



IES INDOOR REPORT

PHOTOMETRIC FILENAME : AT1-14-L30-835-D-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN from BALLABS TEST NO. 19432.0
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
 [ISSUEDATE] 19-DEC-2019
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
 [LUMINAIRE] 2-32 LED 22" ARRAYS 1x4' RECESSED LUMINAIRE
 [MORE] WHITE REFLECTOR w/2 PIECE FROSTED ACRLIC LENS IN DOOR
 [LUMCAT] AT1-14-L30-835-D-DIM-UNV

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3028
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	103
Total Luminaire Watts	29.5
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.14
Spacing Criterion (90-270)	1.10
Spacing Criterion (Diagonal)	1.22
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.76 ft
Luminous Width (90-270)	0.77 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	3746	3677	3627
55	3144	3136	3058
65	2771	2771	2223
75	2185	1823	1634
85	1737	1073	766

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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	1374.181	1374.181	1374.181	1374.181	1374.181
5	1384.982	1383.782	1383.782	1383.782	1382.582
10	1345.377	1342.977	1340.576	1338.176	1338.176
15	1292.570	1292.570	1285.369	1280.569	1280.569
20	1239.763	1236.163	1227.762	1218.160	1215.760
25	1124.548	1120.948	1108.946	1104.145	1098.145
30	1022.535	1017.734	1005.732	996.131	993.731
35	933.723	928.922	918.121	909.720	904.919
40	813.707	807.706	799.305	790.904	787.304
45	714.094	705.693	700.892	694.891	691.291
50	606.080	601.279	596.479	594.078	592.878
55	486.064	486.064	484.864	480.063	472.862
60	396.052	397.252	397.252	380.450	368.449
65	315.642	318.042	315.642	276.036	253.233
70	230.430	234.031	216.028	177.623	174.023
75	152.420	158.421	127.217	116.415	114.015
80	90.012	85.211	72.009	60.008	55.207
85	40.805	33.604	25.203	19.203	18.002
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	493.45	N.A.	16.30
0-30	1006.82	N.A.	33.30
0-40	1577.17	N.A.	52.10
0-60	2553.94	N.A.	84.30
0-80	2993.69	N.A.	98.90
0-90	3028.03	N.A.	100.00
10-90	2897.59	N.A.	95.70
20-40	1083.72	N.A.	35.80
20-50	1624.03	N.A.	53.60
40-70	1272.12	N.A.	42.00
60-80	439.74	N.A.	14.50
70-80	144.40	N.A.	4.80
80-90	34.34	N.A.	1.10
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	3028.03	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	130.44
10-20	363.01
20-30	513.37
30-40	570.35
40-50	540.31
50-60	436.46
60-70	295.34
70-80	144.40
80-90	34.34
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

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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	143	143	143	143	140	140	140	140	133	133	133	128	128	128	122	122	122	120
1	132	127	122	118	129	124	120	116	119	115	112	114	111	109	110	108	106	103
2	121	112	104	98	118	110	103	97	105	100	95	101	97	92	98	94	90	88
3	111	99	90	83	108	97	89	82	94	87	81	91	84	79	88	82	78	75
4	102	89	79	71	99	87	78	71	84	76	70	81	74	69	79	73	68	65
5	94	80	70	62	92	79	69	62	76	68	61	74	66	60	72	65	60	57
6	88	72	62	55	85	71	62	55	69	61	54	67	60	54	65	59	53	51
7	81	66	56	49	79	65	55	49	63	55	48	62	54	48	60	53	48	45
8	76	60	51	44	74	60	50	44	58	50	44	57	49	43	55	48	43	41
9	71	56	46	40	70	55	46	40	54	45	40	52	45	39	51	44	39	37
10	67	52	42	36	65	51	42	36	50	42	36	49	41	36	48	41	36	34

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UGR TABLE - CORRECTED

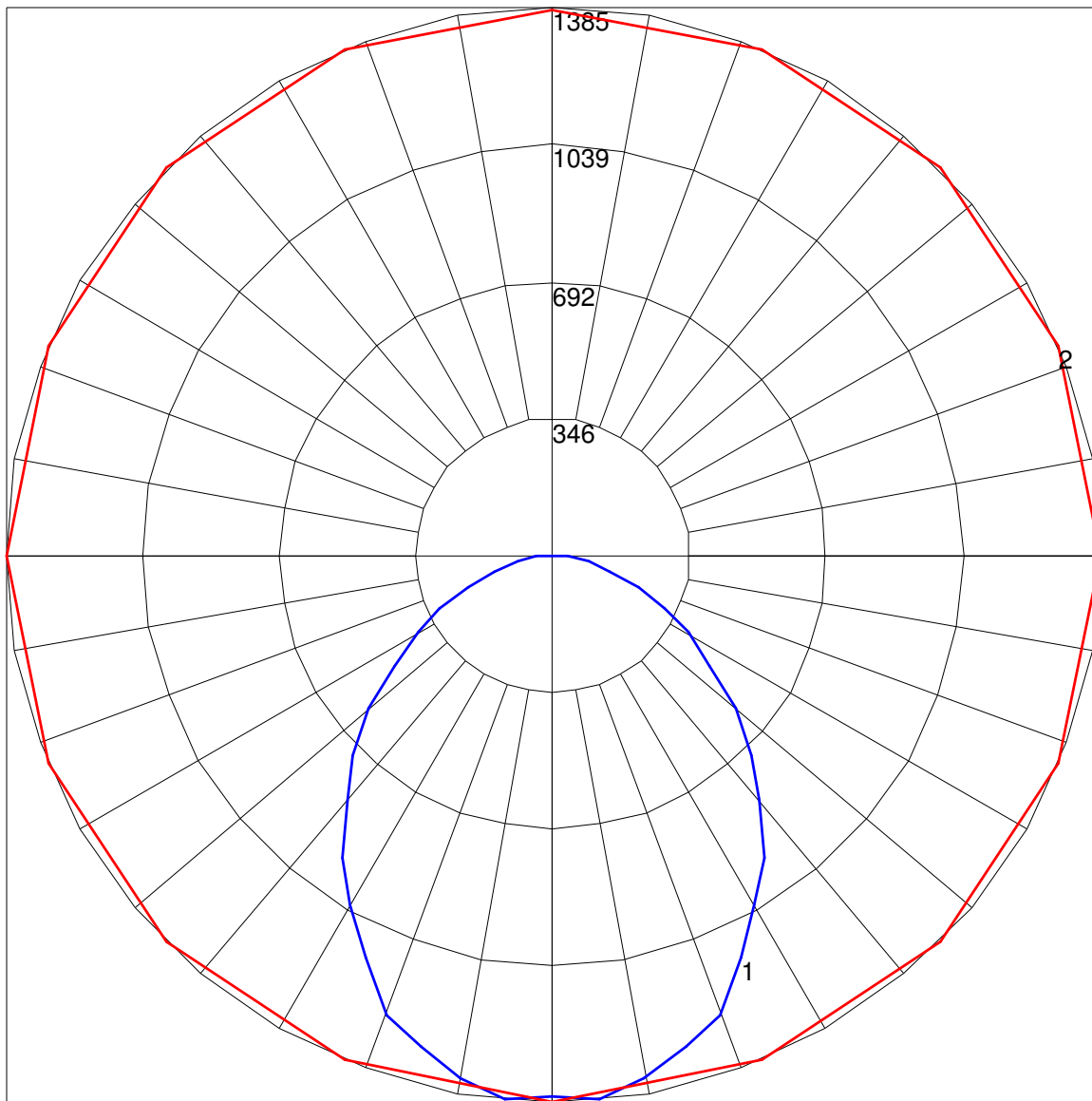
Reflectances

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	15.1	16.6	15.4	16.9	17.2	14.9	16.4	15.2	16.7	17.0
	3H	16.7	18.1	17.1	18.4	18.8	16.0	17.4	16.4	17.7	18.0
	4H	17.3	18.6	17.7	18.9	19.3	16.3	17.6	16.7	18.0	18.4
	6H	17.6	18.8	18.1	19.2	19.6	16.6	17.8	17.0	18.1	18.5
	8H	17.8	18.9	18.2	19.3	19.7	16.6	17.7	17.0	18.1	18.5
	12H	17.9	18.9	18.3	19.3	19.8	16.6	17.7	17.0	18.1	18.5
4H	2H	15.7	17.0	16.1	17.3	17.7	15.5	16.8	15.9	17.1	17.5
	3H	17.5	18.5	17.9	18.9	19.3	16.8	17.9	17.2	18.3	18.7
	4H	18.1	19.1	18.6	19.5	20.0	17.2	18.2	17.7	18.6	19.0
	6H	18.6	19.5	19.1	19.9	20.4	17.5	18.4	18.0	18.8	19.3
	8H	18.8	19.6	19.3	20.0	20.5	17.6	18.4	18.0	18.8	19.3
	12H	18.9	19.6	19.4	20.1	20.6	17.6	18.3	18.1	18.8	19.3
8H	4H	18.3	19.1	18.8	19.5	20.0	17.5	18.3	17.9	18.7	19.2
	6H	18.9	19.5	19.4	20.0	20.5	17.8	18.5	18.3	19.0	19.5
	8H	19.1	19.7	19.6	20.2	20.7	17.9	18.5	18.5	19.0	19.5
	12H	19.3	19.8	19.8	20.3	20.9	18.0	18.5	18.5	19.0	19.6
12H	4H	18.3	19.0	18.8	19.5	19.9	17.5	18.2	18.0	18.7	19.1
	6H	18.9	19.5	19.4	19.9	20.5	17.9	18.5	18.4	18.9	19.5
	8H	19.2	19.7	19.7	20.2	20.7	18.0	18.5	18.5	19.0	19.6

Maximum UGR = 20.9

POLAR GRAPH



Maximum Candela = 1384.982 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.)