
Nata

LumCAT: 3-1548-A3
Luminaire: TE 2213407-1+92.76.365.00
Report No: GC2015051408
Test No: NT-0010
LampCAT: CREE CXA2530
Lamp flux(lm): 4258.0
Number of Lamps: 1
Length(mm): 79
Phm Type: C

Voltage(V): 38.4000
Current(A): 1.2100
Power (W): 46.4640
PF: 0.0000
Ballast type: DC
Width(mm): 79
Height(mm):0

Photometric Results

Lumens(lm): 3980.37
Efficiency(%): 93.48%
Lumens(lm)/Power(W): 85.67
Central intensity(cd): 21051.340
Maximum intensity(cd): 21051.340
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=17.9
 [C90/270]Total=17.9
Field angle(10%Imax): [C0/180]Total=41.5
 [C90/270]Total=41.5
Maximum s/h(1/2): C0_180=0.31 C90_270=0.31
Maximum s/h(1/4): C0_180=0.33 C90_270=0.33
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 93.48%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.283%

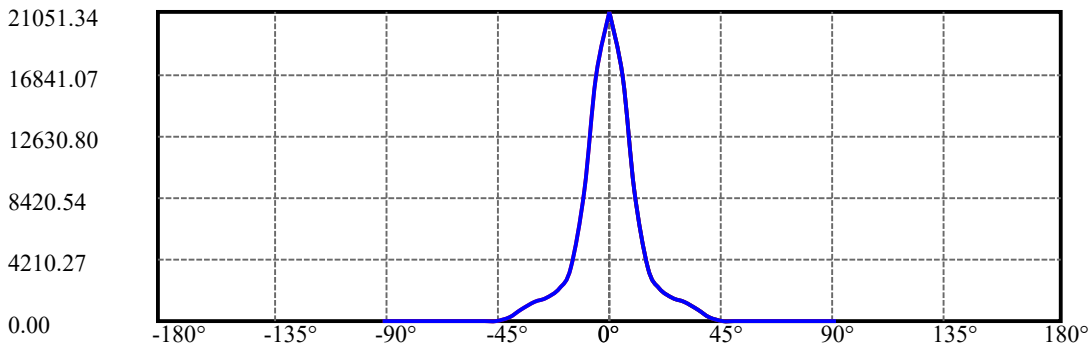
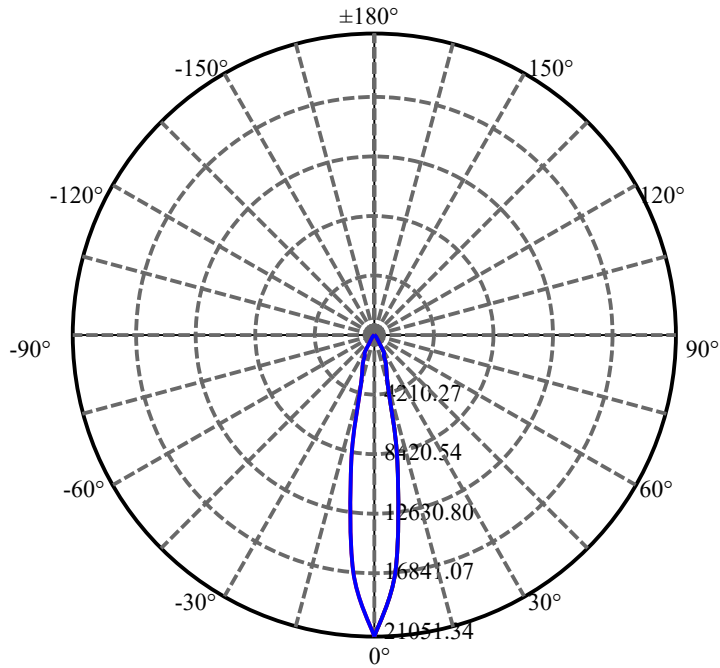
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	21051.338	0.000	0	.000%	.000%
5.0	16563.627	449.676	449.676	10.561%	11.297%
10.0	8936.188	912.209	1361.885	21.423%	34.215%
15.0	3674.612	748.064	2109.949	17.568%	53.009%
20.0	2188.500	483.203	2593.152	11.348%	65.148%
25.0	1619.135	399.351	2992.502	9.379%	75.181%
30.0	1327.969	372.958	3365.461	8.759%	84.551%
35.0	801.077	313.517	3678.978	7.363%	92.428%
40.0	214.136	169.381	3848.358	3.978%	96.683%
45.0	19.142	43.193	3891.552	1.014%	97.769%
50.0	15.694	7.039	3898.591	.165%	97.945%
55.0	14.778	6.626	3905.216	.156%	98.112%
60.0	14.771	6.830	3912.047	.160%	98.283%
65.0	17.932	7.950	3919.997	.187%	98.483%
70.0	23.814	10.570	3930.567	.248%	98.749%
75.0	29.919	14.045	3944.612	.330%	99.102%
80.0	29.059	15.781	3960.393	.371%	99.498%
85.0	15.596	12.134	3972.527	.285%	99.803%
90.0	13.050	7.844	3980.371	.184%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	3365.46	79.04%	84.55%
0-40	3848.36	90.38%	96.68%
0-60	3912.05	91.88%	98.28%
0-90	3972.53	93.30%	99.80%
0-120	3972.53	93.30%	99.80%
0-180	3980.37	93.48%	100.00%
60-90	67.31	1.58%	1.69%
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%
0-27.57	3184.30	74.78%	80.00%

ZONAL LUMEN SUMMARY

0-10	1361.88
10-20	1231.27
20-30	772.31
30-40	482.90
40-50	50.23
50-60	13.46
60-70	18.52
70-80	29.83
80-90	12.13
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



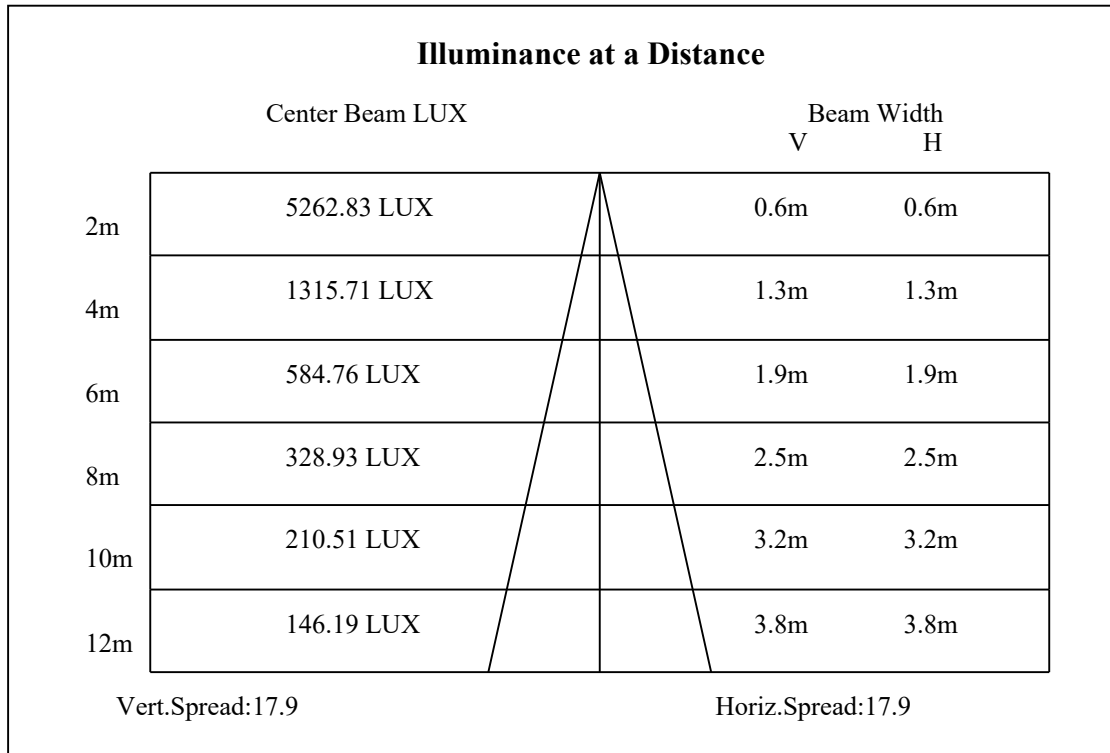
C0(Max): —————

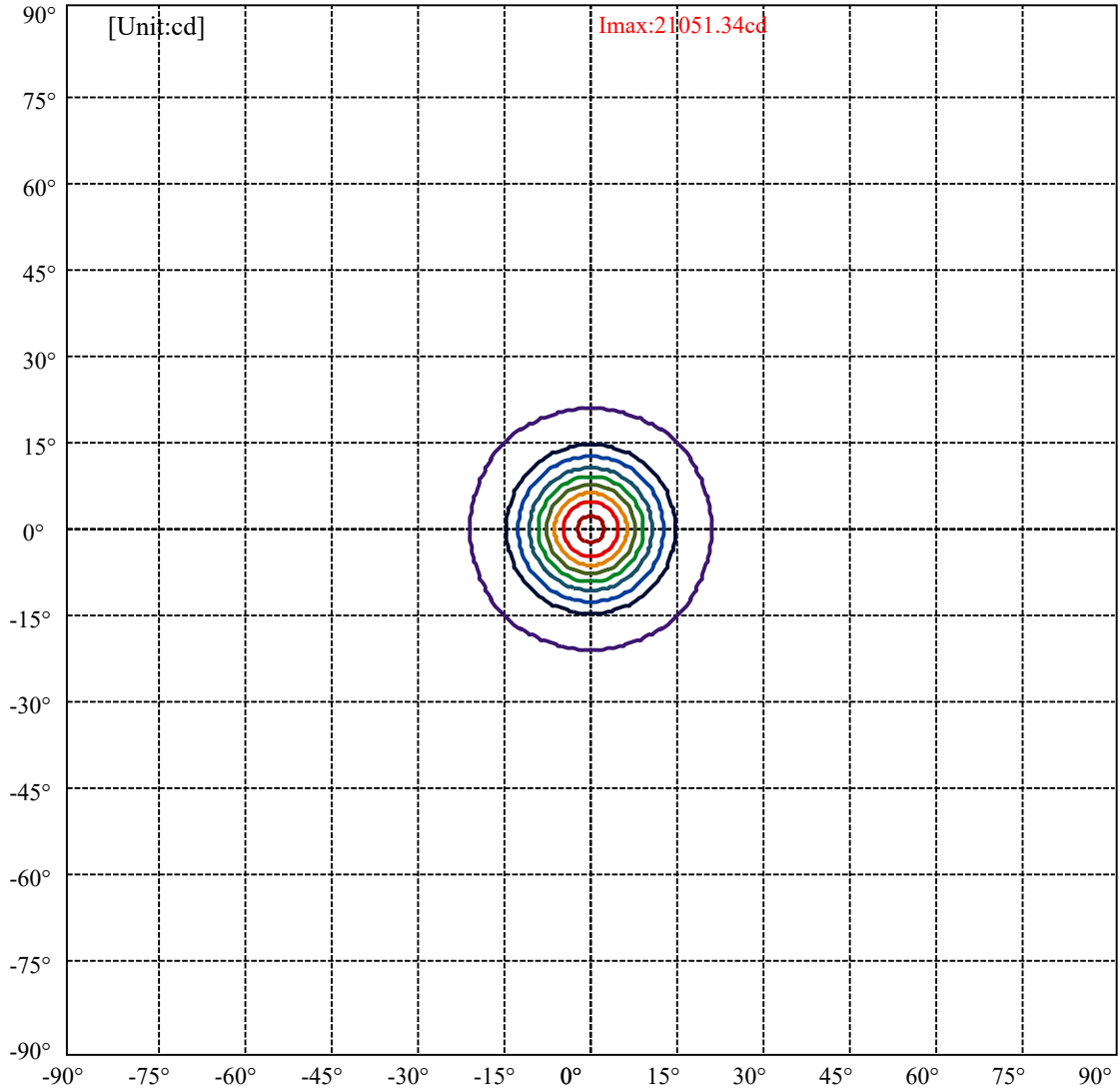
C0/C180: —————

C90/C270: —————

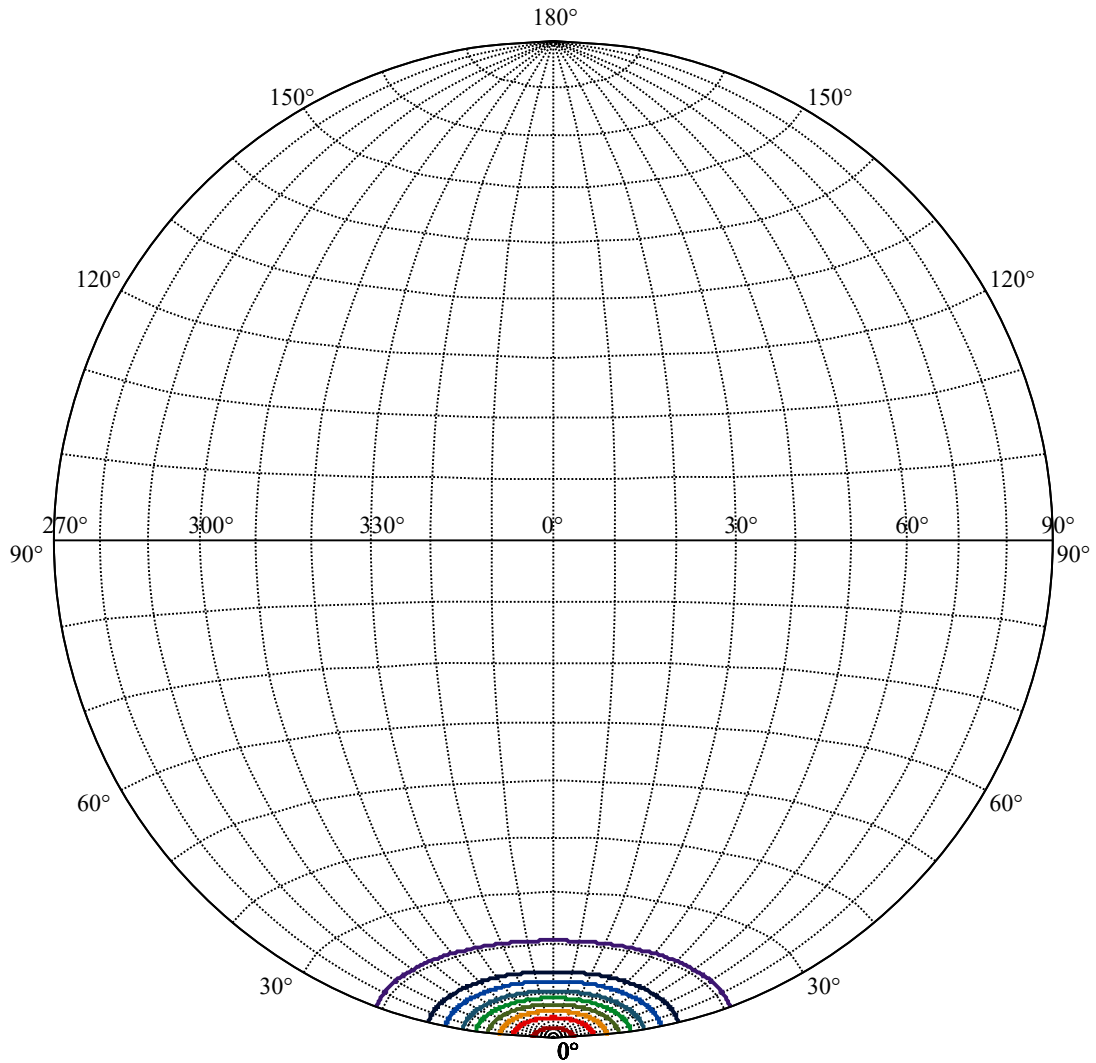
Field angle(10%Imax):C0/180Left:20.7 Right:20.7
:C90/270Left:20.7 Right:20.7

Beam Angle(50%Imax):C0/180Left:9.0 Right:9.0
:C90/270Left:9.0 Right:9.0





(10%Imax) 2105.13	—
(20%Imax) 4210.27	—
(30%Imax) 6315.4	—
(40%Imax) 8420.54	—
(50%Imax) 10525.7	—
(60%Imax) 12630.8	—
(70%Imax) 14735.9	—
(80%Imax) 16841.1	—
(90%Imax) 18946.2	—



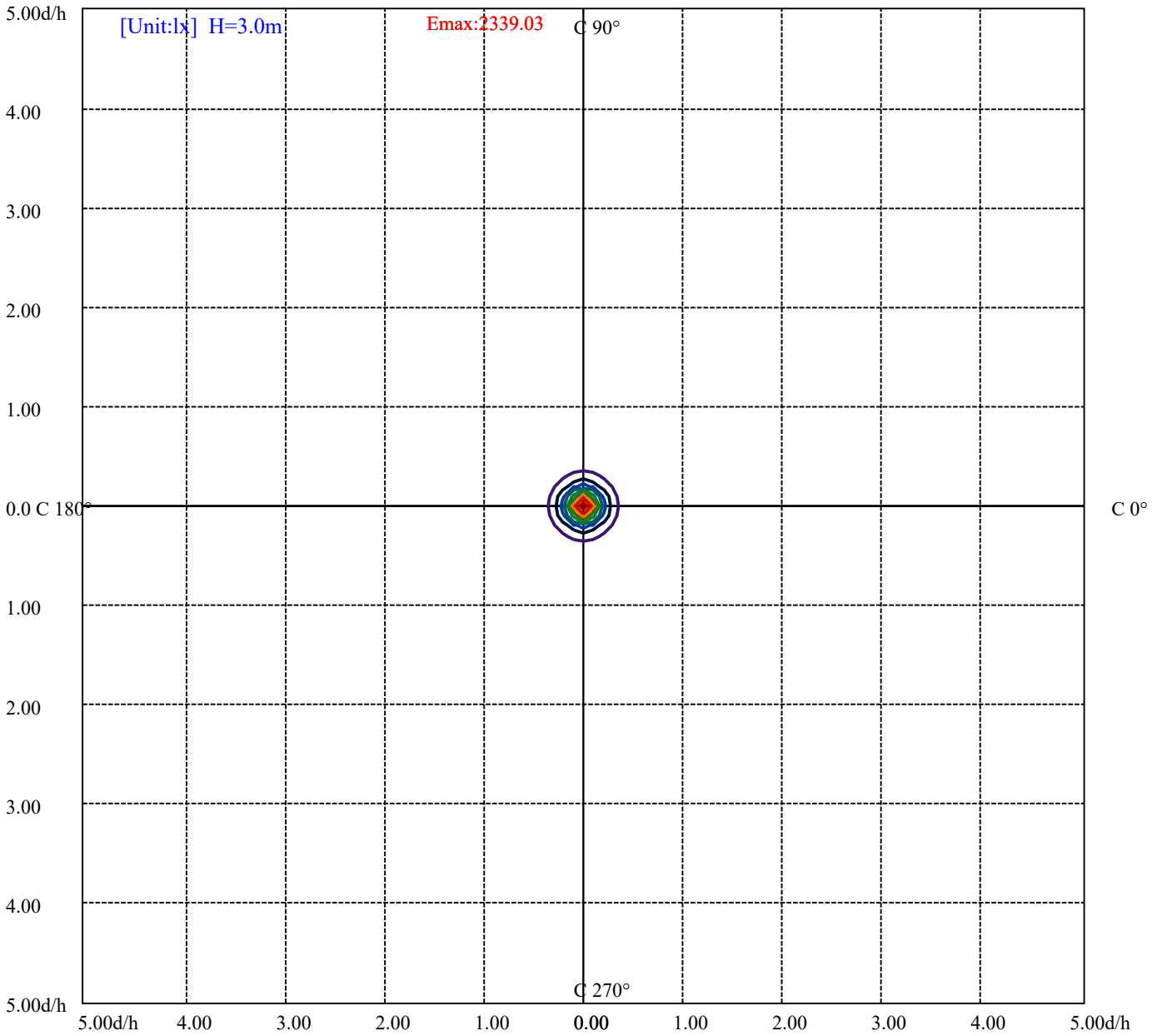
House

[Unit:cd]

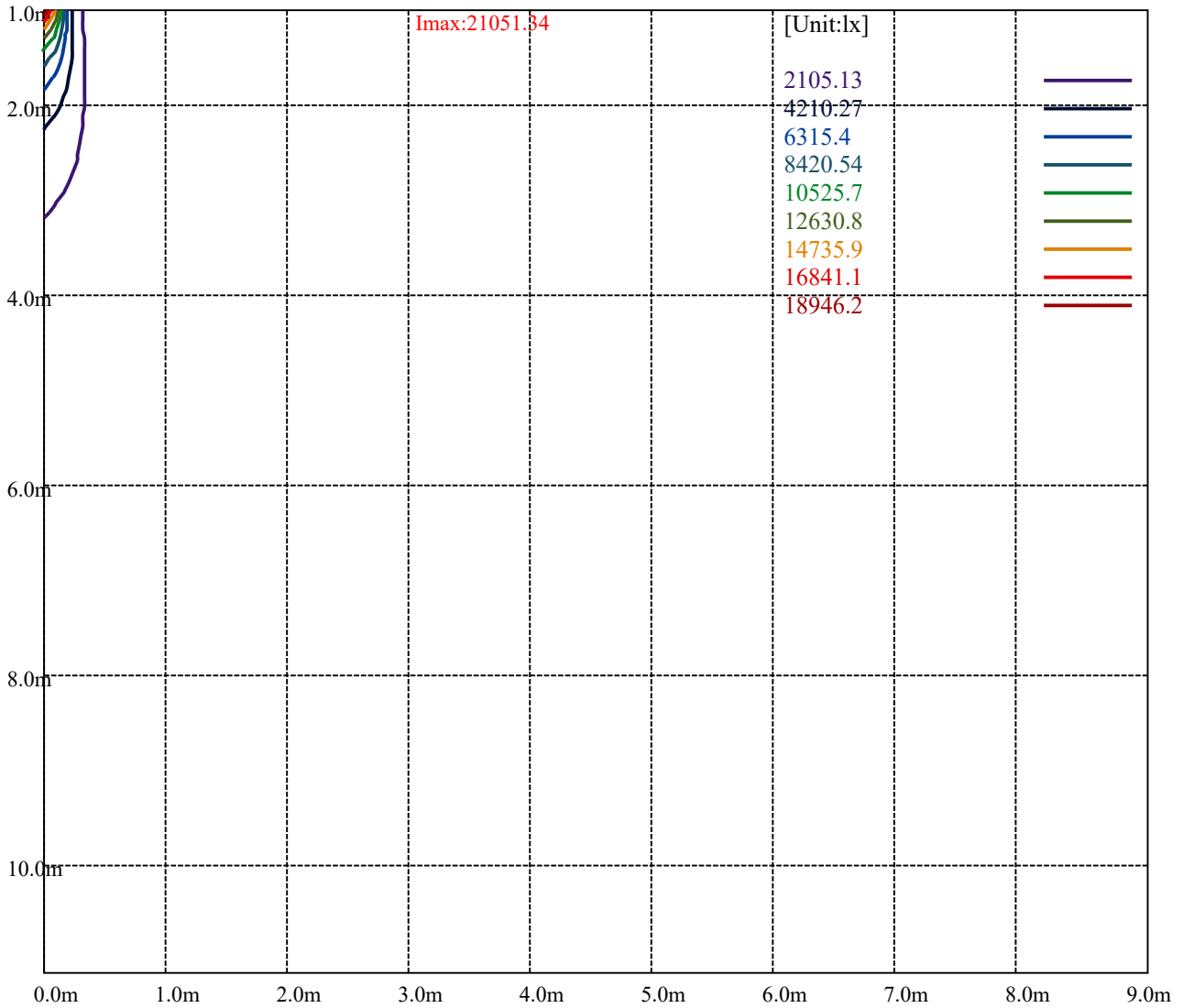
Road

Imax:21051.34

(10%Imax)	2105.13	—
(20%Imax)	4210.27	—
(30%Imax)	6315.4	—
(40%Imax)	8420.54	—
(50%Imax)	10525.7	—
(60%Imax)	12630.8	—
(70%Imax)	14735.9	—
(80%Imax)	16841.1	—
(90%Imax)	18946.2	—



- (10%Emax) 233.9022
- (20%Emax) 467.8045
- (30%Emax) 701.7067
- (40%Emax) 935.6089
- (50%Emax) 1169.511
- (60%Emax) 1403.411
- (70%Emax) 1637.311
- (80%Emax) 1871.222
- (90%Emax) 2105.122



Luminance Table

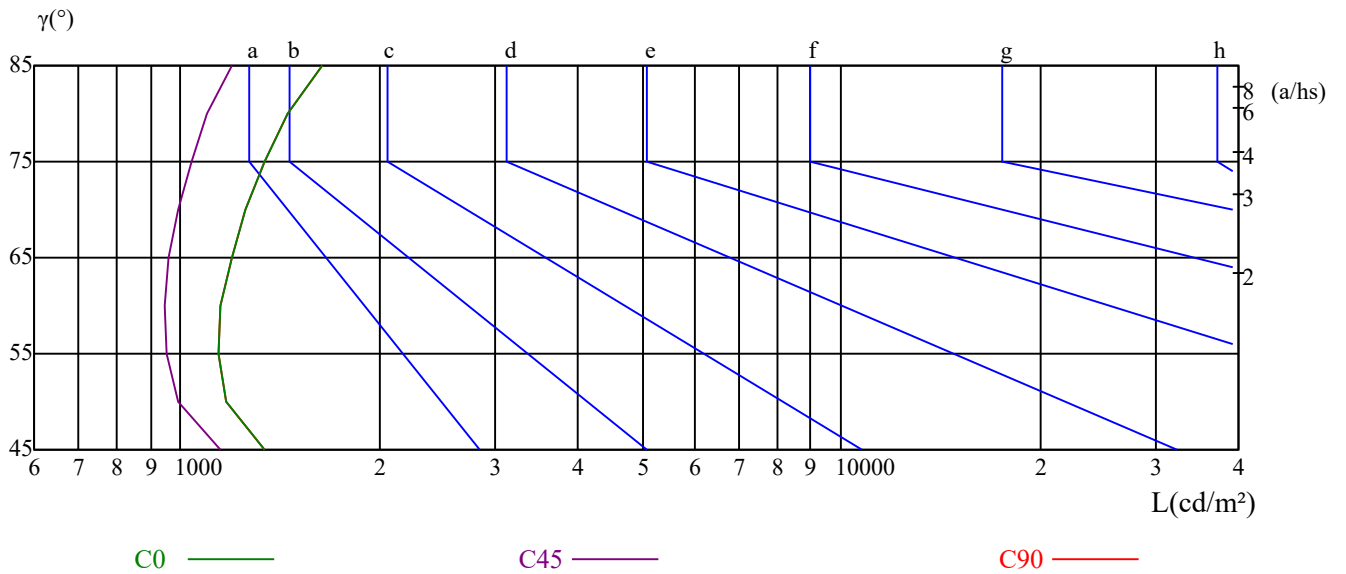
γ	45	50	55	60	65	70	75	80	85
C0	1338	1169	1140	1153	1194	1253	1342	1454	1635
C45	1149	989	950	945	961	990	1037	1097	1197
C90	1338	1169	1140	1153	1194	1253	1342	1454	1635

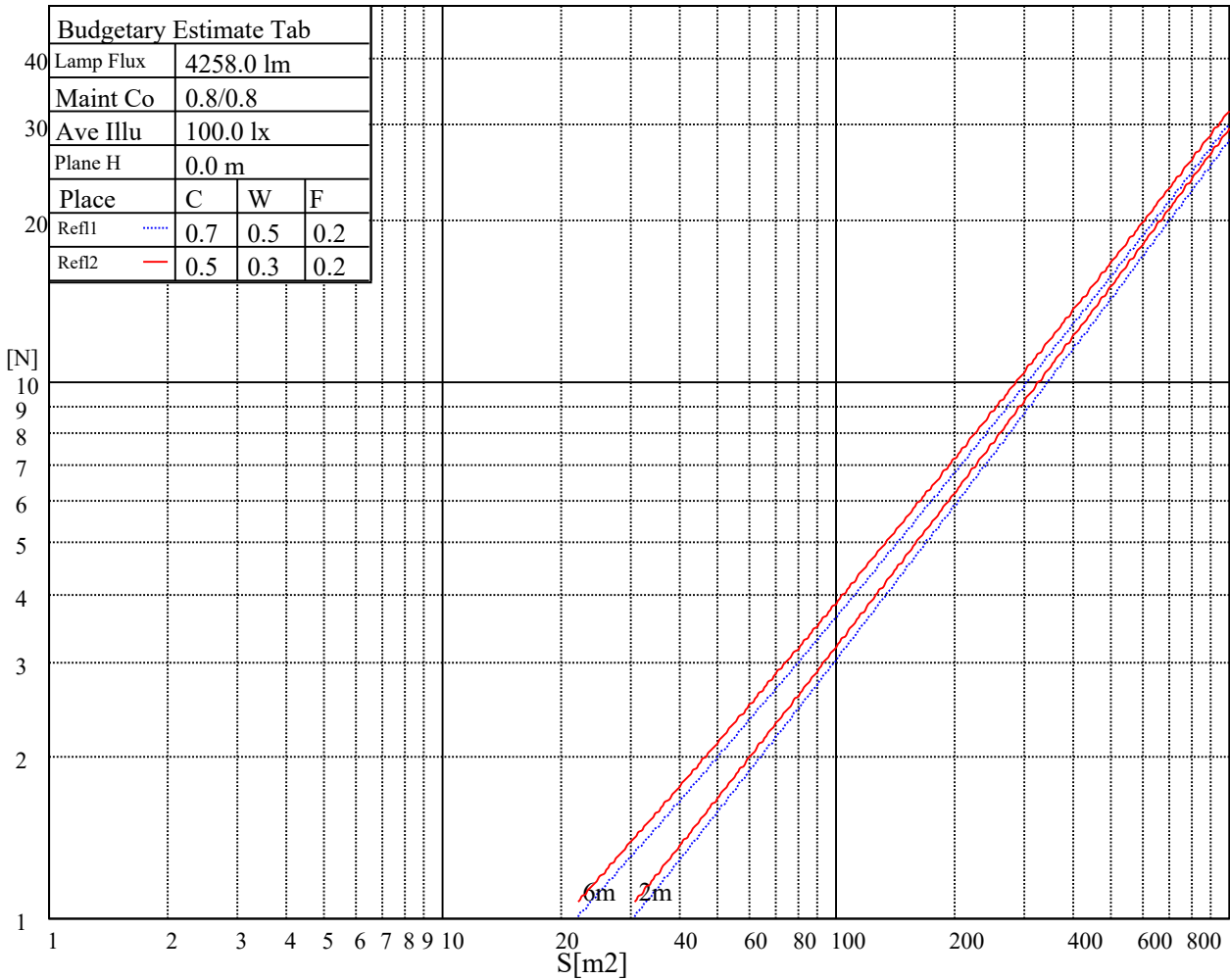
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
2868	2868	2868	4617	4617	4617	13854	13854	13854

Glare Table

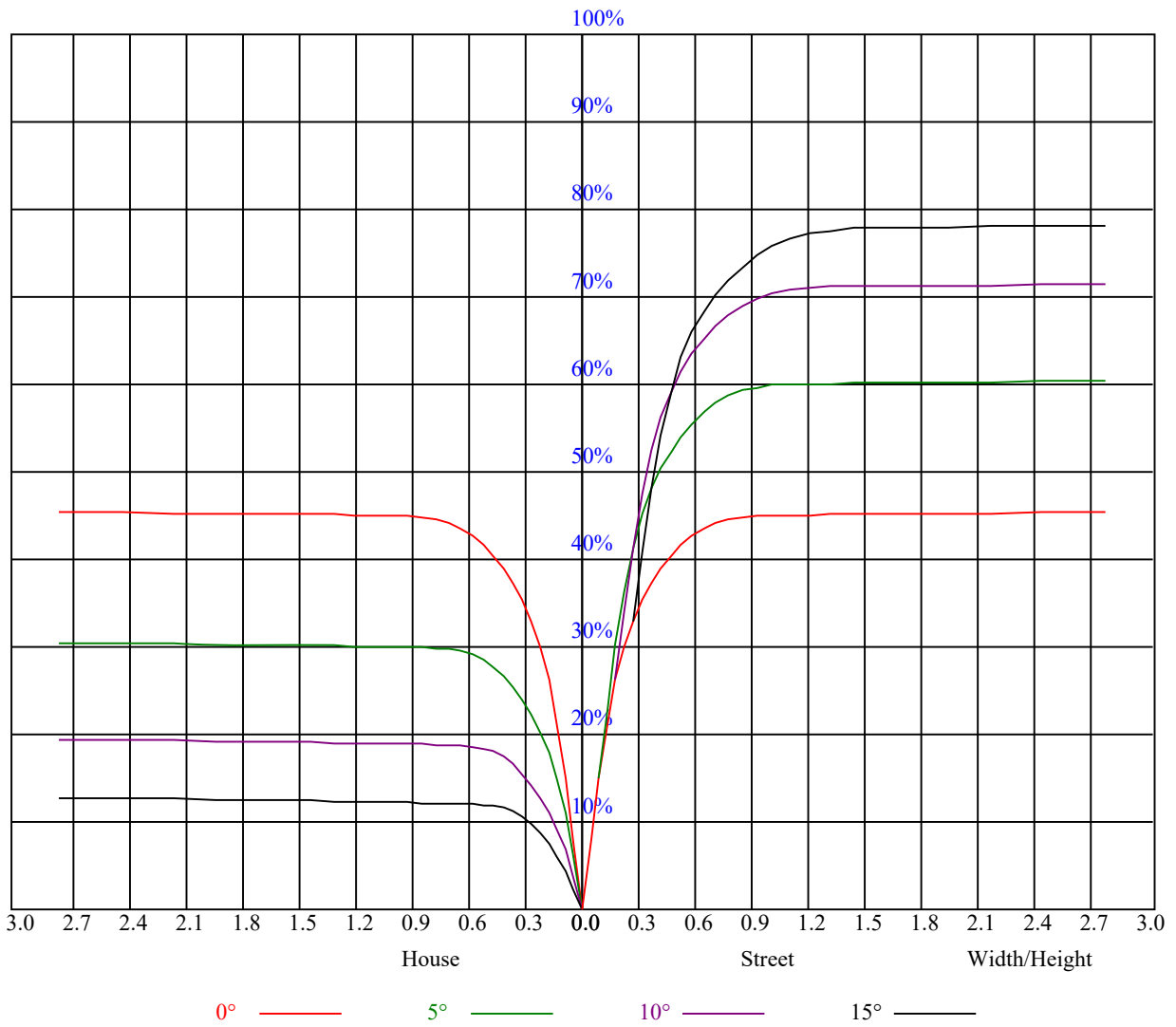
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.11	1.11	1.11	1.09	1.09	1.09	1.04	1.04	1.04	0.99	0.99	0.99	0.95	0.95	0.95	0.93
1	1.05	1.03	1.01	1.03	1.01	0.99	0.99	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.89
2	0.99	0.96	0.93	0.97	0.94	0.92	0.94	0.92	0.90	0.92	0.90	0.88	0.89	0.88	0.86	0.85
3	0.94	0.90	0.87	0.93	0.89	0.86	0.90	0.88	0.85	0.88	0.86	0.84	0.86	0.84	0.83	0.81
4	0.90	0.86	0.82	0.89	0.85	0.82	0.87	0.84	0.81	0.85	0.82	0.80	0.83	0.81	0.79	0.78
5	0.86	0.82	0.78	0.85	0.81	0.78	0.83	0.80	0.77	0.82	0.79	0.77	0.81	0.78	0.76	0.75
6	0.82	0.78	0.75	0.82	0.78	0.75	0.80	0.77	0.74	0.79	0.76	0.74	0.78	0.75	0.73	0.72
7	0.79	0.75	0.72	0.79	0.75	0.72	0.78	0.74	0.71	0.77	0.73	0.71	0.76	0.73	0.71	0.70
8	0.76	0.72	0.69	0.76	0.72	0.69	0.75	0.71	0.69	0.74	0.71	0.68	0.73	0.70	0.68	0.67
9	0.74	0.70	0.67	0.73	0.69	0.67	0.73	0.69	0.66	0.72	0.69	0.66	0.71	0.68	0.66	0.65
10	0.71	0.67	0.64	0.71	0.67	0.64	0.70	0.67	0.64	0.70	0.66	0.64	0.69	0.66	0.64	0.63



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	20987.00	17115.23	8560.41	3340.24	1986.24	1573.33	1356.24	761.48	304.93
45.0	21082.11	20433.09	12633.60	4822.92	2875.85	1702.01	1479.33	1103.90	392.21
90.0	21378.65	20477.85	10395.58	4835.79	2308.51	1692.50	1458.07	1078.61	349.63
135.0	20757.60	20388.33	13092.39	4884.47	2892.64	1736.14	1486.60	1086.56	423.54
180.0	20987.00	17702.71	8648.81	3406.82	1996.31	1616.41	1388.69	784.65	150.17
225.0	21082.11	10835.35	6078.45	2723.11	1829.58	1569.97	1094.22	530.97	29.26
270.0	21378.65	14530.32	6579.77	2831.09	1844.68	1553.74	1275.67	567.34	36.20
315.0	20757.60	11026.15	5500.48	2552.46	1774.19	1508.98	1084.93	495.11	27.14
360.0	20987.00	17115.23	8560.41	3340.24	1986.24	1573.33	1356.24	761.48	304.93

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	17.46	15.16	14.10	13.76	15.78	21.71	29.09	28.37	12.87
45.0	22.04	16.23	15.05	14.49	14.44	16.11	20.53	22.55	14.55
90.0	22.10	15.78	14.77	14.21	14.27	16.95	23.11	27.19	17.90
135.0	22.83	17.12	14.99	14.66	15.50	21.82	31.00	36.54	24.45
180.0	17.74	15.44	15.05	15.05	18.07	23.72	29.04	29.99	13.76
225.0	17.57	15.67	15.27	16.00	21.65	29.37	35.30	32.34	14.44
270.0	17.29	15.33	14.83	15.44	23.95	33.35	39.84	35.19	13.65
315.0	16.11	14.83	14.16	14.55	19.81	27.47	31.44	20.31	13.15
360.0	17.46	15.16	14.10	13.76	15.78	21.71	29.09	28.37	12.87

C/γ(°)	90.0
0.0	12.42
45.0	13.15
90.0	13.04
135.0	13.26
180.0	13.15
225.0	13.76
270.0	12.98
315.0	12.64
360.0	12.42