

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 39-4-L52-830-A-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from BALLABS TEST NO. 19011.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 12-03-2025

[MANUFAC] WILLIAMS INDOOR

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

[LUMINAIRE] 4' SURFACE MOUNT LED LUMINAIRE

[MORE] WITH FROSTED ACRYLIC RIBBED LENS

[LUMCAT] 39-4-L52-830-A-DIM-UNV

[LAMPCAT]HLM 80 CRI, 3000K 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	5176
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	136
Total Luminaire Watts	38
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	5131	4642	4587
55	4281	3815	3835
65	3542	3123	3331
75	2583	2476	2874
85	1523	2063	2678

IES INDOOR REPORT
 PHOTOMETRIC FILENAME : 39-4-L52-830-A-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	1978.306	1978.306	1978.306	1978.306	1978.306
5	1989.291	1988.292	1987.294	1987.294	1988.292
10	1945.351	1944.352	1944.352	1945.351	1947.348
15	1876.445	1878.442	1881.438	1883.435	1885.432
20	1819.522	1820.521	1826.513	1827.511	1827.511
25	1666.730	1670.725	1675.718	1678.714	1678.714
30	1539.903	1544.896	1551.887	1555.881	1556.880
35	1433.048	1441.038	1452.023	1457.016	1460.012
40	1257.288	1267.274	1282.254	1291.242	1295.236
45	1117.478	1131.459	1151.432	1165.413	1170.406
50	933.728	947.709	974.673	995.644	1003.633
55	769.951	786.928	819.883	844.849	855.834
60	614.164	632.139	667.092	704.041	719.021
65	483.342	502.316	547.255	598.185	614.164
70	351.521	374.490	433.410	488.335	510.305
75	229.687	257.649	322.561	381.480	402.452
80	134.816	170.767	241.671	301.589	322.561
85	58.920	97.867	167.772	224.694	244.667
90	0.000	42.942	99.864	145.801	163.777
95	0.000	17.976	63.913	104.857	120.835
100	0.000	0.000	38.947	70.903	81.888
105	0.000	0.000	24.966	46.936	56.922
110	0.000	0.000	0.000	31.956	38.947
115	0.000	0.000	0.000	23.967	28.961
120	0.000	0.000	0.000	19.973	21.970
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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 39-4-L52-830-A-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	720.47	N.A.	13.90
0-30	1495.54	N.A.	28.90
0-40	2392.44	N.A.	46.20
0-60	4001.86	N.A.	77.30
0-80	4890.89	N.A.	94.50
0-90	5067.86	N.A.	97.90
10-90	4879.75	N.A.	94.30
20-40	1671.97	N.A.	32.30
20-50	2549.73	N.A.	49.30
40-70	2153.55	N.A.	41.60
60-80	889.02	N.A.	17.20
70-80	344.89	N.A.	6.70
80-90	176.98	N.A.	3.40
90-110	96.03	N.A.	1.90
90-120	105.94	N.A.	2.00
90-130	107.73	N.A.	2.10
90-150	107.73	N.A.	2.10
90-180	107.73	N.A.	2.10
110-180	11.70	N.A.	0.20
0-180	5175.59	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	188.11
10-20	532.36
20-30	775.07
30-40	896.90
40-50	877.76
50-60	731.66
60-70	544.13
70-80	344.89
80-90	176.98
90-100	69.31
100-110	26.72
110-120	9.91
120-130	1.79
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 : 39-4-L52-830-A-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	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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 39-4-L52-830-A-DIM-UNV_.IES

UGR TABLE - CORRECTED

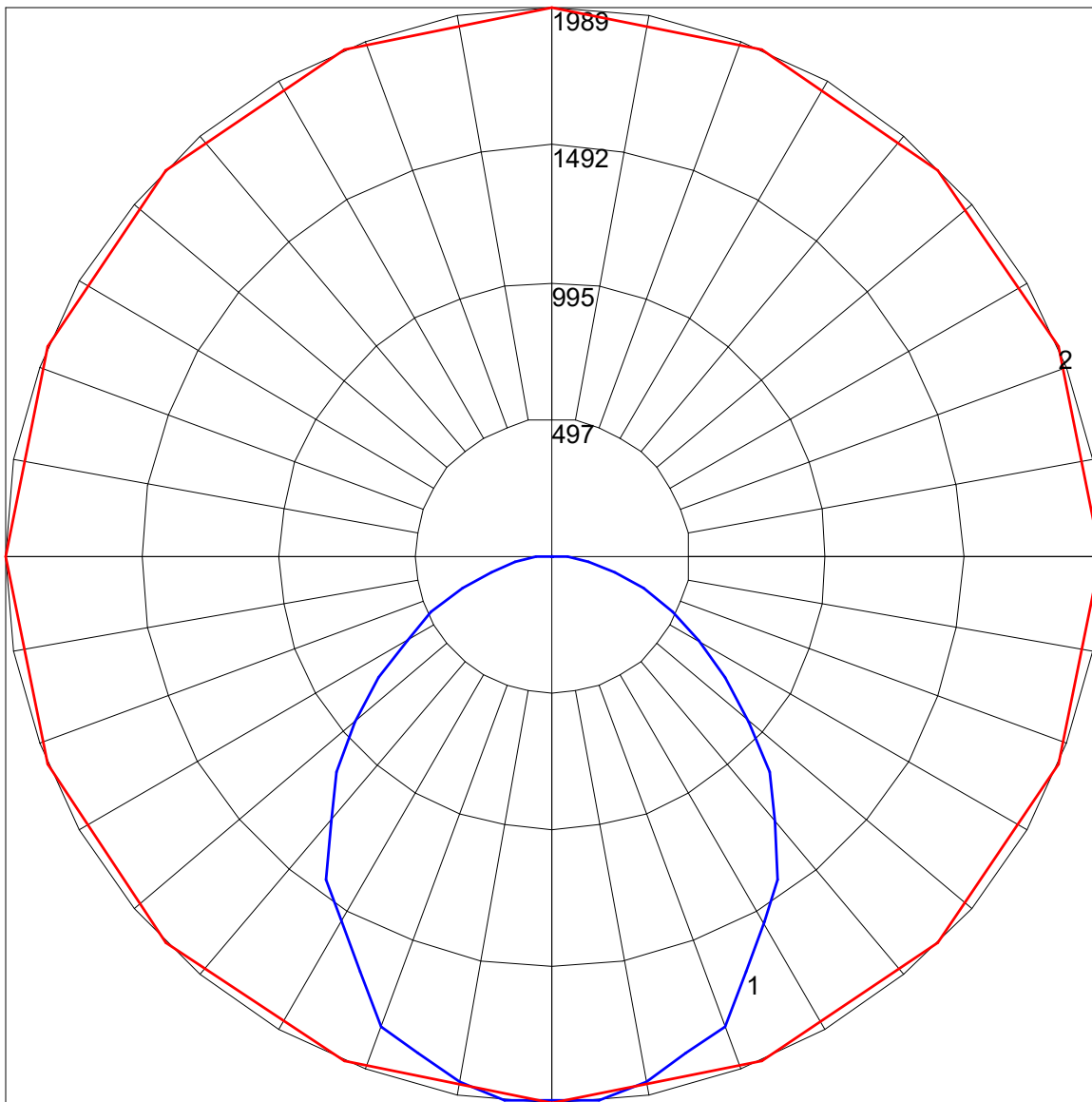
Reflectances

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					UGR Viewed Endwise				
X=2H	Y=2H	15.6	17.1	16.0	17.5	17.9	16.7	18.3	17.1	18.7	19.0
	3H	16.9	18.4	17.3	18.7	19.1	18.8	20.2	19.2	20.6	21.0
	4H	17.3	18.7	17.8	19.1	19.5	19.7	21.0	20.1	21.4	21.8
	6H	17.6	18.9	18.0	19.3	19.7	20.6	21.8	21.0	22.2	22.7
	8H	17.7	18.9	18.1	19.3	19.7	21.0	22.2	21.5	22.6	23.1
	12H	17.7	18.8	18.2	19.3	19.7	21.4	22.6	21.9	23.0	23.5
4H	2H	16.2	17.6	16.7	18.0	18.4	17.2	18.5	17.6	18.9	19.3
	3H	17.8	18.9	18.3	19.4	19.8	19.4	20.6	19.9	21.0	21.4
	4H	18.3	19.4	18.8	19.8	20.3	20.5	21.5	21.0	22.0	22.4
	6H	18.7	19.6	19.2	20.1	20.6	21.6	22.5	22.0	22.9	23.4
	8H	18.8	19.7	19.3	20.1	20.6	22.1	22.9	22.6	23.4	23.9
	12H	18.9	19.6	19.4	20.1	20.7	22.6	23.4	23.2	23.9	24.4
8H	4H	18.8	19.6	19.3	20.1	20.6	20.7	21.5	21.2	22.0	22.5
	6H	19.3	20.0	19.8	20.5	21.0	21.9	22.6	22.4	23.1	23.7
	8H	19.4	20.1	20.0	20.6	21.2	22.5	23.2	23.1	23.7	24.3
	12H	19.6	20.1	20.1	20.7	21.3	23.3	23.8	23.8	24.4	25.0
12H	4H	18.9	19.6	19.4	20.2	20.7	20.7	21.4	21.2	22.0	22.5
	6H	19.4	20.1	20.0	20.6	21.2	21.9	22.6	22.5	23.1	23.7
	8H	19.7	20.3	20.2	20.8	21.4	22.6	23.2	23.2	23.7	24.3

Maximum UGR = 25.0

POLAR GRAPH



Maximum Candela = 1989.291 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.)