



ZhongShan HaoXiang Lighting CO.,LTD
Http://www.diluce.cc
Email:haoxiang88@vip.sina.com
Tel:+86-760-22253325 Fax:+86-760-22287069
Address:12 Wanfu Road Xinglong industrial area,Jiu Zhou ji,Xiaolan town,Zhongshan City,China.

HX-DA616R.01

LumCAT: HX-DA616R.01	Luminaire:
Report No:	Voltage(V): 220.700
Test No:	Current(A): 0.107
LampCAT: ZX-Y6069/119MM-2835-6B12C-7PWR	Power(W): 22.700
Lamp flux(lm): 3061.0	PF: 0.956
Number of Lamps: 1	Ballast type: OT FIT 30/220-240/700 CSSMINI(调600mA)
Length(mm): -1500	Width(mm): -1500
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1559.12
Efficiency(%): 50.94%
Lumens(lm)/Power(W): 68.68
Central intensity(cd): 621.022
Maximum intensity(cd): 627.153
Angle of maximum intensity: C=30.0 γ =0.0
Beam Angle(50%Imax): [H]Left=53.8 Right=50.5
[V]Left=55.0 Right=49.3
Field angle(10%Imax): [H]Left=75.7 Right=72.4
[V]Left=77.0 Right=71.2
Maximum s/h: C0_180=1.25 C90_270=1.26
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 50.94%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 85.667%

Equipment: GMS-1980
Temperature(°C): 25.0

Date: 2022-11-12
Humidity(%): 65.3%

Operator: Lxl
Distance(m): 7.27

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	622.977	.000	.000	.000%	.000%
1.0	622.863	.596	.596	.019%	.019%
2.0	622.524	1.787	2.384	.058%	.078%
3.0	621.995	2.976	5.360	.097%	.175%
4.0	621.242	4.162	9.522	.136%	.311%
5.0	620.282	5.341	14.863	.174%	.486%
6.0	619.066	6.513	21.376	.213%	.698%
7.0	617.767	7.677	29.053	.251%	.949%
8.0	616.084	8.830	37.883	.288%	1.238%
9.0	614.318	9.972	47.855	.326%	1.563%
10.0	612.345	11.101	58.956	.363%	1.926%
11.0	610.134	12.215	71.171	.399%	2.325%
12.0	607.698	13.313	84.483	.435%	2.760%
13.0	605.042	14.392	98.876	.470%	3.230%
14.0	602.387	15.455	114.331	.505%	3.735%
15.0	599.396	16.499	130.829	.539%	4.274%
16.0	596.198	17.519	148.348	.572%	4.846%
17.0	592.635	18.513	166.861	.605%	5.451%
18.0	589.125	19.485	186.346	.637%	6.088%
19.0	584.989	20.427	206.773	.667%	6.755%
20.0	580.682	21.335	228.108	.697%	7.452%
21.0	575.876	22.208	250.316	.726%	8.178%
22.0	571.120	23.049	273.366	.753%	8.931%
23.0	566.041	23.861	297.227	.780%	9.710%
24.0	560.672	24.634	321.861	.805%	10.515%
25.0	554.885	25.365	347.226	.829%	11.344%
26.0	548.904	26.055	373.281	.851%	12.195%
27.0	542.738	26.707	399.988	.873%	13.067%
28.0	536.003	27.311	427.300	.892%	13.959%
29.0	529.185	27.868	455.168	.910%	14.870%
30.0	521.944	28.380	483.548	.927%	15.797%
31.0	514.752	28.850	512.398	.942%	16.740%
32.0	507.058	29.274	541.672	.956%	17.696%
33.0	499.187	29.644	571.316	.968%	18.664%
34.0	491.184	29.972	601.288	.979%	19.644%
35.0	483.001	30.255	631.542	.988%	20.632%
36.0	474.509	30.487	662.029	.996%	21.628%
37.0	465.709	30.665	692.694	1.002%	22.630%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	457.231	30.806	723.500	1.006%	23.636%
39.0	447.858	30.893	754.394	1.009%	24.645%
40.0	438.684	30.919	785.313	1.010%	25.655%
41.0	428.787	30.890	816.203	1.009%	26.665%
42.0	419.568	30.822	847.025	1.007%	27.672%
43.0	409.522	30.712	877.737	1.003%	28.675%
44.0	399.638	30.540	908.277	.998%	29.673%
45.0	389.389	30.323	938.601	.991%	30.663%
46.0	379.215	30.058	968.659	.982%	31.645%
47.0	368.816	29.751	998.410	.972%	32.617%
48.0	358.189	29.389	1027.800	.960%	33.577%
49.0	347.451	28.977	1056.777	.947%	34.524%
50.0	336.532	28.518	1085.295	.932%	35.456%
51.0	325.693	28.018	1113.312	.915%	36.371%
52.0	314.435	27.468	1140.781	.897%	37.268%
53.0	303.204	26.867	1167.648	.878%	38.146%
54.0	291.612	26.217	1193.865	.856%	39.002%
55.0	280.812	25.552	1219.417	.835%	39.837%
56.0	268.836	24.837	1244.254	.811%	40.649%
57.0	257.451	24.063	1268.317	.786%	41.435%
58.0	246.021	23.282	1291.599	.761%	42.195%
59.0	234.425	22.461	1314.060	.734%	42.929%
60.0	222.757	21.599	1335.659	.706%	43.635%
61.0	210.870	20.694	1356.353	.676%	44.311%
62.0	199.344	19.767	1376.119	.646%	44.957%
63.0	187.694	18.824	1394.943	.615%	45.571%
64.0	176.150	17.854	1412.797	.583%	46.155%
65.0	164.311	16.849	1429.646	.550%	46.705%
66.0	152.899	15.827	1445.473	.517%	47.222%
67.0	141.518	14.804	1460.277	.484%	47.706%
68.0	130.023	13.755	1474.032	.449%	48.155%
69.0	118.294	12.668	1486.700	.414%	48.569%
70.0	107.190	11.580	1498.280	.378%	48.947%
71.0	96.122	10.508	1508.789	.343%	49.291%
72.0	85.027	9.419	1518.208	.308%	49.598%
73.0	74.205	8.327	1526.534	.272%	49.870%
74.0	63.177	7.223	1533.757	.236%	50.106%
75.0	52.937	6.135	1539.892	.200%	50.307%

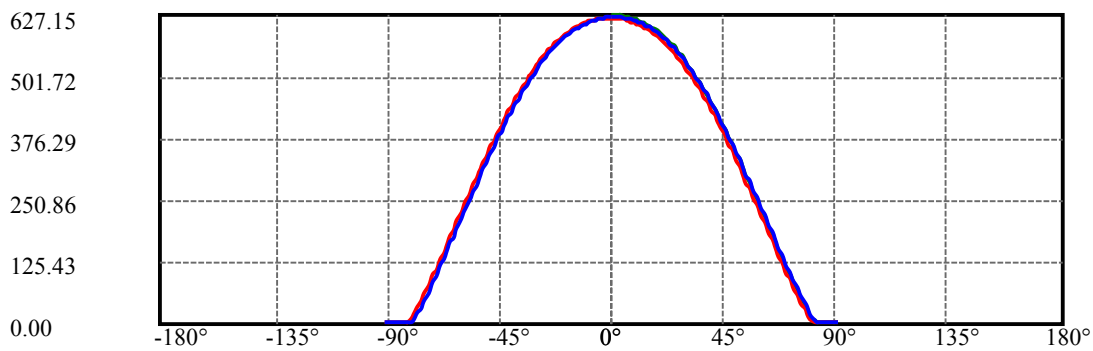
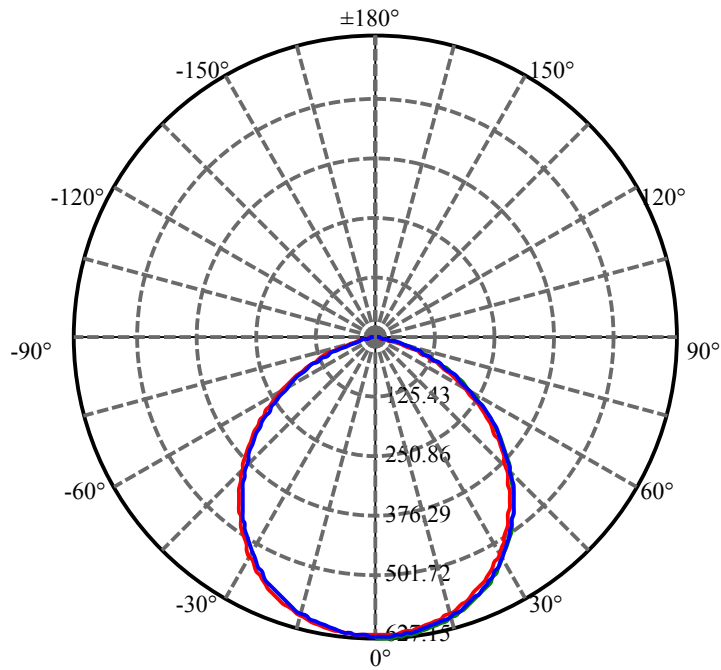
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	42.705	5.077	1544.969	.166%	50.473%
77.0	33.051	4.039	1549.008	.132%	50.605%
78.0	23.912	3.049	1552.057	.100%	50.704%
79.0	15.931	2.141	1554.198	.070%	50.774%
80.0	9.174	1.353	1555.551	.044%	50.818%
81.0	5.065	.770	1556.321	.025%	50.844%
82.0	3.374	.458	1556.779	.015%	50.859%
83.0	3.004	.347	1557.126	.011%	50.870%
84.0	2.819	.317	1557.443	.010%	50.880%
85.0	2.722	.302	1557.745	.010%	50.890%
86.0	2.621	.292	1558.037	.010%	50.900%
87.0	2.528	.282	1558.319	.009%	50.909%
88.0	2.471	.274	1558.593	.009%	50.918%
89.0	2.409	.267	1558.860	.009%	50.927%
90.0	2.365	.262	1559.122	.009%	50.935%

ZONAL LUMEN SUMMARY

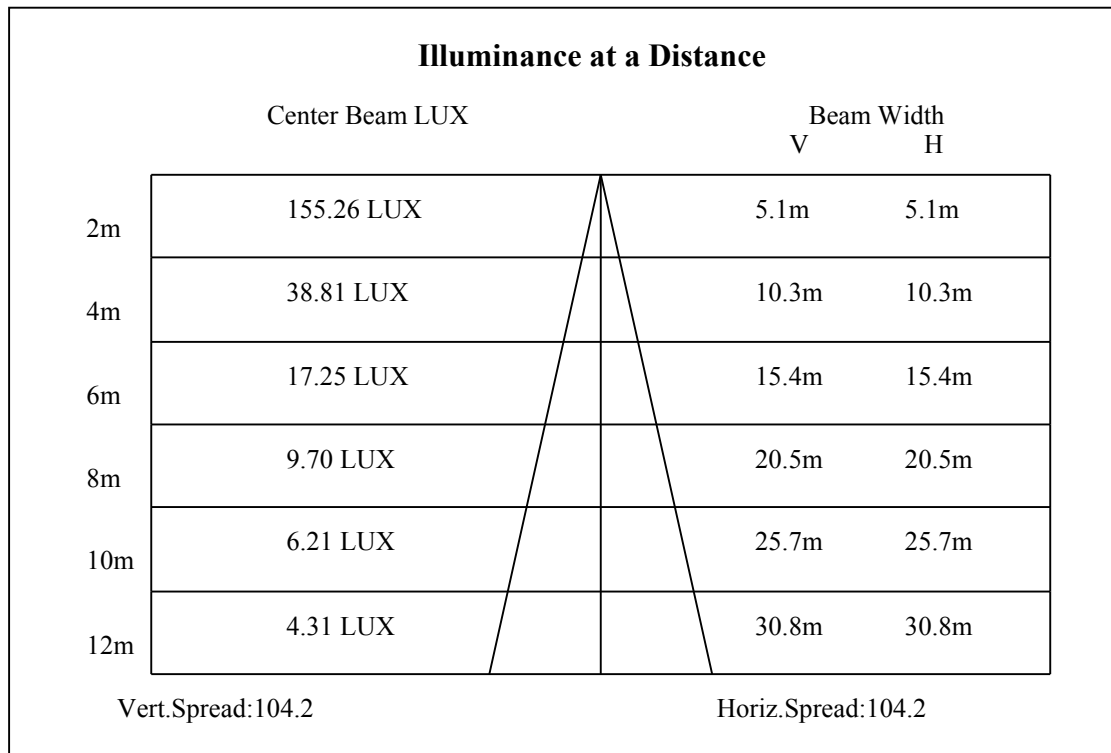
Zone	Lumens	%Lamp	%Fixt
0-30	483.55	15.80%	31.01%
0-40	785.31	25.66%	50.37%
0-60	1335.66	43.63%	85.67%
0-90	1558.86	50.93%	99.98%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-180	1559.12	50.94%	100.00%

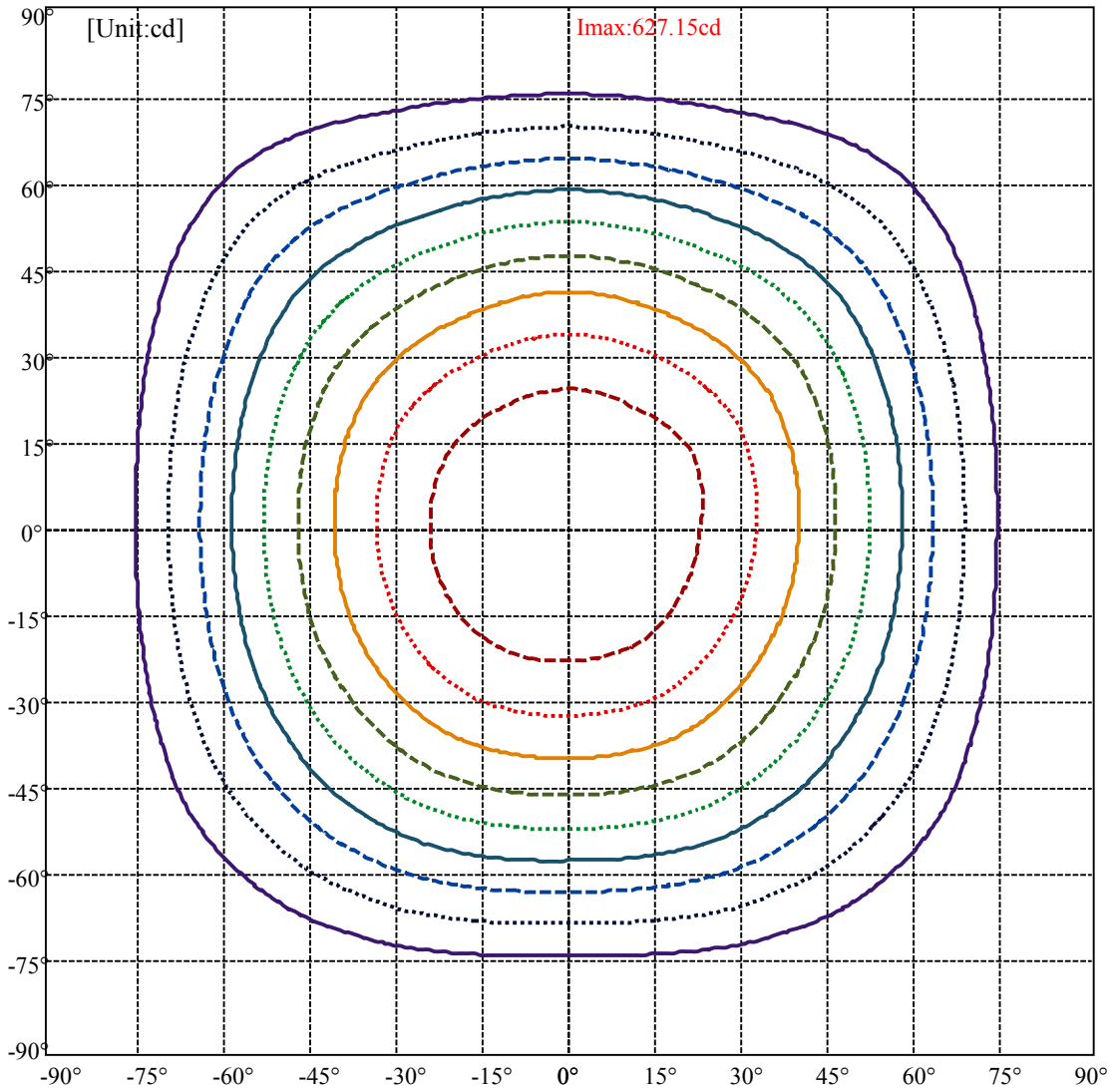
ZONAL LUMEN SUMMARY

0-10	58.96
10-20	169.15
20-30	255.44
30-40	301.76
40-50	299.98
50-60	250.36
60-70	162.62
70-80	57.27
80-90	3.31
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

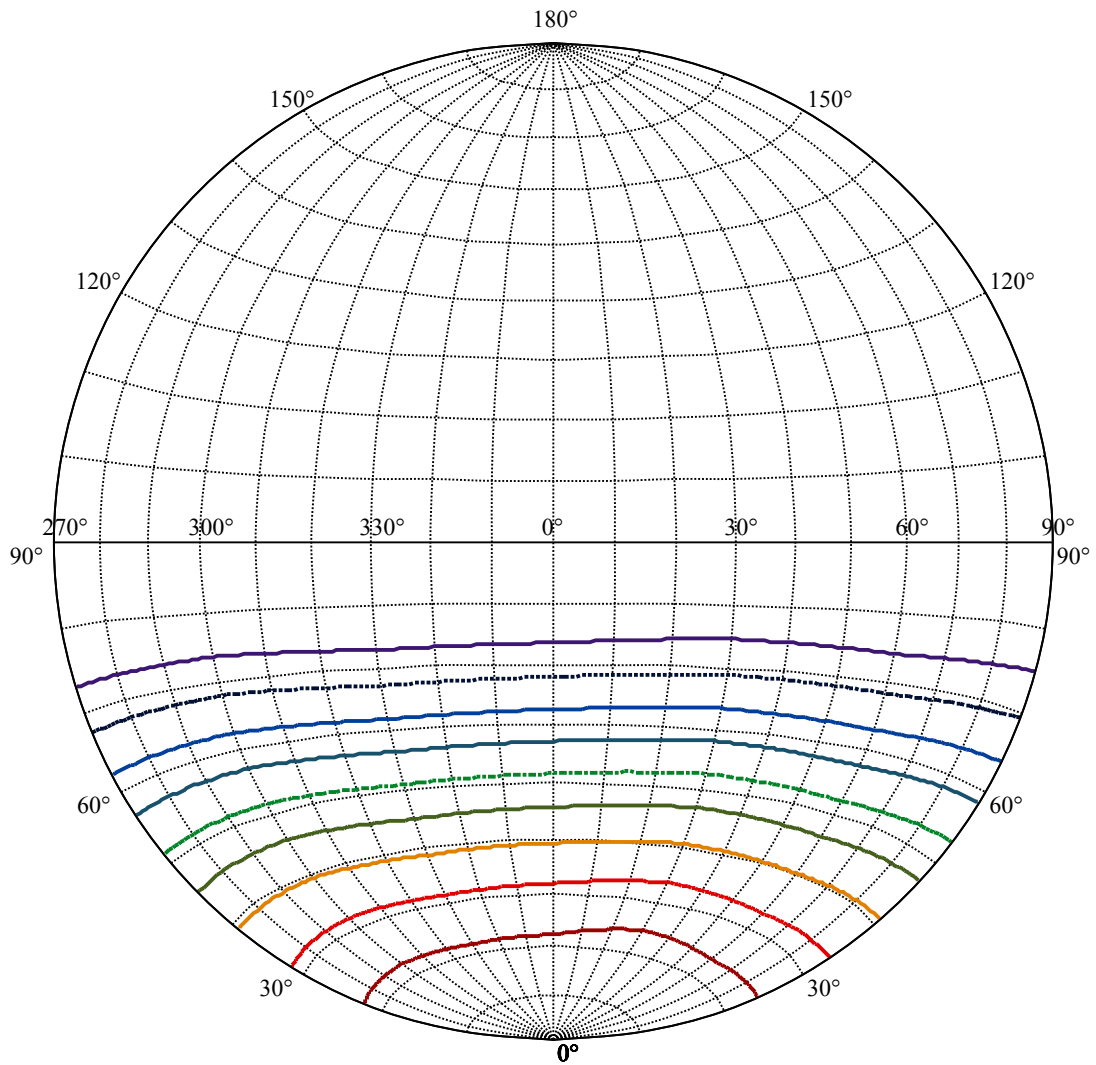


C30(Max): —
C0/C180: —
C90/C270: —





- (10%Imax) 62.61
- (20%Imax) 125.22
- (30%Imax) 187.83
- (40%Imax) 250.44
- (50%Imax) 313.05
- (60%Imax) 375.66
- (70%Imax) 438.27
- (80%Imax) 500.88
- (90%Imax) 563.49

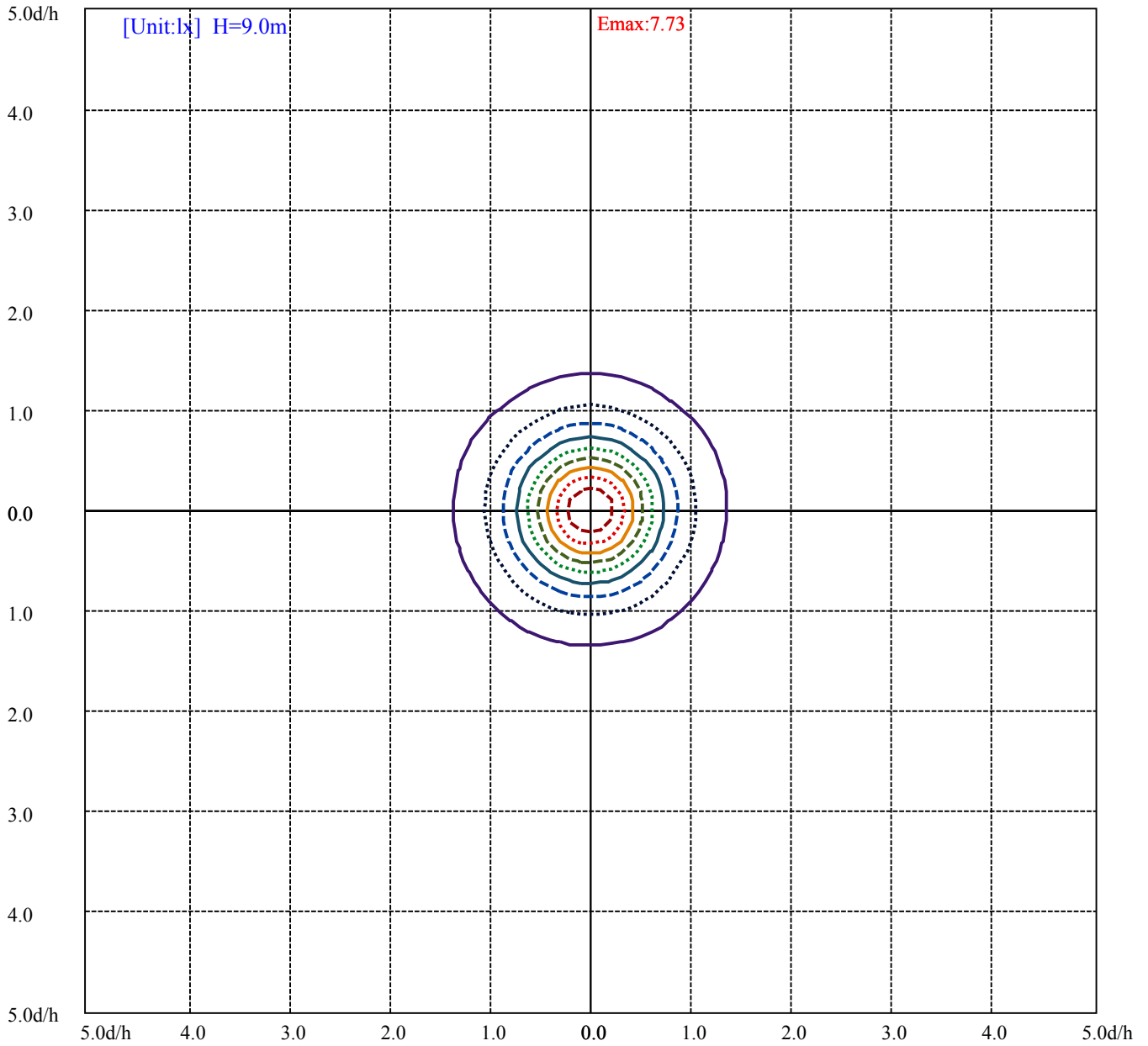


House

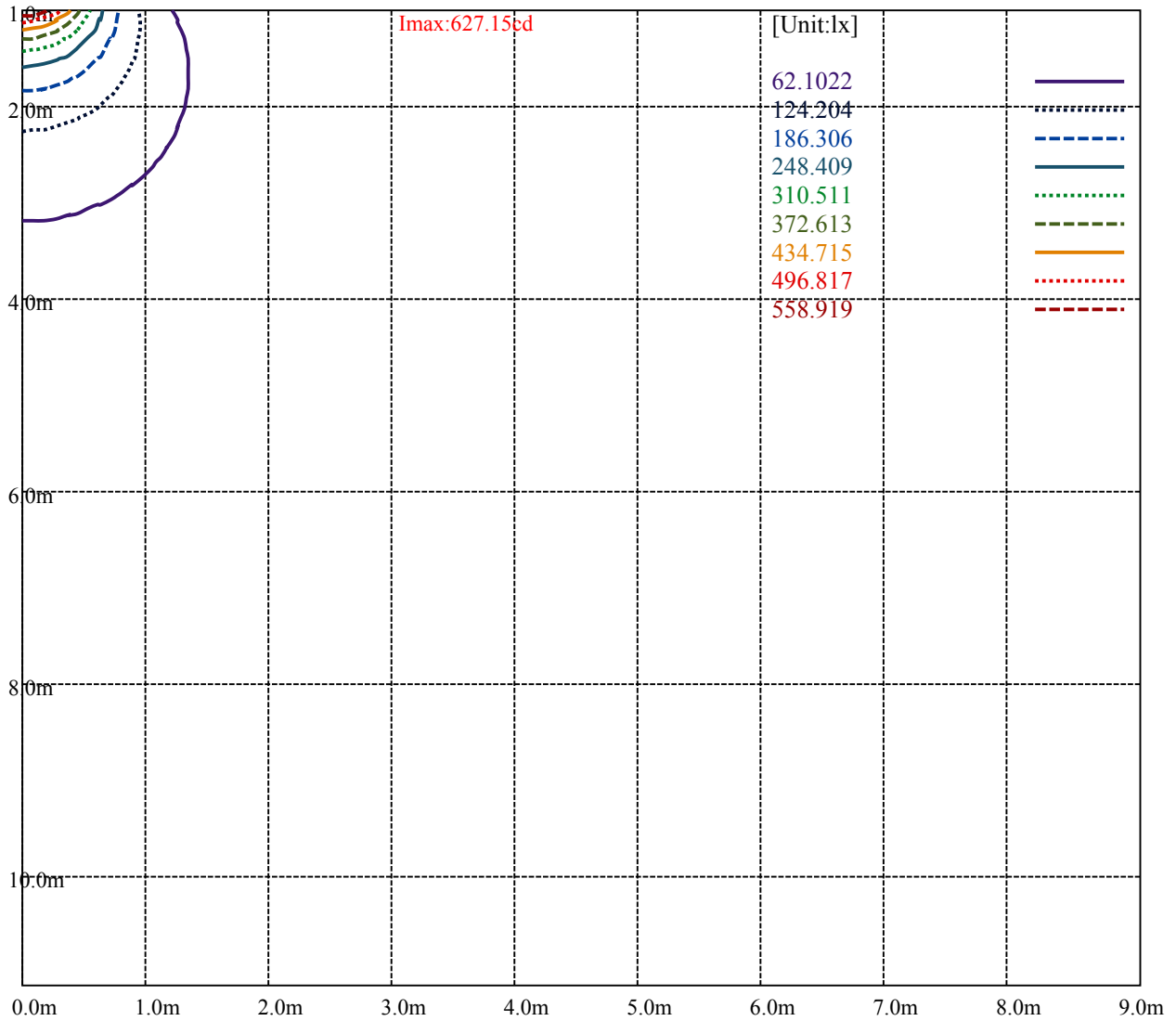
Road

I_{max}:627.15cd

(10%I _{max}) 62.7153	—
(20%I _{max}) 125.431	·····
(30%I _{max}) 188.146	- - - - -
(40%I _{max}) 250.861	—
(50%I _{max}) 313.576	·····
(60%I _{max}) 376.292	- - - - -
(70%I _{max}) 439.007	—
(80%I _{max}) 501.722	·····
(90%I _{max}) 564.437	- - - - -



- (10%Emax) 0.7725
- (20%Emax) 1.545
- (30%Emax) 2.317506
- (40%Emax) 3.09
- (50%Emax) 3.862506
- (60%Emax) 4.635
- (70%Emax) 5.407506
- (80%Emax) 6.18
- (90%Emax) 6.952507

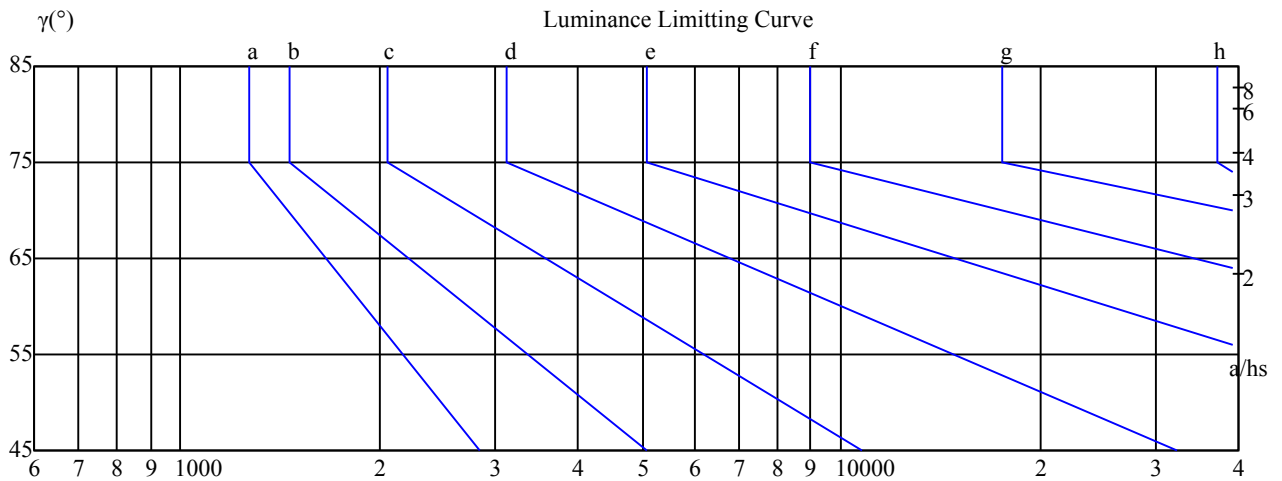


Luminance Table

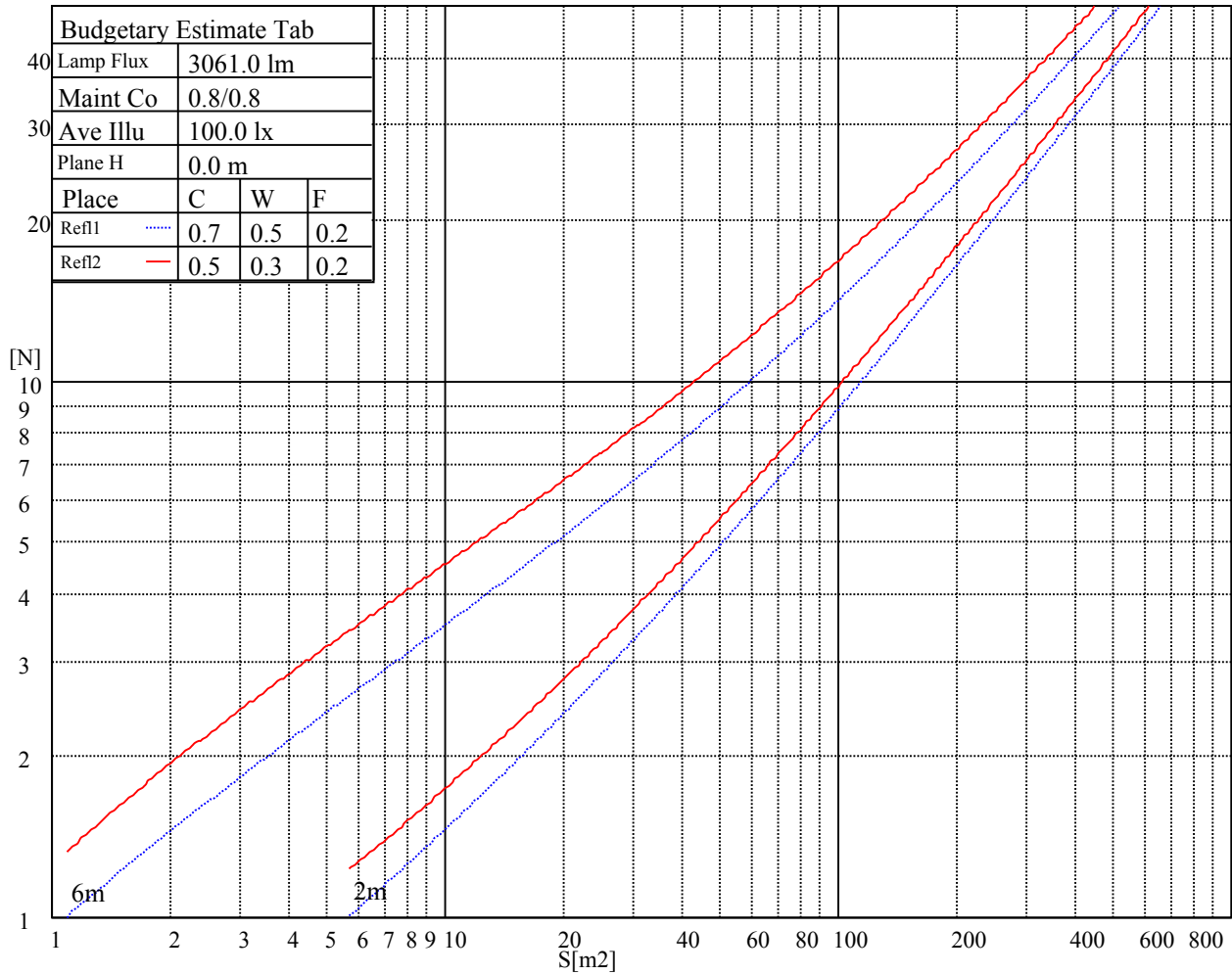
γ	45	50	55	60	65	70	75	80	85
C0	308	292	272	246	213	169	106	22	18
C45	0	0	0	0	0	0	0	0	0
C90	318	305	287	263	233	195	136	51	18

Glare Table

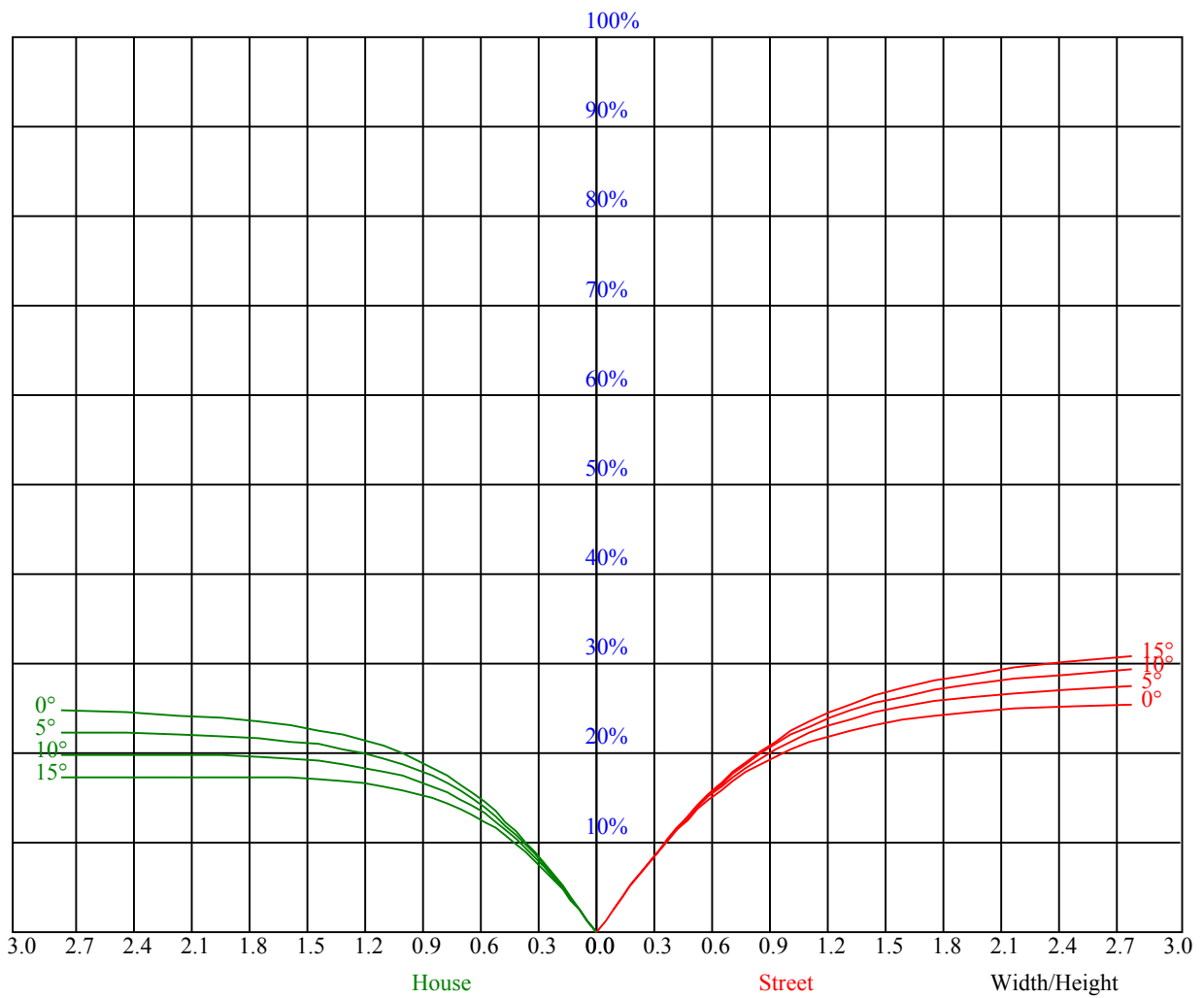
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h



Illuminatin assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	4.3	5.6	4.6	5.8	6.1	4.3	5.7	4.6	5.9	6.1
	3H	5.3	6.5	5.6	6.7	7.0	5.5	6.6	5.8	6.9	7.2
	4H	5.4	6.3	5.7	6.7	7.0	5.6	6.6	6.0	6.9	7.2
	6H	5.4	6.4	5.8	6.7	7.1	5.7	6.7	6.1	7.0	7.3
	8H	5.4	6.4	5.8	6.7	7.1	5.7	6.7	6.1	7.0	7.3
	12H	5.3	6.0	5.7	6.4	6.8	5.5	6.3	6.0	6.6	7.0
4H	2H	4.7	5.6	5.0	6.0	6.3	4.7	5.7	5.1	6.0	6.3
	3H	5.8	6.6	6.3	6.9	7.4	5.9	6.7	6.4	7.0	7.4
	4H	6.2	6.9	6.6	7.3	7.7	6.3	7.0	6.7	7.4	7.8
	6H	6.3	7.0	6.7	7.4	7.8	6.4	7.2	6.9	7.5	8.0
	8H	6.1	6.5	6.6	7.0	7.5	6.3	6.7	6.8	7.2	7.7
	12H	6.1	6.5	6.6	7.0	7.5	6.3	6.7	6.8	7.2	7.7
8H	4H	6.2	6.6	6.7	7.1	7.6	6.3	6.7	6.8	7.2	7.7
	6H	6.3	6.7	6.8	7.2	7.7	6.5	6.9	7.0	7.3	7.8
	8H	6.3	6.7	6.8	7.2	7.7	6.5	6.9	7.0	7.3	7.8
	12H	6.3	6.7	6.8	7.2	7.7	6.5	6.9	7.0	7.3	7.8
12H	4H	6.2	6.6	6.7	7.1	7.6	6.3	6.7	6.8	7.2	7.7
	6H	6.3	6.7	6.8	7.2	7.7	6.5	6.9	7.0	7.3	7.8
	8H	6.3	6.7	6.8	7.2	7.7	6.5	6.9	7.0	7.3	7.8
Variation with the observer position at spacings:											
S = 1.0H		0.5/-0.4					0.4/-0.4				
S = 1.5H		0.7/-1.1					0.7/-0.9				
S = 2.0H		1.8/-1.7					1.7/-1.5				
Standard tables:		BK2					BK2				
Uncorrected UGR		-14.3					-14.2				
According 1000lm											



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	0.61	0.61	0.61	0.59	0.59	0.59	0.57	0.57	0.57	0.54	0.54	0.54	0.52	0.52	0.52	0.51
1	0.54	0.52	0.50	0.53	0.51	0.50	0.51	0.49	0.48	0.49	0.48	0.47	0.47	0.46	0.45	0.44
2	0.48	0.44	0.42	0.47	0.44	0.41	0.45	0.42	0.40	0.43	0.41	0.39	0.42	0.40	0.39	0.38
3	0.42	0.38	0.35	0.41	0.38	0.35	0.40	0.37	0.34	0.38	0.36	0.34	0.37	0.35	0.33	0.32
4	0.38	0.33	0.30	0.37	0.33	0.30	0.36	0.32	0.30	0.34	0.32	0.29	0.33	0.31	0.29	0.28
5	0.34	0.29	0.26	0.33	0.29	0.26	0.32	0.28	0.26	0.31	0.28	0.25	0.30	0.27	0.25	0.24
6	0.30	0.26	0.23	0.30	0.26	0.23	0.29	0.25	0.23	0.28	0.25	0.22	0.27	0.24	0.22	0.21
7	0.28	0.23	0.20	0.27	0.23	0.20	0.26	0.23	0.20	0.26	0.22	0.20	0.25	0.22	0.20	0.19
8	0.25	0.21	0.18	0.25	0.21	0.18	0.24	0.21	0.18	0.24	0.20	0.18	0.23	0.20	0.18	0.17
9	0.23	0.19	0.16	0.23	0.19	0.16	0.22	0.19	0.16	0.22	0.19	0.16	0.21	0.18	0.16	0.15
10	0.21	0.17	0.15	0.21	0.17	0.15	0.21	0.17	0.15	0.20	0.17	0.15	0.20	0.17	0.15	0.14



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	621.02	620.81	620.33	619.65	618.75	617.59	616.37	614.63	612.78
30.0	627.15	627.15	626.99	626.47	625.88	625.04	624.03	622.77	621.07
60.0	624.30	624.30	623.98	623.40	622.71	621.87	620.76	619.65	618.06
90.0	622.40	622.55	622.50	622.24	621.71	621.02	620.07	618.96	617.53
120.0	621.81	621.87	621.66	621.39	620.81	619.91	619.01	617.80	616.21
150.0	621.18	621.39	621.29	621.18	620.60	619.86	619.01	618.01	616.69
180.0	621.02	621.07	620.92	620.55	619.91	619.22	618.01	617.00	615.52
210.0	627.15	626.84	626.41	625.78	624.99	623.93	622.55	621.13	619.33
240.0	624.30	624.03	623.66	622.92	622.24	621.07	619.54	618.33	616.69
270.0	622.40	622.03	621.50	620.81	619.81	618.43	617.00	615.42	613.57
300.0	621.81	621.50	620.97	620.28	619.28	618.27	616.74	615.31	613.46
330.0	621.18	620.81	620.07	619.28	618.22	617.16	615.68	614.20	612.09
360.0	621.02	620.81	620.33	619.65	618.75	617.59	616.37	614.63	612.78
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	611.03	608.92	606.91	604.16	601.15	598.72	595.65	592.85	588.83
30.0	619.33	617.59	615.63	613.31	610.61	608.02	604.90	601.62	598.45
60.0	616.37	614.20	611.88	609.55	606.70	604.11	601.10	597.55	593.91
90.0	616.00	614.20	612.09	609.76	607.49	604.69	601.99	598.66	595.28
120.0	614.68	612.78	610.82	608.34	605.69	603.21	600.20	597.18	593.75
150.0	615.31	613.83	611.83	609.55	607.12	604.80	601.89	599.14	595.81
180.0	613.78	611.98	609.87	607.39	605.11	602.73	599.83	596.66	593.27
210.0	617.32	615.42	613.04	610.82	608.13	605.17	602.26	598.72	595.23
240.0	614.94	612.51	609.92	607.65	604.95	602.10	599.19	596.08	592.48
270.0	611.61	609.29	607.07	604.37	601.47	598.77	595.55	592.43	588.62
300.0	611.35	609.39	607.07	604.69	601.89	598.93	595.97	592.69	589.10
330.0	610.08	608.02	605.48	602.79	600.20	597.40	594.23	590.79	586.88
360.0	611.03	608.92	606.91	604.16	601.15	598.72	595.65	592.85	588.83
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	585.45	581.12	576.36	571.08	565.79	561.35	556.33	549.51	542.75
30.0	594.97	591.64	587.20	582.65	578.37	573.30	568.59	562.94	557.60
60.0	590.63	586.30	582.07	577.84	572.87	567.53	562.09	556.91	550.83
90.0	592.16	588.36	584.45	579.74	575.57	570.44	565.21	559.55	554.27
120.0	590.53	586.46	582.02	577.31	572.87	567.59	562.78	557.07	551.63
150.0	592.64	588.68	584.50	580.06	575.73	571.18	565.95	560.51	555.33
180.0	589.89	585.98	582.07	577.37	572.93	567.75	562.20	557.02	550.89
210.0	591.11	587.09	582.39	577.31	571.97	567.06	561.09	555.48	548.88
240.0	588.52	584.08	579.95	575.15	570.44	565.00	559.82	553.63	547.19
270.0	585.03	580.54	575.78	570.76	566.05	560.51	555.17	548.82	542.06
300.0	585.56	581.17	577.10	571.97	566.85	561.93	556.01	550.73	544.97
330.0	583.02	578.48	574.30	569.28	563.99	558.87	552.84	546.45	540.47
360.0	585.45	581.12	576.36	571.08	565.79	561.35	556.33	549.51	542.75
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	537.20	530.64	523.72	516.11	509.71	502.00	494.17	486.62	478.05
30.0	551.10	544.33	537.20	530.59	522.93	515.79	507.65	500.09	491.43
60.0	545.07	538.25	531.81	524.35	516.64	509.50	501.20	493.65	484.93
90.0	547.82	542.06	536.03	528.85	521.39	513.68	506.60	498.46	490.95
120.0	545.18	538.41	531.91	524.41	517.48	509.45	501.05	493.43	484.82
150.0	549.09	542.48	536.62	529.48	522.82	515.16	507.44	500.31	492.01
180.0	544.97	538.15	530.85	524.20	516.48	508.34	500.94	492.48	484.82
210.0	542.75	535.72	528.26	521.39	513.57	506.38	498.14	489.58	480.96
240.0	540.84	535.14	528.63	521.29	513.62	506.86	498.61	490.16	482.49
270.0	535.88	528.85	522.24	514.58	507.55	499.30	491.00	482.55	474.72
300.0	538.68	530.80	523.19	516.16	510.03	501.63	494.33	486.30	478.16
330.0	534.29	527.21	519.76	511.93	504.80	496.61	489.10	480.59	472.66
360.0	537.20	530.64	523.72	516.11	509.71	502.00	494.17	486.62	478.05

Intensity data(cd)

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	470.02	460.93	452.63	442.96	433.13	423.46	414.68	404.64	395.45
30.0	482.55	474.46	465.11	456.65	446.92	436.83	427.84	417.43	407.07
60.0	476.15	467.11	458.82	449.25	440.48	430.43	421.34	411.04	400.31
90.0	482.49	473.67	465.53	456.12	447.66	437.83	429.06	418.91	408.55
120.0	475.99	467.96	459.77	450.15	440.26	430.38	421.29	410.98	401.52
150.0	484.50	475.68	467.54	458.29	448.77	438.94	430.12	419.97	410.77
180.0	476.15	467.22	459.03	449.51	440.90	431.02	422.03	411.88	401.36
210.0	473.03	463.94	455.54	447.08	437.30	427.37	417.22	407.97	397.40
240.0	473.46	465.37	455.96	446.40	437.78	428.00	419.23	409.19	400.04
270.0	466.74	457.55	449.14	439.42	429.69	419.65	410.56	400.10	390.74
300.0	469.49	460.35	451.89	442.38	433.87	424.20	414.31	404.27	395.13
330.0	463.52	454.27	445.81	436.09	427.42	417.33	407.13	397.88	387.31
360.0	470.02	460.93	452.63	442.96	433.13	423.46	414.68	404.64	395.45
C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	384.82	373.93	364.16	353.00	342.75	331.23	321.03	309.45	297.83
30.0	397.61	388.05	377.16	366.06	354.80	344.65	333.24	323.04	311.15
60.0	390.74	379.80	370.18	359.24	349.36	337.94	326.26	314.53	303.96
90.0	397.98	388.52	377.79	368.07	356.92	346.77	335.35	323.88	313.52
120.0	390.74	381.18	370.39	359.45	349.62	338.26	328.11	316.43	304.64
150.0	400.31	390.85	379.96	369.12	359.19	347.93	337.78	326.26	314.58
180.0	390.74	381.33	370.60	361.09	350.04	340.11	328.64	317.06	306.65
210.0	387.89	377.00	367.22	356.02	344.65	334.24	322.67	312.31	300.20
240.0	389.42	378.59	367.70	357.87	346.50	336.30	324.78	314.74	303.22
270.0	380.01	369.28	359.45	348.30	338.15	326.53	316.38	304.70	292.75
300.0	385.72	375.10	365.21	354.06	342.75	331.28	321.13	309.61	299.36
330.0	376.68	366.96	355.96	345.98	334.66	323.14	312.94	301.21	290.59
360.0	384.82	373.93	364.16	353.00	342.75	331.23	321.03	309.45	297.83
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	286.04	275.58	263.52	252.74	241.75	229.49	217.28	205.02	194.13
30.0	300.57	288.63	276.68	266.06	253.96	243.12	230.91	218.55	206.28
60.0	292.01	281.23	269.13	257.02	246.29	234.35	223.78	211.62	200.74
90.0	301.79	291.27	279.33	267.38	256.65	244.55	232.34	221.45	209.35
120.0	294.07	282.13	270.18	259.45	247.62	237.10	225.15	213.16	202.32
150.0	302.85	292.44	280.54	269.97	259.45	247.30	235.30	223.15	212.47
180.0	294.87	284.30	272.30	260.41	248.57	238.00	226.10	215.32	204.59
210.0	288.21	277.48	265.43	253.17	242.17	229.75	218.76	206.39	194.02
240.0	291.64	281.07	269.18	258.45	246.14	233.82	222.93	210.62	198.36
270.0	280.91	270.24	258.35	247.56	235.46	224.62	212.52	200.26	189.42
300.0	287.68	277.27	265.37	253.27	242.38	230.07	219.23	207.08	194.87
330.0	278.69	268.12	256.02	243.92	231.81	220.93	208.77	197.83	185.57
360.0	286.04	275.58	263.52	252.74	241.75	229.49	217.28	205.02	194.13
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	181.97	171.19	159.40	147.51	136.78	124.68	113.95	102.22	91.91
30.0	195.45	183.14	172.25	160.09	149.36	137.36	125.31	114.80	103.12
60.0	188.37	176.05	163.84	153.01	142.17	130.12	118.23	107.93	96.67
90.0	198.52	186.31	174.04	163.26	151.32	140.69	128.70	118.13	106.55
120.0	190.11	179.28	167.17	156.50	144.45	132.45	120.82	110.67	99.47
150.0	200.47	189.64	177.59	165.59	155.12	143.07	132.45	120.66	110.25
180.0	192.28	180.02	167.86	157.08	144.98	134.19	122.25	110.67	100.47
210.0	183.08	170.61	159.67	147.30	136.36	124.15	112.05	100.21	89.59
240.0	187.47	176.69	164.80	152.80	140.64	129.91	117.76	107.08	95.29
270.0	177.22	166.33	154.33	142.23	131.45	119.34	107.40	96.93	85.15
300.0	182.71	172.04	160.30	149.73	137.84	127.11	115.11	103.12	92.76
330.0	174.68	162.52	150.47	139.69	127.75	117.17	105.49	93.87	82.24
360.0	181.97	171.19	159.40	147.51	136.78	124.68	113.95	102.22	91.91

Intensity data(cd)

C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	80.28	68.87	57.82	48.47	38.37	29.76	20.67	13.48	6.82
30.0	92.65	81.18	71.14	60.04	49.31	38.85	30.07	20.82	13.53
60.0	85.09	75.00	63.63	53.86	43.29	33.03	24.52	15.75	8.62
90.0	94.82	84.62	73.41	62.31	52.75	42.39	33.56	24.26	15.75
120.0	89.37	78.06	68.13	57.08	46.46	37.21	27.48	19.40	11.57
150.0	98.62	87.05	75.74	65.70	54.81	45.40	35.20	26.64	17.71
180.0	88.90	78.65	67.18	57.24	46.46	35.89	25.90	17.86	10.15
210.0	77.80	67.60	56.24	45.35	35.99	26.00	17.76	9.94	4.92
240.0	84.83	73.15	61.68	52.01	41.44	32.45	22.78	14.16	7.24
270.0	74.79	63.37	52.32	42.71	32.35	23.73	15.01	8.56	3.96
300.0	81.08	70.82	59.57	48.73	39.59	29.65	20.24	12.74	6.29
330.0	72.09	62.10	51.27	41.75	31.66	22.25	13.74	7.56	3.54
360.0	80.28	68.87	57.82	48.47	38.37	29.76	20.67	13.48	6.82
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	3.38	3.22	3.07	2.85	2.75	2.64	2.54	2.54	2.38
30.0	7.03	3.28	2.96	2.85	2.80	2.64	2.54	2.43	2.38
60.0	4.12	3.12	2.91	2.75	2.75	2.59	2.48	2.43	2.43
90.0	8.67	4.12	3.01	2.85	2.75	2.64	2.59	2.48	2.43
120.0	5.76	3.12	3.07	2.80	2.70	2.64	2.54	2.48	2.33
150.0	10.09	4.97	3.12	2.96	2.75	2.70	2.59	2.54	2.48
180.0	4.86	3.07	3.01	2.80	2.70	2.59	2.54	2.48	2.38
210.0	3.33	3.07	3.01	2.80	2.75	2.64	2.48	2.48	2.48
240.0	3.65	3.22	3.01	2.80	2.75	2.64	2.54	2.43	2.43
270.0	3.22	3.01	2.96	2.75	2.64	2.54	2.48	2.43	2.38
300.0	3.44	3.22	3.01	2.85	2.70	2.64	2.54	2.48	2.38
330.0	3.22	3.07	2.91	2.75	2.64	2.54	2.48	2.43	2.43
360.0	3.38	3.22	3.07	2.85	2.75	2.64	2.54	2.54	2.38
C/ γ (°)	90.0								
0.0	2.38								
30.0	2.27								
60.0	2.38								
90.0	2.38								
120.0	2.33								
150.0	2.38								
180.0	2.33								
210.0	2.43								
240.0	2.38								
270.0	2.38								
300.0	2.33								
330.0	2.43								
360.0	2.38								