
LumCAT: 1689-M	
Luminaire: 92.70.124.00	
Report No: NATA0100	Voltage(V): 34.8500
Test No: GC2019062812	Current(A): 0.2490
LampCAT: TRIDONIC SLE 9MM G7	Power (W): 8.6780
Lamp flux(lm): 1073.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 46	Width(mm): 46
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 983.30
Efficiency(%): 91.64%
Lumens(lm)/Power(W): 113.31
Central intensity(cd): 862.805
Maximum intensity(cd): 862.805
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=70.4
[C90/270]Total=70.4
Field angle(10%Imax): [C0/180]Total=94.9
[C90/270]Total=94.9
Maximum s/h(1/2): C0_180=0.97 C90_270=0.97
Maximum s/h(1/4): C0_180=1.04 C90_270=1.04
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 91.64%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.642%

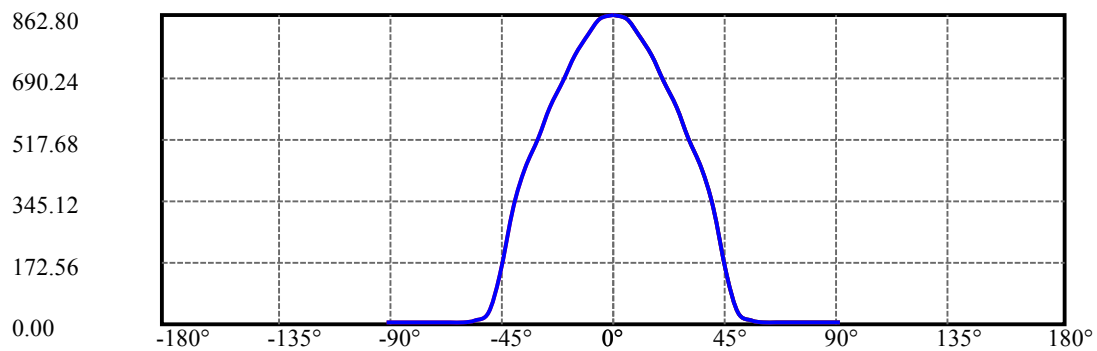
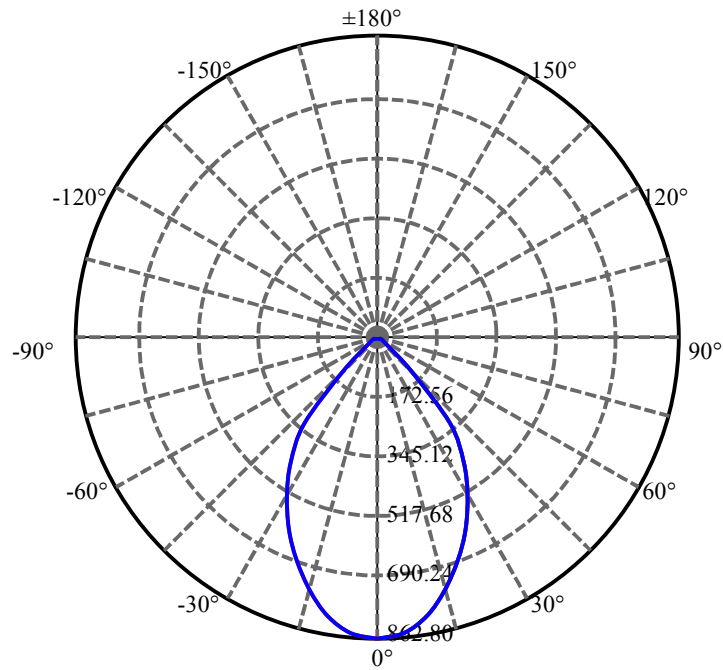
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	862.805	0.000	0	.000%	.000%
5.0	851.245	20.491	20.491	1.910%	2.084%
10.0	811.048	59.465	79.956	5.542%	8.131%
15.0	750.663	92.640	172.596	8.634%	17.553%
20.0	680.618	117.958	290.554	10.993%	29.549%
25.0	603.633	134.694	425.248	12.553%	43.247%
30.0	519.089	142.081	567.329	13.242%	57.696%
35.0	435.291	140.539	707.868	13.098%	71.989%
40.0	325.280	126.895	834.764	11.826%	84.894%
45.0	138.023	85.784	920.548	7.995%	93.618%
50.0	32.611	34.479	955.027	3.213%	97.124%
55.0	13.395	10.003	965.03	.932%	98.142%
60.0	7.875	4.916	969.947	.458%	98.642%
65.0	5.379	3.222	973.169	.300%	98.969%
70.0	4.247	2.437	975.606	.227%	99.217%
75.0	3.705	2.079	977.685	.194%	99.429%
80.0	3.480	1.923	979.608	.179%	99.624%
85.0	3.368	1.861	981.469	.173%	99.813%
90.0	3.333	1.835	983.303	.171%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	567.33	52.87%	57.70%
0-40	834.76	77.80%	84.89%
0-60	969.95	90.40%	98.64%
0-90	981.47	91.47%	99.81%
0-120	981.47	91.47%	99.81%
0-180	983.30	91.64%	100.00%
60-90	16.44	1.53%	1.67%
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%
0-38.10	786.64	73.31%	80.00%

ZONAL LUMEN SUMMARY

0-10	79.96
10-20	210.60
20-30	276.78
30-40	267.43
40-50	120.26
50-60	14.92
60-70	5.66
70-80	4.00
80-90	1.86
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



C0(Max): —————

C0/C180: —————

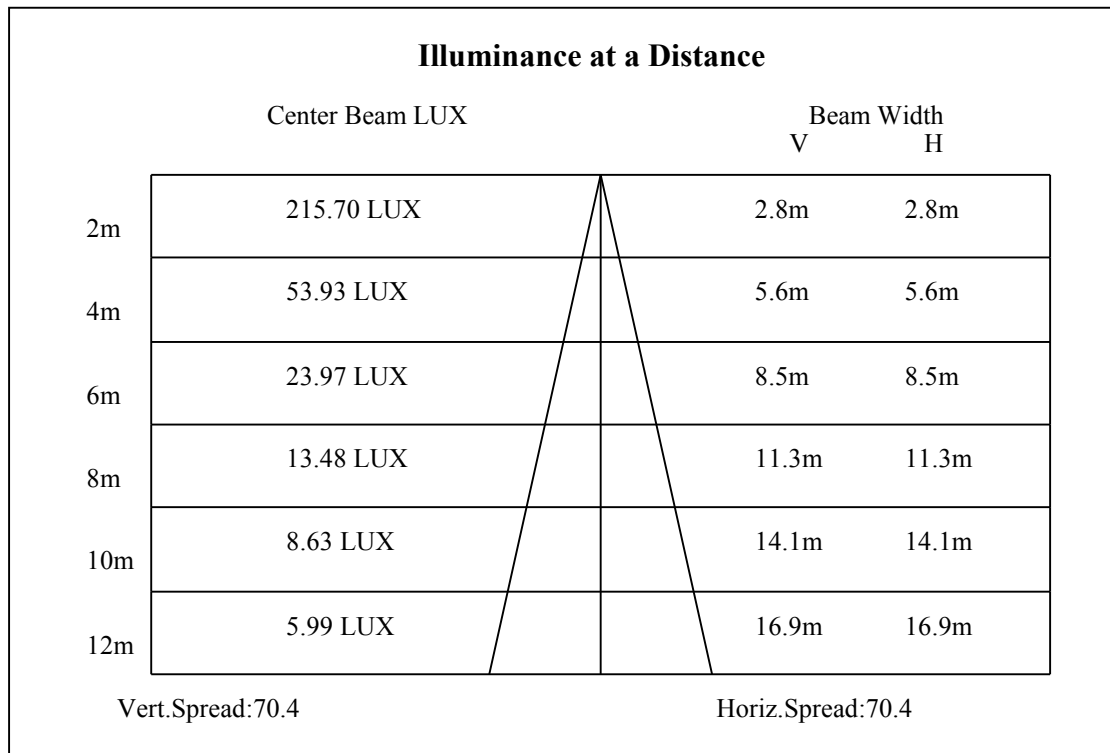
C90/C270: —————

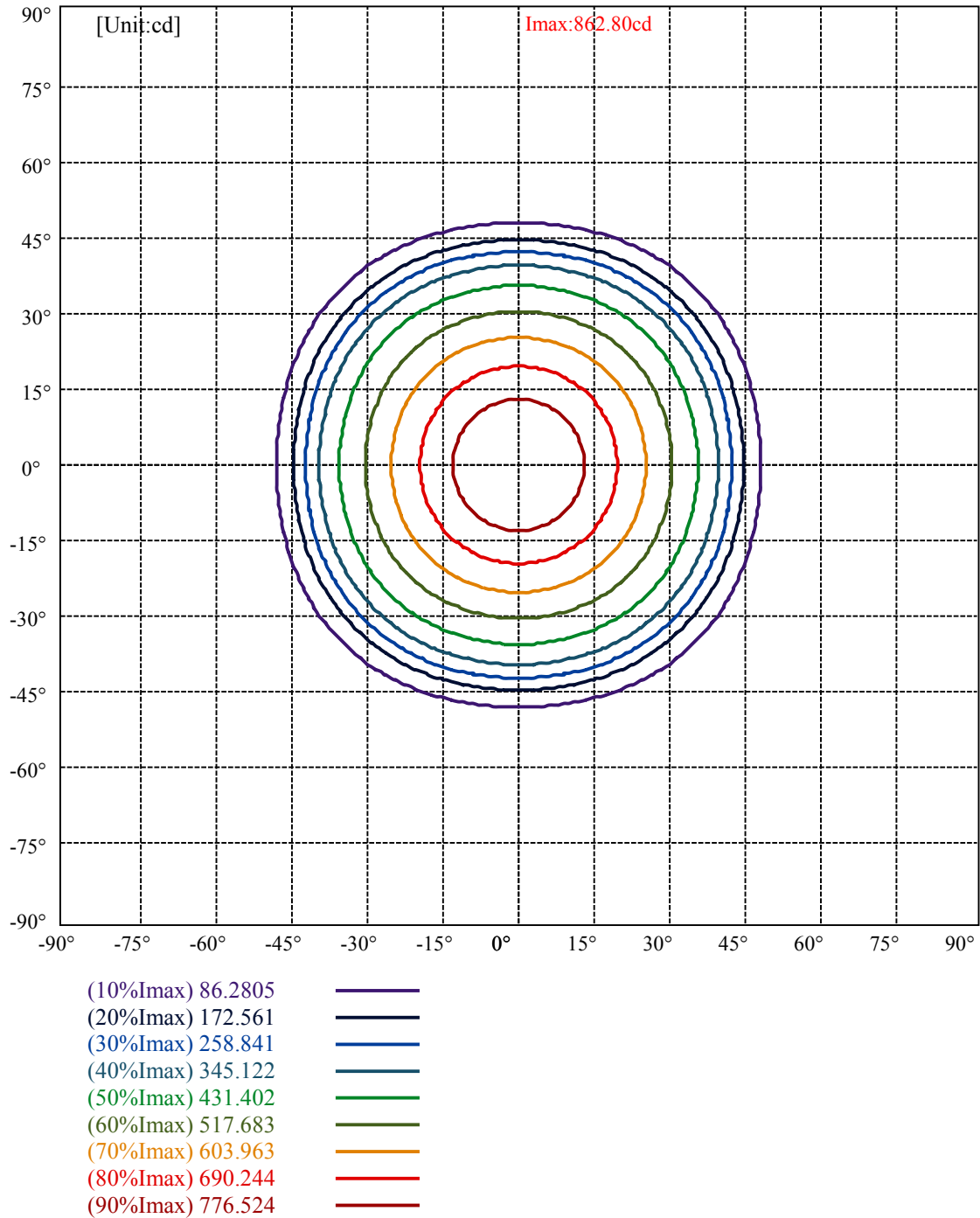
Field angle(10%I_{max}):C0/180Left:47.5 Right:47.5

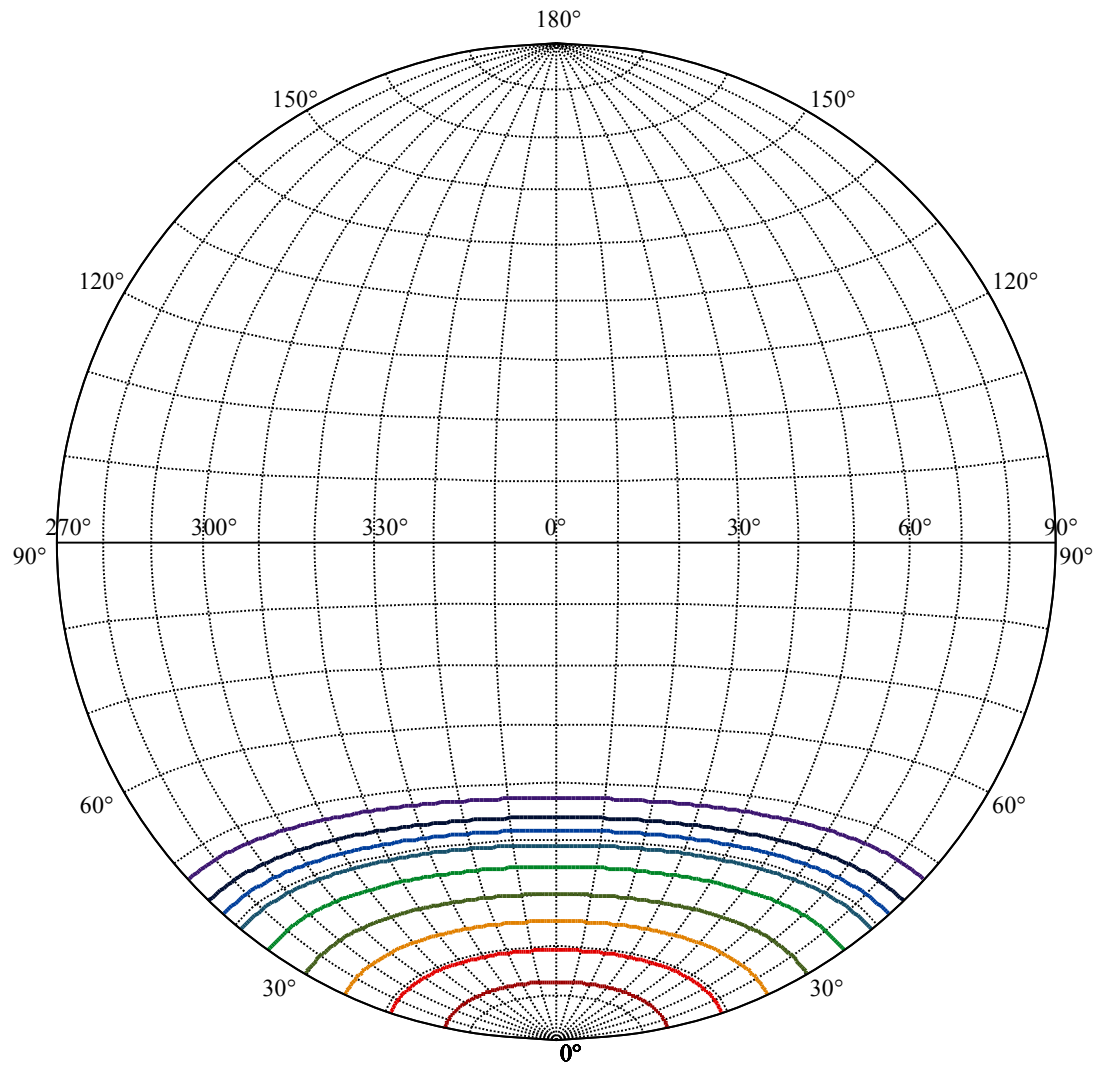
:C90/270Left:47.5 Right:47.5

Beam Angle(50%I_{max}):C0/180Left:35.2 Right:35.2

:C90/270Left:35.2 Right:35.2

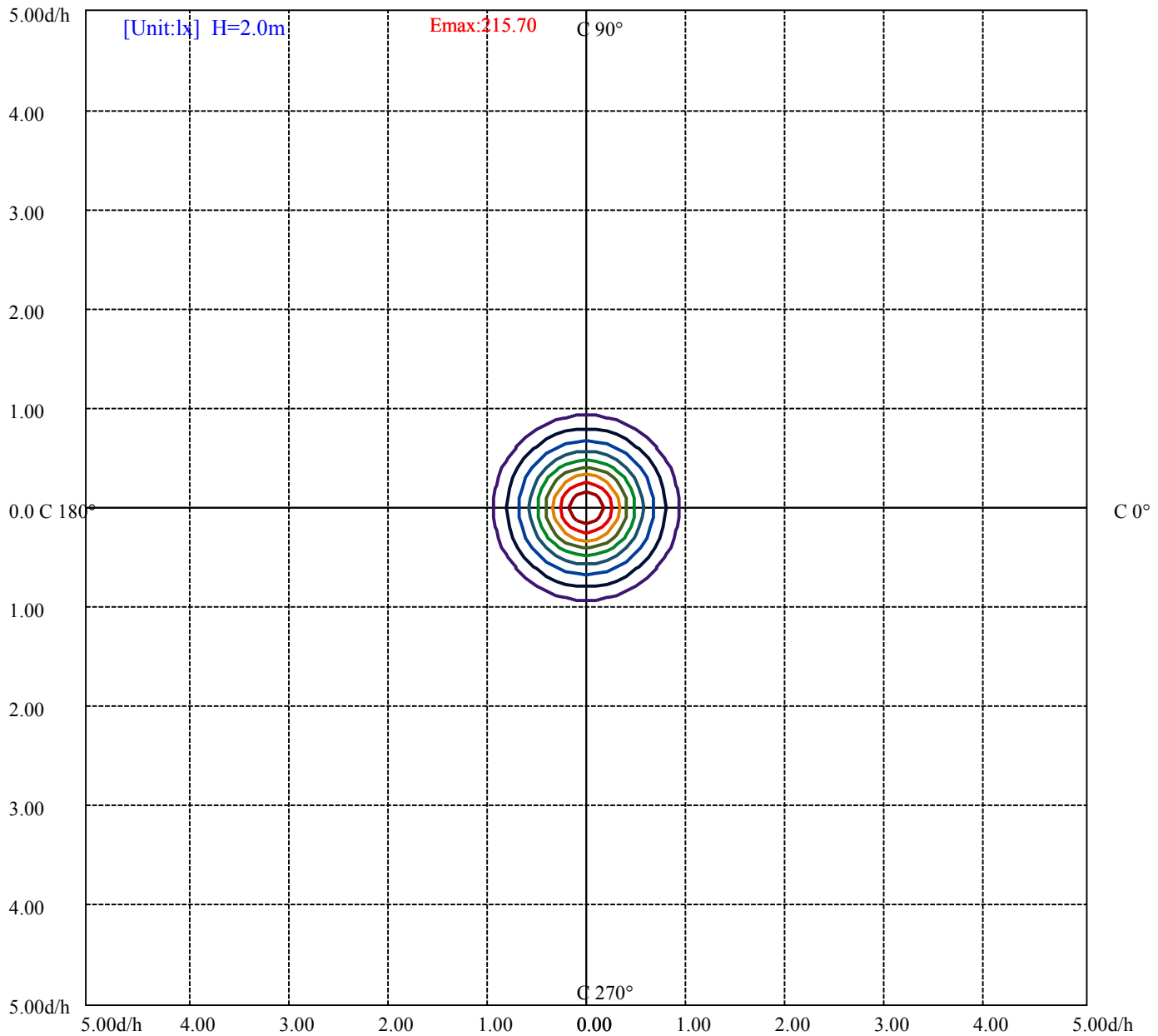


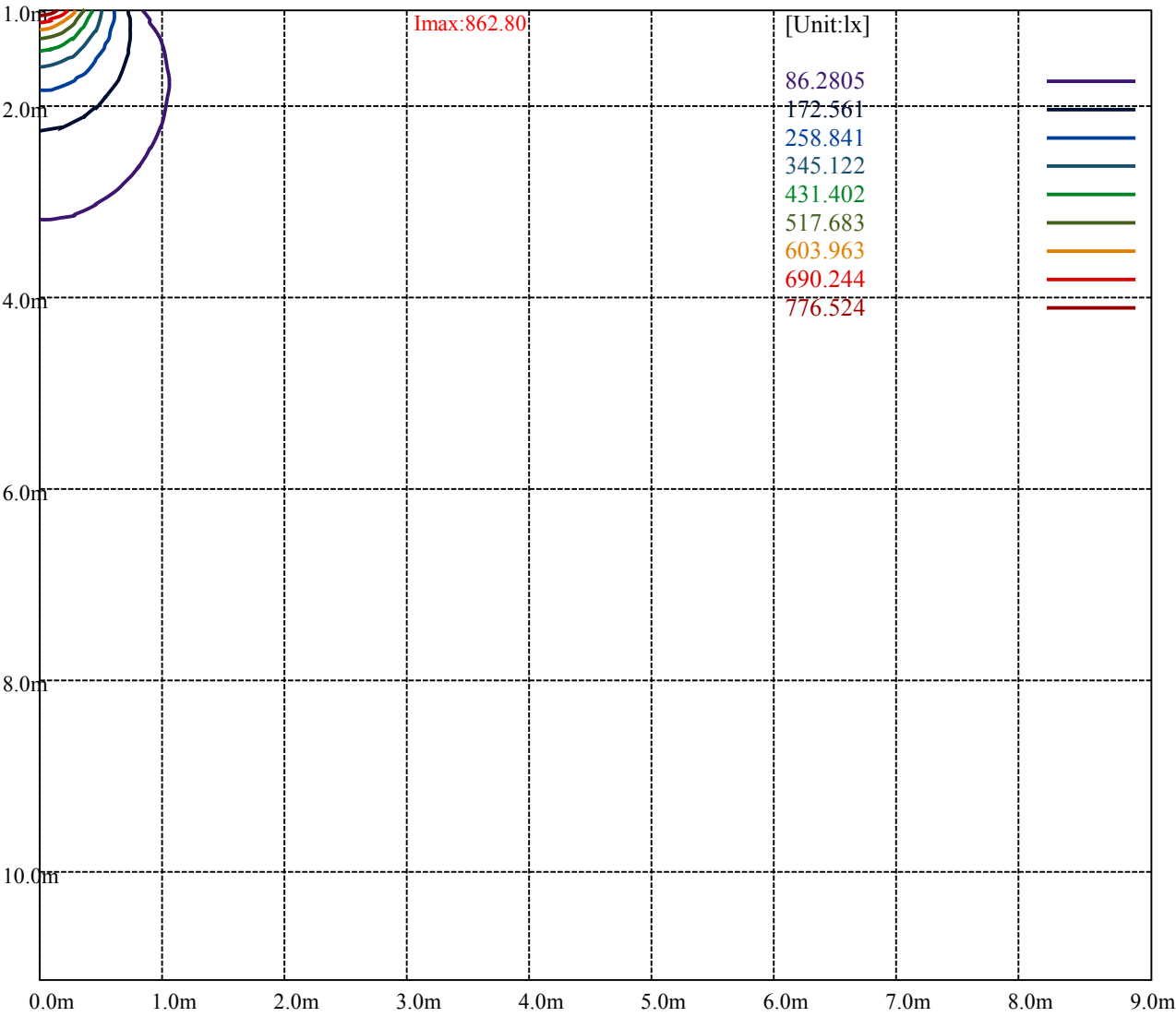




House [Unit:cd] Road

	Imax:862.80	
(10%Imax)	86.2805	—
(20%Imax)	172.561	—
(30%Imax)	258.841	—
(40%Imax)	345.122	—
(50%Imax)	431.402	—
(60%Imax)	517.683	—
(70%Imax)	603.963	—
(80%Imax)	690.244	—
(90%Imax)	776.524	—





Luminance Table

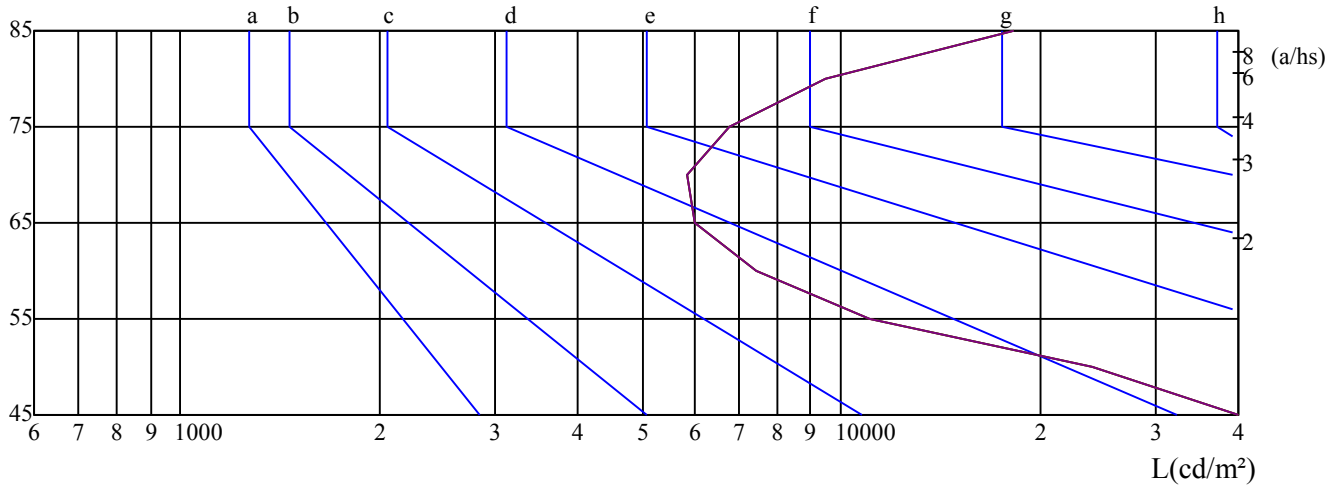
γ	45	50	55	60	65	70	75	80	85
C0	92247	23976	11036	7443	6015	5868	6766	9472	18262
C45	92247	23976	11036	7443	6015	5868	6766	9472	18262
C90	92247	23976	11036	7443	6015	5868	6766	9472	18262

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
6015	6015	6015	6766	6766	6766	18262	18262	18262

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

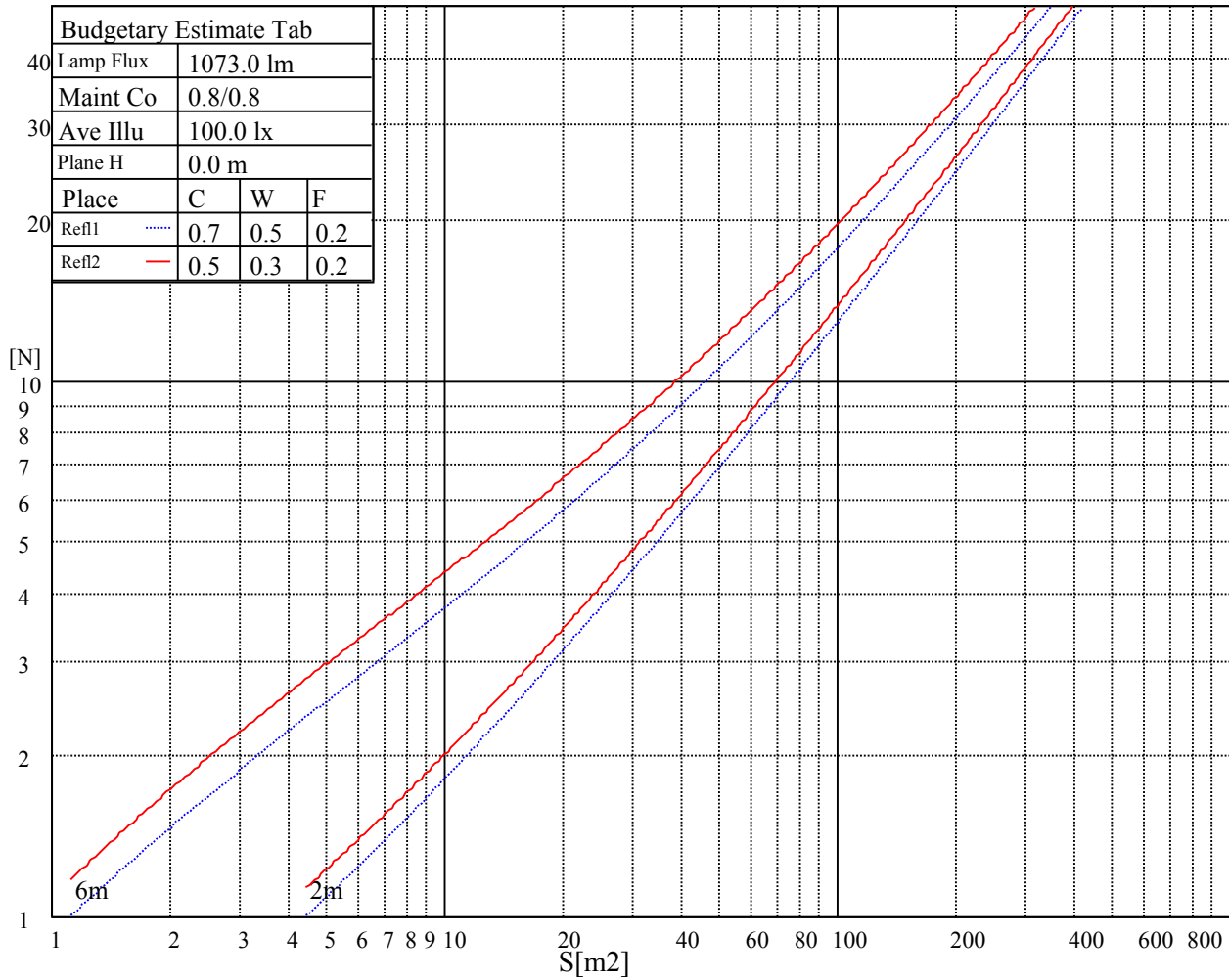
Luminance Limiting Curve

 $\gamma(^{\circ})$ 

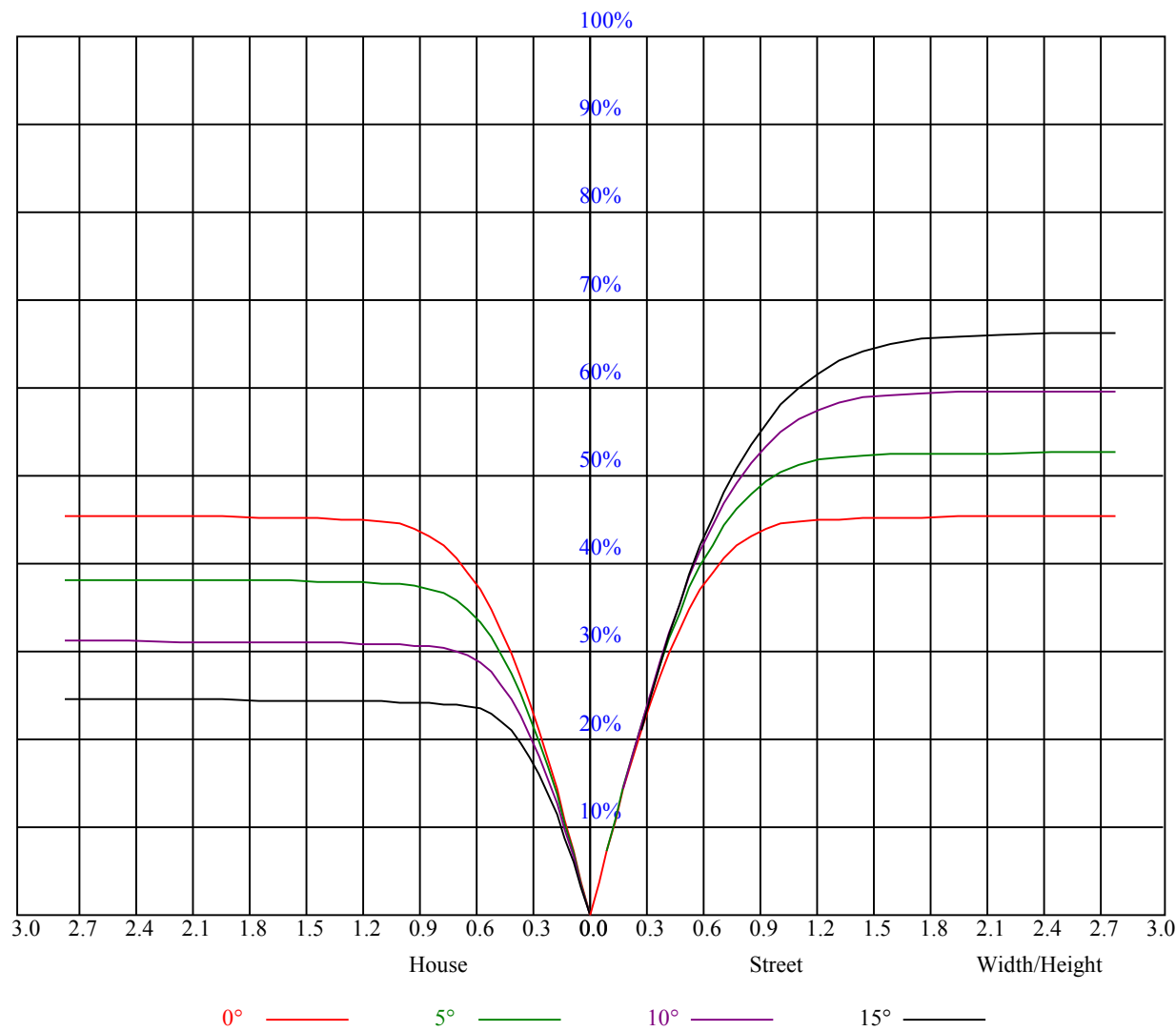
C0 ———

C45 ———

C90 ———



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	1.09	1.09	1.09	1.07	1.07	1.07	1.02	1.02	1.02	0.97	0.97	0.97	0.94	0.94	0.94	0.92
1	1.01	0.98	0.96	0.99	0.96	0.94	0.95	0.93	0.91	0.91	0.90	0.89	0.88	0.87	0.86	0.84
2	0.93	0.89	0.85	0.91	0.87	0.84	0.88	0.85	0.82	0.85	0.83	0.81	0.83	0.81	0.79	0.77
3	0.86	0.81	0.77	0.84	0.80	0.76	0.82	0.78	0.75	0.80	0.76	0.74	0.78	0.75	0.72	0.71
4	0.79	0.74	0.69	0.78	0.73	0.69	0.76	0.72	0.68	0.74	0.70	0.67	0.73	0.69	0.67	0.65
5	0.73	0.68	0.63	0.73	0.67	0.63	0.71	0.66	0.62	0.69	0.65	0.62	0.68	0.64	0.61	0.60
6	0.68	0.62	0.58	0.68	0.62	0.58	0.66	0.61	0.57	0.65	0.60	0.57	0.64	0.60	0.57	0.55
7	0.64	0.58	0.53	0.63	0.57	0.53	0.62	0.57	0.53	0.61	0.56	0.53	0.60	0.55	0.52	0.51
8	0.59	0.53	0.49	0.59	0.53	0.49	0.58	0.53	0.49	0.57	0.52	0.49	0.56	0.52	0.48	0.47
9	0.56	0.50	0.46	0.55	0.49	0.46	0.54	0.49	0.45	0.53	0.49	0.45	0.53	0.48	0.45	0.44
10	0.52	0.46	0.43	0.52	0.46	0.42	0.51	0.46	0.42	0.50	0.45	0.42	0.49	0.45	0.42	0.41



Intensity data(cd)

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C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	862.59	862.48	824.46	770.01	698.06	626.01	536.85	450.90	349.93
45.0	863.38	855.17	820.69	767.87	689.96	609.92	527.23	438.08	334.86
90.0	859.56	847.69	807.98	745.31	673.26	599.23	509.12	422.16	309.54
135.0	865.69	849.15	820.80	761.23	695.70	625.44	530.61	437.34	333.51
180.0	862.59	839.14	805.78	732.09	665.27	582.08	504.17	422.66	307.18
225.0	863.38	847.63	794.70	731.03	665.78	586.07	506.48	430.54	322.31
270.0	859.56	855.06	808.82	750.38	681.64	604.86	525.99	447.19	344.59
315.0	865.69	853.65	805.16	747.39	675.28	595.46	512.27	433.46	300.32
360.0	862.59	862.48	824.46	770.01	698.06	626.01	536.85	450.90	349.93
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	159.08	32.79	12.77	7.20	4.95	4.11	3.66	3.43	3.32
45.0	141.13	30.66	11.31	6.53	4.95	4.16	3.71	3.54	3.38
90.0	113.74	27.06	11.08	7.09	5.06	4.11	3.71	3.49	3.43
135.0	151.88	34.20	14.29	8.33	5.63	4.39	3.71	3.43	3.38
180.0	121.89	31.61	13.33	8.38	5.63	4.28	3.66	3.43	3.32
225.0	130.95	34.20	15.02	8.66	5.63	4.28	3.71	3.49	3.38
270.0	157.95	38.70	16.88	9.56	6.30	4.73	3.88	3.60	3.43
315.0	127.58	31.67	12.49	7.26	4.89	3.94	3.60	3.43	3.32
360.0	159.08	32.79	12.77	7.20	4.95	4.11	3.66	3.43	3.32
C/γ(°)	90.0								
0.0	3.32								
45.0	3.38								
90.0	3.32								
135.0	3.32								
180.0	3.32								
225.0	3.38								
270.0	3.32								
315.0	3.32								
360.0	3.32								