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

Nata

LumCAT: 2-2321-M
Luminaire: 92.70.129.00
Report No: 210724-B009
Test No: 210724-C009
LampCAT: CREE CXA1820 LES12
Lamp flux(lm): 2199.5
Number of Lamps: 1
Length(mm): 570
Phm Type: C

Voltage(V): 36.5900
Current(A): 0.5010
Power (W): 18.3310
PF: 0.0000
Ballast type: DC
Width(mm): 45
Height(mm): 20

Photometric Results

Lumens(lm): 2050.24
Efficiency(%): 93.21%
Lumens(lm)/Power(W): 111.85
Central intensity(cd): 2665.688
Maximum intensity(cd): 4576.500
Angle of maximum intensity: C=90.0 γ=13.0
Beam Angle(50%Imax): [C0/180]Total=48.5
[C90/270]Total=34.8
Field angle(10%Imax): [C0/180]Total=66.2
[C90/270]Total=59.9
Maximum s/h(1/2): C0_180=0.70 C90_270=0.98
Maximum s/h(1/4): C0_180=0.71 C90_270=0.79
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 93.21%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.246%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2710.266	0.000	0	.000%	.000%
1.0	2714.730	2.596	2.596	.118%	.127%
2.0	2729.813	7.815	10.41	.355%	.508%
3.0	2756.813	13.122	23.532	.597%	1.148%
4.0	2785.781	18.553	42.085	.843%	2.053%
5.0	2823.609	24.131	66.217	1.097%	3.230%
6.0	2865.164	29.896	96.113	1.359%	4.688%
7.0	2904.855	35.814	131.927	1.628%	6.435%
8.0	2930.836	41.765	173.692	1.899%	8.472%
9.0	2954.918	47.701	221.393	2.169%	10.798%
10.0	2956.289	53.494	274.887	2.432%	13.408%
11.0	2949.012	59.006	333.893	2.683%	16.286%
12.0	2925.246	64.214	398.107	2.919%	19.418%
13.0	2877.645	68.866	466.973	3.131%	22.777%
14.0	2813.625	72.848	539.821	3.312%	26.330%
15.0	2734.980	76.174	615.994	3.463%	30.045%
16.0	2636.789	78.711	694.706	3.579%	33.884%
17.0	2521.828	80.334	775.039	3.652%	37.802%
18.0	2412.738	81.360	856.4	3.699%	41.771%
19.0	2307.164	82.117	938.516	3.733%	45.776%
20.0	2199.516	82.485	1021.001	3.750%	49.799%
21.0	2095.207	82.467	1103.468	3.749%	53.821%
22.0	1993.078	82.156	1185.624	3.735%	57.829%
23.0	1884.161	81.355	1266.979	3.699%	61.797%
24.0	1764.348	79.769	1346.749	3.627%	65.687%
25.0	1647.689	77.582	1424.331	3.527%	69.472%
26.0	1518.458	74.737	1499.068	3.398%	73.117%
27.0	1388.820	71.127	1570.195	3.234%	76.586%
28.0	1226.440	66.213	1636.408	3.010%	79.816%
29.0	1078.200	60.296	1696.704	2.741%	82.756%
30.0	928.983	54.194	1750.898	2.464%	85.400%
31.0	774.127	47.395	1798.293	2.155%	87.711%
32.0	630.823	40.250	1838.543	1.830%	89.675%
33.0	510.114	33.612	1872.155	1.528%	91.314%
34.0	403.485	27.648	1899.803	1.257%	92.663%
35.0	318.361	22.418	1922.221	1.019%	93.756%
36.0	237.368	17.695	1939.916	.804%	94.619%
37.0	175.725	13.473	1953.389	.613%	95.276%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	133.559	10.323	1963.712	.469%	95.780%
39.0	95.073	7.804	1971.516	.355%	96.160%
40.0	71.293	5.802	1977.318	.264%	96.443%
41.0	53.670	4.450	1981.768	.202%	96.660%
42.0	41.245	3.448	1985.216	.157%	96.829%
43.0	33.870	2.782	1987.999	.127%	96.964%
44.0	29.102	2.377	1990.376	.108%	97.080%
45.0	25.471	2.097	1992.473	.095%	97.183%
46.0	22.904	1.892	1994.365	.086%	97.275%
47.0	21.023	1.747	1996.112	.079%	97.360%
48.0	19.716	1.647	1997.759	.075%	97.440%
49.0	18.717	1.578	1999.337	.072%	97.517%
50.0	17.757	1.521	2000.858	.069%	97.592%
51.0	16.893	1.466	2002.324	.067%	97.663%
52.0	16.239	1.422	2003.746	.065%	97.732%
53.0	15.623	1.386	2005.132	.063%	97.800%
54.0	15.156	1.357	2006.488	.062%	97.866%
55.0	14.836	1.339	2007.827	.061%	97.931%
56.0	14.435	1.323	2009.15	.060%	97.996%
57.0	14.063	1.303	2010.453	.059%	98.059%
58.0	13.746	1.286	2011.739	.058%	98.122%
59.0	13.486	1.273	2013.012	.058%	98.184%
60.0	13.233	1.262	2014.274	.057%	98.246%
61.0	13.008	1.252	2015.526	.057%	98.307%
62.0	12.825	1.245	2016.771	.057%	98.368%
63.0	12.709	1.242	2018.013	.056%	98.428%
64.0	12.551	1.239	2019.252	.056%	98.489%
65.0	12.459	1.238	2020.49	.056%	98.549%
66.0	12.364	1.239	2021.729	.056%	98.609%
67.0	12.263	1.238	2022.967	.056%	98.670%
68.0	12.178	1.238	2024.205	.056%	98.730%
69.0	12.080	1.238	2025.443	.056%	98.791%
70.0	12.052	1.239	2026.682	.056%	98.851%
71.0	12.009	1.244	2027.925	.057%	98.912%
72.0	11.964	1.247	2029.172	.057%	98.973%
73.0	11.893	1.248	2030.42	.057%	99.033%
74.0	11.791	1.245	2031.665	.057%	99.094%
75.0	11.682	1.240	2032.905	.056%	99.155%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	11.588	1.235	2034.14	.056%	99.215%
77.0	11.489	1.230	2035.371	.056%	99.275%
78.0	11.408	1.226	2036.596	.056%	99.335%
79.0	11.320	1.221	2037.817	.056%	99.394%
80.0	11.250	1.217	2039.034	.055%	99.454%
81.0	11.183	1.213	2040.247	.055%	99.513%
82.0	10.930	1.199	2041.447	.055%	99.571%
83.0	10.698	1.176	2042.622	.053%	99.629%
84.0	10.575	1.159	2043.781	.053%	99.685%
85.0	10.114	1.129	2044.91	.051%	99.740%
86.0	9.875	1.093	2046.003	.050%	99.793%
87.0	9.742	1.074	2047.077	.049%	99.846%
88.0	9.703	1.065	2048.142	.048%	99.898%
89.0	9.622	1.059	2049.201	.048%	99.949%
90.0	9.285	1.037	2050.238	.047%	100.000%

Zonal flux distribution table

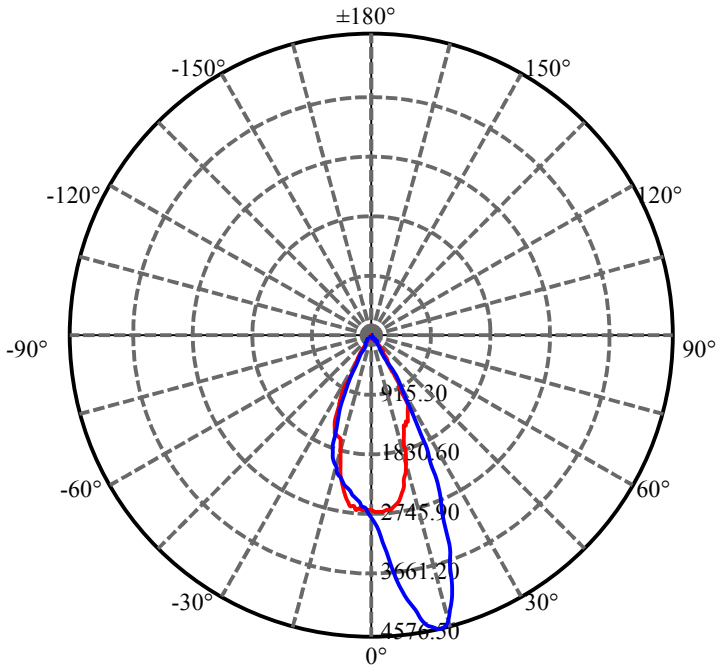
ZONAL LUMEN SUMMARY

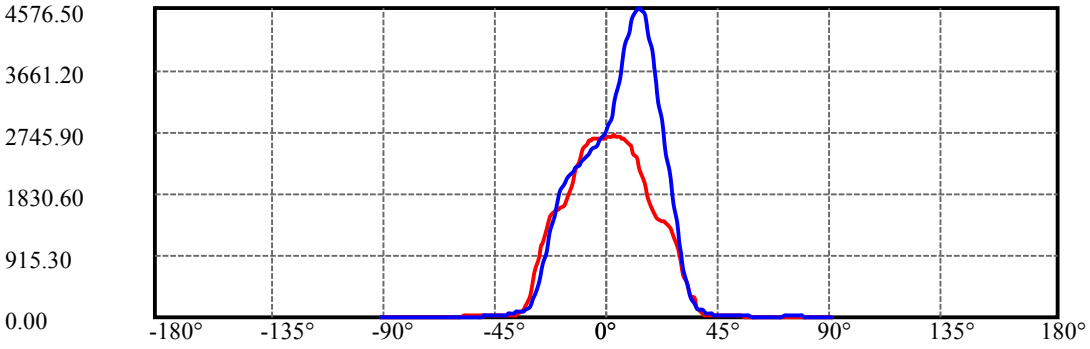
Zone	Lumens	%Lamp	%Fixt
0-30	1750.90	79.60%	85.40%
0-40	1977.32	89.90%	96.44%
0-60	2014.27	91.58%	98.25%
0-90	2049.20	93.17%	99.95%
0-120	2049.20	93.17%	99.95%
0-180	2050.24	93.21%	100.00%
60-90	36.19	1.65%	1.77%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-28.06	1640.19	74.57%	80.00%

ZONAL LUMEN SUMMARY

0-10	274.89
10-20	746.11
20-30	729.90
30-40	226.42
40-50	23.54
50-60	13.42
60-70	12.41
70-80	12.35
80-90	10.17
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:

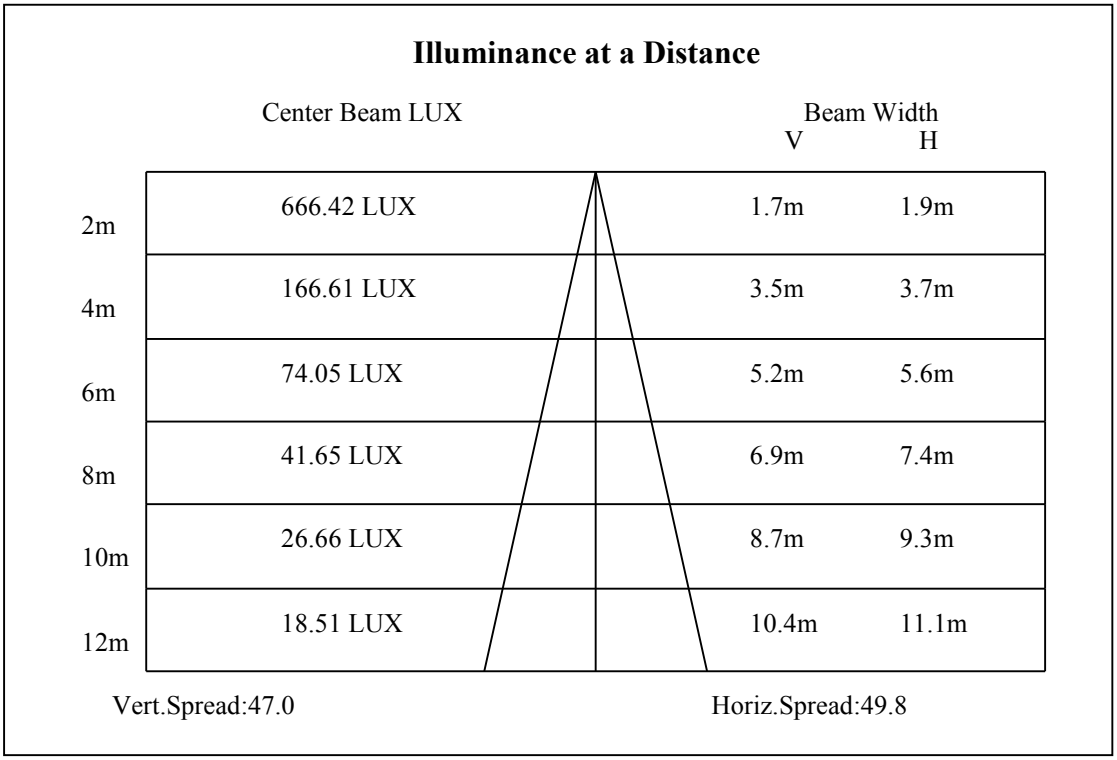
Field angle(10%Imax):C0/180Left:34.1 Right:32.2

:C90/270Left:40.4 Right:19.5

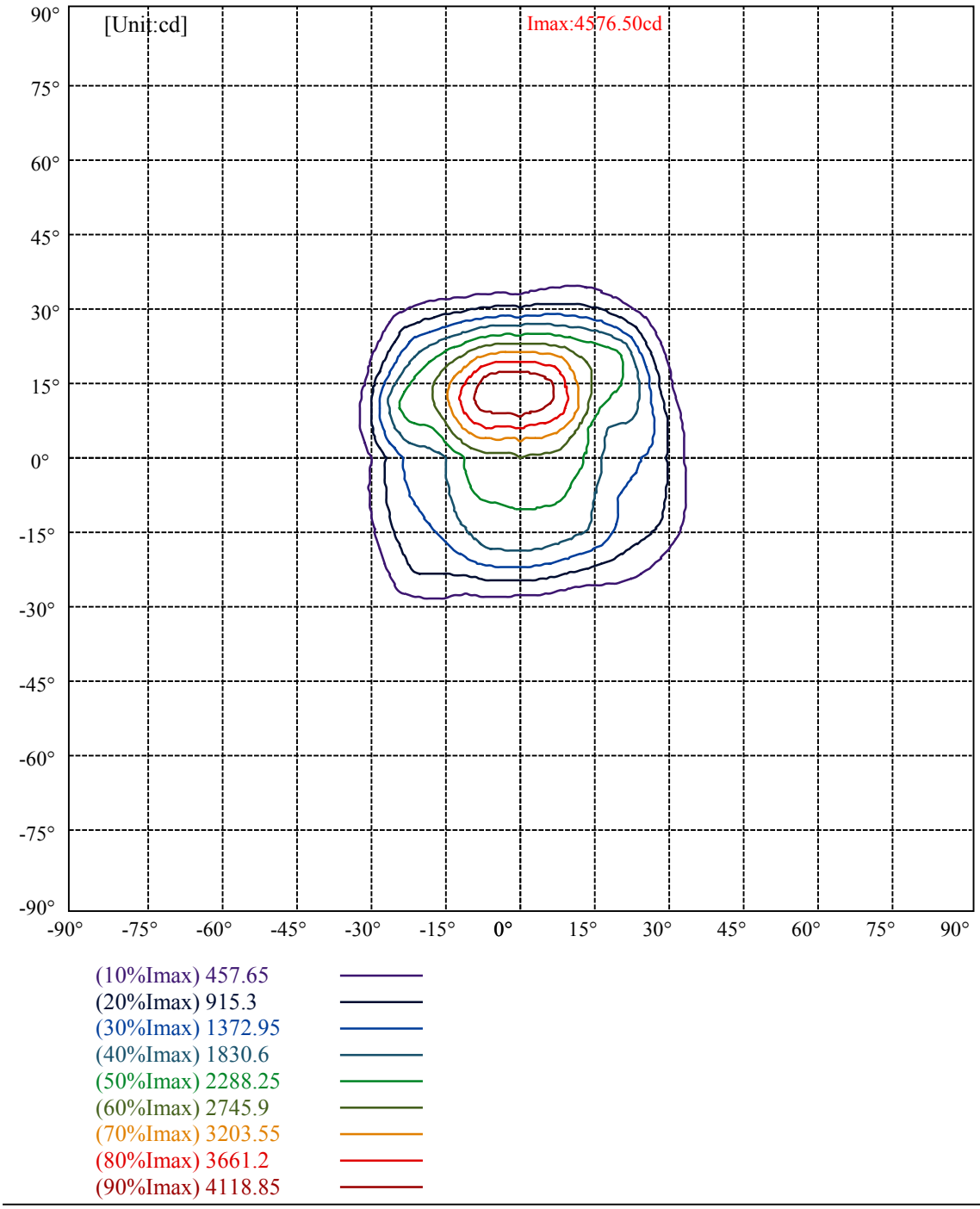
Beam Angle(50%Imax):C0/180Left:26.7 Right:21.8

:C90/270Left:23.3 Right:11.5

Lux distance Curve



ISO-Intensity(V-H)

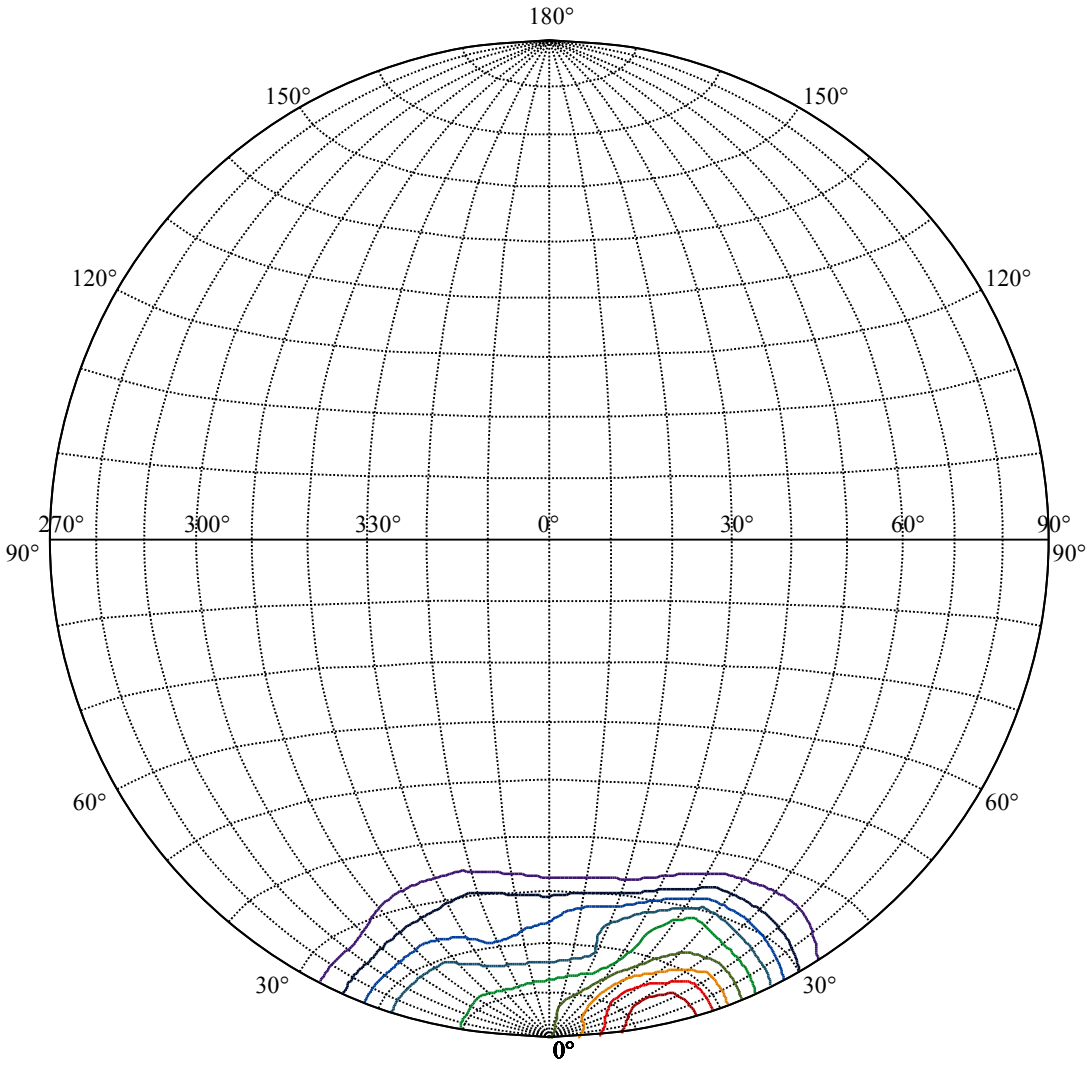


Equipment: GMS1980
Temperature(°C): 25.0

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

Operator: NT07
Distance(m): 7.50

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:4576.50

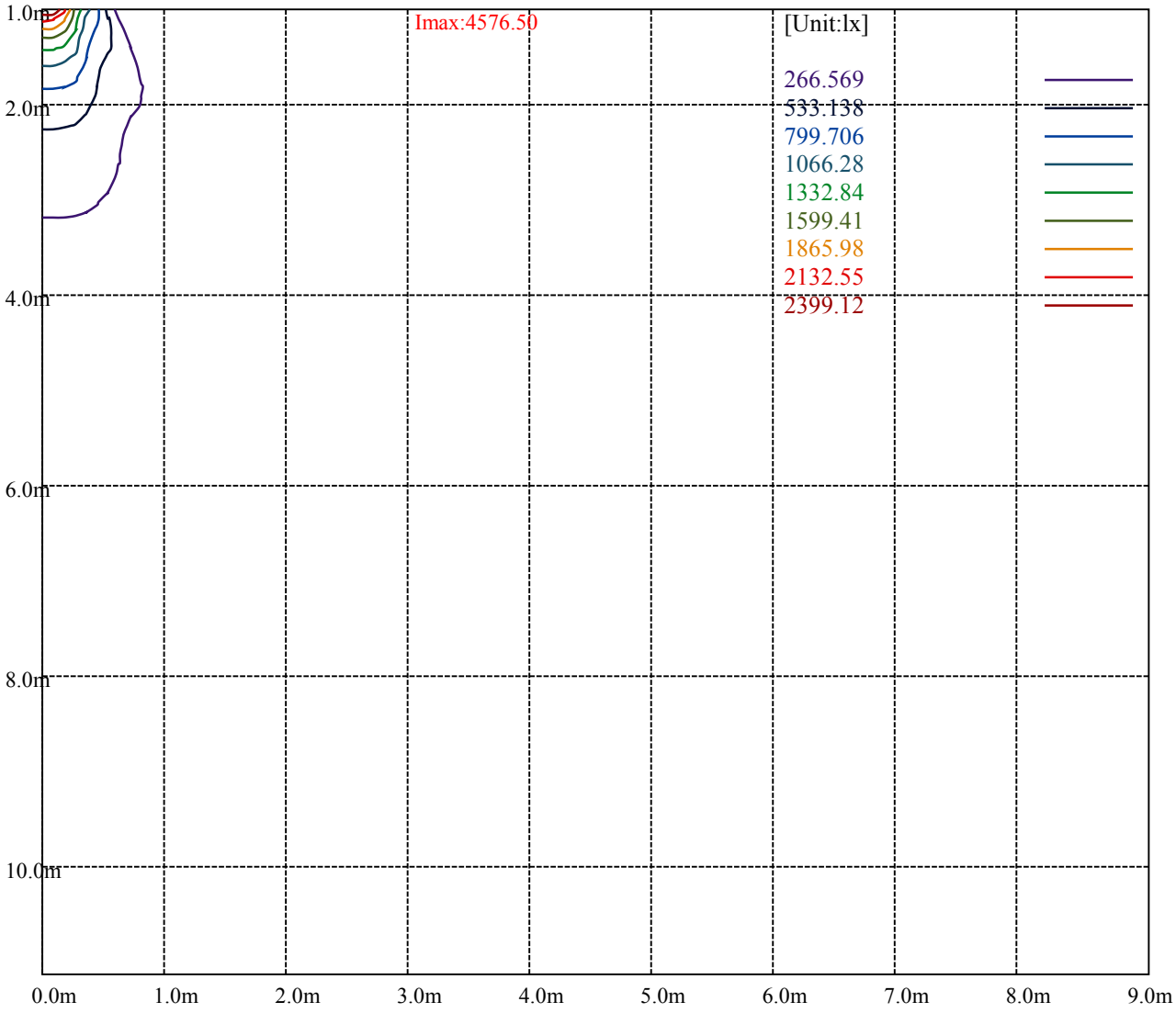
(10%Imax) 457.65
(20%Imax) 915.3
(30%Imax) 1372.95
(40%Imax) 1830.6
(50%Imax) 2288.25
(60%Imax) 2745.9
(70%Imax) 3203.55
(80%Imax) 3661.2
(90%Imax) 4118.85

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

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Luminance Limitting Curve(no luminous side)

Luminance Table

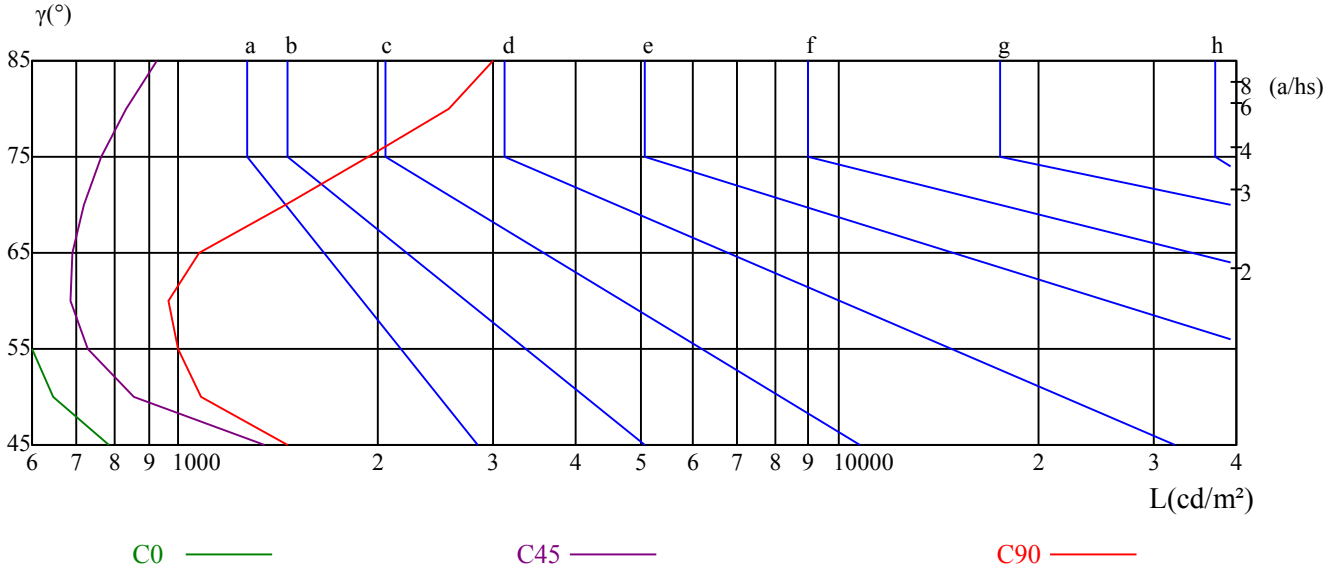
γ	45	50	55	60	65	70	75	80	85
C0	786	645	578	548	550	580	606	646	716
C45	1346	853	729	688	691	717	763	834	929
C90	1465	1081	998	968	1071	1450	1940	2559	2999

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1108	1077	1140	1665	1864	1659	4277	4265	4372

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

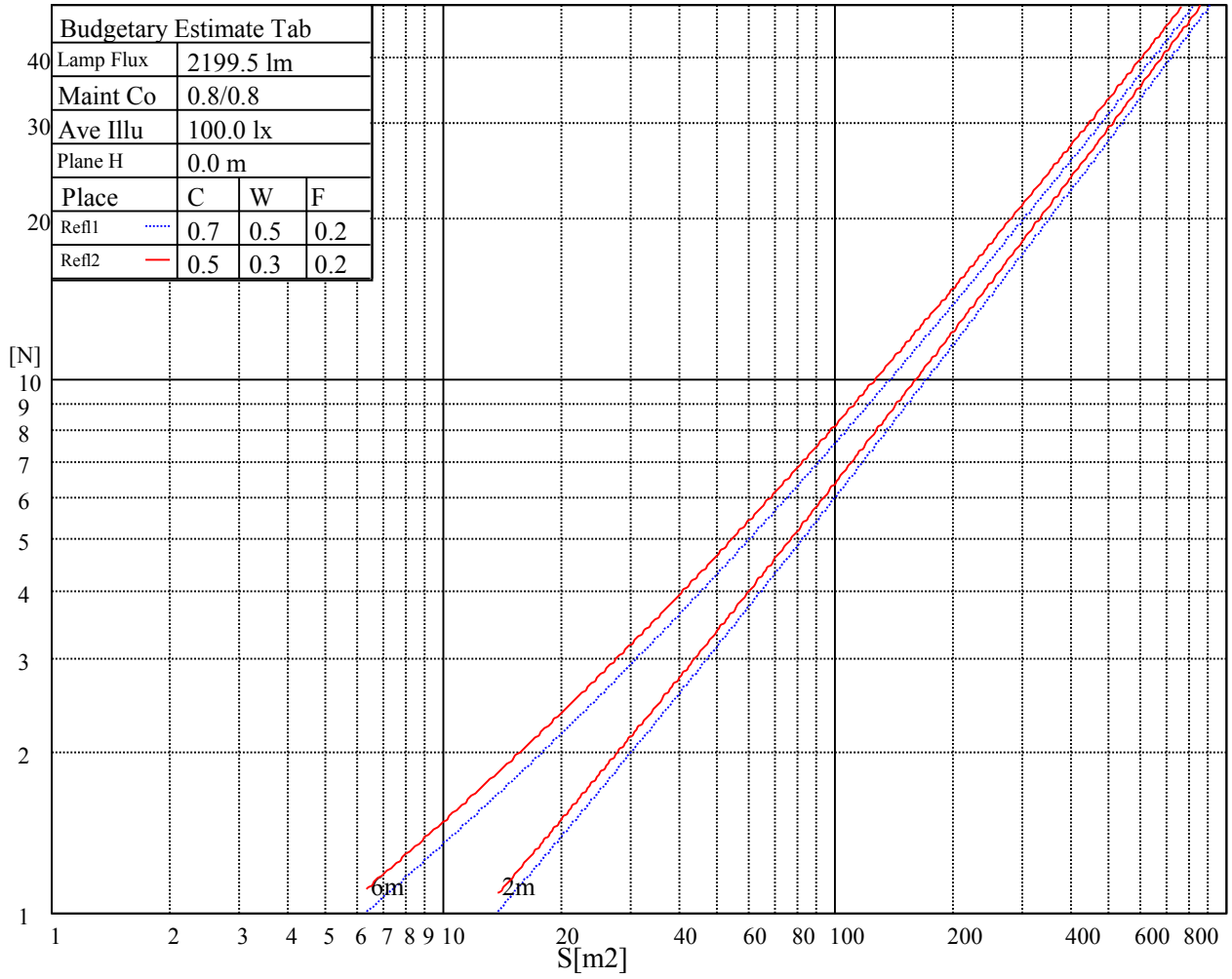


Equipment: GMS1980
Temperature(°C): 25.0

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

Operator: NT07
Distance(m): 7.50

Budgetary Estimate Table

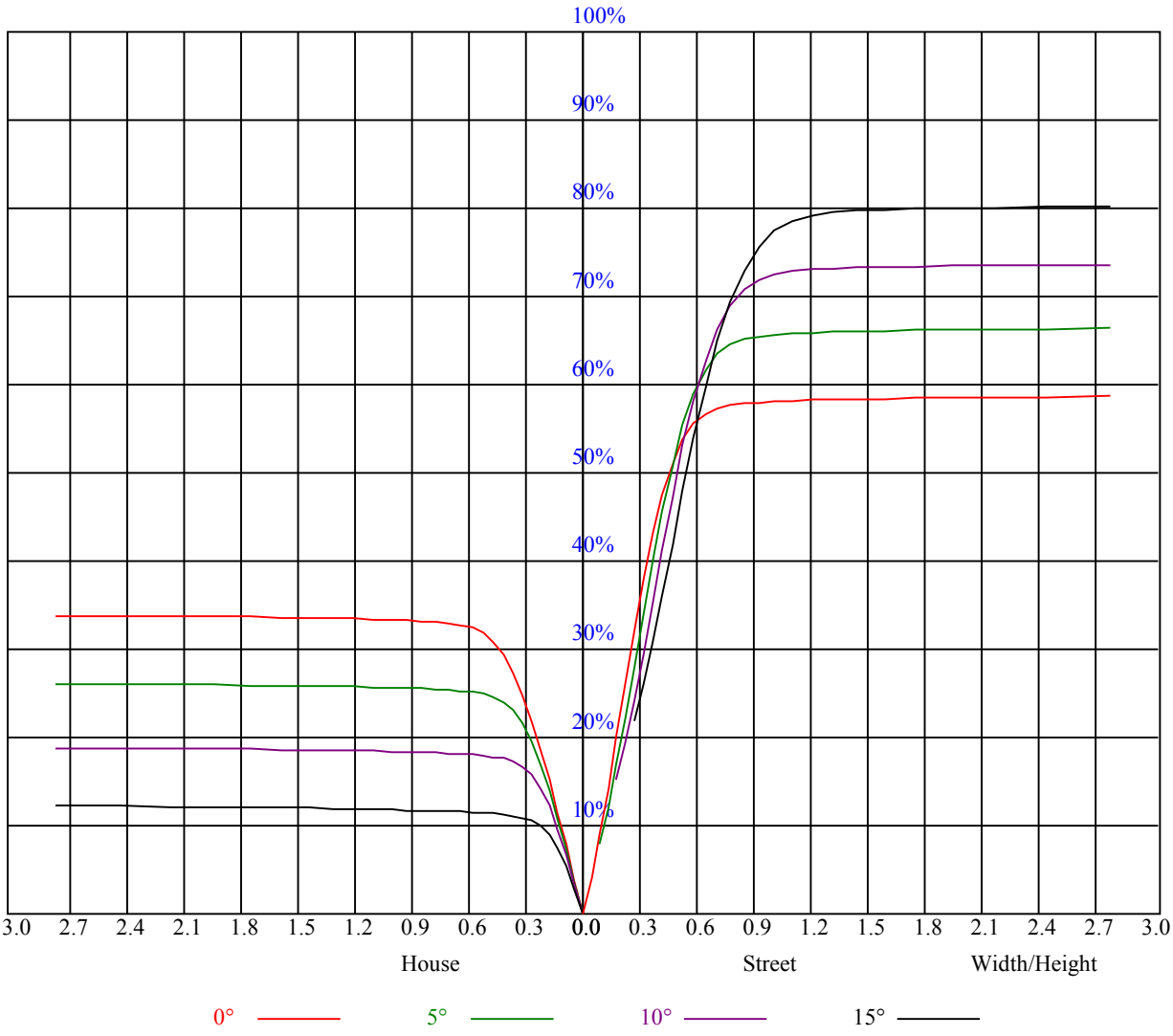


Equipment: GMS1980 Date: 2021/7/24 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 65.0% Distance(m): 7.50

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	1.11	1.11	1.11	1.08	1.08	1.08	1.04	1.04	1.04	0.99	0.99	0.99	0.95	0.95	0.95	0.93
1	1.03	1.01	0.99	1.01	0.99	0.98	0.98	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88
2	0.97	0.93	0.90	0.95	0.92	0.89	0.92	0.90	0.87	0.90	0.88	0.86	0.87	0.85	0.84	0.82
3	0.91	0.87	0.83	0.90	0.86	0.83	0.88	0.84	0.82	0.85	0.83	0.80	0.83	0.81	0.79	0.78
4	0.86	0.81	0.78	0.85	0.81	0.77	0.83	0.79	0.76	0.81	0.78	0.75	0.80	0.77	0.75	0.73
5	0.81	0.76	0.73	0.81	0.76	0.72	0.79	0.75	0.72	0.77	0.74	0.71	0.76	0.73	0.71	0.69
6	0.77	0.72	0.68	0.76	0.72	0.68	0.75	0.71	0.68	0.74	0.70	0.67	0.73	0.69	0.67	0.66
7	0.73	0.68	0.65	0.73	0.68	0.64	0.71	0.67	0.64	0.70	0.67	0.64	0.69	0.66	0.63	0.62
8	0.70	0.65	0.61	0.69	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.60	0.66	0.63	0.60	0.59
9	0.66	0.61	0.58	0.66	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.57	0.64	0.60	0.57	0.56
10	0.63	0.58	0.55	0.63	0.58	0.55	0.62	0.58	0.55	0.61	0.58	0.55	0.61	0.57	0.55	0.53

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	2665.69	2669.63	2670.19	2691.56	2679.19	2675.81	2653.88	2652.75	2613.38
22.5	2696.63	2727.56	2757.94	2777.63	2808.00	2823.19	2861.44	2863.69	2867.06
45.0	2727.56	2808.00	2877.19	2948.63	3036.94	3134.81	3263.63	3362.63	3450.38
67.5	2708.44	2772.00	2890.13	3015.56	3157.31	3322.13	3458.81	3645.00	3816.00
90.0	2756.25	2853.56	2965.50	3144.38	3309.75	3496.50	3708.00	3908.81	4066.88
112.5	2710.13	2781.00	2895.75	3008.81	3143.25	3321.56	3526.31	3708.00	3894.75
135.0	2729.25	2776.50	2833.88	2942.44	3040.31	3166.31	3344.63	3474.56	3604.50
157.5	2688.19	2700.56	2725.31	2754.56	2811.38	2850.75	2926.69	2967.19	3008.81
180.0	2665.69	2648.25	2639.81	2653.88	2633.06	2653.31	2616.19	2615.06	2563.88
202.5	2696.63	2684.81	2655.56	2620.13	2600.44	2591.44	2548.69	2549.25	2490.75
225.0	2727.56	2686.50	2652.75	2603.25	2567.81	2521.13	2507.63	2456.44	2428.88
247.5	2708.44	2657.81	2616.19	2565.56	2520.56	2480.63	2433.38	2392.88	2372.06
270.0	2756.25	2691.00	2632.50	2585.25	2542.50	2504.81	2462.63	2427.19	2389.50
292.5	2710.13	2651.63	2601.56	2563.31	2534.06	2507.06	2469.38	2438.44	2397.38
315.0	2729.25	2670.75	2623.50	2595.38	2581.88	2543.06	2511.56	2476.69	2431.69
337.5	2688.19	2656.13	2639.25	2638.69	2606.06	2585.25	2549.81	2539.13	2497.50
360.0	2665.69	2669.63	2670.19	2691.56	2679.19	2675.81	2653.88	2652.75	2613.38

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2556.00	2519.44	2426.63	2363.63	2230.88	2135.81	2001.38	1855.69	1724.06
22.5	2846.81	2784.94	2739.94	2640.94	2522.81	2361.94	2234.25	2085.75	1964.81
45.0	3511.69	3588.75	3605.06	3614.06	3605.06	3538.69	3456.00	3325.50	3130.88
67.5	3981.38	4088.81	4199.63	4291.31	4342.50	4337.44	4284.00	4178.81	4052.81
90.0	4213.13	4367.25	4476.38	4538.81	4576.50	4560.75	4494.94	4349.25	4163.06
112.5	4064.06	4193.44	4331.81	4433.06	4496.63	4530.94	4497.19	4420.13	4266.56
135.0	3772.13	3866.06	3928.50	4015.69	4014.00	3996.56	3953.25	3854.25	3705.75
157.5	3071.25	3092.06	3103.88	3045.38	2975.63	2872.69	2766.94	2649.94	2549.81
180.0	2513.81	2412.56	2314.13	2178.00	2045.25	1929.94	1791.56	1697.63	1639.13
202.5	2462.06	2388.38	2323.69	2236.50	2103.19	1995.75	1877.63	1763.44	1634.06
225.0	2409.19	2347.88	2314.69	2268.00	2213.44	2142.56	2060.44	1969.31	1870.88
247.5	2334.94	2279.81	2237.63	2212.31	2185.88	2134.69	2081.25	2049.19	1997.44
270.0	2341.69	2301.75	2259.56	2218.50	2170.69	2126.81	2077.31	2021.63	1950.75
292.5	2356.31	2312.44	2266.88	2226.94	2173.50	2119.50	2071.13	2028.38	1963.13
315.0	2399.06	2376.56	2328.75	2278.69	2214.56	2166.19	2134.69	2072.81	1988.44
337.5	2445.19	2380.50	2327.06	2242.13	2171.81	2067.75	1977.75	1866.94	1747.69
360.0	2556.00	2519.44	2426.63	2363.63	2230.88	2135.81	2001.38	1855.69	1724.06

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1603.69	1521.00	1464.75	1456.88	1430.44	1418.63	1379.25	1336.50	1279.13
22.5	1904.06	1885.50	1911.38	1920.38	1938.94	1936.69	1921.50	1866.38	1761.75
45.0	3007.69	2881.69	2777.63	2687.06	2653.31	2644.31	2625.19	2622.94	2566.69
67.5	3888.00	3722.63	3494.81	3327.19	3139.88	2873.25	2658.38	2464.31	2237.06
90.0	3950.44	3691.69	3458.25	3192.75	2917.69	2663.44	2404.69	2147.06	1920.38
112.5	4061.81	3868.31	3603.38	3368.25	3126.38	2886.19	2571.19	2340.56	2108.25
135.0	3573.56	3398.63	3232.69	3035.81	2875.50	2736.00	2563.88	2445.75	2284.31
157.5	2465.44	2435.63	2448.00	2482.88	2502.56	2536.88	2528.44	2468.81	2345.06
180.0	1610.44	1589.63	1579.50	1551.94	1510.88	1429.31	1310.06	1108.52	1055.36
202.5	1533.38	1478.25	1444.50	1420.31	1393.88	1369.13	1328.63	1260.56	1115.21
225.0	1757.25	1671.19	1566.00	1467.00	1370.81	1324.69	1265.06	1233.56	1195.88
247.5	1913.06	1834.88	1735.88	1591.31	1463.06	1312.31	1104.19	981.23	838.52
270.0	1873.13	1764.56	1629.00	1489.50	1319.63	1160.44	980.44	798.19	641.25
292.5	1884.94	1784.25	1647.00	1494.00	1351.13	1109.76	1014.69	862.03	691.99
315.0	1932.75	1865.25	1762.88	1676.25	1577.25	1448.44	1307.25	1190.25	1050.19
337.5	1644.19	1521.56	1436.63	1361.81	1317.94	1297.13	1266.75	1236.38	1204.31
360.0	1603.69	1521.00	1464.75	1456.88	1430.44	1418.63	1379.25	1336.50	1279.13

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	1191.94	1055.81	930.94	799.88	630.00	513.00	410.63	322.88	290.25
22.5	1652.06	1415.25	1221.19	1040.06	789.75	616.50	474.75	311.06	230.96
45.0	2530.69	2381.63	2197.69	1963.69	1724.63	1405.13	1119.71	960.41	719.04
67.5	2003.63	1815.75	1600.88	1403.44	1209.94	984.94	856.13	709.88	582.75
90.0	1685.25	1387.13	1097.04	927.84	707.91	522.34	399.88	282.38	208.86
112.5	1879.88	1644.19	1414.69	1158.19	931.50	726.75	564.19	439.88	317.25
135.0	2120.06	1938.94	1783.13	1616.63	1477.69	1310.63	1103.74	955.91	768.88
157.5	2190.94	1974.38	1756.13	1485.00	1175.06	907.88	694.13	430.31	293.63
180.0	873.39	713.59	560.25	400.44	276.81	178.71	115.93	76.78	52.82
202.5	1078.93	949.89	835.43	711.23	573.69	436.89	324.90	222.98	145.24
225.0	1152.00	1099.13	1063.69	982.69	885.94	802.13	685.13	585.00	494.44
247.5	689.40	570.71	453.66	354.71	282.54	214.59	158.12	118.86	96.47
270.0	519.19	348.19	290.25	201.43	145.29	116.89	98.38	94.11	89.94
292.5	546.64	395.44	277.03	205.43	157.39	115.82	95.68	85.84	81.28
315.0	933.75	817.88	716.63	638.44	553.50	471.38	401.06	339.19	289.13
337.5	1173.38	1115.16	1052.61	974.64	864.39	769.61	659.48	520.31	432.84
360.0	1191.94	1055.81	930.94	799.88	630.00	513.00	410.63	322.88	290.25

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	151.88	105.02	57.99	40.95	37.07	32.29	27.96	24.41	21.60
22.5	124.03	77.12	56.25	46.80	39.32	34.71	29.64	26.66	25.43
45.0	559.91	425.64	309.66	224.38	166.16	111.66	72.00	45.17	35.61
67.5	472.50	381.94	285.19	191.93	143.78	107.49	85.78	76.28	59.46
90.0	155.59	121.28	103.61	80.27	65.81	57.04	51.13	38.53	31.05
112.5	294.19	155.19	123.24	97.09	81.51	67.84	57.09	49.84	45.45
135.0	601.26	466.71	352.80	232.37	155.08	101.53	62.10	46.41	38.42
157.5	163.41	101.87	70.03	55.29	43.37	34.43	29.59	25.93	23.96
180.0	42.36	36.68	32.34	27.90	24.98	23.91	22.73	21.66	21.09
202.5	96.08	59.12	43.14	36.00	30.38	26.89	23.85	20.93	20.25
225.0	376.88	294.75	242.94	140.23	96.36	62.72	36.96	28.18	24.24
247.5	83.87	81.00	77.18	67.22	53.94	39.66	30.04	24.81	21.83
270.0	81.11	66.54	55.97	49.05	40.28	33.02	28.69	24.02	20.42
292.5	75.04	64.80	53.38	47.70	42.92	37.69	34.76	31.73	26.89
315.0	183.66	129.15	81.62	53.33	41.74	35.44	30.38	25.76	20.59
337.5	336.15	244.80	191.59	130.67	78.02	52.43	37.24	31.61	29.36
360.0	151.88	105.02	57.99	40.95	37.07	32.29	27.96	24.41	21.60

C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	20.59	19.63	18.73	17.83	16.99	16.26	15.81	15.24	14.63
22.5	24.19	22.95	21.99	20.98	20.08	19.29	18.68	17.89	17.21
45.0	32.68	28.58	24.69	22.28	21.04	19.74	18.84	18.00	17.16
67.5	51.92	44.83	37.18	32.29	28.01	25.09	21.66	19.58	17.66
90.0	27.51	24.92	23.01	21.26	19.69	18.56	17.72	16.93	16.26
112.5	30.09	25.14	23.51	21.94	20.31	18.84	17.72	17.04	16.26
135.0	32.23	29.03	26.27	24.24	23.18	20.93	18.06	17.27	16.09
157.5	22.56	21.32	20.42	19.69	18.84	18.23	17.49	16.76	16.14
180.0	20.48	19.63	19.18	18.51	17.83	17.04	16.54	16.20	15.98
202.5	19.41	18.56	18.17	17.72	17.38	16.88	16.43	15.75	15.41
225.0	21.04	18.79	17.44	16.43	16.26	15.58	15.58	15.02	15.02
247.5	19.01	17.38	16.03	15.36	15.02	14.63	14.23	14.01	13.73
270.0	18.17	16.71	15.81	15.19	14.63	14.18	13.89	13.56	13.22
292.5	23.01	18.34	15.53	14.40	13.78	13.39	13.11	12.94	12.71
315.0	17.61	16.59	16.03	15.69	15.24	14.79	14.23	13.73	12.94
337.5	27.06	24.08	22.39	21.66	21.21	20.70	20.31	19.91	19.58
360.0	20.59	19.63	18.73	17.83	16.99	16.26	15.81	15.24	14.63

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	14.23	13.89	13.44	13.11	12.83	12.60	12.43	12.21	12.04
22.5	16.65	16.14	15.81	15.41	15.08	14.79	14.51	14.29	14.01
45.0	16.43	15.92	15.30	15.02	14.63	14.23	14.01	13.73	13.56
67.5	16.71	15.98	15.13	14.63	14.23	13.89	13.50	13.22	12.94
90.0	15.69	15.41	14.96	14.29	13.89	13.61	13.16	12.83	12.66
112.5	15.75	15.41	15.30	14.96	14.40	14.01	13.61	13.39	13.22
135.0	15.81	16.09	15.19	14.34	13.61	13.28	12.99	12.77	12.60
157.5	15.64	15.19	14.74	14.46	14.06	13.78	13.39	12.99	12.71
180.0	15.53	15.36	14.85	14.40	14.06	13.89	13.78	13.39	13.05
202.5	15.08	14.74	14.51	14.12	13.89	13.67	13.50	13.33	13.28
225.0	14.46	14.18	13.84	13.56	13.44	13.28	13.11	13.16	12.99
247.5	13.44	13.28	13.05	12.83	12.60	12.49	12.32	12.15	12.04
270.0	12.94	12.66	12.43	12.21	11.98	11.81	11.59	11.48	11.31
292.5	12.49	12.26	12.04	11.81	11.70	11.53	11.42	11.25	11.03
315.0	12.54	12.26	12.04	11.87	11.93	11.53	11.36	11.19	11.36
337.5	19.13	18.62	18.34	18.00	17.61	17.38	17.04	16.76	16.43
360.0	14.23	13.89	13.44	13.11	12.83	12.60	12.43	12.21	12.04

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	11.81	11.70	11.64	11.59	11.48	11.36	11.25	11.31	11.31
22.5	13.89	13.73	13.61	13.50	13.39	13.22	13.05	12.99	12.77
45.0	13.44	13.22	12.94	12.83	12.60	12.43	12.26	12.15	11.98
67.5	12.77	12.60	12.43	12.26	12.09	11.93	11.87	11.76	11.59
90.0	12.60	12.54	12.49	12.49	12.66	12.88	13.33	13.95	14.74
112.5	13.22	13.33	13.56	13.89	14.18	13.95	13.78	13.73	13.73
135.0	12.43	12.26	12.15	11.98	11.81	11.70	11.48	11.36	11.31
157.5	12.49	12.26	12.04	11.87	11.70	11.64	11.53	11.42	11.36
180.0	12.71	12.43	12.38	12.32	11.98	11.81	11.76	11.64	11.70
202.5	13.16	12.94	12.83	12.71	12.66	12.66	12.54	12.43	12.43
225.0	12.99	12.77	12.71	12.77	12.66	12.60	12.43	12.43	12.26
247.5	11.87	11.76	11.76	11.64	11.48	11.31	11.08	11.03	10.97
270.0	11.14	10.97	10.86	10.69	10.58	10.52	10.46	10.41	10.35
292.5	10.91	10.80	10.69	10.58	10.52	10.52	10.52	10.46	10.41
315.0	11.70	11.59	11.64	11.31	11.31	11.48	11.31	11.31	10.91
337.5	16.20	15.92	15.64	15.41	15.13	14.85	14.63	14.46	14.34
360.0	11.81	11.70	11.64	11.59	11.48	11.36	11.25	11.31	11.31

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	11.25	11.03	10.86	10.69	10.41	10.18	10.24	10.29	10.13
22.5	12.60	12.32	12.21	11.98	11.98	11.87	11.81	11.76	11.70
45.0	11.81	11.70	11.59	11.48	11.36	11.25	11.14	11.03	10.86
67.5	11.48	11.36	11.19	11.08	11.03	10.91	10.80	10.69	10.58
90.0	15.13	15.24	14.96	14.57	14.40	14.46	14.29	13.73	13.67
112.5	13.95	14.63	14.91	14.96	14.57	14.12	13.73	13.33	13.33
135.0	11.19	11.14	11.08	11.03	10.86	10.80	10.74	10.69	10.69
157.5	11.31	11.19	11.03	10.97	10.91	10.91	10.91	10.86	10.86
180.0	11.76	11.70	11.59	11.42	11.25	11.25	11.36	11.76	11.81
202.5	12.43	12.38	12.38	12.32	12.15	12.09	11.87	11.76	11.81
225.0	12.32	11.98	11.76	11.70	11.64	11.53	11.42	11.19	10.97
247.5	10.91	10.86	10.86	10.80	10.97	10.74	10.63	10.58	10.46
270.0	10.29	10.24	10.24	10.18	10.18	10.13	10.13	10.07	10.01
292.5	10.29	10.29	10.29	10.24	10.29	10.29	10.35	10.41	10.41
315.0	10.63	10.35	9.96	9.84	9.84	9.84	9.79	9.79	9.62
337.5	14.06	13.89	13.78	13.67	13.56	13.44	13.33	13.22	13.11
360.0	11.25	11.03	10.86	10.69	10.41	10.18	10.24	10.29	10.13

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	10.07	10.07	9.96	9.84	9.73	9.45	9.17	8.94	8.72
22.5	11.48	11.31	11.08	10.80	10.52	10.24	10.01	9.73	9.62
45.0	10.80	10.69	10.58	10.41	10.13	9.96	9.73	9.62	9.56
67.5	10.46	10.35	10.29	10.24	9.79	9.68	9.51	9.39	9.28
90.0	13.56	11.64	10.46	10.41	9.39	9.23	9.06	8.94	8.94
112.5	13.39	13.05	11.93	11.81	10.07	9.11	9.00	8.83	8.78
135.0	10.80	10.91	11.14	10.97	9.23	9.00	8.89	8.78	8.78
157.5	10.69	10.52	10.46	10.35	10.29	8.94	8.78	8.61	8.55
180.0	11.53	10.58	10.35	10.24	9.39	8.89	8.55	8.38	8.38
202.5	12.04	12.09	11.64	11.19	11.03	10.91	10.07	9.96	9.79
225.0	10.80	10.74	10.63	10.52	10.46	10.52	10.07	9.90	9.84
247.5	10.35	10.24	10.18	10.13	10.07	10.07	9.68	9.56	9.45
270.0	10.01	9.96	9.84	9.79	9.68	9.51	9.34	9.23	9.11
292.5	10.46	10.46	10.52	10.58	10.46	10.52	10.52	10.41	10.35
315.0	9.56	9.45	9.39	9.34	9.28	9.23	9.17	9.11	9.00
337.5	12.94	12.83	12.71	12.60	12.32	12.77	14.34	15.86	15.81
360.0	10.07	10.07	9.96	9.84	9.73	9.45	9.17	8.94	8.72

C/γ(°)	90.0
0.0	8.49
22.5	9.62
45.0	9.62
67.5	9.28
90.0	8.94
112.5	8.83
135.0	8.72
157.5	8.61
180.0	8.38
202.5	9.62
225.0	9.73
247.5	9.34
270.0	9.06
292.5	9.51
315.0	8.89
337.5	11.93
360.0	8.49