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Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

Nata

LumCAT: 2-2321-M
Luminaire: 92.70.135.0
Report No: 210515-B001
Test No: 210515-C001
LampCAT: LUMILEDS 1208
Lamp flux(lm): 2245.1
Number of Lamps: 1
Length(mm): 74
Phm Type: C

Voltage(V): 36.5200
Current(A): 0.5860
Power (W): 21.4000
PF: 0.0000
Ballast type: DC
Width(mm): 74
Height(mm): 56

Photometric Results

Lumens(lm): 2181.36
Efficiency(%): 97.16%
Lumens(lm)/Power(W): 101.93
Central intensity(cd): 3005.438
Maximum intensity(cd): 3055.500
Angle of maximum intensity: C=202.5 γ=6.0
Beam Angle(50%Imax): [C0/180]Total=48.8
[C90/270]Total=49.3
Field angle(10%Imax): [C0/180]Total=65.2
[C90/270]Total=64.8
Maximum s/h(1/2): C0_180=0.76 C90_270=0.83
Maximum s/h(1/4): C0_180=0.66 C90_270=0.71
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 97.16%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.410%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2991.656	0.000	0	.000%	.000%
1.0	2993.344	2.864	2.864	.128%	.131%
2.0	2995.734	8.596	11.46	.383%	.525%
3.0	2999.637	14.339	25.799	.639%	1.183%
4.0	3001.746	20.089	45.887	.895%	2.104%
5.0	3003.820	25.836	71.723	1.151%	3.288%
6.0	3001.570	31.560	103.283	1.406%	4.735%
7.0	2997.844	37.238	140.521	1.659%	6.442%
8.0	2988.141	42.841	183.362	1.908%	8.406%
9.0	2977.137	48.345	231.707	2.153%	10.622%
10.0	2960.578	53.734	285.441	2.393%	13.085%
11.0	2941.840	58.977	344.418	2.627%	15.789%
12.0	2917.723	64.053	408.472	2.853%	18.726%
13.0	2883.656	68.848	477.32	3.067%	21.882%
14.0	2851.383	73.408	550.728	3.270%	25.247%
15.0	2812.887	77.762	628.489	3.464%	28.812%
16.0	2769.996	81.805	710.294	3.644%	32.562%
17.0	2717.262	85.451	795.745	3.806%	36.479%
18.0	2653.137	88.546	884.292	3.944%	40.539%
19.0	2582.227	91.085	975.376	4.057%	44.714%
20.0	2488.219	92.803	1068.179	4.134%	48.969%
21.0	2377.055	93.423	1161.603	4.161%	53.251%
22.0	2257.770	93.139	1254.741	4.148%	57.521%
23.0	2114.473	91.741	1346.483	4.086%	61.727%
24.0	1942.281	88.695	1435.178	3.951%	65.793%
25.0	1772.037	84.455	1519.633	3.762%	69.665%
26.0	1597.975	79.549	1599.183	3.543%	73.311%
27.0	1411.710	73.633	1672.816	3.280%	76.687%
28.0	1225.132	66.759	1739.575	2.974%	79.747%
29.0	1051.991	59.576	1799.151	2.654%	82.479%
30.0	888.616	52.396	1851.547	2.334%	84.881%
31.0	729.826	45.039	1896.586	2.006%	86.945%
32.0	600.420	38.110	1934.696	1.697%	88.692%
33.0	488.092	32.068	1966.764	1.428%	90.162%
34.0	398.985	26.846	1993.609	1.196%	91.393%
35.0	323.367	22.434	2016.043	.999%	92.421%
36.0	259.910	18.572	2034.614	.827%	93.273%
37.0	214.520	15.473	2050.088	.689%	93.982%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	173.721	12.959	2063.047	.577%	94.576%
39.0	145.238	10.887	2073.934	.485%	95.075%
40.0	117.499	9.163	2083.097	.408%	95.495%
41.0	98.677	7.698	2090.795	.343%	95.848%
42.0	84.129	6.642	2097.436	.296%	96.153%
43.0	72.250	5.793	2103.229	.258%	96.418%
44.0	62.575	5.089	2108.318	.227%	96.652%
45.0	54.425	4.496	2112.814	.200%	96.858%
46.0	47.619	3.991	2116.805	.178%	97.041%
47.0	41.706	3.553	2120.358	.158%	97.204%
48.0	37.058	3.184	2123.542	.142%	97.350%
49.0	32.987	2.876	2126.418	.128%	97.481%
50.0	29.331	2.598	2129.016	.116%	97.601%
51.0	26.508	2.362	2131.379	.105%	97.709%
52.0	24.159	2.174	2133.553	.097%	97.809%
53.0	22.004	2.008	2135.561	.089%	97.901%
54.0	20.257	1.863	2137.424	.083%	97.986%
55.0	18.886	1.747	2139.171	.078%	98.066%
56.0	17.568	1.647	2140.818	.073%	98.142%
57.0	16.530	1.559	2142.377	.069%	98.213%
58.0	15.666	1.489	2143.866	.066%	98.281%
59.0	14.934	1.431	2145.297	.064%	98.347%
60.0	14.284	1.380	2146.677	.061%	98.410%
61.0	13.764	1.338	2148.016	.060%	98.472%
62.0	13.321	1.305	2149.321	.058%	98.531%
63.0	12.952	1.278	2150.599	.057%	98.590%
64.0	12.628	1.255	2151.854	.056%	98.647%
65.0	12.350	1.236	2153.09	.055%	98.704%
66.0	12.111	1.220	2154.31	.054%	98.760%
67.0	11.918	1.208	2155.519	.054%	98.815%
68.0	11.739	1.198	2156.717	.053%	98.870%
69.0	11.570	1.189	2157.906	.053%	98.925%
70.0	11.440	1.182	2159.088	.053%	98.979%
71.0	11.327	1.177	2160.265	.052%	99.033%
72.0	11.243	1.174	2161.438	.052%	99.087%
73.0	11.173	1.172	2162.61	.052%	99.141%
74.0	11.102	1.171	2163.781	.052%	99.194%
75.0	11.018	1.169	2164.95	.052%	99.248%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	10.962	1.167	2166.117	.052%	99.301%
77.0	10.895	1.165	2167.282	.052%	99.355%
78.0	10.818	1.162	2168.444	.052%	99.408%
79.0	10.705	1.156	2169.601	.052%	99.461%
80.0	10.596	1.148	2170.749	.051%	99.514%
81.0	10.357	1.133	2171.882	.050%	99.566%
82.0	10.139	1.111	2172.994	.050%	99.617%
83.0	10.058	1.098	2174.092	.049%	99.667%
84.0	9.911	1.088	2175.18	.048%	99.717%
85.0	9.784	1.075	2176.255	.048%	99.766%
86.0	9.527	1.056	2177.31	.047%	99.814%
87.0	9.348	1.033	2178.343	.046%	99.862%
88.0	9.218	1.017	2179.36	.045%	99.908%
89.0	9.102	1.004	2180.364	.045%	99.954%
90.0	9.004	0.993	2181.357	.044%	100.000%

Zonal flux distribution table

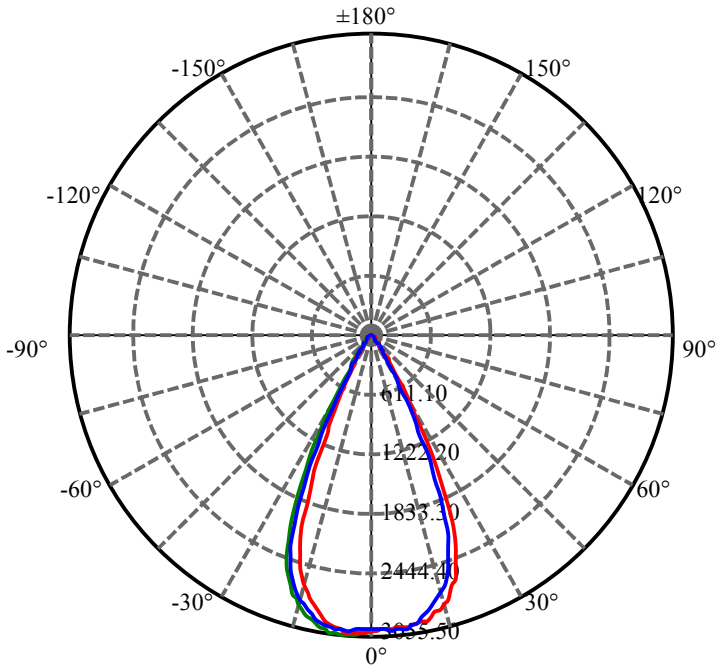
ZONAL LUMEN SUMMARY

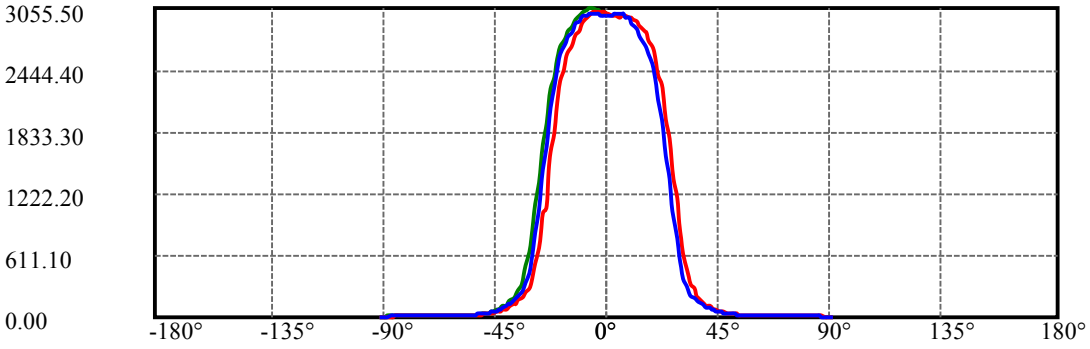
Zone	Lumens	%Lamp	%Fixt
0-30	1851.55	82.47%	84.88%
0-40	2083.10	92.78%	95.50%
0-60	2146.68	95.62%	98.41%
0-90	2180.36	97.12%	99.95%
0-120	2180.36	97.12%	99.95%
0-180	2181.36	97.16%	100.00%
60-90	35.07	1.56%	1.61%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-28.09	1745.09	77.73%	80.00%

ZONAL LUMEN SUMMARY

0-10	285.44
10-20	782.74
20-30	783.37
30-40	231.55
40-50	45.92
50-60	17.66
60-70	12.41
70-80	11.66
80-90	9.62
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]





C202.5(Max):

C0/C180:

C90/C270:

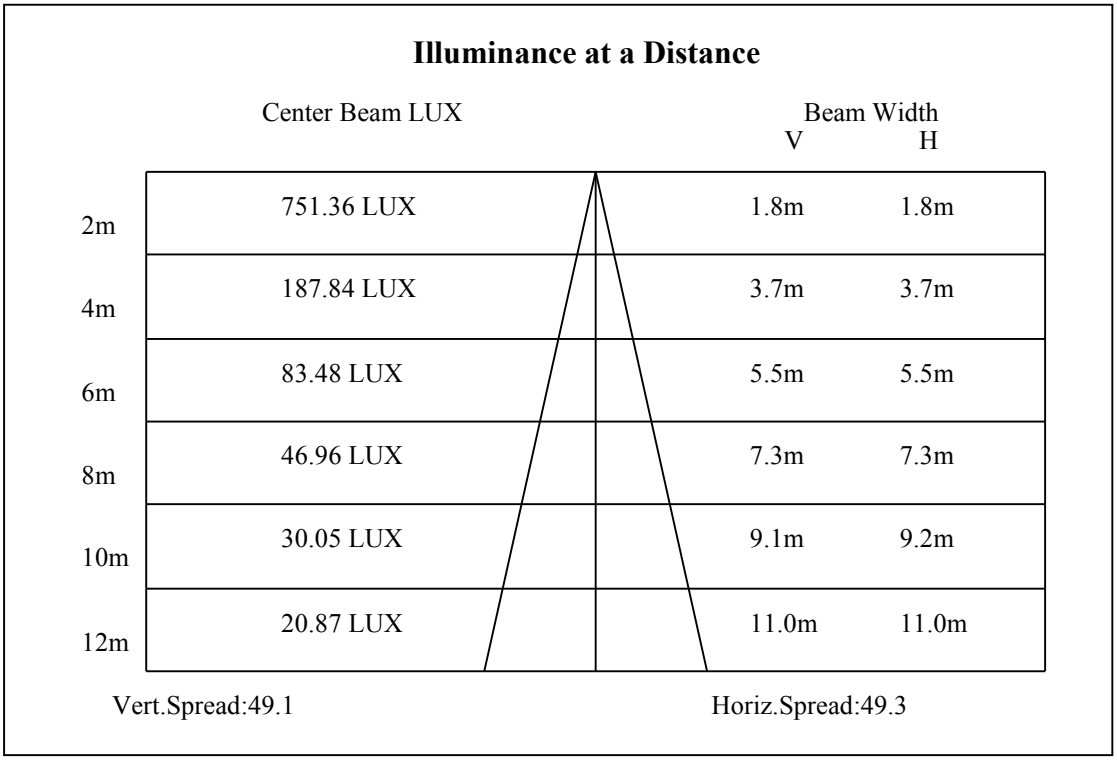
Field angle(10%Imax):C0/180Left:26.7 Right:38.5

:C90/270Left:27.8 Right:37.0

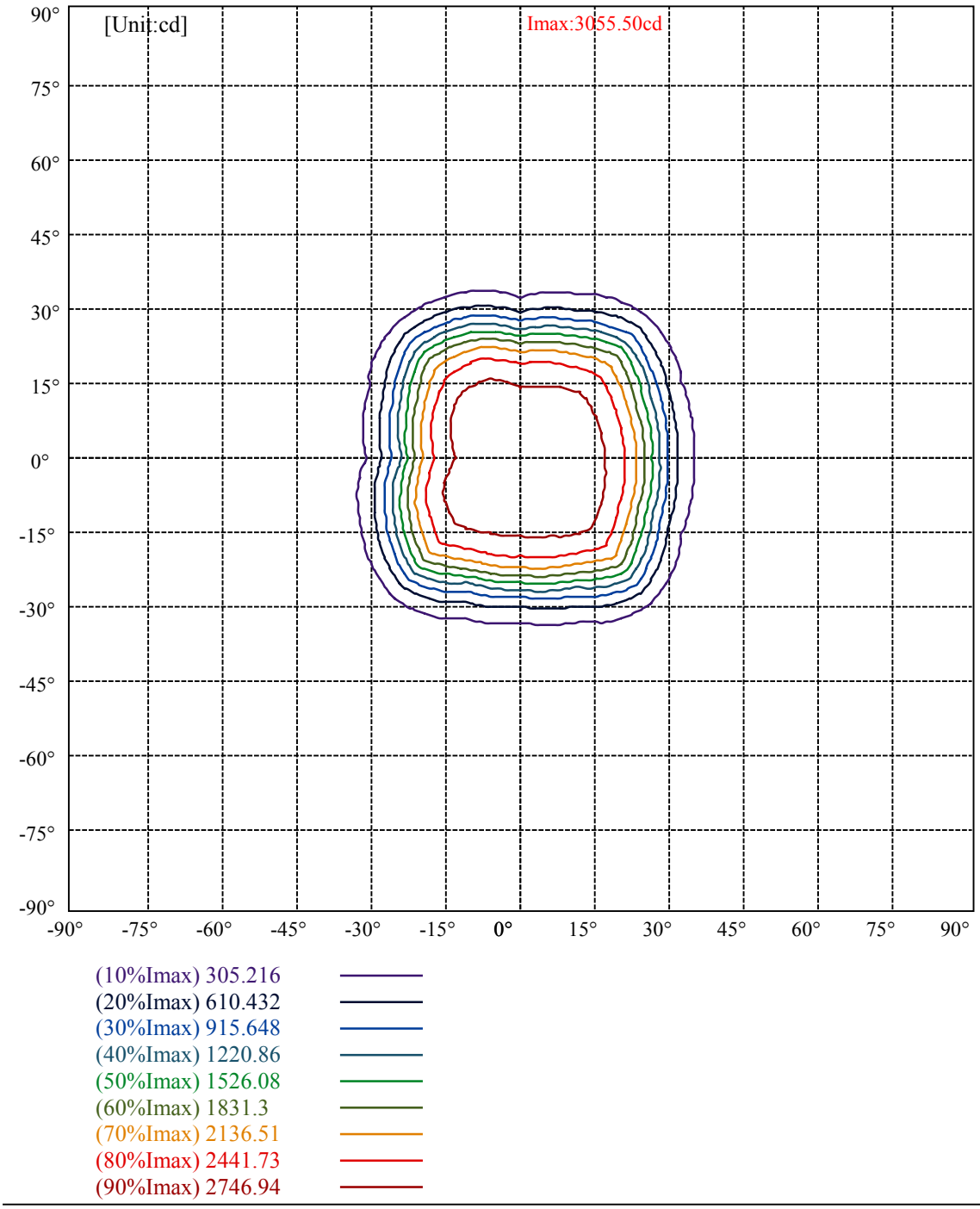
Beam Angle(50%Imax):C0/180Left:18.6 Right:30.2

:C90/270Left:19.8 Right:29.4

Lux distance Curve



ISO-Intensity(V-H)

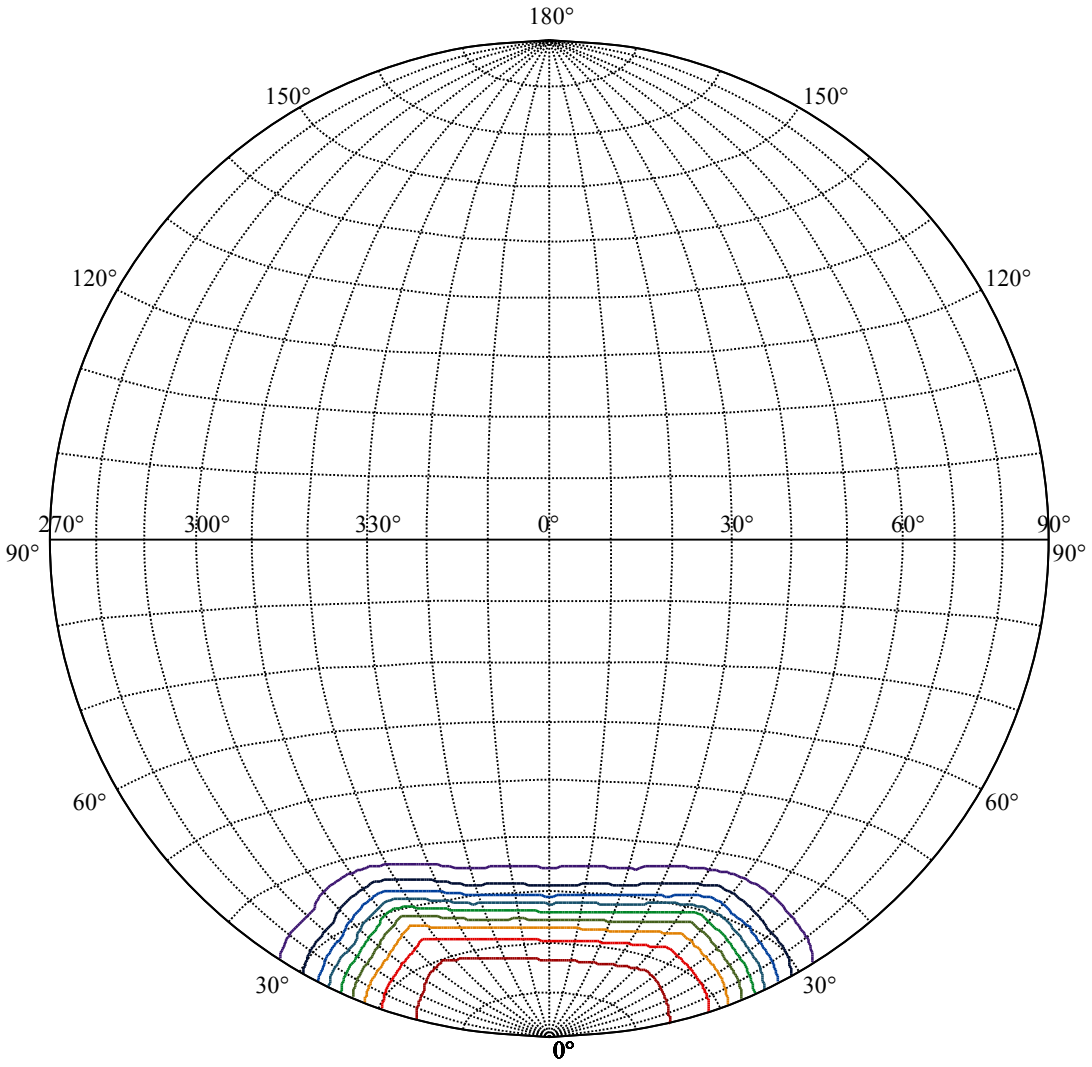


Equipment: GMS1980
Temperature(°C): 25.0

Date: 2021/05/15
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:3055.50

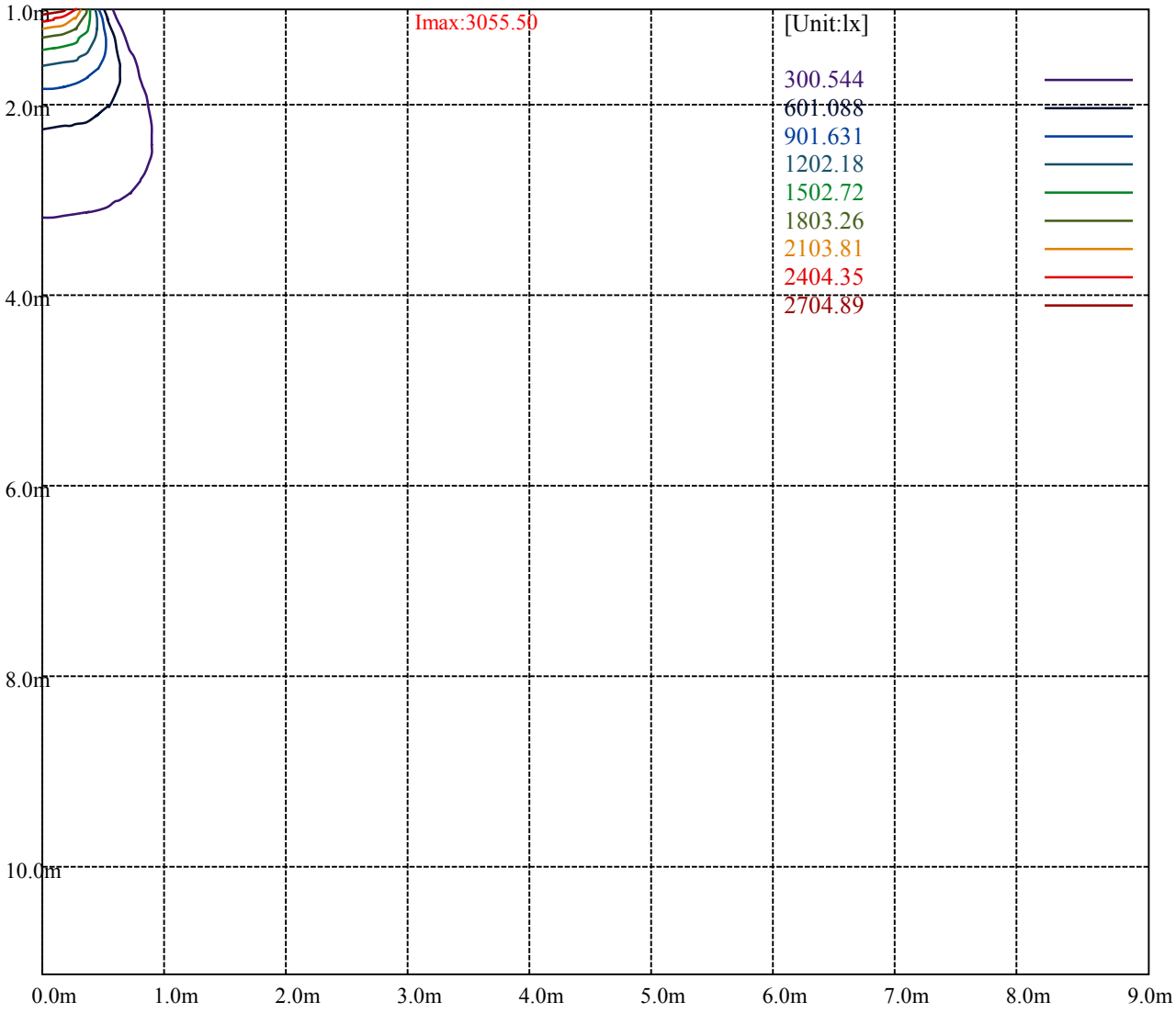
(10%Imax) 305.487
(20%Imax) 610.975
(30%Imax) 916.463
(40%Imax) 1221.95
(50%Imax) 1527.44
(60%Imax) 1832.93
(70%Imax) 2138.41
(80%Imax) 2443.9
(90%Imax) 2749.39

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2021/05/15
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2021/05/15
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

Nata 2-2321-M

Luminance Limitting Curve(no luminous side)

Luminance Table

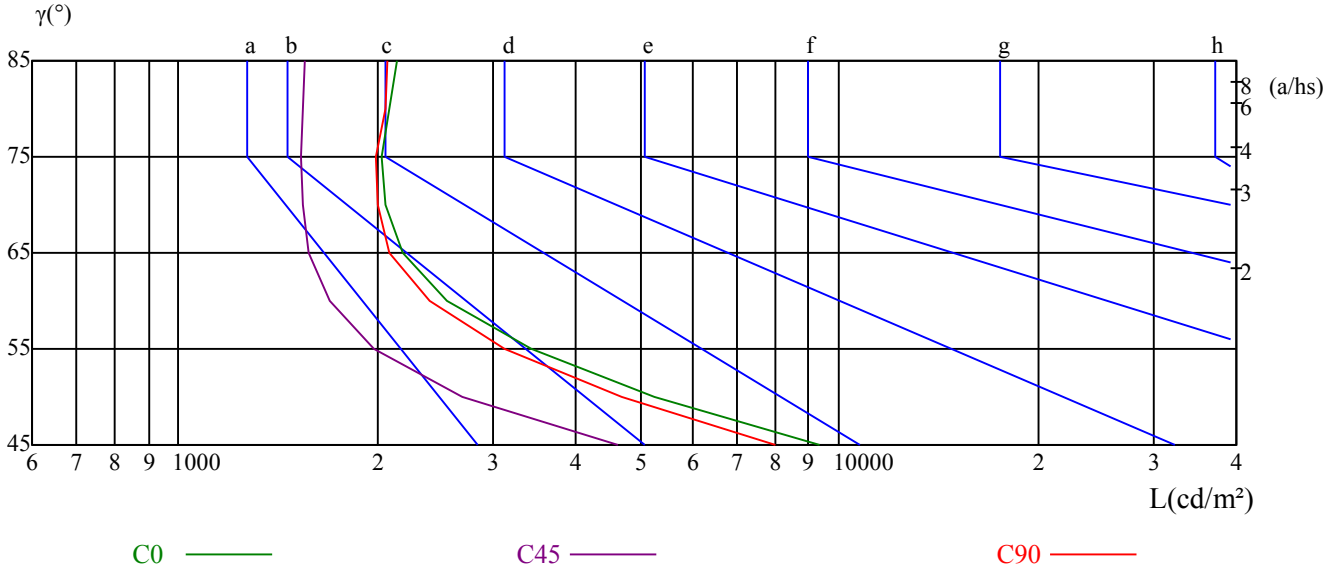
γ	45	50	55	60	65	70	75	80	85
C0	9361	5243	3434	2552	2187	2058	2034	2090	2137
C45	4638	2683	1983	1699	1579	1540	1534	1540	1550
C90	8013	4689	3116	2400	2085	2000	1993	2057	2076

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5530	5542	5086	7739	8017	7580	20095	20507	20596

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

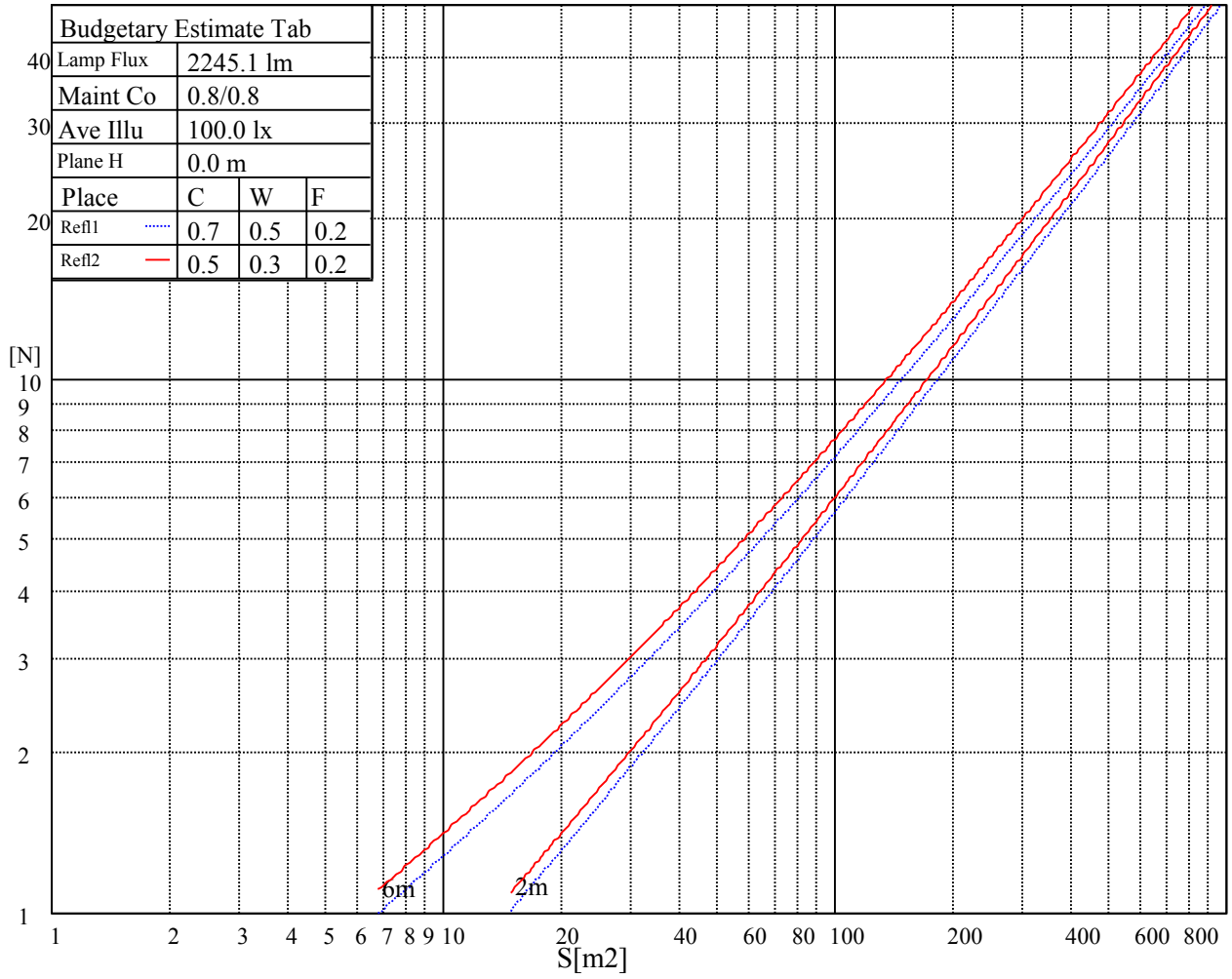


Equipment: GMS1980
Temperature(°C): 25.0

Date: 2021/05/15
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

Budgetary Estimate Table

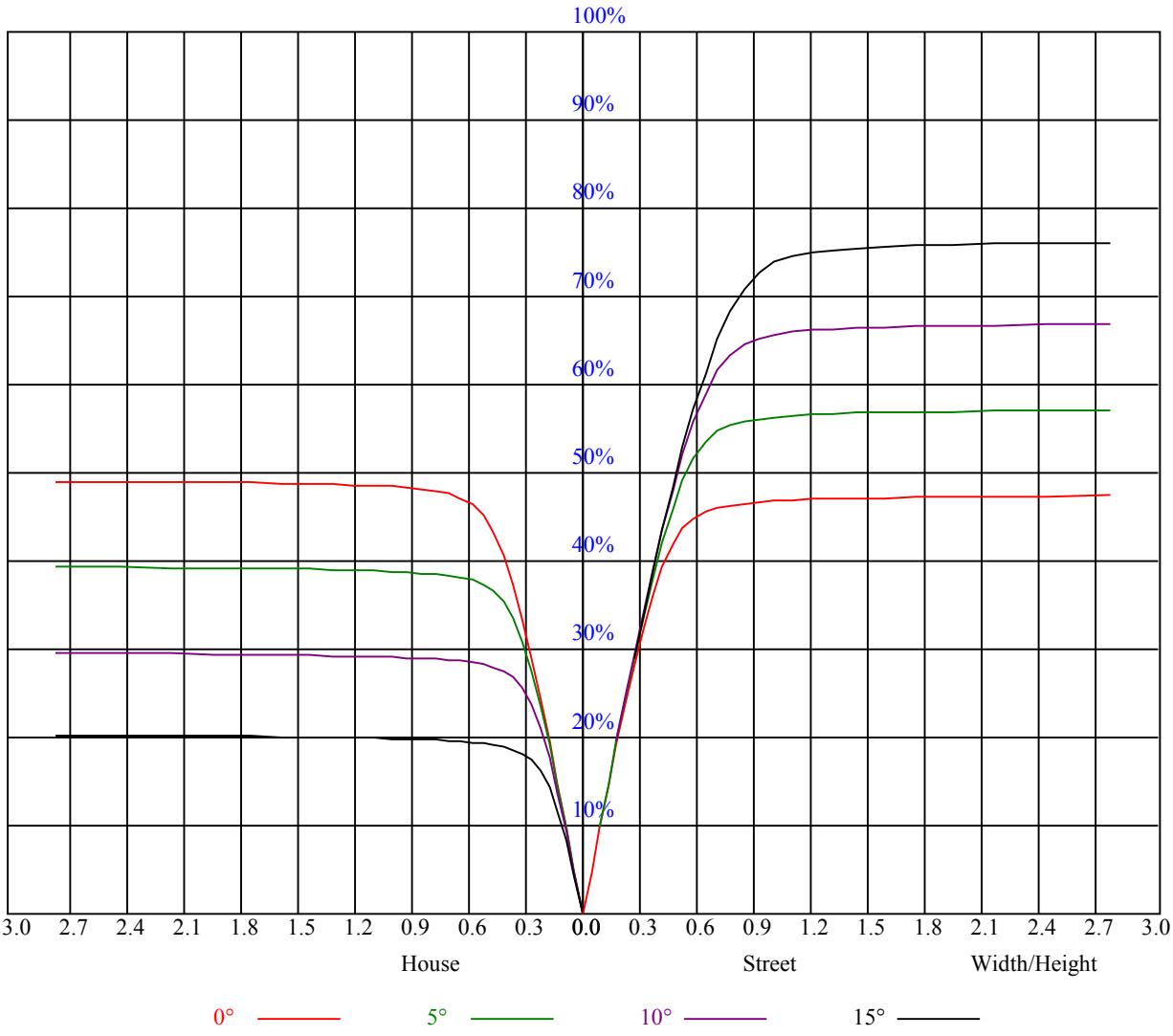


Equipment: GMS1980 Date: 2021/05/15 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 65.0% Distance(m): 7.50

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	1.16	1.16	1.16	1.13	1.13	1.13	1.08	1.08	1.08	1.03	1.03	1.03	0.99	0.99	0.99	0.97
1	1.08	1.06	1.03	1.06	1.04	1.02	1.02	1.00	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.91
2	1.01	0.97	0.94	0.99	0.96	0.93	0.96	0.93	0.91	0.93	0.91	0.89	0.91	0.89	0.87	0.86
3	0.95	0.90	0.87	0.94	0.89	0.86	0.91	0.88	0.85	0.89	0.86	0.83	0.87	0.84	0.82	0.81
4	0.89	0.85	0.81	0.88	0.84	0.80	0.86	0.82	0.79	0.84	0.81	0.78	0.83	0.80	0.78	0.76
5	0.85	0.79	0.76	0.84	0.79	0.75	0.82	0.78	0.75	0.80	0.77	0.74	0.79	0.76	0.73	0.72
6	0.80	0.75	0.71	0.79	0.74	0.71	0.78	0.74	0.70	0.77	0.73	0.70	0.75	0.72	0.69	0.68
7	0.76	0.71	0.67	0.75	0.70	0.67	0.74	0.70	0.66	0.73	0.69	0.66	0.72	0.68	0.66	0.64
8	0.72	0.67	0.63	0.72	0.67	0.63	0.71	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.62	0.61
9	0.69	0.63	0.60	0.68	0.63	0.60	0.67	0.63	0.60	0.67	0.62	0.59	0.66	0.62	0.59	0.58
10	0.66	0.60	0.57	0.65	0.60	0.57	0.64	0.60	0.57	0.64	0.60	0.57	0.63	0.59	0.56	0.55

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2021/05/15	Operator: NT07
Temperature(°C): 25.0	Humidity(%): 65.0%	Distance(m): 7.50

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	3005.44	2993.63	2985.19	2977.88	2976.75	2968.88	2977.88	2977.88	2972.81
22.5	3006.56	2994.75	2986.31	2995.31	2985.19	2995.31	2990.25	2988.00	2986.31
45.0	2991.38	2981.25	2984.63	2981.25	2975.06	2982.38	2973.38	2980.69	2957.63
67.5	2986.88	2976.19	2977.88	2972.81	2979.00	2978.44	2971.13	2970.56	2949.75
90.0	2973.38	2977.88	2983.50	2991.38	2998.13	2993.06	2996.44	2990.25	2963.81
112.5	2989.13	2993.63	2997.00	3010.50	3014.44	3016.69	3017.25	3007.13	3005.44
135.0	2989.13	3001.50	3008.25	3016.69	3016.69	3021.19	3019.50	3018.94	3006.56
157.5	2991.38	3006.00	3017.81	3026.25	3029.06	3032.44	3020.06	3009.94	3003.19
180.0	3005.44	3012.75	3023.44	3023.44	3026.25	3024.56	3001.50	2984.63	2964.94
202.5	3006.56	3016.13	3025.69	3039.19	3045.38	3052.13	3055.50	3047.06	3044.25
225.0	2991.38	3000.94	3006.56	3013.88	3015.56	3025.13	3027.38	3027.94	3022.31
247.5	2986.88	2994.75	2998.13	3002.63	3003.75	3004.31	3002.63	2992.50	2986.88
270.0	2973.38	2981.81	2983.50	2989.69	2995.88	2999.25	2992.50	2994.19	2984.06
292.5	2989.13	2992.50	2991.94	2990.25	3002.06	3000.94	3007.13	3000.94	2994.19
315.0	2989.13	2985.75	2982.38	2983.50	2988.00	2986.31	2994.75	2999.81	3002.06
337.5	2991.38	2984.06	2979.56	2979.56	2976.75	2980.13	2977.88	2975.06	2966.06
360.0	3005.44	2993.63	2985.19	2977.88	2976.75	2968.88	2977.88	2977.88	2972.81

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2957.63	2953.13	2949.19	2931.75	2885.06	2858.63	2829.38	2801.25	2725.31
22.5	2968.31	2966.06	2937.94	2931.75	2885.63	2865.94	2824.88	2782.69	2736.56
45.0	2963.81	2944.13	2929.50	2918.25	2892.38	2886.75	2855.25	2824.31	2781.56
67.5	2941.88	2923.31	2896.88	2885.63	2838.94	2796.75	2760.75	2712.94	2669.63
90.0	2960.44	2912.06	2883.38	2840.63	2793.94	2746.13	2690.44	2651.63	2595.38
112.5	2989.69	2987.44	2970.56	2943.56	2912.63	2867.63	2838.38	2783.81	2748.38
135.0	3005.44	2997.56	2986.88	2957.63	2932.31	2907.00	2873.81	2826.00	2765.25
157.5	2975.06	2948.63	2918.25	2878.31	2837.25	2802.38	2750.63	2701.69	2643.19
180.0	2928.94	2880.00	2835.56	2790.00	2734.88	2685.38	2620.69	2557.13	2454.75
202.5	3024.00	3007.13	2980.69	2945.81	2911.50	2869.31	2826.00	2779.31	2738.25
225.0	3022.31	3013.31	3003.19	2987.44	2960.44	2946.94	2896.31	2860.88	2818.69
247.5	2975.06	2958.19	2941.88	2910.38	2882.25	2832.75	2797.31	2752.31	2705.06
270.0	2976.19	2954.81	2930.63	2894.63	2854.13	2811.94	2772.00	2720.81	2666.81
292.5	2984.06	2967.75	2952.00	2923.31	2895.75	2849.63	2819.25	2780.44	2736.00
315.0	2995.88	2995.88	2996.44	2994.75	2982.38	2972.81	2957.06	2936.25	2889.56
337.5	2965.50	2959.88	2956.50	2949.75	2939.06	2922.19	2894.06	2848.50	2801.81
360.0	2957.63	2953.13	2949.19	2931.75	2885.06	2858.63	2829.38	2801.25	2725.31

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2670.19	2615.63	2505.38	2397.38	2300.63	2140.88	1950.75	1765.69	1556.44
22.5	2684.25	2620.13	2527.31	2441.25	2343.38	2184.19	2035.13	1852.31	1685.25
45.0	2728.69	2672.44	2617.31	2556.00	2475.00	2411.44	2327.06	2185.31	2083.50
67.5	2619.56	2558.25	2454.19	2356.88	2255.06	2090.81	1912.50	1744.31	1545.75
90.0	2503.13	2412.00	2304.00	2145.94	1964.25	1785.38	1598.63	1359.00	1117.52
112.5	2692.69	2644.88	2549.81	2464.31	2369.81	2235.94	2038.50	1865.25	1693.69
135.0	2706.19	2653.31	2580.75	2479.50	2401.88	2316.94	2176.31	2048.06	1909.69
157.5	2556.56	2460.94	2329.88	2166.19	2013.19	1812.94	1607.63	1419.75	1242.56
180.0	2328.75	2195.44	2036.81	1813.50	1623.38	1437.75	1108.18	1016.78	844.20
202.5	2667.38	2598.19	2510.44	2379.38	2250.00	2098.13	1907.44	1704.94	1523.25
225.0	2764.13	2715.19	2655.00	2593.69	2530.69	2459.25	2346.75	2238.19	2113.31
247.5	2639.25	2563.88	2460.94	2331.00	2190.94	2005.88	1824.75	1613.81	1404.56
270.0	2607.75	2503.13	2387.81	2277.56	2077.88	1875.94	1687.50	1464.75	1264.50
292.5	2693.81	2633.63	2553.19	2446.31	2326.50	2157.75	1966.50	1790.44	1582.88
315.0	2843.44	2791.69	2730.94	2674.69	2606.06	2545.31	2466.56	2370.38	2266.31
337.5	2744.44	2676.94	2607.75	2509.31	2395.69	2273.06	2122.31	1913.63	1734.19
360.0	2670.19	2615.63	2505.38	2397.38	2300.63	2140.88	1950.75	1765.69	1556.44

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	1365.19	1168.31	936.56	775.69	632.25	482.06	392.63	315.56	290.25
22.5	1482.19	1287.00	1112.06	951.75	764.44	623.81	501.75	391.50	305.44
45.0	1952.44	1788.19	1603.69	1428.75	1101.88	1013.68	848.64	698.23	545.57
67.5	1342.69	1165.50	971.44	811.13	654.19	515.81	412.31	328.50	285.19
90.0	978.64	781.88	613.46	492.58	385.09	299.36	249.92	217.29	192.99
112.5	1481.06	1278.00	1093.50	905.63	729.00	592.31	455.06	359.44	290.81
135.0	1740.38	1544.06	1364.63	1117.01	982.86	805.89	628.65	517.16	392.29
157.5	1023.19	859.50	709.31	569.25	451.69	366.75	293.06	262.24	219.15
180.0	680.29	537.19	437.01	343.74	283.50	241.09	210.49	186.30	162.11
202.5	1320.19	1114.76	951.58	780.58	648.45	518.29	410.79	330.81	271.01
225.0	1935.00	1767.94	1591.31	1377.56	1165.50	986.06	801.00	633.38	501.75
247.5	1119.99	1006.26	843.30	681.98	558.68	446.63	354.43	290.53	247.73
270.0	1069.31	842.06	685.13	556.88	430.88	349.88	290.81	241.03	213.02
292.5	1396.13	1115.16	985.95	822.60	678.54	522.06	420.64	338.85	267.92
315.0	2148.75	1985.06	1823.06	1643.06	1410.19	1221.75	1038.38	871.88	678.94
337.5	1551.94	1361.25	1109.87	959.68	800.10	621.28	500.91	401.06	309.71
360.0	1365.19	1168.31	936.56	775.69	632.25	482.06	392.63	315.56	290.25

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	210.94	186.13	161.10	138.77	121.78	104.91	91.80	81.51	71.38
22.5	284.63	208.63	176.29	153.28	132.75	111.94	94.44	82.13	70.14
45.0	416.03	314.72	225.28	162.90	110.64	79.31	64.18	51.41	43.37
67.5	224.61	199.69	171.79	151.71	133.65	116.10	101.19	89.61	78.19
90.0	168.41	146.53	129.99	113.06	98.72	86.57	78.30	68.01	60.81
112.5	224.94	196.59	171.90	144.39	124.71	107.89	90.79	79.37	69.47
135.0	275.18	212.18	155.93	108.56	90.06	73.41	58.67	47.36	39.83
157.5	190.24	167.34	144.84	125.21	110.03	96.75	82.63	72.79	64.18
180.0	140.79	124.03	110.03	94.50	83.81	74.31	64.91	56.98	50.96
202.5	224.10	196.20	171.06	142.48	123.24	107.10	92.93	77.68	67.50
225.0	374.63	291.38	192.49	133.88	98.16	78.19	63.84	52.71	44.89
247.5	211.50	186.64	163.97	138.54	122.01	107.44	92.98	80.66	71.04
270.0	188.10	162.84	140.85	124.20	107.94	95.96	84.04	73.80	65.93
292.5	232.48	204.64	173.64	151.31	132.30	112.44	100.24	86.68	73.86
315.0	543.94	421.88	307.13	284.63	154.13	110.42	84.09	68.40	54.79
337.5	248.06	212.91	183.26	156.38	136.07	116.10	101.03	86.91	74.87
360.0	210.94	186.13	161.10	138.77	121.78	104.91	91.80	81.51	71.38

C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	63.68	56.03	49.44	44.33	39.83	35.10	31.89	29.14	26.10
22.5	60.13	52.65	45.39	39.94	34.76	30.66	27.56	25.09	22.11
45.0	37.18	32.46	28.35	25.71	23.51	21.49	19.86	18.62	17.44
67.5	68.29	60.75	53.33	47.36	41.63	36.84	33.08	29.70	26.55
90.0	54.51	48.26	42.86	38.76	34.76	31.39	28.63	26.04	24.02
112.5	60.13	52.09	46.07	40.11	35.61	31.50	27.84	25.14	22.61
135.0	33.64	29.08	25.88	23.06	20.98	19.18	17.66	16.59	15.64
157.5	55.01	48.77	43.31	38.14	33.69	30.43	27.17	24.64	22.28
180.0	45.00	40.05	36.23	32.46	29.59	26.89	24.36	22.56	20.93
202.5	58.67	50.29	43.20	38.03	33.19	29.14	26.21	23.51	21.49
225.0	37.63	33.24	29.87	26.78	24.19	22.28	20.48	19.07	17.94
247.5	61.59	54.51	47.42	41.46	37.01	32.68	29.03	26.38	24.13
270.0	58.16	51.36	46.07	41.40	36.45	33.02	30.09	27.28	24.81
292.5	66.15	57.26	49.05	44.10	39.09	33.36	30.26	27.34	24.53
315.0	45.34	37.46	31.67	27.90	24.86	21.94	20.08	18.39	17.21
337.5	65.70	57.66	49.16	43.43	38.64	33.41	29.93	27.06	24.30
360.0	63.68	56.03	49.44	44.33	39.83	35.10	31.89	29.14	26.10

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	24.19	22.44	20.70	19.24	18.17	17.04	16.14	15.41	14.74
22.5	20.42	19.07	17.38	16.37	15.64	14.79	14.18	13.73	13.28
45.0	16.48	15.75	15.08	14.51	14.06	13.61	13.28	12.99	12.71
67.5	24.08	22.22	19.97	18.56	17.44	16.43	15.41	14.68	14.06
90.0	22.05	20.36	19.07	17.89	16.71	15.86	15.19	14.40	13.89
112.5	20.64	19.18	17.83	16.54	15.58	14.85	14.06	13.56	13.11
135.0	14.74	14.18	13.67	13.16	12.83	12.54	12.21	11.98	11.81
157.5	20.36	19.01	17.44	16.43	15.47	14.79	14.01	13.56	13.11
180.0	19.24	18.11	17.10	16.09	15.36	14.74	14.12	13.67	13.28
202.5	19.69	18.23	17.16	16.26	15.30	14.68	14.12	13.61	13.28
225.0	17.04	16.14	15.36	14.74	14.29	13.84	13.39	13.11	12.83
247.5	21.77	20.14	18.73	17.44	16.37	15.53	14.79	14.23	13.67
270.0	23.06	21.26	19.69	18.51	17.33	16.48	15.64	14.85	14.29
292.5	22.16	20.42	18.73	17.33	16.31	15.36	14.63	13.95	13.44
315.0	16.14	15.36	14.57	13.95	13.50	13.05	12.77	12.43	12.09
337.5	22.05	20.31	18.62	17.49	16.31	15.36	14.63	14.06	13.56
360.0	24.19	22.44	20.70	19.24	18.17	17.04	16.14	15.41	14.74

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	14.23	13.67	13.28	12.94	12.66	12.32	12.09	11.87	11.64
22.5	12.94	12.71	12.38	12.15	11.98	11.81	11.64	11.53	11.36
45.0	12.49	12.26	12.04	11.87	11.76	11.59	11.48	11.36	11.25
67.5	13.61	13.16	12.77	12.43	12.26	12.04	11.81	11.64	11.48
90.0	13.44	12.99	12.66	12.38	12.09	11.93	11.70	11.53	11.36
112.5	12.71	12.38	12.09	11.87	11.70	11.48	11.36	11.19	11.08
135.0	11.64	11.53	11.36	11.25	11.14	11.14	10.97	10.91	10.91
157.5	12.71	12.38	12.15	11.93	11.70	11.53	11.36	11.31	11.19
180.0	12.83	12.54	12.32	12.04	11.87	11.70	11.59	11.53	11.42
202.5	12.94	12.60	12.38	12.15	11.98	11.81	11.64	11.48	11.36
225.0	12.54	12.26	12.09	11.93	11.76	11.64	11.48	11.36	11.25
247.5	13.28	12.94	12.66	12.38	12.15	11.98	11.76	11.64	11.59
270.0	13.78	13.33	12.99	12.71	12.38	12.15	11.98	11.81	11.81
292.5	12.99	12.66	12.32	12.04	11.87	11.64	11.53	11.36	11.25
315.0	11.93	11.76	11.59	11.48	11.36	11.25	11.14	11.03	11.03
337.5	13.16	12.88	12.54	12.26	12.04	11.81	11.59	11.48	11.25
360.0	14.23	13.67	13.28	12.94	12.66	12.32	12.09	11.87	11.64

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	11.48	11.36	11.19	11.03	10.91	10.80	10.69	10.58	10.52
22.5	11.25	11.19	11.03	10.91	10.86	10.74	10.63	10.52	10.46
45.0	11.14	11.03	10.91	10.86	10.74	10.63	10.58	10.46	10.35
67.5	11.36	11.25	11.14	11.03	10.91	10.80	10.69	10.58	10.46
90.0	11.19	11.08	10.91	10.80	10.63	10.58	10.52	10.46	10.35
112.5	11.03	10.86	10.74	10.63	10.52	10.46	10.35	10.29	10.18
135.0	10.74	10.74	10.63	10.46	10.35	10.29	10.24	10.13	10.01
157.5	11.14	11.08	11.03	10.97	10.91	11.03	10.97	10.74	10.63
180.0	11.48	11.36	11.31	10.91	10.80	10.63	10.58	10.41	10.24
202.5	11.25	11.19	11.19	11.14	11.08	10.80	10.58	10.41	10.35
225.0	11.19	11.08	10.97	10.91	10.80	10.74	10.63	10.58	10.46
247.5	11.59	11.64	11.76	11.76	11.93	12.09	11.93	11.59	11.36
270.0	11.76	11.76	11.93	11.93	12.15	12.21	12.38	12.54	12.54
292.5	11.19	11.25	11.19	11.42	11.48	11.48	11.48	11.31	11.03
315.0	10.97	10.86	10.80	10.74	10.63	10.46	10.41	10.29	10.24
337.5	11.14	11.03	10.91	10.80	10.69	10.58	10.46	10.41	10.35
360.0	11.48	11.36	11.19	11.03	10.91	10.80	10.69	10.58	10.52

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	10.58	10.63	10.69	10.41	9.84	9.73	9.45	9.34	9.28
22.5	10.35	10.24	10.13	10.01	9.90	9.68	9.56	9.45	9.28
45.0	10.29	10.18	10.07	9.96	9.79	9.68	9.51	9.45	9.34
67.5	10.29	10.18	10.07	9.90	9.79	9.56	9.39	9.28	9.17
90.0	10.18	9.96	9.84	9.73	9.56	9.34	9.17	9.06	8.83
112.5	10.07	9.96	9.90	9.79	9.73	9.34	9.23	9.11	9.00
135.0	9.96	9.84	9.79	9.68	9.56	9.34	9.23	9.06	9.06
157.5	10.13	9.84	9.73	9.62	9.51	9.17	9.06	9.00	8.89
180.0	9.84	9.73	9.62	9.51	9.34	9.23	9.23	8.83	8.83
202.5	10.24	10.13	10.01	9.90	9.84	9.68	9.51	9.39	9.23
225.0	10.41	10.29	10.24	10.13	10.07	9.96	9.56	9.39	9.28
247.5	10.58	10.29	10.24	10.07	10.01	9.45	9.34	9.17	9.00
270.0	11.70	10.35	10.24	10.13	10.01	9.56	9.28	9.17	9.00
292.5	10.58	10.18	10.13	10.01	10.01	9.45	9.28	9.23	9.11
315.0	10.18	10.13	10.07	9.96	9.90	9.79	9.45	9.39	9.28
337.5	10.35	10.29	10.18	9.79	9.68	9.51	9.34	9.17	9.06
360.0	10.58	10.63	10.69	10.41	9.84	9.73	9.45	9.34	9.28

C/γ(°)	90.0
0.0	9.17
22.5	9.11
45.0	9.11
67.5	8.94
90.0	8.83
112.5	8.94
135.0	9.00
157.5	8.94
180.0	8.83
202.5	9.11
225.0	9.17
247.5	8.94
270.0	8.83
292.5	8.94
315.0	9.17
337.5	9.00
360.0	9.17