

IES INDOOR REPORT

PHOTOMETRIC FILENAME : CMR2AENG-L17-835-CA-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #4792155668.03

[TESTLAB] UL, LLC

[ISSUEDATE] 2026-08-07

[TESTDATE] 3/17/2026

[MANUFAC] H E Williams Inc

[LUMCAT] CMR2AENG-L17-835-CA-DIM-UNV (A,E&N)

[LUMINAIRE] 2' x 2' multi-function recessed troffer with door frame; door

[MORE] frame has arrangement of curved diffused acrylic lenses

[OTHER] This test was performed using the calibrated photodetector method

[MORE] of absolute photometry.

[OTHER] The reported results were measured in a facility that meets the

[MORE] requirements of ANSI/IES LM-75-19. The device under test emits no

[MORE] detectable uplight as defined by ANSI/IES LM-75-19.

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	7395
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	111
Total Luminaire Watts	66.7
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.08
Spacing Criterion (Diagonal)	1.24
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	1.75 ft
Luminous Width (90-270)	1.75 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	9241	8538	7989
55	8269	7632	7039
65	7134	6501	5959
75	5625	4802	4231
85	3433	1340	812

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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>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>	<u>202.5</u>
0	3271.248	3271.248	3271.248	3271.248	3271.248	3271.248	3271.248	3271.248	3271.248	3271.248
5	3259.310	3248.294	3247.861	3237.417	3229.513	3235.150	3243.578	3241.744	3252.868	3242.176
10	3199.774	3185.771	3169.121	3144.126	3129.096	3139.700	3160.411	3172.994	3184.658	3172.023
15	3100.849	3078.006	3041.755	2996.347	2972.603	2989.761	3028.043	3057.275	3074.684	3054.864
20	2962.654	2931.306	2870.736	2806.889	2771.945	2798.143	2851.589	2901.254	2922.920	2896.971
25	2791.924	2752.020	2669.889	2588.063	2552.051	2577.158	2644.444	2710.955	2737.038	2705.089
30	2585.948	2542.154	2443.902	2357.120	2317.665	2344.235	2411.618	2489.500	2518.574	2482.986
35	2361.473	2312.275	2206.715	2116.818	2080.238	2102.277	2167.737	2250.587	2287.116	2245.081
40	2120.904	2068.935	1960.478	1876.732	1843.614	1861.004	1916.138	2003.144	2046.144	1999.113
45	1860.921	1815.484	1719.298	1642.748	1608.741	1625.904	1672.618	1749.938	1788.763	1747.163
50	1604.922	1566.169	1482.691	1406.053	1375.003	1388.526	1437.296	1505.158	1538.225	1503.222
55	1350.699	1320.274	1246.571	1173.805	1149.834	1156.314	1205.120	1266.213	1291.617	1264.798
60	1100.812	1081.831	1009.715	951.644	930.714	935.203	974.653	1036.065	1050.270	1034.942
65	858.597	849.797	782.396	733.901	717.146	719.610	754.788	813.274	817.265	812.316
70	628.224	623.436	561.874	522.909	508.925	512.464	542.738	596.922	596.516	596.181
75	414.601	407.131	353.944	322.721	311.832	317.301	343.269	390.337	392.488	389.808
80	229.157	215.432	171.694	146.230	135.803	144.819	167.994	207.489	215.988	207.172
85	85.212	63.428	33.258	21.195	20.146	21.141	32.851	61.931	79.946	61.787
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Vert. Angles **Horizontal Angles**

	<u>225.0</u>	<u>247.5</u>	<u>270.0</u>	<u>292.5</u>	<u>315.0</u>	<u>337.5</u>	<u>360.0</u>
0	3271.248	3271.248	3271.248	3271.248	3271.248	3271.248	3271.248
5	3243.722	3235.294	3229.657	3237.417	3246.997	3246.531	3259.310
10	3159.979	3139.556	3129.384	3144.054	3168.185	3183.792	3199.774
15	3026.891	2989.257	2972.783	2996.311	3040.819	3075.954	3100.849
20	2849.429	2797.352	2772.053	2806.601	2869.944	2929.290	2962.654
25	2641.169	2575.863	2552.195	2587.596	2668.665	2749.789	2791.924
30	2407.336	2342.472	2317.593	2356.580	2442.570	2539.635	2585.948
35	2162.519	2099.902	2079.914	2116.458	2204.988	2309.612	2361.473
40	1911.099	1858.269	1842.858	1876.660	1958.427	2065.768	2120.904
45	1668.623	1622.629	1608.093	1642.388	1717.175	1811.633	1860.921
50	1434.266	1385.142	1374.139	1405.441	1480.819	1562.282	1604.922
55	1203.137	1152.931	1149.042	1173.157	1244.483	1316.459	1350.699
60	973.282	932.119	930.175	951.176	1007.664	1077.836	1100.812

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CANDELA TABULATION - (Cont.)

65	753.805	717.123	716.581	733.362	780.453	845.946	858.597
70	542.090	510.989	508.439	522.481	559.959	619.917	628.224
75	342.884	316.638	311.702	322.516	352.418	403.985	414.601
80	167.822	144.632	135.878	146.187	170.787	212.974	229.157
85	32.823	21.148	20.222	21.274	33.039	62.478	85.212
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1159.68	N.A.	15.70
0-30	2381.97	N.A.	32.20
0-40	3754.56	N.A.	50.80
0-60	6173.43	N.A.	83.50
0-80	7324.41	N.A.	99.00
0-90	7395.21	N.A.	100.00
10-90	7088.26	N.A.	95.80
20-40	2594.88	N.A.	35.10
20-50	3912.94	N.A.	52.90
40-70	3188.18	N.A.	43.10
60-80	1150.97	N.A.	15.60
70-80	381.67	N.A.	5.20
80-90	70.80	N.A.	1.00
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	7395.21	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	306.95
10-20	852.73
20-30	1222.3
30-40	1372.59
40-50	1318.06
50-60	1100.82
60-70	769.31
70-80	381.67
80-90	70.80
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	53	49	47
6	72	60	51	45	71	59	51	45	57	50	44	55	49	44	54	48	44	42
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	43	39	37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	33
9	59	46	38	33	57	45	38	32	44	37	32	43	37	32	42	36	32	30
10	55	42	35	30	54	42	35	30	41	34	29	40	34	29	39	33	29	27

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UGR TABLE - CORRECTED

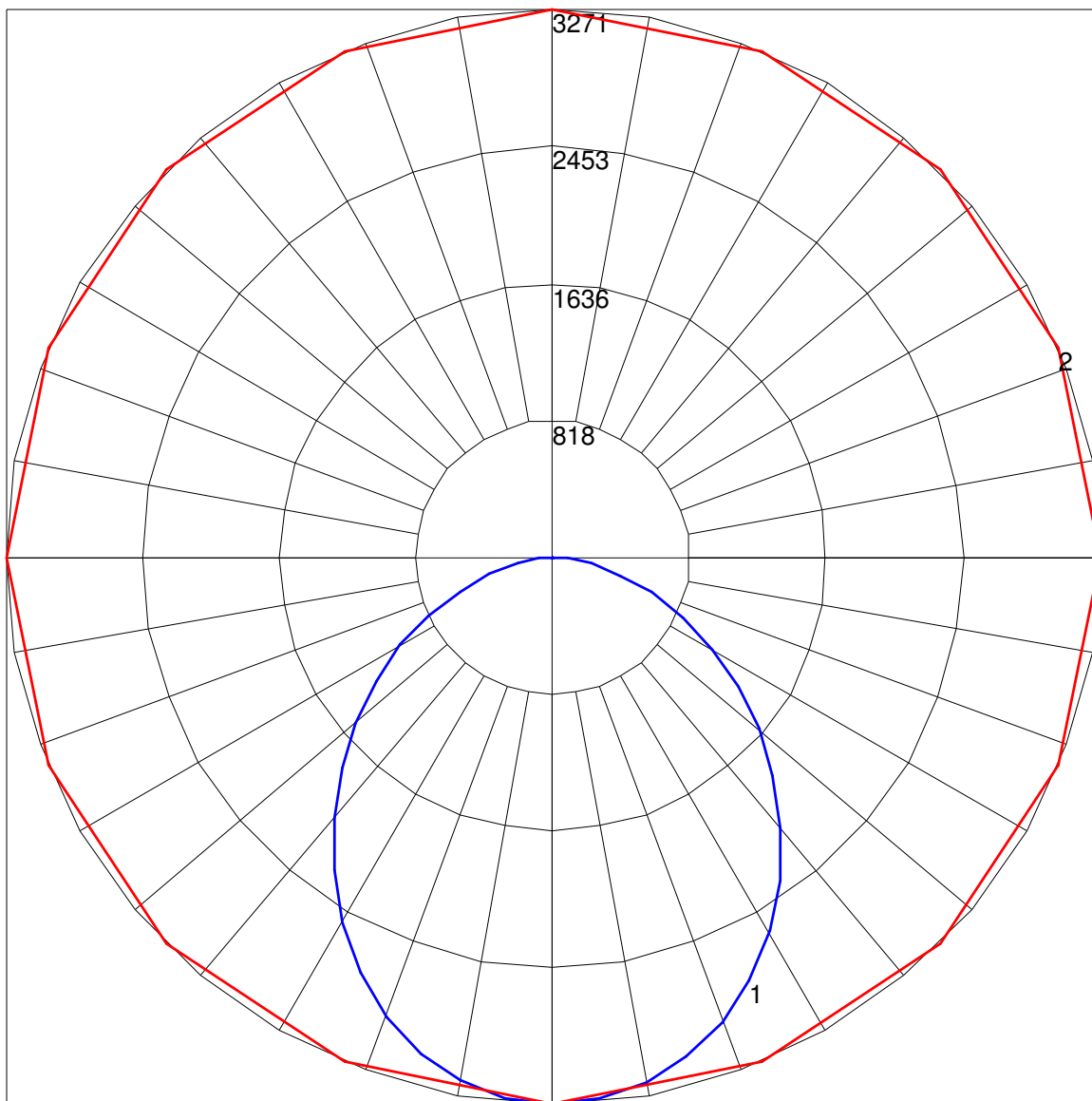
Reflectances

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	19.4	21.0	19.8	21.3	21.6	18.5	20.0	18.8	20.4	20.7
	3H	21.0	22.4	21.4	22.8	23.1	19.9	21.3	20.3	21.7	22.0
	4H	21.6	22.9	22.0	23.2	23.6	20.4	21.7	20.8	22.0	22.4
	6H	21.9	23.1	22.3	23.5	23.9	20.6	21.8	21.0	22.2	22.6
	8H	22.0	23.2	22.4	23.6	24.0	20.6	21.8	21.1	22.2	22.6
	12H	22.1	23.2	22.5	23.6	24.0	20.6	21.7	21.0	22.1	22.5
4H	2H	19.9	21.2	20.3	21.6	21.9	19.1	20.4	19.5	20.8	21.1
	3H	21.7	22.8	22.1	23.2	23.6	20.8	21.8	21.2	22.2	22.6
	4H	22.4	23.3	22.8	23.8	24.2	21.3	22.3	21.7	22.7	23.1
	6H	22.8	23.7	23.3	24.1	24.6	21.6	22.4	22.0	22.9	23.3
	8H	22.9	23.7	23.4	24.2	24.7	21.6	22.4	22.0	22.8	23.3
	12H	23.0	23.7	23.5	24.2	24.7	21.6	22.3	22.1	22.8	23.3
8H	4H	22.5	23.3	23.0	23.8	24.2	21.5	22.3	22.0	22.8	23.2
	6H	23.1	23.7	23.5	24.2	24.7	21.9	22.5	22.4	23.0	23.5
	8H	23.2	23.8	23.7	24.3	24.8	21.9	22.5	22.4	23.0	23.5
	12H	23.4	23.9	23.9	24.4	24.9	21.9	22.5	22.5	23.0	23.5
12H	4H	22.5	23.2	23.0	23.7	24.2	21.5	22.3	22.0	22.7	23.2
	6H	23.0	23.6	23.6	24.1	24.6	21.9	22.5	22.4	23.0	23.5
	8H	23.3	23.8	23.8	24.3	24.8	22.0	22.5	22.5	23.0	23.6

Maximum UGR = 24.9

POLAR GRAPH



Maximum Candela = 3271.248 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.)