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Nata

LumCAT: 3-1699-N

Luminaire: 92.70.065.00+92.70.089.00

Report No: NATA0100

Test No: GC2018091114

LampCAT: LUMINUS CXM-11-AC30

Lamp flux(lm): 2557.0

Number of Lamps: 1

Length(mm): 79

Phm Type: C

Voltage(V): 34.7000

Current(A): 0.5000

Power (W): 17.3500

PF: 0.0000

Ballast type: DC

Width(mm): 79

Height(mm): 0

Photometric Results

Lumens(lm): 2027.91

Efficiency(%): 79.31%

Lumens(lm)/Power(W): 117.01

Central intensity(cd): 9783.282

Maximum intensity(cd): 9783.282

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=21.2

[C90/270]Total=21.2

Field angle(10%Imax): [C0/180]Total=40.8

[C90/270]Total=40.8

Maximum s/h(1/2): C0_180=0.36 C90_270=0.36

Maximum s/h(1/4): C0_180=0.36 C90_270=0.36

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 79.40%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 97.747%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	9783.281	2.341	2.341	.092%	.115%
1.0	9720.492	18.604	20.944	.728%	1.033%
2.0	9538.313	36.504	57.448	1.428%	2.833%
3.0	9229.148	52.968	110.416	2.071%	5.445%
4.0	8833.570	67.573	177.989	2.643%	8.777%
5.0	8371.055	80.007	257.996	3.129%	12.722%
6.0	7826.203	89.709	347.705	3.508%	17.146%
7.0	7207.172	96.319	444.024	3.767%	21.896%
8.0	6619.430	101.025	545.049	3.951%	26.877%
9.0	5955.469	102.165	647.213	3.995%	31.915%
10.0	5259.305	100.150	747.363	3.917%	36.854%
11.0	4654.547	97.393	844.756	3.809%	41.657%
12.0	4045.430	92.235	936.991	3.607%	46.205%
13.0	3414.867	84.239	1021.23	3.294%	50.359%
14.0	2898.422	76.893	1098.124	3.007%	54.151%
15.0	2444.625	69.384	1167.508	2.713%	57.572%
16.0	2004.609	60.593	1228.1	2.370%	60.560%
17.0	1685.250	54.032	1282.132	2.113%	63.224%
18.0	1401.005	47.476	1329.608	1.857%	65.565%
19.0	1186.179	42.349	1371.957	1.656%	67.654%
20.0	1024.622	38.430	1410.387	1.503%	69.549%
21.0	909.816	35.755	1446.142	1.398%	71.312%
22.0	805.964	33.109	1479.251	1.295%	72.945%
23.0	733.036	31.409	1510.66	1.228%	74.493%
24.0	672.609	30.000	1540.66	1.173%	75.973%
25.0	613.730	28.443	1569.103	1.112%	77.375%
26.0	571.542	27.475	1596.579	1.075%	78.730%
27.0	530.648	26.418	1622.997	1.033%	80.033%
28.0	486.668	25.055	1648.052	.980%	81.269%
29.0	451.252	23.991	1672.043	.938%	82.452%
30.0	418.331	22.937	1694.98	.897%	83.583%
31.0	379.849	21.454	1716.434	.839%	84.641%
32.0	350.142	20.347	1736.781	.796%	85.644%
33.0	324.570	19.385	1756.166	.758%	86.600%
34.0	298.371	18.297	1774.462	.716%	87.502%
35.0	274.795	17.284	1791.747	.676%	88.354%
36.0	256.908	16.560	1808.306	.648%	89.171%
37.0	231.251	15.262	1823.568	.597%	89.924%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	213.574	14.419	1837.987	.564%	90.635%
39.0	196.643	13.571	1851.558	.531%	91.304%
40.0	180.274	12.707	1864.265	.497%	91.930%
41.0	166.627	11.988	1876.253	.469%	92.522%
42.0	151.692	11.131	1887.384	.435%	93.070%
43.0	136.280	10.192	1897.576	.399%	93.573%
44.0	124.882	9.513	1907.089	.372%	94.042%
45.0	113.787	8.823	1915.912	.345%	94.477%
46.0	102.480	8.084	1923.996	.316%	94.876%
47.0	92.391	7.410	1931.406	.290%	95.241%
48.0	83.855	6.834	1938.24	.267%	95.578%
49.0	74.468	6.163	1944.403	.241%	95.882%
50.0	66.987	5.627	1950.03	.220%	96.160%
51.0	60.694	5.172	1955.202	.202%	96.415%
52.0	54.548	4.714	1959.916	.184%	96.647%
53.0	48.635	4.259	1964.176	.167%	96.857%
54.0	43.446	3.854	1968.03	.151%	97.047%
55.0	38.602	3.468	1971.498	.136%	97.218%
56.0	34.383	3.126	1974.623	.122%	97.372%
57.0	30.776	2.830	1977.454	.111%	97.512%
58.0	27.309	2.540	1979.994	.099%	97.637%
59.0	24.574	2.310	1982.303	.090%	97.751%
60.0	22.345	2.122	1984.426	.083%	97.856%
61.0	20.777	1.993	1986.418	.078%	97.954%
62.0	19.913	1.928	1988.346	.075%	98.049%
63.0	19.238	1.880	1990.226	.074%	98.142%
64.0	18.570	1.830	1992.056	.072%	98.232%
65.0	18.049	1.794	1993.85	.070%	98.320%
66.0	17.613	1.765	1995.615	.069%	98.408%
67.0	17.149	1.731	1997.346	.068%	98.493%
68.0	16.763	1.704	1999.05	.067%	98.577%
69.0	16.383	1.677	2000.727	.066%	98.660%
70.0	16.017	1.651	2002.378	.065%	98.741%
71.0	15.666	1.624	2004.002	.064%	98.821%
72.0	15.314	1.597	2005.599	.062%	98.900%
73.0	14.963	1.569	2007.168	.061%	98.977%
74.0	14.688	1.548	2008.717	.061%	99.054%
75.0	14.259	1.510	2010.227	.059%	99.128%

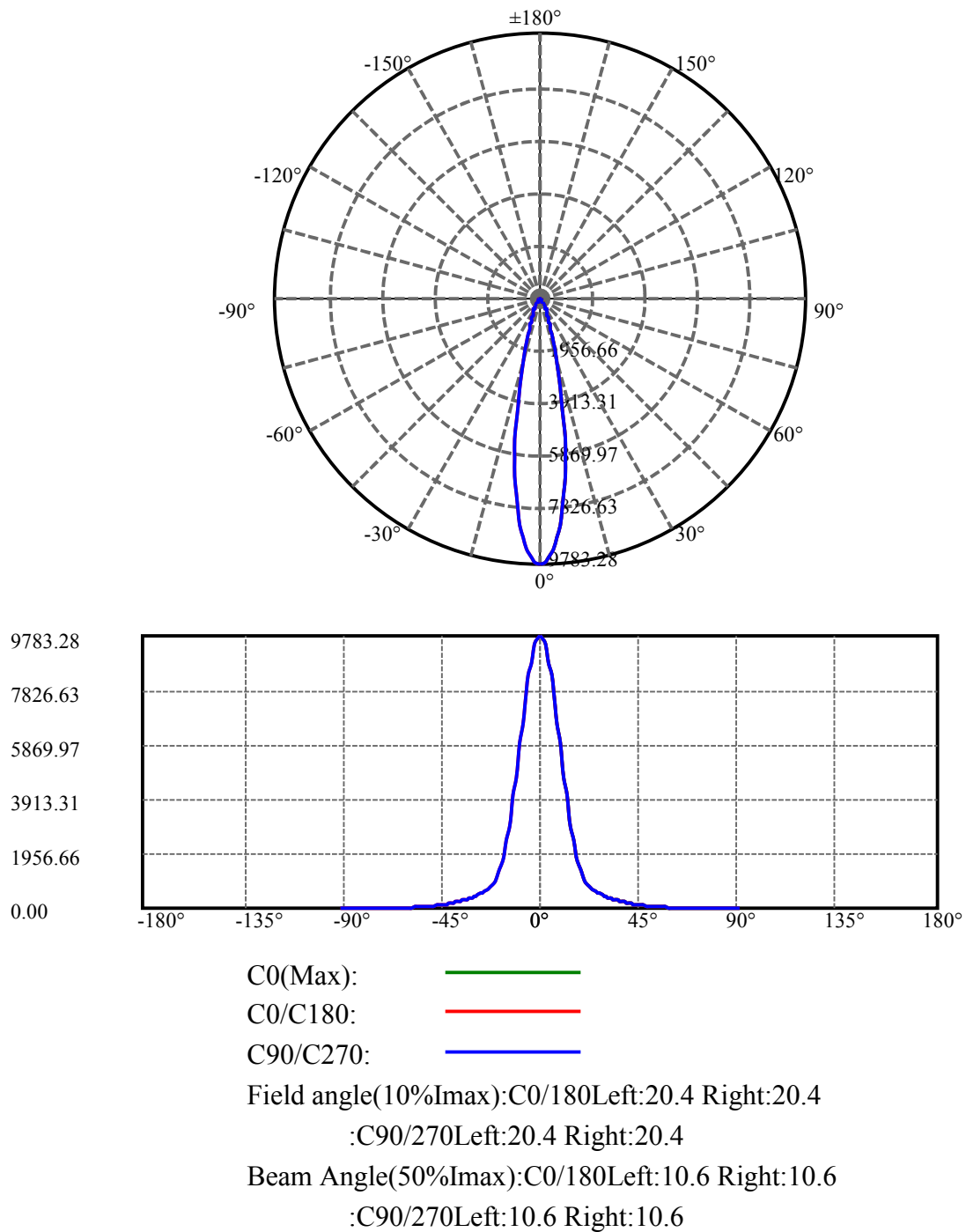
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	13.880	1.477	2011.704	.058%	99.201%
77.0	13.556	1.448	2013.153	.057%	99.272%
78.0	13.085	1.404	2014.556	.055%	99.342%
79.0	12.705	1.368	2015.924	.053%	99.409%
80.0	12.340	1.333	2017.256	.052%	99.475%
81.0	11.911	1.290	2018.547	.050%	99.538%
82.0	11.552	1.255	2019.801	.049%	99.600%
83.0	11.152	1.214	2021.015	.047%	99.660%
84.0	10.765	1.174	2022.189	.046%	99.718%
85.0	10.350	1.131	2023.32	.044%	99.774%
86.0	9.935	1.087	2024.406	.043%	99.827%
87.0	9.499	1.040	2025.447	.041%	99.879%
88.0	9.169	1.005	2026.451	.039%	99.928%
89.0	8.895	0.975	2027.427	.038%	99.976%
90.0	8.796	0.482	2027.909	.019%	100.000%

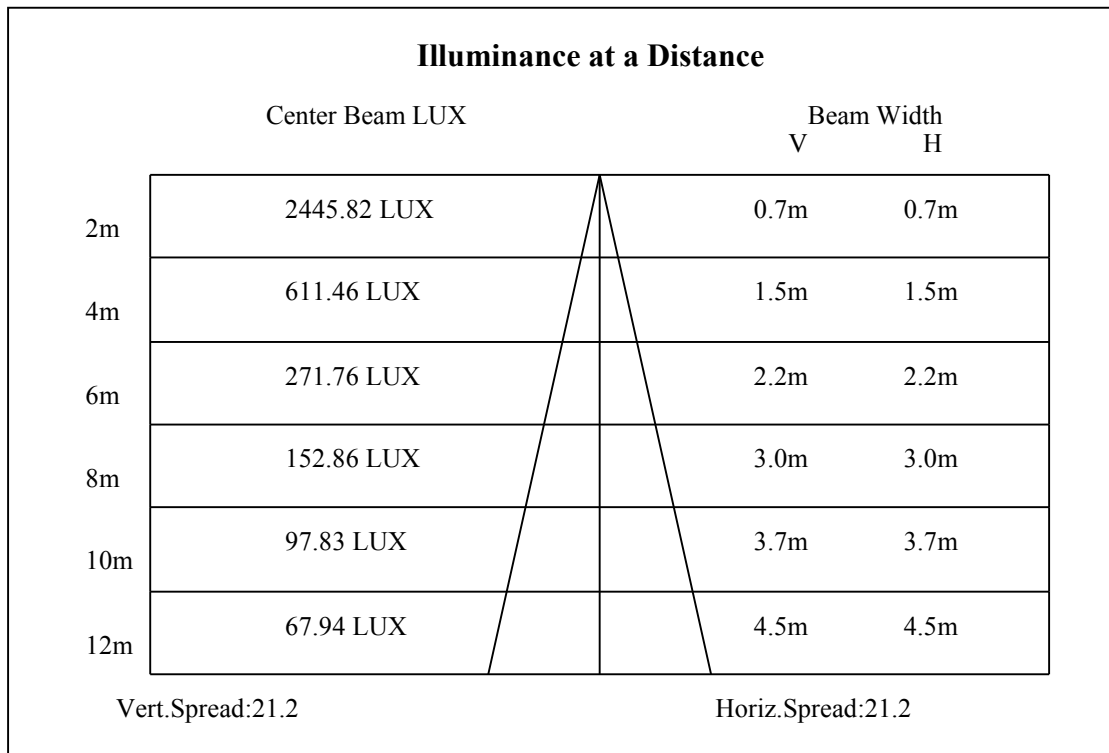
ZONAL LUMEN SUMMARY

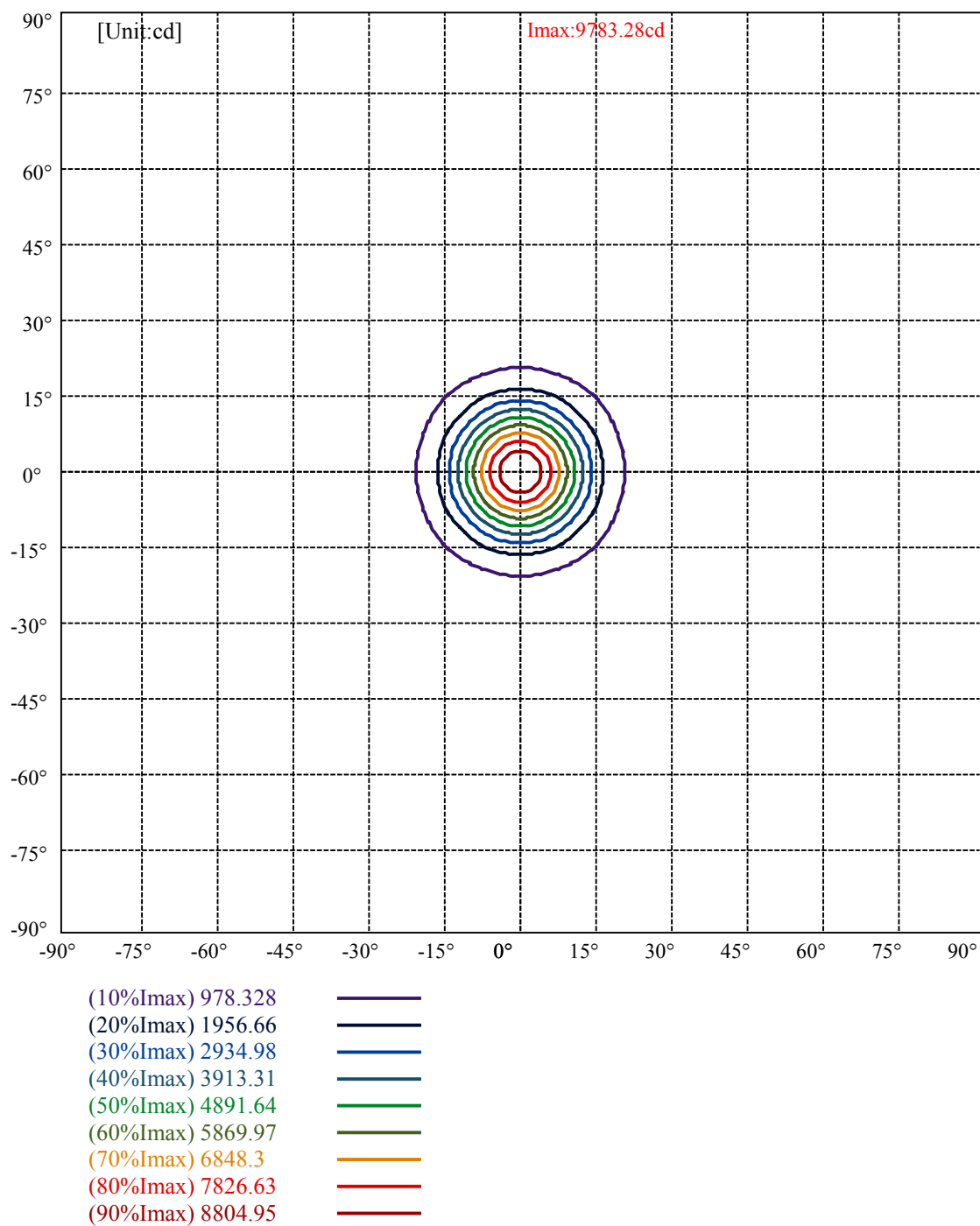
Zone	Lumens	%Lamp	%Fixt
0-30	1694.98	66.29%	83.58%
0-40	1864.27	72.91%	91.93%
0-60	1984.43	77.61%	97.86%
0-90	2027.43	79.29%	99.98%
0-120	2027.43	79.29%	99.98%
0-180	2027.91	79.31%	100.00%
60-90	45.12	1.76%	2.23%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-26.97	1622.33	63.45%	80.00%

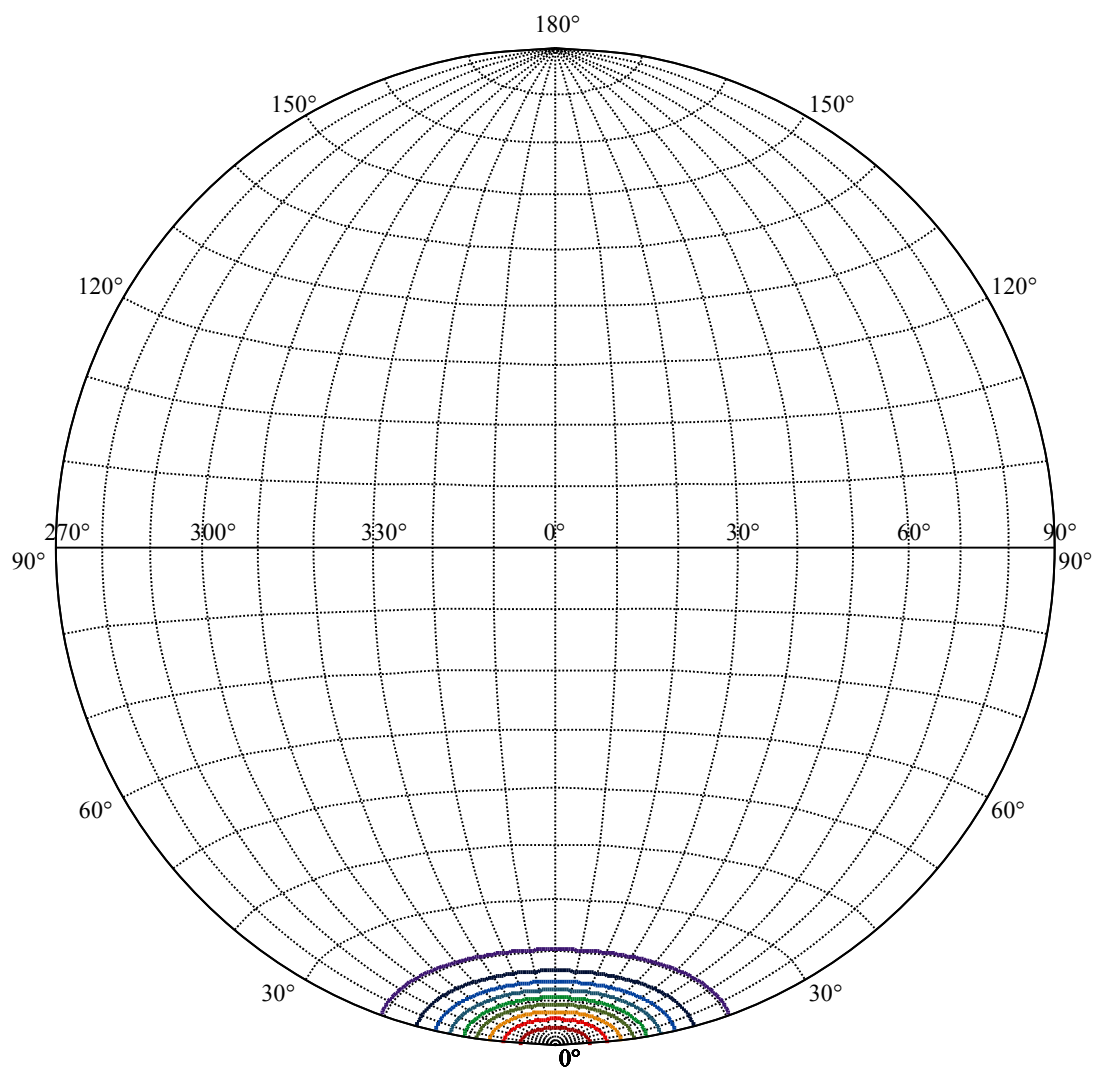
ZONAL LUMEN SUMMARY

0-10	747.36
10-20	663.02
20-30	284.59
30-40	169.29
40-50	85.76
50-60	34.40
60-70	17.95
70-80	14.88
80-90	10.17
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









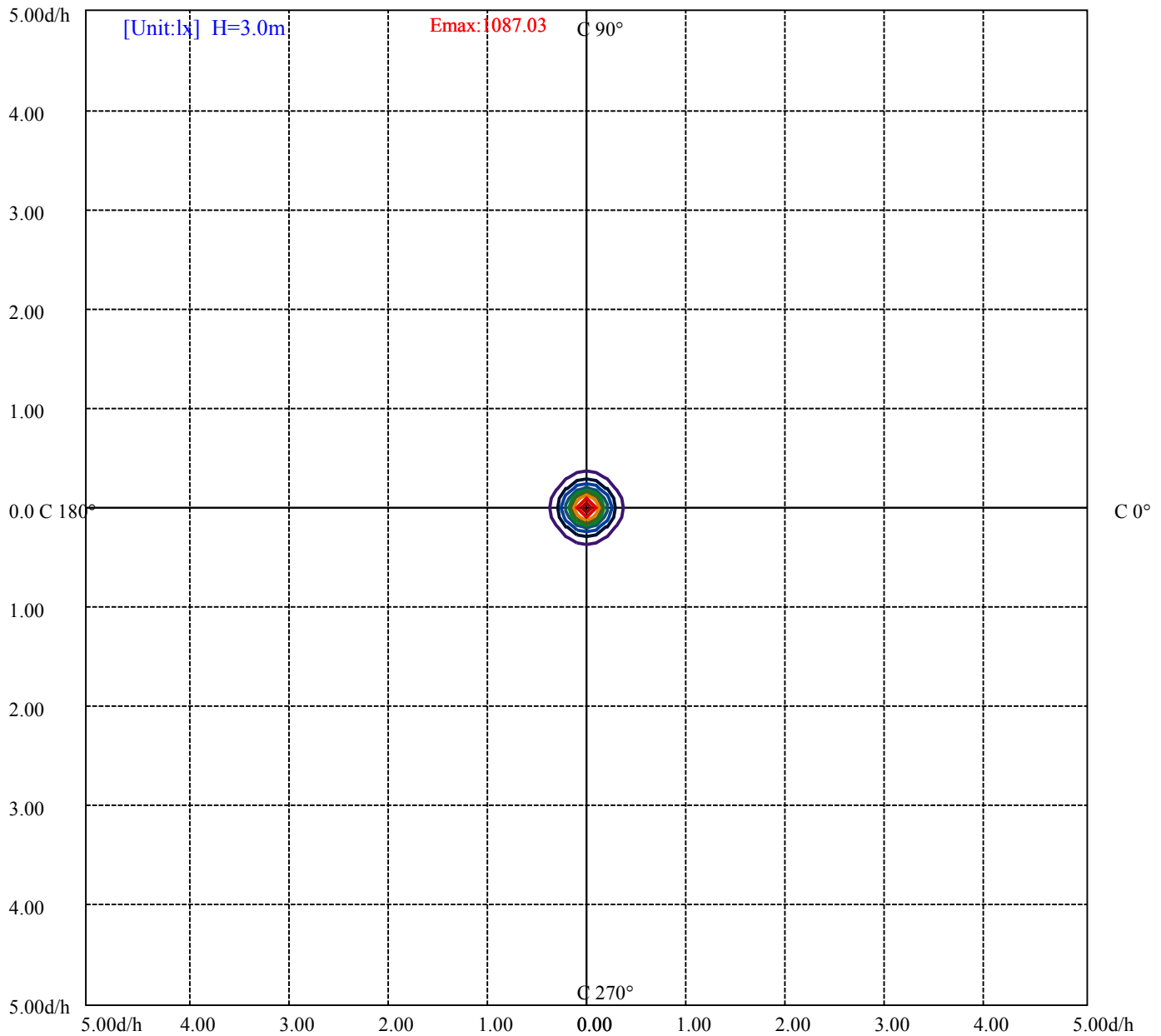
House

[Unit:cd]

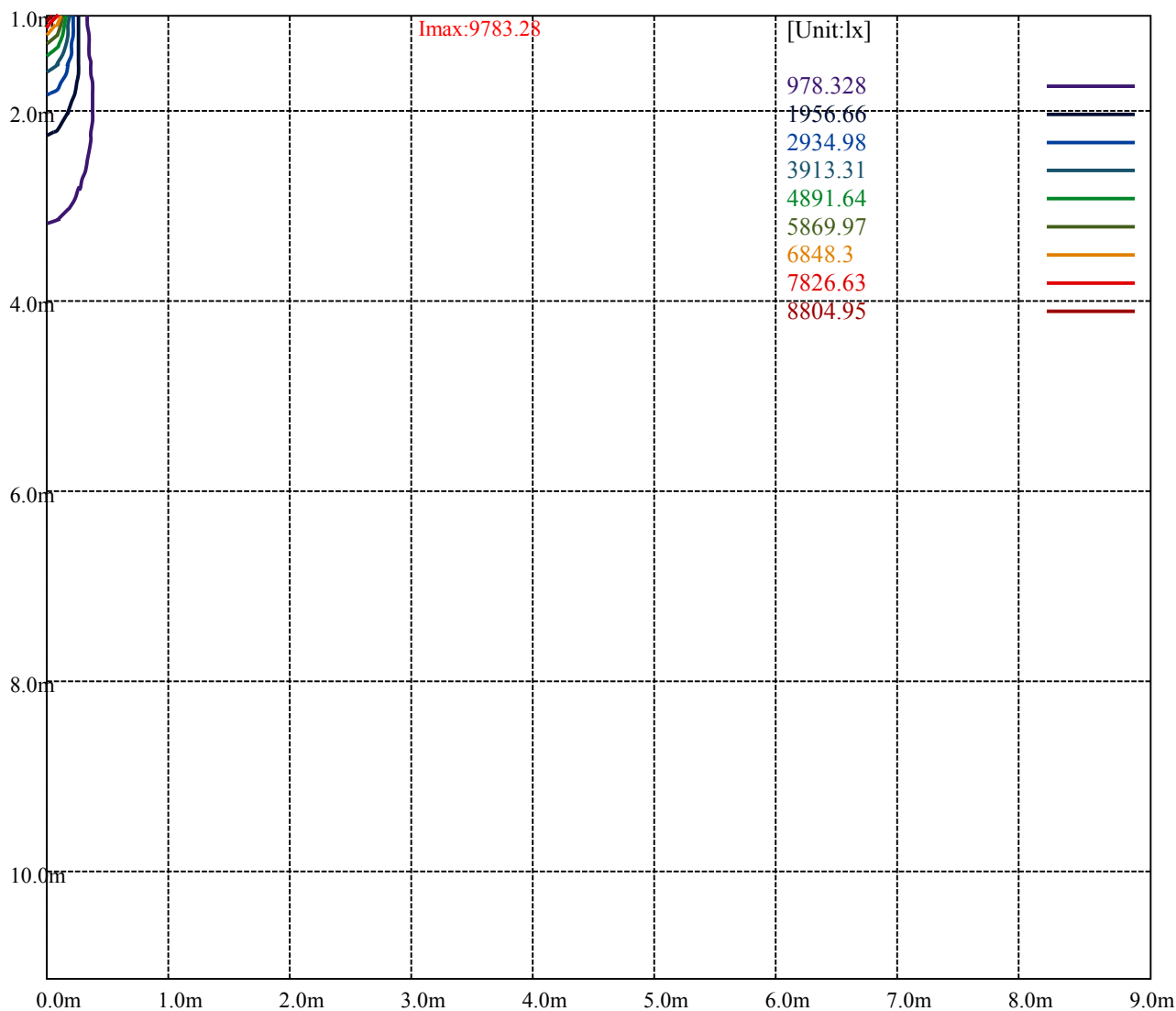
Road

Imax:9783.28

(10%Imax)	978.328	—
(20%Imax)	1956.66	—
(30%Imax)	2934.98	—
(40%Imax)	3913.31	—
(50%Imax)	4891.64	—
(60%Imax)	5869.97	—
(70%Imax)	6848.3	—
(80%Imax)	7826.63	—
(90%Imax)	8804.95	—



(10%Emax)	108.703	—
(20%Emax)	217.4056	—
(30%Emax)	326.1089	—
(40%Emax)	434.8122	—
(50%Emax)	543.5156	—
(60%Emax)	652.2178	—
(70%Emax)	760.9211	—
(80%Emax)	869.6245	—
(90%Emax)	978.3278	—



Luminance Table

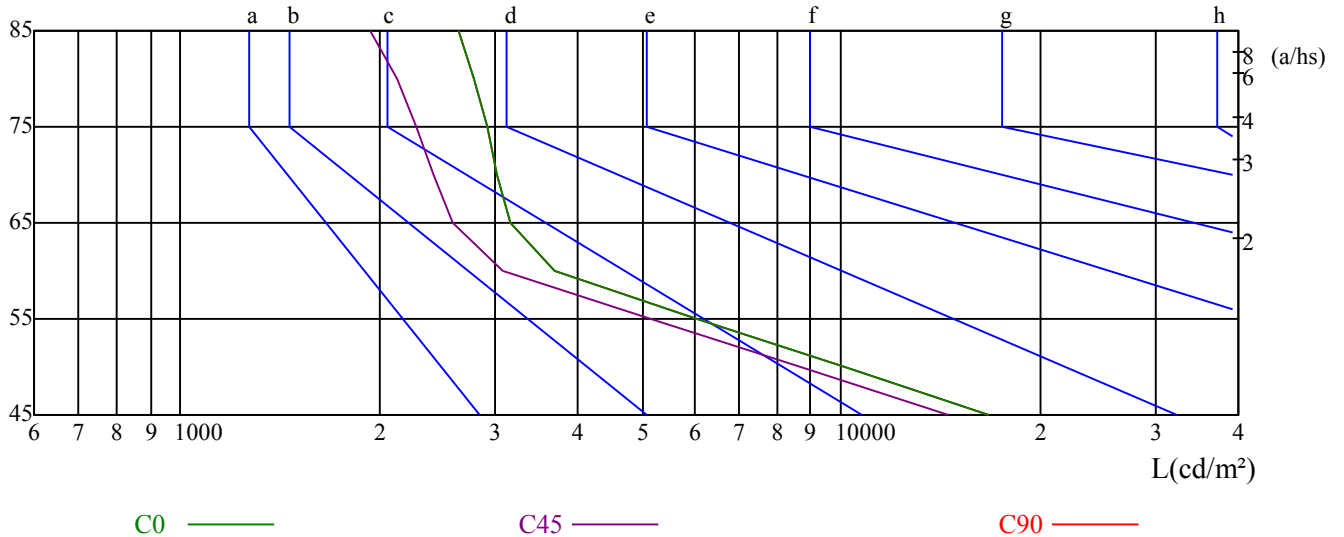
γ	45	50	55	60	65	70	75	80	85
C0	16696	10128	6067	3686	3158	3007	2912	2786	2635
C45	14569	8709	5137	3069	2582	2409	2279	2122	1942
C90	16696	10128	6067	3686	3158	3007	2912	2786	2635

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
6843	6843	6843	8828	8828	8828	19028	19028	19028

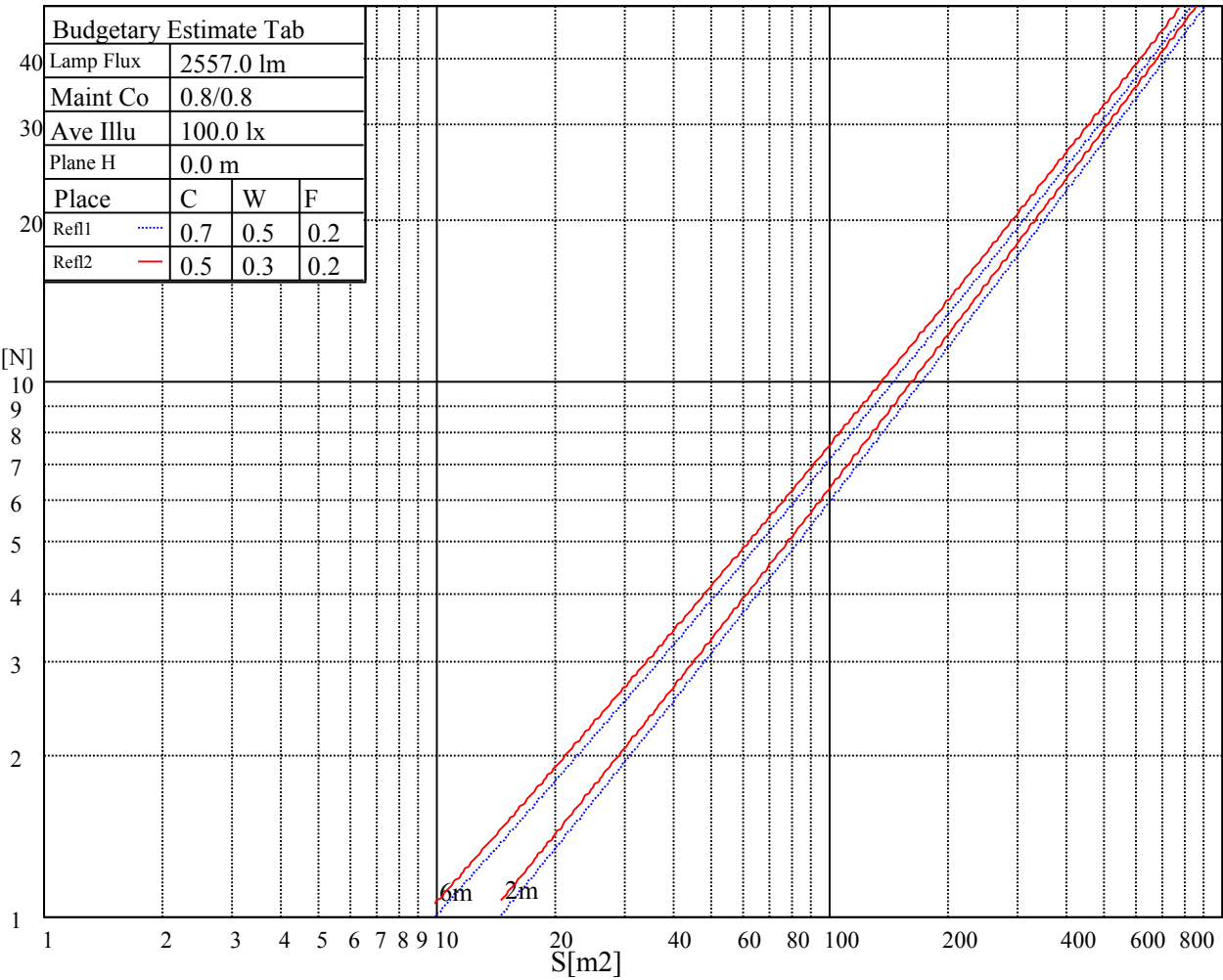
Glare Table

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

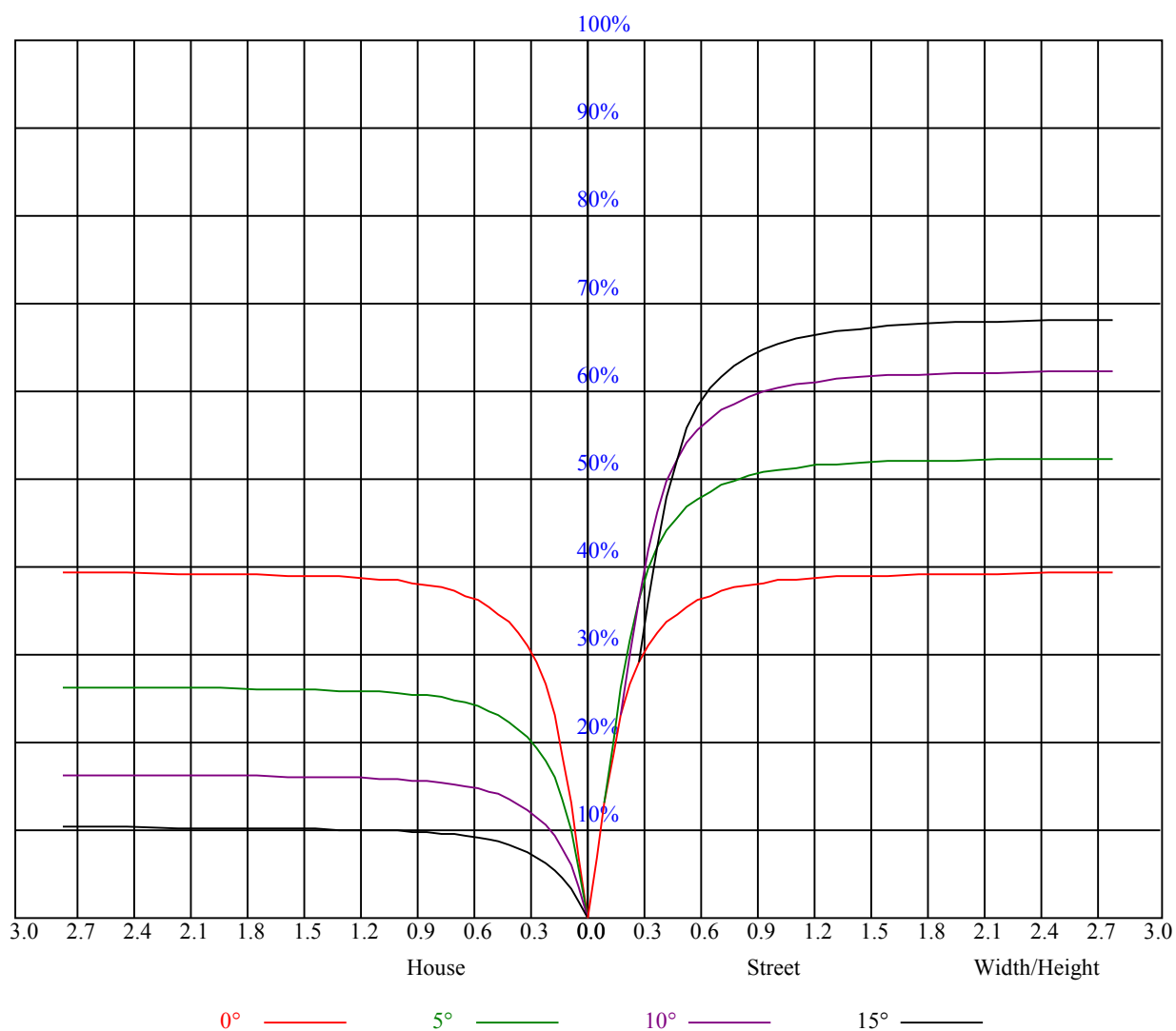
Luminance Limiting Curve

 $\gamma(^{\circ})$ 

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	7.96	8.95	8.32	9.26	9.58	7.98	8.98	8.35	9.29	9.60
	3H	8.87	9.75	9.26	10.08	10.45	8.89	9.77	9.27	10.10	10.47
	4H	9.42	10.23	9.83	10.59	10.98	9.43	10.24	9.84	10.60	10.99
	6H	10.00	10.74	10.42	11.12	11.51	10.00	10.75	10.42	11.12	11.52
	8H	10.27	10.97	10.71	11.36	11.77	10.28	10.97	10.71	11.37	11.78
	12H	10.71	11.38	11.15	11.76	12.20	10.72	11.39	11.15	11.77	12.20
4H	2H	8.02	8.84	8.43	9.19	9.58	8.04	8.86	8.45	9.21	9.60
	3H	9.21	9.87	9.62	10.28	10.69	9.22	9.89	9.64	10.29	10.70
	4H	9.93	10.52	10.36	10.94	11.39	9.93	10.52	10.37	10.95	11.40
	6H	10.58	11.09	11.05	11.54	12.01	10.58	11.09	11.05	11.54	12.01
	8H	10.95	11.43	11.43	11.88	12.36	10.95	11.43	11.43	11.88	12.36
	12H	11.46	11.87	11.95	12.36	12.84	11.46	11.87	11.95	12.36	12.84
8H	4H	10.11	10.59	10.59	11.04	11.51	10.12	10.59	10.59	11.04	11.52
	6H	10.96	11.33	11.47	11.84	12.32	10.95	11.33	11.46	11.84	12.32
	8H	11.46	11.80	11.99	12.32	12.82	11.46	11.79	11.99	12.32	12.81
	12H	12.14	12.43	12.66	12.93	13.51	12.14	12.43	12.66	12.93	13.51
12H	4H	10.13	10.54	10.62	11.03	11.50	10.13	10.54	10.62	11.03	11.51
	6H	11.31	11.37	11.56	11.84	12.39	11.31	11.37	11.56	11.84	12.39
	8H	11.61	11.90	12.13	12.40	12.98	11.61	11.90	12.13	12.40	12.98
Variation with the observer position at spacings:											
S = 1.0H		2.1/-2.8					2.1/-2.8				
S = 1.5H		3.7/-3.0					3.7/-3.0				
S = 2.0H		5.3/-2.7					5.3/-2.7				
Standard tables:		BK2					BK2				
Uncorrected UGR		-2.5					-2.5				



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 RHOFC=20 CU															
0	0.95	0.95	0.95	0.92	0.92	0.92	0.88	0.88	0.88	0.84	0.84	0.84	0.81	0.81	0.81	0.79
1	0.89	0.87	0.85	0.87	0.85	0.84	0.84	0.83	0.81	0.81	0.80	0.79	0.78	0.77	0.77	0.75
2	0.84	0.81	0.79	0.82	0.80	0.78	0.80	0.78	0.76	0.78	0.76	0.75	0.75	0.74	0.73	0.72
3	0.80	0.76	0.74	0.79	0.76	0.73	0.77	0.74	0.72	0.75	0.73	0.71	0.73	0.71	0.70	0.69
4	0.76	0.72	0.70	0.75	0.72	0.69	0.73	0.71	0.68	0.72	0.70	0.68	0.71	0.69	0.67	0.66
5	0.73	0.69	0.66	0.72	0.69	0.66	0.71	0.68	0.65	0.70	0.67	0.65	0.68	0.66	0.64	0.63
6	0.70	0.66	0.64	0.69	0.66	0.63	0.68	0.65	0.63	0.67	0.65	0.62	0.66	0.64	0.62	0.61
7	0.67	0.64	0.61	0.67	0.63	0.61	0.66	0.63	0.61	0.65	0.62	0.60	0.64	0.62	0.60	0.59
8	0.65	0.61	0.59	0.65	0.61	0.59	0.64	0.61	0.59	0.63	0.60	0.58	0.63	0.60	0.58	0.57
9	0.63	0.59	0.57	0.63	0.59	0.57	0.62	0.59	0.57	0.61	0.59	0.57	0.61	0.58	0.56	0.56
10	0.61	0.58	0.55	0.61	0.57	0.55	0.60	0.57	0.55	0.60	0.57	0.55	0.59	0.57	0.55	0.54



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	9753.19	9605.25	9301.50	8912.25	8471.81	7975.69	7310.25	6728.06	6122.81
45.0	9815.63	9783.56	9607.50	9356.63	8966.81	8492.06	7996.50	7380.56	6789.38
90.0	9811.69	9720.56	9524.25	9171.00	8795.81	8341.31	7749.00	7125.19	6517.13
135.0	9753.19	9792.56	9706.50	9485.44	9186.19	8762.06	8309.81	7731.00	7162.88
180.0	9753.19	9804.94	9727.88	9513.00	9188.44	8795.25	8271.00	7678.69	7112.25
225.0	9815.63	9722.25	9520.31	9136.13	8718.75	8260.88	7605.56	7040.25	6450.19
270.0	9810.56	9756.56	9587.25	9329.63	8893.13	8395.88	7957.69	7277.06	6697.13
315.0	9753.19	9578.25	9331.31	8929.13	8447.63	7945.31	7409.81	6696.56	6103.69
360.0	9753.19	9605.25	9301.50	8912.25	8471.81	7975.69	7310.25	6728.06	6122.81
C/ γ (°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	5374.13	4775.06	4199.63	3575.81	3011.06	2560.50	2115.00	1775.25	1459.69
45.0	6126.75	5444.44	4839.19	4246.88	3547.13	3032.44	2585.25	2078.44	1761.19
90.0	5832.00	5137.31	4540.50	3963.94	3365.44	2817.56	2386.13	1968.19	1652.63
135.0	6502.50	5821.88	5204.25	4593.94	3868.31	3326.06	2890.13	2284.88	1937.25
180.0	6516.00	5736.38	5117.06	4521.38	3803.06	3265.31	2783.81	2299.50	1902.38
225.0	5691.94	5077.69	4464.00	3737.81	3267.00	2729.81	2196.56	1893.94	1608.75
270.0	6105.94	5342.63	4725.00	4137.75	3442.50	2945.81	2485.13	1996.88	1681.88
315.0	5494.50	4739.06	4146.75	3585.94	3014.44	2509.88	2115.00	1739.81	1478.25
360.0	5374.13	4775.06	4199.63	3575.81	3011.06	2560.50	2115.00	1775.25	1459.69
C/ γ (°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1219.50	1049.63	904.50	804.94	723.94	664.31	602.44	560.25	520.88
45.0	1487.25	1233.56	1041.19	911.81	795.94	716.06	651.94	597.38	554.63
90.0	1360.69	1113.98	983.25	852.86	756.79	692.10	638.66	579.66	539.21
135.0	1670.06	1362.94	1151.44	1026.00	876.94	785.81	722.81	651.38	604.69
180.0	1603.13	1343.25	1103.96	1003.22	885.66	803.64	730.18	660.49	620.27
225.0	1320.75	1115.33	1035.62	920.25	829.41	760.95	701.83	639.51	595.13
270.0	1436.06	1216.69	1046.81	935.44	838.69	760.50	702.56	645.19	600.19
315.0	1110.60	1054.07	930.21	824.01	740.36	680.91	630.45	576.00	537.36
360.0	1219.50	1049.63	904.50	804.94	723.94	664.31	602.44	560.25	520.88
C/ γ (°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	483.75	439.88	406.13	375.19	338.63	313.31	290.25	284.63	243.00
45.0	512.44	474.19	441.00	408.38	370.13	341.44	314.44	284.63	270.68
90.0	502.03	463.05	424.52	391.95	356.18	325.80	302.01	277.88	257.57
135.0	563.63	515.81	479.81	450.00	404.44	374.63	350.44	313.88	292.50
180.0	576.68	522.00	489.21	452.03	413.61	379.13	351.45	324.28	297.73
225.0	553.84	511.31	472.28	439.88	403.99	371.08	344.48	315.39	290.98
270.0	552.38	508.50	471.38	435.94	397.13	368.44	341.44	311.06	288.56
315.0	500.46	458.61	425.70	393.30	354.71	327.32	302.06	275.23	257.34
360.0	483.75	439.88	406.13	375.19	338.63	313.31	290.25	284.63	243.00
C/ γ (°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	225.17	206.66	191.59	175.67	161.55	147.77	134.38	121.56	111.43
45.0	242.38	223.48	203.79	189.06	173.53	161.89	145.63	131.63	120.71
90.0	236.53	217.80	202.11	186.41	171.39	158.85	144.90	128.98	118.13
135.0	286.31	247.11	227.81	210.88	193.56	180.11	163.86	147.38	134.83
180.0	276.69	254.48	236.03	216.56	198.90	184.67	169.20	151.82	139.05
225.0	266.51	244.24	225.28	206.16	188.89	172.35	157.84	141.24	128.98
270.0	285.75	242.44	222.13	205.54	188.78	174.15	157.11	143.10	131.01
315.0	235.91	213.81	199.86	182.87	165.60	153.23	140.63	124.54	114.92
360.0	225.17	206.66	191.59	175.67	161.55	147.77	134.38	121.56	111.43

Intensity data(cd)

C/ γ (°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	101.64	90.62	82.24	74.70	66.77	59.91	54.34	48.66	43.43
45.0	109.69	99.62	90.34	82.01	72.73	66.21	60.08	54.62	48.26
90.0	108.17	97.76	87.92	80.16	72.06	64.86	58.89	52.88	47.70
135.0	122.46	110.08	100.01	90.68	80.44	72.96	66.15	59.18	52.76
180.0	127.35	113.23	102.88	93.21	83.42	74.81	67.67	61.26	54.56
225.0	117.73	108.28	95.63	86.79	75.60	67.22	60.58	53.94	48.38
270.0	118.46	106.37	96.13	87.08	76.56	69.02	62.61	56.59	49.61
315.0	104.79	93.88	83.98	76.22	68.18	60.92	55.24	49.28	44.38
360.0	101.64	90.62	82.24	74.70	66.77	59.91	54.34	48.66	43.43
C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	39.26	34.88	31.50	28.01	24.98	22.73	20.81	19.80	19.07
45.0	43.37	39.15	34.26	30.88	28.13	25.03	22.61	21.09	20.03
90.0	42.47	37.86	33.92	30.60	27.00	24.41	22.33	20.70	19.91
135.0	47.53	42.24	37.29	33.47	29.98	26.78	23.96	21.88	20.81
180.0	48.32	42.86	38.36	33.86	29.93	26.78	24.02	21.60	20.59
225.0	42.64	37.58	33.53	29.87	25.99	23.46	21.71	20.42	19.69
270.0	44.61	39.43	34.88	31.28	27.62	24.69	22.16	20.70	19.86
315.0	39.38	34.82	31.33	28.24	24.86	22.73	21.15	20.03	19.35
360.0	39.26	34.88	31.50	28.01	24.98	22.73	20.81	19.80	19.07
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	18.51	17.89	17.49	17.10	16.71	16.31	15.98	15.64	15.30
45.0	19.29	18.62	18.00	17.61	17.16	16.76	16.48	16.14	15.75
90.0	19.24	18.51	18.06	17.61	17.10	16.82	16.43	16.03	15.75
135.0	20.03	19.24	18.73	18.23	17.72	17.27	16.93	16.48	16.09
180.0	19.86	19.13	18.51	18.00	17.55	17.10	16.71	16.31	15.98
225.0	19.07	18.45	17.89	17.49	17.04	16.65	16.20	15.86	15.53
270.0	19.18	18.56	18.06	17.61	17.10	16.76	16.37	16.03	15.64
315.0	18.73	18.17	17.66	17.27	16.82	16.43	15.98	15.64	15.30
360.0	18.51	17.89	17.49	17.10	16.71	16.31	15.98	15.64	15.30
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	14.96	14.68	14.40	13.95	13.61	13.28	12.77	12.38	12.04
45.0	15.47	15.13	14.85	14.46	14.12	13.73	13.22	12.88	12.54
90.0	15.36	15.02	14.79	14.34	13.95	13.67	13.16	12.83	12.49
135.0	15.75	15.36	15.08	14.74	14.29	14.01	13.61	13.11	12.83
180.0	15.58	15.24	14.96	14.46	14.06	13.84	13.39	12.99	12.66
225.0	15.13	14.79	14.46	14.06	13.67	13.28	12.88	12.54	12.04
270.0	15.30	14.96	14.68	14.23	13.89	13.56	13.05	12.66	12.26
315.0	14.96	14.51	14.29	13.84	13.44	13.11	12.60	12.26	11.87
360.0	14.96	14.68	14.40	13.95	13.61	13.28	12.77	12.38	12.04
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	11.53	11.25	10.80	10.35	9.96	9.62	9.28	9.00	8.83
45.0	11.98	11.70	11.25	10.80	10.41	10.01	9.62	9.23	8.94
90.0	12.09	11.76	11.31	10.97	10.52	9.96	9.51	9.17	8.83
135.0	12.43	12.09	11.76	11.36	10.97	10.46	9.96	9.51	9.11
180.0	12.26	11.93	11.59	11.19	10.80	10.35	9.73	9.34	9.00
225.0	11.70	11.36	10.91	10.52	10.13	9.73	9.28	9.00	8.72
270.0	11.81	11.31	10.97	10.63	10.13	9.79	9.39	9.11	8.89
315.0	11.48	11.03	10.63	10.29	9.90	9.56	9.23	9.00	8.83
360.0	11.53	11.25	10.80	10.35	9.96	9.62	9.28	9.00	8.83

Intensity data(cd)

Appendix Page: 19 Total:19

C/ γ (°)	90.0
0.0	8.78
45.0	8.78
90.0	8.72
135.0	8.94
180.0	8.83
225.0	8.72
270.0	8.78
315.0	8.83
360.0	8.78