

IES INDOOR REPORT

PHOTOMETRIC FILENAME : CMR2AENG-L17-935-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-L17-935-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	6138
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	92
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	7670	7086	6631
55	6863	6334	5843
65	5921	5396	4946
75	4669	3986	3511
85	2850	1112	674

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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	2715.136	2715.136	2715.136	2715.136	2715.136	2715.136	2715.136	2715.136	2715.136	2715.136
5	2705.227	2696.084	2695.724	2687.056	2680.496	2685.174	2692.170	2690.648	2699.880	2691.006
10	2655.812	2644.190	2630.370	2609.625	2597.150	2605.951	2623.141	2633.585	2643.266	2632.779
15	2573.705	2554.745	2524.657	2486.968	2467.261	2481.502	2513.275	2537.538	2551.988	2535.537
20	2459.003	2432.984	2382.711	2329.718	2300.714	2322.459	2366.819	2408.041	2426.024	2404.486
25	2317.297	2284.177	2216.008	2148.093	2118.203	2139.041	2194.888	2250.093	2271.742	2245.224
30	2146.337	2109.988	2028.439	1956.410	1923.662	1945.715	2001.643	2066.285	2090.416	2060.878
35	1960.022	1919.188	1831.574	1756.959	1726.598	1744.890	1799.222	1867.987	1898.306	1863.417
40	1760.350	1717.216	1627.197	1557.688	1530.200	1544.634	1590.394	1662.610	1698.300	1659.264
45	1544.564	1506.852	1427.017	1363.481	1335.255	1349.500	1388.273	1452.449	1484.673	1450.146
50	1332.086	1299.920	1230.633	1167.024	1141.252	1152.476	1192.956	1249.281	1276.726	1247.674
55	1121.081	1095.828	1034.654	974.258	954.362	959.740	1000.250	1050.956	1072.042	1049.782
60	913.674	897.919	838.064	789.864	772.493	776.219	808.962	859.934	871.724	859.002
65	712.635	705.331	649.389	609.138	595.231	597.276	626.474	675.017	678.330	674.223
70	521.426	517.452	466.355	434.014	422.408	425.345	450.472	495.445	495.108	494.830
75	344.119	337.918	293.773	267.858	258.820	263.359	284.913	323.980	325.765	323.541
80	190.201	178.809	142.506	121.371	112.716	120.200	139.435	172.216	179.270	171.953
85	70.726	52.645	27.604	17.592	16.721	17.547	27.267	51.402	66.355	51.283
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	2715.136	2715.136	2715.136	2715.136	2715.136	2715.136	2715.136
5	2692.289	2685.294	2680.615	2687.056	2695.007	2694.621	2705.227
10	2622.782	2605.831	2597.389	2609.565	2629.593	2642.547	2655.812
15	2512.320	2481.083	2467.410	2486.938	2523.880	2553.042	2573.705
20	2365.026	2321.802	2300.804	2329.479	2382.053	2431.311	2459.003
25	2192.170	2137.966	2118.322	2147.704	2214.992	2282.325	2317.297
30	1998.088	1944.252	1923.602	1955.961	2027.333	2107.897	2146.337
35	1794.890	1742.919	1726.329	1756.660	1830.140	1916.978	1960.022
40	1586.212	1542.363	1529.572	1557.628	1625.494	1714.587	1760.350
45	1384.957	1346.782	1334.717	1363.182	1425.255	1503.656	1544.564
50	1190.440	1149.668	1140.536	1166.516	1229.080	1296.694	1332.086
55	998.604	956.932	953.705	973.721	1032.921	1092.661	1121.081
60	807.824	773.658	772.045	789.476	836.361	894.604	913.674

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CANDELA TABULATION - (Cont.)

65	625.658	595.212	594.762	608.690	647.776	702.135	712.635
70	449.935	424.121	422.005	433.659	464.766	514.531	521.426
75	284.594	262.810	258.713	267.688	292.507	335.308	344.119
80	139.292	120.045	112.779	121.335	141.754	176.769	190.201
85	27.243	17.553	16.784	17.658	27.422	51.857	70.726
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	962.53	N.A.	15.70
0-30	1977.04	N.A.	32.20
0-40	3116.28	N.A.	50.80
0-60	5123.95	N.A.	83.50
0-80	6079.26	N.A.	99.00
0-90	6138.02	N.A.	100.00
10-90	5883.25	N.A.	95.80
20-40	2153.75	N.A.	35.10
20-50	3247.74	N.A.	52.90
40-70	2646.19	N.A.	43.10
60-80	955.31	N.A.	15.60
70-80	316.78	N.A.	5.20
80-90	58.76	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	6138.02	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	254.77
10-20	707.76
20-30	1014.51
30-40	1139.25
40-50	1093.99
50-60	913.68
60-70	638.52
70-80	316.78
80-90	58.76
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

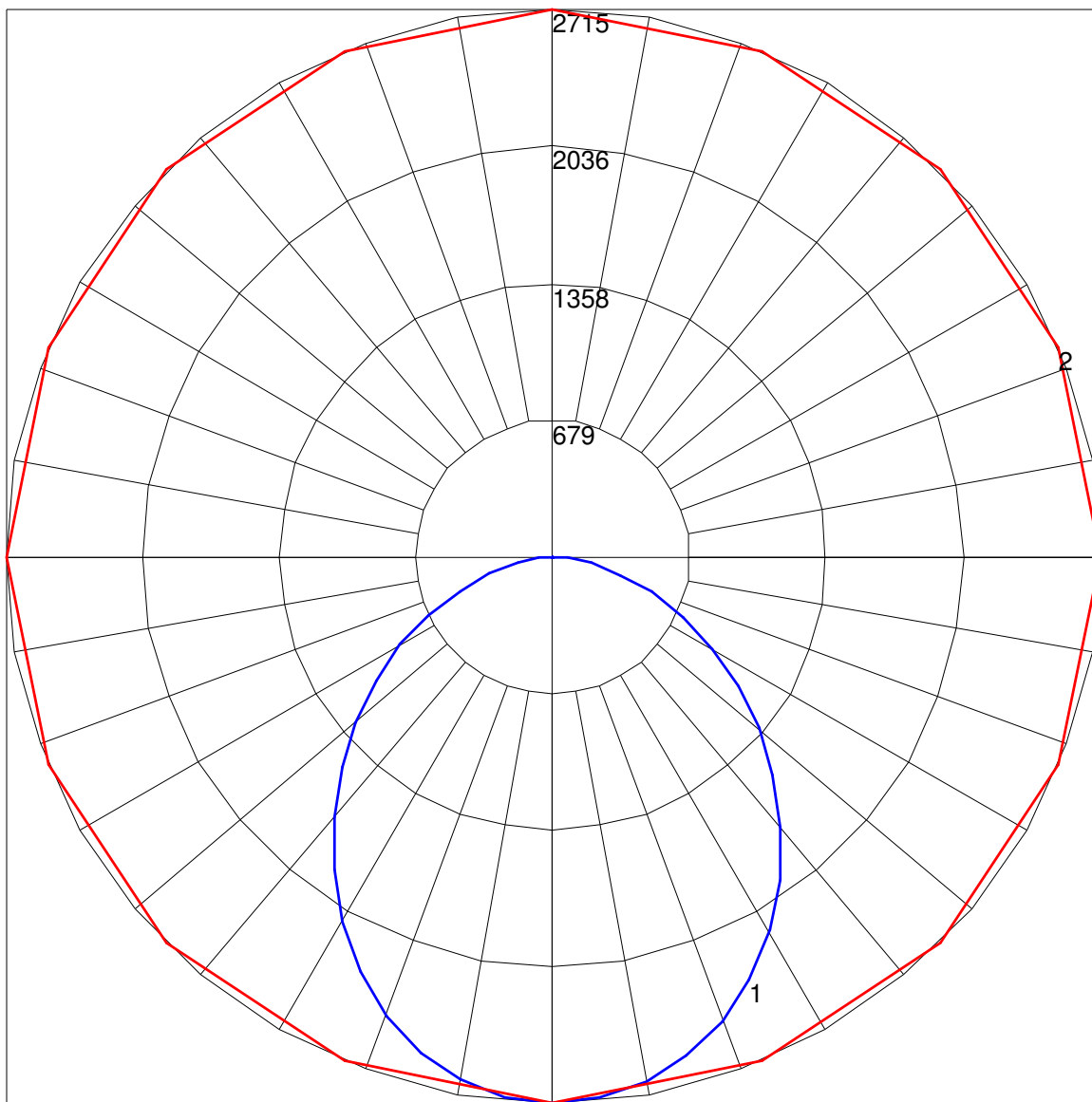
Reflectances

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	18.7	20.3	19.1	20.6	20.9	17.8	19.3	18.1	19.7	20.0
	3H	20.3	21.7	20.7	22.1	22.4	19.2	20.6	19.6	21.0	21.3
	4H	20.9	22.2	21.3	22.5	22.9	19.7	21.0	20.1	21.4	21.7
	6H	21.2	22.4	21.6	22.8	23.2	19.9	21.1	20.3	21.5	21.9
	8H	21.3	22.5	21.7	22.9	23.3	19.9	21.1	20.4	21.5	21.9
	12H	21.4	22.5	21.8	22.9	23.3	19.9	21.0	20.3	21.4	21.8
4H	2H	19.2	20.5	19.6	20.9	21.2	18.4	19.7	18.8	20.1	20.4
	3H	21.0	22.1	21.4	22.5	22.9	20.1	21.1	20.5	21.5	21.9
	4H	21.7	22.6	22.1	23.1	23.5	20.6	21.6	21.0	22.0	22.4
	6H	22.1	23.0	22.6	23.4	23.9	20.9	21.7	21.3	22.2	22.6
	8H	22.3	23.0	22.7	23.5	24.0	20.9	21.7	21.4	22.1	22.6
	12H	22.3	23.0	22.8	23.5	24.0	20.9	21.6	21.4	22.1	22.6
8H	4H	21.8	22.6	22.3	23.1	23.5	20.8	21.6	21.3	22.1	22.5
	6H	22.4	23.0	22.8	23.5	24.0	21.2	21.8	21.7	22.3	22.8
	8H	22.5	23.1	23.0	23.6	24.1	21.2	21.8	21.7	22.3	22.8
	12H	22.7	23.2	23.2	23.7	24.2	21.2	21.8	21.8	22.3	22.8
12H	4H	21.8	22.5	22.3	23.0	23.5	20.8	21.6	21.3	22.0	22.5
	6H	22.3	22.9	22.9	23.4	23.9	21.2	21.8	21.7	22.3	22.8
	8H	22.6	23.1	23.1	23.6	24.1	21.3	21.8	21.8	22.3	22.9

Maximum UGR = 24.2

POLAR GRAPH



Maximum Candela = 2715.136 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.)