



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

NT

Client:

LumCAT: 12-0071-S

Luminaire: 92.70.267.00+99.02.73.185

Report No: 2024430-B001

Ballast type: AC

Test No: 2024430-C001

Voltage(V): 32.770

LampCAT: LUMILEDS LUXEON CoB 5050 Current(A): 0.336

Lamp flux(lm): 1678.3 Power (W): 11.010

Number of Lamps: 1 PF: 0.000

Length(mm): 0 Width(mm): 0

Phm Type: C Height(mm): 0

Photometric Results

Lumens(lm): 1074.07, Efficiency(%): 64.00% , Luminous Efficacy(lm/W): 97.55

Central intensity(cd): 1610.013, Maximum intensity(cd): 1679.654

Angle of maximum intensity: C=135.0 γ =1.0

Beam Angle(50%Imax): [C0/180]Total=38.3

[C90/270]Total=58.1

Field angle(10%Imax): [C0/180]Total=63.7

[C90/270]Total=79.5

Maximum s/h(1/2): C0_180=0.61 C90_270=0.92

Maximum s/h(1/4): C0_180=0.68 C90_270=0.86

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 64.01%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.250%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2024/4/30
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	1649.442	0.000	0	0.00%	0.00%
1.0	1644.687	1.576	1.576	0.09%	0.15%
2.0	1628.191	4.698	6.274	0.28%	0.58%
3.0	1604.197	7.731	14.005	0.46%	1.30%
4.0	1573.216	10.636	24.64	0.63%	2.29%
5.0	1535.360	13.373	38.013	0.80%	3.54%
6.0	1491.812	15.909	53.922	0.95%	5.02%
7.0	1447.909	18.247	72.169	1.09%	6.72%
8.0	1402.934	20.403	92.572	1.22%	8.62%
9.0	1357.268	22.370	114.942	1.33%	10.70%
10.0	1321.142	24.239	139.18	1.44%	12.96%
11.0	1282.700	26.018	165.198	1.55%	15.38%
12.0	1243.076	27.610	192.808	1.65%	17.95%
13.0	1205.205	29.055	221.863	1.73%	20.66%
14.0	1174.462	30.460	252.323	1.81%	23.49%
15.0	1142.966	31.815	284.137	1.90%	26.45%
16.0	1105.955	32.953	317.09	1.96%	29.52%
17.0	1076.821	33.992	351.082	2.03%	32.69%
18.0	1048.058	35.035	386.117	2.09%	35.95%
19.0	1015.830	35.907	422.024	2.14%	39.29%
20.0	981.408	36.555	458.579	2.18%	42.70%
21.0	948.467	37.058	495.637	2.21%	46.15%
22.0	911.437	37.376	533.012	2.23%	49.63%
23.0	870.672	37.393	570.406	2.23%	53.11%
24.0	832.073	37.228	607.634	2.22%	56.57%
25.0	789.556	36.872	644.506	2.20%	60.01%
26.0	743.762	36.194	680.7	2.16%	63.38%
27.0	693.228	35.156	715.857	2.09%	66.65%
28.0	640.547	33.768	749.625	2.01%	69.79%
29.0	588.268	32.149	781.774	1.92%	72.79%
30.0	541.154	30.494	812.268	1.82%	75.63%
31.0	490.426	28.707	840.976	1.71%	78.30%
32.0	440.726	26.676	867.652	1.59%	80.78%
33.0	398.450	24.722	892.375	1.47%	83.08%
34.0	341.362	22.389	914.763	1.33%	85.17%
35.0	297.013	19.826	934.589	1.18%	87.01%
36.0	258.830	17.698	952.287	1.05%	88.66%
37.0	222.846	15.710	967.997	0.94%	90.12%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	188.969	13.746	981.743	0.82%	91.40%
39.0	158.351	11.855	993.598	0.71%	92.51%
40.0	136.815	10.294	1003.892	0.61%	93.47%
41.0	108.270	8.727	1012.619	0.52%	94.28%
42.0	87.725	7.121	1019.74	0.42%	94.94%
43.0	72.637	5.940	1025.68	0.35%	95.49%
44.0	60.421	5.022	1030.702	0.30%	95.96%
45.0	49.631	4.229	1034.932	0.25%	96.36%
46.0	41.050	3.546	1038.478	0.21%	96.69%
47.0	33.570	2.968	1041.446	0.18%	96.96%
48.0	27.462	2.467	1043.913	0.15%	97.19%
49.0	22.370	2.046	1045.96	0.12%	97.38%
50.0	17.824	1.676	1047.635	0.10%	97.54%
51.0	14.261	1.357	1048.993	0.08%	97.67%
52.0	11.683	1.113	1050.106	0.07%	97.77%
53.0	9.675	0.929	1051.035	0.06%	97.86%
54.0	7.981	0.778	1051.813	0.05%	97.93%
55.0	6.990	0.668	1052.482	0.04%	97.99%
56.0	6.536	0.611	1053.093	0.04%	98.05%
57.0	6.328	0.588	1053.681	0.04%	98.10%
58.0	6.247	0.582	1054.263	0.03%	98.16%
59.0	6.244	0.584	1054.846	0.03%	98.21%
60.0	6.236	0.590	1055.436	0.04%	98.27%
61.0	6.225	0.595	1056.031	0.04%	98.32%
62.0	6.207	0.599	1056.63	0.04%	98.38%
63.0	6.181	0.603	1057.232	0.04%	98.43%
64.0	6.181	0.607	1057.839	0.04%	98.49%
65.0	6.196	0.613	1058.452	0.04%	98.55%
66.0	6.218	0.619	1059.071	0.04%	98.60%
67.0	6.262	0.628	1059.698	0.04%	98.66%
68.0	6.288	0.636	1060.334	0.04%	98.72%
69.0	6.320	0.643	1060.977	0.04%	98.78%
70.0	6.368	0.652	1061.629	0.04%	98.84%
71.0	6.405	0.660	1062.289	0.04%	98.90%
72.0	6.434	0.668	1062.957	0.04%	98.97%
73.0	6.423	0.672	1063.629	0.04%	99.03%
74.0	6.309	0.669	1064.298	0.04%	99.09%
75.0	6.116	0.656	1064.955	0.04%	99.15%

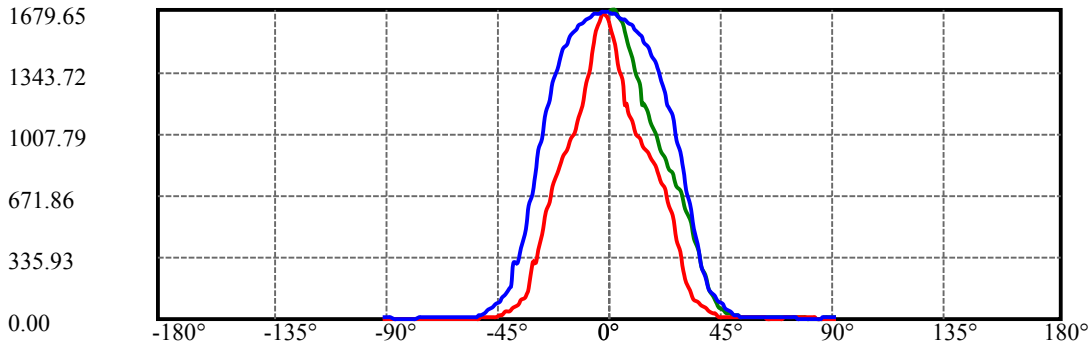
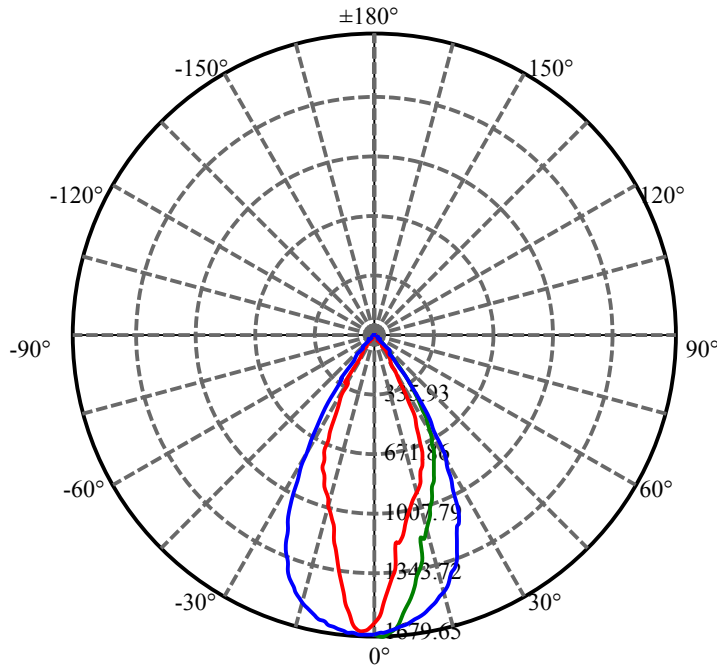
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	5.739	0.629	1065.584	0.04%	99.21%
77.0	5.256	0.586	1066.17	0.03%	99.26%
78.0	5.102	0.554	1066.725	0.03%	99.32%
79.0	4.931	0.539	1067.264	0.03%	99.37%
80.0	4.854	0.527	1067.791	0.03%	99.42%
81.0	4.696	0.516	1068.308	0.03%	99.46%
82.0	4.609	0.505	1068.812	0.03%	99.51%
83.0	4.550	0.498	1069.31	0.03%	99.56%
84.0	4.583	0.498	1069.808	0.03%	99.60%
85.0	5.062	0.526	1070.334	0.03%	99.65%
86.0	6.192	0.615	1070.95	0.04%	99.71%
87.0	7.462	0.747	1071.697	0.04%	99.78%
88.0	7.663	0.828	1072.525	0.05%	99.86%
89.0	7.019	0.805	1073.33	0.05%	99.93%
90.0	6.485	0.740	1074.07	0.04%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	812.27	48.40%	75.63%
0-40	1003.89	59.81%	93.47%
0-60	1055.44	62.89%	98.27%
0-90	1073.33	63.95%	99.93%
0-120	1073.33	63.95%	99.93%
0-180	1074.07	64.00%	100.00%
60-90	17.89	1.07%	1.67%
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%
0-31.69	859.26	51.20%	80.00%

ZONAL LUMEN SUMMARY

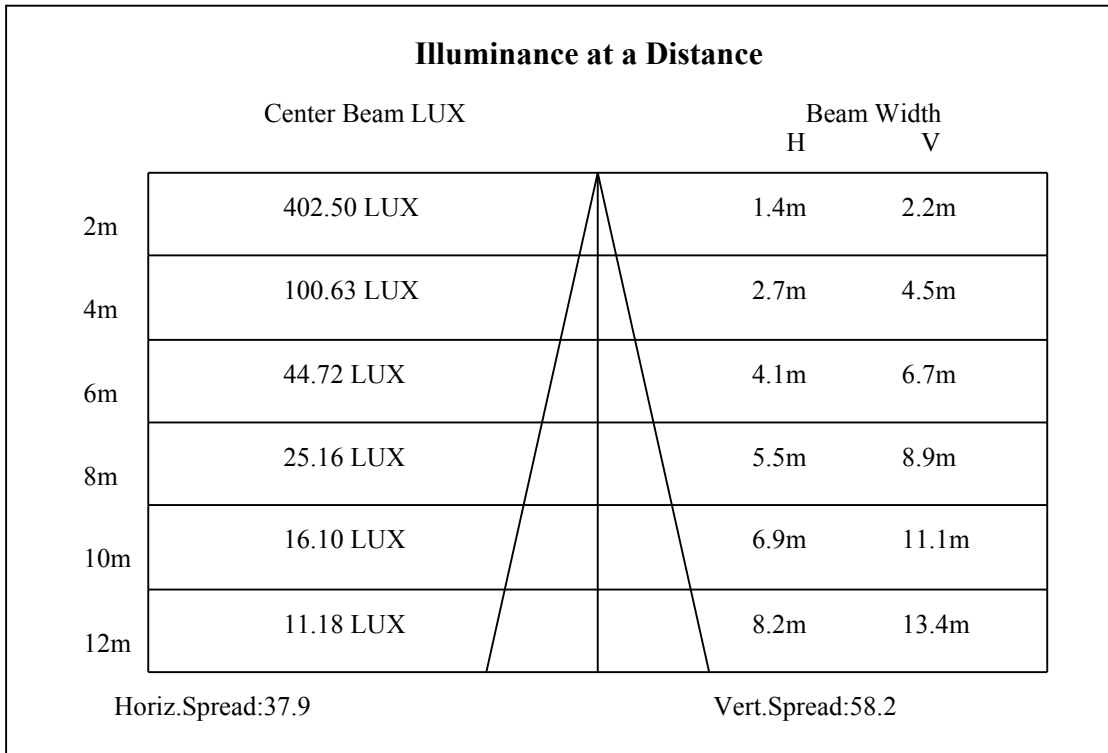
0-10	139.18
10-20	319.40
20-30	353.69
30-40	191.62
40-50	43.74
50-60	7.80
60-70	6.19
70-80	6.16
80-90	5.54
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

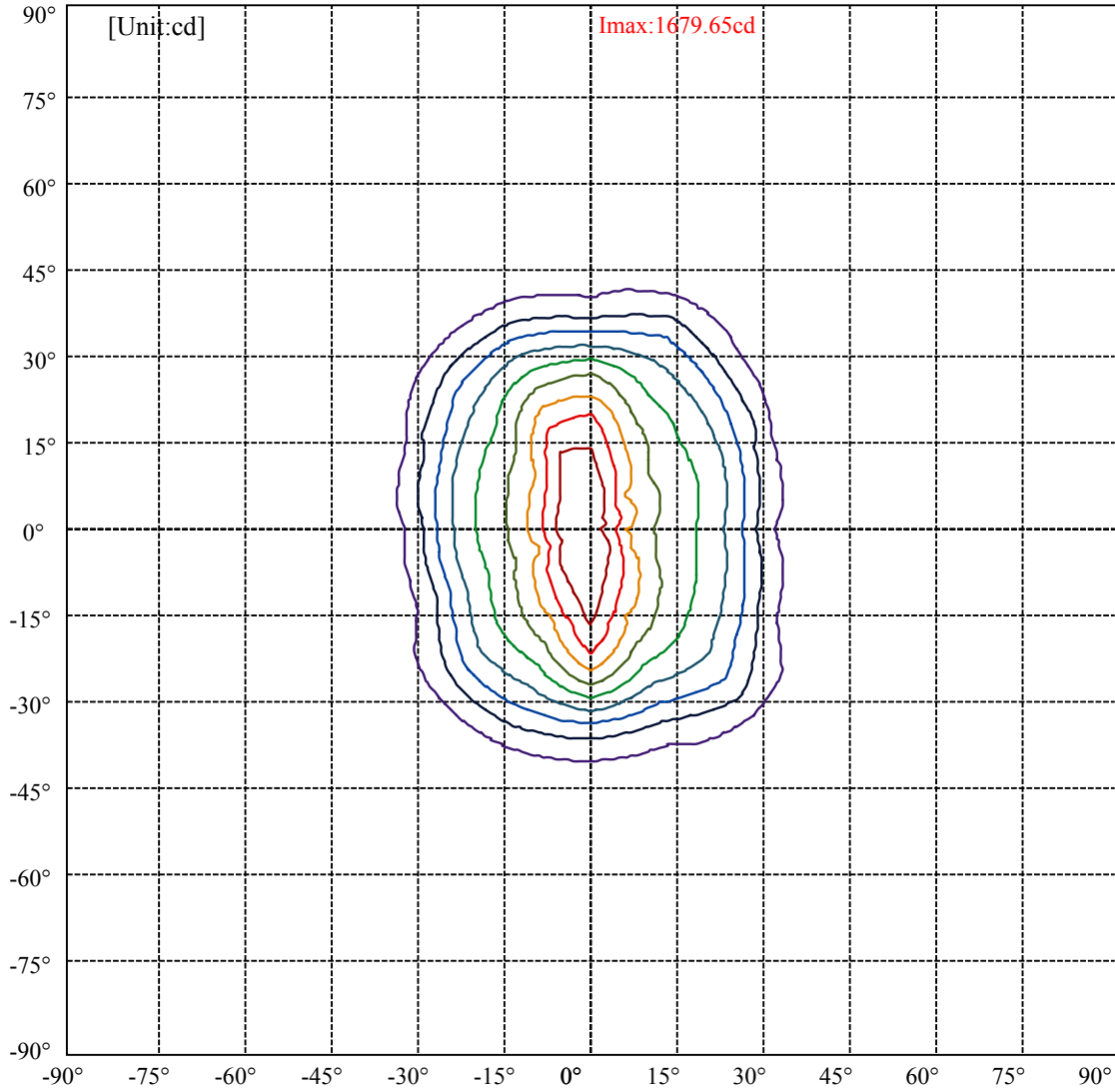


C135(Max): ———
C0/C180: ———
C90/C270: ———

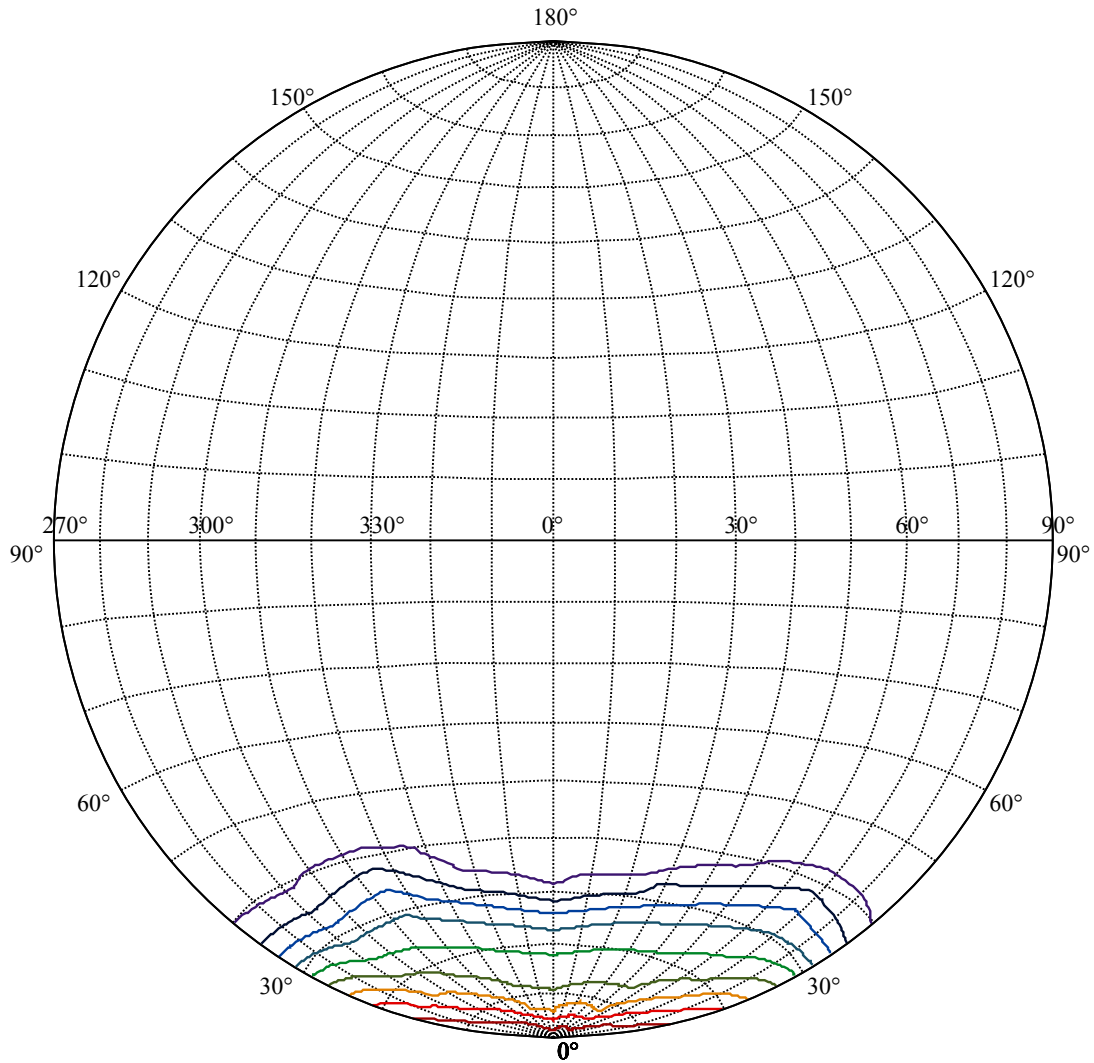
Field angle(10%Imax):C0/180Left:30.0 Right:33.7
:C90/270Left:39.9 Right:39.7

Beam Angle(50%Imax):C0/180Left:17.9 Right:20.3
:C90/270Left:29.0 Right:29.2





(10%Imax) 167.82	—
(20%Imax) 335.639	—
(30%Imax) 503.459	—
(40%Imax) 671.279	—
(50%Imax) 839.098	—
(60%Imax) 1006.92	—
(70%Imax) 1174.74	—
(80%Imax) 1342.56	—
(90%Imax) 1510.38	—



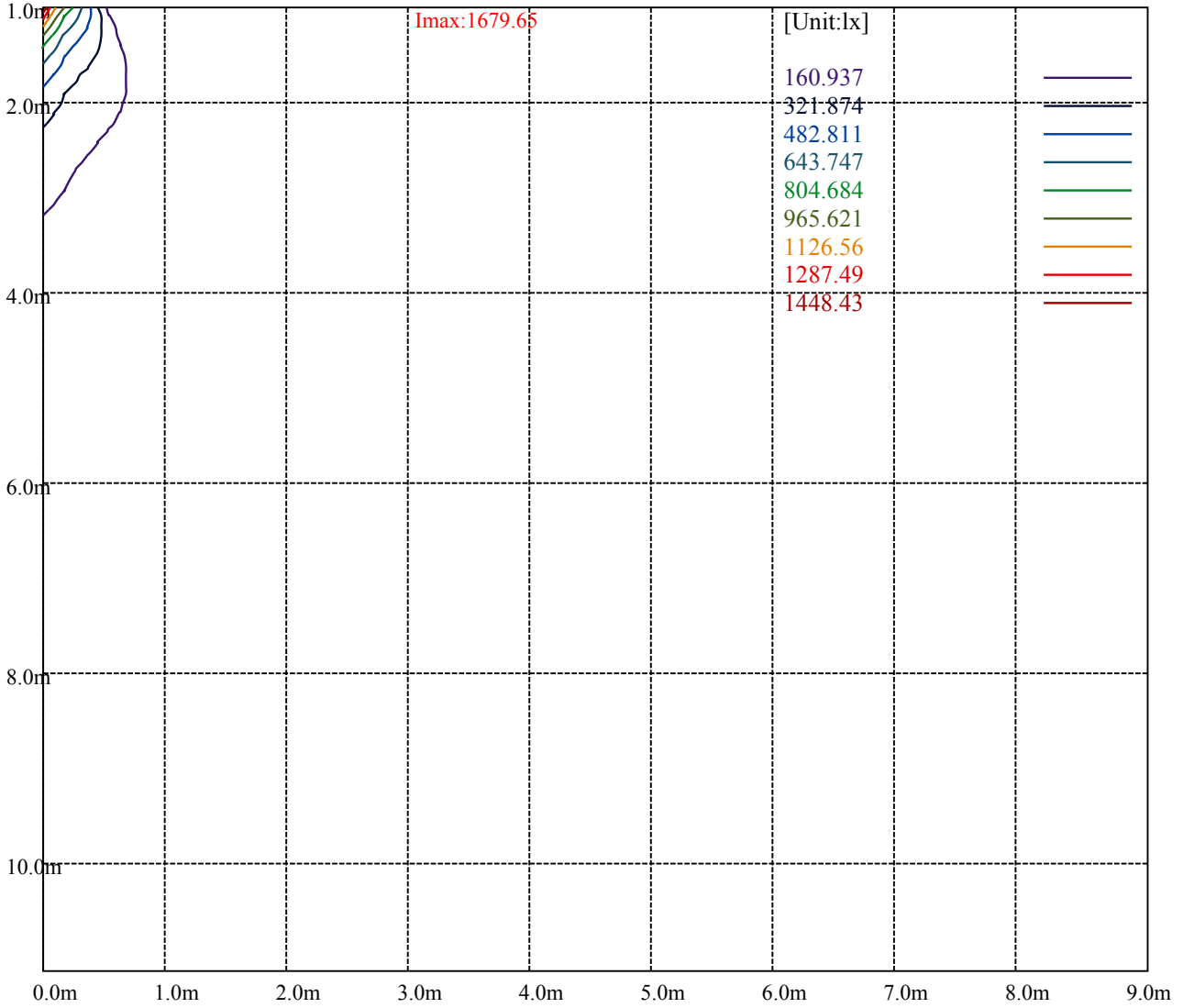
House

[Unit:cd]

Road

I_{max}:1679.65

(10%I _{max})	167.96	—
(20%I _{max})	335.919	—
(30%I _{max})	503.879	—
(40%I _{max})	671.838	—
(50%I _{max})	839.798	—
(60%I _{max})	1007.76	—
(70%I _{max})	1175.72	—
(80%I _{max})	1343.68	—
(90%I _{max})	1511.64	—



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

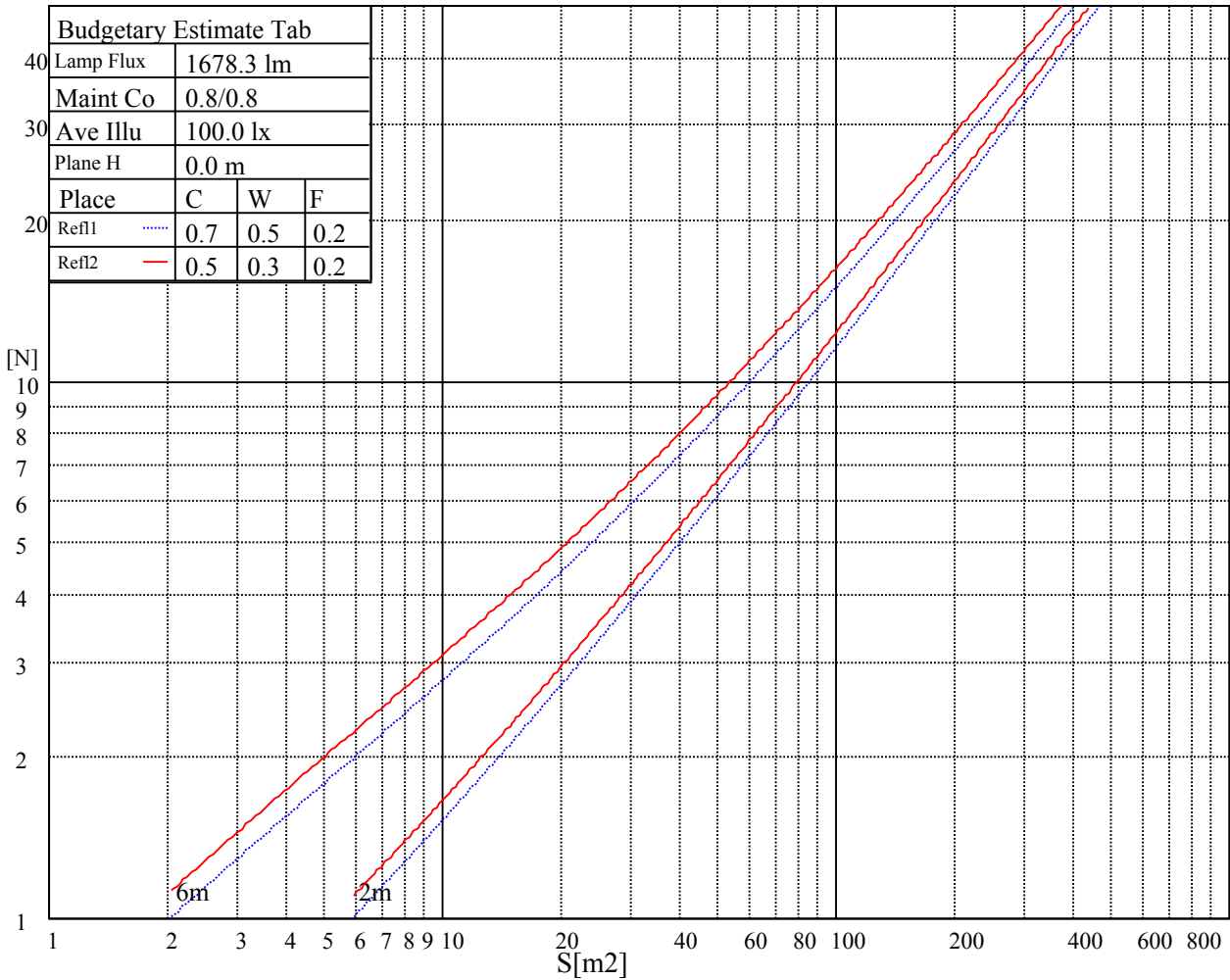
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

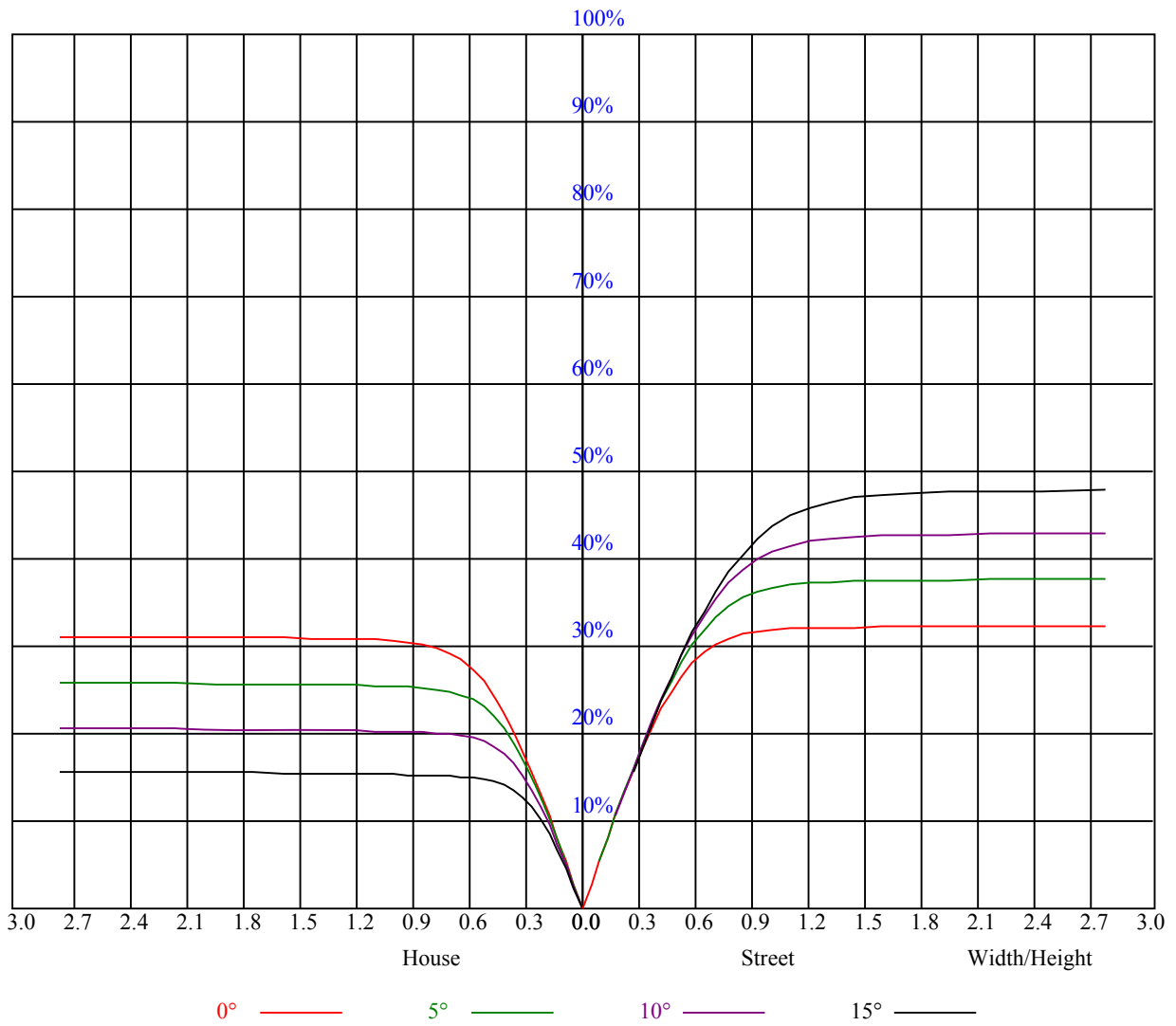
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

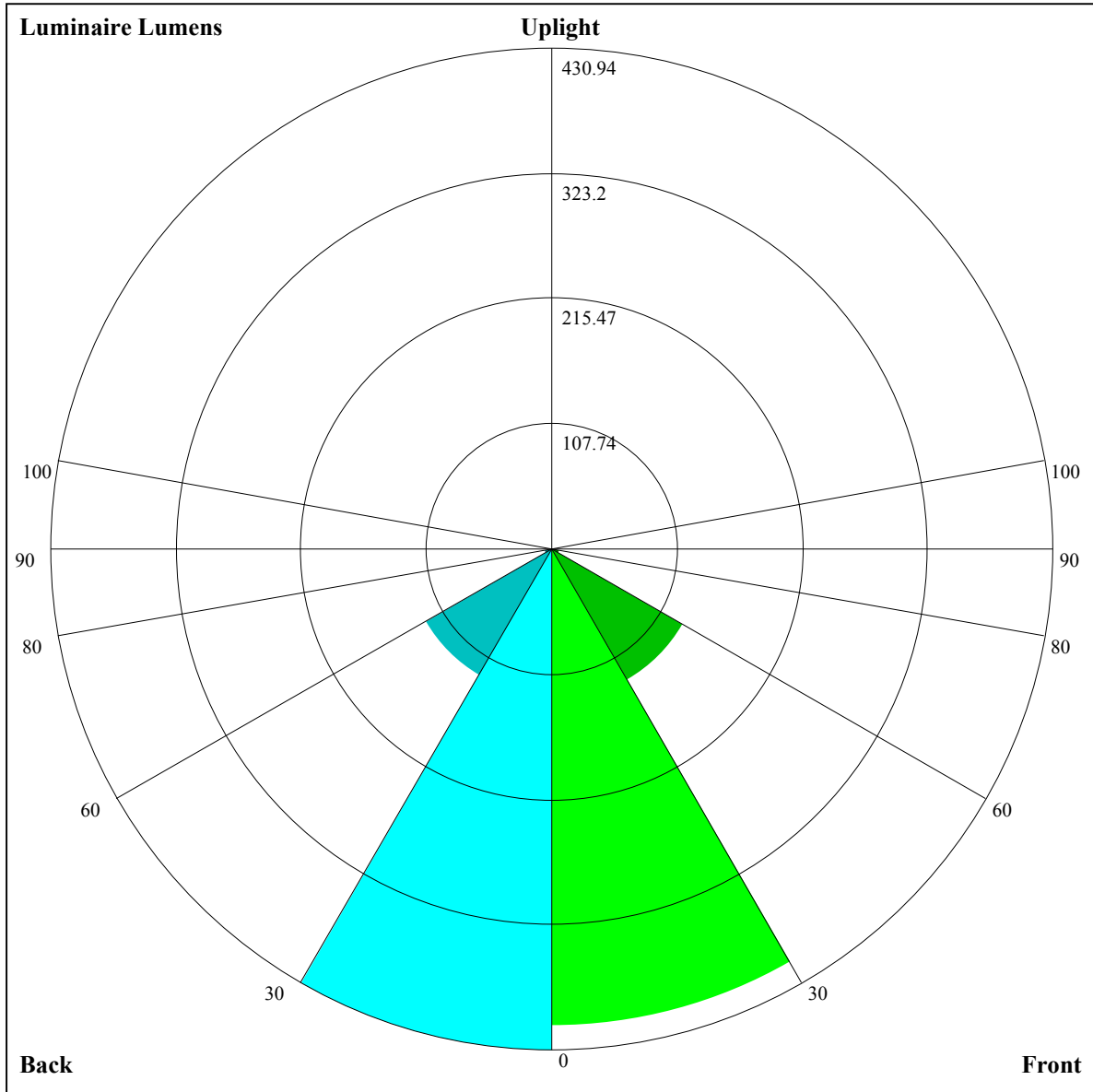
Luminance Limiting Curve





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	0.76	0.76	0.76	0.74	0.74	0.74	0.71	0.71	0.71	0.68	0.68	0.68	0.65	0.65	0.65	0.64
1	0.71	0.69	0.68	0.69	0.68	0.67	0.67	0.66	0.65	0.64	0.64	0.63	0.62	0.62	0.61	0.60
2	0.66	0.63	0.61	0.65	0.63	0.61	0.63	0.61	0.59	0.61	0.59	0.58	0.59	0.58	0.57	0.56
3	0.62	0.59	0.56	0.61	0.58	0.56	0.59	0.57	0.55	0.58	0.56	0.54	0.56	0.55	0.53	0.52
4	0.58	0.54	0.52	0.57	0.54	0.52	0.56	0.53	0.51	0.55	0.52	0.50	0.53	0.51	0.50	0.49
5	0.54	0.51	0.48	0.54	0.50	0.48	0.53	0.50	0.48	0.52	0.49	0.47	0.51	0.48	0.47	0.46
6	0.51	0.48	0.45	0.51	0.47	0.45	0.50	0.47	0.45	0.49	0.46	0.44	0.48	0.46	0.44	0.43
7	0.48	0.45	0.42	0.48	0.45	0.42	0.47	0.44	0.42	0.46	0.44	0.42	0.46	0.43	0.41	0.41
8	0.46	0.42	0.40	0.46	0.42	0.40	0.45	0.42	0.39	0.44	0.41	0.39	0.44	0.41	0.39	0.38
9	0.43	0.40	0.37	0.43	0.40	0.37	0.43	0.39	0.37	0.42	0.39	0.37	0.41	0.39	0.37	0.36
10	0.41	0.38	0.35	0.41	0.38	0.35	0.41	0.37	0.35	0.40	0.37	0.35	0.40	0.37	0.35	0.34





Luminaire Lumens:

FL=409.74,FM=130.3,FH=6.12,FVH=3.22

BL=430.94,BM=125,BH=6.43,BVH=3.01

UL=0,UH=0

BUG Rating:B1-U0-G0

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	1610.01	1562.61	1489.46	1423.91	1358.37	1295.16	1167.23	1167.23	1119.54
22.5	1656.83	1626.98	1586.60	1516.96	1453.76	1388.80	1310.96	1254.78	1202.11
45.0	1631.67	1599.48	1547.98	1499.99	1448.49	1384.12	1334.37	1287.55	1164.60
67.5	1669.71	1658.59	1637.52	1616.45	1584.26	1555.59	1525.15	1493.55	1451.42
90.0	1665.61	1661.51	1656.83	1649.81	1642.20	1632.25	1623.47	1612.94	1602.40
112.5	1653.90	1663.85	1669.12	1674.39	1675.56	1672.05	1666.78	1658.59	1645.13
135.0	1671.46	1679.65	1676.14	1660.93	1639.27	1609.43	1564.36	1523.98	1479.51
157.5	1636.35	1656.25	1663.27	1650.98	1624.06	1583.68	1535.10	1464.29	1401.67
180.0	1610.01	1640.44	1653.90	1645.13	1616.45	1560.85	1504.09	1439.13	1353.68
202.5	1656.83	1667.36	1658.00	1623.47	1581.34	1527.50	1466.63	1384.70	1316.81
225.0	1631.67	1656.83	1669.12	1669.12	1654.49	1626.98	1594.80	1542.71	1492.97
247.5	1669.71	1676.73	1677.90	1674.97	1666.78	1653.90	1631.08	1608.26	1583.09
270.0	1665.61	1667.95	1668.53	1666.78	1663.27	1660.34	1656.25	1648.05	1639.27
292.5	1653.90	1640.44	1625.81	1610.60	1591.29	1563.78	1541.54	1516.38	1489.46
315.0	1671.46	1653.90	1628.74	1595.97	1545.05	1502.92	1456.10	1407.52	1348.42
337.5	1636.35	1602.40	1542.13	1487.70	1426.84	1348.42	1291.06	1156.87	1156.87
360.0	1610.01	1562.61	1489.46	1423.91	1358.37	1295.16	1167.23	1167.23	1119.54
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	1075.76	1030.23	1001.32	975.92	948.59	929.40	905.75	885.80	864.32
22.5	1154.71	1110.82	1064.00	1032.98	1006.65	977.38	955.15	934.66	910.67
45.0	1164.60	1145.11	1107.95	1064.41	1033.62	1000.33	976.86	955.15	934.14
67.5	1416.89	1382.36	1348.42	1303.94	1268.24	1232.54	1189.24	1155.29	1121.35
90.0	1593.04	1577.24	1562.61	1546.22	1528.67	1504.09	1481.85	1457.27	1432.10
112.5	1631.08	1614.11	1595.38	1568.46	1543.88	1517.55	1487.70	1447.91	1412.79
135.0	1420.40	1371.24	1320.91	1270.58	1165.18	1165.18	1124.45	1085.42	1050.01
157.5	1322.67	1259.46	1200.94	1138.91	1095.01	1057.56	1023.62	984.99	955.73
180.0	1285.21	1219.67	1161.73	1098.53	1056.39	1016.59	985.58	948.12	918.86
202.5	1157.58	1157.58	1119.54	1074.41	1035.38	1001.61	962.87	935.31	907.39
225.0	1428.59	1374.17	1317.40	1248.93	1195.67	1146.51	1103.79	1055.22	1019.52
247.5	1552.66	1510.52	1474.83	1439.13	1389.38	1348.42	1307.45	1229.03	1157.69
270.0	1631.08	1618.21	1607.67	1593.63	1579.00	1562.61	1546.22	1519.30	1496.48
292.5	1454.93	1425.08	1394.06	1356.02	1323.84	1291.65	1249.51	1164.77	1164.77
315.0	1304.53	1261.22	1209.72	1170.51	1131.88	1086.24	1055.80	1024.20	989.09
337.5	1122.58	1081.26	1036.73	1006.65	981.89	953.74	931.62	912.83	894.22
360.0	1075.76	1030.23	1001.32	975.92	948.59	929.40	905.75	885.80	864.32
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	838.69	803.10	773.84	743.35	708.94	659.90	614.02	562.05	503.53
22.5	890.19	862.68	838.10	811.18	783.09	746.81	712.86	675.41	632.10
45.0	908.74	888.90	868.59	847.99	826.34	798.07	774.66	743.76	716.32
67.5	1079.80	1046.44	1005.48	973.87	942.86	913.01	875.56	846.29	817.03
90.0	1397.58	1367.14	1334.37	1293.41	1235.47	1163.78	1152.43	1102.15	1047.67
112.5	1375.92	1328.52	1288.72	1247.76	1193.33	1150.03	1103.21	1042.34	992.60
135.0	1008.87	977.03	938.35	909.56	881.41	845.83	817.91	789.76	753.83
157.5	928.23	900.72	865.02	838.69	810.01	770.21	734.52	694.14	635.03
180.0	891.94	858.00	826.98	791.28	745.05	702.33	640.29	585.28	522.08
202.5	871.22	842.84	803.81	769.98	732.82	691.97	631.57	578.09	520.15
225.0	987.92	958.07	917.69	888.43	860.92	826.40	798.31	770.80	733.93
247.5	1157.69	1100.69	1055.16	1010.45	965.80	911.66	869.47	828.44	788.18
270.0	1470.73	1440.88	1395.82	1354.27	1309.21	1258.29	1189.82	1129.54	1066.34
292.5	1126.85	1088.52	1048.02	1007.46	956.43	914.18	873.04	831.72	779.75
315.0	963.34	939.34	914.18	883.16	860.34	836.93	814.69	784.26	759.68
337.5	871.22	850.39	828.39	804.63	770.98	741.36	710.81	668.85	631.98
360.0	838.69	803.10	773.84	743.35	708.94	659.90	614.02	562.05	503.53

Intensity data(cd)

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	425.46	362.84	289.98	238.60	195.17	153.33	128.52	109.38	90.77
22.5	569.48	512.13	451.27	390.99	317.84	303.79	303.79	167.26	138.99
45.0	687.35	646.73	611.79	574.75	522.02	475.38	426.10	375.60	311.87
67.5	788.36	751.49	723.40	694.72	658.44	627.42	594.65	550.17	510.37
90.0	973.64	912.42	848.46	782.97	698.70	630.17	560.29	490.95	404.74
112.5	941.69	890.77	827.57	778.99	728.66	678.92	613.37	561.29	505.11
135.0	724.92	694.49	662.59	619.81	582.12	541.22	496.86	439.27	391.11
157.5	581.77	508.62	448.34	389.23	331.88	304.96	304.96	180.89	151.40
180.0	458.87	378.11	316.67	301.45	301.45	164.45	138.99	118.92	103.12
202.5	459.40	381.63	321.87	267.80	211.03	174.98	147.24	121.14	105.22
225.0	701.74	658.44	620.40	575.92	526.18	479.36	414.40	358.80	313.74
247.5	739.55	700.63	662.53	624.61	575.98	534.54	480.82	435.88	378.23
270.0	984.99	916.52	828.15	755.58	683.02	611.62	524.42	454.19	389.82
292.5	738.85	697.41	643.22	598.92	553.04	492.35	442.49	391.93	329.60
315.0	734.52	703.50	676.58	641.47	609.86	582.36	550.76	501.60	467.07
337.5	581.07	533.02	479.47	422.65	351.43	296.77	247.55	204.54	161.05
360.0	425.46	362.84	289.98	238.60	195.17	153.33	128.52	109.38	90.77
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	79.06	68.71	58.93	48.28	40.61	33.59	27.15	19.66	14.28
22.5	112.30	96.15	82.87	71.46	59.05	50.39	42.49	35.29	26.92
45.0	264.70	221.74	182.94	142.91	118.10	98.14	78.48	66.01	53.20
67.5	467.65	411.47	364.07	314.91	303.21	245.33	172.41	140.69	115.17
90.0	341.36	284.89	225.66	189.26	156.49	136.88	120.91	103.82	90.89
112.5	433.71	376.94	307.30	307.30	246.61	175.51	141.39	120.56	103.82
135.0	343.00	285.30	240.76	200.09	156.20	126.64	102.24	78.36	63.91
157.5	122.66	105.52	92.06	80.59	70.23	58.52	49.57	39.39	32.48
180.0	88.08	77.02	64.61	55.36	45.94	37.81	28.68	22.00	16.21
202.5	89.19	78.13	68.00	58.52	49.39	39.09	31.78	25.11	18.96
225.0	300.28	240.29	170.77	142.21	113.36	93.93	76.84	65.37	56.12
247.5	331.12	285.18	241.46	192.13	158.54	130.80	108.79	88.02	75.08
270.0	328.95	301.45	301.45	187.21	162.63	139.52	125.12	112.66	97.67
292.5	282.08	239.47	202.25	164.62	141.10	122.84	108.21	92.82	81.76
315.0	423.18	380.45	324.27	299.11	299.11	186.92	141.62	112.13	88.78
337.5	133.96	112.83	96.09	79.65	68.47	56.42	47.93	40.32	31.49
360.0	79.06	68.71	58.93	48.28	40.61	33.59	27.15	19.66	14.28
C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	9.42	6.55	6.14	6.03	6.03	5.97	5.79	5.79	6.03
22.5	20.95	15.39	10.77	6.67	6.09	5.91	5.79	5.68	5.56
45.0	44.59	37.28	29.50	24.11	19.31	15.04	10.89	8.60	6.91
67.5	91.18	76.72	65.25	55.71	45.47	37.92	29.14	23.35	18.43
90.0	78.30	65.95	51.15	39.97	30.02	22.41	16.33	13.34	9.77
112.5	90.07	75.20	64.67	54.89	45.47	34.82	27.21	19.90	15.80
135.0	52.79	43.95	35.11	29.44	24.70	20.66	16.62	13.87	10.77
157.5	26.34	19.31	14.40	10.42	7.32	5.97	5.74	5.68	5.62
180.0	10.77	8.13	6.61	6.44	5.91	5.44	5.33	5.15	5.15
202.5	12.76	9.19	7.08	5.85	5.79	5.68	5.56	5.33	5.27
225.0	45.76	38.68	32.36	26.45	21.42	16.21	12.76	10.18	8.31
247.5	64.49	55.71	46.23	39.27	32.89	25.75	20.66	15.45	12.41
270.0	85.79	71.10	59.34	47.99	37.34	26.28	20.19	16.09	12.64
292.5	68.82	59.58	50.97	40.79	33.30	26.45	19.55	15.51	12.35
315.0	66.89	54.54	43.19	36.23	30.61	24.87	20.95	17.44	14.28
337.5	25.16	19.49	14.34	9.13	6.26	5.79	5.68	5.56	5.50
360.0	9.42	6.55	6.14	6.03	6.03	5.97	5.79	5.79	6.03

Intensity data(cd)

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	6.03	5.38	5.33	5.27	5.27	5.27	5.27	5.27	5.27
22.5	5.50	5.50	5.44	5.38	5.33	5.27	5.21	5.21	5.21
45.0	6.26	6.14	6.09	6.03	5.97	5.97	5.97	5.91	5.85
67.5	13.40	10.65	8.90	7.43	6.55	6.55	6.55	6.50	6.44
90.0	7.43	7.20	7.14	7.14	7.08	7.08	7.02	7.02	7.08
112.5	12.82	9.19	7.43	6.91	6.85	6.85	6.85	6.91	6.96
135.0	8.78	7.32	6.55	6.38	6.44	6.50	6.55	6.61	6.67
157.5	5.56	5.50	5.50	5.56	5.62	5.56	5.50	5.50	5.50
180.0	5.15	5.03	5.09	5.09	5.03	5.15	5.21	5.21	5.15
202.5	5.21	5.15	5.15	5.09	5.09	5.09	5.15	5.09	5.03
225.0	7.02	6.61	6.61	6.73	6.79	6.79	6.79	6.67	6.44
247.5	10.12	8.66	7.37	7.02	7.02	7.02	7.02	7.02	7.02
270.0	8.84	7.72	7.67	7.61	7.61	7.61	7.61	7.61	7.67
292.5	9.07	7.26	7.14	7.14	7.14	7.14	7.14	7.14	7.14
315.0	11.06	9.07	7.55	6.73	6.44	6.38	6.32	6.32	6.32
337.5	5.44	5.44	5.62	5.74	5.74	5.68	5.62	5.62	5.56
360.0	6.03	5.38	5.33	5.27	5.27	5.27	5.27	5.27	5.27
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	5.21	5.21	5.21	5.21	5.21	5.21	5.21	5.27	5.27
22.5	5.15	5.15	5.15	5.27	5.33	5.33	5.33	5.33	5.27
45.0	5.79	5.74	5.74	5.74	5.74	5.68	5.62	5.56	5.62
67.5	6.38	6.38	6.44	6.44	6.44	6.38	6.38	6.50	6.32
90.0	7.14	7.26	7.37	7.43	7.55	7.49	7.49	7.61	7.49
112.5	6.96	7.02	7.08	7.20	7.37	7.61	7.78	7.90	8.13
135.0	6.73	6.67	6.61	6.55	6.55	6.61	6.67	6.79	6.91
157.5	5.44	5.44	5.38	5.33	5.38	5.38	5.38	5.44	5.50
180.0	4.92	4.74	4.74	4.68	4.68	4.68	4.68	4.68	4.74
202.5	4.97	4.97	5.09	5.09	5.15	5.15	5.15	5.21	5.21
225.0	6.38	6.32	6.32	6.26	6.26	6.26	6.26	6.32	6.44
247.5	7.02	7.08	7.20	7.32	7.43	7.55	7.72	7.90	8.08
270.0	7.72	7.84	7.84	8.02	8.13	8.19	8.31	8.54	8.72
292.5	7.20	7.20	7.14	7.20	7.26	7.37	7.37	7.26	7.32
315.0	6.32	6.32	6.32	6.32	6.26	6.32	6.38	6.26	6.14
337.5	5.56	5.56	5.50	5.44	5.44	5.38	5.38	5.33	5.33
360.0	5.21	5.21	5.21	5.21	5.21	5.21	5.21	5.27	5.27
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	5.27	5.33	5.38	5.44	5.38	5.38	5.44	5.50	5.56
22.5	5.27	5.27	5.27	5.27	5.27	5.33	5.33	5.33	5.33
45.0	5.68	5.62	5.38	5.38	5.38	5.03	4.86	4.74	4.62
67.5	6.20	6.26	5.97	5.68	5.44	4.92	4.62	4.56	4.51
90.0	7.37	6.85	6.03	4.62	4.51	4.39	4.33	4.27	4.27
112.5	8.31	8.31	8.31	7.72	5.91	4.51	4.45	4.33	4.33
135.0	7.14	7.26	7.26	7.32	7.26	6.55	5.62	4.68	4.62
157.5	5.56	5.68	5.79	5.85	5.97	6.03	6.03	5.79	5.62
180.0	4.74	4.74	4.74	4.74	4.74	4.74	4.74	4.68	4.74
202.5	5.27	5.33	5.27	5.33	5.33	5.38	5.38	5.38	5.27
225.0	6.55	6.73	6.85	6.96	6.91	6.91	6.91	6.26	5.74
247.5	8.19	8.43	8.43	8.37	7.90	4.74	4.45	4.39	4.33
270.0	8.78	8.49	8.31	7.72	5.68	4.56	4.39	4.27	4.21
292.5	7.14	6.96	6.73	6.26	5.21	4.80	4.74	4.62	4.68
315.0	6.14	6.20	6.09	6.03	5.85	5.68	5.38	5.15	4.97
337.5	5.33	5.33	5.15	5.15	5.09	5.15	4.97	4.92	4.86
360.0	5.27	5.33	5.38	5.44	5.38	5.38	5.44	5.50	5.56

Intensity data(cd)

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	5.50	5.38	5.21	4.92	4.80	4.74	4.51	4.51	4.45
22.5	5.27	5.21	5.03	4.92	4.80	5.62	6.61	6.67	6.67
45.0	4.56	4.51	4.68	5.21	6.73	8.54	9.25	8.95	7.72
67.5	4.45	4.45	4.45	4.62	5.50	7.20	9.13	9.19	8.25
90.0	4.21	4.21	4.21	4.33	5.56	8.90	8.72	7.37	6.14
112.5	4.33	4.33	4.27	4.27	4.27	5.15	7.61	7.67	7.26
135.0	4.51	4.51	4.45	4.45	4.97	6.44	8.84	9.42	7.72
157.5	5.15	4.68	4.56	4.56	4.56	4.74	6.14	7.84	8.25
180.0	4.74	4.68	4.68	4.62	4.62	4.56	4.56	4.45	4.45
202.5	4.97	4.74	4.68	4.68	4.68	5.03	5.79	6.79	7.49
225.0	4.68	4.51	4.51	4.45	4.45	4.86	6.03	9.95	9.48
247.5	4.33	4.33	4.27	4.21	4.68	5.85	6.91	6.61	5.97
270.0	4.21	4.21	4.21	4.27	4.21	4.56	9.31	7.78	6.61
292.5	4.62	4.56	4.39	4.51	6.96	10.24	9.36	7.84	6.50
315.0	4.80	4.68	4.51	4.51	4.74	6.38	9.01	9.66	8.31
337.5	4.80	4.74	4.68	4.80	5.44	6.26	7.61	7.90	7.02
360.0	5.50	5.38	5.21	4.92	4.80	4.74	4.51	4.51	4.45

C/γ(°)	90.0
0.0	4.45
22.5	6.38
45.0	7.26
67.5	6.96
90.0	5.79
112.5	6.32
135.0	7.02
157.5	7.78
180.0	4.45
202.5	6.61
225.0	7.90
247.5	6.03
270.0	5.97
292.5	6.61
315.0	7.37
337.5	6.85
360.0	4.45