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NATA

Client:

LumCAT: 2-2640-L Luminaire:

92.70.411.00 Report No: 2023830-B002

Ballast type: AC

Test No: 2023830-C002

LampCAT: LUXEON CoB 1208 LES15

Voltage(V): 33.860

Lamp flux(lm): 2357.0 Number of Lamps:

Current(A): 0.502

1 Length(mm): 0

Power (W): 16.997

Phm Type: C

PF: 0.000

Width(mm): 0

Height(mm): 0

Photometric Results

Lumens(lm): 2157.21, Efficiency(%): 91.52% , Luminous Efficacy(lm/W): 126.92

Central intensity(cd): 6292.542, Maximum intensity(cd): 6292.542

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=26.8

[C90/270]Total=26.8

Field angle(10%Imax): [C0/180]Total=63.0

[C90/270]Total=63.0

Maximum s/h(1/2): C0_180=0.44 C90_270=0.44

Maximum s/h(1/4): C0_180=0.50 C90_270=0.50

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 91.52%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 97.798%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2023/8/30
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.44

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	6292.542	0.000	0	0.00%	0.00%
1.0	6261.475	6.007	6.007	0.25%	0.28%
2.0	6169.103	17.842	23.848	0.76%	1.11%
3.0	6021.032	29.155	53.003	1.24%	2.46%
4.0	5818.853	39.632	92.635	1.68%	4.29%
5.0	5581.387	49.043	141.678	2.08%	6.57%
6.0	5332.641	57.356	199.034	2.43%	9.23%
7.0	5030.964	64.327	263.361	2.73%	12.21%
8.0	4729.564	69.854	333.215	2.96%	15.45%
9.0	4421.521	74.165	407.38	3.15%	18.88%
10.0	4117.976	77.279	484.659	3.28%	22.47%
11.0	3815.676	79.273	563.933	3.36%	26.14%
12.0	3527.214	80.268	644.201	3.41%	29.86%
13.0	3250.862	80.439	724.64	3.41%	33.59%
14.0	2997.550	79.979	804.619	3.39%	37.30%
15.0	2757.384	79.006	883.625	3.35%	40.96%
16.0	2522.754	77.369	960.994	3.28%	44.55%
17.0	2330.677	75.581	1036.575	3.21%	48.05%
18.0	2130.228	73.551	1110.126	3.12%	51.46%
19.0	1967.973	71.300	1181.426	3.02%	54.77%
20.0	1807.793	69.107	1250.533	2.93%	57.97%
21.0	1678.197	66.938	1317.471	2.84%	61.07%
22.0	1559.740	65.068	1382.539	2.76%	64.09%
23.0	1449.517	63.142	1445.681	2.68%	67.02%
24.0	1330.223	60.775	1506.456	2.58%	69.83%
25.0	1198.710	57.502	1563.958	2.44%	72.50%
26.0	1154.289	55.543	1619.501	2.36%	75.07%
27.0	1071.431	54.453	1673.954	2.31%	77.60%
28.0	974.888	51.808	1725.762	2.20%	80.00%
29.0	870.920	48.292	1774.054	2.05%	82.24%
30.0	776.708	44.486	1818.54	1.89%	84.30%
31.0	674.712	40.391	1858.93	1.71%	86.17%
32.0	584.022	36.061	1894.992	1.53%	87.84%
33.0	488.392	31.594	1926.585	1.34%	89.31%
34.0	403.998	27.006	1953.592	1.15%	90.56%
35.0	323.196	22.584	1976.176	0.96%	91.61%
36.0	255.540	18.427	1994.603	0.78%	92.46%
37.0	225.635	15.693	2010.296	0.67%	93.19%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	161.639	12.927	2023.223	0.55%	93.79%
39.0	109.489	9.254	2032.477	0.39%	94.22%
40.0	91.015	6.993	2039.47	0.30%	94.54%
41.0	79.854	6.085	2045.555	0.26%	94.82%
42.0	70.541	5.464	2051.019	0.23%	95.08%
43.0	63.165	4.953	2055.972	0.21%	95.31%
44.0	56.371	4.512	2060.483	0.19%	95.52%
45.0	51.071	4.129	2064.612	0.18%	95.71%
46.0	46.462	3.814	2068.427	0.16%	95.88%
47.0	42.657	3.545	2071.971	0.15%	96.05%
48.0	39.772	3.332	2075.303	0.14%	96.20%
49.0	37.433	3.170	2078.474	0.13%	96.35%
50.0	35.585	3.044	2081.518	0.13%	96.49%
51.0	34.070	2.947	2084.465	0.13%	96.63%
52.0	32.901	2.874	2087.339	0.12%	96.76%
53.0	32.029	2.824	2090.163	0.12%	96.89%
54.0	31.392	2.795	2092.959	0.12%	97.02%
55.0	30.970	2.784	2095.743	0.12%	97.15%
56.0	30.638	2.784	2098.526	0.12%	97.28%
57.0	30.382	2.790	2101.316	0.12%	97.41%
58.0	30.140	2.799	2104.115	0.12%	97.54%
59.0	29.780	2.801	2106.917	0.12%	97.67%
60.0	29.254	2.789	2109.706	0.12%	97.80%
61.0	28.396	2.751	2112.457	0.12%	97.93%
62.0	27.345	2.686	2115.143	0.11%	98.05%
63.0	26.065	2.598	2117.74	0.11%	98.17%
64.0	24.390	2.476	2120.216	0.11%	98.28%
65.0	22.653	2.328	2122.544	0.10%	98.39%
66.0	20.903	2.173	2124.717	0.09%	98.49%
67.0	19.422	2.028	2126.745	0.09%	98.59%
68.0	17.893	1.890	2128.635	0.08%	98.68%
69.0	16.682	1.764	2130.399	0.07%	98.76%
70.0	15.748	1.666	2132.065	0.07%	98.83%
71.0	15.153	1.597	2133.662	0.07%	98.91%
72.0	14.641	1.549	2135.211	0.07%	98.98%
73.0	14.198	1.508	2136.719	0.06%	99.05%
74.0	13.783	1.471	2138.19	0.06%	99.12%
75.0	13.375	1.435	2139.625	0.06%	99.18%

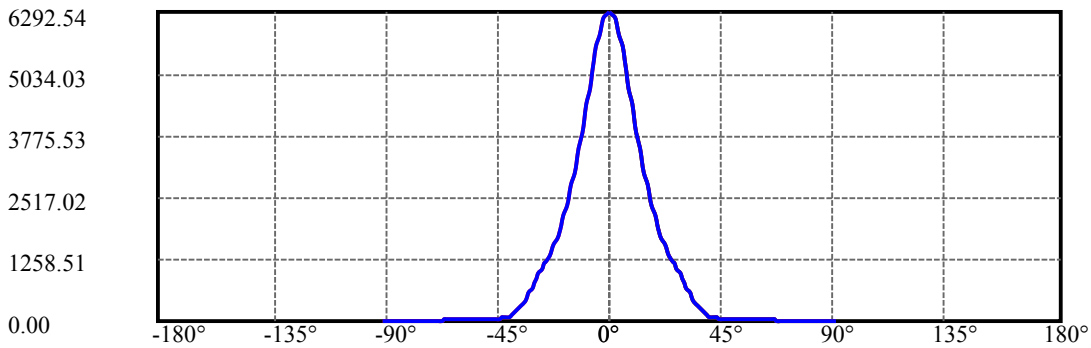
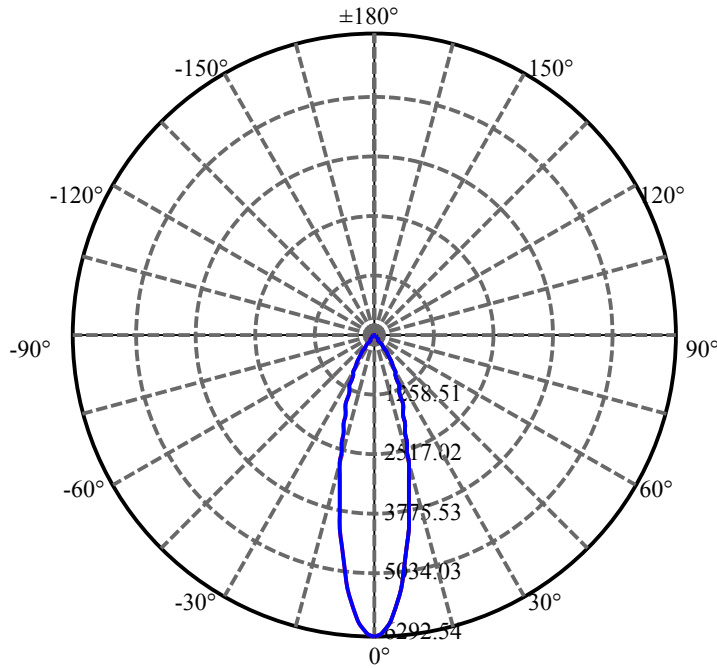
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	13.008	1.401	2141.026	0.06%	99.25%
77.0	12.586	1.365	2142.39	0.06%	99.31%
78.0	12.240	1.329	2143.719	0.06%	99.37%
79.0	11.853	1.294	2145.014	0.05%	99.43%
80.0	11.493	1.259	2146.272	0.05%	99.49%
81.0	11.126	1.223	2147.495	0.05%	99.55%
82.0	10.766	1.187	2148.683	0.05%	99.60%
83.0	10.434	1.152	2149.835	0.05%	99.66%
84.0	10.185	1.123	2150.958	0.05%	99.71%
85.0	9.943	1.099	2152.057	0.05%	99.76%
86.0	9.721	1.075	2153.132	0.05%	99.81%
87.0	9.514	1.053	2154.185	0.04%	99.86%
88.0	9.292	1.030	2155.215	0.04%	99.91%
89.0	9.078	1.007	2156.222	0.04%	99.95%
90.0	9.036	0.993	2157.215	0.04%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1818.54	77.15%	84.30%
0-40	2039.47	86.53%	94.54%
0-60	2109.71	89.51%	97.80%
0-90	2156.22	91.48%	99.95%
0-120	2156.22	91.48%	99.95%
0-180	2157.21	91.52%	100.00%
60-90	46.52	1.97%	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%
0-28.00	1725.77	73.22%	80.00%

ZONAL LUMEN SUMMARY

0-10	484.66
10-20	765.87
20-30	568.01
30-40	220.93
40-50	42.05
50-60	28.19
60-70	22.36
70-80	14.21
80-90	9.95
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: —————

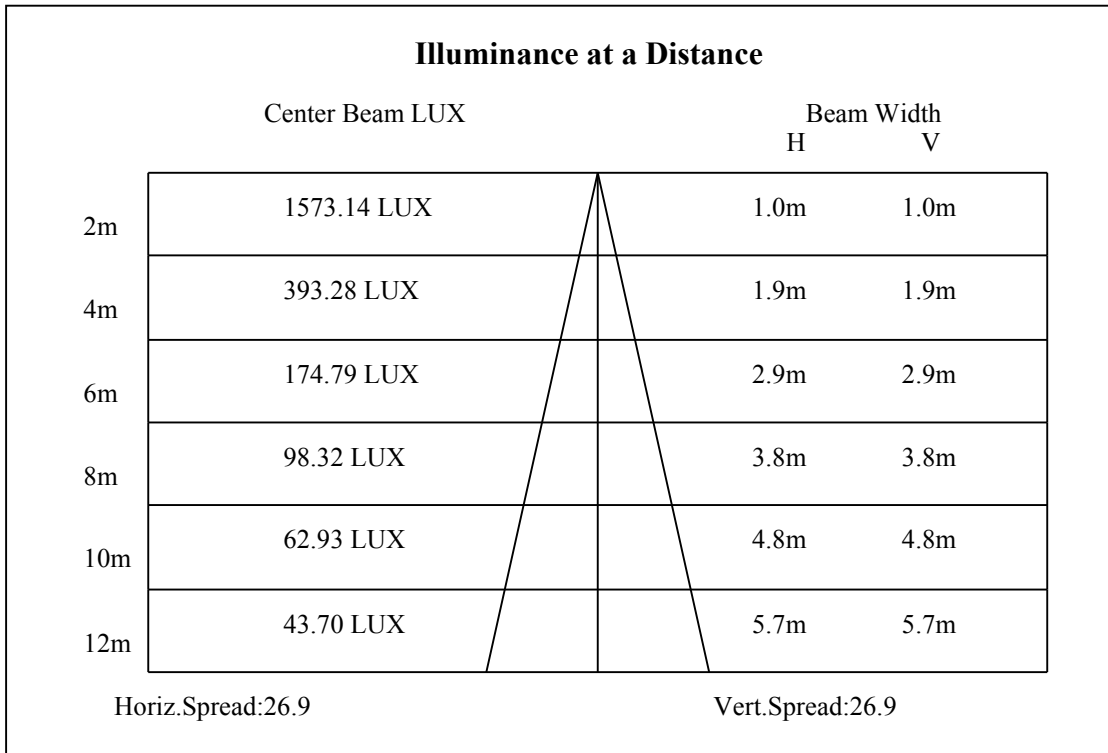
C90/C270: —————

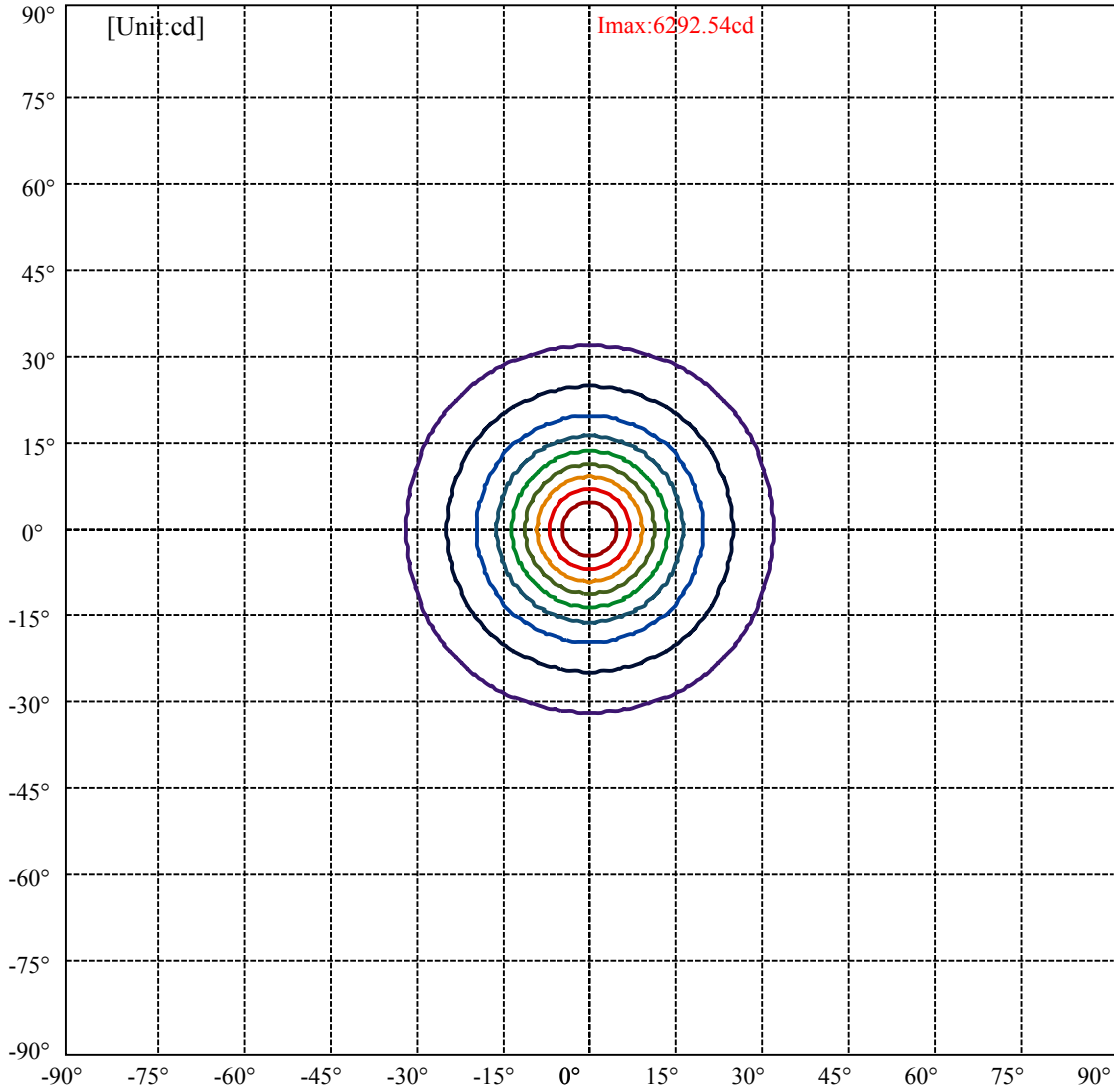
Field angle(10%Imax):C0/180Left:31.5 Right:31.5

:C90/270Left:31.5 Right:31.5

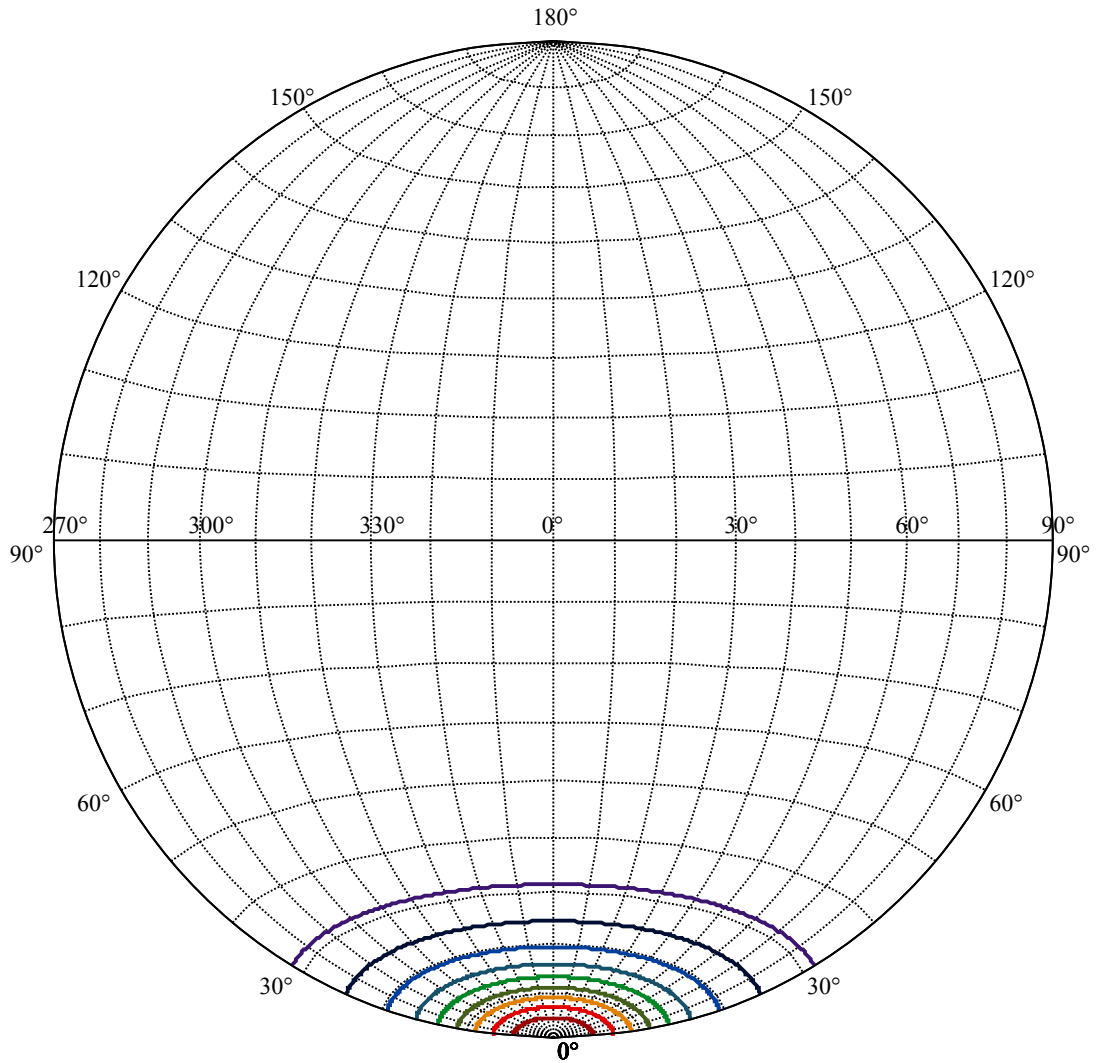
Beam Angle(50%Imax):C0/180Left:13.4 Right:13.4

:C90/270Left:13.4 Right:13.4





(10%Imax) 629.254	—
(20%Imax) 1258.51	—
(30%Imax) 1887.76	—
(40%Imax) 2517.02	—
(50%Imax) 3146.27	—
(60%Imax) 3775.53	—
(70%Imax) 4404.78	—
(80%Imax) 5034.03	—
(90%Imax) 5663.29	—



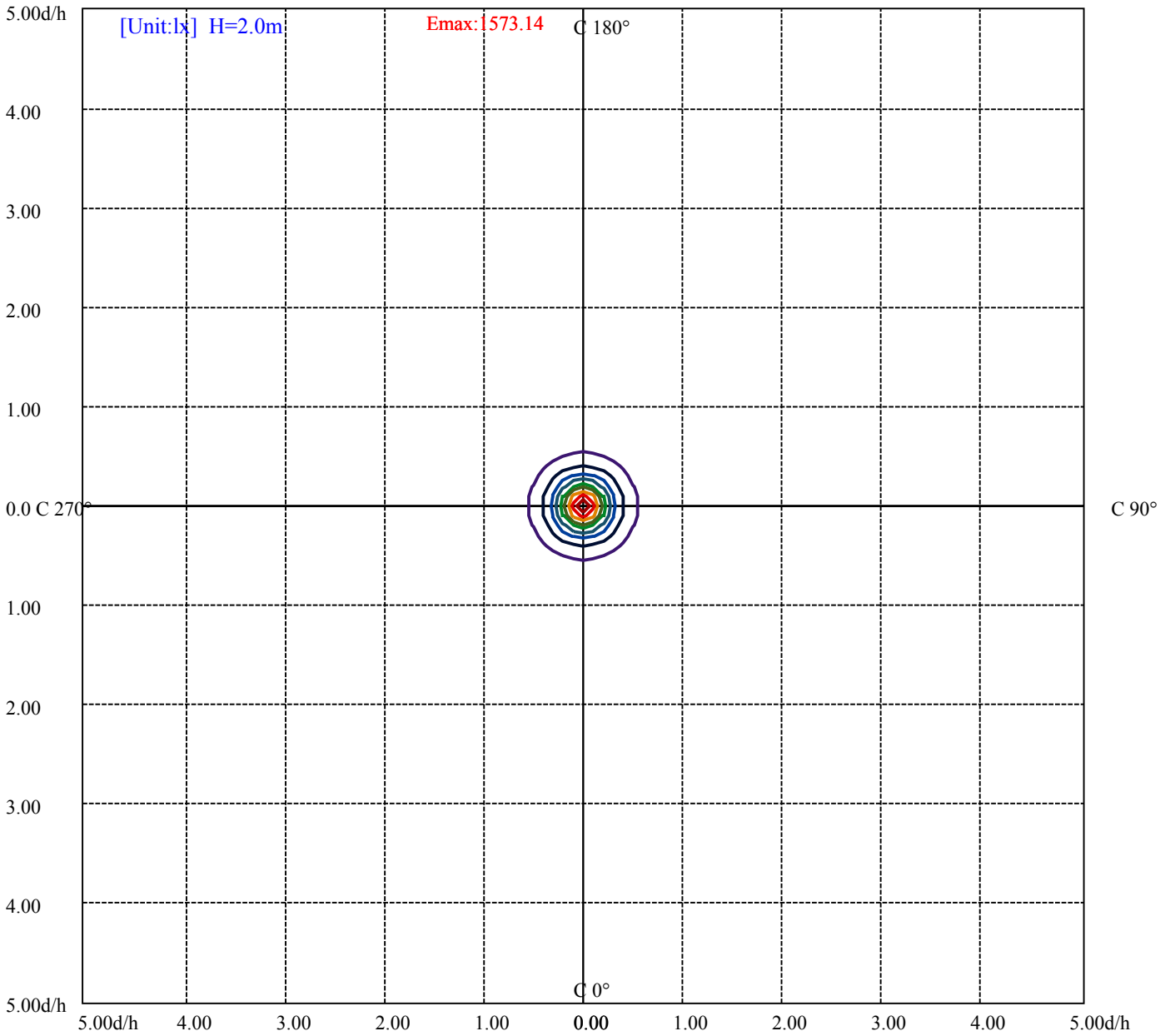
House

[Unit:cd]

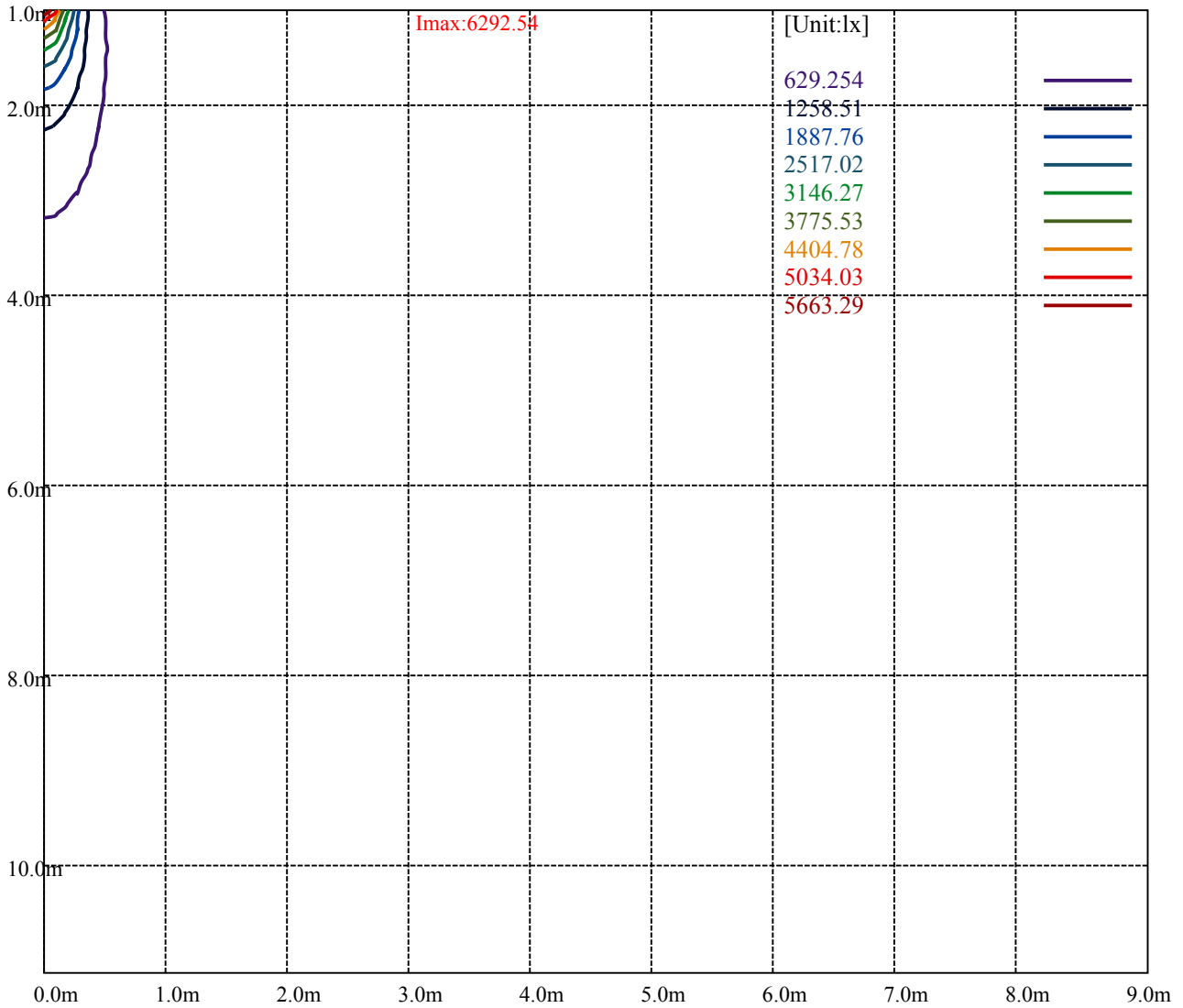
Road

I_{max}:6292.54

(10%I _{max}) 629.254	—
(20%I _{max}) 1258.51	—
(30%I _{max}) 1887.76	—
(40%I _{max}) 2517.02	—
(50%I _{max}) 3146.27	—
(60%I _{max}) 3775.53	—
(70%I _{max}) 4404.78	—
(80%I _{max}) 5034.03	—
(90%I _{max}) 5663.29	—



- (10%Emax) 157.3135
- (20%Emax) 314.6275
- (30%Emax) 471.94
- (40%Emax) 629.2525
- (50%Emax) 786.5675
- (60%Emax) 943.88
- (70%Emax) 1101.195
- (80%Emax) 1258.507
- (90%Emax) 1415.82



Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

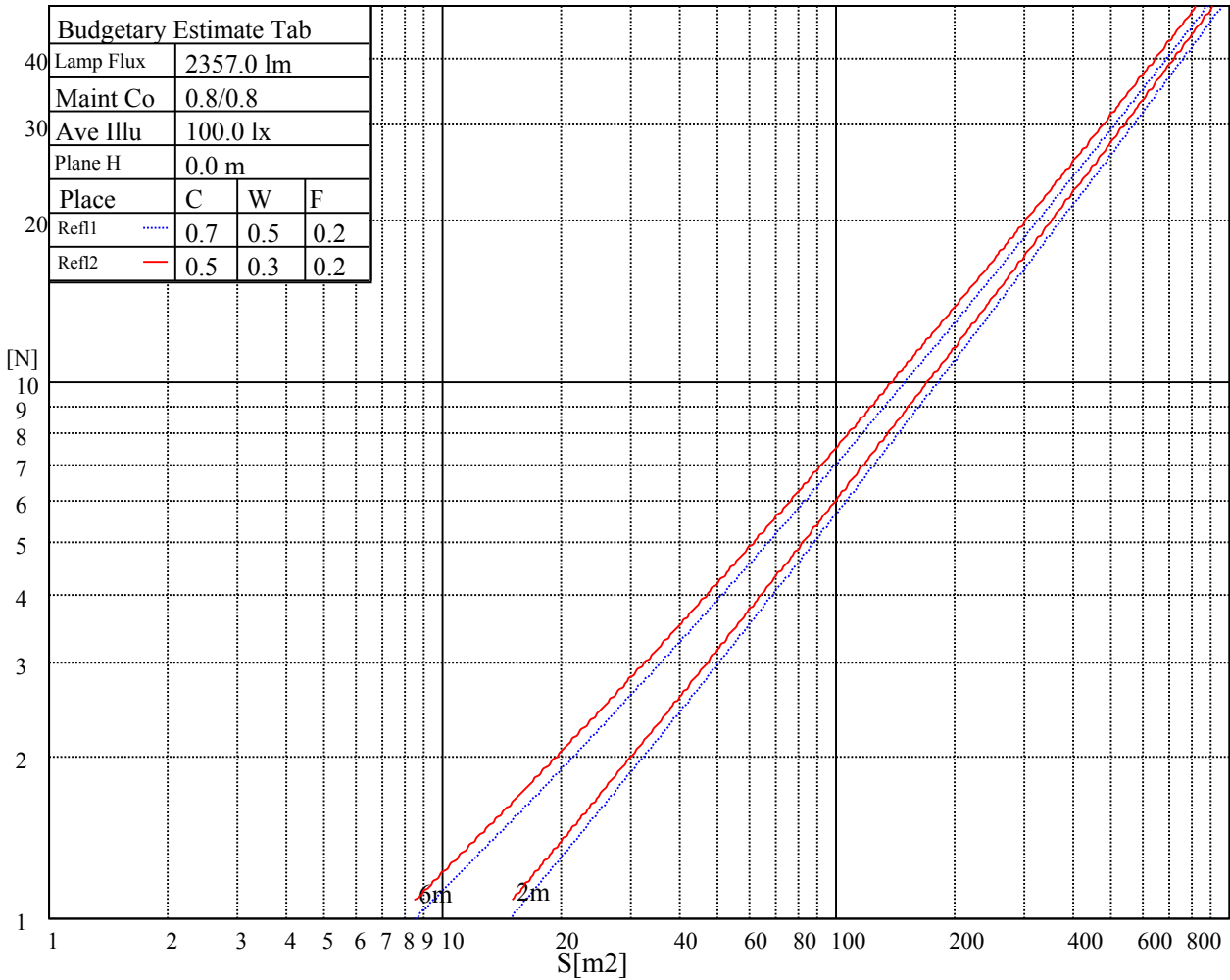
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

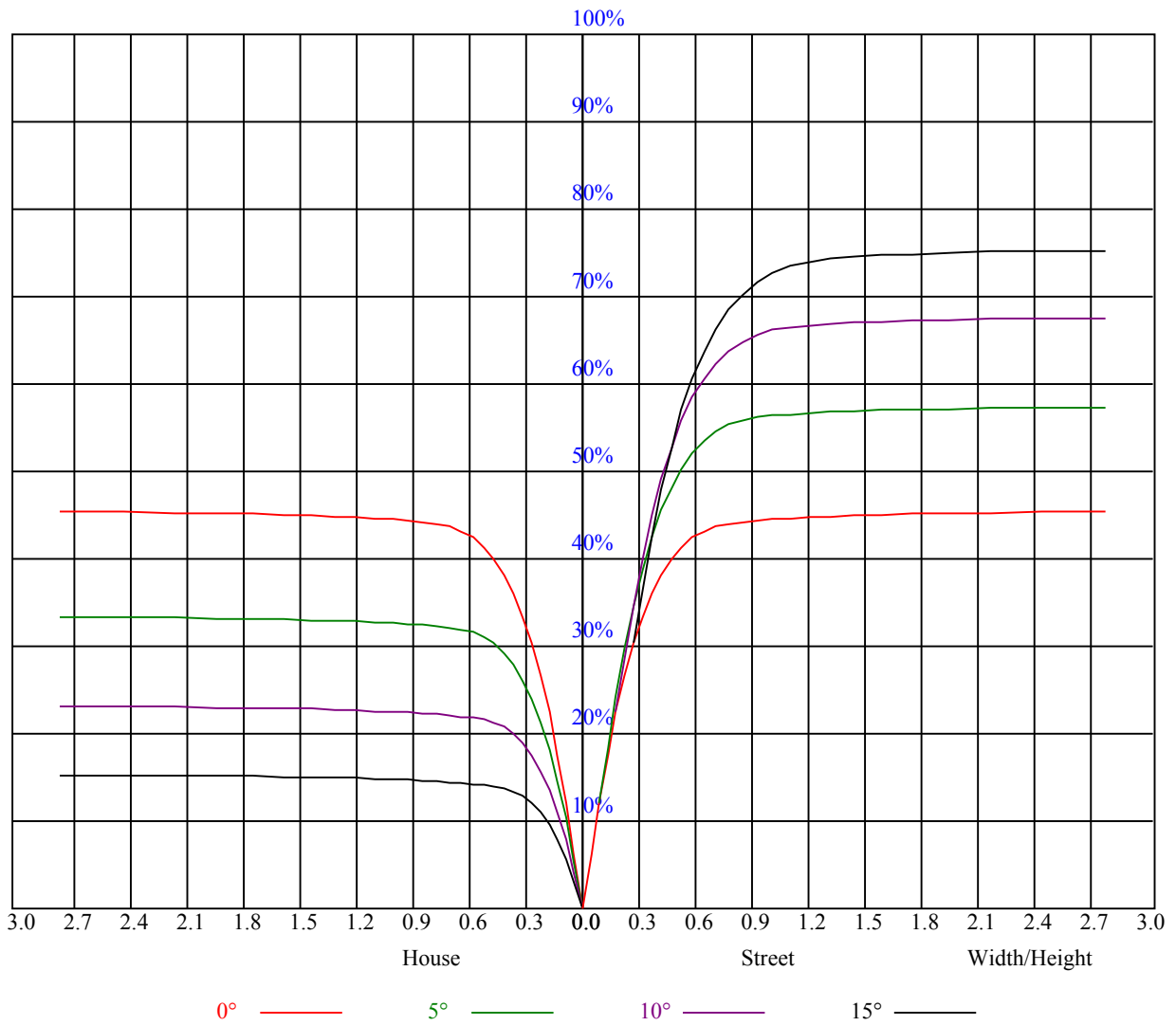


Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	3H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	4H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	6H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	8H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
4H	12H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	3H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	4H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	6H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
8H	8H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	12H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	4H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	6H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	8H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
12H	12H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	4H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	6H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	8H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
Variation with the observer position at spacings:											
S = 1.0H		非数字/非数字					非数字/非数字				
S = 1.5H		非数字/非数字					非数字/非数字				
S = 2.0H		非数字/非数字					非数字/非数字				
Standard tables:		BK0					BK0				
Uncorrected UGR		负无穷大					负无穷大				

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



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 RHOF=20 CU															
0	1.09	1.09	1.09	1.06	1.06	1.06	1.02	1.02	1.02	0.97	0.97	0.97	0.93	0.93	0.93	0.92
1	1.02	1.00	0.98	1.00	0.98	0.96	0.96	0.95	0.93	0.93	0.92	0.91	0.90	0.89	0.88	0.86
2	0.96	0.92	0.90	0.94	0.91	0.89	0.91	0.89	0.87	0.89	0.87	0.85	0.86	0.84	0.83	0.82
3	0.90	0.86	0.83	0.89	0.85	0.82	0.87	0.84	0.81	0.85	0.82	0.80	0.83	0.80	0.79	0.77
4	0.86	0.81	0.78	0.85	0.81	0.77	0.83	0.79	0.76	0.81	0.78	0.76	0.79	0.77	0.75	0.73
5	0.81	0.77	0.73	0.81	0.76	0.73	0.79	0.75	0.72	0.78	0.74	0.72	0.76	0.73	0.71	0.70
6	0.78	0.73	0.69	0.77	0.72	0.69	0.76	0.72	0.69	0.74	0.71	0.68	0.73	0.70	0.68	0.67
7	0.74	0.69	0.66	0.74	0.69	0.66	0.72	0.68	0.66	0.71	0.68	0.65	0.70	0.67	0.65	0.64
8	0.71	0.66	0.63	0.70	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.62	0.68	0.65	0.62	0.61
9	0.68	0.63	0.60	0.68	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.60	0.65	0.62	0.60	0.59
10	0.65	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.58	0.64	0.60	0.57	0.63	0.60	0.57	0.56



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	6277.60	6191.24	6010.24	5823.14	5608.37	5296.73	5036.02	4760.35	4464.21
45.0	6310.26	6301.95	6234.97	6078.32	5896.76	5679.78	5443.97	5117.94	4840.06
90.0	6291.99	6203.42	6072.23	5887.35	5667.60	5360.39	5079.74	4791.91	4491.34
135.0	6290.33	6269.29	6176.85	6057.84	5822.59	5595.09	5351.53	5001.14	4706.66
180.0	6277.60	6309.15	6274.28	6200.65	6024.63	5827.57	5615.01	5362.05	5015.53
225.0	6310.26	6257.67	6143.64	5987.54	5737.35	5507.07	5258.54	4918.67	4628.06
270.0	6291.99	6306.38	6270.40	6145.30	5996.40	5799.89	5533.09	5276.25	4949.66
315.0	6290.33	6252.69	6170.21	5988.10	5797.13	5584.57	5343.23	5019.41	4740.98
360.0	6277.60	6191.24	6010.24	5823.14	5608.37	5296.73	5036.02	4760.35	4464.21
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4103.86	3821.00	3545.34	3289.06	2985.16	2757.66	2548.98	2308.19	2138.81
45.0	4548.90	4265.49	3914.55	3636.68	3315.07	3067.64	2834.05	2566.69	2369.08
90.0	4127.66	3851.45	3515.45	3255.84	3011.18	2728.32	2514.11	2315.39	2148.77
135.0	4409.41	4119.36	3781.15	3518.77	3267.47	3025.57	2739.39	2526.28	2330.88
180.0	4724.93	4434.32	4151.46	3791.67	3527.08	3275.77	2976.31	2756.00	2545.10
225.0	4328.04	3975.99	3703.65	3439.62	3199.94	2913.20	2692.34	2492.52	2300.99
270.0	4665.15	4380.08	4097.22	3740.74	3471.17	3218.20	2982.40	2705.08	2495.84
315.0	4464.21	4096.11	3816.58	3545.34	3229.83	2994.02	2771.50	2511.89	2315.94
360.0	4103.86	3821.00	3545.34	3289.06	2985.16	2757.66	2548.98	2308.19	2138.81
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1942.86	1801.70	1677.71	1564.24	1462.39	1348.36	1103.09	1103.09	1081.50
45.0	2190.84	2029.21	1841.56	1712.03	1596.34	1482.87	1365.52	1280.83	1200.01
90.0	1951.16	1813.88	1690.44	1577.52	1448.55	1356.11	1271.42	1082.33	1082.33
135.0	2117.22	1964.44	1792.85	1671.07	1560.92	1459.62	1346.14	1262.56	1182.30
180.0	2309.85	2135.49	1976.07	1797.28	1678.82	1574.20	1460.73	1354.45	1269.20
225.0	2086.78	1930.68	1763.51	1643.39	1534.35	1413.12	1326.22	1084.65	1084.65
270.0	2303.76	2131.61	1926.80	1790.63	1641.73	1531.58	1426.41	1321.24	1233.78
315.0	2139.36	1936.77	1793.40	1669.41	1554.83	1430.28	1342.27	1100.54	1100.54
360.0	1942.86	1801.70	1677.71	1564.24	1462.39	1348.36	1103.09	1103.09	1081.50
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	961.33	866.23	778.49	668.89	582.43	496.52	395.00	319.17	236.03
45.0	1089.30	995.20	882.28	790.39	703.49	618.24	512.52	432.81	353.65
90.0	991.44	901.71	788.51	700.11	589.24	504.71	423.46	348.73	264.31
135.0	1093.18	979.70	887.26	795.93	686.33	597.21	511.41	411.22	337.05
180.0	1193.37	1107.57	983.02	894.46	797.04	678.58	588.91	484.84	401.26
225.0	1040.65	944.89	848.68	754.75	640.05	550.05	465.08	387.59	296.92
270.0	1146.32	1047.79	933.76	836.89	739.47	654.22	544.62	459.93	382.44
315.0	1055.87	956.01	865.34	772.24	659.65	572.63	466.13	387.70	313.91
360.0	961.33	866.23	778.49	668.89	582.43	496.52	395.00	319.17	236.03
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	181.56	137.17	109.49	90.50	80.65	72.29	65.43	57.51	52.20
45.0	283.91	283.91	153.55	116.69	96.59	83.69	74.67	67.48	59.73
90.0	206.30	155.43	117.40	93.38	82.92	73.45	64.10	57.62	52.48
135.0	284.46	284.46	140.87	108.49	88.23	78.05	69.03	62.00	54.86
180.0	329.30	294.98	294.98	139.10	108.22	91.22	78.44	69.47	62.05
225.0	232.04	177.74	126.43	101.46	85.47	76.06	68.14	60.56	53.36
270.0	293.32	293.32	216.49	120.89	99.08	86.52	74.78	67.42	60.67
315.0	233.43	178.07	133.90	105.39	86.96	77.55	69.75	63.27	55.63
360.0	181.56	137.17	109.49	90.50	80.65	72.29	65.43	57.51	52.20

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	47.66	43.90	40.35	38.14	35.81	34.37	33.16	32.11	31.44
45.0	54.41	49.65	44.84	41.90	39.02	37.20	35.65	34.54	33.43
90.0	46.61	43.01	40.19	37.59	35.76	34.37	33.10	32.27	31.66
135.0	49.87	45.56	42.12	38.91	36.87	35.09	33.60	32.66	31.99
180.0	56.07	49.76	45.45	42.23	39.08	37.20	35.09	33.77	32.77
225.0	48.55	44.67	41.40	38.36	36.48	34.71	33.32	31.99	31.22
270.0	54.80	48.82	44.89	41.63	39.13	36.59	34.93	33.49	32.22
315.0	50.59	46.33	42.01	39.41	37.31	35.15	33.71	32.38	31.50
360.0	47.66	43.90	40.35	38.14	35.81	34.37	33.16	32.11	31.44
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	30.94	30.61	30.22	29.95	29.61	29.17	28.34	27.34	26.29
45.0	32.82	32.27	31.94	31.66	31.39	31.05	30.56	29.84	28.67
90.0	31.39	31.11	30.83	30.72	30.39	30.00	29.34	27.90	26.90
135.0	31.33	31.11	31.00	30.72	30.67	30.33	29.95	28.73	27.62
180.0	31.83	31.39	31.00	30.78	30.56	30.28	29.89	29.45	28.34
225.0	30.50	30.11	29.84	29.50	29.23	28.89	28.34	27.46	26.46
270.0	31.44	30.78	30.28	30.00	29.78	29.45	29.01	28.62	27.57
315.0	30.89	30.39	30.00	29.72	29.50	29.06	28.62	27.84	26.90
360.0	30.94	30.61	30.22	29.95	29.61	29.17	28.34	27.34	26.29
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	24.41	22.92	21.26	19.54	18.16	16.66	15.89	15.22	14.72
45.0	27.40	25.68	23.97	21.98	20.31	18.88	17.27	16.22	15.55
90.0	25.19	23.08	21.31	19.82	18.38	16.66	15.83	15.22	14.67
135.0	26.51	24.69	22.69	20.98	19.54	17.77	16.55	15.61	15.06
180.0	27.40	26.13	23.97	22.36	20.70	19.04	17.60	16.33	15.61
225.0	25.13	23.25	21.70	20.04	18.76	17.16	16.16	15.33	14.83
270.0	26.57	25.35	23.80	21.92	20.26	19.04	17.66	16.33	15.67
315.0	25.91	24.02	22.53	20.59	19.26	17.93	16.50	15.72	15.11
360.0	24.41	22.92	21.26	19.54	18.16	16.66	15.89	15.22	14.72
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	14.23	13.84	13.45	13.12	12.73	12.29	11.96	11.51	11.18
45.0	15.00	14.50	14.06	13.62	13.28	12.79	12.45	12.12	11.68
90.0	14.23	13.84	13.45	13.01	12.68	12.34	11.90	11.57	11.18
135.0	14.56	14.17	13.67	13.28	12.95	12.51	12.18	11.85	11.57
180.0	15.11	14.61	14.12	13.73	13.28	12.95	12.62	12.18	11.79
225.0	14.39	13.89	13.56	13.17	12.84	12.34	12.01	11.68	11.35
270.0	14.95	14.56	14.17	13.67	13.28	12.90	12.57	12.07	11.79
315.0	14.67	14.17	13.78	13.40	13.01	12.57	12.23	11.85	11.40
360.0	14.23	13.84	13.45	13.12	12.73	12.29	11.96	11.51	11.18
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	10.85	10.52	10.24	10.02	9.80	9.58	9.35	9.13	9.02
45.0	11.29	10.90	10.57	10.30	10.02	9.85	9.63	9.41	9.13
90.0	10.79	10.52	10.24	9.96	9.80	9.58	9.35	9.19	9.02
135.0	11.13	10.74	10.41	10.13	9.91	9.69	9.47	9.24	9.02
180.0	11.46	11.07	10.63	10.41	10.13	9.85	9.69	9.41	9.19
225.0	10.96	10.63	10.35	10.13	9.91	9.69	9.47	9.24	9.08
270.0	11.40	11.02	10.63	10.35	10.07	9.85	9.63	9.41	9.13
315.0	11.13	10.74	10.41	10.19	9.91	9.69	9.52	9.30	9.02
360.0	10.85	10.52	10.24	10.02	9.80	9.58	9.35	9.13	9.02

Intensity data(cd)

C/γ(°)	90.0
0.0	9.08
45.0	9.08
90.0	9.02
135.0	9.02
180.0	9.08
225.0	9.02
270.0	9.02
315.0	8.97
360.0	9.08