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NT

Client:

LumCAT: 62-0028透镜

Luminaire: 92.70.410.00 Hodel

Report No: 2024508-B004

Ballast type: AC

Test No: 2024508-C004

Voltage(V): 34.910

LampCAT: LUMILEDS 1203

Current(A): 0.281

Lamp flux(lm): 1234.4

Power (W): 9.809

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1149.18, Efficiency(%): 93.10% , Luminous Efficacy(lm/W): 117.16

Central intensity(cd): 9347.858, Maximum intensity(cd): 9347.858

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=15.6

[C90/270]Total=15.6

Field angle(10%Imax): [C0/180]Total=32.0

[C90/270]Total=32.0

Maximum s/h(1/2): C0_180=0.27 C90_270=0.27

Maximum s/h(1/4): C0_180=0.28 C90_270=0.28

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 93.10%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 95.005%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2024/5/8
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.65

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	9347.857	0.000	0	0.00%	0.00%
1.0	9237.835	8.893	8.893	0.72%	0.77%
2.0	8976.459	26.143	35.036	2.12%	3.05%
3.0	8519.398	41.844	76.88	3.39%	6.69%
4.0	7857.143	54.818	131.698	4.44%	11.46%
5.0	7059.262	64.170	195.867	5.20%	17.04%
6.0	6232.485	69.852	265.719	5.66%	23.12%
7.0	5403.148	72.222	337.941	5.85%	29.41%
8.0	4542.136	71.177	409.118	5.77%	35.60%
9.0	3818.213	67.756	476.874	5.49%	41.50%
10.0	3122.600	62.812	539.686	5.09%	46.96%
11.0	2544.785	56.629	596.314	4.59%	51.89%
12.0	2033.686	50.049	646.364	4.05%	56.25%
13.0	1707.526	44.399	690.762	3.60%	60.11%
14.0	1420.253	40.035	730.798	3.24%	63.59%
15.0	1171.372	35.579	766.377	2.88%	66.69%
16.0	941.876	30.965	797.342	2.51%	69.38%
17.0	793.668	27.027	824.369	2.19%	71.74%
18.0	672.241	24.170	848.538	1.96%	73.84%
19.0	566.344	21.549	870.087	1.75%	75.71%
20.0	473.059	19.024	889.111	1.54%	77.37%
21.0	394.164	16.652	905.764	1.35%	78.82%
22.0	327.243	14.497	920.261	1.17%	80.08%
23.0	276.087	12.660	932.92	1.03%	81.18%
24.0	243.505	11.360	944.28	0.92%	82.17%
25.0	205.838	10.217	954.497	0.83%	83.06%
26.0	165.560	8.767	963.264	0.71%	83.82%
27.0	144.499	7.586	970.85	0.61%	84.48%
28.0	132.890	7.023	977.873	0.57%	85.09%
29.0	107.798	6.297	984.17	0.51%	85.64%
30.0	95.362	5.485	989.655	0.44%	86.12%
31.0	86.123	5.050	994.706	0.41%	86.56%
32.0	78.208	4.708	999.414	0.38%	86.97%
33.0	71.339	4.406	1003.819	0.36%	87.35%
34.0	64.770	4.119	1007.938	0.33%	87.71%
35.0	59.876	3.871	1011.809	0.31%	88.05%
36.0	55.626	3.678	1015.487	0.30%	88.37%
37.0	52.385	3.523	1019.01	0.29%	88.67%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	49.956	3.416	1022.426	0.28%	88.97%
39.0	48.047	3.345	1025.771	0.27%	89.26%
40.0	46.716	3.305	1029.076	0.27%	89.55%
41.0	45.604	3.287	1032.363	0.27%	89.83%
42.0	44.945	3.290	1035.653	0.27%	90.12%
43.0	44.375	3.309	1038.962	0.27%	90.41%
44.0	43.914	3.332	1042.294	0.27%	90.70%
45.0	43.365	3.354	1045.648	0.27%	90.99%
46.0	42.831	3.371	1049.019	0.27%	91.28%
47.0	42.085	3.377	1052.396	0.27%	91.58%
48.0	41.302	3.371	1055.767	0.27%	91.87%
49.0	40.468	3.358	1059.125	0.27%	92.16%
50.0	39.298	3.326	1062.451	0.27%	92.45%
51.0	38.193	3.279	1065.73	0.27%	92.74%
52.0	37.045	3.229	1068.958	0.26%	93.02%
53.0	35.757	3.167	1072.125	0.26%	93.29%
54.0	34.477	3.096	1075.221	0.25%	93.56%
55.0	33.116	3.017	1078.238	0.24%	93.83%
56.0	31.661	2.927	1081.165	0.24%	94.08%
57.0	30.205	2.829	1083.994	0.23%	94.33%
58.0	28.581	2.718	1086.712	0.22%	94.56%
59.0	26.935	2.595	1089.307	0.21%	94.79%
60.0	25.406	2.473	1091.78	0.20%	95.01%
61.0	24.053	2.360	1094.141	0.19%	95.21%
62.0	22.714	2.254	1096.394	0.18%	95.41%
63.0	21.463	2.149	1098.543	0.17%	95.59%
64.0	20.212	2.045	1100.588	0.17%	95.77%
65.0	19.290	1.955	1102.543	0.16%	95.94%
66.0	18.420	1.882	1104.424	0.15%	96.11%
67.0	17.776	1.820	1106.244	0.15%	96.26%
68.0	17.484	1.786	1108.03	0.14%	96.42%
69.0	17.484	1.784	1109.814	0.14%	96.57%
70.0	17.915	1.818	1111.632	0.15%	96.73%
71.0	18.727	1.894	1113.526	0.15%	96.90%
72.0	19.576	1.992	1115.518	0.16%	97.07%
73.0	20.139	2.077	1117.594	0.17%	97.25%
74.0	20.578	2.141	1119.735	0.17%	97.44%
75.0	20.549	2.173	1121.908	0.18%	97.63%

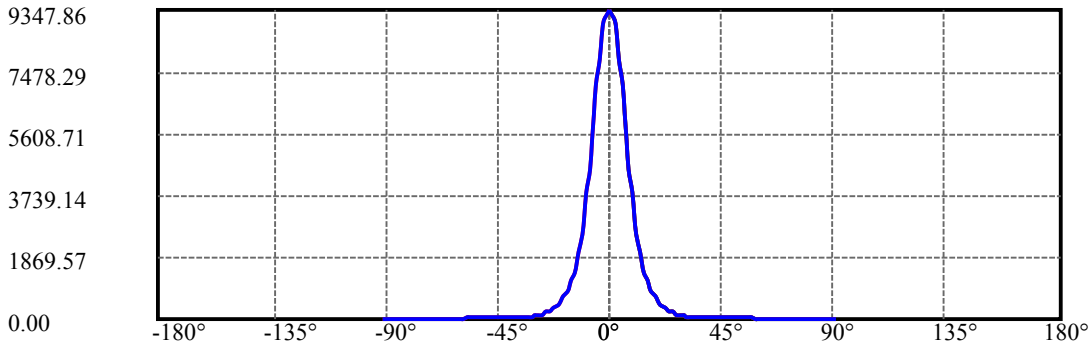
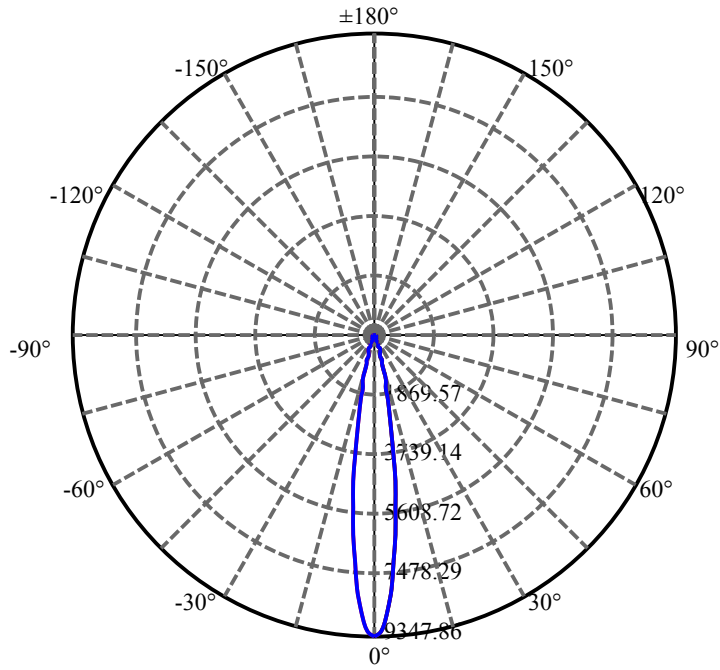
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	20.388	2.173	1124.081	0.18%	97.82%
77.0	19.956	2.151	1126.232	0.17%	98.00%
78.0	18.969	2.084	1128.316	0.17%	98.18%
79.0	17.535	1.961	1130.277	0.16%	98.35%
80.0	16.203	1.819	1132.096	0.15%	98.51%
81.0	15.969	1.740	1133.836	0.14%	98.66%
82.0	16.094	1.739	1135.575	0.14%	98.82%
83.0	16.547	1.774	1137.349	0.14%	98.97%
84.0	16.789	1.816	1139.165	0.15%	99.13%
85.0	16.913	1.839	1141.004	0.15%	99.29%
86.0	16.708	1.838	1142.842	0.15%	99.45%
87.0	16.255	1.804	1144.646	0.15%	99.61%
88.0	14.982	1.711	1146.357	0.14%	99.75%
89.0	13.029	1.535	1147.892	0.12%	99.89%
90.0	10.483	1.289	1149.182	0.10%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	989.66	80.17%	86.12%
0-40	1029.08	83.37%	89.55%
0-60	1091.78	88.45%	95.01%
0-90	1147.89	92.99%	99.89%
0-120	1147.89	92.99%	99.89%
0-180	1149.18	93.10%	100.00%
60-90	56.11	4.55%	4.88%
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%
0-21.94	919.35	74.48%	80.00%

ZONAL LUMEN SUMMARY

0-10	539.69
10-20	349.43
20-30	100.54
30-40	39.42
40-50	33.38
50-60	29.33
60-70	19.85
70-80	20.46
80-90	15.80
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



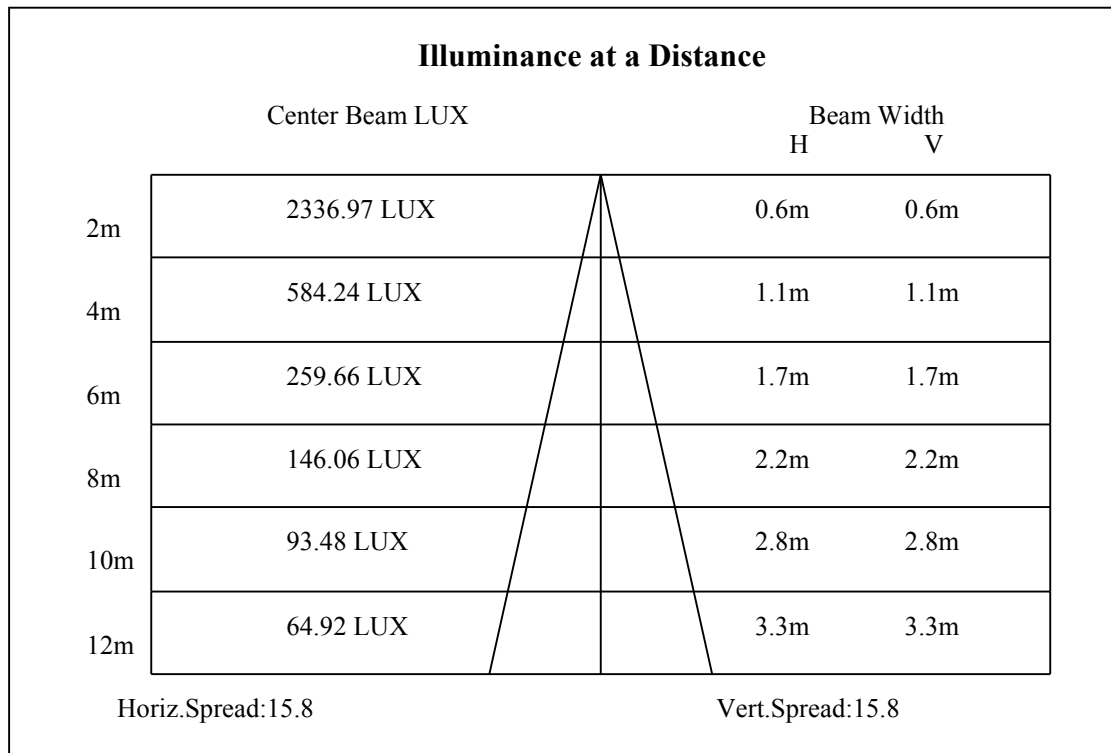
C0(Max): —————

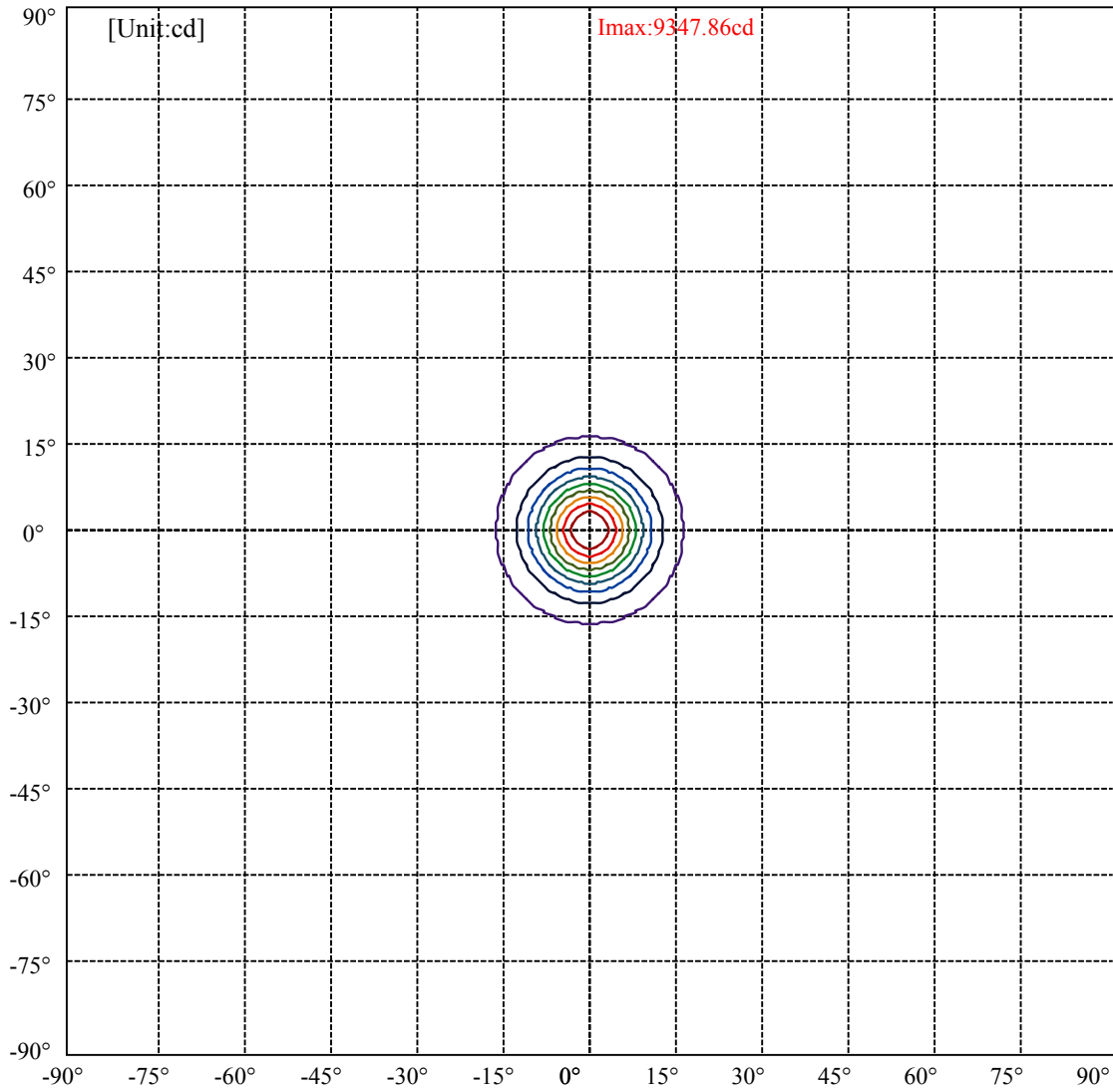
C0/C180: —————

C90/C270: —————

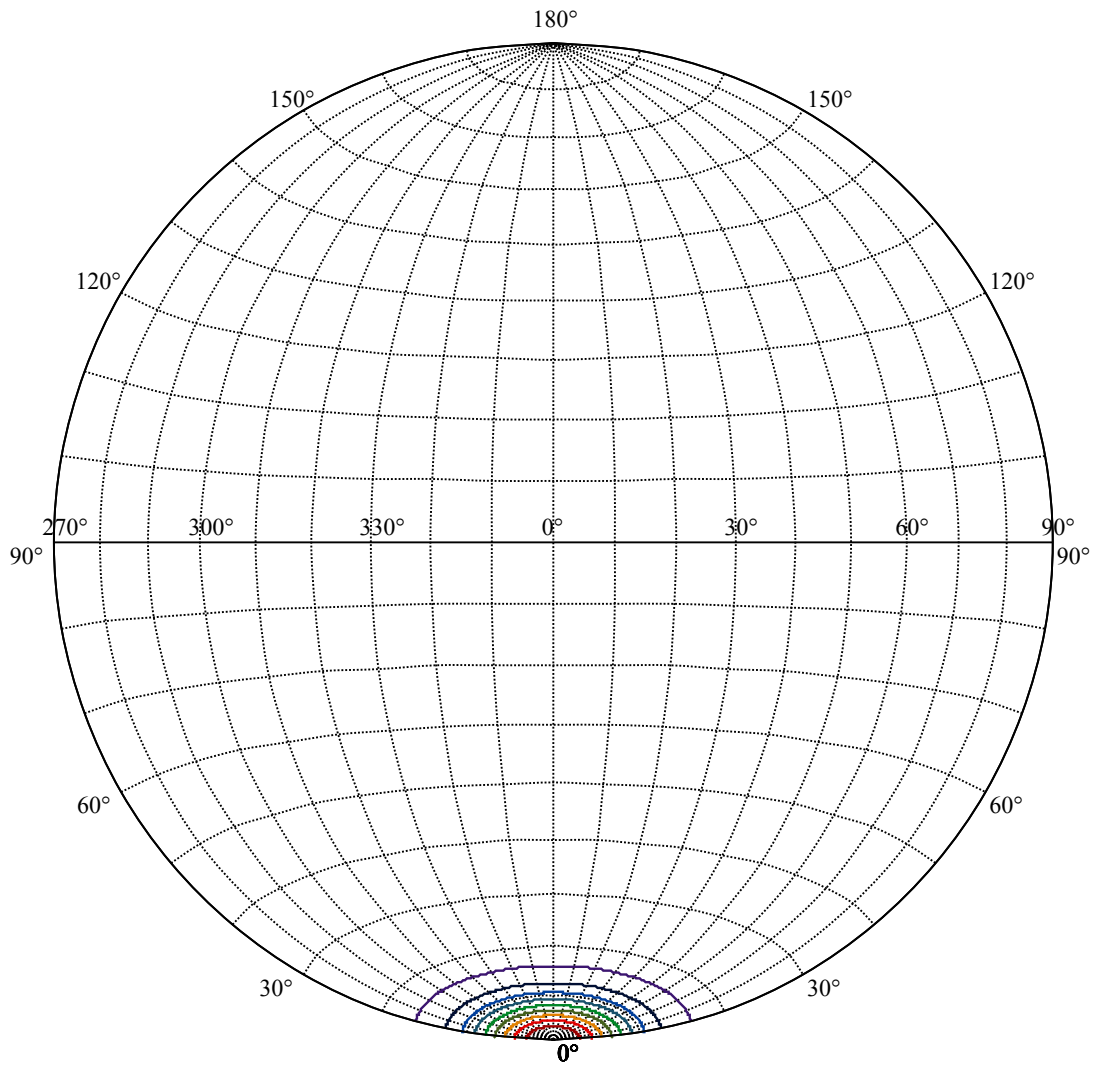
Field angle(10%Imax):C0/180Left:16.0 Right:16.0
:C90/270Left:16.0 Right:16.0

Beam Angle(50%Imax):C0/180Left:7.8 Right:7.8
:C90/270Left:7.8 Right:7.8





(10%Imax) 934.786	—
(20%Imax) 1869.57	—
(30%Imax) 2804.36	—
(40%Imax) 3739.14	—
(50%Imax) 4673.93	—
(60%Imax) 5608.71	—
(70%Imax) 6543.5	—
(80%Imax) 7478.29	—
(90%Imax) 8413.07	—



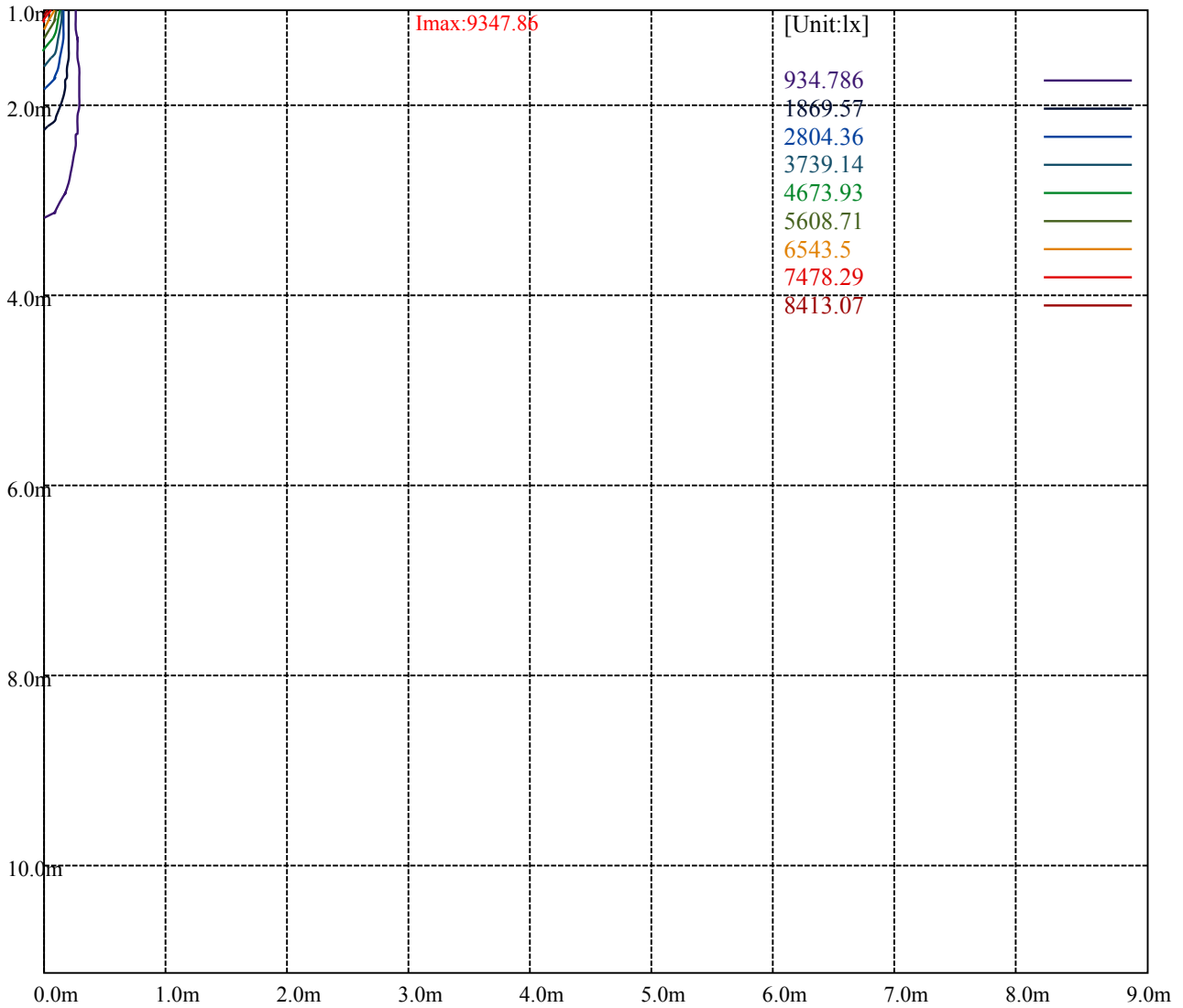
House

[Unit:cd]

Road

Imax:9347.86

(10%Imax) 934.786	—
(20%Imax) 1869.57	—
(30%Imax) 2804.36	—
(40%Imax) 3739.14	—
(50%Imax) 4673.93	—
(60%Imax) 5608.71	—
(70%Imax) 6543.5	—
(80%Imax) 7478.29	—
(90%Imax) 8413.07	—



Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

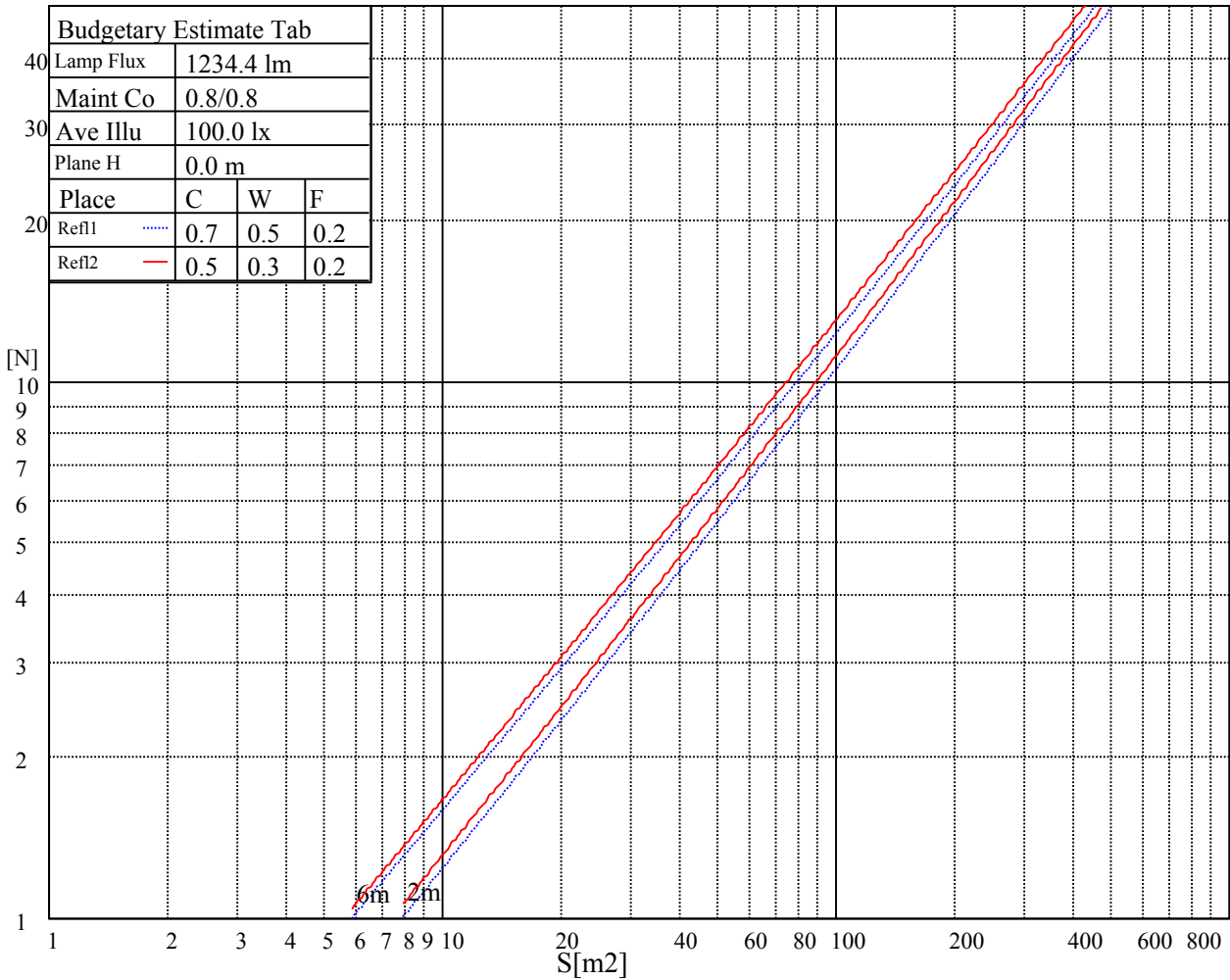
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

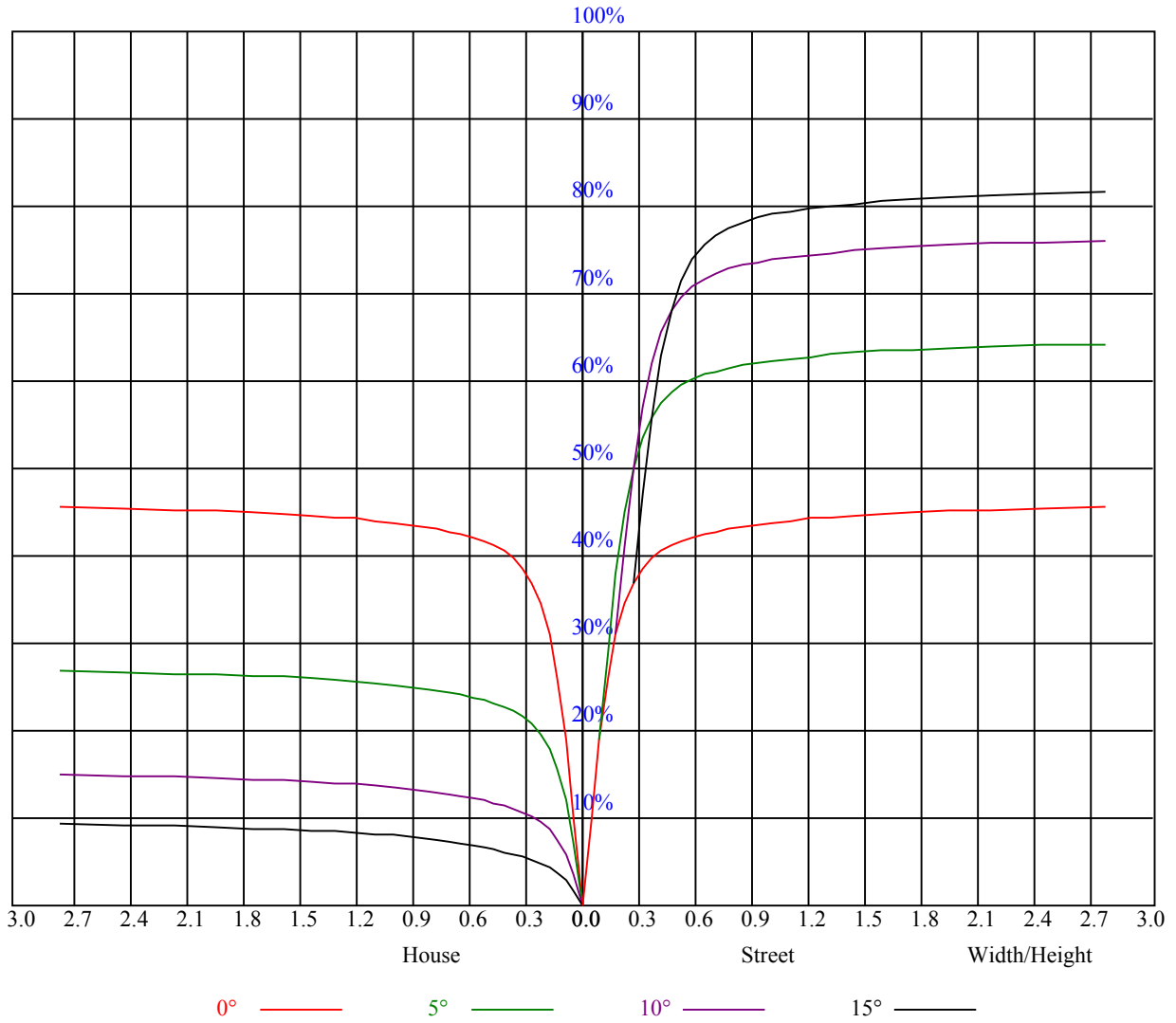
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

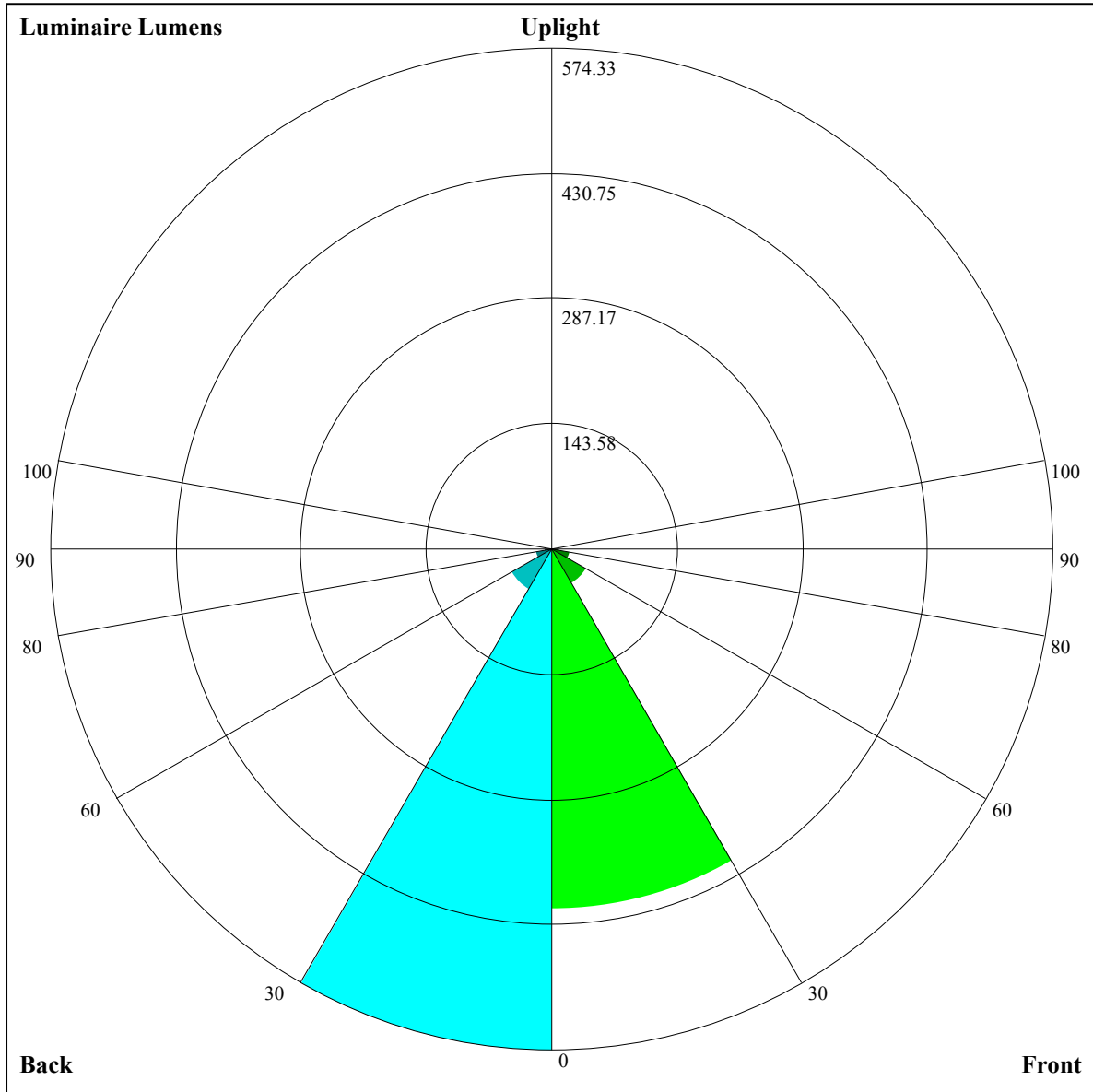
Luminance Limiting Curve





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	1.11	1.11	1.11	1.08	1.08	1.08	1.03	1.03	1.03	0.99	0.99	0.99	0.95	0.95	0.95	0.93
1	1.04	1.02	1.00	1.02	1.00	0.98	0.98	0.96	0.95	0.95	0.93	0.92	0.91	0.90	0.90	0.88
2	0.98	0.95	0.92	0.97	0.94	0.91	0.94	0.91	0.89	0.91	0.89	0.87	0.88	0.87	0.86	0.84
3	0.94	0.90	0.87	0.92	0.89	0.86	0.90	0.87	0.85	0.88	0.86	0.84	0.86	0.84	0.82	0.81
4	0.90	0.86	0.83	0.89	0.85	0.82	0.87	0.84	0.81	0.85	0.83	0.80	0.84	0.81	0.80	0.78
5	0.87	0.83	0.80	0.86	0.82	0.79	0.84	0.81	0.79	0.83	0.80	0.78	0.82	0.79	0.77	0.76
6	0.84	0.80	0.77	0.83	0.79	0.77	0.82	0.79	0.76	0.81	0.78	0.76	0.80	0.77	0.75	0.74
7	0.81	0.77	0.75	0.81	0.77	0.74	0.80	0.76	0.74	0.79	0.76	0.74	0.78	0.75	0.73	0.72
8	0.79	0.75	0.73	0.79	0.75	0.72	0.78	0.75	0.72	0.77	0.74	0.72	0.76	0.74	0.72	0.71
9	0.77	0.73	0.71	0.77	0.73	0.71	0.76	0.73	0.71	0.75	0.72	0.70	0.75	0.72	0.70	0.69
10	0.76	0.72	0.69	0.75	0.72	0.69	0.75	0.71	0.69	0.74	0.71	0.69	0.73	0.71	0.69	0.68





Luminaire Lumens:

FL=413.38,FM=46.51,FH=20.77,FVH=8.16

BL=574.33,BM=54.19,BH=19.31,BVH=8.39

UL=0,UH=0

BUG Rating:B2-U0-G0

NT 62-0028透鏡

Intensity data(cd)

C/γ(°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
0.0	9257.15	8820.57	8252.90	7504.40	6407.10	5511.71	4685.96	3919.31	3071.32
45.0	9423.94	9243.10	8898.40	8339.51	7377.40	6471.48	5553.84	4699.42	3740.23
90.0	9299.87	8920.64	8419.11	7737.32	6914.49	5806.08	4955.16	4166.28	3313.02
135.0	9410.48	9392.92	9220.86	8780.77	8251.15	7387.35	6599.06	5775.64	4785.44
180.0	9257.15	9408.72	9380.04	9189.26	8851.59	8371.12	7598.03	6865.92	6087.57
225.0	9423.94	9439.74	9303.97	8920.06	8454.22	7843.83	6935.56	6137.31	5325.61
270.0	9299.87	9435.64	9421.60	9253.05	8838.71	8344.78	7685.23	6681.57	5827.73
315.0	9410.48	9241.35	8914.79	8430.81	7762.48	6737.75	5847.04	4979.74	4186.17
360.0	9257.15	8820.57	8252.90	7504.40	6407.10	5511.71	4685.96	3919.31	3071.32
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2483.75	1975.19	1110.99	1110.99	839.68	630.81	441.49	336.50	248.31
45.0	3081.85	2520.04	2043.66	1552.08	1231.96	968.02	707.01	547.24	401.52
90.0	2751.20	2177.10	1792.60	1156.64	1156.64	954.85	787.13	647.08	532.32
135.0	4072.05	3448.20	2917.41	2371.39	2012.65	1708.92	1455.51	1243.08	1023.03
180.0	5313.90	4394.51	3746.67	3193.05	2728.96	2253.17	1964.66	1662.68	1455.51
225.0	4546.09	3710.39	3153.84	2692.09	2308.77	1911.99	1660.34	1167.47	1167.47
270.0	4986.18	4036.94	3380.32	2707.89	2257.27	1875.12	1574.90	1322.08	1048.78
315.0	3310.68	2718.43	2212.79	1485.36	1124.28	1059.14	779.93	608.87	472.39
360.0	2483.75	1975.19	1110.99	1110.99	839.68	630.81	441.49	336.50	248.31
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	201.55	169.95	148.30	129.92	119.27	111.02	104.29	98.79	95.39
45.0	317.84	299.69	231.16	168.08	148.18	133.72	121.49	115.00	110.49
90.0	416.04	339.66	277.28	227.71	180.95	154.73	132.61	120.32	111.19
135.0	876.73	721.06	612.20	517.40	416.74	347.68	302.62	302.62	181.48
180.0	1286.97	1082.72	939.34	814.11	677.16	580.60	493.40	416.74	332.47
225.0	1049.84	913.24	760.44	650.07	554.38	450.27	376.48	309.76	253.87
270.0	882.58	732.76	600.50	471.75	382.21	310.23	310.23	186.98	152.80
315.0	346.39	271.66	215.25	174.28	139.05	120.44	106.92	96.50	86.79
360.0	201.55	169.95	148.30	129.92	119.27	111.02	104.29	98.79	95.39
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	93.05	90.53	86.44	81.87	76.78	69.29	63.38	57.53	53.78
45.0	106.57	102.65	98.90	93.93	88.13	80.41	74.15	66.66	61.45
90.0	102.41	96.45	91.00	84.51	79.42	74.21	69.17	63.85	59.87
135.0	149.29	125.24	106.22	95.80	87.96	81.46	74.21	69.06	64.37
180.0	302.62	302.62	181.54	141.21	119.56	104.29	92.99	81.76	74.85
225.0	198.45	162.58	134.60	113.94	95.68	84.33	75.03	65.49	59.17
270.0	122.49	106.28	90.94	81.46	73.80	67.24	60.57	56.36	52.73
315.0	81.11	76.78	72.74	70.17	67.65	64.43	61.21	57.47	52.79
360.0	93.05	90.53	86.44	81.87	76.78	69.29	63.38	57.53	53.78
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	50.56	47.34	45.30	43.72	42.60	41.49	40.85	40.32	39.50
45.0	56.71	51.68	48.16	45.18	42.72	40.73	39.50	38.57	37.57
90.0	56.71	53.72	50.27	48.05	46.35	44.24	42.96	41.38	40.20
135.0	60.34	58.29	56.59	55.48	54.78	54.19	53.72	53.43	53.14
180.0	67.59	63.91	61.39	59.58	58.82	58.41	58.35	58.29	58.00
225.0	53.90	50.80	48.57	46.70	45.82	45.24	45.18	45.24	45.53
270.0	49.45	46.06	44.18	42.84	41.38	40.44	39.85	39.33	39.09
315.0	49.74	47.29	45.18	42.84	41.26	40.09	39.15	38.45	38.27
360.0	50.56	47.34	45.30	43.72	42.60	41.49	40.85	40.32	39.50

NT 62-0028透镜

Intensity data(cd)

C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	38.62	38.10	37.51	36.87	36.23	35.58	34.94	34.35	33.77
45.0	36.28	35.52	34.70	33.77	33.24	32.71	32.30	31.89	31.37
90.0	39.39	38.33	37.04	36.11	35.05	34.00	32.71	31.84	30.84
135.0	52.61	51.68	50.62	49.51	48.22	46.35	44.59	42.37	40.61
180.0	57.53	56.94	55.89	54.84	53.49	51.32	49.57	47.58	45.06
225.0	45.35	45.06	44.54	43.89	43.13	41.79	40.67	39.56	37.81
270.0	38.98	38.92	38.62	38.51	38.27	37.51	36.81	35.87	35.00
315.0	38.16	38.10	37.75	36.93	36.11	35.11	33.94	32.89	31.60
360.0	38.62	38.10	37.51	36.87	36.23	35.58	34.94	34.35	33.77
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	32.77	31.84	30.67	29.50	27.68	26.16	24.81	23.76	22.41
45.0	30.78	30.49	30.08	29.20	27.56	25.93	24.29	22.77	21.77
90.0	29.90	28.85	28.03	26.39	24.99	23.70	22.47	21.54	20.54
135.0	38.98	36.81	34.59	32.77	30.61	28.97	27.27	25.81	24.05
180.0	42.96	40.79	38.16	36.11	34.29	32.13	30.31	28.50	26.86
225.0	36.23	34.76	32.95	31.43	29.85	28.21	26.34	24.87	23.53
270.0	33.71	32.42	31.19	29.85	28.56	26.80	25.46	24.05	22.77
315.0	30.49	28.97	27.62	26.39	25.11	23.58	22.30	21.13	19.78
360.0	32.77	31.84	30.67	29.50	27.68	26.16	24.81	23.76	22.41
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	21.42	20.31	19.66	19.25	19.49	20.25	21.19	22.18	23.41
45.0	20.54	18.79	17.97	17.21	16.50	16.85	19.02	23.17	26.98
90.0	19.55	18.43	17.85	17.15	16.50	16.04	15.57	15.80	19.02
135.0	22.82	21.54	20.37	19.20	18.49	17.85	17.15	16.56	15.98
180.0	25.05	23.82	22.59	21.42	20.60	20.01	19.43	19.20	19.02
225.0	22.18	20.72	19.61	18.49	17.50	16.91	16.39	16.09	15.98
270.0	21.36	20.31	19.31	18.32	17.32	16.62	16.09	15.63	15.10
315.0	18.79	17.79	16.97	16.33	15.80	15.33	15.04	14.69	14.34
360.0	21.42	20.31	19.66	19.25	19.49	20.25	21.19	22.18	23.41
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	24.17	24.52	24.46	23.53	22.24	20.37	17.91	17.15	17.50
45.0	31.31	34.29	36.93	38.10	38.22	37.16	33.01	26.39	18.79
90.0	22.30	24.93	27.27	28.09	29.09	29.09	27.56	22.12	16.44
135.0	15.45	15.10	14.86	14.75	14.75	14.92	15.27	15.51	16.04
180.0	18.79	18.61	18.38	18.08	17.56	16.97	16.39	16.04	16.04
225.0	15.80	15.51	15.10	14.57	14.22	14.05	13.93	13.93	14.75
270.0	14.75	14.28	13.99	13.75	13.58	13.64	14.16	15.33	15.92
315.0	14.05	13.87	13.64	13.52	13.46	13.46	13.52	13.81	14.16
360.0	24.17	24.52	24.46	23.53	22.24	20.37	17.91	17.15	17.50
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	18.67	19.37	19.72	19.72	19.49	18.26	17.21	15.45	13.52
45.0	15.51	15.45	15.57	14.69	13.81	12.76	12.35	11.59	10.01
90.0	15.68	15.86	15.33	14.81	14.22	13.52	12.93	11.24	9.54
135.0	16.39	17.56	18.79	19.43	20.31	20.89	20.01	18.55	16.33
180.0	16.04	16.04	16.56	17.50	18.43	19.43	20.19	19.55	16.97
225.0	15.27	14.57	14.92	15.22	14.92	14.51	14.16	12.82	10.71
270.0	15.16	13.99	14.46	14.51	14.40	14.22	13.87	13.17	11.06
315.0	15.04	15.92	17.03	18.43	19.72	20.07	19.31	17.50	16.09
360.0	18.67	19.37	19.72	19.72	19.49	18.26	17.21	15.45	13.52

Intensity data(cd)

C/ γ ($^{\circ}$)	90.0
0.0	8.84
45.0	8.90
90.0	8.72
135.0	14.05
180.0	14.81
225.0	9.77
270.0	9.89
315.0	8.90
360.0	8.84