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

Nata

LumCAT: 3-1698-N
Luminaire: 92.70.045.00+92.70.089.00

Report No: NATA0100	Voltage(V): 33.8000
Test No: GC2018062210	Current(A): 0.5000
LampCAT: NICHIA NFCWJ120B-V3	Power (W): 16.9000
Lamp flux(lm): 2303.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 79	Width(mm): 79
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1818.94
Efficiency(%): 78.98%
Lumens(lm)/Power(W): 107.79
Central intensity(cd): 11298.950
Maximum intensity(cd): 11298.950
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=17.8
[C90/270]Total=17.8
Field angle(10%Imax): [C0/180]Total=34.7
[C90/270]Total=34.7
Maximum s/h(1/2): C0_180=0.31 C90_270=0.31
Maximum s/h(1/4): C0_180=0.30 C90_270=0.30
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 79.10%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.892%

Equipment: GMS1980	Date: 2018/6/22	Operator: NT07
Temperature(°C): 25.0	Humidity(%): 60.0%	Distance(m): 7.42

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	11298.950	2.703	2.703	.117%	.149%
1.0	11236.461	21.505	24.208	.934%	1.331%
2.0	10974.117	41.999	66.207	1.824%	3.640%
3.0	10628.225	60.998	127.205	2.649%	6.993%
4.0	10122.945	77.436	204.641	3.362%	11.251%
5.0	9345.962	89.325	293.966	3.879%	16.161%
6.0	8581.916	98.372	392.337	4.271%	21.570%
7.0	7639.695	102.099	494.437	4.433%	27.183%
8.0	6573.321	100.321	594.758	4.356%	32.698%
9.0	5568.267	95.522	690.28	4.148%	37.950%
10.0	4605.606	87.702	777.982	3.808%	42.771%
11.0	3693.596	77.286	855.267	3.356%	47.020%
12.0	3059.071	69.746	925.014	3.028%	50.855%
13.0	2441.958	60.239	985.253	2.616%	54.166%
14.0	1950.579	51.748	1037	2.247%	57.011%
15.0	1564.565	44.406	1081.406	1.928%	59.453%
16.0	1320.934	39.927	1121.334	1.734%	61.648%
17.0	1171.442	37.558	1158.892	1.631%	63.713%
18.0	1044.069	35.380	1194.272	1.536%	65.658%
19.0	959.303	34.249	1228.522	1.487%	67.541%
20.0	873.360	32.756	1261.278	1.422%	69.341%
21.0	799.481	31.419	1292.697	1.364%	71.069%
22.0	740.412	30.416	1323.113	1.321%	72.741%
23.0	677.324	29.022	1352.135	1.260%	74.336%
24.0	623.782	27.823	1379.957	1.208%	75.866%
25.0	573.330	26.571	1406.528	1.154%	77.327%
26.0	528.328	25.398	1431.926	1.103%	78.723%
27.0	483.010	24.047	1455.973	1.044%	80.045%
28.0	446.377	22.981	1478.953	.998%	81.309%
29.0	410.968	21.849	1500.802	.949%	82.510%
30.0	375.973	20.615	1521.417	.895%	83.643%
31.0	344.123	19.436	1540.853	.844%	84.712%
32.0	315.067	18.309	1559.162	.795%	85.718%
33.0	290.244	17.335	1576.497	.753%	86.671%
34.0	269.191	16.507	1593.004	.717%	87.579%
35.0	246.666	15.515	1608.519	.674%	88.432%
36.0	223.267	14.391	1622.91	.625%	89.223%
37.0	207.012	13.662	1636.572	.593%	89.974%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	191.211	12.909	1649.482	.561%	90.684%
39.0	176.242	12.163	1661.644	.528%	91.352%
40.0	164.880	11.622	1673.267	.505%	91.991%
41.0	153.525	11.045	1684.312	.480%	92.599%
42.0	139.788	10.257	1694.569	.445%	93.162%
43.0	128.385	9.602	1704.171	.417%	93.690%
44.0	118.481	9.026	1713.196	.392%	94.187%
45.0	107.119	8.306	1721.503	.361%	94.643%
46.0	97.911	7.724	1729.226	.335%	95.068%
47.0	88.138	7.069	1736.295	.307%	95.456%
48.0	78.469	6.395	1742.69	.278%	95.808%
49.0	69.935	5.788	1748.478	.251%	96.126%
50.0	62.166	5.222	1753.7	.227%	96.413%
51.0	54.816	4.672	1758.371	.203%	96.670%
52.0	48.890	4.225	1762.596	.183%	96.902%
53.0	43.206	3.784	1766.38	.164%	97.110%
54.0	37.335	3.312	1769.692	.144%	97.293%
55.0	32.876	2.953	1772.646	.128%	97.455%
56.0	28.767	2.615	1775.261	.114%	97.599%
57.0	25.044	2.303	1777.564	.100%	97.725%
58.0	22.112	2.056	1779.62	.089%	97.838%
59.0	19.793	1.860	1781.481	.081%	97.941%
60.0	17.742	1.685	1783.166	.073%	98.033%
61.0	16.572	1.589	1784.755	.069%	98.121%
62.0	15.911	1.541	1786.296	.067%	98.205%
63.0	15.368	1.502	1787.797	.065%	98.288%
64.0	14.907	1.469	1789.267	.064%	98.369%
65.0	14.494	1.440	1790.707	.063%	98.448%
66.0	14.088	1.411	1792.118	.061%	98.525%
67.0	13.750	1.388	1793.506	.060%	98.602%
68.0	13.441	1.367	1794.873	.059%	98.677%
69.0	13.110	1.342	1796.215	.058%	98.751%
70.0	12.821	1.321	1797.536	.057%	98.823%
71.0	12.546	1.301	1798.837	.056%	98.895%
72.0	12.229	1.275	1800.113	.055%	98.965%
73.0	11.995	1.258	1801.371	.055%	99.034%
74.0	11.768	1.241	1802.611	.054%	99.102%
75.0	11.527	1.221	1803.832	.053%	99.169%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	11.342	1.207	1805.039	.052%	99.236%
77.0	11.176	1.194	1806.233	.052%	99.301%
78.0	10.984	1.178	1807.411	.051%	99.366%
79.0	10.819	1.165	1808.576	.051%	99.430%
80.0	10.598	1.145	1809.721	.050%	99.493%
81.0	10.316	1.117	1810.838	.049%	99.555%
82.0	10.034	1.090	1811.928	.047%	99.614%
83.0	9.738	1.060	1812.987	.046%	99.673%
84.0	9.387	1.024	1814.011	.044%	99.729%
85.0	9.002	0.983	1814.995	.043%	99.783%
86.0	8.548	0.935	1815.93	.041%	99.835%
87.0	8.135	0.891	1816.82	.039%	99.883%
88.0	7.852	0.861	1817.681	.037%	99.931%
89.0	7.680	0.842	1818.523	.037%	99.977%
90.0	7.598	0.417	1818.94	.018%	100.000%

Zonal flux distribution table

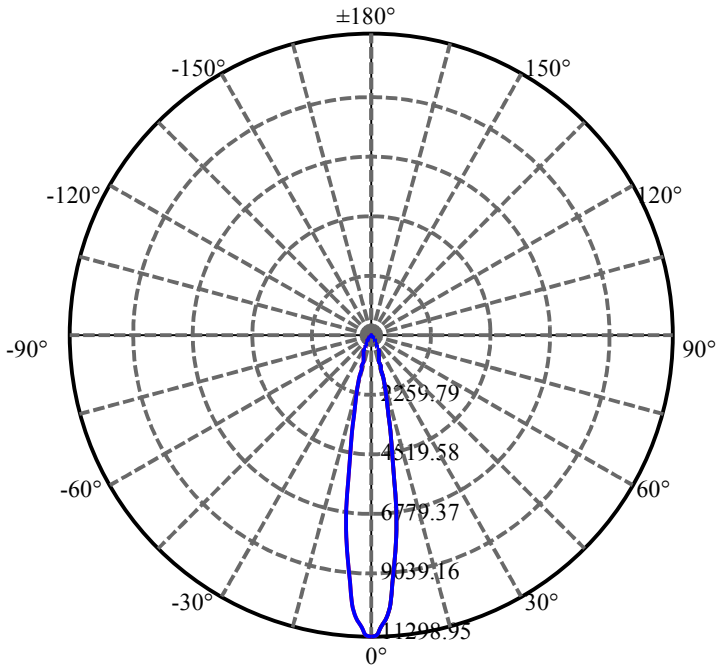
ZONAL LUMEN SUMMARY

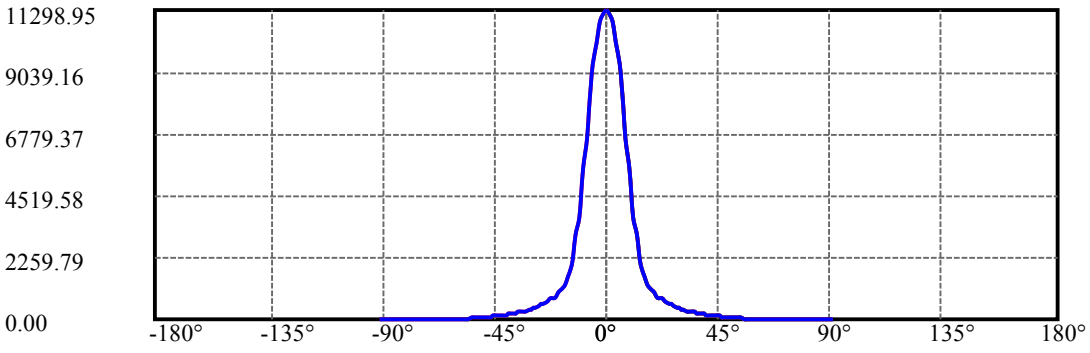
Zone	Lumens	%Lamp	%Fixt
0-30	1521.42	66.06%	83.64%
0-40	1673.27	72.66%	91.99%
0-60	1783.17	77.43%	98.03%
0-90	1818.52	78.96%	99.98%
0-120	1818.52	78.96%	99.98%
0-180	1818.94	78.98%	100.00%
60-90	37.04	1.61%	2.04%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-26.97	1455.15	63.19%	80.00%

ZONAL LUMEN SUMMARY

0-10	777.98
10-20	483.30
20-30	260.14
30-40	151.85
40-50	80.43
50-60	29.47
60-70	14.37
70-80	12.18
80-90	8.80
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):

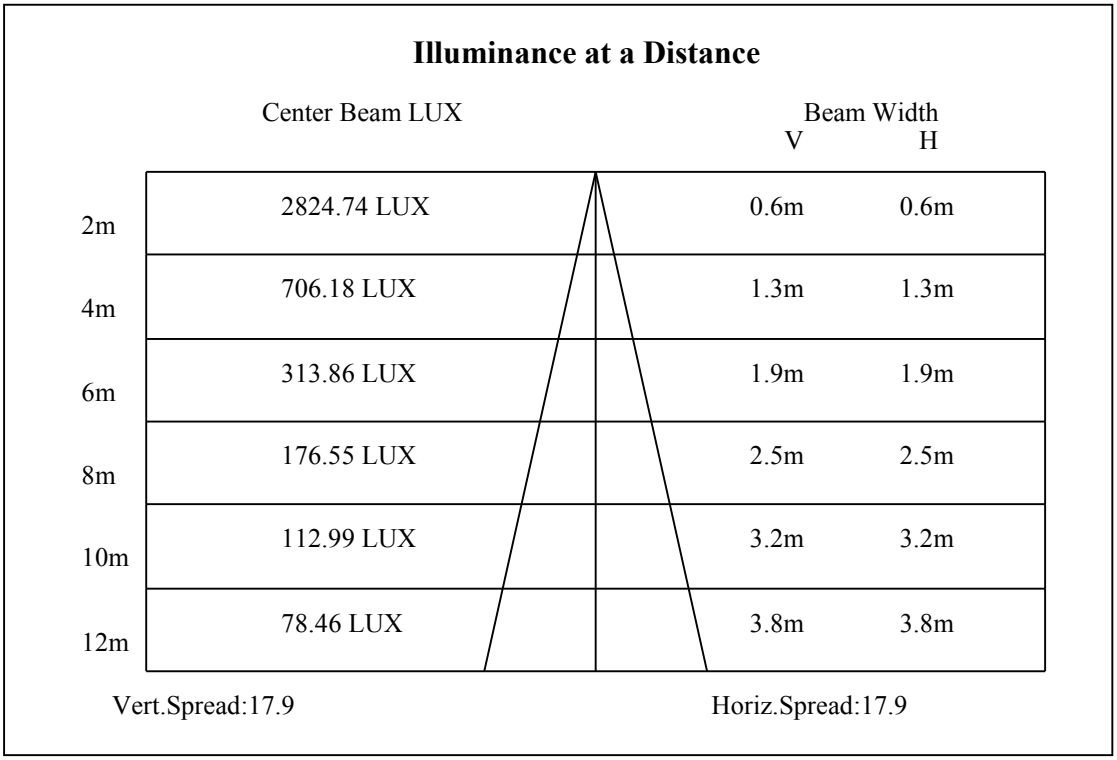
C0/C180:

C90/C270:

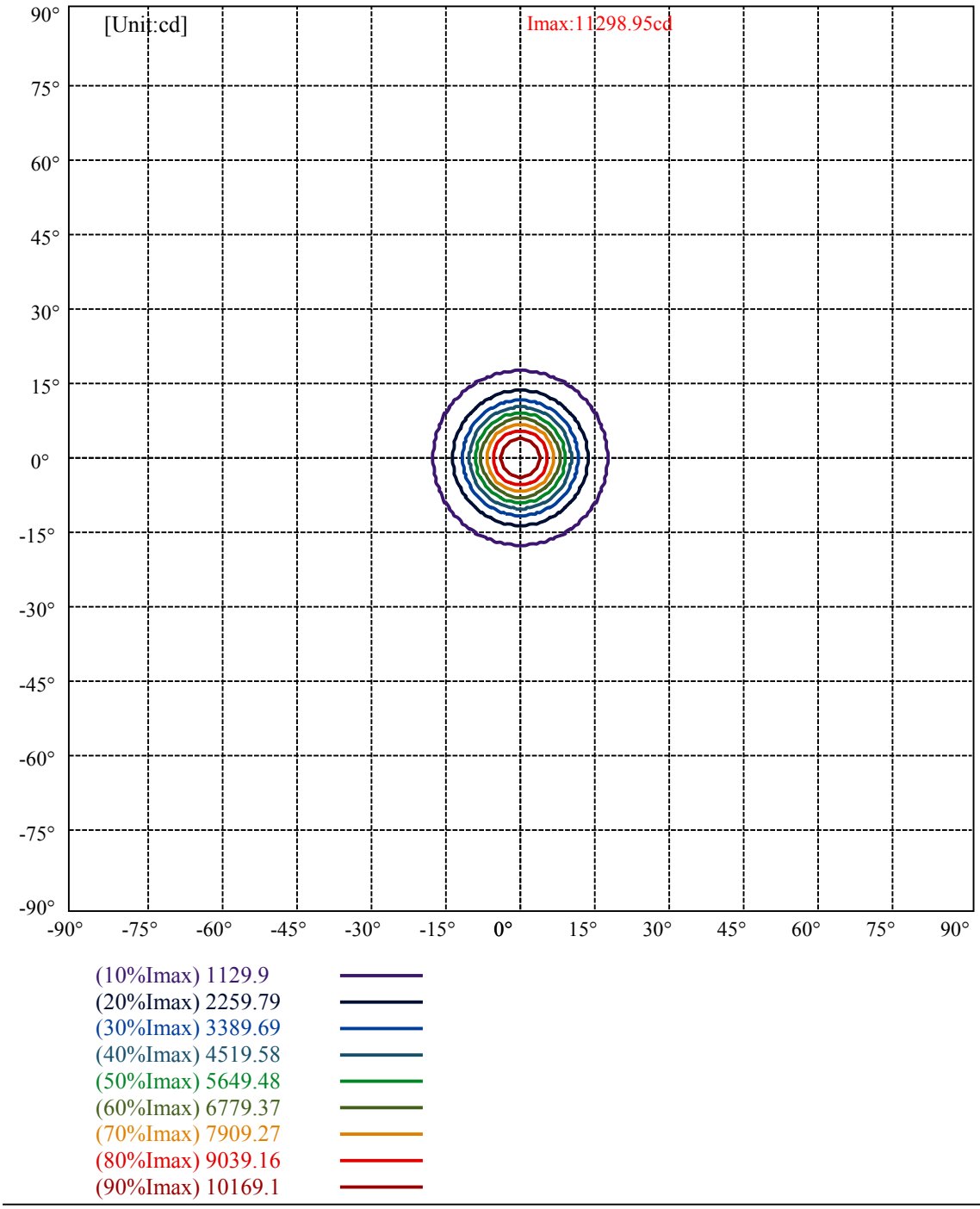
Field angle(10%Imax):C0/180Left:17.3 Right:17.3
:C90/270Left:17.3 Right:17.3

Beam Angle(50%Imax):C0/180Left:8.9 Right:8.9
:C90/270Left:8.9 Right:8.9

Lux distance Curve



ISO-Intensity(V-H)

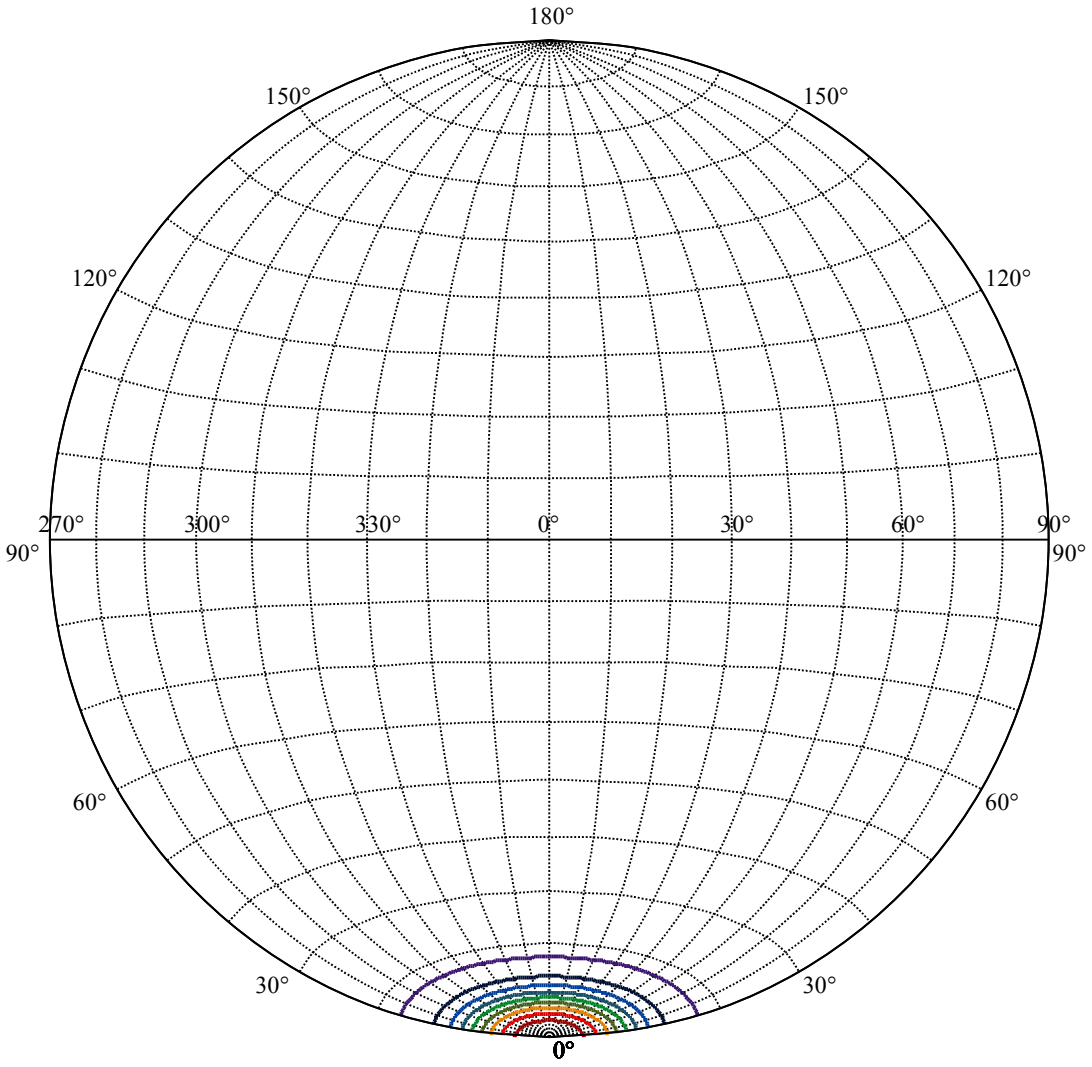


Equipment: GMS1980
Temperature(°C): 25.0

Date: 2018/6/22
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.42

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:11298.95

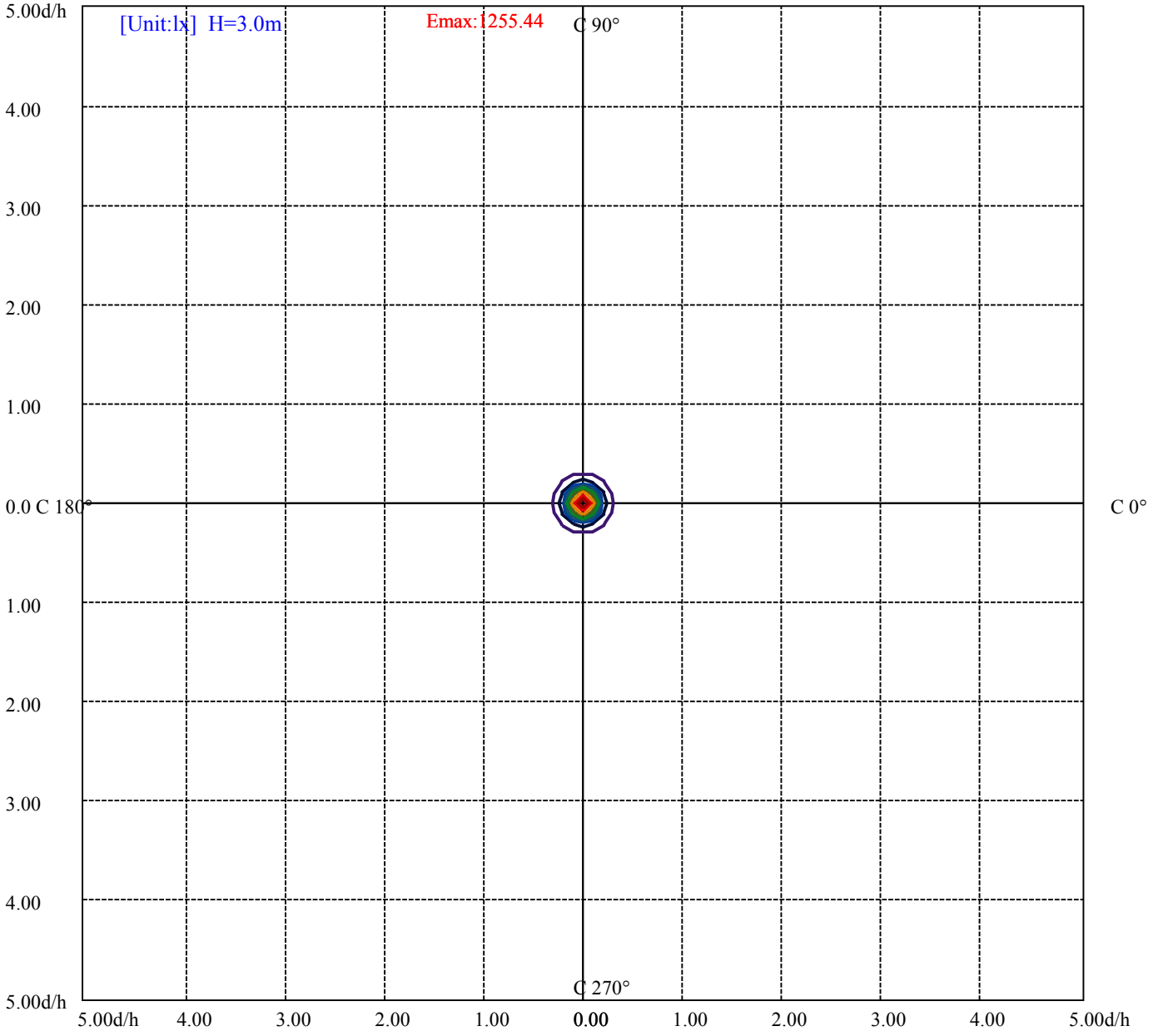
(10%Imax) 1129.9
(20%Imax) 2259.79
(30%Imax) 3389.69
(40%Imax) 4519.58
(50%Imax) 5649.48
(60%Imax) 6779.37
(70%Imax) 7909.27
(80%Imax) 9039.16
(90%Imax) 10169.1

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2018/6/22
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.42

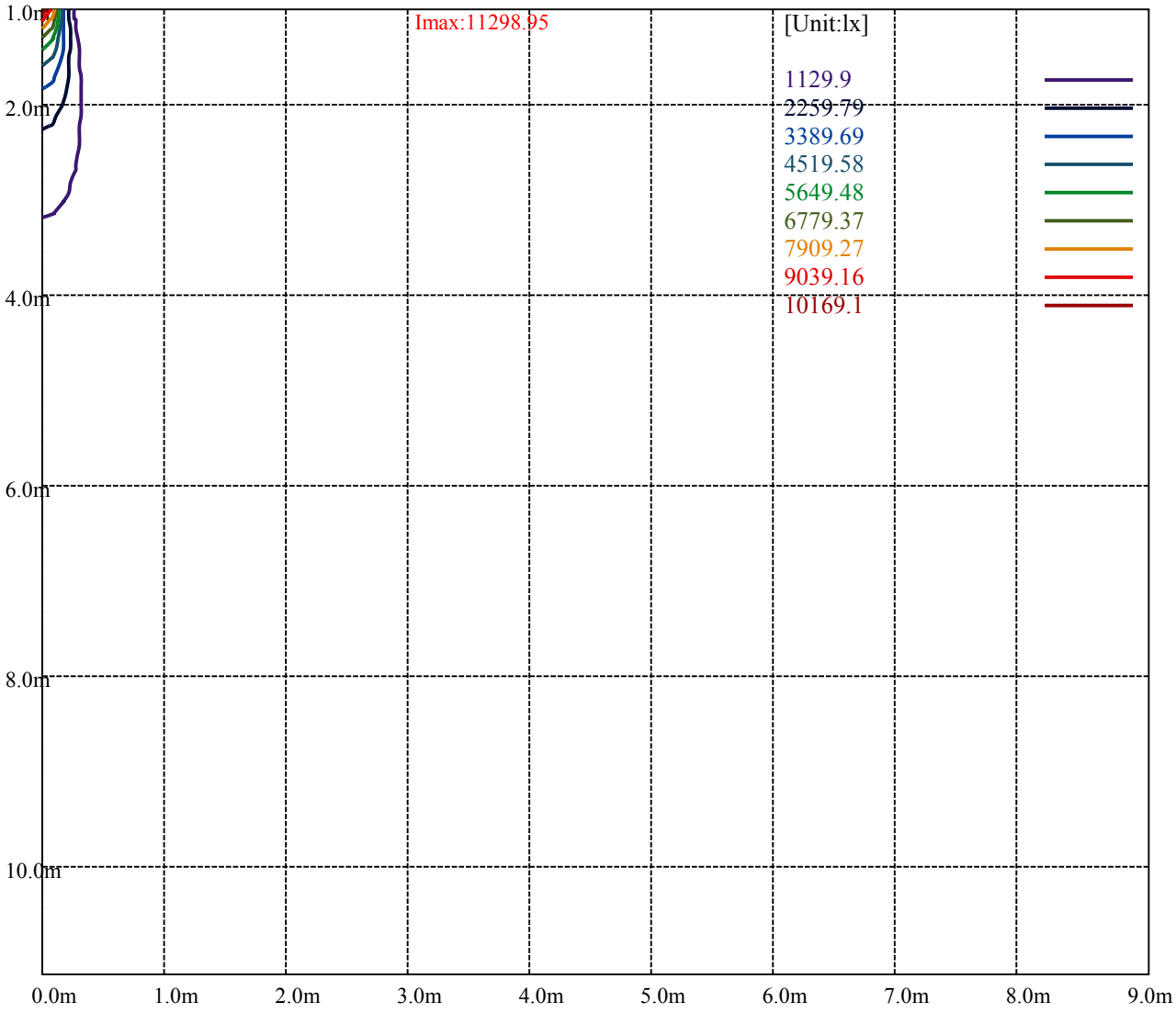
ISO illuminance diagram



(10%Emax) 125.5433
(20%Emax) 251.0878
(30%Emax) 376.6311
(40%Emax) 502.1756
(50%Emax) 627.7189
(60%Emax) 753.2622
(70%Emax) 878.8066
(80%Emax) 1004.35
(90%Emax) 1129.889

Equipment: GMS1980
Temperature(°C): 25.0
Date: 2018/6/22
Humidity(%): 60.0%
Operator: NT07
Distance(m): 7.42

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2018/6/22
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.42

Luminance Limitting Curve(no luminous side)

Luminance Table

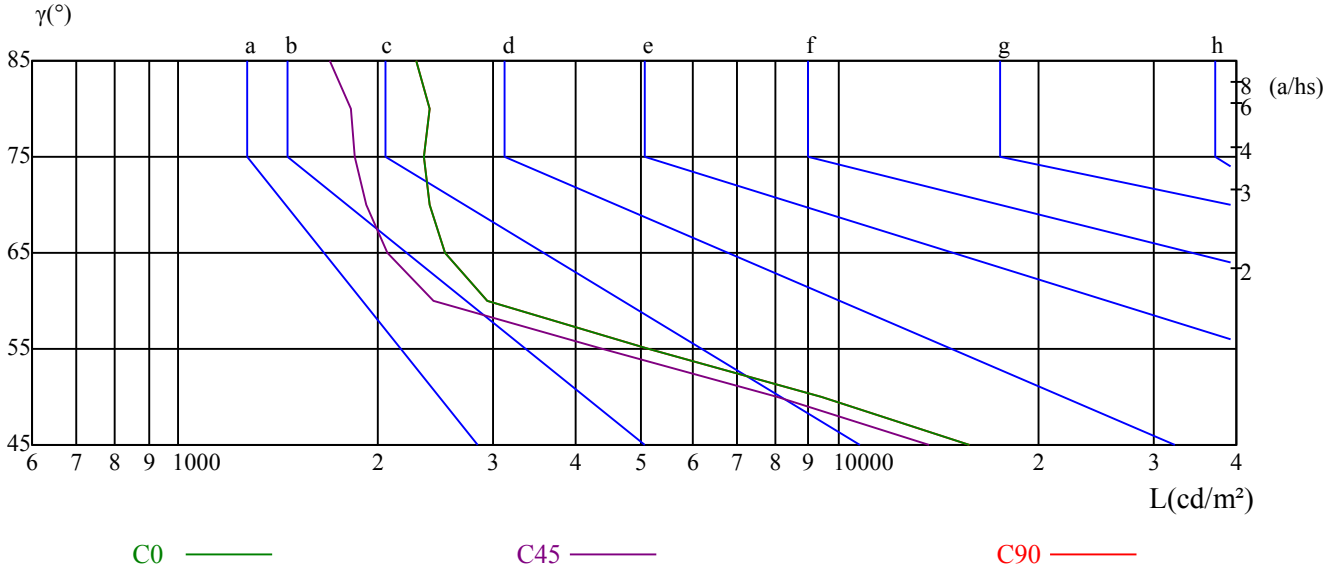
γ	45	50	55	60	65	70	75	80	85
C0	15718	9399	5167	2927	2535	2407	2354	2393	2292
C45	13716	8082	4375	2437	2073	1928	1843	1823	1689
C90	15718	9399	5167	2927	2535	2407	2354	2393	2292

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5495	5495	5495	7136	7136	7136	16549	16549	16549

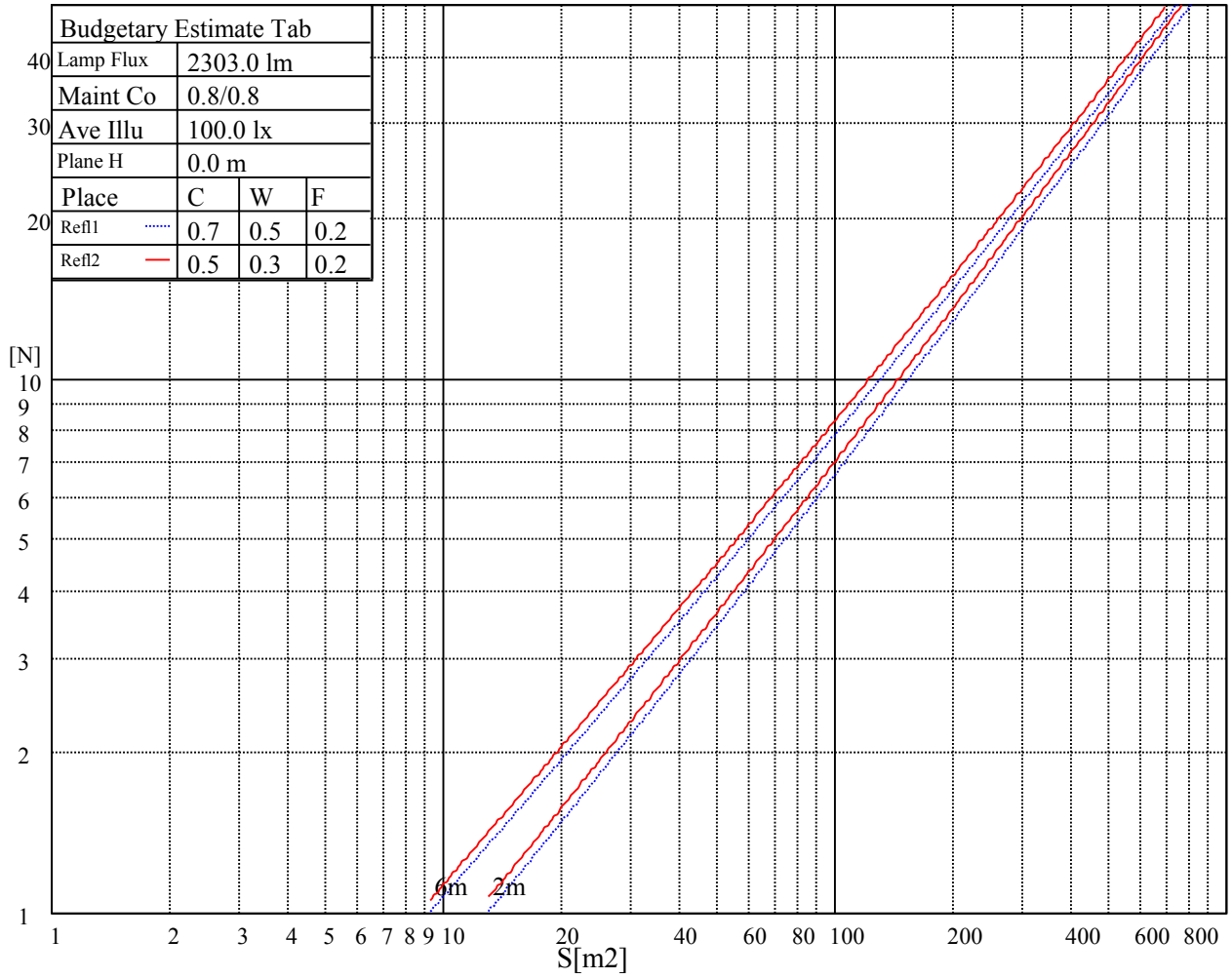
Glare Table

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

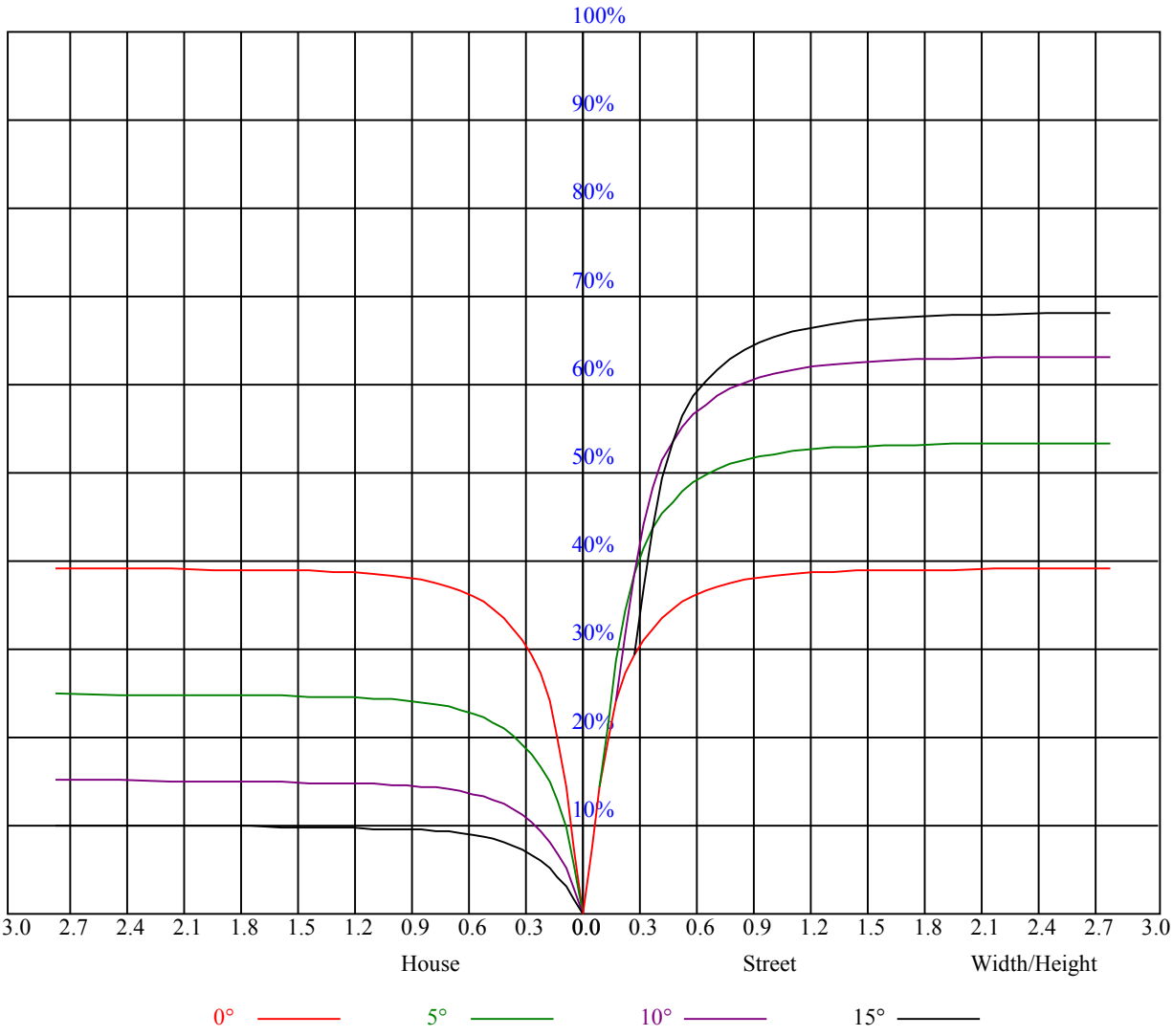


Equipment: GMS1980 Date: 2018/6/22 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.42

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	0.94	0.94	0.94	0.92	0.92	0.92	0.88	0.88	0.88	0.84	0.84	0.84	0.81	0.81	0.81	0.79
1	0.88	0.87	0.85	0.87	0.85	0.84	0.84	0.82	0.81	0.81	0.80	0.79	0.78	0.77	0.77	0.75
2	0.84	0.81	0.79	0.82	0.80	0.78	0.80	0.78	0.76	0.78	0.76	0.75	0.75	0.74	0.73	0.72
3	0.80	0.77	0.74	0.79	0.76	0.73	0.77	0.74	0.72	0.75	0.73	0.71	0.73	0.71	0.70	0.69
4	0.76	0.73	0.70	0.75	0.72	0.70	0.74	0.71	0.69	0.72	0.70	0.68	0.71	0.69	0.67	0.66
5	0.73	0.70	0.67	0.72	0.69	0.67	0.71	0.68	0.66	0.70	0.67	0.66	0.69	0.67	0.65	0.64
6	0.70	0.67	0.64	0.70	0.66	0.64	0.69	0.66	0.64	0.68	0.65	0.63	0.67	0.65	0.63	0.62
7	0.68	0.64	0.62	0.68	0.64	0.62	0.67	0.64	0.61	0.66	0.63	0.61	0.65	0.63	0.61	0.60
8	0.66	0.62	0.60	0.65	0.62	0.60	0.65	0.62	0.60	0.64	0.61	0.59	0.63	0.61	0.59	0.58
9	0.64	0.60	0.58	0.64	0.60	0.58	0.63	0.60	0.58	0.62	0.60	0.58	0.62	0.59	0.58	0.57
10	0.62	0.59	0.57	0.62	0.59	0.56	0.61	0.58	0.56	0.61	0.58	0.56	0.60	0.58	0.56	0.55

Coefficient Utilization Curve



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2018/6/22
Humidity(%): 60.0%

Operator: NT07
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	11308.58	11214.99	10857.12	10427.68	9855.10	8957.68	8120.82	7195.87	6232.38
45.0	11314.09	11176.45	10791.05	10328.58	9728.47	8825.54	7972.17	6986.66	5874.52
90.0	11281.06	10951.82	10704.62	10238.29	9616.70	8671.93	7897.29	6812.13	5590.98
135.0	11292.07	11286.56	11077.35	10758.02	10295.55	9552.29	8792.51	7900.59	6826.99
180.0	11308.58	11303.08	10981.55	10853.82	10418.87	9760.40	9021.54	8061.36	6971.79
225.0	11314.09	11347.12	11226.00	10965.03	10555.41	9918.41	9231.31	8332.24	7317.00
270.0	11281.06	11325.10	11226.00	10972.74	10587.35	9915.66	9265.99	8484.19	7509.69
315.0	11292.07	11286.56	10929.25	10481.64	9926.12	9165.79	8353.71	7344.52	6263.22
360.0	11308.58	11214.99	10857.12	10427.68	9855.10	8957.68	8120.82	7195.87	6232.38

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	5048.67	4184.29	3413.50	2840.91	2119.67	1772.27	1428.16	1231.61	1120.95
45.0	4839.46	3986.08	3143.72	2818.89	1985.33	1590.03	1354.39	1182.06	1060.39
90.0	4783.85	3843.49	2974.15	2483.04	2014.51	1551.49	1354.94	1097.22	1084.72
135.0	5758.90	4828.45	3864.96	3143.72	2818.89	2005.15	1617.01	1362.65	1210.69
180.0	5968.11	4882.95	3922.77	3202.08	2598.11	2001.85	1661.60	1421.01	1236.57
225.0	6354.61	5283.21	4273.48	3496.08	2833.20	2169.22	1770.61	1487.62	1293.83
270.0	6469.13	5522.16	4525.64	3721.81	2945.52	2796.87	1880.73	1520.66	1289.42
315.0	5323.40	4314.22	3430.56	2766.03	2220.42	1717.76	1449.08	1264.65	1074.98
360.0	5048.67	4184.29	3413.50	2840.91	2119.67	1772.27	1428.16	1231.61	1120.95

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	995.42	913.94	834.10	765.28	710.23	650.22	595.16	549.46	507.62
45.0	970.09	893.01	810.43	752.07	696.46	630.95	582.50	537.35	490.55
90.0	967.78	888.28	818.74	740.40	684.35	632.05	577.71	529.26	490.44
135.0	1081.31	988.81	902.37	823.64	763.63	698.67	640.31	590.76	551.67
180.0	1094.80	998.67	900.34	830.03	769.91	700.04	653.68	598.41	542.64
225.0	1087.20	1026.03	942.07	851.39	786.65	727.57	666.40	611.24	564.33
270.0	1150.68	1044.42	936.51	861.63	797.77	725.09	670.59	618.28	569.83
315.0	1005.27	921.26	842.31	771.40	714.30	654.01	603.91	551.89	509.55
360.0	995.42	913.94	834.10	765.28	710.23	650.22	595.16	549.46	507.62

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	461.37	428.89	398.61	367.23	336.95	312.17	285.74	280.24	240.32
45.0	449.81	415.13	378.24	346.86	314.92	288.50	278.03	245.39	227.00
90.0	450.53	414.19	383.41	347.08	318.89	291.14	266.25	246.21	228.87
135.0	497.16	460.27	429.44	386.50	348.51	325.38	295.10	280.24	245.88
180.0	507.95	467.87	425.53	397.67	367.83	329.46	307.32	282.77	258.10
225.0	515.55	475.80	435.88	398.50	365.35	332.49	303.91	280.57	259.48
270.0	515.88	478.44	443.20	407.42	373.28	342.45	312.17	284.64	279.14
315.0	465.83	430.43	393.43	356.55	327.26	298.96	273.41	253.48	234.54
360.0	461.37	428.89	398.61	367.23	336.95	312.17	285.74	280.24	240.32

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	219.34	202.11	185.60	171.50	160.76	148.82	133.79	123.22	113.20
45.0	209.21	195.34	180.81	167.98	157.63	146.78	132.30	121.67	112.48
90.0	208.00	193.41	180.42	166.49	155.75	143.09	131.09	119.53	110.00
135.0	225.79	209.65	193.80	178.99	167.92	157.08	141.11	130.76	121.18
180.0	234.93	216.59	197.65	181.80	168.97	156.20	144.03	131.47	120.35
225.0	235.59	218.46	202.88	185.54	173.70	163.41	150.08	137.37	127.24
270.0	239.50	221.60	202.94	186.81	174.03	163.19	149.31	137.97	128.01
315.0	213.78	198.92	185.60	170.84	160.27	149.64	136.59	125.09	115.40
360.0	219.34	202.11	185.60	171.50	160.76	148.82	133.79	123.22	113.20

Intensity data(cd)

C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	101.30	92.00	82.97	73.50	64.64	57.81	50.82	45.31	39.64
45.0	99.71	90.79	83.19	72.51	64.14	58.25	50.65	45.09	39.70
90.0	99.71	90.51	80.49	71.46	63.92	55.99	49.17	43.49	38.26
135.0	108.63	99.93	90.51	80.88	72.12	65.13	57.26	51.15	45.04
180.0	110.88	101.30	89.47	80.66	72.12	62.87	56.16	50.05	44.54
225.0	116.17	106.64	95.74	85.39	76.47	67.39	59.57	53.46	47.79
270.0	115.73	106.53	97.23	87.26	77.63	69.37	61.22	54.56	47.90
315.0	104.83	95.58	85.50	76.09	68.44	60.51	53.68	48.01	42.78
360.0	101.30	92.00	82.97	73.50	64.64	57.81	50.82	45.31	39.64

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	34.47	30.45	26.65	23.51	21.03	18.99	17.23	16.52	15.97
45.0	34.02	29.79	26.32	22.74	20.37	18.22	16.74	16.08	15.53
90.0	32.48	28.57	25.27	22.13	19.60	17.78	16.57	15.97	15.47
135.0	39.59	34.91	30.12	26.21	23.07	20.70	18.00	16.68	16.02
180.0	38.32	33.80	29.73	25.99	22.85	20.26	18.28	16.79	16.13
225.0	41.24	36.28	31.71	27.42	23.89	21.31	18.77	16.85	16.02
270.0	41.90	36.94	31.88	27.58	24.33	21.69	18.94	17.34	16.41
315.0	36.67	32.26	28.46	24.78	21.75	19.38	17.40	16.35	15.75
360.0	34.47	30.45	26.65	23.51	21.03	18.99	17.23	16.52	15.97

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	15.47	14.98	14.59	14.20	13.82	13.49	13.21	12.88	12.55
45.0	15.09	14.59	14.20	13.82	13.49	13.16	12.83	12.55	12.22
90.0	15.03	14.65	14.26	13.82	13.60	13.32	12.94	12.72	12.44
135.0	15.47	14.98	14.59	14.15	13.82	13.49	13.21	12.88	12.61
180.0	15.58	15.14	14.70	14.31	13.98	13.71	13.32	13.05	12.83
225.0	15.36	14.92	14.48	14.04	13.71	13.38	13.05	12.77	12.50
270.0	15.75	15.25	14.81	14.42	14.04	13.71	13.38	13.10	12.83
315.0	15.20	14.76	14.31	13.93	13.54	13.27	12.94	12.61	12.39
360.0	15.47	14.98	14.59	14.20	13.82	13.49	13.21	12.88	12.55

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	12.28	12.06	11.84	11.62	11.45	11.29	11.12	10.96	10.74
45.0	11.95	11.73	11.51	11.34	11.18	11.07	10.96	10.79	10.57
90.0	12.11	11.89	11.67	11.45	11.29	11.18	10.96	10.85	10.57
135.0	12.33	12.06	11.84	11.51	11.34	11.12	10.90	10.74	10.52
180.0	12.44	12.22	11.95	11.67	11.40	11.18	10.90	10.63	10.35
225.0	12.17	11.95	11.67	11.45	11.23	11.07	10.85	10.68	10.52
270.0	12.50	12.28	12.06	11.78	11.62	11.45	11.23	11.12	10.96
315.0	12.06	11.78	11.62	11.40	11.23	11.07	10.96	10.79	10.57
360.0	12.28	12.06	11.84	11.62	11.45	11.29	11.12	10.96	10.74

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	10.41	10.13	9.80	9.41	9.03	8.48	8.09	7.82	7.60
45.0	10.24	9.91	9.58	9.19	8.75	8.26	7.93	7.65	7.60
90.0	10.30	9.97	9.63	9.19	8.70	8.20	7.87	7.65	7.60
135.0	10.19	9.91	9.69	9.30	8.97	8.59	8.15	7.87	7.71
180.0	10.13	9.80	9.47	9.19	8.92	8.59	8.15	7.87	7.65
225.0	10.24	10.02	9.80	9.52	9.14	8.70	8.26	7.98	7.76
270.0	10.74	10.52	10.24	9.91	9.52	8.97	8.48	8.09	7.87
315.0	10.30	10.02	9.69	9.36	8.97	8.59	8.15	7.87	7.65
360.0	10.41	10.13	9.80	9.41	9.03	8.48	8.09	7.82	7.60

Intensity data(cd)

C/γ(°)	90.0
0.0	7.60
45.0	7.54
90.0	7.60
135.0	7.65
180.0	7.60
225.0	7.54
270.0	7.65
315.0	7.60
360.0	7.60