

Report No.:

Test Time: 2026-01-12 16:18

Luminaire Property

Luminaire Manufacturer:

Luminaire Category:

Lamp Catalog: 4000K

Number of Lamps:

Luminous Length (mm): 600

Luminous Height (mm): 27

Current: 0.0680 A

Power Factor: 0.9470

Luminaire Description:

Lamp Description:

Lumens per Lamp:

Luminous Width (mm): 130

Voltage: 232.00 V

Power: 14.95 W

Photometric Results

CIE Class: Direct

Measurement Flux: 1824.3 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H89.8

Vertical Diffuse Angle(50%): V83.9

Luminous Efficacy (lm/w): 122.03

Max. Intensity: 494.51 cd/klm

S/MH(C0/C180): 1.21

Total Rated Lamp Lumens: 1824.3 lm

Efficiency: 100%

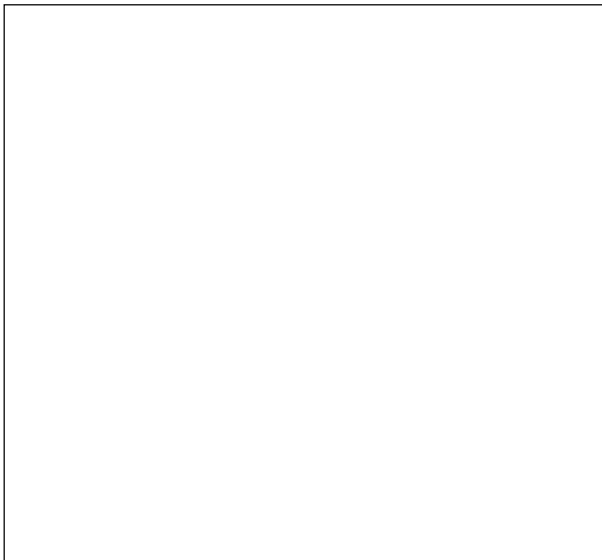
Upward Ratio: 0%

C0r0 Intensity: 494.48 cd/klm

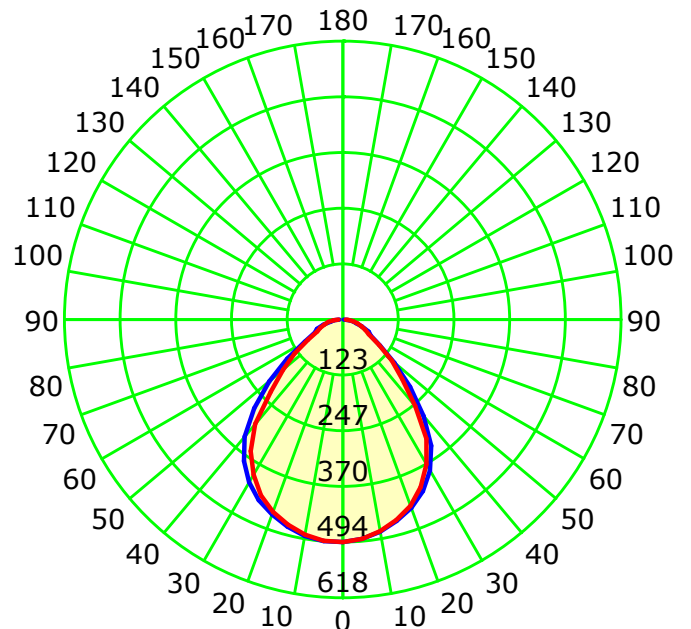
Pos of Max. Intensity: H90 V0

S/MH(C90/C270): 1.16

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd/klm

Average Diffuse Angle(50%): 86.9°

— 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

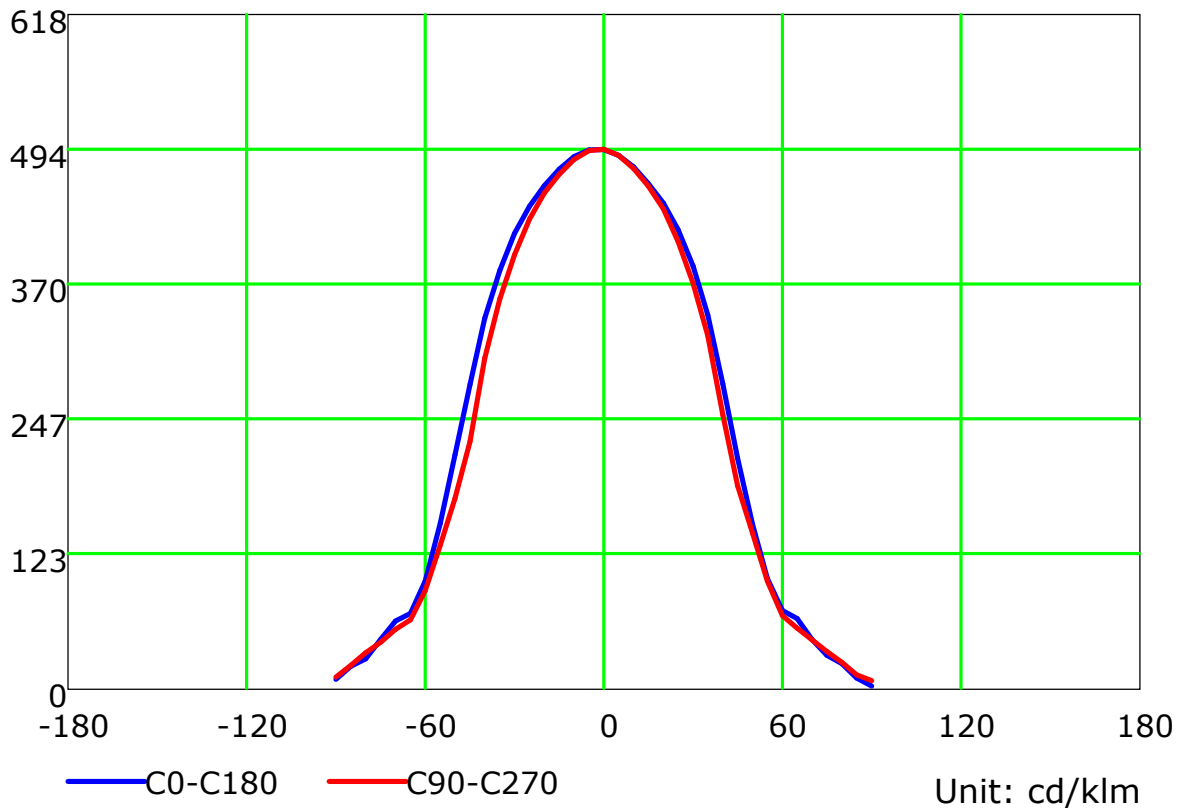
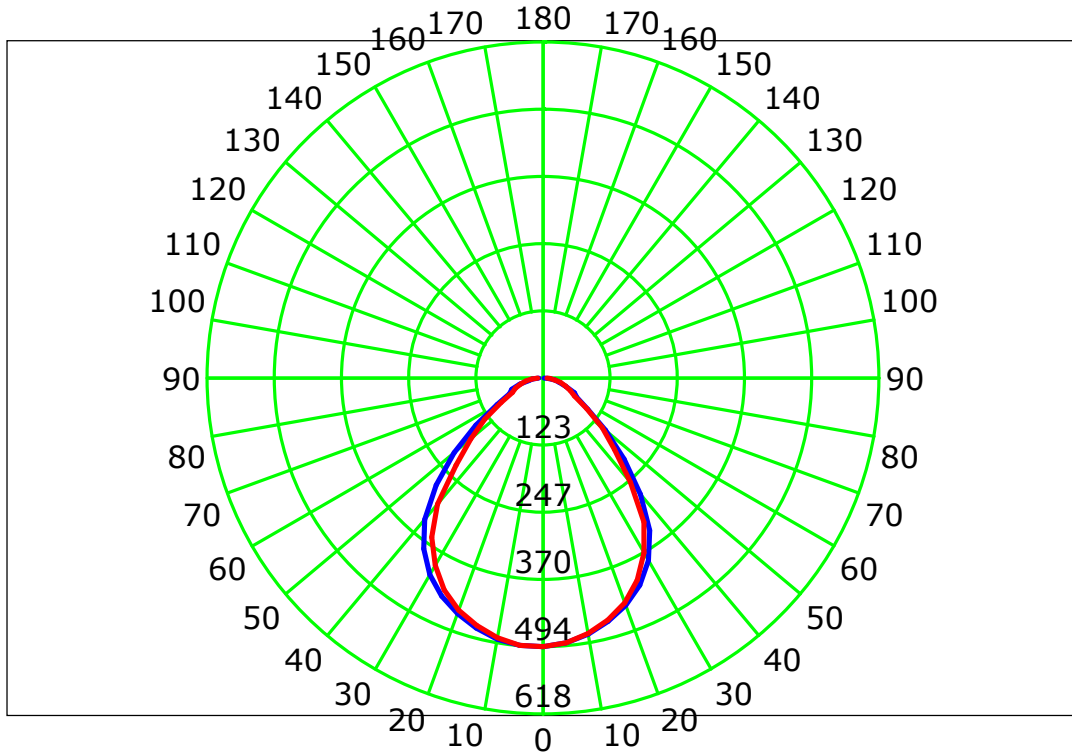
Distance: 7.172 m [K=1.0000]

Humidity:

Inspector:



Luminous Intensity Distribution Curve



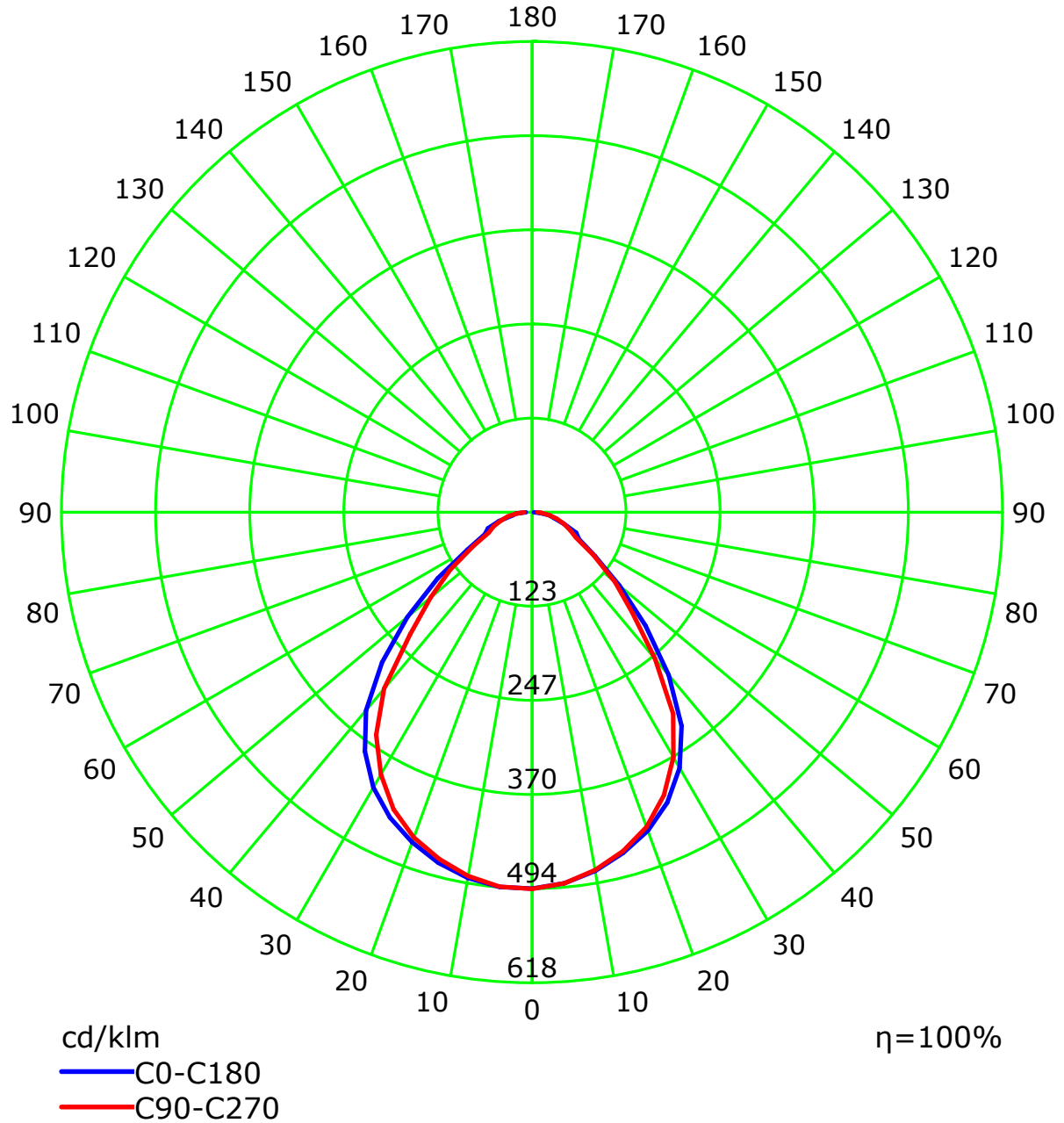
Unit: cd/klm

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)



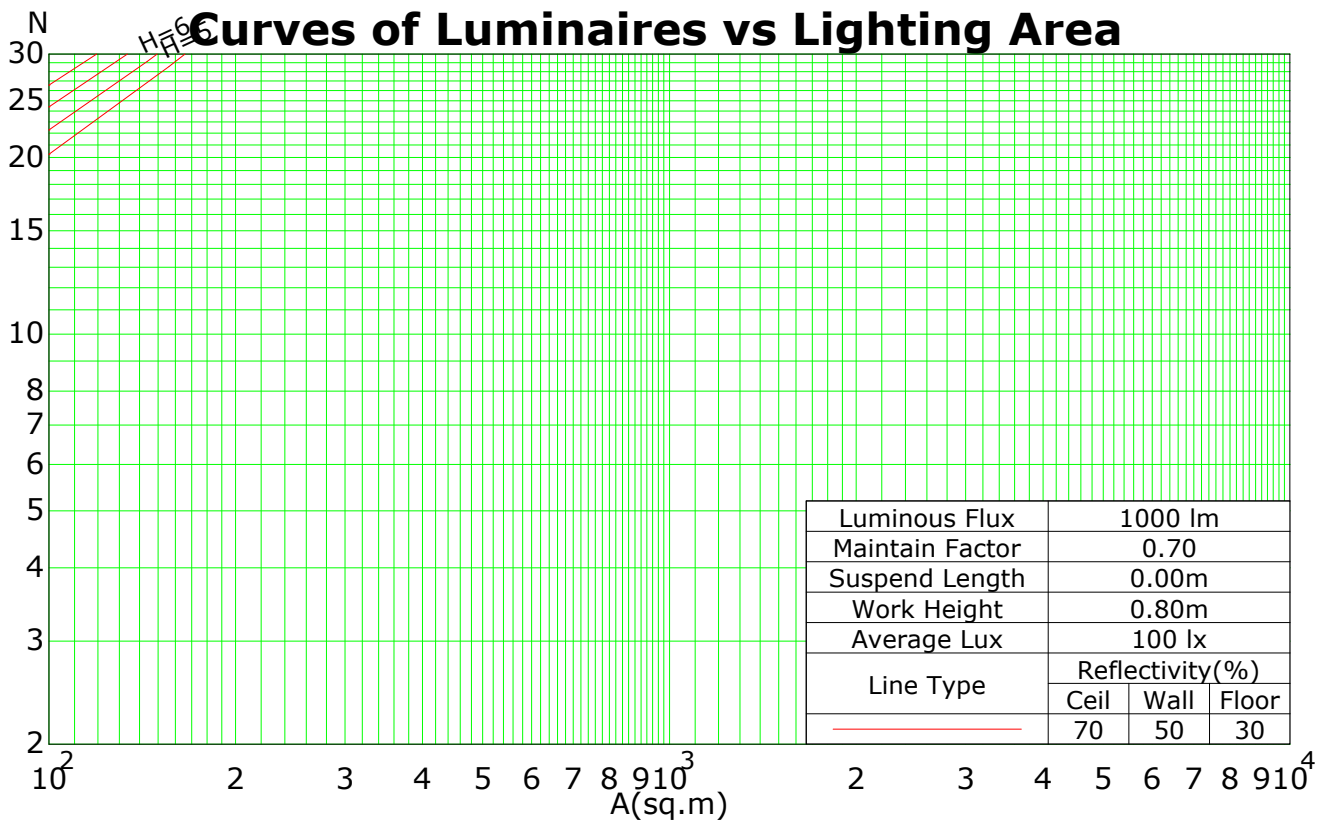
C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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	1.08	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	0.52	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	0.41	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

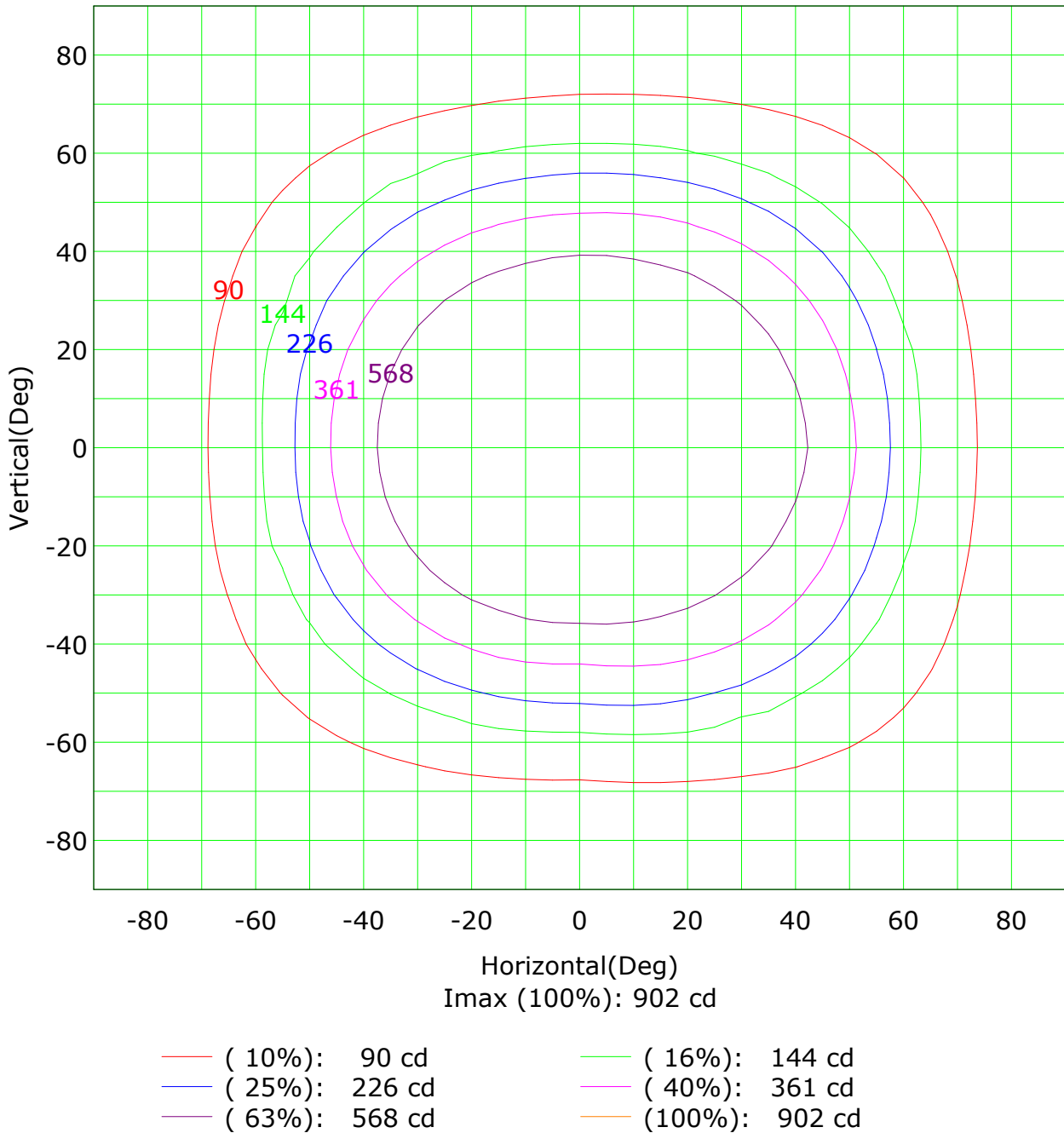


C Plane (°):0.0-360.0: 90.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

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



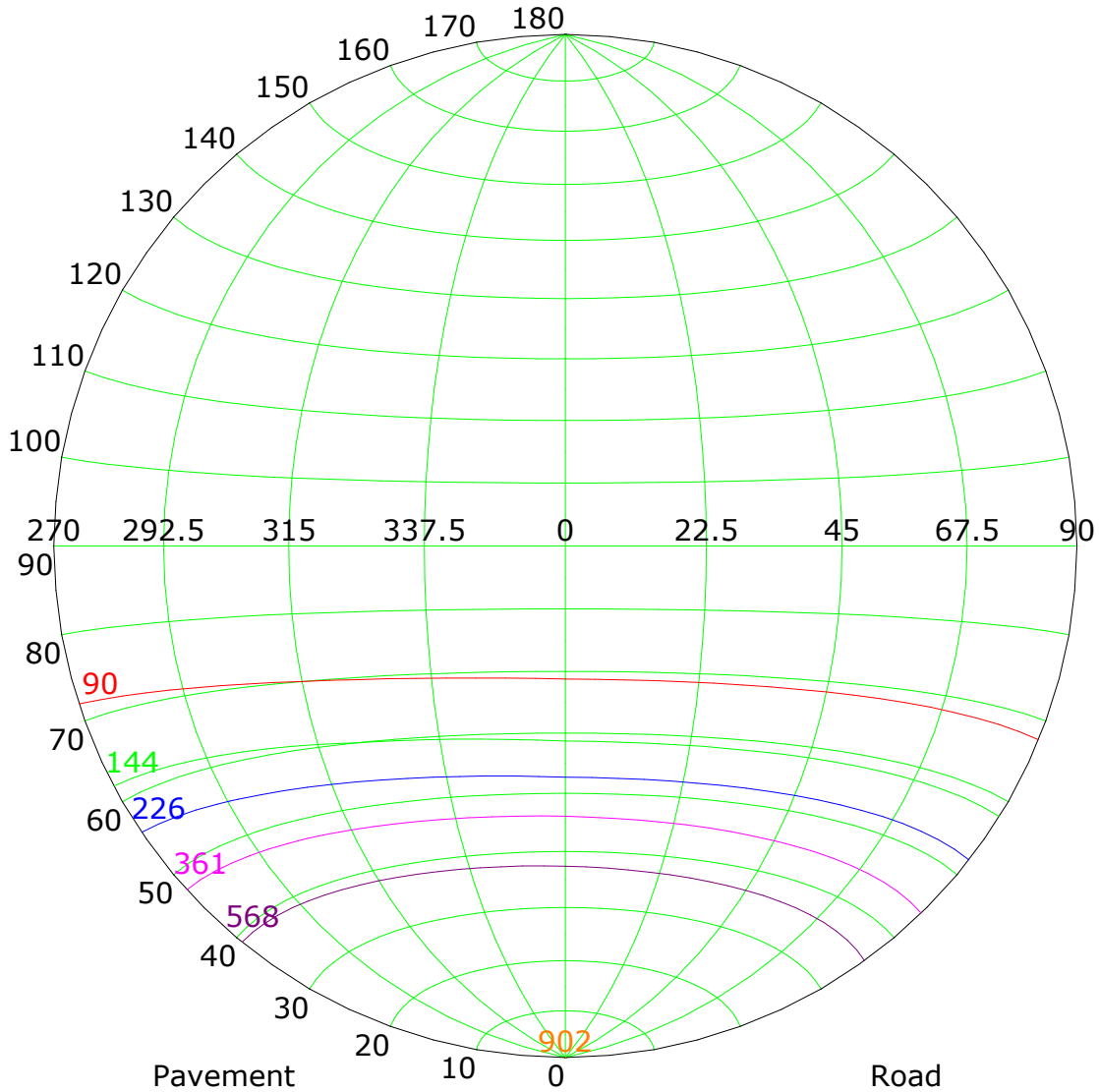
Isocandela (rectangle)



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%): 902 cd

— (10%): 90 cd	— (16%): 144 cd
— (25%): 226 cd	— (40%): 361 cd
— (63%): 568 cd	— (100%): 902 cd

CIE: narrow - short
 CIE: Non-cut-off luminaire
 Max.At90: 24.537 cd/klm

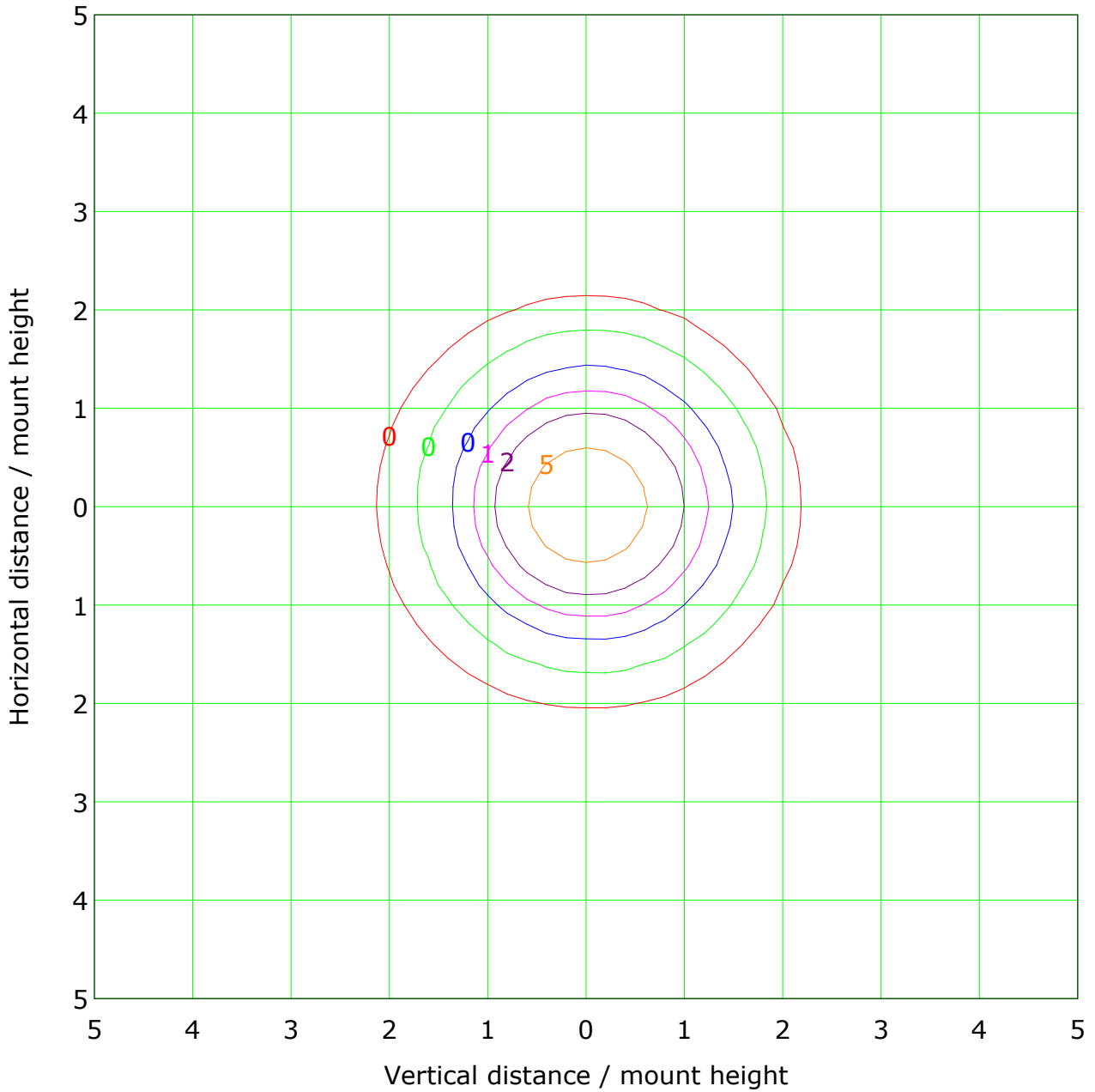
IES: Non-cut-off
 Max.At80: 244.064 cd/klm
 Max.80-90: 42630030631699167000000000000000

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:



IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 9.0 lx

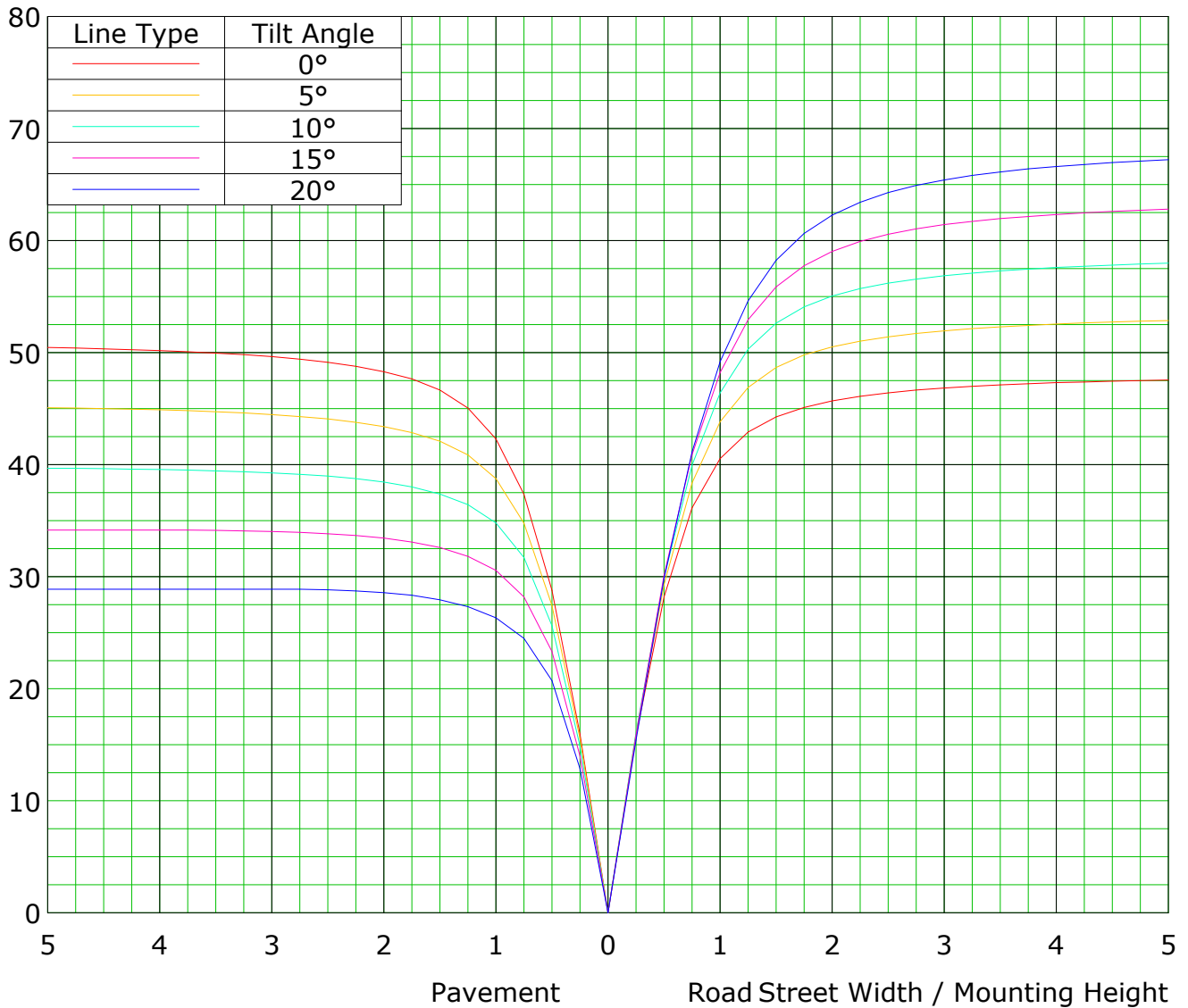
— (1%): 0.1 lx	— (2%): 0.2 lx
— (5%): 0.5 lx	— (10%): 0.9 lx
— (20%): 1.8 lx	— (50%): 4.5 lx
— (100%): 9.0 lx	

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(%)

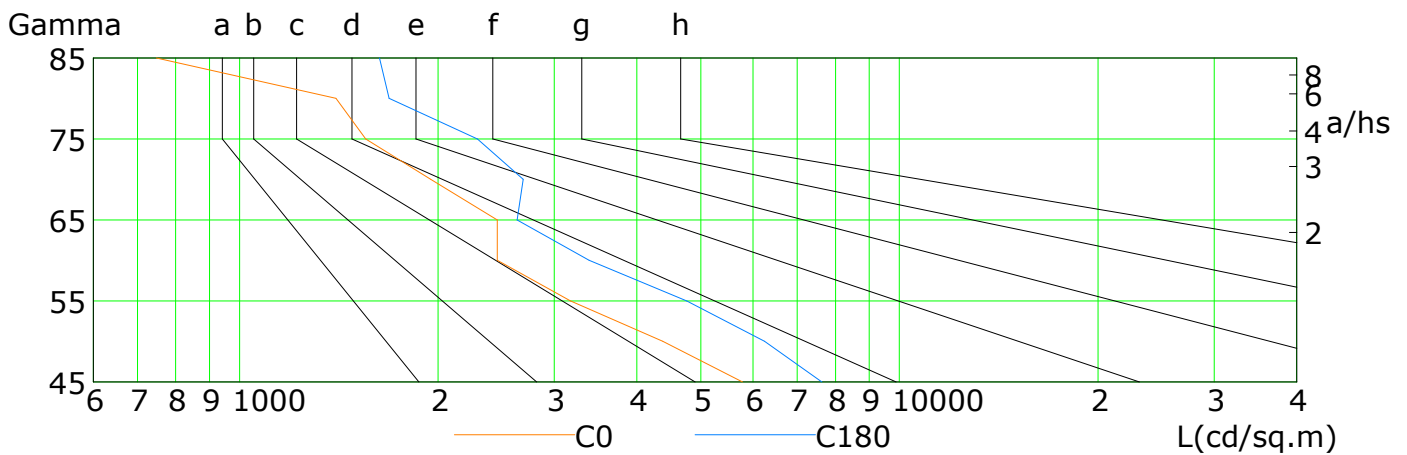
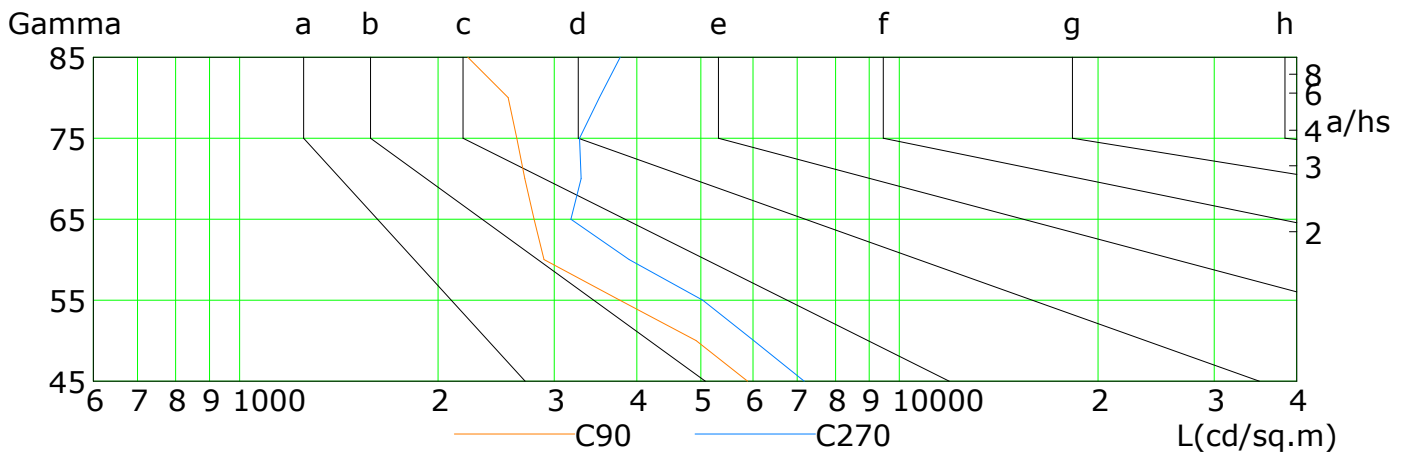

 C Plane (°):0.0-360.0: 90.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

 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

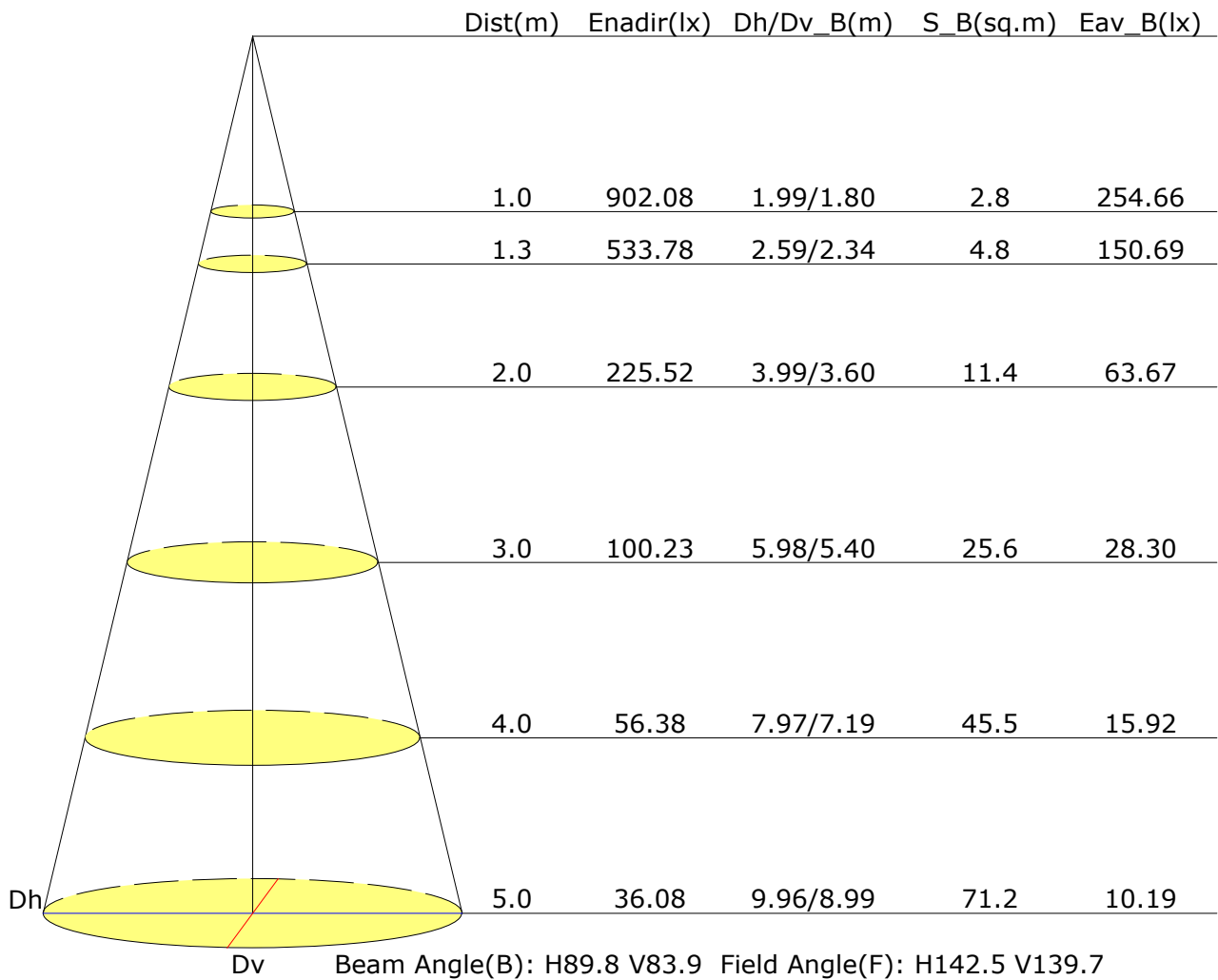


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	5784	4377	3175	2457	2457	1949	1553	1399	748
C90	5885	4918	3769	2894	2794	2705	2630	2553	2217
C180	7633	6248	4763	3385	2634	2690	2294	1686	1630
C270	7170	6014	5034	3893	3178	3294	3274	3509	3773

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

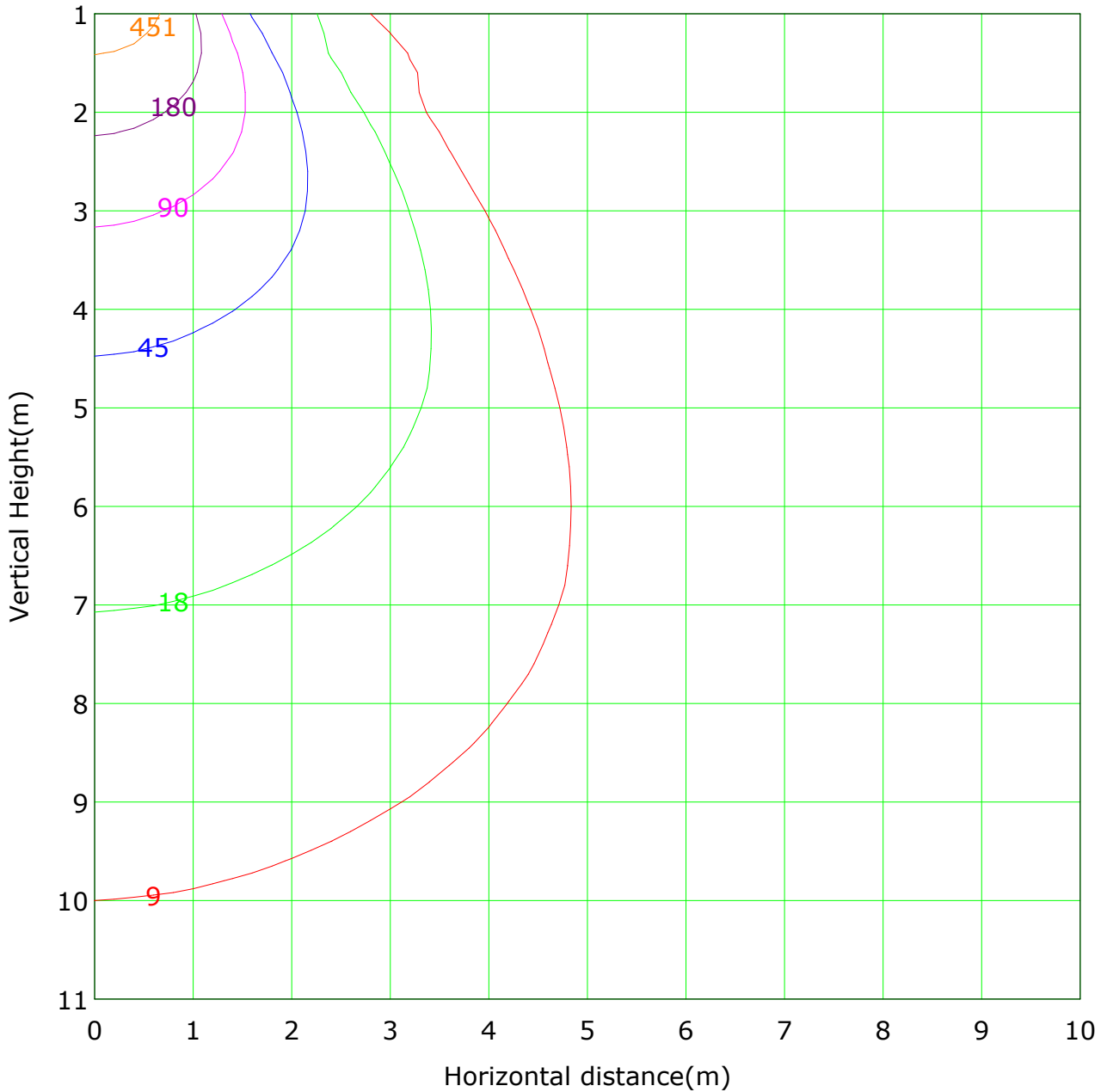
Gamma Plane (°):0.0-90.0:5.0
 Test Device: GPM-1600L
 Distance: 7.172 m [K=1.0000]
 Humidity:
 Inspector:

Illuminance at a Distance





Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 902.1 lx

— (1%): 9.0 lx	— (2%): 18.0 lx
— (5%): 45.1 lx	— (10%): 90.2 lx
— (20%): 180.4 lx	— (50%): 451.0 lx
— (100%): 902.1 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	18.2	13.9
-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	30.4	28.4
-50	0.1	0.3	0.7	1.2	2.1	3.6	5.2	6.4	7.0	6.9	6.0	4.6	3.0	1.8	1.1	0.5	0.2	0.0	50.6	49.4
-40	0.1	0.3	0.8	1.5	3.2	5.5	7.9	9.8	10.7	10.6	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	0.4	0.9	2.4	5.3	8.7	11.5	13.3	14.2	14.1	13.0	10.9	7.8	4.1	1.7	0.8	0.3	0.0	109.4	108.8
-10	0.1	0.4	1.0	2.7	5.9	9.4	12.0	13.9	14.8	14.7	13.5	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	114.9	114.3
10	0.1	0.3	0.9	2.4	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	106.4
20	0.1	0.3	0.8	1.9	4.2	7.0	9.7	11.6	12.4	12.3	11.2	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	4.2	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	3.3	4.6	5.6	5.9	5.8	5.1	4.0	2.6	1.6	1.0	0.5	0.2	0.0	44.2	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	9.2
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	4.4	11.0	23.9	47.9	77.2	103.2	121.7	130.5	129.1	117.4	95.9	67.0	37.9	18.3	8.8	3.1	0.5	999	
Flux(T)	0.0	0.9	7.8	21.0	44.9	74.1	100.0	118.4	127.1	125.7	114.0	92.6	63.7	34.5	14.8	4.5	0.0	0.0		944
Flux(E)	0.0	0.9	7.8	21.0	44.9	74.1	100.0	118.4	127.1	125.7	114.0	92.6	63.7	34.5	14.8	4.5	0.0	0.0		944

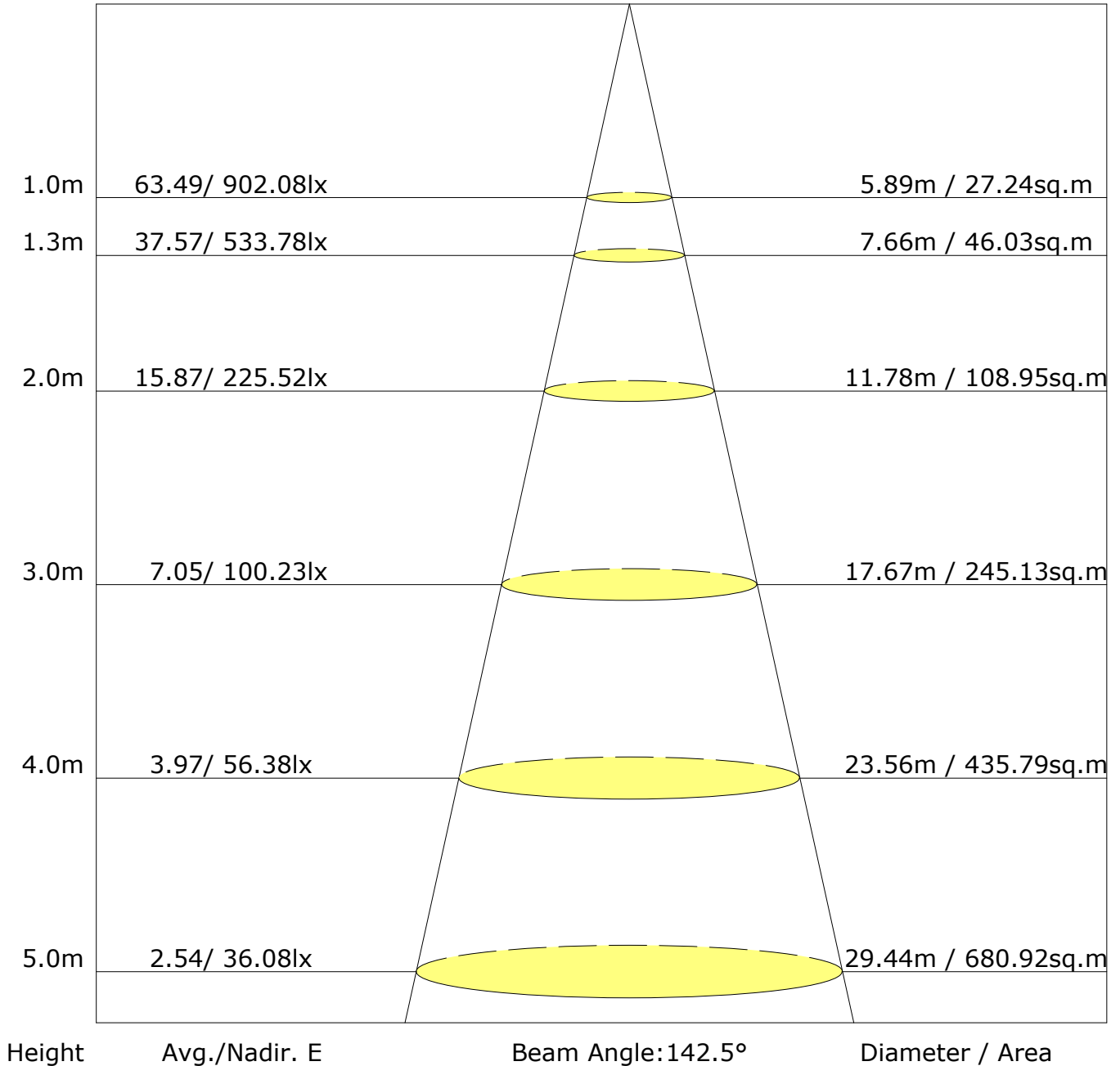
Gamma Plane (°): 0.0-90.0: 5.0
 Test Device: GPM-1600L
 Distance: 7.172 m [K=1.0000]
 Humidity:
 Inspector:

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



The Average Illuminance Effective Figure

Flux Out: 1729.13lm



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

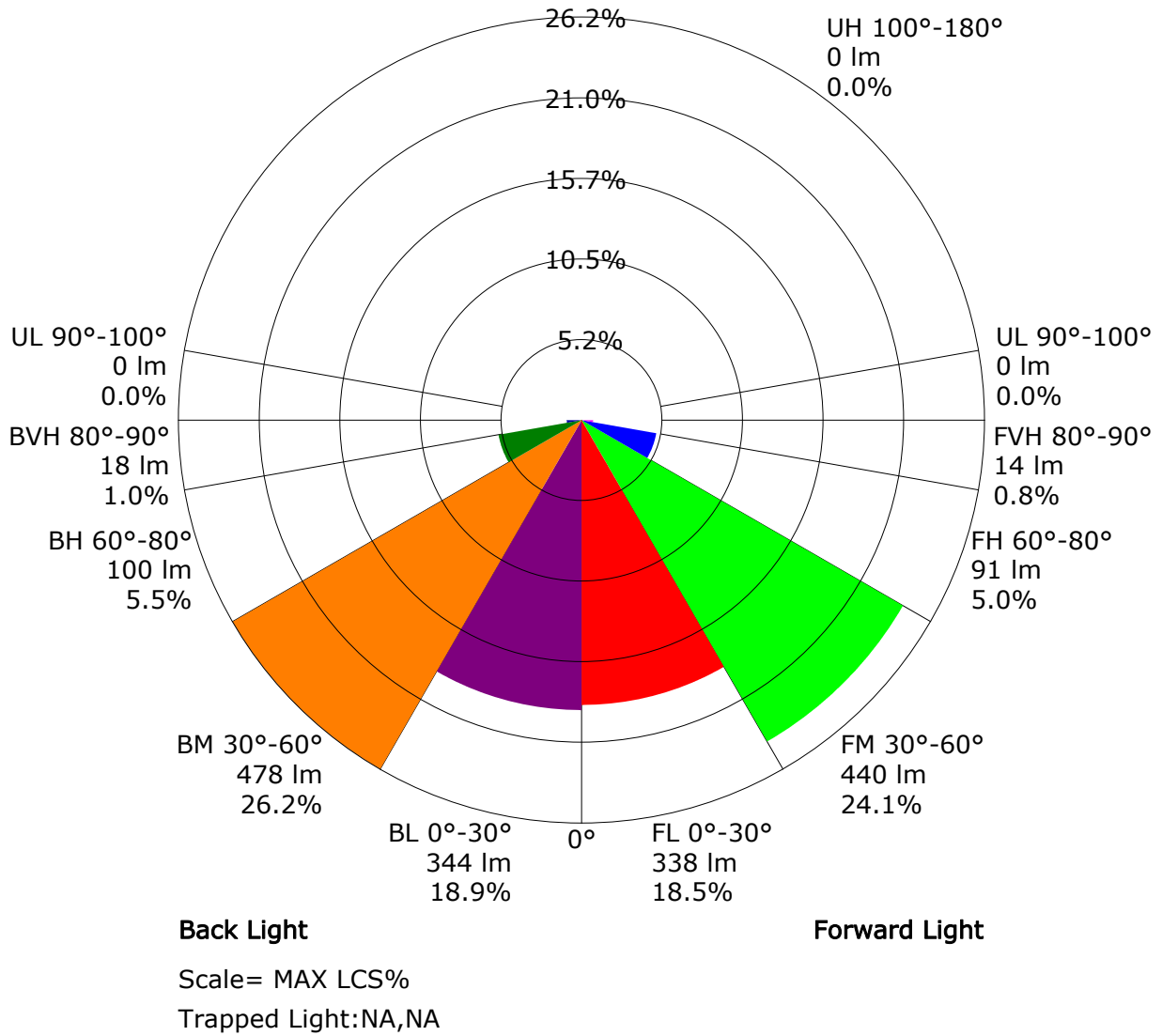
Gamma Plane (°):0.0-90.0:5.0
 Test Device: GPM-1600L
 Distance: 7.172 m [K=1.0000]
 Humidity:
 Inspector:

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	16.0	17.2	16.3	17.5	17.7	16.5	17.8	16.8	18.0	18.2
3H	16.7	17.8	17.0	18.1	18.4	17.4	18.5	17.7	18.7	19.0
4H	17.0	18.0	17.3	18.3	18.6	17.8	18.9	18.1	19.1	19.4
6H	17.2	18.2	17.6	18.5	18.8	18.3	19.2	18.6	19.5	19.9
8H	17.3	18.2	17.6	18.5	18.9	18.5	19.4	18.8	19.7	20.1
12H	17.3	18.2	17.7	18.5	18.9	18.7	19.6	19.0	19.9	20.2
X=4H Y=2H	16.3	17.4	16.6	17.6	17.9	16.8	17.8	17.1	18.1	18.4
3H	17.2	18.1	17.6	18.4	18.8	17.8	18.7	18.2	19.0	19.3
4H	17.6	18.4	18.0	18.8	19.1	18.4	19.2	18.8	19.5	19.9
6H	18.0	18.7	18.4	19.0	19.4	19.0	19.7	19.4	20.1	20.5
8H	18.1	18.7	18.5	19.1	19.5	19.3	19.9	19.7	20.3	20.7
12H	18.1	18.7	18.6	19.1	19.6	19.5	20.1	20.0	20.5	21.0
X=8H Y=4H	17.8	18.5	18.2	18.9	19.3	18.5	19.2	19.0	19.6	20.0
6H	18.3	18.8	18.8	19.3	19.7	19.3	19.8	19.7	20.2	20.7
8H	18.5	19.0	19.0	19.4	19.9	19.6	20.1	20.1	20.6	21.0
12H	18.6	19.0	19.1	19.5	20.0	20.0	20.4	20.5	20.9	21.4
X=12H Y=4H	17.8	18.4	18.3	18.8	19.3	18.5	19.1	19.0	19.5	20.0
6H	18.4	18.8	18.8	19.3	19.8	19.3	19.8	19.8	20.2	20.7
8H	18.6	19.0	19.1	19.5	20.0	19.7	20.1	20.2	20.6	21.1
Variations with the observer position at spacings:										
S=1.0H	+0.5/-0.7					+0.4/-0.5				
S=1.5H	+1.0/-1.3					+1.0/-1.2				
S=2.0H	+1.9/-1.6					+1.9/-1.8				

Calculate in accordance with CIE Pub.117. The table is revised with 1824lm ($8\log(F/F_0) = 2.1$).

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	0.67	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	0.79	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°): 1254.46 lm

%lum = 68.8%

%lamp = 68.8%

cone flux(120°): 1600.92 lm

%lum = 87.8%

%lamp = 87.8%

LED Average Luminance Report

Avg.L	cd/m ²
L 0-180(65) av	3679.14
L 0-180(75) av	3414.18
L 0-180(85) av	4011.39
L 90-270(65) av	3274.31
L 90-270(75) av	3448.11
L 90-270(85) av	4535.06
L 45(65) av	3476.72
L 45(75) av	3431.14
L 45(85) av	4273.22

Standard: GB/T 29293-2012