

Report No.: 9

Test Time: 2017/10/16 17:24

## Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FLP-UFO-200

Current: 0.914 A

Power Factor: 0.984

Voltage: 220 V

Power: 197.5W

## Photometric Results

CIE Class: Direct

Measurement Flux: 19176.7 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(50%): H96.2

Vertical Diffuse Angle(50%): V96.6

Luminaire Efficacy Rating (LER): 97.15

Max. Intensity: 8936.42 cd

S/MH(C0/C180): 1.55

Total Rated Lamp Lumens: 19176.7 lm

Efficiency: 100%

Upward Ratio: 1%

Central Intensity: 8116.46 cd

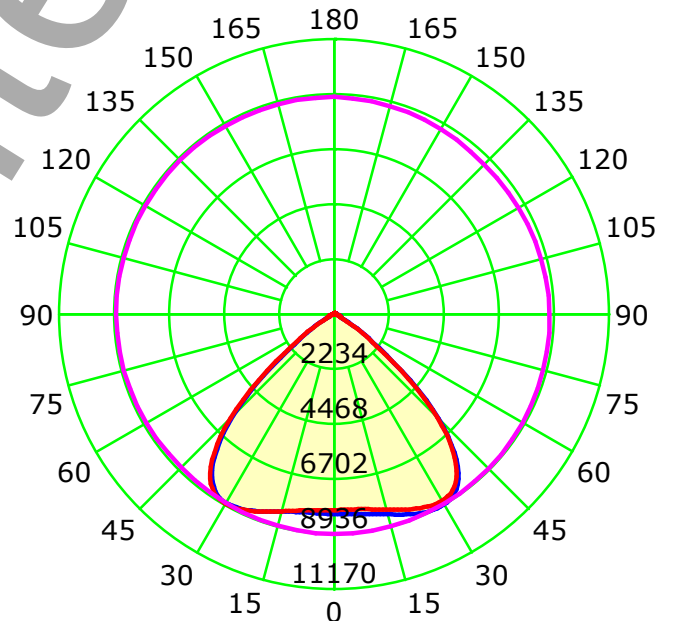
Pos of Max. Intensity: H0 V29

S/MH(C90/C270): 1.56

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

Average Diffuse Angle(50%): 96.3°

— C0-C180 — C90-C270 — G29

C Plane (°):0.0-360.0: 45.0

Test Lab: Inventfine instrument

Test Type: TYPE C

Temperature: 28

Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0

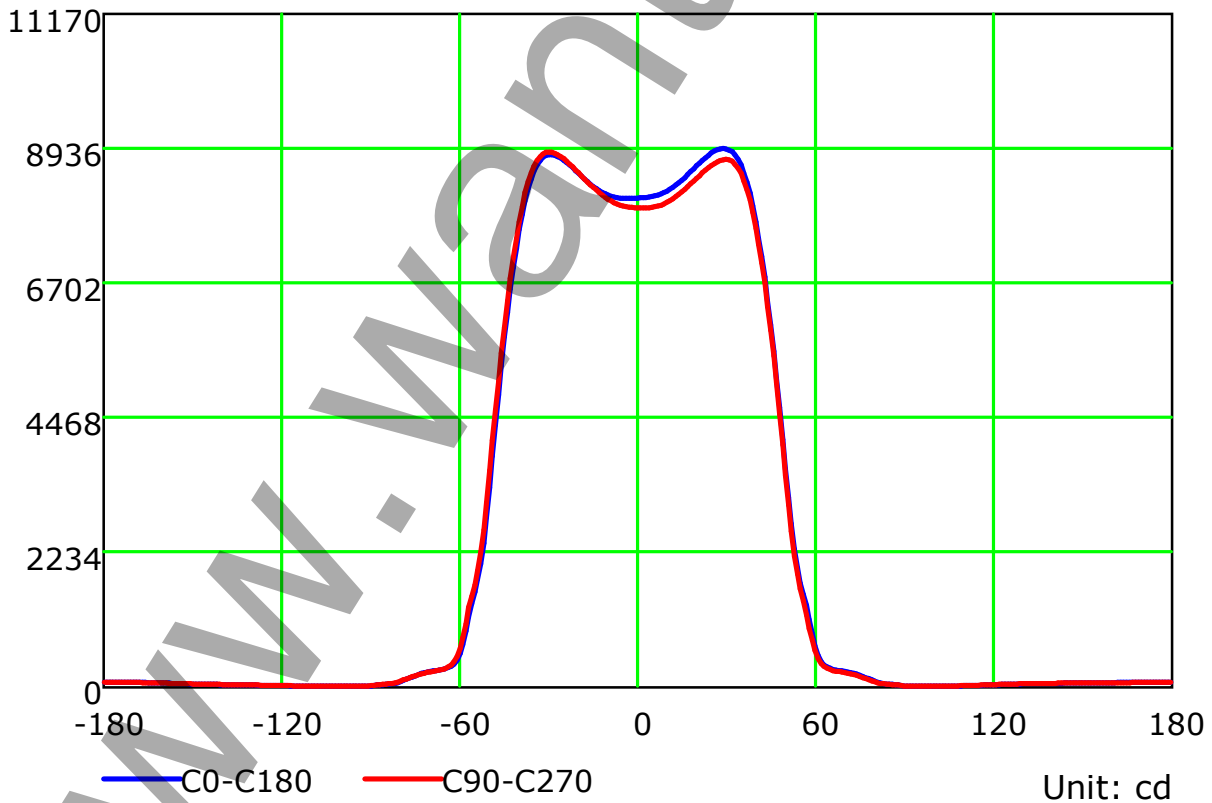
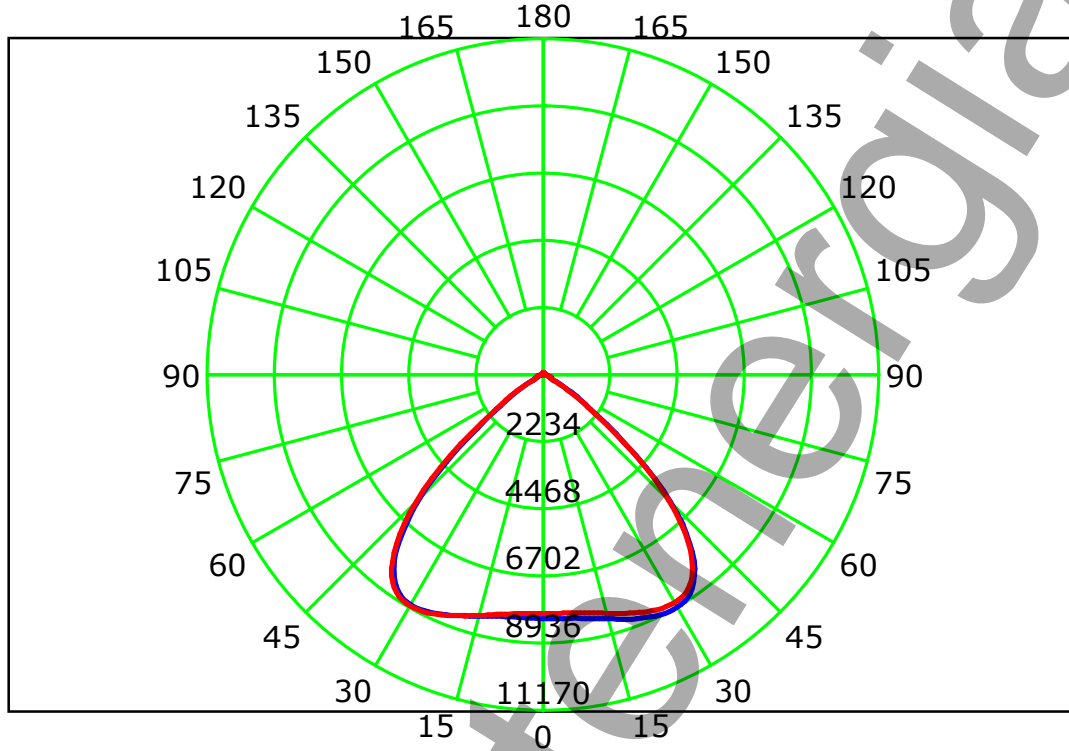
Test Device: GPM-1800B

Distance: 7.992 m

Humidity: 58

Inspector:

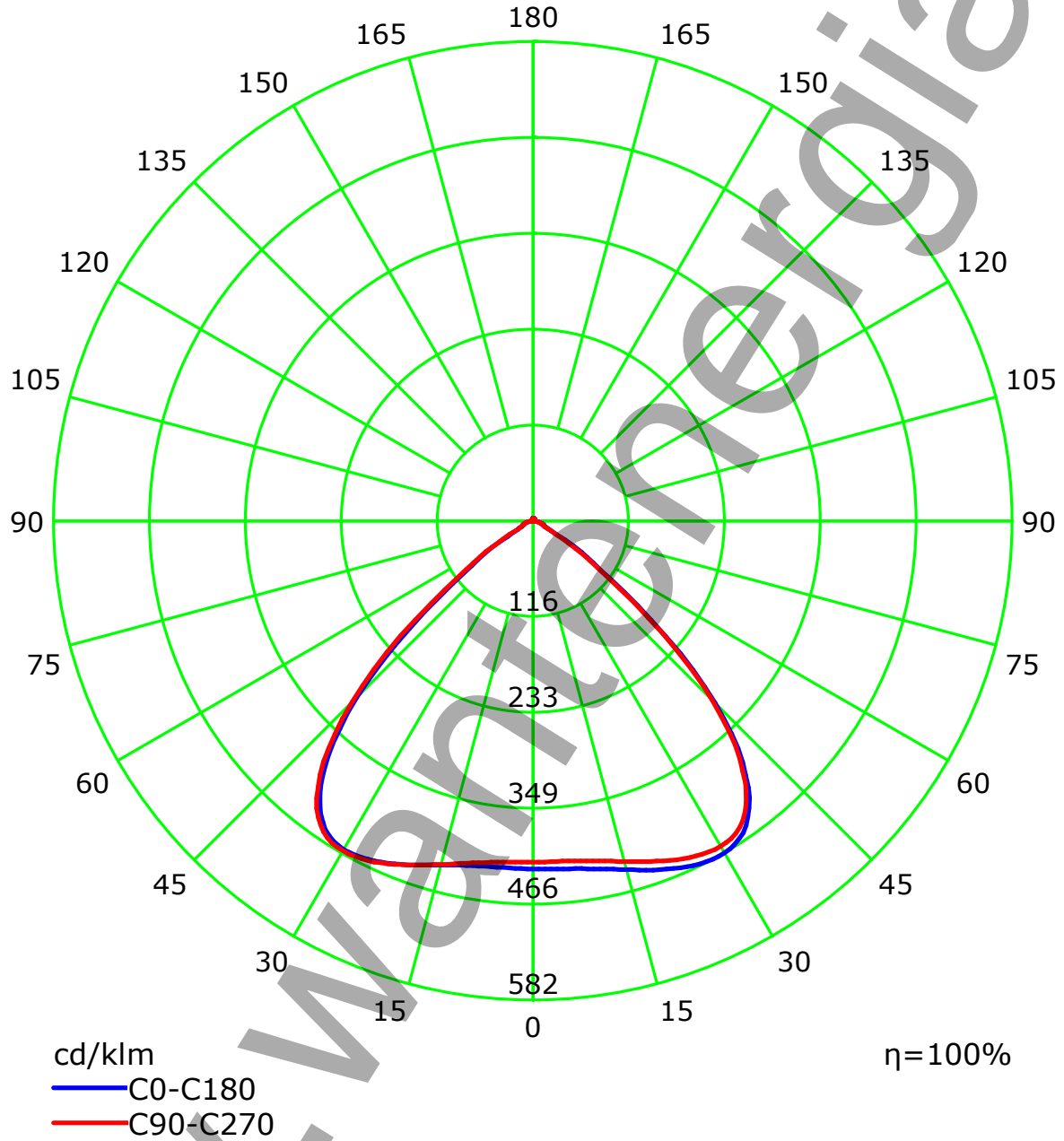
## Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 45.0  
Test Lab: Inventfine instrument  
Test Type: TYPE C  
Temperature: 28  
Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 7.992 m  
Humidity: 58  
Inspector:

## Luminous Intensity Distribution Curve(cd/klm)



C Plane (°):0.0-360.0: 45.0  
Test Lab: Inventfine instrument  
Test Type: TYPE C  
Temperature: 28  
Operator: Jacky tang

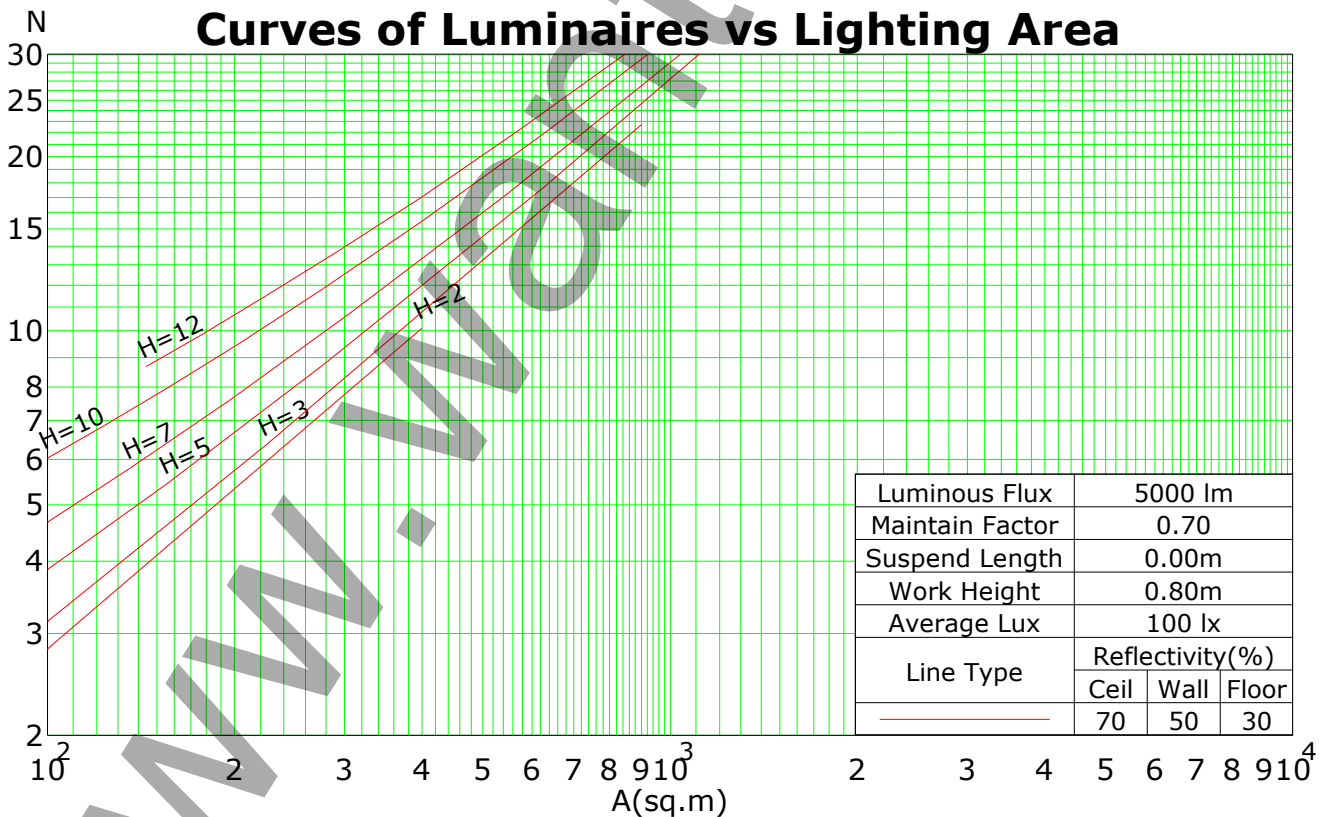
Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 7.992 m  
Humidity: 58  
Inspector:

## 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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99
1	112	108	105	102	109	106	103	100	101	99	97	98	96	94	94	92	91	89
2	104	98	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	97	88	82	77	94	87	81	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	67	62	58	66	61	57	55
6	77	66	58	53	76	65	58	53	63	57	52	62	56	52	60	55	51	49
7	72	60	53	47	71	59	52	47	58	51	47	57	51	46	55	50	46	44
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42	40
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36
10	59	47	40	35	58	46	40	35	45	39	35	45	39	35	44	38	34	33

Spacing Criteria (0-180): 1.55  
Spacing Criteria (90-270): 1.56  
Spacing Criteria (Diagonal): 1.42

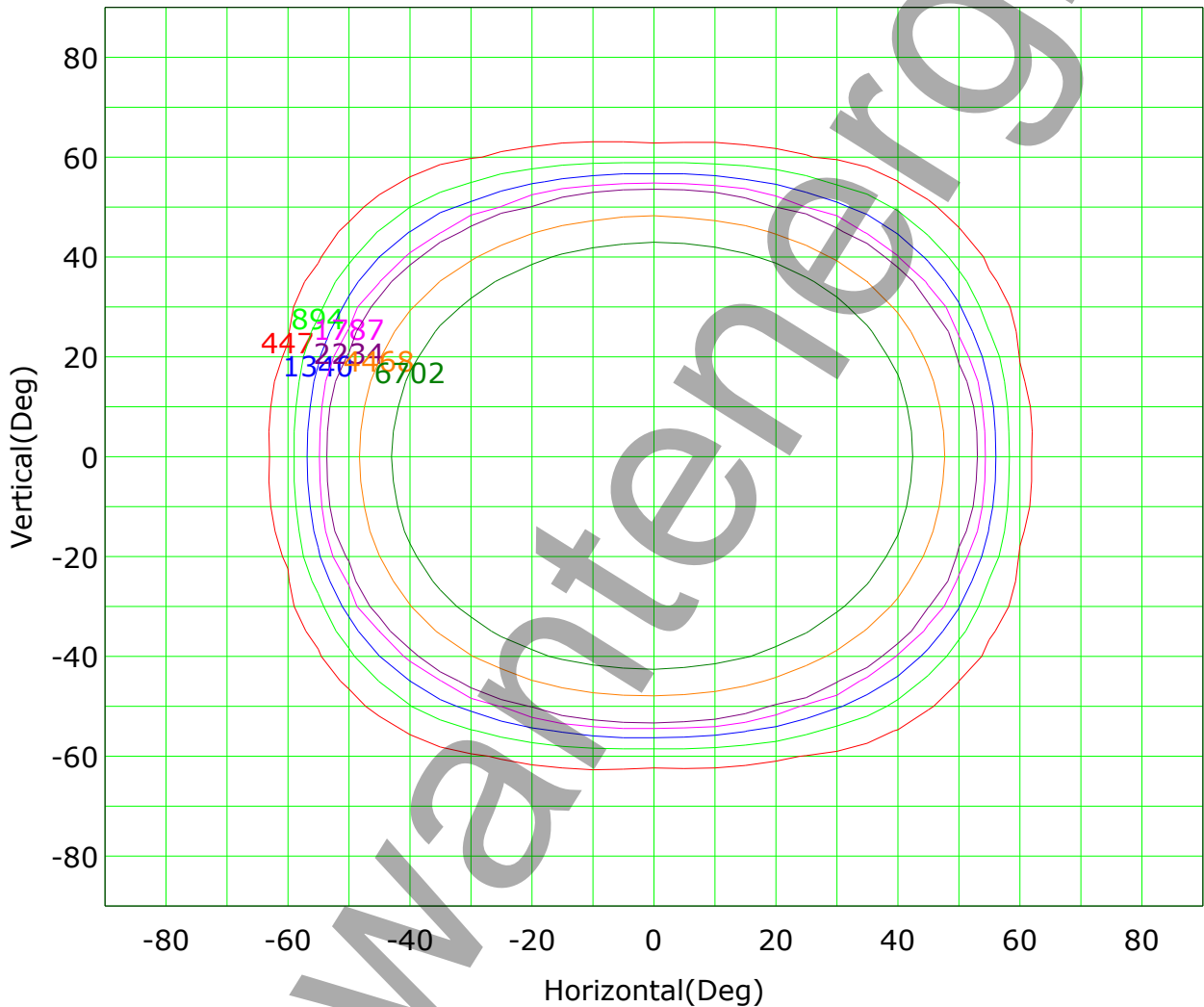
## Curves of Luminaires vs Lighting Area



C Plane (°):0.0-360.0: 45.0  
Test Lab: Inventfine instrument  
Test Type: TYPE C  
Temperature: 28  
Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 7.992 m  
Humidity: 58  
Inspector:

## Isocandela (rectangle)



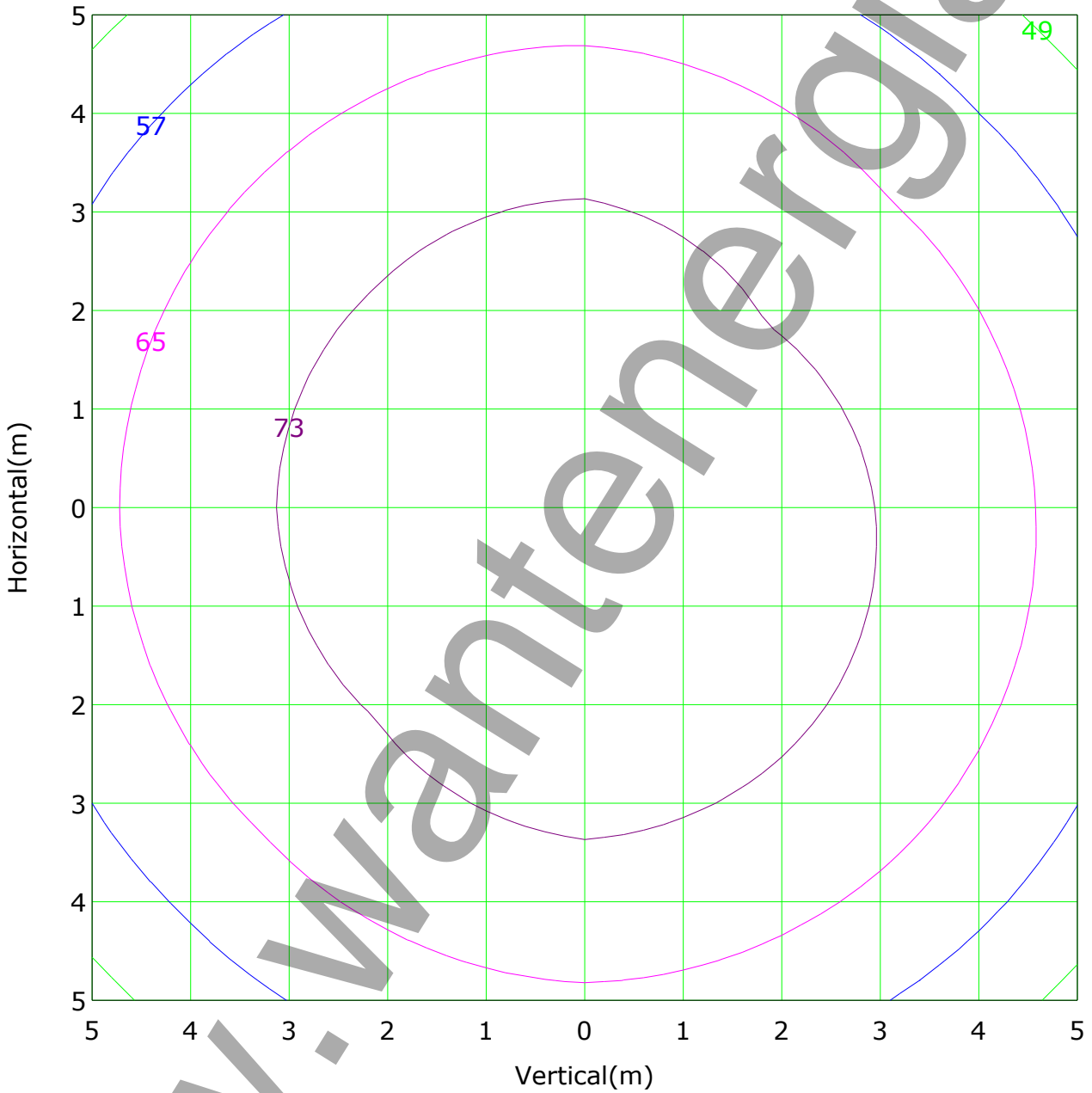
Imax (100%): 8936 cd

— ( 5%): 447 cd	— ( 10%): 894 cd
— ( 15%): 1340 cd	— ( 20%): 1787 cd
— ( 25%): 2234 cd	— ( 50%): 4468 cd
— ( 75%): 6702 cd	— (100%): 8936 cd

C Plane (°):0.0-360.0: 45.0  
Test Lab: Inventfine instrument  
Test Type: TYPE C  
Temperature: 28  
Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 7.992 m  
Humidity: 58  
Inspector:

### IsoLux Plot



Mounting Height: 10.0m    Max Lux(100%): 81.2 lx

( 50%): 40.6 lx

( 60%): 48.7 lx

( 70%): 56.8 lx

( 80%): 64.9 lx

( 90%): 73.0 lx

(100%): 81.2 lx

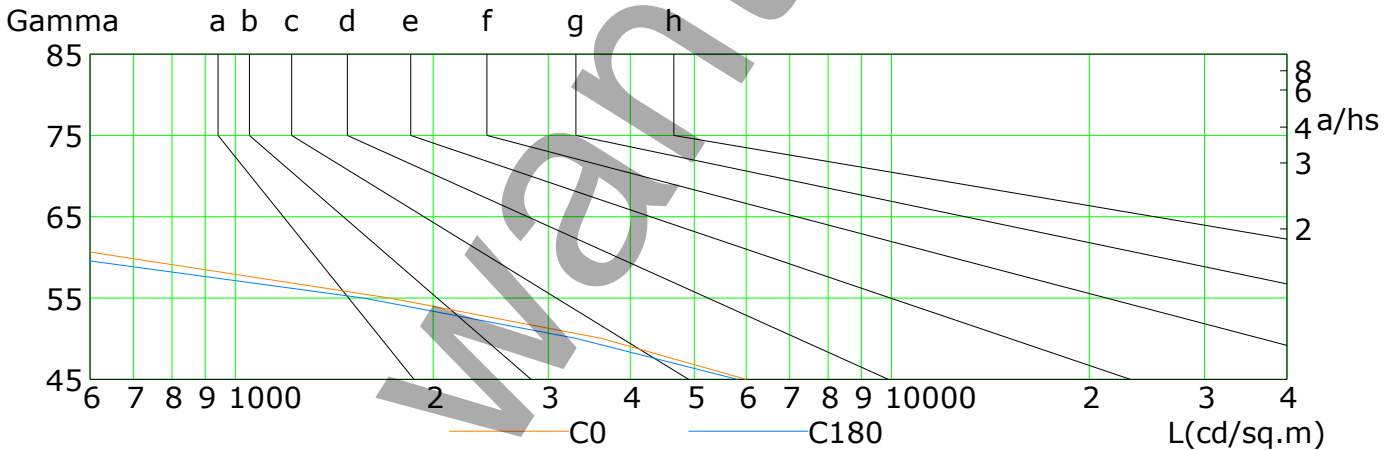
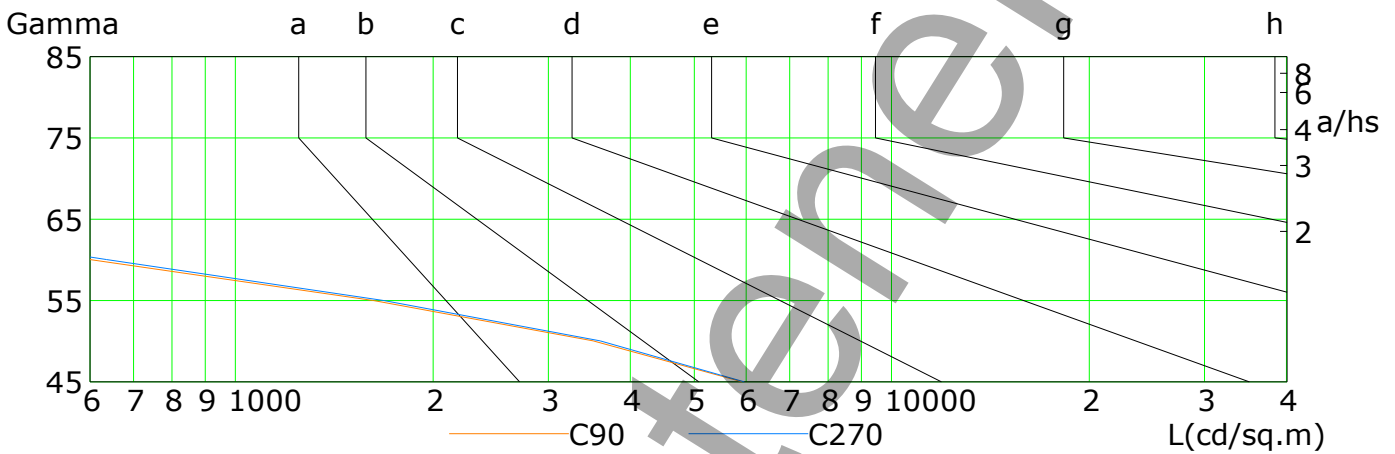
C Plane (°):0.0-360.0: 45.0  
Test Lab: Inventfine instrument  
Test Type: TYPE C  
Temperature: 28  
Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 7.992 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

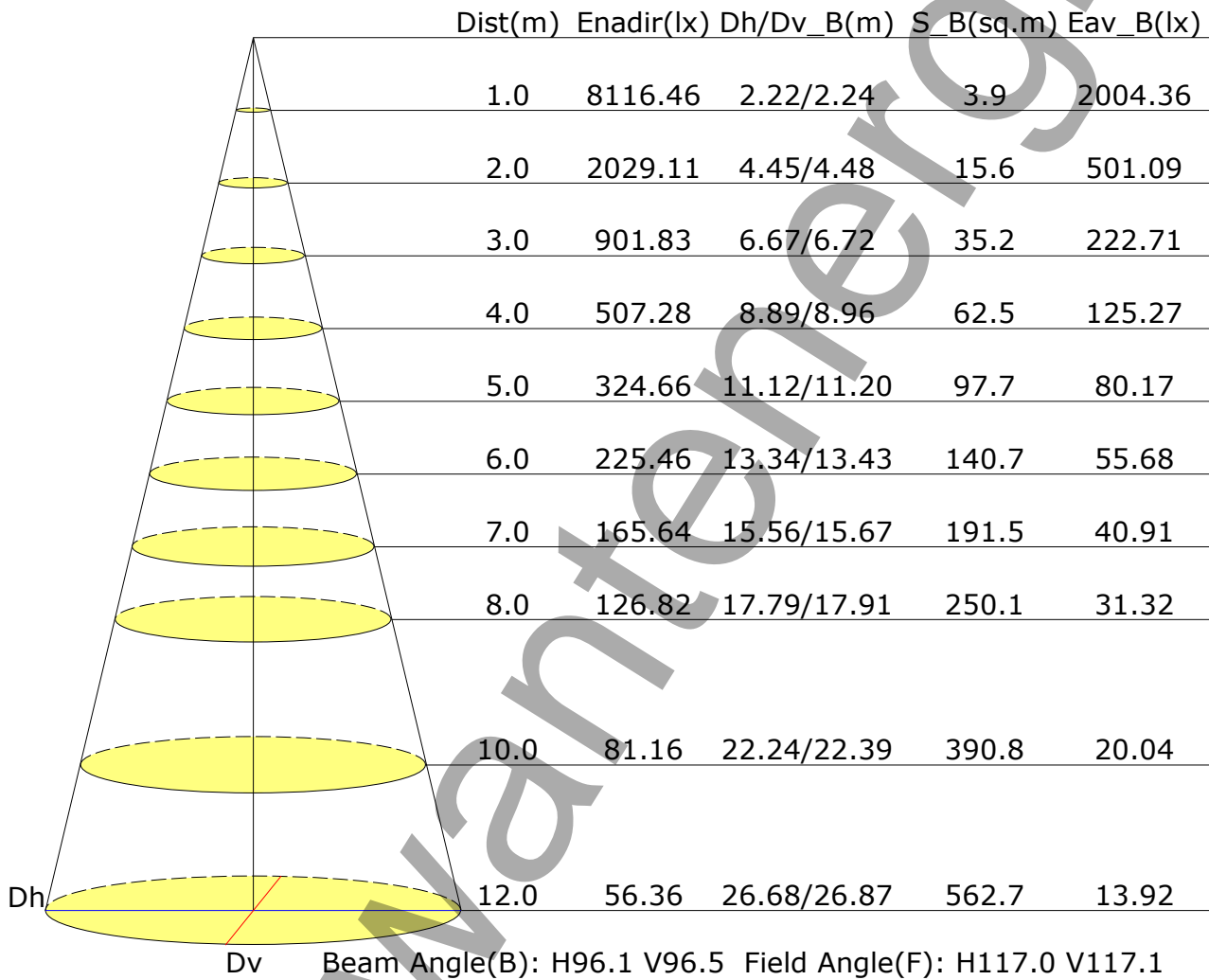


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	6005	3610	1717	674	298	251	188	88	37
C90	5921	3510	1624	599	281	229	167	76	34
C180	5811	3304	1568	546	290	249	178	78	34
C270	5963	3594	1684	637	295	245	179	89	37

C Plane (°):0.0-360.0: 45.0  
Test Lab: Inventfine instrument  
Test Type: TYPE C  
Temperature: 28  
Operator: Jacky tang

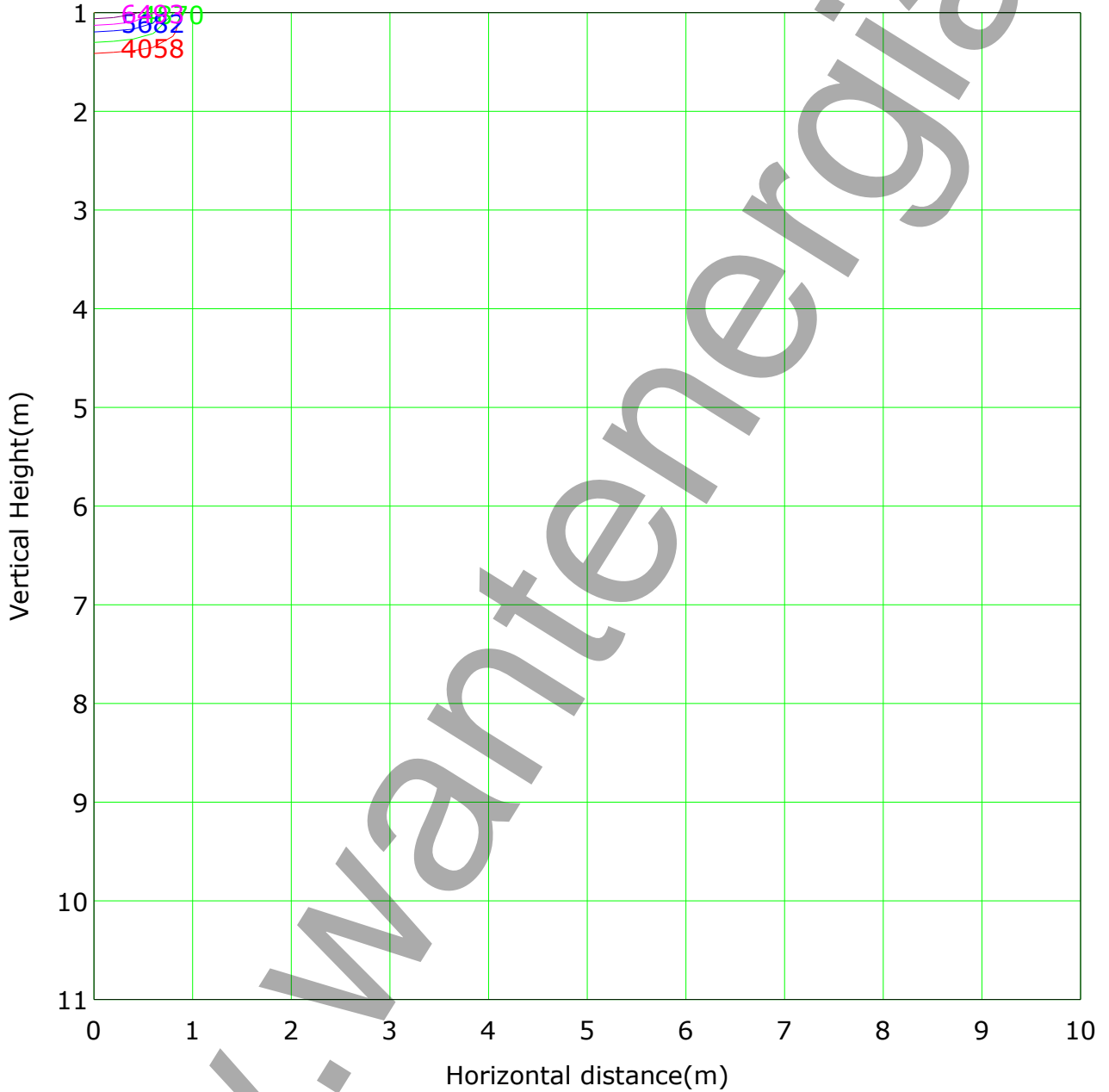
Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 7.992 m  
Humidity: 58  
Inspector:

## Illuminance at a Distance





## Vertical IsoLux Plot

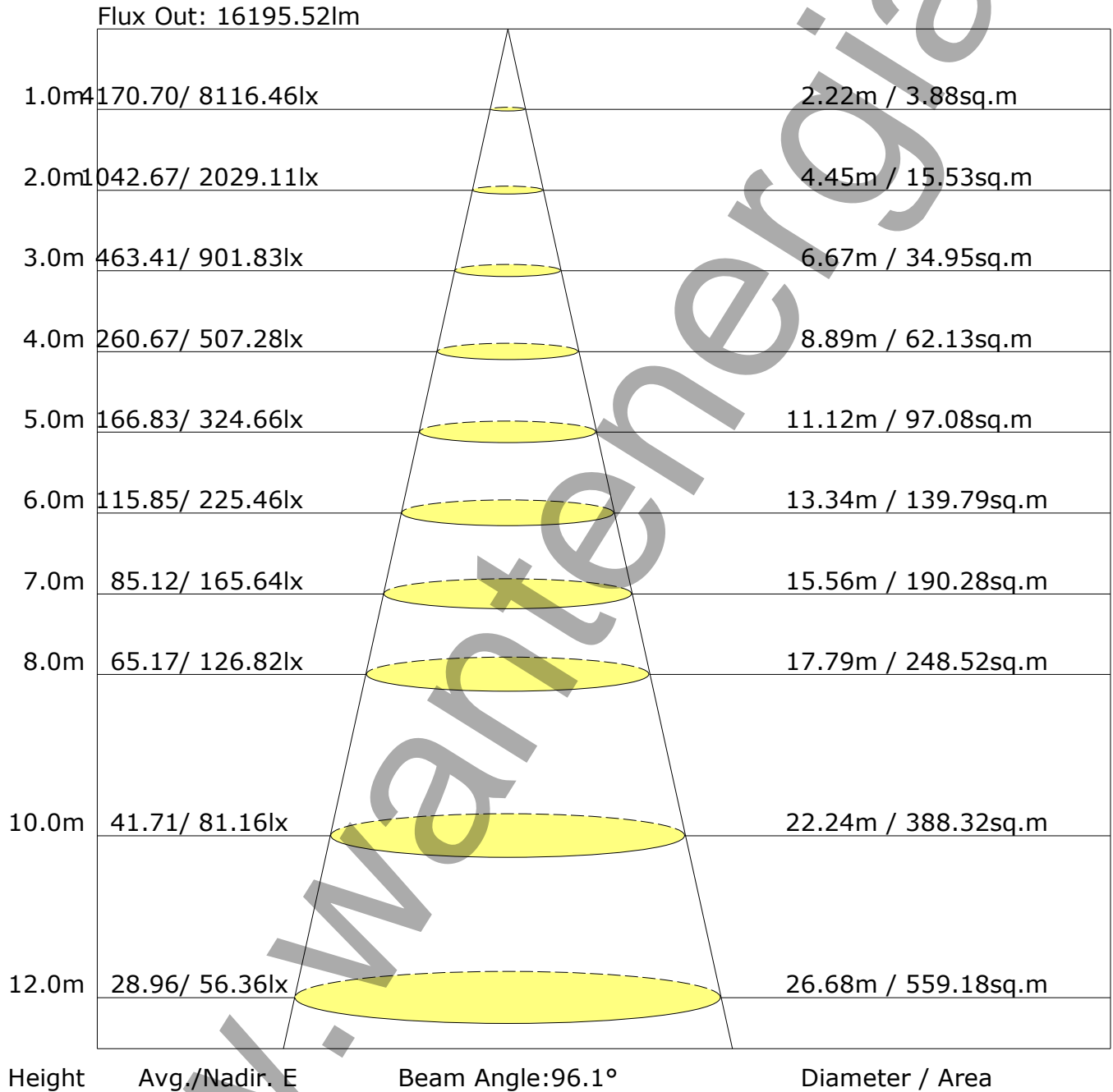


Lowest(m): 1.0m    Highest(m): 11.0m    Max Lux: 8116.5 lx  
 ( 50%):4058.2 lx    ( 60%):4869.9 lx  
 ( 70%):5681.5 lx    ( 80%):6493.2 lx  
 ( 90%):7304.8 lx    (100%):8116.5 lx

C Plane (°):0.0-360.0: 45.0  
 Test Lab: Inventfine instrument  
 Test Type: TYPE C  
 Temperature: 28  
 Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 7.992 m  
 Humidity: 58  
 Inspector:

## The Average Illuminance Effective Figure



C Plane (°): 0.0-360.0: 45.0  
 Test Lab: Inventfine instrument  
 Test Type: TYPE C  
 Temperature: 28  
 Operator: Jacky tang

Gamma Plane (°): 0.0-180.0: 1.0  
 Test Device: GPM-1800B  
 Distance: 7.992 m  
 Humidity: 58  
 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	-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 19177lm ( $8\log(F/F_0) = 10.3$ ).

C Plane (°):0.0-360.0: 45.0  
Test Lab: Inventfine instrument  
Test Type: TYPE C  
Temperature: 28  
Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 7.992 m  
Humidity: 58  
Inspector:

## Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 1.50								
Room Reflectance			Room Index(RI)								
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
0.70	0.50	0.20	0.76	0.84	0.90	0.94	0.99	1.02	1.04	1.07	1.09
	0.30		0.71	0.79	0.85	0.89	0.95	0.98	1.01	1.04	1.06
	0.20		0.67	0.75	0.81	0.86	0.91	0.95	0.98	1.02	1.04
0.50	0.50	0.20	0.75	0.82	0.88	0.91	0.96	0.99	1.00	1.03	1.04
	0.30		0.70	0.78	0.83	0.87	0.92	0.96	0.98	1.01	1.03
	0.20		0.66	0.74	0.80	0.84	0.90	0.93	0.96	0.99	1.01
0.30	0.50	0.20	0.74	0.81	0.85	0.89	0.93	0.95	0.97	0.99	1.01
	0.30		0.69	0.77	0.82	0.86	0.90	0.93	0.95	0.98	0.99
	0.20		0.66	0.73	0.79	0.83	0.88	0.91	0.93	0.96	0.98
0.00	0.00	0.00	0.64	0.71	0.77	0.80	0.85	0.87	0.89	0.92	0.93
<p>Rating:200W Photometrically tested without ceiling board.            Multiply UF values by service correction factors            Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>											

## Utilisation Factor Table(Wall)

Utilisation Factors UF(W)			SHR NOM = 1.50								
Room Reflectance			Room Index(RI)								
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
0.70	0.50	0.20	0.70	0.56	0.46	0.40	0.31	0.26	0.22	0.17	0.13
	0.30		0.58	0.48	0.40	0.35	0.28	0.23	0.20	0.16	0.13
	0.20		0.50	0.42	0.36	0.32	0.26	0.22	0.19	0.15	0.12
0.50	0.50	0.20	0.66	0.53	0.44	0.37	0.29	0.28	0.20	0.15	0.12
	0.30		0.56	0.46	0.39	0.33	0.27	0.22	0.19	0.15	0.12
	0.20		0.49	0.41	0.35	0.30	0.24	0.20	0.18	0.14	0.11
0.30	0.50	0.20	0.64	0.51	0.41	0.35	0.27	0.22	0.19	0.14	0.12
	0.30		0.55	0.45	0.37	0.32	0.25	0.21	0.18	0.14	0.11
	0.20		0.48	0.40	0.34	0.29	0.23	0.19	0.17	0.13	0.11
0.00	0.00	0.00	0.35	0.28	0.23	0.19	0.15	0.12	0.10	0.08	0.06
<p>Rating:200W Photometrically tested without ceiling board.            Multiply UF values by service correction factors            Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>											

## Utilisation Factor Table(Ceiling cavity)

Utilisation Factors UF(C)			SHR NOM = 1.50								
Room Reflectance			Room Index(RI)								
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
0.70	0.50	0.20	0.15	0.16	0.17	0.18	0.19	0.20	0.20	0.21	0.22
	0.30		0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20
	0.20		0.06	0.08	0.10	0.11	0.13	0.15	0.16	0.18	0.19
0.50	0.50	0.20	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.20	0.21
	0.30		0.10	0.11	0.13	0.14	0.15	0.17	0.17	0.19	0.19
	0.20		0.06	0.08	0.10	0.11	0.13	0.14	0.16	0.17	0.18
0.30	0.50	0.20	0.14	0.15	0.16	0.16	0.18	0.18	0.19	0.19	0.20
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.19
	0.20		0.06	0.08	0.10	0.11	0.13	0.14	0.15	0.17	0.17
0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
<p>Rating:200W Photometrically tested without ceiling board.            Multiply UF values by service correction factors            Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>											

## Zonal Lumen

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	7998.6	7.7	7.7	0.04	0.04
1.0-2.0	7999.1	23.0	30.6	0.12	0.16
2.0-3.0	8000.5	38.3	68.9	0.20	0.36
3.0-4.0	8003.7	53.6	122.5	0.28	0.64
4.0-5.0	8009.1	68.9	191.4	0.36	1.00
5.0-6.0	8016.9	84.3	275.6	0.44	1.44
6.0-7.0	8027.9	99.7	375.3	0.52	1.96
7.0-8.0	8043.0	115.1	490.4	0.60	2.56
8.0-9.0	8061.8	130.7	621.1	0.68	3.24
9.0-10.0	8083.5	146.3	767.4	0.76	4.00
10.0-11.0	8109.0	162.1	929.5	0.85	4.85
11.0-12.0	8138.7	177.9	1107.4	0.93	5.77
12.0-13.0	8172.3	194.0	1301.4	1.01	6.79
13.0-14.0	8208.6	210.1	1511.5	1.10	7.88
14.0-15.0	8247.7	226.5	1738.0	1.18	9.06
15.0-16.0	8290.3	243.0	1980.9	1.27	10.33
16.0-17.0	8334.9	259.6	2240.5	1.35	11.68
17.0-18.0	8381.6	276.4	2516.9	1.44	13.12
18.0-19.0	8429.5	293.3	2810.2	1.53	14.65
19.0-20.0	8477.2	310.3	3120.5	1.62	16.27
20.0-21.0	8525.3	327.4	3447.9	1.71	17.98
21.0-22.0	8573.4	344.6	3792.5	1.80	19.78
22.0-23.0	8620.2	361.7	4154.2	1.89	21.66
23.0-24.0	8664.9	378.9	4533.1	1.98	23.64
24.0-25.0	8706.9	395.9	4929.1	2.06	25.70
25.0-26.0	8744.3	412.8	5341.9	2.15	27.86
26.0-27.0	8775.7	429.4	5771.3	2.24	30.10
27.0-28.0	8799.0	445.5	6216.8	2.32	32.42
28.0-29.0	8813.2	461.2	6678.0	2.40	34.82
29.0-30.0	8817.7	476.2	7154.2	2.48	37.31
30.0-31.0	8810.5	490.4	7644.5	2.56	39.86
31.0-32.0	8787.7	503.5	8148.0	2.63	42.49
32.0-33.0	8746.1	515.3	8663.4	2.69	45.18
33.0-34.0	8682.0	525.5	9188.8	2.74	47.92
34.0-35.0	8594.0	533.8	9722.6	2.78	50.70
35.0-36.0	8480.0	540.0	10262.7	2.82	53.52

C Plane (°):0.0-360.0: 45.0  
Test Lab: Inventfine instrument  
Test Type: TYPE C  
Temperature: 28  
Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 7.992 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	8338.6	543.9	10806.6	2.84	56.35
37.0-38.0	8168.7	545.3	11351.9	2.84	59.20
38.0-39.0	7967.0	543.9	11895.8	2.84	62.03
39.0-40.0	7730.6	539.2	12435.0	2.81	64.84
40.0-41.0	7460.6	531.3	12966.3	2.77	67.61
41.0-42.0	7159.4	520.2	13486.6	2.71	70.33
42.0-43.0	6830.7	506.1	13992.6	2.64	72.97
43.0-44.0	6467.8	488.2	14480.8	2.55	75.51
44.0-45.0	6072.5	466.7	14947.6	2.43	77.95
45.0-46.0	5649.8	441.9	15389.5	2.30	80.25
46.0-47.0	5199.2	413.6	15803.1	2.16	82.41
47.0-48.0	4719.4	381.6	16184.6	1.99	84.40
48.0-49.0	4218.4	346.5	16531.1	1.81	86.20
49.0-50.0	3714.0	309.7	16840.8	1.61	87.82
50.0-51.0	3215.7	272.1	17112.9	1.42	89.24
51.0-52.0	2748.8	235.9	17348.8	1.23	90.47
52.0-53.0	2339.3	203.5	17552.3	1.06	91.53
53.0-54.0	2005.0	176.7	17729.1	0.92	92.45
54.0-55.0	1746.8	156.0	17885.0	0.81	93.26
55.0-56.0	1549.6	140.0	18025.1	0.73	93.99
56.0-57.0	1379.8	126.2	18151.2	0.66	94.65
57.0-58.0	1202.9	111.3	18262.5	0.58	95.23
58.0-59.0	1023.0	95.6	18358.2	0.50	95.73
59.0-60.0	853.8	80.7	18438.8	0.42	96.15
60.0-61.0	702.0	67.0	18505.8	0.35	96.50
61.0-62.0	576.2	55.5	18561.4	0.29	96.79
62.0-63.0	482.0	46.9	18608.2	0.24	97.04
63.0-64.0	413.9	40.6	18648.9	0.21	97.25
64.0-65.0	361.3	35.8	18684.6	0.19	97.43
65.0-66.0	320.4	32.0	18716.6	0.17	97.60
66.0-67.0	289.6	29.1	18745.7	0.15	97.75
67.0-68.0	266.1	27.0	18772.7	0.14	97.89
68.0-69.0	247.1	25.2	18797.9	0.13	98.02
69.0-70.0	230.4	23.7	18821.6	0.12	98.15
70.0-71.0	214.3	22.2	18843.7	0.12	98.26
71.0-72.0	198.3	20.6	18864.3	0.11	98.37

C Plane (°):0.0-360.0: 45.0  
Test Lab: Inventfine instrument  
Test Type: TYPE C  
Temperature: 28  
Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 7.992 m  
Humidity: 58  
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	183.8	19.2	18883.6	0.10	98.47
73.0-74.0	170.7	17.9	18901.5	0.09	98.56
74.0-75.0	157.4	16.6	18918.1	0.09	98.65
75.0-76.0	143.2	15.2	18933.3	0.08	98.73
76.0-77.0	128.3	13.7	18947.0	0.07	98.80
77.0-78.0	113.5	12.2	18959.2	0.06	98.87
78.0-79.0	98.7	10.6	18969.8	0.06	98.92
79.0-80.0	84.5	9.1	18978.9	0.05	98.97
80.0-81.0	71.9	7.8	18986.7	0.04	99.01
81.0-82.0	61.2	6.6	18993.3	0.03	99.04
82.0-83.0	52.5	5.7	18999.0	0.03	99.07
83.0-84.0	45.5	5.0	19004.0	0.03	99.10
84.0-85.0	39.5	4.3	19008.3	0.02	99.12
85.0-86.0	34.3	3.8	19012.0	0.02	99.14
86.0-87.0	29.9	3.3	19015.3	0.02	99.16
87.0-88.0	25.8	2.8	19018.1	0.01	99.17
88.0-89.0	20.5	2.3	19020.4	0.01	99.18
89.0-90.0	12.4	1.4	19021.7	0.01	99.19
90.0-91.0	4.7	0.5	19022.3	0.00	99.19
91.0-92.0	1.9	0.2	19022.5	0.00	99.20
92.0-93.0	1.8	0.2	19022.7	0.00	99.20
93.0-94.0	1.9	0.2	19022.9	0.00	99.20
94.0-95.0	2.0	0.2	19023.1	0.00	99.20
95.0-96.0	2.1	0.2	19023.3	0.00	99.20
96.0-97.0	2.3	0.3	19023.6	0.00	99.20
97.0-98.0	2.6	0.3	19023.8	0.00	99.20
98.0-99.0	2.9	0.3	19024.2	0.00	99.20
99.0-100.0	3.1	0.3	19024.5	0.00	99.21
100.0-101.0	3.4	0.4	19024.9	0.00	99.21
101.0-102.0	3.7	0.4	19025.3	0.00	99.21
102.0-103.0	4.1	0.4	19025.7	0.00	99.21
103.0-104.0	4.6	0.5	19026.2	0.00	99.22
104.0-105.0	5.3	0.6	19026.8	0.00	99.22
105.0-106.0	5.9	0.6	19027.4	0.00	99.22
106.0-107.0	6.5	0.7	19028.1	0.00	99.22
107.0-108.0	7.2	0.8	19028.8	0.00	99.23

C Plane (°):0.0-360.0: 45.0  
Test Lab: Inventfine instrument  
Test Type: TYPE C  
Temperature: 28  
Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 7.992 m  
Humidity: 58  
Inspector:

### Zonal Lumen (Continue 3)

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
108.0-109.0	8.0	0.8	19029.7	0.00	99.23
109.0-110.0	8.9	0.9	19030.6	0.00	99.24
110.0-111.0	9.8	1.0	19031.6	0.01	99.24
111.0-112.0	10.9	1.1	19032.7	0.01	99.25
112.0-113.0	12.0	1.2	19033.9	0.01	99.26
113.0-114.0	13.1	1.3	19035.2	0.01	99.26
114.0-115.0	14.3	1.4	19036.7	0.01	99.27
115.0-116.0	15.5	1.5	19038.2	0.01	99.28
116.0-117.0	16.8	1.6	19039.8	0.01	99.29
117.0-118.0	18.1	1.8	19041.6	0.01	99.30
118.0-119.0	19.5	1.9	19043.5	0.01	99.31
119.0-120.0	20.8	2.0	19045.5	0.01	99.32
120.0-121.0	22.1	2.1	19047.5	0.01	99.33
121.0-122.0	23.4	2.2	19049.7	0.01	99.34
122.0-123.0	24.7	2.3	19052.0	0.01	99.35
123.0-124.0	26.0	2.4	19054.4	0.01	99.36
124.0-125.0	27.2	2.5	19056.8	0.01	99.37
125.0-126.0	28.4	2.5	19059.4	0.01	99.39
126.0-127.0	29.5	2.6	19062.0	0.01	99.40
127.0-128.0	30.7	2.7	19064.7	0.01	99.42
128.0-129.0	31.8	2.7	19067.4	0.01	99.43
129.0-130.0	32.9	2.8	19070.2	0.01	99.44
130.0-131.0	33.8	2.8	19073.0	0.01	99.46
131.0-132.0	34.8	2.9	19075.8	0.01	99.47
132.0-133.0	35.6	2.9	19078.7	0.02	99.49
133.0-134.0	36.5	2.9	19081.6	0.02	99.50
134.0-135.0	37.4	2.9	19084.5	0.02	99.52
135.0-136.0	38.1	2.9	19087.5	0.02	99.53
136.0-137.0	38.9	2.9	19090.4	0.02	99.55
137.0-138.0	39.8	2.9	19093.4	0.02	99.57
138.0-139.0	40.6	3.0	19096.3	0.02	99.58
139.0-140.0	41.3	2.9	19099.3	0.02	99.60
140.0-141.0	42.0	2.9	19102.2	0.02	99.61
141.0-142.0	42.8	2.9	19105.1	0.02	99.63
142.0-143.0	43.6	2.9	19108.0	0.02	99.64
143.0-144.0	44.3	2.9	19110.9	0.02	99.66

C Plane (°):0.0-360.0: 45.0  
Test Lab: Inventfine instrument  
Test Type: TYPE C  
Temperature: 28  
Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 7.992 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	45.0	2.9	19113.8	0.01	99.67
145.0-146.0	45.8	2.8	19116.6	0.01	99.69
146.0-147.0	46.5	2.8	19119.4	0.01	99.70
147.0-148.0	47.2	2.8	19122.2	0.01	99.72
148.0-149.0	47.9	2.7	19124.9	0.01	99.73
149.0-150.0	48.8	2.7	19127.7	0.01	99.74
150.0-151.0	49.7	2.7	19130.3	0.01	99.76
151.0-152.0	50.6	2.6	19133.0	0.01	99.77
152.0-153.0	51.6	2.6	19135.6	0.01	99.79
153.0-154.0	52.6	2.6	19138.2	0.01	99.80
154.0-155.0	53.6	2.5	19140.7	0.01	99.81
155.0-156.0	54.6	2.5	19143.2	0.01	99.83
156.0-157.0	55.6	2.4	19145.6	0.01	99.84
157.0-158.0	56.7	2.4	19148.0	0.01	99.85
158.0-159.0	57.7	2.3	19150.3	0.01	99.86
159.0-160.0	58.7	2.3	19152.6	0.01	99.87
160.0-161.0	59.7	2.2	19154.8	0.01	99.89
161.0-162.0	60.6	2.1	19156.9	0.01	99.90
162.0-163.0	61.4	2.0	19158.9	0.01	99.91
163.0-164.0	62.2	1.9	19160.8	0.01	99.92
164.0-165.0	63.0	1.8	19162.7	0.01	99.93
165.0-166.0	63.7	1.7	19164.4	0.01	99.94
166.0-167.0	64.4	1.6	19166.1	0.01	99.94
167.0-168.0	64.9	1.5	19167.6	0.01	99.95
168.0-169.0	65.6	1.4	19169.0	0.01	99.96
169.0-170.0	66.0	1.3	19170.4	0.01	99.97
170.0-171.0	66.3	1.2	19171.6	0.01	99.97
171.0-172.0	66.5	1.1	19172.6	0.01	99.98
172.0-173.0	66.7	1.0	19173.6	0.00	99.98
173.0-174.0	66.8	0.8	19174.4	0.00	99.99
174.0-175.0	66.9	0.7	19175.1	0.00	99.99
175.0-176.0	67.0	0.6	19175.7	0.00	99.99
176.0-177.0	67.1	0.4	19176.2	0.00	100.00
177.0-178.0	67.2	0.3	19176.5	0.00	100.00
178.0-179.0	67.2	0.2	19176.7	0.00	100.00
179.0-180.0	67.4	0.1	19176.7	0.00	100.00

C Plane (°):0.0-360.0: 45.0  
Test Lab: Inventfine instrument  
Test Type: TYPE C  
Temperature: 28  
Operator: Jacky tang

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 7.992 m  
Humidity: 58  
Inspector: