

Report No.:

Test Time: 2024-03-04 19:45

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category:

Lamp Catalog:

Number of Lamps:

Luminous Length (mm): -200

Luminous Height (mm):

Current: 0.063 A

Power Factor: 0.505

Luminaire Description: S-4902-3000K-WH

Lamp Description:

Lumens per Lamp:

Luminous Width (mm): -200

Voltage: 220.0 V

Power: 6.99 W

## Photometric Results

CIE Class: General Diffuse

Measurement Flux: 272.8 lm

Downward Ratio: 45%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 353.9, 354.5, 354.6, 354.5

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 337.7, 322.2, 331.6, 333.5

Luminaire Efficacy Rating (LER): 39.08

Max. Intensity: 56.8 cd

S/MH(C0/C180): 6.53

Total Rated Lamp Lumens: 272.8 lm

Efficiency: 100%

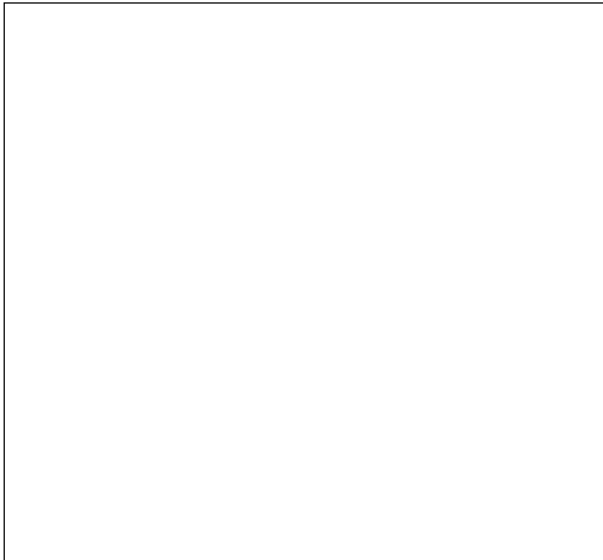
Upward Ratio: 55%

C0r0 Intensity: 1.28 cd

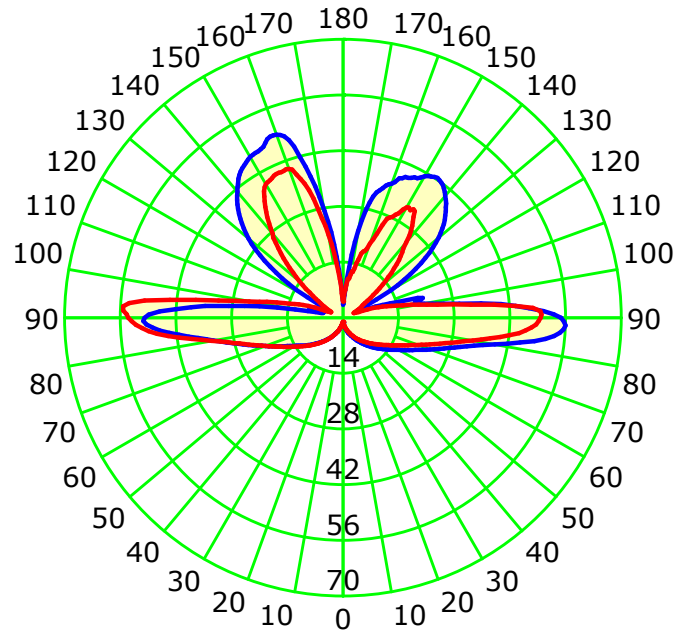
Pos of Max. Intensity: H0 V88

S/MH(C90/C270): 6.70

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

Average Diffuse Angle(50%): 329.9°

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 90.0

Test Lab: 工程部

Test Type: TYPE C

Temperature: 27°

Operator:

Gamma Plane (°):0.0-180.0:1.0

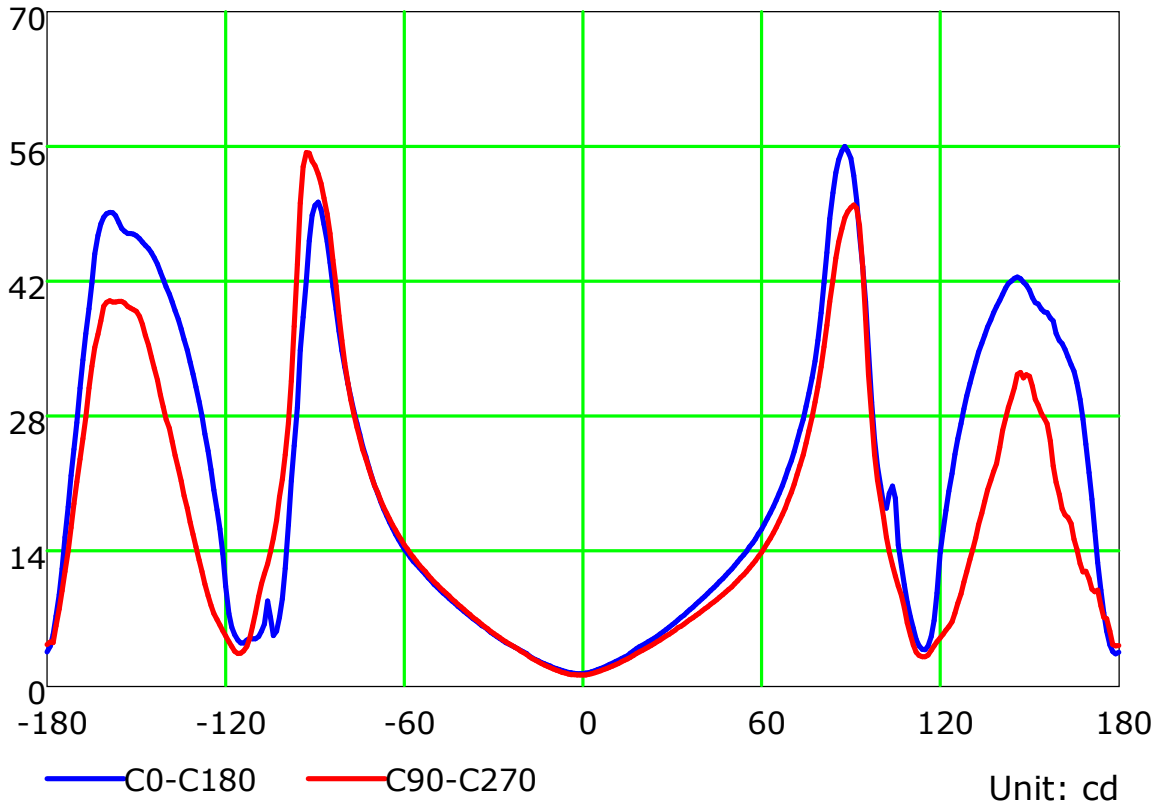
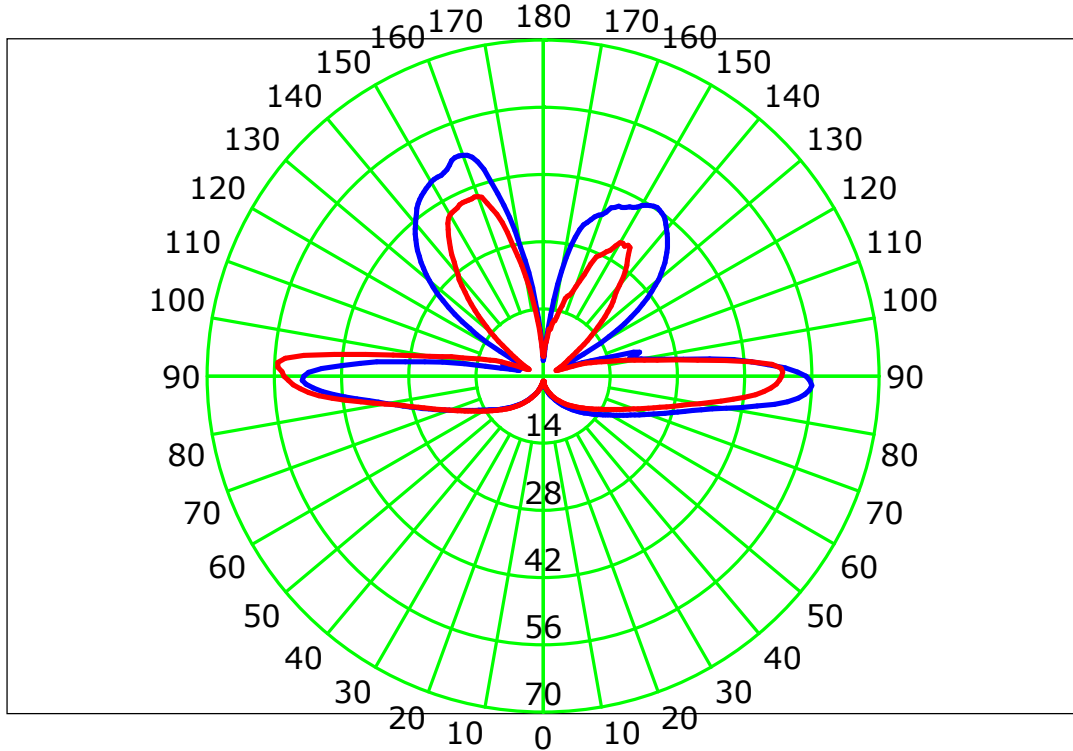
Test Device: GPM-1600L

Distance: 7.943 m [K=1.0000]

Humidity:

Inspector:

## Luminous Intensity Distribution Curve



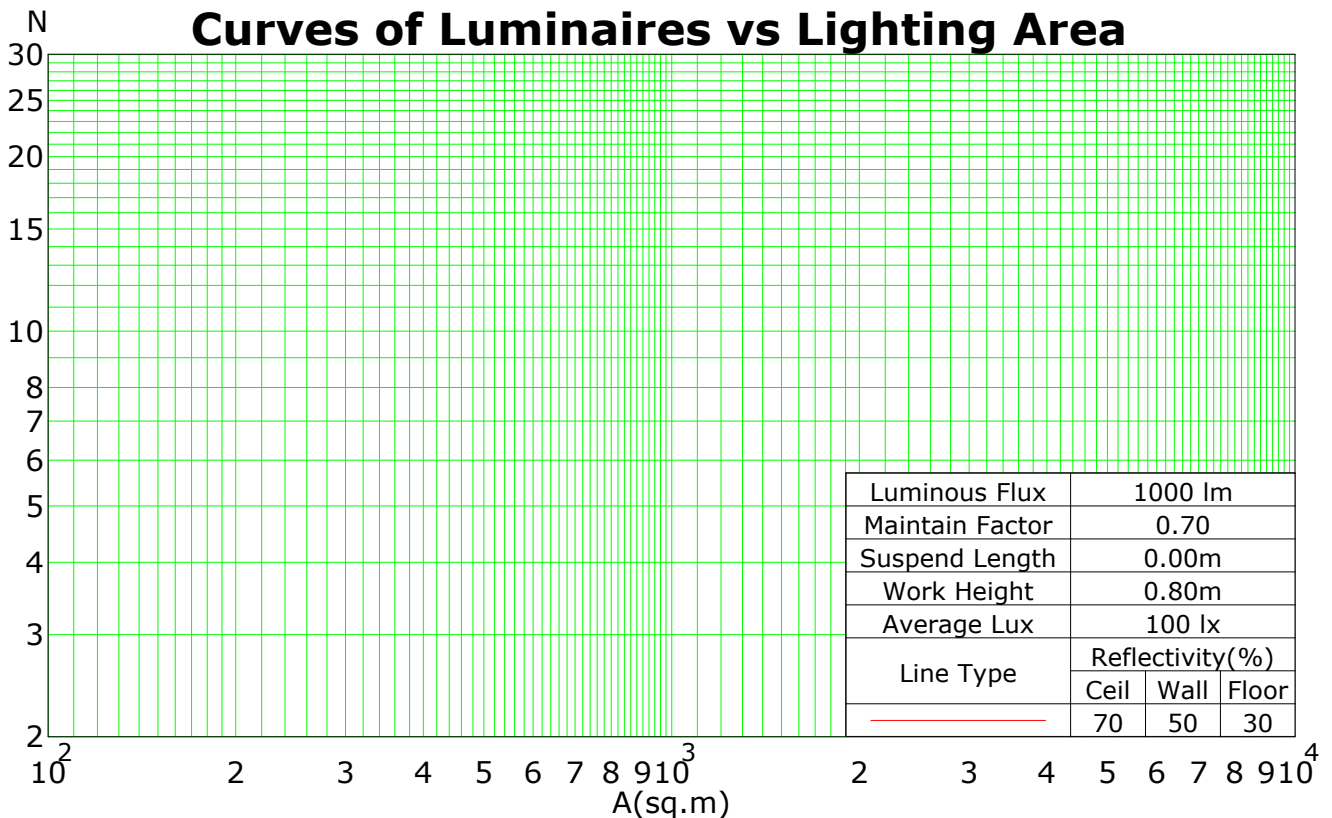
C Plane (°):0.0-360.0: 90.0  
Test Lab: 工程部  
Test Type: TYPE C  
Temperature: 27°  
Operator:

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1600L  
Distance: 7.943 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	1.06	1.06	1.06	1.06	0.97	0.97	0.97	0.97	0.81	0.81	0.81	0.66	0.66	0.66	0.52	0.52	0.52	0.45
1	0.88	0.81	0.74	0.67	0.80	0.73	0.67	0.61	0.58	0.53	0.49	0.45	0.41	0.38	0.33	0.30	0.27	0.21
2	0.78	0.67	0.58	0.50	0.70	0.60	0.52	0.45	0.48	0.41	0.36	0.36	0.31	0.27	0.25	0.22	0.18	0.13
3	0.70	0.57	0.47	0.39	0.63	0.51	0.43	0.35	0.40	0.34	0.28	0.30	0.25	0.21	0.21	0.17	0.13	0.09
4	0.63	0.50	0.40	0.32	0.57	0.45	0.36	0.29	0.35	0.28	0.22	0.26	0.21	0.16	0.18	0.14	0.10	0.06
5	0.58	0.44	0.34	0.26	0.52	0.39	0.30	0.24	0.31	0.24	0.18	0.23	0.18	0.13	0.16	0.12	0.08	0.05
6	0.53	0.39	0.29	0.22	0.47	0.35	0.26	0.20	0.27	0.21	0.16	0.21	0.15	0.11	0.14	0.10	0.07	0.04
7	0.49	0.35	0.25	0.19	0.44	0.31	0.23	0.17	0.25	0.18	0.13	0.19	0.13	0.09	0.13	0.09	0.06	0.03
8	0.45	0.31	0.22	0.16	0.40	0.28	0.20	0.15	0.22	0.16	0.11	0.17	0.12	0.08	0.12	0.08	0.05	0.02
9	0.42	0.28	0.20	0.14	0.38	0.26	0.18	0.13	0.20	0.14	0.10	0.15	0.11	0.07	0.11	0.07	0.04	0.02
10	0.39	0.26	0.18	0.12	0.35	0.23	0.16	0.11	0.19	0.13	0.09	0.14	0.10	0.06	0.10	0.06	0.04	0.02

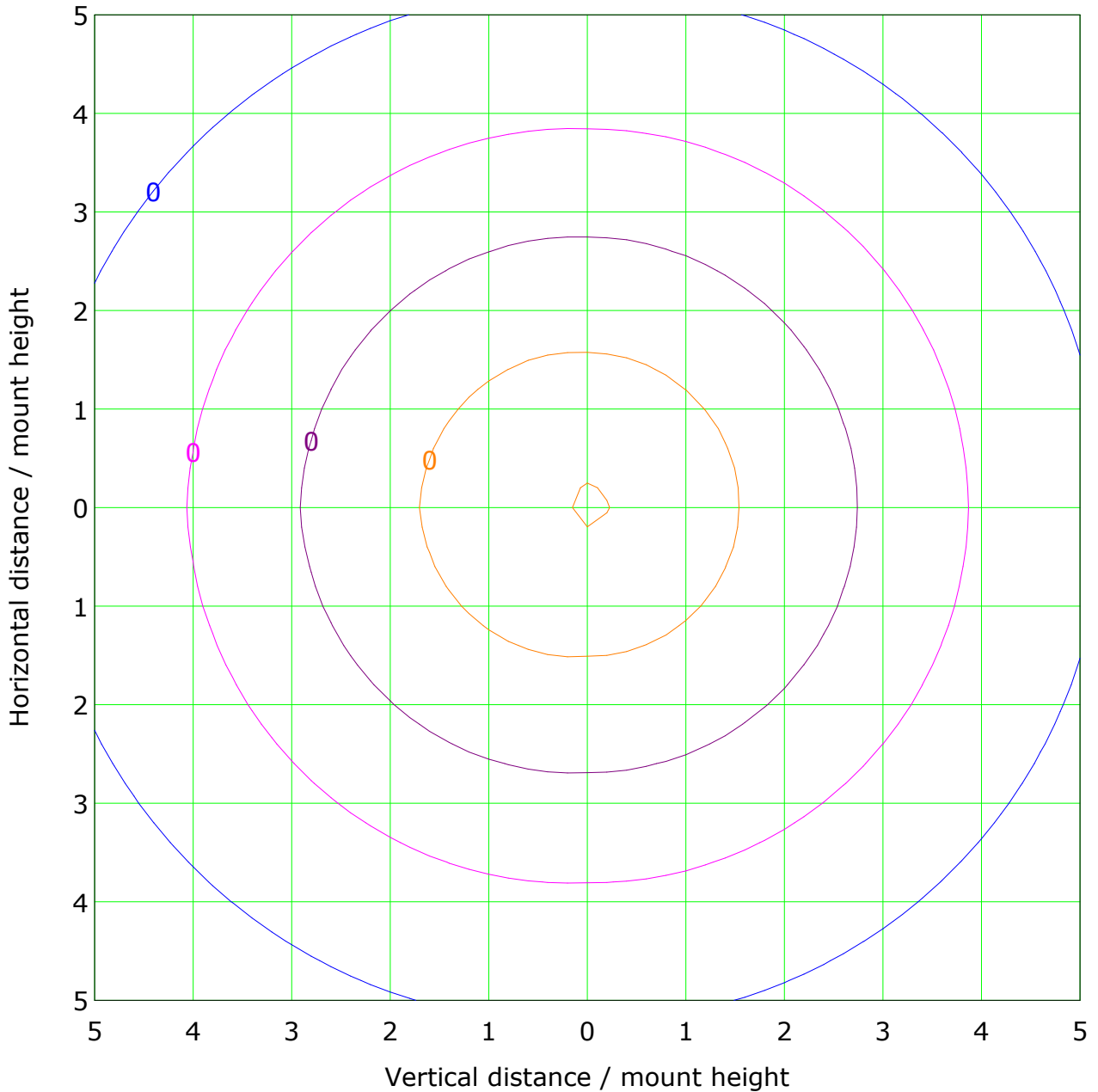
Spacing Criteria (0-180): 6.53  
 Spacing Criteria (90-270): 6.70  
 Spacing Criteria (Diagonal): 6.27



C Plane (°):0.0-360.0: 90.0  
 Test Lab: 工程部  
 Test Type: TYPE C  
 Temperature: 27°  
 Operator:

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1600L  
 Distance: 7.943 m [K=1.0000]  
 Humidity:  
 Inspector:

## IsoLux Plot



Mounting Height: 10.0m    Max Lux(100%): 0.0 lx

— ( 1%): 0.0 lx	— ( 2%): 0.0 lx
— ( 5%): 0.0 lx	— ( 10%): 0.0 lx
— ( 20%): 0.0 lx	— ( 50%): 0.0 lx
— (100%): 0.0 lx	

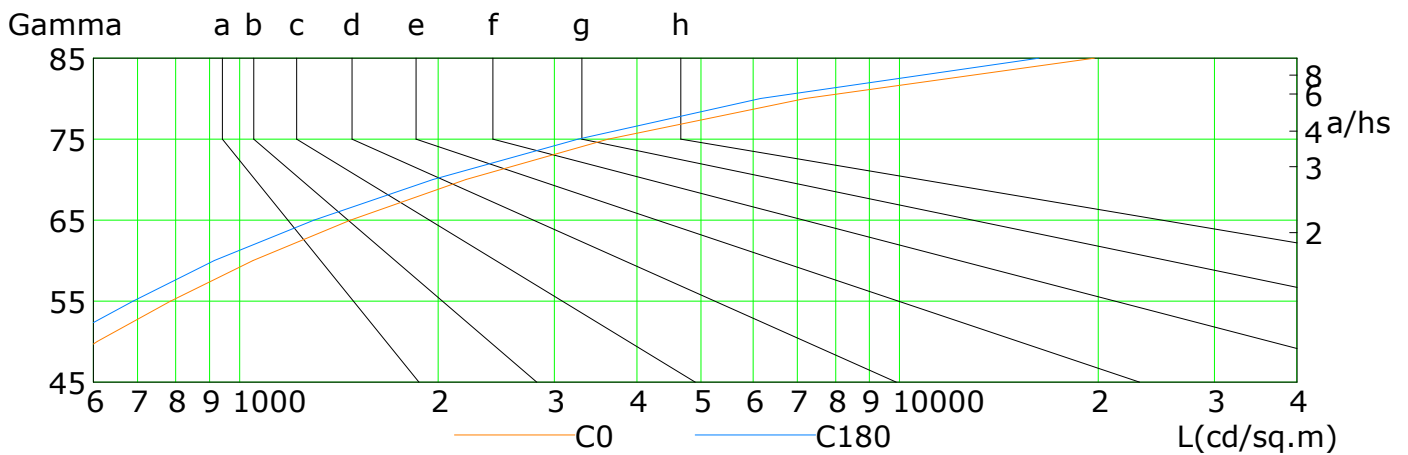
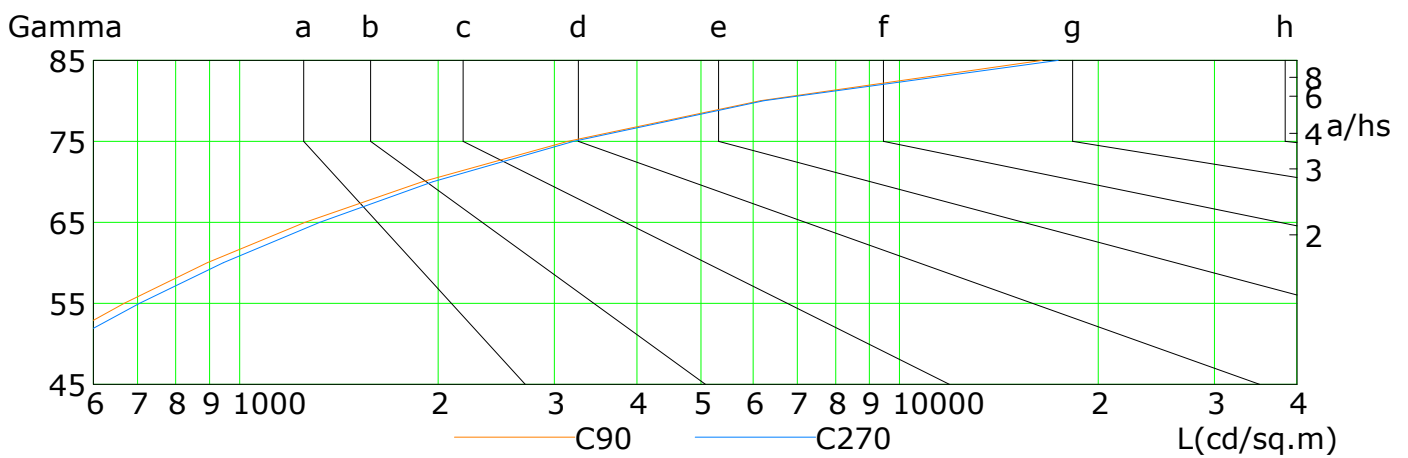
C Plane (°):0.0-360.0: 90.0  
Test Lab: 工程部  
Test Type: TYPE C  
Temperature: 27°  
Operator:

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1600L  
Distance: 7.943 m [K=1.0000]  
Humidity:  
Inspector:

## Lum Limit Curve

Dazzle	Quality	Illuminance (lx)								
		2000	1000	500	<=300					
1.15	A									
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	479	608	786	1049	1472	2204	3619	7200	19744
C90	407	516	668	894	1256	1893	3142	6157	16457
C180	414	529	690	915	1296	1964	3255	6155	16274
C270	425	542	705	945	1322	1964	3207	6231	17395

C Plane (°):0.0-360.0: 90.0

Test Lab: 工程部

Test Type: TYPE C

Temperature: 27°

Operator:

Gamma Plane (°):0.0-180.0:1.0

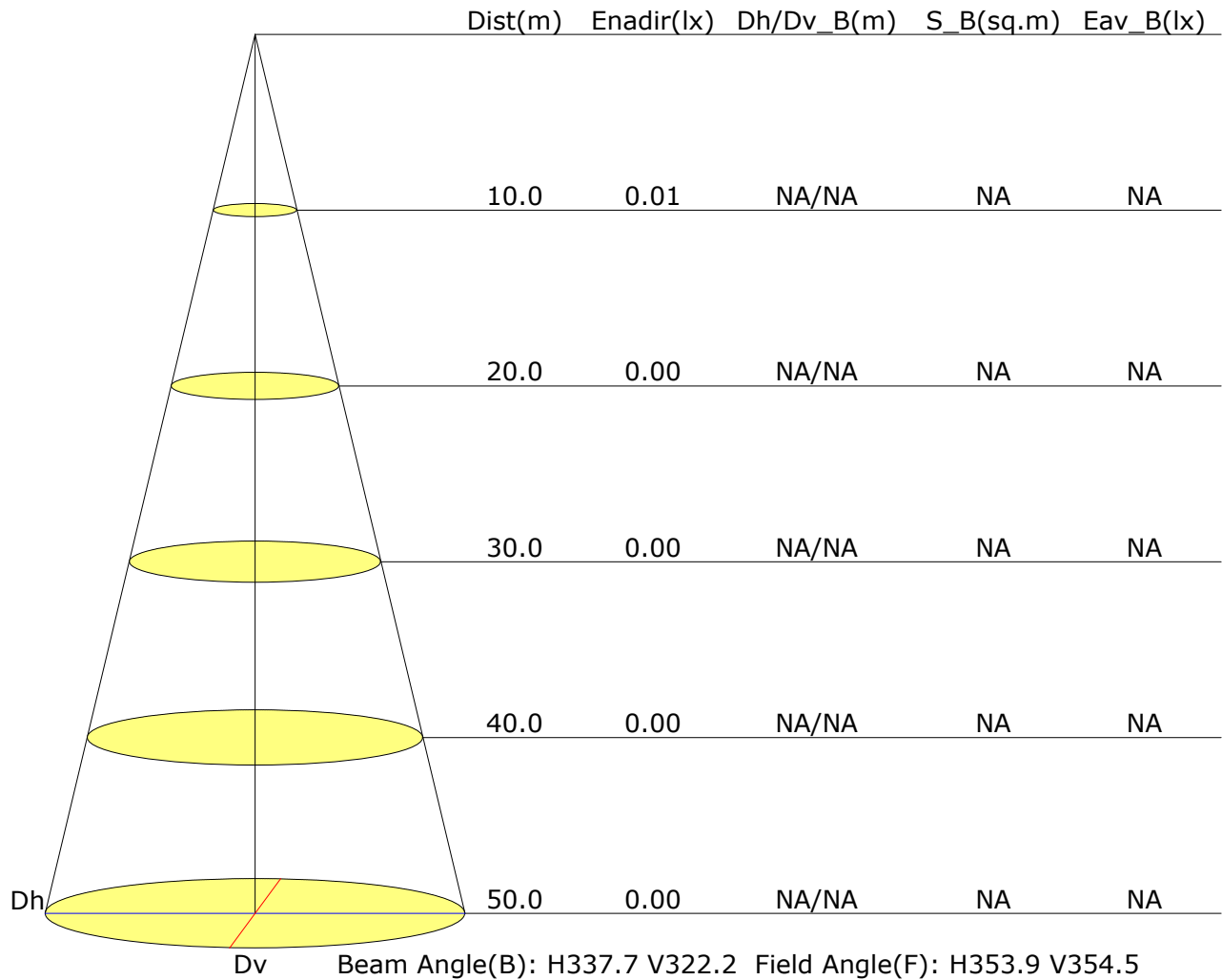
Test Device: GPM-1600L

Distance: 7.943 m [K=1.0000]

Humidity:

Inspector:

## Illuminance at a Distance



C Plane (°):0.0-360.0: 90.0

Test Lab: 工程部

Test Type: TYPE C

Temperature: 27°

Operator:

Gamma Plane (°):0.0-180.0:1.0

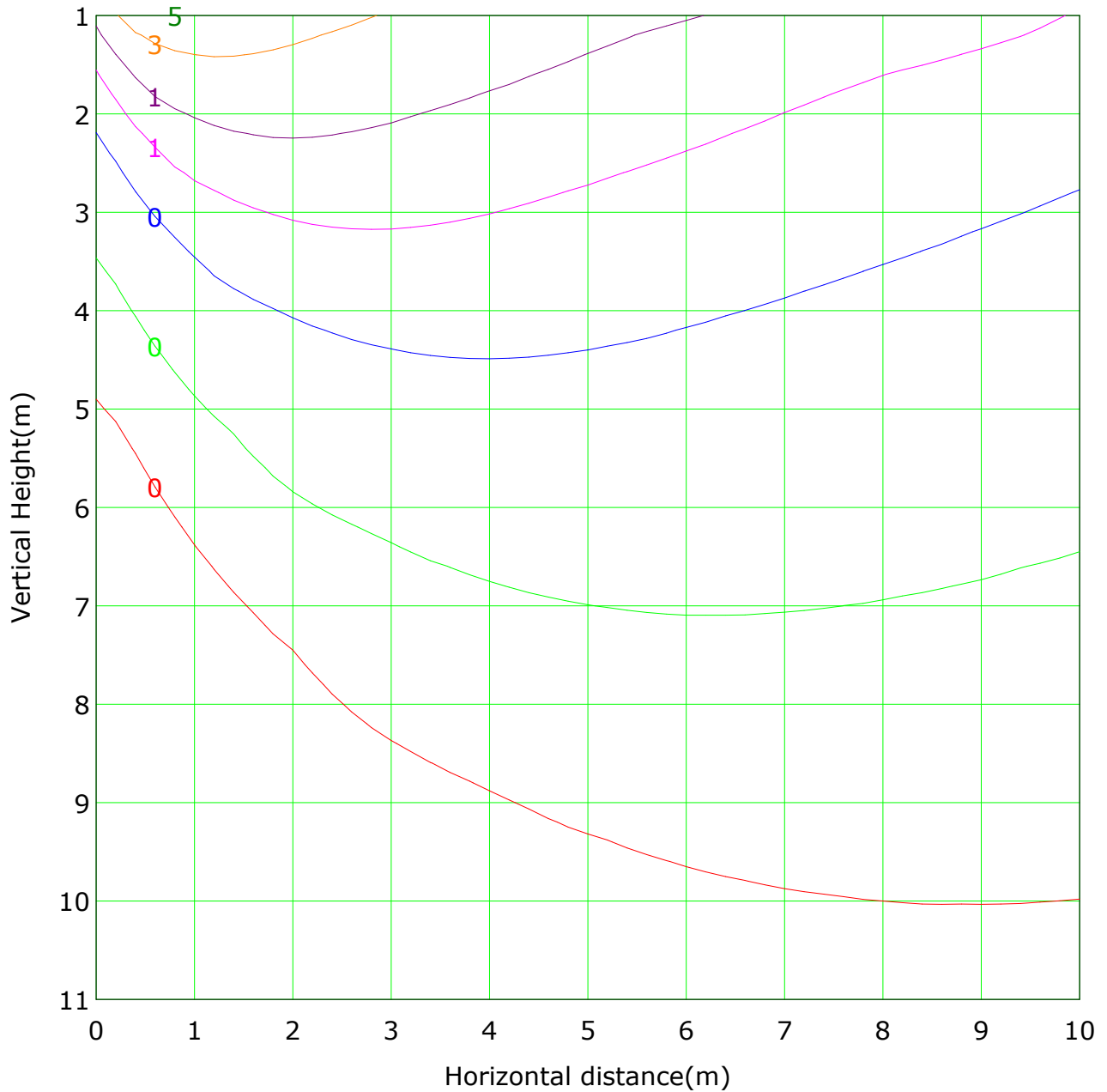
Test Device: GPM-1600L

Distance: 7.943 m [K=1.0000]

Humidity:

Inspector:

## Vertical IsoLux Plot

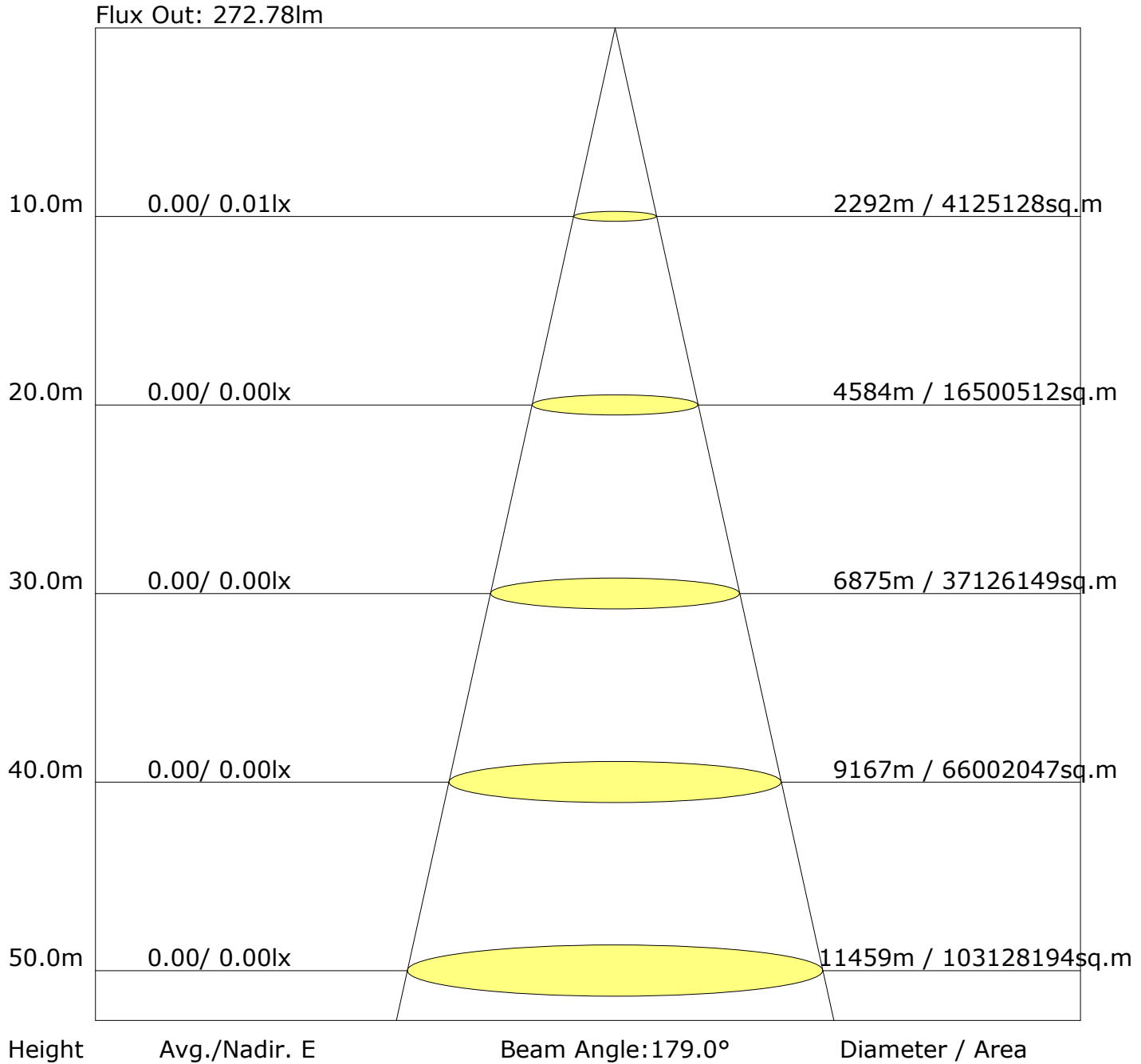


Lowest(m): 1.0m	Highest(m): 11.0m	Max Lux: 5.3 lx
( 1%): 0.1 lx	( 2%): 0.1 lx	
( 5%): 0.3 lx	( 10%): 0.5 lx	
( 20%): 1.1 lx	( 50%): 2.7 lx	
(100%): 5.3 lx		

C Plane (°):0.0-360.0: 90.0  
Test Lab: 工程部  
Test Type: TYPE C  
Temperature: 27°  
Operator:

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1600L  
Distance: 7.943 m [K=1.0000]  
Humidity:  
Inspector:

## The Average Illuminance Effective Figure



C Plane (°):0.0-360.0: 90.0

Test Lab: 工程部

Test Type: TYPE C

Temperature: 27°

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 7.943 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	7.4	8.4	8.3	9.3	10.6	6.8	7.8	7.7	8.8	10.1
3H	12.4	13.3	13.4	14.3	15.6	11.7	12.6	12.7	13.6	15.0
4H	15.4	16.3	16.4	17.3	18.6	14.7	15.6	15.7	16.6	17.9
6H	19.0	19.9	20.0	20.9	22.2	18.2	19.1	19.2	20.1	21.4
8H	21.3	22.1	22.3	23.1	24.4	20.3	21.1	21.3	22.1	23.5
12H	23.7	24.5	24.7	25.5	26.9	22.7	23.5	23.7	24.5	25.9
X=4H Y=2H	8.8	9.7	9.8	10.7	12.0	8.5	9.4	9.5	10.4	11.7
3H	13.8	14.6	14.8	15.6	17.0	13.4	14.1	14.3	15.1	16.5
4H	16.9	17.6	17.9	18.7	20.1	16.4	17.1	17.4	18.1	19.5
6H	20.7	21.3	21.7	22.3	23.7	20.0	20.6	21.0	21.7	23.1
8H	22.9	23.5	24.0	24.6	26.0	22.1	22.7	23.1	23.8	25.2
12H	25.5	26.0	26.5	27.1	28.5	24.6	25.1	25.6	26.2	27.6
X=8H Y=4H	18.0	18.6	19.1	19.7	21.1	17.7	18.3	18.7	19.3	20.7
6H	22.0	22.5	23.0	23.6	25.0	21.5	22.0	22.5	23.0	24.5
8H	24.4	24.9	25.5	25.9	27.4	23.7	24.2	24.8	25.3	26.7
12H	27.1	27.5	28.2	28.6	30.0	26.3	26.7	27.4	27.8	29.3
X=12H Y=4H	18.5	19.1	19.5	20.1	21.5	18.2	18.8	19.3	19.8	21.3
6H	22.5	23.0	23.6	24.1	25.5	22.1	22.6	23.1	23.6	25.1
8H	25.0	25.5	26.1	26.5	28.0	24.5	24.9	25.5	26.0	27.4
Variations with the observer position at spacings:										
S=1.0H	+0.6/-0.7					+0.6/-0.6				
S=1.5H	+0.9/-1.2					+0.9/-1.1				
S=2.0H	+1.3/-1.7					+1.2/-1.6				

Calculate in accordance with CIE Pub.117. The table is revised with  $273\text{lm}$  ( $8\log(F/F_0) = -4.5$ ).

C Plane (°):0.0-360.0: 90.0  
 Test Lab: 工程部  
 Test Type: TYPE C  
 Temperature: 27°  
 Operator:

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1600L  
 Distance: 7.943 m [K=1.0000]  
 Humidity:  
 Inspector:

**FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM**

	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	61	22.5
	FL ( 0°-30°)	2	0.6
	FM (30°-60°)	12	4.3
	FH (60°-80°)	23	8.5
	FVH (80°-90°)	25	9.1
	BACK LIGHT	63	22.9
	BL ( 0°-30°)	2	0.6
	BM (30°-60°)	12	4.3
	BH (60°-80°)	24	8.6
	BVH (80°-90°)	26	9.4
	UP LIGHT	149	54.5
	UL (90°-100°)	43	15.6
	UH (100°-180°)	106	39.0
	TRAPPED LIGHT	NA	NA

BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B0 U3 G1
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B0 U3 G1

C Plane (°):0.0-360.0: 90.0  
Test Lab: 工程部  
Test Type: TYPE C  
Temperature: 27°  
Operator:

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1600L  
Distance: 7.943 m [K=1.0000]  
Humidity:  
Inspector: