
Nata

LumCAT: 1426-N
Luminaire: 92.70.044.00+92.70.147.00
Report No: NT2018011804
Test No: nata-0100
LampCAT: NICHIA NFCWL036B-V2
Lamp flux(lm): 1460.0
Number of Lamps: 1
Length(mm): 46
Phm Type: C

Voltage(V): 34.0000
Current(A): 0.3500
Power (W): 11.9000
PF: 0.0000
Ballast type: DC
Width(mm): 46
Height(mm): 0

Photometric Results

Lumens(lm): 1168.80
Efficiency(%): 80.05%
Lumens(lm)/Power(W): 98.22
Central intensity(cd): 6460.181
Maximum intensity(cd): 6460.181
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=17.7
 [C90/270]Total=17.7
Field angle(10%Imax): [C0/180]Total=39.4
 [C90/270]Total=39.4
Maximum s/h(1/2): C0_180=0.30 C90_270=0.30
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(%): 82.62%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 93.939%

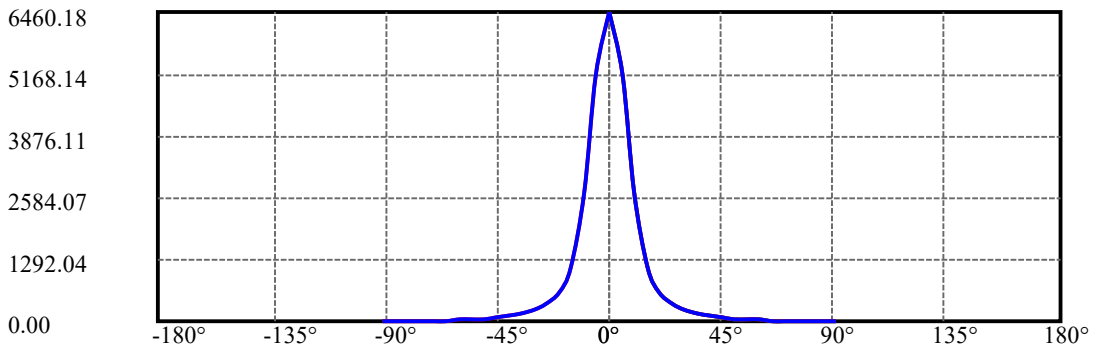
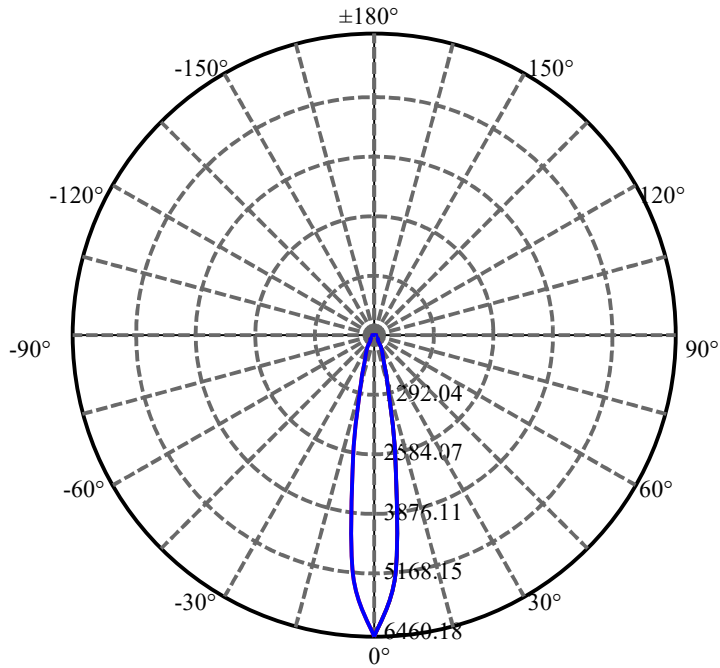
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	6460.180	38.633	38.633	2.646%	3.305%
5.0	5143.713	245.732	284.365	16.831%	24.330%
10.0	2672.369	254.364	538.73	17.422%	46.093%
15.0	1103.640	156.572	695.301	10.724%	59.489%
20.0	616.962	115.664	810.966	7.922%	69.385%
25.0	370.881	85.916	896.881	5.885%	76.735%
30.0	240.390	65.883	962.765	4.513%	82.372%
35.0	154.110	48.452	1011.216	3.319%	86.518%
40.0	112.253	39.551	1050.767	2.709%	89.901%
45.0	81.442	31.566	1082.334	2.162%	92.602%
50.0	58.848	24.710	1107.044	1.692%	94.716%
55.0	35.794	16.072	1123.115	1.101%	96.091%
60.0	21.259	10.092	1133.207	.691%	96.955%
65.0	15.113	7.508	1140.715	.514%	97.597%
70.0	13.358	6.880	1147.595	.471%	98.186%
75.0	12.746	6.748	1154.344	.462%	98.763%
80.0	12.904	6.966	1161.309	.477%	99.359%
85.0	10.998	6.005	1167.314	.411%	99.873%
90.0	5.416	1.484	1168.799	.102%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	962.76	65.94%	82.37%
0-40	1050.77	71.97%	89.90%
0-60	1133.21	77.62%	96.95%
0-90	1167.31	79.95%	99.87%
0-120	1167.31	79.95%	99.87%
0-180	1168.80	80.05%	100.00%
60-90	44.20	3.03%	3.78%
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%
0-27.90	935.04	64.04%	80.00%

ZONAL LUMEN SUMMARY

0-10	538.73
10-20	272.24
20-30	151.80
30-40	88.00
40-50	56.28
50-60	26.16
60-70	14.39
70-80	13.71
80-90	6.01
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



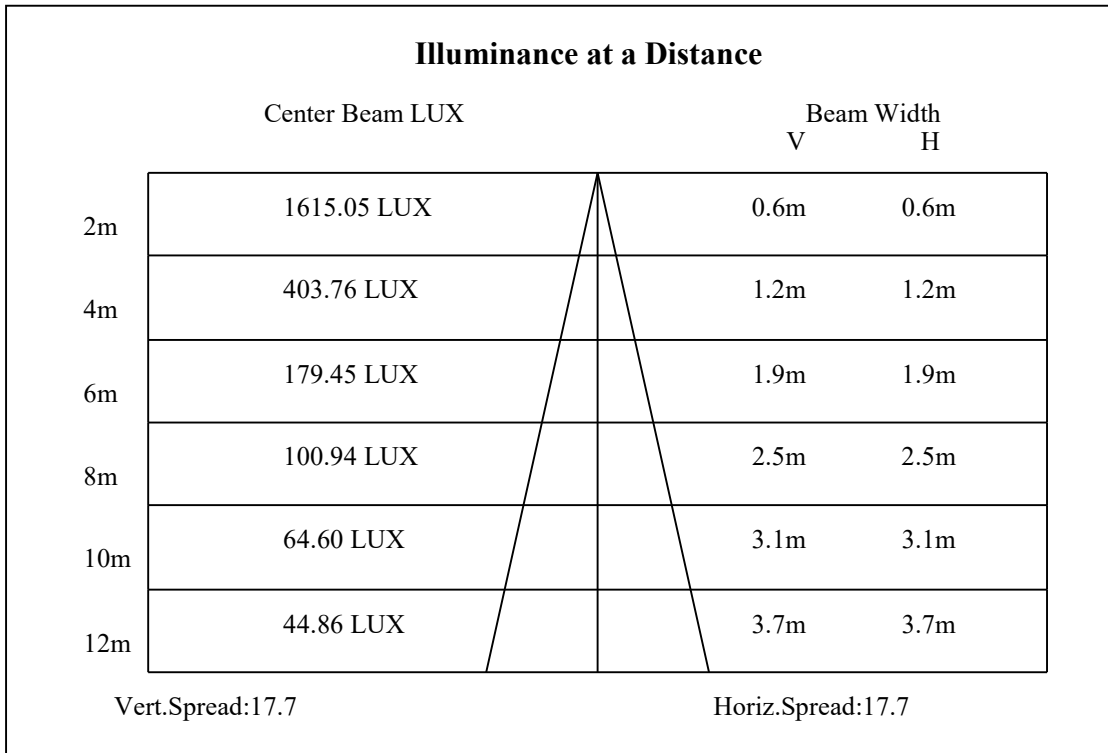
C0(Max): —————

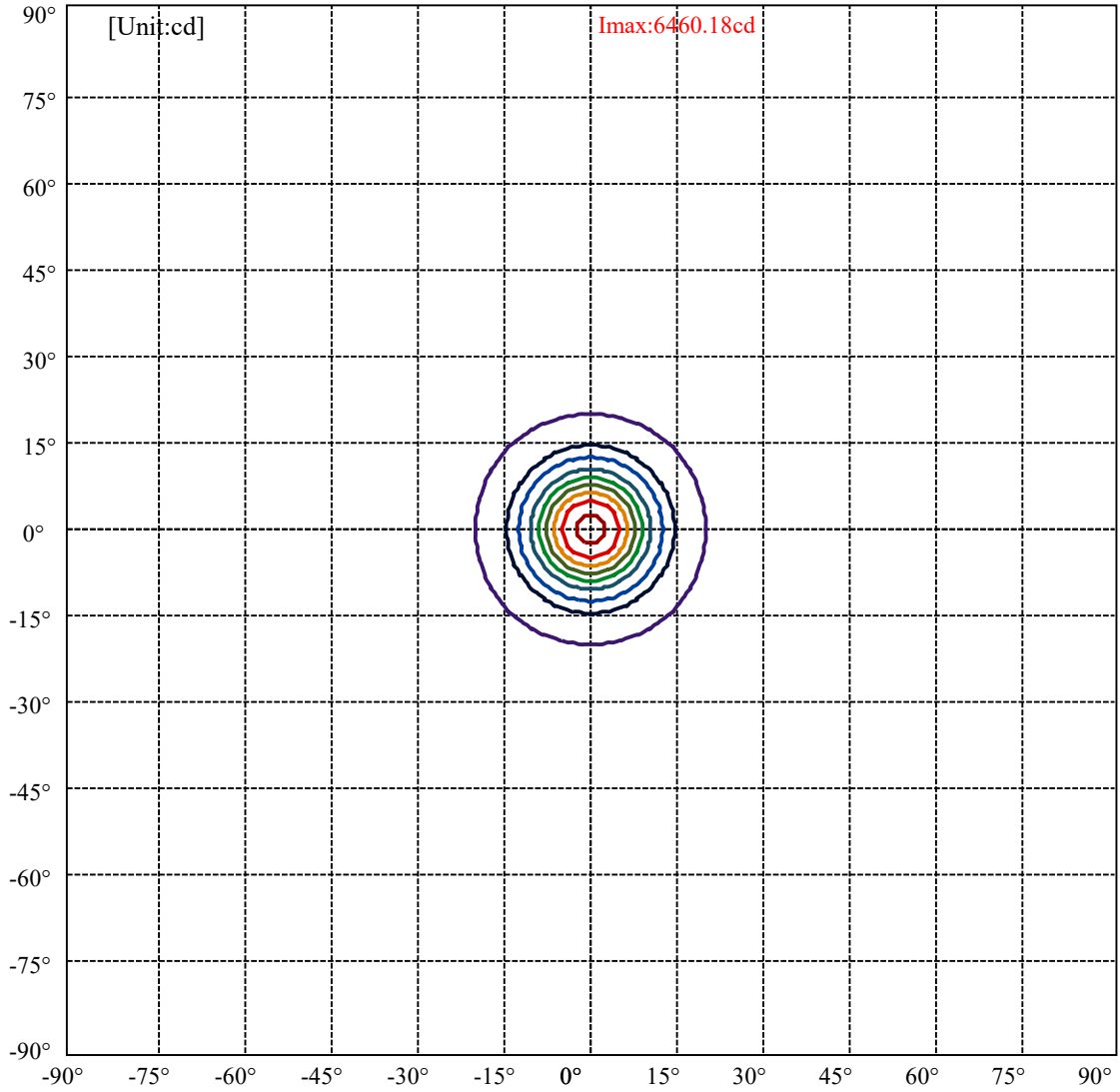
C0/C180: —————

C90/C270: —————

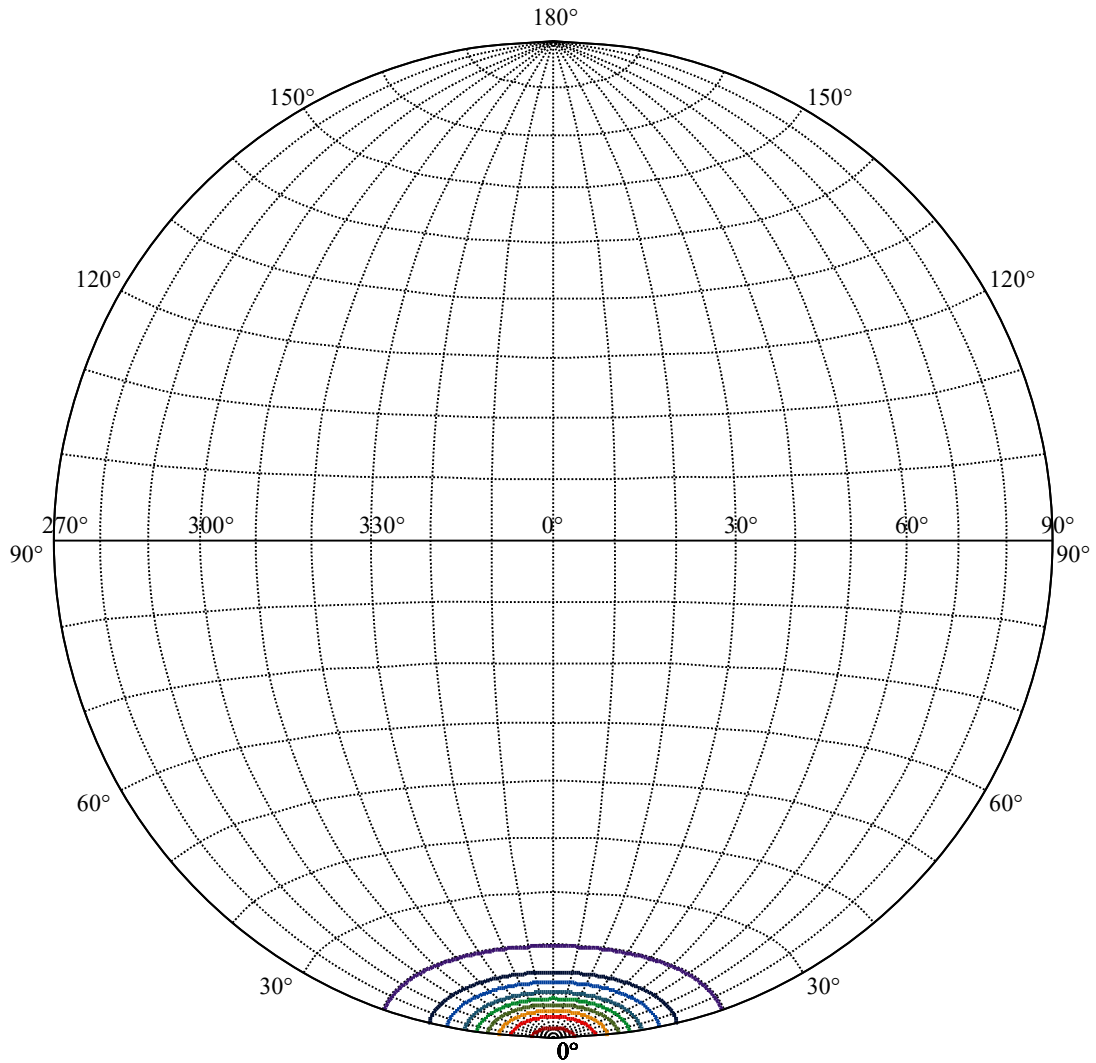
Field angle(10%Imax):C0/180Left:19.7 Right:19.7
:C90/270Left:19.7 Right:19.7

Beam Angle(50%Imax):C0/180Left:8.9 Right:8.9
:C90/270Left:8.9 Right:8.9





(10%Imax) 646.018	—
(20%Imax) 1292.04	—
(30%Imax) 1938.05	—
(40%Imax) 2584.07	—
(50%Imax) 3230.09	—
(60%Imax) 3876.11	—
(70%Imax) 4522.13	—
(80%Imax) 5168.14	—
(90%Imax) 5814.16	—



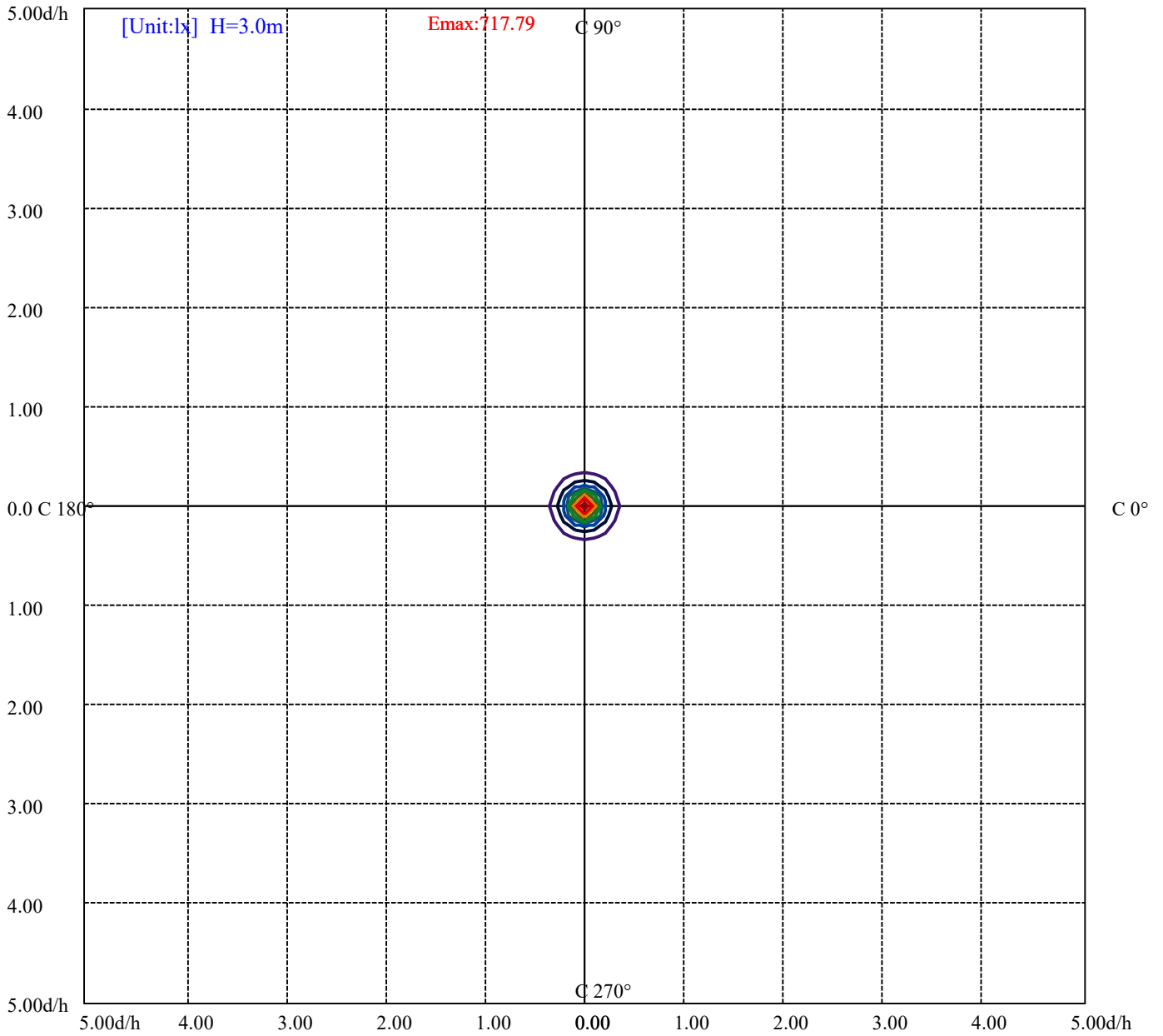
House

[Unit:cd]

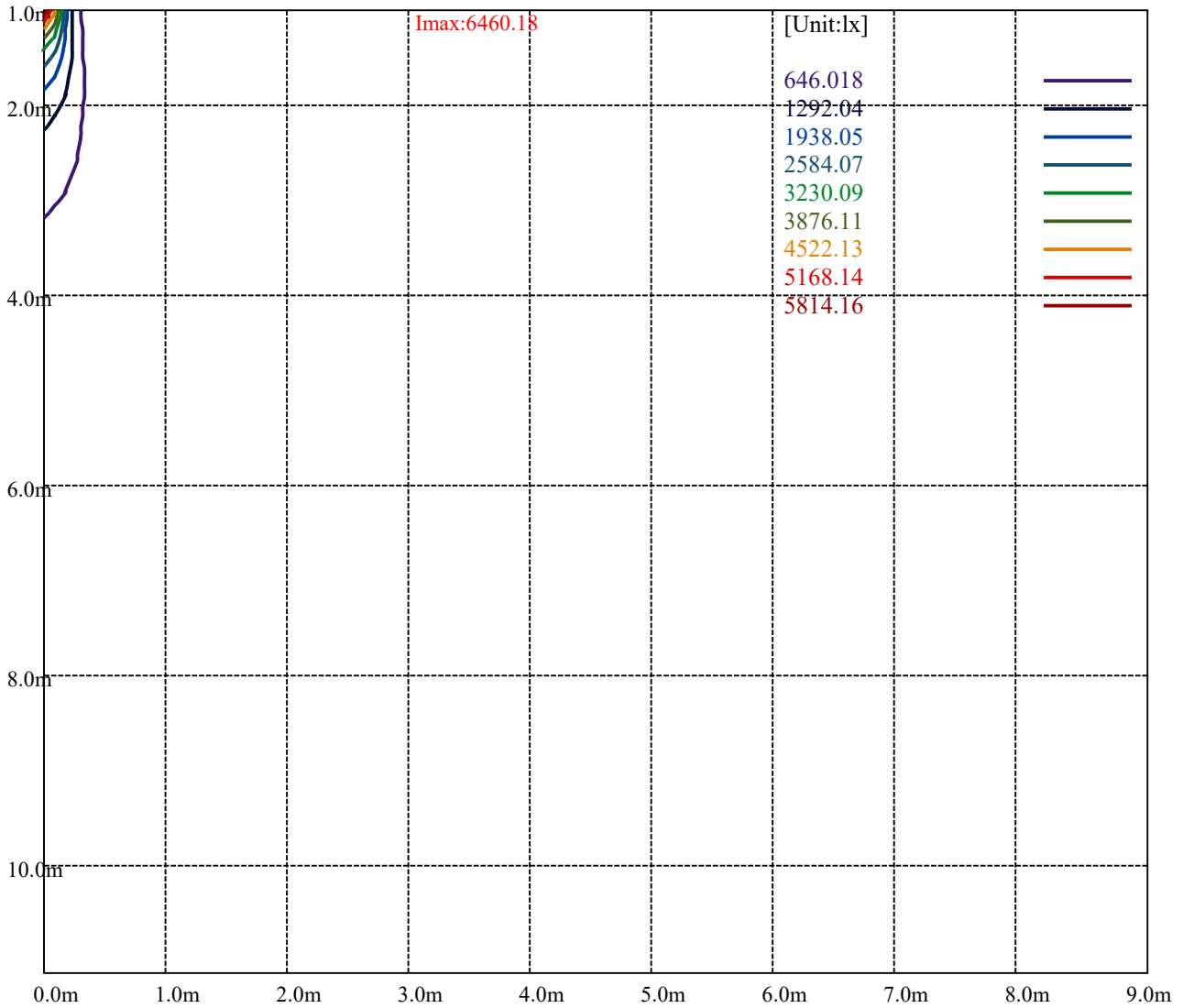
Road

Imax:6460.18

(10%Imax) 646.018	—
(20%Imax) 1292.04	—
(30%Imax) 1938.05	—
(40%Imax) 2584.07	—
(50%Imax) 3230.09	—
(60%Imax) 3876.11	—
(70%Imax) 4522.13	—
(80%Imax) 5168.14	—
(90%Imax) 5814.16	—



(10%Emax) 71.77933	—
(20%Emax) 143.5589	—
(30%Emax) 215.3378	—
(40%Emax) 287.1178	—
(50%Emax) 358.8967	—
(60%Emax) 430.6756	—
(70%Emax) 502.4556	—
(80%Emax) 574.2344	—
(90%Emax) 646.0144	—



Luminance Table

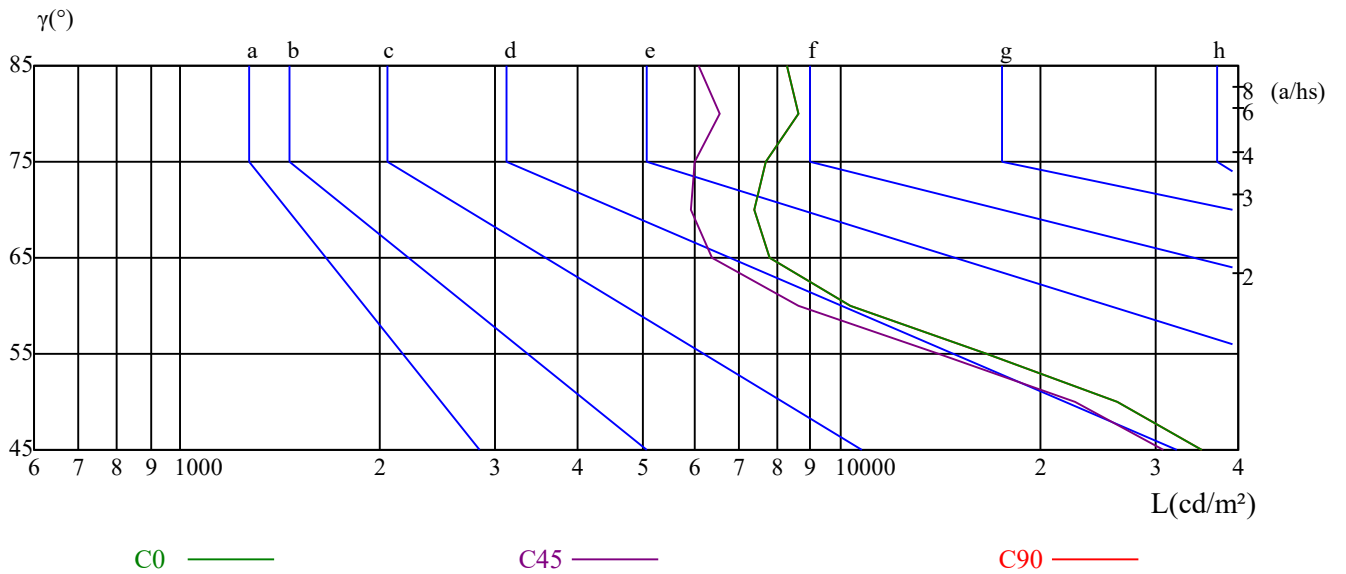
γ	45	50	55	60	65	70	75	80	85
C0	35265	26259	16604	10350	7804	7403	7685	8603	8269
C45	30777	22582	14059	8619	6382	5932	6016	6553	6094
C90	35265	26259	16604	10350	7804	7403	7685	8603	8269

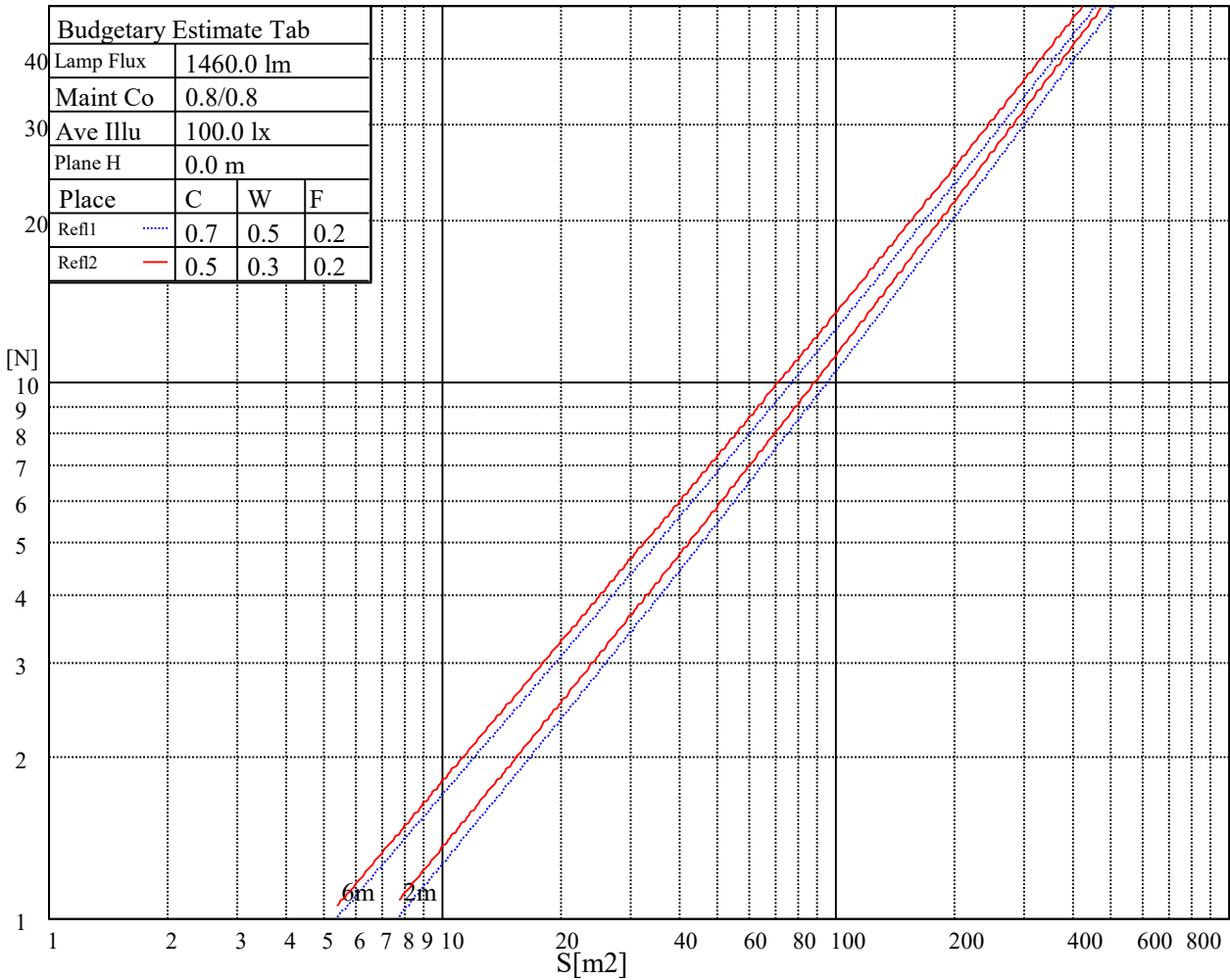
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
16900	16900	16900	23273	23273	23273	59632	59632	59632

Glare Table

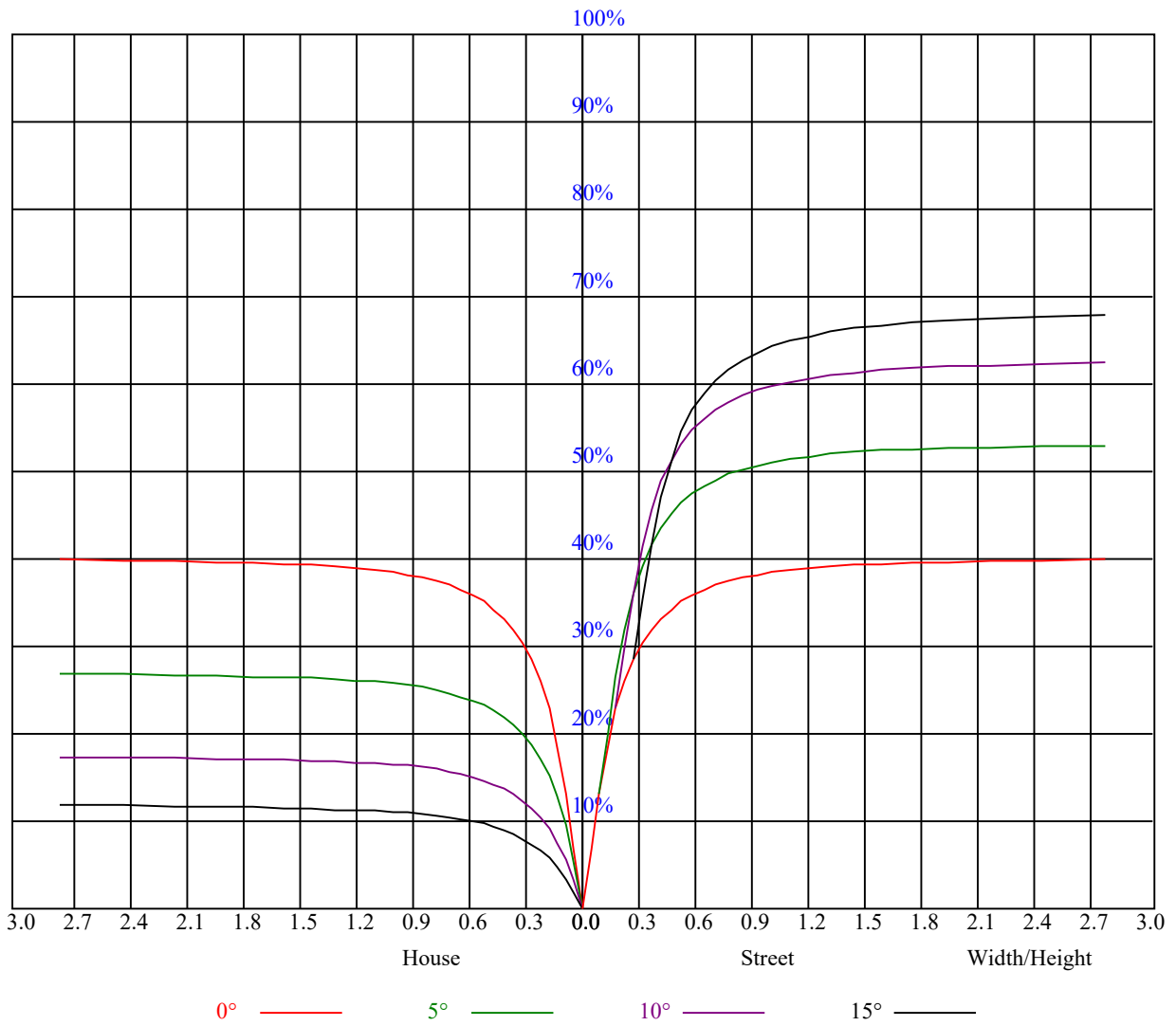
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.98	0.98	0.98	0.96	0.96	0.96	0.92	0.92	0.92	0.88	0.88	0.88	0.84	0.84	0.84	0.83
1	0.89	0.86	0.84	0.87	0.85	0.82	0.84	0.82	0.80	0.80	0.79	0.77	0.78	0.76	0.75	0.73
2	0.84	0.80	0.77	0.82	0.79	0.76	0.80	0.77	0.75	0.77	0.75	0.73	0.75	0.73	0.71	0.70
3	0.79	0.75	0.72	0.78	0.75	0.72	0.76	0.73	0.70	0.74	0.72	0.69	0.72	0.70	0.68	0.67
4	0.76	0.72	0.68	0.75	0.71	0.68	0.73	0.70	0.67	0.72	0.69	0.66	0.70	0.68	0.66	0.64
5	0.73	0.68	0.65	0.72	0.68	0.65	0.70	0.67	0.64	0.69	0.66	0.64	0.68	0.65	0.63	0.62
6	0.70	0.66	0.63	0.69	0.65	0.62	0.68	0.65	0.62	0.67	0.64	0.61	0.66	0.63	0.61	0.60
7	0.67	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.60	0.65	0.62	0.60	0.64	0.61	0.59	0.58
8	0.65	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.58	0.63	0.60	0.58	0.62	0.60	0.58	0.57
9	0.63	0.59	0.57	0.63	0.59	0.57	0.62	0.59	0.56	0.62	0.58	0.56	0.61	0.58	0.56	0.55
10	0.62	0.58	0.55	0.61	0.58	0.55	0.61	0.57	0.55	0.60	0.57	0.55	0.60	0.57	0.55	0.54



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	6371.13	5926.82	3460.29	1477.71	774.64	462.47	289.05	186.75	134.39
45.0	6522.53	5150.53	2699.97	1192.52	661.23	400.81	284.09	157.57	108.02
90.0	6400.86	4300.46	2032.68	904.52	521.77	320.21	200.07	135.49	98.83
135.0	6546.21	4917.64	2229.23	924.40	520.28	317.12	198.64	136.54	105.16
180.0	6371.13	4344.50	1926.42	820.62	484.55	292.24	188.29	133.62	99.27
225.0	6522.53	5074.00	2488.00	1011.11	576.66	345.75	214.55	137.64	99.27
270.0	6400.86	5783.67	3439.37	1436.42	711.33	419.53	284.09	170.62	123.71
315.0	6546.21	5652.09	3102.98	1061.82	685.23	408.90	264.33	174.64	129.38
360.0	6371.13	5926.82	3460.29	1477.71	774.64	462.47	289.05	186.75	134.39

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	97.17	72.78	46.14	25.60	16.63	14.15	12.94	12.88	11.51
45.0	75.32	53.13	32.65	19.99	13.98	12.39	11.40	11.12	10.90
90.0	72.78	50.82	28.74	18.11	13.76	12.61	12.99	11.95	9.69
135.0	77.79	55.66	33.03	20.10	15.25	13.87	13.38	12.55	10.08
180.0	75.37	54.78	30.89	18.83	14.76	13.54	13.54	13.10	10.68
225.0	70.09	50.32	32.10	19.71	14.20	12.77	11.89	15.14	11.56
270.0	88.04	64.58	40.91	24.50	15.80	13.32	12.55	13.43	11.89
315.0	94.97	68.71	41.90	23.23	16.52	14.20	13.27	13.05	11.67
360.0	97.17	72.78	46.14	25.60	16.63	14.15	12.94	12.88	11.51

C/γ(°)	90.0
0.0	6.06
45.0	5.18
90.0	5.12
135.0	5.12
180.0	5.18
225.0	5.18
270.0	5.78
315.0	5.73
360.0	6.06