

Report No.:

Test Time: 2026-01-17 08:42

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category:

Lamp Catalog: 4000K

Number of Lamps:

Luminous Length (mm): 1500

Luminous Height (mm): 27

Current: 0.1900 A

Power Factor: 0.9460

Luminaire Description: X系列1.5米线条灯

Lamp Description:

Lumens per Lamp:

Luminous Width (mm): 130

Voltage: 232.00 V

Power: 41.71 W

## Photometric Results

CIE Class: Direct

Measurement Flux: 5218.2 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H92.9

Vertical Diffuse Angle(50%): V86.8

Luminous Efficacy (lm/w): 125.11

Max. Intensity: 465.27 cd/klm

S/MH(C0/C180): 1.26

Total Rated Lamp Lumens: 5218.2 lm

Efficiency: 100%

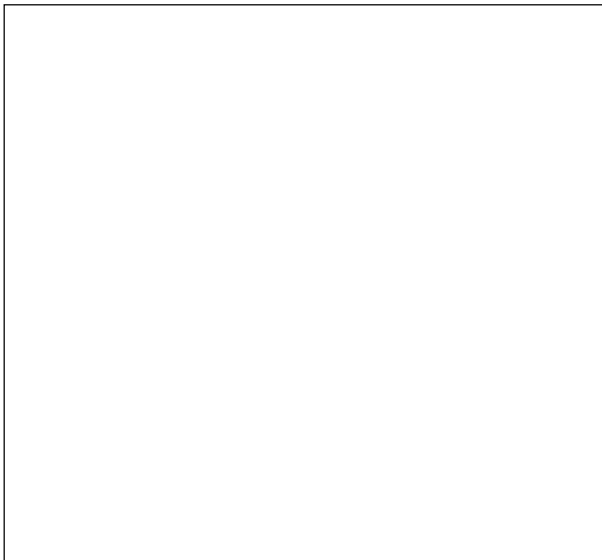
Upward Ratio: 0%

C0r0 Intensity: 461.76 cd/klm

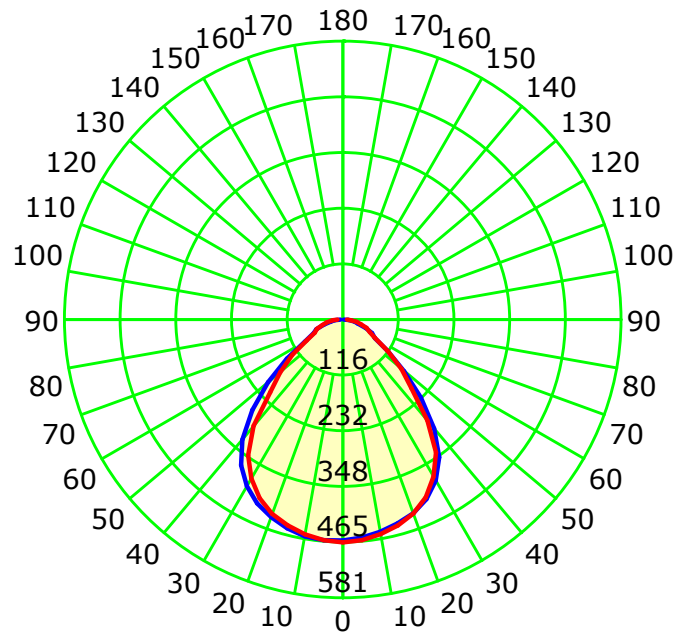
Pos of Max. Intensity: H90 V0

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

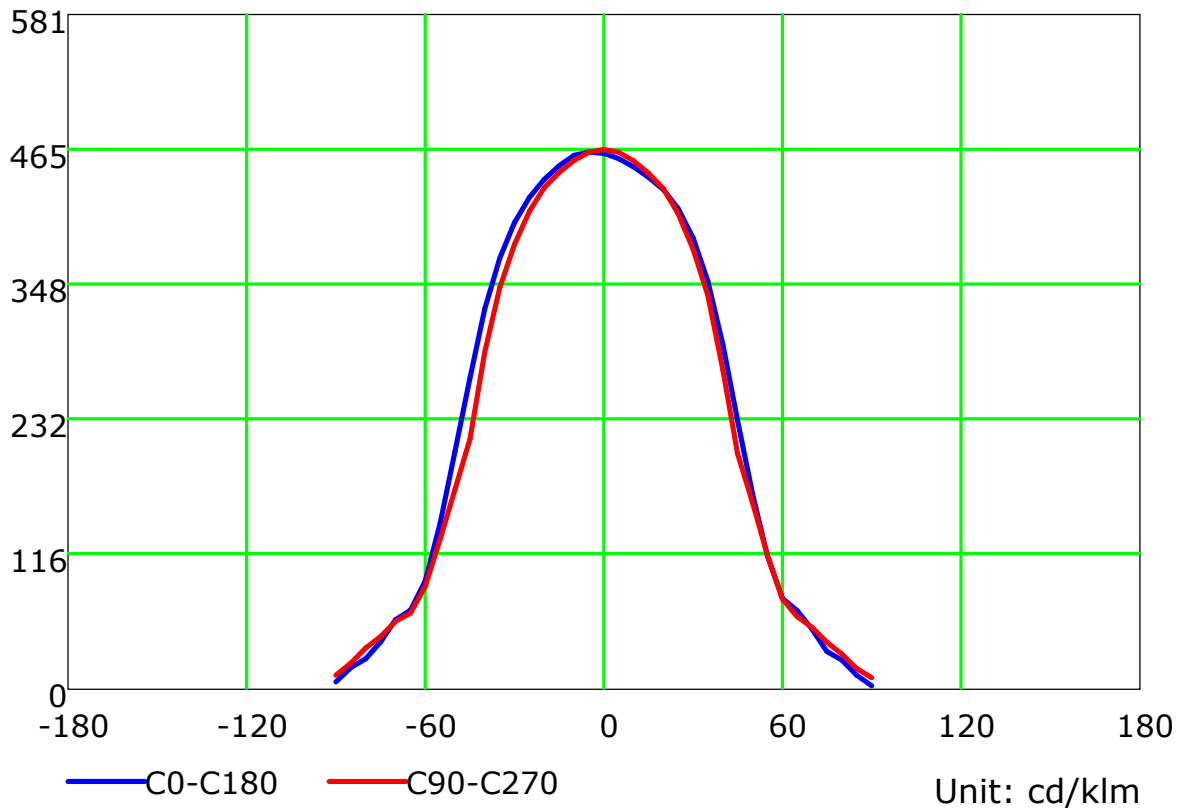
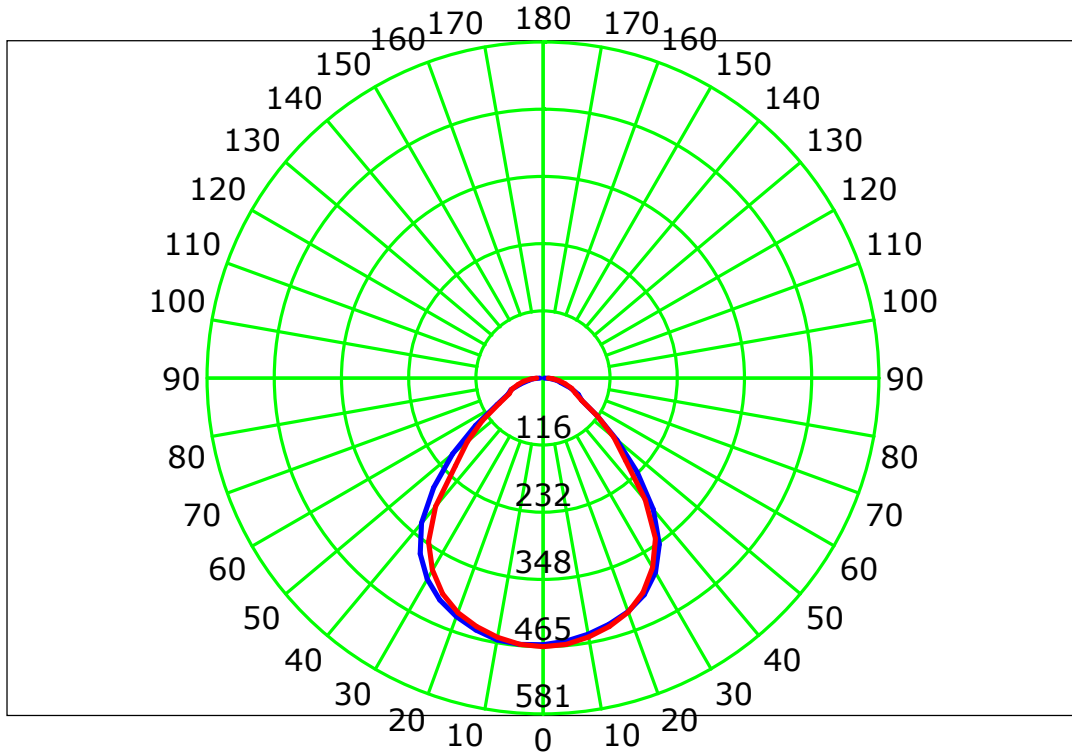
Distance: 7.172 m [K=1.0000]

Humidity:

Inspector:



### Luminous Intensity Distribution Curve

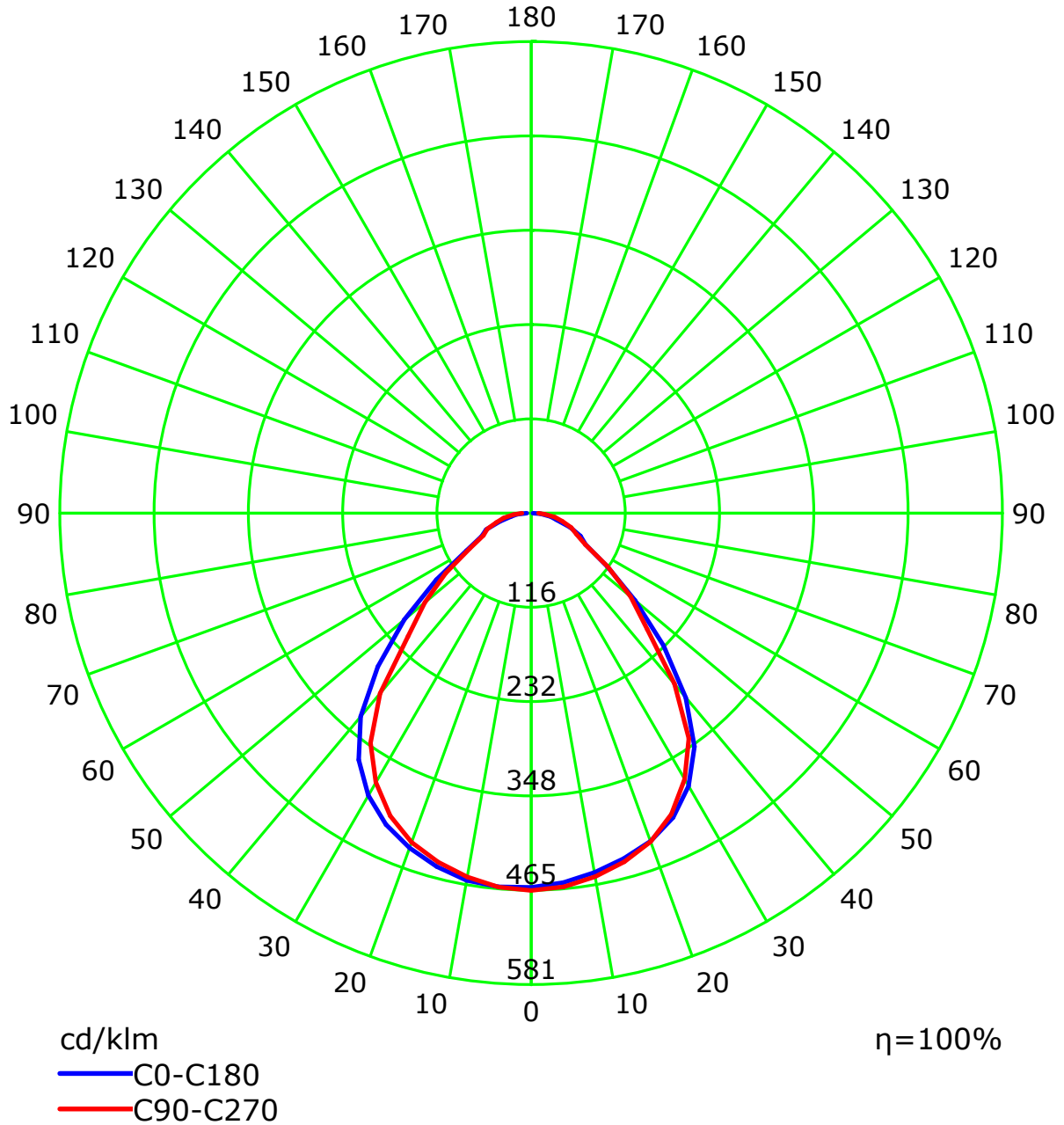


C Plane (°):0.0-360.0: 90.0  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

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)



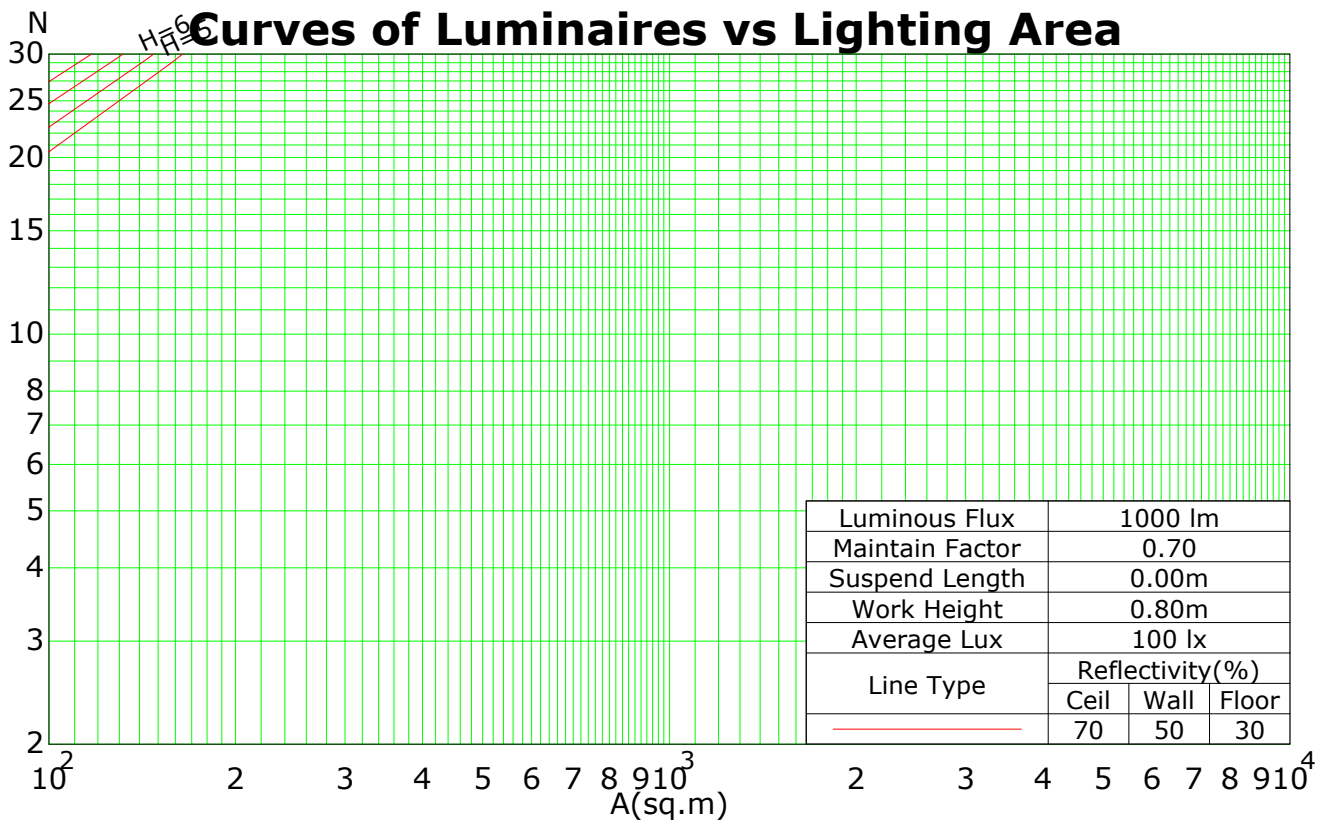
C Plane (°):0.0-360.0: 90.0  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

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	0.99	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): 1.26

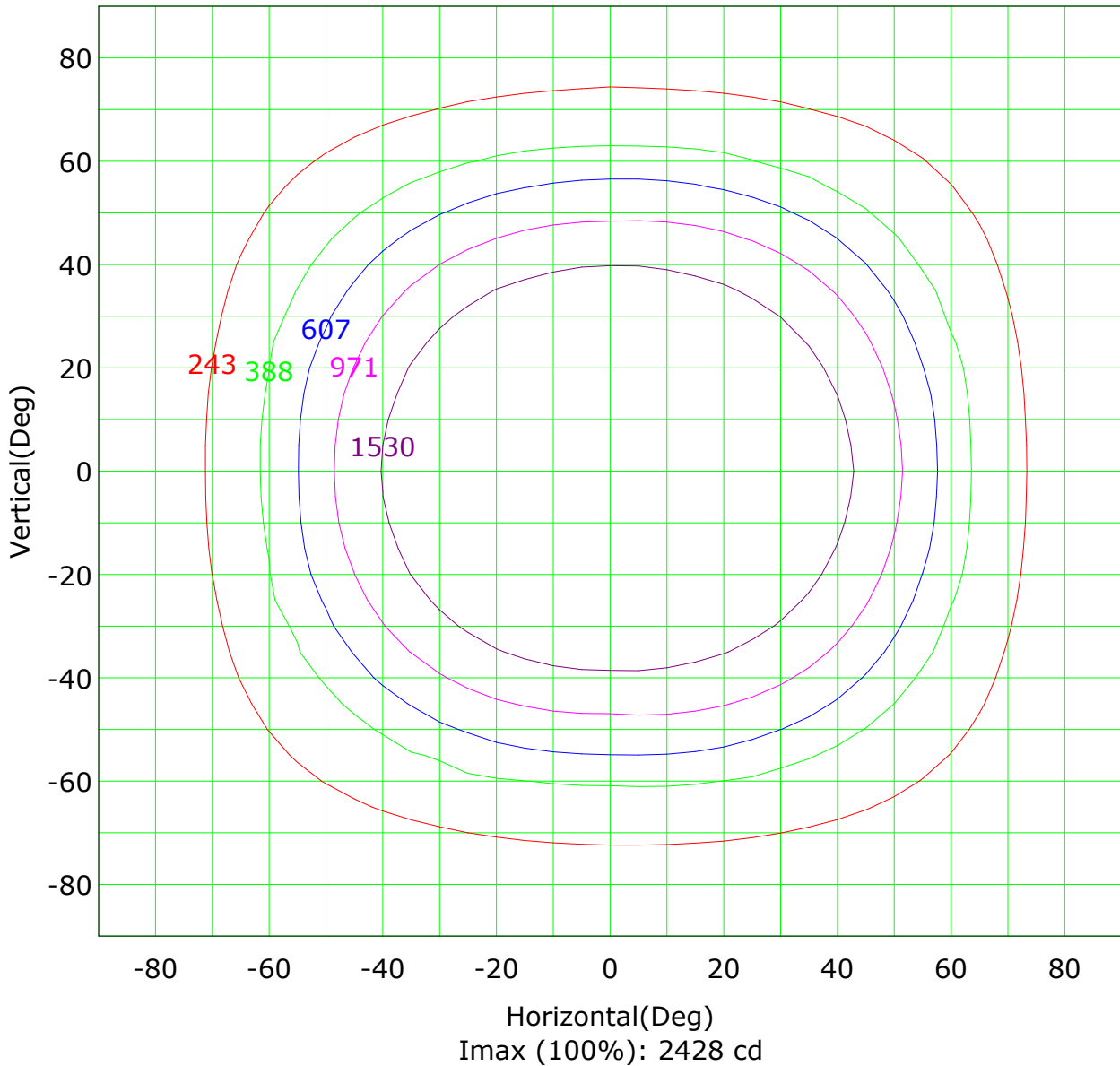


C Plane (°):0.0-360.0: 90.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

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



### Isocandela (rectangle)

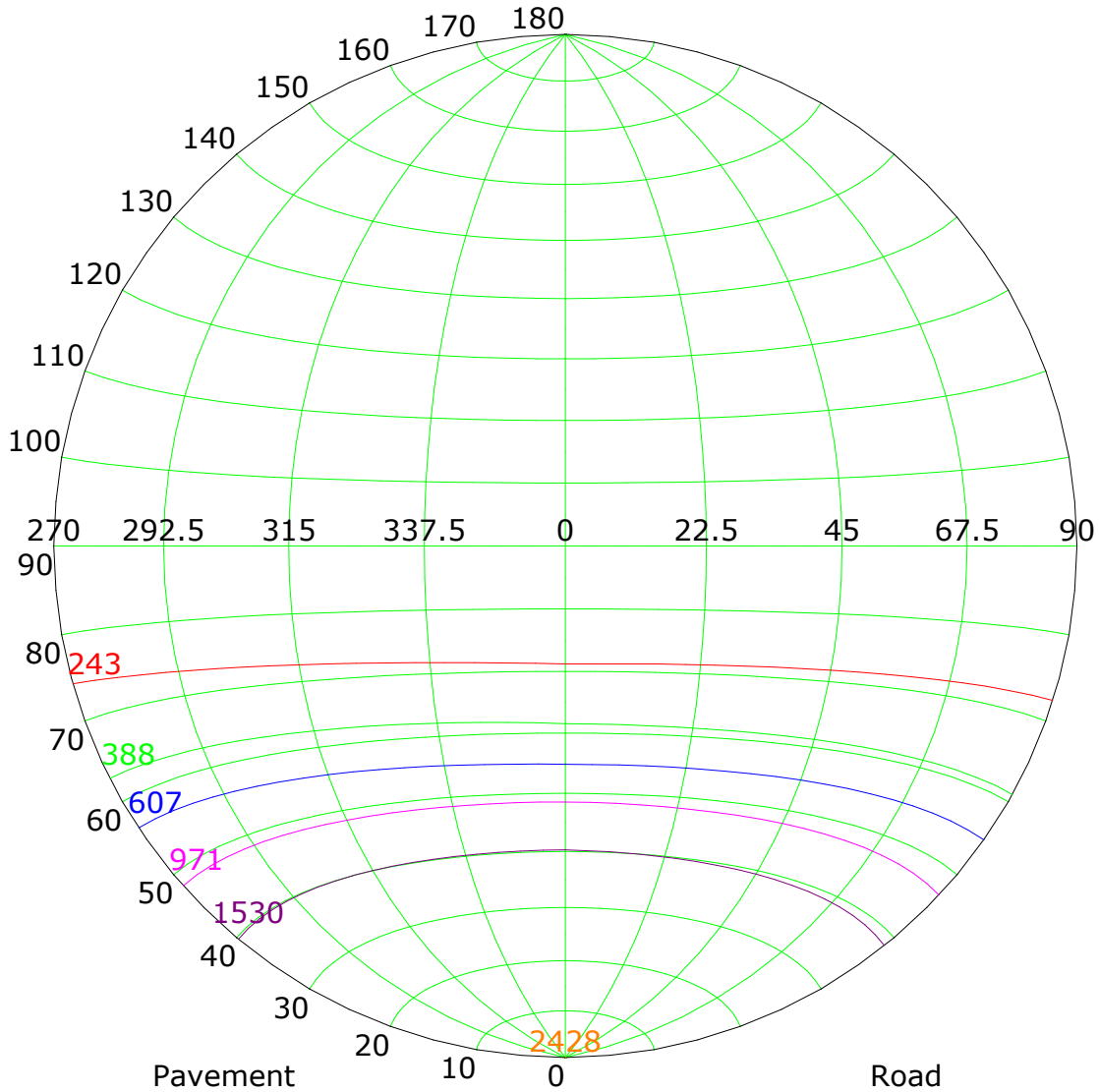


- ( 10%): 243 cd
  - ( 25%): 607 cd
  - ( 63%): 1530 cd
- ( 16%): 388 cd
  - ( 40%): 971 cd
  - (100%): 2428 cd

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%): 2428 cd

— ( 10%): 243 cd	— ( 16%): 388 cd
— ( 25%): 607 cd	— ( 40%): 971 cd
— ( 63%): 1530 cd	— (100%): 2428 cd

CIE: narrow - short  
 CIE: Semi-cut-off luminaire  
 Max.At90: 9.789 cd/klm

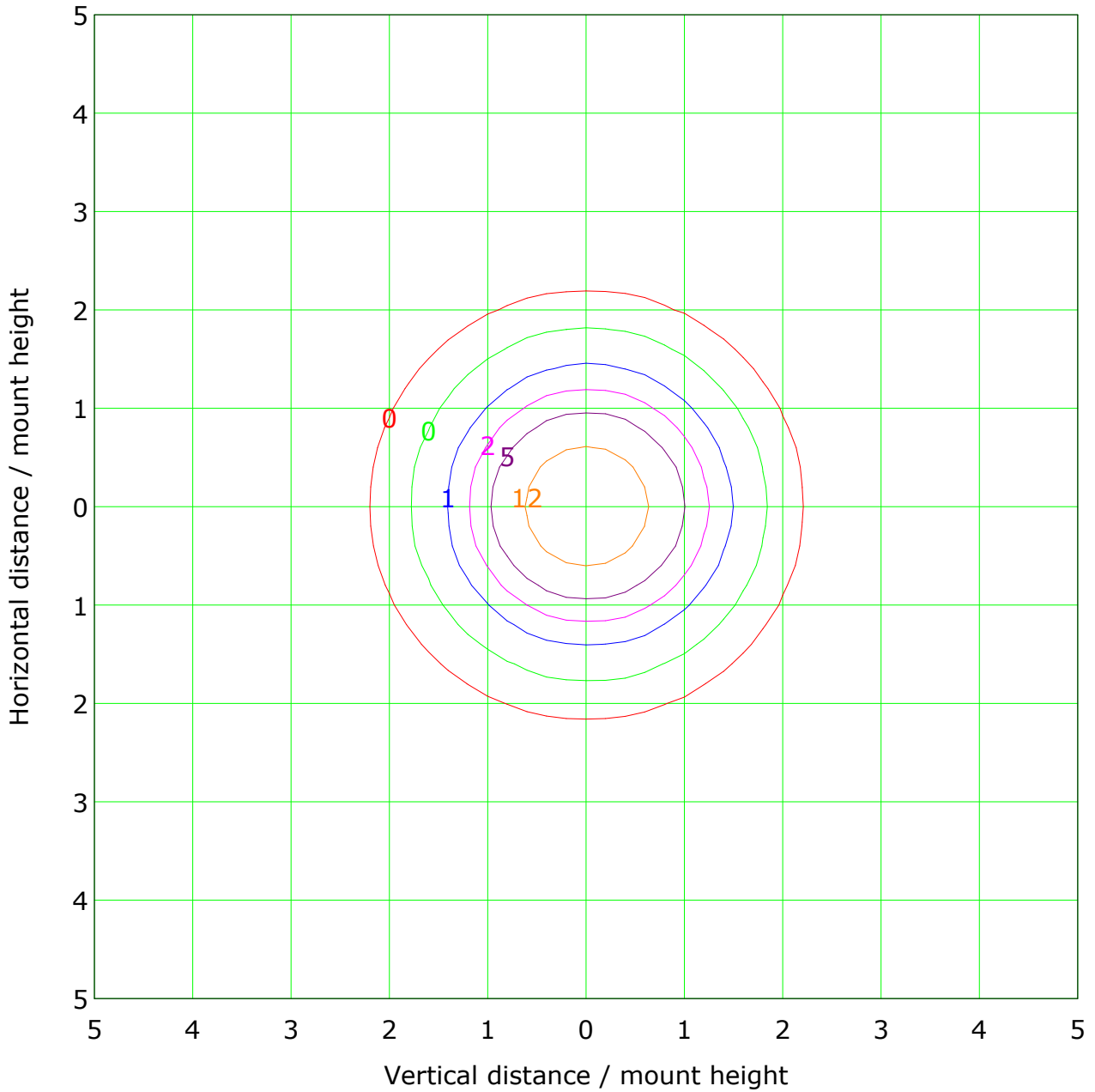
IES: Cut-off  
 Max.At80: 82.523 cd/klm  
 Max.80-90: 2614167830256290700000000000.00

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%): 24.3 lx

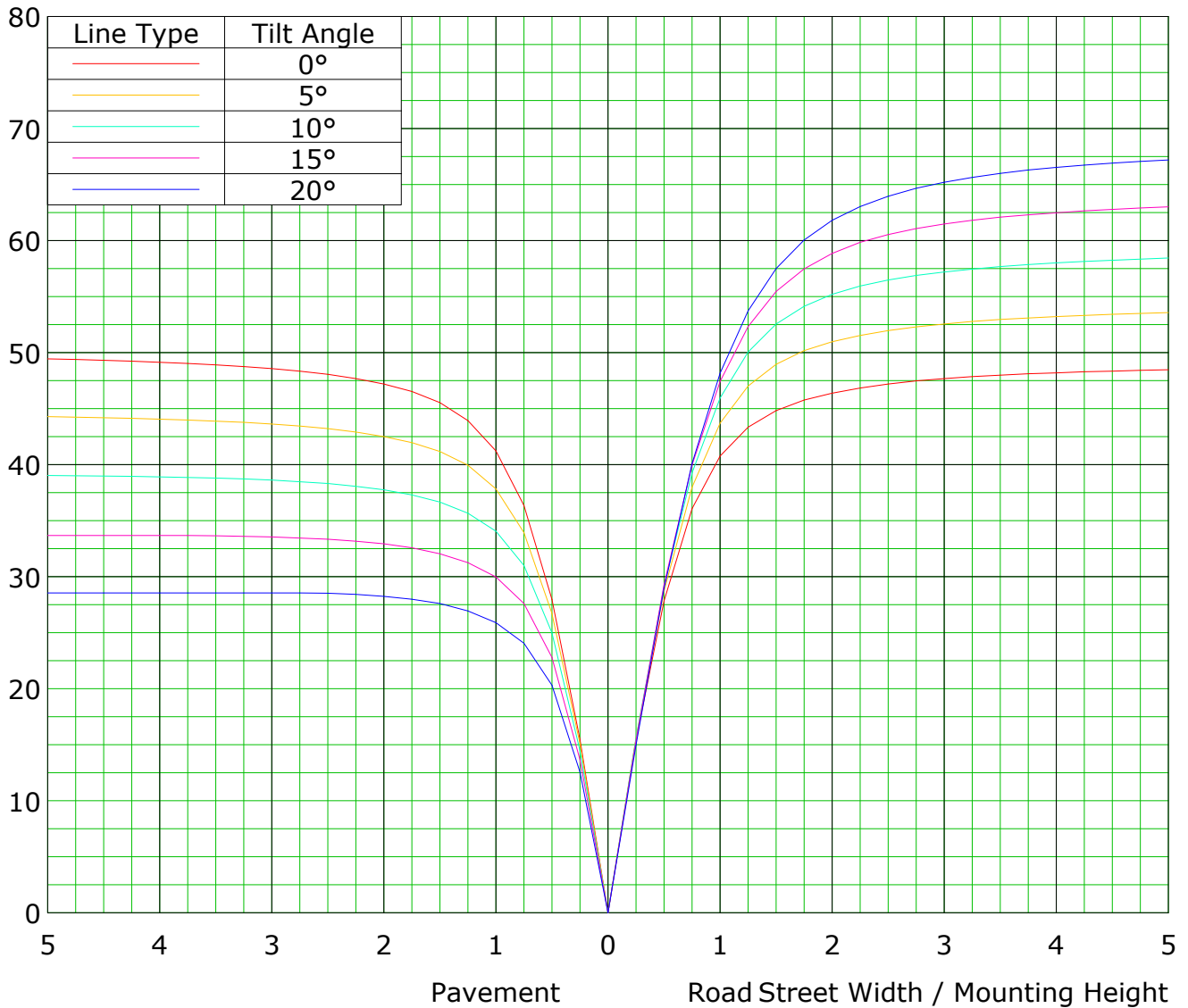
— ( 1%): 0.2 lx	— ( 2%): 0.5 lx
— ( 5%): 1.2 lx	— ( 10%): 2.4 lx
— ( 20%): 4.9 lx	— ( 50%): 12.1 lx
— (100%): 24.3 lx	

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(%)

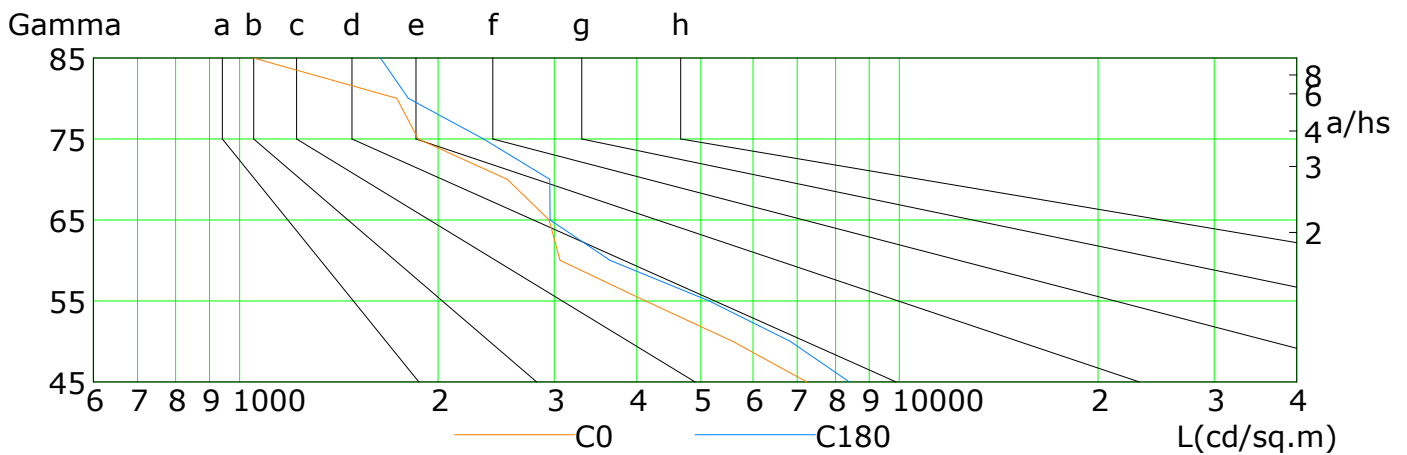
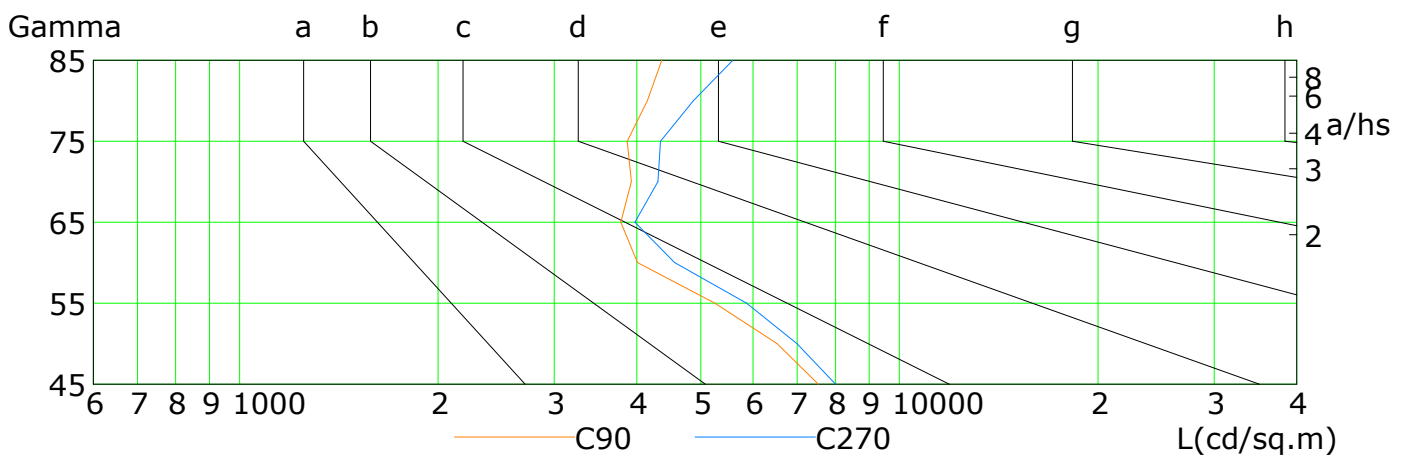

 C Plane (°):0.0-360.0: 90.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

 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	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

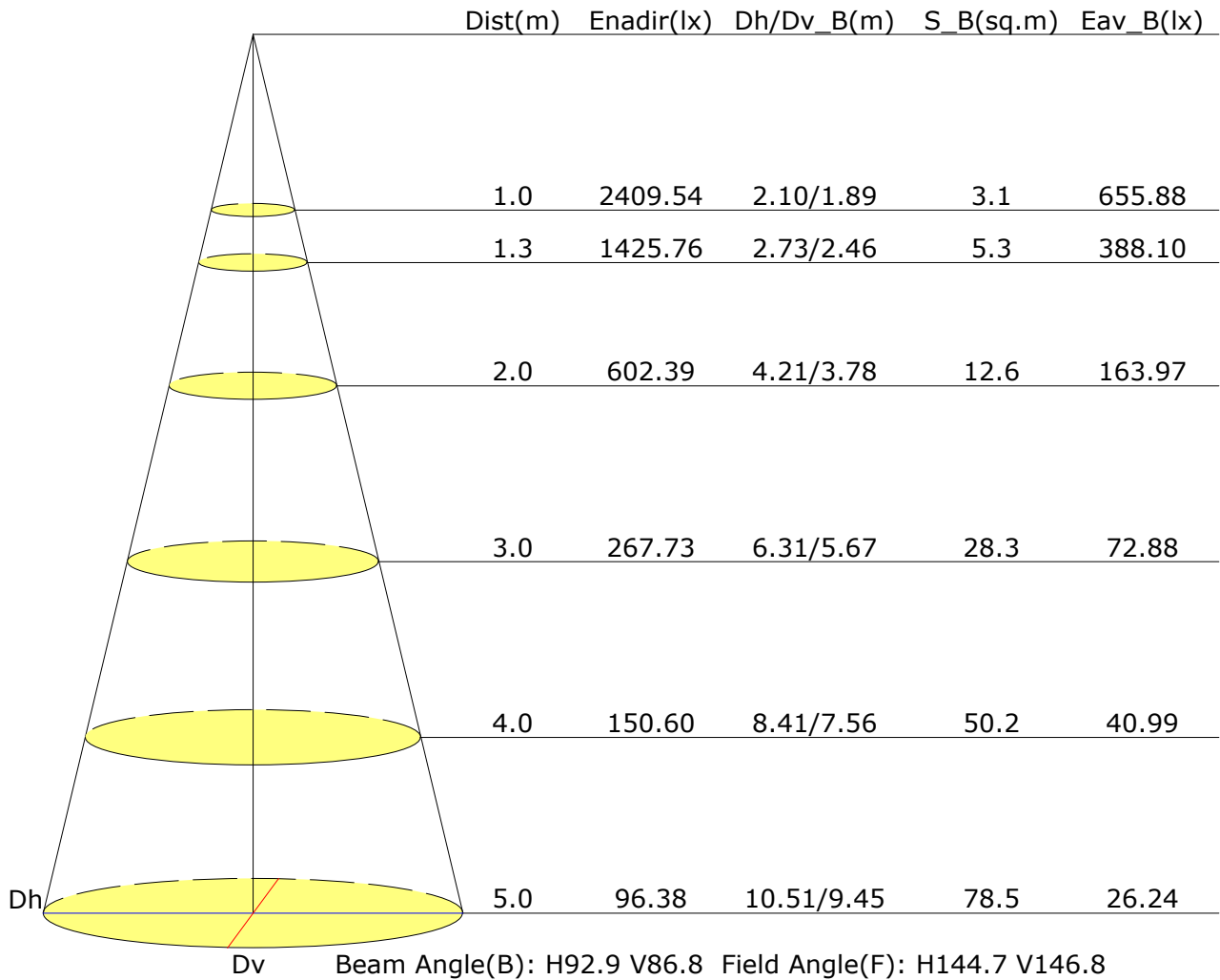


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	7241	5589	4123	3058	2946	2544	1865	1731	1050
C90	7534	6528	5252	4011	3781	3927	3868	4152	4364
C180	8401	6830	5147	3644	2956	2953	2342	1802	1635
C270	8001	6994	5870	4562	3975	4307	4345	4876	5594

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





# 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	1.2	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	3.8	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	2.1	3.5	5.0	6.2	6.8	6.7	5.9	4.7	3.2	1.9	1.1	0.6	0.2	0.0	49.8	48.8	
-40	0.0	0.3	0.7	1.5	3.1	5.3	7.6	9.5	10.3	10.2	9.2	7.2	4.8	2.7	1.3	0.7	0.2	0.0	74.9	74.2	
-30	0.1	0.3	0.8	1.9	4.2	7.1	9.8	11.6	12.4	12.3	11.4	9.5	6.6	3.6	1.6	0.8	0.3	0.0	94.5	93.9	
-20	0.1	0.3	0.9	2.3	5.1	8.4	11.0	12.7	13.4	13.4	12.5	10.8	7.9	4.5	1.9	0.8	0.3	0.0	106.3	105.8	
-10	0.1	0.3	0.9	2.5	5.7	9.1	11.5	13.1	13.9	13.8	12.9	11.3	8.6	4.9	2.1	0.9	0.3	0.0	112.0	111.4	
0	0.1	0.3	0.9	2.5	5.6	9.0	11.5	13.1	13.9	13.8	12.9	11.3	8.6	4.9	2.1	0.9	0.3	0.0	111.8	111.3	
10	0.1	0.3	0.9	2.3	5.1	8.4	11.0	12.6	13.4	13.4	12.5	10.7	7.9	4.4	1.9	0.8	0.3	0.0	105.9	105.4	
20	0.1	0.3	0.8	1.9	4.1	7.0	9.7	11.5	12.3	12.3	11.4	9.4	6.5	3.6	1.6	0.8	0.3	0.0	93.6	92.9	
30	0.0	0.3	0.7	1.4	3.0	5.2	7.4	9.2	10.1	10.0	9.0	7.0	4.7	2.6	1.3	0.7	0.2	0.0	73.0	72.3	
40	0.0	0.2	0.6	1.1	2.0	3.4	4.8	5.9	6.4	6.3	5.7	4.5	3.0	1.8	1.1	0.6	0.2	0.0	47.6	46.5	
50	0.0	0.2	0.5	0.9	1.4	1.9	2.6	3.3	3.6	3.5	3.1	2.5	1.8	1.3	0.9	0.4	0.2	0.0	28.2	26.5	
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	14.1	
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	1.2	
80	0.0	0.1	0.1	0.2	0.3	0.4	0.5	0.5	0.6	0.5	0.5	0.4	0.3	0.3	0.2	0.1	0.0	0.0	5.1	0.0	
90	0.0	0.1	0.1	0.2	0.3	0.4	0.5	0.5	0.6	0.5	0.5	0.4	0.3	0.3	0.2	0.1	0.0	0.0	5.1	0.0	
Flux(T)	0.7	4.0	10.6	23.2	46.8	75.9	101.6	119.6	128.2	127.4	117.2	97.9	70.6	41.3	20.2	9.6	3.4	0.5	999		
Flux(E)	0.0	0.7	7.7	20.5	44.1	73.2	98.8	116.8	125.4	124.5	114.4	95.1	67.8	38.5	17.3	6.4	0.2	0.0		951	
	-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	Flux(T)	Flux(E)

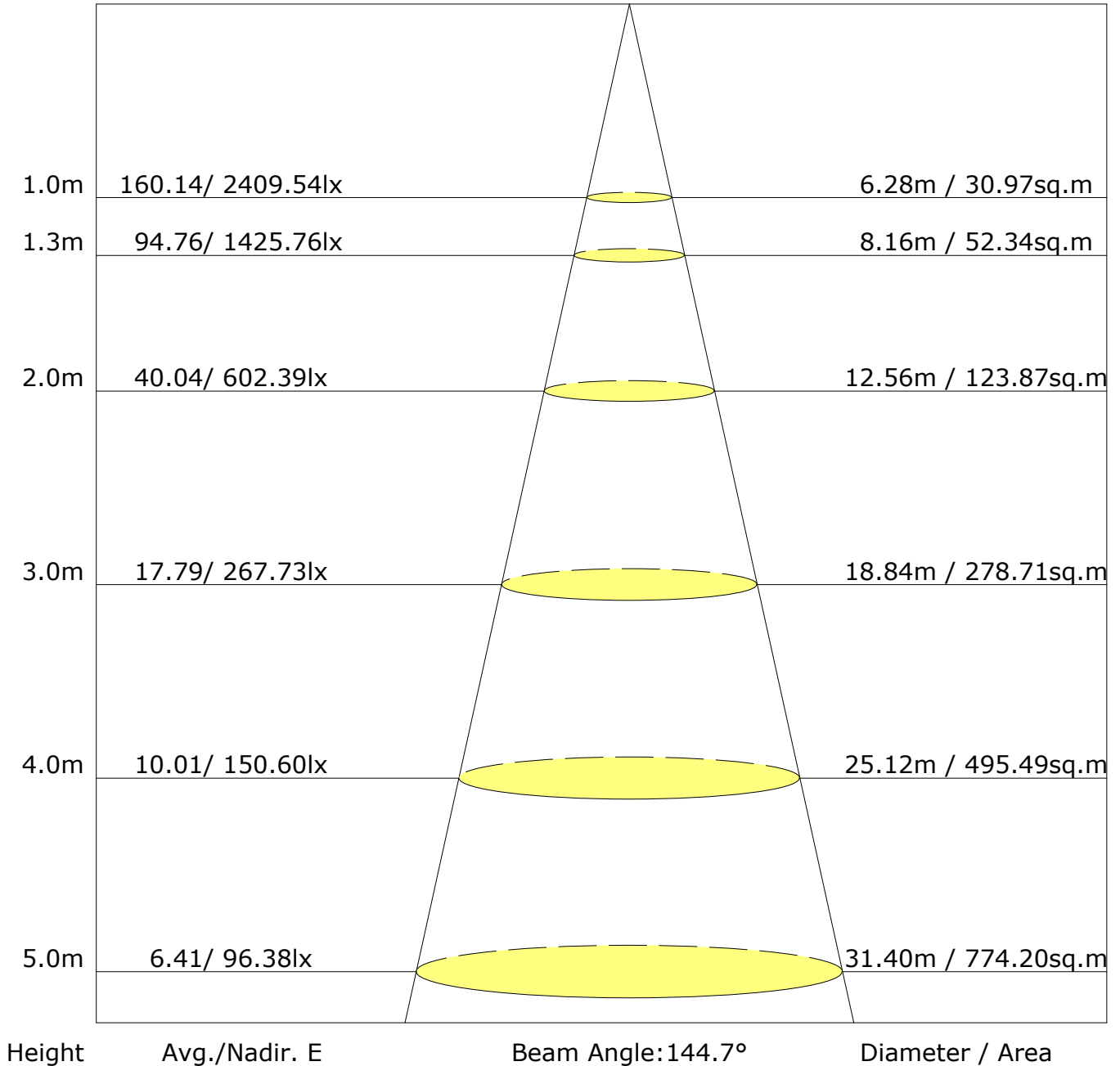
Gamma Plane (°): 0.0-90.0: 5.0  
 Test Device: GPM-1600L  
 Distance: 7.172 m [K=1.0000]  
 Humidity:  
 Inspector:

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



### The Average Illuminance Effective Figure

Flux Out: 4959.26lm



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

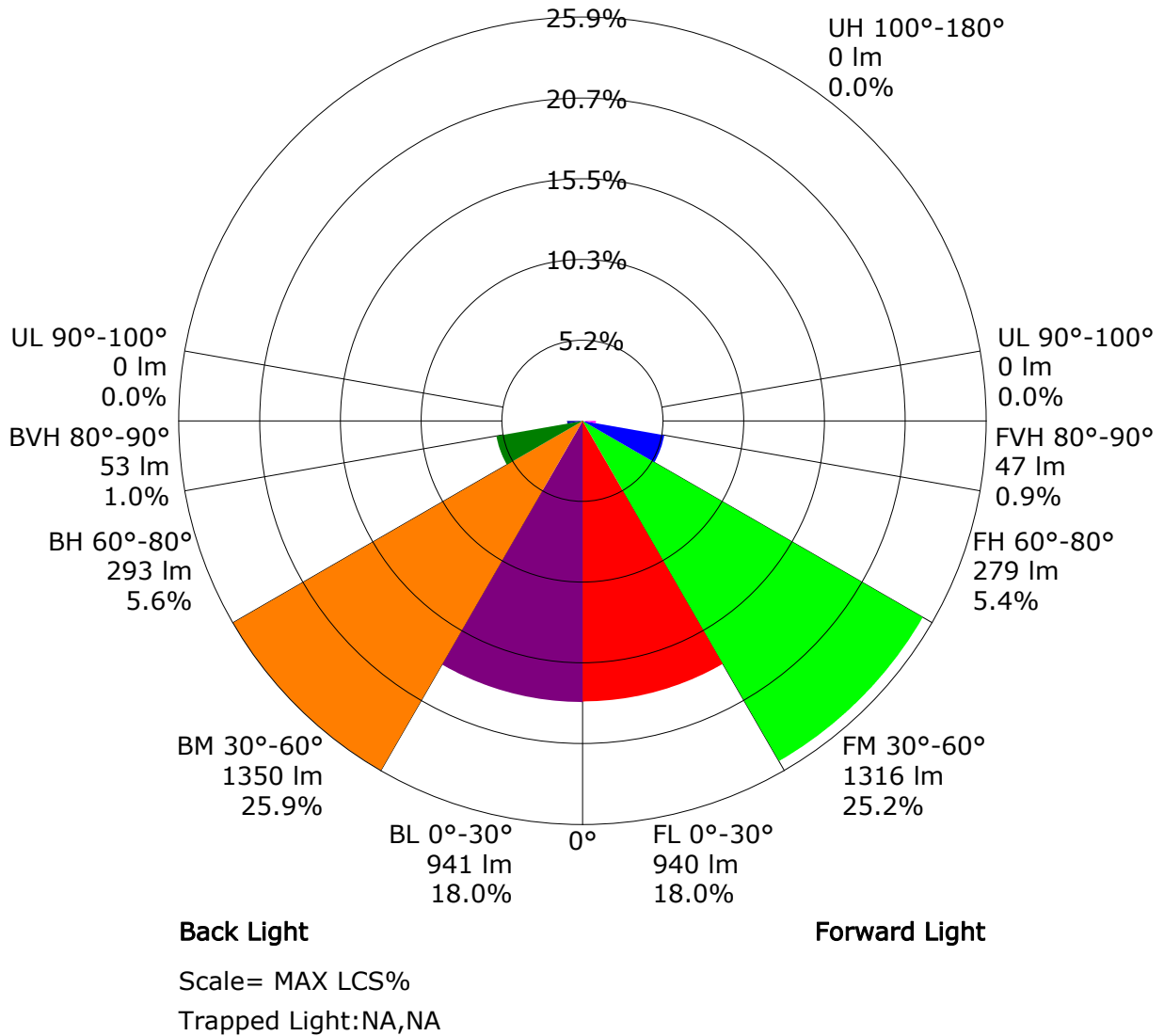
Gamma Plane (°):0.0-90.0:5.0  
Test Device: GPM-1600L  
Distance: 7.172 m [K=1.0000]  
Humidity:  
Inspector:

## 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	17.0	18.3	17.3	18.5	18.7	17.4	18.7	17.7	18.9	19.1
3H	17.7	18.9	18.1	19.1	19.4	18.3	19.5	18.7	19.7	20.0
4H	18.0	19.1	18.4	19.4	19.6	18.9	19.9	19.2	20.2	20.5
6H	18.2	19.2	18.6	19.5	19.8	19.4	20.4	19.8	20.7	21.0
8H	18.3	19.3	18.7	19.6	19.9	19.7	20.6	20.0	20.9	21.3
12H	18.3	19.3	18.7	19.6	19.9	19.9	20.8	20.3	21.1	21.5
X=4H Y=2H	17.3	18.4	17.7	18.7	18.9	17.7	18.7	18.0	19.0	19.3
3H	18.3	19.2	18.6	19.5	19.8	18.8	19.7	19.2	20.1	20.4
4H	18.7	19.5	19.1	19.8	20.2	19.5	20.3	19.9	20.6	21.0
6H	19.0	19.7	19.4	20.1	20.5	20.2	20.9	20.6	21.3	21.7
8H	19.1	19.8	19.6	20.2	20.6	20.5	21.2	21.0	21.6	22.0
12H	19.2	19.8	19.7	20.2	20.7	20.8	21.4	21.3	21.9	22.3
X=8H Y=4H	18.9	19.5	19.3	19.9	20.4	19.6	20.3	20.1	20.7	21.1
6H	19.4	19.9	19.8	20.3	20.8	20.5	21.0	21.0	21.5	21.9
8H	19.6	20.1	20.1	20.5	21.0	20.9	21.4	21.4	21.9	22.3
12H	19.7	20.1	20.2	20.6	21.1	21.3	21.8	21.8	22.2	22.7
X=12H Y=4H	18.9	19.5	19.4	19.9	20.4	19.6	20.2	20.1	20.7	21.1
6H	19.5	19.9	19.9	20.4	20.9	20.5	21.0	21.0	21.5	21.9
8H	19.7	20.1	20.2	20.6	21.1	21.0	21.4	21.5	21.9	22.4
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 5218lm ( $8\log(F/F_0) = 5.7$ ).

## 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	0.83	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	0.87	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°): 3524.05 lm

%lum = 67.5%  
%lamp = 67.5%

cone flux(120°): 4546.02 lm

%lum = 87.1%  
%lamp = 87.1%



## LED Average Luminance Report

Avg.L	cd/m <sup>2</sup>
L 0-180(65) av	4265.05
L 0-180(75) av	3733.92
L 0-180(85) av	4529.47
L 90-270(65) av	4027.46
L 90-270(75) av	4382.23
L 90-270(85) av	6003.11
L 45(65) av	4146.25
L 45(75) av	4058.08
L 45(85) av	5266.29

Standard: GB/T 29293-2012