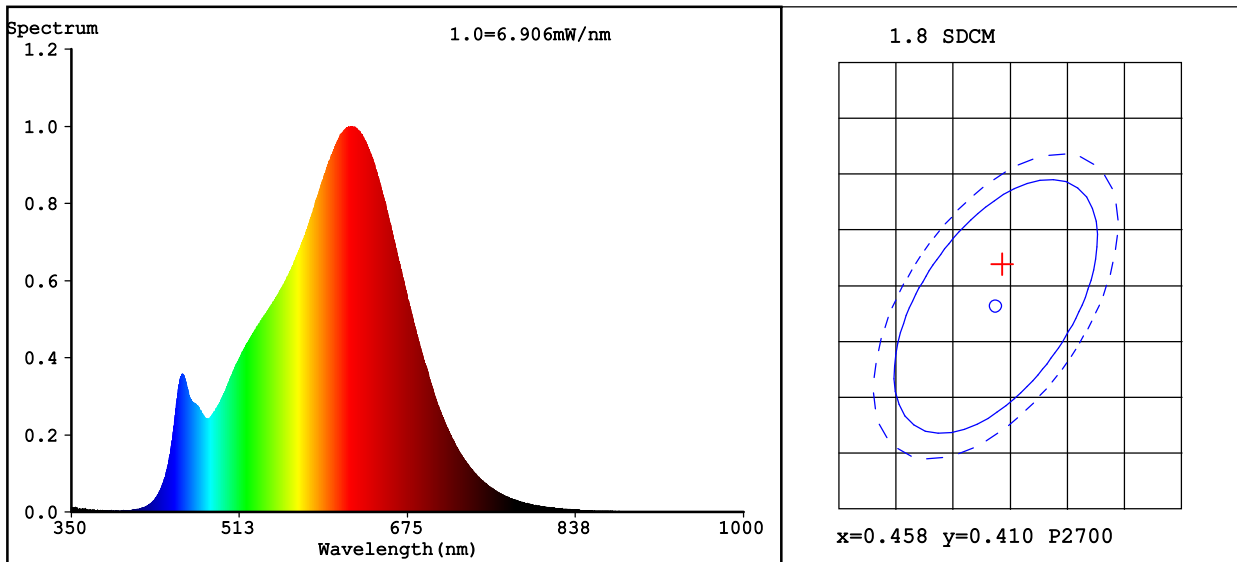


Spectrum Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.4583$ $y=0.4139$ / $u'=0.2600$ $v'=0.5284$
 CCT=2747K (Duv=0.0013) Dominant WL: $\lambda_d = 583.5\text{nm}$ Purity=61.8%
 Ratio: R=26.0% G=71.2% B=2.8% Peak WL: $\lambda_p = 620.4\text{nm}$ FWHM=145.6nm
 Render Index: Ra=92.5
 R1 =93 R2 =98 R3 =98 R4 =92 R5 =93 R6 =98 R7 =90
 R8 =79 R9 =56 R10=94 R11=93 R12=84 R13=95 R14=100 R15=88

Photo Parameters:

Flux = 320.4 lm Eff. : 99.16 lm/W Fe = 1.118 W

Electrical parameters:

V = 120.02 V I = 0.03540 A P = 3.231 W PF = 0.7587

Status: Integral T = 1701 ms Ip = 41541 (63%)

Model: B11-3-E12-927-F-C Number: 1
 Tester: XXL Date: 2018-09-14
 Temperature: 25.0Deg Humidity: 65.0%
 Manufacturer: RAB Lighting Inc. Remarks:

Client:RAB Lighting Inc.

LumCAT: B11-3-E12-927-F-C

Luminaire:

Report No:

Voltage(V): 120.1000

Test No: 253502-01-001

Current(A): 0.0350

LampCAT:

Power (W): 3.2180

Lamp flux(lm)

PF: 0.7567

Number of Lamps: 1

Ballast type:

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 370.09

Lumens(lm)/Power(W): 115.01

Central intensity(cd): 2.763

Maximum intensity(cd): 44.201

Angle of maximum intensity: C=180.0 γ =80.0

Beam Angle(50%Imax): [C0/180]Total=285.6

[C90/270]Total=280.1

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

[C90/270]Total=333.6

Maximum s/h(1/2): C0_180=5.63 C90_270=7.64

Maximum s/h(1/4): C0_180=5.24 C90_270=7.06

Up flux rate of LUM(%): 50.68%

Down flux rate of LUM(%): 49.32%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 18.629%

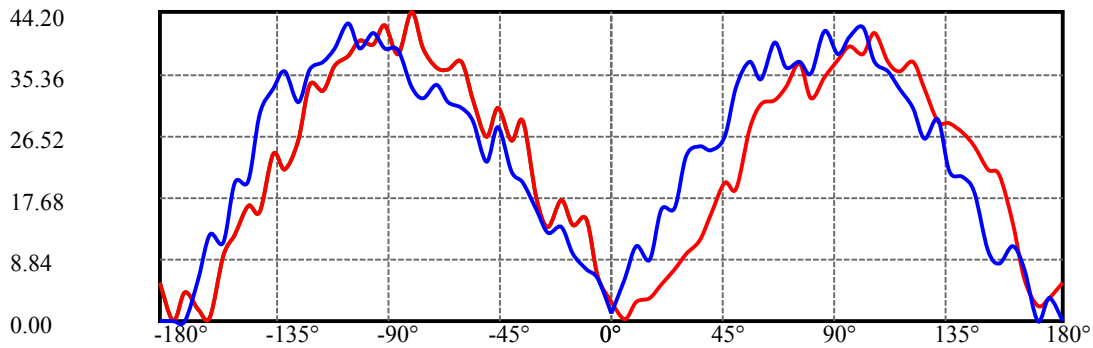
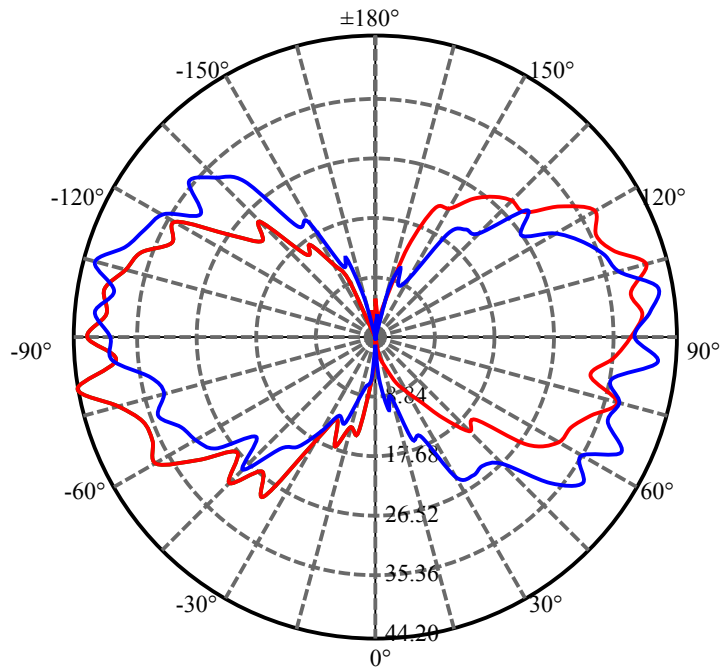
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1.995	0.000	0	.000%	.000%
5.0	4.758	0.081	0.081	.022%	.022%
10.0	8.825	0.486	0.567	.131%	.153%
15.0	8.902	1.052	1.618	.284%	.437%
20.0	12.969	1.802	3.421	.487%	.924%
25.0	12.431	2.664	6.085	.720%	1.644%
30.0	16.652	3.681	9.765	.994%	2.639%
35.0	21.180	5.571	15.336	1.505%	4.144%
40.0	21.793	7.170	22.506	1.937%	6.081%
45.0	26.014	8.852	31.358	2.392%	8.473%
50.0	25.400	10.389	41.747	2.807%	11.280%
55.0	31.155	12.297	54.044	3.323%	14.603%
60.0	33.304	14.900	68.943	4.026%	18.629%
65.0	34.685	16.528	85.472	4.466%	23.095%
70.0	34.916	17.623	103.095	4.762%	27.857%
75.0	36.220	18.594	121.689	5.024%	32.881%
80.0	36.220	19.383	141.072	5.237%	38.118%
85.0	38.292	20.247	161.319	5.471%	43.589%
90.0	39.213	21.221	182.54	5.734%	49.323%
95.0	40.134	21.726	204.266	5.870%	55.193%
100.0	39.827	21.727	225.993	5.871%	61.064%
105.0	39.673	21.272	247.265	5.748%	66.812%
110.0	37.064	20.058	267.323	5.420%	72.231%
115.0	34.685	18.167	285.491	4.909%	77.140%
120.0	34.302	16.771	302.262	4.532%	81.672%
125.0	29.084	14.651	316.913	3.959%	85.631%
130.0	28.700	12.564	329.477	3.395%	89.025%
135.0	26.705	11.195	340.672	3.025%	92.050%
140.0	23.251	9.250	349.922	2.499%	94.550%
145.0	19.952	7.208	357.13	1.948%	96.497%
150.0	15.961	5.288	362.419	1.429%	97.926%
155.0	12.431	3.593	366.012	.971%	98.897%
160.0	9.439	2.294	368.306	.620%	99.517%
165.0	5.295	1.214	369.52	.328%	99.845%
170.0	1.535	0.405	369.925	.109%	99.954%
175.0	1.688	0.115	370.04	.031%	99.986%
180.0	2.763	0.053	370.093	.014%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-30	9.77	2.64%
0-40	22.51	6.08%
0-60	68.94	18.63%
0-90	182.54	49.32%
0-120	302.26	81.67%
0-180	370.09	100.00%
60-90	128.50	34.72%
90-120	140.94	38.08%
90-130	168.16	45.44%
90-150	201.10	54.34%
90-180	208.72	56.40%
0-118.16	296.07	80.00%

ZONAL LUMEN SUMMARY

0-10	0.57
10-20	2.85
20-30	6.34
30-40	12.74
40-50	19.24
50-60	27.20
60-70	34.15
70-80	37.98
80-90	41.47
90-100	43.45
100-110	41.33
110-120	34.94
120-130	27.22
130-140	20.45
140-150	12.50
150-160	5.89
160-170	1.62
170-180	0.12



C180(Max): ———

C0/C180: ———

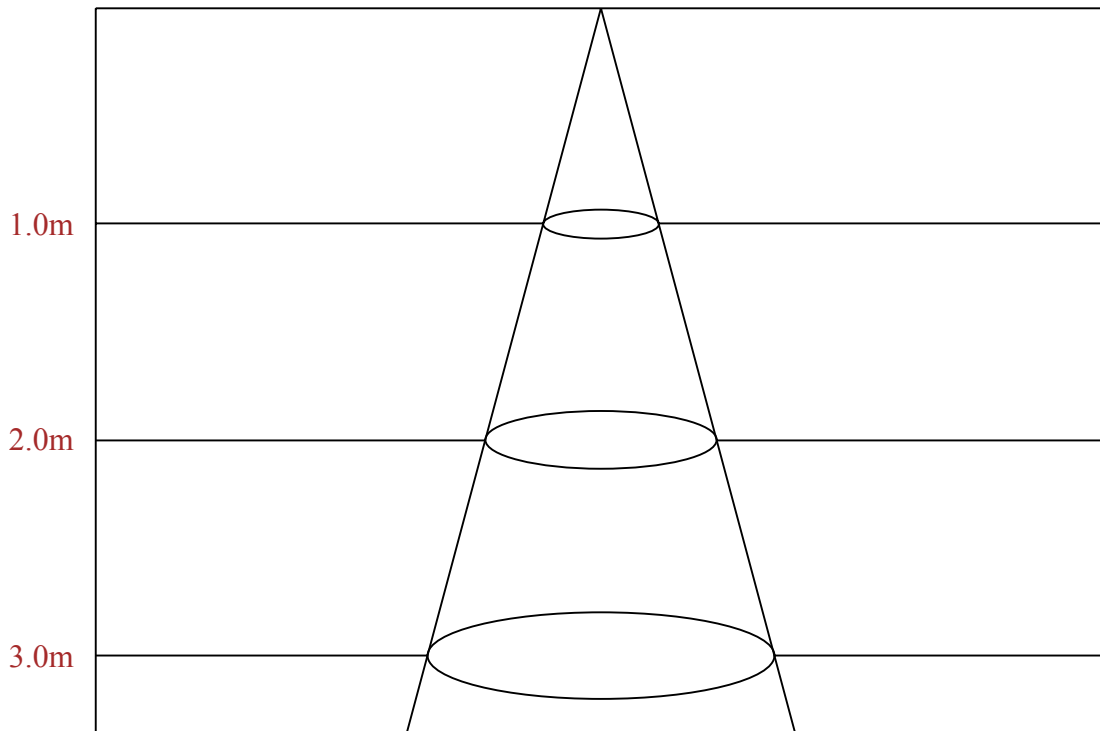
C90/C270: ———

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

:C90/270Left:61.5 Right:272.1

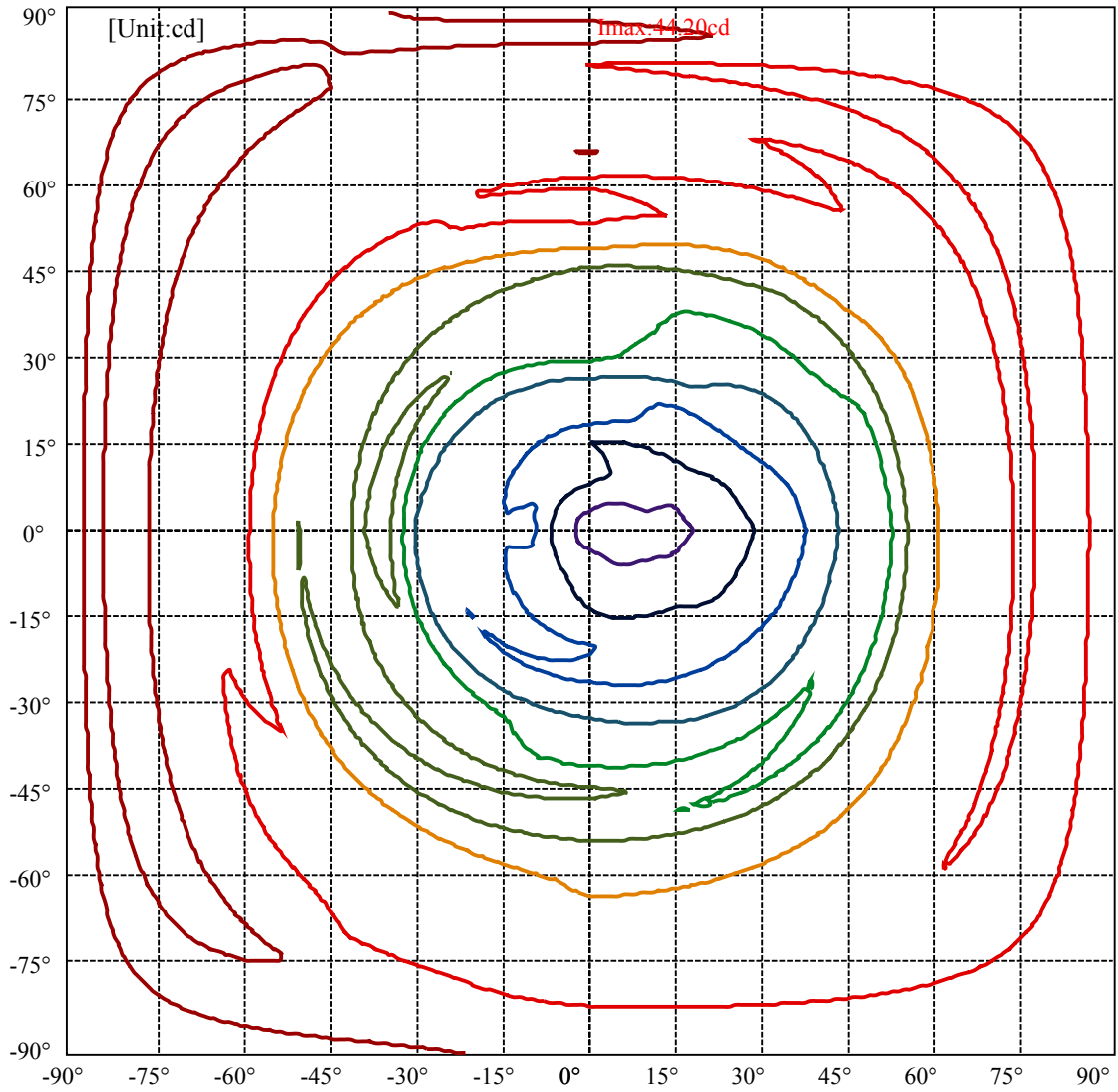
Beam Angle(50%Imax):C0/180Left:56.1 Right:229.5










:C90/270Left:39.3 Right:240.8



Max , Ave

Beam angle of C180 plane 185.53

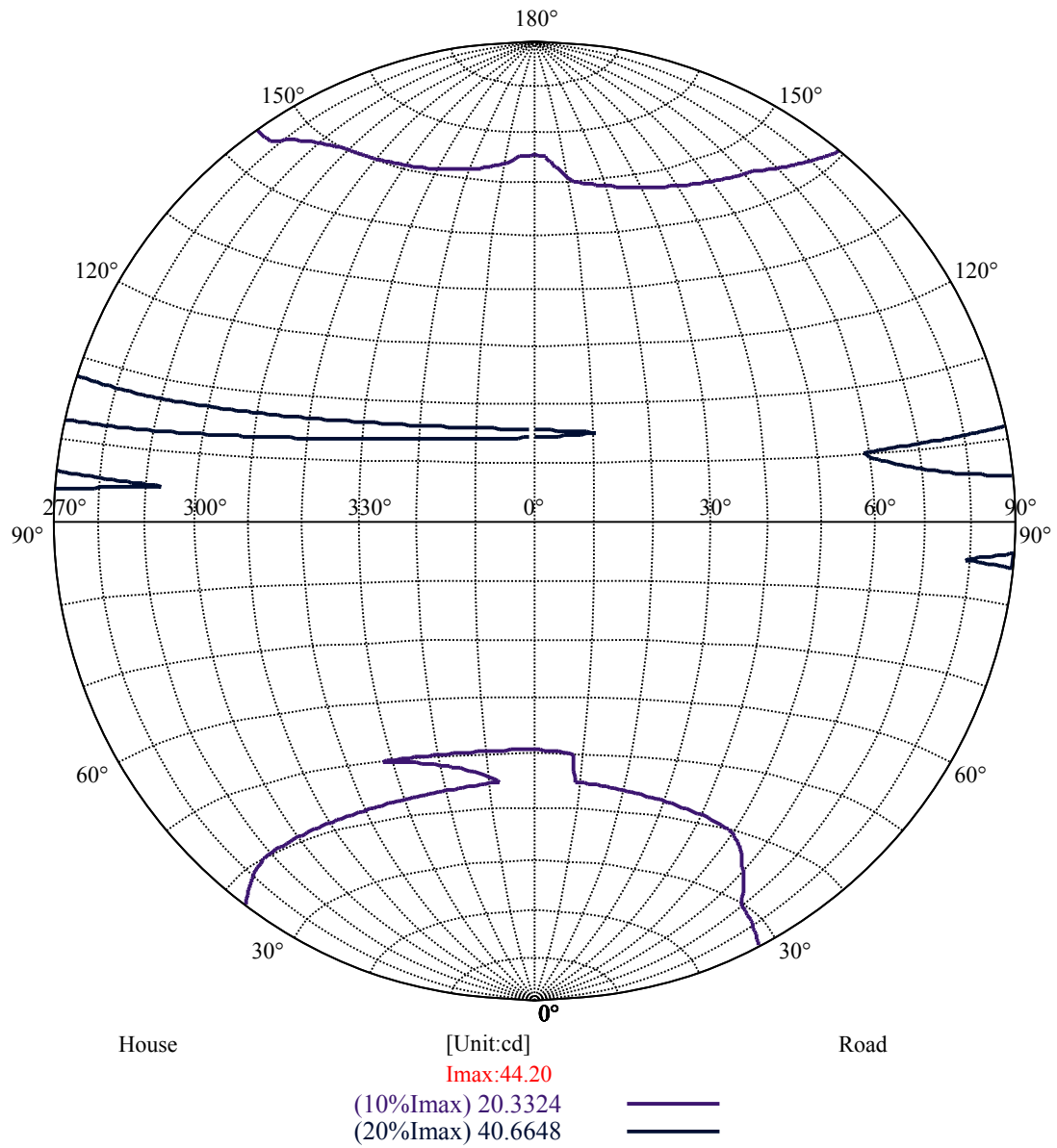


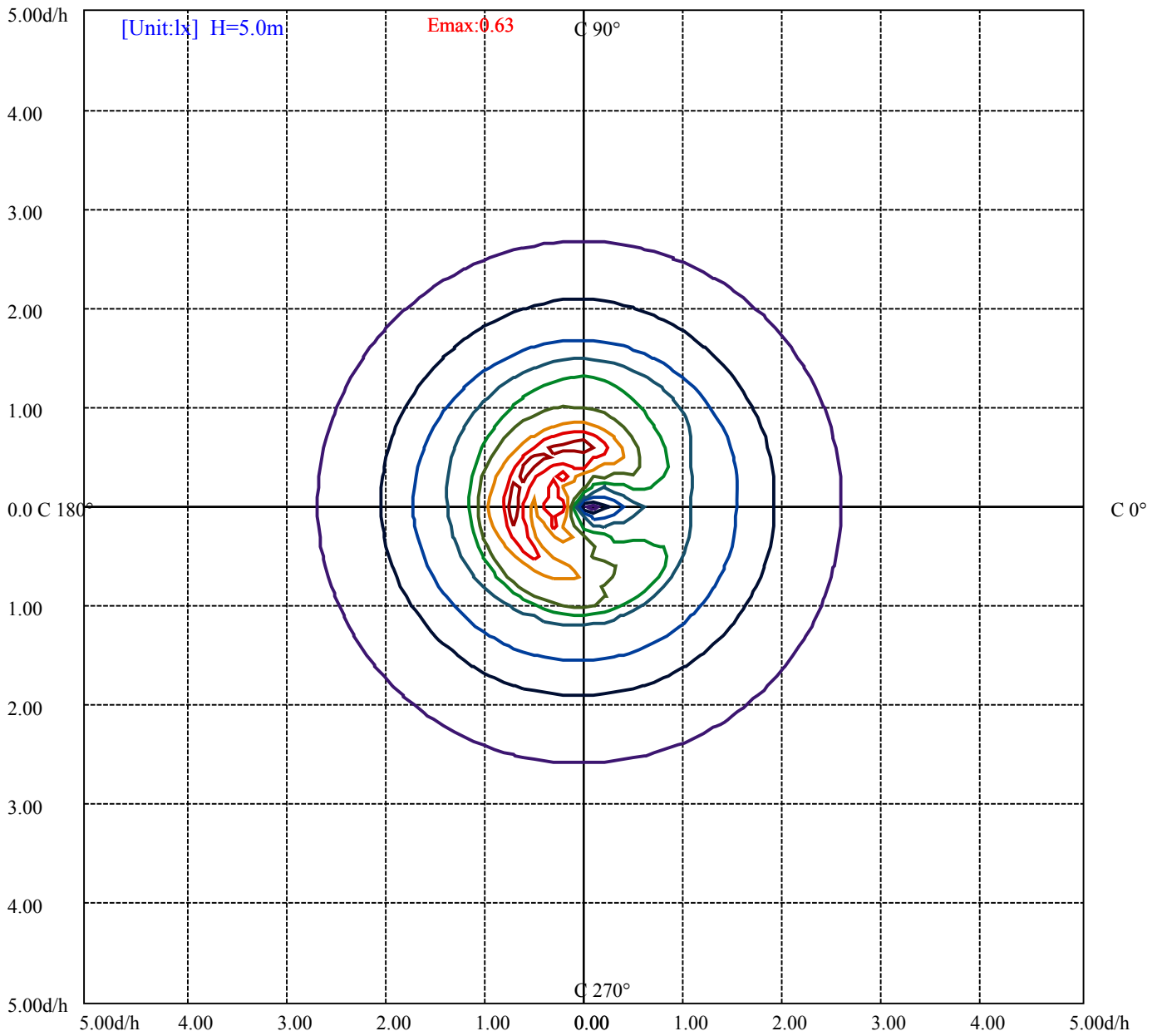
(10%Imax)	4.42009	
(20%Imax)	8.84017	
(30%Imax)	13.2603	
(40%Imax)	17.6803	
(50%Imax)	22.1004	
(60%Imax)	26.5205	
(70%Imax)	30.9406	
(80%Imax)	35.3607	
(90%Imax)	39.7808	

Equipment: Goniophotometer
Temperature(°C): 0.0

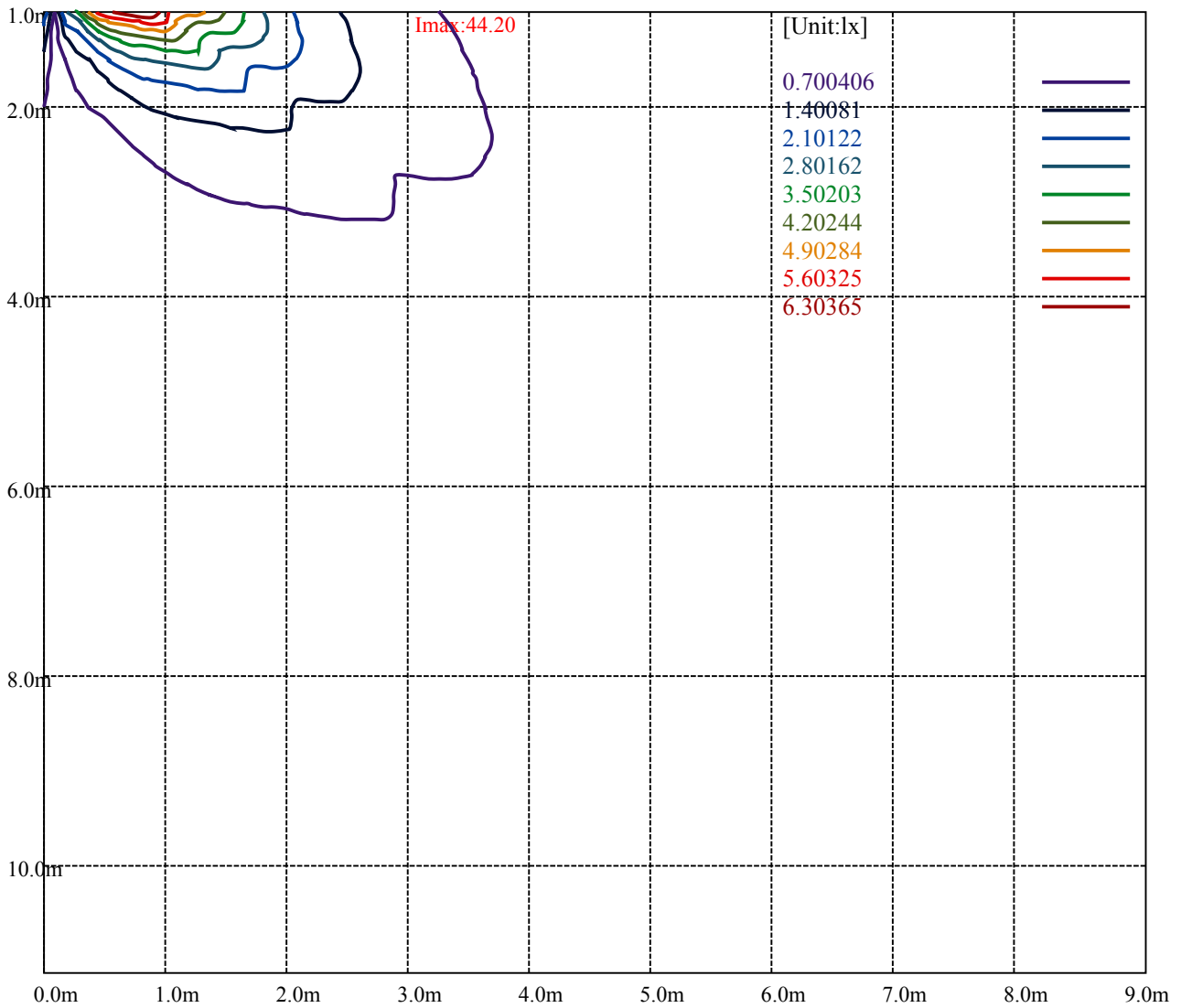
Date: 2018/9/11
Humidity(%): 0.0%

Operator: WANG
Distance(m): 17.52





- (10%Emax) 0.0627476
- (20%Emax) 0.1254956
- (30%Emax) 0.1882432
- (40%Emax) 0.2509908
- (50%Emax) 0.3137388
- (60%Emax) 0.3764864
- (70%Emax) 0.439236
- (80%Emax) 0.50198
- (90%Emax) 0.564728



Luminance Table

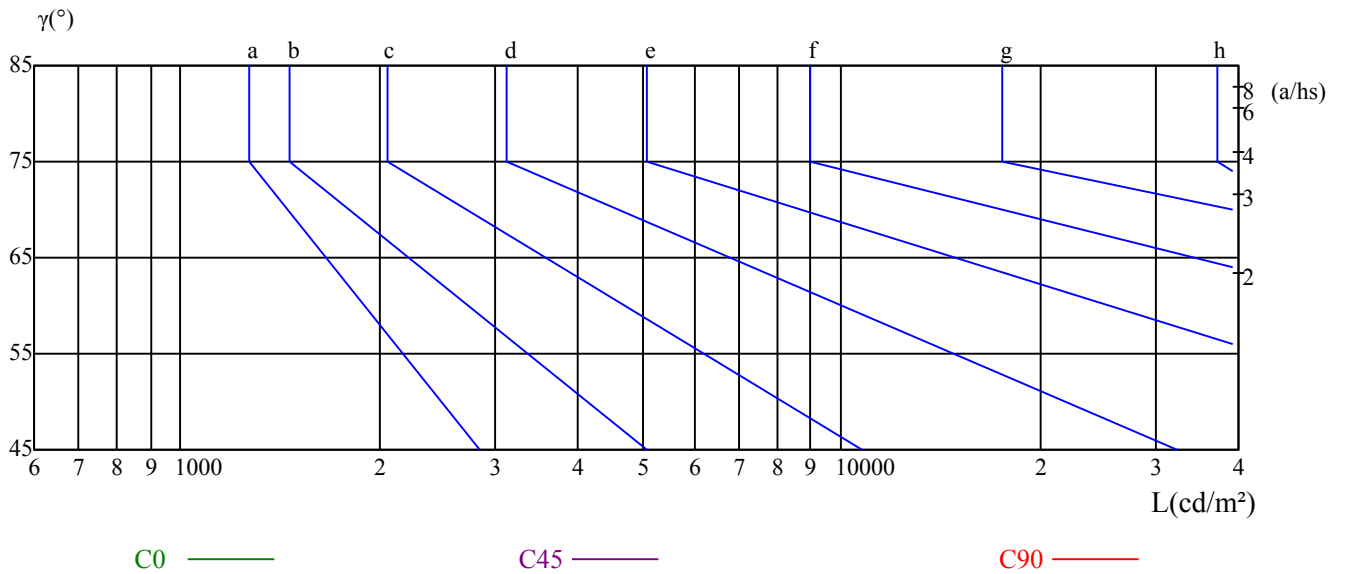
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

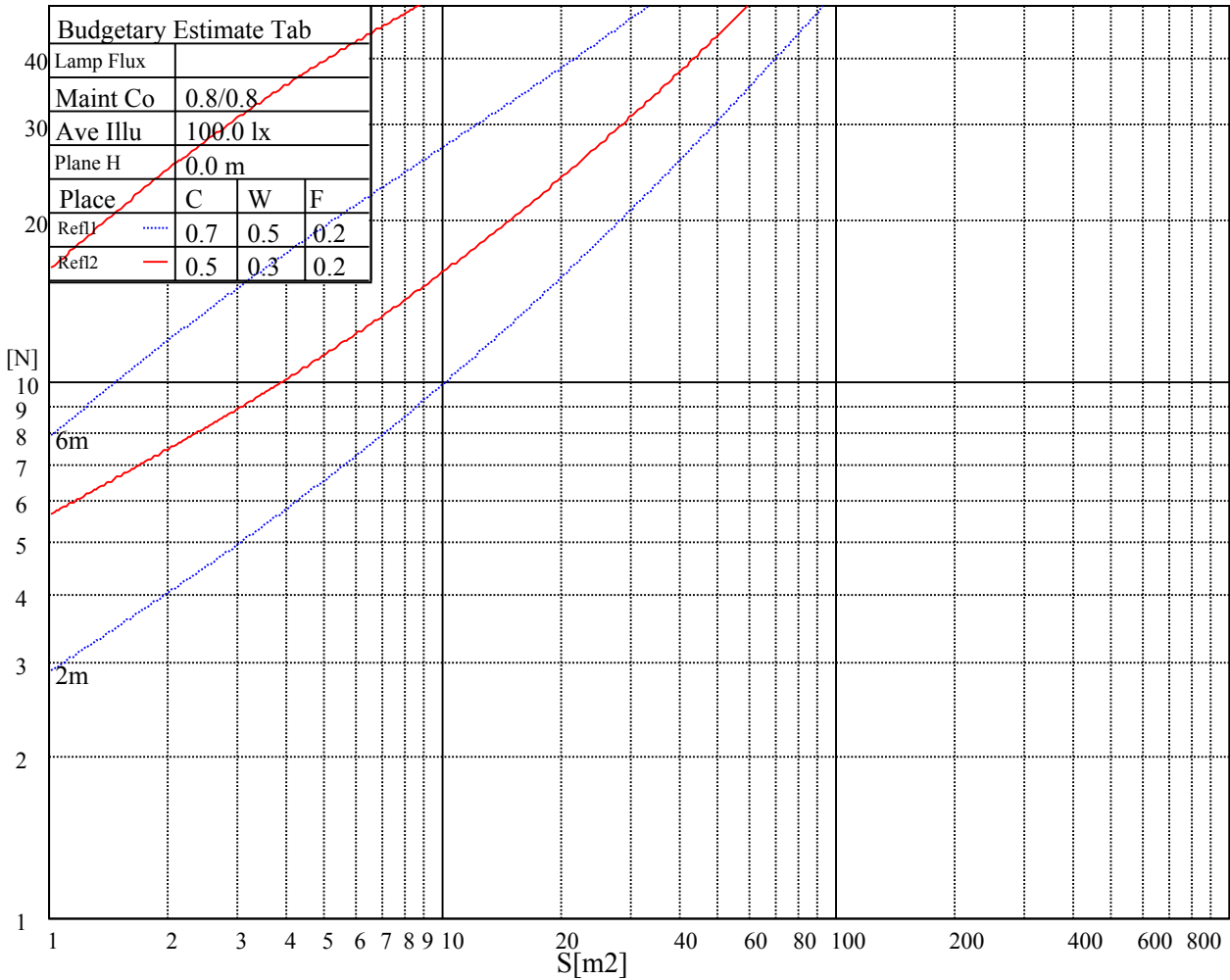
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

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	0.99	0.99	0.99	0.83	0.83	0.83	0.69	0.69	0.69	0.56	0.56	0.56	0.49
1	0.85	0.79	0.74	0.78	0.72	0.68	0.64	0.60	0.56	0.52	0.48	0.46	0.40	0.38	0.35	0.30
2	0.71	0.63	0.56	0.65	0.57	0.51	0.53	0.47	0.42	0.42	0.38	0.34	0.32	0.29	0.26	0.21
3	0.61	0.51	0.44	0.55	0.47	0.40	0.45	0.38	0.33	0.35	0.30	0.26	0.27	0.23	0.19	0.15
4	0.53	0.43	0.35	0.48	0.39	0.32	0.39	0.32	0.27	0.30	0.25	0.21	0.23	0.19	0.15	0.11
5	0.46	0.36	0.29	0.42	0.33	0.27	0.34	0.27	0.22	0.27	0.21	0.17	0.20	0.16	0.12	0.09
6	0.41	0.31	0.25	0.37	0.29	0.22	0.30	0.23	0.18	0.24	0.18	0.14	0.18	0.13	0.10	0.07
7	0.36	0.27	0.21	0.33	0.25	0.19	0.27	0.20	0.16	0.21	0.16	0.12	0.16	0.12	0.09	0.06
8	0.33	0.24	0.18	0.30	0.22	0.16	0.24	0.18	0.13	0.19	0.14	0.10	0.14	0.10	0.07	0.05
9	0.30	0.21	0.16	0.27	0.19	0.14	0.22	0.16	0.12	0.17	0.13	0.09	0.13	0.09	0.06	0.04
10	0.27	0.19	0.14	0.25	0.17	0.13	0.20	0.14	0.10	0.16	0.11	0.08	0.12	0.08	0.06	0.03

C35-1CD 3.3W 120V 2700K E12

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	2.76	0.31	2.76	3.38	5.22	7.37	9.52	11.66	15.35
90.0	1.23	6.14	10.74	8.90	15.96	16.27	23.64	24.86	24.56
180.0	2.76	6.45	14.43	13.81	17.19	13.51	17.50	28.55	25.78
270.0	1.23	6.14	7.37	9.52	13.51	12.58	15.96	19.64	21.49
360.0	2.76	0.31	2.76	3.38	5.22	7.37	9.52	11.66	15.35
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	19.64	19.03	27.32	31.00	31.62	33.46	36.83	31.92	34.99
90.0	26.40	33.46	37.14	34.69	39.90	36.22	37.14	35.30	41.44
180.0	30.39	26.40	31.62	37.14	35.91	36.22	38.98	44.20	38.06
270.0	27.63	22.71	28.55	30.39	31.31	33.76	31.92	33.46	38.68
360.0	19.64	19.03	27.32	31.00	31.62	33.46	36.83	31.92	34.99
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	37.45	39.29	38.06	41.13	37.14	35.61	37.14	33.15	28.55
90.0	38.06	40.52	42.05	37.14	35.61	33.15	30.39	26.09	28.85
180.0	42.36	39.60	40.21	37.75	36.53	32.84	33.76	25.78	21.79
270.0	38.98	41.13	38.98	42.67	38.98	37.14	35.91	31.31	35.61
360.0	37.45	39.29	38.06	41.13	37.14	35.61	37.14	33.15	28.55
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	28.24	27.01	24.86	21.79	20.87	14.12	6.14	2.15	3.38
90.0	21.49	20.57	18.42	10.13	8.29	10.74	7.37	0.00	3.38
180.0	23.94	15.65	16.58	12.28	9.21	0.61	1.53	3.99	0.00
270.0	33.15	29.77	19.95	19.64	11.36	12.28	6.14	0.00	0.00
360.0	28.24	27.01	24.86	21.79	20.87	14.12	6.14	2.15	3.38
C/γ(°)	180.0								
0.0	5.53								
90.0	0.00								
180.0	5.53								
270.0	0.00								
360.0	5.53								