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Nata

LumCAT: 2-2321-M
Luminaire: 92.70.131.00
Report No: 210726-B006
Test No: 210726-C006
LampCAT: SEOUL SAWx15 LES14.5
Lamp flux(lm): 2268.5
Number of Lamps: 1
Length(mm): 570
Phm Type: C
Voltage(V): 34.3400
Current(A): 0.5000
Power (W): 17.1700
PF: 0.0000
Ballast type: DC
Width(mm): 45
Height(mm): 20

Photometric Results

Lumens(lm): 2192.05
Efficiency(%): 96.63%
Lumens(lm)/Power(W): 127.67
Central intensity(cd): 3000.938
Maximum intensity(cd): 3063.375
Angle of maximum intensity: C=22.5 γ =5.0
Beam Angle(50%Imax): [C0/180]Total=49.3
[C90/270]Total=48.7
Field angle(10%Imax): [C0/180]Total=65.6
[C90/270]Total=65.8
Maximum s/h(1/2): C0_180=0.84 C90_270=0.85
Maximum s/h(1/4): C0_180=0.72 C90_270=0.73
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 96.63%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.242%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3007.898	0.000	0	.000%	.000%
1.0	3008.672	2.879	2.879	.127%	.131%
2.0	3010.324	8.639	11.518	.381%	.525%
3.0	3012.996	14.406	25.924	.635%	1.183%
4.0	3017.531	20.186	46.11	.890%	2.103%
5.0	3020.977	25.977	72.087	1.145%	3.289%
6.0	3021.539	31.755	103.842	1.400%	4.737%
7.0	3018.762	37.492	141.334	1.653%	6.448%
8.0	3011.977	43.161	184.495	1.903%	8.417%
9.0	3000.445	48.727	233.222	2.148%	10.639%
10.0	2982.516	54.144	287.366	2.387%	13.109%
11.0	2959.875	59.377	346.743	2.617%	15.818%
12.0	2931.223	64.398	411.141	2.839%	18.756%
13.0	2895.961	69.154	480.295	3.048%	21.911%
14.0	2856.762	73.634	553.929	3.246%	25.270%
15.0	2813.520	77.844	631.773	3.432%	28.821%
16.0	2765.180	81.744	713.517	3.603%	32.550%
17.0	2708.297	85.237	798.754	3.757%	36.439%
18.0	2636.051	88.117	886.87	3.884%	40.458%
19.0	2560.781	90.414	977.285	3.986%	44.583%
20.0	2465.754	92.000	1069.284	4.056%	48.780%
21.0	2343.375	92.345	1161.629	4.071%	52.993%
22.0	2219.098	91.685	1253.314	4.042%	57.175%
23.0	2076.645	90.136	1343.45	3.973%	61.287%
24.0	1919.285	87.365	1430.816	3.851%	65.273%
25.0	1754.086	83.524	1514.34	3.682%	69.083%
26.0	1577.211	78.636	1592.976	3.466%	72.671%
27.0	1403.170	72.916	1665.891	3.214%	75.997%
28.0	1238.660	66.886	1732.777	2.948%	79.048%
29.0	1062.967	60.217	1792.994	2.655%	81.795%
30.0	904.025	53.108	1846.102	2.341%	84.218%
31.0	758.373	46.262	1892.365	2.039%	86.329%
32.0	623.099	39.578	1931.942	1.745%	88.134%
33.0	515.471	33.543	1965.485	1.479%	89.664%
34.0	419.382	28.291	1993.776	1.247%	90.955%
35.0	337.085	23.493	2017.269	1.036%	92.027%
36.0	275.147	19.494	2036.763	.859%	92.916%
37.0	232.372	16.552	2053.315	.730%	93.671%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	183.846	13.893	2067.208	.612%	94.305%
39.0	147.688	11.316	2078.524	.499%	94.821%
40.0	121.848	9.400	2087.925	.414%	95.250%
41.0	102.364	7.984	2095.909	.352%	95.614%
42.0	86.361	6.857	2102.766	.302%	95.927%
43.0	73.614	5.926	2108.692	.261%	96.197%
44.0	64.041	5.195	2113.887	.229%	96.434%
45.0	55.691	4.601	2118.488	.203%	96.644%
46.0	48.561	4.077	2122.565	.180%	96.830%
47.0	42.729	3.631	2126.196	.160%	96.996%
48.0	38.148	3.269	2129.466	.144%	97.145%
49.0	33.855	2.957	2132.423	.130%	97.280%
50.0	30.234	2.672	2135.095	.118%	97.402%
51.0	27.464	2.441	2137.536	.108%	97.513%
52.0	25.024	2.252	2139.788	.099%	97.616%
53.0	22.855	2.083	2141.871	.092%	97.711%
54.0	21.136	1.939	2143.81	.085%	97.799%
55.0	19.684	1.822	2145.632	.080%	97.882%
56.0	18.422	1.722	2147.354	.076%	97.961%
57.0	17.392	1.637	2148.991	.072%	98.036%
58.0	16.474	1.566	2150.558	.069%	98.107%
59.0	15.743	1.506	2152.064	.066%	98.176%
60.0	15.093	1.457	2153.52	.064%	98.242%
61.0	14.534	1.414	2154.934	.062%	98.307%
62.0	14.108	1.380	2156.314	.061%	98.370%
63.0	13.767	1.356	2157.67	.060%	98.432%
64.0	13.472	1.337	2159.007	.059%	98.493%
65.0	13.250	1.322	2160.329	.058%	98.553%
66.0	13.082	1.314	2161.643	.058%	98.613%
67.0	12.945	1.309	2162.952	.058%	98.673%
68.0	12.818	1.305	2164.257	.058%	98.732%
69.0	12.730	1.303	2165.56	.057%	98.792%
70.0	12.649	1.303	2166.864	.057%	98.851%
71.0	12.579	1.304	2168.167	.057%	98.910%
72.0	12.596	1.309	2169.476	.058%	98.970%
73.0	12.674	1.321	2170.798	.058%	99.030%
74.0	12.765	1.337	2172.135	.059%	99.091%
75.0	12.811	1.351	2173.487	.060%	99.153%

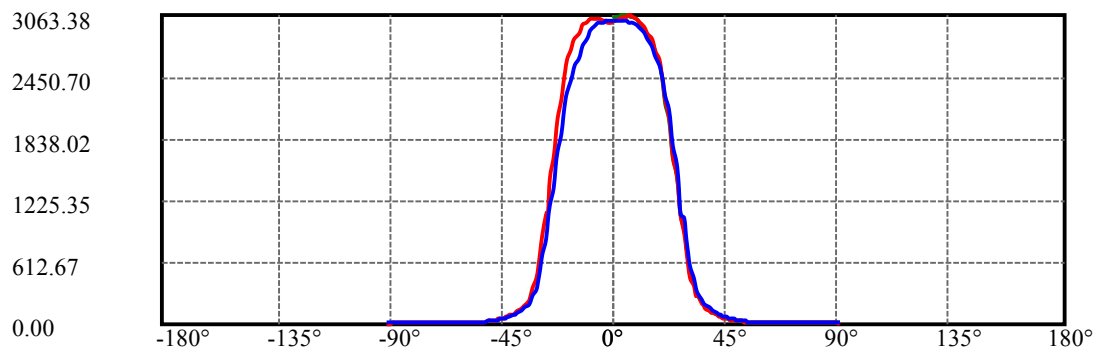
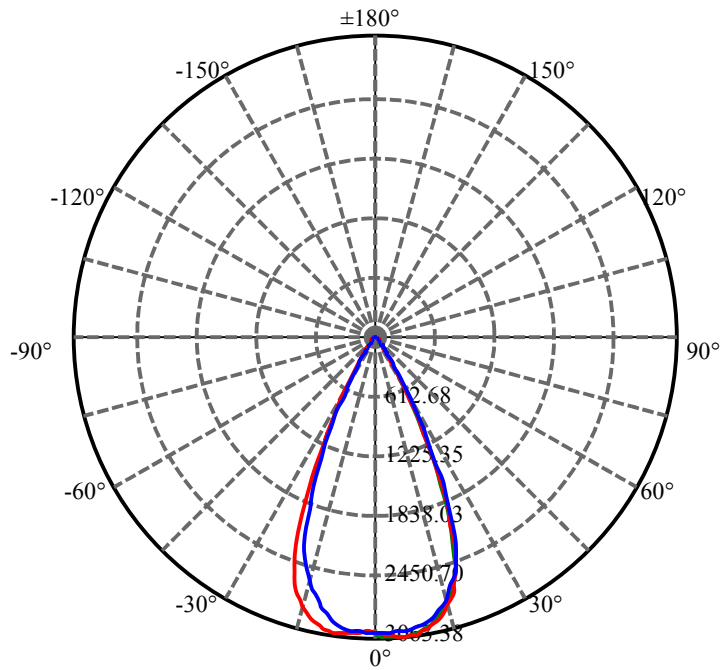
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	12.776	1.358	2174.845	.060%	99.215%
77.0	12.713	1.359	2176.204	.060%	99.277%
78.0	12.554	1.353	2177.556	.060%	99.339%
79.0	12.371	1.339	2178.896	.059%	99.400%
80.0	12.291	1.330	2180.225	.059%	99.461%
81.0	12.154	1.322	2181.547	.058%	99.521%
82.0	11.918	1.305	2182.853	.058%	99.580%
83.0	11.493	1.273	2184.125	.056%	99.638%
84.0	10.969	1.224	2185.349	.054%	99.694%
85.0	10.782	1.187	2186.536	.052%	99.748%
86.0	10.505	1.164	2187.699	.051%	99.802%
87.0	9.977	1.121	2188.82	.049%	99.853%
88.0	9.865	1.087	2189.907	.048%	99.902%
89.0	9.766	1.076	2190.983	.047%	99.951%
90.0	9.696	1.067	2192.05	.047%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1846.10	81.38%	84.22%
0-40	2087.92	92.04%	95.25%
0-60	2153.52	94.93%	98.24%
0-90	2190.98	96.58%	99.95%
0-120	2190.98	96.58%	99.95%
0-180	2192.05	96.63%	100.00%
60-90	38.92	1.72%	1.78%
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%
0-28.35	1753.64	77.30%	80.00%

ZONAL LUMEN SUMMARY

0-10	287.37
10-20	781.92
20-30	776.82
30-40	241.82
40-50	47.17
50-60	18.43
60-70	13.34
70-80	13.36
80-90	10.76
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



C22.5(Max): —————

C0/C180: —————

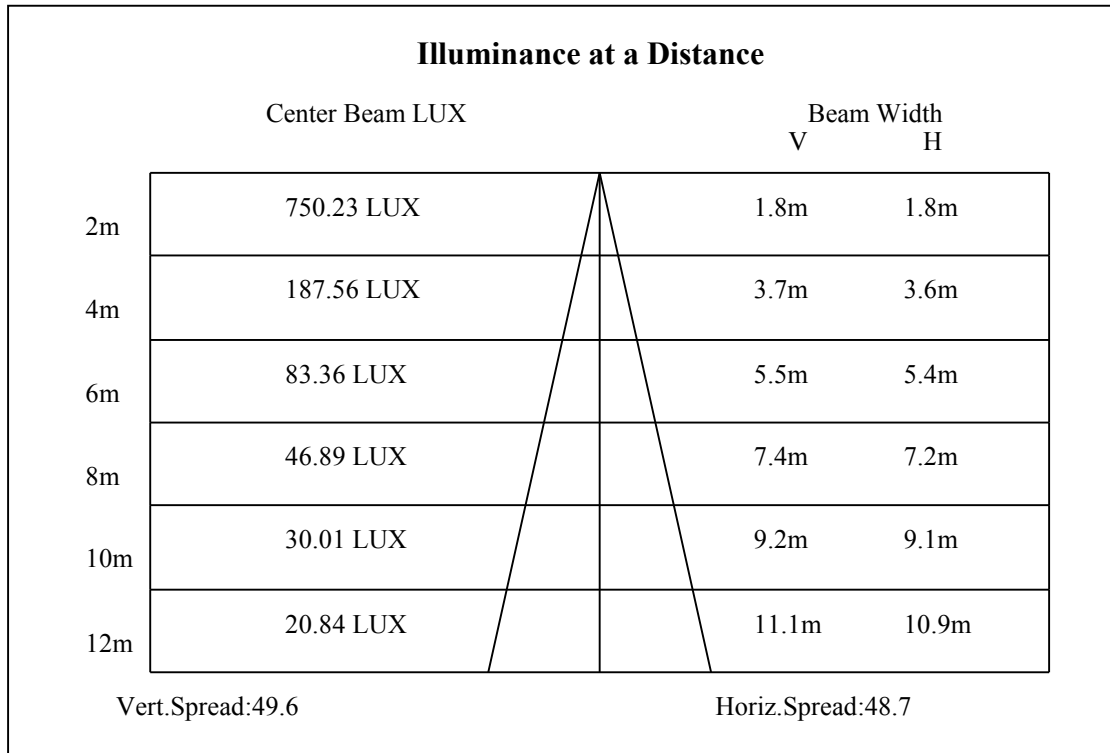
C90/C270: —————

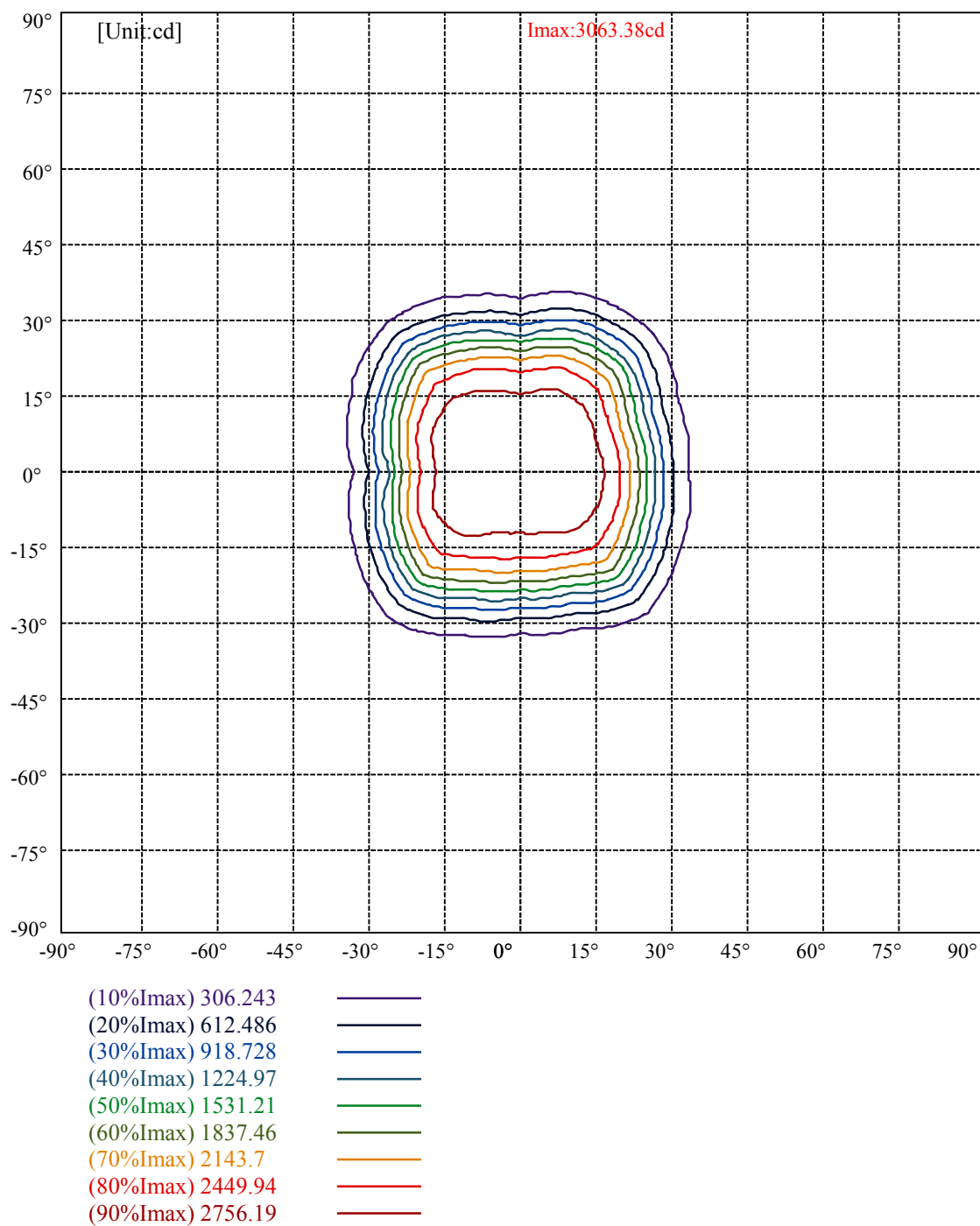
Field angle(10%Imax):C0/180Left:38.7 Right:26.9

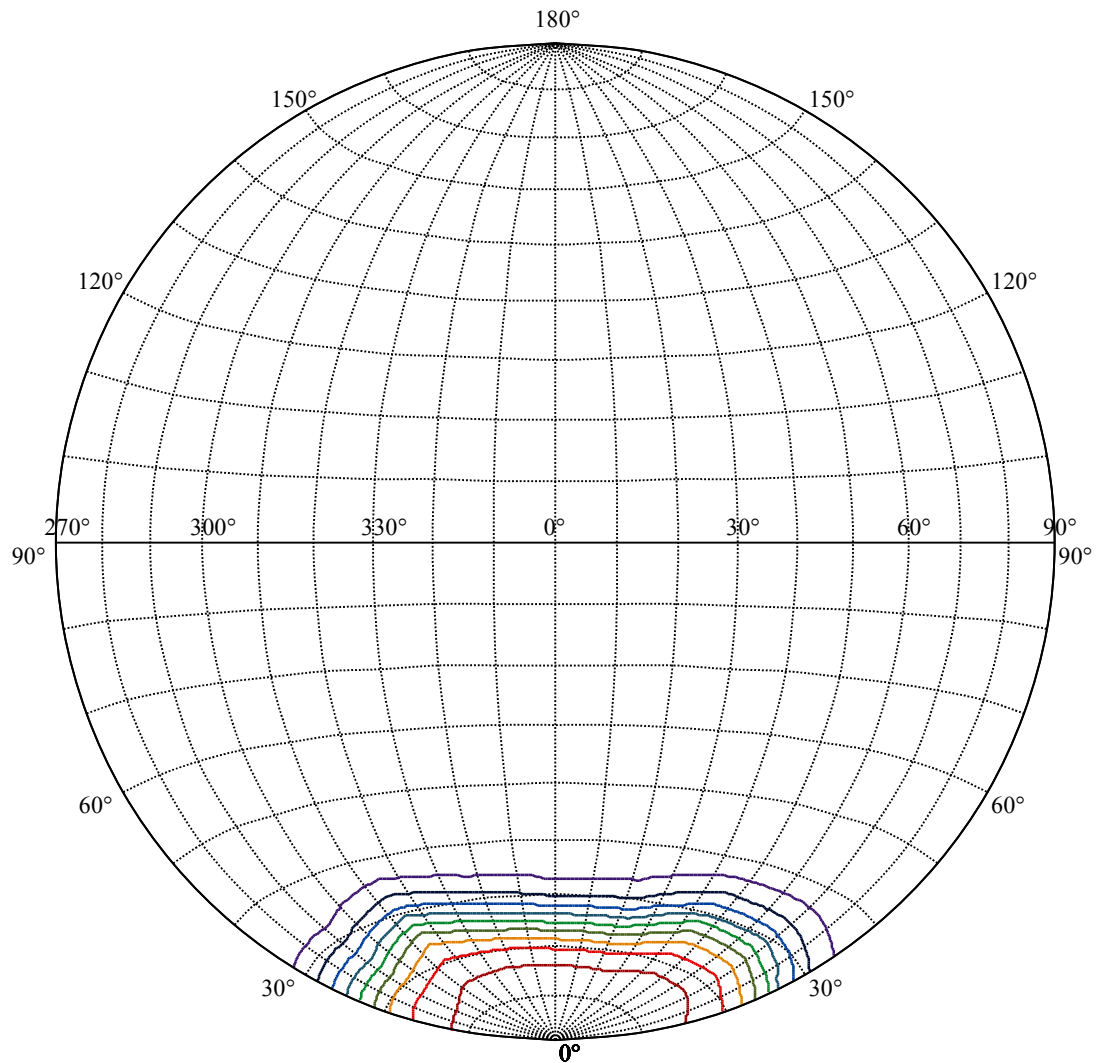
:C90/270Left:33.8 Right:32.0

Beam Angle(50%Imax):C0/180Left:30.6 Right:18.7

:C90/270Left:25.3 Right:23.5







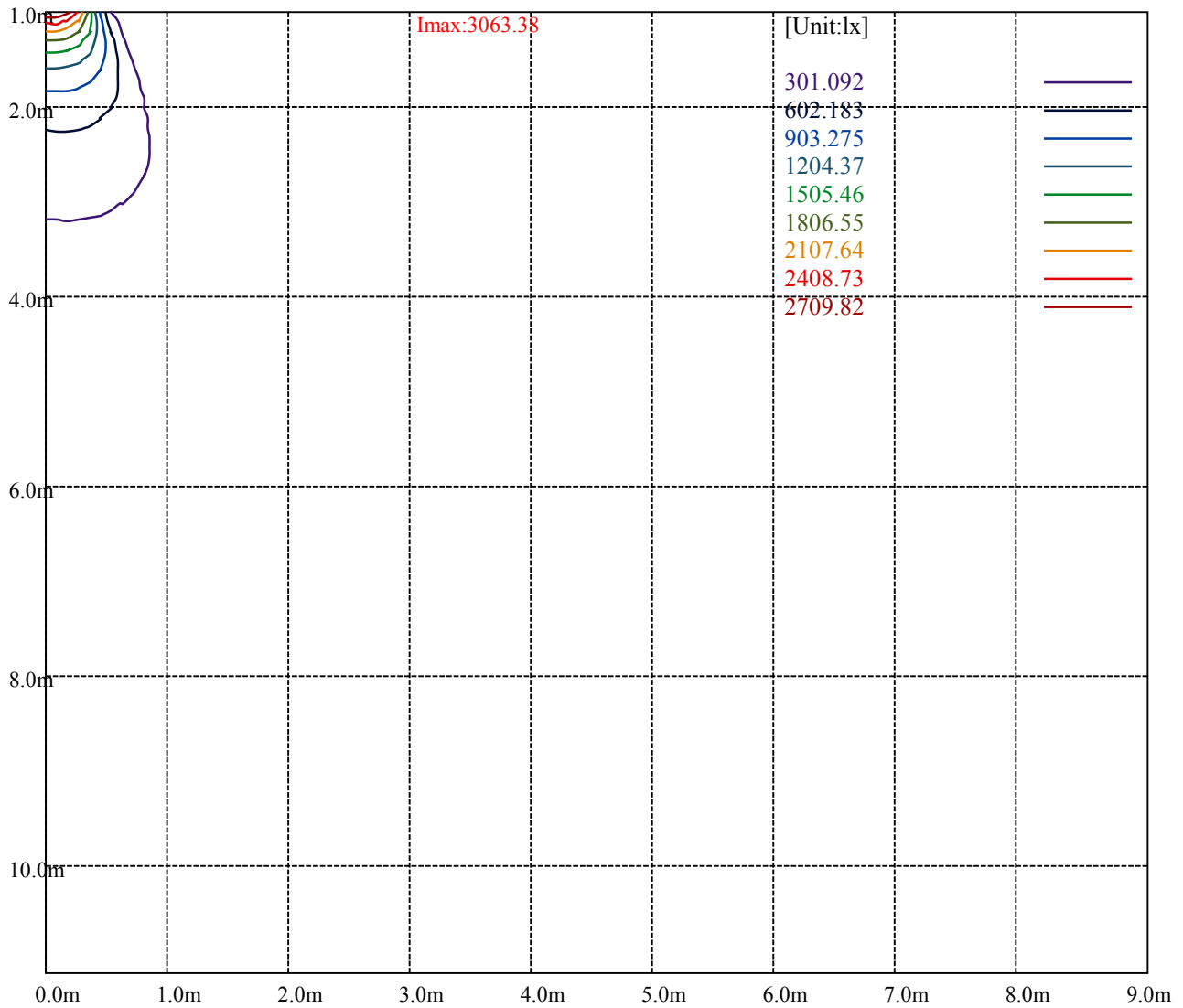
House

[Unit:cd]

Road

I_{max}:3063.38

(10%I _{max})	306.316	—
(20%I _{max})	612.633	—
(30%I _{max})	918.949	—
(40%I _{max})	1225.27	—
(50%I _{max})	1531.58	—
(60%I _{max})	1837.9	—
(70%I _{max})	2144.21	—
(80%I _{max})	2450.53	—
(90%I _{max})	2756.85	—



Luminance Table

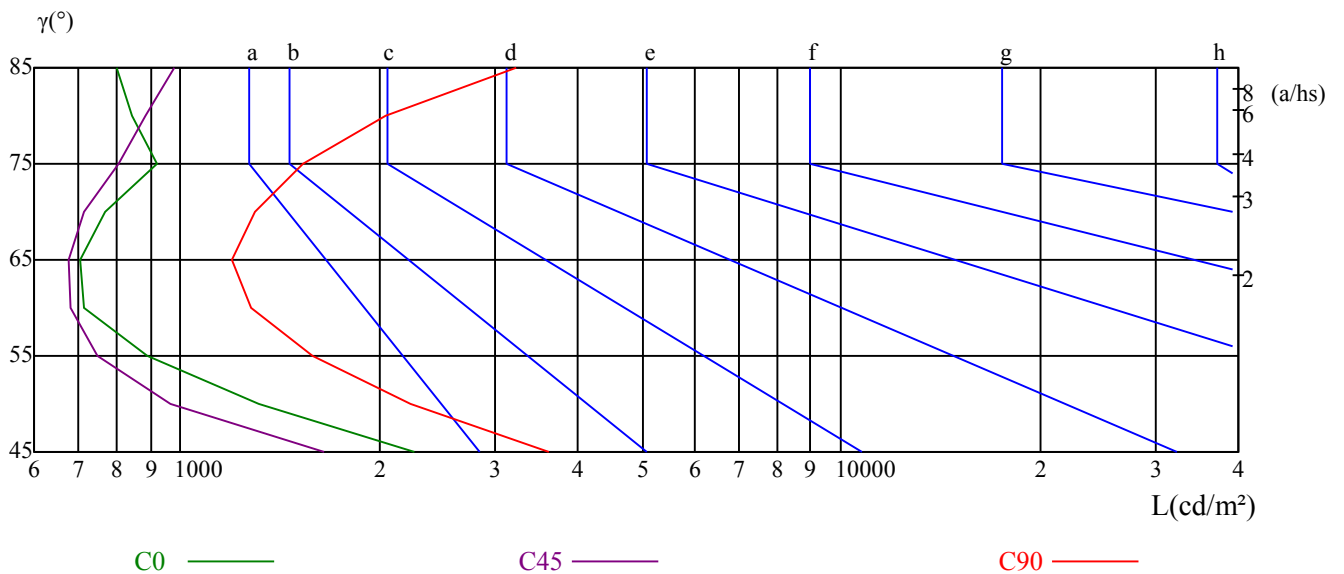
γ	45	50	55	60	65	70	75	80	85
C0	2267	1314	893	716	704	771	924	847	799
C45	1644	962	750	680	676	714	804	886	981
C90	3613	2230	1584	1278	1197	1292	1536	2043	3233

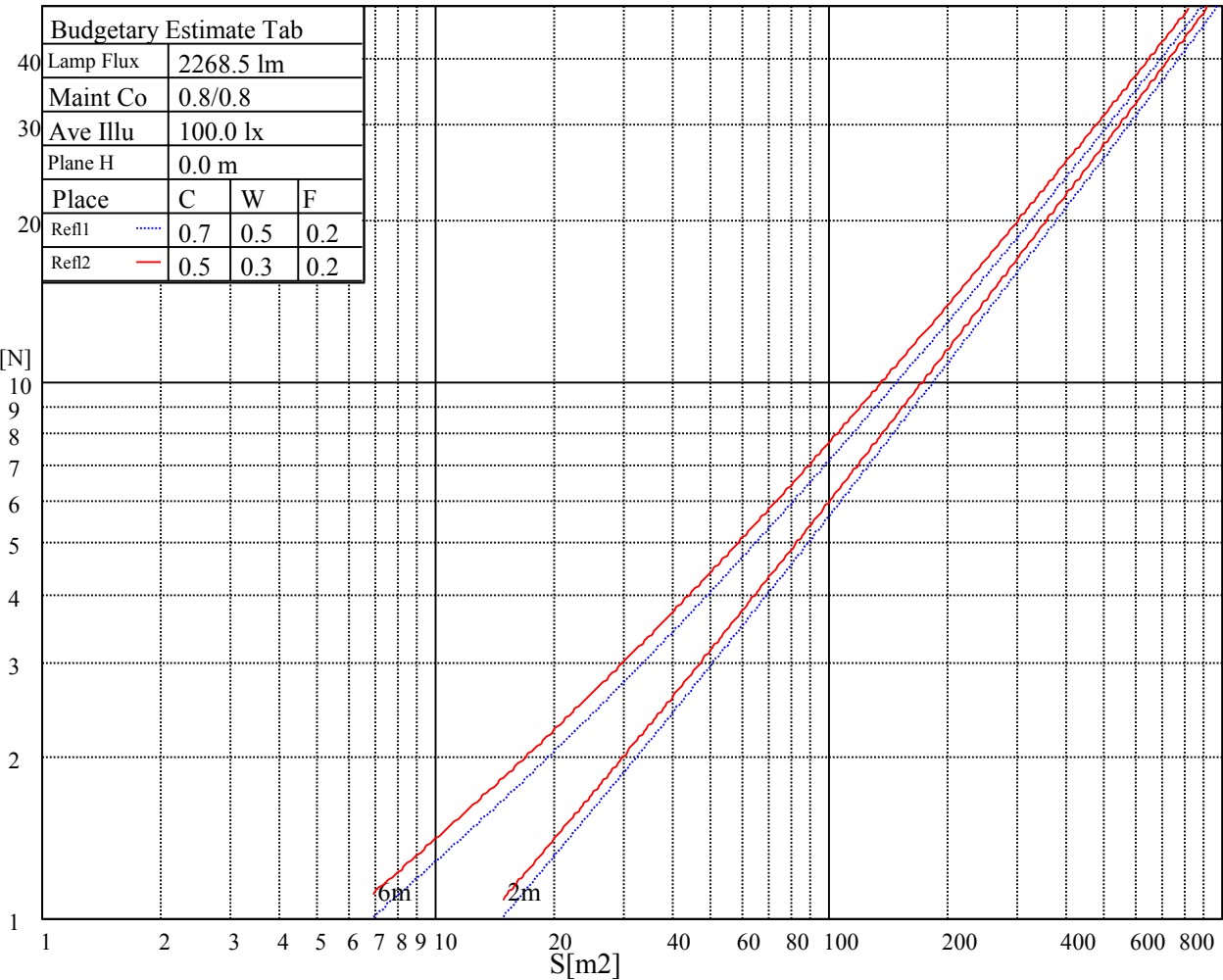
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1302	1264	1151	2216	1809	1817	4667	4730	4888

Glare Table

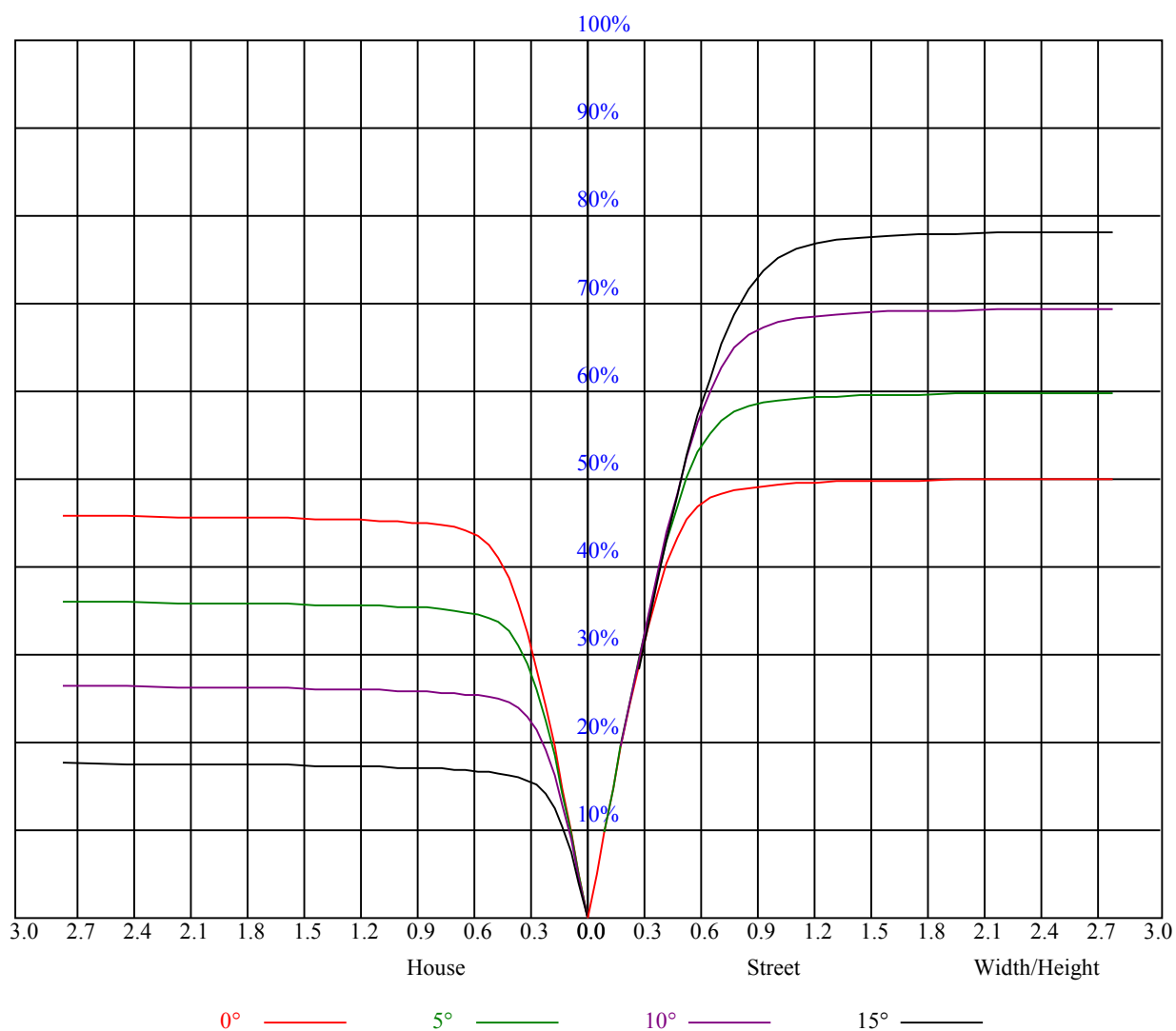
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve





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	COEFFICIENTS 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	0.99	0.99	0.99	0.97
1	1.07	1.05	1.03	1.05	1.03	1.01	1.01	1.00	0.98	0.98	0.96	0.95	0.94	0.93	0.92	0.91
2	1.00	0.97	0.94	0.99	0.95	0.92	0.96	0.93	0.90	0.93	0.90	0.89	0.90	0.88	0.87	0.85
3	0.94	0.90	0.86	0.93	0.89	0.85	0.90	0.87	0.84	0.88	0.85	0.83	0.86	0.84	0.82	0.80
4	0.89	0.84	0.80	0.88	0.83	0.80	0.86	0.82	0.79	0.84	0.80	0.78	0.82	0.79	0.77	0.76
5	0.84	0.79	0.75	0.83	0.78	0.75	0.81	0.77	0.74	0.80	0.76	0.73	0.78	0.75	0.73	0.71
6	0.79	0.74	0.70	0.79	0.74	0.70	0.77	0.73	0.70	0.76	0.72	0.69	0.75	0.71	0.69	0.67
7	0.75	0.70	0.66	0.75	0.70	0.66	0.74	0.69	0.66	0.72	0.68	0.65	0.71	0.68	0.65	0.64
8	0.72	0.66	0.63	0.71	0.66	0.63	0.70	0.66	0.62	0.69	0.65	0.62	0.68	0.65	0.62	0.61
9	0.68	0.63	0.59	0.68	0.63	0.59	0.67	0.62	0.59	0.66	0.62	0.59	0.65	0.61	0.59	0.58
10	0.65	0.60	0.56	0.65	0.60	0.56	0.64	0.59	0.56	0.63	0.59	0.56	0.62	0.59	0.56	0.55



Intensity data(cd)										Appendix Page: 16 Total:19	
C/γ(°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0		
0.0	3000.94	3009.38	3021.19	3033.00	3044.25	3051.00	3058.31	3054.94	3047.06		
22.5	3025.69	3035.25	3045.38	3054.94	3059.44	3063.38	3061.69	3052.13	3038.63		
45.0	3022.31	3027.94	3034.13	3041.44	3049.31	3053.81	3054.38	3047.06	3039.19		
67.5	3008.81	3017.81	3022.31	3023.44	3030.19	3024.56	3026.81	3025.69	3020.63		
90.0	3000.94	3005.44	3006.56	3004.31	3000.38	3001.50	2995.88	2993.06	2980.13		
112.5	3004.88	3003.19	3002.06	2999.81	2995.88	2998.69	2999.25	2994.19	2988.56		
135.0	2999.25	2994.75	2994.19	3002.06	3009.94	3017.81	3025.69	3032.44	3038.06		
157.5	3000.38	2994.75	2997.56	3002.63	3013.31	3025.69	3034.69	3045.94	3052.13		
180.0	3000.94	2994.75	2994.19	3000.94	3011.63	3020.06	3027.94	3034.13	3034.69		
202.5	3025.69	3015.56	3012.75	3013.31	3018.94	3021.75	3033.00	3043.13	3051.56		
225.0	3022.31	3012.19	3007.13	2998.69	2997.00	3003.75	3006.00	3011.06	3009.38		
247.5	3008.81	3003.19	2998.13	2986.88	2985.19	2981.25	2966.63	2953.13	2935.13		
270.0	3000.94	2999.81	2998.13	2997.00	2996.44	2995.88	2979.56	2961.56	2942.44		
292.5	3004.88	3008.25	3006.56	3008.81	3015.00	3007.13	2997.00	2978.44	2959.31		
315.0	2999.25	3006.56	3011.63	3014.44	3019.50	3027.94	3030.75	3024.56	3017.81		
337.5	3000.38	3009.94	3013.31	3026.25	3034.13	3041.44	3047.06	3048.75	3036.94		
360.0	3000.94	3009.38	3021.19	3033.00	3044.25	3051.00	3058.31	3054.94	3047.06		
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0		
0.0	3030.75	3013.31	2989.69	2956.50	2915.44	2876.06	2826.00	2778.19	2709.00		
22.5	3022.88	3000.38	2974.50	2939.06	2899.13	2863.13	2810.25	2755.69	2685.94		
45.0	3030.75	3014.44	2994.75	2976.19	2952.56	2911.50	2878.31	2845.69	2799.56		
67.5	3015.00	3005.44	2995.31	2975.63	2948.63	2912.63	2874.94	2826.00	2779.88		
90.0	2967.75	2950.31	2925.56	2892.94	2845.13	2808.56	2757.94	2702.25	2635.88		
112.5	2981.81	2970.56	2957.63	2943.56	2920.50	2887.88	2857.50	2813.06	2755.69		
135.0	3043.69	3043.69	3035.25	3030.19	3018.38	2997.00	2973.38	2934.56	2896.31		
157.5	3058.88	3054.38	3044.25	3028.50	2999.81	2976.75	2940.75	2896.31	2853.56		
180.0	3027.38	3009.38	2988.00	2959.88	2918.81	2881.69	2837.25	2787.75	2715.19		
202.5	3054.94	3049.88	3038.63	3022.88	2998.69	2962.69	2930.63	2886.19	2840.63		
225.0	3007.69	2995.88	2980.69	2962.13	2933.44	2895.75	2858.63	2815.31	2761.31		
247.5	2908.69	2875.50	2836.13	2785.50	2746.13	2696.06	2638.69	2601.56	2547.56		
270.0	2902.50	2858.06	2812.50	2751.19	2687.63	2634.19	2563.88	2500.31	2423.81		
292.5	2931.19	2888.44	2846.25	2797.31	2745.56	2682.00	2636.44	2580.19	2513.81		
315.0	3000.38	2985.19	2958.75	2926.13	2887.31	2846.81	2802.94	2738.25	2682.00		
337.5	3022.88	3005.44	2980.13	2952.00	2918.25	2875.50	2828.81	2781.56	2732.63		
360.0	3030.75	3013.31	2989.69	2956.50	2915.44	2876.06	2826.00	2778.19	2709.00		
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0		
0.0	2619.00	2520.56	2387.25	2220.75	2054.25	1882.69	1657.69	1477.13	1292.63		
22.5	2590.88	2491.88	2358.56	2192.63	2033.44	1845.00	1652.06	1476.00	1306.69		
45.0	2740.50	2683.13	2610.00	2523.38	2431.13	2316.38	2203.88	2071.13	1913.06		
67.5	2727.56	2666.81	2602.13	2532.38	2431.69	2311.88	2178.56	2007.56	1864.13		
90.0	2573.44	2500.31	2397.94	2264.06	2123.44	1952.44	1766.81	1596.94	1400.63		
112.5	2706.75	2665.69	2588.06	2512.13	2429.44	2257.88	2116.69	1983.38	1782.00		
135.0	2846.25	2786.63	2723.63	2647.69	2572.88	2509.31	2436.75	2325.94	2220.75		
157.5	2808.56	2749.50	2666.81	2574.00	2444.63	2295.00	2143.13	1959.19	1794.38		
180.0	2628.56	2508.75	2384.44	2216.81	2028.38	1855.13	1651.50	1449.56	1110.94		
202.5	2787.75	2721.38	2642.06	2530.69	2398.50	2261.25	2102.06	1891.13	1716.75		
225.0	2711.81	2664.56	2592.56	2539.69	2478.38	2386.13	2297.81	2192.63	2055.38		
247.5	2446.88	2370.38	2271.94	2097.56	1972.13	1827.56	1653.75	1477.13	1320.75		
270.0	2307.94	2198.81	2063.25	1877.06	1721.25	1557.56	1350.56	1185.19	1022.06		
292.5	2412.00	2313.00	2193.19	2013.75	1864.69	1703.81	1519.88	1332.56	1112.57		
315.0	2612.81	2557.69	2490.75	2420.44	2335.50	2238.19	2132.44	1990.13	1843.88		
337.5	2656.13	2573.44	2479.50	2331.00	2185.88	2026.13	1845.00	1649.81	1478.81		
360.0	2619.00	2520.56	2387.25	2220.75	2054.25	1882.69	1657.69	1477.13	1292.63		

Intensity data(cd)										Appendix Page: 17 Total:19	
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0		
0.0	1090.69	896.06	735.75	583.88	461.81	376.88	294.75	287.44	210.21		
22.5	1090.69	930.94	775.69	633.38	501.75	412.88	327.38	288.56	220.28		
45.0	1764.00	1611.00	1406.81	1109.48	1069.31	879.98	739.41	613.74	485.94		
67.5	1680.75	1497.38	1328.06	1164.94	983.25	833.06	697.50	556.31	443.81		
90.0	1101.15	1038.04	855.56	704.53	573.92	447.30	370.63	300.88	243.84		
112.5	1589.63	1443.38	1232.44	1078.88	915.19	733.50	604.69	500.63	384.75		
135.0	2097.56	1933.31	1743.19	1565.44	1357.88	1116.79	994.89	822.26	685.86		
157.5	1598.63	1401.19	1230.19	1070.44	876.94	734.06	607.50	463.50	372.38		
180.0	1089.68	876.83	715.95	579.49	453.49	357.41	284.34	232.43	199.63		
202.5	1540.13	1343.81	1105.65	984.94	794.19	657.73	534.99	406.80	333.28		
225.0	1899.00	1739.81	1551.38	1375.31	1183.50	1003.50	851.63	697.50	560.81		
247.5	1106.38	995.63	834.02	702.73	569.93	455.18	369.68	288.17	229.78		
270.0	842.06	676.69	546.75	432.00	344.81	286.31	220.22	190.74	166.33		
292.5	998.27	847.29	689.63	551.42	446.40	352.86	271.29	220.11	189.06		
315.0	1668.94	1480.50	1301.63	1152.56	939.94	795.38	677.81	514.69	410.06		
337.5	1293.19	1106.72	954.79	775.01	661.67	526.78	400.84	326.36	257.34		
360.0	1090.69	896.06	735.75	583.88	461.81	376.88	294.75	287.44	210.21		
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0		
0.0	185.51	160.76	141.69	122.63	107.21	95.40	83.70	73.52	65.59		
22.5	199.52	170.21	147.49	132.24	113.06	100.13	88.82	76.73	68.18		
45.0	376.09	293.23	221.91	153.62	113.29	87.19	69.30	56.31	47.48		
67.5	360.56	288.56	220.28	187.93	161.72	136.07	114.13	97.88	82.91		
90.0	215.27	190.52	165.32	143.38	126.39	110.25	97.93	86.01	75.83		
112.5	313.31	289.13	217.86	192.26	166.61	144.00	123.02	108.45	94.16		
135.0	548.16	426.99	333.06	243.06	172.86	126.73	95.63	72.45	59.40		
157.5	296.44	288.00	195.86	170.89	148.16	126.39	107.72	93.83	80.83		
180.0	175.84	154.52	133.82	115.59	102.26	89.10	78.98	68.01	60.41		
202.5	256.22	205.48	182.14	155.59	130.56	115.93	100.74	84.15	75.04		
225.0	452.81	356.06	292.50	182.93	131.12	94.50	67.50	55.29	45.90		
247.5	189.28	162.84	141.92	121.11	103.56	90.45	79.37	67.61	59.51		
270.0	144.56	127.52	112.44	97.03	86.57	77.51	67.84	60.98	55.01		
292.5	160.20	140.29	122.85	104.06	91.80	81.45	71.10	62.27	55.46		
315.0	329.06	288.00	160.26	116.89	85.05	68.46	55.29	45.17	38.42		
337.5	199.52	175.84	152.16	123.81	109.35	94.28	80.72	69.19	60.53		
360.0	185.51	160.76	141.69	122.63	107.21	95.40	83.70	73.52	65.59		
C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0		
0.0	59.40	51.08	45.84	41.85	36.96	33.13	30.54	27.39	24.98		
22.5	60.75	52.71	47.31	42.58	37.41	33.69	30.60	27.62	25.09		
45.0	39.94	34.88	30.15	27.17	24.75	22.28	20.64	19.35	18.23		
67.5	70.59	61.37	52.88	46.74	39.71	35.16	31.33	28.07	24.81		
90.0	67.84	60.02	53.21	47.93	43.26	38.31	34.82	31.78	28.91		
112.5	81.62	72.17	63.39	56.19	49.16	43.09	38.48	34.48	30.32		
135.0	49.16	39.60	33.98	29.93	25.99	23.57	21.54	19.58	18.45		
157.5	69.58	61.03	53.10	46.91	40.89	35.72	32.01	28.74	25.48		
180.0	54.00	47.70	42.36	38.25	34.76	30.94	28.35	26.04	23.63		
202.5	65.81	57.04	49.56	43.93	38.59	34.14	30.83	27.68	25.31		
225.0	37.29	32.34	28.74	25.65	23.18	21.38	19.74	18.56	17.44		
247.5	52.48	45.62	39.77	35.33	31.22	27.73	25.14	22.78	21.04		
270.0	48.99	43.76	39.66	35.78	32.74	29.76	27.28	25.26	23.29		
292.5	48.71	43.37	38.25	33.98	30.77	27.62	24.98	23.01	21.32		
315.0	32.74	28.52	25.71	23.34	21.09	19.58	18.34	17.27	16.31		
337.5	52.14	45.79	39.77	34.82	31.22	27.68	24.81	22.78	21.09		
360.0	59.40	51.08	45.84	41.85	36.96	33.13	30.54	27.39	24.98		

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	23.46	21.49	20.14	18.96	17.78	16.93	16.26	15.58	15.19
22.5	23.23	21.43	19.91	18.73	17.66	16.88	16.14	15.47	15.08
45.0	17.10	16.37	15.69	15.13	14.63	14.23	13.84	13.56	13.28
67.5	22.67	20.87	19.13	17.94	16.93	16.03	15.24	14.63	14.12
90.0	26.44	24.47	22.56	20.87	19.63	18.34	17.38	16.48	15.64
112.5	27.51	25.14	22.61	20.93	19.41	18.06	16.88	15.98	15.13
135.0	17.27	16.20	15.58	14.96	14.29	13.95	13.56	13.16	12.88
157.5	23.29	21.43	19.58	18.34	17.27	16.31	15.47	14.85	14.29
180.0	21.99	20.59	19.24	18.11	17.21	16.31	15.64	15.02	14.46
202.5	23.12	21.21	19.80	18.68	17.38	16.59	15.92	15.19	14.74
225.0	16.54	15.92	15.30	14.79	14.34	14.06	13.61	13.33	13.16
247.5	19.35	17.94	16.93	16.09	15.13	14.57	14.06	13.61	13.28
270.0	21.66	20.31	19.18	17.94	17.16	16.37	15.53	15.02	14.57
292.5	19.52	18.28	17.27	16.26	15.36	14.74	14.18	13.67	13.33
315.0	15.69	15.08	14.57	14.18	13.84	13.50	13.22	12.94	12.77
337.5	19.35	18.23	17.27	16.37	15.58	15.02	14.57	14.06	13.84
360.0	23.46	21.49	20.14	18.96	17.78	16.93	16.26	15.58	15.19
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	14.96	14.85	14.91	14.96	15.08	15.19	15.24	15.02	14.79
22.5	14.79	14.57	14.51	14.51	14.63	14.68	14.79	14.96	15.02
45.0	13.05	12.83	12.66	12.43	12.38	12.21	12.15	12.09	12.04
67.5	13.73	13.33	13.05	12.77	12.54	12.32	12.21	12.04	11.93
90.0	15.08	14.46	13.95	13.61	13.28	12.94	12.66	12.43	12.21
112.5	14.51	13.95	13.44	13.11	12.77	12.49	12.26	12.09	11.87
135.0	12.66	12.43	12.26	12.15	11.93	11.81	11.70	11.59	11.53
157.5	13.84	13.44	13.11	12.83	12.60	12.32	12.15	12.04	11.93
180.0	14.06	13.67	13.33	13.05	12.83	12.60	12.54	12.54	12.49
202.5	14.34	14.01	13.67	13.44	13.16	12.99	12.77	12.66	12.66
225.0	12.88	12.71	12.60	12.43	12.32	12.21	12.09	11.98	11.93
247.5	12.99	12.71	12.49	12.32	12.15	12.04	11.93	11.81	11.70
270.0	14.06	13.73	13.44	13.16	12.94	12.71	12.54	12.49	12.43
292.5	12.99	12.71	12.49	12.32	12.21	12.04	11.87	11.81	11.87
315.0	12.66	12.49	12.38	12.32	12.21	12.21	12.26	12.32	12.43
337.5	13.67	13.67	13.73	13.89	14.12	14.34	14.51	14.51	14.46
360.0	14.96	14.85	14.91	14.96	15.08	15.19	15.24	15.02	14.79
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	15.13	15.75	16.14	16.31	16.26	16.09	14.40	13.50	13.28
22.5	15.08	15.36	15.69	15.69	15.47	14.29	12.38	11.70	11.59
45.0	12.04	12.04	12.04	12.09	12.04	12.04	12.04	11.81	11.53
67.5	11.76	11.64	11.59	11.42	11.36	11.25	11.14	11.08	10.97
90.0	11.98	11.87	11.70	11.53	11.42	11.31	11.14	11.03	10.91
112.5	11.70	11.53	11.42	11.31	11.19	11.08	10.97	10.86	10.80
135.0	11.48	11.36	11.31	11.25	11.14	11.03	10.97	10.91	10.86
157.5	11.98	11.98	12.04	12.15	12.26	12.32	12.43	12.49	12.32
180.0	12.60	12.77	12.99	13.11	13.05	13.11	13.33	13.16	13.44
202.5	12.71	12.77	12.83	12.94	13.22	13.28	13.33	13.39	13.73
225.0	11.81	11.76	11.70	11.70	11.76	11.81	11.87	11.98	11.93
247.5	11.70	11.70	11.76	11.81	11.87	11.93	11.98	11.76	11.42
270.0	12.38	12.26	12.38	12.49	12.38	12.32	12.71	12.71	12.77
292.5	11.87	11.98	12.04	12.15	12.21	12.43	12.43	12.49	12.15
315.0	12.60	12.77	12.94	13.22	13.16	13.33	13.50	13.44	13.39
337.5	14.74	15.24	15.69	15.81	15.64	15.81	16.26	15.64	15.58
360.0	15.13	15.75	16.14	16.31	16.26	16.09	14.40	13.50	13.28

Nata 2-2321-M

Intensity data(cd)										Appendix Page: 19 Total:19	
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0		
0.0	13.28	13.16	12.43	11.08	10.86	10.74	9.90	9.68	9.56		
22.5	11.59	11.59	11.53	11.03	10.97	10.41	10.24	10.01	10.01		
45.0	11.31	11.08	10.91	10.86	10.69	10.29	10.18	10.07	10.01		
67.5	10.91	10.80	10.69	10.58	10.46	10.18	10.07	10.01	9.90		
90.0	10.80	10.69	10.52	10.35	10.13	10.01	9.90	9.79	9.68		
112.5	10.69	10.63	10.46	10.41	10.29	10.13	10.01	9.90	9.79		
135.0	10.74	10.63	10.58	10.52	10.18	10.07	9.96	9.90	9.84		
157.5	12.21	11.81	11.31	10.63	10.24	10.07	9.96	9.84	9.73		
180.0	13.33	13.16	11.08	10.69	10.01	9.90	9.73	9.62	9.51		
202.5	13.61	13.67	13.28	11.70	11.25	10.46	10.35	10.24	10.07		
225.0	11.76	11.64	11.31	11.03	10.97	10.74	10.24	10.13	10.07		
247.5	11.03	10.91	10.91	10.86	10.74	10.29	9.96	9.90	9.79		
270.0	12.66	11.31	11.19	11.08	11.03	10.91	9.79	9.68	9.56		
292.5	11.48	11.36	11.36	11.36	11.48	10.63	9.73	9.62	9.56		
315.0	13.16	12.77	12.32	11.93	11.87	11.87	9.90	9.79	9.68		
337.5	15.92	15.47	14.01	11.42	11.36	11.36	9.73	9.68	9.51		
360.0	13.28	13.16	12.43	11.08	10.86	10.74	9.90	9.68	9.56		
C/ γ (°)	90.0										
0.0	9.34										
22.5	9.84										
45.0	9.90										
67.5	9.84										
90.0	9.68										
112.5	9.73										
135.0	9.79										
157.5	9.68										
180.0	9.28										
202.5	10.07										
225.0	9.96										
247.5	9.73										
270.0	9.56										
292.5	9.56										
315.0	9.68										
337.5	9.51										
360.0	9.34										