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

Nata

LumCAT: 2-2322-M
Luminaire: 92.70.129.00
Report No: 210724-B007
Test No: 210724-C007
LampCAT: CREE CXA1820 LES12
Lamp flux(lm): 2199.5
Number of Lamps: 1
Length(mm): 570
Phm Type: C

Voltage(V): 36.6500
Current(A): 0.5010
Power (W): 18.3610
PF: 0.0000
Ballast type: DC
Width(mm): 45
Height(mm): 20

Photometric Results

Lumens(lm): 2130.00
Efficiency(%): 96.84%
Lumens(lm)/Power(W): 116.01
Central intensity(cd): 2112.188
Maximum intensity(cd): 2937.375
Angle of maximum intensity: C=202.5 γ=19.0
Beam Angle(50%Imax): [C0/180]Total=67.4
[C90/270]Total=41.4
Field angle(10%Imax): [C0/180]Total=78.5
[C90/270]Total=64.7
Maximum s/h(1/2): C0_180=1.22 C90_270=0.56
Maximum s/h(1/4): C0_180=0.99 C90_270=0.66
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 96.84%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.329%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2069.859	0.000	0	.000%	.000%
1.0	2071.652	1.982	1.982	.090%	.093%
2.0	2079.211	5.958	7.939	.271%	.373%
3.0	2093.484	9.980	17.919	.454%	.841%
4.0	2109.621	14.069	31.988	.640%	1.502%
5.0	2125.230	18.218	50.206	.828%	2.357%
6.0	2140.207	22.416	72.622	1.019%	3.410%
7.0	2157.328	26.675	99.297	1.213%	4.662%
8.0	2168.965	30.962	130.26	1.408%	6.115%
9.0	2177.824	35.228	165.488	1.602%	7.769%
10.0	2184.047	39.473	204.961	1.795%	9.623%
11.0	2182.746	43.633	248.594	1.984%	11.671%
12.0	2174.906	47.635	296.23	2.166%	13.908%
13.0	2159.859	51.443	347.673	2.339%	16.323%
14.0	2137.957	55.012	402.684	2.501%	18.905%
15.0	2110.887	58.330	461.014	2.652%	21.644%
16.0	2087.283	61.515	522.529	2.797%	24.532%
17.0	2059.949	64.584	587.113	2.936%	27.564%
18.0	2022.711	67.314	654.427	3.060%	30.724%
19.0	1983.885	69.707	724.134	3.169%	33.997%
20.0	1935.330	71.733	795.866	3.261%	37.365%
21.0	1883.074	73.321	869.187	3.334%	40.807%
22.0	1829.732	74.610	943.798	3.392%	44.310%
23.0	1778.495	75.710	1019.508	3.442%	47.864%
24.0	1719.025	76.468	1095.976	3.477%	51.454%
25.0	1656.988	76.763	1172.739	3.490%	55.058%
26.0	1595.187	76.768	1249.507	3.490%	58.662%
27.0	1522.582	76.277	1325.784	3.468%	62.243%
28.0	1446.824	75.179	1400.963	3.418%	65.773%
29.0	1369.399	73.680	1474.644	3.350%	69.232%
30.0	1278.752	71.500	1546.143	3.251%	72.589%
31.0	1177.425	68.352	1614.495	3.108%	75.798%
32.0	1074.867	64.526	1679.021	2.934%	78.827%
33.0	964.185	60.071	1739.092	2.731%	81.648%
34.0	852.553	54.980	1794.072	2.500%	84.229%
35.0	747.056	49.678	1843.75	2.259%	86.561%
36.0	641.791	44.221	1887.971	2.011%	88.637%
37.0	543.284	38.651	1926.621	1.757%	90.452%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	455.706	33.345	1959.966	1.516%	92.017%
39.0	360.949	27.875	1987.841	1.267%	93.326%
40.0	281.436	22.404	2010.245	1.019%	94.378%
41.0	211.634	17.558	2027.803	.798%	95.202%
42.0	156.048	13.359	2041.162	.607%	95.829%
43.0	110.018	9.856	2051.017	.448%	96.292%
44.0	81.018	7.210	2058.228	.328%	96.631%
45.0	62.054	5.498	2063.726	.250%	96.889%
46.0	47.496	4.284	2068.01	.195%	97.090%
47.0	38.507	3.421	2071.431	.156%	97.250%
48.0	31.430	2.827	2074.258	.129%	97.383%
49.0	26.740	2.389	2076.647	.109%	97.495%
50.0	23.629	2.100	2078.747	.095%	97.594%
51.0	21.625	1.915	2080.661	.087%	97.684%
52.0	20.064	1.789	2082.45	.081%	97.768%
53.0	18.728	1.687	2084.138	.077%	97.847%
54.0	17.677	1.605	2085.742	.073%	97.922%
55.0	16.886	1.543	2087.285	.070%	97.995%
56.0	16.200	1.495	2088.78	.068%	98.065%
57.0	15.606	1.454	2090.234	.066%	98.133%
58.0	15.064	1.418	2091.653	.064%	98.200%
59.0	14.600	1.387	2093.039	.063%	98.265%
60.0	14.147	1.358	2094.398	.062%	98.329%
61.0	13.767	1.332	2095.73	.061%	98.391%
62.0	13.430	1.311	2097.04	.060%	98.453%
63.0	13.159	1.293	2098.333	.059%	98.513%
64.0	12.913	1.279	2099.613	.058%	98.574%
65.0	12.727	1.269	2100.882	.058%	98.633%
66.0	12.558	1.262	2102.143	.057%	98.692%
67.0	12.410	1.255	2103.399	.057%	98.751%
68.0	12.273	1.250	2104.649	.057%	98.810%
69.0	12.129	1.245	2105.894	.057%	98.868%
70.0	11.992	1.239	2107.133	.056%	98.927%
71.0	11.862	1.233	2108.365	.056%	98.984%
72.0	11.707	1.226	2109.591	.056%	99.042%
73.0	11.605	1.219	2110.81	.055%	99.099%
74.0	11.503	1.215	2112.025	.055%	99.156%
75.0	11.405	1.210	2113.235	.055%	99.213%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	11.278	1.204	2114.439	.055%	99.270%
77.0	11.162	1.196	2115.636	.054%	99.326%
78.0	11.046	1.189	2116.825	.054%	99.382%
79.0	10.905	1.179	2118.004	.054%	99.437%
80.0	10.747	1.167	2119.171	.053%	99.492%
81.0	10.610	1.155	2120.326	.053%	99.546%
82.0	10.466	1.143	2121.469	.052%	99.600%
83.0	10.294	1.129	2122.598	.051%	99.653%
84.0	10.129	1.113	2123.71	.051%	99.705%
85.0	9.935	1.095	2124.805	.050%	99.756%
86.0	9.773	1.077	2125.883	.049%	99.807%
87.0	9.548	1.057	2126.94	.048%	99.856%
88.0	9.355	1.036	2127.976	.047%	99.905%
89.0	9.211	1.018	2128.993	.046%	99.953%
90.0	9.095	1.004	2129.997	.046%	100.000%

Zonal flux distribution table

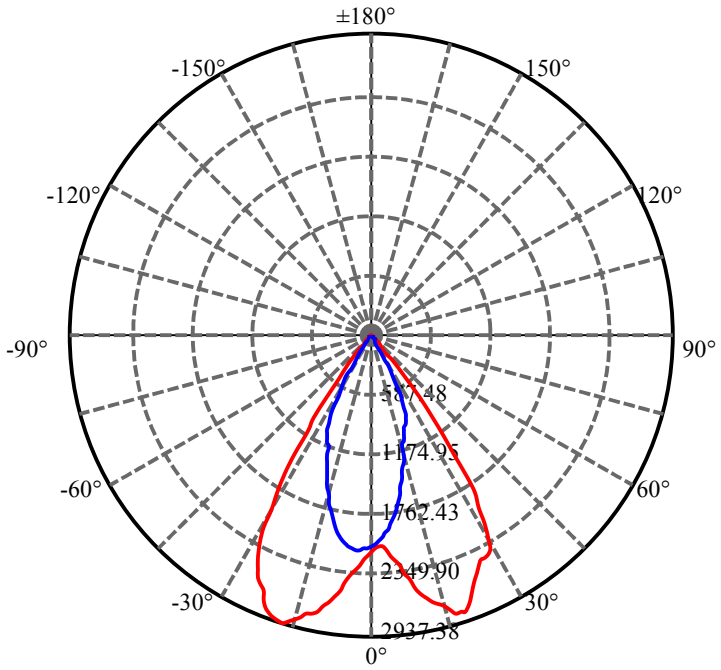
ZONAL LUMEN SUMMARY

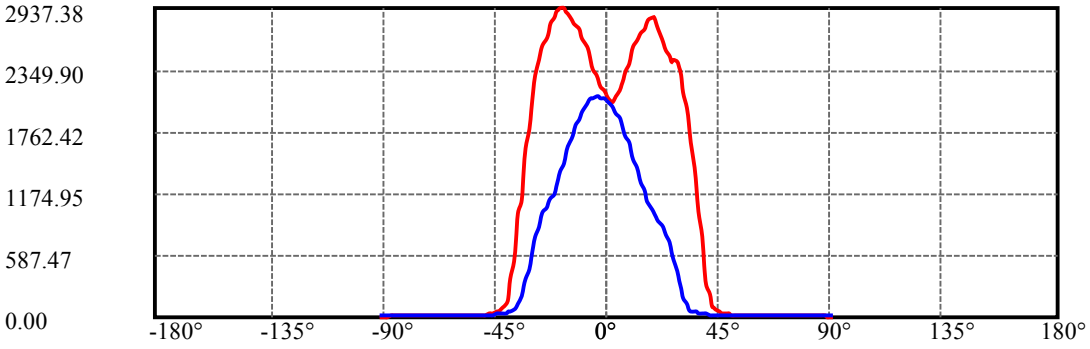
Zone	Lumens	%Lamp	%Fixt
0-30	1546.14	70.29%	72.59%
0-40	2010.25	91.40%	94.38%
0-60	2094.40	95.22%	98.33%
0-90	2128.99	96.79%	99.95%
0-120	2128.99	96.79%	99.95%
0-180	2130.00	96.84%	100.00%
60-90	35.95	1.63%	1.69%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-32.42	1704.00	77.47%	80.00%

ZONAL LUMEN SUMMARY

0-10	204.96
10-20	590.90
20-30	750.28
30-40	464.10
40-50	68.50
50-60	15.65
60-70	12.74
70-80	12.04
80-90	9.82
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

Light Distribution Curve [Unit:cd]





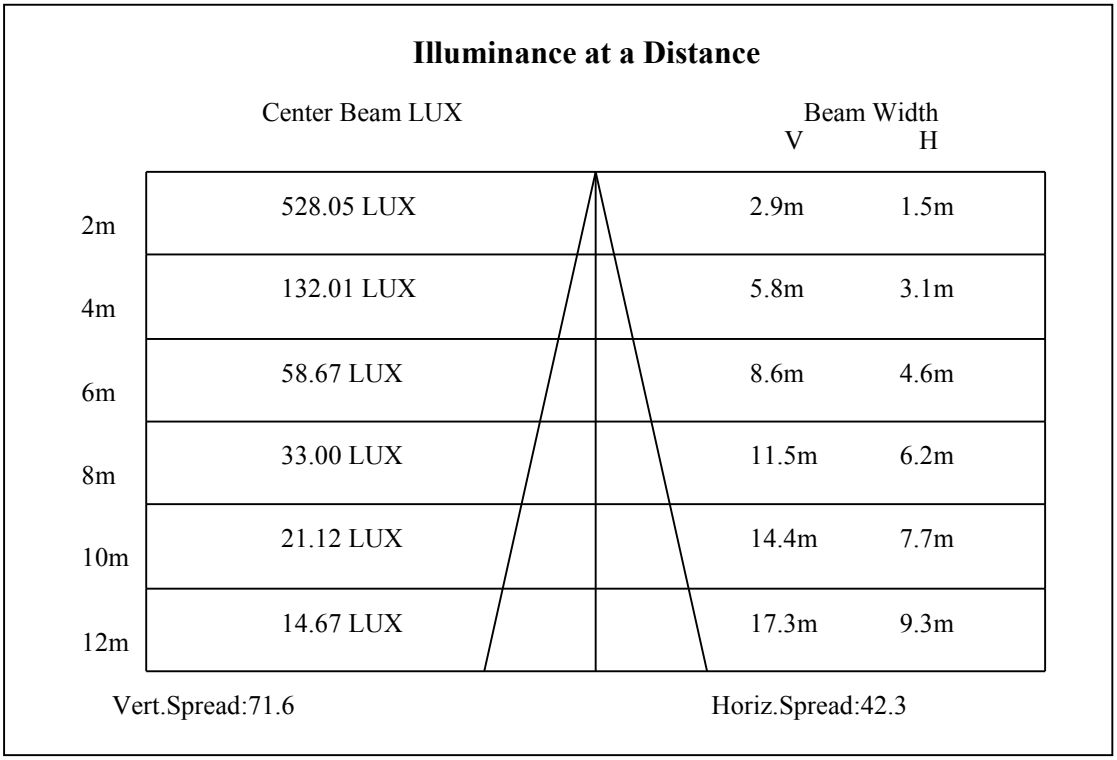
C0/C180:

C90/C270:

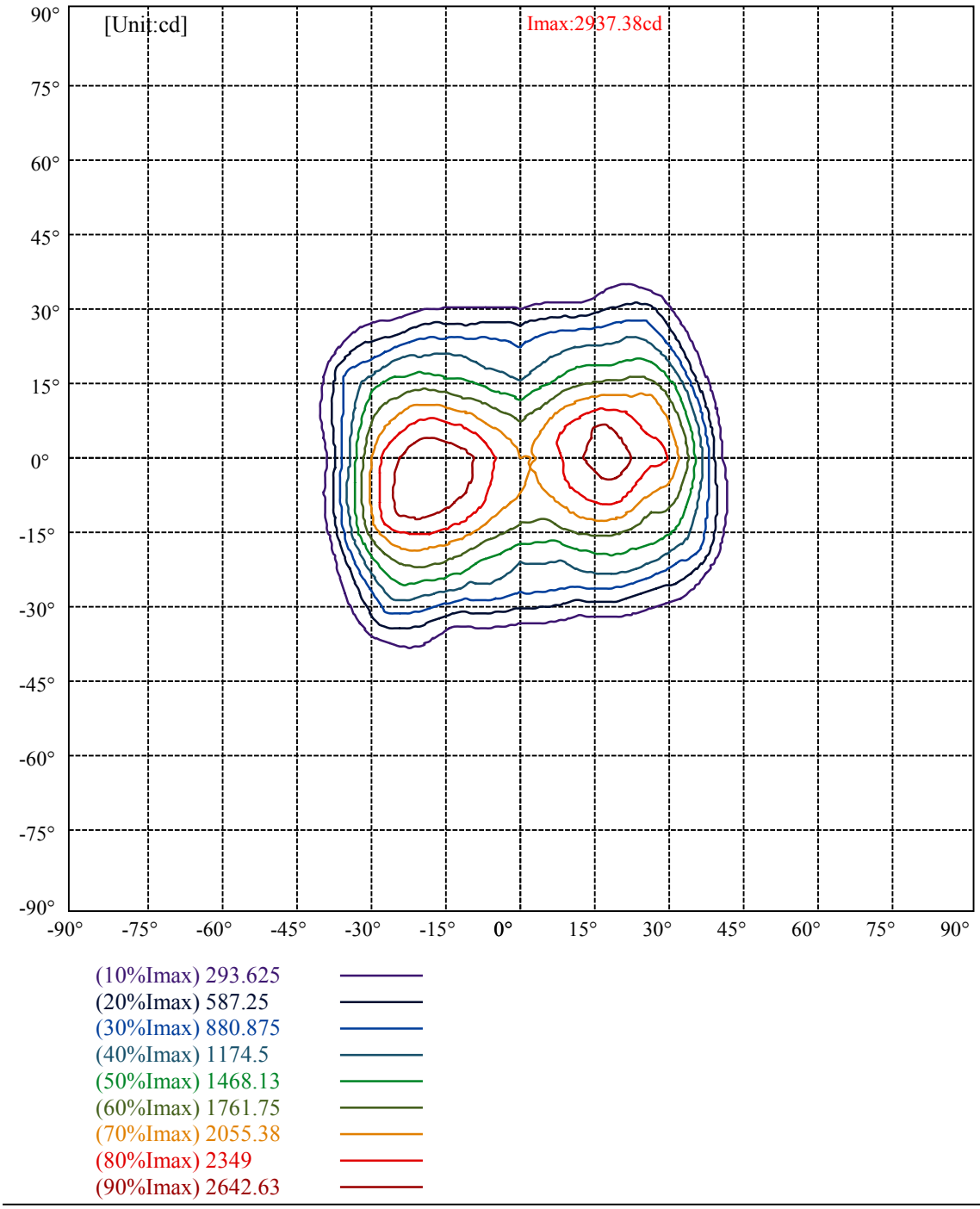
Field angle(10%Imax):C0/180Left:21.4 Right:57.2
:C90/270Left:30.9 Right:33.8

Beam Angle(50%Imax):C0/180Left:15.6 Right:51.8
:C90/270Left:20.9 Right:20.5

Lux distance Curve



ISO-Intensity(V-H)

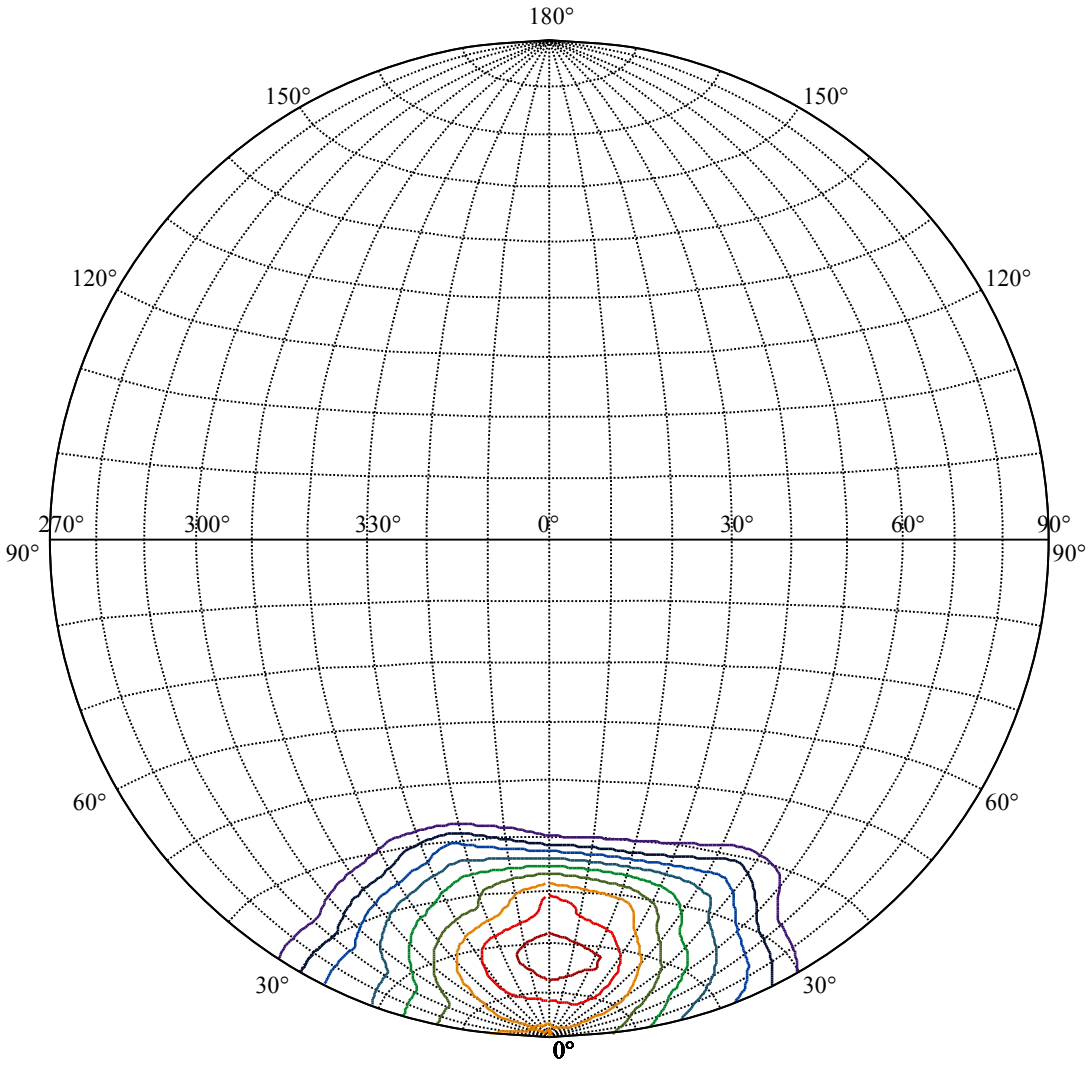


Equipment: GMS1980
Temperature(°C): 25.0

Date: 2021/7/24
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:2937.38

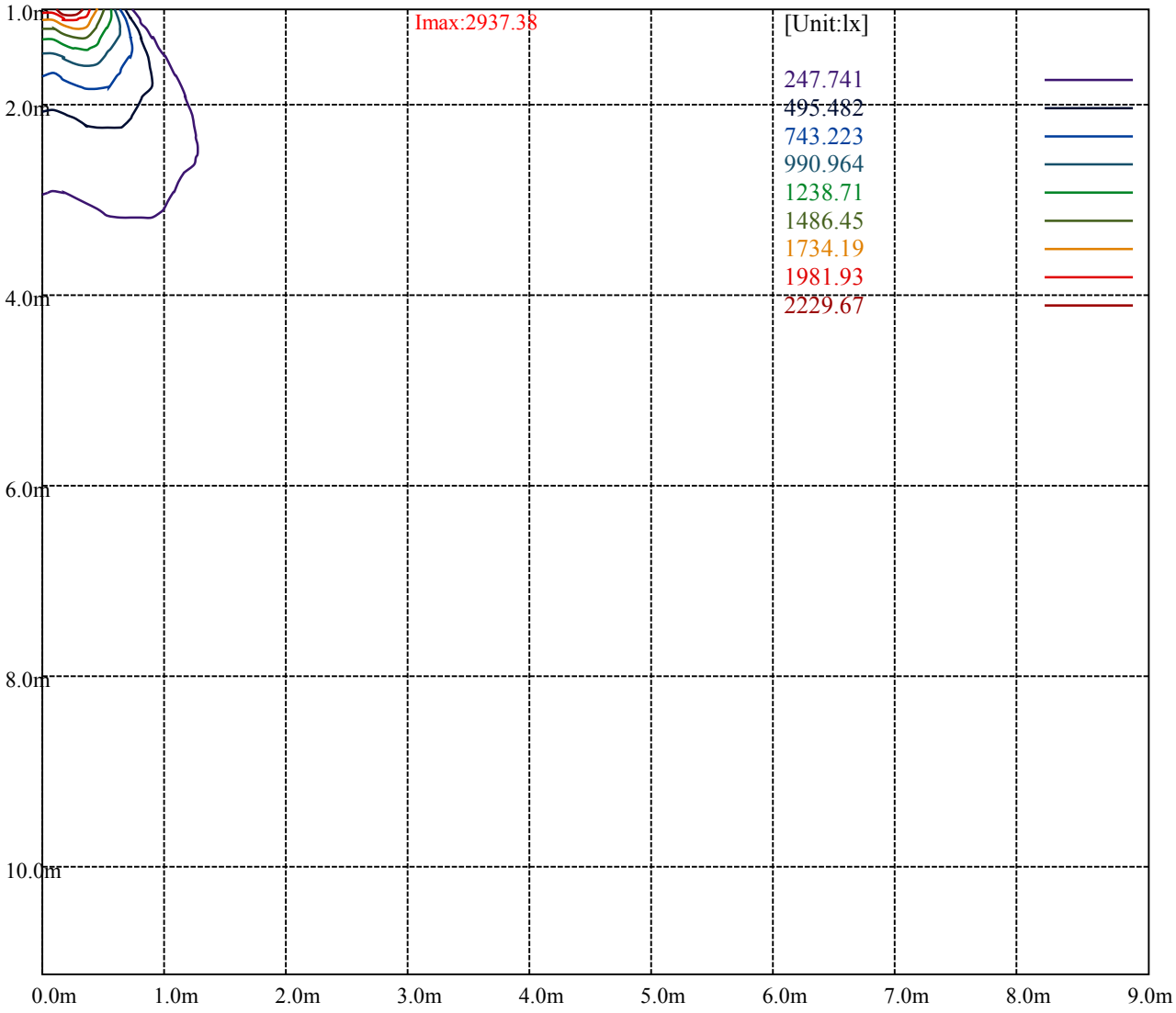
(10%Imax) 293.689
(20%Imax) 587.378
(30%Imax) 881.066
(40%Imax) 1174.76
(50%Imax) 1468.44
(60%Imax) 1762.13
(70%Imax) 2055.82
(80%Imax) 2349.51
(90%Imax) 2643.2

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2021/7/24
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2021/7/24
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

Nata 2-2322-M

Luminance Limitting Curve(no luminous side)

Luminance Table

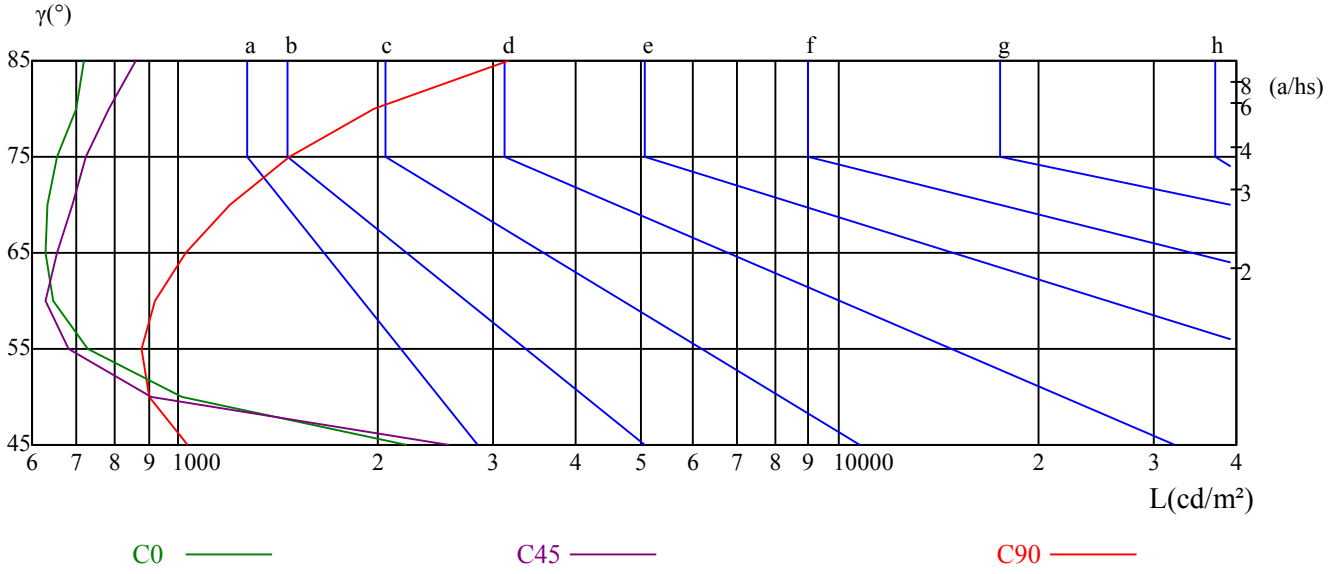
γ	45	50	55	60	65	70	75	80	85
C0	2222	1010	730	644	630	632	653	699	720
C45	2559	906	683	627	655	690	726	782	862
C90	1034	901	881	922	1023	1193	1468	1980	3161

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1217	1134	1152	1724	1699	1680	4315	4567	4410

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 Limitting Curve

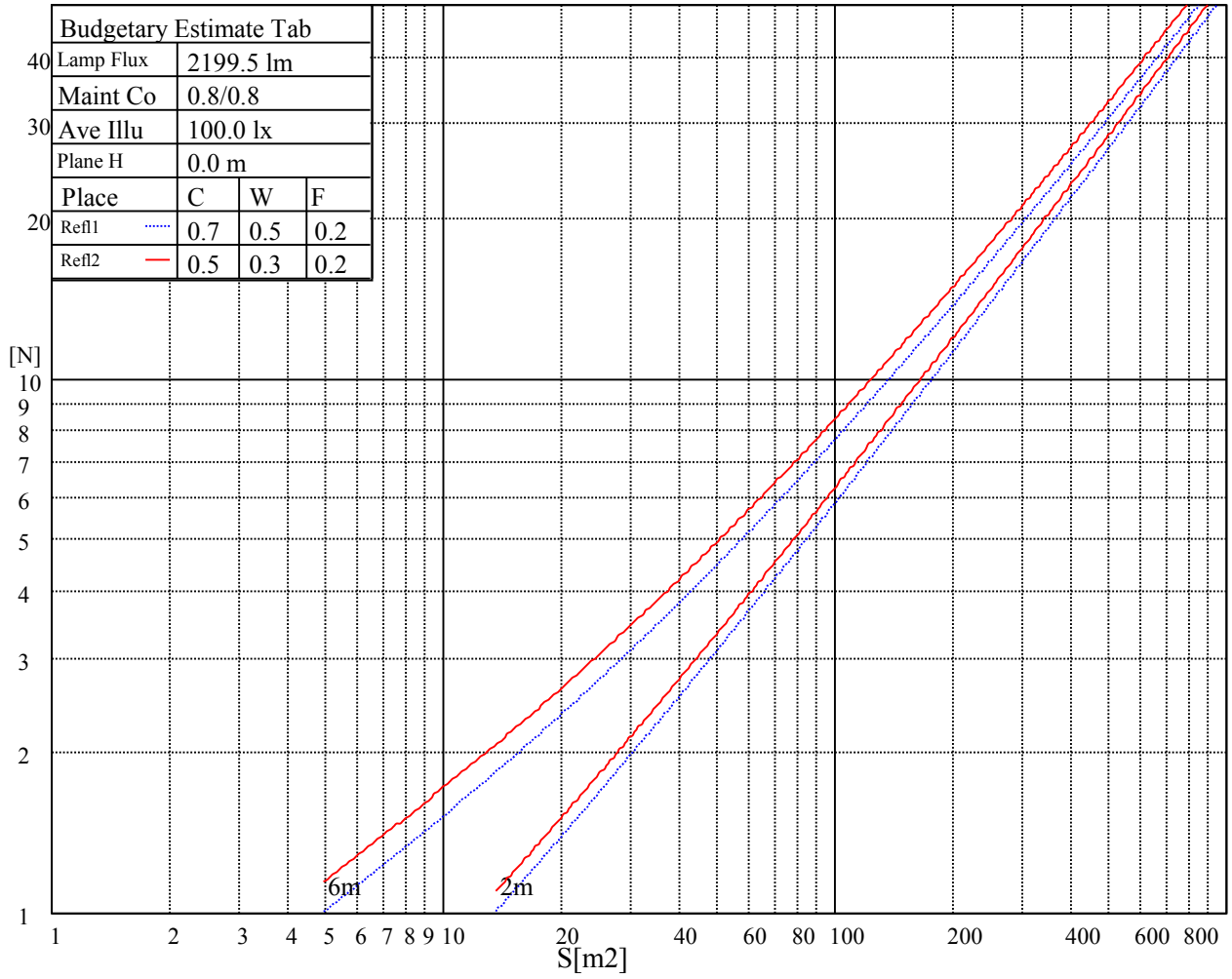


Equipment: GMS1980
Temperature(°C): 25.0

Date: 2021/7/24
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

Budgetary Estimate Table

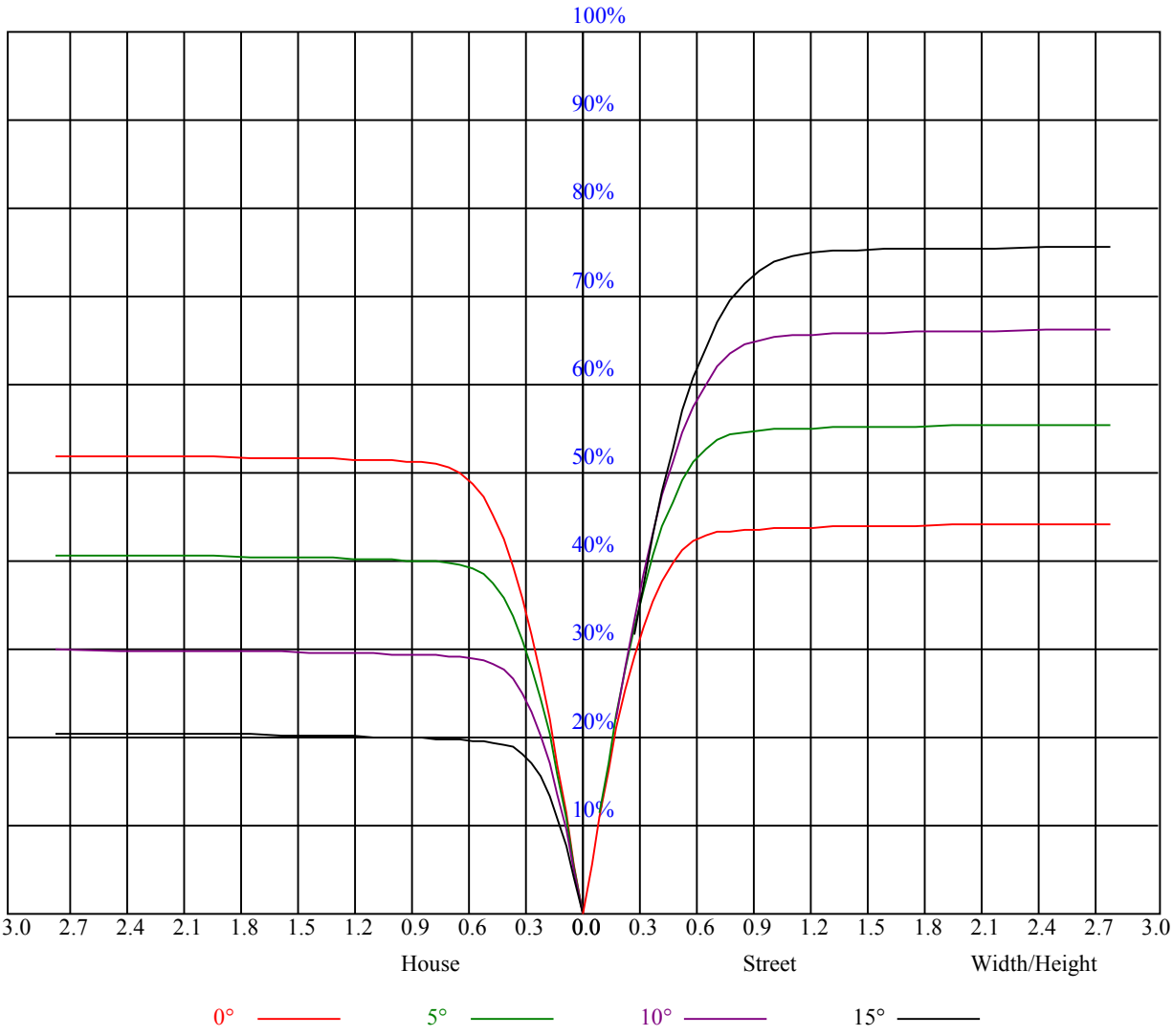


Equipment: GMS1980 Date: 2021/7/24 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 65.0% Distance(m): 7.50

Utilization factor table for indoor luminaire

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	COEFFCIENTS OF UTILIZATION RHOFC=20 CU															
0	1.15	1.15	1.15	1.13	1.13	1.13	1.08	1.08	1.08	1.03	1.03	1.03	0.99	0.99	0.99	0.97
1	1.07	1.04	1.02	1.05	1.03	1.01	1.01	0.99	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.90
2	0.99	0.95	0.92	0.98	0.94	0.91	0.95	0.92	0.89	0.92	0.89	0.87	0.89	0.87	0.85	0.84
3	0.93	0.88	0.84	0.91	0.87	0.83	0.89	0.85	0.82	0.86	0.83	0.81	0.84	0.82	0.79	0.78
4	0.87	0.81	0.77	0.86	0.81	0.77	0.83	0.79	0.76	0.82	0.78	0.75	0.80	0.77	0.74	0.73
5	0.81	0.76	0.71	0.80	0.75	0.71	0.79	0.74	0.70	0.77	0.73	0.70	0.75	0.72	0.69	0.68
6	0.76	0.70	0.66	0.75	0.70	0.66	0.74	0.69	0.66	0.73	0.68	0.65	0.71	0.68	0.65	0.63
7	0.72	0.66	0.62	0.71	0.66	0.62	0.70	0.65	0.61	0.69	0.64	0.61	0.68	0.64	0.61	0.59
8	0.68	0.62	0.58	0.67	0.61	0.58	0.66	0.61	0.57	0.65	0.60	0.57	0.64	0.60	0.57	0.56
9	0.64	0.58	0.54	0.63	0.58	0.54	0.62	0.57	0.54	0.61	0.57	0.54	0.61	0.57	0.53	0.52
10	0.60	0.55	0.51	0.60	0.54	0.51	0.59	0.54	0.51	0.58	0.54	0.51	0.58	0.53	0.50	0.49

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2021/7/24	Operator: NT07
Temperature(°C): 25.0	Humidity(%): 65.0%	Distance(m): 7.50

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	2112.19	2076.75	2052.00	2052.56	2096.44	2154.94	2205.00	2270.25	2337.75
22.5	2050.88	2028.94	2038.50	2081.25	2136.38	2176.31	2233.13	2297.81	2358.00
45.0	2036.25	2021.06	2025.00	2047.50	2073.94	2090.81	2108.25	2128.50	2147.63
67.5	2054.25	2028.38	2004.75	1983.94	1968.19	1947.38	1929.38	1915.31	1890.00
90.0	2057.06	2034.56	2009.25	1975.50	1933.31	1892.25	1838.25	1775.81	1719.56
112.5	2070.00	2067.75	2062.69	2046.94	2025.56	2001.38	1965.38	1926.56	1876.50
135.0	2090.81	2107.69	2121.19	2127.94	2126.81	2122.31	2111.06	2104.31	2090.81
157.5	2087.44	2116.13	2153.25	2191.50	2220.19	2253.94	2293.88	2331.00	2368.69
180.0	2112.19	2156.06	2193.75	2248.88	2300.06	2355.75	2430.00	2509.31	2578.50
202.5	2050.88	2089.13	2133.56	2193.19	2237.63	2291.63	2352.94	2429.44	2490.19
225.0	2036.25	2063.25	2107.13	2147.63	2187.56	2228.06	2257.31	2289.38	2319.75
247.5	2054.25	2081.25	2107.13	2137.50	2153.81	2165.63	2174.06	2167.31	2156.06
270.0	2057.06	2072.81	2085.75	2093.63	2091.94	2087.44	2071.69	2052.56	2025.00
292.5	2070.00	2071.69	2066.63	2057.06	2046.94	2032.31	2012.63	1988.44	1962.56
315.0	2090.81	2076.75	2062.69	2052.56	2054.25	2061.00	2080.69	2099.25	2108.25
337.5	2087.44	2054.25	2044.13	2058.19	2100.94	2142.56	2179.69	2232.00	2274.19
360.0	2112.19	2076.75	2052.00	2052.56	2096.44	2154.94	2205.00	2270.25	2337.75

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2408.63	2502.56	2571.19	2626.88	2662.31	2706.75	2734.88	2782.69	2835.00
22.5	2441.25	2505.94	2541.38	2549.25	2585.81	2597.06	2616.75	2658.38	2639.25
45.0	2154.38	2180.25	2179.13	2178.56	2156.63	2105.44	2071.13	2030.06	1968.19
67.5	1851.75	1806.19	1753.88	1707.19	1645.31	1587.38	1527.19	1463.63	1417.50
90.0	1653.75	1569.94	1501.88	1431.00	1343.81	1276.88	1212.75	1116.34	1071.62
112.5	1816.88	1759.50	1690.31	1627.31	1557.56	1485.00	1420.88	1357.31	1294.88
135.0	2067.75	2046.38	2026.13	2001.38	1967.63	1922.63	1858.50	1801.13	1743.19
157.5	2420.44	2440.13	2456.44	2455.31	2482.31	2480.63	2449.69	2430.56	2430.00
180.0	2635.88	2671.88	2737.69	2776.50	2786.63	2834.44	2876.06	2904.75	2936.25
202.5	2564.44	2634.75	2676.38	2707.31	2773.69	2800.69	2805.75	2850.75	2878.31
225.0	2359.69	2388.38	2423.25	2460.38	2463.19	2463.75	2440.69	2442.94	2428.88
247.5	2135.81	2109.94	2084.63	2052.56	2014.31	1959.75	1899.00	1848.38	1797.19
270.0	1974.94	1928.81	1879.31	1823.06	1756.13	1693.13	1615.50	1545.19	1464.19
292.5	1933.31	1895.63	1852.31	1808.44	1760.63	1694.25	1636.31	1576.13	1504.69
315.0	2109.94	2111.63	2113.88	2114.44	2099.25	2089.13	2080.69	2056.50	2025.00
337.5	2316.38	2392.88	2436.19	2478.94	2502.56	2510.44	2528.44	2531.81	2525.06
360.0	2408.63	2502.56	2571.19	2626.88	2662.31	2706.75	2734.88	2782.69	2835.00

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2837.81	2842.88	2786.63	2729.81	2644.31	2589.75	2541.94	2472.75	2433.38
22.5	2639.25	2577.38	2520.56	2445.75	2385.56	2342.81	2291.06	2238.19	2210.63
45.0	1921.50	1880.44	1801.13	1748.81	1684.13	1606.50	1532.25	1467.56	1404.56
67.5	1364.63	1319.06	1277.44	1247.06	1204.88	1150.31	1109.25	1055.25	989.44
90.0	1022.57	977.91	949.16	914.06	876.77	843.24	781.99	705.99	625.73
112.5	1239.19	1188.00	1145.25	1112.63	1076.63	1032.19	988.31	925.31	827.44
135.0	1689.75	1645.31	1585.13	1501.31	1470.38	1437.19	1376.44	1338.75	1301.06
157.5	2399.06	2388.38	2342.81	2293.88	2234.81	2179.13	2099.81	2012.63	1901.81
180.0	2929.50	2915.44	2895.19	2854.69	2794.50	2703.38	2651.63	2591.44	2538.56
202.5	2902.50	2937.38	2931.19	2930.06	2922.19	2914.88	2862.56	2774.25	2728.13
225.0	2374.31	2327.63	2305.69	2248.88	2190.38	2146.50	2069.44	2009.25	1967.06
247.5	1721.81	1650.38	1589.63	1521.56	1458.00	1410.75	1372.50	1328.06	1267.31
270.0	1383.19	1312.31	1234.69	1164.38	1124.44	1087.88	1040.06	1002.38	949.50
292.5	1432.13	1369.13	1293.75	1217.81	1167.19	1118.36	1079.72	1033.88	974.70
315.0	1983.94	1918.69	1848.94	1795.50	1726.88	1659.94	1591.88	1538.44	1486.13
337.5	2522.25	2491.88	2458.13	2403.00	2314.69	2233.13	2115.56	2017.69	1917.56
360.0	2837.81	2842.88	2786.63	2729.81	2644.31	2589.75	2541.94	2472.75	2433.38

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	2436.19	2422.13	2378.25	2296.13	2134.69	1986.19	1839.38	1662.75	1414.13
22.5	2199.38	2144.81	2071.69	1951.88	1815.19	1697.06	1566.00	1384.88	1209.38
45.0	1379.81	1322.44	1287.56	1247.63	1245.38	1207.13	1121.74	1081.01	985.56
67.5	892.13	799.31	690.19	586.13	469.13	359.44	291.94	208.69	137.42
90.0	544.33	434.76	350.10	271.41	189.11	121.78	81.90	58.95	51.41
112.5	725.06	620.44	504.00	407.25	321.19	296.44	169.93	102.94	71.27
135.0	1235.81	1113.98	1095.98	1014.02	906.30	770.57	653.34	525.15	414.73
157.5	1819.69	1764.00	1705.50	1682.44	1575.56	1479.38	1354.50	1248.19	1146.38
180.0	2444.63	2298.94	2147.06	1963.69	1796.06	1599.19	1391.06	1118.64	984.99
202.5	2636.44	2585.25	2480.63	2361.38	2190.38	2034.00	1856.25	1677.94	1502.44
225.0	1904.06	1862.44	1804.50	1708.31	1645.88	1586.25	1521.00	1465.31	1405.13
247.5	1115.04	1096.03	1001.93	880.14	784.58	663.13	531.23	435.88	337.39
270.0	864.00	768.38	673.88	567.56	458.44	368.44	288.00	200.70	130.95
292.5	909.00	826.48	709.20	612.84	516.38	403.71	322.82	246.26	176.12
315.0	1428.19	1369.69	1308.38	1226.25	1128.94	1018.69	910.69	788.63	657.56
337.5	1827.56	1720.13	1701.56	1683.00	1661.63	1606.50	1527.19	1434.94	1328.06
360.0	2436.19	2422.13	2378.25	2296.13	2134.69	1986.19	1839.38	1662.75	1414.13

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	1222.31	999.00	766.69	495.56	311.63	211.05	108.62	92.25	75.15
22.5	1014.19	781.88	538.88	360.56	290.25	126.84	84.60	69.41	54.39
45.0	898.43	824.68	719.49	623.08	492.41	357.81	253.74	165.38	101.14
67.5	99.73	77.96	63.28	54.62	46.80	40.28	35.16	31.73	28.86
90.0	46.07	40.44	35.66	30.26	27.51	25.54	23.74	21.88	20.53
112.5	56.14	50.06	43.88	37.97	32.85	29.87	26.83	24.86	23.18
135.0	326.76	236.64	170.38	115.54	82.18	68.01	59.85	50.57	43.82
157.5	1082.25	1000.69	928.69	771.75	606.94	414.56	296.44	133.71	93.71
180.0	737.61	533.64	358.71	180.39	122.85	96.36	81.17	62.04	48.60
202.5	1235.25	1082.98	869.46	655.65	411.86	277.31	172.86	101.03	79.76
225.0	1323.56	1206.00	1123.88	969.75	881.44	771.19	647.44	524.25	399.38
247.5	232.76	183.88	137.81	100.69	77.29	66.49	57.26	49.05	43.03
270.0	88.43	64.58	57.38	50.18	42.86	37.69	33.53	30.21	27.84
292.5	105.19	73.91	59.91	52.71	45.51	39.43	34.76	31.28	28.46
315.0	550.13	438.75	347.06	291.38	185.29	139.84	102.94	79.54	66.04
337.5	1249.88	1097.44	1070.16	985.11	845.33	683.89	477.84	293.12	162.39
360.0	1222.31	999.00	766.69	495.56	311.63	211.05	108.62	92.25	75.15

C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	58.22	44.44	35.83	31.33	28.46	25.48	22.89	20.87	19.13
22.5	40.61	30.38	25.20	22.67	20.31	18.90	17.78	16.65	15.86
45.0	62.16	41.96	31.05	26.89	23.68	20.98	19.41	18.06	16.65
67.5	26.38	24.36	22.50	21.09	19.63	18.45	17.49	16.71	15.92
90.0	19.41	18.23	17.38	16.71	16.14	15.47	14.96	14.57	14.23
112.5	21.32	20.08	19.01	18.00	17.10	16.48	15.81	15.30	14.85
135.0	38.19	33.19	30.04	27.34	24.69	22.50	20.87	19.24	18.06
157.5	81.06	70.31	57.94	46.69	39.04	34.48	31.16	28.52	26.16
180.0	38.64	32.85	29.76	27.17	24.98	22.67	20.59	19.13	18.06
202.5	65.59	49.89	37.24	29.53	25.43	22.78	21.04	19.63	18.62
225.0	290.25	180.62	120.83	70.48	44.27	33.58	28.13	24.81	22.28
247.5	37.69	33.81	30.32	27.28	25.03	22.89	21.04	19.69	18.51
270.0	25.99	23.57	22.05	20.93	19.46	18.39	17.61	16.82	16.09
292.5	25.88	23.91	22.05	20.48	19.29	18.11	17.21	16.48	15.81
315.0	56.64	47.87	42.58	37.41	32.68	29.08	26.44	24.30	22.05
337.5	104.85	84.49	72.34	58.89	47.64	37.80	33.58	30.26	27.39
360.0	58.22	44.44	35.83	31.33	28.46	25.48	22.89	20.87	19.13

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	18.23	17.55	16.93	16.43	15.86	15.24	14.63	14.40	13.95
22.5	15.36	14.91	14.46	14.18	13.84	13.56	13.33	13.05	12.83
45.0	15.69	14.91	14.18	13.78	13.33	12.99	12.77	12.66	12.66
67.5	15.36	14.85	14.34	14.01	13.73	13.44	13.16	12.99	12.77
90.0	13.89	13.61	13.33	13.11	12.88	12.71	12.54	12.38	12.26
112.5	14.46	14.18	13.89	13.61	13.39	13.28	13.05	12.94	12.83
135.0	17.04	16.14	15.53	14.91	14.40	14.01	13.67	13.22	12.94
157.5	24.19	22.84	21.77	20.64	19.63	18.73	17.44	16.48	15.64
180.0	17.10	16.54	16.09	15.53	14.85	14.40	14.12	13.73	13.39
202.5	17.27	16.48	15.92	15.41	15.02	14.57	14.23	13.84	13.56
225.0	20.48	19.24	17.94	16.82	15.86	15.08	14.23	13.73	13.33
247.5	17.27	16.43	15.75	15.13	14.51	14.12	13.73	13.39	13.16
270.0	15.75	15.19	14.79	14.46	14.06	13.78	13.56	13.28	13.11
292.5	15.24	14.79	14.40	14.01	13.67	13.44	13.22	13.05	12.88
315.0	20.53	19.13	17.83	16.76	15.98	15.24	14.63	14.18	13.73
337.5	24.98	23.40	22.05	20.93	20.03	19.01	18.06	16.99	15.86
360.0	18.23	17.55	16.93	16.43	15.86	15.24	14.63	14.40	13.95

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	13.73	13.44	13.33	13.22	12.99	12.83	12.60	12.32	11.98
22.5	12.60	12.38	12.21	12.09	11.93	11.76	11.76	11.64	11.59
45.0	12.54	12.38	12.26	12.21	12.04	12.04	11.81	11.70	11.53
67.5	12.66	12.54	12.38	12.32	12.21	12.09	11.98	11.93	11.87
90.0	12.15	12.04	11.93	11.81	11.70	11.59	11.53	11.48	11.36
112.5	12.66	12.60	12.49	12.38	12.32	12.26	12.15	12.09	11.98
135.0	12.71	12.49	12.26	12.09	11.93	11.76	11.64	11.48	11.36
157.5	14.91	14.23	13.78	13.44	13.11	12.88	12.60	12.38	12.21
180.0	13.28	13.16	13.05	12.77	12.71	12.43	12.21	11.98	11.76
202.5	13.28	12.99	12.77	12.54	12.32	12.21	12.04	11.87	11.76
225.0	12.99	12.71	12.60	12.43	12.43	12.32	12.21	12.09	12.04
247.5	12.94	12.77	12.60	12.43	12.32	12.21	12.09	11.98	11.93
270.0	12.94	12.77	12.66	12.49	12.38	12.26	12.15	12.04	11.93
292.5	12.71	12.60	12.54	12.43	12.38	12.32	12.21	12.21	12.15
315.0	13.39	13.05	12.83	12.66	12.49	12.32	12.15	12.04	11.87
337.5	15.08	14.46	13.95	13.61	13.33	13.11	12.94	12.66	12.49
360.0	13.73	13.44	13.33	13.22	12.99	12.83	12.60	12.32	11.98

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	11.81	11.70	11.48	11.53	11.48	11.36	11.31	11.14	10.97
22.5	11.48	11.42	11.31	11.14	10.97	10.80	10.63	10.46	10.29
45.0	11.19	11.14	11.03	10.91	10.69	10.58	10.46	10.35	10.18
67.5	11.76	11.70	11.59	11.48	11.36	11.31	11.19	11.08	10.91
90.0	11.31	11.19	11.14	11.03	10.97	10.86	10.74	10.63	10.58
112.5	11.87	11.81	11.70	11.53	11.42	11.31	11.08	10.97	10.80
135.0	11.25	11.14	11.03	10.91	10.80	10.63	10.58	10.46	10.35
157.5	11.98	11.81	11.70	11.53	11.42	11.25	11.08	10.97	10.74
180.0	11.53	11.36	11.42	11.36	11.25	11.08	10.97	10.69	10.52
202.5	11.70	11.64	11.59	11.59	11.42	11.31	11.19	11.03	10.80
225.0	11.87	11.76	11.70	11.48	11.31	11.19	11.08	10.91	10.80
247.5	11.81	11.76	11.64	11.59	11.48	11.42	11.36	11.25	11.08
270.0	11.81	11.70	11.59	11.53	11.42	11.36	11.31	11.19	11.08
292.5	12.04	11.98	11.93	11.87	11.76	11.64	11.48	11.36	11.19
315.0	11.70	11.59	11.42	11.31	11.19	11.03	10.97	10.86	10.69
337.5	12.21	11.98	11.81	11.70	11.53	11.48	11.31	11.14	10.97
360.0	11.81	11.70	11.48	11.53	11.48	11.36	11.31	11.14	10.97

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	10.74	10.58	10.29	10.13	9.79	9.68	9.28	9.11	8.94
22.5	10.13	9.96	9.73	9.56	9.28	9.11	8.94	8.72	8.61
45.0	10.07	9.96	9.79	9.62	9.39	9.23	9.06	8.89	8.94
67.5	10.80	10.63	10.46	10.24	9.90	9.68	9.51	9.34	9.28
90.0	10.46	10.41	10.24	10.07	9.90	9.84	9.68	9.45	9.45
112.5	10.63	10.52	10.41	10.29	10.13	10.07	9.90	9.56	9.34
135.0	10.24	10.13	10.07	9.90	9.73	9.56	9.39	9.28	9.00
157.5	10.58	10.41	10.18	9.96	9.73	9.51	9.23	9.00	8.89
180.0	10.41	10.13	9.96	9.68	9.51	9.28	9.06	8.83	8.55
202.5	10.63	10.46	10.24	10.07	9.90	9.73	9.51	9.34	9.11
225.0	10.63	10.52	10.35	10.24	10.13	9.96	9.73	9.51	9.34
247.5	11.03	10.91	10.74	10.63	10.46	10.35	10.01	9.84	9.56
270.0	10.97	10.86	10.74	10.63	10.52	10.35	10.13	9.96	9.84
292.5	11.03	10.91	10.74	10.58	10.46	10.29	10.01	9.90	9.84
315.0	10.63	10.52	10.41	10.29	10.18	10.01	9.84	9.68	9.56
337.5	10.80	10.58	10.35	10.18	9.96	9.73	9.51	9.28	9.11
360.0	10.74	10.58	10.29	10.13	9.79	9.68	9.28	9.11	8.94

C/γ(°)	90.0
0.0	8.55
22.5	8.61
45.0	8.89
67.5	9.34
90.0	9.39
112.5	9.34
135.0	9.00
157.5	8.61
180.0	8.49
202.5	8.94
225.0	9.23
247.5	9.45
270.0	9.73
292.5	9.68
315.0	9.45
337.5	8.83
360.0	8.55