



IES INDOOR REPORT

PHOTOMETRIC FILENAME : MX4D-8-00-L15-935-P-AWNS-DSR-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from BALLABS TEST NO. 20650.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 29 AUG, 2024

[MANUFAC] WILLIAMS INDOOR

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

[LUMINAIRE] 8-72 LED 23.75"ARRAYS 8' DOWNLIGHT LUMINAIRE

[MORE] WHITE ALUM BODY w/WHITE REFL & 5/16"FROST DROP LENS

[LUMCAT] MX4D-8-00-L15-935-P-AWNS/DSR-UNV

[LAMPCAT] MX2472_2835 REV A 1 10560314

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	9755
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	102
Total Luminaire Watts	96.1
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.18
Spacing Criterion (Diagonal)	1.30
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	7.99 ft
Luminous Width (90-270)	0.31 ft
Luminous Height	0.02 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	13543	13034	12640
55	12169	11693	11210
65	10380	9867	9638
75	7645	7852	7827
85	2891	5107	6015

IES INDOOR REPORT
 PHOTOMETRIC FILENAME : MX4D-8-00-L15-935-P-AWNS-DSR-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	3817.755	3817.755	3817.755	3817.755	3817.755
5	3817.755	3799.998	3782.241	3782.241	3782.241
10	3728.970	3711.213	3699.375	3699.375	3687.537
15	3616.509	3580.995	3575.076	3580.995	3569.157
20	3444.858	3421.182	3427.101	3403.425	3397.506
25	3255.450	3237.693	3231.774	3219.936	3219.936
30	3018.690	2989.095	3000.933	2983.176	2971.338
35	2770.092	2752.335	2740.497	2740.497	2728.659
40	2491.899	2485.980	2480.061	2456.385	2456.385
45	2190.030	2207.787	2207.787	2190.030	2178.192
50	1894.080	1917.756	1917.756	1923.675	1911.837
55	1598.130	1633.644	1639.563	1627.725	1609.968
60	1284.423	1319.937	1343.613	1349.532	1343.613
65	1006.230	1035.825	1053.582	1059.501	1065.420
70	716.199	739.875	781.308	816.822	816.822
75	455.763	485.358	550.467	580.062	580.062
80	224.922	272.274	313.707	355.140	366.978
85	59.190	106.542	159.813	207.165	213.084
90	0.000	29.595	71.028	106.542	112.461
95	5.919	29.595	76.947	106.542	106.542
100	5.919	29.595	71.028	100.623	106.542
105	0.000	35.514	71.028	94.704	106.542
110	0.000	17.757	59.190	82.866	88.785
115	0.000	17.757	53.271	82.866	88.785
120	0.000	17.757	41.433	71.028	71.028
125	0.000	17.757	35.514	59.190	59.190
130	0.000	5.919	29.595	41.433	53.271
135	0.000	0.000	17.757	35.514	35.514
140	0.000	0.000	17.757	35.514	35.514
145	0.000	0.000	17.757	29.595	35.514
150	0.000	0.000	11.838	17.757	23.676
155	0.000	0.000	0.000	17.757	17.757
160	0.000	0.000	0.000	0.000	5.919
165	0.000	0.000	0.000	0.000	0.000
170	0.000	0.000	0.000	0.000	0.000
175	0.000	0.000	0.000	0.000	0.000
180	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : MX4D-8-00-L15-935-P-AWNS-DSR-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1368.32	N.A.	14.00
0-30	2853.42	N.A.	29.30
0-40	4569.22	N.A.	46.80
0-60	7719.13	N.A.	79.10
0-80	9326.43	N.A.	95.60
0-90	9511.64	N.A.	97.50
10-90	9152.53	N.A.	93.80
20-40	3200.9	N.A.	32.80
20-50	4896.96	N.A.	50.20
40-70	4189.41	N.A.	42.90
60-80	1607.3	N.A.	16.50
70-80	567.79	N.A.	5.80
80-90	185.21	N.A.	1.90
90-110	136.47	N.A.	1.40
90-120	184.08	N.A.	1.90
90-130	215.22	N.A.	2.20
90-150	240.21	N.A.	2.50
90-180	243.20	N.A.	2.50
110-180	106.73	N.A.	1.10
0-180	9754.84	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	359.11
10-20	1009.22
20-30	1485.09
30-40	1715.81
40-50	1696.06
50-60	1453.84
60-70	1039.51
70-80	567.79
80-90	185.21
90-100	72.25
100-110	64.22
110-120	47.60
120-130	31.14
130-140	15.40
140-150	9.60
150-160	2.93
160-170	0.06
170-180	0.00

IES INDOOR REPORT
PHOTOMETRIC FILENAME : MX4D-8-00-L15-935-P-AWNS-DSR-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	701	701	701	701	683	683	683	683	649	649	649	619	619	619	590	590	590	577
1	642	615	590	568	625	600	578	558	572	554	537	547	532	518	523	511	500	487
2	586	539	500	467	569	526	491	460	503	473	447	482	457	435	462	441	423	410
3	536	475	428	391	520	465	422	387	445	408	378	427	396	370	410	384	361	348
4	492	423	372	334	477	414	367	330	397	357	324	382	347	318	368	338	313	300
5	453	379	327	289	440	371	323	287	357	315	282	344	307	278	332	299	273	261
6	419	342	290	253	407	336	287	252	324	280	248	312	274	245	302	268	242	229
7	389	311	260	225	378	305	257	223	295	252	221	285	247	218	276	242	216	204
8	363	284	235	201	353	280	233	200	271	228	198	262	224	196	254	220	194	183
9	339	261	214	181	330	257	212	181	249	208	179	242	204	177	235	201	176	165
10	318	241	196	165	310	238	194	164	231	191	163	225	188	161	219	185	160	150

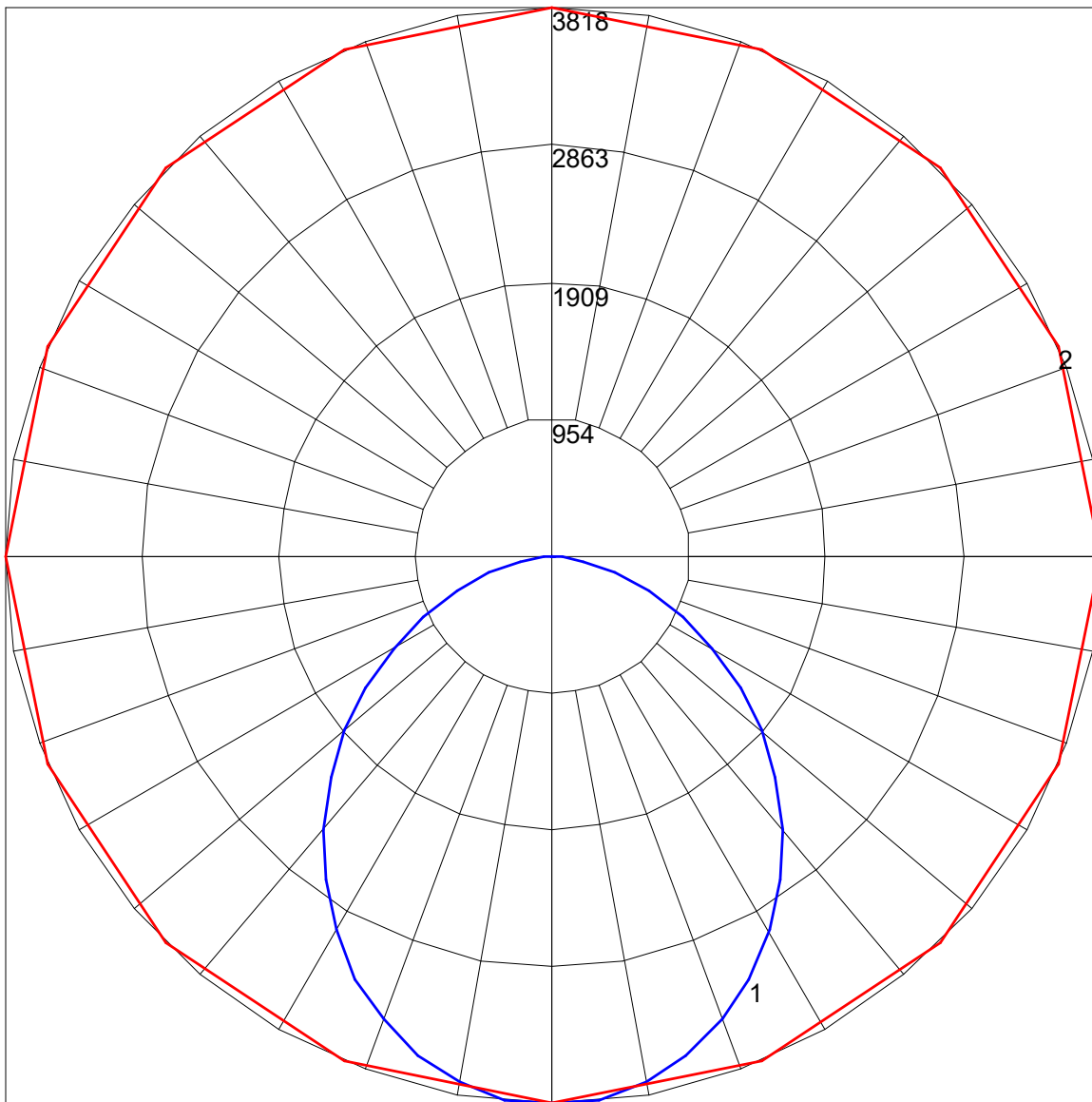
IES INDOOR REPORT
PHOTOMETRIC FILENAME : MX4D-8-00-L15-935-P-AWNS-DSR-UNV_.IES

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					UGR Viewed Endwise				
X=2H	Y=2H	18.7	20.3	19.1	20.6	21.0	19.0	20.5	19.4	20.9	21.3
	3H	20.1	21.5	20.5	21.9	22.3	20.7	22.1	21.1	22.4	22.8
	4H	20.6	21.9	21.0	22.3	22.7	21.3	22.6	21.7	23.0	23.5
	6H	20.8	22.0	21.2	22.4	22.9	21.8	23.0	22.3	23.4	23.9
	8H	20.8	22.0	21.3	22.4	22.9	22.0	23.2	22.5	23.6	24.1
	12H	20.8	22.0	21.3	22.4	22.9	22.2	23.3	22.6	23.7	24.2
4H	2H	19.3	20.6	19.7	21.0	21.4	19.5	20.8	19.9	21.2	21.6
	3H	20.9	22.0	21.3	22.5	22.9	21.4	22.5	21.8	22.9	23.4
	4H	21.5	22.4	21.9	22.9	23.4	22.2	23.2	22.6	23.6	24.1
	6H	21.8	22.7	22.3	23.1	23.6	22.8	23.7	23.3	24.2	24.7
	8H	21.9	22.7	22.3	23.1	23.7	23.1	23.9	23.6	24.4	24.9
	12H	21.9	22.6	22.4	23.1	23.6	23.3	24.0	23.8	24.5	25.1
8H	4H	21.7	22.6	22.2	23.0	23.6	22.4	23.2	22.9	23.7	24.2
	6H	22.2	22.8	22.7	23.4	23.9	23.1	23.8	23.7	24.3	24.9
	8H	22.3	22.9	22.8	23.4	24.0	23.5	24.1	24.0	24.6	25.2
	12H	22.3	22.9	22.9	23.4	24.0	23.8	24.4	24.3	24.9	25.5
12H	4H	21.8	22.5	22.3	23.0	23.5	22.4	23.1	22.9	23.7	24.2
	6H	22.2	22.9	22.8	23.4	23.9	23.2	23.8	23.7	24.3	24.9
	8H	22.4	22.9	22.9	23.5	24.1	23.5	24.1	24.1	24.6	25.2

Maximum UGR = 25.5

POLAR GRAPH



Maximum Candela = 3817.755 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)