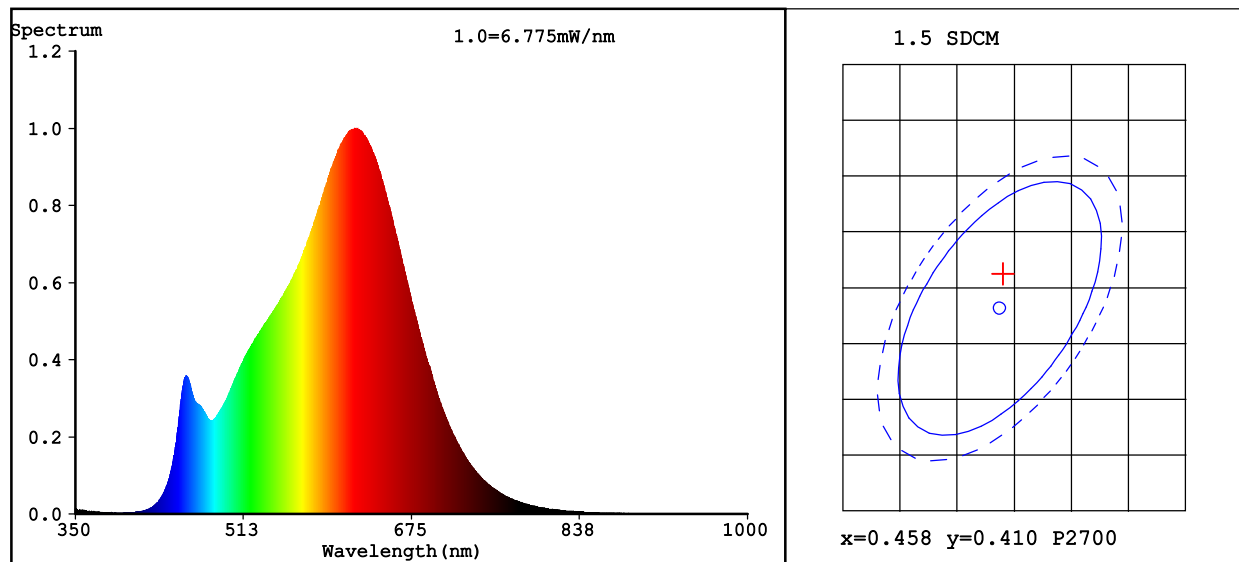


Spectrum Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.4581$ $y=0.4132$ / $u'=0.2602$ $v'=0.5281$

CCT=2745K (Duv=0.0011) Dominant WL: $\lambda_d = 583.6\text{nm}$ Purity=61.5%

Ratio: R=26.1% G=71.1% B=2.8% Peak WL: $\lambda_p = 619.8\text{nm}$ FWHM=144.6nm

Render Index: $R_a = 92.6$

R1 =93	R2 =98	R3 =98	R4 =92	R5 =93	R6 =98	R7 =90
R8 =79	R9 =56	R10=95	R11=93	R12=84	R13=95	R14=99 R15=88

Photo Parameters:

Flux = 313.5 lm Eff. : 97.56 lm/W $\Phi_e = 1.096\text{ W}$

Electrical parameters:

V = 120.03 V I = 0.03487 A P = 3.213 W PF = 0.7662

Status: Integral T = 1725 ms $I_p = 40016$ (61%)

Model: BA11-3-E26-927-F-F
 Tester: XCJ
 Temperature: 25.3Deg
 Manufacturer: RAB Lighting Inc.

Number: 1
 Date: 2018-10-30
 Humidity: 65.0%
 Remarks:

RAB Lighting Inc.

Client:

LumCAT: BA11-3-E26-927-F-F

Luminaire:

Report No:

Voltage(V): 120.0200

Test No: 255181-01-001

Current(A): 0.0360

LampCAT:

Power (W): 3.2520

Lamp flux(lm)

PF: 0.7506

Number of Lamps: 1

Ballast type:

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 316.86

Lumens(lm)/Power(W): 97.44

Central intensity(cd): 16.268

Maximum intensity(cd): 41.131

Angle of maximum intensity: C=270.0 γ =65.0

Beam Angle(50%Imax): [C0/180]Total=246.7

[C90/270]Total=243.2

Field angle(10%Imax): [C0/180]Total=N.A.

[C90/270]Total=352.6

Maximum s/h(1/2): C0_180=2.27 C90_270=3.01

Maximum s/h(1/4): C0_180=2.27 C90_270=2.91

Up flux rate of LUM(%): 37.69%

Down flux rate of LUM(%): 59.56%

CIE Type : General diffuse lighting

Output flux ratio in π solid angle : 28.205%

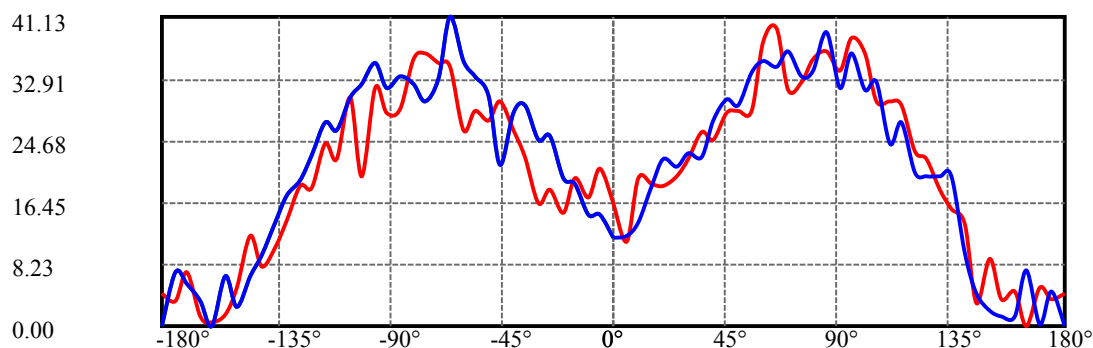
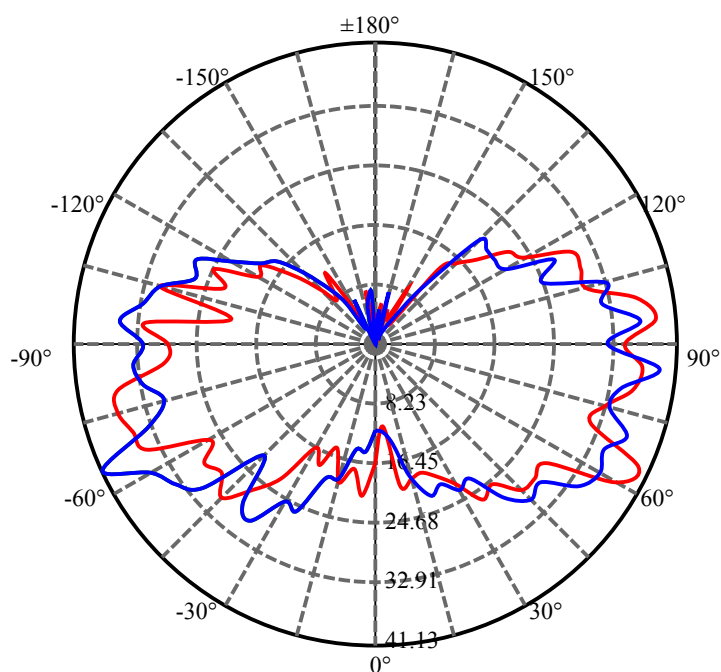
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	13.966	0.084	0.084	.026%	.026%
5.0	14.734	0.704	0.787	.222%	.248%
10.0	16.345	1.556	2.343	.491%	.739%
15.0	19.108	2.711	5.054	.856%	1.595%
20.0	18.877	3.539	8.593	1.117%	2.712%
25.0	21.103	4.889	13.482	1.543%	4.255%
30.0	21.563	5.910	19.391	1.865%	6.120%
35.0	25.016	7.865	27.256	2.482%	8.602%
40.0	26.628	9.382	36.638	2.961%	11.563%
45.0	27.395	10.618	47.257	3.351%	14.914%
50.0	29.007	12.180	59.437	3.844%	18.758%
55.0	31.002	13.920	73.357	4.393%	23.151%
60.0	33.611	15.955	89.312	5.035%	28.186%
65.0	37.371	18.565	107.877	5.859%	34.045%
70.0	33.918	17.471	125.348	5.514%	39.559%
75.0	32.920	17.430	142.778	5.501%	45.060%
80.0	34.378	18.558	161.336	5.857%	50.916%
85.0	34.378	18.772	180.108	5.924%	56.841%
90.0	31.386	17.204	197.312	5.429%	62.270%
95.0	35.299	19.275	216.587	6.083%	68.353%
100.0	29.928	16.155	232.742	5.098%	73.452%
105.0	30.772	16.292	249.035	5.142%	78.594%
110.0	25.554	13.162	262.197	4.154%	82.748%
115.0	26.935	13.381	275.577	4.223%	86.970%
120.0	21.256	10.090	285.668	3.184%	90.155%
125.0	20.029	8.993	294.661	2.838%	92.993%
130.0	17.419	7.314	301.975	2.308%	95.301%
135.0	14.964	5.800	307.775	1.830%	97.132%
140.0	10.206	3.596	311.371	1.135%	98.267%
145.0	6.523	2.051	313.422	.647%	98.914%
150.0	4.681	1.283	314.705	.405%	99.319%
155.0	3.300	0.764	315.469	.241%	99.560%
160.0	1.611	0.302	315.771	.095%	99.655%
165.0	2.993	0.425	316.196	.134%	99.789%
170.0	4.528	0.431	316.627	.136%	99.925%
175.0	4.681	0.224	316.85	.071%	99.996%
180.0	2.149	0.013	316.863	.004%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-30	19.39	6.12%
0-40	36.64	11.56%
0-60	89.31	28.19%
0-90	197.31	62.27%
0-120	285.67	90.15%
0-180	316.86	100.00%
60-90	123.95	39.12%
90-120	105.56	33.31%
90-130	121.87	38.46%
90-150	134.60	42.48%
90-180	136.74	43.16%
0-106.69	253.49	80.00%

ZONAL LUMEN SUMMARY

0-10	2.34
10-20	6.25
20-30	10.80
30-40	17.25
40-50	22.80
50-60	29.88
60-70	36.04
70-80	35.99
80-90	35.98
90-100	35.43
100-110	29.45
110-120	23.47
120-130	16.31
130-140	9.40
140-150	3.33
150-160	1.07
160-170	0.86
170-180	0.22



C270(Max): —————

C0/C180: —————

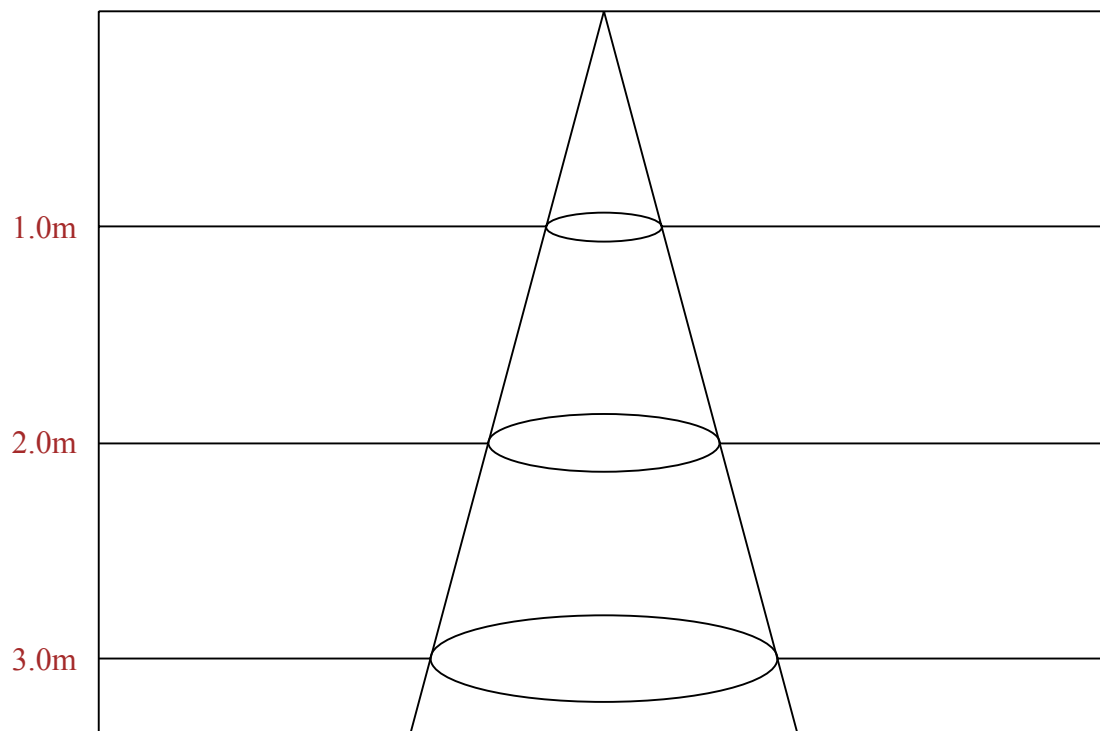
C90/C270: —————

Field angle(10%Imax):C0/180Left:0.0 Right:0.0

:C90/270Left:112.1 Right:240.5

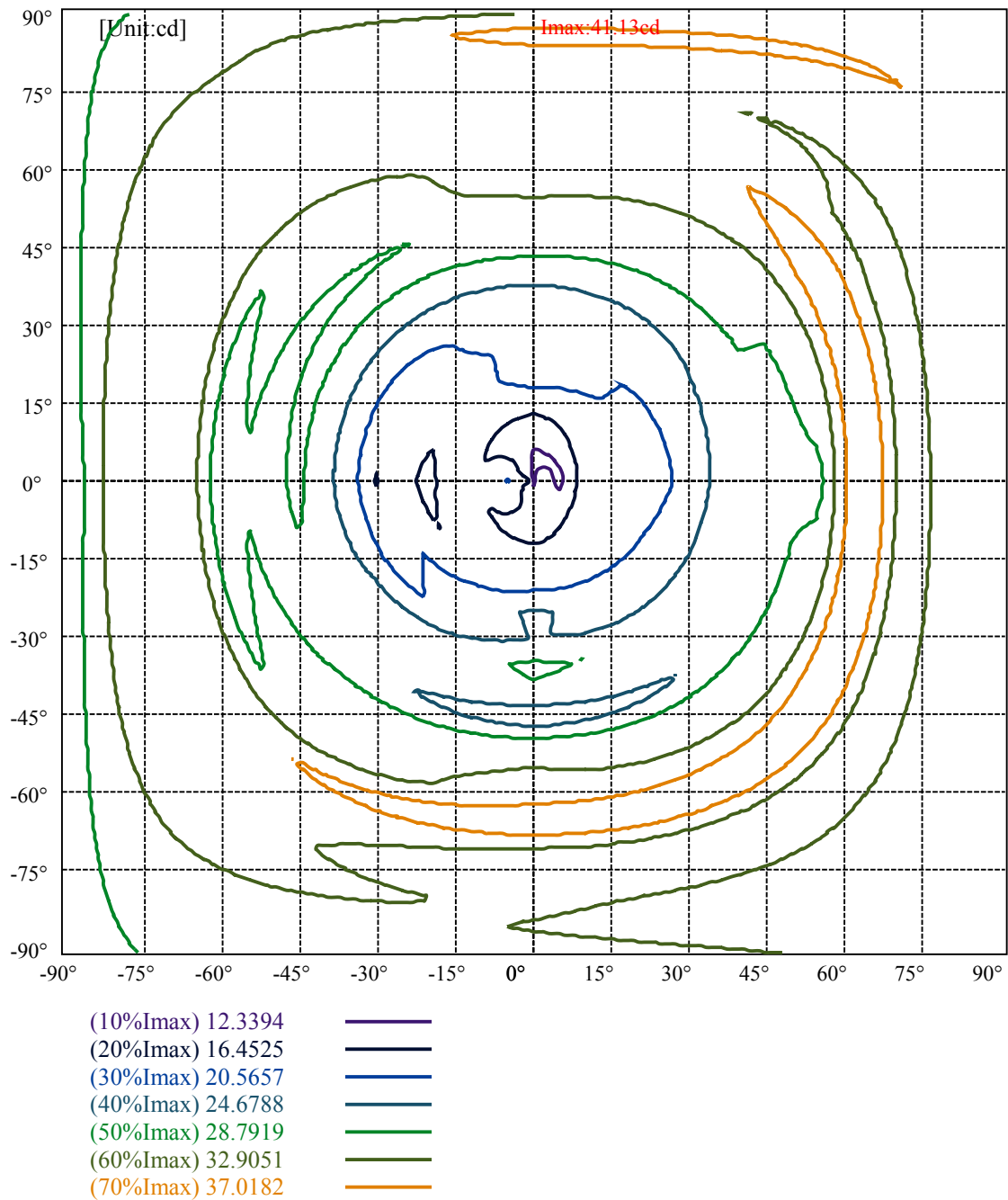
Beam Angle(50%Imax):C0/180Left:183.8 Right:62.9

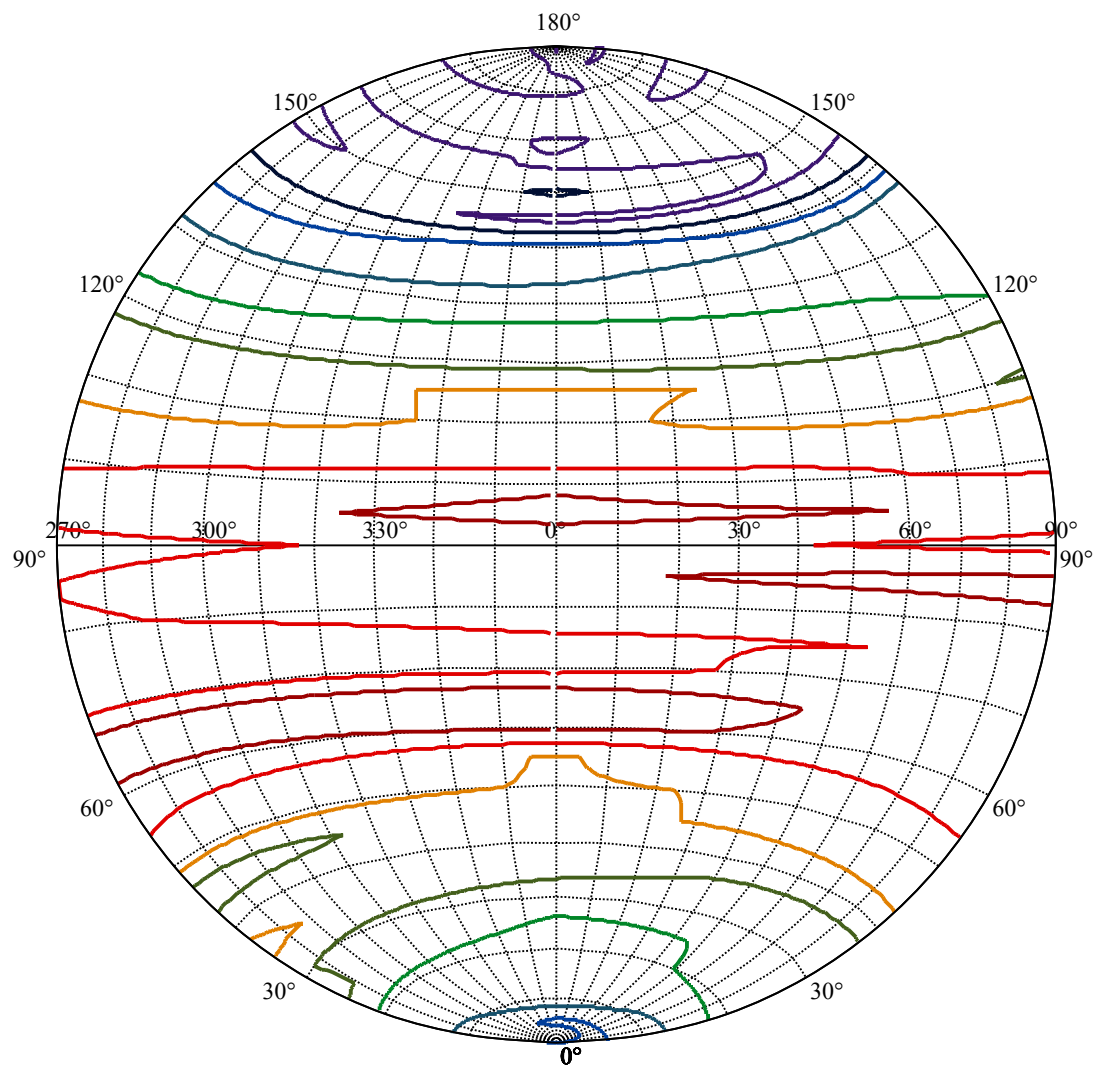
:C90/270Left:58.2 Right:185.0



Max , Ave

Beam angle of C270 plane 319.23





House

[Unit:cd]

Road

I_{max}:41.13

(10%I_{max}) 4.11314

(20%I_{max}) 8.22627

(30%I_{max}) 12.3394

(40%I_{max}) 16.4525

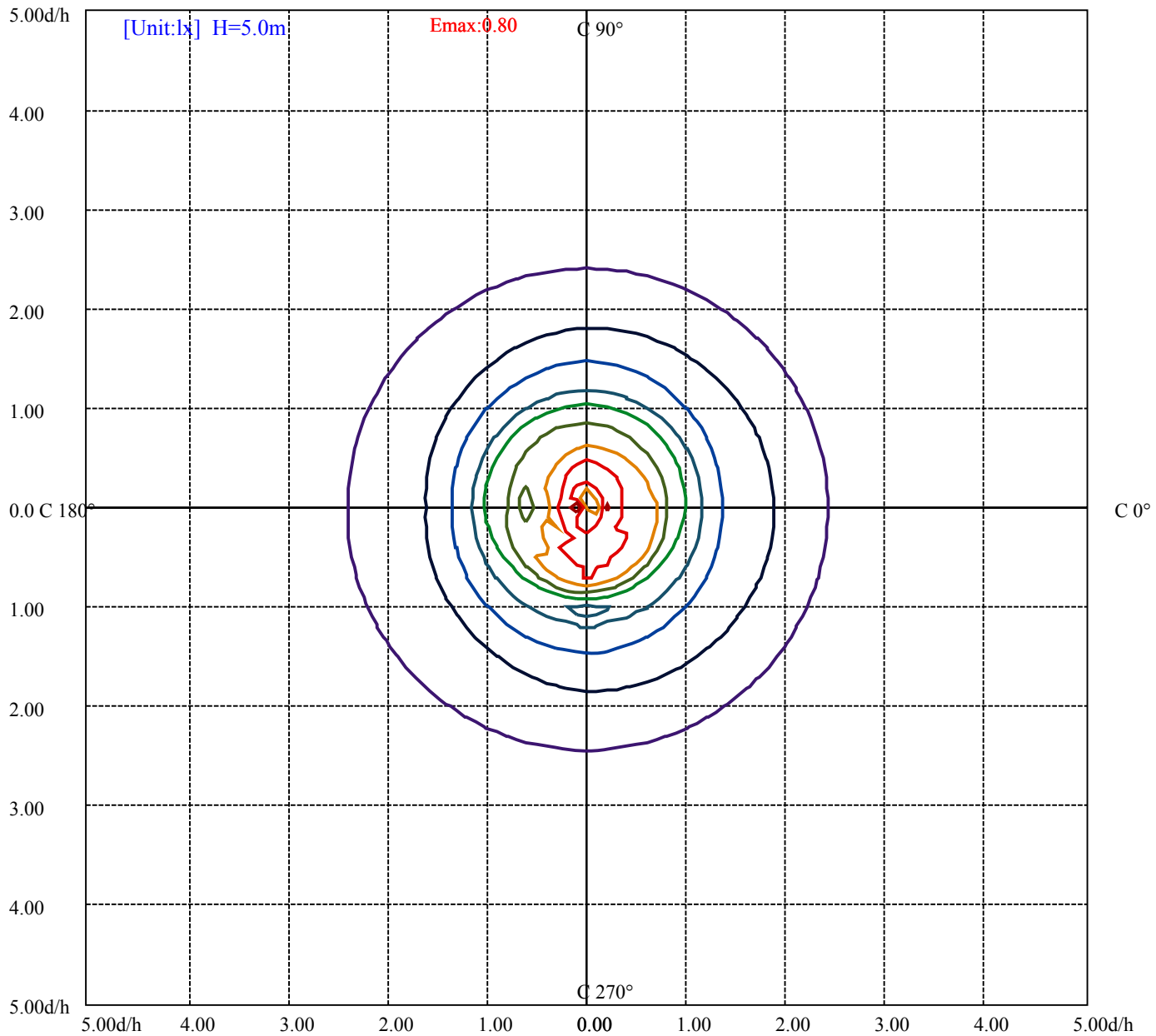
(50%I_{max}) 20.5657

(60%I_{max}) 24.6788

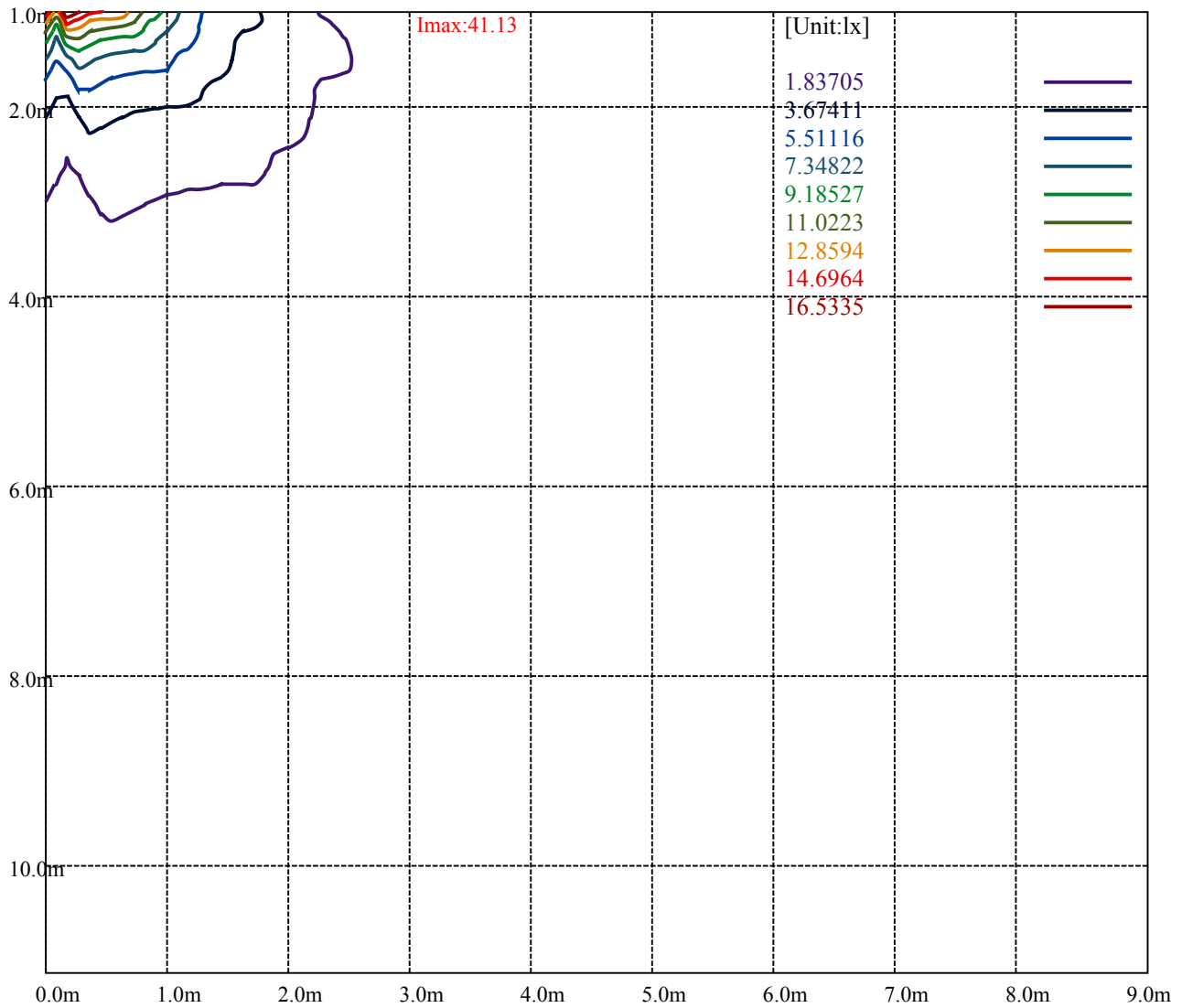
(70%I_{max}) 28.7919

(80%I_{max}) 32.9051

(90%I_{max}) 37.0182



(10%Emax) 0.0801884	—
(20%Emax) 0.1603768	—
(30%Emax) 0.2405648	—
(40%Emax) 0.3207532	—
(50%Emax) 0.40094	—
(60%Emax) 0.481128	—
(70%Emax) 0.56132	—
(80%Emax) 0.641508	—
(90%Emax) 0.721696	—



Luminance Table

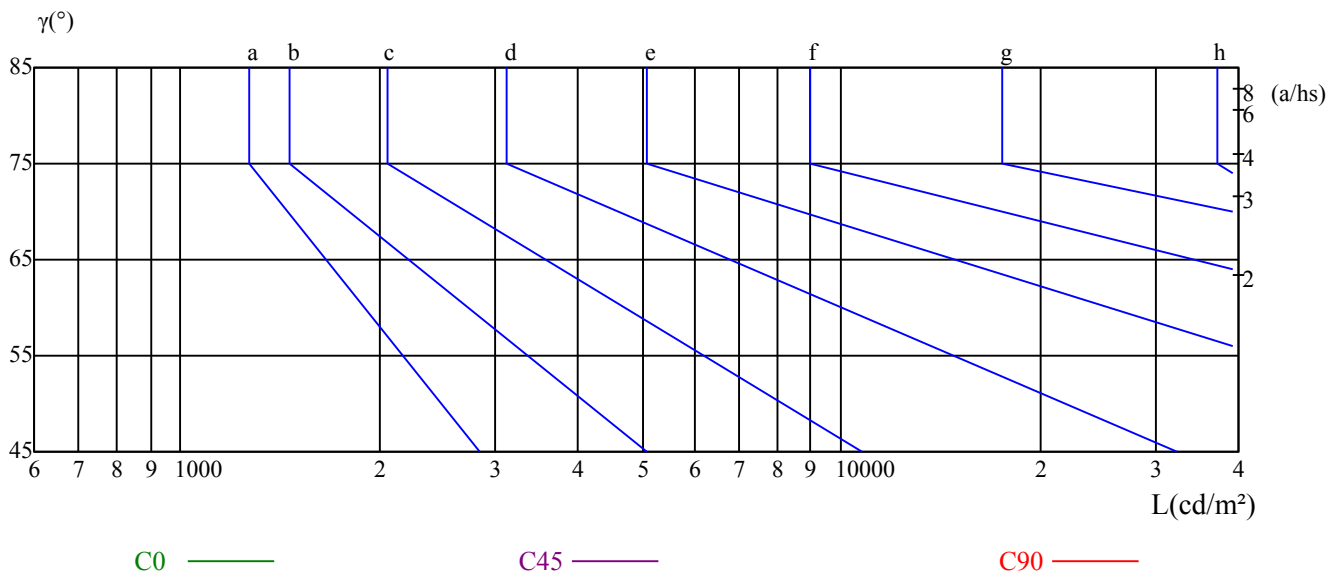
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

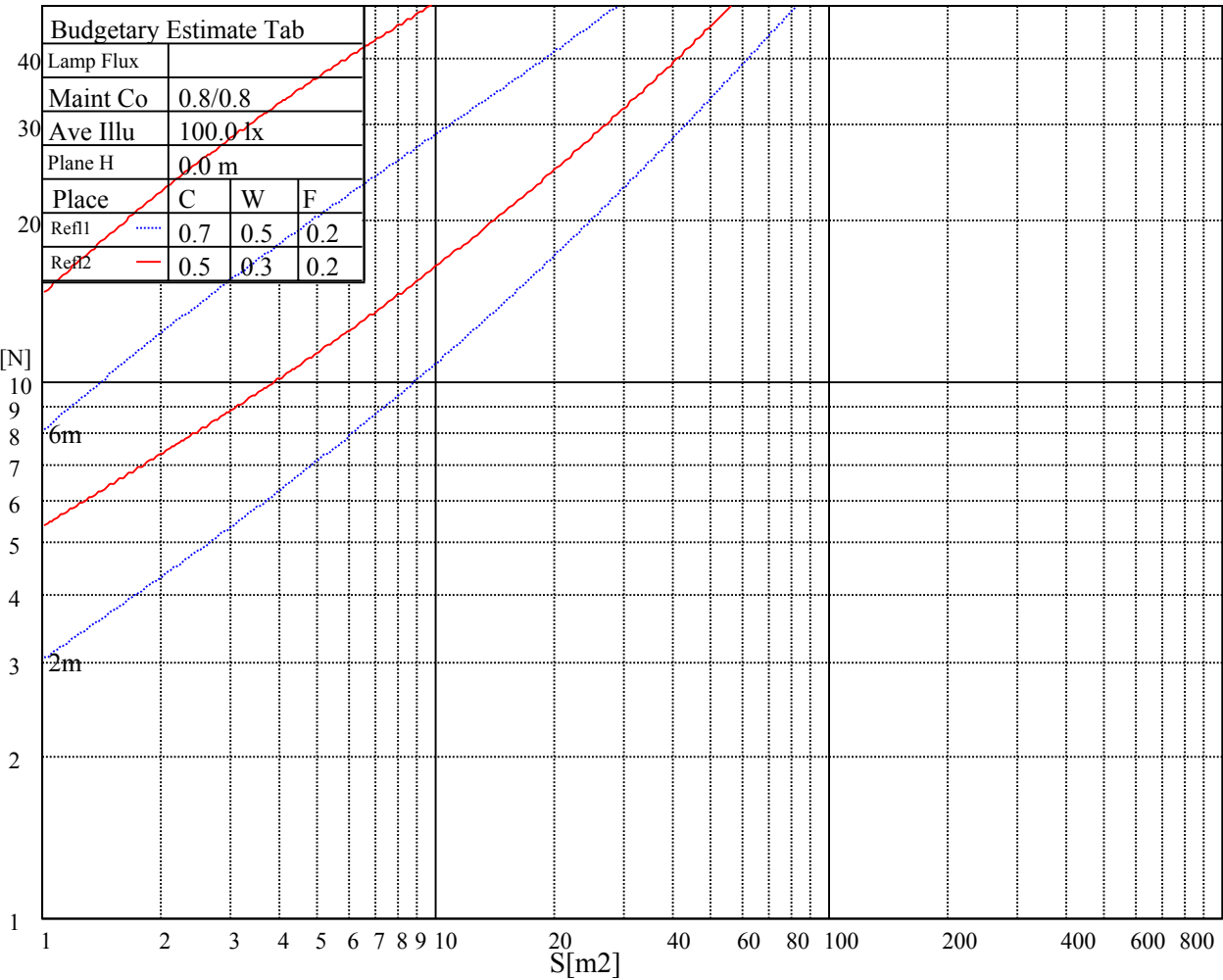
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

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





RHOC	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	1.02	1.02	1.02	0.89	0.89	0.89	0.76	0.76	0.76	0.65	0.65	0.65	0.60
1	0.89	0.83	0.78	0.83	0.77	0.73	0.71	0.67	0.63	0.60	0.57	0.54	0.50	0.48	0.45	0.40
2	0.74	0.66	0.59	0.69	0.61	0.55	0.59	0.53	0.48	0.49	0.45	0.41	0.41	0.37	0.34	0.29
3	0.63	0.54	0.46	0.59	0.50	0.43	0.50	0.43	0.38	0.42	0.36	0.32	0.34	0.30	0.26	0.22
4	0.55	0.45	0.38	0.51	0.42	0.35	0.43	0.36	0.30	0.36	0.30	0.26	0.29	0.25	0.21	0.17
5	0.48	0.38	0.31	0.45	0.36	0.29	0.38	0.31	0.25	0.32	0.26	0.21	0.26	0.21	0.17	0.14
6	0.43	0.33	0.26	0.40	0.31	0.25	0.34	0.27	0.21	0.28	0.22	0.18	0.23	0.18	0.15	0.12
7	0.38	0.29	0.23	0.35	0.27	0.21	0.30	0.23	0.18	0.25	0.20	0.15	0.21	0.16	0.13	0.10
8	0.34	0.26	0.20	0.32	0.24	0.18	0.27	0.21	0.16	0.23	0.17	0.13	0.19	0.14	0.11	0.08
9	0.31	0.23	0.17	0.29	0.21	0.16	0.25	0.18	0.14	0.21	0.16	0.12	0.17	0.13	0.10	0.07
10	0.29	0.20	0.15	0.27	0.19	0.14	0.23	0.17	0.12	0.19	0.14	0.10	0.16	0.12	0.09	0.06

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	16.27	11.36	19.64	19.03	18.72	19.95	22.10	25.78	24.86
90.0	11.66	11.97	13.81	18.72	22.10	21.18	23.02	22.41	27.32
180.0	16.27	20.87	17.19	19.64	15.04	18.11	16.27	22.41	26.09
270.0	11.66	14.73	14.73	19.03	19.64	25.17	24.86	29.47	28.24
360.0	16.27	11.36	19.64	19.03	18.72	19.95	22.10	25.78	24.86
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	28.24	28.55	28.55	37.75	39.60	31.31	32.54	35.61	36.53
90.0	30.08	29.47	33.76	35.30	34.38	36.53	33.15	34.07	38.98
180.0	29.77	27.32	28.55	26.09	34.38	34.99	36.22	35.61	28.85
270.0	21.49	30.70	33.15	35.30	41.13	32.84	29.77	32.23	33.15
360.0	28.24	28.55	28.55	37.75	39.60	31.31	32.54	35.61	36.53
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	34.07	38.37	36.22	29.77	29.77	29.47	23.33	22.10	18.11
90.0	31.62	36.22	31.31	32.54	24.25	27.01	20.57	19.95	19.95
180.0	28.24	31.62	19.95	30.39	22.10	24.25	18.42	18.72	14.12
270.0	31.62	34.99	32.23	30.39	26.09	27.01	22.71	19.34	17.50
360.0	34.07	38.37	36.22	29.77	29.77	29.47	23.33	22.10	18.11
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	15.65	13.51	3.07	8.90	3.68	4.60	0.00	5.22	3.68
90.0	19.95	9.82	4.30	2.15	1.23	1.23	7.37	0.31	4.60
180.0	10.44	7.98	11.97	5.22	1.53	0.61	1.23	7.06	3.38
270.0	13.81	9.52	6.75	2.46	6.75	0.00	3.38	5.53	7.06
360.0	15.65	13.51	3.07	8.90	3.68	4.60	0.00	5.22	3.68
C/γ(°)	180.0								
0.0	4.30								
90.0	0.00								
180.0	4.30								
270.0	0.00								
360.0	4.30								