

IES INDOOR REPORT

PHOTOMETRIC FILENAME : FRM-24-L78-930-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-L78-930-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	6451
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	75
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	3444	2658	2827
55	3056	2302	2486
65	2640	1975	2138
75	2132	1638	1781
85	1570	1176	1387

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CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	3456.739	3456.739	3456.739	3456.739	3456.739
0.5	3416.554	3453.459	3464.940	3462.480	3470.681
1.0	3414.914	3451.819	3463.300	3460.840	3468.221
1.5	3413.274	3449.358	3460.840	3456.739	3464.940
2.0	3409.993	3446.078	3456.739	3451.819	3459.199
2.5	3405.893	3441.157	3450.998	3445.258	3452.639
3.0	3401.792	3436.237	3444.438	3437.877	3445.258
3.5	3395.231	3429.676	3437.057	3428.856	3436.237
4.0	3388.670	3422.295	3428.035	3419.014	3425.575
4.5	3381.290	3414.094	3418.194	3407.533	3413.274
5.0	3373.088	3405.073	3407.533	3395.231	3400.972
5.5	3364.067	3394.411	3395.231	3381.290	3387.030
6.0	3354.226	3382.930	3381.290	3367.348	3370.628
6.5	3342.745	3372.268	3366.528	3350.946	3355.046
7.0	3331.263	3359.967	3351.766	3334.544	3337.004
7.5	3319.782	3346.025	3335.364	3317.321	3318.142
8.0	3306.660	3331.263	3318.962	3298.459	3299.279
8.5	3292.718	3316.501	3300.099	3277.956	3278.777
9.0	3278.777	3300.919	3282.057	3257.454	3257.454
9.5	3264.835	3284.517	3263.195	3236.951	3236.131
10.0	3249.253	3267.295	3242.692	3214.808	3213.168
10.5	3233.671	3250.073	3222.189	3191.845	3188.565
11.0	3217.269	3231.210	3200.047	3168.062	3164.782
11.5	3200.867	3212.348	3177.904	3143.459	3140.179
12.0	3183.644	3192.666	3154.941	3118.036	3114.756
12.5	3165.602	3172.163	3131.158	3091.793	3089.332
13.0	3147.560	3151.660	3107.375	3065.549	3063.089
13.5	3128.697	3130.338	3082.772	3039.306	3037.666
14.0	3109.835	3108.195	3057.348	3011.423	3009.782
14.5	3090.153	3086.872	3031.105	2983.539	2981.079
15.0	3070.470	3064.729	3004.862	2954.015	2953.195
15.5	3050.788	3040.946	2977.798	2925.312	2924.492
16.0	3030.285	3017.983	2950.735	2896.608	2894.968
16.5	3009.782	2994.200	2922.031	2866.264	2865.444
17.0	2989.280	2969.597	2893.328	2836.740	2835.100
17.5	2967.957	2944.174	2864.624	2806.397	2804.756
18.0	2945.814	2918.751	2835.100	2775.233	2773.592
18.5	2922.851	2893.328	2804.756	2744.069	2742.428
19.0	2900.708	2867.904	2775.233	2712.905	2711.264
19.5	2877.746	2841.661	2744.889	2681.741	2680.921
20.0	2854.783	2815.418	2713.725	2648.937	2648.937
20.5	2831.820	2788.354	2682.561	2617.773	2617.773
21.0	2808.037	2761.291	2650.577	2584.968	2586.609
21.5	2783.434	2734.227	2618.593	2552.984	2554.625
22.0	2758.830	2707.164	2586.609	2521.000	2523.461
22.5	2735.047	2680.100	2554.625	2488.196	2491.477
23.0	2711.264	2652.217	2522.640	2456.212	2460.313
23.5	2687.481	2623.513	2489.836	2423.408	2429.149
24.0	2663.698	2596.450	2457.852	2390.604	2397.985
24.5	2639.095	2567.746	2425.868	2359.440	2367.641
25.0	2614.492	2539.863	2393.884	2327.456	2337.297
25.5	2590.709	2511.979	2361.080	2296.292	2306.953
26.0	2566.106	2484.096	2329.916	2264.308	2277.429
26.5	2542.323	2455.392	2297.112	2232.324	2247.906

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27.0	2517.720	2427.508	2265.128	2201.160	2219.202
27.5	2493.937	2399.625	2233.144	2170.816	2189.678
28.0	2470.154	2371.741	2201.980	2140.472	2160.975
28.5	2445.551	2343.858	2170.816	2110.128	2133.911
29.0	2420.948	2315.974	2139.652	2080.604	2105.207
29.5	2397.165	2288.911	2109.308	2051.081	2077.324
30.0	2373.382	2261.027	2078.144	2021.557	2051.081
30.5	2350.419	2233.144	2047.800	1992.853	2024.017
31.0	2327.456	2206.080	2016.636	1964.150	1997.774
31.5	2302.853	2179.017	1987.112	1936.266	1971.530
32.0	2279.070	2151.133	1956.769	1908.382	1945.287
32.5	2255.286	2124.070	1926.425	1880.499	1919.864
33.0	2230.683	2097.826	1896.901	1852.615	1894.441
33.5	2207.720	2070.763	1867.377	1825.552	1869.838
34.0	2183.117	2043.700	1837.853	1799.309	1845.234
34.5	2159.334	2017.456	1809.970	1772.245	1820.631
35.0	2135.551	1990.393	1781.266	1746.822	1796.848
35.5	2112.588	1963.329	1752.563	1720.579	1773.065
36.0	2088.805	1937.086	1723.859	1695.155	1749.282
36.5	2065.022	1910.843	1696.796	1669.732	1726.319
37.0	2041.239	1884.599	1669.732	1644.309	1703.356
37.5	2017.456	1859.176	1642.669	1619.706	1680.393
38.0	1994.493	1833.753	1616.425	1595.923	1657.431
38.5	1970.710	1807.510	1590.182	1572.140	1635.288
39.0	1946.107	1781.266	1563.939	1549.177	1613.145
39.5	1923.144	1756.663	1538.515	1525.394	1591.822
40.0	1899.361	1731.240	1513.912	1503.251	1570.500
40.5	1876.398	1706.637	1489.309	1480.288	1549.177
41.0	1851.795	1681.214	1465.526	1458.145	1527.854
41.5	1828.832	1657.431	1441.743	1436.823	1507.351
42.0	1805.049	1632.827	1417.960	1415.500	1486.029
42.5	1782.086	1609.044	1394.997	1394.177	1465.526
43.0	1758.303	1584.441	1372.034	1372.034	1445.844
43.5	1734.520	1560.658	1349.891	1351.532	1425.341
44.0	1710.737	1536.875	1327.749	1331.029	1405.659
44.5	1687.774	1513.092	1306.426	1310.526	1385.976
45.0	1663.991	1490.129	1284.283	1290.024	1365.473
45.5	1640.208	1466.346	1262.960	1270.341	1345.791
46.0	1617.245	1442.563	1242.458	1249.839	1326.108
46.5	1594.283	1419.600	1221.955	1230.156	1306.426
47.0	1571.320	1396.637	1201.453	1210.474	1285.923
47.5	1547.537	1373.675	1180.950	1191.611	1266.241
48.0	1523.754	1350.712	1161.268	1171.929	1246.558
48.5	1499.971	1327.749	1140.765	1152.246	1226.876
49.0	1477.828	1305.606	1121.903	1132.564	1207.193
49.5	1453.225	1282.643	1102.220	1113.701	1188.331
50.0	1430.262	1260.500	1082.538	1094.019	1168.648
50.5	1407.299	1238.357	1063.675	1075.157	1149.786
51.0	1383.516	1216.215	1044.813	1056.294	1130.104
51.5	1360.553	1193.252	1026.770	1036.612	1109.601
52.0	1335.950	1171.109	1007.908	1017.749	1090.739
52.5	1312.987	1148.966	989.866	998.887	1071.056
53.0	1290.024	1127.643	972.644	980.845	1051.374
53.5	1267.061	1105.500	954.601	961.982	1031.691
54.0	1243.278	1084.178	936.559	943.120	1012.009
54.5	1220.315	1063.675	919.337	925.078	992.326

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55.0	1197.352	1042.352	902.115	907.035	974.284
55.5	1174.389	1021.030	884.892	888.993	955.421
56.0	1151.426	1000.527	867.670	870.951	935.739
56.5	1129.283	980.024	850.448	853.728	916.876
57.0	1107.141	959.522	834.046	835.686	898.014
57.5	1084.178	939.019	817.562	817.972	879.152
58.0	1062.035	919.337	800.832	800.586	861.109
58.5	1039.892	898.834	784.512	782.953	843.067
59.0	1017.749	879.152	767.864	765.649	824.205
59.5	996.427	859.469	751.543	748.591	805.670
60.0	974.284	839.787	735.059	731.533	787.874
60.5	952.961	820.104	718.575	714.639	770.488
61.0	931.638	800.750	702.419	697.581	752.692
61.5	909.496	781.641	685.607	680.850	735.305
62.0	888.993	762.615	669.369	664.120	718.329
62.5	867.670	743.999	652.803	647.636	700.943
63.0	846.348	725.300	636.401	631.398	683.393
63.5	826.665	707.176	620.081	615.324	666.991
64.0	805.342	688.723	603.269	599.250	650.097
64.5	784.020	670.517	586.785	583.422	633.530
65.0	762.123	652.803	570.218	568.086	617.292
65.5	741.292	634.679	553.980	552.996	601.054
66.0	720.626	616.554	537.988	537.742	583.422
66.5	700.533	598.922	522.160	523.144	567.184
67.0	680.440	581.044	506.578	508.711	551.192
67.5	659.938	563.576	491.160	494.195	535.446
68.0	638.615	546.353	476.317	479.925	519.536
68.5	617.784	529.705	461.965	465.655	504.364
69.0	598.020	512.729	447.777	451.467	488.700
69.5	578.748	496.245	433.835	437.526	473.200
70.0	559.229	480.171	420.057	423.830	457.864
70.5	540.367	463.933	406.444	410.380	443.102
71.0	521.012	447.941	393.076	396.930	428.176
71.5	502.560	432.195	379.872	383.645	413.661
72.0	483.779	416.695	366.669	370.441	399.227
72.5	465.491	401.031	353.465	357.401	384.875
73.0	447.203	385.613	340.589	344.280	370.769
73.5	429.407	370.277	327.632	331.322	356.581
74.0	411.856	355.023	314.756	318.282	342.476
74.5	394.224	339.933	302.044	305.489	328.616
75.0	376.920	324.925	289.661	292.695	314.838
75.5	359.616	310.081	277.277	280.230	300.896
76.0	342.640	295.320	264.648	267.600	287.447
76.5	325.909	280.558	252.428	255.134	273.751
77.0	309.589	265.632	240.373	242.751	260.301
77.5	293.269	251.280	228.153	230.777	246.933
78.0	277.113	237.584	216.015	218.722	233.730
78.5	261.121	223.806	204.206	206.912	220.608
79.0	245.621	210.439	192.396	195.185	207.814
79.5	230.777	197.317	180.751	183.457	195.103
80.0	216.015	184.769	169.105	171.730	182.473
80.5	201.582	172.304	157.542	160.166	170.828
81.0	187.476	160.084	146.143	149.177	159.592
81.5	173.780	148.439	134.825	138.926	149.259
82.0	160.658	137.039	123.918	129.084	139.090
82.5	148.111	126.132	113.092	119.899	129.002

IES INDOOR REPORT

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CANDELA TABULATION - (Cont.)

83.0	136.219	115.471	102.923	111.124	119.161
83.5	124.738	105.301	93.574	102.267	109.648
84.0	114.076	95.624	85.045	93.492	100.299
84.5	103.497	86.193	77.336	84.881	91.278
85.0	93.492	77.172	70.037	76.434	82.584
85.5	83.897	68.561	63.230	68.315	74.137
86.0	74.383	60.196	56.751	60.688	66.592
86.5	65.116	52.405	50.600	53.881	59.786
87.0	55.849	45.434	44.860	48.058	53.471
87.5	46.582	39.119	39.775	43.137	47.976
88.0	37.479	33.132	35.018	38.627	43.055
88.5	29.360	27.391	30.098	34.116	38.299
89.0	21.897	21.159	24.111	27.638	30.590
89.5	13.532	13.450	16.156	20.749	24.111
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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CANDELA TABULATION - (Cont.)

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-L78-930-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-L78-930-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-L78-930-DMA-DIM-UNV_.IES_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1162.17	N.A.	18.00
0-30	2280.96	N.A.	35.40
0-40	3451.8	N.A.	53.50
0-60	5410.53	N.A.	83.90
0-80	6358.65	N.A.	98.60
0-90	6450.51	N.A.	100.00
10-90	6131.25	N.A.	95.10
20-40	2289.63	N.A.	35.50
20-50	3366.93	N.A.	52.20
40-70	2574.43	N.A.	39.90
60-80	948.12	N.A.	14.70
70-80	332.42	N.A.	5.20
80-90	91.86	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	6450.51	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	319.26
10-20	842.91
20-30	1118.79
30-40	1170.84
40-50	1077.3
50-60	881.43
60-70	615.70
70-80	332.42
80-90	91.86
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-L78-930-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	68	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-L78-930-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

X=2H	Y=2H	15.3	16.9	15.7	17.2	17.5	14.3	15.8	14.6	16.1	16.4
	3H	17.0	18.4	17.4	18.7	19.1	15.9	17.3	16.3	17.6	18.0
	4H	17.6	18.9	18.0	19.3	19.6	16.5	17.8	16.9	18.2	18.5
	6H	18.0	19.2	18.5	19.6	20.0	16.9	18.1	17.4	18.5	18.9
	8H	18.2	19.3	18.6	19.7	20.1	17.1	18.2	17.5	18.6	19.0
	12H	18.3	19.3	18.7	19.7	20.2	17.2	18.3	17.6	18.7	19.1

UGR Viewed Endwise

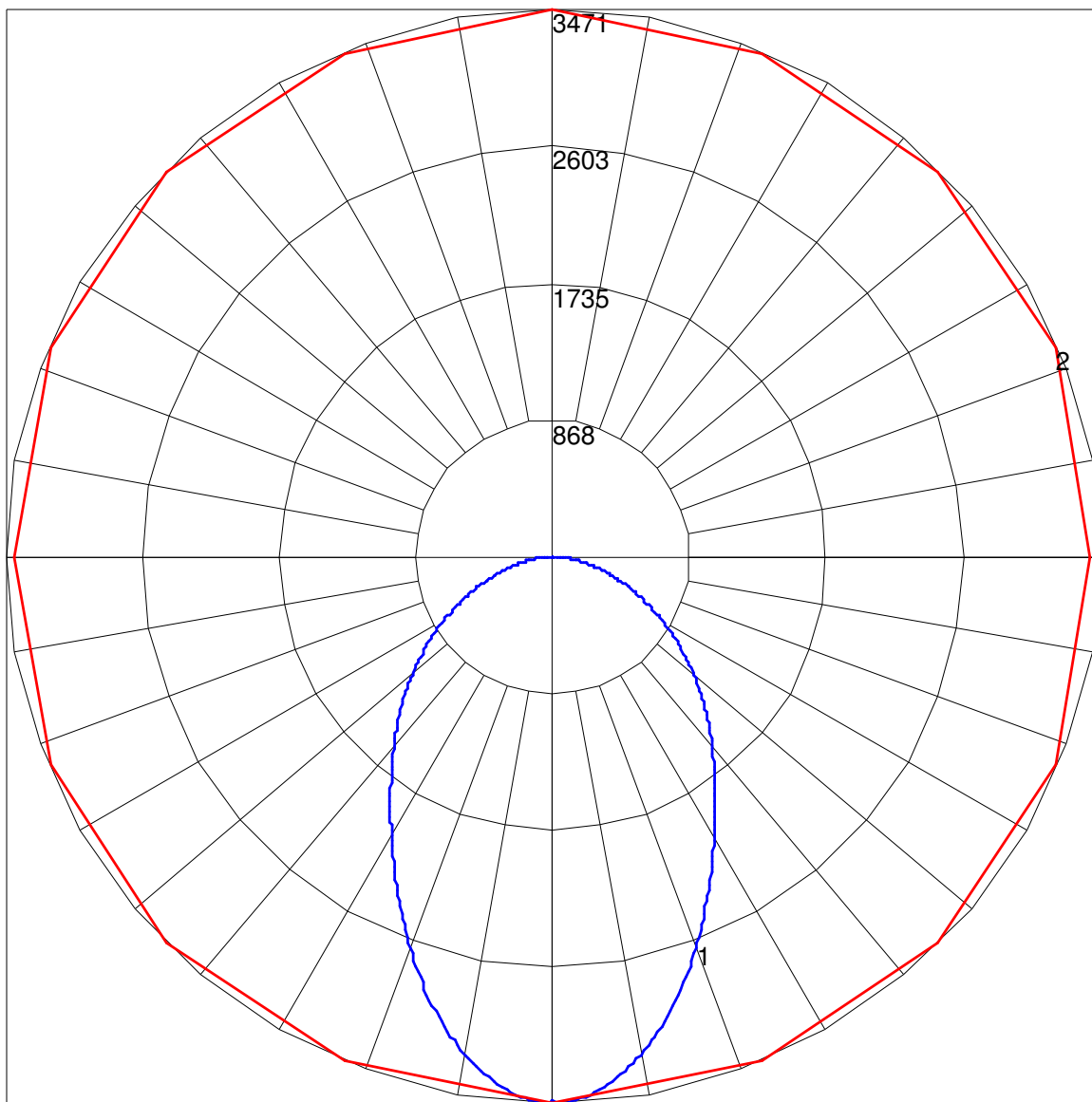
4H	2H	15.7	17.0	16.1	17.3	17.7	14.8	16.1	15.2	16.4	16.8
	3H	17.6	18.6	18.0	19.0	19.4	16.6	17.7	17.0	18.1	18.5
	4H	18.3	19.3	18.7	19.7	20.1	17.3	18.3	17.8	18.7	19.2
	6H	18.8	19.7	19.3	20.1	20.6	17.9	18.8	18.4	19.2	19.7
	8H	19.0	19.8	19.5	20.2	20.7	18.1	18.9	18.5	19.3	19.8
	12H	19.1	19.8	19.6	20.3	20.8	18.2	18.9	18.7	19.4	19.9

8H	4H	18.5	19.2	18.9	19.7	20.2	17.6	18.4	18.1	18.8	19.3
	6H	19.1	19.7	19.6	20.2	20.7	18.3	18.9	18.8	19.4	19.9
	8H	19.3	19.9	19.8	20.4	20.9	18.5	19.1	19.0	19.6	20.1
	12H	19.5	20.0	20.0	20.5	21.1	18.7	19.2	19.2	19.7	20.3

12H	4H	18.5	19.2	18.9	19.6	20.1	17.6	18.3	18.1	18.8	19.3
	6H	19.1	19.7	19.6	20.2	20.7	18.3	18.9	18.8	19.4	19.9
	8H	19.4	19.9	19.9	20.4	21.0	18.6	19.1	19.1	19.6	20.2

Maximum UGR = 21.1

POLAR GRAPH



Maximum Candela = 3470.681 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.)