

IES INDOOR REPORT

PHOTOMETRIC FILENAME : CMR4AENG-L33-950-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] CMR4AENG-L33-950-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	11579
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	104
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	6422	6334	6290
55	5870	5872	5898
65	5059	5223	5289
75	3639	3957	3977
85	1454	1668	1580

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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	4599.936	4599.936	4599.936	4599.936	4599.936	4599.936	4599.936	4599.936	4599.936	4599.936
5	4583.123	4576.966	4571.776	4560.088	4578.889	4558.070	4567.964	4571.136	4577.389	4571.520
10	4506.222	4496.688	4487.494	4473.144	4482.711	4469.204	4479.742	4485.317	4492.768	4484.452
15	4377.673	4365.220	4347.599	4327.646	4334.936	4321.785	4335.395	4346.770	4354.386	4344.624
20	4201.168	4183.619	4158.675	4133.498	4128.754	4125.715	4141.634	4156.873	4165.805	4153.061
25	3981.700	3959.883	3928.347	3896.355	3893.043	3886.649	3905.701	3923.335	3932.852	3918.114
30	3723.967	3698.678	3661.674	3633.013	3622.186	3621.545	3632.941	3651.816	3664.004	3646.018
35	3431.389	3405.575	3369.584	3346.245	3335.181	3333.304	3334.894	3350.673	3365.212	3345.772
40	3109.885	3090.007	3058.458	3044.106	3028.683	3030.109	3018.995	3031.453	3043.349	3027.866
45	2771.287	2753.380	2733.278	2727.751	2714.247	2712.761	2691.733	2695.044	2707.067	2692.574
50	2420.900	2405.099	2398.252	2403.207	2395.036	2387.607	2357.851	2350.799	2361.539	2349.076
55	2054.604	2046.473	2055.397	2066.320	2064.504	2050.753	2018.506	1998.358	2002.020	1997.100
60	1679.687	1682.289	1703.479	1722.130	1726.957	1707.498	1672.274	1641.558	1634.705	1640.558
65	1304.834	1315.944	1347.068	1359.736	1363.933	1347.017	1322.497	1283.438	1268.049	1282.586
70	926.179	947.718	980.670	989.044	989.708	979.749	963.639	924.120	897.960	923.460
75	574.705	600.586	625.003	625.960	628.141	621.136	615.502	585.640	555.025	585.169
80	278.221	301.728	312.962	304.250	300.016	302.995	309.669	294.658	266.500	294.377
85	77.334	90.656	88.715	83.971	84.039	83.923	88.353	89.324	72.648	89.196
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	4599.936	4599.936	4599.936	4599.936	4599.936	4599.936	4599.936
5	4568.092	4558.198	4579.017	4560.088	4571.007	4575.396	4583.123
10	4479.358	4469.076	4482.967	4473.080	4486.661	4494.927	4506.222
15	4334.370	4321.336	4335.096	4327.614	4346.766	4363.394	4377.673
20	4139.712	4125.010	4128.851	4133.242	4157.971	4181.826	4201.168
25	3902.786	3885.496	3893.171	3895.938	3927.258	3957.898	3981.700
30	3629.130	3619.976	3622.122	3632.532	3660.489	3696.436	3723.967
35	3330.249	3331.190	3334.892	3345.925	3368.046	3403.205	3431.389
40	3014.511	3027.674	3028.010	3044.042	3056.633	3087.188	3109.885
45	2688.177	2709.846	2713.671	2727.431	2731.388	2749.953	2771.287
50	2355.154	2384.596	2394.268	2402.662	2396.587	2401.640	2420.900
55	2016.741	2047.742	2063.799	2065.744	2053.539	2043.078	2054.604
60	1671.053	1704.753	1726.476	1721.714	1701.653	1678.734	1679.687

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CANDELA TABULATION - (Cont.)

65	1321.622	1344.803	1363.430	1359.256	1345.338	1312.517	1304.834
70	963.063	978.436	989.275	988.663	978.966	944.585	926.179
75	615.159	620.547	628.026	625.777	623.644	597.787	574.705
80	309.516	302.828	300.083	304.212	312.155	299.540	278.221
85	88.328	83.929	84.107	84.041	88.520	89.811	77.334
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	1657.14	N.A.	14.30
0-30	3461.3	N.A.	29.90
0-40	5562.01	N.A.	48.00
0-60	9485.43	N.A.	81.90
0-80	11450.75	N.A.	98.90
0-90	11578.77	N.A.	100.00
10-90	11145.23	N.A.	96.30
20-40	3904.87	N.A.	33.70
20-50	6004.13	N.A.	51.90
40-70	5235.96	N.A.	45.20
60-80	1965.32	N.A.	17.00
70-80	652.78	N.A.	5.60
80-90	128.02	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	11578.77	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	433.54
10-20	1223.6
20-30	1804.16
30-40	2100.71
40-50	2099.26
50-60	1824.16
60-70	1312.54
70-80	652.78
80-90	128.02
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	64	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

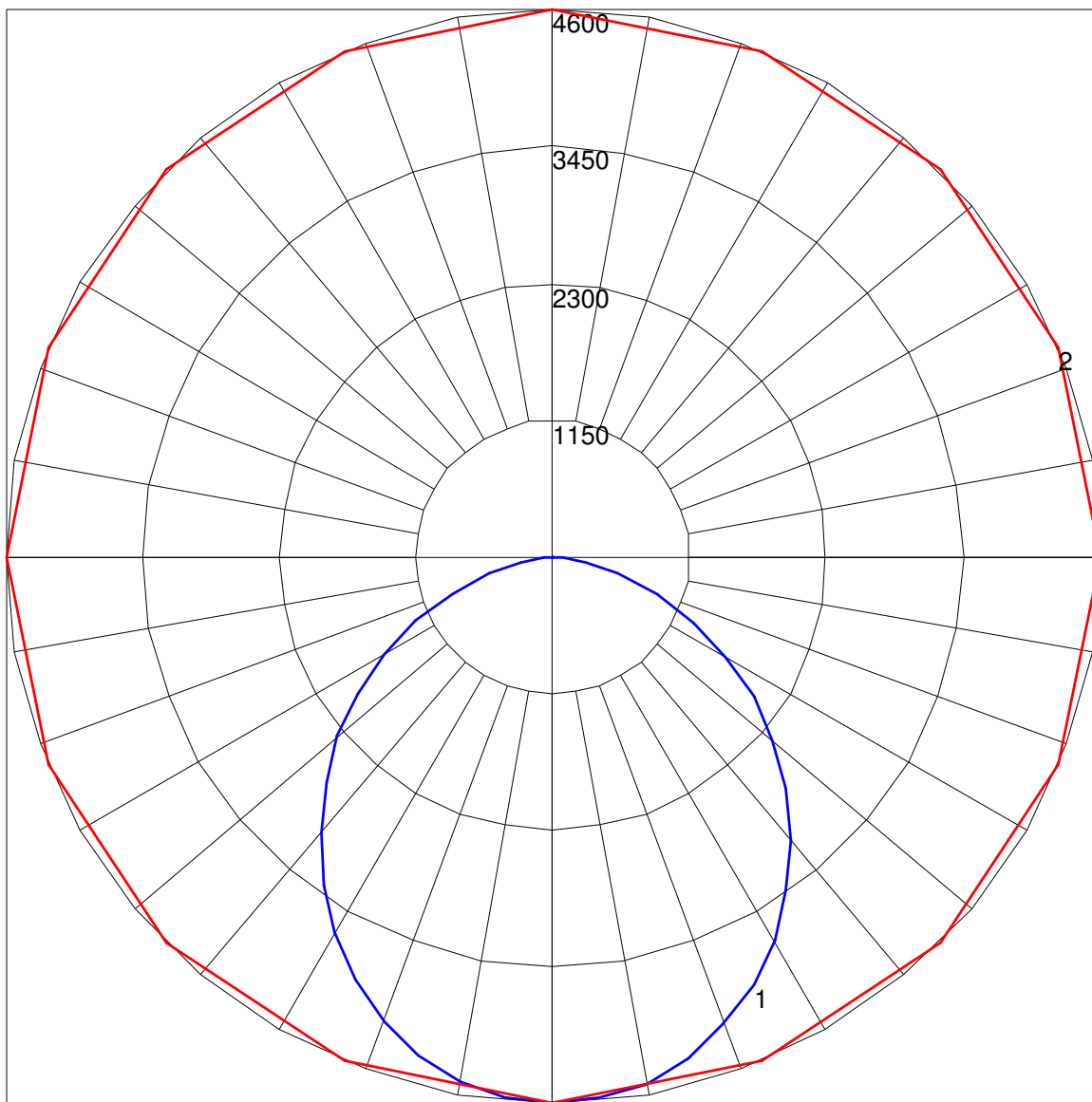
Reflectances

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	18.2	19.8	18.5	20.1	20.4	18.2	19.8	18.6	20.2	20.5
	3H	19.7	21.1	20.1	21.4	21.8	19.9	21.3	20.2	21.6	22.0
	4H	20.2	21.5	20.6	21.9	22.2	20.4	21.7	20.8	22.1	22.5
	6H	20.4	21.7	20.8	22.0	22.4	20.7	21.9	21.1	22.3	22.7
	8H	20.5	21.7	20.9	22.1	22.5	20.7	21.9	21.2	22.3	22.7
	12H	20.5	21.6	20.9	22.0	22.4	20.7	21.9	21.2	22.3	22.7
4H	2H	18.8	20.1	19.2	20.5	20.8	18.8	20.2	19.2	20.5	20.9
	3H	20.5	21.6	20.9	22.0	22.4	20.6	21.8	21.0	22.2	22.6
	4H	21.1	22.1	21.5	22.5	22.9	21.2	22.3	21.7	22.7	23.1
	6H	21.4	22.3	21.9	22.7	23.2	21.6	22.5	22.1	22.9	23.4
	8H	21.5	22.3	21.9	22.8	23.2	21.7	22.5	22.2	23.0	23.4
	12H	21.5	22.3	22.0	22.7	23.2	21.7	22.5	22.2	23.0	23.4
8H	4H	21.3	22.1	21.7	22.6	23.0	21.5	22.3	21.9	22.7	23.2
	6H	21.7	22.4	22.2	22.9	23.4	21.9	22.6	22.4	23.1	23.6
	8H	21.8	22.5	22.3	23.0	23.4	22.0	22.6	22.5	23.1	23.6
	12H	21.9	22.4	22.4	22.9	23.5	22.1	22.6	22.6	23.1	23.7
12H	4H	21.3	22.0	21.8	22.5	23.0	21.5	22.2	21.9	22.7	23.2
	6H	21.7	22.4	22.3	22.8	23.4	21.9	22.5	22.4	23.0	23.5
	8H	21.9	22.4	22.4	22.9	23.5	22.1	22.6	22.6	23.1	23.7

Maximum UGR = 23.7

POLAR GRAPH



Maximum Candela = 4599.936 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.)