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: 1-1005-M
Luminaire: BJB 47.360.1020

Report No: NATA0100	Voltage(V): 33.8900
Test No: GC2019102309	Current(A): 0.2970
LampCAT: BRIDGELUX V10B LES10	Power (W): 10.0600
Lamp flux(lm): 1480.0	PF: 1.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1079.25
Efficiency(%): 72.92%
Lumens(lm)/Power(W): 107.28
Central intensity(cd): 7257.445
Maximum intensity(cd): 7257.445
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=19.2
[C90/270]Total=19.2
Field angle(10%Imax): [C0/180]Total=39.7
[C90/270]Total=39.7
Maximum s/h(1/2): C0_180=0.33 C90_270=0.33
Maximum s/h(1/4): C0_180=0.35 C90_270=0.35
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 72.92%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.564%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	7257.445	0.000	0	.000%	.000%
1.0	7222.008	6.928	6.928	.468%	.642%
2.0	7097.836	20.553	27.481	1.389%	2.546%
3.0	6861.164	33.385	60.867	2.256%	5.640%
4.0	6523.102	44.801	105.668	3.027%	9.791%
5.0	6096.234	54.288	159.956	3.668%	14.821%
6.0	5566.359	61.290	221.246	4.141%	20.500%
7.0	5002.102	65.598	286.844	4.432%	26.578%
8.0	4477.570	67.844	354.688	4.584%	32.864%
9.0	3932.156	68.156	422.845	4.605%	39.179%
10.0	3419.016	66.525	489.37	4.495%	45.343%
11.0	3007.758	64.217	553.587	4.339%	51.294%
12.0	2618.016	61.498	615.084	4.155%	56.992%
13.0	2232.844	57.567	672.652	3.890%	62.326%
14.0	1937.461	53.380	726.031	3.607%	67.272%
15.0	1680.258	49.666	775.697	3.356%	71.874%
16.0	1410.159	45.283	820.98	3.060%	76.069%
17.0	1181.510	40.359	861.34	2.727%	79.809%
18.0	1038.523	36.604	897.943	2.473%	83.201%
19.0	858.150	32.998	930.941	2.230%	86.258%
20.0	706.549	28.638	959.58	1.935%	88.912%
21.0	563.808	24.393	983.973	1.648%	91.172%
22.0	425.060	19.872	1003.845	1.343%	93.013%
23.0	313.158	15.490	1019.335	1.047%	94.448%
24.0	225.823	11.784	1031.119	.796%	95.540%
25.0	125.445	7.987	1039.106	.540%	96.280%
26.0	72.689	4.677	1043.783	.316%	96.714%
27.0	39.192	2.737	1046.52	.185%	96.967%
28.0	21.438	1.535	1048.055	.104%	97.109%
29.0	14.055	0.929	1048.984	.063%	97.196%
30.0	11.243	0.683	1049.667	.046%	97.259%
31.0	9.935	0.589	1050.256	.040%	97.313%
32.0	9.169	0.547	1050.803	.037%	97.364%
33.0	8.543	0.522	1051.325	.035%	97.412%
34.0	7.995	0.500	1051.826	.034%	97.459%
35.0	7.580	0.484	1052.309	.033%	97.504%
36.0	7.207	0.471	1052.78	.032%	97.547%
37.0	6.919	0.461	1053.241	.031%	97.590%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	6.680	0.454	1053.695	.031%	97.632%
39.0	6.448	0.448	1054.143	.030%	97.674%
40.0	6.272	0.444	1054.586	.030%	97.715%
41.0	6.124	0.441	1055.028	.030%	97.756%
42.0	6.005	0.441	1055.468	.030%	97.796%
43.0	5.878	0.440	1055.909	.030%	97.837%
44.0	5.808	0.441	1056.35	.030%	97.878%
45.0	5.716	0.443	1056.793	.030%	97.919%
46.0	5.639	0.444	1057.237	.030%	97.960%
47.0	5.583	0.446	1057.683	.030%	98.002%
48.0	5.548	0.450	1058.133	.030%	98.043%
49.0	5.470	0.452	1058.585	.031%	98.085%
50.0	5.442	0.455	1059.04	.031%	98.127%
51.0	5.379	0.458	1059.498	.031%	98.170%
52.0	5.344	0.460	1059.958	.031%	98.212%
53.0	5.309	0.463	1060.422	.031%	98.255%
54.0	5.288	0.467	1060.889	.032%	98.299%
55.0	5.245	0.470	1061.359	.032%	98.342%
56.0	5.217	0.473	1061.832	.032%	98.386%
57.0	5.189	0.476	1062.307	.032%	98.430%
58.0	5.161	0.479	1062.786	.032%	98.474%
59.0	5.147	0.482	1063.268	.033%	98.519%
60.0	5.126	0.485	1063.753	.033%	98.564%
61.0	5.105	0.488	1064.241	.033%	98.609%
62.0	5.070	0.490	1064.732	.033%	98.655%
63.0	5.063	0.493	1065.225	.033%	98.700%
64.0	5.048	0.496	1065.721	.034%	98.746%
65.0	5.034	0.499	1066.22	.034%	98.793%
66.0	5.020	0.502	1066.721	.034%	98.839%
67.0	4.992	0.503	1067.225	.034%	98.886%
68.0	4.999	0.506	1067.731	.034%	98.933%
69.0	4.971	0.509	1068.24	.034%	98.980%
70.0	4.957	0.510	1068.749	.034%	99.027%
71.0	4.957	0.512	1069.262	.035%	99.074%
72.0	4.950	0.515	1069.777	.035%	99.122%
73.0	4.936	0.517	1070.294	.035%	99.170%
74.0	4.936	0.519	1070.813	.035%	99.218%
75.0	4.929	0.521	1071.334	.035%	99.266%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	4.929	0.523	1071.857	.035%	99.315%
77.0	4.901	0.524	1072.382	.035%	99.363%
78.0	4.915	0.525	1072.907	.036%	99.412%
79.0	4.894	0.527	1073.434	.036%	99.461%
80.0	4.880	0.527	1073.961	.036%	99.510%
81.0	4.866	0.527	1074.488	.036%	99.559%
82.0	4.866	0.528	1075.016	.036%	99.608%
83.0	4.859	0.529	1075.544	.036%	99.657%
84.0	4.852	0.529	1076.073	.036%	99.706%
85.0	4.838	0.529	1076.602	.036%	99.755%
86.0	4.859	0.530	1077.132	.036%	99.804%
87.0	4.838	0.531	1077.663	.036%	99.853%
88.0	4.830	0.530	1078.192	.036%	99.902%
89.0	4.830	0.530	1078.722	.036%	99.951%
90.0	4.823	0.529	1079.251	.036%	100.000%

Zonal flux distribution table

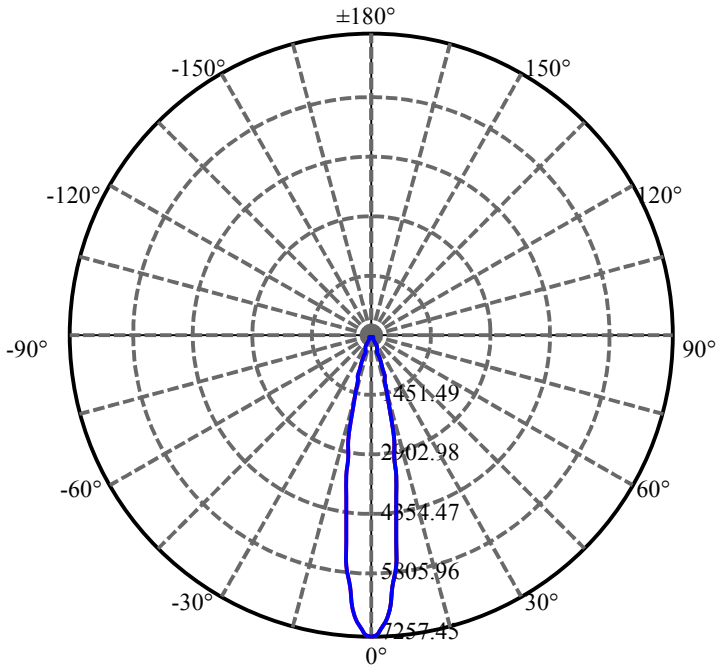
ZONAL LUMEN SUMMARY

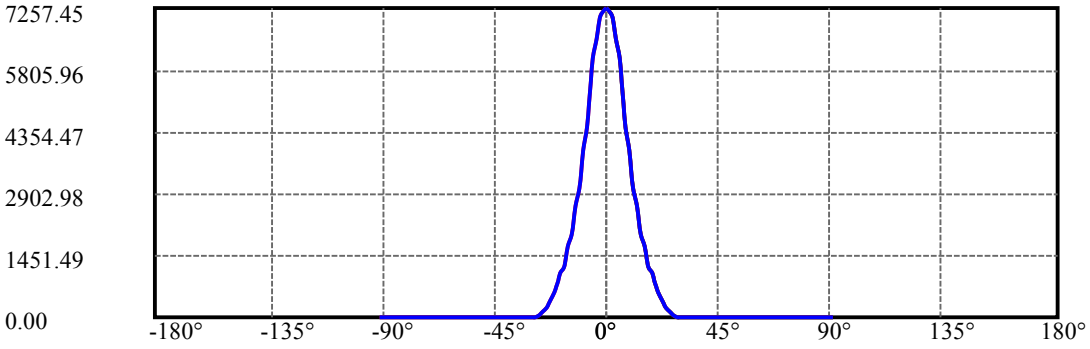
Zone	Lumens	%Lamp	%Fixt
0-30	1049.67	70.92%	97.26%
0-40	1054.59	71.26%	97.71%
0-60	1063.75	71.88%	98.56%
0-90	1078.72	72.89%	99.95%
0-120	1078.72	72.89%	99.95%
0-180	1079.25	72.92%	100.00%
60-90	15.45	1.04%	1.43%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-17.06	863.40	58.34%	80.00%

ZONAL LUMEN SUMMARY

0-10	489.37
10-20	470.21
20-30	90.09
30-40	4.92
40-50	4.45
50-60	4.71
60-70	5.00
70-80	5.21
80-90	4.76
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

Light Distribution Curve [Unit:cd]





C0(Max):

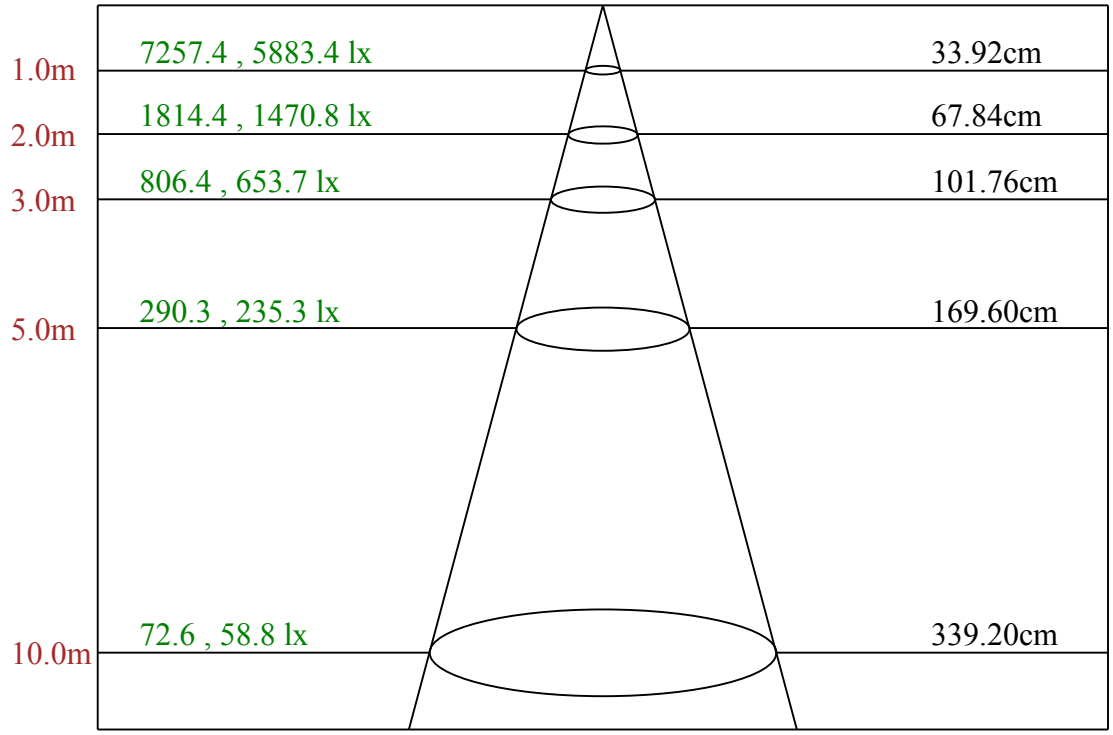
C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:19.9 Right:19.9
:C90/270Left:19.9 Right:19.9

Beam Angle(50%Imax):C0/180Left:9.6 Right:9.6
:C90/270Left:9.6 Right:9.6

Lux distance Curve

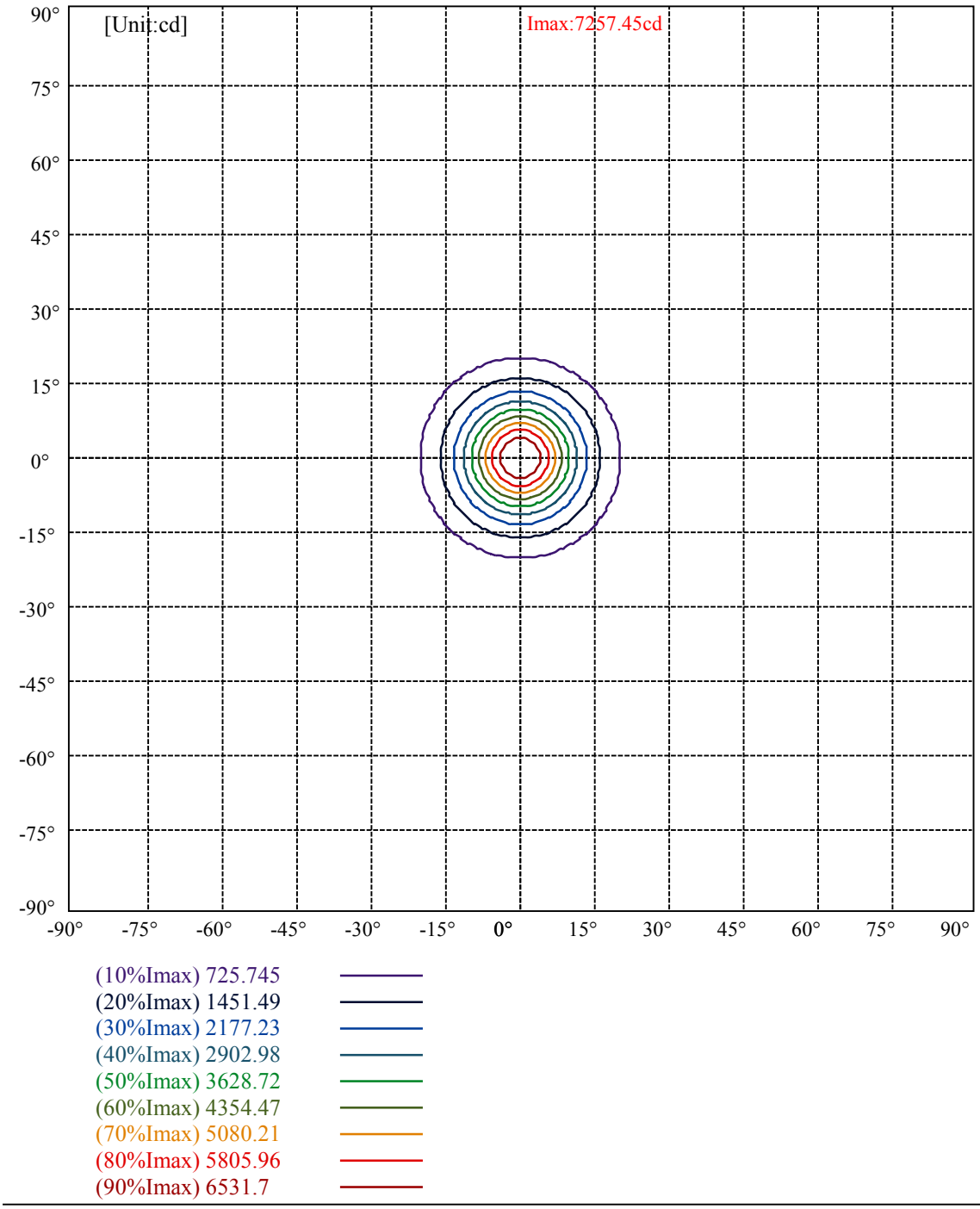


Max , Ave

Beam angle of C0 plane 19.25

Equipment: GMS1980	Date: 2019/10/23	Operator: NT07
Temperature(°C): 25.0	Humidity(%): 65.0%	Distance(m): 7.50

ISO-Intensity(V-H)



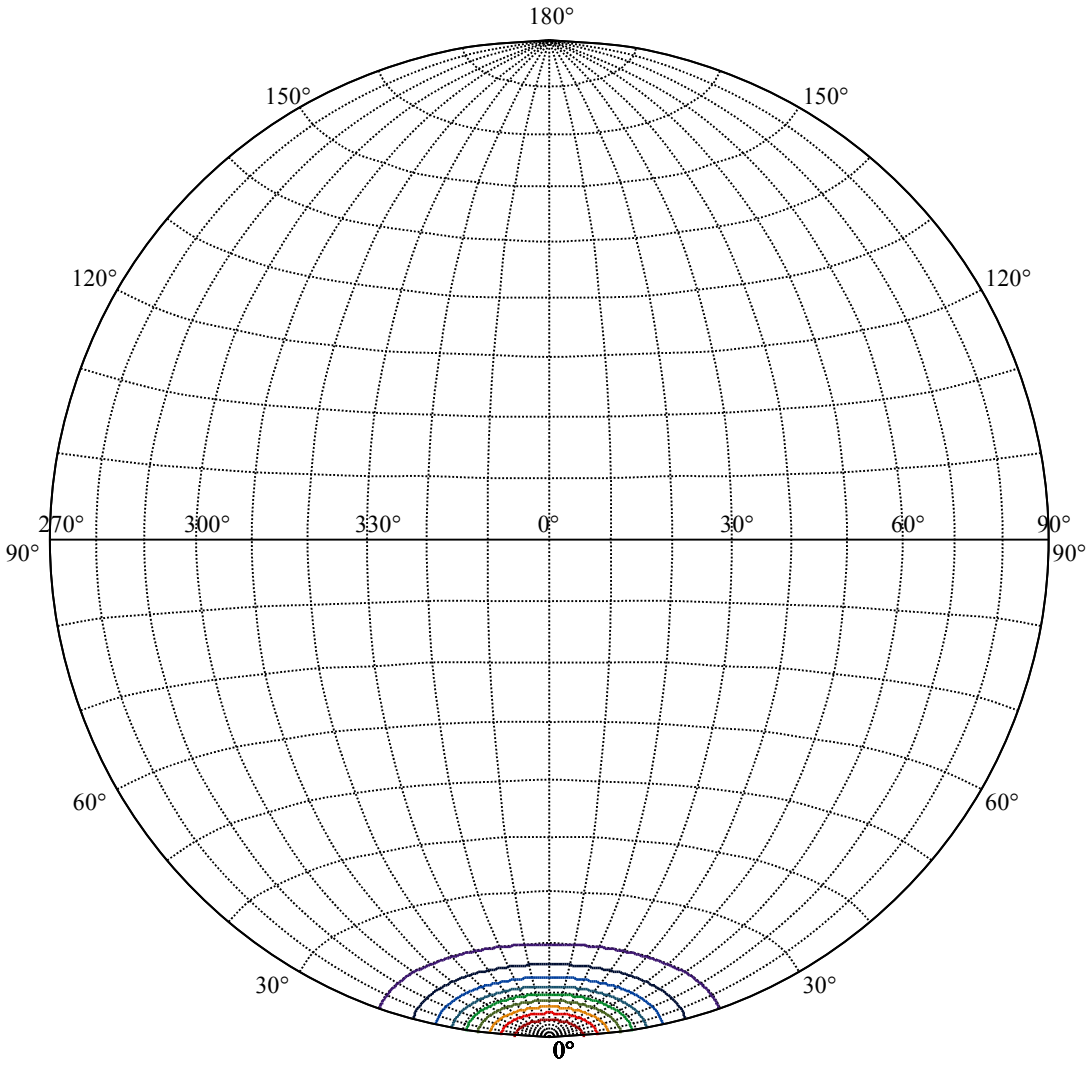
(10%Imax) 725.745
(20%Imax) 1451.49
(30%Imax) 2177.23
(40%Imax) 2902.98
(50%Imax) 3628.72
(60%Imax) 4354.47
(70%Imax) 5080.21
(80%Imax) 5805.96
(90%Imax) 6531.7

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2019/10/23
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:7257.45

(10%Imax) 725.745
(20%Imax) 1451.49
(30%Imax) 2177.23
(40%Imax) 2902.98
(50%Imax) 3628.72
(60%Imax) 4354.47
(70%Imax) 5080.21
(80%Imax) 5805.96
(90%Imax) 6531.7

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2019/10/23
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

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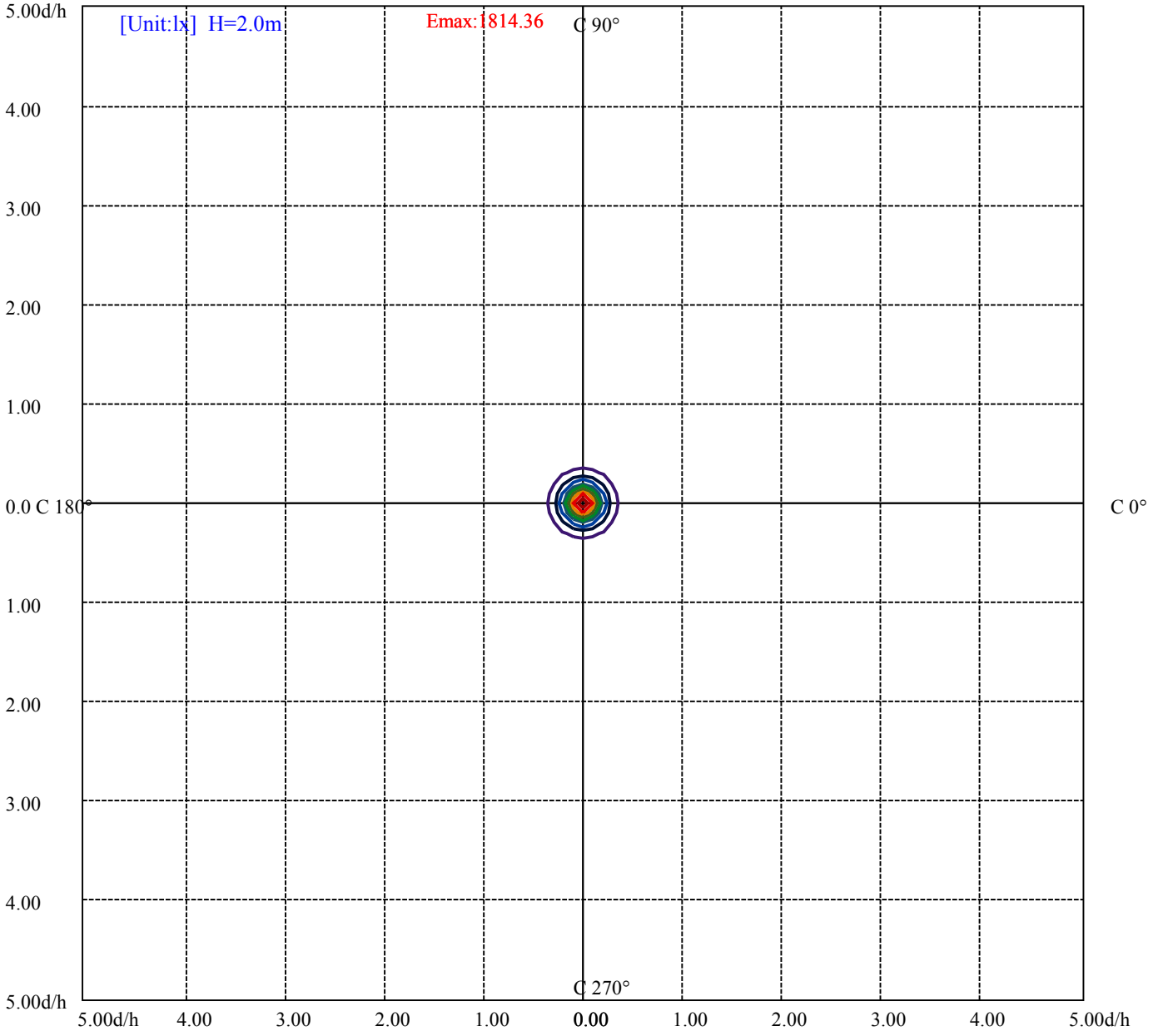
ISO illuminance diagram

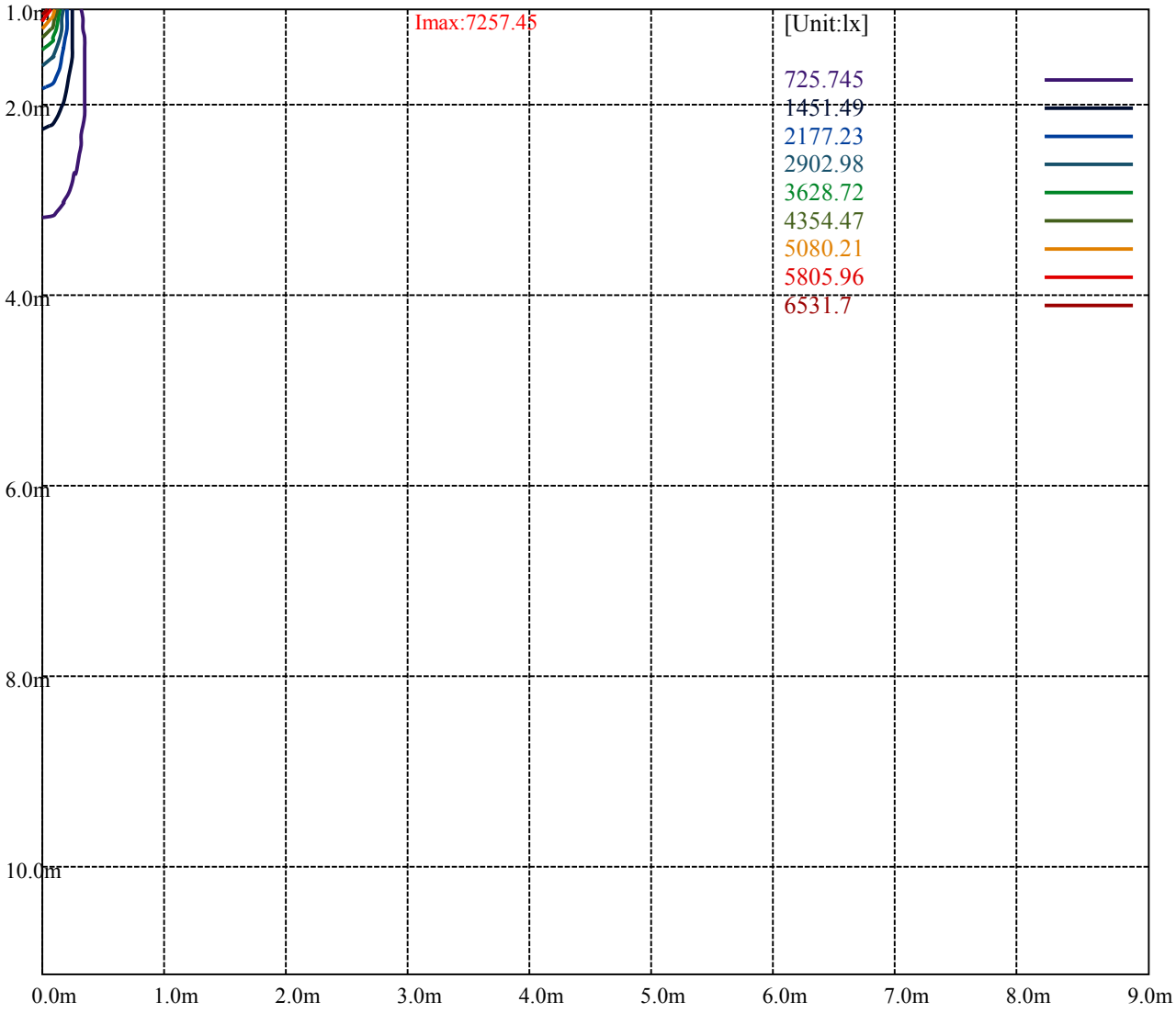


Equipment: GMS1980
Temperature(°C): 25.0

Date: 2019/10/23
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2019/10/23
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

Luminance Limitting Curve(no luminous side)

Luminance Table

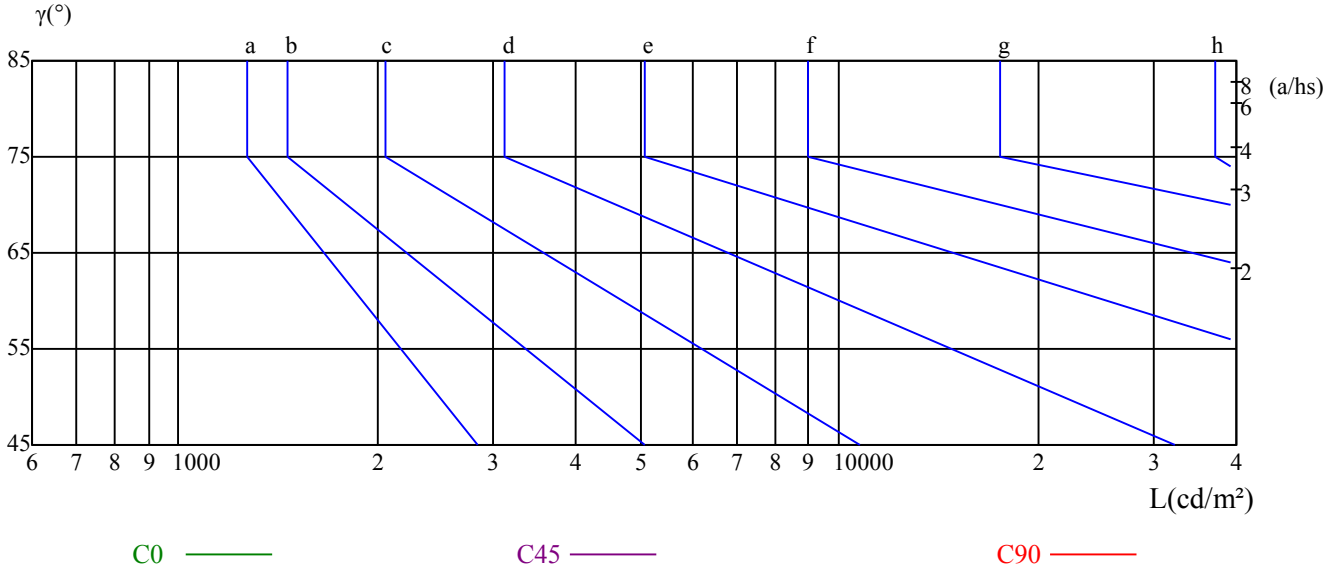
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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

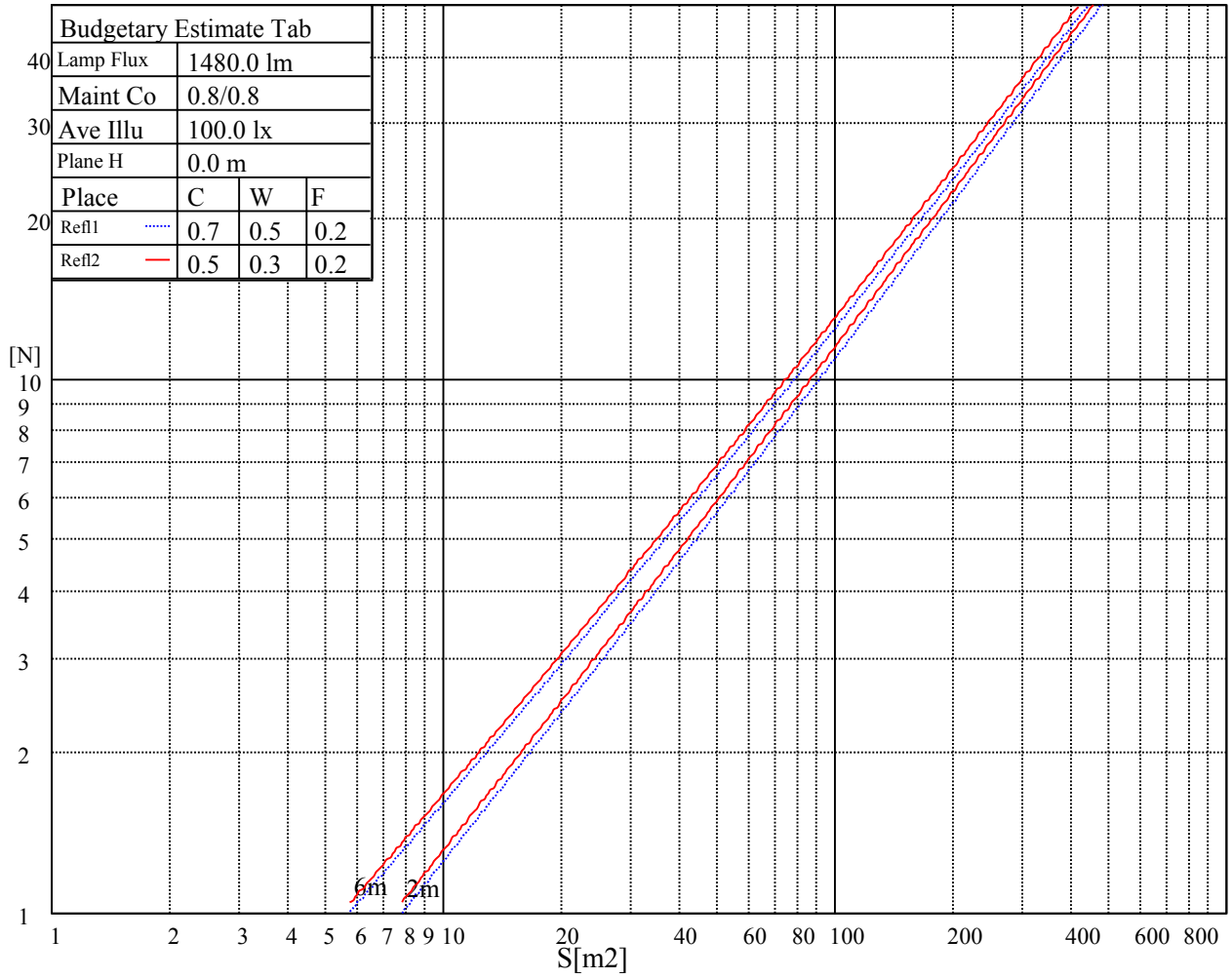
Glare Table

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 Limitting Curve



Budgetary Estimate Table

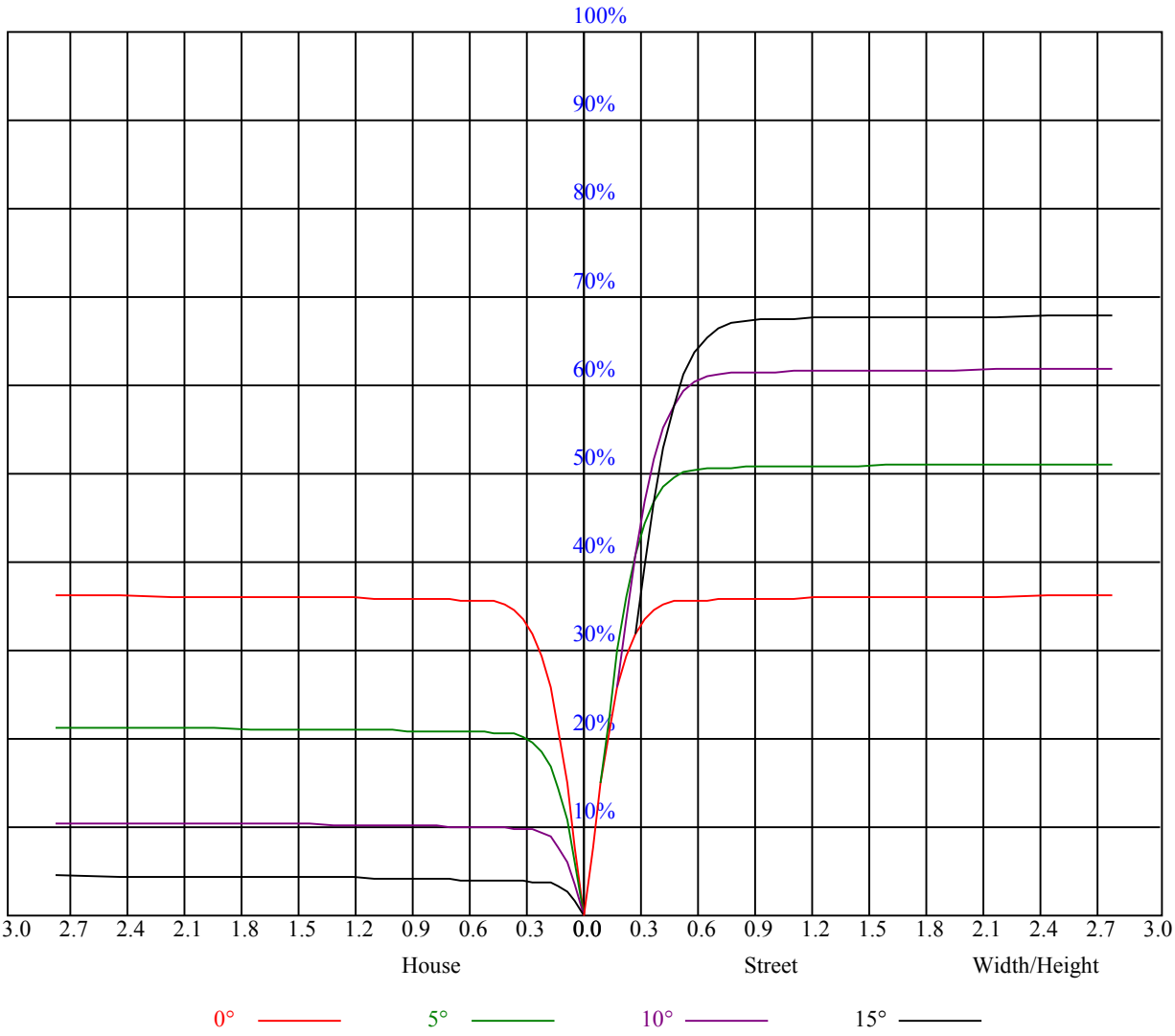


Equipment: GMS1980 Date: 2019/10/23 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 65.0% Distance(m): 7.50

Utilization factor table for indoor luminaire

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	COEFFCIENTS OF UTILIZATION RHOFC=20 CU															
0	0.87	0.87	0.87	0.85	0.85	0.85	0.81	0.81	0.81	0.78	0.78	0.78	0.74	0.74	0.74	0.73
1	0.82	0.81	0.80	0.81	0.80	0.79	0.78	0.77	0.76	0.75	0.75	0.74	0.73	0.72	0.72	0.71
2	0.79	0.77	0.75	0.78	0.76	0.74	0.75	0.74	0.73	0.73	0.72	0.71	0.71	0.70	0.70	0.69
3	0.76	0.73	0.71	0.75	0.73	0.71	0.73	0.71	0.70	0.72	0.70	0.69	0.70	0.69	0.68	0.67
4	0.73	0.71	0.69	0.73	0.70	0.68	0.71	0.69	0.67	0.70	0.68	0.67	0.69	0.67	0.66	0.65
5	0.71	0.68	0.66	0.71	0.68	0.66	0.69	0.67	0.66	0.68	0.66	0.65	0.67	0.66	0.64	0.64
6	0.69	0.66	0.64	0.69	0.66	0.64	0.68	0.65	0.64	0.67	0.65	0.63	0.66	0.64	0.63	0.62
7	0.67	0.65	0.63	0.67	0.64	0.63	0.66	0.64	0.62	0.65	0.63	0.62	0.65	0.63	0.62	0.61
8	0.66	0.63	0.61	0.65	0.63	0.61	0.65	0.62	0.61	0.64	0.62	0.61	0.64	0.62	0.60	0.60
9	0.64	0.62	0.60	0.64	0.61	0.60	0.63	0.61	0.60	0.63	0.61	0.59	0.62	0.61	0.59	0.59
10	0.63	0.60	0.59	0.63	0.60	0.58	0.62	0.60	0.58	0.62	0.60	0.58	0.61	0.59	0.58	0.57

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2019/10/23	Operator: NT07
Temperature(°C): 25.0	Humidity(%): 65.0%	Distance(m): 7.50

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	7253.44	7237.69	7140.38	6928.31	6642.00	6195.38	5682.38	5180.06	4654.69
45.0	7272.56	7223.06	7066.69	6845.63	6469.31	5995.69	5518.13	4923.00	4392.56
90.0	7246.13	7156.13	6967.69	6619.50	6216.19	5753.25	5180.06	4575.94	4059.56
135.0	7260.19	7227.00	7080.75	6836.06	6496.31	6075.00	5469.75	4939.31	4406.63
180.0	7253.44	7198.88	7049.81	6792.75	6396.75	5952.94	5461.88	4799.25	4271.06
225.0	7272.56	7244.44	7150.50	6906.38	6602.06	6193.13	5613.75	5108.63	4584.94
270.0	7241.06	7264.13	7204.50	7054.88	6798.94	6448.50	5963.06	5421.94	4909.50
315.0	7260.19	7224.75	7122.38	6905.81	6563.25	6156.00	5641.88	5068.69	4541.63
360.0	7253.44	7237.69	7140.38	6928.31	6642.00	6195.38	5682.38	5180.06	4654.69

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4034.25	3578.06	3156.19	2724.19	2341.69	2041.31	1744.88	1483.31	1279.13
45.0	3844.69	3341.81	2933.44	2563.31	2159.44	1879.31	1636.88	1369.69	1180.13
90.0	3588.19	3056.63	2681.44	2346.19	1979.44	1726.31	1504.13	1121.40	1079.78
135.0	3858.75	3357.00	2950.31	2538.56	2176.31	1896.19	1653.75	1410.19	1195.88
180.0	3786.19	3234.38	2842.31	2487.38	2132.44	1824.19	1588.50	1352.25	1116.84
225.0	3965.06	3510.00	3084.75	2611.13	2318.63	1988.44	1672.31	1474.31	1113.58
270.0	4338.56	3804.19	3364.88	3005.44	2503.13	2179.69	1929.94	1614.38	1369.69
315.0	4041.56	3470.06	3048.75	2667.94	2251.69	1964.25	1711.69	1455.75	1117.07
360.0	4034.25	3578.06	3156.19	2724.19	2341.69	2041.31	1744.88	1483.31	1279.13

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1079.44	916.88	749.81	595.69	469.69	340.31	299.81	146.36	87.81
45.0	1008.56	822.94	663.75	532.13	398.25	290.81	184.44	108.00	58.44
90.0	913.89	745.82	606.09	463.11	334.29	236.14	145.69	80.44	42.13
135.0	1005.19	838.69	684.00	549.56	407.25	295.31	237.04	112.78	61.31
180.0	972.34	781.09	658.13	509.79	376.37	270.73	183.26	100.18	56.81
225.0	1072.58	893.19	744.86	592.09	449.61	335.87	237.38	138.99	82.46
270.0	1201.50	992.81	817.88	692.44	528.19	410.63	300.94	183.88	115.37
315.0	1054.69	873.79	727.88	575.66	436.84	325.46	218.03	132.92	77.18
360.0	1079.44	916.88	749.81	595.69	469.69	340.31	299.81	146.36	87.81

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	43.88	24.41	15.53	12.04	10.46	9.56	8.89	8.27	7.82
45.0	29.76	18.06	12.60	10.69	9.62	8.94	8.38	7.82	7.48
90.0	23.68	14.01	11.03	9.96	9.11	8.49	7.93	7.54	7.14
135.0	32.01	17.78	12.38	10.35	9.28	8.72	8.16	7.71	7.31
180.0	30.71	17.94	11.64	10.18	9.28	8.61	8.04	7.54	7.26
225.0	45.84	25.14	14.85	11.76	10.35	9.45	8.78	8.21	7.76
270.0	65.14	31.33	19.97	13.22	11.08	10.13	9.39	8.72	8.16
315.0	42.53	22.84	14.46	11.76	10.29	9.45	8.78	8.16	7.71
360.0	43.88	24.41	15.53	12.04	10.46	9.56	8.89	8.27	7.82

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	7.43	7.09	6.81	6.53	6.41	6.24	6.08	5.96	5.91
45.0	7.14	6.86	6.64	6.41	6.24	6.08	5.96	5.91	5.79
90.0	6.86	6.64	6.41	6.24	6.08	5.96	5.91	5.74	5.68
135.0	6.98	6.69	6.53	6.30	6.13	6.02	5.91	5.79	5.74
180.0	6.92	6.69	6.47	6.30	6.13	5.96	5.85	5.74	5.68
225.0	7.31	6.98	6.75	6.47	6.30	6.13	6.02	5.85	5.79
270.0	7.71	7.37	7.03	6.75	6.53	6.36	6.24	6.08	6.02
315.0	7.31	7.03	6.81	6.58	6.36	6.24	6.08	5.96	5.85
360.0	7.43	7.09	6.81	6.53	6.41	6.24	6.08	5.96	5.91

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	5.79	5.68	5.63	5.63	5.51	5.51	5.46	5.40	5.34
45.0	5.68	5.63	5.57	5.51	5.46	5.40	5.34	5.29	5.29
90.0	5.63	5.57	5.51	5.46	5.40	5.40	5.34	5.29	5.29
135.0	5.63	5.57	5.51	5.51	5.40	5.40	5.34	5.34	5.29
180.0	5.63	5.57	5.51	5.46	5.40	5.34	5.29	5.29	5.23
225.0	5.68	5.63	5.57	5.51	5.46	5.40	5.34	5.29	5.29
270.0	5.91	5.79	5.74	5.68	5.57	5.57	5.46	5.46	5.40
315.0	5.79	5.68	5.63	5.63	5.57	5.51	5.46	5.40	5.34
360.0	5.79	5.68	5.63	5.63	5.51	5.51	5.46	5.40	5.34

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	5.34	5.29	5.23	5.23	5.18	5.18	5.18	5.12	5.12
45.0	5.29	5.23	5.18	5.18	5.12	5.12	5.12	5.06	5.06
90.0	5.23	5.18	5.18	5.12	5.12	5.12	5.06	5.06	5.01
135.0	5.29	5.23	5.23	5.18	5.18	5.12	5.12	5.12	5.06
180.0	5.23	5.18	5.18	5.12	5.12	5.12	5.06	5.06	5.01
225.0	5.23	5.18	5.18	5.18	5.12	5.12	5.12	5.06	5.01
270.0	5.34	5.34	5.29	5.29	5.23	5.23	5.18	5.18	5.18
315.0	5.34	5.34	5.29	5.23	5.23	5.18	5.18	5.18	5.12
360.0	5.34	5.29	5.23	5.23	5.18	5.18	5.18	5.12	5.12

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	5.06	5.06	5.06	5.06	5.01	5.01	5.01	4.95	5.01
45.0	5.06	5.01	4.95	5.01	4.95	4.95	4.95	4.95	4.95
90.0	5.06	5.01	5.01	5.01	4.95	5.01	4.95	4.95	4.95
135.0	5.06	5.06	5.01	5.01	5.01	5.01	5.01	4.95	4.95
180.0	5.01	5.01	5.01	4.95	4.95	4.95	4.95	4.89	4.89
225.0	5.01	5.01	5.01	4.95	4.95	4.95	4.89	4.95	4.89
270.0	5.12	5.12	5.12	5.12	5.06	5.06	5.01	5.01	5.01
315.0	5.12	5.12	5.12	5.06	5.06	5.06	5.01	5.01	5.01
360.0	5.06	5.06	5.06	5.06	5.01	5.01	5.01	4.95	5.01

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	4.95	4.95	4.95	4.95	4.95	4.89	4.89	4.89	4.89
45.0	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.84	4.89
90.0	4.95	4.95	4.95	4.95	4.95	4.95	4.95	4.95	4.89
135.0	4.95	4.95	4.95	4.89	4.95	4.89	4.89	4.89	4.89
180.0	4.89	4.89	4.89	4.89	4.89	4.84	4.89	4.84	4.84
225.0	4.95	4.89	4.89	4.89	4.89	4.89	4.89	4.89	4.84
270.0	5.06	5.01	5.01	5.01	4.95	4.95	4.95	4.95	4.89
315.0	4.95	4.95	4.95	4.95	4.95	4.89	4.95	4.89	4.89
360.0	4.95	4.95	4.95	4.95	4.95	4.89	4.89	4.89	4.89

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	4.89	4.89	4.89	4.89	4.84	4.89	4.84	4.84	4.84
45.0	4.84	4.84	4.84	4.84	4.84	4.84	4.84	4.84	4.78
90.0	4.84	4.84	4.84	4.84	4.84	4.84	4.84	4.78	4.84
135.0	4.89	4.89	4.84	4.84	4.84	4.89	4.84	4.84	4.84
180.0	4.84	4.84	4.84	4.84	4.84	4.84	4.84	4.84	4.84
225.0	4.84	4.84	4.84	4.84	4.78	4.84	4.84	4.84	4.84
270.0	4.89	4.89	4.89	4.89	4.89	4.89	4.84	4.84	4.84
315.0	4.89	4.89	4.89	4.84	4.84	4.84	4.84	4.84	4.84
360.0	4.89	4.89	4.89	4.89	4.84	4.89	4.84	4.84	4.84

Intensity data(cd)

C/γ(°)	90.0
0.0	4.84
45.0	4.78
90.0	4.78
135.0	4.84
180.0	4.84
225.0	4.84
270.0	4.84
315.0	4.84
360.0	4.84