



NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.com
Tel:+86-750-3770000 Fax:+86-750-3771111
Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

Nata

LumCAT: 2-1284-N	
Luminaire: 92.70.051.00	
Report No: NATA0100	Voltage(V): 37.6000
Test No: GC2018080206	Current(A): 0.2000
LampCAT: BRIDGELUX V4 HD	Power (W): 7.5200
Lamp flux(lm): 718.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 57	Width(mm): 57
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 608.01
Efficiency(%): 84.68%
Lumens(lm)/Power(W): 81.20
Central intensity(cd): 2812.006
Maximum intensity(cd): 2812.006
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=19.1
 [C90/270]Total=19.1
Field angle(10%Imax): [C0/180]Total=48.0
 [C90/270]Total=48.0
Maximum s/h(1/2): C0_180=0.33 C90_270=0.33
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(%): 85.04%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.278%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2018/8/2
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.42

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2812.006	2.691	2.691	.375%	.443%
2.0	2728.595	20.884	23.575	2.909%	3.878%
4.0	2566.798	39.268	62.844	5.469%	10.336%
6.0	2238.662	51.320	114.164	7.148%	18.777%
8.0	1762.493	53.796	167.96	7.492%	27.625%
10.0	1295.250	49.327	217.287	6.870%	35.738%
12.0	1025.942	46.781	264.068	6.515%	43.432%
14.0	806.081	42.768	306.836	5.957%	50.466%
16.0	637.677	38.548	345.384	5.369%	56.806%
18.0	497.132	33.691	379.075	4.692%	62.347%
20.0	392.903	29.472	408.547	4.105%	67.195%
22.0	325.466	26.739	435.286	3.724%	71.592%
24.0	281.435	25.105	460.391	3.496%	75.722%
26.0	253.996	24.419	484.81	3.401%	79.738%
28.0	236.130	24.312	509.122	3.386%	83.737%
30.0	217.273	23.825	532.948	3.318%	87.655%
32.0	165.582	19.244	552.191	2.680%	90.820%
34.0	89.019	10.917	563.109	1.521%	92.616%
36.0	39.957	5.151	568.26	.717%	93.463%
38.0	25.732	3.474	571.734	.484%	94.034%
40.0	20.302	2.862	574.596	.399%	94.505%
42.0	17.074	2.506	577.102	.349%	94.917%
44.0	14.803	2.255	579.357	.314%	95.288%
46.0	13.227	2.087	581.444	.291%	95.631%
48.0	12.085	1.970	583.413	.274%	95.955%
50.0	11.397	1.915	585.328	.267%	96.270%
52.0	10.860	1.877	587.205	.261%	96.579%
54.0	10.289	1.826	589.03	.254%	96.879%
56.0	9.594	1.744	590.775	.243%	97.166%
58.0	8.878	1.651	592.426	.230%	97.438%
60.0	8.197	1.557	593.982	.217%	97.694%
62.0	7.515	1.455	595.438	.203%	97.933%
64.0	6.896	1.359	596.797	.189%	98.157%
66.0	6.366	1.275	598.072	.178%	98.366%
68.0	5.994	1.219	599.291	.170%	98.567%
70.0	5.396	1.112	600.403	.155%	98.750%
72.0	4.755	0.992	601.395	.138%	98.913%
74.0	4.466	0.942	602.337	.131%	99.068%

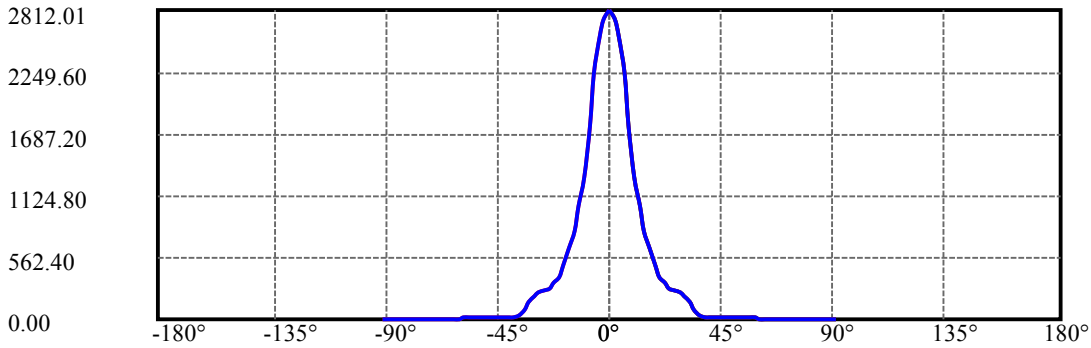
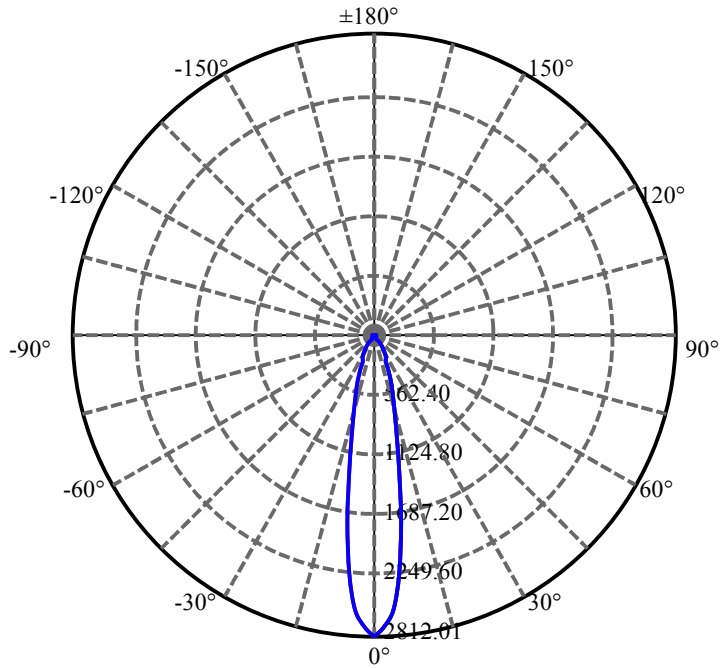
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	4.205	0.895	603.232	.125%	99.215%
78.0	3.943	0.846	604.078	.118%	99.354%
80.0	3.730	0.806	604.883	.112%	99.487%
82.0	3.530	0.767	605.65	.107%	99.613%
84.0	3.331	0.727	606.376	.101%	99.732%
86.0	3.152	0.690	607.066	.096%	99.846%
88.0	2.904	0.637	607.703	.089%	99.950%
90.0	2.760	0.303	608.005	.042%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	532.95	74.23%	87.66%
0-40	574.60	80.03%	94.51%
0-60	593.98	82.73%	97.69%
0-90	607.70	84.64%	99.95%
0-120	607.70	84.64%	99.95%
0-180	608.01	84.68%	100.00%
60-90	15.28	2.13%	2.51%
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%
0-26.13	486.40	67.74%	80.00%

ZONAL LUMEN SUMMARY

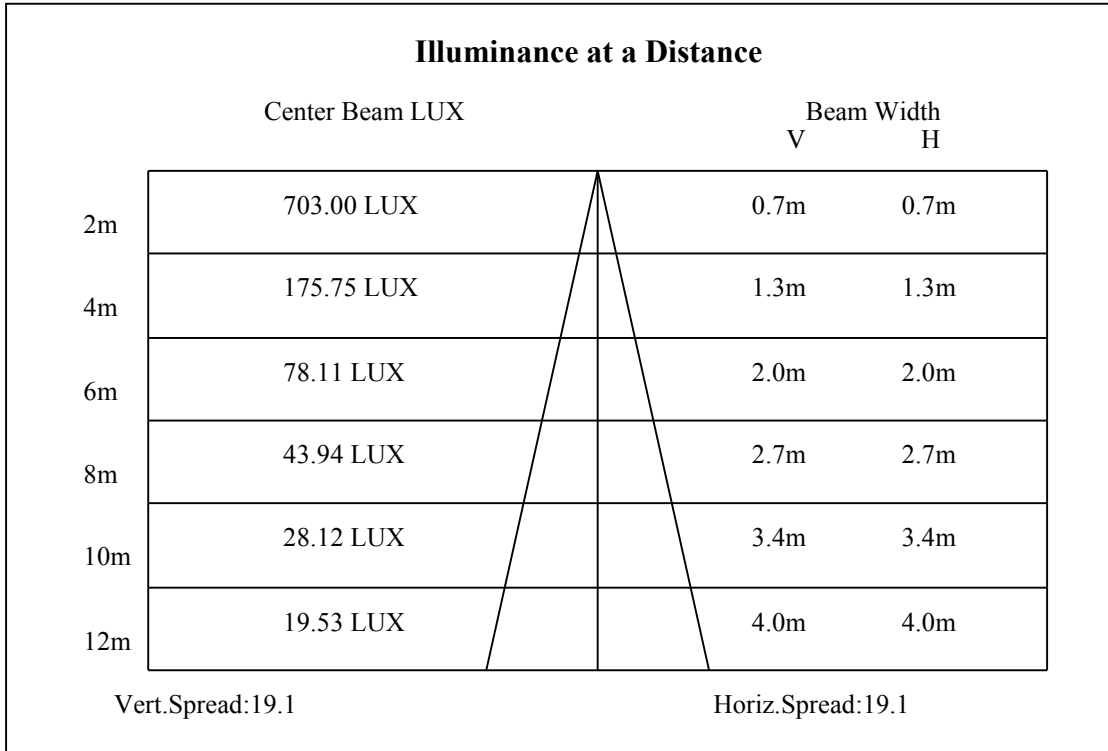
0-10	217.29
10-20	191.26
20-30	124.40
30-40	41.65
40-50	10.73
50-60	8.65
60-70	6.42
70-80	4.48
80-90	2.82
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

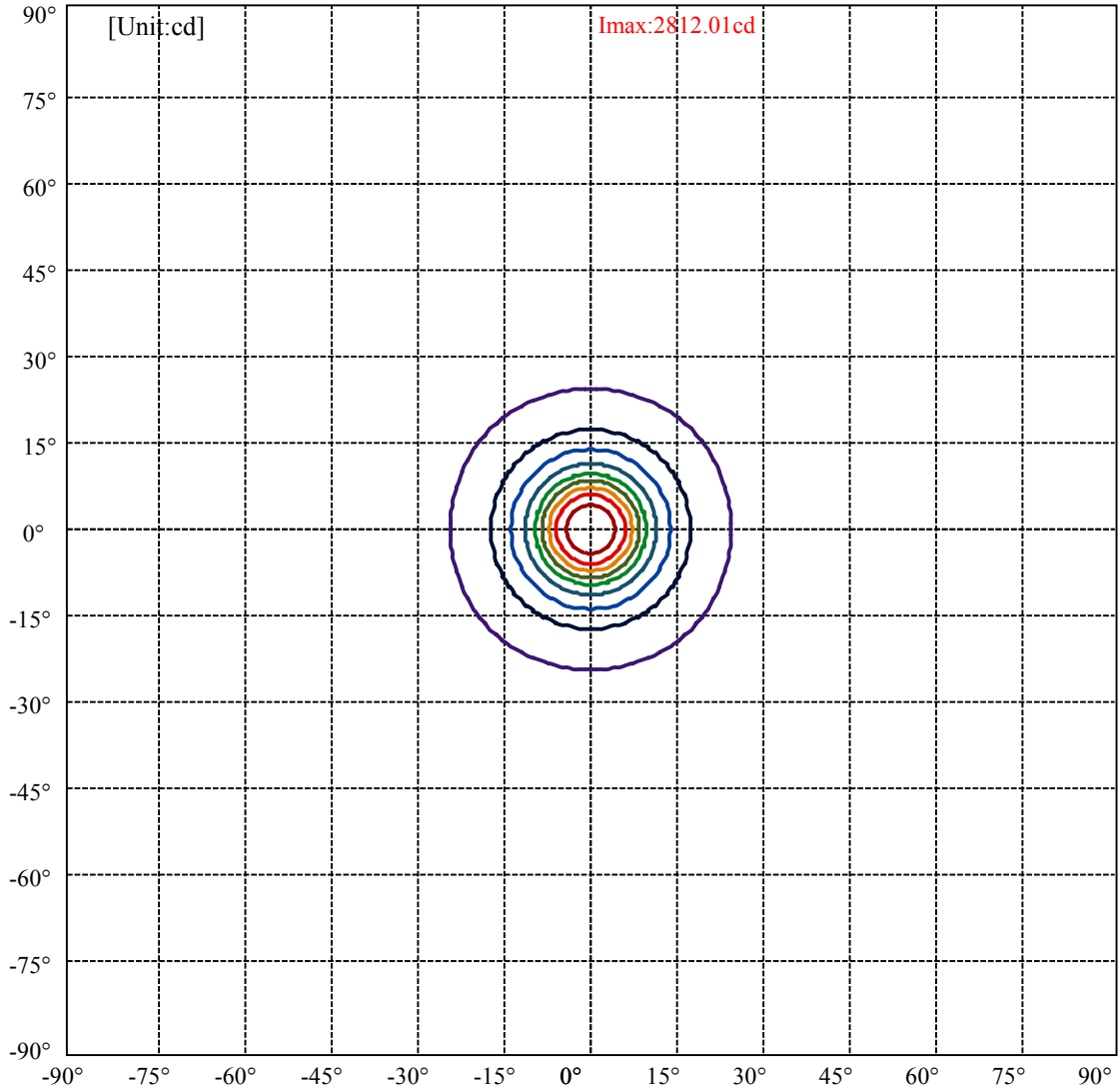


C0(Max): —————
C0/C180: —————
C90/C270: —————

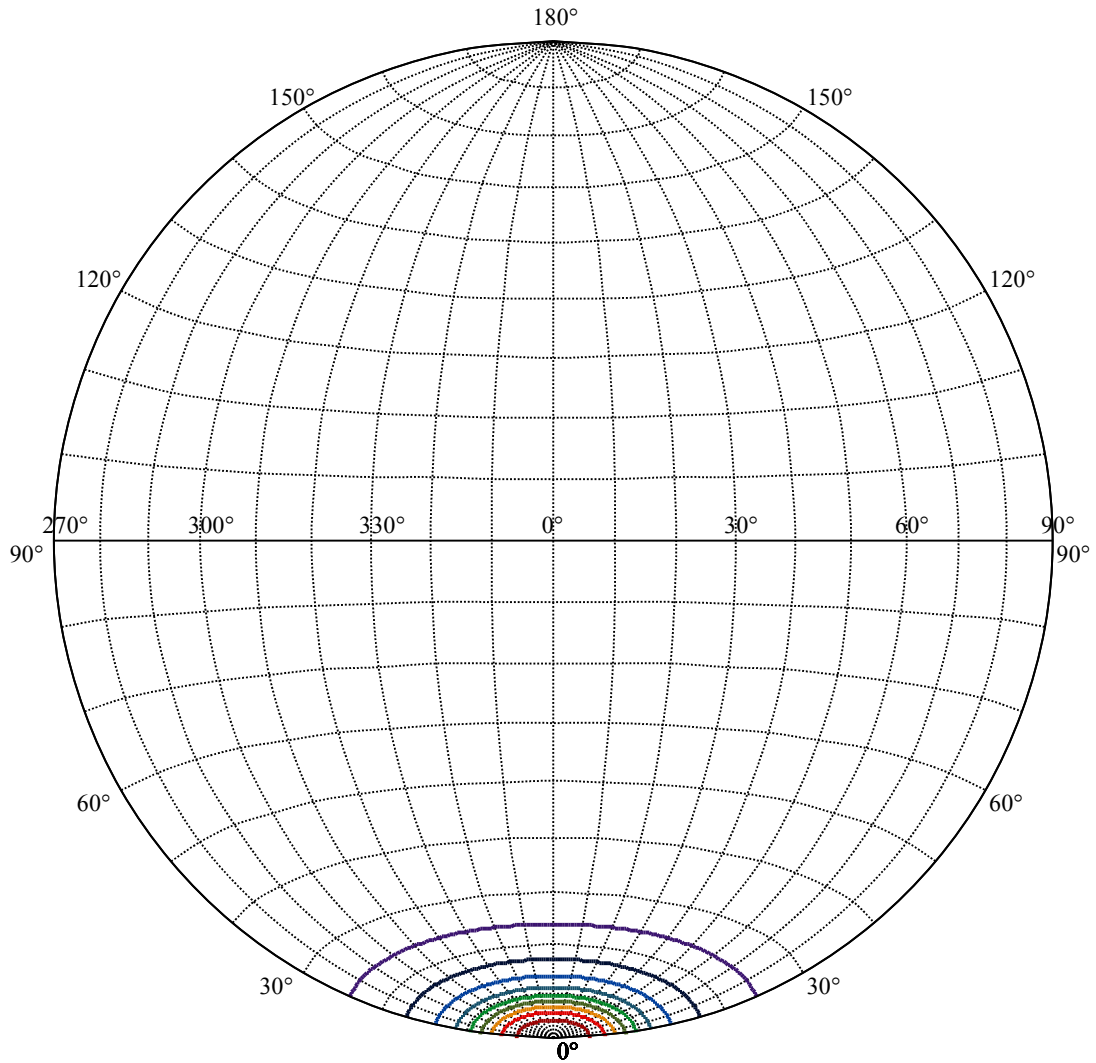
Field angle(10%Imax):C0/180Left:24.0 Right:24.0
:C90/270Left:24.0 Right:24.0

Beam Angle(50%Imax):C0/180Left:9.5 Right:9.5
:C90/270Left:9.5 Right:9.5





(10%Imax) 281.201	—
(20%Imax) 562.401	—
(30%Imax) 843.602	—
(40%Imax) 1124.8	—
(50%Imax) 1406	—
(60%Imax) 1687.2	—
(70%Imax) 1968.4	—
(80%Imax) 2249.6	—
(90%Imax) 2530.81	—



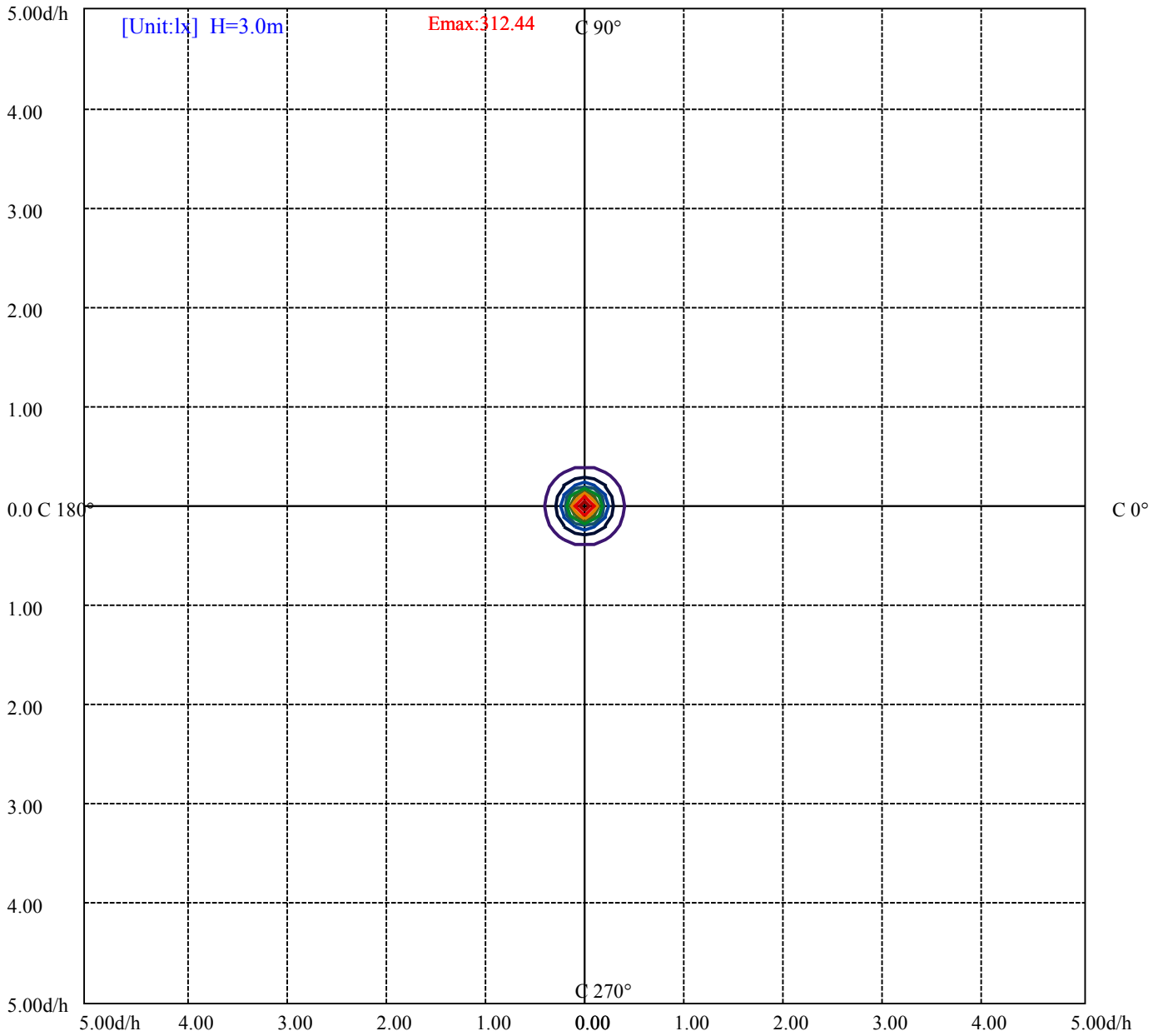
House

[Unit:cd]

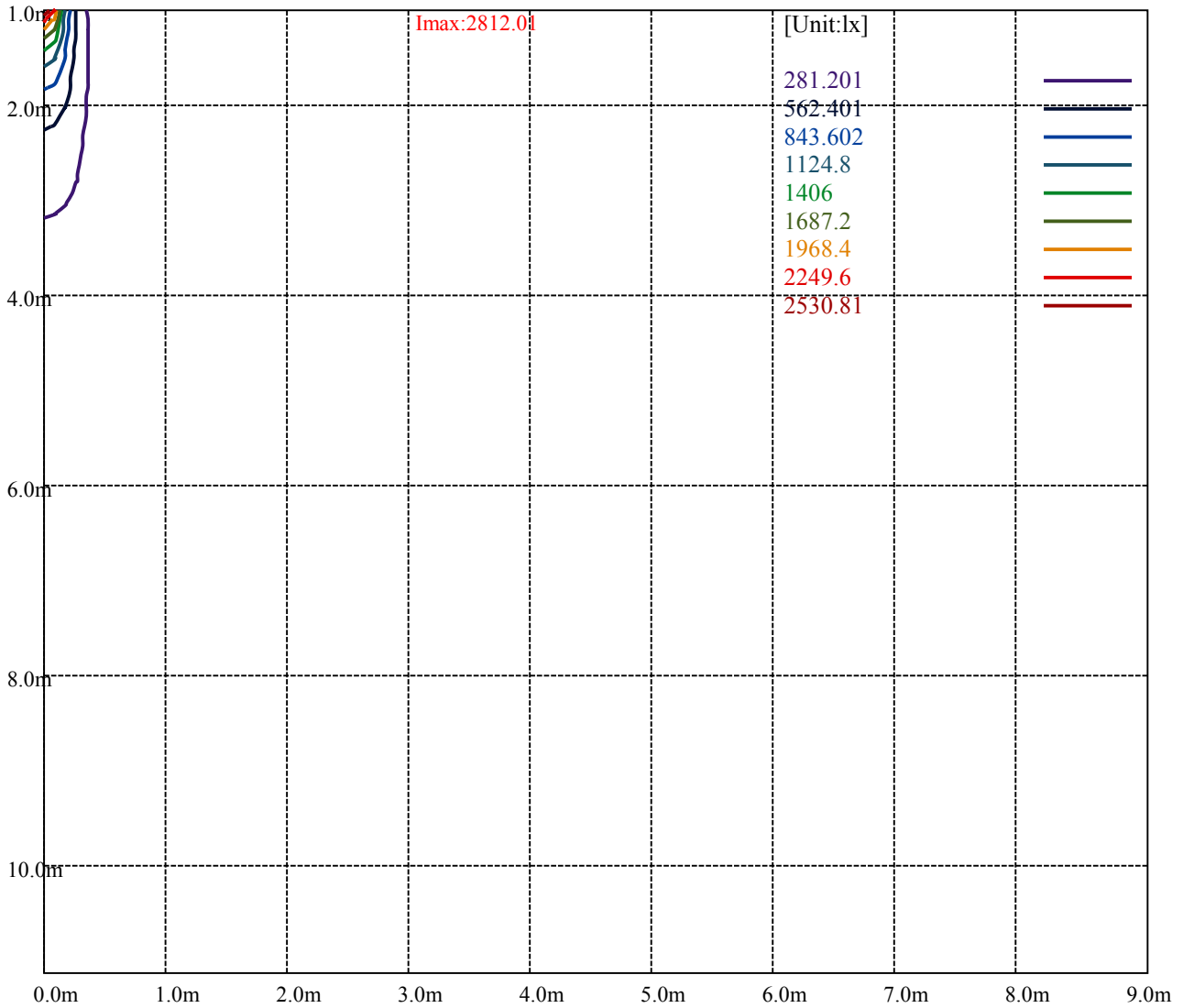
Road

Imax:2812.01

(10%Imax) 281.201	—
(20%Imax) 562.401	—
(30%Imax) 843.602	—
(40%Imax) 1124.8	—
(50%Imax) 1406	—
(60%Imax) 1687.2	—
(70%Imax) 1968.4	—
(80%Imax) 2249.6	—
(90%Imax) 2530.81	—



(10%Emax) 31.24445	—
(20%Emax) 62.48889	—
(30%Emax) 93.73333	—
(40%Emax) 124.9778	—
(50%Emax) 156.2222	—
(60%Emax) 187.4667	—
(70%Emax) 218.7111	—
(80%Emax) 249.9556	—
(90%Emax) 281.2	—



Luminance Table

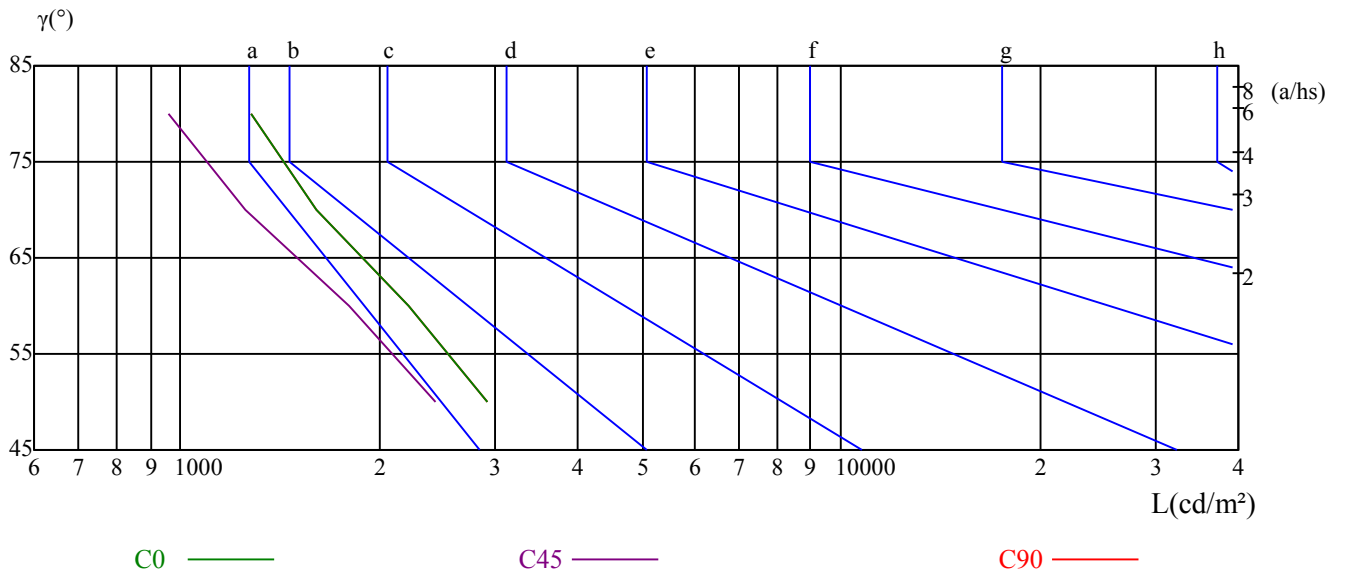
γ	45	50	55	60	65	70	75	80	85
C0	0	2906	0	2217	0	1605	0	1277	0
C45	0	2434	0	1799	0	1257	0	957	0
C90	0	2906	0	2217	0	1605	0	1277	0

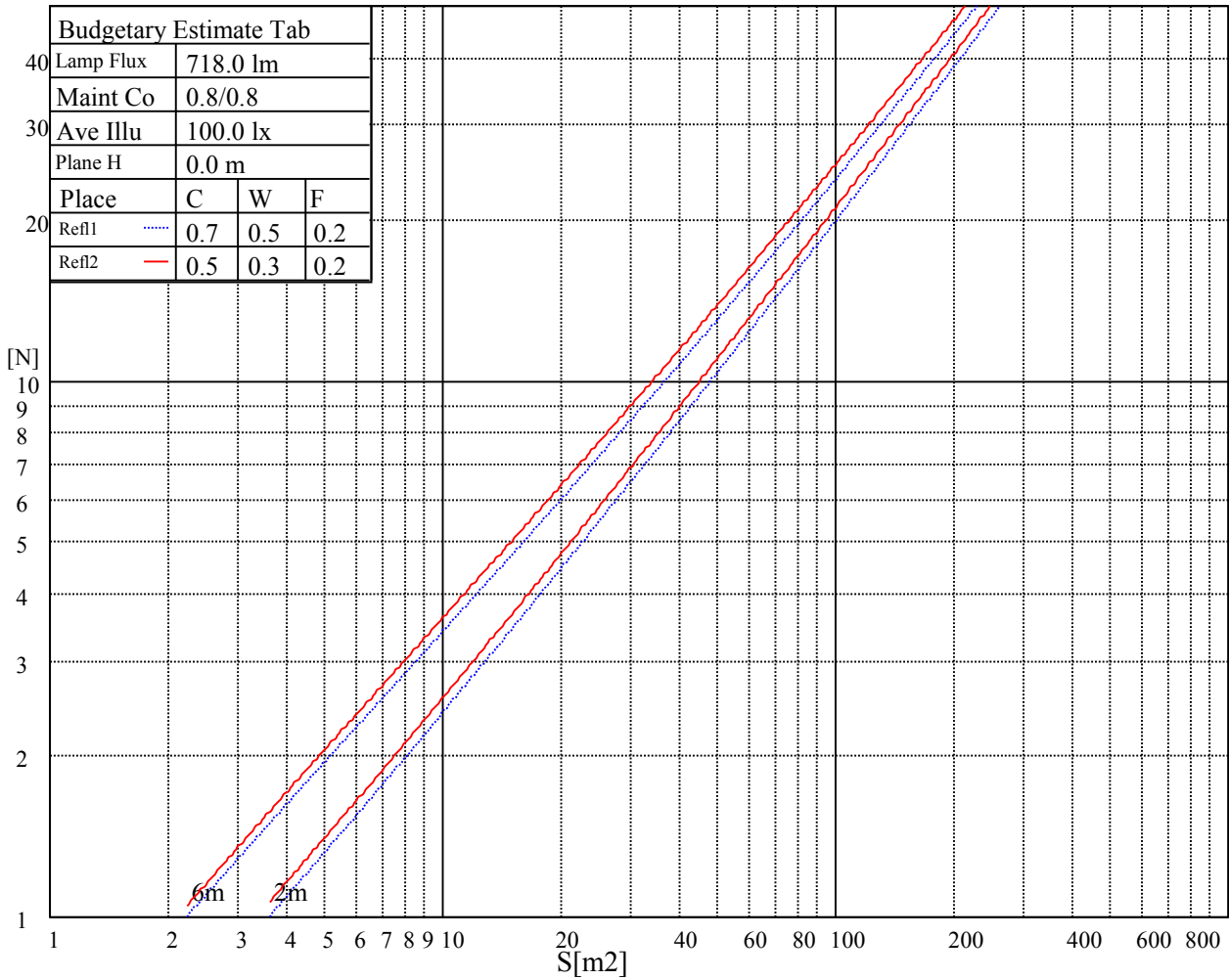
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
67663	68084	67954	58762	60432	60137	47732	44038	44281

Glare Table

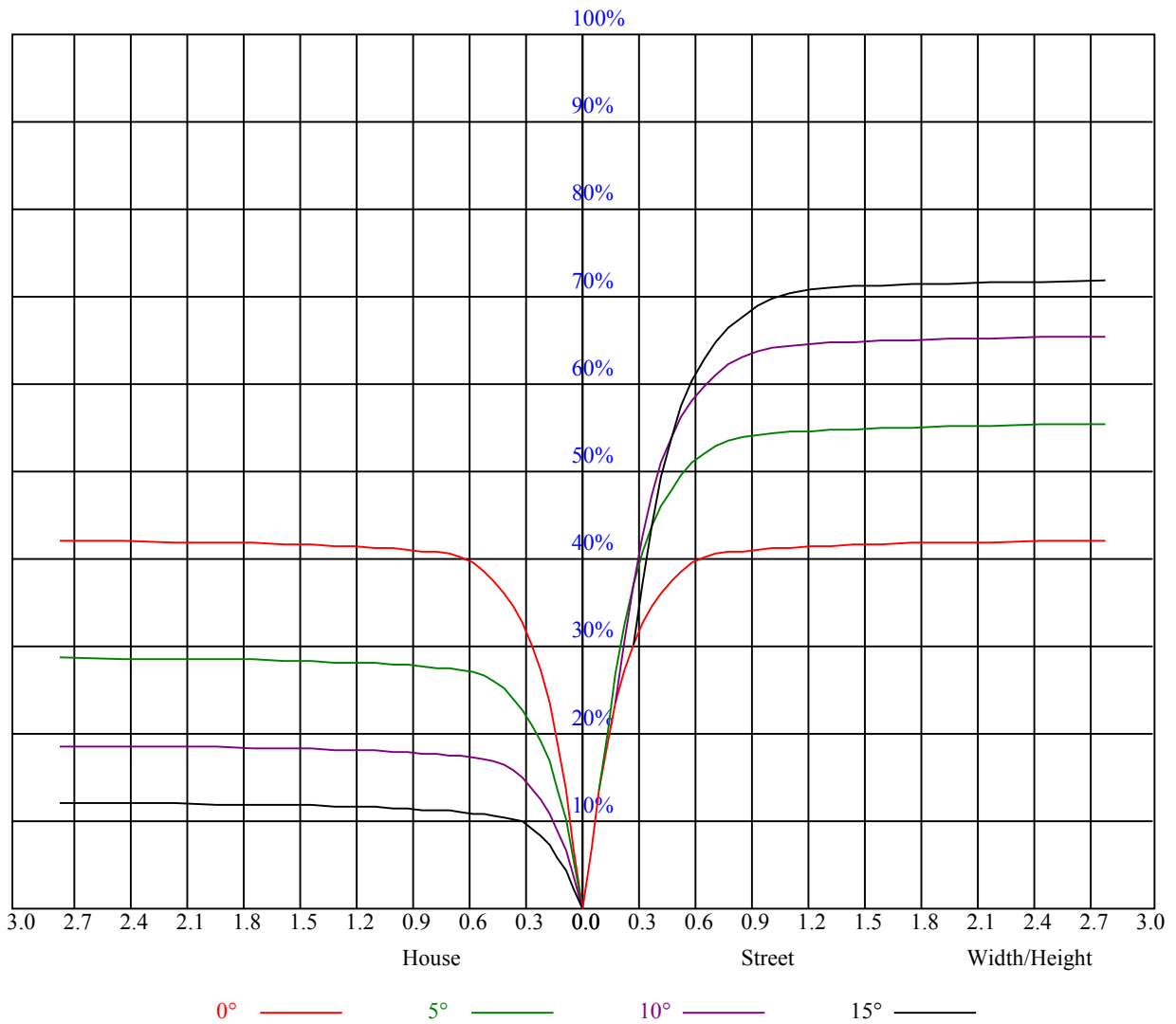
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve





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	1.01	1.01	1.01	0.99	0.99	0.99	0.94	0.94	0.94	0.90	0.90	0.90	0.87	0.87	0.87	0.85
1	0.95	0.93	0.91	0.93	0.91	0.89	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.82	0.80
2	0.89	0.86	0.84	0.88	0.85	0.83	0.85	0.83	0.81	0.83	0.81	0.80	0.81	0.79	0.78	0.77
3	0.85	0.82	0.79	0.84	0.81	0.78	0.82	0.79	0.77	0.80	0.78	0.76	0.78	0.76	0.75	0.73
4	0.81	0.77	0.74	0.80	0.77	0.74	0.79	0.76	0.73	0.77	0.74	0.72	0.75	0.73	0.72	0.70
5	0.78	0.74	0.71	0.77	0.73	0.71	0.76	0.72	0.70	0.74	0.72	0.69	0.73	0.71	0.69	0.68
6	0.75	0.71	0.68	0.74	0.70	0.68	0.73	0.70	0.67	0.72	0.69	0.67	0.71	0.68	0.66	0.65
7	0.72	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.64	0.69	0.66	0.64	0.63
8	0.70	0.66	0.63	0.69	0.65	0.63	0.68	0.65	0.63	0.68	0.65	0.62	0.67	0.64	0.62	0.61
9	0.67	0.63	0.61	0.67	0.63	0.61	0.66	0.63	0.61	0.66	0.63	0.60	0.65	0.62	0.60	0.59
10	0.65	0.61	0.59	0.65	0.61	0.59	0.64	0.61	0.59	0.64	0.61	0.59	0.63	0.60	0.58	0.58



Intensity data(cd)

C/γ(°)	0.0	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0
0.0	2808.98	2815.03	2688.40	2528.19	2145.00	1647.84	1247.58	977.25	781.80
45.0	2805.67	2758.33	2644.36	2429.09	2055.81	1560.85	1206.84	972.30	777.40
90.0	2807.88	2707.67	2532.59	2192.90	1678.67	1090.61	911.57	668.94	514.34
135.0	2825.49	2705.47	2571.13	2207.21	1740.33	1299.33	1013.59	823.09	640.86
180.0	2808.98	2670.79	2452.76	2035.44	1514.60	1086.15	896.26	702.30	569.50
225.0	2805.67	2677.39	2451.66	2026.08	1509.65	1089.02	900.45	714.14	566.92
270.0	2807.88	2741.26	2596.46	2196.75	1685.83	1279.51	993.77	766.94	604.52
315.0	2825.49	2752.82	2597.01	2293.65	1770.06	1308.69	1037.48	823.70	646.09
360.0	2808.98	2815.03	2688.40	2528.19	2145.00	1647.84	1247.58	977.25	781.80
C/γ(°)	18.0	20.0	22.0	24.0	26.0	28.0	30.0	32.0	34.0
0.0	618.28	480.64	389.25	324.28	284.64	259.43	244.78	223.14	144.96
45.0	614.98	486.70	392.55	324.83	290.70	264.49	247.64	218.46	138.58
90.0	376.75	279.91	227.33	191.21	166.33	154.93	151.57	113.64	85.12
135.0	502.11	404.66	337.50	290.70	269.34	247.86	228.37	182.79	86.16
180.0	439.68	353.35	304.19	275.39	256.51	246.21	215.33	126.79	47.02
225.0	439.24	360.07	304.79	271.76	257.50	247.53	210.70	123.22	50.60
270.0	474.59	372.73	315.47	280.79	245.99	227.82	209.71	150.80	67.39
315.0	511.42	405.16	332.65	292.51	260.97	240.76	230.08	185.82	92.33
360.0	618.28	480.64	389.25	324.28	284.64	259.43	244.78	223.14	144.96
C/γ(°)	36.0	38.0	40.0	42.0	44.0	46.0	48.0	50.0	52.0
0.0	56.71	26.76	20.87	17.23	14.92	13.16	11.95	11.29	10.85
45.0	57.75	29.40	22.96	19.10	16.79	14.87	13.54	12.72	12.11
90.0	58.80	41.35	31.22	25.11	20.87	18.28	16.24	14.87	13.49
135.0	32.10	26.98	21.69	18.50	16.08	14.26	13.05	12.66	12.06
180.0	23.95	19.16	15.86	13.60	12.00	10.85	10.13	9.69	9.52
225.0	23.56	18.00	14.87	12.94	11.40	10.35	9.69	9.41	9.19
270.0	31.00	21.53	17.12	14.76	12.83	11.56	10.68	10.02	9.63
315.0	35.79	22.68	17.84	15.36	13.54	12.50	11.40	10.52	10.02
360.0	56.71	26.76	20.87	17.23	14.92	13.16	11.95	11.29	10.85
C/γ(°)	54.0	56.0	58.0	60.0	62.0	64.0	66.0	68.0	70.0
0.0	10.41	9.86	9.19	8.42	7.82	6.99	6.44	6.06	5.95
45.0	11.51	10.79	9.91	9.03	8.26	7.49	6.88	6.28	6.11
90.0	12.28	11.12	10.19	9.36	8.53	7.76	7.05	6.55	5.89
135.0	11.29	10.46	9.52	8.64	7.87	7.27	6.61	6.06	5.51
180.0	9.19	8.64	8.15	7.54	6.94	6.44	6.00	5.78	4.90
225.0	8.86	8.26	7.71	7.32	6.77	6.28	5.95	5.78	4.79
270.0	9.25	8.70	8.09	7.60	6.94	6.50	6.06	5.78	4.96
315.0	9.52	8.92	8.26	7.65	6.99	6.44	5.95	5.67	5.07
360.0	10.41	9.86	9.19	8.42	7.82	6.99	6.44	6.06	5.95
C/γ(°)	72.0	74.0	76.0	78.0	80.0	82.0	84.0	86.0	88.0
0.0	4.79	4.51	4.24	4.02	3.85	3.69	3.52	3.41	3.14
45.0	5.01	4.62	4.29	4.07	3.85	3.63	3.47	3.30	3.03
90.0	5.29	4.84	4.46	4.07	3.74	3.41	3.19	3.03	2.75
135.0	4.79	4.40	4.13	3.85	3.63	3.41	3.25	3.08	2.86
180.0	4.57	4.35	4.18	3.91	3.74	3.63	3.41	3.19	2.97
225.0	4.46	4.24	4.02	3.80	3.58	3.47	3.30	2.97	2.81
270.0	4.62	4.40	4.24	3.96	3.74	3.47	3.19	2.97	2.75
315.0	4.51	4.35	4.07	3.85	3.69	3.52	3.30	3.25	2.92
360.0	4.79	4.51	4.24	4.02	3.85	3.69	3.52	3.41	3.14

Intensity data(cd)

C/γ(°)	90.0
0.0	2.92
45.0	2.86
90.0	2.70
135.0	2.70
180.0	2.75
225.0	2.70
270.0	2.70
315.0	2.75
360.0	2.92