

IES INDOOR REPORT

PHOTOMETRIC FILENAME : CMR2AENG-L17-850-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-L17-850-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	7839
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	118
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	9796	9050	8468
55	8765	8089	7462
65	7562	6891	6316
75	5962	5090	4485
85	3639	1420	860

IES INDOOR REPORT
PHOTOMETRIC FILENAME : CMR2AENG-L17-850-CA-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>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>	<u>202.5</u>
0	3467.522	3467.522	3467.522	3467.522	3467.522	3467.522	3467.522	3467.522	3467.522	3467.522
5	3454.869	3443.192	3442.732	3431.662	3423.284	3429.259	3438.192	3436.249	3448.040	3436.707
10	3391.760	3376.917	3359.268	3332.774	3316.842	3328.082	3350.035	3363.374	3375.737	3362.344
15	3286.900	3262.686	3224.260	3176.128	3150.959	3169.147	3209.725	3240.712	3259.165	3238.156
20	3140.413	3107.184	3042.980	2975.302	2938.262	2966.032	3022.684	3075.329	3098.295	3070.789
25	2959.439	2917.142	2830.082	2743.347	2705.174	2731.788	2803.110	2873.612	2901.260	2867.394
30	2741.105	2694.684	2590.536	2498.547	2456.725	2484.889	2556.315	2638.870	2669.688	2631.965
35	2503.161	2451.012	2339.118	2243.827	2205.052	2228.414	2297.802	2385.622	2424.343	2379.785
40	2248.158	2193.071	2078.107	1989.336	1954.231	1972.665	2031.106	2123.333	2168.913	2119.060
45	1972.576	1924.413	1822.456	1741.313	1705.265	1723.458	1772.975	1854.935	1896.089	1851.993
50	1701.218	1660.139	1571.652	1490.416	1457.503	1471.837	1523.534	1595.467	1630.518	1593.415
55	1431.741	1399.491	1321.365	1244.234	1218.824	1225.693	1277.427	1342.185	1369.114	1340.686
60	1166.861	1146.741	1070.298	1008.742	986.557	991.315	1033.132	1098.229	1113.286	1097.039
65	910.113	900.785	829.340	777.936	760.174	762.786	800.075	862.070	866.301	861.055
70	665.917	660.843	595.586	554.283	539.461	543.212	575.302	632.737	632.307	631.952
75	439.477	431.558	375.180	342.084	330.541	336.339	363.865	413.758	416.037	413.197
80	242.907	228.358	181.996	155.004	143.951	153.509	178.074	219.939	228.948	219.603
85	90.324	67.234	35.254	22.467	21.355	22.410	34.823	65.647	84.743	65.494
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	3467.522	3467.522	3467.522	3467.522	3467.522	3467.522	3467.522
5	3438.345	3429.411	3423.436	3431.662	3441.817	3441.323	3454.869
10	3349.578	3327.929	3317.147	3332.698	3358.276	3374.819	3391.760
15	3208.504	3168.612	3151.150	3176.090	3223.269	3260.512	3286.900
20	3020.395	2965.193	2938.376	2974.997	3042.140	3105.048	3140.413
25	2799.639	2730.414	2705.327	2742.851	2828.785	2914.776	2959.439
30	2551.776	2483.020	2456.648	2497.975	2589.125	2692.013	2741.105
35	2292.270	2225.896	2204.709	2243.445	2337.287	2448.188	2503.161
40	2025.765	1969.765	1953.430	1989.260	2075.932	2189.714	2248.158
45	1768.741	1719.987	1704.579	1740.931	1820.205	1920.331	1972.576
50	1520.321	1468.251	1456.588	1489.768	1569.669	1656.019	1701.218
55	1275.325	1222.107	1217.985	1243.547	1319.152	1395.447	1431.741
60	1031.679	988.046	985.985	1008.246	1068.124	1142.506	1166.861

IES INDOOR REPORT
PHOTOMETRIC FILENAME : CMR2AENG-L17-850-CA-DIM-UNV_.IES

CANDELA TABULATION - (Cont.)

65	799.034	760.150	759.575	777.363	827.280	896.703	910.113
70	574.615	541.648	538.946	553.829	593.557	657.112	665.917
75	363.457	335.637	330.404	341.867	373.563	428.224	439.477
80	177.891	153.310	144.031	154.958	181.035	225.753	242.907
85	34.792	22.417	21.435	22.551	35.021	66.226	90.324
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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : CMR2AENG-L17-850-CA-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1229.26	N.A.	15.70
0-30	2524.89	N.A.	32.20
0-40	3979.83	N.A.	50.80
0-60	6543.84	N.A.	83.50
0-80	7763.87	N.A.	99.00
0-90	7838.92	N.A.	100.00
10-90	7513.55	N.A.	95.80
20-40	2750.58	N.A.	35.10
20-50	4147.72	N.A.	52.90
40-70	3379.47	N.A.	43.10
60-80	1220.03	N.A.	15.60
70-80	404.57	N.A.	5.20
80-90	75.05	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	7838.92	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	325.37
10-20	903.89
20-30	1295.64
30-40	1454.94
40-50	1397.14
50-60	1166.87
60-70	815.47
70-80	404.57
80-90	75.05
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 : CMR2AENG-L17-850-CA-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	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	45	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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : CMR2AENG-L17-850-CA-DIM-UNV_.IES

UGR TABLE - CORRECTED

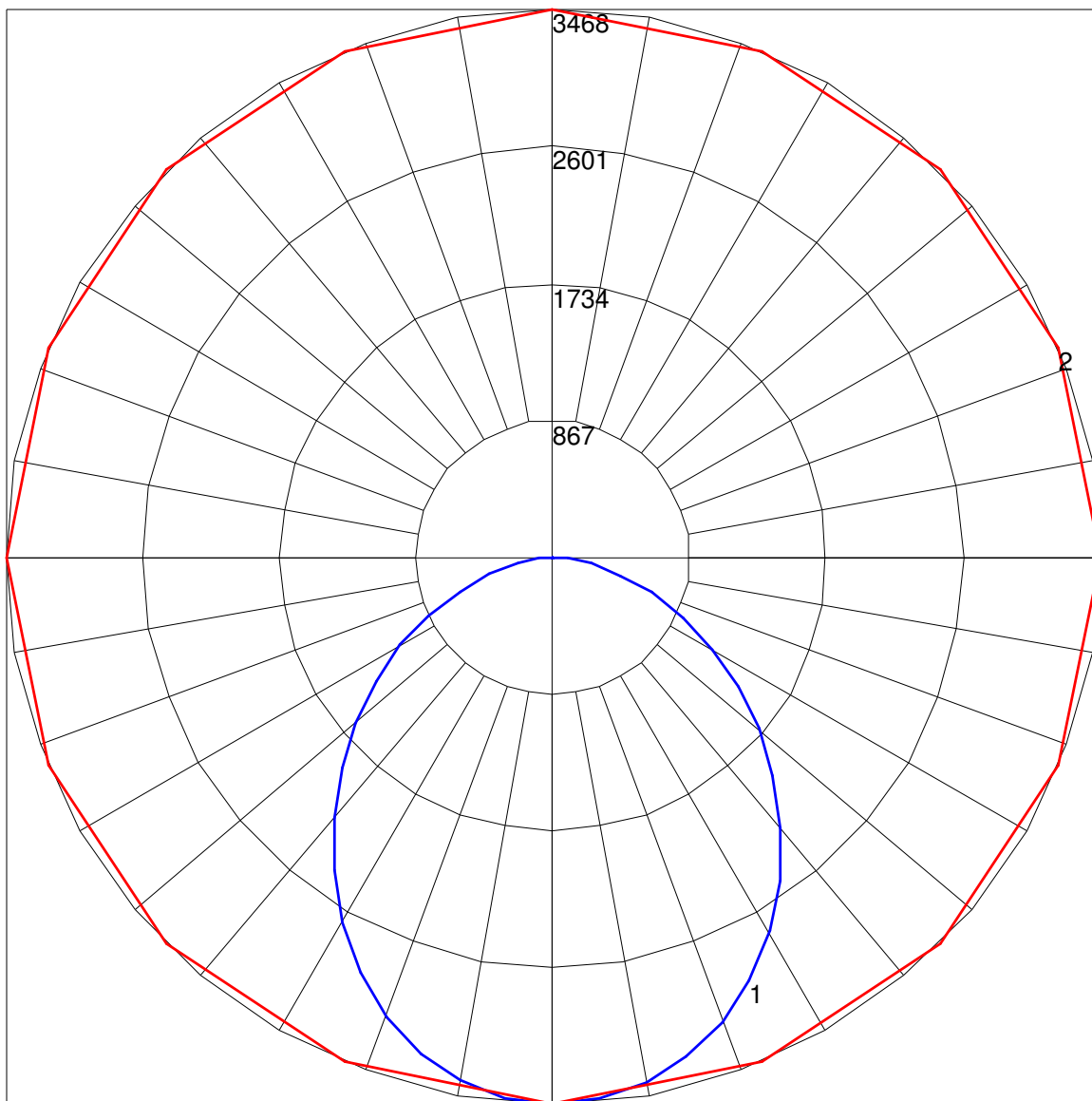
Reflectances

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	19.6	21.2	20.0	21.5	21.8	18.7	20.2	19.0	20.6	20.9
	3H	21.2	22.6	21.6	23.0	23.3	20.1	21.5	20.5	21.9	22.2
	4H	21.8	23.1	22.2	23.4	23.8	20.6	21.9	21.0	22.3	22.6
	6H	22.1	23.3	22.5	23.7	24.1	20.8	22.0	21.2	22.4	22.8
	8H	22.2	23.4	22.6	23.8	24.2	20.8	22.0	21.3	22.4	22.8
	12H	22.3	23.4	22.7	23.8	24.2	20.8	21.9	21.2	22.3	22.7
4H	2H	20.1	21.4	20.5	21.8	22.1	19.3	20.6	19.7	21.0	21.3
	3H	21.9	23.0	22.3	23.4	23.8	21.0	22.0	21.4	22.4	22.8
	4H	22.6	23.5	23.0	24.0	24.4	21.5	22.5	21.9	22.9	23.3
	6H	23.0	23.9	23.5	24.3	24.8	21.8	22.6	22.2	23.1	23.5
	8H	23.2	23.9	23.6	24.4	24.9	21.8	22.6	22.3	23.0	23.5
	12H	23.2	23.9	23.7	24.4	24.9	21.8	22.5	22.3	23.0	23.5
8H	4H	22.7	23.5	23.2	24.0	24.4	21.7	22.5	22.2	23.0	23.4
	6H	23.3	23.9	23.7	24.4	24.9	22.1	22.7	22.6	23.2	23.7
	8H	23.4	24.0	23.9	24.5	25.0	22.1	22.7	22.6	23.2	23.7
	12H	23.6	24.1	24.1	24.6	25.1	22.1	22.7	22.7	23.2	23.7
12H	4H	22.7	23.4	23.2	23.9	24.4	21.7	22.5	22.2	22.9	23.4
	6H	23.2	23.8	23.8	24.3	24.8	22.1	22.7	22.6	23.2	23.7
	8H	23.5	24.0	24.0	24.5	25.0	22.2	22.7	22.7	23.2	23.8

Maximum UGR = 25.1

POLAR GRAPH



Maximum Candela = 3467.522 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.)