NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.com
Tel:+86-750-3770000 Fax:+86-750-3771111
Address:380JinOU Road,GaoXin Zone,Jiang Men City,Guangdong,China

Nata

LumCAT: 2-2262-M
Luminaire: 92.70.131.00
Report No: 200917-B025
Test No: 200917-C025
LampCAT: TRIDONIC SLE G7 15MM
Lamp flux(lm): 2008.5
Number of Lamps: 1
Length(feet)(ft.):0.000
Phm Type: C

Voltage(V): 230.3000
Current(A): 0.0880
Power (W): 19.3900
PF: 0.9520
Ballast type: AC
Width(feet)(ft.):0.000
Height(feet)(ft.):0.000

Photometric Results

Lumens(lm): 1964.80
Efficiency(%): 97.82%
Lumens(lm)/Power(W): 101.33
Central intensity(cd): 11131.460
Maximum intensity(cd): 11131.460
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=18.6
[C90/270]Total=18.6
Field angle(10%Imax): [C0/180]Total=40.6
[C90/270]Total=40.6
Maximum s/h(1/2): C0_180=0.32 C90_270=0.32
Maximum s/h(1/4): C0_180=0.32 C90_270=0.32
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 97.95%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 99.664%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	11131.466	2.663	2.663	.133%	.136%
1.0	11049.100	21.146	23.809	1.053%	1.212%
2.0	10849.566	41.522	65.332	2.067%	3.325%
3.0	10314.680	59.198	124.53	2.947%	6.338%
4.0	9690.874	74.131	198.661	3.691%	10.111%
5.0	9301.956	88.904	287.565	4.426%	14.636%
6.0	8532.879	97.810	385.375	4.870%	19.614%
7.0	7676.215	102.587	487.962	5.108%	24.835%
8.0	6826.280	104.182	592.144	5.187%	30.138%
9.0	5806.044	99.601	691.745	4.959%	35.207%
10.0	4939.230	94.055	785.8	4.683%	39.994%
11.0	4087.555	85.529	871.329	4.258%	44.347%
12.0	3362.966	76.675	948.004	3.817%	48.249%
13.0	2814.653	69.433	1017.436	3.457%	51.783%
14.0	2376.663	63.051	1080.488	3.139%	54.992%
15.0	2132.118	60.514	1141.002	3.013%	58.072%
16.0	1999.056	60.425	1201.427	3.008%	61.147%
17.0	1592.679	51.064	1252.491	2.542%	63.746%
18.0	1423.597	48.242	1300.733	2.402%	66.202%
19.0	1271.162	45.383	1346.116	2.260%	68.512%
20.0	1153.645	43.269	1389.385	2.154%	70.714%
21.0	1020.468	40.103	1429.488	1.997%	72.755%
22.0	961.976	39.518	1469.006	1.967%	74.766%
23.0	899.268	38.532	1507.537	1.918%	76.727%
24.0	841.142	37.518	1545.055	1.868%	78.637%
25.0	797.604	36.965	1582.02	1.840%	80.518%
26.0	757.709	36.425	1618.444	1.813%	82.372%
27.0	724.832	36.086	1654.53	1.797%	84.208%
28.0	696.990	35.883	1690.413	1.787%	86.035%
29.0	669.966	35.618	1726.031	1.773%	87.848%
30.0	634.624	34.797	1760.828	1.732%	89.619%
31.0	579.584	32.735	1793.563	1.630%	91.285%
32.0	521.521	30.306	1823.869	1.509%	92.827%
33.0	460.455	27.501	1851.37	1.369%	94.227%
34.0	392.073	24.043	1875.413	1.197%	95.450%
35.0	324.829	20.431	1895.844	1.017%	96.490%
36.0	262.544	16.923	1912.767	.843%	97.352%
37.0	205.433	13.558	1926.324	.675%	98.042%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	179.024	12.087	1938.411	.602%	98.657%
39.0	88.793	6.128	1944.539	.305%	98.969%
40.0	49.408	3.483	1948.022	.173%	99.146%
41.0	21.850	1.572	1949.594	.078%	99.226%
42.0	13.544	0.994	1950.587	.049%	99.277%
43.0	11.351	0.849	1951.436	.042%	99.320%
44.0	9.942	0.757	1952.194	.038%	99.358%
45.0	8.927	0.692	1952.886	.034%	99.394%
46.0	8.306	0.655	1953.541	.033%	99.427%
47.0	7.836	0.628	1954.17	.031%	99.459%
48.0	7.500	0.611	1954.781	.030%	99.490%
49.0	7.146	0.591	1955.372	.029%	99.520%
50.0	6.914	0.581	1955.953	.029%	99.550%
51.0	6.653	0.567	1956.52	.028%	99.578%
52.0	6.386	0.552	1957.072	.027%	99.607%
53.0	6.201	0.543	1957.615	.027%	99.634%
54.0	5.858	0.520	1958.135	.026%	99.661%
55.0	5.510	0.495	1958.63	.025%	99.686%
56.0	5.191	0.472	1959.102	.023%	99.710%
57.0	4.919	0.452	1959.554	.023%	99.733%
58.0	4.629	0.430	1959.984	.021%	99.755%
59.0	4.333	0.407	1960.392	.020%	99.776%
60.0	4.078	0.387	1960.779	.019%	99.795%
61.0	3.811	0.366	1961.144	.018%	99.814%
62.0	3.463	0.335	1961.48	.017%	99.831%
63.0	3.161	0.309	1961.789	.015%	99.847%
64.0	2.854	0.281	1962.07	.014%	99.861%
65.0	2.541	0.252	1962.322	.013%	99.874%
66.0	2.285	0.229	1962.551	.011%	99.885%
67.0	2.048	0.207	1962.758	.010%	99.896%
68.0	1.862	0.189	1962.947	.009%	99.906%
69.0	1.723	0.176	1963.124	.009%	99.915%
70.0	1.601	0.165	1963.289	.008%	99.923%
71.0	1.468	0.152	1963.441	.008%	99.931%
72.0	1.241	0.129	1963.57	.006%	99.937%
73.0	1.021	0.107	1963.677	.005%	99.943%
74.0	0.899	0.095	1963.772	.005%	99.948%
75.0	0.812	0.086	1963.858	.004%	99.952%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	0.742	0.079	1963.937	.004%	99.956%
77.0	0.719	0.077	1964.014	.004%	99.960%
78.0	0.696	0.075	1964.089	.004%	99.964%
79.0	0.661	0.071	1964.16	.004%	99.967%
80.0	0.644	0.070	1964.229	.003%	99.971%
81.0	0.615	0.067	1964.296	.003%	99.974%
82.0	0.603	0.066	1964.361	.003%	99.978%
83.0	0.580	0.063	1964.425	.003%	99.981%
84.0	0.545	0.059	1964.484	.003%	99.984%
85.0	0.563	0.061	1964.546	.003%	99.987%
86.0	0.545	0.060	1964.605	.003%	99.990%
87.0	0.522	0.057	1964.662	.003%	99.993%
88.0	0.510	0.056	1964.718	.003%	99.996%
89.0	0.505	0.055	1964.774	.003%	99.999%
90.0	0.522	0.029	1964.802	.001%	100.000%

Zonal flux distribution table

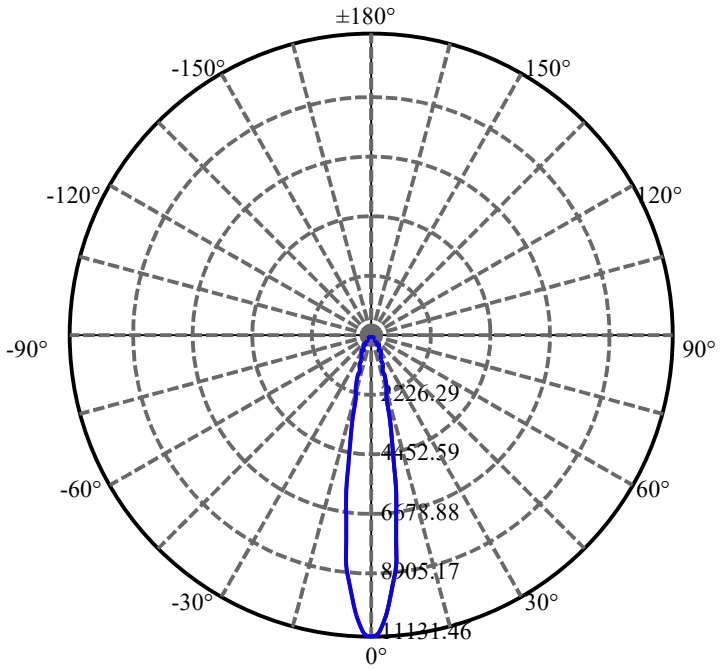
ZONAL LUMEN SUMMARY

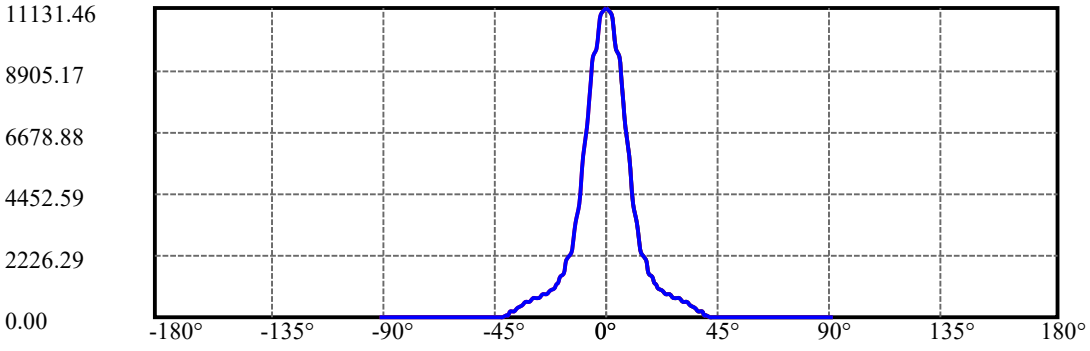
Zone	Lumens	%Lamp	%Fixt
0-30	1760.83	87.67%	89.62%
0-40	1948.02	96.99%	99.15%
0-60	1960.78	97.62%	99.80%
0-90	1964.77	97.82%	100.00%
0-120	1964.77	97.82%	100.00%
0-180	1964.80	97.82%	100.00%
60-90	4.38	0.22%	0.22%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-24.72	1571.84	78.26%	80.00%

ZONAL LUMEN SUMMARY

0-10	785.80
10-20	603.58
20-30	371.44
30-40	187.19
40-50	7.93
50-60	4.83
60-70	2.51
70-80	0.94
80-90	0.54
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):

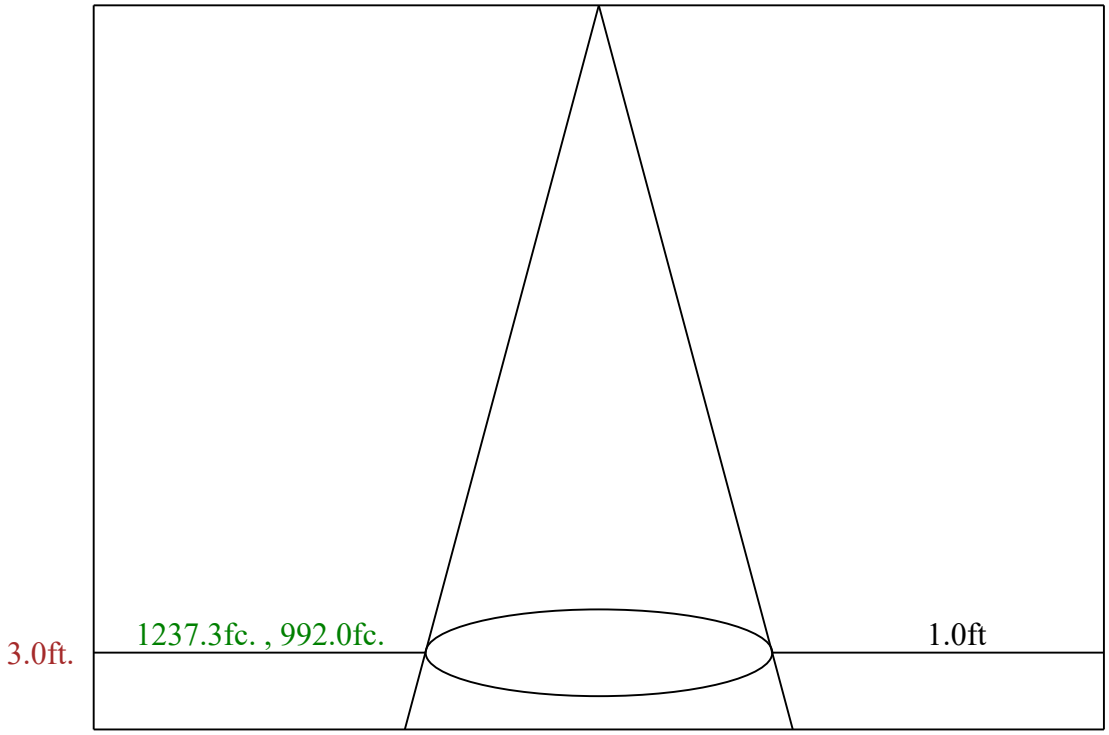
C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:20.3 Right:20.3
:C90/270Left:20.3 Right:20.3

Beam Angle(50%Imax):C0/180Left:9.3 Right:9.3
:C90/270Left:9.3 Right:9.3

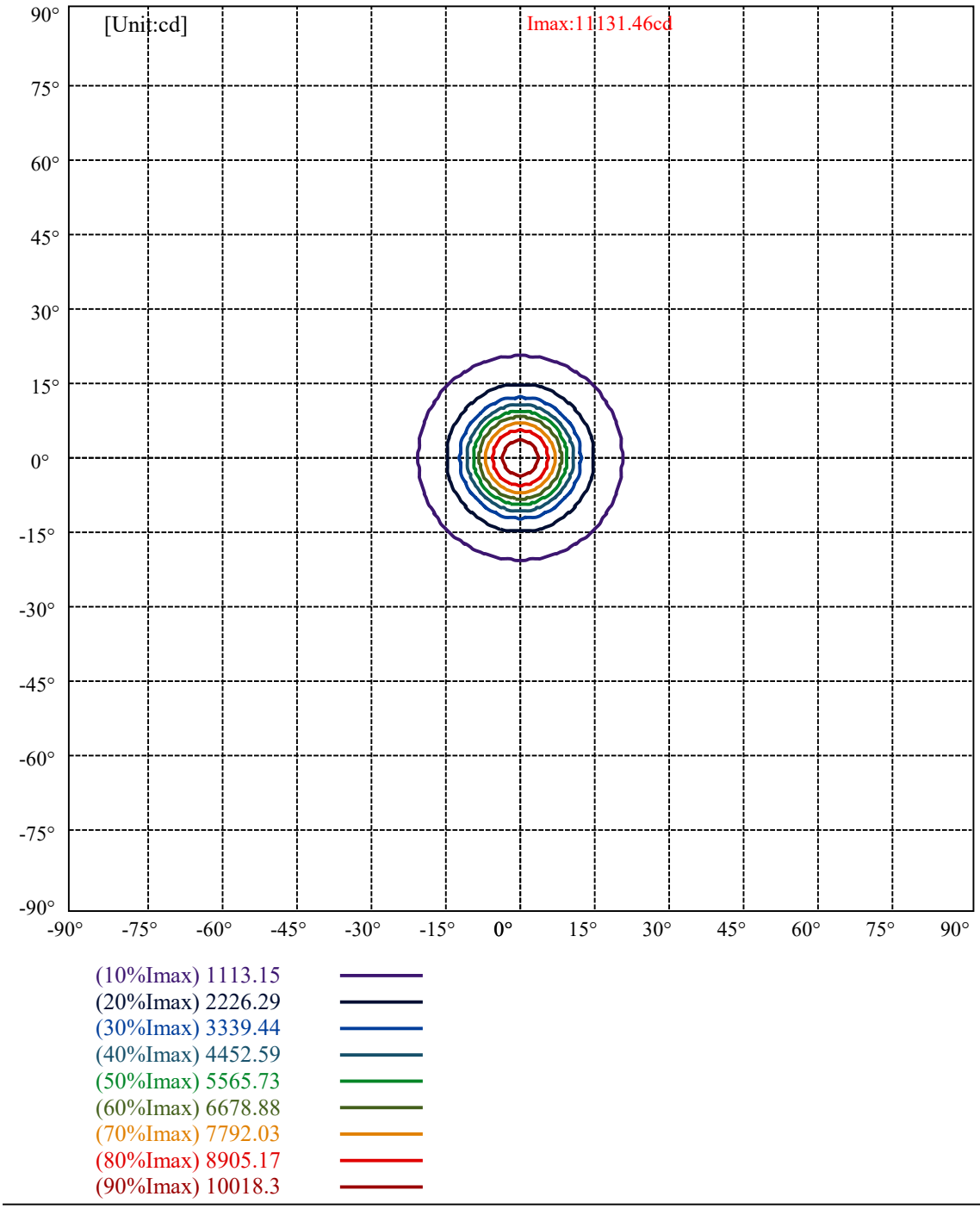
Lux distance Curve



Max , Ave

Beam angle of C0 plane 18.65

ISO-Intensity(V-H)

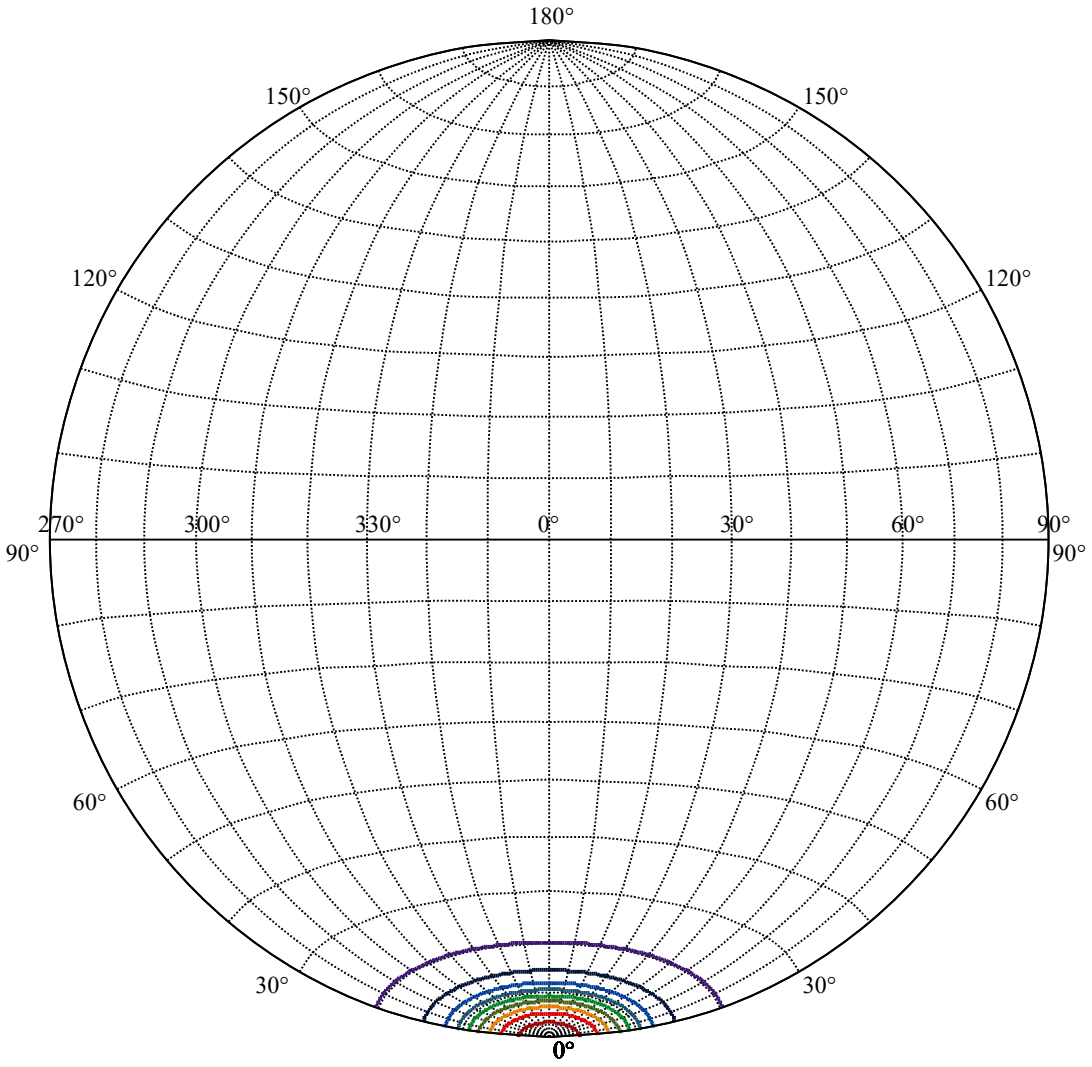


Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2020/9/17
Humidity(%): 60.0%

Operator: NT0100
Distance(feet): 22.35

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:11131.46

(10%Imax) 1113.15
(20%Imax) 2226.29
(30%Imax) 3339.44
(40%Imax) 4452.59
(50%Imax) 5565.73
(60%Imax) 6678.88
(70%Imax) 7792.03
(80%Imax) 8905.17
(90%Imax) 10018.3

Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2020/9/17
Humidity(%): 60.0%

Operator: NT0100
Distance(feet): 22.35

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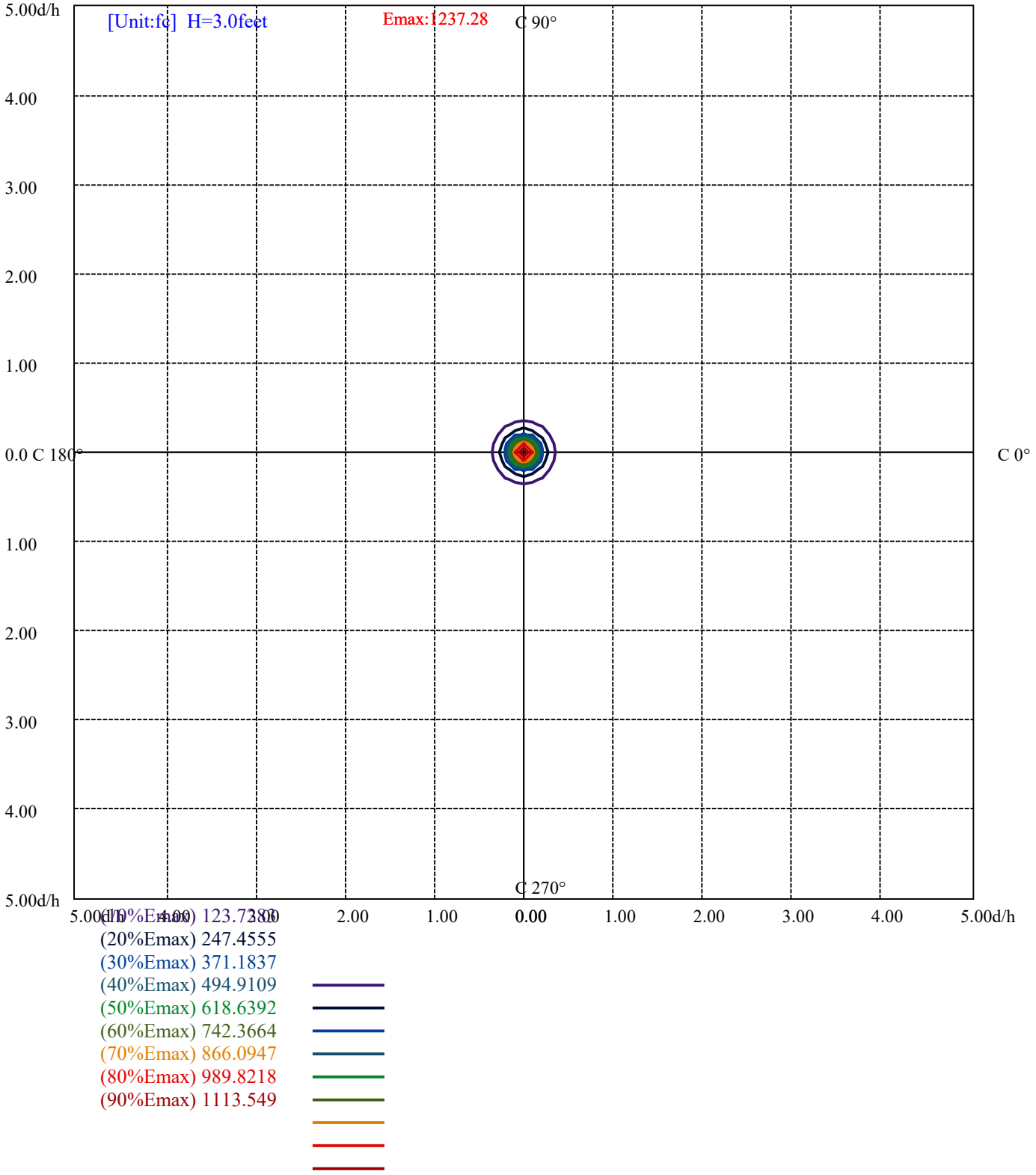
ISO illuminance diagram

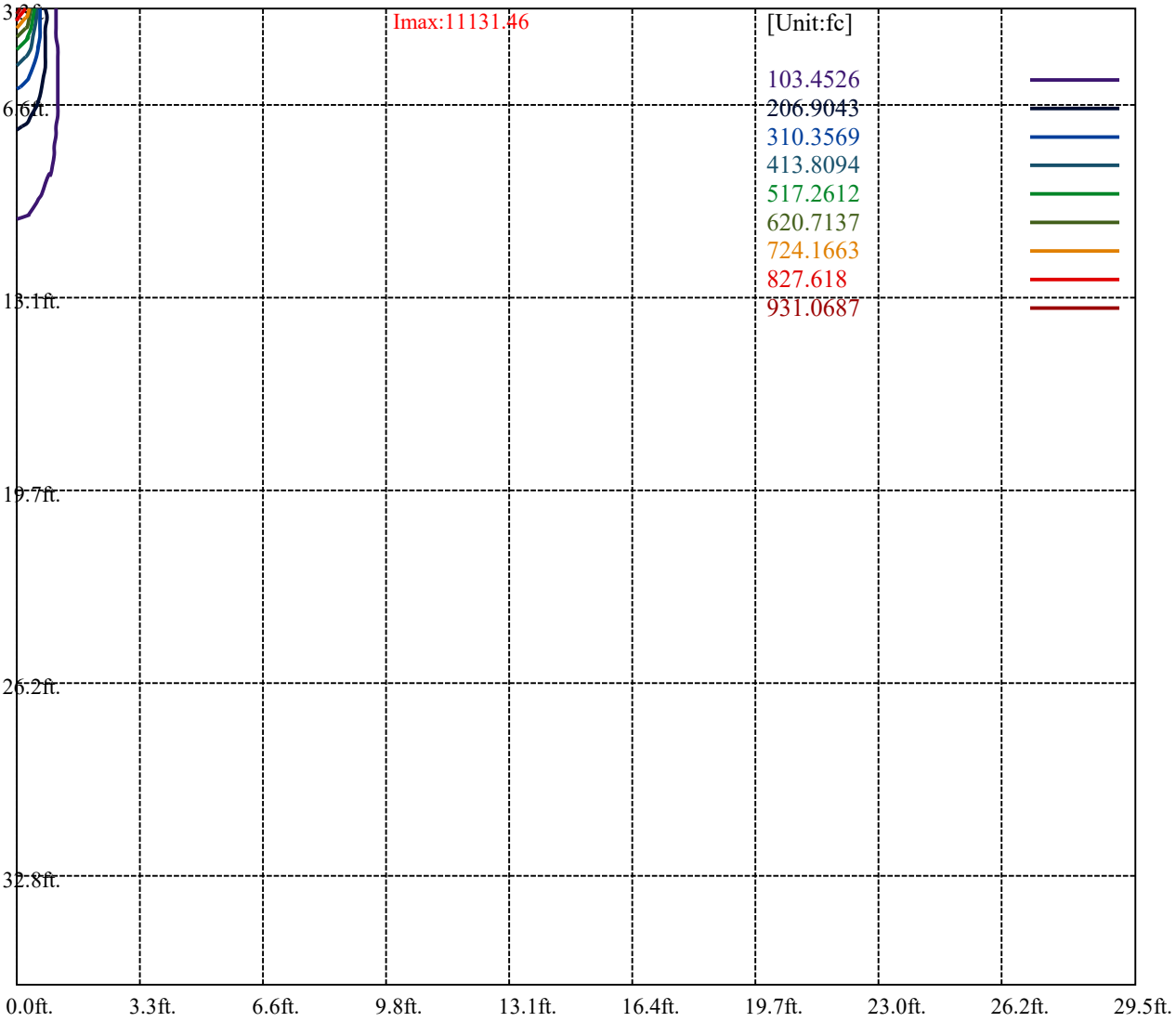


Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2020/9/17
Humidity(%): 60.0%

Operator: NT0100
Distance(feet): 22.35

Space ISO Lux diagram



Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2020/9/17
Humidity(%): 60.0%

Operator: NT0100
Distance(feet): 22.35

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Luminance Limitting Curve(no luminous side)

Luminance Table

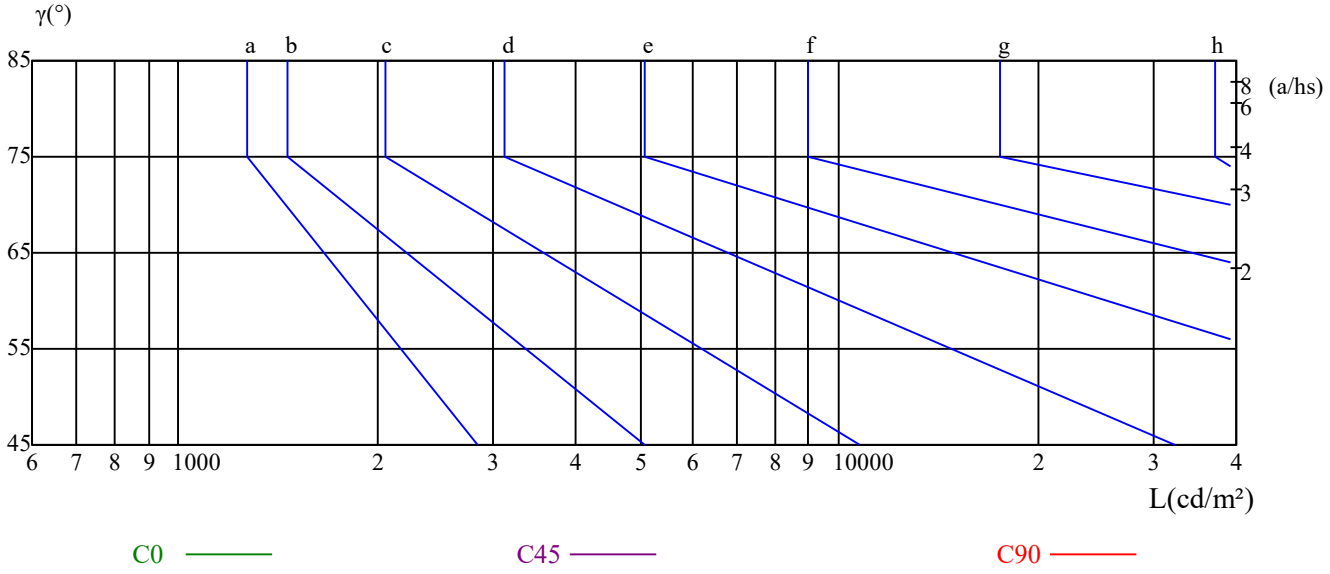
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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

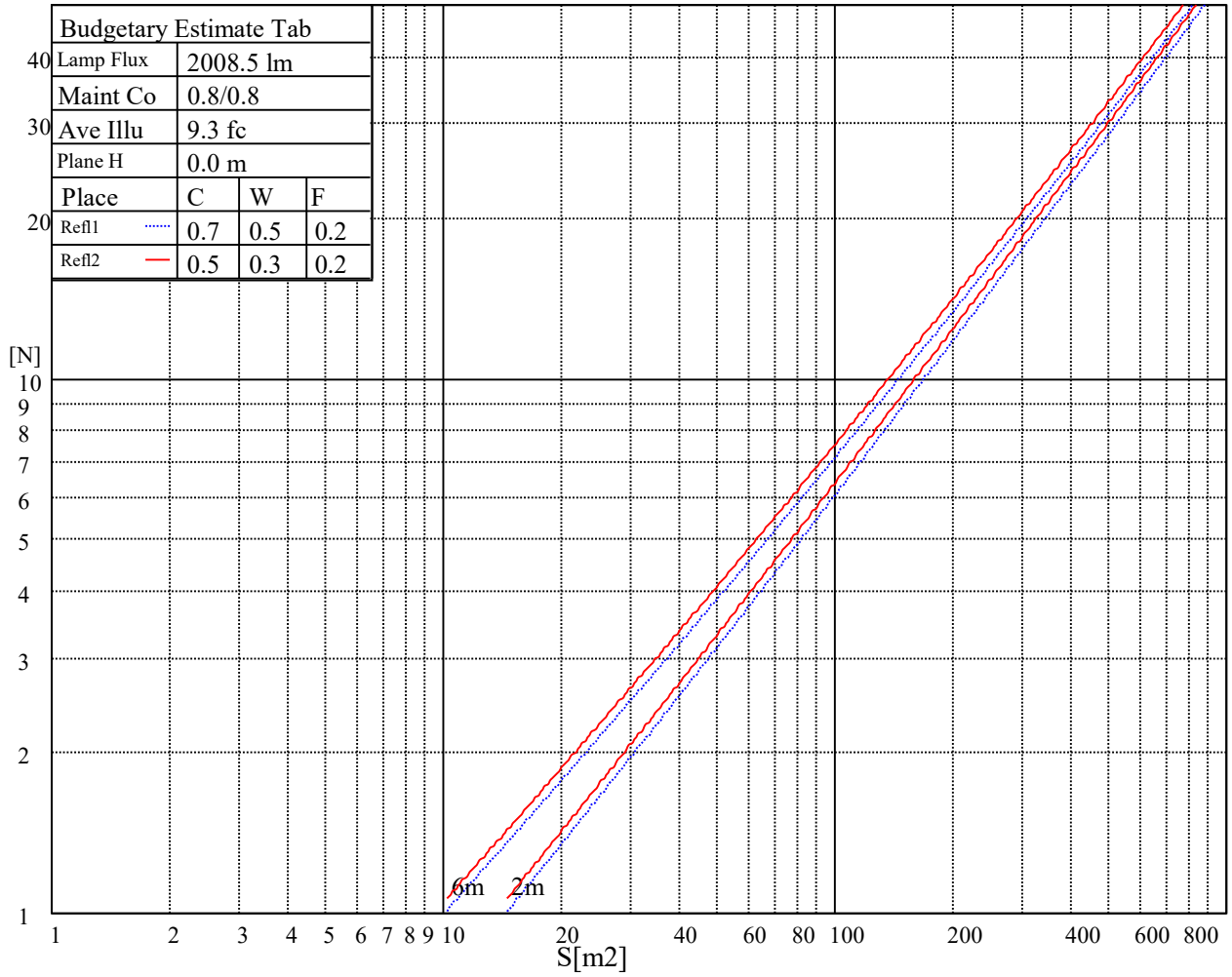


Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2020/9/17
Humidity(%): 60.0%

Operator: NT0100
Distance(feet): 22.35

Budgetary Estimate Table



Equipment: GMS 1800
Temperature(°C): 25.0

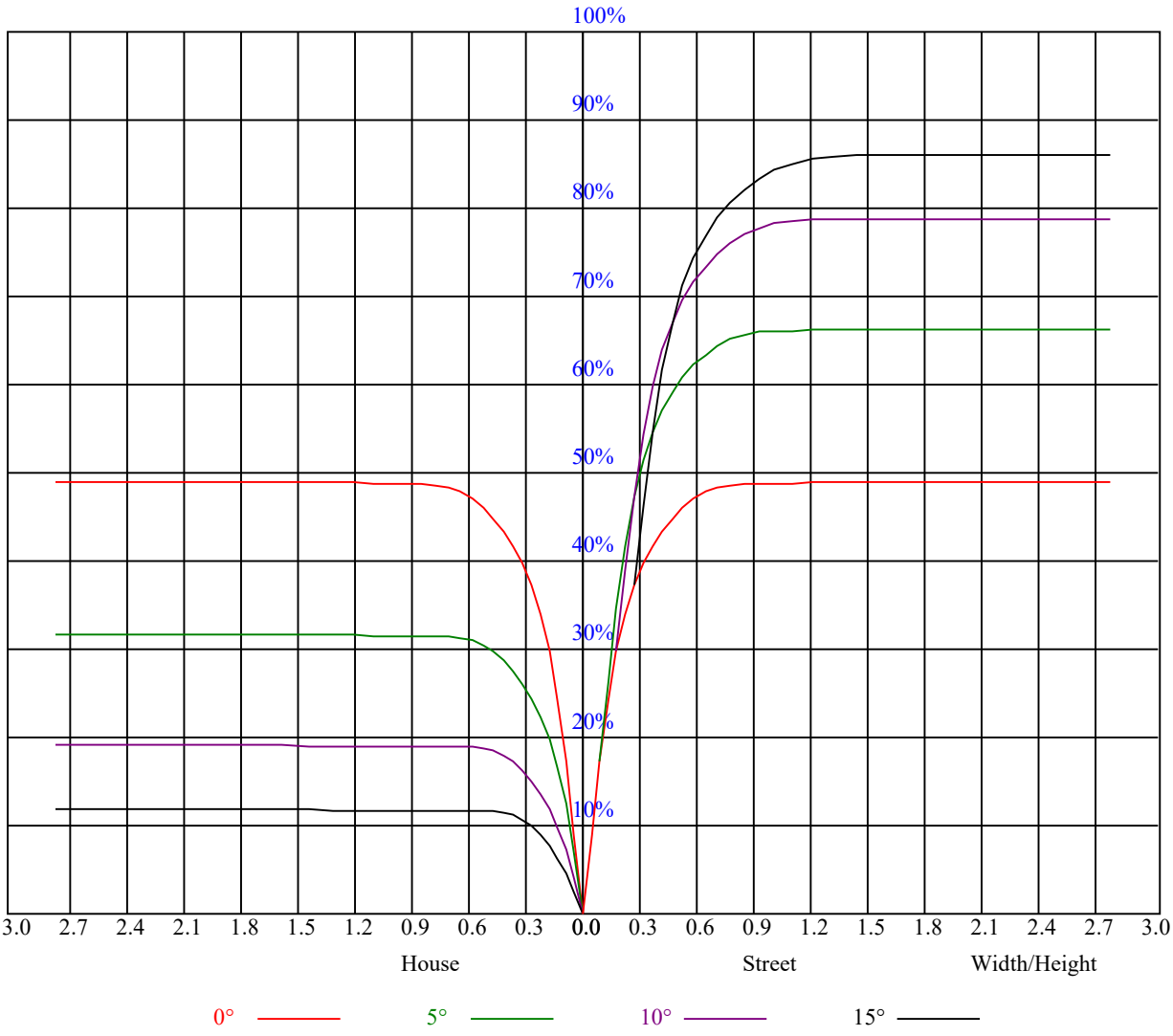
Date: 2020/9/17
Humidity(%): 60.0%

Operator: NT0100
Distance(feet): 22.35

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	1.17	1.17	1.17	1.14	1.14	1.14	1.09	1.09	1.09	1.04	1.04	1.04	1.00	1.00	1.00	0.98
1	1.10	1.08	1.07	1.08	1.06	1.05	1.04	1.03	1.02	1.01	1.00	0.99	0.97	0.97	0.96	0.94
2	1.05	1.02	0.99	1.03	1.01	0.98	1.00	0.98	0.96	0.97	0.96	0.94	0.95	0.93	0.92	0.91
3	1.00	0.97	0.94	0.99	0.96	0.93	0.97	0.94	0.91	0.94	0.92	0.90	0.92	0.90	0.89	0.87
4	0.96	0.92	0.89	0.95	0.91	0.89	0.93	0.90	0.88	0.91	0.89	0.87	0.90	0.87	0.86	0.84
5	0.92	0.88	0.85	0.92	0.88	0.85	0.90	0.87	0.84	0.89	0.86	0.83	0.87	0.85	0.83	0.82
6	0.89	0.85	0.82	0.88	0.84	0.82	0.87	0.84	0.81	0.86	0.83	0.81	0.85	0.82	0.80	0.79
7	0.86	0.82	0.79	0.86	0.82	0.79	0.84	0.81	0.78	0.83	0.80	0.78	0.82	0.80	0.78	0.77
8	0.83	0.79	0.76	0.83	0.79	0.76	0.82	0.78	0.76	0.81	0.78	0.76	0.80	0.77	0.75	0.74
9	0.81	0.77	0.74	0.80	0.76	0.74	0.80	0.76	0.74	0.79	0.76	0.73	0.78	0.75	0.73	0.72
10	0.78	0.74	0.72	0.78	0.74	0.72	0.77	0.74	0.72	0.77	0.74	0.71	0.76	0.73	0.71	0.70

Coefficient Utilization Curve



Equipment: GMS 1800	Date: 2020/9/17	Operator: NT0100
Temperature(°C): 25.0	Humidity(%): 60.0%	Distance(feet): 22.35

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	11181.35	10991.10	10656.99	10132.63	9178.81	8882.76	8096.22	7213.63	6277.68
45.0	11153.51	11153.51	10986.46	10666.27	10202.24	9589.72	8870.46	8095.53	7260.27
90.0	11056.06	10810.12	10415.69	8897.61	8897.61	8439.61	7621.05	6717.12	6163.06
135.0	11134.95	11042.14	10921.49	10401.77	10100.15	9501.55	8777.66	7960.96	7065.37
180.0	11181.35	11199.91	11060.70	10782.28	10443.54	9715.00	9116.40	8281.14	7371.64
225.0	11153.51	11032.86	10773.00	10230.08	9073.94	9073.94	8208.06	7273.96	6286.96
270.0	11056.06	11148.87	11111.74	10930.77	10573.47	10155.84	9334.50	8517.80	7770.70
315.0	11134.95	11014.30	10870.45	10476.02	9057.24	9057.24	8238.68	7349.59	6414.57
360.0	11181.35	10991.10	10656.99	10132.63	9178.81	8882.76	8096.22	7213.63	6277.68

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	5319.91	4410.87	3618.76	2982.11	2684.67	2167.73	1999.75	1760.31	1551.96
45.0	6360.04	5418.05	4499.27	3687.21	3032.92	2531.77	2374.00	2374.00	1711.12
90.0	4862.84	4329.20	3548.23	2931.07	2473.99	2128.75	1857.76	1638.27	1453.12
135.0	6123.39	5167.48	4304.37	3543.36	2944.76	2494.64	2346.15	2346.15	1652.66
180.0	6392.52	5427.34	4517.83	3710.41	3042.20	2531.77	2448.24	2290.47	1642.91
225.0	5306.45	4396.95	3620.62	2996.50	2525.97	2160.77	1873.54	1646.16	1460.55
270.0	6619.90	5831.04	4889.06	4039.88	3311.34	2731.30	2313.67	2313.67	1757.53
315.0	5463.30	4532.91	3702.29	3013.20	2501.37	2266.57	1843.84	1623.42	1511.59
360.0	5319.91	4410.87	3618.76	2982.11	2684.67	2167.73	1999.75	1760.31	1551.96

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1382.12	1242.45	1123.66	1007.18	905.65	881.11	823.75	779.16	743.24
45.0	1515.77	1350.57	1208.58	1096.28	1008.11	935.26	873.54	822.04	778.42
90.0	1297.67	1167.74	1061.01	900.97	900.97	847.56	802.17	778.56	744.36
135.0	1465.19	1341.29	1213.22	1103.24	1013.22	936.19	871.69	815.54	770.06
180.0	1525.51	1301.85	1221.10	1101.38	1001.15	921.34	859.16	809.51	768.67
225.0	1310.20	1182.59	1076.33	917.35	889.69	876.33	817.91	771.78	733.40
270.0	1550.57	1378.88	1236.42	1118.55	1058.23	938.51	873.08	839.67	790.94
315.0	1341.75	1203.93	1088.85	918.79	918.79	857.86	807.84	764.59	732.57
360.0	1382.12	1242.45	1123.66	1007.18	905.65	881.11	823.75	779.16	743.24

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	724.68	686.82	657.49	628.72	542.32	503.15	437.07	341.81	301.81
45.0	744.08	714.84	690.25	665.66	619.72	558.46	519.95	456.84	362.18
90.0	702.31	687.88	662.18	613.13	552.20	488.02	421.85	353.87	284.73
135.0	732.01	700.46	674.94	642.45	593.27	532.94	468.44	404.87	336.66
180.0	737.12	709.74	687.00	660.09	607.65	546.86	483.29	421.11	355.68
225.0	701.29	675.82	640.88	587.93	527.56	466.49	402.50	336.98	269.74
270.0	751.04	717.16	687.93	664.26	622.04	566.82	506.03	443.85	379.35
315.0	706.12	683.20	659.07	614.75	571.92	509.42	444.50	377.26	308.49
360.0	724.68	686.82	657.49	628.72	542.32	503.15	437.07	341.81	301.81

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	234.29	173.32	117.31	69.88	31.79	14.66	12.39	10.49	9.10
45.0	320.42	254.06	254.06	132.95	81.72	40.46	17.08	13.09	11.55
90.0	217.77	156.70	103.20	56.75	21.81	10.26	8.77	7.15	5.89
135.0	268.91	255.91	255.91	109.47	62.64	28.26	14.85	13.46	11.79
180.0	289.32	235.96	235.96	109.65	61.53	26.03	13.22	11.65	9.84
225.0	216.56	144.96	100.97	53.22	22.09	13.60	12.34	10.77	9.51
270.0	312.53	245.71	245.71	109.00	79.12	25.34	16.29	12.16	11.00
315.0	240.55	176.84	119.07	69.42	34.57	16.19	13.41	12.06	10.86
360.0	234.29	173.32	117.31	69.88	31.79	14.66	12.39	10.49	9.10

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	8.26	7.75	7.47	7.15	6.45	6.17	6.03	5.71	5.52
45.0	9.79	8.96	8.03	7.61	7.19	6.82	6.59	6.26	6.17
90.0	5.20	4.92	4.69	4.59	4.55	4.64	4.64	4.59	4.73
135.0	10.49	9.74	9.33	9.00	8.63	8.35	8.07	7.89	7.61
180.0	8.54	8.03	7.47	6.77	6.45	6.08	5.71	5.48	5.29
225.0	8.68	8.07	7.84	7.47	7.19	6.91	6.59	6.31	5.94
270.0	10.02	8.91	8.40	8.07	7.75	7.47	7.05	6.68	6.40
315.0	10.44	10.07	9.47	9.33	8.96	8.86	8.54	8.17	7.93
360.0	8.26	7.75	7.47	7.15	6.45	6.17	6.03	5.71	5.52

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	5.24	4.87	4.59	4.32	4.04	3.76	3.53	3.29	2.97
45.0	5.80	5.34	4.97	4.69	4.36	3.99	3.76	3.53	3.16
90.0	4.78	4.55	4.22	3.94	3.71	3.48	3.20	3.06	2.92
135.0	7.29	6.96	6.54	6.31	5.94	5.57	5.34	4.92	4.50
180.0	4.92	4.55	4.36	3.99	3.67	3.62	3.29	3.02	2.78
225.0	5.52	5.15	4.97	4.83	4.69	4.22	4.08	3.71	3.48
270.0	6.03	5.61	5.20	4.87	4.64	4.36	4.04	3.90	3.39
315.0	7.29	7.05	6.68	6.40	5.99	5.66	5.38	5.06	4.50
360.0	5.24	4.87	4.59	4.32	4.04	3.76	3.53	3.29	2.97

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	2.74	2.55	2.27	2.04	1.86	1.81	1.58	1.48	1.39
45.0	2.92	2.69	2.51	2.32	2.13	2.00	1.90	1.67	1.53
90.0	2.60	2.32	2.13	2.00	1.76	1.67	1.53	1.39	1.21
135.0	4.22	3.81	3.39	3.06	2.88	2.55	2.27	2.04	1.81
180.0	2.41	2.09	1.67	1.44	1.30	1.16	1.21	1.25	1.25
225.0	3.11	2.69	2.41	2.00	1.53	1.21	1.25	1.35	1.25
270.0	3.20	2.92	2.60	2.46	2.23	2.09	1.90	1.76	1.53
315.0	4.08	3.76	3.34	2.97	2.69	2.41	2.13	1.86	1.76
360.0	2.74	2.55	2.27	2.04	1.86	1.81	1.58	1.48	1.39

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	1.21	1.02	0.88	0.84	0.79	0.79	0.74	0.70	0.70
45.0	1.48	1.11	0.97	0.88	0.79	0.74	0.70	0.70	0.70
90.0	0.97	0.84	0.79	0.74	0.65	0.65	0.70	0.65	0.65
135.0	1.48	1.21	0.97	0.84	0.79	0.79	0.70	0.65	0.65
180.0	1.11	0.97	0.88	0.79	0.70	0.70	0.65	0.65	0.65
225.0	1.02	0.84	0.74	0.74	0.74	0.65	0.65	0.60	0.60
270.0	1.30	1.16	1.02	0.88	0.74	0.74	0.74	0.70	0.60
315.0	1.35	1.02	0.93	0.79	0.74	0.70	0.70	0.65	0.60
360.0	1.21	1.02	0.88	0.84	0.79	0.79	0.74	0.70	0.70

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	0.65	0.65	0.65	0.65	0.60	0.60	0.56	0.51	0.42
45.0	0.65	0.60	0.60	0.56	0.56	0.56	0.51	0.56	0.51
90.0	0.56	0.60	0.56	0.56	0.60	0.51	0.56	0.51	0.51
135.0	0.65	0.60	0.60	0.51	0.51	0.56	0.51	0.51	0.60
180.0	0.60	0.65	0.56	0.56	0.56	0.51	0.51	0.46	0.46
225.0	0.60	0.51	0.56	0.46	0.56	0.51	0.46	0.51	0.56
270.0	0.60	0.65	0.56	0.56	0.56	0.56	0.46	0.51	0.46
315.0	0.60	0.56	0.56	0.51	0.56	0.56	0.60	0.51	0.51
360.0	0.65	0.65	0.65	0.65	0.60	0.60	0.56	0.51	0.42

Intensity data(cd)

C/γ(°)	90.0
0.0	0.46
45.0	0.60
90.0	0.56
135.0	0.60
180.0	0.51
225.0	0.46
270.0	0.46
315.0	0.51
360.0	0.46