IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-24-L60-940-CS-SAF12125-PC250-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN from BALLABS TEST NO. 19835.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUEDATE] 2026-05-06
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 6-42 LED 22" ARRAYS 2x4' RECESSED WHITE REFLECTOR LUMINAIRE
[MORE] PAT12 ACRYLIC LENS w/CLEAR ACRYLIC LENS IN DOOR
[LUMCAT] MCTVG-24-L60-940-CS-SAF12125-PC250-DIM-UNV_
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] Indoor, Classroom, Commercial, Healthcare, Institutional, Office, Direct, Clean Room
[_SEARCH_MOUNTING] Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5117
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	105
Total Luminaire Watts	48.9
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.24
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.30
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.57 ft
Luminous Width (90-270)	1.57 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	3462	3444	3350
55	2862	2806	2648
65	2075	2051	1903
75	1236	1272	1261
85	270	372	383

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	2229.164	2229.164	2229.164	2229.164	2229.164
5	2240.224	2226.215	2213.189	2208.027	2208.519
10	2206.798	2191.561	2182.958	2177.306	2178.289
15	2152.483	2138.473	2134.541	2122.498	2128.643
20	2073.835	2062.530	2063.021	2046.063	2053.190
25	1966.432	1959.796	1956.355	1939.397	1948.736
30	1837.647	1834.206	1822.655	1801.027	1811.595
35	1677.157	1680.598	1659.216	1624.807	1644.469
40	1485.945	1502.412	1468.004	1429.663	1453.258
45	1279.496	1298.175	1272.614	1226.163	1237.960
50	1070.097	1060.512	1063.707	1012.094	1010.620
55	857.995	837.350	841.036	793.356	793.848
60	647.858	633.358	629.425	586.169	593.788
65	458.367	449.274	452.960	420.027	420.272
70	299.843	290.996	301.564	288.292	281.656
75	167.126	165.405	172.041	178.186	170.567
80	70.783	68.325	77.419	88.478	79.139
85	12.289	13.763	16.958	25.069	17.450
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	812.52	N.A.	15.90
0-30	1710.91	N.A.	33.40
0-40	2744.09	N.A.	53.60
0-60	4455.78	N.A.	87.10
0-80	5086.38	N.A.	99.40
0-90	5117.02	N.A.	100.00
10-90	4906.31	N.A.	95.90
20-40	1931.57	N.A.	37.70
20-50	2903.69	N.A.	56.70
40-70	2154.52	N.A.	42.10
60-80	630.59	N.A.	12.30
70-80	187.76	N.A.	3.70
80-90	30.64	N.A.	0.60
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	5117.02	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	210.71
10-20	601.81
20-30	898.38
30-40	1033.19
40-50	972.11
50-60	739.57
60-70	442.84
70-80	187.76
80-90	30.64
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	106	102	99	108	104	101	98	100	97	94	96	94	92	92	91	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75
3	93	84	76	70	91	82	75	70	79	73	69	77	72	67	74	70	66	64
4	86	75	67	61	84	74	66	60	71	65	59	69	63	59	67	62	58	56
5	79	67	59	53	77	66	58	53	64	57	52	62	56	52	61	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	37	33	31
10	56	43	36	31	55	43	36	31	42	35	31	41	35	30	40	34	30	29

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UGR TABLE - CORRECTED

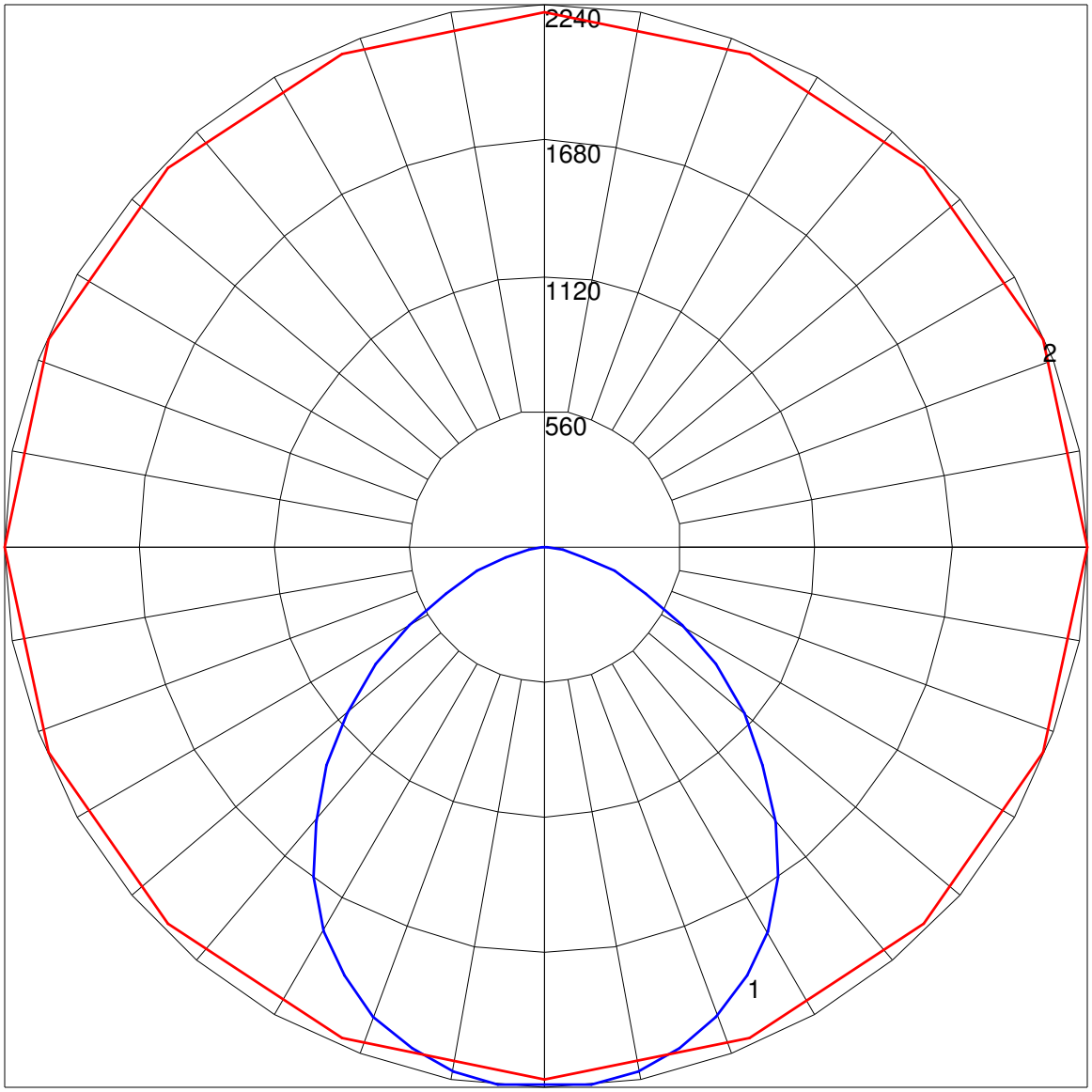
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	15.2	16.7	15.6	17.0	17.4	14.7	16.3	15.1	16.6	16.9
	3H	16.3	17.7	16.7	18.0	18.3	15.9	17.2	16.2	17.5	17.9
	4H	16.6	17.8	17.0	18.2	18.6	16.2	17.5	16.6	17.8	18.2
	6H	16.7	17.9	17.1	18.2	18.6	16.4	17.5	16.8	17.9	18.3
	8H	16.7	17.8	17.1	18.2	18.6	16.4	17.5	16.8	17.9	18.3
	12H	16.7	17.7	17.1	18.1	18.5	16.4	17.4	16.8	17.8	18.3
4H	2H	15.6	16.9	16.0	17.2	17.6	15.2	16.5	15.6	16.8	17.2
	3H	16.9	17.9	17.3	18.3	18.7	16.5	17.6	16.9	18.0	18.4
	4H	17.2	18.2	17.7	18.6	19.0	17.0	17.9	17.4	18.3	18.7
	6H	17.4	18.2	17.9	18.6	19.1	17.2	18.0	17.7	18.5	18.9
	8H	17.4	18.2	17.9	18.6	19.1	17.2	18.0	17.7	18.4	18.9
	12H	17.4	18.1	17.9	18.5	19.0	17.2	17.9	17.7	18.4	18.9
8H	4H	17.3	18.1	17.8	18.5	19.0	17.1	17.8	17.5	18.3	18.7
	6H	17.5	18.2	18.0	18.6	19.1	17.4	18.0	17.9	18.5	19.0
	8H	17.6	18.1	18.1	18.6	19.1	17.5	18.0	18.0	18.5	19.0
	12H	17.6	18.0	18.1	18.5	19.1	17.5	18.0	18.0	18.5	19.0
12H	4H	17.3	18.0	17.8	18.5	18.9	17.1	17.7	17.5	18.2	18.7
	6H	17.5	18.1	18.1	18.6	19.1	17.4	17.9	17.9	18.4	18.9
	8H	17.6	18.1	18.1	18.6	19.1	17.5	18.0	18.0	18.5	19.0

Maximum UGR = 19.1

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POLAR GRAPH



Maximum Candela = 2240.224 Located At Horizontal Angle = 0, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)

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