

IES INDOOR REPORT

PHOTOMETRIC FILENAME : CMR2AENG-L17-927-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-L17-927-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	5916
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	89
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	7393	6830	6391
55	6615	6105	5631
65	5707	5201	4767
75	4500	3842	3385
85	2746	1072	649

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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	2616.998	2616.998	2616.998	2616.998	2616.998	2616.998	2616.998	2616.998	2616.998	2616.998
5	2607.448	2598.636	2598.289	2589.934	2583.610	2588.120	2594.862	2593.395	2602.294	2593.741
10	2559.819	2548.617	2535.296	2515.301	2503.277	2511.760	2528.329	2538.395	2547.726	2537.618
15	2480.679	2462.405	2433.404	2397.078	2378.082	2391.809	2422.434	2445.820	2459.747	2443.891
20	2370.123	2345.045	2296.588	2245.511	2217.556	2238.515	2281.271	2321.003	2338.336	2317.577
25	2233.539	2201.616	2135.911	2070.451	2041.641	2061.727	2115.555	2168.764	2189.631	2164.071
30	2068.759	2033.724	1955.122	1885.696	1854.132	1875.388	1929.295	1991.600	2014.859	1986.389
35	1889.178	1849.820	1765.372	1693.454	1664.191	1681.822	1734.190	1800.470	1829.693	1796.064
40	1696.723	1655.148	1568.383	1501.386	1474.891	1488.803	1532.910	1602.515	1636.915	1599.291
45	1488.737	1452.388	1375.438	1314.198	1286.993	1300.723	1338.095	1399.951	1431.011	1397.731
50	1283.938	1252.935	1186.153	1124.842	1100.002	1110.820	1149.837	1204.126	1230.580	1202.577
55	1080.560	1056.219	997.256	939.044	919.867	925.051	964.096	1012.970	1033.294	1011.839
60	880.649	865.465	807.772	761.315	744.572	748.162	779.723	828.852	840.216	827.954
65	686.877	679.838	625.917	587.121	573.716	575.688	603.830	650.619	653.812	649.853
70	502.579	498.749	449.499	418.327	407.140	409.971	434.190	477.538	477.213	476.945
75	331.681	325.704	283.155	258.177	249.465	253.840	274.615	312.270	313.990	311.847
80	183.326	172.346	137.355	116.984	108.642	115.855	134.396	165.991	172.791	165.738
85	68.169	50.742	26.607	16.956	16.117	16.913	26.281	49.545	63.957	49.429
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	2616.998	2616.998	2616.998	2616.998	2616.998	2616.998	2616.998
5	2594.977	2588.235	2583.726	2589.934	2597.598	2597.225	2607.448
10	2527.983	2511.645	2503.508	2515.244	2534.548	2547.033	2559.819
15	2421.513	2391.406	2378.226	2397.049	2432.655	2460.763	2480.679
20	2279.543	2237.881	2217.642	2245.281	2295.955	2343.432	2370.123
25	2112.935	2060.690	2041.756	2070.076	2134.932	2199.831	2233.539
30	1925.868	1873.977	1854.074	1885.264	1954.056	2031.708	2068.759
35	1730.015	1679.922	1663.931	1693.166	1763.990	1847.689	1889.178
40	1528.879	1486.615	1474.286	1501.328	1566.741	1652.614	1696.723
45	1334.899	1298.103	1286.474	1313.910	1373.740	1449.307	1488.737
50	1147.412	1108.114	1099.311	1124.353	1184.656	1249.826	1283.938
55	962.510	922.345	919.234	938.526	995.586	1053.167	1080.560
60	778.626	745.695	744.140	760.941	806.131	862.269	880.649

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CANDELA TABULATION - (Cont.)

65	603.044	573.698	573.264	586.689	624.362	676.757	686.877
70	433.672	408.791	406.752	417.984	447.967	495.933	502.579
75	274.307	253.311	249.362	258.012	281.934	323.188	331.681
80	134.257	115.706	108.703	116.950	136.630	170.379	183.326
85	26.258	16.919	16.177	17.020	26.431	49.982	68.169
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	927.74	N.A.	15.70
0-30	1905.58	N.A.	32.20
0-40	3003.65	N.A.	50.80
0-60	4938.75	N.A.	83.50
0-80	5859.53	N.A.	99.00
0-90	5916.17	N.A.	100.00
10-90	5670.61	N.A.	95.80
20-40	2075.91	N.A.	35.10
20-50	3130.35	N.A.	52.90
40-70	2550.55	N.A.	43.10
60-80	920.78	N.A.	15.60
70-80	305.33	N.A.	5.20
80-90	56.64	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	5916.17	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	245.56
10-20	682.18
20-30	977.84
30-40	1098.07
40-50	1054.45
50-60	880.65
60-70	615.45
70-80	305.33
80-90	56.64
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

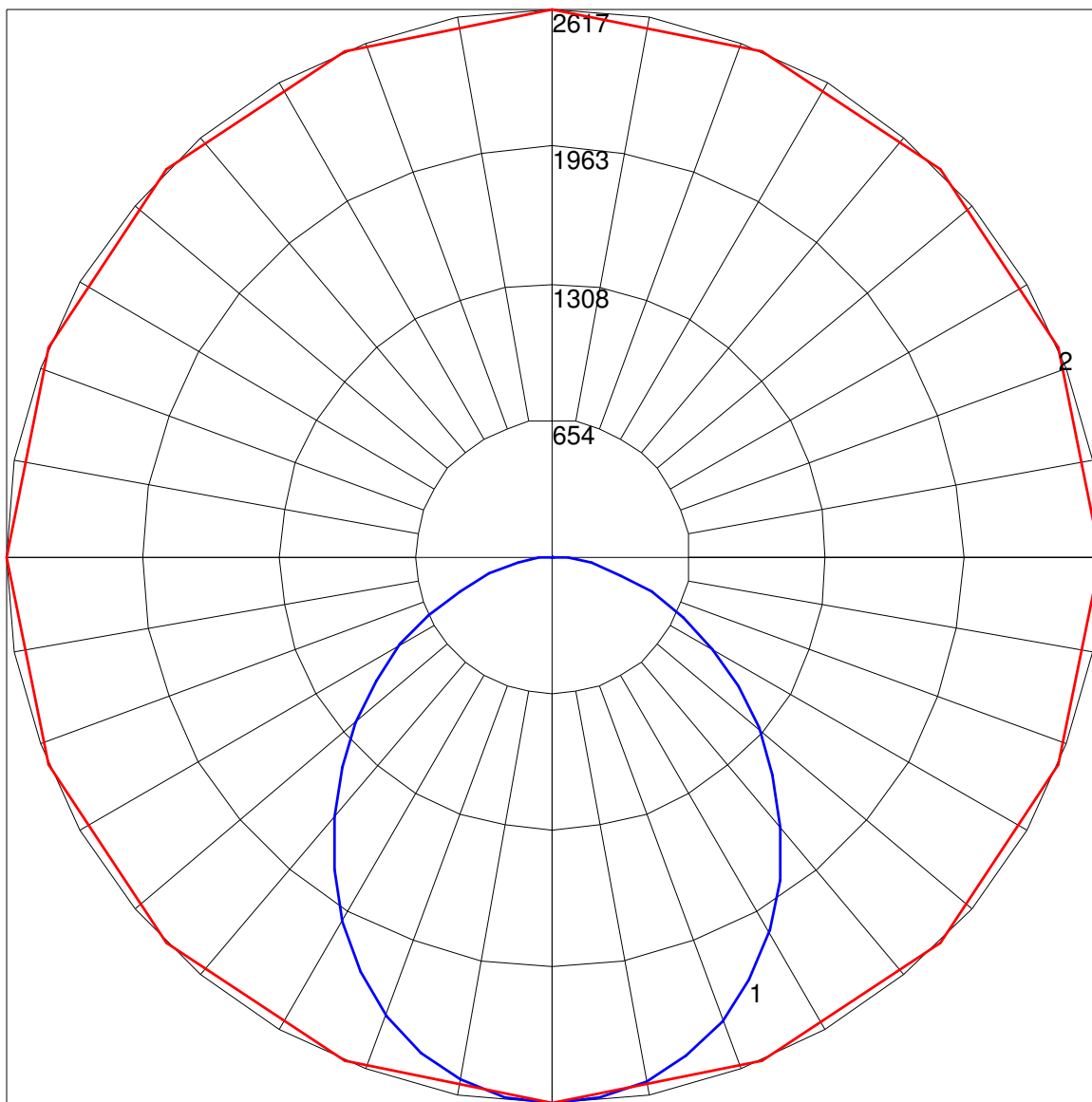
Reflectances

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	18.6	20.2	19.0	20.5	20.8	17.7	19.2	18.0	19.6	19.9
	3H	20.2	21.6	20.6	22.0	22.3	19.1	20.5	19.5	20.9	21.2
	4H	20.8	22.1	21.2	22.4	22.8	19.6	20.9	20.0	21.2	21.6
	6H	21.1	22.3	21.5	22.7	23.1	19.8	21.0	20.2	21.4	21.8
	8H	21.2	22.4	21.6	22.8	23.2	19.8	21.0	20.3	21.4	21.8
	12H	21.3	22.4	21.7	22.8	23.2	19.8	20.9	20.2	21.3	21.7
4H	2H	19.1	20.4	19.5	20.8	21.1	18.3	19.6	18.7	20.0	20.3
	3H	20.9	22.0	21.3	22.4	22.8	20.0	21.0	20.4	21.4	21.8
	4H	21.6	22.5	22.0	23.0	23.4	20.5	21.5	20.9	21.9	22.3
	6H	22.0	22.9	22.5	23.3	23.8	20.8	21.6	21.2	22.1	22.5
	8H	22.1	22.9	22.6	23.4	23.9	20.8	21.6	21.2	22.0	22.5
	12H	22.2	22.9	22.7	23.4	23.9	20.8	21.5	21.3	22.0	22.5
8H	4H	21.7	22.5	22.2	23.0	23.4	20.7	21.5	21.2	22.0	22.4
	6H	22.3	22.9	22.7	23.4	23.9	21.1	21.7	21.6	22.2	22.7
	8H	22.4	23.0	22.9	23.5	24.0	21.1	21.7	21.6	22.2	22.7
	12H	22.6	23.1	23.1	23.6	24.1	21.1	21.7	21.7	22.2	22.7
12H	4H	21.7	22.4	22.2	22.9	23.4	20.7	21.5	21.2	21.9	22.4
	6H	22.2	22.8	22.8	23.3	23.8	21.1	21.7	21.6	22.2	22.7
	8H	22.5	23.0	23.0	23.5	24.0	21.2	21.7	21.7	22.2	22.8

Maximum UGR = 24.1

POLAR GRAPH



Maximum Candela = 2616.998 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.)