



IES INDOOR REPORT

PHOTOMETRIC FILENAME : MX4U-4-00-L8-8TW-F-A-DIM-UNV 4000K_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM BALLABS TEST NO. 20657.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 13-MAR-2020

[MANUFAC] WILLIAMS INDOOR

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

[LUMINAIRE] 2-72 LED 23.75" ARRAYS 4' UPLIGHT LUMINAIRE

[MORE] WHITE ALUM BODY w/WHITE REFL & FLAT FROST LENS

[LUMCAT] MX4U-4-00-P7-8TW-F-A-DIM-UNV 4000k

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3384
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	126
Total Luminaire Watts	26.8
Ballast Factor	1.00
CIE Type	Indirect
Spacing Criterion (0-180)	N.A.
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	N.A.
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.32 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	0	0	0
55	0	0	0
65	0	0	0
75	0	0	0
85	0	0	0

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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	0.000	0.000	0.000	0.000	0.000
5	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000
55	0.000	0.000	0.000	0.000	0.000
60	0.000	0.000	0.000	0.000	0.000
65	0.000	0.000	0.000	0.000	0.000
70	0.000	0.000	0.000	0.000	0.000
75	0.000	0.000	0.000	0.000	0.000
80	0.000	0.000	0.000	0.000	0.000
85	0.000	0.000	0.000	0.000	0.000
90	0.000	0.000	0.000	0.000	0.000
95	60.776	59.560	61.991	60.776	64.422
100	128.845	130.060	122.767	128.845	127.629
105	217.578	216.362	216.362	212.715	209.069
110	311.172	306.310	302.664	300.233	294.155
115	412.060	405.983	398.690	386.534	386.534
120	511.733	500.793	489.853	483.776	477.698
125	602.896	600.465	588.310	576.155	570.077
130	697.707	696.491	684.336	673.396	669.750
135	787.655	790.086	776.715	762.129	757.267
140	883.681	878.819	870.310	849.646	849.646
145	969.983	963.905	950.534	945.672	934.733
150	1041.698	1048.991	1035.621	1024.681	1019.819
155	1112.198	1118.276	1108.552	1095.181	1093.965
160	1174.189	1179.052	1169.327	1163.250	1157.172
165	1220.379	1226.457	1217.948	1211.870	1208.224
170	1253.198	1259.276	1251.983	1248.336	1248.336
175	1270.215	1277.508	1271.431	1267.784	1262.922
180	1275.077	1275.077	1275.077	1275.077	1275.077

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Zone	Lumens	%Lamp	%Fixt
0-20	0.00	N.A.	0.00
0-30	0.00	N.A.	0.00
0-40	0.00	N.A.	0.00
0-60	0.00	N.A.	0.00
0-80	0.00	N.A.	0.00
0-90	0.00	N.A.	0.00
10-90	0.00	N.A.	0.00
20-40	0.00	N.A.	0.00
20-50	0.00	N.A.	0.00
40-70	0.00	N.A.	0.00
60-80	0.00	N.A.	0.00
70-80	0.00	N.A.	0.00
80-90	0.00	N.A.	0.00
90-110	294.90	N.A.	8.70
90-120	688.64	N.A.	20.40
90-130	1214.96	N.A.	35.90
90-150	2410.25	N.A.	71.20
90-180	3383.86	N.A.	100.00
110-180	3088.95	N.A.	91.30
0-180	3383.86	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	0.00
10-20	0.00
20-30	0.00
30-40	0.00
40-50	0.00
50-60	0.00
60-70	0.00
70-80	0.00
80-90	0.00
90-100	68.04
100-110	226.86
110-120	393.73
120-130	526.32
130-140	598.96
140-150	596.33
150-160	509.65
160-170	343.25
170-180	120.71

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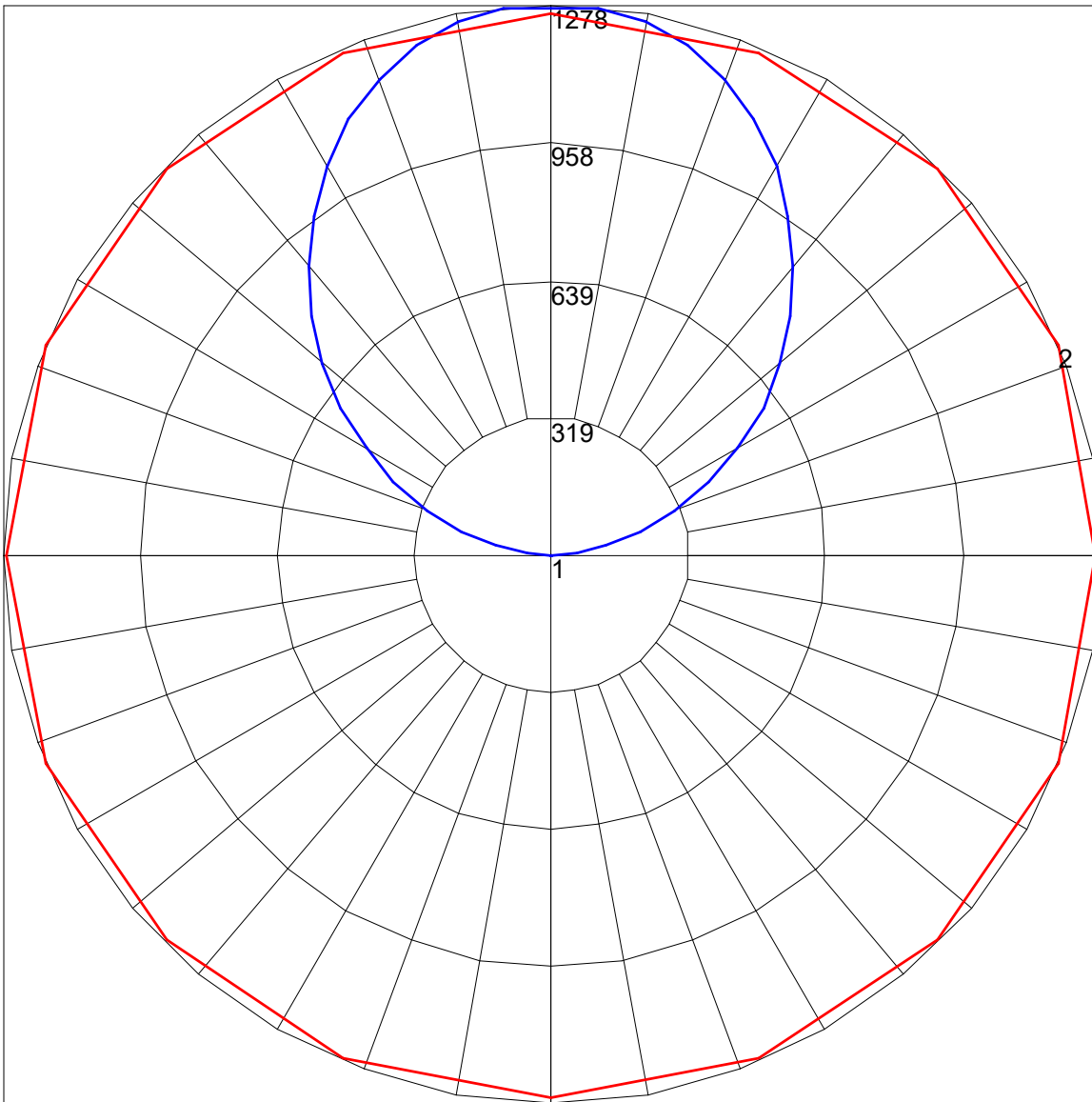
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	95	95	95	95	65	65	65	37	37	37	12	12	12	0
1	101	97	92	89	86	83	79	76	56	55	53	33	32	31	10	10	10	0
2	92	84	78	72	78	72	67	62	49	46	44	28	27	26	9	9	8	0
3	84	74	66	60	71	63	57	52	43	40	36	25	23	21	8	7	7	0
4	76	65	57	50	65	56	49	44	38	34	31	22	20	18	7	6	6	0
5	70	58	49	43	59	49	42	37	34	30	26	20	17	16	6	6	5	0
6	64	51	43	36	54	44	37	32	30	26	22	18	15	13	6	5	4	0
7	59	46	37	31	50	39	32	27	27	23	19	16	13	12	5	4	4	0
8	54	41	33	27	46	36	29	24	25	20	17	14	12	10	5	4	3	0
9	50	37	29	24	43	32	25	21	22	18	15	13	11	9	4	3	3	0
10	47	34	26	21	40	29	23	18	20	16	13	12	9	8	4	3	3	0

POLAR GRAPH



Maximum Candela = 1277.508 Located At Horizontal Angle = 22.5, Vertical Angle = 175
1 - Vertical Plane Through Horizontal Angles (22.5 - 202.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (175) (Through Max. Cd.)