

## IES INDOOR REPORT

PHOTOMETRIC FILENAME : FRM-24-L50-927-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-L50-927-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	4018
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	76
Total Luminaire Watts	52.8
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	2145	1656	1761
55	1903	1434	1549
65	1644	1230	1332
75	1328	1020	1109
85	978	733	864

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : FRM-24-L50-927-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>	2153.107	2153.107	2153.107	2153.107	2153.107
<b>0.5</b>	2128.076	2151.063	2158.215	2156.682	2161.791
<b>1.0</b>	2127.055	2150.042	2157.193	2155.661	2160.258
<b>1.5</b>	2126.033	2148.509	2155.661	2153.107	2158.215
<b>2.0</b>	2123.990	2146.466	2153.107	2150.042	2154.639
<b>2.5</b>	2121.436	2143.401	2149.531	2145.955	2150.553
<b>3.0</b>	2118.882	2140.336	2145.444	2141.358	2145.955
<b>3.5</b>	2114.795	2136.250	2140.847	2135.739	2140.336
<b>4.0</b>	2110.709	2131.652	2135.228	2129.609	2133.696
<b>4.5</b>	2106.111	2126.544	2129.098	2122.457	2126.033
<b>5.0</b>	2101.003	2120.925	2122.457	2114.795	2118.371
<b>5.5</b>	2095.384	2114.284	2114.795	2106.111	2109.687
<b>6.0</b>	2089.254	2107.133	2106.111	2097.427	2099.471
<b>6.5</b>	2082.103	2100.492	2096.916	2087.211	2089.765
<b>7.0</b>	2074.951	2092.830	2087.722	2076.994	2078.527
<b>7.5</b>	2067.800	2084.146	2077.505	2066.267	2066.778
<b>8.0</b>	2059.627	2074.951	2067.289	2054.518	2055.029
<b>8.5</b>	2050.943	2065.756	2055.540	2041.748	2042.259
<b>9.0</b>	2042.259	2056.051	2044.302	2028.977	2028.977
<b>9.5</b>	2033.575	2045.834	2032.553	2016.207	2015.696
<b>10.0</b>	2023.869	2035.107	2019.783	2002.415	2001.393
<b>10.5</b>	2014.164	2024.380	2007.012	1988.112	1986.069
<b>11.0</b>	2003.947	2012.631	1993.220	1973.298	1971.255
<b>11.5</b>	1993.731	2000.882	1979.428	1957.973	1955.930
<b>12.0</b>	1983.004	1988.623	1965.125	1942.138	1940.095
<b>12.5</b>	1971.766	1975.852	1950.311	1925.792	1924.259
<b>13.0</b>	1960.528	1963.082	1935.497	1909.445	1907.913
<b>13.5</b>	1948.779	1949.800	1920.173	1893.099	1892.078
<b>14.0</b>	1937.030	1936.008	1904.337	1875.731	1874.710
<b>14.5</b>	1924.770	1922.727	1887.991	1858.363	1856.831
<b>15.0</b>	1912.510	1908.935	1871.645	1839.974	1839.463
<b>15.5</b>	1900.251	1894.121	1854.788	1822.095	1821.584
<b>16.0</b>	1887.480	1879.818	1837.931	1804.217	1803.195
<b>16.5</b>	1874.710	1865.004	1820.052	1785.316	1784.805
<b>17.0</b>	1861.939	1849.680	1802.173	1766.927	1765.905
<b>17.5</b>	1848.658	1833.844	1784.295	1748.026	1747.005
<b>18.0</b>	1834.866	1818.009	1765.905	1728.615	1727.594
<b>18.5</b>	1820.563	1802.173	1747.005	1709.204	1708.182
<b>19.0</b>	1806.771	1786.338	1728.615	1689.793	1688.771
<b>19.5</b>	1792.468	1769.992	1709.715	1670.382	1669.871
<b>20.0</b>	1778.165	1753.645	1690.304	1649.949	1649.949
<b>20.5</b>	1763.862	1736.788	1670.893	1630.538	1630.538
<b>21.0</b>	1749.048	1719.931	1650.971	1610.105	1611.127
<b>21.5</b>	1733.723	1703.074	1631.049	1590.183	1591.205
<b>22.0</b>	1718.399	1686.217	1611.127	1570.261	1571.793
<b>22.5</b>	1703.585	1669.360	1591.205	1549.828	1551.871
<b>23.0</b>	1688.771	1651.992	1571.283	1529.906	1532.460
<b>23.5</b>	1673.957	1634.113	1550.850	1509.473	1513.049
<b>24.0</b>	1659.144	1617.256	1530.928	1489.041	1493.638
<b>24.5</b>	1643.819	1599.378	1511.006	1469.629	1474.738
<b>25.0</b>	1628.494	1582.010	1491.084	1449.707	1455.837
<b>25.5</b>	1613.681	1564.642	1470.651	1430.296	1436.937
<b>26.0</b>	1598.356	1547.274	1451.240	1410.374	1418.547
<b>26.5</b>	1583.542	1529.395	1430.807	1390.452	1400.158

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : FRM-24-L50-927-DMA-DIM-UNV\_.IES\_.IES****CANDELA TABULATION - (Cont.)**

27.0	1568.218	1512.027	1410.885	1371.041	1382.279
27.5	1553.404	1494.660	1390.963	1352.141	1363.890
28.0	1538.590	1477.292	1371.552	1333.240	1346.011
28.5	1523.266	1459.924	1352.141	1314.340	1329.154
29.0	1507.941	1442.556	1332.730	1295.951	1311.275
29.5	1493.127	1425.699	1313.829	1277.561	1293.907
30.0	1478.313	1408.331	1294.418	1259.172	1277.561
30.5	1464.010	1390.963	1275.518	1241.293	1260.704
31.0	1449.707	1374.106	1256.107	1223.414	1244.358
31.5	1434.383	1357.249	1237.717	1206.046	1228.011
32.0	1419.569	1339.881	1218.817	1188.678	1211.665
32.5	1404.755	1323.024	1199.916	1171.310	1195.830
33.0	1389.431	1306.678	1181.527	1153.943	1179.994
33.5	1375.128	1289.821	1163.137	1137.086	1164.670
34.0	1359.803	1272.964	1144.748	1120.739	1149.345
34.5	1344.989	1256.617	1127.380	1103.882	1134.021
35.0	1330.176	1239.760	1109.501	1088.047	1119.207
35.5	1315.873	1222.903	1091.623	1071.701	1104.393
36.0	1301.059	1206.557	1073.744	1055.865	1089.579
36.5	1286.245	1190.211	1056.887	1040.030	1075.276
37.0	1271.431	1173.865	1040.030	1024.194	1060.973
37.5	1256.617	1158.029	1023.173	1008.870	1046.670
38.0	1242.314	1142.194	1006.826	994.056	1032.367
38.5	1227.501	1125.847	990.480	979.242	1018.575
39.0	1212.176	1109.501	974.134	964.939	1004.783
39.5	1197.873	1094.177	958.298	950.125	991.502
40.0	1183.059	1078.341	942.974	936.333	978.220
40.5	1168.756	1063.017	927.649	922.030	964.939
41.0	1153.432	1047.181	912.836	908.238	951.658
41.5	1139.129	1032.367	898.022	894.957	938.887
42.0	1124.315	1017.043	883.208	881.675	925.606
42.5	1110.012	1002.229	868.905	868.394	912.836
43.0	1095.198	986.904	854.602	854.602	900.576
43.5	1080.384	972.091	840.810	841.832	887.805
44.0	1065.571	957.277	827.018	829.061	875.546
44.5	1051.268	942.463	813.736	816.291	863.286
45.0	1036.454	928.160	799.944	803.520	850.515
45.5	1021.640	913.346	786.663	791.260	838.256
46.0	1007.337	898.533	773.892	778.490	825.996
46.5	993.034	884.230	761.122	766.230	813.736
47.0	978.731	869.927	748.351	753.970	800.966
47.5	963.918	855.624	735.581	742.222	788.706
48.0	949.104	841.321	723.321	729.962	776.447
48.5	934.290	827.018	710.551	717.702	764.187
49.0	920.498	813.226	698.802	705.443	751.927
49.5	905.173	798.923	686.542	693.694	740.178
50.0	890.870	785.130	674.283	681.434	727.919
50.5	876.567	771.338	662.534	669.685	716.170
51.0	861.753	757.546	650.785	657.936	703.910
51.5	847.451	743.243	639.547	645.677	691.140
52.0	832.126	729.451	627.798	633.928	679.391
52.5	817.823	715.659	616.560	622.179	667.131
53.0	803.520	702.378	605.833	610.941	654.871
53.5	789.217	688.585	594.595	599.192	642.612
54.0	774.403	675.304	583.357	587.443	630.352
54.5	760.100	662.534	572.629	576.205	618.092

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : FRM-24-L50-927-DMA-DIM-UNV\_.IES\_.IES****CANDELA TABULATION - (Cont.)**

55.0	745.797	649.252	561.902	564.967	606.854
55.5	731.494	635.971	551.175	553.729	595.105
56.0	717.191	623.201	540.448	542.491	582.846
56.5	703.399	610.430	529.720	531.764	571.097
57.0	689.607	597.660	519.504	520.526	559.348
57.5	675.304	584.889	509.237	509.492	547.599
58.0	661.512	572.629	498.816	498.663	536.361
58.5	647.720	559.859	488.650	487.680	525.123
59.0	633.928	547.599	478.281	476.902	513.374
59.5	620.646	535.339	468.116	466.277	501.830
60.0	606.854	523.080	457.848	455.652	490.745
60.5	593.573	510.820	447.581	445.129	479.915
61.0	580.292	498.765	437.517	434.504	468.831
61.5	566.499	486.863	427.046	424.083	458.001
62.0	553.729	475.012	416.931	413.662	447.427
62.5	540.448	463.416	406.613	403.395	436.598
63.0	527.166	451.769	396.396	393.280	425.666
63.5	514.907	440.480	386.231	383.268	415.450
64.0	501.625	428.987	375.759	373.256	404.927
64.5	488.344	417.647	365.492	363.397	394.609
65.0	474.705	406.613	355.173	353.845	384.494
65.5	461.730	395.324	345.059	344.446	374.380
66.0	448.858	384.035	335.098	334.945	363.397
66.5	436.343	373.052	325.239	325.852	353.283
67.0	423.827	361.916	315.534	316.862	343.322
67.5	411.057	351.036	305.930	307.820	333.514
68.0	397.776	340.308	296.684	298.932	323.605
68.5	384.801	329.939	287.745	290.044	314.154
69.0	372.490	319.365	278.908	281.206	304.398
69.5	360.486	309.097	270.224	272.523	294.743
70.0	348.328	299.085	261.642	263.992	285.191
70.5	336.579	288.971	253.162	255.614	275.996
71.0	324.524	279.010	244.836	247.237	266.699
71.5	313.031	269.202	236.612	238.962	257.658
72.0	301.333	259.548	228.388	230.737	248.667
72.5	289.941	249.791	220.163	222.615	239.728
73.0	278.550	240.188	212.144	214.442	230.942
73.5	267.465	230.635	204.073	206.371	222.105
74.0	256.534	221.134	196.053	198.249	213.318
74.5	245.551	211.735	188.135	190.280	204.686
75.0	234.773	202.387	180.422	182.312	196.104
75.5	223.995	193.141	172.708	174.547	187.420
76.0	213.421	183.946	164.842	166.681	179.042
76.5	203.000	174.752	157.230	158.916	170.512
77.0	192.835	165.455	149.721	151.203	162.134
77.5	182.669	156.515	142.110	143.745	153.808
78.0	172.606	147.985	134.550	136.236	145.584
78.5	162.645	139.403	127.194	128.880	137.411
79.0	152.991	131.076	119.838	121.575	129.442
79.5	143.745	122.903	112.585	114.270	121.524
80.0	134.550	115.088	105.331	106.966	113.657
80.5	125.560	107.323	98.129	99.763	106.404
81.0	116.773	99.712	91.028	92.918	99.406
81.5	108.243	92.458	83.979	86.533	92.969
82.0	100.070	85.358	77.185	80.403	86.635
82.5	92.254	78.564	70.442	74.682	80.352

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : FRM-24-L50-927-DMA-DIM-UNV\_.IES\_.IES****CANDELA TABULATION - (Cont.)**

83.0	84.847	71.923	64.108	69.216	74.222
83.5	77.696	65.589	58.285	63.699	68.297
84.0	71.055	59.562	52.972	58.233	62.473
84.5	64.465	53.687	48.170	52.870	56.854
85.0	58.233	48.068	43.624	47.608	51.440
85.5	52.257	42.705	39.384	42.551	46.178
86.0	46.331	37.494	35.349	37.801	41.479
86.5	40.559	32.641	31.518	33.561	37.239
87.0	34.787	28.299	27.942	29.934	33.305
87.5	29.015	24.366	24.775	26.869	29.883
88.0	23.344	20.637	21.812	24.060	26.818
88.5	18.287	17.061	18.747	21.250	23.855
89.0	13.639	13.179	15.018	17.215	19.054
89.5	8.429	8.377	10.063	12.924	15.018
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-L50-927-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-L50-927-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-L50-927-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-L50-927-DMA-DIM-UNV\_.IES\_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	723.88	N.A.	18.00
0-30	1420.75	N.A.	35.40
0-40	2150.03	N.A.	53.50
0-60	3370.07	N.A.	83.90
0-80	3960.63	N.A.	98.60
0-90	4017.84	N.A.	100.00
10-90	3818.98	N.A.	95.10
20-40	1426.15	N.A.	35.50
20-50	2097.17	N.A.	52.20
40-70	1603.54	N.A.	39.90
60-80	590.56	N.A.	14.70
70-80	207.05	N.A.	5.20
80-90	57.22	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	4017.84	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	198.86
10-20	525.02
20-30	696.86
30-40	729.28
40-50	671.02
50-60	549.02
60-70	383.50
70-80	207.05
80-90	57.22
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-L50-927-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-L50-927-DMA-DIM-UNV\_.IES\_.IES

## UGR TABLE - CORRECTED

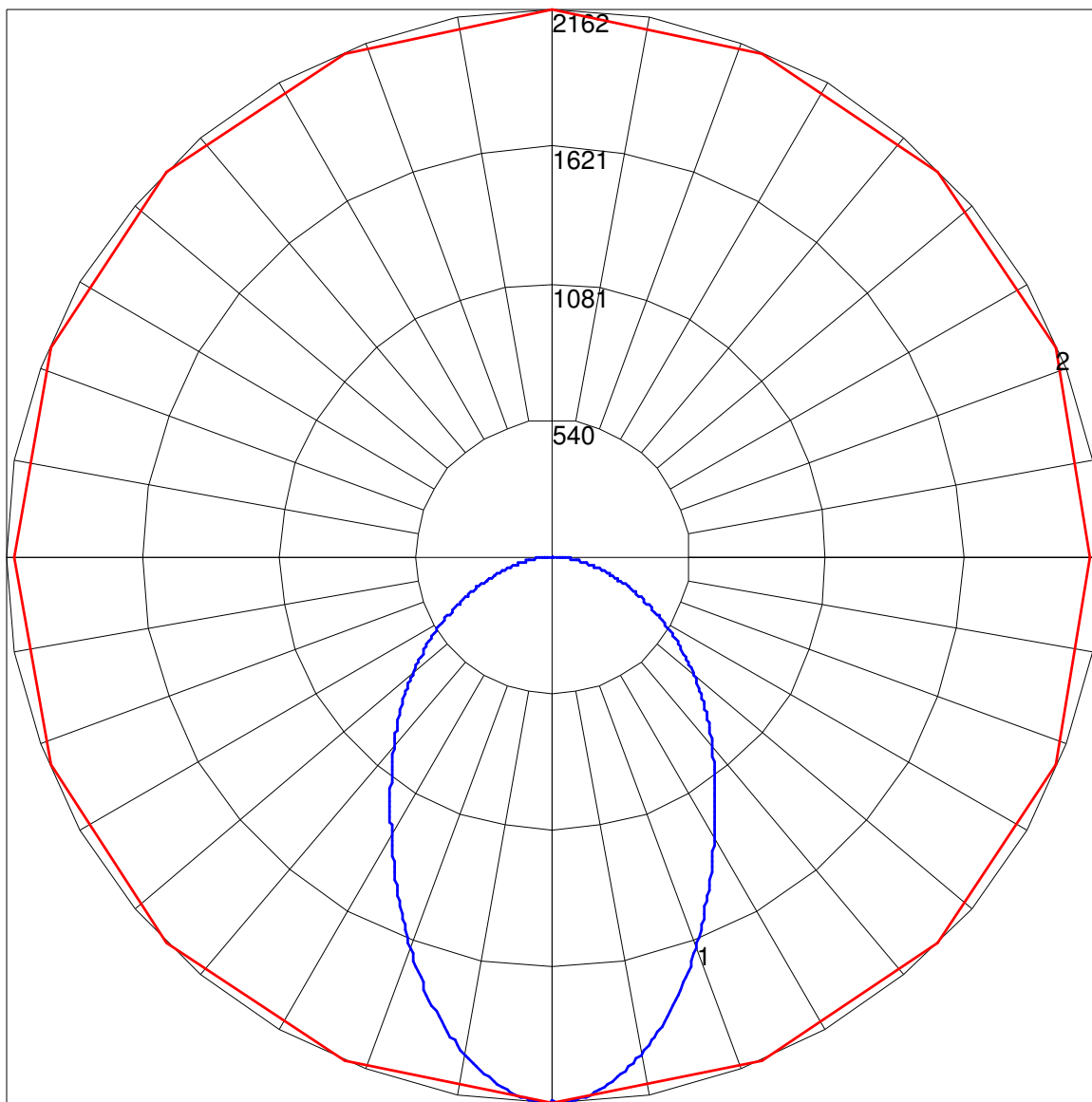
### Reflectances

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	13.6	15.2	14.0	15.5	15.8	12.6	14.1	12.9	14.4	14.7
	3H	15.3	16.7	15.7	17.0	17.4	14.2	15.6	14.6	15.9	16.3
	4H	15.9	17.2	16.3	17.6	17.9	14.8	16.1	15.2	16.5	16.8
	6H	16.3	17.5	16.8	17.9	18.3	15.2	16.4	15.7	16.8	17.2
	8H	16.5	17.6	16.9	18.0	18.4	15.4	16.5	15.8	16.9	17.3
	12H	16.6	17.6	17.0	18.0	18.5	15.5	16.6	15.9	17.0	17.4
4H	2H	14.0	15.3	14.4	15.6	16.0	13.1	14.4	13.5	14.7	15.1
	3H	15.9	16.9	16.3	17.3	17.7	14.9	16.0	15.3	16.4	16.8
	4H	16.6	17.6	17.0	18.0	18.4	15.6	16.6	16.1	17.0	17.5
	6H	17.1	18.0	17.6	18.4	18.9	16.2	17.1	16.7	17.5	18.0
	8H	17.3	18.1	17.8	18.5	19.0	16.4	17.2	16.8	17.6	18.1
	12H	17.4	18.1	17.9	18.6	19.1	16.5	17.2	17.0	17.7	18.2
8H	4H	16.8	17.5	17.2	18.0	18.5	15.9	16.7	16.4	17.1	17.6
	6H	17.4	18.0	17.9	18.5	19.0	16.6	17.2	17.1	17.7	18.2
	8H	17.6	18.2	18.1	18.7	19.2	16.8	17.4	17.3	17.9	18.4
	12H	17.8	18.3	18.3	18.8	19.4	17.0	17.5	17.5	18.0	18.6
12H	4H	16.8	17.5	17.2	17.9	18.4	15.9	16.6	16.4	17.1	17.6
	6H	17.4	18.0	17.9	18.5	19.0	16.6	17.2	17.1	17.7	18.2
	8H	17.7	18.2	18.2	18.7	19.3	16.9	17.4	17.4	17.9	18.5

Maximum UGR = 19.4

POLAR GRAPH



Maximum Candela = 2161.791 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.)