IES INDOOR REPORT
PHOTOMETRIC FILENAME : MX4WU-4-00-P7-8TW-F-POE-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-P7-8TW-F-PoE-UNV

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2896
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	145
Total Luminaire Watts	20
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	52.012	50.971	53.052	52.012	55.132
100	110.264	111.305	105.063	110.264	109.224
105	186.201	185.161	185.161	182.040	178.920
110	266.299	262.138	259.017	256.937	251.736
115	352.638	347.437	341.195	330.793	330.793
120	437.937	428.575	419.213	414.012	408.810
125	515.954	513.874	503.471	493.069	487.868
130	597.092	596.052	585.650	576.287	573.167
135	674.069	676.150	664.707	652.224	648.063
140	756.247	752.086	744.805	727.121	727.121
145	830.104	824.902	813.460	809.299	799.937
150	891.477	897.719	886.276	876.914	872.753
155	951.810	957.012	948.690	937.247	936.207
160	1004.862	1009.023	1000.701	995.500	990.299
165	1044.391	1049.592	1042.310	1037.109	1033.989
170	1072.477	1077.678	1071.437	1068.316	1068.316
175	1087.040	1093.282	1088.081	1084.960	1080.799
180	1091.201	1091.201	1091.201	1091.201	1091.201

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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	252.38	N.A.	8.70
90-120	589.33	N.A.	20.40
90-130	1039.75	N.A.	35.90
90-150	2062.67	N.A.	71.20
90-180	2895.88	N.A.	100.00
110-180	2643.5	N.A.	91.30
0-180	2895.88	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	58.23
100-110	194.15
110-120	336.95
120-130	450.42
130-140	512.58
140-150	510.34
150-160	436.15
160-170	293.75
170-180	103.30

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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	95	95	95	95	81	81	81	81	55	55	55	32	32	32	10	10	10	0
1	86	82	79	75	73	70	67	65	48	46	45	28	27	26	9	9	8	0
2	78	72	66	61	67	61	57	53	42	39	37	24	23	22	8	7	7	0
3	71	63	56	51	61	54	48	44	37	34	31	21	20	18	7	6	6	0
4	65	55	48	43	55	47	42	37	33	29	26	19	17	15	6	6	5	0
5	59	49	42	36	51	42	36	32	29	25	22	17	15	13	5	5	4	0
6	55	44	36	31	46	37	31	27	26	22	19	15	13	11	5	4	4	0
7	50	39	32	27	43	34	28	23	23	19	17	13	11	10	4	4	3	0
8	46	35	28	23	39	30	24	20	21	17	14	12	10	9	4	3	3	0
9	43	32	25	20	36	27	22	18	19	15	13	11	9	8	4	3	2	0
10	40	29	22	18	34	25	19	16	17	14	11	10	8	7	3	3	2	0

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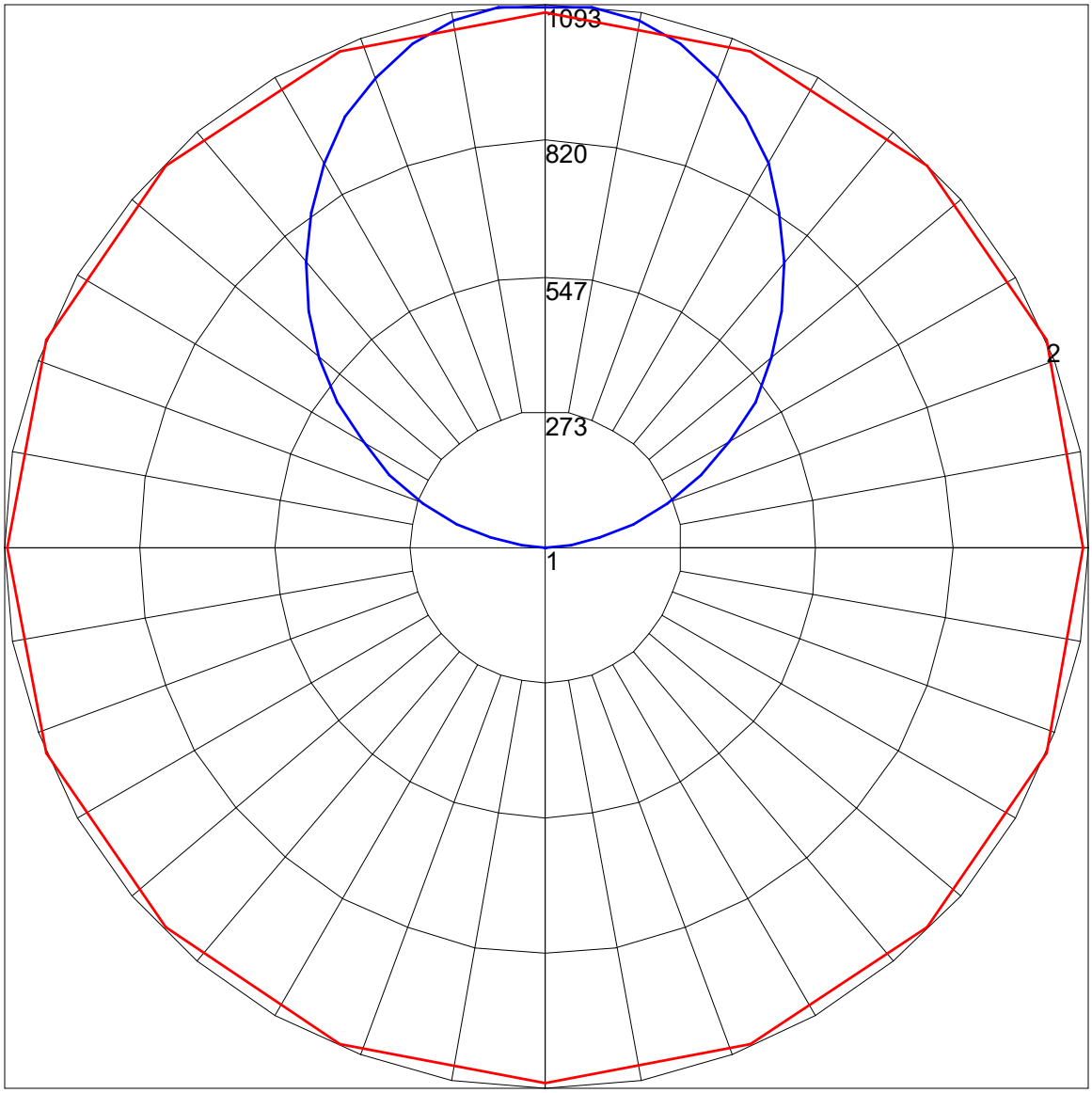
POLAR GRAPH



Maximum Candela = 1093.282 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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