NATA LIGHTING CO.,LTD.
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Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

Nata

LumCAT: 2-2187-M
Luminaire: 92.70.131.00
Report No: 200406-B022
Test No: 200406-C022
LampCAT: LUMINUS CXM-14-AC40
Lamp flux(lm): 2111.0
Number of Lamps: 1
Length(mm): 0
Phm Type: C

Voltage(V): 220.1000
Current(A): 0.0890
Power (W): 18.8400
PF: 0.9540
Ballast type: AC
Width(mm): 0
Height(mm): 0

Photometric Results

Lumens(lm): 1608.40
Efficiency(%): 76.19%
Lumens(lm)/Power(W): 85.37
Central intensity(cd): 7033.979
Maximum intensity(cd): 7033.979
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=25.9
[C90/270]Total=25.9
Field angle(10%Imax): [C0/180]Total=48.4
[C90/270]Total=48.4
Maximum s/h(1/2): C0_180=0.44 C90_270=0.44
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(%): 76.19%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 99.743%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	7033.981	0.000	0	.000%	.000%
1.0	7003.007	6.716	6.716	.318%	.418%
2.0	6913.565	19.974	26.691	.946%	1.659%
3.0	6771.454	32.730	59.421	1.550%	3.694%
4.0	6582.303	44.699	104.12	2.117%	6.474%
5.0	6367.745	55.710	159.831	2.639%	9.937%
6.0	6065.486	65.340	225.171	3.095%	14.000%
7.0	5776.973	73.506	298.676	3.482%	18.570%
8.0	5455.050	80.385	379.062	3.808%	23.568%
9.0	5050.122	85.139	464.201	4.033%	28.861%
10.0	4685.624	88.105	552.306	4.174%	34.339%
11.0	4282.611	89.611	641.917	4.245%	39.910%
12.0	3871.477	89.136	731.053	4.222%	45.452%
13.0	3499.207	87.471	818.524	4.144%	50.891%
14.0	3143.003	85.020	903.544	4.027%	56.177%
15.0	2812.669	81.762	985.306	3.873%	61.260%
16.0	2444.227	77.028	1062.334	3.649%	66.049%
17.0	2179.843	72.009	1134.343	3.411%	70.526%
18.0	1907.456	67.391	1201.734	3.192%	74.716%
19.0	1652.992	61.945	1263.678	2.934%	78.568%
20.0	1433.794	56.497	1320.175	2.676%	82.080%
21.0	1204.242	50.656	1370.831	2.400%	85.230%
22.0	1001.112	44.318	1415.148	2.099%	87.985%
23.0	889.697	39.674	1454.823	1.879%	90.452%
24.0	733.898	35.498	1490.32	1.682%	92.659%
25.0	582.437	29.931	1520.251	1.418%	94.520%
26.0	447.438	24.310	1544.561	1.152%	96.031%
27.0	317.277	18.709	1563.27	.886%	97.194%
28.0	224.586	13.719	1576.989	.650%	98.047%
29.0	175.567	10.469	1587.458	.496%	98.698%
30.0	92.609	7.241	1594.699	.343%	99.148%
31.0	22.511	3.204	1597.902	.152%	99.348%
32.0	8.144	0.878	1598.781	.042%	99.402%
33.0	4.930	0.385	1599.166	.018%	99.426%
34.0	4.513	0.286	1599.452	.014%	99.444%
35.0	4.200	0.271	1599.722	.013%	99.461%
36.0	3.921	0.259	1599.981	.012%	99.477%
37.0	3.648	0.247	1600.228	.012%	99.492%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	3.416	0.236	1600.463	.011%	99.507%
39.0	3.213	0.226	1600.69	.011%	99.521%
40.0	3.039	0.218	1600.908	.010%	99.534%
41.0	2.865	0.210	1601.118	.010%	99.548%
42.0	2.709	0.203	1601.321	.010%	99.560%
43.0	2.575	0.196	1601.516	.009%	99.572%
44.0	2.459	0.190	1601.706	.009%	99.584%
45.0	2.384	0.186	1601.892	.009%	99.596%
46.0	2.320	0.184	1602.076	.009%	99.607%
47.0	2.175	0.179	1602.255	.008%	99.618%
48.0	2.100	0.173	1602.428	.008%	99.629%
49.0	2.007	0.169	1602.597	.008%	99.639%
50.0	1.920	0.164	1602.76	.008%	99.650%
51.0	1.850	0.160	1602.92	.008%	99.660%
52.0	1.798	0.157	1603.076	.007%	99.669%
53.0	1.740	0.154	1603.23	.007%	99.679%
54.0	1.705	0.152	1603.382	.007%	99.688%
55.0	1.642	0.149	1603.532	.007%	99.698%
56.0	1.618	0.147	1603.679	.007%	99.707%
57.0	1.560	0.145	1603.824	.007%	99.716%
58.0	1.543	0.144	1603.968	.007%	99.725%
59.0	1.526	0.143	1604.111	.007%	99.734%
60.0	1.497	0.143	1604.254	.007%	99.742%
61.0	1.444	0.140	1604.394	.007%	99.751%
62.0	1.439	0.139	1604.533	.007%	99.760%
63.0	1.410	0.139	1604.672	.007%	99.768%
64.0	1.386	0.137	1604.809	.006%	99.777%
65.0	1.357	0.136	1604.945	.006%	99.785%
66.0	1.351	0.135	1605.08	.006%	99.794%
67.0	1.340	0.135	1605.215	.006%	99.802%
68.0	1.334	0.135	1605.351	.006%	99.811%
69.0	1.305	0.135	1605.485	.006%	99.819%
70.0	1.282	0.133	1605.618	.006%	99.827%
71.0	1.299	0.133	1605.752	.006%	99.836%
72.0	1.288	0.135	1605.886	.006%	99.844%
73.0	1.270	0.134	1606.02	.006%	99.852%
74.0	1.264	0.133	1606.153	.006%	99.861%
75.0	1.270	0.134	1606.287	.006%	99.869%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	1.276	0.135	1606.422	.006%	99.877%
77.0	1.264	0.135	1606.558	.006%	99.886%
78.0	1.276	0.136	1606.694	.006%	99.894%
79.0	1.276	0.137	1606.831	.006%	99.903%
80.0	1.264	0.137	1606.968	.006%	99.911%
81.0	1.264	0.137	1607.105	.006%	99.920%
82.0	1.247	0.136	1607.241	.006%	99.928%
83.0	1.288	0.138	1607.379	.007%	99.937%
84.0	1.270	0.139	1607.518	.007%	99.945%
85.0	1.311	0.141	1607.659	.007%	99.954%
86.0	1.322	0.144	1607.803	.007%	99.963%
87.0	1.299	0.143	1607.946	.007%	99.972%
88.0	1.328	0.144	1608.09	.007%	99.981%
89.0	1.386	0.149	1608.239	.007%	99.990%
90.0	1.473	0.157	1608.396	.007%	100.000%

Zonal flux distribution table

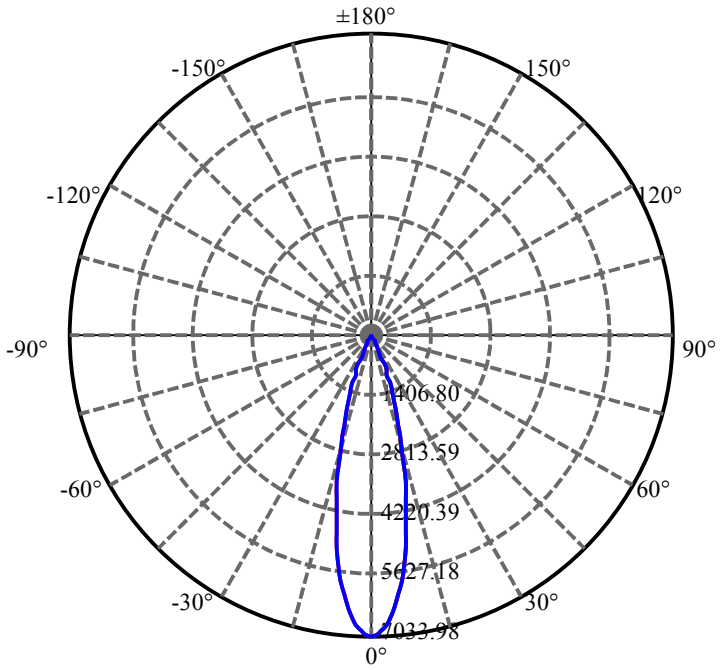
ZONAL LUMEN SUMMARY

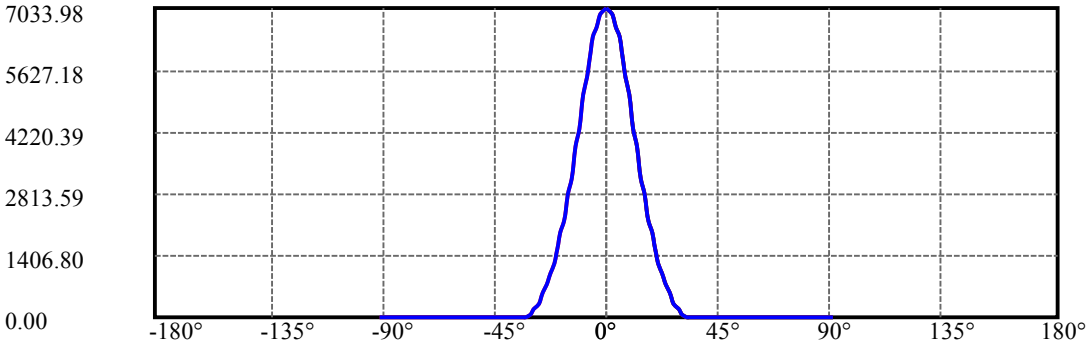
Zone	Lumens	%Lamp	%Fixt
0-30	1594.70	75.54%	99.15%
0-40	1600.91	75.84%	99.53%
0-60	1604.25	75.99%	99.74%
0-90	1608.24	76.18%	99.99%
0-120	1608.24	76.18%	99.99%
0-180	1608.40	76.19%	100.00%
60-90	4.13	0.20%	0.26%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-19.41	1286.72	60.95%	80.00%

ZONAL LUMEN SUMMARY

0-10	552.31
10-20	767.87
20-30	274.52
30-40	6.21
40-50	1.85
50-60	1.49
60-70	1.36
70-80	1.35
80-90	1.27
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):

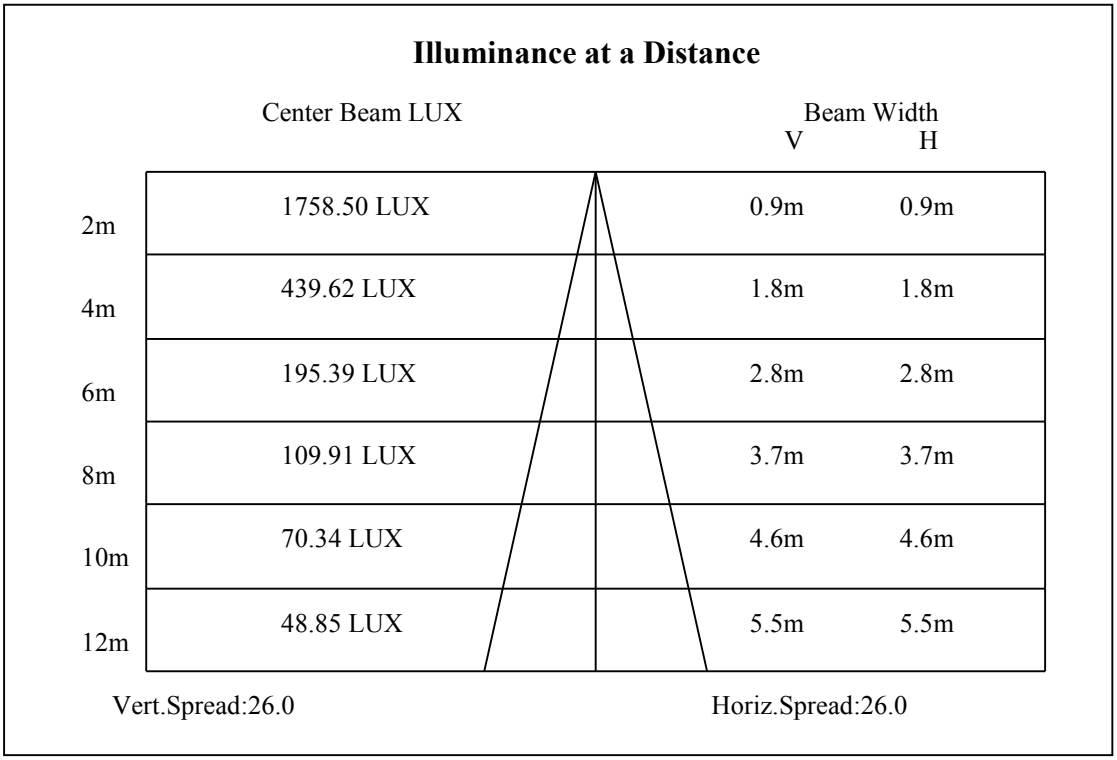
C0/C180:

C90/C270:

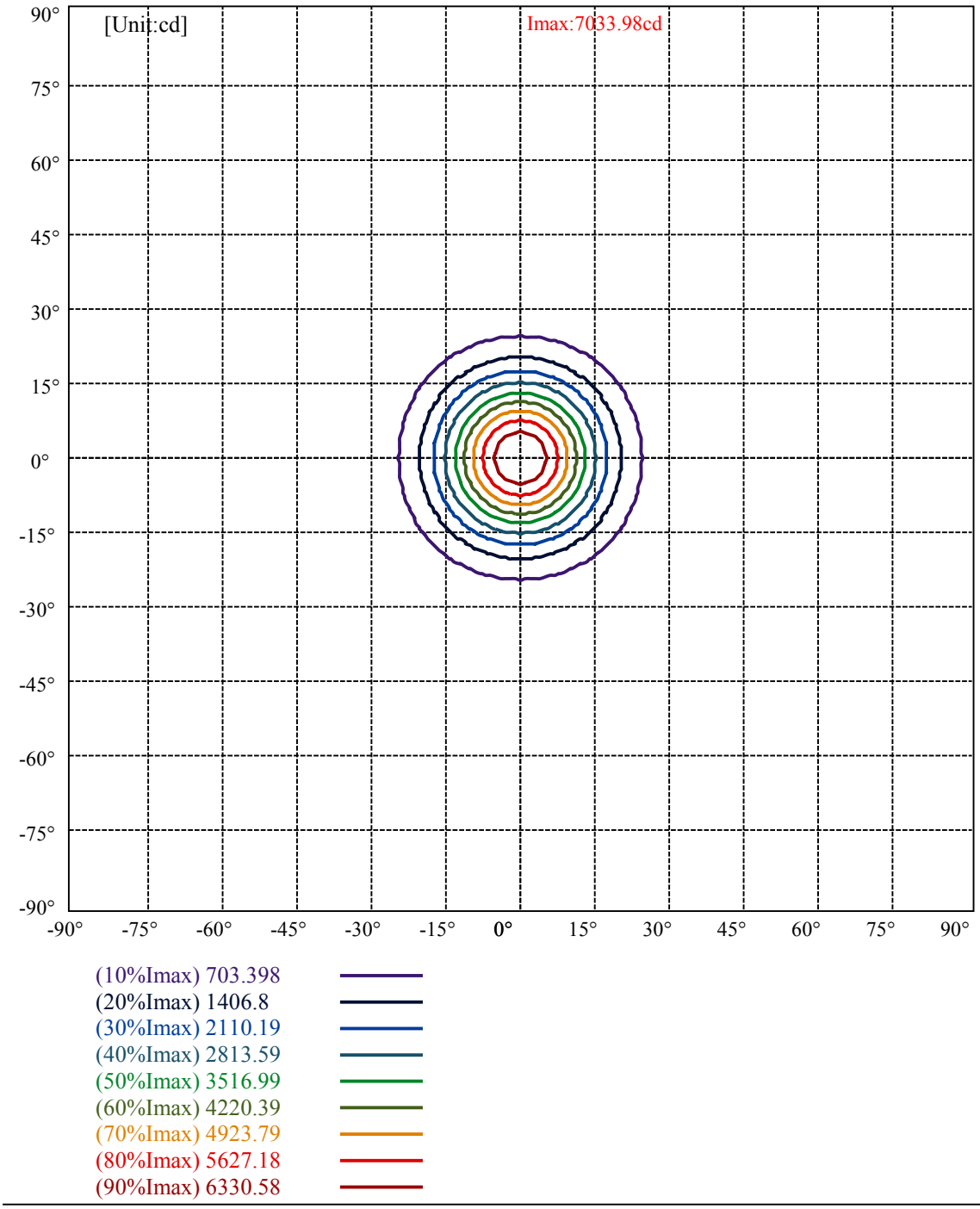
Field angle(10%Imax):C0/180Left:24.2 Right:24.2
:C90/270Left:24.2 Right:24.2

Beam Angle(50%Imax):C0/180Left:13.0 Right:13.0
:C90/270Left:13.0 Right:13.0

Lux distance Curve



ISO-Intensity(V-H)



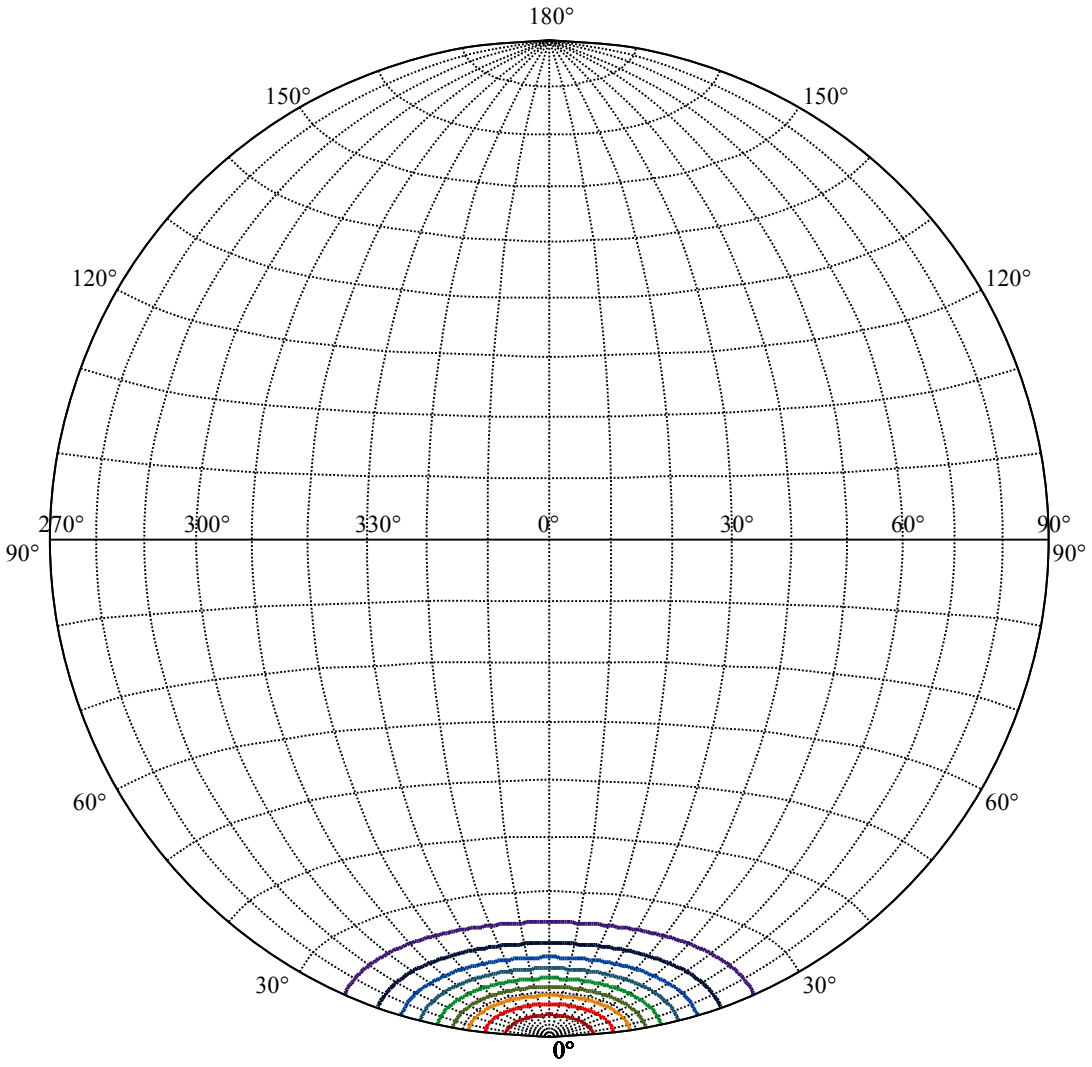
(10%Imax) 703.398
(20%Imax) 1406.8
(30%Imax) 2110.19
(40%Imax) 2813.59
(50%Imax) 3516.99
(60%Imax) 4220.39
(70%Imax) 4923.79
(80%Imax) 5627.18
(90%Imax) 6330.58

Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2020/4/6
Humidity(%): 60.0%

Operator: NT07
Distance(m): 6.81

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:7033.98

(10%Imax) 703.398
(20%Imax) 1406.8
(30%Imax) 2110.19
(40%Imax) 2813.59
(50%Imax) 3516.99
(60%Imax) 4220.39
(70%Imax) 4923.79
(80%Imax) 5627.18
(90%Imax) 6330.58

Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2020/4/6
Humidity(%): 60.0%

Operator: NT07
Distance(m): 6.81

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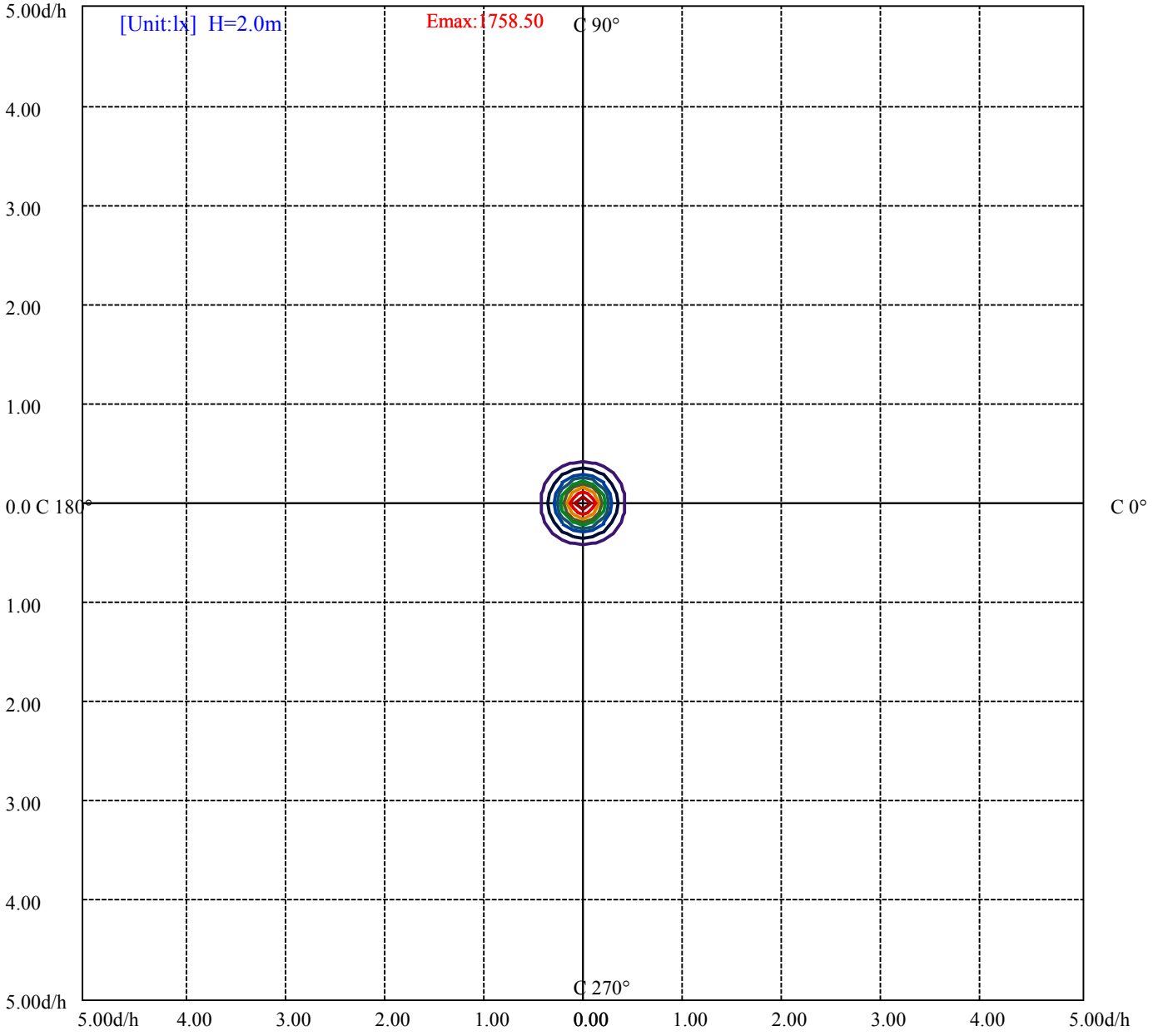
ISO illuminance diagram

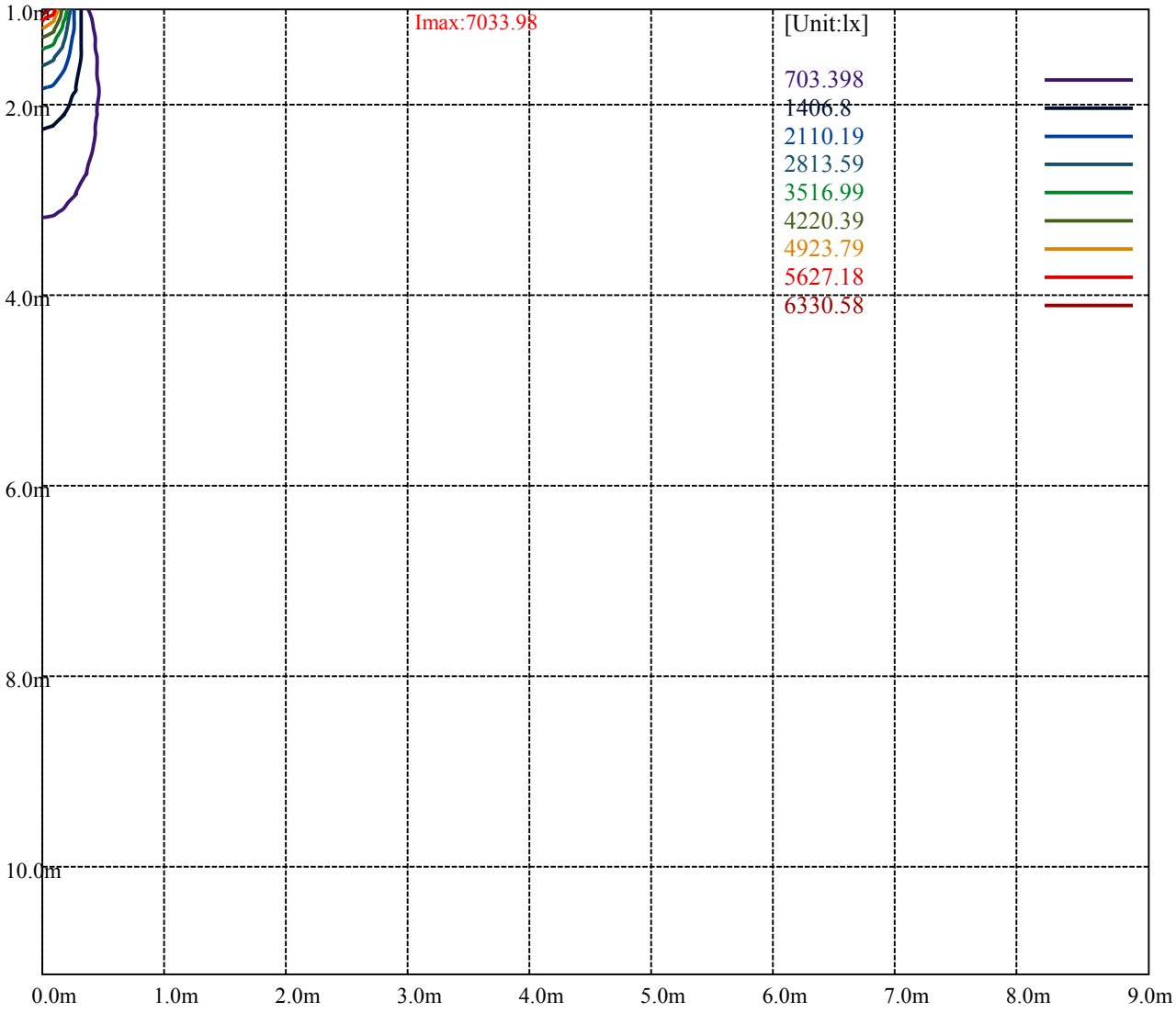


Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2020/4/6
Humidity(%): 60.0%

Operator: NT07
Distance(m): 6.81

Space ISO Lux diagram



Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2020/4/6
Humidity(%): 60.0%

Operator: NT07
Distance(m): 6.81

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Luminance Limitting Curve(no luminous side)

Luminance Table

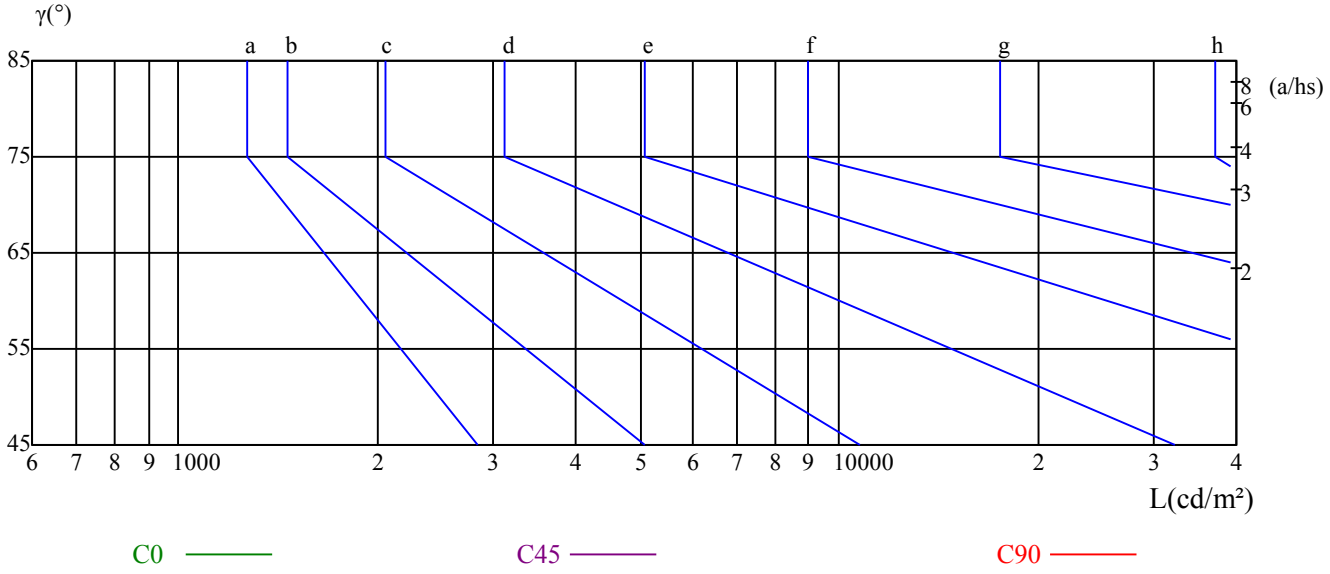
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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

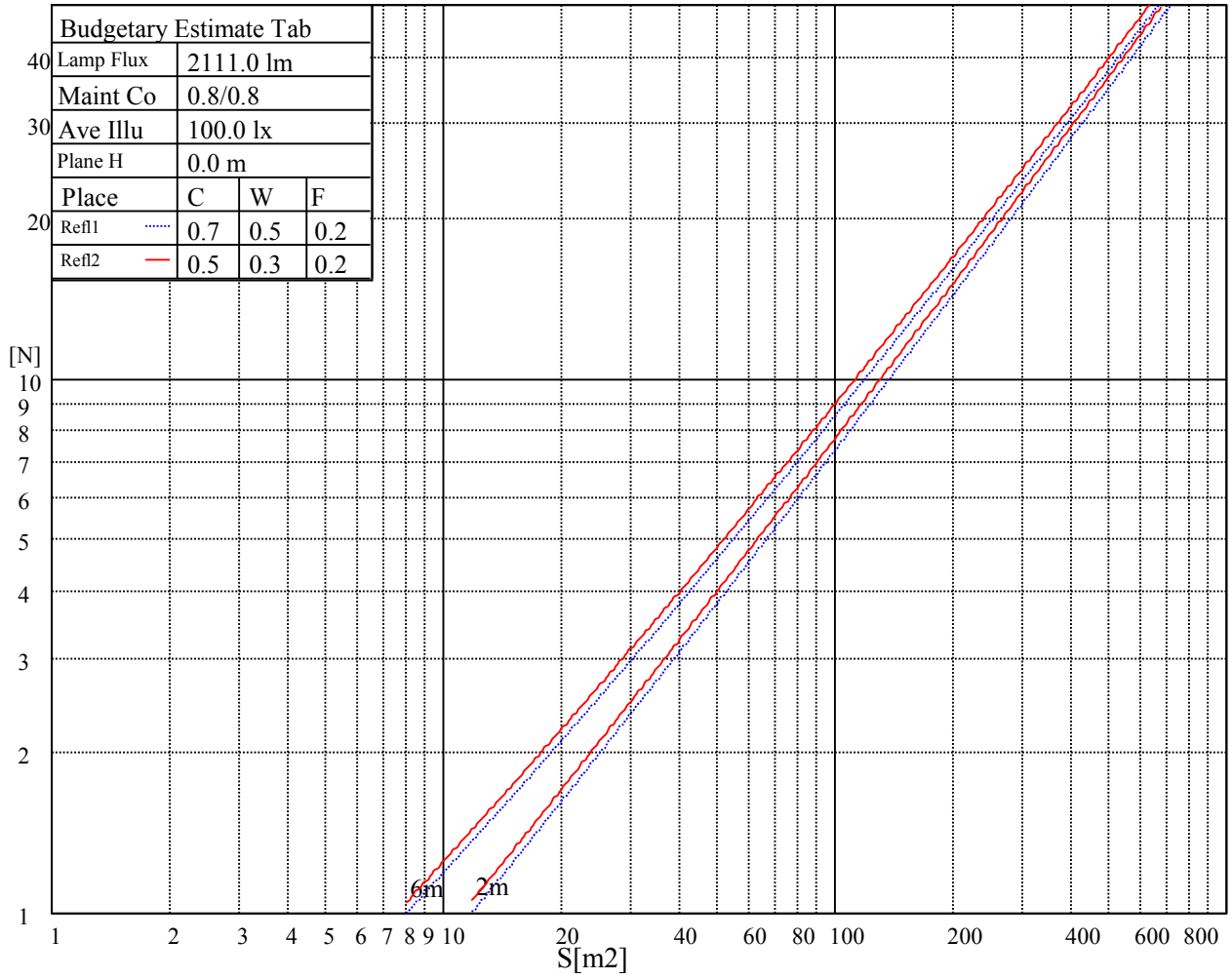


Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2020/4/6
Humidity(%): 60.0%

Operator: NT07
Distance(m): 6.81

Budgetary Estimate Table

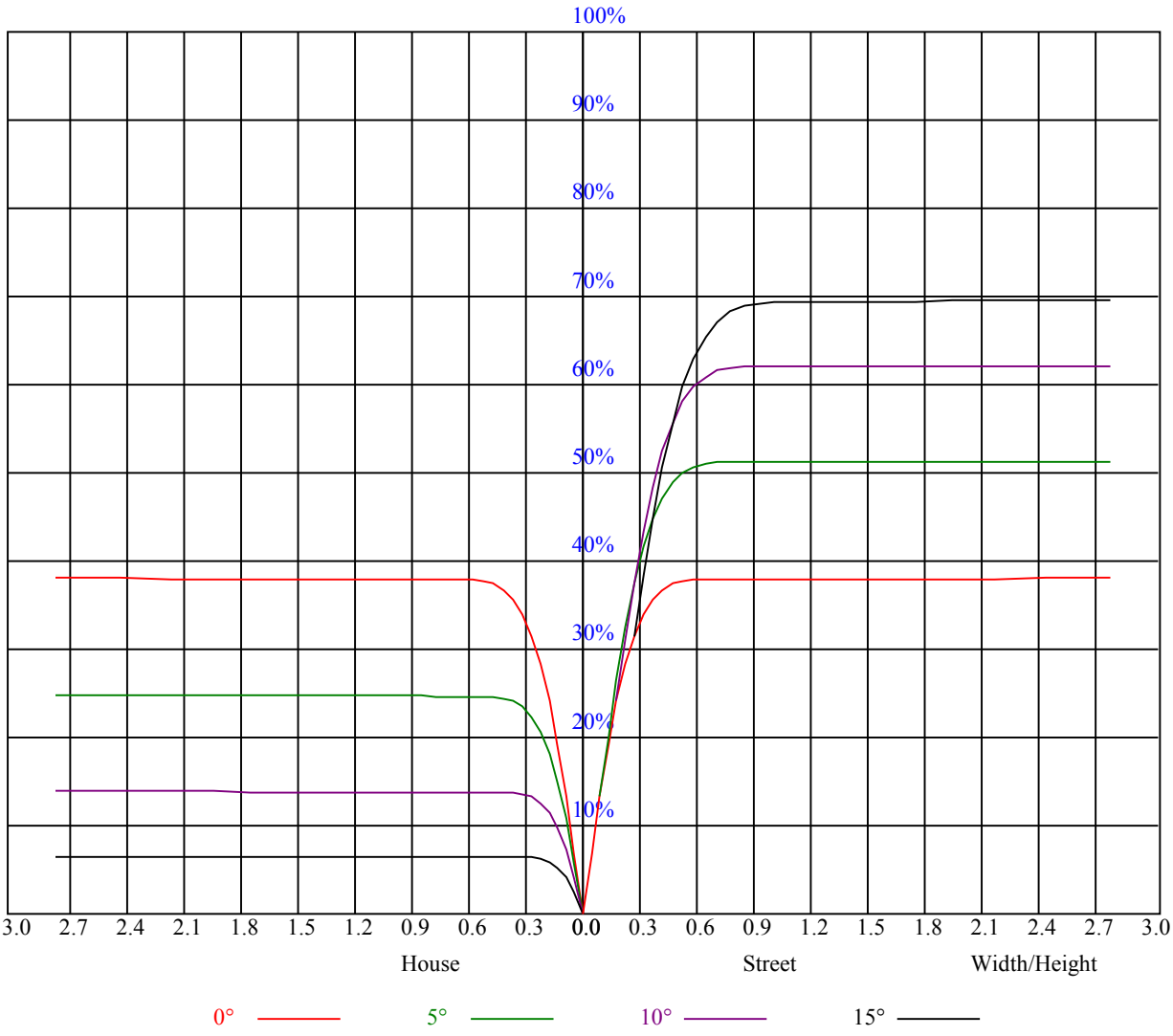


Equipment: GMS 1800 Date: 2020/4/6 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 6.81

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	0.91	0.91	0.91	0.89	0.89	0.89	0.85	0.85	0.85	0.81	0.81	0.81	0.78	0.78	0.78	0.76
1	0.86	0.85	0.83	0.84	0.83	0.82	0.81	0.80	0.80	0.79	0.78	0.77	0.76	0.76	0.75	0.74
2	0.82	0.80	0.78	0.81	0.79	0.77	0.79	0.77	0.76	0.76	0.75	0.74	0.74	0.73	0.72	0.71
3	0.79	0.76	0.74	0.78	0.75	0.73	0.76	0.74	0.72	0.74	0.73	0.71	0.73	0.71	0.70	0.69
4	0.76	0.73	0.71	0.75	0.72	0.70	0.74	0.71	0.69	0.72	0.70	0.69	0.71	0.69	0.68	0.67
5	0.73	0.70	0.68	0.73	0.70	0.68	0.71	0.69	0.67	0.70	0.68	0.66	0.69	0.67	0.66	0.65
6	0.71	0.68	0.65	0.70	0.67	0.65	0.69	0.67	0.65	0.68	0.66	0.64	0.67	0.66	0.64	0.63
7	0.69	0.65	0.63	0.68	0.65	0.63	0.67	0.65	0.63	0.67	0.64	0.63	0.66	0.64	0.62	0.61
8	0.67	0.63	0.61	0.66	0.63	0.61	0.65	0.63	0.61	0.65	0.62	0.61	0.64	0.62	0.61	0.60
9	0.65	0.62	0.60	0.64	0.61	0.59	0.64	0.61	0.59	0.63	0.61	0.59	0.63	0.61	0.59	0.58
10	0.63	0.60	0.58	0.63	0.60	0.58	0.62	0.59	0.58	0.62	0.59	0.58	0.61	0.59	0.57	0.57

Coefficient Utilization Curve



Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2020/4/6
Humidity(%): 60.0%

Operator: NT07
Distance(m): 6.81

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	7058.46	7025.05	6930.85	6787.93	6597.67	6357.30	6072.39	5748.03	5390.26
45.0	7002.31	7062.17	7058.92	6991.17	6869.60	6772.15	6476.10	6322.04	6033.41
90.0	7051.50	7025.51	6938.74	6798.14	6612.52	6379.58	6103.01	5784.69	5431.56
135.0	7023.66	7032.94	6975.40	6864.49	6706.26	6503.48	6249.65	5953.60	5619.49
180.0	7058.46	7027.37	6934.10	6791.64	6605.56	6372.15	6090.95	5775.41	5495.59
225.0	7002.31	6883.05	6721.57	6510.44	6253.36	5951.74	5616.24	5250.12	4857.08
270.0	7051.50	7013.45	6915.54	6766.12	6571.22	6432.01	6046.87	5857.08	5509.52
315.0	7023.66	6954.52	6833.40	6661.71	6442.22	6173.55	5868.68	5524.83	5303.48
360.0	7058.46	7025.05	6930.85	6787.93	6597.67	6357.30	6072.39	5748.03	5390.26

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	5007.43	4606.97	4199.09	3791.66	3399.09	3174.50	2814.87	2356.87	2180.08
45.0	5708.12	5343.39	4952.21	4549.43	4142.01	3741.08	3355.47	2980.53	2632.51
90.0	5053.83	4655.69	4248.74	3840.85	3445.96	3072.88	2789.35	2394.46	2156.41
135.0	5330.86	4867.29	4459.87	4132.26	3730.41	3343.87	2975.43	2628.33	2311.86
180.0	5119.73	4722.05	4316.95	3912.31	3517.88	3142.48	2788.89	2460.82	2161.98
225.0	4451.06	4043.63	3649.21	3270.55	2908.61	2567.08	2376.36	1975.90	1822.77
270.0	4975.41	4735.97	4331.33	3929.02	3533.20	3154.55	2799.56	2468.70	2167.55
315.0	4754.53	4509.99	4103.49	3545.73	3316.49	2947.59	2601.42	2288.20	2005.60
360.0	5007.43	4606.97	4199.09	3791.66	3399.09	3174.50	2814.87	2356.87	2180.08

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1905.83	1574.98	1447.37	1252.47	914.24	914.24	749.69	591.13	446.96
45.0	2315.57	2028.34	1770.80	1540.17	1336.00	1148.99	978.23	812.10	680.32
90.0	1884.49	1643.19	1427.41	1234.38	830.06	830.06	729.92	574.75	431.46
135.0	2026.02	1770.80	1542.49	1335.53	1148.07	978.69	813.50	651.55	499.81
180.0	1890.05	1648.29	1429.73	1234.38	1055.72	887.28	721.15	565.24	424.17
225.0	1588.43	1377.30	1092.85	883.61	817.63	653.82	500.69	364.31	248.12
270.0	1895.16	1653.86	1436.69	1241.80	1063.15	893.77	727.19	570.81	483.57
315.0	1754.09	1527.18	1323.01	911.59	844.03	810.71	650.81	529.60	365.10
360.0	1905.83	1574.98	1447.37	1252.47	914.24	914.24	749.69	591.13	446.96

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	317.86	209.51	134.20	47.66	11.23	5.57	5.01	4.73	4.36
45.0	527.19	363.38	269.19	269.19	82.60	26.03	6.13	5.29	4.87
90.0	305.01	197.40	109.88	45.85	8.77	5.61	5.10	4.73	4.41
135.0	365.70	250.16	250.16	229.28	37.03	8.12	5.38	4.92	4.55
180.0	298.88	276.61	276.61	62.32	17.22	5.43	4.83	4.45	4.18
225.0	151.00	73.97	21.16	5.29	4.73	4.55	4.04	3.71	3.53
270.0	303.06	258.05	258.05	54.11	12.67	5.01	4.55	4.18	3.90
315.0	269.51	167.61	85.29	27.19	5.85	4.83	4.41	4.08	3.81
360.0	317.86	209.51	134.20	47.66	11.23	5.57	5.01	4.73	4.36

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	4.04	3.76	3.53	3.39	3.16	2.97	2.78	2.69	2.60
45.0	4.55	4.27	3.94	3.62	3.48	3.29	3.11	2.88	2.83
90.0	4.13	3.85	3.57	3.39	3.25	3.06	2.88	2.74	2.64
135.0	4.27	3.94	3.71	3.53	3.29	3.06	2.92	2.78	2.60
180.0	3.90	3.57	3.34	3.16	2.97	2.78	2.60	2.51	2.37
225.0	3.34	3.11	2.92	2.74	2.60	2.51	2.37	2.18	2.13
270.0	3.62	3.39	3.16	2.97	2.83	2.64	2.51	2.46	2.27
315.0	3.53	3.29	3.16	2.92	2.74	2.60	2.51	2.37	2.23
360.0	4.04	3.76	3.53	3.39	3.16	2.97	2.78	2.69	2.60

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	2.41	2.32	2.23	2.13	2.04	1.95	1.86	1.86	1.76
45.0	2.88	3.06	2.55	2.46	2.23	2.13	2.09	2.00	1.90
90.0	2.55	2.37	2.27	2.23	2.13	2.04	1.95	1.90	1.86
135.0	2.55	2.37	2.32	2.23	2.09	2.00	1.95	1.90	1.81
180.0	2.27	2.18	2.09	2.09	1.95	1.86	1.76	1.72	1.72
225.0	2.09	2.00	1.86	1.81	1.81	1.72	1.67	1.58	1.58
270.0	2.18	2.18	2.04	1.95	1.95	1.86	1.81	1.72	1.67
315.0	2.13	2.09	2.04	1.90	1.86	1.81	1.72	1.72	1.62
360.0	2.41	2.32	2.23	2.13	2.04	1.95	1.86	1.86	1.76

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	1.67	1.62	1.62	1.58	1.58	1.58	1.48	1.39	1.44
45.0	1.86	1.81	1.72	1.67	1.67	1.67	1.58	1.53	1.53
90.0	1.86	1.72	1.72	1.62	1.67	1.62	1.53	1.53	1.53
135.0	1.76	1.72	1.67	1.58	1.53	1.58	1.53	1.44	1.44
180.0	1.72	1.58	1.53	1.53	1.48	1.44	1.39	1.39	1.39
225.0	1.53	1.53	1.53	1.44	1.39	1.39	1.53	1.39	1.35
270.0	1.67	1.62	1.58	1.58	1.58	1.48	1.48	1.48	1.48
315.0	1.58	1.53	1.58	1.48	1.44	1.44	1.44	1.39	1.35
360.0	1.67	1.62	1.62	1.58	1.58	1.58	1.48	1.39	1.44

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	1.39	1.39	1.35	1.35	1.35	1.35	1.30	1.25	1.30
45.0	1.53	1.44	1.44	1.44	1.44	1.39	1.35	1.35	1.35
90.0	1.53	1.44	1.39	1.44	1.44	1.44	1.39	1.39	1.44
135.0	1.44	1.39	1.30	1.35	1.35	1.30	1.30	1.21	1.25
180.0	1.35	1.30	1.35	1.30	1.25	1.30	1.21	1.25	1.21
225.0	1.35	1.35	1.30	1.30	1.25	1.25	1.30	1.21	1.21
270.0	1.39	1.44	1.44	1.39	1.44	1.39	1.35	1.39	1.39
315.0	1.30	1.35	1.30	1.25	1.21	1.25	1.25	1.21	1.25
360.0	1.39	1.39	1.35	1.35	1.35	1.35	1.30	1.25	1.30

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	1.30	1.25	1.21	1.25	1.30	1.25	1.25	1.21	1.21
45.0	1.35	1.30	1.30	1.30	1.25	1.25	1.25	1.30	1.30
90.0	1.39	1.35	1.39	1.39	1.44	1.44	1.48	1.48	1.44
135.0	1.21	1.25	1.25	1.21	1.21	1.21	1.21	1.16	1.16
180.0	1.25	1.25	1.21	1.16	1.21	1.21	1.16	1.16	1.16
225.0	1.25	1.25	1.21	1.21	1.21	1.21	1.25	1.21	1.21
270.0	1.35	1.35	1.39	1.39	1.39	1.39	1.48	1.48	1.48
315.0	1.21	1.16	1.16	1.25	1.21	1.16	1.11	1.21	1.16
360.0	1.30	1.25	1.21	1.25	1.30	1.25	1.25	1.21	1.21

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	1.21	1.16	1.21	1.21	1.21	1.16	1.16	1.21	1.21
45.0	1.25	1.25	1.30	1.30	1.30	1.25	1.21	1.25	1.30
90.0	1.48	1.44	1.48	1.48	1.58	1.62	1.62	1.62	1.72
135.0	1.21	1.16	1.21	1.16	1.21	1.21	1.16	1.21	1.21
180.0	1.21	1.16	1.21	1.11	1.21	1.21	1.16	1.21	1.25
225.0	1.16	1.21	1.21	1.21	1.21	1.21	1.21	1.25	1.35
270.0	1.48	1.48	1.53	1.53	1.67	1.76	1.72	1.72	1.86
315.0	1.11	1.11	1.16	1.16	1.11	1.16	1.16	1.16	1.21
360.0	1.21	1.16	1.21	1.21	1.21	1.16	1.16	1.21	1.21

Intensity data(cd)

C/γ(°)	90.0
0.0	1.25
45.0	1.25
90.0	1.86
135.0	1.21
180.0	1.48
225.0	1.30
270.0	2.13
315.0	1.30
360.0	1.25