

IES INDOOR REPORT

PHOTOMETRIC FILENAME : MX4D-6-00-L12-935-F-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM BALLABS TEST NO. 29653.0

[TESTLABV] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 06/17/2025

[MANUFAC] WILLIAMS INDOOR

[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO 64836

[LUMINAIRE] 6' DIRECT SUSPENDED LUMINAIRE

[MORE] WITH FROSTED ACRYLIC LENS

[LUMCAT] MX4D-6-00-L12-935-F-DIM-UNV

[LAMPCAT] HLM 90 CRI, 3500K CCT

[_SEARCH_SOURCETYPE] LED

[_SEARCH_APPLICATION] Indoor, Architectural, Classroom, Direct

[_SEARCH_MOUNTING] Suspended

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5851
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	90
Total Luminaire Watts	64.8
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.16
Spacing Criterion (Diagonal)	1.28
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	6.00 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	11201	10861	10691
55	10286	9868	9589
65	8755	8613	8329
75	6646	6955	6568
85	3213	4131	3901

IES INDOOR REPORT
PHOTOMETRIC FILENAME : MX4D-6-00-L12-935-F-DIM-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	2381.053	2381.053	2381.053	2381.053	2381.053
5	2391.698	2366.859	2356.213	2349.116	2349.116
10	2349.116	2324.277	2313.631	2306.534	2299.437
15	2267.500	2249.758	2232.015	2224.918	2214.273
20	2171.691	2146.851	2132.657	2111.366	2104.269
25	2047.493	2019.104	2004.910	1980.071	1976.522
30	1923.295	1891.358	1862.970	1855.873	1838.130
35	1749.417	1728.126	1703.287	1678.447	1678.447
40	1586.186	1564.895	1532.958	1525.861	1501.021
45	1405.212	1383.920	1362.629	1341.338	1341.338
50	1234.883	1206.495	1188.752	1174.558	1156.816
55	1046.812	1021.972	1004.229	986.487	975.841
60	851.643	837.449	826.804	812.610	801.964
65	656.475	652.927	645.830	628.087	624.538
70	486.146	482.598	471.952	464.855	457.758
75	305.172	315.818	319.366	308.721	301.624
80	156.135	163.232	163.232	166.780	170.329
85	49.679	53.228	63.873	56.776	60.325
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : MX4D-6-00-L12-935-F-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	854.25	N.A.	14.60
0-30	1778.67	N.A.	30.40
0-40	2847.52	N.A.	48.70
0-60	4803.65	N.A.	82.10
0-80	5775.16	N.A.	98.70
0-90	5850.97	N.A.	100.00
10-90	5626.94	N.A.	96.20
20-40	1993.27	N.A.	34.10
20-50	3048.17	N.A.	52.10
40-70	2595.19	N.A.	44.40
60-80	971.51	N.A.	16.60
70-80	332.45	N.A.	5.70
80-90	75.81	N.A.	1.30
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	5850.97	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	224.03
10-20	630.22
20-30	924.42
30-40	1068.85
40-50	1054.9
50-60	901.23
60-70	639.06
70-80	332.45
80-90	75.81
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

IES INDOOR REPORT
PHOTOMETRIC FILENAME : MX4D-6-00-L12-935-F-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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	87	82	77	83	79	75	80	77	74	72
3	91	81	73	67	89	80	72	67	77	70	65	74	69	64	71	67	63	61
4	84	72	64	57	82	71	63	57	68	62	56	66	60	55	64	59	55	52
5	77	65	56	50	75	64	56	49	62	54	49	60	53	48	58	52	48	46
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40
7	66	53	45	39	65	52	44	39	51	44	38	49	43	38	48	42	38	36
8	62	49	40	35	60	48	40	35	47	39	34	45	39	34	44	38	34	32
9	58	45	37	31	57	44	36	31	43	36	31	42	36	31	41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26

IES INDOOR REPORT
PHOTOMETRIC FILENAME : MX4D-6-00-L12-935-F-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

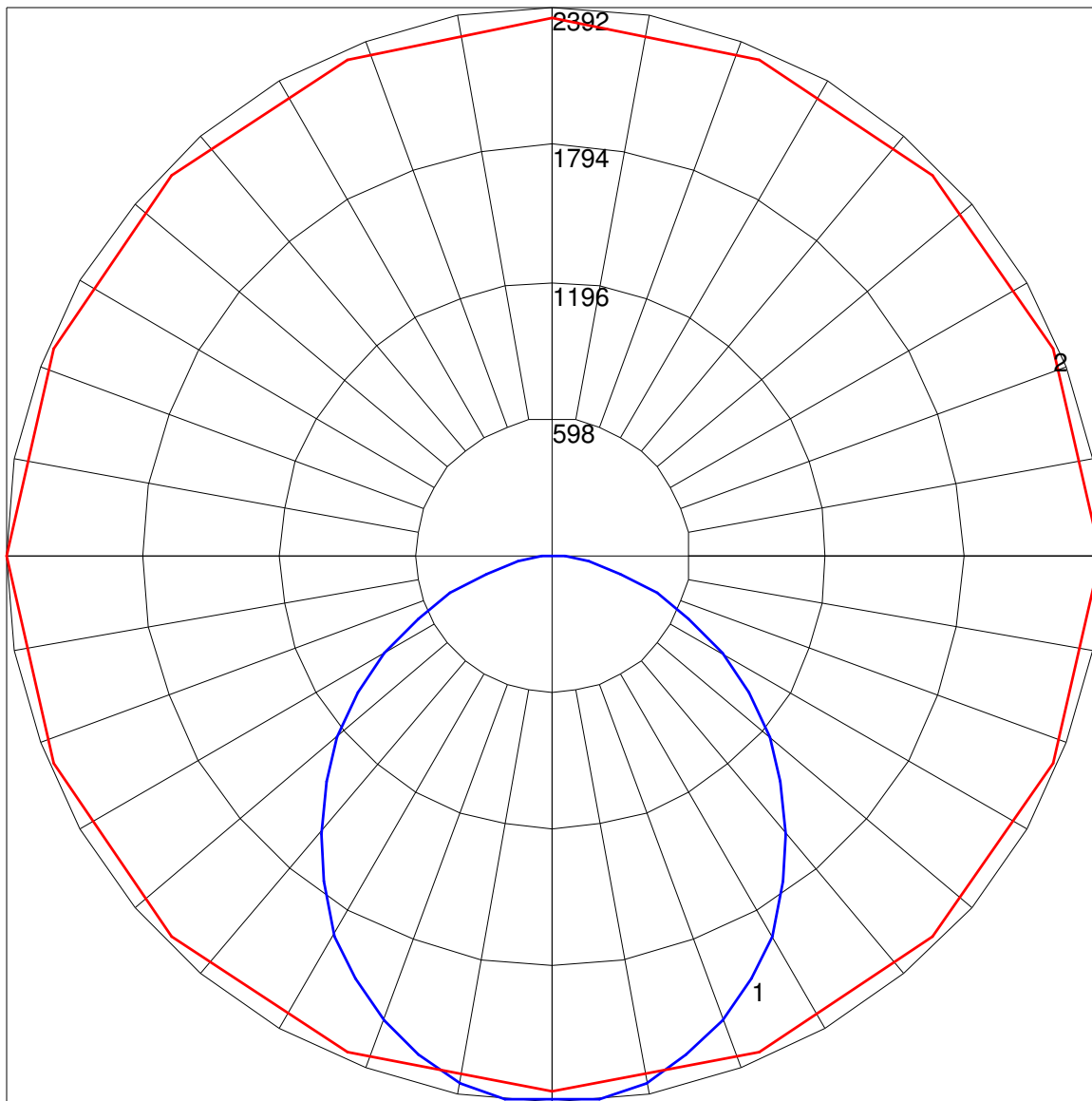
X=2H	Y=2H	20.0	21.6	20.4	21.9	22.2	19.7	21.3	20.1	21.6	21.9
	3H	21.6	23.0	21.9	23.3	23.7	21.3	22.7	21.7	23.0	23.4
	4H	22.1	23.4	22.5	23.8	24.2	21.8	23.2	22.2	23.5	23.9
	6H	22.4	23.6	22.8	24.0	24.4	22.2	23.4	22.6	23.8	24.2
	8H	22.5	23.7	22.9	24.0	24.4	22.3	23.5	22.7	23.9	24.3
	12H	22.5	23.6	22.9	24.0	24.4	22.3	23.5	22.8	23.8	24.3

UGR Viewed Endwise

4H	2H	20.5	21.9	20.9	22.2	22.6	20.3	21.7	20.7	22.0	22.4
	3H	22.3	23.4	22.7	23.8	24.2	22.1	23.2	22.5	23.6	24.0
	4H	23.0	24.0	23.4	24.4	24.8	22.7	23.7	23.2	24.2	24.6
	6H	23.4	24.3	23.8	24.7	25.1	23.2	24.1	23.6	24.5	25.0
	8H	23.5	24.3	23.9	24.7	25.2	23.3	24.2	23.8	24.6	25.1
	12H	23.5	24.3	24.0	24.7	25.2	23.4	24.1	23.9	24.6	25.1
8H	4H	23.2	24.0	23.6	24.5	24.9	23.0	23.8	23.4	24.3	24.7
	6H	23.7	24.4	24.2	24.9	25.3	23.5	24.2	24.0	24.7	25.2
	8H	23.8	24.4	24.3	25.0	25.4	23.7	24.3	24.2	24.8	25.3
	12H	23.9	24.5	24.4	25.0	25.5	23.9	24.4	24.4	24.9	25.4
12H	4H	23.2	23.9	23.7	24.4	24.9	23.0	23.7	23.5	24.2	24.7
	6H	23.7	24.3	24.2	24.8	25.3	23.6	24.2	24.1	24.7	25.2
	8H	23.9	24.4	24.4	24.9	25.5	23.8	24.3	24.3	24.8	25.4

Maximum UGR = 25.5

POLAR GRAPH



Maximum Candela = 2391.698 Located At Horizontal Angle = 0, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)