



NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.com
Tel:+86-750-3770000 Fax:+86-750-3771111
Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

Nata

LumCAT: 1-0938-N	
Luminaire: 92.70.246.00	
Report No: 210708-B017	Voltage(V): 35.9900
Test No: 210708-C017	Current(A): 0.5100
LampCAT: Fortimo LED SLM 1204 G7N	Power (W): 18.3540
Lamp flux(lm): 2446.6	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 570	Width(mm): 45
Phm Type: C	Height(mm): 20

Photometric Results

Lumens(lm): 1926.21
Efficiency(%): 78.73%
Lumens(lm)/Power(W): 104.95
Central intensity(cd): 3975.890
Maximum intensity(cd): 3975.890
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=41.9
[C90/270]Total=41.9
Field angle(10%Imax): [C0/180]Total=61.5
[C90/270]Total=61.5
Maximum s/h(1/2): C0_180=0.68 C90_270=0.68
Maximum s/h(1/4): C0_180=0.65 C90_270=0.65
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 78.73%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.998%

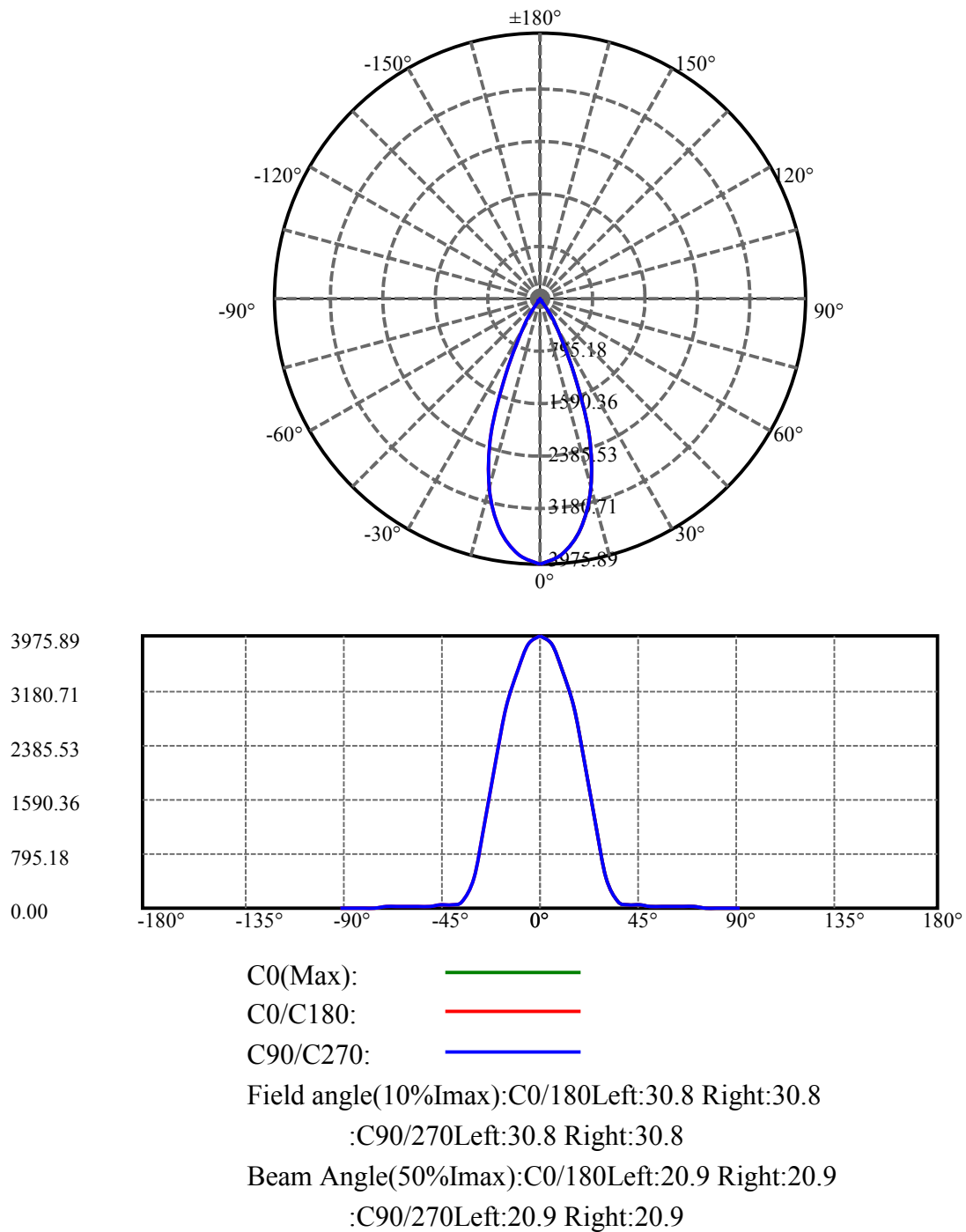
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3975.891	0.000	0	.000%	.000%
5.0	3847.641	93.528	93.528	3.823%	4.856%
10.0	3490.383	262.504	356.032	10.729%	18.484%
15.0	2949.258	381.995	738.027	15.613%	38.315%
20.0	2162.953	421.318	1159.345	17.220%	60.188%
25.0	1222.242	355.045	1514.39	14.512%	78.620%
30.0	450.773	211.722	1726.111	8.654%	89.612%
35.0	100.617	81.196	1807.308	3.319%	93.827%
40.0	54.436	25.869	1833.177	1.057%	95.170%
45.0	39.720	17.434	1850.611	.713%	96.075%
50.0	31.324	14.355	1864.966	.587%	96.820%
55.0	25.038	12.255	1877.221	.501%	97.457%
60.0	20.046	10.421	1887.642	.426%	97.998%
65.0	16.052	8.776	1896.418	.359%	98.453%
70.0	13.282	7.428	1903.846	.304%	98.839%
75.0	11.285	6.421	1910.267	.262%	99.172%
80.0	10.259	5.765	1916.032	.236%	99.471%
85.0	9.323	5.321	1921.352	.217%	99.748%
90.0	8.423	4.859	1926.212	.199%	100.000%

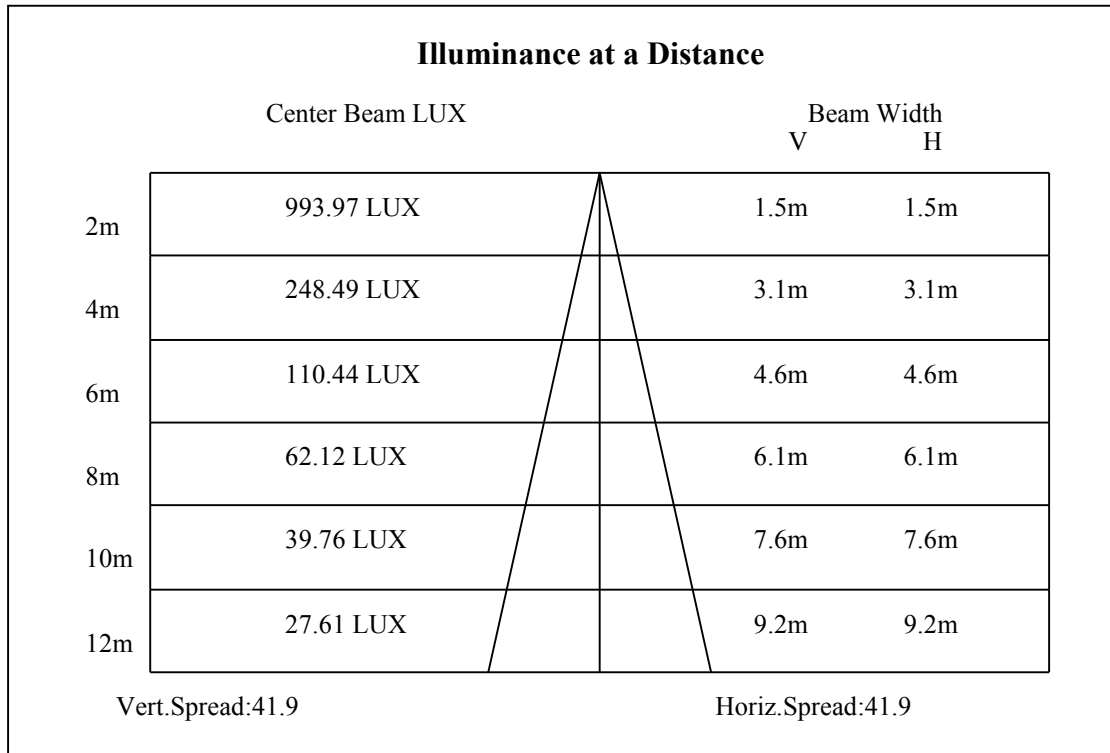
ZONAL LUMEN SUMMARY

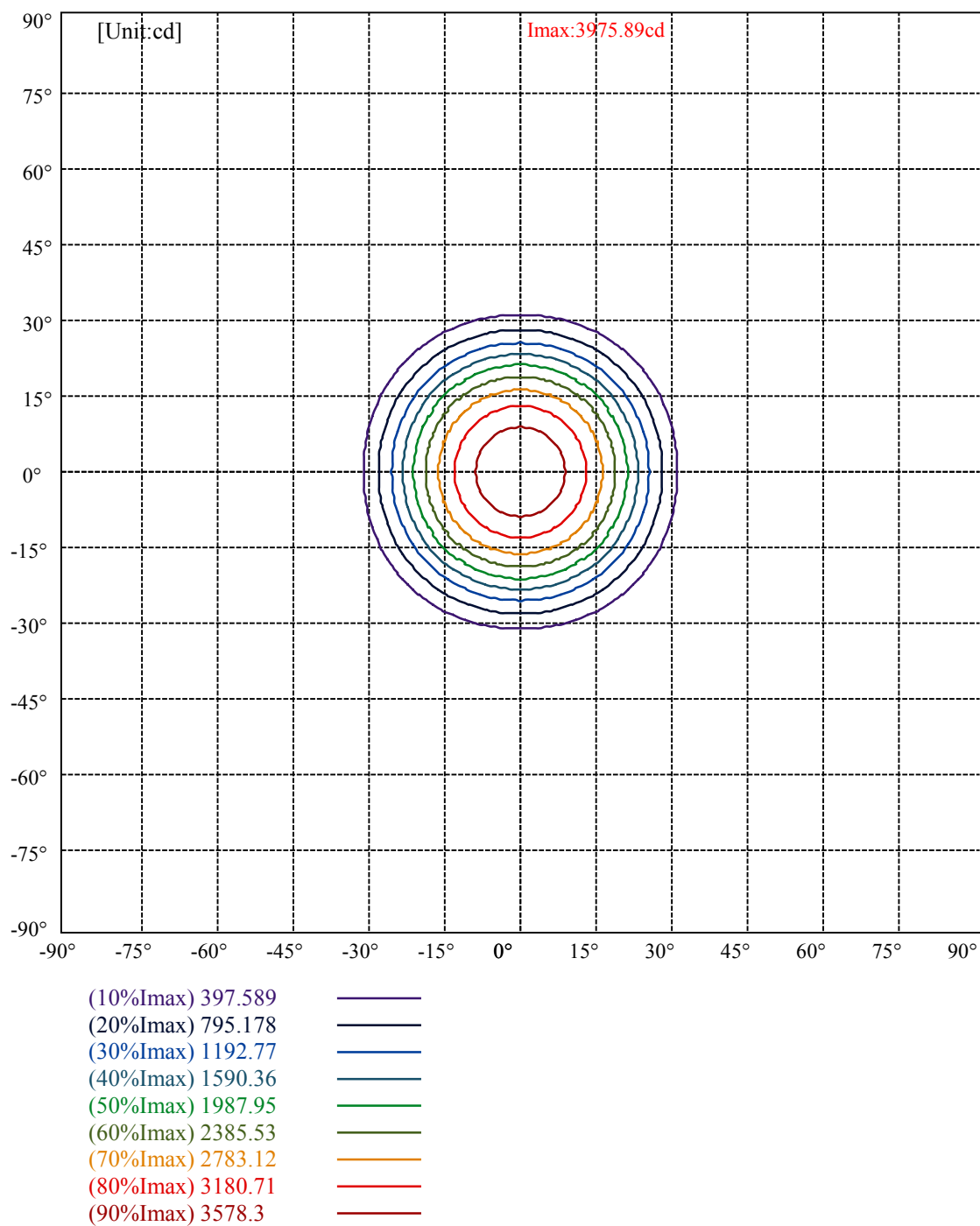
Zone	Lumens	%Lamp	%Fixt
0-30	1726.11	70.55%	89.61%
0-40	1833.18	74.93%	95.17%
0-60	1887.64	77.15%	98.00%
0-90	1921.35	78.53%	99.75%
0-120	1921.35	78.53%	99.75%
0-180	1926.21	78.73%	100.00%
60-90	44.13	1.80%	2.29%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-25.63	1540.97	62.98%	80.00%

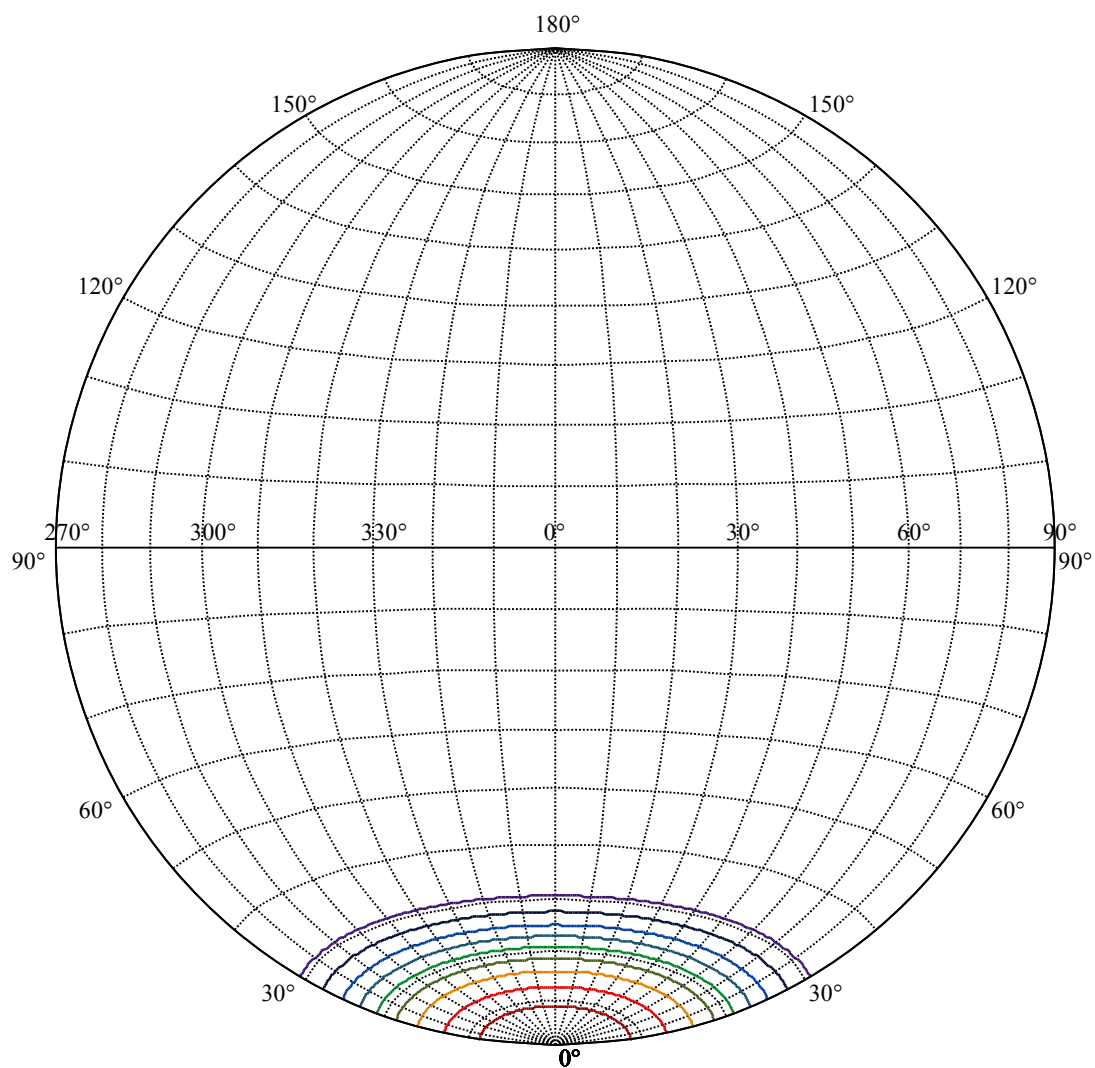
ZONAL LUMEN SUMMARY

0-10	356.03
10-20	803.31
20-30	566.77
30-40	107.07
40-50	31.79
50-60	22.68
60-70	16.20
70-80	12.19
80-90	5.32
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









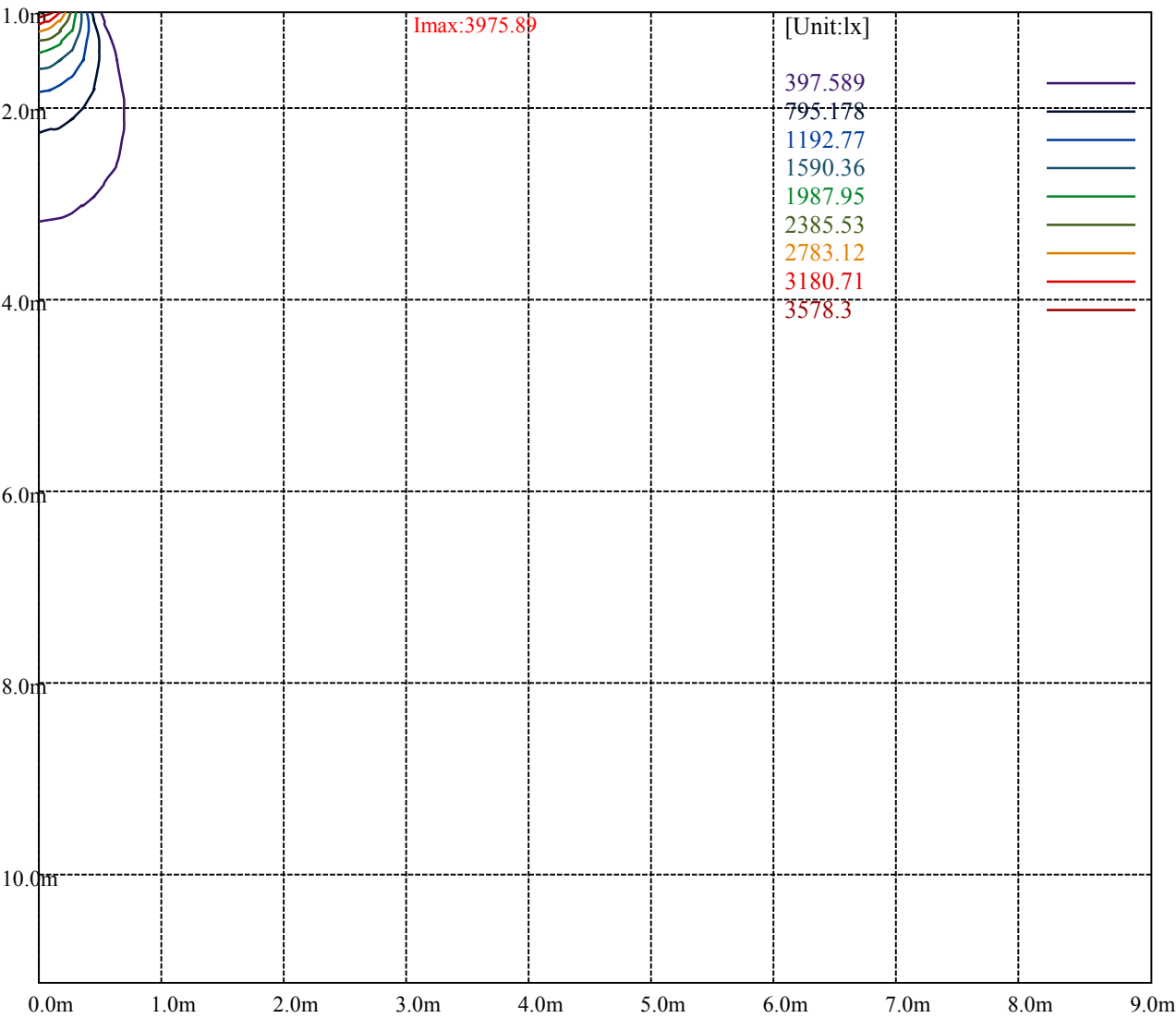
House

[Unit:cd]

Road

Imax:3975.89

(10%Imax)	397.589	—
(20%Imax)	795.178	—
(30%Imax)	1192.77	—
(40%Imax)	1590.36	—
(50%Imax)	1987.95	—
(60%Imax)	2385.53	—
(70%Imax)	2783.12	—
(80%Imax)	3180.71	—
(90%Imax)	3578.3	—



Luminance Table

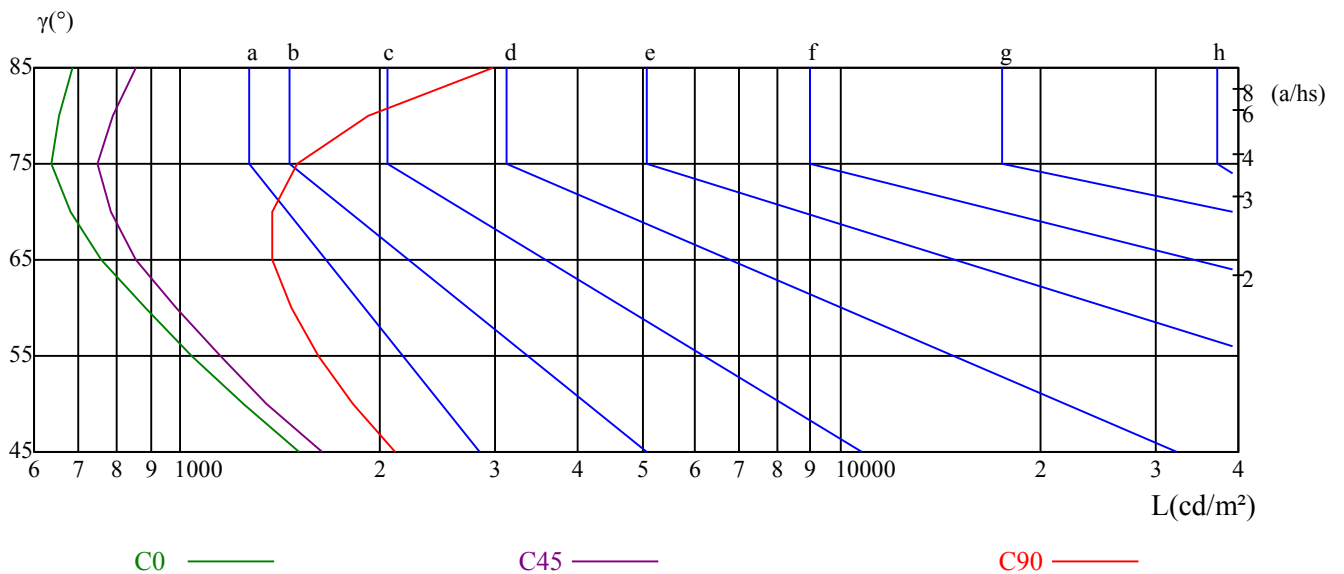
γ	45	50	55	60	65	70	75	80	85
C0	1516	1242	1041	883	758	682	639	654	686
C45	1635	1353	1147	985	857	784	750	788	855
C90	2116	1824	1621	1473	1377	1381	1503	1921	2977

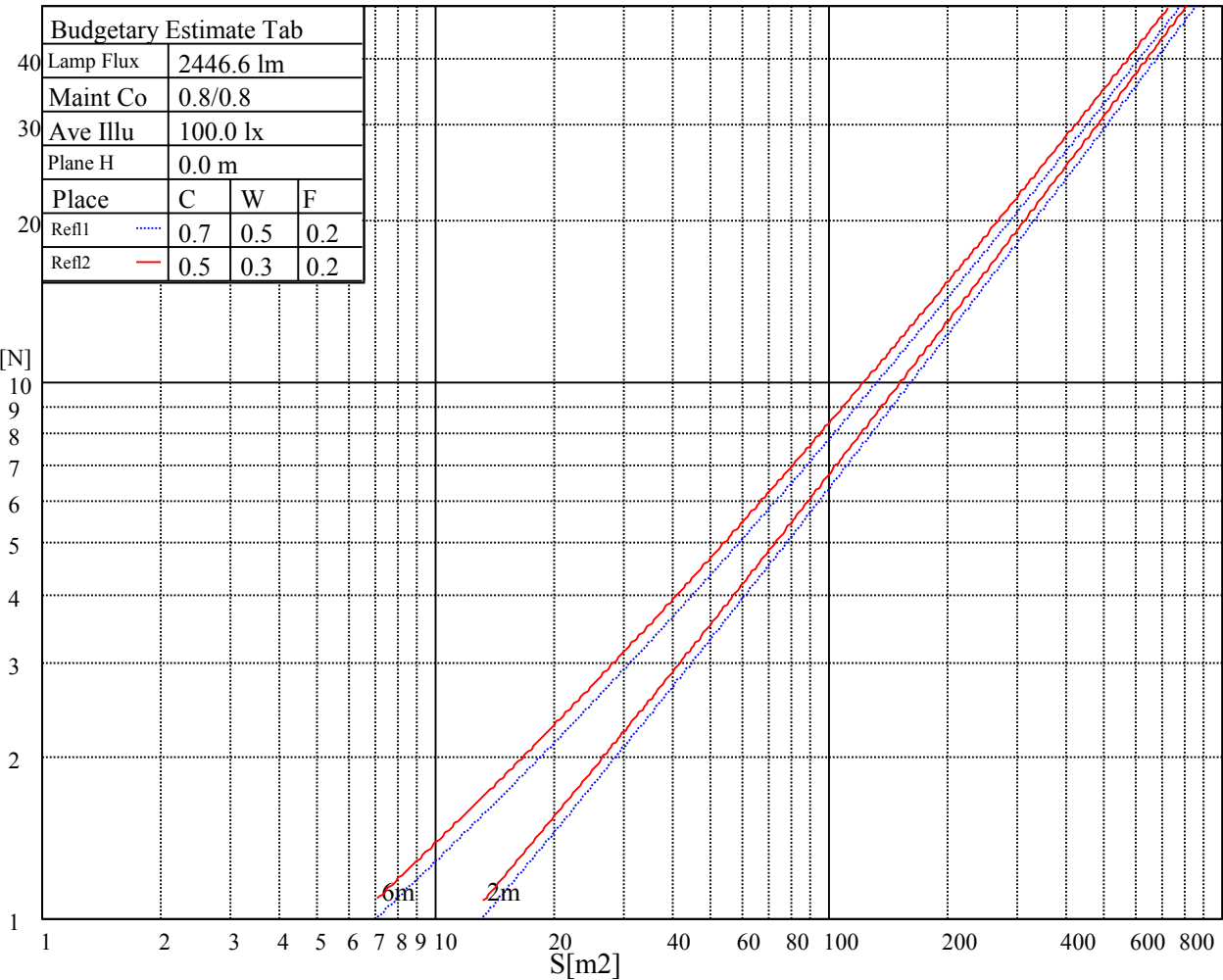
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1481	1481	1481	1700	1700	1700	4171	4171	4171

Glare Table

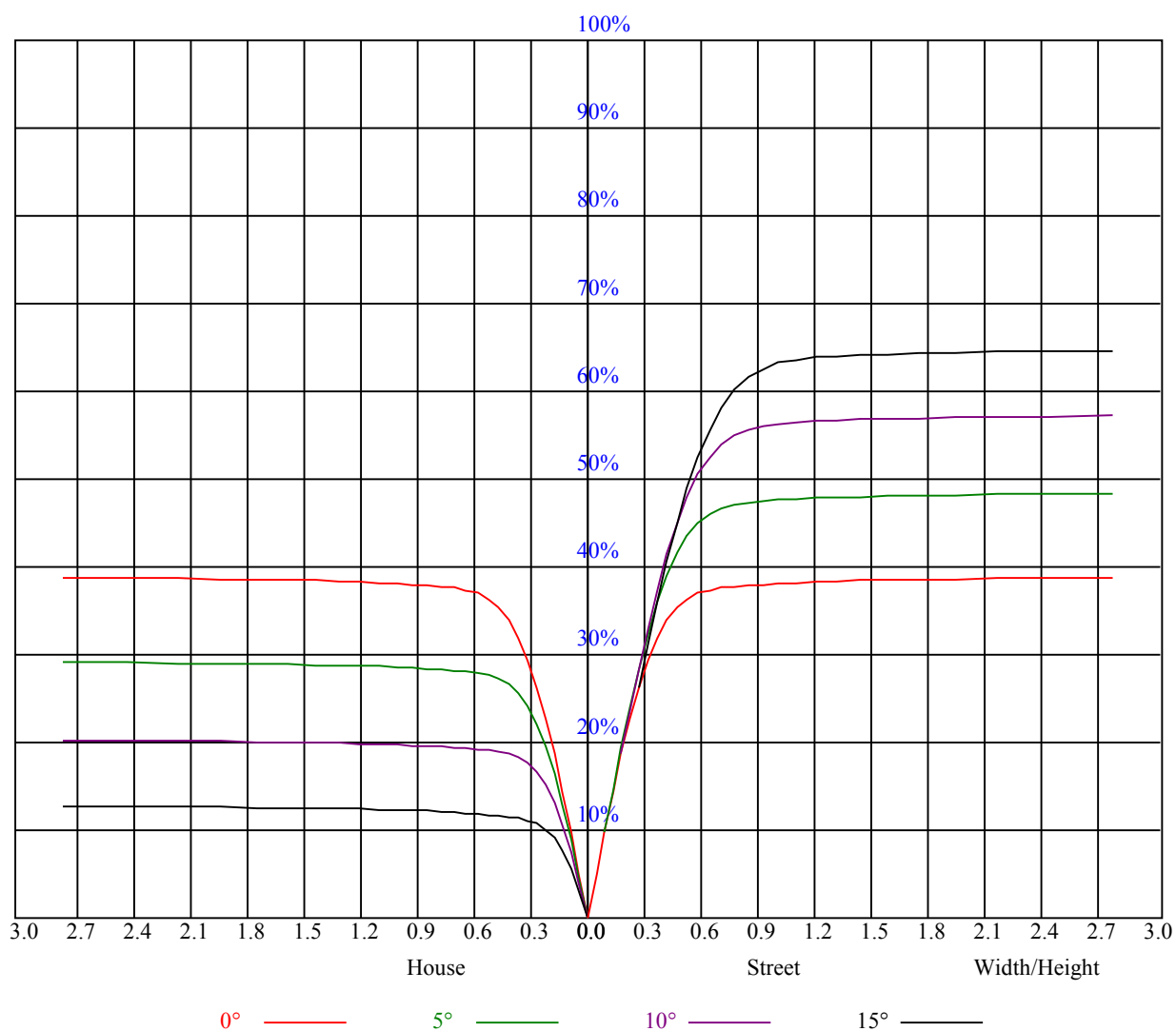
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

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	0.94	0.94	0.94	0.92	0.92	0.92	0.87	0.87	0.87	0.84	0.84	0.84	0.80	0.80	0.80	0.79
1	0.88	0.86	0.84	0.86	0.84	0.83	0.83	0.82	0.80	0.80	0.79	0.78	0.77	0.76	0.76	0.74
2	0.82	0.80	0.77	0.81	0.79	0.76	0.79	0.77	0.75	0.76	0.75	0.73	0.74	0.73	0.72	0.70
3	0.78	0.75	0.72	0.77	0.74	0.71	0.75	0.72	0.70	0.73	0.71	0.69	0.71	0.69	0.68	0.67
4	0.74	0.70	0.67	0.73	0.70	0.67	0.71	0.68	0.66	0.70	0.67	0.65	0.69	0.66	0.65	0.64
5	0.70	0.66	0.63	0.70	0.66	0.63	0.68	0.65	0.63	0.67	0.64	0.62	0.66	0.63	0.62	0.61
6	0.67	0.63	0.60	0.66	0.63	0.60	0.65	0.62	0.60	0.64	0.61	0.59	0.63	0.61	0.59	0.58
7	0.64	0.60	0.57	0.64	0.60	0.57	0.63	0.59	0.57	0.62	0.59	0.56	0.61	0.58	0.56	0.55
8	0.61	0.57	0.55	0.61	0.57	0.54	0.60	0.57	0.54	0.59	0.56	0.54	0.59	0.56	0.54	0.53
9	0.59	0.55	0.52	0.58	0.55	0.52	0.58	0.54	0.52	0.57	0.54	0.52	0.56	0.54	0.52	0.51
10	0.56	0.53	0.50	0.56	0.52	0.50	0.56	0.52	0.50	0.55	0.52	0.50	0.54	0.52	0.50	0.49



Intensity data(cd)										Appendix Page: 14 Total:14	
C/ γ (°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0		
0.0	3967.88	3898.13	3575.81	3078.00	2306.81	1417.50	545.63	112.73	56.87		
45.0	3987.56	3863.25	3507.75	2975.06	2201.06	1227.38	413.44	84.43	48.71		
90.0	3975.75	3814.31	3439.69	2845.13	1964.81	1101.99	330.36	73.35	47.36		
135.0	3972.38	3848.06	3528.00	2976.19	2192.63	1291.50	459.00	92.19	53.33		
180.0	3967.88	3780.00	3391.88	2833.88	2019.38	1075.33	355.22	86.85	51.92		
225.0	3987.56	3862.13	3492.56	2925.00	2207.81	1118.25	464.74	114.19	59.18		
270.0	3975.75	3884.63	3538.69	3063.38	2300.63	1428.19	615.38	139.28	62.89		
315.0	3972.38	3830.63	3448.69	2897.44	2110.50	1117.80	422.44	101.93	55.24		
360.0	3967.88	3898.13	3575.81	3078.00	2306.81	1417.50	545.63	112.73	56.87		
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0		
0.0	40.61	31.84	25.59	20.59	16.31	13.73	11.48	10.13	9.28		
45.0	36.96	30.15	24.19	19.52	15.92	13.16	11.14	10.01	9.23		
90.0	36.39	29.14	23.96	19.07	15.53	12.83	11.25	11.42	9.17		
135.0	39.71	31.61	25.09	20.36	16.20	13.44	11.42	10.24	9.23		
180.0	38.59	30.94	24.30	19.46	15.58	12.88	10.91	9.73	8.94		
225.0	41.74	31.95	25.71	20.36	16.14	13.33	11.25	9.96	9.11		
270.0	43.76	33.64	26.78	21.04	16.82	13.78	11.59	10.52	10.29		
315.0	39.99	31.33	24.69	19.97	15.92	13.11	11.25	10.07	9.34		
360.0	40.61	31.84	25.59	20.59	16.31	13.73	11.48	10.13	9.28		
C/ γ (°)	90.0										
0.0	8.38										
45.0	8.49										
90.0	8.44										
135.0	8.38										
180.0	8.38										
225.0	8.49										
270.0	8.44										
315.0	8.38										
360.0	8.38										