

Report No.: 5

Test Time: 2016/8/15 18:04

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: HLB-I150Q-120

Current: 0.659A

Power Factor: 0.954

Voltage: 220V

Power: 138.4 W

Photometric Results

CIE Class: Direct

Measurement Flux: 14526 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(50%): H107.6

Vertical Diffuse Angle(50%): V107.6

Luminaire Efficacy Rating (LER): 105

Max. Intensity: 6507.46 cd

Total Rated Lamp Lumens: 14526.0 lm

Efficiency: 100%

Upward Ratio: 1%

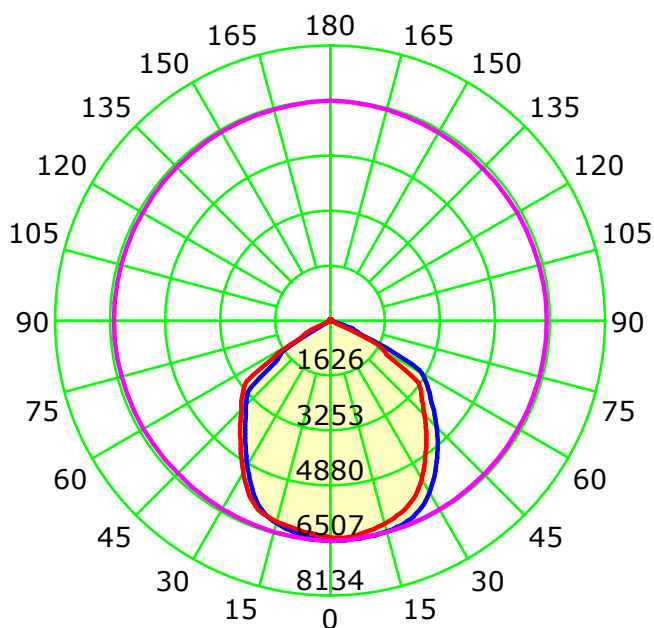
Central Intensity: 6507.45 cd

Pos of Max. Intensity: H0 V0

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 107.6° Unit: cd

— C0-C180 — C90-C270 — G0

C Plane (°):0.0-360.0: 45.0

Test Lab: Inventfine instrument

Test Type: TYPE C

Temperature: 28

Operator:

Gamma Plane (°):0.0-180.0:1.0

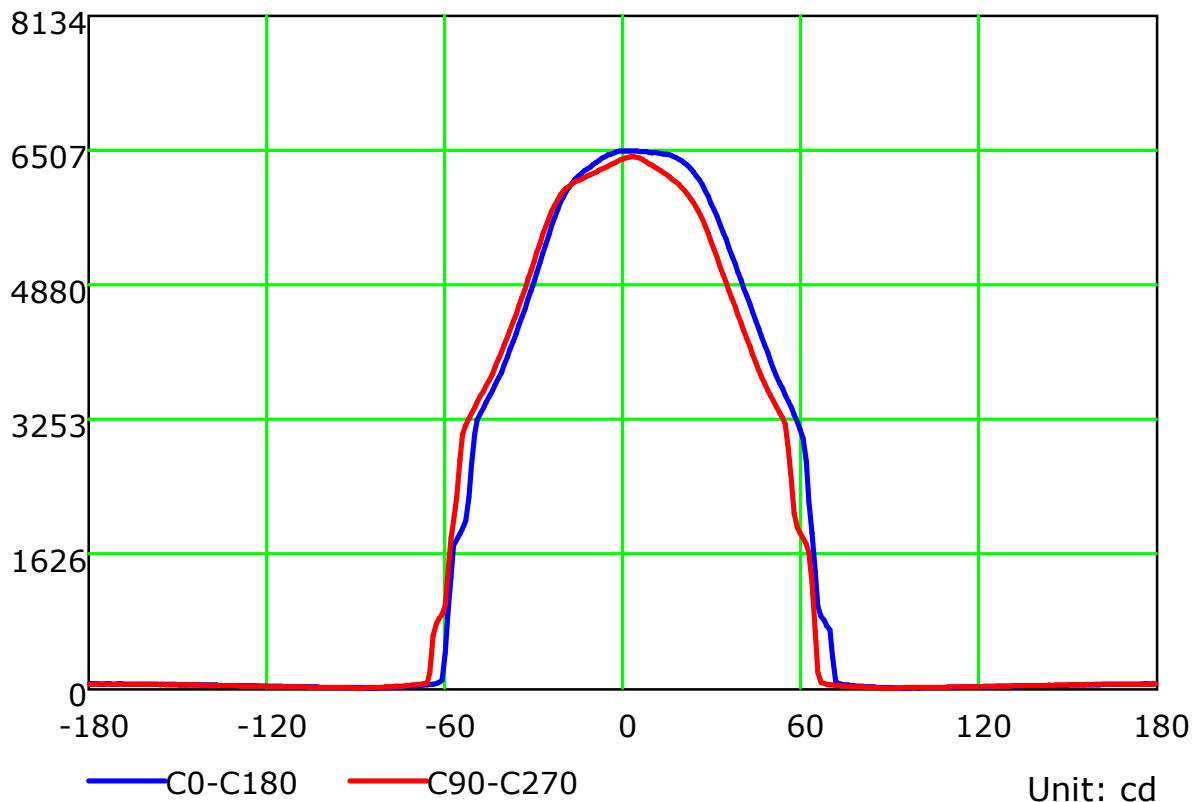
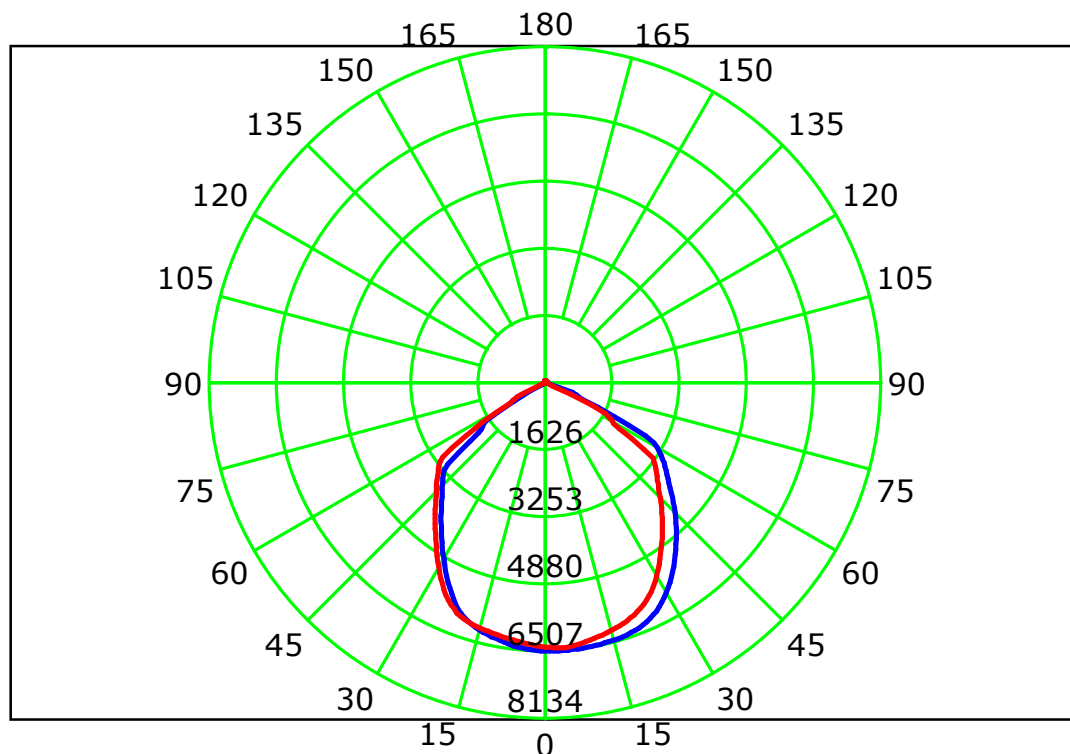
Test Device: GPM-1800B

Distance: 7.984 m

Humidity: 28

Inspector:

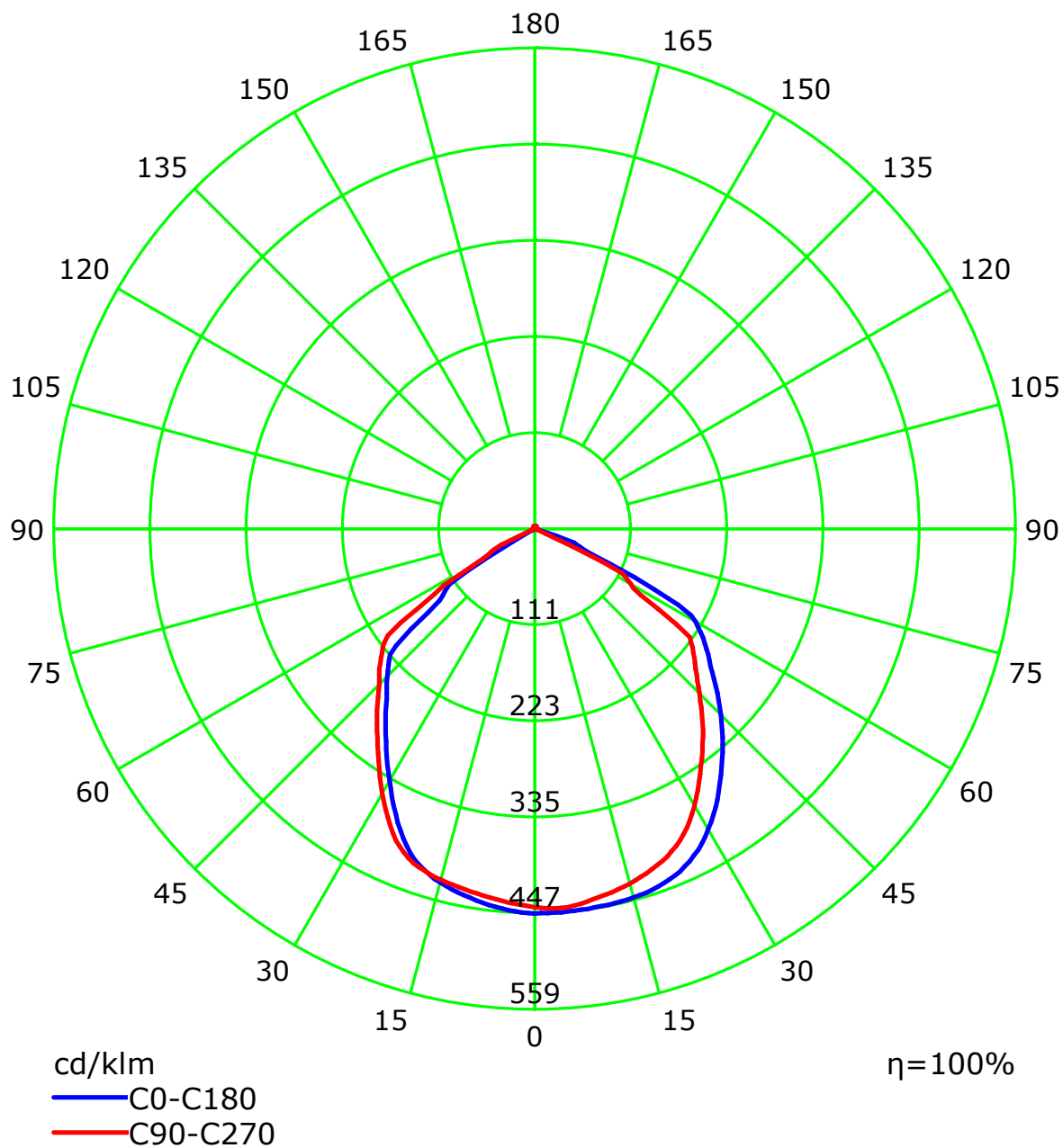
Luminous Intensity Distribution Curve



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

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 7.984 m
Humidity: 28
Inspector:

Luminous Intensity Distribution Curve(cd/klm)



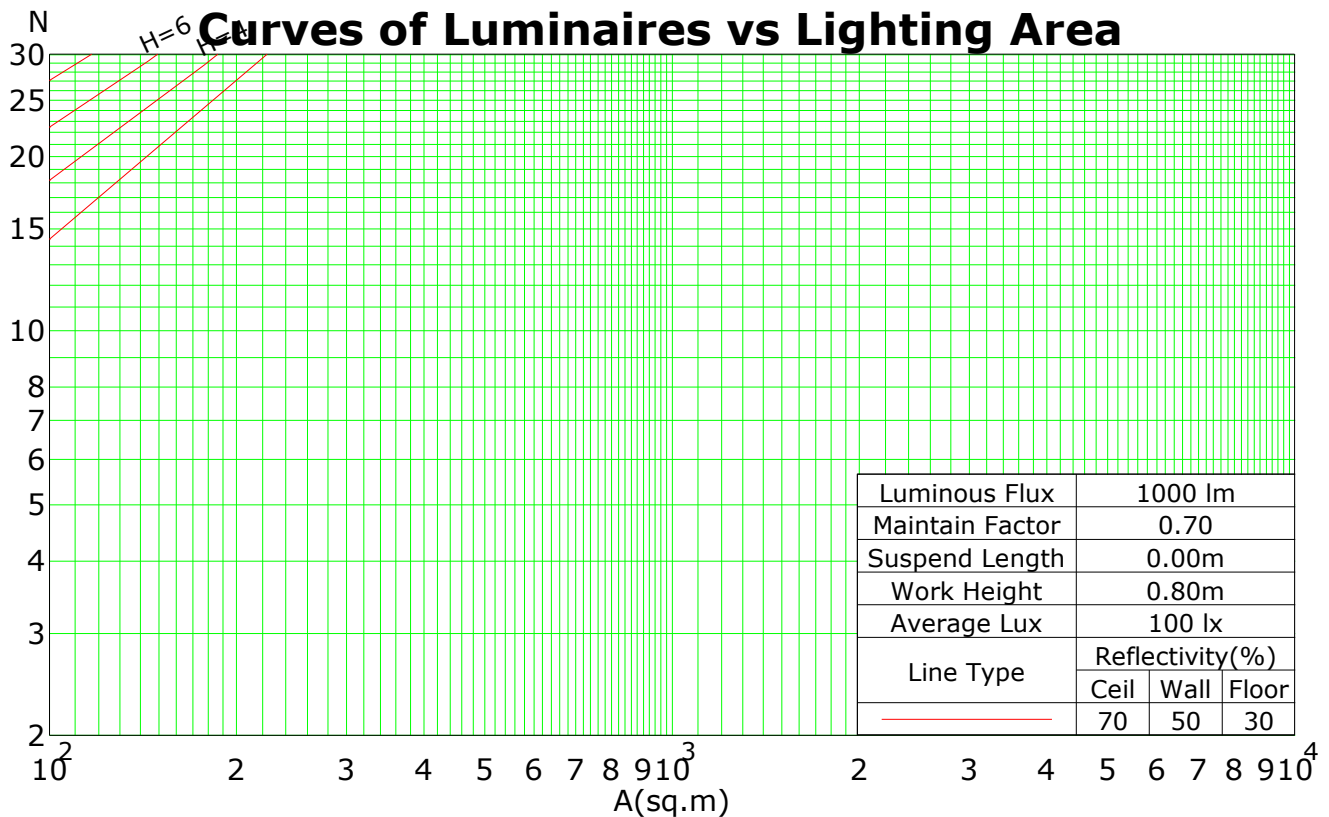
Coefficients Of Utilization - Zonal Cavity Method

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	106	106	106	101	101	101	99
1	111	107	104	101	108	105	102	99	100	98	96	96	95	93	93	91	90	88
2	103	96	90	85	100	94	89	84	90	86	82	87	83	80	84	81	78	76
3	95	86	79	73	92	84	78	72	81	76	71	78	74	70	76	72	68	66
4	87	77	69	63	85	75	68	63	73	67	62	71	65	61	68	64	60	58
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51
6	75	63	55	49	73	62	54	48	60	53	48	58	52	48	57	51	47	45
7	70	57	49	43	68	56	49	43	55	48	43	53	47	42	52	46	42	40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36
9	61	48	40	35	59	47	40	35	46	40	35	45	39	35	44	39	34	33
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	35	31	30

Spacing Criteria (0-180): 1.23

Spacing Criteria (90-270): 1.22

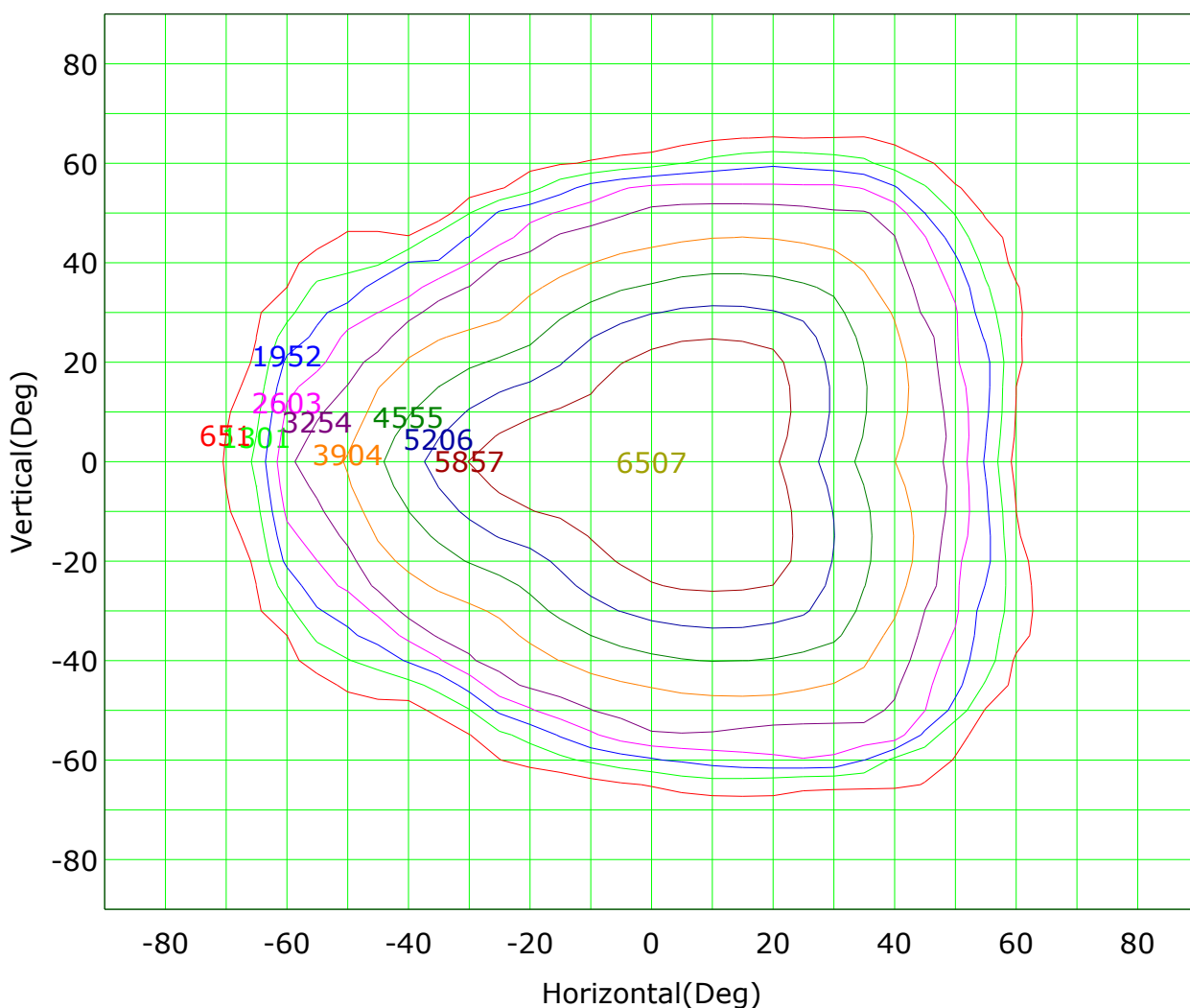
Spacing Criteria (Diagonal): 1.31



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

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 7.984 m
Humidity: 28
Inspector:

Isocandela (rectangle)



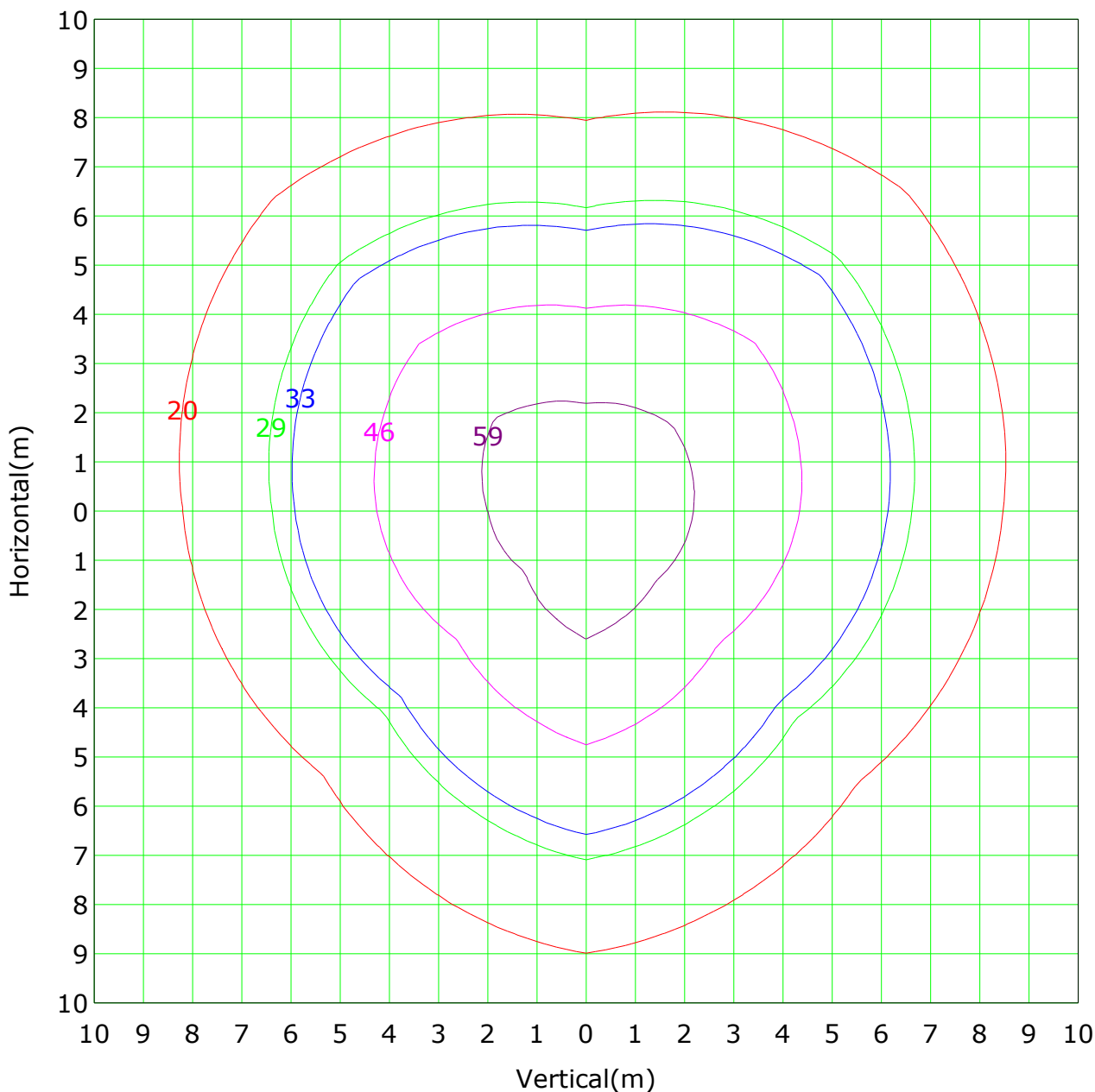
Imax (100%): 6507 cd

(10%): 651 cd	(20%): 1301 cd
(30%): 1952 cd	(40%): 2603 cd
(50%): 3254 cd	(60%): 3904 cd
(70%): 4555 cd	(80%): 5206 cd
(90%): 5857 cd	(100%): 6507 cd

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

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 7.984 m
Humidity: 28
Inspector:

IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 65.1 lx

(30%): 19.5 lx	(45%): 29.3 lx
(50%): 32.5 lx	(70%): 45.6 lx
(90%): 58.6 lx	

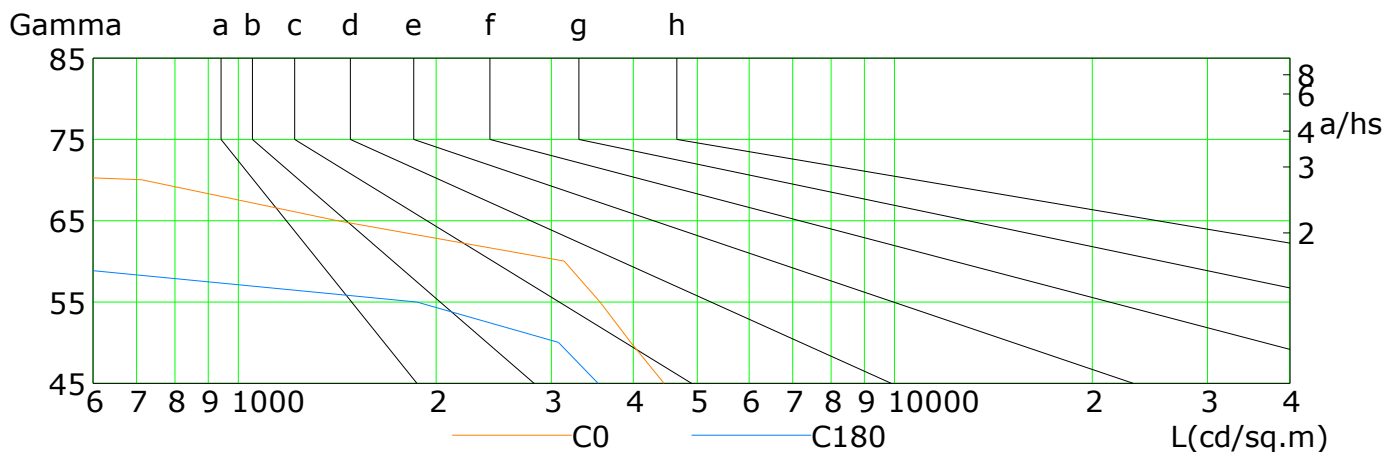
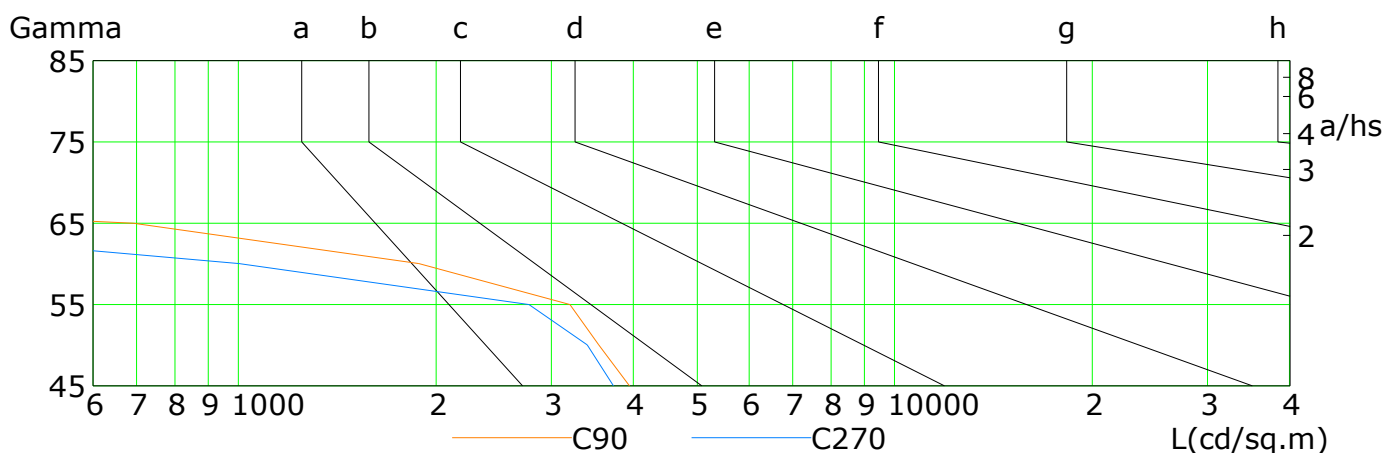
C Plane (°):0.0-360.0: 45.0
Test Lab: Inventfine instrument
Test Type: TYPE C
Temperature: 28
Operator:

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 7.984 m
Humidity: 28
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

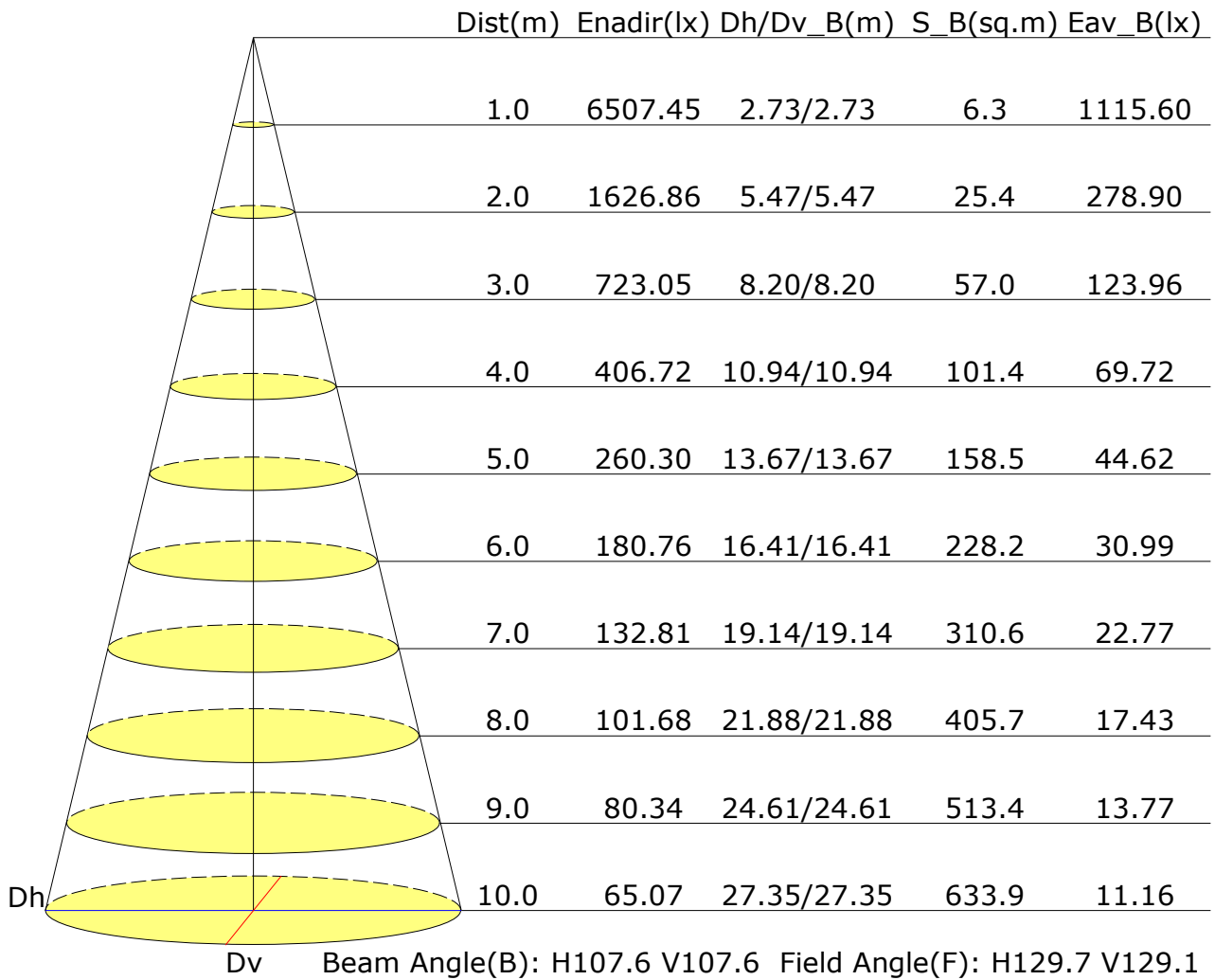


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	4452	3962	3554	3139	1415	712	45	29	17
C90	3946	3542	3200	1884	692	43	29	17	9
C180	3534	3077	1870	433	48	32	20	10	7
C270	3731	3398	2772	1001	200	43	27	16	9

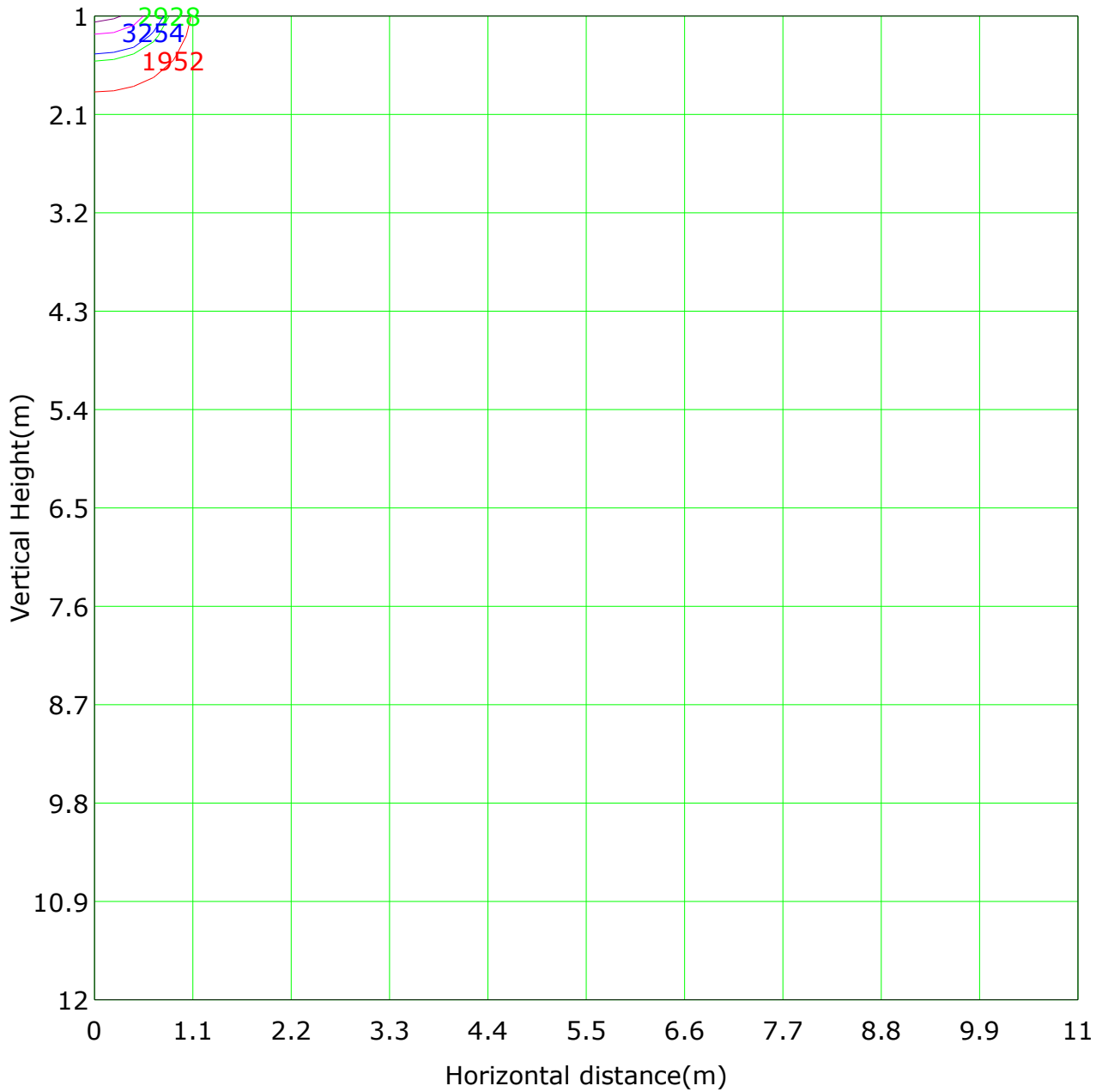
C Plane (°):0.0-360.0: 45.0
Test Lab: Inventfine instrument
Test Type: TYPE C
Temperature: 28
Operator:

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 7.984 m
Humidity: 28
Inspector:

Illuminance at a Distance



Vertical IsoLux Plot

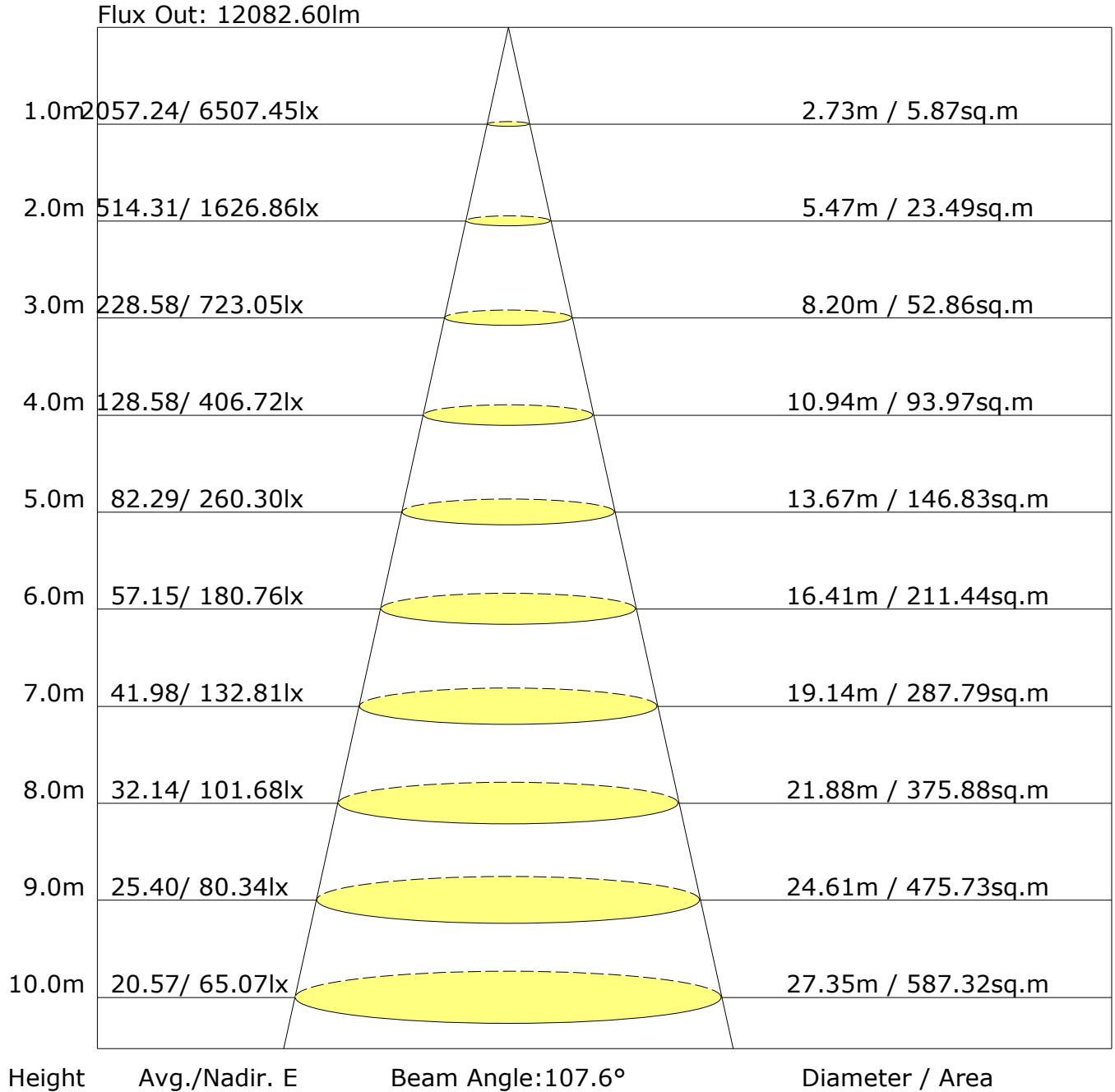


Lowest(m): 1.0m Highest(m): 12.0m Max Lux: 6507.5 lx
— (30%):1952.2 lx — (45%):2928.4 lx
— (50%):3253.7 lx — (70%):4555.2 lx
— (90%):5856.7 lx

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

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 7.984 m
Humidity: 28
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.\$

Calculate in accordance with CIE 190:2010

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

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 7.984 m
Humidity: 28
Inspector:

Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 1.25									
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	0.65	0.76	0.83	0.88	0.94	0.99	1.01	1.05	1.07	
	0.30		0.58	0.69	0.77	0.82	0.89	0.94	0.97	1.02	1.05	
	0.20		0.53	0.64	0.72	0.78	0.85	0.90	0.94	0.99	1.02	
0.50	0.50	0.20	0.63	0.73	0.80	0.85	0.91	0.95	0.98	1.01	1.03	
	0.30		0.57	0.68	0.75	0.80	0.87	0.91	0.94	0.98	1.01	
	0.20		0.52	0.63	0.71	0.76	0.83	0.88	0.92	0.96	0.99	
0.30	0.50	0.20	0.61	0.72	0.78	0.82	0.88	0.92	0.94	0.97	0.99	
	0.30		0.56	0.67	0.74	0.78	0.85	0.89	0.91	0.95	0.97	
	0.20		0.52	0.63	0.70	0.75	0.82	0.86	0.89	0.93	0.96	
0.00	0.00	0.00	0.50	0.60	0.67	0.72	0.78	0.82	0.85	0.89	0.91	
Rating:140W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

Utilisation Factor Table(Wall)

Utilisation Factors UF(W)			SHR NOM = 1.25									
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	0.88	0.70	0.58	0.50	0.39	0.32	0.27	0.20	0.16	
	0.30		0.74	0.60	0.51	0.44	0.35	0.29	0.25	0.19	0.16	
	0.20		0.63	0.52	0.45	0.39	0.32	0.27	0.23	0.18	0.15	
0.50	0.50	0.20	0.85	0.67	0.55	0.47	0.36	0.33	0.25	0.19	0.15	
	0.30		0.72	0.58	0.49	0.42	0.33	0.27	0.23	0.18	0.15	
	0.20		0.62	0.51	0.44	0.38	0.31	0.26	0.22	0.17	0.14	
0.30	0.50	0.20	0.82	0.64	0.53	0.45	0.34	0.28	0.24	0.18	0.14	
	0.30		0.70	0.56	0.47	0.40	0.32	0.26	0.22	0.17	0.14	
	0.20		0.61	0.50	0.43	0.37	0.30	0.24	0.21	0.16	0.13	
0.00	0.00	0.00	0.50	0.39	0.32	0.28	0.21	0.17	0.15	0.11	0.09	
Rating:140W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

Utilisation Factor Table(Ceiling cavity)

Utilisation Factors UF(C)			SHR NOM = 1.25									
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	0.17	0.18	0.18	0.19	0.20	0.21	0.21	0.22	0.22	
	0.30		0.10	0.12	0.13	0.15	0.16	0.17	0.18	0.20	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	0.16	0.17	0.18	0.18	0.19	0.20	0.20	0.21	0.21	
	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	0.09	0.11	0.13	0.14	0.15	0.17	0.18	
0.30	0.50	0.20	0.15	0.16	0.17	0.18	0.19	0.19	0.20	0.20	0.21	
	0.30		0.10	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		0.06	0.08	0.09	0.11	0.12	0.14	0.15	0.17	0.18	
0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Rating:140W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

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	6507.5	6425.6	6400.5	6391.4	6507.5	6425.6	6400.5	6391.4	6507.5	
G1.0	6505.8	6425.9	6415.4	6407.2	6500.2	6422.4	6391.4	6373.5	6505.8	
G2.0	6506.5	6429.4	6427.0	6414.9	6494.6	6422.4	6374.6	6358.1	6506.5	
G3.0	6505.4	6427.5	6432.6	6417.0	6480.0	6419.8	6357.8	6328.5	6505.4	
G4.0	6504.6	6425.2	6433.6	6422.6	6466.0	6416.1	6339.0	6299.8	6504.6	
G5.0	6502.3	6416.8	6428.9	6420.5	6453.4	6414.7	6321.5	6280.5	6502.3	
G6.0	6495.6	6396.3	6415.6	6410.7	6435.2	6419.4	6304.2	6249.9	6495.6	
G7.0	6494.2	6377.9	6397.5	6408.6	6417.0	6427.0	6289.6	6218.7	6494.2	
G8.0	6495.1	6352.3	6374.6	6411.0	6390.0	6430.1	6271.9	6193.8	6495.1	
G9.0	6484.6	6322.6	6348.5	6404.2	6363.7	6431.9	6251.1	6166.8	6484.6	
G10.0	6483.0	6282.1	6329.6	6397.5	6339.4	6432.9	6234.8	6127.4	6483.0	
G11.0	6484.6	6238.8	6309.8	6394.7	6312.6	6436.4	6217.3	6095.2	6484.6	
G12.0	6479.0	6186.1	6286.5	6397.5	6288.6	6450.1	6200.1	6062.8	6479.0	
G13.0	6471.1	6132.7	6265.6	6400.7	6262.1	6465.0	6181.4	6015.3	6471.1	
G14.0	6466.7	6072.6	6241.6	6401.2	6231.3	6475.8	6165.4	5971.5	6466.7	
G15.0	6461.8	6012.3	6214.3	6394.7	6199.1	6480.0	6150.4	5924.6	6461.8	
G16.0	6454.8	5949.8	6185.9	6394.2	6162.3	6485.1	6133.0	5863.8	6454.8	
G17.0	6443.6	5876.4	6157.7	6396.5	6120.1	6485.3	6110.8	5797.9	6443.6	
G18.0	6424.5	5801.8	6131.6	6394.9	6072.8	6484.8	6079.8	5723.8	6424.5	
G19.0	6405.1	5727.5	6098.9	6389.1	6016.2	6483.2	6053.5	5644.5	6405.1	
G20.0	6384.9	5648.3	6059.6	6382.3	5955.9	6466.2	6020.9	5554.8	6384.9	
G21.0	6357.8	5569.0	6025.1	6370.0	5880.1	6438.9	5978.7	5462.5	6357.8	
G22.0	6329.9	5485.1	5981.7	6355.7	5796.5	6400.7	5911.6	5364.2	6329.9	
G23.0	6297.3	5391.2	5932.3	6336.4	5698.6	6355.7	5848.7	5256.3	6297.3	
G24.0	6249.0	5300.1	5879.7	6312.4	5594.2	6310.1	5775.0	5150.0	6249.0	
G25.0	6204.3	5205.0	5820.0	6279.5	5487.0	6254.8	5689.7	5048.7	6204.3	
G26.0	6155.6	5122.5	5750.6	6242.0	5376.3	6194.0	5589.5	4941.9	6155.6	
G27.0	6095.0	5023.0	5675.8	6200.1	5260.0	6129.7	5484.9	4836.8	6095.0	
G28.0	6025.1	4924.5	5593.7	6151.4	5151.2	6056.5	5384.0	4738.7	6025.1	
G29.0	5951.0	4834.5	5503.1	6089.9	5034.4	5980.8	5277.7	4633.2	5951.0	
G30.0	5870.3	4743.4	5411.0	6025.3	4922.8	5895.5	5168.7	4541.1	5870.3	
G31.0	5788.8	4649.7	5310.1	5953.3	4814.5	5815.6	5057.8	4439.5	5788.8	
G32.0	5706.7	4561.9	5212.5	5881.3	4707.5	5731.2	4949.6	4342.1	5706.7	
G33.0	5617.0	4464.2	5108.8	5796.5	4601.5	5642.0	4837.8	4250.5	5617.0	
G34.0	5523.6	4370.1	5011.4	5717.9	4498.2	5548.8	4736.4	4152.9	5523.6	
G35.0	5430.8	4279.0	4906.7	5626.8	4393.8	5458.3	4630.8	4059.4	5430.8	
G36.0	5332.3	4181.8	4812.1	5531.3	4293.6	5359.8	4525.0	3964.4	5332.3	

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

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 7.984 m
Humidity: 28
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	5232.5	4088.3	4715.9	5439.0	4197.6	5260.0	4431.8	3872.1	5232.5	
G38.0	5138.4	3989.3	4619.6	5344.4	4103.7	5164.0	4337.7	3779.8	5138.4	
G39.0	5036.8	3896.1	4522.7	5246.7	4010.3	5052.4	4246.6	3692.6	5036.8	
G40.0	4945.2	3801.9	4428.6	5154.5	3914.5	4945.7	4156.4	3620.9	4945.2	
G41.0	4844.5	3715.9	4334.9	5046.3	3826.2	4845.5	4074.6	3549.1	4844.5	
G42.0	4751.3	3642.1	4235.6	4944.5	3749.7	4738.3	3982.5	3474.8	4751.3	
G43.0	4653.0	3560.1	4141.2	4846.1	3673.5	4639.9	3895.9	3404.6	4653.0	
G44.0	4555.3	3490.4	4038.5	4752.7	3606.6	4544.6	3808.9	3330.7	4555.3	
G45.0	4452.1	3417.4	3945.9	4648.8	3533.7	4445.3	3731.3	3259.0	4452.1	
G46.0	4351.0	3344.5	3848.1	4549.7	3463.6	4344.9	3669.3	3187.7	4351.0	
G47.0	4256.8	3275.1	3765.8	4447.2	3396.2	4256.8	3602.0	3067.9	4256.8	
G48.0	4159.2	3199.3	3691.2	4351.2	3326.3	4161.7	3542.6	2687.6	4159.2	
G49.0	4062.7	3109.4	3608.8	4254.7	3251.7	4071.3	3466.8	2299.1	4062.7	
G50.0	3961.8	2915.7	3542.3	4152.4	3077.2	3979.3	3397.6	1973.6	3961.8	
G51.0	3863.2	2501.4	3475.2	4059.9	2698.3	3891.4	3329.6	1881.0	3863.2	
G52.0	3782.1	2064.4	3411.4	3969.3	2311.7	3812.2	3264.8	1807.9	3782.1	
G53.0	3698.5	1867.8	3346.1	3876.7	2022.5	3746.5	3190.9	1731.2	3698.5	
G54.0	3628.6	1738.2	3272.5	3785.9	1932.8	3681.2	3071.8	1657.6	3628.6	
G55.0	3554.2	1329.4	3200.2	3716.2	1869.9	3613.4	2772.2	1582.8	3554.2	
G56.0	3476.9	944.0	2893.6	3647.4	1799.5	3550.5	2323.8	1192.4	3476.9	
G57.0	3393.2	835.4	2494.4	3587.3	1729.3	3482.0	2024.4	417.6	3393.2	
G58.0	3312.8	755.3	2121.1	3520.2	1353.9	3417.2	1817.0	92.8	3312.8	
G59.0	3224.0	691.9	1949.1	3451.4	889.7	3341.9	1384.9	70.4	3224.0	
G60.0	3138.9	339.1	1883.6	3382.0	432.7	3261.5	1001.3	57.8	3138.9	
G61.0	3022.2	75.3	1813.9	3306.0	99.0	3114.3	893.5	51.5	3022.2	
G62.0	2755.1	57.8	1749.4	3230.3	70.1	2758.2	840.8	46.4	2755.1	
G63.0	2269.7	49.6	1649.9	3143.1	59.2	2305.6	776.5	41.7	2269.7	
G64.0	1878.7	44.5	1272.4	3045.5	52.7	2031.6	642.9	37.3	1878.7	
G65.0	1415.2	38.5	692.3	2777.3	48.0	1917.2	200.4	35.7	1415.2	
G66.0	993.4	35.2	196.4	2111.5	42.7	1587.4	69.2	32.9	993.4	
G67.0	871.1	33.1	70.8	1295.0	39.4	1154.9	58.0	30.1	871.1	
G68.0	821.7	30.5	58.0	981.5	38.2	931.9	52.0	28.2	821.7	
G69.0	756.4	27.7	48.5	908.8	35.2	859.7	47.8	25.6	756.4	
G70.0	711.9	25.2	42.7	849.4	32.4	794.9	43.1	22.8	711.9	
G71.0	384.5	22.8	39.2	799.1	28.2	576.3	39.4	20.5	384.5	
G72.0	80.6	20.7	35.7	745.2	25.6	134.0	36.1	18.6	80.6	
G73.0	60.4	18.4	32.4	631.0	23.3	66.4	33.3	16.8	60.4	

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

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 7.984 m
Humidity: 28
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	52.4	16.3	30.1	171.5	21.9	57.8	30.1	14.9	52.4	
G75.0	45.2	14.9	28.7	62.7	19.8	52.9	27.3	13.5	45.2	
G76.0	39.8	13.8	25.4	53.6	17.7	48.9	25.9	11.9	39.8	
G77.0	37.5	11.6	23.1	47.5	14.9	45.0	23.3	10.5	37.5	
G78.0	33.3	10.7	22.1	41.5	13.1	41.7	21.0	9.6	33.3	
G79.0	30.5	9.6	19.8	36.6	11.6	37.8	17.7	8.4	30.5	
G80.0	29.1	8.2	16.5	34.3	10.0	34.5	15.9	7.9	29.1	
G81.0	24.7	7.7	15.9	31.7	10.0	32.6	15.1	7.2	24.7	
G82.0	22.6	7.7	14.4	28.2	8.4	29.6	13.5	7.0	22.6	
G83.0	20.3	7.5	12.8	25.4	7.5	25.6	11.2	7.0	20.3	
G84.0	19.3	6.5	10.3	23.3	7.0	22.8	10.0	7.5	19.3	
G85.0	17.2	6.8	9.3	20.7	7.2	20.5	8.6	7.5	17.2	
G86.0	14.4	7.7	9.3	17.7	7.5	17.9	7.9	7.9	14.4	
G87.0	13.5	8.4	7.7	15.6	7.9	17.5	8.2	8.4	13.5	
G88.0	12.4	7.5	6.8	15.1	7.9	15.4	7.5	9.3	12.4	
G89.0	9.3	9.1	7.2	13.5	7.9	12.4	6.1	9.8	9.3	
G90.0	8.4	10.0	7.2	10.7	9.1	10.3	7.0	9.6	8.4	
G91.0	8.9	9.3	5.8	10.9	9.8	9.3	6.8	10.0	8.9	
G92.0	6.8	10.9	7.5	9.8	10.0	9.6	8.2	10.7	6.8	
G93.0	6.1	10.9	7.7	7.5	10.0	7.2	7.9	11.9	6.1	
G94.0	7.2	10.7	7.2	6.8	10.9	6.1	8.4	11.6	7.2	
G95.0	7.5	10.9	8.6	7.2	11.6	5.4	8.4	12.1	7.5	
G96.0	6.5	13.1	9.3	6.8	11.9	7.5	9.1	12.6	6.5	
G97.0	6.1	13.5	9.3	5.6	12.1	7.9	10.3	13.1	6.1	
G98.0	8.6	12.8	8.4	6.1	12.8	7.9	10.7	14.9	8.6	
G99.0	8.9	13.5	10.5	7.9	13.3	8.2	11.4	15.9	8.9	
G100.0	7.7	15.4	9.8	6.8	14.4	6.8	11.2	16.1	7.7	
G101.0	9.8	14.7	11.6	8.4	15.1	7.2	11.4	15.9	9.8	
G102.0	10.0	16.1	11.9	9.1	15.1	9.3	13.1	16.5	10.0	
G103.0	8.6	17.7	10.7	7.9	16.3	10.0	13.3	18.2	8.6	
G104.0	11.4	17.0	13.1	8.2	16.5	8.9	13.3	18.9	11.4	
G105.0	11.9	17.7	12.4	10.3	17.0	9.1	14.0	19.6	11.9	
G106.0	10.5	19.6	13.1	9.1	17.9	11.4	14.9	18.9	10.5	
G107.0	10.9	18.6	14.7	10.9	18.2	11.9	15.9	19.3	10.9	
G108.0	13.1	19.3	15.4	11.6	19.3	12.6	16.1	21.4	13.1	
G109.0	14.0	21.4	14.2	10.5	20.0	11.2	16.3	22.1	14.0	
G110.0	12.8	22.1	16.8	11.2	20.7	11.6	17.0	22.6	12.8	

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

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 7.984 m
Humidity: 28
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	14.9	21.2	17.2	13.5	21.2	12.4	17.7	23.3	14.9	
G112.0	15.4	23.5	16.8	12.4	21.4	12.6	18.6	22.4	15.4	
G113.0	14.4	22.4	18.6	14.2	22.1	15.1	19.3	23.3	14.4	
G114.0	17.0	23.3	17.9	15.4	23.1	14.0	19.1	25.2	17.0	
G115.0	15.9	25.2	18.4	13.8	24.0	14.2	19.8	26.1	15.9	
G116.0	16.8	26.3	20.5	16.5	24.0	15.1	21.0	25.4	16.8	
G117.0	18.6	25.4	19.6	15.1	24.7	17.2	21.4	26.3	18.6	
G118.0	17.7	28.0	20.3	15.9	26.1	17.9	21.9	28.7	17.7	
G119.0	18.6	28.7	22.4	18.2	27.0	17.0	22.6	29.6	18.6	
G120.0	20.5	27.7	21.7	17.2	28.0	17.5	23.3	30.5	20.5	
G121.0	21.2	28.2	22.1	17.7	28.0	19.3	24.5	29.4	21.2	
G122.0	20.7	31.0	24.2	20.3	28.4	20.3	24.9	30.1	20.7	
G123.0	22.6	31.5	23.3	18.9	29.6	20.5	25.4	30.8	22.6	
G124.0	23.1	30.5	24.2	19.6	31.5	19.6	25.9	33.1	23.1	
G125.0	22.6	33.1	26.3	21.9	32.2	20.3	27.0	33.8	22.6	
G126.0	24.5	31.9	25.6	21.0	31.9	22.1	27.5	32.6	24.5	
G127.0	24.0	34.3	28.0	23.1	34.0	22.8	28.2	33.6	24.0	
G128.0	26.1	32.9	26.8	21.9	34.3	22.4	29.1	35.9	26.1	
G129.0	25.6	33.6	29.8	24.5	35.2	24.5	30.1	36.6	25.6	
G130.0	26.3	36.1	30.1	25.6	34.3	25.4	31.0	35.7	26.3	
G131.0	28.2	35.2	29.1	24.2	35.0	25.6	31.5	35.9	28.2	
G132.0	28.9	37.8	31.2	24.9	36.8	25.6	32.6	38.7	28.9	
G133.0	28.7	38.5	31.0	27.7	37.3	27.5	33.3	39.4	28.7	
G134.0	30.5	37.0	33.1	26.8	38.2	28.2	34.0	38.2	30.5	
G135.0	30.8	37.8	33.8	27.3	37.0	28.7	34.7	38.9	30.8	
G136.0	31.7	38.5	32.9	27.7	38.0	28.4	35.4	41.3	31.7	
G137.0	31.5	38.7	35.0	28.4	39.6	29.4	36.1	41.3	31.5	
G138.0	32.2	41.0	35.7	30.8	40.3	31.0	36.8	40.3	32.2	
G139.0	33.6	40.1	34.7	30.1	39.6	30.5	37.0	40.8	33.6	
G140.0	33.3	42.0	36.8	32.2	41.3	31.5	38.0	42.9	33.3	
G141.0	34.5	41.0	36.1	32.4	42.0	32.9	38.2	43.1	34.5	
G142.0	35.2	41.7	36.6	31.7	40.8	32.9	38.2	42.2	35.2	
G143.0	35.2	43.6	38.5	34.0	41.3	33.3	38.9	42.9	35.2	
G144.0	35.4	44.0	38.9	34.5	43.6	34.0	39.8	44.5	35.4	
G145.0	36.6	43.6	37.8	33.3	44.0	35.2	40.5	45.7	36.6	
G146.0	36.8	45.4	39.8	35.2	43.1	35.2	40.8	44.5	36.8	
G147.0	37.8	45.9	39.2	36.1	43.6	35.7	41.3	45.2	37.8	

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

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 7.984 m
Humidity: 28
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	38.2	45.4	40.1	34.3	46.1	36.1	42.7	46.8	38.2	
G149.0	38.5	47.1	42.0	35.2	46.4	37.0	43.1	47.5	38.5	
G150.0	38.7	46.6	41.3	37.5	45.9	37.0	44.0	48.5	38.7	
G151.0	39.2	46.6	42.0	36.6	47.8	38.2	43.8	48.5	39.2	
G152.0	40.1	48.5	43.6	38.7	47.1	38.7	43.8	48.0	40.1	
G153.0	40.8	48.0	43.3	37.8	47.8	39.2	44.7	48.5	40.8	
G154.0	41.5	49.4	45.2	38.5	49.9	39.8	46.1	49.9	41.5	
G155.0	42.0	49.9	45.7	40.5	50.1	40.5	46.8	49.9	42.0	
G156.0	43.1	49.2	44.7	41.5	48.9	40.8	46.1	49.4	43.1	
G157.0	44.0	50.1	46.6	40.8	49.4	41.5	46.6	49.6	44.0	
G158.0	44.5	49.9	45.9	42.9	51.3	42.2	48.0	50.1	44.5	
G159.0	45.2	50.6	46.6	43.6	50.1	42.9	47.3	50.3	45.2	
G160.0	45.7	51.3	48.0	42.9	50.8	43.1	47.3	50.3	45.7	
G161.0	46.4	50.8	47.3	45.0	52.7	44.0	48.9	51.3	46.4	
G162.0	47.1	51.3	48.9	44.0	51.5	44.0	48.2	51.5	47.1	
G163.0	47.5	51.5	48.9	46.1	52.0	45.2	48.9	51.5	47.5	
G164.0	48.7	52.4	48.7	46.8	54.1	45.7	48.9	52.0	48.7	
G165.0	48.9	52.4	48.9	47.3	52.4	46.1	50.8	52.2	48.9	
G166.0	50.1	52.9	49.6	48.0	52.7	46.4	50.6	52.4	50.1	
G167.0	49.9	53.4	50.8	47.3	52.9	47.1	49.4	52.4	49.9	
G168.0	50.1	53.4	51.0	47.8	53.1	47.3	49.6	53.1	50.1	
G169.0	51.5	54.1	51.0	107.4	54.8	48.5	50.6	53.1	51.5	
G170.0	51.0	54.3	52.2	106.3	55.2	49.2	50.6	53.4	51.0	
G171.0	51.3	54.5	52.4	106.5	53.6	49.9	51.0	54.1	51.3	
G172.0	52.7	54.5	52.7	107.2	53.4	50.1	51.5	54.5	52.7	
G173.0	53.4	54.5	53.1	107.4	55.2	50.8	53.6	53.6	53.4	
G174.0	53.6	54.3	52.7	108.8	55.0	52.0	53.8	53.6	53.6	
G175.0	53.4	54.1	52.9	108.1	53.8	52.4	54.5	54.5	53.4	
G176.0	54.5	54.3	53.1	109.1	53.8	53.4	52.7	54.3	54.5	
G177.0	55.0	54.5	53.4	109.5	55.7	53.6	52.9	54.5	55.0	
G178.0	54.1	54.1	53.8	109.3	54.3	53.8	52.9	55.0	54.1	
G179.0	55.5	53.8	53.8	110.2	54.5	53.4	53.1	53.1	55.5	
G180.0	55.5	54.5	54.3	110.0	55.2	54.8	53.4	54.8	55.5	

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

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 7.984 m
Humidity: 28
Inspector: