

Report No.:

Test Time: 2025-10-10 16:55

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category:

Lamp Catalog: 4000K

Number of Lamps:

Luminous Length (mm): 1200

Luminous Height (mm): 20

Current: 0.1420 A

Power Factor: 0.9210

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: 30.34 W

## Photometric Results

CIE Class: Direct

Measurement Flux: 3834.6 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H88.2

Vertical Diffuse Angle(50%): V83.4

Luminous Efficacy (lm/w): 126.39

Max. Intensity: 486.51 cd/klm

S/MH(C0/C180): 1.20

Total Rated Lamp Lumens: 3834.6 lm

Efficiency: 100%

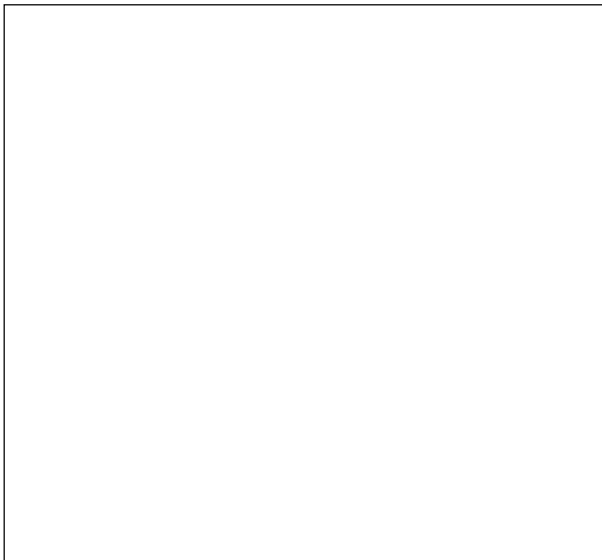
Upward Ratio: 0%

C0r0 Intensity: 485.48 cd/klm

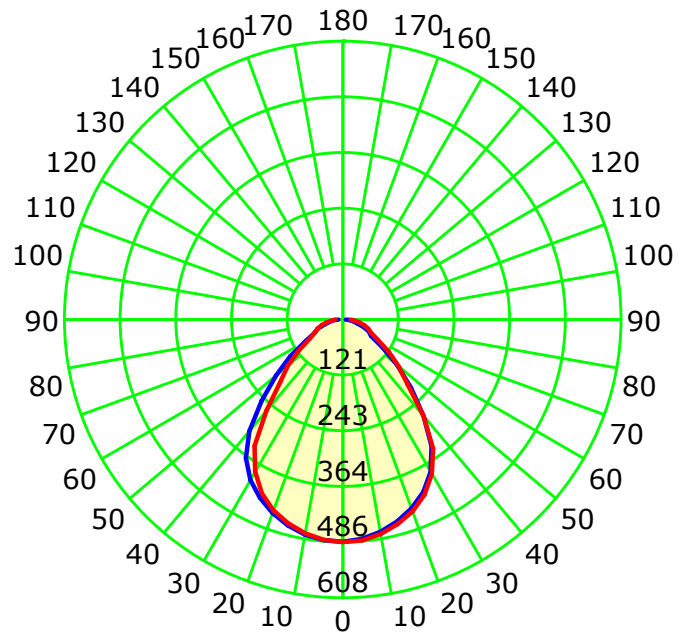
Pos of Max. Intensity: H90 V0

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

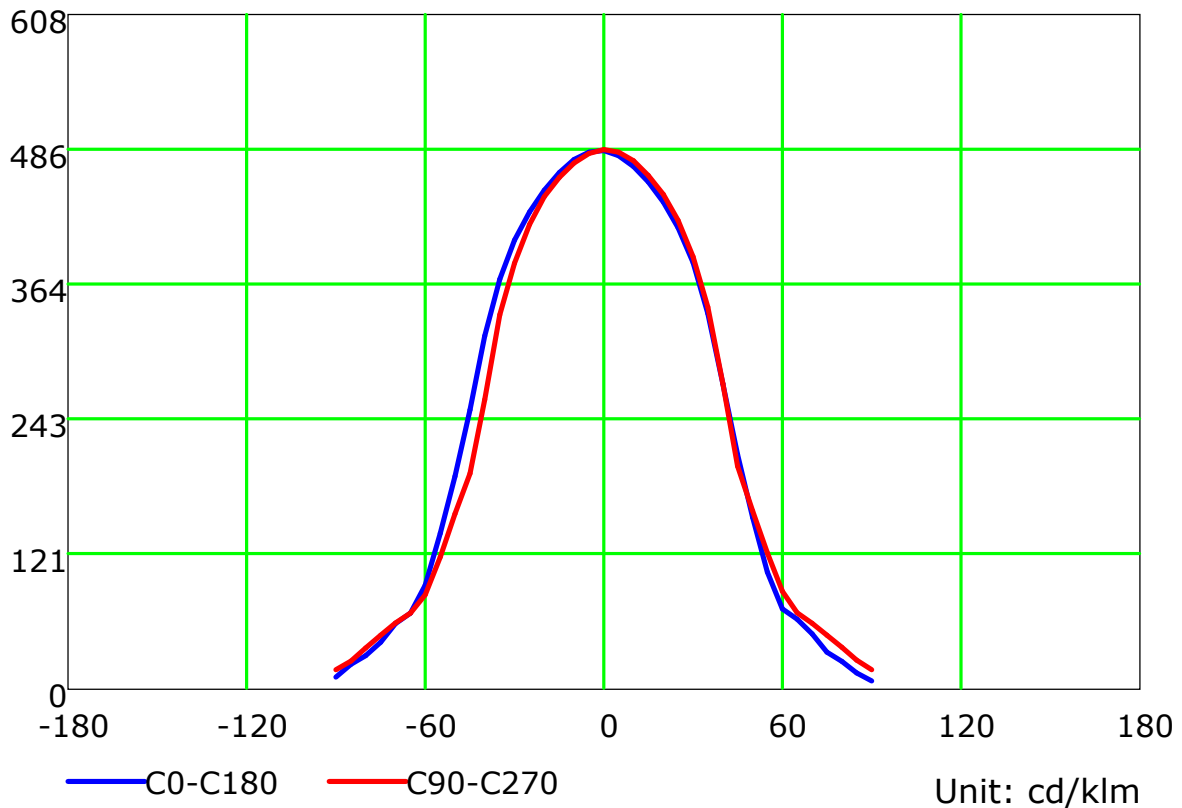
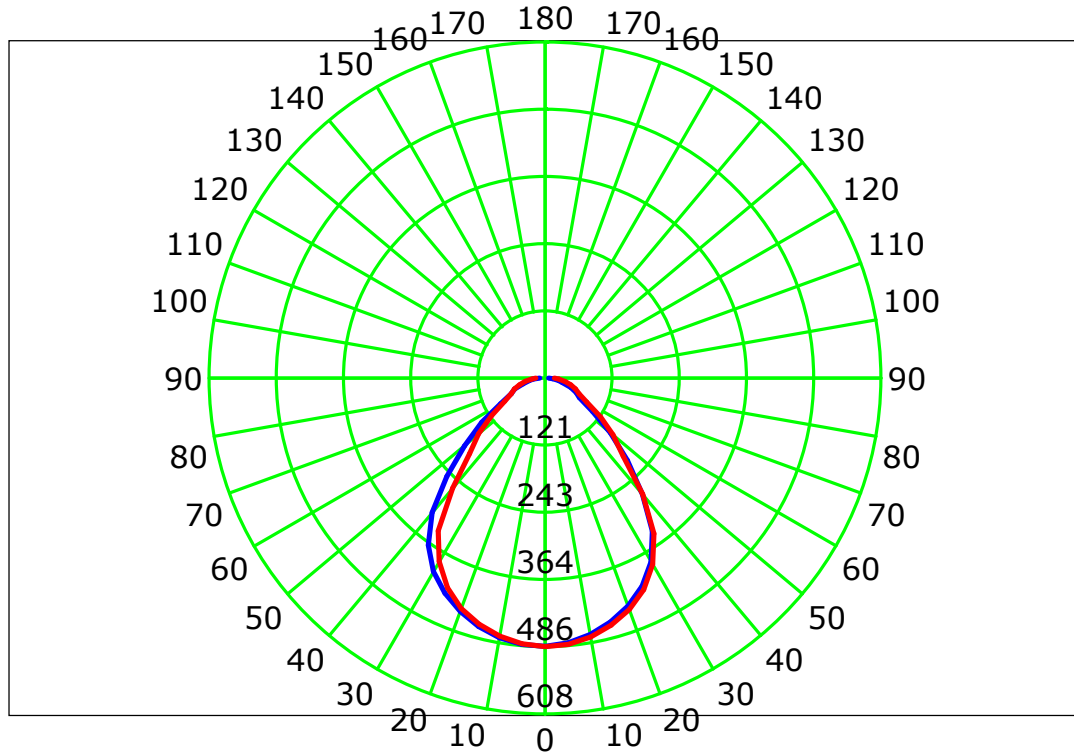
Distance: 7.172 m [K=1.0000]

Humidity:

Inspector:



### Luminous Intensity Distribution Curve

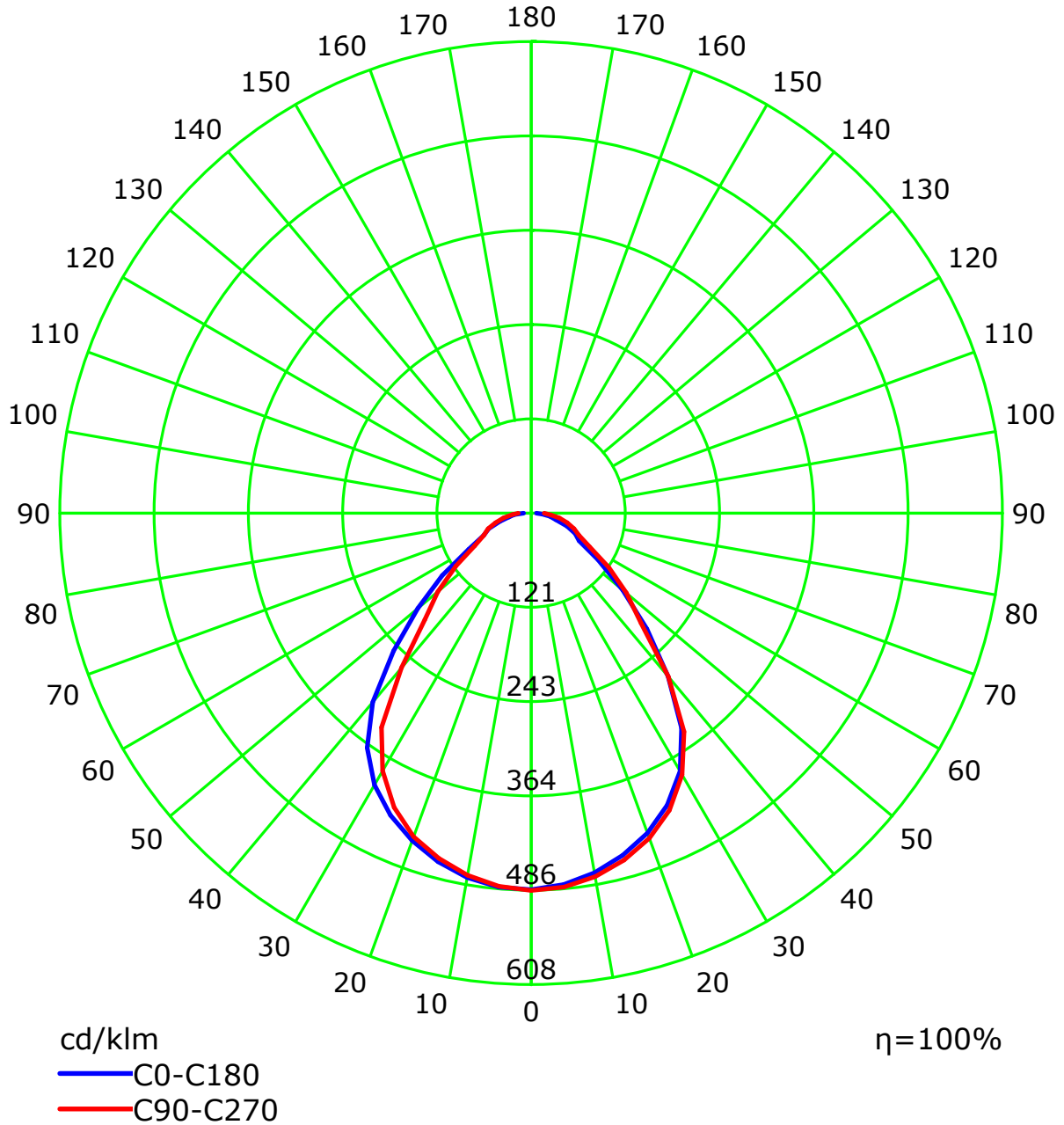


C Plane (°):0.0-360.0: 90.0  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

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)



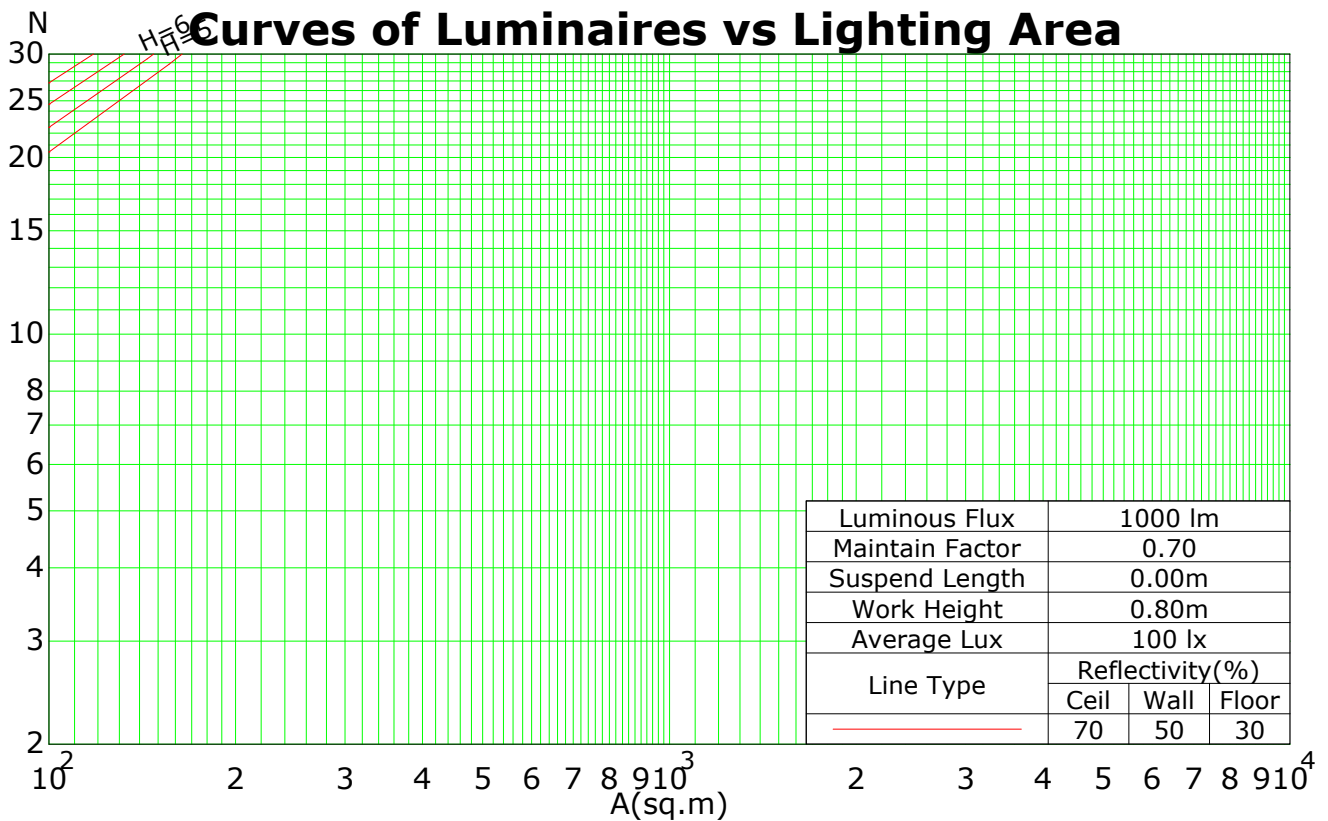
C Plane (°):0.0-360.0: 90.0  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

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	0.60	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	0.43	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

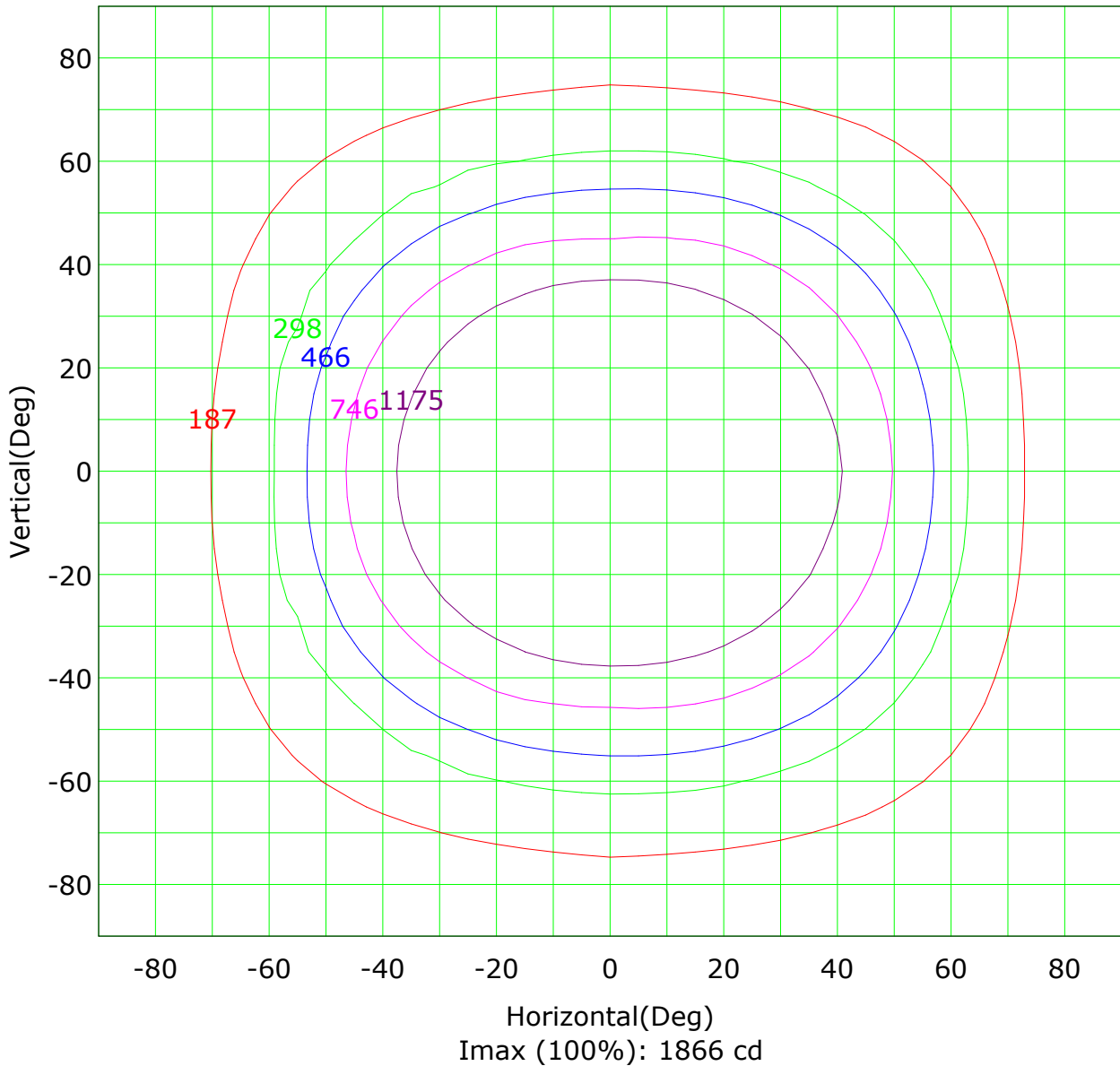


C Plane (°):0.0-360.0: 90.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

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



### Isocandela (rectangle)

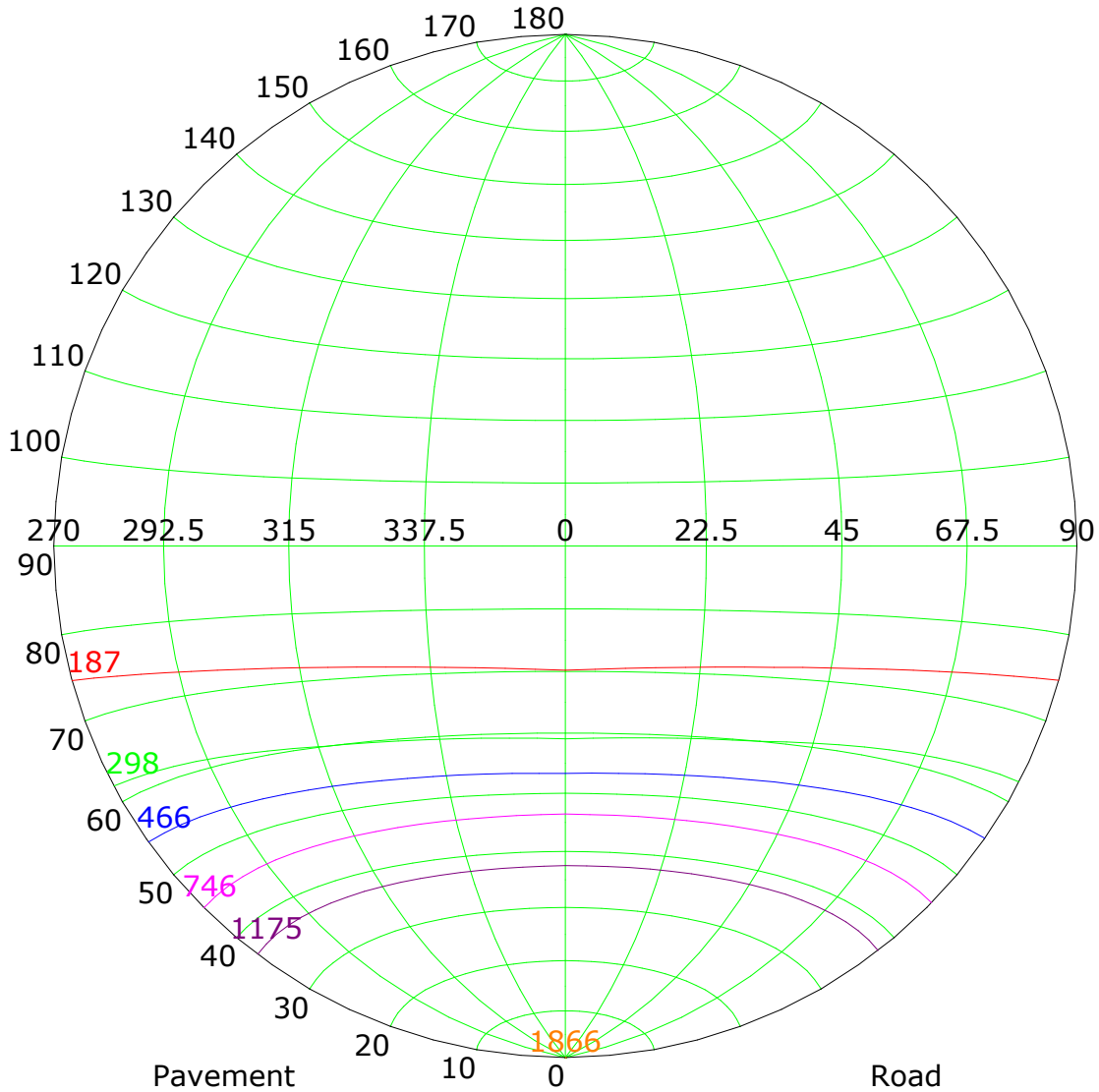


— ( 10%): 187 cd	— ( 16%): 298 cd
— ( 25%): 466 cd	— ( 40%): 746 cd
— ( 63%): 1175 cd	— (100%): 1866 cd

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%): 1866 cd

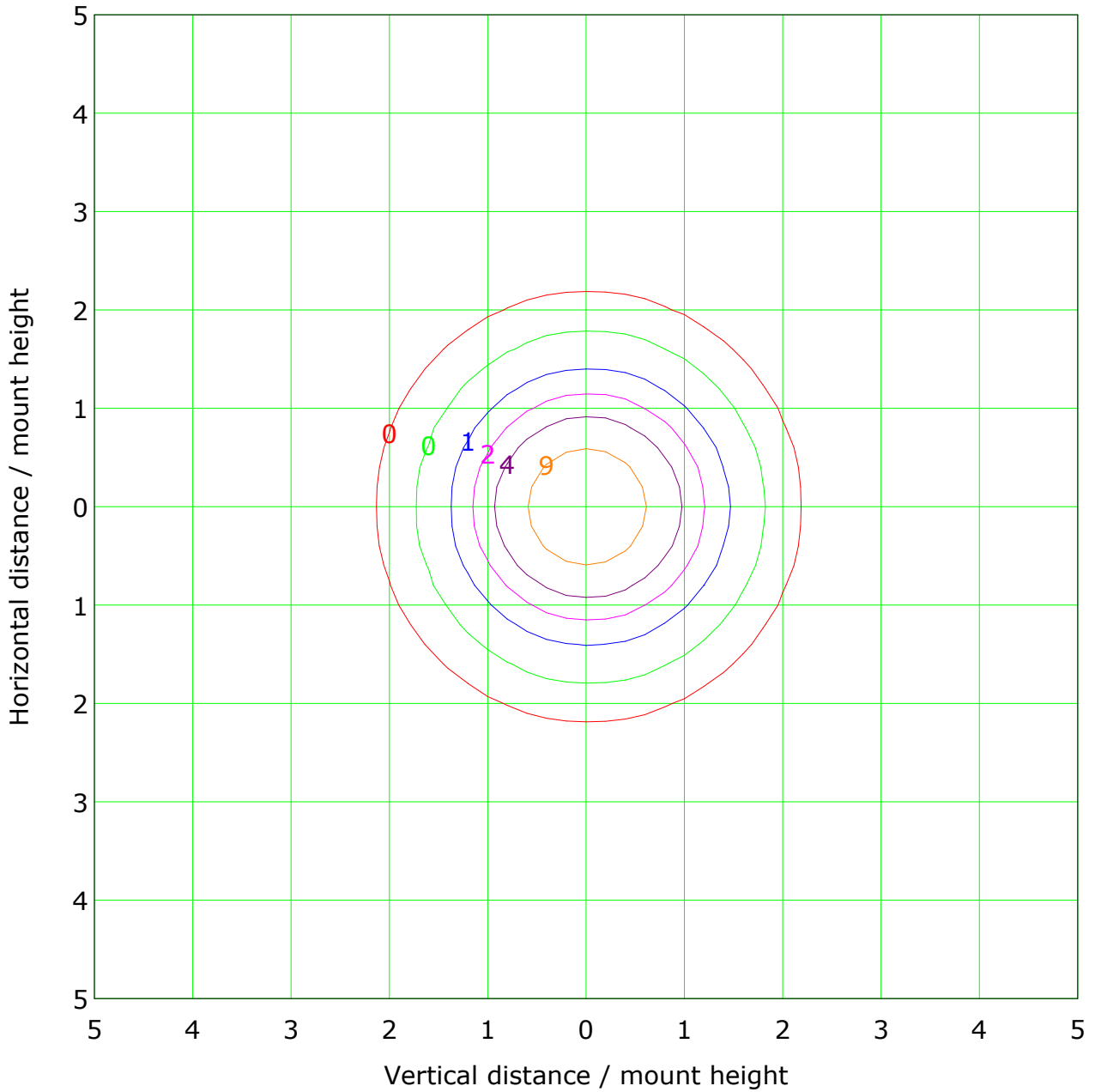
— ( 10%): 187 cd	— ( 16%): 298 cd
— ( 25%): 466 cd	— ( 40%): 746 cd
— ( 63%): 1175 cd	— (100%): 1866 cd

CIE: narrow - short  
 CIE: Non-cut-off luminaire  
 Max.At90: 12.867 cd/klm

IES: Semi-cut-off  
 Max.At80: 114.465 cd/klm  
 Max.80-90: 4841015303702448500000000000.00



### IsoLux Plot



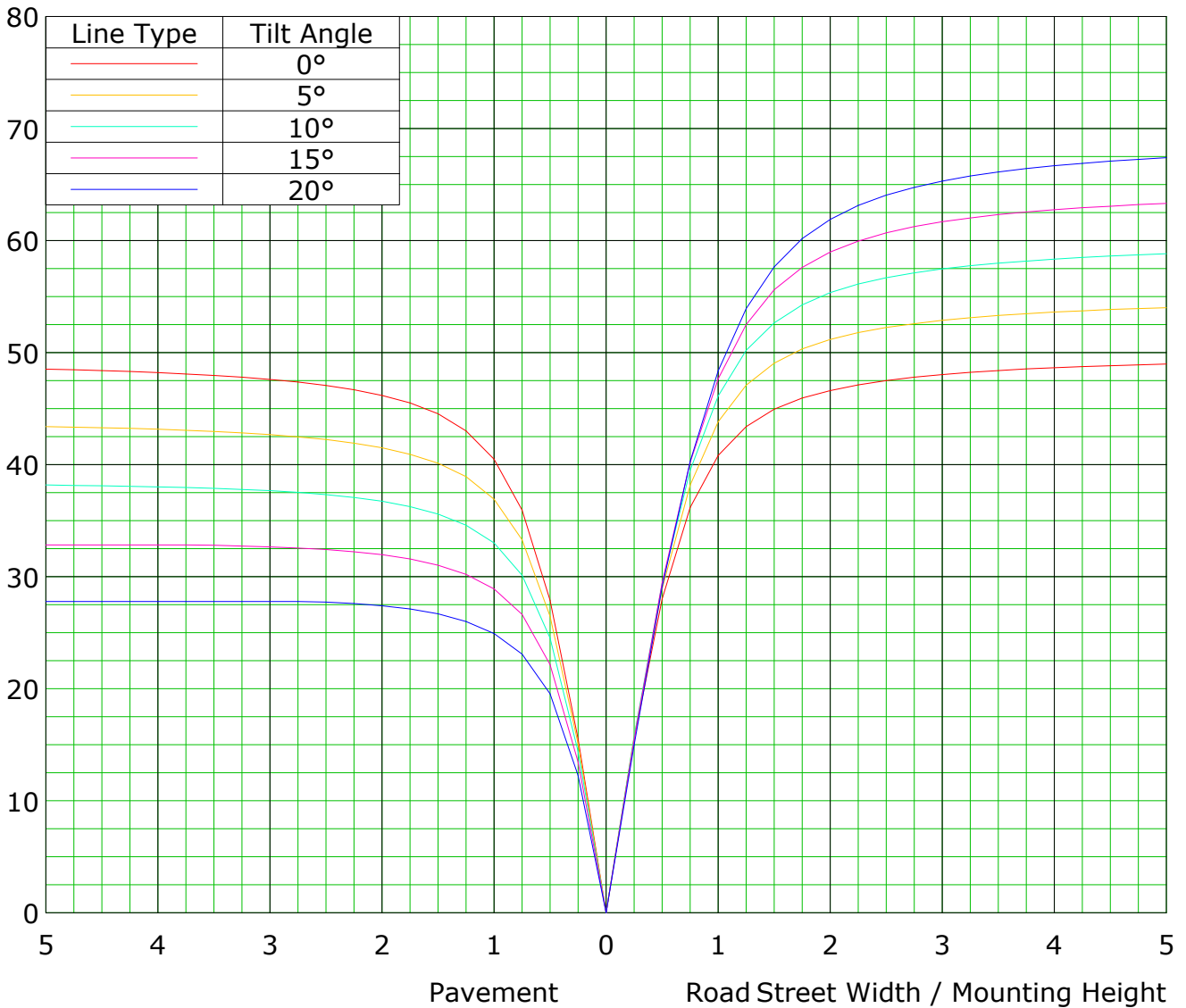
Mounting Height: 10.0m		Max Lux(100%): 18.7 lx	
— ( 1%):	0.2 lx	— ( 2%):	0.4 lx
— ( 5%):	0.9 lx	— ( 10%):	1.9 lx
— ( 20%):	3.7 lx	— ( 50%):	9.3 lx
— (100%):	18.7 lx		

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:

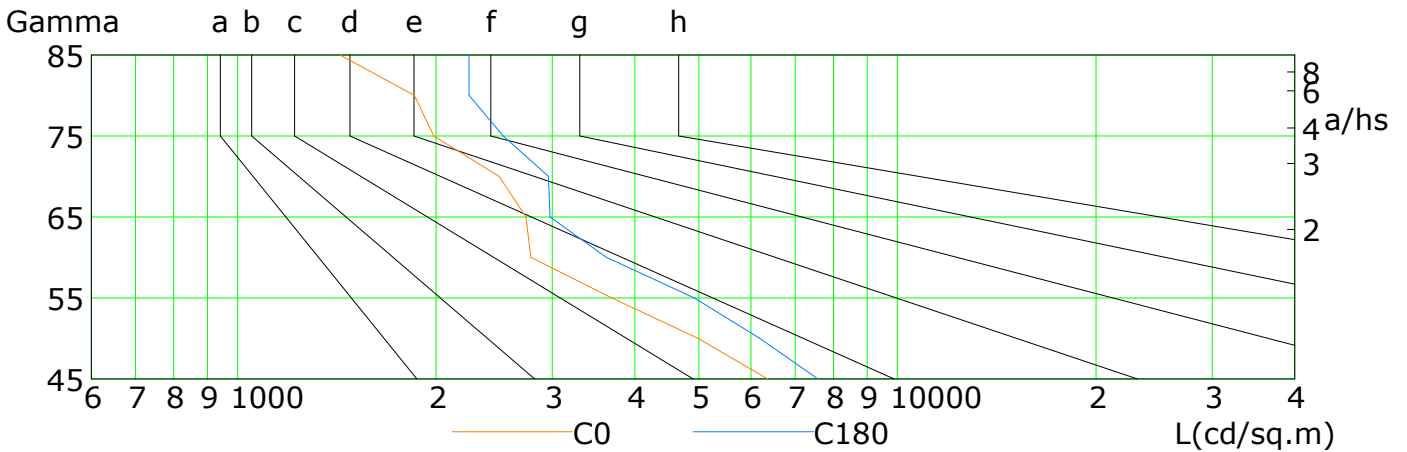
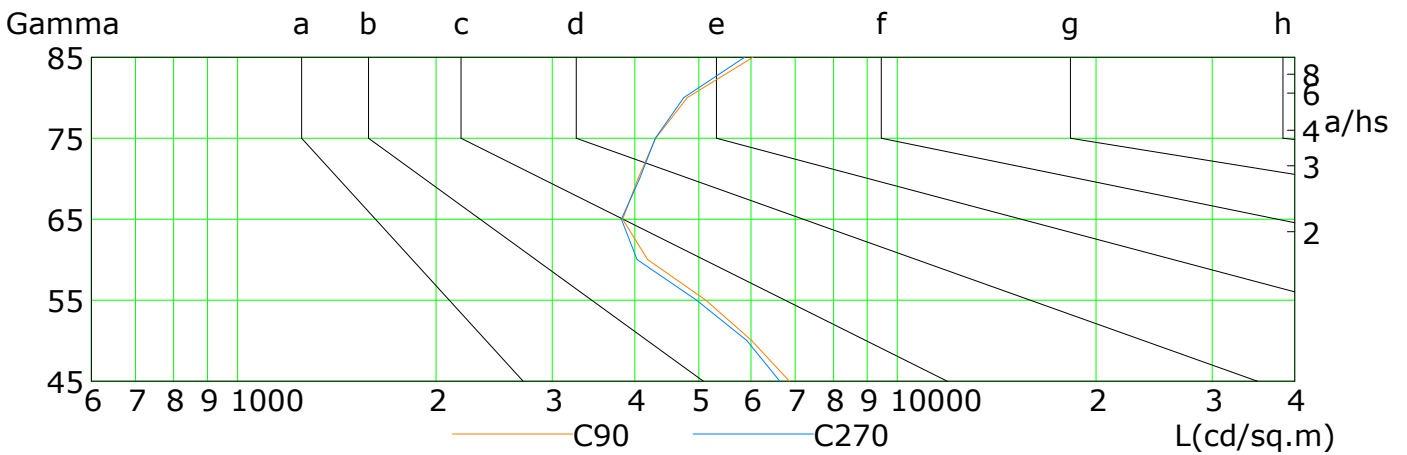
Gamma Plane (°):0.0-90.0:5.0  
 Test Device: GPM-1600L  
 Distance: 7.172 m [K=1.0000]  
 Humidity:  
 Inspector:



## 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

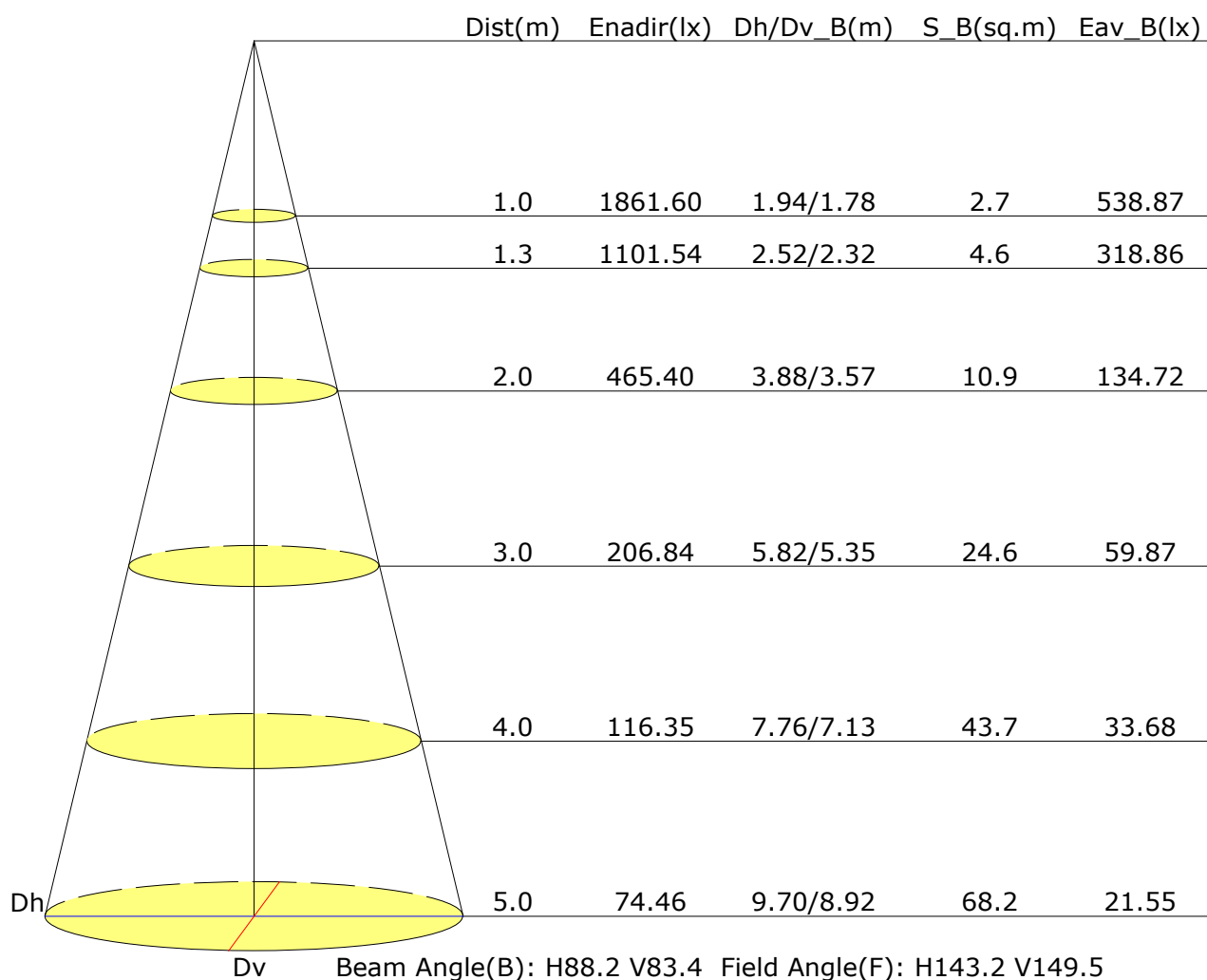


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	6362	4987	3691	2781	2737	2492	1984	1852	1430
C90	6861	6011	5127	4185	3835	4047	4302	4802	6037
C180	7578	6181	4921	3620	2974	2959	2527	2244	2242
C270	6637	5912	4962	4031	3816	4068	4295	4744	5870

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

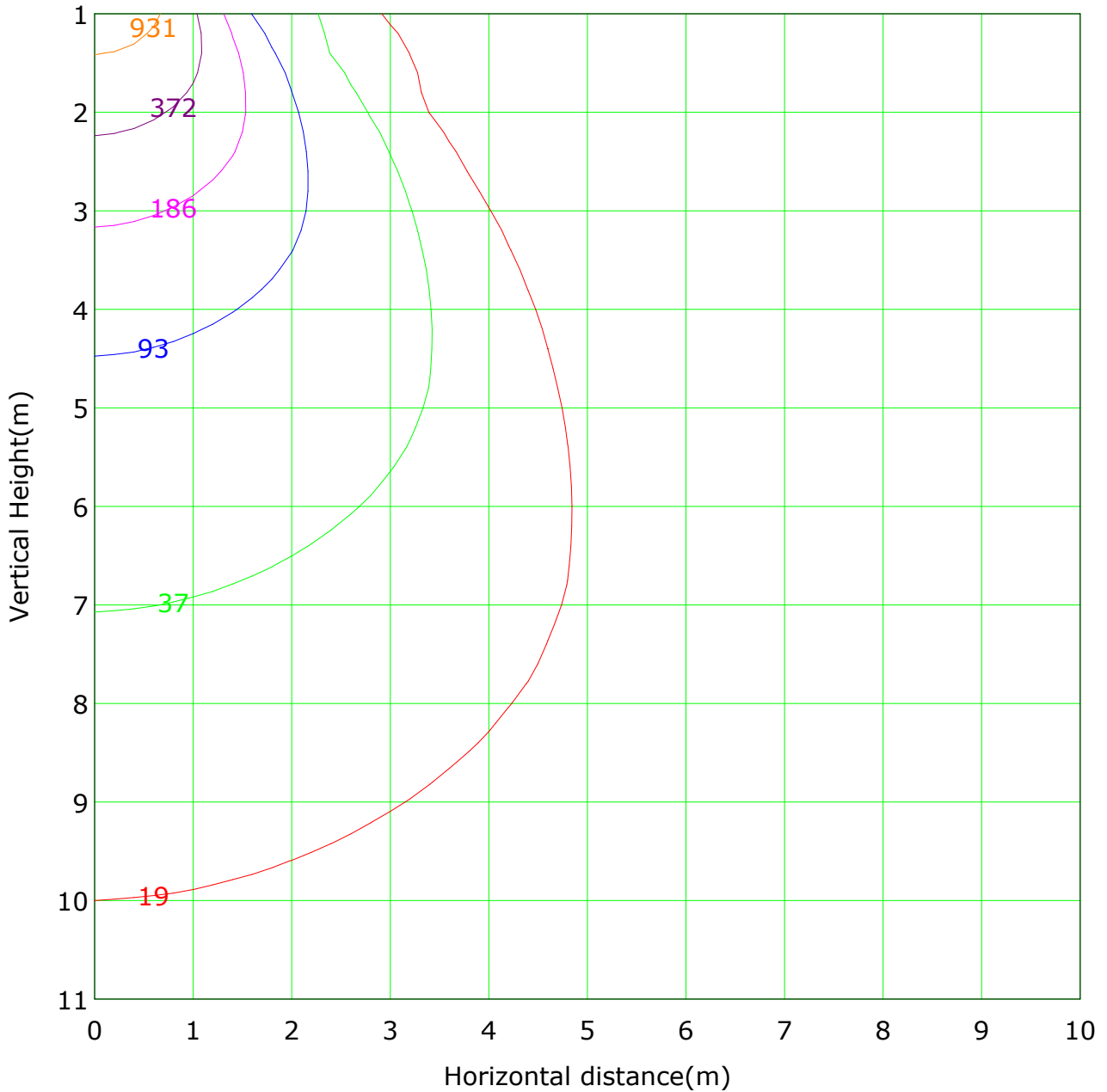


C Plane (°):0.0-360.0: 90.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

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: 1861.6 lx

— ( 1%): 18.6 lx	— ( 2%): 37.2 lx
— ( 5%): 93.1 lx	— ( 10%): 186.2 lx
— ( 20%): 372.3 lx	— ( 50%): 930.8 lx
— (100%):1861.6 lx	



# Area Flux Table

Unit: lm/klm

-90	0.0	0.1	0.2	0.3	0.4	0.6	0.6	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	0.5	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	15.5	
-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	29.0	27.2	
-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	45.1	
-40	0.1	0.3	0.8	1.5	3.0	4.9	7.1	9.0	9.9	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	3.9	6.7	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	8.2	11.1	12.9	13.9	13.8	12.8	10.7	7.5	4.1	1.8	0.8	0.3	0.0	106.2	105.5	
-10	0.1	0.3	0.9	2.4	5.3	9.0	11.7	13.5	14.5	14.4	13.3	11.3	8.2	4.5	1.9	0.8	0.3	0.0	112.7	112.2	
0	0.1	0.3	0.9	2.5	5.4	9.0	11.7	13.5	14.5	14.5	13.3	11.3	8.2	4.5	1.9	0.8	0.3	0.0	112.9	112.3	
10	0.1	0.3	0.9	2.2	4.8	8.3	11.1	13.0	13.9	13.9	12.8	10.8	7.6	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	6.8	9.8	11.7	12.7	12.6	11.5	9.3	6.2	3.4	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	4.5	2.5	1.3	0.7	0.2	0.0	72.2	71.4	
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	3.0	1.8	1.1	0.6	0.2	0.0	47.2	46.0	
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	1.4	0.9	0.5	0.2	0.0	29.5	27.7	
60	0.0	0.2	0.4	0.7	1.1	1.5	1.8	2.0	2.1	2.1	2.0	1.7	1.4	1.0	0.6	0.4	0.1	0.0	19.2	15.6	
70	0.0	0.2	0.3	0.5	0.7	1.0	1.2	1.4	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	0.4	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	7.4	0.0	
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	7.4	0.0	
Flux(T)	0.9	4.5	11.1	23.5	45.7	74.7	101.6	120.9	130.7	129.7	118.0	96.7	67.8	39.3	19.5	9.6	3.6	0.7	999		
Flux(E)	0.0	0.7	7.7	20.4	42.6	71.7	98.6	117.9	127.8	126.7	114.9	93.5	64.7	36.0	16.2	5.8	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)

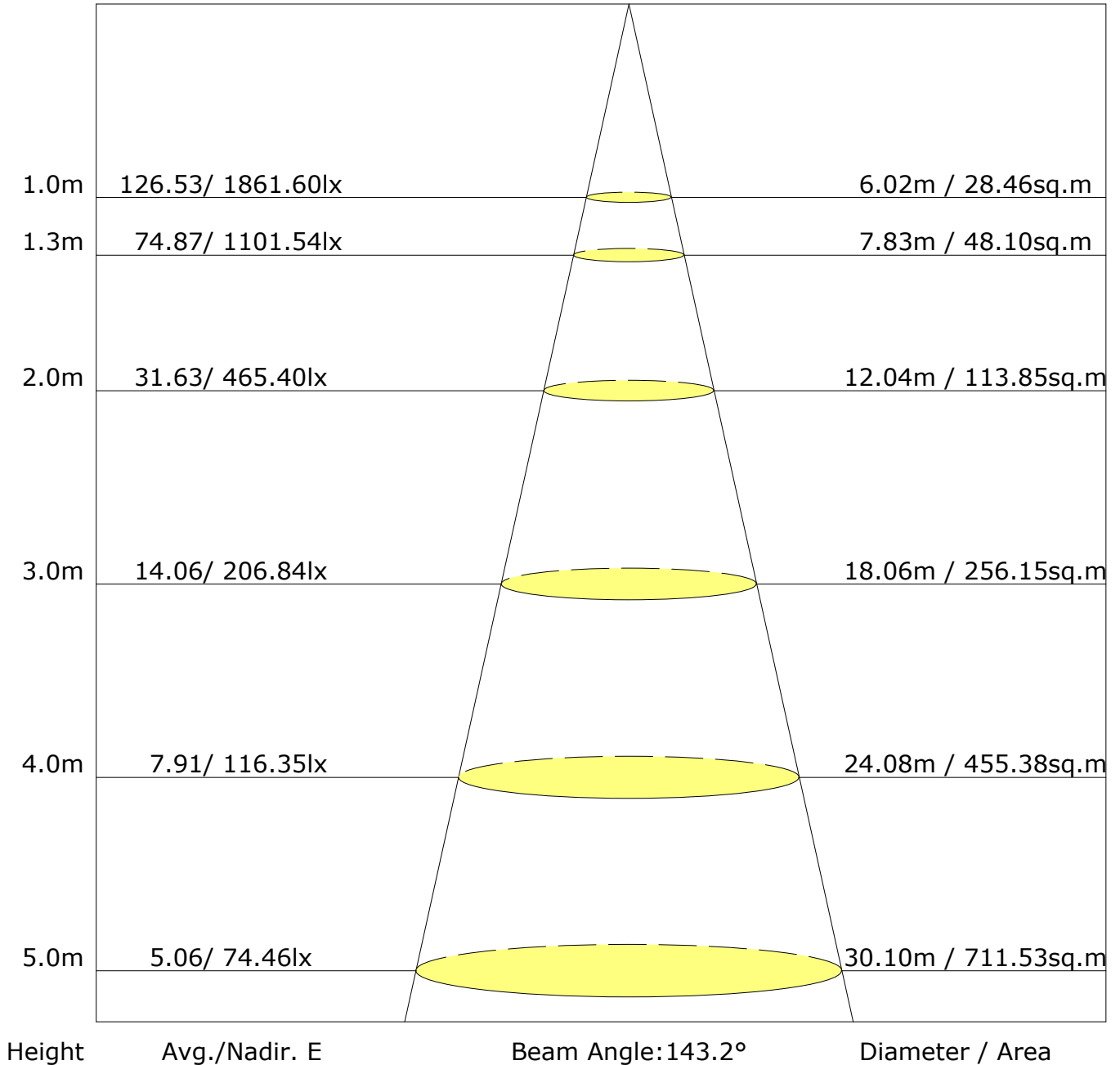
Gamma Plane (°): 0.0-90.0: 5.0  
 Test Device: GPM-1600L  
 Distance: 7.172 m [K=1.0000]  
 Humidity:  
 Inspector:

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



### The Average Illuminance Effective Figure

Flux Out: 3601.15lm



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	16.5	17.7	16.7	17.9	18.2	17.0	18.3	17.3	18.5	18.7
3H	17.3	18.4	17.6	18.7	18.9	18.1	19.2	18.4	19.5	19.8
4H	17.6	18.7	17.9	19.0	19.2	18.8	19.8	19.1	20.1	20.4
6H	17.9	18.9	18.3	19.2	19.5	19.4	20.4	19.8	20.7	21.1
8H	18.0	19.0	18.4	19.3	19.6	19.8	20.7	20.1	21.1	21.4
12H	18.1	19.0	18.5	19.3	19.7	20.1	21.0	20.5	21.4	21.7
X=4H Y=2H	16.8	17.9	17.2	18.2	18.4	17.3	18.4	17.6	18.6	18.9
3H	17.9	18.8	18.3	19.1	19.5	18.6	19.6	19.0	19.9	20.2
4H	18.4	19.2	18.8	19.5	19.9	19.4	20.3	19.8	20.6	21.0
6H	18.8	19.5	19.2	19.9	20.3	20.3	21.0	20.7	21.4	21.8
8H	19.0	19.6	19.4	20.0	20.5	20.7	21.4	21.2	21.8	22.2
12H	19.1	19.7	19.6	20.1	20.6	21.2	21.8	21.6	22.2	22.6
X=8H Y=4H	18.7	19.3	19.1	19.7	20.2	19.6	20.3	20.1	20.7	21.1
6H	19.3	19.8	19.7	20.3	20.7	20.7	21.2	21.1	21.7	22.1
8H	19.5	20.0	20.0	20.5	21.0	21.2	21.7	21.7	22.2	22.6
12H	19.8	20.2	20.3	20.7	21.2	21.8	22.2	22.3	22.7	23.2
X=12H Y=4H	18.7	19.3	19.2	19.7	20.2	19.7	20.3	20.1	20.7	21.1
6H	19.4	19.9	19.9	20.3	20.8	20.7	21.2	21.2	21.7	22.1
8H	19.7	20.1	20.2	20.6	21.1	21.3	21.7	21.8	22.2	22.7
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 3835lm ( $8\log(F/F_0) = 4.7$ ).



## 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	0.89	
Rating:30W 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	0.52	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	0.17	
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:30W 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:30W 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°): 2589.75 lm

%lum = 67.5%  
%lamp = 67.5%

cone flux(120°): 3306.42 lm

%lum = 86.2%  
%lamp = 86.2%



## LED Average Luminance Report

Avg.L	cd/m <sup>2</sup>
L 0-180(65) av	3797.53
L 0-180(75) av	3550.89
L 0-180(85) av	5063.88
L 90-270(65) av	3961.95
L 90-270(75) av	4565.73
L 90-270(85) av	7087.59
L 45(65) av	3879.74
L 45(75) av	4058.31
L 45(85) av	6075.74

Standard: GB/T 29293-2012