
LumCAT: 1681-S	
Luminaire: 92.70.124.00	
Report No: NATA0100	Voltage(V): 34.8500
Test No: GC2019062816	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): 47	Width(mm): 47
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 929.36
Efficiency(%): 86.61%
Lumens(lm)/Power(W): 107.09
Central intensity(cd): 1148.344
Maximum intensity(cd): 1148.344
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=57.6
[C90/270]Total=57.6
Field angle(10%Imax): [C0/180]Total=77.5
[C90/270]Total=77.5
Maximum s/h(1/2): C0_180=0.90 C90_270=0.90
Maximum s/h(1/4): C0_180=0.86 C90_270=0.86
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 86.61%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.068%

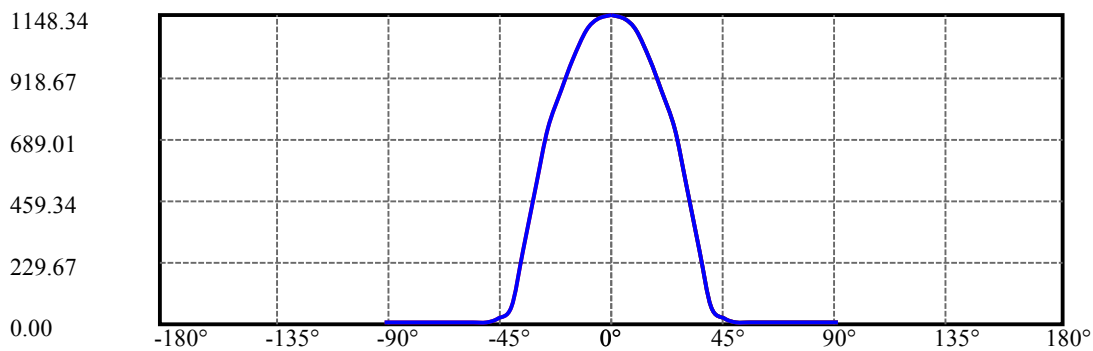
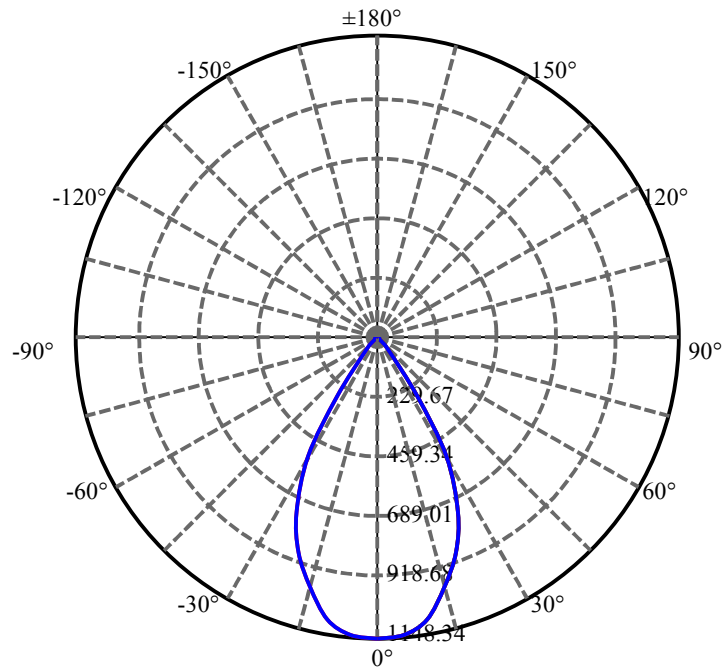
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1148.344	0.000	0	.000%	.000%
5.0	1136.377	27.313	27.313	2.545%	2.939%
10.0	1090.399	79.659	106.972	7.424%	11.510%
15.0	983.644	123.031	230.003	11.466%	24.749%
20.0	869.196	152.700	382.703	14.231%	41.179%
25.0	730.730	167.803	550.506	15.639%	59.235%
30.0	524.074	158.796	709.302	14.799%	76.322%
35.0	273.727	117.482	826.784	10.949%	88.963%
40.0	62.803	56.147	882.931	5.233%	95.005%
45.0	19.927	15.318	898.249	1.428%	96.653%
50.0	10.181	6.084	904.333	.567%	97.307%
55.0	7.411	3.825	908.158	.356%	97.719%
60.0	6.609	3.241	911.399	.302%	98.068%
65.0	6.616	3.215	914.614	.300%	98.414%
70.0	6.630	3.354	917.968	.313%	98.775%
75.0	5.906	3.277	921.245	.305%	99.127%
80.0	5.414	3.029	924.274	.282%	99.453%
85.0	4.697	2.747	927.022	.256%	99.749%
90.0	3.832	2.335	929.357	.218%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	709.30	66.10%	76.32%
0-40	882.93	82.29%	95.00%
0-60	911.40	84.94%	98.07%
0-90	927.02	86.40%	99.75%
0-120	927.02	86.40%	99.75%
0-180	929.36	86.61%	100.00%
60-90	18.86	1.76%	2.03%
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%
0-31.45	743.49	69.29%	80.00%

ZONAL LUMEN SUMMARY

0-10	106.97
10-20	275.73
20-30	326.60
30-40	173.63
40-50	21.40
50-60	7.07
60-70	6.57
70-80	6.31
80-90	2.75
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

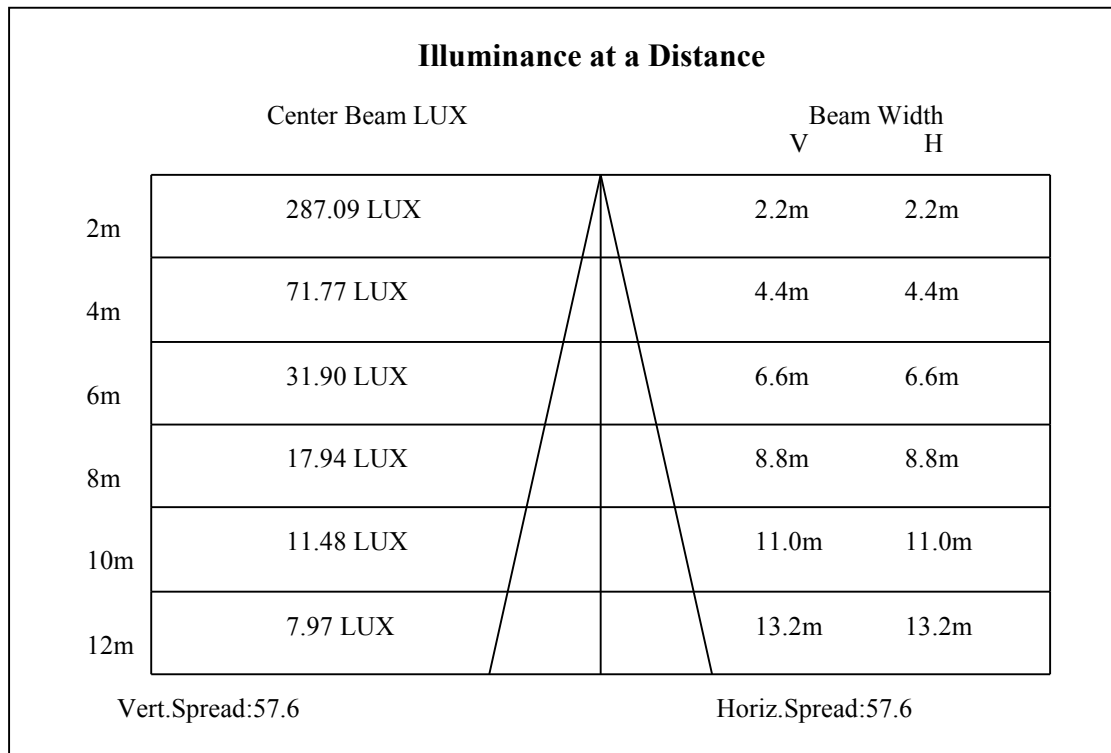
C0(Max): —————C0/C180: —————C90/C270: —————

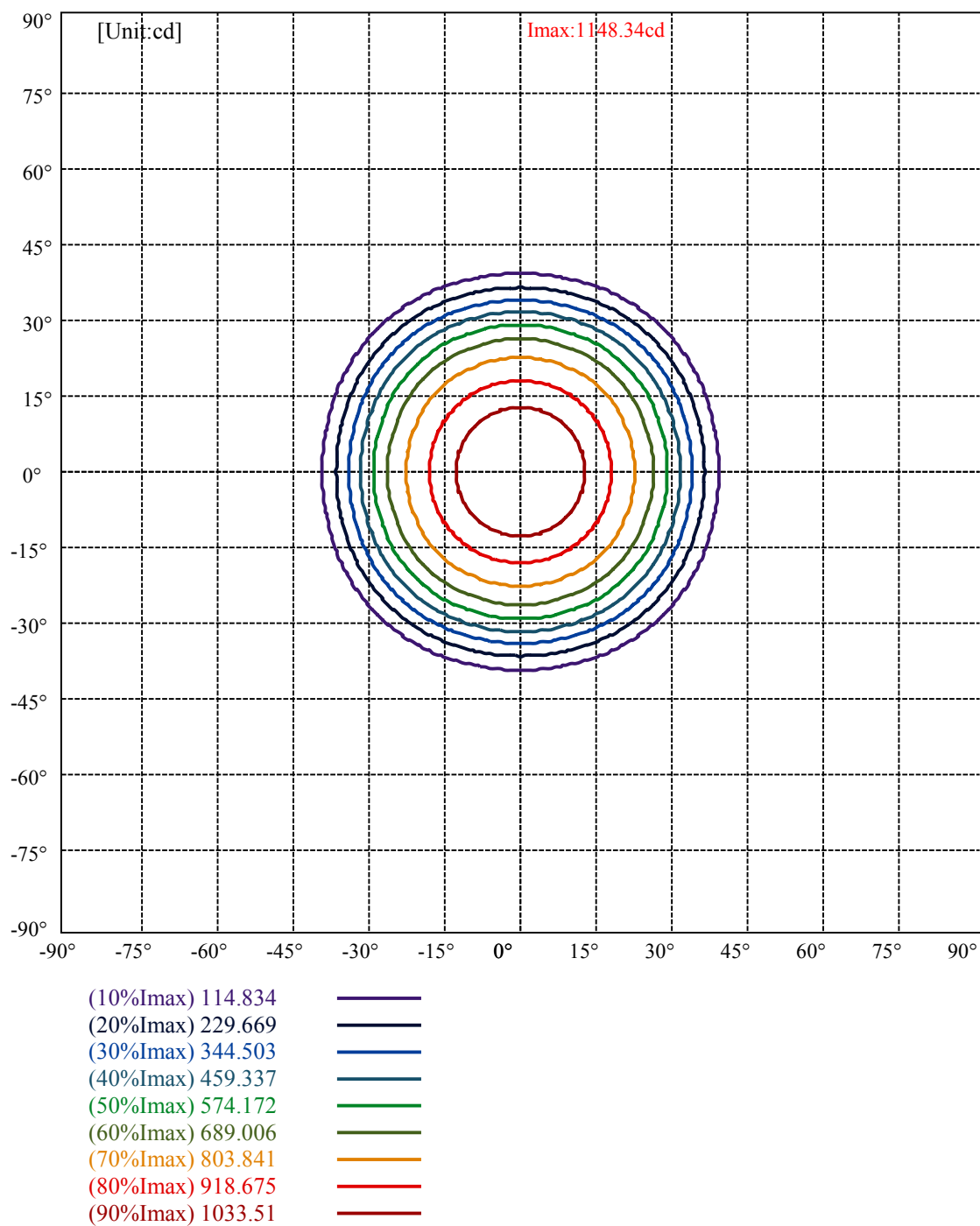
Field angle(10%Imax):C0/180Left:38.8 Right:38.8

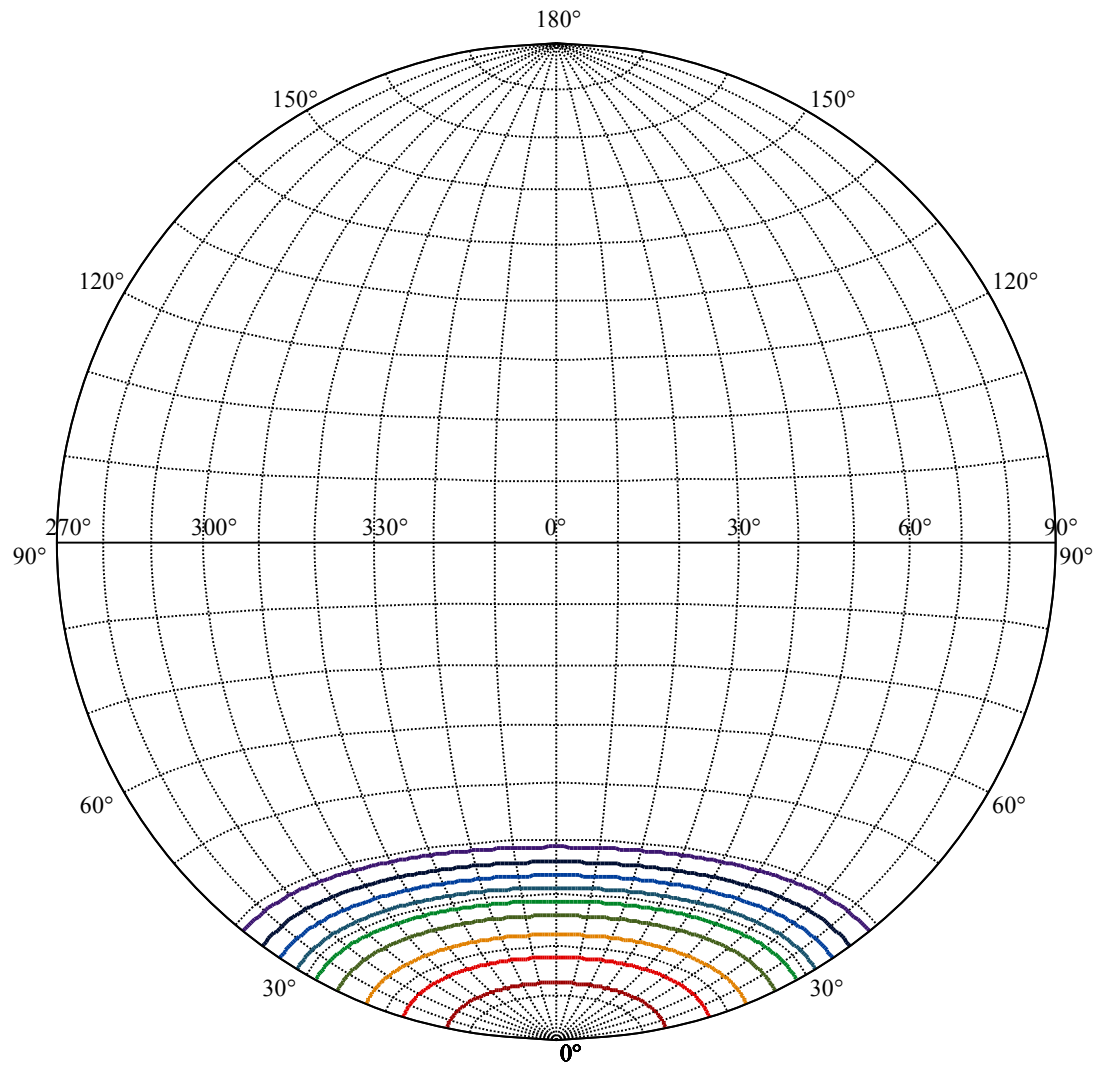
:C90/270Left:38.8 Right:38.8

Beam Angle(50%Imax):C0/180Left:28.8 Right:28.8

:C90/270Left:28.8 Right:28.8

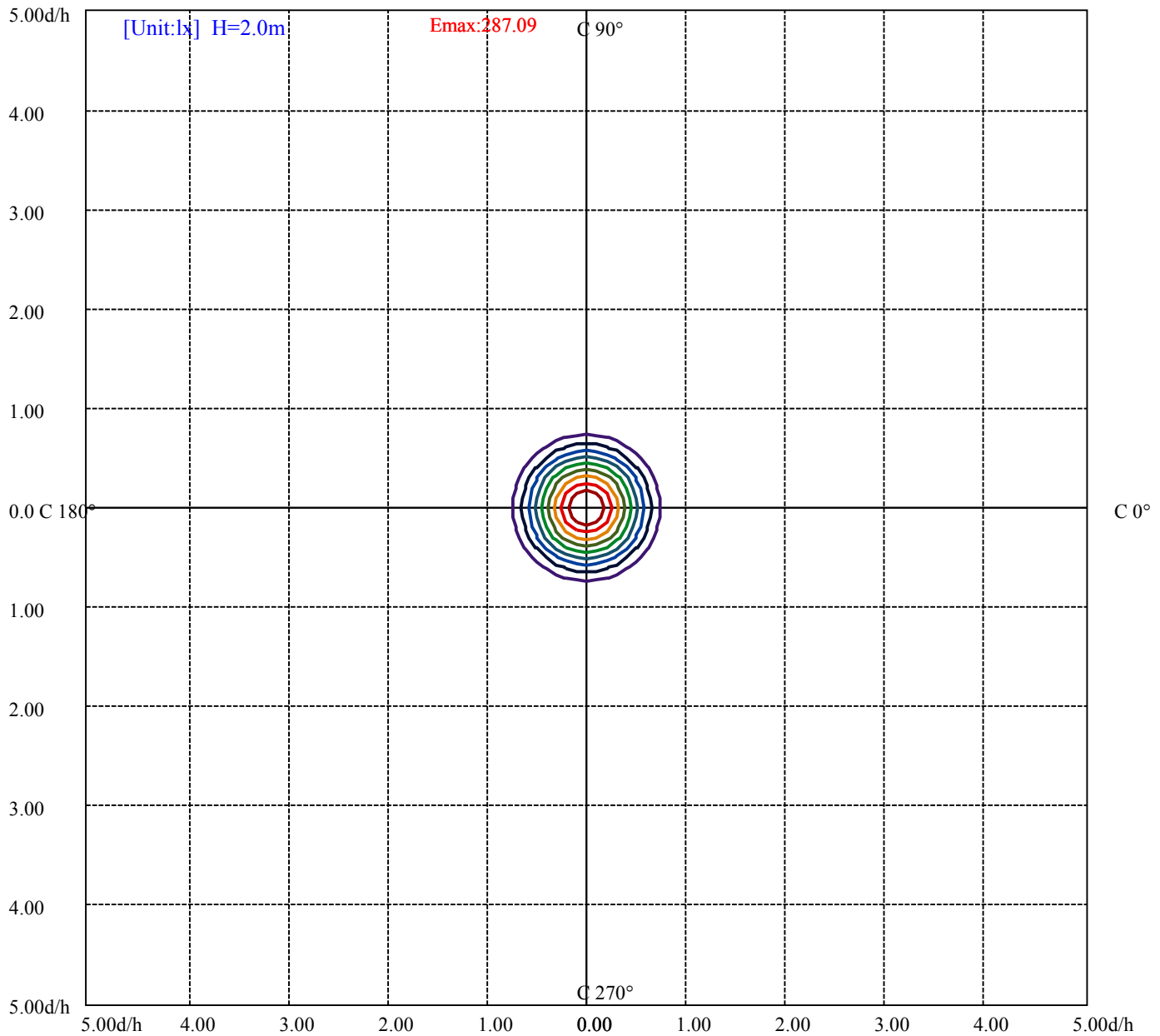


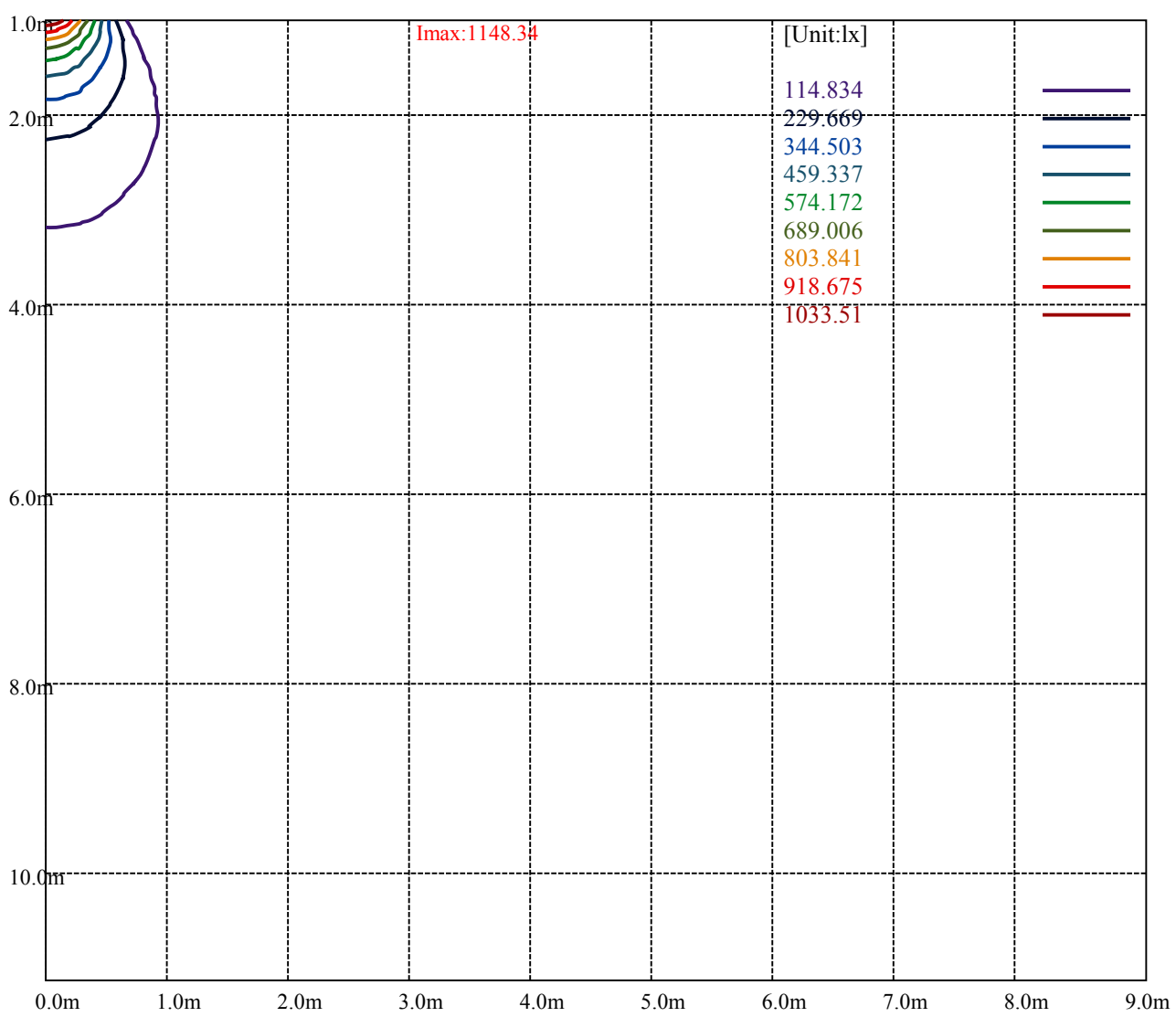




House [Unit:cd] Road

Imax:1148.34	
(10%Imax)	114.834
(20%Imax)	229.669
(30%Imax)	344.503
(40%Imax)	459.337
(50%Imax)	574.172
(60%Imax)	689.006
(70%Imax)	803.841
(80%Imax)	918.675
(90%Imax)	1033.51





Luminance Table

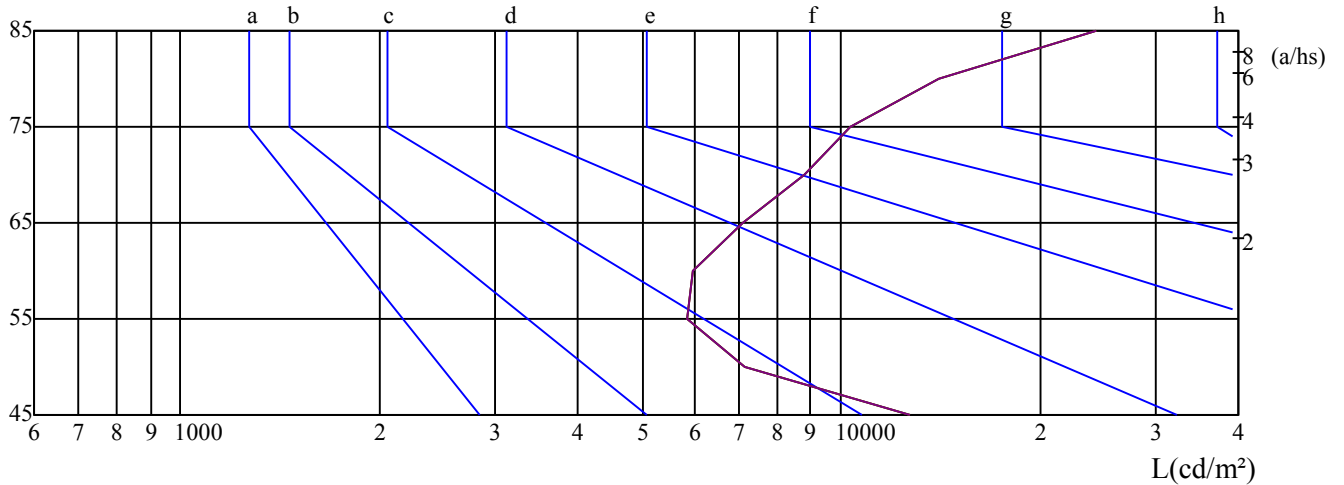
γ	45	50	55	60	65	70	75	80	85
C0	12757	7170	5849	5984	7087	8776	10330	14114	24396
C45	12757	7170	5849	5984	7087	8776	10330	14114	24396
C90	12757	7170	5849	5984	7087	8776	10330	14114	24396

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
7087	7087	7087	10330	10330	10330	24396	24396	24396

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

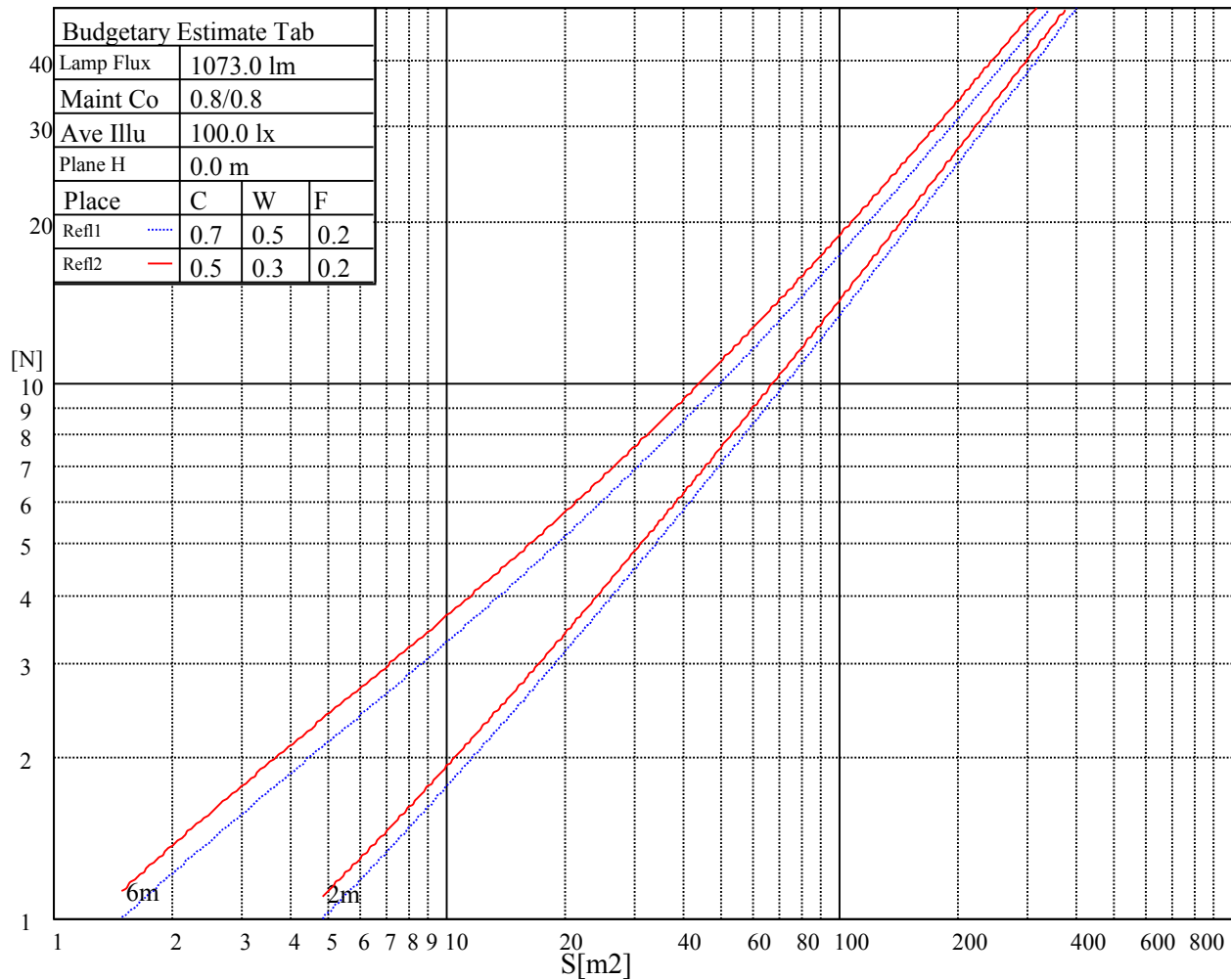
Luminance Limiting Curve

 $\gamma(^{\circ})$ 

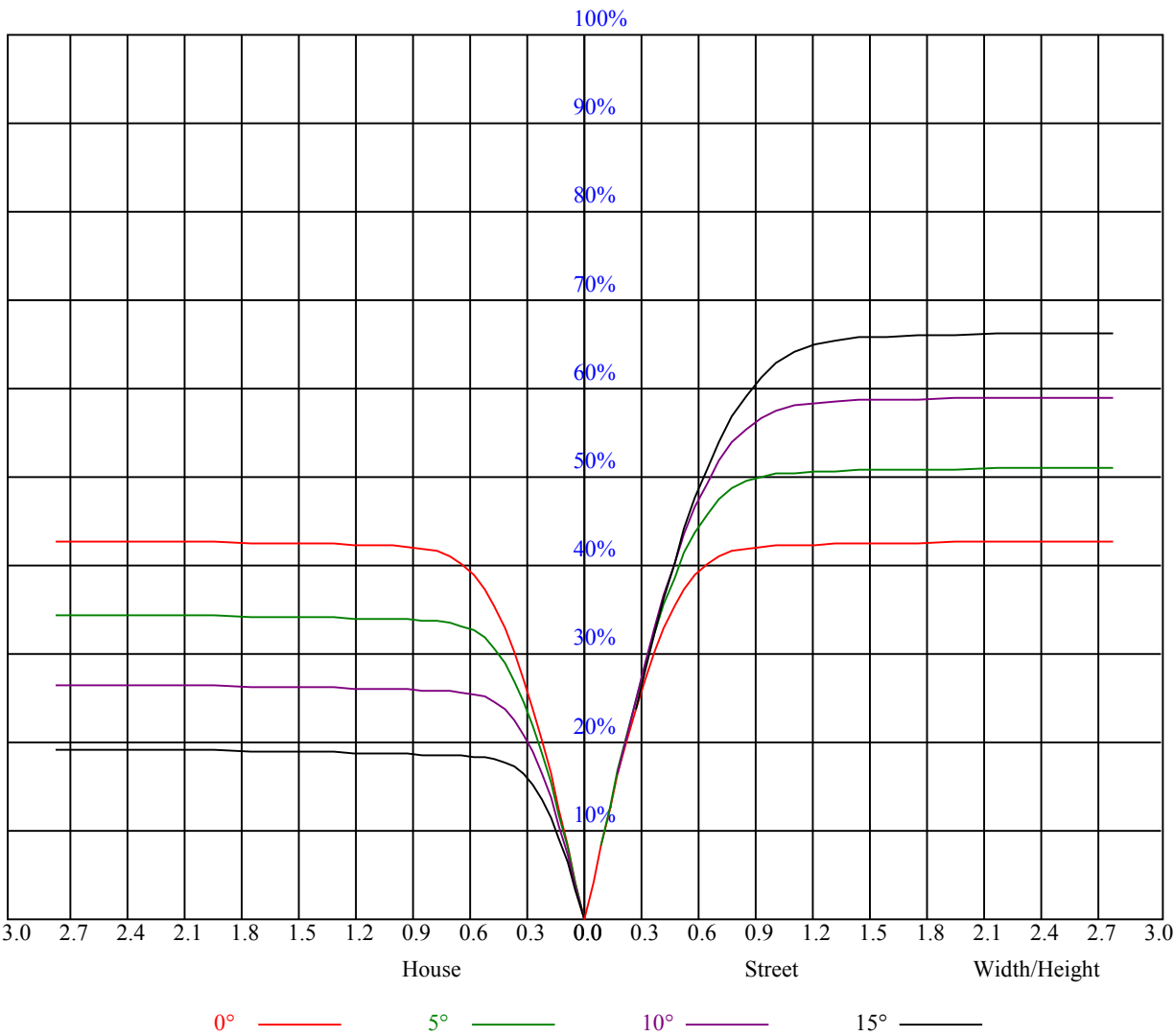
C0 ———

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	1.03	1.03	1.03	1.01	1.01	1.01	0.96	0.96	0.96	0.92	0.92	0.92	0.88	0.88	0.88	0.87
1	0.96	0.94	0.92	0.94	0.92	0.90	0.90	0.89	0.87	0.87	0.86	0.85	0.84	0.83	0.82	0.81
2	0.89	0.86	0.83	0.88	0.85	0.82	0.85	0.82	0.80	0.82	0.80	0.78	0.80	0.78	0.77	0.75
3	0.83	0.79	0.76	0.82	0.78	0.75	0.80	0.77	0.74	0.78	0.75	0.73	0.76	0.74	0.72	0.70
4	0.78	0.74	0.70	0.77	0.73	0.70	0.75	0.72	0.69	0.74	0.71	0.68	0.72	0.69	0.67	0.66
5	0.74	0.69	0.65	0.73	0.68	0.65	0.71	0.67	0.64	0.70	0.66	0.64	0.68	0.65	0.63	0.62
6	0.69	0.64	0.61	0.69	0.64	0.60	0.67	0.63	0.60	0.66	0.62	0.60	0.65	0.62	0.59	0.58
7	0.65	0.60	0.57	0.65	0.60	0.57	0.64	0.59	0.56	0.63	0.59	0.56	0.62	0.58	0.56	0.55
8	0.62	0.57	0.53	0.61	0.57	0.53	0.60	0.56	0.53	0.59	0.56	0.53	0.59	0.55	0.53	0.51
9	0.59	0.54	0.50	0.58	0.53	0.50	0.57	0.53	0.50	0.57	0.53	0.50	0.56	0.52	0.50	0.48
10	0.56	0.51	0.47	0.55	0.50	0.47	0.54	0.50	0.47	0.54	0.50	0.47	0.53	0.50	0.47	0.46



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	1149.19	1137.38	1117.13	1041.75	923.63	790.31	587.81	339.19	100.91
45.0	1145.25	1138.50	1082.81	987.75	867.38	754.31	567.56	307.13	70.54
90.0	1149.19	1121.23	1057.61	944.94	824.51	685.24	467.83	199.69	46.41
135.0	1149.75	1142.44	1094.06	969.75	860.63	729.56	504.00	295.88	52.76
180.0	1149.19	1119.66	1070.49	947.59	847.86	676.63	455.74	192.83	43.82
225.0	1145.25	1139.63	1079.55	958.67	855.96	715.61	494.33	239.12	48.54
270.0	1149.19	1145.81	1120.50	1008.56	882.56	740.25	563.63	316.69	73.07
315.0	1149.75	1146.38	1101.04	1010.14	891.06	753.92	551.70	299.31	66.38
360.0	1149.19	1137.38	1117.13	1041.75	923.63	790.31	587.81	339.19	100.91
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	27.45	12.77	8.33	7.09	7.20	7.31	4.73	4.56	4.33
45.0	19.91	10.35	7.37	6.41	6.02	6.13	5.34	4.44	4.28
90.0	16.03	9.17	7.20	6.75	7.03	8.16	9.23	7.37	5.06
135.0	18.45	9.90	7.37	6.41	6.47	5.96	4.84	4.84	5.01
180.0	15.92	9.39	7.09	6.69	7.03	5.57	4.95	4.78	4.56
225.0	16.76	9.06	7.09	6.36	6.19	6.02	5.01	4.78	4.61
270.0	23.06	10.41	7.37	6.64	6.58	7.59	8.61	8.16	5.51
315.0	21.83	10.41	7.48	6.53	6.41	6.30	4.56	4.39	4.22
360.0	27.45	12.77	8.33	7.09	7.20	7.31	4.73	4.56	4.33
C/γ(°)	90.0								
0.0	3.94								
45.0	3.83								
90.0	3.77								
135.0	3.83								
180.0	3.77								
225.0	3.88								
270.0	3.77								
315.0	3.88								
360.0	3.94								