



IES INDOOR REPORT

PHOTOMETRIC FILENAME : MX2UD-8-L4-835U-L12-835D-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] MX2U-4-00-L4-835-FW-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	12688
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	123
Total Luminaire Watts	103
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	26742	24474	22432
55	23591	21448	19423
65	20741	18655	16891
75	17100	15665	14543
85	12335	13265	13566

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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	4276.558	4276.558	4276.558	4276.558	4276.558
0.5	4270.059	4302.555	4266.809	4266.809	4260.310
1.0	4266.809	4302.555	4266.809	4266.809	4260.310
1.5	4266.809	4299.305	4266.809	4266.809	4260.310
2.0	4266.809	4299.305	4263.559	4266.809	4260.310
2.5	4263.559	4296.056	4263.559	4266.809	4260.310
3.0	4260.310	4296.056	4260.310	4266.809	4257.060
3.5	4257.060	4292.806	4257.060	4263.559	4253.810
4.0	4253.810	4289.556	4253.810	4260.310	4250.561
4.5	4250.561	4286.307	4247.311	4257.060	4247.311
5.0	4244.061	4279.807	4244.061	4253.810	4240.812
5.5	4240.812	4276.558	4237.562	4247.311	4237.562
6.0	4234.312	4270.059	4234.312	4240.812	4231.063
6.5	4227.813	4263.559	4227.813	4231.063	4221.314
7.0	4221.314	4257.060	4221.314	4221.314	4211.565
7.5	4214.814	4250.561	4214.814	4211.565	4201.816
8.0	4208.315	4244.061	4205.065	4198.566	4192.067
8.5	4198.566	4234.312	4198.566	4188.817	4179.068
9.0	4188.817	4227.813	4188.817	4175.818	4166.069
9.5	4182.318	4218.064	4179.068	4162.820	4149.821
10.0	4172.569	4208.315	4166.069	4146.571	4133.573
10.5	4162.820	4198.566	4156.320	4133.573	4117.324
11.0	4153.071	4188.817	4140.072	4117.324	4097.826
11.5	4140.072	4175.818	4127.073	4101.076	4081.578
12.0	4130.323	4166.069	4114.075	4084.828	4062.080
12.5	4117.324	4153.071	4097.826	4065.330	4042.582
13.0	4104.326	4140.072	4081.578	4049.081	4023.084
13.5	4091.327	4127.073	4065.330	4029.583	4006.836
14.0	4078.328	4114.075	4049.081	4010.085	3984.088
14.5	4062.080	4097.826	4029.583	3990.587	3961.340
15.0	4045.832	4081.578	4010.085	3967.840	3941.842
15.5	4032.833	4068.579	3990.587	3945.092	3919.095
16.0	4016.585	4049.081	3971.089	3925.594	3896.347
16.5	4000.336	4032.833	3951.591	3902.846	3873.599
17.0	3984.088	4013.335	3928.844	3876.849	3847.602
17.5	3967.840	3997.087	3906.096	3854.102	3824.855
18.0	3948.342	3977.589	3883.348	3828.104	3798.857
18.5	3932.093	3958.091	3860.601	3805.357	3772.860
19.0	3912.595	3938.593	3837.853	3779.359	3746.863
19.5	3893.097	3915.845	3815.106	3753.362	3720.865
20.0	3873.599	3896.347	3789.108	3727.365	3694.868
20.5	3854.102	3873.599	3763.111	3698.118	3665.621
21.0	3831.354	3850.852	3740.363	3668.871	3636.374
21.5	3811.856	3828.104	3714.366	3639.624	3607.127
22.0	3789.108	3805.357	3688.369	3610.377	3574.630
22.5	3769.610	3782.609	3662.371	3581.130	3542.134
23.0	3746.863	3759.861	3633.124	3548.633	3512.887
23.5	3724.115	3733.864	3607.127	3519.386	3477.140
24.0	3698.118	3711.116	3581.130	3486.889	3444.644
24.5	3675.370	3685.119	3551.883	3454.393	3412.147
25.0	3649.373	3659.122	3522.636	3425.146	3379.651
25.5	3626.625	3629.875	3496.638	3392.649	3347.154
26.0	3597.378	3603.877	3464.142	3356.903	3314.657
26.5	3571.381	3574.630	3434.895	3324.406	3282.161

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27.0	3542.134	3548.633	3405.648	3295.159	3249.339
27.5	3516.136	3519.386	3373.151	3262.663	3215.867
28.0	3486.889	3490.139	3343.904	3227.241	3183.696
28.5	3457.642	3460.892	3311.408	3195.070	3150.874
29.0	3428.396	3428.396	3278.911	3162.573	3118.703
29.5	3392.649	3399.149	3245.764	3129.101	3083.931
30.0	3363.402	3366.652	3212.618	3097.255	3049.810
30.5	3334.155	3334.155	3178.171	3062.483	3015.688
31.0	3301.659	3301.659	3143.400	3029.012	2981.892
31.5	3269.162	3269.162	3108.629	2993.590	2945.495
32.0	3237.640	3235.690	3073.857	2957.844	2910.399
32.5	3205.469	3199.944	3038.436	2921.448	2875.953
33.0	3173.297	3165.498	3003.015	2885.052	2838.906
33.5	3140.475	3130.076	2967.268	2848.006	2803.810
34.0	3107.329	3094.330	2930.222	2810.959	2765.464
34.5	3073.857	3058.259	2894.801	2773.263	2728.418
35.0	3041.361	3022.837	2858.079	2734.917	2690.397
35.5	3007.239	2987.416	2821.033	2697.871	2650.751
36.0	2972.468	2950.370	2784.962	2658.875	2610.780
36.5	2940.296	2914.299	2747.591	2619.879	2568.859
37.0	2904.875	2878.227	2709.245	2580.883	2527.264
37.5	2869.778	2842.156	2671.549	2541.562	2485.993
38.0	2835.657	2805.435	2633.203	2502.241	2444.722
38.5	2800.235	2769.689	2595.507	2461.620	2410.276
39.0	2764.164	2733.617	2558.460	2424.249	2376.479
39.5	2728.093	2697.871	2521.089	2392.728	2337.158
40.0	2691.372	2662.450	2483.393	2356.981	2298.812
40.5	2655.300	2626.703	2446.997	2318.635	2261.766
41.0	2619.879	2591.607	2418.400	2281.589	2226.020
41.5	2583.483	2556.186	2383.954	2245.843	2191.248
42.0	2547.737	2520.114	2351.782	2210.746	2157.777
42.5	2511.340	2484.693	2316.360	2177.275	2125.280
43.0	2476.244	2448.622	2282.239	2144.453	2093.759
43.5	2442.447	2420.675	2248.443	2112.282	2062.562
44.0	2412.876	2388.503	2215.296	2080.760	2032.015
44.5	2384.603	2354.382	2182.474	2049.563	2001.143
45.0	2349.182	2320.910	2149.978	2019.016	1970.596
45.5	2314.736	2285.814	2117.806	1988.469	1940.374
46.0	2280.289	2251.042	2085.959	1958.248	1909.828
46.5	2246.168	2216.596	2054.438	1927.701	1879.931
47.0	2211.721	2182.799	2022.916	1897.479	1849.709
47.5	2177.600	2149.003	1991.069	1866.607	1819.487
48.0	2144.128	2115.206	1959.222	1836.060	1789.590
48.5	2110.982	2081.735	1927.051	1805.838	1759.693
49.0	2077.835	2048.263	1894.879	1775.616	1730.121
49.5	2044.689	2015.442	1862.382	1745.719	1700.874
50.0	2011.542	1982.295	1830.536	1715.823	1671.627
50.5	1978.395	1949.148	1798.689	1686.251	1642.705
51.0	1945.249	1916.327	1767.167	1657.004	1613.783
51.5	1911.452	1883.505	1735.971	1627.432	1584.861
52.0	1878.306	1850.034	1705.099	1598.185	1555.939
52.5	1844.834	1817.537	1675.202	1568.938	1527.342
53.0	1812.013	1785.040	1645.305	1540.016	1498.420
53.5	1779.191	1752.869	1616.058	1511.094	1469.498
54.0	1746.369	1721.022	1586.486	1482.172	1440.901
54.5	1713.548	1689.500	1557.239	1453.250	1412.304

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55.0	1681.051	1657.979	1528.317	1424.653	1384.032
55.5	1649.204	1626.782	1499.395	1396.381	1356.085
56.0	1617.683	1595.260	1470.473	1368.758	1328.463
56.5	1586.486	1564.063	1441.551	1341.136	1301.815
57.0	1555.939	1533.191	1412.304	1313.839	1275.493
57.5	1525.392	1502.970	1383.382	1286.867	1249.496
58.0	1495.495	1473.073	1354.460	1259.895	1223.823
58.5	1465.598	1443.176	1325.863	1233.247	1198.151
59.0	1435.702	1413.604	1297.916	1206.925	1172.804
59.5	1406.130	1384.032	1269.644	1181.253	1147.781
60.0	1377.208	1354.460	1241.697	1155.905	1123.084
60.5	1347.961	1325.213	1214.399	1130.558	1098.061
61.0	1319.039	1296.291	1187.427	1105.536	1073.689
61.5	1289.792	1268.019	1160.455	1080.513	1049.641
62.0	1260.870	1239.747	1133.808	1056.141	1026.244
62.5	1231.948	1211.800	1107.485	1032.093	1002.521
63.0	1203.351	1183.528	1081.488	1008.046	979.124
63.5	1174.754	1155.256	1055.816	983.998	956.051
64.0	1146.156	1126.983	1030.143	960.601	932.979
64.5	1117.559	1098.711	1004.796	936.878	909.906
65.0	1088.962	1070.764	979.449	913.481	886.833
65.5	1060.690	1043.142	954.426	889.758	864.086
66.0	1032.418	1015.520	929.404	866.360	842.638
66.5	1004.146	988.223	904.381	842.963	819.890
67.0	976.524	960.276	879.359	819.565	797.468
67.5	948.577	932.654	854.337	796.493	774.720
68.0	920.630	905.031	829.639	773.420	752.622
68.5	893.008	877.734	804.617	750.672	730.524
69.0	865.386	850.762	779.919	728.250	708.752
69.5	837.438	823.790	755.222	705.827	686.979
70.0	810.466	796.818	731.174	683.729	665.856
70.5	783.494	770.170	707.127	661.957	644.733
71.0	756.522	743.198	683.404	640.184	623.935
71.5	730.199	717.201	659.682	619.061	603.463
72.0	703.877	691.204	636.284	597.938	583.315
72.5	677.880	665.856	613.537	577.140	563.492
73.0	651.883	640.509	591.114	556.667	543.669
73.5	625.885	615.486	568.691	536.195	524.171
74.0	600.213	590.464	546.593	516.047	504.998
74.5	574.866	565.766	525.146	496.549	486.150
75.0	549.843	541.719	503.698	477.051	467.627
75.5	525.146	517.671	482.575	457.878	449.429
76.0	500.448	494.599	461.452	438.705	431.230
76.5	476.401	471.201	440.979	419.857	413.357
77.0	452.353	448.454	420.507	401.658	395.809
77.5	428.956	425.706	401.009	383.460	378.261
78.0	405.883	403.608	381.511	365.912	361.038
78.5	383.135	381.836	362.338	348.364	344.139
79.0	361.038	360.388	343.814	331.466	327.566
79.5	338.940	339.915	325.291	314.567	311.318
80.0	317.817	319.767	306.768	297.669	295.069
80.5	297.019	299.944	289.220	281.421	279.146
81.0	276.871	280.446	271.997	265.173	263.548
81.5	257.048	261.598	254.449	249.249	247.949
82.0	237.875	242.750	237.875	233.651	233.001
82.5	219.027	224.552	220.977	218.377	217.727

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83.0	201.154	206.679	204.729	203.429	203.104
83.5	183.281	189.455	188.805	188.481	188.481
84.0	166.383	172.882	173.207	173.857	174.507
84.5	149.810	156.634	158.259	159.883	160.533
85.0	133.561	140.710	143.635	145.910	146.885
85.5	118.288	125.437	129.337	132.261	133.886
86.0	103.339	110.489	115.363	118.938	120.563
86.5	89.041	96.515	101.714	105.939	108.214
87.0	75.067	82.541	88.391	93.265	95.865
87.5	61.419	69.218	75.717	80.917	83.516
88.0	48.095	56.219	63.043	68.568	71.818
88.5	35.096	43.221	50.370	56.869	60.444
89.0	21.773	29.897	37.371	43.221	46.795
89.5	8.774	16.248	21.123	23.723	25.997
90.0	5.518	14.313	17.122	21.264	22.762
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

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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-L12-835D-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-L12-835D-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-L12-835D-FWF-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1532.74	N.A.	12.10
0-30	3155.23	N.A.	24.90
0-40	4946.36	N.A.	39.00
0-60	7990.9	N.A.	63.00
0-80	9510.51	N.A.	75.00
0-90	9672.33	N.A.	76.20
10-90	9268.86	N.A.	73.10
20-40	3413.61	N.A.	26.90
20-50	5082.4	N.A.	40.10
40-70	4023.58	N.A.	31.70
60-80	1519.61	N.A.	12.00
70-80	540.57	N.A.	4.30
80-90	161.82	N.A.	1.30
90-110	273.60	N.A.	2.20
90-120	686.14	N.A.	5.40
90-130	1229.5	N.A.	9.70
90-150	2308.55	N.A.	18.20
90-180	3015.97	N.A.	23.80
110-180	2742.37	N.A.	21.60
0-180	12688.3	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	403.47
10-20	1129.27
20-30	1622.48
30-40	1791.13
40-50	1668.79
50-60	1375.76
60-70	979.04
70-80	540.57
80-90	161.82
90-100	55.08
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-L12-835D-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	113	113	113	113	108	108	108	108	98	98	98	89	89	89	80	80	80	76
1	104	100	96	92	99	95	92	88	87	84	81	79	77	75	71	70	68	65
2	95	88	81	76	90	84	78	73	76	72	68	70	66	63	63	61	58	55
3	87	77	70	64	83	74	67	62	68	62	58	62	58	54	57	53	50	47
4	80	69	61	55	76	66	59	53	61	55	50	56	51	47	51	47	44	41
5	74	62	54	47	70	59	52	46	55	48	43	50	45	41	46	42	38	36
6	68	56	48	42	65	54	46	40	50	43	38	46	40	36	42	38	34	32
7	63	51	43	37	60	49	41	36	45	39	34	42	36	32	39	34	31	28
8	59	46	38	33	56	45	37	32	41	35	31	38	33	29	36	31	28	25
9	55	43	35	30	53	41	34	29	38	32	28	36	30	26	33	28	25	23
10	52	39	32	27	49	38	31	26	35	29	25	33	28	24	31	26	23	21

IES INDOOR REPORT

PHOTOMETRIC FILENAME : MX2UD-8-L4-835U-L12-835D-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	21.1	22.3	21.8	23.0	23.8	20.0	21.1	20.7	21.8	22.7
	3H	22.8	23.8	23.5	24.5	25.4	21.6	22.6	22.3	23.3	24.2
	4H	23.3	24.3	24.1	25.0	25.9	22.2	23.1	22.9	23.9	24.7
	6H	23.7	24.6	24.5	25.3	26.2	22.6	23.5	23.4	24.2	25.1
	8H	23.8	24.7	24.6	25.4	26.3	22.8	23.6	23.5	24.4	25.3
	12H	23.9	24.7	24.7	25.5	26.4	22.9	23.7	23.7	24.5	25.4

UGR Viewed Endwise

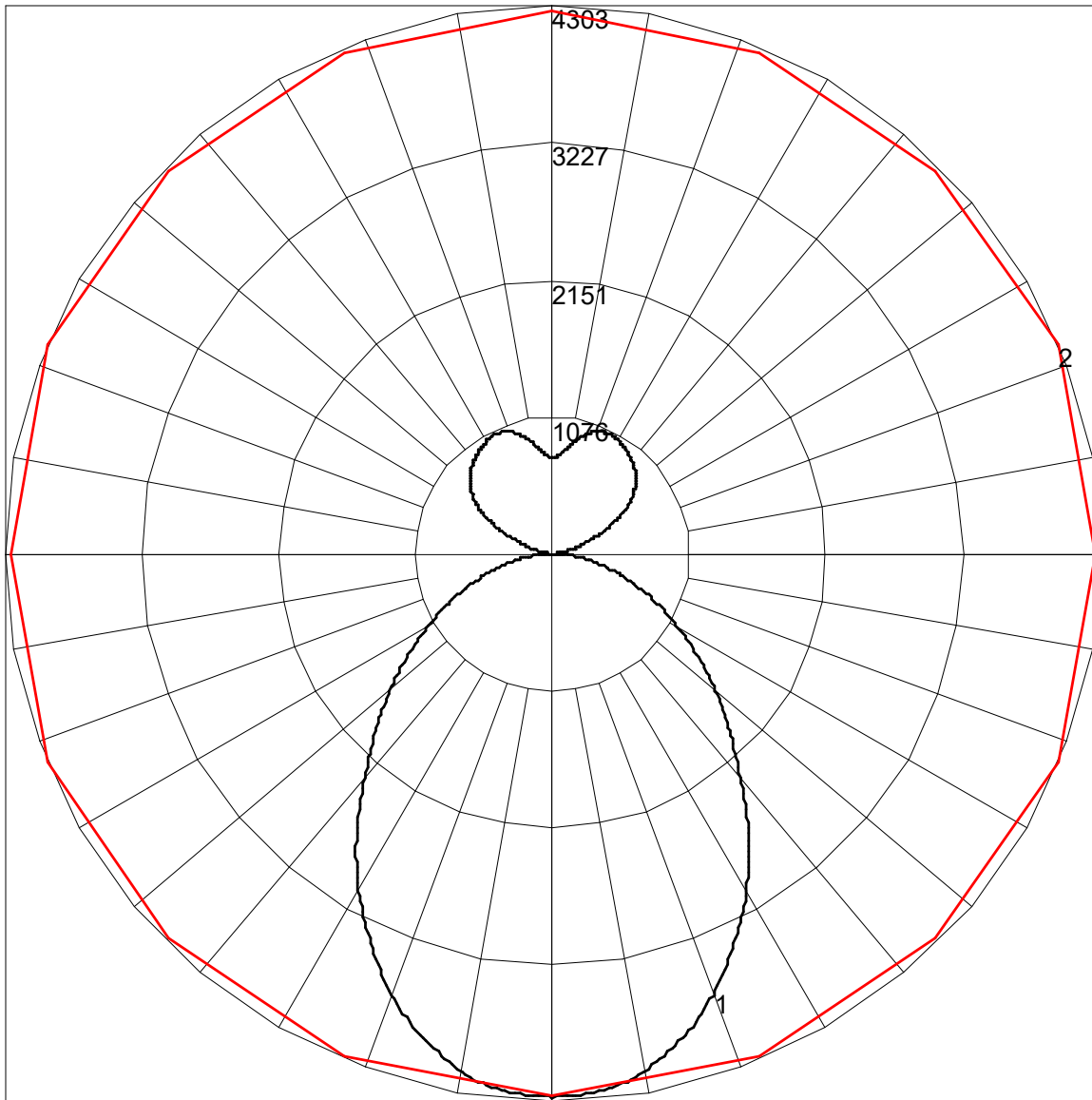
4H	2H	21.5	22.5	22.3	23.2	24.1	20.6	21.6	21.4	22.3	23.2
	3H	23.4	24.2	24.1	25.0	25.9	22.4	23.2	23.2	24.0	24.9
	4H	24.1	24.8	24.9	25.6	26.5	23.1	23.8	23.9	24.6	25.5
	6H	24.6	25.2	25.4	26.0	27.0	23.7	24.3	24.5	25.1	26.1
	8H	24.8	25.4	25.6	26.2	27.1	23.9	24.5	24.7	25.3	26.2
	12H	24.9	25.4	25.7	26.2	27.2	24.1	24.6	24.9	25.4	26.4

8H	4H	24.3	24.9	25.1	25.7	26.6	23.4	24.0	24.2	24.8	25.7
	6H	24.9	25.4	25.8	26.3	27.2	24.1	24.6	24.9	25.4	26.4
	8H	25.2	25.6	26.0	26.4	27.4	24.4	24.8	25.2	25.7	26.7
	12H	25.4	25.7	26.2	26.6	27.6	24.7	25.0	25.5	25.9	26.9

12H	4H	24.3	24.8	25.1	25.6	26.6	23.4	24.0	24.2	24.8	25.7
	6H	25.0	25.4	25.8	26.2	27.2	24.2	24.6	25.0	25.4	26.4
	8H	25.3	25.6	26.1	26.5	27.5	24.5	24.9	25.4	25.7	26.8

Maximum UGR = 27.6

POLAR GRAPH



Maximum Candela = 4302.555 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.)