

IES INDOOR REPORT

PHOTOMETRIC FILENAME : FRM-24-L78-827-DMA-DIM-UNV_.IES_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GENERATED FROM 15746385.01
[TESTLAB] UL Verification Services Inc.
[ISSUE DATE] 2025-05-02
[TEST DATE] 3/20/2025
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] FRM-24-L78-827-DMA-DIM-UNV_
[LUMINAIRE] Recessed 2 x 4 narrow aperture LED luminaire
[MORE] with center frame driver housing
[LAMP] LED
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] INDOOR
[_SEARCH_MOUNTING] RECESSED
[FILEGENINFO] 1.10000

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	7630
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	89
Total Luminaire Watts	85.6
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.06
Spacing Criterion (90-270)	0.94
Spacing Criterion (Diagonal)	1.06
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.88 ft
Luminous Width (90-270)	1.90 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	4075	3145	3344
55	3614	2723	2941
65	3122	2336	2529
75	2522	1938	2106
85	1857	1391	1641

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	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	4089.070	4089.070	4089.070	4089.070	4089.070
0.5	4041.534	4085.190	4098.771	4095.861	4105.562
1.0	4039.594	4083.249	4096.831	4093.921	4102.652
1.5	4037.654	4080.339	4093.921	4089.070	4098.771
2.0	4033.773	4076.459	4089.070	4083.249	4091.981
2.5	4028.923	4070.638	4082.279	4075.488	4084.220
3.0	4024.072	4064.817	4074.518	4066.757	4075.488
3.5	4016.311	4057.056	4065.787	4056.086	4064.817
4.0	4008.550	4048.325	4055.116	4044.444	4052.205
4.5	3999.819	4038.624	4043.474	4030.863	4037.654
5.0	3990.118	4027.952	4030.863	4016.311	4023.102
5.5	3979.446	4015.341	4016.311	3999.819	4006.610
6.0	3967.805	4001.759	3999.819	3983.327	3987.207
6.5	3954.223	3989.147	3982.357	3963.924	3968.775
7.0	3940.641	3974.596	3964.894	3944.522	3947.432
7.5	3927.060	3958.104	3945.492	3924.149	3925.119
8.0	3911.538	3940.641	3926.089	3901.836	3902.806
8.5	3895.045	3923.179	3903.777	3877.583	3878.553
9.0	3878.553	3904.747	3882.434	3853.330	3853.330
9.5	3862.061	3885.344	3860.121	3829.077	3828.107
10.0	3843.629	3864.972	3835.868	3802.884	3800.944
10.5	3825.197	3844.599	3811.615	3775.720	3771.840
11.0	3805.794	3822.286	3785.422	3747.587	3743.706
11.5	3786.392	3799.973	3759.228	3718.483	3714.603
12.0	3766.019	3776.690	3732.065	3688.409	3684.529
12.5	3744.676	3752.437	3703.931	3657.365	3654.455
13.0	3723.334	3728.184	3675.798	3626.321	3623.411
13.5	3701.021	3702.961	3646.694	3595.277	3593.337
14.0	3678.708	3676.768	3616.620	3562.293	3560.353
14.5	3655.425	3651.545	3585.576	3529.309	3526.399
15.0	3632.142	3625.351	3554.532	3494.385	3493.414
15.5	3608.859	3597.218	3522.518	3460.430	3459.460
16.0	3584.606	3570.054	3490.504	3426.476	3424.536
16.5	3560.353	3541.921	3456.550	3390.581	3389.611
17.0	3536.100	3512.817	3422.595	3355.657	3353.717
17.5	3510.877	3482.743	3388.641	3319.762	3317.822
18.0	3484.683	3452.669	3353.717	3282.898	3280.957
18.5	3457.520	3422.595	3317.822	3246.033	3244.093
19.0	3431.327	3392.522	3282.898	3209.168	3207.228
19.5	3404.163	3361.478	3247.003	3172.304	3171.333
20.0	3377.000	3330.434	3210.138	3133.499	3133.499
20.5	3349.836	3298.420	3173.274	3096.634	3096.634
21.0	3321.703	3266.406	3135.439	3057.829	3059.769
21.5	3292.599	3234.391	3097.604	3019.994	3021.934
22.0	3263.495	3202.377	3059.769	2982.159	2985.070
22.5	3235.362	3170.363	3021.934	2943.354	2947.235
23.0	3207.228	3137.379	2984.100	2905.520	2910.370
23.5	3179.094	3103.425	2945.295	2866.715	2873.506
24.0	3150.961	3071.411	2907.460	2827.910	2836.641
24.5	3121.857	3037.456	2869.625	2791.045	2800.746
25.0	3092.753	3004.472	2831.790	2753.210	2764.852
25.5	3064.620	2971.488	2792.985	2716.346	2728.957
26.0	3035.516	2938.504	2756.121	2678.511	2694.033
26.5	3007.383	2904.549	2717.316	2640.676	2659.108

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27.0	2978.279	2871.565	2679.481	2603.811	2625.154
27.5	2950.145	2838.581	2641.646	2567.917	2590.230
28.0	2922.012	2805.597	2604.781	2532.022	2556.275
28.5	2892.908	2772.613	2567.917	2496.128	2524.261
29.0	2863.804	2739.629	2531.052	2461.203	2490.307
29.5	2835.671	2707.614	2495.157	2426.279	2457.323
30.0	2807.537	2674.630	2458.293	2391.354	2426.279
30.5	2780.374	2641.646	2422.398	2357.400	2394.265
31.0	2753.210	2609.632	2385.533	2323.446	2363.221
31.5	2724.107	2577.618	2350.609	2290.461	2332.177
32.0	2695.973	2544.634	2314.714	2257.477	2301.133
32.5	2667.839	2512.620	2278.820	2224.493	2271.059
33.0	2638.736	2481.576	2243.895	2191.509	2240.985
33.5	2611.572	2449.562	2208.971	2159.495	2211.881
34.0	2582.469	2417.548	2174.047	2128.451	2182.778
34.5	2554.335	2386.504	2141.062	2096.437	2153.674
35.0	2526.201	2354.490	2107.108	2066.363	2125.540
35.5	2499.038	2322.475	2073.154	2035.319	2097.407
36.0	2470.904	2291.431	2039.199	2005.245	2069.273
36.5	2442.771	2260.388	2007.185	1975.171	2042.110
37.0	2414.637	2229.344	1975.171	1945.097	2014.946
37.5	2386.504	2199.270	1943.157	1915.994	1987.783
38.0	2359.340	2169.196	1912.113	1887.860	1960.619
38.5	2331.207	2138.152	1881.069	1859.727	1934.426
39.0	2302.103	2107.108	1850.025	1832.563	1908.233
39.5	2274.939	2078.004	1819.952	1804.430	1883.010
40.0	2246.806	2047.931	1790.848	1778.236	1857.786
40.5	2219.642	2018.827	1761.744	1751.073	1832.563
41.0	2190.539	1988.753	1733.611	1724.879	1807.340
41.5	2163.375	1960.619	1705.477	1699.656	1783.087
42.0	2135.242	1931.516	1677.343	1674.433	1757.864
42.5	2108.078	1903.382	1650.180	1649.210	1733.611
43.0	2079.945	1874.278	1623.016	1623.016	1710.328
43.5	2051.811	1846.145	1596.823	1598.763	1686.074
44.0	2023.677	1818.011	1570.630	1574.510	1662.792
44.5	1996.514	1789.878	1545.407	1550.257	1639.509
45.0	1968.380	1762.714	1519.213	1526.004	1615.255
45.5	1940.247	1734.581	1493.990	1502.721	1591.973
46.0	1913.083	1706.447	1469.737	1478.468	1568.690
46.5	1885.920	1679.284	1445.484	1455.185	1545.407
47.0	1858.756	1652.120	1421.231	1431.902	1521.154
47.5	1830.623	1624.957	1396.978	1409.589	1497.871
48.0	1802.489	1597.793	1373.695	1386.306	1474.588
48.5	1774.356	1570.630	1349.442	1363.023	1451.305
49.0	1748.162	1544.436	1327.129	1339.740	1428.022
49.5	1719.059	1517.273	1303.846	1317.428	1405.709
50.0	1691.895	1491.080	1280.563	1294.145	1382.426
50.5	1664.732	1464.886	1258.250	1271.832	1360.113
51.0	1636.598	1438.693	1235.937	1249.519	1336.830
51.5	1609.435	1411.530	1214.595	1226.236	1312.577
52.0	1580.331	1385.336	1192.282	1203.923	1290.264
52.5	1553.168	1359.143	1170.939	1181.610	1266.981
53.0	1526.004	1333.920	1150.566	1160.268	1243.698
53.5	1498.841	1307.726	1129.224	1137.955	1220.415
54.0	1470.707	1282.503	1107.881	1115.642	1197.132
54.5	1443.544	1258.250	1087.508	1094.299	1173.849

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55.0	1416.380	1233.027	1067.136	1072.956	1152.507
55.5	1389.217	1207.804	1046.763	1051.614	1130.194
56.0	1362.053	1183.551	1026.391	1030.271	1106.911
56.5	1335.860	1159.297	1006.018	1009.898	1084.598
57.0	1309.667	1135.044	986.616	988.556	1062.285
57.5	1282.503	1110.791	967.116	967.601	1039.972
58.0	1256.310	1087.508	947.326	947.034	1018.630
58.5	1230.116	1063.255	928.020	926.177	997.287
59.0	1203.923	1039.972	908.327	905.707	974.974
59.5	1178.700	1016.689	889.021	885.529	953.049
60.0	1152.507	993.406	869.522	865.350	931.998
60.5	1127.283	970.123	850.022	845.366	911.431
61.0	1102.060	947.228	830.911	825.187	890.379
61.5	1075.867	924.625	811.023	805.396	869.813
62.0	1051.614	902.118	791.815	785.606	849.731
62.5	1026.391	880.096	772.218	766.106	829.164
63.0	1001.167	857.977	752.816	746.898	808.404
63.5	977.884	836.537	733.510	727.884	789.001
64.0	952.661	814.710	713.623	708.869	769.017
64.5	927.438	793.173	694.123	690.146	749.420
65.0	901.536	772.218	674.527	672.004	730.212
65.5	876.895	750.779	655.318	654.154	711.003
66.0	852.447	729.339	636.401	636.110	690.146
66.5	828.679	708.481	617.678	618.842	670.937
67.0	804.911	687.332	599.245	601.768	652.020
67.5	780.658	666.669	581.007	584.596	633.394
68.0	755.435	646.296	563.448	567.716	614.573
68.5	730.794	626.603	546.471	550.836	596.626
69.0	707.414	606.521	529.687	534.053	578.097
69.5	684.616	587.022	513.195	517.561	559.761
70.0	661.527	568.007	496.897	501.360	541.620
70.5	639.214	548.799	480.793	485.450	524.158
71.0	616.319	529.881	464.980	469.540	506.501
71.5	594.492	511.255	449.361	453.824	489.330
72.0	572.276	492.920	433.742	438.205	472.256
72.5	550.642	474.390	418.123	422.780	455.279
73.0	529.008	456.152	402.892	407.258	438.593
73.5	507.957	438.011	387.564	391.930	421.810
74.0	487.196	419.966	372.333	376.505	405.124
74.5	466.338	402.116	357.296	361.371	388.728
75.0	445.869	384.363	342.648	346.237	372.430
75.5	425.399	366.804	327.999	331.491	355.938
76.0	405.318	349.341	313.059	316.551	340.028
76.5	385.527	331.879	298.604	301.805	323.827
77.0	366.222	314.223	284.343	287.157	307.917
77.5	346.916	297.246	269.888	272.993	292.104
78.0	327.805	281.045	255.531	258.732	276.485
78.5	308.887	264.747	241.561	244.762	260.963
79.0	290.552	248.934	227.591	230.889	245.829
79.5	272.993	233.412	213.815	217.017	230.792
80.0	255.531	218.569	200.039	203.144	215.852
80.5	238.456	203.823	186.361	189.465	202.077
81.0	221.770	189.368	172.876	176.465	188.786
81.5	205.569	175.592	159.488	164.339	176.562
82.0	190.047	162.108	146.586	152.697	164.533
82.5	175.204	149.205	133.780	141.832	152.600

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CANDELA TABULATION - (Cont.)

83.0	161.137	136.593	121.750	131.452	140.959
83.5	147.556	124.564	110.691	120.974	129.705
84.0	134.944	113.116	100.602	110.594	118.646
84.5	122.430	101.960	91.483	100.408	107.975
85.0	110.594	91.289	82.849	90.416	97.691
85.5	99.244	81.102	74.797	80.811	87.699
86.0	87.990	71.207	67.133	71.789	78.774
86.5	77.028	61.991	59.857	63.737	70.722
87.0	66.065	53.745	53.066	56.849	63.252
87.5	55.103	46.275	47.051	51.028	56.752
88.0	44.335	39.193	41.424	45.693	50.931
88.5	34.730	32.402	35.604	40.357	45.305
89.0	25.902	25.029	28.522	32.693	36.186
89.5	16.007	15.910	19.111	24.544	28.522
90.0	0.000	0.000	0.000	0.000	0.000
90.5	0.000	0.000	0.000	0.000	0.000
91.0	0.000	0.000	0.000	0.000	0.000
91.5	0.000	0.000	0.000	0.000	0.000
92.0	0.000	0.000	0.000	0.000	0.000
92.5	0.000	0.000	0.000	0.000	0.000
93.0	0.000	0.000	0.000	0.000	0.000
93.5	0.000	0.000	0.000	0.000	0.000
94.0	0.000	0.000	0.000	0.000	0.000
94.5	0.000	0.000	0.000	0.000	0.000
95.0	0.000	0.000	0.000	0.000	0.000
95.5	0.000	0.000	0.000	0.000	0.000
96.0	0.000	0.000	0.000	0.000	0.000
96.5	0.000	0.000	0.000	0.000	0.000
97.0	0.000	0.000	0.000	0.000	0.000
97.5	0.000	0.000	0.000	0.000	0.000
98.0	0.000	0.000	0.000	0.000	0.000
98.5	0.000	0.000	0.000	0.000	0.000
99.0	0.000	0.000	0.000	0.000	0.000
99.5	0.000	0.000	0.000	0.000	0.000
100.0	0.000	0.000	0.000	0.000	0.000
100.5	0.000	0.000	0.000	0.000	0.000
101.0	0.000	0.000	0.000	0.000	0.000
101.5	0.000	0.000	0.000	0.000	0.000
102.0	0.000	0.000	0.000	0.000	0.000
102.5	0.000	0.000	0.000	0.000	0.000
103.0	0.000	0.000	0.000	0.000	0.000
103.5	0.000	0.000	0.000	0.000	0.000
104.0	0.000	0.000	0.000	0.000	0.000
104.5	0.000	0.000	0.000	0.000	0.000
105.0	0.000	0.000	0.000	0.000	0.000
105.5	0.000	0.000	0.000	0.000	0.000
106.0	0.000	0.000	0.000	0.000	0.000
106.5	0.000	0.000	0.000	0.000	0.000
107.0	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	0.000	0.000	0.000
108.0	0.000	0.000	0.000	0.000	0.000
108.5	0.000	0.000	0.000	0.000	0.000
109.0	0.000	0.000	0.000	0.000	0.000
109.5	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	0.000	0.000	0.000
110.5	0.000	0.000	0.000	0.000	0.000

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111.0	0.000	0.000	0.000	0.000	0.000
111.5	0.000	0.000	0.000	0.000	0.000
112.0	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	0.000	0.000	0.000
113.0	0.000	0.000	0.000	0.000	0.000
113.5	0.000	0.000	0.000	0.000	0.000
114.0	0.000	0.000	0.000	0.000	0.000
114.5	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.000	0.000	0.000	0.000
115.5	0.000	0.000	0.000	0.000	0.000
116.0	0.000	0.000	0.000	0.000	0.000
116.5	0.000	0.000	0.000	0.000	0.000
117.0	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.000	0.000	0.000	0.000
118.0	0.000	0.000	0.000	0.000	0.000
118.5	0.000	0.000	0.000	0.000	0.000
119.0	0.000	0.000	0.000	0.000	0.000
119.5	0.000	0.000	0.000	0.000	0.000
120.0	0.000	0.000	0.000	0.000	0.000
120.5	0.000	0.000	0.000	0.000	0.000
121.0	0.000	0.000	0.000	0.000	0.000
121.5	0.000	0.000	0.000	0.000	0.000
122.0	0.000	0.000	0.000	0.000	0.000
122.5	0.000	0.000	0.000	0.000	0.000
123.0	0.000	0.000	0.000	0.000	0.000
123.5	0.000	0.000	0.000	0.000	0.000
124.0	0.000	0.000	0.000	0.000	0.000
124.5	0.000	0.000	0.000	0.000	0.000
125.0	0.000	0.000	0.000	0.000	0.000
125.5	0.000	0.000	0.000	0.000	0.000
126.0	0.000	0.000	0.000	0.000	0.000
126.5	0.000	0.000	0.000	0.000	0.000
127.0	0.000	0.000	0.000	0.000	0.000
127.5	0.000	0.000	0.000	0.000	0.000
128.0	0.000	0.000	0.000	0.000	0.000
128.5	0.000	0.000	0.000	0.000	0.000
129.0	0.000	0.000	0.000	0.000	0.000
129.5	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000
130.5	0.000	0.000	0.000	0.000	0.000
131.0	0.000	0.000	0.000	0.000	0.000
131.5	0.000	0.000	0.000	0.000	0.000
132.0	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000
133.0	0.000	0.000	0.000	0.000	0.000
133.5	0.000	0.000	0.000	0.000	0.000
134.0	0.000	0.000	0.000	0.000	0.000
134.5	0.000	0.000	0.000	0.000	0.000
135.0	0.000	0.000	0.000	0.000	0.000
135.5	0.000	0.000	0.000	0.000	0.000
136.0	0.000	0.000	0.000	0.000	0.000
136.5	0.000	0.000	0.000	0.000	0.000
137.0	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000
138.0	0.000	0.000	0.000	0.000	0.000
138.5	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : FRM-24-L78-827-DMA-DIM-UNV_.IES_.IES

CANDELA TABULATION - (Cont.)

139.0	0.000	0.000	0.000	0.000	0.000
139.5	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000
140.5	0.000	0.000	0.000	0.000	0.000
141.0	0.000	0.000	0.000	0.000	0.000
141.5	0.000	0.000	0.000	0.000	0.000
142.0	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000
143.0	0.000	0.000	0.000	0.000	0.000
143.5	0.000	0.000	0.000	0.000	0.000
144.0	0.000	0.000	0.000	0.000	0.000
144.5	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000
145.5	0.000	0.000	0.000	0.000	0.000
146.0	0.000	0.000	0.000	0.000	0.000
146.5	0.000	0.000	0.000	0.000	0.000
147.0	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000
148.0	0.000	0.000	0.000	0.000	0.000
148.5	0.000	0.000	0.000	0.000	0.000
149.0	0.000	0.000	0.000	0.000	0.000
149.5	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000
150.5	0.000	0.000	0.000	0.000	0.000
151.0	0.000	0.000	0.000	0.000	0.000
151.5	0.000	0.000	0.000	0.000	0.000
152.0	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000
153.0	0.000	0.000	0.000	0.000	0.000
153.5	0.000	0.000	0.000	0.000	0.000
154.0	0.000	0.000	0.000	0.000	0.000
154.5	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000
155.5	0.000	0.000	0.000	0.000	0.000
156.0	0.000	0.000	0.000	0.000	0.000
156.5	0.000	0.000	0.000	0.000	0.000
157.0	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000
158.0	0.000	0.000	0.000	0.000	0.000
158.5	0.000	0.000	0.000	0.000	0.000
159.0	0.000	0.000	0.000	0.000	0.000
159.5	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000
160.5	0.000	0.000	0.000	0.000	0.000
161.0	0.000	0.000	0.000	0.000	0.000
161.5	0.000	0.000	0.000	0.000	0.000
162.0	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000
163.0	0.000	0.000	0.000	0.000	0.000
163.5	0.000	0.000	0.000	0.000	0.000
164.0	0.000	0.000	0.000	0.000	0.000
164.5	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000
165.5	0.000	0.000	0.000	0.000	0.000
166.0	0.000	0.000	0.000	0.000	0.000
166.5	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : FRM-24-L78-827-DMA-DIM-UNV_.IES_.IES

CANDELA TABULATION - (Cont.)

167.0	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000
168.0	0.000	0.000	0.000	0.000	0.000
168.5	0.000	0.000	0.000	0.000	0.000
169.0	0.000	0.000	0.000	0.000	0.000
169.5	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000
170.5	0.000	0.000	0.000	0.000	0.000
171.0	0.000	0.000	0.000	0.000	0.000
171.5	0.000	0.000	0.000	0.000	0.000
172.0	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000
173.0	0.000	0.000	0.000	0.000	0.000
173.5	0.000	0.000	0.000	0.000	0.000
174.0	0.000	0.000	0.000	0.000	0.000
174.5	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000
175.5	0.000	0.000	0.000	0.000	0.000
176.0	0.000	0.000	0.000	0.000	0.000
176.5	0.000	0.000	0.000	0.000	0.000
177.0	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000
178.0	0.000	0.000	0.000	0.000	0.000
178.5	0.000	0.000	0.000	0.000	0.000
179.0	0.000	0.000	0.000	0.000	0.000
179.5	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : FRM-24-L78-827-DMA-DIM-UNV_.IES_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1374.76	N.A.	18.00
0-30	2698.21	N.A.	35.40
0-40	4083.23	N.A.	53.50
0-60	6400.27	N.A.	83.90
0-80	7521.82	N.A.	98.60
0-90	7630.48	N.A.	100.00
10-90	7252.82	N.A.	95.10
20-40	2708.47	N.A.	35.50
20-50	3982.84	N.A.	52.20
40-70	3045.36	N.A.	39.90
60-80	1121.55	N.A.	14.70
70-80	393.22	N.A.	5.20
80-90	108.66	N.A.	1.40
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	7630.48	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	377.66
10-20	997.10
20-30	1323.45
30-40	1385.02
40-50	1274.37
50-60	1042.67
60-70	728.33
70-80	393.22
80-90	108.66
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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : FRM-24-L78-827-DMA-DIM-UNV_.IES_.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	105	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73
3	93	83	75	69	90	81	74	69	78	72	68	76	71	66	73	69	65	63
4	85	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	69	56	48	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39
8	64	51	43	38	63	51	43	38	49	42	37	48	42	37	47	41	37	35
9	60	47	40	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32
10	57	44	37	32	55	44	36	31	43	36	31	42	36	31	41	35	31	29

IES INDOOR REPORT
PHOTOMETRIC FILENAME : FRM-24-L78-827-DMA-DIM-UNV_.IES_.IES

UGR TABLE - CORRECTED

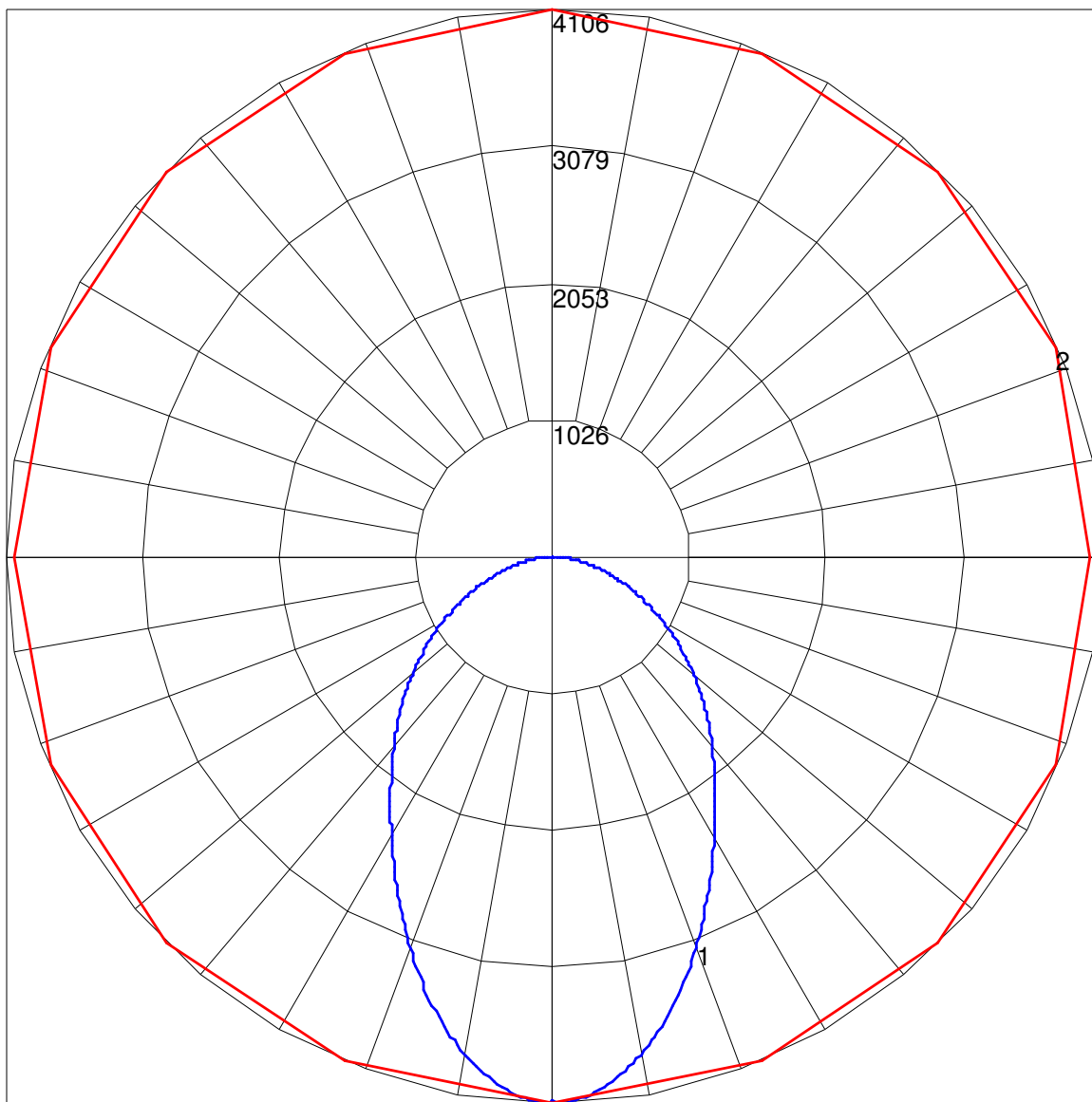
Reflectances

Ceiling Cavity	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor Cavity	20	20	20	20	20	20	20	20	20	20

Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	15.9	17.5	16.3	17.8	18.1	14.9	16.4	15.2	16.7	17.0
	3H	17.6	19.0	18.0	19.3	19.7	16.5	17.9	16.9	18.2	18.6
	4H	18.2	19.5	18.6	19.9	20.2	17.1	18.4	17.5	18.8	19.1
	6H	18.6	19.8	19.1	20.2	20.6	17.5	18.7	18.0	19.1	19.5
	8H	18.8	19.9	19.2	20.3	20.7	17.7	18.8	18.1	19.2	19.6
	12H	18.9	19.9	19.3	20.3	20.8	17.8	18.9	18.2	19.3	19.7
4H	2H	16.3	17.6	16.7	17.9	18.3	15.4	16.7	15.8	17.0	17.4
	3H	18.2	19.2	18.6	19.6	20.0	17.2	18.3	17.6	18.7	19.1
	4H	18.9	19.9	19.3	20.3	20.7	17.9	18.9	18.4	19.3	19.8
	6H	19.4	20.3	19.9	20.7	21.2	18.5	19.4	19.0	19.8	20.3
	8H	19.6	20.4	20.1	20.8	21.3	18.7	19.5	19.1	19.9	20.4
	12H	19.7	20.4	20.2	20.9	21.4	18.8	19.5	19.3	20.0	20.5
8H	4H	19.1	19.8	19.5	20.3	20.8	18.2	19.0	18.7	19.4	19.9
	6H	19.7	20.3	20.2	20.8	21.3	18.9	19.5	19.4	20.0	20.5
	8H	19.9	20.5	20.4	21.0	21.5	19.1	19.7	19.6	20.2	20.7
	12H	20.1	20.6	20.6	21.1	21.7	19.3	19.8	19.8	20.3	20.9
12H	4H	19.1	19.8	19.5	20.2	20.7	18.2	18.9	18.7	19.4	19.9
	6H	19.7	20.3	20.2	20.8	21.3	18.9	19.5	19.4	20.0	20.5
	8H	20.0	20.5	20.5	21.0	21.6	19.2	19.7	19.7	20.2	20.8

Maximum UGR = 21.7

POLAR GRAPH



Maximum Candela = 4105.562 Located At Horizontal Angle = 90, Vertical Angle = .5
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (.5) (Through Max. Cd.)