

Test Report

Client : NINGBO OMLITE LIGHTING & SOLUTIONS CO., LTD
Address : Room 702, Building 4, No.118 Nanhai road, Beilun, Ningbo China, zip no.315800

Description of the submitted sample(s):

Sample Name : LED WATER-PROOF LIGHT
Model/Type : WPOS 1.2M-40W
Trademark : MMJ Light Up
Ratings : 220-240VAC, 50/60Hz, 40W
Test Item : LM-79-19
State of Sample(s) : Normal
Sample Quantity : 1 PCS
Manufacturer : NINGBO OMLITE LIGHTING & SOLUTIONS CO., LTD
Address : Room 702, Building 4, No.118 Nanhai road, Beilun, Ningbo China,
zip no.315800
Sample Received Date : 2025-06-27
Sample tested Date : 2025-06-27
Test Standard : LM-79-19
Test Laboratory : Shenzhen AOCE Electronic Technology Service Co., Ltd
Room 202, 2nd Floor, No.12th Building of Xinhe Tongfuyu
Testing location : Industrial Park, Fuhai Street, Baoan District, Shenzhen,
Guangdong, China
Remark : The tested sample(s) and the sample information are provided by
the client.

Compiled by:

Reviewed by:

Approved by:

Date :

2025-07-16

Robin Liu
Lab Supervisor

Summary of Result

Test Item	Test Result	
	Luminous Flux (lm)	Luminous Efficacy (lm/W)
Integrating Sphere Test	5671.544	141.435
Goniophotometer Test	5951.37	148.04

1 Test Condition

1.1 Air Temperature

The ambient temperature in which measurements are being taken shall be maintained at $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$, measured at a point not more than 1 m from the SSL product and at the same height as the SSL product. The temperature sensor shall be shielded from direct optical radiation from the SSL product and optical radiation from any other source. If measurements are performed at other than this recommended temperature, this is a non-standard condition and shall be noted in the test report.

1.2 Thermal Conditions for Mounting SSL Products

The method of mounting can be the primary path for heat flow away from the device and can affect measurement results significantly. The SSL product under test shall be mounted to the measuring instrument so that heat conduction through supporting objects causes negligible cooling effects. If the SSL product under test is provided with a support structure that is designated to be used as a component of the luminaire thermal management system, the product shall be tested with the support structure attached. Any such support structure included in the measurement shall be reported.

1.3 Air Movement

The incidence of air movements on the surface of a SSL product under test may substantially alter electrical and photometric values. Air flow around the SSL product being tested should be such that normal convective air flow induced by device under test is not affected.

1.4 Waveshape of AC Power Supply

The AC power supply, while operating the SSL product, shall have a sinusoidal voltage waveshape at the prescribed frequency typically 50/60 Hz or 50 Hz) such that the RMS summation of the harmonic components does not exceed 3 percent of the fundamental during operation of the test item.

1.5 Voltage Regulation

The voltage of an AC power supply (RMS voltage) or DC power supply (instantaneous voltage) applied to the device under test shall be regulated to within ± 0.2 percent under load.

1.6 Seasoning

For the purpose of rating new SSL products, SSL products shall be tested with no seasoning.

1.7 Stabilization

Before measurements are taken, the SSL product under test shall be operated long enough to reach stabilization and temperature equilibrium. The time required for stabilization depends on the type of SSL products under test. The stabilization time typically ranges from 30 min to 2 or more hours for large SSL products.

1.8 Operating Orientation

The SSL product under test shall be evaluated in the operating orientation recommended by the manufacturer for an intended use of the SSL product. Stabilization and photometric measurements of SSL products shall be done in such operating orientation.

2 Test Method

2.1 Integrating Sphere Measurement

The integrating sphere system includes AC power source, digital power meter, DC power supply, spectrophotometer, and integrating sphere. The system is calibrated by standard lamp before measurement weekly. The standard lamp has been calibrated regularly and traced to the National Primary Standard.

The 4π geometry was used to measure total luminous, luminous efficacy, chromaticity coordinates, correlated color temperature, and color rendering index, the spectral radiant flux measurements taken at 1 nm intervals over the range of 380 to 780 nm. The product was operated in its intended orientation and was recorded in the report.

2.2 Goniophotometer Measurement

The goniophotometer system is calibrated by standard lamp before measurement weekly. The standard lamp has been calibrated regularly and traced to National Primary Standards.

Type C goniophotometer was used for measuring total luminous flux, luminous efficacy, luminous intensity distribution, and color angular uniformity, which were calculated from the software taken at 1° vertical intervals and 22.5° horizontal intervals. The product was operated in its intended orientation and was recorded in the report.

2.3 Electrical Measurement

According to ANSI C82.77-2002, the measurement was made using a digital power meter and power supply, the SSL product under test was operated at rated voltage and stabilized enough before measurement. The total harmonic distortion of current and power factor can be calculated from the digital power meter. The digital power meter was calibrated regularly and traced to National Primary Standards.

3 Test Result

3.1 Integrating Sphere

Temperature (°C)	Test Humidity	Orientation	Stabilization Time(min)	Test Time(min)	Number of hours operated prior to measurement
24.8	48.3%	Face down	10	5	0

Input Voltage (V)	Frequency (Hz)	Current (A)	Power Factor	Power (W)
230.1	50	0.179	0.973	40.1

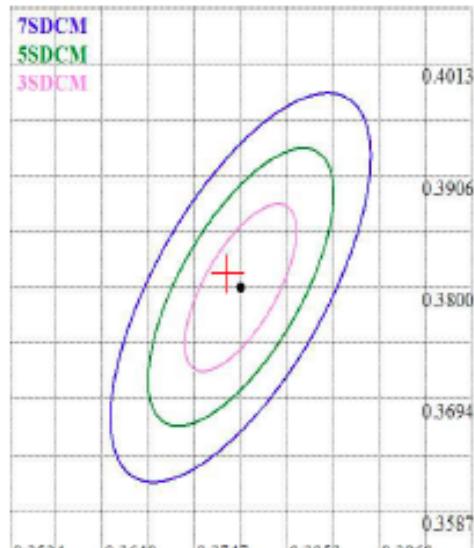
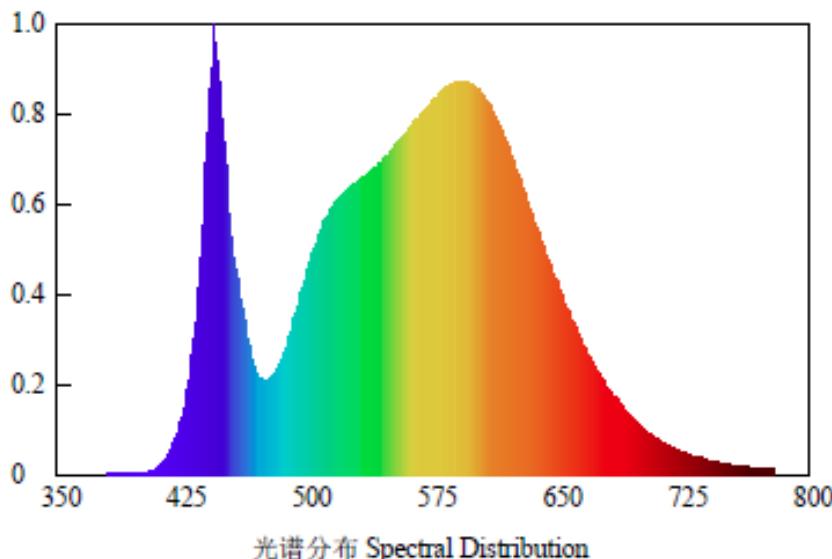
Luminous Flux (lm)	Radiant Flux (W)	CCT (K)	Duv	Luminous Efficacy (lm/W)
5671.544	16.871	4086	+0.00268	141.435

Ra	SDCM	X	y	u'	v'
81.3	1.47	0.3785	0.3813	0.222	0.5033

R1	R2	R3	R4	R5
79	86	93	82	80
R6	R7	R8	R9	R10
82	86	63	1	68
R11	R12	R13	R14	R15
82	64	81	96	72

Spectral Distribution & Chromaticity Diagram

光色参数 Spectroradiometric Parameters



色品坐标 Chromaticity Coordinates: $x=0.3785$ $y=0.3813$ $u'=0.222$ $v'=0.5033$

相关色温 Correlated Color Temperature: 4086 K

主波长 Dominant Wavelength: 576.0 nm(E)

显色指数 Rendering Index: Ra=81.3

峰值波长 Peak Wavelength: 445.2 nm

色纯度 Purity: 0.2802

谱线带宽 Bandwidth: 19.7nm

光通量 Luminous Flux: 5671.544 lm

辐射通量 Radiant Flux: 16.871W

色比 Color Ratio: Kr=37.3% Kg=53.1% Kb=9.6%

色容差 Color Tolerance(SDCM): 1.4719

色偏差 Chromaticity Difference: +0.00268Duv

R1=79 R2=86 R3=93 R4=82 R5=80 R6=82 R7=86 R8=63

R9=1 R10=68 R11=82 R12=64 R13=81 R14=96 R15=72

电参数 Electric Parameters

电压 Voltage: 230.1 V

电流 Current: 0.179 A

功率因数 Power Factor: 0.973

功率 Power: 40.1 W

发光效率 Luminous Efficacy: 141.435 lm/W

3.2. Goniophotometer

Temperature (°C)	Test Humidity	Orientation	Stabilization Time(min)	Test Time(min)	Number of hours operated prior to measurement
24.9	48.3%	Face forward	20	30	0

Input Voltage (V)	Frequency (Hz)	Current (A)	Power Factor	Power (W)
230.2	50	0.179	0.973	40.2

Luminous Flux (lm)	CBCP (cd)	Field Angle (10%)	Beam Angle (50%)	Luminous Efficacy (lm/W)
5951.37	1821.188	159.8*209.3	107.0*124.0	148.04

Photometric Results

Lumens(lm): 5951.37

Efficiency(%): 106.27%

Lumens(lm)/Power(W): 148.04

Central intensity(cd): 1821.188

Maximum intensity(cd): 1821.188

Angle of maximum intensity: C=0.0 γ=0.0

Beam Angle(50%Imax): [C0/180]Total=107.0
[C90/270]Total=124.0

Field angle(10%Imax): [C0/180]Total=159.8
[C90/270]Total=209.3

Maximum s/h(1/2): C0_180=1.21 C90_270=1.26

Maximum s/h(1/4): C0_180=1.32 C90_270=1.40

Up flux rate of lamp(%): 6.46%

Down flux rate of lamp(%): 99.82%

Up flux rate of LUM(%): 6.08%

Down flux rate of LUM(%): 93.92%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 68.570%

4.1. Zonal flux distribution table

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1818.126	.000	.000	.000%	.000%
5.0	1809.049	43.362	43.362	.774%	.774%
10.0	1781.685	128.452	171.814	2.294%	3.068%
15.0	1737.427	208.751	380.565	3.728%	6.796%
20.0	1676.764	281.377	661.943	5.025%	11.820%
25.0	1602.758	343.961	1005.904	6.142%	17.963%
30.0	1516.153	394.701	1400.605	7.048%	25.011%
35.0	1419.482	432.293	1832.897	7.720%	32.730%
40.0	1312.963	455.888	2288.785	8.141%	40.871%
45.0	1202.041	465.674	2754.459	8.316%	49.187%
50.0	1086.432	462.420	3216.879	8.257%	57.444%
55.0	964.903	446.029	3662.907	7.965%	65.409%
60.0	843.347	417.972	4080.879	7.464%	72.873%
65.0	719.353	379.895	4460.774	6.784%	79.657%
70.0	594.179	332.595	4793.369	5.939%	85.596%
75.0	473.761	279.143	5072.512	4.985%	90.581%
80.0	360.604	223.253	5295.765	3.987%	94.567%
85.0	262.024	169.183	5464.948	3.021%	97.588%
90.0	193.544	124.738	5589.686	2.227%	99.816%
95.0	154.394	95.268	5684.954	1.701%	101.517%
100.0	120.229	74.621	5759.576	1.333%	102.850%
105.0	87.919	55.695	5815.270	.995%	103.844%
110.0	51.018	36.316	5851.586	.648%	104.493%
115.0	26.918	19.734	5871.320	.352%	104.845%
120.0	31.144	14.115	5885.435	.252%	105.097%
125.0	30.250	14.191	5899.625	.253%	105.351%
130.0	23.734	11.738	5911.363	.210%	105.560%
135.0	18.884	8.612	5919.975	.154%	105.714%
140.0	16.107	6.479	5926.454	.116%	105.830%
145.0	15.755	5.316	5931.770	.095%	105.925%
150.0	16.283	4.718	5936.488	.084%	106.009%
155.0	16.934	4.204	5940.691	.075%	106.084%
160.0	17.611	3.623	5944.314	.065%	106.149%
165.0	18.315	2.961	5947.275	.053%	106.201%
170.0	19.088	2.219	5949.494	.040%	106.241%
175.0	19.806	1.391	5950.885	.025%	106.266%
180.0	20.239	.479	5951.364	.009%	106.274%

4.2. Zonal flux distribution table

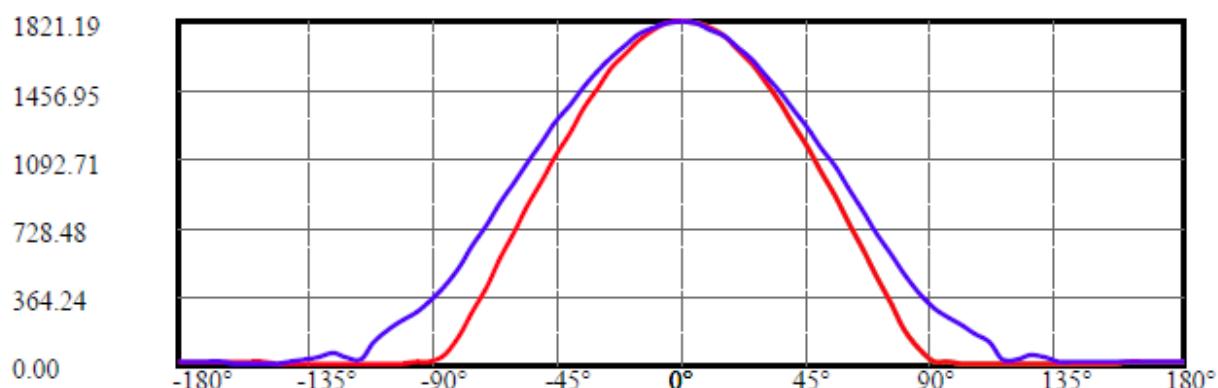
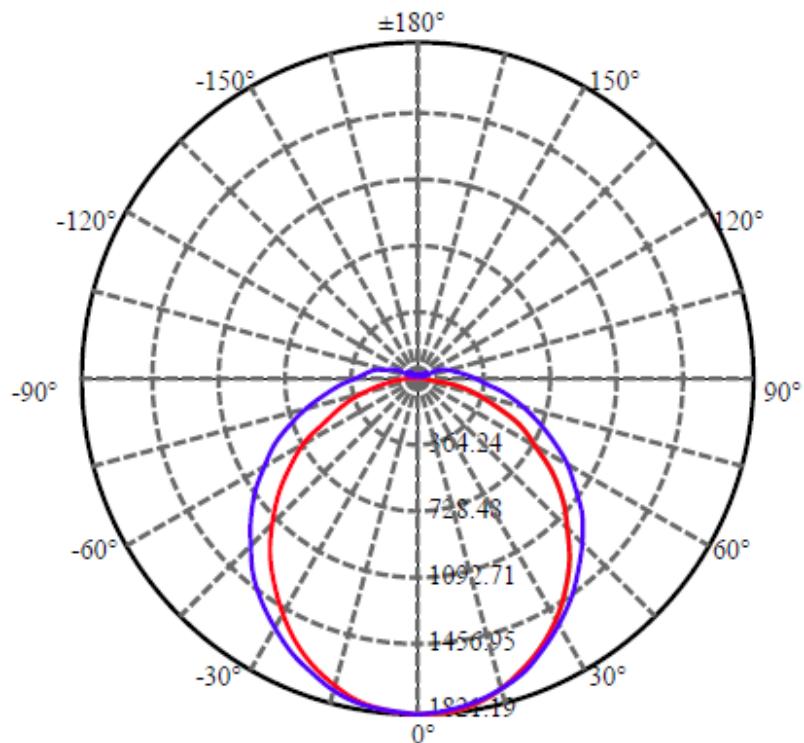
ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1400.61	25.01%	23.53%
0-40	2288.79	40.87%	38.46%
0-60	4080.88	72.87%	68.57%
0-90	5589.69	99.82%	93.92%
0-120	5885.44	105.10%	98.89%
0-180	5951.36	106.27%	100.00%
60-90	1926.78	34.41%	32.38%
90-120	420.49	7.51%	7.07%
90-130	446.42	7.97%	7.50%
90-150	471.54	8.42%	7.92%
90-180	485.94	8.68%	8.17%
0-69.51	4761.09	85.02%	80.00%

ZONAL LUMEN SUMMARY

0-10	171.81
10-20	490.13
20-30	738.66
30-40	888.18
40-50	928.09
50-60	864.00
60-70	712.49
70-80	502.40
80-90	293.92
90-100	169.89
100-110	92.01
110-120	33.85
120-130	25.93
130-140	15.09
140-150	10.03
150-160	7.83
160-170	5.18
170-180	1.39

4.3. Light Distribution Curve



C0(Max):

C0/C180:

C90/C270:

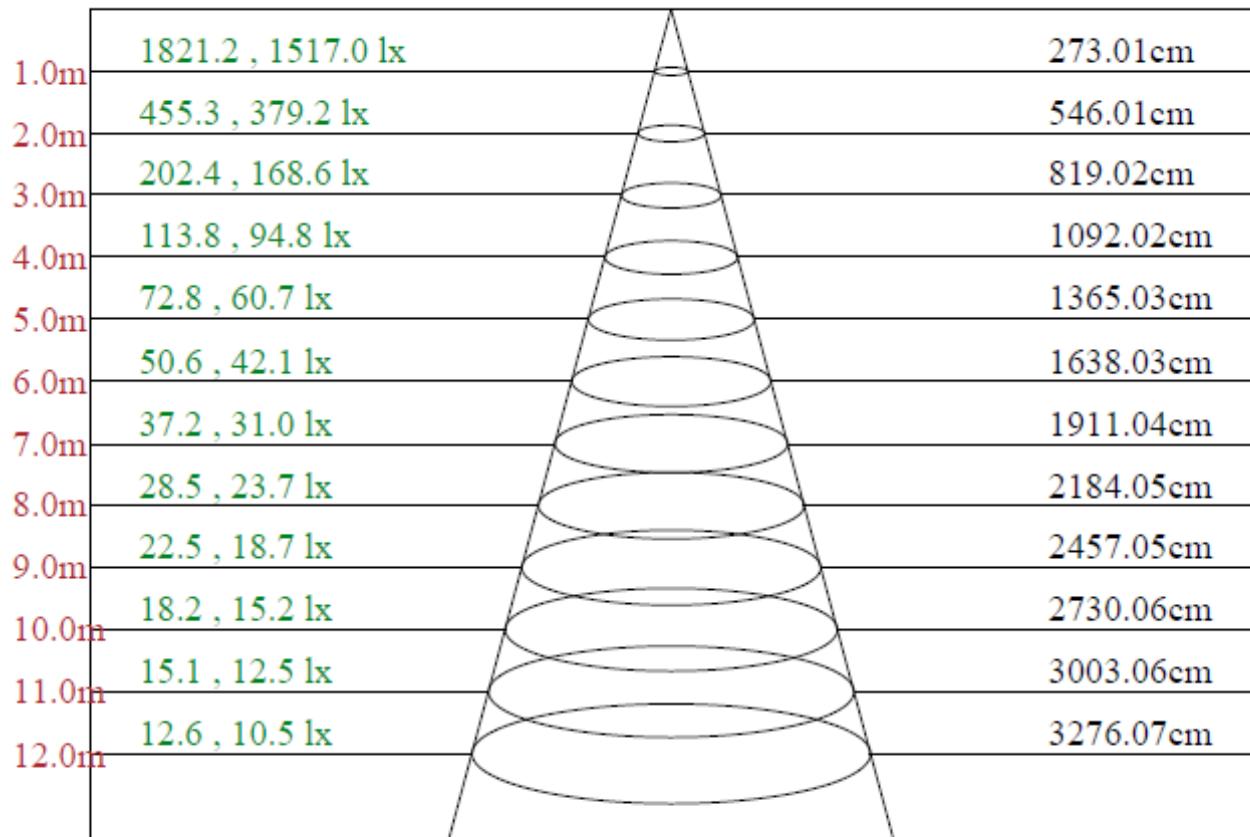
Field angle(10%Imax):C0/180Left:79.1 Right:80.7

:C90/270Left:105.6 Right:103.6

Beam Angle(50%Imax):C0/180Left:52.6 Right:54.4

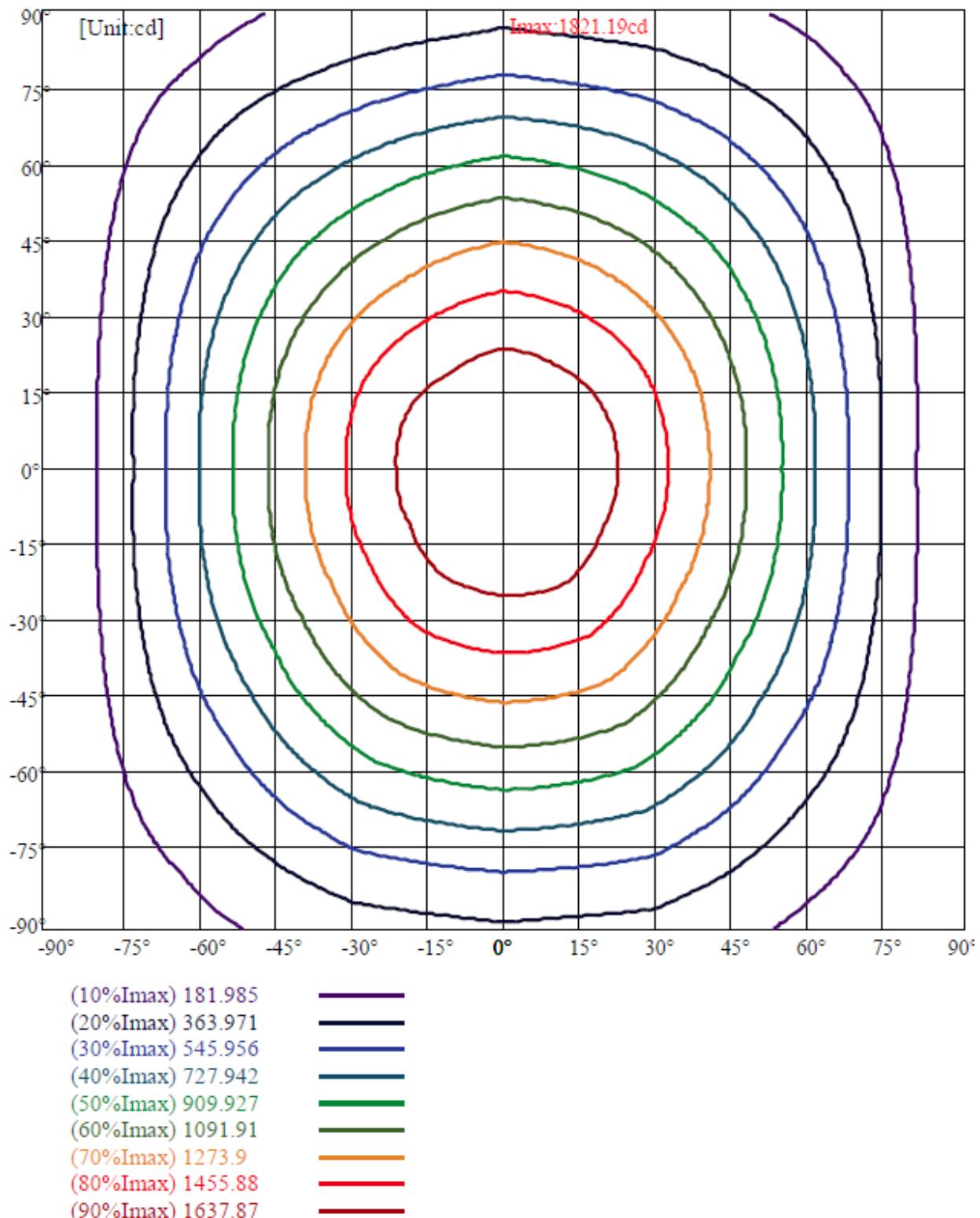
:C90/270Left:62.8 Right:61.2

4.4. Lux distance Curve

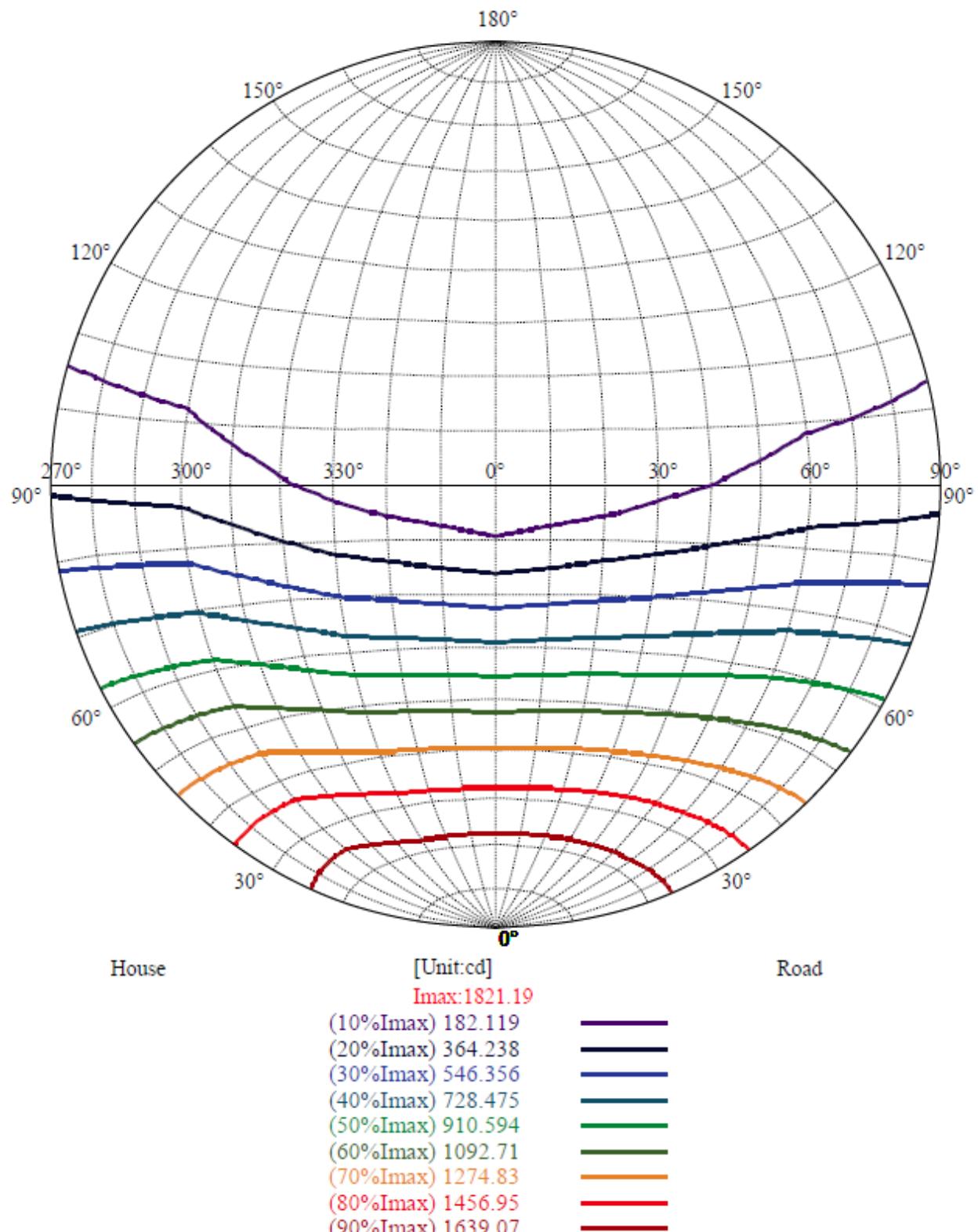


Max , Ave Beam angle of C0plane107.51

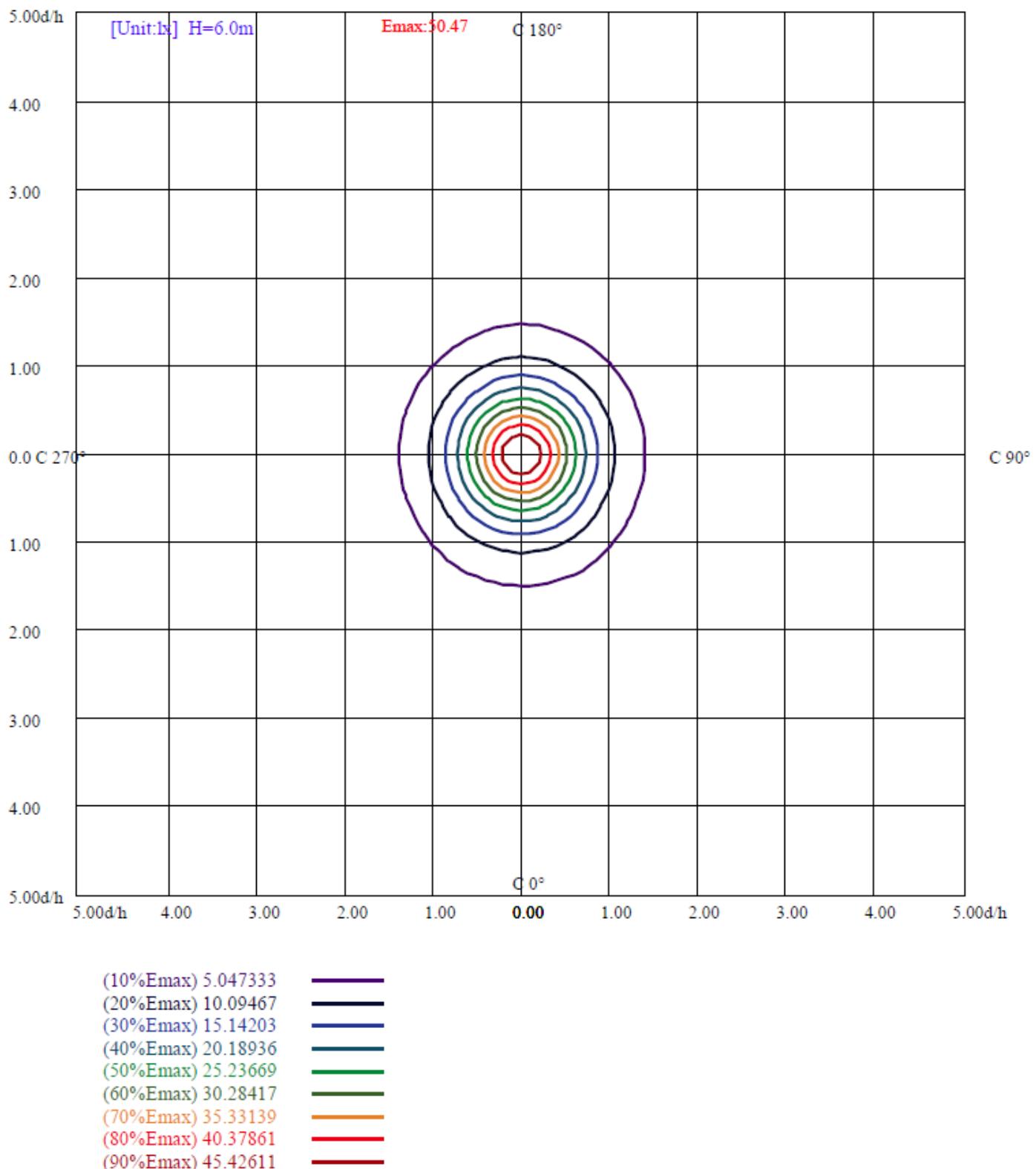
4.5. ISO-Intensity(V-H)



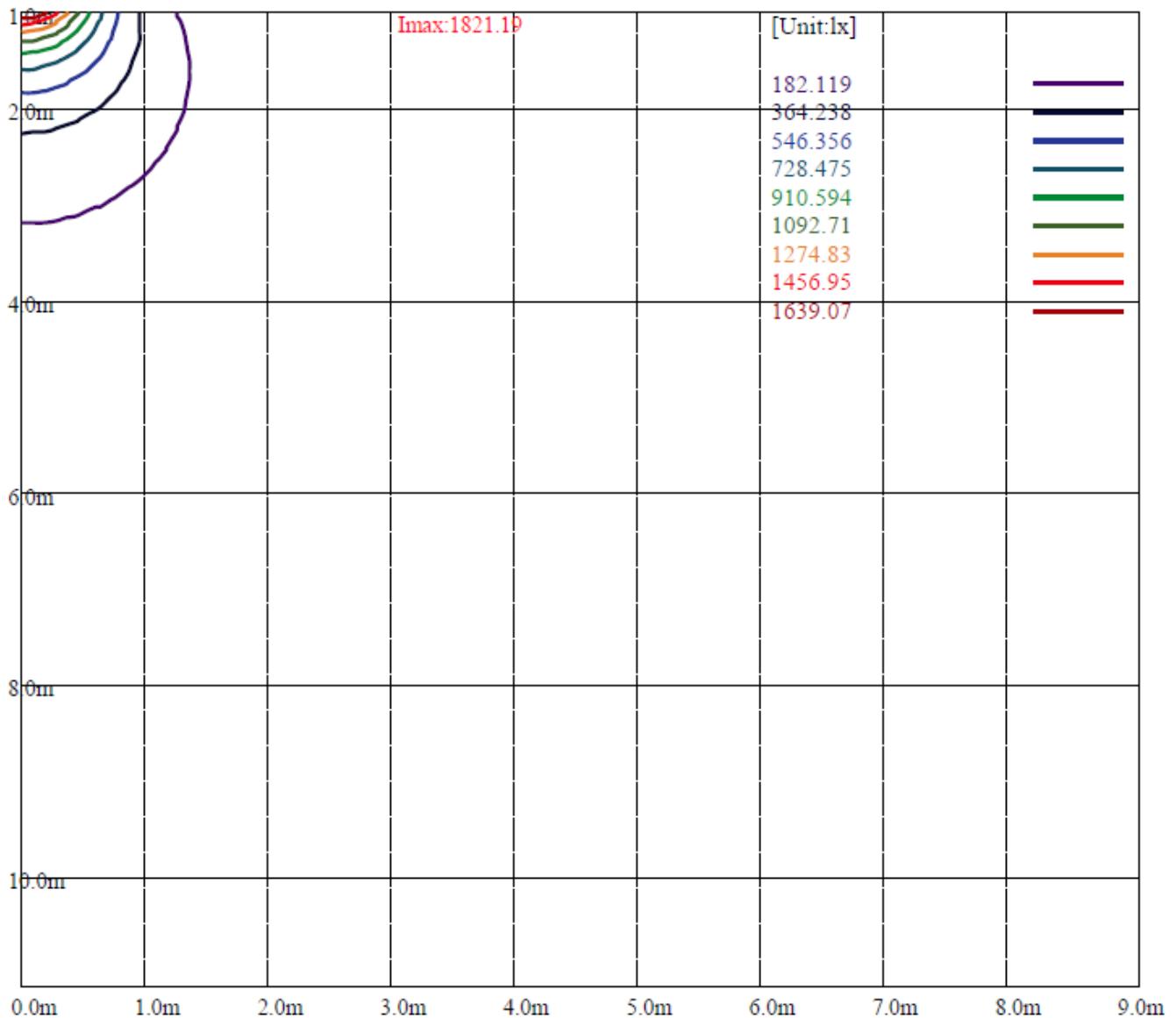
4.6. ISO candela diagram on circular web



4.7. ISO illuminance diagram



4.8. Space ISO Lux diagram



4.9. Luminance Limitting Curve(no luminous side)

Luminance Table

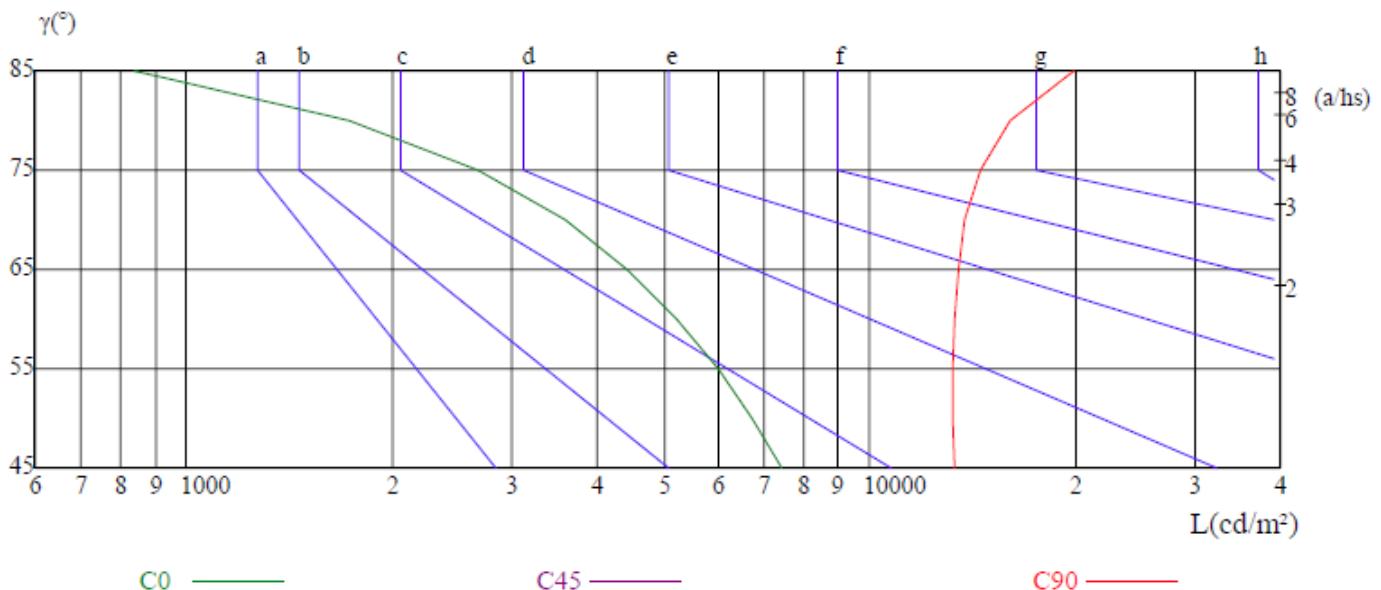
γ	45	50	55	60	65	70	75	80	85
C0	7440	6727	6012	5236	4421	3599	2665	1732	836
C45	0	0	0	0	0	0	0	0	0
C90	13291	13280	13257	13366	13509	13817	14550	16118	19984

L _{横(65)}	L _{纵(65)}	L ₄₅₍₆₅₎	L _{横(75)}	L _{纵(75)}	L ₄₅₍₇₅₎	L _{横(85)}	L _{纵(85)}	L ₄₅₍₈₅₎
11065	15780	0	9416	18678	0	6602	36660	0

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
		2000	1000	500	<=300				
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

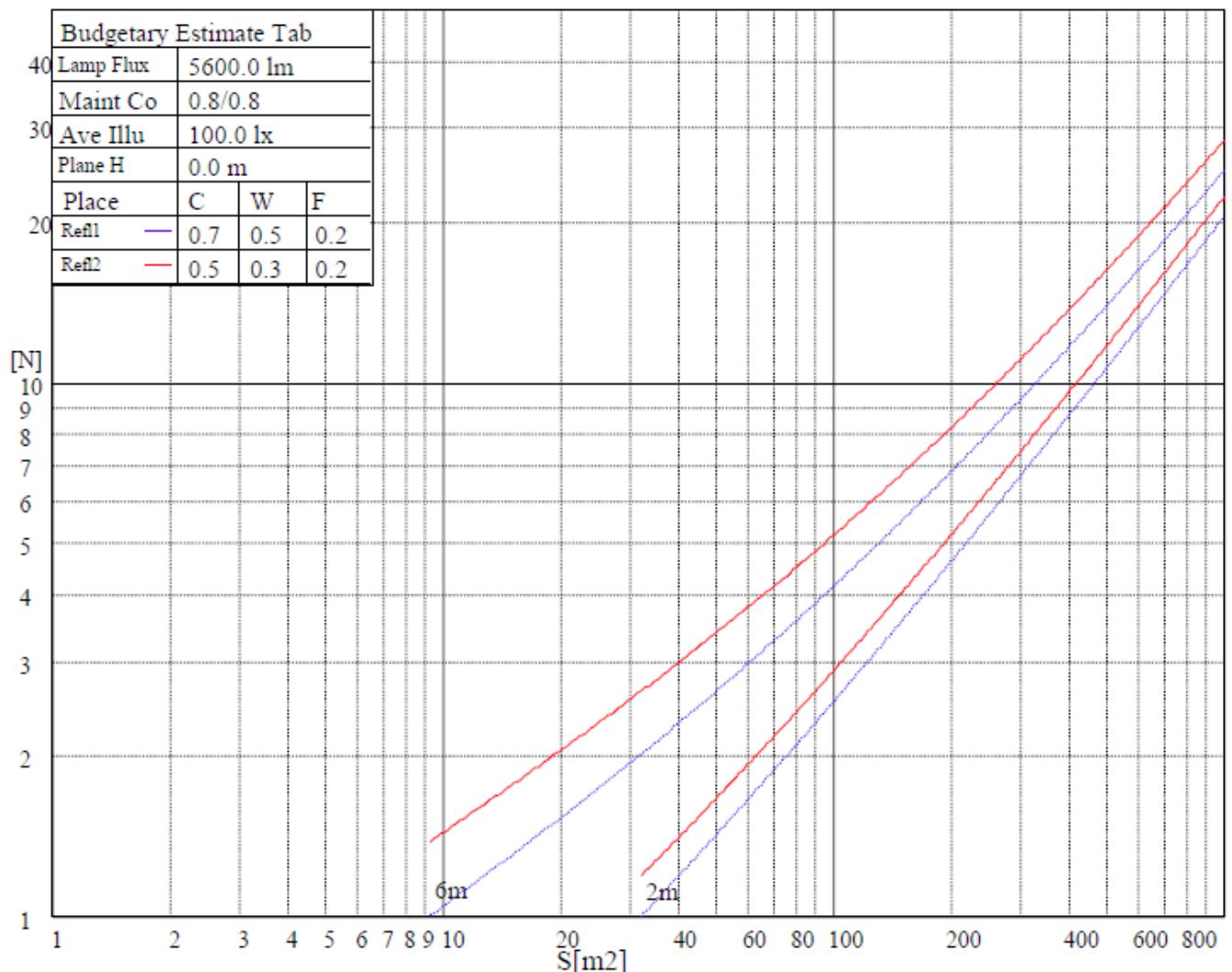
Luminance Limiting Curve



4.10. UGR Glare

Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions	Viewed crosswise						Viewed endwise				
X	Y	18.5	20.3	18.9	20.6	20.9	18.9	20.7	19.3	21.0	21.3
2H	2H	19.6	21.2	20.0	21.5	21.9	20.6	22.2	21.0	22.6	22.9
	3H	20.0	21.5	20.4	21.8	22.2	21.2	22.8	21.6	23.1	23.5
	4H	20.2	21.6	20.6	22.0	22.4	21.7	23.1	22.1	23.5	23.9
	6H	20.2	21.6	20.6	22.0	22.4	21.8	23.2	22.2	23.6	24.0
	8H	20.2	21.6	20.6	22.0	22.4	21.9	23.3	22.4	23.7	24.1
	12H	20.3	21.6	20.7	22.0	22.4	21.9	23.3	22.4	23.7	24.1
4H	2H	19.1	20.7	19.5	21.0	21.4	19.4	21.0	19.8	21.3	21.7
	3H	20.5	21.8	20.9	22.2	22.6	21.3	22.7	21.7	23.0	23.4
	4H	18.5	20.3	18.9	20.6	20.9	18.9	20.7	19.3	21.0	21.3
	6H	21.2	22.3	21.7	22.7	23.2	22.5	23.6	22.9	24.0	24.5
	8H	21.3	22.3	21.7	22.8	23.2	22.7	23.7	23.1	24.1	24.6
	12H	21.4	22.3	21.8	22.8	23.2	22.8	23.8	23.3	24.3	24.7
8H	4H	21.4	22.5	21.9	22.9	23.4	22.4	23.4	22.9	23.9	24.3
	6H	21.9	22.8	22.3	23.2	23.7	22.9	23.9	23.4	24.3	24.8
	8H	22.0	22.8	22.5	23.3	23.8	23.2	24.0	23.7	24.5	25.0
	12H	22.3	23.0	22.8	23.5	24.0	23.6	24.4	24.1	24.9	25.4
12H	4H	21.6	22.5	22.1	23.0	23.5	22.5	23.4	22.9	23.9	24.4
	6H	23.6	22.9	22.6	23.4	23.9	24.6	23.9	23.6	24.3	24.9
	8H	22.3	23.0	22.8	23.5	24.1	23.4	24.1	23.9	24.6	25.2
Variation with the observer position at spacings:											
S = 1.0H	0.2/-0.9					0.3/-0.5					
S = 1.5H	0.5/-0.7					0.5/-0.7					
S = 2.0H	0.5/-0.6					0.9/-1.0					
Standard tables:	BKBF					BK4					
Uncorrected UGR	10.2					4.5					

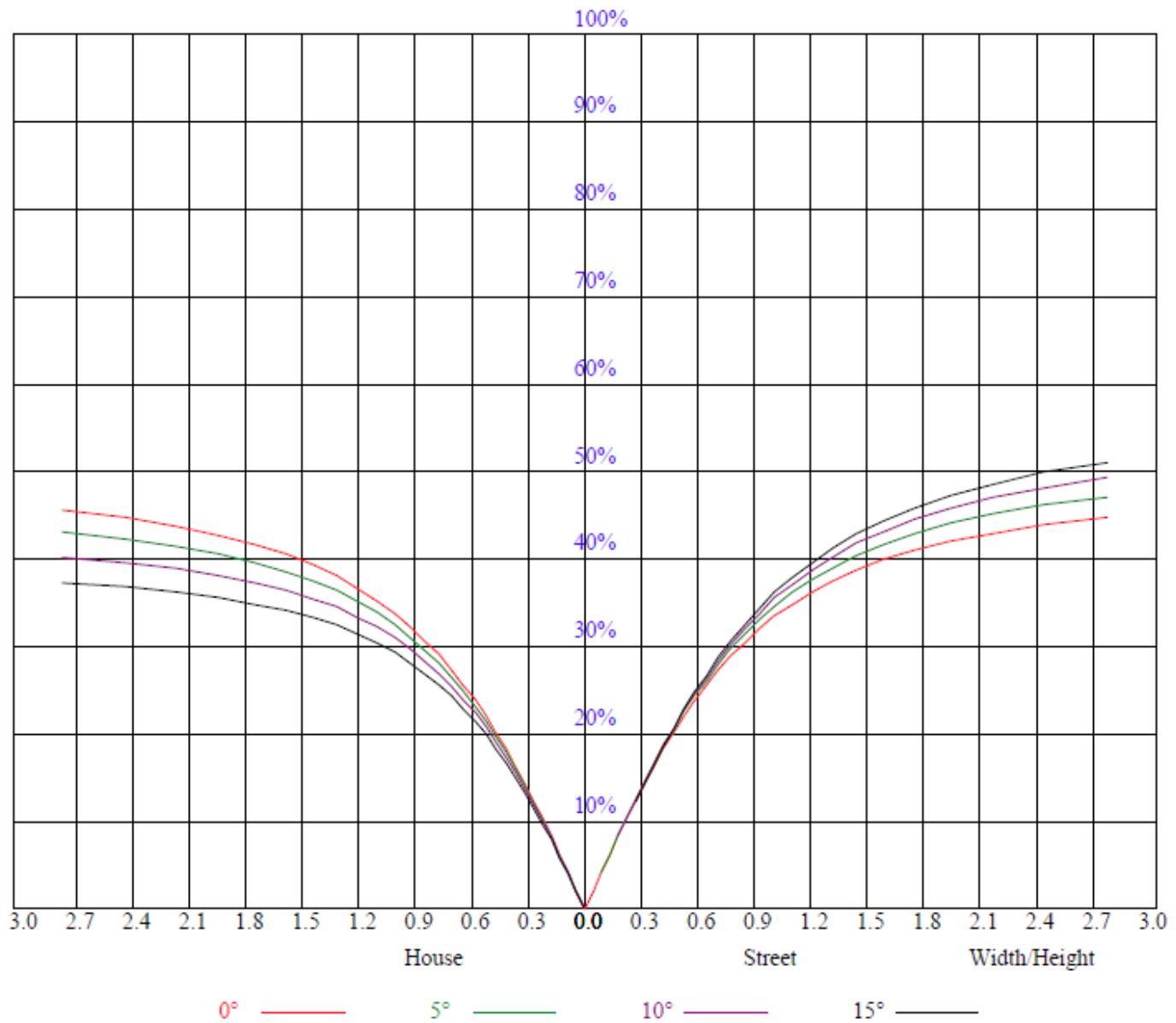
4.11. Budgetary Estimate Table



4.12. Utilization factor table for indoor luminaire

RHOCC	80			70			50			30			10			0
RHOW	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	COEFFICIENTS OF UTILIZATION RHOFC=20 CU															
0	1.25	1.25	1.25	1.21	1.21	1.21	1.14	1.14	1.14	1.08	1.08	1.08	1.03	1.03	1.03	1.00
1	1.07	1.01	0.97	1.04	0.99	0.95	0.98	0.94	0.90	0.92	0.89	0.86	0.88	0.85	0.83	0.80
2	0.92	0.84	0.78	0.90	0.82	0.76	0.85	0.79	0.73	0.80	0.75	0.71	0.76	0.72	0.68	0.65
3	0.80	0.71	0.64	0.78	0.70	0.63	0.74	0.67	0.61	0.70	0.64	0.59	0.67	0.62	0.57	0.55
4	0.71	0.61	0.54	0.69	0.60	0.53	0.66	0.58	0.52	0.62	0.56	0.50	0.59	0.54	0.49	0.46
5	0.63	0.53	0.46	0.62	0.52	0.46	0.59	0.51	0.44	0.56	0.49	0.43	0.53	0.47	0.42	0.40
6	0.57	0.47	0.40	0.56	0.46	0.40	0.53	0.45	0.39	0.50	0.43	0.38	0.48	0.42	0.37	0.35
7	0.52	0.42	0.35	0.50	0.41	0.35	0.48	0.40	0.34	0.46	0.39	0.34	0.44	0.38	0.33	0.31
8	0.47	0.38	0.31	0.46	0.37	0.31	0.44	0.36	0.31	0.42	0.35	0.30	0.40	0.34	0.29	0.27
9	0.43	0.34	0.28	0.42	0.34	0.28	0.40	0.33	0.27	0.39	0.32	0.27	0.37	0.31	0.26	0.24
10	0.40	0.31	0.26	0.39	0.31	0.25	0.37	0.30	0.25	0.36	0.29	0.24	0.35	0.28	0.24	0.22

4.13. Coefficient Utilization Curve



4.14. Intensity data(cd)

C/ γ (°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0	C/ γ (°)	180.0
0.0	1821.19	1814.52	1787.38	1742.02	1676.51	1597.66	1500.94	1396.09	1281.97	0.0	20.48
30.0	1816.96	1810.95	1785.26	1742.02	1679.27	1604.33	1515.90	1416.08	1302.29	30.0	20.00
60.0	1817.12	1807.05	1778.92	1735.68	1675.69	1604.82	1523.05	1428.11	1325.54	60.0	19.67
90.0	1816.96	1807.21	1780.55	1739.91	1685.94	1616.36	1540.12	1451.36	1359.19	90.0	20.32
120.0	1816.96	1800.87	1769.01	1721.37	1657.16	1582.87	1497.85	1399.99	1294.49	120.0	20.32
150.0	1819.56	1808.35	1777.13	1729.34	1665.45	1582.71	1490.86	1388.12	1271.24	150.0	20.65
180.0	1821.19	1808.35	1774.86	1723.65	1652.61	1569.38	1472.17	1359.67	1237.43	180.0	20.48
210.0	1816.96	1803.63	1772.58	1721.70	1656.84	1577.34	1481.76	1379.67	1263.92	210.0	20.00
240.0	1817.12	1810.95	1786.40	1746.57	1690.16	1622.86	1540.77	1452.33	1357.23	240.0	19.67
270.0	1816.96	1810.30	1787.38	1747.87	1696.18	1632.78	1556.54	1474.28	1381.46	270.0	20.32
300.0	1816.96	1815.01	1795.50	1760.23	1707.56	1643.51	1564.66	1478.51	1384.87	300.0	20.32
330.0	1819.56	1811.43	1785.26	1738.77	1677.81	1598.48	1509.23	1409.58	1295.95	330.0	20.65
360.0	1821.19	1814.52	1787.38	1742.02	1676.51	1597.66	1500.94	1396.09	1281.97	360.0	20.48
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0		
0.0	1155.33	1027.23	895.39	754.29	610.42	471.59	327.89	197.51	87.13		
30.0	1186.22	1059.58	934.57	808.26	676.42	546.21	425.75	313.58	212.14		
60.0	1221.33	1112.25	995.53	880.76	765.18	645.70	532.88	426.56	329.03		
90.0	1261.16	1158.91	1047.07	936.85	819.64	701.78	589.61	482.65	382.51		
120.0	1188.01	1077.79	959.44	844.02	728.61	609.12	497.77	389.66	300.90		
150.0	1152.89	1024.14	897.67	770.06	637.08	511.91	391.78	277.17	181.09		
180.0	1113.07	983.34	844.02	706.98	567.99	422.66	286.27	160.45	57.87		
210.0	1147.69	1026.75	897.51	772.66	642.93	520.53	398.28	290.17	198.49		
240.0	1251.73	1145.42	1032.43	920.27	807.29	689.43	577.58	466.07	368.69		
270.0	1286.20	1186.54	1078.28	970.66	860.93	744.21	628.63	521.01	422.66		
300.0	1280.34	1175.16	1066.41	950.34	836.71	718.04	605.06	491.10	390.31		
330.0	1180.53	1060.07	930.51	805.01	679.02	548.97	423.64	311.31	213.44		
360.0	1155.33	1027.23	895.39	754.29	610.42	471.59	327.89	197.51	87.13		
C/ γ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0		
0.0	22.43	18.04	16.58	15.12	14.47	13.82	13.49	13.49	13.49		
30.0	142.57	102.09	72.83	26.99	30.89	24.55	18.21	14.31	13.98		
60.0	258.47	209.87	167.11	131.03	39.99	28.12	46.33	35.93	26.50		
90.0	310.17	257.99	210.36	170.85	121.27	37.88	34.30	53.48	40.15		
120.0	237.34	191.50	151.35	113.47	37.06	32.51	43.89	33.16	24.38		
150.0	120.46	84.86	54.95	27.47	26.82	20.32	16.09	14.31	14.63		
180.0	20.32	18.37	16.91	15.77	14.96	14.47	14.14	14.14	14.31		
210.0	135.41	99.16	63.24	27.64	32.19	22.92	16.91	13.82	13.49		
240.0	288.71	236.37	191.17	150.05	63.40	32.35	55.43	44.87	31.54		
270.0	341.71	285.46	235.72	190.36	122.41	39.18	41.94	64.70	45.68		
300.0	303.50	246.93	199.95	158.01	75.43	33.00	55.27	46.82	33.00		
330.0	141.43	102.09	62.59	28.29	33.33	23.90	17.72	13.98	13.66		
360.0	22.43	18.04	16.58	15.12	14.47	13.82	13.49	13.49	13.49		
C/ γ (°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0		
0.0	13.82	14.14	14.96	15.77	16.58	17.23	18.21	19.18	20.00		
30.0	14.31	14.96	15.77	16.58	17.39	18.04	18.53	19.51	19.67		
60.0	19.83	16.26	16.58	17.07	17.72	18.21	18.69	19.02	19.34		
90.0	27.47	20.48	17.23	17.56	18.21	18.86	19.18	19.67	20.32		
120.0	18.69	16.42	16.91	17.56	17.88	18.53	19.02	19.51	20.00		
150.0	14.63	15.28	16.09	16.91	17.72	18.37	19.18	20.00	20.48		
180.0	14.63	15.28	16.26	17.07	18.04	18.86	19.34	20.00	20.48		
210.0	13.49	13.98	14.47	15.28	15.77	16.58	17.72	18.69	19.67		
240.0	21.95	15.44	14.96	14.96	15.61	16.09	16.74	17.72	18.86		
270.0	30.72	20.97	15.77	15.61	15.93	16.58	17.56	18.37	19.67		
300.0	23.25	15.93	15.12	15.28	15.93	16.74	17.56	18.37	19.18		
330.0	13.82	14.14	14.96	15.77	16.42	17.23	18.04	19.02	20.00		
360.0	13.82	14.14	14.96	15.77	16.58	17.23	18.21	19.18	20.00		

5. Test Equipment

Equipment Name	Manufacturer	Model No.	Equipment No.	Calibration Due Date
2m Integrating Sphere	SENSING	SL-300	AOC-S-126	2026-04-13
Horizontal Distribution Photometer	SENSING	GMS1800D	AOC-S-124	2026-04-13
Standard Lamp	SENSING	240V/150W	AOC-S-151	2025-08-01
Digital power meter	HENGHE	WT310E	AOC-S-012	2026-04-13
Digital power meter	SENSING	UI2008	AOC-S-123	2026-04-13
Digital power meter	SENSING	UI2021	AOC-S-123	2026-04-13
DC source	OYHS	OYHS-Z120V-50A	AOC-S-062	2026-04-13
Variable frequency power supply	WOSEN	BP6005	AOC-S-129	2026-04-13
Variable frequency power supply	AIPUSI	KDF-500	AOC-S-130	2026-04-13
Oscilloscope	TEKTRONIX	MDO3012	AOC-S-028	2026-04-13

Photo Document

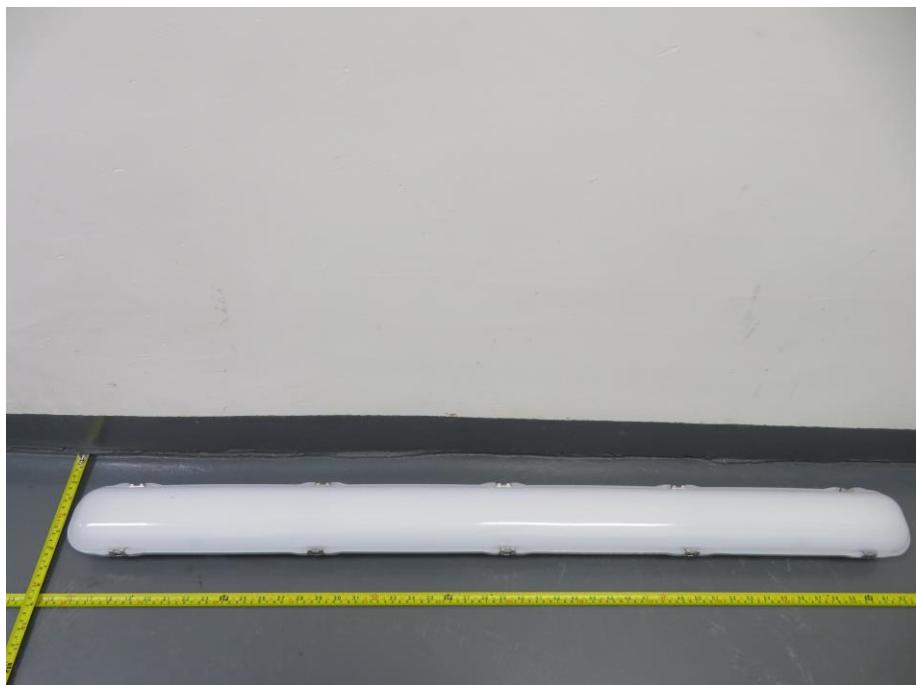


Fig.1

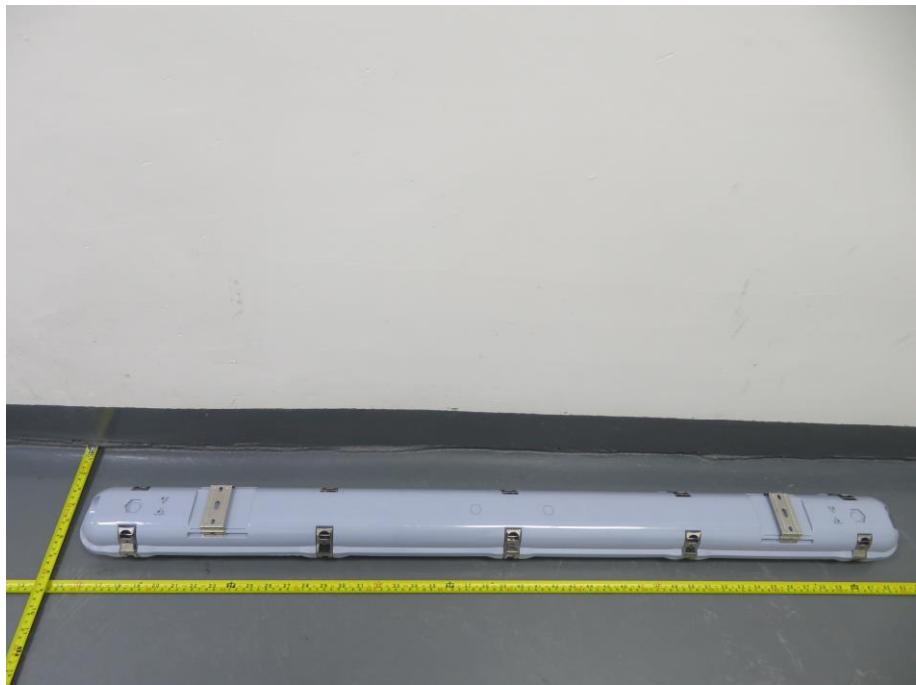


Fig.2



Fig.3

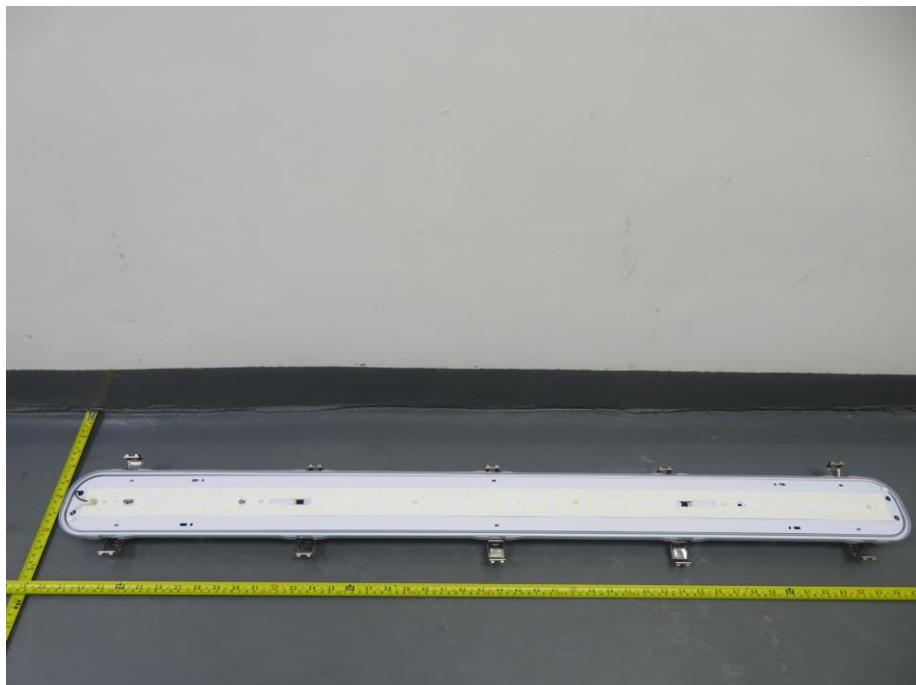


Fig.4

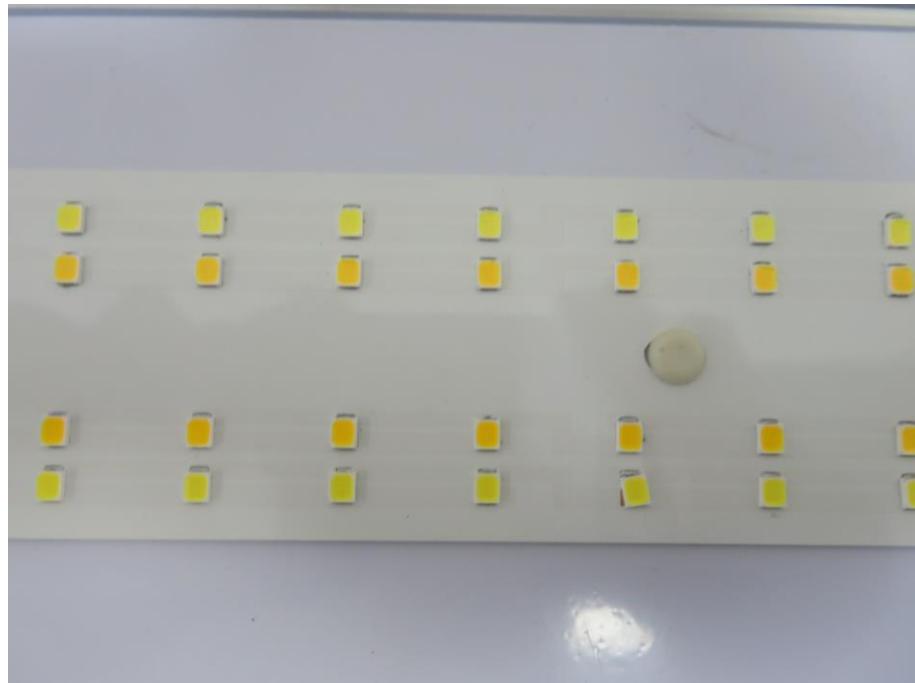


Fig.5

-- End of Report --

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