

IES INDOOR REPORT

PHOTOMETRIC FILENAME : CMR4AENG-L33-835-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] CMR4AENG-L33-835-CA-DIM-UNV (A,E&N)

[LUMINAIRE] 2' x 4' 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	13010
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	117
Total Luminaire Watts	111.3
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.18
Spacing Criterion (Diagonal)	1.30
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.75 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	7216	7117	7068
55	6595	6598	6627
65	5685	5869	5942
75	4088	4446	4469
85	1634	1874	1775

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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	5168.467	5168.467	5168.467	5168.467	5168.467	5168.467	5168.467	5168.467	5168.467	5168.467
5	5149.576	5142.658	5136.827	5123.695	5144.819	5121.427	5132.544	5136.108	5143.134	5136.539
10	5063.170	5052.459	5042.128	5026.005	5036.754	5021.578	5033.418	5039.682	5048.054	5038.710
15	4918.734	4904.742	4884.943	4862.524	4870.714	4855.938	4871.230	4884.011	4892.569	4881.600
20	4720.414	4700.696	4672.669	4644.380	4639.050	4635.634	4653.522	4670.644	4680.680	4666.361
25	4473.820	4449.307	4413.874	4377.927	4374.206	4367.021	4388.428	4408.242	4418.935	4402.376
30	4184.233	4155.818	4114.240	4082.037	4069.872	4069.152	4081.957	4103.164	4116.858	4096.650
35	3855.494	3826.489	3786.049	3759.826	3747.394	3745.286	3747.072	3764.801	3781.137	3759.294
40	3494.253	3471.918	3436.470	3420.344	3403.015	3404.616	3392.130	3406.127	3419.493	3402.096
45	3113.806	3093.685	3071.099	3064.889	3049.716	3048.046	3024.419	3028.139	3041.648	3025.364
50	2720.113	2702.359	2694.666	2700.232	2691.052	2682.705	2649.271	2641.347	2653.415	2639.411
55	2308.543	2299.408	2309.435	2321.708	2319.667	2304.217	2267.984	2245.347	2249.461	2243.932
60	1887.289	1890.213	1914.021	1934.978	1940.401	1918.537	1878.959	1844.447	1836.747	1843.324
65	1466.105	1478.589	1513.560	1527.794	1532.509	1513.502	1485.951	1442.066	1424.774	1441.108
70	1040.651	1064.851	1101.877	1111.286	1112.031	1100.841	1082.741	1038.337	1008.943	1037.595
75	645.736	674.816	702.250	703.326	705.777	697.905	691.575	658.023	623.624	657.494
80	312.608	339.020	351.643	341.854	337.096	340.444	347.943	331.077	299.439	330.760
85	86.892	101.861	99.680	94.349	94.426	94.295	99.273	100.364	81.627	100.220
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	5168.467	5168.467	5168.467	5168.467	5168.467	5168.467	5168.467
5	5132.688	5121.571	5144.963	5123.695	5135.963	5140.894	5149.576
10	5032.987	5021.434	5037.042	5025.933	5041.192	5050.479	5063.170
15	4870.079	4855.434	4870.894	4862.488	4884.007	4902.690	4918.734
20	4651.362	4634.843	4639.158	4644.092	4671.877	4698.680	4720.414
25	4385.153	4365.726	4374.350	4377.459	4412.650	4447.076	4473.820
30	4077.674	4067.389	4069.800	4081.497	4112.909	4153.299	4184.233
35	3741.853	3742.910	3747.070	3759.466	3784.322	3823.825	3855.494
40	3387.091	3401.881	3402.259	3420.272	3434.419	3468.751	3494.253
45	3020.424	3044.770	3049.068	3064.529	3068.975	3089.834	3113.806
50	2646.240	2679.322	2690.188	2699.621	2692.794	2698.472	2720.113
55	2266.001	2300.834	2318.875	2321.060	2307.347	2295.593	2308.543
60	1877.588	1915.453	1939.861	1934.510	1911.970	1886.218	1887.289

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CANDELA TABULATION - (Cont.)

65	1484.969	1511.015	1531.944	1527.254	1511.616	1474.738	1466.105
70	1082.093	1099.366	1111.545	1110.858	1099.962	1061.331	1040.651
75	691.190	697.243	705.647	703.121	700.724	671.670	645.736
80	347.770	340.256	337.172	341.811	350.736	336.562	312.608
85	99.245	94.302	94.502	94.428	99.461	100.911	86.892
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	1861.96	N.A.	14.30
0-30	3889.1	N.A.	29.90
0-40	6249.45	N.A.	48.00
0-60	10657.79	N.A.	81.90
0-80	12866.01	N.A.	98.90
0-90	13009.85	N.A.	100.00
10-90	12522.73	N.A.	96.30
20-40	4387.49	N.A.	33.70
20-50	6746.21	N.A.	51.90
40-70	5883.11	N.A.	45.20
60-80	2208.23	N.A.	17.00
70-80	733.46	N.A.	5.60
80-90	143.84	N.A.	1.10
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	13009.85	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	487.12
10-20	1374.83
20-30	2027.15
30-40	2360.34
40-50	2358.72
50-60	2049.61
60-70	1474.77
70-80	733.46
80-90	143.84
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	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	87	81	77	83	79	75	80	77	74	72
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55	64	59	54	52
5	77	65	56	49	75	63	55	49	61	54	49	59	53	48	58	52	47	45
6	71	58	50	43	69	57	49	43	56	48	43	54	47	42	52	46	42	40
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	37	35
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32
9	58	44	36	31	56	44	36	31	43	36	31	42	35	31	41	35	30	29
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26

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UGR TABLE - CORRECTED

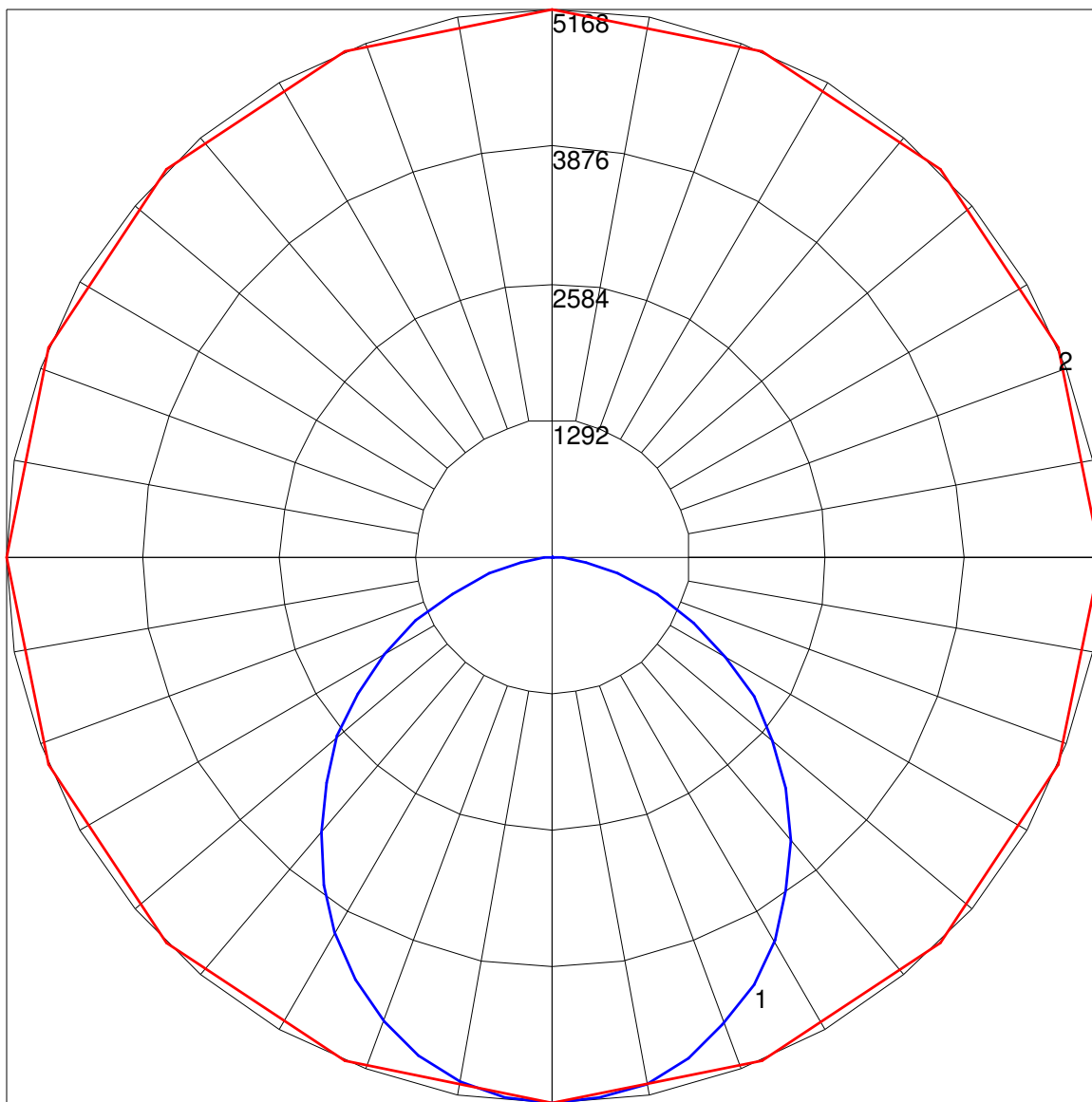
Reflectances

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	18.9	20.5	20.8	18.6	20.2	19.0	20.6	20.9
	3H	20.1	21.5	20.5	21.8	22.2	20.3	21.7	20.6	22.0	22.4
	4H	20.6	21.9	21.0	22.3	22.6	20.8	22.1	21.2	22.5	22.9
	6H	20.8	22.1	21.2	22.4	22.8	21.1	22.3	21.5	22.7	23.1
	8H	20.9	22.1	21.3	22.5	22.9	21.1	22.3	21.6	22.7	23.1
	12H	20.9	22.0	21.3	22.4	22.8	21.1	22.3	21.6	22.7	23.1
4H	2H	19.2	20.5	19.6	20.9	21.2	19.2	20.6	19.6	20.9	21.3
	3H	20.9	22.0	21.3	22.4	22.8	21.0	22.2	21.4	22.6	23.0
	4H	21.5	22.5	21.9	22.9	23.3	21.6	22.7	22.1	23.1	23.5
	6H	21.8	22.7	22.3	23.1	23.6	22.0	22.9	22.5	23.3	23.8
	8H	21.9	22.7	22.3	23.2	23.6	22.1	22.9	22.6	23.4	23.8
	12H	21.9	22.7	22.4	23.1	23.6	22.1	22.9	22.6	23.4	23.8
8H	4H	21.7	22.5	22.1	23.0	23.4	21.9	22.7	22.3	23.1	23.6
	6H	22.1	22.8	22.6	23.3	23.8	22.3	23.0	22.8	23.5	24.0
	8H	22.2	22.9	22.7	23.4	23.8	22.4	23.0	22.9	23.5	24.0
	12H	22.3	22.8	22.8	23.3	23.9	22.5	23.0	23.0	23.5	24.1
12H	4H	21.7	22.4	22.2	22.9	23.4	21.9	22.6	22.3	23.1	23.6
	6H	22.1	22.8	22.7	23.2	23.8	22.3	22.9	22.8	23.4	23.9
	8H	22.3	22.8	22.8	23.3	23.9	22.5	23.0	23.0	23.5	24.1

Maximum UGR = 24.1

POLAR GRAPH



Maximum Candela = 5168.467 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.)