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

Nata

Client: NT
LumCAT: 11-0162-S2-MB_69-0026-2
Luminaire:
Report No: 20260309-B004
Ballast type: DC

Test No: 20260309-C004	Voltage(V): 43.060
LampCAT: LUMILEDS 2835*2	Current(A): 0.214
Lamp flux(lm): 1037.0	Power (W): 9.214
Number of Lamps: 1	PF: 0.000
Length(mm): 21	Width(mm): 280
Phm Type: C	Height(mm): 13

Photometric Results

Lumens(lm): 844.89, Efficiency(%): 81.48% , Luminous Efficacy(lm/W): 91.70
Central intensity(cd): 2158.975, Maximum intensity(cd): 2234.490
Angle of maximum intensity: C=180.0 γ=4.0
Beam Angle(50%Imax): [C0/180]Total=36.2
[C90/270]Total=32.1
Field angle(10%Imax): [C0/180]Total=59.7
[C90/270]Total=57.7
Maximum s/h(1/2): C0_180=0.73 C90_270=0.51
Maximum s/h(1/4): C0_180=0.68 C90_270=0.55
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 81.31%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 99.655%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2136.635	0.000	0	0.00%	0.00%
1.0	2132.178	2.043	2.043	0.20%	0.24%
2.0	2117.075	6.099	8.141	0.59%	0.96%
3.0	2092.585	10.068	18.21	0.97%	2.16%
4.0	2059.232	13.897	32.107	1.34%	3.80%
5.0	2017.594	17.538	49.645	1.69%	5.88%
6.0	1943.490	20.817	70.462	2.01%	8.34%
7.0	1884.001	23.757	94.219	2.29%	11.15%
8.0	1831.166	26.589	120.808	2.56%	14.30%
9.0	1765.977	29.153	149.961	2.81%	17.75%
10.0	1691.831	31.292	181.253	3.02%	21.45%
11.0	1602.403	32.916	214.169	3.17%	25.35%
12.0	1518.177	34.112	248.281	3.29%	29.39%
13.0	1443.743	35.151	283.432	3.39%	33.55%
14.0	1357.587	35.857	319.288	3.46%	37.79%
15.0	1273.981	36.127	355.416	3.48%	42.07%
16.0	1184.574	36.025	391.44	3.47%	46.33%
17.0	1101.429	35.599	427.04	3.43%	50.54%
18.0	1019.894	34.976	462.016	3.37%	54.68%
19.0	940.482	34.107	496.122	3.29%	58.72%
20.0	864.133	33.029	529.152	3.19%	62.63%
21.0	790.029	31.763	560.915	3.06%	66.39%
22.0	721.106	30.367	591.282	2.93%	69.98%
23.0	653.163	28.836	620.118	2.78%	73.40%
24.0	587.150	27.118	647.235	2.62%	76.61%
25.0	523.471	25.253	672.488	2.44%	79.59%
26.0	469.882	23.448	695.937	2.26%	82.37%
27.0	423.110	21.847	717.784	2.11%	84.96%
28.0	344.773	19.441	737.225	1.87%	87.26%
29.0	301.415	16.906	754.131	1.63%	89.26%
30.0	252.551	14.957	769.088	1.44%	91.03%
31.0	201.326	12.631	781.719	1.22%	92.52%
32.0	168.472	10.594	792.313	1.02%	93.78%
33.0	129.660	8.783	801.096	0.85%	94.82%
34.0	102.061	7.013	808.109	0.68%	95.65%
35.0	78.546	5.609	813.718	0.54%	96.31%
36.0	61.513	4.460	818.177	0.43%	96.84%
37.0	46.924	3.537	821.714	0.34%	97.26%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	36.567	2.787	824.501	0.27%	97.59%
39.0	28.439	2.219	826.72	0.21%	97.85%
40.0	22.466	1.775	828.495	0.17%	98.06%
41.0	17.757	1.432	829.927	0.14%	98.23%
42.0	14.683	1.179	831.106	0.11%	98.37%
43.0	12.392	1.003	832.109	0.10%	98.49%
44.0	10.677	0.871	832.98	0.08%	98.59%
45.0	9.287	0.767	833.747	0.07%	98.68%
46.0	8.333	0.689	834.436	0.07%	98.76%
47.0	7.478	0.629	835.065	0.06%	98.84%
48.0	6.760	0.576	835.64	0.06%	98.91%
49.0	6.204	0.532	836.173	0.05%	98.97%
50.0	5.737	0.498	836.67	0.05%	99.03%
51.0	5.323	0.468	837.138	0.05%	99.08%
52.0	4.914	0.439	837.578	0.04%	99.13%
53.0	4.573	0.413	837.99	0.04%	99.18%
54.0	4.222	0.388	838.378	0.04%	99.23%
55.0	3.896	0.362	838.74	0.03%	99.27%
56.0	3.597	0.339	839.079	0.03%	99.31%
57.0	3.335	0.317	839.396	0.03%	99.35%
58.0	3.105	0.298	839.694	0.03%	99.38%
59.0	2.905	0.281	839.975	0.03%	99.42%
60.0	2.674	0.264	840.238	0.03%	99.45%
61.0	2.496	0.247	840.485	0.02%	99.48%
62.0	2.339	0.233	840.718	0.02%	99.51%
63.0	2.187	0.220	840.938	0.02%	99.53%
64.0	2.056	0.208	841.146	0.02%	99.56%
65.0	1.914	0.196	841.343	0.02%	99.58%
66.0	1.809	0.186	841.529	0.02%	99.60%
67.0	1.710	0.177	841.705	0.02%	99.62%
68.0	1.626	0.169	841.874	0.02%	99.64%
69.0	1.568	0.163	842.037	0.02%	99.66%
70.0	1.510	0.158	842.195	0.02%	99.68%
71.0	1.474	0.154	842.35	0.01%	99.70%
72.0	1.437	0.151	842.501	0.01%	99.72%
73.0	1.395	0.148	842.649	0.01%	99.73%
74.0	1.379	0.146	842.795	0.01%	99.75%
75.0	1.358	0.145	842.94	0.01%	99.77%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	1.337	0.143	843.083	0.01%	99.79%
77.0	1.311	0.141	843.224	0.01%	99.80%
78.0	1.290	0.139	843.363	0.01%	99.82%
79.0	1.285	0.138	843.501	0.01%	99.84%
80.0	1.248	0.137	843.638	0.01%	99.85%
81.0	1.222	0.134	843.772	0.01%	99.87%
82.0	1.201	0.131	843.903	0.01%	99.88%
83.0	1.201	0.131	844.033	0.01%	99.90%
84.0	1.164	0.129	844.162	0.01%	99.91%
85.0	1.133	0.125	844.288	0.01%	99.93%
86.0	1.133	0.124	844.412	0.01%	99.94%
87.0	1.101	0.122	844.534	0.01%	99.96%
88.0	1.075	0.119	844.653	0.01%	99.97%
89.0	1.086	0.118	844.771	0.01%	99.99%
90.0	1.086	0.119	844.89	0.01%	100.00%

Zonal flux distribution table

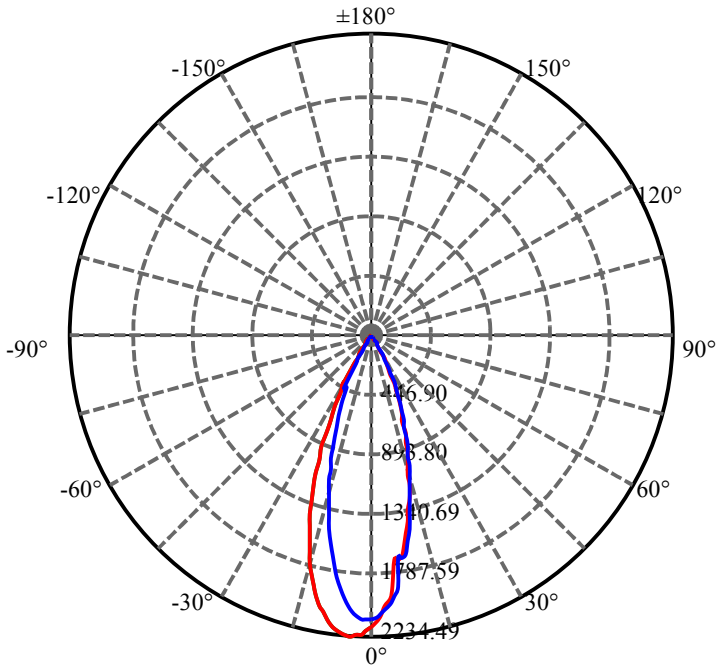
ZONAL LUMEN SUMMARY

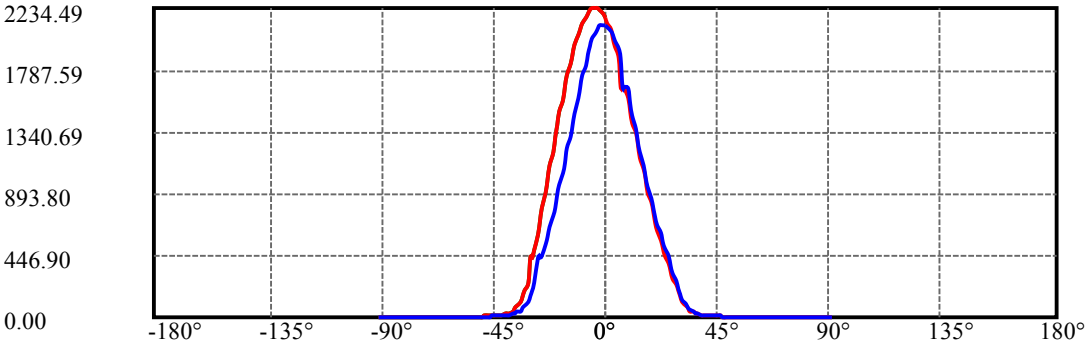
Zone	Lumens	%Lamp	%Fixt
0-30	769.09	74.17%	91.03%
0-40	828.50	79.89%	98.06%
0-60	840.24	81.03%	99.45%
0-90	844.77	81.46%	99.99%
0-120	844.77	81.46%	99.99%
0-180	844.89	81.48%	100.00%
60-90	4.53	0.44%	0.54%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-25.15	675.91	65.18%	80.00%

ZONAL LUMEN SUMMARY

0-10	181.25
10-20	347.90
20-30	239.94
30-40	59.41
40-50	8.18
50-60	3.57
60-70	1.96
70-80	1.44
80-90	1.13
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]





C180(Max):

C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:28.4 Right:31.3
:C90/270Left:28.6 Right:29.0

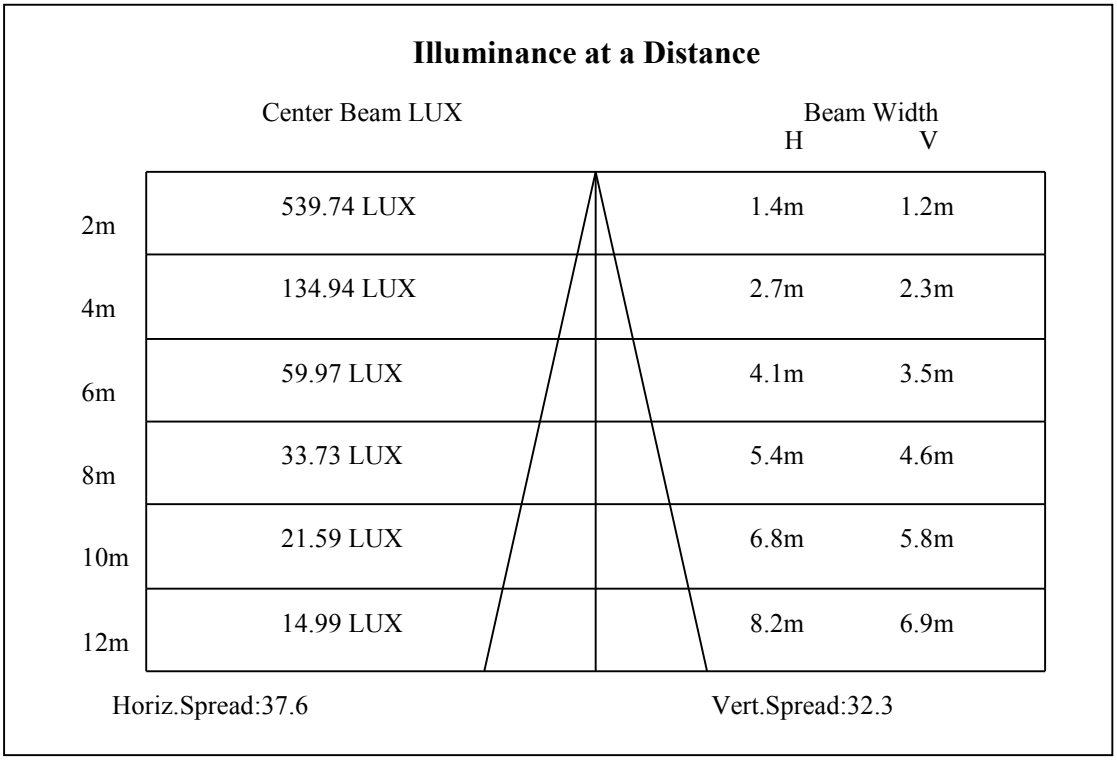
Beam Angle(50%Imax):C0/180Left:18.8 Right:17.4
:C90/270Left:16.7 Right:15.4

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2026/3/9
Humidity(%): 60.0%

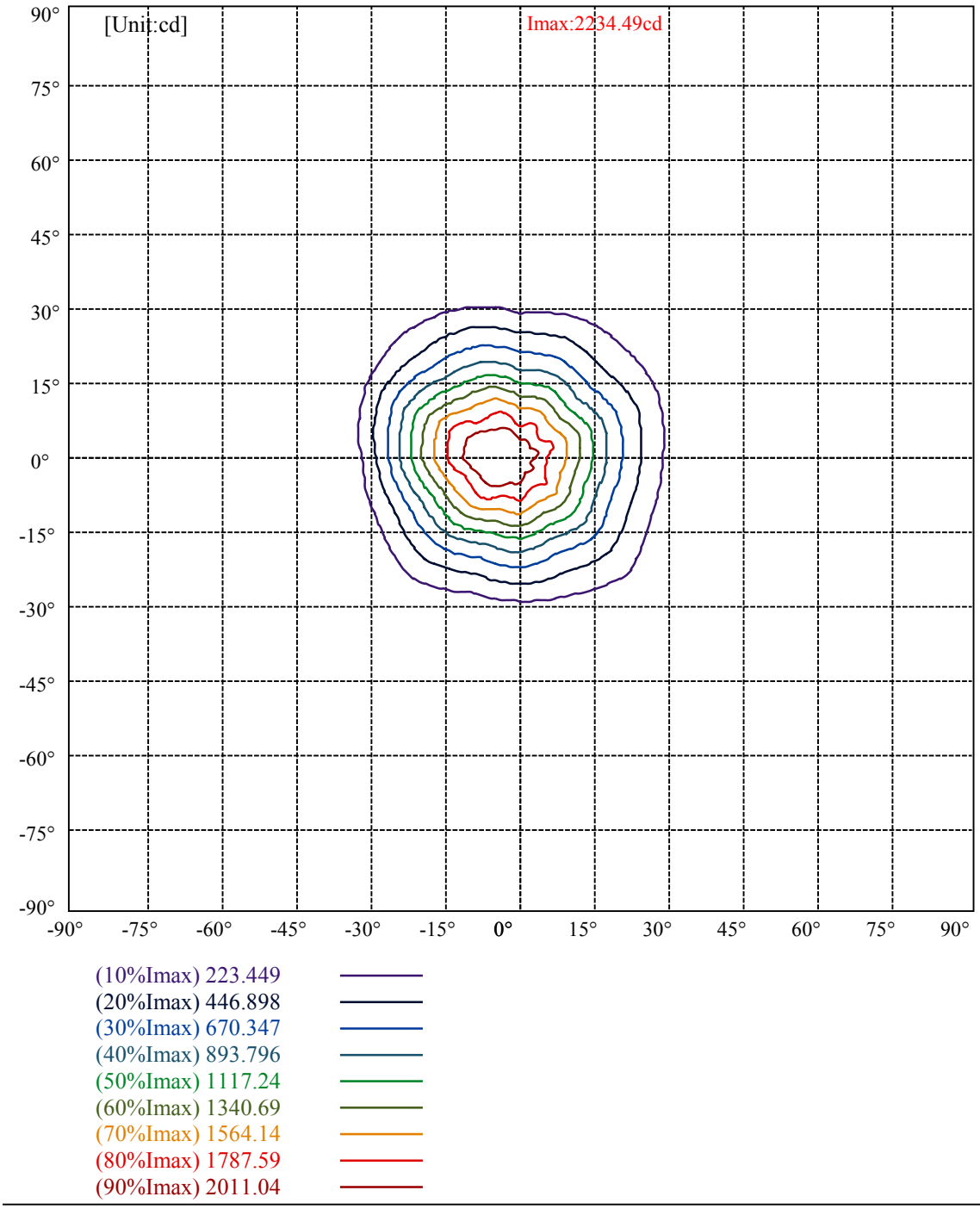
Operator: 杨泽全
Distance(m): 9.16

Lux distance Curve



Equipment: GMS1980
Date: 2026/3/9
Operator: 杨泽全
Temperature(°C): 25.0
Humidity(%): 60.0%
Distance(m): 9.16

ISO-Intensity(V-H)

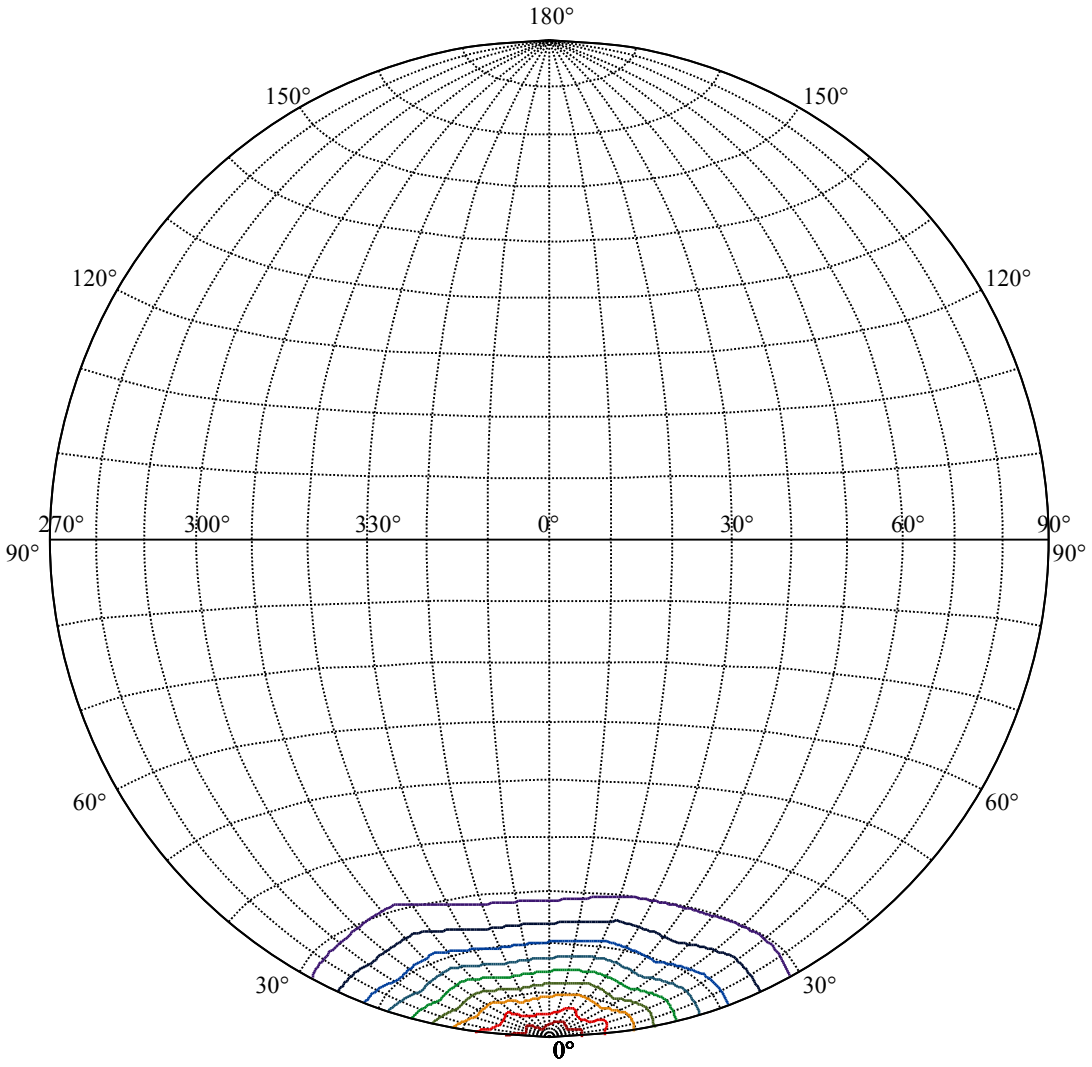


Equipment: GMS1980
Temperature(°C): 25.0

Date: 2026/3/9
Humidity(%): 60.0%

Operator: 杨泽全
Distance(m): 9.16

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:2234.49

(10%Imax) 223.189
(20%Imax) 446.378
(30%Imax) 669.567
(40%Imax) 892.756
(50%Imax) 1115.94
(60%Imax) 1339.13
(70%Imax) 1562.32
(80%Imax) 1785.51
(90%Imax) 2008.7

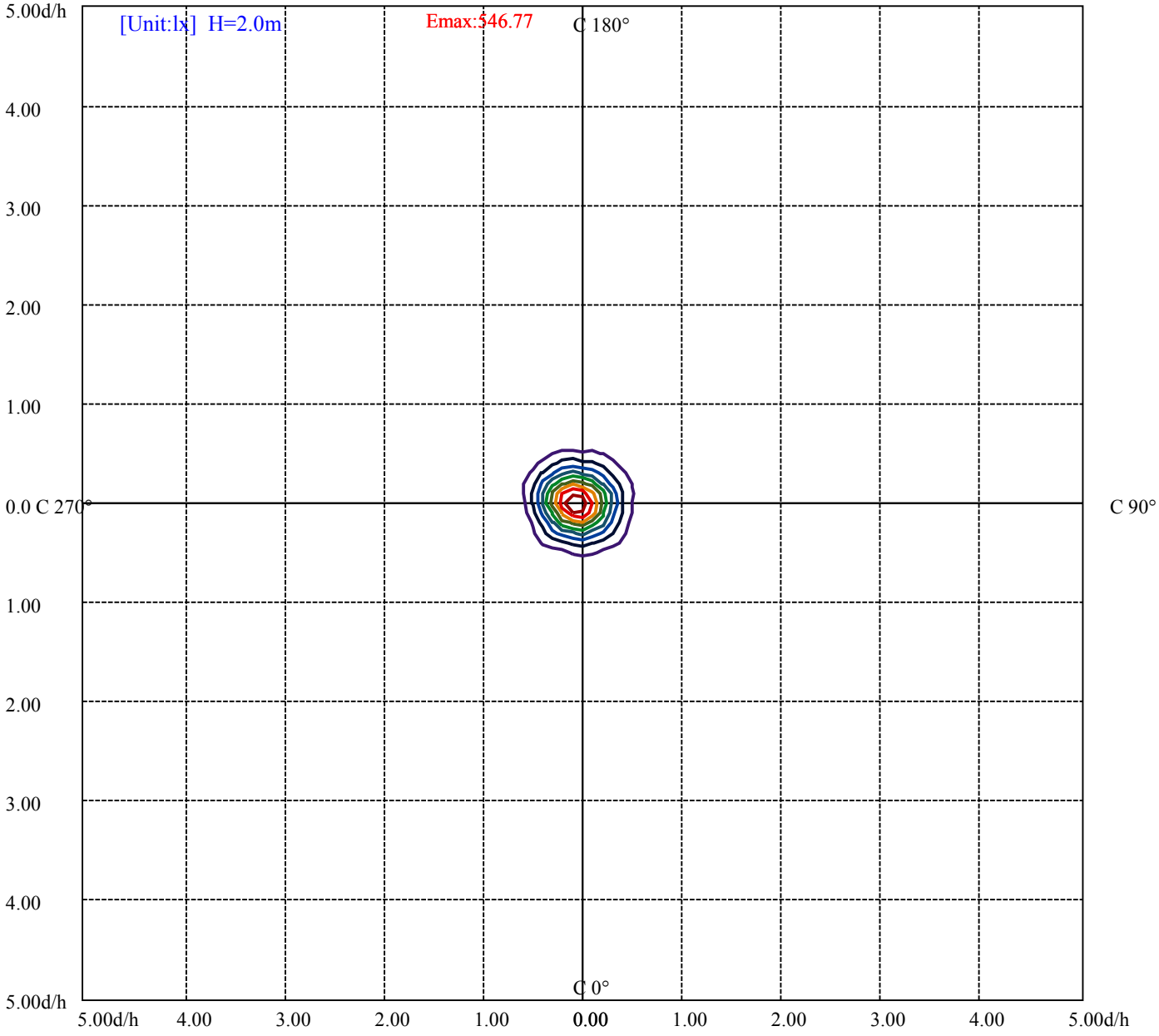
Equipment: GMS1980
Temperature(°C): 25.0

Date: 2026/3/9
Humidity(%): 60.0%

Operator: 杨泽全
Distance(m): 9.16

NT Nata 11-0162-S2-MB_69-0026-2

ISO illuminance diagram



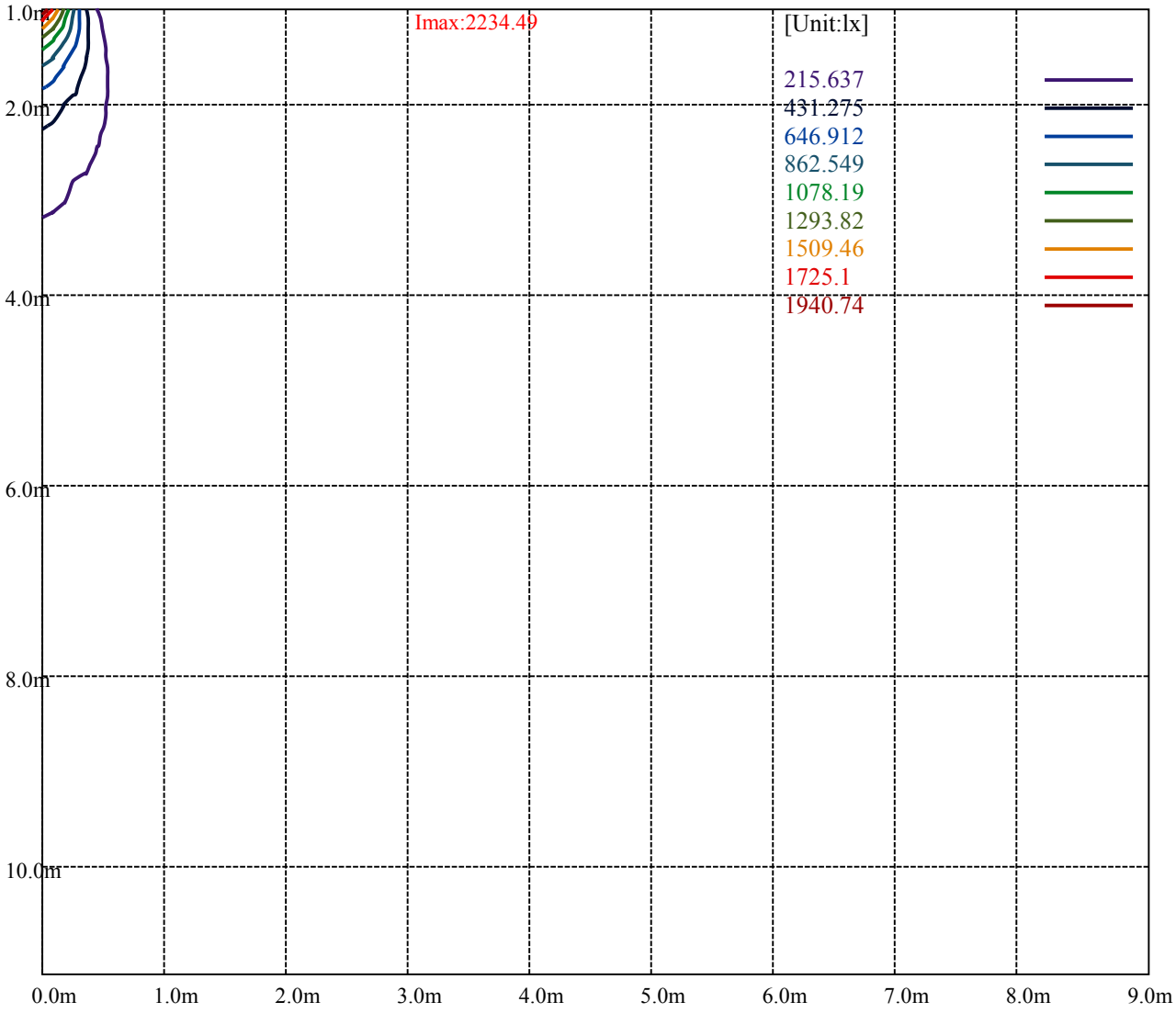
(10%Emax) 54.67625
(20%Emax) 109.3528
(30%Emax) 164.029
(40%Emax) 218.7055
(50%Emax) 273.3825
(60%Emax) 328.0575
(70%Emax) 382.735
(80%Emax) 437.41
(90%Emax) 492.0875

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2026/3/9
Humidity(%): 60.0%

Operator: 杨泽全
Distance(m): 9.16

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2026/3/9
Humidity(%): 60.0%

Operator: 杨泽全
Distance(m): 9.16

NT Nata 11-0162-S2-MB_69-0026-2

Luminance Limitting Curve(no luminous side)

Luminance Table

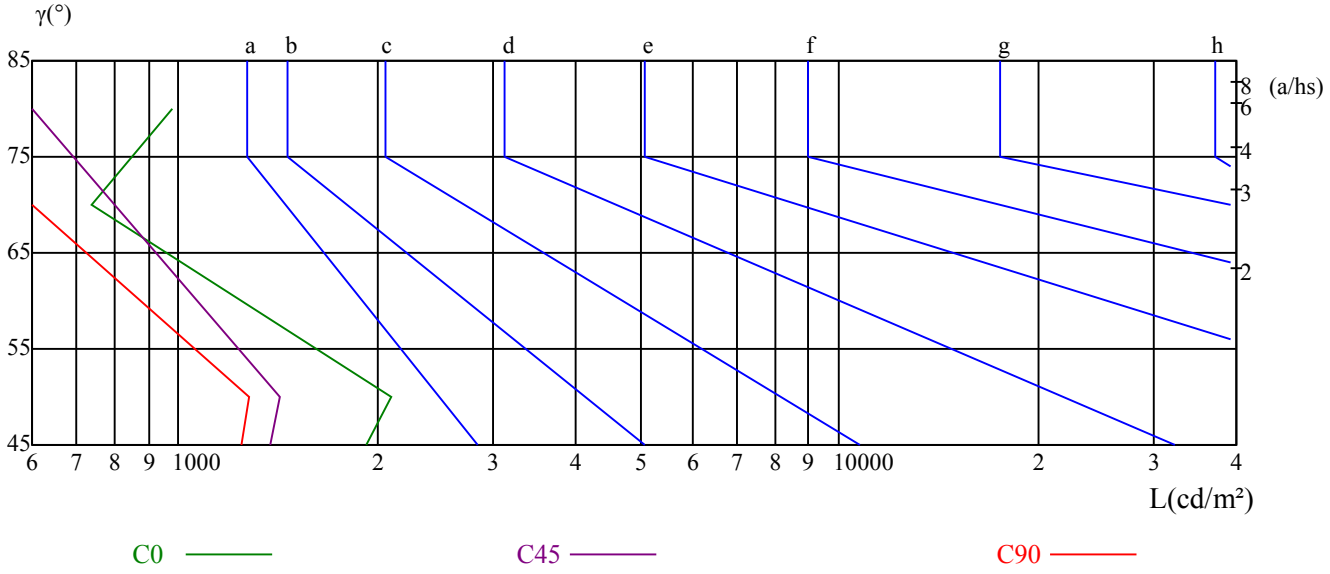
γ	45	50	55	60	65	70	75	80	85
C0	1928	2104	0	0	0	740	0	976	0
C45	1372	1422	0	0	0	0	0	336	0
C90	1246	1277	0	0	0	247	250	0	264

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	496	414	207	0	2128	1064

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

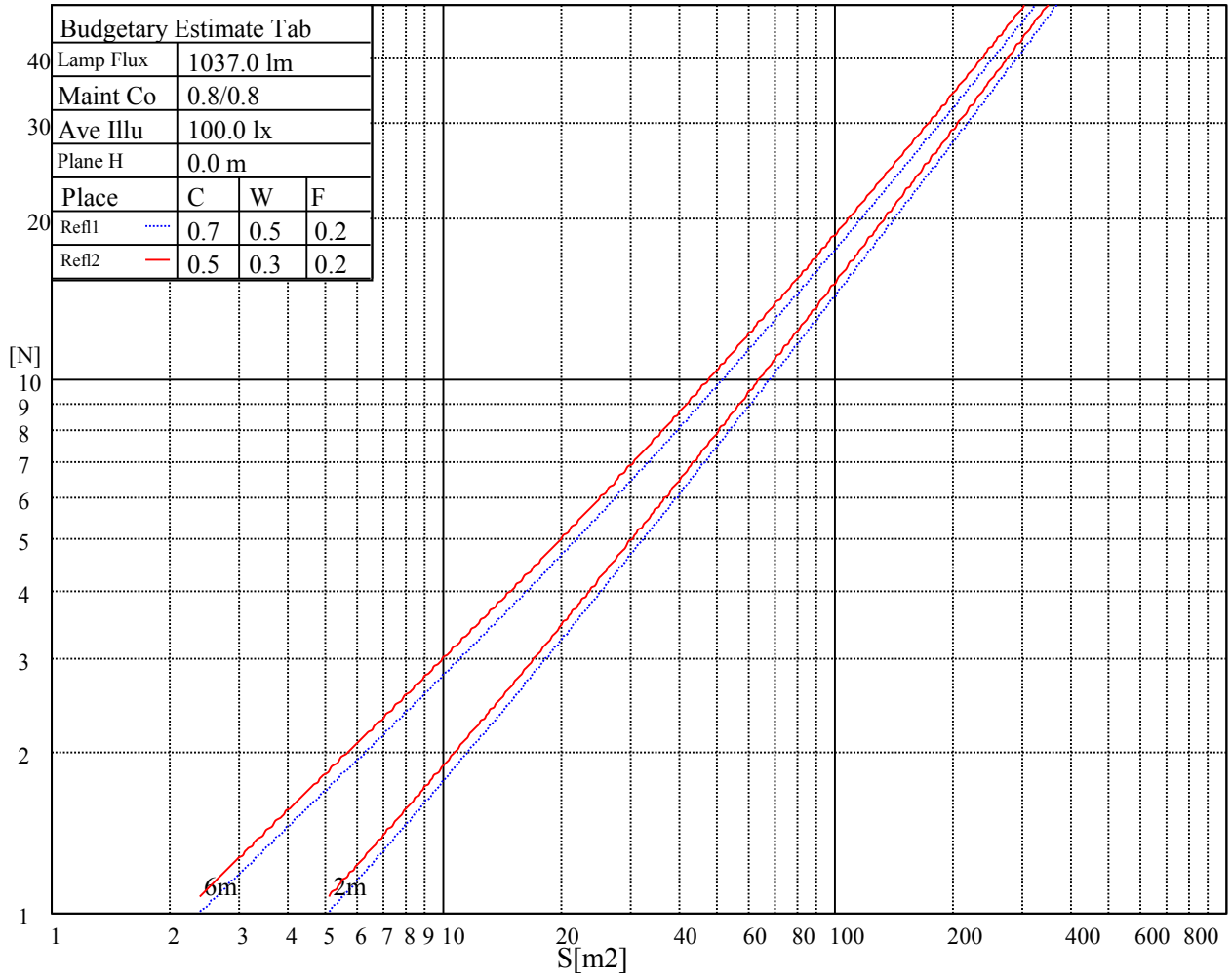


Equipment: GMS1980
Temperature(°C): 25.0

Date: 2026/3/9
Humidity(%): 60.0%

Operator: 杨泽全
Distance(m): 9.16

Budgetary Estimate Table

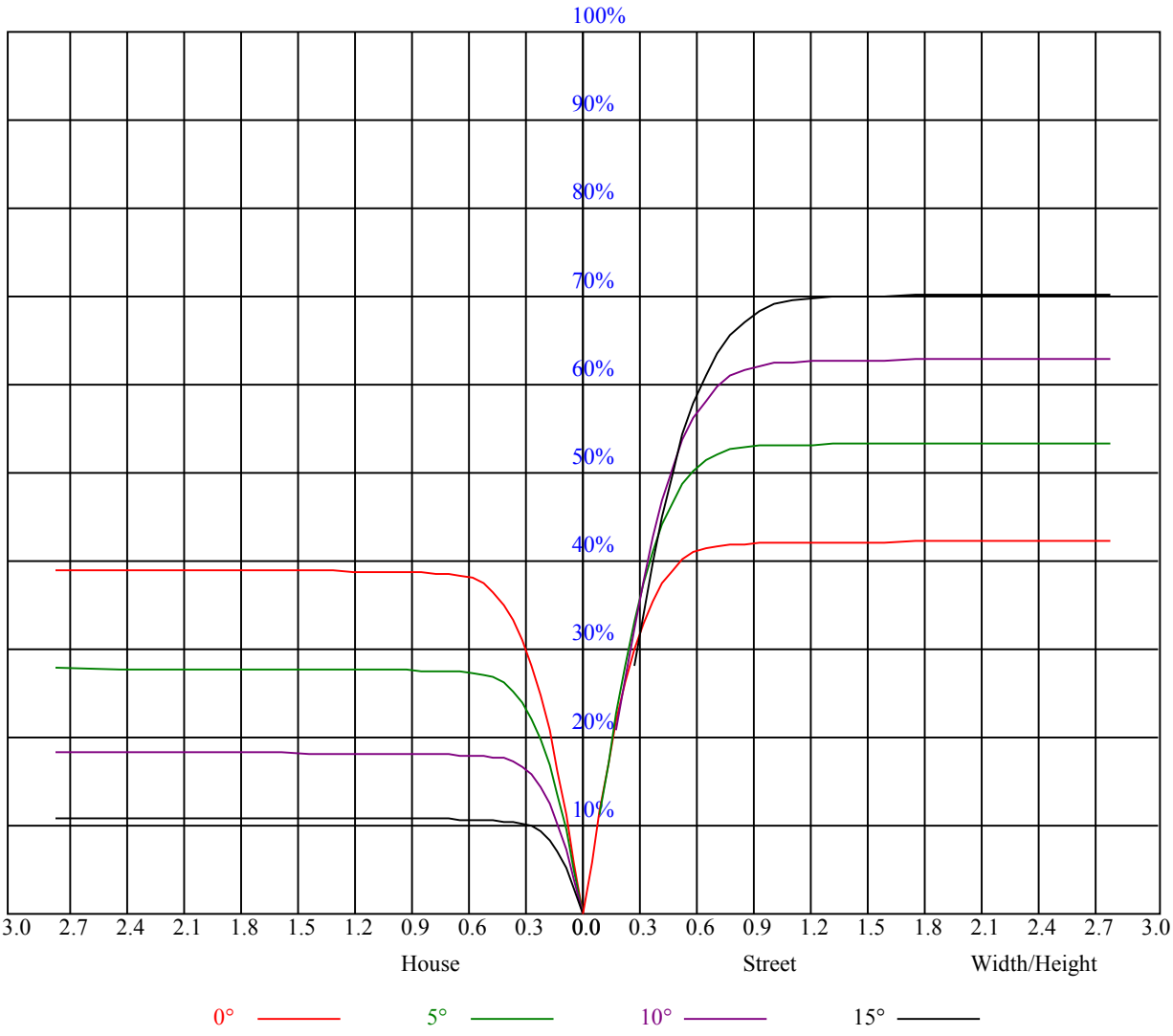


Equipment: GMS1980 Date: 2026/3/9 Operator: 杨泽全
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 9.16

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	0.97	0.97	0.97	0.95	0.95	0.95	0.90	0.90	0.90	0.86	0.86	0.86	0.83	0.83	0.83	0.81
1	0.91	0.89	0.88	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.80	0.79	0.78
2	0.86	0.83	0.81	0.85	0.82	0.80	0.82	0.80	0.78	0.80	0.78	0.77	0.78	0.76	0.75	0.74
3	0.82	0.78	0.76	0.81	0.78	0.75	0.79	0.76	0.74	0.77	0.75	0.73	0.75	0.73	0.72	0.71
4	0.78	0.74	0.71	0.77	0.73	0.71	0.75	0.72	0.70	0.74	0.71	0.69	0.72	0.70	0.68	0.67
5	0.74	0.70	0.67	0.73	0.70	0.67	0.72	0.69	0.67	0.71	0.68	0.66	0.70	0.67	0.65	0.64
6	0.71	0.67	0.64	0.70	0.66	0.64	0.69	0.66	0.63	0.68	0.65	0.63	0.67	0.65	0.63	0.62
7	0.68	0.64	0.61	0.67	0.64	0.61	0.66	0.63	0.61	0.65	0.62	0.60	0.65	0.62	0.60	0.59
8	0.65	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.58	0.63	0.60	0.58	0.62	0.60	0.58	0.57
9	0.62	0.59	0.56	0.62	0.58	0.56	0.61	0.58	0.56	0.61	0.58	0.55	0.60	0.57	0.55	0.54
10	0.60	0.56	0.54	0.60	0.56	0.54	0.59	0.56	0.53	0.59	0.56	0.53	0.58	0.55	0.53	0.52

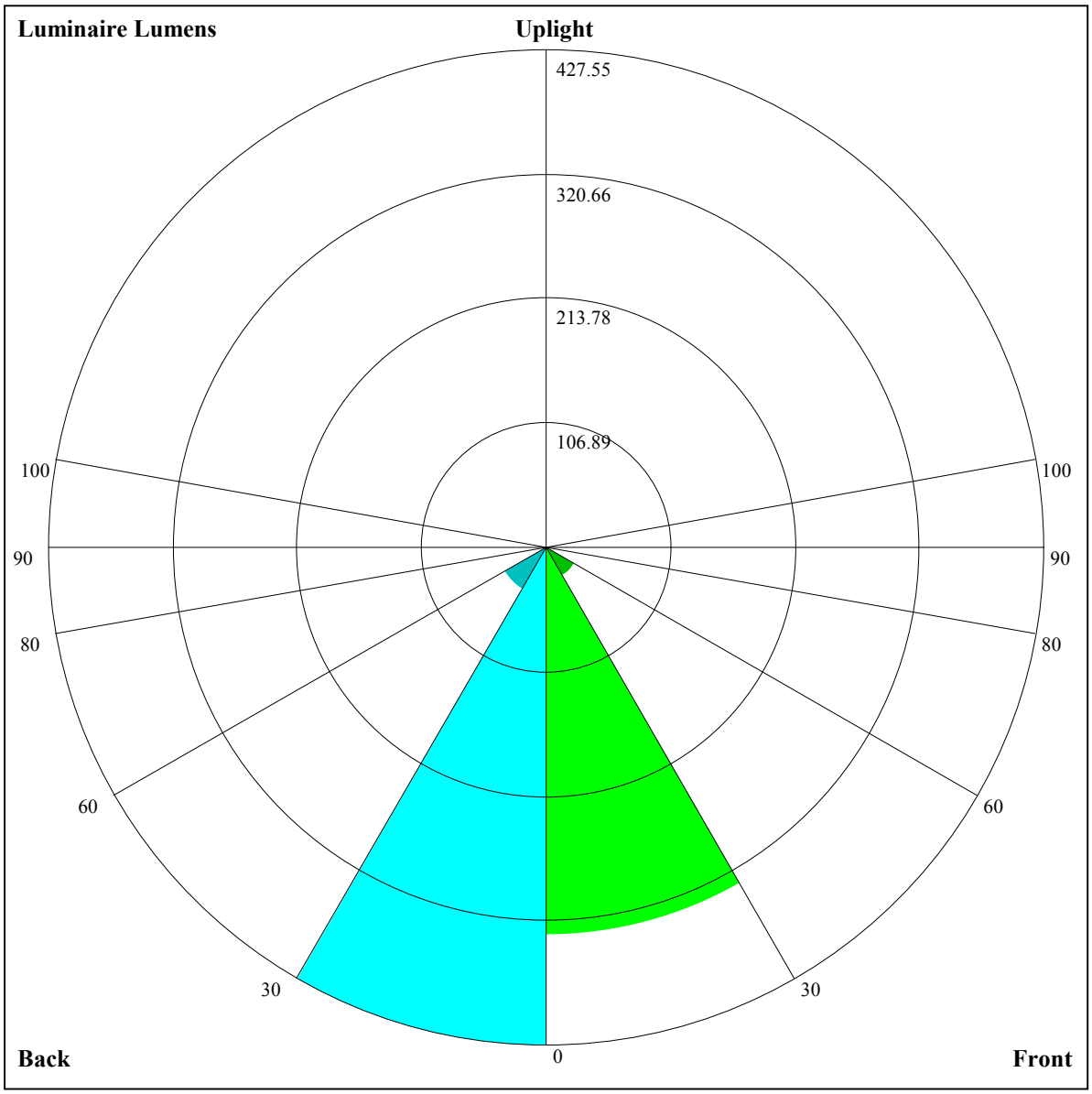
Coefficient Utilization Curve



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2026/3/9
Humidity(%): 60.0%

Operator: 杨泽全
Distance(m): 9.16



Luminaire Lumens:
FL=332.62,FM=28.55,FH=1.64,FVH=0.61
BL=427.55,BM=40.81,BH=1.72,BVH=0.63
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	2158.97	2121.22	2075.07	2010.46	1951.73	1870.34	1672.24	1672.24	1653.95
22.5	2190.86	2162.33	2115.34	2068.36	2014.66	1953.41	1888.80	1800.70	1727.70
45.0	2137.16	2103.60	2048.22	1995.36	1934.95	1869.50	1661.08	1661.08	1621.56
67.5	2136.32	2122.06	2099.40	2065.84	2011.30	1957.60	1896.35	1829.23	1738.61
90.0	2111.99	2099.40	2070.87	2038.15	1995.36	1943.34	1868.66	1665.86	1665.86
112.5	2103.60	2115.34	2117.86	2110.31	2088.49	2060.81	2025.57	1968.51	1913.97
135.0	2143.87	2158.97	2164.85	2161.49	2149.75	2129.61	2093.53	2057.45	2000.39
157.5	2110.31	2143.03	2174.08	2191.70	2201.77	2200.93	2192.54	2177.43	2148.91
180.0	2158.97	2195.05	2217.71	2230.29	2234.49	2231.13	2218.55	2198.41	2164.85
202.5	2190.86	2209.32	2222.74	2221.90	2212.67	2187.50	2158.14	2118.70	2059.97
225.0	2137.16	2162.33	2180.79	2184.15	2176.60	2152.26	2122.90	2070.04	2018.85
247.5	2136.32	2138.84	2129.61	2110.31	2072.55	2029.76	1976.90	1897.19	1783.92
270.0	2111.99	2113.67	2106.95	2082.62	2054.09	2016.34	1957.60	1899.71	1817.48
292.5	2103.60	2078.43	2049.06	2002.07	1956.76	1902.22	1825.03	1656.63	1656.63
315.0	2143.87	2121.22	2090.17	2050.74	1994.52	1942.50	1868.66	1801.54	1731.06
337.5	2110.31	2070.04	2010.46	1957.60	1898.03	1834.26	1669.30	1669.30	1594.96
360.0	2158.97	2121.22	2075.07	2010.46	1951.73	1870.34	1672.24	1672.24	1653.95

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	1579.27	1482.78	1404.50	1325.62	1246.08	1147.58	1070.72	994.11	902.15
22.5	1653.02	1556.53	1476.82	1397.11	1296.43	1215.04	1115.19	1036.32	959.96
45.0	1540.34	1437.39	1354.24	1271.09	1167.21	1087.58	1010.89	917.93	847.87
67.5	1662.25	1582.54	1478.50	1395.43	1291.39	1210.00	1128.61	1030.44	954.09
90.0	1645.81	1543.28	1459.62	1354.24	1269.58	1187.68	1089.93	1014.00	941.50
112.5	1854.40	1789.79	1700.01	1623.66	1543.95	1440.74	1357.68	1275.45	1173.08
135.0	1947.53	1887.96	1671.48	1671.48	1652.35	1553.18	1472.54	1388.89	1305.57
157.5	2118.70	2082.62	2027.24	1975.22	1919.00	1856.08	1788.11	1698.33	1622.82
180.0	2129.61	2086.82	2037.31	1966.83	1904.74	1837.62	1747.00	1672.32	1570.80
202.5	2003.75	1940.82	1852.72	1669.89	1669.89	1606.62	1519.03	1406.93	1315.14
225.0	1959.28	1892.16	1796.50	1715.11	1631.21	1542.27	1452.49	1339.22	1250.28
247.5	1660.07	1639.10	1553.76	1466.67	1377.90	1268.48	1182.23	1098.83	1017.10
270.0	1744.48	1666.45	1583.38	1475.98	1389.56	1303.98	1217.55	1114.35	1035.48
292.5	1597.48	1495.87	1413.56	1330.99	1248.10	1146.65	1066.94	989.50	896.11
315.0	1641.28	1563.25	1483.53	1382.85	1301.46	1222.59	1143.72	1047.23	973.39
337.5	1518.36	1421.95	1345.26	1268.65	1191.04	1095.30	1021.05	929.34	857.52
360.0	1579.27	1482.78	1404.50	1325.62	1246.08	1147.58	1070.72	994.11	902.15

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	832.26	765.39	686.52	627.45	556.21	500.08	445.20	392.26	329.33
22.5	886.97	802.22	737.61	677.20	618.47	552.18	502.68	454.85	431.36
45.0	781.66	705.06	647.92	593.55	541.28	480.28	436.14	395.03	356.43
67.5	883.61	817.32	738.45	678.04	621.82	569.80	508.55	462.40	428.84
90.0	855.17	789.47	727.55	669.23	613.77	547.06	494.04	441.51	376.74
112.5	1093.37	1017.02	928.08	859.28	793.83	730.06	655.39	599.17	544.63
135.0	1204.05	1124.50	1046.22	948.47	873.96	802.31	733.50	652.11	591.62
157.5	1524.65	1442.42	1358.52	1253.63	1168.89	1082.47	974.23	886.97	802.22
180.0	1482.70	1394.59	1307.33	1193.22	1097.57	1001.08	904.59	785.44	690.63
202.5	1223.26	1111.16	1024.15	938.74	835.70	757.25	680.81	588.26	518.28
225.0	1160.50	1051.42	970.87	872.70	796.35	725.87	642.80	580.71	522.82
247.5	919.69	845.94	776.04	693.14	629.88	567.03	490.01	429.51	369.52
270.0	956.61	881.93	796.35	730.06	648.67	585.74	523.65	447.30	431.36
292.5	825.13	759.01	681.98	624.17	570.31	507.29	458.29	410.89	364.82
315.0	900.39	832.43	751.04	690.63	632.73	565.61	516.94	469.96	427.16
337.5	788.29	707.83	647.50	590.95	538.25	476.50	427.58	379.17	332.35
360.0	832.26	765.39	686.52	627.45	556.21	500.08	445.20	392.26	329.33

Intensity data(cd)

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	280.58	234.85	193.15	146.00	113.69	86.93	65.36	45.73	34.90
22.5	431.36	306.76	258.43	222.27	189.63	151.87	124.52	100.02	78.96
45.0	311.37	278.15	248.19	213.29	187.19	156.90	133.66	112.52	88.86
67.5	428.84	314.90	273.53	222.01	183.75	149.44	112.01	87.35	67.21
90.0	323.29	270.01	208.92	165.21	119.90	91.29	69.14	51.85	36.58
112.5	490.09	422.97	422.97	359.54	258.26	213.54	172.26	128.29	99.60
135.0	534.73	467.69	417.43	370.44	316.32	275.55	236.70	199.86	159.17
157.5	715.80	610.08	531.21	458.21	422.13	422.13	248.95	199.53	148.09
180.0	596.65	487.58	428.84	428.84	246.01	195.50	153.88	108.41	80.88
202.5	451.58	373.30	313.89	260.36	213.12	162.61	129.13	101.78	79.79
225.0	466.60	428.00	428.00	302.82	260.69	213.62	180.06	146.75	110.25
247.5	296.10	241.98	193.07	150.61	108.83	83.32	63.60	48.50	35.07
270.0	431.36	247.19	196.59	150.53	115.71	88.60	63.60	47.24	35.41
292.5	308.69	264.72	222.35	182.75	138.95	111.09	87.01	63.35	48.58
315.0	427.16	335.71	293.42	259.10	229.15	201.96	169.91	142.72	118.31
337.5	275.55	232.50	192.65	148.85	117.89	91.21	64.78	49.08	35.07
360.0	280.58	234.85	193.15	146.00	113.69	86.93	65.36	45.73	34.90

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	25.76	21.06	17.62	14.60	12.92	11.50	10.32	9.15	8.39
22.5	57.64	44.39	34.07	26.51	20.39	16.87	14.18	11.83	10.40
45.0	72.83	58.90	46.82	36.58	27.10	21.31	17.03	13.42	11.24
67.5	51.52	36.92	28.44	22.57	18.63	15.10	13.09	11.58	10.07
90.0	28.44	22.74	18.79	15.35	13.34	11.91	10.40	9.40	8.56
112.5	76.52	54.20	40.61	31.21	24.67	18.96	15.69	13.42	11.75
135.0	130.72	105.72	84.16	61.59	47.57	34.07	26.35	20.72	15.86
157.5	114.70	81.22	60.66	45.98	35.74	26.51	21.48	17.87	15.19
180.0	62.59	44.30	34.40	27.60	22.49	17.79	15.19	13.17	11.58
202.5	58.31	45.31	35.41	26.51	21.40	16.87	14.26	12.33	10.49
225.0	89.36	68.97	50.09	38.76	29.95	22.15	17.87	14.68	12.42
247.5	27.69	21.23	17.70	15.02	12.67	11.24	10.07	8.89	8.14
270.0	26.68	21.48	17.96	14.85	13.01	11.50	9.98	9.06	8.22
292.5	35.32	27.52	21.82	16.95	14.10	12.17	10.66	9.15	8.22
315.0	98.76	74.84	58.40	45.56	32.64	24.84	18.29	14.68	12.25
337.5	27.35	21.98	18.12	15.35	12.84	11.33	10.07	8.89	8.05
360.0	25.76	21.06	17.62	14.60	12.92	11.50	10.32	9.15	8.39

C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	7.64	7.13	6.46	6.13	5.71	5.29	5.12	4.78	4.45
22.5	9.23	8.22	7.47	6.71	6.29	5.96	5.54	5.20	4.95
45.0	9.73	8.31	7.47	6.63	6.04	5.62	5.37	4.87	4.61
67.5	9.15	8.31	7.47	6.80	6.21	5.79	5.37	5.03	4.61
90.0	7.64	7.13	6.54	5.87	5.54	5.12	4.70	4.36	4.03
112.5	10.07	9.06	8.22	7.30	6.71	6.13	5.62	5.29	4.87
135.0	13.17	11.16	9.31	8.22	7.38	6.71	6.13	5.45	5.12
157.5	12.67	11.16	9.90	8.64	7.89	7.22	6.46	5.96	5.54
180.0	10.07	9.06	8.22	7.38	6.80	6.21	5.79	5.37	4.95
202.5	9.40	8.56	7.72	7.05	6.46	6.04	5.54	5.03	4.70
225.0	10.32	9.15	8.14	7.38	6.63	6.13	5.71	5.12	4.78
247.5	7.47	6.88	6.21	5.71	5.37	5.03	4.61	4.28	3.94
270.0	7.30	6.80	6.29	5.79	5.20	4.87	4.53	4.20	3.86
292.5	7.47	6.88	6.29	5.62	5.29	4.87	4.53	4.20	3.86
315.0	9.90	8.73	7.72	6.96	6.29	5.71	5.29	4.95	4.70
337.5	7.38	6.80	6.21	5.96	5.45	5.12	4.87	4.53	4.20
360.0	7.64	7.13	6.46	6.13	5.71	5.29	5.12	4.78	4.45

Intensity data(cd)

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	4.20	3.94	3.52	3.36	3.10	2.94	2.68	2.52	2.35
22.5	4.61	4.36	4.03	3.69	3.52	3.27	3.02	2.85	2.68
45.0	4.28	3.94	3.61	3.36	3.10	2.94	2.68	2.43	2.27
67.5	4.28	3.94	3.69	3.44	3.10	2.85	2.60	2.43	2.27
90.0	3.69	3.36	3.10	2.85	2.68	2.43	2.27	2.10	2.01
112.5	4.53	4.20	3.86	3.52	3.27	3.10	2.85	2.68	2.43
135.0	4.70	4.28	3.94	3.69	3.44	3.19	2.94	2.85	2.68
157.5	5.03	4.61	4.28	4.03	3.61	3.36	3.10	2.85	2.68
180.0	4.53	4.11	3.86	3.52	3.27	3.02	2.85	2.60	2.43
202.5	4.36	3.94	3.69	3.44	3.19	3.02	2.77	2.60	2.43
225.0	4.36	4.03	3.78	3.52	3.36	3.19	3.02	2.77	2.68
247.5	3.61	3.36	3.10	2.85	2.68	2.60	2.35	2.18	2.01
270.0	3.52	3.27	3.02	2.77	2.52	2.35	2.18	2.01	1.85
292.5	3.52	3.27	3.02	2.77	2.60	2.43	2.18	2.10	2.01
315.0	4.36	4.03	3.61	3.36	3.19	2.94	2.68	2.52	2.35
337.5	3.94	3.69	3.44	3.19	3.02	2.85	2.60	2.43	2.27
360.0	4.20	3.94	3.52	3.36	3.10	2.94	2.68	2.52	2.35

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	2.27	2.10	2.01	1.93	1.85	1.76	1.76	1.68	1.59
22.5	2.43	2.35	2.18	2.01	1.93	1.85	1.76	1.68	1.59
45.0	2.10	2.10	1.85	1.76	1.68	1.59	1.51	1.51	1.43
67.5	2.10	1.93	1.85	1.68	1.59	1.51	1.43	1.34	1.43
90.0	1.85	1.68	1.59	1.59	1.43	1.43	1.43	1.34	1.34
112.5	2.27	2.18	2.01	1.85	1.76	1.59	1.51	1.43	1.43
135.0	2.52	2.35	2.27	2.10	1.93	1.85	1.68	1.59	1.51
157.5	2.52	2.35	2.18	2.01	1.85	1.76	1.68	1.59	1.59
180.0	2.35	2.10	1.93	1.85	1.76	1.68	1.68	1.59	1.59
202.5	2.35	2.18	2.01	1.85	1.76	1.68	1.59	1.59	1.59
225.0	2.52	2.35	2.18	2.10	2.01	1.85	1.85	1.68	1.59
247.5	1.85	1.76	1.68	1.59	1.51	1.51	1.43	1.43	1.34
270.0	1.76	1.68	1.51	1.51	1.43	1.43	1.34	1.34	1.34
292.5	1.85	1.68	1.59	1.51	1.43	1.34	1.26	1.34	1.26
315.0	2.18	2.10	1.93	1.85	1.76	1.59	1.59	1.51	1.43
337.5	2.10	2.01	1.85	1.76	1.68	1.59	1.59	1.51	1.51
360.0	2.27	2.10	2.01	1.93	1.85	1.76	1.76	1.68	1.59

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	1.59	1.59	1.51	1.51	1.43	1.43	1.34	1.34	1.26
22.5	1.59	1.43	1.51	1.43	1.34	1.43	1.34	1.34	1.26
45.0	1.34	1.34	1.34	1.26	1.26	1.26	1.26	1.26	1.26
67.5	1.26	1.34	1.26	1.26	1.26	1.26	1.26	1.17	1.26
90.0	1.34	1.26	1.26	1.26	1.17	1.17	1.17	1.17	1.17
112.5	1.43	1.34	1.34	1.26	1.34	1.34	1.26	1.26	1.26
135.0	1.43	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.26
157.5	1.59	1.59	1.51	1.51	1.43	1.43	1.43	1.43	1.43
180.0	1.59	1.51	1.51	1.51	1.51	1.43	1.43	1.43	1.34
202.5	1.51	1.51	1.51	1.51	1.51	1.34	1.34	1.43	1.34
225.0	1.51	1.43	1.43	1.43	1.43	1.34	1.34	1.34	1.26
247.5	1.43	1.34	1.34	1.34	1.26	1.26	1.17	1.17	1.17
270.0	1.34	1.26	1.26	1.26	1.17	1.17	1.26	1.17	1.09
292.5	1.26	1.26	1.34	1.26	1.26	1.26	1.17	1.17	1.17
315.0	1.34	1.34	1.26	1.26	1.34	1.26	1.26	1.26	1.26
337.5	1.43	1.43	1.34	1.34	1.34	1.26	1.26	1.26	1.17
360.0	1.59	1.59	1.51	1.51	1.43	1.43	1.34	1.34	1.26

Intensity data(cd)

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	1.26	1.17	1.17	1.17	1.09	1.17	1.09	1.09	1.09
22.5	1.26	1.17	1.17	1.17	1.17	1.09	1.09	1.09	1.09
45.0	1.17	1.17	1.17	1.17	1.09	1.09	1.09	1.09	1.09
67.5	1.17	1.09	1.17	1.09	1.09	1.09	1.09	1.09	1.09
90.0	1.17	1.09	1.17	1.09	1.09	1.09	1.09	1.09	1.09
112.5	1.26	1.17	1.26	1.26	1.17	1.17	1.17	1.09	1.09
135.0	1.34	1.26	1.34	1.26	1.26	1.26	1.09	1.09	1.09
157.5	1.34	1.34	1.34	1.34	1.34	1.43	1.09	1.09	1.09
180.0	1.43	1.51	1.34	1.34	1.17	1.09	1.09	1.09	1.09
202.5	1.17	1.17	1.17	1.09	1.09	1.09	1.09	1.01	1.09
225.0	1.17	1.17	1.17	1.09	1.09	1.09	1.09	1.09	1.09
247.5	1.09	1.17	1.09	1.09	1.09	1.09	1.09	1.09	1.09
270.0	1.17	1.17	1.09	1.09	1.09	1.09	1.17	1.01	1.01
292.5	1.17	1.17	1.17	1.09	1.09	1.09	1.09	1.09	1.09
315.0	1.17	1.17	1.17	1.17	1.09	1.09	1.09	1.09	1.09
337.5	1.17	1.17	1.17	1.09	1.09	1.09	1.09	1.01	1.09
360.0	1.26	1.17	1.17	1.17	1.09	1.17	1.09	1.09	1.09

C/γ(°)	90.0
0.0	1.09
22.5	1.09
45.0	1.09
67.5	1.09
90.0	1.09
112.5	1.09
135.0	1.09
157.5	1.09
180.0	1.09
202.5	1.09
225.0	1.09
247.5	1.09
270.0	1.09
292.5	1.09
315.0	1.09
337.5	1.01
360.0	1.09