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NATA

LumCAT: 3-2116-N	
Luminaire: 92.70.131.00	
Report No: NATA0100	Voltage(V): 34.8000
Test No: GC2019022001	Current(A): 0.4000
LampCAT: CITIZEN CLU720	Power (W): 13.9200
Lamp flux(lm): 1681.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 80	Width(mm): 80
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1399.76
Efficiency(%): 83.27%
Lumens(lm)/Power(W): 100.68
Central intensity(cd): 7517.672
Maximum intensity(cd): 7517.672
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=20.1
 [C90/270]Total=20.1
Field angle(10%Imax): [C0/180]Total=42.2
 [C90/270]Total=42.2
Maximum s/h(1/2): C0_180=0.34 C90_270=0.34
Maximum s/h(1/4): C0_180=0.34 C90_270=0.34
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 83.37%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.100%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	7517.672	1.799	1.799	.107%	.128%
1.0	7479.352	14.314	16.113	.852%	1.151%
2.0	7361.438	28.173	44.286	1.676%	3.164%
3.0	7138.266	40.968	85.254	2.437%	6.091%
4.0	6840.844	52.329	137.583	3.113%	9.829%
5.0	6472.547	61.862	199.445	3.680%	14.249%
6.0	6025.219	69.065	268.51	4.109%	19.183%
7.0	5480.367	73.241	341.752	4.357%	24.415%
8.0	4975.945	75.942	417.694	4.518%	29.840%
9.0	4381.313	75.160	492.854	4.471%	35.210%
10.0	3780.352	71.987	564.841	4.282%	40.353%
11.0	3281.484	68.663	633.504	4.085%	45.258%
12.0	2791.898	63.655	697.158	3.787%	49.806%
13.0	2310.117	56.987	754.145	3.390%	53.877%
14.0	1935.000	51.334	805.479	3.054%	57.544%
15.0	1612.849	45.776	851.256	2.723%	60.815%
16.0	1329.180	40.177	891.433	2.390%	63.685%
17.0	1161.401	37.237	928.669	2.215%	66.345%
18.0	1017.309	34.474	963.143	2.051%	68.808%
19.0	909.274	32.463	995.606	1.931%	71.127%
20.0	822.769	30.859	1026.465	1.836%	73.332%
21.0	756.316	29.722	1056.187	1.768%	75.455%
22.0	705.642	28.988	1085.175	1.724%	77.526%
23.0	661.795	28.357	1113.531	1.687%	79.552%
24.0	625.514	27.900	1141.431	1.660%	81.545%
25.0	594.007	27.529	1168.96	1.638%	83.512%
26.0	565.186	27.170	1196.13	1.616%	85.453%
27.0	526.198	26.197	1222.327	1.558%	87.324%
28.0	479.018	24.661	1246.988	1.467%	89.086%
29.0	412.573	21.934	1268.922	1.305%	90.653%
30.0	339.012	18.588	1287.51	1.106%	91.981%
31.0	254.138	14.354	1301.864	.854%	93.006%
32.0	176.534	10.259	1312.122	.610%	93.739%
33.0	122.182	7.297	1319.42	.434%	94.261%
34.0	71.367	4.376	1323.796	.260%	94.573%
35.0	53.030	3.336	1327.132	.198%	94.812%
36.0	45.977	2.964	1330.095	.176%	95.023%
37.0	42.209	2.786	1332.881	.166%	95.222%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	38.763	2.617	1335.498	.156%	95.409%
39.0	36.211	2.499	1337.997	.149%	95.588%
40.0	34.172	2.409	1340.405	.143%	95.760%
41.0	32.604	2.346	1342.751	.140%	95.927%
42.0	31.036	2.277	1345.028	.135%	96.090%
43.0	29.496	2.206	1347.234	.131%	96.248%
44.0	28.139	2.144	1349.378	.128%	96.401%
45.0	26.670	2.068	1351.446	.123%	96.549%
46.0	25.369	2.001	1353.447	.119%	96.692%
47.0	24.026	1.927	1355.374	.115%	96.829%
48.0	22.845	1.862	1357.236	.111%	96.962%
49.0	21.642	1.791	1359.027	.107%	97.090%
50.0	20.503	1.722	1360.749	.102%	97.213%
51.0	19.519	1.663	1362.413	.099%	97.332%
52.0	18.471	1.596	1364.009	.095%	97.446%
53.0	17.438	1.527	1365.536	.091%	97.555%
54.0	16.608	1.473	1367.009	.088%	97.661%
55.0	15.841	1.423	1368.432	.085%	97.762%
56.0	15.082	1.371	1369.804	.082%	97.860%
57.0	14.456	1.330	1371.133	.079%	97.955%
58.0	13.795	1.283	1372.416	.076%	98.047%
59.0	13.233	1.244	1373.66	.074%	98.136%
60.0	12.776	1.213	1374.873	.072%	98.222%
61.0	12.382	1.188	1376.061	.071%	98.307%
62.0	12.066	1.168	1377.229	.069%	98.391%
63.0	11.827	1.156	1378.385	.069%	98.473%
64.0	11.292	1.113	1379.498	.066%	98.553%
65.0	10.603	1.054	1380.551	.063%	98.628%
66.0	9.844	0.986	1381.538	.059%	98.698%
67.0	9.049	0.913	1382.451	.054%	98.764%
68.0	8.599	0.874	1383.325	.052%	98.826%
69.0	8.374	0.857	1384.183	.051%	98.887%
70.0	8.248	0.850	1385.033	.051%	98.948%
71.0	8.114	0.841	1385.874	.050%	99.008%
72.0	8.009	0.835	1386.709	.050%	99.068%
73.0	7.889	0.827	1387.536	.049%	99.127%
74.0	7.777	0.820	1388.356	.049%	99.186%
75.0	7.678	0.813	1389.17	.048%	99.244%

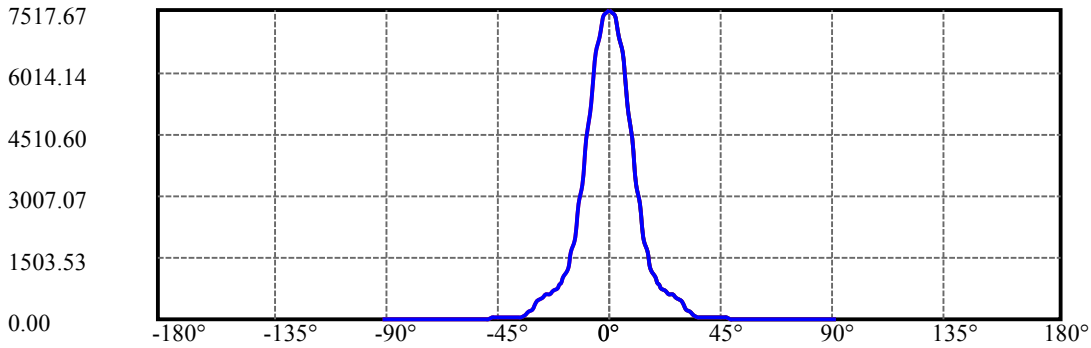
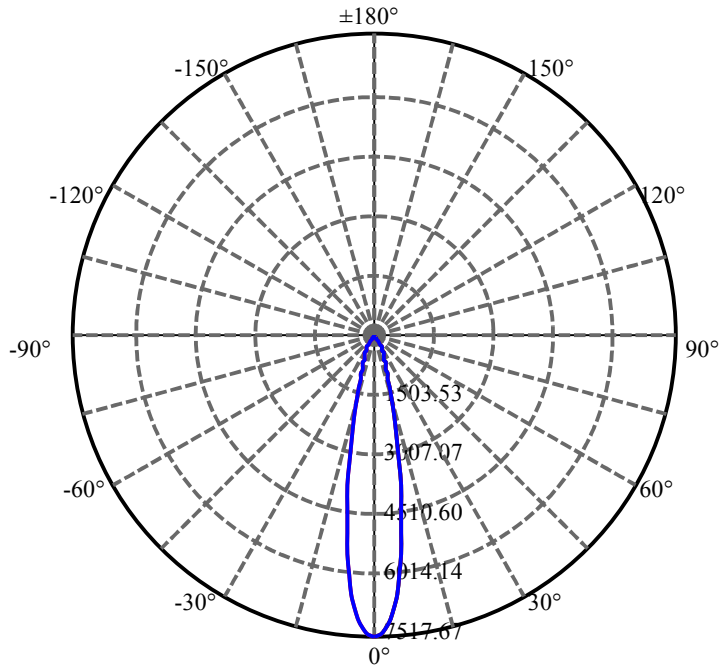
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	7.538	0.802	1389.972	.048%	99.301%
77.0	7.432	0.794	1390.766	.047%	99.358%
78.0	7.348	0.788	1391.554	.047%	99.414%
79.0	7.256	0.781	1392.335	.046%	99.470%
80.0	7.186	0.776	1393.111	.046%	99.525%
81.0	7.158	0.775	1393.886	.046%	99.581%
82.0	7.102	0.771	1394.657	.046%	99.636%
83.0	6.989	0.761	1395.418	.045%	99.690%
84.0	6.806	0.742	1396.16	.044%	99.743%
85.0	6.539	0.714	1396.875	.042%	99.794%
86.0	6.258	0.685	1397.559	.041%	99.843%
87.0	5.977	0.654	1398.214	.039%	99.890%
88.0	5.738	0.629	1398.843	.037%	99.935%
89.0	5.583	0.612	1399.455	.036%	99.978%
90.0	5.505	0.302	1399.757	.018%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1287.51	76.59%	91.98%
0-40	1340.41	79.74%	95.76%
0-60	1374.87	81.79%	98.22%
0-90	1399.45	83.25%	99.98%
0-120	1399.45	83.25%	99.98%
0-180	1399.76	83.27%	100.00%
60-90	25.79	1.53%	1.84%
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%
0-23.22	1119.81	66.62%	80.00%

ZONAL LUMEN SUMMARY

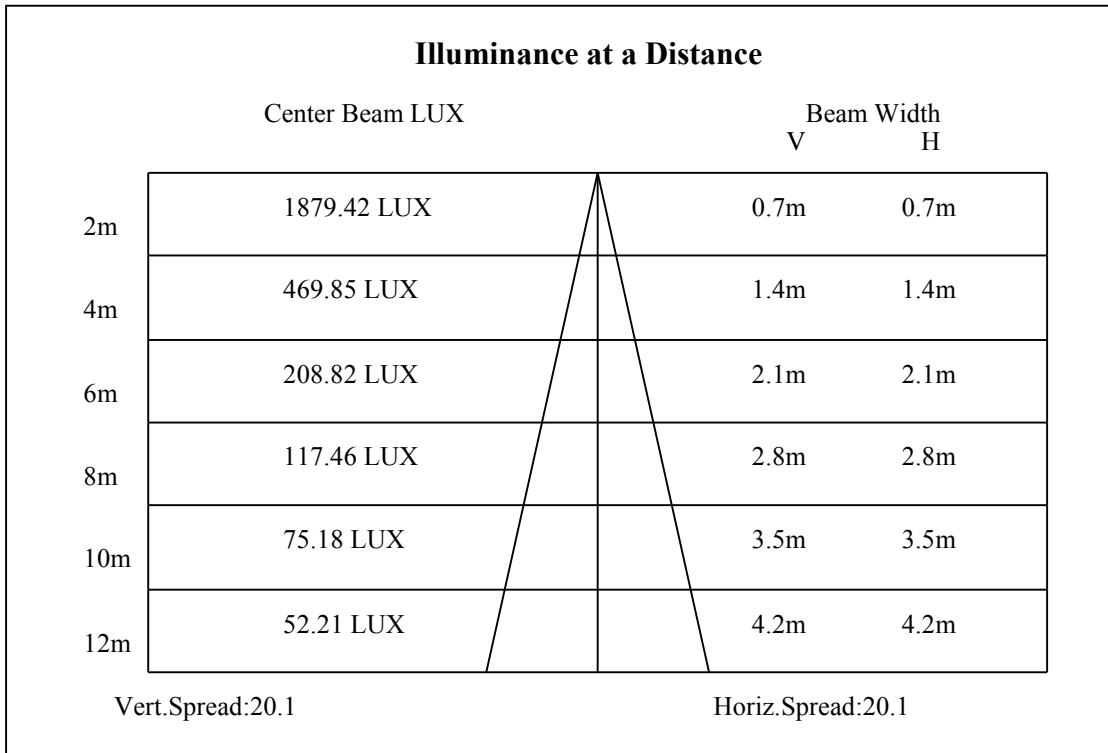
0-10	564.84
10-20	461.62
20-30	261.05
30-40	52.90
40-50	20.34
50-60	14.12
60-70	10.16
70-80	8.08
80-90	6.34
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

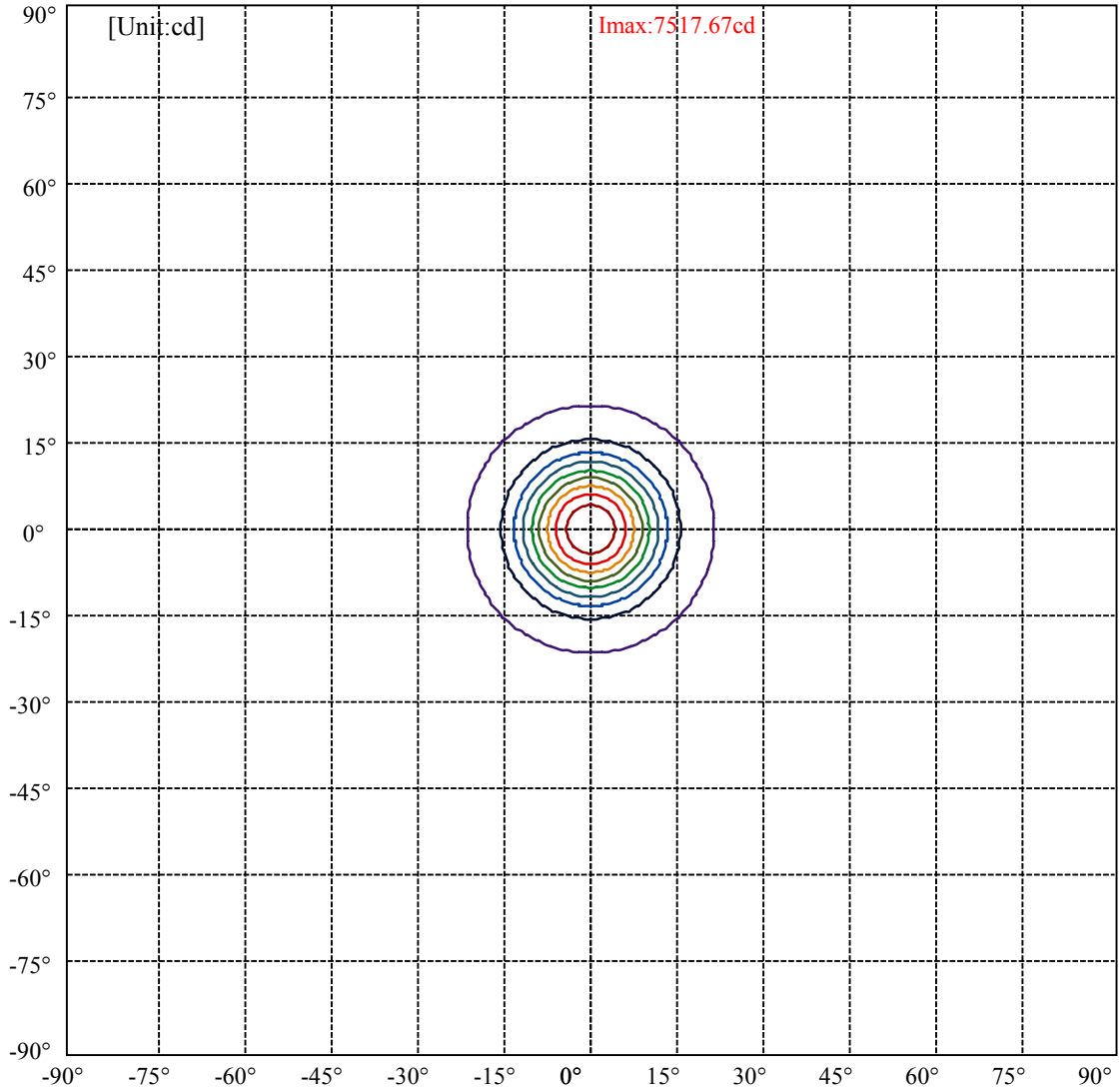


C0(Max): —————
C0/C180: —————
C90/C270: —————

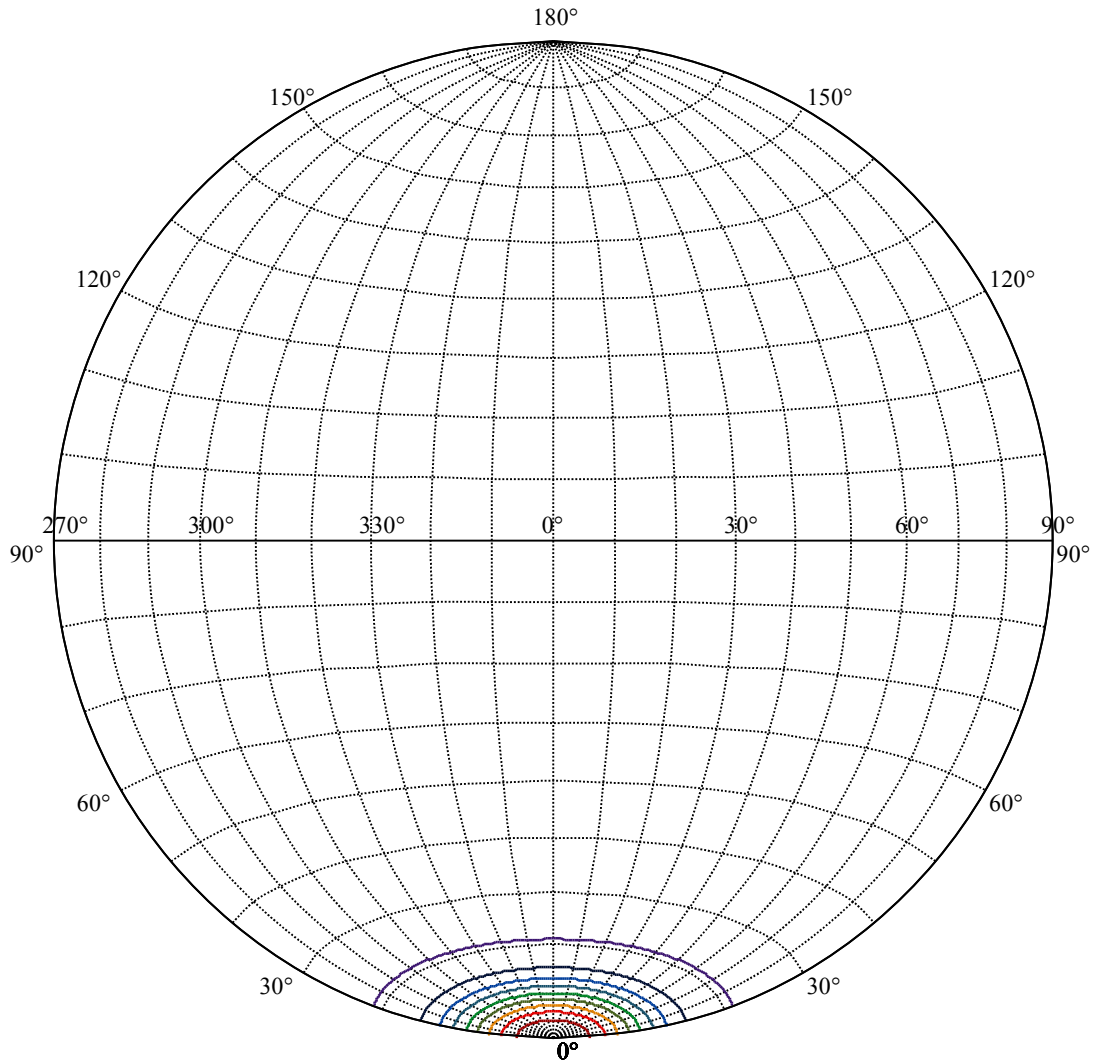
Field angle(10%Imax):C0/180Left:21.1 Right:21.1
:C90/270Left:21.1 Right:21.1

Beam Angle(50%Imax):C0/180Left:10.0 Right:10.0
:C90/270Left:10.0 Right:10.0





(10%Imax) 751.767	—
(20%Imax) 1503.53	—
(30%Imax) 2255.3	—
(40%Imax) 3007.07	—
(50%Imax) 3758.84	—
(60%Imax) 4510.6	—
(70%Imax) 5262.37	—
(80%Imax) 6014.14	—
(90%Imax) 6765.91	—



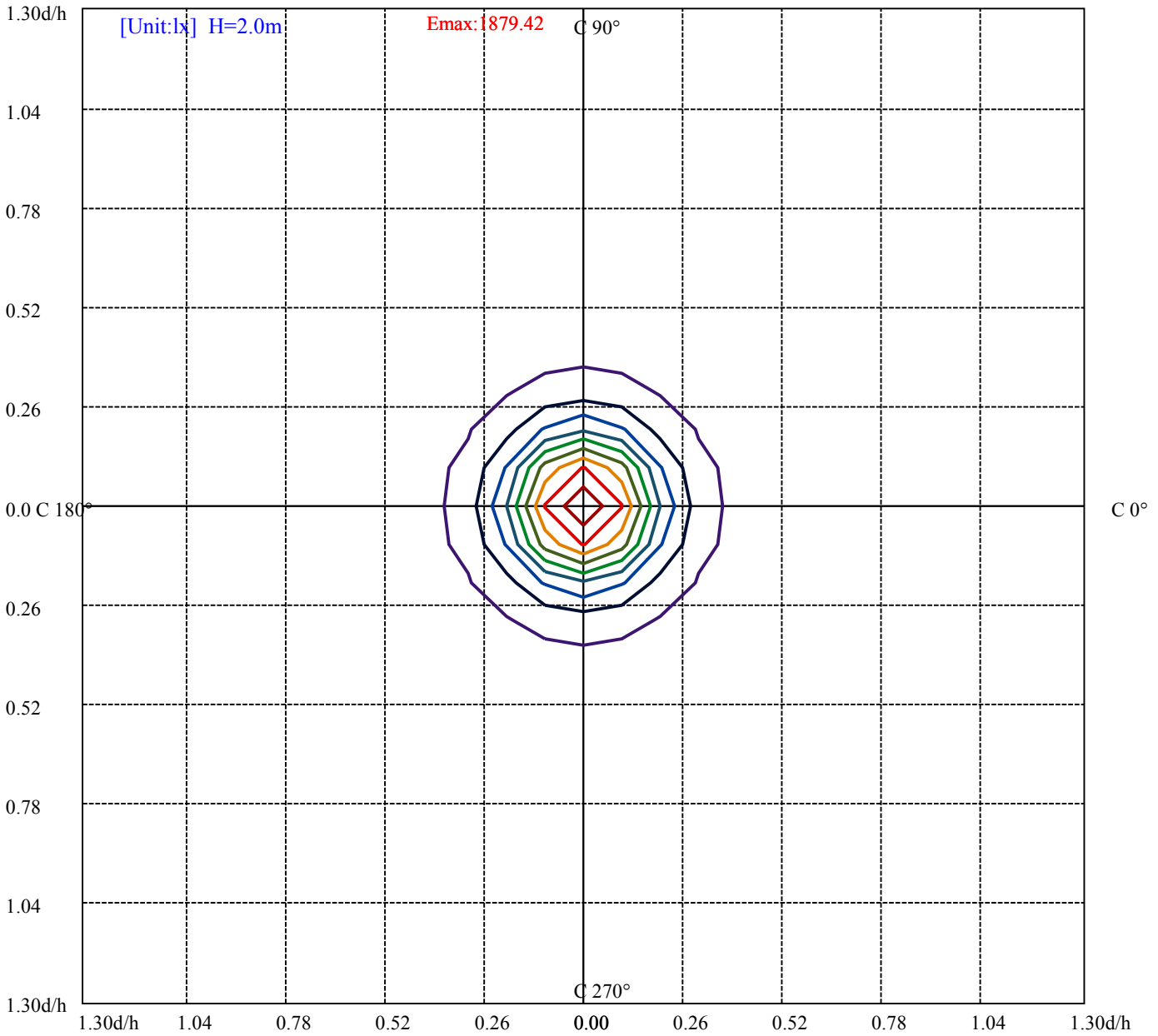
House

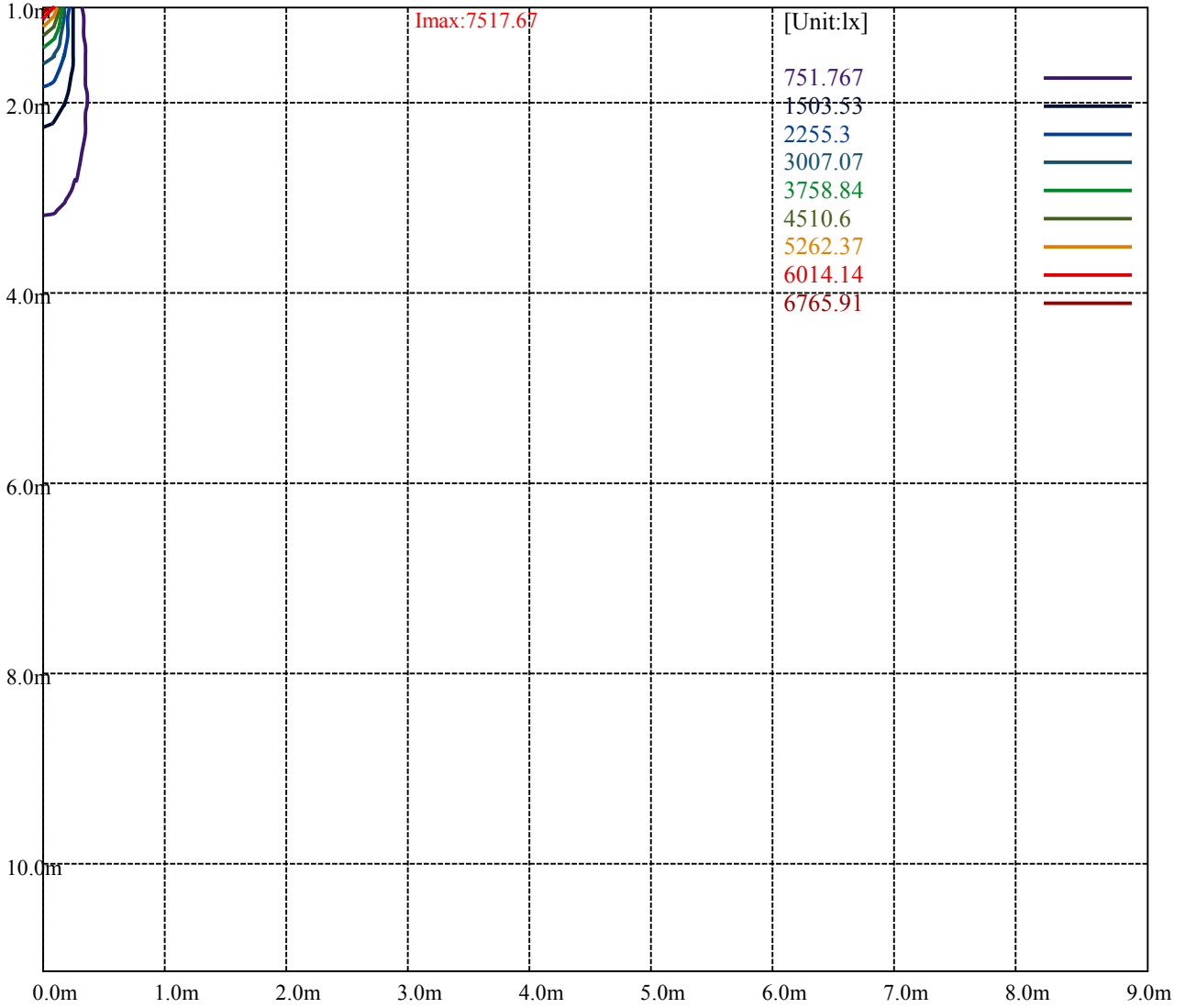
[Unit:cd]

Road

Imax:7517.67

(10%Imax) 751.767	—
(20%Imax) 1503.53	—
(30%Imax) 2255.3	—
(40%Imax) 3007.07	—
(50%Imax) 3758.84	—
(60%Imax) 4510.6	—
(70%Imax) 5262.37	—
(80%Imax) 6014.14	—
(90%Imax) 6765.91	—





Luminance Table

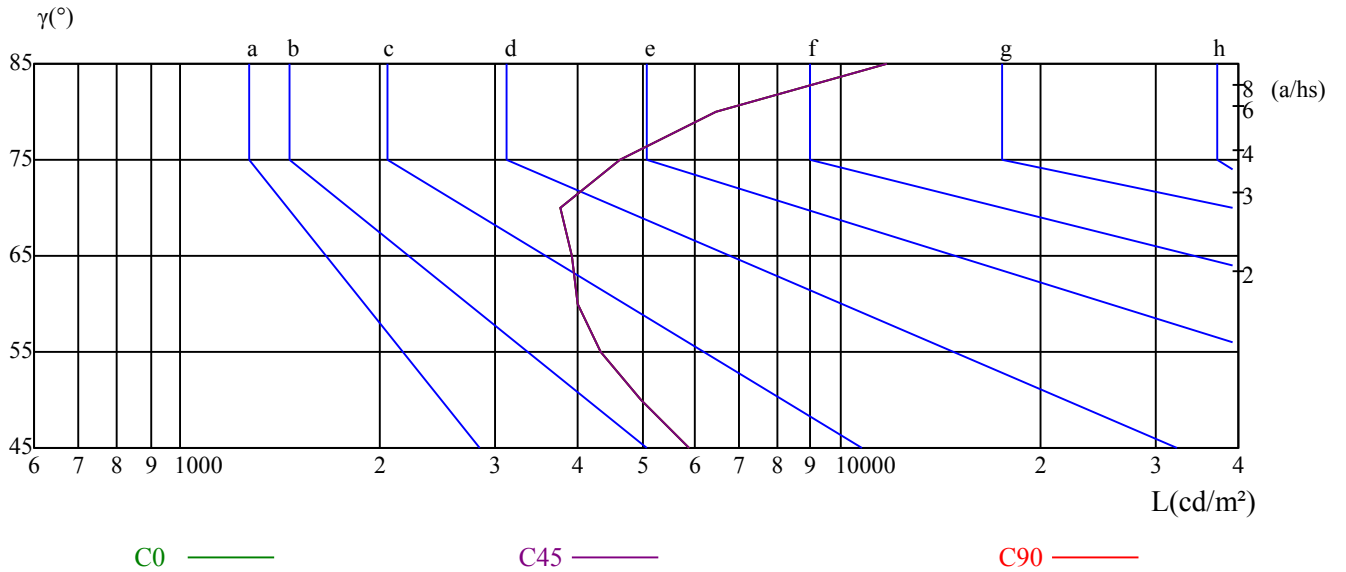
γ	45	50	55	60	65	70	75	80	85
C0	5893	4984	4315	3992	3920	3768	4635	6466	11723
C45	5893	4984	4315	3992	3920	3768	4635	6466	11723
C90	5893	4984	4315	3992	3920	3768	4635	6466	11723

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3920	3920	3920	4635	4635	4635	11723	11723	11723

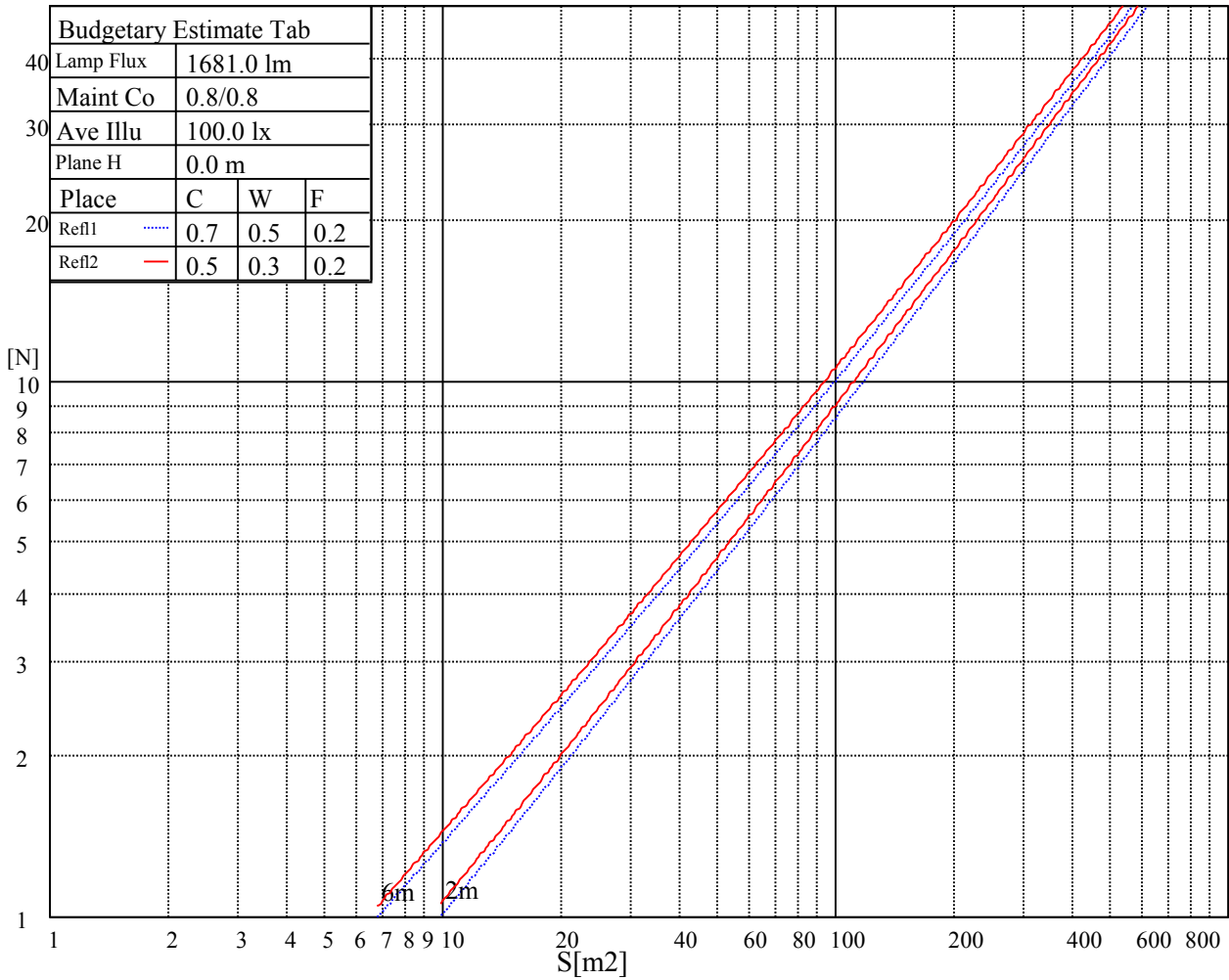
Glare Table

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

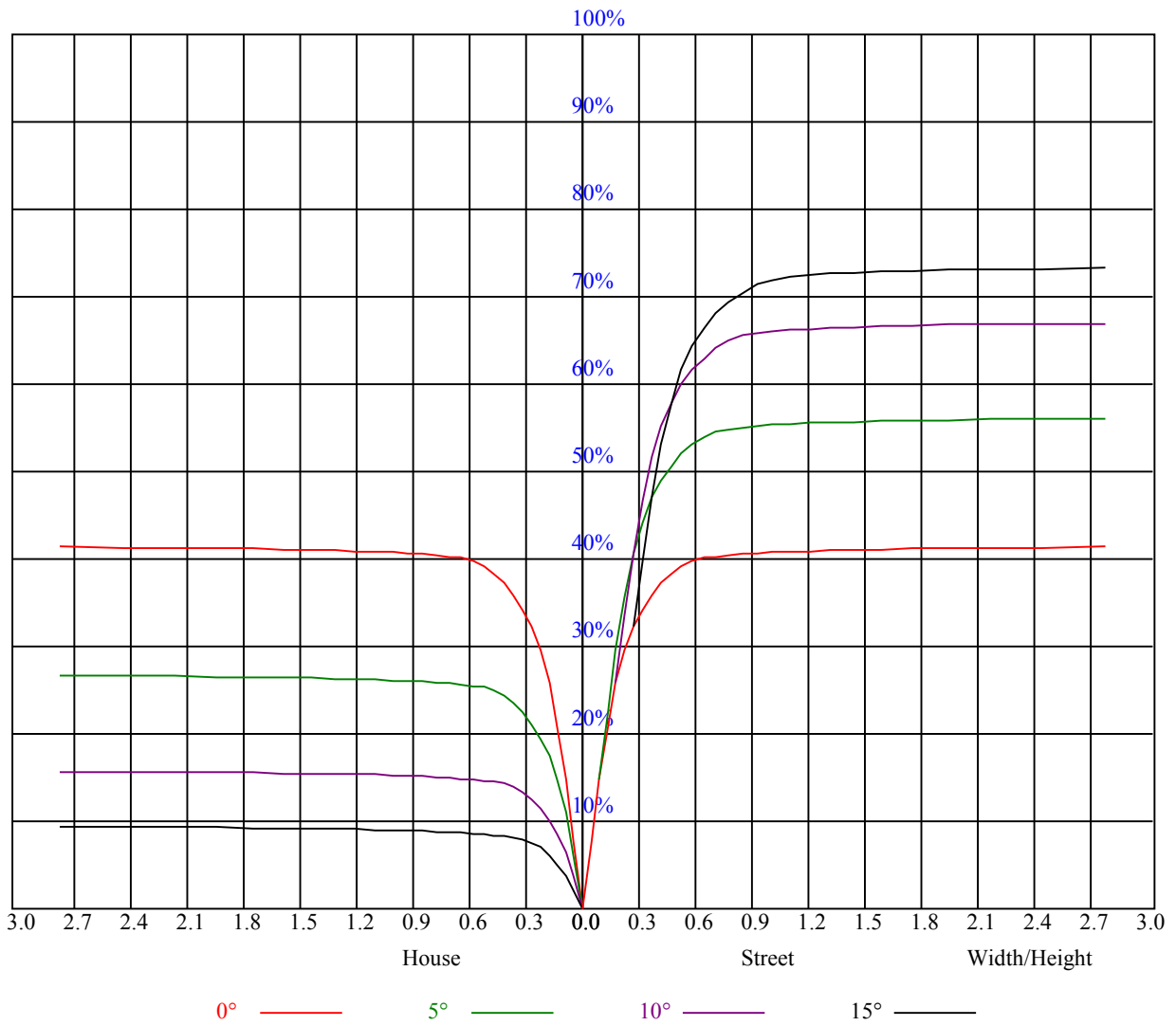
Luminance Limiting Curve



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	7.16	8.10	7.53	8.42	8.73	7.16	8.10	7.52	8.41	8.73
	3H	8.94	9.77	9.33	10.11	10.48	8.90	9.73	9.28	10.06	10.43
	4H	9.97	10.74	10.38	11.09	11.49	9.93	10.70	10.34	11.05	11.45
	6H	11.26	11.96	11.68	12.34	12.74	11.27	11.97	11.69	12.35	12.74
	8H	12.02	12.68	12.45	13.07	13.48	12.03	12.69	12.47	13.08	13.49
	12H	13.33	13.96	13.76	14.34	14.78	13.30	13.93	13.74	14.32	14.75
4H	2H	7.66	8.43	8.07	8.78	9.17	7.65	8.42	8.06	8.78	9.17
	3H	9.69	10.32	10.10	10.73	11.13	9.66	10.29	10.07	10.70	11.10
	4H	10.93	11.50	11.37	11.92	12.37	10.91	11.47	11.34	11.89	12.34
	6H	12.35	12.83	12.82	13.28	13.76	12.37	12.85	12.84	13.30	13.78
	8H	13.26	13.71	13.74	14.16	14.64	13.29	13.74	13.76	14.19	14.66
	12H	14.59	14.98	15.09	15.47	15.95	14.57	14.96	15.06	15.45	15.93
8H	4H	11.40	11.85	11.88	12.30	12.78	11.38	11.83	11.86	12.28	12.76
	6H	13.14	13.50	13.65	14.00	14.49	13.16	13.51	13.67	14.02	14.50
	8H	14.26	14.58	14.79	15.10	15.60	14.28	14.59	14.81	15.11	15.61
	12H	15.85	16.12	16.38	16.62	17.20	15.82	16.09	16.34	16.59	17.17
12H	4H	11.53	11.91	12.02	12.40	12.88	11.51	11.89	12.00	12.38	12.86
	6H	13.61	13.70	13.92	14.17	14.72	13.63	13.71	13.93	14.19	14.74
	8H	14.63	14.90	15.15	15.40	15.98	14.64	14.91	15.16	15.41	15.99
Variation with the observer position at spacings:											
S = 1.0H	2.5/-1.2					2.5/-1.2					
S = 1.5H	3.1/-1.2					3.1/-1.2					
S = 2.0H	3.5/-1.1					3.5/-1.1					
Standard tables:	BKBF					BKBF					
Uncorrected UGR	-0.3					-0.3					



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	0.99	0.99	0.99	0.97	0.97	0.97	0.93	0.93	0.93	0.89	0.89	0.89	0.85	0.85	0.85	0.83
1	0.94	0.92	0.90	0.92	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.84	0.83	0.82	0.81	0.80
2	0.89	0.86	0.84	0.87	0.85	0.83	0.85	0.83	0.81	0.82	0.81	0.79	0.80	0.79	0.78	0.77
3	0.85	0.82	0.79	0.84	0.81	0.79	0.82	0.79	0.77	0.80	0.78	0.76	0.78	0.76	0.75	0.74
4	0.81	0.78	0.75	0.81	0.77	0.75	0.79	0.76	0.74	0.77	0.75	0.73	0.76	0.74	0.72	0.71
5	0.78	0.75	0.72	0.78	0.74	0.72	0.76	0.73	0.71	0.75	0.73	0.71	0.74	0.72	0.70	0.69
6	0.76	0.72	0.69	0.75	0.72	0.69	0.74	0.71	0.69	0.73	0.70	0.68	0.72	0.70	0.68	0.67
7	0.73	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.67	0.71	0.68	0.66	0.70	0.68	0.66	0.65
8	0.71	0.67	0.65	0.71	0.67	0.65	0.70	0.67	0.65	0.69	0.66	0.64	0.68	0.66	0.64	0.63
9	0.69	0.66	0.63	0.69	0.65	0.63	0.68	0.65	0.63	0.67	0.65	0.63	0.67	0.64	0.63	0.62
10	0.67	0.64	0.61	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



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	7486.31	7581.38	7586.44	7512.75	7332.19	7059.94	6737.06	6296.63	5843.25
45.0	7508.25	7565.06	7542.00	7426.13	7252.88	6962.63	6567.75	6136.88	5654.81
90.0	7531.31	7475.06	7351.88	7124.06	6800.06	6431.63	5986.13	5357.81	4821.75
135.0	7544.81	7464.94	7281.56	7000.31	6674.63	6230.25	5711.06	5199.19	4664.25
180.0	7486.31	7328.25	7090.31	6697.69	6308.44	5856.19	5290.31	4682.25	4136.06
225.0	7508.25	7365.94	7154.44	6834.94	6416.44	5972.06	5493.94	4843.69	4307.63
270.0	7531.31	7506.00	7398.56	7189.88	6918.19	6525.00	6055.31	5586.75	5082.75
315.0	7544.81	7548.19	7486.31	7320.38	7023.94	6742.69	6360.19	5739.75	5297.06
360.0	7486.31	7581.38	7586.44	7512.75	7332.19	7059.94	6737.06	6296.63	5843.25
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	5290.88	4701.94	4163.63	3638.25	3008.81	2549.81	2145.94	1725.75	1463.63
45.0	5004.00	4452.75	3902.63	3377.81	2761.31	2334.38	1958.63	1569.94	1332.00
90.0	4268.81	3598.31	3100.50	2637.00	2175.75	1792.69	1509.19	1105.99	1086.58
135.0	3992.63	3474.00	2971.13	2468.25	2030.63	1713.94	1424.25	1204.31	1058.63
180.0	3530.81	2957.63	2509.88	2074.50	1744.88	1449.56	1115.04	1061.27	941.12
225.0	3776.63	3136.50	2662.88	2250.56	1855.13	1541.81	1320.19	1112.06	1005.69
270.0	4420.69	3898.13	3382.88	2837.81	2361.94	1992.94	1654.31	1378.13	1193.06
315.0	4766.06	4023.56	3558.38	3051.00	2542.50	2104.88	1775.25	1476.00	1210.50
360.0	5290.88	4701.94	4163.63	3638.25	3008.81	2549.81	2145.94	1725.75	1463.63
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1256.63	1099.69	954.00	868.50	801.00	732.38	687.94	651.38	616.50
45.0	1140.19	984.38	876.38	796.50	743.06	696.38	659.81	622.69	595.13
90.0	943.09	839.87	768.88	701.89	649.52	611.61	578.98	547.88	527.12
135.0	936.56	852.19	778.50	717.75	672.19	630.56	585.56	555.19	529.88
180.0	829.80	760.89	707.63	659.03	629.33	605.64	581.63	560.59	523.35
225.0	900.96	823.28	767.19	714.94	671.96	637.20	607.05	575.38	550.07
270.0	1038.94	940.50	856.13	795.38	735.19	686.81	645.19	613.13	582.75
315.0	1092.32	973.41	873.45	796.56	742.89	693.79	657.96	625.84	596.70
360.0	1256.63	1099.69	954.00	868.50	801.00	732.38	687.94	651.38	616.50
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	585.00	561.94	522.00	467.44	389.25	297.00	286.31	130.95	73.63
45.0	564.19	534.94	486.00	428.63	325.13	288.00	171.34	91.24	60.58
90.0	498.49	452.25	374.18	301.05	224.78	136.01	83.36	56.93	49.05
135.0	485.44	429.75	365.63	291.94	195.58	125.72	68.74	52.43	47.70
180.0	449.78	384.81	289.91	186.24	124.14	69.30	50.96	47.19	43.54
225.0	502.71	417.43	343.01	262.52	163.58	93.88	56.76	46.91	43.82
270.0	549.00	504.56	443.25	370.13	286.31	181.58	116.10	64.07	52.48
315.0	574.99	546.47	476.61	404.16	324.34	220.78	143.89	81.23	53.44
360.0	585.00	561.94	522.00	467.44	389.25	297.00	286.31	130.95	73.63
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	53.04	48.43	43.37	39.54	37.07	35.21	33.13	31.78	30.43
45.0	52.26	47.76	42.69	39.09	36.45	34.48	32.63	31.16	29.76
90.0	44.44	40.50	37.52	35.49	33.53	31.84	30.71	28.97	27.68
135.0	42.92	39.54	36.73	34.82	33.08	31.73	30.09	28.63	27.23
180.0	39.15	37.29	35.49	33.75	31.89	30.60	29.03	27.62	26.33
225.0	39.66	36.23	34.71	32.85	31.28	30.38	28.86	27.17	26.10
270.0	47.93	43.31	39.15	36.84	34.71	33.08	31.61	30.04	28.58
315.0	48.43	44.61	40.44	37.29	35.38	33.53	32.23	30.60	29.03
360.0	53.04	48.43	43.37	39.54	37.07	35.21	33.13	31.78	30.43

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	28.91	27.73	26.38	25.03	23.85	22.56	21.49	20.42	19.13
45.0	27.96	26.55	25.20	24.08	22.61	21.43	20.53	19.35	18.28
90.0	26.33	25.03	23.63	22.50	21.38	20.19	19.29	18.28	17.33
135.0	25.71	24.53	23.34	22.16	20.93	20.03	18.90	17.89	16.93
180.0	24.86	23.63	22.11	20.87	20.03	19.13	18.11	17.27	16.31
225.0	24.75	23.46	22.11	21.04	20.08	19.01	18.11	17.16	16.26
270.0	27.06	25.65	24.47	23.40	21.77	20.70	19.74	18.51	17.49
315.0	27.79	26.38	24.98	23.68	22.50	20.98	19.97	18.90	17.78
360.0	28.91	27.73	26.38	25.03	23.85	22.56	21.49	20.42	19.13
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	18.23	17.27	16.37	15.53	14.74	14.12	13.44	13.16	12.60
45.0	17.27	16.48	15.53	14.85	14.18	13.50	12.99	12.54	12.21
90.0	16.43	15.81	15.13	14.46	13.73	13.28	12.83	12.43	11.98
135.0	16.20	15.47	14.79	14.23	13.67	13.16	12.83	12.43	12.04
180.0	15.64	14.85	14.18	13.56	12.88	12.43	11.93	11.48	11.53
225.0	15.47	14.79	14.12	13.50	12.94	12.54	12.21	11.81	11.76
270.0	16.82	15.92	15.19	14.79	14.12	13.44	12.99	12.66	12.26
315.0	16.82	16.14	15.36	14.74	14.12	13.39	12.99	12.54	12.15
360.0	18.23	17.27	16.37	15.53	14.74	14.12	13.44	13.16	12.60
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	12.26	11.87	11.59	11.36	10.58	9.28	8.72	8.49	8.38
45.0	11.93	11.53	11.25	10.80	9.34	8.72	8.38	8.27	8.16
90.0	11.53	11.25	10.58	9.45	8.78	8.49	8.33	8.21	8.04
135.0	11.64	11.03	10.24	9.17	8.61	8.44	8.27	8.16	7.99
180.0	12.04	10.69	9.17	8.72	8.49	8.38	8.27	8.16	8.04
225.0	11.48	10.91	9.39	8.72	8.38	8.27	8.16	8.04	7.88
270.0	11.98	11.59	11.31	9.96	8.94	8.66	8.55	8.44	8.33
315.0	11.76	11.48	11.31	10.58	9.28	8.55	8.33	8.21	8.10
360.0	12.26	11.87	11.59	11.36	10.58	9.28	8.72	8.49	8.38
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	8.27	8.16	8.04	7.93	7.76	7.65	7.54	7.43	7.37
45.0	7.99	7.82	7.71	7.65	7.48	7.37	7.26	7.14	7.09
90.0	7.93	7.82	7.71	7.65	7.59	7.48	7.43	7.31	7.26
135.0	7.88	7.76	7.65	7.54	7.48	7.43	7.37	7.31	7.26
180.0	7.99	7.82	7.71	7.59	7.48	7.43	7.37	7.37	7.43
225.0	7.82	7.71	7.59	7.48	7.31	7.20	7.09	6.98	6.86
270.0	8.27	8.16	8.04	7.93	7.71	7.59	7.48	7.37	7.20
315.0	7.93	7.88	7.76	7.65	7.48	7.31	7.26	7.14	7.03
360.0	8.27	8.16	8.04	7.93	7.76	7.65	7.54	7.43	7.37
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	7.37	7.31	7.09	6.86	6.69	6.53	6.47	6.24	6.02
45.0	7.03	7.03	7.09	7.09	6.92	6.75	6.36	5.96	5.68
90.0	7.31	7.37	7.31	7.14	6.64	6.08	5.68	5.57	5.46
135.0	7.31	7.26	7.09	6.81	6.36	5.96	5.68	5.57	5.46
180.0	7.43	7.20	6.92	6.53	6.24	5.91	5.74	5.51	5.51
225.0	6.86	6.92	6.81	6.64	6.30	6.08	5.68	5.51	5.40
270.0	7.09	6.98	6.92	6.81	6.69	6.41	6.02	5.63	5.46
315.0	6.86	6.75	6.69	6.58	6.47	6.36	6.19	5.91	5.68
360.0	7.37	7.31	7.09	6.86	6.69	6.53	6.47	6.24	6.02

Intensity data(cd)

C/γ(°)	90.0
0.0	5.79
45.0	5.51
90.0	5.40
135.0	5.46
180.0	5.51
225.0	5.46
270.0	5.40
315.0	5.51
360.0	5.79