

Report No.:

Test Time: 2026-01-12 16:12

Luminaire Property

Luminaire Manufacturer:

Luminaire Category:

Lamp Catalog: 3000K

Number of Lamps:

Luminous Length (mm): 600

Luminous Height (mm): 27

Current: 0.0690 A

Power Factor: 0.9480

Luminaire Description:

Lamp Description:

Lumens per Lamp:

Luminous Width (mm): 130

Voltage: 231.90 V

Power: 15.11 W

Photometric Results

CIE Class: Direct

Measurement Flux: 1770.1 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H89.8

Vertical Diffuse Angle(50%): V83.9

Luminous Efficacy (lm/w): 117.15

Max. Intensity: 495.1 cd/klm

S/MH(C0/C180): 1.21

Total Rated Lamp Lumens: 1770.1 lm

Efficiency: 100%

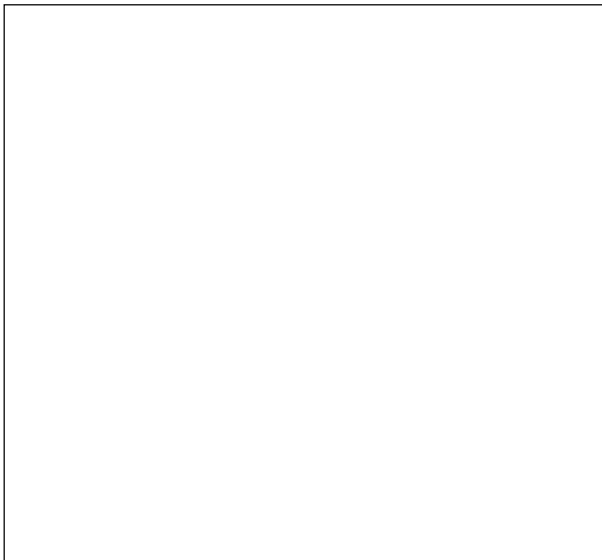
Upward Ratio: 0%

C0r0 Intensity: 495.1 cd/klm

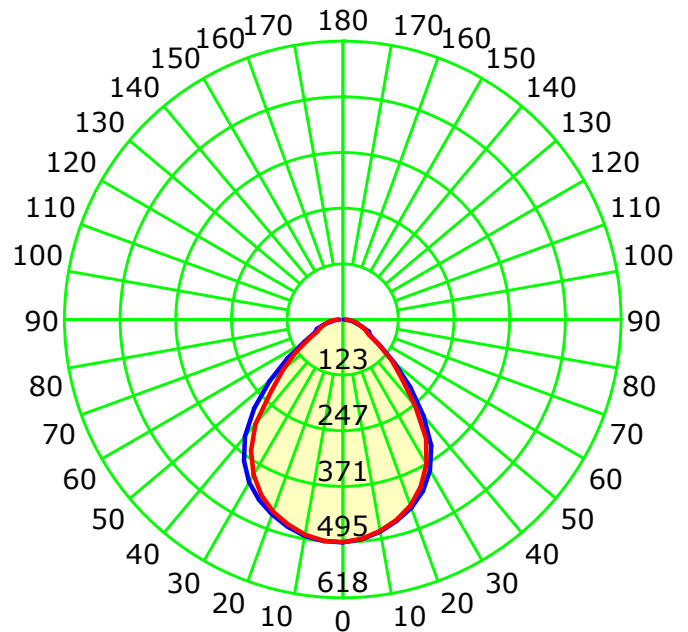
Pos of Max. Intensity: H0 V0

S/MH(C90/C270): 1.16

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd/klm

Average Diffuse Angle(50%): 86.8°

— 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

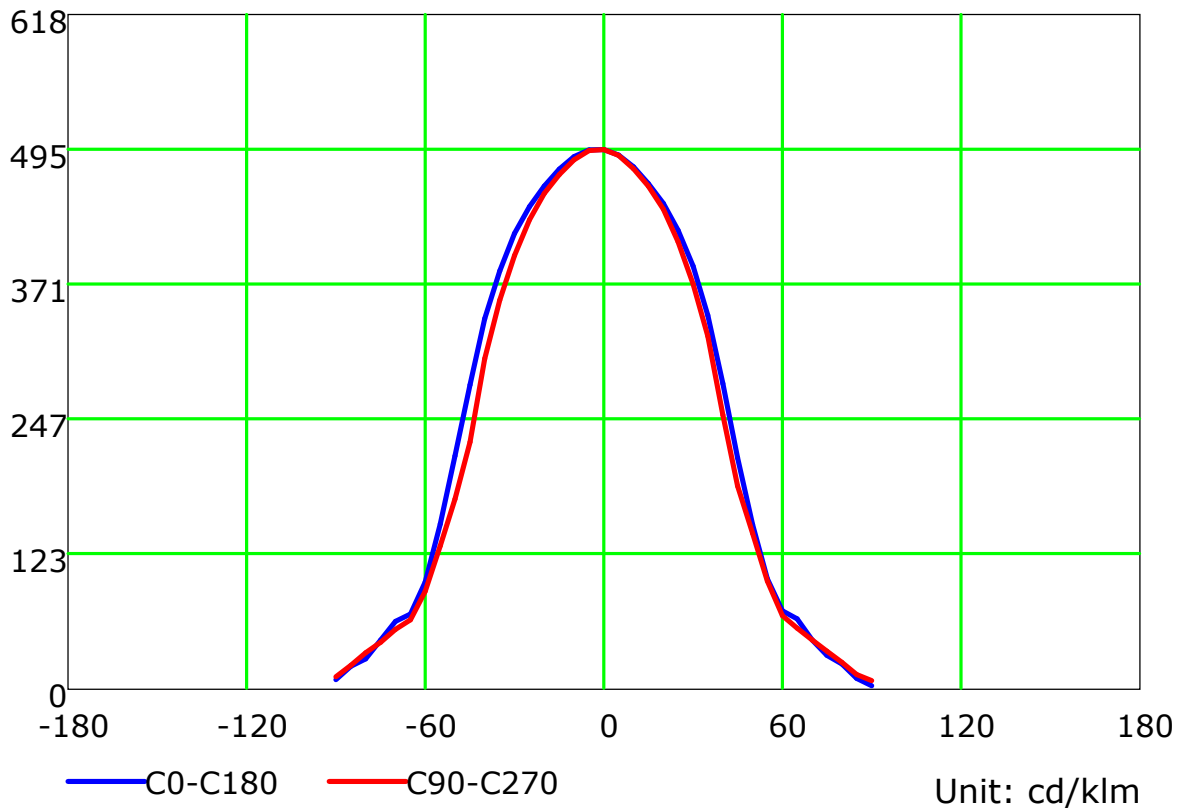
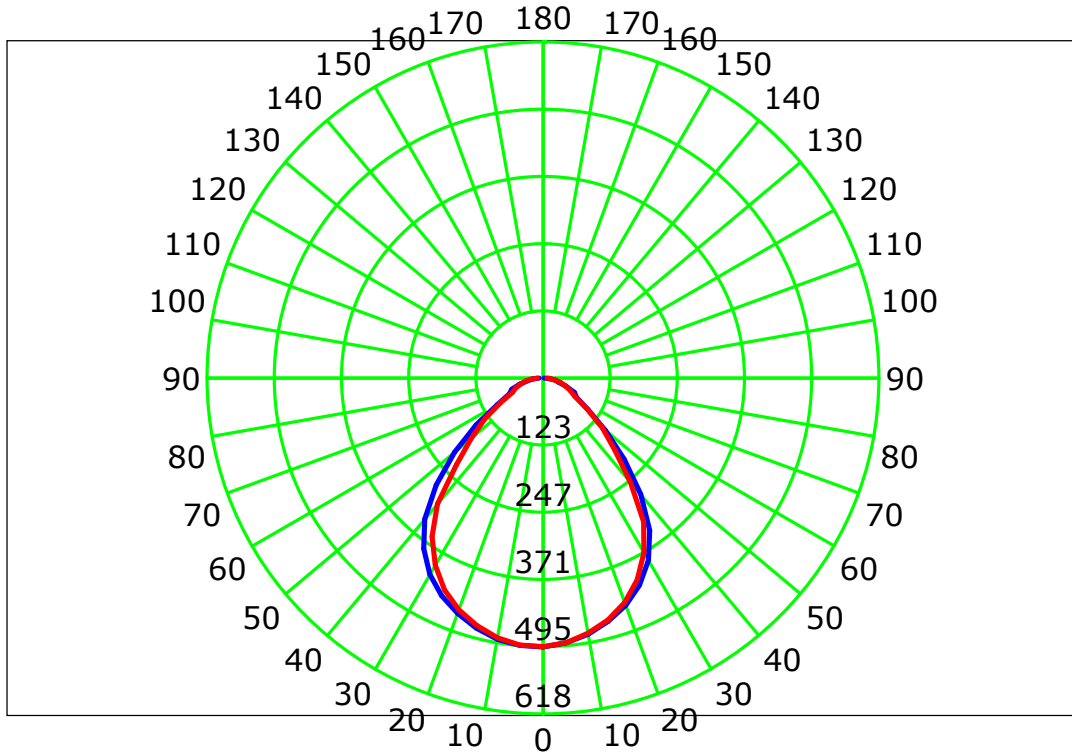
Distance: 7.172 m [K=1.0000]

Humidity:

Inspector:



Luminous Intensity Distribution Curve

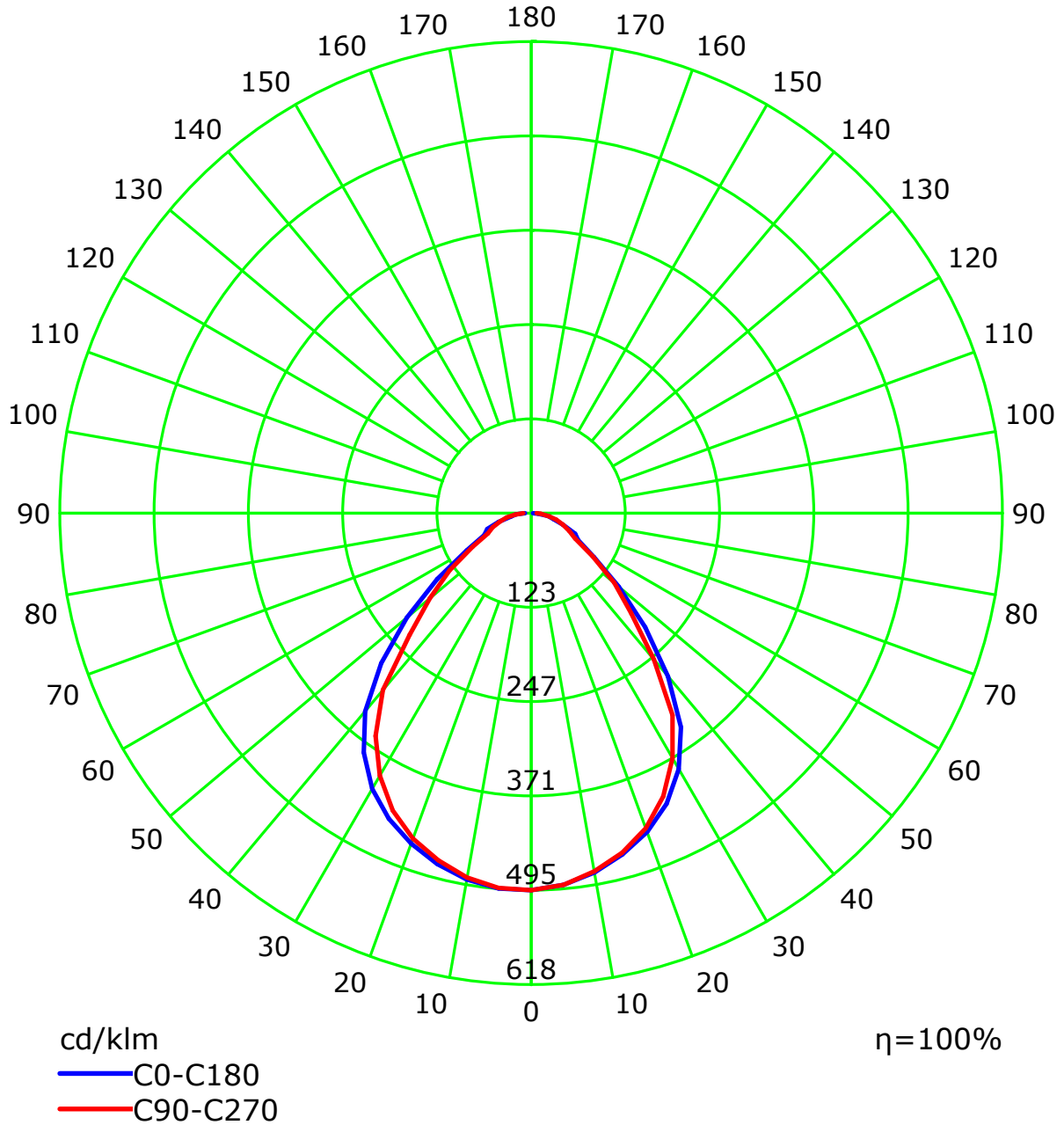


C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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:

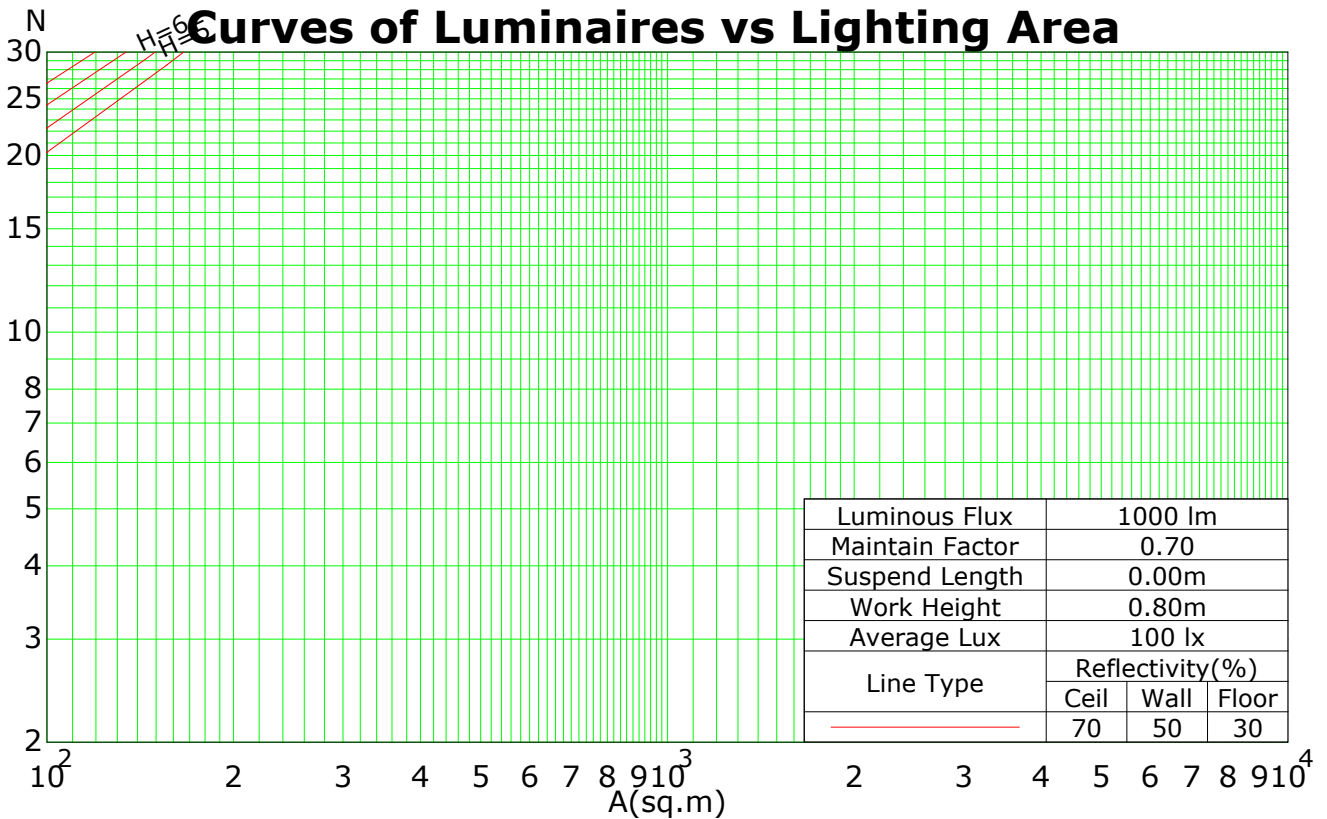
Gamma Plane (°):0.0-90.0:5.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
Humidity:
Inspector:



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	1.08	1.04	1.00	0.97	1.00	0.97	0.94	0.96	0.94	0.91	0.92	0.90	0.89	0.87
2	1.02	0.95	0.89	0.84	0.99	0.93	0.87	0.83	0.89	0.85	0.81	0.86	0.82	0.79	0.83	0.80	0.77	0.75
3	0.94	0.85	0.78	0.72	0.92	0.83	0.77	0.71	0.80	0.75	0.70	0.78	0.73	0.69	0.75	0.71	0.68	0.66
4	0.87	0.76	0.69	0.63	0.85	0.75	0.68	0.62	0.73	0.66	0.61	0.70	0.65	0.61	0.68	0.64	0.60	0.58
5	0.81	0.69	0.61	0.55	0.79	0.68	0.61	0.55	0.66	0.59	0.54	0.64	0.58	0.54	0.62	0.57	0.53	0.51
6	0.75	0.63	0.55	0.49	0.73	0.62	0.55	0.49	0.60	0.54	0.49	0.59	0.53	0.48	0.57	0.52	0.48	0.46
7	0.70	0.58	0.50	0.44	0.69	0.57	0.49	0.44	0.56	0.49	0.44	0.54	0.48	0.43	0.53	0.47	0.43	0.41
8	0.66	0.53	0.45	0.40	0.64	0.53	0.45	0.40	0.51	0.44	0.40	0.50	0.44	0.39	0.49	0.43	0.39	0.37
9	0.62	0.49	0.42	0.36	0.60	0.49	0.41	0.36	0.47	0.41	0.36	0.46	0.40	0.36	0.45	0.40	0.36	0.34
10	0.58	0.46	0.38	0.33	0.57	0.45	0.38	0.33	0.44	0.38	0.33	0.43	0.37	0.33	0.42	0.37	0.33	0.31

Spacing Criteria (0-180): 1.21
 Spacing Criteria (90-270): 1.16
 Spacing Criteria (Diagonal): 1.22

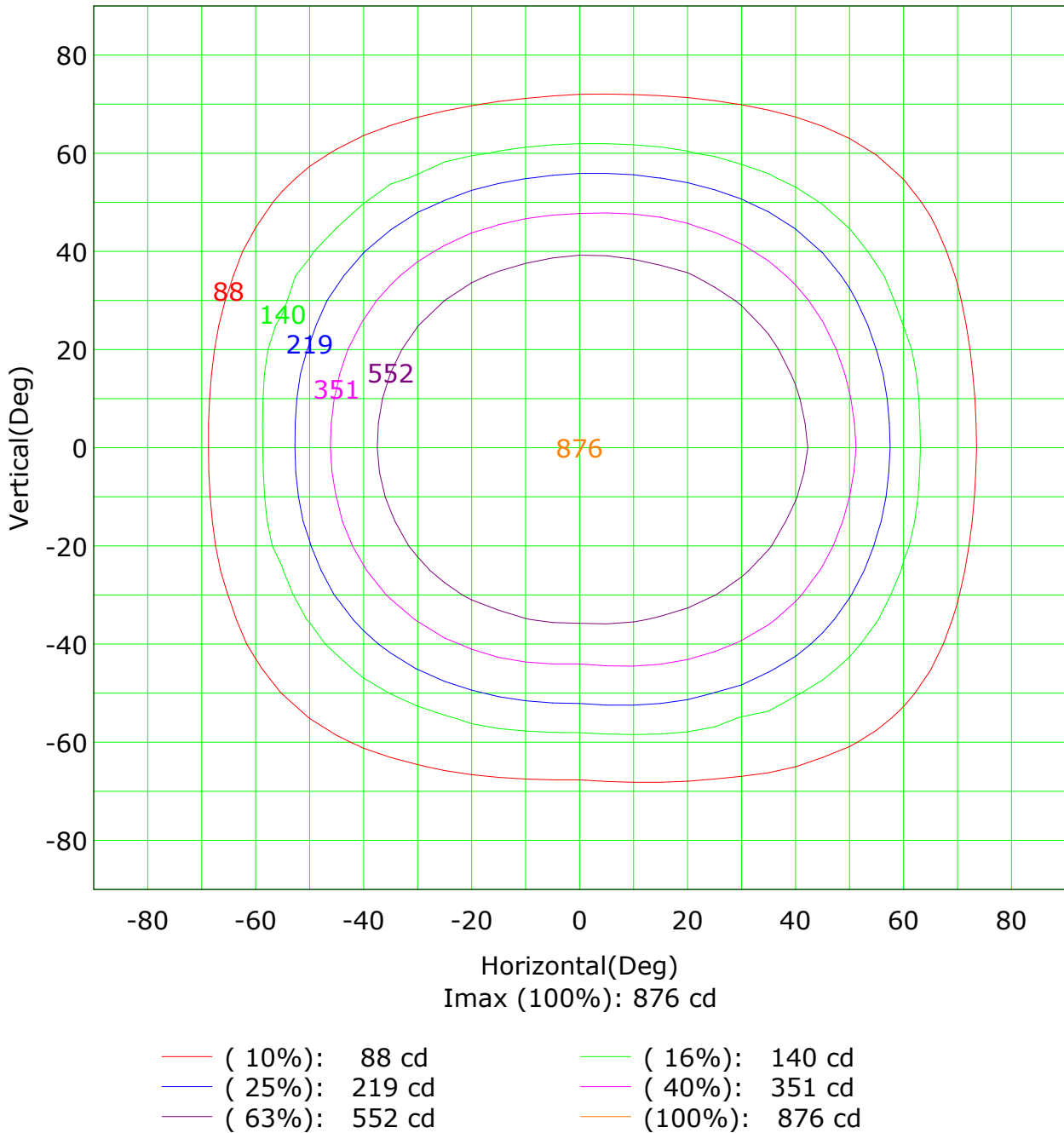


C Plane (°):0.0-360.0: 90.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

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



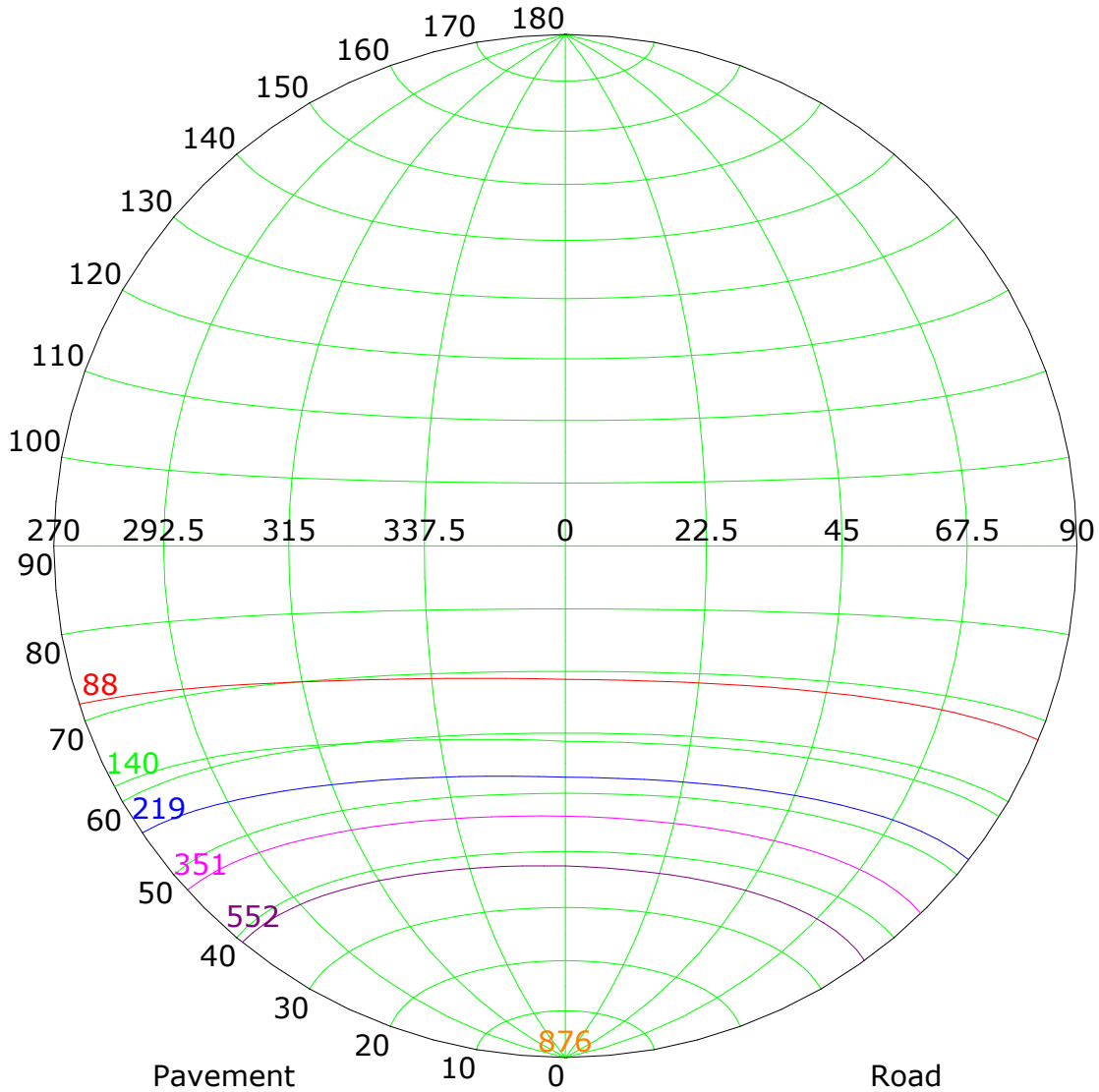
Isocandela (rectangle)



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%): 876 cd

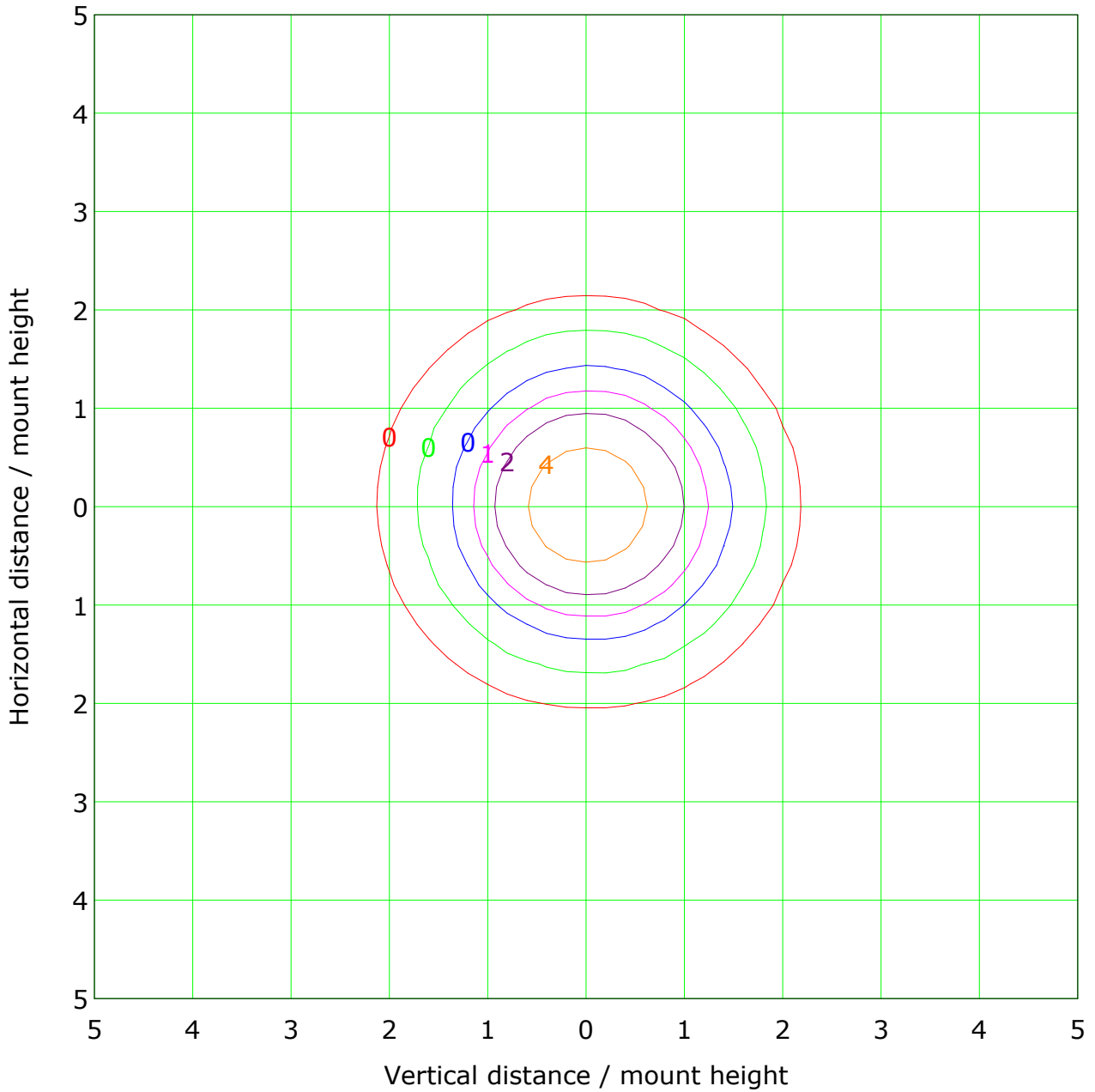
— (10%): 88 cd	— (16%): 140 cd
— (25%): 219 cd	— (40%): 351 cd
— (63%): 552 cd	— (100%): 876 cd

CIE: narrow - short
 CIE: Non-cut-off luminaire
 Max.At90: 25.177 cd/klm

IES: Non-cut-off
 Max.At80: 251.640 cd/klm
 Max.80-90: 45278296934309491000000000000000



IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 8.8 lx

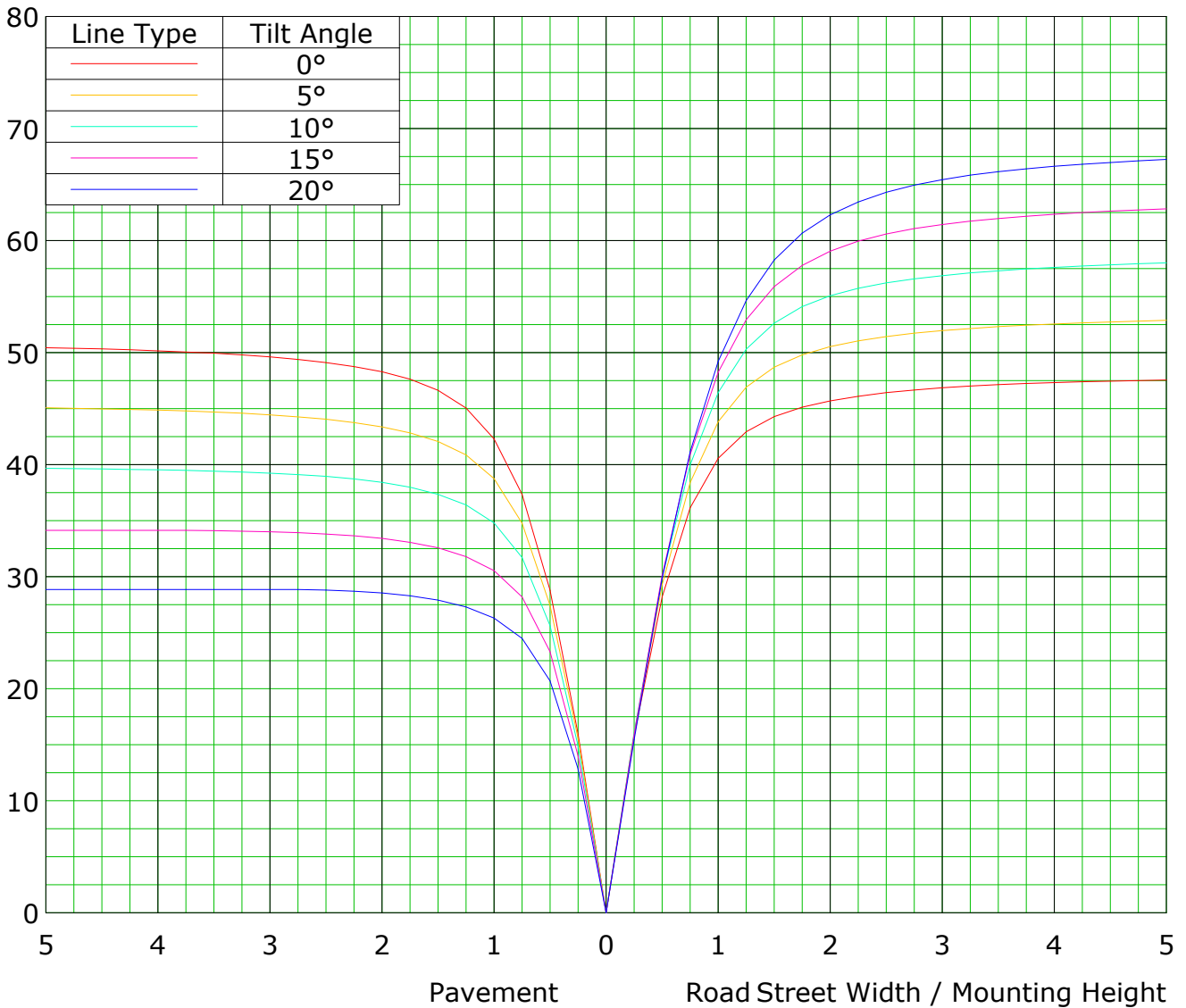
— (1%): 0.1 lx	— (2%): 0.2 lx
— (5%): 0.4 lx	— (10%): 0.9 lx
— (20%): 1.8 lx	— (50%): 4.4 lx
— (100%): 8.8 lx	

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:

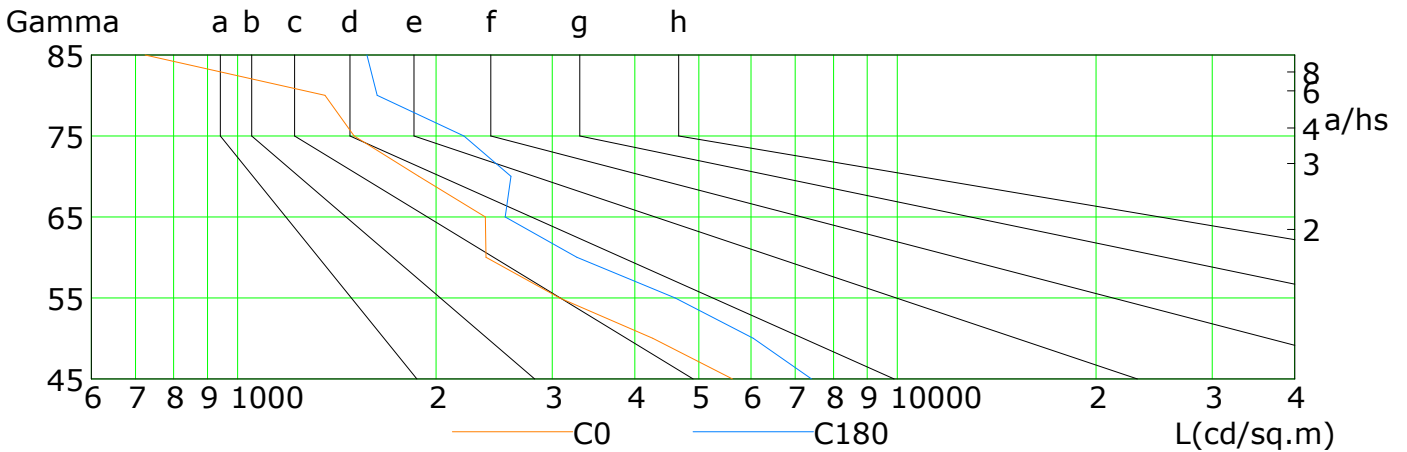
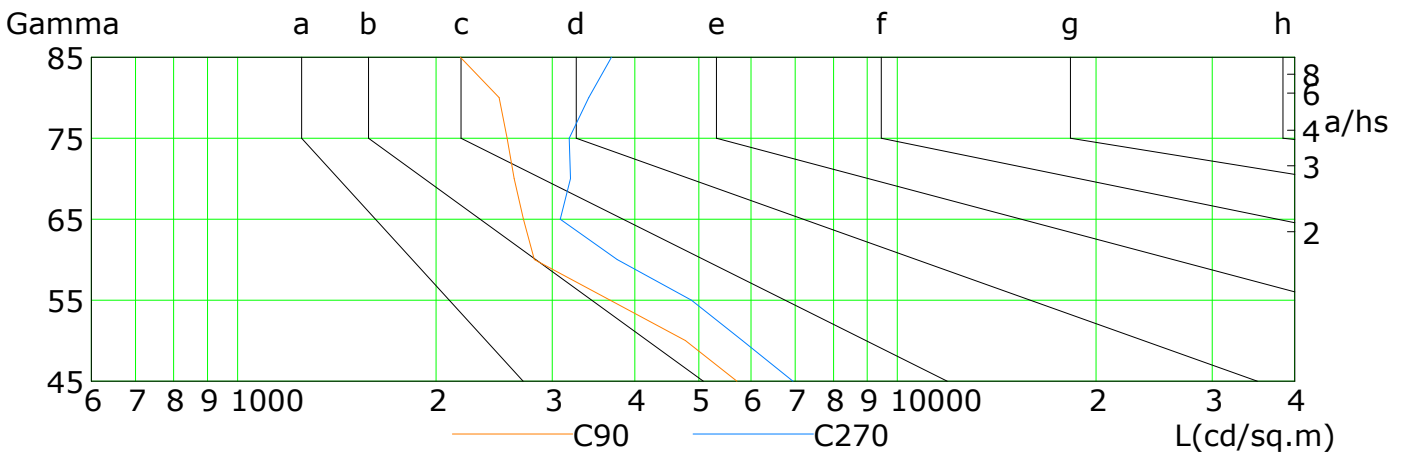
Gamma Plane (°):0.0-90.0:5.0
 Test Device: GPM-1600L
 Distance: 7.172 m [K=1.0000]
 Humidity:
 Inspector:



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

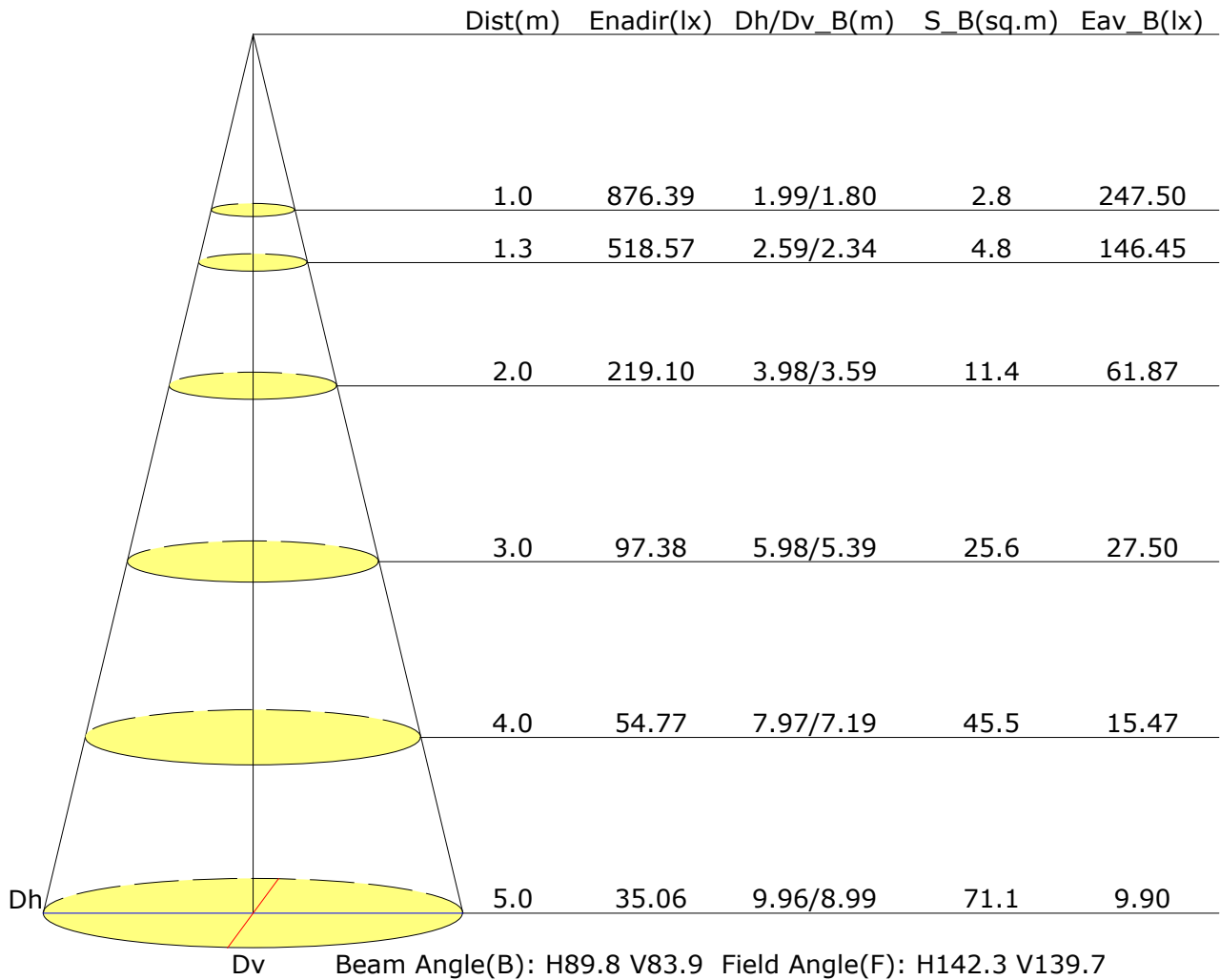


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	5626	4257	3077	2378	2375	1883	1502	1356	724
C90	5711	4773	3669	2816	2711	2625	2563	2490	2176
C180	7410	6044	4602	3267	2543	2598	2203	1628	1571
C270	6947	5824	4872	3762	3084	3196	3180	3407	3687

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

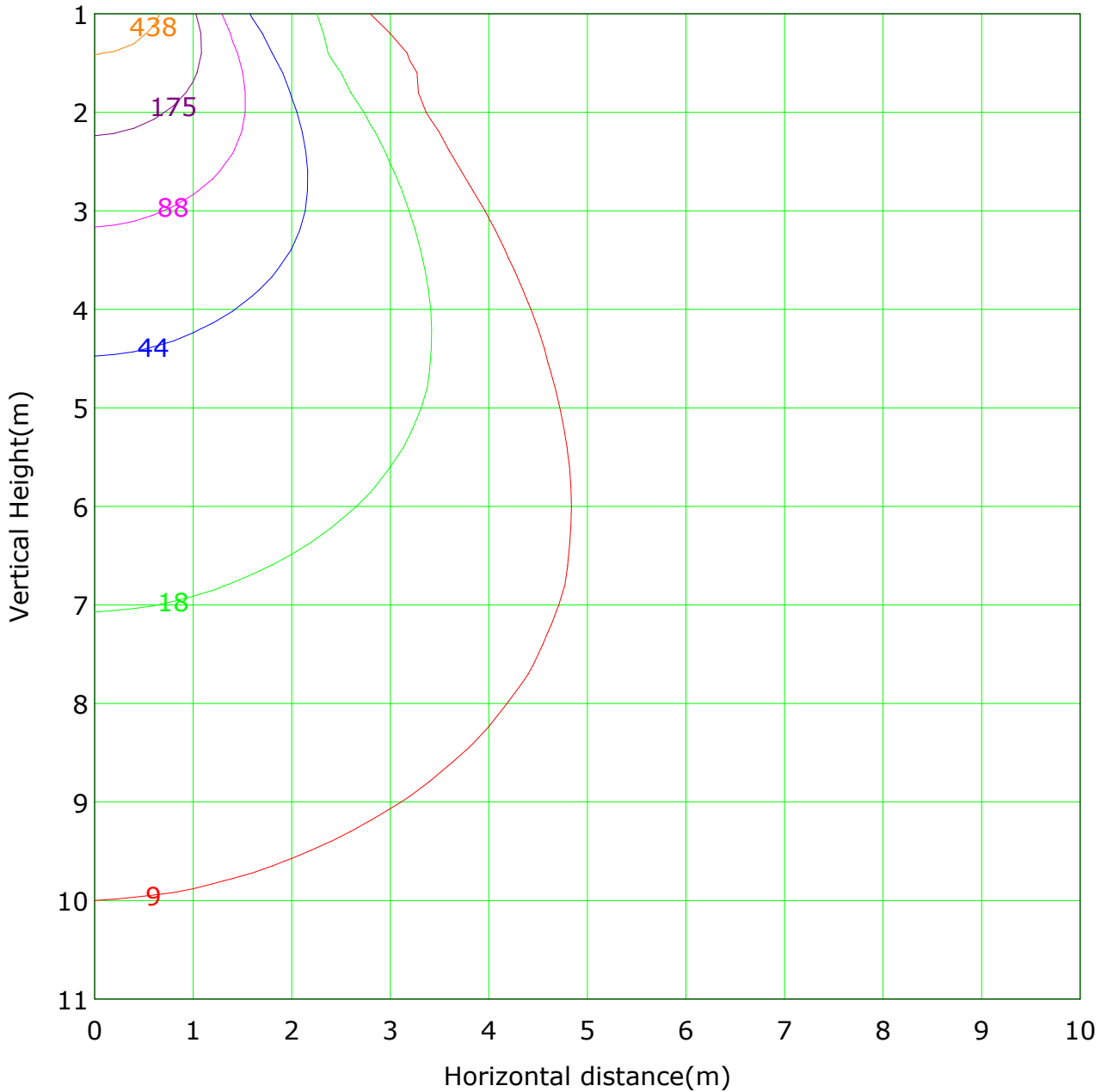
Gamma Plane (°):0.0-90.0:5.0
 Test Device: GPM-1600L
 Distance: 7.172 m [K=1.0000]
 Humidity:
 Inspector:

Illuminance at a Distance





Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 876.4 lx
 (1%): 8.8 lx (2%): 17.5 lx
 (5%): 43.8 lx (10%): 87.6 lx
 (20%): 175.3 lx (50%): 438.2 lx
 (100%): 876.4 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	0.6	0.6	0.6	0.5	0.4	0.3	0.2	0.1	0.0	0.0	5.9	0.0
-80	0.0	0.1	0.3	0.5	0.7	0.9	1.1	1.2	1.3	1.3	1.2	1.0	0.8	0.6	0.4	0.2	0.1	0.0	11.7	1.0
-70	0.0	0.2	0.4	0.7	1.1	1.4	1.7	1.9	2.0	2.0	1.9	1.6	1.3	0.9	0.6	0.3	0.1	0.0	18.1	13.8
-60	0.0	0.2	0.5	1.0	1.4	2.1	2.9	3.6	4.0	3.9	3.4	2.6	1.9	1.3	0.8	0.4	0.2	0.0	30.3	28.2
-50	0.1	0.2	0.7	1.2	2.1	3.6	5.2	6.4	7.0	6.9	6.0	4.6	3.0	1.8	1.0	0.5	0.2	0.0	50.5	49.3
-40	0.1	0.3	0.8	1.5	3.2	5.5	7.9	9.8	10.7	10.5	9.4	7.2	4.6	2.5	1.3	0.6	0.2	0.0	76.3	75.4
-30	0.1	0.3	0.8	2.0	4.4	7.4	10.2	12.0	12.9	12.8	11.7	9.6	6.4	3.4	1.5	0.7	0.2	0.0	96.6	95.9
-20	0.1	0.3	0.9	2.4	5.3	8.7	11.5	13.3	14.2	14.1	13.0	10.9	7.8	4.2	1.7	0.8	0.3	0.0	109.5	108.8
-10	0.1	0.4	1.0	2.7	5.9	9.4	12.1	13.9	14.8	14.7	13.6	11.5	8.4	4.6	1.9	0.8	0.3	0.0	115.7	115.1
0	0.1	0.4	1.0	2.6	5.8	9.3	12.0	13.8	14.7	14.6	13.5	11.4	8.3	4.5	1.8	0.8	0.3	0.0	115.0	114.4
10	0.1	0.3	0.9	2.3	5.2	8.5	11.2	13.0	13.9	13.8	12.8	10.7	7.5	4.0	1.7	0.8	0.3	0.0	107.1	106.5
20	0.1	0.3	0.8	1.9	4.2	7.0	9.7	11.6	12.4	12.3	11.3	9.1	6.0	3.2	1.4	0.7	0.2	0.0	92.3	91.5
30	0.1	0.3	0.7	1.4	3.0	5.1	7.2	8.9	9.7	9.5	8.5	6.5	4.3	2.3	1.2	0.6	0.2	0.0	69.6	68.7
40	0.0	0.2	0.6	1.1	1.9	3.2	4.6	5.6	5.9	5.8	5.1	4.0	2.6	1.6	1.0	0.5	0.2	0.0	44.1	42.8
50	0.0	0.2	0.5	0.9	1.3	1.9	2.5	3.0	3.1	3.0	2.7	2.2	1.7	1.2	0.8	0.4	0.2	0.0	25.6	23.3
60	0.0	0.2	0.4	0.7	1.0	1.3	1.5	1.7	1.7	1.7	1.6	1.4	1.1	0.8	0.5	0.3	0.1	0.0	16.0	9.1
70	0.0	0.1	0.3	0.4	0.6	0.8	0.9	1.0	1.0	1.0	1.0	0.8	0.7	0.5	0.3	0.2	0.1	0.0	9.8	0.0
80	0.0	0.1	0.2	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.1	0.1	0.0	0.0	4.3	0.0
90	0.8	4.3	10.9	23.9	47.9	77.1	103.2	121.7	130.6	129.2	117.4	96.0	67.1	37.9	18.3	8.7	3.1	0.5	999	
Flux(T)	0.0	0.8	7.8	20.8	44.8	74.0	100.0	118.4	127.2	125.8	114.0	92.6	63.7	34.5	14.8	4.5	0.0	0.0		944
Flux(E)	0.0	0.8	7.8	20.8	44.8	74.0	100.0	118.4	127.2	125.8	114.0	92.6	63.7	34.5	14.8	4.5	0.0	0.0		944

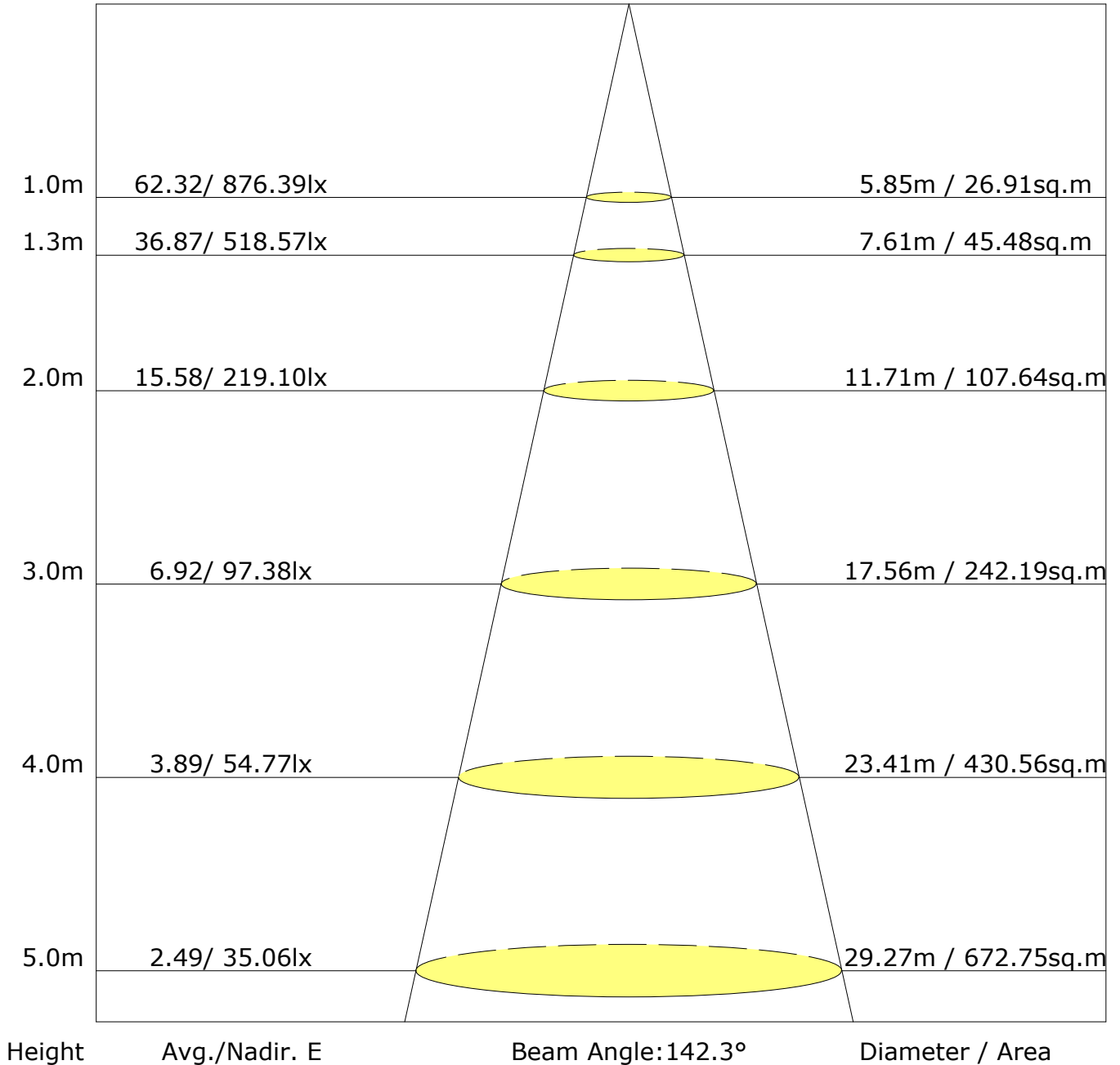
Gamma Plane (°): 0.0-90.0: 5.0
 Test Device: GPM-1600L
 Distance: 7.172 m [K=1.0000]
 Humidity:
 Inspector:

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



The Average Illuminance Effective Figure

Flux Out: 1676.92lm



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:

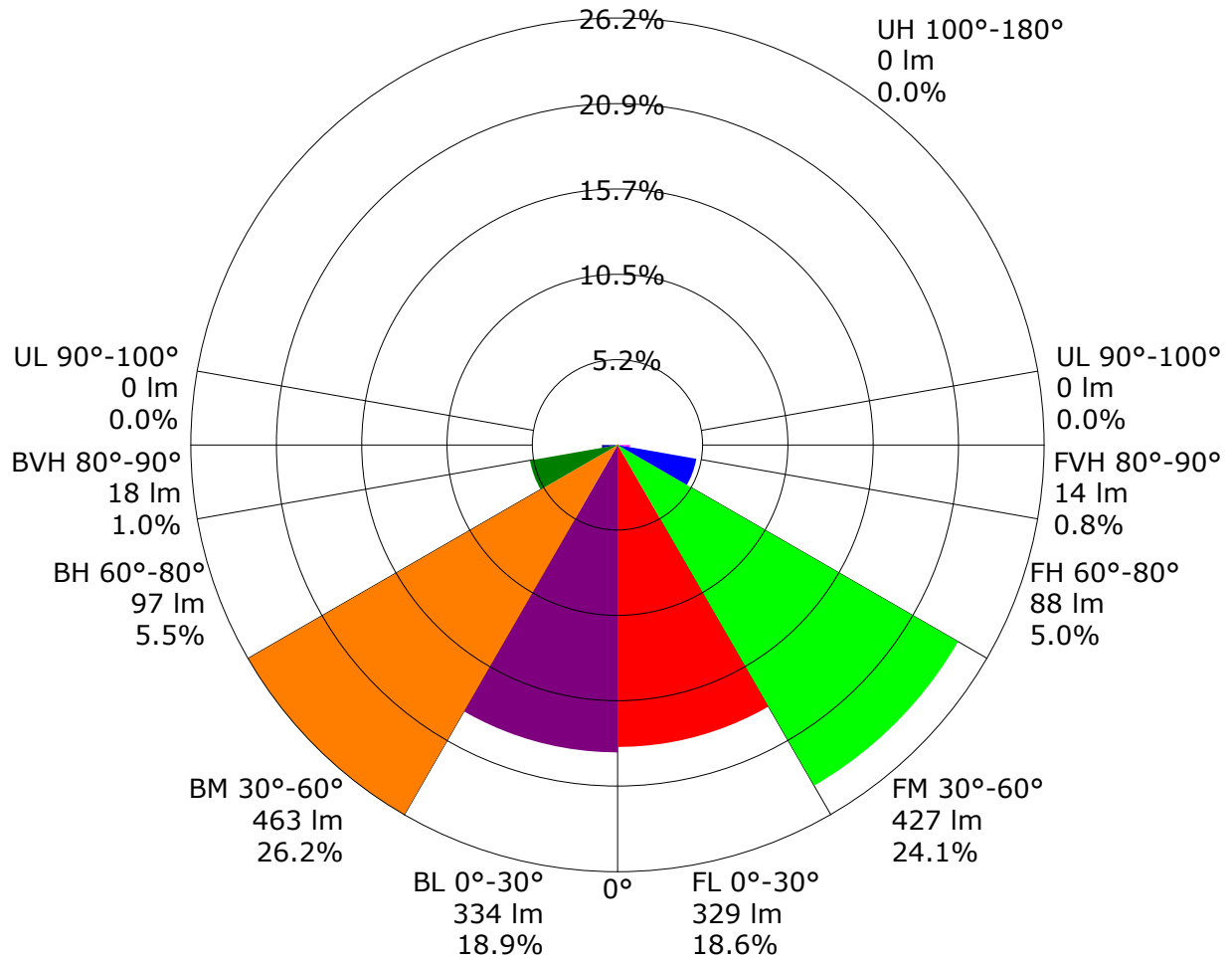
UGR Table

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	15.9	17.1	16.2	17.4	17.6	16.4	17.7	16.7	17.9	18.1
3H	16.6	17.7	16.9	18.0	18.3	17.2	18.4	17.6	18.6	18.9
4H	16.9	17.9	17.2	18.2	18.5	17.7	18.8	18.0	19.0	19.3
6H	17.1	18.1	17.5	18.4	18.7	18.2	19.1	18.5	19.4	19.8
8H	17.2	18.1	17.5	18.4	18.8	18.4	19.3	18.7	19.6	20.0
12H	17.2	18.1	17.6	18.4	18.8	18.6	19.5	18.9	19.8	20.1
X=4H Y=2H	16.2	17.3	16.5	17.5	17.8	16.7	17.7	17.0	18.0	18.3
3H	17.1	18.0	17.5	18.3	18.7	17.7	18.6	18.1	18.9	19.2
4H	17.5	18.3	17.9	18.6	19.0	18.3	19.1	18.7	19.4	19.8
6H	17.8	18.6	18.3	18.9	19.3	18.9	19.6	19.3	20.0	20.4
8H	18.0	18.6	18.4	19.0	19.4	19.2	19.8	19.6	20.2	20.6
12H	18.0	18.6	18.5	19.0	19.5	19.4	20.0	19.9	20.4	20.9
X=8H Y=4H	17.7	18.4	18.1	18.7	19.2	18.4	19.1	18.8	19.5	19.9
6H	18.2	18.7	18.6	19.1	19.6	19.2	19.7	19.6	20.1	20.6
8H	18.4	18.8	18.9	19.3	19.8	19.5	20.0	20.0	20.5	20.9
12H	18.5	18.9	19.0	19.4	19.9	19.9	20.3	20.4	20.8	21.3
X=12H Y=4H	17.7	18.3	18.2	18.7	19.2	18.4	19.0	18.9	19.4	19.9
6H	18.3	18.7	18.7	19.2	19.7	19.2	19.7	19.7	20.1	20.6
8H	18.5	18.9	19.0	19.4	19.9	19.6	20.0	20.1	20.5	21.0
Variations with the observer position at spacings:										
S=1.0H	+0.5/-0.7					+0.4/-0.5				
S=1.5H	+1.0/-1.4					+1.0/-1.2				
S=2.0H	+2.0/-1.6					+1.9/-1.8				

Calculate in accordance with CIE Pub.117. The table is revised with 1770lm ($8\log(F/F_0) = 2.0$).



LCS Graph



Back Light

Forward Light

Scale= MAX LCS%

Trapped Light:NA,NA

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	0.67	0.76	0.82	0.87	0.93	0.97	1.00	1.03	1.06
	0.30		0.60	0.70	0.76	0.81	0.88	0.92	0.95	1.00	1.03
	0.20		0.55	0.65	0.71	0.76	0.83	0.88	0.92	0.97	1.00
0.50	0.50	0.20	0.65	0.74	0.80	0.84	0.90	0.93	0.96	0.99	1.01
	0.30		0.59	0.68	0.75	0.79	0.85	0.90	0.93	0.97	0.99
	0.20		0.55	0.64	0.71	0.75	0.82	0.86	0.90	0.94	0.97
0.30	0.50	0.20	0.64	0.72	0.78	0.82	0.87	0.90	0.93	0.96	0.98
	0.30		0.59	0.67	0.73	0.78	0.83	0.87	0.90	0.93	0.96
	0.20		0.55	0.64	0.70	0.74	0.80	0.84	0.87	0.91	0.94
0.00	0.00	0.00	0.53	0.61	0.67	0.71	0.77	0.81	0.83	0.87	0.89
Rating:15W 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	0.84	0.69	0.58	0.50	0.40	0.33	0.29	0.22	0.18	
	0.30		0.70	0.59	0.51	0.45	0.36	0.31	0.26	0.21	0.17	
	0.20		0.60	0.51	0.45	0.40	0.33	0.28	0.25	0.20	0.17	
0.50	0.50	0.20	0.81	0.66	0.55	0.48	0.38	0.35	0.27	0.21	0.17	
	0.30		0.69	0.57	0.49	0.43	0.35	0.29	0.25	0.20	0.16	
	0.20		0.60	0.50	0.44	0.39	0.32	0.27	0.24	0.19	0.16	
0.30	0.50	0.20	0.78	0.63	0.53	0.46	0.36	0.30	0.26	0.20	0.16	
	0.30		0.67	0.55	0.47	0.41	0.33	0.28	0.24	0.19	0.16	
	0.20		0.59	0.49	0.43	0.38	0.31	0.26	0.23	0.18	0.15	
0.00	0.00	0.00	0.47	0.39	0.33	0.29	0.23	0.19	0.17	0.13	0.11	
Rating:15W 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	0.14	0.16	0.17	0.17	0.18	0.19	0.19	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:15W 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°): 1217.91 lm

%lum = 68.8%
%lamp = 68.8%

cone flux(120°): 1553.74 lm

%lum = 87.8%
%lamp = 87.8%

LED Average Luminance Report

Avg.L	cd/m ²
L 0-180(65) av	3554.61
L 0-180(75) av	3288.61
L 0-180(85) av	3872.38
L 90-270(65) av	3177.38
L 90-270(75) av	3353.74
L 90-270(85) av	4439.45
L 45(65) av	3366.00
L 45(75) av	3321.18
L 45(85) av	4155.91

Standard: GB/T 29293-2012