



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: 92.70.327.00

Luminaire:

Report No: 210810-B001

Test No: 210810-C001

LampCAT: OSRAM-3030

Lamp flux(lm): -1.0

Number of Lamps: 1

Length(mm): 570

Phm Type: C

Voltage(V): 32.8800

Current(A): 0.1200

Power (W): 3.9450

PF: 0.0000

Ballast type: DC

Width(mm): 45

Height(mm): 20

Photometric Results

Lumens(lm): 258.61

Efficiency(%): 0.00%

Lumens(lm)/Power(W): 65.55

Central intensity(cd): 713.987

Maximum intensity(cd): 727.671

Angle of maximum intensity: C=270.0 γ =1.0

Beam Angle(50%Imax): [C0/180]Total=43.4

[C90/270]Total=20.0

Field angle(10%Imax): [C0/180]Total=73.9

[C90/270]Total=42.7

Maximum s/h(1/2): C0_180=0.63 C90_270=0.30

Maximum s/h(1/4): C0_180=0.65 C90_270=0.32

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 97.756%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	720.082	0.000	0	.000%	.000%
1.0	717.815	0.688	0.688	.000%	.266%
2.0	710.025	2.049	2.737	.000%	1.058%
3.0	696.920	3.365	6.102	.000%	2.360%
4.0	680.096	4.609	10.712	.000%	4.142%
5.0	658.544	5.759	16.47	.000%	6.369%
6.0	628.888	6.766	23.236	.000%	8.985%
7.0	599.475	7.624	30.861	.000%	11.933%
8.0	567.966	8.355	39.216	.000%	15.164%
9.0	531.924	8.914	48.13	.000%	18.611%
10.0	494.612	9.290	57.42	.000%	22.203%
11.0	459.448	9.533	66.953	.000%	25.889%
12.0	424.488	9.663	76.615	.000%	29.625%
13.0	387.845	9.640	86.256	.000%	33.353%
14.0	355.388	9.513	95.769	.000%	37.032%
15.0	325.321	9.345	105.114	.000%	40.645%
16.0	297.080	9.120	114.234	.000%	44.172%
17.0	269.131	8.817	123.051	.000%	47.581%
18.0	244.617	8.471	131.522	.000%	50.857%
19.0	223.394	8.142	139.664	.000%	54.005%
20.0	202.966	7.804	147.468	.000%	57.023%
21.0	183.527	7.421	154.889	.000%	59.892%
22.0	167.215	7.048	161.938	.000%	62.618%
23.0	152.247	6.703	168.641	.000%	65.210%
24.0	137.790	6.341	174.982	.000%	67.662%
25.0	125.014	5.976	180.958	.000%	69.972%
26.0	113.792	5.637	186.595	.000%	72.152%
27.0	103.070	5.306	191.9	.000%	74.204%
28.0	93.215	4.970	196.87	.000%	76.125%
29.0	84.580	4.652	201.521	.000%	77.924%
30.0	76.626	4.353	205.874	.000%	79.607%
31.0	69.078	4.055	209.929	.000%	81.175%
32.0	62.520	3.770	213.699	.000%	82.633%
33.0	56.556	3.508	217.207	.000%	83.989%
34.0	50.749	3.247	220.454	.000%	85.245%
35.0	45.379	2.985	223.44	.000%	86.399%
36.0	40.737	2.742	226.182	.000%	87.460%
37.0	36.849	2.530	228.712	.000%	88.438%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	32.647	2.320	231.032	.000%	89.335%
39.0	29.055	2.106	233.138	.000%	90.149%
40.0	26.347	1.932	235.07	.000%	90.896%
41.0	23.778	1.785	236.855	.000%	91.587%
42.0	21.153	1.632	238.487	.000%	92.218%
43.0	18.983	1.487	239.974	.000%	92.793%
44.0	17.149	1.364	241.338	.000%	93.320%
45.0	15.427	1.252	242.59	.000%	93.804%
46.0	13.829	1.144	243.734	.000%	94.247%
47.0	12.488	1.047	244.781	.000%	94.651%
48.0	11.312	0.962	245.743	.000%	95.023%
49.0	10.229	0.885	246.627	.000%	95.365%
50.0	9.194	0.810	247.437	.000%	95.679%
51.0	8.384	0.744	248.181	.000%	95.966%
52.0	7.660	0.688	248.869	.000%	96.232%
53.0	6.984	0.637	249.506	.000%	96.479%
54.0	6.371	0.589	250.095	.000%	96.706%
55.0	5.863	0.546	250.641	.000%	96.917%
56.0	5.367	0.507	251.148	.000%	97.114%
57.0	4.885	0.469	251.617	.000%	97.295%
58.0	4.452	0.432	252.049	.000%	97.462%
59.0	4.048	0.397	252.446	.000%	97.616%
60.0	3.652	0.364	252.81	.000%	97.756%
61.0	3.283	0.331	253.141	.000%	97.884%
62.0	2.943	0.300	253.441	.000%	98.000%
63.0	2.629	0.271	253.712	.000%	98.105%
64.0	2.383	0.246	253.958	.000%	98.200%
65.0	2.170	0.225	254.183	.000%	98.287%
66.0	2.002	0.208	254.391	.000%	98.368%
67.0	1.912	0.197	254.588	.000%	98.444%
68.0	1.897	0.193	254.781	.000%	98.518%
69.0	1.893	0.193	254.974	.000%	98.593%
70.0	1.908	0.195	255.17	.000%	98.669%
71.0	1.927	0.198	255.368	.000%	98.745%
72.0	1.964	0.202	255.57	.000%	98.824%
73.0	1.998	0.207	255.778	.000%	98.904%
74.0	2.009	0.211	255.988	.000%	98.985%
75.0	1.949	0.209	256.197	.000%	99.066%

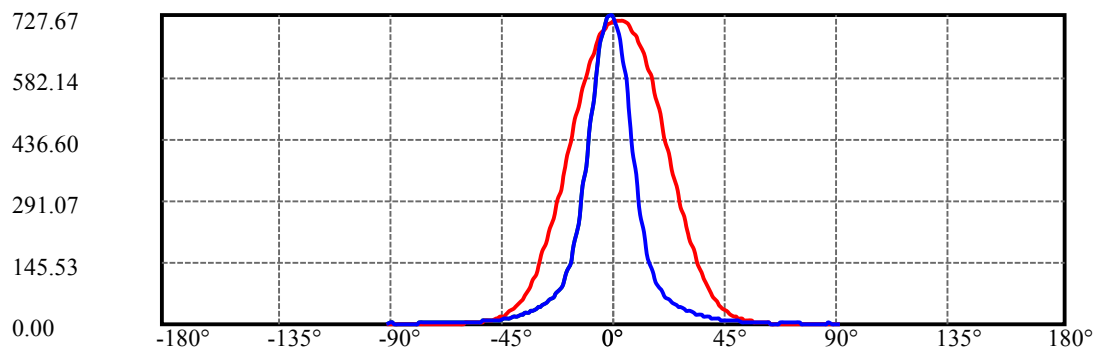
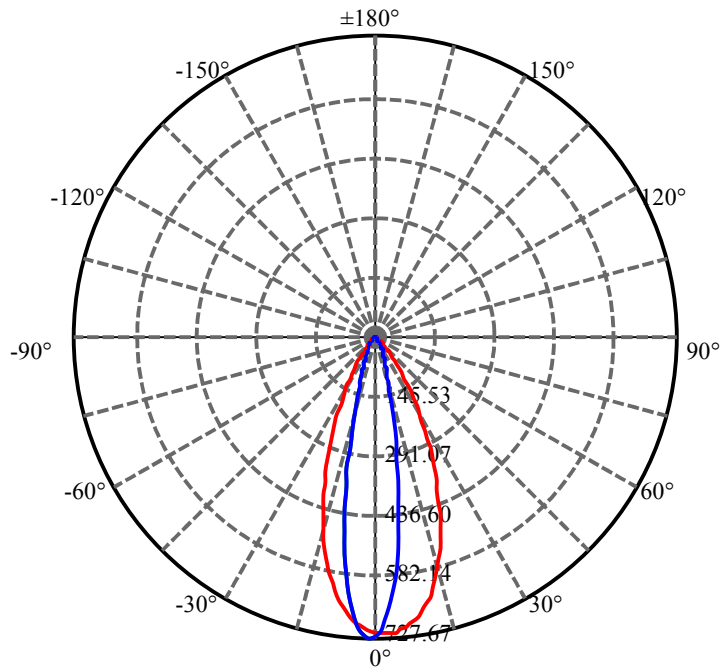
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	1.808	0.199	256.397	.000%	99.143%
77.0	1.587	0.181	256.578	.000%	99.213%
78.0	1.367	0.158	256.736	.000%	99.274%
79.0	1.273	0.142	256.878	.000%	99.329%
80.0	1.244	0.136	257.013	.000%	99.382%
81.0	1.206	0.132	257.146	.000%	99.433%
82.0	1.184	0.130	257.276	.000%	99.483%
83.0	1.180	0.129	257.404	.000%	99.533%
84.0	1.158	0.127	257.531	.000%	99.582%
85.0	1.147	0.126	257.657	.000%	99.630%
86.0	1.501	0.145	257.802	.000%	99.686%
87.0	1.714	0.176	257.978	.000%	99.754%
88.0	2.080	0.208	258.186	.000%	99.835%
89.0	1.920	0.219	258.405	.000%	99.920%
90.0	1.871	0.208	258.613	.000%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	205.87	N.A.	79.61%
0-40	235.07	N.A.	90.90%
0-60	252.81	N.A.	97.76%
0-90	258.40	N.A.	99.92%
0-120	258.40	N.A.	99.92%
0-180	258.61	N.A.	100.00%
60-90	5.96	N.A.	2.30%
90-120	0.00	N.A.	0.00%
90-130	0.00	N.A.	0.00%
90-150	0.00	N.A.	0.00%
90-180	0.00	N.A.	0.00%
0-30.25	206.89	N.A.	80.00%

ZONAL LUMEN SUMMARY

0-10	57.42
10-20	90.05
20-30	58.41
30-40	29.20
40-50	12.37
50-60	5.37
60-70	2.36
70-80	1.84
80-90	1.39
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

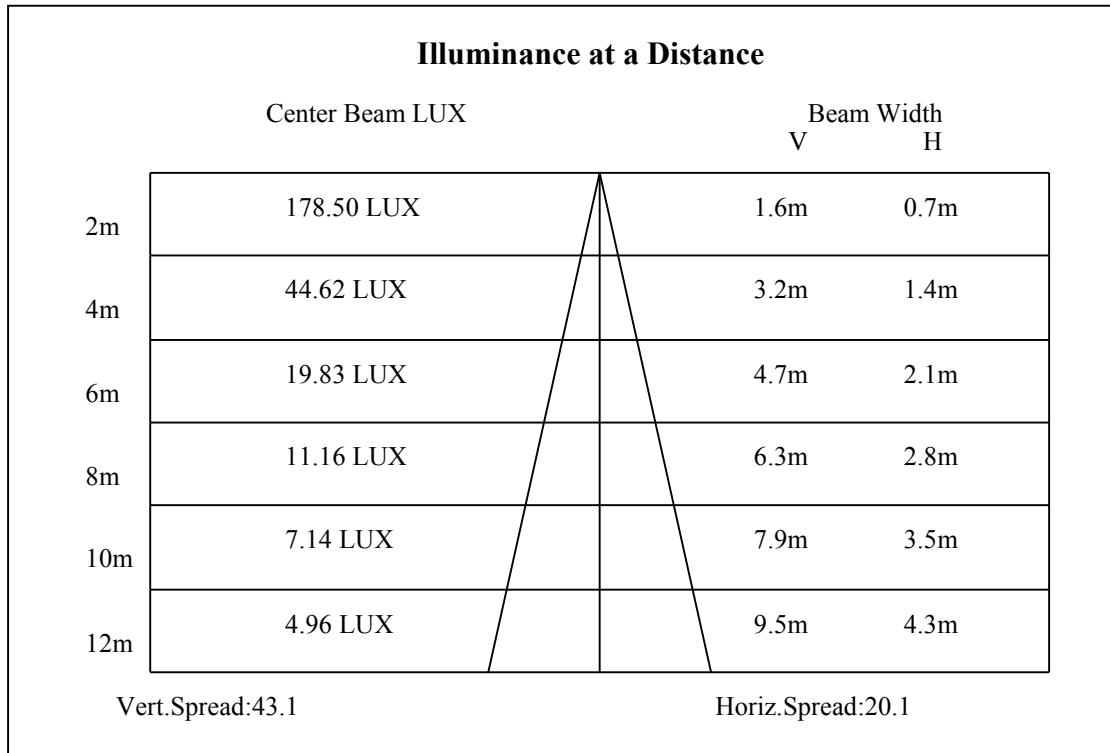
C270(Max): —————C0/C180: —————C90/C270: —————

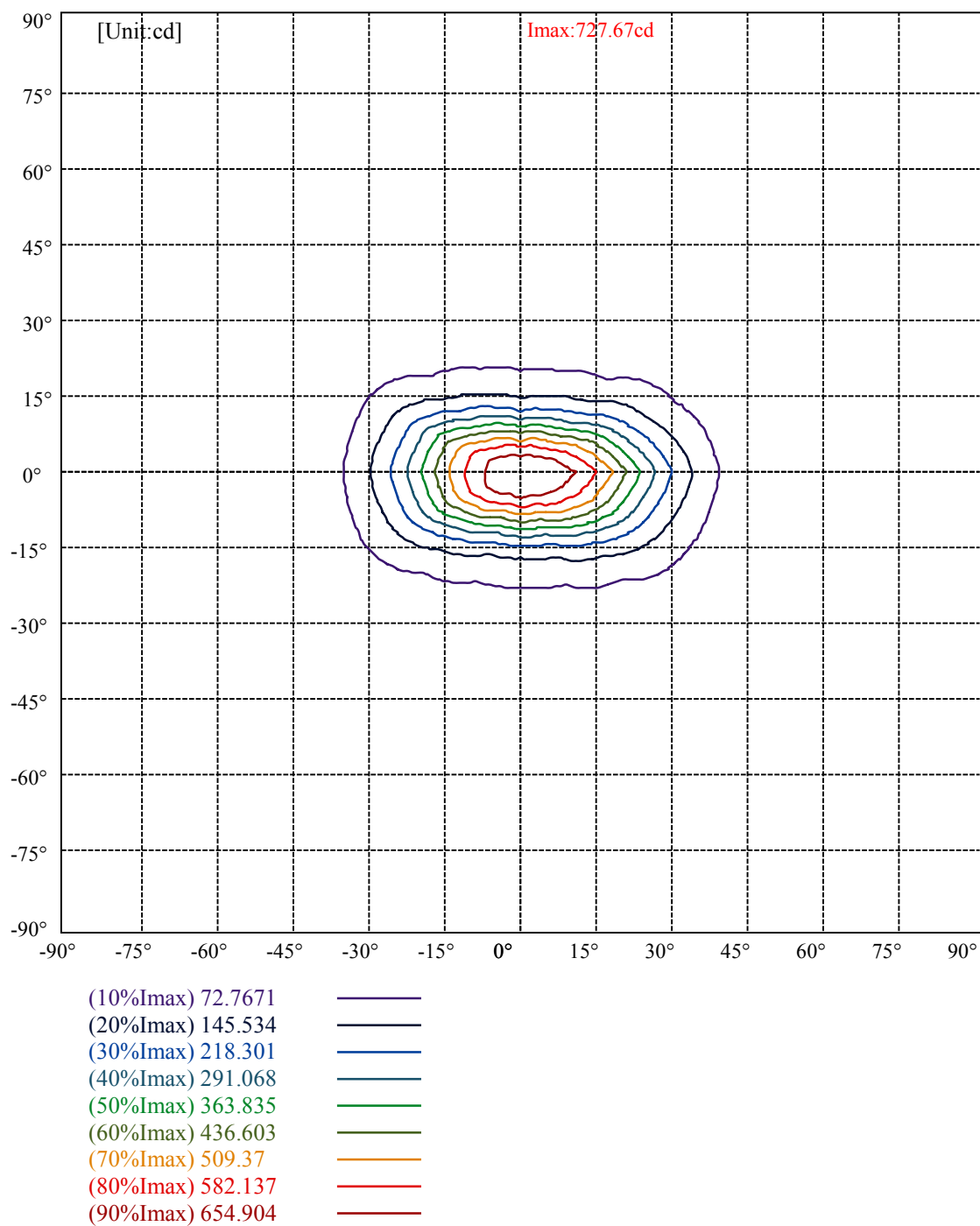
Field angle(10%Imax):C0/180Left:34.8 Right:39.1

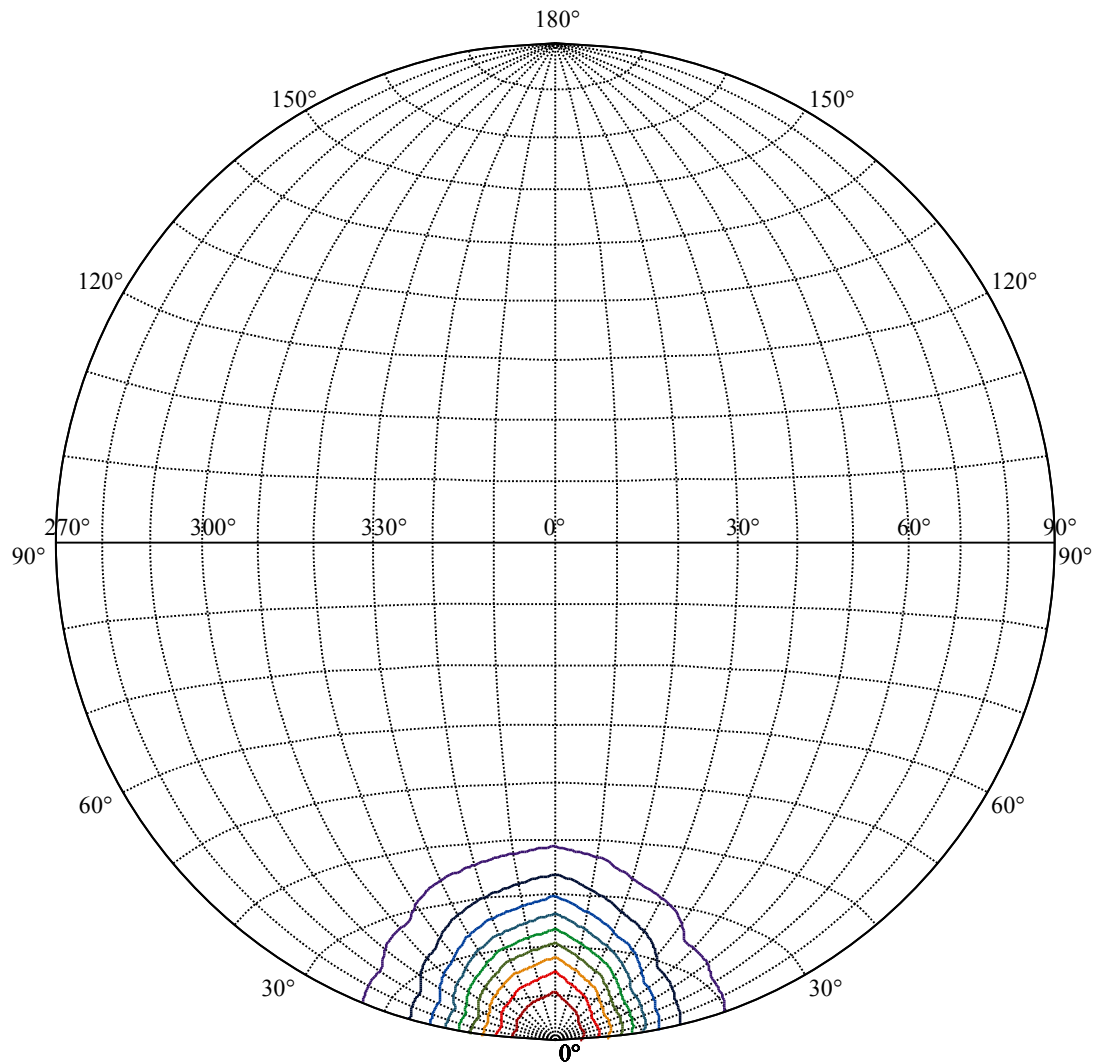
:C90/270Left:22.8 Right:19.9

Beam Angle(50%Imax):C0/180Left:19.6 Right:23.7

:C90/270Left:11.2 Right:8.8







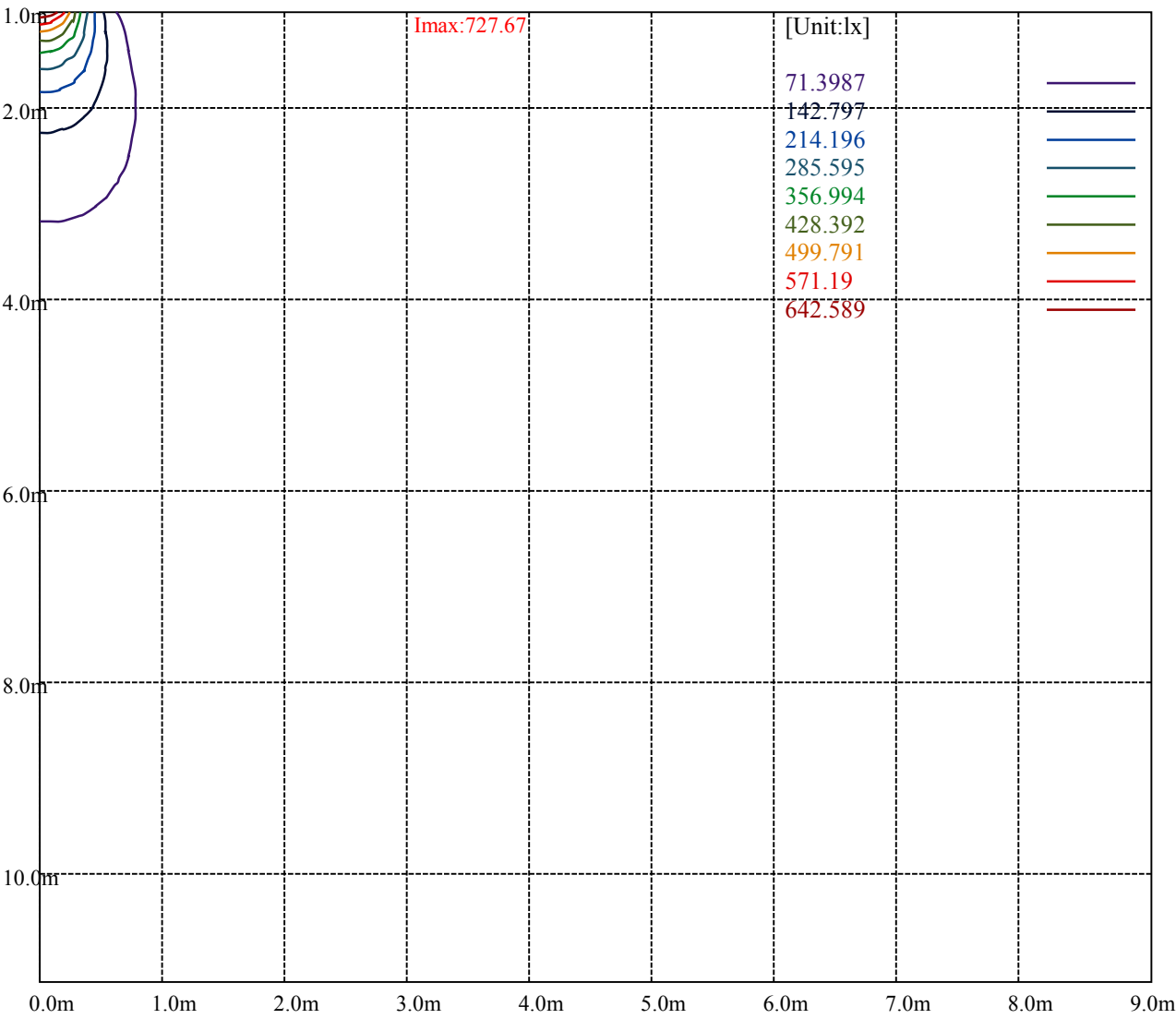
House

[Unit:cd]

Road

Imax:727.67
(10%Imax) 72.7671
(20%Imax) 145.534
(30%Imax) 218.301
(40%Imax) 291.068
(50%Imax) 363.835
(60%Imax) 436.603
(70%Imax) 509.37
(80%Imax) 582.137
(90%Imax) 654.904





Luminance Table

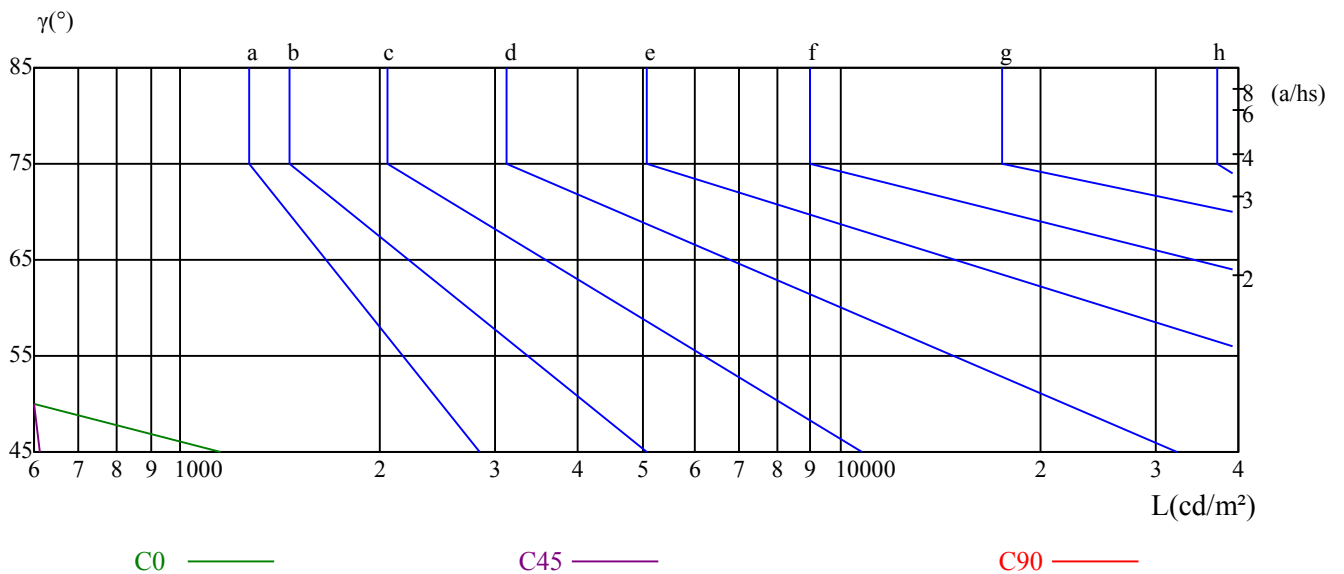
γ	45	50	55	60	65	70	75	80	85
C0	1147	571	303	158	76	55	61	72	79
C45	610	390	265	197	140	141	163	106	110
C90	500	407	317	233	190	261	271	235	382

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
127	232	237	167	396	304	481	548	521

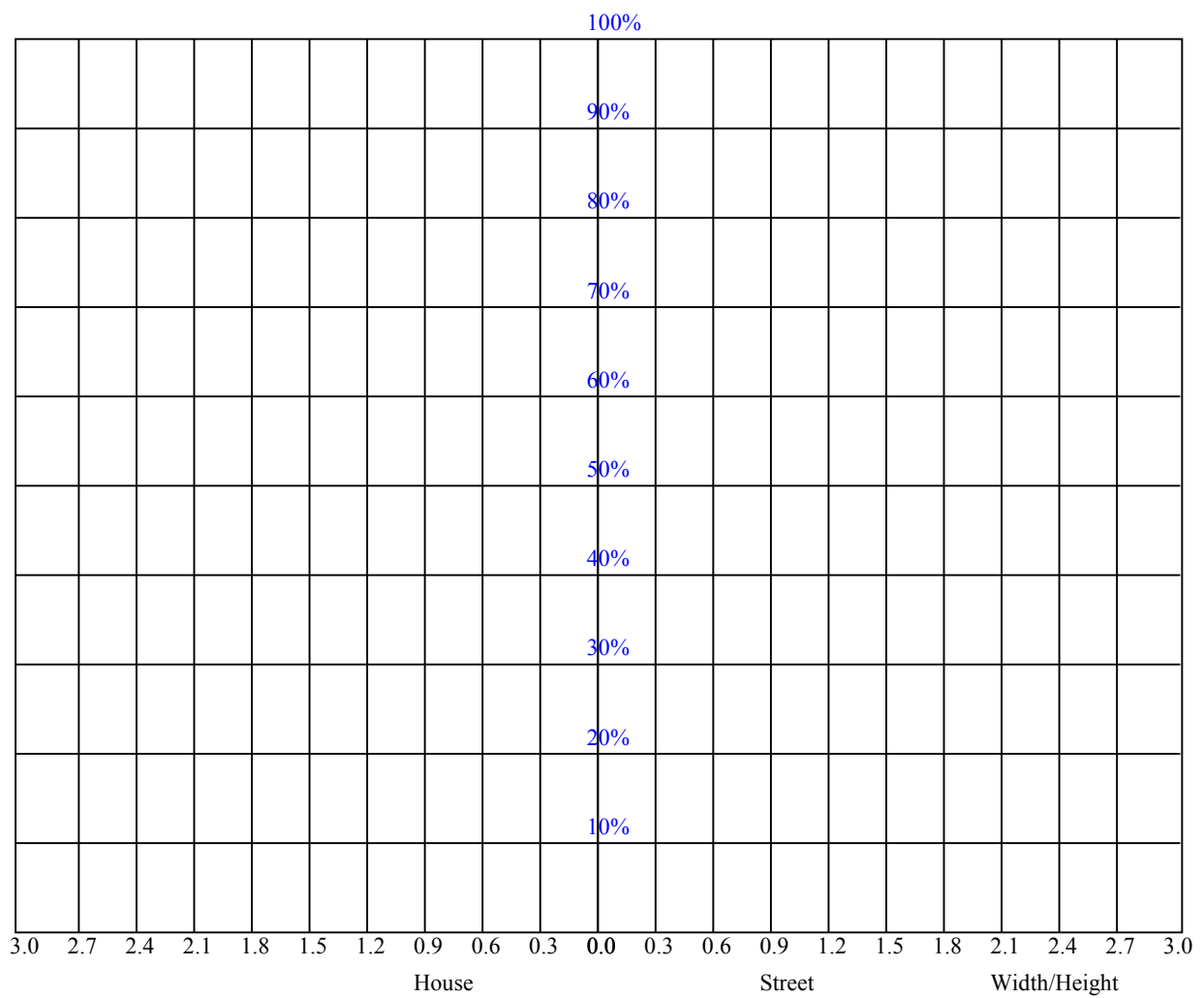
Glare Table

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



Intensity data(cd)										Appendix Page: 16 Total:19	
C/γ(°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0		
0.0	713.99	716.02	716.14	715.90	713.27	709.21	704.25	697.38	689.01		
22.5	720.86	718.29	713.99	707.00	696.96	683.27	668.46	649.22	630.45		
45.0	720.62	713.93	700.54	681.72	659.55	629.38	593.76	558.99	517.52		
67.5	722.35	715.60	700.01	674.55	645.27	609.78	556.72	510.77	463.50		
90.0	722.71	710.88	683.51	653.34	617.25	573.21	512.26	460.99	408.95		
112.5	723.97	716.92	701.44	677.84	649.87	615.99	565.50	521.40	476.05		
135.0	718.59	711.42	700.60	682.08	661.94	638.70	603.44	571.90	538.97		
157.5	717.57	713.81	707.89	699.77	690.39	679.09	662.12	646.47	628.96		
180.0	713.99	710.10	705.50	697.44	690.80	680.59	668.75	654.47	639.54		
202.5	720.86	720.20	716.38	708.43	701.56	691.28	676.10	659.73	642.64		
225.0	720.62	722.65	719.48	711.54	700.78	679.57	654.29	631.05	594.30		
247.5	722.35	722.65	716.26	699.89	675.09	648.08	608.82	564.49	522.00		
270.0	722.71	727.67	723.25	711.24	691.10	659.43	618.62	577.39	527.02		
292.5	723.97	724.74	718.05	702.51	679.27	652.98	615.75	573.27	533.29		
315.0	718.59	721.76	720.20	714.35	701.56	686.92	665.29	639.00	613.42		
337.5	717.57	718.41	717.15	713.15	706.88	699.23	688.05	675.09	661.82		
360.0	713.99	716.02	716.14	715.90	713.27	709.21	704.25	697.38	689.01		
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0		
0.0	678.43	665.77	653.16	639.06	618.62	600.76	581.16	554.81	531.74		
22.5	607.27	580.56	555.58	530.07	496.07	468.34	440.08	404.89	375.97		
45.0	478.80	434.76	390.90	352.96	312.33	274.03	242.90	214.75	183.14		
67.5	408.47	354.10	308.38	262.14	221.68	190.79	162.05	141.02	121.24		
90.0	352.12	298.70	256.46	215.17	180.63	155.12	131.99	115.50	100.27		
112.5	416.72	369.39	324.16	277.67	236.38	204.18	173.58	150.82	129.19		
135.0	498.28	456.81	420.06	379.61	339.64	305.58	270.02	240.51	209.61		
157.5	603.98	581.87	558.57	530.67	501.39	474.38	443.78	416.54	384.75		
180.0	620.65	600.46	580.98	557.67	535.33	508.56	481.85	456.45	430.22		
202.5	620.47	596.21	572.25	544.11	516.74	485.91	454.00	425.74	397.54		
225.0	557.55	527.14	481.55	444.02	406.62	359.95	323.80	290.10	250.48		
247.5	476.95	418.87	372.80	328.40	277.25	240.39	208.24	177.47	151.35		
270.0	473.48	424.60	370.11	323.80	275.88	233.22	200.11	175.61	143.53		
292.5	490.57	434.88	389.71	345.97	294.76	257.30	224.19	188.46	164.02		
315.0	580.92	545.84	512.44	477.60	437.93	397.89	362.58	328.70	288.25		
337.5	646.11	623.82	604.04	582.89	554.27	529.83	504.79	471.93	444.80		
360.0	678.43	665.77	653.16	639.06	618.62	600.76	581.16	554.81	531.74		
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0		
0.0	508.14	484.24	454.12	429.68	401.90	374.53	351.05	327.45	301.39		
22.5	347.22	316.81	288.85	262.85	236.08	212.84	193.24	171.91	155.06		
45.0	161.27	142.15	125.78	108.57	96.86	86.88	76.30	69.07	62.86		
67.5	104.81	93.87	83.36	74.03	67.46	61.78	55.63	51.21	47.50		
90.0	88.08	79.23	71.70	63.82	58.56	53.90	48.82	45.29	42.13		
112.5	111.14	99.13	87.42	77.32	70.21	64.06	57.60	52.70	48.58		
135.0	182.43	161.09	142.15	122.13	108.57	96.68	84.13	75.47	68.06		
157.5	352.72	326.61	298.41	268.23	246.78	223.54	198.92	180.75	163.48		
180.0	397.83	372.08	347.40	317.47	294.64	272.95	249.47	227.36	208.78		
202.5	362.28	334.97	308.86	277.73	253.41	231.06	209.73	185.29	167.67		
225.0	222.04	196.59	168.92	149.56	132.41	116.04	102.06	91.30	80.85		
247.5	131.99	114.61	102.00	90.17	80.37	72.90	65.73	59.63	54.85		
270.0	125.12	112.10	95.78	86.22	78.99	70.21	63.58	59.10	53.30		
292.5	143.05	122.13	110.24	97.10	85.15	78.04	70.27	62.80	58.38		
315.0	258.49	231.24	201.01	179.02	159.36	139.88	122.97	109.71	96.74		
337.5	417.25	387.44	361.45	332.52	304.68	280.66	255.14	231.18	211.05		
360.0	508.14	484.24	454.12	429.68	401.90	374.53	351.05	327.45	301.39		

Intensity data(cd)										Appendix Page: 17 Total:19	
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0		
0.0	276.54	255.03	232.56	213.50	193.72	175.20	159.42	139.40	122.08		
22.5	138.03	123.15	111.14	99.19	87.96	79.29	71.29	62.32	55.57		
45.0	56.77	51.39	47.15	43.08	39.97	36.81	34.12	32.03	29.94		
67.5	43.56	40.39	37.64	35.07	32.68	31.01	28.98	27.19	24.44		
90.0	38.96	36.21	33.88	31.55	29.64	27.73	24.62	22.23	20.44		
112.5	44.46	40.93	38.12	35.25	32.74	30.83	28.86	27.19	25.45		
135.0	60.83	54.67	49.83	45.05	41.47	38.00	34.96	32.63	30.29		
157.5	145.92	130.14	117.65	104.33	91.84	82.58	71.58	62.92	54.38		
180.0	188.76	172.27	154.34	134.68	118.31	104.15	91.66	79.41	69.37		
202.5	149.50	134.68	119.69	107.91	95.84	85.39	75.71	67.70	60.53		
225.0	72.90	65.07	58.56	53.36	48.34	43.92	40.51	37.47	34.12		
247.5	50.67	45.95	42.48	39.56	36.15	33.52	31.13	28.86	26.83		
270.0	49.24	45.53	41.41	38.60	35.79	32.68	30.47	28.44	25.99		
292.5	53.84	48.22	45.05	41.83	38.54	35.67	33.16	30.53	28.38		
315.0	86.76	76.90	68.78	62.50	56.47	51.09	46.97	43.68	39.20		
337.5	192.40	170.89	155.00	140.54	125.78	112.45	101.46	89.99	79.05		
360.0	276.54	255.03	232.56	213.50	193.72	175.20	159.42	139.40	122.08		
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0		
0.0	109.89	99.91	82.22	72.06	65.31	56.29	46.61	41.95	36.15		
22.5	49.95	43.68	37.47	33.10	29.22	26.47	23.42	20.26	18.52		
45.0	28.14	26.53	25.10	23.42	22.11	20.73	18.88	17.33	16.01		
67.5	22.11	20.44	18.82	17.45	16.13	14.46	13.03	12.19	11.29		
90.0	18.40	17.33	16.37	14.22	13.09	12.19	11.53	10.70	9.92		
112.5	23.00	21.27	19.72	18.11	17.03	15.72	13.86	12.85	12.01		
135.0	28.26	26.59	25.10	23.12	21.63	20.14	18.52	17.09	15.48		
157.5	46.31	41.05	36.75	31.73	27.79	24.68	21.51	18.76	16.67		
180.0	60.59	54.38	46.73	40.03	35.13	30.23	25.87	22.65	19.60		
202.5	52.28	45.95	40.09	35.37	31.01	27.96	24.68	21.45	19.42		
225.0	31.79	29.76	27.61	25.69	24.08	22.53	21.09	19.84	18.22		
247.5	25.04	22.23	20.38	18.70	17.21	16.19	14.76	13.15	12.25		
270.0	23.06	20.73	19.00	17.15	16.19	14.82	13.32	12.25	11.59		
292.5	26.65	24.86	22.53	20.26	18.70	17.33	16.37	14.82	13.50		
315.0	36.33	34.12	31.25	28.98	27.31	25.16	23.36	21.93	20.02		
337.5	69.97	60.77	53.24	45.47	39.62	35.55	31.61	26.53	23.72		
360.0	109.89	99.91	82.22	72.06	65.31	56.29	46.61	41.95	36.15		
C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0		
0.0	30.06	26.77	22.95	19.54	17.21	14.40	12.43	10.99	9.32		
22.5	16.43	14.22	12.91	11.77	10.16	9.32	8.54	7.65	6.99		
45.0	14.82	13.56	12.49	11.23	9.98	9.02	8.19	7.47	6.81		
67.5	10.64	9.74	9.14	8.60	8.13	7.65	7.29	6.81	6.39		
90.0	9.38	8.84	8.37	7.89	7.47	6.99	6.51	6.09	5.74		
112.5	10.99	10.16	9.50	8.84	8.31	7.83	7.29	6.87	6.45		
135.0	13.80	12.37	11.23	10.04	9.08	8.19	7.41	6.75	6.15		
157.5	14.70	12.79	11.59	10.46	9.38	8.43	7.53	6.87	6.09		
180.0	16.91	15.06	12.85	11.29	9.92	8.60	7.41	6.51	5.74		
202.5	17.39	15.06	13.38	11.89	10.58	9.62	8.66	7.83	7.17		
225.0	16.73	15.36	14.04	12.85	11.65	10.16	9.26	8.48	7.59		
247.5	11.53	10.58	9.86	9.26	8.66	8.13	7.77	7.29	6.99		
270.0	10.99	10.10	9.50	9.02	8.60	8.01	7.59	7.17	6.69		
292.5	12.49	11.53	10.64	9.98	9.32	8.54	8.13	7.71	7.35		
315.0	18.76	17.39	15.54	14.10	12.73	11.29	10.22	9.20	8.25		
337.5	21.21	17.75	15.83	14.22	12.49	10.93	9.92	8.84	8.01		
360.0	30.06	26.77	22.95	19.54	17.21	14.40	12.43	10.99	9.32		

Intensity data(cd)										Appendix Page: 18 Total:19	
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0		
0.0	8.25	7.29	6.27	5.56	4.90	4.24	3.59	3.11	2.57		
22.5	6.33	5.74	5.14	4.66	4.12	3.76	3.35	2.87	2.57		
45.0	6.15	5.80	5.38	4.96	4.66	4.30	4.00	3.70	3.41		
67.5	6.04	5.68	5.32	4.96	4.54	4.18	3.76	3.47	3.11		
90.0	5.26	4.90	4.60	4.18	3.82	3.47	3.17	2.87	2.63		
112.5	5.98	5.62	5.20	4.78	4.42	4.06	3.59	3.29	2.93		
135.0	5.62	5.14	4.72	4.24	3.88	3.53	3.17	2.87	2.57		
157.5	5.50	4.90	4.42	3.82	3.35	2.93	2.45	2.09	1.85		
180.0	4.84	4.24	3.70	3.17	2.63	2.27	1.79	1.49	1.25		
202.5	6.45	5.80	5.26	4.72	4.12	3.64	3.29	2.75	2.33		
225.0	7.05	6.57	6.04	5.62	5.26	4.90	4.60	4.36	4.00		
247.5	6.63	6.21	5.92	5.50	5.14	4.84	4.48	4.00	3.76		
270.0	6.33	5.98	5.56	5.20	4.90	4.54	4.24	3.94	3.59		
292.5	6.87	6.51	6.21	5.80	5.38	5.08	4.72	4.36	4.00		
315.0	7.53	6.93	6.33	5.80	5.44	4.90	4.54	4.12	3.76		
337.5	7.11	6.51	5.80	5.20	4.66	4.12	3.70	3.23	2.75		
360.0	8.25	7.29	6.27	5.56	4.90	4.24	3.59	3.11	2.57		
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0		
0.0	2.15	1.85	1.61	1.25	1.14	1.14	1.08	1.08	1.14		
22.5	2.27	1.97	1.73	1.43	1.25	1.25	1.31	1.31	1.31		
45.0	3.11	2.87	2.63	2.45	2.39	2.33	2.33	2.39	2.45		
67.5	2.87	2.57	2.33	2.33	2.33	2.39	2.45	2.45	2.51		
90.0	2.21	2.21	2.21	2.21	2.27	2.39	2.45	2.51	2.51		
112.5	2.63	2.33	2.15	2.03	2.03	2.09	2.09	2.15	2.21		
135.0	2.15	1.91	1.73	1.55	1.43	1.43	1.43	1.43	1.43		
157.5	1.55	1.25	1.20	1.20	1.14	1.14	1.14	1.20	1.14		
180.0	1.20	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14		
202.5	2.03	1.79	1.55	1.31	1.25	1.25	1.25	1.25	1.31		
225.0	3.70	3.47	3.17	2.99	2.81	2.69	2.63	2.63	2.75		
247.5	3.47	3.17	2.93	2.75	2.75	2.75	2.81	2.87	2.87		
270.0	3.29	3.05	2.81	2.57	2.57	2.69	2.69	2.75	2.81		
292.5	3.64	3.35	2.99	2.75	2.57	2.45	2.45	2.51	2.57		
315.0	3.41	3.11	2.75	2.51	2.27	2.03	1.85	1.67	1.55		
337.5	2.39	2.09	1.79	1.55	1.25	1.20	1.20	1.20	1.14		
360.0	2.15	1.85	1.61	1.25	1.14	1.14	1.08	1.08	1.14		
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0		
0.0	1.14	1.08	1.08	1.08	1.14	1.08	1.08	1.08	1.14		
22.5	1.37	1.37	1.37	1.43	1.37	1.37	1.31	1.20	1.20		
45.0	2.51	2.57	2.51	2.45	2.09	1.79	1.43	1.37	1.37		
67.5	2.57	2.63	2.75	2.69	2.21	1.49	1.37	1.31	1.31		
90.0	2.57	2.69	2.69	2.03	1.37	1.25	1.25	1.25	1.25		
112.5	2.21	2.33	2.21	2.09	1.49	1.25	1.25	1.25	1.20		
135.0	1.49	1.43	1.43	1.37	1.31	1.25	1.25	1.25	1.20		
157.5	1.14	1.20	1.20	1.14	1.20	1.20	1.20	1.14	1.14		
180.0	1.14	1.14	1.14	1.14	1.14	1.08	1.14	1.14	1.14		
202.5	1.31	1.31	1.31	1.31	1.31	1.25	1.25	1.14	1.14		
225.0	2.81	2.87	2.93	2.63	2.51	2.33	1.79	1.43	1.31		
247.5	2.93	3.05	3.05	3.05	2.87	1.91	1.31	1.25	1.25		
270.0	2.87	2.99	3.05	3.23	3.35	2.75	1.49	1.25	1.25		
292.5	2.63	2.63	2.69	2.75	2.75	2.63	1.91	1.31	1.25		
315.0	1.61	1.55	1.61	1.61	1.61	1.55	1.55	1.49	1.37		
337.5	1.14	1.14	1.14	1.20	1.20	1.20	1.25	1.49	1.37		
360.0	1.14	1.08	1.08	1.08	1.14	1.08	1.08	1.08	1.14		

Nata 92.70.327.00

Intensity data(cd)									Appendix Page: 19 Total:19		
C/ $\gamma(^{\circ})$	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0		
0.0	1.14	1.14	1.14	1.08	1.08	1.14	1.08	1.08	1.08		
22.5	1.20	1.14	1.20	1.14	1.14	1.14	1.20	1.49	1.55		
45.0	1.31	1.25	1.25	1.20	1.20	2.27	2.93	2.45	2.15		
67.5	1.25	1.25	1.25	1.25	1.20	2.51	3.11	2.63	2.15		
90.0	1.25	1.25	1.25	1.20	1.20	2.27	1.97	1.67	1.49		
112.5	1.14	1.20	1.14	1.20	1.14	2.81	2.51	2.09	1.97		
135.0	1.14	1.08	1.14	1.08	1.14	1.37	1.37	1.31	1.49		
157.5	1.14	1.08	1.08	1.14	1.08	1.25	2.15	1.73	1.49		
180.0	1.08	1.14	1.14	1.14	1.08	1.08	1.14	1.14	1.08		
202.5	1.14	1.14	1.14	1.14	1.14	1.14	1.20	1.37	1.43		
225.0	1.31	1.25	1.20	1.20	1.20	1.20	1.61	4.18	3.59		
247.5	1.25	1.20	1.25	1.20	1.20	1.20	2.63	4.24	3.47		
270.0	1.25	1.25	1.20	1.25	1.25	1.25	1.20	2.39	2.27		
292.5	1.25	1.20	1.20	1.14	1.14	1.20	1.14	3.29	2.87		
315.0	1.31	1.25	1.25	1.14	1.14	1.14	1.14	1.14	1.31		
337.5	1.14	1.14	1.08	1.08	1.08	1.08	1.08	1.08	1.31		
360.0	1.14	1.14	1.14	1.08	1.08	1.14	1.08	1.08	1.08		
C/ $\gamma(^{\circ})$	90.0										
0.0	1.14										
22.5	1.49										
45.0	2.33										
67.5	2.15										
90.0	1.61										
112.5	2.15										
135.0	1.43										
157.5	1.55										
180.0	1.14										
202.5	1.43										
225.0	2.87										
247.5	2.87										
270.0	1.91										
292.5	2.45										
315.0	1.49										
337.5	1.91										
360.0	1.14										