

Report No.:

Test Time: 2024-03-05 09:00

Luminaire Property

Luminaire Manufacturer:

Luminaire Category:

Lamp Catalog:

Number of Lamps:

Luminous Length (mm): -150

Luminous Height (mm):

Current: 0.063 A

Power Factor: 0.505

Luminaire Description: S-4902-2-3000K-WH

Lamp Description:

Lumens per Lamp:

Luminous Width (mm): -150

Voltage: 220.0 V

Power: 6.98 W

Photometric Results

CIE Class: General Diffuse

Measurement Flux: 310.5 lm

Downward Ratio: 59%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 347.6, 343.1, 346.3, 346.2

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 328.6, 199.2, 260.9, 195.5

Luminaire Efficacy Rating (LER): 44.53

Max. Intensity: 64.74 cd

S/MH(C0/C180): 7.78

Total Rated Lamp Lumens: 310.5 lm

Efficiency: 100%

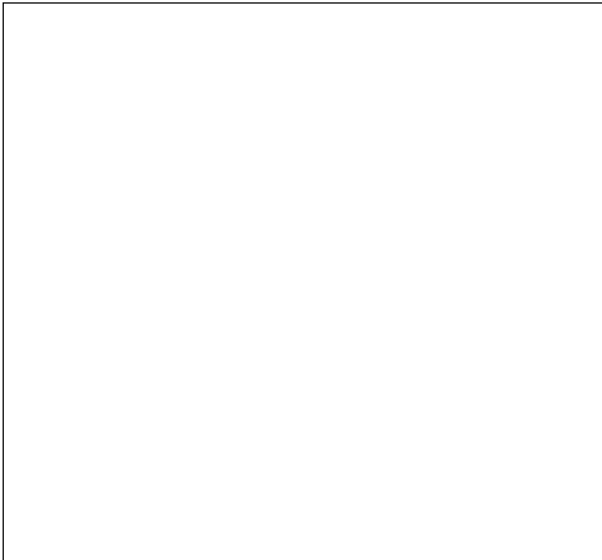
Upward Ratio: 41%

C0r0 Intensity: 1.45 cd

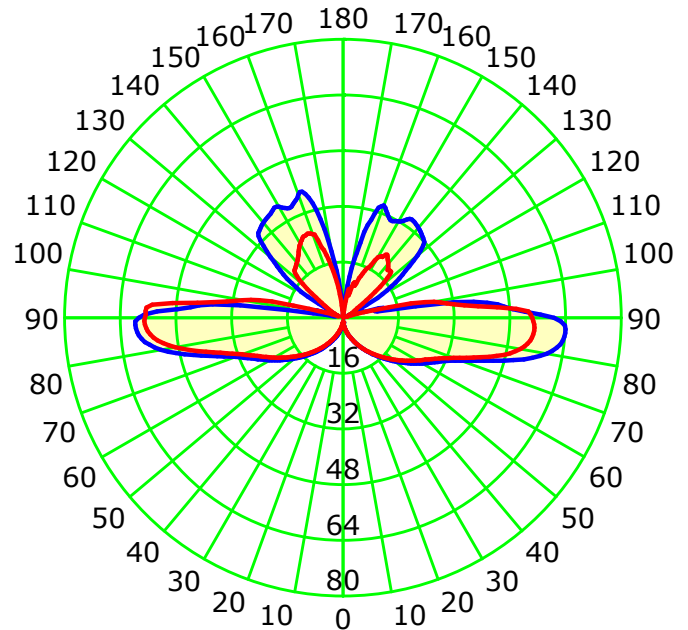
Pos of Max. Intensity: H0 V87

S/MH(C90/C270): 7.83

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

Average Diffuse Angle(50%): 263.9°

— 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

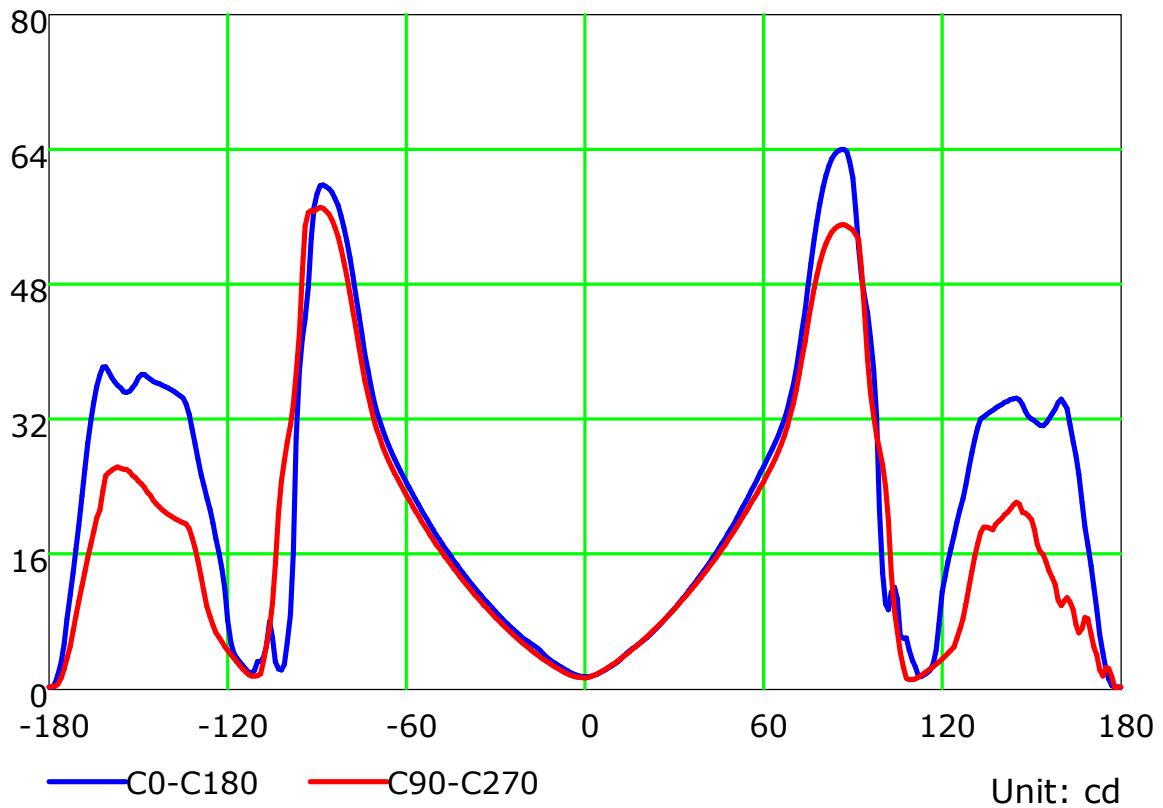
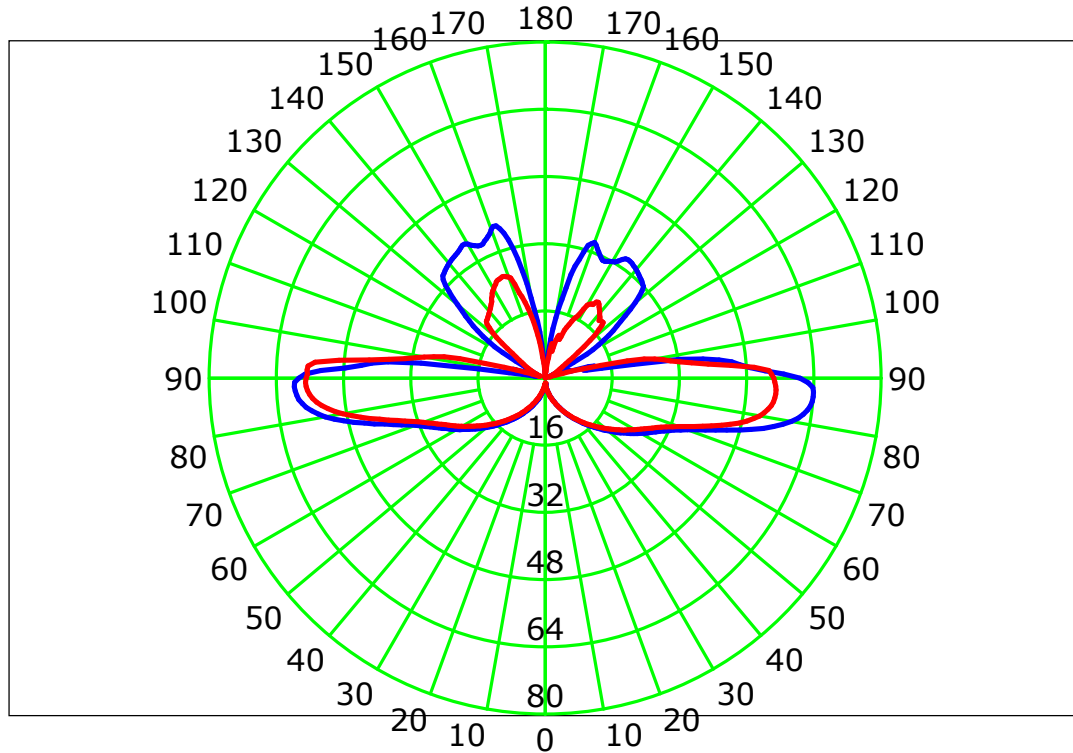
Test Device: GPM-1600L

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:

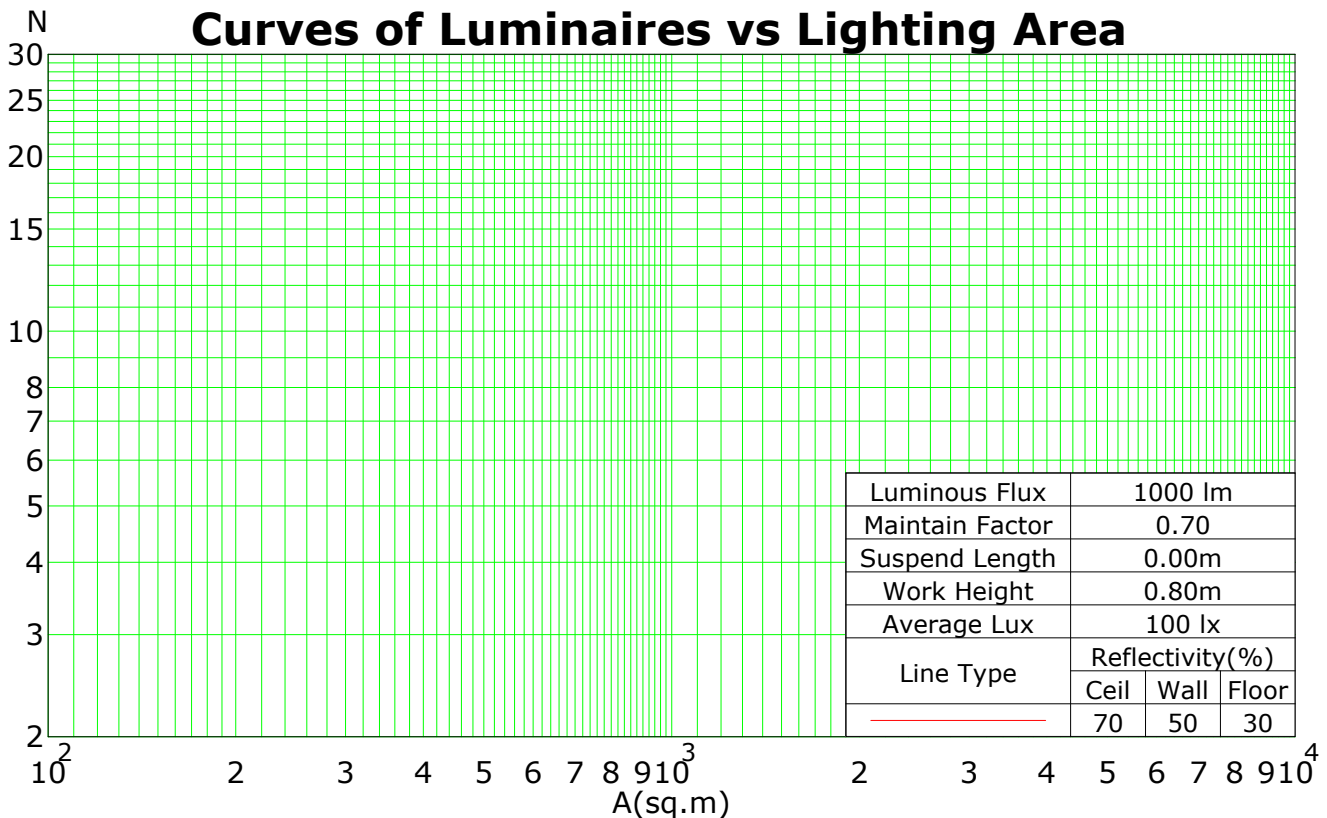
Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1600L
Distance: 7.943 m [K=1.0000]
Humidity:
Inspector:

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	1.09	1.09	1.09	1.09	1.02	1.02	1.02	1.02	0.88	0.88	0.88	0.76	0.76	0.76	0.64	0.64	0.64	0.59
1	0.90	0.81	0.74	0.67	0.83	0.75	0.68	0.62	0.63	0.57	0.52	0.52	0.47	0.43	0.41	0.38	0.35	0.29
2	0.79	0.67	0.57	0.48	0.72	0.61	0.52	0.44	0.50	0.43	0.37	0.41	0.35	0.30	0.32	0.27	0.23	0.18
3	0.70	0.56	0.46	0.37	0.64	0.51	0.42	0.34	0.42	0.34	0.28	0.34	0.28	0.22	0.26	0.21	0.17	0.12
4	0.63	0.49	0.38	0.29	0.58	0.44	0.35	0.27	0.36	0.28	0.22	0.29	0.23	0.17	0.22	0.17	0.13	0.09
5	0.58	0.42	0.32	0.24	0.52	0.39	0.29	0.22	0.32	0.24	0.18	0.25	0.19	0.14	0.19	0.14	0.10	0.07
6	0.53	0.38	0.27	0.20	0.48	0.34	0.25	0.18	0.28	0.21	0.15	0.23	0.16	0.12	0.17	0.12	0.08	0.05
7	0.49	0.34	0.24	0.17	0.44	0.31	0.22	0.16	0.25	0.18	0.13	0.20	0.14	0.10	0.16	0.11	0.07	0.04
8	0.45	0.30	0.21	0.15	0.41	0.28	0.19	0.13	0.23	0.16	0.11	0.19	0.13	0.08	0.14	0.09	0.06	0.03
9	0.42	0.27	0.19	0.13	0.38	0.25	0.17	0.12	0.21	0.14	0.09	0.17	0.11	0.07	0.13	0.09	0.05	0.03
10	0.39	0.25	0.17	0.11	0.36	0.23	0.15	0.10	0.19	0.13	0.08	0.16	0.10	0.06	0.12	0.08	0.04	0.02

Spacing Criteria (0-180): 7.78
 Spacing Criteria (90-270): 7.83
 Spacing Criteria (Diagonal): 7.27

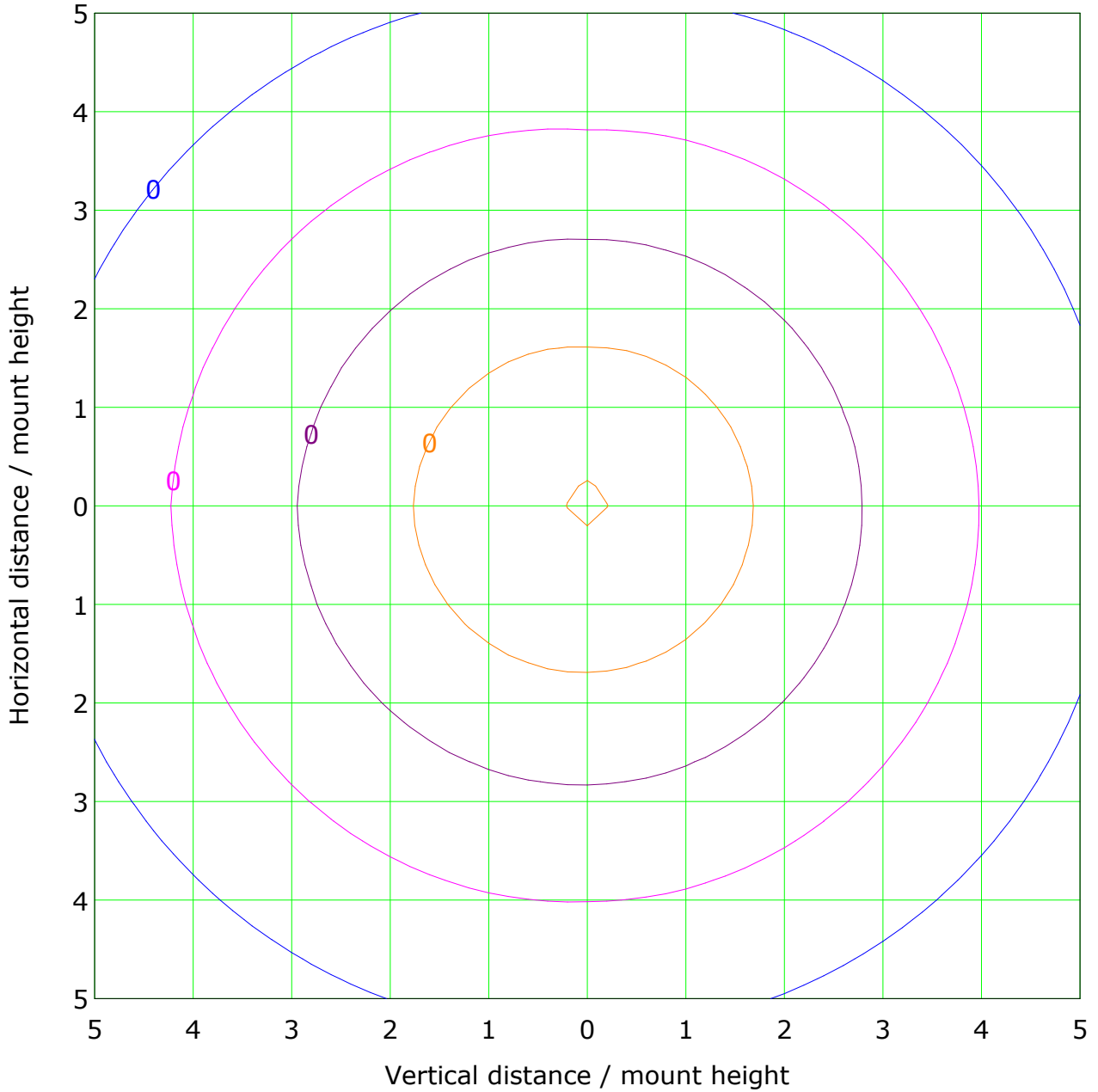
Curves of Luminaires vs Lighting Area



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%): 0.1 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%): 0.1 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]

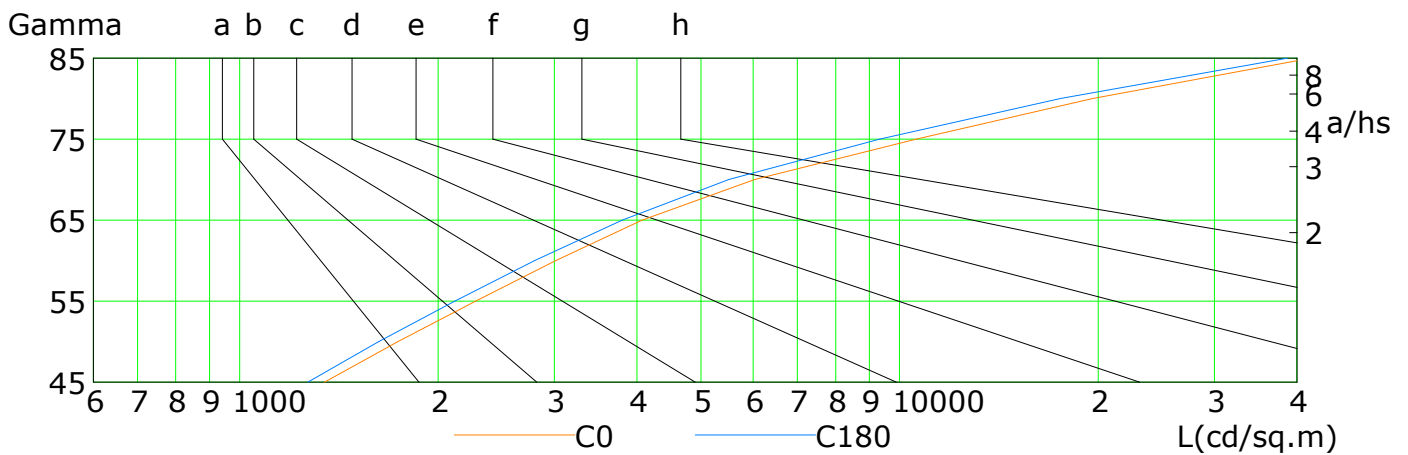
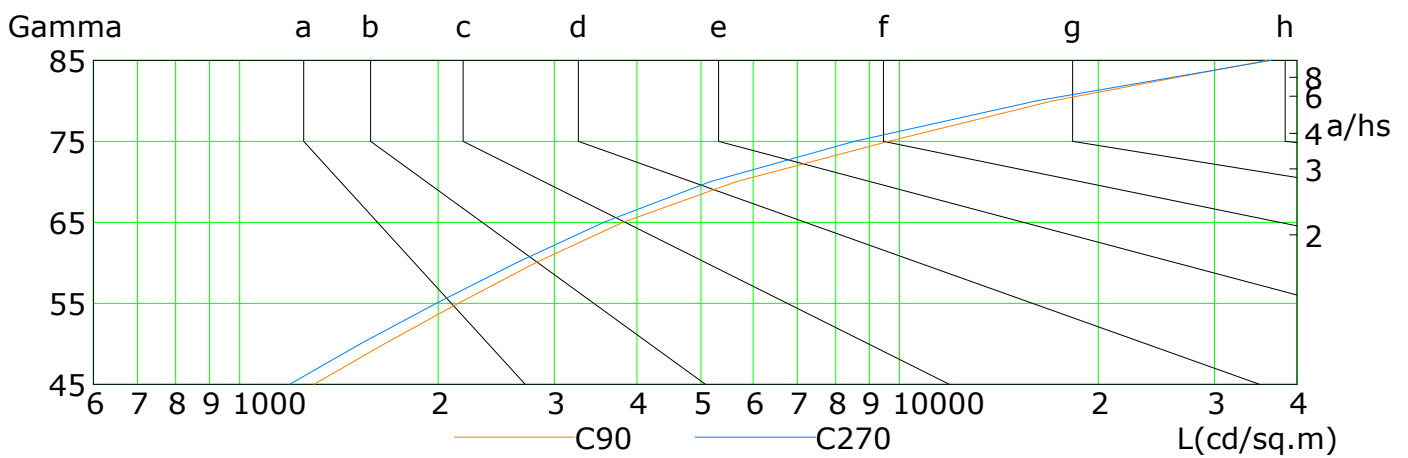
Humidity:

Inspector:

Lum Limit Curve

Dazzle	Quality	Illuminance (lx)								
		2000	1000	500	<=300					
1.15	A									
1.50	B									
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	1344	1739	2278	3014	4071	6031	10589	19628	41917
C90	1296	1659	2144	2809	3809	5655	9620	17099	36054
C180	1269	1626	2119	2802	3800	5515	9329	17526	38697
C270	1191	1525	1985	2629	3563	5164	8542	16151	36548

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Temperature: 27°

Operator:

Gamma Plane (°):0.0-180.0:1.0

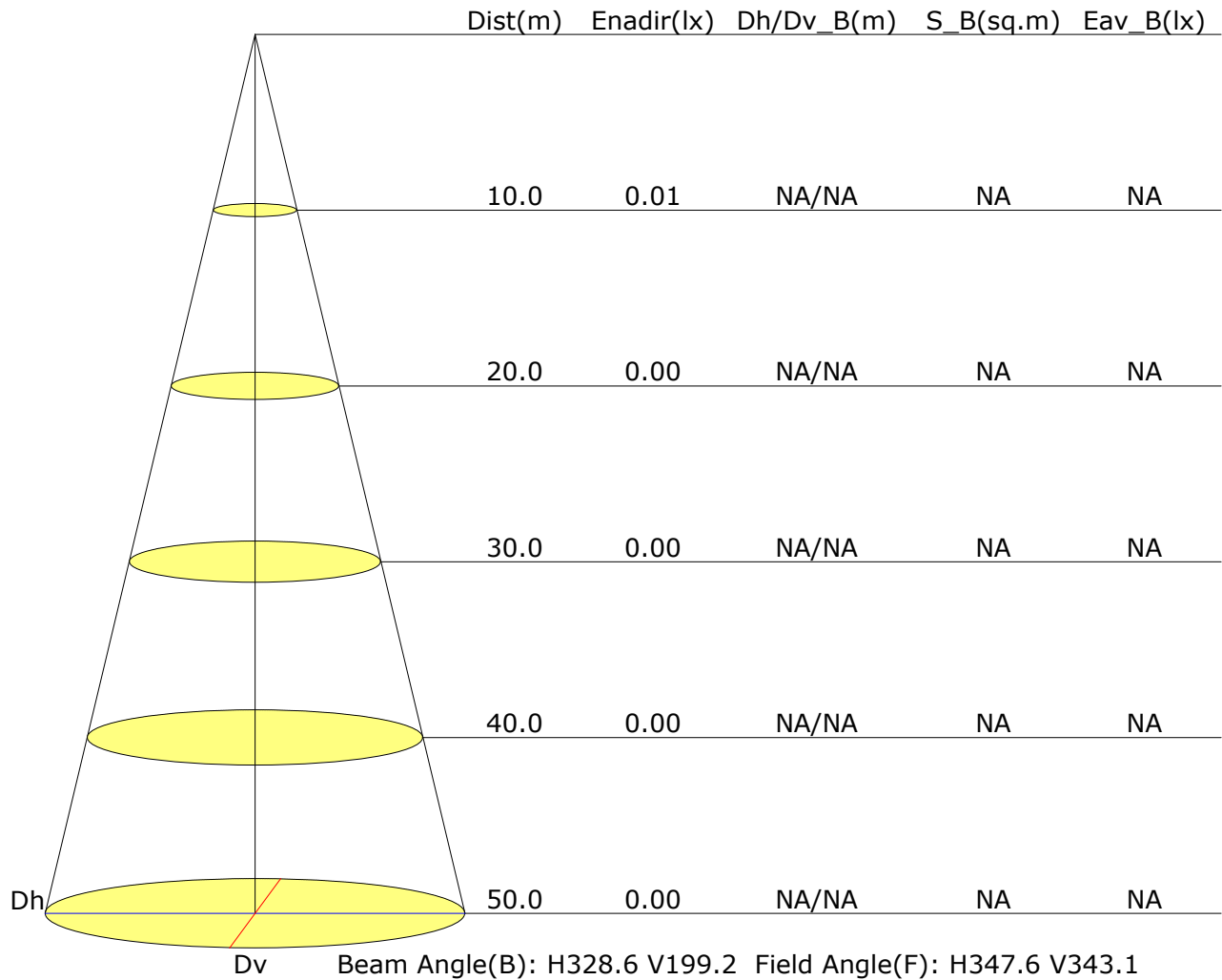
Test Device: GPM-1600L

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

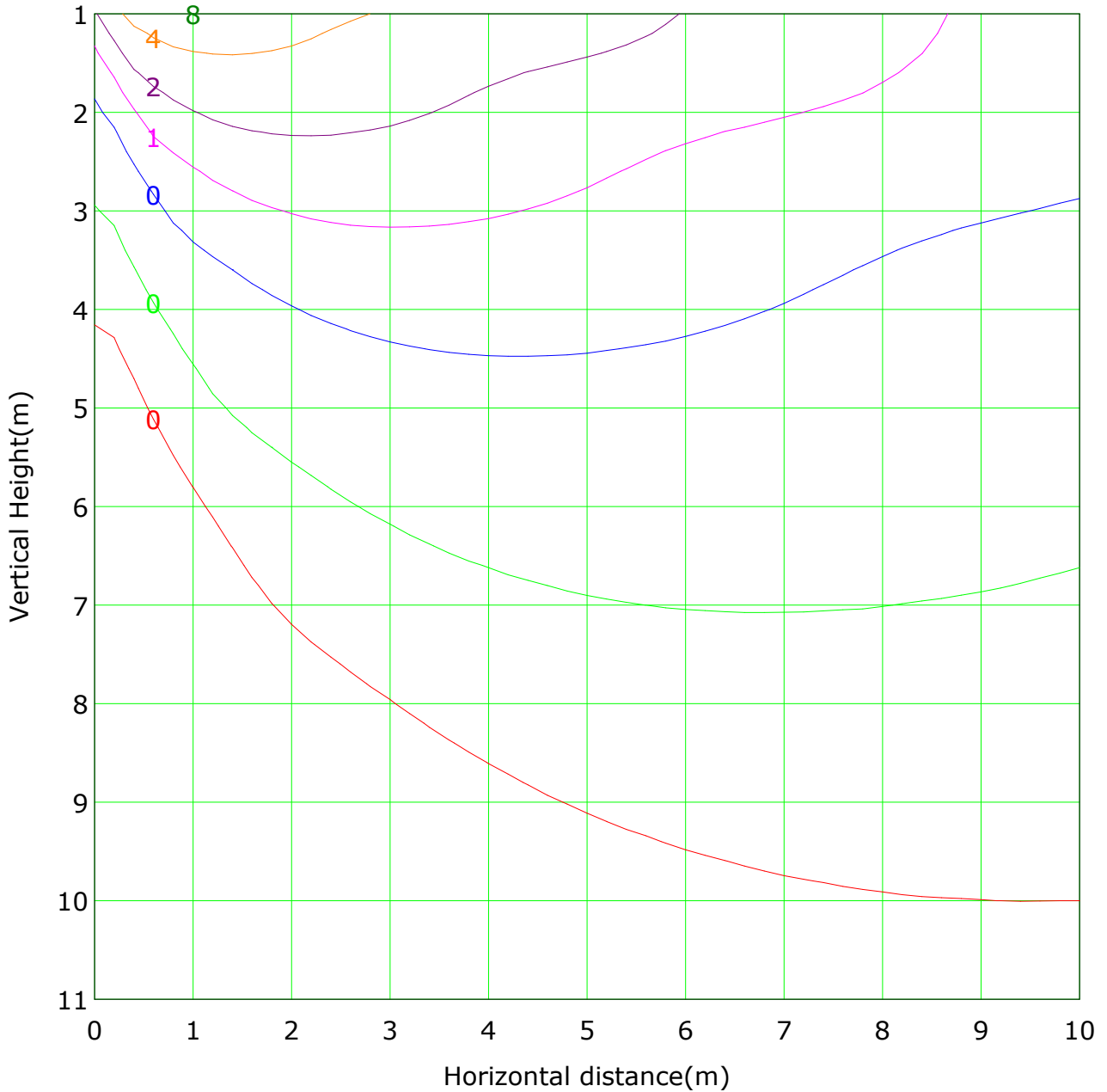
Test Device: GPM-1600L

Distance: 7.943 m [K=1.0000]

Humidity:

Inspector:

Vertical IsoLux Plot

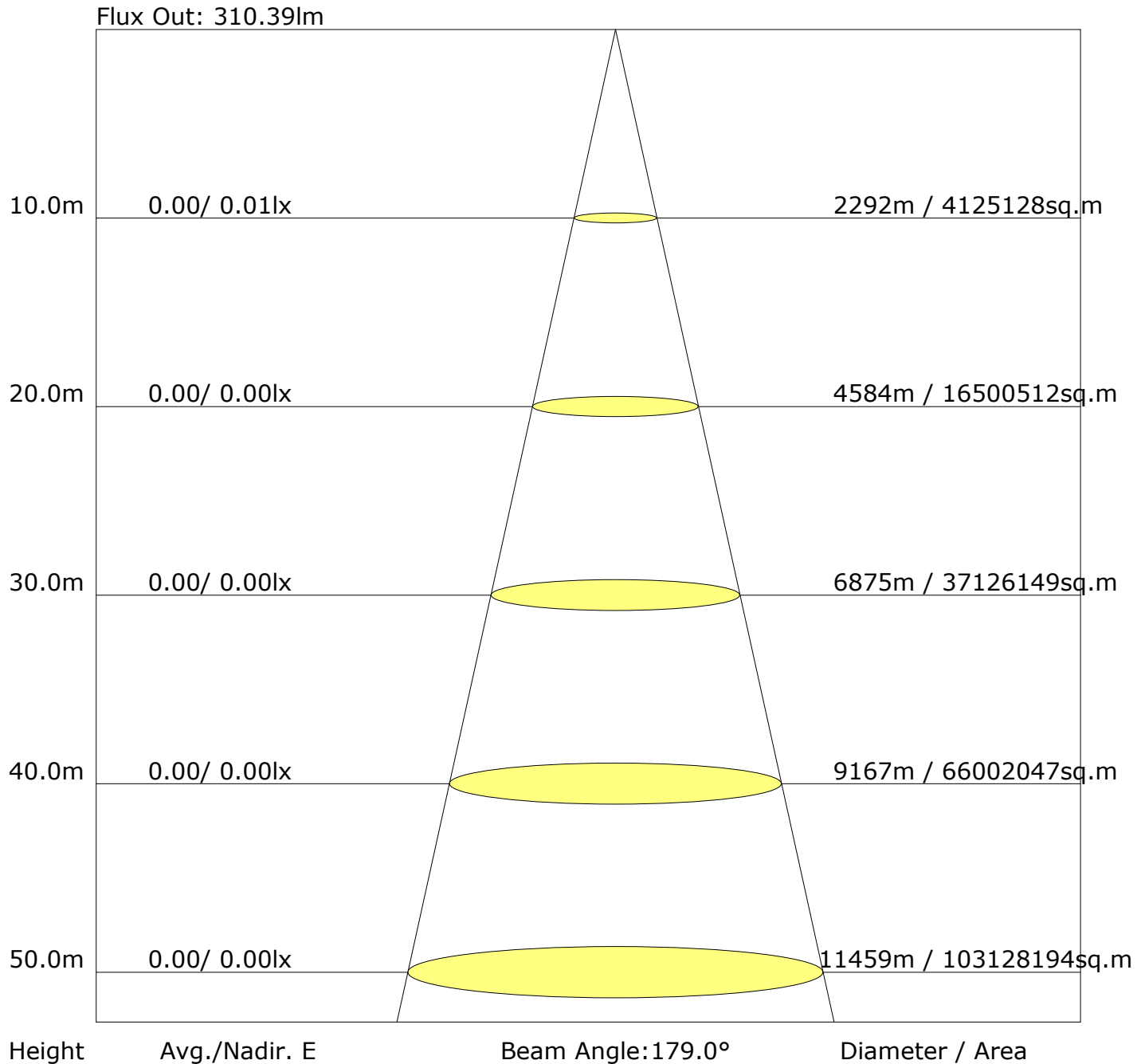


Lowest(m): 1.0m	Highest(m): 11.0m	Max Lux: 8.4 lx
(1%): 0.1 lx	(2%): 0.2 lx	
(5%): 0.4 lx	(10%): 0.8 lx	
(20%): 1.7 lx	(50%): 4.2 lx	
(100%): 8.4 lx		

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	12.4	13.6	13.3	14.5	15.6	12.0	13.2	12.8	14.1	15.2
3H	17.3	18.4	18.1	19.2	20.4	16.7	17.8	17.6	18.7	19.8
4H	20.5	21.5	21.3	22.4	23.5	19.8	20.8	20.6	21.7	22.8
6H	24.1	25.0	24.9	26.0	27.1	23.2	24.1	24.0	25.1	26.2
8H	25.9	26.8	26.7	27.7	28.9	24.9	25.9	25.8	26.8	27.9
12H	27.7	28.6	28.6	29.5	30.7	26.7	27.7	27.6	28.6	29.7
X=4H Y=2H	13.9	14.9	14.7	15.8	16.9	13.6	14.7	14.5	15.6	16.7
3H	18.8	19.7	19.6	20.6	21.8	18.4	19.3	19.2	20.2	21.4
4H	22.0	22.9	22.9	23.8	25.0	21.5	22.3	22.4	23.2	24.4
6H	25.7	26.5	26.6	27.4	28.6	24.9	25.7	25.8	26.6	27.8
8H	27.5	28.3	28.4	29.2	30.4	26.7	27.4	27.6	28.4	29.6
12H	29.4	30.1	30.4	31.1	32.3	28.6	29.2	29.5	30.2	31.4
X=8H Y=4H	23.2	23.9	24.1	24.9	26.1	22.8	23.5	23.7	24.5	25.7
6H	27.0	27.6	27.9	28.5	29.8	26.4	27.0	27.3	27.9	29.2
8H	28.9	29.5	29.9	30.5	31.7	28.3	28.8	29.2	29.8	31.1
12H	31.0	31.5	31.9	32.5	33.8	30.3	30.8	31.2	31.8	33.0
X=12H Y=4H	23.6	24.3	24.5	25.2	26.4	23.3	24.0	24.2	24.9	26.2
6H	27.4	28.0	28.3	28.9	30.2	26.9	27.5	27.8	28.4	29.7
8H	29.4	30.0	30.4	31.0	32.2	28.9	29.4	29.8	30.4	31.6
Variations with the observer position at spacings:										
S=1.0H	+0.5/-0.6					+0.5/-0.6				
S=1.5H	+0.8/-1.0					+0.8/-1.0				
S=2.0H	+1.1/-1.5					+1.1/-1.5				

Calculate in accordance with CIE Pub.117. The table is revised with 310lm ($8\log(F/F_0) = -4.1$).

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 Test Lab: 工程部
 Test Type: TYPE C
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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	92	29.7
	FL (0°-30°)	3	0.8
	FM (30°-60°)	20	6.4
	FH (60°-80°)	38	12.3
	FVH (80°-90°)	32	10.2
	BACK LIGHT	90	29.0
	BL (0°-30°)	2	0.8
	BM (30°-60°)	19	6.2
	BH (60°-80°)	37	11.8
	BVH (80°-90°)	32	10.2
	UP LIGHT	128	41.3
	UL (90°-100°)	46	14.7
	UH (100°-180°)	82	26.6
	TRAPPED LIGHT	NA	NA

BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B0 U2 G1
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B0 U2 G1

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