NATA LIGHTING CO.,LTD.
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Address:Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

NT

Client: NT
LumCAT: 61-0241
Luminaire: 92.70.458.00
Report No: 20250526-B014
Ballast type: AC

Test No: 20250526-C014	Voltage(V): 220.800
LampCAT: LUMINUS CXM-6	Current(A): 0.084
Lamp flux(lm): 999.0	Power (W): 10.300
Number of Lamps: 1	PF: 0.554
Length(mm): 50	Width(mm): 50
Phm Type: C	Height(mm): 24

Photometric Results

Lumens(lm): 907.73, Efficiency(%): 90.86% , Luminous Efficacy(lm/W): 88.13
Central intensity(cd): 1938.584, Maximum intensity(cd): 1938.584
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=36.2
[C90/270]Total=36.2
Field angle(10%Imax): [C0/180]Total=68.8
[C90/270]Total=68.8
Maximum s/h(1/2): C0_180=0.58 C90_270=0.58
Maximum s/h(1/4): C0_180=0.62 C90_270=0.62
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 90.86%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.888%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1938.584	0.000	0	0.00%	0.00%
1.0	1934.121	1.853	1.853	0.19%	0.20%
2.0	1919.399	5.531	7.384	0.55%	0.81%
3.0	1895.086	9.123	16.507	0.91%	1.82%
4.0	1862.246	12.577	29.084	1.26%	3.20%
5.0	1824.010	15.858	44.942	1.59%	4.95%
6.0	1777.248	18.926	63.868	1.89%	7.04%
7.0	1721.960	21.720	85.587	2.17%	9.43%
8.0	1669.802	24.274	109.861	2.43%	12.10%
9.0	1603.390	26.527	136.389	2.66%	15.03%
10.0	1539.974	28.446	164.835	2.85%	18.16%
11.0	1472.829	30.104	194.939	3.01%	21.48%
12.0	1409.081	31.503	226.443	3.15%	24.95%
13.0	1332.277	32.533	258.976	3.26%	28.53%
14.0	1251.342	33.070	292.046	3.31%	32.17%
15.0	1185.796	33.458	325.504	3.35%	35.86%
16.0	1100.878	33.506	359.01	3.35%	39.55%
17.0	1035.798	33.274	392.284	3.33%	43.22%
18.0	975.613	33.164	425.448	3.32%	46.87%
19.0	913.197	32.861	458.309	3.29%	50.49%
20.0	849.243	32.258	490.567	3.23%	54.04%
21.0	787.566	31.430	521.997	3.15%	57.51%
22.0	727.855	30.453	552.45	3.05%	60.86%
23.0	670.395	29.339	581.789	2.94%	64.09%
24.0	614.400	28.090	609.879	2.81%	67.19%
25.0	563.022	26.772	636.651	2.68%	70.14%
26.0	509.706	25.322	661.973	2.53%	72.93%
27.0	463.430	23.808	685.781	2.38%	75.55%
28.0	413.637	22.205	707.986	2.22%	78.00%
29.0	375.661	20.650	728.636	2.07%	80.27%
30.0	335.074	19.190	747.826	1.92%	82.38%
31.0	295.899	17.559	765.385	1.76%	84.32%
32.0	269.008	16.184	781.569	1.62%	86.10%
33.0	234.509	14.834	796.403	1.48%	87.74%
34.0	207.518	13.377	809.78	1.34%	89.21%
35.0	174.185	11.854	821.634	1.19%	90.52%
36.0	147.207	10.233	831.868	1.02%	91.64%
37.0	125.771	8.903	840.771	0.89%	92.62%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	106.893	7.766	848.537	0.78%	93.48%
39.0	90.340	6.732	855.269	0.67%	94.22%
40.0	75.992	5.801	861.07	0.58%	94.86%
41.0	63.961	4.984	866.053	0.50%	95.41%
42.0	53.217	4.257	870.311	0.43%	95.88%
43.0	44.930	3.636	873.946	0.36%	96.28%
44.0	37.509	3.112	877.058	0.31%	96.62%
45.0	30.908	2.629	879.687	0.26%	96.91%
46.0	26.545	2.247	881.934	0.22%	97.16%
47.0	22.362	1.945	883.879	0.19%	97.37%
48.0	19.098	1.676	885.555	0.17%	97.56%
49.0	16.507	1.462	887.017	0.15%	97.72%
50.0	14.575	1.296	888.313	0.13%	97.86%
51.0	13.056	1.169	889.482	0.12%	97.99%
52.0	11.890	1.070	890.553	0.11%	98.11%
53.0	11.144	1.002	891.555	0.10%	98.22%
54.0	10.445	0.952	892.506	0.10%	98.32%
55.0	9.945	0.910	893.416	0.09%	98.42%
56.0	9.612	0.884	894.3	0.09%	98.52%
57.0	9.306	0.865	895.165	0.09%	98.62%
58.0	8.986	0.846	896.011	0.08%	98.71%
59.0	8.646	0.824	896.835	0.08%	98.80%
60.0	8.220	0.797	897.632	0.08%	98.89%
61.0	7.720	0.761	898.393	0.08%	98.97%
62.0	7.168	0.717	899.11	0.07%	99.05%
63.0	6.661	0.673	899.783	0.07%	99.12%
64.0	6.255	0.634	900.417	0.06%	99.19%
65.0	5.902	0.602	901.018	0.06%	99.26%
66.0	5.489	0.568	901.587	0.06%	99.32%
67.0	5.089	0.532	902.118	0.05%	99.38%
68.0	4.829	0.502	902.621	0.05%	99.44%
69.0	4.470	0.474	903.095	0.05%	99.49%
70.0	4.137	0.442	903.537	0.04%	99.54%
71.0	3.844	0.412	903.95	0.04%	99.58%
72.0	3.530	0.383	904.333	0.04%	99.63%
73.0	3.257	0.355	904.688	0.04%	99.67%
74.0	2.984	0.328	905.016	0.03%	99.70%
75.0	2.711	0.301	905.317	0.03%	99.73%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	2.431	0.273	905.59	0.03%	99.76%
77.0	2.198	0.247	905.837	0.02%	99.79%
78.0	1.952	0.222	906.059	0.02%	99.82%
79.0	1.765	0.200	906.259	0.02%	99.84%
80.0	1.599	0.181	906.44	0.02%	99.86%
81.0	1.432	0.164	906.604	0.02%	99.88%
82.0	1.319	0.149	906.753	0.01%	99.89%
83.0	1.279	0.141	906.895	0.01%	99.91%
84.0	1.199	0.135	907.03	0.01%	99.92%
85.0	1.146	0.128	907.158	0.01%	99.94%
86.0	1.106	0.123	907.281	0.01%	99.95%
87.0	1.066	0.119	907.399	0.01%	99.96%
88.0	1.006	0.113	907.513	0.01%	99.98%
89.0	0.979	0.109	907.622	0.01%	99.99%
90.0	0.959	0.106	907.728	0.01%	100.00%

Zonal flux distribution table

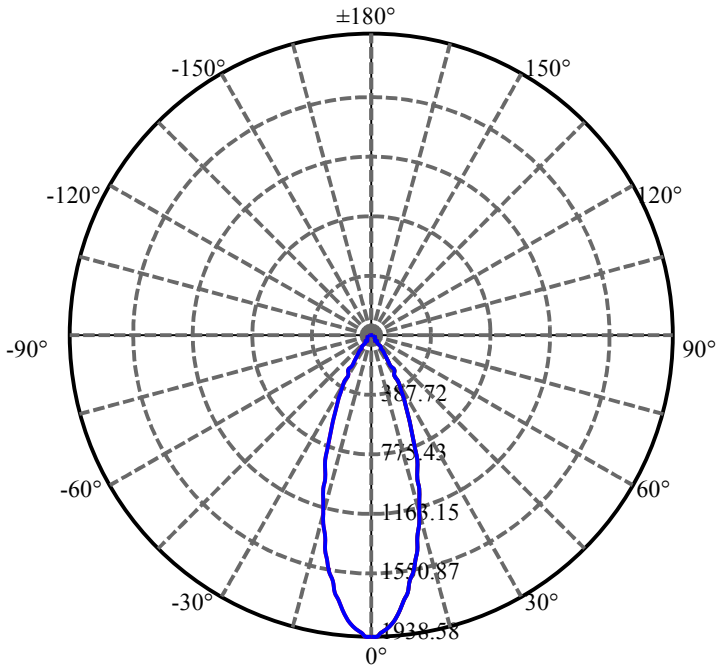
ZONAL LUMEN SUMMARY

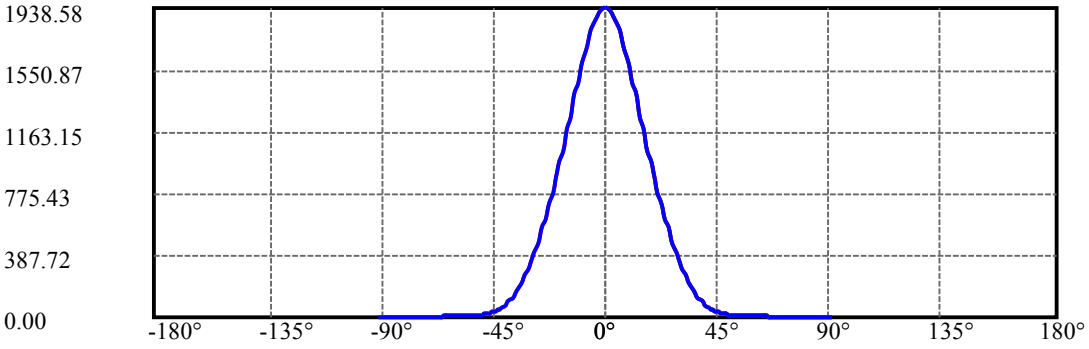
Zone	Lumens	%Lamp	%Fixt
0-30	747.83	74.86%	82.38%
0-40	861.07	86.19%	94.86%
0-60	897.63	89.85%	98.89%
0-90	907.62	90.85%	99.99%
0-120	907.62	90.85%	99.99%
0-180	907.73	90.86%	100.00%
60-90	9.99	1.00%	1.10%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-28.88	726.18	72.69%	80.00%

ZONAL LUMEN SUMMARY

0-10	164.84
10-20	325.73
20-30	257.26
30-40	113.24
40-50	27.24
50-60	9.32
60-70	5.91
70-80	2.90
80-90	1.18
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

Light Distribution Curve [Unit:cd]





C0(Max):

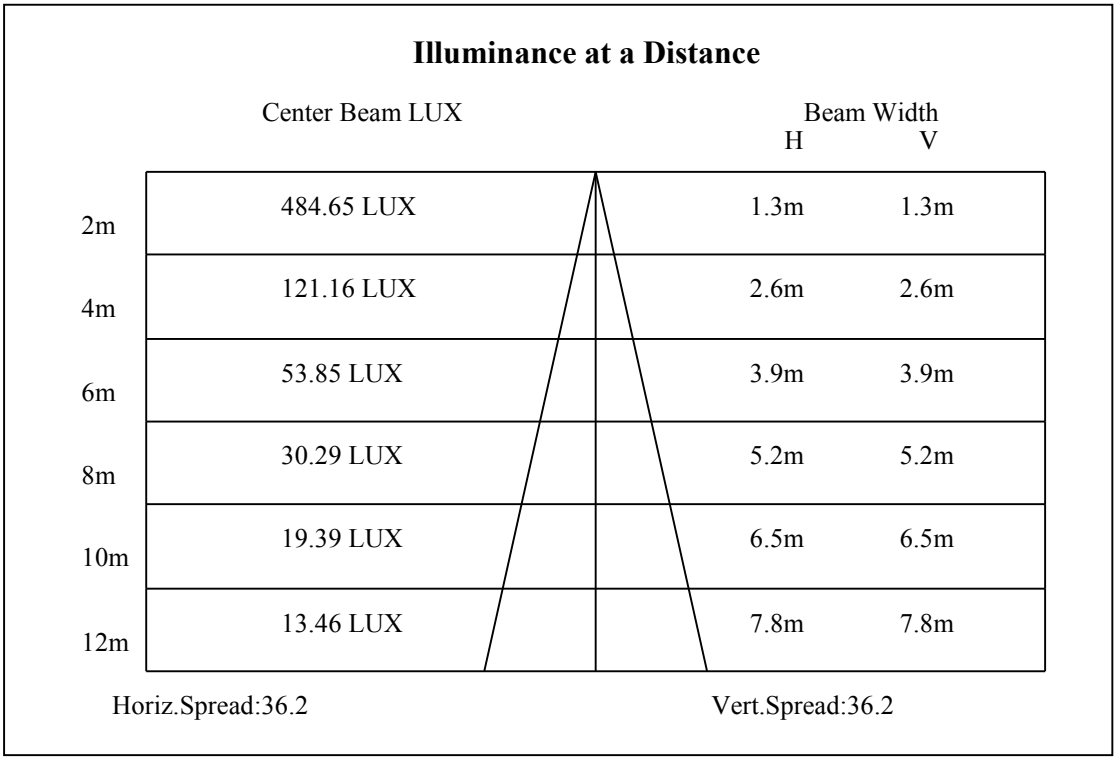
C0/C180:

C90/C270:

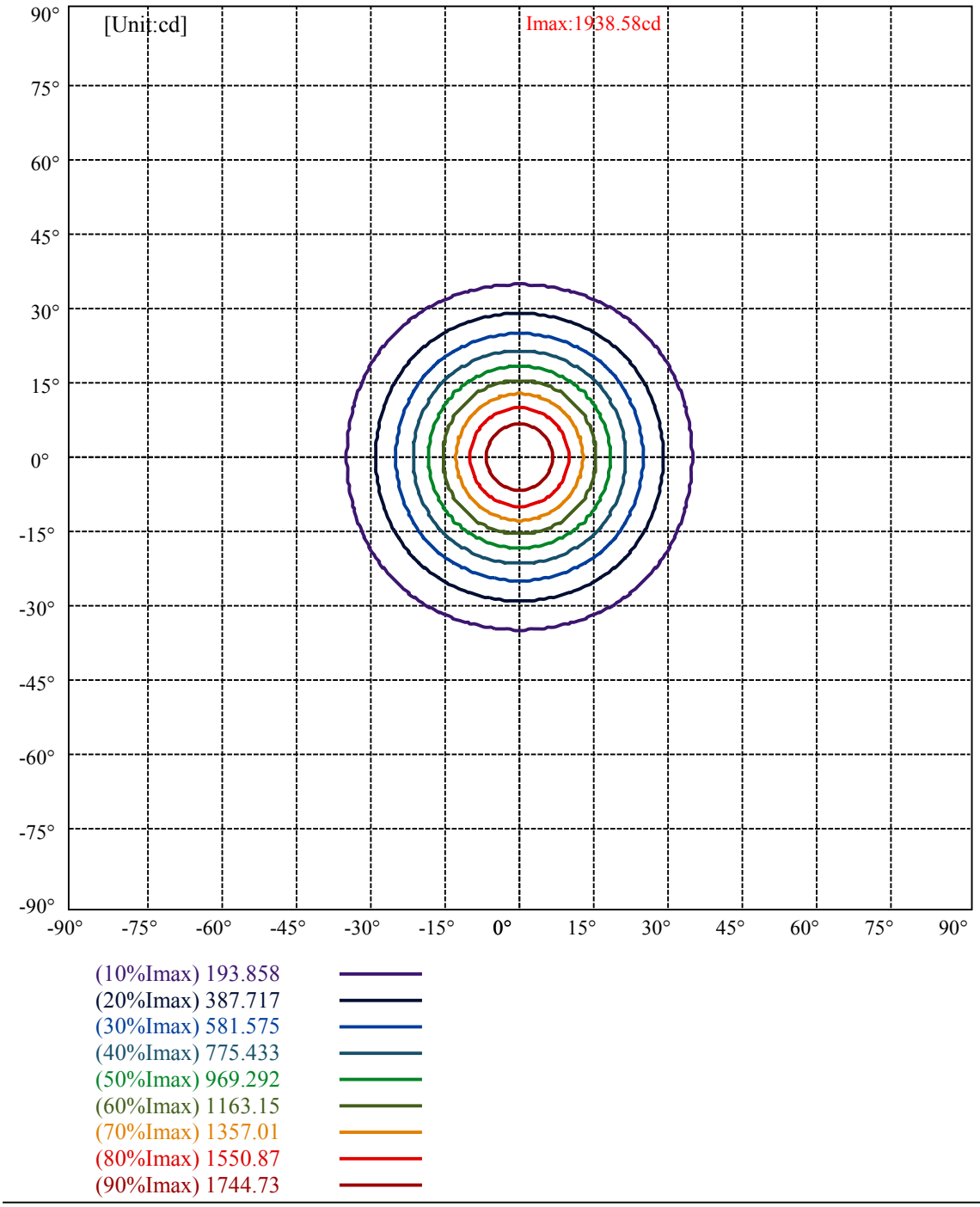
Field angle(10%Imax):C0/180Left:34.4 Right:34.4
:C90/270Left:34.4 Right:34.4

Beam Angle(50%Imax):C0/180Left:18.1 Right:18.1
:C90/270Left:18.1 Right:18.1

Lux distance Curve



ISO-Intensity(V-H)

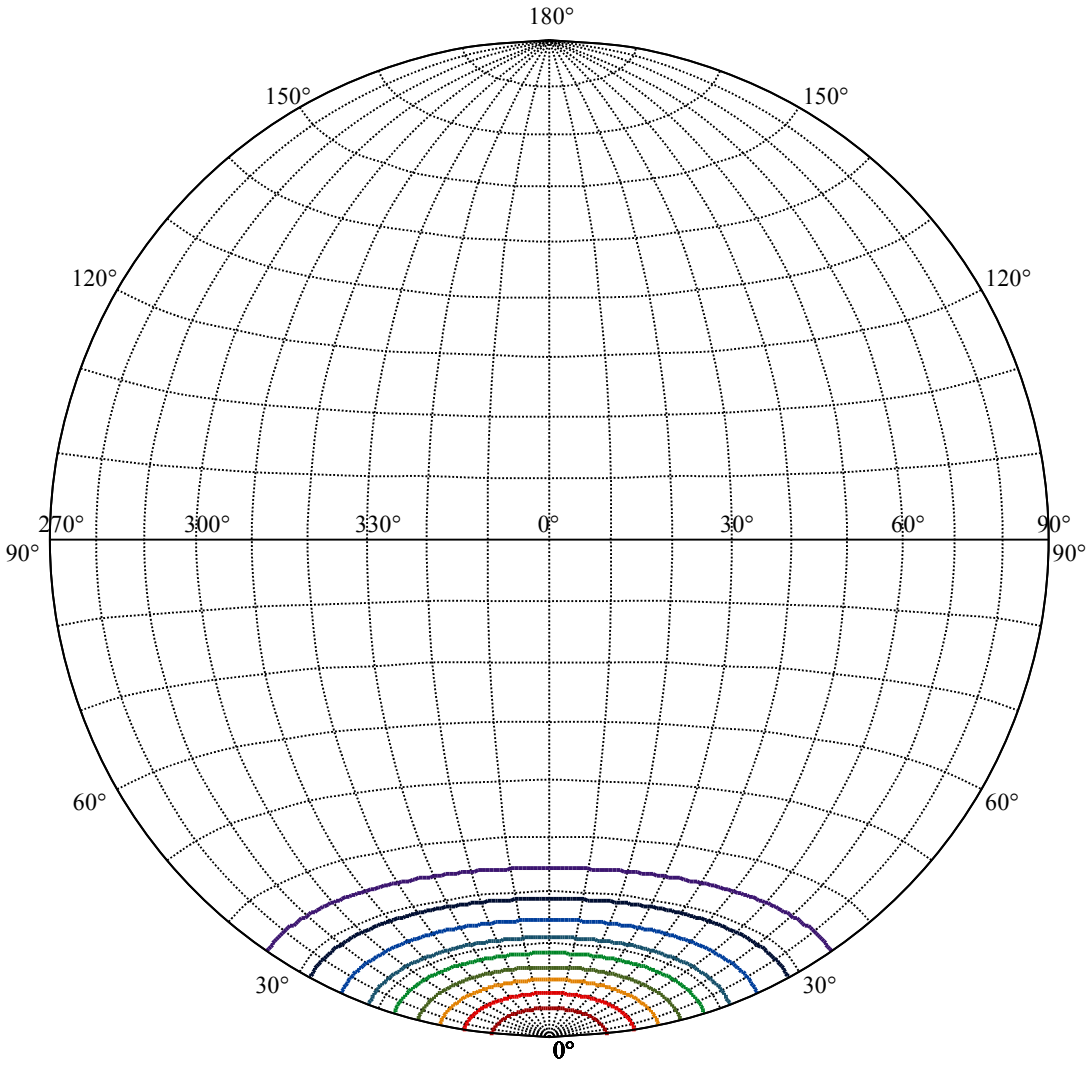


Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2025/5/26
Humidity(%): 60.0%

Operator: NT
Distance(m): 7.30

ISO candela diagram on circular web



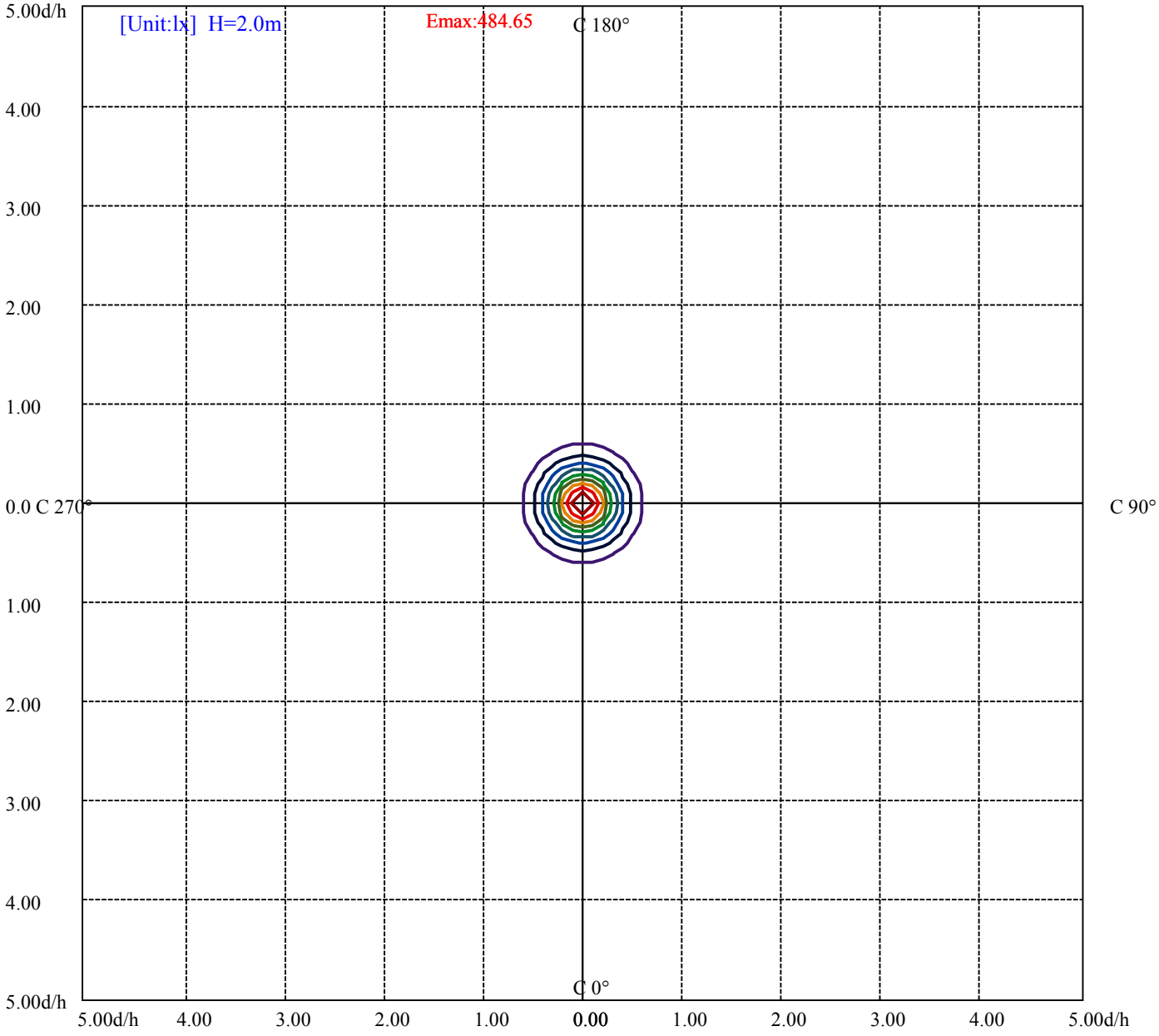
House [Unit:cd] Road

Imax:1938.58

(10%Imax) 193.858
(20%Imax) 387.717
(30%Imax) 581.575
(40%Imax) 775.433
(50%Imax) 969.292
(60%Imax) 1163.15
(70%Imax) 1357.01
(80%Imax) 1550.87
(90%Imax) 1744.73

NT NT 61-0241

ISO illuminance diagram

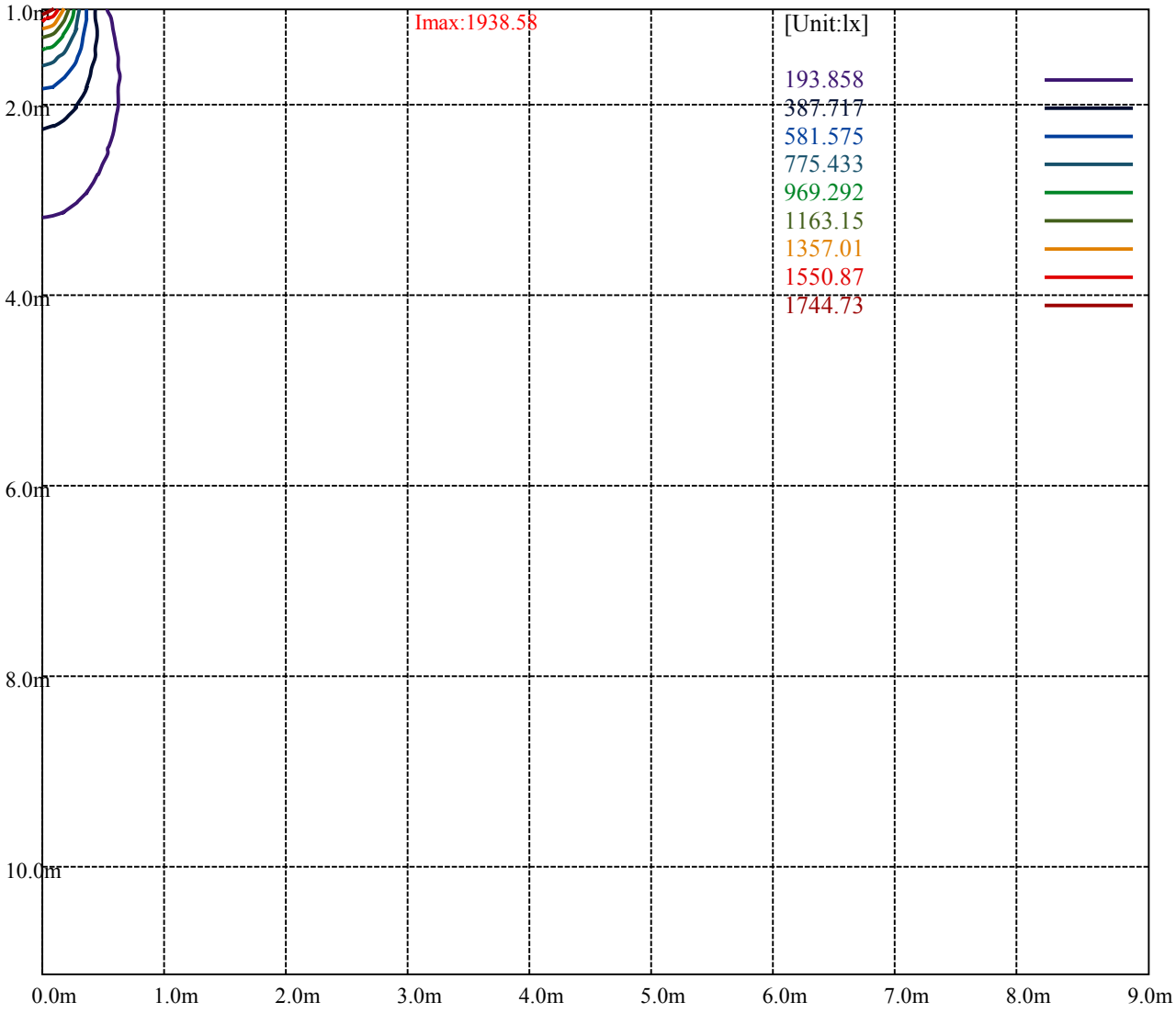


Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2025/5/26
Humidity(%): 60.0%

Operator: NT
Distance(m): 7.30

Space ISO Lux diagram



Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2025/5/26
Humidity(%): 60.0%

Operator: NT
Distance(m): 7.30

Luminance Limitting Curve(no luminous side)

Luminance Table

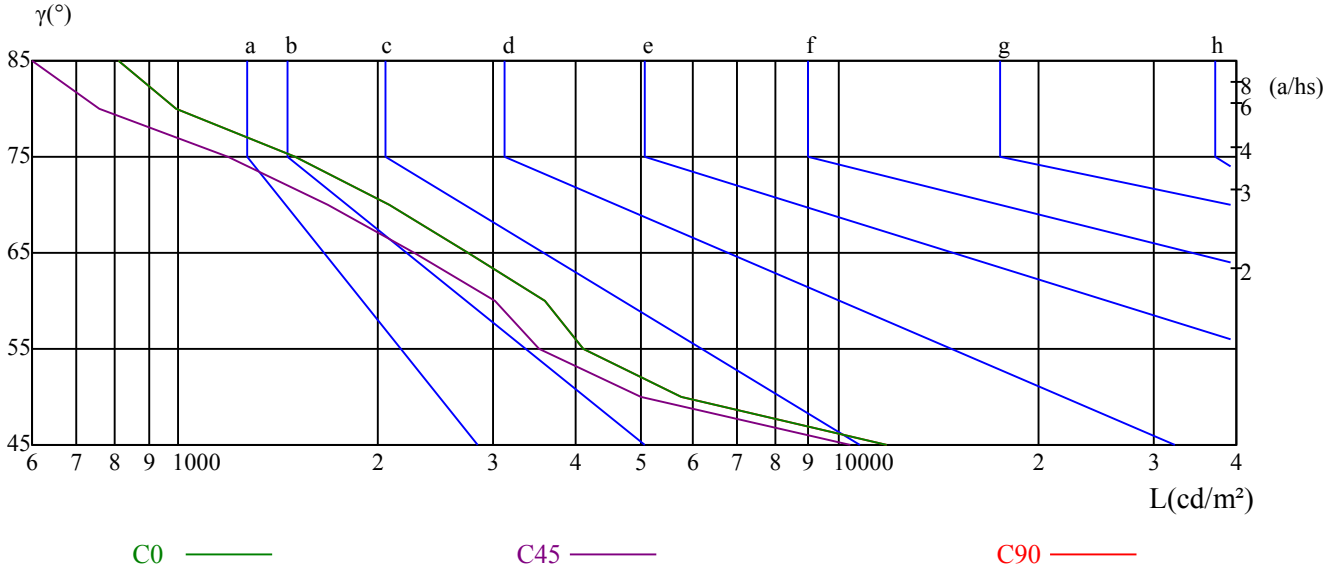
γ	45	50	55	60	65	70	75	80	85
C0	11814	5769	4115	3591	2753	2086	1501	989	811
C45	10415	5014	3522	3022	2275	1689	1186	759	600
C90	11814	5769	4115	3591	2753	2086	1501	989	811

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5586	5586	5586	4190	4190	4190	5258	5258	5258

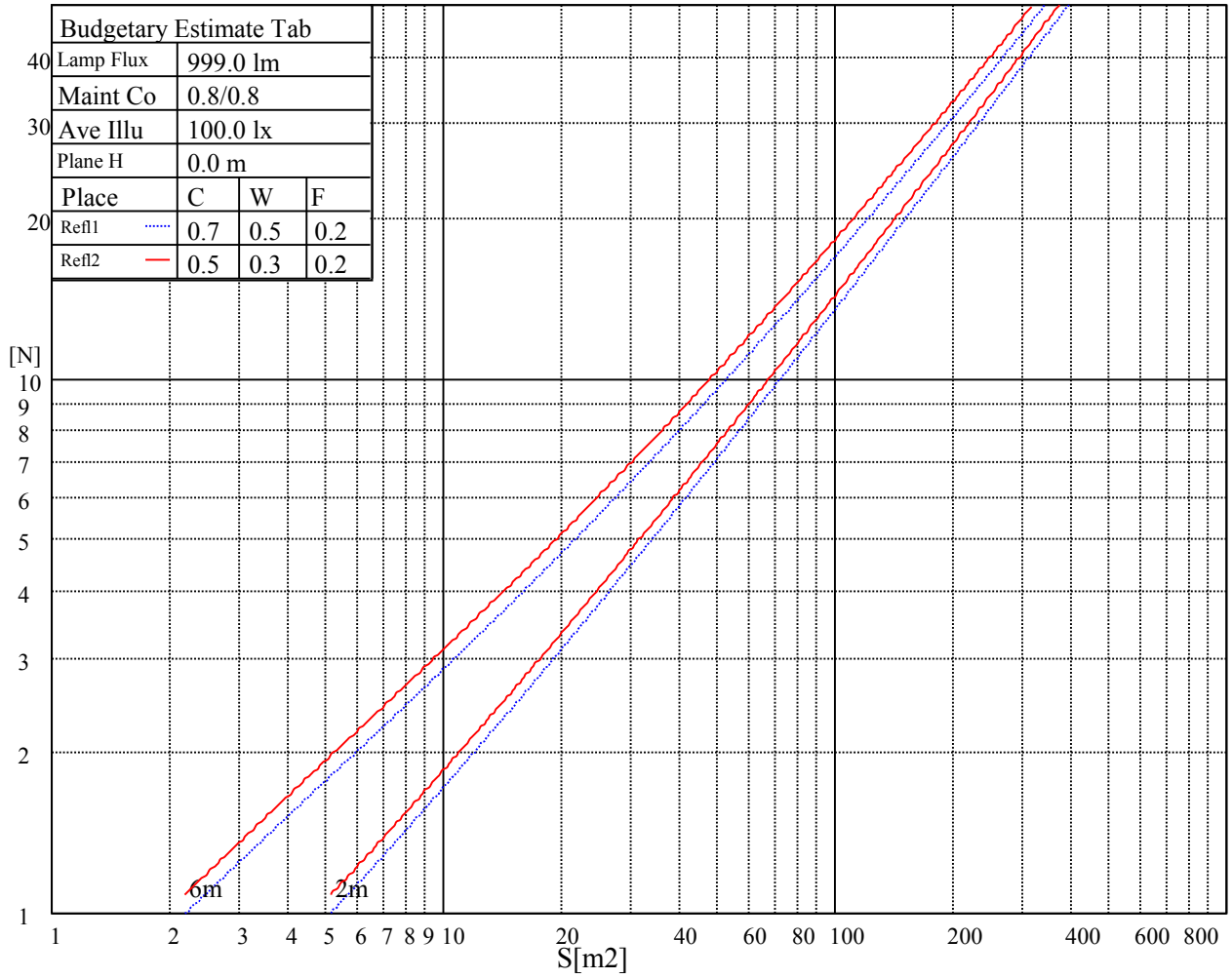
Glare Table

Glare	Quality	Service Values Illuminance(lx)							
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 Limitting Curve



Budgetary Estimate Table



Equipment: GMS 1800
Temperature(°C): 25.0

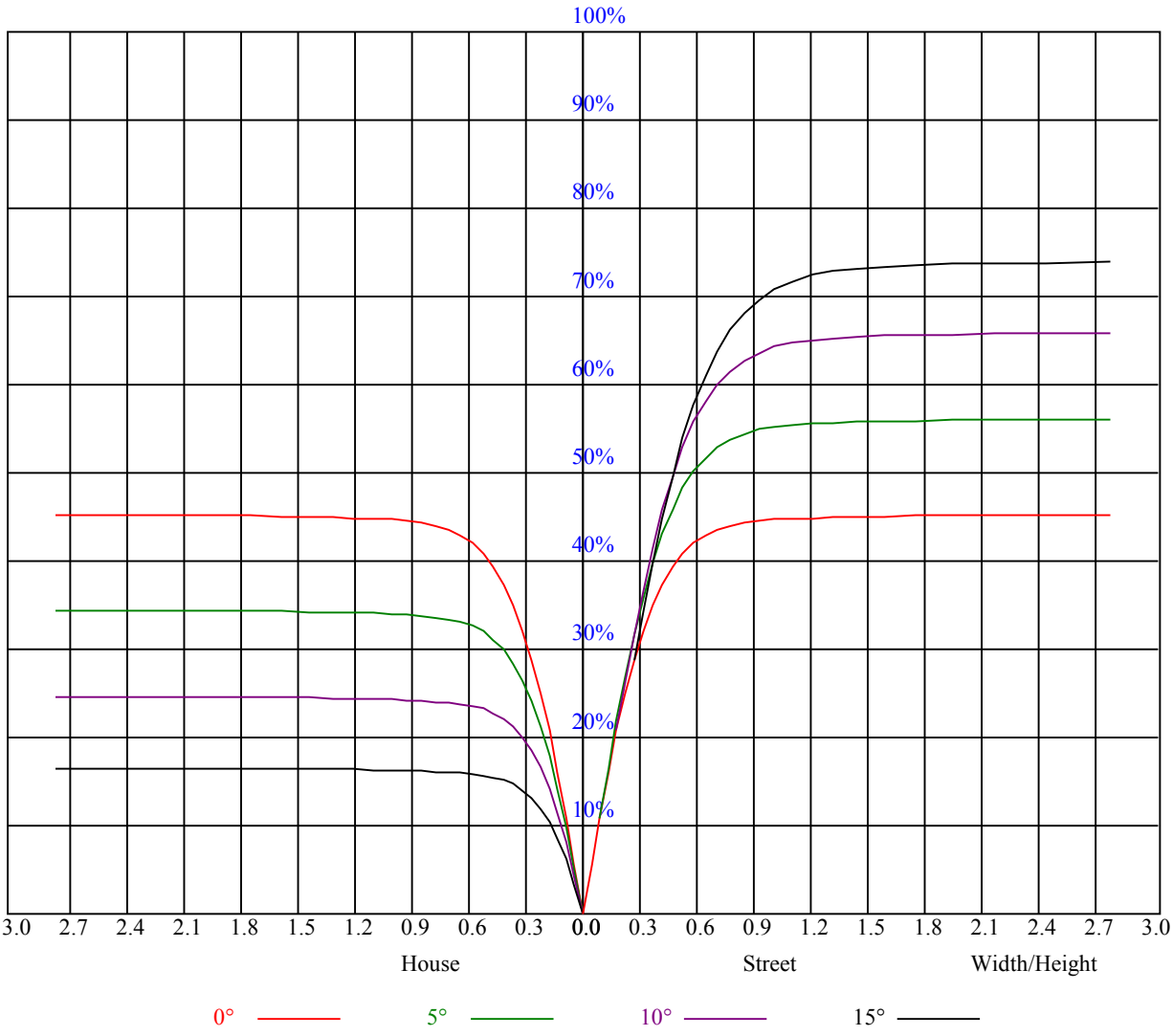
Date: 2025/5/26
Humidity(%): 60.0%

Operator: NT
Distance(m): 7.30

Utilization factor table for indoor luminaire

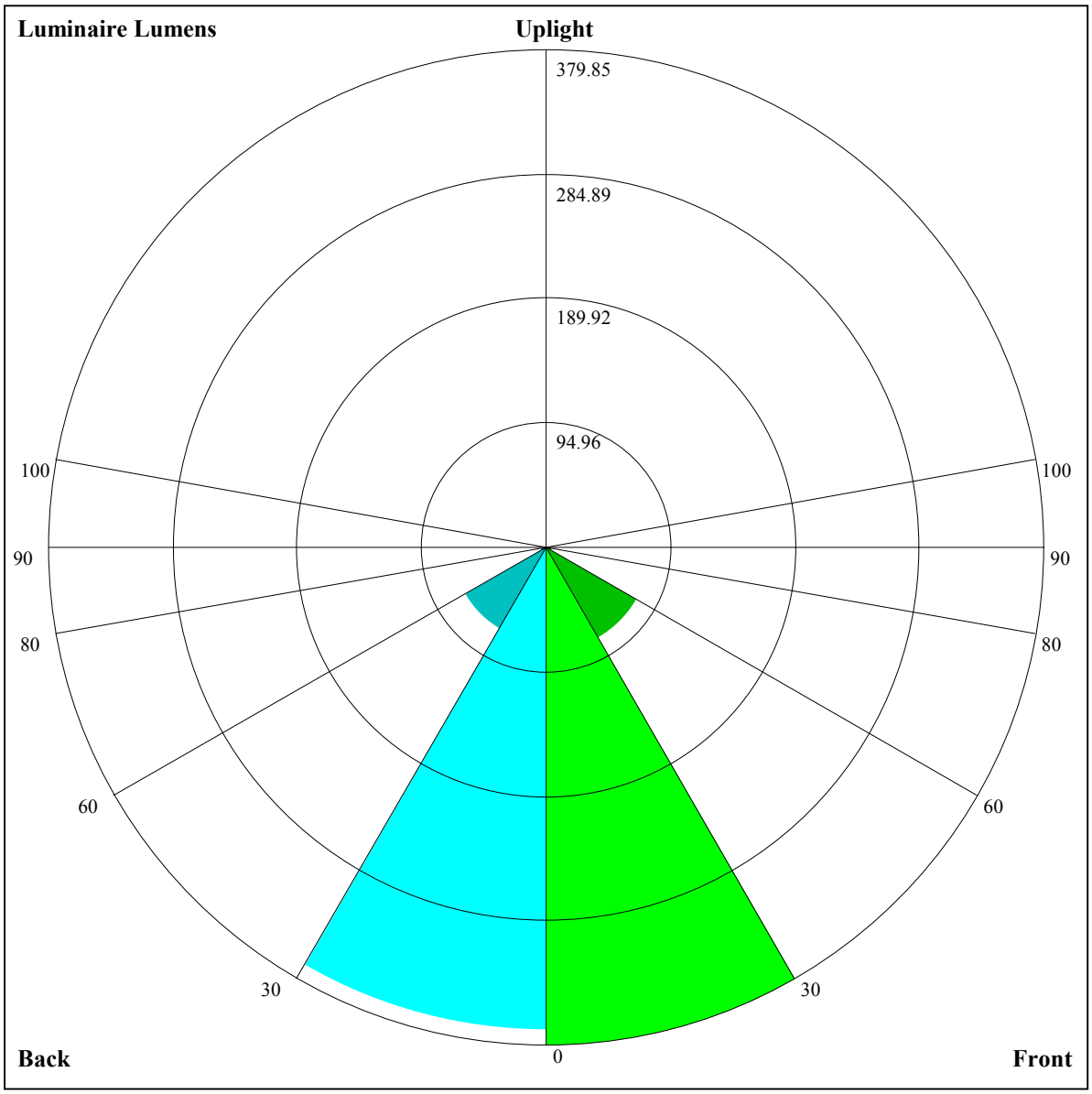
RHOCC	80			70			50			30			10			0
RHOW	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	COEFFCIENTS OF UTILIZATION RHOFC=20 CU															
0	1.08	1.08	1.08	1.06	1.06	1.06	1.01	1.01	1.01	0.97	0.97	0.97	0.93	0.93	0.93	0.91
1	1.01	0.99	0.97	0.99	0.97	0.96	0.96	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86
2	0.95	0.92	0.89	0.93	0.90	0.88	0.91	0.88	0.86	0.88	0.86	0.84	0.85	0.84	0.82	0.81
3	0.89	0.85	0.82	0.88	0.84	0.81	0.86	0.83	0.80	0.84	0.81	0.79	0.82	0.80	0.78	0.76
4	0.85	0.80	0.77	0.84	0.79	0.76	0.82	0.78	0.75	0.80	0.77	0.74	0.78	0.76	0.74	0.72
5	0.80	0.75	0.72	0.79	0.75	0.72	0.78	0.74	0.71	0.76	0.73	0.70	0.75	0.72	0.70	0.68
6	0.76	0.71	0.68	0.75	0.71	0.67	0.74	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.66	0.65
7	0.72	0.67	0.64	0.72	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.63	0.69	0.65	0.63	0.62
8	0.69	0.64	0.61	0.68	0.64	0.61	0.68	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.60	0.59
9	0.66	0.61	0.58	0.65	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.57	0.63	0.60	0.57	0.56
10	0.63	0.58	0.55	0.63	0.58	0.55	0.62	0.58	0.55	0.61	0.58	0.55	0.61	0.57	0.55	0.54

Coefficient Utilization Curve



Equipment: GMS 1800	Date: 2025/5/26	Operator: NT
Temperature(°C): 25.0	Humidity(%): 60.0%	Distance(m): 7.30

LCS Graph



Luminaire Lumens:

FL=379.85,FM=79.42,FH=4.56,FVH=0.68

BL=368.5,BM=71.85,BH=4.2,BVH=0.6

UL=0,UH=0

BUG Rating:B1-U0-G0

Intensity data(cd)

C/γ(°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
0.0	1944.71	1937.25	1919.67	1891.95	1856.25	1813.09	1762.46	1707.04	1647.35
45.0	1942.58	1935.12	1918.07	1887.69	1849.86	1813.62	1764.06	1697.98	1651.62
90.0	1923.93	1898.35	1860.51	1817.35	1763.53	1706.51	1643.62	1582.34	1518.92
135.0	1943.11	1928.19	1904.21	1870.11	1828.54	1777.91	1719.30	1657.48	1593.00
180.0	1944.71	1944.18	1933.52	1912.21	1881.83	1842.93	1815.75	1741.14	1704.91
225.0	1942.58	1938.85	1924.46	1903.68	1872.77	1832.80	1784.84	1729.95	1669.20
270.0	1923.93	1940.98	1947.38	1942.58	1929.79	1918.07	1876.50	1854.65	1810.42
315.0	1943.11	1950.04	1947.38	1935.12	1915.40	1887.16	1851.45	1805.09	1762.99
360.0	1944.71	1937.25	1919.67	1891.95	1856.25	1813.09	1762.46	1707.04	1647.35

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	1585.00	1517.86	1449.11	1377.17	1302.03	1243.95	1141.10	1037.18	1037.18
45.0	1591.40	1529.58	1465.10	1400.62	1332.94	1264.20	1194.92	1125.11	1058.50
90.0	1452.31	1384.10	1315.89	1274.32	1174.67	1036.65	1036.65	981.60	915.90
135.0	1522.66	1451.25	1377.17	1333.48	1258.34	1181.07	1106.46	1034.52	966.84
180.0	1641.49	1572.21	1499.74	1426.20	1349.46	1272.19	1193.86	1117.12	1046.24
225.0	1603.66	1534.38	1460.84	1384.63	1308.43	1231.16	1185.86	1042.25	1042.25
270.0	1736.88	1700.11	1638.29	1572.21	1502.40	1429.40	1353.73	1274.32	1196.52
315.0	1693.72	1630.30	1576.48	1504.00	1429.93	1352.13	1273.79	1194.92	1022.95
360.0	1585.00	1517.86	1449.11	1377.17	1302.03	1243.95	1141.10	1037.18	1037.18

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	969.72	907.16	843.74	784.70	726.66	670.55	613.90	559.55	507.05
45.0	992.42	927.94	866.12	804.31	745.69	688.13	632.71	578.89	528.80
90.0	851.84	789.60	729.17	671.19	615.87	562.69	511.90	462.66	417.47
135.0	900.23	836.81	776.60	719.57	663.09	608.20	553.84	502.68	453.12
180.0	976.43	911.95	849.60	788.85	730.23	673.75	617.79	563.44	510.68
225.0	971.00	903.21	837.93	774.62	712.43	653.23	595.89	540.15	486.91
270.0	1120.32	1047.31	976.43	907.69	841.61	778.73	718.51	660.42	615.66
315.0	1022.95	981.60	914.35	849.60	787.25	727.89	670.65	636.39	557.95
360.0	969.72	907.16	843.74	784.70	726.66	670.55	613.90	559.55	507.05

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	457.02	409.53	365.20	323.90	300.82	265.17	220.14	203.09	176.60
45.0	498.95	432.34	405.70	363.60	323.63	286.86	273.00	266.08	191.26
90.0	375.16	334.82	297.36	275.67	229.36	211.35	183.26	157.84	134.82
135.0	406.23	361.47	319.37	296.45	267.14	267.14	192.00	165.84	142.71
180.0	480.30	411.56	383.85	341.22	284.73	269.81	269.81	192.38	165.47
225.0	436.39	389.23	353.31	303.75	265.44	237.46	199.46	176.34	150.86
270.0	549.05	496.29	455.79	397.17	360.93	319.37	279.93	273.54	236.98
315.0	504.34	473.85	424.72	378.84	335.14	294.91	258.46	225.04	194.77
360.0	457.02	409.53	365.20	323.90	300.82	265.17	220.14	203.09	176.60

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	152.89	131.57	112.92	96.30	81.37	68.32	57.34	48.07	40.45
45.0	165.31	142.44	121.61	103.17	86.97	75.35	60.59	50.20	43.16
90.0	115.05	97.47	82.28	68.90	57.55	48.17	40.29	33.63	27.98
135.0	122.25	104.50	88.51	74.82	62.99	52.97	44.18	36.77	30.54
180.0	141.48	120.60	102.53	86.60	72.85	60.96	50.84	42.58	38.21
225.0	128.32	108.29	90.86	76.52	64.37	54.04	45.24	37.78	31.65
270.0	185.40	159.39	135.84	114.84	96.51	80.68	67.68	60.91	47.11
315.0	166.96	141.91	120.60	101.57	85.32	71.20	59.58	49.51	40.98
360.0	152.89	131.57	112.92	96.30	81.37	68.32	57.34	48.07	40.45

Intensity data(cd)

C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	33.68	28.24	23.71	20.20	17.37	15.08	13.48	12.31	11.62
45.0	35.86	29.90	25.10	21.42	18.65	16.57	15.19	14.12	13.32
90.0	23.23	19.56	16.84	14.87	13.32	12.20	11.40	10.87	10.55
135.0	25.47	21.42	18.33	16.68	13.91	13.00	11.78	10.71	10.34
180.0	29.79	26.96	22.75	19.45	16.79	14.71	13.00	11.72	10.82
225.0	26.75	22.81	19.50	16.89	14.81	13.16	11.99	11.03	10.60
270.0	38.74	34.53	28.67	23.98	20.30	17.37	14.87	12.90	11.46
315.0	33.73	28.94	23.98	19.29	16.89	14.49	12.74	11.46	10.44
360.0	33.68	28.24	23.71	20.20	17.37	15.08	13.48	12.31	11.62

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	10.82	10.50	10.28	10.28	10.34	10.39	10.18	9.43	8.42
45.0	12.68	12.10	11.51	10.82	10.13	9.49	8.90	8.31	7.73
90.0	10.13	9.54	9.27	8.85	8.37	7.83	7.35	6.98	6.50
135.0	9.86	9.49	9.11	8.74	8.37	7.94	7.57	7.19	6.66
180.0	10.07	9.43	8.95	8.63	8.31	7.99	7.57	7.25	6.87
225.0	9.86	9.54	9.43	9.38	9.22	9.01	8.37	7.51	6.77
270.0	10.39	9.65	9.27	9.01	8.74	8.42	8.05	7.67	7.30
315.0	9.75	9.33	9.06	8.74	8.42	8.10	7.78	7.41	7.09
360.0	10.82	10.50	10.28	10.28	10.34	10.39	10.18	9.43	8.42

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	7.30	6.66	6.29	5.81	5.44	5.17	4.90	4.64	4.37
45.0	7.25	6.82	6.50	6.08	5.44	5.22	4.85	4.48	4.21
90.0	6.02	5.70	5.33	4.90	4.53	4.26	3.94	3.62	3.30
135.0	6.23	5.92	5.54	5.17	4.74	4.42	4.21	3.73	3.57
180.0	6.50	6.08	5.86	5.38	5.01	4.80	4.42	4.05	3.68
225.0	6.39	6.02	5.65	5.22	4.90	4.64	4.26	4.00	3.62
270.0	6.93	6.55	6.08	5.76	5.44	5.12	4.64	4.32	4.05
315.0	6.66	6.29	5.97	5.60	5.22	5.01	4.53	4.26	3.94
360.0	7.30	6.66	6.29	5.81	5.44	5.17	4.90	4.64	4.37

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	4.16	3.94	3.62	3.36	2.98	2.72	2.24	2.08	1.87
45.0	3.84	3.52	3.25	2.98	2.72	2.45	2.18	2.08	1.87
90.0	3.09	2.82	2.66	2.40	2.18	1.97	1.81	1.60	1.49
135.0	3.25	2.93	2.72	2.45	2.18	1.92	1.76	1.55	1.39
180.0	3.41	3.14	2.82	2.50	2.29	2.08	1.87	1.65	1.49
225.0	3.30	2.98	2.77	2.50	2.08	1.92	1.71	1.60	1.44
270.0	3.73	3.41	3.04	2.77	2.56	2.29	2.03	1.81	1.65
315.0	3.46	3.30	2.98	2.72	2.45	2.24	2.03	1.76	1.60
360.0	4.16	3.94	3.62	3.36	2.98	2.72	2.24	2.08	1.87

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	1.65	1.49	1.49	1.49	1.39	1.33	1.28	1.28	1.28
45.0	1.71	1.55	1.49	1.39	1.33	1.33	1.28	1.23	1.17
90.0	1.44	1.33	1.33	1.23	1.17	1.23	1.12	1.07	1.07
135.0	1.28	1.23	1.17	1.12	1.07	1.01	1.01	0.96	0.85
180.0	1.33	1.23	1.17	1.07	1.01	0.96	0.91	0.85	0.85
225.0	1.28	1.23	1.17	1.12	1.07	1.01	1.01	0.91	0.91
270.0	1.39	1.23	1.17	1.07	1.01	0.96	0.91	0.80	0.80
315.0	1.39	1.28	1.23	1.12	1.12	1.01	1.01	0.96	0.91
360.0	1.65	1.49	1.49	1.49	1.39	1.33	1.28	1.28	1.28

Intensity data(cd)

C/γ(°)	90.0
0.0	1.23
45.0	1.23
90.0	1.07
135.0	0.85
180.0	0.75
225.0	0.91
270.0	0.80
315.0	0.85
360.0	1.23