

## IES INDOOR REPORT

PHOTOMETRIC FILENAME : FRM-24-L78-940-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-L78-940-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	6765
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	79
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	3612	2788	2964
55	3205	2414	2608
65	2768	2071	2242
75	2236	1718	1867
85	1647	1234	1455

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : FRM-24-L78-940-DMA-DIM-UNV\_.IES\_.IES****CANDELA TABULATION**

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
<b>0.0</b>	3625.361	3625.361	3625.361	3625.361	3625.361
<b>0.5</b>	3583.215	3621.920	3633.962	3631.382	3639.983
<b>1.0</b>	3581.495	3620.200	3632.242	3629.661	3637.402
<b>1.5</b>	3579.775	3617.620	3629.661	3625.361	3633.962
<b>2.0</b>	3576.335	3614.179	3625.361	3620.200	3627.941
<b>2.5</b>	3572.034	3609.019	3619.340	3613.319	3621.060
<b>3.0</b>	3567.733	3603.858	3612.459	3605.578	3613.319
<b>3.5</b>	3560.853	3596.977	3604.718	3596.117	3603.858
<b>4.0</b>	3553.972	3589.236	3595.257	3585.796	3592.677
<b>4.5</b>	3546.231	3580.635	3584.936	3573.754	3579.775
<b>5.0</b>	3537.630	3571.174	3573.754	3560.853	3566.873
<b>5.5</b>	3528.168	3559.993	3560.853	3546.231	3552.252
<b>6.0</b>	3517.847	3547.951	3546.231	3531.609	3535.049
<b>6.5</b>	3505.806	3536.770	3530.749	3514.407	3518.707
<b>7.0</b>	3493.764	3523.868	3515.267	3497.205	3499.785
<b>7.5</b>	3481.723	3509.246	3498.065	3479.142	3480.002
<b>8.0</b>	3467.961	3493.764	3480.862	3459.360	3460.220
<b>8.5</b>	3453.339	3478.282	3461.080	3437.857	3438.717
<b>9.0</b>	3438.717	3461.940	3442.158	3416.354	3416.354
<b>9.5</b>	3424.095	3444.738	3422.375	3394.852	3393.991
<b>10.0</b>	3407.753	3426.676	3400.872	3371.629	3369.908
<b>10.5</b>	3391.411	3408.613	3379.370	3347.546	3344.105
<b>11.0</b>	3374.209	3388.831	3356.147	3322.602	3319.162
<b>11.5</b>	3357.007	3369.048	3332.924	3296.799	3293.359
<b>12.0</b>	3338.944	3348.406	3308.841	3270.136	3266.695
<b>12.5</b>	3320.022	3326.903	3283.897	3242.612	3240.032
<b>13.0</b>	3301.100	3305.400	3258.954	3215.089	3212.508
<b>13.5</b>	3281.317	3283.037	3233.151	3187.565	3185.845
<b>14.0</b>	3261.535	3259.814	3206.488	3158.321	3156.601
<b>14.5</b>	3240.892	3237.452	3178.964	3129.078	3126.497
<b>15.0</b>	3220.249	3214.229	3151.441	3098.114	3097.254
<b>15.5</b>	3199.607	3189.285	3123.057	3068.010	3067.150
<b>16.0</b>	3178.104	3165.202	3094.673	3037.906	3036.186
<b>16.5</b>	3156.601	3140.259	3064.570	3006.082	3005.222
<b>17.0</b>	3135.099	3114.456	3034.466	2975.118	2973.398
<b>17.5</b>	3112.736	3087.792	3004.362	2943.294	2941.574
<b>18.0</b>	3089.513	3061.129	2973.398	2910.610	2908.890
<b>18.5</b>	3065.430	3034.466	2941.574	2877.926	2876.206
<b>19.0</b>	3042.207	3007.802	2910.610	2845.242	2843.521
<b>19.5</b>	3018.124	2980.279	2878.786	2812.558	2811.697
<b>20.0</b>	2994.041	2952.755	2846.102	2778.153	2778.153
<b>20.5</b>	2969.958	2924.372	2813.418	2745.469	2745.469
<b>21.0</b>	2945.014	2895.988	2779.873	2711.065	2712.785
<b>21.5</b>	2919.211	2867.605	2746.329	2677.520	2679.241
<b>22.0</b>	2893.408	2839.221	2712.785	2643.976	2646.556
<b>22.5</b>	2868.465	2810.837	2679.241	2609.572	2613.012
<b>23.0</b>	2843.521	2781.594	2645.696	2576.027	2580.328
<b>23.5</b>	2818.578	2751.490	2611.292	2541.623	2547.644
<b>24.0</b>	2793.635	2723.106	2577.748	2507.219	2514.960
<b>24.5</b>	2767.832	2693.002	2544.203	2474.535	2483.136
<b>25.0</b>	2742.029	2663.759	2510.659	2440.990	2451.312
<b>25.5</b>	2717.085	2634.515	2476.255	2408.306	2419.488
<b>26.0</b>	2691.282	2605.271	2443.571	2374.762	2388.524
<b>26.5</b>	2666.339	2575.167	2409.166	2341.218	2357.560

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : FRM-24-L78-940-DMA-DIM-UNV\_.IES\_.IES****CANDELA TABULATION - (Cont.)**

27.0	2640.536	2545.924	2375.622	2308.533	2327.456
27.5	2615.592	2516.680	2342.078	2276.709	2296.492
28.0	2590.649	2487.436	2309.394	2244.885	2266.388
28.5	2564.846	2458.192	2276.709	2213.061	2238.004
29.0	2539.043	2428.949	2244.025	2182.097	2207.901
29.5	2514.100	2400.565	2212.201	2151.133	2178.657
30.0	2489.156	2371.321	2179.517	2120.169	2151.133
30.5	2465.073	2342.078	2147.693	2090.066	2122.750
31.0	2440.990	2313.694	2115.009	2059.962	2095.226
31.5	2415.187	2285.310	2084.045	2030.718	2067.703
32.0	2390.244	2256.067	2052.221	2001.474	2040.179
32.5	2365.301	2227.683	2020.397	1972.231	2013.516
33.0	2339.497	2200.160	1989.433	1942.987	1986.853
33.5	2315.414	2171.776	1958.469	1914.603	1961.049
34.0	2289.611	2143.392	1927.505	1887.080	1935.246
34.5	2264.668	2115.869	1898.261	1858.696	1909.443
35.0	2239.725	2087.485	1868.157	1832.033	1884.500
35.5	2215.642	2059.102	1838.054	1804.509	1859.556
36.0	2190.698	2031.578	1807.950	1777.846	1834.613
36.5	2165.755	2004.055	1779.566	1751.183	1810.530
37.0	2140.812	1976.531	1751.183	1724.519	1786.447
37.5	2115.869	1949.868	1722.799	1698.716	1762.364
38.0	2091.786	1923.204	1695.275	1673.773	1738.281
38.5	2066.843	1895.681	1667.752	1648.830	1715.058
39.0	2041.039	1868.157	1640.228	1624.747	1691.835
39.5	2016.956	1842.354	1613.565	1599.803	1669.472
40.0	1992.013	1815.691	1587.762	1576.580	1647.109
40.5	1967.930	1789.888	1561.959	1552.497	1624.747
41.0	1942.127	1763.224	1537.015	1529.274	1602.384
41.5	1918.044	1738.281	1512.072	1506.912	1580.881
42.0	1893.101	1712.478	1487.129	1484.549	1558.518
42.5	1869.018	1687.535	1463.046	1462.186	1537.015
43.0	1844.074	1661.731	1438.963	1438.963	1516.373
43.5	1819.131	1636.788	1415.740	1417.460	1494.870
44.0	1794.188	1611.845	1392.517	1395.957	1474.227
44.5	1770.105	1586.902	1370.154	1374.455	1453.585
45.0	1745.162	1562.819	1346.931	1352.952	1432.082
45.5	1720.219	1537.875	1324.568	1332.309	1411.439
46.0	1696.136	1512.932	1303.066	1310.807	1390.797
46.5	1672.053	1488.849	1281.563	1290.164	1370.154
47.0	1647.969	1464.766	1260.060	1269.521	1348.651
47.5	1623.026	1440.683	1238.557	1249.739	1328.009
48.0	1598.083	1416.600	1217.915	1229.096	1307.366
48.5	1573.140	1392.517	1196.412	1208.454	1286.724
49.0	1549.917	1369.294	1176.630	1187.811	1266.081
49.5	1524.114	1345.211	1155.987	1168.028	1246.298
50.0	1500.031	1321.988	1135.344	1147.386	1225.656
50.5	1475.948	1298.765	1115.562	1127.603	1205.873
51.0	1451.004	1275.542	1095.779	1107.821	1185.231
51.5	1426.921	1251.459	1076.857	1087.178	1163.728
52.0	1401.118	1228.236	1057.074	1067.396	1143.945
52.5	1377.035	1205.013	1038.152	1047.613	1123.303
53.0	1352.952	1182.650	1020.090	1028.691	1102.660
53.5	1328.869	1159.427	1001.167	1008.908	1082.018
54.0	1303.926	1137.065	982.245	989.126	1061.375
54.5	1279.843	1115.562	964.183	970.203	1040.732

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : FRM-24-L78-940-DMA-DIM-UNV\_.IES\_.IES****CANDELA TABULATION - (Cont.)**

55.0	1255.760	1093.199	946.120	951.281	1021.810
55.5	1231.677	1070.836	928.058	932.359	1002.027
56.0	1207.593	1049.333	909.996	913.436	981.385
56.5	1184.371	1027.831	891.933	895.374	961.602
57.0	1161.148	1006.328	874.731	876.451	941.820
57.5	1137.065	984.825	857.443	857.873	922.037
58.0	1113.842	964.183	839.897	839.639	903.115
58.5	1090.619	942.680	822.781	821.146	884.192
59.0	1067.396	922.037	805.320	802.998	864.410
59.5	1045.033	901.395	788.204	785.108	844.971
60.0	1021.810	880.752	770.916	767.218	826.307
60.5	999.447	860.109	753.628	749.499	808.073
61.0	977.084	839.811	736.684	731.609	789.408
61.5	953.861	819.770	719.051	714.063	771.174
62.0	932.359	799.816	702.021	696.517	753.370
62.5	909.996	780.291	684.647	679.228	735.135
63.0	887.633	760.681	667.445	662.198	716.729
63.5	866.990	741.672	650.329	645.340	699.527
64.0	844.627	722.320	632.696	628.482	681.809
64.5	822.265	703.225	615.408	611.882	664.434
65.0	799.300	684.647	598.034	595.798	647.404
65.5	777.453	665.639	581.004	579.972	630.374
66.0	755.778	646.630	564.232	563.974	611.882
66.5	734.705	628.138	547.632	548.664	594.852
67.0	713.633	609.387	531.290	533.526	578.079
67.5	692.130	591.067	515.119	518.302	561.565
68.0	669.767	573.005	499.551	503.336	544.879
68.5	647.920	555.545	484.500	488.370	528.967
69.0	627.192	537.740	469.620	473.490	512.539
69.5	606.979	520.452	454.998	458.868	496.283
70.0	586.509	503.594	440.548	444.505	480.199
70.5	566.726	486.564	426.270	430.399	464.717
71.0	546.427	469.792	412.250	416.293	449.063
71.5	527.075	453.278	398.403	402.359	433.839
72.0	507.378	437.022	384.555	388.511	418.701
72.5	488.198	420.593	370.707	374.836	403.649
73.0	469.018	404.423	357.203	361.074	388.855
73.5	450.353	388.339	343.614	347.484	373.976
74.0	431.947	372.341	330.110	333.808	359.182
74.5	413.455	356.515	316.778	320.391	344.646
75.0	395.306	340.775	303.791	306.973	330.196
75.5	377.158	325.207	290.803	293.899	315.574
76.0	359.354	309.725	277.557	280.654	301.468
76.5	341.807	294.243	264.742	267.580	287.104
77.0	324.691	278.589	252.098	254.592	272.999
77.5	307.575	263.537	239.282	242.035	258.979
78.0	290.631	249.174	226.553	229.391	245.131
78.5	273.859	234.724	214.167	217.006	231.369
79.0	257.603	220.704	201.782	204.706	217.952
79.5	242.035	206.942	189.568	192.406	204.620
80.0	226.553	193.783	177.355	180.107	191.374
80.5	211.415	180.709	165.227	167.979	179.161
81.0	196.621	167.893	153.271	156.454	167.377
81.5	182.257	155.680	141.402	145.703	156.540
82.0	168.495	143.724	129.963	135.381	145.875
82.5	155.336	132.285	118.609	125.748	135.295

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : FRM-24-L78-940-DMA-DIM-UNV\_.IES\_.IES****CANDELA TABULATION - (Cont.)**

83.0	142.864	121.103	107.944	116.545	124.974
83.5	130.823	110.438	98.138	107.256	114.997
84.0	119.641	100.289	89.193	98.052	105.191
84.5	108.546	90.397	81.108	89.021	95.730
85.0	98.052	80.936	73.453	80.162	86.613
85.5	87.989	71.905	66.314	71.647	77.754
86.0	78.012	63.132	59.520	63.648	69.841
86.5	68.293	54.961	53.069	56.509	62.702
87.0	58.573	47.650	47.048	50.402	56.079
87.5	48.854	41.027	41.715	45.242	50.316
88.0	39.307	34.748	36.727	40.511	45.156
88.5	30.792	28.728	31.566	35.781	40.167
89.0	22.965	22.191	25.287	28.986	32.082
89.5	14.192	14.106	16.944	21.761	25.287
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

IES INDOOR REPORT  
 PHOTOMETRIC FILENAME : FRM-24-L78-940-DMA-DIM-UNV\_.IES\_.IES

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-L78-940-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-L78-940-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-L78-940-DMA-DIM-UNV\_.IES\_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	1218.86	N.A.	18.00
0-30	2392.23	N.A.	35.40
0-40	3620.18	N.A.	53.50
0-60	5674.46	N.A.	83.90
0-80	6668.83	N.A.	98.60
0-90	6765.17	N.A.	100.00
10-90	6430.33	N.A.	95.10
20-40	2401.32	N.A.	35.50
20-50	3531.18	N.A.	52.20
40-70	2700.01	N.A.	39.90
60-80	994.37	N.A.	14.70
70-80	348.63	N.A.	5.20
80-90	96.34	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	6765.17	N.A.	100.00

Total Luminaire Efficiency = N.A.%

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	334.84
10-20	884.03
20-30	1173.37
30-40	1227.96
40-50	1129.85
50-60	924.43
60-70	645.73
70-80	348.63
80-90	96.34
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-L78-940-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-L78-940-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	15.5	17.1	15.9	17.4	17.7	UGR Viewed Endwise				
	3H	17.2	18.6	17.6	18.9	19.3	14.5	16.0	14.8	16.3	16.6
	4H	17.8	19.1	18.2	19.5	19.8	16.1	17.5	16.5	17.8	18.2
	6H	18.2	19.4	18.7	19.8	20.2	16.7	18.0	17.1	18.4	18.7
	8H	18.4	19.5	18.8	19.9	20.3	17.1	18.3	17.6	18.7	19.1
	12H	18.5	19.5	18.9	19.9	20.4	17.3	18.4	17.7	18.8	19.2

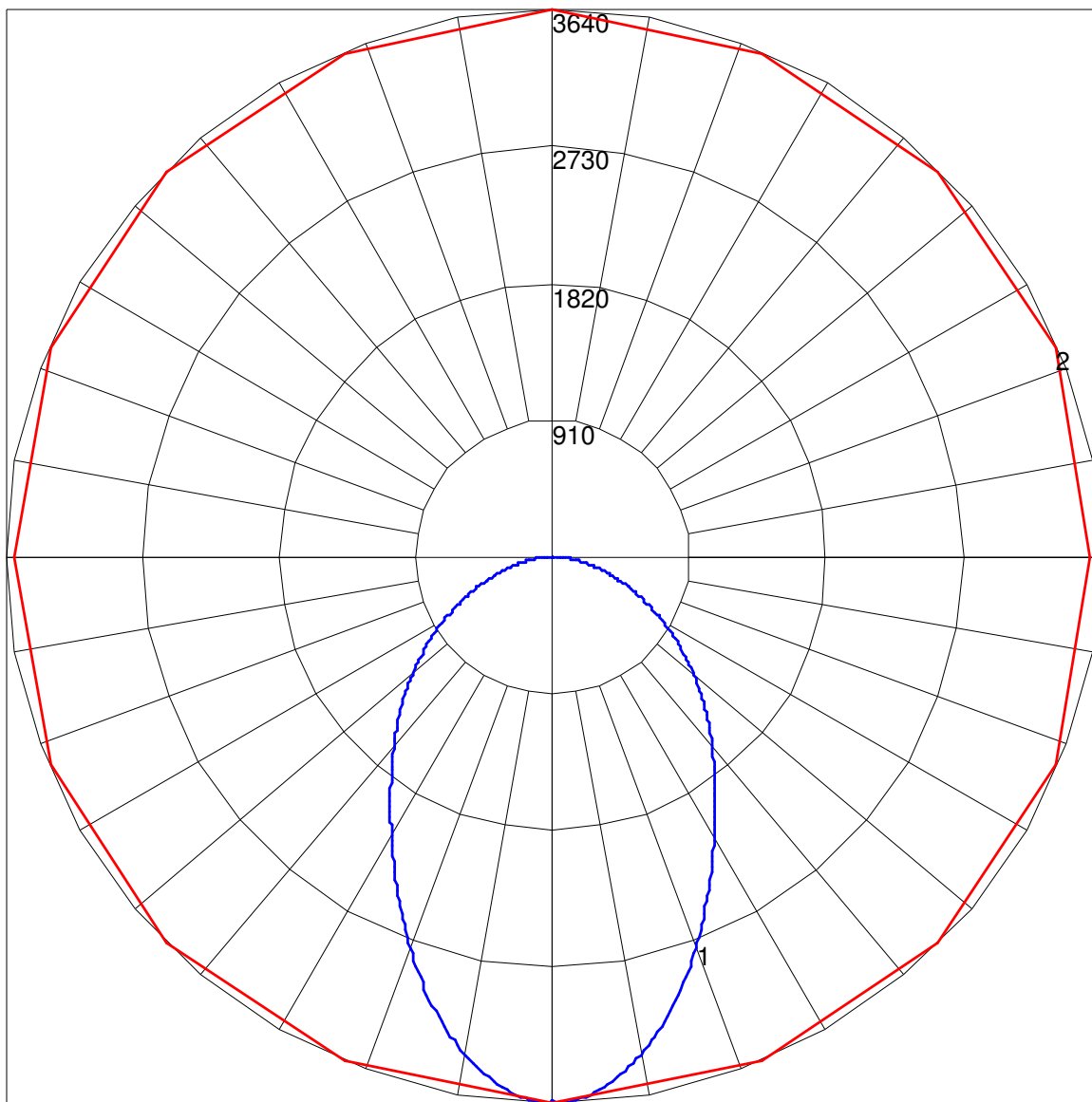
4H	2H	15.9	17.2	16.3	17.5	17.9	17.4	18.5	17.8	18.9	19.3
	3H	17.8	18.8	18.2	19.2	19.6	14.5	16.0	14.8	16.3	16.6
	4H	18.5	19.5	18.9	19.9	20.3	16.1	17.5	16.5	17.8	18.2
	6H	19.0	19.9	19.5	20.3	20.8	16.7	18.0	17.1	18.4	18.7
	8H	19.2	20.0	19.7	20.4	20.9	17.1	18.3	17.6	18.7	19.1
	12H	19.3	20.0	19.8	20.5	21.0	17.3	18.4	17.7	18.8	19.2

8H	4H	18.7	19.4	19.1	19.9	20.4	17.4	18.5	17.8	18.9	19.3
	6H	19.3	19.9	19.8	20.4	20.9	17.8	18.6	18.3	19.0	19.5
	8H	19.5	20.1	20.0	20.6	21.1	18.5	19.1	19.0	19.6	20.1
	12H	19.7	20.2	20.2	20.7	21.3	18.7	19.3	19.2	19.8	20.3

12H	4H	18.7	19.4	19.1	19.8	20.3	18.9	19.4	19.4	19.9	20.5
	6H	19.3	19.9	19.8	20.4	20.9	17.8	18.5	18.3	19.0	19.5
	8H	19.6	20.1	20.1	20.6	21.2	18.5	19.1	19.0	19.6	20.1

Maximum UGR = 21.3

POLAR GRAPH



Maximum Candela = 3639.983 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.)