

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 39-4-L52-840-A-(L40)-DIM1-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] 10-23-2025

[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-L52-840-A-(L40)-DIM1-UNV

[LAMPCAT]HLM 80 CRI, 4000K CCT

[_SEARCH_SOURCE]TYPE] 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	4165
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	145
Total Luminaire Watts	28.63
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	4129	3735	3691
55	3445	3070	3086
65	2850	2513	2680
75	2078	1992	2313
85	1225	1660	2155

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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	1591.909	1591.909	1591.909	1591.909	1591.909
5	1600.748	1599.945	1599.141	1599.141	1599.945
10	1565.390	1564.587	1564.587	1565.390	1566.998
15	1509.943	1511.550	1513.961	1515.568	1517.175
20	1464.138	1464.942	1469.763	1470.567	1470.567
25	1341.189	1344.404	1348.422	1350.832	1350.832
30	1239.133	1243.151	1248.777	1251.991	1252.794
35	1153.150	1159.578	1168.418	1172.436	1174.846
40	1011.718	1019.754	1031.808	1039.040	1042.254
45	899.216	910.466	926.538	937.788	941.806
50	751.355	762.605	784.302	801.178	807.606
55	619.567	633.228	659.746	679.836	688.675
60	494.207	508.672	536.797	566.530	578.584
65	388.937	404.205	440.367	481.350	494.207
70	282.863	301.346	348.757	392.955	410.634
75	184.825	207.326	259.559	306.971	323.846
80	108.484	137.414	194.468	242.684	259.559
85	47.412	78.752	135.003	180.807	196.879
90	0.000	34.554	80.359	117.324	131.789
95	0.000	14.465	51.430	84.377	97.234
100	0.000	0.000	31.340	57.055	65.894
105	0.000	0.000	20.090	37.769	45.805
110	0.000	0.000	0.000	25.715	31.340
115	0.000	0.000	0.000	19.286	23.304
120	0.000	0.000	0.000	16.072	17.679
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	579.75	N.A.	13.90
0-30	1203.44	N.A.	28.90
0-40	1925.16	N.A.	46.20
0-60	3220.23	N.A.	77.30
0-80	3935.61	N.A.	94.50
0-90	4078.02	N.A.	97.90
10-90	3926.65	N.A.	94.30
20-40	1345.41	N.A.	32.30
20-50	2051.73	N.A.	49.30
40-70	1732.93	N.A.	41.60
60-80	715.38	N.A.	17.20
70-80	277.53	N.A.	6.70
80-90	142.41	N.A.	3.40
90-110	77.28	N.A.	1.90
90-120	85.25	N.A.	2.00
90-130	86.69	N.A.	2.10
90-150	86.69	N.A.	2.10
90-180	86.69	N.A.	2.10
110-180	9.41	N.A.	0.20
0-180	4164.71	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	151.37
10-20	428.38
20-30	623.69
30-40	721.72
40-50	706.32
50-60	588.76
60-70	437.85
70-80	277.53
80-90	142.41
90-100	55.78
100-110	21.50
110-120	7.97
120-130	1.44
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

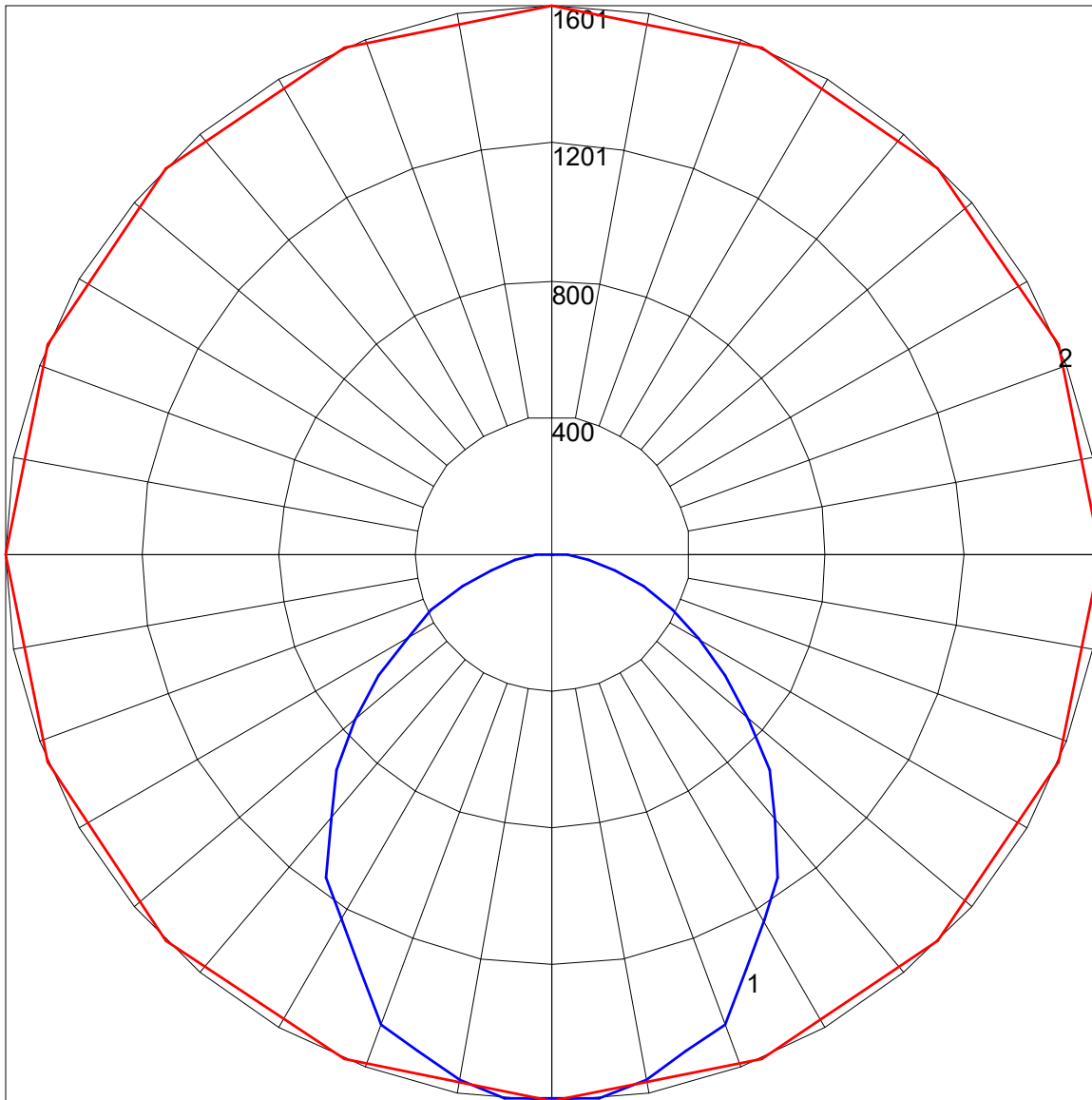
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UGR TABLE - CORRECTED

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					UGR Viewed Endwise				
X=2H	Y=2H	14.9	16.4	15.3	16.8	17.2	16.0	17.6	16.4	18.0	18.3
	3H	16.2	17.7	16.6	18.0	18.4	18.1	19.5	18.5	19.9	20.3
	4H	16.6	18.0	17.1	18.4	18.8	19.0	20.3	19.4	20.7	21.1
	6H	16.9	18.2	17.3	18.6	19.0	19.9	21.1	20.3	21.5	22.0
	8H	17.0	18.2	17.4	18.6	19.0	20.3	21.5	20.8	21.9	22.4
	12H	17.0	18.1	17.5	18.6	19.0	20.7	21.9	21.2	22.3	22.8
4H	2H	15.5	16.9	16.0	17.3	17.7	16.5	17.8	16.9	18.2	18.6
	3H	17.1	18.2	17.6	18.7	19.1	18.7	19.9	19.2	20.3	20.7
	4H	17.6	18.7	18.1	19.1	19.6	19.8	20.8	20.3	21.3	21.7
	6H	18.0	18.9	18.5	19.4	19.9	20.9	21.8	21.3	22.2	22.7
	8H	18.1	19.0	18.6	19.4	19.9	21.4	22.2	21.9	22.7	23.2
	12H	18.2	18.9	18.7	19.4	20.0	21.9	22.7	22.5	23.2	23.7
8H	4H	18.1	18.9	18.6	19.4	19.9	20.0	20.8	20.5	21.3	21.8
	6H	18.6	19.3	19.1	19.8	20.3	21.2	21.9	21.7	22.4	23.0
	8H	18.7	19.4	19.3	19.9	20.5	21.8	22.5	22.4	23.0	23.6
	12H	18.9	19.4	19.4	20.0	20.6	22.6	23.1	23.1	23.7	24.3
12H	4H	18.2	18.9	18.7	19.5	20.0	20.0	20.7	20.5	21.3	21.8
	6H	18.7	19.4	19.3	19.9	20.5	21.2	21.9	21.8	22.4	23.0
	8H	19.0	19.6	19.5	20.1	20.7	21.9	22.5	22.5	23.0	23.6

Maximum UGR = 24.3

POLAR GRAPH



Maximum Candela = 1600.748 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.)