

## IES INDOOR REPORT

PHOTOMETRIC FILENAME : AT3-24-L80-RGB835-D-DMX-UNV WHITE ONLY\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM BALLABS TEST NO. 19260.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUE DATE] 1 DEC 2023

[MANUFAC] WILLIAMS INDOOR

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

[LUMINAIRE] 2x4' RECESSED LED LUMINAIRE

[MORE] WTH FROSTED ACRYLIC LENS

[LUMCAT] AT3-24-L80-RGB835-D-DMX-UNV

[\_SEARCH\_SOURCETYPE]LED

[\_SEARCH\_APPLICATION]INDOOR,COMMERCIAL,DIRECT,OFFICE,ARCHITECTURAL

[\_SEARCH\_MOUNTING]RECESSED

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	7993
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	90
Total Luminaire Watts	89.2
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.12
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.30
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.76 ft
Luminous Width (90-270)	1.88 ft
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	3641	4070	4341
55	3103	3596	3826
65	2817	3441	3697
75	2396	3276	3276
85	2123	1513	1415

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : AT3-24-L80-RGB835-D-DMX-UNV WHITE ONLY\_.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>	3184.828	3184.828	3184.828	3184.828	3184.828
<b>5</b>	3167.983	3169.106	3169.106	3170.229	3171.352
<b>10</b>	3103.972	3107.341	3115.202	3125.309	3132.047
<b>15</b>	2989.426	2997.287	3015.255	3042.207	3054.560
<b>20</b>	2817.607	2834.452	2877.126	2928.784	2950.121
<b>25</b>	2586.269	2607.606	2670.494	2740.120	2771.564
<b>30</b>	2342.578	2571.670	2429.049	2421.188	2597.499
<b>35</b>	2095.518	2133.700	2242.631	2349.316	2389.744
<b>40</b>	1858.565	1902.362	2032.630	2137.069	2170.759
<b>45</b>	1687.869	1741.773	1886.640	1982.095	2012.416
<b>50</b>	1420.595	1482.360	1617.120	1695.730	1715.944
<b>55</b>	1166.797	1230.808	1352.092	1416.103	1438.563
<b>60</b>	948.935	1015.192	1118.508	1176.904	1195.995
<b>65</b>	780.485	853.480	953.427	1008.454	1024.176
<b>70</b>	590.698	668.185	759.148	802.945	810.806
<b>75</b>	406.526	484.013	555.885	562.623	555.885
<b>80</b>	262.782	341.392	334.654	232.461	211.124
<b>85</b>	121.284	139.252	86.471	81.979	80.856
<b>90</b>	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : AT3-24-L80-RGB835-D-DMX-UNV WHITE ONLY\_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	1151.06	N.A.	14.40
0-30	2385.1	N.A.	29.80
0-40	3790.8	N.A.	47.40
0-60	6402.58	N.A.	80.10
0-80	7859.48	N.A.	98.30
0-90	7993.04	N.A.	100.00
10-90	7692.21	N.A.	96.20
20-40	2639.74	N.A.	33.00
20-50	4057.77	N.A.	50.80
40-70	3524.97	N.A.	44.10
60-80	1456.91	N.A.	18.20
70-80	543.70	N.A.	6.80
80-90	133.56	N.A.	1.70
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	7993.04	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	300.83
10-20	850.23
20-30	1234.04
30-40	1405.7
40-50	1418.02
50-60	1193.75
60-70	913.20
70-80	543.70
80-90	133.56
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	246	246	246	246	240	240	240	240	229	229	229	219	219	219	211	211	211	206
1	225	215	207	199	219	211	203	196	202	195	189	194	188	184	186	182	178	174
2	205	188	174	163	200	184	172	161	177	166	157	170	161	154	164	157	150	146
3	187	166	149	136	182	163	147	135	157	143	133	151	140	130	146	136	128	124
4	172	147	130	116	167	145	128	115	140	125	114	135	122	112	130	120	111	106
5	158	132	114	100	154	130	113	100	126	110	99	121	108	98	118	106	97	92
6	146	119	101	88	143	117	100	88	114	98	87	110	97	86	107	95	85	81
7	136	109	91	78	132	107	90	78	104	88	77	101	87	77	98	86	76	72
8	127	99	82	70	124	98	81	70	95	80	69	93	79	69	90	78	69	65
9	119	91	75	63	116	90	74	63	88	73	63	86	72	62	83	71	62	58
10	111	84	68	58	109	83	68	57	81	67	57	79	66	57	78	65	57	53

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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

X=2H	Y=2H	13.1	14.7	13.5	15.0	15.3	14.2	15.8	14.5	16.1	16.4
	3H	14.9	16.3	15.2	16.6	17.0	16.2	17.7	16.6	18.0	18.3
	4H	15.5	16.9	15.9	17.2	17.6	16.9	18.3	17.3	18.7	19.0
	6H	16.0	17.3	16.4	17.7	18.1	17.3	18.5	17.7	18.9	19.3
	8H	16.2	17.4	16.7	17.8	18.2	17.3	18.5	17.7	18.9	19.3
	12H	16.4	17.5	16.8	17.9	18.3	17.4	18.5	17.8	18.9	19.3

### UGR Viewed Endwise

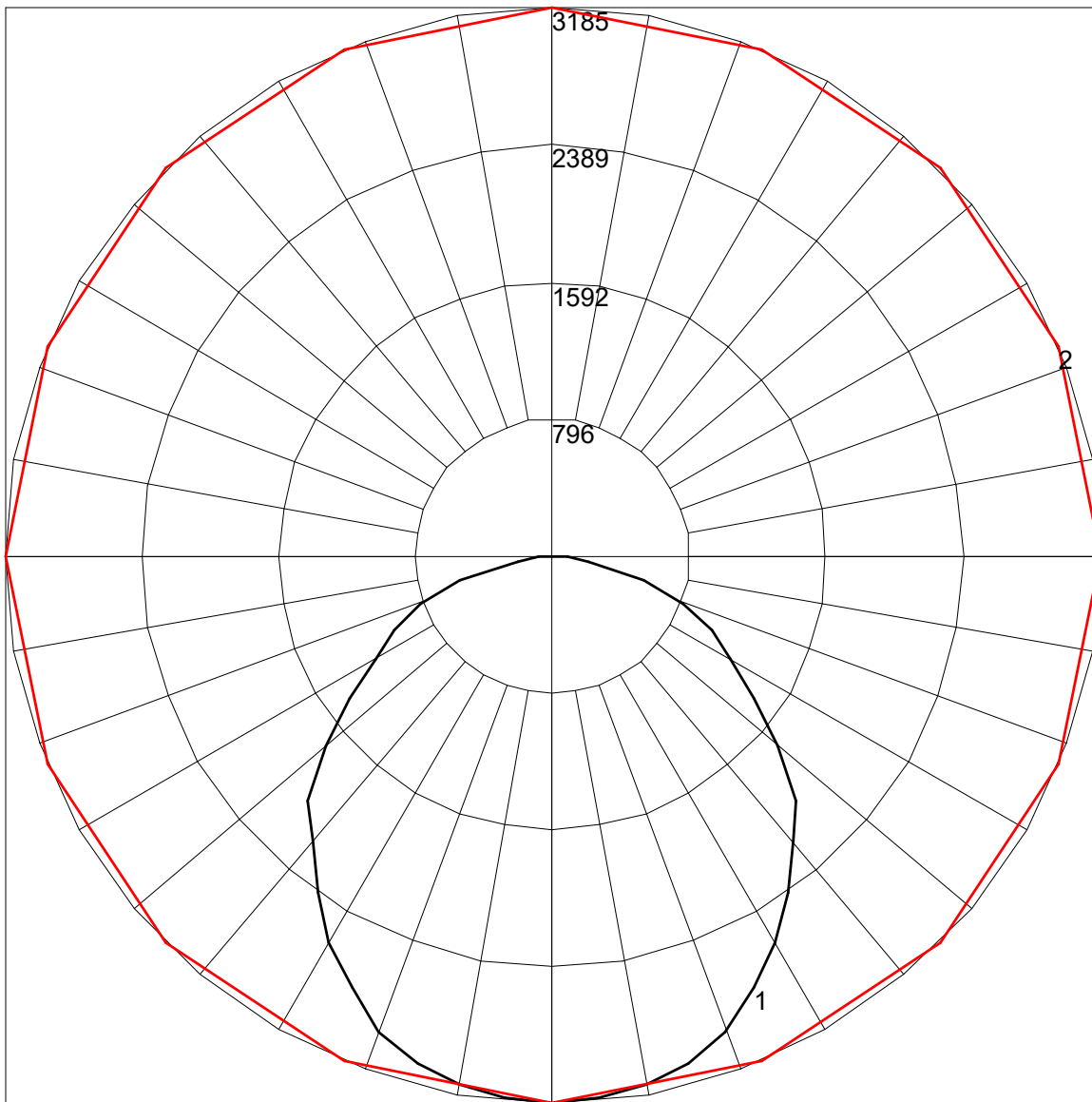
4H	2H	13.9	15.3	14.3	15.7	16.0	14.8	16.1	15.2	16.5	16.9
	3H	16.0	17.1	16.4	17.5	17.9	17.0	18.2	17.5	18.6	19.0
	4H	16.8	17.8	17.2	18.2	18.6	17.9	19.0	18.4	19.4	19.8
	6H	17.4	18.4	17.9	18.8	19.2	18.3	19.2	18.8	19.7	20.1
	8H	17.7	18.5	18.1	19.0	19.4	18.4	19.3	18.9	19.7	20.2
	12H	17.8	18.6	18.3	19.1	19.6	18.5	19.2	18.9	19.7	20.2

8H	4H	17.2	18.1	17.7	18.5	19.0	18.2	19.1	18.7	19.5	20.0
	6H	18.1	18.8	18.6	19.3	19.8	18.7	19.4	19.2	19.9	20.4
	8H	18.4	19.0	18.9	19.6	20.0	18.8	19.5	19.3	20.0	20.5
	12H	18.7	19.2	19.2	19.7	20.3	18.9	19.5	19.4	20.0	20.5

12H	4H	17.3	18.0	17.7	18.5	19.0	18.2	19.0	18.7	19.5	20.0
	6H	18.2	18.8	18.7	19.3	19.8	18.8	19.4	19.3	19.9	20.4
	8H	18.5	19.1	19.0	19.6	20.2	18.9	19.5	19.5	20.0	20.6

Maximum UGR = 20.6

POLAR GRAPH



Maximum Candela = 3184.828 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)  
# 2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)