Report No.: Test Time: 2024-03-28 12:53

Luminaire Property

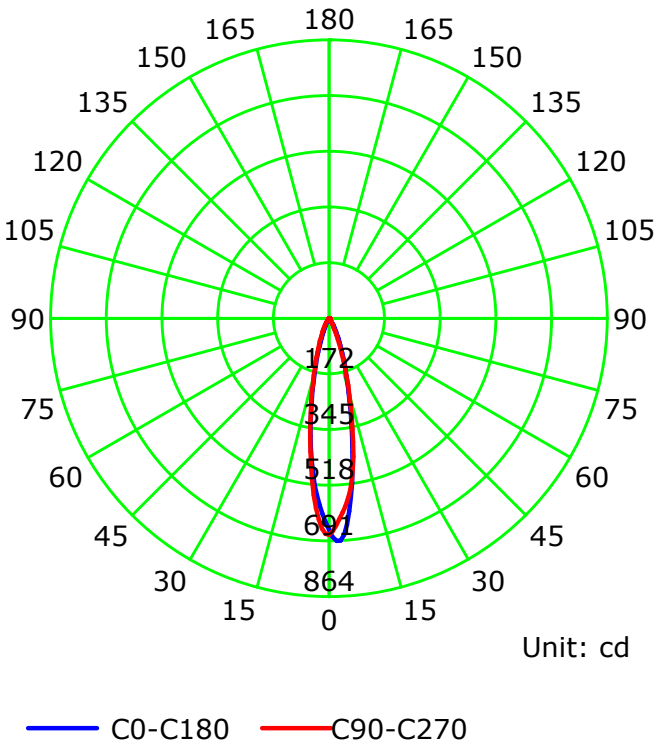
Luminaire Manufacturer:
Luminaire Description: HCP-242182-红色 Lamp Catalog: SMD
Lamp Description: 3535 Number of Lamps: 7
Luminous Length (mm): 71 Luminous Width (mm): 58
Voltage: 230.4 V Current: 0.073 A
Power: 5.62 W Power Factor: 0.336

Photometric Results

CIE Class: Direct Total Rated Lamp Lumens: 144.5 lm
Measurement Flux: 144.5 lm Efficiency: 100%
Downward Ratio: 100% Upward Ratio: 0%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 45.9, 46.3, 45.5, 47.2
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 21.4, 22.6, 22.3, 21.8
Luminaire Efficacy Rating (LER): 25.75 Central Intensity: 656.76 cd
Max. Intensity: 691.91 cd Pos of Max. Intensity: H0 V2
S/MH(C0/C180): 0.38 S/MH(C90/C270): 0.38

Picture Of Luminaire

Luminous Intensity Distribution Curve



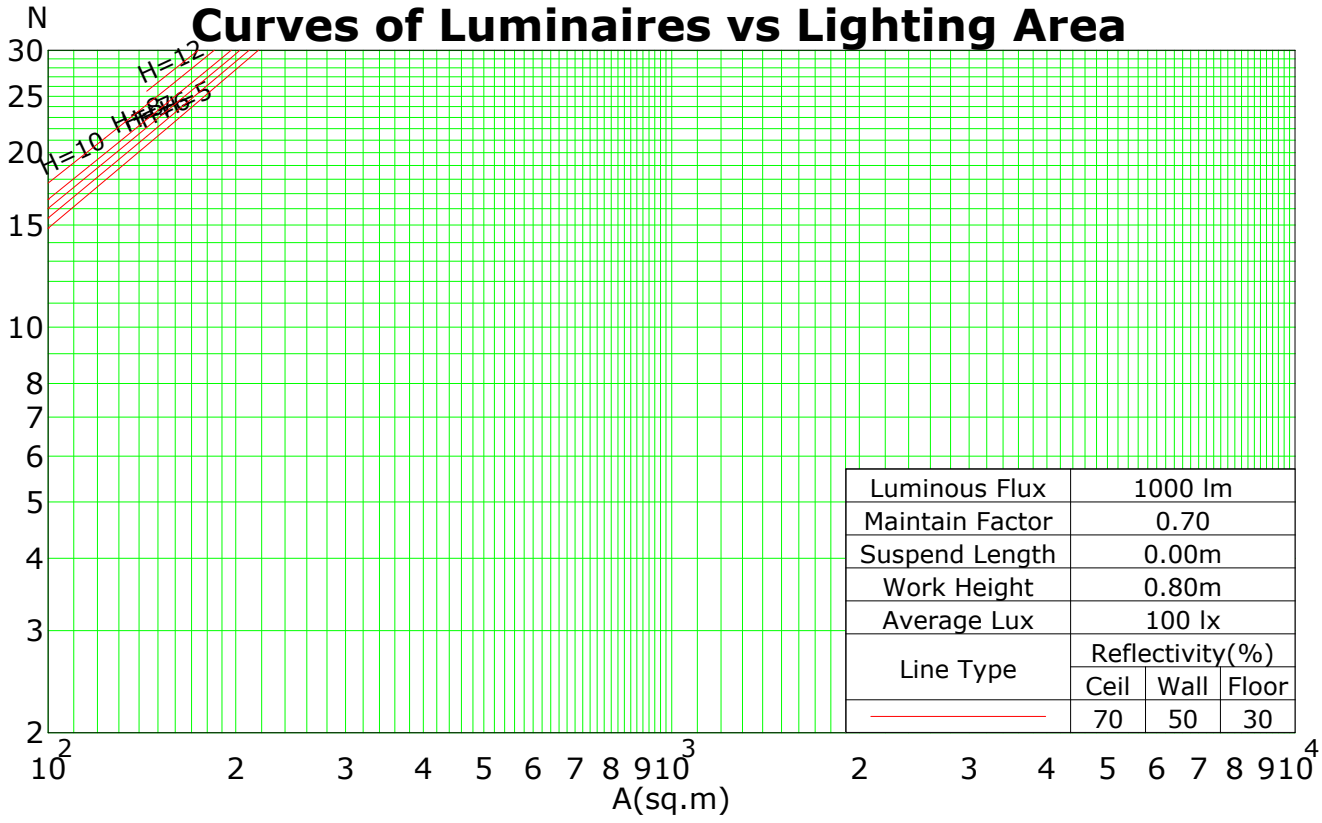
C Plane (°):0.0-360.0: 45.0 Gamma Plane (°):0.0-90.0:1.0
Test Lab: NINGBO LED LIGHTING Test Device: GPM-1600L
Test Type: TYPE C Distance: 6.500 m
Temperature: 25°C Humidity:
Operator: DING LI Inspector:

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	115	113	111	109	112	111	109	107	107	105	104	103	102	101	100	99	98	96
2	111	107	104	101	109	105	103	100	102	100	98	99	98	96	97	95	94	93
3	107	102	98	95	105	101	97	95	98	96	93	96	94	92	94	92	90	89
4	104	98	94	91	102	97	93	90	95	92	89	93	90	88	91	89	87	86
5	100	94	90	87	99	93	89	86	92	88	85	90	87	85	89	86	84	83
6	97	91	86	83	96	90	86	83	89	85	82	87	84	82	86	83	81	80
7	94	87	83	80	93	87	83	80	86	82	79	85	81	79	84	81	79	78
8	91	84	80	77	90	84	80	77	83	79	77	82	79	76	81	78	76	75
9	89	82	78	75	88	81	77	75	81	77	74	80	77	74	79	76	74	73
10	86	79	75	72	86	79	75	72	78	75	72	78	74	72	77	74	72	71

Spacing Criteria (0-180): 0.38
Spacing Criteria (90-270): 0.38
Spacing Criteria (Diagonal): 0.41

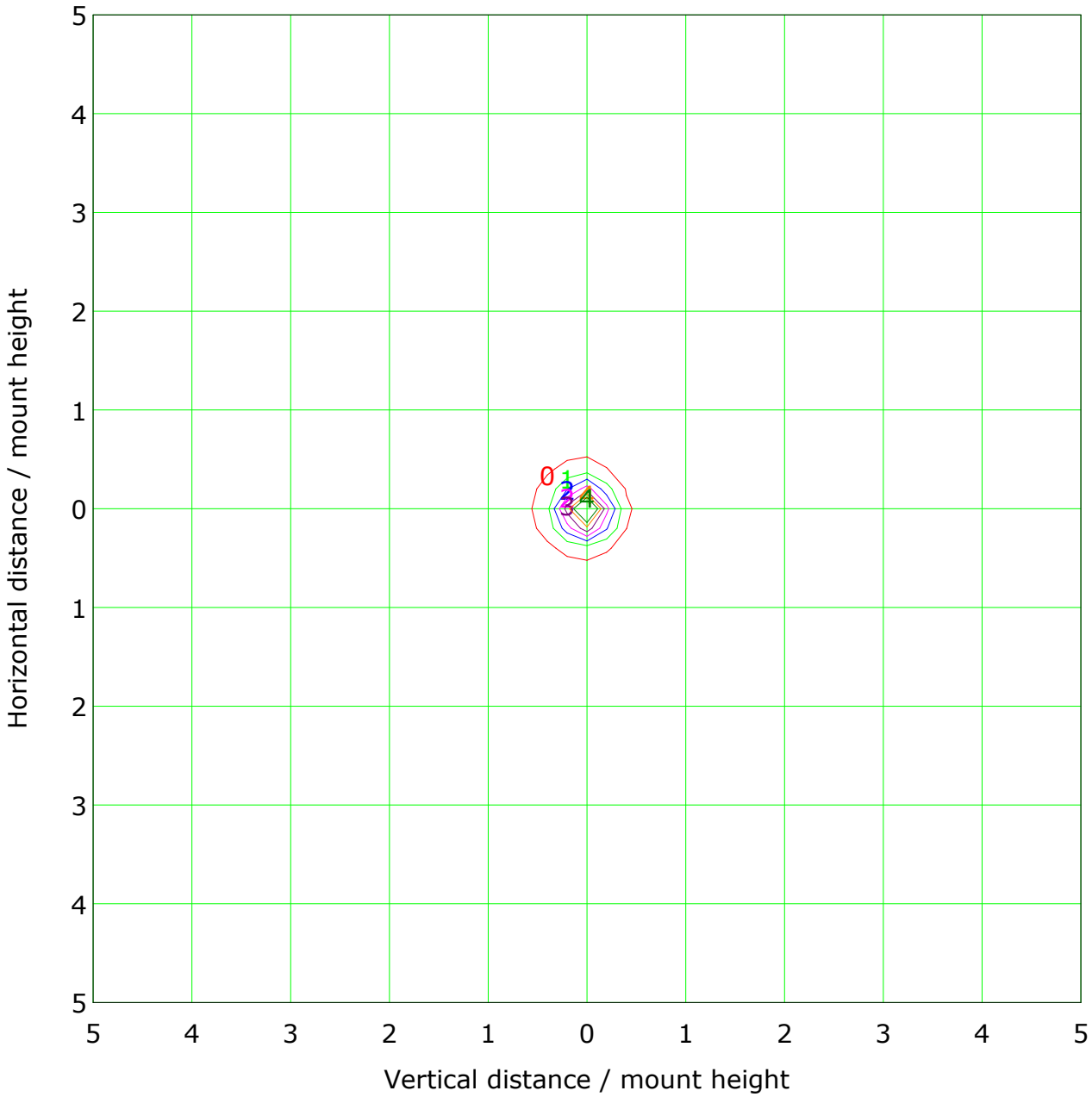
Curves of Luminaires vs Lighting Area



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%): 6.9 lx

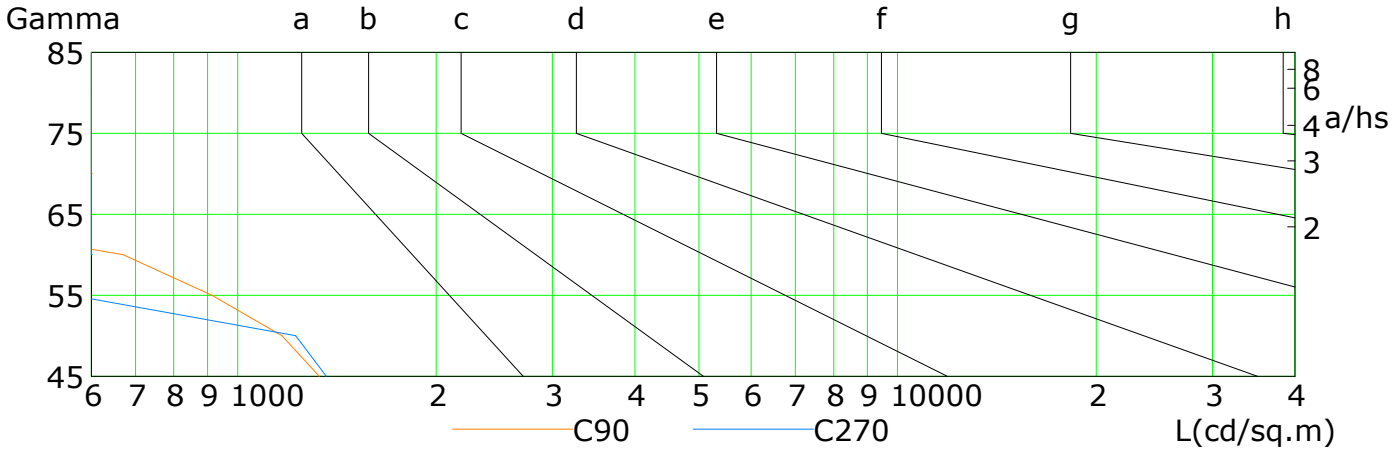
(5%): 0.3 lx	(15%): 1.0 lx
(25%): 1.7 lx	(35%): 2.4 lx
(45%): 3.1 lx	(55%): 3.8 lx
(65%): 4.5 lx	

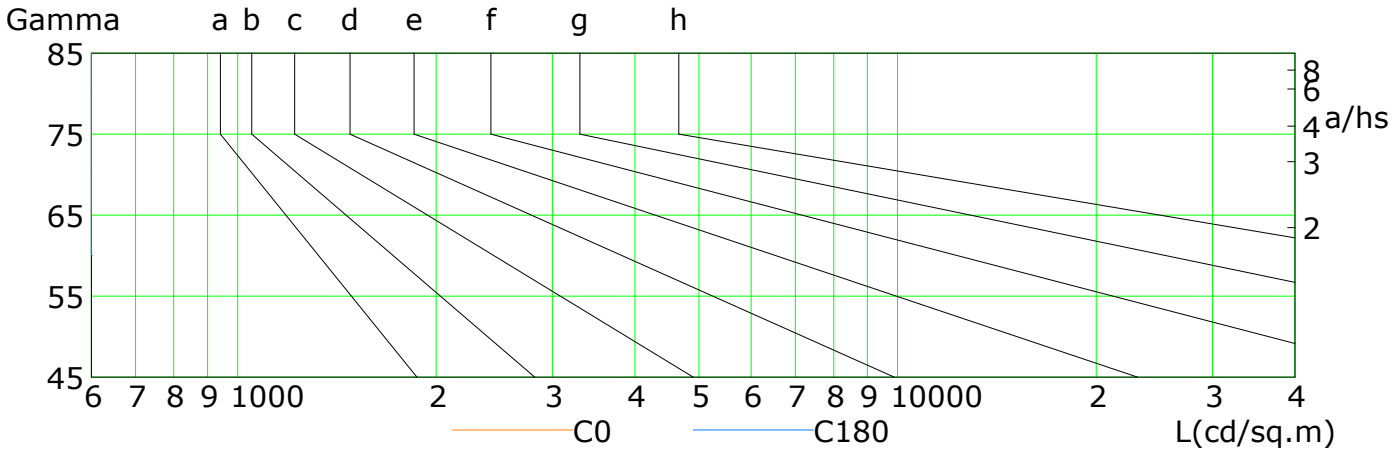
C Plane (°):0.0-360.0: 45.0
Test Lab: NINGBO LED LIGHTING
Test Type: TYPE C
Temperature: 25°C
Operator: DING LI

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

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



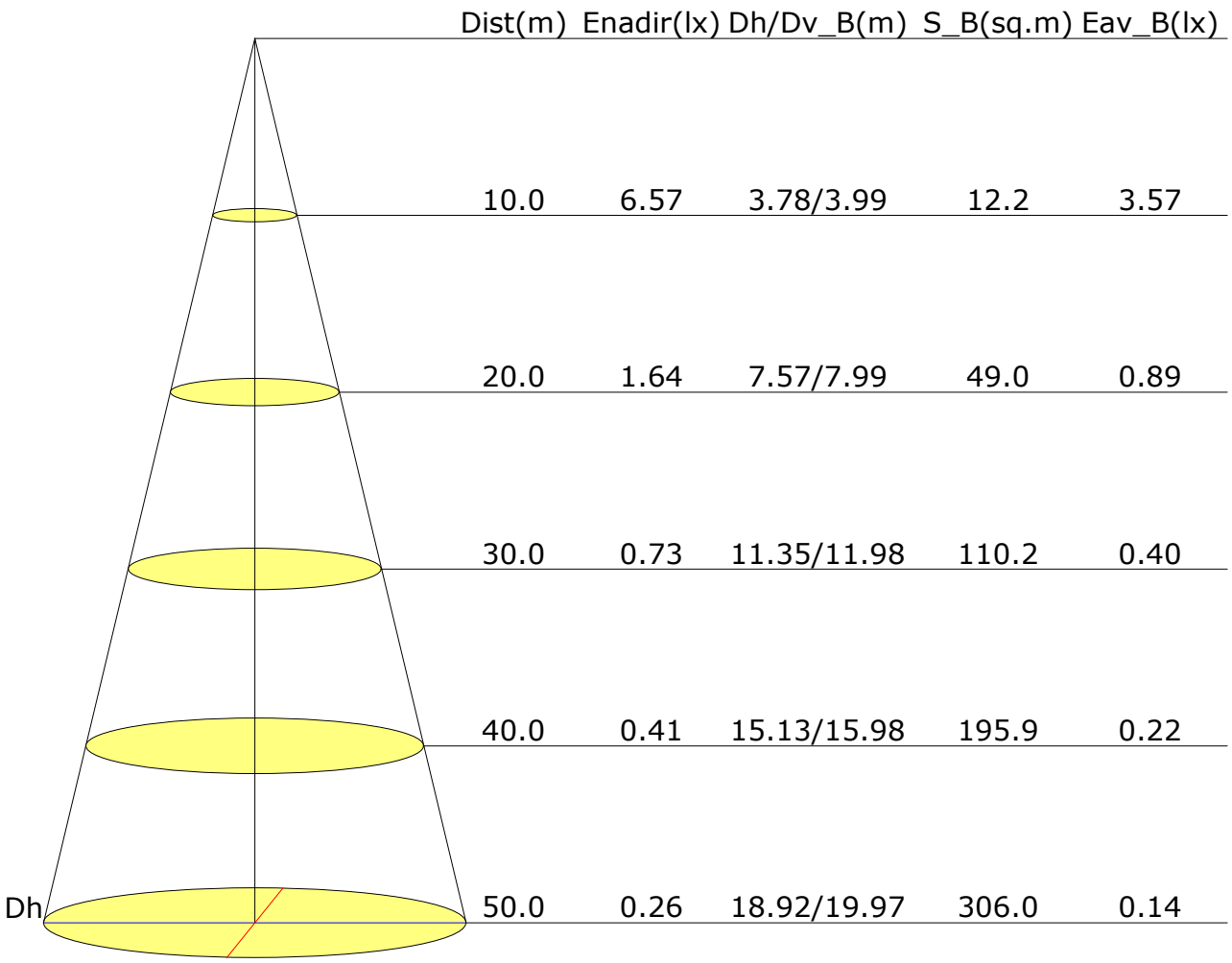


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	536	446	423	49	0	0	0	0	0
C90	1329	1167	914	670	305	0	0	0	0
C180	326	38	34	0	0	0	0	0	0
C270	1363	1224	563	0	0	0	0	0	0

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

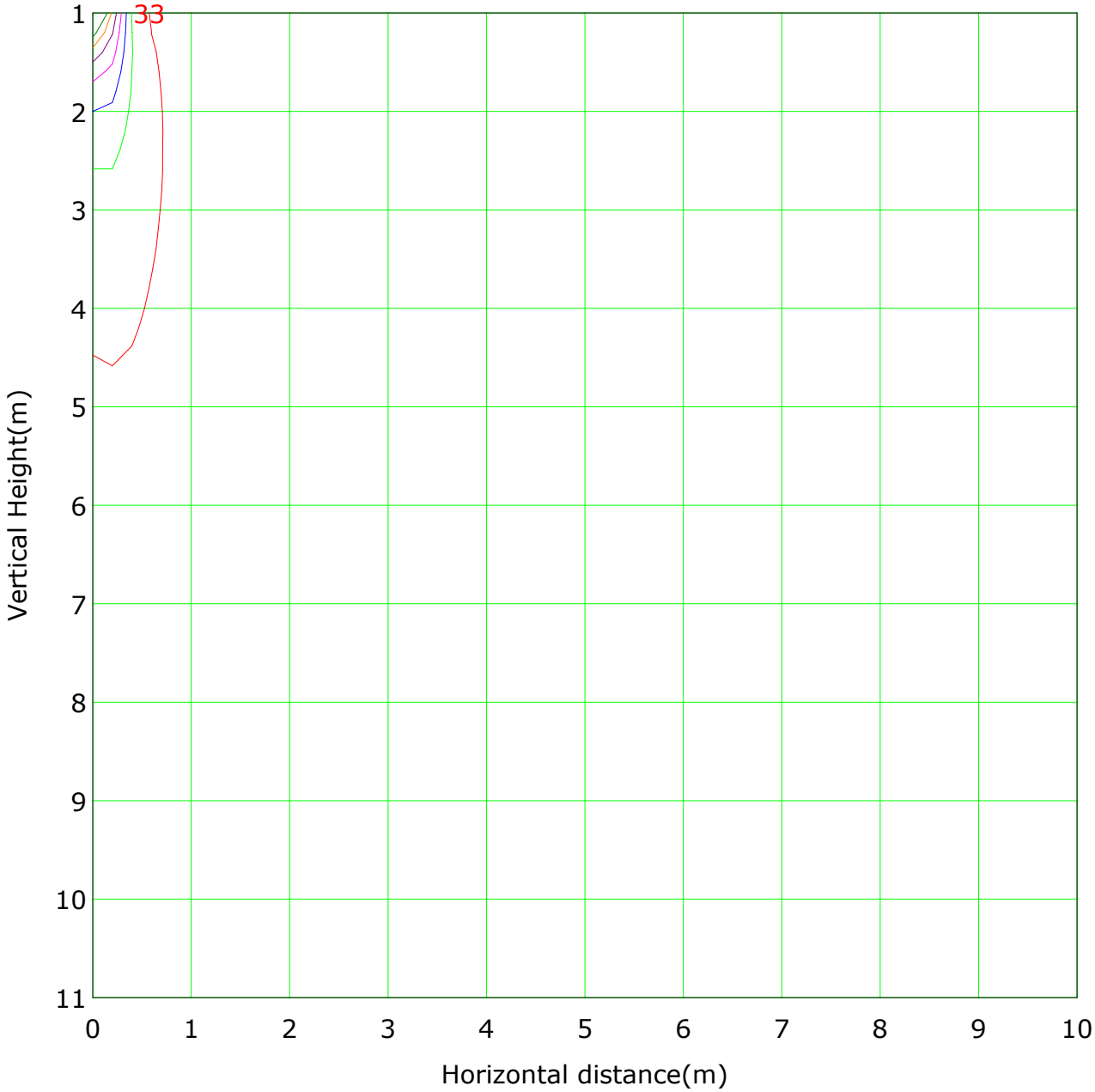
Illuminance at a Distance



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

Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 656.8 lx

(5%): 32.8 lx
(15%): 98.5 lx
(25%): 164.2 lx
(35%): 229.9 lx
(45%): 295.5 lx
(55%): 361.2 lx
(65%): 426.9 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

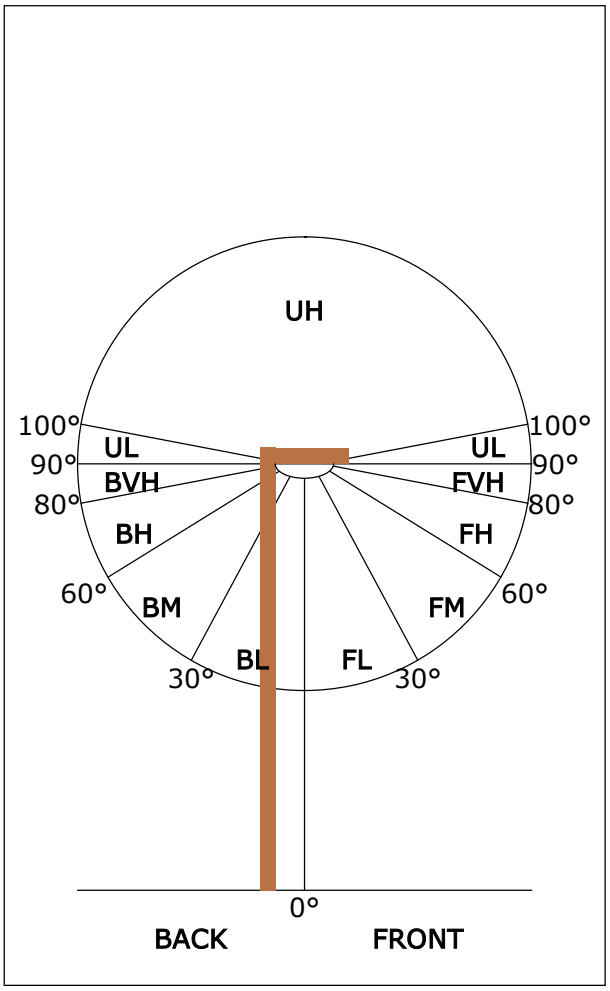
Reflectance: Ceiling (cavity)	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
X=2H Y=2H	5.9	6.5	6.1	6.7	6.9	5.8	6.4	6.0	6.6	6.8
3H	5.7	6.3	6.0	6.5	6.8	5.7	6.2	5.9	6.5	6.7
4H	5.7	6.2	6.0	6.4	6.7	5.6	6.1	5.9	6.4	6.6
6H	5.6	6.1	5.9	6.4	6.6	5.5	6.0	5.8	6.3	6.6
8H	5.5	6.0	5.9	6.3	6.6	5.5	6.0	5.8	6.2	6.5
12H	5.5	6.0	5.8	6.3	6.6	5.4	5.9	5.8	6.2	6.5
X=4H Y=2H	5.8	6.3	6.1	6.6	6.8	5.7	6.2	6.0	6.5	6.7
3H	5.6	6.1	6.0	6.4	6.7	5.5	6.0	5.9	6.3	6.6
4H	5.5	5.9	5.9	6.3	6.6	5.4	5.9	5.8	6.2	6.5
6H	5.4	5.8	5.8	6.2	6.6	5.4	5.7	5.8	6.1	6.5
8H	5.4	5.7	5.8	6.1	6.5	5.3	5.6	5.7	6.0	6.4
12H	5.3	5.6	5.8	6.1	6.5	5.3	5.6	5.7	6.0	6.4
X=8H Y=4H	5.4	5.7	5.8	6.1	6.5	5.3	5.6	5.7	6.0	6.4
6H	5.3	5.6	5.7	6.0	6.4	5.2	5.5	5.7	5.9	6.4
8H	5.2	5.5	5.7	5.9	6.4	5.2	5.4	5.6	5.8	6.3
12H	5.2	5.4	5.7	5.9	6.4	5.1	5.3	5.6	5.8	6.3
X=12H Y=4H	5.3	5.6	5.8	6.1	6.5	5.3	5.6	5.7	6.0	6.4
6H	5.2	5.5	5.7	5.9	6.4	5.2	5.4	5.6	5.8	6.3
8H	5.2	5.4	5.7	5.9	6.4	5.1	5.3	5.6	5.8	6.3
Variations with the observer position at spacings:										
S=1.0H	+5.1/-6.8					+4.4/-3.8				
S=1.5H	+7.9/-24.5					+7.0/-24.9				
S=2.0H	+10.1/-1.$					+8.9/-1.$				

Calculate in accordance with CIE Pub.117. The table is revised with 144lm (8log(F/F0) = -6.7).

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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	77	53.0
FL (0°-30°)	71	48.9
FM (30°-60°)	6	4.1
FH (60°-80°)	0	0.1
FVH (80°-90°)	0	0.0
BACK LIGHT	68	47.0
BL (0°-30°)	62	43.0
BM (30°-60°)	6	4.0
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)	B0 U0 G0
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B0 U0 G0

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