IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-24-L200-840-CS-SAF125-PC250-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN from BALLABS TEST NO. 19834.0
[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 2'x4' RECESSED WHITE REFL LUMINAIRE
[MORE] FROSTED ACRYLIC LENS w/CLEAR ACRYLIC LENS IN DOOR
[LUMCAT] MCTVG-24-L200-840-CS-SAF125-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	20740
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	111
Total Luminaire Watts	186.5
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.20
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	13592	13634	13646
55	11899	11582	11803
65	9223	8992	9283
75	5901	6114	5655
85	1167	2212	1799

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	8828.008	8828.008	8828.008	8828.008	8828.008
5	8863.435	8806.973	8761.582	8740.547	8742.761
10	8710.655	8663.050	8624.302	8606.588	8583.339
15	8453.808	8409.524	8395.132	8363.026	8348.634
20	8089.573	8069.645	8067.431	7981.077	7994.362
25	7626.805	7616.842	7599.128	7549.308	7569.236
30	7093.184	7071.042	7023.436	7023.436	7042.257
35	6448.852	6430.031	6410.104	6389.069	6395.711
40	5748.058	5748.058	5755.808	5722.595	5722.595
45	5022.908	5036.194	5038.408	4993.017	5042.836
50	4294.437	4257.903	4270.081	4190.370	4297.759
55	3567.073	3494.005	3471.863	3477.398	3538.289
60	2784.354	2755.570	2700.215	2778.819	2799.854
65	2037.062	2065.847	1986.136	2045.919	2050.347
70	1389.409	1383.874	1368.374	1355.089	1332.947
75	798.218	767.220	827.003	783.826	765.005
80	318.845	315.523	379.735	388.592	357.593
85	53.141	68.640	100.746	108.496	81.925
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	3197.71	N.A.	15.40
0-30	6689.45	N.A.	32.30
0-40	10699.11	N.A.	51.60
0-60	17699.00	N.A.	85.30
0-80	20595.81	N.A.	99.30
0-90	20739.52	N.A.	100.00
10-90	19906.12	N.A.	96.00
20-40	7501.4	N.A.	36.20
20-50	11369.64	N.A.	54.80
40-70	9026.4	N.A.	43.50
60-80	2896.81	N.A.	14.00
70-80	870.30	N.A.	4.20
80-90	143.71	N.A.	0.70
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	20739.52	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	833.40
10-20	2364.31
20-30	3491.74
30-40	4009.66
40-50	3868.24
50-60	3131.65
60-70	2026.51
70-80	870.30
80-90	143.71
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	107	104	100	97	99	96	94	95	93	91	92	90	88	86
2	101	93	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76	74
3	93	83	75	69	90	81	74	69	78	72	67	76	71	66	73	69	65	63
4	85	74	66	59	83	73	65	59	70	64	58	68	62	57	66	61	57	55
5	79	66	58	52	77	65	57	51	63	56	51	61	55	50	60	54	50	48
6	73	60	52	45	71	59	51	45	57	50	45	56	49	45	54	49	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	45	40	50	44	39	38
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34
9	59	46	38	33	58	46	38	33	44	37	33	43	37	32	42	37	32	30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	29	28

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UGR TABLE - CORRECTED

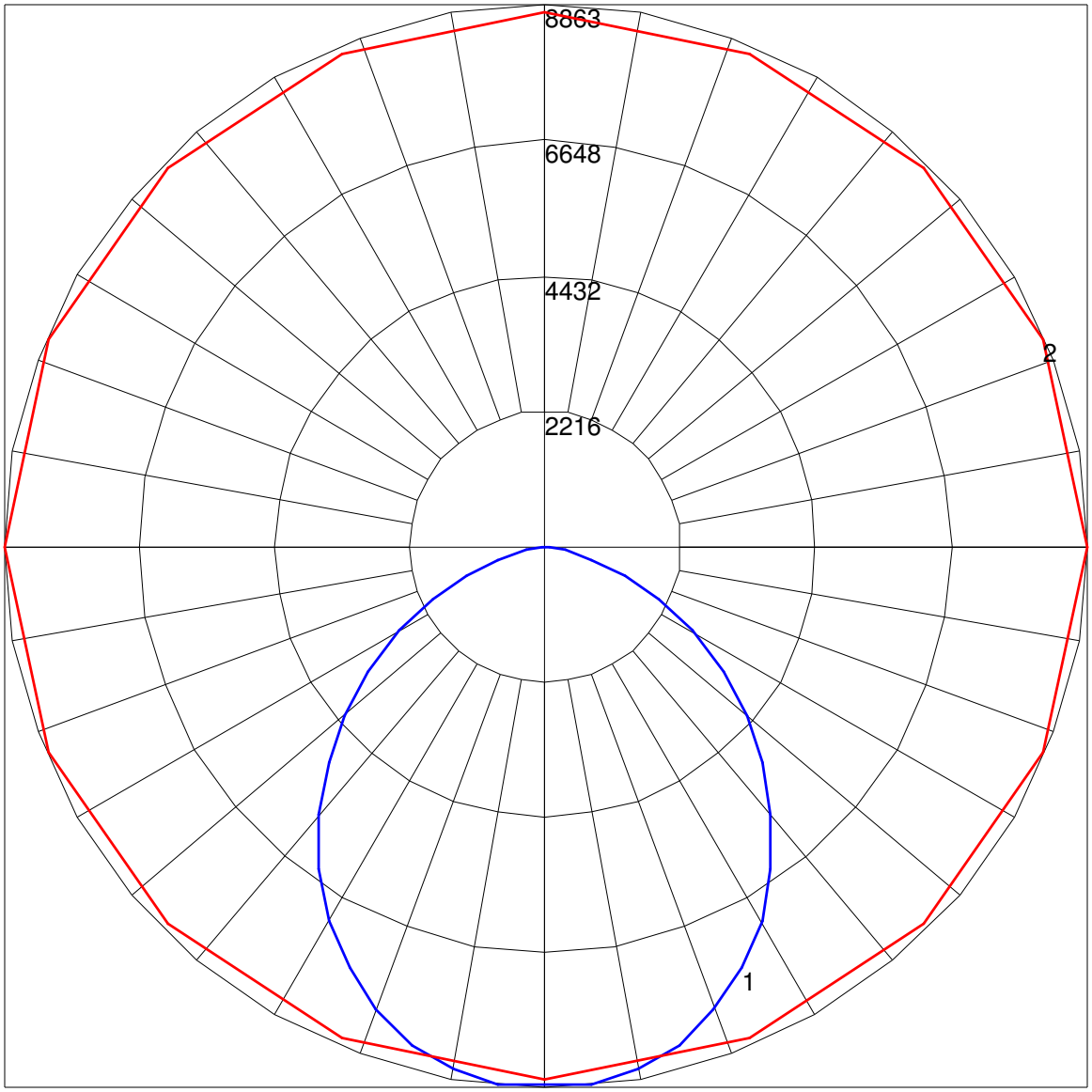
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	20.3	21.9	20.7	22.2	22.5	20.3	21.9	20.7	22.2	22.5
	3H	21.6	23.0	22.0	23.3	23.7	21.5	22.9	21.9	23.3	23.6
	4H	21.9	23.2	22.3	23.6	23.9	21.9	23.2	22.3	23.5	23.9
	6H	22.0	23.2	22.5	23.6	24.0	22.0	23.2	22.4	23.6	24.0
	8H	22.0	23.2	22.5	23.6	24.0	22.0	23.2	22.5	23.6	24.0
	12H	22.0	23.1	22.5	23.5	23.9	22.0	23.1	22.5	23.5	23.9
4H	2H	20.7	22.0	21.1	22.4	22.8	20.8	22.1	21.2	22.4	22.8
	3H	22.2	23.3	22.6	23.7	24.1	22.2	23.2	22.6	23.6	24.0
	4H	22.6	23.6	23.0	24.0	24.4	22.6	23.5	23.0	23.9	24.4
	6H	22.8	23.6	23.2	24.1	24.5	22.8	23.6	23.3	24.1	24.5
	8H	22.8	23.6	23.3	24.0	24.5	22.8	23.6	23.3	24.1	24.5
	12H	22.8	23.5	23.3	24.0	24.5	22.8	23.5	23.3	24.0	24.5
8H	4H	22.7	23.5	23.2	24.0	24.4	22.7	23.5	23.2	23.9	24.4
	6H	23.0	23.6	23.5	24.1	24.6	23.0	23.7	23.5	24.1	24.6
	8H	23.0	23.6	23.5	24.1	24.6	23.1	23.7	23.6	24.2	24.7
	12H	23.0	23.5	23.5	24.0	24.6	23.1	23.6	23.6	24.1	24.7
12H	4H	22.7	23.4	23.2	23.9	24.4	22.7	23.4	23.2	23.9	24.3
	6H	23.0	23.6	23.5	24.0	24.6	23.0	23.6	23.5	24.0	24.6
	8H	23.0	23.5	23.5	24.0	24.6	23.1	23.6	23.6	24.1	24.7

Maximum UGR = 24.7

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POLAR GRAPH



Maximum Candela = 8863.435 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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