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NT

Client:

LumCAT: 62-0030透镜

Luminaire: 92.70.410.00 Hodel

Report No: 2024506-B013

Ballast type: AC

Test No: 2024506-C013

Voltage(V): 34.870

LampCAT: LUMILEDS 1203

Current(A): 0.281

Lamp flux(lm): 1231.8

Power (W): 9.798

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

### Photometric Results

Lumens(lm): 1117.05, Efficiency(%): 90.69% , Luminous Efficacy(lm/W): 114.01

Central intensity(cd): 2728.377, Maximum intensity(cd): 2765.101

Angle of maximum intensity: C=0.0  $\gamma$ =4.0

Beam Angle(50%Imax): [C0/180]Total=35.2

[C90/270]Total=35.2

Field angle(10%Imax): [C0/180]Total=53.0

[C90/270]Total=53.0

Maximum s/h(1/2): C0\_180=0.61 C90\_270=0.61

Maximum s/h(1/4): C0\_180=0.54 C90\_270=0.54

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 90.69%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 94.785%

Equipment: GMS1980  
Temperature(°C): 25.0

Date: 2024/5/6  
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	2728.377	0.000	0	0.00%	0.00%
1.0	2733.644	2.613	2.613	0.21%	0.23%
2.0	2747.178	7.867	10.48	0.64%	0.94%
3.0	2760.053	13.171	23.652	1.07%	2.12%
4.0	2765.100	18.494	42.146	1.50%	3.77%
5.0	2759.248	23.765	65.911	1.93%	5.90%
6.0	2741.106	28.906	94.817	2.35%	8.49%
7.0	2709.797	33.834	128.651	2.75%	11.52%
8.0	2663.637	38.457	167.108	3.12%	14.96%
9.0	2604.676	42.697	209.804	3.47%	18.78%
10.0	2526.987	46.440	256.244	3.77%	22.94%
11.0	2437.667	49.607	305.851	4.03%	27.38%
12.0	2333.277	52.153	358.004	4.23%	32.05%
13.0	2213.453	53.958	411.963	4.38%	36.88%
14.0	2079.509	54.950	466.912	4.46%	41.80%
15.0	1926.766	55.000	521.912	4.47%	46.72%
16.0	1750.540	53.883	575.795	4.37%	51.55%
17.0	1527.488	51.048	626.843	4.14%	56.12%
18.0	1298.746	46.598	673.441	3.78%	60.29%
19.0	1175.717	43.051	716.492	3.49%	64.14%
20.0	1007.787	39.964	756.456	3.24%	67.72%
21.0	839.747	35.476	791.932	2.88%	70.89%
22.0	688.788	30.717	822.649	2.49%	73.64%
23.0	563.908	26.285	848.934	2.13%	76.00%
24.0	450.974	22.189	871.123	1.80%	77.98%
25.0	365.363	18.562	889.684	1.51%	79.65%
26.0	294.236	15.570	905.254	1.26%	81.04%
27.0	259.533	13.548	918.803	1.10%	82.25%
28.0	211.990	11.938	930.74	0.97%	83.32%
29.0	169.218	9.973	940.714	0.81%	84.21%
30.0	139.796	8.343	949.057	0.68%	84.96%
31.0	118.793	7.196	956.253	0.58%	85.61%
32.0	102.385	6.337	962.59	0.51%	86.17%
33.0	88.032	5.610	968.2	0.46%	86.67%
34.0	76.562	4.981	973.181	0.40%	87.12%
35.0	68.106	4.493	977.674	0.36%	87.52%
36.0	60.644	4.099	981.773	0.33%	87.89%
37.0	55.765	3.797	985.57	0.31%	88.23%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	52.370	3.609	989.179	0.29%	88.55%
39.0	50.103	3.498	992.677	0.28%	88.87%
40.0	48.574	3.441	996.118	0.28%	89.17%
41.0	47.330	3.415	999.533	0.28%	89.48%
42.0	46.182	3.397	1002.931	0.28%	89.78%
43.0	44.960	3.376	1006.307	0.27%	90.09%
44.0	43.877	3.353	1009.66	0.27%	90.39%
45.0	43.036	3.340	1013	0.27%	90.69%
46.0	42.312	3.338	1016.338	0.27%	90.98%
47.0	41.668	3.340	1019.678	0.27%	91.28%
48.0	40.936	3.339	1023.017	0.27%	91.58%
49.0	40.146	3.330	1026.347	0.27%	91.88%
50.0	39.203	3.308	1029.655	0.27%	92.18%
51.0	38.040	3.268	1032.923	0.27%	92.47%
52.0	36.679	3.206	1036.129	0.26%	92.76%
53.0	35.311	3.132	1039.261	0.25%	93.04%
54.0	33.906	3.051	1042.312	0.25%	93.31%
55.0	32.502	2.964	1045.276	0.24%	93.57%
56.0	31.200	2.879	1048.155	0.23%	93.83%
57.0	29.890	2.793	1050.948	0.23%	94.08%
58.0	28.625	2.706	1053.654	0.22%	94.32%
59.0	27.359	2.617	1056.271	0.21%	94.56%
60.0	26.064	2.524	1058.795	0.20%	94.78%
61.0	24.857	2.430	1061.225	0.20%	95.00%
62.0	23.672	2.338	1063.564	0.19%	95.21%
63.0	22.421	2.242	1065.805	0.18%	95.41%
64.0	21.171	2.139	1067.944	0.17%	95.60%
65.0	20.198	2.047	1069.992	0.17%	95.79%
66.0	19.078	1.960	1071.951	0.16%	95.96%
67.0	18.186	1.874	1073.825	0.15%	96.13%
68.0	17.301	1.798	1075.623	0.15%	96.29%
69.0	16.518	1.725	1077.348	0.14%	96.45%
70.0	15.860	1.663	1079.011	0.13%	96.59%
71.0	15.245	1.608	1080.618	0.13%	96.74%
72.0	14.857	1.565	1082.184	0.13%	96.88%
73.0	14.689	1.545	1083.729	0.13%	97.02%
74.0	15.245	1.574	1085.303	0.13%	97.16%
75.0	16.496	1.677	1086.98	0.14%	97.31%

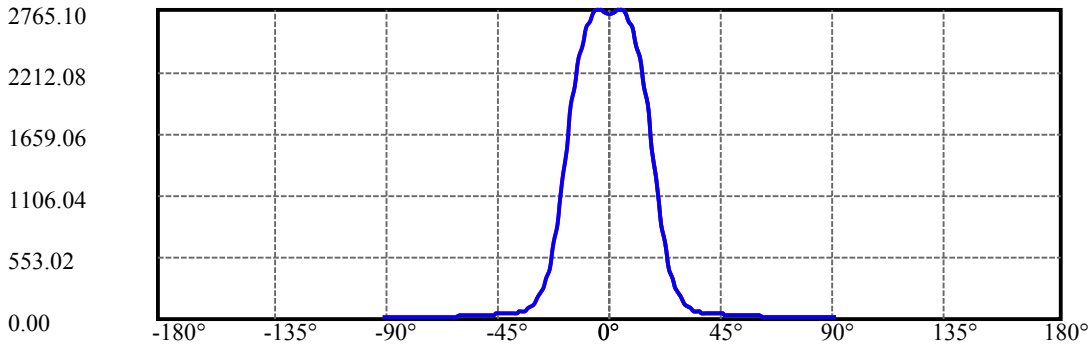
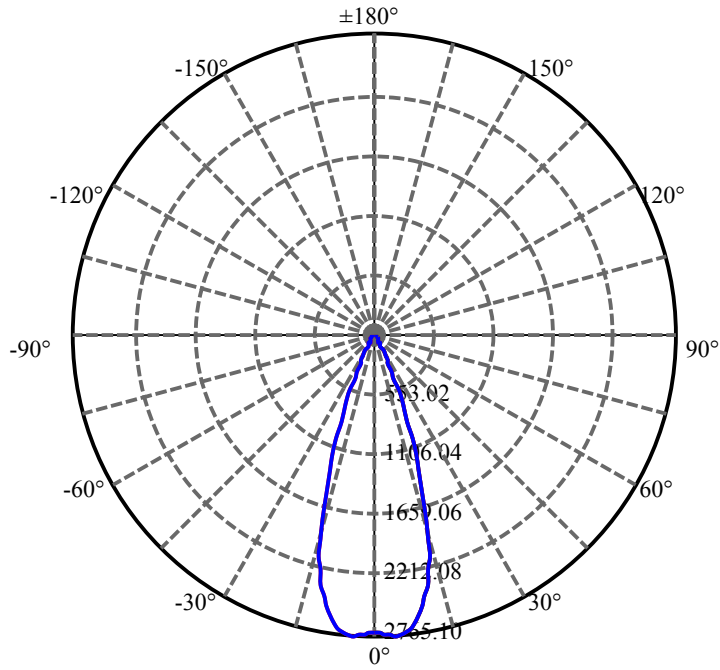
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	17.930	1.827	1088.807	0.15%	97.47%
77.0	19.488	1.995	1090.802	0.16%	97.65%
78.0	21.661	2.203	1093.005	0.18%	97.85%
79.0	22.575	2.377	1095.381	0.19%	98.06%
80.0	21.968	2.401	1097.783	0.19%	98.27%
81.0	20.073	2.274	1100.056	0.18%	98.48%
82.0	18.830	2.110	1102.166	0.17%	98.67%
83.0	18.091	2.007	1104.173	0.16%	98.85%
84.0	17.674	1.948	1106.121	0.16%	99.02%
85.0	18.003	1.947	1108.069	0.16%	99.20%
86.0	17.213	1.925	1109.994	0.16%	99.37%
87.0	16.313	1.835	1111.828	0.15%	99.53%
88.0	16.094	1.775	1113.604	0.14%	99.69%
89.0	15.728	1.744	1115.348	0.14%	99.85%
90.0	15.369	1.705	1117.053	0.14%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	949.06	77.05%	84.96%
0-40	996.12	80.87%	89.17%
0-60	1058.80	85.96%	94.78%
0-90	1115.35	90.55%	99.85%
0-120	1115.35	90.55%	99.85%
0-180	1117.05	90.69%	100.00%
60-90	56.55	4.59%	5.06%
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%
0-25.25	893.64	72.55%	80.00%

ZONAL LUMEN SUMMARY

0-10	256.24
10-20	500.21
20-30	192.60
30-40	47.06
40-50	33.54
50-60	29.14
60-70	20.22
70-80	18.77
80-90	17.56
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: —————

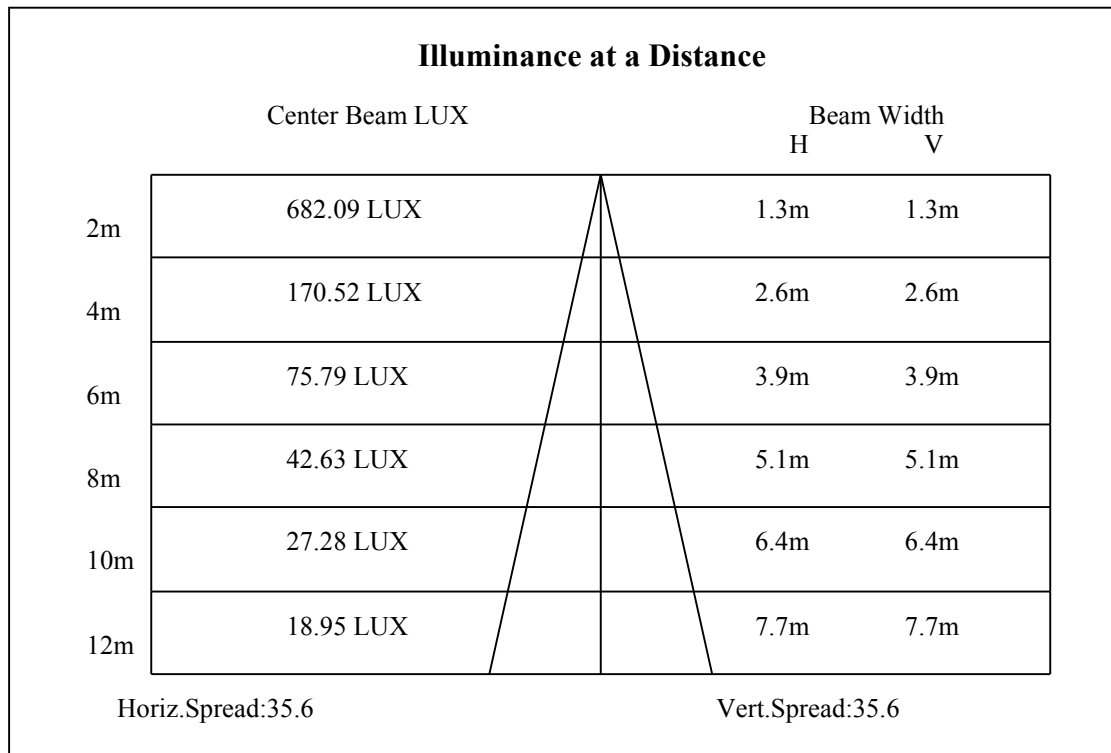
C90/C270: —————

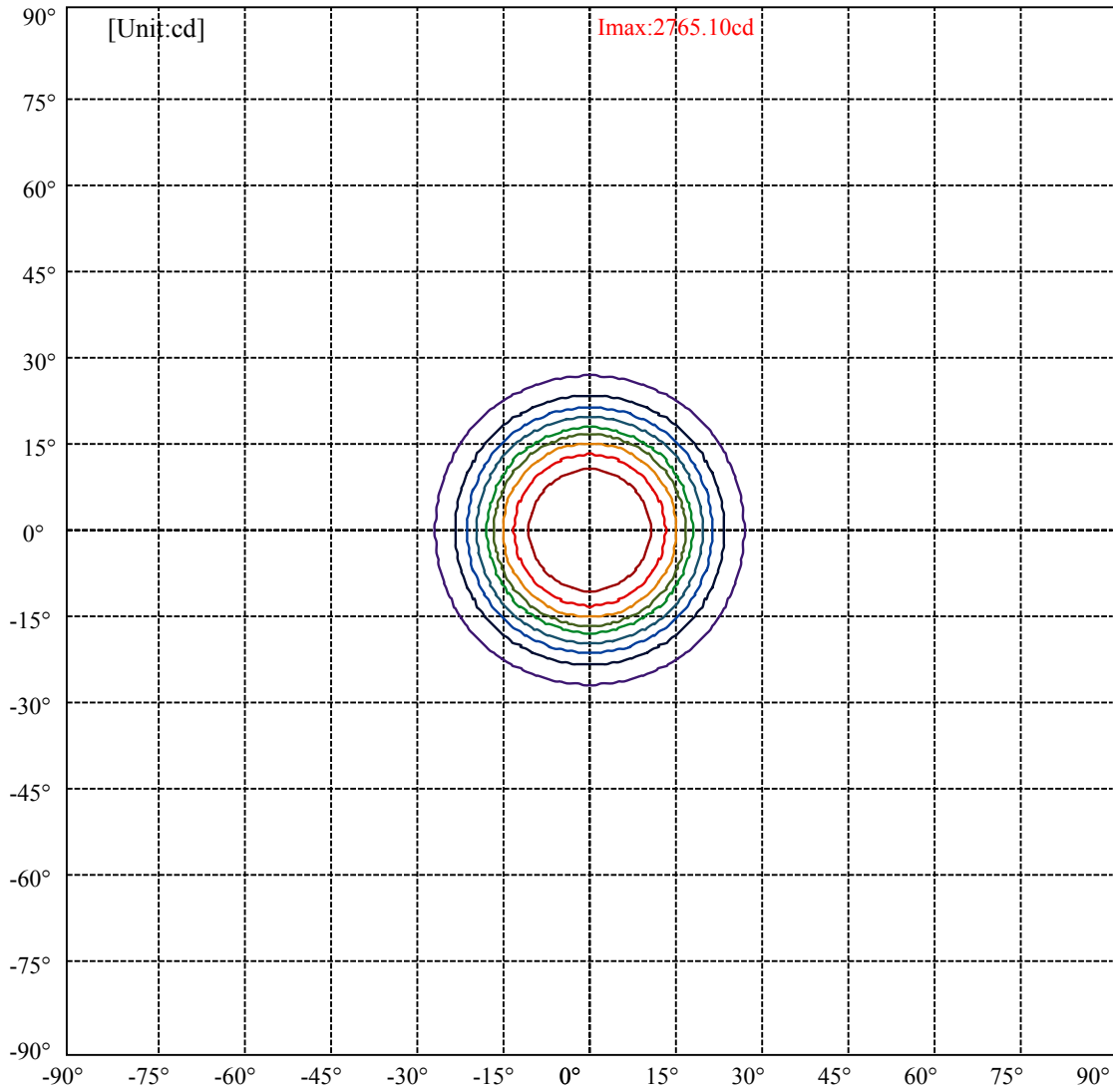
Field angle(10%Imax):C0/180Left:30.5 Right:22.5

:C90/270Left:30.5 Right:22.5

Beam Angle(50%Imax):C0/180Left:21.6 Right:13.6

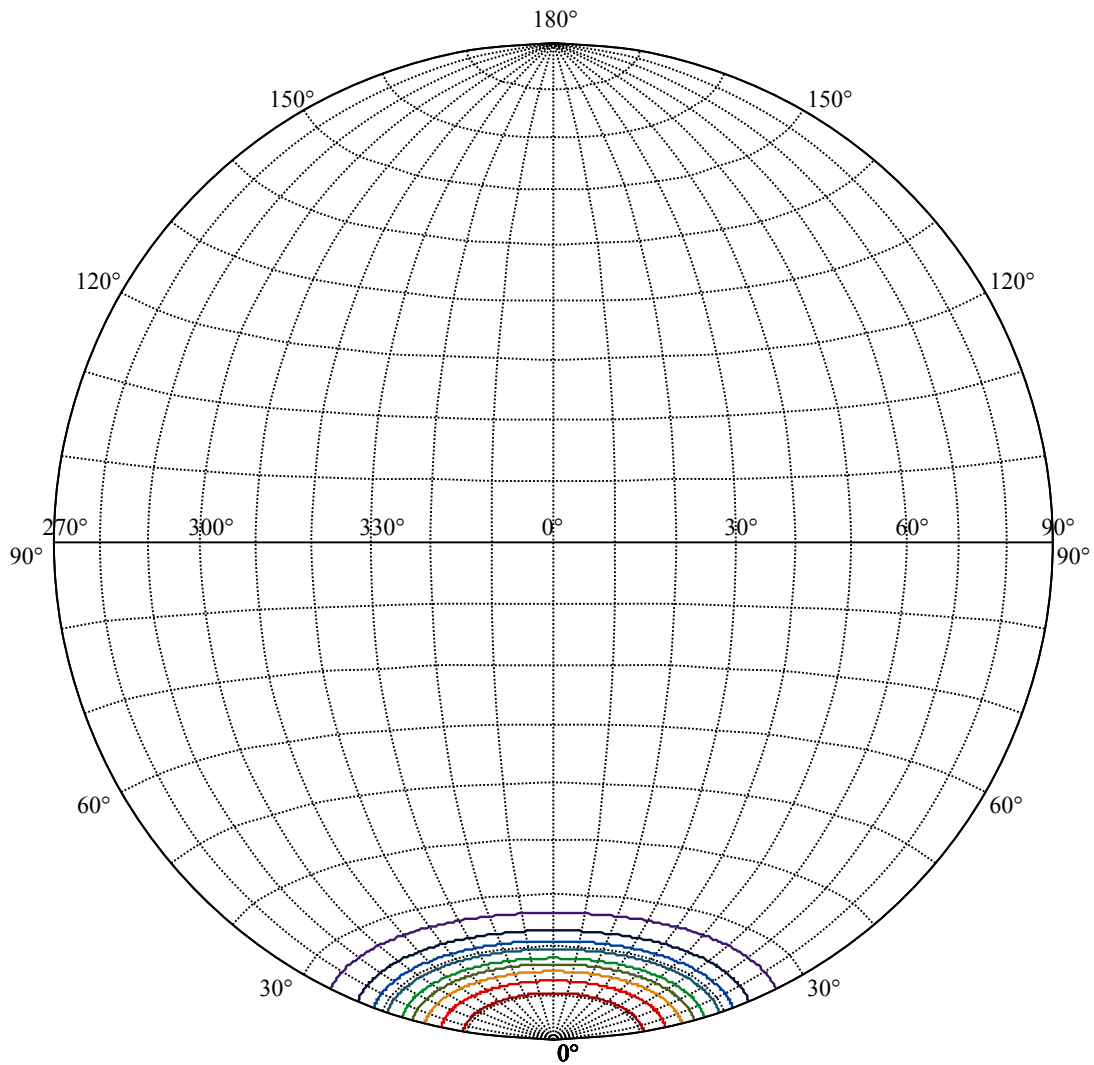
:C90/270Left:21.6 Right:13.6





(10%I <sub>max</sub> ) 276.51	—
(20%I <sub>max</sub> ) 553.02	—
(30%I <sub>max</sub> ) 829.53	—
(40%I <sub>max</sub> ) 1106.04	—
(50%I <sub>max</sub> ) 1382.55	—
(60%I <sub>max</sub> ) 1659.06	—
(70%I <sub>max</sub> ) 1935.57	—
(80%I <sub>max</sub> ) 2212.08	—
(90%I <sub>max</sub> ) 2488.59	—





House

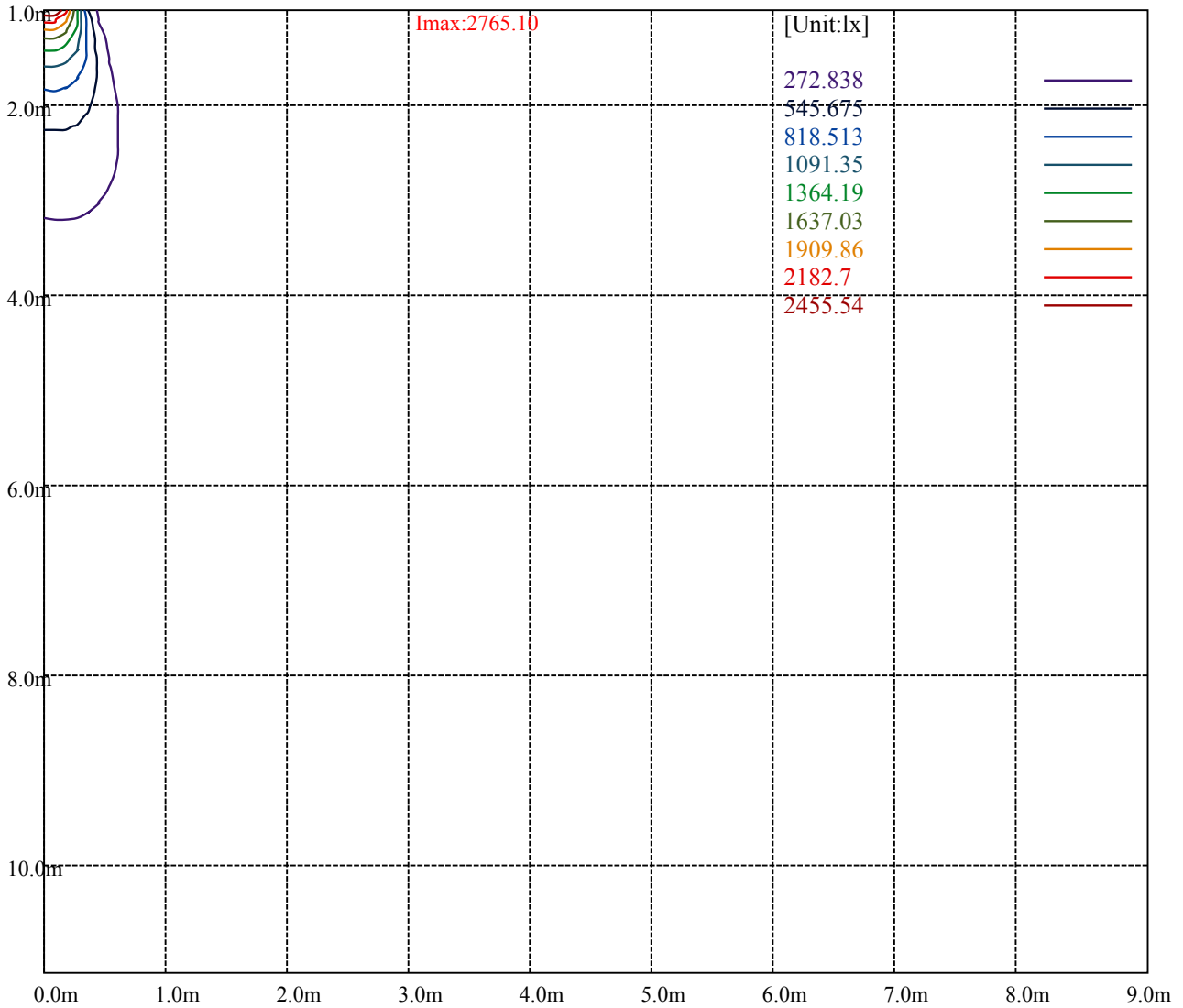
[Unit:cd]

Road

**Imax:2765.10**

(10%Imax) 276.51	—
(20%Imax) 553.02	—
(30%Imax) 829.53	—
(40%Imax) 1106.04	—
(50%Imax) 1382.55	—
(60%Imax) 1659.06	—
(70%Imax) 1935.57	—
(80%Imax) 2212.08	—
(90%Imax) 2488.59	—





Luminance Table

$\gamma$	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

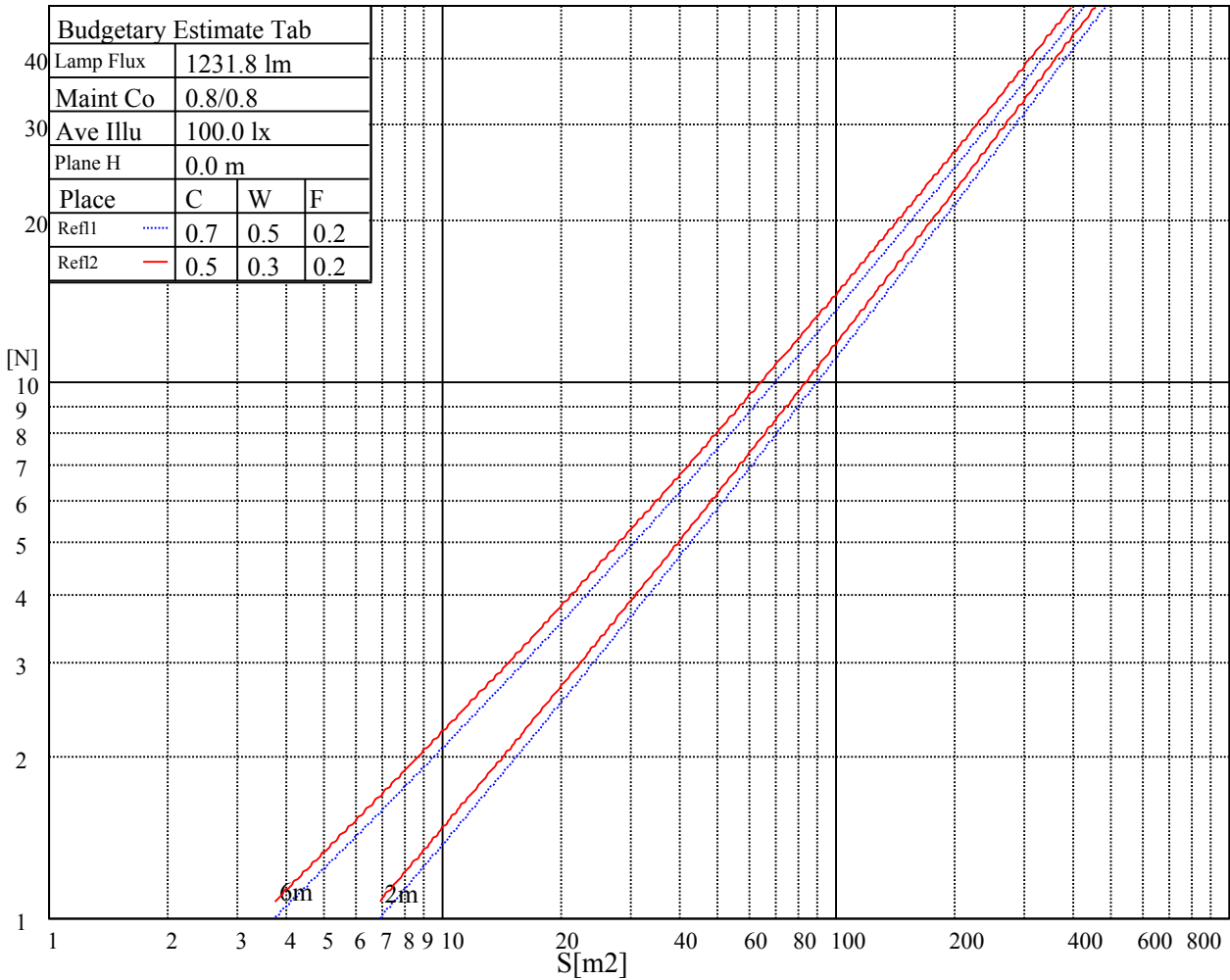
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

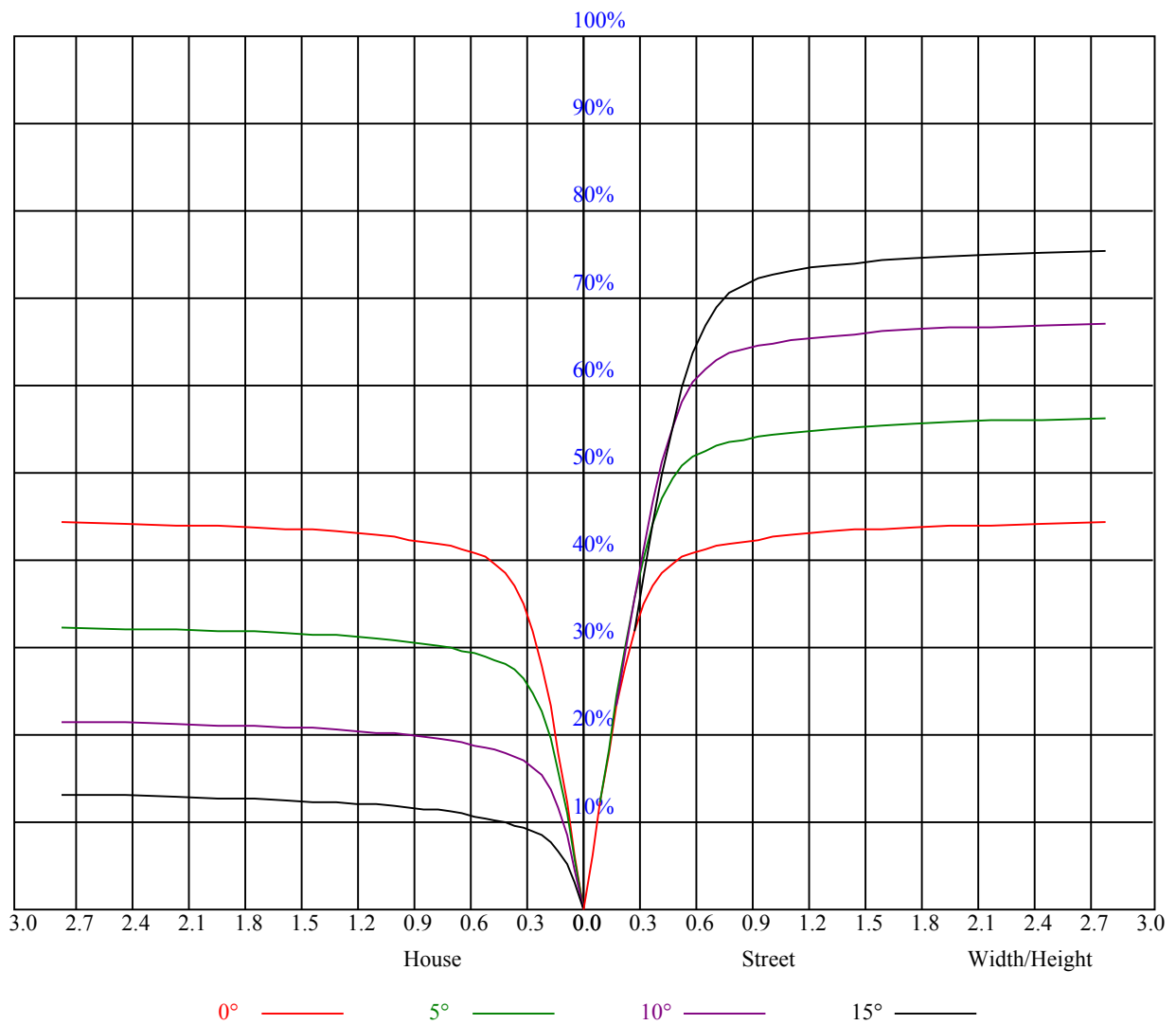
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

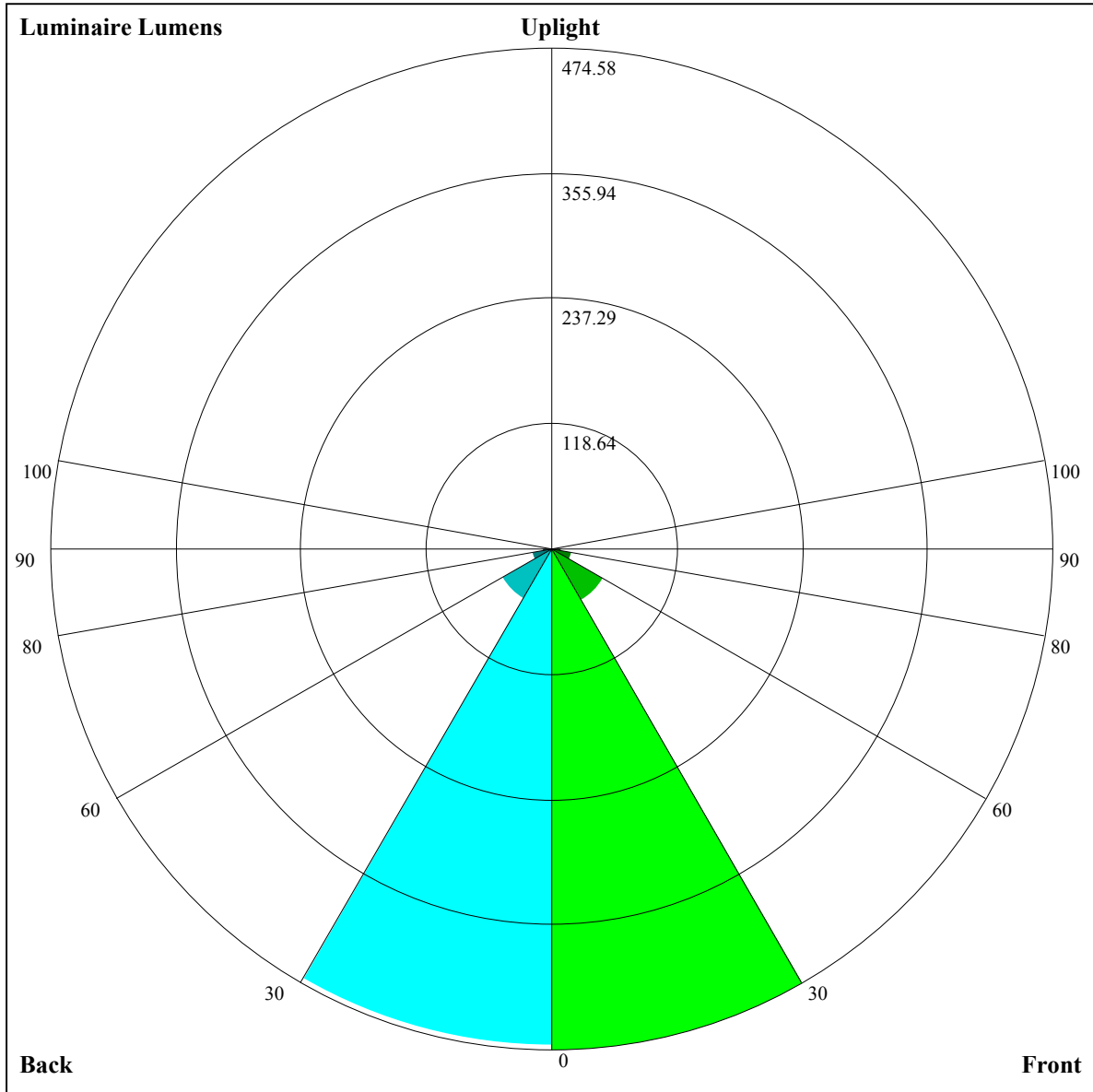
Luminance Limiting Curve





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 RHOF=20 CU															
0	1.08	1.08	1.08	1.05	1.05	1.05	1.01	1.01	1.01	0.96	0.96	0.96	0.93	0.93	0.93	0.91
1	1.00	0.98	0.96	0.98	0.96	0.94	0.94	0.93	0.91	0.91	0.90	0.89	0.88	0.87	0.86	0.84
2	0.94	0.90	0.87	0.92	0.89	0.86	0.89	0.87	0.85	0.87	0.85	0.83	0.84	0.83	0.81	0.80
3	0.89	0.84	0.81	0.87	0.84	0.80	0.85	0.82	0.79	0.83	0.80	0.78	0.81	0.79	0.77	0.75
4	0.84	0.80	0.76	0.83	0.79	0.76	0.81	0.78	0.75	0.80	0.76	0.74	0.78	0.75	0.73	0.72
5	0.80	0.76	0.72	0.79	0.75	0.72	0.78	0.74	0.71	0.76	0.73	0.71	0.75	0.72	0.70	0.69
6	0.77	0.72	0.69	0.76	0.72	0.68	0.75	0.71	0.68	0.74	0.70	0.68	0.72	0.69	0.67	0.66
7	0.74	0.69	0.66	0.73	0.69	0.65	0.72	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.64	0.63
8	0.71	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.63	0.68	0.65	0.62	0.68	0.64	0.62	0.61
9	0.68	0.64	0.61	0.68	0.63	0.60	0.67	0.63	0.60	0.66	0.63	0.60	0.65	0.62	0.60	0.59
10	0.66	0.61	0.58	0.65	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.58	0.63	0.60	0.58	0.57





Luminaire Lumens:

FL=474.58,FM=55.62,FH=19.51,FVH=9.68

BL=469.72,BM=53.76,BH=18.59,BVH=9.68

UL=0,UH=0

BUG Rating:B1-U0-G0



NT 62-0030透镜

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	2711.41	2690.34	2696.78	2700.87	2691.51	2676.29	2653.47	2625.38	2584.41
45.0	2737.16	2710.82	2694.43	2696.19	2695.02	2686.83	2673.37	2644.69	2613.09
90.0	2729.55	2733.64	2733.64	2737.74	2736.57	2723.70	2691.51	2647.03	2591.43
135.0	2735.40	2753.54	2770.51	2784.56	2787.49	2780.46	2760.56	2720.77	2674.54
180.0	2711.41	2741.25	2772.27	2793.92	2812.65	2814.41	2803.29	2780.46	2727.21
225.0	2737.16	2776.37	2807.97	2824.35	2833.72	2830.21	2809.14	2776.95	2707.89
270.0	2729.55	2730.72	2757.05	2785.14	2806.21	2812.65	2807.38	2791.00	2758.22
315.0	2735.40	2732.47	2744.76	2757.64	2757.64	2749.45	2730.13	2692.09	2652.30
360.0	2711.41	2690.34	2696.78	2700.87	2691.51	2676.29	2653.47	2625.38	2584.41
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2519.45	2449.81	2365.54	2278.92	2146.66	2027.28	1903.21	1761.00	1571.39
45.0	2564.51	2484.92	2407.67	2296.48	2195.82	2081.70	1959.39	1828.30	1645.71
90.0	2514.77	2407.09	2299.41	2173.00	1997.43	1855.81	1662.10	1365.39	1158.75
135.0	2613.67	2541.11	2436.35	2339.20	2225.67	2070.58	1923.11	1753.98	1525.15
180.0	2679.22	2621.87	2558.08	2453.32	2352.66	2233.28	2058.29	1897.94	1662.68
225.0	2646.45	2545.79	2452.74	2347.98	2231.52	2061.81	1898.53	1718.86	1367.73
270.0	2708.48	2647.03	2565.68	2453.32	2343.88	2211.04	2072.93	1884.48	1699.55
315.0	2590.85	2518.28	2415.87	2323.99	2213.96	2094.58	1936.57	1794.36	1588.94
360.0	2519.45	2449.81	2365.54	2278.92	2146.66	2027.28	1903.21	1761.00	1571.39
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1155.76	1155.76	1030.87	876.90	705.96	585.63	479.12	390.70	300.40
45.0	1491.21	1334.96	1175.78	978.55	833.42	705.84	565.39	469.41	366.99
90.0	1117.84	955.85	807.08	673.48	556.02	430.96	350.26	286.88	226.95
135.0	1341.39	1161.73	948.71	797.72	666.04	551.93	431.95	352.36	302.62
180.0	1474.83	1269.41	1069.26	852.15	706.43	584.11	479.36	371.09	302.03
225.0	1128.31	1079.15	897.38	737.62	571.76	463.85	355.11	289.45	239.65
270.0	1522.81	1291.06	1101.45	925.88	733.93	602.84	466.48	375.77	303.79
315.0	1157.81	1157.81	1031.75	875.67	736.74	586.10	480.12	387.24	311.46
360.0	1155.76	1155.76	1030.87	876.90	705.96	585.63	479.12	390.70	300.40
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	244.68	204.13	174.28	144.20	123.42	106.22	89.89	79.77	71.22
45.0	297.94	297.94	234.03	165.09	142.09	122.96	102.47	90.07	80.06
90.0	191.90	163.63	136.88	120.21	102.41	89.66	78.71	69.47	60.98
135.0	302.62	191.19	165.03	142.44	119.33	103.06	89.07	75.67	67.48
180.0	302.03	239.06	170.59	145.55	123.13	101.42	88.49	75.73	67.30
225.0	195.76	168.90	145.55	119.85	103.41	90.36	79.47	68.65	61.51
270.0	303.79	236.37	162.81	140.04	120.85	105.75	89.31	78.30	69.06
315.0	237.54	194.70	164.57	140.98	115.70	99.66	86.85	74.85	67.24
360.0	244.68	204.13	174.28	144.20	123.42	106.22	89.89	79.77	71.22
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	62.62	57.53	54.37	51.68	50.27	48.92	47.75	46.23	45.00
45.0	71.51	62.97	57.82	53.90	51.38	49.33	48.11	46.41	45.00
90.0	55.83	52.14	49.45	47.29	46.00	44.83	43.72	42.43	41.49
135.0	59.46	55.01	51.97	49.98	48.40	47.17	45.94	44.83	43.54
180.0	59.99	55.19	51.73	49.92	48.46	47.40	45.82	44.71	43.66
225.0	55.89	52.55	50.04	48.81	47.87	46.94	45.88	44.89	44.30
270.0	60.80	56.06	51.79	49.69	48.34	47.11	46.17	45.24	44.13
315.0	59.05	54.66	51.79	49.57	47.87	46.94	46.06	44.95	43.89
360.0	62.62	57.53	54.37	51.68	50.27	48.92	47.75	46.23	45.00

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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	44.13	43.72	43.25	42.90	42.49	41.96	41.20	40.20	39.21
45.0	43.77	42.25	41.55	40.91	40.09	39.33	38.57	37.57	36.40
90.0	40.44	39.62	38.86	37.75	36.81	35.35	34.00	32.13	30.67
135.0	42.66	41.96	41.14	40.32	39.33	38.04	36.87	35.46	33.77
180.0	42.72	42.19	41.84	41.20	40.61	39.97	38.80	37.86	36.58
225.0	43.77	43.19	42.31	41.61	40.67	39.74	38.22	36.93	35.52
270.0	43.66	42.96	42.49	41.84	40.91	40.15	38.68	36.40	35.00
315.0	43.13	42.60	41.90	40.97	40.26	39.09	37.98	36.87	35.35
360.0	44.13	43.72	43.25	42.90	42.49	41.96	41.20	40.20	39.21
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	37.98	36.17	34.88	33.59	32.36	30.84	29.50	28.09	26.80
45.0	34.88	33.47	32.07	30.49	29.38	28.09	26.92	25.87	24.70
90.0	29.44	28.21	26.80	25.63	24.64	23.70	22.77	21.83	20.66
135.0	32.71	31.66	30.55	29.55	28.32	27.15	25.93	24.35	23.17
180.0	34.82	33.42	32.30	31.19	29.67	28.44	27.27	25.93	24.46
225.0	33.71	32.36	31.19	29.61	28.32	27.04	25.46	24.17	23.12
270.0	33.83	32.25	30.90	29.38	27.86	26.28	24.87	24.17	23.06
315.0	33.88	32.48	30.90	29.67	28.44	27.33	25.81	24.46	23.41
360.0	37.98	36.17	34.88	33.59	32.36	30.84	29.50	28.09	26.80
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	25.34	24.05	22.94	21.71	20.72	19.61	18.90	18.38	17.79
45.0	23.29	22.24	21.30	20.31	19.31	18.38	17.56	16.74	15.98
90.0	19.66	18.61	17.79	16.85	16.15	15.45	14.63	14.10	13.64
135.0	22.00	20.66	19.55	18.38	17.56	16.74	15.92	15.16	14.63
180.0	23.17	21.77	20.72	19.78	18.67	17.85	17.15	16.50	15.80
225.0	21.83	20.48	19.55	18.49	17.67	16.74	15.92	15.39	14.81
270.0	21.83	20.66	19.78	18.26	17.56	16.74	16.09	15.33	14.69
315.0	22.24	20.89	19.96	18.84	17.85	16.91	15.98	15.27	14.63
360.0	25.34	24.05	22.94	21.71	20.72	19.61	18.90	18.38	17.79
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	17.32	17.38	18.79	20.95	24.23	25.98	29.50	30.78	29.85
45.0	15.51	15.16	15.63	16.91	18.67	20.48	22.06	24.29	25.40
90.0	13.34	13.05	12.93	12.93	13.23	13.75	14.75	15.74	16.50
135.0	14.28	14.05	14.92	15.68	16.56	17.91	20.25	21.89	20.37
180.0	15.57	15.45	16.09	18.14	18.96	20.07	24.35	25.57	23.00
225.0	14.46	14.69	15.80	17.62	18.43	20.66	22.59	22.30	19.90
270.0	14.22	13.93	13.81	14.46	15.86	16.91	17.91	18.08	18.90
315.0	14.16	13.81	13.99	15.27	17.50	20.13	21.89	21.95	21.83
360.0	17.32	17.38	18.79	20.95	24.23	25.98	29.50	30.78	29.85
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	24.40	20.19	19.14	18.96	19.37	15.33	15.39	15.10	14.86
45.0	24.87	21.83	18.67	17.44	16.97	15.74	14.40	14.22	13.40
90.0	16.44	16.68	17.56	19.14	21.36	19.49	18.55	18.43	17.62
135.0	18.61	18.14	17.38	16.62	17.15	18.61	17.15	17.15	16.97
180.0	20.83	19.90	19.43	18.08	17.73	18.96	18.08	16.85	16.74
225.0	19.43	18.90	17.67	16.91	17.73	17.21	17.09	16.91	15.86
270.0	17.44	17.26	17.21	16.62	16.80	17.15	14.86	14.69	14.98
315.0	18.55	17.73	17.67	17.62	16.91	15.22	14.98	15.39	15.39
360.0	24.40	20.19	19.14	18.96	19.37	15.33	15.39	15.10	14.86

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Appendix Page: 19 Total:19

Intensity data(cd)

C/γ(°)	90.0
0.0	14.63
45.0	13.64
90.0	17.15
135.0	16.27
180.0	15.74
225.0	15.74
270.0	14.63
315.0	15.16
360.0	14.63