Report No.: Test Time: 2025-09-17 13:11

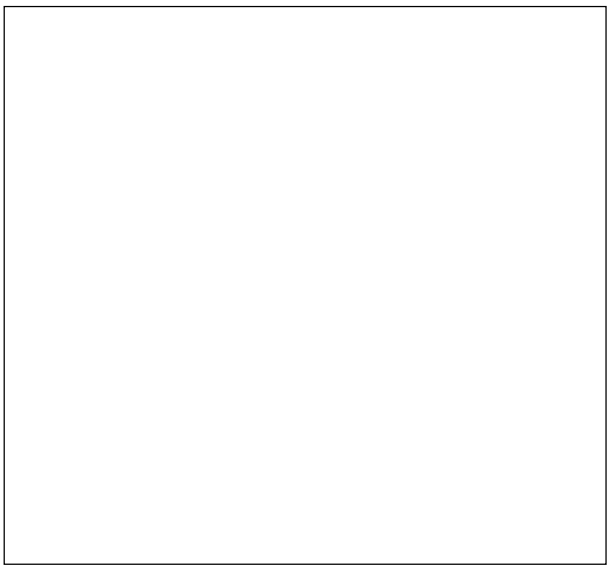
Luminaire Property

Luminaire Manufacturer:
Luminaire Description: HCP-262560-5K
Lamp Description: 0
Luminous Length (mm): 0
Luminous Width (mm): 0
Luminous Height (mm): 0
Voltage: 230.4 V
Current: 0.084 A
Power: 18.78 W
Power Factor: 0.969

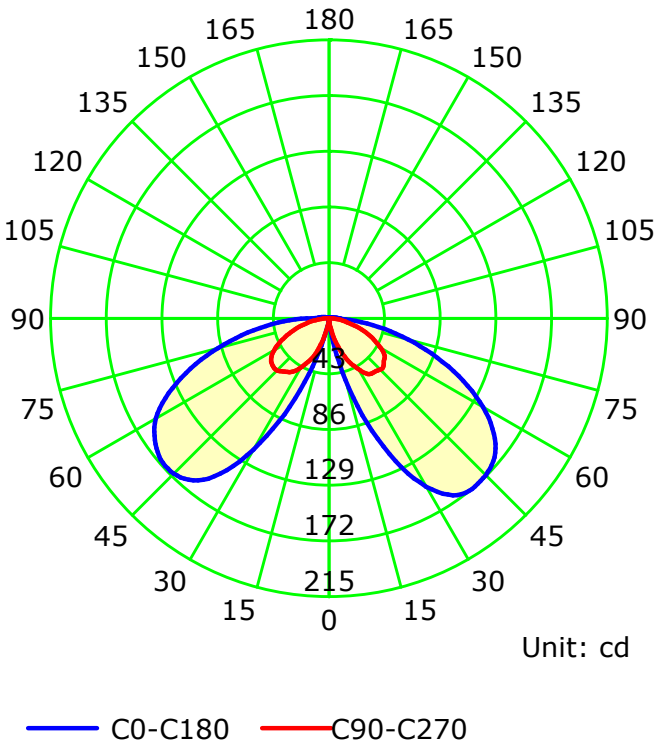
Photometric Results

CIE Class: Direct
Total Rated Lamp Lumens: 443.1 lm
Measurement Flux: 443.1 lm
Efficiency: 100%
Downward Ratio: 98%
Upward Ratio: 2%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 174.9, 169.6, 175.0, 174.7
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 146.2, 141.5, 141.3, 139.7
Luminaire Efficacy Rating (LER): 23.64
Central Intensity: 0.15 cd
Max. Intensity: 172.75 cd
Pos of Max. Intensity: H0 V40
S/MH(C0/C180): 15.92
S/MH(C90/C270): 11.42

Picture Of Luminaire



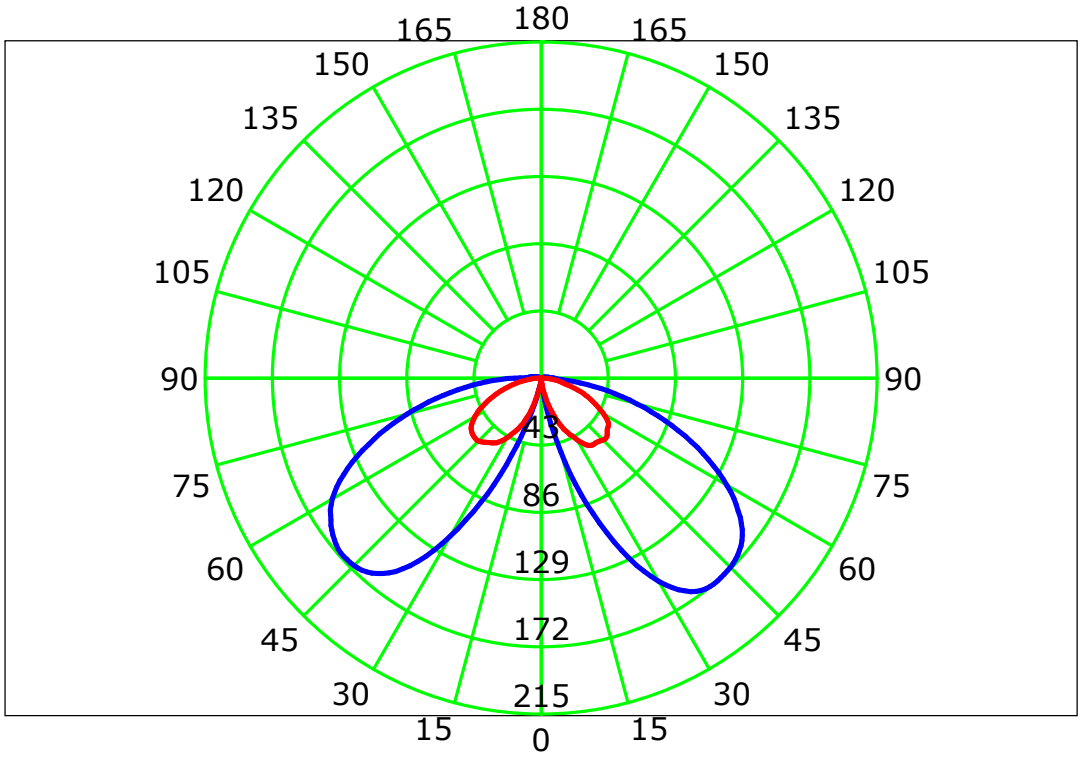
Luminous Intensity Distribution Curve

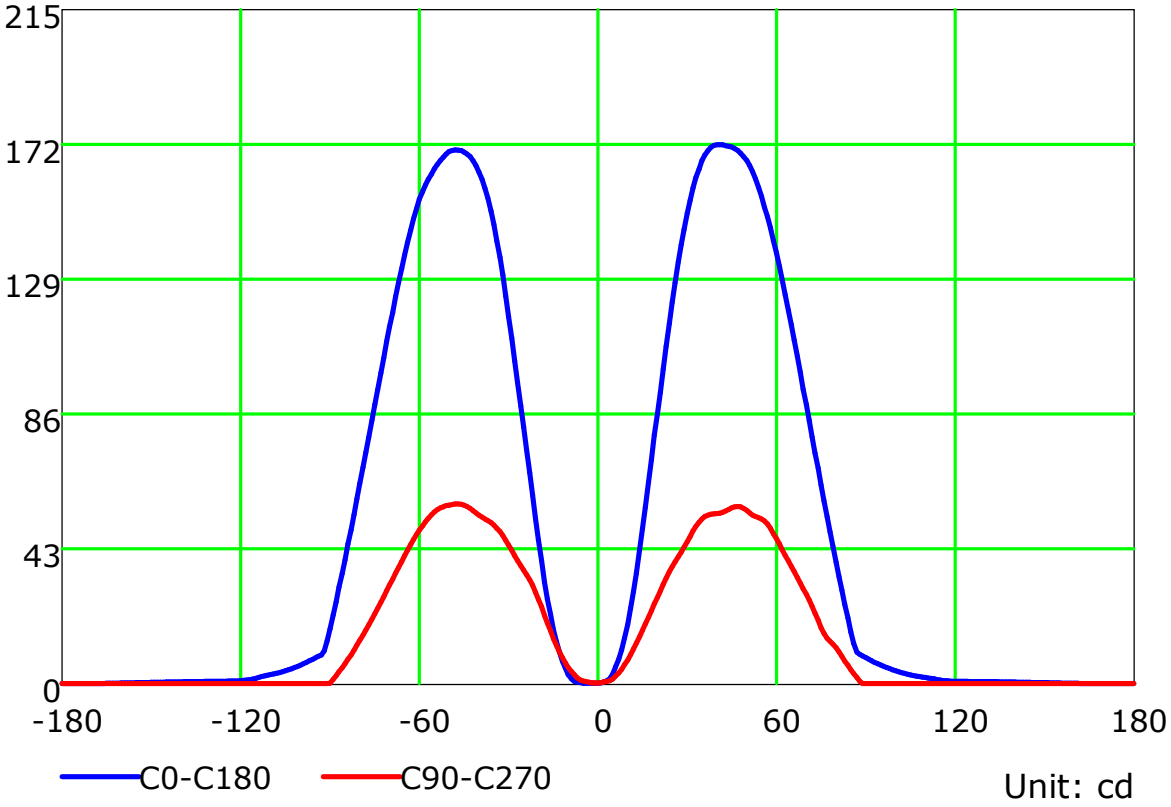


Unit: cd

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:

Luminous Intensity Distribution Curve

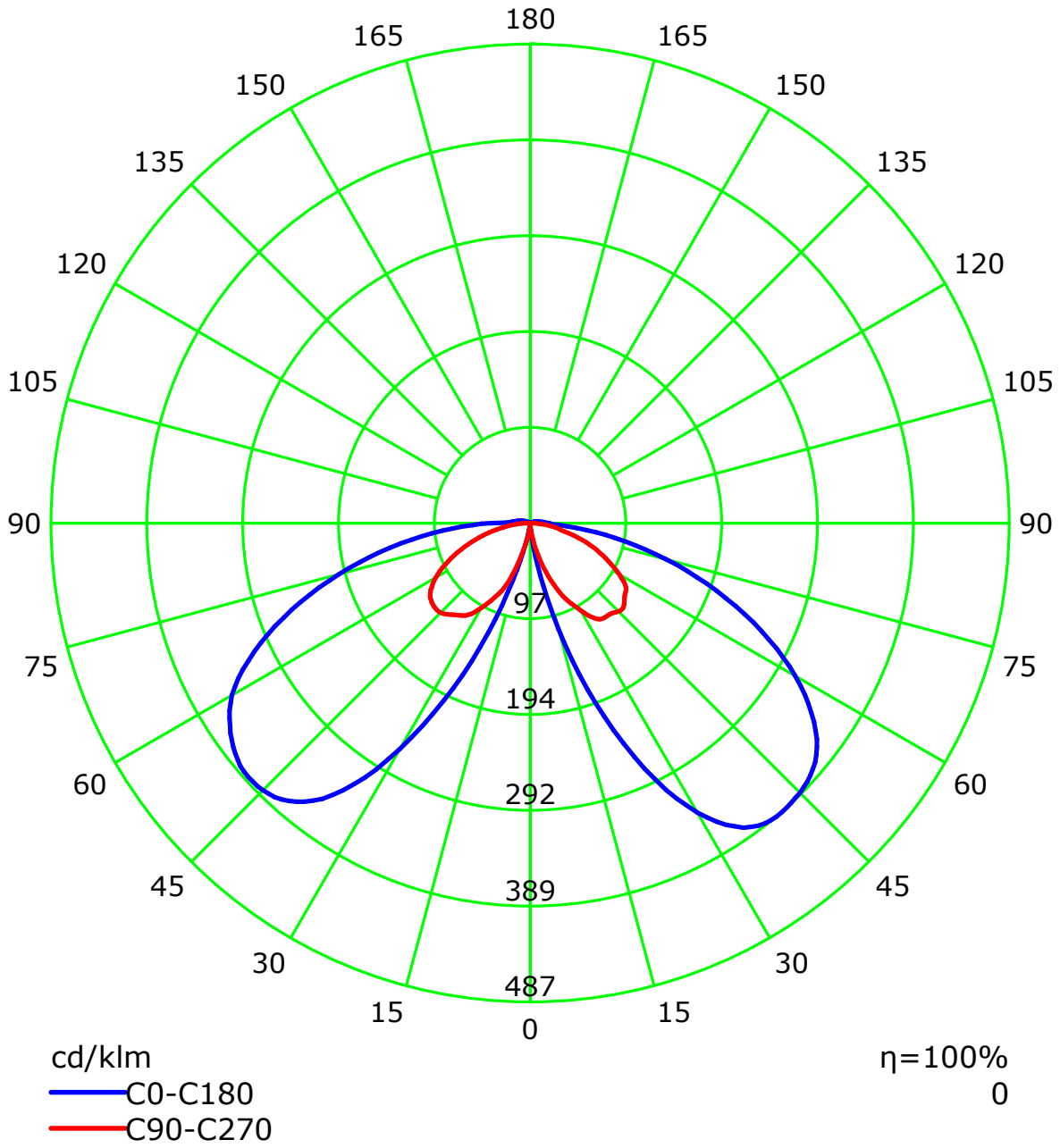




C Plane (°):0.0-360.0: 45.0
Test Lab: NINGBO LED LIGHTING
Test Type: TYPE C
Temperature: 25°C
Operator: DING LI

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

Luminous Intensity Distribution Curve(cd/klm)



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

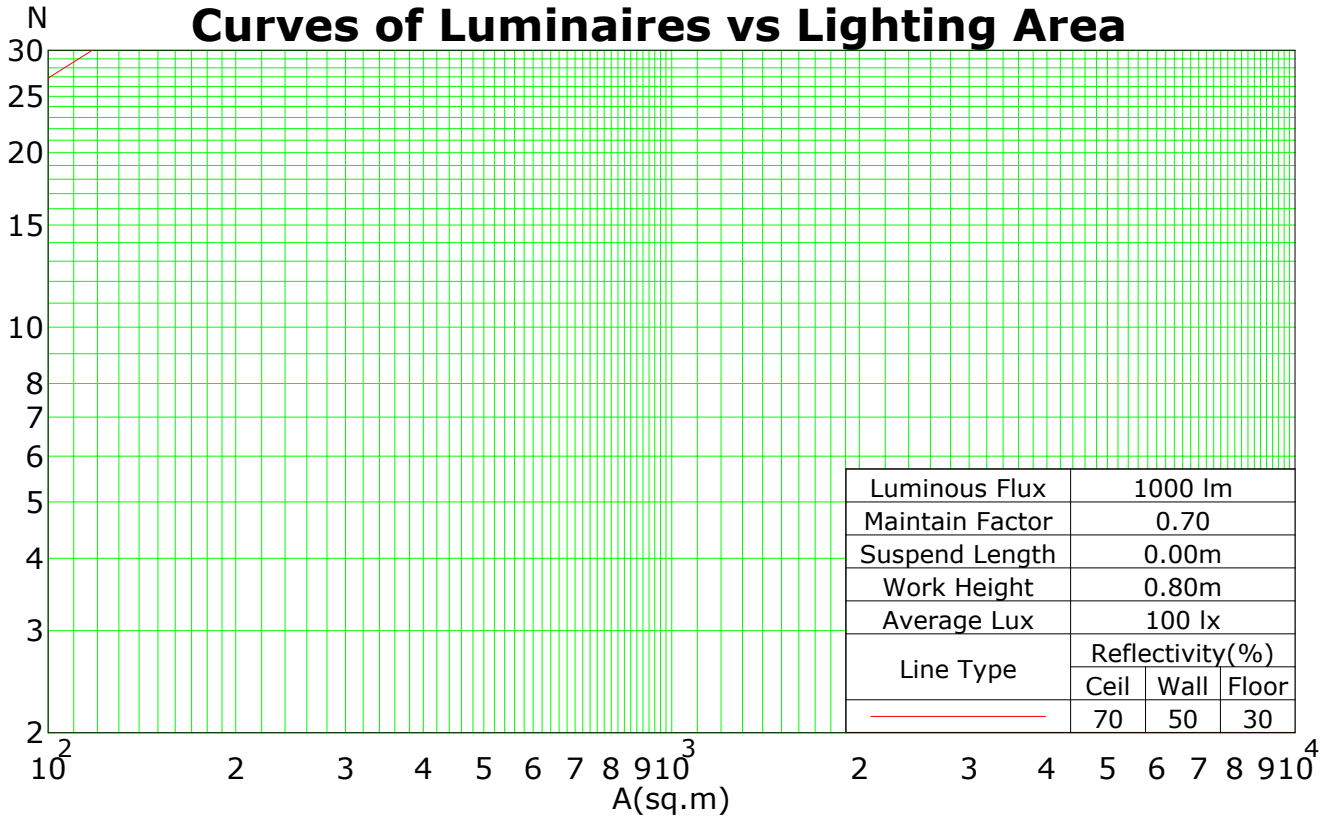
Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1600L
Distance: 6.500 m
Humidity:
Inspector:

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	110	110	110	105	105	105	100	100	100	98
1	105	99	94	89	102	97	92	87	92	88	84	87	84	81	83	81	78	76
2	93	83	75	68	90	81	73	67	77	71	65	73	68	63	70	65	61	59
3	83	71	61	53	80	69	60	52	65	58	51	62	55	50	59	53	49	46
4	75	61	50	42	72	59	49	42	56	48	41	53	46	40	51	44	39	37
5	68	53	42	34	65	51	42	34	49	40	33	46	39	33	44	38	32	30
6	62	46	36	28	59	45	35	28	43	34	28	41	33	27	39	32	27	24
7	56	41	31	24	54	40	30	24	38	30	23	36	29	23	35	28	23	20
8	52	37	27	20	50	36	26	20	34	26	20	33	25	19	31	24	19	17
9	48	33	24	17	46	32	23	17	31	23	17	29	22	17	28	21	16	14
10	44	30	21	15	43	29	21	15	28	20	15	27	20	14	26	19	14	12

Spacing Criteria (0-180): 15.92
Spacing Criteria (90-270): 11.42
Spacing Criteria (Diagonal): 12.01

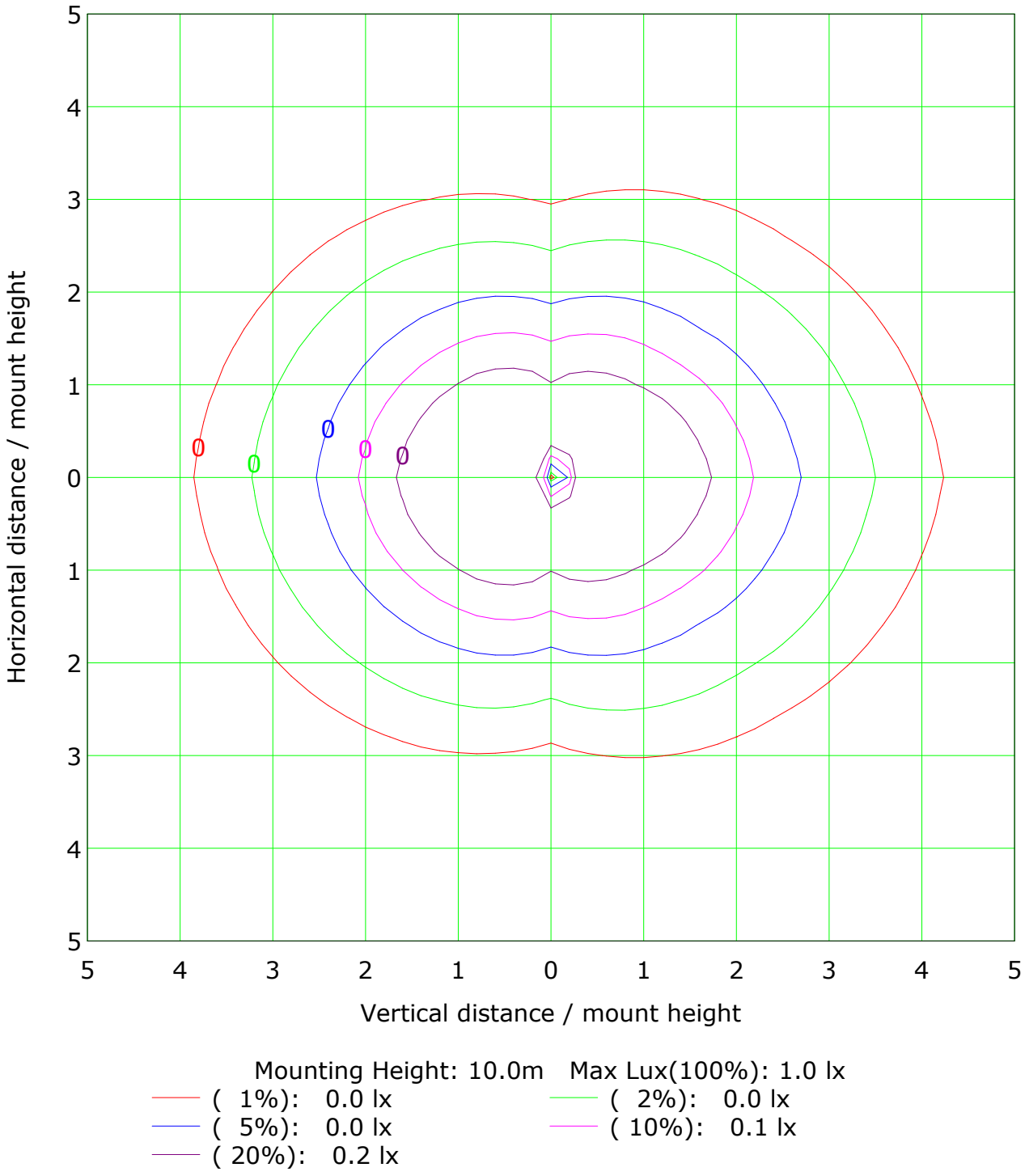
Curves of Luminaires vs Lighting Area



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



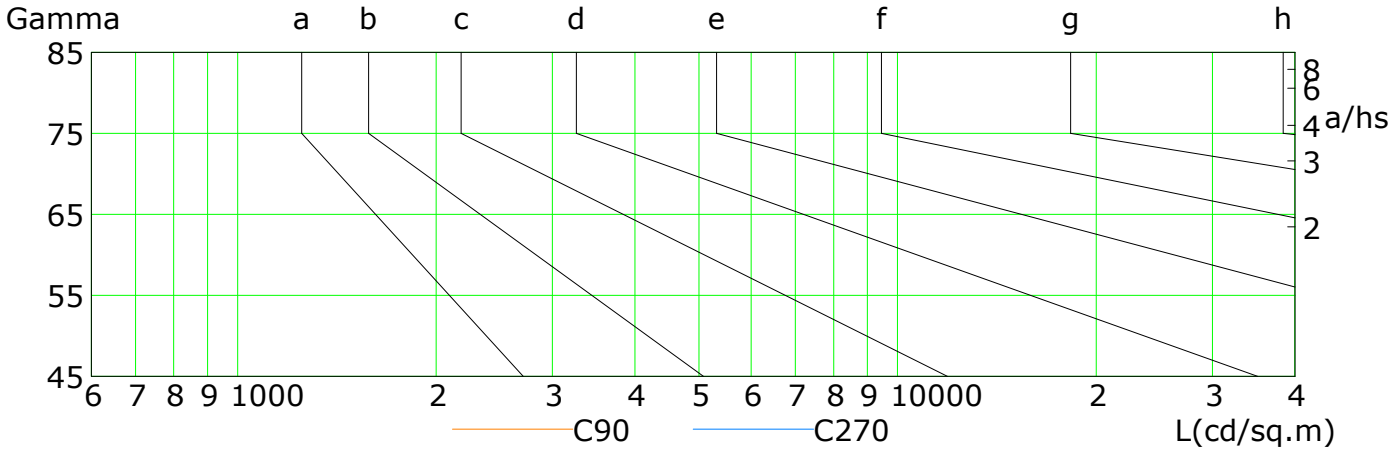
Mounting Height: 10.0m Max Lux(100%): 1.0 lx

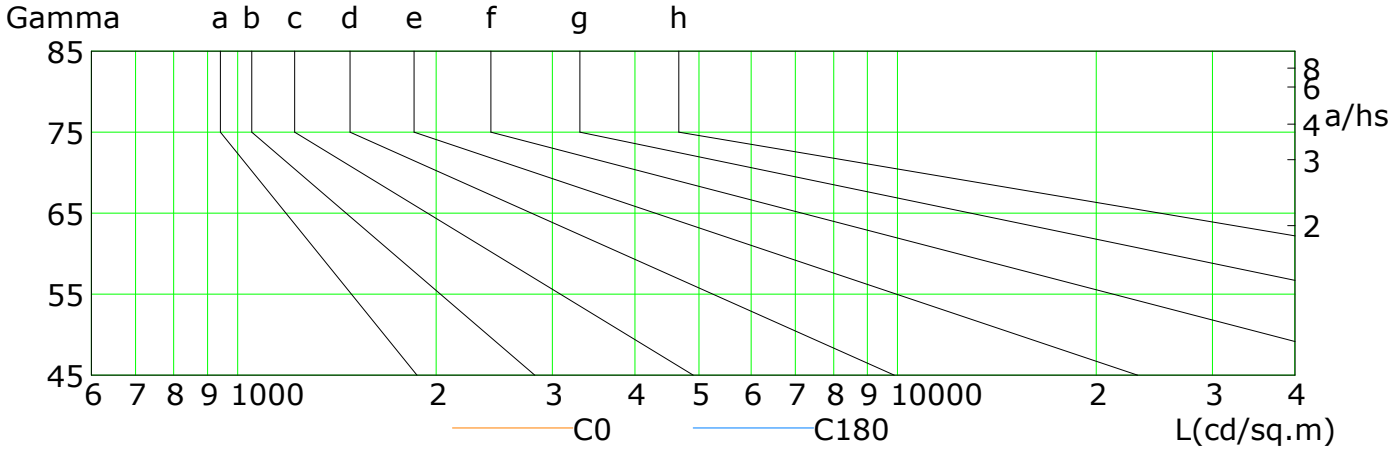
(1%): 0.0 lx
(2%): 0.0 lx
(5%): 0.0 lx
(10%): 0.1 lx
(20%): 0.2 lx

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



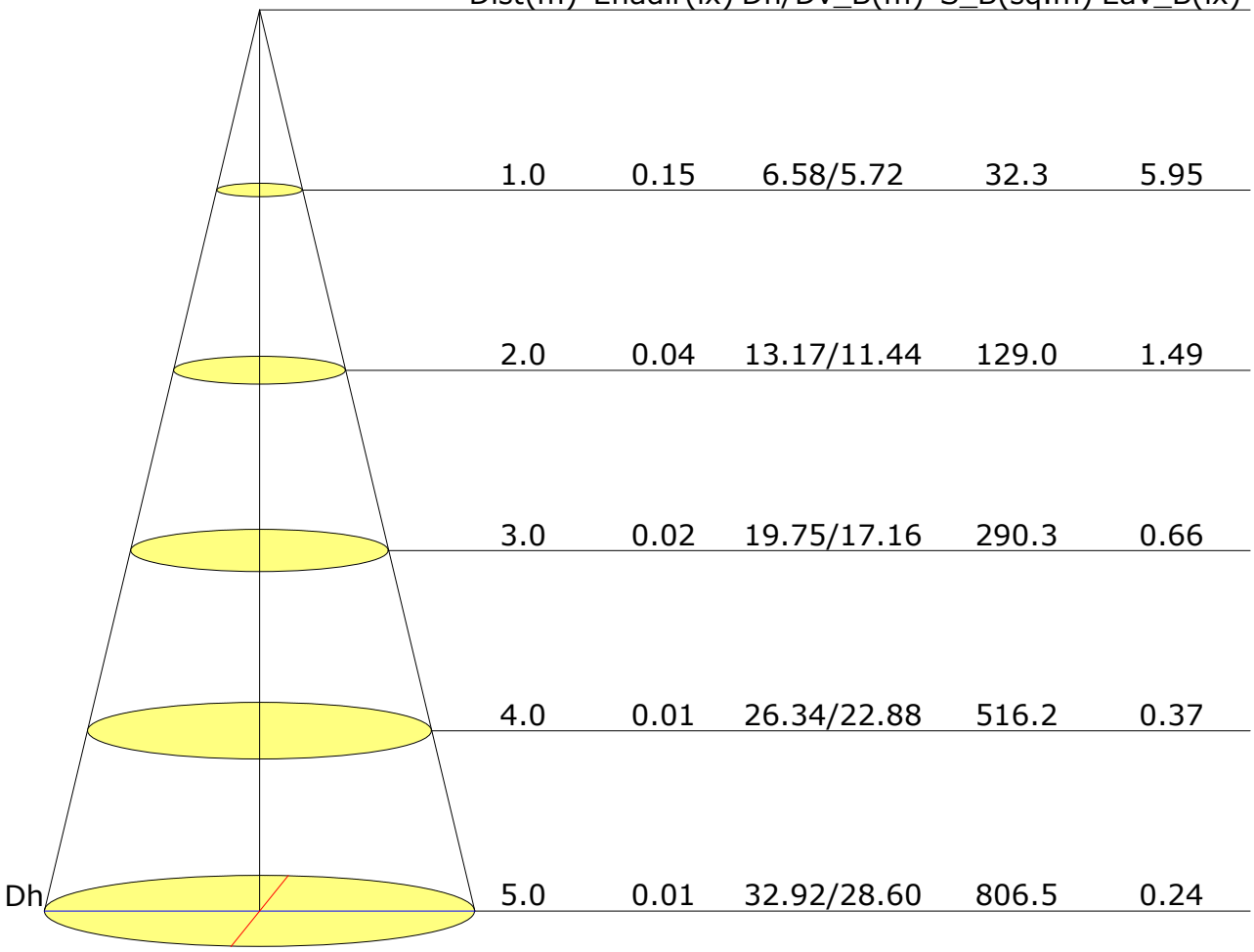


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	172	168	156	138	115	89	64	39	17
C90	56	56	53	46	38	29	18	12	4
C180	170	171	165	155	137	114	89	64	40
C270	57	57	55	49	41	32	22	14	6

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



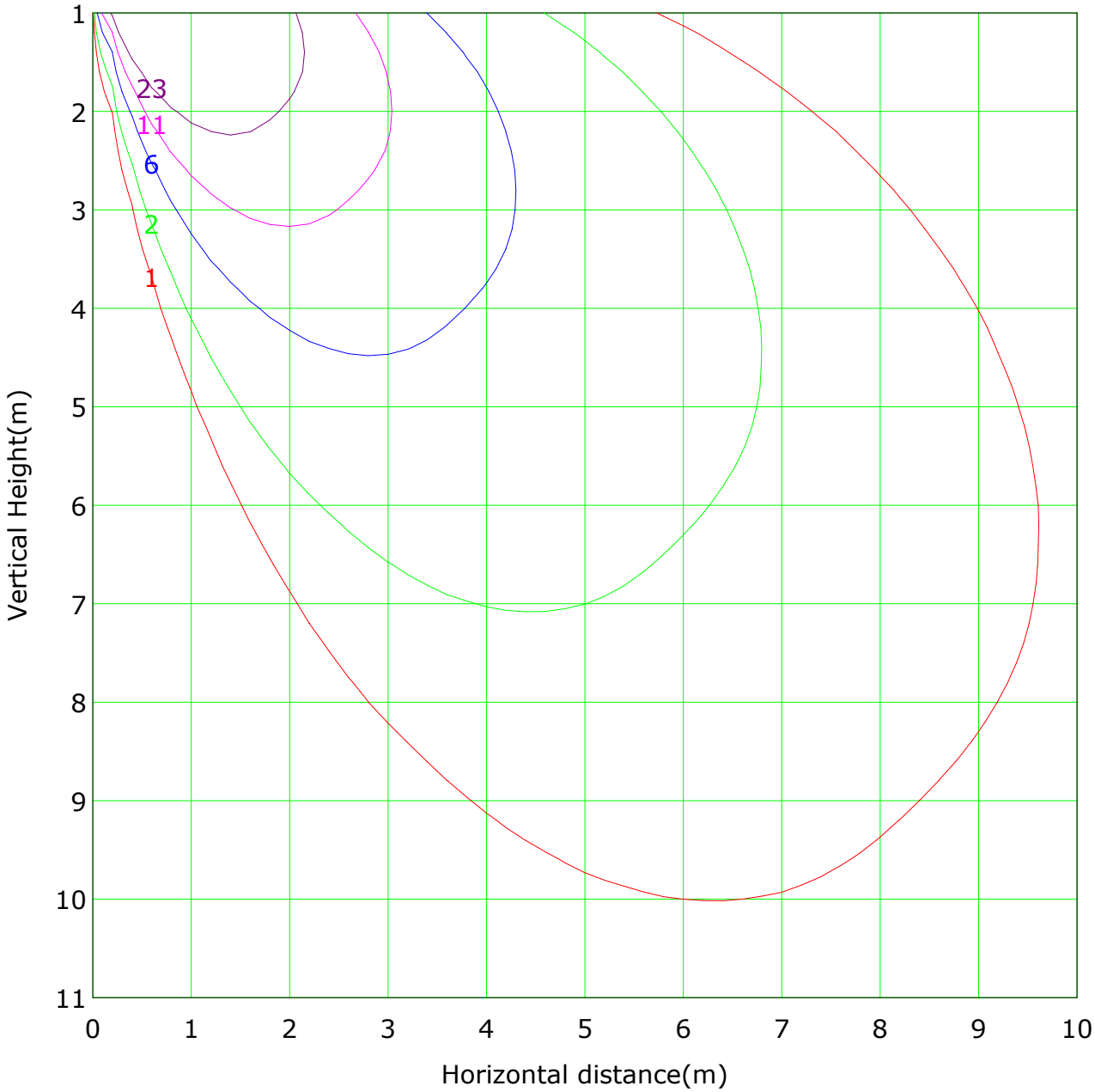
Dist(m)	Enadir(lx)	Dh/Dv_B(m)	S_B(sq.m)	Eav_B(lx)
1.0	0.15	6.58/5.72	32.3	5.95
2.0	0.04	13.17/11.44	129.0	1.49
3.0	0.02	19.75/17.16	290.3	0.66
4.0	0.01	26.34/22.88	516.2	0.37
5.0	0.01	32.92/28.60	806.5	0.24

Beam Angle(B): H146.2 V141.5 Field Angle(F): H174.9 V169.6

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

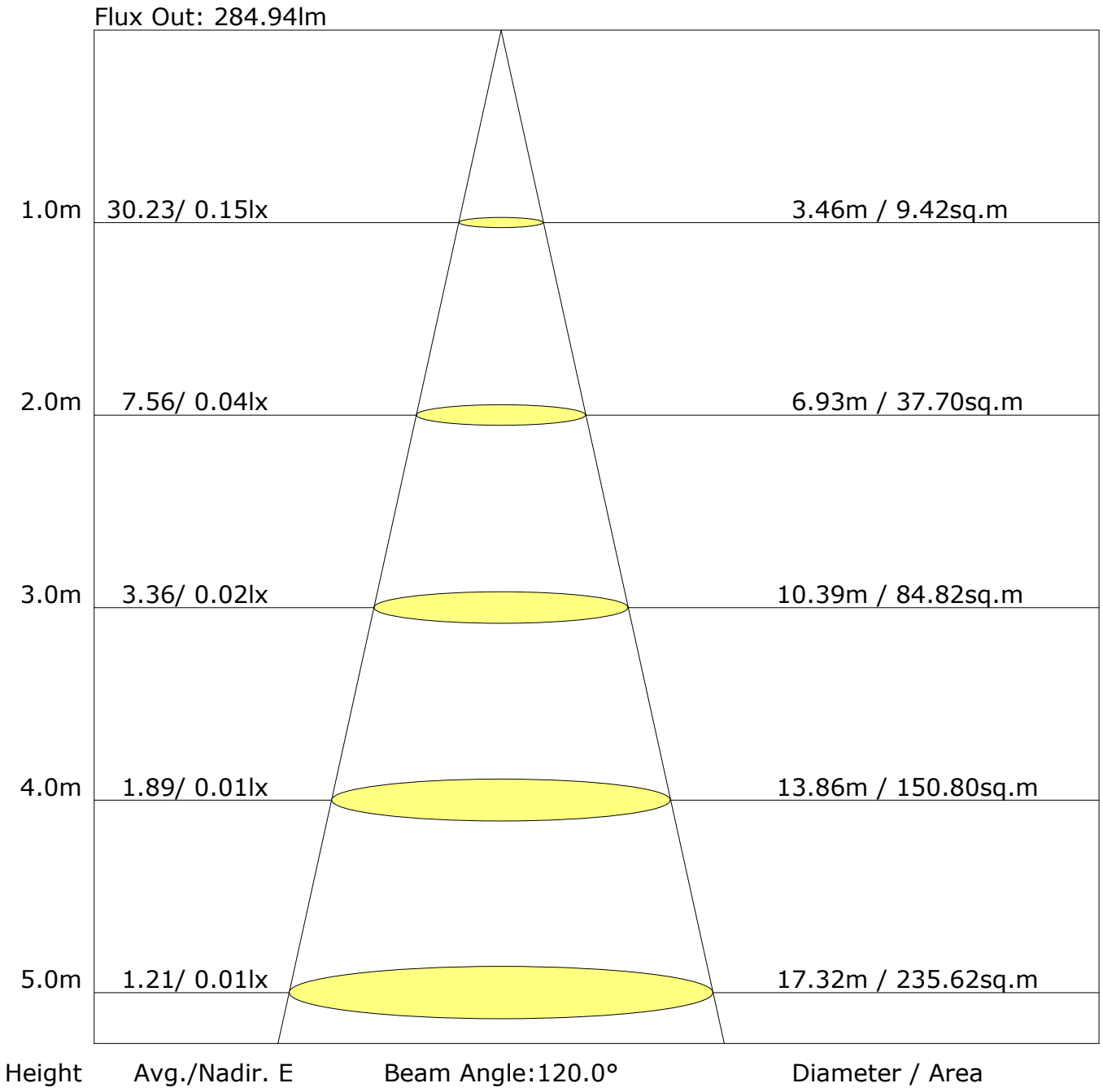


Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 113.8 lx

(1%): 1.1 lx
(2%): 2.3 lx
(5%): 5.7 lx
(10%): 11.4 lx
(20%): 22.8 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:

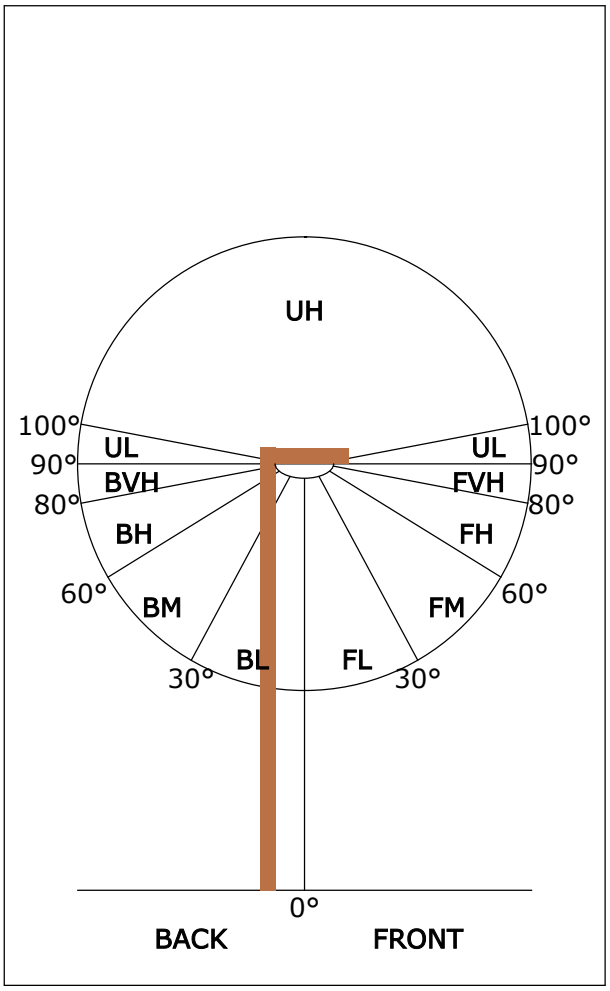
The Average Illuminance Effective Figure



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	214	48.2
FL (0°-30°)	22	4.9
FM (30°-60°)	120	27.1
FH (60°-80°)	63	14.2
FVH (80°-90°)	10	2.2
BACK LIGHT	219	49.5
BL (0°-30°)	21	4.8
BM (30°-60°)	122	27.6
BH (60°-80°)	65	14.8
BVH (80°-90°)	10	2.4
UP LIGHT	10	2.2
UL (90°-100°)	5	1.2
UH (100°-180°)	5	1.0
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 U1 G1
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B0 U1 G1

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:

Zonal Lumen

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	0.2	0.0	0.0	0.00	0.00
1.0-2.0	0.3	0.0	0.0	0.00	0.00
2.0-3.0	0.5	0.0	0.0	0.00	0.00
3.0-4.0	0.7	0.0	0.0	0.00	0.00
4.0-5.0	1.2	0.0	0.0	0.00	0.00
5.0-6.0	2.0	0.0	0.0	0.00	0.01
6.0-7.0	3.1	0.0	0.1	0.01	0.02
7.0-8.0	4.4	0.1	0.1	0.01	0.03
8.0-9.0	6.1	0.1	0.2	0.02	0.05
9.0-10.0	8.2	0.1	0.4	0.03	0.09
10.0-11.0	10.7	0.2	0.6	0.05	0.14
11.0-12.0	13.6	0.3	0.9	0.07	0.20
12.0-13.0	16.8	0.4	1.3	0.09	0.29
13.0-14.0	20.5	0.5	1.8	0.12	0.41
14.0-15.0	24.5	0.7	2.5	0.15	0.56
15.0-16.0	28.6	0.8	3.3	0.19	0.75
16.0-17.0	33.2	1.0	4.4	0.23	0.99
17.0-18.0	37.8	1.2	5.6	0.28	1.27
18.0-19.0	42.6	1.5	7.1	0.33	1.60
19.0-20.0	47.4	1.7	8.8	0.39	1.99
20.0-21.0	52.0	2.0	10.8	0.45	2.44
21.0-22.0	56.8	2.3	13.1	0.52	2.96
22.0-23.0	61.5	2.6	15.7	0.58	3.54
23.0-24.0	66.1	2.9	18.6	0.65	4.19
24.0-25.0	70.6	3.2	21.8	0.72	4.92
25.0-26.0	74.8	3.5	25.3	0.80	5.72
26.0-27.0	79.0	3.9	29.2	0.87	6.59
27.0-28.0	83.1	4.2	33.4	0.95	7.54
28.0-29.0	87.0	4.6	37.9	1.03	8.57
29.0-30.0	90.7	4.9	42.8	1.11	9.67
30.0-31.0	94.2	5.2	48.1	1.18	10.85
31.0-32.0	97.4	5.6	53.7	1.26	12.11
32.0-33.0	100.3	5.9	59.6	1.33	13.45
33.0-34.0	102.7	6.2	65.8	1.40	14.85
34.0-35.0	104.7	6.5	72.3	1.47	16.32
35.0-36.0	106.5	6.8	79.1	1.53	17.85

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:

Zonal Lumen (Continue 1)

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	107.8	7.0	86.1	1.59	19.44
37.0-38.0	108.8	7.3	93.4	1.64	21.07
38.0-39.0	109.5	7.5	100.9	1.69	22.76
39.0-40.0	110.0	7.7	108.5	1.73	24.49
40.0-41.0	110.4	7.9	116.4	1.77	26.27
41.0-42.0	110.6	8.0	124.4	1.81	28.08
42.0-43.0	110.7	8.2	132.6	1.85	29.93
43.0-44.0	110.8	8.4	141.0	1.89	31.82
44.0-45.0	110.7	8.5	149.5	1.92	33.74
45.0-46.0	110.6	8.7	158.1	1.95	35.69
46.0-47.0	110.3	8.8	166.9	1.98	37.67
47.0-48.0	109.9	8.9	175.8	2.01	39.68
48.0-49.0	109.4	9.0	184.8	2.03	41.71
49.0-50.0	108.7	9.1	193.9	2.04	43.75
50.0-51.0	107.8	9.1	203.0	2.06	45.81
51.0-52.0	106.7	9.2	212.1	2.07	47.88
52.0-53.0	105.6	9.2	221.3	2.07	49.95
53.0-54.0	104.4	9.2	230.5	2.08	52.03
54.0-55.0	103.0	9.2	239.7	2.08	54.10
55.0-56.0	101.5	9.2	248.9	2.07	56.17
56.0-57.0	99.8	9.1	258.0	2.06	58.23
57.0-58.0	98.1	9.1	267.1	2.05	60.28
58.0-59.0	96.1	9.0	276.1	2.03	62.31
59.0-60.0	93.8	8.9	284.9	2.00	64.31
60.0-61.0	91.5	8.7	293.7	1.97	66.28
61.0-62.0	88.9	8.6	302.2	1.93	68.22
62.0-63.0	86.3	8.4	310.6	1.89	70.11
63.0-64.0	83.4	8.2	318.8	1.85	71.96
64.0-65.0	80.6	8.0	326.8	1.80	73.76
65.0-66.0	77.7	7.8	334.6	1.75	75.51
66.0-67.0	74.6	7.5	342.1	1.69	77.20
67.0-68.0	71.5	7.2	349.3	1.64	78.84
68.0-69.0	68.4	7.0	356.3	1.57	80.41
69.0-70.0	65.2	6.7	363.0	1.51	81.93
70.0-71.0	62.1	6.4	369.4	1.45	83.37
71.0-72.0	58.9	6.1	375.5	1.38	84.76

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:

Zonal Lumen (Continue 2)

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
72.0-73.0	55.6	5.8	381.3	1.31	86.07
73.0-74.0	52.4	5.5	386.9	1.24	87.31
74.0-75.0	49.1	5.2	392.0	1.17	88.48
75.0-76.0	45.9	4.9	396.9	1.10	89.58
76.0-77.0	42.7	4.5	401.5	1.03	90.61
77.0-78.0	39.5	4.2	405.7	0.96	91.56
78.0-79.0	36.6	3.9	409.6	0.89	92.45
79.0-80.0	33.6	3.6	413.2	0.82	93.27
80.0-81.0	30.6	3.3	416.6	0.75	94.01
81.0-82.0	27.6	3.0	419.5	0.68	94.69
82.0-83.0	24.7	2.7	422.2	0.61	95.30
83.0-84.0	21.8	2.4	424.6	0.54	95.83
84.0-85.0	19.0	2.1	426.7	0.47	96.30
85.0-86.0	16.2	1.8	428.5	0.40	96.70
86.0-87.0	13.8	1.5	430.0	0.34	97.04
87.0-88.0	11.6	1.3	431.2	0.29	97.33
88.0-89.0	9.9	1.1	432.3	0.24	97.57
89.0-90.0	8.4	0.9	433.2	0.21	97.78
90.0-91.0	7.1	0.8	434.0	0.17	97.95
91.0-92.0	6.1	0.7	434.7	0.15	98.10
92.0-93.0	5.4	0.6	435.3	0.13	98.24
93.0-94.0	5.1	0.6	435.8	0.13	98.36
94.0-95.0	4.8	0.5	436.3	0.12	98.48
95.0-96.0	4.5	0.5	436.8	0.11	98.59
96.0-97.0	4.2	0.5	437.3	0.10	98.70
97.0-98.0	3.9	0.4	437.7	0.10	98.79
98.0-99.0	3.7	0.4	438.1	0.09	98.88
99.0-100.0	3.4	0.4	438.5	0.08	98.97
100.0-101.0	3.2	0.3	438.8	0.08	99.05
101.0-102.0	3.0	0.3	439.2	0.07	99.12
102.0-103.0	2.8	0.3	439.5	0.07	99.18
103.0-104.0	2.6	0.3	439.7	0.06	99.25
104.0-105.0	2.4	0.3	440.0	0.06	99.30
105.0-106.0	2.2	0.2	440.2	0.05	99.36
106.0-107.0	2.0	0.2	440.4	0.05	99.40
107.0-108.0	1.9	0.2	440.6	0.04	99.45

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:

Zonal Lumen (Continue 3)

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
108.0-109.0	1.8	0.2	440.8	0.04	99.49
109.0-110.0	1.6	0.2	441.0	0.04	99.53
110.0-111.0	1.5	0.2	441.1	0.03	99.56
111.0-112.0	1.4	0.1	441.3	0.03	99.60
112.0-113.0	1.3	0.1	441.4	0.03	99.62
113.0-114.0	1.2	0.1	441.5	0.03	99.65
114.0-115.0	1.1	0.1	441.6	0.02	99.68
115.0-116.0	1.0	0.1	441.7	0.02	99.70
116.0-117.0	0.9	0.1	441.8	0.02	99.72
117.0-118.0	0.8	0.1	441.9	0.02	99.73
118.0-119.0	0.7	0.1	442.0	0.02	99.75
119.0-120.0	0.7	0.1	442.0	0.02	99.77
120.0-121.0	0.7	0.1	442.1	0.01	99.78
121.0-122.0	0.6	0.1	442.1	0.01	99.79
122.0-123.0	0.6	0.1	442.2	0.01	99.80
123.0-124.0	0.6	0.1	442.3	0.01	99.82
124.0-125.0	0.6	0.1	442.3	0.01	99.83
125.0-126.0	0.5	0.0	442.4	0.01	99.84
126.0-127.0	0.5	0.0	442.4	0.01	99.85
127.0-128.0	0.5	0.0	442.4	0.01	99.86
128.0-129.0	0.5	0.0	442.5	0.01	99.87
129.0-130.0	0.5	0.0	442.5	0.01	99.88
130.0-131.0	0.5	0.0	442.6	0.01	99.89
131.0-132.0	0.4	0.0	442.6	0.01	99.89
132.0-133.0	0.4	0.0	442.6	0.01	99.90
133.0-134.0	0.4	0.0	442.7	0.01	99.91
134.0-135.0	0.4	0.0	442.7	0.01	99.92
135.0-136.0	0.4	0.0	442.7	0.01	99.92
136.0-137.0	0.4	0.0	442.8	0.01	99.93
137.0-138.0	0.4	0.0	442.8	0.01	99.94
138.0-139.0	0.4	0.0	442.8	0.01	99.94
139.0-140.0	0.3	0.0	442.8	0.01	99.95
140.0-141.0	0.3	0.0	442.9	0.01	99.95
141.0-142.0	0.3	0.0	442.9	0.00	99.96
142.0-143.0	0.3	0.0	442.9	0.00	99.96
143.0-144.0	0.3	0.0	442.9	0.00	99.97

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:

Zonal Lumen (Continue 4)

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
144.0-145.0	0.3	0.0	442.9	0.00	99.97
145.0-146.0	0.2	0.0	442.9	0.00	99.97
146.0-147.0	0.2	0.0	443.0	0.00	99.98
147.0-148.0	0.2	0.0	443.0	0.00	99.98
148.0-149.0	0.2	0.0	443.0	0.00	99.98
149.0-150.0	0.2	0.0	443.0	0.00	99.98
150.0-151.0	0.2	0.0	443.0	0.00	99.99
151.0-152.0	0.2	0.0	443.0	0.00	99.99
152.0-153.0	0.2	0.0	443.0	0.00	99.99
153.0-154.0	0.1	0.0	443.0	0.00	99.99
154.0-155.0	0.1	0.0	443.0	0.00	99.99
155.0-156.0	0.1	0.0	443.0	0.00	99.99
156.0-157.0	0.1	0.0	443.0	0.00	100.00
157.0-158.0	0.1	0.0	443.1	0.00	100.00
158.0-159.0	0.1	0.0	443.1	0.00	100.00
159.0-160.0	0.1	0.0	443.1	0.00	100.00
160.0-161.0	0.1	0.0	443.1	0.00	100.00
161.0-162.0	0.1	0.0	443.1	0.00	100.00
162.0-163.0	0.1	0.0	443.1	0.00	100.00
163.0-164.0	0.0	0.0	443.1	0.00	100.00
164.0-165.0	0.0	0.0	443.1	0.00	100.00
165.0-166.0	0.0	0.0	443.1	0.00	100.00
166.0-167.0	0.0	0.0	443.1	0.00	100.00
167.0-168.0	0.0	0.0	443.1	0.00	100.00
168.0-169.0	0.0	0.0	443.1	0.00	100.00
169.0-170.0	0.0	0.0	443.1	0.00	100.00
170.0-171.0	0.0	0.0	443.1	0.00	100.00
171.0-172.0	0.0	0.0	443.1	0.00	100.00
172.0-173.0	0.0	0.0	443.1	0.00	100.00
173.0-174.0	0.0	0.0	443.1	0.00	100.00
174.0-175.0	0.0	0.0	443.1	0.00	100.00
175.0-176.0	0.0	0.0	443.1	0.00	100.00
176.0-177.0	0.0	0.0	443.1	0.00	100.00
177.0-178.0	0.0	0.0	443.1	0.00	100.00
178.0-179.0	0.0	0.0	443.1	0.00	100.00
179.0-180.0	0.0	0.0	443.1	0.00	100.00

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: