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

Nata

LumCAT: 2-2321-M
Luminaire: 92.70.135.00
Report No: 210806-B011
Test No: 210806-C011
LampCAT: LUMILEDS LUXEON CoB 1205 LES-3
Lamp flux(lm): 2254.2
Number of Lamps: 1
Length(mm): 570
Phm Type: C

Voltage(V): 34.8200
Current(A): 0.4510
Power (W): 15.7030
PF: 0.0000
Ballast type: DC
Width(mm): 45
Height(mm): 20

Photometric Results

Lumens(lm): 2184.46
Efficiency(%): 96.91%
Lumens(lm)/Power(W): 139.11
Central intensity(cd): 3041.423
Maximum intensity(cd): 3092.810
Angle of maximum intensity: C=202.5 γ=7.0
Beam Angle(50%Imax): [C0/180]Total=49.0
[C90/270]Total=48.4
Field angle(10%Imax): [C0/180]Total=64.6
[C90/270]Total=64.6
Maximum s/h(1/2): C0_180=0.81 C90_270=0.76
Maximum s/h(1/4): C0_180=0.69 C90_270=0.66
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 96.91%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.356%

Equipment: GMS1980
Temperature(°C): 25.0
Date: 2021/8/06
Humidity(%): 65.0%
Operator: NT07
Distance(m): 7.73

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3047.323	0.000	0	.000%	.000%
1.0	3046.651	2.916	2.916	.129%	.133%
2.0	3045.008	8.743	11.659	.388%	.534%
3.0	3040.638	14.555	26.214	.646%	1.200%
4.0	3037.949	20.347	46.561	.903%	2.131%
5.0	3034.476	26.123	72.684	1.159%	3.327%
6.0	3028.875	31.865	104.549	1.414%	4.786%
7.0	3022.563	37.561	142.11	1.666%	6.505%
8.0	3014.870	43.209	185.319	1.917%	8.483%
9.0	3003.143	48.773	234.091	2.164%	10.716%
10.0	2986.002	54.200	288.291	2.404%	13.197%
11.0	2964.565	59.458	347.749	2.638%	15.919%
12.0	2939.282	64.538	412.287	2.863%	18.874%
13.0	2903.095	69.334	481.621	3.076%	22.048%
14.0	2865.413	73.836	555.458	3.276%	25.428%
15.0	2824.968	78.120	633.578	3.466%	29.004%
16.0	2778.510	82.107	715.684	3.642%	32.763%
17.0	2721.371	85.648	801.332	3.799%	36.683%
18.0	2659.639	88.721	890.053	3.936%	40.745%
19.0	2589.205	91.319	981.373	4.051%	44.925%
20.0	2494.310	93.042	1074.415	4.128%	49.184%
21.0	2381.788	93.631	1168.046	4.154%	53.471%
22.0	2260.863	93.296	1261.342	4.139%	57.742%
23.0	2113.311	91.782	1353.124	4.072%	61.943%
24.0	1943.429	88.695	1441.819	3.935%	66.003%
25.0	1768.350	84.398	1526.217	3.744%	69.867%
26.0	1597.778	79.458	1605.674	3.525%	73.504%
27.0	1413.272	73.666	1679.34	3.268%	76.877%
28.0	1198.957	66.136	1745.477	2.934%	79.904%
29.0	1024.729	58.178	1803.654	2.581%	82.567%
30.0	880.508	51.441	1855.095	2.282%	84.922%
31.0	728.141	44.766	1899.862	1.986%	86.972%
32.0	591.845	37.816	1937.678	1.678%	88.703%
33.0	486.366	31.765	1969.442	1.409%	90.157%
34.0	393.492	26.627	1996.069	1.181%	91.376%
35.0	315.738	22.026	2018.096	.977%	92.384%
36.0	257.696	18.258	2036.354	.810%	93.220%
37.0	211.884	15.315	2051.669	.679%	93.921%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	173.698	12.870	2064.539	.571%	94.510%
39.0	143.736	10.835	2075.374	.481%	95.006%
40.0	117.011	9.094	2084.468	.403%	95.422%
41.0	99.011	7.692	2092.16	.341%	95.775%
42.0	83.247	6.622	2098.782	.294%	96.078%
43.0	71.610	5.736	2104.518	.254%	96.340%
44.0	62.475	5.061	2109.579	.225%	96.572%
45.0	54.480	4.495	2114.074	.199%	96.778%
46.0	47.604	3.992	2118.066	.177%	96.961%
47.0	42.032	3.565	2121.631	.158%	97.124%
48.0	37.480	3.214	2124.845	.143%	97.271%
49.0	33.473	2.914	2127.759	.129%	97.404%
50.0	29.862	2.641	2130.4	.117%	97.525%
51.0	27.083	2.409	2132.809	.107%	97.635%
52.0	24.730	2.223	2135.032	.099%	97.737%
53.0	22.635	2.060	2137.093	.091%	97.832%
54.0	20.820	1.915	2139.008	.085%	97.919%
55.0	19.408	1.796	2140.804	.080%	98.001%
56.0	18.184	1.699	2142.503	.075%	98.079%
57.0	17.074	1.612	2144.115	.072%	98.153%
58.0	16.182	1.538	2145.653	.068%	98.223%
59.0	15.457	1.479	2147.132	.066%	98.291%
60.0	14.789	1.429	2148.561	.063%	98.357%
61.0	14.217	1.384	2149.945	.061%	98.420%
62.0	13.769	1.349	2151.293	.060%	98.482%
63.0	13.373	1.320	2152.613	.059%	98.542%
64.0	13.026	1.295	2153.909	.057%	98.601%
65.0	12.735	1.275	2155.184	.057%	98.660%
66.0	12.492	1.259	2156.442	.056%	98.717%
67.0	12.275	1.245	2157.688	.055%	98.774%
68.0	12.089	1.234	2158.922	.055%	98.831%
69.0	11.909	1.224	2160.146	.054%	98.887%
70.0	11.768	1.216	2161.362	.054%	98.943%
71.0	11.622	1.209	2162.571	.054%	98.998%
72.0	11.514	1.203	2163.774	.053%	99.053%
73.0	11.435	1.200	2164.974	.053%	99.108%
74.0	11.361	1.198	2166.173	.053%	99.163%
75.0	11.305	1.198	2167.37	.053%	99.218%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	11.260	1.198	2168.568	.053%	99.272%
77.0	11.207	1.198	2169.766	.053%	99.327%
78.0	11.155	1.197	2170.963	.053%	99.382%
79.0	11.099	1.196	2172.159	.053%	99.437%
80.0	10.972	1.190	2173.349	.053%	99.491%
81.0	10.797	1.177	2174.526	.052%	99.545%
82.0	10.629	1.162	2175.688	.052%	99.598%
83.0	10.416	1.144	2176.832	.051%	99.651%
84.0	10.322	1.130	2177.961	.050%	99.702%
85.0	10.158	1.118	2179.079	.050%	99.754%
86.0	9.971	1.100	2180.179	.049%	99.804%
87.0	9.841	1.084	2181.264	.048%	99.854%
88.0	9.762	1.074	2182.338	.048%	99.903%
89.0	9.680	1.066	2183.403	.047%	99.952%
90.0	9.624	1.058	2184.462	.047%	100.000%

Zonal flux distribution table

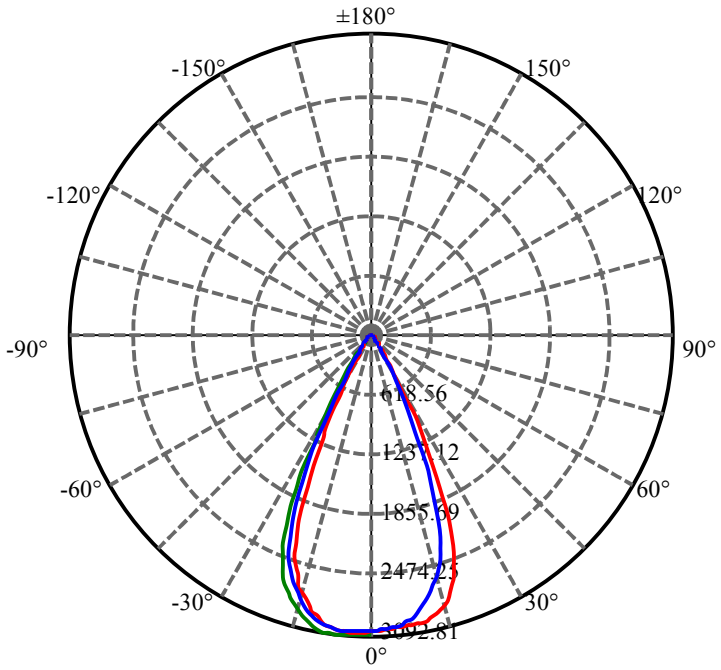
ZONAL LUMEN SUMMARY

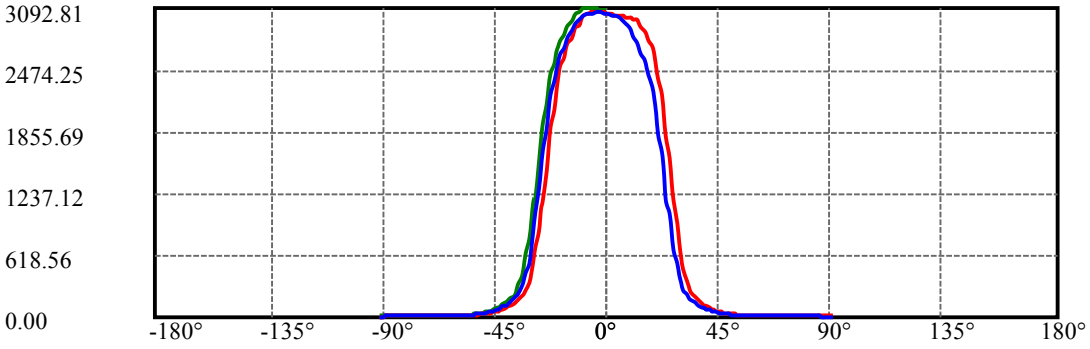
Zone	Lumens	%Lamp	%Fixt
0-30	1855.10	82.30%	84.92%
0-40	2084.47	92.47%	95.42%
0-60	2148.56	95.31%	98.36%
0-90	2183.40	96.86%	99.95%
0-120	2183.40	96.86%	99.95%
0-180	2184.46	96.91%	100.00%
60-90	36.27	1.61%	1.66%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-28.04	1747.57	77.53%	80.00%

ZONAL LUMEN SUMMARY

0-10	288.29
10-20	786.12
20-30	780.68
30-40	229.37
40-50	45.93
50-60	18.16
60-70	12.80
70-80	11.99
80-90	10.05
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:26.6 Right:38.0
:C90/270Left:30.1 Right:34.5

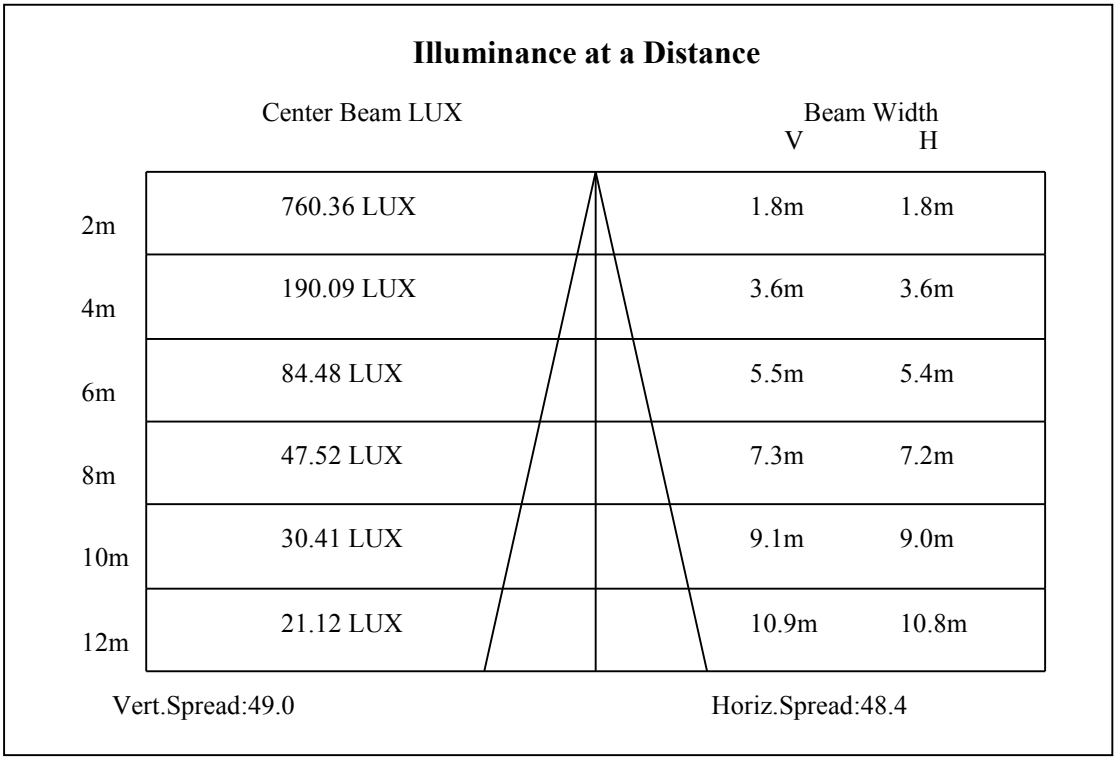
Beam Angle(50%Imax):C0/180Left:18.7 Right:30.3
:C90/270Left:21.8 Right:26.6

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2021/8/06
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.73

Lux distance Curve

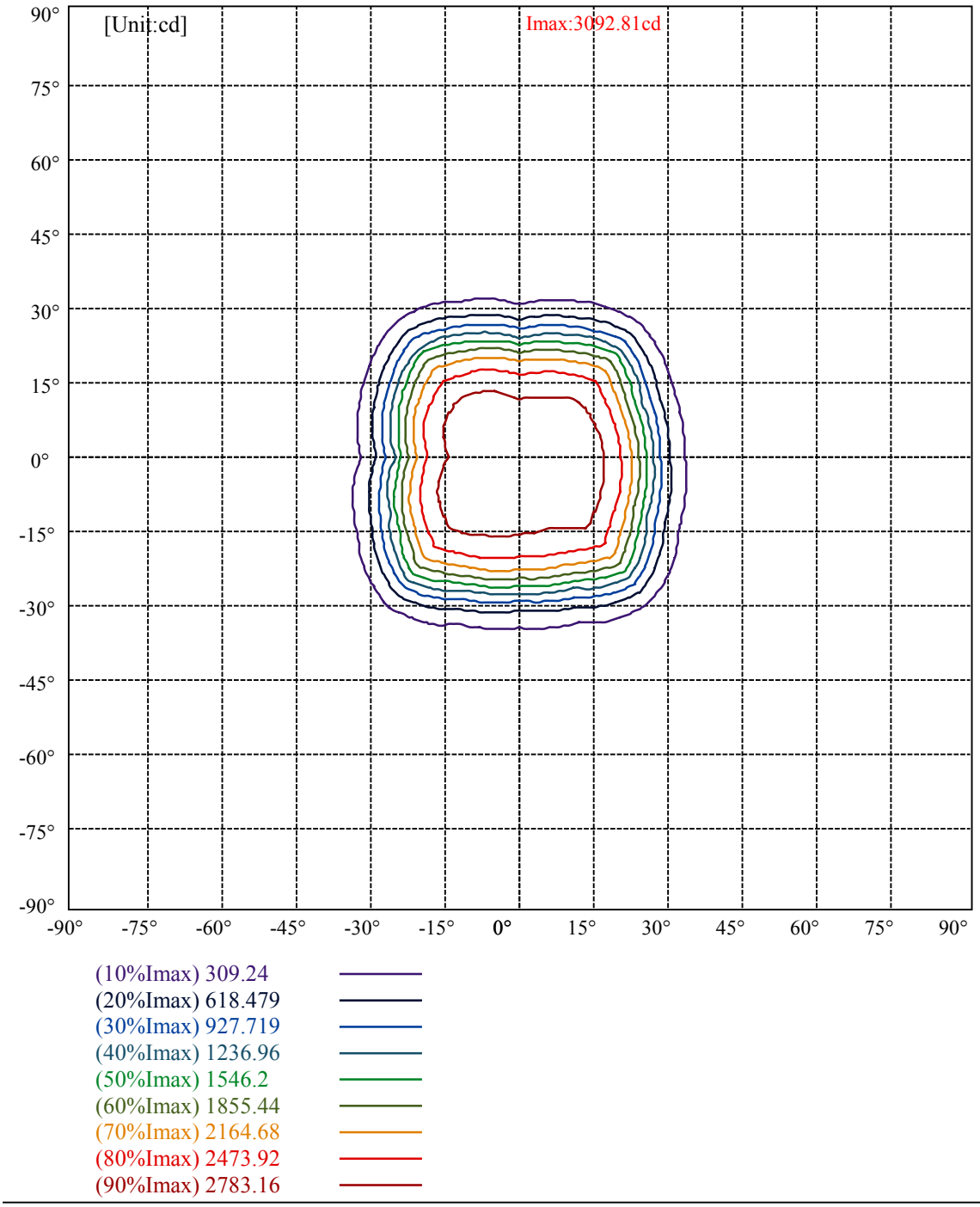


Equipment: GMS1980
Temperature(°C): 25.0

Date: 2021/8/06
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.73

ISO-Intensity(V-H)

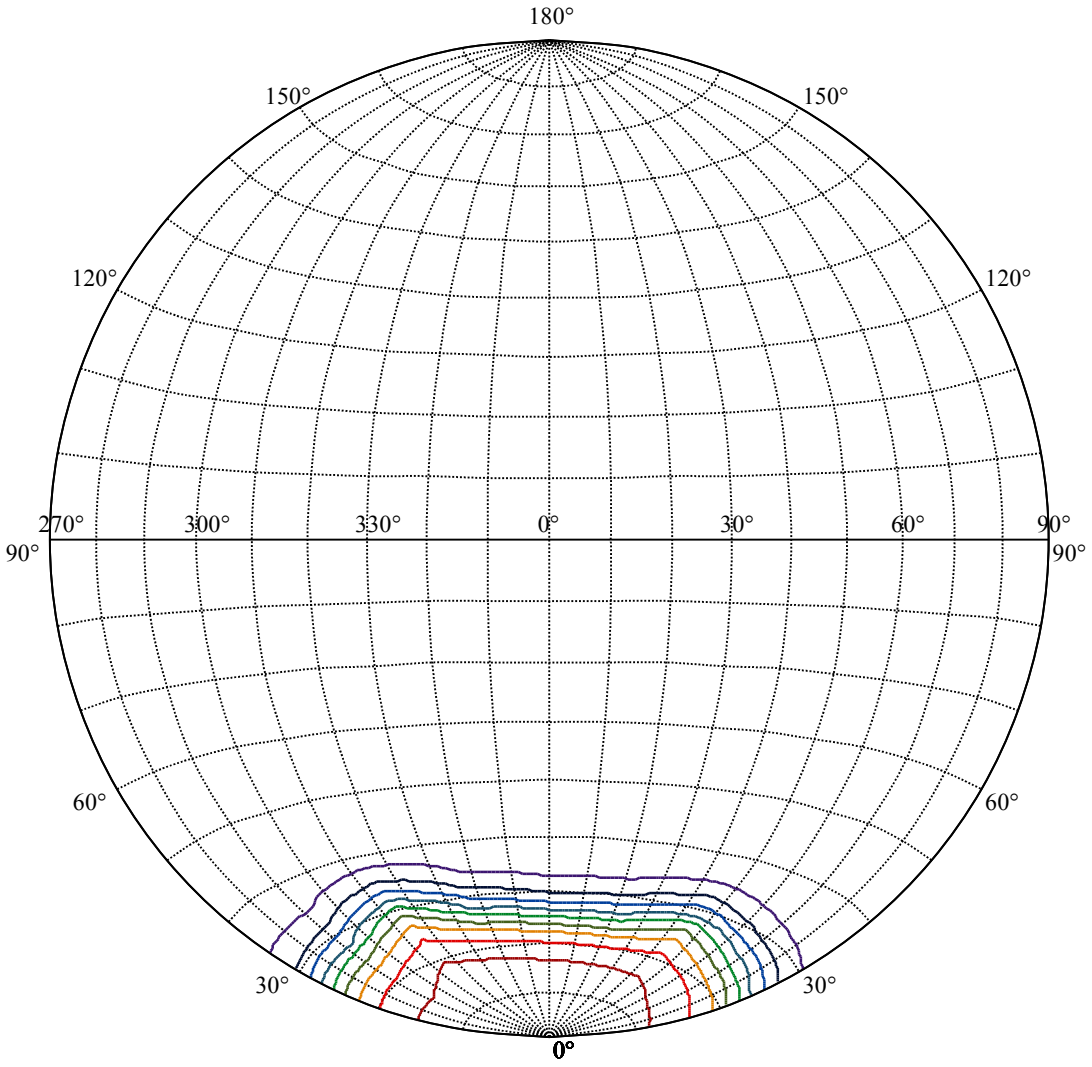


Equipment: GMS1980
Temperature(°C): 25.0

Date: 2021/8/06
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.73

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:3092.81

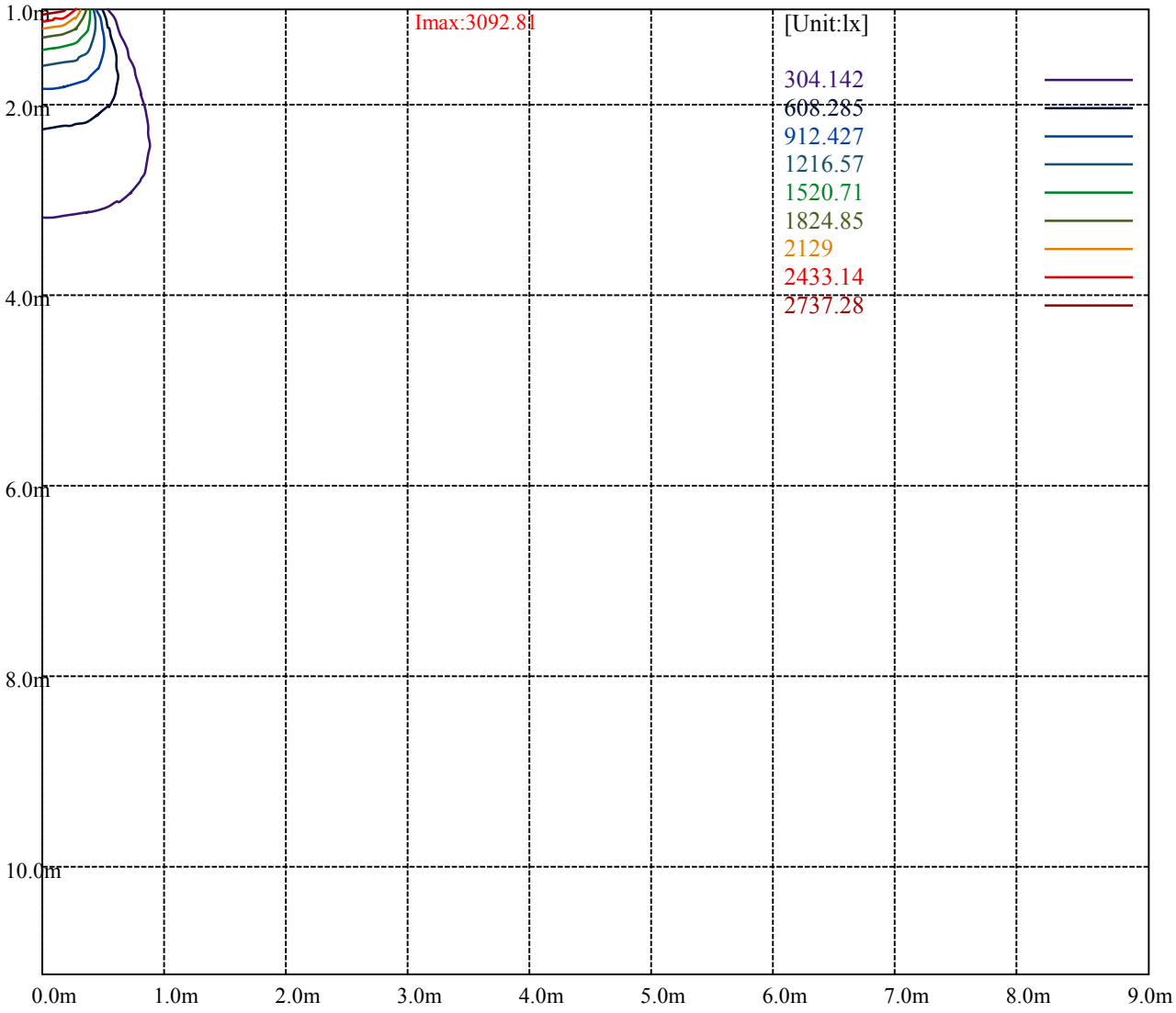
(10%Imax) 309.248
(20%Imax) 618.496
(30%Imax) 927.743
(40%Imax) 1236.99
(50%Imax) 1546.24
(60%Imax) 1855.49
(70%Imax) 2164.73
(80%Imax) 2473.98
(90%Imax) 2783.23

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2021/8/06
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.73

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2021/8/06
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.73

Nata 2-2321-M

Luminance Limitting Curve(no luminous side)

Luminance Table

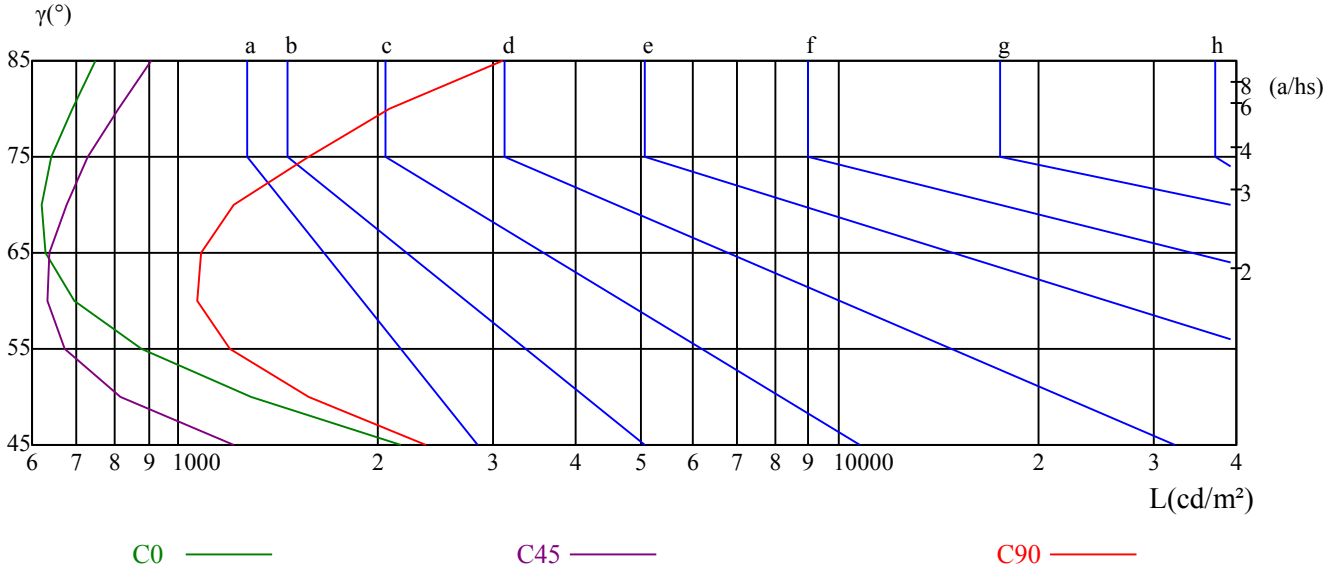
γ	45	50	55	60	65	70	75	80	85
C0	2164	1286	880	695	629	623	643	690	747
C45	1215	816	673	634	638	677	727	812	910
C90	2365	1569	1199	1067	1082	1211	1576	2081	3091

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1224	1202	1123	1751	1724	1667	4571	4410	4571

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

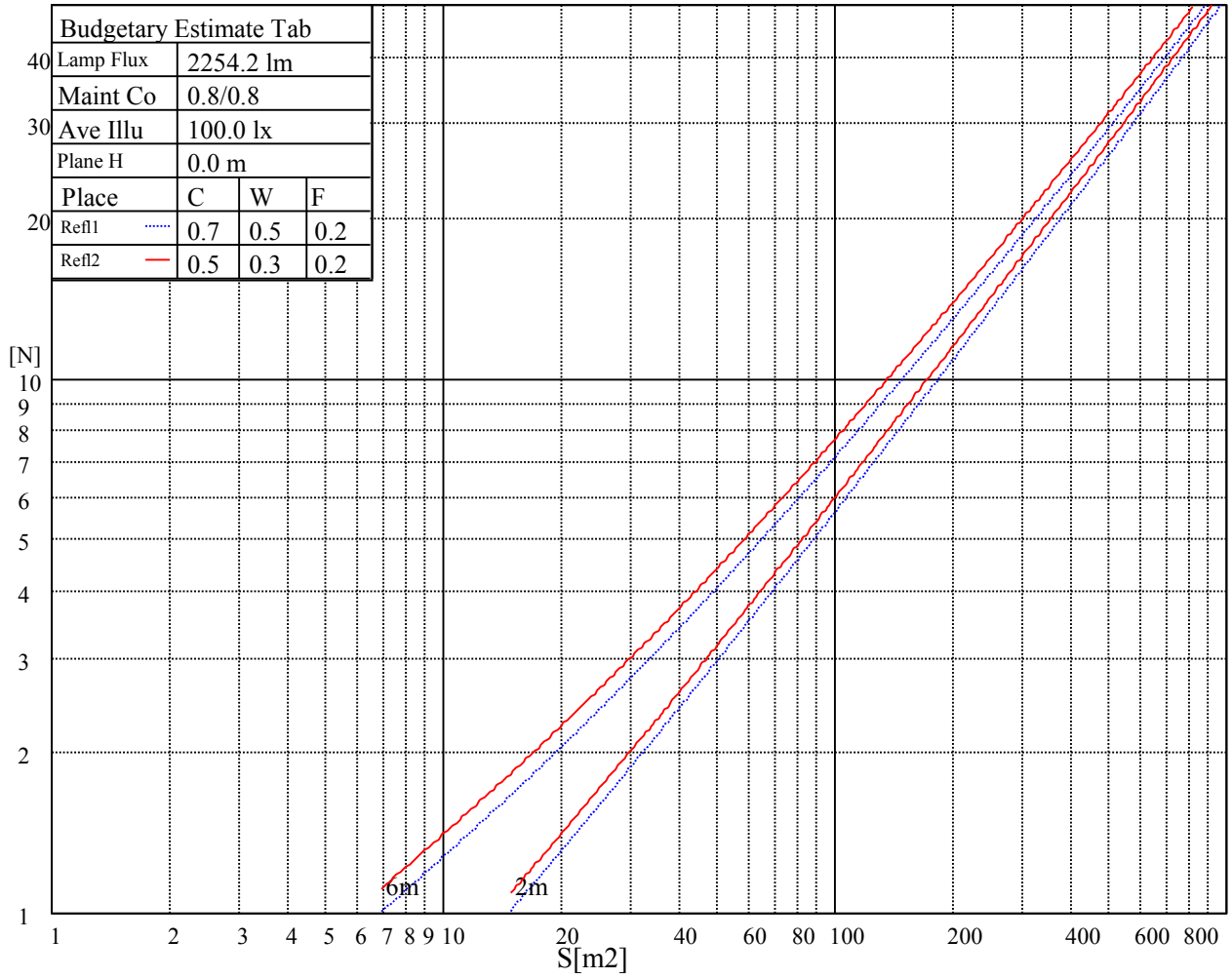


Equipment: GMS1980
Temperature(°C): 25.0

Date: 2021/8/06
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.73

Budgetary Estimate Table

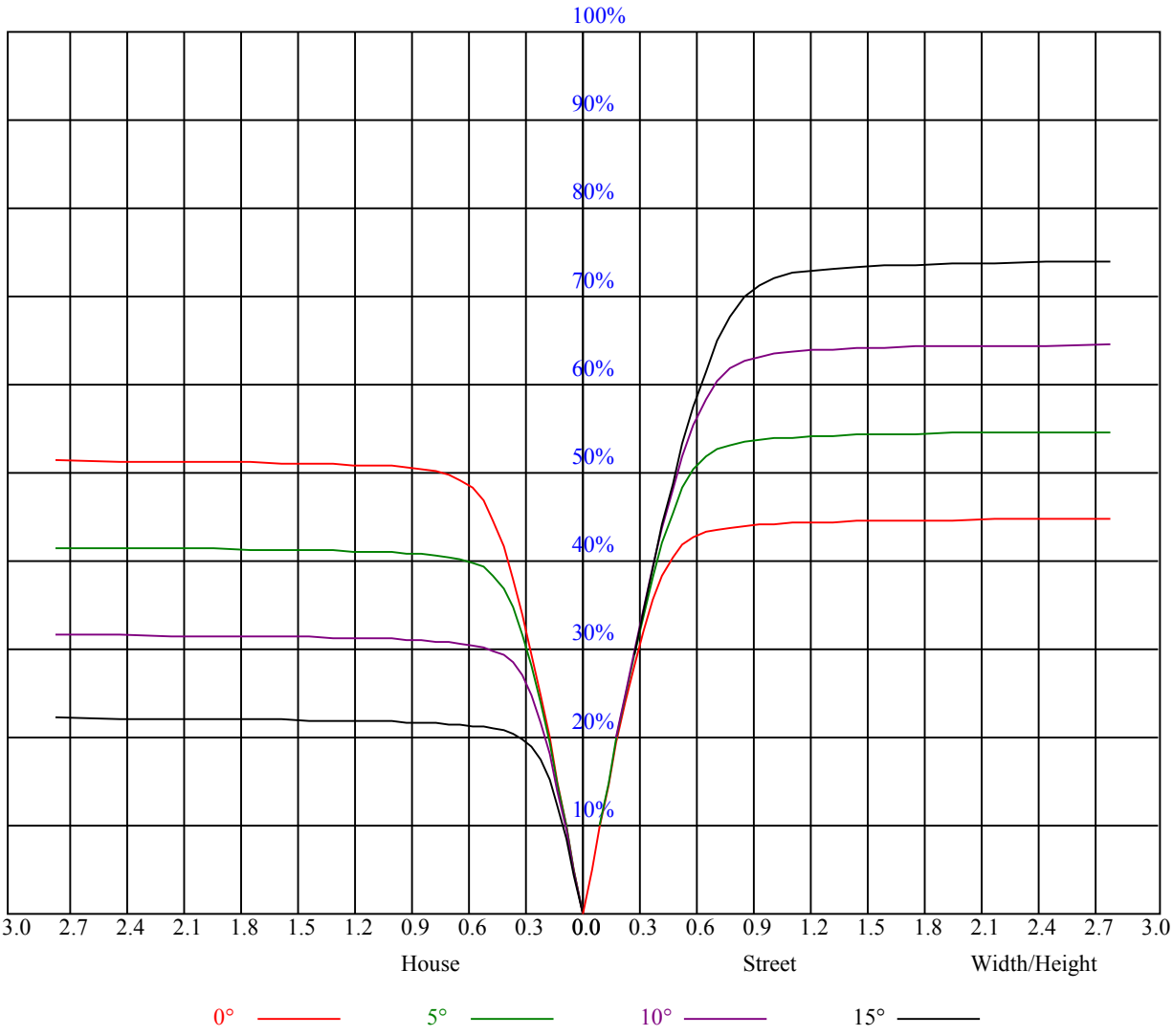


Equipment: GMS1980 Date: 2021/8/06 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 65.0% Distance(m): 7.73

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	1.15	1.15	1.15	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	1.05	1.03	1.05	1.03	1.01	1.02	1.00	0.98	0.98	0.97	0.95	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	0.90	0.89	0.87	0.86
3	0.95	0.90	0.87	0.93	0.89	0.86	0.91	0.87	0.85	0.89	0.86	0.83	0.86	0.84	0.82	0.81
4	0.89	0.84	0.81	0.88	0.84	0.80	0.86	0.82	0.79	0.84	0.81	0.78	0.82	0.80	0.77	0.76
5	0.84	0.79	0.75	0.83	0.79	0.75	0.82	0.78	0.74	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	0.73	0.70	0.76	0.73	0.70	0.75	0.72	0.69	0.68
7	0.76	0.70	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	0.65	0.62	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	0.66	0.62	0.59	0.66	0.62	0.59	0.58
10	0.65	0.60	0.57	0.65	0.60	0.57	0.64	0.60	0.57	0.64	0.59	0.56	0.63	0.59	0.56	0.55

Coefficient Utilization Curve



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2021/8/06
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.73

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	3041.42	3039.03	3039.03	3024.09	3018.72	3012.74	3007.96	3006.77	3000.79
22.5	3066.52	3058.15	3039.63	3030.67	3021.70	3014.53	3007.36	3000.79	2999.00
45.0	3055.76	3045.01	3032.46	3022.90	3013.34	3002.58	2994.82	2984.66	2976.89
67.5	3044.41	3043.81	3036.04	3024.09	3015.73	3005.57	2991.23	2979.28	2956.57
90.0	3037.24	3030.67	3024.09	3015.13	3007.96	3000.79	2982.27	2964.94	2941.04
112.5	3046.20	3043.81	3042.02	3040.83	3035.45	3034.85	3022.30	3013.94	3002.58
135.0	3044.41	3043.81	3045.01	3043.81	3045.61	3047.40	3050.39	3045.61	3041.42
157.5	3042.62	3046.80	3052.18	3050.39	3053.97	3054.57	3058.15	3055.17	3054.57
180.0	3041.42	3045.01	3048.59	3051.58	3053.97	3055.17	3050.39	3043.81	3026.48
202.5	3066.52	3068.91	3078.47	3081.46	3085.04	3091.02	3091.62	3092.81	3092.81
225.0	3055.76	3058.75	3064.73	3067.71	3074.29	3073.09	3075.48	3075.48	3077.87
247.5	3044.41	3049.79	3051.58	3049.79	3051.58	3050.39	3049.19	3041.42	3035.45
270.0	3037.24	3040.83	3045.01	3046.80	3049.19	3044.41	3040.83	3033.65	3029.47
292.5	3046.20	3049.79	3048.00	3040.83	3037.84	3033.65	3019.31	3013.94	3002.58
315.0	3044.41	3042.02	3040.83	3036.04	3029.47	3021.11	3016.92	3006.17	3003.78
337.5	3042.62	3040.23	3032.46	3024.09	3013.34	3009.75	3003.78	3002.58	2996.61
360.0	3041.42	3039.03	3039.03	3024.09	3018.72	3012.74	3007.96	3006.77	3000.79

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3001.39	2994.22	2981.67	2968.52	2941.04	2903.99	2871.13	2828.70	2764.17
22.5	2990.63	2981.07	2970.91	2946.42	2917.14	2886.66	2849.02	2806.59	2745.65
45.0	2968.52	2951.20	2940.44	2924.31	2893.83	2866.94	2829.30	2787.47	2743.26
67.5	2933.27	2908.77	2865.15	2825.71	2773.13	2721.15	2678.12	2631.52	2567.58
90.0	2906.98	2862.76	2813.76	2756.40	2694.86	2641.08	2577.74	2506.63	2415.81
112.5	2982.86	2959.56	2924.90	2883.08	2833.48	2787.47	2734.29	2687.09	2623.75
135.0	3036.04	3025.29	3006.77	2984.06	2951.20	2907.58	2867.54	2824.52	2764.17
157.5	3043.22	3024.69	3001.39	2968.52	2931.48	2895.03	2849.02	2798.83	2752.22
180.0	3007.36	2973.30	2927.89	2891.44	2843.04	2786.88	2740.87	2685.30	2584.31
202.5	3086.24	3071.30	3056.36	3028.28	2994.82	2955.98	2915.34	2872.32	2829.30
225.0	3071.90	3065.32	3058.15	3048.59	3033.65	3016.33	2987.65	2951.20	2913.55
247.5	3024.69	3015.73	2996.01	2979.88	2945.82	2904.59	2871.13	2828.10	2771.94
270.0	3013.34	2996.01	2975.10	2947.01	2901.60	2856.79	2801.81	2742.06	2682.31
292.5	2988.84	2965.54	2947.61	2927.29	2882.48	2841.25	2797.63	2745.05	2690.08
315.0	2998.40	2991.83	2987.05	2978.68	2968.52	2954.78	2936.86	2910.56	2874.71
337.5	2996.61	2989.44	2979.88	2970.32	2943.43	2920.12	2892.04	2850.21	2819.14
360.0	3001.39	2994.22	2981.67	2968.52	2941.04	2903.99	2871.13	2828.70	2764.17

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2700.83	2623.75	2496.48	2375.78	2222.21	2021.44	1803.34	1600.78	1366.55
22.5	2684.70	2611.80	2473.77	2336.94	2212.65	1974.83	1781.23	1612.73	1373.72
45.0	2687.09	2624.94	2568.18	2495.28	2405.05	2305.27	2192.93	2031.00	1886.40
67.5	2498.27	2415.81	2282.56	2145.13	2003.51	1818.88	1628.86	1457.37	1260.19
90.0	2304.67	2183.97	2033.39	1826.05	1644.40	1459.17	1173.01	1034.20	857.10
112.5	2546.07	2458.23	2347.09	2200.70	2062.67	1898.35	1675.47	1505.18	1325.32
135.0	2697.84	2635.70	2563.40	2486.32	2408.04	2304.67	2201.89	2071.04	1921.65
157.5	2691.27	2626.14	2528.15	2408.04	2279.57	2111.07	1925.24	1735.82	1557.16
180.0	2507.23	2401.47	2255.67	2077.01	1895.96	1685.03	1465.74	1171.28	1077.46
202.5	2770.74	2712.78	2642.87	2535.32	2430.15	2307.66	2136.76	1943.16	1760.32
225.0	2866.94	2821.53	2768.35	2708.60	2648.85	2578.34	2507.23	2432.54	2337.53
247.5	2725.93	2678.72	2608.21	2519.78	2420.59	2292.12	2127.80	1961.09	1759.72
270.0	2624.35	2551.45	2451.66	2356.65	2224.60	2066.26	1881.02	1672.48	1476.49
292.5	2644.66	2587.90	2528.74	2434.93	2322.60	2201.30	2034.59	1844.57	1668.90
315.0	2837.07	2801.81	2740.27	2687.09	2624.94	2550.25	2486.92	2402.66	2286.74
337.5	2766.56	2691.27	2620.16	2515.00	2368.01	2238.34	2072.83	1817.68	1649.18
360.0	2700.83	2623.75	2496.48	2375.78	2222.21	2021.44	1803.34	1600.78	1366.55

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	1165.78	944.69	748.70	602.91	475.04	370.47	306.53	246.36	210.39
22.5	1165.78	1007.43	790.53	637.56	521.64	399.75	318.48	267.21	214.51
45.0	1721.48	1511.15	1189.20	1094.85	873.95	713.63	572.61	419.64	329.18
67.5	1085.11	899.28	716.44	586.18	461.89	366.88	307.73	245.29	208.06
90.0	679.63	531.62	430.04	339.75	272.95	224.73	194.91	172.51	150.10
112.5	1125.74	929.76	766.63	605.89	488.18	390.78	302.95	243.07	204.83
135.0	1769.28	1596.00	1189.92	1166.79	989.15	784.73	638.40	506.59	393.95
157.5	1315.16	1131.12	953.66	772.01	611.87	492.36	381.22	305.93	242.84
180.0	872.21	689.55	553.49	434.64	349.85	276.95	231.54	205.37	179.74
202.5	1550.59	1171.93	1149.17	952.16	794.41	635.71	504.08	405.66	326.67
225.0	2197.11	2068.65	1930.62	1772.87	1547.00	1354.60	1164.58	941.71	777.98
247.5	1577.48	1304.41	1157.95	983.47	822.86	646.88	530.13	428.01	325.24
270.0	1281.10	1038.51	856.86	696.72	540.17	441.57	358.52	313.70	236.56
292.5	1492.03	1192.01	1080.15	910.75	739.80	590.60	481.91	390.13	297.09
315.0	2154.69	2019.65	1848.16	1667.70	1449.61	1231.51	1048.07	855.06	680.59
337.5	1459.17	1147.55	1034.14	863.85	711.90	548.35	440.20	349.61	274.09
360.0	1165.78	944.69	748.70	602.91	475.04	370.47	306.53	246.36	210.39

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	186.07	163.78	143.71	122.13	107.67	95.01	81.68	72.42	64.47
22.5	186.55	164.80	138.69	121.30	105.46	90.70	77.80	68.18	59.10
45.0	235.19	153.92	115.80	85.63	64.17	54.79	46.07	37.29	33.04
67.5	179.62	157.45	139.88	116.34	102.36	90.35	75.77	66.45	59.39
90.0	130.20	115.38	102.06	88.02	78.52	70.03	62.80	54.85	49.30
112.5	180.69	156.37	137.07	118.31	102.54	90.76	78.22	68.72	60.47
135.0	276.60	203.52	144.90	97.64	76.48	62.86	50.97	42.13	36.39
157.5	210.57	182.78	158.17	138.93	118.97	104.15	89.99	77.86	68.72
180.0	157.03	138.93	123.15	105.94	94.23	84.19	73.91	65.13	58.38
202.5	254.01	219.53	194.38	166.59	146.51	129.25	112.16	97.82	86.88
225.0	630.99	483.40	357.32	308.32	180.81	129.42	91.18	70.27	58.20
247.5	266.80	228.61	197.90	170.95	149.20	128.05	112.16	96.50	83.36
270.0	208.84	187.09	159.30	137.73	123.21	105.88	92.68	83.83	72.78
292.5	247.97	213.44	187.92	162.05	139.04	122.02	107.02	92.56	80.25
315.0	544.35	421.26	305.93	211.17	153.39	114.96	81.74	67.46	56.17
337.5	227.66	199.87	172.98	148.72	129.60	111.74	97.82	84.31	72.72
360.0	186.07	163.78	143.71	122.13	107.67	95.01	81.68	72.42	64.47

C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	56.71	49.95	44.87	39.91	36.15	32.45	29.34	26.95	24.62
22.5	51.27	45.35	39.68	35.37	31.37	28.02	25.45	23.30	21.03
45.0	29.52	26.35	23.84	22.05	20.26	18.88	17.81	16.79	16.07
67.5	50.85	44.46	40.15	34.84	31.07	28.02	24.80	22.65	20.79
90.0	44.40	39.20	35.61	32.57	29.58	26.95	24.92	22.95	21.39
112.5	54.38	46.31	41.35	37.64	32.92	29.34	27.01	24.08	21.81
135.0	31.25	27.96	24.92	22.89	21.21	19.48	18.34	17.39	16.55
157.5	59.75	52.16	46.25	41.29	35.91	32.27	29.22	26.23	23.78
180.0	51.63	45.83	41.53	37.23	33.94	30.65	27.84	25.57	23.66
202.5	75.89	67.16	58.74	51.57	45.95	40.63	36.03	32.63	29.70
225.0	47.68	39.68	34.36	30.35	26.53	24.08	22.11	20.32	18.82
247.5	73.20	63.22	54.85	48.46	42.90	36.99	32.98	29.70	26.89
270.0	65.13	58.50	51.09	45.89	41.41	36.51	33.28	30.41	27.43
292.5	70.75	60.47	53.48	47.38	42.07	36.45	32.63	29.52	26.47
315.0	45.41	38.96	33.94	29.88	26.53	24.14	21.93	20.32	18.88
337.5	63.88	56.11	47.86	42.36	37.76	32.92	29.64	26.89	24.26
360.0	56.71	49.95	44.87	39.91	36.15	32.45	29.34	26.95	24.62

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	22.65	21.15	19.84	18.46	17.51	16.67	15.77	15.12	14.64
22.5	19.54	18.28	17.03	16.19	15.48	14.82	14.28	13.86	13.44
45.0	15.30	14.70	14.28	13.92	13.50	13.15	12.91	12.61	12.43
67.5	18.94	17.75	16.67	15.66	14.88	14.34	13.74	13.27	12.91
90.0	19.84	18.52	17.51	16.55	15.72	15.12	14.52	13.98	13.56
112.5	20.55	18.70	17.69	16.61	15.60	14.94	14.34	13.74	13.38
135.0	15.72	15.12	14.64	14.22	13.80	13.44	13.15	12.85	12.67
157.5	21.93	20.20	18.76	17.75	16.79	16.01	15.36	14.76	14.28
180.0	21.63	20.32	19.12	17.87	16.97	16.25	15.54	14.88	14.40
202.5	26.41	24.32	22.47	20.50	19.18	18.05	16.85	16.07	15.36
225.0	17.75	16.73	15.89	15.30	14.64	14.16	13.74	13.32	13.03
247.5	23.90	21.99	20.32	18.52	17.33	16.37	15.42	14.64	14.10
270.0	25.34	23.48	21.69	20.08	18.82	17.69	16.67	15.83	15.06
292.5	23.90	21.99	20.14	18.58	17.39	16.31	15.48	14.70	14.04
315.0	17.69	16.79	16.01	15.24	14.64	14.22	13.74	13.38	13.09
337.5	22.05	20.50	18.88	17.75	16.67	15.77	15.12	14.46	13.92
360.0	22.65	21.15	19.84	18.46	17.51	16.67	15.77	15.12	14.64

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	14.10	13.68	13.32	13.03	12.79	12.55	12.31	12.13	11.95
22.5	13.15	12.85	12.55	12.37	12.19	12.01	11.83	11.71	11.59
45.0	12.25	12.13	11.95	11.83	11.71	11.65	11.53	11.47	11.35
67.5	12.61	12.37	12.13	11.95	11.77	11.65	11.47	11.35	11.23
90.0	13.21	12.85	12.61	12.37	12.13	11.95	11.83	11.65	11.59
112.5	13.03	12.67	12.43	12.25	12.07	11.89	11.77	11.65	11.47
135.0	12.43	12.25	12.13	12.01	11.89	11.83	11.71	11.59	11.53
157.5	13.92	13.44	13.15	12.91	12.61	12.43	12.25	12.07	11.83
180.0	13.92	13.56	13.21	12.91	12.67	12.43	12.19	12.07	11.89
202.5	14.64	14.22	13.80	13.32	13.09	12.79	12.49	12.31	12.13
225.0	12.79	12.49	12.31	12.13	11.95	11.83	11.71	11.53	11.41
247.5	13.56	13.15	12.79	12.49	12.25	12.01	11.77	11.65	11.53
270.0	14.46	13.92	13.44	13.09	12.73	12.43	12.19	11.95	11.71
292.5	13.62	13.15	12.79	12.49	12.25	11.95	11.77	11.65	11.47
315.0	12.79	12.49	12.31	12.13	11.95	11.83	11.71	11.59	11.53
337.5	13.50	13.21	12.85	12.61	12.37	12.19	12.01	11.89	11.71
360.0	14.10	13.68	13.32	13.03	12.79	12.55	12.31	12.13	11.95

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	11.77	11.65	11.53	11.35	11.29	11.17	10.99	10.88	10.82
22.5	11.47	11.35	11.23	11.11	11.05	10.93	10.82	10.70	10.64
45.0	11.23	11.17	11.05	10.93	10.88	10.76	10.70	10.64	10.58
67.5	11.17	11.17	11.17	11.29	11.41	11.29	11.17	10.93	10.64
90.0	11.59	11.65	11.65	11.83	11.71	11.83	12.01	11.83	11.11
112.5	11.47	11.47	11.47	11.59	11.59	11.65	11.65	11.47	11.11
135.0	11.47	11.35	11.29	11.05	10.99	10.93	10.88	10.82	10.70
157.5	11.77	11.65	11.59	11.65	11.71	11.83	11.83	11.95	12.01
180.0	11.77	11.77	11.83	11.89	11.95	12.07	12.07	12.19	12.19
202.5	11.89	11.77	11.65	11.53	11.41	11.41	11.41	11.47	11.47
225.0	11.35	11.29	11.17	11.11	11.05	10.93	10.88	10.82	10.76
247.5	11.35	11.23	11.17	10.99	10.93	10.82	10.76	10.70	10.64
270.0	11.53	11.41	11.23	11.05	10.99	10.88	10.76	10.70	10.64
292.5	11.35	11.23	11.05	10.99	10.88	10.82	10.70	10.64	10.58
315.0	11.41	11.29	11.29	11.17	11.11	10.93	10.82	10.82	10.70
337.5	11.59	11.47	11.35	11.29	11.17	11.05	11.05	11.05	10.99
360.0	11.77	11.65	11.53	11.35	11.29	11.17	10.99	10.88	10.82

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	10.70	10.52	10.40	10.28	10.16	9.98	9.80	9.74	9.68
22.5	10.58	10.40	10.28	10.22	9.92	9.86	9.80	9.74	9.68
45.0	10.46	10.40	10.34	10.22	9.92	9.86	9.74	9.80	9.68
67.5	10.34	10.28	10.16	10.16	9.80	9.68	9.68	9.56	9.50
90.0	10.40	10.28	10.16	10.10	9.68	9.56	9.38	9.38	9.38
112.5	10.64	10.46	10.40	10.34	10.28	9.80	9.74	9.56	9.56
135.0	10.64	10.52	10.46	10.40	10.16	9.92	9.80	9.68	9.62
157.5	11.77	11.23	10.58	10.52	10.40	9.98	9.92	9.80	9.62
180.0	12.01	11.41	10.46	10.34	10.28	9.92	9.74	9.62	9.56
202.5	11.35	11.17	10.93	10.64	10.52	10.40	10.16	10.10	9.92
225.0	10.64	10.64	10.52	10.52	10.46	10.34	10.16	10.04	9.98
247.5	10.58	10.46	10.34	10.28	10.22	10.10	9.92	9.86	9.74
270.0	10.64	10.58	10.34	10.16	10.04	9.98	9.80	9.68	9.56
292.5	10.52	10.40	10.34	10.28	10.22	10.04	9.92	9.86	9.80
315.0	10.64	10.58	10.52	10.40	10.34	10.16	10.04	9.98	9.86
337.5	10.88	10.76	10.46	10.34	10.16	9.98	9.86	9.80	9.74
360.0	10.70	10.52	10.40	10.28	10.16	9.98	9.80	9.74	9.68

C/γ(°)	90.0
0.0	9.62
22.5	9.62
45.0	9.68
67.5	9.50
90.0	9.38
112.5	9.56
135.0	9.68
157.5	9.50
180.0	9.32
202.5	9.80
225.0	9.92
247.5	9.74
270.0	9.50
292.5	9.62
315.0	9.80
337.5	9.74
360.0	9.62