



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : AT1-24-L55-835-D-(L50)-DIM-UNV\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM BALLABS TEST NO. 18878.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 15-JULY-2020

[MANUFAC] WILLIAMS INDOOR

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

[LUMINAIRE] 4-32LED 22"ARRAYS-SERIES 2x4'RECESSED LUMINAIRE w/WHITE

[MORE] REFL, FROST CONCAVE ACRYLIC LENS w/SHALLOW ACRYLIC CENTER

[MORE] DIFFUSER EVERLINE #D10CC55UNVTZ-C @ 98 SETPOINT WIRED ZH8

[LUMCAT] AT1-24-L55-835-D-(L50)-DIM-UNV

[LAMPCAT] HLM 80 CRI 3500K CCT

[\_SEARCH\_SOURCETYPE] LED

[\_SEARCH\_APPLICATION] Indoor, Architectural, Classroom, Commercial, Educational, Office, Direct

[\_SEARCH\_MOUNTING] Ceiling, Recessed

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5042
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	119
Total Luminaire Watts	42.3
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.12
Spacing Criterion (90-270)	1.28
Spacing Criterion (Diagonal)	1.34
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.76 ft
Luminous Width (90-270)	1.77 ft
Luminous Height	0.00 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2322	2725	2967
55	2023	2488	2698
65	1800	2376	2546
75	1548	2290	2348
85	1326	1378	1429

IES INDOOR REPORT  
 PHOTOMETRIC FILENAME : AT1-24-L55-835-D-(L50)-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>
<b>0</b>	1920.056	1920.056	1920.056	1920.056	1920.056
<b>5</b>	1910.789	1908.009	1908.009	1910.789	1910.789
<b>10</b>	1864.456	1865.383	1876.503	1885.769	1889.476
<b>15</b>	1781.056	1788.469	1810.709	1832.949	1844.996
<b>20</b>	1705.069	1719.896	1762.522	1808.856	1827.389
<b>25</b>	1541.049	1562.362	1620.742	1683.756	1709.702
<b>30</b>	1421.509	1451.162	1531.782	1612.402	1644.836
<b>35</b>	1297.335	1332.548	1431.702	1521.589	1553.095
<b>40</b>	1137.948	1183.355	1295.482	1382.589	1405.755
<b>45</b>	1013.775	1068.448	1189.842	1272.315	1295.482
<b>50</b>	853.461	910.915	1023.968	1092.541	1111.075
<b>55</b>	716.314	773.768	881.261	936.861	955.395
<b>60</b>	582.874	639.401	733.921	780.254	791.374
<b>65</b>	469.821	533.761	619.941	656.081	664.421
<b>70</b>	356.767	426.267	500.401	526.347	530.054
<b>75</b>	247.420	312.287	366.034	375.301	375.301
<b>80</b>	157.534	222.400	237.227	182.554	171.434
<b>85</b>	71.353	96.373	74.133	74.133	76.913
<b>90</b>	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : AT1-24-L55-835-D-(L50)-DIM-UNV\_.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	694.62	N.A.	13.80
0-30	1449.19	N.A.	28.70
0-40	2337.38	N.A.	46.40
0-60	3997.63	N.A.	79.30
0-80	4943.63	N.A.	98.10
0-90	5041.9	N.A.	100.00
10-90	4860.7	N.A.	96.40
20-40	1642.76	N.A.	32.60
20-50	2536.49	N.A.	50.30
40-70	2247.86	N.A.	44.60
60-80	946.00	N.A.	18.80
70-80	358.39	N.A.	7.10
80-90	98.27	N.A.	1.90
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	5041.9	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	181.20
10-20	513.42
20-30	754.57
30-40	888.19
40-50	893.73
50-60	766.52
60-70	587.61
70-80	358.39
80-90	98.27
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

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : AT1-24-L55-835-D-(L50)-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	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	75	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	62	70	65	61	59
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34
8	61	48	39	33	59	47	39	33	45	38	33	44	38	33	43	37	33	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : AT1-24-L55-835-D-(L50)-DIM-UNV\_.IES**

**UGR TABLE - CORRECTED**

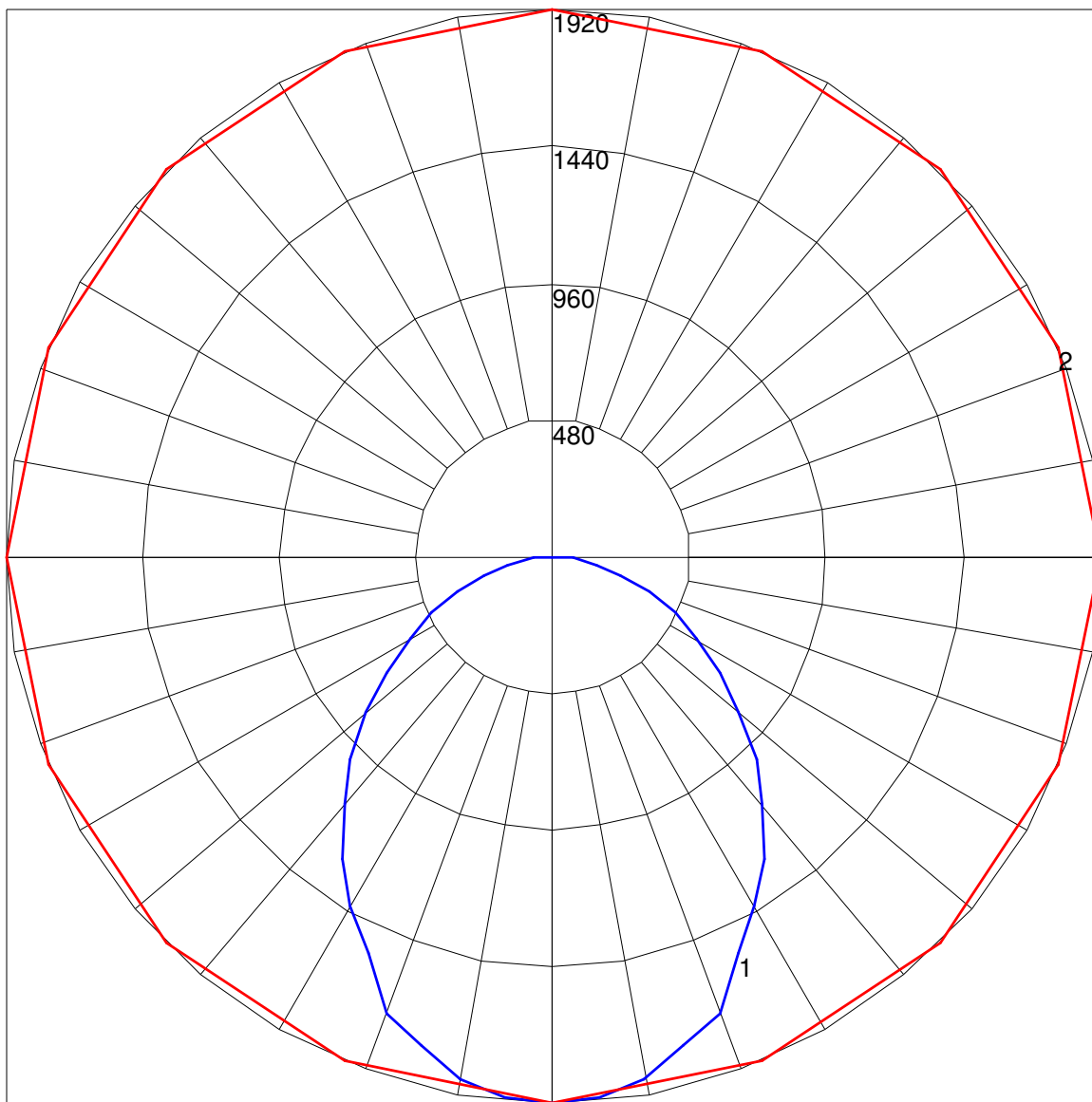
Reflectances

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	14.1	15.7	14.5	16.1	16.4	15.6	17.2	16.0	17.5	17.9
	3H	15.9	17.3	16.2	17.7	18.0	17.6	19.1	18.0	19.4	19.7
	4H	16.5	17.9	16.9	18.3	18.6	18.3	19.7	18.7	20.1	20.5
	6H	17.0	18.3	17.5	18.7	19.1	18.8	20.0	19.2	20.4	20.8
	8H	17.2	18.4	17.6	18.8	19.2	18.9	20.1	19.3	20.5	20.9
	12H	17.3	18.5	17.8	18.9	19.3	18.9	20.1	19.4	20.5	20.9
4H	2H	15.0	16.4	15.4	16.8	17.2	16.2	17.6	16.6	17.9	18.3
	3H	17.1	18.2	17.5	18.6	19.0	18.4	19.6	18.8	20.0	20.4
	4H	17.9	18.9	18.3	19.3	19.8	19.3	20.4	19.7	20.8	21.2
	6H	18.5	19.5	19.0	19.9	20.4	19.8	20.8	20.3	21.2	21.7
	8H	18.8	19.6	19.2	20.1	20.5	20.0	20.8	20.4	21.3	21.7
	12H	18.9	19.7	19.4	20.2	20.7	20.1	20.9	20.6	21.3	21.8
8H	4H	18.4	19.3	18.9	19.7	20.2	19.6	20.5	20.1	20.9	21.4
	6H	19.3	20.0	19.7	20.5	20.9	20.3	21.0	20.8	21.5	21.9
	8H	19.6	20.2	20.1	20.7	21.2	20.5	21.1	21.0	21.6	22.1
	12H	19.9	20.4	20.4	20.9	21.5	20.6	21.2	21.1	21.7	22.2
12H	4H	18.5	19.2	18.9	19.7	20.2	19.7	20.5	20.2	20.9	21.4
	6H	19.4	20.0	19.9	20.5	21.0	20.4	21.0	20.9	21.5	22.0
	8H	19.8	20.3	20.3	20.8	21.4	20.6	21.2	21.1	21.7	22.2

Maximum UGR = 22.2

POLAR GRAPH



Maximum Candela = 1920.056 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)