

IES INDOOR REPORT

PHOTOMETRIC FILENAME : CMR2AENG-L17-830-CA-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #4792155668.03

[TESTLAB] UL, LLC

[ISSUE DATE] 2026-08-07

[TEST DATE] 3/17/2026

[MANUFAC] H E Williams Inc

[LUMCAT] CMR2AENG-L17-830-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	7321
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	110
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	9149	8453	7909
55	8186	7555	6969
65	7063	6436	5899
75	5569	4754	4188
85	3399	1327	804

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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	3238.535	3238.535	3238.535	3238.535	3238.535	3238.535	3238.535	3238.535	3238.535	3238.535
5	3226.717	3215.811	3215.382	3205.043	3197.218	3202.798	3211.142	3209.327	3220.339	3209.754
10	3167.776	3153.913	3137.429	3112.685	3097.805	3108.303	3128.807	3141.264	3152.811	3140.302
15	3069.841	3047.226	3011.338	2966.384	2942.877	2959.863	2997.762	3026.702	3043.937	3024.315
20	2933.027	2901.993	2842.028	2778.820	2744.226	2770.162	2823.073	2872.241	2893.691	2868.001
25	2764.005	2724.500	2643.190	2562.183	2526.531	2551.387	2617.999	2683.845	2709.668	2678.038
30	2560.089	2516.733	2419.463	2333.549	2294.488	2320.793	2387.502	2464.605	2493.388	2458.156
35	2337.858	2289.152	2184.648	2095.649	2059.436	2081.255	2146.060	2228.081	2264.245	2222.630
40	2099.695	2048.246	1940.873	1857.965	1825.178	1842.394	1896.976	1983.113	2025.683	1979.122
45	1842.312	1797.330	1702.105	1626.320	1592.653	1609.645	1655.892	1732.439	1770.876	1729.692
50	1588.873	1550.507	1467.864	1391.993	1361.253	1374.640	1422.923	1490.106	1522.842	1488.189
55	1337.192	1307.071	1234.105	1162.067	1138.335	1144.751	1193.069	1253.550	1278.701	1252.150
60	1089.804	1071.012	999.618	942.127	921.407	925.851	964.907	1025.704	1039.768	1024.593
65	850.011	841.299	774.572	726.562	709.974	712.414	747.240	805.141	809.092	804.193
70	621.942	617.202	556.255	517.680	503.836	507.340	537.310	590.953	590.551	590.219
75	410.455	403.059	350.404	319.494	308.713	314.128	339.836	386.434	388.563	385.910
80	226.866	213.278	169.977	144.768	134.445	143.371	166.315	205.414	213.828	205.101
85	84.360	62.794	32.926	20.983	19.945	20.930	32.523	61.311	79.147	61.169
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	3238.535	3238.535	3238.535	3238.535	3238.535	3238.535	3238.535
5	3211.285	3202.941	3197.360	3205.043	3214.527	3214.066	3226.717
10	3128.379	3108.160	3098.091	3112.614	3136.503	3151.954	3167.776
15	2996.622	2959.364	2943.055	2966.348	3010.411	3045.195	3069.841
20	2820.935	2769.378	2744.333	2778.535	2841.244	2899.997	2933.027
25	2614.757	2550.104	2526.673	2561.720	2641.979	2722.291	2764.005
30	2383.262	2319.047	2294.417	2333.014	2418.145	2514.239	2560.089
35	2140.893	2078.903	2059.115	2095.293	2182.938	2286.516	2337.858
40	1891.988	1839.686	1824.430	1857.894	1938.843	2045.110	2099.695
45	1651.937	1606.403	1592.012	1625.964	1700.003	1793.517	1842.312
50	1419.923	1371.291	1360.398	1391.387	1466.011	1546.659	1588.873
55	1191.106	1141.401	1137.552	1161.426	1232.038	1303.295	1337.192
60	963.549	922.797	920.873	941.664	997.587	1067.057	1089.804

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CANDELA TABULATION - (Cont.)

65	746.267	709.951	709.415	726.028	772.648	837.486	850.011
70	536.669	505.879	503.355	517.256	554.360	613.717	621.942
75	339.455	313.472	308.585	319.290	348.894	399.945	410.455
80	166.144	143.186	134.519	144.725	169.079	210.844	226.866
85	32.494	20.937	20.019	21.062	32.708	61.853	84.360
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	1148.08	N.A.	15.70
0-30	2358.15	N.A.	32.20
0-40	3717.01	N.A.	50.80
0-60	6111.7	N.A.	83.50
0-80	7251.16	N.A.	99.00
0-90	7321.26	N.A.	100.00
10-90	7017.38	N.A.	95.80
20-40	2568.94	N.A.	35.10
20-50	3873.81	N.A.	52.90
40-70	3156.3	N.A.	43.10
60-80	1139.46	N.A.	15.60
70-80	377.85	N.A.	5.20
80-90	70.09	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	7321.26	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	303.88
10-20	844.20
20-30	1210.08
30-40	1358.86
40-50	1304.88
50-60	1089.81
60-70	761.61
70-80	377.85
80-90	70.09
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

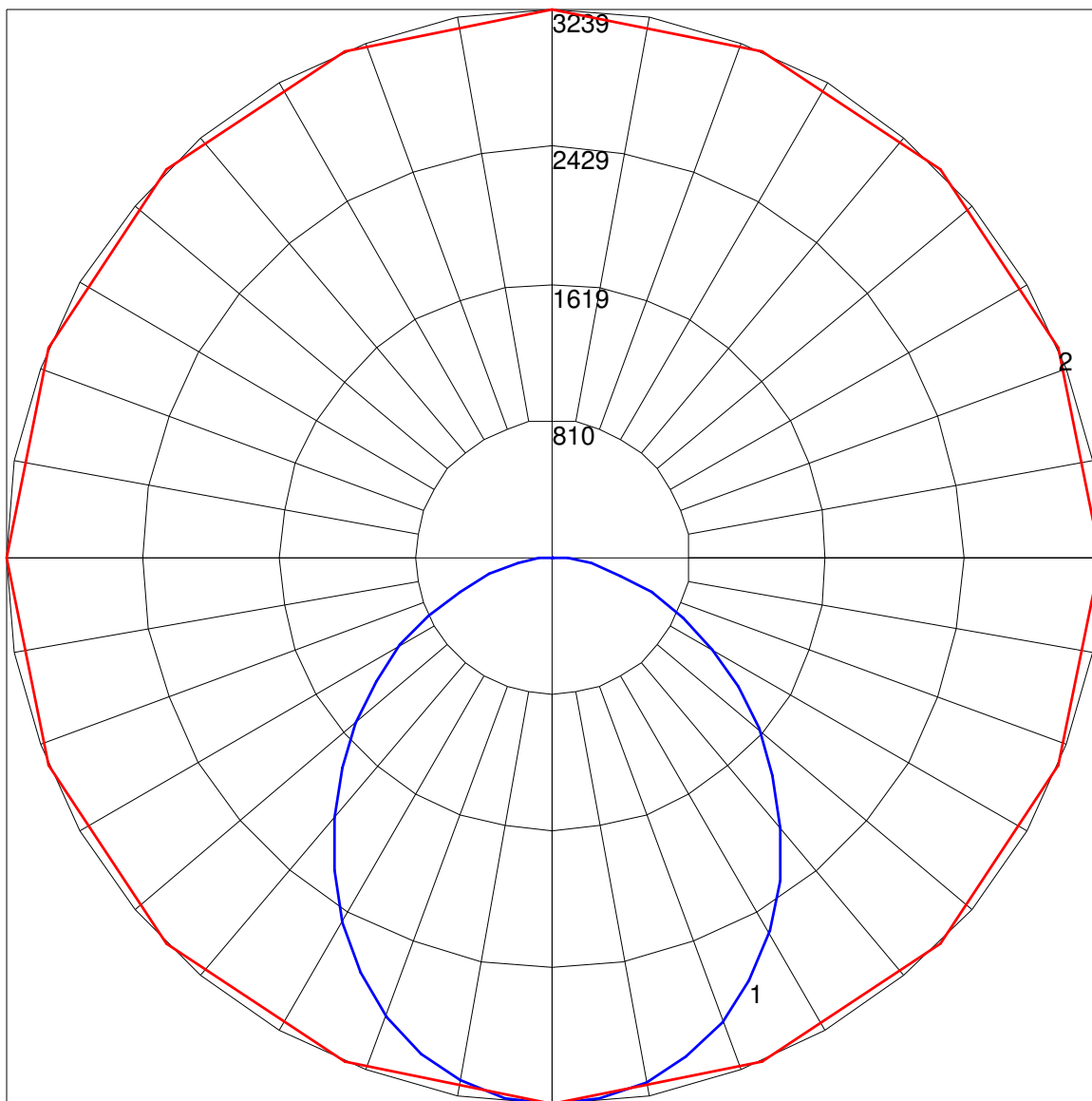
Reflectances

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	19.3	20.9	19.7	21.2	21.5	18.4	19.9	18.7	20.3	20.6
	3H	20.9	22.3	21.3	22.7	23.0	19.8	21.2	20.2	21.6	21.9
	4H	21.5	22.8	21.9	23.1	23.5	20.3	21.6	20.7	21.9	22.3
	6H	21.8	23.0	22.2	23.4	23.8	20.5	21.7	20.9	22.1	22.5
	8H	21.9	23.1	22.3	23.5	23.9	20.5	21.7	21.0	22.1	22.5
	12H	22.0	23.1	22.4	23.5	23.9	20.5	21.6	20.9	22.0	22.4
4H	2H	19.8	21.1	20.2	21.5	21.8	19.0	20.3	19.4	20.7	21.0
	3H	21.6	22.7	22.0	23.1	23.5	20.7	21.7	21.1	22.1	22.5
	4H	22.3	23.2	22.7	23.7	24.1	21.2	22.2	21.6	22.6	23.0
	6H	22.7	23.6	23.2	24.0	24.5	21.5	22.3	21.9	22.8	23.2
	8H	22.8	23.6	23.3	24.1	24.6	21.5	22.3	21.9	22.7	23.2
	12H	22.9	23.6	23.4	24.1	24.6	21.5	22.2	22.0	22.7	23.2
8H	4H	22.4	23.2	22.9	23.7	24.1	21.4	22.2	21.9	22.7	23.1
	6H	23.0	23.6	23.4	24.1	24.6	21.8	22.4	22.3	22.9	23.4
	8H	23.1	23.7	23.6	24.2	24.7	21.8	22.4	22.3	22.9	23.4
	12H	23.3	23.8	23.8	24.3	24.8	21.8	22.4	22.4	22.9	23.4
12H	4H	22.4	23.1	22.9	23.6	24.1	21.4	22.2	21.9	22.6	23.1
	6H	22.9	23.5	23.5	24.0	24.5	21.8	22.4	22.3	22.9	23.4
	8H	23.2	23.7	23.7	24.2	24.7	21.9	22.4	22.4	22.9	23.5

Maximum UGR = 24.8

POLAR GRAPH



Maximum Candela = 3238.535 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.)