

IES INDOOR REPORT

PHOTOMETRIC FILENAME : CMR2AENG-L17-930-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-L17-930-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	6064
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	91
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	7578	7001	6551
55	6781	6258	5772
65	5850	5331	4886
75	4612	3938	3469
85	2815	1099	666

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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	2682.423	2682.423	2682.423	2682.423	2682.423	2682.423	2682.423	2682.423	2682.423	2682.423
5	2672.634	2663.601	2663.246	2654.682	2648.201	2652.823	2659.734	2658.230	2667.352	2658.584
10	2623.814	2612.332	2598.679	2578.184	2565.859	2574.554	2591.537	2601.855	2611.419	2601.059
15	2542.696	2523.965	2494.239	2457.005	2437.535	2451.604	2482.995	2506.966	2521.241	2504.988
20	2429.376	2403.671	2354.003	2301.649	2272.995	2294.478	2338.303	2379.028	2396.794	2375.516
25	2289.378	2256.657	2189.309	2122.212	2092.682	2113.270	2168.444	2222.983	2244.371	2218.173
30	2120.478	2084.567	2004.000	1932.838	1900.485	1922.273	1977.527	2041.390	2065.231	2036.048
35	1936.408	1896.066	1809.506	1735.790	1705.795	1723.867	1777.545	1845.481	1875.435	1840.966
40	1739.141	1696.527	1607.592	1538.920	1511.763	1526.023	1571.233	1642.578	1677.838	1639.273
45	1525.955	1488.697	1409.824	1347.053	1319.168	1333.241	1371.547	1434.949	1466.786	1432.674
50	1316.036	1284.259	1215.807	1152.963	1127.502	1138.591	1178.583	1234.229	1261.344	1232.642
55	1107.574	1082.625	1022.188	962.520	942.864	948.177	988.198	1038.294	1059.126	1037.135
60	902.666	887.101	827.966	780.348	763.186	766.866	799.216	849.573	861.222	848.653
65	704.049	696.833	641.565	601.799	588.059	590.080	618.926	666.884	670.157	666.099
70	515.144	511.218	460.737	428.785	417.319	420.221	445.045	489.476	489.143	488.868
75	339.973	333.847	290.234	264.631	255.702	260.186	281.481	320.077	321.840	319.643
80	187.909	176.654	140.789	119.909	111.358	118.752	137.755	170.141	177.110	169.881
85	69.874	52.011	27.272	17.380	16.520	17.336	26.938	50.783	65.556	50.665
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	2682.423	2682.423	2682.423	2682.423	2682.423	2682.423	2682.423
5	2659.852	2652.941	2648.319	2654.682	2662.537	2662.155	2672.634
10	2591.183	2574.436	2566.095	2578.125	2597.912	2610.709	2623.814
15	2482.051	2451.191	2437.682	2456.975	2493.472	2522.283	2542.696
20	2336.532	2293.828	2273.084	2301.413	2353.354	2402.018	2429.376
25	2165.758	2112.207	2092.800	2121.828	2188.306	2254.827	2289.378
30	1974.015	1920.827	1900.426	1932.396	2002.908	2082.501	2120.478
35	1773.265	1721.920	1705.530	1735.495	1808.090	1893.882	1936.408
40	1567.101	1523.781	1511.144	1538.861	1605.910	1693.930	1739.141
45	1368.271	1330.556	1318.636	1346.758	1408.083	1485.539	1525.955
50	1176.098	1135.817	1126.794	1152.462	1214.272	1281.071	1316.036
55	986.572	945.403	942.214	961.989	1020.476	1079.496	1107.574
60	798.091	764.337	762.743	779.964	826.284	883.825	902.666

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CANDELA TABULATION - (Cont.)

65	618.120	588.041	587.596	601.357	639.971	693.676	704.049
70	444.514	419.011	416.920	428.434	459.166	508.332	515.144
75	281.165	259.643	255.596	264.463	288.983	331.268	339.973
80	137.614	118.598	111.420	119.873	140.046	174.639	187.909
85	26.915	17.342	16.582	17.445	27.092	51.232	69.874
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	950.93	N.A.	15.70
0-30	1953.22	N.A.	32.20
0-40	3078.74	N.A.	50.80
0-60	5062.22	N.A.	83.50
0-80	6006.02	N.A.	99.00
0-90	6064.07	N.A.	100.00
10-90	5812.37	N.A.	95.80
20-40	2127.81	N.A.	35.10
20-50	3208.61	N.A.	52.90
40-70	2614.31	N.A.	43.10
60-80	943.80	N.A.	15.60
70-80	312.97	N.A.	5.20
80-90	58.06	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	6064.07	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	251.70
10-20	699.23
20-30	1002.29
30-40	1125.52
40-50	1080.81
50-60	902.67
60-70	630.83
70-80	312.97
80-90	58.06
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

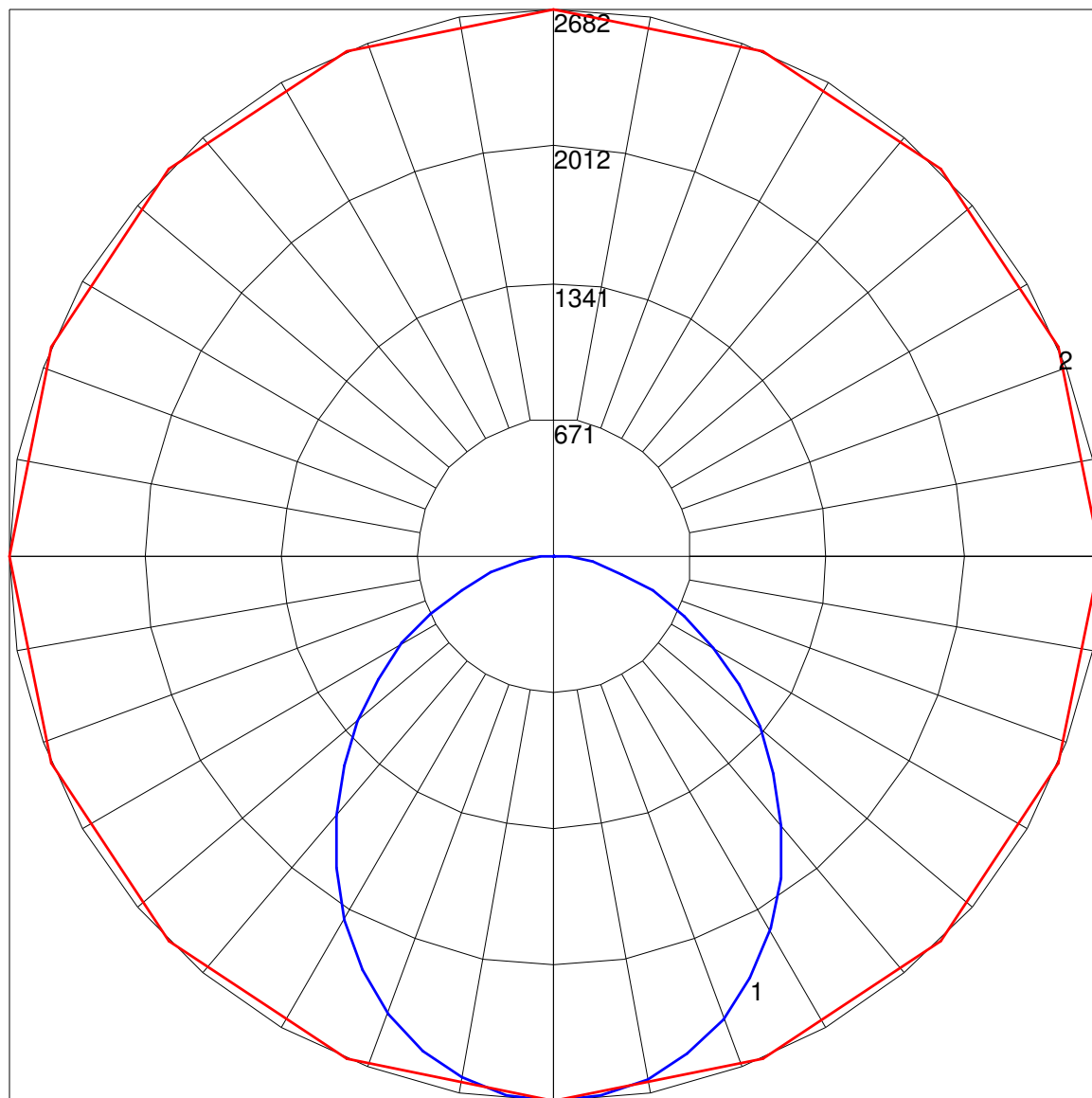
Reflectances

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	21.3	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	20.3	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	20.8	21.7	21.3	22.2	22.6
	8H	22.2	23.0	22.7	23.5	24.0	20.9	21.7	21.3	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	22.3	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 = 2682.423 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.)