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Nata

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LumCAT: 3-1547-A3  
Luminaire: TE 2213407-1+92.76.365.00  
Report No: GC2015050805  
Test No: NT-0010  
LampCAT: SOLERIQ S19  
Lamp flux(lm): 3679.0  
Number of Lamps: 1  
Length(mm): 84  
Phm Type: C

Voltage(V): 48.2000  
Current(A): 0.7100  
Power (W): 34.2200  
PF: 0.0000  
Ballast type: DC  
Width(mm): 84  
Height(mm): 0

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Photometric Results

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Lumens(lm): 3301.78  
Efficiency(%): 89.75%  
Lumens(lm)/Power(W): 96.49  
Central intensity(cd): 6287.146  
Maximum intensity(cd): 6287.146  
Angle of maximum intensity: C=0.0  $\gamma$ =0.0  
Beam Angle(50%Imax): [C0/180]Total=39.8  
                                  [C90/270]Total=39.8  
Field angle(10%Imax): [C0/180]Total=70.2  
                                  [C90/270]Total=70.2  
Maximum s/h(1/2): C0\_180=0.66 C90\_270=0.66  
Maximum s/h(1/4): C0\_180=0.63 C90\_270=0.63  
Up flux rate of lamp(%): 1.95%  
Down flux rate of lamp(%): 87.80%  
Up flux rate of LUM(%): 2.17%  
Down flux rate of LUM(%): 97.83%  
CIE Type : Direct lighting  
Output flux ratio in  $\pi$  solid angle : 96.369%

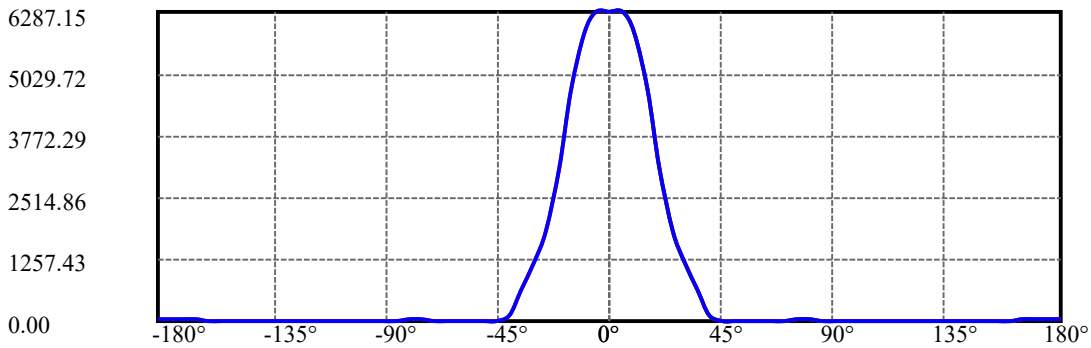
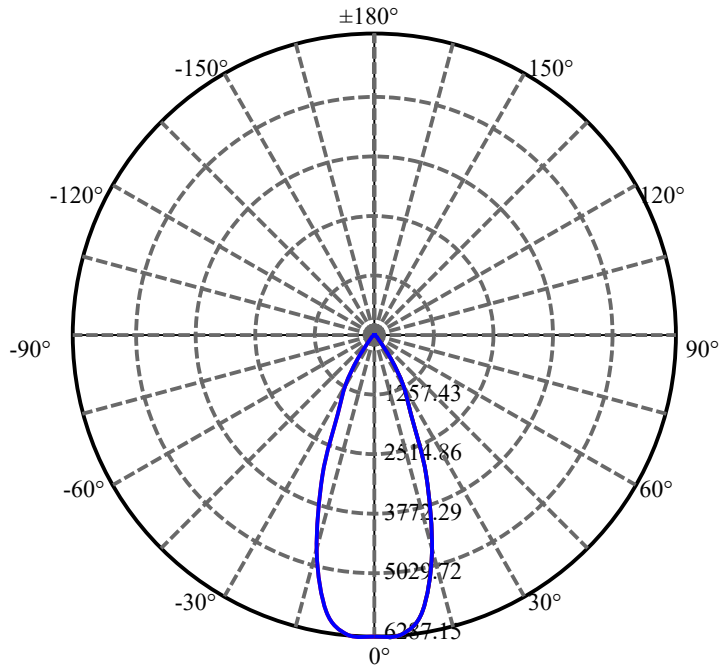
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	6287.146	0.000	0	.000%	.000%
5.0	6287.007	150.320	150.32	4.086%	4.553%
10.0	5843.250	433.937	584.258	11.795%	17.695%
15.0	4669.061	623.583	1207.841	16.950%	36.582%
20.0	3108.045	640.943	1848.784	17.422%	55.994%
25.0	1829.718	517.880	2366.664	14.077%	71.679%
30.0	1197.450	383.091	2749.755	10.413%	83.281%
35.0	637.338	270.185	3019.94	7.344%	91.464%
40.0	105.865	123.998	3143.938	3.370%	95.220%
45.0	14.023	22.198	3166.136	.603%	95.892%
50.0	12.050	5.268	3171.405	.143%	96.051%
55.0	11.729	5.170	3176.575	.141%	96.208%
60.0	11.323	5.328	3181.903	.145%	96.369%
65.0	11.001	5.427	3187.33	.148%	96.534%
70.0	10.875	5.539	3192.87	.151%	96.702%
75.0	19.604	7.967	3200.836	.217%	96.943%
80.0	27.318	12.555	3213.391	.341%	97.323%
85.0	11.617	10.579	3223.971	.288%	97.644%
90.0	10.784	6.134	3230.104	.167%	97.829%
95.0	10.708	5.885	3235.989	.160%	98.008%
100.0	11.162	5.942	3241.931	.162%	98.187%
105.0	11.029	5.938	3247.869	.161%	98.367%
110.0	9.770	5.437	3253.306	.148%	98.532%
115.0	9.707	4.932	3258.238	.134%	98.681%
120.0	9.665	4.710	3262.947	.128%	98.824%
125.0	9.665	4.468	3267.416	.121%	98.959%
130.0	9.770	4.226	3271.642	.115%	99.087%
135.0	9.945	3.984	3275.625	.108%	99.208%
140.0	10.064	3.705	3279.33	.101%	99.320%
145.0	10.603	3.448	3282.778	.094%	99.425%
150.0	12.407	3.388	3286.167	.092%	99.527%
155.0	15.379	3.516	3289.683	.096%	99.634%
160.0	18.855	3.591	3293.274	.098%	99.742%
165.0	21.779	3.349	3296.622	.091%	99.844%
170.0	24.268	2.731	3299.354	.074%	99.927%
175.0	25.940	1.796	3301.15	.049%	99.981%
180.0	26.479	0.627	3301.777	.017%	100.000%

## ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2749.75	74.74%	83.28%
0-40	3143.94	85.46%	95.22%
0-60	3181.90	86.49%	96.37%
0-90	3230.10	87.80%	97.83%
0-120	3262.95	88.69%	98.82%
0-180	3301.78	89.75%	100.00%
60-90	53.53	1.45%	1.62%
90-120	38.98	1.06%	1.18%
90-130	47.67	1.30%	1.44%
90-150	62.20	1.69%	1.88%
90-180	77.18	2.10%	2.34%
0-28.59	2641.42	71.80%	80.00%

## ZONAL LUMEN SUMMARY

0-10	584.26
10-20	1264.53
20-30	900.97
30-40	394.18
40-50	27.47
50-60	10.50
60-70	10.97
70-80	20.52
80-90	16.71
90-100	11.83
100-110	11.37
110-120	9.64
120-130	8.69
130-140	7.69
140-150	6.84
150-160	7.11
160-170	6.08
170-180	1.80



C0(Max): —————

C0/C180: —————

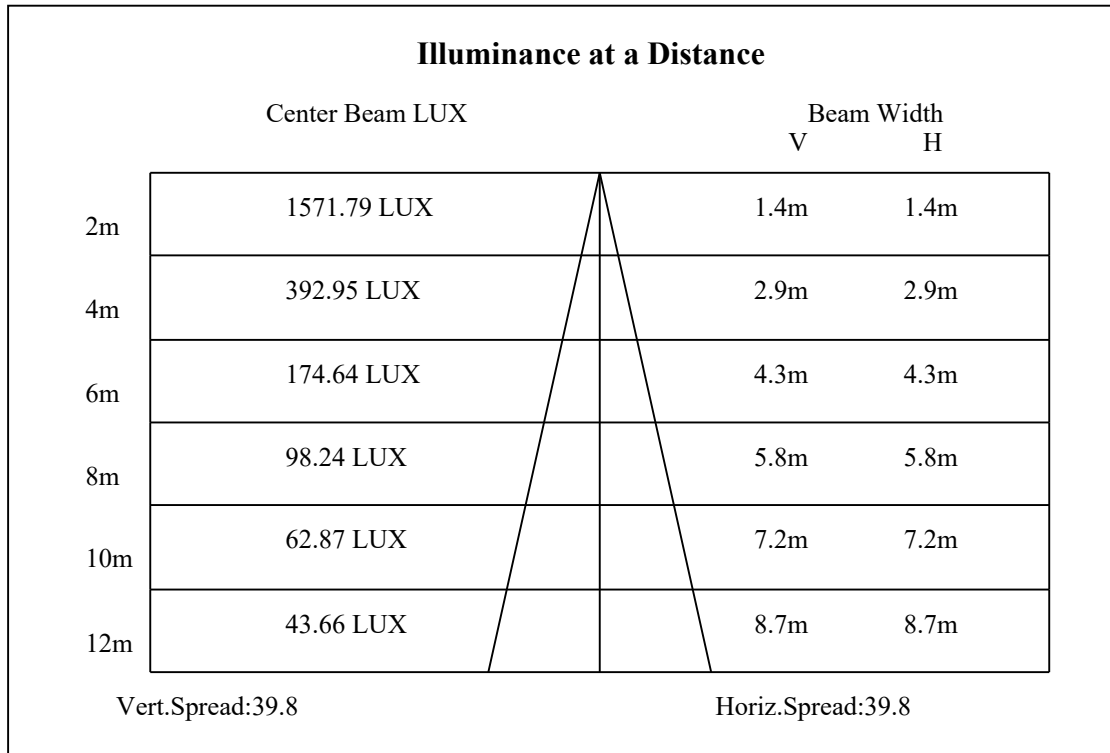
C90/C270: —————

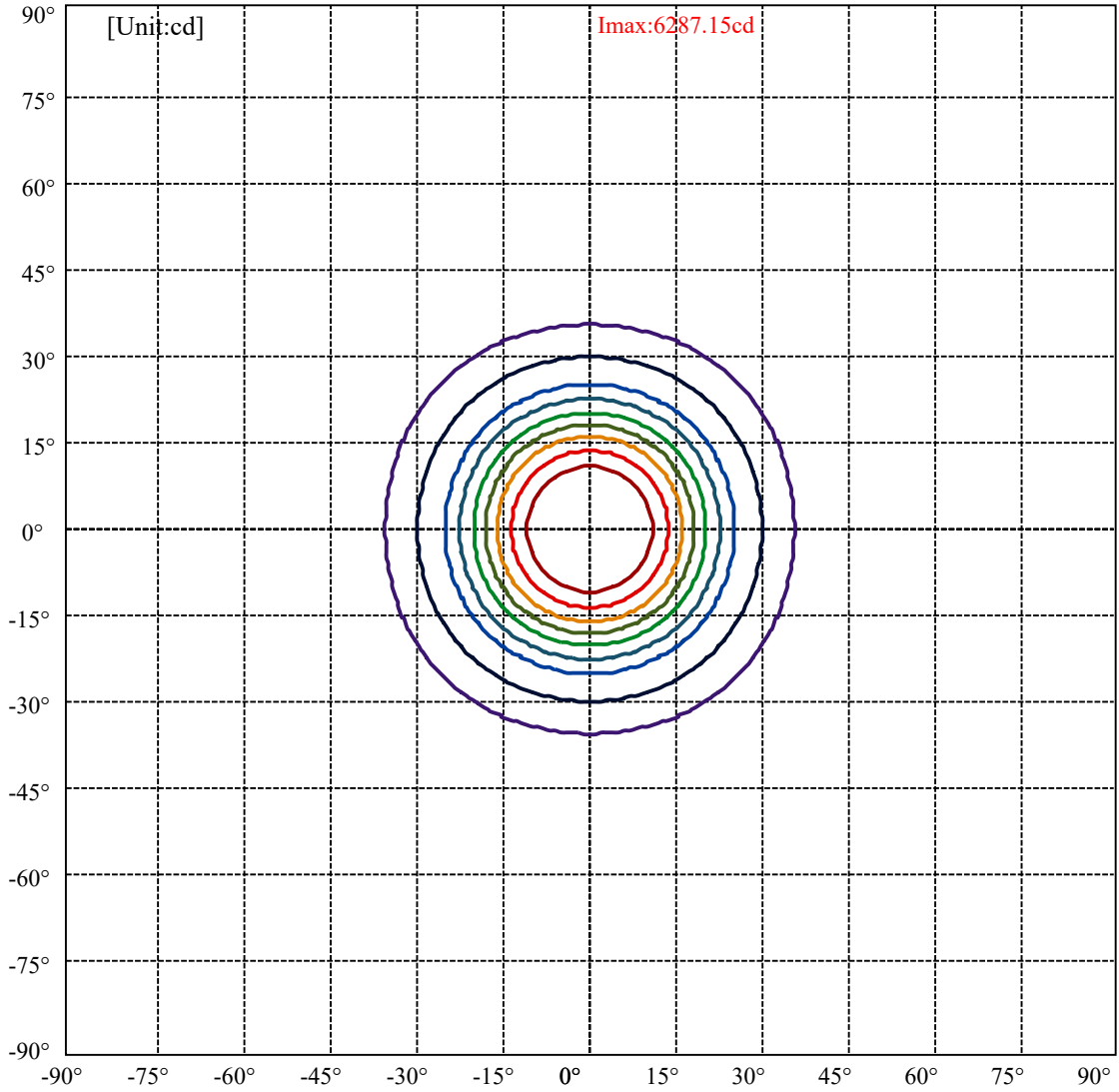
Field angle(10%Imax):C0/180Left:35.1 Right:35.1

:C90/270Left:35.1 Right:35.1

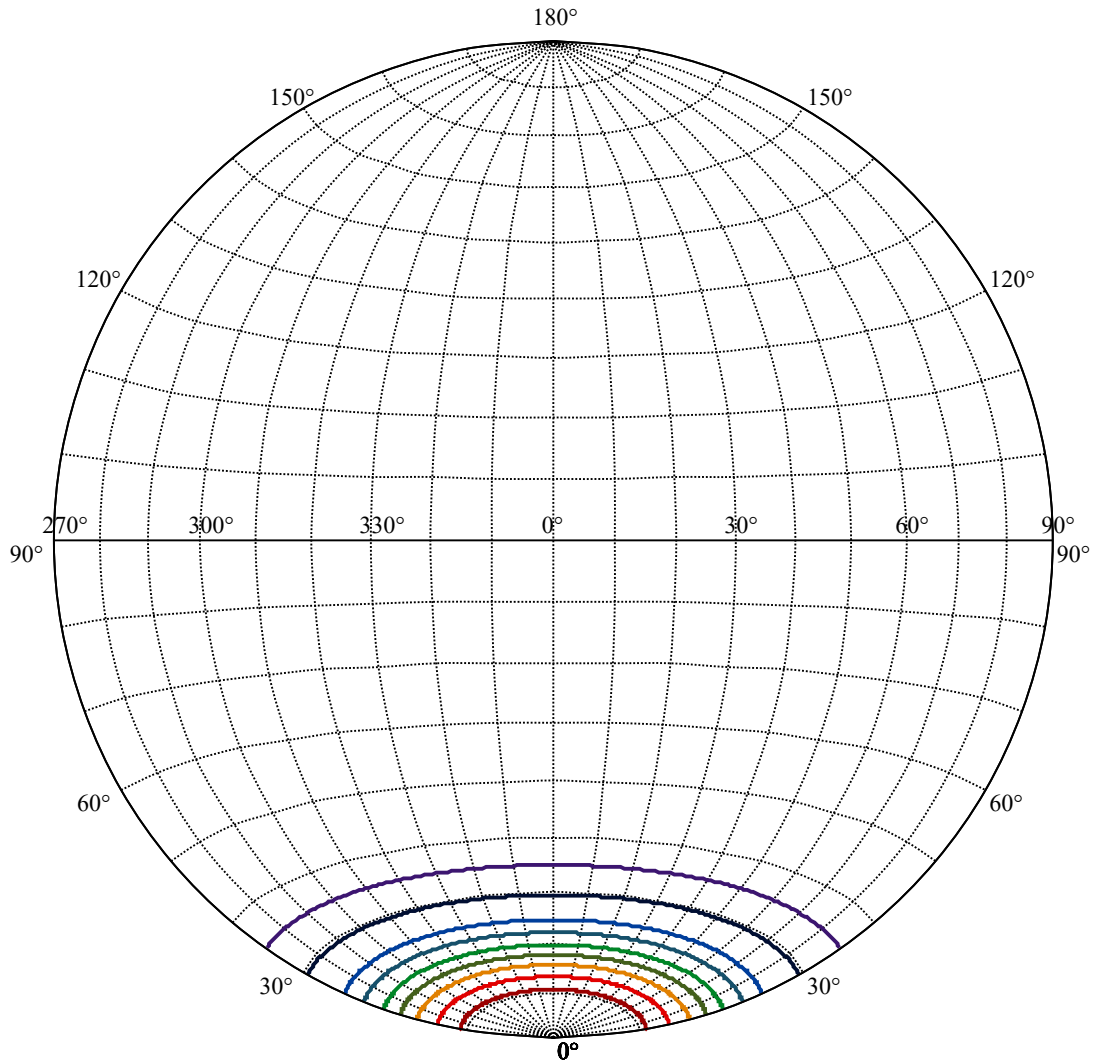
Beam Angle(50%Imax):C0/180Left:19.9 Right:19.9

:C90/270Left:19.9 Right:19.9





(10%Imax) 628.715	—
(20%Imax) 1257.43	—
(30%Imax) 1886.14	—
(40%Imax) 2514.86	—
(50%Imax) 3143.57	—
(60%Imax) 3772.29	—
(70%Imax) 4401	—
(80%Imax) 5029.72	—
(90%Imax) 5658.43	—



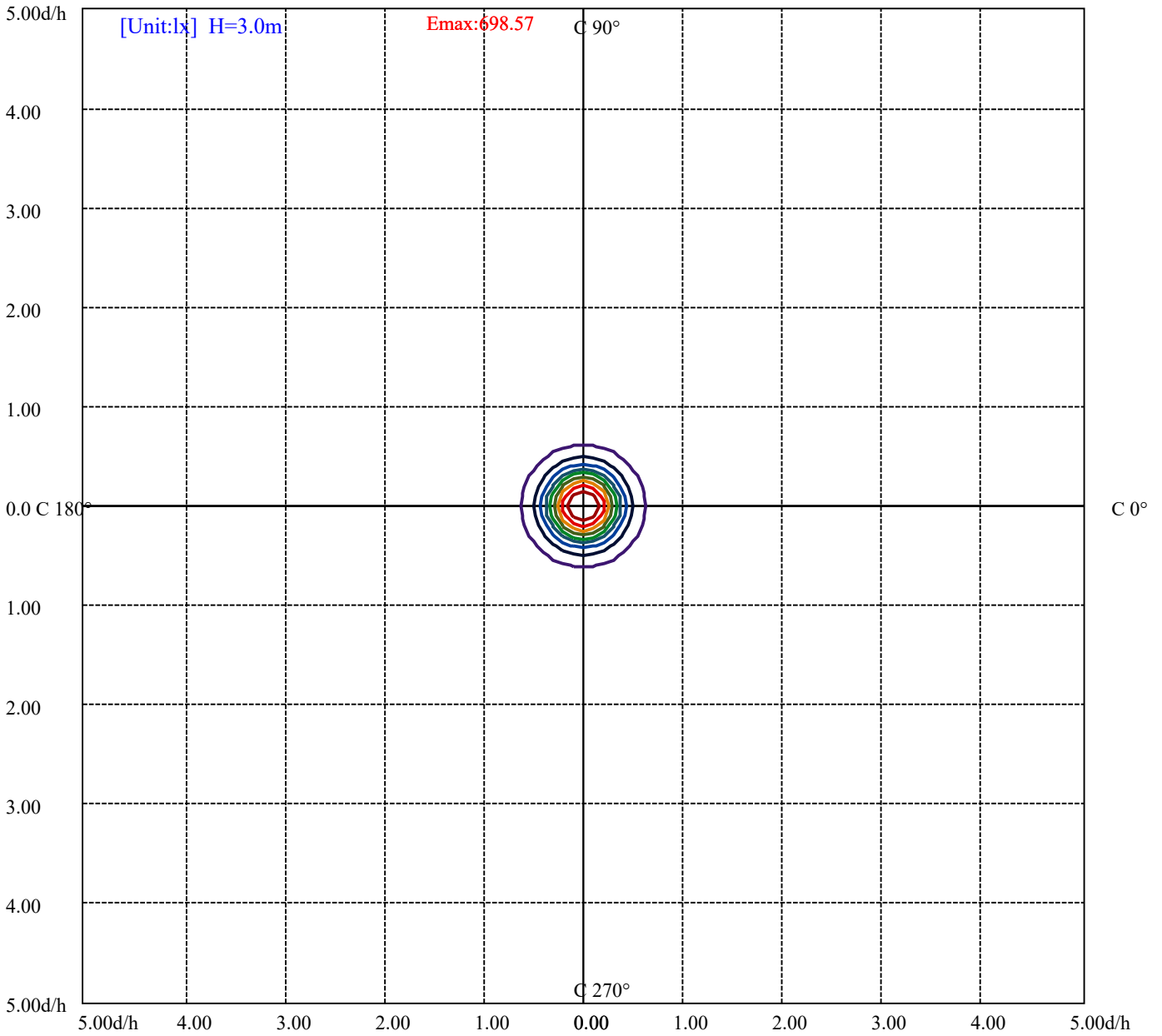
House

[Unit:cd]

Road

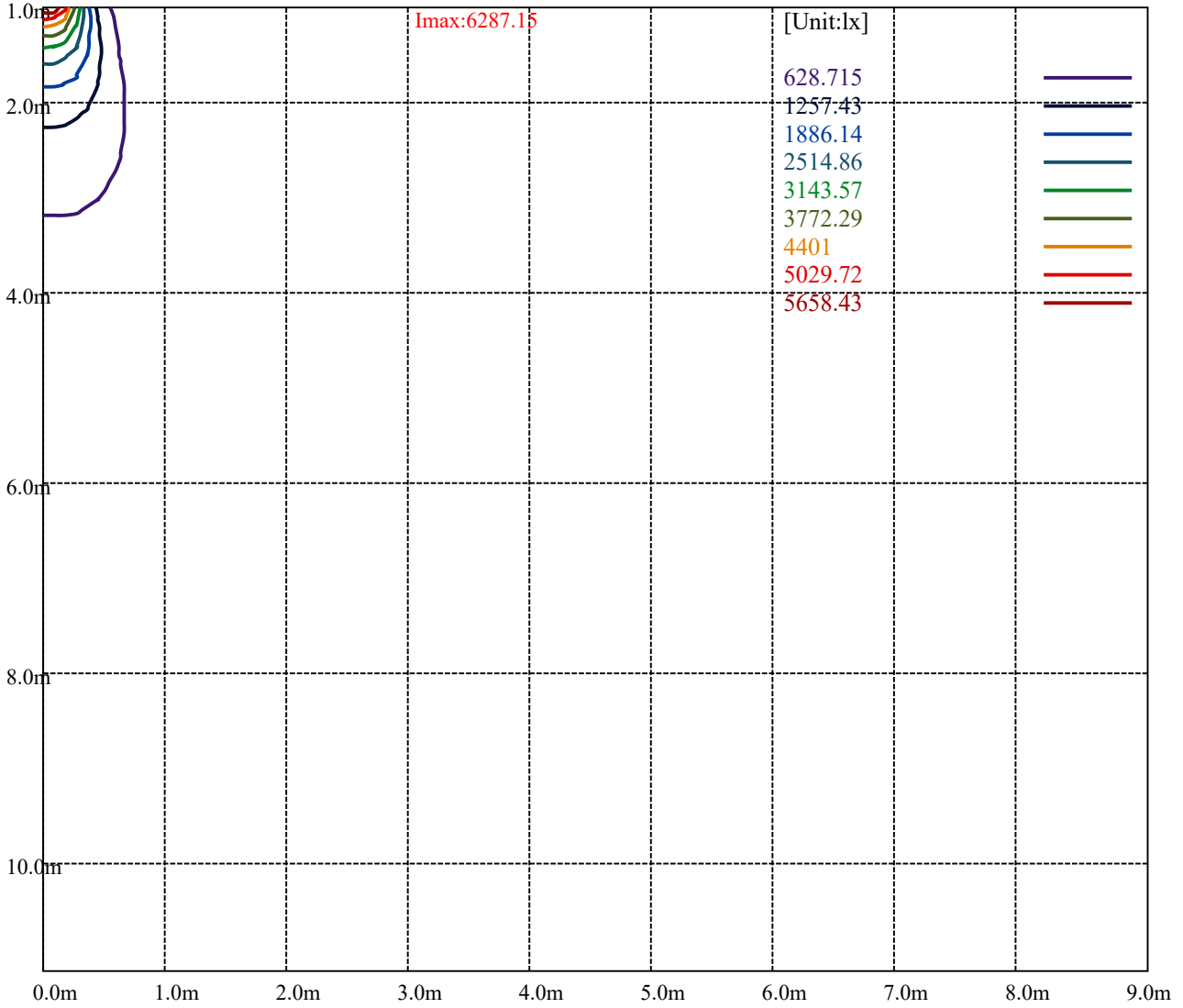
Imax:6287.15

(10%Imax) 628.715	—
(20%Imax) 1257.43	—
(30%Imax) 1886.14	—
(40%Imax) 2514.86	—
(50%Imax) 3143.57	—
(60%Imax) 3772.29	—
(70%Imax) 4401	—
(80%Imax) 5029.72	—
(90%Imax) 5658.43	—



- (10%Emax) 69.85722
- (20%Emax) 139.7144
- (30%Emax) 209.5711
- (40%Emax) 279.4289
- (50%Emax) 349.2856
- (60%Emax) 419.1433
- (70%Emax) 489
- (80%Emax) 558.8578
- (90%Emax) 628.7145





Luminance Table

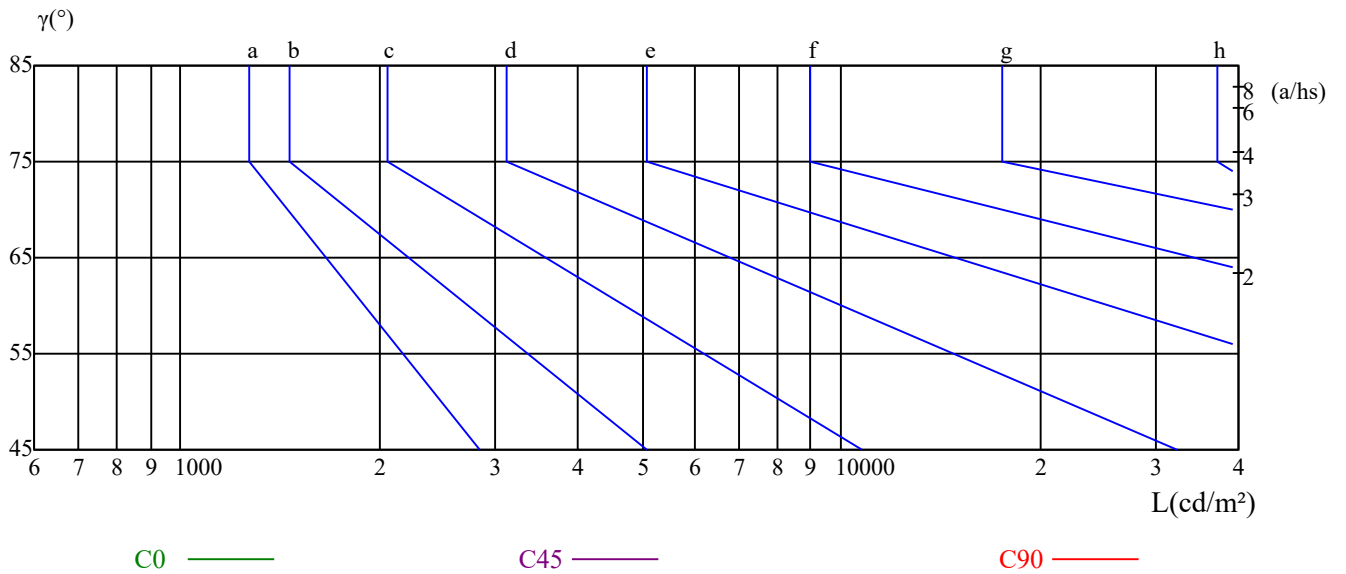
$\gamma$	45	50	55	60	65	70	75	80	85
C0	565	526	564	611	682	799	1783	3297	2107
C45	548	507	540	580	641	741	1624	2910	1753
C90	565	526	564	611	682	799	1783	3297	2107

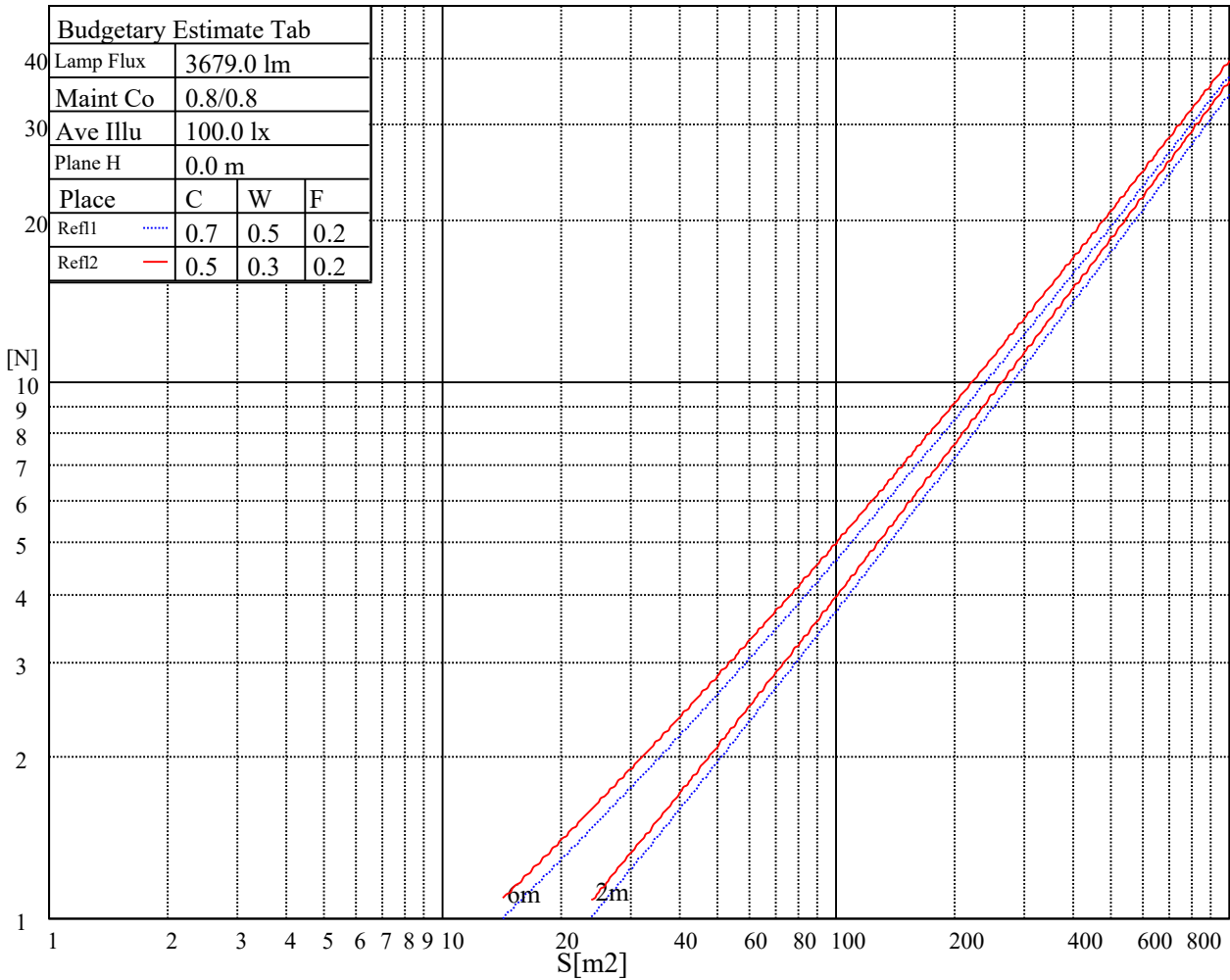
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
803	803	803	2338	2338	2338	4114	4114	4114

Glare Table

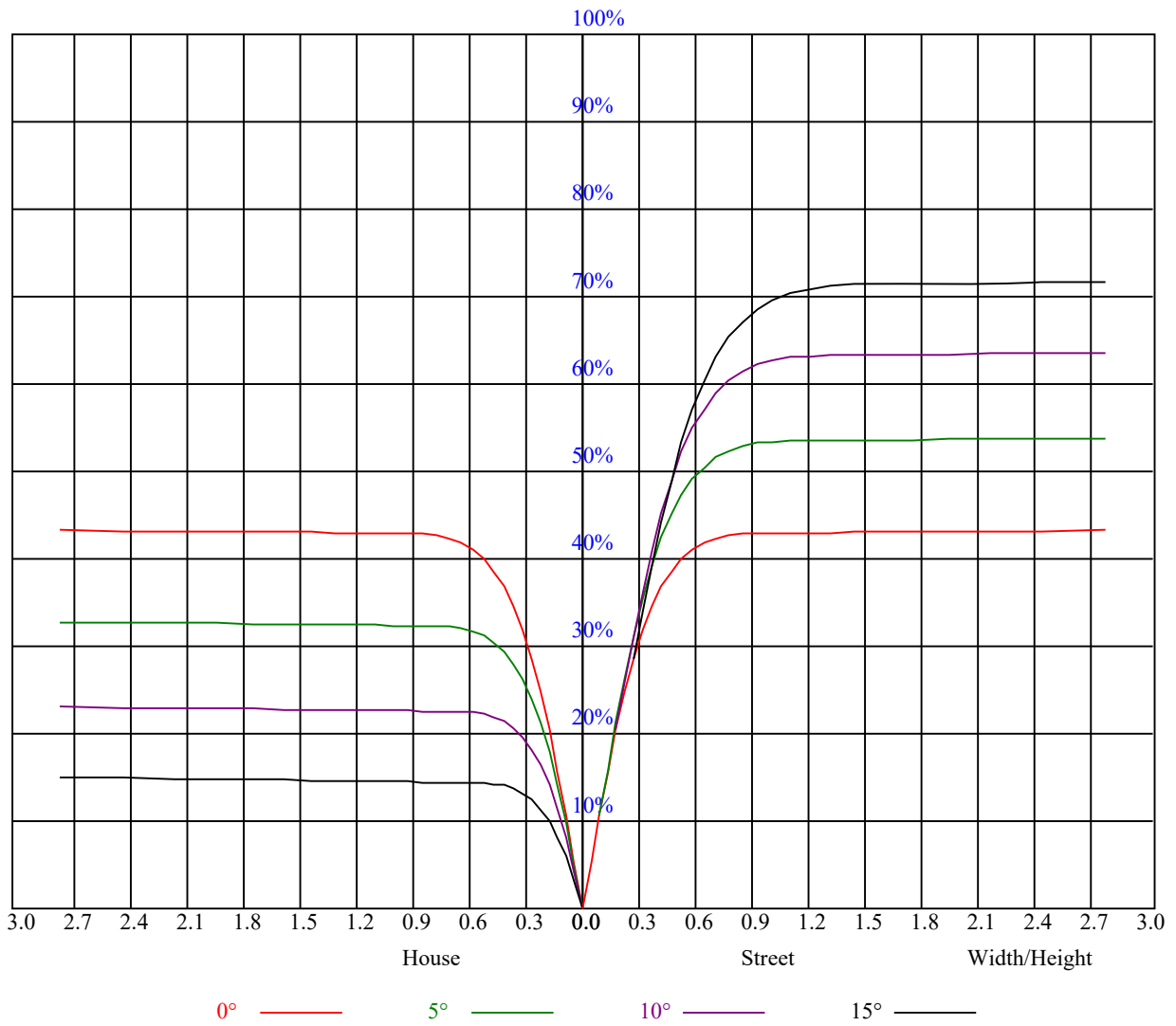
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.06	1.06	1.06	1.04	1.04	1.04	0.99	0.99	0.99	0.94	0.94	0.94	0.90	0.90	0.90	0.88
1	0.99	0.97	0.95	0.97	0.95	0.94	0.93	0.92	0.90	0.90	0.88	0.87	0.86	0.85	0.85	0.83
2	0.93	0.90	0.87	0.92	0.89	0.86	0.88	0.86	0.84	0.86	0.84	0.82	0.83	0.81	0.80	0.78
3	0.88	0.84	0.81	0.87	0.83	0.80	0.84	0.81	0.79	0.82	0.79	0.77	0.80	0.77	0.76	0.74
4	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	0.71
5	0.79	0.74	0.71	0.78	0.74	0.71	0.76	0.73	0.70	0.75	0.72	0.69	0.73	0.70	0.68	0.67
6	0.75	0.70	0.67	0.74	0.70	0.67	0.73	0.69	0.66	0.72	0.68	0.66	0.70	0.67	0.65	0.64
7	0.72	0.67	0.64	0.71	0.67	0.63	0.70	0.66	0.63	0.69	0.65	0.62	0.67	0.64	0.62	0.61
8	0.68	0.64	0.60	0.68	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.60	0.65	0.62	0.59	0.58
9	0.65	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.57	0.63	0.60	0.57	0.62	0.59	0.57	0.56
10	0.63	0.58	0.55	0.62	0.58	0.55	0.61	0.57	0.55	0.61	0.57	0.55	0.60	0.57	0.54	0.53



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	6280.99	6316.80	5913.40	4699.27	3162.88	1792.09	1202.93	649.02	49.46
45.0	6288.82	6336.38	6285.47	5334.31	3860.02	2227.39	1464.22	934.93	305.49
90.0	6279.31	6280.99	6018.03	4966.16	3330.17	1951.55	1234.83	766.52	92.09
135.0	6299.46	6254.14	5954.80	4989.66	3525.99	2107.65	1324.35	852.12	287.59
180.0	6280.99	6248.54	5759.53	4641.09	3027.48	1847.48	1097.41	627.65	50.41
225.0	6288.82	6216.09	5428.31	4024.51	2431.04	1485.48	1001.51	337.38	18.13
270.0	6279.31	6324.63	5725.40	4432.95	2849.55	1638.23	1154.82	510.83	23.22
315.0	6299.46	6318.48	5661.06	4264.54	2677.23	1587.87	1099.54	420.24	20.53
360.0	6280.99	6316.80	5913.40	4699.27	3162.88	1792.09	1202.93	649.02	49.46

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	13.82	11.75	11.25	10.91	10.69	10.46	11.81	19.47	10.63
45.0	16.23	12.42	11.92	11.53	11.13	10.85	10.91	27.98	13.71
90.0	14.94	12.31	12.20	11.64	11.19	11.13	19.92	35.14	12.31
135.0	15.16	12.53	12.42	11.92	11.47	11.19	20.76	47.45	12.70
180.0	13.26	12.48	12.14	11.86	11.53	11.47	25.07	35.14	11.86
225.0	13.76	11.97	11.75	11.19	10.97	11.19	35.92	21.93	10.91
270.0	12.76	11.64	11.25	10.91	10.63	10.46	16.67	16.56	10.57
315.0	12.25	11.30	10.91	10.63	10.41	10.24	15.78	14.88	10.24
360.0	13.82	11.75	11.25	10.91	10.69	10.46	11.81	19.47	10.63

C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	10.41	10.29	10.74	10.18	10.07	9.85	9.79	9.79	9.90
45.0	10.80	10.52	10.69	10.97	9.74	9.68	9.62	9.62	9.68
90.0	11.02	10.80	11.13	12.09	9.62	9.57	9.57	9.57	9.57
135.0	11.92	11.41	11.75	15.44	9.68	9.62	9.62	9.62	9.62
180.0	11.19	11.13	11.92	9.90	9.74	9.68	9.62	9.62	9.68
225.0	10.74	11.02	11.92	9.79	9.74	9.79	9.74	9.74	9.96
270.0	10.18	10.29	10.63	9.85	9.74	9.74	9.68	9.68	9.85
315.0	10.02	10.18	10.52	10.02	9.85	9.74	9.68	9.68	9.90
360.0	10.41	10.29	10.74	10.18	10.07	9.85	9.79	9.79	9.90

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	10.18	10.35	10.97	12.76	15.95	19.58	22.38	24.90	26.30
45.0	9.74	9.74	9.85	10.74	13.04	16.17	19.19	21.99	24.39
90.0	9.68	9.68	9.90	11.25	13.88	17.40	20.53	23.33	25.51
135.0	9.74	9.74	9.90	11.19	13.88	17.46	20.48	23.39	25.79
180.0	9.79	9.79	10.18	11.69	14.60	18.02	20.98	23.39	25.35
225.0	10.18	10.52	11.53	14.21	17.46	20.81	23.44	25.40	26.13
270.0	10.13	10.29	11.19	13.54	17.06	20.53	23.44	25.79	26.97
315.0	10.13	10.41	11.30	13.88	17.18	20.87	23.78	25.96	27.08
360.0	10.18	10.35	10.97	12.76	15.95	19.58	22.38	24.90	26.30

C/γ(°)	180.0
0.0	26.30
45.0	25.79
90.0	26.80
135.0	27.02
180.0	26.30
225.0	25.79
270.0	26.80
315.0	27.02
360.0	26.30