
正奇事

Client:

LumCAT: ZS-FL2*2-K40-3065

Luminaire: LED 灯具

Report No:

Ballast type:

Test No:

Voltage(V): 120.010

LampCAT:

Current(A): 0.311

Lamp flux(lm): 4983.4

Power (W): 37.110

Number of Lamps: 1

PF: 0.994

Length(mm): 580

Width(mm): 580

Phm Type: C

Height(mm): 8

Photometric Results

Lumens(lm): 4983.35, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 134.29

Central intensity(cd): 1939.215, Maximum intensity(cd): 1939.215

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=97.8

[C90/270]Total=96.8

Field angle(10%Imax): [C0/180]Total=161.8

[C90/270]Total=162.0

Maximum s/h(1/2): C0_180=1.17 C90_270=1.16

Maximum s/h(1/4): C0_180=1.28 C90_270=1.26

Up flux rate of lamp(%): 2.26%

Down flux rate of lamp(%): 97.74%

Up flux rate of LUM(%): 2.26%

Down flux rate of LUM(%): 97.74%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 77.222%

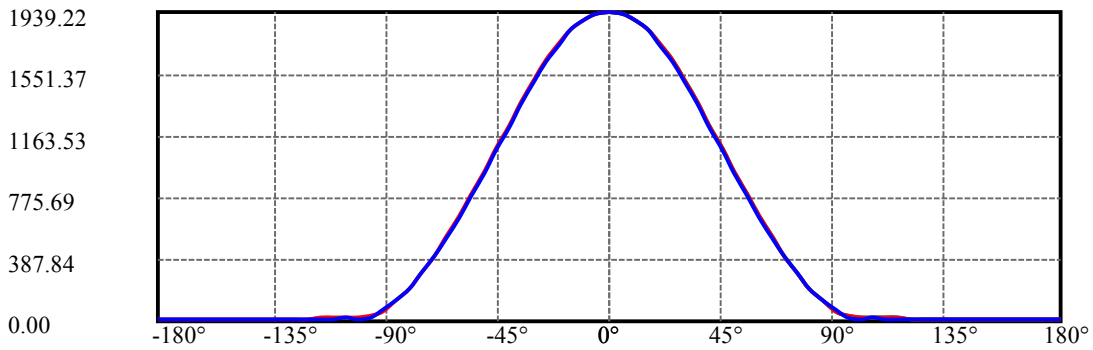
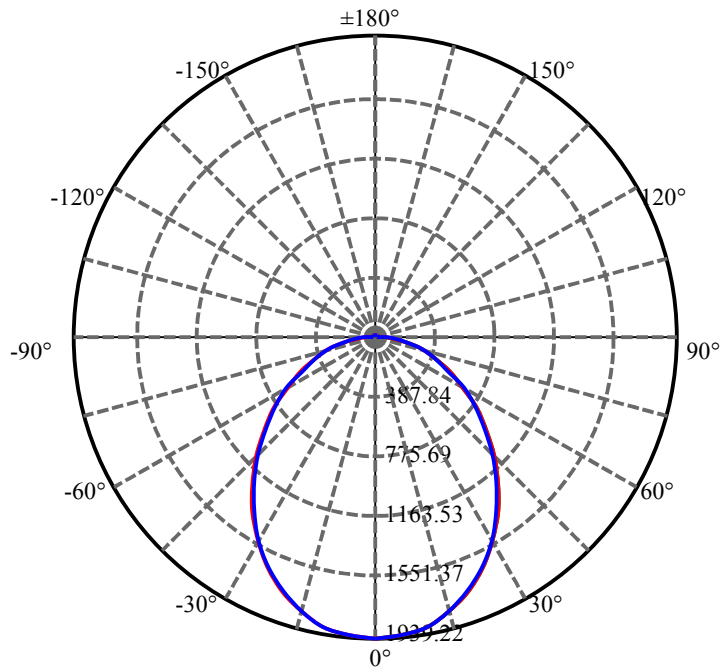
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1939.215	0.000	0	0.00%	0.00%
5.0	1926.155	46.209	46.209	0.93%	0.93%
10.0	1888.991	136.480	182.689	2.74%	3.67%
15.0	1828.249	220.504	403.193	4.42%	8.09%
20.0	1743.439	294.357	697.551	5.91%	14.00%
25.0	1636.702	354.514	1052.065	7.11%	21.11%
30.0	1513.987	398.722	1450.787	8.00%	29.11%
35.0	1370.197	424.716	1875.504	8.52%	37.64%
40.0	1223.373	432.718	2308.221	8.68%	46.32%
45.0	1078.431	426.198	2734.419	8.55%	54.87%
50.0	928.687	405.567	3139.986	8.14%	63.01%
55.0	789.920	373.682	3513.669	7.50%	70.51%
60.0	657.528	334.574	3848.242	6.71%	77.22%
65.0	530.575	288.830	4137.072	5.80%	83.02%
70.0	416.172	239.722	4376.795	4.81%	87.83%
75.0	314.308	190.936	4567.73	3.83%	91.66%
80.0	222.214	143.558	4711.289	2.88%	94.54%
85.0	147.296	100.405	4811.693	2.01%	96.56%
90.0	68.732	59.150	4870.844	1.19%	97.74%
95.0	26.116	25.970	4896.814	0.52%	98.26%
100.0	18.706	12.179	4908.993	0.24%	98.51%
105.0	20.621	10.523	4919.516	0.21%	98.72%
110.0	18.863	10.321	4929.837	0.21%	98.93%
115.0	18.077	9.354	4939.19	0.19%	99.11%
120.0	17.104	8.553	4947.743	0.17%	99.29%
125.0	15.193	7.465	4955.209	0.15%	99.44%
130.0	13.471	6.232	4961.441	0.13%	99.56%
135.0	11.148	4.974	4966.415	0.10%	99.66%
140.0	8.453	3.629	4970.045	0.07%	99.73%
145.0	7.635	2.684	4972.729	0.05%	99.79%
150.0	8.608	2.392	4975.121	0.05%	99.83%
155.0	9.057	2.236	4977.356	0.04%	99.88%
160.0	9.506	1.947	4979.303	0.04%	99.92%
165.0	10.292	1.632	4980.935	0.03%	99.95%
170.0	11.528	1.294	4982.229	0.03%	99.98%
175.0	13.098	0.881	4983.11	0.02%	100.00%
180.0	6.737	0.237	4983.347	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1450.79	29.11%	29.11%
0-40	2308.22	46.32%	46.32%
0-60	3848.24	77.22%	77.22%
0-90	4870.84	97.74%	97.74%
0-120	4947.74	99.29%	99.29%
0-180	4983.35	100.00%	100.00%
60-90	1022.60	20.52%	20.52%
90-120	76.90	1.54%	1.54%
90-130	90.60	1.82%	1.82%
90-150	104.28	2.09%	2.09%
90-180	112.27	2.25%	2.25%
0-62.40	3986.68	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	182.69
10-20	514.86
20-30	753.24
30-40	857.43
40-50	831.77
50-60	708.26
60-70	528.55
70-80	334.49
80-90	159.55
90-100	38.15
100-110	20.84
110-120	17.91
120-130	13.70
130-140	8.60
140-150	5.08
150-160	4.18
160-170	2.93
170-180	0.88



C0(Max): ———

C0/C180: ———

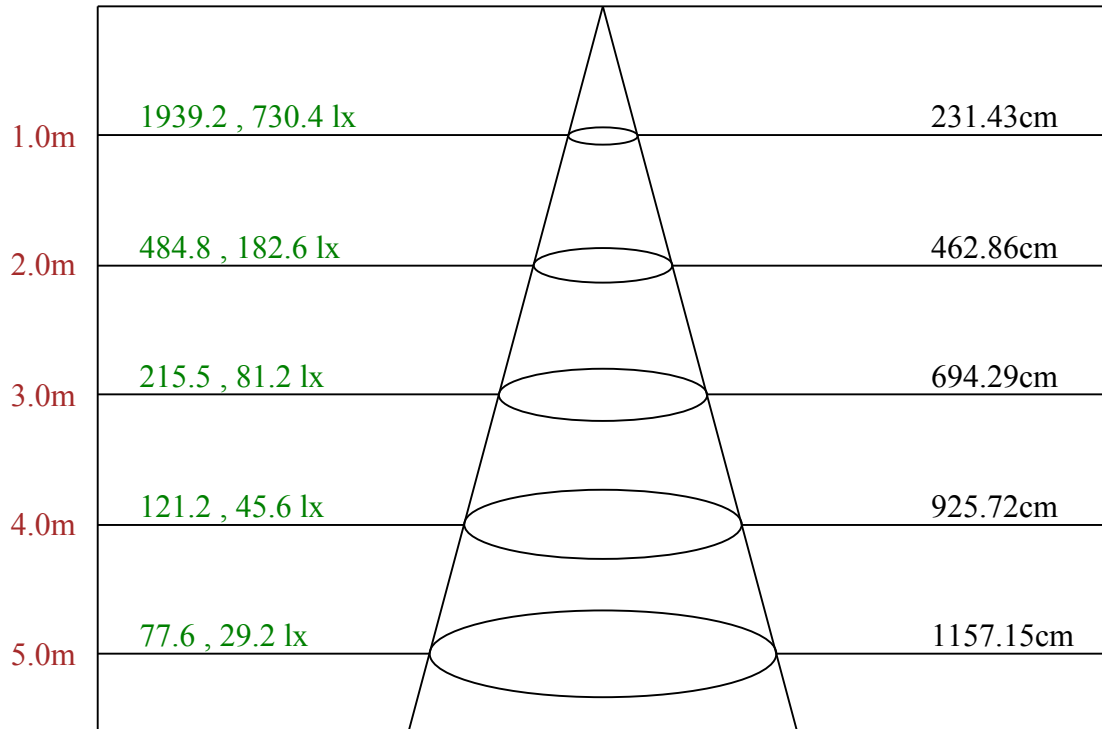
C90/C270: ———

Field angle(10%Imax):C0/180Left:80.9 Right:80.9

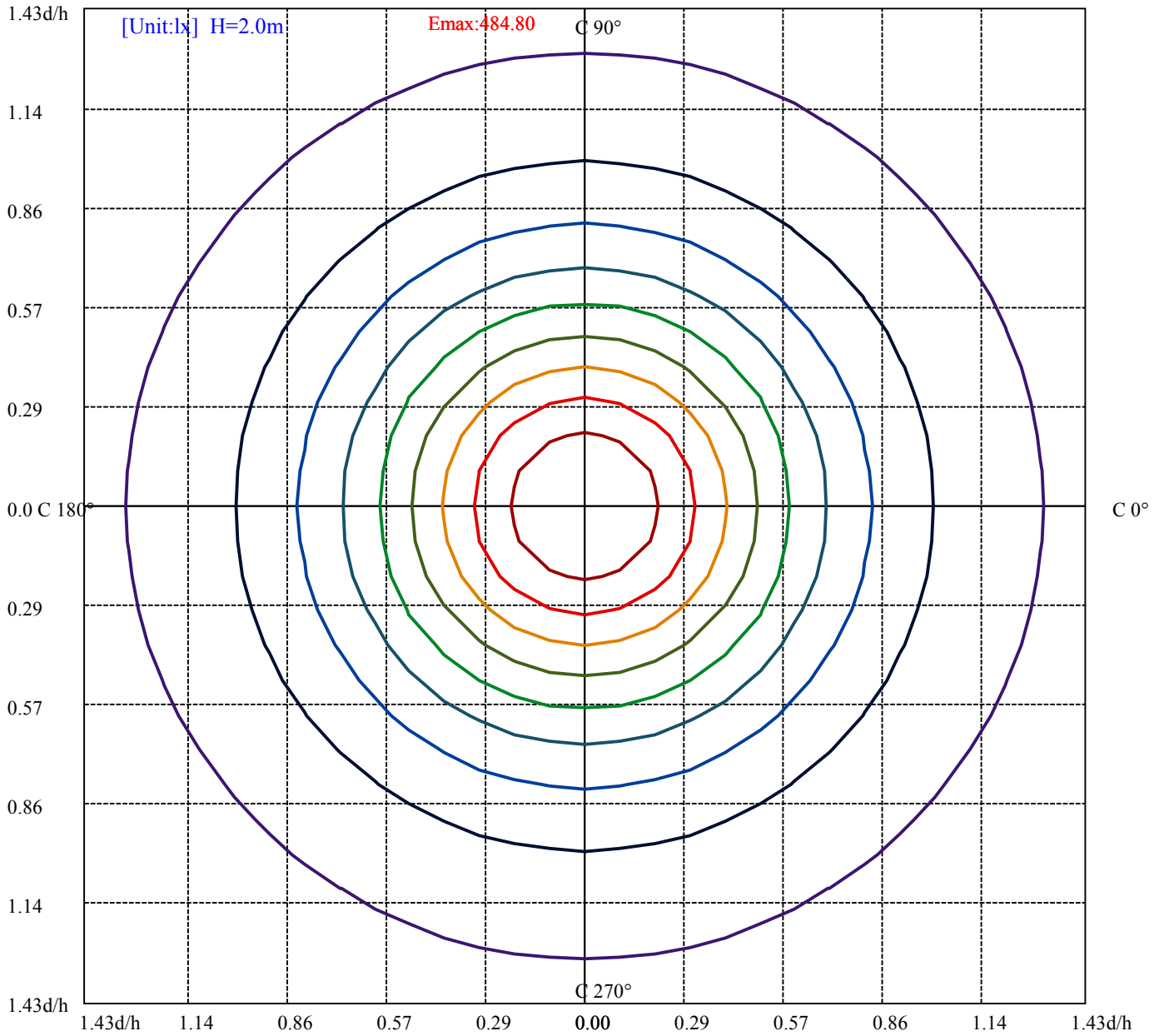
:C90/270Left:81.0 Right:81.0

Beam Angle(50%Imax):C0/180Left:48.9 Right:48.9

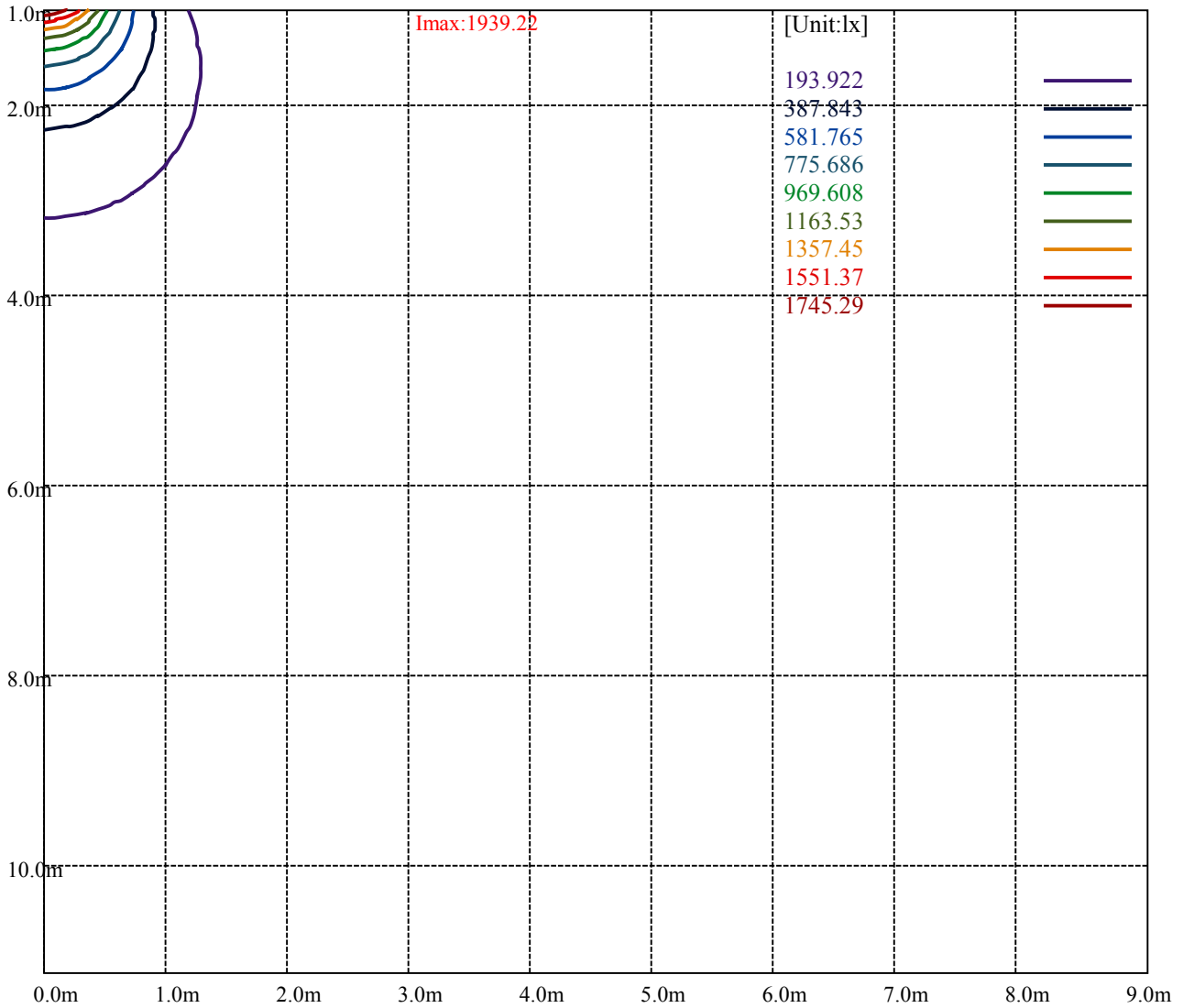
:C90/270Left:48.4 Right:48.4



Max , Ave Beam angle of C0 plane 98.33



(10%Emax) 48.48025	—
(20%Emax) 96.96075	—
(30%Emax) 145.441	—
(40%Emax) 193.9215	—
(50%Emax) 242.4017	—
(60%Emax) 290.8825	—
(70%Emax) 339.3625	—
(80%Emax) 387.8425	—
(90%Emax) 436.3225	—



Luminance Table

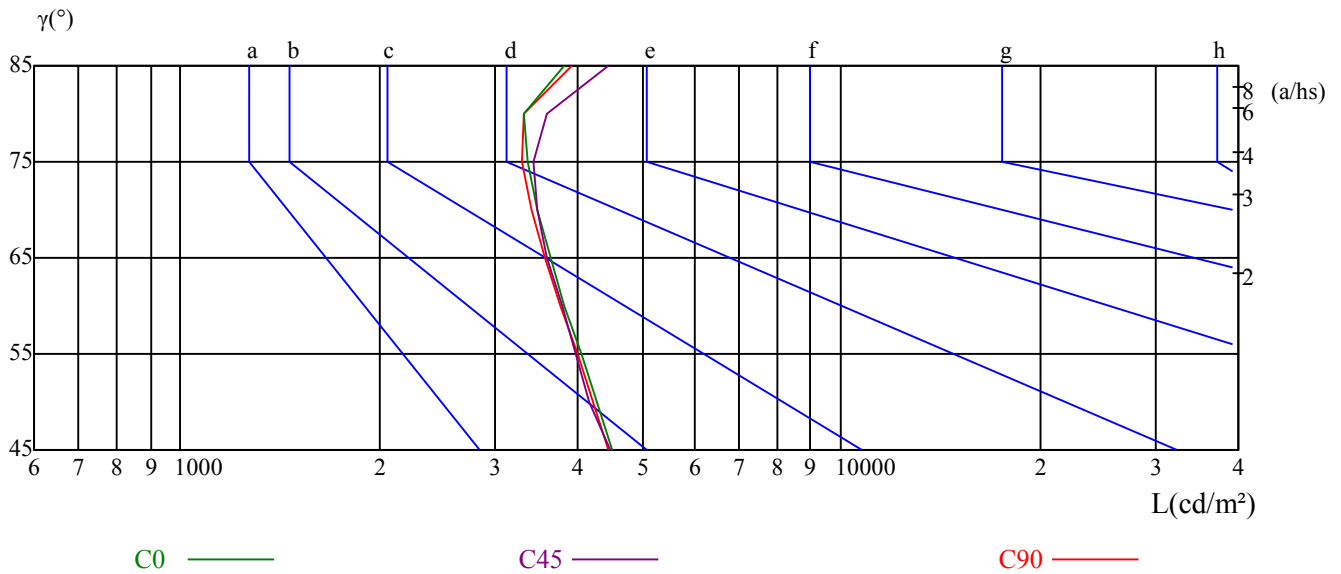
γ	45	50	55	60	65	70	75	80	85
C0	4503	4268	4045	3820	3629	3459	3348	3307	3808
C45	4485	4170	3979	3783	3598	3473	3421	3583	4443
C90	4436	4201	3989	3773	3564	3409	3293	3317	3918

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3737	3669	3748	3520	3463	3670	4408	4536	5434

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	1.19	1.19	1.19	1.15	1.15	1.15	1.10	1.10	1.10	1.05	1.05	1.05	1.00	1.00	1.00	0.98
1	1.03	0.99	0.95	1.01	0.97	0.93	0.96	0.93	0.90	0.92	0.89	0.86	0.88	0.85	0.84	0.81
2	0.90	0.83	0.78	0.88	0.82	0.76	0.84	0.79	0.74	0.80	0.76	0.72	0.77	0.74	0.70	0.68
3	0.79	0.71	0.65	0.78	0.70	0.64	0.74	0.68	0.63	0.71	0.66	0.61	0.69	0.64	0.60	0.58
4	0.71	0.62	0.55	0.69	0.61	0.55	0.66	0.59	0.54	0.64	0.58	0.53	0.61	0.56	0.52	0.50
5	0.63	0.55	0.48	0.62	0.54	0.48	0.60	0.52	0.47	0.58	0.51	0.46	0.55	0.50	0.45	0.43
6	0.57	0.48	0.42	0.56	0.48	0.42	0.54	0.47	0.41	0.52	0.46	0.41	0.50	0.45	0.40	0.38
7	0.52	0.43	0.37	0.51	0.43	0.37	0.49	0.42	0.37	0.48	0.41	0.36	0.46	0.40	0.36	0.34
8	0.48	0.39	0.33	0.47	0.39	0.33	0.45	0.38	0.33	0.44	0.37	0.33	0.43	0.37	0.32	0.30
9	0.44	0.36	0.30	0.43	0.35	0.30	0.42	0.35	0.30	0.41	0.34	0.30	0.39	0.34	0.29	0.27
10	0.41	0.33	0.28	0.40	0.32	0.27	0.39	0.32	0.27	0.38	0.31	0.27	0.37	0.31	0.27	0.25

Intensity data(cd)

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	1939.22	1926.78	1895.69	1839.72	1756.22	1654.95	1530.59	1391.12	1252.54
15.0	1939.22	1930.26	1895.33	1839.79	1760.97	1655.27	1532.56	1396.41	1253.10
30.0	1939.22	1927.52	1896.92	1843.83	1760.14	1658.46	1535.17	1394.80	1248.12
45.0	1939.22	1930.22	1894.24	1836.68	1758.43	1657.69	1535.36	1393.25	1248.44
60.0	1939.22	1931.12	1898.74	1841.18	1758.43	1657.69	1534.46	1395.95	1245.74
75.0	1939.22	1931.13	1897.90	1840.41	1756.88	1655.38	1532.33	1394.91	1242.21
90.0	1939.22	1932.03	1901.47	1847.56	1759.49	1659.75	1533.04	1394.65	1241.89
105.0	1939.22	1932.02	1903.24	1846.57	1764.72	1660.39	1538.06	1395.05	1244.84
120.0	1939.22	1935.60	1905.81	1853.45	1777.61	1672.89	1549.21	1413.79	1259.41
135.0	1939.22	1933.81	1905.89	1852.75	1777.09	1677.11	1558.22	1420.41	1269.99
150.0	1939.22	1935.62	1905.95	1854.71	1779.19	1681.19	1559.82	1424.97	1277.53
165.0	1939.22	1933.83	1907.82	1855.80	1779.56	1681.79	1562.49	1426.16	1283.54
180.0	1939.22	1924.11	1883.25	1819.29	1742.01	1629.19	1505.71	1360.03	1215.23
195.0	1939.22	1924.88	1885.47	1820.09	1733.20	1626.61	1498.53	1354.32	1204.73
210.0	1939.22	1923.02	1883.42	1818.63	1732.25	1623.36	1499.18	1352.50	1205.82
225.0	1939.22	1923.03	1878.95	1815.09	1724.25	1616.31	1490.39	1349.18	1195.37
240.0	1939.22	1921.23	1878.95	1813.29	1726.05	1611.82	1485.89	1341.98	1198.07
255.0	1939.22	1921.25	1875.44	1806.28	1715.56	1605.08	1473.95	1334.73	1191.91
270.0	1939.22	1918.55	1874.52	1808.02	1715.46	1593.25	1467.44	1323.66	1181.68
285.0	1939.22	1917.63	1871.76	1803.40	1708.06	1594.73	1460.71	1317.70	1174.68
300.0	1939.22	1920.26	1874.21	1804.70	1715.32	1599.76	1471.56	1323.51	1183.57
315.0	1939.22	1918.50	1874.36	1805.01	1712.24	1599.65	1472.65	1328.54	1179.92
330.0	1939.22	1918.54	1873.59	1805.26	1713.56	1602.98	1536.45	1326.97	1182.23
345.0	1939.22	1916.79	1872.84	1806.47	1715.87	1605.55	1471.90	1330.18	1180.39
360.0	1939.22	1926.78	1895.69	1839.72	1756.22	1654.95	1530.59	1391.12	1252.54
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	1102.41	952.29	811.93	668.02	544.54	423.73	317.13	214.09	135.91
15.0	1108.00	958.41	811.51	676.26	550.86	430.84	319.77	225.72	148.69
30.0	1102.34	952.06	812.58	672.20	549.82	434.64	330.25	238.47	161.98
45.0	1092.83	942.62	806.81	672.79	546.87	435.33	331.00	241.95	167.30
60.0	1091.93	942.62	802.31	669.19	549.56	433.54	330.10	240.15	163.70
75.0	1092.21	944.01	802.99	672.75	550.60	432.03	325.15	232.63	153.59
90.0	1092.72	944.45	808.76	676.66	549.05	432.23	323.50	229.15	146.47
105.0	1099.13	951.62	816.70	679.09	556.76	438.93	334.60	239.25	161.00
120.0	1108.64	962.39	818.84	682.52	561.54	447.79	343.06	251.88	176.05
135.0	1116.87	964.65	824.14	691.74	571.95	455.76	352.18	259.40	181.94
150.0	1130.98	975.45	837.00	696.75	571.79	455.81	351.52	258.02	176.21
165.0	1136.44	986.65	846.73	705.01	572.26	454.76	347.12	250.25	165.04
180.0	1069.54	923.86	779.95	647.59	517.89	402.41	295.81	202.54	122.59
195.0	1059.63	918.10	780.16	640.43	512.35	401.28	300.96	208.70	133.46
210.0	1058.24	909.77	771.19	643.41	524.62	410.34	305.96	219.57	146.68
225.0	1044.26	898.55	770.83	641.31	512.69	404.75	304.91	220.37	148.41
240.0	1048.76	909.34	767.23	633.21	509.09	397.56	296.82	212.27	143.91
255.0	1049.10	908.98	765.27	626.05	499.40	386.23	287.42	200.30	127.54
270.0	1046.89	902.21	761.13	622.74	494.24	381.91	279.47	188.71	119.52
285.0	1037.97	894.95	755.54	617.02	496.50	384.96	326.50	196.08	125.92
300.0	1031.00	891.97	755.64	682.52	496.54	387.30	287.09	203.13	137.23
315.0	1097.06	884.49	754.79	625.09	499.89	388.20	290.03	208.06	139.61
330.0	1032.09	882.85	748.00	619.43	502.56	386.58	283.20	202.28	133.06
345.0	1033.29	886.19	748.06	618.90	492.43	381.21	279.85	190.15	119.29
360.0	1102.41	952.29	811.93	668.02	544.54	423.73	317.13	214.09	135.91

Intensity data(cd)

C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	71.95	31.09	23.98	20.43	18.65	17.77	16.88	15.99	15.10
15.0	78.82	32.25	24.18	20.60	17.91	17.02	16.12	15.23	14.33
30.0	81.89	29.70	22.50	20.70	19.80	18.90	17.10	14.40	12.60
45.0	83.65	26.08	17.99	19.79	19.79	17.99	17.09	16.19	14.39
60.0	80.05	26.98	13.49	17.99	17.09	16.19	16.19	12.59	10.79
75.0	70.06	32.34	8.08	16.17	14.37	14.37	14.37	14.37	13.47
90.0	70.09	31.45	5.39	17.07	16.18	15.28	15.28	15.28	14.38
105.0	86.35	34.18	8.10	16.19	14.39	13.49	14.39	14.39	13.49
120.0	106.53	31.60	13.54	18.96	18.06	17.15	16.25	12.64	10.83
135.0	112.59	27.02	18.01	19.82	19.82	18.91	18.01	16.21	14.41
150.0	108.78	30.57	22.48	20.68	19.78	18.88	17.08	13.49	12.59
165.0	96.87	31.39	24.22	20.63	17.94	17.04	16.15	15.25	14.35
180.0	39.97	29.31	23.98	21.32	19.54	18.65	16.88	15.99	14.21
195.0	45.68	29.56	24.18	21.50	18.81	17.91	17.02	15.23	13.44
210.0	50.39	28.80	22.50	23.40	22.50	21.60	19.80	13.50	12.60
225.0	53.97	24.29	22.49	23.39	22.49	20.69	19.79	17.99	12.59
240.0	50.37	17.09	23.39	22.49	19.79	18.89	17.99	13.49	13.49
255.0	45.81	9.88	8.98	20.66	16.17	17.07	17.07	16.17	15.27
270.0	79.08	8.99	8.09	20.67	17.97	17.97	17.97	17.07	16.18
285.0	45.87	12.59	16.19	19.79	16.19	17.09	17.09	16.19	15.29
300.0	48.75	18.96	24.38	22.57	20.76	19.86	18.06	14.44	13.54
315.0	50.44	24.32	24.32	24.32	22.52	21.62	19.82	18.01	9.01
330.0	48.55	28.77	24.27	24.27	22.48	21.58	17.08	14.38	12.59
345.0	43.05	29.60	24.22	21.53	19.73	17.94	17.04	16.15	14.35
360.0	71.95	31.09	23.98	20.43	18.65	17.77	16.88	15.99	15.10
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	14.21	13.32	7.99	8.88	8.88	9.77	10.66	12.44	13.32
15.0	13.44	12.54	8.06	8.96	8.96	9.85	10.75	10.75	13.44
30.0	10.80	6.30	8.10	9.00	9.00	9.90	10.80	10.80	12.60
45.0	5.40	6.30	8.10	8.99	8.99	9.89	10.79	12.59	12.59
60.0	9.89	7.20	8.10	8.99	8.99	9.89	10.79	12.59	13.49
75.0	12.57	12.57	8.08	8.98	8.98	9.88	10.78	10.78	13.47
90.0	13.48	12.58	8.09	8.99	9.88	10.78	10.78	10.78	13.48
105.0	12.59	12.59	8.10	8.99	9.89	10.79	10.79	10.79	13.49
120.0	9.93	6.32	8.13	9.03	9.03	9.93	10.83	12.64	12.64
135.0	5.40	6.30	8.11	9.01	9.01	9.91	10.81	12.61	13.51
150.0	10.79	6.29	7.19	8.99	8.99	9.89	10.79	12.59	13.49
165.0	13.45	12.56	7.18	8.97	8.97	9.87	10.76	12.56	13.45
180.0	12.44	9.77	7.11	7.99	8.88	8.88	9.77	10.66	13.32
195.0	12.54	6.27	7.17	8.06	8.96	8.96	8.96	10.75	12.54
210.0	9.90	6.30	7.20	8.10	9.00	9.00	9.90	10.80	12.60
225.0	6.30	6.30	7.20	8.10	8.99	8.99	9.89	10.79	12.59
240.0	12.59	6.30	7.20	8.10	8.99	8.99	9.89	10.79	12.59
255.0	14.37	8.98	7.19	8.08	8.98	8.98	9.88	10.78	12.57
270.0	15.28	9.88	8.09	8.99	8.99	8.99	9.88	12.58	13.48
285.0	14.39	8.99	8.10	8.99	8.99	8.99	9.89	12.59	13.49
300.0	9.93	6.32	7.22	8.13	9.03	9.03	9.93	12.64	13.54
315.0	5.40	6.30	7.21	8.11	9.01	9.01	9.91	10.81	12.61
330.0	9.89	6.29	7.19	8.09	8.99	8.99	9.89	10.79	12.59
345.0	12.56	6.28	7.18	8.07	8.97	8.97	9.87	10.76	13.45
360.0	14.21	13.32	7.99	8.88	8.88	9.77	10.66	12.44	13.32

Intensity data(cd)

C/γ(°)	180.0
0.0	13.32
15.0	13.44
30.0	13.50
45.0	13.49
60.0	13.49
75.0	13.47
90.0	13.48
105.0	13.49
120.0	13.54
135.0	13.51
150.0	13.49
165.0	13.45
180.0	0.00
195.0	0.00
210.0	0.00
225.0	0.00
240.0	0.00
255.0	0.00
270.0	0.00
285.0	0.00
300.0	0.00
315.0	0.00
330.0	0.00
345.0	0.00
360.0	13.32