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Nata

LumCAT: LN01D04524DA-N

Luminaire: 97.70.234.00

Report No: 210106-B003

Test No: 210106-C003

LampCAT: TRIDONIC SLE G7 9MM

Lamp flux(lm): 1977.5

Number of Lamps: 1

Length(mm): 92

Phm Type: C

Voltage(V): 36.0900

Current(A): 0.3810

Power (W): 13.7500

PF: 0.0000

Ballast type: DC

Width(mm): 92

Height(mm): 50

Photometric Results

Lumens(lm): 1732.97

Efficiency(%): 87.63%

Lumens(lm)/Power(W): 126.03

Central intensity(cd): 6298.172

Maximum intensity(cd): 6298.172

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=28.1

[C90/270]Total=28.1

Field angle(10%Imax): [C0/180]Total=47.1

[C90/270]Total=47.1

Maximum s/h(1/2): C0_180=0.47 C90_270=0.47

Maximum s/h(1/4): C0_180=0.45 C90_270=0.45

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 87.63%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 96.297%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	6298.172	0.000	0	.000%	.000%
1.0	6281.789	6.019	6.019	.304%	.347%
2.0	6228.563	17.956	23.975	.908%	1.383%
3.0	6135.398	29.571	53.546	1.495%	3.090%
4.0	6011.648	40.660	94.206	2.056%	5.436%
5.0	5857.453	51.060	145.266	2.582%	8.383%
6.0	5647.852	60.463	205.73	3.058%	11.872%
7.0	5425.945	68.735	274.464	3.476%	15.838%
8.0	5191.313	75.986	350.45	3.843%	20.223%
9.0	4906.125	81.834	432.284	4.138%	24.945%
10.0	4597.031	86.000	518.284	4.349%	29.907%
11.0	4283.930	88.739	607.024	4.487%	35.028%
12.0	3942.211	89.923	696.947	4.547%	40.217%
13.0	3543.258	88.834	785.781	4.492%	45.343%
14.0	3177.211	86.021	871.802	4.350%	50.307%
15.0	2802.094	82.087	953.889	4.151%	55.044%
16.0	2443.781	76.867	1030.755	3.887%	59.479%
17.0	2073.797	70.351	1101.106	3.558%	63.539%
18.0	1762.945	63.260	1164.366	3.199%	67.189%
19.0	1467.338	56.200	1220.566	2.842%	70.432%
20.0	1197.541	48.775	1269.341	2.466%	73.247%
21.0	1012.634	42.440	1311.781	2.146%	75.696%
22.0	845.592	37.342	1349.122	1.888%	77.850%
23.0	701.388	32.460	1381.582	1.641%	79.723%
24.0	573.202	27.867	1409.449	1.409%	81.331%
25.0	482.041	23.994	1433.443	1.213%	82.716%
26.0	406.652	20.978	1454.421	1.061%	83.927%
27.0	343.216	18.346	1472.767	.928%	84.985%
28.0	297.042	16.210	1488.977	.820%	85.921%
29.0	251.852	14.361	1503.337	.726%	86.749%
30.0	217.702	12.678	1516.015	.641%	87.481%
31.0	192.241	11.408	1527.423	.577%	88.139%
32.0	170.016	10.378	1537.802	.525%	88.738%
33.0	152.719	9.508	1547.309	.481%	89.287%
34.0	138.080	8.800	1556.11	.445%	89.794%
35.0	124.439	8.153	1564.263	.412%	90.265%
36.0	113.288	7.569	1571.832	.383%	90.702%
37.0	104.182	7.093	1578.925	.359%	91.111%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	95.745	6.673	1585.598	.337%	91.496%
39.0	87.483	6.254	1591.852	.316%	91.857%
40.0	80.993	5.876	1597.728	.297%	92.196%
41.0	75.101	5.558	1603.286	.281%	92.517%
42.0	69.546	5.255	1608.541	.266%	92.820%
43.0	64.413	4.962	1613.504	.251%	93.106%
44.0	59.991	4.695	1618.199	.237%	93.377%
45.0	55.969	4.456	1622.656	.225%	93.634%
46.0	51.947	4.220	1626.876	.213%	93.878%
47.0	48.382	3.990	1630.866	.202%	94.108%
48.0	45.281	3.786	1634.653	.191%	94.327%
49.0	42.293	3.596	1638.249	.182%	94.534%
50.0	39.255	3.400	1641.649	.172%	94.730%
51.0	36.851	3.220	1644.869	.163%	94.916%
52.0	34.685	3.070	1647.939	.155%	95.093%
53.0	32.716	2.932	1650.87	.148%	95.263%
54.0	31.022	2.809	1653.68	.142%	95.425%
55.0	29.623	2.707	1656.387	.137%	95.581%
56.0	28.371	2.621	1659.007	.133%	95.732%
57.0	27.239	2.543	1661.55	.129%	95.879%
58.0	26.248	2.473	1664.023	.125%	96.022%
59.0	25.341	2.412	1666.435	.122%	96.161%
60.0	24.483	2.354	1668.789	.119%	96.297%
61.0	23.632	2.296	1671.085	.116%	96.429%
62.0	22.880	2.241	1673.326	.113%	96.558%
63.0	22.219	2.193	1675.52	.111%	96.685%
64.0	21.488	2.145	1677.664	.108%	96.809%
65.0	20.995	2.102	1679.767	.106%	96.930%
66.0	20.798	2.085	1681.852	.105%	97.050%
67.0	21.115	2.108	1683.96	.107%	97.172%
68.0	21.874	2.178	1686.137	.110%	97.298%
69.0	22.345	2.256	1688.393	.114%	97.428%
70.0	23.266	2.343	1690.736	.118%	97.563%
71.0	24.398	2.464	1693.199	.125%	97.705%
72.0	25.334	2.586	1695.785	.131%	97.854%
73.0	26.374	2.704	1698.489	.137%	98.010%
74.0	27.415	2.828	1701.317	.143%	98.174%
75.0	28.097	2.933	1704.25	.148%	98.343%

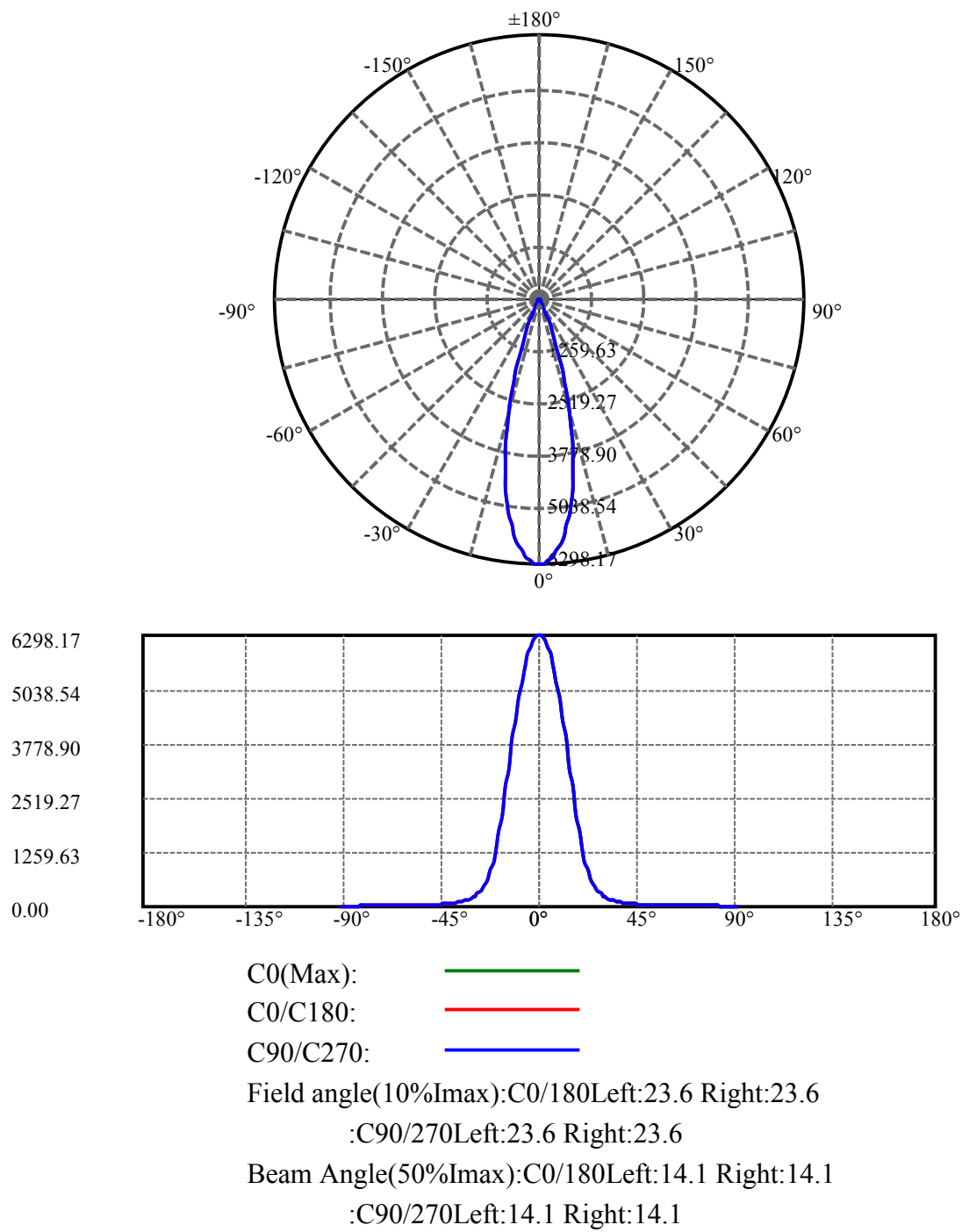
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	28.652	3.012	1707.263	.152%	98.517%
77.0	28.540	3.049	1710.312	.154%	98.693%
78.0	27.570	3.004	1713.315	.152%	98.866%
79.0	25.657	2.860	1716.175	.145%	99.031%
80.0	23.449	2.647	1718.823	.134%	99.184%
81.0	21.199	2.415	1721.237	.122%	99.323%
82.0	18.429	2.149	1723.386	.109%	99.447%
83.0	15.258	1.831	1725.217	.093%	99.553%
84.0	12.558	1.515	1726.733	.077%	99.640%
85.0	10.814	1.276	1728.008	.065%	99.714%
86.0	9.844	1.129	1729.137	.057%	99.779%
87.0	9.148	1.039	1730.177	.053%	99.839%
88.0	8.599	0.972	1731.149	.049%	99.895%
89.0	8.262	0.924	1732.073	.047%	99.948%
90.0	8.072	0.896	1732.969	.045%	100.000%

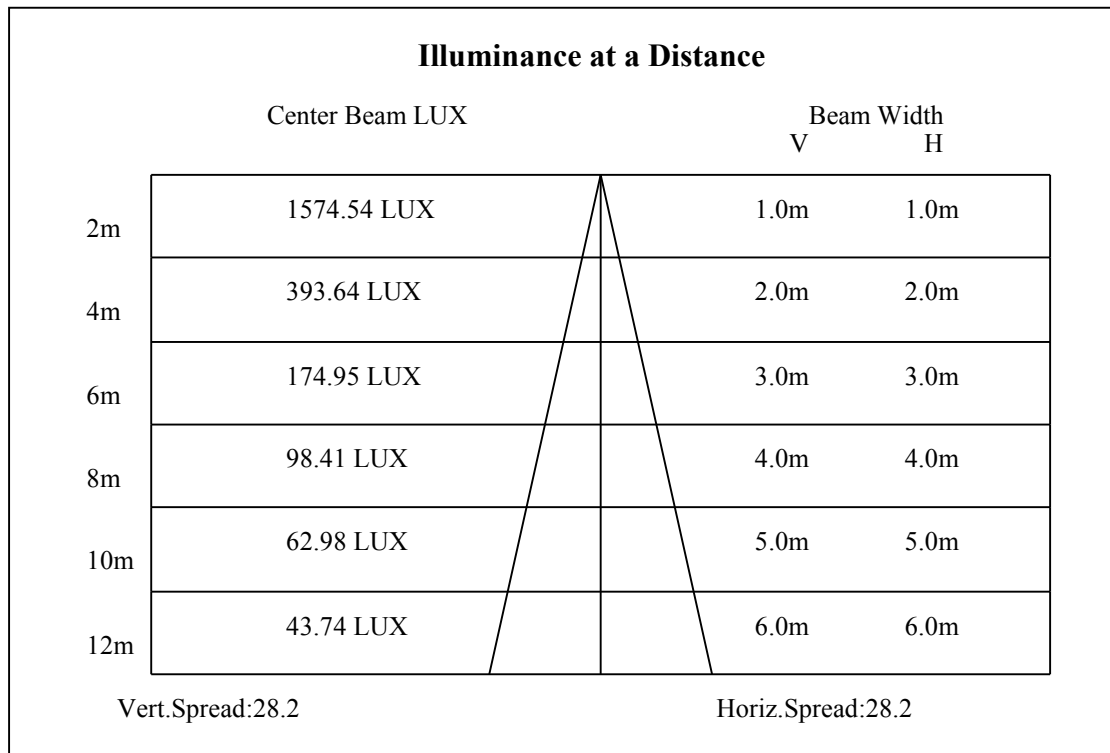
ZONAL LUMEN SUMMARY

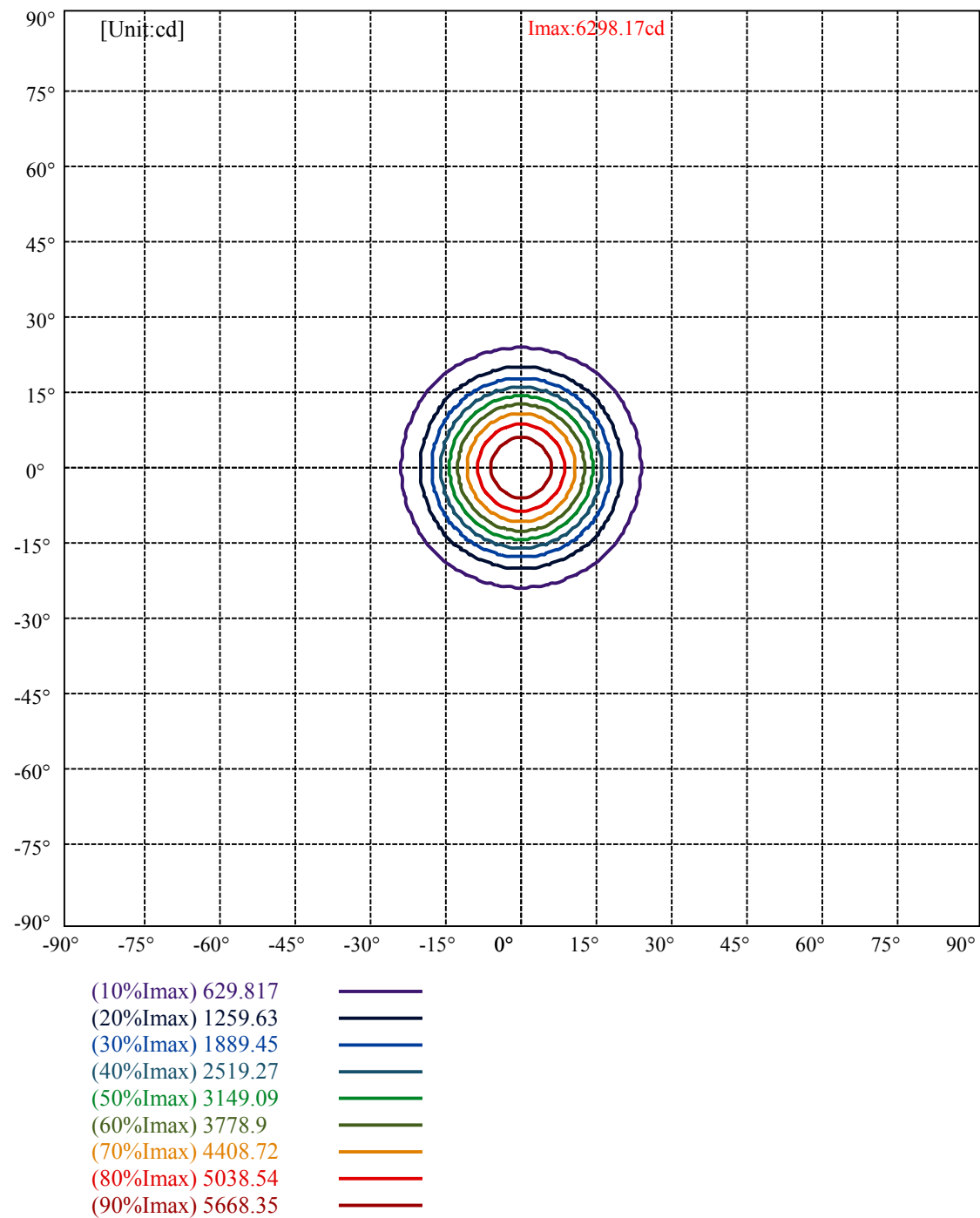
Zone	Lumens	%Lamp	%Fixt
0-30	1516.02	76.66%	87.48%
0-40	1597.73	80.80%	92.20%
0-60	1668.79	84.39%	96.30%
0-90	1732.07	87.59%	99.95%
0-120	1732.07	87.59%	99.95%
0-180	1732.97	87.63%	100.00%
60-90	65.64	3.32%	3.79%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-23.17	1386.38	70.11%	80.00%

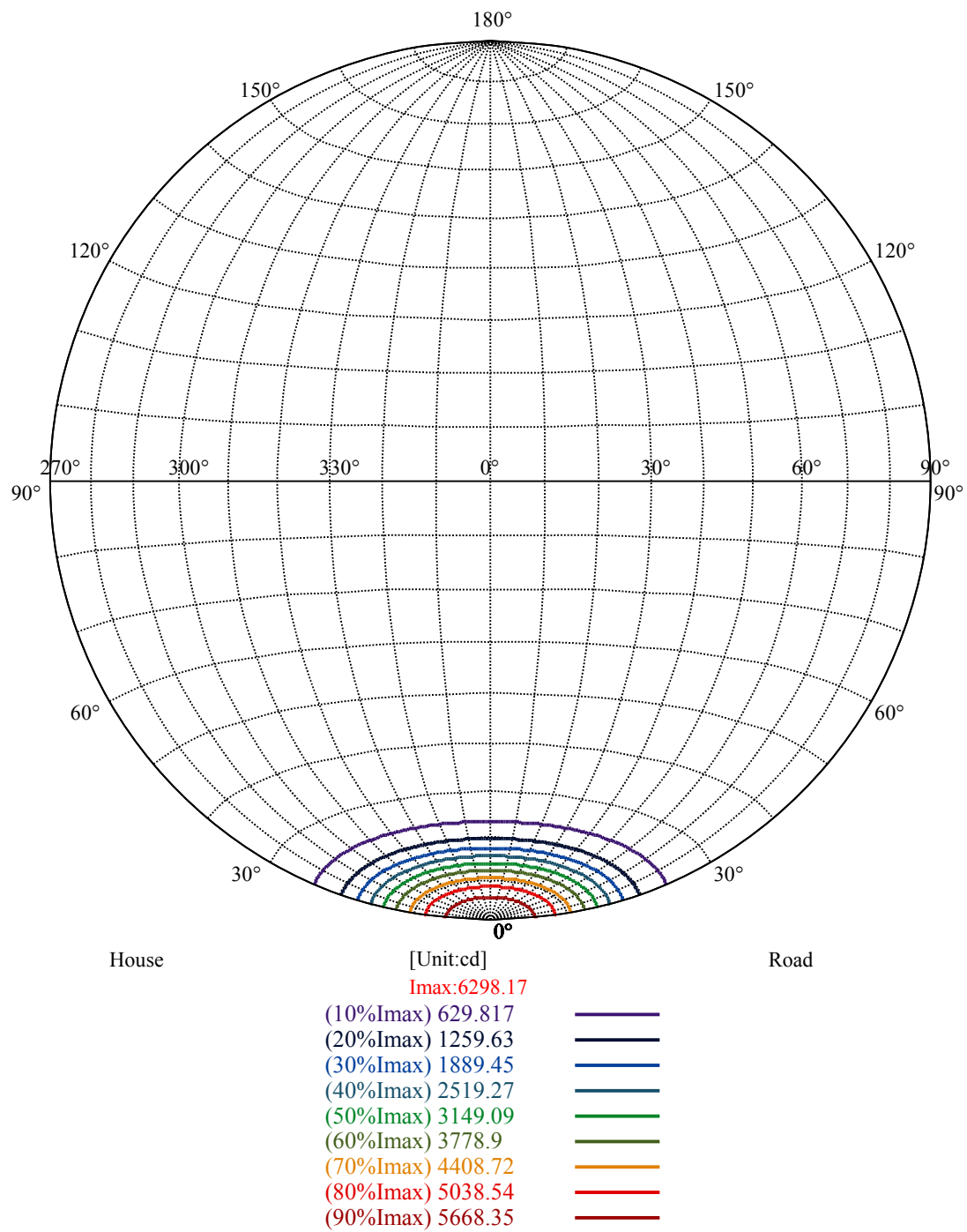
ZONAL LUMEN SUMMARY

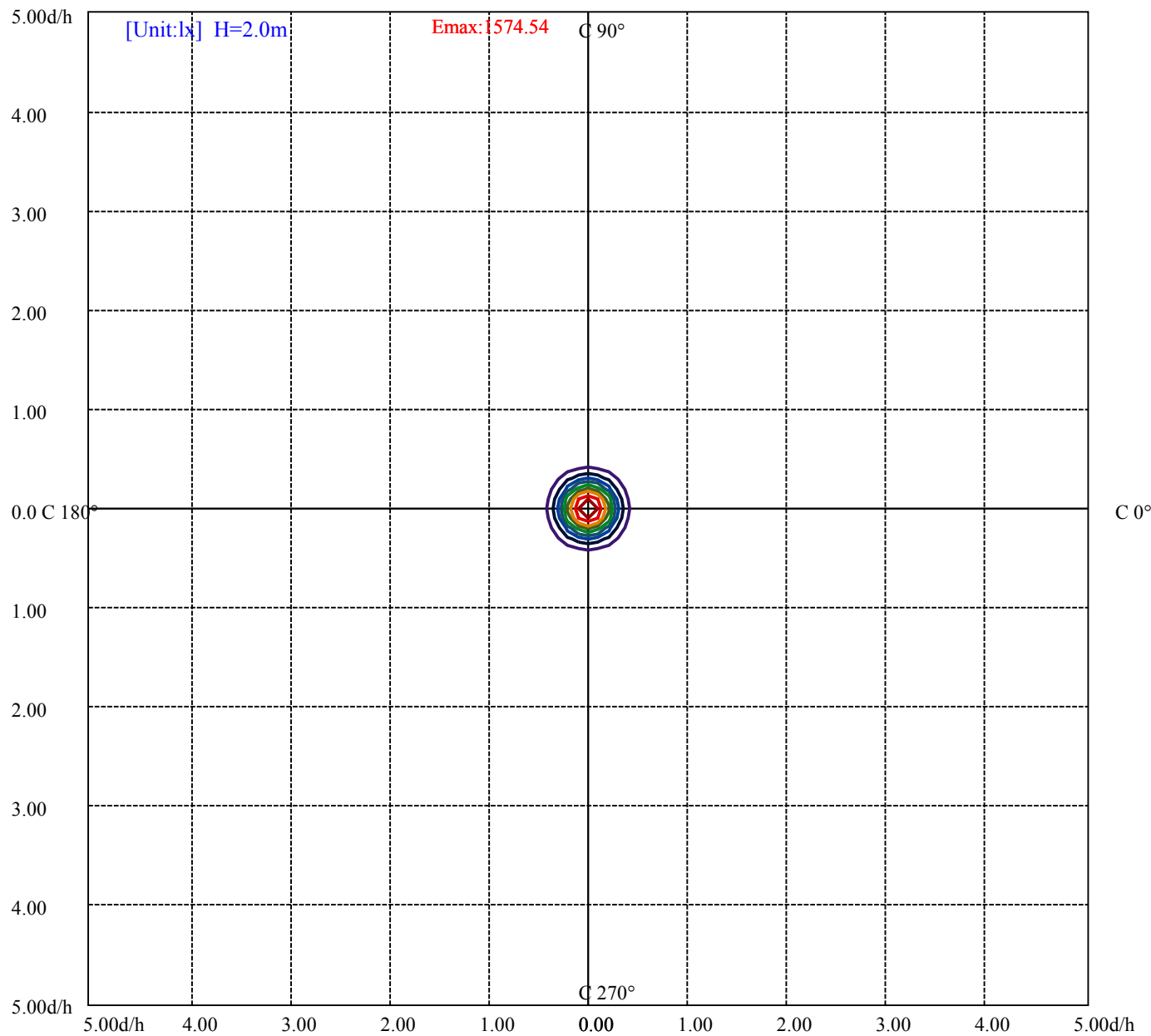
0-10	518.28
10-20	751.06
20-30	246.67
30-40	81.71
40-50	43.92
50-60	27.14
60-70	21.95
70-80	28.09
80-90	13.25
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



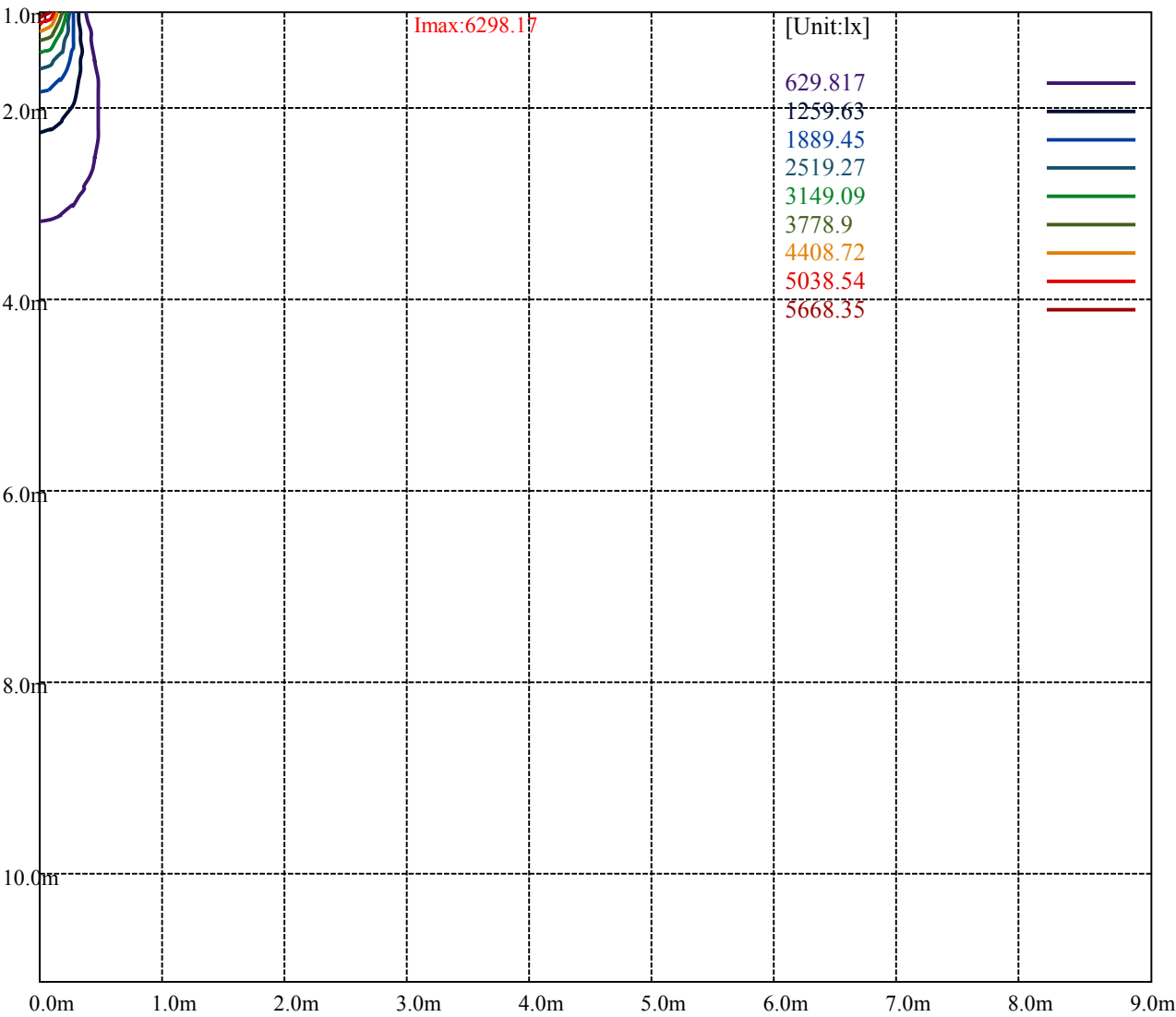








(10%Emax)	157.4543	—
(20%Emax)	314.9075	—
(30%Emax)	472.3625	—
(40%Emax)	629.8175	—
(50%Emax)	787.27	—
(60%Emax)	944.725	—
(70%Emax)	1102.18	—
(80%Emax)	1259.635	—
(90%Emax)	1417.088	—



Luminance Table

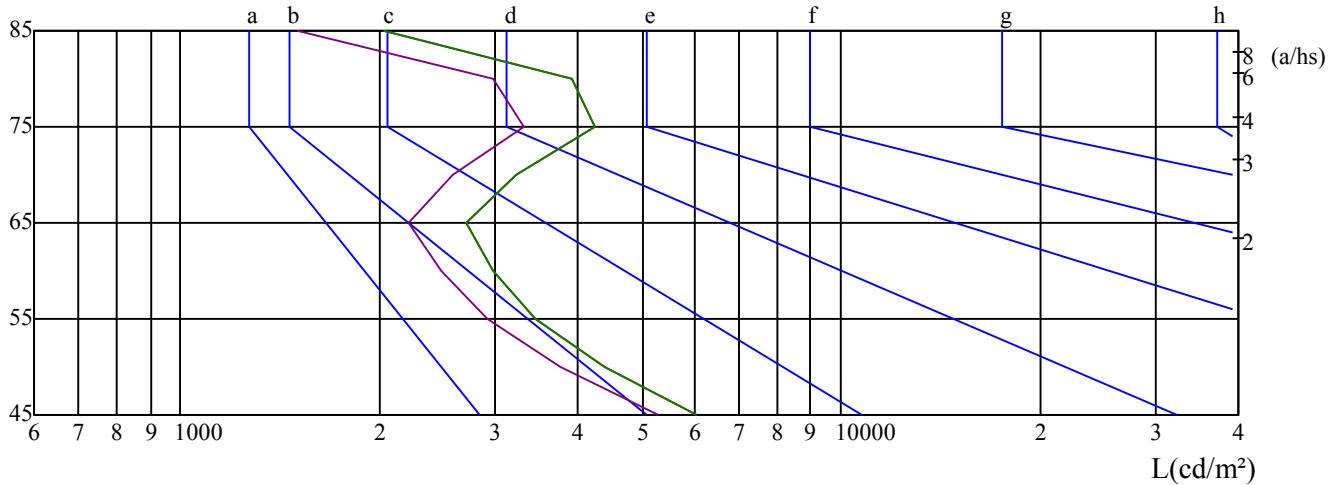
γ	45	50	55	60	65	70	75	80	85
C0	6059	4379	3435	2980	2710	3224	4235	3908	2033
C45	5288	3766	2909	2482	2216	2583	3316	2977	1498
C90	6059	4379	3435	2980	2710	3224	4235	3908	2033

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5869	5869	5869	12826	12826	12826	14659	14659	14659

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

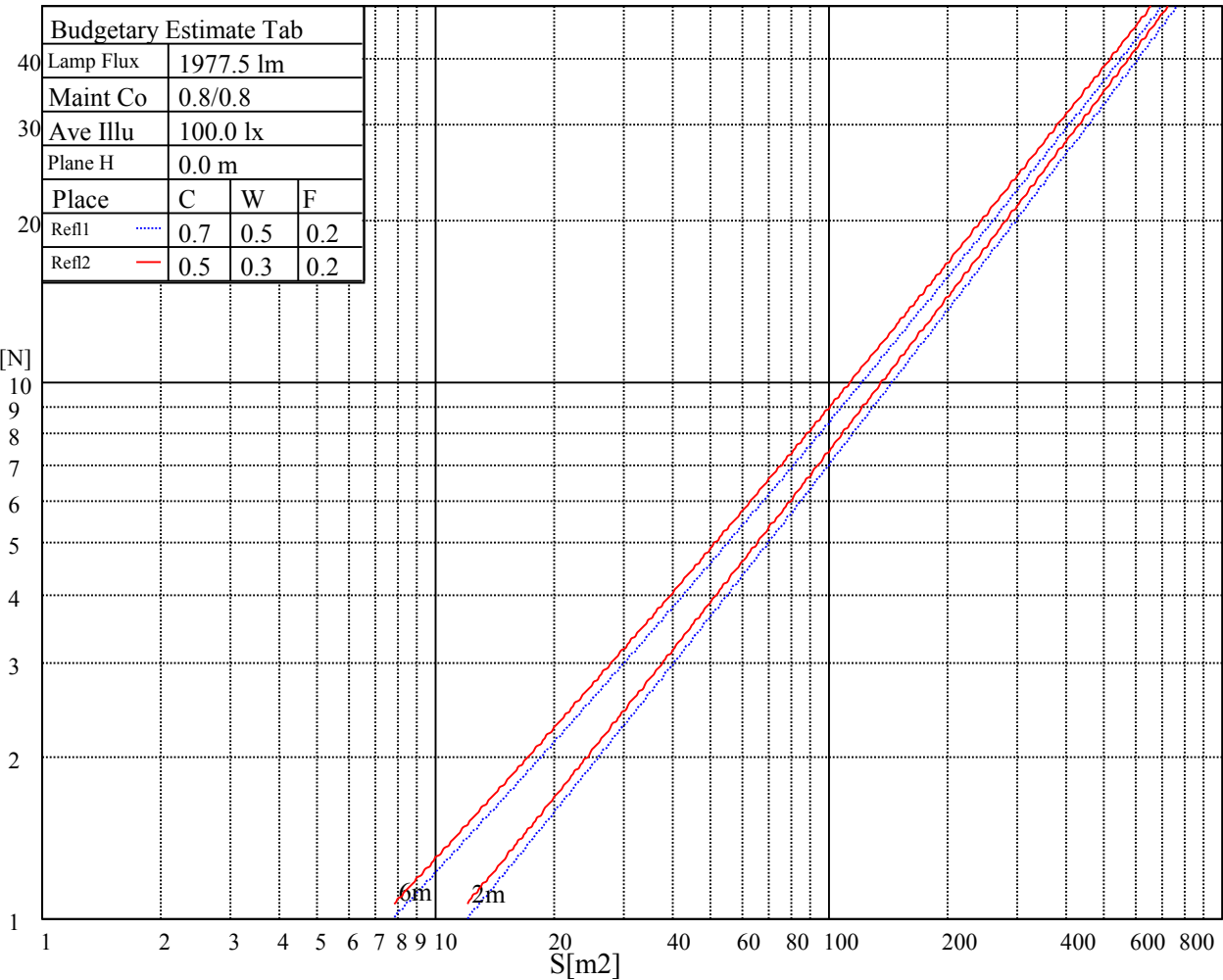
Luminance Limiting Curve

 $\gamma(^{\circ})$ 

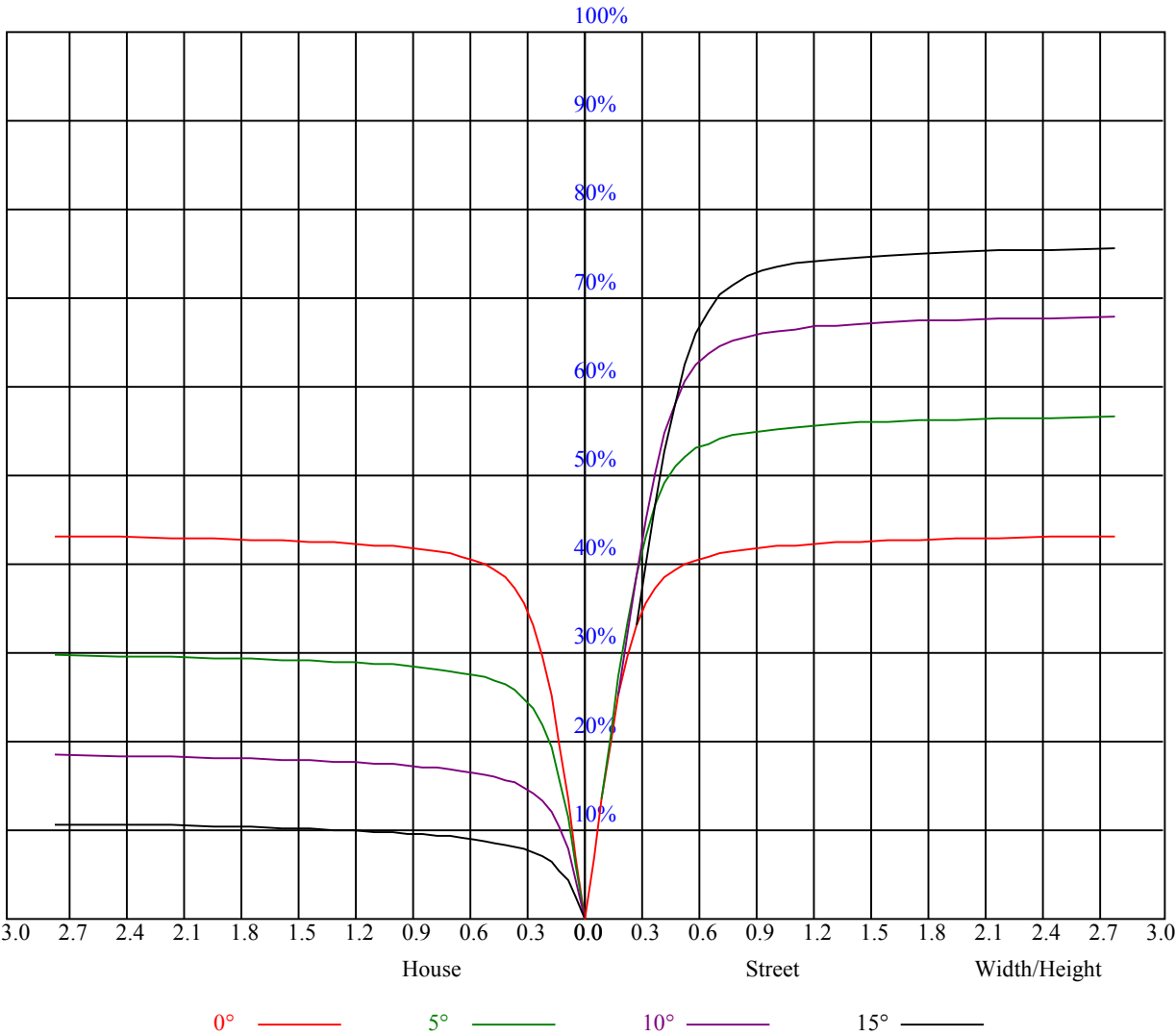
C0 ———

C45 ———

C90 ———



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	1.04	1.04	1.04	1.02	1.02	1.02	0.97	0.97	0.97	0.93	0.93	0.93	0.89	0.89	0.89	0.88
1	0.98	0.96	0.94	0.96	0.94	0.92	0.92	0.91	0.89	0.89	0.88	0.87	0.86	0.85	0.84	0.83
2	0.92	0.89	0.86	0.91	0.88	0.85	0.88	0.86	0.84	0.85	0.83	0.82	0.83	0.81	0.80	0.79
3	0.87	0.84	0.81	0.86	0.83	0.80	0.84	0.81	0.79	0.82	0.80	0.78	0.80	0.78	0.77	0.75
4	0.83	0.79	0.76	0.83	0.79	0.76	0.81	0.78	0.75	0.79	0.76	0.74	0.77	0.75	0.73	0.72
5	0.80	0.76	0.73	0.79	0.75	0.72	0.78	0.74	0.72	0.76	0.73	0.71	0.75	0.73	0.71	0.70
6	0.77	0.73	0.70	0.76	0.72	0.69	0.75	0.72	0.69	0.74	0.71	0.69	0.73	0.70	0.68	0.67
7	0.74	0.70	0.67	0.73	0.70	0.67	0.72	0.69	0.66	0.72	0.68	0.66	0.71	0.68	0.66	0.65
8	0.71	0.67	0.65	0.71	0.67	0.64	0.70	0.67	0.64	0.69	0.66	0.64	0.69	0.66	0.64	0.63
9	0.69	0.65	0.62	0.69	0.65	0.62	0.68	0.65	0.62	0.67	0.64	0.62	0.67	0.64	0.62	0.61
10	0.67	0.63	0.60	0.67	0.63	0.60	0.66	0.63	0.60	0.65	0.62	0.60	0.65	0.62	0.60	0.59



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	6307.31	6278.63	6207.75	6090.75	5954.63	5769.56	5544.56	5321.25	5079.38
45.0	6304.50	6260.63	6170.06	6062.63	5910.75	5742.00	5520.38	5265.56	5020.31
90.0	6293.81	6262.88	6199.88	6094.69	5950.69	5797.69	5596.88	5366.81	5134.50
135.0	6287.06	6301.69	6276.94	6222.94	6140.25	6005.81	5831.44	5654.81	5429.81
180.0	6307.31	6305.06	6273.00	6197.63	6078.38	5933.81	5756.63	5490.00	5254.31
225.0	6304.50	6309.00	6283.13	6199.88	6096.38	5961.94	5748.19	5550.19	5327.44
270.0	6293.81	6289.31	6248.81	6170.06	6063.75	5924.81	5708.81	5506.31	5280.19
315.0	6287.06	6247.13	6168.94	6044.63	5898.38	5724.00	5475.94	5252.63	5004.56
360.0	6307.31	6278.63	6207.75	6090.75	5954.63	5769.56	5544.56	5321.25	5079.38
C/ γ (°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4743.00	4444.88	4121.44	3736.69	3336.19	2970.56	2567.81	2188.13	1873.69
45.0	4714.31	4376.81	4053.94	3713.06	3267.56	2909.81	2563.31	2231.44	1838.81
90.0	4878.56	4537.13	4239.00	3920.63	3494.25	3143.81	2793.38	2372.06	2055.38
135.0	5173.88	4921.88	4613.06	4316.06	3949.88	3561.19	3210.75	2903.06	2627.75
180.0	4998.38	4645.13	4347.00	4028.06	3641.06	3238.31	2878.88	2486.81	2155.50
225.0	5054.06	4755.94	4462.88	4101.75	3719.81	3368.81	2968.31	2613.94	2239.31
270.0	4980.94	4719.38	4429.69	4070.25	3687.75	3330.00	2921.06	2566.69	2192.06
315.0	4705.88	4375.13	4004.44	3651.19	3249.56	2895.19	2513.25	2188.13	1807.88
360.0	4743.00	4444.88	4121.44	3736.69	3336.19	2970.56	2567.81	2188.13	1873.69
C/ γ (°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1558.69	1312.88	1072.69	873.00	728.44	595.13	491.06	416.81	356.63
45.0	1567.13	1318.50	1050.19	873.00	724.50	598.50	494.44	419.63	353.25
90.0	1762.31	1437.75	1103.46	1009.58	824.79	689.63	562.44	469.80	386.21
135.0	2117.25	1850.06	1474.31	1244.25	1081.69	855.00	695.81	596.25	482.63
180.0	1807.88	1501.31	1099.80	1027.74	817.99	696.54	580.22	456.53	394.20
225.0	1897.88	1622.25	1378.69	1116.96	942.69	793.41	640.97	543.83	464.57
270.0	1850.63	1580.06	1309.50	1080.00	909.00	763.88	617.06	523.13	445.50
315.0	1541.81	1115.89	1091.70	876.54	735.64	619.03	503.61	430.37	370.24
360.0	1558.69	1312.88	1072.69	873.00	728.44	595.13	491.06	416.81	356.63
C/ γ (°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	295.31	285.19	223.93	199.41	174.38	157.73	143.27	127.97	117.39
45.0	304.88	287.44	221.23	196.03	175.11	153.68	139.73	127.63	114.69
90.0	326.76	267.36	230.68	202.33	179.83	157.50	142.88	130.50	117.45
135.0	405.00	344.25	288.56	243.06	210.32	183.99	164.98	148.78	132.41
180.0	336.15	278.49	242.21	213.41	187.76	166.89	151.48	136.80	125.78
225.0	390.49	330.36	288.34	245.93	221.29	194.74	170.44	155.87	139.78
270.0	373.50	315.56	284.63	236.25	206.66	184.28	165.15	146.76	131.06
315.0	313.65	267.69	235.24	205.20	182.59	161.33	143.83	130.33	116.94
360.0	295.31	285.19	223.93	199.41	174.38	157.73	143.27	127.97	117.39
C/ γ (°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	108.06	98.72	90.45	83.87	77.29	72.00	66.77	61.93	57.94
45.0	105.75	97.82	89.83	82.86	77.12	71.38	66.15	61.93	57.54
90.0	108.45	100.24	92.03	84.49	78.47	72.34	67.39	62.33	57.60
135.0	121.11	111.38	101.70	93.09	86.12	79.26	73.13	68.29	63.28
180.0	114.81	105.08	97.43	89.66	82.63	76.95	71.83	65.93	61.65
225.0	124.65	115.59	106.65	95.46	89.49	83.31	77.01	71.21	66.54
270.0	117.73	107.49	98.33	89.44	81.62	75.54	69.47	63.90	59.46
315.0	105.75	97.14	89.55	81.00	75.21	70.03	64.63	59.79	55.91
360.0	108.06	98.72	90.45	83.87	77.29	72.00	66.77	61.93	57.94

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	53.89	50.01	46.86	44.21	40.56	38.03	36.00	33.64	31.78
45.0	54.06	50.40	47.03	44.44	41.91	38.93	36.79	34.93	32.79
90.0	53.89	49.95	46.41	43.43	40.67	37.58	35.21	33.19	31.22
135.0	59.12	54.84	50.74	47.25	44.04	40.56	37.91	35.55	32.91
180.0	57.66	54.06	49.78	46.63	43.71	40.28	37.86	35.33	33.53
225.0	61.76	57.32	53.83	50.06	47.03	43.82	40.89	38.64	36.56
270.0	55.58	50.91	47.42	44.33	41.01	38.03	35.66	33.36	31.50
315.0	51.81	48.09	45.00	41.91	39.43	36.84	34.48	32.85	31.44
360.0	53.89	50.01	46.86	44.21	40.56	38.03	36.00	33.64	31.78
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	30.60	29.03	27.79	26.94	25.82	24.92	24.19	23.23	22.50
45.0	31.39	30.15	28.91	27.79	26.83	25.88	24.86	24.08	23.18
90.0	29.53	28.29	27.06	26.10	25.26	24.47	23.79	23.06	22.39
135.0	31.16	29.76	28.24	27.00	26.10	25.09	24.24	23.51	22.73
180.0	31.56	30.15	28.80	27.73	26.61	25.76	24.92	24.08	23.29
225.0	34.14	32.51	31.16	29.64	28.52	27.45	26.49	25.26	24.41
270.0	30.04	28.52	27.45	26.38	25.37	24.58	23.68	22.89	22.28
315.0	29.76	28.58	27.56	26.33	25.48	24.58	23.68	22.95	22.28
360.0	30.60	29.03	27.79	26.94	25.82	24.92	24.19	23.23	22.50
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	21.83	20.98	20.42	19.86	19.18	18.68	18.23	17.66	17.10
45.0	22.50	21.77	21.09	20.48	19.97	19.35	18.84	18.39	17.72
90.0	21.83	21.38	21.60	22.95	25.88	30.99	34.82	38.81	44.04
135.0	22.16	21.43	20.87	20.42	19.97	19.41	18.96	18.62	18.73
180.0	22.56	21.88	21.15	20.59	19.97	19.41	18.84	18.34	17.83
225.0	23.63	22.61	21.94	21.26	20.53	19.80	19.18	18.56	18.06
270.0	21.71	20.98	20.53	21.15	24.24	28.69	31.73	37.41	42.86
315.0	21.54	20.87	20.36	19.69	19.18	18.68	18.17	18.34	18.84
360.0	21.83	20.98	20.42	19.86	19.18	18.68	18.23	17.66	17.10
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	16.71	16.14	15.75	15.19	14.74	14.29	13.78	13.28	12.83
45.0	17.21	16.76	16.20	15.69	15.19	14.63	14.12	13.61	13.11
90.0	48.32	51.75	56.08	59.12	61.65	62.21	59.34	53.61	47.42
135.0	19.18	19.97	21.21	22.61	23.23	23.57	23.57	22.84	21.38
180.0	17.33	16.82	16.31	15.86	15.41	14.85	14.34	13.89	13.33
225.0	17.33	16.88	16.43	15.92	15.41	15.08	14.63	14.06	13.61
270.0	46.29	51.64	55.52	57.94	60.92	61.03	59.29	54.51	48.94
315.0	20.31	21.04	21.83	22.44	22.67	22.67	21.49	19.46	16.99
360.0	16.71	16.14	15.75	15.19	14.74	14.29	13.78	13.28	12.83
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	12.32	11.81	11.36	10.91	10.29	9.79	8.94	8.49	8.16
45.0	12.54	12.15	11.48	10.91	10.29	9.68	9.11	8.66	8.38
90.0	41.96	34.54	24.86	16.71	10.52	9.62	9.00	8.44	8.04
135.0	19.24	16.88	13.89	12.04	11.36	9.84	9.34	8.66	8.33
180.0	12.88	12.38	11.81	11.25	10.63	10.13	9.34	8.78	8.38
225.0	13.16	12.66	12.09	11.53	11.03	10.46	9.79	9.17	8.78
270.0	43.14	34.65	24.98	16.20	12.32	10.29	9.23	8.55	8.16
315.0	14.34	12.38	11.59	10.91	10.07	8.94	8.44	8.04	7.88
360.0	12.32	11.81	11.36	10.91	10.29	9.79	8.94	8.49	8.16

Intensity data(cd)

C/ γ (°)	90.0
0.0	8.04
45.0	8.33
90.0	7.88
135.0	7.93
180.0	8.10
225.0	8.49
270.0	7.99
315.0	7.82
360.0	8.04