

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 39W-4-L52-940-A-(L40)-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from BALLABS TEST NO. 19087.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 05-20-2026

[MANUFAC] WILLIAMS INDOOR

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

[LUMINAIRE] 4' SURFACE MOUNT LED LUMINAIRE

[MORE] WITH FROSTED ACRYLIC RIBBED LENS

[LUMCAT] 39W-4-L52-940-A-(L40)-DIM-UNV

[LAMPCAT] HLM 90 CRI, 4000K CCT

[_SEARCH_SOURCETYPE] LED

[_SEARCH_APPLICATION] INDOOR, ARCHITECTURAL, COMMERCIAL, DIRECT, LINEAR

[_SEARCH_MOUNTING] SURFACE, SUSPENDED

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3540
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	124
Total Luminaire Watts	28.6
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.18
Spacing Criterion (90-270)	1.18
Spacing Criterion (Diagonal)	1.30
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	4.01 ft
Luminous Width (90-270)	0.79 ft
Luminous Height	0.18 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	3509	3175	3137
55	2928	2609	2623
65	2422	2136	2278
75	1766	1693	1966
85	1041	1411	1831

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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	1353.023	1353.023	1353.023	1353.023	1353.023
5	1360.536	1359.853	1359.170	1359.170	1359.853
10	1330.484	1329.801	1329.801	1330.484	1331.850
15	1283.357	1284.723	1286.772	1288.138	1289.504
20	1244.426	1245.109	1249.207	1249.890	1249.890
25	1139.927	1142.659	1146.074	1148.123	1148.123
30	1053.186	1056.601	1061.382	1064.114	1064.797
35	980.105	985.569	993.082	996.497	998.546
40	859.897	866.727	876.972	883.119	885.851
45	764.277	773.839	787.499	797.061	800.476
50	638.605	648.167	666.608	680.951	686.415
55	526.593	538.204	560.743	577.818	585.331
60	420.045	432.339	456.244	481.515	491.760
65	330.572	343.549	374.284	409.117	420.045
70	240.416	256.125	296.422	333.987	349.013
75	157.090	176.214	220.609	260.906	275.249
80	92.205	116.793	165.286	206.266	220.609
85	40.297	66.934	114.744	153.675	167.335
90	0.000	29.369	68.300	99.718	112.012
95	0.000	12.294	43.712	71.715	82.643
100	0.000	0.000	26.637	48.493	56.006
105	0.000	0.000	17.075	32.101	38.931
110	0.000	0.000	0.000	21.856	26.637
115	0.000	0.000	0.000	16.392	19.807
120	0.000	0.000	0.000	13.660	15.026
125	0.000	0.000	0.000	0.000	0.000
130	0.000	0.000	0.000	0.000	0.000
135	0.000	0.000	0.000	0.000	0.000
140	0.000	0.000	0.000	0.000	0.000
145	0.000	0.000	0.000	0.000	0.000
150	0.000	0.000	0.000	0.000	0.000
155	0.000	0.000	0.000	0.000	0.000
160	0.000	0.000	0.000	0.000	0.000
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

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	492.75	N.A.	13.90
0-30	1022.85	N.A.	28.90
0-40	1636.26	N.A.	46.20
0-60	2736.99	N.A.	77.30
0-80	3345.02	N.A.	94.50
0-90	3466.06	N.A.	97.90
10-90	3337.41	N.A.	94.30
20-40	1143.51	N.A.	32.30
20-50	1743.84	N.A.	49.30
40-70	1472.88	N.A.	41.60
60-80	608.03	N.A.	17.20
70-80	235.88	N.A.	6.70
80-90	121.04	N.A.	3.40
90-110	65.68	N.A.	1.90
90-120	72.46	N.A.	2.00
90-130	73.68	N.A.	2.10
90-150	73.68	N.A.	2.10
90-180	73.68	N.A.	2.10
110-180	8.00	N.A.	0.20
0-180	3539.74	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	128.66
10-20	364.10
20-30	530.09
30-40	613.42
40-50	600.33
50-60	500.41
60-70	372.15
70-80	235.88
80-90	121.04
90-100	47.41
100-110	18.27
110-120	6.78
120-130	1.22
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

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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	119	119	119	119	116	116	116	116	110	110	110	105	105	105	100	100	100	98
1	108	103	99	95	105	101	97	93	96	93	90	92	89	86	88	86	83	81
2	98	90	83	77	95	88	82	76	84	79	74	80	76	72	77	74	70	68
3	90	79	71	65	87	78	70	64	74	68	63	71	66	61	69	64	60	58
4	82	71	62	55	80	69	61	55	66	59	54	64	58	53	61	56	52	50
5	76	63	54	48	74	62	54	48	60	52	47	58	51	46	55	50	45	43
6	70	57	48	42	68	56	48	42	54	47	41	52	46	41	50	45	40	38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	46	40	36	34
8	61	48	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	30
9	57	44	36	30	55	43	35	30	42	35	30	41	34	30	39	34	29	27
10	53	40	33	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

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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	14.3	15.8	14.7	16.2	16.6	15.4	17.0	15.8	17.4	17.7
	3H	15.6	17.1	16.0	17.4	17.8	17.5	18.9	17.9	19.3	19.7
	4H	16.0	17.4	16.5	17.8	18.2	18.4	19.7	18.8	20.1	20.5
	6H	16.3	17.6	16.7	18.0	18.4	19.3	20.5	19.7	20.9	21.4
	8H	16.4	17.6	16.8	18.0	18.4	19.7	20.9	20.2	21.3	21.8
	12H	16.4	17.5	16.9	18.0	18.4	20.1	21.3	20.6	21.7	22.2

UGR Viewed Endwise

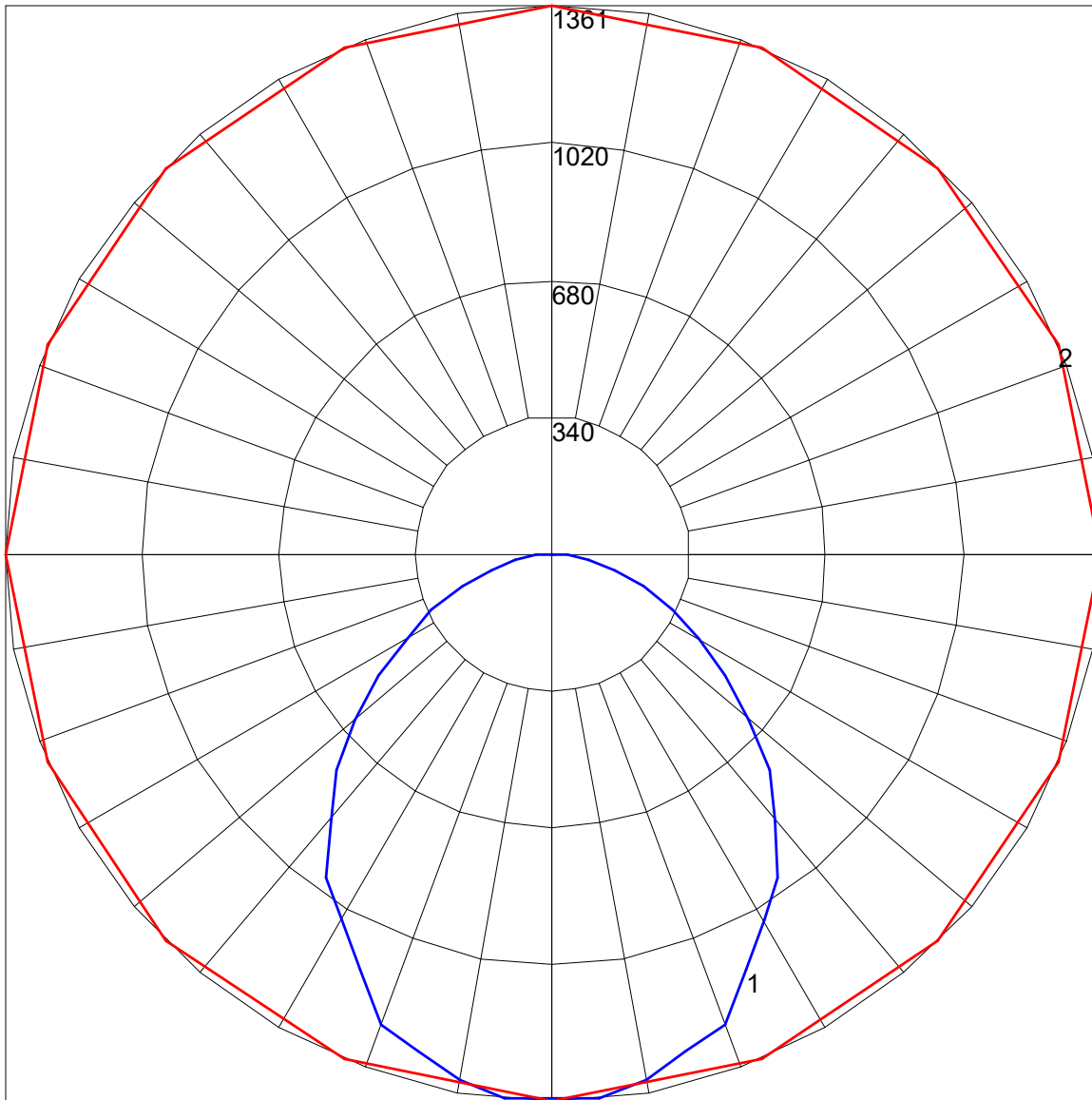
4H	2H	14.9	16.3	15.4	16.7	17.1	15.9	17.2	16.3	17.6	18.0
	3H	16.5	17.6	17.0	18.1	18.5	18.1	19.3	18.6	19.7	20.2
	4H	17.0	18.1	17.5	18.5	19.0	19.2	20.2	19.7	20.7	21.1
	6H	17.4	18.3	17.9	18.8	19.3	20.3	21.2	20.7	21.6	22.1
	8H	17.5	18.4	18.0	18.8	19.3	20.8	21.6	21.3	22.1	22.6
	12H	17.6	18.3	18.1	18.8	19.4	21.3	22.1	21.9	22.6	23.1

8H	4H	17.5	18.3	18.0	18.8	19.3	19.4	20.2	19.9	20.7	21.2
	6H	18.0	18.7	18.5	19.2	19.7	20.6	21.3	21.1	21.8	22.4
	8H	18.1	18.8	18.7	19.3	19.9	21.2	21.9	21.8	22.4	23.0
	12H	18.3	18.8	18.8	19.4	20.0	22.0	22.5	22.5	23.1	23.7

12H	4H	17.6	18.3	18.1	18.9	19.4	19.4	20.1	19.9	20.7	21.2
	6H	18.1	18.8	18.7	19.3	19.9	20.6	21.3	21.2	21.8	22.4
	8H	18.4	19.0	18.9	19.5	20.1	21.3	21.9	21.9	22.4	23.0

Maximum UGR = 23.7

POLAR GRAPH



Maximum Candela = 1360.536 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.)