Report No.: Test Time: 2024-03-28 12:10

Luminaire Property

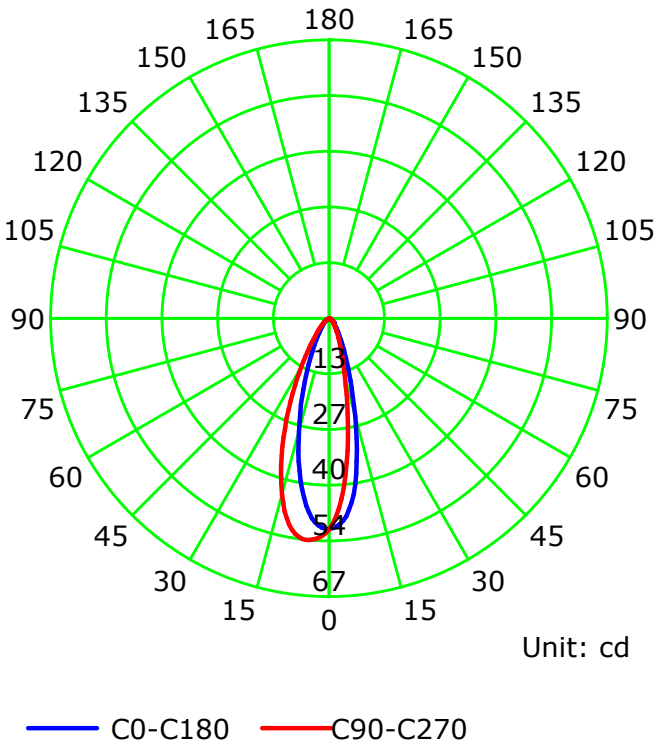
Luminaire Manufacturer:
Luminaire Description: HCP-242062-蓝色 Lamp Catalog: SMD
Lamp Description: 3535 Number of Lamps: 7
Luminous Length (mm): -38 Luminous Width (mm): -38
Voltage: 230.4 V Current: 0.037 A
Power: 3.35 W Power Factor: 0.395

Photometric Results

CIE Class: Direct Total Rated Lamp Lumens: 23.5 lm
Measurement Flux: 23.5 lm Efficiency: 100%
Downward Ratio: 100% Upward Ratio: 0%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 63.5, 64.2, 67.6, 61.8
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 30.9, 32.6, 33.9, 30.2
Luminaire Efficacy Rating (LER): 7.08 Central Intensity: 51.29 cd
Max. Intensity: 54.25 cd Pos of Max. Intensity: H270 V6
S/MH(C0/C180): 0.51 S/MH(C90/C270): 0.56

Picture Of Luminaire

Luminous Intensity Distribution Curve



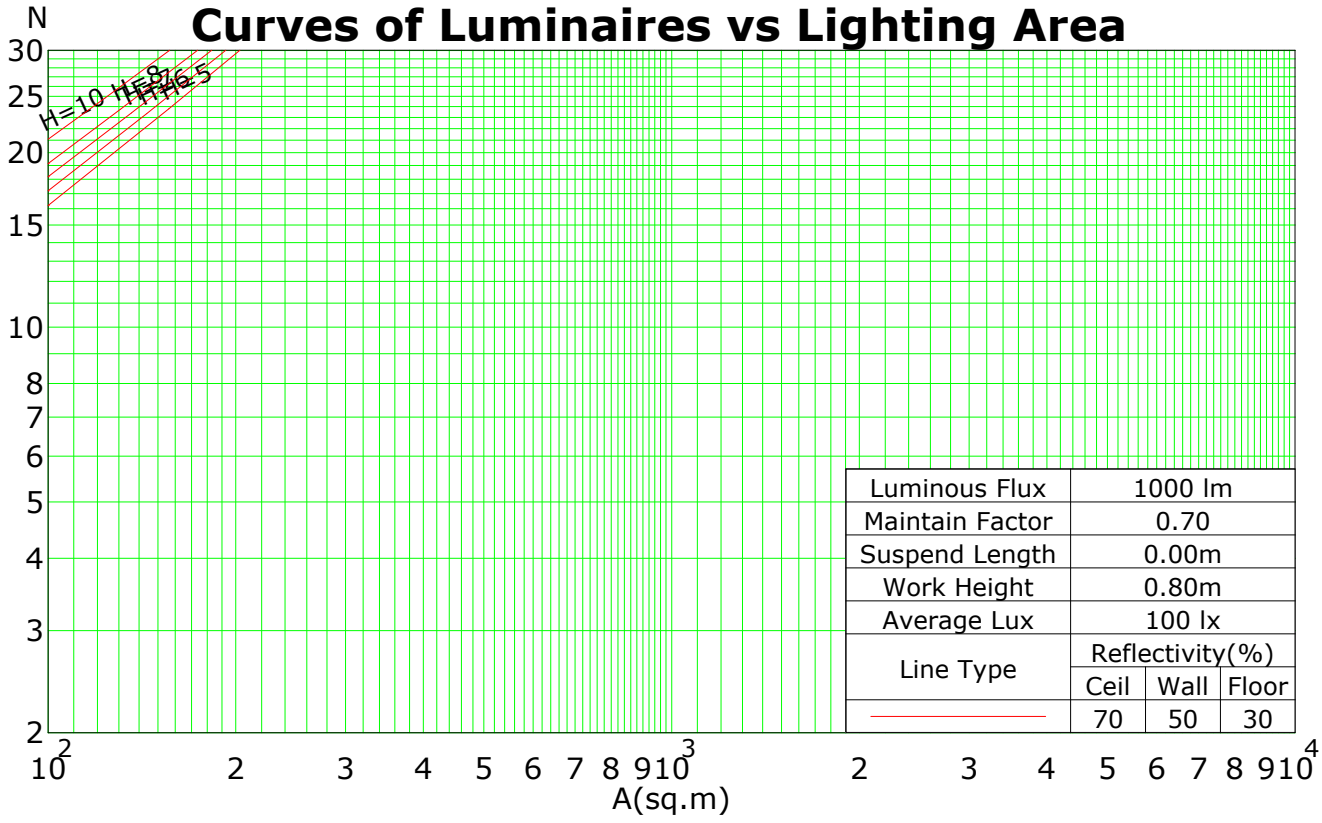
C Plane (°):0.0-360.0: 45.0 Gamma Plane (°):0.0-90.0:1.0
Test Lab: NINGBO LED LIGHTING Test Device: GPM-1600L
Test Type: TYPE C Distance: 6.500 m
Temperature: 25°C Humidity:
Operator: DING LI Inspector:

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94
2	108	104	100	97	106	102	99	96	99	96	93	96	94	91	93	91	90	88
3	103	97	92	89	101	96	91	88	93	90	87	91	88	85	89	86	84	82
4	98	91	86	82	97	90	85	82	88	84	81	86	83	80	84	81	79	77
5	94	86	81	76	92	85	80	76	83	79	75	82	78	75	80	77	74	73
6	90	81	76	72	88	81	75	71	79	74	71	78	74	71	76	73	70	69
7	86	77	72	68	85	77	71	67	75	71	67	74	70	67	73	69	66	65
8	82	73	68	64	81	73	68	64	72	67	64	71	66	63	70	66	63	62
9	79	70	64	61	78	69	64	61	69	64	60	68	63	60	67	63	60	59
10	76	67	61	58	75	66	61	58	66	61	58	65	61	57	64	60	57	56

Spacing Criteria (0-180): 0.51
Spacing Criteria (90-270): 0.56
Spacing Criteria (Diagonal): 0.57

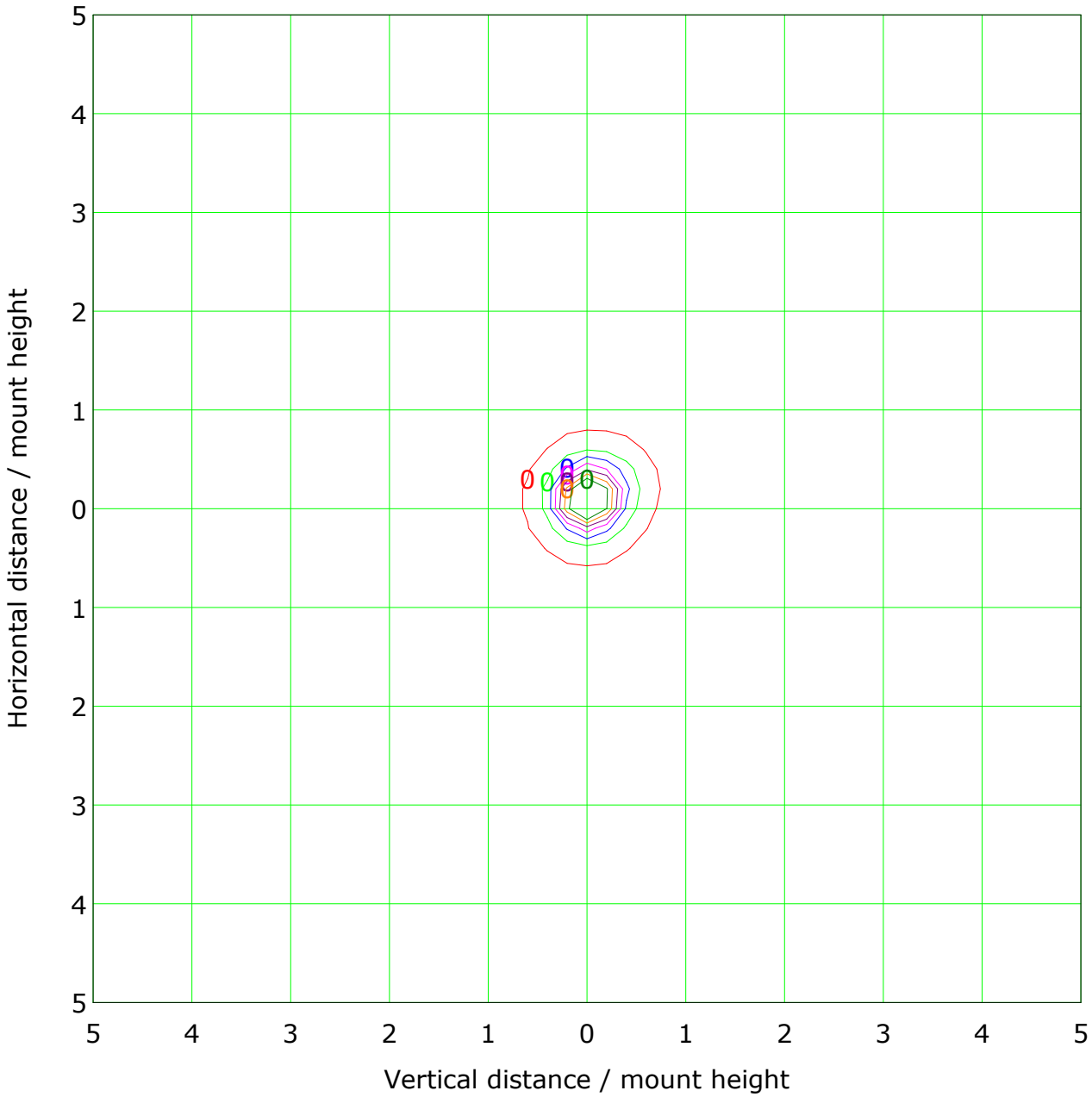
Curves of Luminaires vs Lighting Area



C Plane (°):0.0-360.0: 45.0
Test Lab: NINGBO LED LIGHTING
Test Type: TYPE C
Temperature: 25°C
Operator: DING LI

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 6.500 m
Humidity:
Inspector:

IsoLux Plot



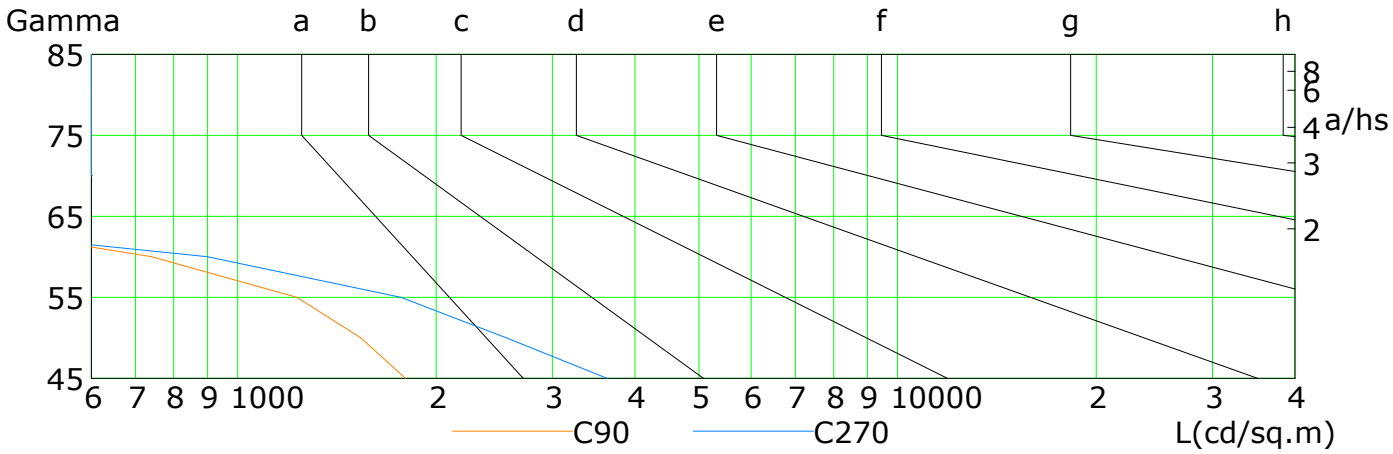
Mounting Height: 10.0m Max Lux(100%): 0.5 lx

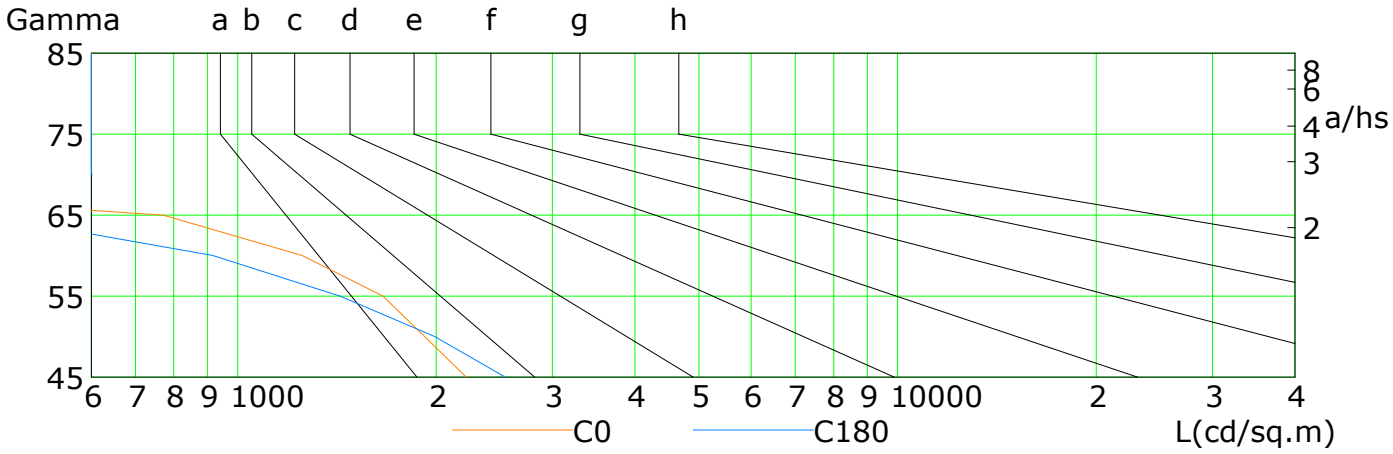
(5%): 0.0 lx
(15%): 0.1 lx
(25%): 0.1 lx
(35%): 0.2 lx
(45%): 0.2 lx
(55%): 0.3 lx
(65%): 0.3 lx

C Plane (°):0.0-360.0: 45.0
Gamma Plane (°):0.0-90.0:1.0
Test Lab: NINGBO LED LIGHTING
Test Device: GPM-1600L
Test Type: TYPE C
Distance: 6.500 m
Temperature: 25°C
Humidity:
Operator: DING LI
Inspector:

Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
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



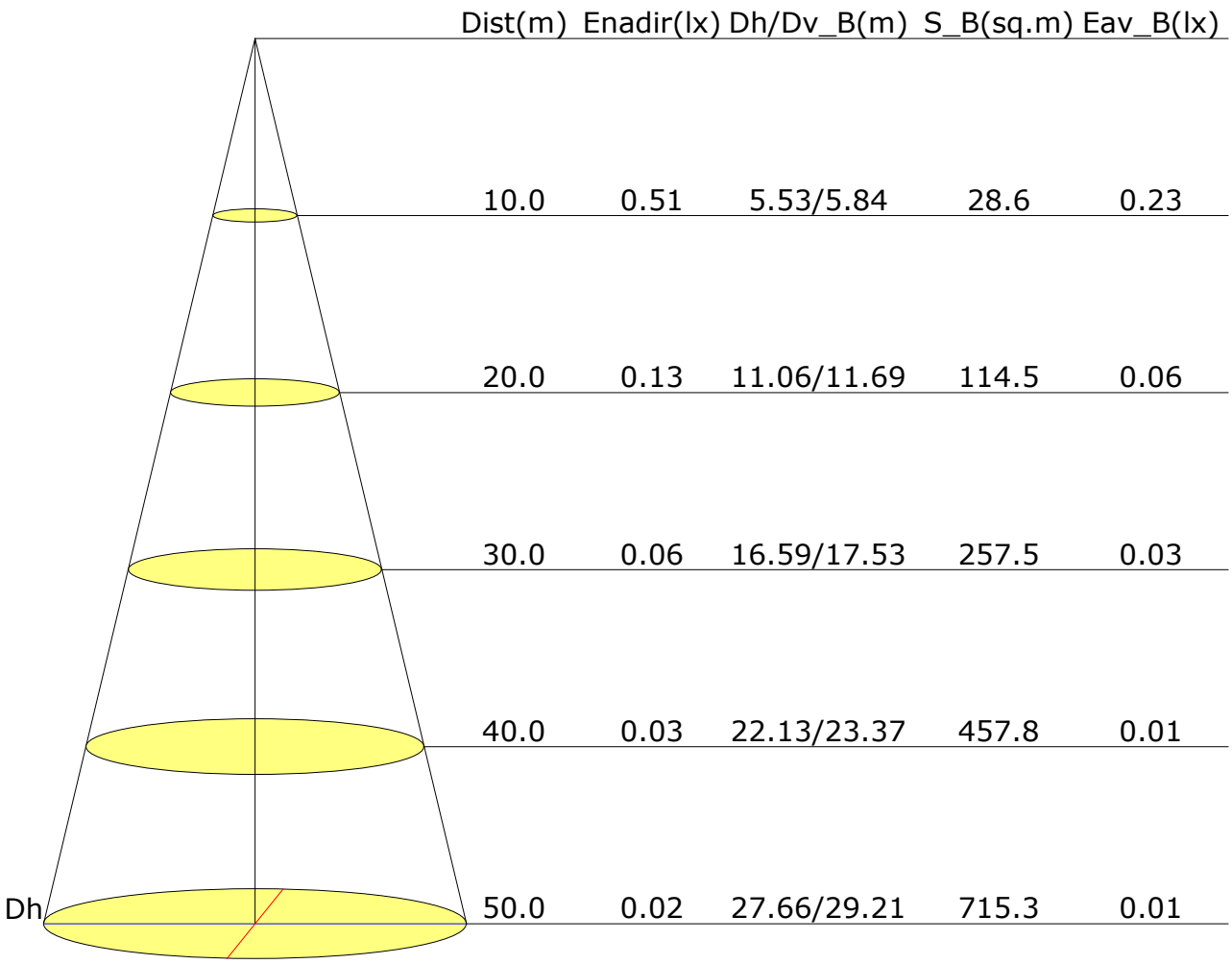


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	2220	1920	1660	1252	772	103	0	0	0
C90	1796	1536	1230	741	313	0	0	0	0
C180	2544	1989	1430	917	417	0	0	0	0
C270	3629	2551	1768	899	230	0	0	0	0

C Plane (°):0.0-360.0: 45.0
Test Lab: NINGBO LED LIGHTING
Test Type: TYPE C
Temperature: 25°C
Operator: DING LI

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 6.500 m
Humidity:
Inspector:

Illuminance at a Distance



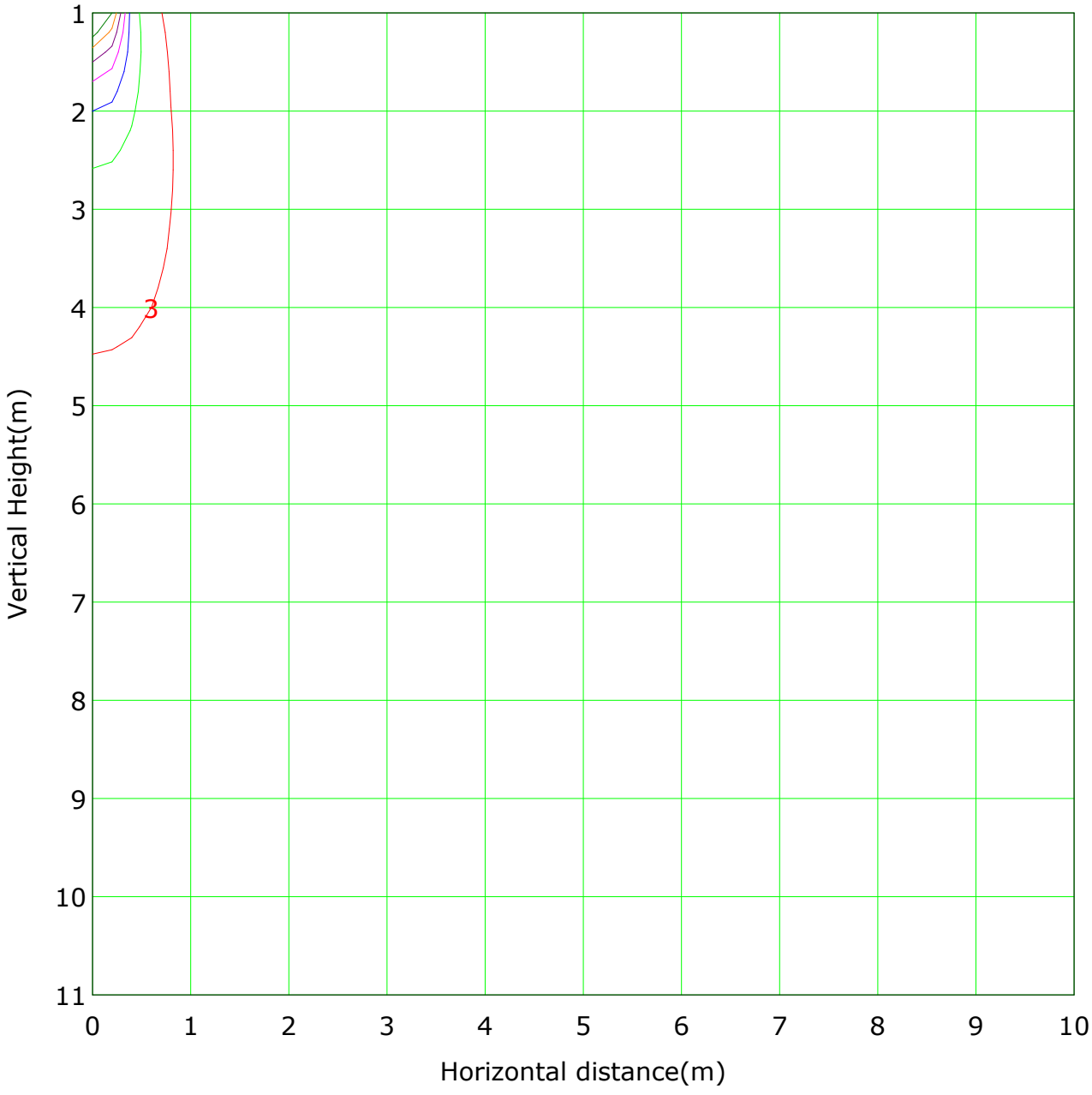
Dist(m)	Enadir(lx)	Dh/Dv_B(m)	S_B(sq.m)	Eav_B(lx)
10.0	0.51	5.53/5.84	28.6	0.23
20.0	0.13	11.06/11.69	114.5	0.06
30.0	0.06	16.59/17.53	257.5	0.03
40.0	0.03	22.13/23.37	457.8	0.01
50.0	0.02	27.66/29.21	715.3	0.01

Beam Angle(B): H30.9 V32.6 Field Angle(F): H63.5 V64.2

C Plane (°):0.0-360.0: 45.0
Test Lab: NINGBO LED LIGHTING
Test Type: TYPE C
Temperature: 25°C
Operator: DING LI

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 6.500 m
Humidity:
Inspector:

Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 51.3 lx

(5%): 2.6 lx
(15%): 7.7 lx
(25%): 12.8 lx
(35%): 18.0 lx
(45%): 23.1 lx
(55%): 28.2 lx
(65%): 33.3 lx

C Plane (°):0.0-360.0: 45.0
Gamma Plane (°):0.0-90.0:1.0
Test Lab: NINGBO LED LIGHTING
Test Device: GPM-1600L
Test Type: TYPE C
Distance: 6.500 m
Temperature: 25°C
Humidity:
Operator: DING LI
Inspector:

UGR Table

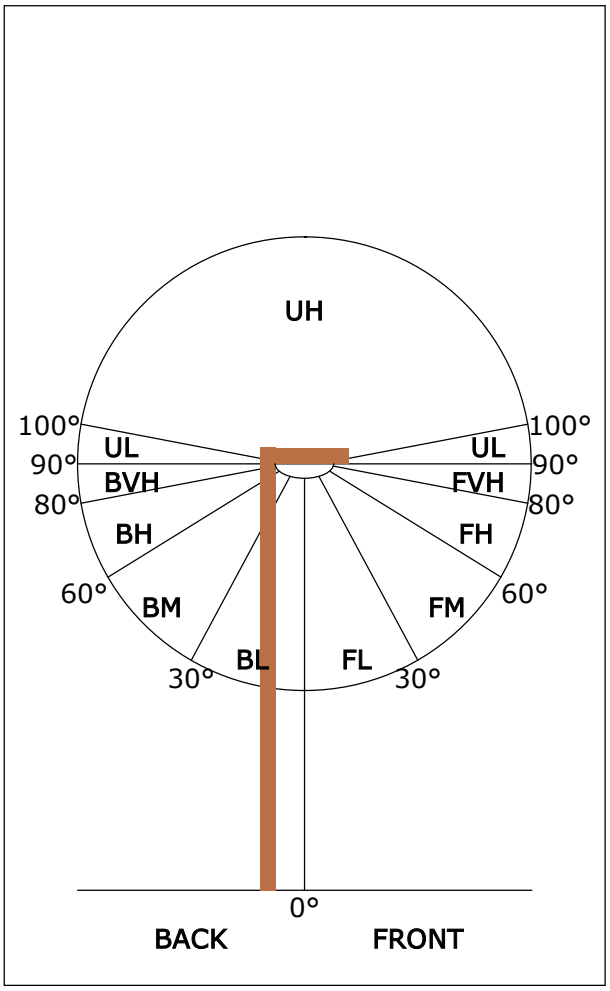
Reflectance: Ceiling (cavity)	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
X=2H Y=2H	10.0	10.9	10.3	11.1	11.3	10.7	11.5	10.9	11.7	11.9
3H	10.1	10.8	10.4	11.0	11.3	10.6	11.3	10.9	11.5	11.8
4H	10.0	10.7	10.3	10.9	11.2	10.5	11.2	10.8	11.4	11.7
6H	9.9	10.6	10.2	10.8	11.1	10.4	11.1	10.7	11.3	11.6
8H	9.9	10.5	10.2	10.8	11.1	10.4	11.0	10.7	11.3	11.6
12H	9.8	10.4	10.2	10.7	11.1	10.3	10.9	10.7	11.2	11.6
X=4H Y=2H	10.1	10.8	10.4	11.1	11.3	10.7	11.4	11.0	11.7	11.9
3H	10.1	10.7	10.5	11.0	11.3	10.6	11.2	10.9	11.5	11.8
4H	10.0	10.6	10.4	10.9	11.3	10.5	11.0	10.9	11.4	11.7
6H	10.0	10.4	10.4	10.8	11.2	10.4	10.9	10.8	11.2	11.6
8H	9.9	10.3	10.3	10.7	11.1	10.4	10.8	10.8	11.2	11.6
12H	9.9	10.2	10.3	10.7	11.1	10.3	10.7	10.8	11.1	11.5
X=8H Y=4H	9.9	10.3	10.3	10.7	11.1	10.4	10.8	10.8	11.2	11.6
6H	9.8	10.2	10.3	10.6	11.0	10.3	10.6	10.7	11.0	11.5
8H	9.8	10.1	10.2	10.5	11.0	10.2	10.5	10.7	11.0	11.5
12H	9.7	10.0	10.2	10.5	11.0	10.2	10.4	10.7	10.9	11.4
X=12H Y=4H	9.9	10.2	10.3	10.7	11.1	10.3	10.7	10.8	11.1	11.5
6H	9.8	10.1	10.2	10.5	11.0	10.2	10.5	10.7	11.0	11.5
8H	9.7	10.0	10.2	10.5	11.0	10.2	10.4	10.7	10.9	11.4
Variations with the observer position at spacings:										
S=1.0H	+1.2/-1.3					+3.3/-2.9				
S=1.5H	+2.5/-3.0					+5.6/-8.2				
S=2.0H	+4.0/-9.9					+7.5/-22.6				

Calculate in accordance with CIE Pub.117. The table is revised with 24lm (8log(F/F0) = -13.0).

C Plane (°):0.0-360.0: 45.0
Test Lab: NINGBO LED LIGHTING
Test Type: TYPE C
Temperature: 25°C
Operator: DING LI

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 6.500 m
Humidity:
Inspector:

FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM



ZONE	LUMENS	% LAMP LUMENS
FORWARD LIGHT	8	35.5
FL (0°-30°)	6	26.6
FM (30°-60°)	2	8.5
FH (60°-80°)	0	0.5
FVH (80°-90°)	0	0.0
BACK LIGHT	15	64.5
BL (0°-30°)	11	48.7
BM (30°-60°)	4	15.2
BH (60°-80°)	0	0.6
BVH (80°-90°)	0	0.0
UP LIGHT	0	0.0
UL (90°-100°)	0	0.0
UH (100°-180°)	0	0.0
TRAPPED LIGHT	NA	NA

BUG(**B**acklight,**U**plight,**G**lare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B0 U0 G0
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B0 U0 G0

C Plane (°):0.0-360.0: 45.0
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