

## IES INDOOR REPORT

PHOTOMETRIC FILENAME : FRM-22-L50-940-DMA-DIM-UNV\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] GENERATED FROM 15746385.02  
[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-22-L50-940-DMA-DIM-UNV  
[LUMINAIRE] Recessed 2 x 2 narrow aperture LED luminaire  
[MORE] with center frame driver housing  
[LAMP] LED  
[ \_SEARCH\_SOURCE TYPE] LED  
[ \_SEARCH\_APPLICATION] INDOOR  
[ \_SEARCH\_MOUNTING] RECESSED

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4340
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	81
Total Luminaire Watts	53.9
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.98
Spacing Criterion (90-270)	1.00
Spacing Criterion (Diagonal)	1.06
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	1.90 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	4255	3688	4335
55	3748	3200	3806
65	3233	2736	3267
75	2637	2279	2705
85	1844	1394	1844

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : FRM-22-L50-940-DMA-DIM-UNV\_.IES**

**CANDELA TABULATION**

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	2330.132	2330.132	2330.132	2330.132	2330.132
0.5	2321.232	2331.245	2335.138	2330.688	2321.232
1.0	2319.563	2330.132	2333.470	2330.132	2319.563
1.5	2317.895	2327.907	2331.801	2327.907	2317.895
2.0	2315.113	2325.126	2329.020	2324.570	2314.557
2.5	2311.220	2321.788	2325.126	2321.232	2311.220
3.0	2307.326	2317.338	2320.676	2316.782	2307.326
3.5	2302.320	2311.776	2315.113	2311.776	2301.763
4.0	2296.201	2305.657	2308.995	2306.213	2296.757
4.5	2289.526	2298.982	2302.320	2299.538	2290.638
5.0	2281.738	2291.195	2295.088	2292.307	2283.407
5.5	2273.395	2282.851	2286.745	2285.076	2276.176
6.0	2265.051	2273.395	2277.845	2276.732	2268.388
6.5	2255.038	2263.938	2268.388	2267.276	2259.488
7.0	2244.470	2253.370	2257.820	2257.263	2250.032
7.5	2233.345	2242.245	2246.695	2247.251	2240.020
8.0	2222.220	2230.007	2235.013	2236.682	2230.007
8.5	2209.982	2217.770	2223.332	2225.001	2218.326
9.0	2197.188	2204.420	2210.538	2212.763	2207.201
9.5	2184.395	2191.626	2197.188	2200.526	2194.963
10.0	2171.045	2177.720	2183.282	2187.176	2182.170
10.5	2157.138	2163.257	2169.932	2173.826	2169.932
11.0	2142.676	2148.795	2154.913	2159.920	2157.695
11.5	2127.657	2133.220	2139.895	2144.901	2143.788
12.0	2112.638	2117.645	2123.763	2130.438	2129.882
12.5	2097.620	2101.513	2107.632	2115.420	2115.420
13.0	2080.932	2085.382	2091.501	2099.845	2100.957
13.5	2065.913	2068.695	2074.813	2084.270	2086.495
14.0	2049.782	2052.007	2057.570	2068.695	2071.476
14.5	2032.538	2034.763	2039.770	2052.007	2055.901
15.0	2015.295	2017.520	2021.413	2035.320	2040.326
15.5	1998.607	1999.720	2003.057	2018.632	2024.195
16.0	1981.363	1981.363	1984.145	2001.388	2008.063
16.5	1963.563	1963.563	1965.788	1983.588	1991.376
17.0	1945.763	1944.651	1945.763	1965.232	1974.132
17.5	1927.963	1925.738	1926.294	1947.432	1958.001
18.0	1909.607	1906.826	1906.269	1928.519	1940.757
18.5	1891.251	1887.357	1886.244	1909.607	1922.957
19.0	1872.894	1867.332	1865.663	1890.694	1905.157
19.5	1854.538	1847.863	1845.082	1871.226	1886.801
20.0	1836.182	1827.838	1824.501	1851.201	1869.001
20.5	1816.713	1807.257	1803.363	1831.732	1850.644
21.0	1797.801	1787.232	1781.669	1811.707	1832.844
21.5	1778.332	1767.207	1759.976	1791.682	1813.932
22.0	1759.419	1747.182	1738.838	1771.101	1794.463
22.5	1741.063	1726.601	1717.144	1751.076	1776.107
23.0	1721.594	1706.019	1696.007	1730.494	1757.194
23.5	1703.238	1685.994	1674.313	1710.469	1738.282
24.0	1685.438	1665.969	1653.176	1690.444	1719.369
24.5	1666.526	1645.388	1631.482	1669.863	1701.013
25.0	1648.169	1625.363	1609.788	1649.282	1682.657
25.5	1629.813	1605.338	1588.094	1628.701	1664.301
26.0	1611.457	1585.869	1566.957	1609.232	1647.057
26.5	1593.657	1566.401	1545.819	1589.207	1628.144

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : FRM-22-L50-940-DMA-DIM-UNV\_.IES**

**CANDELA TABULATION - (Cont.)**

27.0	1575.857	1546.932	1524.682	1569.738	1610.901
27.5	1558.057	1527.463	1503.544	1550.269	1593.101
28.0	1541.369	1508.551	1482.407	1530.801	1575.301
28.5	1523.569	1489.638	1461.826	1511.332	1558.057
29.0	1506.882	1470.726	1441.244	1491.863	1540.813
29.5	1489.638	1452.369	1420.107	1472.394	1523.013
30.0	1472.394	1433.457	1399.526	1453.482	1505.769
30.5	1455.707	1415.101	1378.944	1434.569	1488.526
31.0	1439.019	1396.744	1358.363	1415.657	1471.838
31.5	1422.332	1378.388	1338.338	1396.744	1454.594
32.0	1405.088	1360.588	1318.313	1378.388	1437.907
32.5	1388.401	1342.788	1298.844	1359.476	1421.219
33.0	1372.269	1324.432	1278.819	1340.563	1403.976
33.5	1355.582	1307.188	1259.350	1322.207	1387.288
34.0	1339.451	1288.832	1239.882	1303.851	1370.044
34.5	1323.319	1271.588	1220.969	1284.938	1353.913
35.0	1307.744	1253.788	1202.057	1266.582	1337.226
35.5	1291.613	1236.544	1183.144	1248.782	1319.982
36.0	1276.038	1219.300	1164.788	1230.982	1303.851
36.5	1260.463	1202.057	1146.432	1213.182	1287.719
37.0	1244.888	1185.369	1128.075	1195.382	1271.032
37.5	1229.313	1168.682	1110.275	1177.582	1254.344
38.0	1214.294	1152.550	1093.032	1160.894	1238.213
38.5	1199.275	1136.419	1075.788	1143.650	1222.082
39.0	1183.700	1119.732	1058.544	1126.963	1206.507
39.5	1169.238	1103.600	1041.857	1110.275	1190.932
40.0	1154.219	1088.025	1025.169	1093.588	1175.357
40.5	1138.644	1072.450	1009.038	1076.900	1159.782
41.0	1123.625	1056.875	992.907	1060.769	1144.207
41.5	1109.163	1041.300	977.332	1045.194	1129.188
42.0	1094.144	1026.838	961.200	1029.063	1114.169
42.5	1079.125	1011.263	945.625	1014.044	1099.150
43.0	1064.107	996.800	930.607	998.469	1084.132
43.5	1049.644	981.782	915.588	983.450	1069.113
44.0	1035.182	967.319	900.569	968.432	1054.094
44.5	1020.719	952.857	886.107	952.857	1039.075
45.0	1005.700	938.394	871.644	937.838	1024.613
45.5	991.238	923.375	857.182	923.375	1009.594
46.0	976.775	909.469	842.719	908.357	994.575
46.5	961.757	895.007	828.813	893.338	980.113
47.0	947.294	880.544	814.907	878.319	964.538
47.5	932.275	866.082	801.000	863.857	950.075
48.0	917.813	851.619	787.650	849.394	935.057
48.5	903.907	837.713	774.300	834.932	920.038
49.0	889.444	823.250	760.950	820.469	905.575
49.5	874.982	809.344	748.157	806.007	890.000
50.0	860.519	794.882	734.807	791.544	875.538
50.5	846.057	780.975	722.013	777.082	860.519
51.0	831.594	767.069	709.775	763.175	846.057
51.5	817.132	752.607	697.538	749.269	831.038
52.0	803.225	739.257	685.300	735.363	816.575
52.5	788.763	725.350	673.063	721.457	802.113
53.0	774.857	712.000	660.825	707.550	787.094
53.5	760.394	698.094	648.588	694.200	772.632
54.0	745.932	685.300	636.906	680.850	758.169
54.5	732.582	671.950	625.225	667.500	743.707

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : FRM-22-L50-940-DMA-DIM-UNV\_.IES**

**CANDELA TABULATION - (Cont.)**

55.0	718.675	658.600	613.544	654.150	729.800
55.5	704.769	645.806	602.419	641.356	716.450
56.0	690.863	633.013	590.738	628.563	702.544
56.5	676.957	620.219	579.056	615.213	688.082
57.0	663.607	607.981	567.931	602.419	674.732
57.5	649.700	595.188	556.250	590.181	660.825
58.0	636.350	582.394	544.958	577.944	646.919
58.5	623.000	570.156	533.833	565.150	633.013
59.0	609.094	557.919	522.653	553.024	619.106
59.5	595.744	545.348	511.472	540.453	605.756
60.0	582.394	532.832	500.069	527.881	591.850
60.5	569.600	520.261	488.888	515.477	578.500
61.0	557.363	507.801	477.875	503.128	565.150
61.5	544.402	495.563	466.583	490.724	552.078
62.0	532.053	483.771	455.346	478.653	539.173
62.5	519.593	472.145	443.943	466.471	526.602
63.0	507.133	460.686	432.206	454.735	513.530
63.5	494.506	448.950	420.414	443.443	500.570
64.0	481.824	437.324	409.011	431.595	487.553
64.5	469.364	425.865	397.775	420.080	474.481
65.0	456.681	414.406	386.483	408.955	461.576
65.5	443.554	403.115	375.469	397.775	449.061
66.0	430.983	391.878	364.288	387.095	436.490
66.5	418.189	380.698	353.108	376.303	423.418
67.0	406.230	369.628	342.261	365.568	411.458
67.5	394.215	358.670	331.636	355.221	399.332
68.0	382.255	347.990	321.624	344.875	387.484
68.5	370.240	337.421	312.112	334.362	375.691
69.0	358.559	326.908	303.045	324.183	364.400
69.5	347.378	316.618	294.089	314.170	353.219
70.0	335.864	306.438	285.134	304.380	341.705
70.5	324.683	296.148	276.234	294.646	330.413
71.0	313.503	285.968	267.278	285.134	319.454
71.5	302.378	276.011	258.267	275.511	308.663
72.0	291.364	266.221	249.423	265.999	297.594
72.5	280.573	256.431	240.634	256.654	286.747
73.0	269.781	246.808	231.956	247.364	275.956
73.5	259.213	237.129	223.279	237.964	265.387
74.0	248.755	227.618	214.657	228.563	255.152
74.5	238.353	217.994	205.924	219.218	244.472
75.0	228.118	208.483	197.191	209.984	234.014
75.5	217.828	198.971	188.680	200.751	223.501
76.0	207.704	189.403	180.058	191.406	213.099
76.5	197.803	179.947	171.548	181.949	202.698
77.0	187.790	170.602	162.981	172.438	192.407
77.5	177.833	161.201	154.638	163.371	182.116
78.0	167.988	152.246	146.405	154.526	172.048
78.5	158.198	143.513	138.117	145.682	162.203
79.0	148.463	134.724	129.940	137.227	152.079
79.5	138.951	125.935	121.819	128.716	142.344
80.0	129.551	117.424	113.642	120.206	132.666
80.5	120.317	109.136	105.688	111.806	123.154
81.0	111.417	100.904	97.789	103.518	113.976
81.5	102.962	92.838	90.168	95.397	105.020
82.0	94.563	84.995	82.436	87.443	96.398
82.5	86.831	77.541	74.760	79.766	88.166

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : FRM-22-L50-940-DMA-DIM-UNV\_.IES**

**CANDELA TABULATION - (Cont.)**

83.0	79.488	70.644	66.973	72.368	80.378
83.5	72.758	64.303	59.463	65.359	72.980
84.0	66.249	58.462	52.399	58.907	66.194
84.5	59.908	52.955	45.946	52.899	59.853
85.0	53.734	47.782	40.606	47.337	53.734
85.5	47.504	42.498	36.268	41.830	47.838
86.0	41.719	37.324	32.596	36.601	41.997
86.5	36.156	32.318	29.203	31.651	36.768
87.0	31.261	27.534	25.977	27.145	32.040
87.5	26.589	23.251	22.751	23.363	27.813
88.0	22.306	19.580	19.358	20.136	23.863
88.5	18.078	16.131	15.464	16.743	19.914
89.0	12.683	11.626	10.291	11.514	14.908
89.5	5.006	5.507	4.839	5.118	6.953
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-22-L50-940-DMA-DIM-UNV\_.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-22-L50-940-DMA-DIM-UNV\_.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-22-L50-940-DMA-DIM-UNV\_.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-22-L50-940-DMA-DIM-UNV\_.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	782.56	N.A.	18.00
0-30	1535.5	N.A.	35.40
0-40	2324.75	N.A.	53.60
0-60	3644.66	N.A.	84.00
0-80	4283.08	N.A.	98.70
0-90	4340.45	N.A.	100.00
10-90	4125.34	N.A.	95.00
20-40	1542.19	N.A.	35.50
20-50	2268.45	N.A.	52.30
40-70	1734.3	N.A.	40.00
60-80	638.41	N.A.	14.70
70-80	224.03	N.A.	5.20
80-90	57.38	N.A.	1.30
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	4340.45	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	215.12
10-20	567.45
20-30	752.94
30-40	789.25
40-50	726.27
50-60	593.65
60-70	414.38
70-80	224.03
80-90	57.38
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-22-L50-940-DMA-DIM-UNV\_.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	73	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	74	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	54	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-22-L50-940-DMA-DIM-UNV\_.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	15.9	17.4	16.3	17.8	18.1	UGR Viewed Endwise			
	3H	17.5	18.9	17.9	19.3	19.6	15.9	17.4	16.3	17.7
	4H	18.1	19.4	18.5	19.8	20.2	17.5	18.9	17.9	19.3
	6H	18.6	19.8	19.0	20.1	20.5	18.2	19.5	18.6	19.8
	8H	18.7	19.8	19.1	20.2	20.6	18.6	19.8	19.0	20.2
	12H	18.7	19.8	19.2	20.2	20.6	18.7	19.9	19.2	20.2

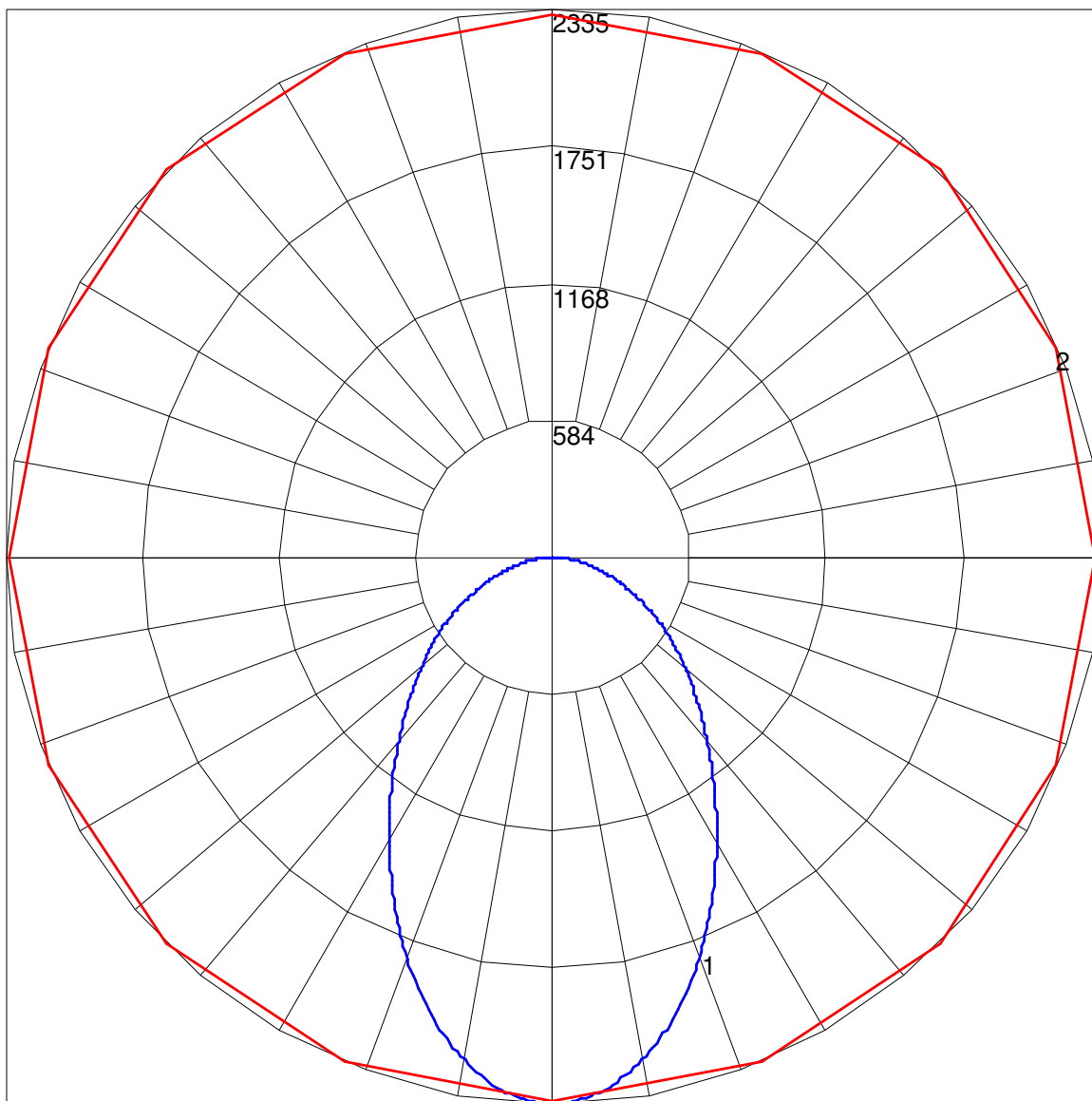
4H	2H	16.3	17.6	16.7	18.0	18.4	18.8	19.9	19.2	20.3
	3H	18.2	19.3	18.6	19.7	20.1	15.9	17.4	16.3	17.7
	4H	18.9	19.9	19.3	20.3	20.7	17.5	18.9	17.9	19.3
	6H	19.4	20.3	19.9	20.7	21.2	18.2	19.5	18.6	19.8
	8H	19.6	20.4	20.1	20.8	21.3	18.6	19.8	19.0	20.2
	12H	19.7	20.4	20.2	20.9	21.4	18.7	19.9	19.2	20.2

8H	4H	19.1	19.9	19.6	20.4	20.8	18.8	19.9	19.2	20.3
	6H	19.7	20.4	20.2	20.9	21.4	15.9	17.4	16.3	17.7
	8H	19.9	20.5	20.5	21.0	21.5	17.5	18.9	17.9	19.3
	12H	20.1	20.6	20.6	21.1	21.7	18.2	19.5	18.6	19.8

12H	4H	19.1	19.8	19.6	20.3	20.8	18.6	19.8	19.0	20.2
	6H	19.8	20.4	20.3	20.8	21.4	18.7	19.9	19.2	20.2
	8H	20.0	20.5	20.5	21.0	21.6	18.8	19.9	19.2	20.3

Maximum UGR = 21.7

POLAR GRAPH



Maximum Candela = 2335.138 Located At Horizontal Angle = 45, Vertical Angle = .5  
# 1 - Vertical Plane Through Horizontal Angles (45 - 225) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (.5) (Through Max. Cd.)