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Nata

LumCAT: 2-1570-A

Luminaire: 92.70.188.00+92.70.147.00

Report No: NT2017092616

Voltage(V): 35.4000

Test No: GC2017092616

Current(A): 0.3000

LampCAT: LUMILEDS 1203

Power (W): 10.6200

Lamp flux(lm): 1187.0

PF: 0.0000

Number of Lamps: 1

Ballast type: DC

Length(mm): 65

Width(mm): 65

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 977.39

Efficiency(%): 82.34%

Lumens(lm)/Power(W): 92.03

Central intensity(cd): 8782.321

Maximum intensity(cd): 8782.321

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=13.2

[C90/270]Total=13.2

Field angle(10%Imax): [C0/180]Total=30.5

[C90/270]Total=30.5

Beam angle of C0 plane : 13.16

Average BeamAngle(IEC 61341):13.16

Maximum s/h(1/2): C0_180=0.23 C90_270=0.23

Maximum s/h(1/4): C0_180=0.23 C90_270=0.23

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 82.51%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 97.681%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	8782.322	2.101	2.101	.177%	.215%
1.0	8646.057	16.547	18.648	1.394%	1.908%
2.0	8148.347	31.185	49.833	2.627%	5.099%
3.0	7508.798	43.095	92.928	3.631%	9.508%
4.0	6773.727	51.816	144.744	4.365%	14.809%
5.0	5809.827	55.528	200.271	4.678%	20.490%
6.0	4905.938	56.235	256.507	4.738%	26.244%
7.0	4016.777	53.681	310.188	4.522%	31.736%
8.0	3148.263	48.048	358.236	4.048%	36.652%
9.0	2476.987	42.492	400.728	3.580%	41.000%
10.0	1961.935	37.360	438.088	3.147%	44.822%
11.0	1583.353	33.131	471.219	2.791%	48.212%
12.0	1336.838	30.480	501.698	2.568%	51.331%
13.0	1133.013	27.950	529.648	2.355%	54.190%
14.0	1015.522	26.941	556.589	2.270%	56.947%
15.0	904.928	25.684	582.273	2.164%	59.574%
16.0	802.165	24.247	606.52	2.043%	62.055%
17.0	700.744	22.467	628.987	1.893%	64.354%
18.0	621.105	21.047	650.034	1.773%	66.507%
19.0	559.710	19.983	670.017	1.683%	68.552%
20.0	500.697	18.779	688.796	1.582%	70.473%
21.0	453.080	17.806	706.602	1.500%	72.295%
22.0	413.900	17.003	723.605	1.432%	74.035%
23.0	375.030	16.069	739.674	1.354%	75.679%
24.0	339.512	15.143	754.817	1.276%	77.228%
25.0	309.266	14.333	769.15	1.207%	78.695%
26.0	282.426	13.577	782.727	1.144%	80.084%
27.0	261.036	12.996	795.723	1.095%	81.413%
28.0	234.926	12.095	807.817	1.019%	82.651%
29.0	214.913	11.426	819.243	.963%	83.820%
30.0	198.203	10.868	830.111	.916%	84.932%
31.0	181.810	10.269	840.379	.865%	85.982%
32.0	164.240	9.544	849.923	.804%	86.959%
33.0	149.375	8.922	858.845	.752%	87.872%
34.0	137.111	8.408	867.253	.708%	88.732%
35.0	125.687	7.906	875.158	.666%	89.541%
36.0	115.660	7.455	882.613	.628%	90.303%
37.0	107.449	7.091	889.705	.597%	91.029%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	99.900	6.745	896.449	.568%	91.719%
39.0	89.006	6.142	902.592	.517%	92.347%
40.0	81.132	5.719	908.311	.482%	92.933%
41.0	74.539	5.363	913.673	.452%	93.481%
42.0	67.802	4.975	918.648	.419%	93.990%
43.0	61.739	4.617	923.266	.389%	94.463%
44.0	55.889	4.257	927.523	.359%	94.898%
45.0	49.805	3.862	931.385	.325%	95.293%
46.0	44.513	3.511	934.897	.296%	95.653%
47.0	39.799	3.192	938.089	.269%	95.979%
48.0	35.504	2.893	940.982	.244%	96.275%
49.0	31.864	2.637	943.619	.222%	96.545%
50.0	28.464	2.391	946.01	.201%	96.790%
51.0	24.934	2.125	948.135	.179%	97.007%
52.0	21.403	1.850	949.985	.156%	97.196%
53.0	16.950	1.485	951.469	.125%	97.348%
54.0	12.167	1.079	952.549	.091%	97.459%
55.0	9.525	0.856	953.404	.072%	97.546%
56.0	8.148	0.741	954.145	.062%	97.622%
57.0	7.164	0.659	954.804	.056%	97.689%
58.0	6.951	0.646	955.45	.054%	97.756%
59.0	6.848	0.644	956.094	.054%	97.821%
60.0	6.751	0.641	956.735	.054%	97.887%
61.0	6.682	0.641	957.376	.054%	97.953%
62.0	6.648	0.644	958.02	.054%	98.019%
63.0	6.621	0.647	958.667	.054%	98.085%
64.0	6.600	0.651	959.317	.055%	98.151%
65.0	6.600	0.656	959.973	.055%	98.218%
66.0	6.600	0.661	960.634	.056%	98.286%
67.0	6.600	0.666	961.3	.056%	98.354%
68.0	6.607	0.672	961.972	.057%	98.423%
69.0	6.600	0.676	962.648	.057%	98.492%
70.0	6.600	0.680	963.328	.057%	98.562%
71.0	6.634	0.688	964.016	.058%	98.632%
72.0	6.662	0.695	964.711	.059%	98.703%
73.0	6.682	0.701	965.411	.059%	98.775%
74.0	6.717	0.708	966.12	.060%	98.847%
75.0	6.799	0.720	966.84	.061%	98.921%

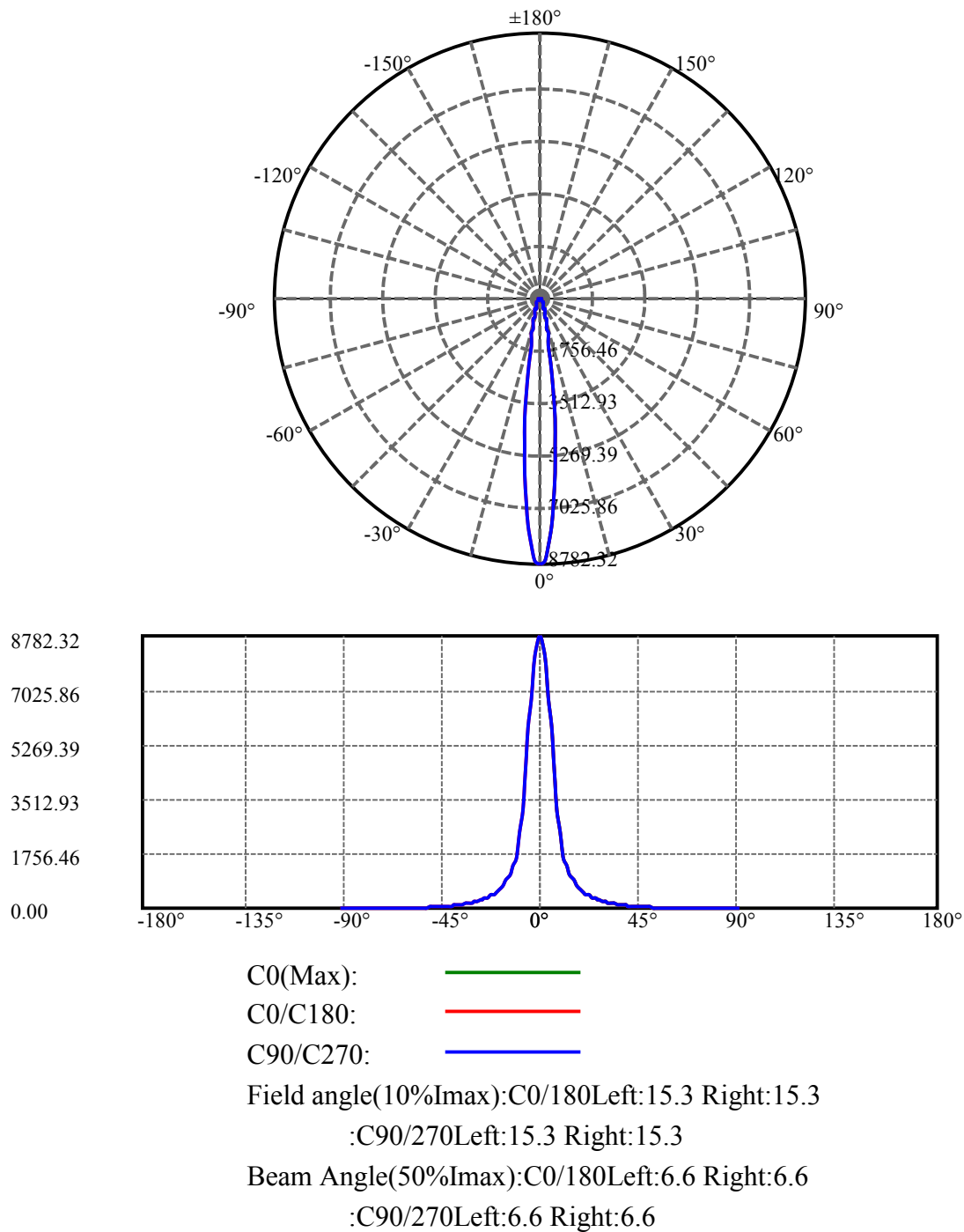
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	6.882	0.732	967.572	.062%	98.996%
77.0	6.999	0.748	968.32	.063%	99.072%
78.0	7.171	0.769	969.089	.065%	99.151%
79.0	7.323	0.788	969.877	.066%	99.232%
80.0	7.495	0.809	970.687	.068%	99.315%
81.0	7.543	0.817	971.504	.069%	99.398%
82.0	7.563	0.821	972.325	.069%	99.482%
83.0	7.612	0.828	973.153	.070%	99.567%
84.0	7.646	0.834	973.987	.070%	99.652%
85.0	7.625	0.833	974.82	.070%	99.737%
86.0	7.075	0.774	975.594	.065%	99.817%
87.0	5.836	0.639	976.233	.054%	99.882%
88.0	4.487	0.492	976.725	.041%	99.932%
89.0	4.040	0.443	977.168	.037%	99.978%
90.0	3.985	0.218	977.387	.018%	100.000%

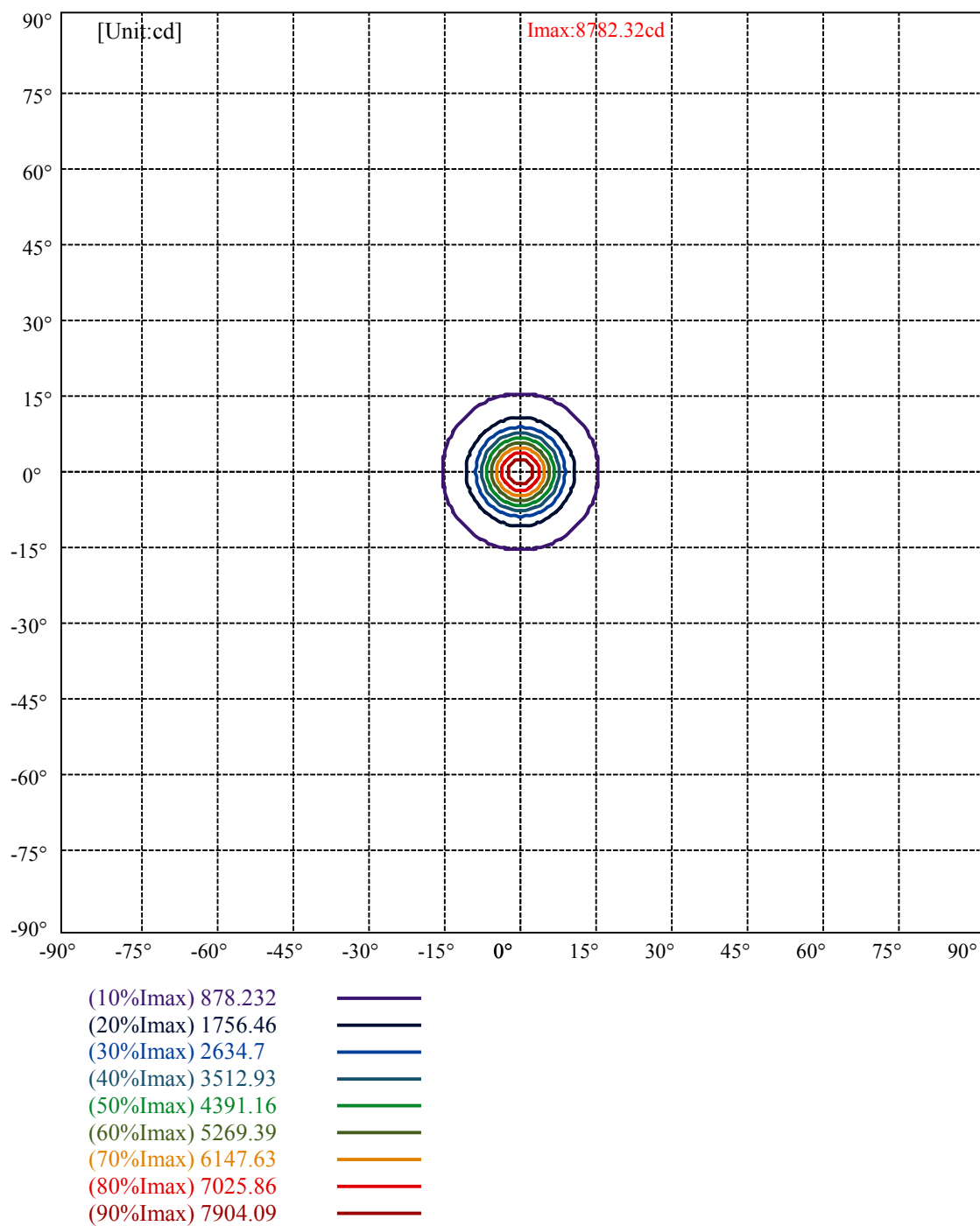
ZONAL LUMEN SUMMARY

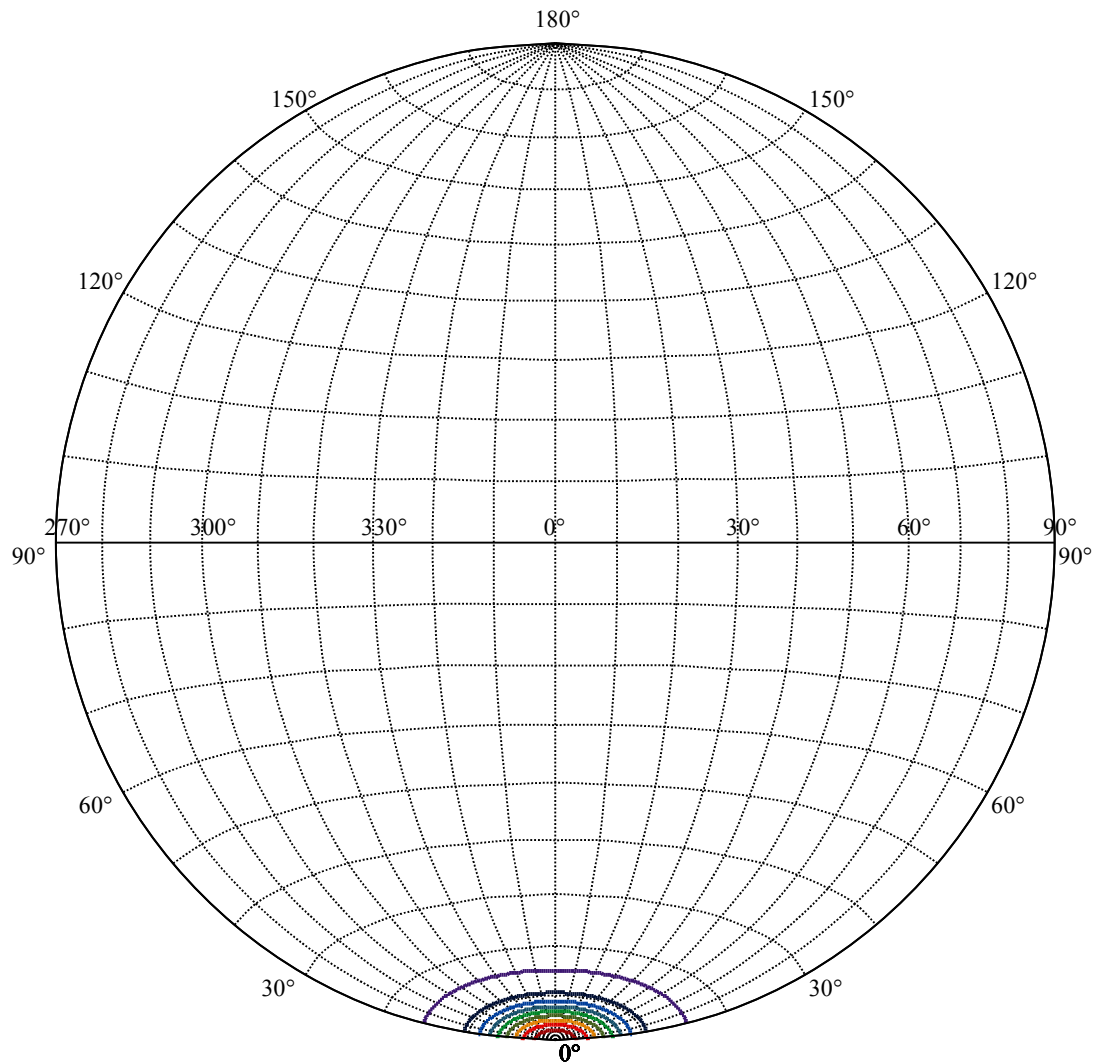
Zone	Lumens	%Lamp	%Fixt
0-30	830.11	69.93%	84.93%
0-40	908.31	76.52%	92.93%
0-60	956.74	80.60%	97.89%
0-90	977.17	82.32%	99.98%
0-120	977.17	82.32%	99.98%
0-180	977.39	82.34%	100.00%
60-90	21.07	1.78%	2.16%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-25.94	781.91	65.87%	80.00%

ZONAL LUMEN SUMMARY

0-10	438.09
10-20	250.71
20-30	141.31
30-40	78.20
40-50	37.70
50-60	10.72
60-70	6.59
70-80	7.36
80-90	6.48
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







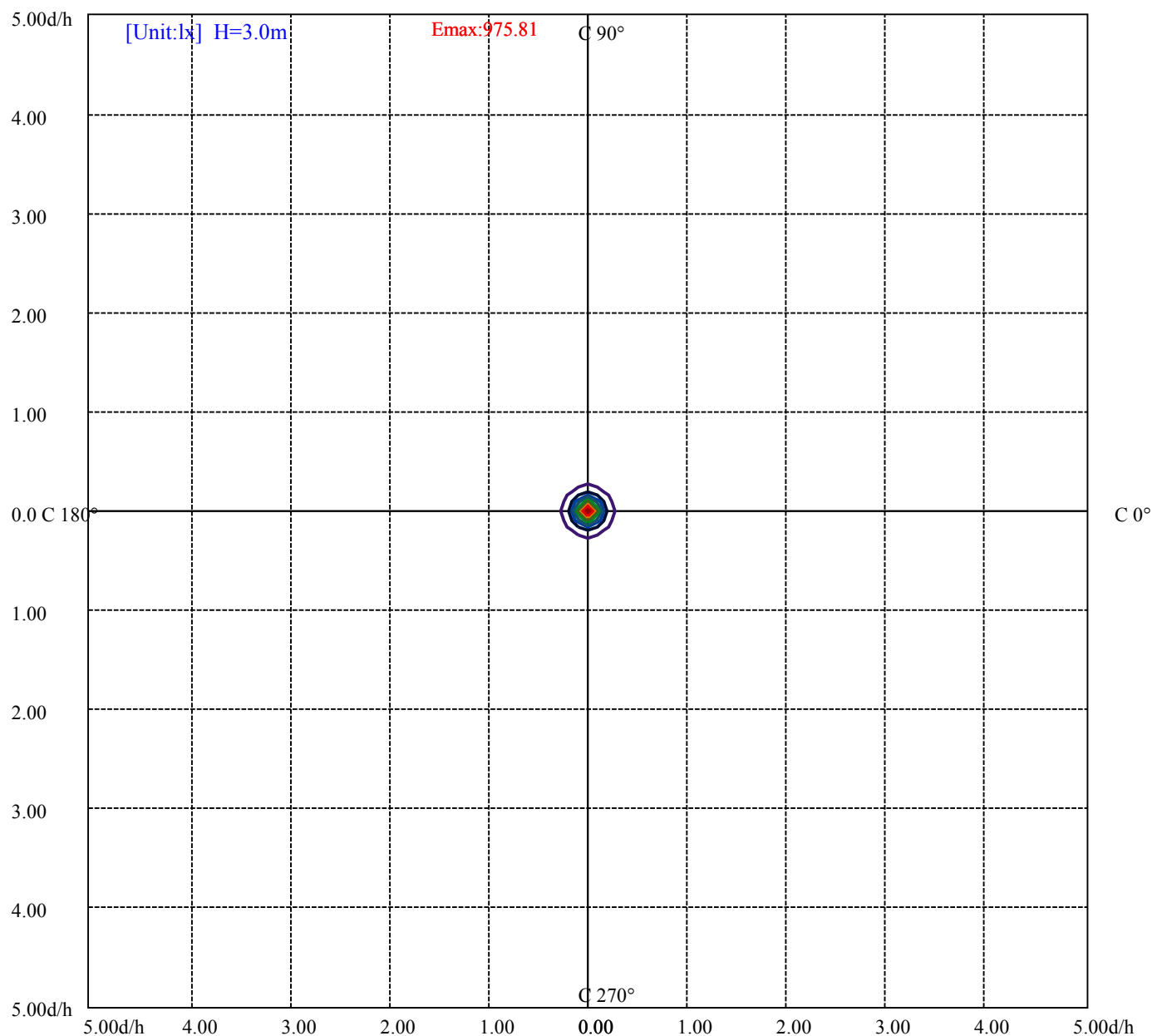
House

[Unit:cd]

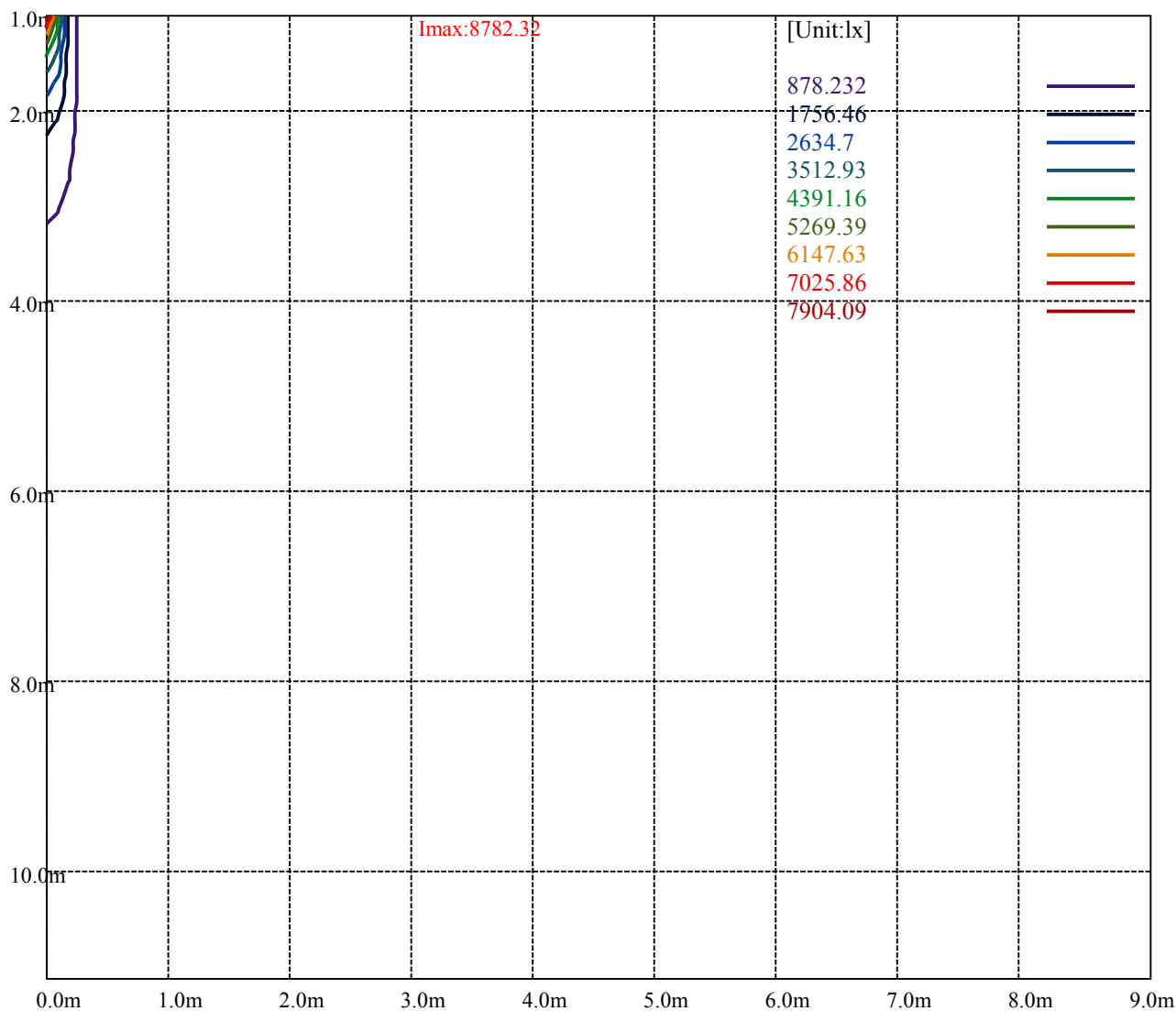
Road

Imax:8782.32

(10%Imax)	878.232	—
(20%Imax)	1756.46	—
(30%Imax)	2634.7	—
(40%Imax)	3512.93	—
(50%Imax)	4391.16	—
(60%Imax)	5269.39	—
(70%Imax)	6147.63	—
(80%Imax)	7025.86	—
(90%Imax)	7904.09	—



(10%Emax)	97.58111	—
(20%Emax)	195.1622	—
(30%Emax)	292.7433	—
(40%Emax)	390.3244	—
(50%Emax)	487.9055	—
(60%Emax)	585.4866	—
(70%Emax)	683.0677	—
(80%Emax)	780.6489	—
(90%Emax)	878.23	—



Luminance Table

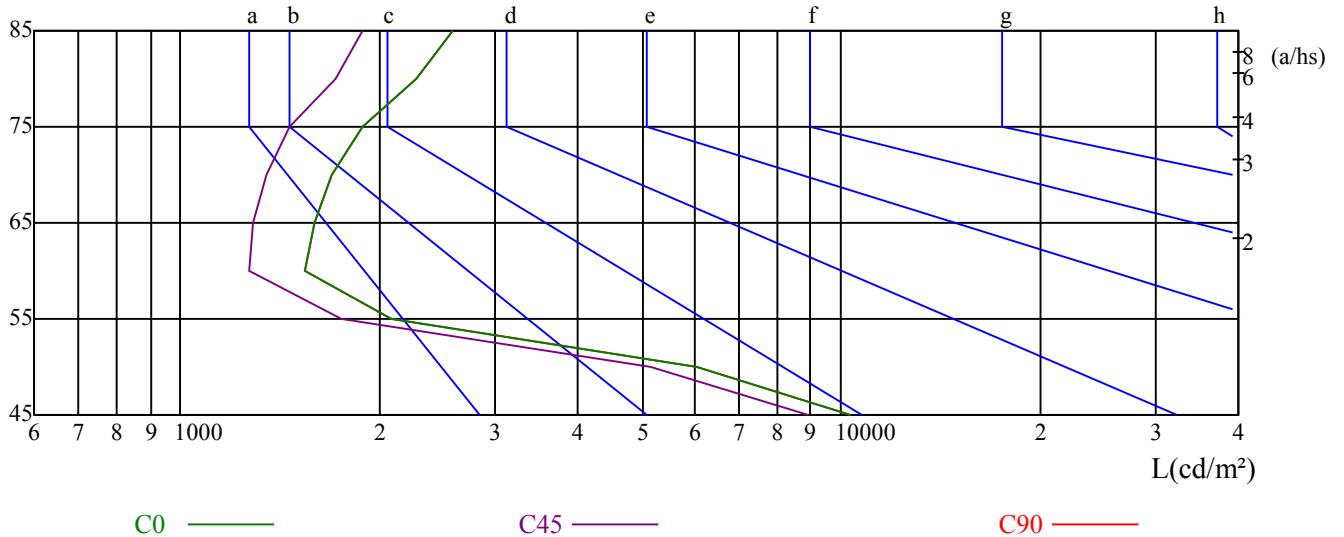
γ	45	50	55	60	65	70	75	80	85
C0	10320	6047	2092	1547	1593	1697	1886	2275	2578
C45	8914	5145	1752	1275	1290	1347	1464	1721	1892
C90	10320	6047	2092	1547	1593	1697	1886	2275	2578

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3696	3696	3696	6218	6218	6218	20708	20708	20708

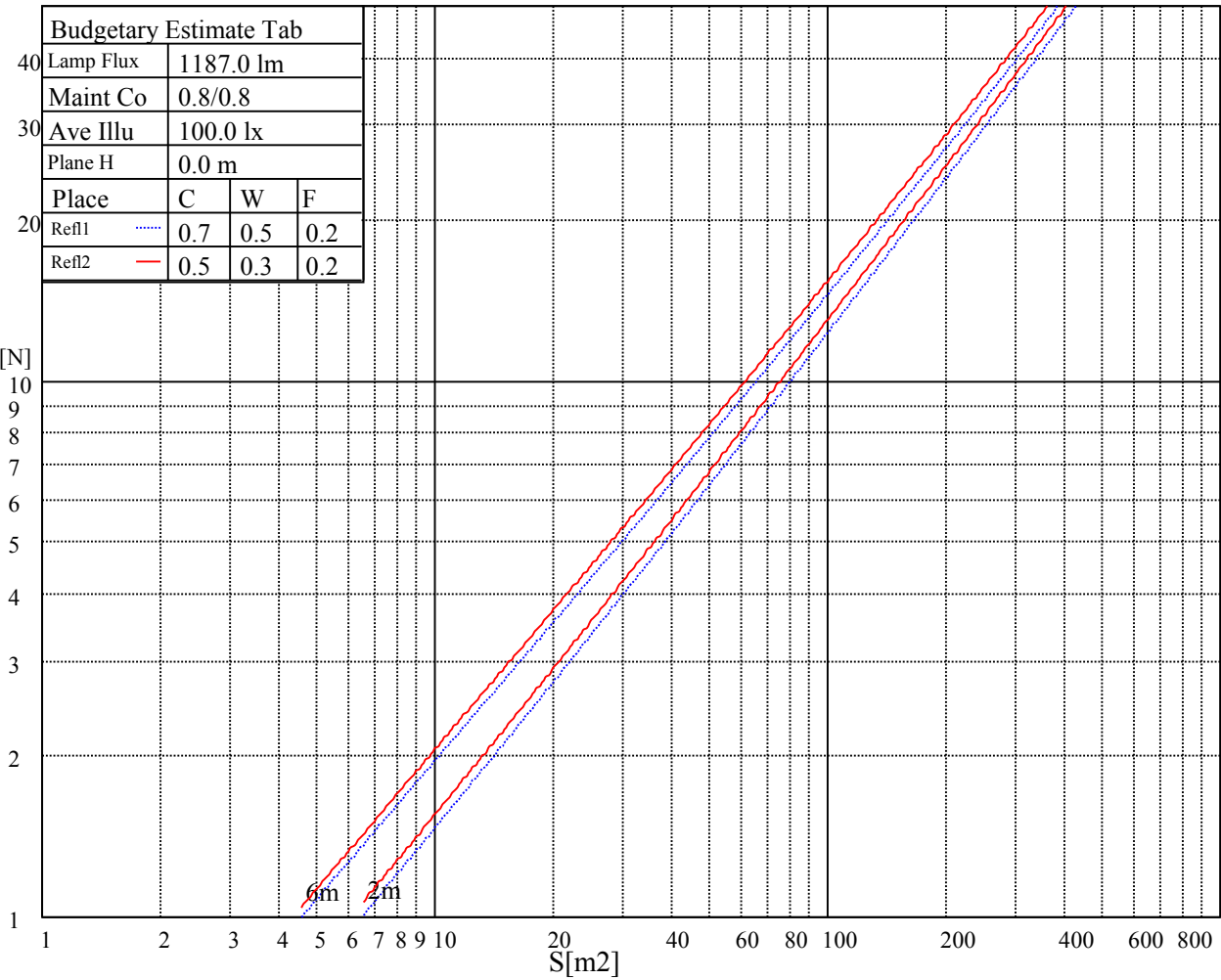
Glare Table

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

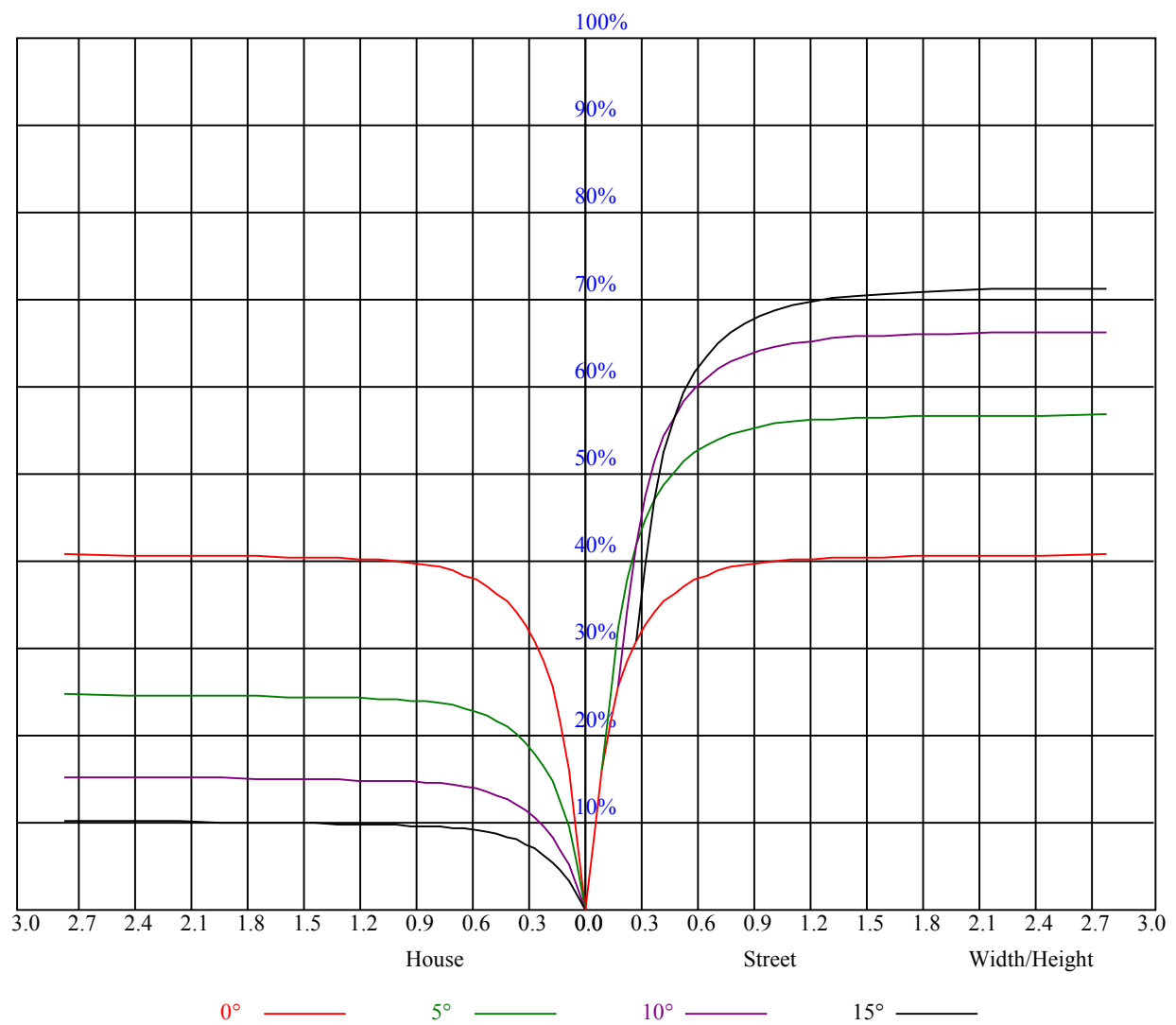
Luminance Limiting Curve

 $\gamma(^{\circ})$ 

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	5.28	6.26	5.65	6.57	6.88	4.97	5.94	5.34	6.25	6.57
	3H	7.12	7.97	7.50	8.31	8.67	6.87	7.72	7.25	8.06	8.43
	4H	8.35	9.14	8.76	9.50	9.89	8.06	8.86	8.47	9.21	9.60
	6H	9.99	10.72	10.41	11.09	11.49	9.47	10.20	9.89	10.58	10.97
	8H	10.80	11.48	11.24	11.88	12.29	10.20	10.89	10.64	11.28	11.69
	12H	11.95	12.60	12.38	12.98	13.41	11.31	11.96	11.75	12.35	12.78
4H	2H	5.56	6.36	5.97	6.71	7.10	5.30	6.10	5.71	6.45	6.84
	3H	7.76	8.41	8.17	8.82	9.22	7.55	8.20	7.97	8.61	9.02
	4H	9.21	9.79	9.65	10.22	10.67	8.96	9.54	9.40	9.97	10.42
	6H	10.76	11.26	11.23	11.71	12.19	10.32	10.82	10.79	11.27	11.75
	8H	11.77	12.24	12.25	12.69	13.17	11.23	11.70	11.71	12.15	12.63
	12H	12.97	13.37	13.46	13.86	14.34	12.39	12.79	12.88	13.28	13.76
8H	4H	9.64	10.11	10.12	10.56	11.03	9.43	9.90	9.91	10.35	10.82
	6H	11.49	11.86	12.00	12.37	12.85	11.10	11.47	11.61	11.98	12.46
	8H	12.65	12.98	13.19	13.51	14.00	12.17	12.50	12.71	13.03	13.52
	12H	13.95	14.24	14.47	14.74	15.32	13.44	13.72	13.96	14.22	14.80
12H	4H	9.75	10.15	10.24	10.64	11.12	9.56	9.97	10.06	10.46	10.93
	6H	11.95	12.02	12.22	12.49	13.04	11.60	11.67	11.87	12.14	12.69
	8H	12.94	13.23	13.46	13.72	14.30	12.50	12.79	13.03	13.29	13.87
Variation with the observer position at spacings:											
S = 1.0H		2.5/-3.9					2.5/-3.9				
S = 1.5H		3.9/-3.1					3.9/-3.1				
S = 2.0H		4.9/-2.5					4.9/-2.5				
Standard tables:		BK3					BK3				
Uncorrected UGR		-3.9					-3.9				



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	0.98	0.98	0.98	0.96	0.96	0.96	0.92	0.92	0.92	0.88	0.88	0.88	0.84	0.84	0.84	0.83
1	0.92	0.90	0.89	0.90	0.89	0.87	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.81	0.80	0.78
2	0.87	0.85	0.82	0.86	0.84	0.81	0.83	0.81	0.80	0.81	0.79	0.78	0.79	0.78	0.76	0.75
3	0.83	0.80	0.77	0.82	0.79	0.77	0.80	0.78	0.76	0.78	0.76	0.75	0.77	0.75	0.73	0.72
4	0.80	0.76	0.74	0.79	0.76	0.73	0.77	0.75	0.72	0.76	0.73	0.72	0.74	0.72	0.71	0.70
5	0.77	0.73	0.70	0.76	0.73	0.70	0.75	0.72	0.70	0.73	0.71	0.69	0.72	0.70	0.68	0.67
6	0.74	0.70	0.68	0.73	0.70	0.67	0.72	0.69	0.67	0.71	0.69	0.67	0.70	0.68	0.66	0.65
7	0.72	0.68	0.65	0.71	0.68	0.65	0.70	0.67	0.65	0.69	0.67	0.65	0.69	0.66	0.64	0.63
8	0.69	0.66	0.63	0.69	0.66	0.63	0.68	0.65	0.63	0.68	0.65	0.63	0.67	0.64	0.63	0.62
9	0.67	0.64	0.62	0.67	0.64	0.61	0.66	0.63	0.61	0.66	0.63	0.61	0.65	0.63	0.61	0.60
10	0.66	0.62	0.60	0.65	0.62	0.60	0.65	0.62	0.60	0.64	0.62	0.60	0.64	0.61	0.59	0.59



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Intensity data(cd)									Appendix Page: 17 Total:19
C/γ(°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
0.0	8806.82	8728.64	8251.85	7646.23	6902.97	5854.70	4974.90	4097.85	3189.42
45.0	8775.44	8587.70	7979.87	7319.20	6547.86	5505.09	4635.20	3769.71	3009.93
90.0	8745.71	8482.54	7905.55	7147.97	6346.90	5398.28	4425.43	3589.13	2780.35
135.0	8801.32	8742.41	8291.49	7721.11	7008.68	6112.91	5149.98	4266.87	3344.13
180.0	8806.82	8601.46	8032.73	7410.04	6668.43	5640.53	4873.04	3884.78	3016.54
225.0	8775.44	8690.10	8303.06	7663.30	6989.41	6091.44	5247.98	4296.05	3388.17
270.0	8745.71	8766.63	8385.64	7846.09	7163.94	6268.17	5320.65	4460.67	3540.68
315.0	8801.32	8568.98	8036.58	7316.44	6561.62	5607.49	4620.33	3769.16	2916.89
360.0	8806.82	8728.64	8251.85	7646.23	6902.97	5854.70	4974.90	4097.85	3189.42
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2457.17	1975.42	1602.69	1352.19	1191.42	1045.52	929.90	810.43	710.78
45.0	2262.27	1818.51	1500.29	1257.49	1089.02	973.40	854.48	748.22	665.08
90.0	2223.73	1759.05	1441.38	1184.26	1071.62	927.70	837.52	743.54	645.43
135.0	2604.17	2095.45	1675.37	1413.85	1205.74	1053.78	945.87	843.46	731.70
180.0	2403.21	1897.79	1528.37	1352.74	1094.80	1050.59	925.61	825.30	733.46
225.0	2709.33	2107.01	1672.06	1399.53	1091.82	1050.64	945.21	843.46	739.46
270.0	2843.11	2217.12	1759.05	1461.75	1223.35	1058.73	940.91	834.66	716.83
315.0	2312.92	1825.12	1487.62	1272.90	1096.34	963.82	859.93	768.26	663.21
360.0	2457.17	1975.42	1602.69	1352.19	1191.42	1045.52	929.90	810.43	710.78
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	635.35	574.79	510.92	466.33	427.79	387.60	351.26	321.53	291.80
45.0	585.80	527.44	471.83	428.34	392.55	354.56	322.08	294.00	279.14
90.0	580.90	525.07	472.00	424.04	386.88	350.49	317.40	291.52	264.77
135.0	650.77	586.90	523.04	476.79	433.29	394.20	354.56	323.18	292.35
180.0	636.34	574.95	522.87	468.09	428.94	392.28	354.29	320.48	294.72
225.0	647.90	582.88	514.50	468.70	427.90	382.59	353.24	318.39	285.30
270.0	637.00	570.38	502.66	457.52	416.23	374.93	338.05	308.32	278.59
315.0	594.77	535.26	487.74	434.84	397.62	363.59	325.22	296.70	272.75
360.0	635.35	574.79	510.92	466.33	427.79	387.60	351.26	321.53	291.80
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	279.69	244.18	223.97	208.28	189.28	171.89	156.20	140.83	129.16
45.0	241.31	224.41	207.45	190.00	173.98	156.20	141.33	129.22	119.53
90.0	243.79	222.26	202.55	186.20	171.28	152.56	140.94	131.03	120.68
135.0	280.24	244.07	220.89	204.48	186.59	170.62	153.44	140.61	125.80
180.0	268.01	245.00	226.01	206.13	189.06	170.56	153.22	140.45	130.04
225.0	264.27	242.47	217.20	203.32	187.96	167.92	155.42	143.26	130.65
270.0	262.51	229.59	212.46	194.18	177.78	163.79	148.16	137.04	126.30
315.0	248.47	227.44	208.77	193.03	178.55	160.38	146.28	134.45	123.33
360.0	279.69	244.18	223.97	208.28	189.28	171.89	156.20	140.83	129.16
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	119.86	111.32	101.58	91.23	82.58	74.77	67.77	61.50	54.51
45.0	109.67	101.36	93.71	82.58	76.75	71.19	64.53	59.35	53.79
90.0	111.32	103.40	96.07	83.91	77.13	70.14	64.25	57.81	51.81
135.0	116.55	108.08	100.64	89.91	80.66	73.61	65.90	60.12	54.56
180.0	118.10	109.73	101.80	89.96	80.38	73.56	66.73	60.07	54.01
225.0	120.19	111.87	104.06	95.14	87.26	80.22	74.33	68.05	61.77
270.0	116.55	108.57	102.68	92.66	84.79	80.11	73.06	67.99	63.37
315.0	113.03	105.27	98.66	86.66	79.50	72.73	65.85	59.02	53.29
360.0	119.86	111.32	101.58	91.23	82.58	74.77	67.77	61.50	54.51

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Intensity data(cd)										Appendix Page: 18 Total:19	
C/ γ (°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0		
0.0	48.23	43.16	38.21	34.47	30.83	27.64	24.72	21.31	16.24		
45.0	47.07	42.28	37.60	32.92	29.12	25.99	22.30	18.44	13.60		
90.0	46.63	41.62	37.60	33.86	31.05	28.08	24.67	20.76	15.91		
135.0	48.23	42.45	37.93	33.42	30.06	26.76	23.67	20.76	16.63		
180.0	47.90	43.00	38.04	33.47	29.95	26.43	22.90	19.60	15.69		
225.0	56.43	51.48	46.03	42.12	38.04	33.36	29.57	25.60	21.14		
270.0	56.76	50.49	45.53	40.25	35.46	32.21	27.53	24.22	20.21		
315.0	47.18	41.62	37.44	33.53	30.39	27.25	24.11	20.54	16.19		
360.0	48.23	43.16	38.21	34.47	30.83	27.64	24.72	21.31	16.24		
C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0		
0.0	12.22	9.86	8.37	7.43	7.21	7.10	6.99	6.94	6.88		
45.0	10.19	8.31	7.21	6.83	6.66	6.61	6.50	6.44	6.44		
90.0	11.56	9.36	7.93	7.38	7.05	6.83	6.72	6.61	6.61		
135.0	12.06	9.36	8.15	6.88	6.72	6.66	6.55	6.50	6.44		
180.0	10.68	8.04	7.38	6.61	6.55	6.55	6.55	6.50	6.44		
225.0	14.70	11.18	8.92	7.43	7.05	6.88	6.77	6.72	6.72		
270.0	14.59	11.18	8.92	7.49	7.21	7.05	6.94	6.83	6.83		
315.0	11.34	8.92	8.31	7.27	7.16	7.10	6.99	6.94	6.83		
360.0	12.22	9.86	8.37	7.43	7.21	7.10	6.99	6.94	6.88		
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0		
0.0	6.88	6.83	6.83	6.83	6.83	6.83	6.83	6.83	6.83		
45.0	6.39	6.44	6.44	6.44	6.44	6.44	6.44	6.44	6.50		
90.0	6.66	6.66	6.66	6.72	6.77	6.77	6.77	6.83	6.83		
135.0	6.39	6.33	6.33	6.28	6.28	6.28	6.22	6.22	6.28		
180.0	6.39	6.33	6.33	6.33	6.33	6.33	6.33	6.33	6.39		
225.0	6.72	6.72	6.72	6.72	6.72	6.72	6.77	6.72	6.77		
270.0	6.77	6.77	6.77	6.77	6.77	6.83	6.83	6.83	6.88		
315.0	6.77	6.72	6.72	6.72	6.66	6.66	6.61	6.61	6.61		
360.0	6.88	6.83	6.83	6.83	6.83	6.83	6.83	6.83	6.83		
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0		
0.0	6.83	6.83	6.83	6.94	6.99	7.10	7.21	7.32	7.38		
45.0	6.50	6.50	6.55	6.61	6.72	6.88	7.05	7.16	7.32		
90.0	6.94	6.99	7.10	7.32	7.60	7.93	8.26	8.48	8.64		
135.0	6.28	6.28	6.33	6.33	6.33	6.33	6.39	6.44	6.55		
180.0	6.39	6.44	6.44	6.50	6.55	6.61	6.72	6.77	6.83		
225.0	6.77	6.83	6.83	6.88	6.88	6.99	7.16	7.38	7.65		
270.0	6.94	6.94	6.99	7.10	7.16	7.27	7.60	7.93	8.26		
315.0	6.66	6.66	6.66	6.72	6.83	6.88	6.99	7.10	7.32		
360.0	6.83	6.83	6.83	6.94	6.99	7.10	7.21	7.32	7.38		
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0		
0.0	7.16	6.99	6.83	6.72	6.66	6.77	6.77	6.39	4.07		
45.0	7.38	7.43	7.65	7.76	7.76	7.49	7.16	4.07	4.02		
90.0	8.42	8.26	8.09	7.87	7.65	7.38	4.13	4.02	3.96		
135.0	6.77	6.99	7.16	7.27	7.27	6.94	4.13	4.13	4.07		
180.0	6.83	7.05	7.38	7.54	7.65	4.51	4.07	4.02	4.02		
225.0	7.76	7.65	7.65	7.71	7.65	7.54	4.84	4.18	4.02		
270.0	8.48	8.37	8.15	8.09	8.04	7.82	7.71	4.40	4.02		
315.0	7.54	7.76	7.98	8.20	8.31	8.15	7.87	4.68	4.13		
360.0	7.16	6.99	6.83	6.72	6.66	6.77	6.77	6.39	4.07		

Intensity data(cd)

Appendix Page: 19 Total:19

C/ γ (°)	90.0
0.0	4.02
45.0	3.96
90.0	3.96
135.0	3.91
180.0	3.91
225.0	4.02
270.0	4.02
315.0	4.07
360.0	4.02