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

Nata

LumCAT: 3-1942-E
Luminaire: BJB 47.319.2011

Report No: NATA0100	Voltage(V): 35.9300
Test No: GC2019112010	Current(A): 0.3970
LampCAT: LUMILEDS LUXEON CoB 1204 LES13	Power (W): 14.2600
Lamp flux(lm): 1930.0	PF: 1.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1711.25
Efficiency(%): 88.67%
Lumens(lm)/Power(W): 120.00
Central intensity(cd): 7819.594
Maximum intensity(cd): 7819.594
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=13.7
[C90/270]Total=13.7
Field angle(10%Imax): [C0/180]Total=59.2
[C90/270]Total=59.2
Maximum s/h(1/2): C0_180=0.24 C90_270=0.24
Maximum s/h(1/4): C0_180=0.33 C90_270=0.33
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 88.67%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.510%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	7819.594	0.000	0	.000%	.000%
1.0	7711.664	7.431	7.431	.385%	.434%
2.0	7300.477	21.547	28.978	1.116%	1.693%
3.0	6735.234	33.569	62.547	1.739%	3.655%
4.0	6060.516	42.831	105.379	2.219%	6.158%
5.0	5242.219	48.624	154.002	2.519%	8.999%
6.0	4446.773	50.918	204.921	2.638%	11.975%
7.0	3821.484	51.321	256.241	2.659%	14.974%
8.0	3262.359	50.698	306.939	2.627%	17.937%
9.0	2868.539	49.688	356.627	2.574%	20.840%
10.0	2585.461	49.357	405.984	2.557%	23.724%
11.0	2385.773	49.673	455.656	2.574%	26.627%
12.0	2245.078	50.622	506.278	2.623%	29.585%
13.0	2122.664	51.834	558.112	2.686%	32.614%
14.0	2014.664	52.957	611.07	2.744%	35.709%
15.0	1921.500	54.037	665.107	2.800%	38.867%
16.0	1831.781	54.996	720.103	2.850%	42.080%
17.0	1727.438	55.427	775.53	2.872%	45.319%
18.0	1639.758	55.518	831.048	2.877%	48.564%
19.0	1555.031	55.583	886.63	2.880%	51.812%
20.0	1458.633	55.158	941.789	2.858%	55.035%
21.0	1372.148	54.357	996.146	2.816%	58.211%
22.0	1288.913	53.475	1049.621	2.771%	61.336%
23.0	1203.968	52.307	1101.928	2.710%	64.393%
24.0	1127.341	50.971	1152.899	2.641%	67.372%
25.0	1057.113	49.670	1202.569	2.574%	70.274%
26.0	991.716	48.363	1250.931	2.506%	73.100%
27.0	926.599	46.932	1297.863	2.432%	75.843%
28.0	866.588	45.400	1343.263	2.352%	78.496%
29.0	811.238	43.897	1387.16	2.274%	81.061%
30.0	761.513	42.464	1429.624	2.200%	83.543%
31.0	708.251	40.901	1470.525	2.119%	85.933%
32.0	638.944	38.596	1509.121	2.000%	88.188%
33.0	560.911	35.348	1544.469	1.832%	90.254%
34.0	475.038	31.351	1575.82	1.624%	92.086%
35.0	377.880	26.489	1602.308	1.372%	93.634%
36.0	275.681	20.810	1623.118	1.078%	94.850%
37.0	206.346	15.721	1638.839	.815%	95.768%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	123.813	11.020	1649.859	.571%	96.412%
39.0	69.497	6.598	1656.457	.342%	96.798%
40.0	43.017	3.924	1660.381	.203%	97.027%
41.0	30.853	2.630	1663.012	.136%	97.181%
42.0	26.241	2.074	1665.086	.107%	97.302%
43.0	23.210	1.832	1666.918	.095%	97.409%
44.0	20.665	1.656	1668.574	.086%	97.506%
45.0	18.527	1.506	1670.08	.078%	97.594%
46.0	16.798	1.381	1671.461	.072%	97.675%
47.0	15.497	1.284	1672.746	.067%	97.750%
48.0	14.386	1.208	1673.954	.063%	97.820%
49.0	13.591	1.149	1675.103	.060%	97.888%
50.0	12.867	1.103	1676.206	.057%	97.952%
51.0	12.298	1.065	1677.271	.055%	98.014%
52.0	11.841	1.036	1678.306	.054%	98.075%
53.0	11.355	1.009	1679.316	.052%	98.134%
54.0	10.891	0.981	1680.296	.051%	98.191%
55.0	10.533	0.956	1681.252	.050%	98.247%
56.0	10.174	0.936	1682.188	.048%	98.302%
57.0	9.795	0.913	1683.101	.047%	98.355%
58.0	9.527	0.894	1683.995	.046%	98.407%
59.0	9.323	0.881	1684.876	.046%	98.459%
60.0	9.148	0.873	1685.749	.045%	98.510%
61.0	8.979	0.865	1686.614	.045%	98.560%
62.0	8.845	0.859	1687.472	.045%	98.610%
63.0	8.733	0.855	1688.327	.044%	98.660%
64.0	8.627	0.852	1689.179	.044%	98.710%
65.0	8.515	0.848	1690.028	.044%	98.760%
66.0	8.452	0.847	1690.874	.044%	98.809%
67.0	8.388	0.847	1691.721	.044%	98.859%
68.0	8.297	0.845	1692.566	.044%	98.908%
69.0	8.227	0.843	1693.409	.044%	98.957%
70.0	8.184	0.843	1694.252	.044%	99.007%
71.0	8.142	0.844	1695.096	.044%	99.056%
72.0	8.107	0.845	1695.941	.044%	99.105%
73.0	8.051	0.845	1696.786	.044%	99.155%
74.0	8.044	0.846	1697.632	.044%	99.204%
75.0	7.980	0.847	1698.478	.044%	99.254%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	7.973	0.847	1699.325	.044%	99.303%
77.0	7.938	0.848	1700.174	.044%	99.353%
78.0	7.917	0.849	1701.022	.044%	99.402%
79.0	7.896	0.850	1701.872	.044%	99.452%
80.0	7.882	0.851	1702.723	.044%	99.502%
81.0	7.861	0.851	1703.574	.044%	99.551%
82.0	7.854	0.852	1704.426	.044%	99.601%
83.0	7.854	0.854	1705.28	.044%	99.651%
84.0	7.833	0.855	1706.135	.044%	99.701%
85.0	7.819	0.854	1706.989	.044%	99.751%
86.0	7.791	0.853	1707.842	.044%	99.801%
87.0	7.784	0.852	1708.694	.044%	99.851%
88.0	7.784	0.853	1709.547	.044%	99.900%
89.0	7.777	0.853	1710.4	.044%	99.950%
90.0	7.770	0.852	1711.252	.044%	100.000%

Zonal flux distribution table

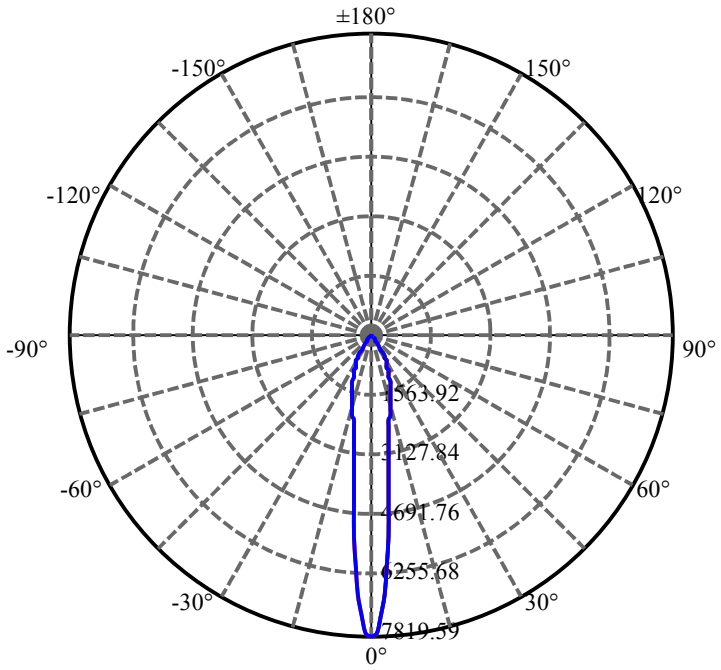
ZONAL LUMEN SUMMARY

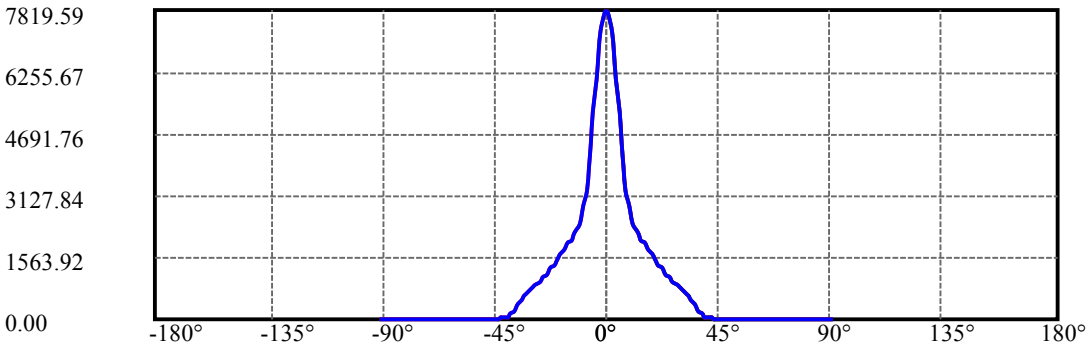
Zone	Lumens	%Lamp	%Fixt
0-30	1429.62	74.07%	83.54%
0-40	1660.38	86.03%	97.03%
0-60	1685.75	87.34%	98.51%
0-90	1710.40	88.62%	99.95%
0-120	1710.40	88.62%	99.95%
0-180	1711.25	88.67%	100.00%
60-90	25.52	1.32%	1.49%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-28.59	1369.00	70.93%	80.00%

ZONAL LUMEN SUMMARY

0-10	405.98
10-20	535.81
20-30	487.83
30-40	230.76
40-50	15.82
50-60	9.54
60-70	8.50
70-80	8.47
80-90	7.68
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):

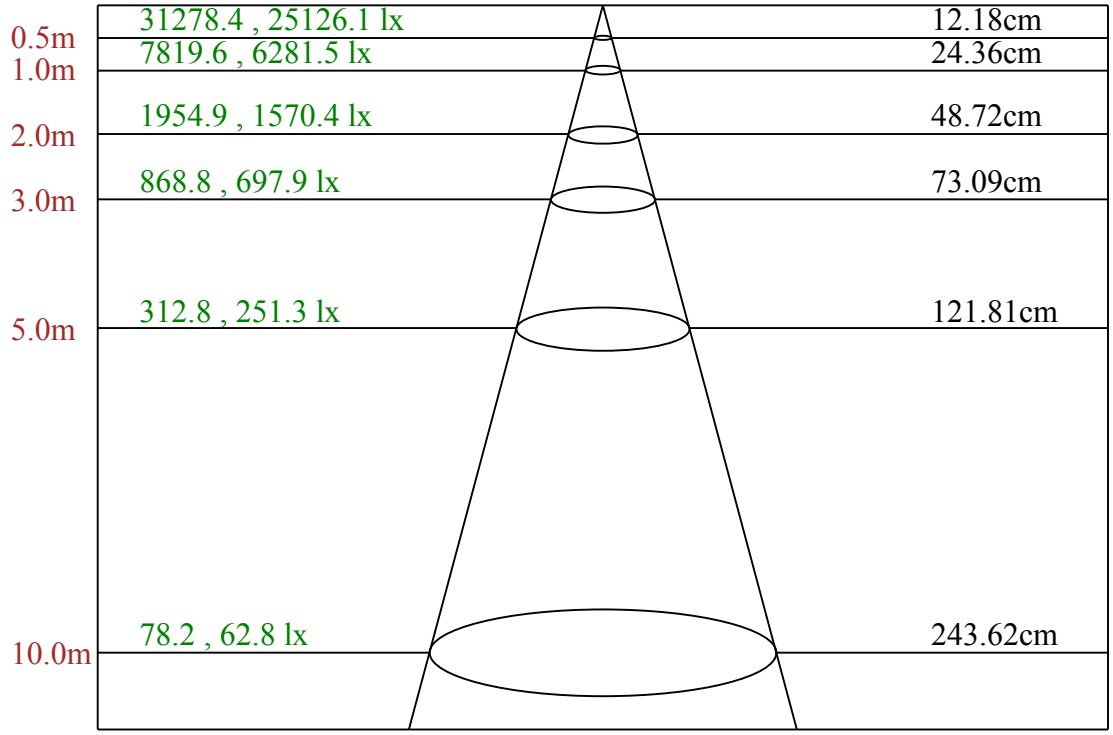
C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:29.6 Right:29.6
:C90/270Left:29.6 Right:29.6

Beam Angle(50%Imax):C0/180Left:6.9 Right:6.9
:C90/270Left:6.9 Right:6.9

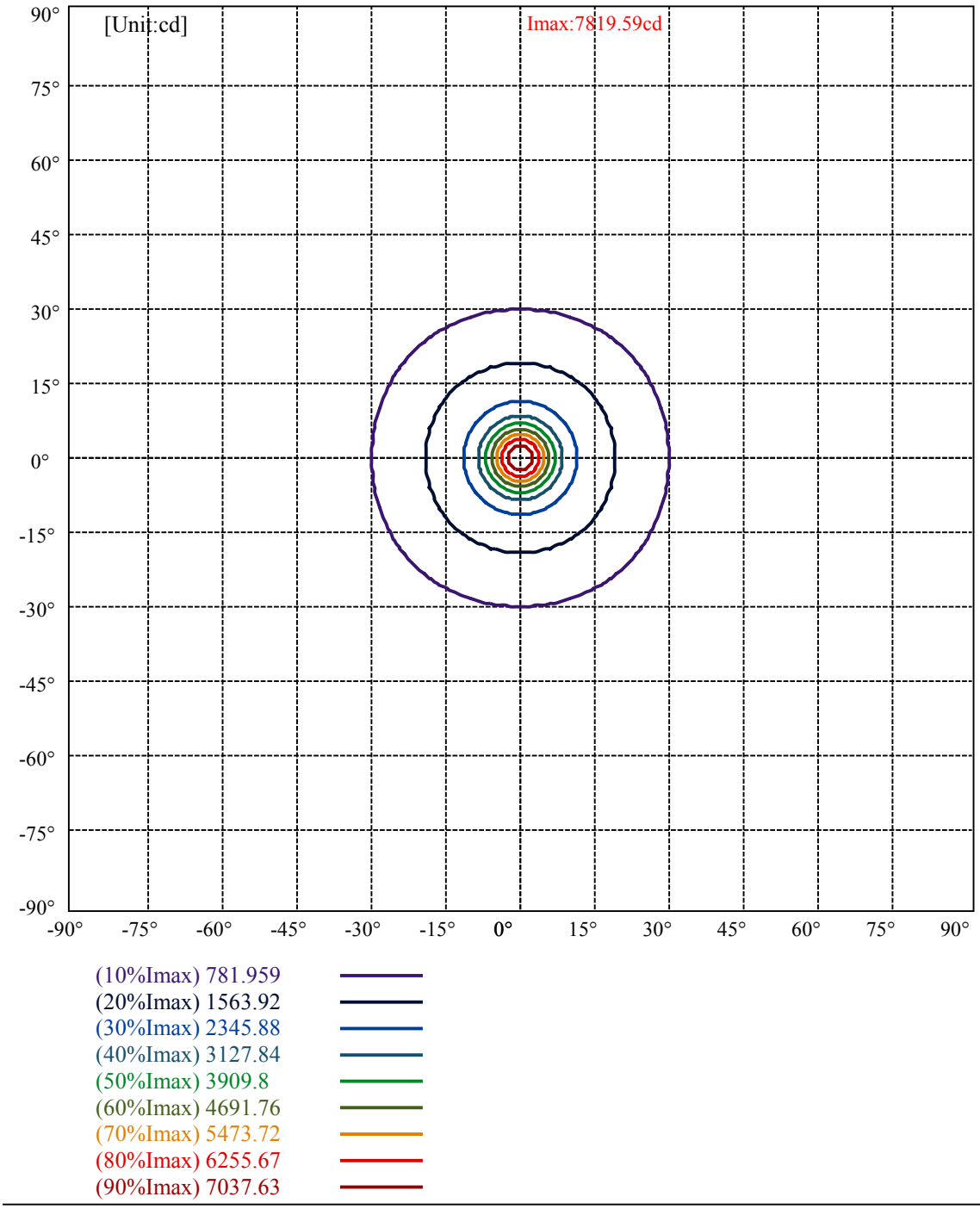
Lux distance Curve



Max , Ave

Beam angle of C0 plane 13.89

ISO-Intensity(V-H)

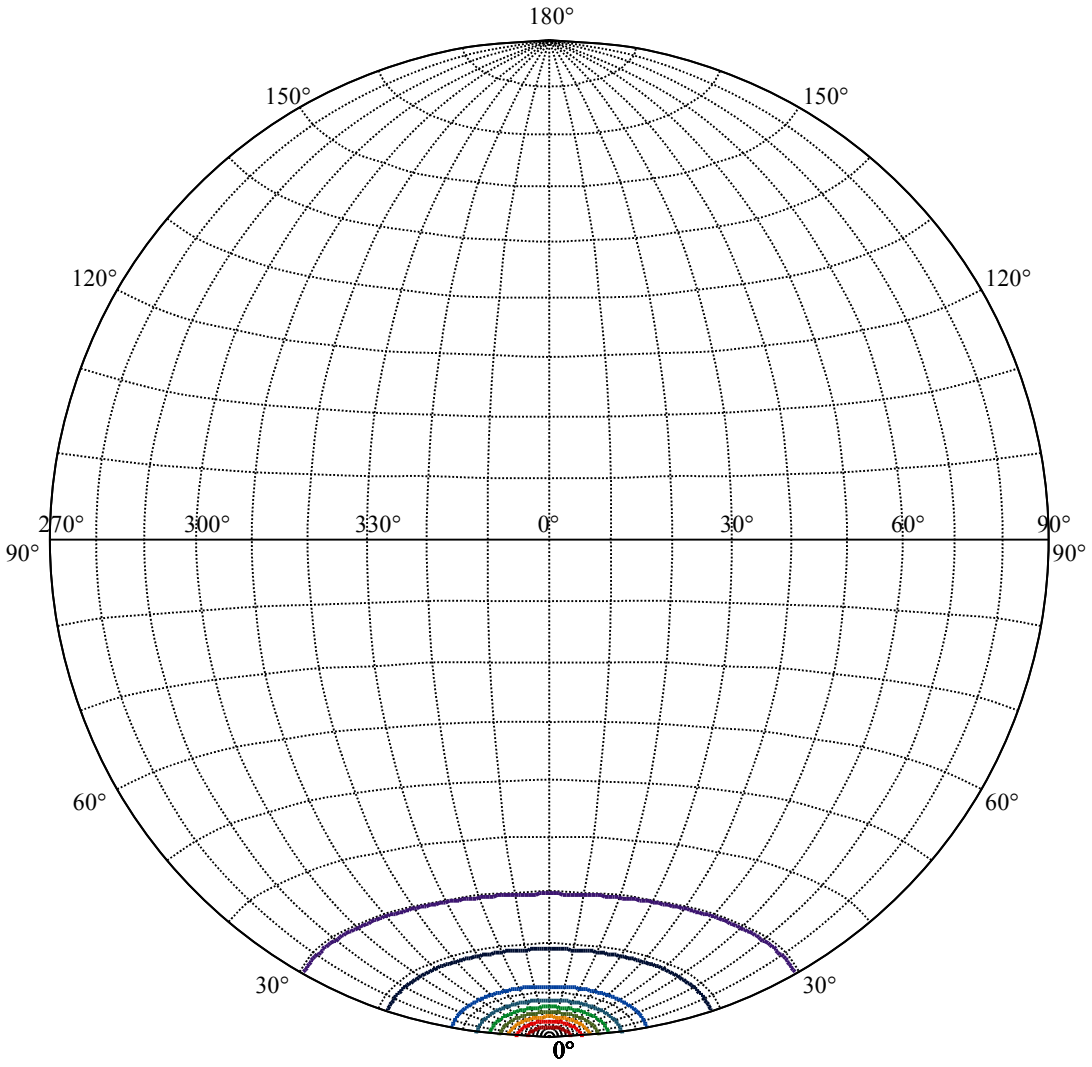


Equipment: GMS1980
Temperature(°C): 25.0

Date: 2019/11/20
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

ISO candela diagram on circular web



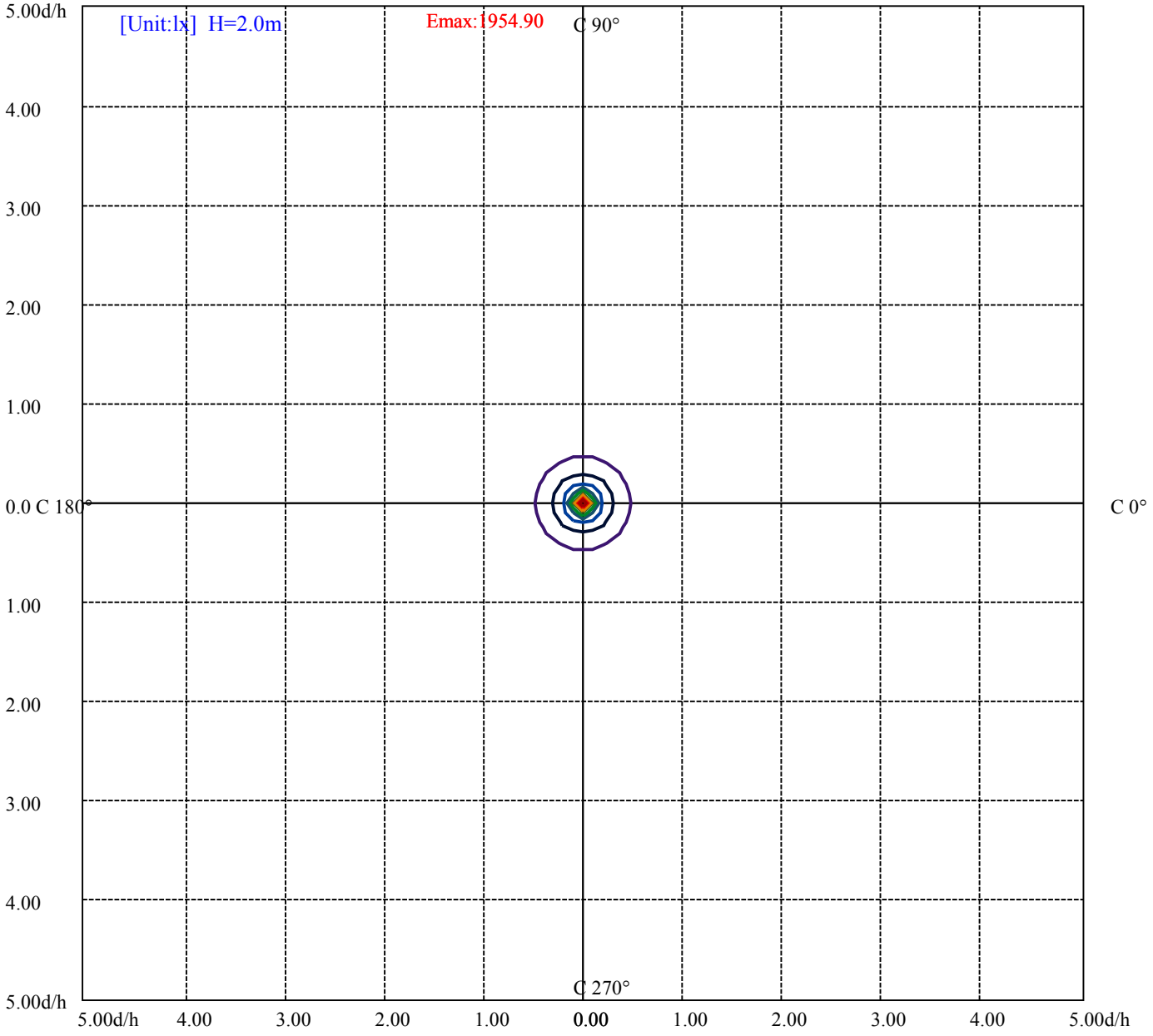
House [Unit:cd] Road

Imax:7819.59

(10%Imax) 781.959
(20%Imax) 1563.92
(30%Imax) 2345.88
(40%Imax) 3127.84
(50%Imax) 3909.8
(60%Imax) 4691.76
(70%Imax) 5473.72
(80%Imax) 6255.67
(90%Imax) 7037.63

Equipment: GMS1980 Date: 2019/11/20 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 65.0% Distance(m): 7.50

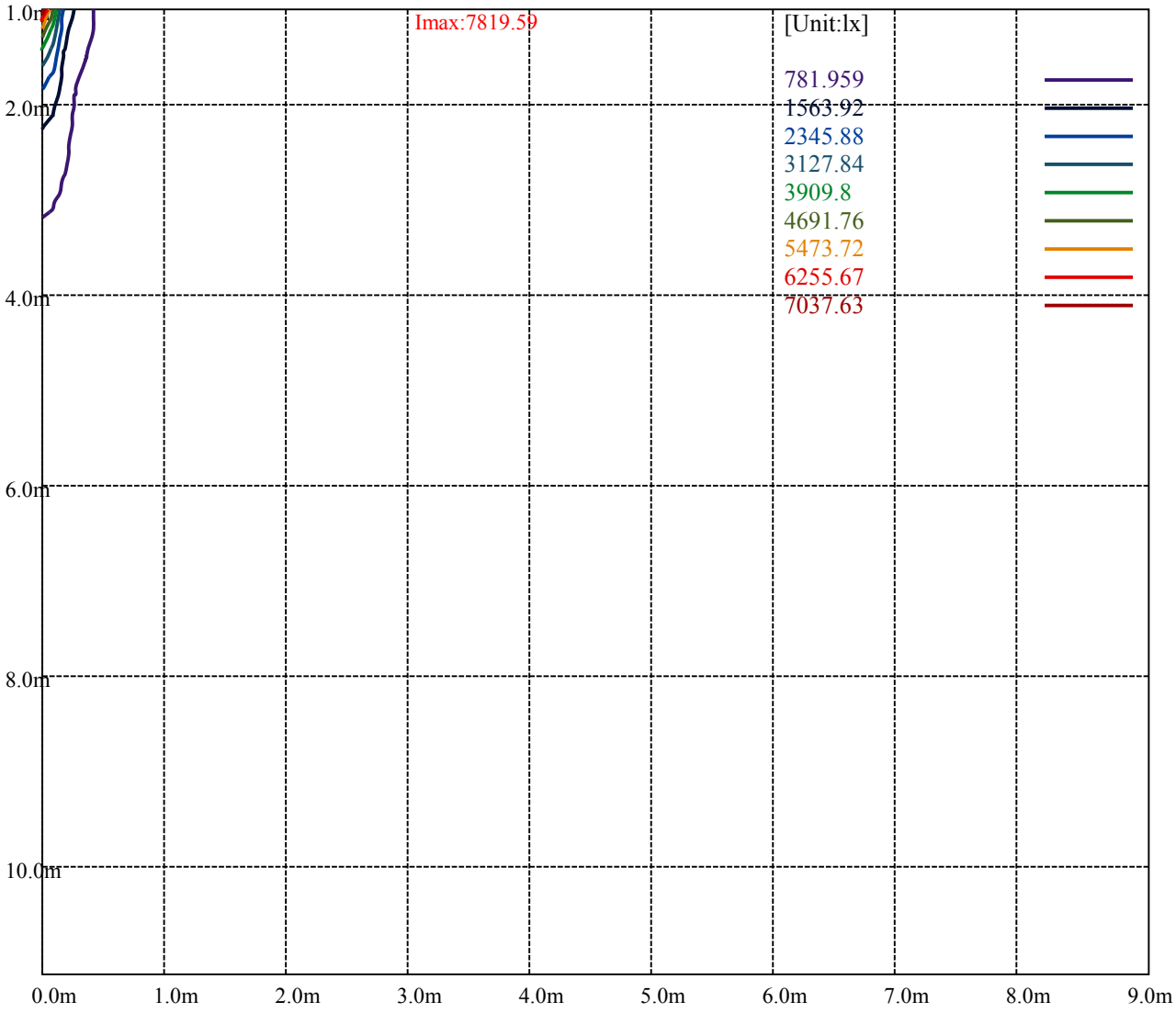
ISO illuminance diagram



(10%Emax) 195.4895
(20%Emax) 390.98
(30%Emax) 586.4675
(40%Emax) 781.9575
(50%Emax) 977.4475
(60%Emax) 1172.938
(70%Emax) 1368.425
(80%Emax) 1563.915
(90%Emax) 1759.405

Equipment: GMS1980
Temperature(°C): 25.0
Date: 2019/11/20
Humidity(%): 65.0%
Operator: NT07
Distance(m): 7.50

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2019/11/20
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

Luminance Limitting Curve(no luminous side)

Luminance Table

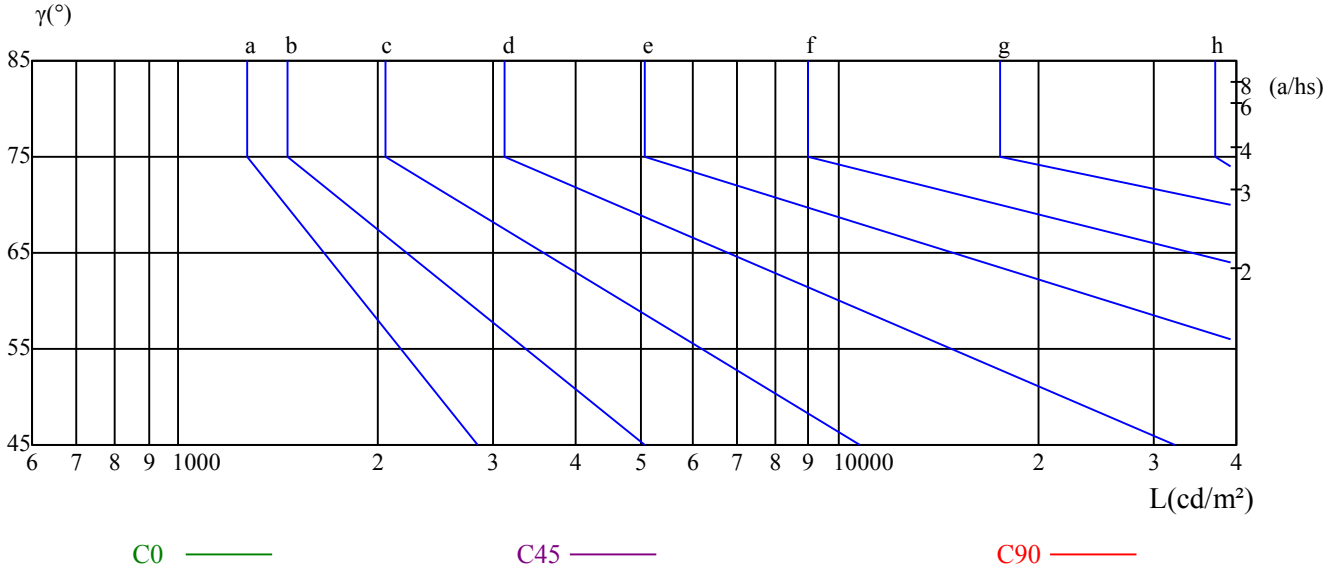
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

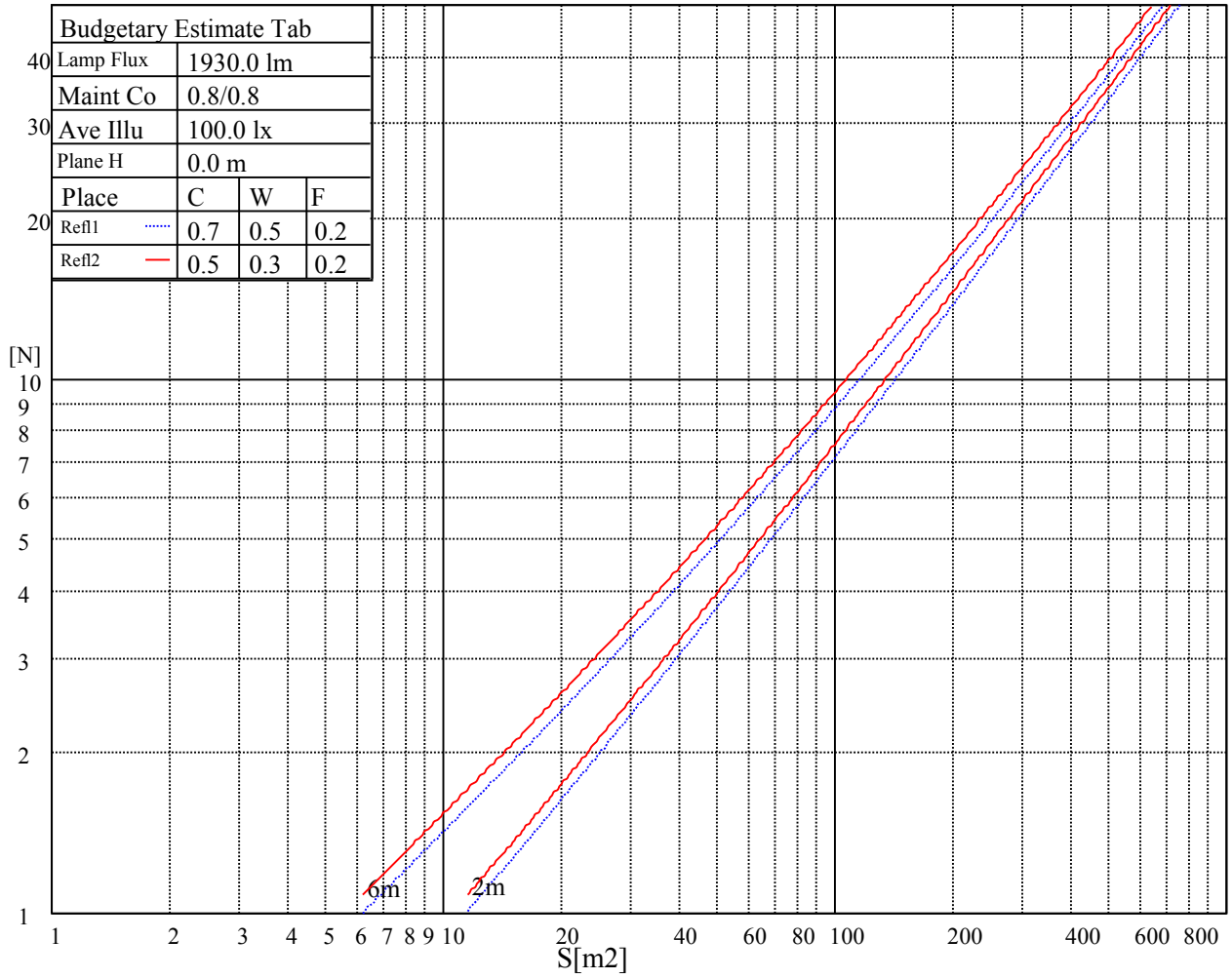
Glare Table

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

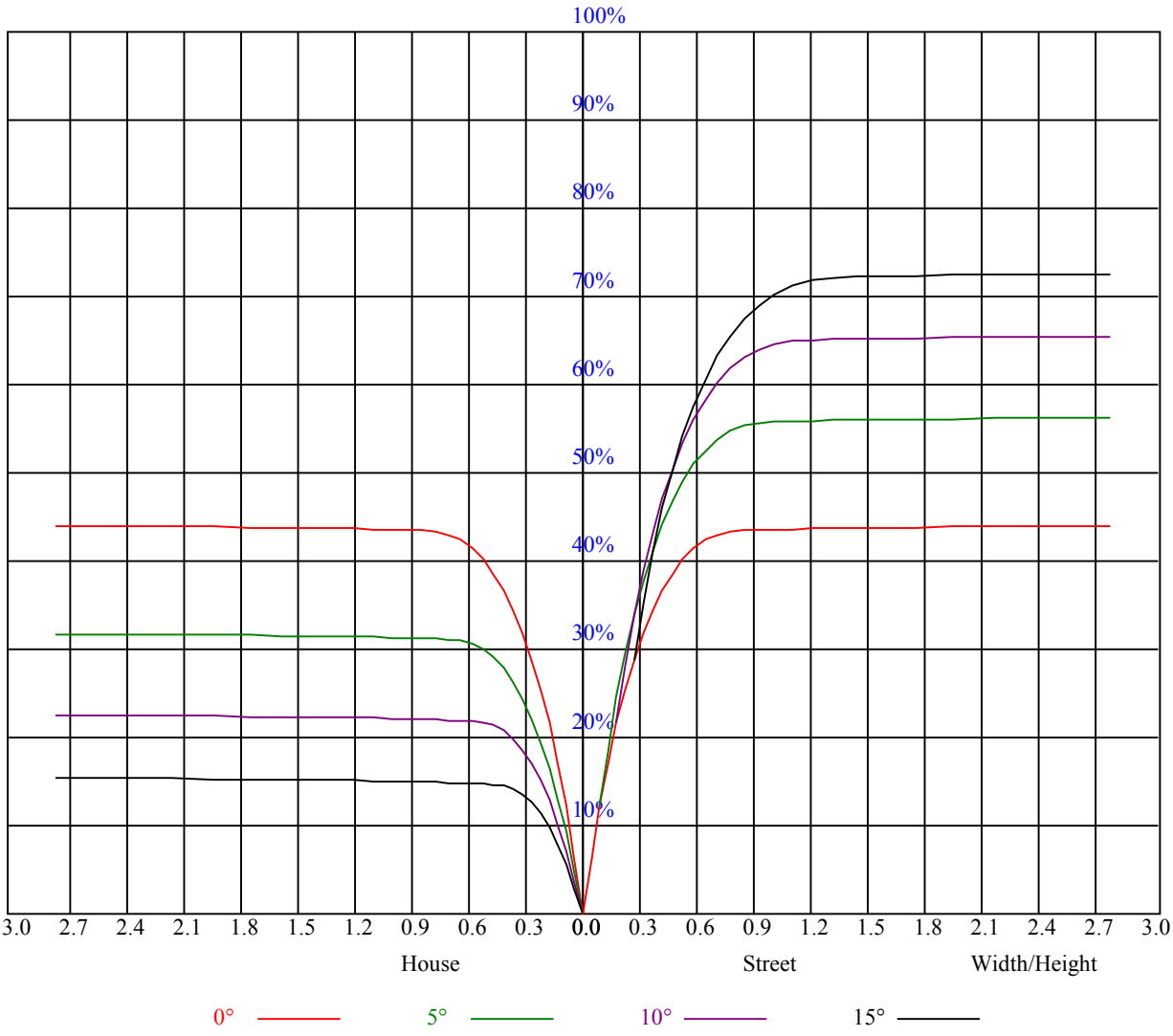


Equipment: GMS1980 Date: 2019/11/20 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 65.0% Distance(m): 7.50

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	1.06	1.06	1.06	1.03	1.03	1.03	0.99	0.99	0.99	0.94	0.94	0.94	0.90	0.90	0.90	0.89
1	0.99	0.97	0.95	0.97	0.95	0.93	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84
2	0.93	0.90	0.87	0.91	0.89	0.86	0.89	0.86	0.84	0.86	0.84	0.82	0.84	0.82	0.81	0.79
3	0.88	0.84	0.81	0.87	0.83	0.80	0.84	0.81	0.79	0.82	0.80	0.78	0.80	0.78	0.77	0.75
4	0.83	0.79	0.76	0.82	0.78	0.75	0.80	0.77	0.74	0.79	0.76	0.74	0.77	0.75	0.73	0.72
5	0.79	0.75	0.71	0.78	0.74	0.71	0.77	0.73	0.70	0.75	0.72	0.70	0.74	0.71	0.69	0.68
6	0.75	0.71	0.68	0.75	0.70	0.67	0.73	0.70	0.67	0.72	0.69	0.67	0.71	0.68	0.66	0.65
7	0.72	0.67	0.64	0.71	0.67	0.64	0.70	0.67	0.64	0.69	0.66	0.63	0.68	0.65	0.63	0.62
8	0.69	0.64	0.61	0.68	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.61	0.66	0.63	0.60	0.59
9	0.66	0.62	0.59	0.66	0.61	0.58	0.65	0.61	0.58	0.64	0.61	0.58	0.63	0.60	0.58	0.57
10	0.63	0.59	0.56	0.63	0.59	0.56	0.62	0.59	0.56	0.62	0.58	0.56	0.61	0.58	0.56	0.55

Coefficient Utilization Curve



Equipment: GMS1980	Date: 2019/11/20	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	7673.06	7961.63	8107.88	7986.94	7711.88	7015.50	6141.38	5423.63	4484.81
45.0	7868.81	7980.19	7859.25	7471.69	6907.50	6170.06	5165.44	4419.56	3773.81
90.0	7848.56	7625.25	7093.69	6318.56	5534.44	4681.13	3922.88	3367.13	2919.94
135.0	7887.94	7579.13	6855.19	6076.69	5266.13	4334.06	3683.25	3156.19	2764.13
180.0	7673.06	7156.13	6096.94	5371.31	4604.06	3833.44	3188.81	2793.38	2505.38
225.0	7868.81	7552.13	6945.19	6075.56	5152.50	4382.44	3628.69	3090.38	2685.94
270.0	7848.56	7853.63	7589.81	7120.69	6422.06	5492.81	4615.88	3932.44	3291.75
315.0	7887.94	7985.25	7855.88	7460.44	6885.56	6028.31	5227.88	4389.19	3673.13
360.0	7673.06	7961.63	8107.88	7986.94	7711.88	7015.50	6141.38	5423.63	4484.81

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	3846.38	3260.81	2862.56	2623.50	2429.44	2279.25	2164.50	2057.63	1932.75
45.0	3148.31	2806.88	2572.31	2386.13	2243.81	2130.19	2019.38	1925.44	1819.69
90.0	2647.69	2434.50	2283.19	2172.94	2061.00	1955.81	1863.00	1769.63	1653.75
135.0	2509.88	2349.00	2208.94	2103.75	1999.13	1910.25	1815.75	1724.06	1634.06
180.0	2328.19	2181.94	2067.19	1978.31	1884.38	1794.38	1715.06	1633.50	1526.06
225.0	2446.88	2261.25	2126.81	2031.19	1937.81	1852.88	1779.75	1706.06	1612.13
270.0	2840.63	2579.06	2399.06	2250.00	2131.31	2030.06	1946.25	1865.25	1776.38
315.0	3180.38	2810.25	2566.13	2414.81	2294.44	2164.50	2068.31	1972.69	1864.69
360.0	3846.38	3260.81	2862.56	2623.50	2429.44	2279.25	2164.50	2057.63	1932.75

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1836.56	1742.06	1624.50	1533.38	1447.88	1355.06	1266.19	1189.69	1108.69
45.0	1718.44	1623.38	1526.63	1432.69	1350.00	1277.44	1176.19	1110.38	1049.63
90.0	1561.50	1476.00	1383.19	1292.63	1215.56	1122.08	1059.47	1001.48	941.40
135.0	1553.63	1471.50	1371.38	1290.94	1211.06	1121.63	1050.75	984.94	927.00
180.0	1459.69	1386.00	1305.00	1225.13	1116.68	1082.93	1000.07	936.51	877.78
225.0	1538.44	1464.19	1383.75	1304.44	1234.69	1117.74	1075.44	1009.35	940.28
270.0	1690.31	1612.69	1515.94	1437.75	1357.88	1267.31	1180.13	1108.13	1038.94
315.0	1759.50	1664.44	1558.69	1460.25	1377.56	1287.56	1210.50	1116.45	1050.02
360.0	1836.56	1742.06	1624.50	1533.38	1447.88	1355.06	1266.19	1189.69	1108.69

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1040.63	972.00	909.56	858.38	810.56	755.44	715.50	659.81	558.56
45.0	975.94	915.19	869.06	806.06	752.63	714.94	636.75	554.06	463.50
90.0	891.96	835.71	772.26	732.09	687.09	584.38	504.17	407.70	277.03
135.0	853.88	800.44	747.00	704.81	640.13	556.88	449.44	346.50	300.94
180.0	817.99	765.00	723.88	671.79	601.26	507.71	404.49	312.02	214.93
225.0	882.34	823.28	772.88	733.84	689.01	600.86	512.66	414.39	292.84
270.0	964.69	896.06	839.25	780.19	727.31	685.13	612.56	531.00	429.75
315.0	985.39	925.03	856.01	804.94	758.03	706.22	651.71	574.82	485.49
360.0	1040.63	972.00	909.56	858.38	810.56	755.44	715.50	659.81	558.56

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	465.19	370.13	286.31	161.33	94.22	45.34	32.74	28.97	25.37
45.0	345.38	285.19	163.07	82.80	42.98	32.12	28.24	25.20	22.50
90.0	199.91	127.01	64.18	33.13	29.25	25.93	22.89	19.91	17.66
135.0	167.85	100.41	47.98	32.01	28.80	25.99	22.11	19.80	18.06
180.0	128.08	69.69	38.59	31.89	27.84	24.75	21.66	19.29	17.49
225.0	204.47	127.91	57.71	37.18	32.91	28.29	25.59	22.56	19.86
270.0	324.56	291.38	150.98	71.94	38.14	31.78	27.79	24.69	21.94
315.0	370.01	279.06	181.69	105.69	50.01	32.63	28.91	25.26	22.44
360.0	465.19	370.13	286.31	161.33	94.22	45.34	32.74	28.97	25.37

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	22.56	19.86	17.83	16.14	14.96	13.84	13.11	12.49	11.87
45.0	19.86	17.78	16.37	14.79	13.89	13.16	12.54	12.04	11.59
90.0	16.09	14.74	13.67	12.94	12.32	11.76	11.36	11.03	10.52
135.0	16.20	15.08	14.18	13.28	12.66	12.21	11.70	11.31	10.86
180.0	16.09	15.08	14.29	13.56	12.99	12.43	11.93	11.42	11.03
225.0	18.34	16.71	15.30	14.63	13.95	13.16	12.71	12.32	11.76
270.0	19.41	17.49	16.26	14.85	13.95	13.22	12.60	12.15	11.70
315.0	19.69	17.66	16.09	14.91	14.01	13.16	12.43	11.98	11.53
360.0	22.56	19.86	17.83	16.14	14.96	13.84	13.11	12.49	11.87

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	11.42	11.03	10.58	10.13	9.79	9.45	9.28	9.06	8.94
45.0	11.08	10.69	10.29	9.79	9.45	9.28	9.06	8.89	8.72
90.0	10.13	9.84	9.62	9.34	9.17	9.00	8.89	8.78	8.66
135.0	10.46	10.13	9.84	9.51	9.28	9.17	9.06	8.89	8.83
180.0	10.52	10.24	9.96	9.68	9.51	9.34	9.17	9.00	8.89
225.0	11.31	10.91	10.41	10.01	9.73	9.51	9.34	9.11	8.94
270.0	11.19	10.80	10.46	10.07	9.79	9.56	9.34	9.17	9.00
315.0	11.03	10.63	10.24	9.84	9.51	9.28	9.06	8.94	8.78
360.0	11.42	11.03	10.58	10.13	9.79	9.45	9.28	9.06	8.94

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	8.78	8.66	8.55	8.49	8.44	8.33	8.27	8.27	8.21
45.0	8.66	8.55	8.44	8.38	8.33	8.27	8.16	8.10	8.10
90.0	8.55	8.44	8.38	8.33	8.27	8.16	8.16	8.10	8.10
135.0	8.72	8.61	8.49	8.44	8.38	8.33	8.27	8.21	8.16
180.0	8.72	8.66	8.55	8.49	8.44	8.33	8.27	8.21	8.16
225.0	8.83	8.72	8.61	8.49	8.44	8.33	8.21	8.16	8.10
270.0	8.89	8.78	8.61	8.55	8.44	8.38	8.27	8.21	8.16
315.0	8.72	8.61	8.49	8.44	8.38	8.27	8.21	8.21	8.16
360.0	8.78	8.66	8.55	8.49	8.44	8.33	8.27	8.27	8.21

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	8.16	8.10	8.10	8.04	8.04	7.99	7.93	7.93	7.93
45.0	8.04	8.04	8.04	7.99	7.93	7.93	7.93	7.88	7.88
90.0	8.04	7.99	7.99	7.93	7.93	7.93	7.88	7.88	7.82
135.0	8.16	8.04	8.10	7.99	7.99	7.99	7.93	7.93	7.93
180.0	8.16	8.10	8.04	7.99	7.99	7.93	7.93	7.93	7.88
225.0	8.10	8.04	7.99	7.93	7.93	7.88	7.88	7.88	7.82
270.0	8.10	8.04	8.04	7.99	7.99	7.93	7.93	7.88	7.88
315.0	8.10	8.04	8.04	7.99	7.99	7.93	7.93	7.88	7.93
360.0	8.16	8.10	8.10	8.04	8.04	7.99	7.93	7.93	7.93

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	7.93	7.88	7.88	7.88	7.88	7.88	7.82	7.88	7.82
45.0	7.82	7.82	7.88	7.76	7.82	7.76	7.76	7.76	7.76
90.0	7.82	7.82	7.82	7.82	7.76	7.76	7.76	7.76	7.76
135.0	7.88	7.88	7.88	7.82	7.82	7.76	7.76	7.76	7.76
180.0	7.88	7.93	7.88	7.93	7.82	7.76	7.82	7.82	7.82
225.0	7.82	7.82	7.82	7.82	7.82	7.76	7.76	7.76	7.76
270.0	7.88	7.82	7.82	7.82	7.82	7.82	7.76	7.76	7.76
315.0	7.88	7.88	7.88	7.82	7.82	7.82	7.82	7.76	7.76
360.0	7.93	7.88	7.88	7.88	7.88	7.88	7.82	7.88	7.82

Intensity data(cd)

C/γ(°)	90.0
0.0	7.82
45.0	7.76
90.0	7.76
135.0	7.76
180.0	7.76
225.0	7.76
270.0	7.76
315.0	7.76
360.0	7.82