

Report No.: 5

Test Time: 2016/8/15 17:52

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: HLB-I150Q-90

Current: 0.662 A

Power Factor: 0.954

Voltage: 220 V

Power: 139 W

Photometric Results

CIE Class: Direct

Measurement Flux: 14123.7 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(50%): H107.7

Vertical Diffuse Angle(50%): V106.8

Luminaire Efficacy Rating (LER): 102

Max. Intensity: 6355.28 cd

Total Rated Lamp Lumens: 14123.7 lm

Efficiency: 100%

Upward Ratio: 1%

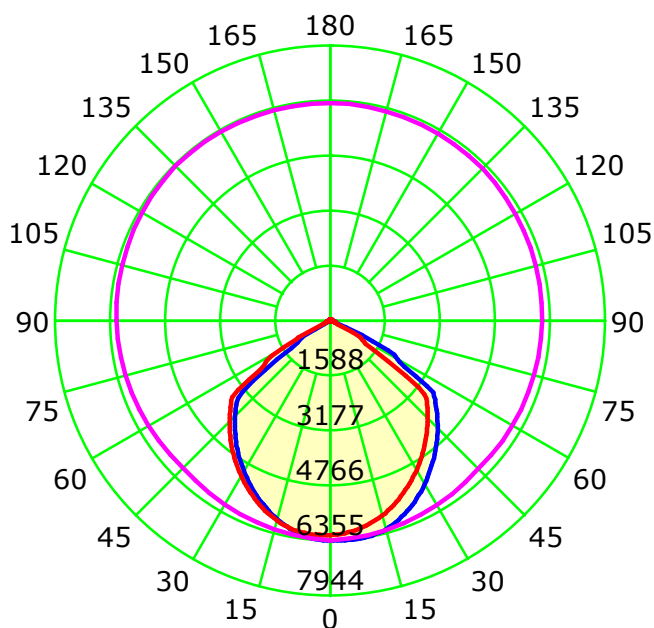
Central Intensity: 6351.08 cd

Pos of Max. Intensity: H0 V6

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 107.2° Unit: cd

— C0-C180 — C90-C270 — G6

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

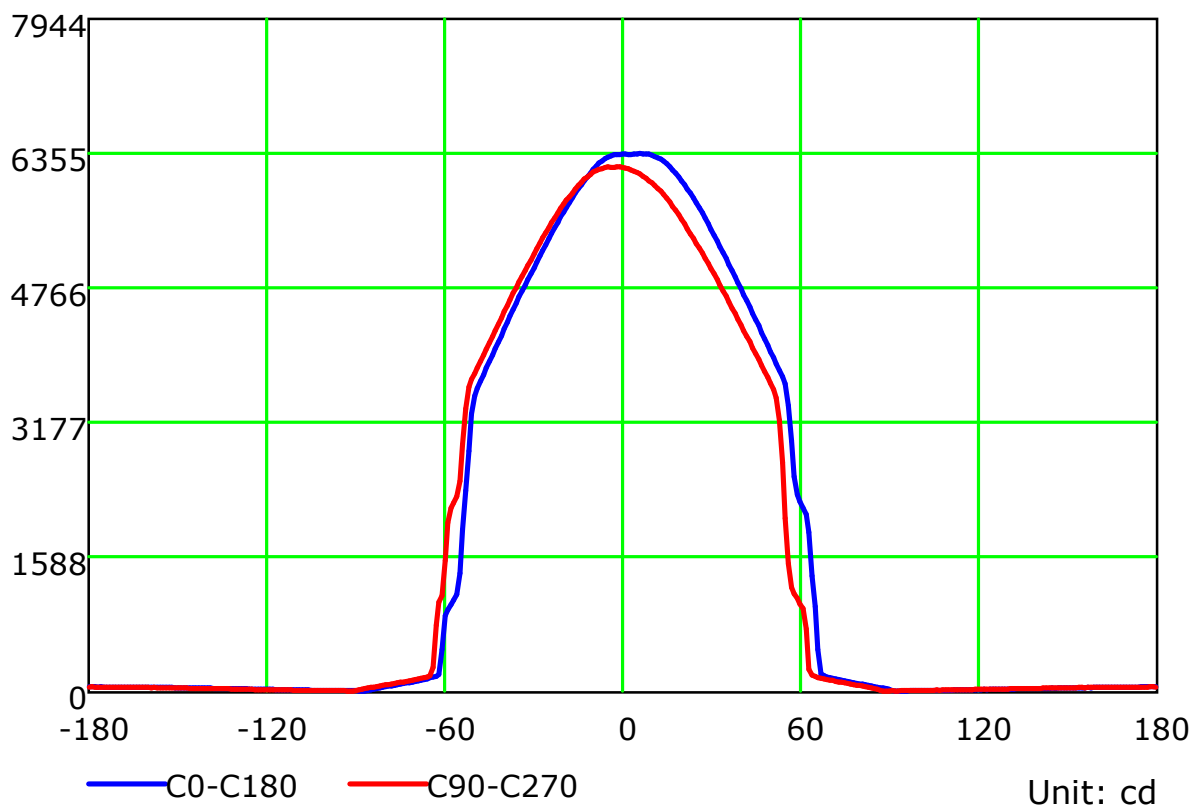
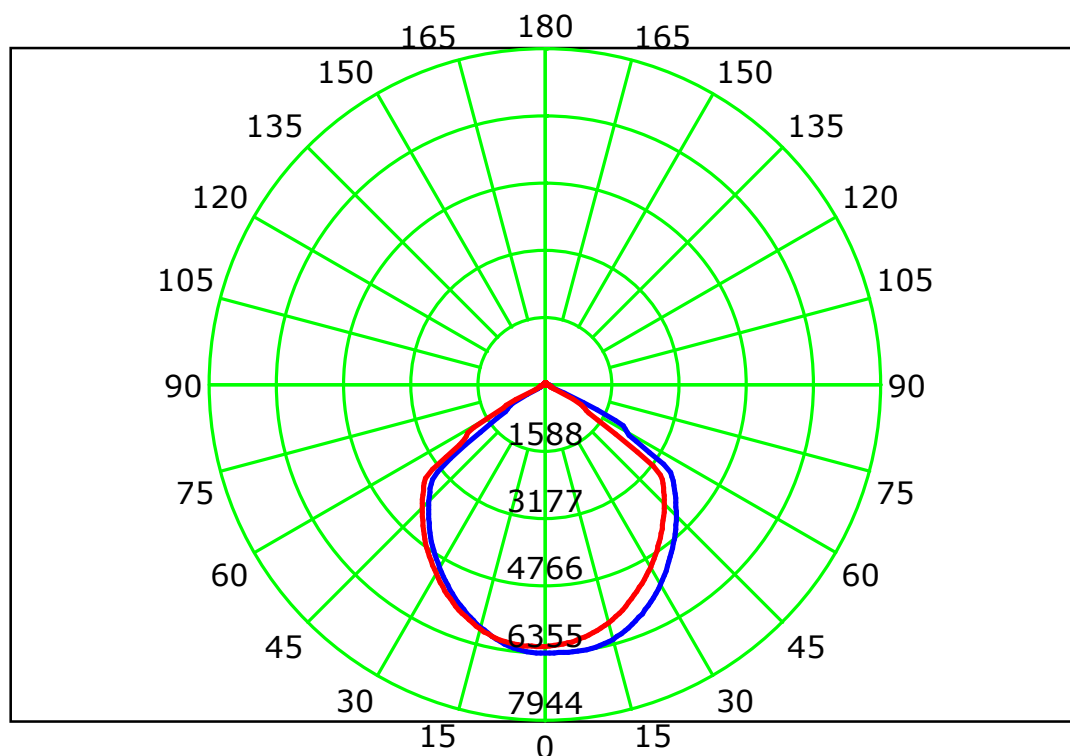
Test Device: GPM-1800B

Distance: 7.984 m

Humidity: 28

Inspector:

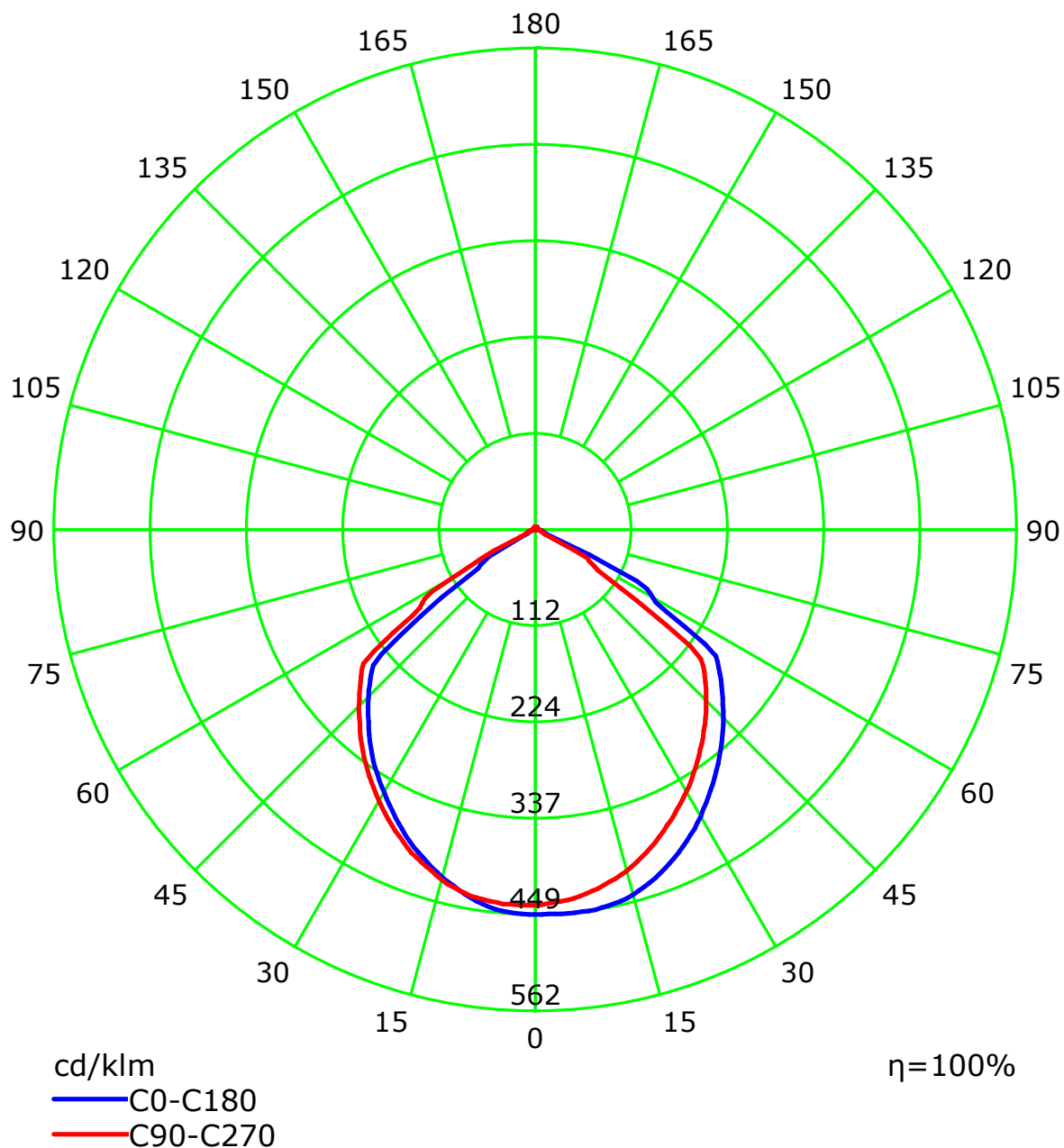
Luminous Intensity Distribution Curve



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)



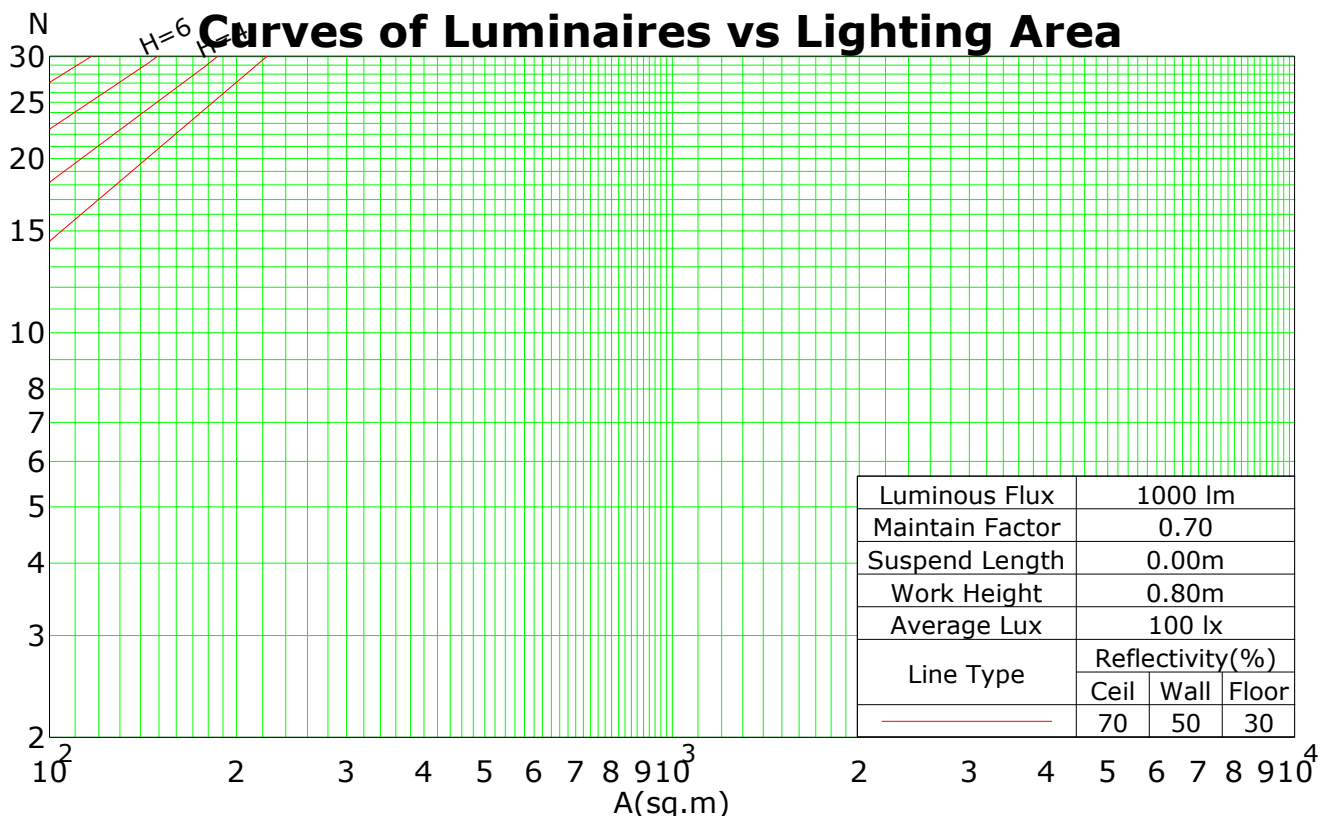
Coefficients Of Utilization - Zonal Cavity Method

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	94	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	49	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	38	49	43	38	48	42	38	36
9	61	48	40	35	59	47	40	35	46	39	35	45	39	35	44	38	34	33
10	57	44	37	32	56	44	37	32	43	36	32	42	36	31	41	35	31	30

Spacing Criteria (0-180): 1.23

Spacing Criteria (90-270): 1.22

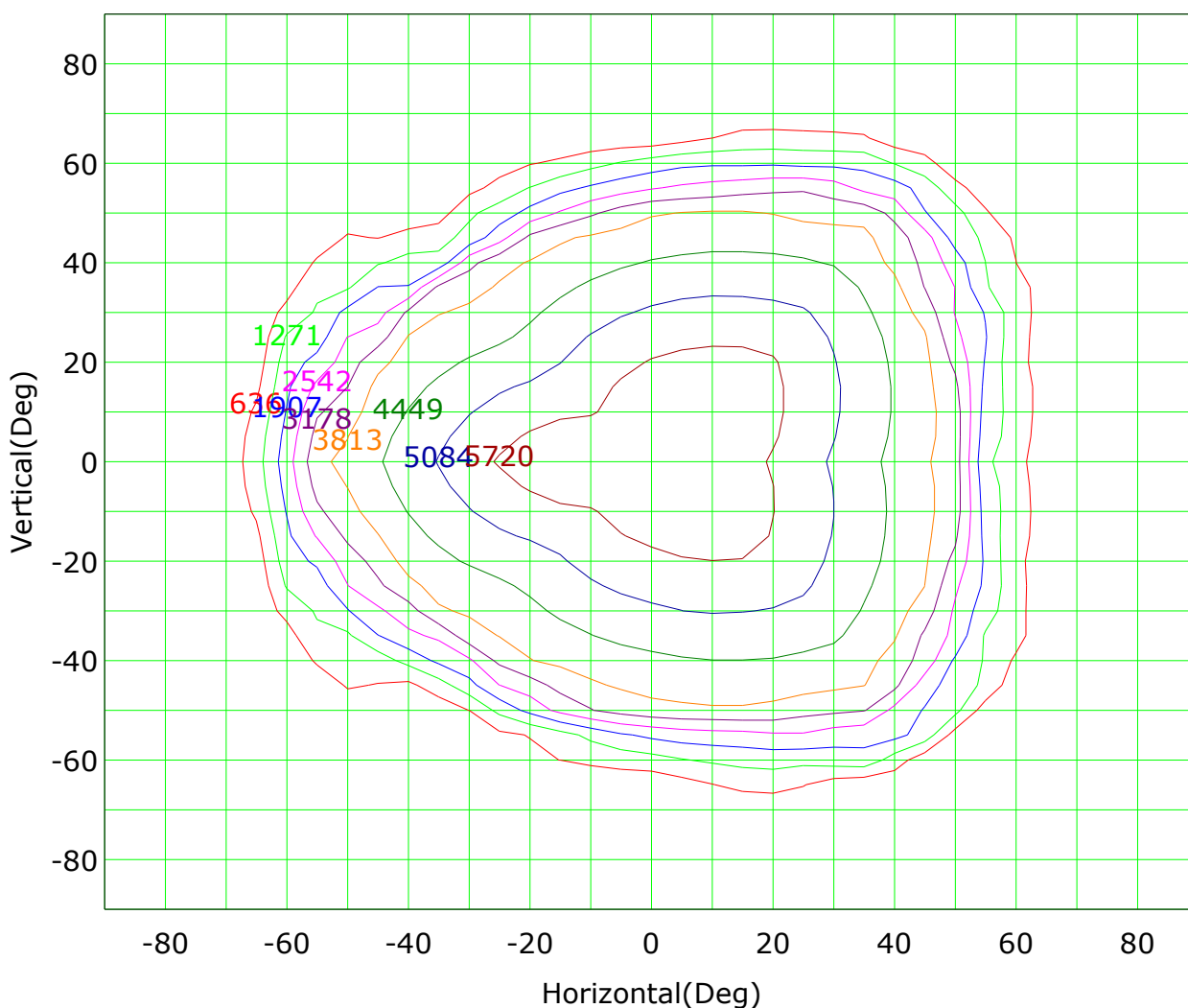
Spacing Criteria (Diagonal): 1.35



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)



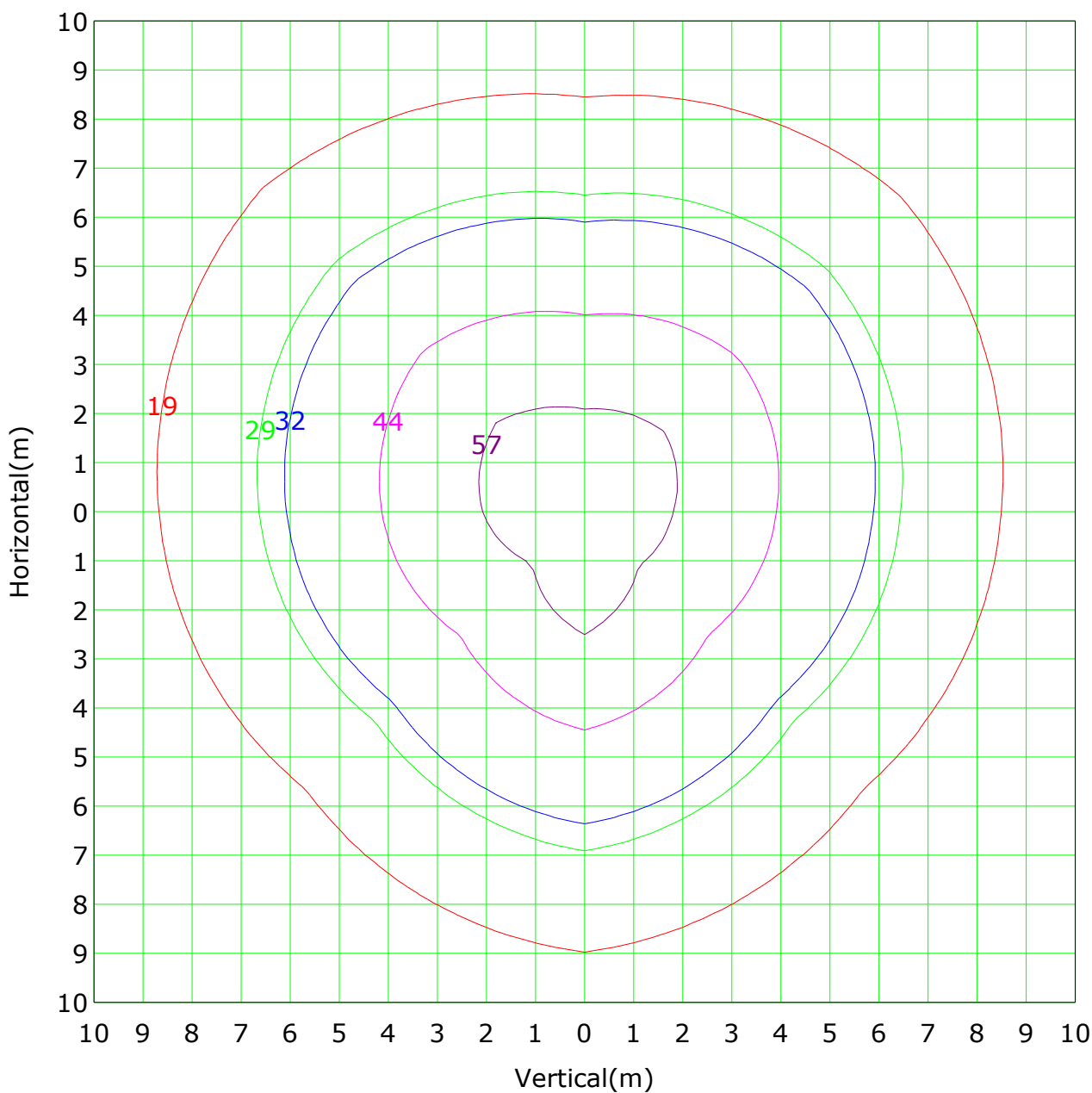
Imax (100%): 6355 cd

(10%): 636 cd	(20%): 1271 cd
(30%): 1907 cd	(40%): 2542 cd
(50%): 3178 cd	(60%): 3813 cd
(70%): 4449 cd	(80%): 5084 cd
(90%): 5720 cd	(100%): 6355 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%): 63.5 lx

(30%): 19.1 lx	(45%): 28.6 lx
(50%): 31.8 lx	(70%): 44.5 lx
(90%): 57.2 lx	

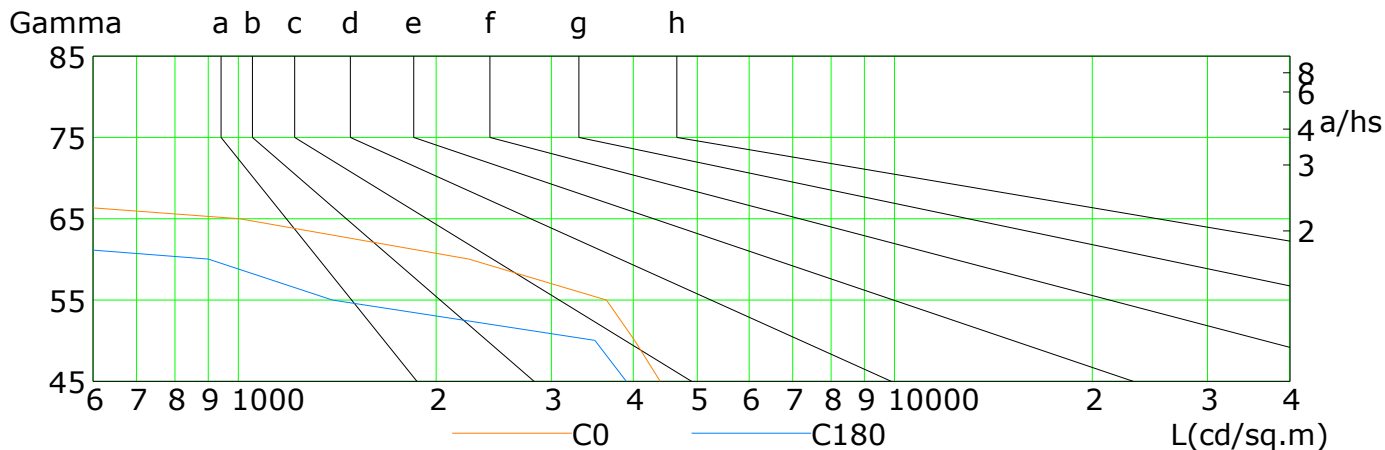
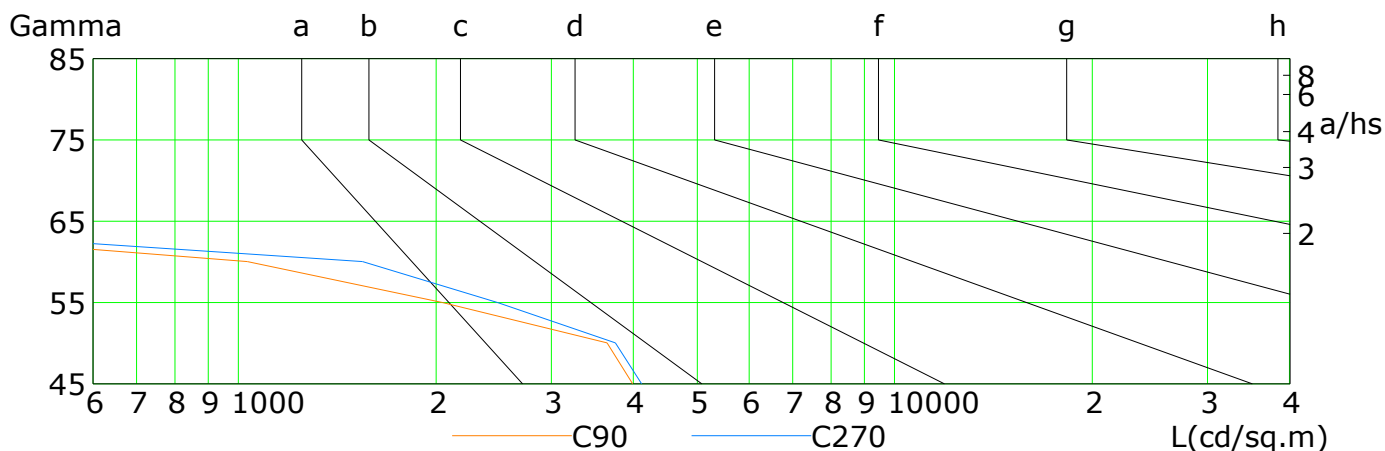
C Plane (°):0.0-360.0: 45.0
Test Lab: Inventfine instrument
Test Type: TYPE C
Temperature: 28
Operator:

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

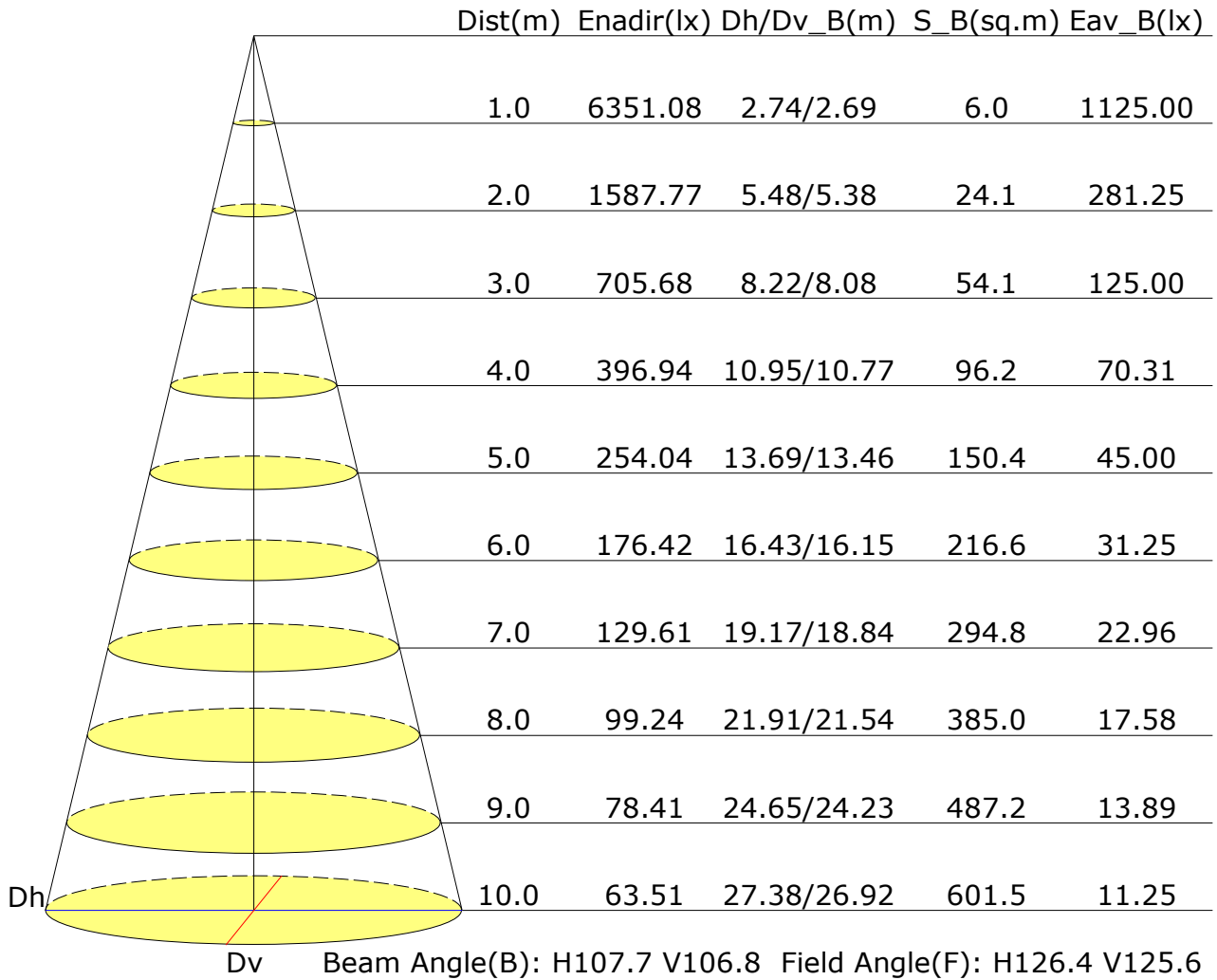


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	4392	4016	3638	2247	1004	160	123	89	58
C90	3989	3643	2047	1031	175	135	100	69	34
C180	3899	3492	1392	900	159	119	86	56	20
C270	4119	3758	2482	1545	189	137	107	76	45

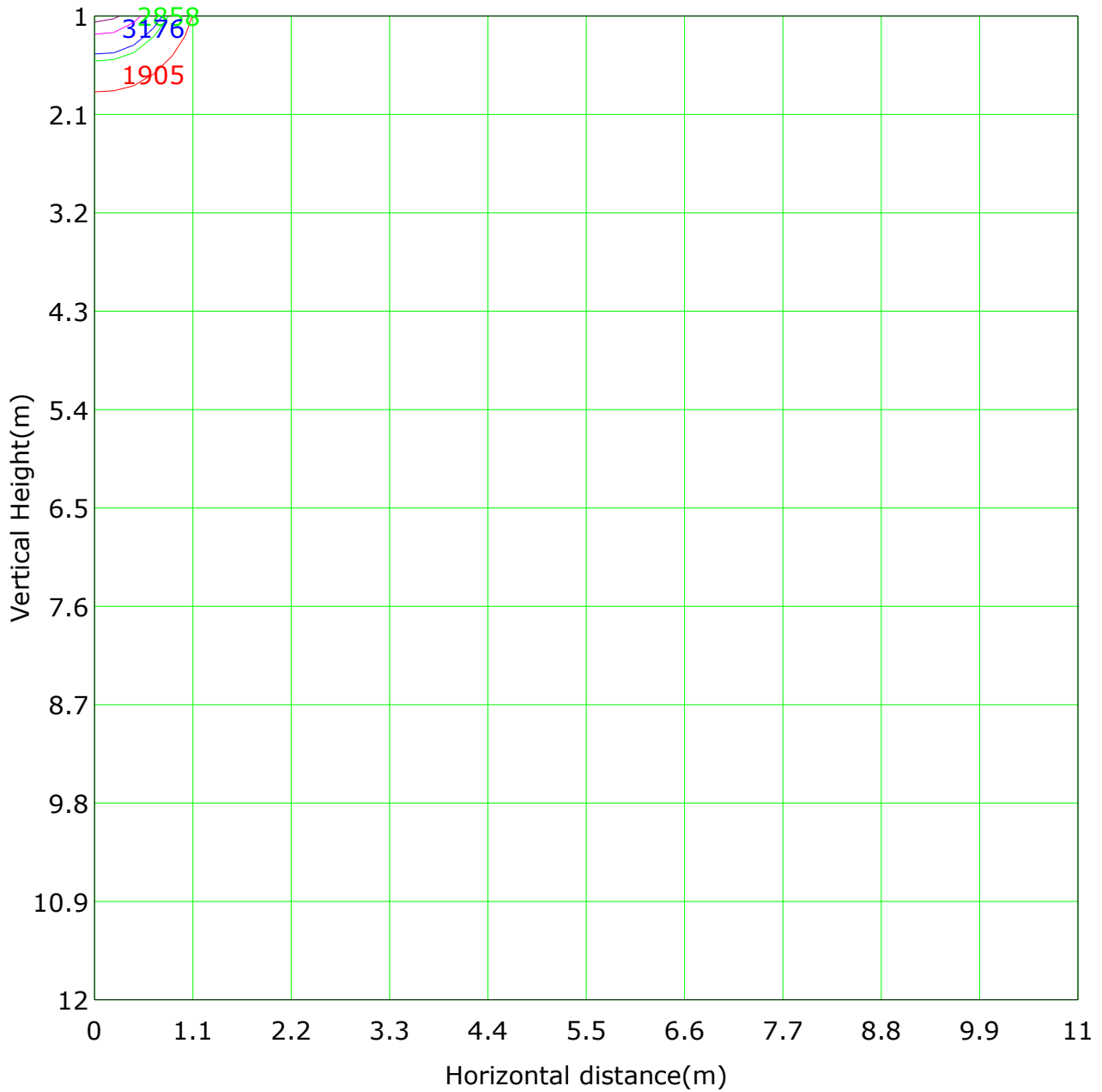
C Plane (°):0.0-360.0: 45.0
Test Lab: Inventfine instrument
Test Type: TYPE C
Temperature: 28
Operator:

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

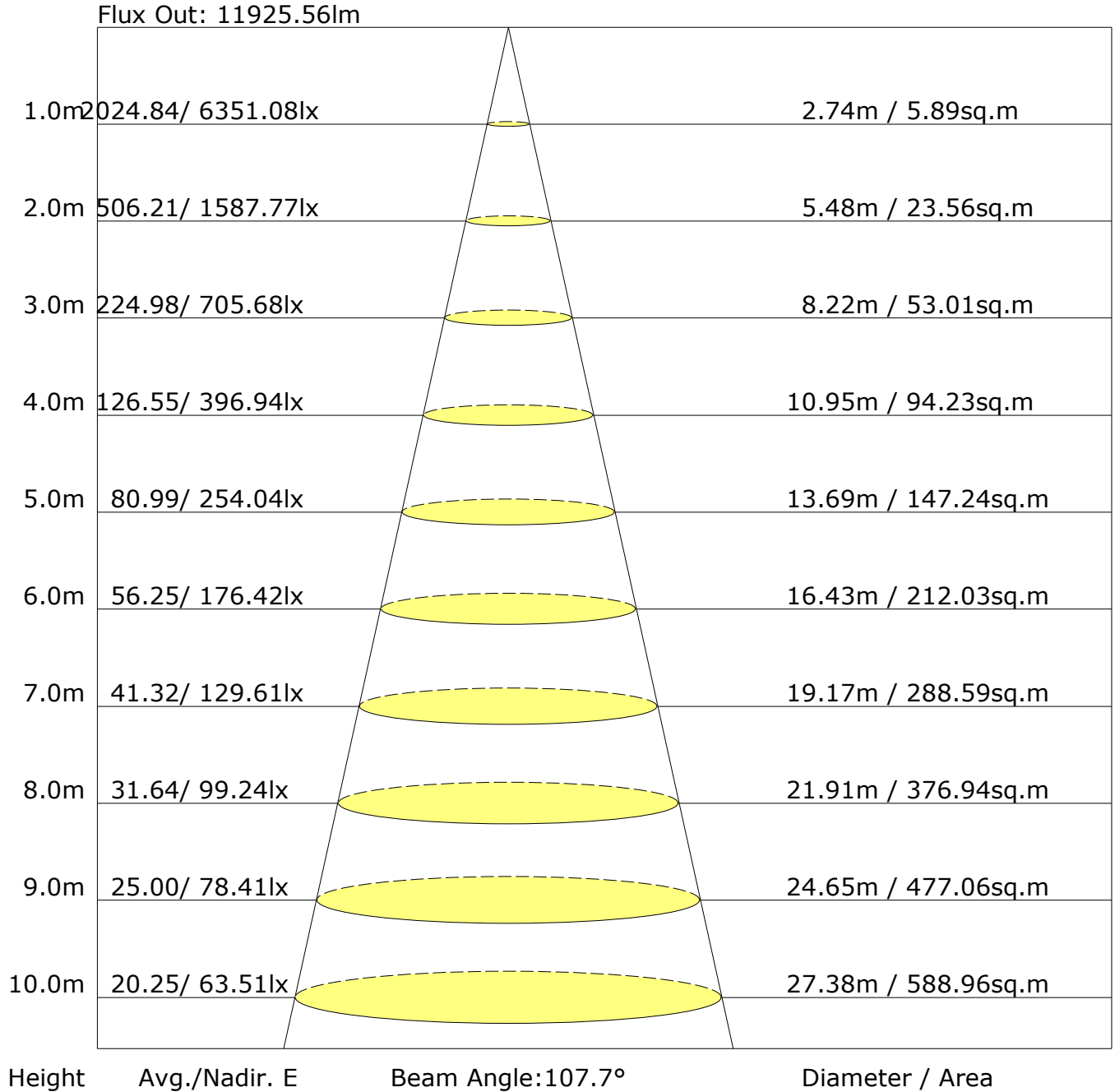


Lowest(m): 1.0m Highest(m): 12.0m Max Lux: 6351.1 lx
— (30%):1905.3 lx — (45%):2858.0 lx
— (50%):3175.5 lx — (70%):4445.8 lx
— (90%):5716.0 lx

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	0.64	0.75	0.82	0.87	0.94	0.98	1.01	1.05	1.07	
	0.30		0.57	0.69	0.76	0.82	0.89	0.94	0.97	1.01	1.04	
	0.20		0.52	0.64	0.72	0.77	0.85	0.90	0.94	0.98	1.02	
0.50	0.50	0.20	0.63	0.73	0.80	0.85	0.91	0.95	0.97	1.00	1.02	
	0.30		0.56	0.67	0.75	0.80	0.87	0.91	0.94	0.98	1.00	
	0.20		0.52	0.63	0.71	0.76	0.83	0.88	0.91	0.96	0.98	
0.30	0.50	0.20	0.61	0.71	0.78	0.82	0.88	0.91	0.94	0.97	0.98	
	0.30		0.56	0.66	0.73	0.78	0.84	0.88	0.91	0.95	0.97	
	0.20		0.51	0.62	0.70	0.75	0.81	0.86	0.89	0.93	0.95	
0.00	0.00	0.00	0.49	0.60	0.67	0.72	0.78	0.82	0.85	0.88	0.90	
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	0.21	0.17	
	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	0.37	0.34	0.25	0.19	0.16	
	0.30		0.72	0.58	0.49	0.42	0.33	0.28	0.24	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	0.35	0.28	0.24	0.18	0.15	
	0.30		0.70	0.56	0.47	0.41	0.32	0.26	0.22	0.17	0.14	
	0.20		0.61	0.50	0.43	0.37	0.30	0.25	0.21	0.17	0.14	
0.00	0.00	0.00	0.50	0.39	0.33	0.28	0.22	0.18	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	0.16	0.18	0.18	0.19	0.20	0.21	0.21	0.22	0.22	
	0.30		0.10	0.12	0.13	0.14	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	0.17	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	0.16	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	
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	6351.1	6244.4	6194.5	6161.2	6351.1	6244.4	6194.5	6161.2	6351.1	
G1.0	6349.7	6220.4	6186.8	6176.8	6347.6	6262.3	6201.5	6145.5	6349.7	
G2.0	6347.1	6194.5	6175.1	6188.9	6344.3	6284.9	6202.9	6122.0	6347.1	
G3.0	6346.2	6170.3	6161.9	6202.6	6342.5	6296.3	6194.3	6097.1	6346.2	
G4.0	6352.5	6129.9	6148.6	6213.4	6326.9	6302.1	6195.6	6070.7	6352.5	
G5.0	6351.8	6091.5	6135.3	6216.2	6314.5	6313.8	6200.8	6045.8	6351.8	
G6.0	6355.3	6052.8	6116.4	6219.6	6295.9	6326.4	6188.9	6012.7	6355.3	
G7.0	6354.3	6010.6	6090.3	6220.6	6269.8	6329.9	6179.6	5972.9	6354.3	
G8.0	6353.9	5973.6	6065.6	6217.8	6244.1	6327.1	6167.9	5935.1	6353.9	
G9.0	6350.1	5924.4	6037.2	6215.2	6206.8	6327.8	6151.4	5891.5	6350.1	
G10.0	6332.9	5875.0	6011.3	6213.4	6167.7	6320.8	6138.6	5846.8	6332.9	
G11.0	6324.0	5828.9	5977.5	6206.6	6125.7	6317.5	6112.2	5805.3	6324.0	
G12.0	6308.2	5775.5	5941.9	6191.0	6081.0	6312.9	6081.5	5761.3	6308.2	
G13.0	6288.6	5718.9	5910.0	6173.0	6033.5	6296.5	6053.5	5712.8	6288.6	
G14.0	6267.7	5669.5	5871.3	6162.3	5987.5	6286.3	6020.9	5658.5	6267.7	
G15.0	6239.0	5610.7	5831.9	6142.3	5939.8	6275.4	5980.3	5604.0	6239.0	
G16.0	6200.1	5550.1	5787.4	6107.3	5887.4	6255.8	5937.0	5548.5	6200.1	
G17.0	6162.8	5487.7	5734.7	6080.5	5834.5	6235.3	5889.4	5491.2	6162.8	
G18.0	6122.5	5422.7	5683.0	6051.6	5776.2	6208.7	5847.7	5430.6	6122.5	
G19.0	6081.7	5355.8	5635.7	6020.4	5717.9	6176.8	5804.9	5368.4	6081.7	
G20.0	6034.4	5295.0	5582.3	5980.1	5661.1	6143.9	5758.0	5309.7	6034.4	
G21.0	5988.0	5230.2	5523.8	5938.9	5607.5	6110.4	5710.2	5243.2	5988.0	
G22.0	5937.0	5166.1	5467.2	5902.0	5542.2	6074.5	5656.6	5182.9	5937.0	
G23.0	5887.4	5094.8	5406.1	5855.9	5481.6	6038.1	5595.6	5119.7	5887.4	
G24.0	5830.3	5034.0	5350.4	5812.3	5415.0	5997.3	5539.7	5052.9	5830.3	
G25.0	5773.4	4962.9	5291.0	5765.2	5350.4	5951.0	5483.3	4985.3	5773.4	
G26.0	5713.5	4894.6	5238.6	5721.7	5276.6	5902.5	5423.6	4918.6	5713.5	
G27.0	5656.4	4831.2	5176.1	5663.2	5210.6	5851.0	5361.6	4849.4	5656.4	
G28.0	5593.5	4765.1	5114.8	5611.7	5146.3	5801.4	5299.9	4779.5	5593.5	
G29.0	5526.4	4698.4	5055.0	5559.7	5071.7	5745.0	5233.9	4708.4	5526.4	
G30.0	5461.8	4628.7	4994.4	5498.4	5003.0	5688.3	5168.7	4639.0	5461.8	
G31.0	5393.8	4559.8	4933.3	5438.1	4934.2	5630.5	5099.2	4571.6	5393.8	
G32.0	5324.8	4493.1	4866.7	5381.0	4866.4	5572.3	5034.2	4494.0	5324.8	
G33.0	5253.3	4423.0	4799.3	5317.4	4799.5	5511.5	4972.0	4419.5	5253.3	
G34.0	5182.9	4350.0	4735.9	5242.5	4735.2	5446.0	4907.2	4349.3	5182.9	
G35.0	5115.3	4279.4	4668.6	5188.3	4667.9	5385.6	4838.5	4276.2	5115.3	
G36.0	5045.4	4205.3	4601.7	5121.1	4586.8	5321.5	4772.3	4206.3	5045.4	

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 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	4974.6	4133.5	4531.8	5055.2	4512.9	5257.2	4706.6	4136.1	4974.6	
G38.0	4901.9	4066.2	4469.6	4993.4	4436.3	5188.3	4628.3	4064.1	4901.9	
G39.0	4832.2	3996.3	4400.4	4926.3	4358.4	5119.7	4559.3	3995.1	4832.2	
G40.0	4764.8	3919.1	4329.0	4859.7	4282.5	5051.7	4487.8	3931.5	4764.8	
G41.0	4689.1	3851.6	4264.3	4794.6	4201.6	4979.7	4412.3	3866.9	4689.1	
G42.0	4618.3	3785.9	4196.5	4726.8	4124.9	4914.7	4336.3	3803.8	4618.3	
G43.0	4542.8	3718.3	4131.4	4657.6	4050.6	4843.8	4265.0	3738.1	4542.8	
G44.0	4470.5	3642.3	4061.5	4600.8	3973.7	4768.8	4192.3	3674.5	4470.5	
G45.0	4391.7	3538.4	3989.1	4531.3	3899.3	4702.1	4118.6	3604.6	4391.7	
G46.0	4320.2	3200.0	3922.6	4460.5	3823.1	4633.2	4042.7	3534.6	4320.2	
G47.0	4239.3	2774.5	3856.5	4394.8	3743.4	4550.4	3972.8	3431.4	4239.3	
G48.0	4164.1	2400.5	3779.3	4321.8	3668.6	4479.8	3899.6	3151.8	4164.1	
G49.0	4090.9	2252.7	3713.9	4249.6	3585.0	4402.2	3826.6	2579.0	4090.9	
G50.0	4016.3	2184.9	3642.8	4178.8	3491.8	4323.5	3758.1	1842.4	4016.3	
G51.0	3943.9	1999.2	3569.4	4110.5	3276.2	4247.3	3687.8	1341.1	3943.9	
G52.0	3867.6	1523.3	3466.6	4037.1	2844.4	4166.9	3599.0	1182.2	3867.6	
G53.0	3794.9	1145.8	3206.8	3961.6	2372.0	4088.1	3341.5	1125.8	3794.9	
G54.0	3717.8	1041.7	2704.6	3889.8	1906.9	4013.3	2913.1	1072.4	3717.8	
G55.0	3637.6	944.7	2047.2	3809.9	1392.4	3938.7	2482.0	1009.5	3637.6	
G56.0	3381.3	513.4	1508.7	3735.5	1142.6	3858.1	2302.6	960.1	3381.3	
G57.0	2958.6	206.0	1230.9	3657.9	1080.3	3782.8	2229.9	666.2	2958.6	
G58.0	2539.6	182.0	1155.8	3448.0	1025.6	3708.5	2164.6	234.0	2539.6	
G59.0	2329.2	168.0	1098.5	3040.6	962.9	3624.1	1990.6	175.5	2329.2	
G60.0	2246.9	159.6	1030.9	2603.4	900.2	3364.1	1545.5	162.9	2246.9	
G61.0	2167.9	151.9	979.4	2339.2	495.9	2899.6	1133.0	154.3	2167.9	
G62.0	2094.0	144.3	739.4	2259.5	202.5	2483.0	1054.0	145.4	2094.0	
G63.0	1879.4	136.3	261.7	2185.1	180.6	2289.3	782.1	135.4	1879.4	
G64.0	1367.7	130.0	189.7	2108.7	168.3	2219.6	286.2	128.2	1367.7	
G65.0	1004.4	124.0	174.5	2023.0	159.2	2147.6	189.0	122.6	1004.4	
G66.0	497.8	117.9	165.7	1939.5	148.0	1905.5	172.7	115.6	497.8	
G67.0	208.8	110.0	158.0	1435.7	140.1	1418.0	163.4	110.7	208.8	
G68.0	186.7	104.6	147.7	536.7	134.0	1078.0	155.0	102.3	186.7	
G69.0	171.5	97.9	141.0	231.2	127.5	999.9	144.9	96.0	171.5	
G70.0	159.6	90.7	135.4	203.9	119.1	763.0	137.3	90.4	159.6	
G71.0	151.5	84.1	128.6	186.4	112.1	291.1	131.0	85.3	151.5	
G72.0	144.7	78.5	119.8	173.1	105.6	194.4	125.8	79.5	144.7	
G73.0	138.0	72.7	113.3	163.1	98.6	177.3	119.6	73.6	138.0	

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	129.1	65.0	108.1	156.8	92.3	165.0	113.0	65.7	129.1	
G75.0	122.6	59.2	99.5	147.0	85.5	155.0	107.0	60.1	122.6	
G76.0	117.2	53.4	93.4	140.3	80.6	146.1	98.8	54.3	117.2	
G77.0	109.1	45.4	88.3	135.4	74.6	139.8	92.5	48.7	109.1	
G78.0	102.8	38.7	79.9	128.9	68.1	133.1	86.5	43.8	102.8	
G79.0	97.4	31.9	74.1	120.5	62.2	126.5	81.8	37.8	97.4	
G80.0	89.5	23.5	69.0	114.2	55.7	120.0	76.2	31.2	89.5	
G81.0	83.4	13.5	62.2	108.6	47.5	111.9	68.3	22.1	83.4	
G82.0	77.8	6.8	54.3	99.7	42.2	106.7	62.0	15.6	77.8	
G83.0	70.6	6.8	47.5	93.4	35.7	100.2	57.6	7.7	70.6	
G84.0	64.6	7.5	41.7	87.2	28.0	94.2	51.5	7.2	64.6	
G85.0	58.5	7.2	33.8	82.3	19.6	87.6	45.4	7.9	58.5	
G86.0	52.4	7.7	23.3	76.0	11.2	81.6	38.7	6.5	52.4	
G87.0	45.0	8.4	14.2	67.3	5.4	72.9	30.3	7.0	45.0	
G88.0	38.9	8.6	7.2	62.0	5.8	67.1	23.5	8.9	38.9	
G89.0	30.8	9.6	5.8	53.6	6.1	62.0	17.0	9.1	30.8	
G90.0	22.8	9.8	6.3	47.1	7.9	55.9	9.1	8.2	22.8	
G91.0	14.7	9.8	8.2	41.5	8.4	49.6	7.0	8.9	14.7	
G92.0	6.8	10.5	6.8	34.3	9.1	41.0	5.8	9.3	6.8	
G93.0	6.1	11.4	7.0	24.2	8.2	35.9	6.3	10.9	6.1	
G94.0	6.5	12.1	9.1	16.8	8.2	28.9	7.9	11.4	6.5	
G95.0	7.0	12.4	9.1	8.2	10.3	18.9	8.4	10.7	7.0	
G96.0	7.5	13.1	8.6	5.4	10.5	10.0	8.6	11.4	7.5	
G97.0	7.7	14.0	8.9	5.8	10.9	4.9	9.3	11.9	7.7	
G98.0	8.2	14.2	9.1	6.1	11.6	5.6	7.9	12.6	8.2	
G99.0	8.6	15.1	11.2	7.9	10.7	7.5	8.4	14.2	8.6	
G100.0	9.1	15.9	10.7	7.0	10.9	7.9	8.9	14.7	9.1	
G101.0	9.3	16.5	12.1	8.6	13.5	6.5	11.2	15.6	9.3	
G102.0	10.0	17.2	12.8	8.6	13.5	6.5	11.2	15.1	10.0	
G103.0	10.5	17.7	11.9	7.7	14.2	8.4	10.0	15.6	10.5	
G104.0	11.2	18.4	12.6	9.8	14.2	9.3	10.9	17.2	11.2	
G105.0	11.4	19.1	14.9	8.6	14.7	7.9	11.4	17.2	11.4	
G106.0	12.4	20.0	15.6	9.3	16.3	8.4	13.5	17.9	12.4	
G107.0	12.4	20.0	14.7	10.9	17.0	8.9	14.2	18.2	12.4	
G108.0	12.8	21.4	16.5	11.6	16.8	10.9	13.3	18.9	12.8	
G109.0	14.2	22.1	17.2	10.9	17.7	10.9	13.8	20.3	14.2	
G110.0	14.9	22.1	16.5	11.2	17.7	11.9	14.2	20.3	14.9	

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:

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	14.4	22.6	17.2	13.1	19.1	11.2	14.9	21.2	14.4	
G112.0	16.1	23.8	19.1	12.8	19.6	11.6	17.0	21.2	16.1	
G113.0	16.5	24.2	18.2	14.4	20.0	13.8	17.5	21.7	16.5	
G114.0	16.8	25.2	20.0	14.7	20.7	14.0	16.5	22.4	16.8	
G115.0	18.2	25.4	19.6	14.4	21.4	13.5	17.0	23.3	18.2	
G116.0	19.1	26.1	20.0	16.1	22.1	14.0	18.9	23.8	19.1	
G117.0	18.4	27.5	21.9	16.3	22.4	15.6	19.6	24.5	18.4	
G118.0	20.3	28.2	21.2	16.5	23.1	16.1	18.6	25.4	20.3	
G119.0	20.7	28.4	22.8	17.5	24.0	15.6	19.3	25.6	20.7	
G120.0	20.3	30.1	24.2	18.4	24.2	16.1	21.4	26.6	20.3	
G121.0	20.7	30.8	24.5	18.4	25.2	17.0	21.9	27.5	20.7	
G122.0	22.8	30.5	23.8	19.3	26.3	18.2	20.7	28.7	22.8	
G123.0	22.1	31.2	25.9	20.0	27.3	18.6	21.4	29.1	22.1	
G124.0	22.8	32.9	26.8	20.0	28.0	18.2	22.1	30.1	22.8	
G125.0	25.2	32.4	25.6	20.5	28.2	18.9	24.2	30.8	25.2	
G126.0	24.5	33.1	28.0	21.2	28.9	19.3	25.2	31.2	24.5	
G127.0	26.3	33.8	27.5	21.9	30.8	20.7	24.2	32.2	26.3	
G128.0	25.6	35.7	29.4	22.6	31.2	20.7	24.7	33.1	25.6	
G129.0	28.0	35.2	30.1	23.3	31.2	21.4	27.0	32.9	28.0	
G130.0	28.7	35.9	29.1	24.0	31.9	22.6	28.0	33.8	28.7	
G131.0	28.2	38.2	31.5	24.2	33.8	22.8	28.4	35.0	28.2	
G132.0	28.4	37.3	32.2	25.4	34.3	23.5	28.0	35.2	28.4	
G133.0	30.8	38.0	31.2	25.9	33.8	24.0	30.5	35.7	30.8	
G134.0	30.3	40.1	34.0	26.6	34.3	24.7	31.2	37.3	30.3	
G135.0	31.0	39.2	34.7	28.0	36.3	25.6	30.3	38.5	31.0	
G136.0	32.9	41.5	34.0	27.7	36.6	26.3	30.8	39.2	32.9	
G137.0	31.9	42.0	36.1	28.4	37.5	27.3	33.1	38.0	31.9	
G138.0	34.3	41.0	35.0	29.8	36.8	27.7	32.4	39.8	34.3	
G139.0	33.1	42.9	37.5	29.4	38.5	28.2	33.1	40.5	33.1	
G140.0	33.6	41.7	37.5	31.2	39.2	29.4	35.4	39.8	33.6	
G141.0	36.1	43.8	37.0	30.5	38.2	29.6	35.7	41.3	36.1	
G142.0	36.6	44.5	39.2	31.0	38.5	30.3	35.4	42.0	36.6	
G143.0	35.7	43.1	39.4	32.6	40.5	31.5	35.7	42.4	35.7	
G144.0	36.1	43.8	38.7	33.3	41.7	32.4	37.8	41.5	36.1	
G145.0	38.5	46.1	38.9	32.6	40.3	32.2	36.8	43.3	38.5	
G146.0	37.3	45.2	41.0	34.3	40.8	33.8	37.5	43.8	37.3	
G147.0	39.4	45.7	40.3	35.0	43.3	34.0	39.4	43.1	39.4	

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 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	40.1	48.0	40.8	35.2	43.6	33.8	40.1	43.3	40.1	
G149.0	39.2	48.5	42.4	34.7	43.1	34.5	40.3	45.7	39.2	
G150.0	40.8	47.1	41.7	36.6	45.2	36.1	41.0	44.5	40.8	
G151.0	41.5	49.6	44.0	35.7	44.3	35.4	40.1	47.1	41.5	
G152.0	40.5	48.5	42.9	37.8	46.6	37.0	41.0	47.8	40.5	
G153.0	42.4	50.6	43.3	38.2	47.1	38.0	41.5	46.8	42.4	
G154.0	43.1	50.8	45.7	37.5	45.9	36.8	43.6	48.7	43.1	
G155.0	42.4	49.6	46.4	38.2	46.6	37.5	44.0	48.9	42.4	
G156.0	44.7	49.6	45.0	40.8	48.9	39.6	43.3	49.2	44.7	
G157.0	45.4	51.5	47.5	41.3	47.5	40.5	44.0	47.8	45.4	
G158.0	45.0	50.3	46.4	42.0	48.2	39.4	46.1	50.1	45.0	
G159.0	46.6	50.1	46.8	42.7	49.9	41.5	45.0	50.1	46.6	
G160.0	46.4	52.2	49.2	41.5	48.7	42.2	45.7	48.9	46.4	
G161.0	47.1	50.6	47.8	42.4	50.6	41.3	47.5	50.6	47.1	
G162.0	47.8	52.2	49.6	42.9	51.0	43.3	46.4	51.0	47.8	
G163.0	48.2	51.0	50.1	43.6	51.3	44.0	47.1	50.6	48.2	
G164.0	49.9	51.3	48.7	46.1	51.3	44.7	47.3	49.4	49.9	
G165.0	50.3	51.5	48.9	46.6	50.3	43.6	48.9	51.0	50.3	
G166.0	50.8	52.4	49.4	47.5	51.0	44.0	49.4	51.3	50.8	
G167.0	50.3	53.8	51.3	46.4	50.8	46.1	48.5	50.1	50.3	
G168.0	50.8	52.7	51.5	46.8	52.4	46.8	48.2	50.1	50.8	
G169.0	51.7	54.3	50.1	48.7	52.7	45.9	48.7	50.1	51.7	
G170.0	52.2	54.1	52.2	47.5	52.7	46.6	49.2	52.4	52.2	
G171.0	52.2	52.7	52.2	48.2	52.2	48.9	49.6	51.0	52.2	
G172.0	52.7	52.4	51.0	50.1	52.7	49.6	51.3	52.4	52.7	
G173.0	52.7	52.9	51.3	50.6	52.4	48.5	51.5	52.7	52.7	
G174.0	52.9	53.6	52.9	49.9	52.4	49.4	50.8	52.9	52.9	
G175.0	53.1	53.6	51.0	51.3	52.4	51.5	51.0	53.1	53.1	
G176.0	53.4	53.6	52.9	50.3	53.1	50.3	50.8	51.5	53.4	
G177.0	53.6	53.1	52.9	52.0	52.9	52.4	51.3	51.3	53.6	
G178.0	53.4	52.7	53.1	50.8	53.6	51.3	52.7	51.3	53.4	
G179.0	53.4	52.7	53.1	52.0	53.1	52.0	53.1	52.7	53.4	
G180.0	54.5	53.1	52.7	52.0	54.5	53.1	52.0	52.0	54.5	

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: