

IES INDOOR REPORT

PHOTOMETRIC FILENAME : CMR2AENG-L17-950-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-L17-950-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	6582
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	99
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	8225	7599	7110
55	7359	6792	6265
65	6349	5786	5303
75	5006	4274	3765
85	3055	1193	722

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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	2911.410	2911.410	2911.410	2911.410	2911.410	2911.410	2911.410	2911.410	2911.410	2911.410
5	2900.786	2890.982	2890.596	2881.301	2874.267	2879.283	2886.784	2885.152	2895.052	2885.537
10	2847.799	2835.336	2820.517	2798.273	2784.896	2794.333	2812.766	2823.965	2834.345	2823.100
15	2759.756	2739.425	2707.162	2666.749	2645.617	2660.887	2694.958	2720.975	2736.469	2718.829
20	2636.762	2608.862	2554.955	2498.131	2467.031	2490.348	2537.914	2582.116	2601.399	2578.304
25	2484.812	2449.298	2376.201	2303.376	2271.326	2293.671	2353.555	2412.750	2435.964	2407.529
30	2301.494	2262.517	2175.073	2097.837	2062.722	2086.369	2146.340	2215.655	2241.531	2209.857
35	2101.711	2057.925	1963.976	1883.968	1851.412	1871.027	1929.286	2003.023	2035.533	1998.122
40	1887.605	1841.352	1744.826	1670.292	1640.816	1656.294	1705.363	1782.798	1821.068	1779.211
45	1656.219	1615.781	1530.175	1462.046	1431.779	1447.055	1488.630	1557.445	1591.999	1554.975
50	1428.381	1393.891	1319.595	1251.387	1223.753	1235.788	1279.193	1339.590	1369.020	1337.867
55	1202.122	1175.044	1109.448	1044.687	1023.352	1029.119	1072.557	1126.929	1149.539	1125.670
60	979.723	962.829	898.647	846.963	828.336	832.331	867.441	922.098	934.740	921.098
65	764.151	756.319	696.333	653.172	638.260	640.453	671.761	723.814	727.366	722.962
70	559.119	554.858	500.068	465.389	452.943	456.093	483.036	531.261	530.899	530.601
75	368.995	362.346	315.010	287.221	277.530	282.397	305.509	347.400	349.314	346.929
80	203.950	191.735	152.808	130.145	120.864	128.889	149.515	184.665	192.230	184.383
85	75.838	56.451	29.600	18.864	17.930	18.816	29.238	55.118	71.152	54.990
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	2911.410	2911.410	2911.410	2911.410	2911.410	2911.410	2911.410
5	2886.912	2879.411	2874.395	2881.301	2889.827	2889.413	2900.786
10	2812.381	2794.205	2785.152	2798.208	2819.684	2833.574	2847.799
15	2693.933	2660.439	2645.777	2666.717	2706.329	2737.599	2759.756
20	2535.992	2489.643	2467.127	2497.875	2554.250	2607.068	2636.762
25	2350.640	2292.518	2271.454	2302.960	2375.112	2447.312	2484.812
30	2142.529	2084.800	2062.658	2097.356	2173.888	2260.275	2301.494
35	1924.642	1868.913	1851.124	1883.647	1962.439	2055.554	2101.711
40	1700.878	1653.859	1640.144	1670.228	1743.000	1838.533	1887.605
45	1485.075	1444.140	1431.203	1461.725	1528.285	1612.354	1656.219
50	1276.496	1232.777	1222.984	1250.843	1317.929	1390.431	1428.381
55	1070.792	1026.108	1022.647	1044.110	1107.590	1171.649	1202.122
60	866.221	829.586	827.855	846.546	896.821	959.274	979.723

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CANDELA TABULATION - (Cont.)

65	670.887	638.239	637.757	652.692	694.603	752.892	764.151
70	482.460	454.780	452.511	465.008	498.364	551.726	559.119
75	305.167	281.808	277.415	287.039	313.652	359.547	368.995
80	149.361	128.723	120.932	130.106	152.001	189.547	203.950
85	29.212	18.822	17.997	18.934	29.404	55.605	75.838
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	1032.11	N.A.	15.70
0-30	2119.96	N.A.	32.20
0-40	3341.56	N.A.	50.80
0-60	5494.36	N.A.	83.50
0-80	6518.72	N.A.	99.00
0-90	6581.74	N.A.	100.00
10-90	6308.55	N.A.	95.80
20-40	2309.45	N.A.	35.10
20-50	3482.52	N.A.	52.90
40-70	2837.48	N.A.	43.10
60-80	1024.37	N.A.	15.60
70-80	339.68	N.A.	5.20
80-90	63.01	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	6581.74	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	273.19
10-20	758.93
20-30	1087.85
30-40	1221.6
40-50	1173.07
50-60	979.73
60-70	684.68
70-80	339.68
80-90	63.01
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	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	32	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

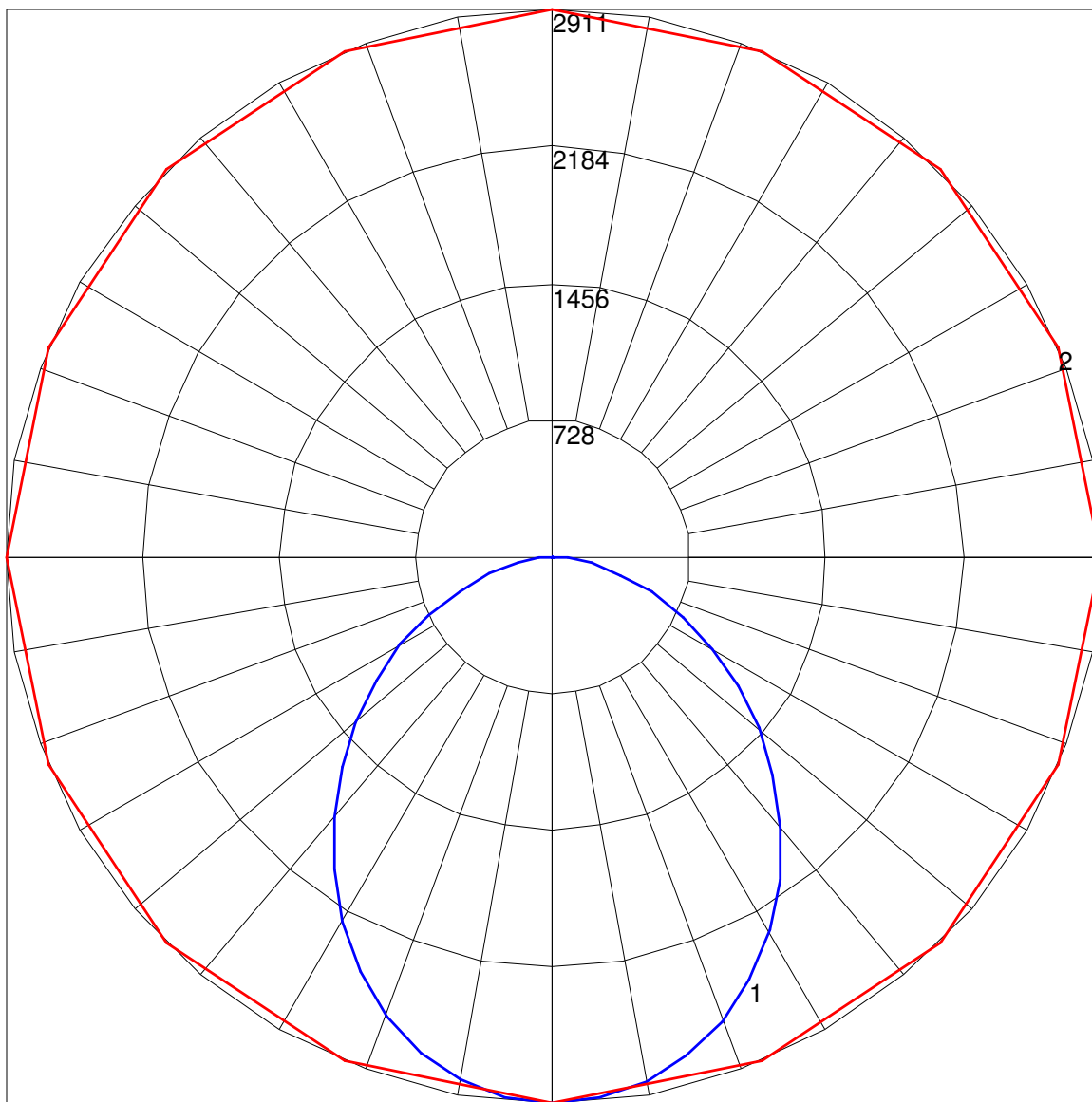
Reflectances

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	18.9	20.5	19.3	20.8	21.1	18.0	19.5	18.3	19.9	20.2
	3H	20.5	21.9	20.9	22.3	22.6	19.4	20.8	19.8	21.2	21.5
	4H	21.1	22.4	21.5	22.7	23.1	19.9	21.2	20.3	21.6	21.9
	6H	21.4	22.6	21.8	23.0	23.4	20.1	21.3	20.5	21.7	22.1
	8H	21.5	22.7	21.9	23.1	23.5	20.1	21.3	20.6	21.7	22.1
	12H	21.6	22.7	22.0	23.1	23.5	20.1	21.2	20.5	21.6	22.0
4H	2H	19.4	20.7	19.8	21.1	21.4	18.6	19.9	19.0	20.3	20.6
	3H	21.2	22.3	21.6	22.7	23.1	20.3	21.3	20.7	21.7	22.1
	4H	21.9	22.8	22.3	23.3	23.7	20.8	21.8	21.2	22.2	22.6
	6H	22.3	23.2	22.8	23.6	24.1	21.1	21.9	21.5	22.4	22.8
	8H	22.5	23.2	22.9	23.7	24.2	21.1	21.9	21.6	22.3	22.8
	12H	22.5	23.2	23.0	23.7	24.2	21.1	21.8	21.6	22.3	22.8
8H	4H	22.0	22.8	22.5	23.3	23.7	21.0	21.8	21.5	22.3	22.7
	6H	22.6	23.2	23.0	23.7	24.2	21.4	22.0	21.9	22.5	23.0
	8H	22.7	23.3	23.2	23.8	24.3	21.4	22.0	21.9	22.5	23.0
	12H	22.9	23.4	23.4	23.9	24.4	21.4	22.0	22.0	22.5	23.0
12H	4H	22.0	22.7	22.5	23.2	23.7	21.0	21.8	21.5	22.2	22.7
	6H	22.5	23.1	23.1	23.6	24.1	21.4	22.0	21.9	22.5	23.0
	8H	22.8	23.3	23.3	23.8	24.3	21.5	22.0	22.0	22.5	23.1

Maximum UGR = 24.4

POLAR GRAPH



Maximum Candela = 2911.41 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.)