



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : AHTG-24-L80-835-A-DIM-UNV\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
 [TEST] GEN FROM BALLABS TEST NO. 18091.0  
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC  
 [ISSUEDATE] 17-NOV-2020  
 [MANUFAC] WILLIAMS INDOOR  
 [OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO 64836  
 [LUMINAIRE] 2'x4' RECESSED LED TROFFER  
 [MORE] FROSTED ACRYLIC DIFFUSER  
 [LUMCAT] AHTG-24-L80-835-A-DIM-UNV  
 [LAMPCAT] HLM 80 CRI, 3500K CCT  
 [SEARCH\_SOURCETYPE]LED  
 [SEARCH\_APPLICATION]INDOOR,DIRECT  
 [SEARCH\_MOUNTING]RECESSED

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	8036
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	123
Total Luminaire Watts	65.3
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.18
Spacing Criterion (90-270)	1.16
Spacing Criterion (Diagonal)	1.30
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.92 ft
Luminous Width (90-270)	1.92 ft
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	3865	3957	3938
55	3278	3528	3471
65	2737	3011	2398
75	2084	1897	1356
85	1590	1190	1052

IES INDOOR REPORT  
 PHOTOMETRIC FILENAME : AHTG-24-L80-835-A-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>	3394.807	3394.807	3394.807	3394.807	3394.807
<b>5</b>	3380.418	3380.418	3377.938	3376.449	3376.449
<b>10</b>	3318.893	3314.924	3308.970	3301.527	3299.542
<b>15</b>	3182.446	3175.003	3160.614	3147.218	3143.745
<b>20</b>	3111.990	3105.043	3084.204	3060.388	3052.945
<b>25</b>	2875.316	2870.850	2849.018	2825.698	2807.836
<b>30</b>	2654.519	2647.077	2624.253	2593.986	2574.635
<b>35</b>	2438.188	2435.707	2420.326	2390.060	2380.136
<b>40</b>	2178.690	2183.652	2185.637	2164.301	2156.859
<b>45</b>	1908.277	1933.582	1953.925	1953.925	1944.497
<b>50</b>	1595.192	1624.466	1667.633	1686.984	1675.076
<b>55</b>	1312.871	1350.083	1413.097	1425.005	1390.273
<b>60</b>	1038.488	1079.670	1151.119	1074.708	1027.572
<b>65</b>	807.768	856.393	888.644	775.517	707.541
<b>70</b>	587.964	642.542	609.795	484.264	433.654
<b>75</b>	376.594	411.823	342.855	266.940	245.109
<b>80</b>	223.277	228.239	178.622	147.363	142.401
<b>85</b>	96.754	85.838	72.441	64.999	64.006
<b>90</b>	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : AHTG-24-L80-835-A-DIM-UNV\_.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	1218.62	N.A.	15.20
0-30	2532.37	N.A.	31.50
0-40	4039.3	N.A.	50.30
0-60	6759.68	N.A.	84.10
0-80	7944.74	N.A.	98.90
0-90	8036.22	N.A.	100.00
10-90	7716.04	N.A.	96.00
20-40	2820.68	N.A.	35.10
20-50	4309.55	N.A.	53.60
40-70	3533.07	N.A.	44.00
60-80	1185.06	N.A.	14.70
70-80	372.37	N.A.	4.60
80-90	91.48	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	8036.22	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	320.18
10-20	898.44
20-30	1313.75
30-40	1506.93
40-50	1488.88
50-60	1231.5
60-70	812.69
70-80	372.37
80-90	91.48
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 : AHTG-24-L80-835-A-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	244	244	244	244	238	238	238	238	228	228	228	218	218	218	209	209	209	205
1	225	216	208	201	219	211	204	197	203	197	191	195	190	185	187	183	180	176
2	206	190	177	166	200	186	174	164	179	169	160	172	164	157	166	159	153	149
3	189	168	153	140	184	165	151	139	159	147	136	154	143	134	148	139	132	127
4	173	150	133	120	169	147	131	119	142	128	117	138	126	116	133	123	114	110
5	160	135	117	104	156	132	116	104	128	114	102	124	111	101	121	109	100	96
6	148	122	104	92	144	120	103	91	116	101	90	113	100	90	110	98	89	85
7	138	111	94	81	134	109	93	81	106	91	81	103	90	80	100	88	79	75
8	128	101	85	73	125	100	84	73	97	83	72	95	82	72	92	80	71	68
9	120	93	77	66	117	92	76	66	90	75	65	88	75	65	86	74	65	61
10	113	86	71	60	110	85	70	60	83	69	60	81	68	59	80	68	59	56

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : AHTG-24-L80-835-A-DIM-UNV\_.IES**

**UGR TABLE - CORRECTED**

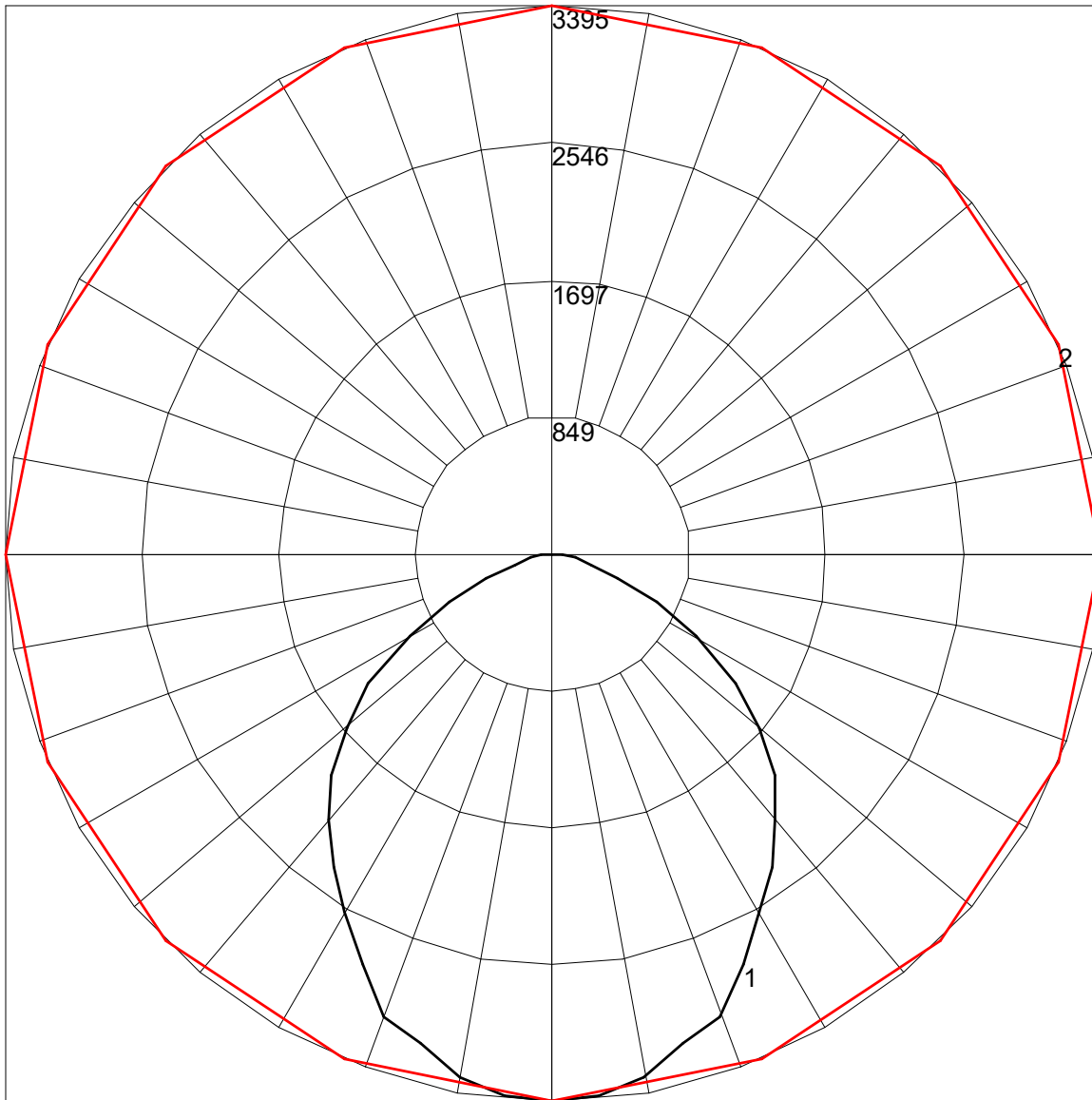
Reflectances

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	13.4	15.0	13.8	15.3	15.6	13.6	15.2	14.0	15.5	15.8
	3H	15.0	16.4	15.4	16.7	17.1	14.6	16.0	15.0	16.3	16.7
	4H	15.5	16.8	15.9	17.1	17.5	14.8	16.1	15.2	16.5	16.9
	6H	15.8	17.0	16.2	17.4	17.8	15.0	16.2	15.4	16.6	16.9
	8H	15.9	17.1	16.3	17.5	17.9	15.0	16.2	15.4	16.6	17.0
	12H	16.0	17.1	16.4	17.5	17.9	15.0	16.1	15.5	16.5	17.0
4H	2H	14.1	15.4	14.5	15.7	16.1	14.2	15.5	14.6	15.9	16.3
	3H	15.8	16.9	16.2	17.3	17.7	15.4	16.5	15.8	16.9	17.3
	4H	16.4	17.4	16.9	17.8	18.3	15.7	16.6	16.1	17.1	17.5
	6H	16.9	17.7	17.3	18.2	18.6	15.9	16.7	16.3	17.2	17.6
	8H	17.0	17.8	17.5	18.2	18.7	15.9	16.7	16.4	17.2	17.6
	12H	17.1	17.8	17.6	18.3	18.8	16.0	16.7	16.4	17.2	17.6
8H	4H	16.6	17.4	17.0	17.8	18.3	15.9	16.7	16.3	17.1	17.6
	6H	17.1	17.8	17.6	18.3	18.7	16.2	16.8	16.6	17.3	17.8
	8H	17.3	17.9	17.8	18.4	18.9	16.2	16.8	16.8	17.3	17.8
	12H	17.5	18.0	18.0	18.5	19.0	16.4	16.9	16.9	17.4	17.9
12H	4H	16.5	17.3	17.0	17.7	18.2	15.9	16.6	16.4	17.1	17.6
	6H	17.1	17.7	17.6	18.2	18.7	16.2	16.8	16.7	17.2	17.8
	8H	17.4	17.9	17.9	18.4	18.9	16.3	16.8	16.8	17.3	17.9

Maximum UGR = 19.0

POLAR GRAPH



Maximum Candela = 3394.807 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.)