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

Nata

Client:
LumCAT: 2-2323-M
Luminaire: 92.70.131.00
Report No: 210722-B004
Ballast type:
Test No: 210722-C004
LampCAT: CITIZEN CLU038 LES14.5
Lamp flux(lm): 2340.5
Number of Lamps: 1
Length(mm): 570
Phm Type: C

Voltage(V):
Current(A):
Power (W): 17.859
PF:
Width(mm): 45
Height(mm): 20

Photometric Results

Lumens(lm): 2107.16, Efficiency(%): 90.03% , Luminous Efficacy(lm/W): 117.99
Central intensity(cd): 2616.750, Maximum intensity(cd): 4338.563
Angle of maximum intensity: C=90.0 γ=15.0
Beam Angle(50%Imax): [C0/180]Total=49.4
[C90/270]Total=37.4
Field angle(10%Imax): [C0/180]Total=66.9
[C90/270]Total=61.0
Maximum s/h(1/2): C0_180=0.76 C90_270=1.05
Maximum s/h(1/4): C0_180=0.75 C90_270=0.86
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 90.03%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.186%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2649.656	0.000	0	0.00%	0.00%
1.0	2651.696	2.537	2.537	0.11%	0.12%
2.0	2666.707	7.633	10.17	0.33%	0.48%
3.0	2689.594	12.811	22.981	0.55%	1.09%
4.0	2715.153	18.091	41.072	0.77%	1.95%
5.0	2745.246	23.490	64.562	1.00%	3.06%
6.0	2772.106	28.995	93.558	1.24%	4.44%
7.0	2797.102	34.568	128.125	1.48%	6.08%
8.0	2820.727	40.206	168.331	1.72%	7.99%
9.0	2839.606	45.874	214.205	1.96%	10.17%
10.0	2848.289	51.473	265.678	2.20%	12.61%
11.0	2842.629	56.864	322.542	2.43%	15.31%
12.0	2826.317	61.970	384.512	2.65%	18.25%
13.0	2794.430	66.704	451.216	2.85%	21.41%
14.0	2747.989	70.942	522.159	3.03%	24.78%
15.0	2690.825	74.666	596.825	3.19%	28.32%
16.0	2621.672	77.843	674.668	3.33%	32.02%
17.0	2529.914	80.224	754.892	3.43%	35.83%
18.0	2435.168	81.863	836.756	3.50%	39.71%
19.0	2337.153	83.029	919.784	3.55%	43.65%
20.0	2233.653	83.658	1003.443	3.57%	47.62%
21.0	2121.089	83.620	1087.062	3.57%	51.59%
22.0	2020.532	83.228	1170.29	3.56%	55.54%
23.0	1913.580	82.548	1252.838	3.53%	59.46%
24.0	1790.768	80.990	1333.829	3.46%	63.30%
25.0	1673.578	78.772	1412.6	3.37%	67.04%
26.0	1542.287	75.911	1488.511	3.24%	70.64%
27.0	1425.484	72.607	1561.118	3.10%	74.09%
28.0	1290.583	68.765	1629.884	2.94%	77.35%
29.0	1150.295	63.860	1693.744	2.73%	80.38%
30.0	1017.795	58.538	1752.282	2.50%	83.16%
31.0	872.230	52.597	1804.878	2.25%	85.65%
32.0	743.804	46.297	1851.176	1.98%	87.85%
33.0	611.954	39.941	1891.117	1.71%	89.75%
34.0	513.739	34.067	1925.184	1.46%	91.36%
35.0	398.619	28.334	1953.518	1.21%	92.71%
36.0	310.869	22.590	1976.109	0.97%	93.78%
37.0	239.927	17.964	1994.072	0.77%	94.63%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	179.153	13.988	2008.061	0.60%	95.30%
39.0	135.482	10.739	2018.8	0.46%	95.81%
40.0	102.031	8.284	2027.084	0.35%	96.20%
41.0	76.159	6.345	2033.429	0.27%	96.50%
42.0	56.700	4.827	2038.256	0.21%	96.73%
43.0	43.063	3.696	2041.952	0.16%	96.91%
44.0	34.169	2.915	2044.866	0.12%	97.04%
45.0	28.252	2.399	2047.265	0.10%	97.16%
46.0	24.142	2.049	2049.314	0.09%	97.25%
47.0	21.287	1.807	2051.121	0.08%	97.34%
48.0	19.501	1.649	2052.77	0.07%	97.42%
49.0	18.141	1.546	2054.316	0.07%	97.49%
50.0	17.069	1.468	2055.784	0.06%	97.56%
51.0	16.264	1.410	2057.194	0.06%	97.63%
52.0	15.617	1.368	2058.562	0.06%	97.69%
53.0	15.114	1.337	2059.899	0.06%	97.76%
54.0	14.695	1.314	2061.213	0.06%	97.82%
55.0	14.358	1.297	2062.51	0.06%	97.88%
56.0	14.122	1.287	2063.797	0.05%	97.94%
57.0	13.940	1.283	2065.08	0.05%	98.00%
58.0	13.803	1.283	2066.362	0.05%	98.06%
59.0	13.683	1.285	2067.647	0.05%	98.12%
60.0	13.585	1.288	2068.936	0.06%	98.19%
61.0	13.549	1.295	2070.23	0.06%	98.25%
62.0	13.514	1.304	2071.535	0.06%	98.31%
63.0	13.469	1.312	2072.847	0.06%	98.37%
64.0	13.440	1.320	2074.167	0.06%	98.43%
65.0	13.402	1.328	2075.496	0.06%	98.50%
66.0	13.360	1.335	2076.831	0.06%	98.56%
67.0	13.321	1.342	2078.172	0.06%	98.62%
68.0	13.300	1.349	2079.521	0.06%	98.69%
69.0	13.243	1.354	2080.875	0.06%	98.75%
70.0	13.194	1.358	2082.233	0.06%	98.82%
71.0	13.120	1.360	2083.593	0.06%	98.88%
72.0	13.099	1.363	2084.956	0.06%	98.95%
73.0	13.033	1.367	2086.323	0.06%	99.01%
74.0	12.934	1.365	2087.688	0.06%	99.08%
75.0	12.920	1.366	2089.054	0.06%	99.14%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	12.874	1.369	2090.423	0.06%	99.21%
77.0	12.716	1.364	2091.788	0.06%	99.27%
78.0	12.611	1.356	2093.143	0.06%	99.33%
79.0	12.424	1.345	2094.489	0.06%	99.40%
80.0	12.171	1.326	2095.815	0.06%	99.46%
81.0	11.897	1.302	2097.116	0.06%	99.52%
82.0	11.531	1.270	2098.387	0.05%	99.58%
83.0	11.060	1.228	2099.615	0.05%	99.64%
84.0	10.649	1.183	2100.797	0.05%	99.70%
85.0	10.266	1.141	2101.939	0.05%	99.75%
86.0	9.960	1.106	2103.044	0.05%	99.80%
87.0	9.461	1.063	2104.107	0.05%	99.86%
88.0	9.348	1.030	2105.138	0.04%	99.90%
89.0	9.208	1.017	2106.155	0.04%	99.95%
90.0	9.151	1.007	2107.161	0.04%	100.00%

Zonal flux distribution table

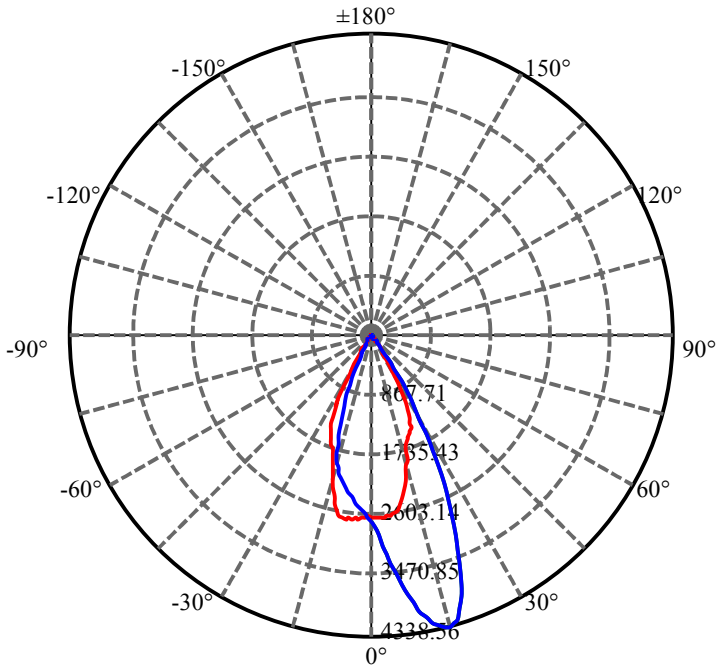
ZONAL LUMEN SUMMARY

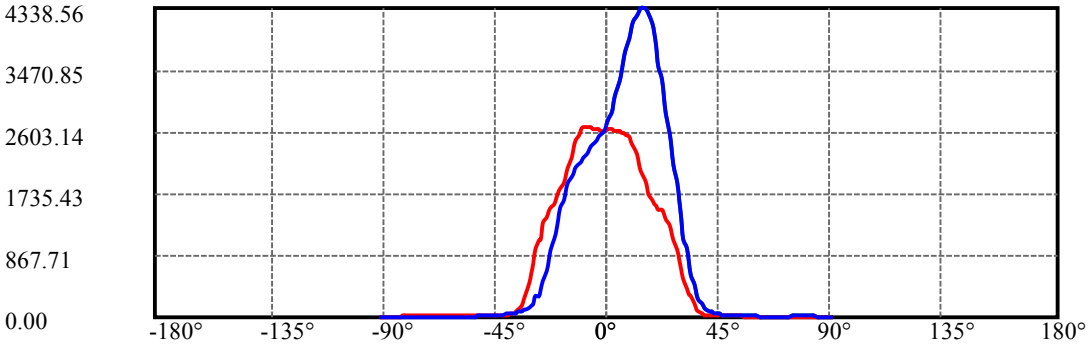
Zone	Lumens	%Lamp	%Fixt
0-30	1752.28	74.87%	83.16%
0-40	2027.08	86.61%	96.20%
0-60	2068.94	88.40%	98.19%
0-90	2106.15	89.99%	99.95%
0-120	2106.15	89.99%	99.95%
0-180	2107.16	90.03%	100.00%
60-90	37.22	1.59%	1.77%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-28.87	1685.73	72.02%	80.00%

ZONAL LUMEN SUMMARY

0-10	265.68
10-20	737.76
20-30	748.84
30-40	274.80
40-50	28.70
50-60	13.15
60-70	13.30
70-80	13.58
80-90	10.34
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]





C90(Max):

C0/C180:

C90/C270:

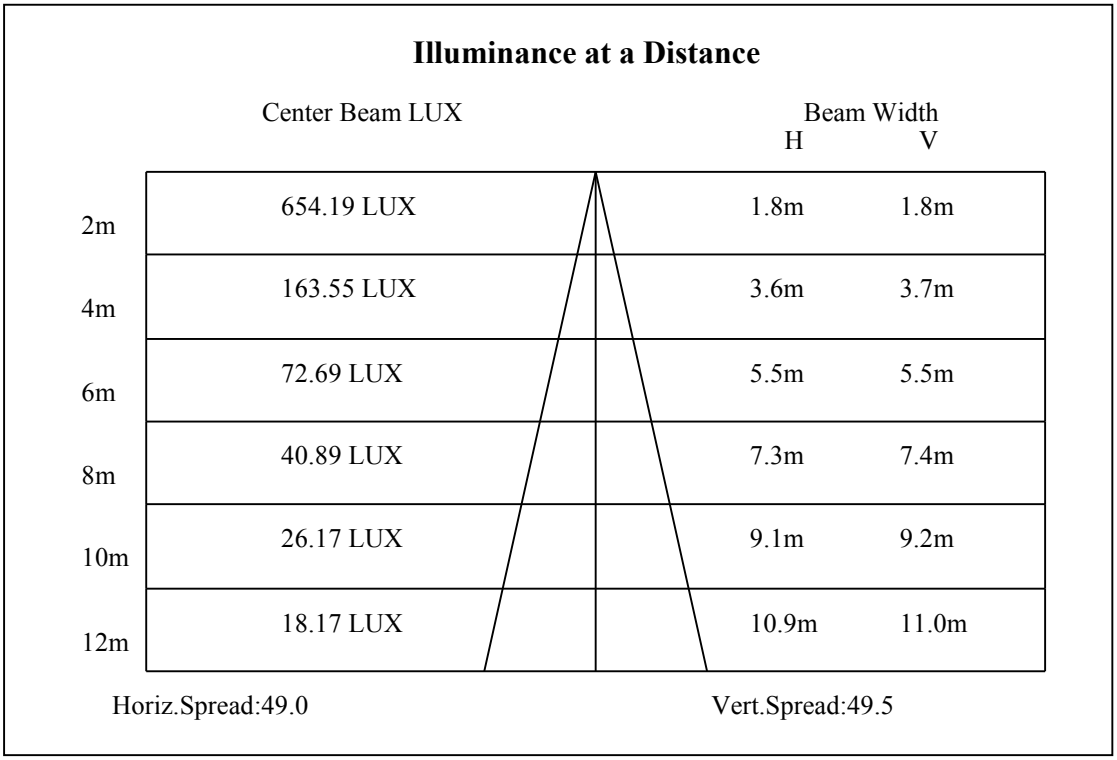
Field angle(10%Imax):C0/180Left:24.7 Right:42.2

:C90/270Left:40.8 Right:20.2

Beam Angle(50%Imax):C0/180Left:16.8 Right:32.6

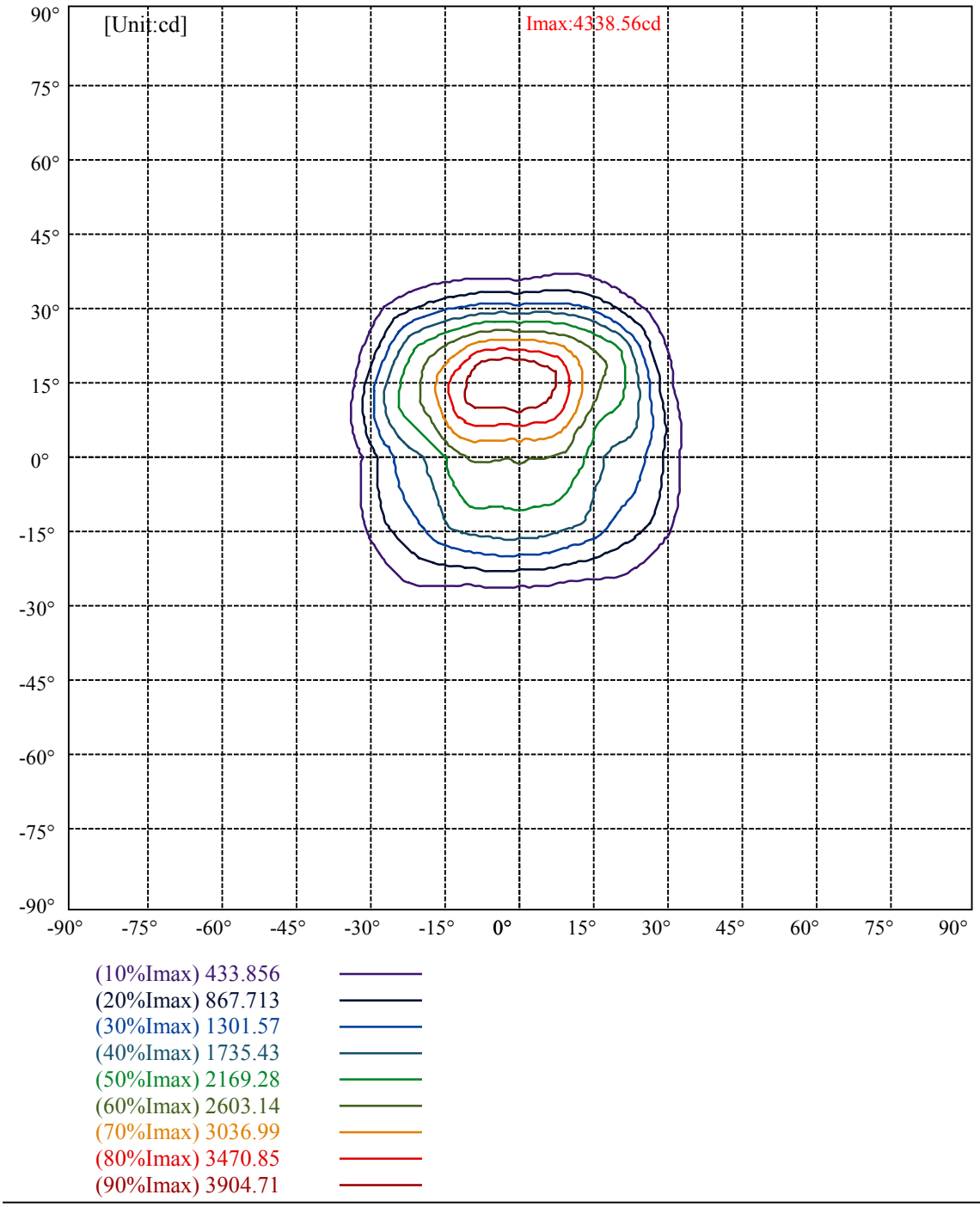
:C90/270Left:25.6 Right:11.8

Lux distance Curve



Equipment: GMS 1800 Date: 2021/7/22 Operator: NT0
Temperature(°C): 25 Humidity(%): 60%

ISO-Intensity(V-H)

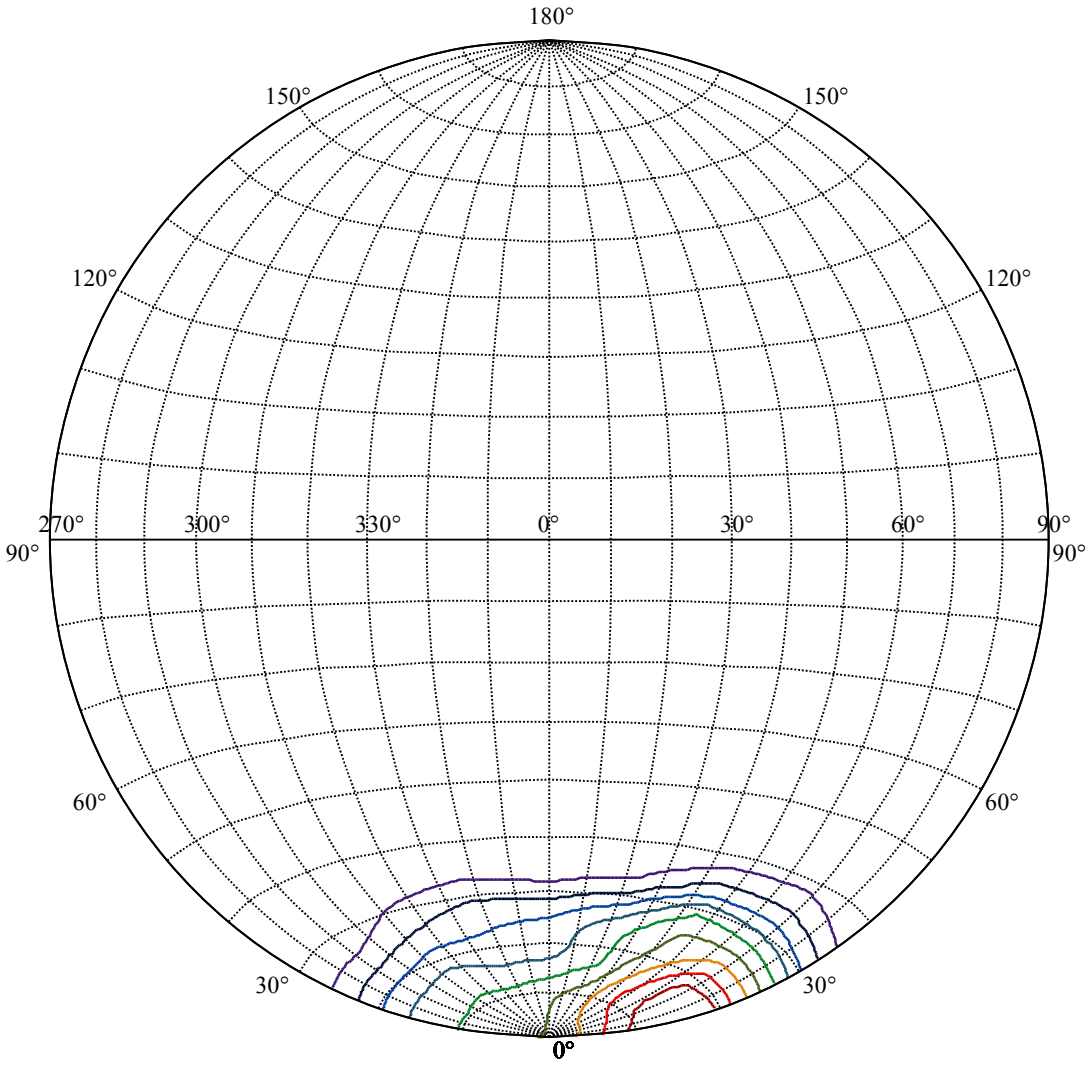


Equipment: GMS 1800
Temperature(°C): 25

Date: 2021/7/22
Humidity(%): 60%

Operator: NT0

ISO candela diagram on circular web



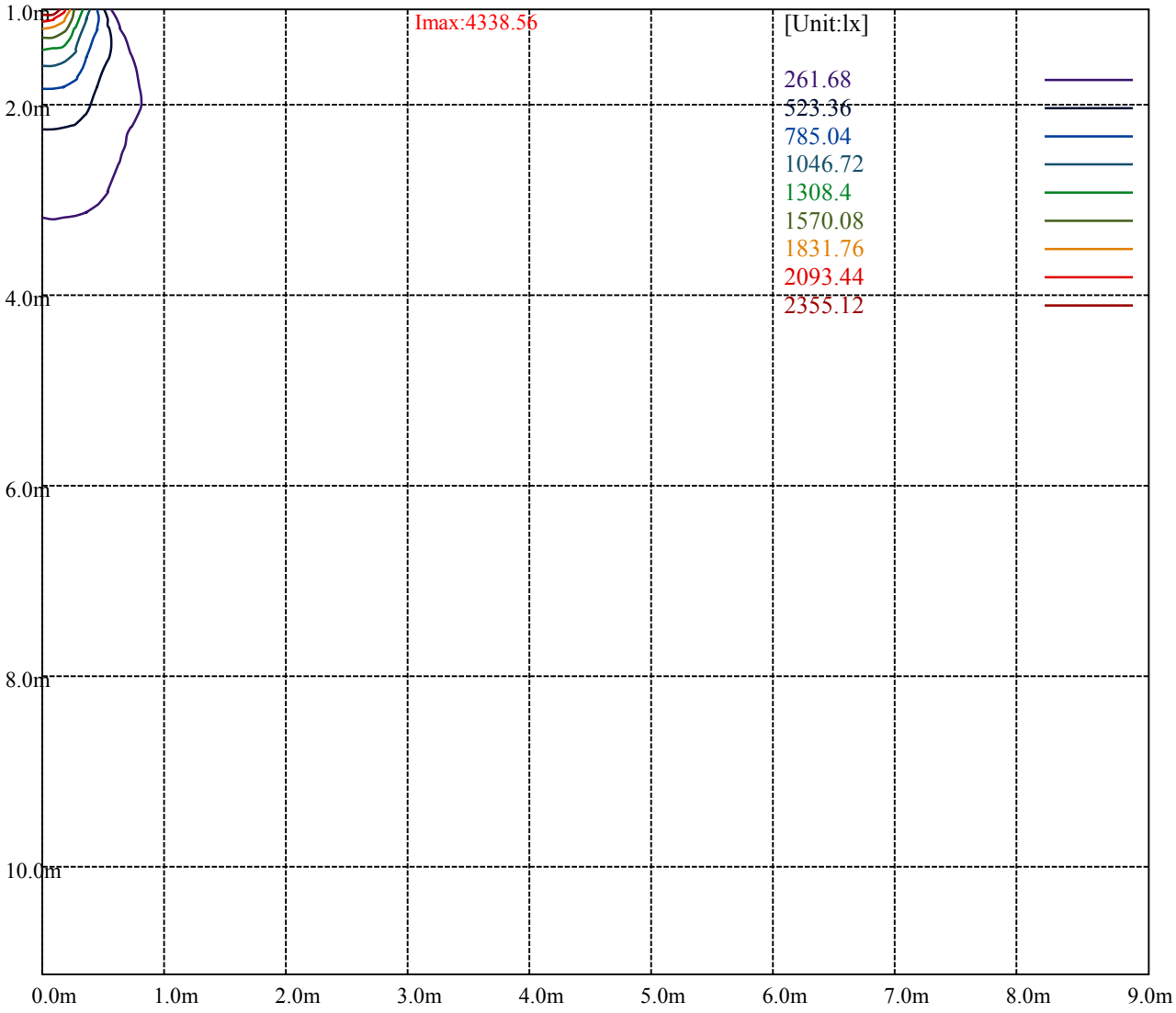
House [Unit:cd] Road

Imax:4338.56

(10%Imax) 433.86
(20%Imax) 867.72
(30%Imax) 1301.58
(40%Imax) 1735.44
(50%Imax) 2169.3
(60%Imax) 2603.16
(70%Imax) 3037.02
(80%Imax) 3470.88
(90%Imax) 3904.74

Equipment: GMS 1800 Date: 2021/7/22 Operator: NT0
Temperature(°C): 25 Humidity(%): 60%

Space ISO Lux diagram



Equipment: GMS 1800
Temperature(°C): 25

Date: 2021/7/22
Humidity(%): 60%

Operator: NT0

Nata 2-2323-M

Luminance Limitting Curve(no luminous side)

Luminance Table

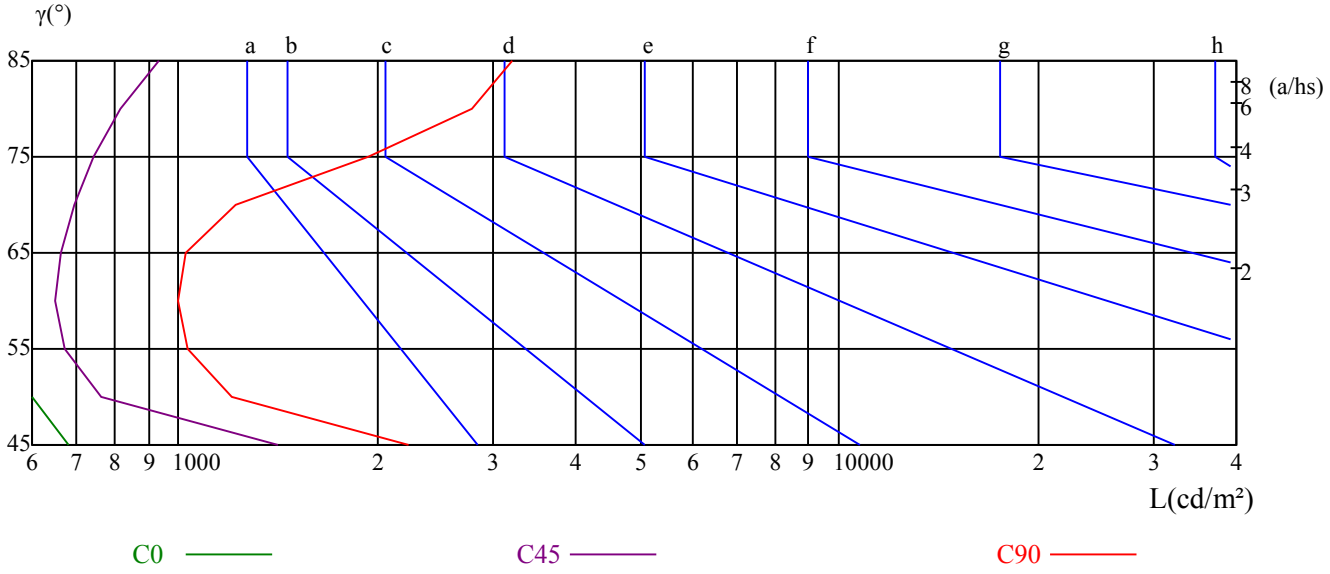
γ	45	50	55	60	65	70	75	80	85
C0	679	587	557	529	548	570	601	663	714
C45	1412	765	673	648	662	696	745	814	936
C90	2227	1205	1036	1000	1028	1216	1931	2790	3197

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1485	1037	1174	2267	1853	1838	4250	4566	4630

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: GMS 1800 Date: 2021/7/22 Operator: NT0
Temperature(°C): 25 Humidity(%): 60%

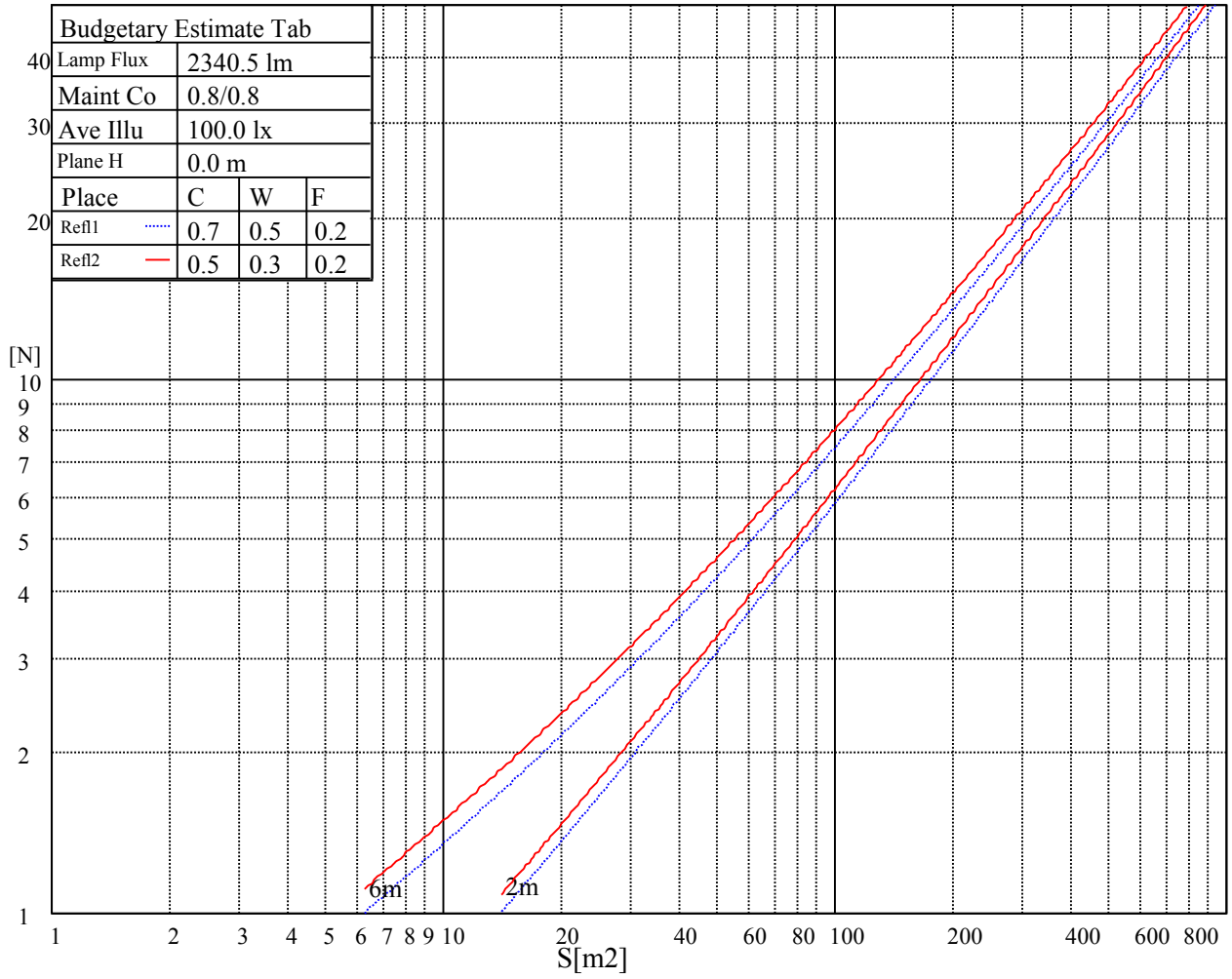
UGR Glare

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										
2H	2H	9.96	10.89	10.32	11.20	11.52	15.23	16.17	15.60	16.48	16.80
	3H	9.99	10.82	10.37	11.16	11.50	15.08	15.92	15.47	16.25	16.60
	4H	10.07	10.85	10.47	11.20	11.57	15.06	15.84	15.46	16.19	16.56
	6H	10.26	10.97	10.68	11.34	11.74	15.18	15.88	15.60	16.26	16.66
	8H	10.37	11.05	10.79	11.43	11.84	15.27	15.94	15.69	16.33	16.74
	12H	10.50	11.14	10.93	11.54	11.96	15.37	16.01	15.79	16.40	16.82
4H	2H	9.72	10.49	10.12	10.85	11.22	14.92	15.70	15.32	16.05	16.42
	3H	9.85	10.50	10.28	10.90	11.31	14.76	15.41	15.19	15.81	16.23
	4H	10.10	10.66	10.54	11.09	11.54	14.82	15.38	15.25	15.80	16.25
	6H	10.42	10.92	10.90	11.37	11.83	14.97	15.47	15.45	15.92	16.38
	8H	10.67	11.13	11.15	11.59	12.06	15.16	15.62	15.65	16.08	16.56
	12H	10.94	11.36	11.43	11.82	12.34	15.38	15.81	15.87	16.26	16.78
8H	4H	10.11	10.57	10.60	11.03	11.51	14.66	15.12	15.15	15.58	16.06
	6H	10.61	10.99	11.12	11.47	11.98	14.87	15.25	15.38	15.73	16.24
	8H	11.05	11.36	11.58	11.88	12.38	15.18	15.49	15.71	16.02	16.51
	12H	11.49	11.73	12.03	12.25	12.77	15.50	15.74	16.05	16.26	16.79
12H	4H	10.12	10.54	10.61	11.00	11.52	14.62	15.05	15.11	15.50	16.02
	6H	10.73	11.04	11.26	11.57	12.06	14.89	15.21	15.43	15.73	16.23
	8H	11.20	11.44	11.74	11.95	12.48	15.19	15.43	15.73	15.95	16.47

Variation with the observer position at spacings:		
S = 1.0H	5.5/-9.1	4.5/-5.4
S = 1.5H	7.9/-7.0	6.5/-4.1
S = 2.0H	9.6/-5.5	7.9/-3.3
Standard tables:	BK1	BK3
Uncorrected UGR	-3.0	-6.9

UGR calculation is based on CIE Publ. 117 ,S/H = 0.25

Budgetary Estimate Table

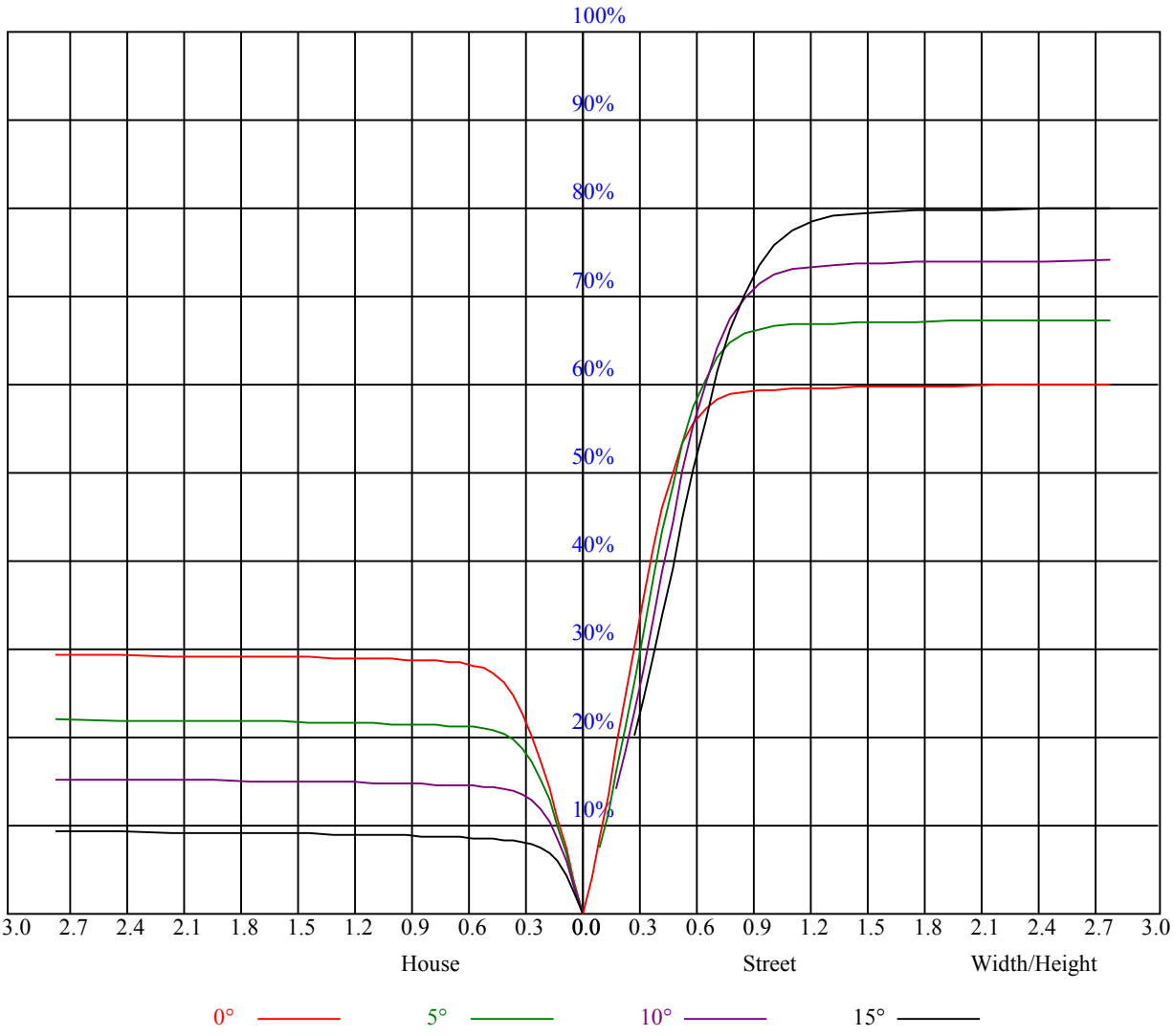


Equipment: GMS 1800 Date: 2021/7/22 Operator: NT0
Temperature(°C): 25 Humidity(%): 60%

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	1.07	1.07	1.07	1.05	1.05	1.05	1.00	1.00	1.00	0.96	0.96	0.96	0.92	0.92	0.92	0.90
1	1.00	0.98	0.96	0.98	0.96	0.94	0.94	0.93	0.91	0.91	0.90	0.89	0.88	0.87	0.86	0.84
2	0.93	0.90	0.87	0.92	0.89	0.86	0.89	0.86	0.84	0.86	0.84	0.82	0.84	0.82	0.81	0.79
3	0.88	0.84	0.80	0.87	0.83	0.80	0.84	0.81	0.78	0.82	0.79	0.77	0.80	0.78	0.76	0.74
4	0.83	0.78	0.74	0.82	0.77	0.74	0.80	0.76	0.73	0.78	0.75	0.72	0.76	0.74	0.71	0.70
5	0.78	0.73	0.70	0.77	0.73	0.69	0.76	0.72	0.69	0.74	0.71	0.68	0.73	0.70	0.67	0.66
6	0.74	0.69	0.65	0.73	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.64	0.69	0.66	0.64	0.63
7	0.70	0.65	0.61	0.69	0.65	0.61	0.68	0.64	0.61	0.67	0.63	0.61	0.66	0.63	0.60	0.59
8	0.66	0.61	0.58	0.66	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.57	0.63	0.60	0.57	0.56
9	0.63	0.58	0.55	0.63	0.58	0.55	0.62	0.58	0.55	0.61	0.57	0.55	0.60	0.57	0.54	0.53
10	0.60	0.55	0.52	0.60	0.55	0.52	0.59	0.55	0.52	0.58	0.55	0.52	0.58	0.54	0.52	0.51

Coefficient Utilization Curve

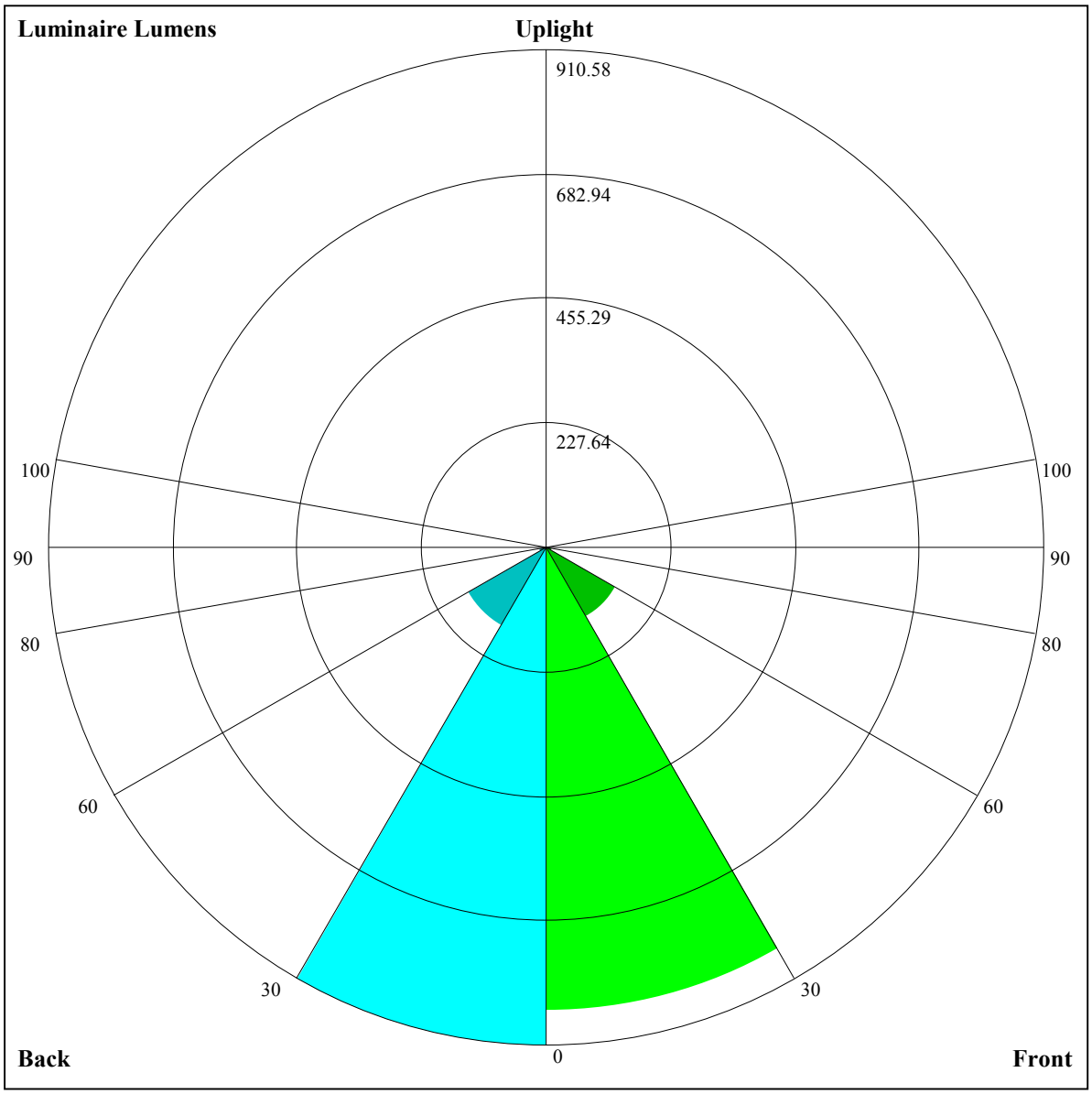


Equipment: GMS 1800
Temperature(°C): 25

Date: 2021/7/22
Humidity(%): 60%

Operator: NT0

LCS Graph



Luminaire Lumens:

FL=849.02,FM=145.36,FH=11.6,FVH=5.49

BL=910.58,BM=166.04,BH=14.96,BVH=5.9

UL=0,UH=0

BUG Rating:B2-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	2616.75	2627.44	2628.00	2624.63	2620.69	2621.25	2599.31	2587.50	2560.50
22.5	2623.50	2648.25	2680.88	2703.94	2749.50	2765.25	2800.13	2828.25	2839.50
45.0	2669.06	2728.13	2801.81	2880.56	2964.94	3066.19	3153.94	3246.75	3329.44
67.5	2652.75	2711.25	2823.75	2926.13	3045.38	3178.69	3323.81	3438.00	3557.25
90.0	2690.44	2777.06	2882.25	3033.00	3164.63	3308.06	3456.56	3617.44	3755.25
112.5	2653.88	2715.75	2805.19	2925.56	3039.75	3169.69	3322.69	3447.00	3564.56
135.0	2666.25	2714.06	2799.00	2889.00	2977.31	3099.94	3200.06	3292.31	3407.63
157.5	2624.63	2639.81	2676.94	2718.00	2787.75	2850.75	2893.50	2970.00	3024.00
180.0	2616.75	2604.38	2615.63	2633.06	2646.56	2648.25	2665.13	2656.13	2669.63
202.5	2623.50	2598.19	2571.19	2556.00	2541.94	2522.81	2507.63	2485.69	2473.31
225.0	2669.06	2627.44	2577.94	2536.31	2500.88	2473.31	2432.25	2400.75	2371.50
247.5	2652.75	2596.50	2543.06	2491.88	2448.56	2404.13	2357.44	2318.06	2275.88
270.0	2690.44	2623.50	2566.13	2526.19	2480.06	2435.06	2392.88	2340.00	2299.50
292.5	2653.88	2584.13	2541.94	2493.00	2444.06	2412.00	2366.44	2314.69	2278.69
315.0	2666.25	2628.56	2574.00	2543.06	2506.50	2461.50	2414.81	2383.88	2336.06
337.5	2624.63	2602.69	2579.63	2553.19	2523.94	2507.06	2467.13	2427.19	2388.94
360.0	2616.75	2627.44	2628.00	2624.63	2620.69	2621.25	2599.31	2587.50	2560.50

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2534.63	2464.88	2387.25	2284.31	2166.75	2049.19	1948.50	1857.94	1724.63
22.5	2819.81	2769.19	2693.25	2601.00	2493.00	2396.25	2312.44	2196.00	2134.69
45.0	3374.44	3427.31	3429.00	3421.69	3411.00	3332.25	3261.94	3186.00	3099.94
67.5	3699.00	3812.06	3910.50	3966.19	4044.94	4080.94	4097.81	4114.13	4064.63
90.0	3900.94	4034.25	4139.44	4225.50	4274.44	4325.63	4338.56	4325.06	4266.56
112.5	3719.81	3829.50	3938.63	4057.31	4140.56	4195.69	4256.44	4267.13	4285.69
135.0	3501.00	3605.06	3708.56	3771.56	3848.06	3898.13	3901.50	3873.94	3782.25
157.5	3078.00	3157.88	3176.44	3203.44	3159.00	3117.38	3040.88	2940.75	2822.06
180.0	2662.88	2630.81	2565.00	2490.75	2368.69	2249.44	2113.88	2002.50	1874.81
202.5	2440.13	2427.19	2390.06	2342.25	2276.44	2184.75	2071.69	1977.75	1855.13
225.0	2335.50	2310.19	2268.00	2233.69	2205.00	2171.81	2121.19	2080.13	1998.56
247.5	2238.75	2190.38	2148.19	2109.38	2059.88	2008.69	1944.00	1859.63	1728.56
270.0	2248.31	2194.88	2149.31	2098.69	2032.31	1967.06	1888.31	1765.13	1650.94
292.5	2237.06	2181.94	2151.56	2110.50	2057.06	1982.81	1907.44	1797.19	1674.56
315.0	2289.38	2245.50	2205.00	2164.50	2130.19	2071.69	2010.94	1951.31	1842.19
337.5	2354.06	2291.63	2221.88	2140.31	2043.56	1936.13	1837.69	1752.19	1673.44
360.0	2534.63	2464.88	2387.25	2284.31	2166.75	2049.19	1948.50	1857.94	1724.63

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1650.38	1589.06	1550.81	1519.31	1496.25	1450.13	1383.19	1305.00	1190.81
22.5	2089.13	2080.69	2076.19	2077.88	2066.06	2026.69	1960.88	1848.38	1718.44
45.0	3021.75	2902.50	2833.31	2764.69	2707.88	2685.38	2653.31	2613.94	2566.13
67.5	3974.06	3855.94	3683.81	3526.88	3354.75	3171.94	2973.38	2777.06	2577.94
90.0	4122.56	3988.13	3808.69	3532.50	3336.75	3109.50	2844.56	2595.94	2375.44
112.5	4229.44	4140.00	3996.00	3792.38	3586.50	3396.38	3127.50	2906.44	2677.50
135.0	3705.75	3613.50	3482.44	3345.75	3198.38	3041.44	2878.31	2754.56	2650.50
157.5	2713.50	2602.69	2535.75	2489.06	2433.38	2386.69	2347.31	2282.06	2212.31
180.0	1801.69	1738.69	1670.63	1598.06	1542.38	1473.19	1405.13	1312.88	1112.46
202.5	1731.94	1634.63	1566.00	1494.56	1434.38	1380.38	1308.94	1239.75	1120.11
225.0	1911.94	1811.81	1700.44	1567.13	1459.69	1344.38	1218.38	1132.31	1046.25
247.5	1622.81	1510.88	1373.06	1250.44	1106.72	994.89	838.46	709.14	580.05
270.0	1524.94	1379.25	1225.13	1091.81	936.56	787.50	658.69	522.00	409.50
292.5	1559.25	1423.13	1300.50	1107.11	1026.23	879.19	732.26	609.92	474.64
315.0	1748.25	1644.75	1518.75	1415.25	1308.38	1185.75	1058.63	951.19	844.88
337.5	1555.31	1478.81	1416.94	1364.63	1334.25	1303.88	1263.38	1216.69	1119.66
360.0	1650.38	1589.06	1550.81	1519.31	1496.25	1450.13	1383.19	1305.00	1190.81

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	1077.19	942.19	799.88	668.81	535.50	415.13	326.25	287.44	179.38
22.5	1557.56	1370.81	1180.69	992.81	783.56	641.81	498.38	345.94	296.44
45.0	2489.06	2323.69	2189.81	2016.56	1770.19	1521.56	1122.08	1098.06	862.26
67.5	2390.06	2193.75	1970.44	1761.19	1552.50	1352.25	1182.94	1022.63	840.94
90.0	2115.56	1879.88	1631.81	1404.56	1101.09	975.43	790.82	603.62	462.26
112.5	2441.25	2190.94	1952.44	1706.63	1485.00	1287.56	1077.19	902.25	723.38
135.0	2550.38	2429.44	2275.88	2138.63	1971.56	1767.94	1575.00	1383.75	1117.69
157.5	2090.81	1954.69	1821.94	1652.63	1424.25	1235.81	1014.75	771.19	560.81
180.0	1081.01	930.88	752.29	629.66	495.68	330.08	243.00	165.04	95.01
202.5	1081.46	1005.64	912.32	809.38	711.11	596.81	486.06	388.29	297.90
225.0	951.19	852.19	774.00	684.56	594.56	523.13	442.69	372.94	301.50
247.5	455.91	349.88	266.46	200.14	154.52	112.33	80.16	62.10	51.69
270.0	305.44	285.75	191.64	161.10	131.34	115.37	105.36	90.23	75.09
292.5	371.19	275.34	210.60	167.74	133.26	103.78	91.01	84.54	70.59
315.0	758.81	672.19	588.38	516.38	444.94	367.88	304.88	290.25	171.62
337.5	1090.86	992.08	886.16	773.94	666.62	554.01	450.73	351.56	271.35
360.0	1077.19	942.19	799.88	668.81	535.50	415.13	326.25	287.44	179.38

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	112.61	73.29	49.05	34.20	30.49	26.27	20.59	19.46	18.62
22.5	151.48	100.86	60.92	44.83	37.18	32.01	26.27	24.47	23.06
45.0	697.95	554.34	416.42	307.80	233.94	166.95	119.98	78.69	48.71
67.5	719.44	595.13	471.94	363.94	288.00	197.55	133.14	101.03	76.05
90.0	333.06	242.10	188.66	144.56	110.70	79.99	68.96	58.73	49.50
112.5	569.25	452.81	348.19	290.25	184.16	139.78	102.04	77.12	66.15
135.0	957.77	797.68	646.20	487.41	375.02	284.01	197.94	128.98	88.48
157.5	390.94	288.00	145.35	100.63	72.84	55.91	40.95	34.65	30.04
180.0	71.66	54.96	42.92	34.14	29.76	25.43	23.68	21.99	21.04
202.5	197.33	135.90	90.23	61.20	46.41	37.01	30.83	24.81	21.88
225.0	285.19	176.63	128.36	84.71	54.73	38.14	29.03	24.30	21.38
247.5	44.33	35.21	25.82	19.52	18.00	16.76	15.75	14.96	14.29
270.0	61.99	59.18	56.81	54.28	47.42	36.11	28.91	22.67	19.18
292.5	57.04	44.66	40.56	36.90	32.91	28.41	23.91	18.96	15.53
315.0	124.99	87.81	56.98	39.77	31.44	26.38	20.87	17.44	15.58
337.5	198.90	140.29	98.04	63.56	39.49	27.84	24.36	20.76	17.21
360.0	112.61	73.29	49.05	34.20	30.49	26.27	20.59	19.46	18.62

C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	17.83	17.16	16.59	15.86	15.30	14.79	14.29	14.01	13.73
22.5	22.11	21.49	20.64	19.86	19.29	18.79	18.23	17.72	17.27
45.0	34.31	27.28	24.08	20.76	18.68	17.72	17.04	16.31	15.69
67.5	58.05	47.59	37.18	29.53	23.23	20.81	19.52	18.34	17.04
90.0	41.85	30.43	26.66	24.69	22.67	20.70	19.46	18.39	17.89
112.5	56.93	45.73	31.95	26.72	23.29	21.49	19.69	18.28	16.99
135.0	58.16	42.24	34.76	30.43	28.07	23.29	19.46	17.89	16.88
157.5	26.10	24.53	23.23	22.05	20.76	19.97	19.24	18.51	17.94
180.0	20.36	19.74	18.96	18.45	17.83	17.16	16.82	16.65	16.65
202.5	20.59	19.35	18.68	18.17	17.72	17.27	16.82	16.43	16.20
225.0	19.18	17.55	16.88	16.48	16.26	15.75	15.53	15.13	14.74
247.5	13.78	13.39	13.11	12.77	12.54	12.32	12.21	12.04	11.87
270.0	17.66	16.82	16.14	15.64	14.91	14.29	13.73	13.28	12.71
292.5	13.95	13.05	12.60	12.26	12.04	11.76	11.59	11.42	11.25
315.0	15.08	14.40	14.01	13.73	13.39	13.11	12.99	12.21	11.98
337.5	16.09	15.53	15.13	14.63	14.29	13.89	13.61	13.28	12.99
360.0	17.83	17.16	16.59	15.86	15.30	14.79	14.29	14.01	13.73

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	13.56	13.44	13.05	12.66	12.49	12.26	11.98	11.93	11.81
22.5	16.76	16.37	15.92	15.47	15.19	14.85	14.51	14.40	14.29
45.0	15.13	14.68	14.29	13.95	13.78	13.44	13.16	12.94	12.77
67.5	15.86	15.13	14.68	14.01	13.61	13.33	12.94	12.77	12.54
90.0	16.88	15.98	15.53	15.30	14.46	13.95	13.61	12.83	12.54
112.5	16.03	15.36	14.68	14.01	13.67	13.28	12.83	12.49	12.26
135.0	16.03	15.41	15.02	14.51	14.34	14.01	13.50	13.16	12.99
157.5	17.44	16.82	16.54	16.48	16.59	16.93	17.16	17.38	17.55
180.0	17.21	17.78	18.28	18.90	19.29	19.58	20.14	20.70	21.09
202.5	16.03	16.03	16.37	16.82	17.38	18.00	18.62	19.41	19.97
225.0	14.68	14.18	13.78	13.61	13.50	13.33	13.28	13.50	13.56
247.5	11.76	11.64	11.53	11.48	11.36	11.31	11.25	11.14	11.14
270.0	12.49	12.21	11.98	11.81	11.64	11.53	11.31	11.14	10.97
292.5	11.08	10.97	10.91	10.80	10.74	10.63	10.58	10.46	10.35
315.0	11.48	11.36	11.25	11.25	10.97	10.86	10.97	11.14	11.14
337.5	12.71	12.38	12.15	11.98	11.81	11.64	11.53	11.42	11.25
360.0	13.56	13.44	13.05	12.66	12.49	12.26	11.98	11.93	11.81

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	11.64	11.53	11.59	11.36	11.36	11.36	11.08	11.14	11.03
22.5	14.12	13.84	13.67	13.44	13.44	13.39	13.11	13.11	12.88
45.0	12.66	12.54	12.43	12.32	12.15	12.04	11.93	11.81	11.70
67.5	12.32	12.15	11.98	11.87	11.70	11.59	11.48	11.36	11.25
90.0	12.38	12.15	11.98	11.87	11.64	11.64	11.64	11.70	11.81
112.5	12.04	11.81	11.64	11.59	11.42	11.25	11.14	10.97	10.86
135.0	12.94	12.99	12.99	13.05	13.11	13.05	12.99	12.99	12.99
157.5	17.83	18.00	18.11	18.11	18.11	18.28	18.51	18.39	18.00
180.0	21.09	20.87	20.59	20.53	20.70	20.87	20.87	20.53	20.19
202.5	20.48	20.98	21.21	21.26	21.21	21.04	20.81	20.87	21.26
225.0	13.84	14.23	14.57	14.74	15.19	15.47	15.69	15.81	15.86
247.5	11.08	11.14	11.19	11.14	11.03	10.97	10.91	10.91	10.86
270.0	10.86	10.63	10.52	10.46	10.41	10.35	10.29	10.29	10.24
292.5	10.29	10.24	10.13	10.07	10.01	10.01	9.96	9.96	9.90
315.0	10.80	10.91	10.86	11.08	10.80	10.74	10.86	10.69	10.58
337.5	11.14	11.03	10.97	10.86	10.86	10.74	10.63	10.58	10.52
360.0	11.64	11.53	11.59	11.36	11.36	11.36	11.08	11.14	11.03

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	10.91	10.80	10.63	10.58	10.52	10.41	10.35	10.35	10.41
22.5	12.77	12.60	12.38	12.09	11.93	11.76	11.76	11.59	11.53
45.0	11.53	11.42	11.36	11.25	11.19	11.03	10.86	10.74	10.63
67.5	11.14	11.08	10.97	10.86	10.74	10.69	10.63	10.52	10.46
90.0	12.21	13.05	13.84	14.46	14.96	15.02	15.36	15.69	14.85
112.5	10.80	10.74	10.69	10.69	10.63	10.52	10.46	10.46	10.35
135.0	13.05	12.99	12.71	12.49	12.43	12.04	11.87	11.36	11.08
157.5	17.94	18.17	17.89	17.44	17.49	16.76	16.37	15.69	14.68
180.0	20.42	20.03	19.41	19.52	18.90	18.90	18.17	17.44	16.76
202.5	21.66	21.32	20.98	21.15	21.09	20.53	20.59	20.03	19.41
225.0	15.58	15.19	15.08	15.30	15.41	15.24	14.91	14.63	14.12
247.5	10.86	10.80	10.86	10.86	10.69	10.58	10.58	10.46	10.46
270.0	10.24	10.18	10.13	10.13	10.13	10.13	10.13	10.18	10.29
292.5	9.84	9.79	9.79	9.79	9.79	9.73	9.73	9.68	9.68
315.0	10.18	9.96	9.90	9.84	9.84	9.90	9.84	9.79	9.79
337.5	10.46	10.41	10.35	10.29	10.24	10.24	10.18	10.18	10.24
360.0	10.91	10.80	10.63	10.58	10.52	10.41	10.35	10.35	10.41

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	10.46	10.46	10.46	9.90	9.68	9.68	9.06	8.83	8.78
22.5	11.53	11.31	11.08	10.97	10.86	10.41	10.18	10.07	9.90
45.0	10.58	10.58	10.52	10.58	10.18	10.07	9.96	9.90	9.79
67.5	10.41	10.29	10.24	10.13	10.01	9.73	9.68	9.56	9.51
90.0	14.57	14.51	13.89	11.81	10.01	9.51	9.28	9.17	9.11
112.5	10.29	10.24	10.01	9.68	9.51	9.28	9.17	9.11	9.00
135.0	10.69	10.46	10.41	10.35	9.45	9.17	9.06	8.94	8.89
157.5	13.67	12.43	11.36	10.97	10.29	9.28	9.11	8.94	8.78
180.0	15.24	13.44	11.31	11.14	9.28	9.06	8.89	8.83	8.55
202.5	18.62	17.10	15.08	12.66	12.60	11.81	10.29	10.24	10.07
225.0	13.73	13.11	12.32	11.76	11.81	11.87	10.07	10.01	9.90
247.5	10.41	10.41	10.41	10.46	10.52	10.01	9.56	9.56	9.45
270.0	10.35	10.35	10.29	10.41	10.41	10.41	9.84	9.39	9.06
292.5	9.73	9.79	9.79	9.79	9.79	9.23	9.06	9.00	8.89
315.0	9.79	9.79	9.84	9.90	10.01	10.13	9.23	9.11	8.94
337.5	10.29	10.24	9.96	9.90	9.84	9.73	8.94	8.89	8.72
360.0	10.46	10.46	10.46	9.90	9.68	9.68	9.06	8.83	8.78

C/γ(°)	90.0
0.0	8.55
22.5	9.90
45.0	9.79
67.5	9.45
90.0	9.06
112.5	8.89
135.0	8.83
157.5	8.66
180.0	8.61
202.5	10.01
225.0	9.79
247.5	9.45
270.0	9.06
292.5	8.83
315.0	8.83
337.5	8.72
360.0	8.55