IES INDOOR REPORT
PHOTOMETRIC FILENAME : MX4WU-4-00-L15-835-F-DIM-UNV_.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] 15-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] MX4WU-4-00-L15-835-F-DIM-UNV

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5760
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	107
Total Luminaire Watts	54
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

	0.0	22.5	45.0	67.5	90.0
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	103.448	101.379	105.517	103.448	109.655
100	219.310	221.379	208.965	219.310	217.241
105	370.345	368.276	368.276	362.069	355.862
110	529.655	521.379	515.172	511.034	500.690
115	701.379	691.034	678.621	657.931	657.931
120	871.034	852.414	833.793	823.448	813.103
125	1026.207	1022.069	1001.379	980.689	970.345
130	1187.586	1185.517	1164.827	1146.207	1140.000
135	1340.689	1344.827	1322.069	1297.241	1288.965
140	1504.138	1495.862	1481.379	1446.207	1446.207
145	1651.034	1640.689	1617.931	1609.655	1591.034
150	1773.103	1785.517	1762.758	1744.137	1735.862
155	1893.103	1903.448	1886.896	1864.137	1862.068
160	1998.620	2006.896	1990.344	1979.999	1969.655
165	2077.241	2087.586	2073.103	2062.758	2056.551
170	2133.103	2143.448	2131.034	2124.827	2124.827
175	2162.068	2174.482	2164.137	2157.930	2149.655
180	2170.344	2170.344	2170.344	2170.344	2170.344

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ZONAL LUMEN SUMMARY

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	501.97	N.A.	8.70
90-120	1172.15	N.A.	20.40
90-130	2068.02	N.A.	35.90
90-150	4102.55	N.A.	71.20
90-180	5759.75	N.A.	100.00
110-180	5257.79	N.A.	91.30
0-180	5759.75	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	115.82
100-110	386.15
110-120	670.19
120-130	895.87
130-140	1019.5
140-150	1015.03
150-160	867.49
160-170	584.26
170-180	205.46

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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	161	161	161	161	138	138	138	138	94	94	94	54	54	54	17	17	17	0
1	147	140	134	128	125	120	115	110	82	79	76	47	46	44	15	15	14	0
2	133	122	112	105	113	104	97	90	72	67	63	41	39	37	13	13	12	0
3	121	107	96	87	103	92	82	75	63	57	53	36	33	31	12	11	10	0
4	111	94	82	73	94	81	71	63	56	49	44	32	29	26	10	9	9	0
5	101	83	71	62	86	72	61	54	49	43	38	29	25	22	9	8	7	0
6	93	74	62	53	79	64	53	46	44	37	32	26	22	19	8	7	6	0
7	85	66	54	46	73	57	47	40	39	33	28	23	19	17	7	6	6	0
8	79	60	48	40	67	51	41	34	36	29	24	21	17	15	7	6	5	0
9	73	54	42	35	62	47	37	30	32	26	21	19	15	13	6	5	4	0
10	68	49	38	30	58	42	33	27	29	23	19	17	14	11	6	4	4	0

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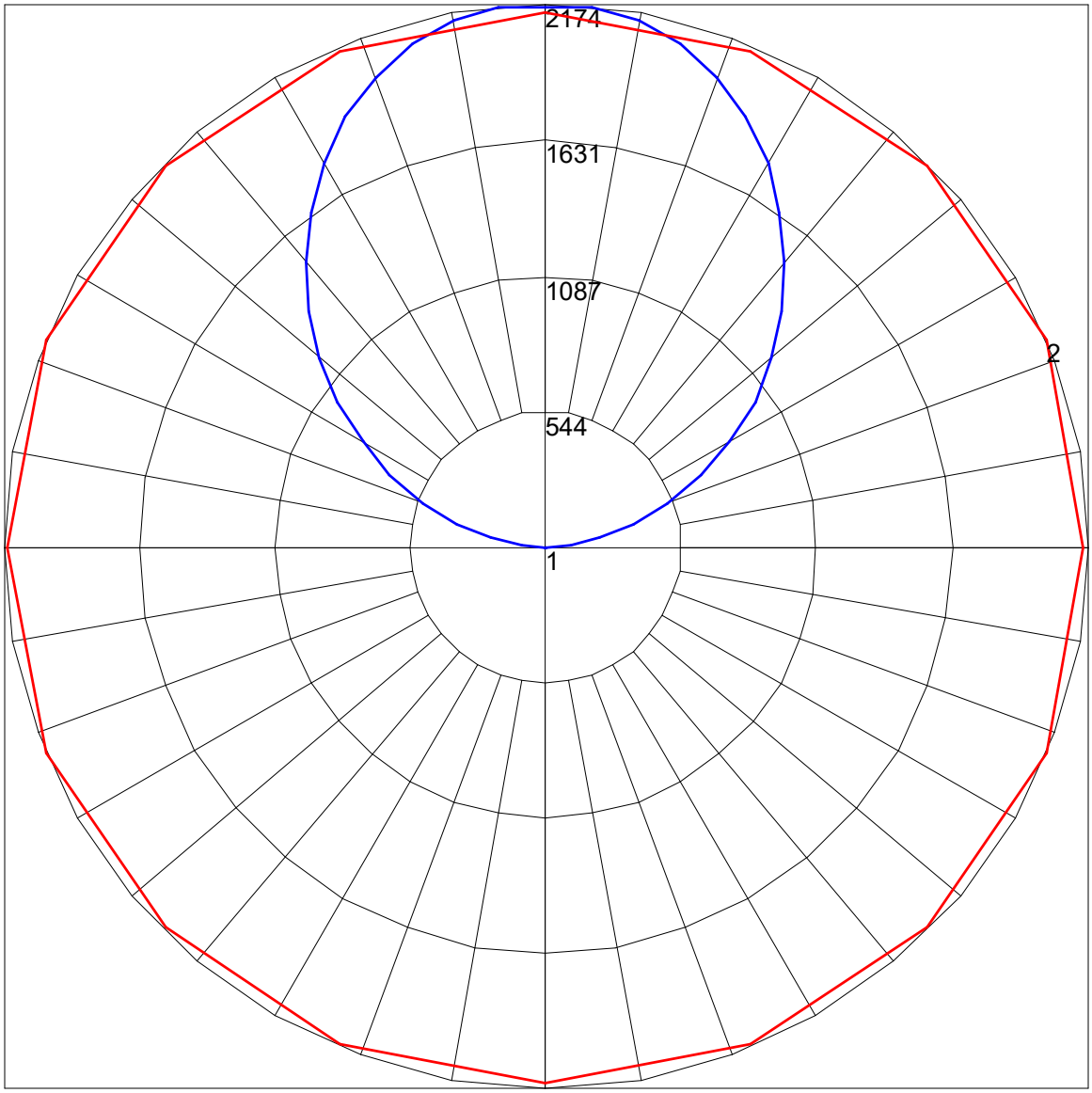
POLAR GRAPH



Maximum Candela = 2174.482 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.)

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