



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : MX2UD-8-L4-835U-L8-835D-FWF-DIM-UNV\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #13052732.23

[TESTLAB] UL Verification Services Inc.

[ISSUE DATE] 25 JUN 2020

[MANUFAC] WILLIAMS INDOOR

[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.

[LUMCAT] MX2UD-8'00-L4/835U/L8/835D-FWF-DIM-UNV

[LUMINAIRE] Formed White aluminum housing, frosted lens enclosure

[LAMP] 144 White LEDs

[OTHER] This test was performed using the calibrated photodetector met

[MORE] hod of absolute photometry.

[SEARCH\_SOURCETYPE] LED

[SEARCH\_APPLICATION] Indoor, Architectural, Commercial, Indirect, Linear

[SEARCH\_MOUNTING] Suspended

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	9502
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	126
Total Luminaire Watts	75.4
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.18
Spacing Criterion (90-270)	1.10
Spacing Criterion (Diagonal)	1.22
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	8.00 ft
Luminous Width (90-270)	0.17 ft
Luminous Height	0.00 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	17933	16412	15043
55	15820	14383	13025
65	13908	12510	11327
75	11467	10505	9753
85	8272	8896	9097

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : MX2UD-8-L4-835U-L8-835D-FWF-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	2867.827	2867.827	2867.827	2867.827	2867.827
0.5	2863.469	2885.261	2861.290	2861.290	2856.931
1.0	2861.290	2885.261	2861.290	2861.290	2856.931
1.5	2861.290	2883.082	2861.290	2861.290	2856.931
2.0	2861.290	2883.082	2859.110	2861.290	2856.931
2.5	2859.110	2880.902	2859.110	2861.290	2856.931
3.0	2856.931	2880.902	2856.931	2861.290	2854.752
3.5	2854.752	2878.723	2854.752	2859.110	2852.573
4.0	2852.573	2876.544	2852.573	2856.931	2850.394
4.5	2850.394	2874.365	2848.214	2854.752	2848.214
5.0	2846.035	2870.006	2846.035	2852.573	2843.856
5.5	2843.856	2867.827	2841.677	2848.214	2841.677
6.0	2839.498	2863.469	2839.498	2843.856	2837.318
6.5	2835.139	2859.110	2835.139	2837.318	2830.781
7.0	2830.781	2854.752	2830.781	2830.781	2824.243
7.5	2826.422	2850.394	2826.422	2824.243	2817.706
8.0	2822.064	2846.035	2819.885	2815.526	2811.168
8.5	2815.526	2839.498	2815.526	2808.989	2802.451
9.0	2808.989	2835.139	2808.989	2800.272	2793.734
9.5	2804.630	2828.602	2802.451	2791.555	2782.838
10.0	2798.093	2822.064	2793.734	2780.659	2771.942
10.5	2791.555	2815.526	2787.197	2771.942	2761.046
11.0	2785.018	2808.989	2776.301	2761.046	2747.971
11.5	2776.301	2800.272	2767.584	2750.150	2737.075
12.0	2769.763	2793.734	2758.867	2739.254	2724.000
12.5	2761.046	2785.018	2747.971	2726.179	2710.925
13.0	2752.330	2776.301	2737.075	2715.283	2697.850
13.5	2743.613	2767.584	2726.179	2702.208	2686.954
14.0	2734.896	2758.867	2715.283	2689.133	2671.699
14.5	2724.000	2747.971	2702.208	2676.058	2656.445
15.0	2713.104	2737.075	2689.133	2660.803	2643.370
15.5	2704.387	2728.358	2676.058	2645.549	2628.115
16.0	2693.491	2715.283	2662.982	2632.474	2612.861
16.5	2682.595	2704.387	2649.907	2617.219	2597.606
17.0	2671.699	2691.312	2634.653	2599.786	2580.173
17.5	2660.803	2680.416	2619.398	2584.531	2564.918
18.0	2647.728	2667.341	2604.144	2567.098	2547.485
18.5	2636.832	2654.266	2588.890	2551.843	2530.051
19.0	2623.757	2641.190	2573.635	2534.410	2512.618
19.5	2610.682	2625.936	2558.381	2516.976	2495.184
20.0	2597.606	2612.861	2540.947	2499.542	2477.750
20.5	2584.531	2597.606	2523.514	2479.930	2458.138
21.0	2569.277	2582.352	2508.259	2460.317	2438.525
21.5	2556.202	2567.098	2490.826	2440.704	2418.912
22.0	2540.947	2551.843	2473.392	2421.091	2397.120
22.5	2527.872	2536.589	2455.958	2401.478	2375.328
23.0	2512.618	2521.334	2436.346	2379.686	2355.715
23.5	2497.363	2503.901	2418.912	2360.074	2331.744
24.0	2479.930	2488.646	2401.478	2338.282	2309.952
24.5	2464.675	2471.213	2381.866	2316.490	2288.160
25.0	2447.242	2453.779	2362.253	2296.877	2266.368
25.5	2431.987	2434.166	2344.819	2275.085	2244.576
26.0	2412.374	2416.733	2323.027	2251.114	2222.784
26.5	2394.941	2397.120	2303.414	2229.322	2200.992

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : MX2UD-8-L4-835U-L8-835D-FWF-DIM-UNV\_.IES**

**CANDELA TABULATION - (Cont.)**

27.0	2375.328	2379.686	2283.802	2209.709	2178.982
27.5	2357.894	2360.074	2262.010	2187.917	2156.536
28.0	2338.282	2340.461	2242.397	2164.164	2134.962
28.5	2318.669	2320.848	2220.605	2142.589	2112.952
29.0	2299.056	2299.056	2198.813	2120.797	2091.378
29.5	2275.085	2279.443	2176.585	2098.352	2068.061
30.0	2255.472	2257.651	2154.357	2076.996	2045.179
30.5	2235.859	2235.859	2131.258	2053.678	2022.298
31.0	2214.067	2214.067	2107.940	2031.232	1999.634
31.5	2192.275	2192.275	2084.623	2007.479	1975.227
32.0	2171.137	2169.829	2061.305	1983.508	1951.692
32.5	2149.563	2145.858	2037.552	1959.101	1928.592
33.0	2127.989	2122.759	2013.799	1934.694	1903.749
33.5	2105.979	2099.005	1989.828	1909.851	1880.214
34.0	2083.751	2075.034	1964.985	1885.008	1854.499
34.5	2061.305	2050.845	1941.231	1859.729	1829.656
35.0	2039.513	2027.092	1916.606	1834.015	1804.160
35.5	2016.632	2003.339	1891.764	1809.172	1777.573
36.0	1993.314	1978.496	1867.574	1783.021	1750.769
36.5	1971.740	1954.307	1842.514	1756.871	1722.658
37.0	1947.987	1930.117	1816.799	1730.721	1694.764
37.5	1924.452	1905.928	1791.520	1704.352	1667.088
38.0	1901.570	1881.303	1765.806	1677.984	1639.412
38.5	1877.817	1857.332	1740.527	1650.744	1616.313
39.0	1853.628	1833.143	1715.684	1625.683	1593.649
39.5	1829.438	1809.172	1690.623	1604.545	1567.281
40.0	1804.813	1785.419	1665.345	1580.574	1541.566
40.5	1780.624	1761.447	1640.938	1554.859	1516.723
41.0	1756.871	1737.912	1621.761	1530.016	1492.752
41.5	1732.464	1714.159	1598.661	1506.045	1469.435
42.0	1708.493	1689.970	1577.087	1482.510	1446.989
42.5	1684.086	1666.216	1553.334	1460.064	1425.197
43.0	1660.550	1642.027	1530.452	1438.054	1404.059
43.5	1637.887	1623.286	1507.788	1416.480	1383.138
44.0	1618.056	1601.712	1485.561	1395.342	1362.654
44.5	1599.097	1578.830	1463.551	1374.421	1341.951
45.0	1575.344	1556.385	1441.759	1353.937	1321.467
45.5	1552.244	1532.849	1420.185	1333.452	1301.200
46.0	1529.145	1509.532	1398.828	1313.186	1280.716
46.5	1506.263	1486.432	1377.690	1292.701	1260.667
47.0	1483.164	1463.769	1356.552	1272.435	1240.401
47.5	1460.282	1441.105	1335.196	1251.732	1220.134
48.0	1437.836	1418.441	1313.840	1231.248	1200.085
48.5	1415.608	1395.996	1292.266	1210.981	1180.037
49.0	1393.380	1373.550	1270.692	1190.715	1160.206
49.5	1371.153	1351.540	1248.900	1170.666	1140.593
50.0	1348.925	1329.312	1227.543	1150.618	1120.980
50.5	1326.697	1307.084	1206.187	1130.787	1101.586
51.0	1304.469	1285.074	1185.049	1111.174	1082.191
51.5	1281.805	1263.064	1164.129	1091.343	1062.796
52.0	1259.578	1240.619	1143.426	1071.731	1043.401
52.5	1237.132	1218.827	1123.378	1052.118	1024.224
53.0	1215.122	1197.035	1103.329	1032.723	1004.829
53.5	1193.112	1175.460	1083.716	1013.328	985.434
54.0	1171.102	1154.104	1063.885	993.933	966.257
54.5	1149.092	1132.966	1044.273	974.538	947.080

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : MX2UD-8-L4-835U-L8-835D-FWF-DIM-UNV\_.IES****CANDELA TABULATION - (Cont.)**

55.0	1127.300	1111.828	1024.878	955.361	928.121
55.5	1105.944	1090.908	1005.483	936.402	909.380
56.0	1084.806	1069.769	986.088	917.879	890.857
56.5	1063.885	1048.849	966.693	899.356	872.988
57.0	1043.401	1028.147	947.080	881.051	855.336
57.5	1022.916	1007.880	927.685	862.963	837.902
58.0	1002.868	987.831	908.291	844.876	820.687
58.5	982.819	967.783	889.114	827.006	803.471
59.0	962.771	947.952	870.372	809.355	786.473
59.5	942.940	928.121	851.413	792.139	769.693
60.0	923.545	908.291	832.672	775.141	753.132
60.5	903.932	888.678	814.367	758.144	736.352
61.0	884.537	869.283	796.280	741.364	720.008
61.5	864.924	850.324	778.192	724.584	703.882
62.0	845.530	831.365	760.323	708.240	688.191
62.5	826.135	812.624	742.671	692.114	672.283
63.0	806.958	793.665	725.238	675.988	656.593
63.5	787.781	774.706	708.022	659.862	641.121
64.0	768.604	755.747	690.806	644.172	625.648
64.5	749.427	736.788	673.809	628.263	610.176
65.0	730.250	718.046	656.811	612.573	594.704
65.5	711.291	699.523	640.031	596.665	579.449
66.0	692.332	681.000	623.251	580.975	565.067
66.5	673.373	662.695	606.471	565.284	549.812
67.0	654.850	643.954	589.692	549.594	534.776
67.5	636.108	625.430	572.912	534.122	519.521
68.0	617.367	606.907	556.350	518.650	504.703
68.5	598.844	588.602	539.570	503.395	489.884
69.0	580.321	570.515	523.008	488.359	475.284
69.5	561.580	552.427	506.446	473.322	460.683
70.0	543.492	534.340	490.320	458.504	446.518
70.5	525.405	516.470	474.194	443.903	432.353
71.0	507.318	498.383	458.286	429.302	418.406
71.5	489.666	480.949	442.378	415.138	404.677
72.0	472.015	463.516	426.687	400.973	391.166
72.5	454.581	446.518	411.433	387.026	377.873
73.0	437.148	429.520	396.396	373.297	364.580
73.5	419.714	412.740	381.360	359.568	351.505
74.0	402.498	395.961	366.541	346.057	338.648
74.5	385.500	379.399	352.159	332.982	326.008
75.0	368.721	363.273	337.776	319.907	313.587
75.5	352.159	347.147	323.611	307.049	301.383
76.0	335.597	331.674	309.446	294.192	289.180
76.5	319.471	315.984	295.717	281.553	277.194
77.0	303.345	300.730	281.988	269.349	265.427
77.5	287.654	285.475	268.913	257.146	253.659
78.0	272.182	270.657	255.838	245.378	242.109
78.5	256.928	256.056	242.981	233.610	230.777
79.0	242.109	241.673	230.559	222.278	219.663
79.5	227.291	227.944	218.138	210.947	208.767
80.0	213.126	214.433	205.716	199.615	197.871
80.5	199.179	201.140	193.949	188.719	187.193
81.0	185.668	188.065	182.399	177.823	176.733
81.5	172.375	175.426	170.631	167.145	166.273
82.0	159.517	162.786	159.517	156.684	156.249
82.5	146.878	150.583	148.186	146.442	146.006

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : MX2UD-8-L4-835U-L8-835D-FWF-DIM-UNV\_.IES****CANDELA TABULATION - (Cont.)**

83.0	134.892	138.597	137.290	136.418	136.200
83.5	122.907	127.047	126.612	126.394	126.394
84.0	111.575	115.933	116.151	116.587	117.023
84.5	100.461	105.037	106.127	107.217	107.652
85.0	89.565	94.359	96.321	97.846	98.500
85.5	79.323	84.117	86.732	88.693	89.783
86.0	69.299	74.093	77.362	79.759	80.848
86.5	59.710	64.722	68.209	71.042	72.567
87.0	50.340	55.352	59.274	62.543	64.286
87.5	41.187	46.417	50.775	54.262	56.005
88.0	32.252	37.700	42.276	45.981	48.160
88.5	23.535	28.983	33.778	38.136	40.533
89.0	14.601	20.049	25.061	28.983	31.380
89.5	5.884	10.896	14.165	15.908	17.434
90.0	4.876	11.851	13.376	16.447	17.517
90.5	6.046	9.118	6.740	7.334	7.632
91.0	9.713	11.993	8.226	8.028	8.226
91.5	14.669	15.362	10.407	8.920	8.821
92.0	20.021	18.931	13.876	10.605	10.110
92.5	26.067	22.499	18.831	12.786	12.191
93.0	32.212	26.661	24.481	15.759	14.768
93.5	38.158	32.013	30.428	20.219	18.237
94.0	44.006	38.357	35.780	26.166	22.598
94.5	49.854	44.799	40.537	33.005	28.346
95.0	55.800	51.935	45.195	40.240	34.987
95.5	61.549	58.972	50.250	47.079	42.321
96.0	67.198	65.513	56.098	53.224	49.556
96.5	72.749	72.154	63.135	59.071	56.098
97.0	78.398	79.290	71.163	65.216	62.342
97.5	84.246	86.625	80.083	71.758	68.982
98.0	89.697	94.157	89.201	78.299	75.524
98.5	95.247	101.888	97.923	85.534	81.966
99.0	100.699	109.420	106.447	94.058	88.805
99.5	106.447	116.656	114.971	103.771	96.536
100.0	111.997	123.990	123.990	114.277	105.753
100.5	116.953	131.126	133.207	124.684	115.764
101.0	122.305	138.262	142.921	134.397	126.369
101.5	127.756	145.299	152.832	143.614	136.676
102.0	132.910	152.237	163.140	152.634	146.191
102.5	138.361	159.373	173.844	161.653	155.706
103.0	144.308	166.311	185.143	170.771	164.924
103.5	149.363	173.051	196.937	179.989	173.943
104.0	153.724	180.385	208.731	189.107	182.962
104.5	158.779	188.017	220.724	198.721	192.180
105.0	163.833	195.549	232.618	208.731	201.397
105.5	168.888	202.388	245.106	218.940	210.912
106.0	173.745	209.227	257.495	229.545	220.724
106.5	178.205	216.066	270.479	240.348	230.734
107.0	182.764	223.004	283.661	252.143	240.646
107.5	187.521	230.239	296.942	264.631	251.548
108.0	191.684	237.276	310.322	277.516	262.847
108.5	196.541	244.115	323.900	290.896	274.641
109.0	202.091	250.953	337.479	304.672	286.931
109.5	207.938	257.792	350.859	318.746	299.816
110.0	212.993	264.532	363.942	333.118	313.097
110.5	216.958	271.569	377.025	347.786	326.874

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : MX2UD-8-L4-835U-L8-835D-FWF-DIM-UNV\_.IES****CANDELA TABULATION - (Cont.)**

111.0	220.823	278.606	390.306	362.455	341.245
111.5	224.589	285.445	402.992	377.619	355.914
112.0	228.257	292.283	415.778	393.081	370.979
112.5	232.320	299.221	428.167	408.642	386.440
113.0	236.582	306.159	440.853	424.599	402.001
113.5	240.844	312.998	453.143	440.952	418.157
114.0	245.106	319.738	465.136	457.108	434.411
114.5	249.368	326.675	476.831	473.065	450.963
115.0	253.431	333.514	488.427	489.220	467.614
115.5	257.495	340.353	500.024	505.574	484.760
116.0	261.658	347.093	511.322	521.432	501.907
116.5	265.424	353.832	522.720	537.191	519.152
117.0	269.388	360.572	533.821	552.553	536.299
117.5	273.353	367.213	544.723	567.817	553.148
118.0	277.119	374.051	555.428	582.783	569.898
118.5	280.885	380.692	566.033	597.253	586.351
119.0	284.652	387.233	576.539	611.129	602.308
119.5	288.418	393.676	586.648	624.509	617.770
120.0	292.085	400.217	596.857	637.295	632.736
120.5	295.752	406.759	606.867	649.684	647.305
121.0	299.320	413.201	616.878	661.577	661.577
121.5	302.888	419.643	626.690	672.975	674.958
122.0	306.357	425.887	636.304	683.878	688.140
122.5	309.826	432.330	645.620	694.384	700.727
123.0	313.295	438.673	654.739	704.790	713.215
123.5	316.665	445.214	663.659	715.098	725.208
124.0	320.035	451.558	672.282	724.811	736.705
124.5	323.504	458.000	680.508	734.326	747.805
125.0	326.675	464.541	688.437	743.544	758.708
125.5	330.045	470.984	696.465	752.563	769.214
126.0	333.217	477.426	704.196	761.582	779.224
126.5	336.488	483.769	711.927	770.106	788.937
127.0	339.857	490.112	719.360	778.431	798.551
127.5	343.128	496.257	726.893	786.558	807.570
128.0	346.498	502.204	734.326	794.686	816.292
128.5	349.967	508.151	741.760	802.417	824.618
129.0	353.436	514.197	748.995	810.147	832.943
129.5	357.004	520.144	756.230	817.779	840.773
130.0	360.770	525.694	763.564	825.113	848.603
130.5	364.735	531.046	770.601	832.448	856.235
131.0	368.898	536.200	777.440	839.485	863.470
131.5	372.862	541.354	784.180	846.423	870.507
132.0	376.628	546.210	790.820	853.162	877.445
132.5	380.295	551.067	797.263	859.605	884.284
133.0	383.963	555.824	803.606	865.750	890.726
133.5	387.233	560.581	809.453	871.795	896.970
134.0	390.504	565.042	815.598	877.742	902.917
134.5	393.775	569.502	821.347	883.193	908.864
135.0	397.145	574.160	826.798	888.645	914.414
135.5	400.118	578.818	832.150	893.898	919.667
136.0	403.190	583.377	837.205	899.151	924.920
136.5	406.362	587.937	842.161	904.304	929.975
137.0	409.435	592.496	846.621	909.260	934.732
137.5	412.804	597.055	851.180	914.117	939.291
138.0	416.372	601.515	855.541	918.775	943.949
138.5	419.941	605.678	859.605	923.532	948.509

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : MX2UD-8-L4-835U-L8-835D-FWF-DIM-UNV\_.IES****CANDELA TABULATION - (Cont.)**

139.0	423.707	610.138	863.470	928.091	952.969
139.5	427.176	614.598	867.236	932.452	956.933
140.0	430.942	619.058	870.903	936.714	961.096
140.5	434.807	623.320	874.571	940.778	964.961
141.0	438.574	627.483	878.039	944.941	968.926
141.5	442.538	631.546	881.409	948.905	972.791
142.0	446.205	635.412	884.482	952.770	976.458
142.5	450.071	639.178	887.554	956.636	980.126
143.0	453.936	642.944	890.528	960.402	983.694
143.5	458.000	646.512	893.501	964.069	987.361
144.0	462.063	650.080	896.276	967.637	991.028
144.5	465.929	653.450	898.754	971.205	994.100
145.0	469.794	656.721	901.331	974.873	998.065
145.5	473.957	659.992	903.809	978.441	1001.038
146.0	478.318	663.262	906.287	981.910	1005.003
146.5	482.481	666.335	908.566	985.279	1007.976
147.0	486.445	669.011	910.648	988.748	1010.950
147.5	490.410	671.786	912.531	992.118	1014.914
148.0	494.672	674.660	914.315	995.092	1017.888
148.5	499.132	677.138	915.801	998.065	1020.861
149.0	503.493	679.814	917.189	1001.038	1023.834
149.5	507.953	682.391	917.982	1004.012	1027.799
150.0	512.512	684.770	918.577	1005.994	1030.772
150.5	517.368	687.148	919.072	1007.976	1032.754
151.0	522.027	689.329	919.469	1009.959	1035.728
151.5	526.883	691.608	919.865	1011.941	1037.710
152.0	531.740	693.888	919.865	1012.932	1039.692
152.5	536.794	695.771	919.865	1013.923	1041.675
153.0	542.047	697.853	919.370	1013.923	1042.666
153.5	547.201	699.736	918.577	1014.914	1043.657
154.0	552.058	701.718	917.685	1013.923	1043.657
154.5	557.311	703.700	916.396	1013.923	1043.657
155.0	562.663	705.782	915.207	1012.932	1042.666
155.5	568.114	707.764	913.720	1011.941	1041.675
156.0	573.763	709.548	912.134	1010.950	1040.683
156.5	579.016	711.233	910.350	1009.959	1038.701
157.0	584.765	713.314	908.467	1007.976	1036.719
157.5	590.613	714.999	906.386	1005.994	1034.737
158.0	596.460	716.684	904.106	1003.021	1032.754
158.5	602.011	718.270	901.430	1000.047	1029.781
159.0	607.264	719.756	898.754	997.074	1026.808
159.5	612.715	721.342	895.682	993.109	1022.843
160.0	618.067	722.730	892.609	989.640	1019.870
160.5	623.320	724.117	889.239	985.478	1015.905
161.0	628.672	725.406	885.770	980.819	1011.941
161.5	633.925	726.595	882.202	976.062	1007.976
162.0	639.178	727.983	878.238	970.908	1003.021
162.5	644.629	729.073	874.273	965.457	998.065
163.0	649.882	730.362	870.210	959.609	992.118
163.5	655.135	731.452	865.849	953.663	985.775
164.0	660.289	732.542	861.389	947.418	979.234
164.5	665.145	733.731	856.829	940.877	972.296
165.0	669.705	734.822	852.270	934.038	965.060
165.5	674.561	735.813	847.612	927.001	957.330
166.0	679.319	736.804	842.854	919.667	949.401
166.5	683.779	737.696	838.097	912.233	941.174

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : MX2UD-8-L4-835U-L8-835D-FWF-DIM-UNV\_.IES****CANDELA TABULATION - (Cont.)**

167.0	688.239	738.687	833.340	904.602	932.651
167.5	692.600	739.678	828.582	896.772	923.929
168.0	696.961	740.570	823.825	888.843	914.909
168.5	701.322	741.363	819.067	880.716	905.890
169.0	705.484	742.057	814.409	872.489	896.574
169.5	709.548	742.850	809.949	864.362	887.059
170.0	713.413	743.643	805.390	856.136	877.643
170.5	717.180	744.436	801.029	847.909	868.326
171.0	720.549	745.328	796.767	839.881	859.010
171.5	723.721	745.922	792.505	831.952	850.090
172.0	726.893	746.715	788.541	824.221	840.971
172.5	729.965	747.310	784.675	816.788	832.051
173.0	732.740	747.905	781.008	809.453	823.528
173.5	735.317	748.400	777.539	802.516	815.202
174.0	737.696	748.896	774.268	796.172	807.273
174.5	739.975	749.391	771.295	789.829	799.939
175.0	742.057	749.887	768.421	784.180	792.803
175.5	743.940	750.382	765.844	778.828	786.063
176.0	745.625	750.680	763.366	773.971	780.017
176.5	747.211	751.076	761.285	769.610	774.566
177.0	748.499	751.373	759.402	765.745	769.808
177.5	749.689	751.572	757.816	762.375	765.646
178.0	750.581	751.770	756.527	759.699	762.276
178.5	751.373	751.869	755.536	757.419	759.600
179.0	751.968	751.968	754.842	755.834	757.618
179.5	752.265	752.067	754.446	754.942	756.527
180.0	753.851	753.851	753.851	753.851	753.851



**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : MX2UD-8-L4-835U-L8-835D-FWF-DIM-UNV\_.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	1027.84	N.A.	10.80
0-30	2115.87	N.A.	22.30
0-40	3316.99	N.A.	34.90
0-60	5358.64	N.A.	56.40
0-80	6377.68	N.A.	67.10
0-90	6486.25	N.A.	68.30
10-90	6215.68	N.A.	65.40
20-40	2289.14	N.A.	24.10
20-50	3408.22	N.A.	35.90
40-70	2698.19	N.A.	28.40
60-80	1019.04	N.A.	10.70
70-80	362.50	N.A.	3.80
80-90	108.57	N.A.	1.10
90-110	273.50	N.A.	2.90
90-120	686.05	N.A.	7.20
90-130	1229.41	N.A.	12.90
90-150	2308.46	N.A.	24.30
90-180	3015.88	N.A.	31.70
110-180	2742.37	N.A.	28.90
0-180	9502.13	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	270.56
10-20	757.28
20-30	1088.03
30-40	1201.12
40-50	1119.08
50-60	922.57
60-70	656.54
70-80	362.50
80-90	108.57
90-100	54.98
100-110	218.52
110-120	412.55
120-130	543.36
130-140	567.55
140-150	511.50
150-160	396.26
160-170	236.83
170-180	74.33

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : MX2UD-8-L4-835U-L8-835D-FWF-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	111	111	111	111	105	105	105	105	93	93	93	83	83	83	73	73	73	68
1	102	98	94	90	96	93	89	86	83	80	78	73	71	70	65	64	62	58
2	93	86	80	75	88	81	76	71	73	69	65	65	62	59	58	55	53	49
3	85	76	69	63	80	72	65	60	65	59	55	58	54	50	51	48	46	42
4	78	68	60	53	74	64	57	51	58	52	47	52	47	43	46	43	40	37
5	72	61	52	46	68	58	50	45	52	46	41	47	42	38	42	38	35	32
6	67	55	46	41	63	52	45	39	47	41	36	42	37	34	38	34	31	28
7	62	50	41	36	58	47	40	35	43	37	32	39	34	30	35	31	28	25
8	58	45	37	32	54	43	36	31	39	33	29	36	31	27	32	28	25	23
9	54	41	34	29	51	40	33	28	36	30	26	33	28	24	30	26	23	21
10	50	38	31	26	48	37	30	25	34	28	24	31	26	22	28	24	21	19

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : MX2UD-8-L4-835U-L8-835D-FWF-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	19.1	20.2	19.9	21.0	22.0	18.0	19.0	18.8	19.8	20.8
	3H	20.8	21.7	21.6	22.5	23.5	19.6	20.5	20.4	21.3	22.3
	4H	21.3	22.2	22.1	23.0	24.0	20.2	21.0	21.0	21.9	22.9
	6H	21.7	22.5	22.5	23.3	24.4	20.6	21.4	21.4	22.2	23.3
	8H	21.8	22.6	22.7	23.4	24.5	20.8	21.5	21.6	22.4	23.4
	12H	21.9	22.6	22.7	23.5	24.5	20.9	21.6	21.7	22.5	23.5

### UGR Viewed Endwise

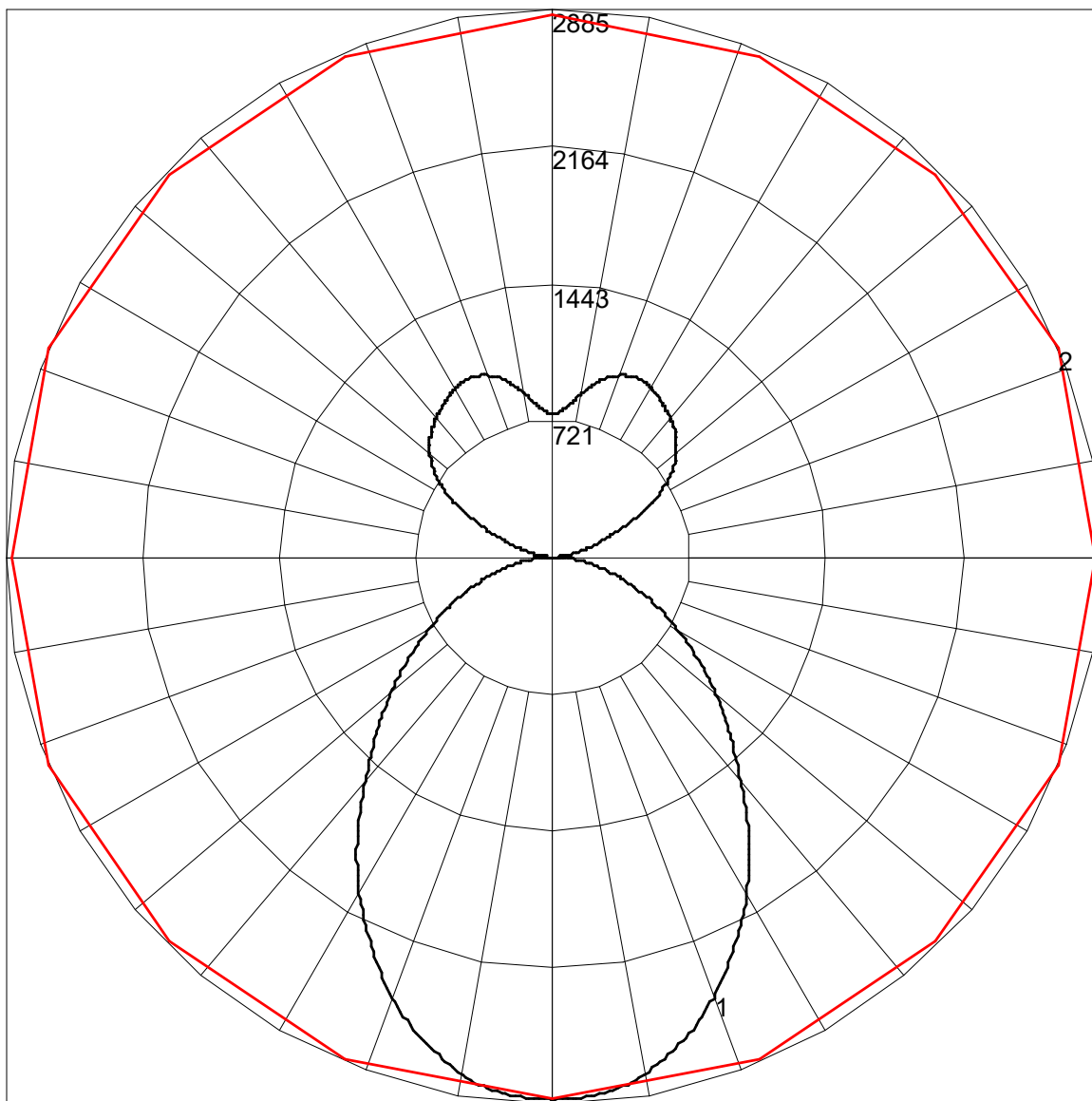
4H	2H	19.5	20.4	20.4	21.2	22.3	18.6	19.5	19.4	20.3	21.3
	3H	21.4	22.1	22.2	23.0	24.0	20.4	21.1	21.2	22.0	23.0
	4H	22.1	22.7	22.9	23.6	24.7	21.1	21.8	21.9	22.6	23.7
	6H	22.6	23.2	23.5	24.0	25.1	21.7	22.2	22.5	23.1	24.2
	8H	22.8	23.3	23.6	24.2	25.3	21.9	22.4	22.7	23.3	24.4
	12H	22.9	23.3	23.8	24.2	25.3	22.0	22.5	22.9	23.4	24.5

8H	4H	22.3	22.8	23.1	23.7	24.8	21.4	21.9	22.2	22.8	23.9
	6H	22.9	23.3	23.8	24.3	25.4	22.1	22.5	23.0	23.4	24.5
	8H	23.1	23.5	24.1	24.4	25.6	22.4	22.8	23.3	23.7	24.8
	12H	23.3	23.7	24.2	24.6	25.7	22.6	23.0	23.5	23.9	25.0

12H	4H	22.3	22.7	23.1	23.6	24.7	21.4	21.9	22.3	22.8	23.9
	6H	22.9	23.3	23.8	24.2	25.4	22.2	22.5	23.1	23.4	24.6
	8H	23.2	23.6	24.1	24.5	25.6	22.5	22.8	23.4	23.7	24.9

Maximum UGR = 25.7

POLAR GRAPH



Maximum Candela = 2885.261 Located At Horizontal Angle = 22.5, Vertical Angle = .5  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)  
# 2 - Horizontal Cone Through Vertical Angle (.5) (Through Max. Cd.)