

Report No.: 6

Test Time: 2017/7/20 09:48

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: 100W-1

Current: 0.472 A

Power Factor: 0.975

Voltage: 220V

Power: 101.2 W

Photometric Results

CIE Class: Direct

Measurement Flux: 11124.6 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(50%): H89.2

Vertical Diffuse Angle(50%): V133.4

Luminaire Efficacy Rating (LER): 109.98

Max. Intensity: 6718.44 cd

S/MH(C0/C180): 1.34

Total Rated Lamp Lumens: 11124.6 lm

Efficiency: 100%

Upward Ratio: 1%

Central Intensity: 2812.82 cd

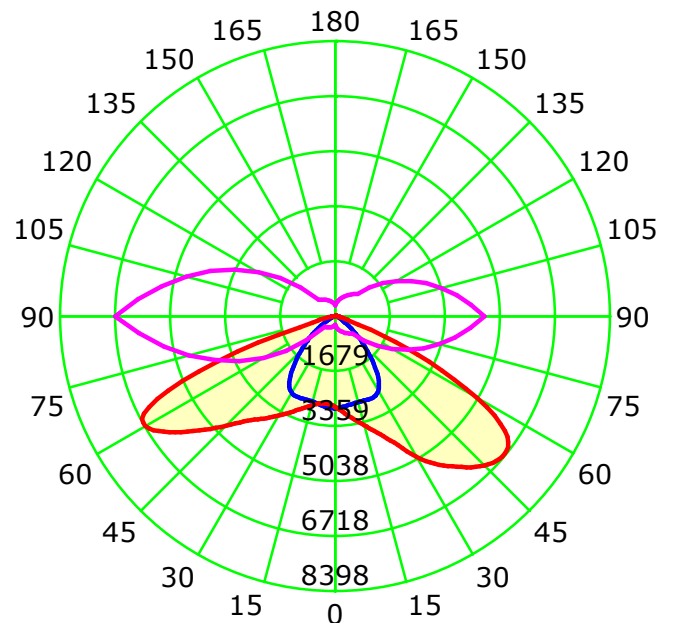
Pos of Max. Intensity: H270 V61

S/MH(C90/C270): 2.63

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

Average Diffuse Angle(50%): 111.3°

— C0-C180 — C90-C270 — G61

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

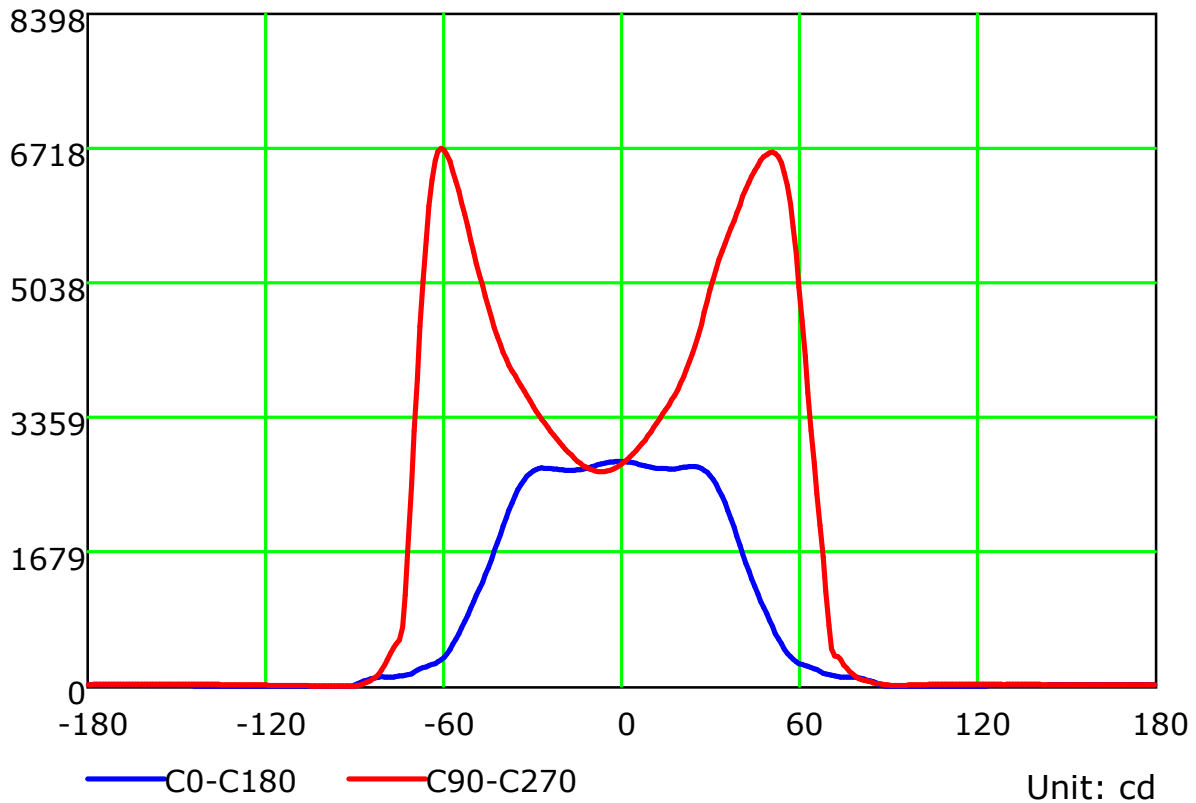
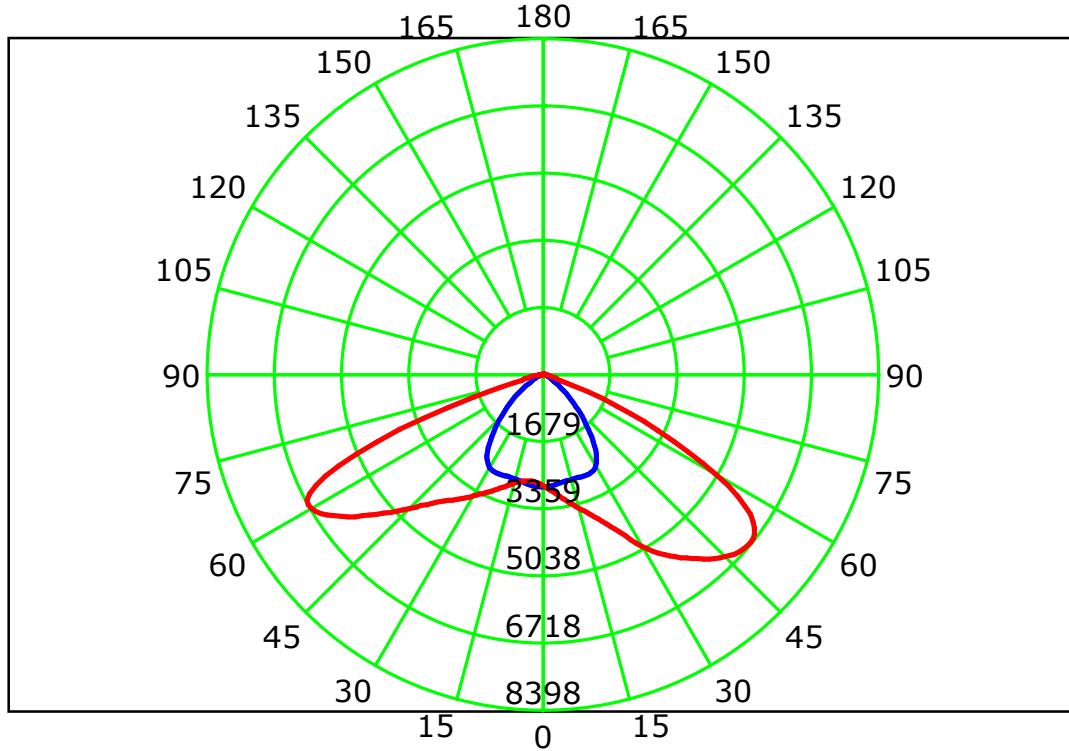
Test Device: GPM-1800B

Distance: 7.992 m

Humidity: 58

Inspector:

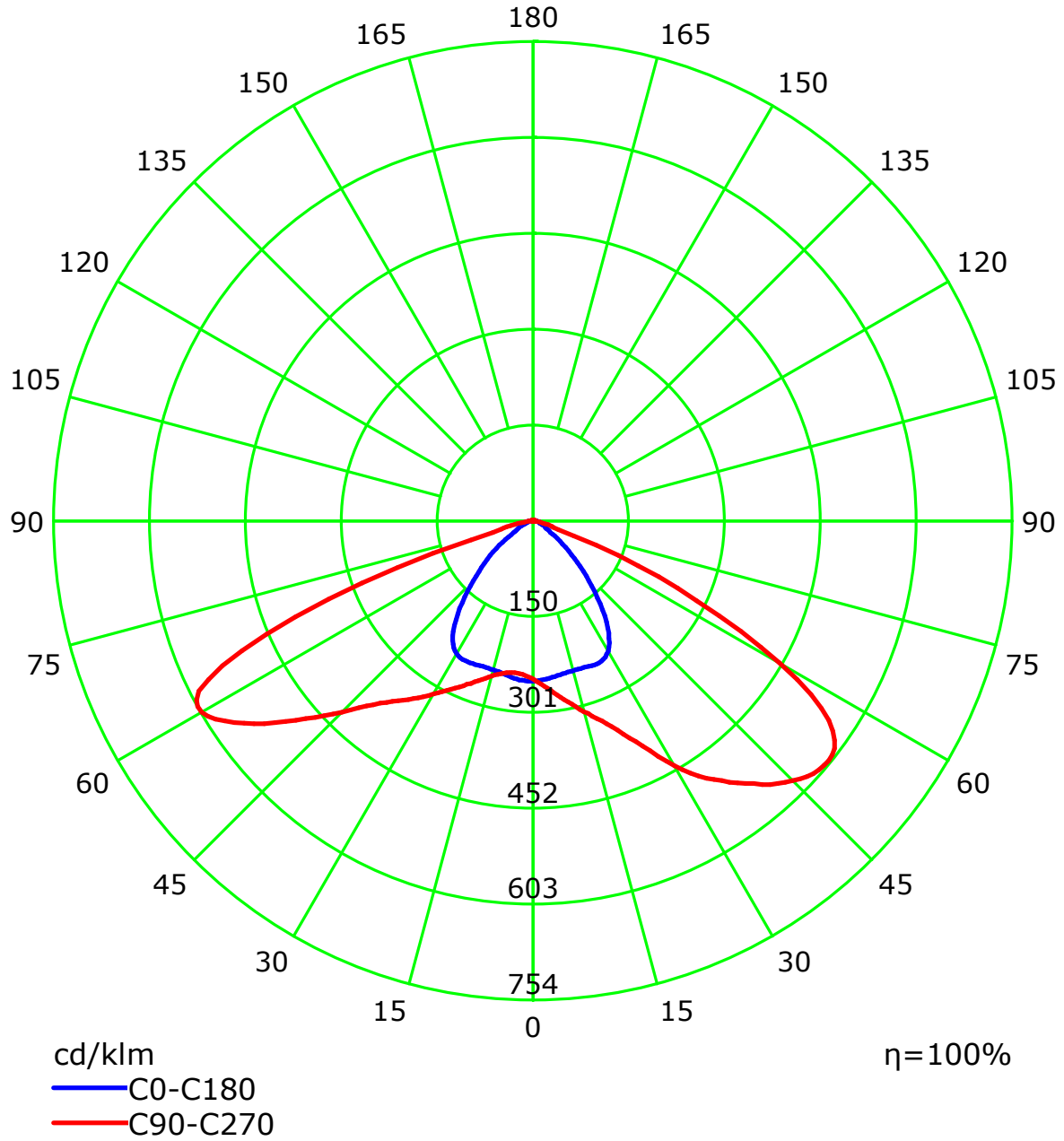
Luminous Intensity Distribution Curve



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)



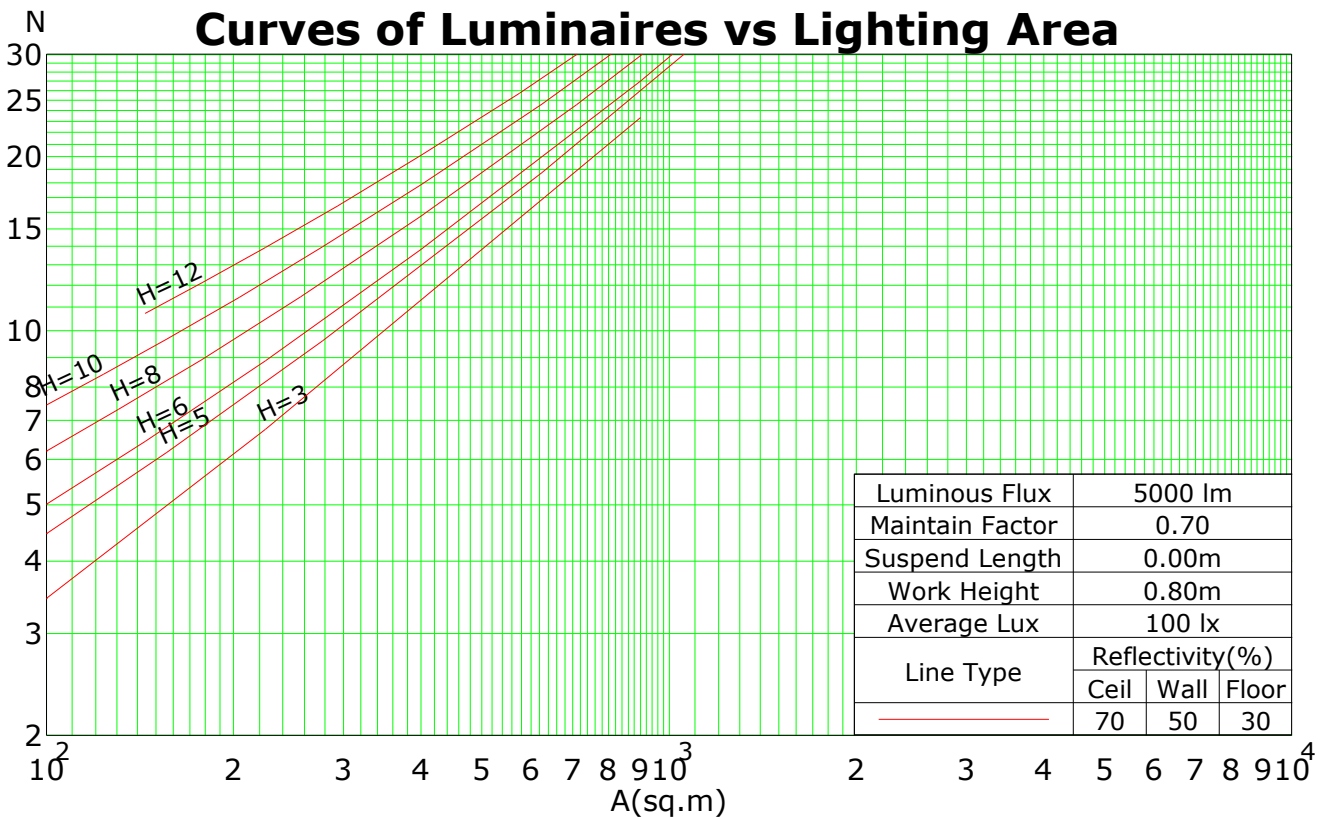
C Plane (°):0.0-360.0: 45.0
Test Lab: Inventfine instrument
Test Type: TYPE C
Temperature: 28
Operator: Jacky tang

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	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71
3	91	81	73	66	88	79	72	66	76	70	64	73	68	63	70	66	62	60
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	62	57	53	51
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	36	31	41	35	30	28
9	55	42	33	28	54	41	33	28	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	29	24	36	29	24	35	29	24	22

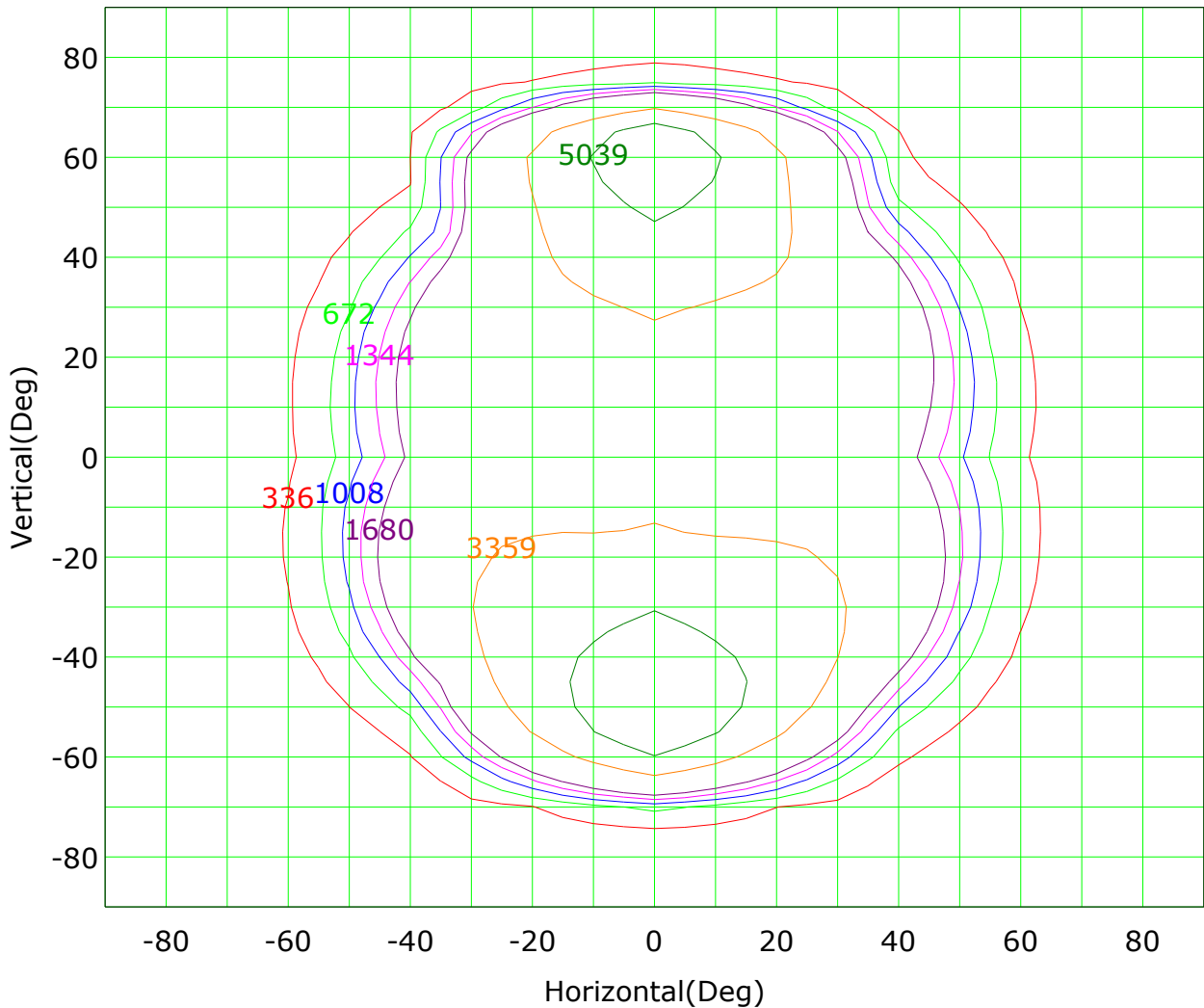
Spacing Criteria (0-180): 1.34
 Spacing Criteria (90-270): 2.63
 Spacing Criteria (Diagonal): 1.63



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)



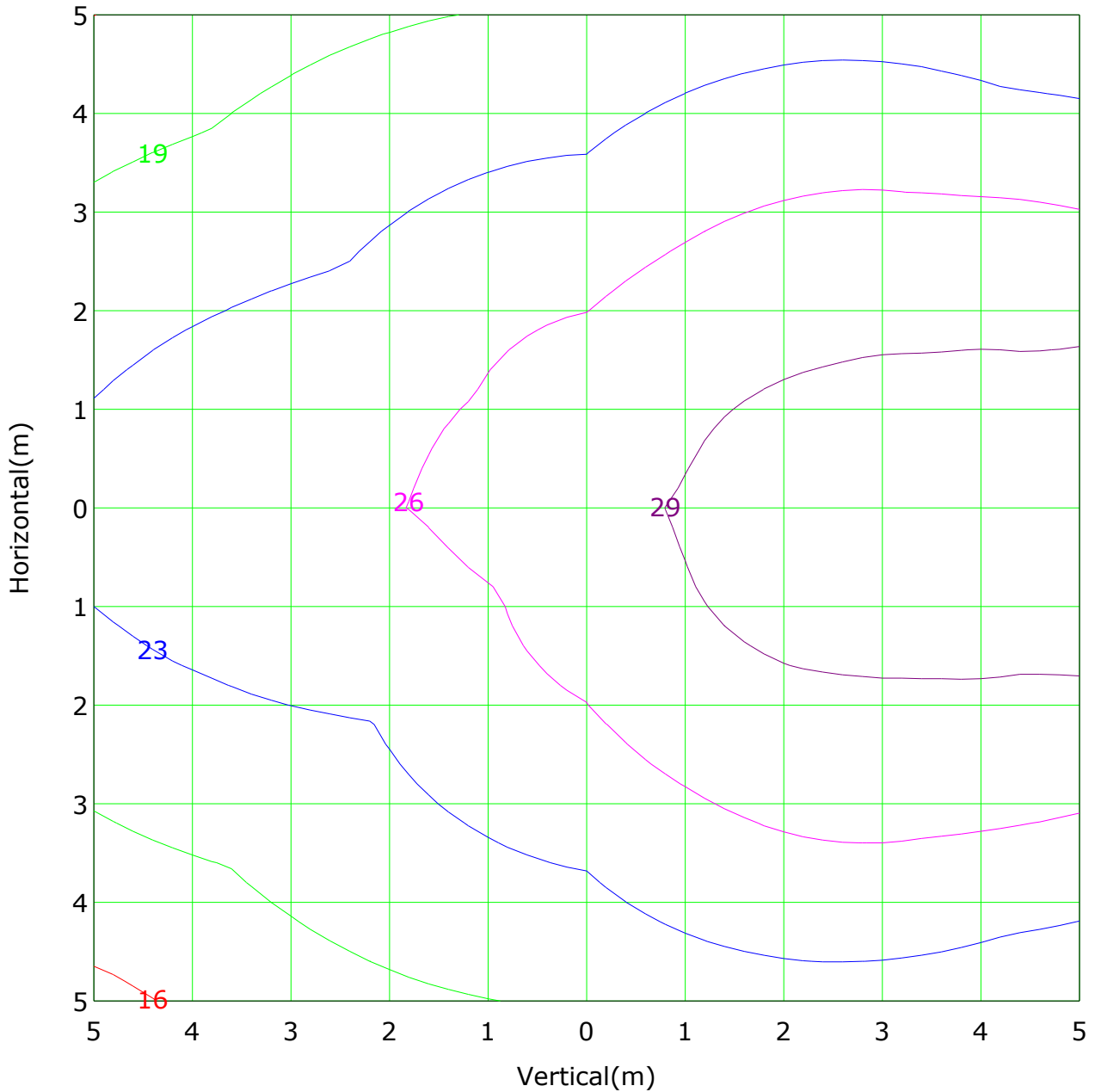
Imax (100%): 6718 cd

— (5%): 336 cd	— (10%): 672 cd
— (15%): 1008 cd	— (20%): 1344 cd
— (25%): 1680 cd	— (50%): 3359 cd
— (75%): 5039 cd	— (100%): 6718 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%): 32.2 lx

— (50%): 16.1 lx	— (60%): 19.3 lx
— (70%): 22.6 lx	— (80%): 25.8 lx
— (90%): 29.0 lx	— (100%): 32.2 lx

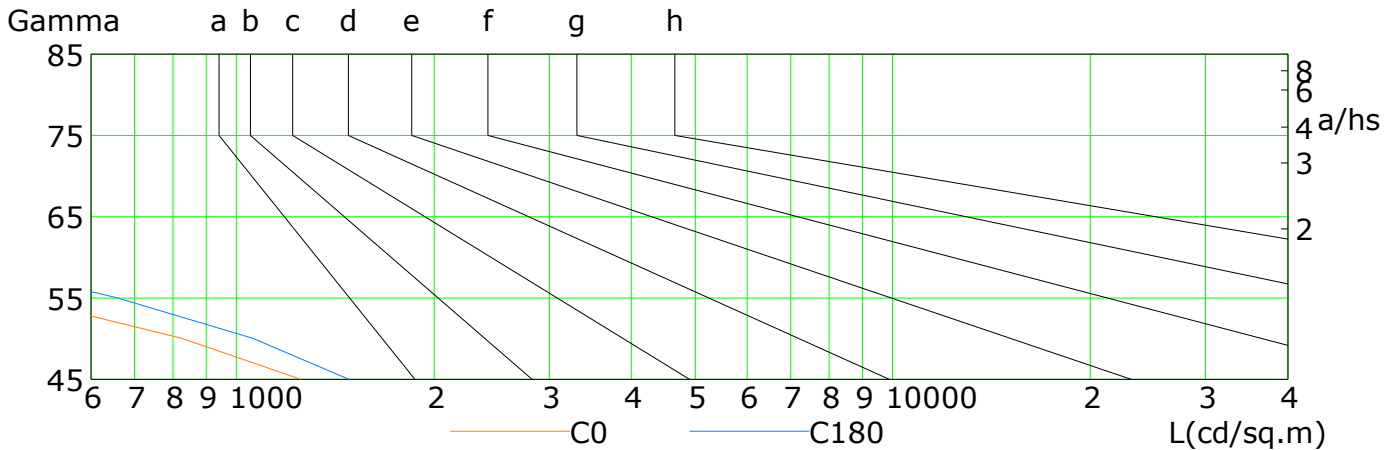
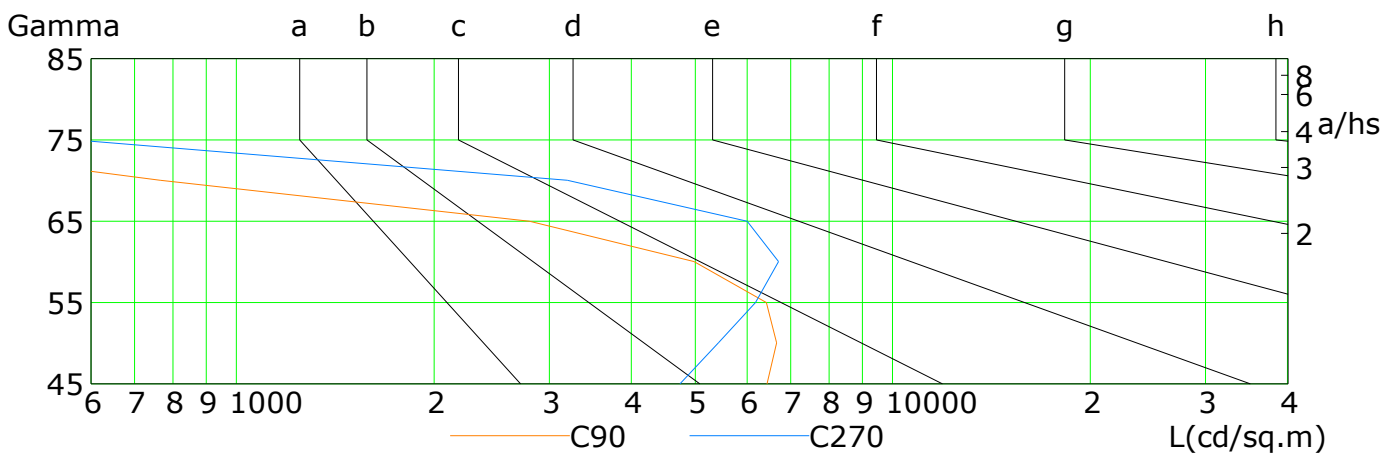
C Plane (°):0.0-360.0: 45.0
Test Lab: Inventfine instrument
Test Type: TYPE C
Temperature: 28
Operator: Jacky tang

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

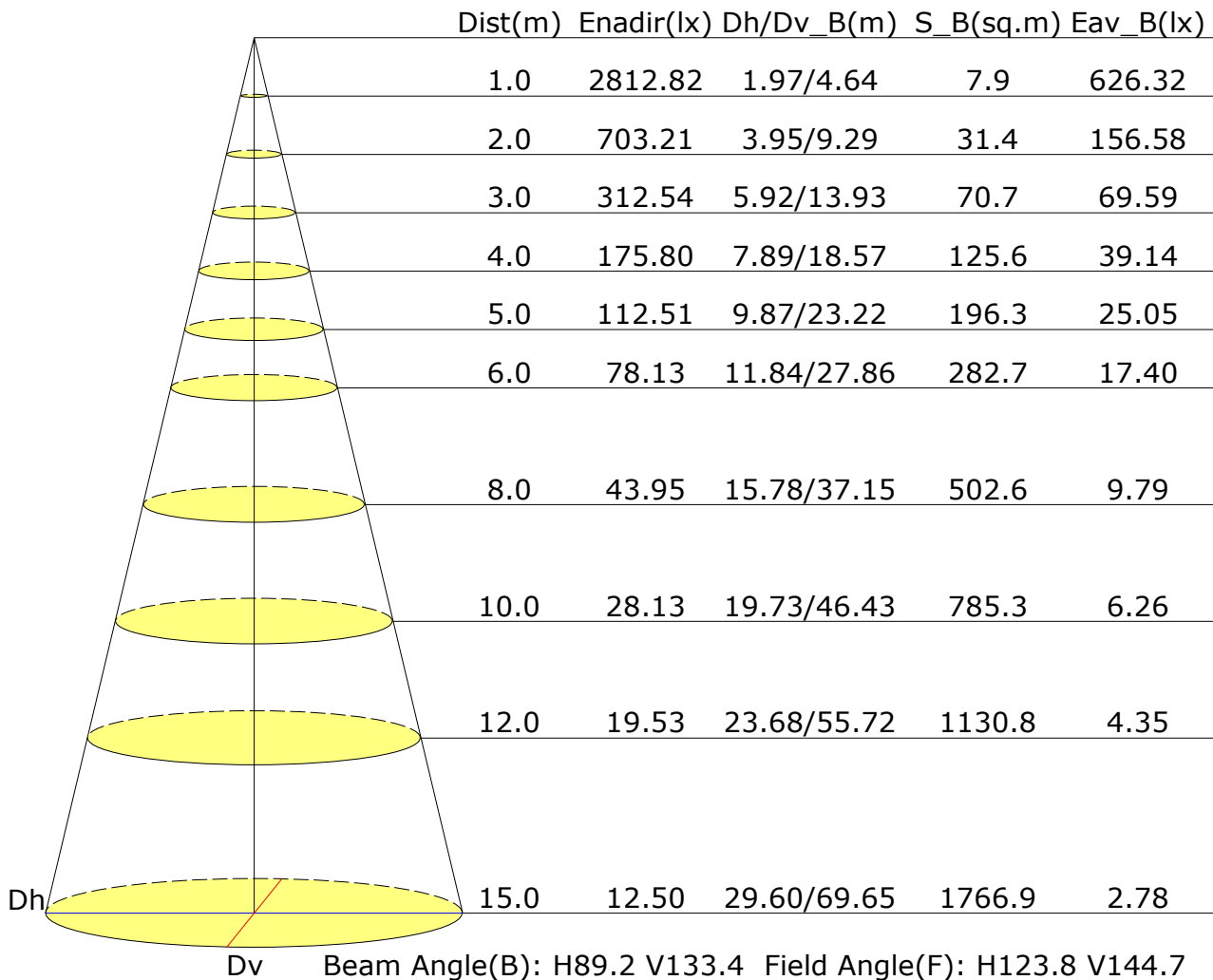


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	1254	826	470	287	224	145	115	110	57
C90	6439	6663	6421	4986	2797	765	272	103	46
C180	1484	1059	660	367	258	180	130	119	89
C270	4742	5430	6186	6701	6004	3195	577	266	69

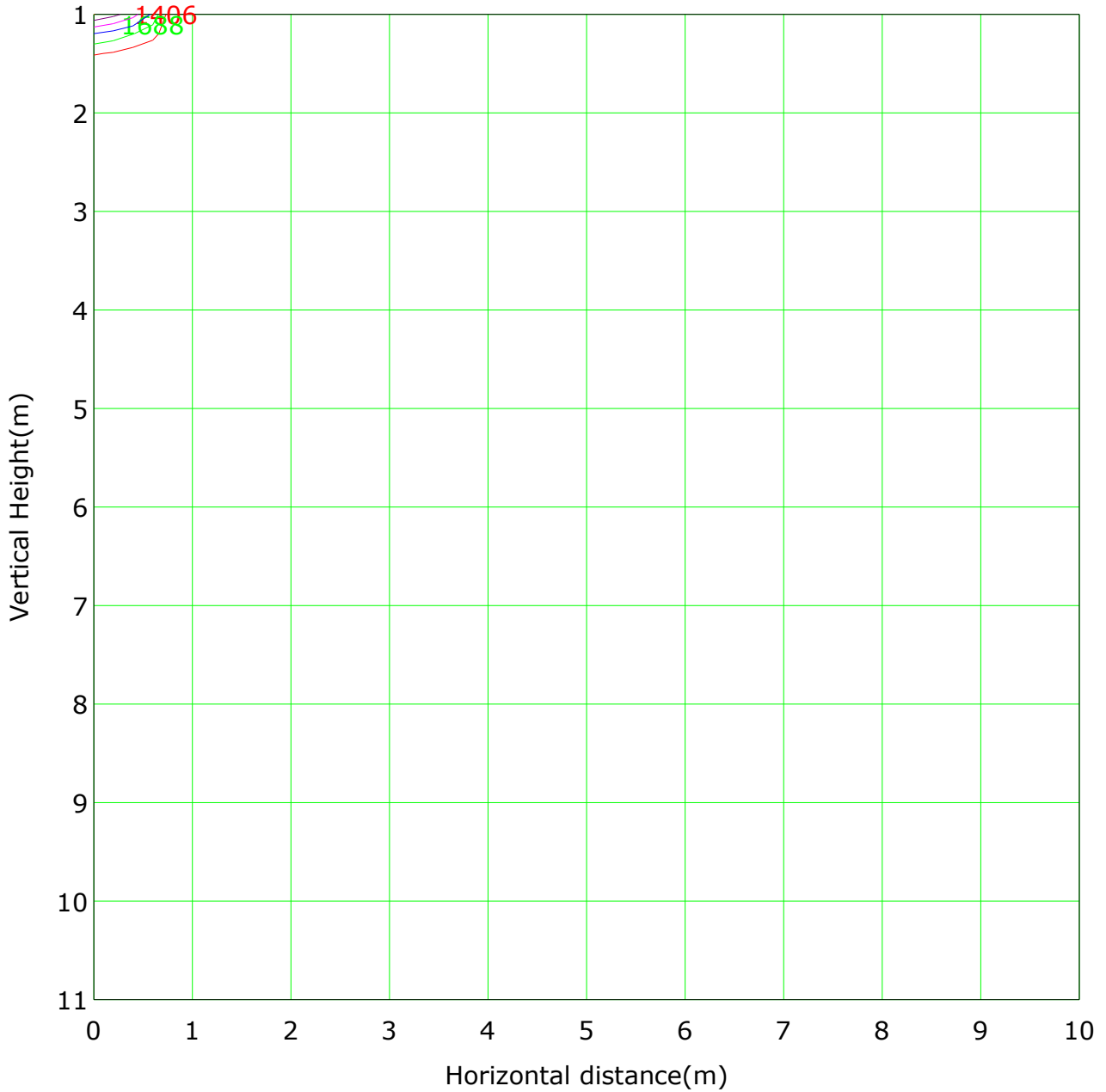
C Plane (°):0.0-360.0: 45.0
Test Lab: Inventfine instrument
Test Type: TYPE C
Temperature: 28
Operator: Jacky tang

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: 2812.8 lx
 — (50%):1406.4 lx — (60%):1687.7 lx
 — (70%):1969.0 lx — (80%):2250.3 lx
 — (90%):2531.5 lx — (100%):2812.8 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:

Area Flux Table

Unit: lm

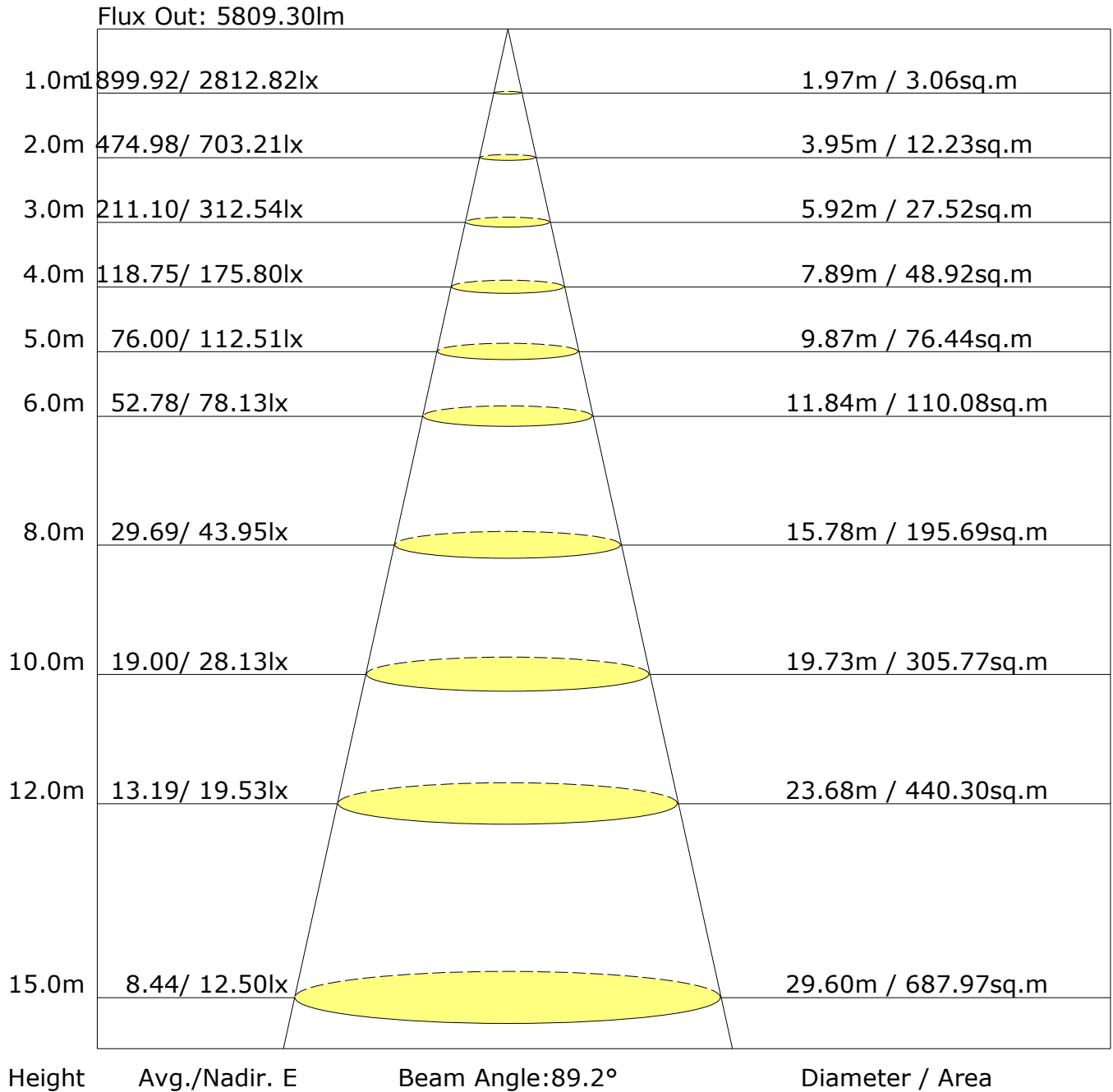
		Vertical plane																		
		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90
Flux(E)	Flux(T)	0.1	0.3	0.5	0.7	0.9	1.2	1.6	2.1	2.6	2.5	2.0	1.4	0.9	0.6	0.4	0.2	0.1	0.0	18.1
0.0	3.5	0.1	0.5	1.0	1.6	2.6	5.0	10.0	18.4	27.6	27.5	18.1	9.5	4.3	2.0	1.2	0.7	0.3	0.0	130.4
0.0	14.9	0.2	0.7	1.5	2.7	4.7	19.3	55.6	102.9	150.0	149.5	101.5	54.1	18.1	3.9	2.2	1.2	0.5	0.1	668.7
0.0	41.2	0.2	0.9	1.9	3.9	8.1	31.6	80.4	127.3	168.2	166.0	121.5	73.4	26.1	5.7	3.1	1.6	0.7	0.1	820.6
0.0	131.8	0.2	0.9	2.3	5.9	16.8	44.4	85.8	115.1	135.6	133.1	107.2	72.7	31.0	10.8	4.3	1.9	0.8	0.1	769.1
0.0	328.9	0.2	1.0	2.8	8.9	28.9	59.7	85.7	100.9	111.5	110.5	97.0	76.1	45.7	19.4	6.1	2.3	0.9	0.2	757.8
0.0	708.5	0.3	1.1	3.3	12.0	36.5	63.9	80.5	88.8	95.4	94.8	87.1	76.3	55.2	27.1	8.2	2.6	0.9	0.2	734.1
0.0	1512.1	0.3	1.1	3.6	13.7	37.8	63.5	76.9	80.3	84.2	83.3	78.6	75.1	58.0	30.3	9.6	2.9	1.0	0.2	700.3
0.0	4458.9	0.3	1.1	3.6	13.1	35.1	61.9	75.3	79.0	82.2	80.9	78.4	74.9	57.7	29.3	9.5	2.9	1.0	0.2	686.3
0.0	11140.8	0.3	1.1	3.7	13.7	36.6	64.6	79.6	84.8	88.7	89.2	85.7	80.0	61.1	31.4	10.3	3.0	1.0	0.2	735.0
0.0	27747.6	0.3	1.1	3.8	15.4	42.1	71.3	89.1	97.0	102.2	102.8	98.4	89.5	67.9	36.5	11.8	2.9	0.9	0.2	833.3
0.0	6767.9	0.2	1.0	2.9	10.8	35.5	72.8	108.2	135.4	157.4	157.3	134.6	104.2	64.6	28.3	8.4	2.4	0.9	0.2	936.9
0.0	1792.2	0.2	0.9	2.3	6.8	21.7	55.4	105.3	147.3	180.5	179.2	143.0	97.2	45.8	16.8	5.4	1.9	0.8	0.1	1010.5
0.0	4180.5	0.2	0.8	1.8	3.9	9.7	30.5	75.3	125.7	170.2	168.6	121.3	69.8	26.0	7.7	3.3	1.5	0.7	0.1	817.1
0.0	10140.8	0.2	0.7	1.4	2.5	4.4	10.5	26.6	51.2	76.3	75.8	50.0	25.4	9.5	3.8	2.1	1.1	0.5	0.1	342.1
0.0	25140.8	0.1	0.5	1.0	1.4	2.1	3.3	4.9	6.7	8.4	8.3	6.4	4.5	2.8	1.6	1.1	0.7	0.3	0.0	54.1
0.0	603.0	0.1	0.3	0.5	0.6	0.7	0.9	1.2	1.4	1.5	1.5	1.3	1.0	0.7	0.5	0.3	0.2	0.1	0.0	12.6
0.0	11052.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	10558.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Horizontal plane

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



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 $11125lm$ ($8\log(F/F_0) = 8.4$).

Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 1.75								
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	NA	0.71	0.79	0.84	0.91	0.96	0.99	1.03	1.05
		0.30	NA	0.64	0.72	0.78	0.86	0.91	0.95	0.99	1.03
		0.20	NA	0.59	0.67	0.73	0.82	0.87	0.91	0.96	1.00
0.50	0.50	0.20	NA	0.69	0.76	0.82	0.88	0.92	0.95	0.99	1.01
		0.30	NA	0.63	0.70	0.76	0.84	0.88	0.92	0.96	0.99
		0.20	NA	0.58	0.66	0.72	0.80	0.85	0.89	0.94	0.97
0.30	0.50	0.20	NA	0.67	0.74	0.79	0.85	0.89	0.92	0.95	0.97
		0.30	NA	0.62	0.69	0.75	0.82	0.86	0.89	0.93	0.95
		0.20	NA	0.57	0.65	0.71	0.78	0.83	0.86	0.91	0.94
0.00	0.00	0.00	NA	0.55	0.62	0.68	0.75	0.79	0.82	0.86	0.89
<p>Rating:104W 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 = 1.75								
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	NA	0.76	0.63	0.54	0.42	0.34	0.29	0.22	0.18
	0.30		NA	0.65	0.55	0.48	0.38	0.32	0.27	0.21	0.17
	0.20		NA	0.57	0.49	0.43	0.35	0.29	0.25	0.20	0.17
0.50	0.50	0.20	NA	0.73	0.60	0.51	0.40	0.36	0.28	0.21	0.17
	0.30		NA	0.63	0.53	0.46	0.36	0.30	0.26	0.20	0.16
	0.20		NA	0.56	0.48	0.42	0.33	0.28	0.24	0.19	0.16
0.30	0.50	0.20	NA	0.70	0.58	0.49	0.38	0.31	0.26	0.20	0.16
	0.30		NA	0.61	0.52	0.44	0.35	0.29	0.25	0.19	0.16
	0.20		NA	0.55	0.47	0.41	0.32	0.27	0.23	0.18	0.15
0.00	0.00	0.00	0.99	0.44	0.37	0.32	0.24	0.20	0.17	0.13	0.11
<p>Rating:104W 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 = 1.75								
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	NA	0.18	0.18	0.19	0.20	0.21	0.21	0.22	0.22
	0.30		NA	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20
	0.20		NA	0.07	0.09	0.10	0.12	0.14	0.15	0.17	0.18
0.50	0.50	0.20	NA	0.17	0.18	0.18	0.19	0.20	0.20	0.21	0.21
	0.30		NA	0.11	0.13	0.14	0.15	0.16	0.17	0.18	0.19
	0.20		NA	0.07	0.09	0.10	0.12	0.13	0.15	0.16	0.17
0.30	0.50	0.20	NA	0.16	0.17	0.18	0.18	0.19	0.19	0.20	0.20
	0.30		NA	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.18
	0.20		NA	0.07	0.09	0.10	0.12	0.13	0.14	0.16	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:104W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>											