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Nata

LumCAT: 3-1545-A3
Luminaire: TE 2213401-1+92.76.365.00
Report No: GC2015051301
Test No: NT-0010
LampCAT: CREE CXA1816
Lamp flux(lm): 2259.6
Number of Lamps: 1
Length(mm): 84
Phm Type: C

Voltage(V): 40.0000
Current(A): 0.7300
Power (W): 29.2000
PF: 0.0000
Ballast type: DC
Width(mm): 84
Height(mm): 0

Photometric Results

Lumens(lm): 2147.21
Efficiency(%): 95.03%
Lumens(lm)/Power(W): 73.53
Central intensity(cd): 25969.380
Maximum intensity(cd): 25969.380
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=10.3
 [C90/270]Total=10.3
Field angle(10%Imax): [C0/180]Total=23.3
 [C90/270]Total=23.3
Maximum s/h(1/2): C0_180=0.18 C90_270=0.18
Maximum s/h(1/4): C0_180=0.21 C90_270=0.21
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 95.03%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 99.480%

Equipment: GMS1980
Temperature(°C): 26.0

Date: 2015-5-13
Humidity(%): 90.0%

Operator: NT07
Distance(m): 7.48

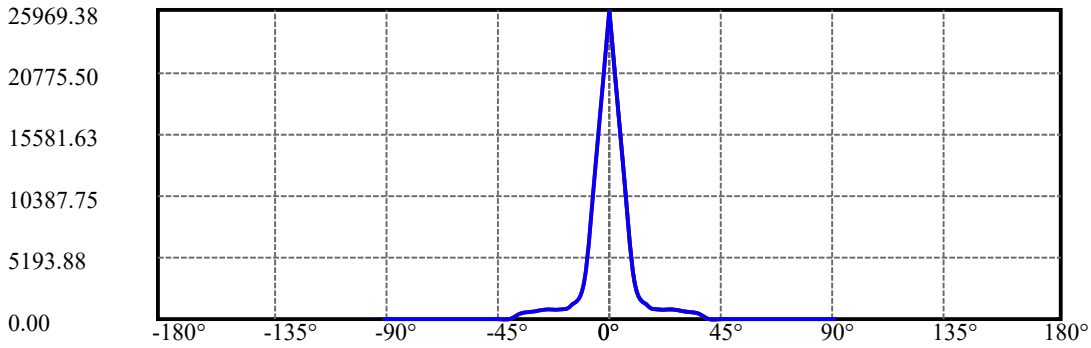
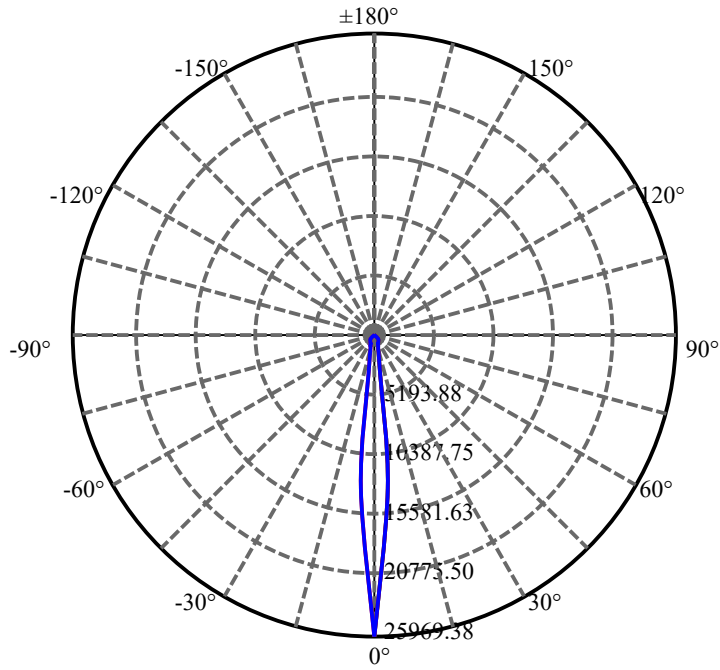
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	25969.379	0.000	0	.000%	.000%
5.0	13287.605	469.306	469.306	20.769%	21.857%
10.0	3306.557	593.625	1062.931	26.271%	49.503%
15.0	1171.601	265.641	1328.573	11.756%	61.874%
20.0	881.834	169.232	1497.805	7.489%	69.756%
25.0	766.968	172.929	1670.734	7.653%	77.809%
30.0	693.785	184.860	1855.593	8.181%	86.419%
35.0	481.677	173.095	2028.688	7.660%	94.480%
40.0	57.069	89.886	2118.574	3.978%	98.666%
45.0	5.987	11.675	2130.249	.517%	99.210%
50.0	4.476	2.114	2132.363	.094%	99.309%
55.0	4.084	1.861	2134.225	.082%	99.395%
60.0	3.805	1.824	2136.048	.081%	99.480%
65.0	3.693	1.823	2137.871	.081%	99.565%
70.0	3.581	1.842	2139.713	.082%	99.651%
75.0	3.525	1.857	2141.57	.082%	99.737%
80.0	3.469	1.871	2143.441	.083%	99.824%
85.0	3.469	1.885	2145.326	.083%	99.912%
90.0	3.413	1.884	2147.211	.083%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1855.59	82.12%	86.42%
0-40	2118.57	93.76%	98.67%
0-60	2136.05	94.53%	99.48%
0-90	2145.33	94.94%	99.91%
0-120	2145.33	94.94%	99.91%
0-180	2147.21	95.03%	100.00%
60-90	11.10	0.49%	0.52%
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%
0-26.27	1717.77	76.02%	80.00%

ZONAL LUMEN SUMMARY

0-10	1062.93
10-20	434.87
20-30	357.79
30-40	262.98
40-50	13.79
50-60	3.68
60-70	3.66
70-80	3.73
80-90	1.89
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: —————

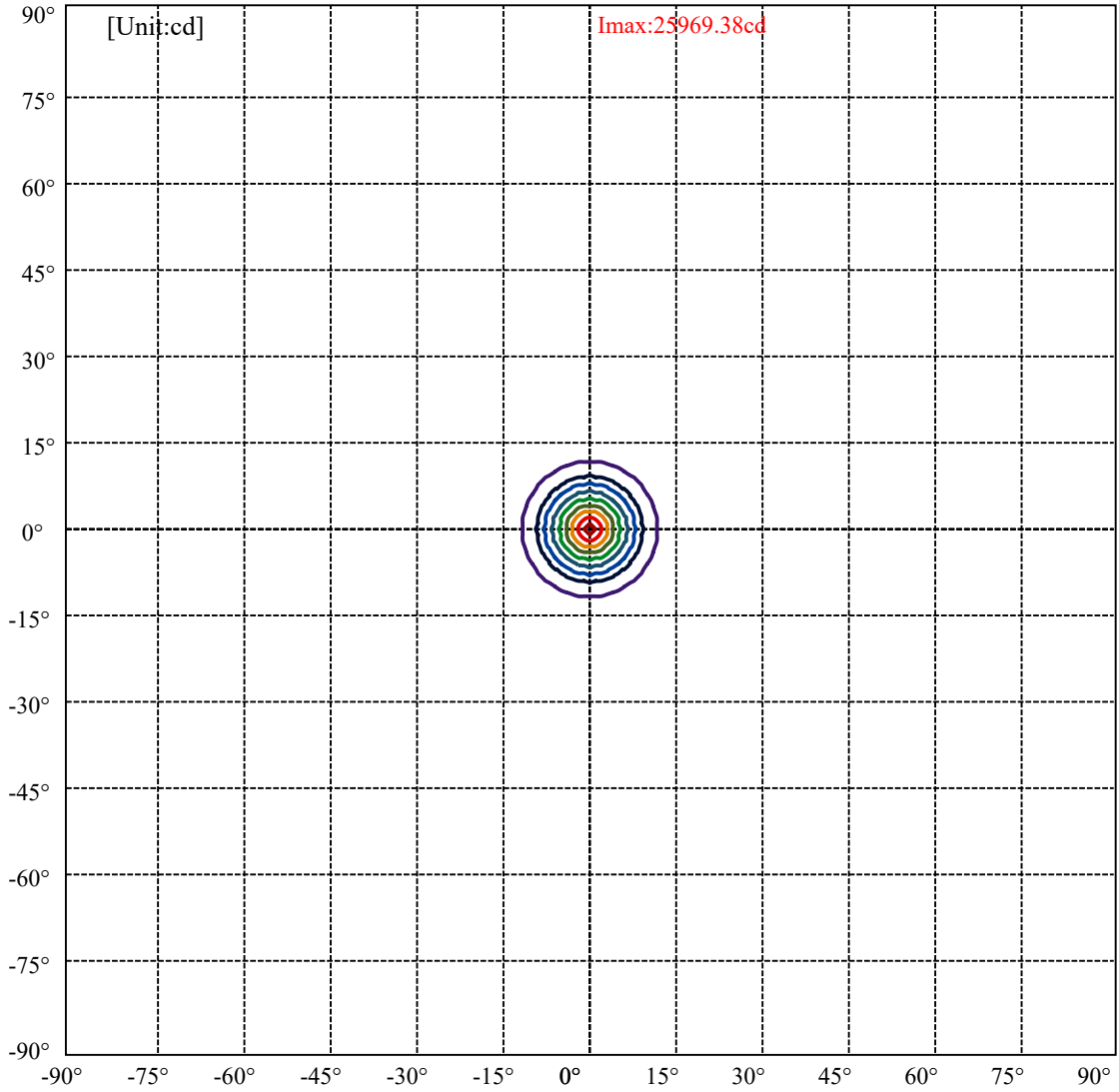
C90/C270: —————

Field angle(10%Imax):C0/180Left:11.7 Right:11.7

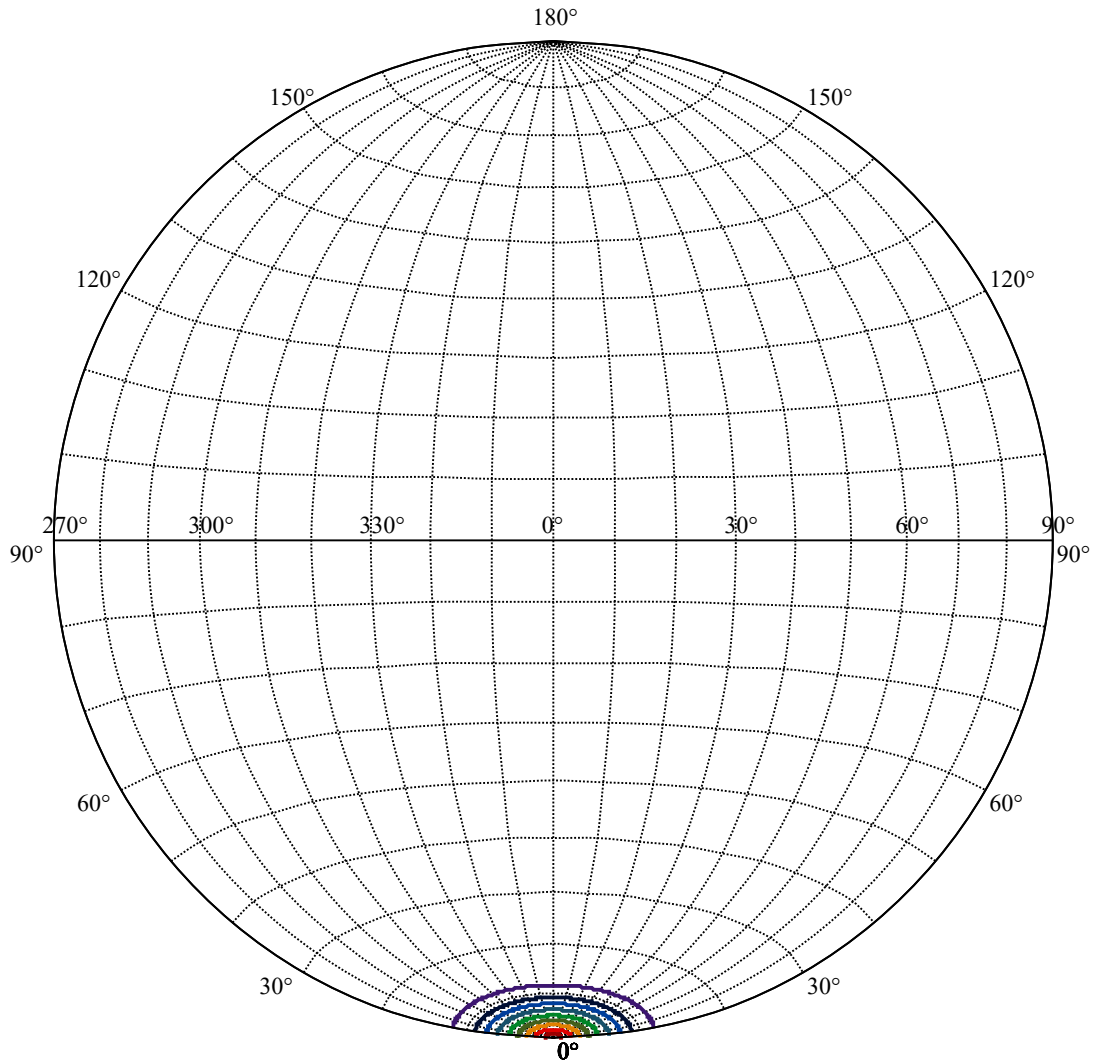
:C90/270Left:11.7 Right:11.7

Beam Angle(50%Imax):C0/180Left:5.2 Right:5.2

:C90/270Left:5.2 Right:5.2



(10%Imax) 2596.94	—
(20%Imax) 5193.88	—
(30%Imax) 7790.81	—
(40%Imax) 10387.8	—
(50%Imax) 12984.7	—
(60%Imax) 15581.6	—
(70%Imax) 18178.6	—
(80%Imax) 20775.5	—
(90%Imax) 23372.4	—



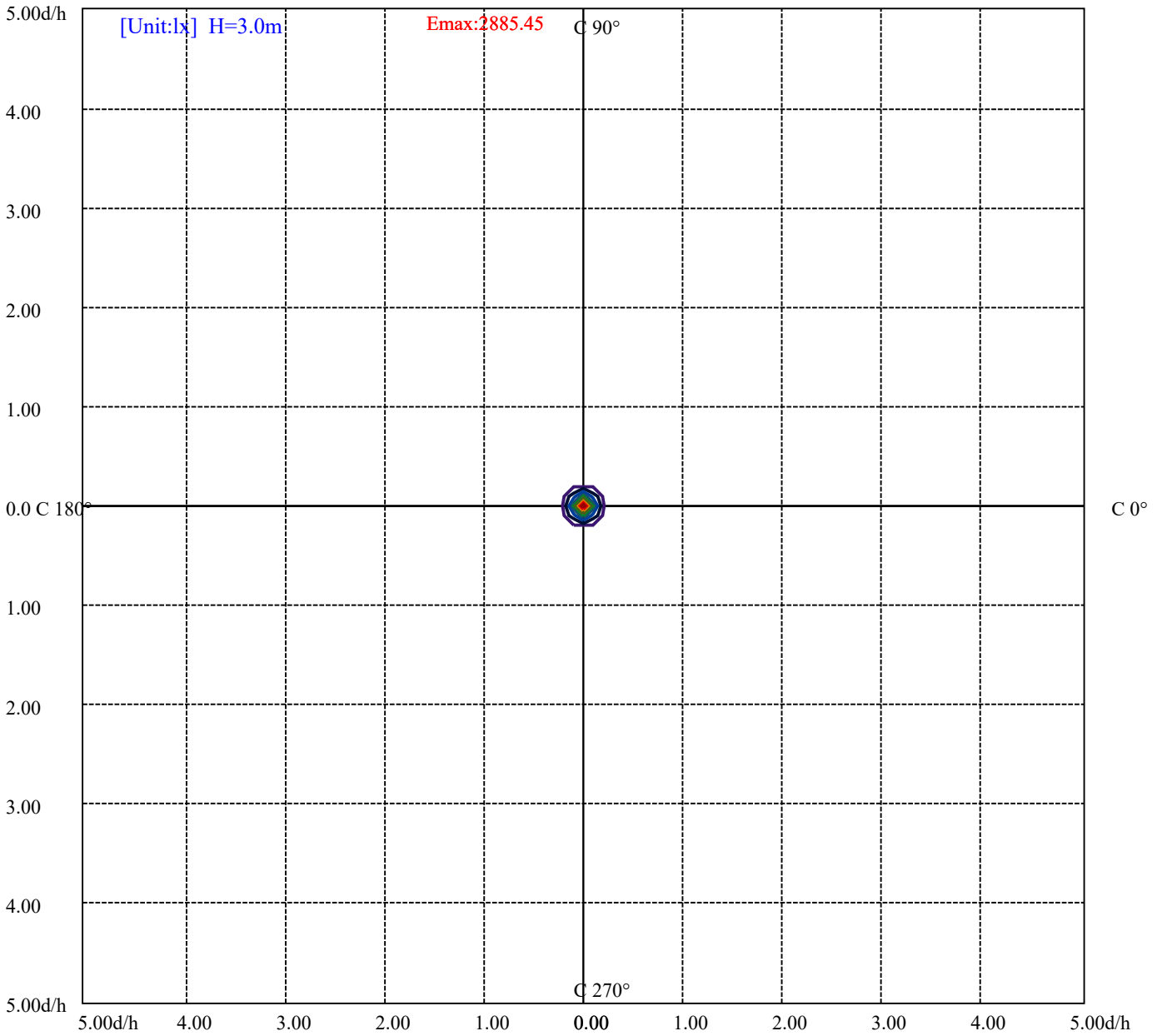
House

[Unit:cd]

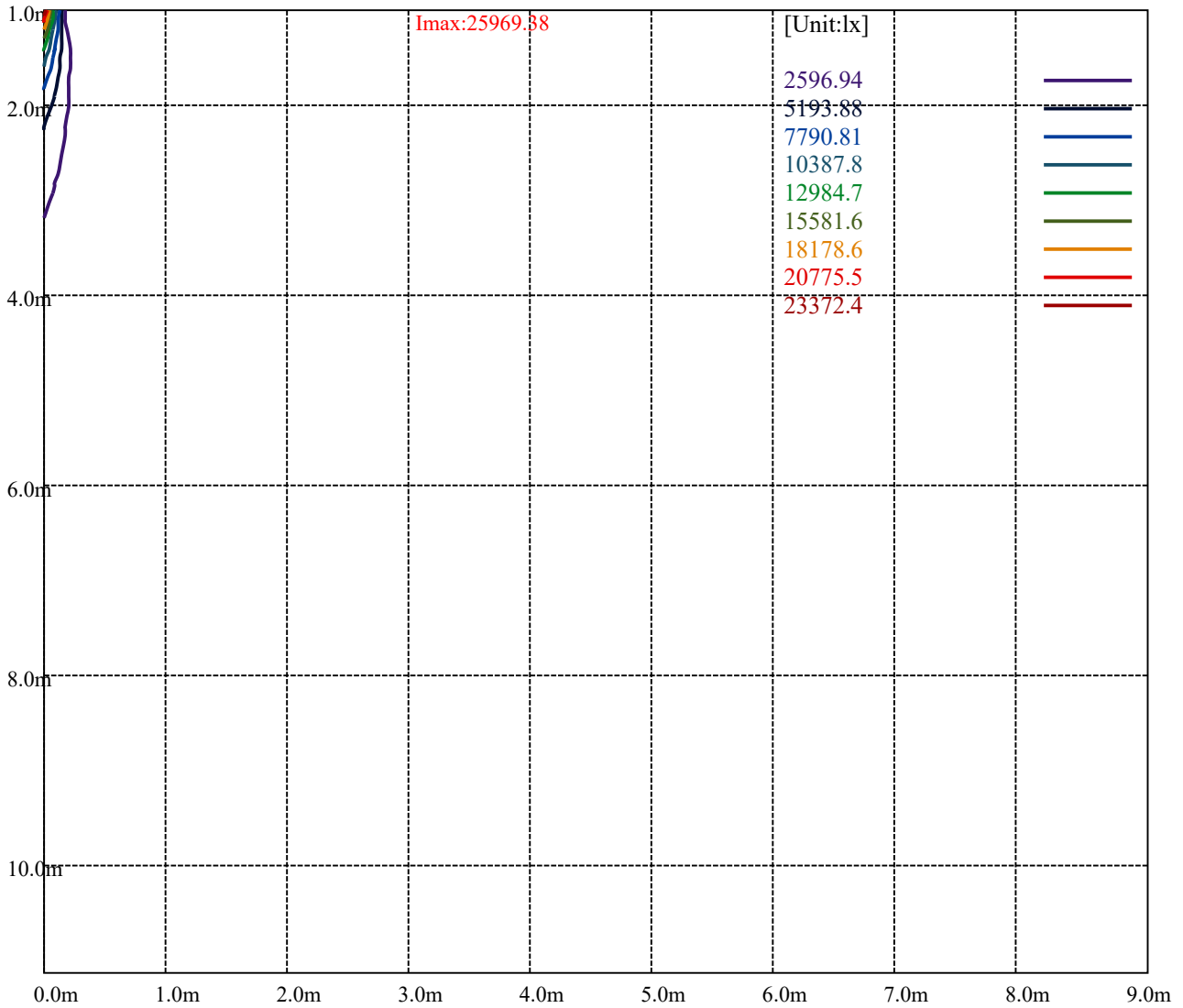
Road

Imax:25969.38

(10%Imax) 2596.94	—
(20%Imax) 5193.88	—
(30%Imax) 7790.81	—
(40%Imax) 10387.8	—
(50%Imax) 12984.7	—
(60%Imax) 15581.6	—
(70%Imax) 18178.6	—
(80%Imax) 20775.5	—
(90%Imax) 23372.4	—



(10%Emax) 288.5444	—
(20%Emax) 577.0889	—
(30%Emax) 865.6334	—
(40%Emax) 1154.178	—
(50%Emax) 1442.722	—
(60%Emax) 1731.267	—
(70%Emax) 2019.811	—
(80%Emax) 2308.355	—
(90%Emax) 2596.9	—



Luminance Table

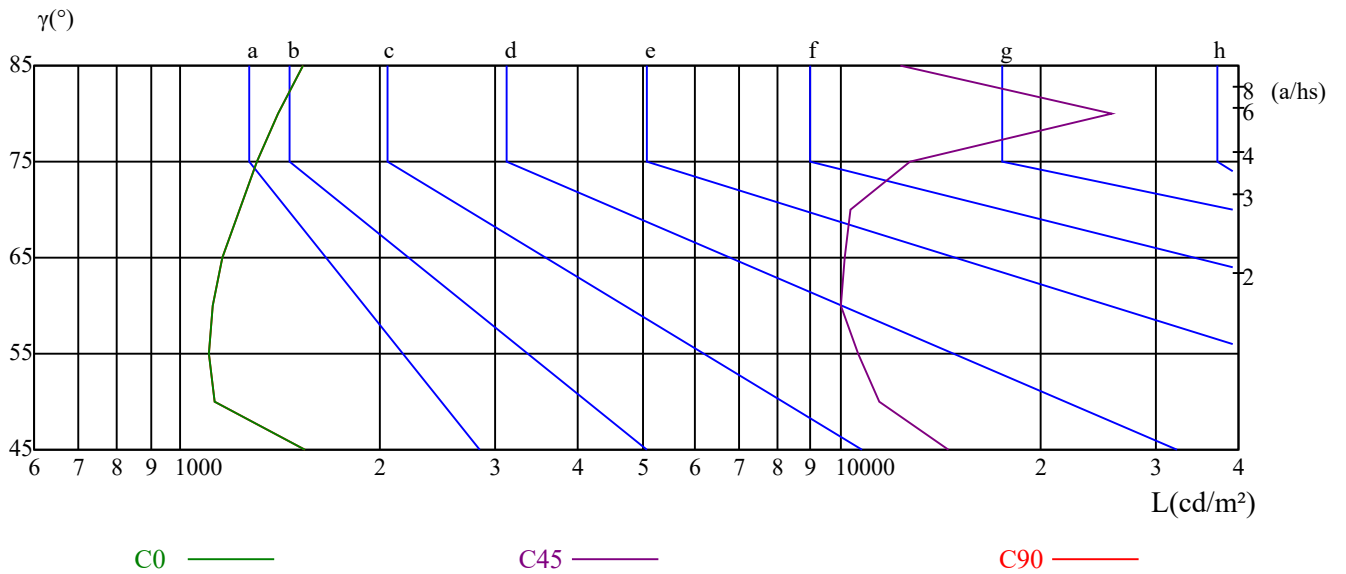
γ	45	50	55	60	65	70	75	80	85
C0	1544	1125	1107	1116	1158	1225	1303	1404	1533
C45	14566	11425	10598	9990	10116	10331	12695	25722	12305
C90	1544	1125	1107	1116	1158	1225	1303	1404	1533

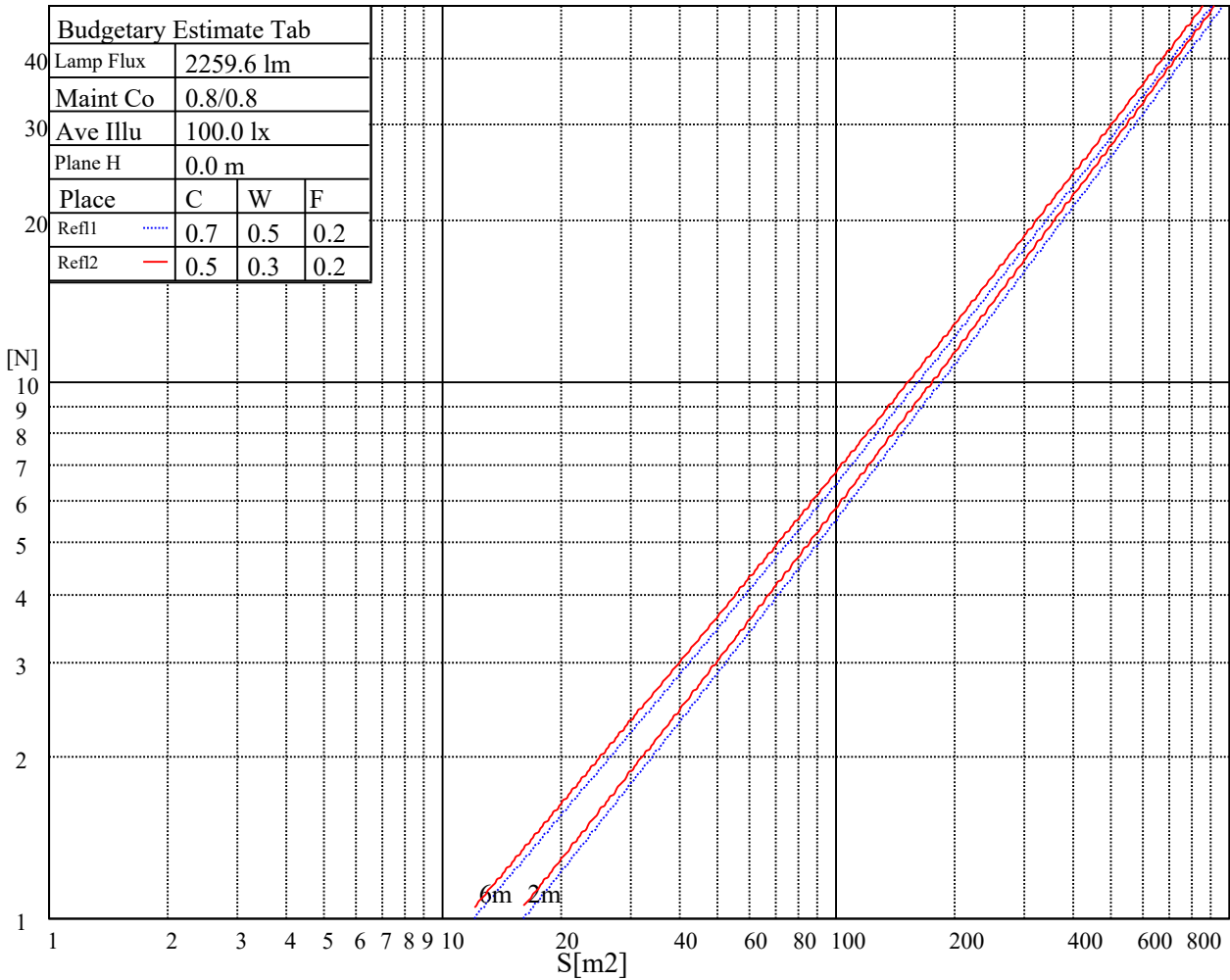
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
2853	2853	31050	4622	4622	58414	13486	13486	148024

Glare Table

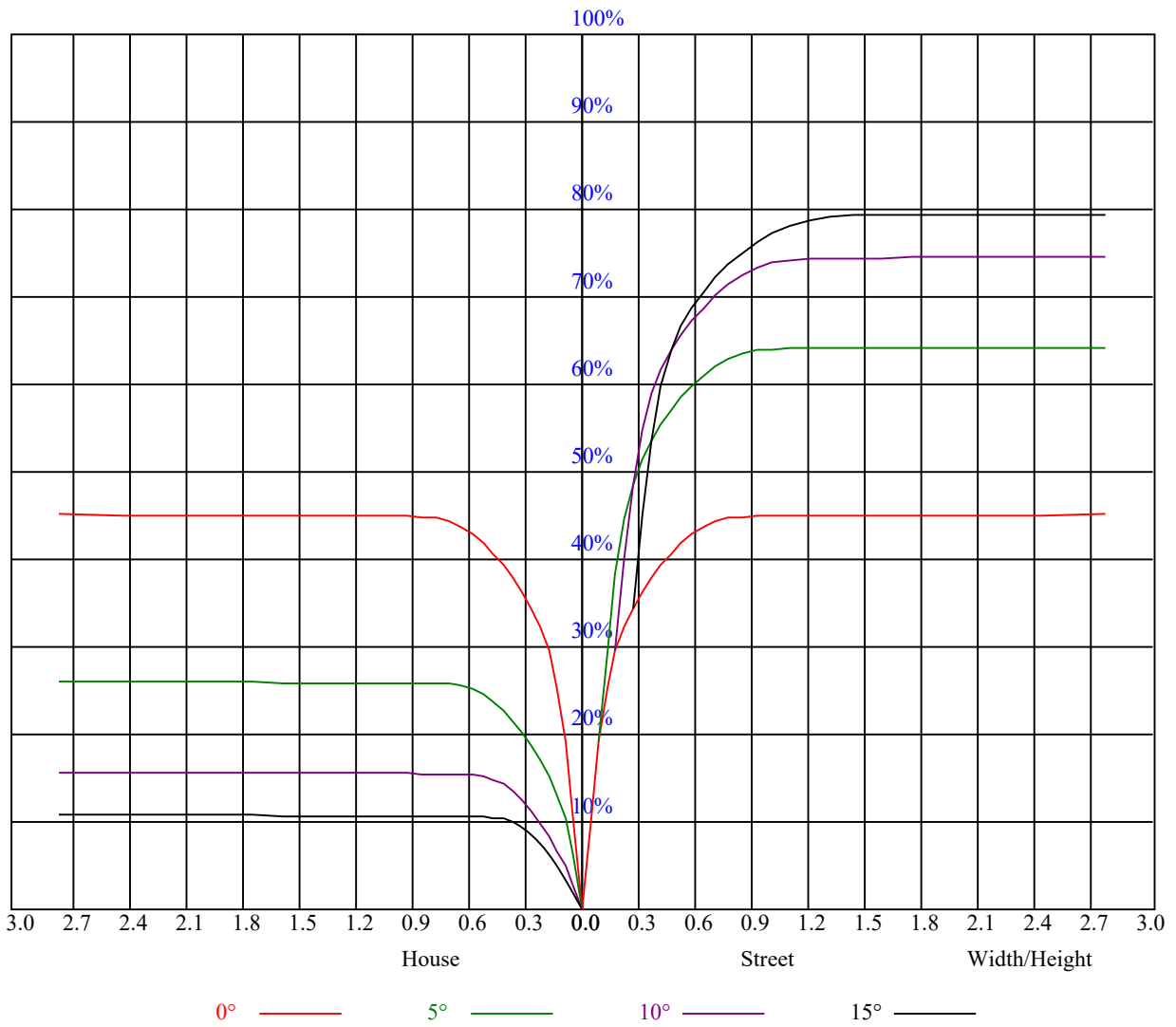
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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 RHOF=20 CU															
0	1.13	1.13	1.13	1.10	1.10	1.10	1.06	1.06	1.06	1.01	1.01	1.01	0.97	0.97	0.97	0.95
1	1.07	1.05	1.04	1.05	1.04	1.02	1.01	1.00	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92
2	1.02	0.99	0.97	1.01	0.98	0.96	0.98	0.96	0.94	0.95	0.93	0.92	0.92	0.91	0.90	0.89
3	0.98	0.94	0.92	0.97	0.93	0.91	0.94	0.92	0.89	0.92	0.90	0.88	0.90	0.88	0.87	0.86
4	0.94	0.90	0.87	0.93	0.89	0.87	0.91	0.88	0.86	0.89	0.87	0.85	0.88	0.86	0.84	0.83
5	0.91	0.87	0.84	0.90	0.86	0.83	0.88	0.85	0.83	0.87	0.84	0.82	0.85	0.83	0.81	0.80
6	0.88	0.84	0.81	0.87	0.83	0.80	0.86	0.82	0.80	0.84	0.82	0.79	0.83	0.81	0.79	0.78
7	0.85	0.81	0.78	0.84	0.81	0.78	0.83	0.80	0.78	0.82	0.79	0.77	0.81	0.79	0.77	0.76
8	0.82	0.78	0.76	0.82	0.78	0.76	0.81	0.78	0.75	0.80	0.77	0.75	0.79	0.77	0.75	0.74
9	0.80	0.76	0.74	0.80	0.76	0.74	0.79	0.76	0.73	0.78	0.75	0.73	0.78	0.75	0.73	0.72
10	0.78	0.74	0.72	0.78	0.74	0.72	0.77	0.74	0.72	0.77	0.74	0.71	0.76	0.73	0.71	0.70



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	25969.38	13287.60	3306.56	1171.60	881.83	766.97	693.78	481.68	57.07
45.0	25969.38	13287.60	3306.56	1171.60	881.83	766.97	693.78	481.68	57.07
90.0	25969.38	13287.60	3306.56	1171.60	881.83	766.97	693.78	481.68	57.07
135.0	25969.38	13287.60	3306.56	1171.60	881.83	766.97	693.78	481.68	57.07
180.0	25969.38	13287.60	3306.56	1171.60	881.83	766.97	693.78	481.68	57.07
225.0	25969.38	13287.60	3306.56	1171.60	881.83	766.97	693.78	481.68	57.07
270.0	25969.38	13287.60	3306.56	1171.60	881.83	766.97	693.78	481.68	57.07
315.0	25969.38	13287.60	3306.56	1171.60	881.83	766.97	693.78	481.68	57.07
360.0	25969.38	13287.60	3306.56	1171.60	881.83	766.97	693.78	481.68	57.07

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	5.99	4.48	4.08	3.80	3.69	3.58	3.52	3.47	3.47
45.0	5.99	4.48	4.08	3.80	3.69	3.58	3.52	3.47	3.47
90.0	5.99	4.48	4.08	3.80	3.69	3.58	3.52	3.47	3.47
135.0	5.99	4.48	4.08	3.80	3.69	3.58	3.52	3.47	3.47
180.0	5.99	4.48	4.08	3.80	3.69	3.58	3.52	3.47	3.47
225.0	5.99	4.48	4.08	3.80	3.69	3.58	3.52	3.47	3.47
270.0	5.99	4.48	4.08	3.80	3.69	3.58	3.52	3.47	3.47
315.0	5.99	4.48	4.08	3.80	3.69	3.58	3.52	3.47	3.47
360.0	5.99	4.48	4.08	3.80	3.69	3.58	3.52	3.47	3.47

C/γ(°)	90.0
0.0	3.41
45.0	3.41
90.0	3.41
135.0	3.41
180.0	3.41
225.0	3.41
270.0	3.41
315.0	3.41
360.0	3.41