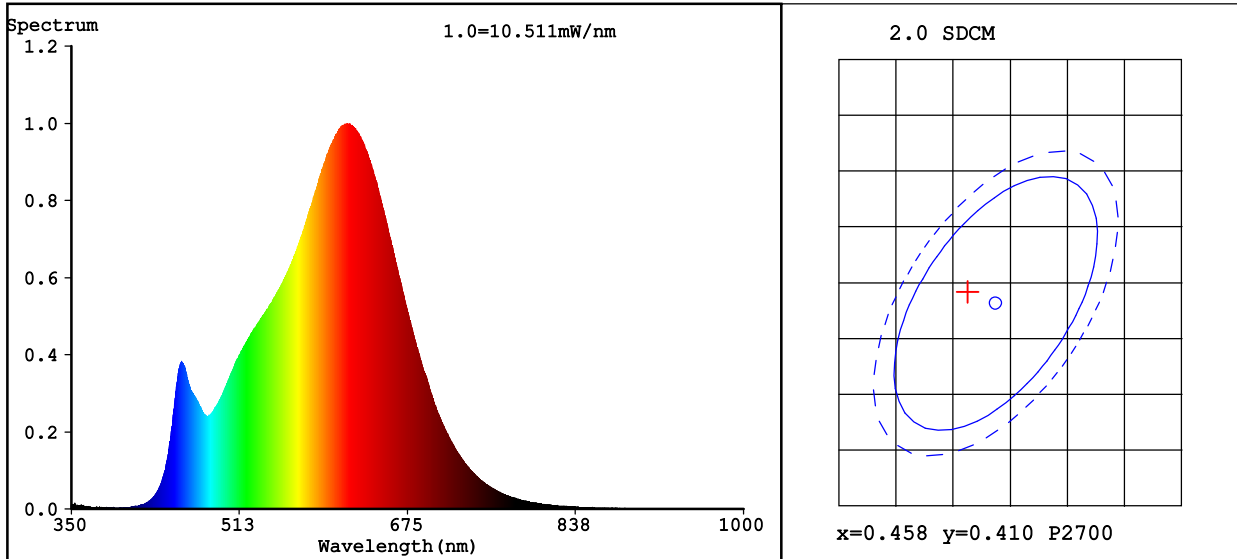


Spectrum Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.4553$ $y=0.4111$ / $u'=0.2594$ $v'=0.5269$
 CCT=2768K (Duv=0.0006) Dominant WL:Ld =583.7nm Purity=60.1%
 Ratio:R=25.7% G=71.5% B=2.8% Peak WL:Lp=616.8nm FWHM=141.5nm
 Render Index:Ra=90.9
 R1 =91 R2 =97 R3 =97 R4 =90 R5 =91 R6 =97 R7 =88
 R8 =75 R9 =48 R10=93 R11=91 R12=83 R13=93 R14=99 R15=86

Photo Parameters:

Flux = 491.2 lm Eff. : 102.28 lm/W Fe = 1.678 W

Electrical parameters:

V = 119.94 V I = 0.05031 A P = 4.802 W PF = 0.7966

Status: Integral T = 989 ms Ip = 36972 (56%)

Model:A19-5-E26-927-F-F	Number:1
Tester:XCJ	Date:2018-10-10
Temperature:24.2Deg	Humidity:65.0%
Manufacturer:RAB Lighting Inc.	Remarks:

RAB Lighting Inc.

Client:

LumCAT: A19-5-E26-927-F-F

Luminaire:

Report No:

Voltage(V): 120.1000

Test No: 255202-01-001

Current(A): 0.0510

LampCAT:

Power (W): 4.8220

Lamp flux(lm)

PF: 0.7811

Number of Lamps: 1

Ballast type:

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 497.27

Lumens(lm)/Power(W): 103.12

Central intensity(cd): 47.270

Maximum intensity(cd): 53.102

Angle of maximum intensity: C=45.0 γ =60.0

Beam Angle(50%Imax): [C0/180]Total=286.1

[C90/270]Total=283.0

Field angle(10%Imax): [C0/180]Total=344.3

[C90/270]Total=338.0

Maximum s/h(1/2): C0_180=1.45 C90_270=1.68

Maximum s/h(1/4): C0_180=1.60 C90_270=1.78

Up flux rate of LUM(%): 40.00%

Down flux rate of LUM(%): 57.58%

CIE Type : General diffuse lighting

Output flux ratio in π solid angle : 31.111%

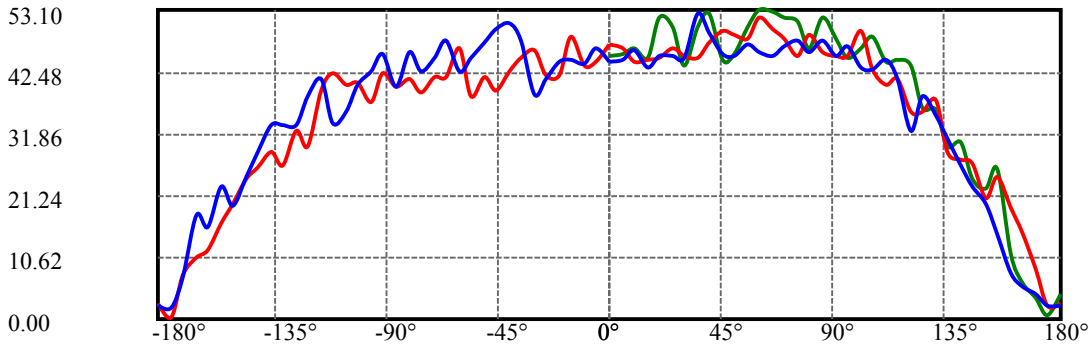
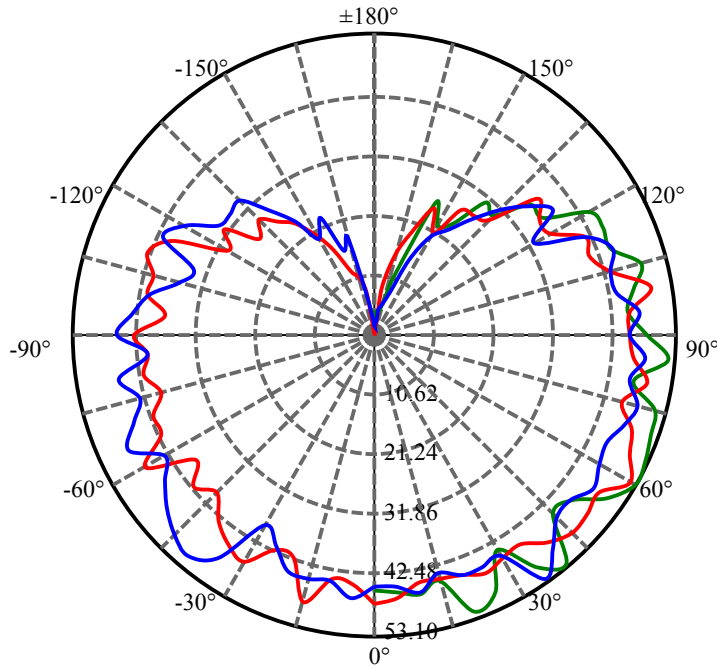
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	43.856	0.262	0.262	.053%	.053%
5.0	45.793	2.188	2.45	.440%	.493%
10.0	44.450	4.231	6.681	.851%	1.344%
15.0	44.278	6.282	12.962	1.263%	2.607%
20.0	44.815	8.402	21.364	1.690%	4.296%
25.0	45.064	10.439	31.803	2.099%	6.396%
30.0	44.546	12.209	44.012	2.455%	8.851%
35.0	46.138	14.506	58.518	2.917%	11.768%
40.0	45.697	16.101	74.619	3.238%	15.006%
45.0	46.234	17.920	92.539	3.604%	18.610%
50.0	44.930	18.866	111.405	3.794%	22.403%
55.0	46.503	20.880	132.285	4.199%	26.602%
60.0	47.098	22.357	154.642	4.496%	31.098%
65.0	46.234	22.968	177.611	4.619%	35.717%
70.0	46.234	23.814	201.425	4.789%	40.506%
75.0	44.911	23.778	225.203	4.782%	45.288%
80.0	45.966	24.813	250.016	4.990%	50.278%
85.0	44.201	24.136	274.152	4.854%	55.132%
90.0	43.971	24.102	298.254	4.847%	59.979%
95.0	42.436	23.172	321.426	4.660%	64.639%
100.0	42.436	22.907	344.334	4.607%	69.245%
105.0	40.940	21.676	366.01	4.359%	73.604%
110.0	39.808	20.504	386.514	4.123%	77.728%
115.0	38.484	19.118	405.632	3.845%	81.572%
120.0	36.431	17.294	422.926	3.478%	85.050%
125.0	35.376	15.884	438.81	3.194%	88.244%
130.0	32.556	13.670	452.48	2.749%	90.994%
135.0	31.002	12.016	464.496	2.416%	93.410%
140.0	27.472	9.679	474.175	1.947%	95.356%
145.0	25.151	7.907	482.083	1.590%	96.947%
150.0	20.853	5.715	487.798	1.149%	98.096%
155.0	18.993	4.400	492.198	.885%	98.981%
160.0	14.599	2.737	494.935	.550%	99.531%
165.0	11.971	1.698	496.633	.342%	99.873%
170.0	5.813	0.553	497.186	.111%	99.984%
175.0	1.381	0.066	497.252	.013%	99.997%
180.0	2.302	0.014	497.266	.003%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-30	44.01	8.85%
0-40	74.62	15.01%
0-60	154.64	31.10%
0-90	298.25	59.98%
0-120	422.93	85.05%
0-180	497.27	100.00%
60-90	165.97	33.38%
90-120	148.77	29.92%
90-130	178.33	35.86%
90-150	213.65	42.96%
90-180	223.10	44.87%
0-112.96	397.81	80.00%

ZONAL LUMEN SUMMARY

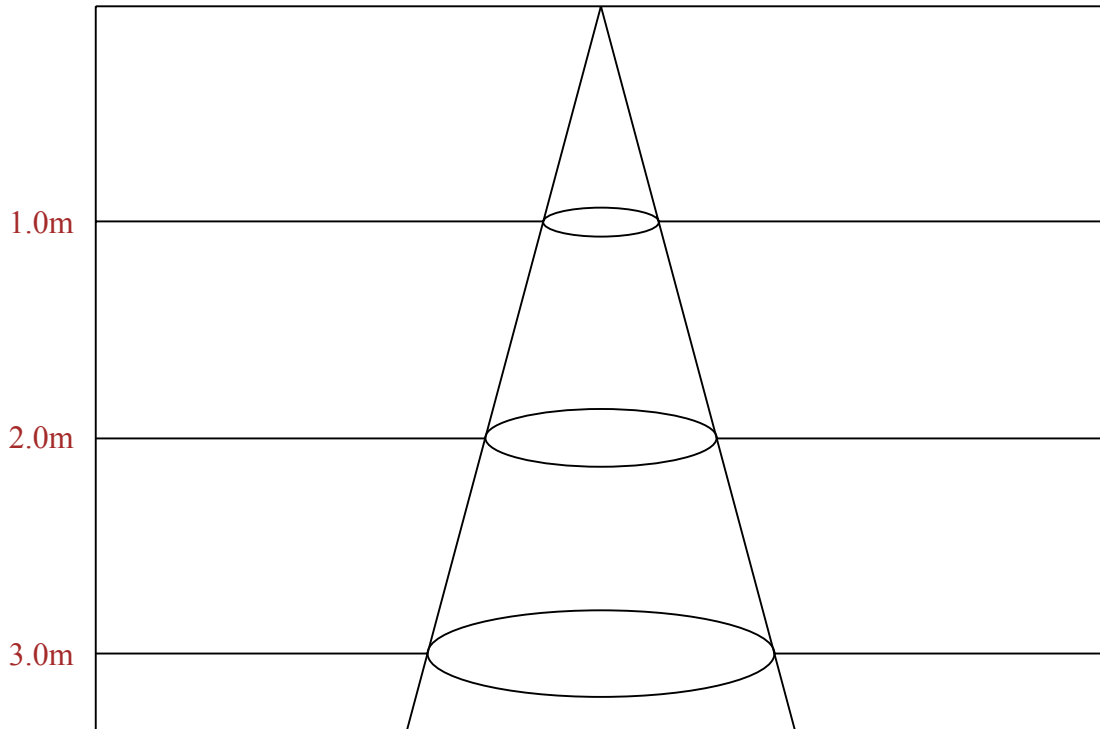
0-10	6.68
10-20	14.68
20-30	22.65
30-40	30.61
40-50	36.79
50-60	43.24
60-70	46.78
70-80	48.59
80-90	48.24
90-100	46.08
100-110	42.18
110-120	36.41
120-130	29.55
130-140	21.70
140-150	13.62
150-160	7.14
160-170	2.25
170-180	0.07



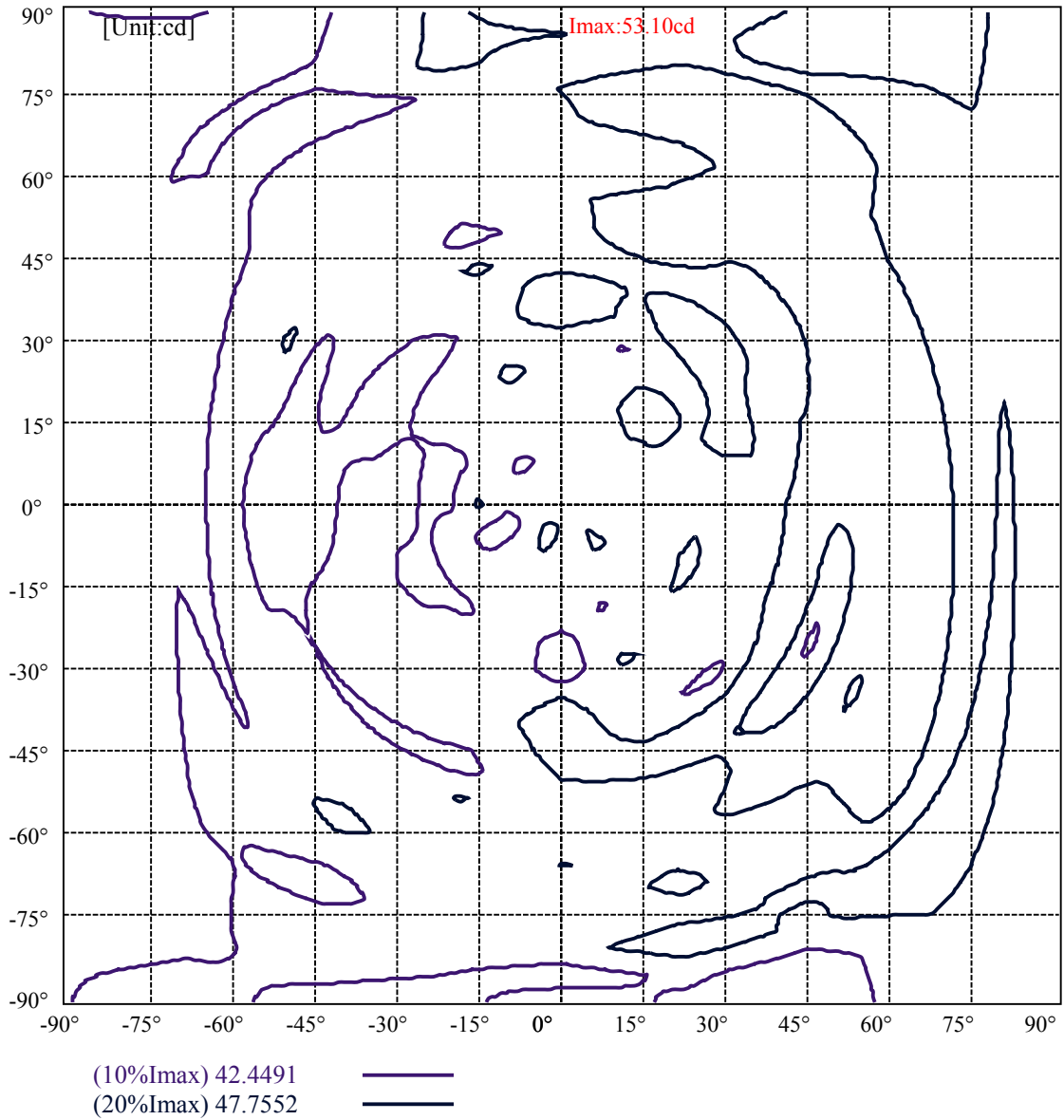
C45(Max): —
C0/C180: —
C90/C270: —

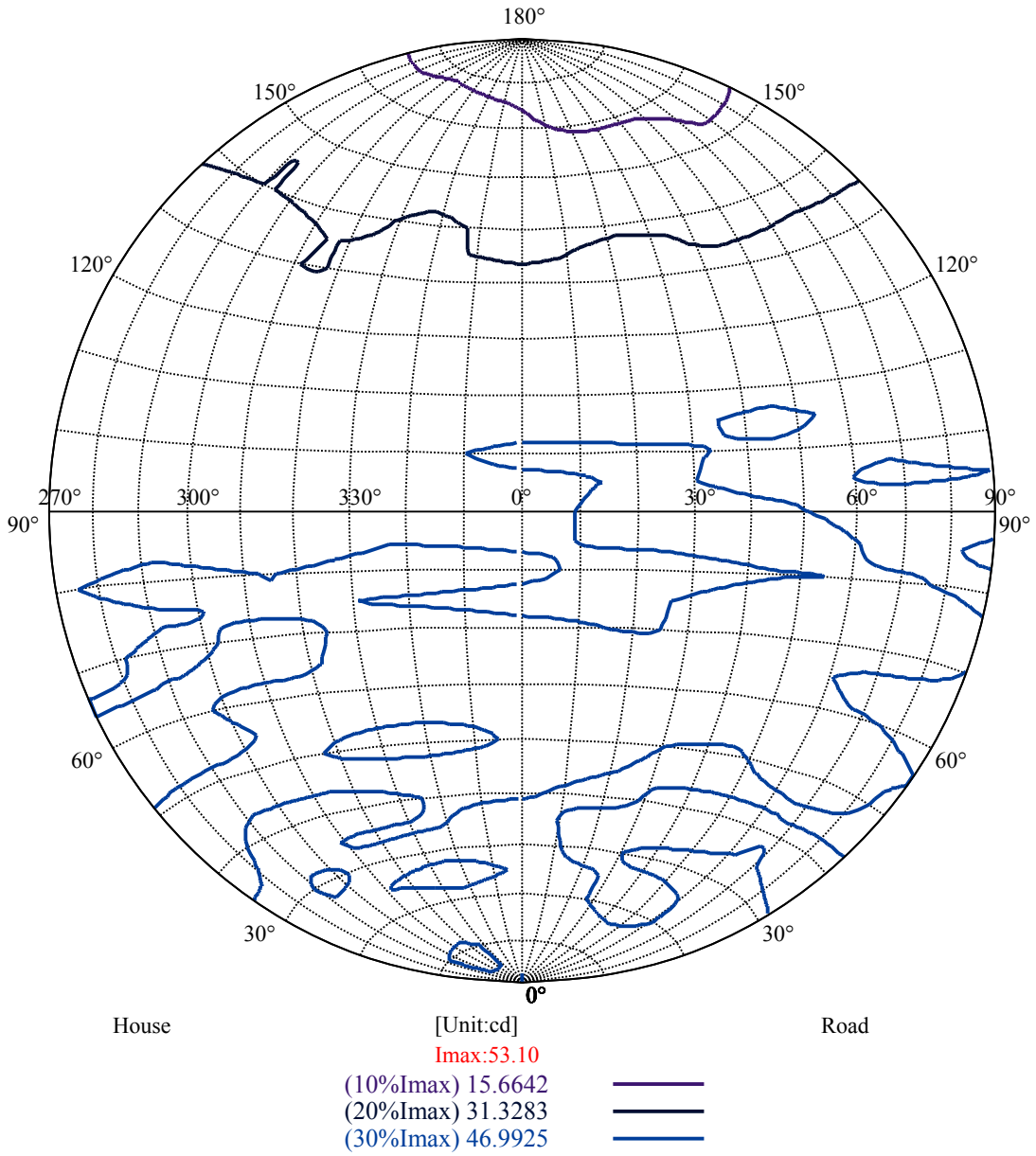
Field angle(10%Imax):C0/180Left:231.7 Right:112.6
:C90/270Left:206.9 Right:131.1

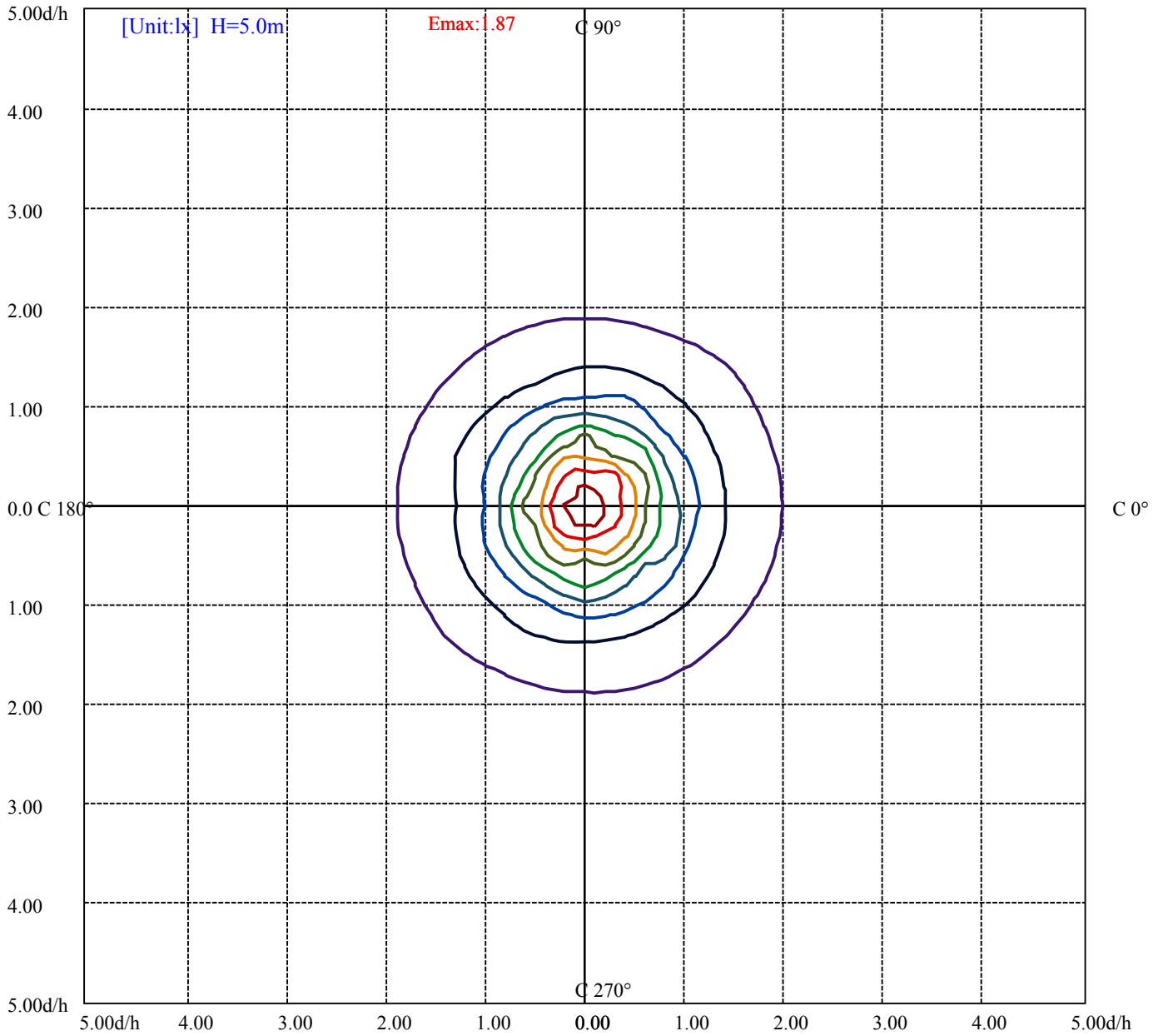
Beam Angle(50%Imax):C0/180Left:200.4 Right:85.7
:C90/270Left:177.8 Right:105.2



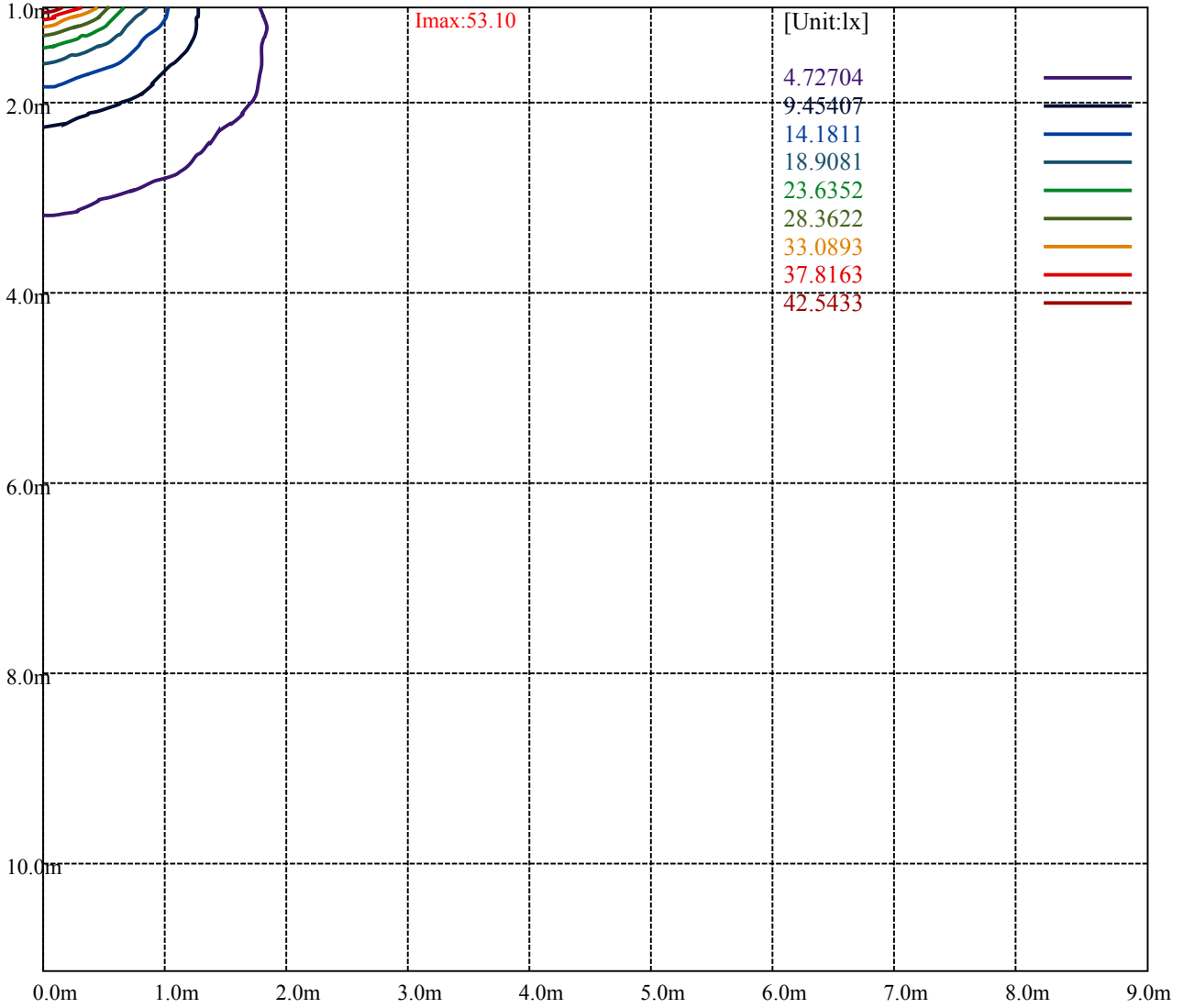
Max , Ave Beam angle of C45 plane 294.20







- (10%Emax) 0.1869184
- (20%Emax) 0.3738364
- (30%Emax) 0.560756
- (40%Emax) 0.747672
- (50%Emax) 0.934592
- (60%Emax) 1.121508
- (70%Emax) 1.308428
- (80%Emax) 1.495344
- (90%Emax) 1.682264



Luminance Table

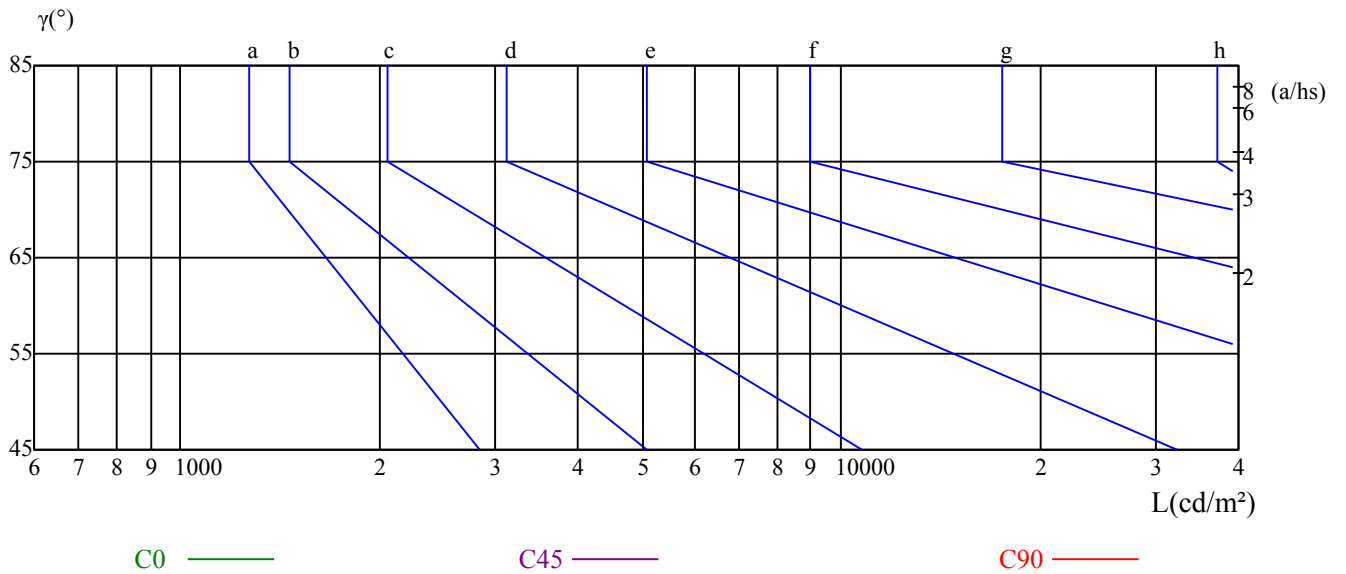
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

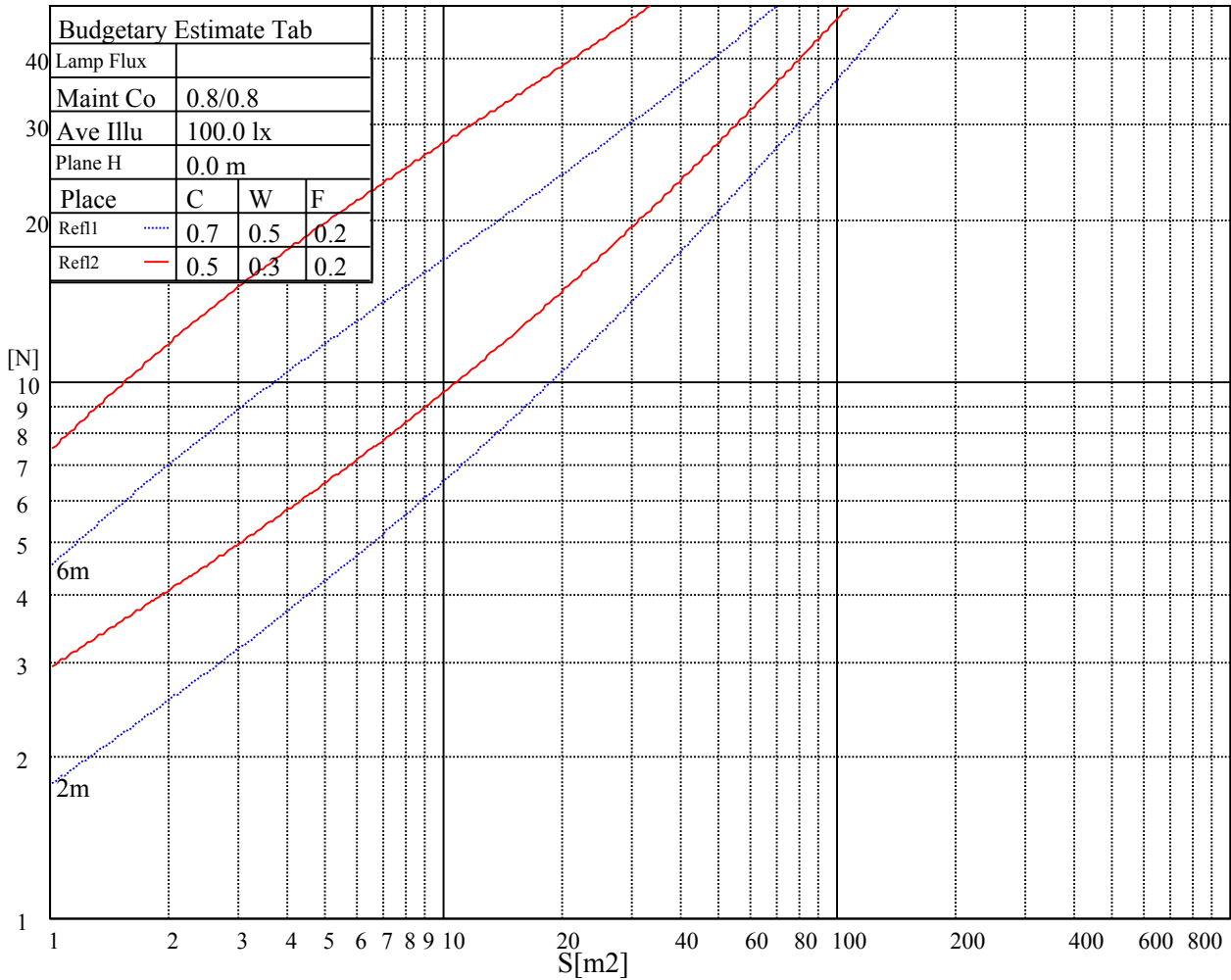
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

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 RHOF=20 CU															
0	1.09	1.09	1.09	1.01	1.01	1.01	0.88	0.88	0.88	0.75	0.75	0.75	0.63	0.63	0.63	0.58
1	0.90	0.84	0.80	0.83	0.79	0.74	0.71	0.68	0.64	0.60	0.57	0.55	0.50	0.48	0.46	0.41
2	0.76	0.68	0.62	0.70	0.63	0.58	0.60	0.54	0.50	0.50	0.46	0.42	0.41	0.38	0.35	0.31
3	0.65	0.56	0.49	0.61	0.53	0.46	0.51	0.45	0.40	0.43	0.38	0.34	0.35	0.31	0.28	0.24
4	0.57	0.48	0.41	0.53	0.45	0.38	0.45	0.38	0.33	0.38	0.32	0.28	0.31	0.27	0.23	0.20
5	0.50	0.41	0.34	0.47	0.38	0.32	0.40	0.33	0.28	0.33	0.28	0.24	0.27	0.23	0.20	0.16
6	0.45	0.36	0.29	0.42	0.33	0.27	0.36	0.29	0.24	0.30	0.24	0.20	0.25	0.20	0.17	0.14
7	0.40	0.31	0.25	0.37	0.29	0.24	0.32	0.25	0.21	0.27	0.22	0.18	0.22	0.18	0.15	0.12
8	0.36	0.28	0.22	0.34	0.26	0.21	0.29	0.23	0.18	0.25	0.19	0.16	0.20	0.16	0.13	0.11
9	0.33	0.25	0.19	0.31	0.23	0.18	0.27	0.20	0.16	0.23	0.17	0.14	0.19	0.15	0.12	0.09
10	0.30	0.23	0.17	0.28	0.21	0.16	0.24	0.18	0.14	0.21	0.16	0.12	0.17	0.13	0.10	0.08

Intensity data(cd)

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	47.27	46.66	44.20	44.51	44.81	46.35	45.12	44.81	47.58
22.5	43.59	42.36	43.59	42.97	45.74	46.35	48.81	50.03	44.81
45.0	45.12	45.43	46.35	44.81	51.87	50.03	43.59	50.03	52.49
67.5	40.52	45.43	42.05	44.51	45.12	45.43	42.05	46.04	47.58
90.0	44.20	44.51	46.04	43.28	45.12	45.12	44.81	52.49	49.11
112.5	45.74	42.67	42.97	46.96	43.89	49.11	45.74	44.81	46.04
135.0	43.89	45.43	41.44	44.81	45.12	43.59	44.51	40.21	42.97
157.5	40.52	45.12	43.28	43.89	41.75	42.36	42.36	40.21	41.75
180.0	47.27	44.20	43.59	48.50	41.75	41.75	46.04	44.81	42.67
202.5	43.59	45.74	40.21	40.52	46.35	42.05	40.21	45.12	43.89
225.0	45.12	46.35	45.12	44.51	44.51	41.75	43.89	46.96	43.59
247.5	40.52	51.57	47.27	43.28	44.81	44.20	47.58	44.81	45.12
270.0	44.20	46.35	43.89	44.51	44.20	41.13	38.68	47.88	50.95
292.5	45.74	46.66	46.96	43.89	42.05	45.43	48.50	44.81	44.51
315.0	43.89	47.58	48.50	44.20	44.51	47.27	45.43	47.88	40.52
337.5	40.52	46.66	45.74	43.28	45.43	49.11	45.43	47.27	47.58
360.0	47.27	46.66	44.20	44.51	44.81	46.35	45.12	44.81	47.58
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	49.42	48.81	48.19	51.87	49.73	48.19	45.12	48.81	45.74
22.5	46.96	47.88	48.50	49.42	50.34	46.35	46.04	42.67	48.81
45.0	44.51	45.43	50.03	53.10	52.80	51.87	51.26	46.35	51.87
67.5	46.35	52.80	49.11	47.58	44.51	52.18	50.95	47.88	45.12
90.0	45.43	45.12	47.27	45.74	45.12	46.96	47.88	45.74	47.88
112.5	48.50	40.82	43.59	46.04	45.12	44.20	43.28	48.81	48.50
135.0	43.28	46.96	44.20	45.74	42.67	46.96	38.98	42.97	42.05
157.5	44.51	39.90	48.50	45.74	42.97	41.13	42.05	42.97	39.90
180.0	39.29	41.44	38.37	46.66	41.44	41.44	38.98	41.13	39.90
202.5	44.81	42.36	44.81	45.74	42.05	45.43	43.59	40.82	41.75
225.0	43.59	41.75	45.12	44.51	50.03	43.89	39.90	46.35	43.59
247.5	42.97	41.13	48.19	45.43	42.36	42.67	46.96	45.43	42.67
270.0	49.73	47.58	44.81	42.67	47.88	44.81	42.67	45.74	39.90
292.5	47.88	48.50	45.12	46.35	46.66	48.81	46.04	51.26	43.59
315.0	49.42	47.58	48.81	49.73	45.12	44.81	48.50	46.66	39.60
337.5	53.10	40.82	49.42	47.27	50.95	50.03	46.35	51.87	46.35
360.0	49.42	48.81	48.19	51.87	49.73	48.19	45.12	48.81	45.74
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	45.12	45.12	49.42	42.97	40.21	41.13	35.61	35.61	37.45
22.5	49.73	48.19	47.58	45.12	43.59	40.52	43.59	38.06	32.54
45.0	48.19	44.81	46.35	48.50	44.20	44.51	43.59	36.22	35.91
67.5	43.28	48.19	45.74	44.51	41.75	39.90	32.84	36.53	33.76
90.0	45.12	46.96	43.28	42.97	44.51	41.13	32.23	38.37	34.99
112.5	48.50	44.51	36.53	38.68	38.06	36.22	36.53	30.70	32.23
135.0	41.13	41.44	38.37	42.05	34.07	32.54	36.22	36.83	28.24
157.5	42.97	40.21	42.36	36.22	35.61	35.91	36.22	34.38	30.70
180.0	42.36	37.14	40.52	40.21	42.36	39.29	29.77	32.23	26.40
202.5	43.59	40.82	43.28	36.53	35.91	33.15	31.62	30.70	27.63
225.0	41.44	37.75	42.05	34.07	39.90	35.61	36.22	37.75	33.46
247.5	40.52	40.82	36.83	41.75	42.67	40.52	38.06	38.37	29.16
270.0	45.43	42.67	40.21	35.61	33.76	41.13	38.37	33.46	33.15
292.5	41.44	38.37	36.83	40.52	39.90	34.07	35.91	34.38	36.22
315.0	37.75	37.14	45.74	44.20	38.37	39.60	38.98	35.61	30.39
337.5	46.96	44.81	43.89	41.13	42.05	40.52	37.14	36.83	38.68
360.0	45.12	45.12	49.42	42.97	40.21	41.13	35.61	35.61	37.45

Intensity data(cd)

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	28.55	27.32	26.70	20.87	24.56	19.03	14.73	8.59	2.15
22.5	34.99	28.85	29.47	24.86	21.79	12.58	6.14	0.00	0.00
45.0	29.77	30.39	23.94	22.41	25.78	11.36	6.14	3.68	0.61
67.5	31.92	24.25	23.33	20.57	11.97	8.29	11.05	1.53	1.23
90.0	31.00	26.40	22.71	19.95	14.43	7.98	5.53	4.30	2.46
112.5	29.77	25.17	25.17	19.03	14.43	15.04	3.38	2.15	3.99
135.0	29.77	24.86	27.01	19.95	17.80	7.67	13.81	7.37	1.23
157.5	29.77	23.64	22.71	19.64	13.51	14.43	11.66	3.68	0.00
180.0	28.85	26.09	23.94	19.95	16.58	11.97	10.44	7.67	0.31
202.5	27.32	27.01	19.64	18.72	18.42	16.88	9.52	4.60	0.00
225.0	27.63	20.87	24.86	17.19	18.72	15.35	10.74	5.53	1.84
247.5	27.01	33.15	21.49	21.49	13.51	13.20	13.51	5.83	0.00
270.0	33.46	28.85	24.25	19.34	22.71	15.96	17.80	7.37	1.84
292.5	41.44	31.62	31.62	22.41	24.25	18.72	17.19	10.13	0.00
315.0	31.00	27.01	26.70	21.18	22.71	24.56	21.49	11.36	2.15
337.5	33.76	34.07	28.85	26.09	22.71	20.57	18.42	9.21	4.30
360.0	28.55	27.32	26.70	20.87	24.56	19.03	14.73	8.59	2.15
C/γ(°)	180.0								
0.0	2.76								
22.5	1.53								
45.0	4.30								
67.5	1.53								
90.0	2.15								
112.5	0.00								
135.0	1.84								
157.5	4.30								
180.0	2.76								
202.5	1.53								
225.0	4.30								
247.5	1.53								
270.0	2.15								
292.5	0.00								
315.0	1.84								
337.5	4.30								
360.0	2.76								