.3	0.5	1589.6	0.03	99.33
145.0-146.0	7.6	0.5	1590.1	0.03	99.36
146.0-147.0	7.8	0.5	1590.6	0.03	99.39
147.0-148.0	8.0	0.5	1591.0	0.03	99.42
148.0-149.0	8.3	0.5	1591.5	0.03	99.45
149.0-150.0	8.5	0.5	1592.0	0.03	99.48
150.0-151.0	8.7	0.5	1592.5	0.03	99.50
151.0-152.0	8.9	0.5	1592.9	0.03	99.53
152.0-153.0	9.1	0.5	1593.4	0.03	99.56
153.0-154.0	9.3	0.5	1593.8	0.03	99.59
154.0-155.0	9.5	0.4	1594.3	0.03	99.62
155.0-156.0	9.6	0.4	1594.7	0.03	99.65
156.0-157.0	9.8	0.4	1595.2	0.03	99.67
157.0-158.0	9.9	0.4	1595.6	0.03	99.70
158.0-159.0	10.0	0.4	1596.0	0.03	99.72
159.0-160.0	10.1	0.4	1596.4	0.02	99.75
160.0-161.0	10.2	0.4	1596.7	0.02	99.77
161.0-162.0	10.3	0.4	1597.1	0.02	99.79
162.0-163.0	10.4	0.3	1597.4	0.02	99.82
163.0-164.0	10.5	0.3	1597.8	0.02	99.84
164.0-165.0	10.5	0.3	1598.1	0.02	99.85
165.0-166.0	10.6	0.3	1598.4	0.02	99.87
166.0-167.0	10.7	0.3	1598.6	0.02	99.89
167.0-168.0	10.7	0.3	1598.9	0.02	99.91
168.0-169.0	10.8	0.2	1599.1	0.01	99.92
169.0-170.0	10.8	0.2	1599.3	0.01	99.93
170.0-171.0	10.9	0.2	1599.5	0.01	99.95
171.0-172.0	11.0	0.2	1599.7	0.01	99.96
172.0-173.0	11.0	0.2	1599.9	0.01	99.97
173.0-174.0	11.0	0.1	1600.0	0.01	99.98
174.0-175.0	11.1	0.1	1600.1	0.01	99.98
175.0-176.0	11.1	0.1	1600.2	0.01	99.99
176.0-177.0	11.1	0.1	1600.3	0.00	99.99
177.0-178.0	11.1	0.1	1600.3	0.00	100.00
178.0-179.0	11.2	0.0	1600.4	0.00	100.00
179.0-180.0	11.2	0.0	1600.4	0.00	100.00

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

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 8.598 m
Humidity: 65
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	2586.6	2586.6	2586.6	2586.6	2586.6	2586.6	2586.6	2586.6	2586.6	
G1.0	2582.1	2578.9	2575.8	2578.6	2583.2	2586.5	2590.0	2584.0	2582.1	
G2.0	2572.0	2568.7	2562.6	2566.6	2578.4	2581.4	2584.2	2573.0	2572.0	
G3.0	2559.7	2559.3	2555.2	2559.8	2568.4	2569.8	2565.2	2551.4	2559.7	
G4.0	2546.8	2548.1	2542.4	2552.9	2542.7	2540.8	2532.4	2513.1	2546.8	
G5.0	2516.1	2520.9	2518.7	2538.4	2497.3	2490.2	2490.8	2474.6	2516.1	
G6.0	2469.6	2470.8	2479.3	2510.5	2451.4	2445.2	2443.6	2430.1	2469.6	
G7.0	2414.0	2421.1	2427.1	2457.1	2401.3	2394.7	2400.1	2381.1	2414.0	
G8.0	2362.5	2370.4	2369.5	2403.4	2347.6	2338.4	2347.2	2321.1	2362.5	
G9.0	2309.6	2320.2	2310.6	2344.0	2282.7	2272.6	2281.8	2254.7	2309.6	
G10.0	2245.6	2252.7	2252.5	2278.5	2216.6	2206.6	2215.8	2190.7	2245.6	
G11.0	2177.0	2186.1	2183.3	2209.6	2147.7	2139.8	2143.0	2113.4	2177.0	
G12.0	2113.2	2119.1	2109.7	2141.3	2070.9	2062.6	2067.9	2041.9	2113.2	
G13.0	2029.4	2037.1	2037.2	2065.0	1988.9	1983.8	1998.1	1969.9	2029.4	
G14.0	1956.0	1963.4	1957.2	1985.0	1915.2	1909.1	1915.6	1898.3	1956.0	
G15.0	1881.0	1889.9	1872.7	1910.4	1840.5	1830.3	1842.8	1825.7	1881.0	
G16.0	1809.6	1813.7	1792.7	1827.8	1754.3	1753.8	1764.1	1749.6	1809.6	
G17.0	1725.7	1731.9	1718.3	1747.9	1679.8	1679.7	1678.5	1670.9	1725.7	
G18.0	1651.7	1656.4	1644.1	1672.9	1602.6	1600.9	1603.1	1595.2	1651.7	
G19.0	1569.5	1578.7	1568.4	1590.0	1526.3	1514.6	1526.0	1511.9	1569.5	
G20.0	1494.9	1504.7	1489.8	1518.8	1454.2	1441.2	1448.3	1440.8	1494.9	
G21.0	1426.4	1428.0	1421.3	1447.3	1386.4	1375.1	1384.1	1374.6	1426.4	
G22.0	1355.3	1365.0	1357.5	1376.1	1317.0	1310.5	1318.5	1311.1	1355.3	
G23.0	1292.0	1298.1	1291.7	1315.0	1254.5	1248.1	1254.4	1248.8	1292.0	
G24.0	1221.8	1239.2	1232.1	1248.1	1196.9	1194.5	1187.4	1180.9	1221.8	
G25.0	1161.1	1180.4	1173.7	1189.9	1138.6	1127.0	1124.6	1116.1	1161.1	
G26.0	1098.2	1114.8	1110.5	1126.0	1060.6	1056.0	1051.8	1040.7	1098.2	
G27.0	1016.0	1044.2	1045.5	1061.9	984.7	980.0	970.3	958.1	1016.0	
G28.0	934.6	967.4	971.9	986.5	912.5	905.4	899.3	888.0	934.6	
G29.0	856.9	885.8	897.1	900.9	846.4	833.8	828.7	817.4	856.9	
G30.0	784.9	819.8	826.8	831.8	773.1	754.2	748.8	737.7	784.9	
G31.0	702.2	748.6	742.7	758.0	693.5	669.3	658.8	656.0	702.2	
G32.0	623.8	665.3	662.0	670.6	601.5	574.6	576.2	564.2	623.8	
G33.0	533.1	574.6	569.2	578.2	516.6	489.1	491.6	478.5	533.1	
G34.0	450.1	490.3	485.6	494.4	433.3	408.1	400.7	396.4	450.1	
G35.0	365.1	408.2	405.9	414.4	355.1	334.6	322.8	319.9	365.1	
G36.0	298.8	325.9	325.8	331.8	280.3	270.5	256.3	253.7	298.8	

C Plane (°):0.0-360.0: 45.0

Test Lab: Inventfine instrument

Test Type: TYPE C

Temperature: 26

Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1800B

Distance: 8.598 m

Humidity: 65

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	243.2	261.1	261.9	265.4	225.9	223.0	203.3	195.5	243.2	
G38.0	198.2	208.5	207.1	212.6	181.6	178.7	162.0	156.8	198.2	
G39.0	158.0	164.1	168.6	171.9	140.4	137.4	124.3	122.0	158.0	
G40.0	121.2	128.0	132.7	135.8	105.3	103.4	97.0	95.0	121.2	
G41.0	93.2	97.8	101.6	104.4	86.1	80.8	79.7	76.7	93.2	
G42.0	76.2	81.1	83.2	84.3	72.3	66.4	65.3	64.2	76.2	
G43.0	62.9	68.2	69.0	69.3	62.9	58.1	57.7	56.7	62.9	
G44.0	56.4	59.1	60.4	60.4	55.2	51.9	51.7	50.7	56.4	
G45.0	50.7	53.0	53.9	53.7	49.5	46.8	46.4	45.9	50.7	
G46.0	45.2	47.9	47.8	48.1	45.1	42.5	42.5	42.0	45.2	
G47.0	41.4	43.1	43.4	43.7	41.1	39.0	38.9	38.6	41.4	
G48.0	38.3	39.4	39.9	40.1	37.0	36.0	35.7	35.6	38.3	
G49.0	35.3	36.3	36.7	36.8	34.6	33.5	33.2	33.0	35.3	
G50.0	32.7	33.6	34.0	34.0	31.9	31.1	30.6	30.5	32.7	
G51.0	30.2	31.2	31.4	31.4	29.3	28.7	28.4	28.3	30.2	
G52.0	28.2	29.0	28.9	29.2	27.5	26.9	26.5	26.6	28.2	
G53.0	26.4	27.1	27.1	27.4	25.4	24.9	24.6	24.4	26.4	
G54.0	24.3	25.3	25.0	25.1	23.5	23.0	22.6	22.6	24.3	
G55.0	22.5	23.2	23.3	23.4	21.9	21.4	21.0	21.1	22.5	
G56.0	21.1	21.8	21.8	21.9	20.3	19.9	19.4	19.5	21.1	
G57.0	19.4	20.1	20.2	20.2	18.7	18.2	18.0	17.9	19.4	
G58.0	17.9	18.6	18.5	18.5	17.2	16.9	16.6	16.7	17.9	
G59.0	16.7	17.3	17.3	17.3	16.1	15.6	15.3	15.4	16.7	
G60.0	15.5	16.0	16.1	16.1	14.7	14.4	14.1	14.3	15.5	
G61.0	14.2	14.8	14.8	14.9	13.5	13.2	12.9	13.0	14.2	
G62.0	13.2	13.6	13.5	13.7	12.6	12.3	12.1	12.1	13.2	
G63.0	12.3	12.6	12.6	12.7	11.7	11.3	11.0	11.2	12.3	
G64.0	11.3	11.7	11.7	11.8	10.6	10.2	10.0	10.1	11.3	
G65.0	10.3	10.7	10.7	10.7	9.7	9.3	9.2	9.3	10.3	
G66.0	9.5	9.8	9.8	9.8	8.9	8.7	8.4	8.5	9.5	
G67.0	8.8	9.1	9.0	9.0	8.2	7.9	7.6	7.8	8.8	
G68.0	8.0	8.3	8.3	8.3	7.4	7.1	6.9	7.0	8.0	
G69.0	7.2	7.6	7.5	7.6	6.6	6.4	6.1	6.3	7.2	
G70.0	6.5	6.9	6.8	6.8	6.0	5.8	5.6	5.8	6.5	
G71.0	6.0	6.2	6.2	6.2	5.4	5.3	5.0	5.1	6.0	
G72.0	5.4	5.7	5.5	5.5	4.8	4.7	4.4	4.4	5.4	
G73.0	4.8	5.0	5.0	5.1	4.2	4.1	3.8	3.9	4.8	

C Plane (°):0.0-360.0: 45.0

Test Lab: Inventfine instrument

Test Type: TYPE C

Temperature: 26

Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1800B

Distance: 8.598 m

Humidity: 65

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	4.2	4.5	4.4	4.4	3.6	3.6	3.3	3.4	4.2	
G75.0	3.7	3.9	3.9	3.9	3.1	3.0	2.9	2.9	3.7	
G76.0	3.3	3.5	3.4	3.4	2.7	2.7	2.3	2.5	3.3	
G77.0	2.8	3.0	2.9	3.0	2.3	2.2	1.9	2.0	2.8	
G78.0	2.3	2.5	2.4	2.5	1.8	1.7	1.5	1.5	2.3	
G79.0	1.8	2.0	1.9	2.0	1.4	1.3	1.1	1.2	1.8	
G80.0	1.4	1.6	1.5	1.6	1.0	0.9	0.8	0.8	1.4	
G81.0	1.0	1.2	1.1	1.2	0.7	0.6	0.5	0.5	1.0	
G82.0	0.7	0.8	0.7	0.8	0.4	0.3	0.2	0.2	0.7	
G83.0	0.3	0.4	0.4	0.5	0.1	0.1	0.0	0.0	0.3	
G84.0	0.1	0.2	0.1	0.2	0.0	0.0	0.0	0.0	0.1	
G85.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G86.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G87.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G88.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G89.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G91.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G92.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G93.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G94.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G95.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G96.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G97.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G98.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G99.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G101.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G102.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G103.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
G104.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
G105.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	
G106.0	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.2	
G107.0	0.2	0.2	0.1	0.1	0.0	0.1	0.0	0.0	0.2	
G108.0	0.3	0.3	0.2	0.2	0.0	0.1	0.0	0.0	0.3	
G109.0	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.3	
G110.0	0.4	0.4	0.3	0.3	0.1	0.2	0.1	0.1	0.4	

C Plane (°):0.0-360.0: 45.0

Test Lab: Inventfine instrument

Test Type: TYPE C

Temperature: 26

Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1800B

Distance: 8.598 m

Humidity: 65

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	0.5	0.5	0.4	0.4	0.1	0.2	0.2	0.2	0.5	
G112.0	0.6	0.6	0.4	0.5	0.2	0.3	0.3	0.3	0.6	
G113.0	0.7	0.7	0.6	0.6	0.3	0.4	0.3	0.3	0.7	
G114.0	0.8	0.8	0.7	0.7	0.4	0.4	0.4	0.4	0.8	
G115.0	0.9	0.9	0.8	0.8	0.5	0.6	0.5	0.5	0.9	
G116.0	1.0	1.0	1.0	0.9	0.5	0.7	0.6	0.6	1.0	
G117.0	1.3	1.2	1.1	1.1	0.7	0.8	0.7	0.7	1.3	
G118.0	1.4	1.4	1.3	1.3	0.8	0.9	0.8	0.8	1.4	
G119.0	1.5	1.5	1.4	1.4	0.9	1.0	0.9	0.9	1.5	
G120.0	1.8	1.7	1.6	1.6	1.0	1.1	1.1	1.1	1.8	
G121.0	1.9	1.9	1.8	1.8	1.2	1.2	1.2	1.2	1.9	
G122.0	2.2	2.2	2.0	2.0	1.3	1.4	1.4	1.4	2.2	
G123.0	2.4	2.3	2.3	2.2	1.4	1.5	1.5	1.6	2.4	
G124.0	2.7	2.6	2.5	2.4	1.6	1.7	1.7	1.8	2.7	
G125.0	2.9	2.8	2.7	2.7	1.8	1.9	1.8	1.9	2.9	
G126.0	3.1	3.1	2.9	2.9	2.0	2.0	2.0	2.1	3.1	
G127.0	3.4	3.4	3.3	3.2	2.2	2.2	2.2	2.3	3.4	
G128.0	3.6	3.6	3.5	3.4	2.3	2.4	2.4	2.4	3.6	
G129.0	4.0	3.9	3.8	3.7	2.5	2.5	2.6	2.7	4.0	
G130.0	4.3	4.1	4.0	3.9	2.7	2.8	2.8	2.9	4.3	
G131.0	4.5	4.4	4.3	4.3	3.0	3.0	3.0	3.1	4.5	
G132.0	4.7	4.7	4.6	4.6	3.2	3.2	3.3	3.3	4.7	
G133.0	5.0	5.0	4.9	4.8	3.4	3.4	3.5	3.5	5.0	
G134.0	5.3	5.3	5.2	5.1	3.6	3.6	3.7	3.8	5.3	
G135.0	5.6	5.6	5.4	5.4	3.9	3.9	3.9	4.0	5.6	
G136.0	5.9	5.9	5.8	5.7	4.1	4.1	4.2	4.3	5.9	
G137.0	6.2	6.2	6.0	6.0	4.3	4.3	4.4	4.5	6.2	
G138.0	6.5	6.5	6.3	6.3	4.6	4.6	4.7	4.7	6.5	
G139.0	6.8	6.8	6.6	6.6	4.8	4.9	4.9	5.0	6.8	
G140.0	7.1	7.1	7.0	6.9	5.1	5.1	5.2	5.3	7.1	
G141.0	7.5	7.4	7.3	7.2	5.3	5.4	5.4	5.5	7.5	
G142.0	7.7	7.6	7.5	7.5	5.6	5.6	5.6	5.7	7.7	
G143.0	8.0	8.0	7.8	7.8	5.8	5.9	5.9	5.9	8.0	
G144.0	8.3	8.2	8.1	8.2	6.0	6.1	6.1	6.2	8.3	
G145.0	8.6	8.6	8.4	8.4	6.3	6.3	6.4	6.4	8.6	
G146.0	8.8	8.8	8.7	8.7	6.5	6.6	6.6	6.7	8.8	
G147.0	9.1	9.1	9.0	8.9	6.8	6.8	6.8	6.9	9.1	

C Plane (°):0.0-360.0: 45.0

Test Lab: Inventfine instrument

Test Type: TYPE C

Temperature: 26

Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1800B

Distance: 8.598 m

Humidity: 65

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	9.4	9.3	9.2	9.2	7.0	7.0	7.0	7.1	9.4	
G149.0	9.6	9.6	9.4	9.5	7.2	7.2	7.3	7.3	9.6	
G150.0	9.8	9.8	9.7	9.7	7.4	7.4	7.4	7.6	9.8	
G151.0	10.0	10.0	9.9	9.9	7.6	7.6	7.6	7.7	10.0	
G152.0	10.3	10.2	10.1	10.2	7.8	7.9	7.8	7.9	10.3	
G153.0	10.5	10.5	10.4	10.4	8.0	8.0	8.0	8.1	10.5	
G154.0	10.7	10.6	10.5	10.6	8.1	8.2	8.1	8.2	10.7	
G155.0	10.8	10.8	10.7	10.8	8.3	8.4	8.4	8.4	10.8	
G156.0	10.9	10.9	10.8	10.9	8.4	8.5	8.5	8.5	10.9	
G157.0	11.0	11.1	11.0	11.0	8.6	8.7	8.6	8.6	11.0	
G158.0	11.2	11.1	11.1	11.2	8.7	8.8	8.8	8.8	11.2	
G159.0	11.2	11.2	11.2	11.3	8.8	8.9	8.9	8.9	11.2	
G160.0	11.3	11.3	11.3	11.4	8.9	9.0	9.0	9.0	11.3	
G161.0	11.4	11.4	11.4	11.4	9.1	9.2	9.1	9.2	11.4	
G162.0	11.4	11.4	11.4	11.5	9.2	9.3	9.3	9.3	11.4	
G163.0	11.4	11.4	11.5	11.5	9.3	9.4	9.4	9.4	11.4	
G164.0	11.5	11.4	11.5	11.5	9.5	9.6	9.5	9.6	11.5	
G165.0	11.5	11.5	11.5	11.5	9.6	9.7	9.6	9.6	11.5	
G166.0	11.5	11.5	11.5	11.5	9.7	9.8	9.8	9.7	11.5	
G167.0	11.5	11.5	11.5	11.5	9.8	10.0	9.9	9.9	11.5	
G168.0	11.5	11.5	11.5	11.6	9.9	10.1	10.0	10.0	11.5	
G169.0	11.5	11.4	11.4	11.5	10.0	10.2	10.1	10.2	11.5	
G170.0	11.5	11.4	11.4	11.5	10.2	10.3	10.3	10.3	11.5	
G171.0	11.5	11.4	11.4	11.5	10.4	10.5	10.5	10.4	11.5	
G172.0	11.5	11.4	11.4	11.5	10.4	10.6	10.5	10.4	11.5	
G173.0	11.5	11.4	11.4	11.5	10.5	10.7	10.6	10.5	11.5	
G174.0	11.4	11.4	11.3	11.4	10.7	10.8	10.8	10.7	11.4	
G175.0	11.4	11.3	11.3	11.4	10.8	10.8	10.9	10.8	11.4	
G176.0	11.3	11.3	11.2	11.4	10.8	10.9	10.9	10.9	11.3	
G177.0	11.3	11.3	11.2	11.3	10.9	11.0	11.0	11.0	11.3	
G178.0	11.3	11.3	11.2	11.3	11.0	11.1	11.1	11.1	11.3	
G179.0	11.2	11.2	11.1	11.2	11.1	11.2	11.1	11.2	11.2	
G180.0	11.2	11.2	11.1	11.2	11.2	11.2	11.2	11.3	11.2	

C Plane (°):0.0-360.0: 45.0

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