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Nata

LumCAT: 3-2101-M	
Luminaire: 92.70.136.00	
Report No: GC2017082805	Voltage(V): 36.7000
Test No: NT-0010	Current(A): 1.0000
LampCAT: CREE CXA3050	Power (W): 36.7000
Lamp flux(lm): 3994.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 84	Width(mm): 84
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 3585.59
Efficiency(%): 89.77%
Lumens(lm)/Power(W): 97.70
Central intensity(cd): 9124.909
Maximum intensity(cd): 9124.909
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=32.7
 [C90/270]Total=32.7
Field angle(10%Imax): [C0/180]Total=65.1
 [C90/270]Total=65.1
Maximum s/h(1/2): C0_180=0.55 C90_270=0.55
Maximum s/h(1/4): C0_180=0.52 C90_270=0.52
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 89.77%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.721%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2017/8/28
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.42

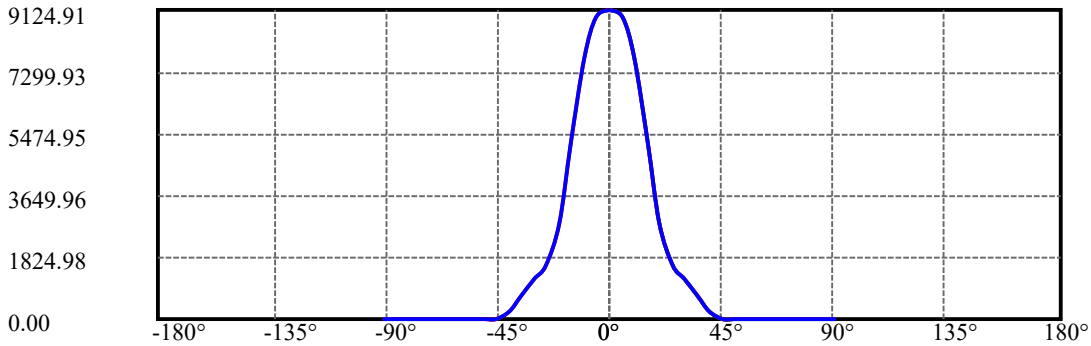
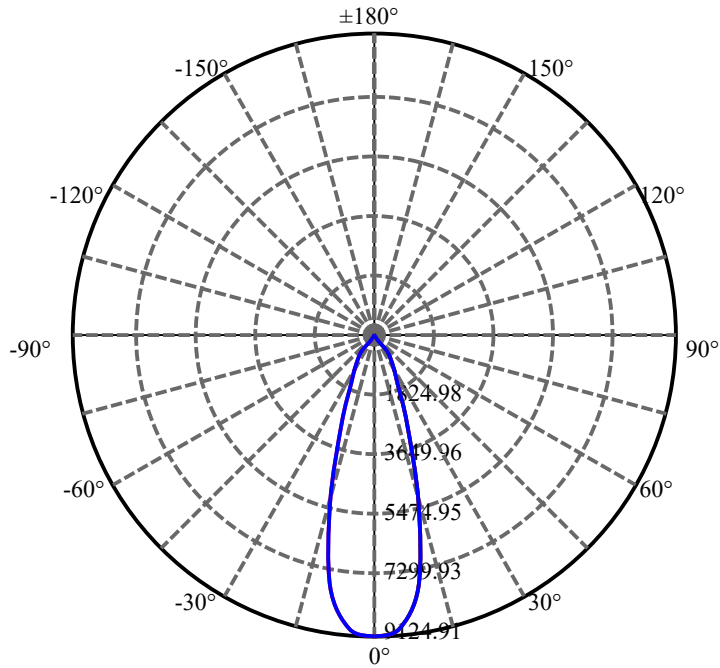
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	9124.910	0.000	0	.000%	.000%
5.0	8901.381	215.499	215.499	5.396%	6.010%
10.0	7726.065	594.816	810.315	14.893%	22.599%
15.0	5213.153	767.546	1577.861	19.217%	44.006%
20.0	2840.497	663.734	2241.595	16.618%	62.517%
25.0	1606.752	466.434	2708.029	11.678%	75.525%
30.0	1169.838	351.380	3059.409	8.798%	85.325%
35.0	668.192	270.663	3330.072	6.777%	92.874%
40.0	209.304	146.404	3476.476	3.666%	96.957%
45.0	19.029	42.278	3518.753	1.059%	98.136%
50.0	16.166	7.112	3525.865	.178%	98.334%
55.0	15.381	6.859	3532.724	.172%	98.526%
60.0	14.927	7.006	3539.73	.175%	98.721%
65.0	14.652	7.191	3546.921	.180%	98.922%
70.0	14.500	7.382	3554.302	.185%	99.127%
75.0	14.666	7.624	3561.926	.191%	99.340%
80.0	14.741	7.868	3569.794	.197%	99.560%
85.0	14.549	7.959	3577.753	.199%	99.781%
90.0	14.067	7.835	3585.588	.196%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	3059.41	76.60%	85.33%
0-40	3476.48	87.04%	96.96%
0-60	3539.73	88.63%	98.72%
0-90	3577.75	89.58%	99.78%
0-120	3577.75	89.58%	99.78%
0-180	3585.59	89.77%	100.00%
60-90	45.03	1.13%	1.26%
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%
0-27.28	2868.47	71.82%	80.00%

ZONAL LUMEN SUMMARY

0-10	810.32
10-20	1431.28
20-30	817.81
30-40	417.07
40-50	49.39
50-60	13.87
60-70	14.57
70-80	15.49
80-90	7.96
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



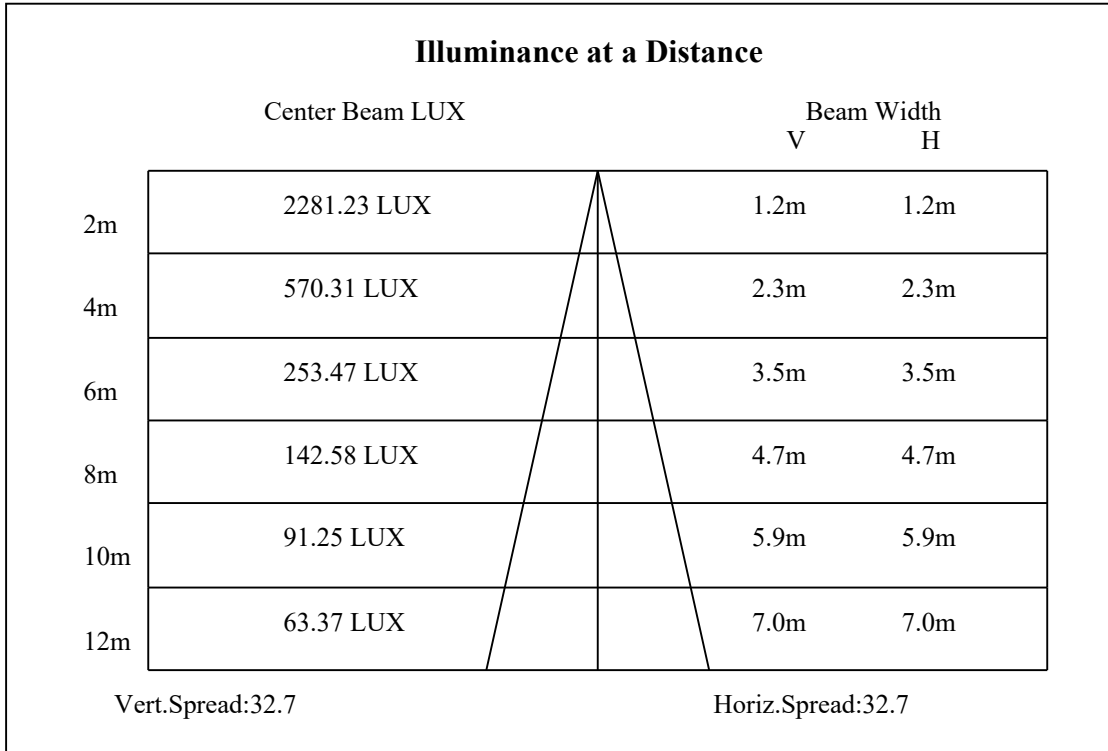
C0(Max): —————

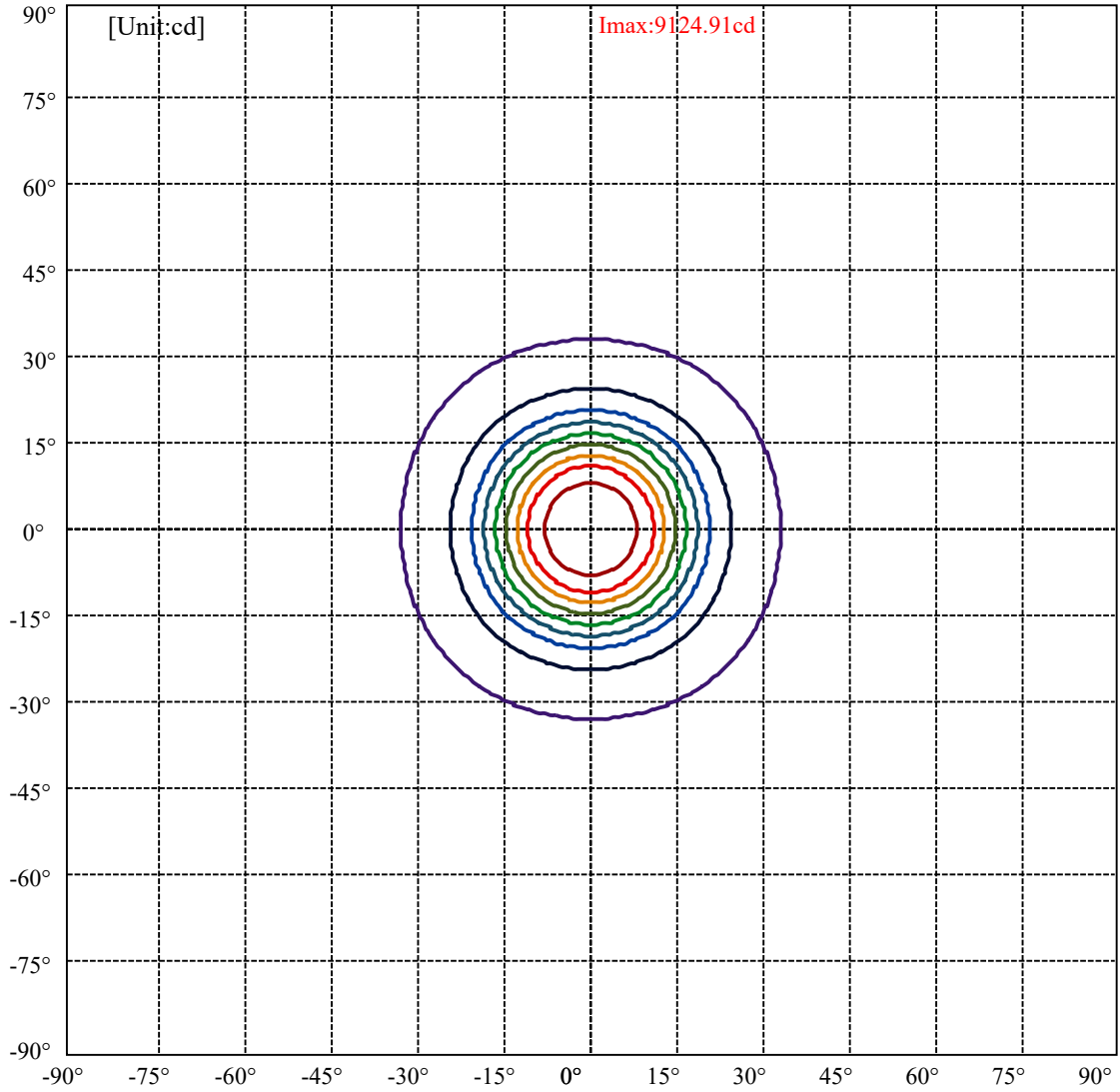
C0/C180: —————

C90/C270: —————

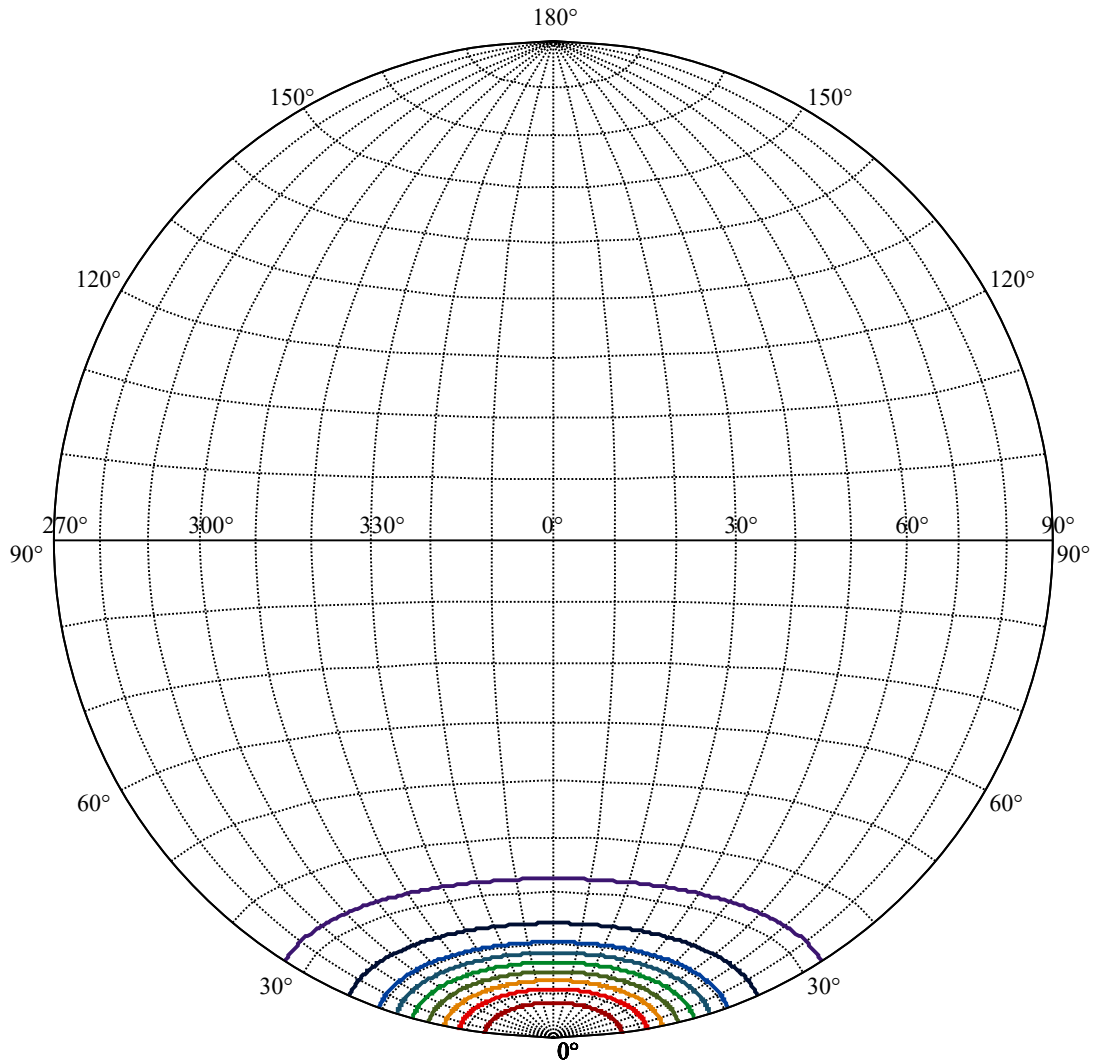
Field angle(10%Imax):C0/180Left:32.6 Right:32.6
:C90/270Left:32.6 Right:32.6

Beam Angle(50%Imax):C0/180Left:16.4 Right:16.4
:C90/270Left:16.4 Right:16.4





(10%Imax)	912.491	—
(20%Imax)	1824.98	—
(30%Imax)	2737.47	—
(40%Imax)	3649.96	—
(50%Imax)	4562.45	—
(60%Imax)	5474.95	—
(70%Imax)	6387.44	—
(80%Imax)	7299.93	—
(90%Imax)	8212.42	—



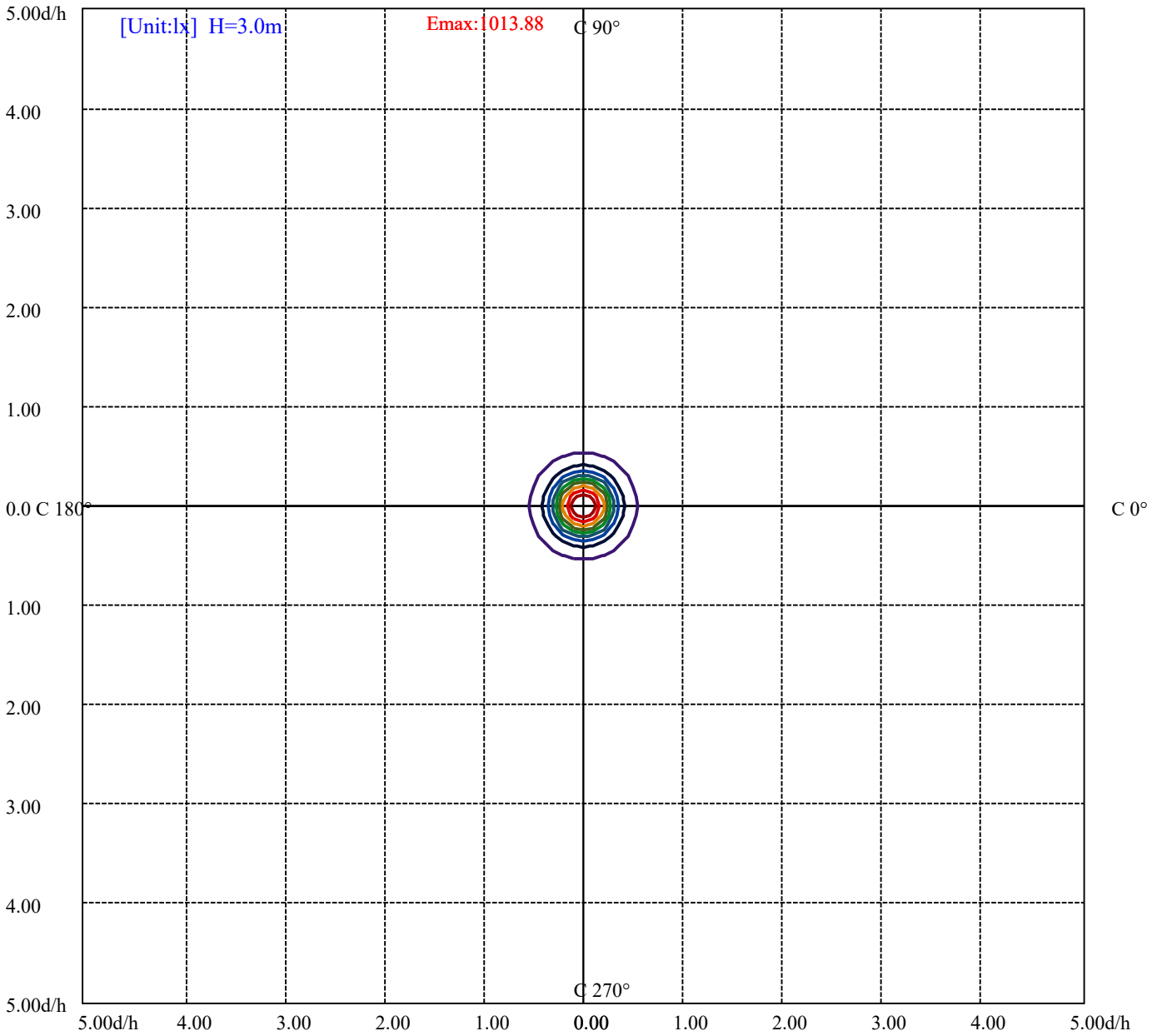
House

[Unit:cd]

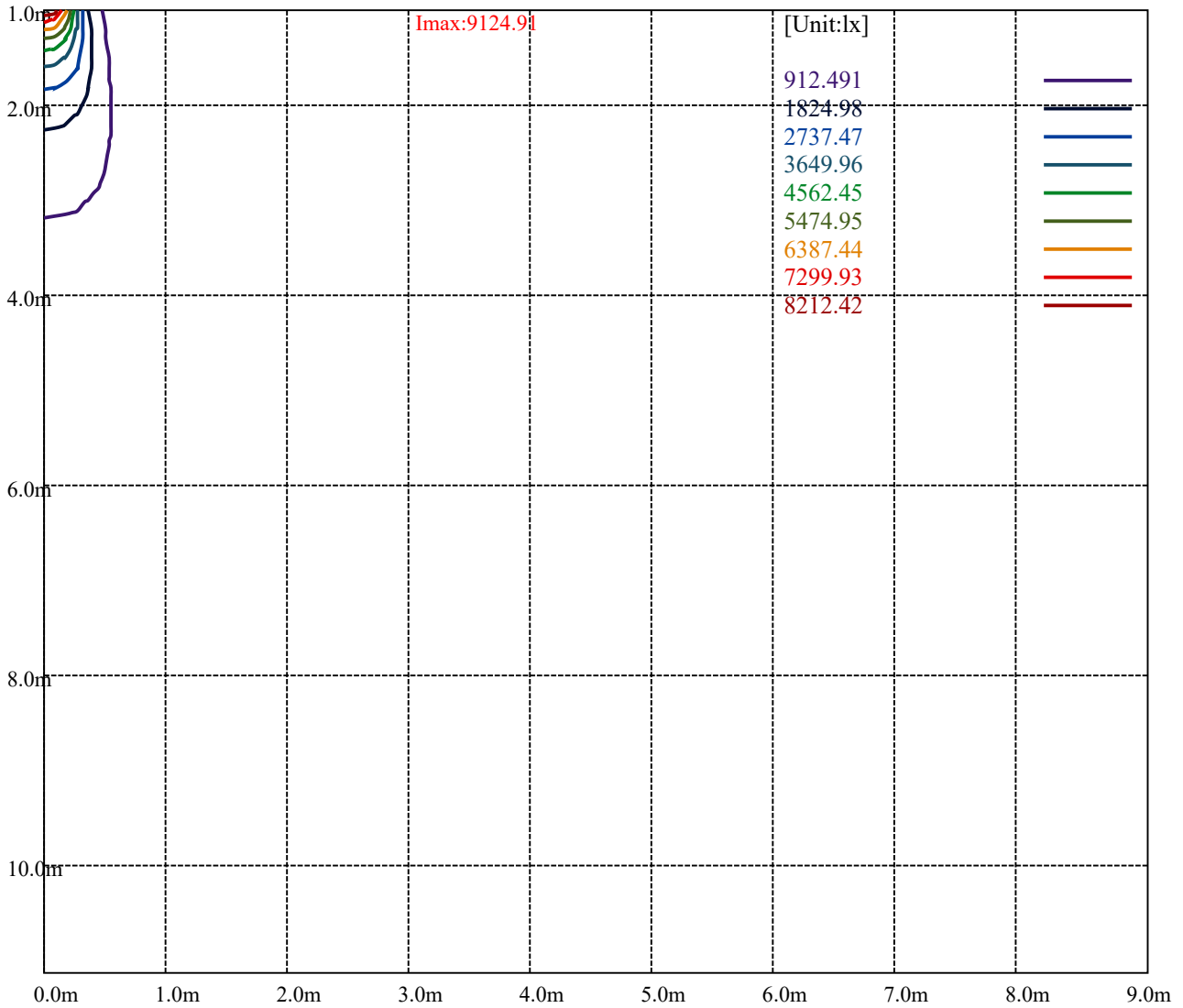
Road

Imax:9124.91

(10%Imax)	912.491	—
(20%Imax)	1824.98	—
(30%Imax)	2737.47	—
(40%Imax)	3649.96	—
(50%Imax)	4562.45	—
(60%Imax)	5474.95	—
(70%Imax)	6387.44	—
(80%Imax)	7299.93	—
(90%Imax)	8212.42	—



- (10%Emax) 101.3878
- (20%Emax) 202.7756
- (30%Emax) 304.1633
- (40%Emax) 405.5511
- (50%Emax) 506.9389
- (60%Emax) 608.3267
- (70%Emax) 709.7145
- (80%Emax) 811.1022
- (90%Emax) 912.49



Luminance Table

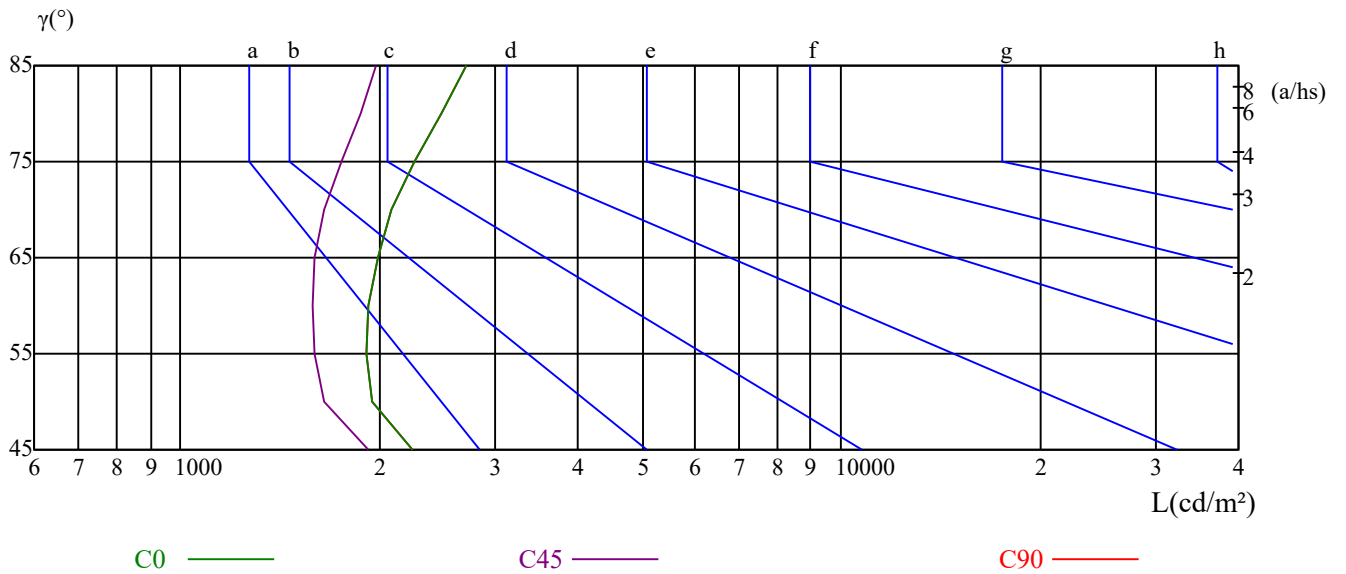
γ	45	50	55	60	65	70	75	80	85
C0	2245	1950	1912	1930	1989	2088	2267	2481	2708
C45	1928	1649	1593	1581	1601	1648	1752	1870	1983
C90	2245	1950	1912	1930	1989	2088	2267	2481	2708

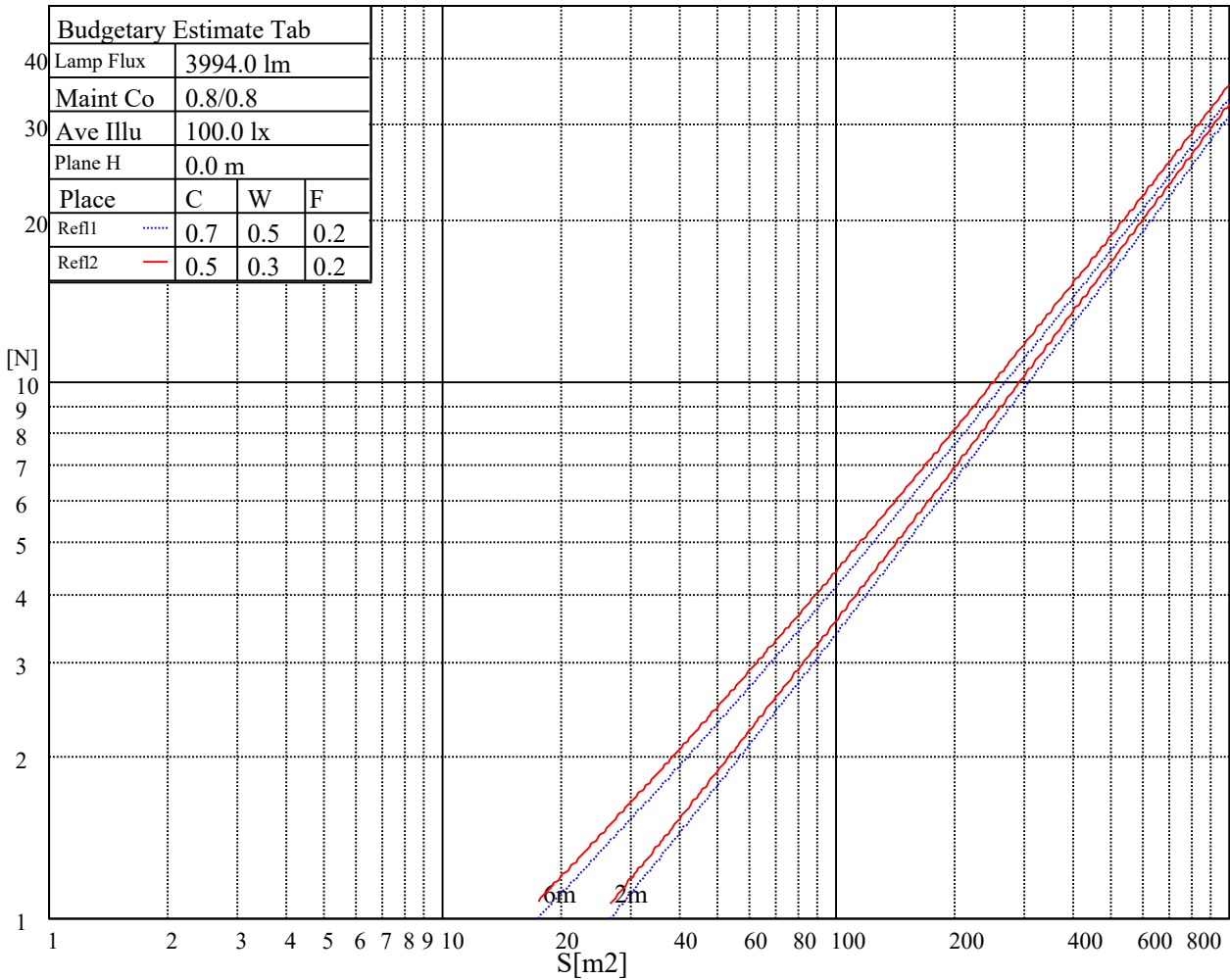
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4799	4799	4799	7843	7843	7843	23104	23104	23104

Glare Table

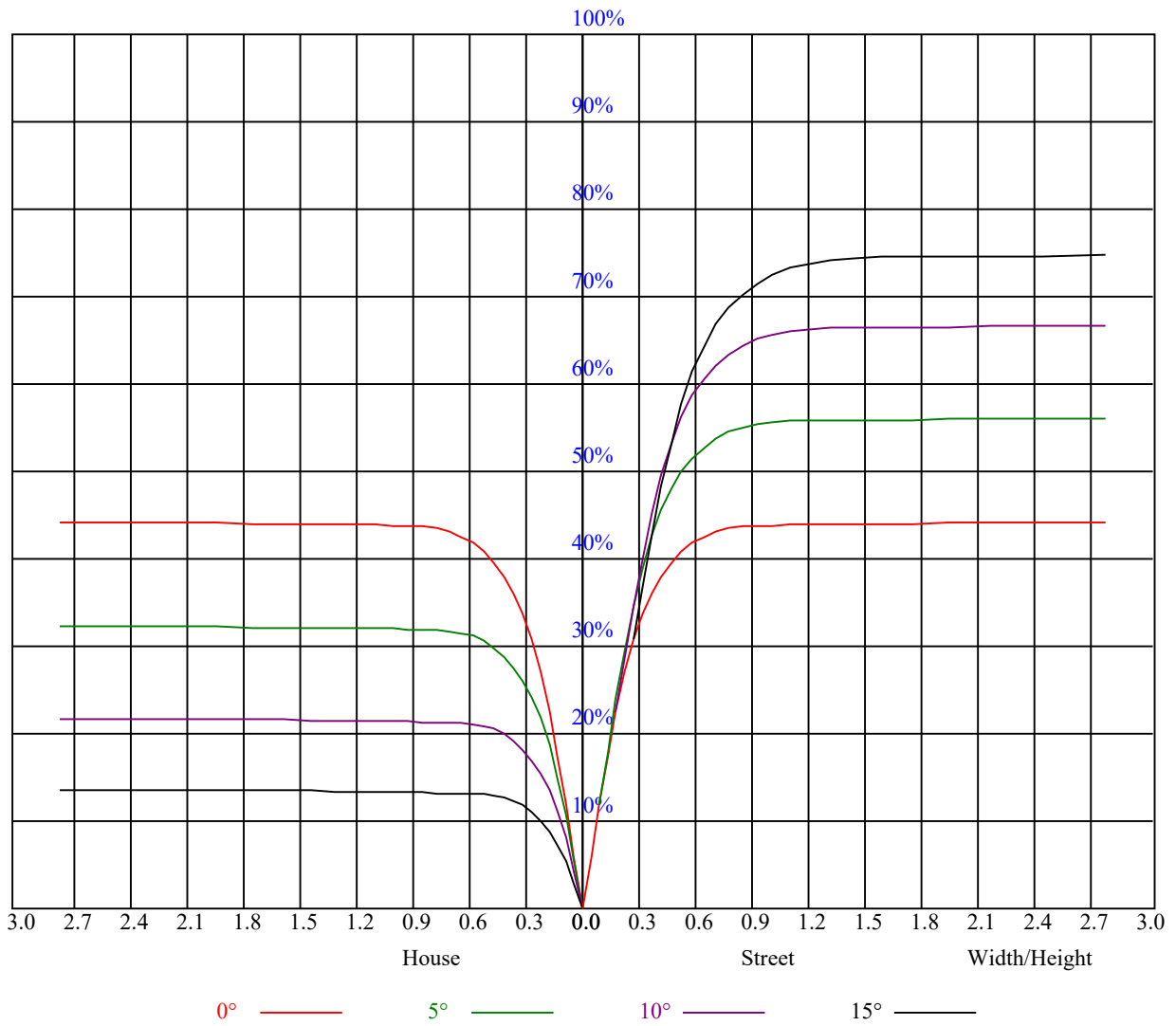
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.07	1.07	1.07	1.04	1.04	1.04	1.00	1.00	1.00	0.96	0.96	0.96	0.92	0.92	0.92	0.90
1	1.00	0.98	0.96	0.98	0.97	0.95	0.95	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.87	0.85
2	0.95	0.91	0.89	0.93	0.90	0.88	0.90	0.88	0.86	0.88	0.86	0.84	0.85	0.84	0.82	0.81
3	0.89	0.86	0.83	0.88	0.85	0.82	0.86	0.83	0.81	0.84	0.81	0.79	0.82	0.80	0.78	0.77
4	0.85	0.81	0.78	0.84	0.80	0.77	0.82	0.79	0.76	0.80	0.78	0.75	0.79	0.76	0.75	0.73
5	0.81	0.77	0.73	0.80	0.76	0.73	0.79	0.75	0.72	0.77	0.74	0.72	0.76	0.73	0.71	0.70
6	0.77	0.73	0.70	0.77	0.72	0.69	0.75	0.72	0.69	0.74	0.71	0.68	0.73	0.70	0.68	0.67
7	0.74	0.69	0.66	0.73	0.69	0.66	0.72	0.69	0.66	0.71	0.68	0.66	0.70	0.67	0.65	0.64
8	0.71	0.66	0.63	0.70	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.63	0.68	0.65	0.63	0.61
9	0.68	0.64	0.61	0.68	0.63	0.61	0.67	0.63	0.60	0.66	0.63	0.60	0.65	0.62	0.60	0.59
10	0.65	0.61	0.58	0.65	0.61	0.58	0.64	0.61	0.58	0.64	0.60	0.58	0.63	0.60	0.58	0.57



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	9112.38	8997.32	7967.76	5631.17	3109.59	1691.88	1270.70	781.80	291.80
45.0	9128.35	8919.69	7721.11	5182.46	2762.18	1573.51	1235.47	681.05	288.50
90.0	9130.00	8782.05	7363.79	4618.68	2419.73	1461.20	1075.75	548.25	79.34
135.0	9128.90	8945.01	7791.58	5364.70	2886.61	1606.55	1215.09	644.16	290.70
180.0	9112.38	8802.97	7476.11	4779.45	2636.65	1533.32	1071.84	587.51	114.63
225.0	9128.35	8930.70	7759.10	5179.16	2899.27	1612.60	1097.82	643.94	167.48
270.0	9130.00	8965.38	8089.44	5765.51	3203.73	1782.18	1314.75	785.65	284.09
315.0	9128.90	8867.93	7639.63	5184.11	2806.22	1592.78	1077.29	673.17	157.90
360.0	9112.38	8997.32	7967.76	5631.17	3109.59	1691.88	1270.70	781.80	291.80
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	20.10	16.63	15.64	15.09	14.76	14.59	15.09	15.58	14.98
45.0	18.72	16.02	15.31	14.87	14.65	14.59	15.20	15.53	15.14
90.0	16.90	15.75	15.14	14.81	14.59	14.53	15.53	15.58	15.14
135.0	17.89	16.19	15.47	14.98	14.70	14.48	14.31	14.26	14.20
180.0	17.34	16.13	15.42	14.98	14.70	14.48	14.31	14.26	14.20
225.0	19.60	16.02	15.25	14.81	14.53	14.37	14.26	14.20	14.20
270.0	23.40	16.30	15.42	14.92	14.65	14.48	14.31	14.26	14.26
315.0	18.28	16.30	15.42	14.98	14.65	14.48	14.31	14.26	14.26
360.0	20.10	16.63	15.64	15.09	14.76	14.59	15.09	15.58	14.98
C/γ(°)	90.0								
0.0	14.09								
45.0	14.04								
90.0	14.09								
135.0	14.09								
180.0	14.04								
225.0	13.98								
270.0	14.09								
315.0	14.09								
360.0	14.09								