

Report No	:	Voltage	:	V
Test No	:	Current	:	A
LumCAT	:	Power	:	8.500 W
Luminaire	:	0019590006 LASTD03 8.5W 2700K 806lm	:	
LampCAT	:	Ballast type	:	
Lamp flux	:	lm	:	-60 mm
Number of Lamps	:	1	:	-60 mm
Phm Type	:	C	:	Height : 42 mm

Photometric Results

Lumens(lm)	:	806.00	Central intensity(cd)	:	121.215
Efficiency(%)	:	100.00%	Maximum intensity(cd)	:	121.341
Luminous Efficacy(lm/W)	:	94.82	Angle of maximum intensity	:	C=0.0 γ =3.0
Beam Angle(50%Imax)	:	[C0/180]Total=182.4 [C90/270]Total=182.4			
Field angle(10%Imax)	:	[C0/180]Total=306.0 [C90/270]Total=306.0			
Maximum s/h(1/2)	:	C0_180=1.47 C90_270=1.47			
Maximum s/h(1/4)	:	C0_180=1.63 C90_270=1.63			
CIE Type	:	Semidirect lighting			
Output flux ratio in π solid angle	:	43.494%			

Zonal flux distribution table

Appendix Page: 2 Total:23

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	121.215	0.000	0	0.00%	0.00%
1.0	121.261	0.116	0.116	0.01%	0.01%
2.0	121.327	0.348	0.464	0.04%	0.06%
3.0	121.341	0.580	1.045	0.07%	0.13%
4.0	121.319	0.812	1.857	0.10%	0.23%
5.0	121.306	1.044	2.901	0.13%	0.36%
6.0	121.291	1.275	4.176	0.16%	0.52%
7.0	121.266	1.506	5.681	0.19%	0.70%
8.0	121.238	1.736	7.417	0.22%	0.92%
9.0	121.207	1.965	9.382	0.24%	1.16%
10.0	121.165	2.193	11.575	0.27%	1.44%
11.0	121.119	2.421	13.996	0.30%	1.74%
12.0	121.067	2.647	16.643	0.33%	2.06%
13.0	121.011	2.873	19.516	0.36%	2.42%
14.0	120.940	3.097	22.613	0.38%	2.81%
15.0	120.865	3.320	25.933	0.41%	3.22%
16.0	120.778	3.541	29.473	0.44%	3.66%
17.0	120.683	3.760	33.234	0.47%	4.12%
18.0	120.576	3.978	37.211	0.49%	4.62%
19.0	120.457	4.193	41.405	0.52%	5.14%
20.0	120.321	4.407	45.812	0.55%	5.68%
21.0	120.173	4.618	50.43	0.57%	6.26%
22.0	120.010	4.827	55.256	0.60%	6.86%
23.0	119.833	5.033	60.289	0.62%	7.48%
24.0	119.638	5.236	65.525	0.65%	8.13%
25.0	119.424	5.436	70.96	0.67%	8.80%
26.0	119.180	5.632	76.593	0.70%	9.50%
27.0	118.919	5.825	82.418	0.72%	10.23%
28.0	118.639	6.014	88.432	0.75%	10.97%
29.0	118.339	6.200	94.632	0.77%	11.74%
30.0	118.021	6.382	101.014	0.79%	12.53%
31.0	117.675	6.559	107.573	0.81%	13.35%
32.0	117.307	6.732	114.305	0.84%	14.18%
33.0	116.913	6.900	121.205	0.86%	15.04%
34.0	116.495	7.064	128.269	0.88%	15.91%
35.0	116.042	7.222	135.491	0.90%	16.81%
36.0	115.570	7.375	142.865	0.91%	17.73%
37.0	115.086	7.523	150.388	0.93%	18.66%

Equipment: ZT-40
Temperature($^{\circ}\text{C}$): 24.9

Date:
Humidity(%): 55.6%

Operator: LSC

Zonal flux distribution table

Appendix Page: 3 Total:23

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	114.576	7.666	158.054	0.95%	19.61%
39.0	114.038	7.803	165.857	0.97%	20.58%
40.0	113.469	7.935	173.791	0.98%	21.56%
41.0	112.881	8.060	181.852	1.00%	22.56%
42.0	112.276	8.180	190.032	1.01%	23.58%
43.0	111.647	8.295	198.327	1.03%	24.61%
44.0	110.989	8.403	206.73	1.04%	25.65%
45.0	110.302	8.504	215.234	1.06%	26.70%
46.0	109.596	8.600	223.834	1.07%	27.77%
47.0	108.863	8.689	232.523	1.08%	28.85%
48.0	108.114	8.771	241.294	1.09%	29.94%
49.0	107.340	8.848	250.142	1.10%	31.03%
50.0	106.533	8.917	259.059	1.11%	32.14%
51.0	105.692	8.979	268.038	1.11%	33.26%
52.0	104.845	9.034	277.072	1.12%	34.38%
53.0	103.975	9.084	286.156	1.13%	35.50%
54.0	103.090	9.127	295.282	1.13%	36.64%
55.0	102.182	9.163	304.445	1.14%	37.77%
56.0	101.252	9.193	313.638	1.14%	38.91%
57.0	100.292	9.215	322.853	1.14%	40.06%
58.0	99.306	9.230	332.083	1.15%	41.20%
59.0	98.306	9.238	341.321	1.15%	42.35%
60.0	97.299	9.241	350.563	1.15%	43.49%
61.0	96.266	9.237	359.8	1.15%	44.64%
62.0	95.215	9.227	369.027	1.14%	45.78%
63.0	94.155	9.210	378.237	1.14%	46.93%
64.0	93.078	9.187	387.424	1.14%	48.07%
65.0	91.982	9.158	396.582	1.14%	49.20%
66.0	90.874	9.123	405.706	1.13%	50.34%
67.0	89.747	9.082	414.788	1.13%	51.46%
68.0	88.608	9.035	423.823	1.12%	52.58%
69.0	87.455	8.982	432.805	1.11%	53.70%
70.0	86.290	8.923	441.728	1.11%	54.81%
71.0	85.116	8.859	450.587	1.10%	55.90%
72.0	83.933	8.790	459.377	1.09%	56.99%
73.0	82.744	8.716	468.093	1.08%	58.08%
74.0	81.541	8.637	476.73	1.07%	59.15%
75.0	80.327	8.553	485.283	1.06%	60.21%

Equipment: ZT-40
Temperature($^{\circ}\text{C}$): 24.9

Date:
Humidity(%): 55.6%

Operator: LSC

Zonal flux distribution table

Appendix Page: 4 Total:23

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	79.104	8.463	493.746	1.05%	61.26%
77.0	77.887	8.370	502.116	1.04%	62.30%
78.0	76.665	8.273	510.389	1.03%	63.32%
79.0	75.443	8.173	518.562	1.01%	64.34%
80.0	74.214	8.068	526.63	1.00%	65.34%
81.0	72.987	7.960	534.591	0.99%	66.33%
82.0	71.761	7.849	542.44	0.97%	67.30%
83.0	70.539	7.736	550.176	0.96%	68.26%
84.0	69.320	7.619	557.795	0.95%	69.21%
85.0	68.099	7.500	565.295	0.93%	70.14%
86.0	66.876	7.378	572.673	0.92%	71.05%
87.0	65.664	7.254	579.927	0.90%	71.95%
88.0	64.460	7.128	587.054	0.88%	72.84%
89.0	63.260	7.001	594.055	0.87%	73.70%
90.0	62.064	6.871	600.926	0.85%	74.56%
91.0	60.874	6.740	607.667	0.84%	75.39%
92.0	59.691	6.608	614.275	0.82%	76.21%
93.0	58.516	6.475	620.75	0.80%	77.02%
94.0	57.360	6.342	627.092	0.79%	77.80%
95.0	56.218	6.208	633.3	0.77%	78.57%
96.0	55.083	6.075	639.375	0.75%	79.33%
97.0	53.952	5.940	645.315	0.74%	80.06%
98.0	52.837	5.805	651.12	0.72%	80.78%
99.0	51.742	5.671	656.791	0.70%	81.49%
100.0	50.653	5.537	662.329	0.69%	82.17%
101.0	49.578	5.404	667.732	0.67%	82.85%
102.0	48.519	5.271	673.003	0.65%	83.50%
103.0	47.476	5.139	678.142	0.64%	84.14%
104.0	46.445	5.007	683.149	0.62%	84.76%
105.0	45.423	4.877	688.026	0.61%	85.36%
106.0	44.415	4.747	692.773	0.59%	85.95%
107.0	43.424	4.618	697.391	0.57%	86.52%
108.0	42.447	4.490	701.881	0.56%	87.08%
109.0	41.481	4.364	706.245	0.54%	87.62%
110.0	40.530	4.239	710.484	0.53%	88.15%
111.0	39.598	4.115	714.599	0.51%	88.66%
112.0	38.683	3.994	718.592	0.50%	89.16%
113.0	37.782	3.873	722.466	0.48%	89.64%

Equipment: ZT-40
Temperature($^{\circ}\text{C}$): 24.9

Date:
Humidity(%): 55.6%

Operator: LSC

Zonal flux distribution table

Appendix Page: 5 Total:23

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
114.0	36.890	3.755	726.221	0.47%	90.10%
115.0	36.010	3.637	729.858	0.45%	90.55%
116.0	35.146	3.521	733.379	0.44%	90.99%
117.0	34.306	3.408	736.787	0.42%	91.41%
118.0	33.480	3.297	740.084	0.41%	91.82%
119.0	32.660	3.187	743.271	0.40%	92.22%
120.0	31.849	3.078	746.35	0.38%	92.60%
121.0	31.056	2.972	749.321	0.37%	92.97%
122.0	30.278	2.867	752.189	0.36%	93.32%
123.0	29.522	2.765	754.954	0.34%	93.67%
124.0	28.771	2.665	757.62	0.33%	94.00%
125.0	28.032	2.567	760.186	0.32%	94.32%
126.0	27.302	2.470	762.656	0.31%	94.62%
127.0	26.582	2.375	765.031	0.29%	94.92%
128.0	25.879	2.282	767.313	0.28%	95.20%
129.0	25.191	2.191	769.505	0.27%	95.47%
130.0	24.519	2.103	771.608	0.26%	95.73%
131.0	23.854	2.017	773.625	0.25%	95.98%
132.0	23.202	1.932	775.557	0.24%	96.22%
133.0	22.559	1.850	777.407	0.23%	96.45%
134.0	21.927	1.769	779.176	0.22%	96.67%
135.0	21.311	1.691	780.867	0.21%	96.88%
136.0	20.711	1.615	782.482	0.20%	97.08%
137.0	20.125	1.541	784.024	0.19%	97.27%
138.0	19.545	1.469	785.493	0.18%	97.46%
139.0	18.976	1.400	786.893	0.17%	97.63%
140.0	18.413	1.331	788.224	0.17%	97.79%
141.0	17.864	1.265	789.489	0.16%	97.95%
142.0	17.327	1.201	790.69	0.15%	98.10%
143.0	16.798	1.139	791.829	0.14%	98.24%
144.0	16.283	1.079	792.908	0.13%	98.38%
145.0	15.786	1.021	793.929	0.13%	98.50%
146.0	15.292	0.965	794.895	0.12%	98.62%
147.0	14.805	0.911	795.805	0.11%	98.74%
148.0	14.332	0.858	796.664	0.11%	98.84%
149.0	13.869	0.808	797.472	0.10%	98.94%
150.0	13.415	0.759	798.231	0.09%	99.04%
151.0	12.971	0.712	798.943	0.09%	99.12%

Equipment: ZT-40
Temperature($^{\circ}\text{C}$): 24.9

Date:
Humidity(%): 55.6%

Operator: LSC

Zonal flux distribution table

Appendix Page: 6 Total:23

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
152.0	12.539	0.667	799.611	0.08%	99.21%
153.0	12.117	0.624	800.235	0.08%	99.28%
154.0	11.709	0.583	800.818	0.07%	99.36%
155.0	11.313	0.543	801.361	0.07%	99.42%
156.0	10.919	0.506	801.867	0.06%	99.49%
157.0	10.526	0.469	802.336	0.06%	99.55%
158.0	10.136	0.434	802.769	0.05%	99.60%
159.0	9.747	0.400	803.169	0.05%	99.65%
160.0	9.358	0.367	803.536	0.05%	99.69%
161.0	8.967	0.335	803.871	0.04%	99.74%
162.0	8.573	0.305	804.176	0.04%	99.77%
163.0	8.180	0.276	804.453	0.03%	99.81%
164.0	7.784	0.249	804.701	0.03%	99.84%
165.0	7.386	0.222	804.923	0.03%	99.87%
166.0	6.982	0.197	805.121	0.02%	99.89%
167.0	6.564	0.173	805.294	0.02%	99.91%
168.0	6.122	0.151	805.445	0.02%	99.93%
169.0	5.668	0.129	805.573	0.02%	99.95%
170.0	5.200	0.109	805.682	0.01%	99.96%
171.0	4.688	0.089	805.772	0.01%	99.97%
172.0	4.093	0.071	805.843	0.01%	99.98%
173.0	3.423	0.054	805.897	0.01%	99.99%
174.0	2.820	0.039	805.935	0.00%	99.99%
175.0	2.294	0.027	805.962	0.00%	100.00%
176.0	1.791	0.018	805.98	0.00%	100.00%
177.0	1.333	0.010	805.99	0.00%	100.00%
178.0	1.008	0.006	805.996	0.00%	100.00%
179.0	0.900	0.003	805.999	0.00%	100.00%
180.0	0.883	0.001	805.999	0.00%	100.00%

Equipment: ZT-40
Temperature($^{\circ}\text{C}$): 24.9

Date:
Humidity(%): 55.6%

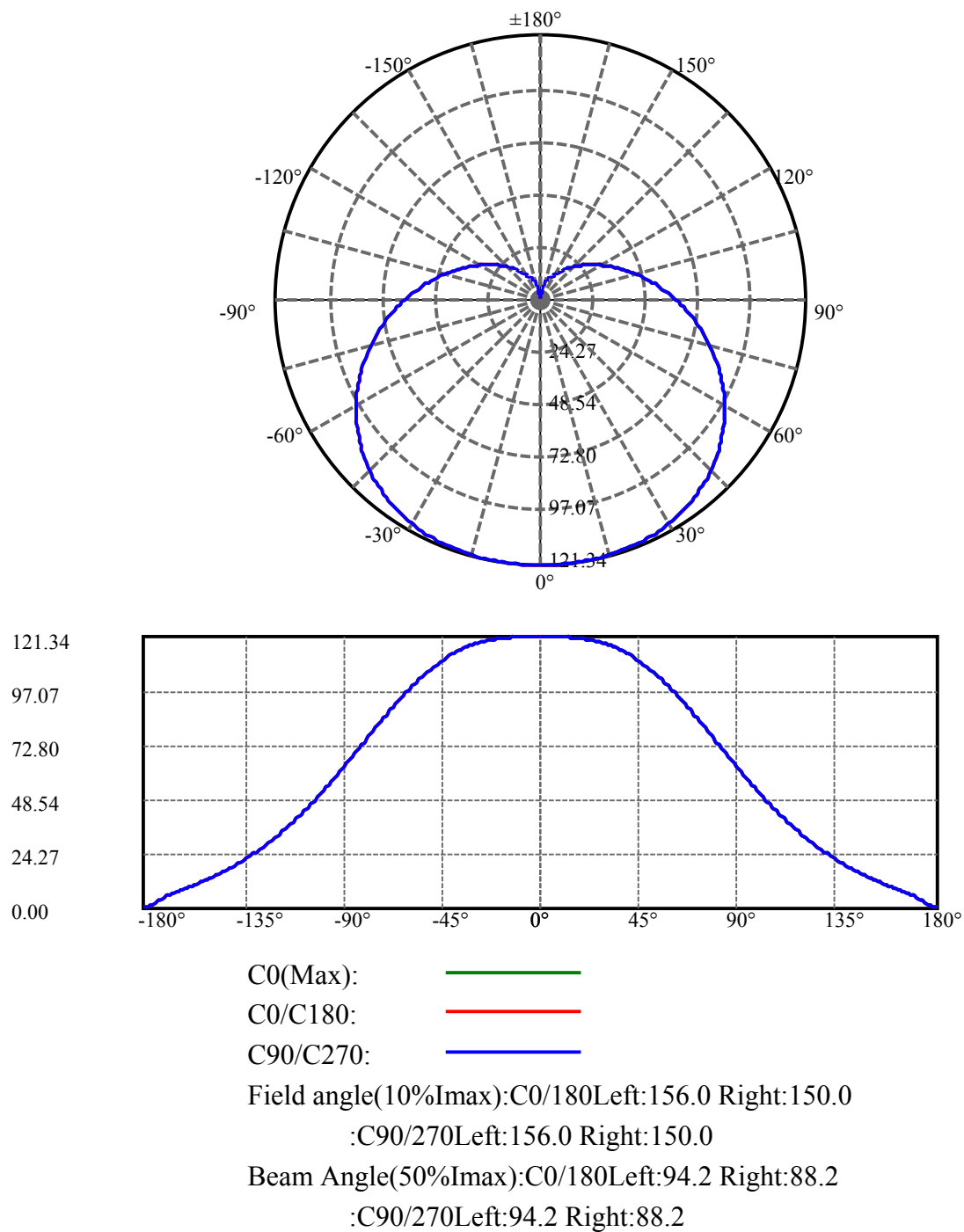
Operator: LSC

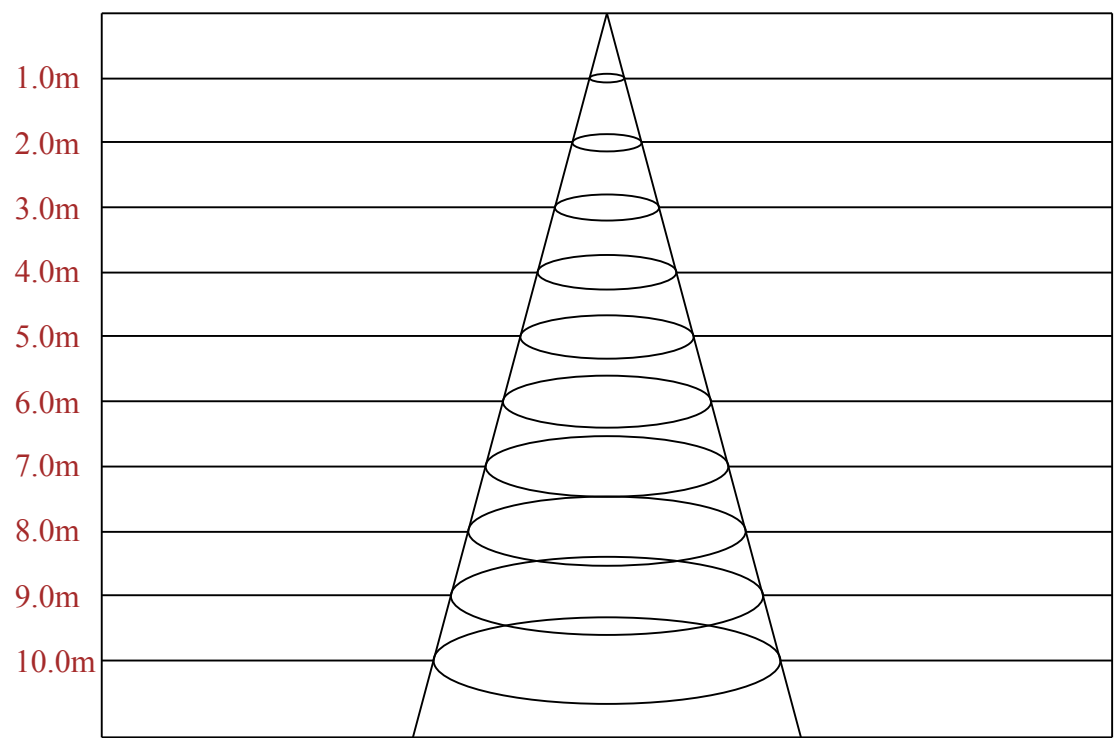
ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-30	101.01	12.53%
0-40	173.79	21.56%
0-60	350.56	43.49%
0-90	600.93	74.56%
0-120	746.35	92.60%
0-180	806.00	100.00%
60-90	250.36	31.06%
90-120	145.42	18.04%
90-130	170.68	21.18%
90-150	197.30	24.48%
90-180	205.07	25.44%
0-96.91	644.80	80.00%

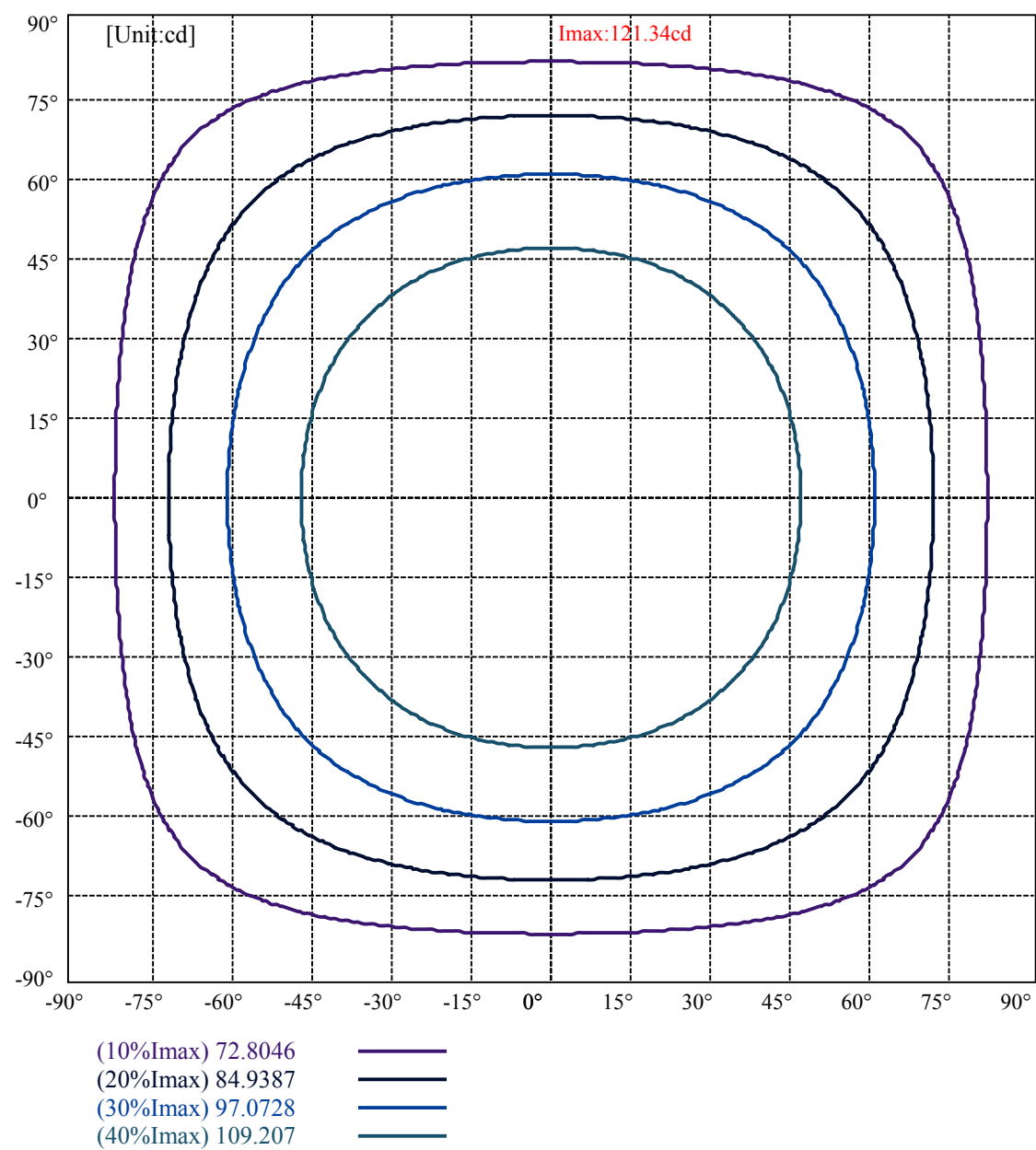
ZONAL LUMEN SUMMARY

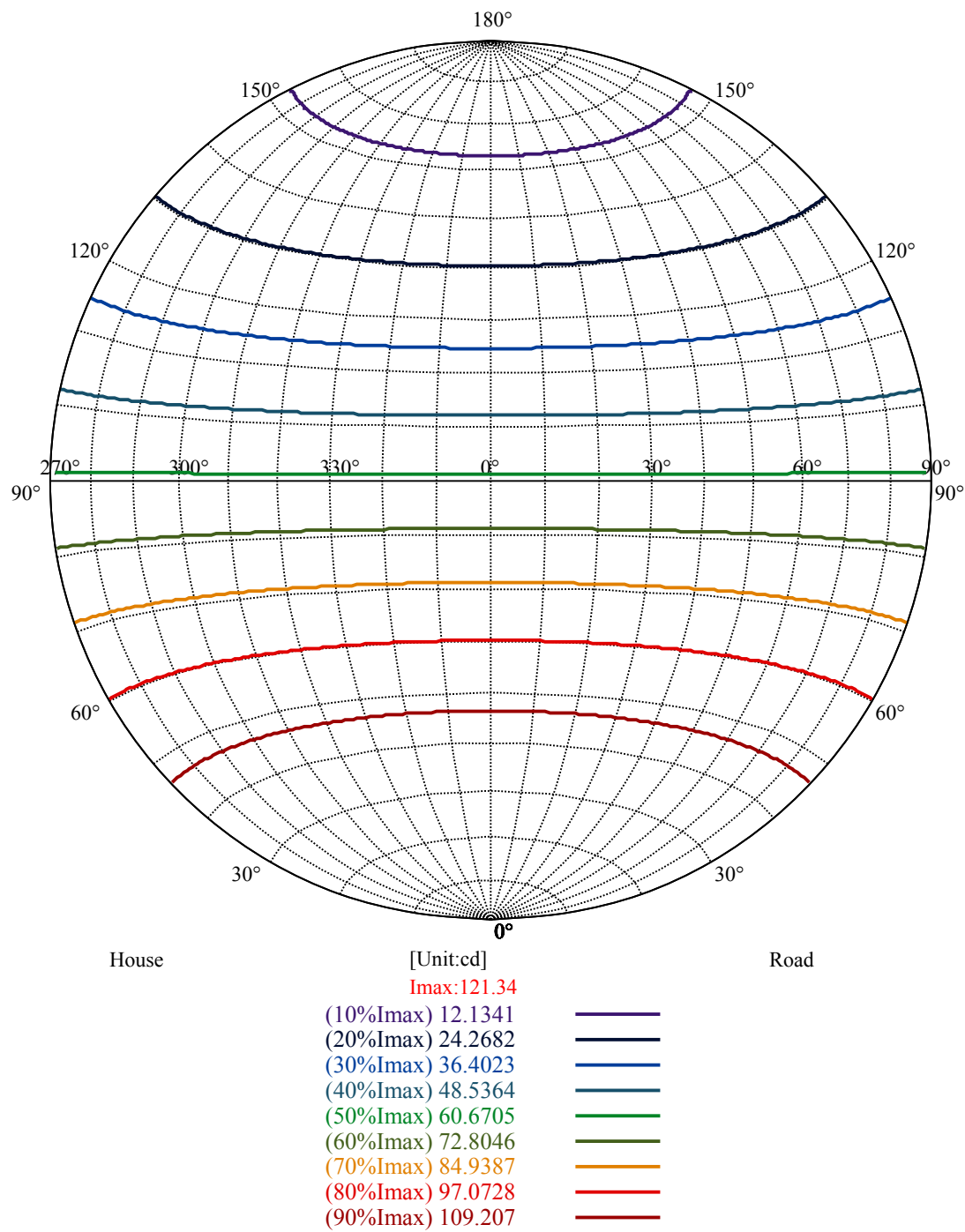
0-10	11.57
10-20	34.24
20-30	55.20
30-40	72.78
40-50	85.27
50-60	91.50
60-70	91.17
70-80	84.90
80-90	74.30
90-100	61.40
100-110	48.16
110-120	35.87
120-130	25.26
130-140	16.62
140-150	10.01
150-160	5.30
160-170	2.15
170-180	0.32

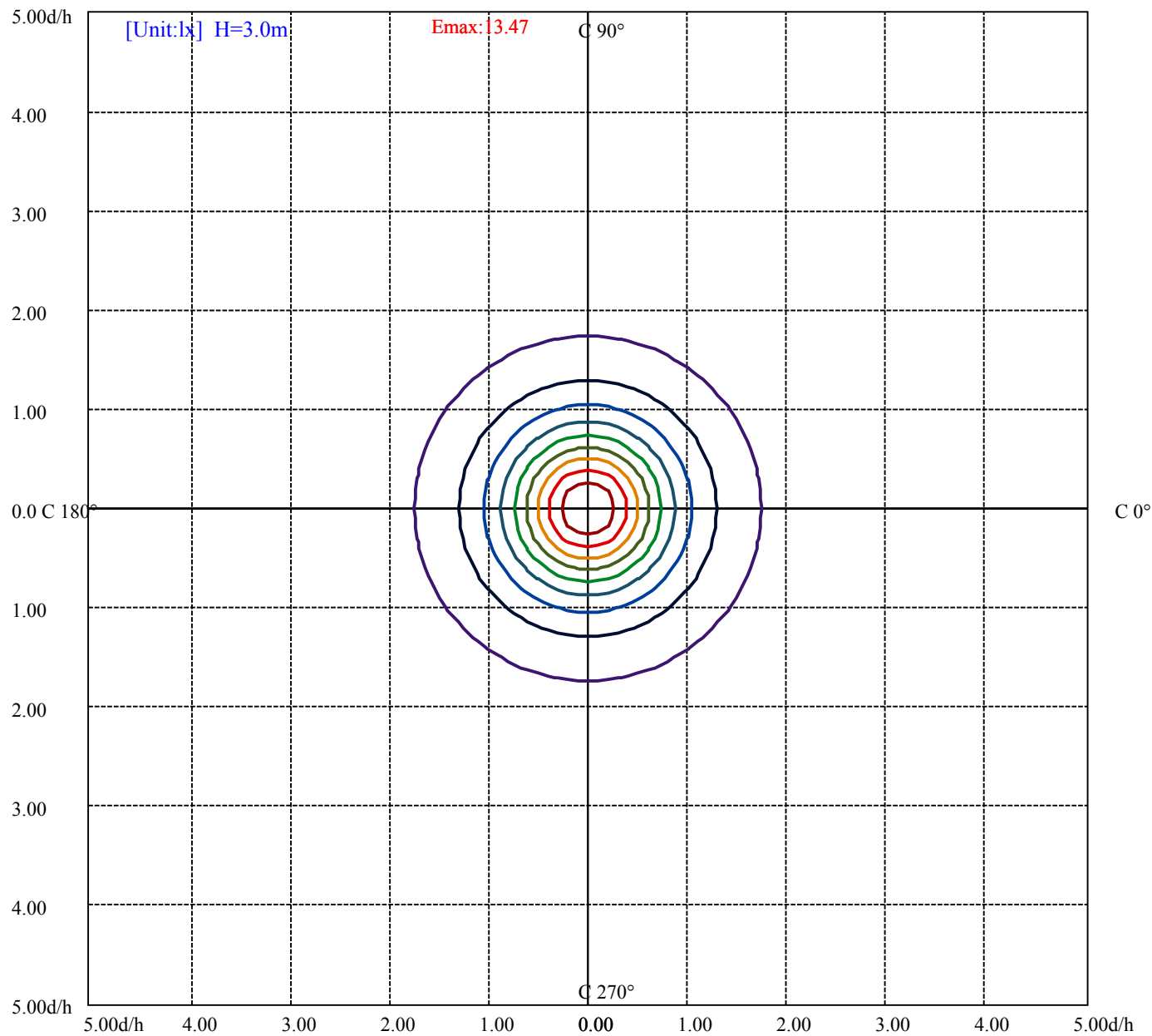




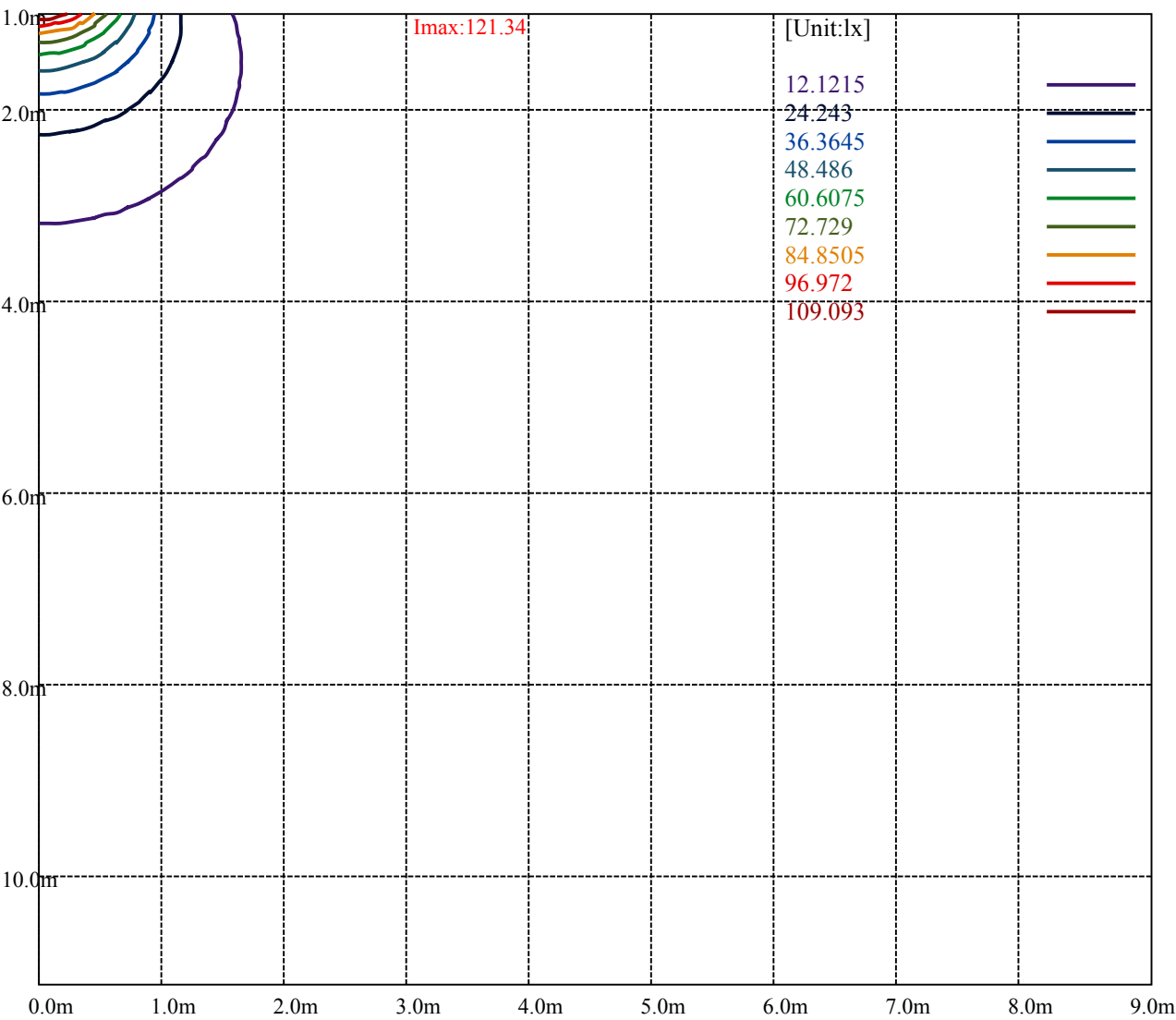
Max , Ave Beam angle of C0 plane 182.41







(10%Emax)	1.346833	—
(20%Emax)	2.693667	—
(30%Emax)	4.0405	—
(40%Emax)	5.387333	—
(50%Emax)	6.734167	—
(60%Emax)	8.080999	—
(70%Emax)	9.427834	—
(80%Emax)	10.77467	—
(90%Emax)	12.12156	—



Luminance Limiting Curve(no luminous side)

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Luminance Table

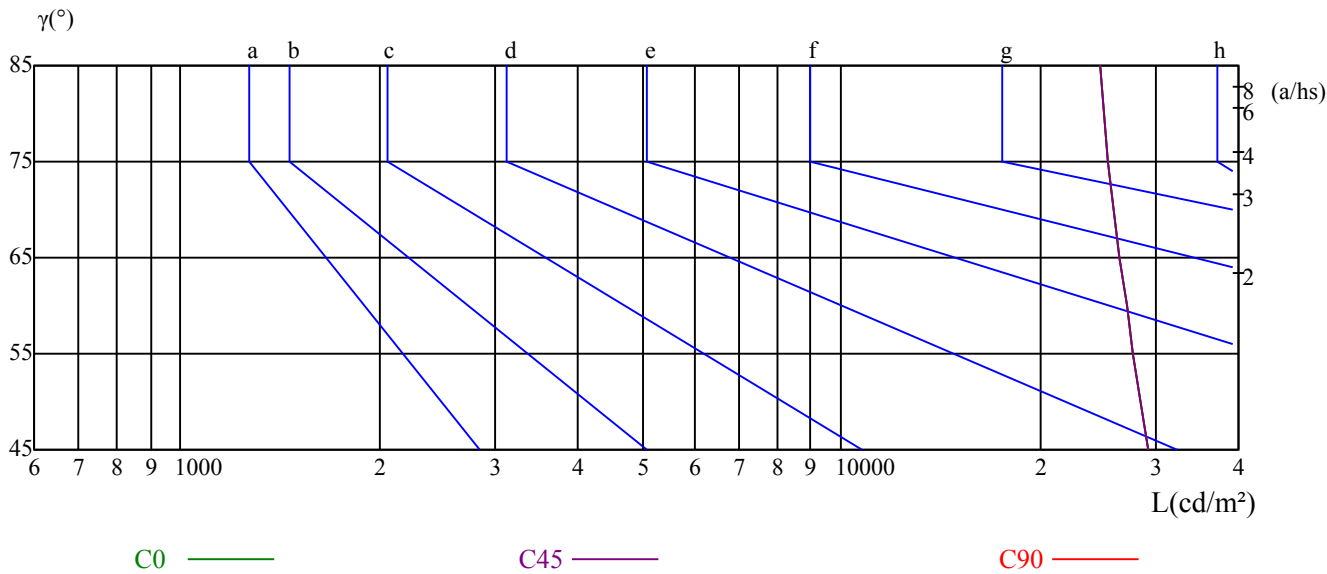
γ	45	50	55	60	65	70	75	80	85
C0	29171	28425	27722	27057	26441	25874	25372	24965	24702
C45	29171	28425	27722	27057	26441	25874	25372	24965	24702
C90	29171	28425	27722	27057	26441	25874	25372	24965	24702

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
76977	76977	76977	109767	109767	109767	276345	276345	276345

Glare Table

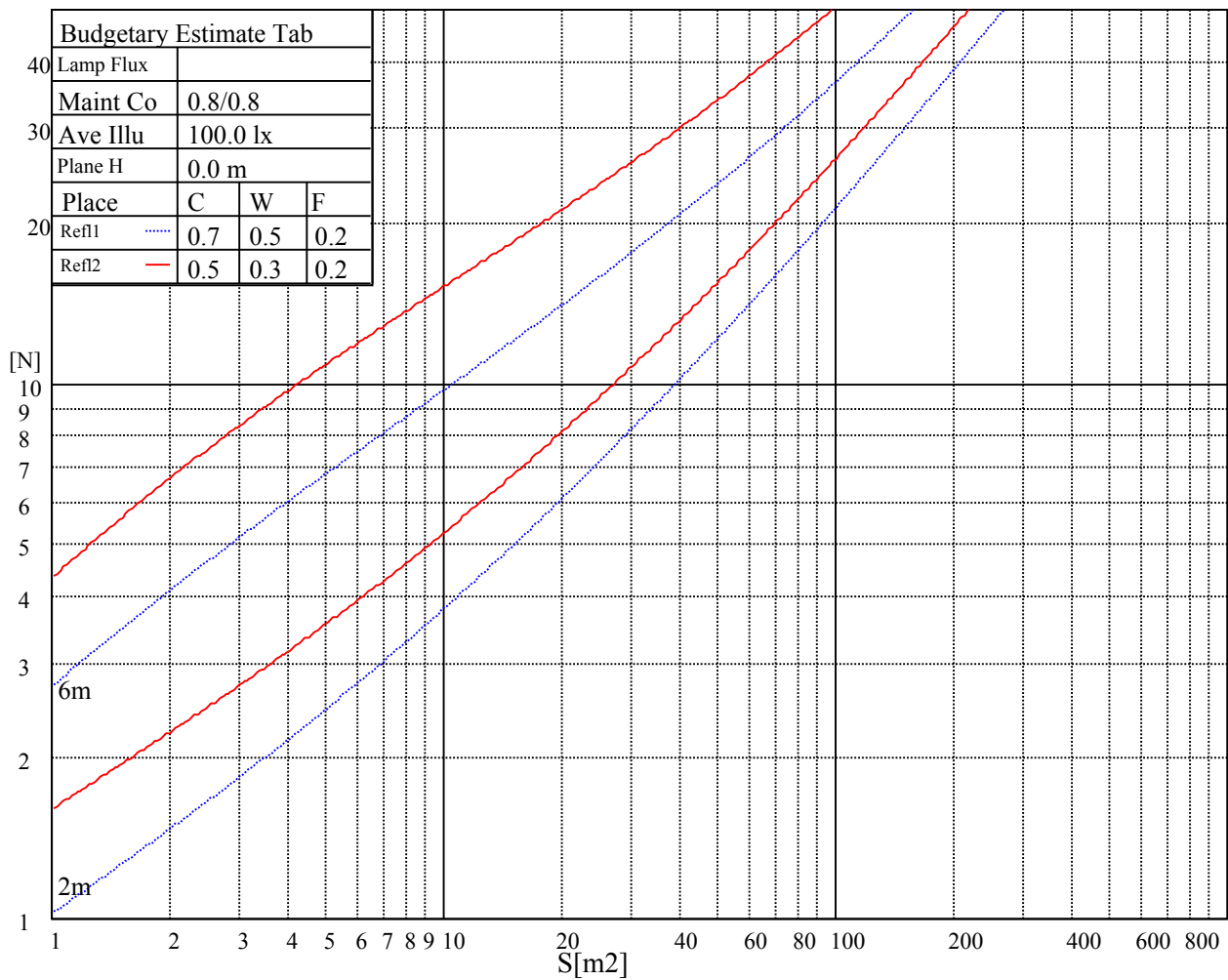
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

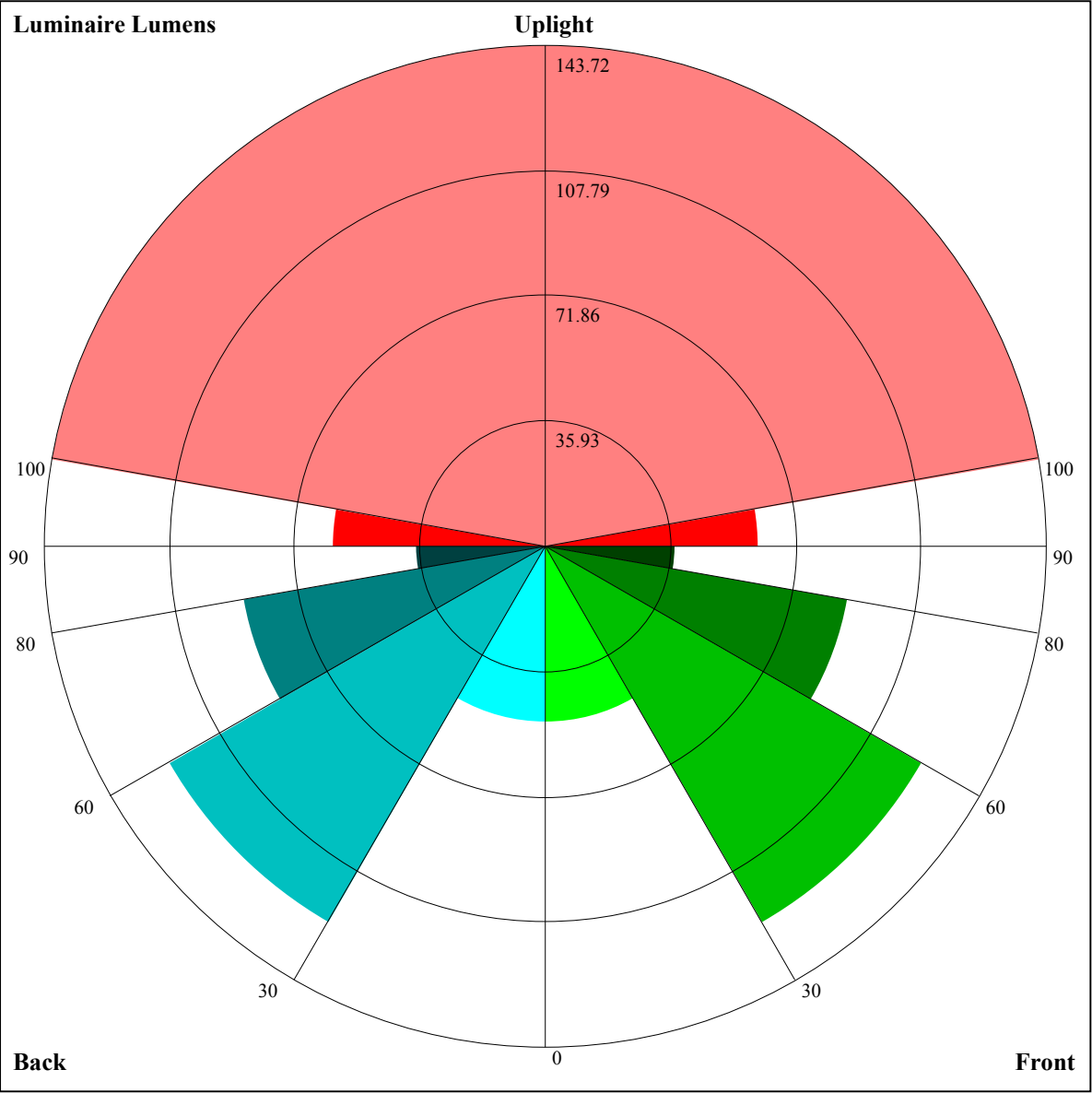


Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	21.94	23.24	22.63	23.97	24.83	21.94	23.24	22.63	23.97	24.83
	3H	24.22	25.42	24.93	26.17	27.05	24.22	25.42	24.93	26.17	27.05
	4H	25.30	26.44	26.01	27.19	28.08	25.30	26.44	26.01	27.19	28.08
	6H	26.37	27.44	27.09	28.20	29.12	26.37	27.44	27.09	28.20	29.12
	8H	26.86	27.90	27.59	28.66	29.58	26.86	27.90	27.59	28.66	29.58
	12H	27.32	28.33	28.06	29.10	30.03	27.32	28.33	28.06	29.10	30.03
4H	2H	22.80	23.94	23.51	24.69	25.58	22.80	23.94	23.51	24.69	25.58
	3H	25.24	26.25	25.97	27.01	27.94	25.24	26.25	25.97	27.01	27.94
	4H	26.52	27.44	27.27	28.22	29.17	26.52	27.44	27.27	28.22	29.17
	6H	27.72	28.56	28.49	29.36	30.30	27.72	28.56	28.49	29.36	30.30
	8H	28.32	29.11	29.10	29.91	30.87	28.32	29.11	29.10	29.91	30.87
	12H	28.90	29.64	29.68	30.44	31.42	28.90	29.64	29.68	30.44	31.42
8H	4H	27.01	27.80	27.79	28.60	29.56	27.01	27.80	27.79	28.60	29.56
	6H	28.43	29.11	29.22	29.92	30.90	28.43	29.11	29.22	29.92	30.90
	8H	29.22	29.83	30.03	30.67	31.65	29.22	29.83	30.03	30.67	31.65
	12H	29.95	30.48	30.76	31.33	32.32	29.95	30.48	30.76	31.33	32.32
12H	4H	27.11	27.85	27.90	28.65	29.63	27.11	27.85	27.90	28.65	29.63
	6H	28.65	29.26	29.46	30.10	31.08	28.65	29.26	29.46	30.10	31.08
	8H	29.47	30.01	30.29	30.85	31.84	29.47	30.01	30.29	30.85	31.84
Variation with the observer position at spacings:											
S = 1.0H		0.2/-0.9					0.2/-0.9				
S = 1.5H		0.4/-0.8					0.4/-0.8				
S = 2.0H		0.3/-0.6					0.3/-0.6				
Standard tables:		BKBF					BKBF				
Uncorrected UGR		13.7					13.7				

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



RHOC	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 RHOF=20 CU															
0	1.13	1.13	1.13	1.07	1.07	1.07	0.97	0.97	0.97	0.87	0.87	0.87	0.79	0.79	0.79	0.75
1	0.92	0.87	0.82	0.88	0.82	0.78	0.79	0.74	0.71	0.70	0.67	0.64	0.63	0.60	0.58	0.54
2	0.78	0.70	0.63	0.74	0.67	0.60	0.66	0.60	0.55	0.59	0.54	0.50	0.53	0.49	0.45	0.41
3	0.67	0.58	0.51	0.64	0.55	0.49	0.57	0.50	0.44	0.51	0.45	0.40	0.45	0.41	0.37	0.33
4	0.59	0.49	0.42	0.56	0.47	0.40	0.50	0.43	0.37	0.45	0.38	0.34	0.40	0.35	0.30	0.27
5	0.52	0.42	0.35	0.49	0.40	0.34	0.44	0.37	0.31	0.40	0.33	0.28	0.35	0.30	0.26	0.23
6	0.46	0.37	0.30	0.44	0.35	0.29	0.40	0.32	0.27	0.35	0.29	0.24	0.32	0.26	0.22	0.19
7	0.42	0.32	0.26	0.40	0.31	0.25	0.36	0.28	0.23	0.32	0.26	0.21	0.29	0.23	0.19	0.17
8	0.38	0.29	0.23	0.36	0.28	0.22	0.33	0.25	0.20	0.29	0.23	0.19	0.26	0.21	0.17	0.15
9	0.34	0.26	0.20	0.33	0.25	0.19	0.30	0.23	0.18	0.27	0.21	0.17	0.24	0.19	0.15	0.13
10	0.32	0.23	0.18	0.30	0.23	0.17	0.27	0.21	0.16	0.25	0.19	0.15	0.22	0.17	0.14	0.12



Luminaire Lumens:

FL=50.5,FM=124.76,FH=88.03,FVH=37.15

BL=50.5,BM=124.76,BH=88.03,BVH=37.15

UL=61.41,UH=143.72

BUG Rating:B0-U3-G1

Intensity data(cd)

Appendix Page: 19 Total:23

C/ γ (°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
0.0	121.22	121.26	121.33	121.34	121.32	121.31	121.29	121.27	121.24
45.0	121.22	121.26	121.33	121.34	121.32	121.31	121.29	121.27	121.24
90.0	121.22	121.26	121.33	121.34	121.32	121.31	121.29	121.27	121.24
135.0	121.22	121.26	121.33	121.34	121.32	121.31	121.29	121.27	121.24
180.0	121.22	121.26	121.33	121.34	121.32	121.31	121.29	121.27	121.24
225.0	121.22	121.26	121.33	121.34	121.32	121.31	121.29	121.27	121.24
270.0	121.22	121.26	121.33	121.34	121.32	121.31	121.29	121.27	121.24
315.0	121.22	121.26	121.33	121.34	121.32	121.31	121.29	121.27	121.24
360.0	121.22	121.26	121.33	121.34	121.32	121.31	121.29	121.27	121.24
C/ γ (°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	121.21	121.17	121.12	121.07	121.01	120.94	120.87	120.78	120.68
45.0	121.21	121.17	121.12	121.07	121.01	120.94	120.87	120.78	120.68
90.0	121.21	121.17	121.12	121.07	121.01	120.94	120.87	120.78	120.68
135.0	121.21	121.17	121.12	121.07	121.01	120.94	120.87	120.78	120.68
180.0	121.21	121.17	121.12	121.07	121.01	120.94	120.87	120.78	120.68
225.0	121.21	121.17	121.12	121.07	121.01	120.94	120.87	120.78	120.68
270.0	121.21	121.17	121.12	121.07	121.01	120.94	120.87	120.78	120.68
315.0	121.21	121.17	121.12	121.07	121.01	120.94	120.87	120.78	120.68
360.0	121.21	121.17	121.12	121.07	121.01	120.94	120.87	120.78	120.68
C/ γ (°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	120.58	120.46	120.32	120.17	120.01	119.83	119.64	119.42	119.18
45.0	120.58	120.46	120.32	120.17	120.01	119.83	119.64	119.42	119.18
90.0	120.58	120.46	120.32	120.17	120.01	119.83	119.64	119.42	119.18
135.0	120.58	120.46	120.32	120.17	120.01	119.83	119.64	119.42	119.18
180.0	120.58	120.46	120.32	120.17	120.01	119.83	119.64	119.42	119.18
225.0	120.58	120.46	120.32	120.17	120.01	119.83	119.64	119.42	119.18
270.0	120.58	120.46	120.32	120.17	120.01	119.83	119.64	119.42	119.18
315.0	120.58	120.46	120.32	120.17	120.01	119.83	119.64	119.42	119.18
360.0	120.58	120.46	120.32	120.17	120.01	119.83	119.64	119.42	119.18
C/ γ (°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	118.92	118.64	118.34	118.02	117.68	117.31	116.91	116.50	116.04
45.0	118.92	118.64	118.34	118.02	117.68	117.31	116.91	116.50	116.04
90.0	118.92	118.64	118.34	118.02	117.68	117.31	116.91	116.50	116.04
135.0	118.92	118.64	118.34	118.02	117.68	117.31	116.91	116.50	116.04
180.0	118.92	118.64	118.34	118.02	117.68	117.31	116.91	116.50	116.04
225.0	118.92	118.64	118.34	118.02	117.68	117.31	116.91	116.50	116.04
270.0	118.92	118.64	118.34	118.02	117.68	117.31	116.91	116.50	116.04
315.0	118.92	118.64	118.34	118.02	117.68	117.31	116.91	116.50	116.04
360.0	118.92	118.64	118.34	118.02	117.68	117.31	116.91	116.50	116.04
C/ γ (°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	115.57	115.09	114.58	114.04	113.47	112.88	112.28	111.65	110.99
45.0	115.57	115.09	114.58	114.04	113.47	112.88	112.28	111.65	110.99
90.0	115.57	115.09	114.58	114.04	113.47	112.88	112.28	111.65	110.99
135.0	115.57	115.09	114.58	114.04	113.47	112.88	112.28	111.65	110.99
180.0	115.57	115.09	114.58	114.04	113.47	112.88	112.28	111.65	110.99
225.0	115.57	115.09	114.58	114.04	113.47	112.88	112.28	111.65	110.99
270.0	115.57	115.09	114.58	114.04	113.47	112.88	112.28	111.65	110.99
315.0	115.57	115.09	114.58	114.04	113.47	112.88	112.28	111.65	110.99
360.0	115.57	115.09	114.58	114.04	113.47	112.88	112.28	111.65	110.99

C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	110.30	109.60	108.86	108.11	107.34	106.53	105.69	104.85	103.98
45.0	110.30	109.60	108.86	108.11	107.34	106.53	105.69	104.85	103.98
90.0	110.30	109.60	108.86	108.11	107.34	106.53	105.69	104.85	103.98
135.0	110.30	109.60	108.86	108.11	107.34	106.53	105.69	104.85	103.98
180.0	110.30	109.60	108.86	108.11	107.34	106.53	105.69	104.85	103.98
225.0	110.30	109.60	108.86	108.11	107.34	106.53	105.69	104.85	103.98
270.0	110.30	109.60	108.86	108.11	107.34	106.53	105.69	104.85	103.98
315.0	110.30	109.60	108.86	108.11	107.34	106.53	105.69	104.85	103.98
360.0	110.30	109.60	108.86	108.11	107.34	106.53	105.69	104.85	103.98

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	103.09	102.18	101.25	100.29	99.31	98.31	97.30	96.27	95.22
45.0	103.09	102.18	101.25	100.29	99.31	98.31	97.30	96.27	95.22
90.0	103.09	102.18	101.25	100.29	99.31	98.31	97.30	96.27	95.22
135.0	103.09	102.18	101.25	100.29	99.31	98.31	97.30	96.27	95.22
180.0	103.09	102.18	101.25	100.29	99.31	98.31	97.30	96.27	95.22
225.0	103.09	102.18	101.25	100.29	99.31	98.31	97.30	96.27	95.22
270.0	103.09	102.18	101.25	100.29	99.31	98.31	97.30	96.27	95.22
315.0	103.09	102.18	101.25	100.29	99.31	98.31	97.30	96.27	95.22
360.0	103.09	102.18	101.25	100.29	99.31	98.31	97.30	96.27	95.22

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	94.16	93.08	91.98	90.87	89.75	88.61	87.46	86.29	85.12
45.0	94.16	93.08	91.98	90.87	89.75	88.61	87.46	86.29	85.12
90.0	94.16	93.08	91.98	90.87	89.75	88.61	87.46	86.29	85.12
135.0	94.16	93.08	91.98	90.87	89.75	88.61	87.46	86.29	85.12
180.0	94.16	93.08	91.98	90.87	89.75	88.61	87.46	86.29	85.12
225.0	94.16	93.08	91.98	90.87	89.75	88.61	87.46	86.29	85.12
270.0	94.16	93.08	91.98	90.87	89.75	88.61	87.46	86.29	85.12
315.0	94.16	93.08	91.98	90.87	89.75	88.61	87.46	86.29	85.12
360.0	94.16	93.08	91.98	90.87	89.75	88.61	87.46	86.29	85.12

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	83.93	82.74	81.54	80.33	79.10	77.89	76.67	75.44	74.21
45.0	83.93	82.74	81.54	80.33	79.10	77.89	76.67	75.44	74.21
90.0	83.93	82.74	81.54	80.33	79.10	77.89	76.67	75.44	74.21
135.0	83.93	82.74	81.54	80.33	79.10	77.89	76.67	75.44	74.21
180.0	83.93	82.74	81.54	80.33	79.10	77.89	76.67	75.44	74.21
225.0	83.93	82.74	81.54	80.33	79.10	77.89	76.67	75.44	74.21
270.0	83.93	82.74	81.54	80.33	79.10	77.89	76.67	75.44	74.21
315.0	83.93	82.74	81.54	80.33	79.10	77.89	76.67	75.44	74.21
360.0	83.93	82.74	81.54	80.33	79.10	77.89	76.67	75.44	74.21

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	72.99	71.76	70.54	69.32	68.10	66.88	65.66	64.46	63.26
45.0	72.99	71.76	70.54	69.32	68.10	66.88	65.66	64.46	63.26
90.0	72.99	71.76	70.54	69.32	68.10	66.88	65.66	64.46	63.26
135.0	72.99	71.76	70.54	69.32	68.10	66.88	65.66	64.46	63.26
180.0	72.99	71.76	70.54	69.32	68.10	66.88	65.66	64.46	63.26
225.0	72.99	71.76	70.54	69.32	68.10	66.88	65.66	64.46	63.26
270.0	72.99	71.76	70.54	69.32	68.10	66.88	65.66	64.46	63.26
315.0	72.99	71.76	70.54	69.32	68.10	66.88	65.66	64.46	63.26
360.0	72.99	71.76	70.54	69.32	68.10	66.88	65.66	64.46	63.26

C/ γ (°)	90.0	91.0	92.0	93.0	94.0	95.0	96.0	97.0	98.0
0.0	62.06	60.87	59.69	58.52	57.36	56.22	55.08	53.95	52.84
45.0	62.06	60.87	59.69	58.52	57.36	56.22	55.08	53.95	52.84
90.0	62.06	60.87	59.69	58.52	57.36	56.22	55.08	53.95	52.84
135.0	62.06	60.87	59.69	58.52	57.36	56.22	55.08	53.95	52.84
180.0	62.06	60.87	59.69	58.52	57.36	56.22	55.08	53.95	52.84
225.0	62.06	60.87	59.69	58.52	57.36	56.22	55.08	53.95	52.84
270.0	62.06	60.87	59.69	58.52	57.36	56.22	55.08	53.95	52.84
315.0	62.06	60.87	59.69	58.52	57.36	56.22	55.08	53.95	52.84
360.0	62.06	60.87	59.69	58.52	57.36	56.22	55.08	53.95	52.84
C/ γ (°)	99.0	100.0	101.0	102.0	103.0	104.0	105.0	106.0	107.0
0.0	51.74	50.65	49.58	48.52	47.48	46.45	45.42	44.42	43.42
45.0	51.74	50.65	49.58	48.52	47.48	46.45	45.42	44.42	43.42
90.0	51.74	50.65	49.58	48.52	47.48	46.45	45.42	44.42	43.42
135.0	51.74	50.65	49.58	48.52	47.48	46.45	45.42	44.42	43.42
180.0	51.74	50.65	49.58	48.52	47.48	46.45	45.42	44.42	43.42
225.0	51.74	50.65	49.58	48.52	47.48	46.45	45.42	44.42	43.42
270.0	51.74	50.65	49.58	48.52	47.48	46.45	45.42	44.42	43.42
315.0	51.74	50.65	49.58	48.52	47.48	46.45	45.42	44.42	43.42
360.0	51.74	50.65	49.58	48.52	47.48	46.45	45.42	44.42	43.42
C/ γ (°)	108.0	109.0	110.0	111.0	112.0	113.0	114.0	115.0	116.0
0.0	42.45	41.48	40.53	39.60	38.68	37.78	36.89	36.01	35.15
45.0	42.45	41.48	40.53	39.60	38.68	37.78	36.89	36.01	35.15
90.0	42.45	41.48	40.53	39.60	38.68	37.78	36.89	36.01	35.15
135.0	42.45	41.48	40.53	39.60	38.68	37.78	36.89	36.01	35.15
180.0	42.45	41.48	40.53	39.60	38.68	37.78	36.89	36.01	35.15
225.0	42.45	41.48	40.53	39.60	38.68	37.78	36.89	36.01	35.15
270.0	42.45	41.48	40.53	39.60	38.68	37.78	36.89	36.01	35.15
315.0	42.45	41.48	40.53	39.60	38.68	37.78	36.89	36.01	35.15
360.0	42.45	41.48	40.53	39.60	38.68	37.78	36.89	36.01	35.15
C/ γ (°)	117.0	118.0	119.0	120.0	121.0	122.0	123.0	124.0	125.0
0.0	34.31	33.48	32.66	31.85	31.06	30.28	29.52	28.77	28.03
45.0	34.31	33.48	32.66	31.85	31.06	30.28	29.52	28.77	28.03
90.0	34.31	33.48	32.66	31.85	31.06	30.28	29.52	28.77	28.03
135.0	34.31	33.48	32.66	31.85	31.06	30.28	29.52	28.77	28.03
180.0	34.31	33.48	32.66	31.85	31.06	30.28	29.52	28.77	28.03
225.0	34.31	33.48	32.66	31.85	31.06	30.28	29.52	28.77	28.03
270.0	34.31	33.48	32.66	31.85	31.06	30.28	29.52	28.77	28.03
315.0	34.31	33.48	32.66	31.85	31.06	30.28	29.52	28.77	28.03
360.0	34.31	33.48	32.66	31.85	31.06	30.28	29.52	28.77	28.03
C/ γ (°)	126.0	127.0	128.0	129.0	130.0	131.0	132.0	133.0	134.0
0.0	27.30	26.58	25.88	25.19	24.52	23.85	23.20	22.56	21.93
45.0	27.30	26.58	25.88	25.19	24.52	23.85	23.20	22.56	21.93
90.0	27.30	26.58	25.88	25.19	24.52	23.85	23.20	22.56	21.93
135.0	27.30	26.58	25.88	25.19	24.52	23.85	23.20	22.56	21.93
180.0	27.30	26.58	25.88	25.19	24.52	23.85	23.20	22.56	21.93
225.0	27.30	26.58	25.88	25.19	24.52	23.85	23.20	22.56	21.93
270.0	27.30	26.58	25.88	25.19	24.52	23.85	23.20	22.56	21.93
315.0	27.30	26.58	25.88	25.19	24.52	23.85	23.20	22.56	21.93
360.0	27.30	26.58	25.88	25.19	24.52	23.85	23.20	22.56	21.93

C/ γ (°)	135.0	136.0	137.0	138.0	139.0	140.0	141.0	142.0	143.0
0.0	21.31	20.71	20.13	19.55	18.98	18.41	17.86	17.33	16.80
45.0	21.31	20.71	20.13	19.55	18.98	18.41	17.86	17.33	16.80
90.0	21.31	20.71	20.13	19.55	18.98	18.41	17.86	17.33	16.80
135.0	21.31	20.71	20.13	19.55	18.98	18.41	17.86	17.33	16.80
180.0	21.31	20.71	20.13	19.55	18.98	18.41	17.86	17.33	16.80
225.0	21.31	20.71	20.13	19.55	18.98	18.41	17.86	17.33	16.80
270.0	21.31	20.71	20.13	19.55	18.98	18.41	17.86	17.33	16.80
315.0	21.31	20.71	20.13	19.55	18.98	18.41	17.86	17.33	16.80
360.0	21.31	20.71	20.13	19.55	18.98	18.41	17.86	17.33	16.80
C/ γ (°)	144.0	145.0	146.0	147.0	148.0	149.0	150.0	151.0	152.0
0.0	16.28	15.79	15.29	14.81	14.33	13.87	13.42	12.97	12.54
45.0	16.28	15.79	15.29	14.81	14.33	13.87	13.42	12.97	12.54
90.0	16.28	15.79	15.29	14.81	14.33	13.87	13.42	12.97	12.54
135.0	16.28	15.79	15.29	14.81	14.33	13.87	13.42	12.97	12.54
180.0	16.28	15.79	15.29	14.81	14.33	13.87	13.42	12.97	12.54
225.0	16.28	15.79	15.29	14.81	14.33	13.87	13.42	12.97	12.54
270.0	16.28	15.79	15.29	14.81	14.33	13.87	13.42	12.97	12.54
315.0	16.28	15.79	15.29	14.81	14.33	13.87	13.42	12.97	12.54
360.0	16.28	15.79	15.29	14.81	14.33	13.87	13.42	12.97	12.54
C/ γ (°)	153.0	154.0	155.0	156.0	157.0	158.0	159.0	160.0	161.0
0.0	12.12	11.71	11.31	10.92	10.53	10.14	9.75	9.36	8.97
45.0	12.12	11.71	11.31	10.92	10.53	10.14	9.75	9.36	8.97
90.0	12.12	11.71	11.31	10.92	10.53	10.14	9.75	9.36	8.97
135.0	12.12	11.71	11.31	10.92	10.53	10.14	9.75	9.36	8.97
180.0	12.12	11.71	11.31	10.92	10.53	10.14	9.75	9.36	8.97
225.0	12.12	11.71	11.31	10.92	10.53	10.14	9.75	9.36	8.97
270.0	12.12	11.71	11.31	10.92	10.53	10.14	9.75	9.36	8.97
315.0	12.12	11.71	11.31	10.92	10.53	10.14	9.75	9.36	8.97
360.0	12.12	11.71	11.31	10.92	10.53	10.14	9.75	9.36	8.97
C/ γ (°)	162.0	163.0	164.0	165.0	166.0	167.0	168.0	169.0	170.0
0.0	8.57	8.18	7.78	7.39	6.98	6.56	6.12	5.67	5.20
45.0	8.57	8.18	7.78	7.39	6.98	6.56	6.12	5.67	5.20
90.0	8.57	8.18	7.78	7.39	6.98	6.56	6.12	5.67	5.20
135.0	8.57	8.18	7.78	7.39	6.98	6.56	6.12	5.67	5.20
180.0	8.57	8.18	7.78	7.39	6.98	6.56	6.12	5.67	5.20
225.0	8.57	8.18	7.78	7.39	6.98	6.56	6.12	5.67	5.20
270.0	8.57	8.18	7.78	7.39	6.98	6.56	6.12	5.67	5.20
315.0	8.57	8.18	7.78	7.39	6.98	6.56	6.12	5.67	5.20
360.0	8.57	8.18	7.78	7.39	6.98	6.56	6.12	5.67	5.20
C/ γ (°)	171.0	172.0	173.0	174.0	175.0	176.0	177.0	178.0	179.0
0.0	4.69	4.09	3.42	2.82	2.29	1.79	1.33	1.01	0.90
45.0	4.69	4.09	3.42	2.82	2.29	1.79	1.33	1.01	0.90
90.0	4.69	4.09	3.42	2.82	2.29	1.79	1.33	1.01	0.90
135.0	4.69	4.09	3.42	2.82	2.29	1.79	1.33	1.01	0.90
180.0	4.69	4.09	3.42	2.82	2.29	1.79	1.33	1.01	0.90
225.0	4.69	4.09	3.42	2.82	2.29	1.79	1.33	1.01	0.90
270.0	4.69	4.09	3.42	2.82	2.29	1.79	1.33	1.01	0.90
315.0	4.69	4.09	3.42	2.82	2.29	1.79	1.33	1.01	0.90
360.0	4.69	4.09	3.42	2.82	2.29	1.79	1.33	1.01	0.90

Intensity data(cd)

Appendix Page: 23 Total:23

C/$\gamma(^{\circ})$	180.0
0.0	0.88
45.0	0.88
90.0	0.88
135.0	0.88
180.0	0.88
225.0	0.88
270.0	0.88
315.0	0.88
360.0	0.88