Report No.: Test Time: 2025-09-17 09:30

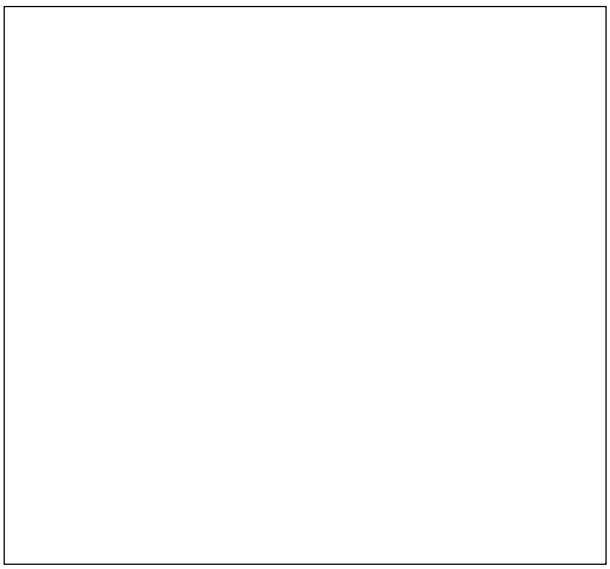
Luminaire Property

Luminaire Manufacturer:
Luminaire Description: HCP-262560-3K
Lamp Description: 0
Luminous Length (mm): 0
Luminous Width (mm): 0
Luminous Height (mm): 0
Voltage: 230.6 V
Current: 0.084 A
Power: 18.78 W
Power Factor: 0.970

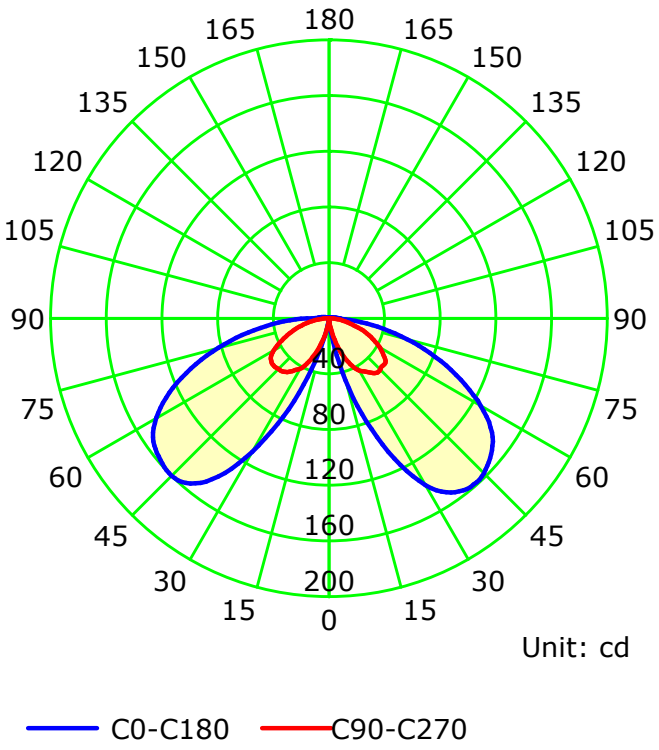
Photometric Results

CIE Class: Direct
Total Rated Lamp Lumens: 411.1 lm
Measurement Flux: 411.1 lm
Efficiency: 100%
Downward Ratio: 98%
Upward Ratio: 2%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 174.8, 169.6, 175.1, 174.8
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 145.9, 141.7, 141.9, 140.1
Luminaire Efficacy Rating (LER): 21.94
Central Intensity: 0.13 cd
Max. Intensity: 160.2 cd
Pos of Max. Intensity: H180 V46
S/MH(C0/C180): 16.14
S/MH(C90/C270): 10.36

Picture Of Luminaire



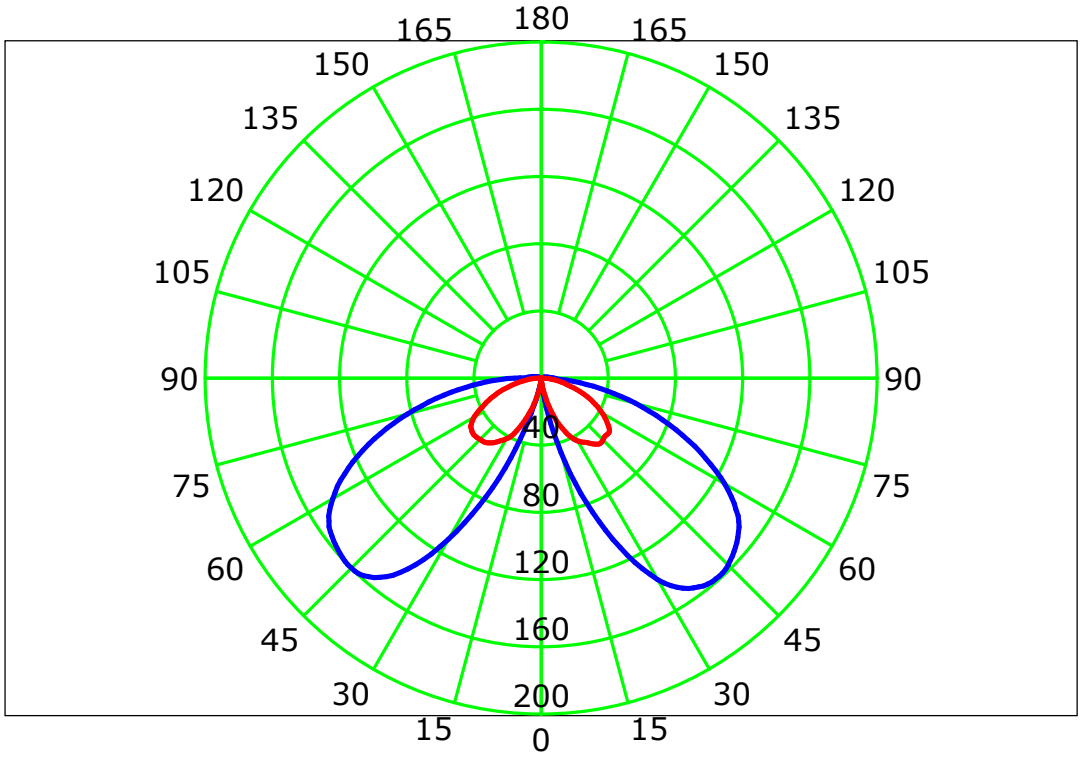
Luminous Intensity Distribution Curve

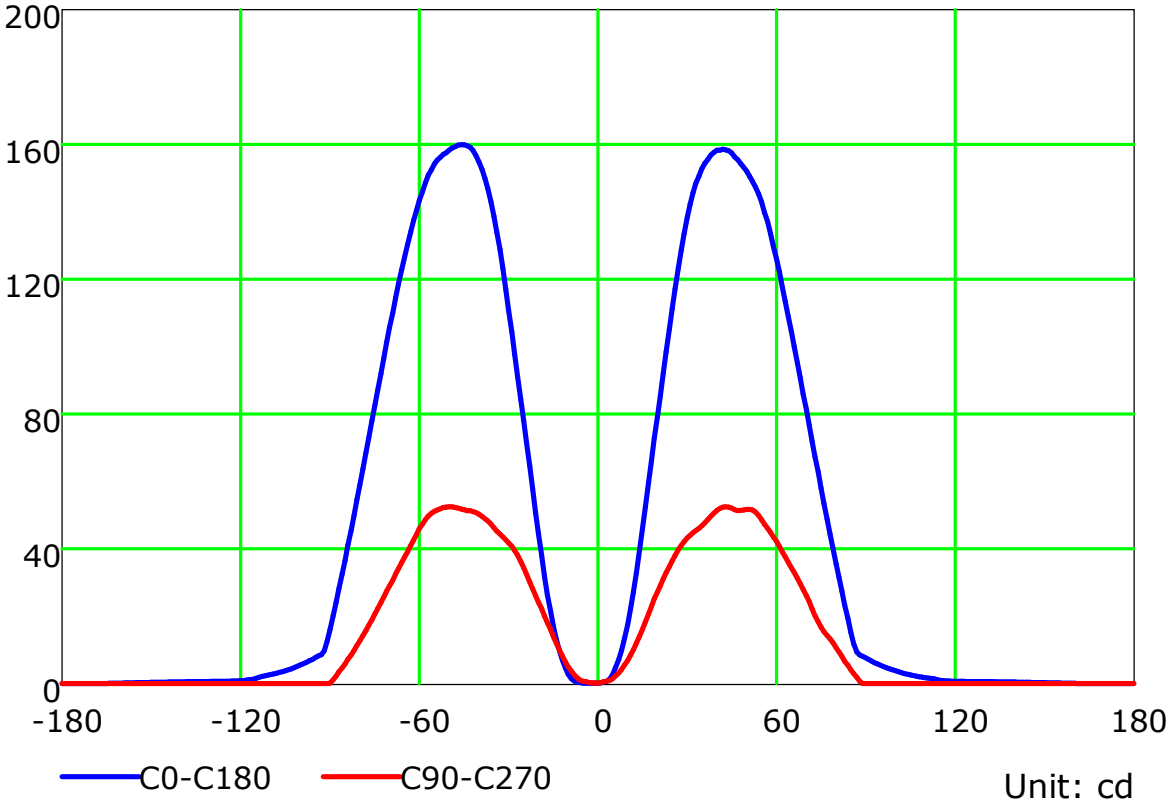


Unit: cd

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

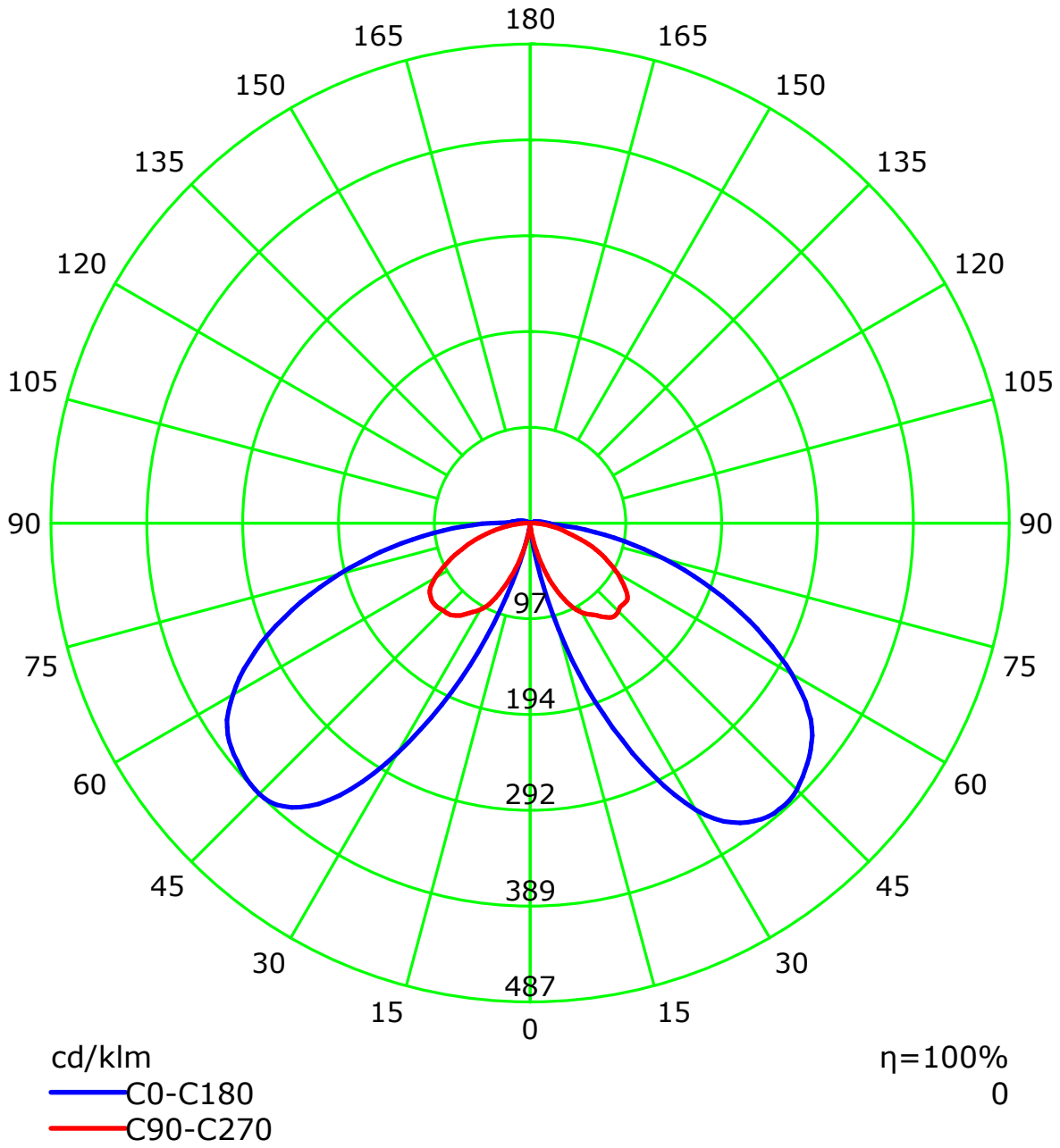




C Plane (°):0.0-360.0: 45.0
Test Lab: NINGBO LED LIGHTING
Test Type: TYPE C
Temperature: 25°C
Operator: DING LI

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

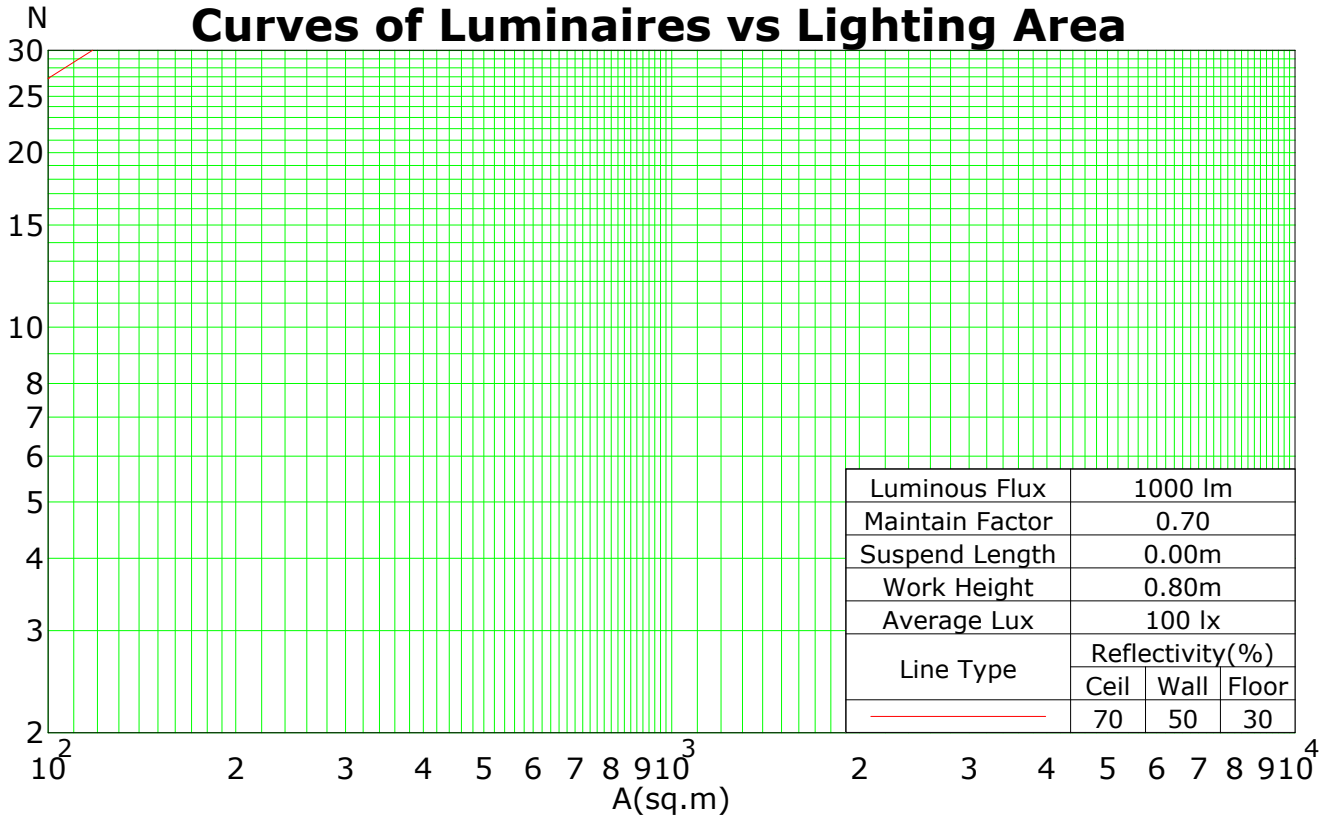
Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1600L
Distance: 6.500 m
Humidity:
Inspector:

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	54	49	46
4	75	61	50	42	72	59	49	42	56	48	41	53	46	40	51	45	39	37
5	68	53	42	35	65	51	42	34	49	40	34	47	39	33	44	38	32	30
6	62	46	36	29	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	27	20	34	26	20	33	25	20	31	24	19	17
9	48	33	24	17	46	32	23	17	31	23	17	29	22	17	28	21	17	14
10	44	30	21	15	43	29	21	15	28	20	15	27	20	15	26	19	14	12

Spacing Criteria (0-180): 16.14
Spacing Criteria (90-270): 10.36
Spacing Criteria (Diagonal): 12.25

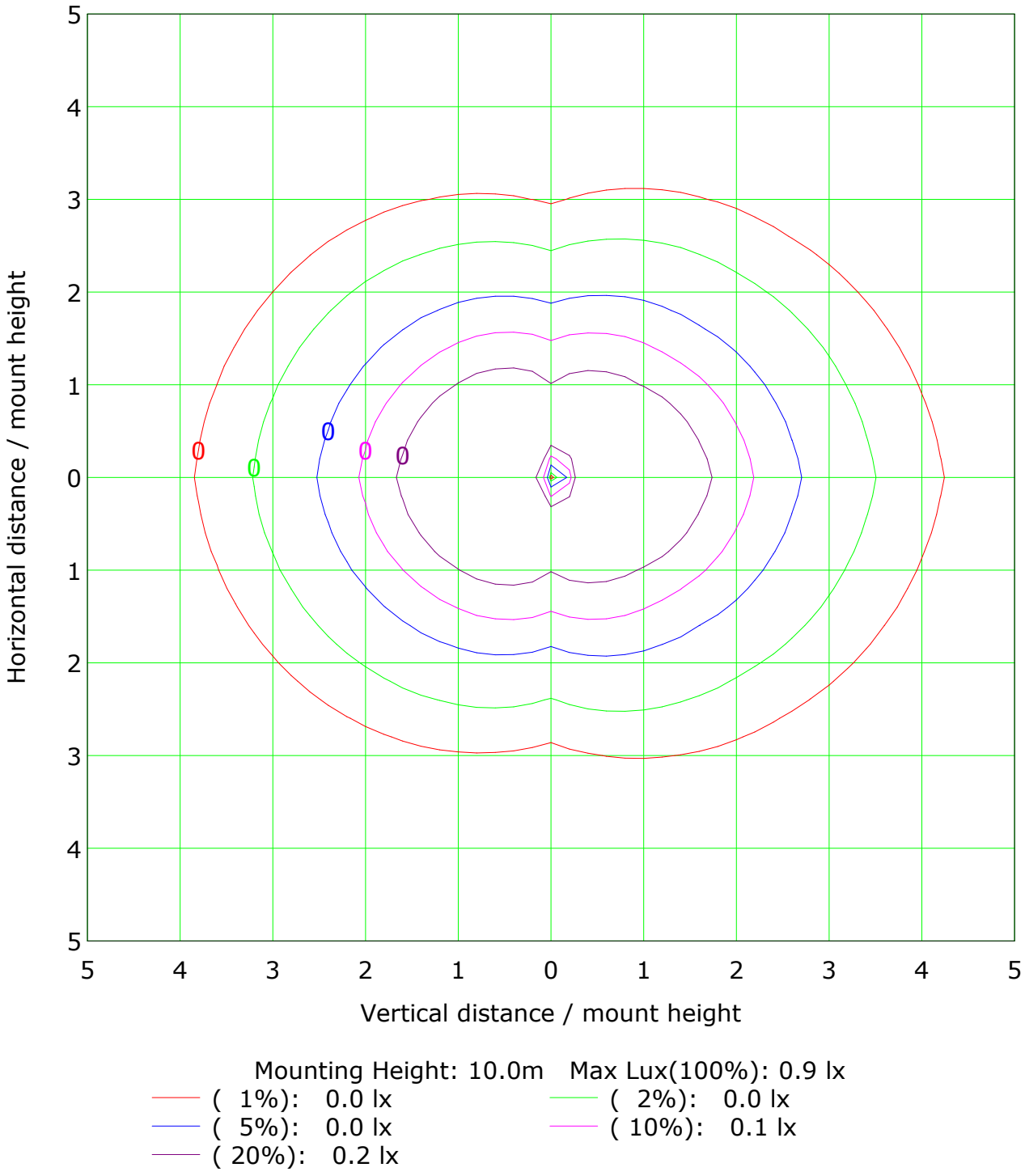
Curves of Luminaires vs Lighting Area



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



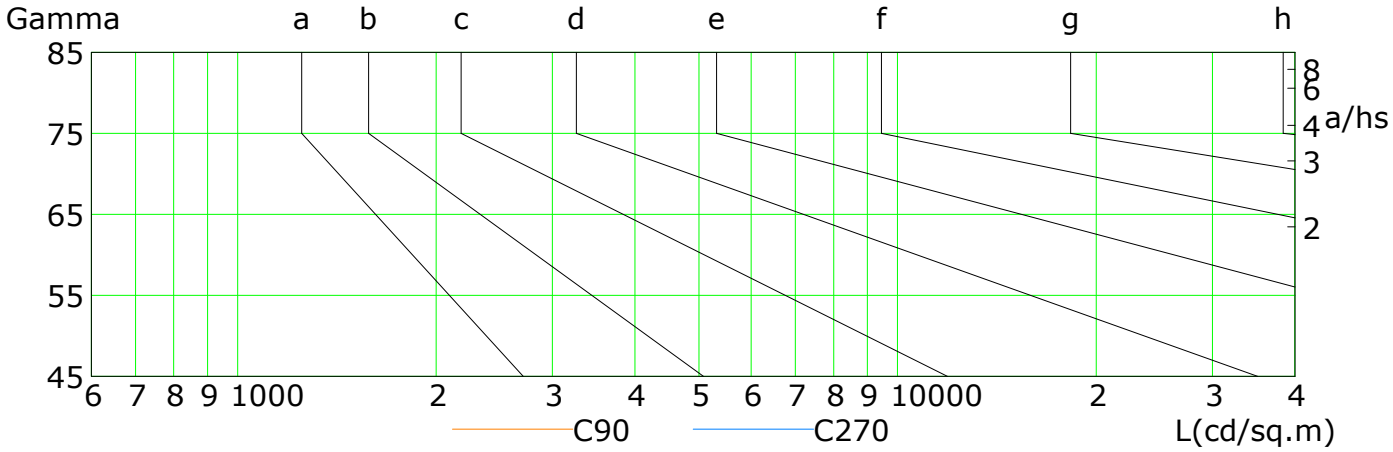
Mounting Height: 10.0m Max Lux(100%): 0.9 lx

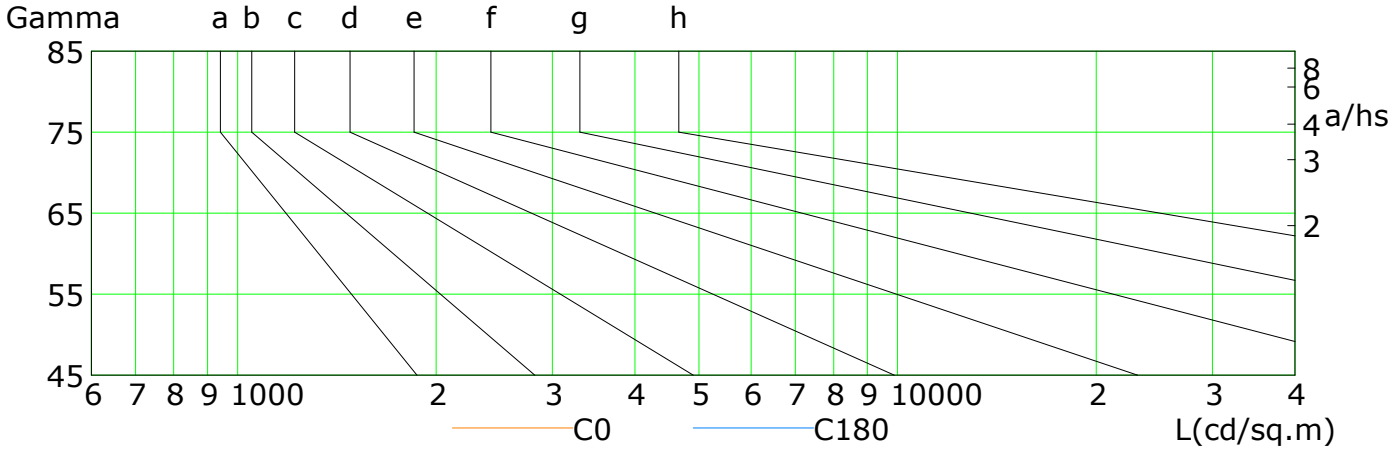
(1%): 0.0 lx
(2%): 0.0 lx
(5%): 0.0 lx
(10%): 0.1 lx
(20%): 0.2 lx

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



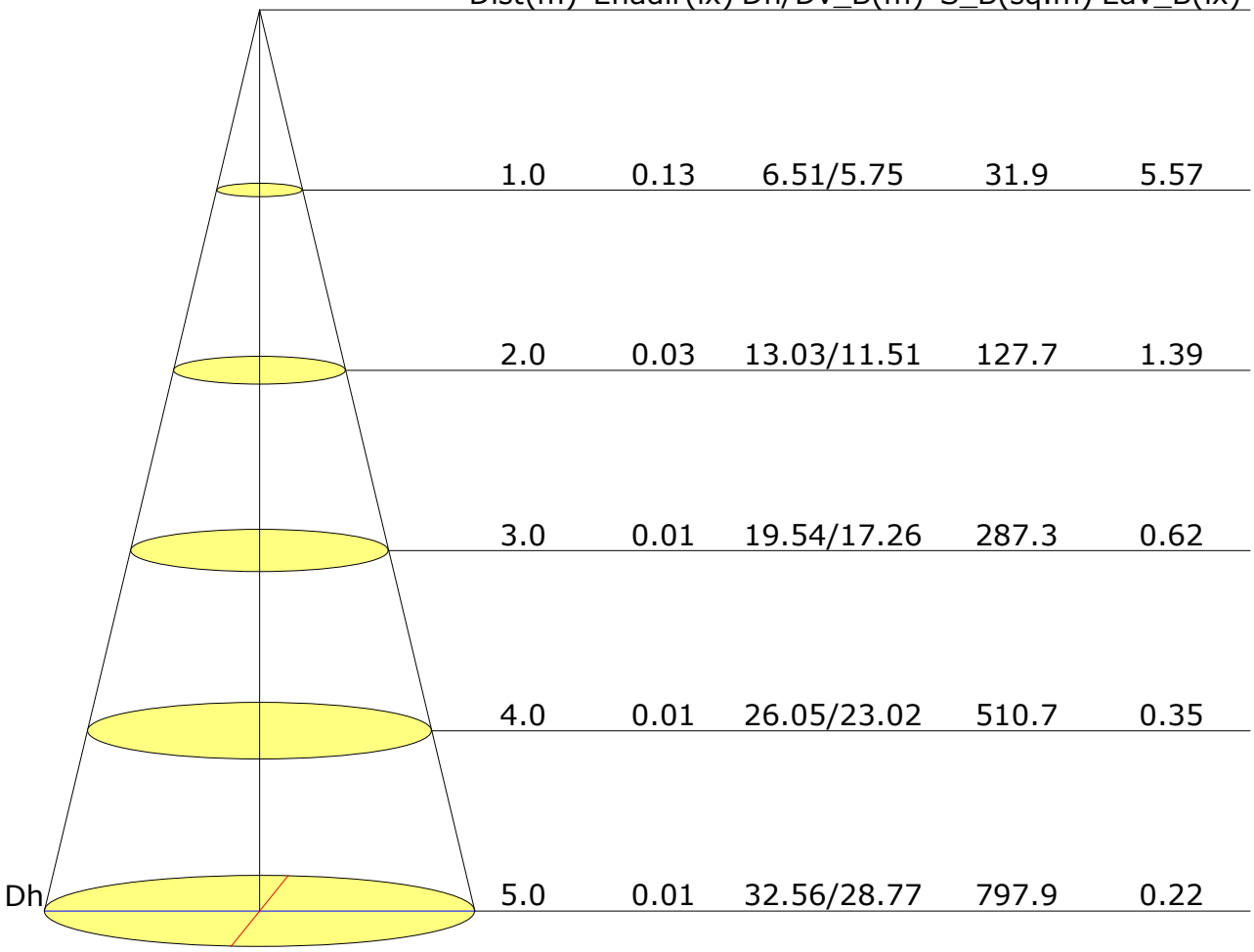


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	158	152	143	126	105	82	58	36	15
C90	52	52	49	42	34	26	17	11	4
C180	160	159	154	144	127	106	83	59	37
C270	52	53	51	46	38	29	21	13	6

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:

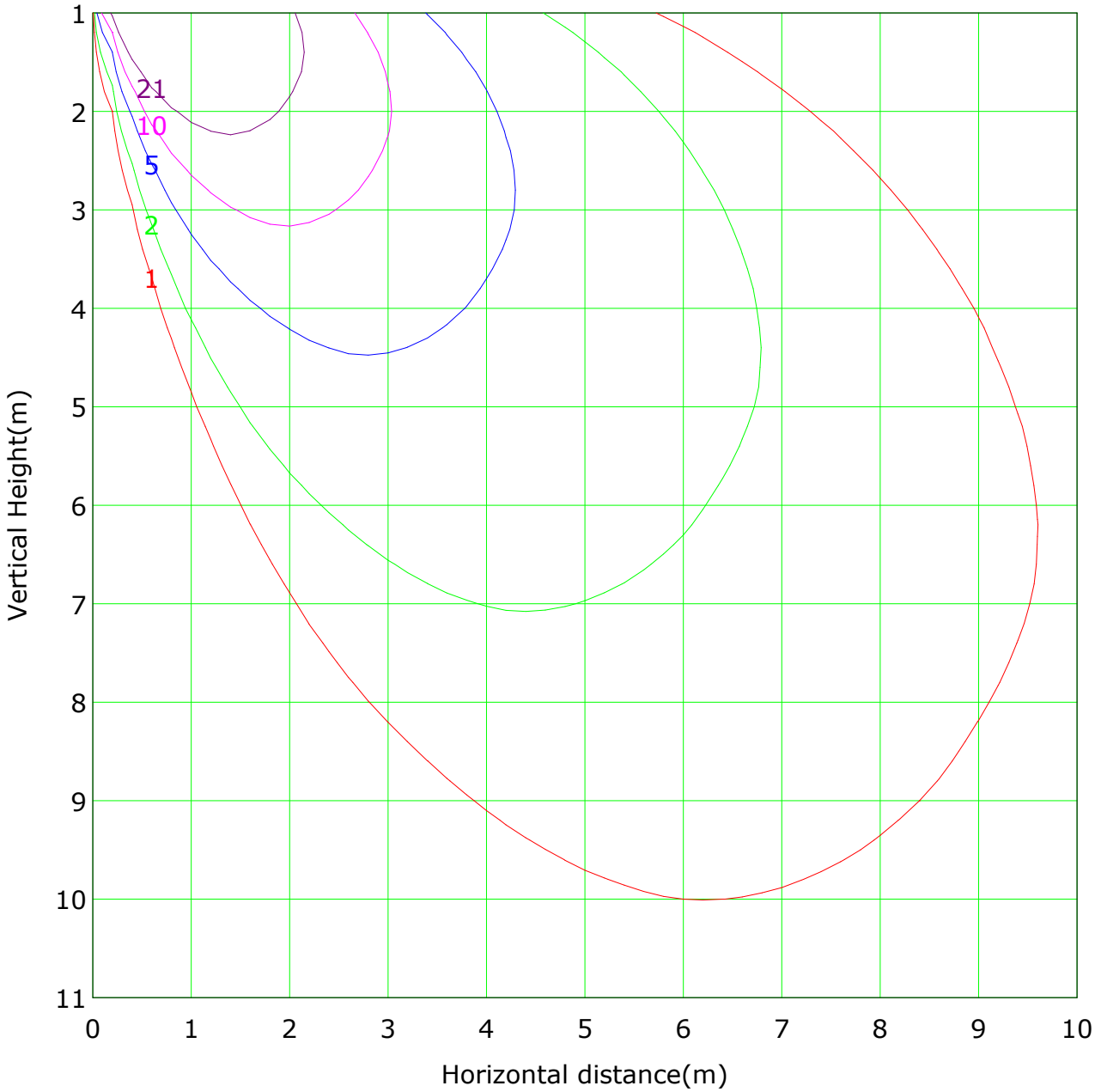
Illuminance at a Distance



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

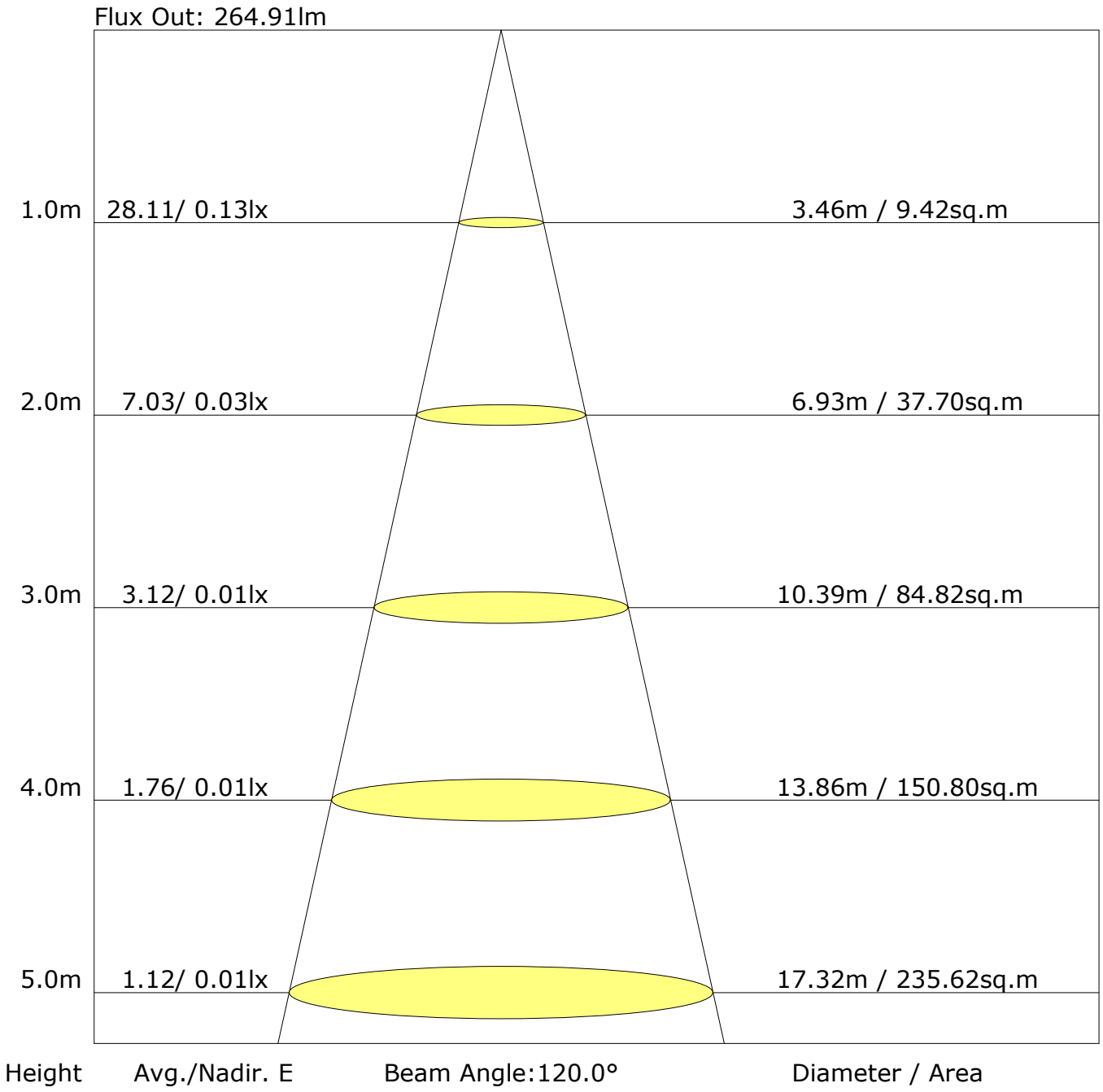


Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 104.7 lx

(1%): 1.0 lx
(2%): 2.1 lx
(5%): 5.2 lx
(10%): 10.5 lx
(20%): 20.9 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:

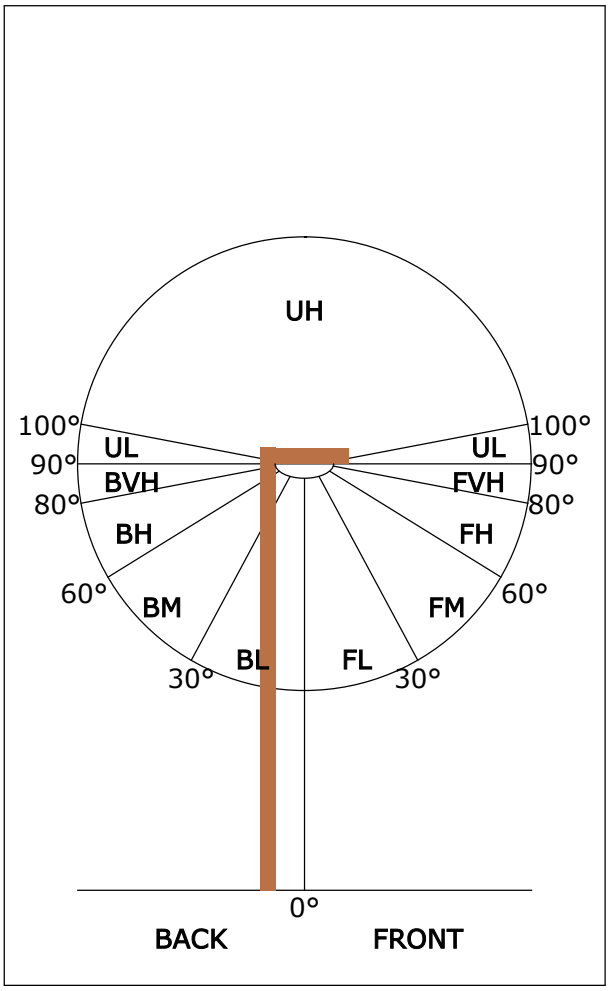
The Average Illuminance Effective Figure



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	199	48.3
FL (0°-30°)	20	4.9
FM (30°-60°)	111	27.1
FH (60°-80°)	58	14.1
FVH (80°-90°)	9	2.1
BACK LIGHT	204	49.5
BL (0°-30°)	20	4.8
BM (30°-60°)	113	27.6
BH (60°-80°)	61	14.7
BVH (80°-90°)	10	2.3
UP LIGHT	9	2.2
UL (90°-100°)	5	1.2
UH (100°-180°)	4	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 G0
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B0 U1 G0

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	1.1	0.0	0.0	0.00	0.00
5.0-6.0	1.8	0.0	0.0	0.00	0.01
6.0-7.0	2.8	0.0	0.1	0.01	0.02
7.0-8.0	4.1	0.1	0.1	0.01	0.03
8.0-9.0	5.7	0.1	0.2	0.02	0.05
9.0-10.0	7.6	0.1	0.4	0.03	0.09
10.0-11.0	10.0	0.2	0.6	0.05	0.14
11.0-12.0	12.8	0.3	0.8	0.07	0.20
12.0-13.0	15.8	0.4	1.2	0.09	0.30
13.0-14.0	19.3	0.5	1.7	0.12	0.42
14.0-15.0	23.1	0.6	2.3	0.15	0.57
15.0-16.0	27.0	0.8	3.1	0.19	0.76
16.0-17.0	31.3	1.0	4.1	0.24	1.00
17.0-18.0	35.6	1.2	5.3	0.29	1.28
18.0-19.0	40.0	1.4	6.7	0.34	1.62
19.0-20.0	44.5	1.6	8.3	0.40	2.02
20.0-21.0	48.7	1.9	10.2	0.45	2.47
21.0-22.0	53.0	2.1	12.3	0.52	2.99
22.0-23.0	57.4	2.4	14.7	0.59	3.58
23.0-24.0	61.6	2.7	17.4	0.66	4.23
24.0-25.0	65.8	3.0	20.4	0.73	4.96
25.0-26.0	69.7	3.3	23.7	0.80	5.76
26.0-27.0	73.7	3.6	27.3	0.88	6.64
27.0-28.0	77.5	3.9	31.2	0.96	7.59
28.0-29.0	81.1	4.2	35.5	1.03	8.62
29.0-30.0	84.5	4.6	40.0	1.11	9.73
30.0-31.0	87.6	4.9	44.9	1.19	10.92
31.0-32.0	90.4	5.2	50.1	1.26	12.18
32.0-33.0	92.9	5.5	55.6	1.33	13.51
33.0-34.0	95.1	5.8	61.3	1.40	14.91
34.0-35.0	97.0	6.0	67.3	1.46	16.38
35.0-36.0	98.6	6.3	73.6	1.53	17.90

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	99.9	6.5	80.1	1.59	19.49
37.0-38.0	101.1	6.7	86.9	1.64	21.13
38.0-39.0	102.0	7.0	93.8	1.69	22.82
39.0-40.0	102.7	7.2	101.0	1.74	24.57
40.0-41.0	103.1	7.3	108.3	1.79	26.35
41.0-42.0	103.4	7.5	115.9	1.83	28.18
42.0-43.0	103.5	7.7	123.5	1.86	30.04
43.0-44.0	103.3	7.8	131.3	1.90	31.94
44.0-45.0	103.0	7.9	139.2	1.93	33.87
45.0-46.0	102.6	8.0	147.3	1.95	35.82
46.0-47.0	102.1	8.1	155.4	1.98	37.79
47.0-48.0	101.6	8.2	163.6	2.00	39.79
48.0-49.0	101.1	8.3	171.9	2.02	41.81
49.0-50.0	100.5	8.4	180.3	2.04	43.85
50.0-51.0	99.8	8.4	188.7	2.05	45.91
51.0-52.0	99.1	8.5	197.2	2.07	47.98
52.0-53.0	98.3	8.5	205.8	2.08	50.05
53.0-54.0	97.2	8.6	214.4	2.08	52.14
54.0-55.0	96.0	8.6	222.9	2.08	54.22
55.0-56.0	94.5	8.5	231.5	2.08	56.30
56.0-57.0	92.8	8.5	240.0	2.06	58.36
57.0-58.0	91.0	8.4	248.4	2.05	60.41
58.0-59.0	89.0	8.3	256.7	2.02	62.44
59.0-60.0	86.9	8.2	264.9	2.00	64.43
60.0-61.0	84.6	8.1	273.0	1.96	66.40
61.0-62.0	82.2	7.9	280.9	1.93	68.32
62.0-63.0	79.7	7.8	288.7	1.89	70.21
63.0-64.0	77.1	7.6	296.2	1.84	72.05
64.0-65.0	74.4	7.4	303.6	1.79	73.84
65.0-66.0	71.8	7.2	310.8	1.74	75.58
66.0-67.0	69.0	6.9	317.7	1.69	77.27
67.0-68.0	66.2	6.7	324.4	1.63	78.90
68.0-69.0	63.3	6.5	330.9	1.57	80.47
69.0-70.0	60.3	6.2	337.1	1.51	81.98
70.0-71.0	57.4	5.9	343.0	1.44	83.43
71.0-72.0	54.4	5.7	348.7	1.38	84.80

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	51.4	5.4	354.0	1.31	86.11
73.0-74.0	48.4	5.1	359.1	1.24	87.35
74.0-75.0	45.4	4.8	363.9	1.17	88.52
75.0-76.0	42.5	4.5	368.4	1.10	89.61
76.0-77.0	39.6	4.2	372.7	1.03	90.64
77.0-78.0	36.7	3.9	376.6	0.96	91.59
78.0-79.0	34.0	3.6	380.2	0.89	92.48
79.0-80.0	31.1	3.4	383.6	0.82	93.30
80.0-81.0	28.3	3.1	386.6	0.74	94.04
81.0-82.0	25.6	2.8	389.4	0.67	94.72
82.0-83.0	22.8	2.5	391.9	0.60	95.32
83.0-84.0	20.2	2.2	394.1	0.54	95.86
84.0-85.0	17.5	1.9	396.0	0.47	96.32
85.0-86.0	15.0	1.6	397.7	0.40	96.72
86.0-87.0	12.7	1.4	399.0	0.34	97.06
87.0-88.0	10.7	1.2	400.2	0.29	97.34
88.0-89.0	9.1	1.0	401.2	0.24	97.59
89.0-90.0	7.7	0.8	402.1	0.21	97.79
90.0-91.0	6.5	0.7	402.8	0.17	97.97
91.0-92.0	5.6	0.6	403.4	0.15	98.11
92.0-93.0	5.0	0.6	403.9	0.13	98.25
93.0-94.0	4.7	0.5	404.5	0.13	98.37
94.0-95.0	4.4	0.5	404.9	0.12	98.49
95.0-96.0	4.2	0.5	405.4	0.11	98.60
96.0-97.0	3.9	0.4	405.8	0.10	98.71
97.0-98.0	3.6	0.4	406.2	0.10	98.80
98.0-99.0	3.4	0.4	406.6	0.09	98.89
99.0-100.0	3.2	0.3	406.9	0.08	98.98
100.0-101.0	3.0	0.3	407.3	0.08	99.05
101.0-102.0	2.8	0.3	407.5	0.07	99.13
102.0-103.0	2.6	0.3	407.8	0.07	99.19
103.0-104.0	2.4	0.3	408.1	0.06	99.25
104.0-105.0	2.2	0.2	408.3	0.06	99.31
105.0-106.0	2.0	0.2	408.5	0.05	99.36
106.0-107.0	1.9	0.2	408.7	0.05	99.41
107.0-108.0	1.8	0.2	408.9	0.04	99.46

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	1.6	0.2	409.1	0.04	99.50
109.0-110.0	1.5	0.2	409.2	0.04	99.54
110.0-111.0	1.4	0.1	409.4	0.03	99.57
111.0-112.0	1.3	0.1	409.5	0.03	99.60
112.0-113.0	1.2	0.1	409.6	0.03	99.63
113.0-114.0	1.1	0.1	409.7	0.03	99.66
114.0-115.0	1.0	0.1	409.8	0.02	99.68
115.0-116.0	0.9	0.1	409.9	0.02	99.70
116.0-117.0	0.8	0.1	410.0	0.02	99.72
117.0-118.0	0.7	0.1	410.1	0.02	99.74
118.0-119.0	0.7	0.1	410.1	0.02	99.76
119.0-120.0	0.6	0.1	410.2	0.01	99.77
120.0-121.0	0.6	0.1	410.3	0.01	99.79
121.0-122.0	0.6	0.1	410.3	0.01	99.80
122.0-123.0	0.5	0.1	410.4	0.01	99.81
123.0-124.0	0.5	0.0	410.4	0.01	99.82
124.0-125.0	0.5	0.0	410.5	0.01	99.83
125.0-126.0	0.5	0.0	410.5	0.01	99.84
126.0-127.0	0.5	0.0	410.5	0.01	99.85
127.0-128.0	0.5	0.0	410.6	0.01	99.86
128.0-129.0	0.4	0.0	410.6	0.01	99.87
129.0-130.0	0.4	0.0	410.7	0.01	99.88
130.0-131.0	0.4	0.0	410.7	0.01	99.89
131.0-132.0	0.4	0.0	410.7	0.01	99.90
132.0-133.0	0.4	0.0	410.8	0.01	99.91
133.0-134.0	0.4	0.0	410.8	0.01	99.91
134.0-135.0	0.4	0.0	410.8	0.01	99.92
135.0-136.0	0.4	0.0	410.8	0.01	99.93
136.0-137.0	0.3	0.0	410.9	0.01	99.93
137.0-138.0	0.3	0.0	410.9	0.01	99.94
138.0-139.0	0.3	0.0	410.9	0.01	99.94
139.0-140.0	0.3	0.0	410.9	0.01	99.95
140.0-141.0	0.3	0.0	411.0	0.00	99.95
141.0-142.0	0.3	0.0	411.0	0.00	99.96
142.0-143.0	0.3	0.0	411.0	0.00	99.96
143.0-144.0	0.2	0.0	411.0	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	0.2	0.0	411.0	0.00	99.97
145.0-146.0	0.2	0.0	411.0	0.00	99.97
146.0-147.0	0.2	0.0	411.0	0.00	99.98
147.0-148.0	0.2	0.0	411.1	0.00	99.98
148.0-149.0	0.2	0.0	411.1	0.00	99.98
149.0-150.0	0.2	0.0	411.1	0.00	99.98
150.0-151.0	0.2	0.0	411.1	0.00	99.99
151.0-152.0	0.1	0.0	411.1	0.00	99.99
152.0-153.0	0.1	0.0	411.1	0.00	99.99
153.0-154.0	0.1	0.0	411.1	0.00	99.99
154.0-155.0	0.1	0.0	411.1	0.00	99.99
155.0-156.0	0.1	0.0	411.1	0.00	99.99
156.0-157.0	0.1	0.0	411.1	0.00	100.00
157.0-158.0	0.1	0.0	411.1	0.00	100.00
158.0-159.0	0.1	0.0	411.1	0.00	100.00
159.0-160.0	0.1	0.0	411.1	0.00	100.00
160.0-161.0	0.1	0.0	411.1	0.00	100.00
161.0-162.0	0.1	0.0	411.1	0.00	100.00
162.0-163.0	0.0	0.0	411.1	0.00	100.00
163.0-164.0	0.0	0.0	411.1	0.00	100.00
164.0-165.0	0.0	0.0	411.1	0.00	100.00
165.0-166.0	0.0	0.0	411.1	0.00	100.00
166.0-167.0	0.0	0.0	411.1	0.00	100.00
167.0-168.0	0.0	0.0	411.1	0.00	100.00
168.0-169.0	0.0	0.0	411.1	0.00	100.00
169.0-170.0	0.0	0.0	411.1	0.00	100.00
170.0-171.0	0.0	0.0	411.1	0.00	100.00
171.0-172.0	0.0	0.0	411.1	0.00	100.00
172.0-173.0	0.0	0.0	411.1	0.00	100.00
173.0-174.0	0.0	0.0	411.1	0.00	100.00
174.0-175.0	0.0	0.0	411.1	0.00	100.00
175.0-176.0	0.0	0.0	411.1	0.00	100.00
176.0-177.0	0.0	0.0	411.1	0.00	100.00
177.0-178.0	0.0	0.0	411.1	0.00	100.00
178.0-179.0	0.0	0.0	411.1	0.00	100.00
179.0-180.0	0.0	0.0	411.1	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: