IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-24-L200-827-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-L200-827-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	19453
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	104
Total Luminaire Watts	186.5
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	13162	13092	12735
55	10881	10666	10068
65	7889	7796	7234
75	4697	4835	4794
85	1026	1415	1456

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	8474.634	8474.634	8474.634	8474.634	8474.634
5	8516.680	8463.422	8413.901	8394.279	8396.148
10	8389.607	8331.677	8298.975	8277.484	8281.222
15	8183.114	8129.856	8114.906	8069.122	8092.481
20	7884.119	7841.139	7843.008	7778.537	7805.633
25	7475.805	7450.577	7437.496	7373.025	7408.531
30	6986.201	6973.120	6929.205	6846.981	6887.159
35	6376.064	6389.145	6307.856	6177.046	6251.795
40	5649.133	5711.735	5580.925	5435.165	5524.863
45	4864.272	4935.283	4838.110	4661.516	4706.365
50	4068.198	4031.758	4043.905	3847.689	3842.083
55	3261.846	3183.360	3197.376	3016.110	3017.979
60	2462.970	2407.843	2392.893	2228.446	2257.411
65	1742.579	1708.008	1722.023	1596.819	1597.754
70	1139.918	1106.281	1146.458	1096.003	1070.775
75	635.364	628.823	654.051	677.410	648.445
80	269.095	259.752	294.323	336.369	300.864
85	46.718	52.324	64.471	95.305	66.339
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	3088.97	N.A.	15.90
0-30	6504.37	N.A.	33.40
0-40	10432.25	N.A.	53.60
0-60	16939.59	N.A.	87.10
0-80	19336.92	N.A.	99.40
0-90	19453.41	N.A.	100.00
10-90	18652.35	N.A.	95.90
20-40	7343.28	N.A.	37.70
20-50	11038.97	N.A.	56.70
40-70	8190.88	N.A.	42.10
60-80	2397.34	N.A.	12.30
70-80	713.80	N.A.	3.70
80-90	116.48	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	19453.41	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	801.06
10-20	2287.91
20-30	3415.39
30-40	3927.89
40-50	3695.69
50-60	2811.65
60-70	1683.54
70-80	713.80
80-90	116.48
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

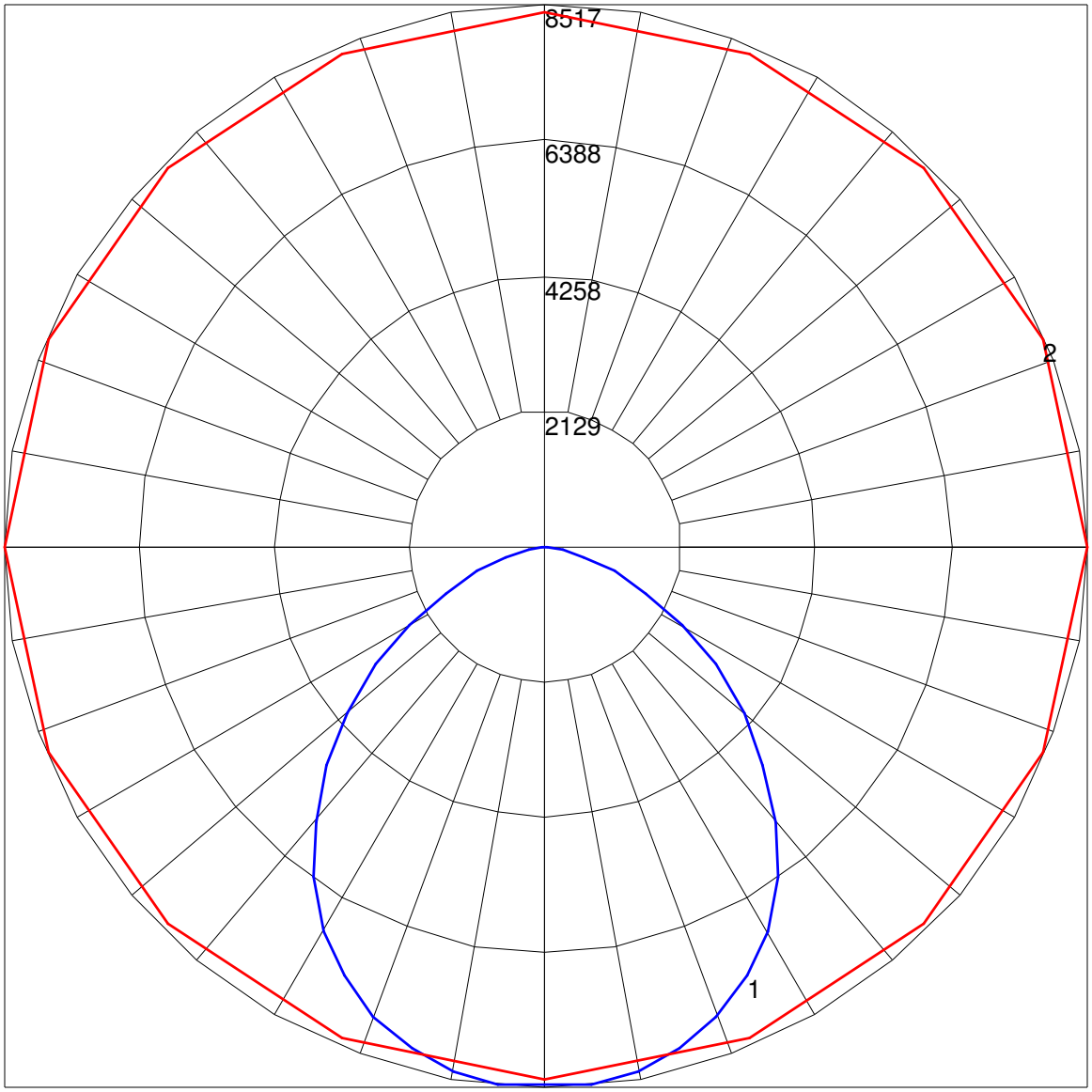
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	19.8	21.3	20.2	21.6	22.0	19.3	20.9	19.7	21.2	21.5
	3H	20.9	22.3	21.3	22.6	22.9	20.5	21.8	20.8	22.1	22.5
	4H	21.2	22.4	21.6	22.8	23.2	20.8	22.1	21.2	22.4	22.8
	6H	21.3	22.5	21.7	22.8	23.2	21.0	22.1	21.4	22.5	22.9
	8H	21.3	22.4	21.7	22.8	23.2	21.0	22.1	21.4	22.5	22.9
	12H	21.3	22.3	21.7	22.7	23.1	21.0	22.0	21.4	22.4	22.9
4H	2H	20.2	21.5	20.6	21.8	22.2	19.8	21.1	20.2	21.4	21.8
	3H	21.5	22.5	21.9	22.9	23.3	21.1	22.2	21.5	22.6	23.0
	4H	21.8	22.8	22.3	23.2	23.6	21.6	22.5	22.0	22.9	23.3
	6H	22.0	22.8	22.5	23.2	23.7	21.8	22.6	22.3	23.1	23.5
	8H	22.0	22.8	22.5	23.2	23.7	21.8	22.6	22.3	23.0	23.5
	12H	22.0	22.7	22.5	23.1	23.6	21.8	22.5	22.3	23.0	23.5
8H	4H	21.9	22.7	22.4	23.1	23.6	21.7	22.4	22.1	22.9	23.3
	6H	22.1	22.8	22.6	23.2	23.7	22.0	22.6	22.5	23.1	23.6
	8H	22.2	22.7	22.7	23.2	23.7	22.1	22.6	22.6	23.1	23.6
	12H	22.2	22.6	22.7	23.1	23.7	22.1	22.6	22.6	23.1	23.6
12H	4H	21.9	22.6	22.4	23.1	23.5	21.7	22.3	22.1	22.8	23.3
	6H	22.1	22.7	22.7	23.2	23.7	22.0	22.5	22.5	23.0	23.5
	8H	22.2	22.7	22.7	23.2	23.7	22.1	22.6	22.6	23.1	23.6

Maximum UGR = 23.7

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POLAR GRAPH



Maximum Candela = 8516.68 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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