

Report No.:

Test Time: 2025-10-10 16:50

Luminaire Property

Luminaire Manufacturer:

Luminaire Category:

Lamp Catalog: 3000K

Number of Lamps:

Luminous Length (mm): 1200

Luminous Height (mm): 20

Current: 0.1430 A

Power Factor: 0.9200

Luminaire Description: X系列1.2米线条灯

Lamp Description:

Lumens per Lamp:

Luminous Width (mm): 130

Voltage: 232.10 V

Power: 30.58 W

Photometric Results

CIE Class: Direct

Measurement Flux: 3759.4 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H88.2

Vertical Diffuse Angle(50%): V83.4

Luminous Efficacy (lm/w): 122.94

Max. Intensity: 486.51 cd/klm

S/MH(C0/C180): 1.20

Total Rated Lamp Lumens: 3759.4 lm

Efficiency: 100%

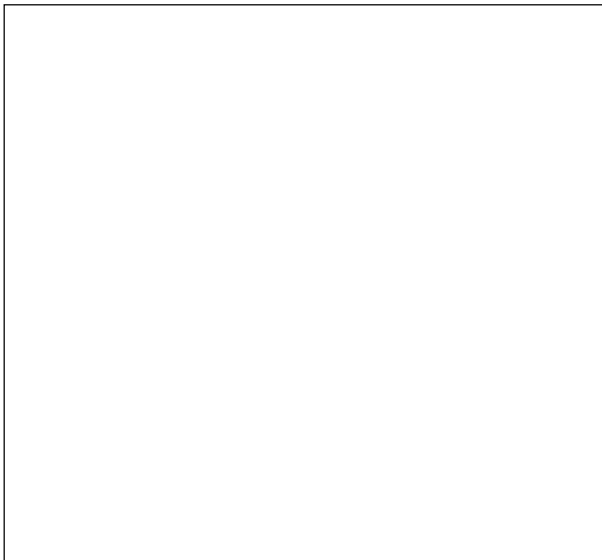
Upward Ratio: 0%

C0r0 Intensity: 486.14 cd/klm

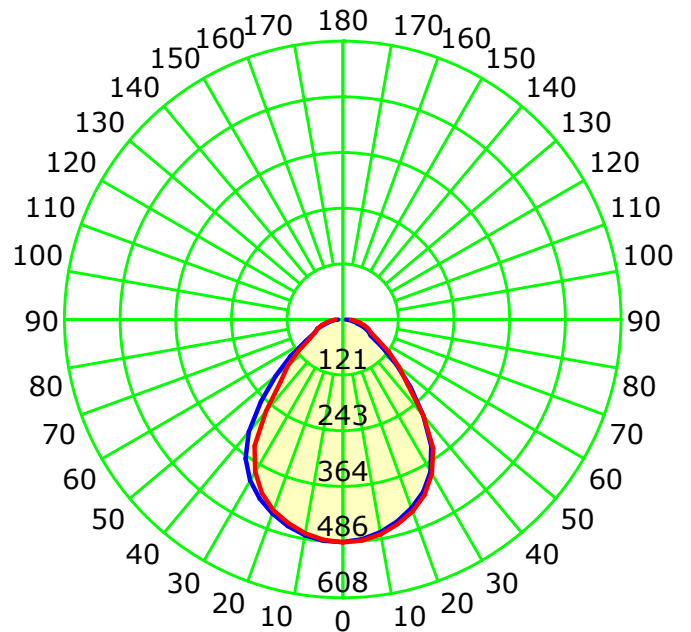
Pos of Max. Intensity: H90 V0

S/MH(C90/C270): 1.18

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd/klm

Average Diffuse Angle(50%): 85.8°

— 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

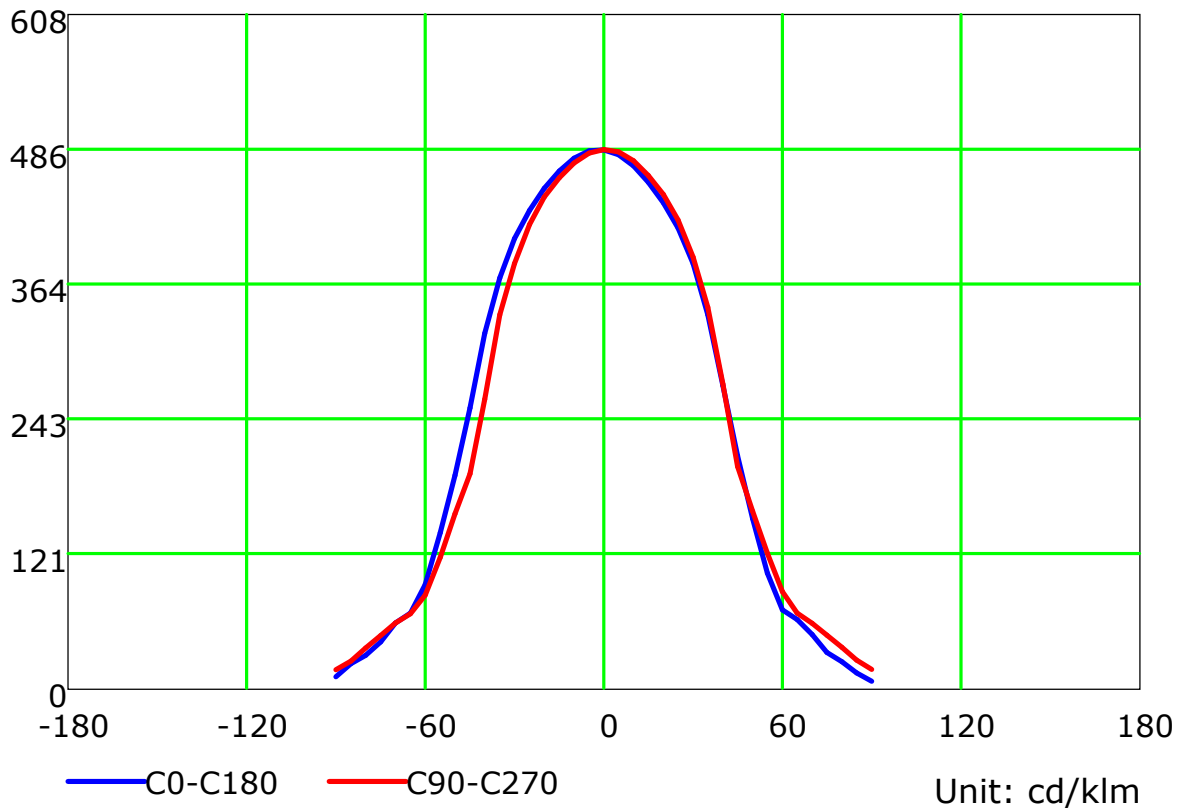
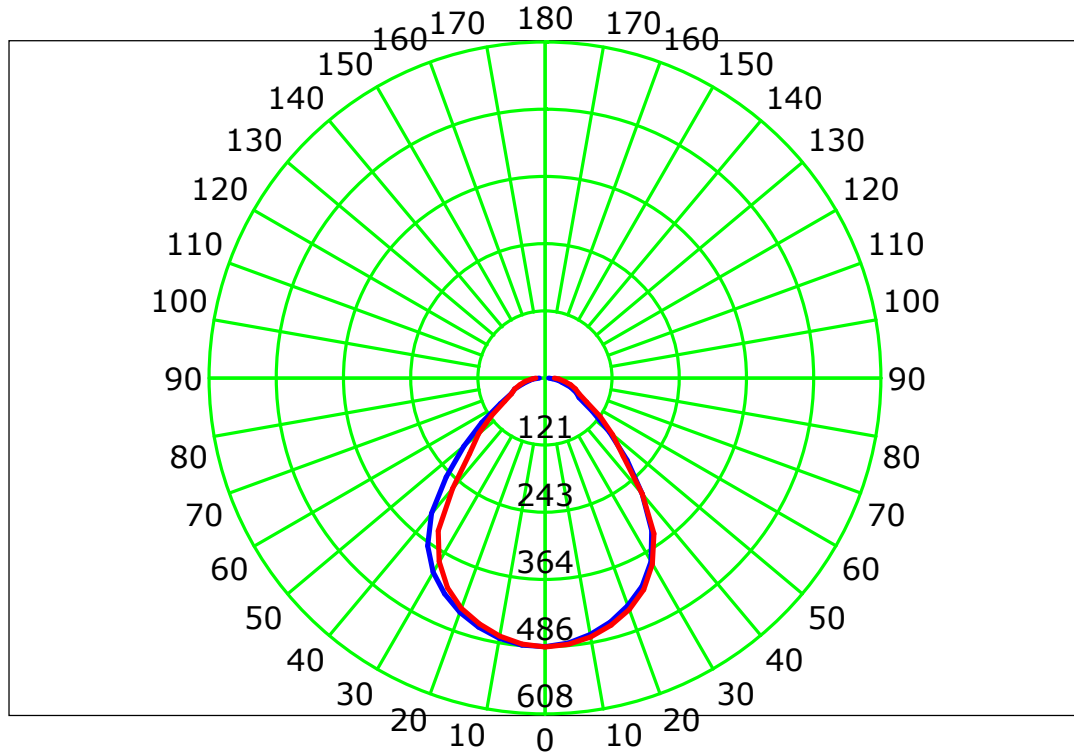
Distance: 7.172 m [K=1.0000]

Humidity:

Inspector:



Luminous Intensity Distribution Curve



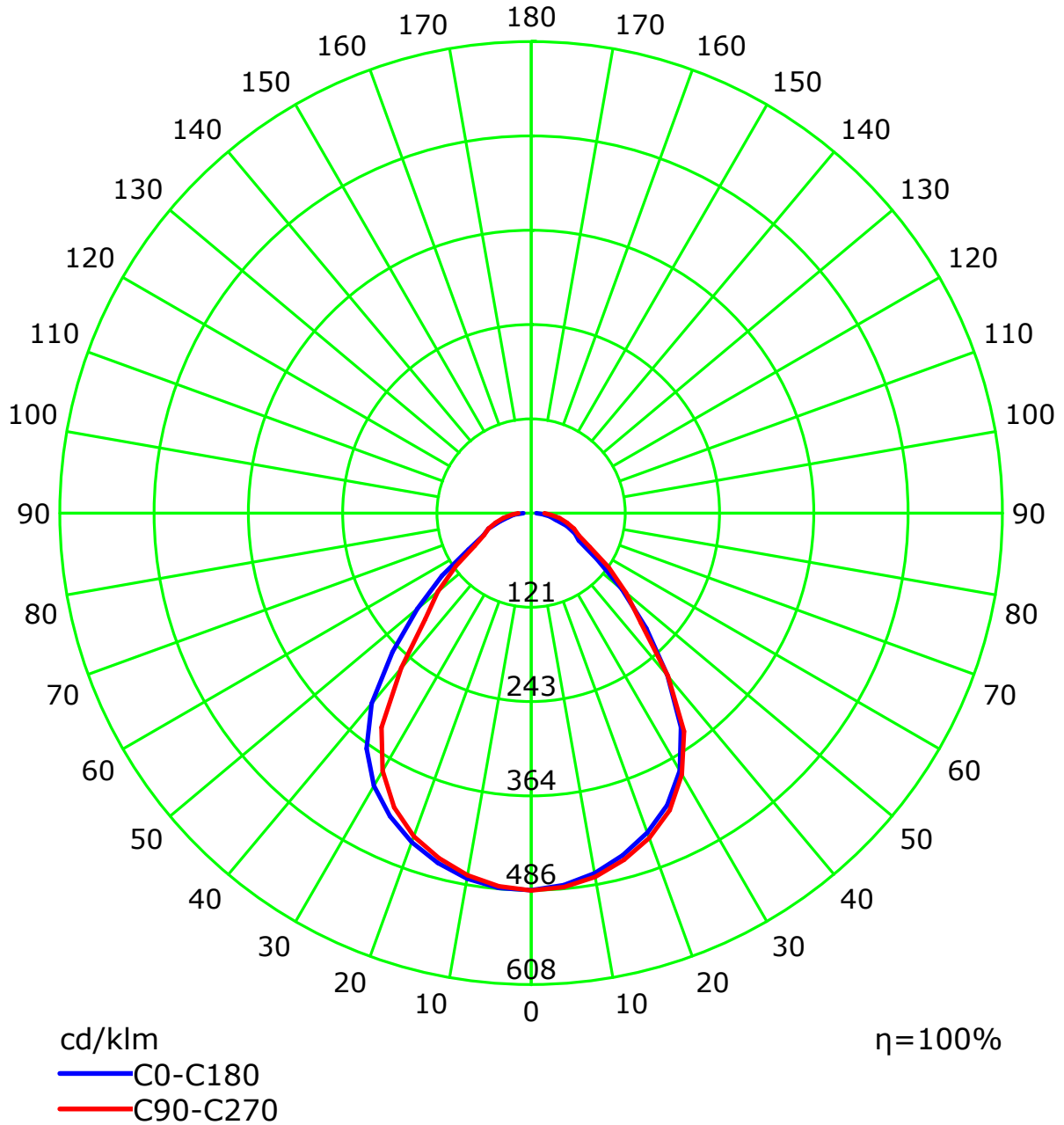
Unit: cd/klm

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)



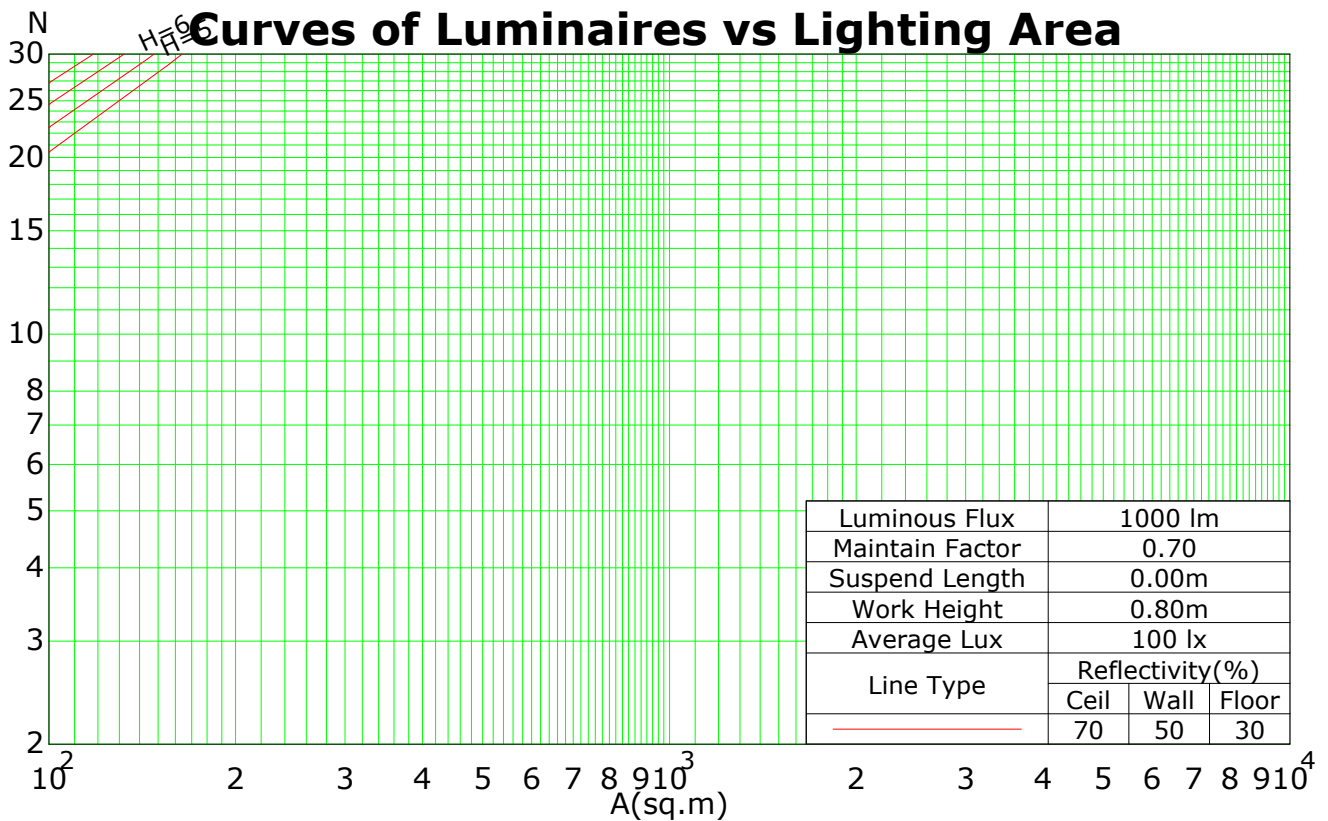
C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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
RCR	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	0.98	1.07	1.03	1.00	0.97	0.99	0.96	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	0.86	0.82	0.89	0.84	0.80	0.85	0.81	0.78	0.82	0.79	0.76	0.74
3	0.93	0.84	0.77	0.71	0.91	0.82	0.76	0.70	0.80	0.74	0.69	0.77	0.72	0.68	0.74	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	0.68	0.60	0.54	0.65	0.59	0.54	0.64	0.58	0.53	0.62	0.57	0.52	0.51
6	0.75	0.63	0.54	0.48	0.73	0.62	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	0.44	0.68	0.56	0.49	0.43	0.55	0.48	0.43	0.54	0.47	0.43	0.52	0.47	0.42	0.41
8	0.65	0.53	0.45	0.39	0.64	0.52	0.44	0.39	0.51	0.44	0.39	0.50	0.43	0.39	0.48	0.43	0.39	0.37
9	0.61	0.49	0.41	0.36	0.60	0.48	0.41	0.36	0.47	0.40	0.36	0.46	0.40	0.35	0.45	0.39	0.35	0.34
10	0.58	0.45	0.38	0.33	0.56	0.45	0.38	0.33	0.44	0.37	0.33	0.43	0.37	0.32	0.42	0.36	0.32	0.31

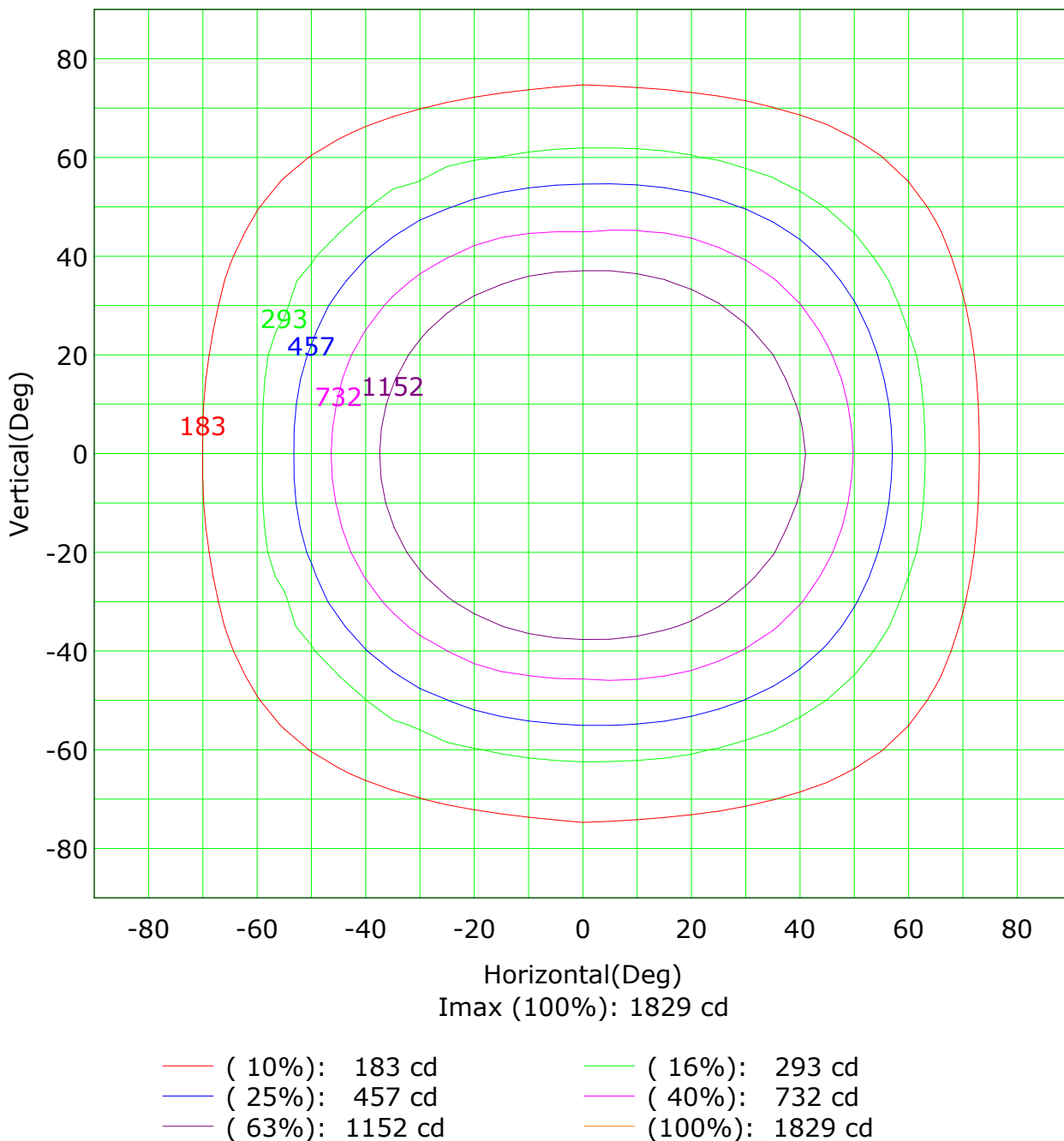
Spacing Criteria (0-180): 1.20
 Spacing Criteria (90-270): 1.18
 Spacing Criteria (Diagonal): 1.21



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:

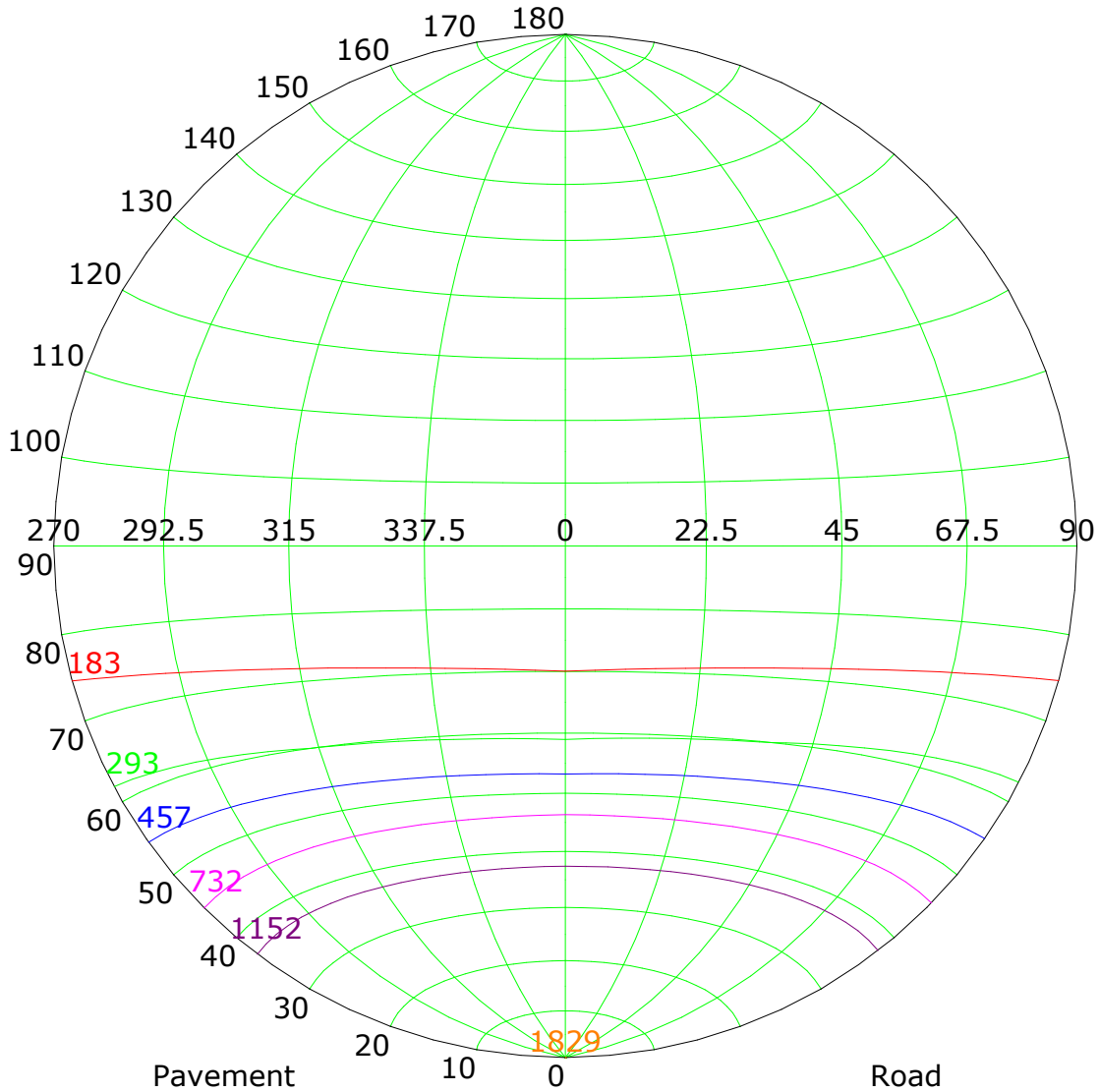
Isocandela (rectangle)



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%): 1829 cd

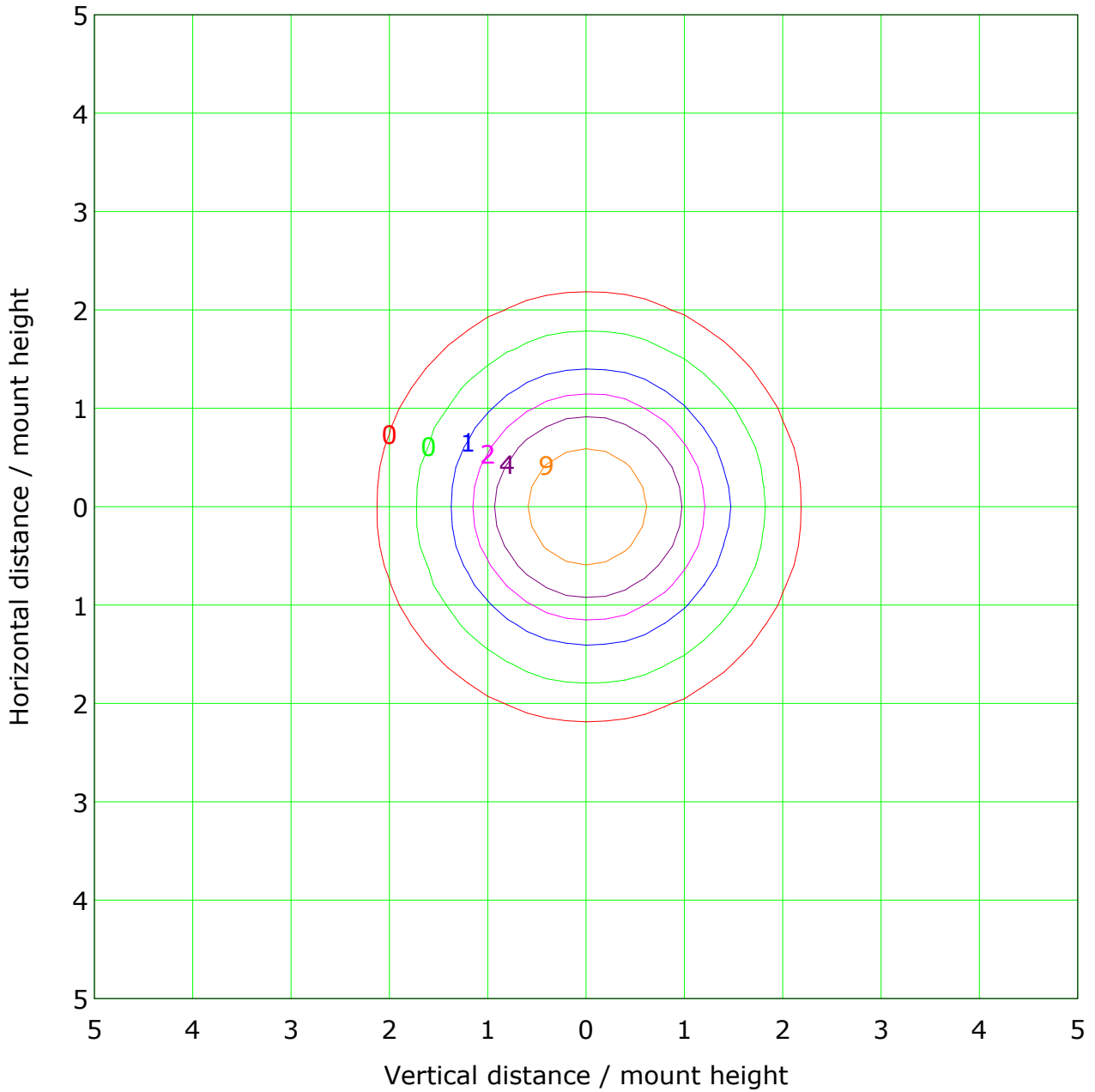
— (10%): 183 cd	— (16%): 293 cd
— (25%): 457 cd	— (40%): 732 cd
— (63%): 1152 cd	— (100%): 1829 cd

CIE: narrow - short
 CIE: Non-cut-off luminaire
 Max.At90: 12.974 cd/klm

IES: Semi-cut-off
 Max.At80: 116.642 cd/klm
 Max.80-90: 29183840886.256 cd/klm



IsoLux Plot



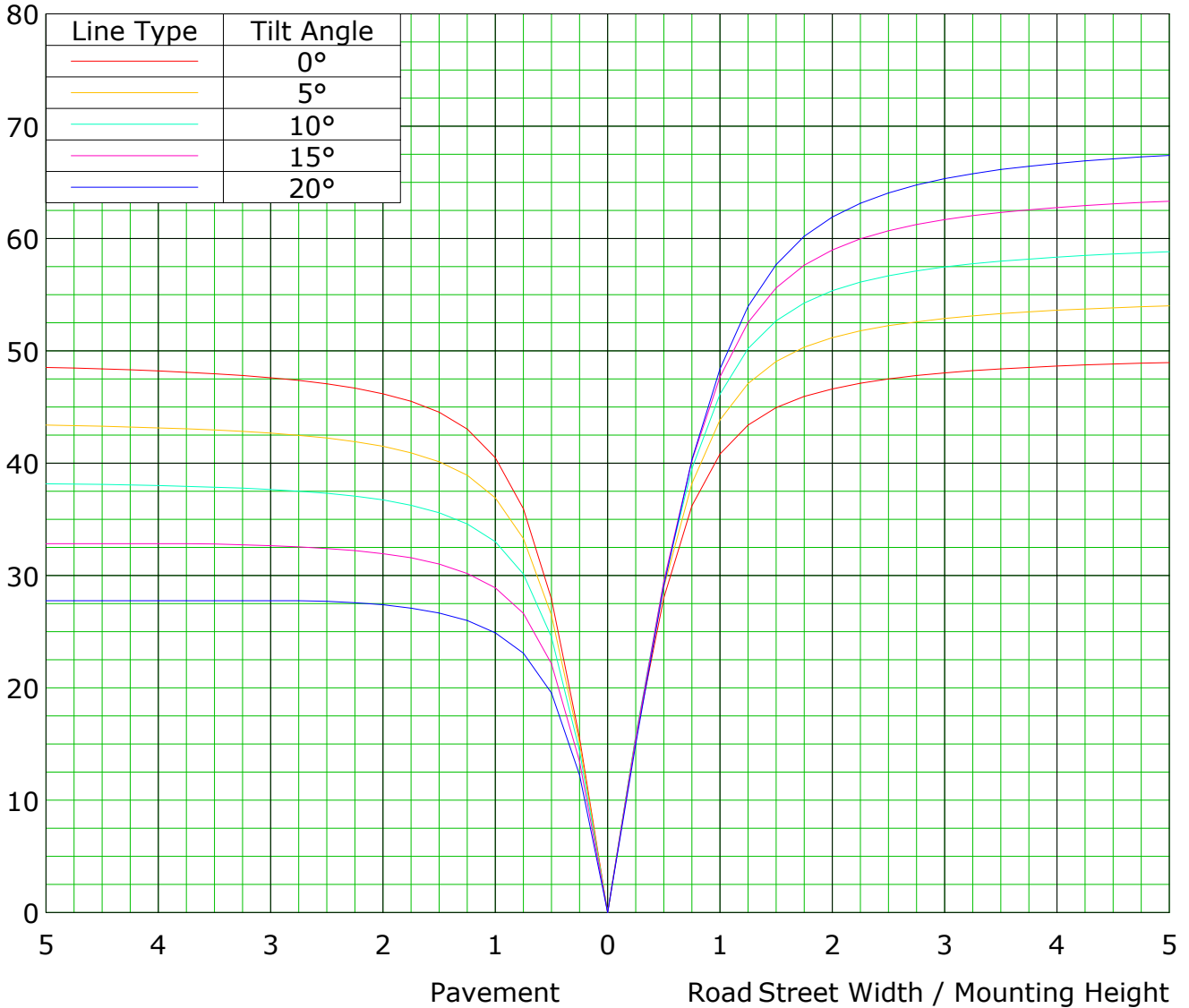
Mounting Height: 10.0m		Max Lux(100%): 18.3 lx	
— (1%):	0.2 lx	— (2%):	0.4 lx
— (5%):	0.9 lx	— (10%):	1.8 lx
— (20%):	3.7 lx	— (50%):	9.1 lx
— (100%):	18.3 lx		

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:

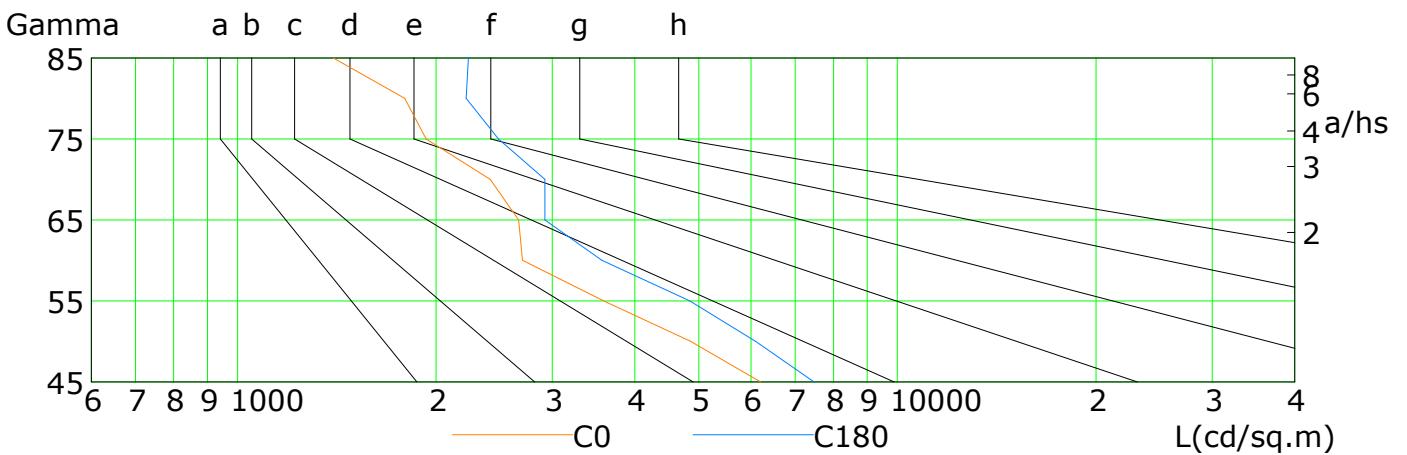
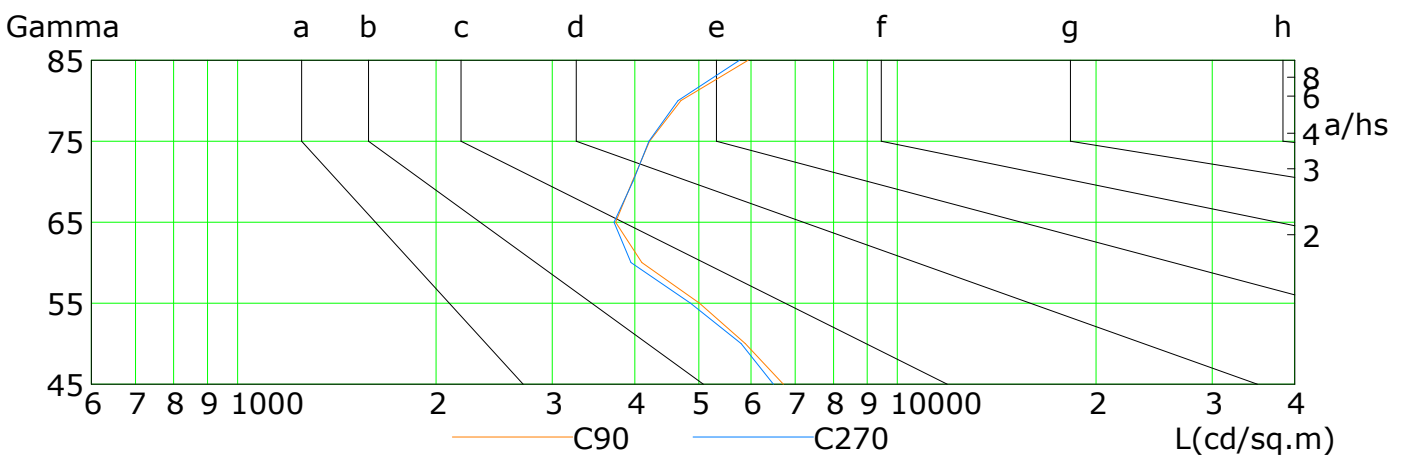
 Gamma Plane (°):0.0-90.0:5.0
 Test Device: GPM-1600L
 Distance: 7.172 m [K=1.0000]
 Humidity:
 Inspector:



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

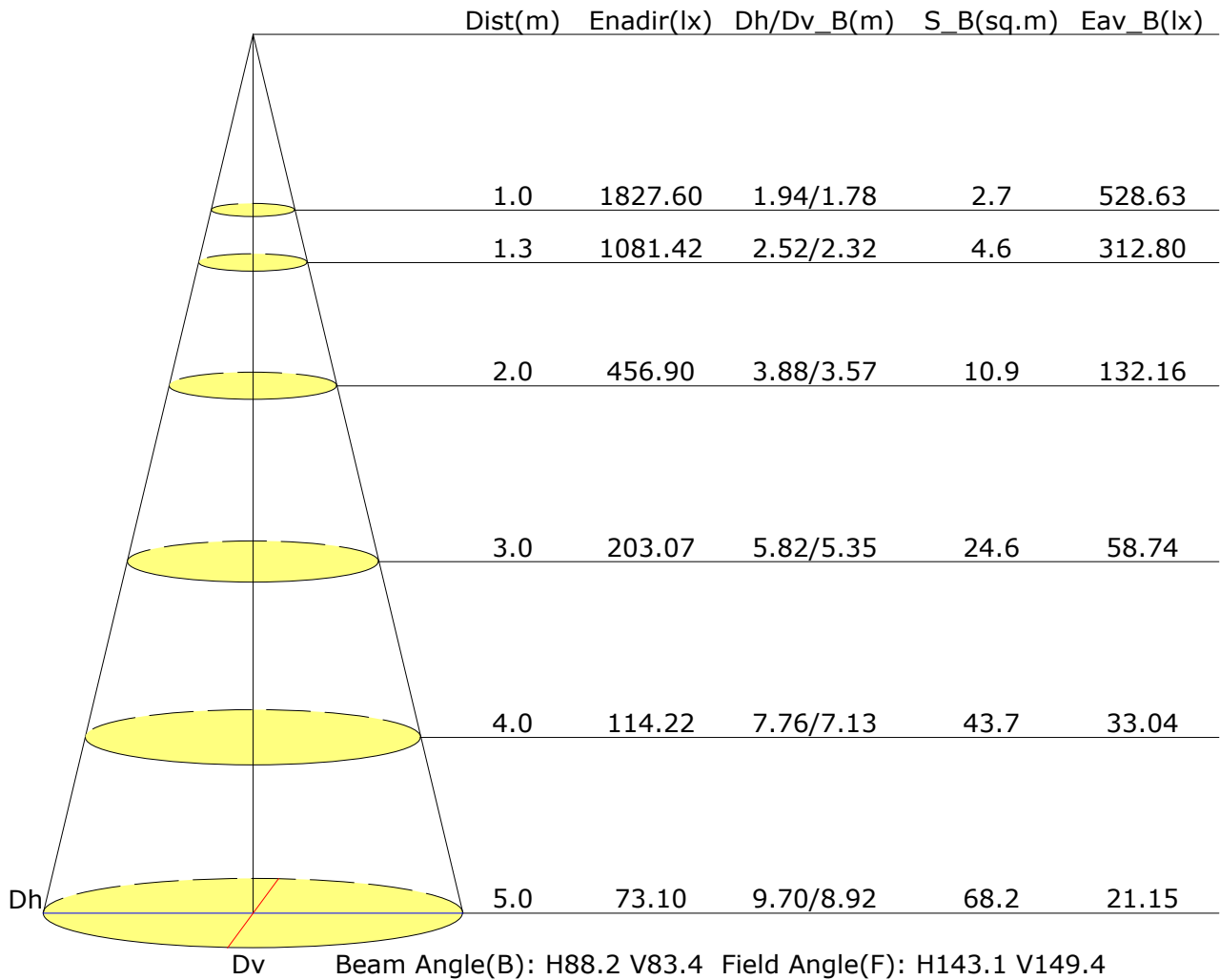


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	6203	4856	3588	2702	2665	2416	1930	1791	1397
C90	6718	5882	5013	4100	3742	3962	4213	4696	5943
C180	7479	6091	4846	3566	2923	2922	2486	2220	2238
C270	6491	5794	4859	3948	3719	3975	4200	4651	5760

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

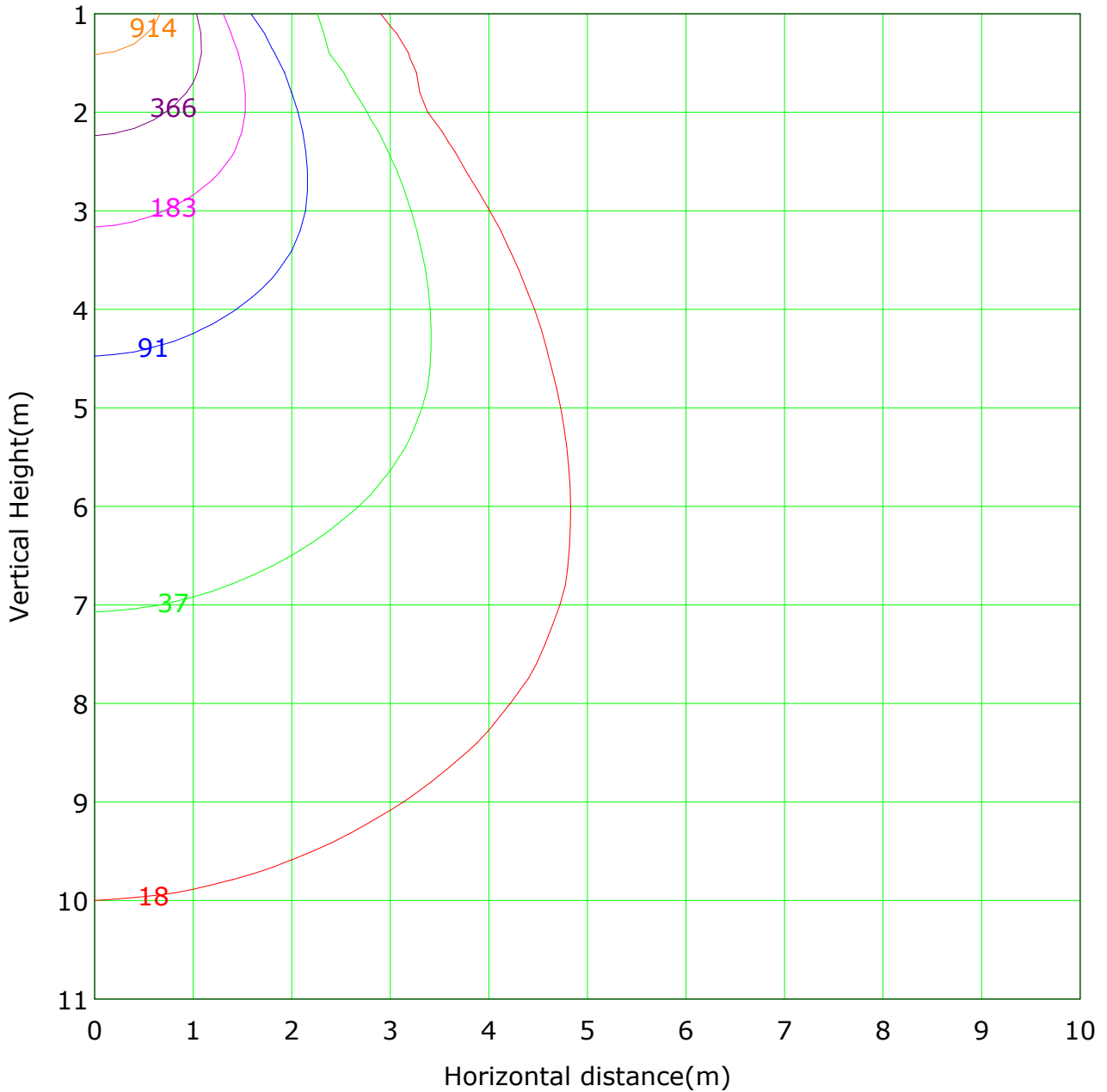


C Plane (°):0.0-360.0: 90.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

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: 1827.6 lx
 (1%): 18.3 lx (2%): 36.6 lx
 (5%): 91.4 lx (10%): 182.8 lx
 (20%): 365.5 lx (50%): 913.8 lx
 (100%):1827.6 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	0.6	0.7	0.7	0.8	0.8	0.7	0.6	0.5	0.4	0.3	0.2	0.1	0.0	7.3	0.0	
-80	0.0	0.2	0.3	0.5	0.7	1.0	1.2	1.3	1.4	1.4	1.3	1.1	0.9	0.7	0.4	0.3	0.1	0.0	13.0	3.0	
-70	0.0	0.2	0.4	0.7	1.1	1.5	1.8	2.0	2.1	2.1	1.9	1.7	1.4	1.0	0.6	0.4	0.1	0.0	19.1	15.4	
-60	0.1	0.2	0.5	1.0	1.4	2.0	2.7	3.3	3.6	3.6	3.2	2.5	1.9	1.3	0.9	0.5	0.2	0.0	28.9	27.1	
-50	0.1	0.3	0.7	1.2	2.0	3.3	4.7	5.7	6.1	6.0	5.4	4.3	2.9	1.7	1.1	0.6	0.2	0.0	46.2	45.0	
-40	0.1	0.3	0.8	1.5	3.0	5.0	7.1	9.0	10.0	9.9	8.7	6.6	4.4	2.5	1.3	0.7	0.2	0.0	70.8	70.0	
-30	0.1	0.3	0.8	1.9	4.0	6.8	9.7	11.6	12.6	12.5	11.4	9.2	6.1	3.3	1.5	0.7	0.3	0.0	92.7	92.0	
-20	0.1	0.3	0.9	2.2	4.8	8.3	11.1	13.0	13.9	13.8	12.8	10.7	7.5	4.1	1.7	0.8	0.3	0.0	106.2	105.6	
-10	0.1	0.4	0.9	2.5	5.4	9.0	11.7	13.6	14.5	14.4	13.3	11.3	8.2	4.5	1.9	0.8	0.3	0.0	112.8	112.2	
0	0.1	0.4	0.9	2.5	5.4	9.0	11.8	13.6	14.6	14.5	13.3	11.3	8.2	4.5	1.9	0.8	0.3	0.0	113.0	112.4	
10	0.1	0.3	0.9	2.2	4.8	8.3	11.2	13.0	13.9	13.9	12.8	10.7	7.5	4.1	1.8	0.8	0.3	0.0	106.6	106.0	
20	0.1	0.3	0.8	1.9	4.0	6.9	9.8	11.7	12.7	12.6	11.5	9.3	6.1	3.3	1.5	0.7	0.3	0.0	93.6	92.9	
30	0.1	0.3	0.8	1.5	3.0	5.0	7.3	9.2	10.2	10.1	8.9	6.8	4.4	2.5	1.3	0.7	0.2	0.0	72.2	71.3	
40	0.1	0.3	0.7	1.2	2.0	3.4	4.7	5.8	6.3	6.2	5.5	4.3	2.9	1.8	1.1	0.6	0.2	0.0	47.1	45.9	
50	0.1	0.2	0.5	1.0	1.5	2.1	2.8	3.4	3.7	3.7	3.2	2.6	1.9	1.3	0.9	0.5	0.2	0.0	29.5	27.6	
60	0.0	0.2	0.4	0.7	1.1	1.5	1.8	2.0	2.1	2.1	1.9	1.7	1.4	1.0	0.6	0.4	0.1	0.0	19.2	15.5	
70	0.0	0.2	0.3	0.5	0.8	1.0	1.2	1.3	1.4	1.4	1.3	1.1	0.9	0.7	0.5	0.3	0.1	0.0	13.1	3.0	
80	0.0	0.1	0.2	0.3	0.5	0.6	0.7	0.7	0.8	0.8	0.7	0.6	0.5	0.4	0.3	0.2	0.1	0.0	7.4	0.0	
90	0.0	0.1	0.2	0.3	0.5	0.6	0.7	0.7	0.8	0.8	0.7	0.6	0.5	0.4	0.3	0.2	0.1	0.0	7.4	0.0	
Flux(T)	1.0	4.5	11.2	23.6	45.9	75.0	101.8	121.1	130.8	129.7	117.9	96.5	67.6	39.1	19.4	9.5	3.6	0.7	999		
Flux(E)	0.0	0.7	7.8	20.5	42.8	71.9	98.8	118.1	127.8	126.7	114.8	93.3	64.4	35.8	16.0	5.6	0.0	0.0		945	
	-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	Flux(T)	Flux(E)

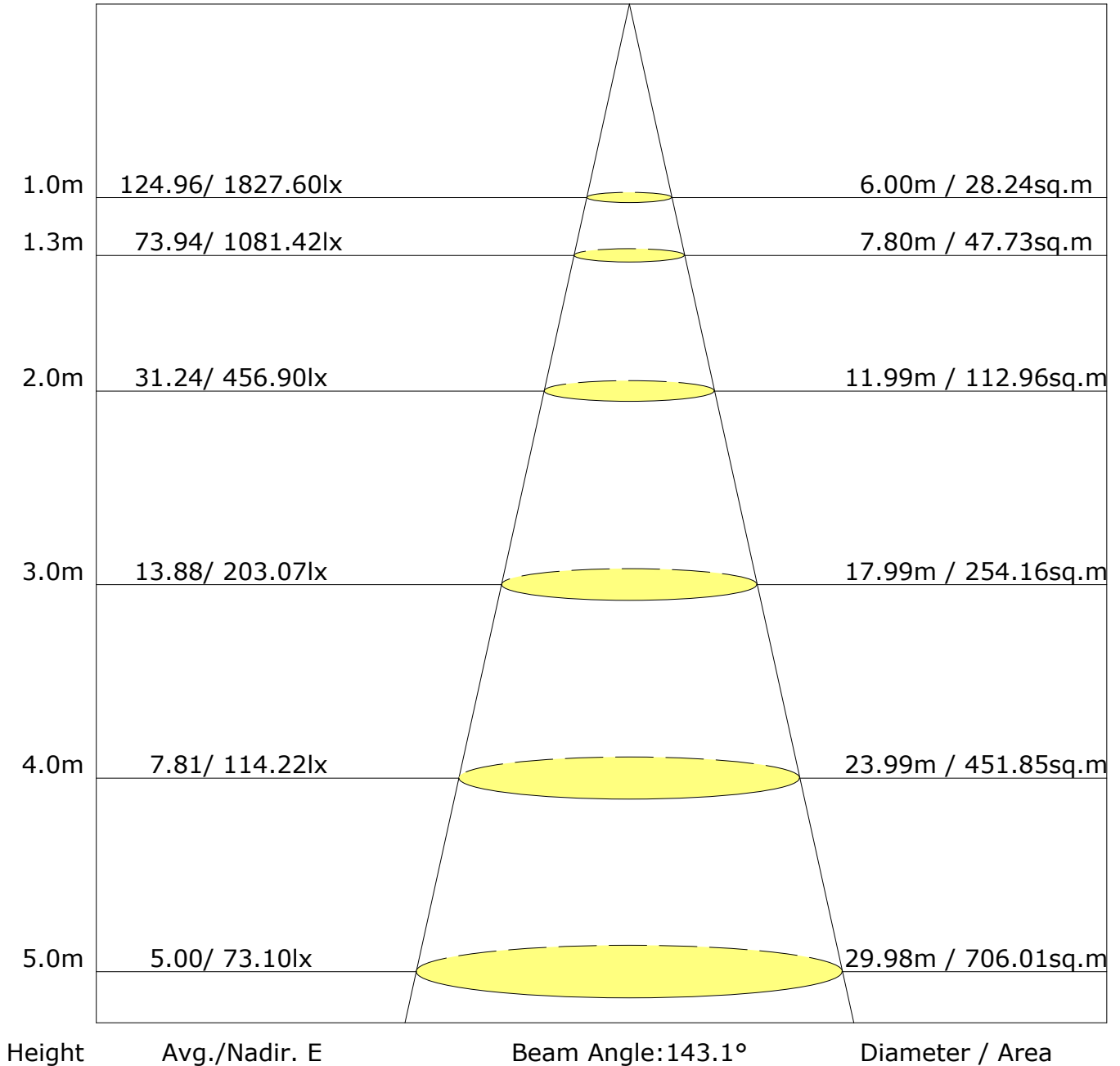
Gamma Plane (°): 0.0-90.0: 5.0
 Test Device: GPM-1600L
 Distance: 7.172 m [K=1.0000]
 Humidity:
 Inspector:

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



The Average Illuminance Effective Figure

Flux Out: 3529.04lm



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

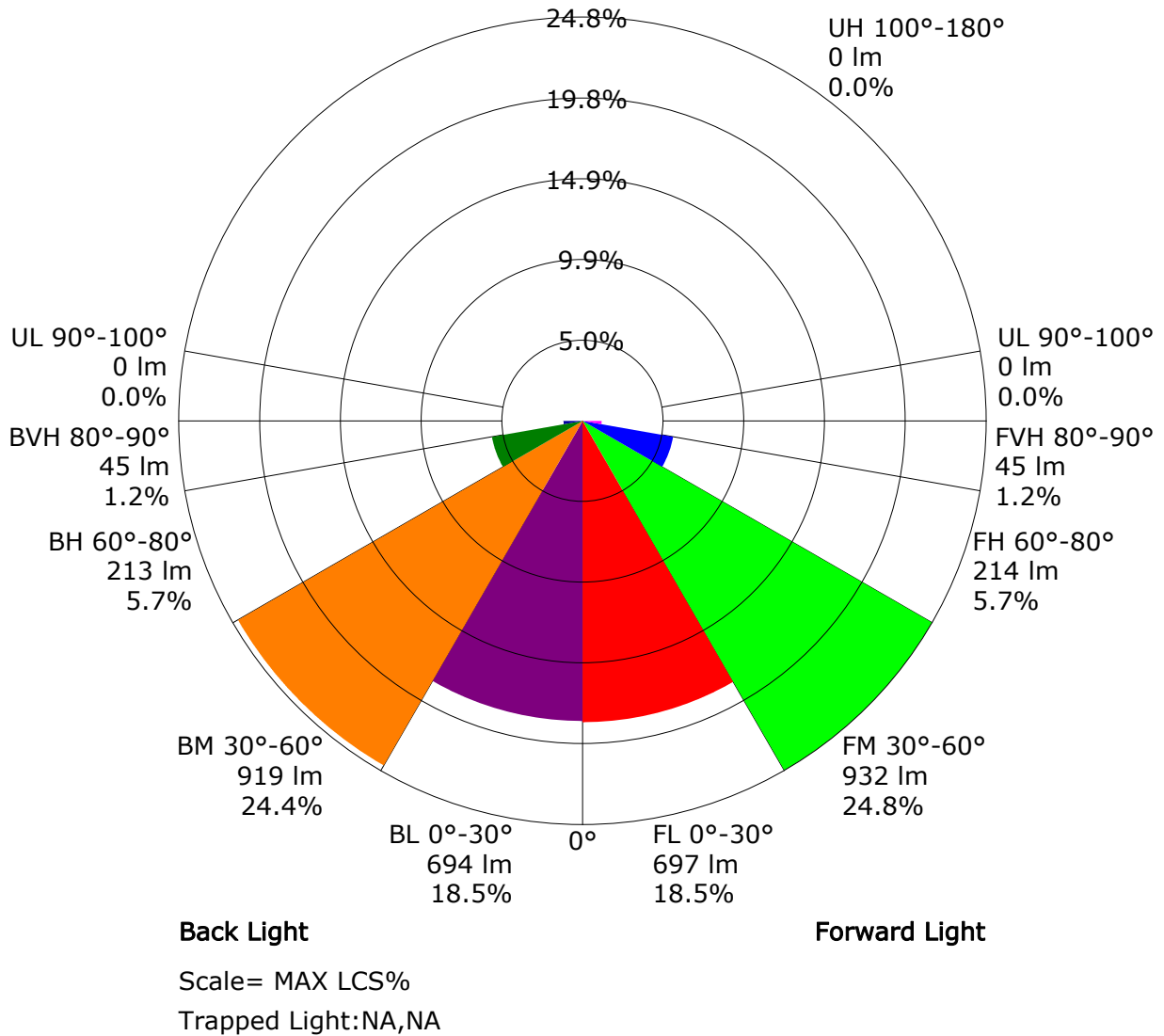
Gamma Plane (°):0.0-90.0:5.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
Humidity:
Inspector:

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	16.3	17.6	16.6	17.8	18.1	16.9	18.2	17.2	18.4	18.6
3H	17.2	18.3	17.5	18.6	18.8	18.0	19.2	18.3	19.4	19.7
4H	17.5	18.6	17.8	18.8	19.1	18.7	19.7	19.0	20.0	20.3
6H	17.8	18.8	18.1	19.1	19.4	19.4	20.4	19.7	20.7	21.0
8H	17.9	18.9	18.3	19.2	19.5	19.7	20.7	20.1	21.0	21.3
12H	18.0	18.9	18.4	19.2	19.6	20.0	21.0	20.4	21.3	21.6
X=4H Y=2H	16.7	17.8	17.0	18.1	18.3	17.2	18.3	17.5	18.6	18.8
3H	17.8	18.7	18.1	19.0	19.4	18.5	19.5	18.9	19.8	20.1
4H	18.2	19.1	18.6	19.4	19.8	19.4	20.2	19.8	20.5	20.9
6H	18.7	19.4	19.1	19.8	20.2	20.2	21.0	20.6	21.3	21.7
8H	18.9	19.5	19.3	19.9	20.3	20.7	21.3	21.1	21.7	22.1
12H	19.0	19.6	19.4	20.0	20.5	21.1	21.7	21.5	22.1	22.6
X=8H Y=4H	18.6	19.2	19.0	19.6	20.0	19.6	20.2	20.0	20.6	21.0
6H	19.2	19.7	19.6	20.1	20.6	20.6	21.1	21.1	21.6	22.0
8H	19.4	19.9	19.9	20.4	20.8	21.1	21.6	21.6	22.1	22.6
12H	19.7	20.1	20.1	20.5	21.0	21.7	22.1	22.2	22.6	23.1
X=12H Y=4H	18.6	19.2	19.1	19.6	20.1	19.6	20.2	20.0	20.6	21.0
6H	19.3	19.8	19.8	20.2	20.7	20.6	21.1	21.1	21.6	22.1
8H	19.6	20.0	20.1	20.5	21.0	21.2	21.7	21.7	22.1	22.6
Variations with the observer position at spacings:										
S=1.0H	+0.4/-0.6					+0.3/-0.4				
S=1.5H	+0.8/-1.2					+0.5/-0.8				
S=2.0H	+1.6/-1.5					+1.1/-1.2				

Calculate in accordance with CIE Pub.117. The table is revised with 3759lm ($8\log(F/F_0) = 4.6$).

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	0.82	0.86	0.92	0.96	0.99	1.03	1.05	
	0.30		0.59	0.69	0.75	0.80	0.87	0.91	0.95	0.99	1.02	
	0.20		0.55	0.64	0.70	0.75	0.82	0.87	0.91	0.96	0.99	
0.50	0.50	0.20	0.65	0.73	0.79	0.83	0.89	0.93	0.95	0.99	1.01	
	0.30		0.59	0.68	0.74	0.78	0.85	0.89	0.92	0.96	0.98	
	0.20		0.54	0.63	0.70	0.74	0.81	0.85	0.89	0.93	0.96	
0.30	0.50	0.20	0.63	0.72	0.77	0.81	0.86	0.90	0.92	0.95	0.97	
	0.30		0.58	0.67	0.72	0.77	0.82	0.86	0.89	0.93	0.95	
	0.20		0.54	0.63	0.69	0.73	0.79	0.83	0.86	0.91	0.93	
0.00	0.00	0.00	0.52	0.60	0.66	0.70	0.76	0.80	0.83	0.86	0.88	
Rating:31W 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	0.85	0.70	0.59	0.51	0.41	0.34	0.30	0.23	0.19	
	0.30		0.71	0.60	0.52	0.46	0.37	0.32	0.27	0.22	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	0.82	0.67	0.56	0.49	0.39	0.36	0.28	0.22	0.18	
	0.30		0.69	0.58	0.50	0.44	0.36	0.30	0.26	0.21	0.17	
	0.20		0.60	0.51	0.45	0.40	0.33	0.28	0.25	0.20	0.16	
0.30	0.50	0.20	0.79	0.64	0.54	0.47	0.37	0.31	0.27	0.21	0.17	
	0.30		0.68	0.56	0.48	0.42	0.34	0.29	0.25	0.20	0.16	
	0.20		0.59	0.50	0.44	0.39	0.32	0.27	0.24	0.19	0.16	
0.00	0.00	0.00	0.48	0.40	0.34	0.30	0.24	0.20	0.17	0.14	0.11	
Rating:31W 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	0.21
	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	0.11	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:31W 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°): 2540.13 lm

%lum = 67.6%
%lamp = 67.6%

cone flux(120°): 3242.13 lm

%lum = 86.2%
%lamp = 86.2%

LED Average Luminance Report

Avg.L	cd/m ²
L 0-180(65) av	3716.00
L 0-180(75) av	3475.72
L 0-180(85) av	5012.76
L 90-270(65) av	3863.89
L 90-270(75) av	4468.15
L 90-270(85) av	6966.61
L 45(65) av	3789.94
L 45(75) av	3971.94
L 45(85) av	5989.68

Standard: GB/T 29293-2012