NATA LIGHTING CO.,LTD
www.nata.cn
Email:info@nata.cn
Tel:+86 0750-377 0000(10 lines) Fax:+86 0750-377 1111
Address:380JinOu Road,Gaoxin Zone,Jiang Men City,Guangdong,China

Nata

LumCAT: 8384-E
Luminaire: TE 2213480-1+92.76.365.00

Report No: GC201703308	Voltage(V): 34.0000
Test No: NT-0010	Current(A): 0.8000
LampCAT: LUMILEDS LUXEON CoB 1216	Power (W): 27.2000
Lamp flux(lm): 3850.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 200	Width(mm): 200
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 3597.73
Efficiency(%): 93.45%
Lumens(lm)/Power(W): 132.27
Central intensity(cd): 2337.006
Maximum intensity(cd): 2337.006
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=83.4
[C90/270]Total=83.4
Field angle(10%Imax): [C0/180]Total=100.6
[C90/270]Total=100.6
Maximum s/h(1/2): C0_180=1.21 C90_270=1.21
Maximum s/h(1/4): C0_180=1.18 C90_270=1.18
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 93.45%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.572%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2337.007	0.000	0	.000%	.000%
1.0	2336.869	2.236	2.236	.058%	.062%
2.0	2336.227	6.707	8.944	.174%	.249%
3.0	2335.080	11.172	20.116	.290%	.559%
4.0	2333.474	15.627	35.743	.406%	.993%
5.0	2331.684	20.069	55.812	.521%	1.551%
6.0	2330.262	24.500	80.312	.636%	2.232%
7.0	2329.069	28.920	109.232	.751%	3.036%
8.0	2328.152	33.331	142.563	.866%	3.963%
9.0	2327.142	37.729	180.292	.980%	5.011%
10.0	2325.858	42.108	222.4	1.094%	6.182%
11.0	2324.206	46.464	268.864	1.207%	7.473%
12.0	2321.270	50.782	319.645	1.319%	8.885%
13.0	2316.360	55.037	374.682	1.430%	10.414%
14.0	2309.800	59.214	433.897	1.538%	12.060%
15.0	2301.725	63.309	497.206	1.644%	13.820%
16.0	2290.530	67.289	564.495	1.748%	15.690%
17.0	2278.142	71.146	635.642	1.848%	17.668%
18.0	2263.002	74.874	710.515	1.945%	19.749%
19.0	2246.163	78.450	788.965	2.038%	21.930%
20.0	2227.398	81.879	870.844	2.127%	24.205%
21.0	2206.569	85.141	955.985	2.211%	26.572%
22.0	2184.821	88.247	1044.232	2.292%	29.025%
23.0	2162.478	91.218	1135.45	2.369%	31.560%
24.0	2138.391	94.032	1229.483	2.442%	34.174%
25.0	2108.890	96.574	1326.056	2.508%	36.858%
26.0	2081.866	98.923	1424.98	2.569%	39.608%
27.0	2048.419	101.048	1526.028	2.625%	42.416%
28.0	2010.247	102.757	1628.785	2.669%	45.273%
29.0	1969.322	104.117	1732.902	2.704%	48.167%
30.0	1924.496	105.132	1838.034	2.731%	51.089%
31.0	1870.862	105.619	1943.653	2.743%	54.024%
32.0	1818.100	105.684	2049.338	2.745%	56.962%
33.0	1760.153	105.417	2154.754	2.738%	59.892%
34.0	1695.875	104.590	2259.344	2.717%	62.799%
35.0	1634.395	103.426	2362.77	2.686%	65.674%
36.0	1565.299	101.879	2464.649	2.646%	68.506%
37.0	1497.213	99.882	2564.531	2.594%	71.282%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	1428.943	97.671	2662.202	2.537%	73.997%
39.0	1357.278	95.101	2757.303	2.470%	76.640%
40.0	1284.833	92.147	2849.451	2.393%	79.201%
41.0	1220.651	89.219	2938.67	2.317%	81.681%
42.0	1147.371	86.034	3024.704	2.235%	84.073%
43.0	1078.284	82.445	3107.149	2.141%	86.364%
44.0	1008.679	78.768	3185.917	2.046%	88.554%
45.0	922.745	74.227	3260.144	1.928%	90.617%
46.0	813.440	67.898	3328.042	1.764%	92.504%
47.0	686.760	59.667	3387.709	1.550%	94.162%
48.0	554.276	50.169	3437.878	1.303%	95.557%
49.0	401.127	39.234	3477.112	1.019%	96.647%
50.0	271.648	28.050	3505.162	.729%	97.427%
51.0	138.453	17.351	3522.513	.451%	97.909%
52.0	67.729	8.847	3531.361	.230%	98.155%
53.0	25.046	4.036	3535.396	.105%	98.267%
54.0	19.036	1.943	3537.339	.050%	98.321%
55.0	17.260	1.620	3538.959	.042%	98.366%
56.0	16.457	1.524	3540.483	.040%	98.409%
57.0	15.838	1.477	3541.96	.038%	98.450%
58.0	15.388	1.444	3543.404	.038%	98.490%
59.0	15.471	1.443	3544.846	.037%	98.530%
60.0	16.333	1.503	3546.349	.039%	98.572%
61.0	17.857	1.632	3547.98	.042%	98.617%
62.0	19.311	1.791	3549.771	.047%	98.667%
63.0	20.440	1.933	3551.705	.050%	98.721%
64.0	21.412	2.054	3553.758	.053%	98.778%
65.0	21.862	2.142	3555.9	.056%	98.837%
66.0	21.885	2.183	3558.083	.057%	98.898%
67.0	21.674	2.190	3560.273	.057%	98.959%
68.0	21.284	2.176	3562.449	.057%	99.019%
69.0	20.720	2.143	3564.592	.056%	99.079%
70.0	20.059	2.094	3566.686	.054%	99.137%
71.0	19.302	2.034	3568.721	.053%	99.194%
72.0	18.568	1.969	3570.69	.051%	99.248%
73.0	17.815	1.903	3572.592	.049%	99.301%
74.0	17.067	1.834	3574.426	.048%	99.352%
75.0	16.421	1.769	3576.195	.046%	99.401%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	15.829	1.712	3577.907	.044%	99.449%
77.0	15.292	1.659	3579.567	.043%	99.495%
78.0	14.801	1.611	3581.177	.042%	99.540%
79.0	14.342	1.566	3582.743	.041%	99.583%
80.0	13.879	1.521	3584.265	.040%	99.626%
81.0	13.484	1.480	3585.745	.038%	99.667%
82.0	13.090	1.441	3587.186	.037%	99.707%
83.0	12.791	1.407	3588.593	.037%	99.746%
84.0	12.576	1.382	3589.974	.036%	99.784%
85.0	12.457	1.366	3591.341	.035%	99.822%
86.0	12.278	1.352	3592.693	.035%	99.860%
87.0	11.773	1.316	3594.009	.034%	99.897%
88.0	11.355	1.267	3595.276	.033%	99.932%
89.0	11.140	1.233	3596.509	.032%	99.966%
90.0	11.112	1.220	3597.729	.032%	100.000%

Zonal flux distribution table

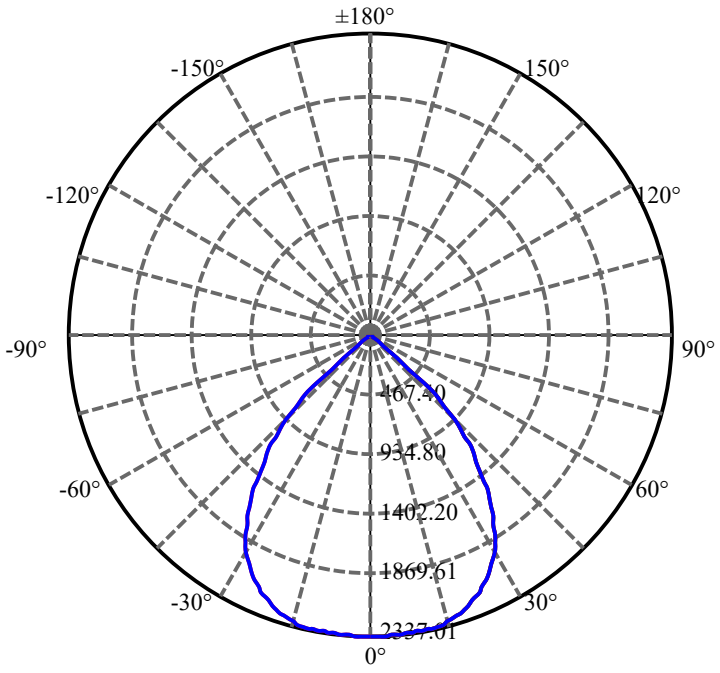
ZONAL LUMEN SUMMARY

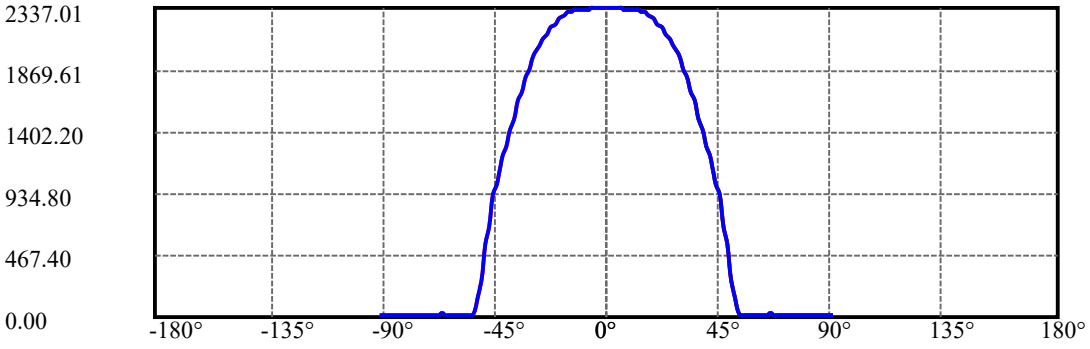
Zone	Lumens	%Lamp	%Fixt
0-30	1838.03	47.74%	51.09%
0-40	2849.45	74.01%	79.20%
0-60	3546.35	92.11%	98.57%
0-90	3596.51	93.42%	99.97%
0-120	3596.51	93.42%	99.97%
0-180	3597.73	93.45%	100.00%
60-90	51.66	1.34%	1.44%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-40.32	2878.18	74.76%	80.00%

ZONAL LUMEN SUMMARY

0-10	222.40
10-20	648.44
20-30	967.19
30-40	1011.42
40-50	655.71
50-60	41.19
60-70	20.34
70-80	17.58
80-90	12.24
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(Max):

C0/C180:

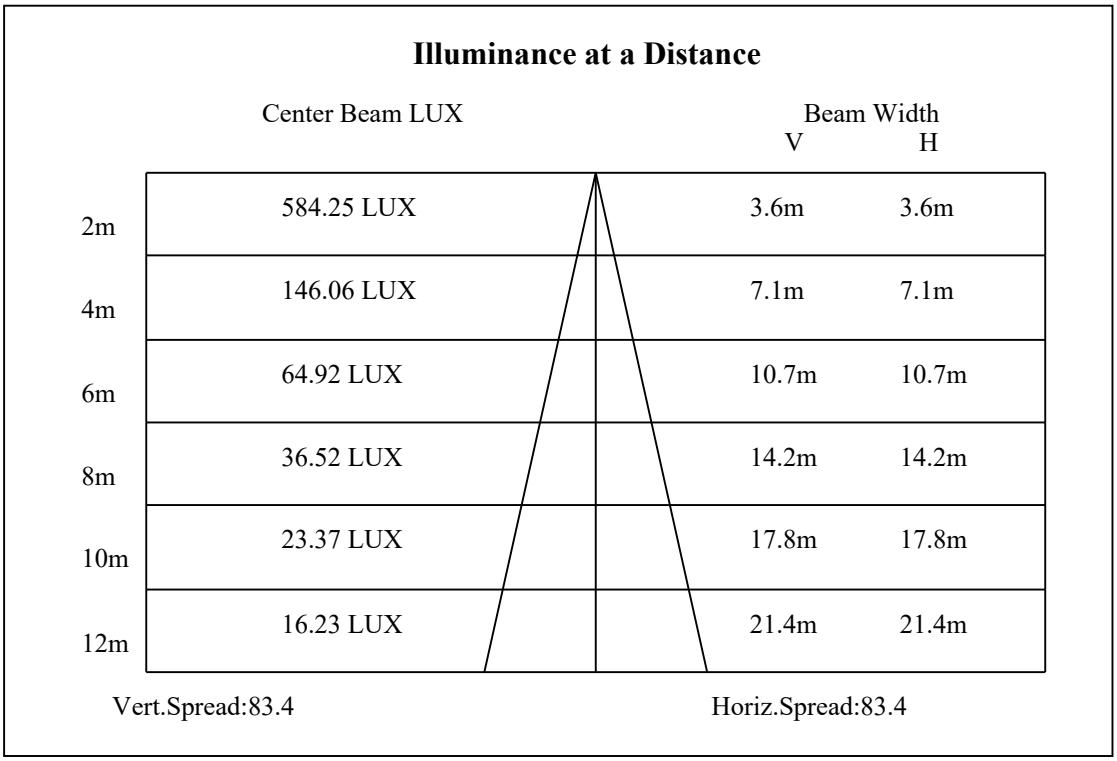
C90/C270:

Field angle(10%Imax):C0/180Left:50.3 Right:50.3
:C90/270Left:50.3 Right:50.3

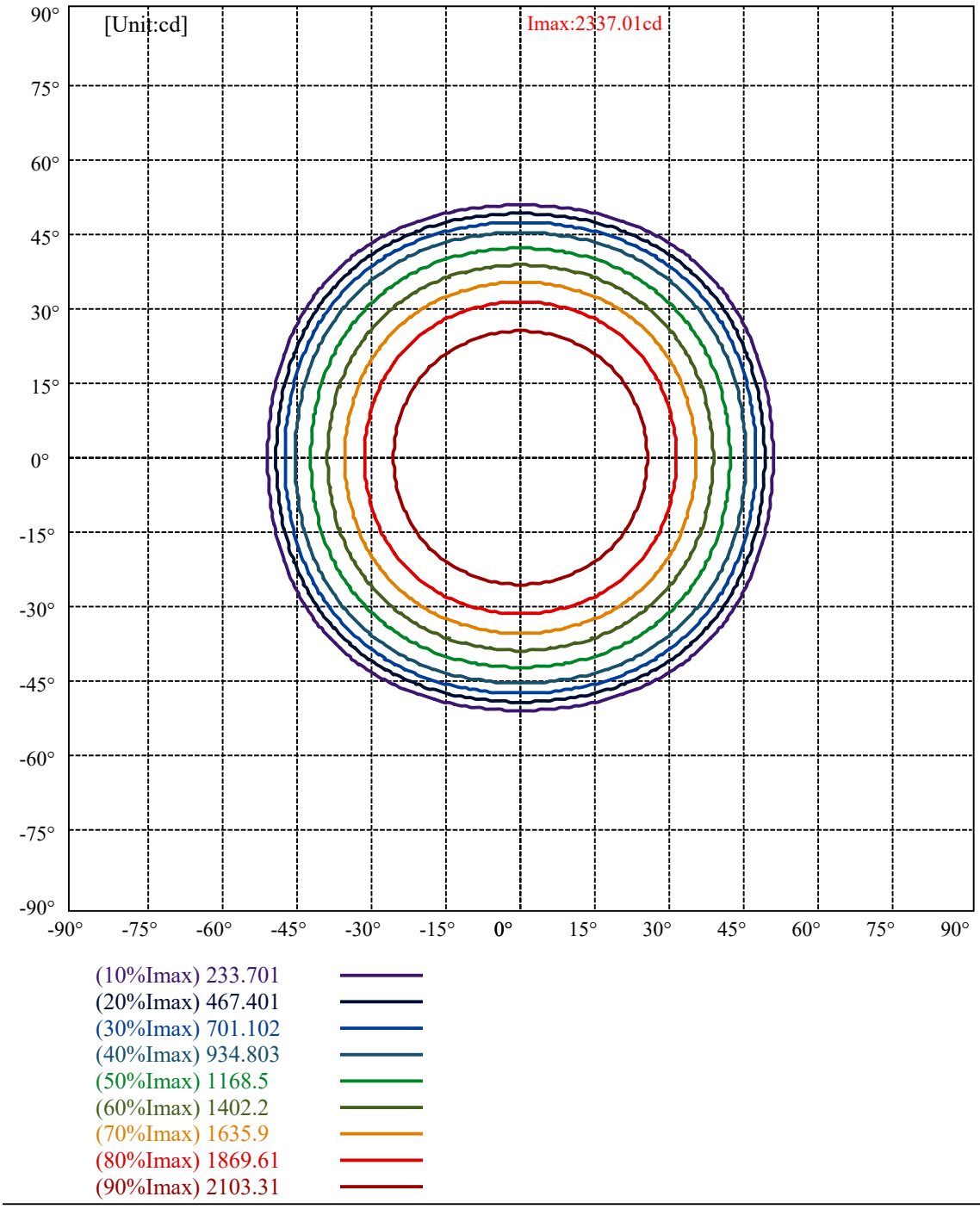
Beam Angle(50%Imax):C0/180Left:41.7 Right:41.7
:C90/270Left:41.7 Right:41.7

Equipment: gms1980 Date: 2017/3/23 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.42

Lux distance Curve



ISO-Intensity(V-H)

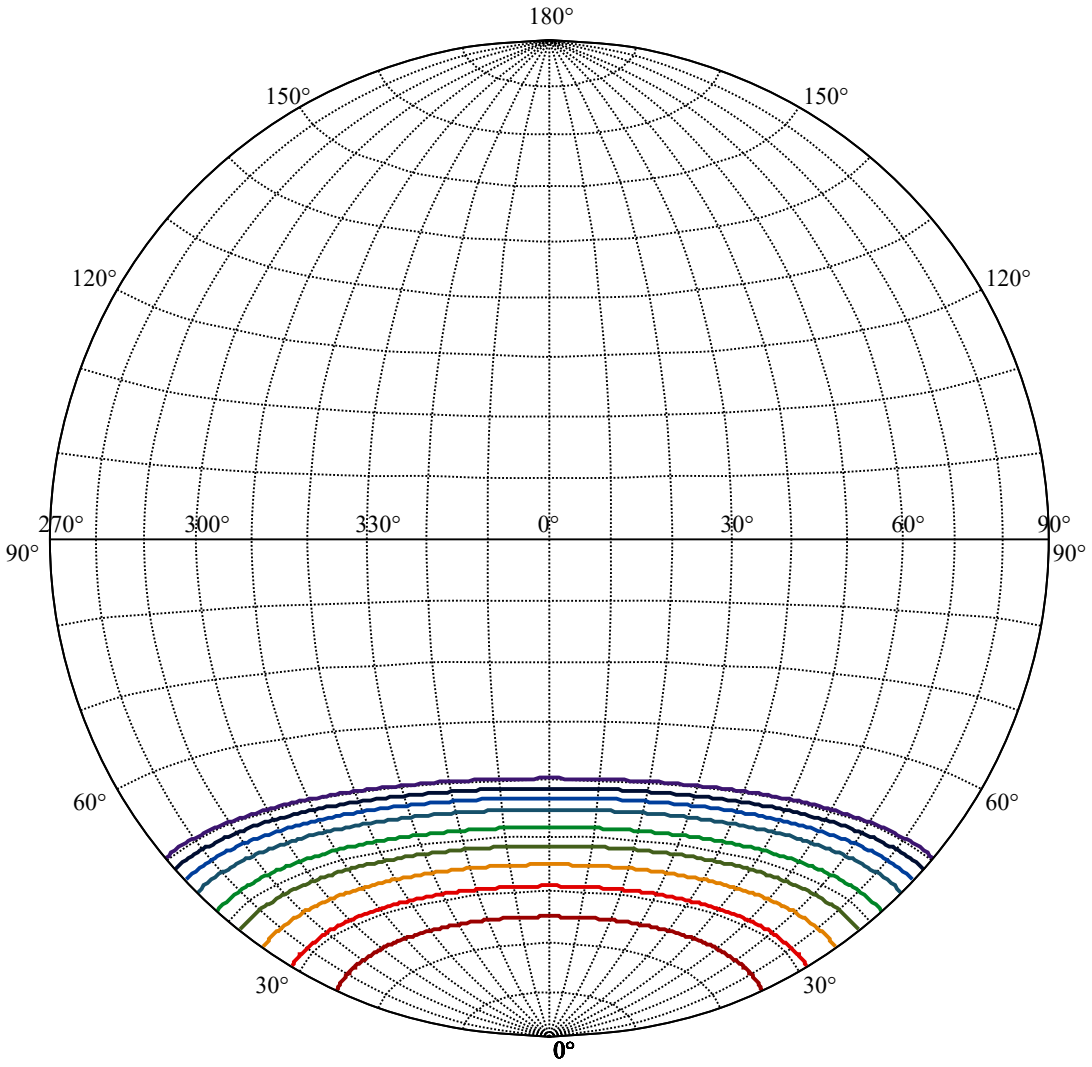


Equipment: gms1980
Temperature(°C): 25.0

Date: 2017/3/23
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.42

ISO candela diagram on circular web



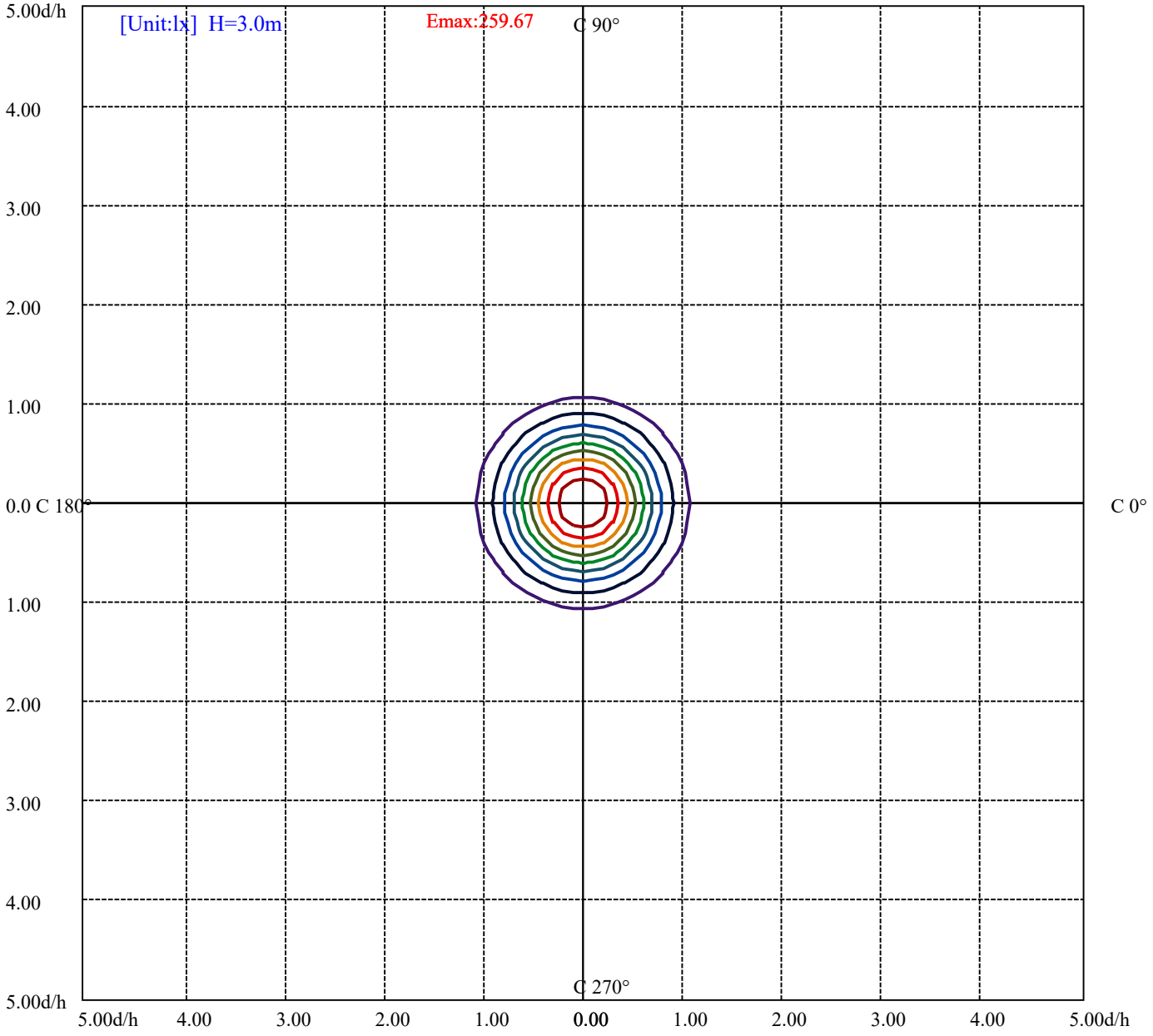
House [Unit:cd] Road

Imax:2337.01

(10%Imax) 233.701
(20%Imax) 467.401
(30%Imax) 701.102
(40%Imax) 934.803
(50%Imax) 1168.5
(60%Imax) 1402.2
(70%Imax) 1635.9
(80%Imax) 1869.61
(90%Imax) 2103.31

Equipment: gms1980 Date: 2017/3/23 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.42

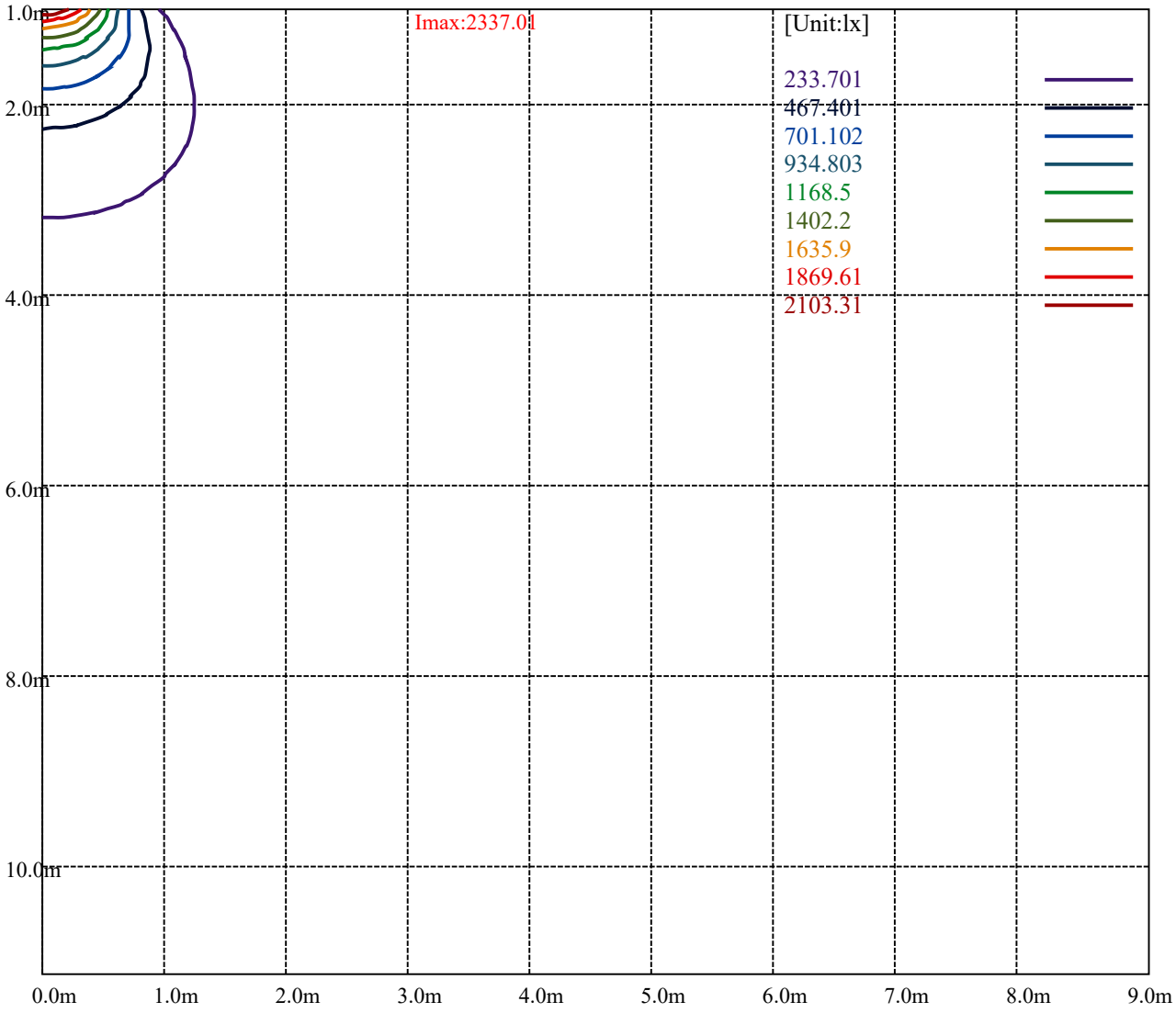
ISO illuminance diagram



(10%Emax) 25.96678
(20%Emax) 51.93344
(30%Emax) 77.90022
(40%Emax) 103.867
(50%Emax) 129.8333
(60%Emax) 155.8
(70%Emax) 181.7667
(80%Emax) 207.7344
(90%Emax) 233.7011

Equipment: gms1980
Temperature(°C): 25.0
Date: 2017/3/23
Humidity(%): 60.0%
Operator: NT07
Distance(m): 7.42

Space ISO Lux diagram



Equipment: gms1980
Temperature(°C): 25.0

Date: 2017/3/23
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.42

Luminance Limitting Curve(no luminous side)

Luminance Table

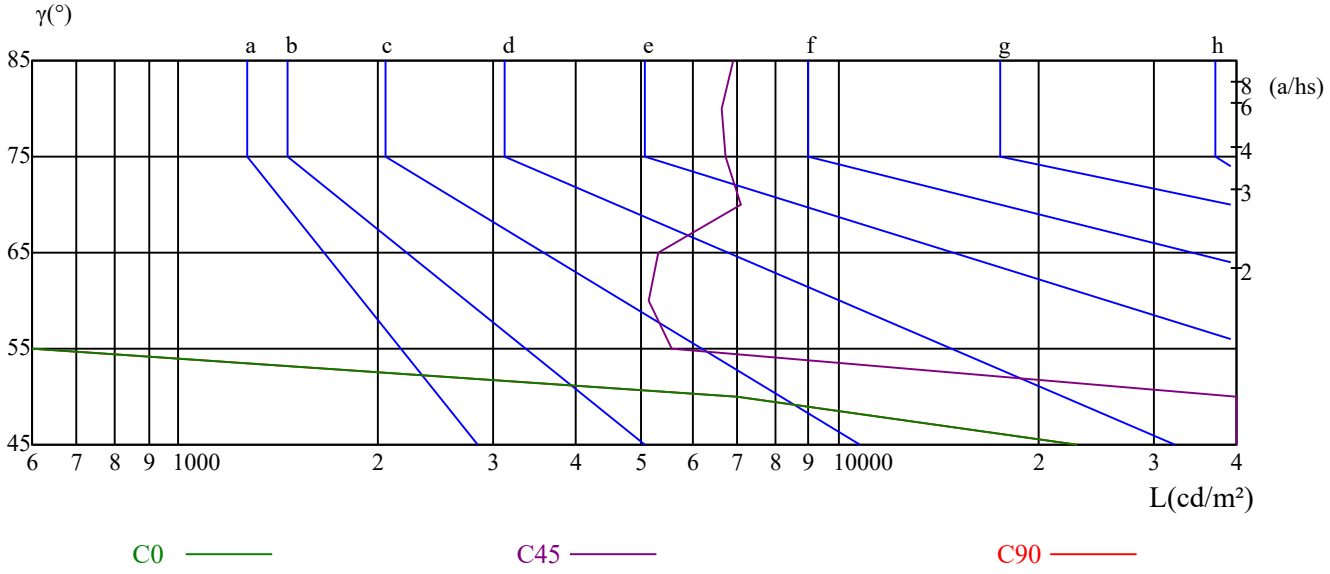
γ	45	50	55	60	65	70	75	80	85
C0	22894	7013	468	470	677	676	613	586	610
C45	308087	91831	5569	5167	5315	7082	6731	6650	6906
C90	22894	7013	468	470	677	676	613	586	610

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1293	1293	12165	1586	1586	21829	3573	3573	54346

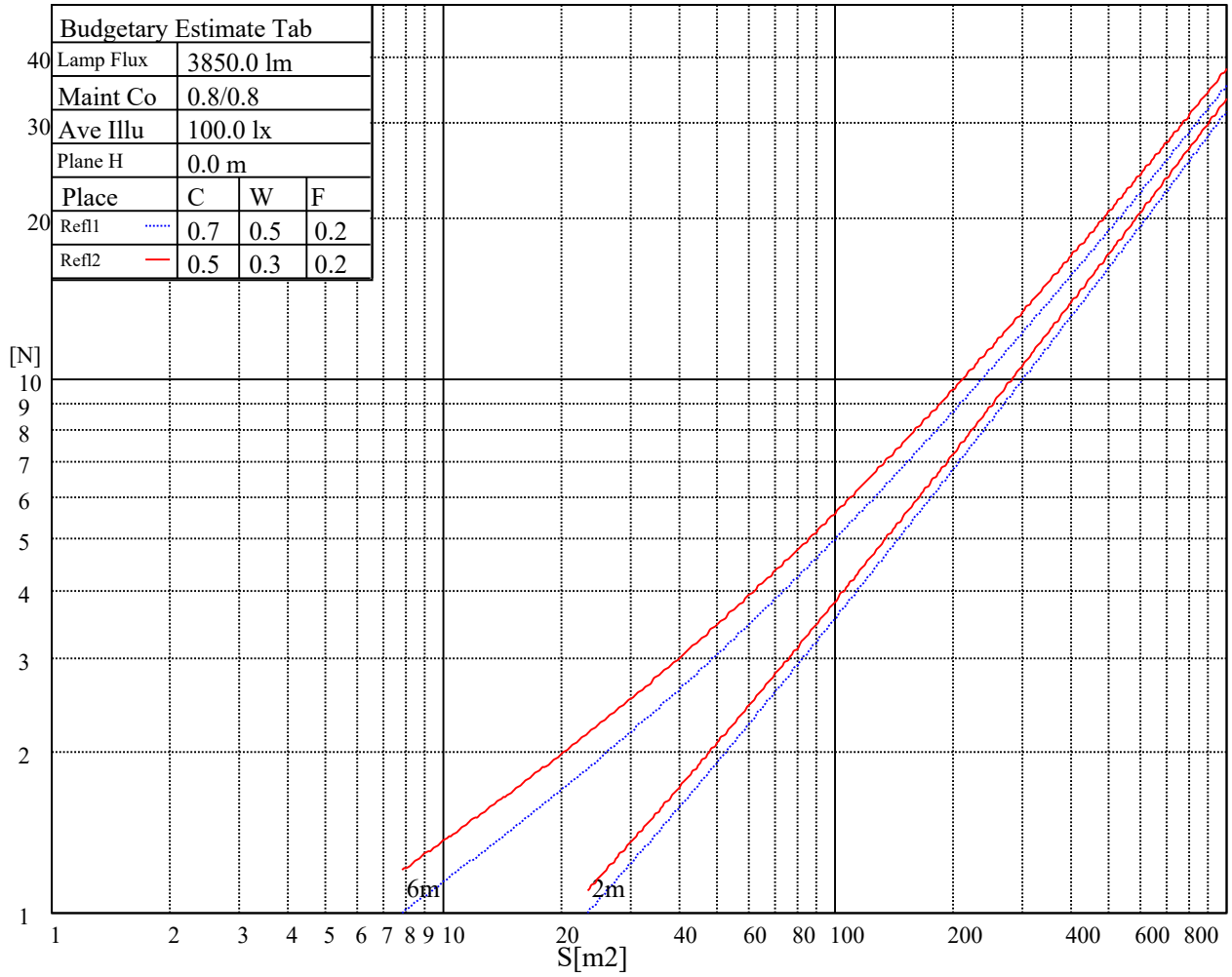
Glare Table

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



Budgetary Estimate Table

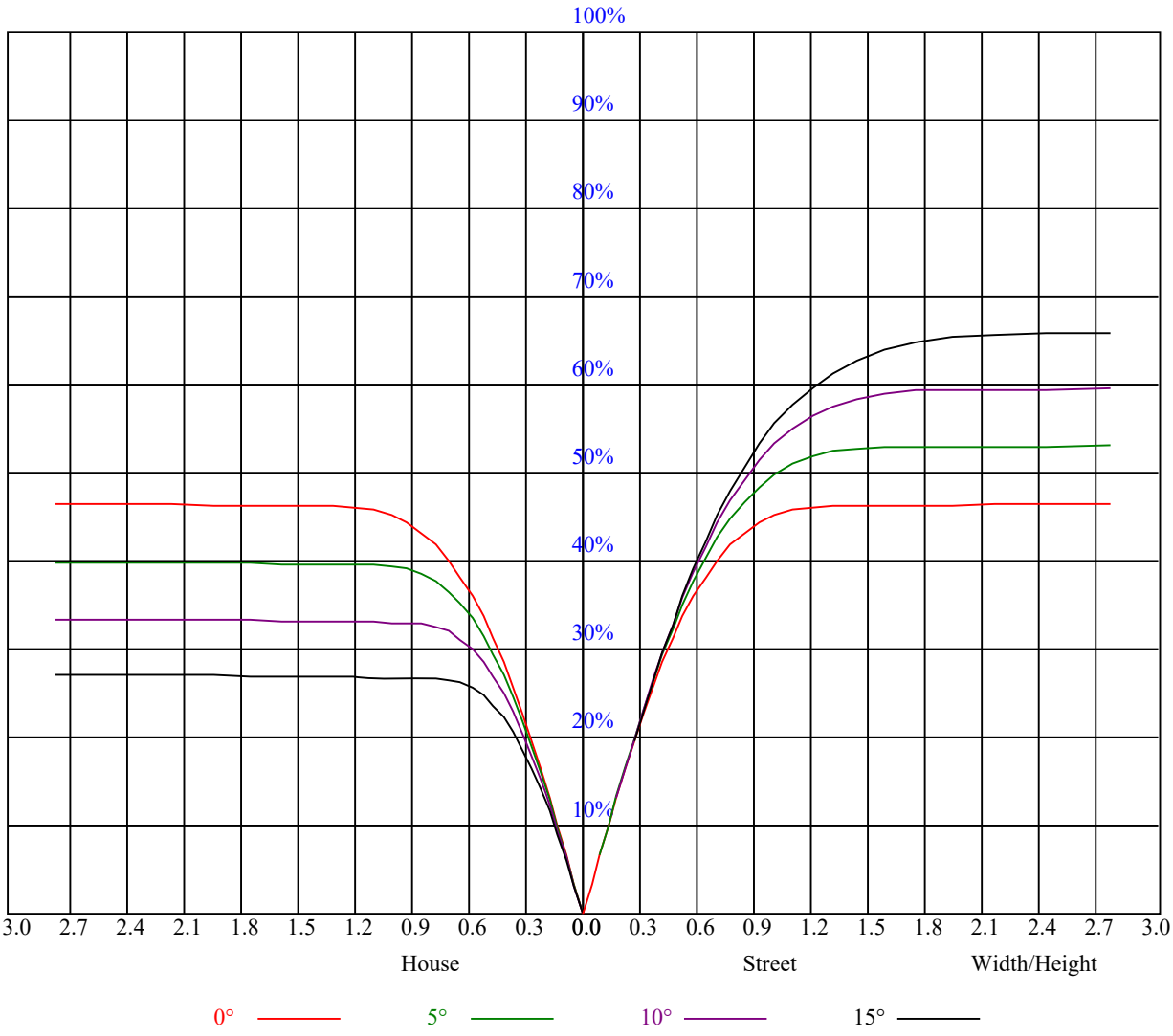


Equipment: gms1980 Date: 2017/3/23 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.42

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	1.09	1.09	1.09	1.04	1.04	1.04	0.99	0.99	0.99	0.95	0.95	0.95	0.93
1	1.02	1.00	0.97	1.00	0.98	0.96	0.96	0.94	0.93	0.93	0.91	0.90	0.90	0.88	0.87	0.86
2	0.94	0.89	0.86	0.92	0.88	0.85	0.89	0.86	0.83	0.86	0.84	0.81	0.84	0.81	0.79	0.78
3	0.86	0.81	0.76	0.85	0.80	0.76	0.82	0.78	0.75	0.80	0.76	0.73	0.78	0.75	0.72	0.71
4	0.79	0.73	0.69	0.78	0.73	0.68	0.76	0.71	0.67	0.74	0.70	0.67	0.72	0.69	0.66	0.64
5	0.73	0.67	0.62	0.72	0.66	0.62	0.70	0.65	0.61	0.69	0.64	0.61	0.67	0.63	0.60	0.58
6	0.67	0.61	0.56	0.67	0.61	0.56	0.65	0.60	0.56	0.64	0.59	0.55	0.62	0.58	0.55	0.53
7	0.62	0.56	0.51	0.62	0.56	0.51	0.60	0.55	0.51	0.59	0.54	0.51	0.58	0.54	0.50	0.49
8	0.58	0.51	0.47	0.57	0.51	0.47	0.56	0.51	0.47	0.55	0.50	0.46	0.54	0.50	0.46	0.45
9	0.54	0.47	0.43	0.53	0.47	0.43	0.52	0.47	0.43	0.51	0.46	0.43	0.51	0.46	0.43	0.41
10	0.50	0.44	0.40	0.50	0.44	0.40	0.49	0.43	0.40	0.48	0.43	0.40	0.47	0.43	0.39	0.38

Coefficient Utilization Curve



Equipment: gms1980	Date: 2017/3/23	Operator: NT07
Temperature(°C): 25.0	Humidity(%): 60.0%	Distance(m): 7.42

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	2333.29	2332.74	2331.64	2329.44	2327.78	2323.93	2322.28	2320.08	2318.98
30.0	2342.65	2339.90	2335.49	2331.64	2327.78	2323.38	2320.08	2316.77	2314.02
60.0	2338.80	2336.04	2332.19	2327.78	2322.83	2318.98	2315.67	2311.27	2306.86
90.0	2337.69	2335.49	2332.74	2329.44	2325.58	2321.18	2318.43	2315.67	2312.92
120.0	2334.39	2333.84	2332.74	2330.54	2328.34	2326.13	2323.38	2322.28	2320.63
150.0	2334.94	2334.94	2334.94	2333.84	2332.19	2331.64	2329.99	2328.89	2328.89
180.0	2333.84	2334.39	2335.49	2335.49	2334.39	2333.84	2332.74	2332.74	2332.74
210.0	2342.65	2344.30	2347.05	2348.71	2350.36	2350.36	2350.91	2350.91	2352.01
240.0	2338.80	2341.00	2342.65	2344.85	2345.95	2347.05	2347.60	2348.16	2349.81
270.0	2337.69	2339.35	2340.45	2341.55	2341.55	2342.65	2341.55	2343.20	2342.65
300.0	2334.39	2335.49	2335.49	2335.49	2334.39	2333.29	2333.29	2332.74	2332.74
330.0	2334.94	2334.94	2333.84	2332.19	2330.54	2327.78	2327.23	2326.13	2325.58
360.0	2333.29	2332.74	2331.64	2329.44	2327.78	2323.93	2322.28	2320.08	2318.98

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2316.77	2314.57	2311.82	2308.51	2301.36	2294.75	2286.49	2272.18	2260.07
30.0	2309.62	2305.76	2300.81	2294.20	2285.39	2276.58	2263.37	2250.71	2233.64
60.0	2304.11	2298.05	2293.10	2286.49	2276.58	2264.47	2252.91	2237.49	2220.98
90.0	2309.07	2306.31	2303.01	2298.05	2290.90	2283.19	2274.38	2260.07	2248.50
120.0	2319.53	2318.98	2317.32	2314.02	2309.62	2303.56	2294.20	2285.39	2273.83
150.0	2328.89	2329.44	2329.44	2328.89	2327.78	2323.93	2319.53	2311.82	2302.46
180.0	2332.74	2332.74	2332.74	2331.09	2327.78	2323.93	2317.87	2309.07	2299.16
210.0	2353.11	2353.11	2353.66	2353.11	2350.91	2345.95	2340.45	2332.74	2320.63
240.0	2350.91	2350.91	2352.01	2350.91	2348.71	2344.30	2337.14	2327.78	2317.32
270.0	2342.65	2342.65	2342.10	2339.35	2336.04	2329.44	2322.28	2310.72	2298.05
300.0	2332.74	2332.74	2331.64	2330.54	2326.13	2321.18	2314.02	2302.46	2291.45
330.0	2325.58	2325.03	2322.83	2320.08	2315.12	2306.31	2298.05	2285.94	2271.63
360.0	2316.77	2314.57	2311.82	2308.51	2301.36	2294.75	2286.49	2272.18	2260.07

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2248.50	2229.78	2210.51	2194.55	2169.77	2145.55	2125.73	2094.35	2065.72
30.0	2214.37	2196.75	2174.18	2150.50	2128.48	2107.56	2071.22	2042.04	2013.96
60.0	2200.60	2179.68	2159.31	2136.19	2111.41	2088.84	2064.62	2027.18	1999.65
90.0	2235.29	2216.02	2196.20	2176.38	2152.71	2131.78	2108.66	2075.63	2048.10
120.0	2255.66	2239.69	2221.53	2195.10	2176.93	2156.56	2131.23	2103.15	2075.08
150.0	2289.25	2276.03	2258.41	2239.14	2219.32	2195.10	2170.32	2145.55	2120.22
180.0	2284.29	2267.77	2250.71	2230.33	2209.41	2187.39	2164.82	2133.99	2107.01
210.0	2308.51	2294.20	2276.58	2256.76	2238.04	2214.92	2193.45	2168.12	2142.24
240.0	2303.56	2289.25	2270.53	2250.71	2231.44	2208.86	2185.19	2162.62	2138.94
270.0	2282.64	2265.02	2248.50	2227.58	2205.56	2185.19	2162.62	2132.33	2105.36
300.0	2277.68	2261.72	2243.00	2224.83	2202.26	2178.03	2156.56	2128.48	2101.50
330.0	2255.66	2238.04	2219.32	2196.75	2172.53	2149.95	2126.28	2093.24	2064.62
360.0	2248.50	2229.78	2210.51	2194.55	2169.77	2145.55	2125.73	2094.35	2065.72

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	2032.68	1985.88	1944.04	1899.45	1838.33	1787.13	1732.07	1662.15	1602.69
30.0	1968.27	1923.12	1880.73	1817.41	1757.95	1711.70	1637.38	1583.97	1517.35
60.0	1965.51	1921.47	1870.82	1822.37	1763.46	1700.14	1641.78	1574.06	1512.95
90.0	2013.41	1977.08	1937.99	1898.90	1834.48	1789.33	1734.28	1656.10	1597.74
120.0	2040.94	2005.70	1961.66	1913.76	1866.96	1808.05	1745.29	1686.93	1626.37
150.0	2084.44	2054.15	2015.06	1968.82	1918.72	1874.67	1808.60	1748.59	1689.68
180.0	2078.93	2039.84	1997.45	1955.60	1904.40	1848.24	1793.74	1728.77	1669.31
210.0	2116.37	2082.78	2047.00	2010.66	1970.47	1913.76	1864.21	1809.70	1736.48
240.0	2105.91	2076.73	2044.79	2004.05	1958.36	1912.66	1857.05	1796.49	1739.23
270.0	2076.18	2037.64	1996.90	1953.95	1901.10	1844.94	1792.09	1728.77	1670.41
300.0	2066.82	2027.73	1989.74	1948.45	1891.74	1842.74	1789.88	1718.86	1658.85
330.0	2031.58	1990.84	1945.69	1900.55	1844.39	1783.83	1725.47	1656.10	1591.68
360.0	2032.68	1985.88	1944.04	1899.45	1838.33	1787.13	1732.07	1662.15	1602.69

Intensity data(cd)

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	1542.13	1470.56	1397.88	1332.36	1258.04	1193.07	1122.60	1058.18	987.71
30.0	1443.58	1376.41	1313.65	1234.36	1169.95	1107.18	1034.51	963.49	871.54
60.0	1443.03	1370.90	1308.69	1237.12	1150.13	1097.33	1038.91	967.07	863.95
90.0	1530.02	1460.65	1387.97	1330.71	1251.98	1185.36	1114.89	1047.72	983.86
120.0	1547.08	1482.67	1418.80	1337.32	1271.80	1206.84	1093.75	1064.24	1005.05
150.0	1617.01	1556.99	1482.67	1408.34	1342.28	1276.76	1195.83	1131.41	1072.50
180.0	1598.29	1526.16	1461.75	1387.97	1313.65	1248.68	1185.91	1097.88	1048.82
210.0	1675.92	1614.25	1543.78	1470.01	1404.49	1331.81	1267.95	1195.83	1092.92
240.0	1672.06	1610.40	1538.28	1462.85	1396.78	1332.92	1252.53	1188.12	1126.45
270.0	1602.14	1532.22	1468.90	1403.94	1323.56	1260.79	1197.48	1094.85	1061.38
300.0	1596.09	1523.41	1449.08	1381.92	1307.59	1242.62	1171.05	1103.33	1044.97
330.0	1516.25	1441.93	1375.86	1300.43	1227.76	1164.44	1093.03	1027.30	944.99
360.0	1542.13	1470.56	1397.88	1332.36	1258.04	1193.07	1122.60	1058.18	987.71

C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	882.00	755.37	630.40	494.41	311.07	292.35	57.81	27.86	18.66
30.0	745.46	606.72	469.08	307.77	207.67	53.51	25.66	17.84	17.12
60.0	754.77	634.25	467.10	325.66	187.52	57.42	26.81	17.78	16.85
90.0	883.66	762.53	638.10	502.11	330.34	281.34	78.13	30.01	18.83
120.0	921.31	807.57	674.50	543.63	387.10	245.22	102.24	31.38	19.32
150.0	995.42	907.33	799.97	678.29	519.73	382.09	284.64	75.10	30.83
180.0	983.09	883.49	758.84	635.52	482.68	322.91	179.59	55.55	27.80
210.0	1065.84	991.35	886.74	775.69	650.88	471.28	318.50	176.35	47.07
240.0	1058.73	988.81	896.87	770.24	622.14	475.69	305.01	286.29	42.89
270.0	985.18	861.74	741.55	608.10	425.92	273.47	133.57	33.80	21.86
300.0	953.58	836.86	716.83	584.15	405.77	291.80	112.81	36.28	20.48
330.0	843.90	725.26	561.13	425.75	282.71	112.70	36.67	24.50	18.83
360.0	882.00	755.37	630.40	494.41	311.07	292.35	57.81	27.86	18.66

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	17.73	16.79	16.13	15.53	14.98	15.03	17.29	20.37	21.91
30.0	16.52	15.86	15.25	14.65	14.98	16.90	20.21	22.13	22.85
60.0	15.91	15.36	14.87	14.65	15.14	16.85	19.16	21.36	22.08
90.0	18.00	16.85	16.19	15.69	15.20	15.91	17.89	20.48	22.30
120.0	17.56	16.79	16.19	15.58	14.92	14.65	15.97	18.88	20.65
150.0	19.38	17.95	17.23	16.68	16.02	15.53	15.03	14.81	15.42
180.0	19.10	18.06	16.85	16.30	15.64	15.14	14.70	15.31	17.07
210.0	25.66	20.48	19.49	18.00	17.18	16.52	15.91	15.47	16.19
240.0	24.06	18.22	17.12	16.63	15.97	15.47	15.09	14.92	15.53
270.0	18.33	17.01	16.35	15.69	14.92	14.53	14.26	15.58	17.40
300.0	18.44	17.07	15.86	15.25	14.81	14.37	14.37	16.52	19.71
330.0	17.73	16.68	15.97	15.42	14.92	14.76	16.13	18.44	20.65
360.0	17.73	16.79	16.13	15.53	14.98	15.03	17.29	20.37	21.91

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	22.63	23.01	23.01	22.85	22.41	21.91	21.25	20.48	19.77
30.0	22.96	22.90	22.68	22.35	22.02	21.31	20.54	19.77	18.83
60.0	22.08	21.97	22.24	22.52	22.74	22.63	22.19	21.53	20.92
90.0	23.12	23.78	24.11	24.33	24.45	24.22	23.29	22.02	20.59
120.0	21.14	21.58	21.91	21.80	21.36	20.65	19.82	18.94	18.28
150.0	16.63	18.22	19.32	19.88	19.93	19.66	19.21	18.55	17.84
180.0	19.60	21.09	20.54	19.55	18.55	18.11	17.78	17.45	17.18
210.0	18.28	21.09	23.89	24.67	24.50	23.95	23.01	21.91	20.26
240.0	16.90	19.43	20.81	21.53	21.80	21.80	21.80	21.69	21.53
270.0	19.55	20.65	20.92	20.81	20.54	20.21	19.88	19.60	19.27
300.0	20.70	20.87	20.32	19.82	19.55	19.32	18.94	18.55	17.78
330.0	21.69	22.35	22.57	22.52	22.24	21.64	20.92	20.21	19.38
360.0	22.63	23.01	23.01	22.85	22.41	21.91	21.25	20.48	19.77

Intensity data(cd)

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	18.94	17.45	16.13	15.47	15.03	14.59	14.15	13.76	13.43
30.0	17.78	16.85	16.02	15.09	14.53	14.09	13.76	13.49	13.21
60.0	20.48	20.10	19.10	18.28	17.56	16.46	15.75	15.03	14.15
90.0	19.55	18.66	18.00	17.23	16.57	15.97	15.36	14.70	14.15
120.0	17.56	16.90	16.41	16.02	15.53	15.20	14.81	14.42	13.98
150.0	17.18	16.52	15.80	15.03	14.37	13.87	13.54	13.21	13.05
180.0	16.85	16.41	16.08	15.69	15.25	14.98	14.65	14.15	13.71
210.0	19.16	18.61	18.00	17.51	17.01	16.41	15.86	15.25	14.53
240.0	21.36	21.14	20.59	19.99	19.10	18.55	17.78	16.96	16.30
270.0	18.66	17.67	16.74	16.02	15.31	14.76	14.15	13.76	13.16
300.0	16.79	16.08	15.42	15.09	14.87	14.48	14.09	13.87	13.54
330.0	18.50	17.40	16.52	15.64	14.81	14.15	13.71	13.49	13.32
360.0	18.94	17.45	16.13	15.47	15.03	14.59	14.15	13.76	13.43

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	13.21	12.94	12.83	12.66	12.50	12.39	11.51	11.29	11.18
30.0	12.94	12.66	12.50	12.33	12.22	11.51	11.23	11.12	11.12
60.0	13.65	13.27	12.94	12.66	12.44	11.73	11.12	11.12	11.07
90.0	13.60	13.27	12.94	12.66	12.44	12.28	11.51	11.12	11.07
120.0	13.65	13.16	12.83	12.61	12.55	12.66	11.67	11.12	11.12
150.0	12.88	12.61	12.55	12.50	12.66	12.77	12.88	11.40	11.18
180.0	13.32	12.94	12.61	12.44	12.55	12.77	11.95	11.23	11.18
210.0	13.98	13.49	12.99	12.72	12.50	12.33	12.28	12.33	11.34
240.0	15.31	14.31	13.65	13.16	12.94	12.61	12.39	12.06	11.18
270.0	12.88	12.55	12.33	12.11	12.06	11.95	11.84	11.18	11.07
300.0	13.21	12.94	12.61	12.55	12.33	12.22	11.67	11.12	11.12
330.0	13.16	12.94	12.72	12.50	12.28	12.11	11.23	11.18	11.07
360.0	13.21	12.94	12.83	12.66	12.50	12.39	11.51	11.29	11.18

C/γ(°)	90.0
0.0	11.18
30.0	11.12
60.0	11.07
90.0	11.07
120.0	11.07
150.0	11.12
180.0	11.18
210.0	11.23
240.0	11.12
270.0	11.07
300.0	11.07
330.0	11.07
360.0	11.18