Report No.: Test Time: 2024-03-28 15:38

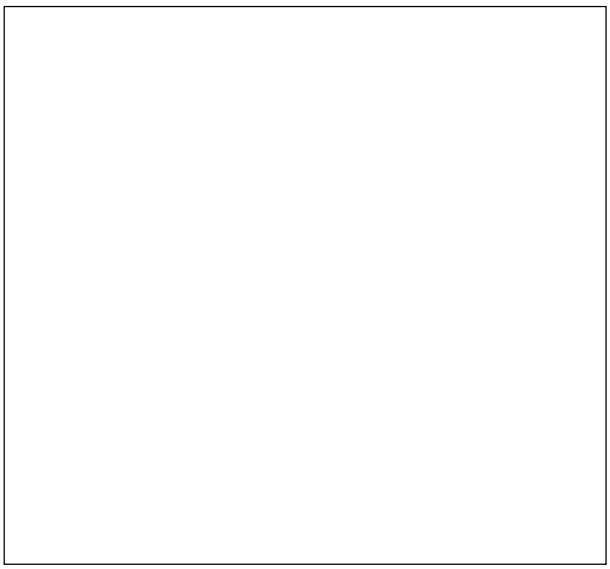
Luminaire Property

Luminaire Manufacturer:
Luminaire Description: HCP-242302-绿色 Lamp Catalog: SMD
Lamp Description: 3535 Number of Lamps: 14
Luminous Length (mm): 88 Luminous Width (mm): 88
Voltage: 230.5 V Current: 0.106 A
Power: 8.68 W Power Factor: 0.356

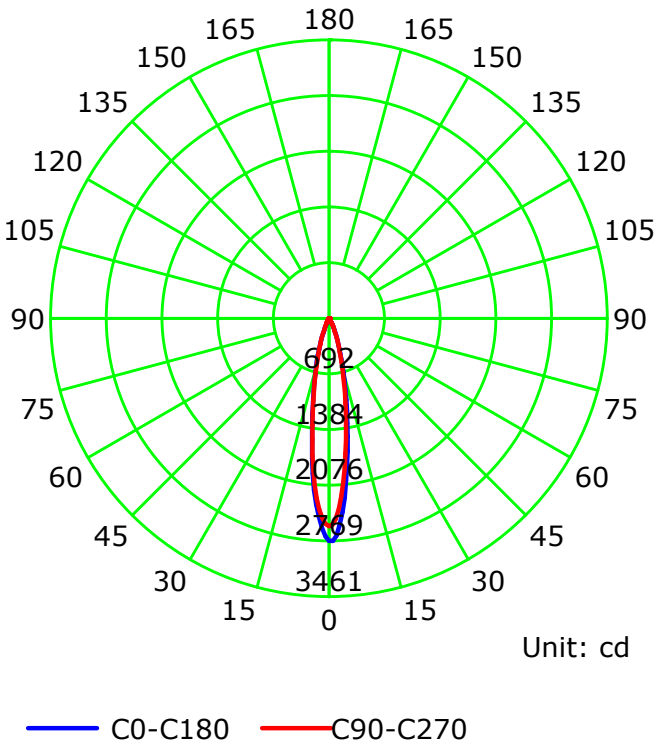
Photometric Results

CIE Class: Direct Total Rated Lamp Lumens: 436.4 lm
Measurement Flux: 436.4 lm Efficiency: 100%
Downward Ratio: 100% Upward Ratio: 0%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 42.0, 42.5, 43.0, 41.9
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 18.6, 18.8, 19.2, 18.5
Luminaire Efficacy Rating (LER): 50.32 Central Intensity: 2767.59 cd
Max. Intensity: 2769.25 cd Pos of Max. Intensity: H0 V1
S/MH(C0/C180): 0.32 S/MH(C90/C270): 0.32

Picture Of Luminaire



Luminous Intensity Distribution Curve



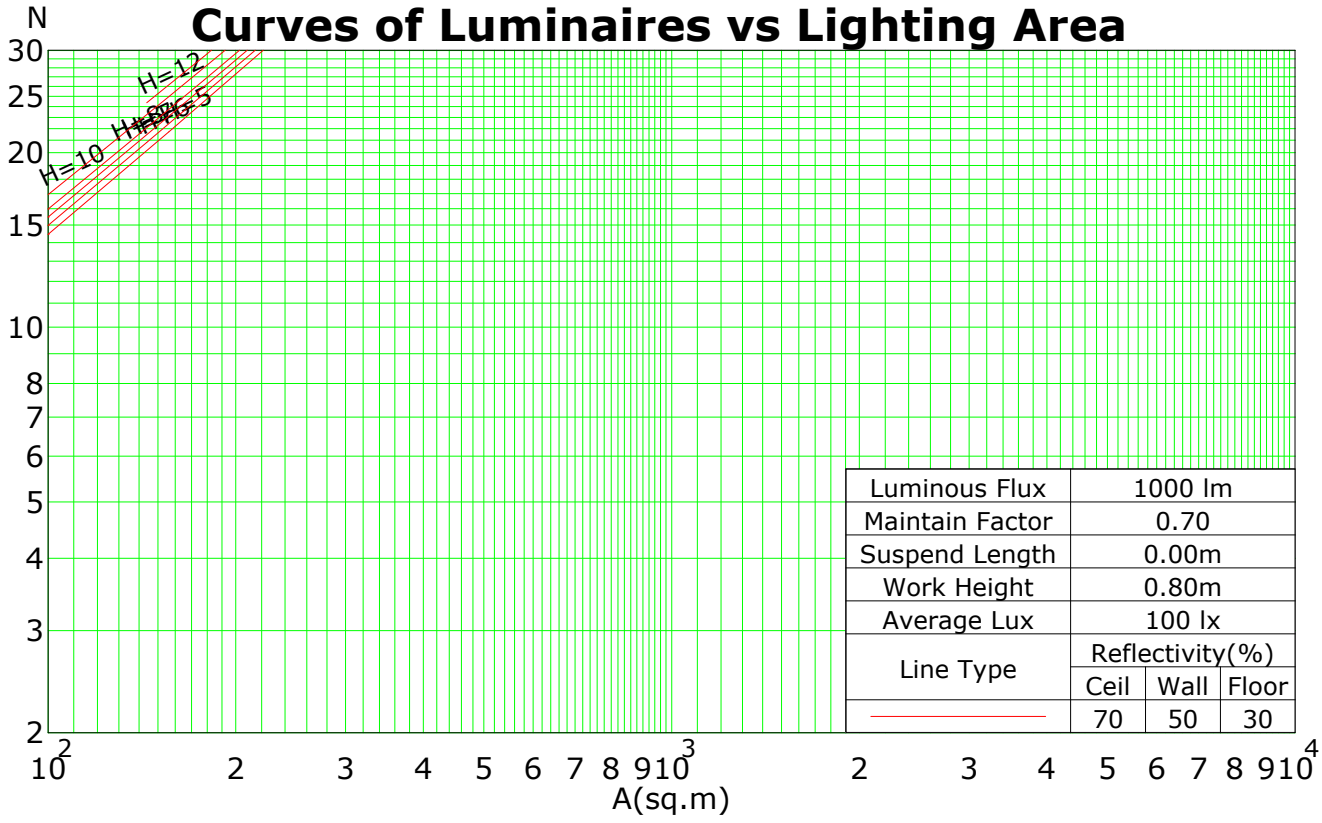
C Plane (°):0.0-360.0: 45.0 Gamma Plane (°):0.0-180.0:1.0
Test Lab: NINGBO LED LIGHTING Test Device: GPM-1600L
Test Type: TYPE C Distance: 6.500 m
Temperature: 25°C Humidity:
Operator: DING LI Inspector:

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	115	113	111	110	113	111	109	108	107	106	105	103	102	101	100	99	99	97
2	112	108	105	103	109	106	104	102	103	101	99	100	99	97	98	96	95	94
3	108	104	100	97	106	102	99	97	100	97	95	98	96	94	96	94	92	91
4	105	100	96	93	103	99	95	93	97	94	92	95	93	91	93	91	90	88
5	102	96	92	89	101	95	92	89	94	91	88	92	90	88	91	89	87	86
6	99	93	89	86	98	93	89	86	91	88	86	90	87	85	89	86	84	83
7	97	90	86	84	96	90	86	83	89	85	83	88	85	83	87	84	82	81
8	94	88	84	81	93	87	84	81	86	83	81	86	83	80	85	82	80	79
9	92	85	81	79	91	85	81	79	84	81	78	83	80	78	83	80	78	77
10	90	83	79	77	89	83	79	77	82	79	76	81	78	76	81	78	76	75

Spacing Criteria (0-180): 0.32
Spacing Criteria (90-270): 0.32
Spacing Criteria (Diagonal): 0.35

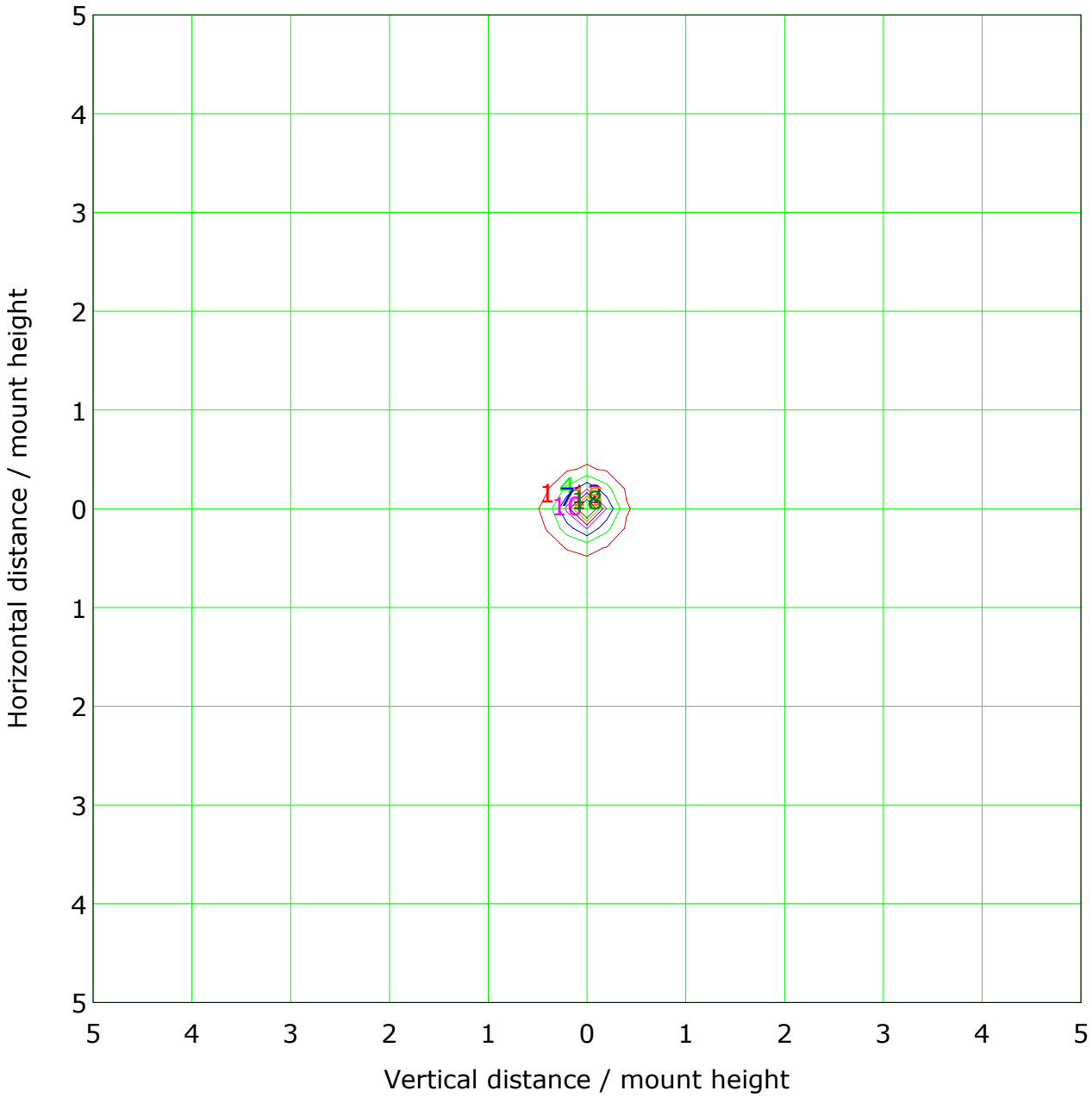
Curves of Luminaires vs Lighting Area



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 (°):0.0-180.0:1.0
Test Device: GPM-1600L
Distance: 6.500 m
Humidity:
Inspector:

IsoLux Plot



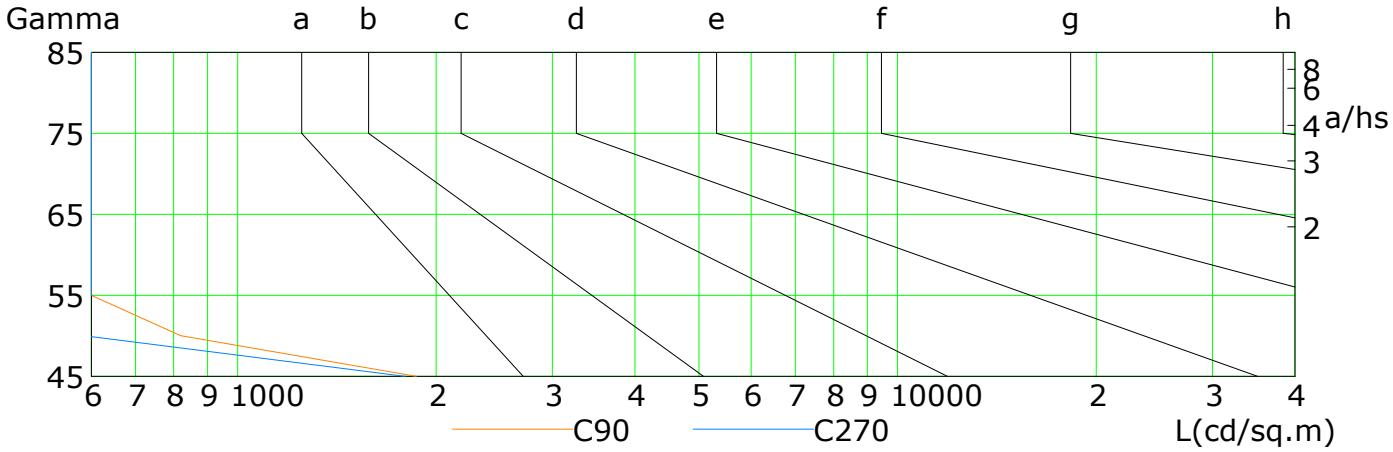
Mounting Height: 10.0m Max Lux(100%): 27.7 lx

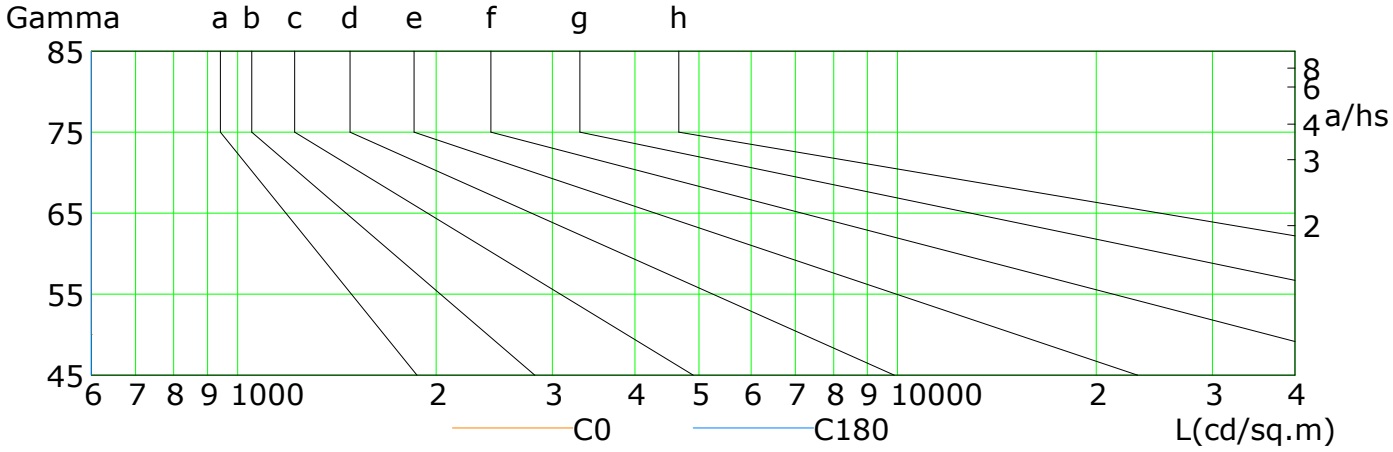
(5%): 1.4 lx
(15%): 4.2 lx
(25%): 6.9 lx
(35%): 9.7 lx
(45%): 12.5 lx
(55%): 15.2 lx
(65%): 18.0 lx

C Plane (°):0.0-360.0: 45.0
Gamma Plane (°):0.0-180.0:1.0
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



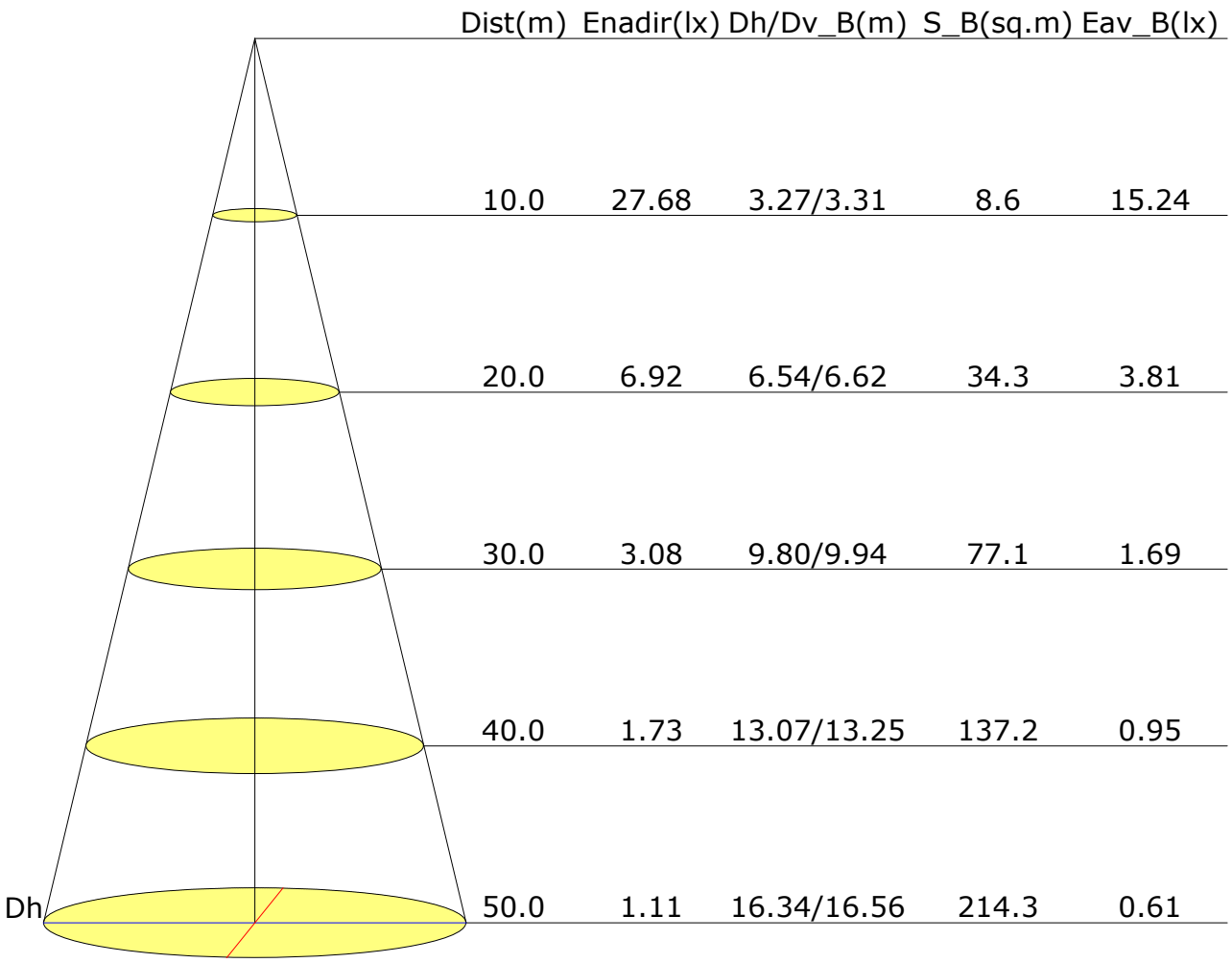


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	163	0	0	0	0	0	0	0	0
C90	1865	820	0	0	0	0	0	0	0
C180	0	0	0	0	0	0	0	0	0
C270	1793	589	0	0	0	0	0	0	0

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 (°):0.0-180.0:1.0
Test Device: GPM-1600L
Distance: 6.500 m
Humidity:
Inspector:

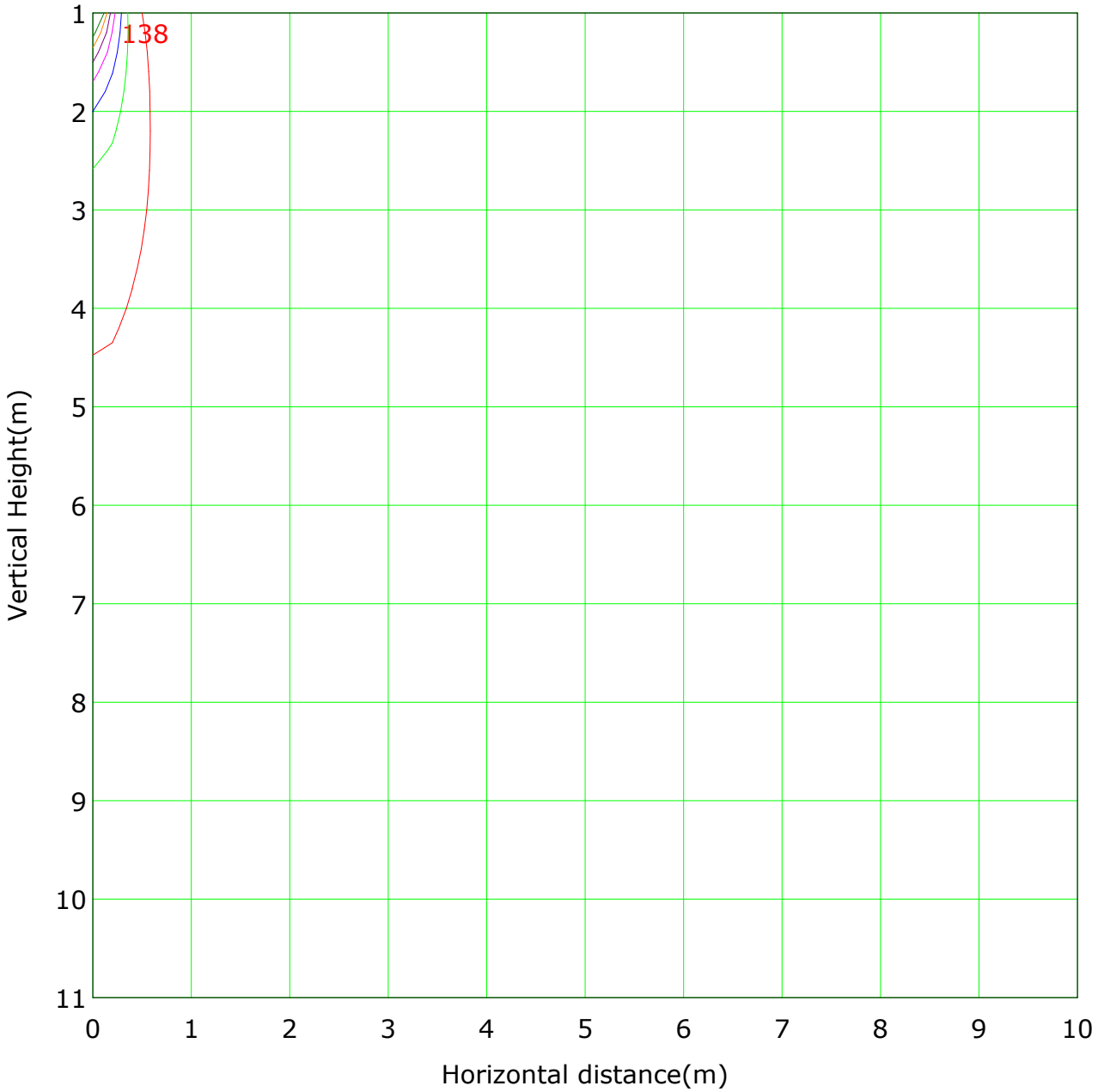
Illuminance at a Distance



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 (°):0.0-180.0:1.0
Test Device: GPM-1600L
Distance: 6.500 m
Humidity:
Inspector:

Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 2767.6 lx

(5%): 138.4 lx
(15%): 415.1 lx
(25%): 691.9 lx
(35%): 968.7 lx
(45%):1245.4 lx
(55%):1522.2 lx
(65%):1798.9 lx

C Plane (°):0.0-360.0: 45.0
Gamma Plane (°):0.0-180.0:1.0
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

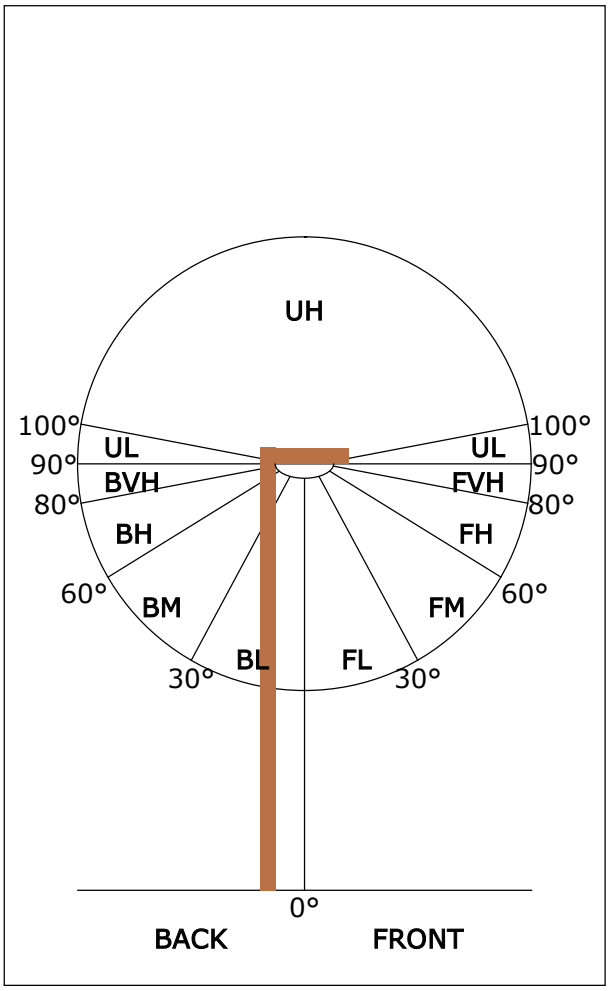
Reflectance: Ceiling (cavity)	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
X=2H Y=2H	1.9	2.4	2.1	2.6	2.8	3.1	3.7	3.3	3.8	4.0
3H	1.7	2.3	2.0	2.5	2.7	2.9	3.5	3.2	3.7	3.9
4H	1.7	2.2	1.9	2.4	2.7	2.9	3.4	3.2	3.6	3.9
6H	1.6	2.0	1.9	2.3	2.6	2.8	3.3	3.1	3.5	3.8
8H	1.5	2.0	1.9	2.3	2.6	2.8	3.2	3.1	3.5	3.8
12H	1.5	1.9	1.8	2.2	2.5	2.7	3.1	3.1	3.4	3.8
X=4H Y=2H	1.7	2.2	1.9	2.4	2.7	2.9	3.4	3.2	3.6	3.9
3H	1.5	1.9	1.8	2.2	2.5	2.7	3.1	3.1	3.4	3.8
4H	1.4	1.8	1.8	2.1	2.5	2.6	3.0	3.0	3.3	3.7
6H	1.3	1.7	1.7	2.0	2.4	2.5	2.9	2.9	3.2	3.6
8H	1.3	1.6	1.7	2.0	2.4	2.5	2.8	2.9	3.2	3.6
12H	1.2	1.5	1.7	1.9	2.3	2.4	2.7	2.9	3.1	3.6
X=8H Y=4H	1.3	1.6	1.7	2.0	2.4	2.5	2.8	2.9	3.2	3.6
6H	1.2	1.4	1.6	1.8	2.3	2.4	2.6	2.8	3.1	3.5
8H	1.1	1.3	1.6	1.8	2.3	2.3	2.6	2.8	3.0	3.5
12H	1.1	1.3	1.6	1.7	2.2	2.3	2.5	2.8	2.9	3.4
X=12H Y=4H	1.2	1.5	1.7	1.9	2.3	2.4	2.7	2.9	3.1	3.6
6H	1.1	1.3	1.6	1.8	2.3	2.3	2.6	2.8	3.0	3.5
8H	1.1	1.3	1.6	1.7	2.2	2.3	2.5	2.8	2.9	3.4
Variations with the observer position at spacings:										
S=1.0H	+6.9/-1.$					+5.8/-1.$				
S=1.5H	+9.8/-1.$					+8.6/-1.$				
S=2.0H	+11.8/-1.$					+10.6/-1.$				

Calculate in accordance with CIE Pub.117. The table is revised with 436lm (8log(F/F0) = -2.9).

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 (°):0.0-180.0:1.0
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	223	51.0
FL (0°-30°)	214	49.1
FM (30°-60°)	8	1.9
FH (60°-80°)	0	0.0
FVH (80°-90°)	0	0.0
BACK LIGHT	214	49.0
BL (0°-30°)	205	47.0
BM (30°-60°)	9	2.0
BH (60°-80°)	0	0.0
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)	B1 U0 G0
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B1 U0 G0

C Plane (°):0.0-360.0: 45.0
Test Lab: NINGBO LED LIGHTING
Test Type: TYPE C
Temperature: 25°C
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Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1600L
Distance: 6.500 m
Humidity:
Inspector: