

Report No.:

Test Time: 2026-01-17 08:48

Luminaire Property

Luminaire Manufacturer:

Luminaire Category:

Lamp Catalog: 3000K

Number of Lamps:

Luminous Length (mm): 1500

Luminous Height (mm): 27

Current: 0.1900 A

Power Factor: 0.9470

Luminaire Description: X系列1.5米线条灯

Lamp Description:

Lumens per Lamp:

Luminous Width (mm): 130

Voltage: 231.90 V

Power: 41.80 W

Photometric Results

CIE Class: Direct

Measurement Flux: 4735 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H92.8

Vertical Diffuse Angle(50%): V86.8

Luminous Efficacy (lm/w): 113.28

Max. Intensity: 464.58 cd/klm

S/MH(C0/C180): 1.26

Total Rated Lamp Lumens: 4735.0 lm

Efficiency: 100%

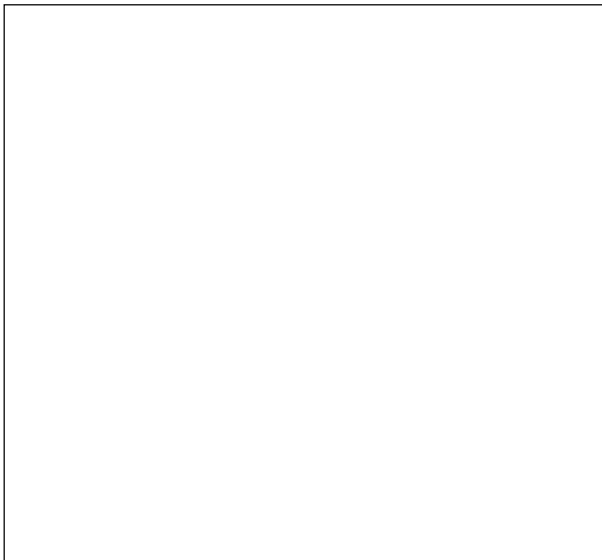
Upward Ratio: 0%

C0r0 Intensity: 463.62 cd/klm

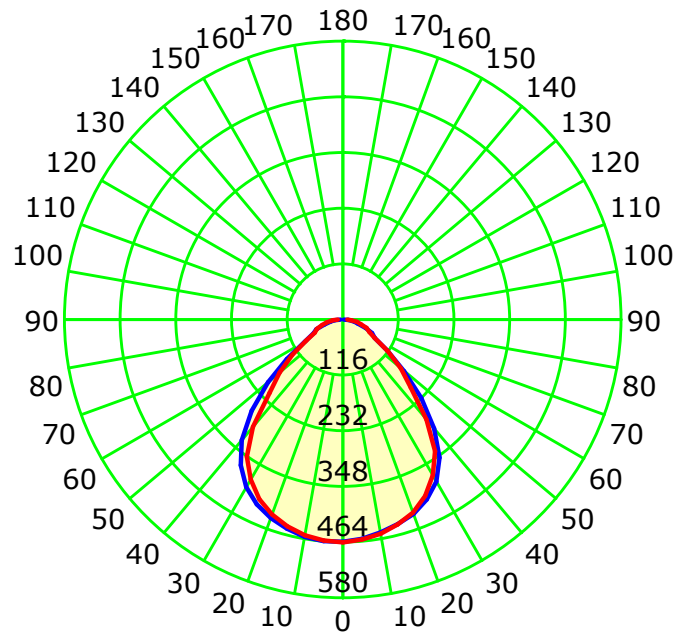
Pos of Max. Intensity: H90 V0

S/MH(C90/C270): 1.21

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd/klm

Average Diffuse Angle(50%): 89.8°

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:5.0

Test Device: GPM-1600L

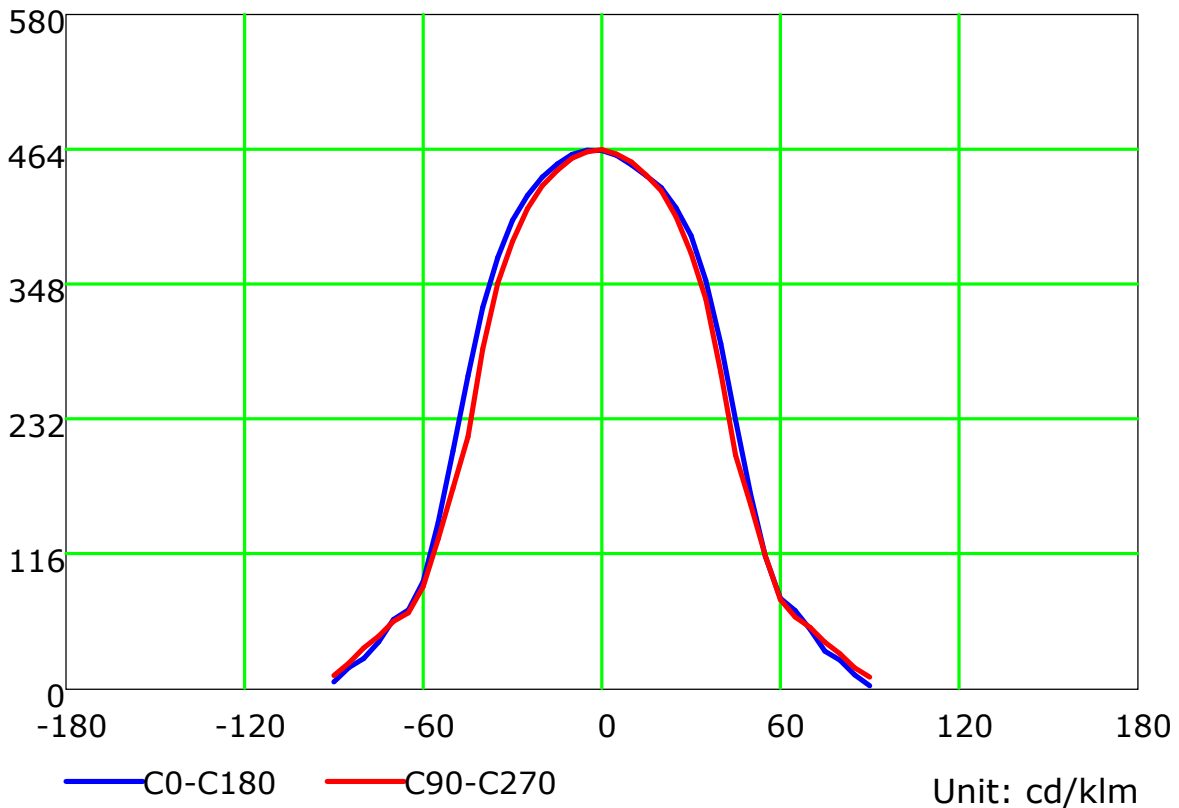
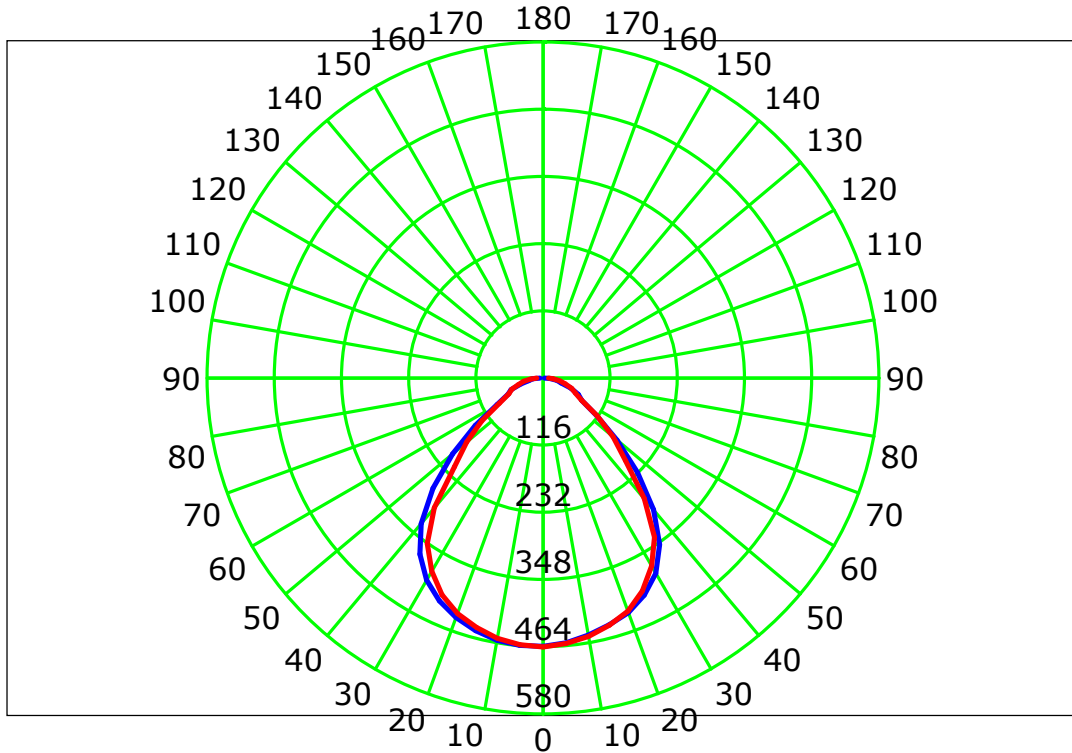
Distance: 7.172 m [K=1.0000]

Humidity:

Inspector:



Luminous Intensity Distribution Curve



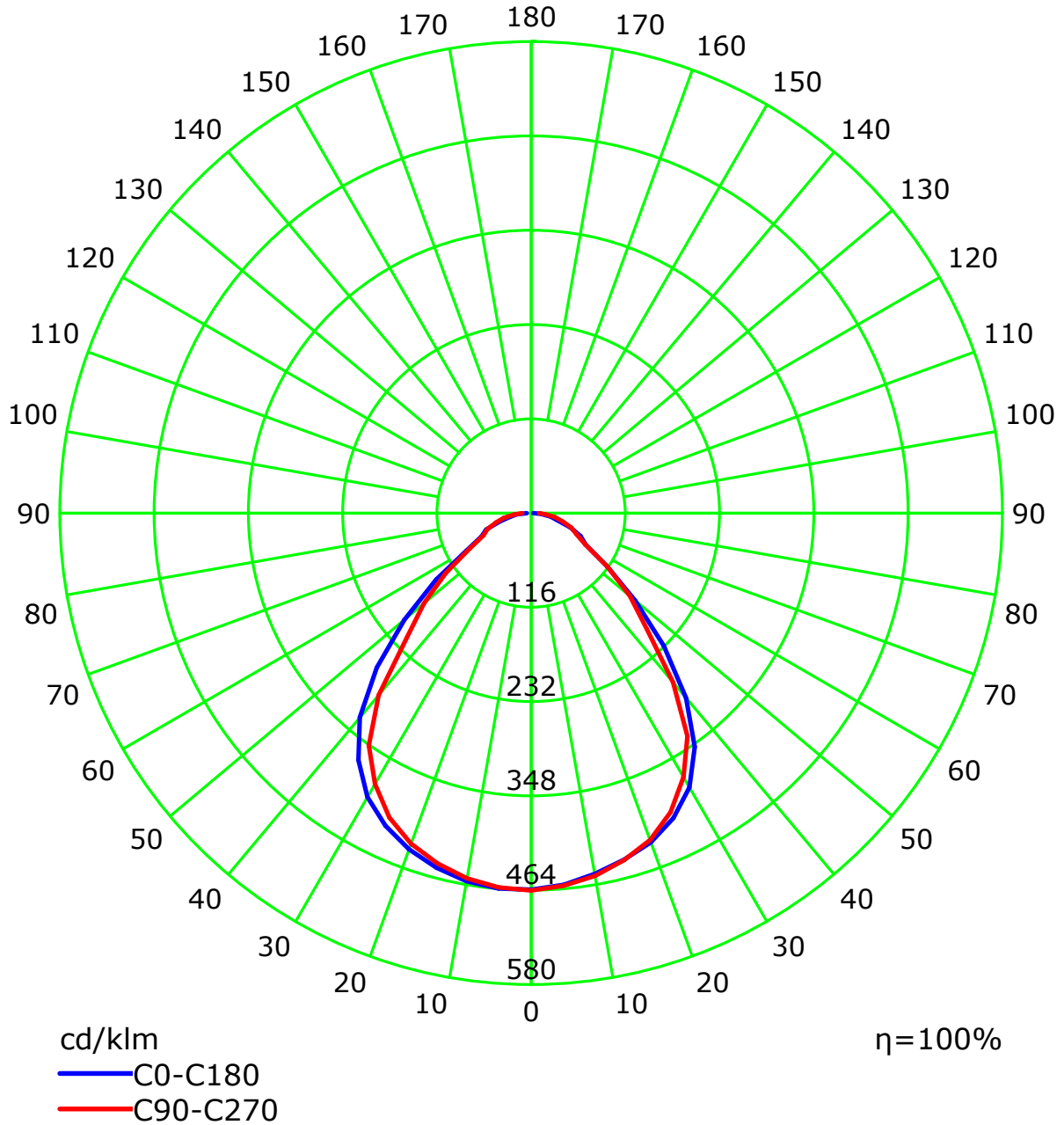
Unit: cd/klm

C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:5.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
Humidity:
Inspector:



Luminous Intensity Distribution Curve(cd/klm)



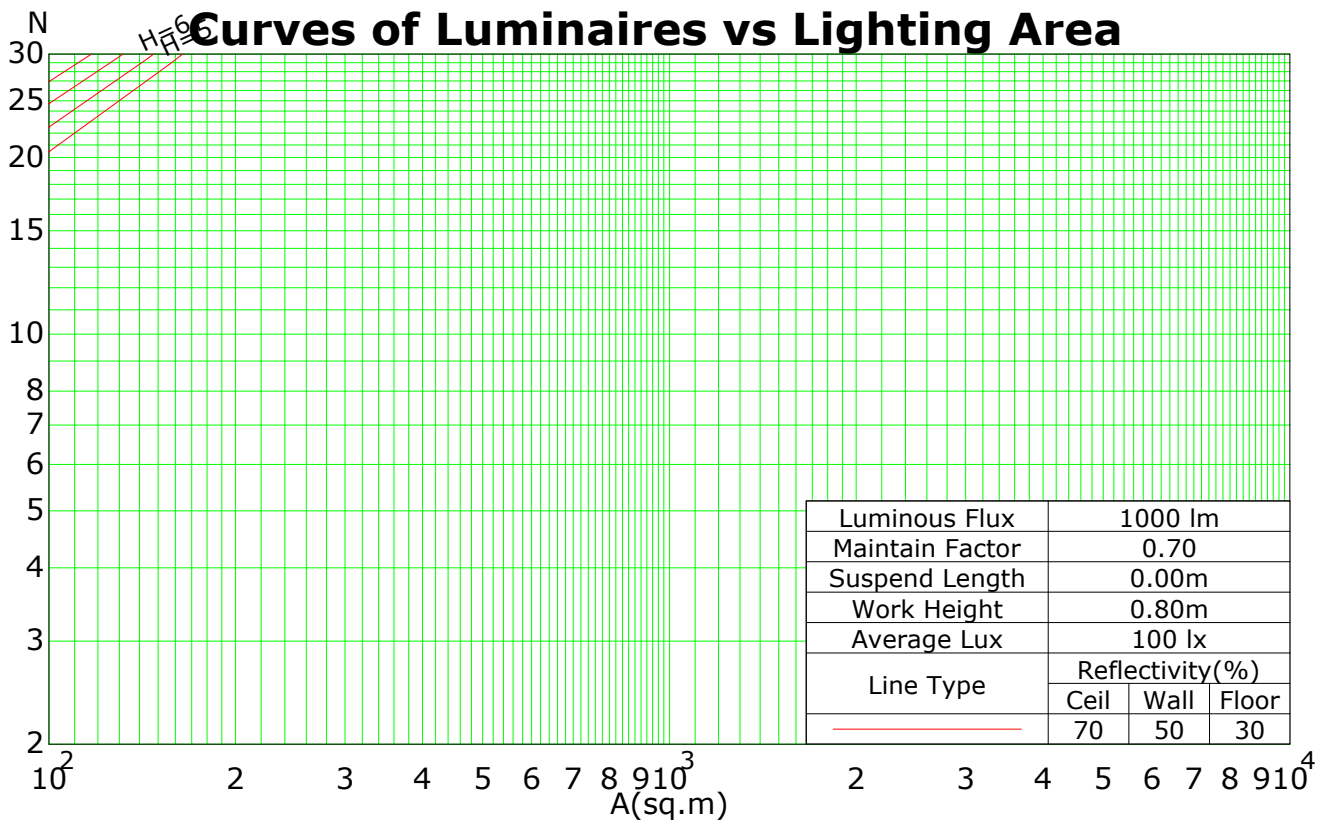
C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:5.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
Humidity:
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
RCCR	RF = 0.2																	
0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1	1.10	1.06	1.02	0.99	1.07	1.04	1.00	0.97	0.99	0.97	0.94	0.95	0.93	0.91	0.92	0.90	0.88	0.86
2	1.01	0.94	0.88	0.83	0.99	0.92	0.87	0.82	0.89	0.84	0.80	0.86	0.82	0.78	0.83	0.79	0.77	0.75
3	0.94	0.84	0.77	0.71	0.91	0.83	0.76	0.70	0.80	0.74	0.69	0.77	0.72	0.68	0.75	0.70	0.67	0.65
4	0.87	0.76	0.68	0.62	0.84	0.74	0.67	0.61	0.72	0.66	0.61	0.70	0.64	0.60	0.68	0.63	0.59	0.57
5	0.80	0.69	0.60	0.54	0.78	0.67	0.60	0.54	0.65	0.59	0.54	0.64	0.58	0.53	0.62	0.57	0.52	0.50
6	0.75	0.62	0.54	0.48	0.73	0.61	0.54	0.48	0.60	0.53	0.48	0.58	0.52	0.47	0.57	0.51	0.47	0.45
7	0.70	0.57	0.49	0.43	0.68	0.56	0.49	0.43	0.55	0.48	0.43	0.53	0.47	0.43	0.52	0.47	0.42	0.40
8	0.65	0.52	0.45	0.39	0.64	0.52	0.44	0.39	0.50	0.44	0.39	0.49	0.43	0.39	0.48	0.43	0.38	0.37
9	0.61	0.48	0.41	0.35	0.60	0.48	0.40	0.35	0.47	0.40	0.35	0.46	0.40	0.35	0.45	0.39	0.35	0.33
10	0.57	0.45	0.37	0.32	0.56	0.44	0.37	0.32	0.43	0.37	0.32	0.42	0.36	0.32	0.42	0.36	0.32	0.30

Spacing Criteria (0-180): 1.26
 Spacing Criteria (90-270): 1.21
 Spacing Criteria (Diagonal): 1.25

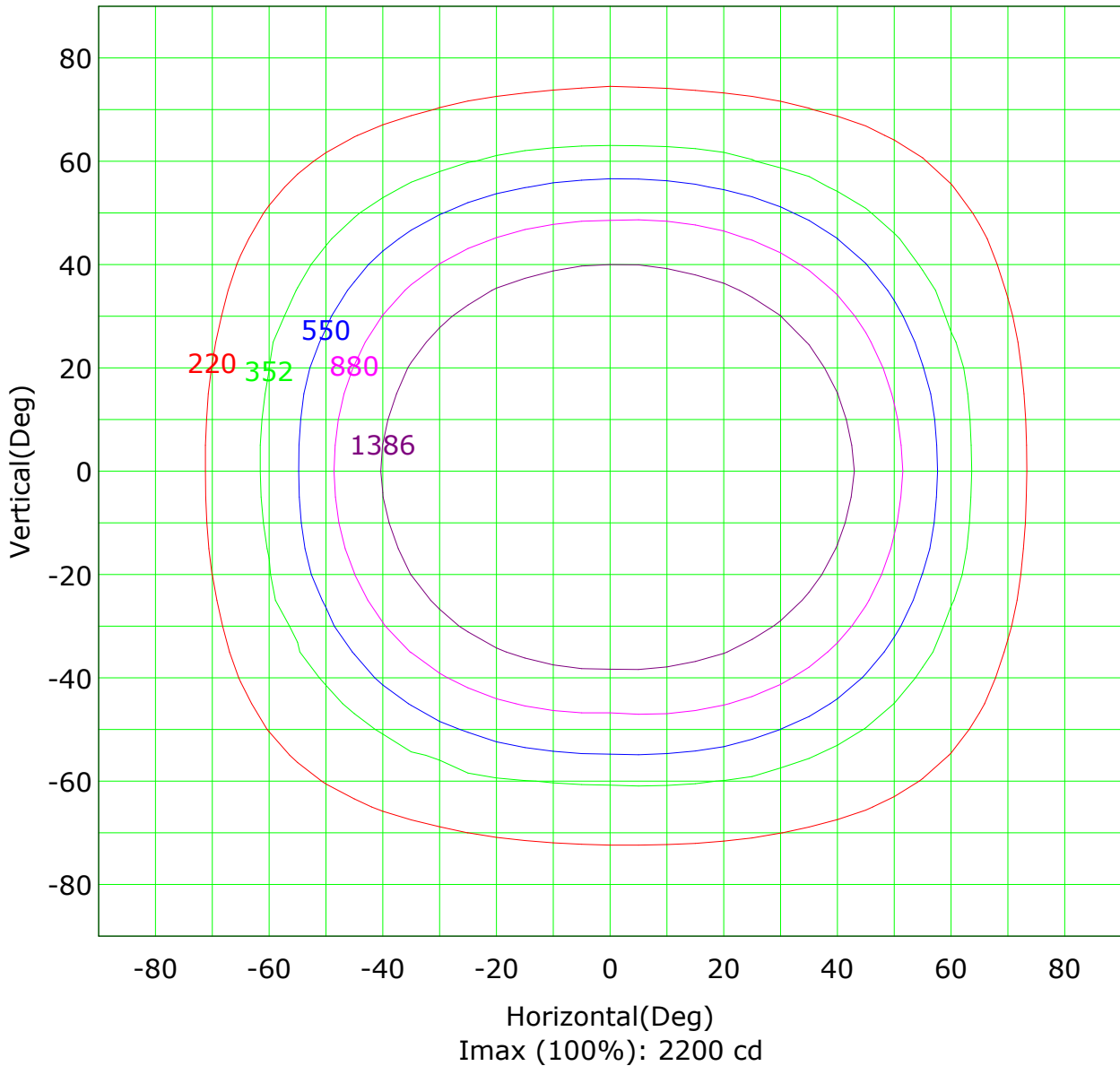


C Plane (°):0.0-360.0: 90.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

Gamma Plane (°):0.0-90.0:5.0
 Test Device: GPM-1600L
 Distance: 7.172 m [K=1.0000]
 Humidity:
 Inspector:



Isocandela (rectangle)

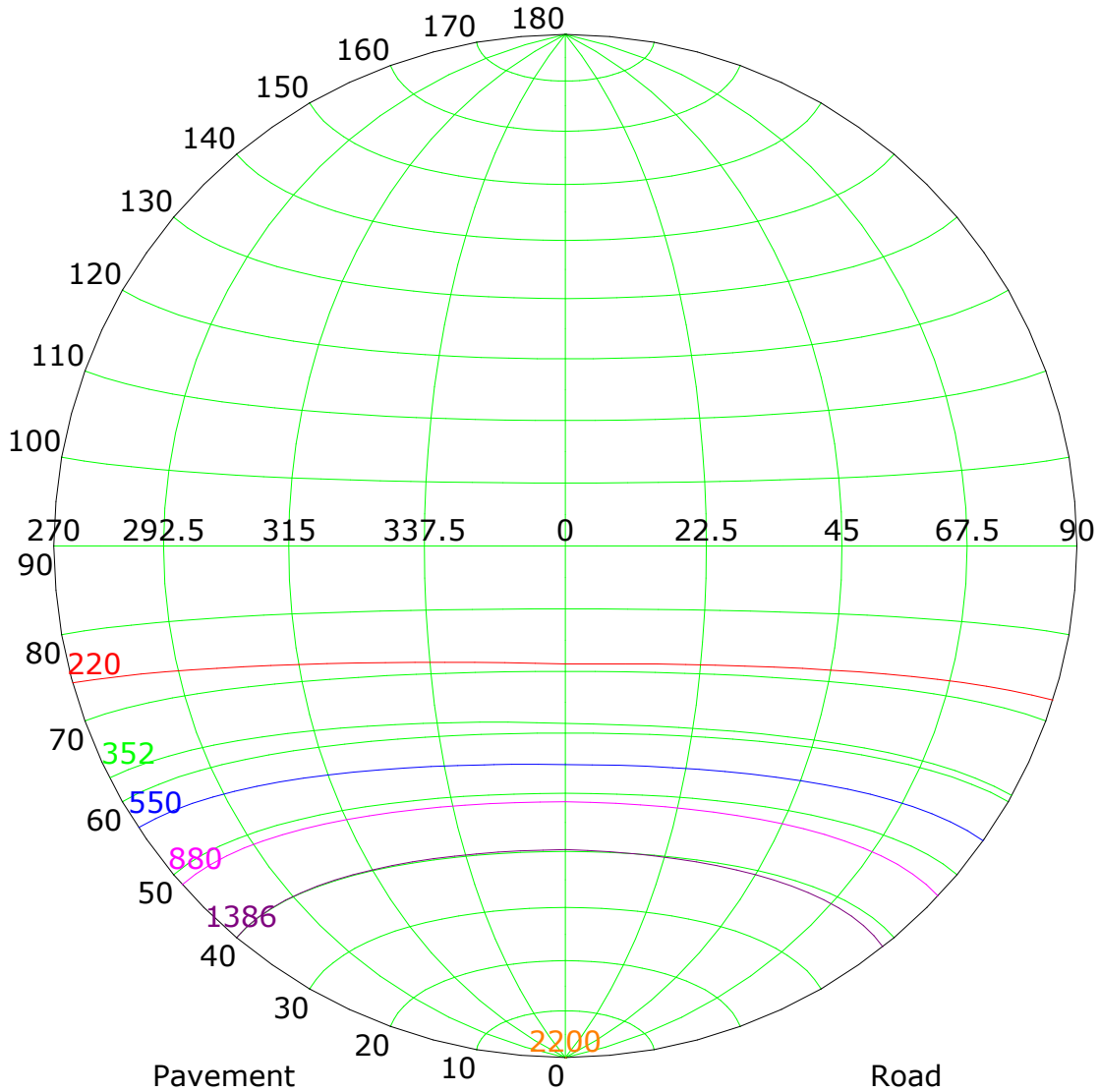


- (10%): 220 cd
- (16%): 352 cd
- (25%): 550 cd
- (40%): 880 cd
- (63%): 1386 cd
- (100%): 2200 cd

C Plane (°):0.0-360.0: 90.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

Gamma Plane (°):0.0-90.0:5.0
 Test Device: GPM-1600L
 Distance: 7.172 m [K=1.0000]
 Humidity:
 Inspector:

Isocandela (sphere)



Imax (100%): 2200 cd

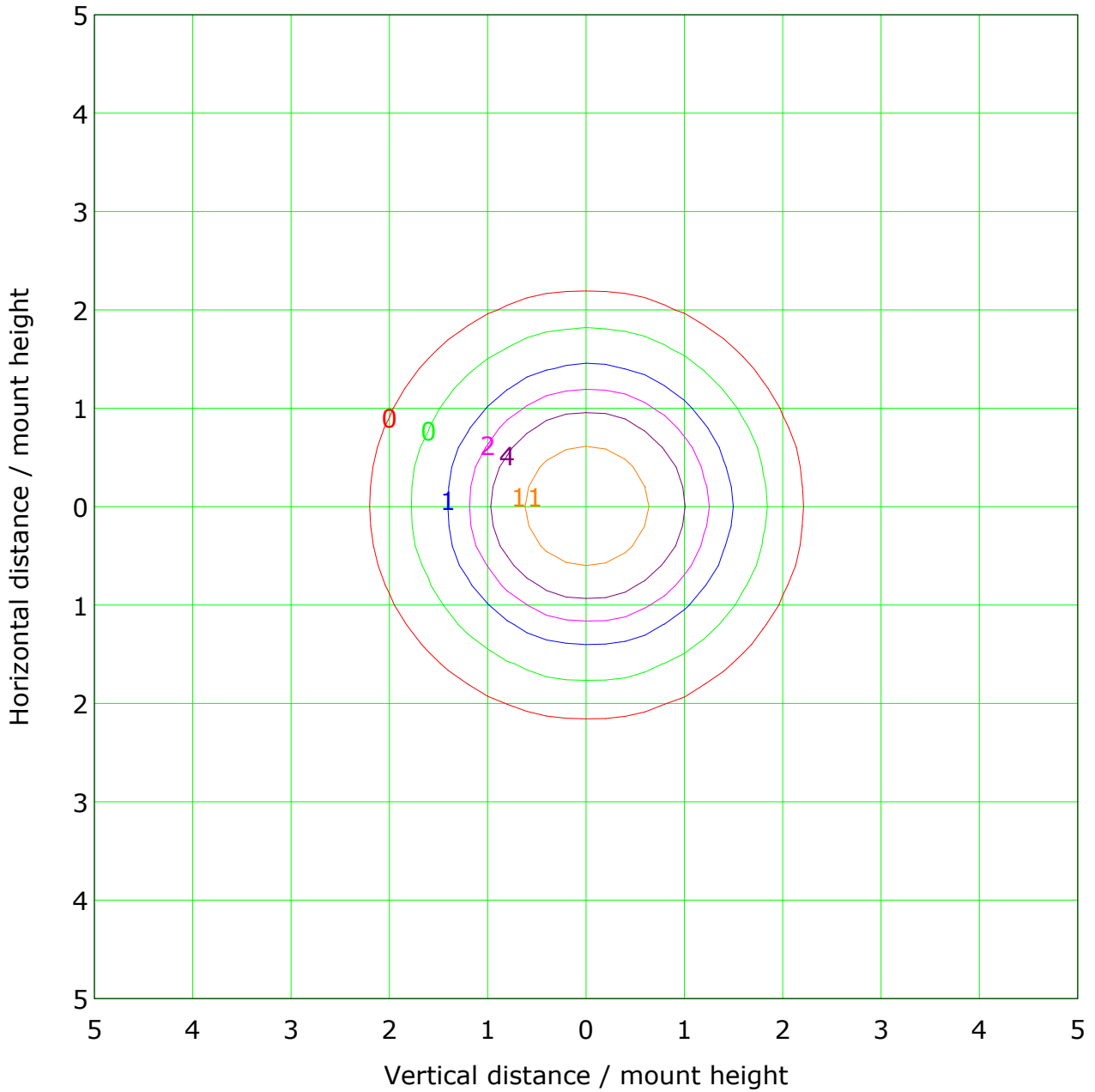
— (10%): 220 cd	— (16%): 352 cd
— (25%): 550 cd	— (40%): 880 cd
— (63%): 1386 cd	— (100%): 2200 cd

CIE: narrow - short
 CIE: Semi-cut-off luminaire
 Max.At90: 10.768 cd/klm

IES: Cut-off
 Max.At80: 91.138 cd/klm
 Max.80-90: 3174939328673388000000000000.00



IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 22.0 lx

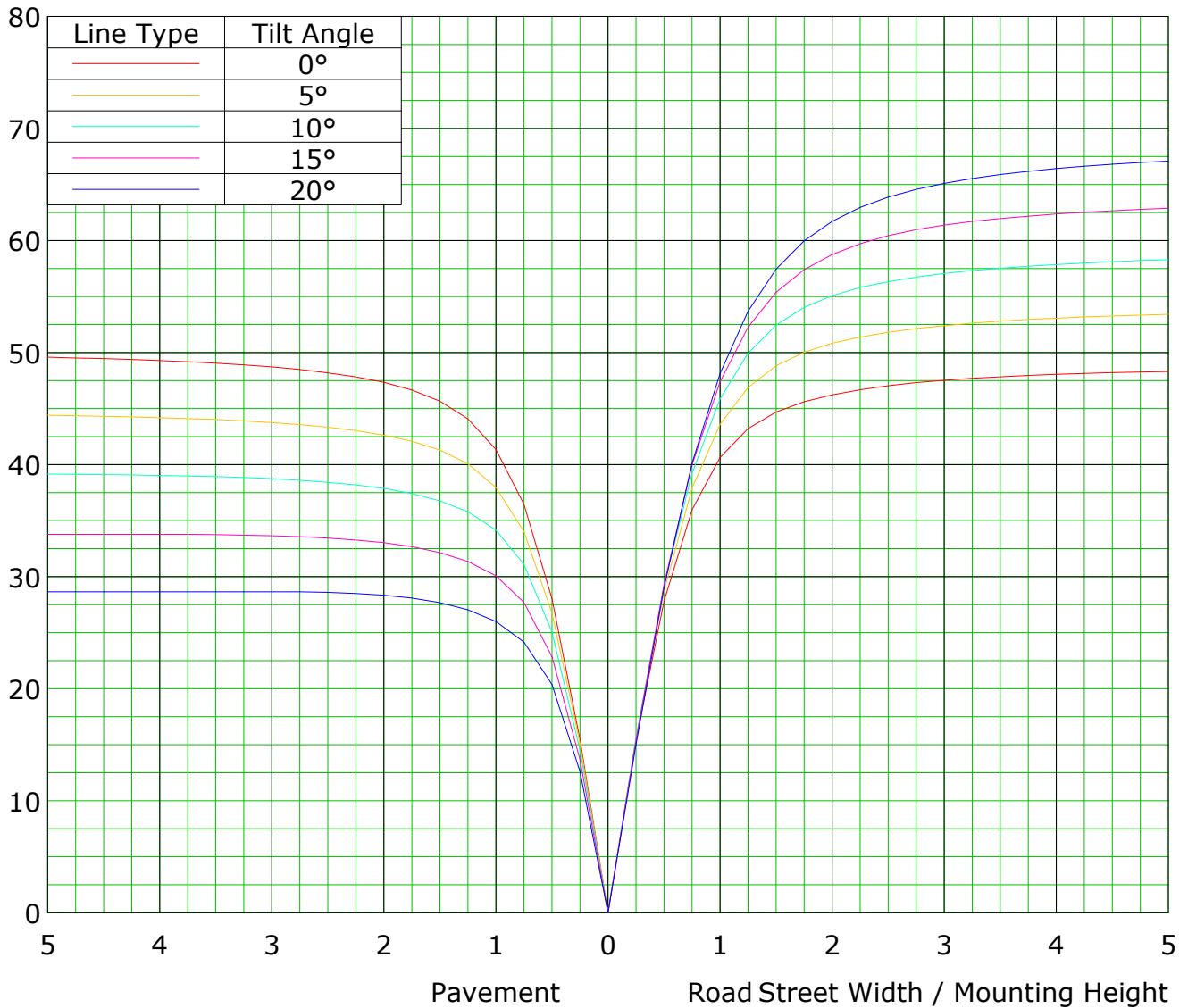
— (1%): 0.2 lx	— (2%): 0.4 lx
— (5%): 1.1 lx	— (10%): 2.2 lx
— (20%): 4.4 lx	— (50%): 11.0 lx
— (100%): 22.0 lx	

C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:5.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
Humidity:
Inspector:

Roadway CU Curve

Efficiency(%)



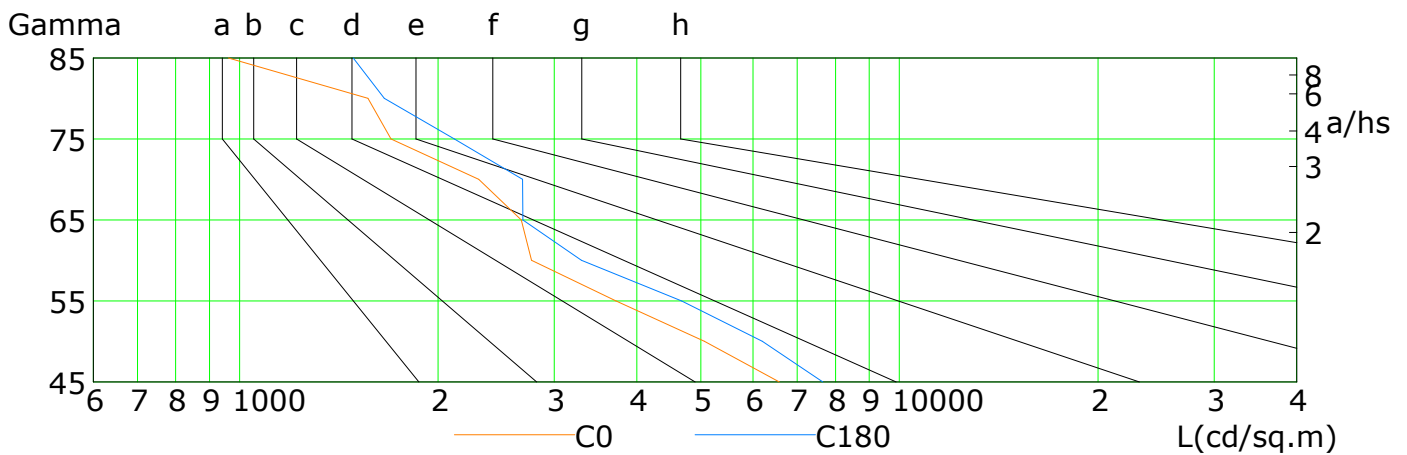
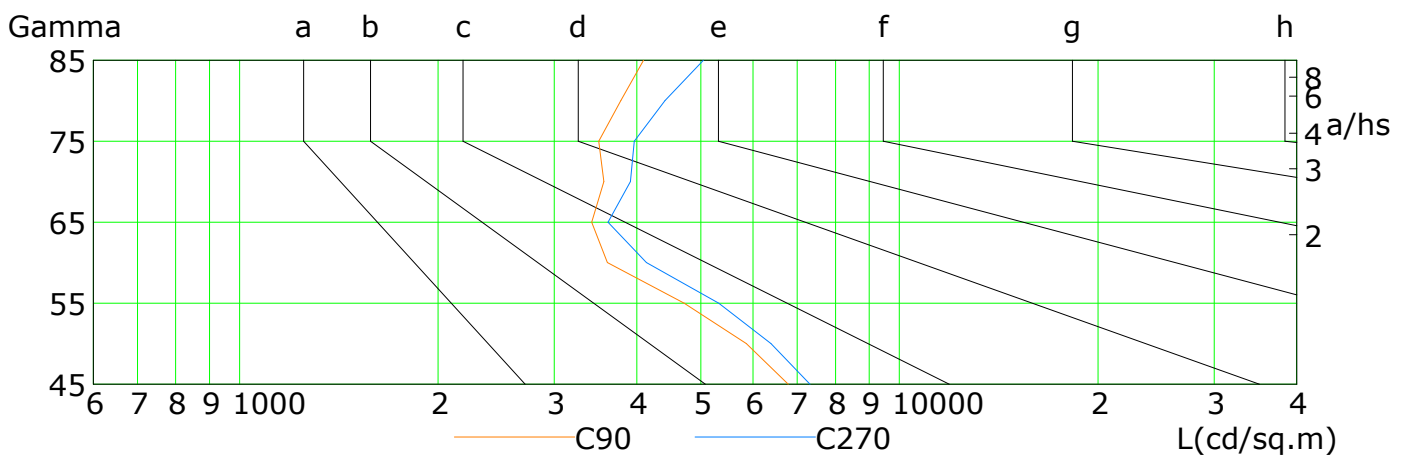
C Plane (°):0.0-360.0: 90.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

Gamma Plane (°):0.0-90.0:5.0
 Test Device: GPM-1600L
 Distance: 7.172 m [K=1.0000]
 Humidity:
 Inspector:

Lum Limit Curve

Dazzle	Quality	Illuminance (lx)									
		2000	1000	500	<=300						
1.15	A										
1.50	B										
1.85	C										
2.20	D										
2.55	E										

a b c d e f g h

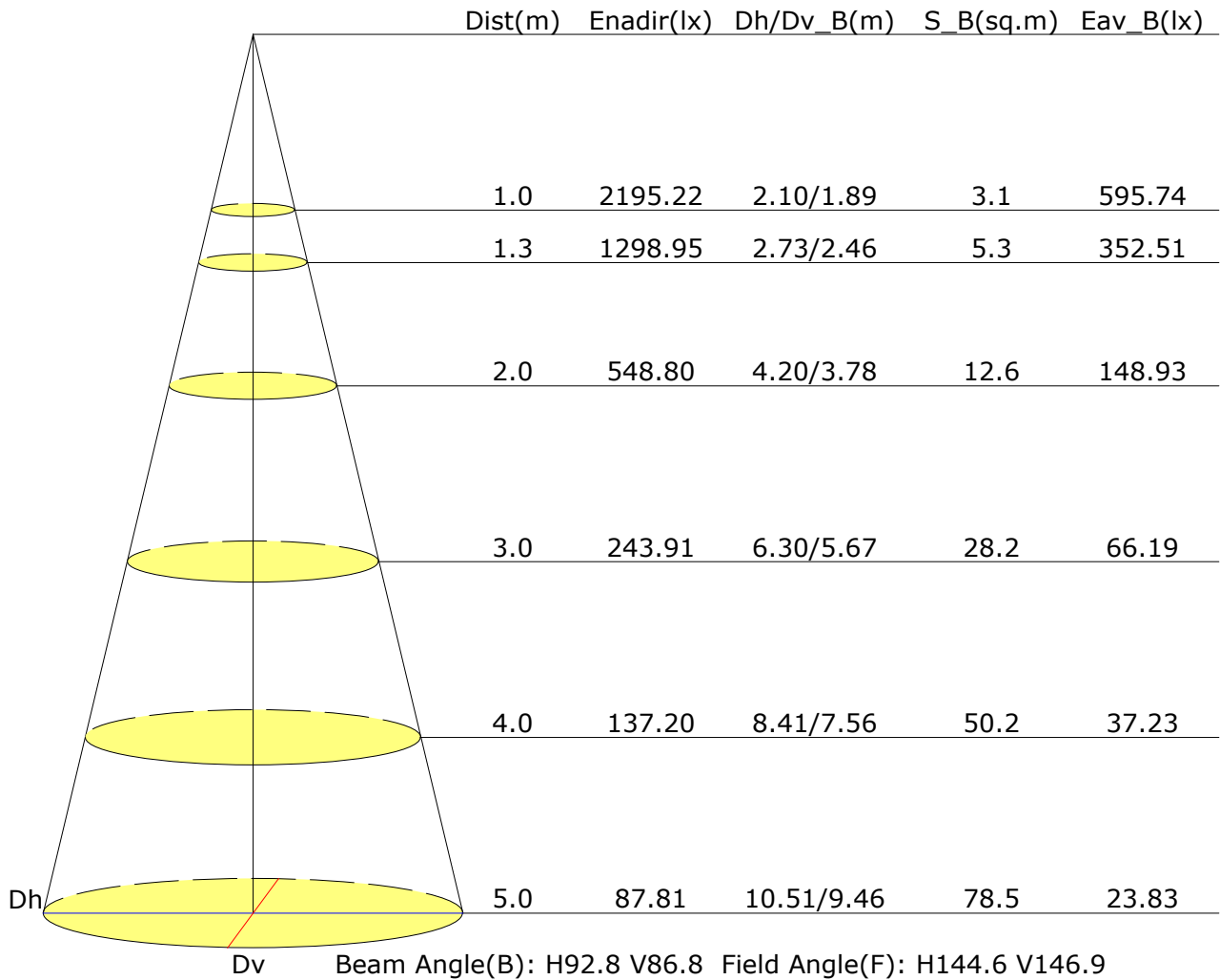


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	6577	5065	3719	2770	2672	2305	1697	1564	962
C90	6782	5863	4720	3611	3417	3564	3504	3785	4095
C180	7656	6194	4676	3297	2688	2683	2116	1657	1486
C270	7322	6386	5325	4138	3617	3914	3964	4414	5045

C Plane (°):0.0-360.0: 90.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

Gamma Plane (°):0.0-90.0:5.0
 Test Device: GPM-1600L
 Distance: 7.172 m [K=1.0000]
 Humidity:
 Inspector:

Illuminance at a Distance

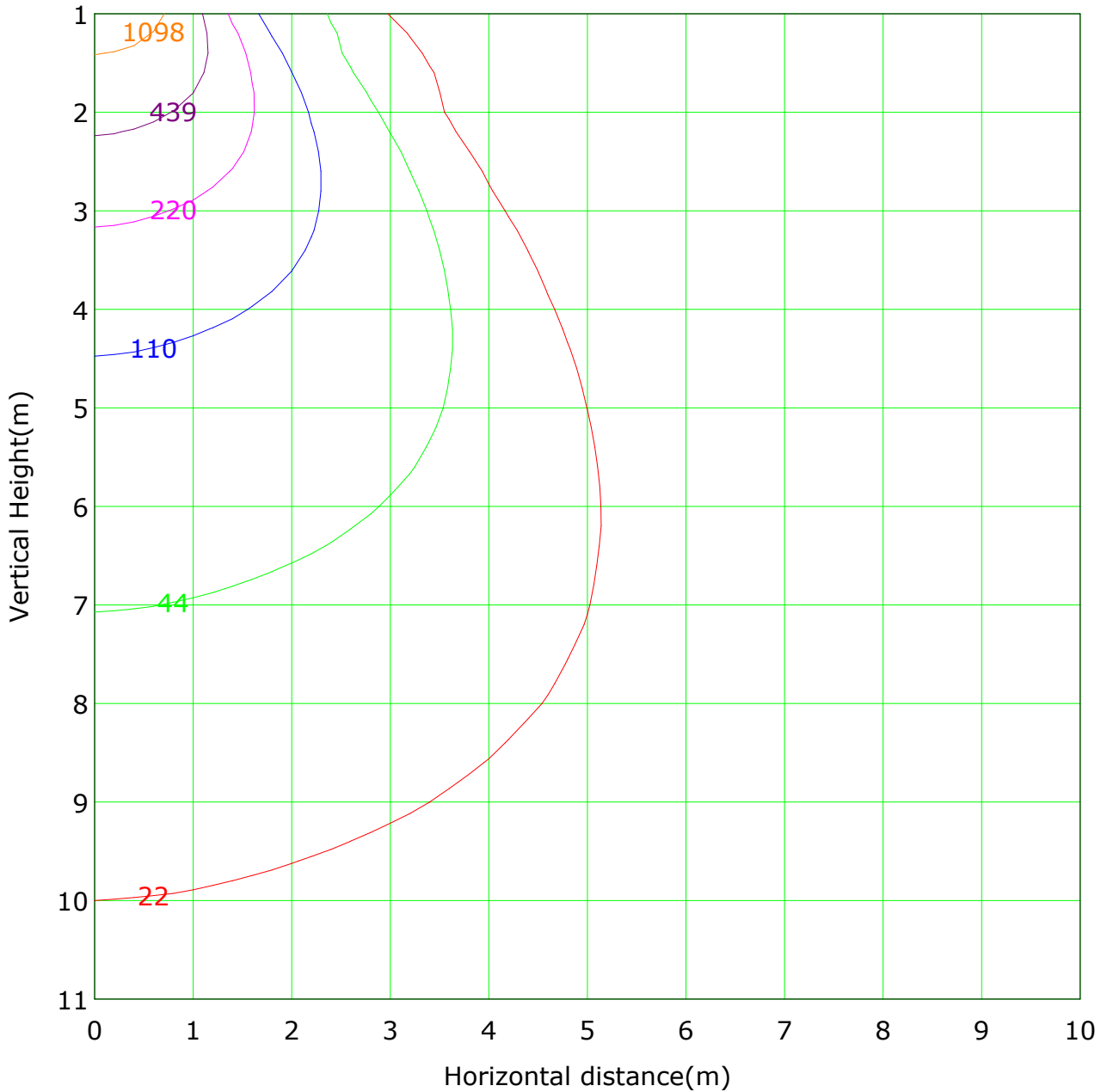


C Plane (°):0.0-360.0: 90.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

Gamma Plane (°):0.0-90.0:5.0
 Test Device: GPM-1600L
 Distance: 7.172 m [K=1.0000]
 Humidity:
 Inspector:



Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 2195.2 lx
 — (1%): 22.0 lx — (2%): 43.9 lx
 — (5%): 109.8 lx — (10%): 219.5 lx
 — (20%): 439.0 lx — (50%): 1097.6 lx
 — (100%): 2195.2 lx

C Plane (°):0.0-360.0: 90.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

Gamma Plane (°):0.0-90.0:5.0
 Test Device: GPM-1600L
 Distance: 7.172 m [K=1.0000]
 Humidity:
 Inspector:

Area Flux Table

Unit: lm/klm

-90	0.0	0.1	0.2	0.3	0.4	0.5	0.5	0.6	0.7	0.7	0.6	0.5	0.4	0.3	0.2	0.1	0.1	0.0	6.0	0.0
-80	0.0	0.1	0.3	0.5	0.7	0.9	1.1	1.3	1.4	1.4	1.3	1.1	0.9	0.6	0.4	0.2	0.1	0.0	12.2	2.8
-70	0.0	0.2	0.4	0.7	1.1	1.4	1.7	2.0	2.1	2.1	1.9	1.7	1.4	1.0	0.6	0.4	0.1	0.0	18.7	15.5
-60	0.0	0.2	0.5	1.0	1.4	2.0	2.8	3.5	3.9	3.9	3.4	2.7	1.9	1.4	0.9	0.4	0.2	0.0	30.3	28.7
-50	0.0	0.2	0.6	1.2	2.0	3.5	5.0	6.2	6.8	6.7	6.0	4.7	3.2	1.9	1.1	0.6	0.2	0.0	50.1	49.0
-40	0.0	0.3	0.7	1.5	3.1	5.4	7.7	9.5	10.4	10.3	9.3	7.3	4.8	2.7	1.3	0.7	0.2	0.0	75.3	74.6
-30	0.1	0.3	0.8	1.9	4.2	7.2	9.9	11.6	12.4	12.4	11.5	9.6	6.6	3.6	1.6	0.8	0.3	0.0	94.8	94.2
-20	0.1	0.3	0.9	2.3	5.1	8.5	11.1	12.7	13.5	13.4	12.5	10.8	8.0	4.5	1.9	0.8	0.3	0.0	106.6	106.1
-10	0.1	0.3	0.9	2.5	5.7	9.1	11.6	13.2	14.0	13.8	12.9	11.3	8.6	4.9	2.1	0.9	0.3	0.0	112.2	111.6
0	0.1	0.3	0.9	2.5	5.7	9.1	11.6	13.1	13.9	13.8	12.9	11.3	8.6	4.9	2.1	0.9	0.3	0.0	111.9	111.3
10	0.1	0.3	0.9	2.3	5.1	8.4	11.0	12.6	13.4	13.3	12.5	10.7	7.9	4.4	1.9	0.8	0.3	0.0	105.7	105.1
20	0.1	0.3	0.8	1.9	4.1	7.0	9.7	11.4	12.2	12.2	11.3	9.4	6.5	3.6	1.6	0.8	0.3	0.0	93.1	92.5
30	0.0	0.3	0.7	1.4	3.0	5.2	7.4	9.2	10.0	9.9	8.9	7.0	4.7	2.6	1.3	0.7	0.2	0.0	72.6	71.8
40	0.0	0.2	0.6	1.1	2.0	3.3	4.8	5.9	6.4	6.3	5.6	4.4	3.0	1.8	1.1	0.6	0.2	0.0	47.3	46.3
50	0.0	0.2	0.5	0.9	1.4	1.9	2.6	3.2	3.5	3.5	3.1	2.5	1.8	1.3	0.9	0.4	0.2	0.0	28.1	26.4
60	0.0	0.2	0.4	0.7	1.0	1.4	1.6	1.8	1.9	1.9	1.8	1.6	1.3	0.9	0.6	0.3	0.1	0.0	17.6	14.0
70	0.0	0.1	0.3	0.4	0.6	0.8	1.0	1.2	1.2	1.2	1.1	1.0	0.8	0.6	0.4	0.2	0.1	0.0	11.1	1.3
80	0.0	0.1	0.1	0.2	0.3	0.4	0.5	0.5	0.6	0.6	0.5	0.4	0.4	0.3	0.2	0.1	0.0	0.0	5.3	0.0
90	0.7	4.1	10.6	23.2	46.9	76.0	101.7	119.6	128.1	127.3	117.2	97.9	70.6	41.3	20.1	9.6	3.4	0.5	999	
Flux(T)	0.0	0.7	7.7	20.5	44.2	73.3	98.9	116.8	125.3	124.4	114.4	95.1	67.8	38.4	17.3	6.4	0.2	0.0		951
Flux(E)	0.0	0.7	7.7	20.5	44.2	73.3	98.9	116.8	125.3	124.4	114.4	95.1	67.8	38.4	17.3	6.4	0.2	0.0		951

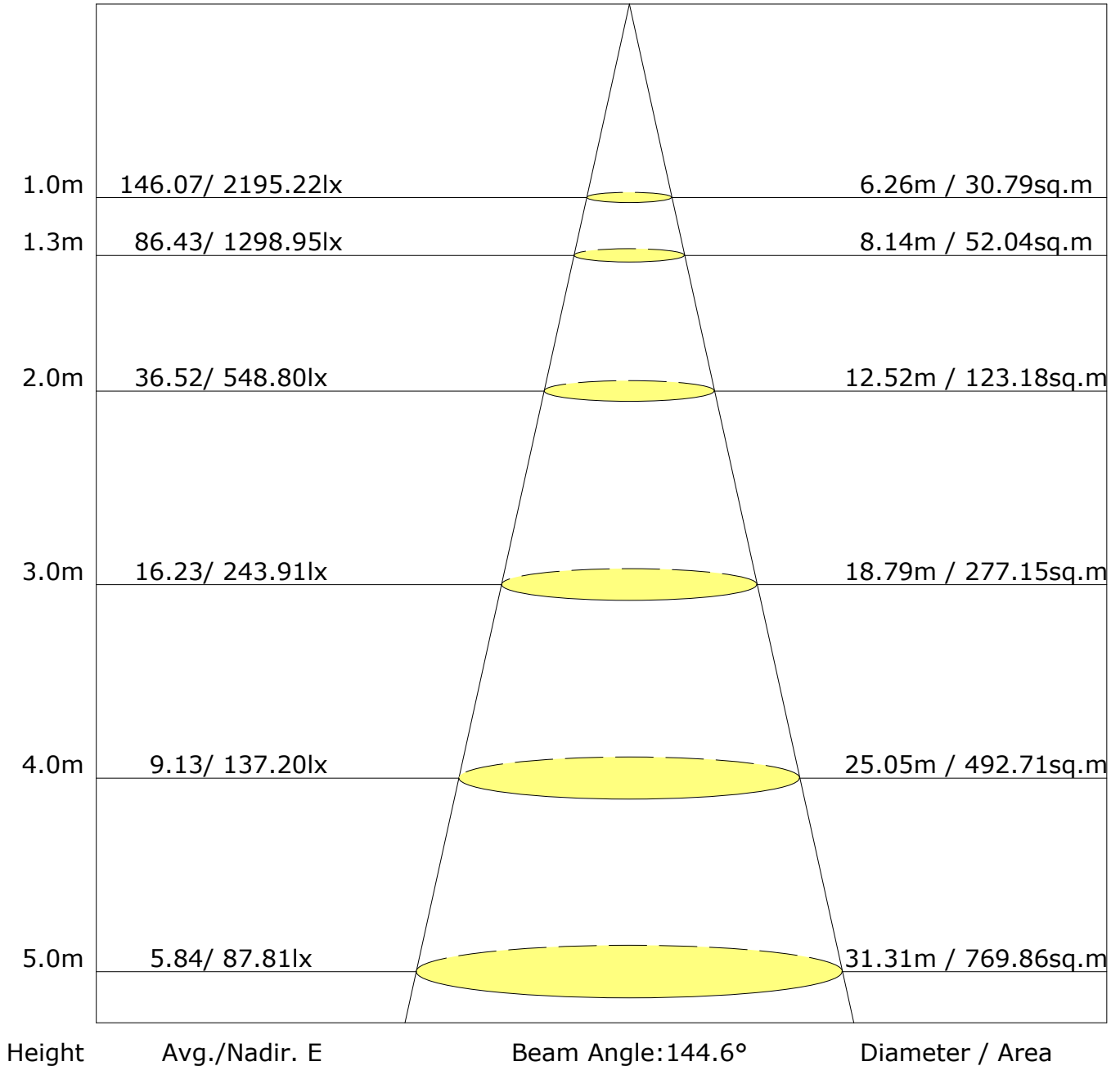
Gamma Plane (°): 0.0-90.0: 5.0
 Test Device: GPM-1600L
 Distance: 7.172 m [K=1.0000]
 Humidity:
 Inspector:

C Plane (°): 0.0-360.0: 90.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:



The Average Illuminance Effective Figure

Flux Out: 4498.12lm



C Plane (°):0.0-360.0: 90.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

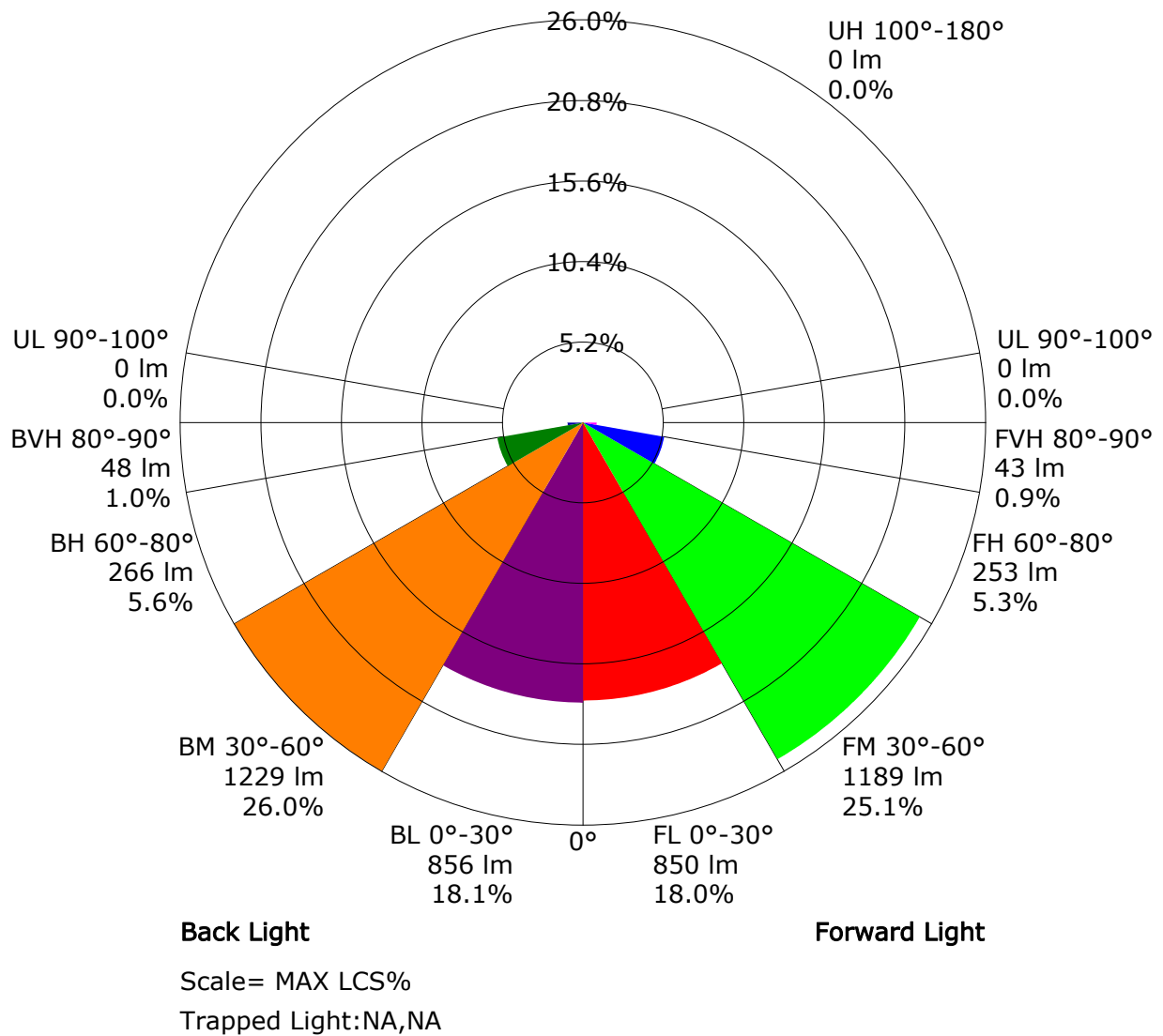
Gamma Plane (°):0.0-90.0:5.0
 Test Device: GPM-1600L
 Distance: 7.172 m [K=1.0000]
 Humidity:
 Inspector:

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	16.7	17.9	17.0	18.1	18.4	17.1	18.3	17.4	18.5	18.8
3H	17.4	18.5	17.7	18.8	19.1	18.0	19.1	18.3	19.4	19.7
4H	17.7	18.7	18.0	19.0	19.3	18.5	19.6	18.9	19.9	20.2
6H	17.9	18.9	18.2	19.2	19.5	19.1	20.1	19.4	20.4	20.7
8H	18.0	18.9	18.3	19.2	19.6	19.3	20.3	19.7	20.6	20.9
12H	18.0	18.9	18.4	19.2	19.6	19.6	20.5	19.9	20.8	21.1
X=4H Y=2H	17.0	18.0	17.3	18.3	18.6	17.3	18.4	17.7	18.7	19.0
3H	17.9	18.8	18.3	19.2	19.5	18.5	19.4	18.9	19.7	20.1
4H	18.3	19.1	18.7	19.5	19.8	19.1	20.0	19.5	20.3	20.7
6H	18.7	19.4	19.1	19.8	20.2	19.8	20.6	20.3	21.0	21.4
8H	18.8	19.5	19.2	19.9	20.3	20.2	20.9	20.6	21.3	21.7
12H	18.9	19.5	19.3	19.9	20.3	20.5	21.1	21.0	21.5	22.0
X=8H Y=4H	18.5	19.2	19.0	19.6	20.0	19.3	20.0	19.7	20.4	20.8
6H	19.0	19.6	19.5	20.0	20.5	20.2	20.7	20.6	21.1	21.6
8H	19.2	19.7	19.7	20.2	20.6	20.6	21.1	21.1	21.5	22.0
12H	19.4	19.8	19.9	20.3	20.8	21.0	21.4	21.5	21.9	22.4
X=12H Y=4H	18.6	19.2	19.0	19.6	20.0	19.3	19.9	19.7	20.3	20.8
6H	19.1	19.6	19.6	20.0	20.5	20.2	20.7	20.7	21.1	21.6
8H	19.4	19.8	19.8	20.2	20.7	20.7	21.1	21.2	21.6	22.1
Variations with the observer position at spacings:										
S=1.0H	+0.4/-0.6					+0.3/-0.4				
S=1.5H	+0.9/-1.4					+0.7/-1.0				
S=2.0H	+1.9/-1.6					+1.5/-1.5				

Calculate in accordance with CIE Pub.117. The table is revised with 4735lm ($8\log(F/F_0) = 5.4$).

LCS Graph



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	0.66	0.75	0.81	0.86	0.92	0.96	0.99	1.03	1.05
	0.30		0.59	0.68	0.75	0.80	0.87	0.91	0.95	0.99	1.02
	0.20		0.54	0.64	0.70	0.75	0.82	0.88	0.91	0.96	0.99
0.50	0.50	0.20	0.64	0.73	0.79	0.83	0.89	0.93	0.95	0.99	1.01
	0.30		0.58	0.67	0.74	0.78	0.85	0.89	0.92	0.96	0.99
	0.20		0.54	0.63	0.69	0.74	0.81	0.86	0.89	0.93	0.96
0.30	0.50	0.20	0.63	0.71	0.77	0.81	0.86	0.90	0.92	0.95	0.97
	0.30		0.57	0.66	0.72	0.77	0.83	0.86	0.89	0.93	0.95
	0.20		0.53	0.62	0.69	0.73	0.79	0.84	0.87	0.91	0.93
0.00	0.00	0.00	0.51	0.60	0.66	0.70	0.76	0.80	0.83	0.86	0.89
Rating:42W 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	0.86	0.70	0.59	0.51	0.41	0.34	0.29	0.23	0.19	
	0.30		0.72	0.60	0.51	0.45	0.37	0.31	0.27	0.21	0.18	
	0.20		0.61	0.52	0.46	0.41	0.34	0.29	0.25	0.20	0.17	
0.50	0.50	0.20	0.83	0.67	0.56	0.49	0.39	0.36	0.28	0.21	0.18	
	0.30		0.70	0.58	0.50	0.44	0.36	0.30	0.26	0.20	0.17	
	0.20		0.61	0.51	0.45	0.40	0.33	0.28	0.24	0.19	0.16	
0.30	0.50	0.20	0.80	0.64	0.54	0.47	0.37	0.31	0.26	0.20	0.17	
	0.30		0.68	0.56	0.48	0.42	0.34	0.29	0.25	0.19	0.16	
	0.20		0.60	0.50	0.44	0.39	0.32	0.27	0.23	0.18	0.15	
0.00	0.00	0.00	0.49	0.40	0.34	0.30	0.24	0.20	0.17	0.13	0.11	
Rating:42W 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	0.15	0.16	0.17	0.18	0.19	0.20	0.20	0.21	0.21
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.19
	0.20		0.05	0.07	0.08	0.10	0.12	0.13	0.14	0.16	0.17
0.50	0.50	0.20	0.15	0.16	0.17	0.17	0.18	0.19	0.20	0.20	0.20
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.19
	0.20		0.05	0.07	0.08	0.10	0.11	0.13	0.14	0.16	0.17
0.30	0.50	0.20	0.14	0.15	0.16	0.17	0.18	0.18	0.19	0.19	0.20
	0.30		0.09	0.10	0.12	0.13	0.14	0.15	0.16	0.17	0.18
	0.20		0.05	0.07	0.08	0.09	0.11	0.13	0.14	0.15	0.16
0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA
Rating:42W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											

Zonal Lumen (Continue 1)

cone flux(90°): 3198.32 lm

%lum = 67.5%
%lamp = 67.5%

cone flux(120°): 4124.45 lm

%lum = 87.1%
%lamp = 87.1%

LED Average Luminance Report

Avg.L	cd/m ²
L 0-180(65) av	3873.47
L 0-180(75) av	3384.11
L 0-180(85) av	4130.83
L 90-270(65) av	3652.81
L 90-270(75) av	3984.57
L 90-270(85) av	5510.33
L 45(65) av	3763.14
L 45(75) av	3684.34
L 45(85) av	4820.58

Standard: GB/T 29293-2012