IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-24-L200-830-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-L200-830-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	19934
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	107
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	13064	13104	13116
55	11437	11132	11345
65	8865	8643	8922
75	5672	5876	5436
85	1121	2126	1729

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	8485.165	8485.165	8485.165	8485.165	8485.165
5	8519.216	8464.947	8421.319	8401.101	8403.229
10	8372.370	8326.613	8289.370	8272.344	8249.998
15	8125.498	8082.934	8069.100	8038.241	8024.408
20	7775.408	7756.254	7754.126	7671.125	7683.895
25	7330.612	7321.035	7304.010	7256.125	7275.279
30	6817.714	6796.432	6750.676	6750.676	6768.765
35	6198.406	6180.316	6161.162	6140.944	6147.329
40	5524.828	5524.828	5532.276	5500.353	5500.353
45	4827.840	4840.609	4842.737	4799.109	4846.994
50	4127.659	4092.544	4104.249	4027.633	4130.852
55	3428.543	3358.312	3337.030	3342.351	3400.876
60	2676.221	2648.555	2595.350	2670.901	2691.119
65	1957.951	1985.618	1909.003	1966.464	1970.721
70	1335.450	1330.130	1315.232	1302.463	1281.181
75	767.219	737.424	794.886	753.386	735.296
80	306.462	303.270	364.988	373.500	343.706
85	51.077	65.974	96.833	104.282	78.744
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	3073.52	N.A.	15.40
0-30	6429.66	N.A.	32.30
0-40	10283.61	N.A.	51.60
0-60	17011.65	N.A.	85.30
0-80	19795.96	N.A.	99.30
0-90	19934.09	N.A.	100.00
10-90	19133.05	N.A.	96.00
20-40	7210.08	N.A.	36.20
20-50	10928.09	N.A.	54.80
40-70	8675.85	N.A.	43.50
60-80	2784.31	N.A.	14.00
70-80	836.50	N.A.	4.20
80-90	138.13	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	19934.09	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	801.04
10-20	2272.49
20-30	3356.14
30-40	3853.94
40-50	3718.01
50-60	3010.03
60-70	1947.81
70-80	836.50
80-90	138.13
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	97	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

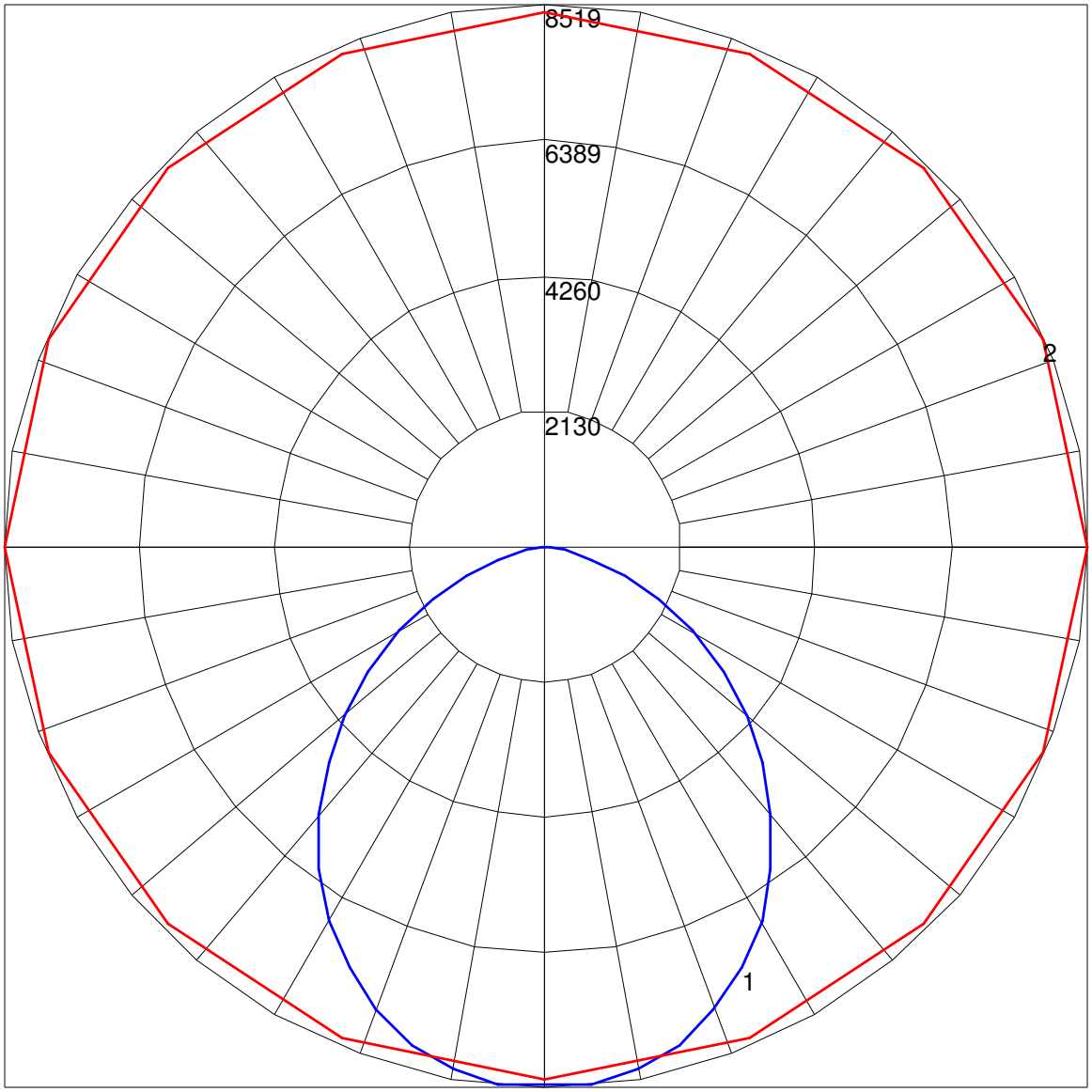
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	20.2	21.8	20.6	22.1	22.4	20.2	21.8	20.6	22.1	22.4
	3H	21.5	22.9	21.9	23.2	23.6	21.4	22.8	21.8	23.2	23.5
	4H	21.8	23.1	22.2	23.5	23.8	21.8	23.1	22.2	23.4	23.8
	6H	21.9	23.1	22.4	23.5	23.9	21.9	23.1	22.3	23.5	23.9
	8H	21.9	23.1	22.4	23.5	23.9	21.9	23.1	22.4	23.5	23.9
	12H	21.9	23.0	22.4	23.4	23.8	21.9	23.0	22.4	23.4	23.8
4H	2H	20.6	21.9	21.0	22.3	22.7	20.7	22.0	21.1	22.3	22.7
	3H	22.1	23.2	22.5	23.6	24.0	22.1	23.1	22.5	23.5	23.9
	4H	22.5	23.5	22.9	23.9	24.3	22.5	23.4	22.9	23.8	24.3
	6H	22.7	23.5	23.1	24.0	24.4	22.7	23.5	23.2	24.0	24.4
	8H	22.7	23.5	23.2	23.9	24.4	22.7	23.5	23.2	24.0	24.4
	12H	22.7	23.4	23.2	23.9	24.4	22.7	23.4	23.2	23.9	24.4
8H	4H	22.6	23.4	23.1	23.9	24.3	22.6	23.4	23.1	23.8	24.3
	6H	22.9	23.5	23.4	24.0	24.5	22.9	23.6	23.4	24.0	24.5
	8H	22.9	23.5	23.4	24.0	24.5	23.0	23.6	23.5	24.1	24.6
	12H	22.9	23.4	23.4	23.9	24.5	23.0	23.5	23.5	24.0	24.6
12H	4H	22.6	23.3	23.1	23.8	24.3	22.6	23.3	23.1	23.8	24.2
	6H	22.9	23.5	23.4	23.9	24.5	22.9	23.5	23.4	23.9	24.5
	8H	22.9	23.4	23.4	23.9	24.5	23.0	23.5	23.5	24.0	24.6

Maximum UGR = 24.6

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POLAR GRAPH



Maximum Candela = 8519.216 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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