



IES INDOOR REPORT
PHOTOMETRIC FILENAME : 39W-4-L30-840-A-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] 04-20-2023
 [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-L30-840-A-DIM-UNV
 [LAMPCAT] HLM 80 CRI, 4000K CCT
 [_SEARCH_SOURCETYPE] LED
 [_SEARCH_APPLICATION] INDOOR, ARCHETECTURAL, COMMERCIAL, DIRECT, LINEAR
 [_SEARCH_MOUNTING] SURFACE, SUSPENDEd

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3118
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	137
Total Luminaire Watts	22.8
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	3091	2796	2763
55	2579	2298	2310
65	2134	1881	2006
75	1556	1492	1732
85	917	1243	1613

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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	1191.734	1191.734	1191.734	1191.734	1191.734
5	1198.352	1197.750	1197.148	1197.148	1197.750
10	1171.882	1171.280	1171.280	1171.882	1173.085
15	1130.373	1131.576	1133.381	1134.584	1135.787
20	1096.083	1096.684	1100.294	1100.895	1100.895
25	1004.041	1006.447	1009.455	1011.260	1011.260
30	927.640	930.648	934.859	937.265	937.867
35	863.270	868.083	874.700	877.708	879.513
40	757.392	763.408	772.431	777.846	780.252
45	673.170	681.593	693.624	702.046	705.054
50	562.479	570.901	587.144	599.777	604.590
55	463.820	474.047	493.899	508.938	515.556
60	369.973	380.801	401.857	424.115	433.139
65	291.166	302.596	329.667	360.348	369.973
70	211.757	225.593	261.087	294.174	307.408
75	138.364	155.208	194.311	229.804	242.438
80	81.214	102.871	145.583	181.678	194.311
85	35.493	58.955	101.066	135.356	147.388
90	0.000	25.868	60.158	87.831	98.659
95	0.000	10.828	38.501	63.166	72.791
100	0.000	0.000	23.462	42.712	49.330
105	0.000	0.000	15.040	28.274	34.290
110	0.000	0.000	0.000	19.251	23.462
115	0.000	0.000	0.000	14.438	17.446
120	0.000	0.000	0.000	12.032	13.235
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	434.01	N.A.	13.90
0-30	900.92	N.A.	28.90
0-40	1441.21	N.A.	46.20
0-60	2410.73	N.A.	77.30
0-80	2946.28	N.A.	94.50
0-90	3052.89	N.A.	97.90
10-90	2939.57	N.A.	94.30
20-40	1007.2	N.A.	32.30
20-50	1535.96	N.A.	49.30
40-70	1297.3	N.A.	41.60
60-80	535.55	N.A.	17.20
70-80	207.76	N.A.	6.70
80-90	106.61	N.A.	3.40
90-110	57.85	N.A.	1.90
90-120	63.82	N.A.	2.00
90-130	64.90	N.A.	2.10
90-150	64.90	N.A.	2.10
90-180	64.90	N.A.	2.10
110-180	7.05	N.A.	0.20
0-180	3117.78	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	113.32
10-20	320.69
20-30	466.90
30-40	540.29
40-50	528.77
50-60	440.75
60-70	327.78
70-80	207.76
80-90	106.61
90-100	41.75
100-110	16.10
110-120	5.97
120-130	1.08
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

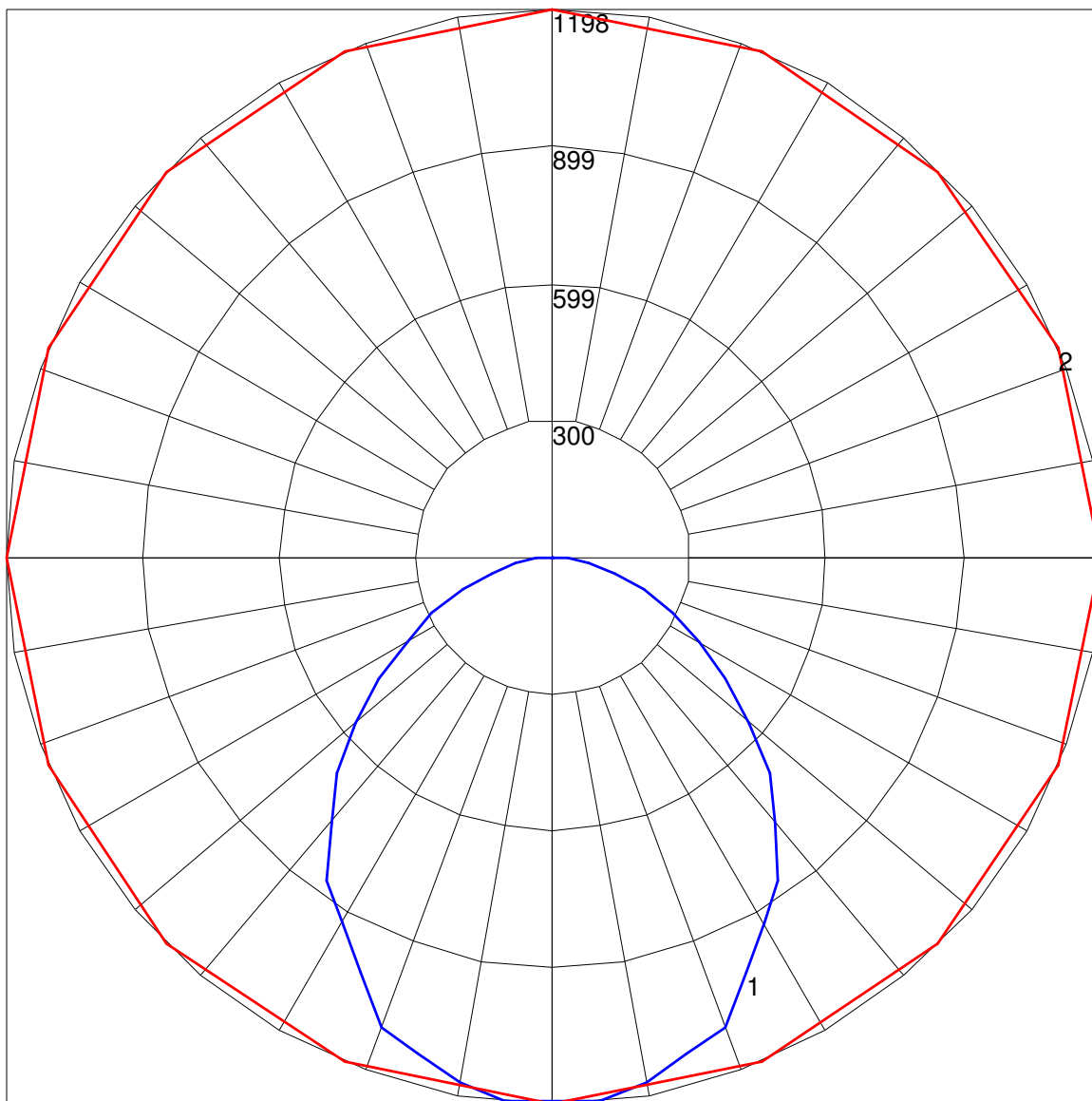
Reflectances

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	13.9	15.4	14.3	15.8	16.2	15.0	16.6	15.4	17.0	17.3
	3H	15.2	16.7	15.6	17.0	17.4	17.1	18.5	17.5	18.9	19.3
	4H	15.6	17.0	16.1	17.4	17.8	18.0	19.3	18.4	19.7	20.1
	6H	15.9	17.2	16.3	17.6	18.0	18.9	20.1	19.3	20.5	20.9
	8H	16.0	17.2	16.4	17.6	18.0	19.3	20.5	19.8	20.9	21.4
	12H	16.0	17.1	16.5	17.6	18.0	19.7	20.9	20.2	21.3	21.8
4H	2H	14.5	15.9	15.0	16.3	16.7	15.5	16.8	15.9	17.2	17.6
	3H	16.1	17.2	16.6	17.7	18.1	17.7	18.9	18.2	19.3	19.7
	4H	16.6	17.7	17.1	18.1	18.6	18.8	19.8	19.2	20.3	20.7
	6H	17.0	17.9	17.5	18.4	18.9	19.9	20.7	20.3	21.2	21.7
	8H	17.1	17.9	17.6	18.4	18.9	20.4	21.2	20.9	21.7	22.2
	12H	17.2	17.9	17.7	18.4	19.0	20.9	21.7	21.5	22.2	22.7
8H	4H	17.1	17.9	17.6	18.4	18.9	19.0	19.8	19.5	20.3	20.8
	6H	17.6	18.3	18.1	18.8	19.3	20.2	20.9	20.7	21.4	22.0
	8H	17.7	18.4	18.3	18.9	19.5	20.8	21.5	21.4	22.0	22.6
	12H	17.9	18.4	18.4	19.0	19.6	21.6	22.1	22.1	22.7	23.3
12H	4H	17.2	17.9	17.7	18.5	19.0	19.0	19.7	19.5	20.3	20.8
	6H	17.7	18.4	18.3	18.9	19.5	20.2	20.9	20.8	21.4	22.0
	8H	18.0	18.6	18.5	19.1	19.7	20.9	21.5	21.5	22.0	22.6

Maximum UGR = 23.3

POLAR GRAPH



Maximum Candela = 1198.352 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.)