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Nata

LumCAT: 2-2322-M
Luminaire: 92.70.131.00

Report No: 210809-B003	Voltage(V): 34.3300
Test No: 210809-C003	Current(A): 0.5000
LampCAT: SAMSUNG LC033D LES14.5	Power (W): 17.1650
Lamp flux(lm): 2652.3	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 570	Width(mm): 45
Phm Type: C	Height(mm): 20

Photometric Results

Lumens(lm): 2555.79
Efficiency(%): 96.36%
Lumens(lm)/Power(W): 148.90
Central intensity(cd): 2784.485
Maximum intensity(cd): 3281.032
Angle of maximum intensity: C=270.0 γ=20.0
Beam Angle(50%Imax): [C0/180]Total=42.5
[C90/270]Total=67.2
Field angle(10%Imax): [C0/180]Total=65.8
[C90/270]Total=80.5
Maximum s/h(1/2): C0_180=0.70 C90_270=1.13
Maximum s/h(1/4): C0_180=0.72 C90_270=0.95
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 96.36%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.708%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2768.501	0.000	0	.000%	.000%
1.0	2770.406	2.650	2.65	.100%	.104%
2.0	2774.626	7.959	10.609	.300%	.415%
3.0	2780.004	13.285	23.894	.501%	.935%
4.0	2781.647	18.617	42.51	.702%	1.663%
5.0	2777.427	23.915	66.425	.902%	2.599%
6.0	2769.771	29.152	95.577	1.099%	3.740%
7.0	2760.323	34.325	129.903	1.294%	5.083%
8.0	2749.268	39.431	169.334	1.487%	6.625%
9.0	2737.841	44.470	213.804	1.677%	8.365%
10.0	2721.296	49.403	263.207	1.863%	10.298%
11.0	2701.727	54.187	317.394	2.043%	12.419%
12.0	2677.042	58.798	376.192	2.217%	14.719%
13.0	2642.609	63.131	439.323	2.380%	17.189%
14.0	2605.040	67.169	506.492	2.532%	19.817%
15.0	2562.578	70.943	577.435	2.675%	22.593%
16.0	2516.792	74.427	651.862	2.806%	25.505%
17.0	2461.334	77.523	729.385	2.923%	28.539%
18.0	2408.789	80.298	809.683	3.027%	31.680%
19.0	2355.235	82.884	892.567	3.125%	34.923%
20.0	2297.536	85.159	977.726	3.211%	38.255%
21.0	2232.929	86.994	1064.72	3.280%	41.659%
22.0	2168.283	88.444	1153.164	3.335%	45.120%
23.0	2098.709	89.533	1242.697	3.376%	48.623%
24.0	2012.552	89.887	1332.584	3.389%	52.140%
25.0	1926.475	89.565	1422.149	3.377%	55.644%
26.0	1840.173	88.912	1511.061	3.352%	59.123%
27.0	1750.562	87.848	1598.909	3.312%	62.560%
28.0	1645.823	85.989	1684.898	3.242%	65.925%
29.0	1544.078	83.457	1768.355	3.147%	69.190%
30.0	1438.178	80.520	1848.876	3.036%	72.341%
31.0	1327.239	76.958	1925.833	2.901%	75.352%
32.0	1213.496	72.789	1998.622	2.744%	78.200%
33.0	1103.853	68.270	2066.892	2.574%	80.871%
34.0	982.961	63.153	2130.045	2.381%	83.342%
35.0	858.896	57.201	2187.246	2.157%	85.580%
36.0	750.814	51.253	2238.5	1.932%	87.586%
37.0	650.436	45.701	2284.201	1.723%	89.374%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	545.070	39.904	2324.105	1.504%	90.935%
39.0	448.490	33.913	2358.018	1.279%	92.262%
40.0	362.540	28.286	2386.304	1.066%	93.369%
41.0	286.078	23.097	2409.401	.871%	94.272%
42.0	220.287	18.397	2427.798	.694%	94.992%
43.0	158.524	14.032	2441.83	.529%	95.541%
44.0	115.969	10.360	2452.191	.391%	95.947%
45.0	81.865	7.603	2459.794	.287%	96.244%
46.0	58.864	5.504	2465.297	.208%	96.459%
47.0	44.157	4.097	2469.395	.154%	96.620%
48.0	35.702	3.228	2472.623	.122%	96.746%
49.0	30.407	2.715	2475.338	.102%	96.852%
50.0	26.508	2.373	2477.711	.089%	96.945%
51.0	24.267	2.148	2479.859	.081%	97.029%
52.0	22.534	2.008	2481.867	.076%	97.108%
53.0	21.548	1.918	2483.785	.072%	97.183%
54.0	21.033	1.877	2485.662	.071%	97.256%
55.0	20.843	1.869	2487.531	.070%	97.329%
56.0	20.805	1.882	2489.413	.071%	97.403%
57.0	20.884	1.906	2491.319	.072%	97.478%
58.0	20.981	1.936	2493.255	.073%	97.553%
59.0	21.033	1.964	2495.219	.074%	97.630%
60.0	21.074	1.989	2497.208	.075%	97.708%
61.0	21.153	2.015	2499.223	.076%	97.787%
62.0	21.160	2.039	2501.262	.077%	97.867%
63.0	21.179	2.059	2503.322	.078%	97.947%
64.0	21.261	2.082	2505.404	.079%	98.029%
65.0	21.418	2.112	2507.516	.080%	98.111%
66.0	21.593	2.146	2509.662	.081%	98.195%
67.0	21.840	2.184	2511.846	.082%	98.281%
68.0	22.079	2.225	2514.071	.084%	98.368%
69.0	22.213	2.260	2516.33	.085%	98.456%
70.0	22.258	2.284	2518.614	.086%	98.546%
71.0	22.221	2.299	2520.913	.087%	98.636%
72.0	22.239	2.312	2523.225	.087%	98.726%
73.0	22.307	2.329	2525.554	.088%	98.817%
74.0	22.250	2.342	2527.897	.088%	98.909%
75.0	22.064	2.341	2530.238	.088%	99.000%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	21.608	2.318	2532.557	.087%	99.091%
77.0	20.813	2.262	2534.818	.085%	99.180%
78.0	19.976	2.183	2537.002	.082%	99.265%
79.0	19.166	2.103	2539.105	.079%	99.347%
80.0	18.340	2.022	2541.127	.076%	99.426%
81.0	17.489	1.938	2543.064	.073%	99.502%
82.0	16.339	1.834	2544.899	.069%	99.574%
83.0	14.826	1.694	2546.593	.064%	99.640%
84.0	13.683	1.553	2548.146	.059%	99.701%
85.0	12.705	1.440	2549.586	.054%	99.757%
86.0	11.771	1.338	2550.924	.050%	99.810%
87.0	11.151	1.255	2552.179	.047%	99.859%
88.0	10.995	1.213	2553.392	.046%	99.906%
89.0	10.912	1.201	2554.593	.045%	99.953%
90.0	10.860	1.194	2555.786	.045%	100.000%

Zonal flux distribution table

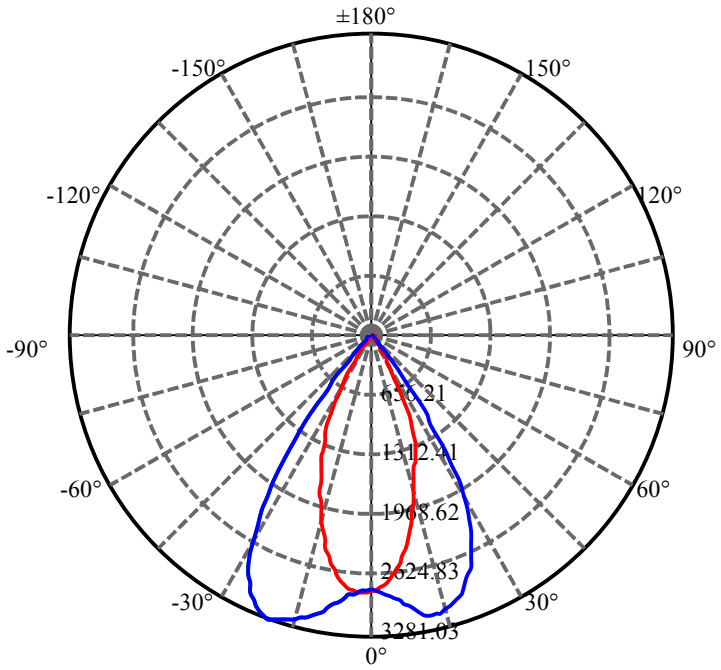
ZONAL LUMEN SUMMARY

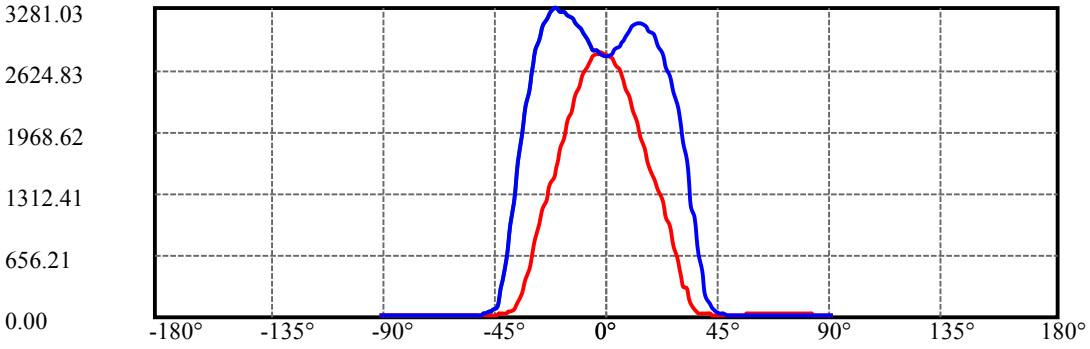
Zone	Lumens	%Lamp	%Fixt
0-30	1848.88	69.71%	72.34%
0-40	2386.30	89.97%	93.37%
0-60	2497.21	94.15%	97.71%
0-90	2554.59	96.31%	99.95%
0-120	2554.59	96.31%	99.95%
0-180	2555.79	96.36%	100.00%
60-90	59.37	2.24%	2.32%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-32.67	2044.63	77.09%	80.00%

ZONAL LUMEN SUMMARY

0-10	263.21
10-20	714.52
20-30	871.15
30-40	537.43
40-50	91.41
50-60	19.50
60-70	21.41
70-80	22.51
80-90	13.47
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]





C270(Max):

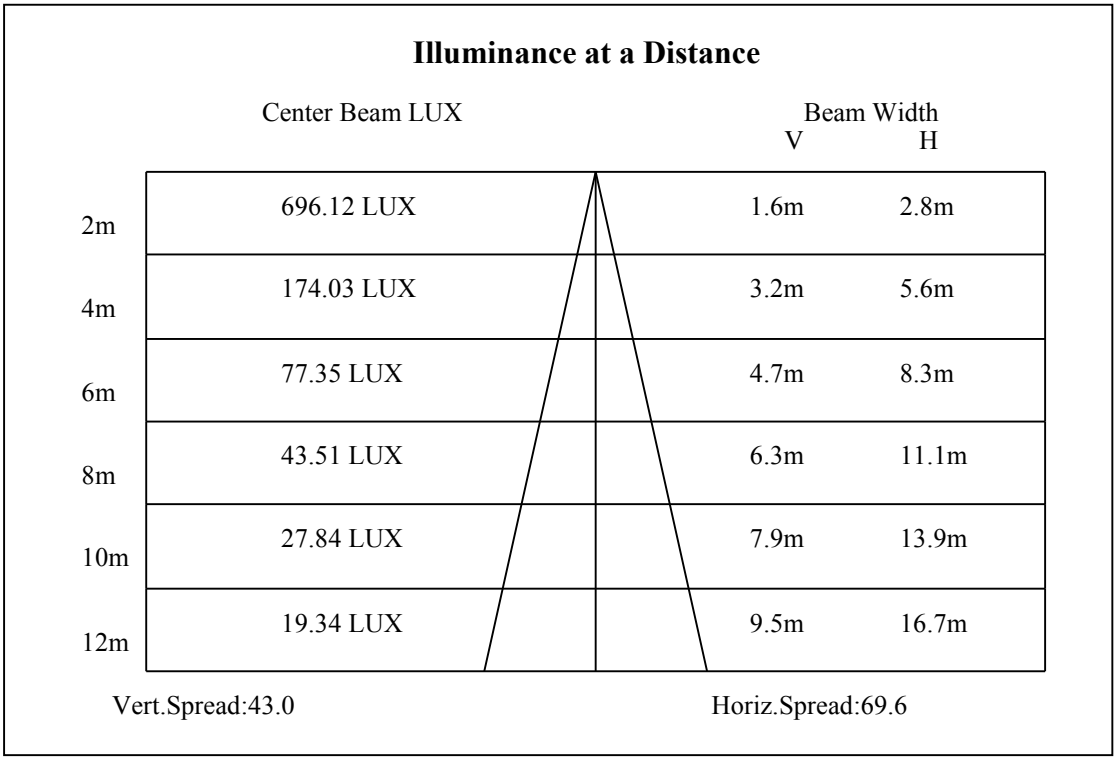
C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:31.5 Right:34.2
:C90/270Left:21.7 Right:58.8

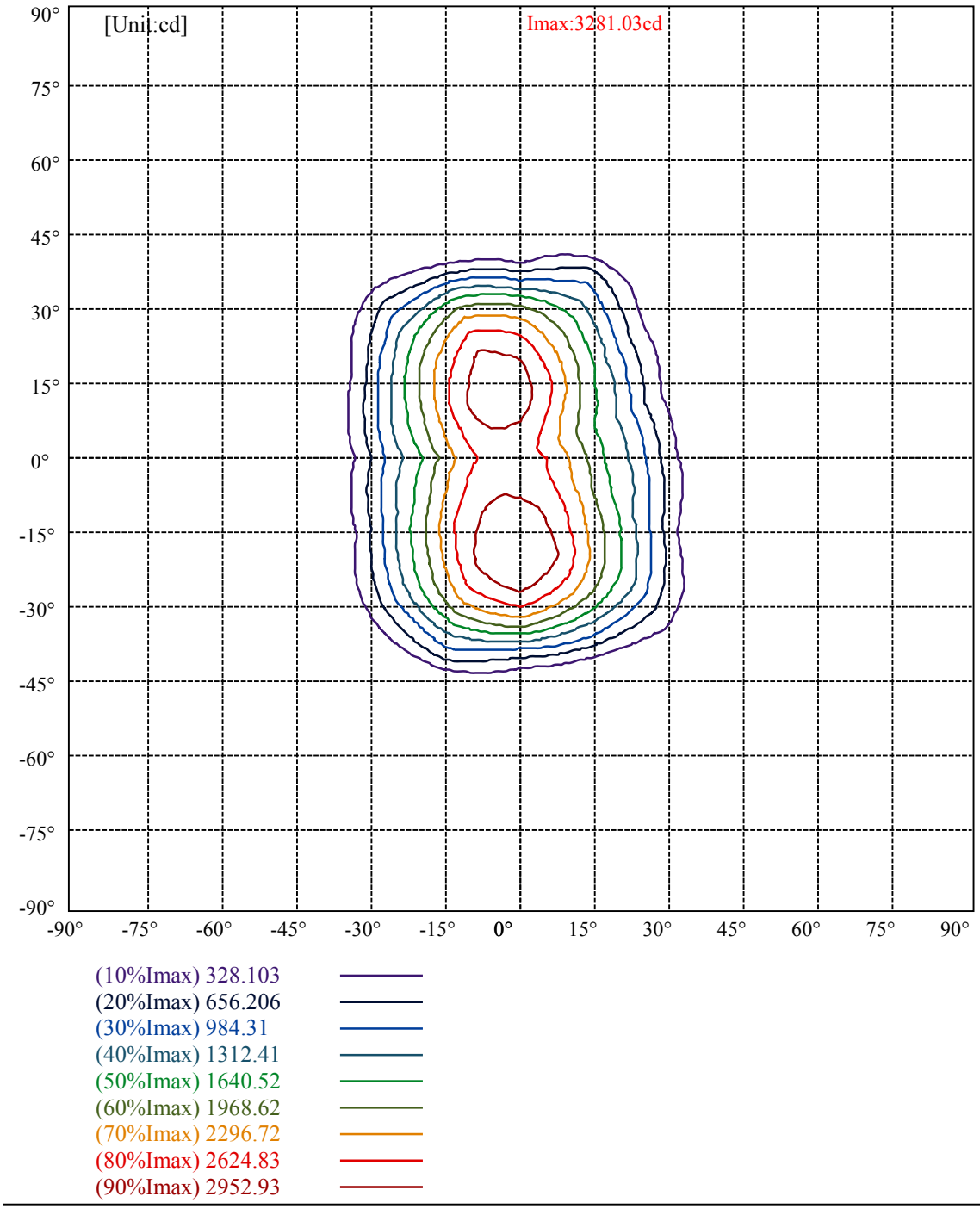
Beam Angle(50%Imax):C0/180Left:20.3 Right:22.2
:C90/270Left:15.0 Right:52.2

Lux distance Curve



Equipment: GMS1980 Date: 2021/8/09 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 65.0% Distance(m): 7.73

ISO-Intensity(V-H)



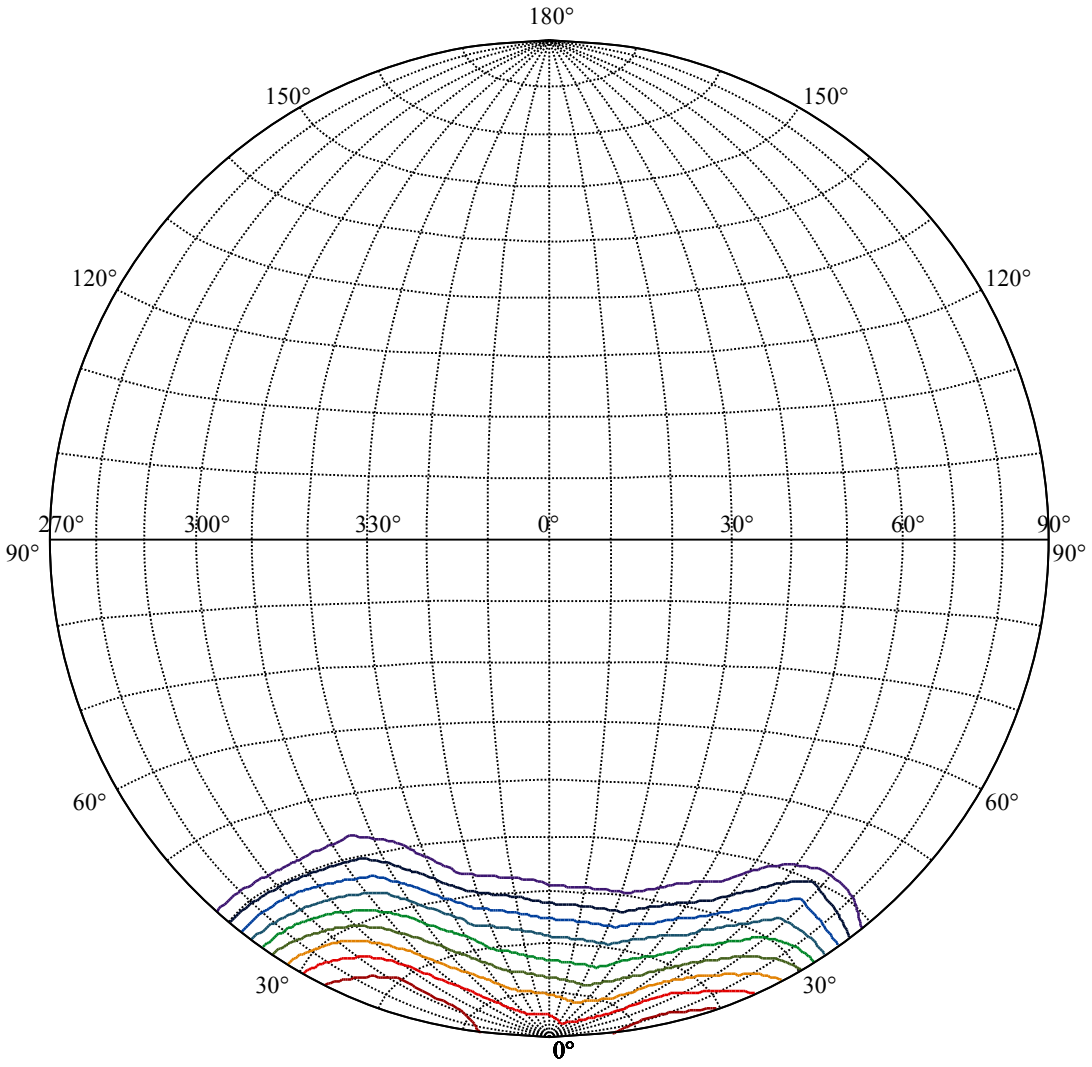
(10%Imax) 328.103
(20%Imax) 656.206
(30%Imax) 984.31
(40%Imax) 1312.41
(50%Imax) 1640.52
(60%Imax) 1968.62
(70%Imax) 2296.72
(80%Imax) 2624.83
(90%Imax) 2952.93

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2021/8/09
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.73

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:3281.03

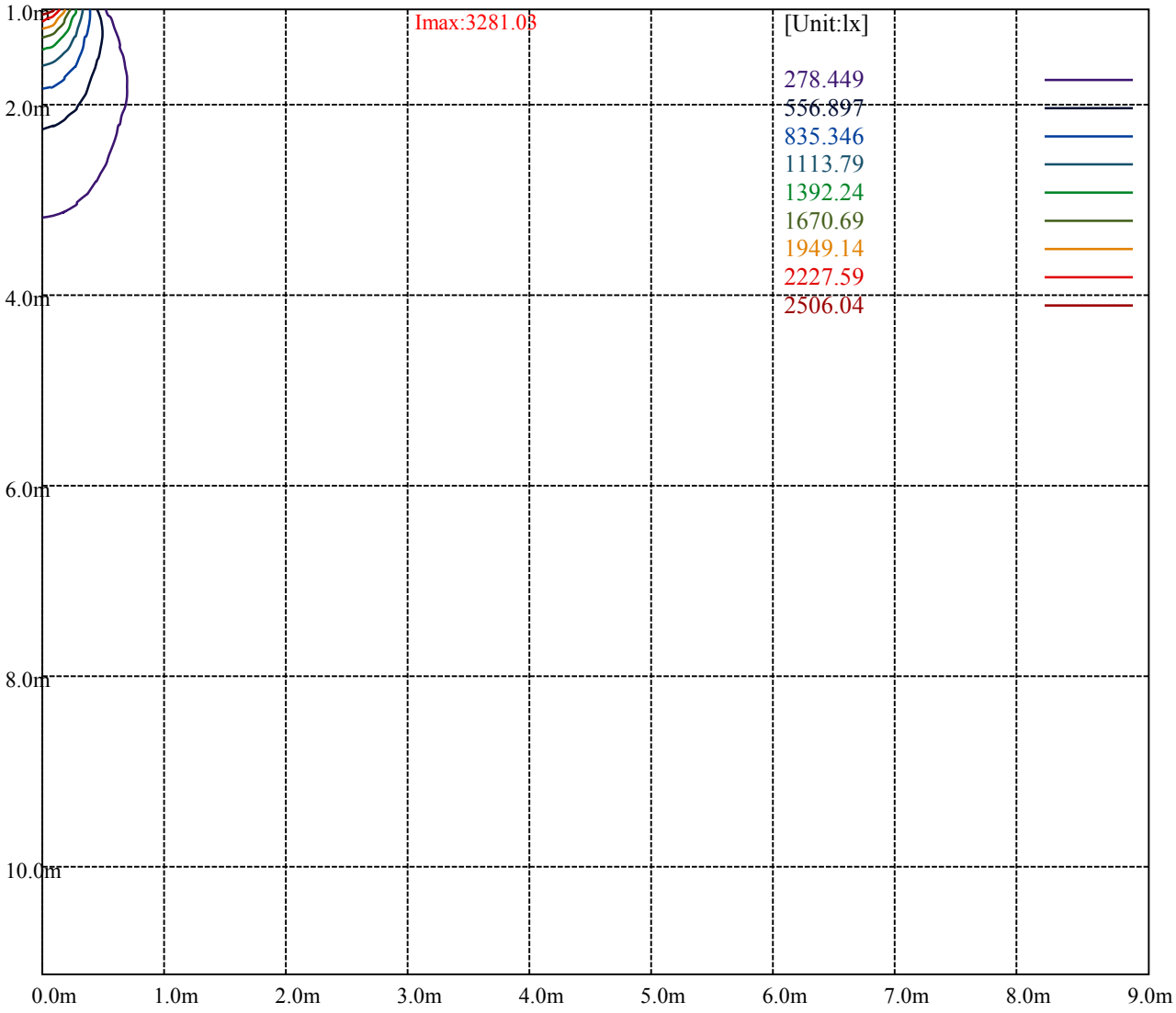
(10%Imax) 328.103
(20%Imax) 656.206
(30%Imax) 984.31
(40%Imax) 1312.41
(50%Imax) 1640.52
(60%Imax) 1968.62
(70%Imax) 2296.72
(80%Imax) 2624.83
(90%Imax) 2952.93

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2021/8/09
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.73

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2021/8/09
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.73

Nata 2-2322-M

Luminance Limitting Curve(no luminous side)

Luminance Table

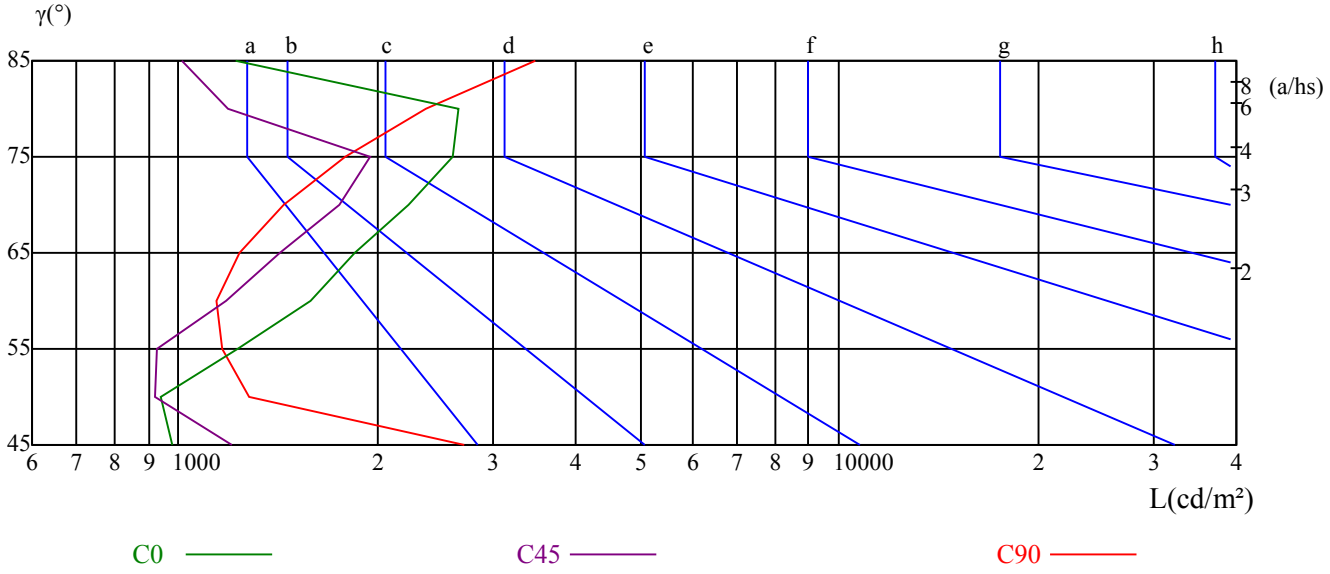
γ	45	50	55	60	65	70	75	80	85
C0	976	941	1230	1582	1846	2223	2600	2660	1222
C45	1203	919	930	1183	1423	1749	1947	1189	1014
C90	2709	1277	1168	1142	1241	1441	1783	2361	3472

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
2850	1367	1809	5031	2034	3150	6522	5038	5600

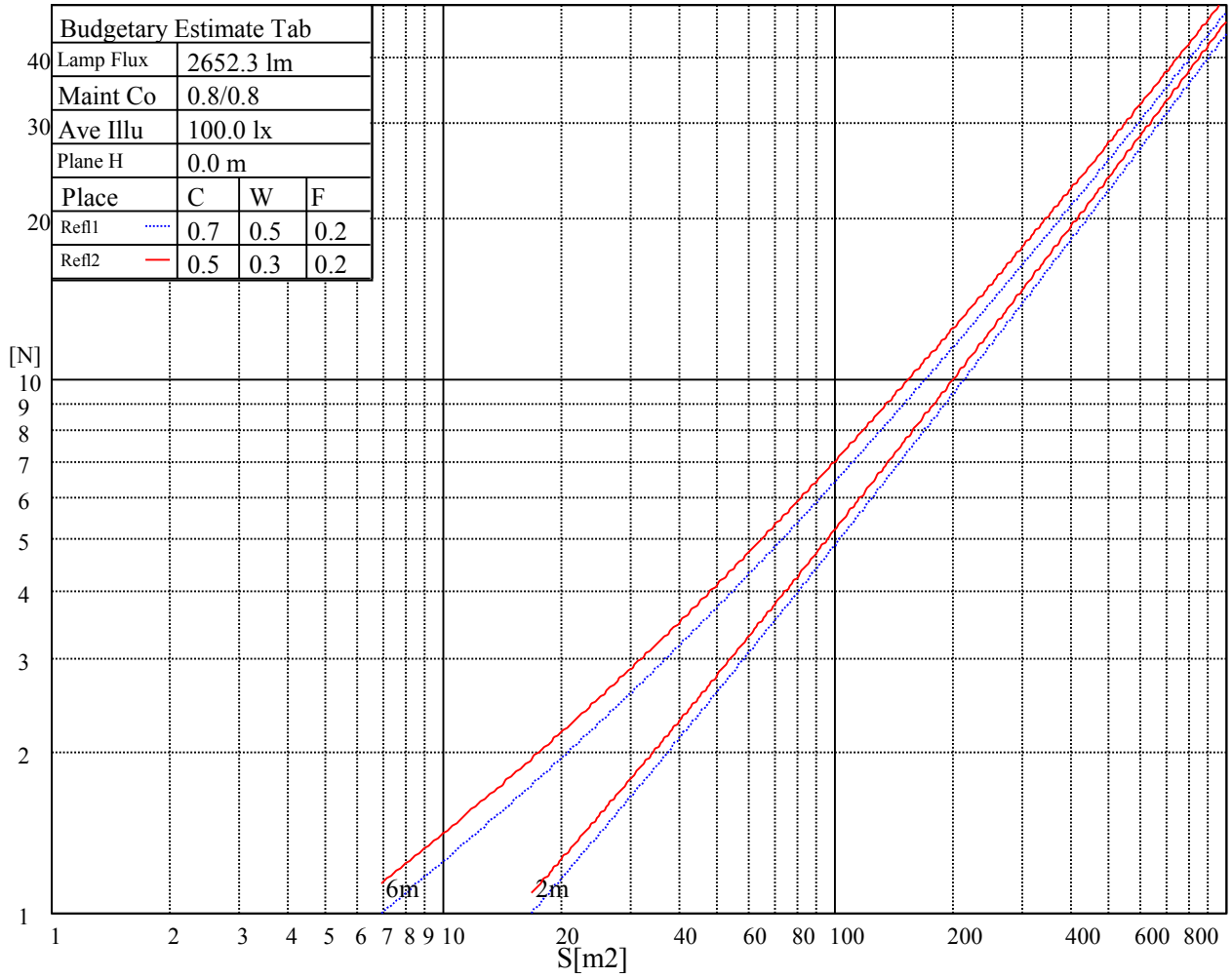
Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limitting Curve



Budgetary Estimate Table

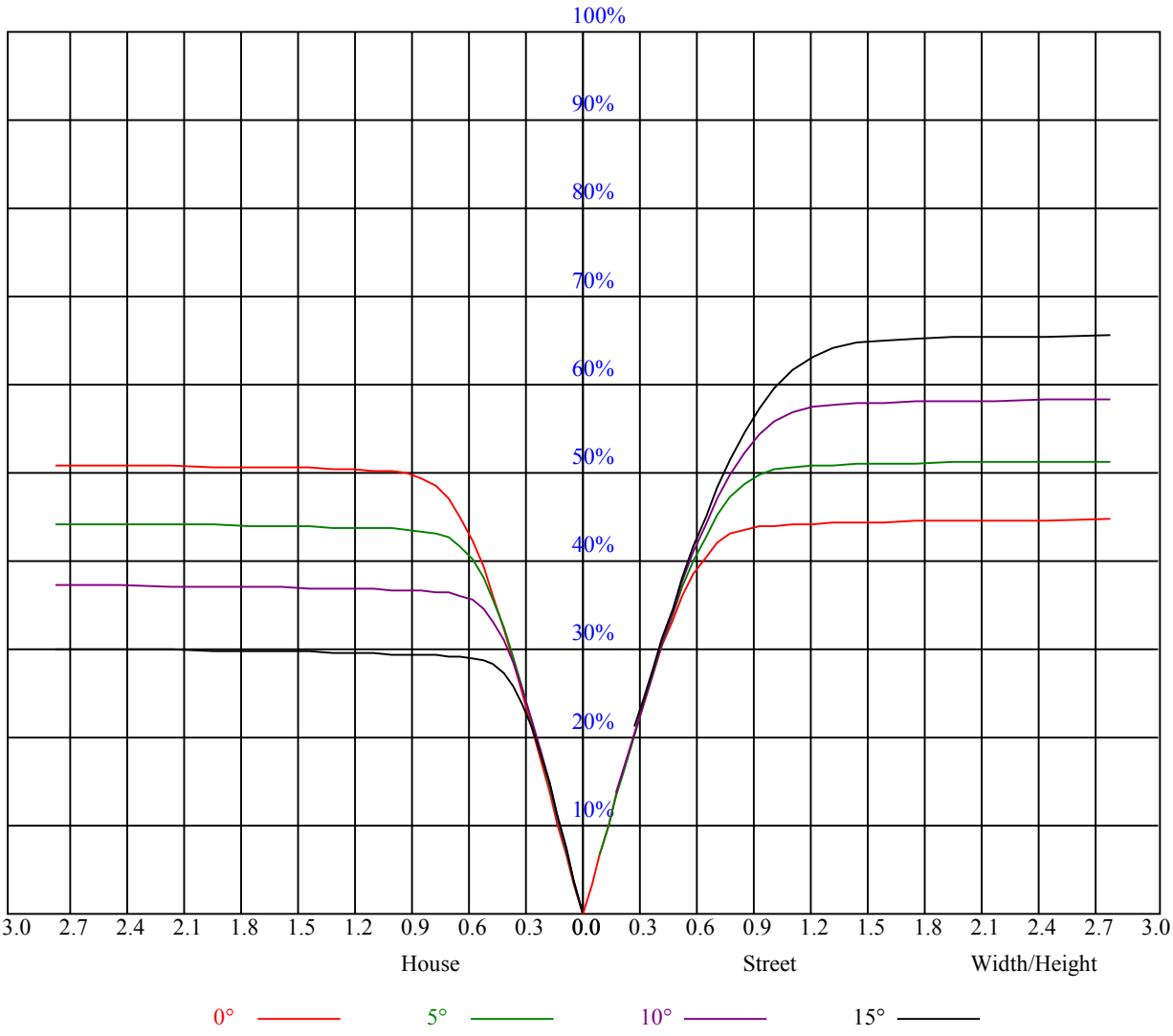


Equipment: GMS1980 Date: 2021/8/09 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 65.0% Distance(m): 7.73

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	1.12	1.12	1.12	1.07	1.07	1.07	1.03	1.03	1.03	0.98	0.98	0.98	0.96
1	1.06	1.04	1.02	1.04	1.02	1.00	1.00	0.98	0.97	0.97	0.95	0.94	0.93	0.92	0.91	0.89
2	0.99	0.95	0.91	0.97	0.93	0.90	0.94	0.91	0.88	0.91	0.89	0.86	0.88	0.86	0.85	0.83
3	0.92	0.87	0.83	0.91	0.86	0.83	0.88	0.84	0.81	0.86	0.83	0.80	0.84	0.81	0.79	0.77
4	0.86	0.81	0.77	0.85	0.80	0.76	0.83	0.79	0.75	0.81	0.77	0.74	0.79	0.76	0.73	0.72
5	0.81	0.75	0.71	0.80	0.74	0.71	0.78	0.73	0.70	0.76	0.72	0.69	0.75	0.71	0.69	0.67
6	0.76	0.70	0.66	0.75	0.70	0.66	0.74	0.69	0.65	0.72	0.68	0.65	0.71	0.67	0.64	0.63
7	0.71	0.65	0.61	0.71	0.65	0.61	0.69	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.60	0.59
8	0.67	0.61	0.57	0.67	0.61	0.57	0.66	0.61	0.57	0.65	0.60	0.57	0.64	0.60	0.57	0.55
9	0.63	0.58	0.54	0.63	0.58	0.54	0.62	0.57	0.54	0.61	0.57	0.54	0.60	0.56	0.53	0.52
10	0.60	0.55	0.51	0.60	0.54	0.51	0.59	0.54	0.51	0.58	0.54	0.50	0.57	0.53	0.50	0.49

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2021/8/09	Operator: NT07
Temperature(°C): 25.0	Humidity(%): 65.0%	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	2784.49	2769.55	2743.26	2714.57	2678.72	2632.71	2565.19	2500.06	2434.33
22.5	2758.19	2731.90	2694.86	2645.86	2599.85	2535.32	2466.00	2393.10	2311.24
45.0	2752.22	2731.90	2710.99	2680.52	2658.41	2631.52	2593.87	2540.10	2491.70
67.5	2764.17	2753.41	2757.00	2766.56	2773.73	2779.70	2781.50	2772.53	2768.95
90.0	2765.96	2772.53	2791.66	2828.10	2851.41	2880.69	2908.77	2938.65	2982.86
112.5	2771.94	2779.11	2803.01	2838.26	2871.72	2898.02	2931.48	2965.54	3003.78
135.0	2778.51	2788.67	2813.17	2843.64	2872.32	2897.42	2917.14	2932.07	2944.62
157.5	2773.73	2786.88	2798.83	2810.18	2819.74	2819.74	2825.12	2816.75	2804.20
180.0	2784.49	2800.02	2807.79	2801.22	2789.27	2768.95	2735.49	2694.26	2648.25
202.5	2758.19	2778.51	2803.61	2822.73	2826.91	2828.70	2817.35	2800.62	2772.53
225.0	2749.83	2773.13	2798.23	2825.71	2846.03	2857.98	2863.96	2861.57	2853.20
247.5	2764.17	2783.29	2806.00	2832.29	2853.80	2868.74	2891.44	2923.11	2955.98
270.0	2765.96	2769.55	2783.89	2803.61	2826.91	2839.46	2875.31	2917.73	2955.38
292.5	2771.94	2774.33	2780.30	2789.86	2798.23	2801.22	2824.52	2847.23	2871.13
315.0	2778.51	2772.53	2759.39	2757.00	2748.63	2737.28	2714.57	2704.42	2693.66
337.5	2773.73	2761.18	2742.06	2719.95	2690.67	2661.39	2604.63	2557.42	2496.48
360.0	2784.49	2769.55	2743.26	2714.57	2678.72	2632.71	2565.19	2500.06	2434.33

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2342.31	2262.24	2176.20	2078.21	1979.61	1888.79	1792.59	1701.17	1603.77
22.5	2230.58	2141.54	2045.34	1967.66	1891.78	1783.62	1701.76	1635.44	1526.09
45.0	2431.94	2365.62	2308.25	2249.70	2182.77	2131.98	2073.43	2013.08	1941.97
67.5	2768.35	2773.73	2777.91	2774.33	2758.19	2727.72	2684.10	2651.83	2594.47
90.0	3033.65	3074.29	3099.98	3111.33	3119.70	3120.30	3099.98	3071.30	3042.62
112.5	3061.74	3104.16	3144.80	3176.46	3193.79	3203.35	3210.52	3193.19	3168.10
135.0	2959.56	2973.30	2991.83	2999.60	2996.61	2982.86	2951.79	2911.16	2860.37
157.5	2777.31	2744.45	2702.62	2660.20	2586.70	2522.17	2459.43	2382.35	2299.29
180.0	2591.48	2517.39	2445.09	2373.39	2274.20	2187.55	2100.91	1995.75	1890.58
202.5	2737.88	2697.25	2650.64	2583.72	2515.60	2441.50	2362.63	2281.37	2193.53
225.0	2859.18	2857.38	2854.99	2851.41	2832.29	2812.57	2784.49	2744.45	2705.01
247.5	2990.04	3030.07	3055.17	3082.05	3107.75	3119.10	3117.31	3117.31	3117.91
270.0	3007.36	3052.18	3086.24	3123.28	3154.36	3171.68	3197.98	3222.47	3240.40
292.5	2899.81	2924.31	2944.03	2957.17	2961.95	2963.74	2965.54	2972.11	2970.91
315.0	2676.93	2660.80	2640.48	2615.38	2581.33	2543.68	2504.84	2452.26	2388.32
337.5	2437.32	2362.03	2304.07	2228.78	2145.13	2080.00	1993.95	1923.45	1838.00
360.0	2342.31	2262.24	2176.20	2078.21	1979.61	1888.79	1792.59	1701.17	1603.77

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1512.35	1465.74	1414.35	1346.83	1272.14	1186.69	1068.38	973.37	870.00
22.5	1478.29	1434.07	1368.94	1283.49	1201.03	1084.52	991.30	890.32	759.46
45.0	1870.86	1789.00	1705.95	1637.83	1582.85	1520.11	1437.65	1337.87	1184.90
67.5	2519.18	2440.31	2372.19	2298.69	2216.24	2135.57	2045.94	1979.61	1921.06
90.0	3018.72	2987.05	2926.70	2868.14	2813.76	2757.00	2656.61	2577.74	2494.68
112.5	3144.80	3125.67	3107.75	3048.59	3004.97	2951.20	2871.13	2791.66	2703.82
135.0	2806.59	2738.48	2650.64	2568.78	2497.67	2420.59	2327.38	2240.14	2149.91
157.5	2222.21	2123.62	2042.35	1962.29	1863.69	1773.47	1680.85	1596.00	1522.50
180.0	1794.98	1680.85	1582.85	1489.04	1423.31	1361.77	1251.23	1169.13	1072.68
202.5	2097.92	2011.88	1909.11	1808.72	1715.51	1626.47	1545.81	1482.47	1401.21
225.0	2664.98	2603.43	2527.55	2447.48	2362.63	2277.18	2188.75	2090.16	1998.73
247.5	3109.54	3088.63	3073.69	3050.39	3018.72	2970.32	2901.60	2842.45	2770.14
270.0	3245.78	3269.08	3281.03	3273.86	3245.78	3206.94	3159.14	3098.79	3009.75
292.5	2968.52	2965.54	2964.34	2926.10	2877.70	2828.10	2749.23	2654.82	2573.56
315.0	2330.96	2275.99	2212.65	2154.69	2091.35	2035.18	1976.63	1916.87	1840.99
337.5	1754.94	1684.43	1620.50	1561.94	1505.18	1444.23	1349.22	1182.21	1169.36
360.0	1512.35	1465.74	1414.35	1346.83	1272.14	1186.69	1068.38	973.37	870.00

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	752.29	635.77	538.37	430.22	334.62	307.73	196.95	132.59	81.32
22.5	654.89	558.09	440.38	361.51	307.13	199.99	148.07	94.71	59.27
45.0	1163.03	1051.95	940.21	836.18	728.75	631.89	548.59	458.48	363.36
67.5	1825.45	1737.61	1683.24	1596.60	1507.57	1425.70	1331.29	1251.23	1177.13
90.0	2388.92	2271.81	2157.08	2010.09	1861.90	1672.48	1473.51	1174.92	1056.67
112.5	2628.53	2505.44	2405.05	2290.33	2129.59	1996.34	1846.36	1652.17	1469.32
135.0	2068.65	1964.68	1849.95	1743.59	1662.33	1567.92	1482.47	1383.88	1186.93
157.5	1427.50	1307.39	1197.45	1089.89	950.67	834.15	731.97	609.48	484.60
180.0	971.88	839.53	728.99	620.24	517.28	399.33	319.26	248.57	171.19
202.5	1258.99	1180.48	1076.63	952.10	828.59	704.61	598.78	498.70	381.88
225.0	1906.12	1812.31	1745.98	1680.85	1579.87	1484.26	1397.02	1280.50	1174.14
247.5	2695.45	2587.30	2475.56	2385.93	2283.16	2140.95	2013.08	1874.45	1705.35
270.0	2935.66	2835.28	2699.64	2568.78	2410.43	2245.51	2082.99	1913.29	1642.01
292.5	2491.10	2373.98	2264.63	2136.76	1989.17	1849.95	1722.08	1562.54	1410.17
315.0	1774.66	1716.10	1642.61	1562.54	1498.60	1419.73	1342.05	1253.02	1127.54
337.5	1065.87	955.45	859.49	745.24	646.17	535.39	427.17	338.86	251.44
360.0	752.29	635.77	538.37	430.22	334.62	307.73	196.95	132.59	81.32

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	58.08	50.25	44.34	36.57	33.46	31.55	29.46	27.84	26.65
22.5	50.01	44.40	38.60	32.74	30.47	28.14	26.35	24.68	23.42
45.0	290.94	215.65	156.13	108.03	75.47	55.57	44.75	37.88	33.22
67.5	1077.94	993.69	896.29	762.45	638.76	485.79	309.52	178.78	109.77
90.0	847.59	667.32	485.55	294.22	200.95	138.87	96.14	77.26	66.68
112.5	1270.94	1067.19	872.99	641.75	431.42	302.95	189.18	112.87	85.81
135.0	1132.68	1024.46	898.92	794.41	704.07	596.51	492.78	368.02	260.58
157.5	390.78	304.14	220.07	157.93	113.05	76.01	61.13	54.14	45.83
180.0	121.42	82.70	64.83	56.77	50.19	44.28	34.60	31.49	28.98
202.5	301.33	232.08	170.48	108.57	77.44	64.53	57.30	49.89	42.90
225.0	1073.16	950.67	837.74	727.19	592.15	489.38	387.20	304.14	213.62
247.5	1570.31	1420.92	1177.49	1132.02	1007.49	865.22	727.13	544.77	354.57
270.0	1433.47	1214.18	982.34	768.42	606.49	388.39	302.35	168.80	108.21
292.5	1191.35	1088.46	965.43	790.17	568.37	424.54	284.18	164.02	111.80
315.0	1021.77	922.58	824.59	704.49	617.25	537.78	441.57	354.93	308.92
337.5	181.23	128.29	85.33	60.11	53.60	47.74	40.93	36.87	34.54
360.0	58.08	50.25	44.34	36.57	33.46	31.55	29.46	27.84	26.65

C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	25.57	24.62	24.02	23.66	23.42	23.72	24.14	25.04	26.29
22.5	22.59	21.87	21.57	21.63	21.93	22.77	23.78	25.04	26.59
45.0	29.22	26.29	24.68	23.36	22.05	21.27	20.61	20.08	20.14
67.5	69.85	54.38	43.74	34.96	28.80	25.22	22.47	21.09	19.84
90.0	50.85	39.38	32.51	26.47	24.20	21.93	20.26	19.60	19.12
112.5	71.88	55.81	42.72	33.22	28.02	23.24	21.63	19.90	18.76
135.0	185.71	122.02	75.65	53.90	41.47	29.76	25.63	21.69	18.94
157.5	40.45	33.58	30.23	28.02	25.87	24.08	22.83	21.87	20.85
180.0	27.07	25.34	23.90	22.95	22.29	21.75	21.57	21.63	21.93
202.5	34.96	31.85	29.52	27.25	25.63	24.20	23.06	22.41	21.93
225.0	154.46	100.62	69.61	54.32	44.46	35.67	30.18	26.29	24.08
247.5	224.13	139.34	86.34	66.80	54.97	44.75	37.94	28.98	24.02
270.0	82.10	63.88	52.40	44.16	35.37	29.88	26.17	23.66	21.57
292.5	77.56	54.85	45.05	36.39	28.20	24.50	22.23	20.20	19.12
315.0	181.11	118.19	76.48	47.80	34.84	27.90	23.42	21.39	19.96
337.5	32.33	29.82	28.08	26.35	24.98	23.48	22.35	21.69	21.63
360.0	25.57	24.62	24.02	23.66	23.42	23.72	24.14	25.04	26.29

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	27.79	29.58	31.25	33.10	34.48	35.19	35.91	36.45	36.87
22.5	28.44	29.88	31.55	32.80	33.52	34.06	34.36	34.84	35.37
45.0	20.02	20.32	20.79	21.51	22.41	23.30	24.08	24.98	25.57
67.5	18.88	18.22	17.69	17.21	16.85	16.49	16.31	15.95	15.72
90.0	18.46	18.05	17.51	16.91	16.31	15.95	15.54	15.42	15.00
112.5	17.99	17.33	16.79	16.31	16.01	15.66	15.36	15.12	15.00
135.0	17.45	16.91	16.37	15.95	15.72	15.48	15.36	15.30	15.30
157.5	20.32	20.02	19.96	20.14	20.26	20.55	20.97	21.27	21.51
180.0	22.41	22.95	23.42	23.96	24.20	24.38	24.14	23.54	22.77
202.5	21.69	21.69	21.93	22.35	22.77	23.06	23.30	23.54	23.54
225.0	22.53	21.09	20.14	19.36	18.82	18.52	18.22	18.22	18.34
247.5	20.97	19.36	18.28	17.75	17.27	16.85	16.55	16.25	15.89
270.0	20.32	19.48	18.76	18.28	17.99	17.39	16.79	16.37	16.13
292.5	18.22	17.57	17.09	16.67	16.31	15.95	15.66	15.42	15.18
315.0	19.00	18.34	17.81	17.15	16.79	16.55	16.43	16.43	16.55
337.5	22.05	22.71	23.54	24.68	25.99	27.13	28.20	29.34	29.82
360.0	27.79	29.58	31.25	33.10	34.48	35.19	35.91	36.45	36.87

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	37.29	38.12	39.08	40.03	40.99	41.65	42.31	43.32	44.04
22.5	36.33	37.47	39.02	39.86	40.45	41.35	42.19	42.54	42.48
45.0	25.87	26.23	26.65	27.31	28.38	29.22	29.70	29.64	29.58
67.5	15.60	15.42	15.30	15.30	15.30	15.54	15.54	15.66	15.54
90.0	14.76	14.64	14.46	14.22	14.10	13.98	13.86	13.86	13.68
112.5	14.76	14.64	14.46	14.28	14.10	13.92	13.80	13.68	13.62
135.0	15.24	15.30	15.42	15.54	15.66	15.83	15.83	15.89	15.83
157.5	21.63	21.57	21.21	20.97	21.03	21.15	21.27	21.27	21.03
180.0	22.29	22.23	22.71	23.12	23.48	23.42	22.89	22.23	21.93
202.5	23.24	22.65	22.11	21.93	22.11	22.53	22.89	23.18	23.12
225.0	18.46	18.64	18.82	19.00	19.12	19.18	19.00	18.88	18.64
247.5	15.66	15.24	14.82	14.58	14.34	14.04	13.92	13.80	13.68
270.0	15.77	15.42	15.18	14.82	14.58	14.34	14.22	13.98	13.86
292.5	15.00	14.76	14.58	14.40	14.22	14.04	13.92	13.74	13.62
315.0	16.73	17.15	17.57	18.11	18.64	19.18	19.66	20.02	20.26
337.5	30.23	30.71	31.31	32.03	32.92	33.88	34.42	34.42	34.60
360.0	37.29	38.12	39.08	40.03	40.99	41.65	42.31	43.32	44.04

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	44.22	44.58	45.59	45.89	45.29	45.11	44.10	42.90	41.71
22.5	42.90	43.86	43.86	43.32	42.31	40.63	38.60	36.51	32.21
45.0	30.18	30.65	30.23	29.28	25.75	23.06	20.55	17.21	15.48
67.5	15.60	15.77	15.77	15.72	15.72	15.00	13.56	13.03	13.32
90.0	13.62	13.62	13.50	13.38	13.21	13.21	13.09	12.85	12.61
112.5	13.56	13.50	13.50	13.44	13.44	13.32	13.21	13.09	12.97
135.0	15.72	15.54	15.42	15.06	14.82	14.52	13.92	13.44	13.03
157.5	20.55	20.14	20.02	19.78	19.24	16.37	14.58	13.56	12.85
180.0	22.17	22.29	21.57	20.91	20.79	19.60	18.28	17.33	16.73
202.5	22.23	21.45	21.27	21.63	21.51	20.61	20.08	20.20	19.30
225.0	18.64	18.64	18.70	18.64	18.28	17.87	17.51	17.09	16.55
247.5	13.56	13.44	13.32	13.21	13.15	12.97	12.85	12.73	12.61
270.0	13.80	13.74	13.80	13.62	13.27	13.15	13.03	12.85	12.73
292.5	13.50	13.44	13.38	13.38	13.38	13.32	13.32	13.21	13.03
315.0	20.44	20.61	20.67	20.67	20.55	20.20	19.78	19.30	18.58
337.5	35.13	35.61	35.37	35.07	35.02	34.06	33.16	31.37	29.76
360.0	44.22	44.58	45.59	45.89	45.29	45.11	44.10	42.90	41.71

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	39.44	33.88	25.04	18.05	16.61	13.03	11.41	11.23	11.05
22.5	26.17	19.60	16.31	15.60	11.53	11.23	10.99	10.93	10.93
45.0	14.34	13.86	13.86	12.73	11.05	10.82	10.64	10.64	10.58
67.5	14.40	15.30	12.61	12.55	10.88	10.58	10.40	10.28	10.28
90.0	12.61	12.85	12.43	12.43	10.88	10.70	10.46	10.28	10.28
112.5	12.79	12.67	12.43	12.25	11.77	11.05	10.82	10.70	10.64
135.0	12.67	12.43	12.31	12.13	11.71	11.41	11.23	11.17	11.11
157.5	12.67	12.55	12.43	12.37	12.49	11.89	11.71	11.53	11.41
180.0	16.31	15.89	14.82	13.80	12.55	11.59	11.41	11.29	11.17
202.5	19.06	18.22	17.63	16.67	15.30	14.10	11.77	11.53	11.41
225.0	16.01	15.42	14.70	13.98	13.32	13.03	11.59	11.35	11.23
247.5	12.43	12.25	12.13	11.95	11.83	11.65	10.93	10.76	10.64
270.0	12.67	12.43	12.13	11.95	11.65	11.47	11.11	10.88	10.70
292.5	12.91	12.73	12.55	12.37	12.13	11.41	10.99	10.76	10.70
315.0	17.75	16.67	15.60	14.40	13.98	12.43	11.41	11.23	11.11
337.5	27.61	24.68	20.26	15.72	15.60	11.95	11.53	11.35	11.35
360.0	39.44	33.88	25.04	18.05	16.61	13.03	11.41	11.23	11.05

C/γ(°)	90.0
0.0	11.05
22.5	10.93
45.0	10.64
67.5	10.28
90.0	10.28
112.5	10.64
135.0	10.99
157.5	11.35
180.0	11.11
202.5	11.29
225.0	11.05
247.5	10.52
270.0	10.70
292.5	10.64
315.0	11.05
337.5	11.23
360.0	11.05