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Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

Nata

LumCAT: 2-2322-M
Luminaire: 92.70.135.00
Report No: 210806-B013
Test No: 210806-C013
LampCAT: LUMILEDS LUXEON CoB 1205 ES 3
Lamp flux(lm): 2254.2
Number of Lamps: 1
Length(mm): 570
Phm Type: C

Voltage(V): 34.9900
Current(A): 0.4510
Power (W): 15.7800
PF: 0.0000
Ballast type: DC
Width(mm): 45
Height(mm): 20

Photometric Results

Lumens(lm): 2175.31
Efficiency(%): 96.50%
Lumens(lm)/Power(W): 137.85
Central intensity(cd): 2350.679
Maximum intensity(cd): 2978.084
Angle of maximum intensity: C=90.0 γ=18.0
Beam Angle(50%Imax): [C0/180]Total=39.9
[C90/270]Total=66.8
Field angle(10%Imax): [C0/180]Total=64.4
[C90/270]Total=79.0
Maximum s/h(1/2): C0_180=0.58 C90_270=1.18
Maximum s/h(1/4): C0_180=0.65 C90_270=0.96
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 96.50%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.270%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2353.965	0.000	0	.000%	.000%
1.0	2359.866	2.255	2.255	.100%	.104%
2.0	2357.364	6.771	9.026	.300%	.415%
3.0	2361.024	11.285	20.311	.501%	.934%
4.0	2366.663	15.825	36.136	.702%	1.661%
5.0	2367.783	20.367	56.503	.904%	2.597%
6.0	2372.900	24.914	81.417	1.105%	3.743%
7.0	2366.924	29.420	110.837	1.305%	5.095%
8.0	2371.219	33.910	144.747	1.504%	6.654%
9.0	2361.621	38.357	183.104	1.702%	8.417%
10.0	2348.774	42.627	225.731	1.891%	10.377%
11.0	2335.069	46.801	272.533	2.076%	12.528%
12.0	2313.408	50.815	323.347	2.254%	14.864%
13.0	2280.357	54.516	377.864	2.418%	17.371%
14.0	2235.169	57.798	435.662	2.564%	20.028%
15.0	2216.646	61.117	496.778	2.711%	22.837%
16.0	2176.201	64.367	561.146	2.855%	25.796%
17.0	2132.432	67.097	628.243	2.977%	28.881%
18.0	2082.878	69.501	697.744	3.083%	32.076%
19.0	2031.453	71.581	769.325	3.175%	35.366%
20.0	1972.794	73.289	842.614	3.251%	38.735%
21.0	1911.017	74.577	917.191	3.308%	42.164%
22.0	1861.359	75.807	992.998	3.363%	45.649%
23.0	1785.193	76.514	1069.513	3.394%	49.166%
24.0	1732.561	76.911	1146.424	3.412%	52.702%
25.0	1665.941	77.275	1223.698	3.428%	56.254%
26.0	1594.644	76.966	1300.665	3.414%	59.792%
27.0	1526.780	76.366	1377.031	3.388%	63.303%
28.0	1442.920	75.187	1452.218	3.335%	66.759%
29.0	1360.387	73.342	1525.56	3.254%	70.131%
30.0	1262.041	70.805	1596.365	3.141%	73.386%
31.0	1166.280	67.577	1663.942	2.998%	76.492%
32.0	1057.742	63.716	1727.657	2.827%	79.421%
33.0	953.798	59.261	1786.918	2.629%	82.146%
34.0	857.674	54.821	1841.738	2.432%	84.666%
35.0	752.304	50.000	1891.738	2.218%	86.964%
36.0	651.676	44.703	1936.441	1.983%	89.019%
37.0	554.036	39.324	1975.765	1.744%	90.827%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	466.498	34.064	2009.829	1.511%	92.393%
39.0	363.723	28.338	2038.167	1.257%	93.696%
40.0	281.432	22.501	2060.668	.998%	94.730%
41.0	220.877	17.887	2078.555	.793%	95.552%
42.0	143.456	13.237	2091.791	.587%	96.161%
43.0	98.215	8.952	2100.744	.397%	96.572%
44.0	69.560	6.332	2107.076	.281%	96.863%
45.0	50.857	4.628	2111.704	.205%	97.076%
46.0	38.638	3.500	2115.204	.155%	97.237%
47.0	31.930	2.807	2118.01	.125%	97.366%
48.0	27.602	2.407	2120.417	.107%	97.477%
49.0	23.509	2.099	2122.516	.093%	97.573%
50.0	19.707	1.802	2124.318	.080%	97.656%
51.0	17.847	1.589	2125.907	.070%	97.729%
52.0	16.469	1.473	2127.379	.065%	97.797%
53.0	15.502	1.391	2128.77	.062%	97.861%
54.0	14.905	1.340	2130.11	.059%	97.922%
55.0	14.382	1.307	2131.417	.058%	97.982%
56.0	14.012	1.283	2132.7	.057%	98.041%
57.0	13.627	1.264	2133.964	.056%	98.099%
58.0	13.321	1.246	2135.21	.055%	98.157%
59.0	13.146	1.237	2136.448	.055%	98.214%
60.0	12.985	1.235	2137.682	.055%	98.270%
61.0	12.899	1.235	2138.917	.055%	98.327%
62.0	12.866	1.241	2140.159	.055%	98.384%
63.0	12.907	1.253	2141.412	.056%	98.442%
64.0	13.056	1.274	2142.686	.057%	98.500%
65.0	13.172	1.298	2143.984	.058%	98.560%
66.0	13.265	1.319	2145.303	.059%	98.621%
67.0	13.351	1.338	2146.642	.059%	98.682%
68.0	13.317	1.351	2147.993	.060%	98.744%
69.0	13.194	1.352	2149.345	.060%	98.807%
70.0	13.280	1.360	2150.705	.060%	98.869%
71.0	13.504	1.384	2152.089	.061%	98.933%
72.0	13.373	1.398	2153.487	.062%	98.997%
73.0	13.037	1.381	2154.868	.061%	99.060%
74.0	13.321	1.386	2156.254	.061%	99.124%
75.0	13.161	1.399	2157.653	.062%	99.188%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	12.903	1.384	2159.036	.061%	99.252%
77.0	12.817	1.371	2160.408	.061%	99.315%
78.0	12.440	1.352	2161.76	.060%	99.377%
79.0	12.152	1.321	2163.081	.059%	99.438%
80.0	11.656	1.284	2164.364	.057%	99.497%
81.0	11.189	1.235	2165.6	.055%	99.554%
82.0	10.770	1.191	2166.791	.053%	99.609%
83.0	10.475	1.155	2167.946	.051%	99.662%
84.0	10.154	1.124	2169.069	.050%	99.713%
85.0	9.949	1.097	2170.167	.049%	99.764%
86.0	9.557	1.066	2171.233	.047%	99.813%
87.0	9.385	1.037	2172.269	.046%	99.860%
88.0	9.262	1.021	2173.291	.045%	99.907%
89.0	9.191	1.011	2174.302	.045%	99.954%
90.0	9.127	1.004	2175.307	.045%	100.000%

Zonal flux distribution table

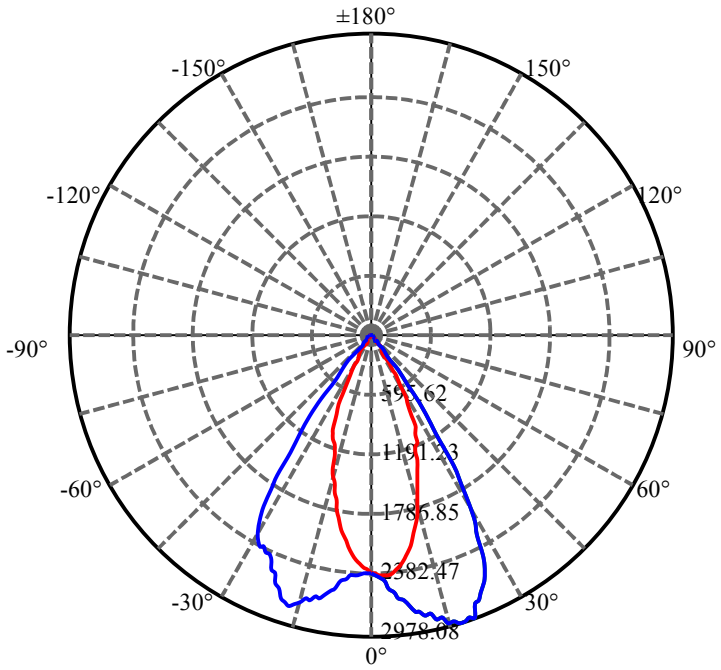
ZONAL LUMEN SUMMARY

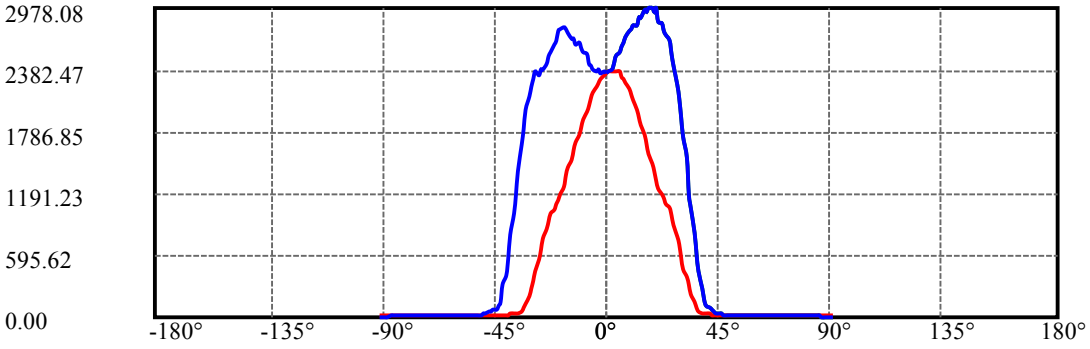
Zone	Lumens	%Lamp	%Fixt
0-30	1596.36	70.82%	73.39%
0-40	2060.67	91.41%	94.73%
0-60	2137.68	94.83%	98.27%
0-90	2174.30	96.46%	99.95%
0-120	2174.30	96.46%	99.95%
0-180	2175.31	96.50%	100.00%
60-90	37.85	1.68%	1.74%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-32.21	1740.25	77.20%	80.00%

ZONAL LUMEN SUMMARY

0-10	225.73
10-20	616.88
20-30	753.75
30-40	464.30
40-50	63.65
50-60	13.36
60-70	13.02
70-80	13.66
80-90	9.94
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]





C90(Max):

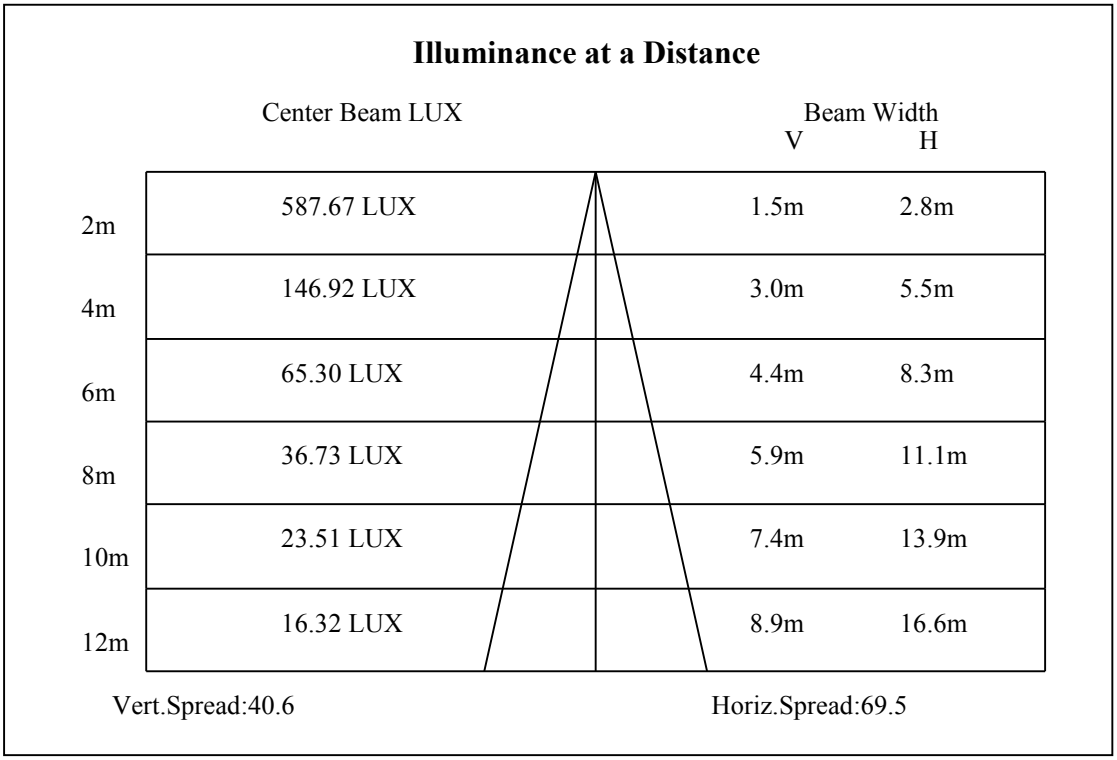
C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:32.6 Right:31.8
:C90/270Left:59.0 Right:19.9

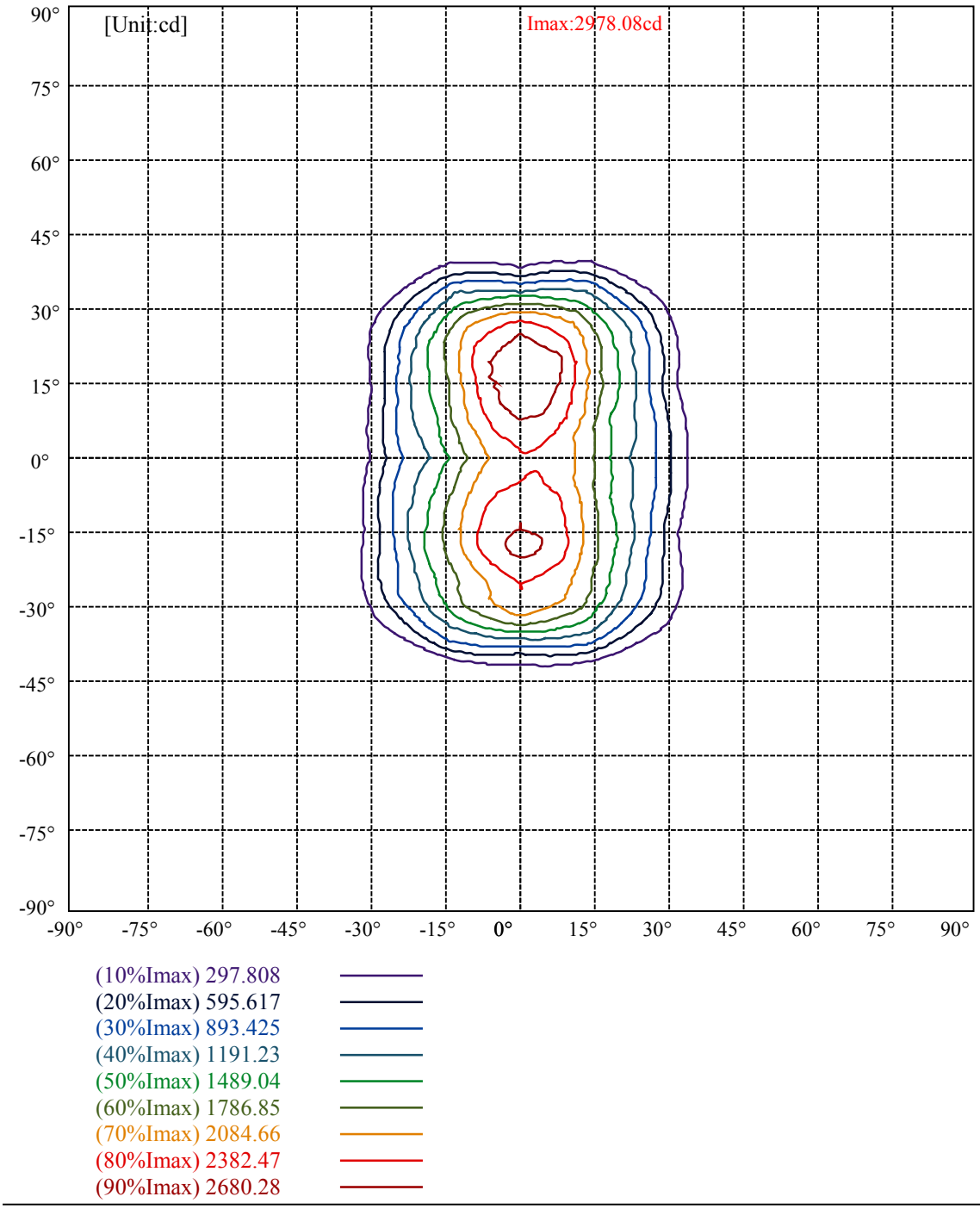
Beam Angle(50%Imax):C0/180Left:20.0 Right:19.9
:C90/270Left:52.7 Right:14.1

Lux distance Curve



Equipment: GMS1980 Date: 2021/8/06 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 65.0% Distance(m): 7.73

ISO-Intensity(V-H)

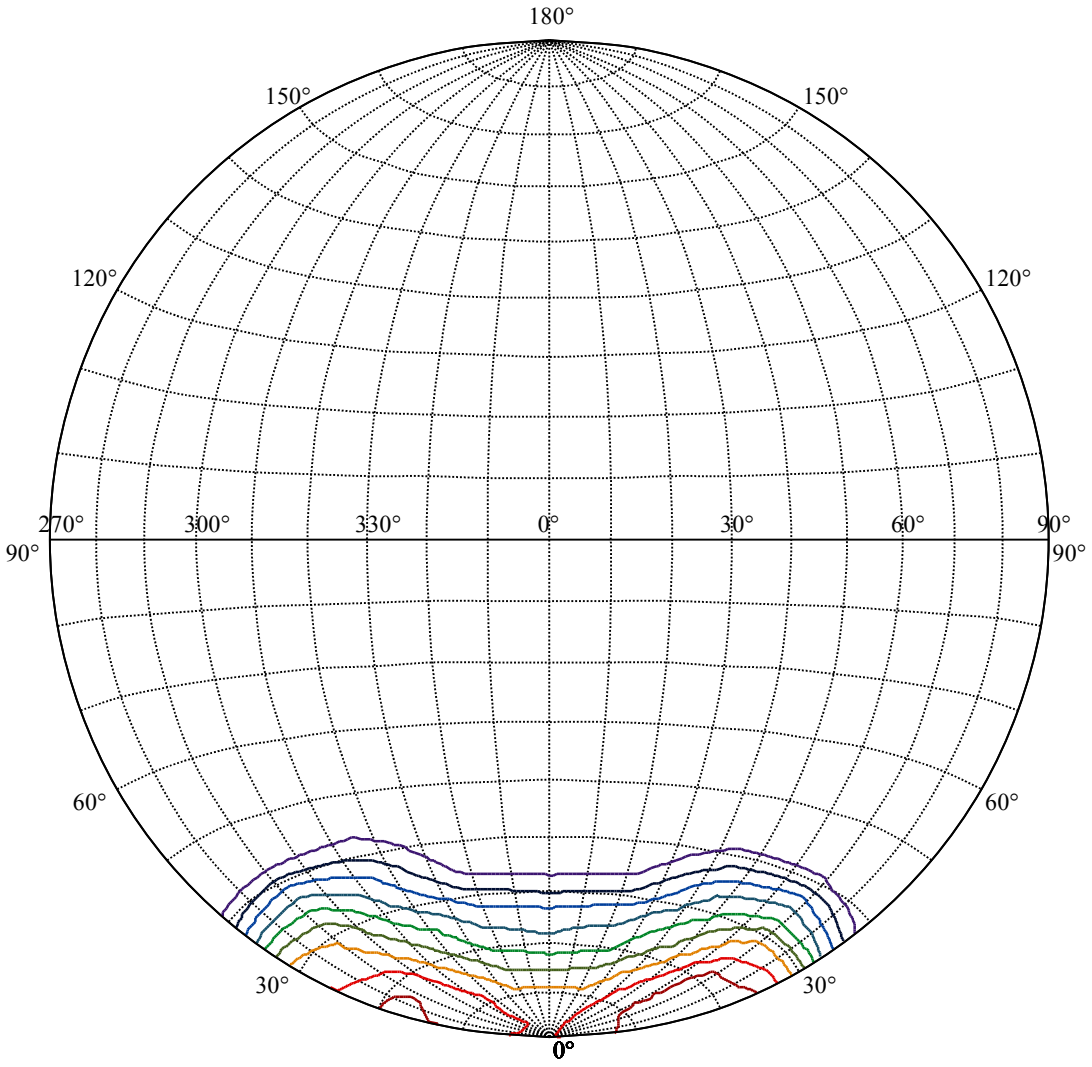


Equipment: GMS1980
Temperature(°C): 25.0

Date: 2021/8/06
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.73

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:2978.08

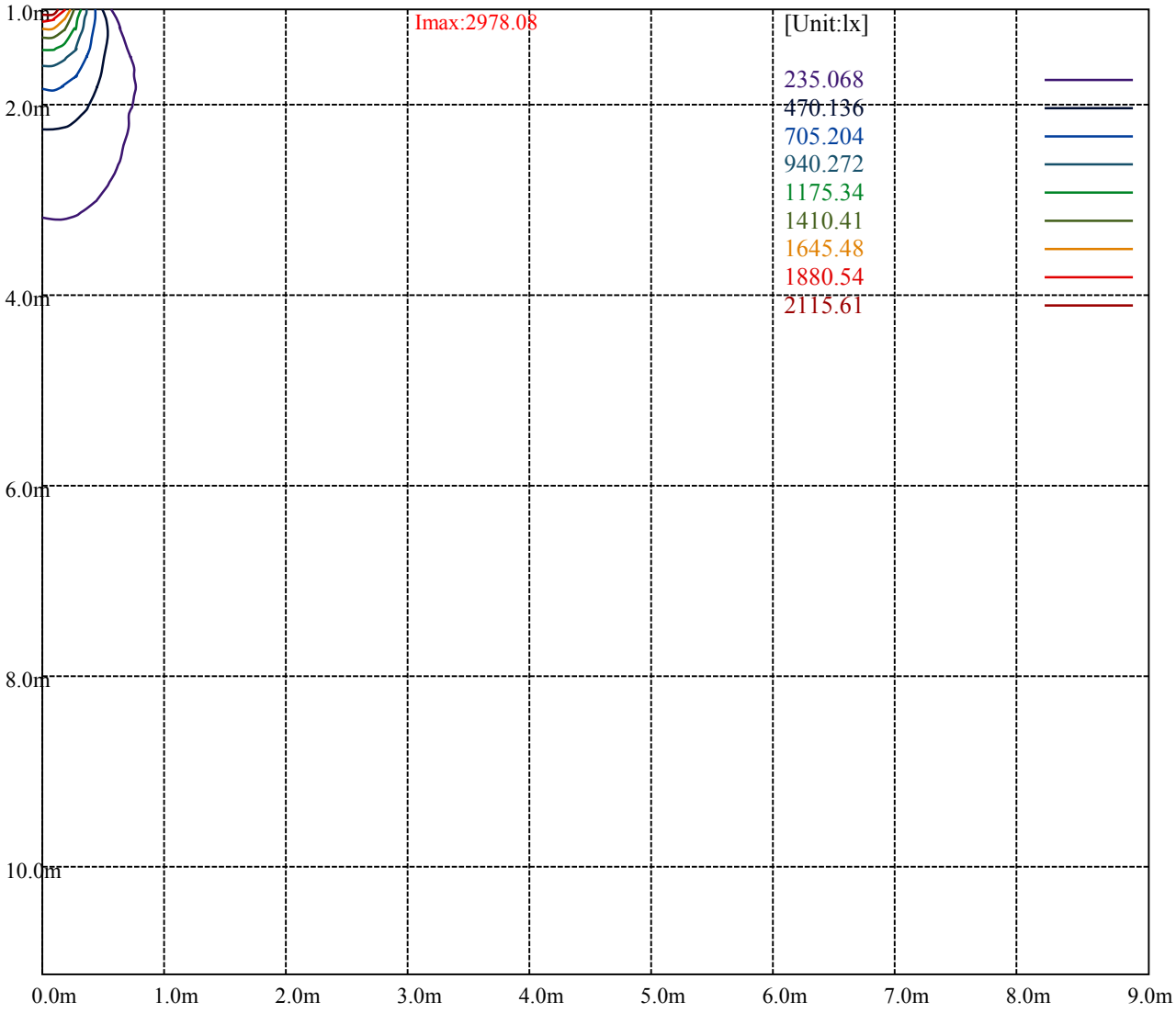
(10%Imax) 297.808
(20%Imax) 595.617
(30%Imax) 893.425
(40%Imax) 1191.23
(50%Imax) 1489.04
(60%Imax) 1786.85
(70%Imax) 2084.66
(80%Imax) 2382.47
(90%Imax) 2680.28

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2021/8/06
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.73

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2021/8/06
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.73

Nata 2-2322-M

Luminance Limitting Curve(no luminous side)

Luminance Table

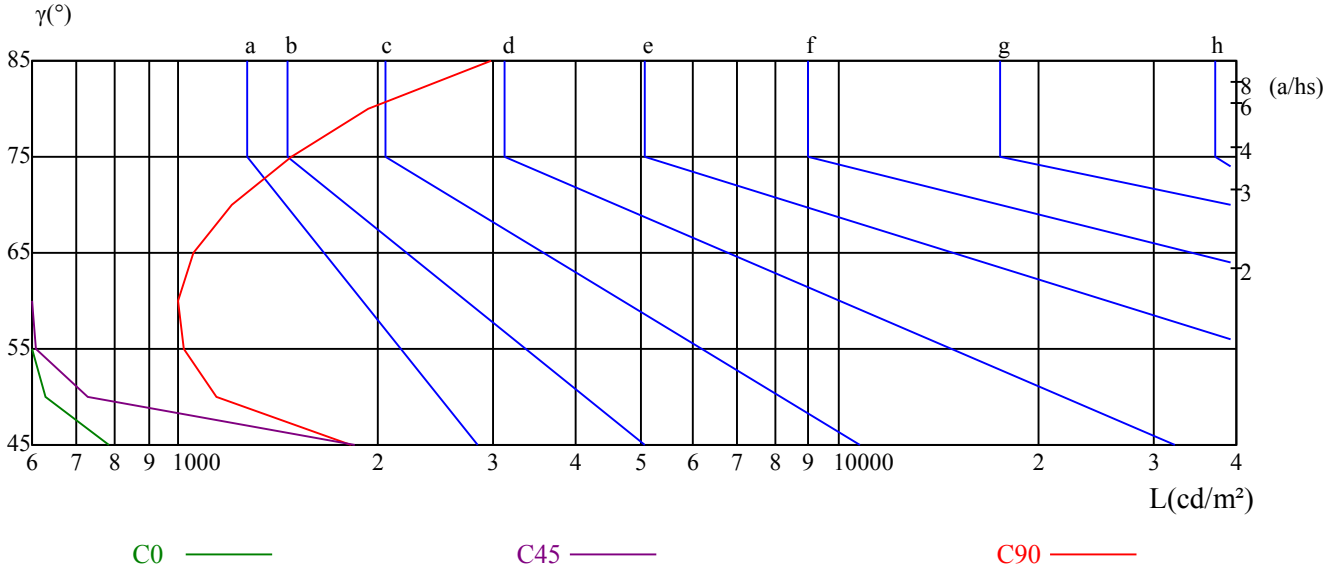
γ	45	50	55	60	65	70	75	80	85
C0	785	630	569	553	748	859	992	972	822
C45	1853	728	607	590	629	681	743	789	861
C90	1827	1138	1017	1001	1056	1205	1480	1936	2976

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1494	1158	1093	2592	1692	1735	4931	4263	4297

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

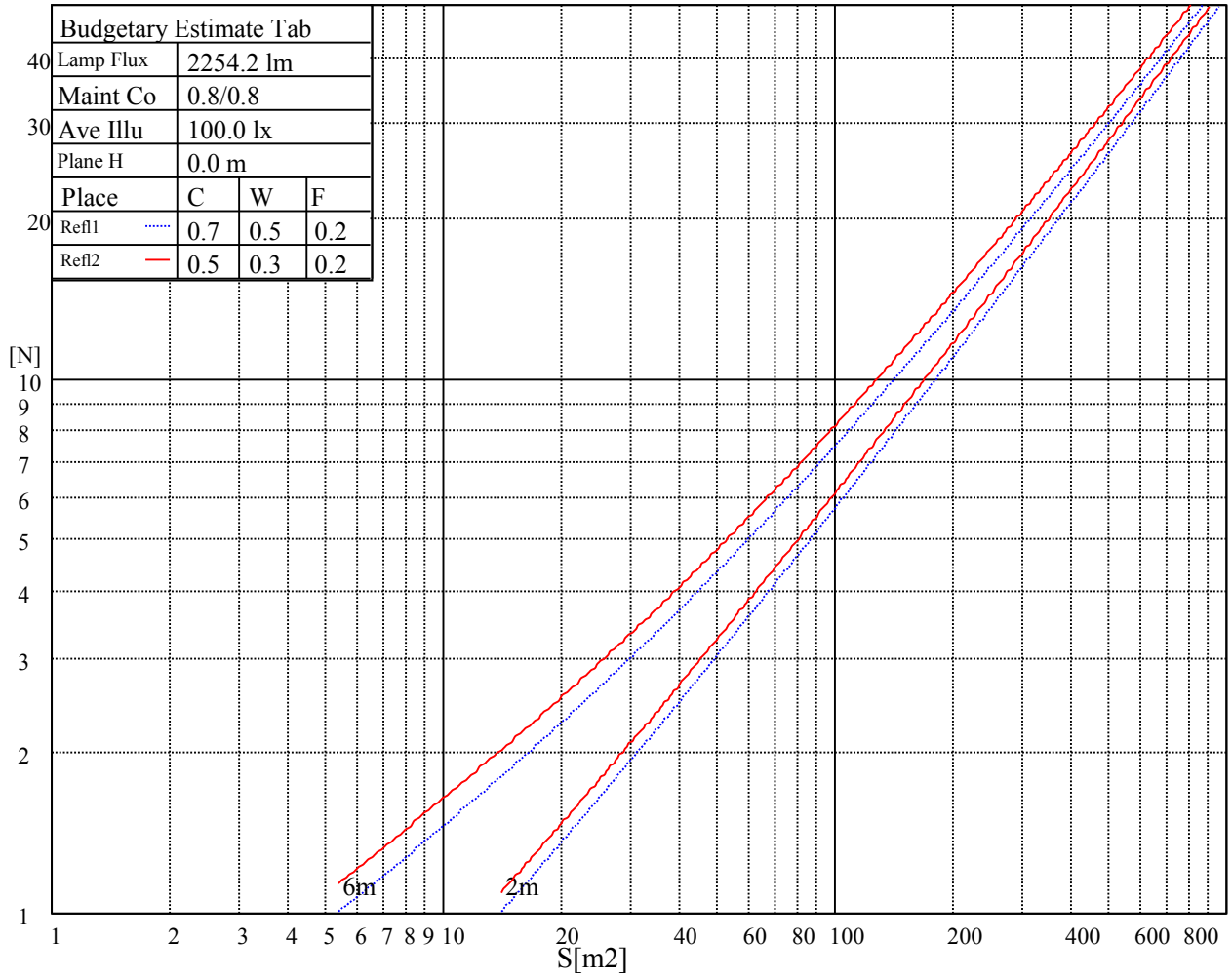


Equipment: GMS1980
Temperature(°C): 25.0

Date: 2021/8/06
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.73

Budgetary Estimate Table

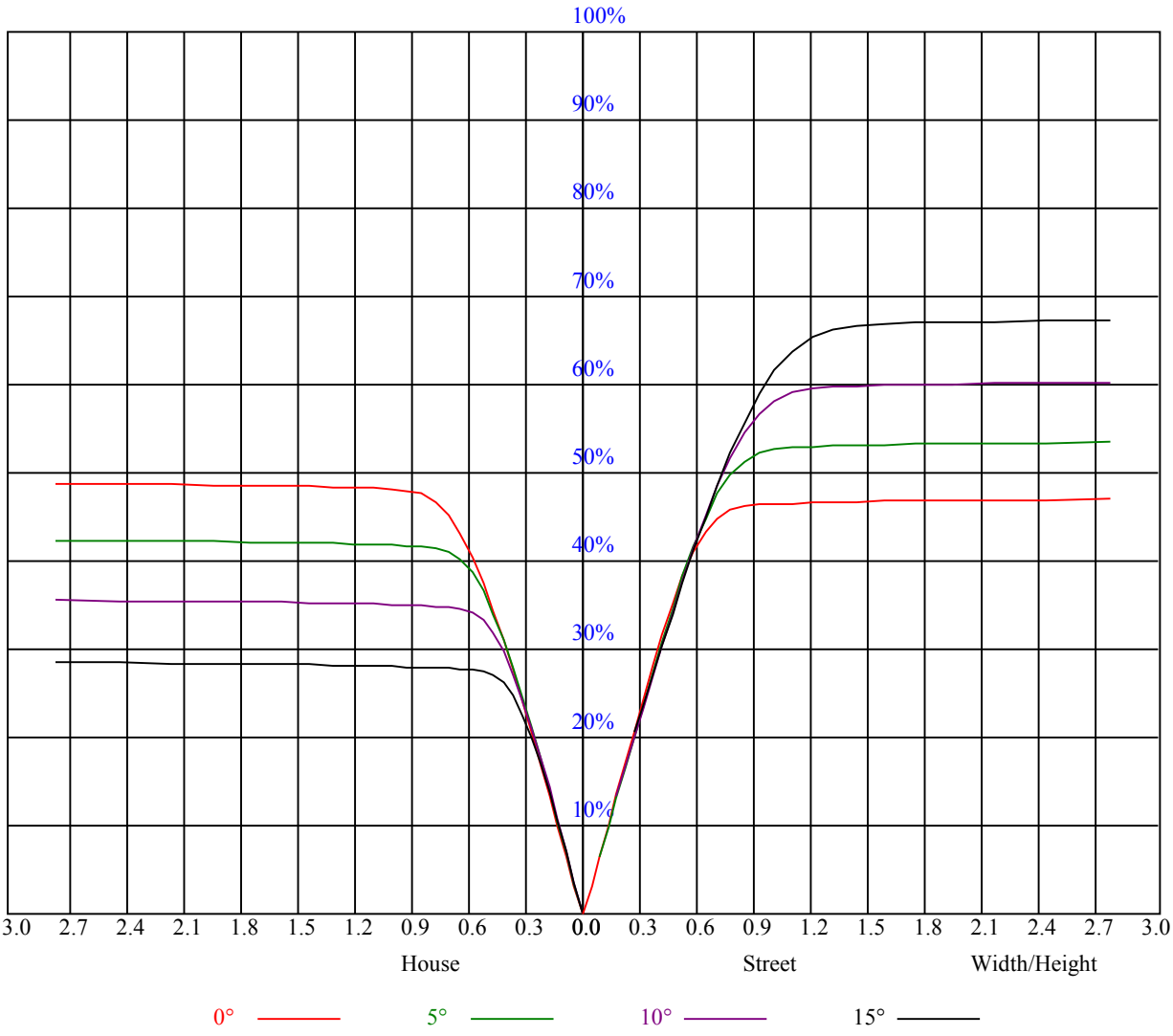


Equipment: GMS1980 Date: 2021/8/06 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 65.0% Distance(m): 7.73

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	1.12	1.12	1.12	1.07	1.07	1.07	1.03	1.03	1.03	0.98	0.98	0.98	0.97
1	1.07	1.04	1.02	1.05	1.02	1.00	1.01	0.99	0.97	0.97	0.96	0.94	0.94	0.93	0.92	0.90
2	0.99	0.95	0.92	0.98	0.94	0.91	0.94	0.91	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	0.72	0.80	0.75	0.71	0.79	0.74	0.71	0.77	0.73	0.70	0.76	0.72	0.69	0.68
6	0.76	0.71	0.67	0.76	0.70	0.66	0.74	0.69	0.66	0.73	0.69	0.65	0.72	0.68	0.65	0.64
7	0.72	0.66	0.62	0.71	0.66	0.62	0.70	0.65	0.62	0.69	0.65	0.61	0.68	0.64	0.61	0.60
8	0.68	0.62	0.58	0.67	0.62	0.58	0.66	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.57	0.56
9	0.64	0.58	0.55	0.64	0.58	0.55	0.63	0.58	0.54	0.62	0.57	0.54	0.61	0.57	0.54	0.53
10	0.61	0.55	0.51	0.60	0.55	0.51	0.59	0.55	0.51	0.59	0.54	0.51	0.58	0.54	0.51	0.50

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2021/8/06	Operator: NT07
Temperature(°C): 25.0	Humidity(%): 65.0%	Distance(m): 7.73

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	2350.68	2358.45	2373.98	2373.39	2370.40	2358.45	2321.40	2298.10	2249.10
22.5	2372.79	2356.65	2369.80	2365.02	2369.80	2330.36	2306.46	2270.01	2240.14
45.0	2366.21	2381.75	2394.90	2408.04	2415.81	2444.49	2466.00	2476.76	2494.09
67.5	2353.07	2382.95	2394.90	2421.79	2457.64	2514.40	2574.75	2624.35	2624.94
90.0	2351.87	2375.78	2394.30	2437.92	2506.63	2545.47	2609.41	2639.88	2708.60
112.5	2349.48	2361.43	2371.00	2389.52	2421.79	2483.33	2499.46	2561.01	2562.20
135.0	2336.34	2350.68	2336.34	2332.75	2331.56	2342.91	2377.57	2357.25	2381.15
157.5	2349.48	2328.57	2301.08	2290.33	2266.43	2233.56	2194.72	2163.65	2106.89
180.0	2350.68	2322.60	2293.32	2254.48	2221.61	2169.03	2107.48	2041.16	1979.61
202.5	2372.79	2357.25	2338.13	2303.47	2284.95	2268.82	2241.93	2182.77	2131.98
225.0	2366.21	2371.00	2347.69	2350.08	2336.94	2307.06	2304.67	2280.77	2290.33
247.5	2353.07	2356.65	2351.28	2350.68	2362.63	2351.87	2376.37	2387.13	2459.43
270.0	2351.87	2359.64	2356.65	2377.57	2368.01	2389.52	2426.57	2443.89	2533.52
292.5	2349.48	2366.21	2376.37	2373.98	2393.70	2390.12	2442.10	2468.99	2531.13
315.0	2336.34	2358.45	2362.63	2371.00	2388.32	2383.54	2387.73	2374.58	2378.17
337.5	2353.07	2369.80	2355.46	2376.37	2370.40	2371.59	2329.77	2300.49	2268.22
360.0	2350.68	2358.45	2373.98	2373.39	2370.40	2358.45	2321.40	2298.10	2249.10

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2203.69	2140.35	2083.58	2004.11	1924.64	1845.77	1749.56	1664.72	1573.29
22.5	2191.14	2158.87	2104.50	2057.29	1983.20	1901.34	1836.21	1772.27	1676.07
45.0	2477.95	2452.86	2450.47	2454.05	2414.02	2353.07	2346.50	2290.93	2182.18
67.5	2697.25	2747.44	2739.67	2795.84	2775.52	2756.40	2816.15	2776.72	2837.67
90.0	2760.58	2770.14	2817.95	2811.37	2876.50	2879.49	2951.20	2948.81	2969.72
112.5	2601.04	2652.43	2629.13	2681.11	2644.66	2630.32	2662.59	2614.19	2676.93
135.0	2341.12	2310.05	2296.90	2281.96	2234.16	2158.87	2146.32	2087.77	1971.25
157.5	2055.50	1996.34	1956.31	1912.09	1829.04	1753.15	1698.77	1635.44	1550.59
180.0	1913.29	1826.65	1759.72	1675.47	1600.78	1508.16	1435.26	1361.17	1251.23
202.5	2082.39	2039.37	1970.65	1913.29	1846.36	1776.45	1717.30	1667.70	1605.56
225.0	2277.18	2274.79	2293.91	2262.84	2238.94	2194.72	2173.21	2132.58	2049.52
247.5	2468.99	2495.28	2513.21	2535.91	2544.28	2541.29	2533.52	2549.66	2546.67
270.0	2559.81	2592.68	2644.66	2633.91	2681.71	2682.31	2728.91	2768.95	2797.63
292.5	2547.86	2565.79	2602.24	2575.95	2594.47	2580.73	2595.07	2625.54	2633.31
315.0	2372.19	2399.08	2388.32	2372.19	2324.99	2298.69	2252.68	2163.05	2120.03
337.5	2235.95	2158.27	2109.87	2047.13	1972.44	1901.93	1823.06	1759.72	1677.26
360.0	2203.69	2140.35	2083.58	2004.11	1924.64	1845.77	1749.56	1664.72	1573.29

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1480.08	1400.61	1314.56	1231.51	1183.11	1146.06	1089.30	1045.68	989.51
22.5	1583.45	1510.55	1417.94	1370.13	1335.48	1284.09	1229.71	1154.43	1082.72
45.0	2143.93	2091.35	1977.82	1950.93	1875.64	1763.31	1738.21	1659.94	1601.98
67.5	2777.91	2788.07	2758.19	2695.45	2695.45	2526.95	2476.76	2391.31	2296.90
90.0	2978.08	2945.82	2970.91	2847.23	2820.93	2762.38	2719.35	2658.41	2540.69
112.5	2611.20	2605.82	2616.58	2558.62	2544.88	2443.30	2406.25	2308.85	2254.48
135.0	1937.19	1879.23	1778.25	1755.54	1680.85	1627.67	1566.72	1556.56	1532.66
157.5	1471.12	1379.69	1317.55	1289.47	1261.98	1212.39	1151.44	1045.08	953.06
180.0	1186.75	1133.57	1084.16	1040.42	1001.16	933.46	846.64	754.68	652.68
202.5	1537.44	1484.86	1430.48	1340.86	1274.53	1189.56	1170.32	1118.87	1049.80
225.0	2035.18	1945.55	1883.41	1861.30	1780.64	1725.07	1674.28	1616.91	1548.80
247.5	2532.33	2490.50	2431.94	2326.78	2305.27	2149.91	2087.77	1995.15	1931.21
270.0	2775.52	2757.00	2670.95	2628.53	2546.67	2513.80	2436.72	2382.35	2387.73
292.5	2614.19	2598.06	2550.25	2467.79	2395.49	2289.73	2280.77	2182.18	2106.29
315.0	2059.68	1973.64	1922.85	1860.11	1803.34	1756.74	1656.95	1660.53	1532.06
337.5	1601.98	1518.92	1438.85	1351.61	1276.32	1238.68	1189.80	1124.13	1053.74
360.0	1480.08	1400.61	1314.56	1231.51	1183.11	1146.06	1089.30	1045.68	989.51

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	885.54	777.39	697.32	572.43	463.68	393.17	307.73	219.65	149.98
22.5	1014.01	923.18	795.31	680.59	581.40	481.61	380.03	306.53	213.02
45.0	1544.01	1503.38	1353.40	1355.20	1270.35	1187.71	1169.07	1056.01	941.47
67.5	2277.78	2132.58	2082.99	1884.61	1813.50	1604.96	1487.85	1368.94	1244.06
90.0	2424.18	2237.15	2101.51	1917.47	1734.63	1531.47	1186.21	1053.56	818.61
112.5	2195.32	2087.77	1985.59	1876.24	1708.93	1576.28	1455.58	1272.14	1218.36
135.0	1472.31	1419.73	1351.01	1185.62	1160.46	1071.43	985.09	892.89	764.06
157.5	855.06	737.35	634.58	519.85	394.97	307.73	254.07	158.64	104.09
180.0	559.29	449.64	355.77	283.11	208.78	133.19	85.81	56.47	45.71
202.5	938.78	851.72	762.45	656.51	557.26	450.84	359.95	291.47	218.40
225.0	1454.39	1391.05	1243.46	1232.70	1138.29	1052.25	1011.62	976.36	919.00
247.5	1900.74	1876.84	1929.42	1819.48	1821.87	1690.41	1608.55	1482.47	1381.49
270.0	2335.14	2359.64	2299.29	2226.39	2131.39	1991.56	1818.28	1664.72	1403.60
292.5	2100.91	2047.13	2054.30	1984.39	1900.14	1829.63	1685.63	1593.01	1450.80
315.0	1483.66	1384.47	1291.86	1256.60	1153.23	1117.38	1044.48	1011.62	933.34
337.5	987.36	907.71	827.94	741.47	621.61	504.25	420.84	318.30	230.89
360.0	885.54	777.39	697.32	572.43	463.68	393.17	307.73	219.65	149.98

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	93.93	58.56	46.13	40.33	35.73	31.25	25.81	23.54	22.05
22.5	151.23	103.73	59.51	47.68	42.25	36.93	31.79	27.55	24.26
45.0	842.58	684.23	610.61	480.17	385.17	315.08	221.68	146.99	85.63
67.5	1101.84	959.03	813.24	570.64	367.48	319.08	101.82	65.61	58.80
90.0	619.10	435.36	284.72	169.58	115.02	85.57	67.28	54.32	43.02
112.5	1047.47	896.29	722.41	507.90	332.23	308.92	118.91	73.79	62.02
135.0	668.04	547.04	478.02	362.46	283.89	213.56	138.45	94.59	60.05
157.5	68.42	52.40	46.79	41.59	36.09	28.98	26.17	24.08	22.41
180.0	41.53	37.35	32.68	25.51	23.54	21.75	20.38	19.06	17.87
202.5	144.06	96.02	60.71	46.61	42.19	38.06	33.28	26.29	24.20
225.0	895.10	730.78	667.44	533.59	451.13	359.11	310.72	202.20	139.40
247.5	1178.92	1142.42	1008.33	830.09	680.29	448.68	269.25	161.21	96.44
270.0	1184.30	1005.64	788.14	577.21	407.51	305.34	152.91	106.78	80.31
292.5	1335.48	1189.56	1051.47	913.86	717.27	528.51	370.05	209.25	133.31
315.0	883.15	814.43	724.80	622.63	538.97	453.52	371.66	305.93	216.31
337.5	171.67	111.74	68.95	49.71	44.16	39.68	35.13	30.23	26.89
360.0	93.93	58.56	46.13	40.33	35.73	31.25	25.81	23.54	22.05

C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	20.55	19.30	18.28	17.33	16.61	15.89	15.24	14.76	14.34
22.5	22.35	20.97	19.66	18.58	17.63	16.79	16.07	15.54	14.88
45.0	44.99	30.12	25.75	22.89	18.76	16.85	16.07	15.18	14.34
67.5	51.57	40.69	31.07	24.32	20.26	18.11	16.67	15.66	14.88
90.0	34.30	28.56	25.81	23.54	21.39	19.54	18.16	17.21	16.67
112.5	51.15	39.14	31.07	25.34	20.20	18.40	17.09	16.07	15.30
135.0	37.70	28.08	24.44	21.15	19.42	17.45	16.31	15.66	15.06
157.5	21.03	19.48	18.40	17.51	16.61	15.77	15.24	14.70	14.28
180.0	17.03	16.13	15.42	14.88	14.46	13.92	13.62	13.38	13.03
202.5	22.29	20.85	19.48	18.28	17.39	16.55	15.77	15.24	14.76
225.0	87.48	43.98	34.12	29.52	25.34	21.03	19.06	17.51	16.25
247.5	68.00	61.66	55.75	54.20	45.47	26.59	22.95	17.45	16.25
270.0	68.90	60.95	53.90	41.29	32.21	26.11	21.87	19.96	18.28
292.5	89.87	66.27	57.66	52.94	41.53	30.12	23.48	20.44	17.15
315.0	151.12	97.94	57.42	38.18	28.56	23.78	20.85	18.76	17.15
337.5	25.39	24.08	22.65	21.69	20.32	18.40	17.09	16.01	15.42
360.0	20.55	19.30	18.28	17.33	16.61	15.89	15.24	14.76	14.34

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	13.98	13.68	13.44	13.15	12.91	12.73	12.55	12.43	12.55
22.5	14.52	14.16	13.74	13.50	13.27	13.09	12.91	12.73	12.55
45.0	13.98	13.27	12.91	12.61	12.37	12.19	12.01	11.89	11.77
67.5	14.28	13.86	13.62	13.32	13.09	12.91	12.73	12.43	12.25
90.0	16.25	15.72	15.36	14.88	14.40	14.16	13.62	13.32	13.15
112.5	14.70	14.22	13.80	13.50	13.21	12.97	12.73	12.55	12.31
135.0	14.22	13.74	13.27	12.91	12.73	12.49	12.31	12.13	12.01
157.5	13.92	13.56	13.32	13.09	12.85	12.73	12.67	12.97	13.44
180.0	12.85	12.67	12.49	12.37	12.49	13.38	14.52	15.83	17.15
202.5	14.28	13.92	13.68	13.38	13.03	12.91	12.79	12.61	12.85
225.0	15.54	14.88	14.16	13.68	13.21	12.91	12.67	12.43	12.19
247.5	15.36	14.76	14.28	13.86	13.50	13.27	12.97	12.67	12.37
270.0	17.45	16.85	16.43	15.77	15.36	14.82	14.28	14.10	13.62
292.5	15.83	15.00	14.46	14.04	13.68	13.38	13.09	12.79	12.55
315.0	16.31	15.24	15.00	14.10	13.56	13.21	12.97	12.73	12.49
337.5	15.00	14.58	14.22	13.86	13.50	13.21	12.97	12.79	12.61
360.0	13.98	13.68	13.44	13.15	12.91	12.73	12.55	12.43	12.55

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	13.27	14.58	15.83	16.67	16.97	16.37	15.72	16.73	17.69
22.5	12.85	13.32	14.22	14.88	15.36	15.12	14.88	15.54	16.25
45.0	11.71	11.71	11.77	11.59	11.47	11.53	11.41	11.53	11.65
67.5	11.95	11.83	11.65	11.53	11.41	11.29	11.23	11.17	11.11
90.0	12.67	12.43	12.31	12.13	11.89	11.83	11.71	11.59	11.47
112.5	12.19	12.01	12.01	12.01	11.89	11.71	11.65	11.41	11.29
135.0	11.89	11.77	11.65	11.59	11.59	11.65	11.89	12.13	12.01
157.5	14.10	15.24	15.77	16.13	15.72	15.30	16.01	16.79	16.55
180.0	17.57	17.57	16.55	16.07	17.09	18.58	18.16	16.91	17.75
202.5	13.32	13.98	14.88	15.66	15.95	15.77	15.18	15.95	16.91
225.0	12.07	11.95	11.83	11.71	11.59	11.47	11.47	11.47	11.59
247.5	12.13	11.95	11.83	11.65	11.53	11.35	11.23	11.17	11.05
270.0	13.38	13.15	12.79	12.55	12.31	12.13	11.95	11.89	11.83
292.5	12.37	12.19	12.07	11.95	11.83	11.71	11.59	11.47	11.35
315.0	12.37	12.19	12.13	11.95	11.89	11.71	11.59	11.65	11.71
337.5	12.67	13.03	13.44	14.16	15.12	15.54	15.42	15.06	15.83
360.0	13.27	14.58	15.83	16.67	16.97	16.37	15.72	16.73	17.69

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	17.15	15.77	17.33	17.51	15.72	17.03	15.72	16.37	15.24
22.5	15.66	14.76	15.95	15.95	14.70	15.48	14.16	14.34	13.62
45.0	11.47	11.23	11.23	11.17	10.88	10.88	10.70	10.46	10.28
67.5	10.93	10.82	10.76	10.64	10.64	10.52	10.34	10.22	10.10
90.0	11.41	11.35	11.29	11.11	10.99	10.82	10.70	10.52	10.34
112.5	11.17	11.05	10.88	10.82	10.70	10.58	10.46	10.40	10.28
135.0	11.83	11.95	11.89	11.47	11.29	11.29	10.82	10.58	10.28
157.5	15.48	16.25	16.91	15.72	16.19	15.12	15.06	14.16	13.03
180.0	18.52	17.21	17.99	16.91	17.57	16.97	16.73	16.49	14.58
202.5	16.43	15.54	17.03	16.61	16.01	15.83	14.94	14.28	13.62
225.0	11.77	11.77	11.65	11.77	11.77	11.29	11.23	10.28	10.10
247.5	10.99	10.88	10.76	10.70	10.64	10.52	10.40	10.28	10.10
270.0	11.71	11.59	11.47	11.35	11.29	11.11	10.93	10.82	10.70
292.5	11.17	11.05	10.93	10.88	10.76	10.70	10.58	10.46	10.34
315.0	11.77	11.95	11.83	11.65	11.89	11.59	11.11	10.52	10.40
337.5	16.49	15.42	15.24	16.31	15.42	15.36	15.18	14.28	13.50
360.0	17.15	15.77	17.33	17.51	15.72	17.03	15.72	16.37	15.24

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	15.66	15.36	14.52	11.59	11.17	9.92	9.80	9.68	9.62
22.5	12.43	11.47	10.99	10.93	9.98	9.86	9.74	9.62	9.56
45.0	10.10	10.04	9.98	9.74	9.38	9.26	9.20	9.08	9.08
67.5	10.04	9.86	9.68	9.56	9.26	9.08	8.96	8.84	8.72
90.0	10.16	10.04	9.74	9.56	9.32	9.02	8.78	8.72	8.66
112.5	10.16	9.98	9.86	9.68	9.50	9.14	9.08	8.96	8.90
135.0	10.16	10.04	9.86	9.74	9.68	9.44	9.38	9.20	9.20
157.5	11.83	10.88	10.82	10.76	10.64	9.80	9.68	9.62	9.50
180.0	11.71	10.88	10.93	10.88	10.88	9.62	9.56	9.44	9.38
202.5	12.61	11.71	10.70	10.58	10.58	10.52	9.80	9.68	9.62
225.0	9.98	9.86	9.74	9.62	9.56	9.50	9.32	9.26	9.20
247.5	9.98	9.80	9.62	9.50	9.32	9.20	8.96	8.84	8.78
270.0	10.52	10.34	10.10	9.86	9.74	9.44	9.20	8.96	8.78
292.5	10.16	9.98	9.86	9.74	9.56	9.38	9.20	9.08	8.96
315.0	10.28	10.16	10.04	9.92	9.80	9.74	9.62	9.50	9.38
337.5	13.27	11.95	11.17	10.82	10.82	9.98	9.86	9.68	9.68
360.0	15.66	15.36	14.52	11.59	11.17	9.92	9.80	9.68	9.62

C/γ(°)	90.0
0.0	9.56
22.5	9.44
45.0	9.02
67.5	8.66
90.0	8.66
112.5	8.84
135.0	9.20
157.5	9.44
180.0	9.38
202.5	9.50
225.0	9.14
247.5	8.66
270.0	8.72
292.5	8.90
315.0	9.32
337.5	9.56
360.0	9.56