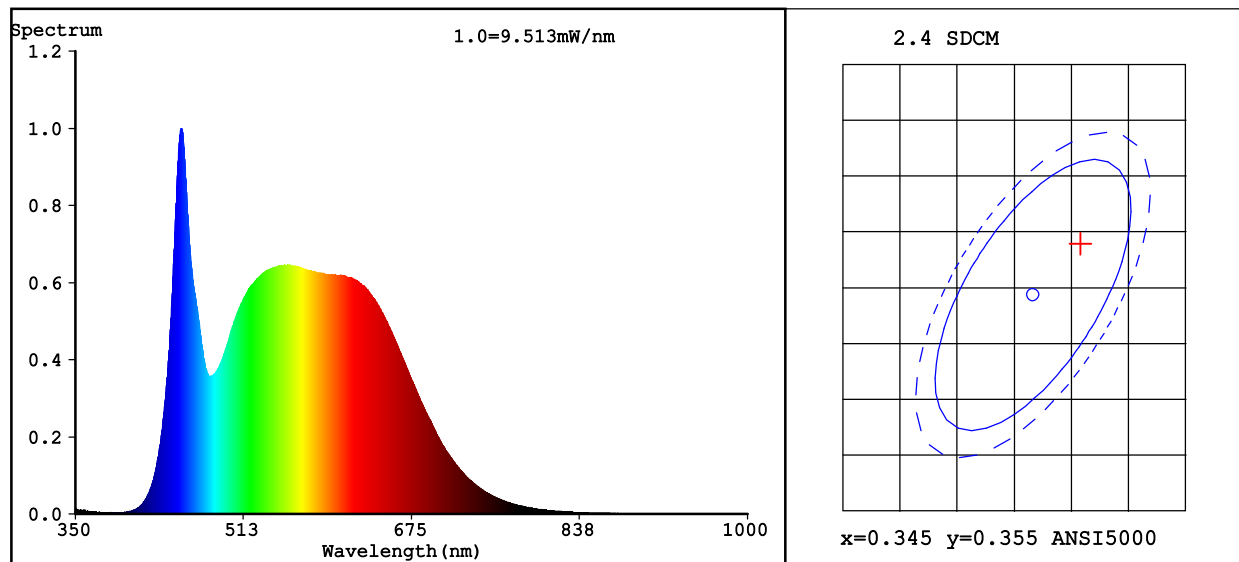


Spectrum Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.3488$ $y=0.3599$ $u'=0.2108$ $v'=0.4892$

CCT=4891K (Duv=0.0026) Dominant WL:Ld =571.7nm Purity=12.7%

Ratio:R=17.2% G=77.8% B=5.0% Peak WL:Lp=452.5nm FWHM=27.1nm

Render Index:Ra=92.1

R1 =92	R2 =94	R3 =95	R4 =91	R5 =90	R6 =90	R7 =96
R8 =88	R9 =66	R10=85	R11=90	R12=66	R13=93	R14=97
						R15=90

Photo Parameters:

Flux = 417.9 lm Eff. : 112.64 lm/W Fe = 1.452 W

Electrical parameters:

V = 119.94 V I = 0.04001 A P = 3.710 W PF = 0.7723

Status: Integral T = 2000 ms Ip = 45448 (69%)

Model:G16.5-3-E26-950-F-C
 Tester:SY
 Temperature:24.8Deg
 Manufacturer:RAB Lighting Inc.

Number:1
 Date:2018-09-30
 Humidity:65.0%
 Remarks:

RAB Lighting Inc.

Client:

LumCAT: G16.5-3-E26-950-F-C

Luminaire:

Report No:

Voltage(V): 120.0300

Test No: 255182-01-001

Current(A): 0.0390

LampCAT:

Power (W): 3.5620

Lamp flux(lm)

PF: 0.7694

Number of Lamps: 1

Ballast type:

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 478.91

Lumens(lm)/Power(W): 134.45

Central intensity(cd): 5.525

Maximum intensity(cd): 56.479

Angle of maximum intensity: C=270.0 γ =80.0

Beam Angle(50%Imax): [C0/180]Total=271.3

[C90/270]Total=268.8

Field angle(10%Imax): [C0/180]Total=295.6

[C90/270]Total=292.4

Maximum s/h(1/2): C0_180=4.67 C90_270=4.27

Maximum s/h(1/4): C0_180=4.39 C90_270=3.99

Up flux rate of LUM(%): 42.24%

Down flux rate of LUM(%): 54.88%

CIE Type : General diffuse lighting

Output flux ratio in π solid angle : 24.894%

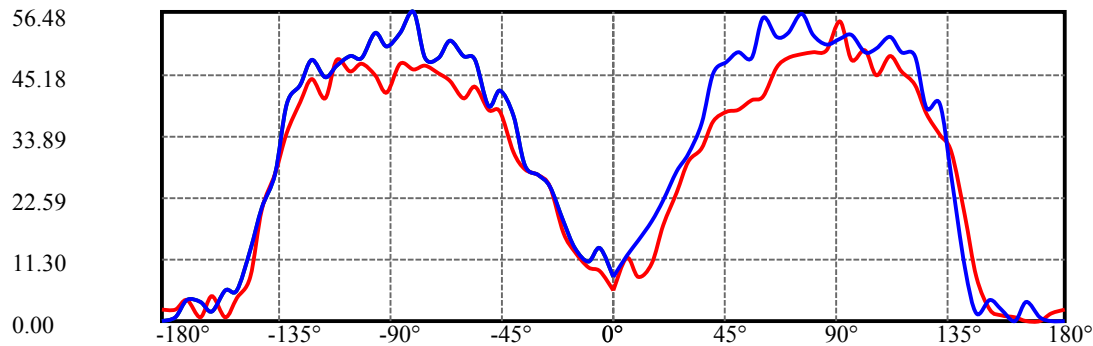
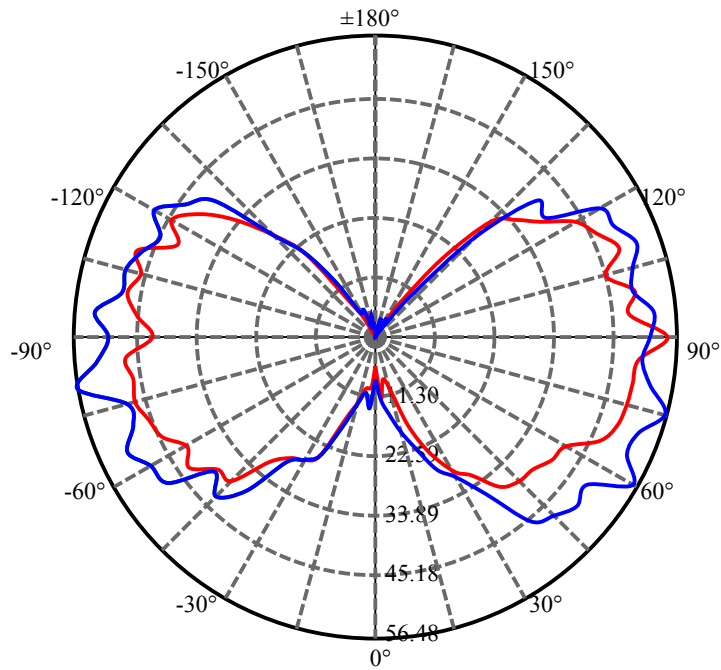
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	6.753	0.040	0.04	.008%	.008%
5.0	11.511	0.550	0.59	.115%	.123%
10.0	10.820	1.030	1.62	.215%	.338%
15.0	13.659	1.938	3.558	.405%	.743%
20.0	18.494	3.467	7.025	.724%	1.467%
25.0	25.016	5.795	12.82	1.210%	2.677%
30.0	28.239	7.740	20.56	1.616%	4.293%
35.0	31.002	9.747	30.307	2.035%	6.328%
40.0	37.448	13.194	43.501	2.755%	9.083%
45.0	41.515	16.091	59.592	3.360%	12.443%
50.0	41.438	17.400	76.992	3.633%	16.076%
55.0	44.661	20.053	97.045	4.187%	20.264%
60.0	46.503	22.075	119.12	4.609%	24.873%
65.0	48.345	24.017	143.137	5.015%	29.888%
70.0	48.498	24.980	168.117	5.216%	35.104%
75.0	49.956	26.450	194.567	5.523%	40.627%
80.0	50.954	27.505	222.072	5.743%	46.370%
85.0	49.803	27.195	249.267	5.678%	52.049%
90.0	49.496	27.130	276.398	5.665%	57.714%
95.0	49.342	26.943	303.341	5.626%	63.340%
100.0	48.421	26.138	329.479	5.458%	68.798%
105.0	47.117	24.947	354.426	5.209%	74.007%
110.0	48.652	25.060	379.486	5.233%	79.240%
115.0	45.045	22.377	401.863	4.673%	83.912%
120.0	45.889	21.784	423.647	4.549%	88.461%
125.0	39.980	17.951	441.598	3.748%	92.209%
130.0	36.911	15.499	457.097	3.236%	95.445%
135.0	27.779	10.767	467.864	2.248%	97.694%
140.0	17.496	6.165	474.028	1.287%	98.981%
145.0	7.597	2.388	476.417	.499%	99.480%
150.0	3.990	1.094	477.51	.228%	99.708%
155.0	2.302	0.533	478.044	.111%	99.819%
160.0	1.765	0.331	478.375	.069%	99.888%
165.0	1.918	0.272	478.647	.057%	99.945%
170.0	2.149	0.205	478.851	.043%	99.988%
175.0	1.074	0.051	478.903	.011%	99.999%
180.0	1.074	0.006	478.909	.001%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-30	20.56	4.29%
0-40	43.50	9.08%
0-60	119.12	24.87%
0-90	276.40	57.71%
0-120	423.65	88.46%
0-180	478.91	100.00%
60-90	179.35	37.45%
90-120	174.38	36.41%
90-130	207.83	43.40%
90-150	228.24	47.66%
90-180	229.64	47.95%
0-110.81	383.13	80.00%

ZONAL LUMEN SUMMARY

0-10	1.62
10-20	5.40
20-30	13.53
30-40	22.94
40-50	33.49
50-60	42.13
60-70	49.00
70-80	53.96
80-90	54.33
90-100	53.08
100-110	50.01
110-120	44.16
120-130	33.45
130-140	16.93
140-150	3.48
150-160	0.86
160-170	0.48
170-180	0.05



C270(Max): —————

C0/C180: —————

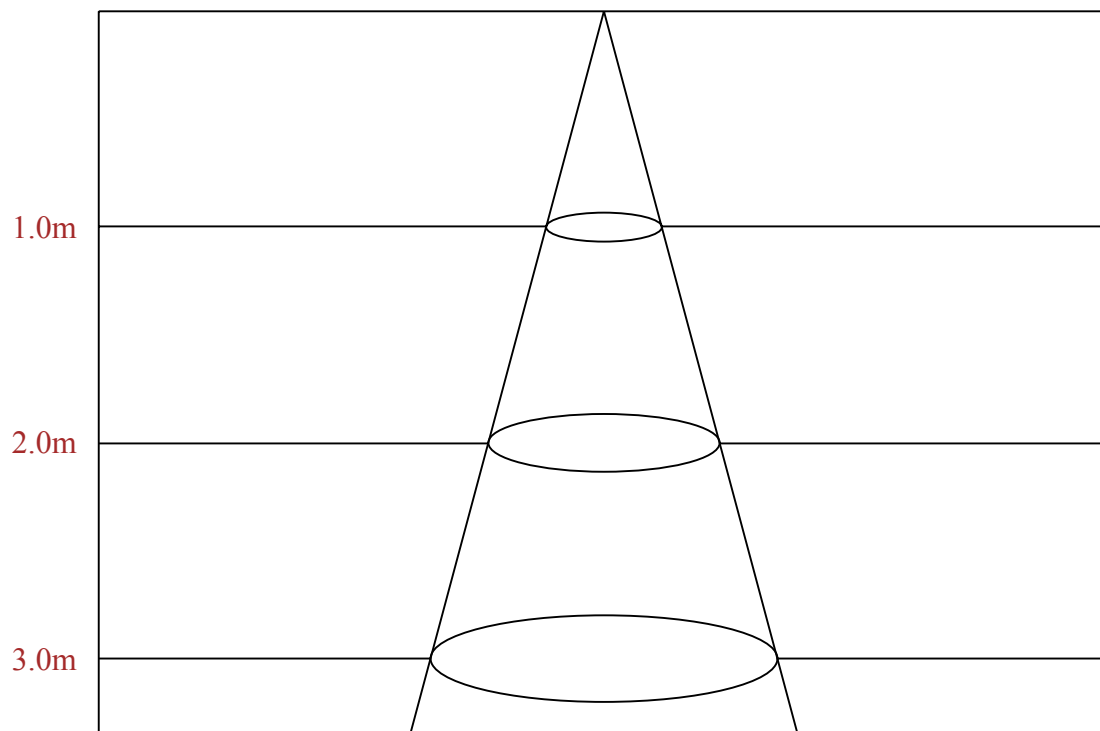
C90/C270: —————

Field angle(10%Imax):C0/180Left:238.4 Right:57.2

:C90/270Left:69.9 Right:222.5

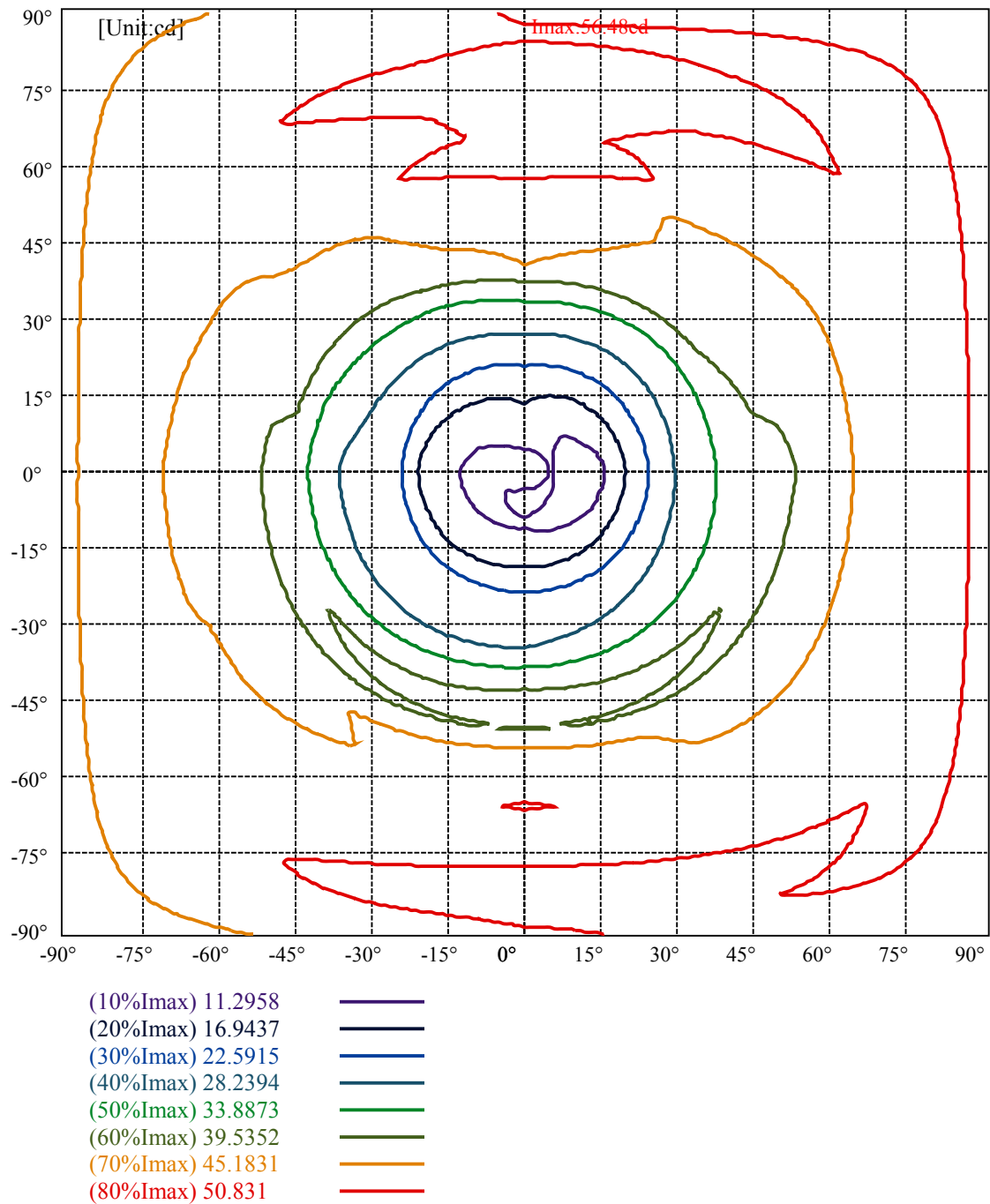
Beam Angle(50%Imax):C0/180Left:224.8 Right:46.5

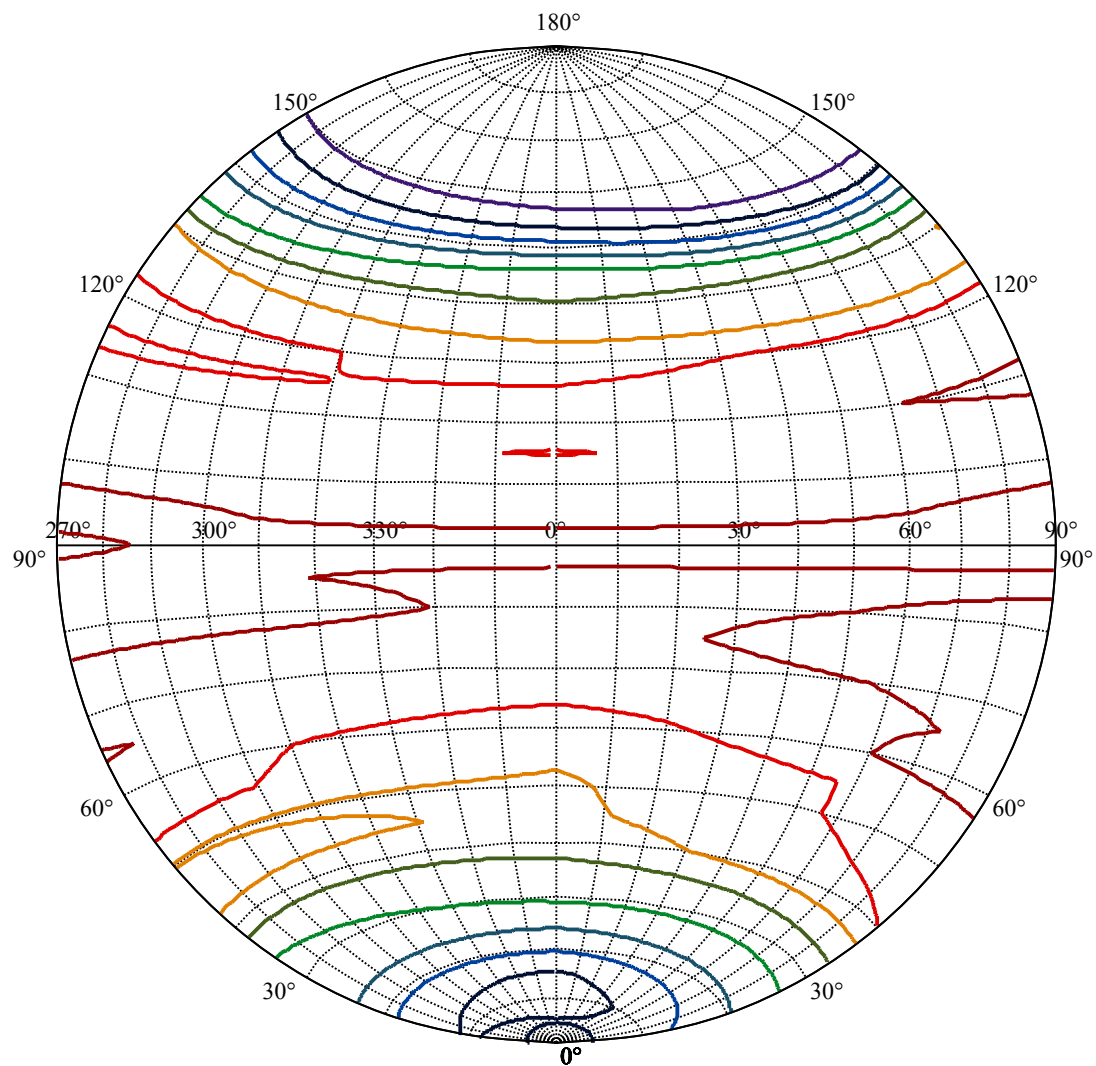
:C90/270Left:54.5 Right:214.3



Max , Ave

Beam angle of C270 plane 292.00





House

[Unit:cd]

Road

Imax:56.48

(10%Imax) 5.64789

(20%Imax) 11.2958

(30%Imax) 16.9437

(40%Imax) 22.5915

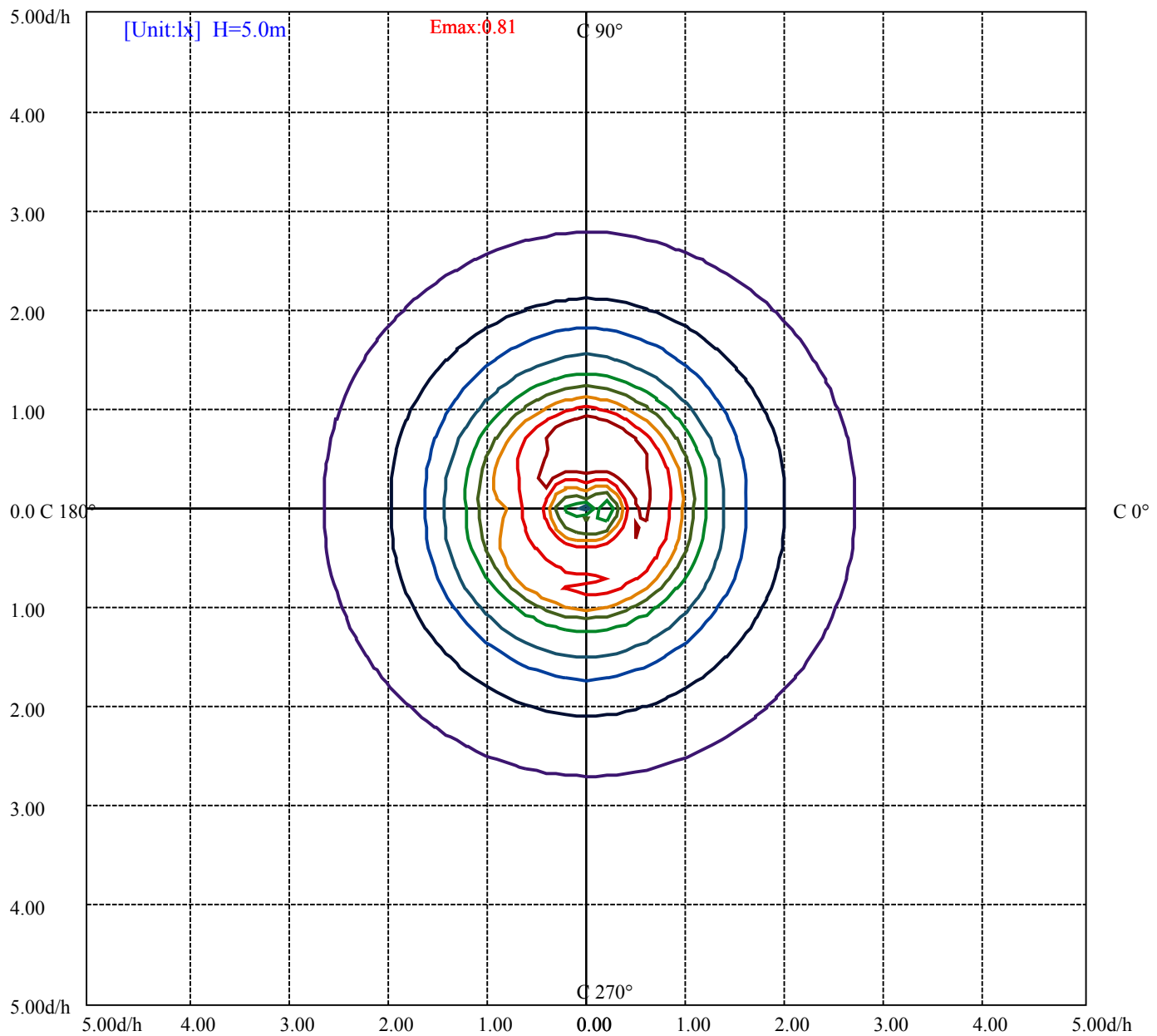
(50%Imax) 28.2394

(60%Imax) 33.8873

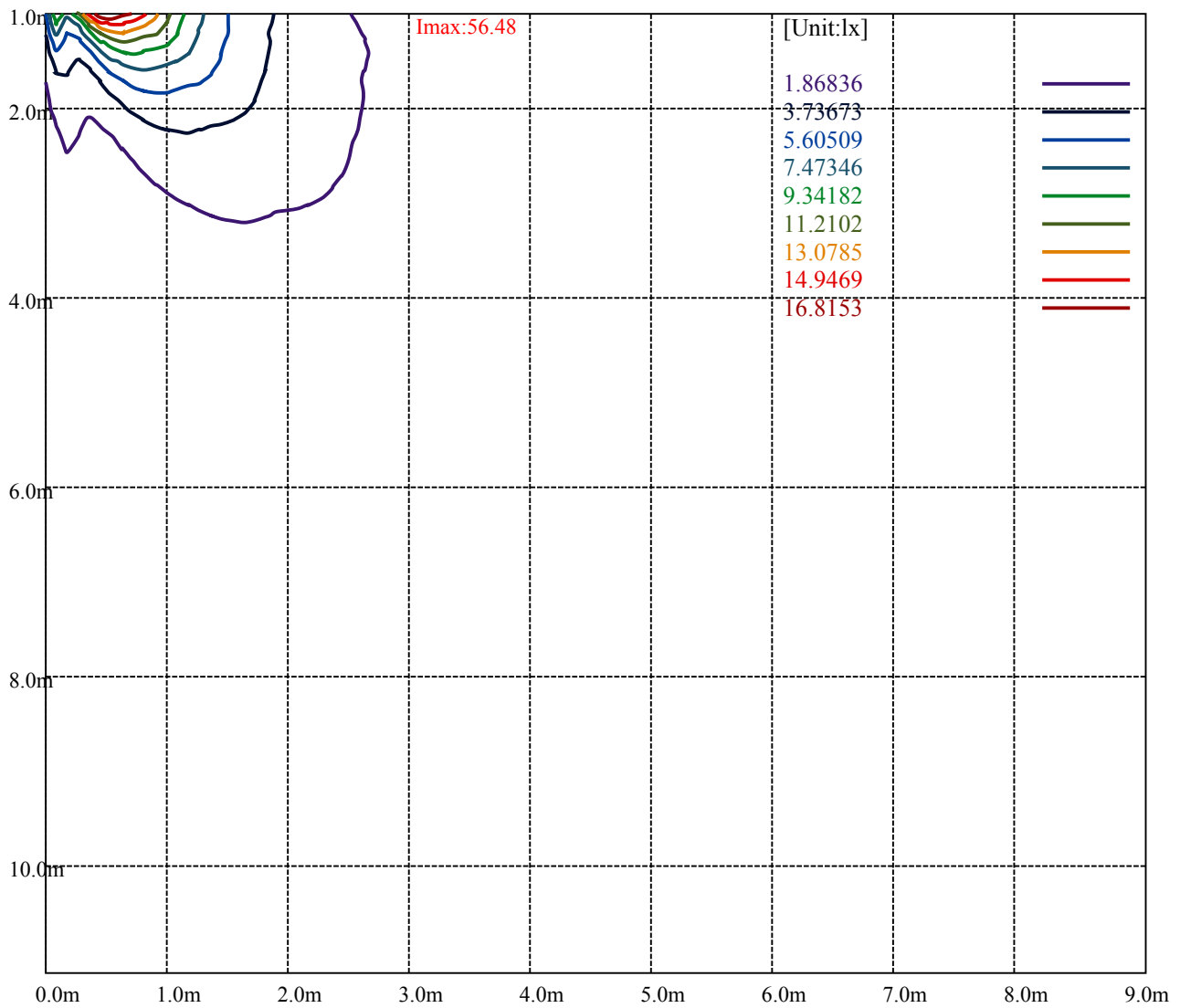
(70%Imax) 39.5352

(80%Imax) 45.1831

(90%Imax) 50.831



(10%Emax) 0.0813908	—
(20%Emax) 0.1627816	—
(30%Emax) 0.2441728	—
(40%Emax) 0.3255636	—
(50%Emax) 0.406956	—
(60%Emax) 0.488344	—
(70%Emax) 0.569736	—
(80%Emax) 0.651128	—
(90%Emax) 0.73252	—



Luminance Table

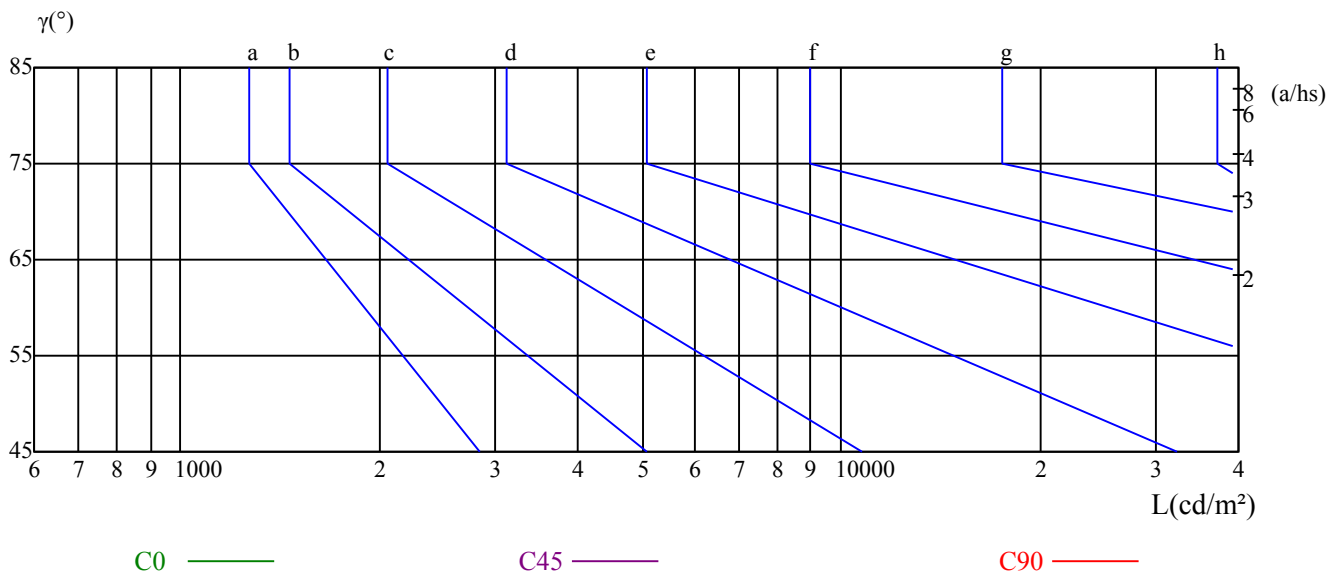
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

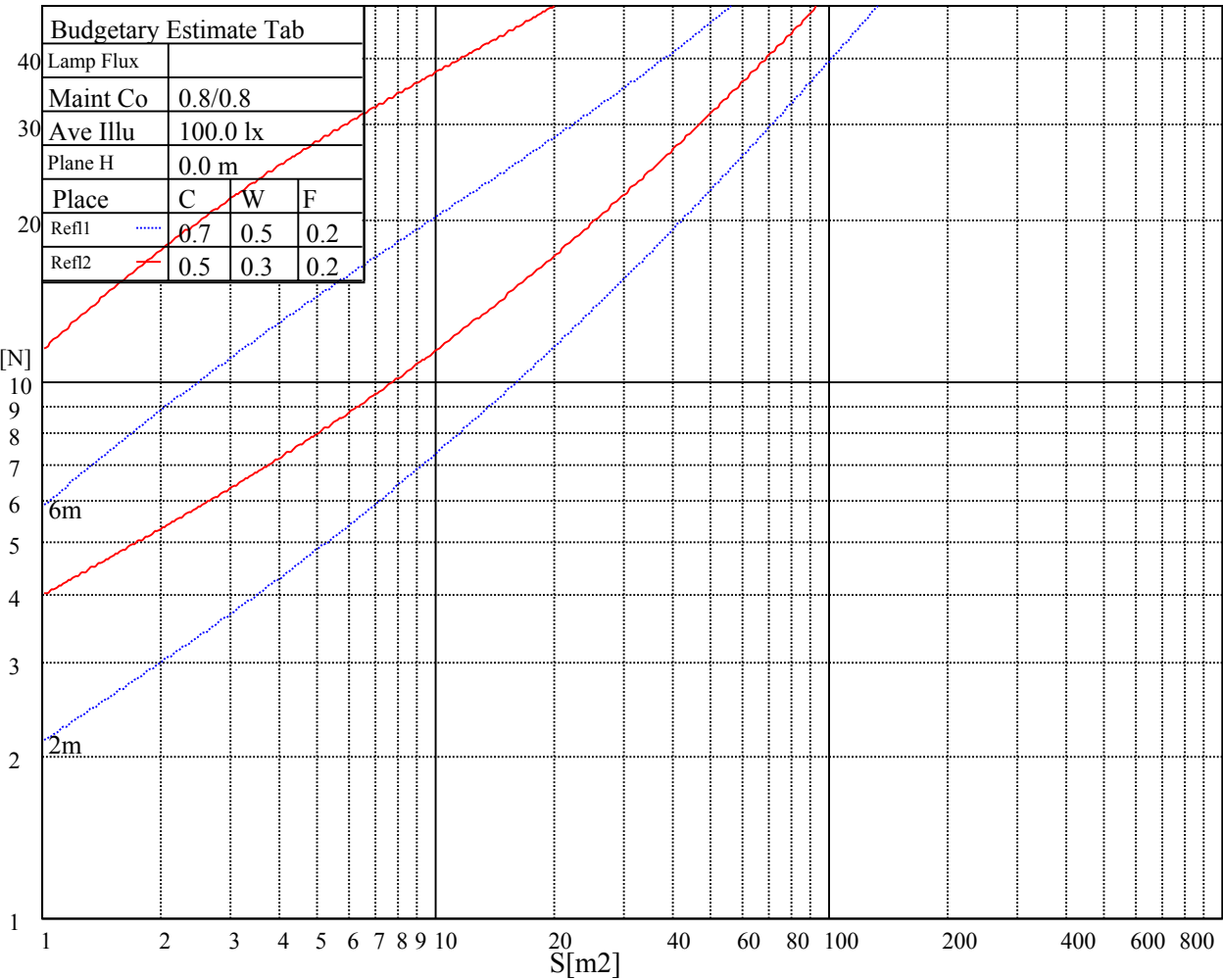
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

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	1.08	1.08	1.08	1.01	1.01	1.01	0.86	0.86	0.86	0.73	0.73	0.73	0.61	0.61	0.61	0.55
1	0.88	0.82	0.77	0.81	0.76	0.71	0.68	0.65	0.61	0.57	0.54	0.51	0.46	0.44	0.42	0.37
2	0.73	0.65	0.58	0.68	0.60	0.54	0.57	0.51	0.46	0.47	0.42	0.38	0.37	0.34	0.31	0.26
3	0.63	0.53	0.46	0.58	0.49	0.42	0.48	0.41	0.36	0.39	0.34	0.30	0.31	0.27	0.24	0.19
4	0.54	0.44	0.37	0.50	0.41	0.34	0.41	0.35	0.29	0.34	0.28	0.24	0.27	0.22	0.19	0.15
5	0.47	0.38	0.31	0.44	0.35	0.28	0.36	0.29	0.24	0.30	0.24	0.20	0.23	0.19	0.15	0.12
6	0.42	0.33	0.26	0.39	0.30	0.24	0.32	0.25	0.20	0.26	0.21	0.16	0.21	0.16	0.13	0.10
7	0.37	0.28	0.22	0.34	0.26	0.20	0.29	0.22	0.17	0.24	0.18	0.14	0.19	0.14	0.11	0.08
8	0.34	0.25	0.19	0.31	0.23	0.17	0.26	0.19	0.15	0.21	0.16	0.12	0.17	0.13	0.09	0.07
9	0.30	0.22	0.16	0.28	0.20	0.15	0.24	0.17	0.13	0.19	0.14	0.10	0.15	0.11	0.08	0.06
10	0.28	0.20	0.14	0.26	0.18	0.13	0.22	0.15	0.11	0.18	0.13	0.09	0.14	0.10	0.07	0.05

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	5.53	11.66	7.98	10.44	17.50	23.64	29.16	31.62	36.53
90.0	7.98	11.97	14.73	18.11	22.10	27.32	30.39	36.22	45.12
180.0	5.53	9.21	9.82	12.58	15.96	24.56	26.70	27.63	30.70
270.0	7.98	13.20	10.74	13.51	18.42	24.56	26.70	28.55	37.45
360.0	5.53	11.66	7.98	10.44	17.50	23.64	29.16	31.62	36.53
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	38.37	38.68	40.21	41.13	46.35	48.19	48.81	49.11	49.42
90.0	47.27	49.11	48.19	55.56	51.87	52.49	56.17	52.18	50.34
180.0	38.37	38.68	42.67	40.82	43.89	45.12	46.66	46.04	46.96
270.0	42.05	39.29	47.58	48.50	51.26	48.19	48.19	56.48	52.49
360.0	38.37	38.68	40.21	41.13	46.35	48.19	48.81	49.11	49.42
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	54.64	47.58	49.42	44.81	48.50	45.74	43.28	37.75	34.07
90.0	51.57	52.18	49.11	49.73	51.87	49.11	48.50	38.98	39.60
180.0	41.75	44.81	46.96	45.43	47.58	40.82	44.20	39.90	34.38
270.0	50.03	52.80	48.19	48.50	46.66	44.51	47.58	43.28	39.60
360.0	54.64	47.58	49.42	44.81	48.50	45.74	43.28	37.75	34.07
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	30.70	19.34	7.98	2.15	0.92	0.61	0.00	0.00	1.53
90.0	26.40	9.82	1.53	3.99	2.15	0.00	3.68	0.61	0.00
180.0	27.01	20.26	7.98	4.30	0.61	4.60	0.61	3.99	2.15
270.0	27.01	20.57	12.89	5.53	5.53	1.84	3.38	3.99	0.61
360.0	30.70	19.34	7.98	2.15	0.92	0.61	0.00	0.00	1.53
C/γ(°)	180.0								
0.0	2.15								
90.0	0.00								
180.0	2.15								
270.0	0.00								
360.0	2.15								