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Nata

LumCAT: NA01D0201545BW

Luminaire:

Report No: 200304-B010

Voltage(V): 3.7900

Test No: 200304-C010

Current(A): 0.2550

LampCAT: NICHIA NF2W757DR

Power (W): 0.9660

Lamp flux(lm): 106.0

PF: 0.0000

Number of Lamps: 1

Ballast type: DC

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 94.99

Efficiency(%): 89.62%

Lumens(lm)/Power(W): 98.34

Central intensity(cd): 262.744

Maximum intensity(cd): 264.881

Angle of maximum intensity: C=315.0 $\gamma=1.0$

Beam Angle(50%Imax): [C0/180]Total=47.0

[C90/270]Total=16.2

Field angle(10%Imax): [C0/180]Total=80.1

[C90/270]Total=41.3

Maximum s/h(1/2): C0_180=0.73 C90_270=0.25

Maximum s/h(1/4): C0_180=0.75 C90_270=0.29

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 89.62%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 92.443%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	262.828	0.000	0	.000%	.000%
1.0	260.996	0.251	0.251	.236%	.264%
2.0	255.888	0.742	0.993	.700%	1.045%
3.0	247.887	1.205	2.197	1.137%	2.313%
4.0	237.790	1.626	3.823	1.534%	4.025%
5.0	226.564	1.998	5.821	1.885%	6.128%
6.0	211.771	2.304	8.124	2.173%	8.553%
7.0	198.313	2.545	10.67	2.401%	11.232%
8.0	185.323	2.746	13.415	2.590%	14.122%
9.0	170.838	2.886	16.302	2.723%	17.161%
10.0	157.275	2.969	19.271	2.801%	20.287%
11.0	145.167	3.022	22.293	2.851%	23.468%
12.0	133.186	3.043	25.336	2.871%	26.671%
13.0	121.243	3.019	28.355	2.849%	29.850%
14.0	111.438	2.978	31.334	2.810%	32.985%
15.0	102.038	2.931	34.264	2.765%	36.071%
16.0	93.818	2.870	37.134	2.707%	39.092%
17.0	85.433	2.791	39.926	2.633%	42.030%
18.0	78.272	2.699	42.625	2.546%	44.872%
19.0	72.271	2.619	45.244	2.471%	47.629%
20.0	66.150	2.533	47.777	2.390%	50.296%
21.0	60.405	2.430	50.207	2.293%	52.854%
22.0	55.874	2.337	52.544	2.204%	55.314%
23.0	51.472	2.252	54.797	2.125%	57.685%
24.0	47.011	2.153	56.95	2.031%	59.952%
25.0	43.323	2.054	59.004	1.938%	62.114%
26.0	39.888	1.964	60.968	1.853%	64.182%
27.0	36.506	1.869	62.837	1.763%	66.149%
28.0	33.374	1.769	64.606	1.669%	68.012%
29.0	30.530	1.672	66.278	1.577%	69.772%
30.0	27.879	1.577	67.855	1.488%	71.432%
31.0	25.446	1.484	69.339	1.400%	72.994%
32.0	23.157	1.392	70.731	1.314%	74.460%
33.0	21.182	1.306	72.038	1.232%	75.835%
34.0	19.311	1.225	73.263	1.156%	77.125%
35.0	17.525	1.144	74.407	1.079%	78.329%
36.0	15.908	1.065	75.472	1.004%	79.450%
37.0	14.516	0.992	76.464	.936%	80.495%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	13.187	0.925	77.389	.872%	81.468%
39.0	11.862	0.855	78.244	.807%	82.368%
40.0	10.821	0.791	79.035	.746%	83.201%
41.0	9.847	0.736	79.771	.694%	83.976%
42.0	8.912	0.682	80.452	.643%	84.693%
43.0	8.079	0.629	81.082	.594%	85.356%
44.0	7.407	0.584	81.666	.551%	85.971%
45.0	6.768	0.545	82.211	.514%	86.545%
46.0	6.223	0.508	82.719	.479%	87.079%
47.0	5.766	0.477	83.196	.450%	87.581%
48.0	5.354	0.450	83.645	.424%	88.055%
49.0	5.010	0.426	84.071	.402%	88.503%
50.0	4.690	0.404	84.475	.382%	88.928%
51.0	4.430	0.386	84.861	.364%	89.334%
52.0	4.205	0.371	85.232	.350%	89.725%
53.0	4.001	0.357	85.589	.337%	90.100%
54.0	3.814	0.344	85.933	.325%	90.463%
55.0	3.667	0.334	86.267	.315%	90.814%
56.0	3.523	0.325	86.592	.306%	91.156%
57.0	3.386	0.316	86.908	.298%	91.489%
58.0	3.273	0.308	87.216	.290%	91.813%
59.0	3.189	0.302	87.518	.285%	92.131%
60.0	3.090	0.297	87.814	.280%	92.443%
61.0	3.016	0.291	88.106	.275%	92.750%
62.0	2.946	0.287	88.393	.271%	93.053%
63.0	2.883	0.283	88.677	.267%	93.351%
64.0	2.809	0.279	88.956	.263%	93.645%
65.0	2.767	0.276	89.232	.260%	93.936%
66.0	2.735	0.275	89.506	.259%	94.225%
67.0	2.689	0.273	89.779	.257%	94.512%
68.0	2.637	0.270	90.049	.255%	94.796%
69.0	2.602	0.267	90.316	.252%	95.077%
70.0	2.552	0.265	90.581	.250%	95.356%
71.0	2.521	0.262	90.843	.247%	95.632%
72.0	2.493	0.261	91.104	.246%	95.906%
73.0	2.468	0.259	91.363	.245%	96.179%
74.0	2.454	0.259	91.622	.244%	96.452%
75.0	2.433	0.258	91.88	.244%	96.723%

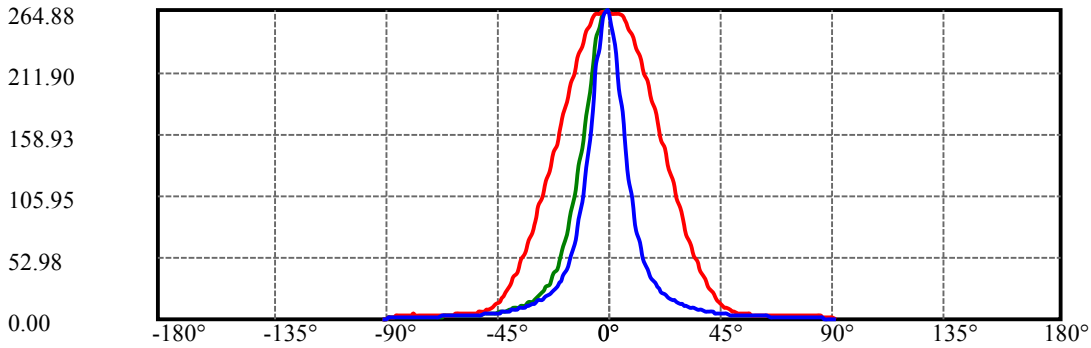
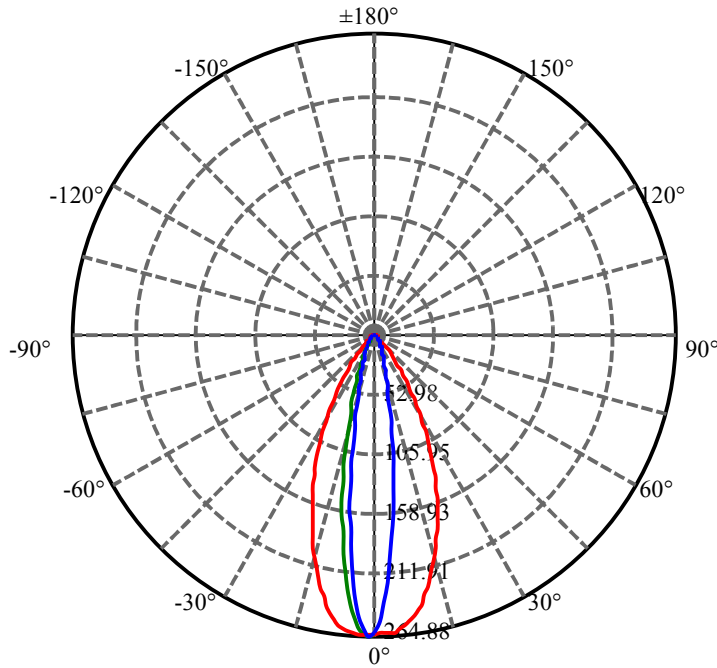
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	2.429	0.258	92.138	.243%	96.995%
77.0	2.426	0.259	92.397	.244%	97.268%
78.0	2.433	0.260	92.657	.245%	97.541%
79.0	2.401	0.260	92.917	.245%	97.815%
80.0	2.373	0.257	93.174	.243%	98.086%
81.0	2.334	0.255	93.429	.240%	98.354%
82.0	2.310	0.252	93.681	.238%	98.619%
83.0	2.250	0.248	93.929	.234%	98.880%
84.0	2.148	0.240	94.168	.226%	99.132%
85.0	2.014	0.227	94.395	.214%	99.371%
86.0	1.649	0.200	94.596	.189%	99.582%
87.0	1.216	0.157	94.752	.148%	99.747%
88.0	0.802	0.111	94.863	.104%	99.863%
89.0	0.580	0.076	94.939	.071%	99.943%
90.0	0.404	0.054	94.993	.051%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	67.86	64.01%	71.43%
0-40	79.03	74.56%	83.20%
0-60	87.81	82.84%	92.44%
0-90	94.94	89.56%	99.94%
0-120	94.94	89.56%	99.94%
0-180	94.99	89.62%	100.00%
60-90	7.42	7.00%	7.81%
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%
0-36.53	75.99	71.69%	80.00%

ZONAL LUMEN SUMMARY

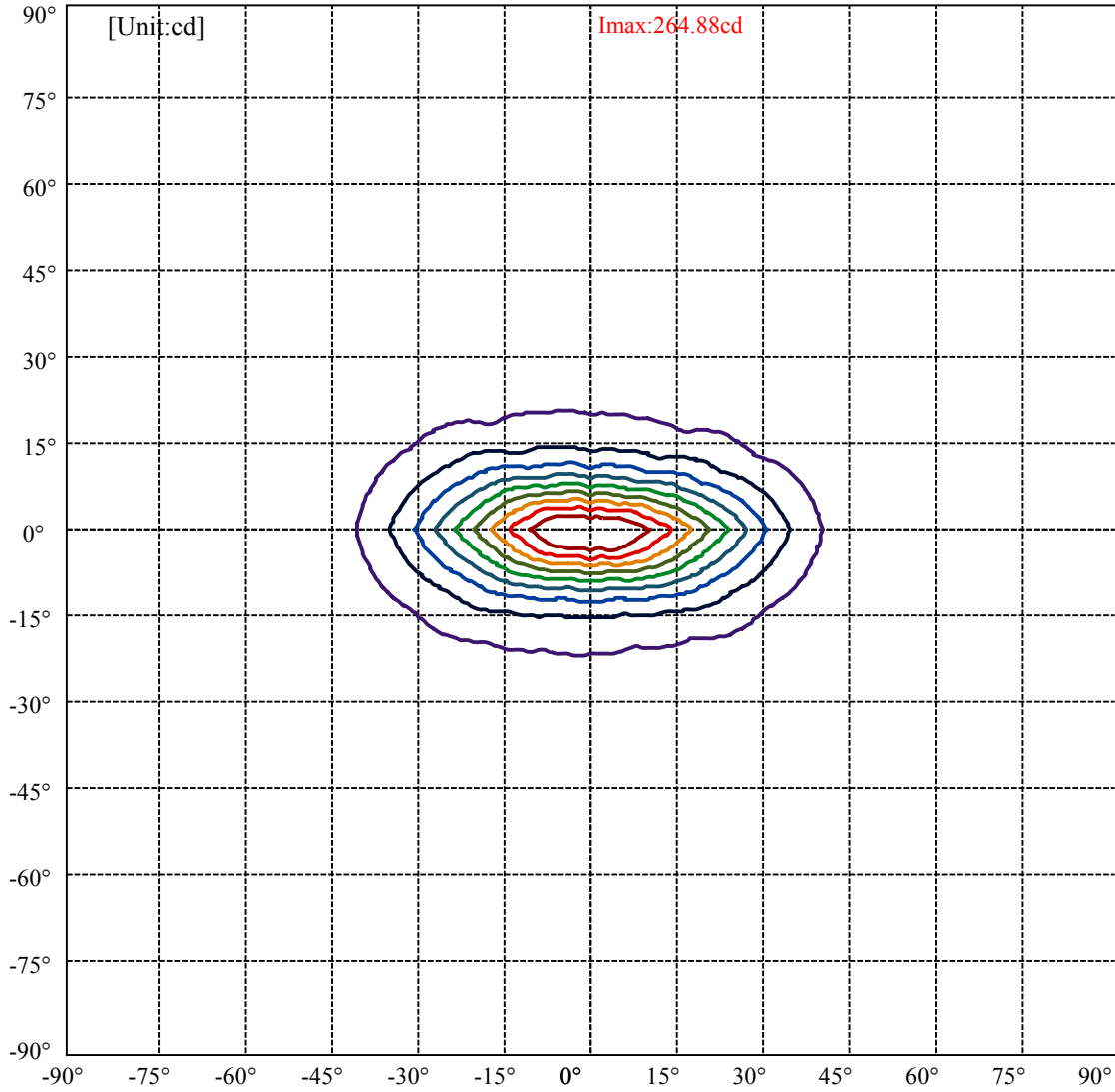
0-10	19.27
10-20	28.51
20-30	20.08
30-40	11.18
40-50	5.44
50-60	3.34
60-70	2.77
70-80	2.59
80-90	1.76
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



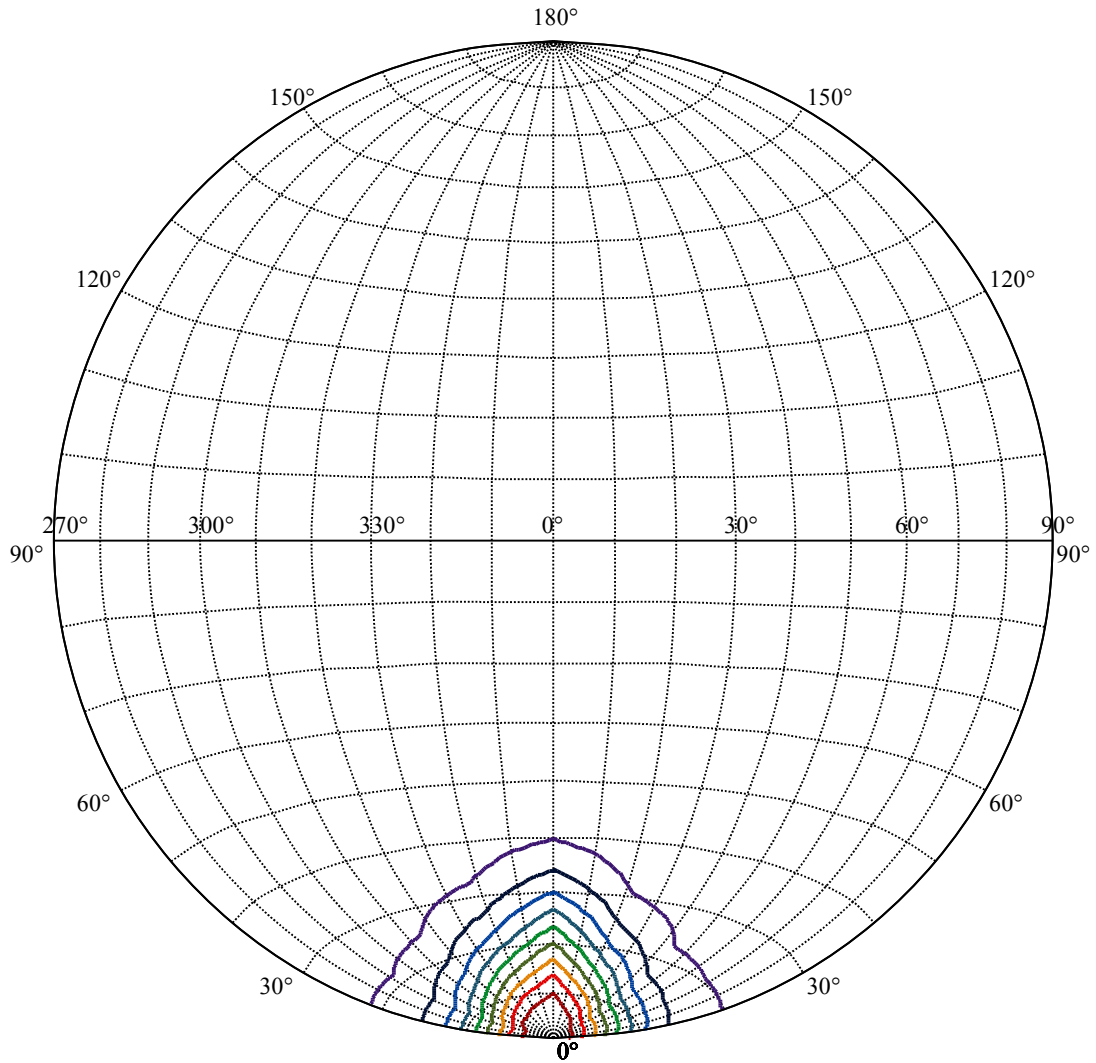
C315(Max): —
 C0/C180: —
 C90/C270: —

Field angle(10%Imax):C0/180Left:39.2 Right:40.9
 :C90/270Left:20.5 Right:20.8

Beam Angle(50%Imax):C0/180Left:22.4 Right:24.6
 :C90/270Left:7.9 Right:8.3



(10%Imax)	26.4182	—
(20%Imax)	52.8364	—
(30%Imax)	79.2546	—
(40%Imax)	105.673	—
(50%Imax)	132.091	—
(60%Imax)	158.509	—
(70%Imax)	184.928	—
(80%Imax)	211.346	—
(90%Imax)	237.764	—



House

[Unit:cd]

Road

I_{max}:264.88

(10%I_{max}) 26.4881

(20%I_{max}) 52.9762

(30%I_{max}) 79.4644

(40%I_{max}) 105.952

(50%I_{max}) 132.441

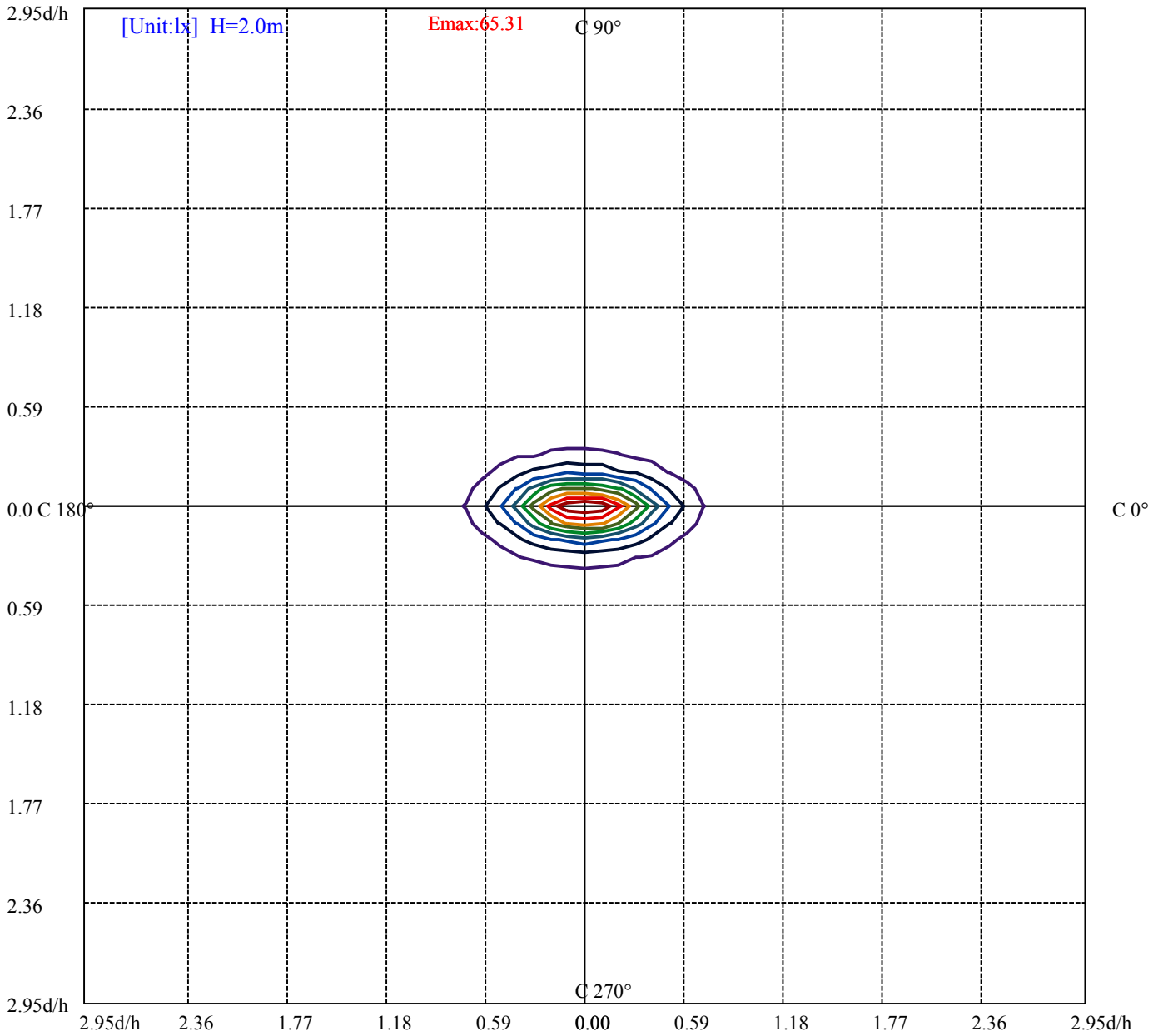
(60%I_{max}) 158.929

(70%I_{max}) 185.417

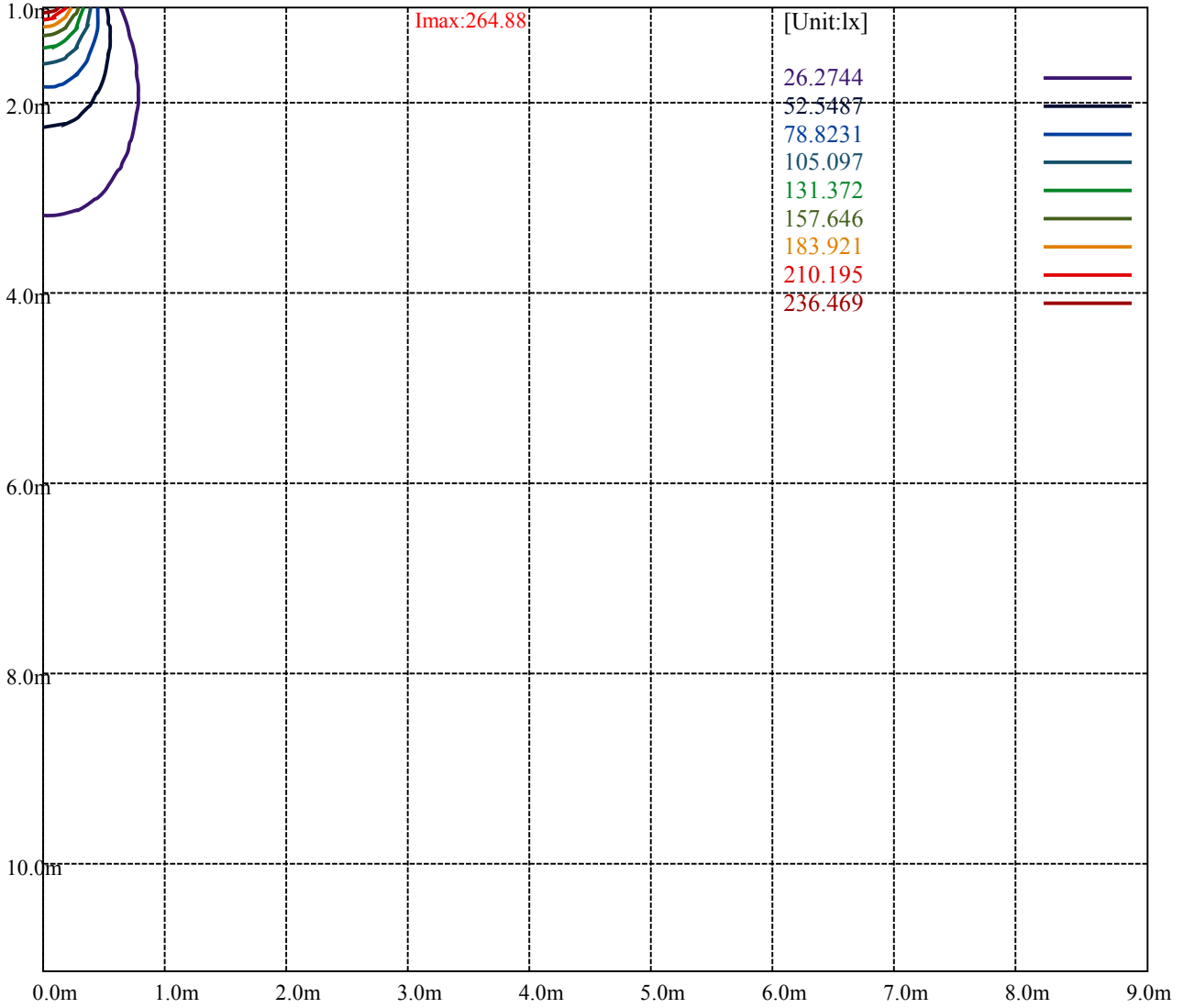
(80%I_{max}) 211.905

(90%I_{max}) 238.393





(10%Emax) 6.5306	—
(20%Emax) 13.06122	—
(30%Emax) 19.59183	—
(40%Emax) 26.1225	—
(50%Emax) 32.653	—
(60%Emax) 39.18375	—
(70%Emax) 45.71425	—
(80%Emax) 52.24475	—
(90%Emax) 58.7755	—



Luminance Table

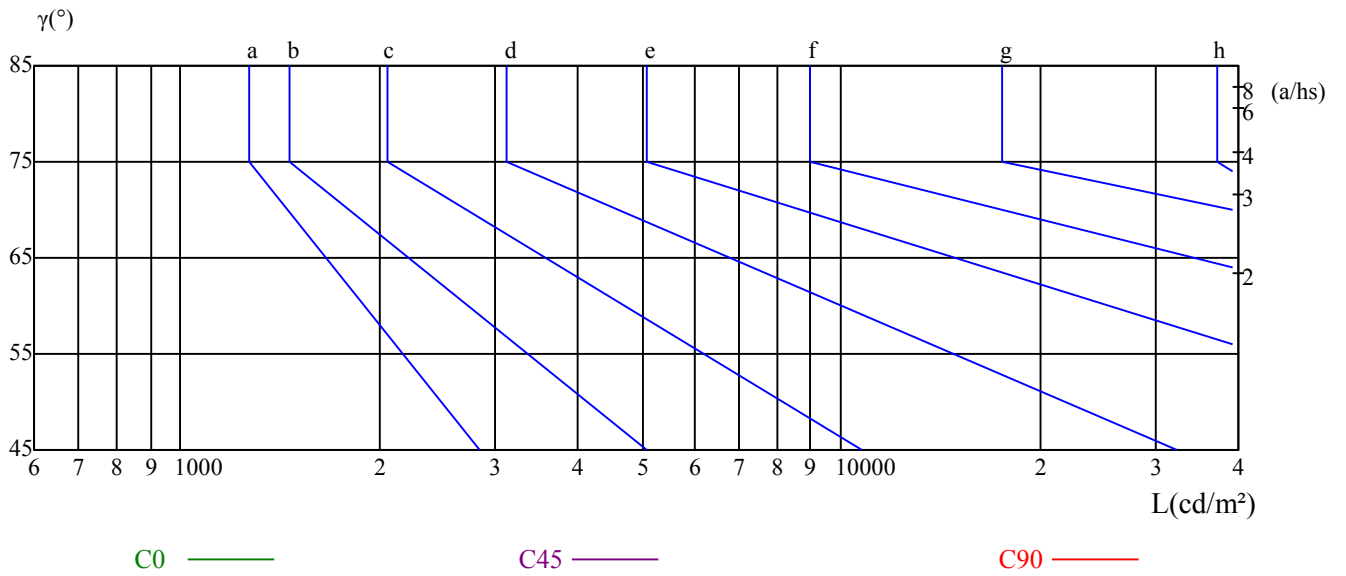
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

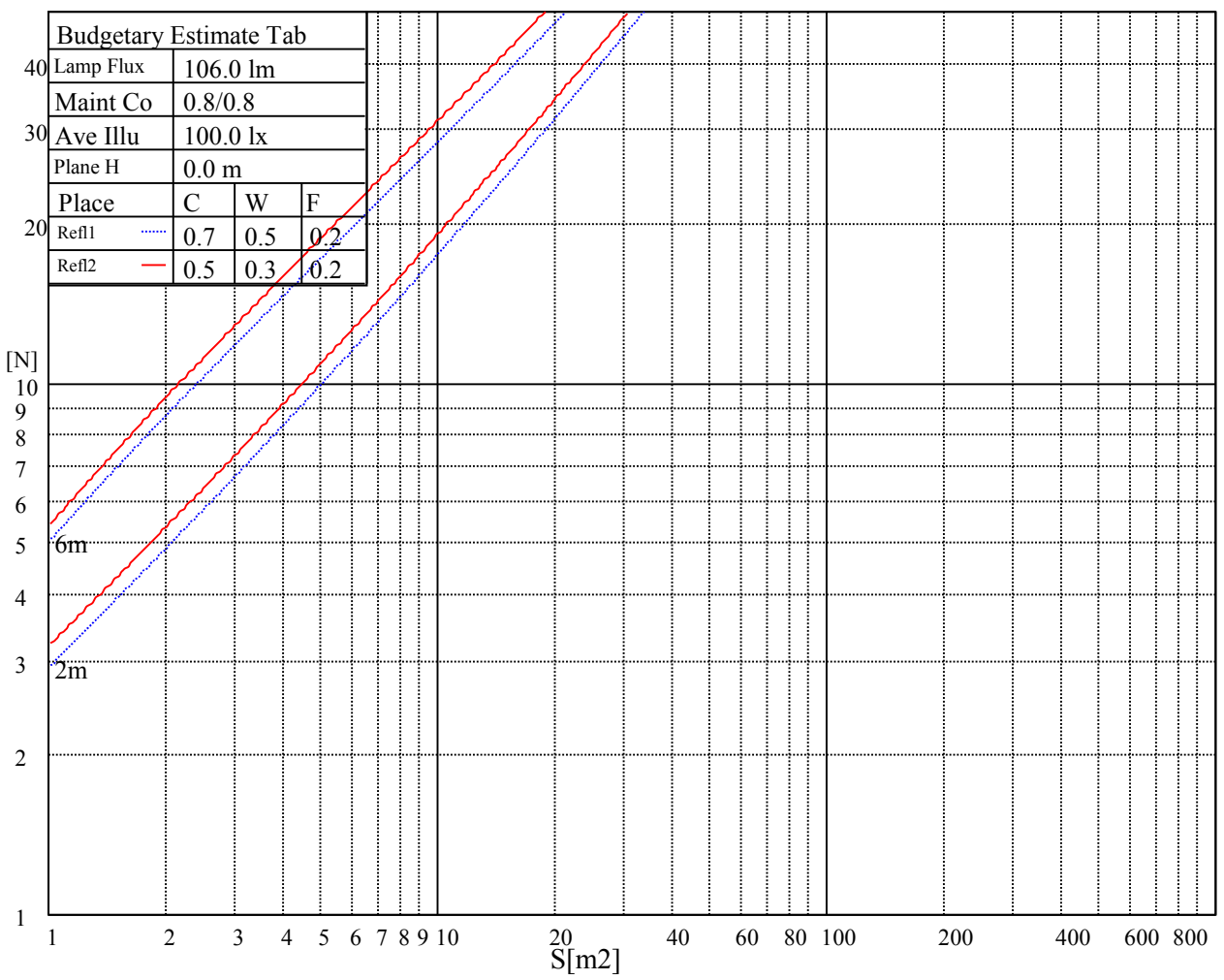
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

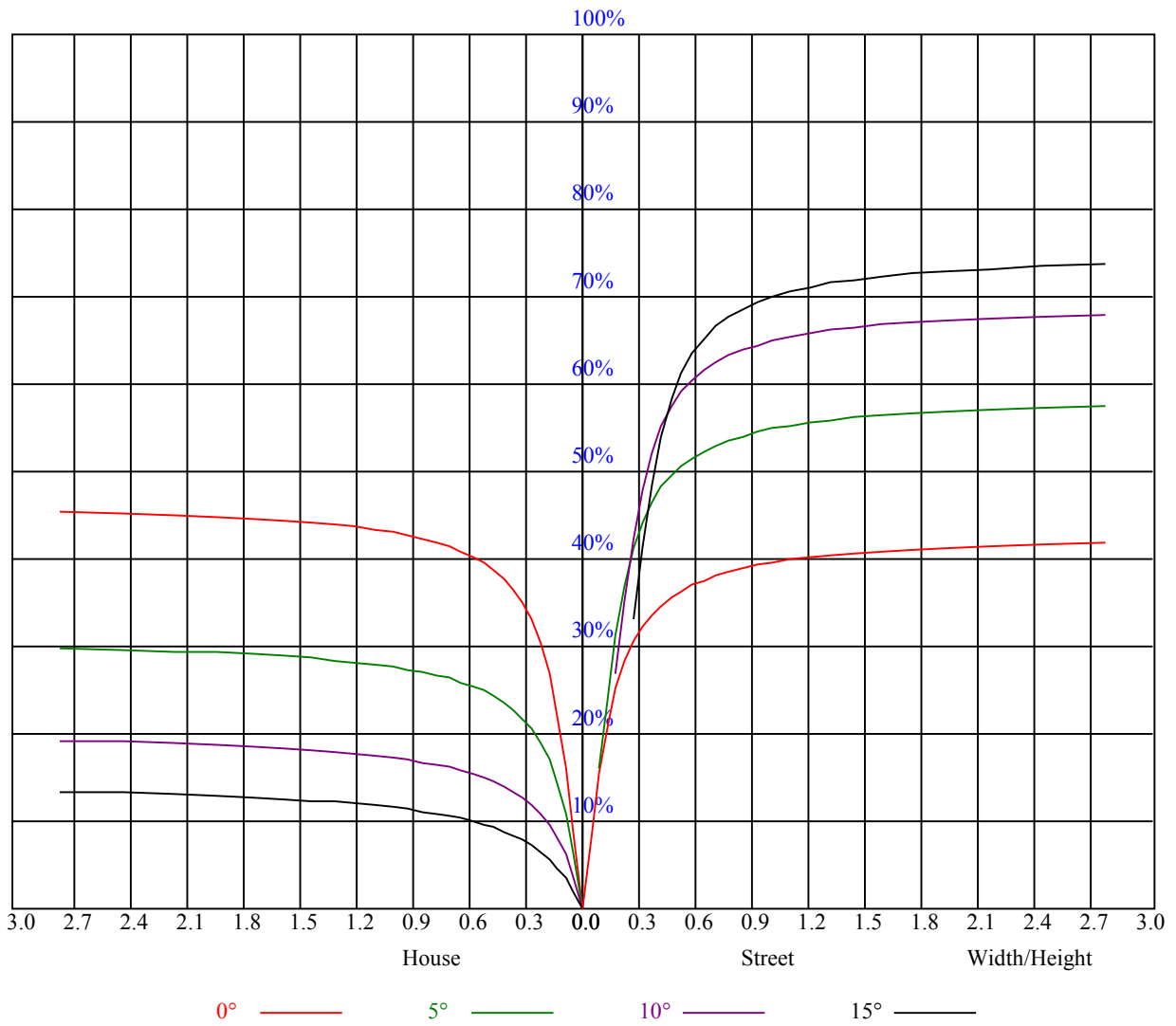
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve





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	1.07	1.07	1.07	1.04	1.04	1.04	1.00	1.00	1.00	0.95	0.95	0.95	0.91	0.91	0.91	0.90
1	0.98	0.95	0.93	0.96	0.93	0.91	0.92	0.90	0.89	0.89	0.87	0.86	0.86	0.84	0.83	0.82
2	0.91	0.87	0.83	0.89	0.85	0.82	0.86	0.83	0.80	0.83	0.81	0.79	0.81	0.79	0.77	0.75
3	0.84	0.80	0.76	0.83	0.79	0.75	0.81	0.77	0.74	0.79	0.75	0.73	0.77	0.74	0.72	0.70
4	0.79	0.74	0.70	0.78	0.73	0.70	0.76	0.72	0.69	0.74	0.71	0.68	0.73	0.70	0.67	0.66
5	0.75	0.69	0.65	0.74	0.69	0.65	0.72	0.68	0.65	0.71	0.67	0.64	0.69	0.66	0.63	0.62
6	0.71	0.65	0.62	0.70	0.65	0.61	0.69	0.64	0.61	0.67	0.63	0.60	0.66	0.63	0.60	0.59
7	0.67	0.62	0.58	0.67	0.62	0.58	0.65	0.61	0.58	0.64	0.60	0.57	0.63	0.60	0.57	0.56
8	0.64	0.59	0.55	0.63	0.58	0.55	0.62	0.58	0.55	0.62	0.58	0.55	0.61	0.57	0.54	0.53
9	0.61	0.56	0.53	0.61	0.56	0.52	0.60	0.55	0.52	0.59	0.55	0.52	0.58	0.55	0.52	0.51
10	0.58	0.54	0.50	0.58	0.53	0.50	0.57	0.53	0.50	0.57	0.53	0.50	0.56	0.52	0.50	0.49



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	262.74	261.73	261.51	262.07	261.34	259.20	256.16	253.13	248.96
22.5	263.36	261.34	258.41	254.59	249.13	241.03	231.36	222.19	211.33
45.0	261.23	254.93	247.11	235.46	221.06	206.89	189.68	172.13	157.11
67.5	262.86	256.11	243.73	229.33	210.88	193.44	173.25	153.06	136.13
90.0	261.11	250.99	235.24	218.19	197.33	178.43	156.99	136.41	119.48
112.5	264.21	258.75	247.22	233.44	215.27	197.89	177.81	157.89	141.19
135.0	263.70	259.14	250.43	239.12	227.48	212.96	197.33	182.53	166.28
157.5	263.42	262.46	259.54	256.44	251.78	246.83	239.79	231.53	223.59
180.0	262.74	263.03	262.63	262.80	262.41	261.62	260.04	257.18	252.17
202.5	263.36	264.66	264.26	261.73	258.86	254.70	247.61	240.30	232.20
225.0	261.23	264.04	262.80	256.78	248.06	237.21	221.01	206.94	192.15
247.5	262.86	263.03	257.46	243.90	229.11	211.44	188.21	170.10	152.49
270.0	261.11	264.15	259.76	247.84	232.43	216.39	189.39	169.99	153.62
292.5	264.21	263.53	257.63	244.13	229.61	212.68	189.96	171.84	154.01
315.0	263.70	264.88	263.19	258.19	250.76	239.96	223.43	208.80	193.67
337.5	263.42	263.19	263.31	262.18	259.14	254.36	246.32	239.01	230.79
360.0	262.74	261.73	261.51	262.07	261.34	259.20	256.16	253.13	248.96
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	244.18	239.23	232.43	226.01	218.59	211.22	203.85	195.47	186.81
22.5	200.19	189.23	176.57	165.54	153.00	141.19	131.29	122.57	109.80
45.0	142.71	125.94	113.23	101.48	87.92	78.08	69.30	59.51	52.76
67.5	118.35	102.09	88.93	77.34	64.80	56.53	49.84	44.21	38.36
90.0	104.18	87.08	75.43	65.53	55.41	48.83	43.26	38.36	34.14
112.5	123.53	107.38	94.11	82.24	69.41	60.69	53.61	46.80	41.23
135.0	152.21	136.74	122.06	110.31	97.76	86.18	76.95	68.63	59.68
157.5	212.85	201.71	191.03	180.51	167.91	157.84	147.43	136.01	125.33
180.0	247.28	240.75	233.49	227.59	220.50	210.32	202.05	194.23	185.51
202.5	221.63	209.81	198.62	185.96	173.14	162.39	150.47	139.61	127.69
225.0	173.48	158.79	144.62	129.26	115.09	103.61	91.46	81.68	71.78
247.5	133.54	116.27	102.43	88.59	76.28	66.88	57.99	51.24	44.89
270.0	129.60	113.74	101.03	84.94	72.45	64.01	54.34	47.93	42.47
292.5	134.83	117.23	103.05	88.76	76.11	66.43	57.21	50.46	43.99
315.0	174.99	160.37	146.31	131.23	116.83	104.85	92.59	82.52	72.06
337.5	219.88	210.04	199.35	185.68	174.71	163.97	150.98	141.86	130.44
360.0	244.18	239.23	232.43	226.01	218.59	211.22	203.85	195.47	186.81
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	179.04	171.17	161.16	153.17	145.63	136.35	128.76	120.71	112.89
22.5	101.08	93.60	82.46	74.48	68.91	61.37	55.07	50.29	44.21
45.0	46.80	40.50	36.73	32.51	28.69	26.33	23.68	21.21	19.74
67.5	34.54	31.22	27.90	25.48	23.40	21.60	19.80	18.39	16.93
90.0	31.11	28.18	25.88	23.68	21.77	20.25	18.62	17.21	16.09
112.5	37.13	33.30	30.15	27.62	25.26	23.51	21.49	19.74	18.39
135.0	53.44	47.81	42.36	37.63	34.14	30.71	27.96	25.59	23.23
157.5	116.33	106.71	97.43	89.27	81.62	75.15	68.01	61.71	56.64
180.0	175.89	167.79	158.85	150.30	142.54	134.16	126.68	118.18	110.31
202.5	116.78	108.11	99.45	89.38	81.84	75.09	67.28	61.26	56.08
225.0	63.23	56.81	50.40	44.72	40.28	36.45	32.40	29.59	27.11
247.5	39.71	35.94	32.79	29.42	27.06	24.92	22.61	20.93	19.52
270.0	37.13	33.69	30.71	27.56	25.31	23.34	21.21	19.69	18.34
292.5	38.76	34.82	31.56	28.01	25.65	23.46	21.09	19.58	18.06
315.0	62.94	56.19	49.22	43.31	38.76	34.65	30.43	27.39	24.75
337.5	118.46	110.48	101.36	89.94	83.14	76.22	67.11	61.71	55.91
360.0	179.04	171.17	161.16	153.17	145.63	136.35	128.76	120.71	112.89

Intensity data(cd)

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	103.22	95.63	88.37	80.66	73.13	66.15	60.24	54.17	49.05
22.5	39.77	36.00	31.50	28.18	25.26	22.33	20.03	17.89	15.75
45.0	18.17	16.31	15.30	14.18	12.99	11.98	11.19	10.35	9.62
67.5	15.81	14.57	13.44	12.54	11.64	10.91	10.24	9.56	8.89
90.0	15.08	13.78	12.88	12.09	11.36	10.52	9.90	9.28	8.61
112.5	17.10	15.75	14.74	13.73	12.60	11.81	11.19	10.35	9.73
135.0	21.43	19.69	18.11	16.76	15.58	14.34	13.39	12.54	11.48
157.5	51.41	45.96	41.63	37.74	33.41	30.38	27.68	24.41	21.94
180.0	103.22	96.36	87.69	80.78	74.36	67.05	61.37	55.97	50.23
202.5	50.46	45.11	40.89	36.62	33.24	29.87	26.78	24.19	21.54
225.0	24.58	22.39	20.64	18.96	17.44	16.37	15.13	14.06	13.11
247.5	18.11	16.76	15.69	14.51	13.61	12.66	11.76	10.97	10.24
270.0	16.93	15.75	14.74	13.56	12.66	11.87	11.08	10.46	9.73
292.5	16.59	15.30	14.29	13.28	12.43	11.64	10.80	10.13	9.45
315.0	22.28	20.14	18.45	16.82	15.36	14.29	13.05	12.21	11.25
337.5	49.95	44.49	40.11	35.66	32.06	28.35	25.09	22.44	19.80
360.0	103.22	95.63	88.37	80.66	73.13	66.15	60.24	54.17	49.05
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	43.43	38.81	34.03	29.53	25.88	22.67	19.07	16.48	14.29
22.5	14.23	12.94	11.53	10.41	9.56	8.61	7.82	7.14	6.58
45.0	9.06	8.38	7.82	7.37	6.86	6.41	6.08	5.63	5.34
67.5	8.38	7.88	7.43	6.98	6.64	6.24	5.91	5.57	5.29
90.0	8.10	7.71	7.14	6.69	6.36	5.96	5.63	5.29	5.01
112.5	9.11	8.49	7.99	7.54	7.09	6.69	6.30	5.96	5.68
135.0	10.80	10.07	9.39	8.72	8.21	7.65	7.20	6.69	6.24
157.5	19.80	17.78	16.14	14.51	12.94	11.81	10.58	9.45	8.78
180.0	44.89	40.28	35.44	30.88	27.23	23.40	20.42	17.38	14.85
202.5	19.29	17.44	15.92	14.18	12.88	11.81	10.69	9.73	8.94
225.0	12.09	11.31	10.58	9.79	9.17	8.61	7.99	7.48	7.09
247.5	9.56	9.00	8.49	7.88	7.43	7.09	6.64	6.30	5.91
270.0	9.06	8.49	7.99	7.43	7.03	6.64	6.19	5.91	5.57
292.5	8.83	8.33	7.88	7.31	6.98	6.53	6.19	5.85	5.57
315.0	10.35	9.62	9.11	8.21	7.71	7.31	6.75	6.30	6.02
337.5	17.55	15.75	14.12	12.38	11.19	10.13	9.17	8.10	7.37
360.0	43.43	38.81	34.03	29.53	25.88	22.67	19.07	16.48	14.29
C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	11.87	10.35	9.06	7.93	6.92	6.24	5.68	5.29	4.89
22.5	6.02	5.63	5.23	4.89	4.67	4.28	4.11	3.94	3.77
45.0	5.12	4.73	4.56	4.33	4.11	3.88	3.71	3.49	3.38
67.5	5.01	4.73	4.50	4.28	4.11	3.94	3.77	3.60	3.43
90.0	4.78	4.56	4.33	4.11	3.99	3.77	3.66	3.49	3.43
112.5	5.34	5.01	4.78	4.56	4.28	4.11	3.99	3.77	3.60
135.0	5.96	5.57	5.29	4.95	4.73	4.44	4.22	3.99	3.77
157.5	8.04	7.26	6.69	6.24	5.74	5.40	5.06	4.84	4.56
180.0	12.99	11.36	9.84	8.89	8.04	7.14	6.64	6.19	5.74
202.5	8.16	7.54	6.92	6.36	5.96	5.57	5.18	4.89	4.67
225.0	6.64	6.24	5.91	5.57	5.23	4.89	4.61	4.39	4.16
247.5	5.63	5.29	5.01	4.73	4.56	4.33	4.16	3.94	3.83
270.0	5.29	5.01	4.78	4.50	4.33	4.16	3.94	3.77	3.66
292.5	5.18	5.01	4.73	4.50	4.28	4.11	3.88	3.77	3.60
315.0	5.57	5.23	5.01	4.67	4.39	4.22	3.99	3.83	3.66
337.5	6.69	6.08	5.63	5.18	4.84	4.56	4.28	4.11	3.88
360.0	11.87	10.35	9.06	7.93	6.92	6.24	5.68	5.29	4.89

Intensity data(cd)

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	4.56	4.33	4.16	3.99	3.88	3.77	3.66	3.66	3.54
22.5	3.60	3.54	3.43	3.26	3.21	3.09	3.04	2.93	2.93
45.0	3.26	3.15	3.04	2.98	2.81	2.76	2.70	2.64	2.59
67.5	3.26	3.15	3.04	2.98	2.87	2.76	2.70	2.64	2.59
90.0	3.26	3.15	3.04	2.93	2.87	2.81	2.76	2.64	2.59
112.5	3.43	3.32	3.21	3.09	2.93	2.93	2.76	2.76	2.64
135.0	3.60	3.49	3.32	3.15	3.04	2.98	2.93	2.81	2.70
157.5	4.39	4.22	4.05	3.83	3.66	3.60	3.43	3.38	3.32
180.0	5.46	5.18	4.84	4.73	4.61	4.44	4.28	4.16	4.11
202.5	4.44	4.22	4.05	3.88	3.77	3.60	3.49	3.38	3.32
225.0	3.99	3.83	3.60	3.43	3.32	3.21	3.09	3.04	2.93
247.5	3.60	3.49	3.38	3.21	3.15	3.04	2.93	2.87	2.81
270.0	3.54	3.38	3.32	3.21	3.09	3.04	2.93	2.87	2.81
292.5	3.43	3.32	3.21	3.09	2.98	2.93	2.81	2.70	2.64
315.0	3.49	3.38	3.26	3.09	2.98	2.93	2.87	2.76	2.70
337.5	3.71	3.54	3.43	3.32	3.21	3.15	3.09	3.04	2.93
360.0	4.56	4.33	4.16	3.99	3.88	3.77	3.66	3.66	3.54
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	3.60	3.54	3.60	3.66	3.66	3.54	3.43	3.32	3.26
22.5	2.87	2.81	2.76	2.76	2.70	2.70	2.70	2.59	2.59
45.0	2.59	2.48	2.42	2.42	2.42	2.36	2.36	2.31	2.31
67.5	2.48	2.42	2.42	2.36	2.31	2.25	2.25	2.19	2.19
90.0	2.53	2.42	2.42	2.36	2.36	2.25	2.25	2.14	2.14
112.5	2.59	2.48	2.48	2.42	2.42	2.31	2.31	2.31	2.25
135.0	2.64	2.64	2.53	2.53	2.42	2.42	2.36	2.36	2.36
157.5	3.21	3.09	3.04	3.04	2.98	2.93	2.87	2.81	2.70
180.0	4.05	3.99	3.94	3.83	3.77	3.71	3.60	3.60	3.54
202.5	3.21	3.15	3.09	3.04	2.98	2.93	2.87	2.81	2.76
225.0	2.81	2.76	2.70	2.64	2.59	2.53	2.53	2.48	2.48
247.5	2.76	2.64	2.53	2.53	2.42	2.42	2.36	2.36	2.31
270.0	2.70	2.64	2.59	2.53	2.53	2.42	2.42	2.31	2.31
292.5	2.59	2.53	2.48	2.42	2.36	2.36	2.31	2.31	2.25
315.0	2.59	2.53	2.48	2.48	2.42	2.42	2.36	2.31	2.31
337.5	2.93	2.81	2.81	2.76	2.70	2.64	2.64	2.64	2.59
360.0	3.60	3.54	3.60	3.66	3.66	3.54	3.43	3.32	3.26
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	3.21	3.15	3.15	3.04	3.09	3.09	3.09	3.15	3.09
22.5	2.59	2.53	2.53	2.48	2.48	2.48	2.42	2.42	2.42
45.0	2.31	2.31	2.31	2.31	2.31	2.25	2.31	2.25	2.31
67.5	2.19	2.19	2.08	2.14	2.08	2.08	2.08	2.03	2.03
90.0	2.14	2.08	2.08	2.03	1.97	1.97	1.97	1.97	1.91
112.5	2.25	2.25	2.19	2.19	2.14	2.14	2.19	2.14	2.14
135.0	2.31	2.31	2.31	2.31	2.31	2.25	2.25	2.25	2.25
157.5	2.76	2.70	2.64	2.59	2.64	2.59	2.59	2.53	2.53
180.0	3.49	3.49	3.60	3.71	3.83	3.99	4.16	3.99	3.66
202.5	2.76	2.76	2.70	2.64	2.64	2.64	2.70	2.64	2.70
225.0	2.42	2.42	2.42	2.42	2.42	2.42	2.36	2.36	2.36
247.5	2.25	2.19	2.19	2.14	2.14	2.14	2.14	2.14	2.08
270.0	2.25	2.19	2.19	2.08	2.08	2.03	2.03	1.97	1.97
292.5	2.14	2.14	2.08	2.14	2.08	2.08	2.03	2.03	1.97
315.0	2.25	2.25	2.25	2.25	2.14	2.19	2.14	2.14	2.14
337.5	2.59	2.53	2.53	2.48	2.53	2.48	2.48	2.42	2.42
360.0	3.21	3.15	3.15	3.04	3.09	3.09	3.09	3.15	3.09

Intensity data(cd)

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	3.09	3.04	2.87	2.59	2.31	2.08	1.46	1.07	0.90
22.5	2.36	2.25	2.19	2.19	1.91	1.18	0.90	0.68	0.34
45.0	2.25	2.31	2.25	2.03	1.63	0.96	0.62	0.45	0.34
67.5	2.03	2.03	2.03	1.91	1.69	1.01	0.68	0.56	0.34
90.0	1.91	1.86	1.86	1.69	1.46	0.79	0.51	0.39	0.34
112.5	2.08	2.08	2.08	1.97	1.91	1.29	0.79	0.62	0.45
135.0	2.19	2.19	2.19	2.14	2.03	1.35	0.84	0.56	0.39
157.5	2.48	2.42	2.36	2.36	2.31	2.03	1.18	0.96	0.73
180.0	3.54	3.43	3.04	2.76	2.48	2.03	1.29	1.07	0.79
202.5	2.59	2.59	2.53	2.42	2.42	2.31	1.91	1.13	0.90
225.0	2.36	2.42	2.36	2.36	2.36	2.19	2.08	1.18	0.79
247.5	2.03	2.03	2.03	2.03	1.97	1.86	1.63	0.79	0.62
270.0	1.91	1.91	1.91	1.80	1.74	1.69	1.58	0.84	0.56
292.5	1.97	1.97	1.91	1.86	1.80	1.80	1.29	0.79	0.56
315.0	2.14	2.08	2.08	2.03	2.03	1.91	1.46	0.84	0.62
337.5	2.42	2.36	2.31	2.25	2.19	1.91	1.24	0.90	0.62
360.0	3.09	3.04	2.87	2.59	2.31	2.08	1.46	1.07	0.90

C/γ(°)	90.0
0.0	0.34
22.5	0.34
45.0	0.39
67.5	0.34
90.0	0.34
112.5	0.34
135.0	0.34
157.5	0.34
180.0	0.34
202.5	0.68
225.0	0.56
247.5	0.51
270.0	0.45
292.5	0.45
315.0	0.39
337.5	0.34
360.0	0.34