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Nata

Client: NT

LumCAT: 69-0020 & 11-0161-S5-MS

Luminaire: L560*W40*H20(matt silver)

Report No: 20241030-B019

Ballast type: AC

Test No: 20241030-C019

Voltage(V): 219.400

LampCAT: LUMILEDS LUXEON 5050

Current(A): 0.082

Lamp flux(lm): -1.0

Power (W): 18.130

Number of Lamps: 1

PF: 0.968

Length(mm): 560

Width(mm): 40

Phm Type: C

Height(mm): 20

Photometric Results

Lumens(lm): 2299.99, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 126.86

Central intensity(cd): 2717.785, Maximum intensity(cd): 2718.370

Angle of maximum intensity: C=0.0 γ =1.0

Beam Angle(50%Imax): [C0/180]Total=59.2

[C90/270]Total=58.2

Field angle(10%Imax): [C0/180]Total=80.2

[C90/270]Total=76.2

Maximum s/h(1/2): C0_180=0.95 C90_270=0.95

Maximum s/h(1/4): C0_180=0.87 C90_270=0.85

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.621%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2687.807	0.000	0	0.00%	0.00%
1.0	2686.878	2.572	2.572	0.00%	0.11%
2.0	2682.606	7.707	10.278	0.00%	0.45%
3.0	2676.344	12.817	23.095	0.00%	1.00%
4.0	2667.741	17.888	40.984	0.00%	1.78%
5.0	2656.651	22.905	63.889	0.00%	2.78%
6.0	2644.449	27.859	91.748	0.00%	3.99%
7.0	2631.318	32.747	124.494	0.00%	5.41%
8.0	2615.802	37.553	162.047	0.00%	7.05%
9.0	2599.116	42.241	204.288	0.00%	8.88%
10.0	2579.599	46.840	251.128	0.00%	10.92%
11.0	2560.513	51.360	302.488	0.00%	13.15%
12.0	2539.686	55.752	358.24	0.00%	15.58%
13.0	2506.665	59.887	418.128	0.00%	18.18%
14.0	2485.253	63.896	482.024	0.00%	20.96%
15.0	2458.040	67.864	549.888	0.00%	23.91%
16.0	2424.748	71.547	621.434	0.00%	27.02%
17.0	2394.148	75.043	696.477	0.00%	30.28%
18.0	2351.061	78.238	774.715	0.00%	33.68%
19.0	2303.270	80.976	855.691	0.00%	37.20%
20.0	2255.479	83.438	939.129	0.00%	40.83%
21.0	2193.540	85.430	1024.559	0.00%	44.55%
22.0	2123.562	86.754	1111.313	0.00%	48.32%
23.0	2045.522	87.479	1198.792	0.00%	52.12%
24.0	1959.282	87.559	1286.351	0.00%	55.93%
25.0	1860.094	86.844	1373.196	0.00%	59.70%
26.0	1749.377	85.202	1458.398	0.00%	63.41%
27.0	1634.694	82.792	1541.19	0.00%	67.01%
28.0	1518.322	79.828	1621.017	0.00%	70.48%
29.0	1389.851	76.086	1697.103	0.00%	73.79%
30.0	1262.901	71.624	1768.727	0.00%	76.90%
31.0	1137.882	66.810	1835.537	0.00%	79.81%
32.0	1009.835	61.530	1897.067	0.00%	82.48%
33.0	883.865	55.789	1952.856	0.00%	84.91%
34.0	769.688	50.041	2002.897	0.00%	87.08%
35.0	665.715	44.578	2047.476	0.00%	89.02%
36.0	573.316	39.451	2086.927	0.00%	90.74%
37.0	450.967	33.406	2120.333	0.00%	92.19%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	373.951	27.535	2147.868	0.00%	93.39%
39.0	306.095	23.212	2171.08	0.00%	94.40%
40.0	237.038	18.943	2190.022	0.00%	95.22%
41.0	165.399	14.331	2204.353	0.00%	95.84%
42.0	127.689	10.648	2215.001	0.00%	96.30%
43.0	96.511	8.305	2223.306	0.00%	96.67%
44.0	74.799	6.466	2229.772	0.00%	96.95%
45.0	60.410	5.196	2234.968	0.00%	97.17%
46.0	49.825	4.311	2239.279	0.00%	97.36%
47.0	42.356	3.666	2242.945	0.00%	97.52%
48.0	37.169	3.215	2246.16	0.00%	97.66%
49.0	33.116	2.886	2249.047	0.00%	97.79%
50.0	29.846	2.625	2251.672	0.00%	97.90%
51.0	26.913	2.401	2254.073	0.00%	98.00%
52.0	24.528	2.207	2256.28	0.00%	98.10%
53.0	22.502	2.046	2258.326	0.00%	98.19%
54.0	20.695	1.904	2260.23	0.00%	98.27%
55.0	19.078	1.775	2262.006	0.00%	98.35%
56.0	17.666	1.660	2263.666	0.00%	98.42%
57.0	16.372	1.556	2265.222	0.00%	98.49%
58.0	15.062	1.454	2266.676	0.00%	98.55%
59.0	13.958	1.357	2268.033	0.00%	98.61%
60.0	12.919	1.270	2269.302	0.00%	98.67%
61.0	12.107	1.194	2270.497	0.00%	98.72%
62.0	11.288	1.127	2271.624	0.00%	98.77%
63.0	10.695	1.069	2272.693	0.00%	98.81%
64.0	10.285	1.029	2273.723	0.00%	98.86%
65.0	10.007	1.004	2274.727	0.00%	98.90%
66.0	9.817	0.989	2275.716	0.00%	98.94%
67.0	9.729	0.983	2276.699	0.00%	98.99%
68.0	9.656	0.982	2277.681	0.00%	99.03%
69.0	9.598	0.982	2278.663	0.00%	99.07%
70.0	9.598	0.986	2279.649	0.00%	99.12%
71.0	9.568	0.991	2280.64	0.00%	99.16%
72.0	9.525	0.993	2281.632	0.00%	99.20%
73.0	9.510	0.995	2282.628	0.00%	99.25%
74.0	9.481	0.998	2283.626	0.00%	99.29%
75.0	9.510	1.003	2284.629	0.00%	99.33%

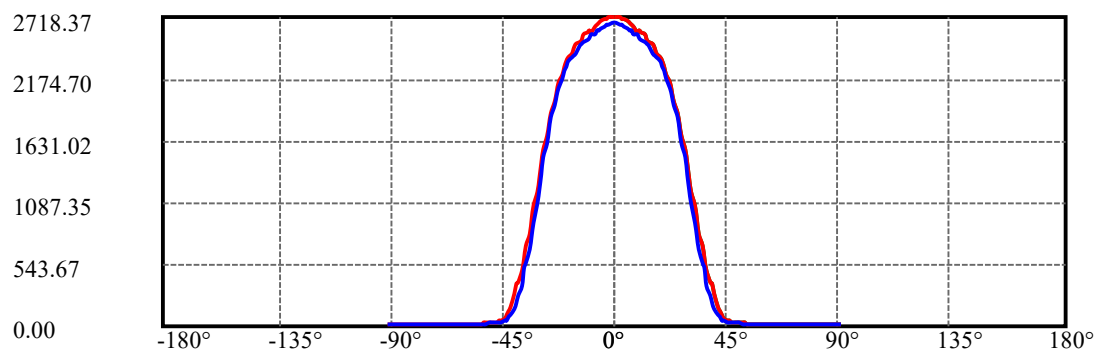
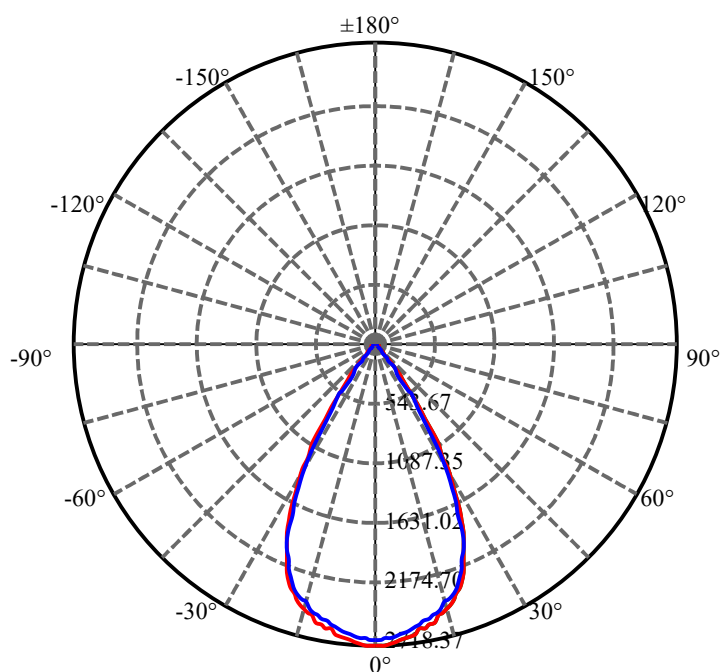
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	9.510	1.010	2285.639	0.00%	99.38%
77.0	9.481	1.012	2286.652	0.00%	99.42%
78.0	9.451	1.013	2287.665	0.00%	99.46%
79.0	9.437	1.015	2288.68	0.00%	99.51%
80.0	9.437	1.018	2289.697	0.00%	99.55%
81.0	9.466	1.022	2290.72	0.00%	99.60%
82.0	9.437	1.025	2291.745	0.00%	99.64%
83.0	9.422	1.025	2292.77	0.00%	99.69%
84.0	9.437	1.027	2293.797	0.00%	99.73%
85.0	9.422	1.029	2294.827	0.00%	99.78%
86.0	9.422	1.030	2295.857	0.00%	99.82%
87.0	9.437	1.032	2296.889	0.00%	99.87%
88.0	9.422	1.033	2297.922	0.00%	99.91%
89.0	9.422	1.033	2298.955	0.00%	99.96%
90.0	9.437	1.034	2299.989	0.00%	100.00%

Zonal flux distribution table

ZONAL LUMEN SUMMARY			
Zone	Lumens	%Lamp	%Fixt
0-30	1768.73	N.A.	76.90%
0-40	2190.02	N.A.	95.22%
0-60	2269.30	N.A.	98.67%
0-90	2298.95	N.A.	99.96%
0-120	2298.95	N.A.	99.96%
0-180	2299.99	N.A.	100.00%
60-90	29.65	N.A.	1.29%
90-120	0.00	N.A.	0.00%
90-130	0.00	N.A.	0.00%
90-150	0.00	N.A.	0.00%
90-180	0.00	N.A.	0.00%
0-31.07	1839.99	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	251.13
10-20	688.00
20-30	829.60
30-40	421.30
40-50	61.65
50-60	17.63
60-70	10.35
70-80	10.05
80-90	9.26
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



C0(Max):

C0/C180:

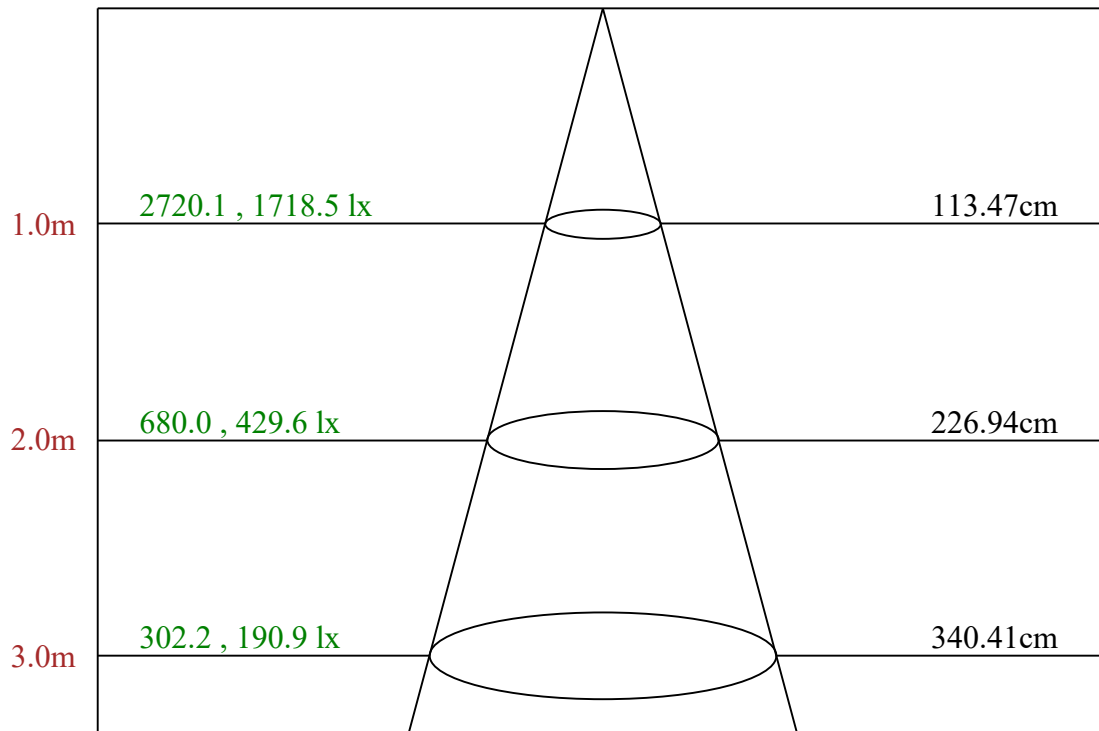
C90/C270:

Field angle(10%Imax):C0/180Left:40.1 Right:40.1

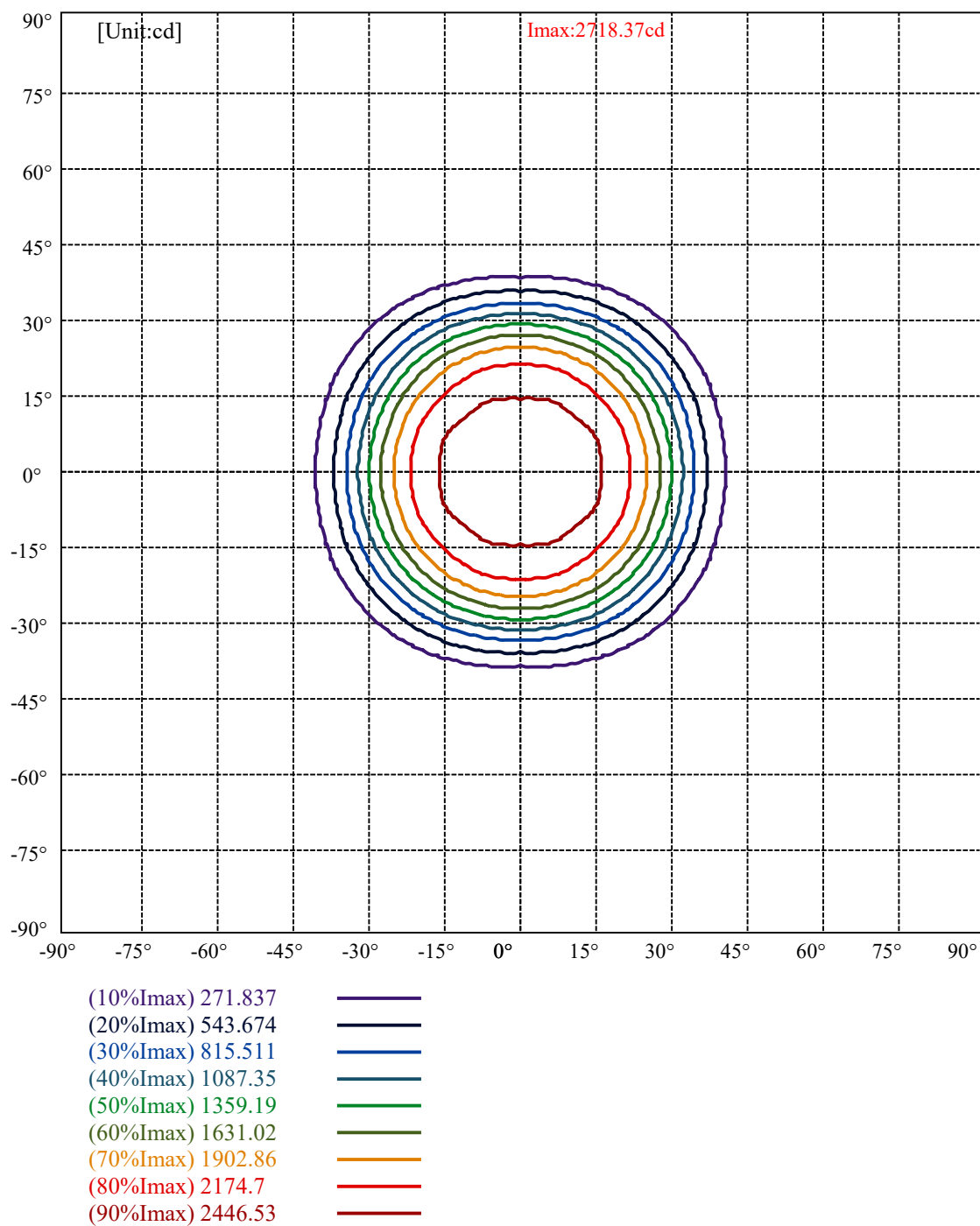
:C90/270Left:38.0 Right:38.0

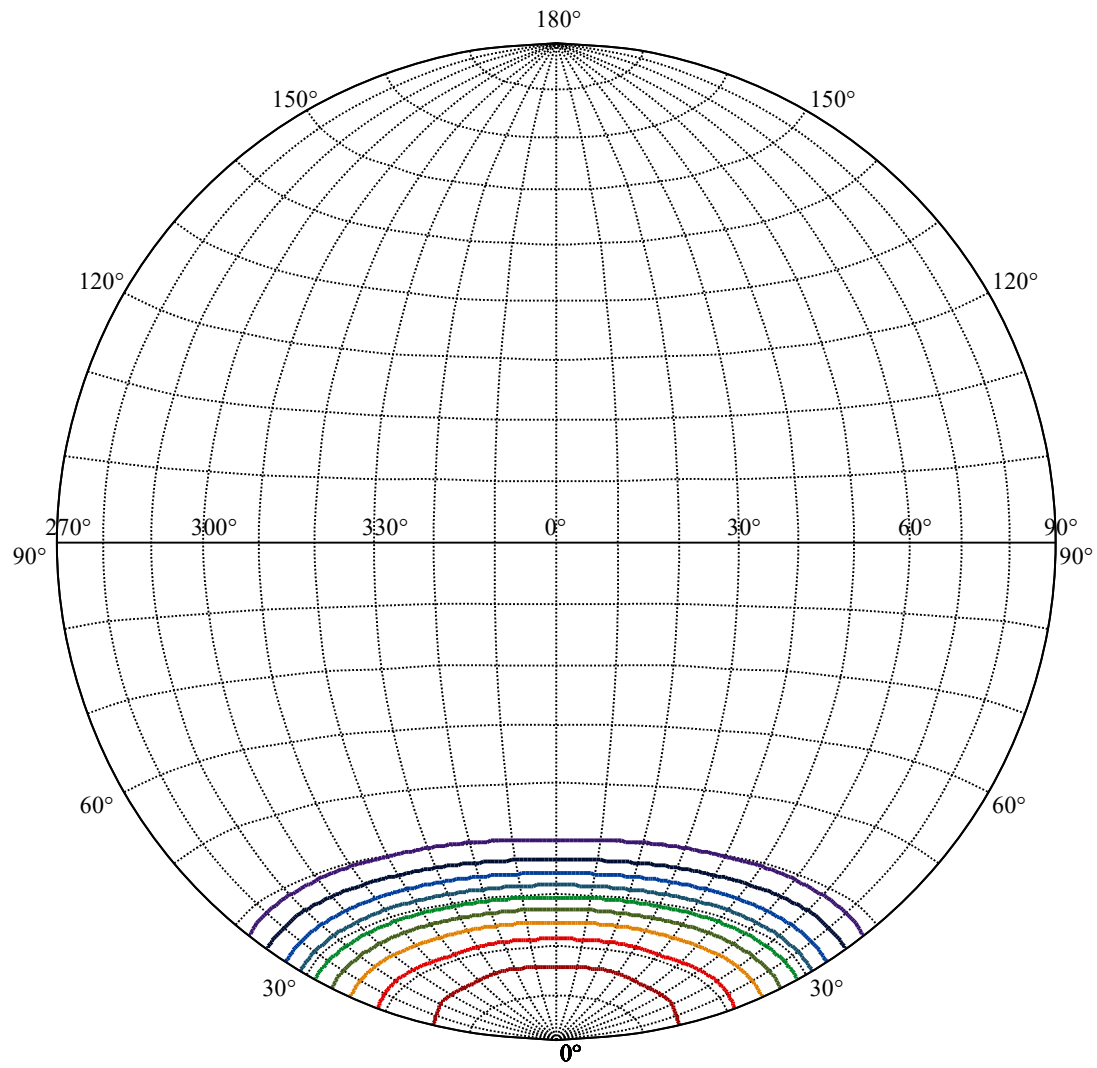
Beam Angle(50%Imax):C0/180Left:29.6 Right:29.6

:C90/270Left:29.1 Right:29.1



Max , Ave Beam angle of C0 plane 59.14



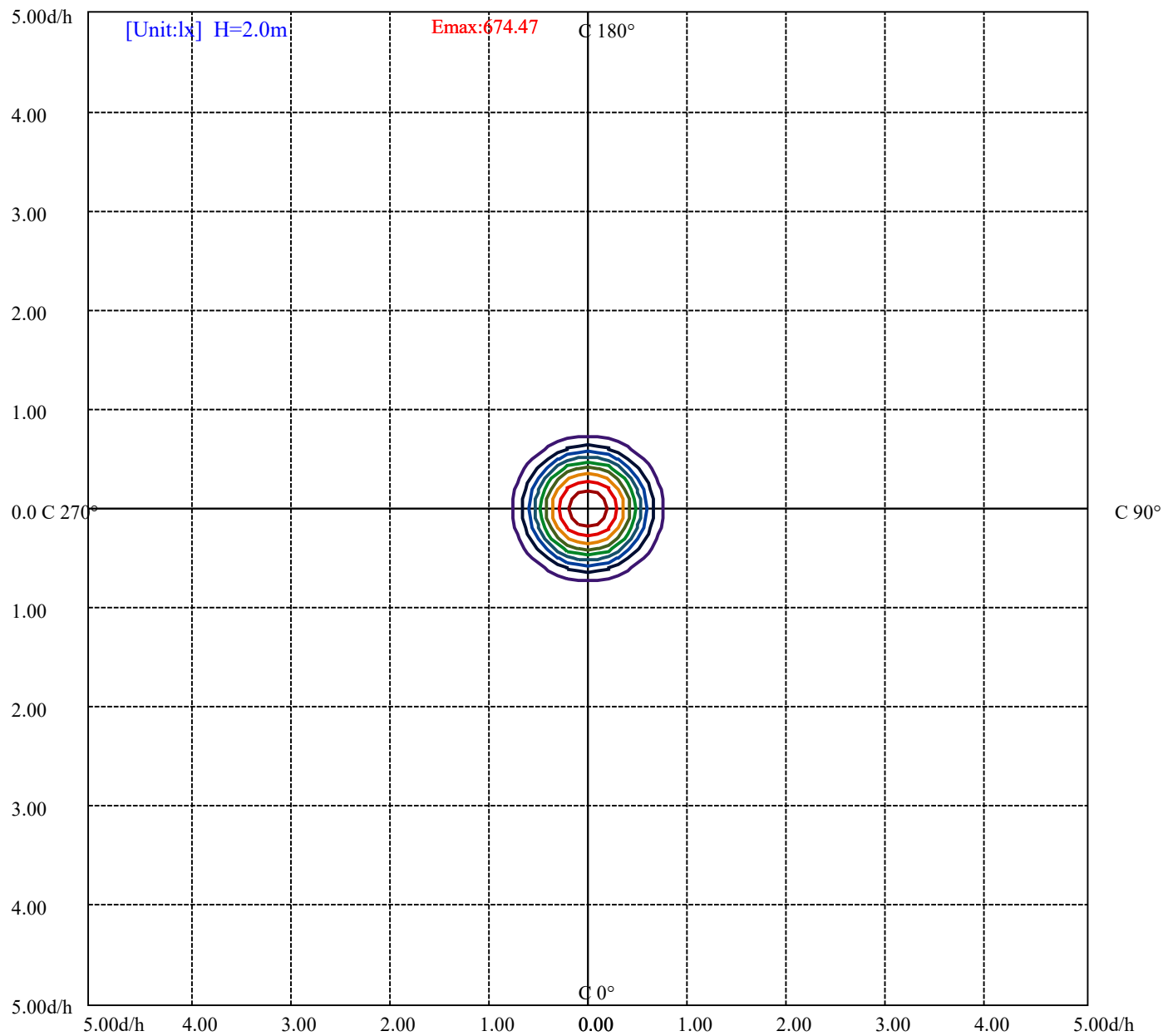


House

[Unit:cd]

Road

Imax:2718.37	
(10%Imax)	272.13
(20%Imax)	544.259
(30%Imax)	816.389
(40%Imax)	1088.52
(50%Imax)	1360.65
(60%Imax)	1632.78
(70%Imax)	1904.91
(80%Imax)	2177.04
(90%Imax)	2449.17



(10%Emax) 67.447	—
(20%Emax) 134.894	—
(30%Emax) 202.3412	—
(40%Emax) 269.7875	—
(50%Emax) 337.235	—
(60%Emax) 404.6825	—
(70%Emax) 472.13	—
(80%Emax) 539.5775	—
(90%Emax) 607.0225	—

Luminance Limiting Curve(no luminous side)

Appendix Page: 11 Total:18

Luminance Table

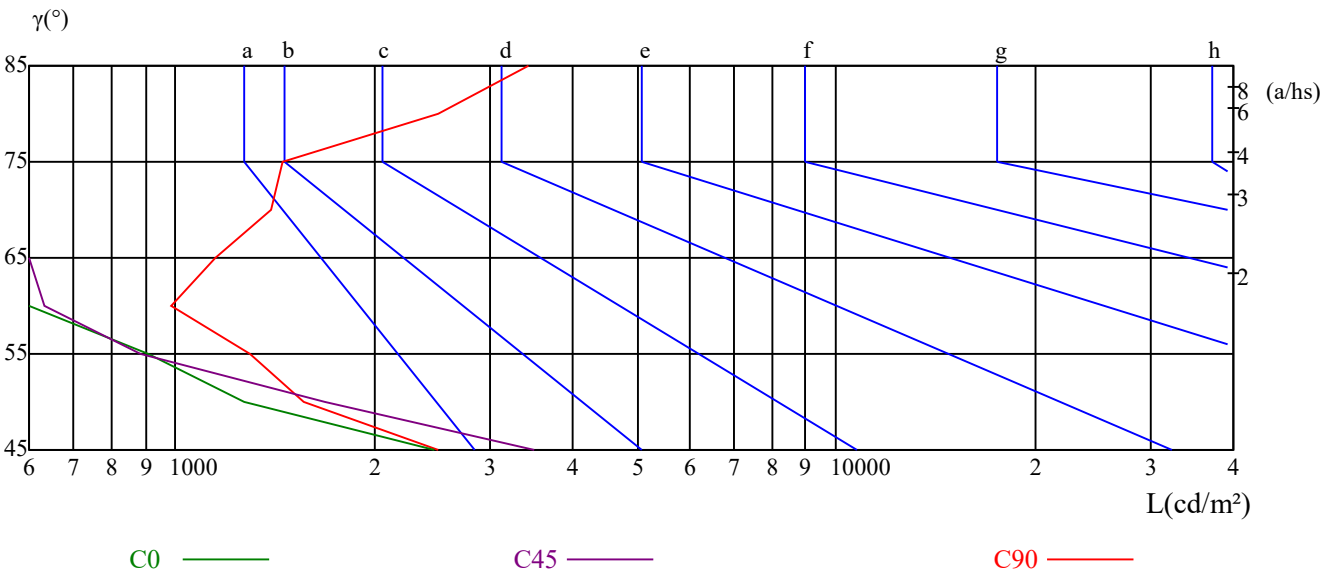
γ	45	50	55	60	65	70	75	80	85
C0	2463	1273	909	560	597	644	574	632	719
C45	3484	1680	887	631	590	749	836	769	906
C90	2497	1559	1300	984	1148	1391	1452	2502	3427

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1236	1236	1153	1645	1645	2019	4826	4826	4826

Glare Table

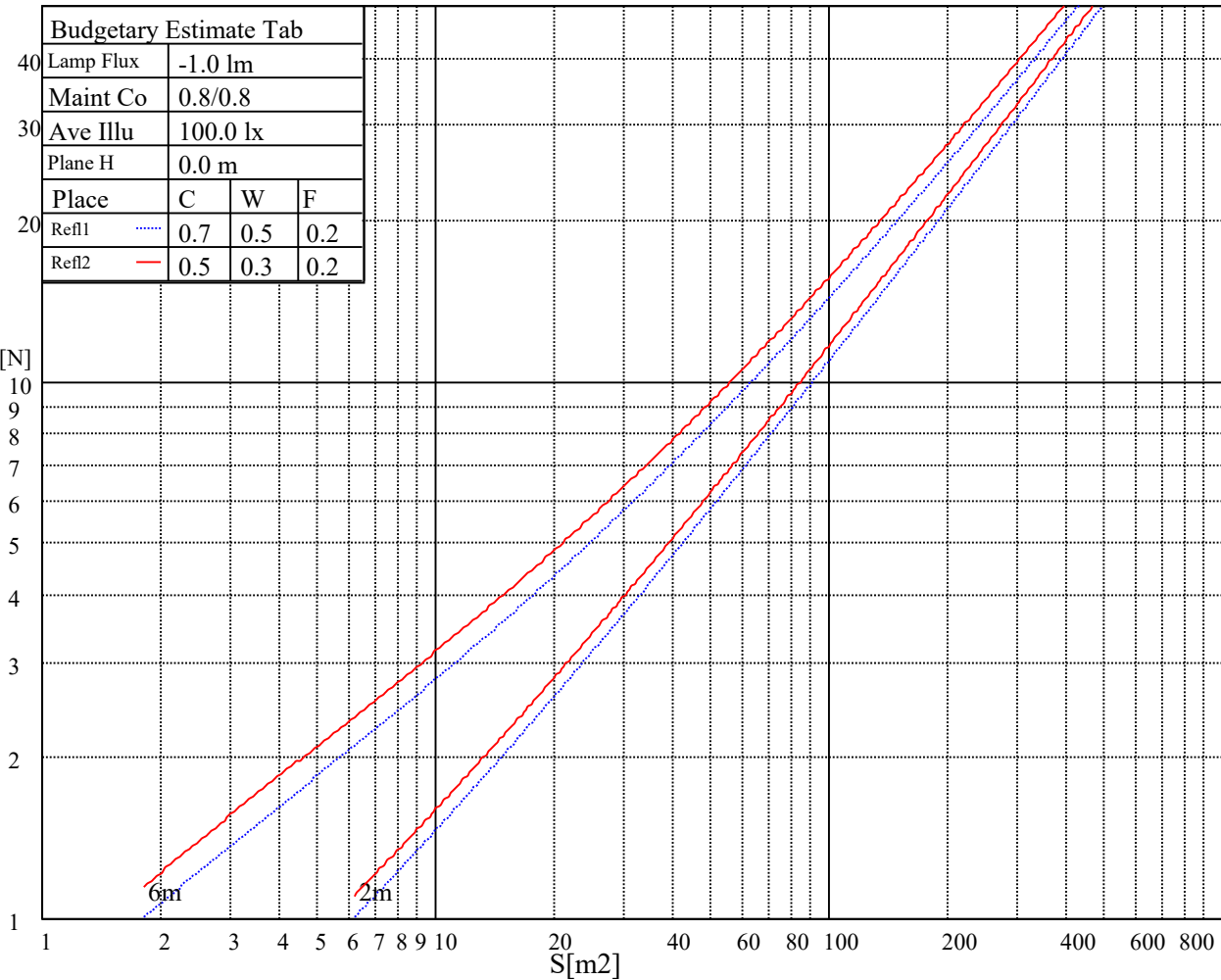
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve



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	14.59	15.54	14.96	15.85	16.17	13.94	14.89	14.30	15.20	15.52
	3H	14.42	15.26	14.81	15.60	15.95	13.79	14.64	14.18	14.97	15.32
	4H	14.35	15.13	14.75	15.48	15.85	13.76	14.54	14.16	14.89	15.26
	6H	14.32	15.03	14.74	15.41	15.81	13.81	14.52	14.23	14.90	15.30
	8H	14.29	14.97	14.71	15.35	15.76	13.85	14.53	14.28	14.92	15.33
	12H	14.27	14.92	14.70	15.31	15.73	13.96	14.60	14.39	15.00	15.42
4H	2H	14.29	15.07	14.69	15.42	15.79	13.64	14.42	14.04	14.77	15.14
	3H	14.10	14.75	14.52	15.15	15.56	13.49	14.14	13.91	14.54	14.95
	4H	14.08	14.65	14.52	15.07	15.52	13.52	14.09	13.96	14.51	14.96
	6H	14.05	14.55	14.52	15.00	15.45	13.61	14.11	14.08	14.56	15.02
	8H	14.07	14.53	14.55	14.99	15.46	13.75	14.21	14.24	14.67	15.14
	12H	14.12	14.54	14.61	15.00	15.52	13.99	14.41	14.48	14.87	15.39
8H	4H	13.92	14.38	14.41	14.84	15.32	13.37	13.84	13.86	14.29	14.77
	6H	13.93	14.31	14.43	14.79	15.30	13.53	13.91	14.04	14.39	14.90
	8H	14.04	14.36	14.58	14.88	15.38	13.79	14.11	14.33	14.63	15.13
	12H	14.16	14.40	14.70	14.92	15.44	14.16	14.40	14.70	14.92	15.44
12H	4H	13.88	14.31	14.37	14.76	15.28	13.33	13.76	13.83	14.21	14.73
	6H	13.95	14.27	14.48	14.79	15.29	13.55	13.87	14.09	14.39	14.89
	8H	14.05	14.29	14.59	14.81	15.33	13.81	14.05	14.35	14.57	15.09
Variation with the observer position at spacings:											
S = 1.0H		5.5/-8.5					5.6/-9.7				
S = 1.5H		8.0/-6.8					8.2/-8.4				
S = 2.0H		9.6/-5.7					10.0/-7.4				
Standard tables:		BK1					BK1				
Uncorrected UGR		-4.4					-4.0				

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



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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Intensity data(cd)									Appendix Page: 15 Total:18	
C/γ(°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	
0.0	2717.78	2718.37	2712.99	2702.28	2693.32	2678.98	2662.31	2648.03	2632.52	
22.5	2705.85	2698.12	2696.31	2692.74	2686.53	2678.75	2667.46	2655.17	2640.24	
45.0	2703.45	2696.66	2690.69	2682.96	2672.84	2659.32	2647.15	2634.27	2618.18	
67.5	2670.09	2661.49	2658.15	2653.35	2645.98	2637.26	2628.30	2615.55	2601.50	
90.0	2665.29	2664.12	2657.57	2650.37	2637.90	2623.56	2607.47	2592.55	2574.05	
112.5	2656.98	2661.49	2658.15	2653.35	2645.98	2637.26	2628.30	2615.55	2601.50	
135.0	2691.51	2696.66	2690.69	2682.96	2672.84	2659.32	2647.15	2634.27	2618.18	
157.5	2691.51	2698.12	2696.31	2692.74	2686.53	2678.75	2667.46	2655.17	2640.24	
180.0	2717.78	2718.37	2712.99	2702.28	2693.32	2678.98	2662.31	2648.03	2632.52	
202.5	2705.85	2698.12	2696.31	2692.74	2686.53	2678.75	2667.46	2655.17	2640.24	
225.0	2703.45	2696.66	2690.69	2682.96	2672.84	2659.32	2647.15	2634.27	2618.18	
247.5	2670.09	2661.49	2658.15	2653.35	2645.98	2637.26	2628.30	2615.55	2601.50	
270.0	2665.29	2664.12	2657.57	2650.37	2637.90	2623.56	2607.47	2592.55	2574.05	
292.5	2656.98	2661.49	2658.15	2653.35	2645.98	2637.26	2628.30	2615.55	2601.50	
315.0	2691.51	2696.66	2690.69	2682.96	2672.84	2659.32	2647.15	2634.27	2618.18	
337.5	2691.51	2698.12	2696.31	2692.74	2686.53	2678.75	2667.46	2655.17	2640.24	
360.0	2717.78	2718.37	2712.99	2702.28	2693.32	2678.98	2662.31	2648.03	2632.52	
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	
0.0	2613.44	2596.12	2577.04	2560.36	2508.04	2497.27	2479.01	2441.50	2405.92	
22.5	2623.56	2606.65	2587.22	2566.09	2529.34	2512.31	2486.68	2454.38	2420.61	
45.0	2606.30	2577.04	2557.37	2533.32	2509.44	2472.81	2452.33	2422.42	2387.72	
67.5	2590.15	2566.91	2547.84	2527.59	2491.54	2475.68	2451.27	2407.73	2380.64	
90.0	2558.55	2539.47	2522.20	2503.12	2484.63	2463.15	2404.75	2387.43	2369.34	
112.5	2646.21	2566.91	2547.84	2527.59	2491.54	2475.68	2451.27	2407.73	2380.64	
135.0	2642.64	2577.04	2557.37	2533.32	2509.44	2472.81	2452.33	2422.42	2387.72	
157.5	2714.22	2606.65	2587.22	2566.09	2529.34	2512.31	2486.68	2454.38	2420.61	
180.0	2613.44	2596.12	2577.04	2560.36	2508.04	2497.27	2479.01	2441.50	2405.92	
202.5	2623.56	2606.65	2587.22	2566.09	2529.34	2512.31	2486.68	2454.38	2420.61	
225.0	2606.30	2577.04	2557.37	2533.32	2509.44	2472.81	2452.33	2422.42	2387.72	
247.5	2590.15	2566.91	2547.84	2527.59	2491.54	2475.68	2451.27	2407.73	2380.64	
270.0	2558.55	2539.47	2522.20	2503.12	2484.63	2463.15	2404.75	2387.43	2369.34	
292.5	2523.37	2566.91	2547.84	2527.59	2491.54	2475.68	2451.27	2407.73	2380.64	
315.0	2540.11	2577.04	2557.37	2533.32	2509.44	2472.81	2452.33	2422.42	2387.72	
337.5	2535.31	2606.65	2587.22	2566.09	2529.34	2512.31	2486.68	2454.38	2420.61	
360.0	2613.44	2596.12	2577.04	2560.36	2508.04	2497.27	2479.01	2441.50	2405.92	
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0	
0.0	2365.13	2323.40	2278.46	2212.27	2142.04	2058.24	1979.29	1879.68	1772.59	
22.5	2378.30	2315.09	2268.92	2211.57	2146.84	2061.69	1977.94	1876.82	1772.12	
45.0	2332.94	2288.93	2239.71	2173.76	2099.49	2026.52	1945.05	1852.65	1742.10	
67.5	2345.58	2304.79	2255.46	2195.82	2127.88	2054.61	1954.71	1853.35	1738.53	
90.0	2329.72	2285.13	2237.20	2173.76	2098.03	2020.31	1939.55	1835.44	1716.93	
112.5	2345.58	2304.79	2255.46	2195.82	2127.88	2054.61	1954.71	1853.35	1738.53	
135.0	2332.94	2288.93	2239.71	2173.76	2099.49	2026.52	1945.05	1852.65	1742.10	
157.5	2378.30	2315.09	2268.92	2211.57	2146.84	2061.69	1977.94	1876.82	1772.12	
180.0	2365.13	2323.40	2278.46	2212.27	2142.04	2058.24	1979.29	1879.68	1772.59	
202.5	2378.30	2315.09	2268.92	2211.57	2146.84	2061.69	1977.94	1876.82	1772.12	
225.0	2332.94	2288.93	2239.71	2173.76	2099.49	2026.52	1945.05	1852.65	1742.10	
247.5	2345.58	2304.79	2255.46	2195.82	2127.88	2054.61	1954.71	1853.35	1738.53	
270.0	2329.72	2285.13	2237.20	2173.76	2098.03	2020.31	1939.55	1835.44	1716.93	
292.5	2345.58	2304.79	2255.46	2195.82	2127.88	2054.61	1954.71	1853.35	1738.53	
315.0	2332.94	2288.93	2239.71	2173.76	2099.49	2026.52	1945.05	1852.65	1742.10	
337.5	2378.30	2315.09	2268.92	2211.57	2146.84	2061.69	1977.94	1876.82	1772.12	
360.0	2365.13	2323.40	2278.46	2212.27	2142.04	2058.24	1979.29	1879.68	1772.59	

Intensity data(cd)

Appendix Page: 16 Total:18

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1670.29	1557.23	1435.03	1307.22	1186.78	1066.92	948.47	813.64	702.04
22.5	1652.79	1536.74	1415.48	1295.16	1167.06	1045.80	926.06	819.61	720.35
45.0	1636.52	1521.35	1394.01	1270.46	1152.43	1022.91	891.12	784.44	690.45
67.5	1614.52	1497.42	1361.47	1232.31	1101.98	978.55	846.18	727.79	621.04
90.0	1599.60	1478.34	1341.86	1200.12	1073.36	917.22	795.73	680.21	560.00
112.5	1614.52	1497.42	1361.47	1232.31	1101.98	978.55	846.18	727.79	621.04
135.0	1636.52	1521.35	1394.01	1270.46	1152.43	1022.91	891.12	784.44	690.45
157.5	1652.79	1536.74	1415.48	1295.16	1167.06	1045.80	926.06	819.61	720.35
180.0	1670.29	1557.23	1435.03	1307.22	1186.78	1066.92	948.47	813.64	702.04
202.5	1652.79	1536.74	1415.48	1295.16	1167.06	1045.80	926.06	819.61	720.35
225.0	1636.52	1521.35	1394.01	1270.46	1152.43	1022.91	891.12	784.44	690.45
247.5	1614.52	1497.42	1361.47	1232.31	1101.98	978.55	846.18	727.79	621.04
270.0	1599.60	1478.34	1341.86	1200.12	1073.36	917.22	795.73	680.21	560.00
292.5	1614.52	1497.42	1361.47	1232.31	1101.98	978.55	846.18	727.79	621.04
315.0	1636.52	1521.35	1394.01	1270.46	1152.43	1022.91	891.12	784.44	690.45
337.5	1652.79	1536.74	1415.48	1295.16	1167.06	1045.80	926.06	819.61	720.35
360.0	1670.29	1557.23	1435.03	1307.22	1186.78	1066.92	948.47	813.64	702.04
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	595.29	494.28	389.23	367.40	279.15	175.51	131.91	99.55	71.16
22.5	612.91	488.66	403.28	341.89	296.94	188.68	146.31	110.78	81.93
45.0	579.43	464.38	397.95	342.82	241.35	189.03	149.06	117.10	96.09
67.5	547.01	424.64	364.07	255.68	195.82	143.56	110.55	79.77	62.27
90.0	512.54	358.10	271.78	200.56	148.94	105.16	77.78	57.24	46.64
112.5	547.01	424.64	364.07	255.68	195.82	143.56	110.55	79.77	62.27
135.0	579.43	464.38	397.95	342.82	241.35	189.03	149.06	117.10	96.09
157.5	612.91	488.66	403.28	341.89	296.94	188.68	146.31	110.78	81.93
180.0	595.29	494.28	389.23	367.40	279.15	175.51	131.91	99.55	71.16
202.5	612.91	488.66	403.28	341.89	296.94	188.68	146.31	110.78	81.93
225.0	579.43	464.38	397.95	342.82	241.35	189.03	149.06	117.10	96.09
247.5	547.01	424.64	364.07	255.68	195.82	143.56	110.55	79.77	62.27
270.0	512.54	358.10	271.78	200.56	148.94	105.16	77.78	57.24	46.64
292.5	547.01	424.64	364.07	255.68	195.82	143.56	110.55	79.77	62.27
315.0	579.43	464.38	397.95	342.82	241.35	189.03	149.06	117.10	96.09
337.5	612.91	488.66	403.28	341.89	296.94	188.68	146.31	110.78	81.93
360.0	595.29	494.28	389.23	367.40	279.15	175.51	131.91	99.55	71.16
C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	55.83	45.30	38.51	35.05	32.42	30.20	27.56	25.63	23.47
22.5	64.73	52.20	42.55	36.64	32.54	29.20	26.80	24.70	23.00
45.0	78.83	65.37	55.71	47.23	40.44	35.17	30.02	26.22	23.12
67.5	50.56	41.49	35.76	32.19	29.44	26.98	24.93	23.23	21.71
90.0	39.21	35.17	32.30	30.20	27.68	25.87	24.23	22.30	20.89
112.5	50.56	41.49	35.76	32.19	29.44	26.98	24.93	23.23	21.71
135.0	78.83	65.37	55.71	47.23	40.44	35.17	30.02	26.22	23.12
157.5	64.73	52.20	42.55	36.64	32.54	29.20	26.80	24.70	23.00
180.0	55.83	45.30	38.51	35.05	32.42	30.20	27.56	25.63	23.47
202.5	64.73	52.20	42.55	36.64	32.54	29.20	26.80	24.70	23.00
225.0	78.83	65.37	55.71	47.23	40.44	35.17	30.02	26.22	23.12
247.5	50.56	41.49	35.76	32.19	29.44	26.98	24.93	23.23	21.71
270.0	39.21	35.17	32.30	30.20	27.68	25.87	24.23	22.30	20.89
292.5	50.56	41.49	35.76	32.19	29.44	26.98	24.93	23.23	21.71
315.0	78.83	65.37	55.71	47.23	40.44	35.17	30.02	26.22	23.12
337.5	64.73	52.20	42.55	36.64	32.54	29.20	26.80	24.70	23.00
360.0	55.83	45.30	38.51	35.05	32.42	30.20	27.56	25.63	23.47

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	21.59	20.01	18.38	16.80	15.27	13.93	12.87	11.94	11.24
22.5	21.48	20.01	18.61	17.38	15.98	14.92	13.69	12.76	11.82
45.0	20.66	18.61	17.03	15.86	14.69	13.69	12.87	12.17	11.47
67.5	20.25	18.84	17.79	16.44	15.16	13.93	12.87	12.06	11.06
90.0	19.20	17.67	16.09	14.81	13.58	12.64	11.59	10.94	10.36
112.5	20.25	18.84	17.79	16.44	15.16	13.93	12.87	12.06	11.06
135.0	20.66	18.61	17.03	15.86	14.69	13.69	12.87	12.17	11.47
157.5	21.48	20.01	18.61	17.38	15.98	14.92	13.69	12.76	11.82
180.0	21.59	20.01	18.38	16.80	15.27	13.93	12.87	11.94	11.24
202.5	21.48	20.01	18.61	17.38	15.98	14.92	13.69	12.76	11.82
225.0	20.66	18.61	17.03	15.86	14.69	13.69	12.87	12.17	11.47
247.5	20.25	18.84	17.79	16.44	15.16	13.93	12.87	12.06	11.06
270.0	19.20	17.67	16.09	14.81	13.58	12.64	11.59	10.94	10.36
292.5	20.25	18.84	17.79	16.44	15.16	13.93	12.87	12.06	11.06
315.0	20.66	18.61	17.03	15.86	14.69	13.69	12.87	12.17	11.47
337.5	21.48	20.01	18.61	17.38	15.98	14.92	13.69	12.76	11.82
360.0	21.59	20.01	18.38	16.80	15.27	13.93	12.87	11.94	11.24
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	10.71	10.12	10.01	9.89	9.77	9.66	9.66	9.66	9.66
22.5	11.06	10.59	10.12	9.89	9.77	9.66	9.66	9.54	9.54
45.0	10.94	10.48	10.12	9.89	9.77	9.66	9.66	9.66	9.54
67.5	10.36	10.01	9.89	9.66	9.66	9.66	9.66	9.54	9.54
90.0	10.12	10.01	9.77	9.77	9.66	9.66	9.66	9.66	9.66
112.5	10.36	10.01	9.89	9.66	9.66	9.66	9.66	9.54	9.54
135.0	10.94	10.48	10.12	9.89	9.77	9.66	9.66	9.66	9.54
157.5	11.06	10.59	10.12	9.89	9.77	9.66	9.66	9.54	9.54
180.0	10.71	10.12	10.01	9.89	9.77	9.66	9.66	9.66	9.66
202.5	11.06	10.59	10.12	9.89	9.77	9.66	9.66	9.54	9.54
225.0	10.94	10.48	10.12	9.89	9.77	9.66	9.66	9.66	9.54
247.5	10.36	10.01	9.89	9.66	9.66	9.66	9.66	9.54	9.54
270.0	10.12	10.01	9.77	9.77	9.66	9.66	9.66	9.66	9.66
292.5	10.36	10.01	9.89	9.66	9.66	9.66	9.66	9.54	9.54
315.0	10.94	10.48	10.12	9.89	9.77	9.66	9.66	9.66	9.54
337.5	11.06	10.59	10.12	9.89	9.77	9.66	9.66	9.54	9.54
360.0	10.71	10.12	10.01	9.89	9.77	9.66	9.66	9.66	9.66
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	9.54	9.54	9.54	9.54	9.54	9.54	9.54	9.42	9.42
22.5	9.54	9.54	9.54	9.54	9.42	9.54	9.42	9.42	9.42
45.0	9.42	9.42	9.42	9.42	9.54	9.42	9.42	9.42	9.42
67.5	9.54	9.54	9.42	9.54	9.54	9.42	9.42	9.42	9.42
90.0	9.66	9.54	9.54	9.54	9.54	9.54	9.54	9.54	9.54
112.5	9.54	9.54	9.42	9.54	9.54	9.42	9.42	9.42	9.42
135.0	9.42	9.42	9.42	9.42	9.54	9.42	9.42	9.42	9.42
157.5	9.54	9.54	9.54	9.54	9.42	9.54	9.42	9.42	9.42
180.0	9.54	9.54	9.54	9.54	9.54	9.54	9.54	9.42	9.42
202.5	9.54	9.54	9.54	9.54	9.42	9.54	9.42	9.42	9.42
225.0	9.42	9.42	9.42	9.42	9.54	9.42	9.42	9.42	9.42
247.5	9.54	9.54	9.42	9.54	9.54	9.42	9.42	9.42	9.42
270.0	9.66	9.54	9.54	9.54	9.54	9.54	9.54	9.54	9.54
292.5	9.54	9.54	9.42	9.54	9.54	9.42	9.42	9.42	9.42
315.0	9.42	9.42	9.42	9.42	9.54	9.42	9.42	9.42	9.42
337.5	9.54	9.54	9.54	9.54	9.42	9.54	9.42	9.42	9.42
360.0	9.54	9.54	9.54	9.54	9.54	9.54	9.54	9.42	9.42

Nata 69-0020 & 11-0161-S5-MS

Intensity data(cd)									Appendix Page: 18 Total:18
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	9.42	9.54	9.42	9.54	9.42	9.42	9.42	9.42	9.42
22.5	9.42	9.42	9.42	9.42	9.42	9.42	9.42	9.42	9.42
45.0	9.42	9.42	9.42	9.42	9.42	9.42	9.42	9.42	9.42
67.5	9.54	9.42	9.42	9.42	9.42	9.42	9.42	9.42	9.42
90.0	9.54	9.42	9.42	9.42	9.42	9.42	9.54	9.42	9.42
112.5	9.54	9.42	9.42	9.42	9.42	9.42	9.42	9.42	9.42
135.0	9.42	9.42	9.42	9.42	9.42	9.42	9.42	9.42	9.42
157.5	9.42	9.42	9.42	9.42	9.42	9.42	9.42	9.42	9.42
180.0	9.42	9.54	9.42	9.54	9.42	9.42	9.42	9.42	9.42
202.5	9.42	9.42	9.42	9.42	9.42	9.42	9.42	9.42	9.42
225.0	9.42	9.42	9.42	9.42	9.42	9.42	9.42	9.42	9.42
247.5	9.54	9.42	9.42	9.42	9.42	9.42	9.42	9.42	9.42
270.0	9.54	9.42	9.42	9.42	9.42	9.42	9.54	9.42	9.42
292.5	9.54	9.42	9.42	9.42	9.42	9.42	9.42	9.42	9.42
315.0	9.42	9.42	9.42	9.42	9.42	9.42	9.42	9.42	9.42
337.5	9.42	9.42	9.42	9.42	9.42	9.42	9.42	9.42	9.42
360.0	9.42	9.54	9.42	9.54	9.42	9.42	9.42	9.42	9.42
C/ γ (°)	90.0								
0.0	9.54								
22.5	9.42								
45.0	9.42								
67.5	9.42								
90.0	9.42								
112.5	9.42								
135.0	9.42								
157.5	9.42								
180.0	9.54								
202.5	9.42								
225.0	9.42								
247.5	9.42								
270.0	9.42								
292.5	9.42								
315.0	9.42								
337.5	9.42								
360.0	9.54								