IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-24-L200-850-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-L200-850-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	21344
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	114
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	13988	14031	14043
55	12246	11919	12147
65	9491	9254	9553
75	6073	6292	5820
85	1201	2276	1851

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	9085.129	9085.129	9085.129	9085.129	9085.129
5	9121.588	9063.481	9016.768	8995.121	8997.399
10	8964.358	8915.367	8875.490	8857.260	8833.334
15	8700.031	8654.457	8639.645	8606.604	8591.793
20	8325.186	8304.678	8302.400	8213.531	8227.203
25	7848.941	7838.687	7820.457	7769.187	7789.695
30	7299.777	7276.990	7227.998	7227.998	7247.367
35	6636.679	6617.310	6596.802	6575.154	6581.990
40	5915.474	5915.474	5923.449	5889.269	5889.269
45	5169.204	5182.876	5185.154	5138.441	5189.712
50	4419.515	4381.917	4394.450	4312.417	4422.933
55	3670.966	3595.770	3572.983	3578.679	3641.343
60	2865.450	2835.827	2778.860	2859.753	2881.401
65	2096.393	2126.016	2043.983	2105.508	2110.065
70	1429.877	1424.180	1408.229	1394.557	1371.770
75	821.467	789.565	851.090	806.656	787.287
80	328.131	324.713	390.795	399.910	368.008
85	54.689	70.639	103.680	111.656	84.311
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	3290.84	N.A.	15.40
0-30	6884.29	N.A.	32.30
0-40	11010.73	N.A.	51.60
0-60	18214.5	N.A.	85.30
0-80	21195.68	N.A.	99.30
0-90	21343.57	N.A.	100.00
10-90	20485.9	N.A.	96.00
20-40	7719.89	N.A.	36.20
20-50	11700.79	N.A.	54.80
40-70	9289.29	N.A.	43.50
60-80	2981.18	N.A.	14.00
70-80	895.65	N.A.	4.20
80-90	147.90	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	21343.57	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	857.68
10-20	2433.17
20-30	3593.44
30-40	4126.45
40-50	3980.9
50-60	3222.86
60-70	2085.53
70-80	895.65
80-90	147.90
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

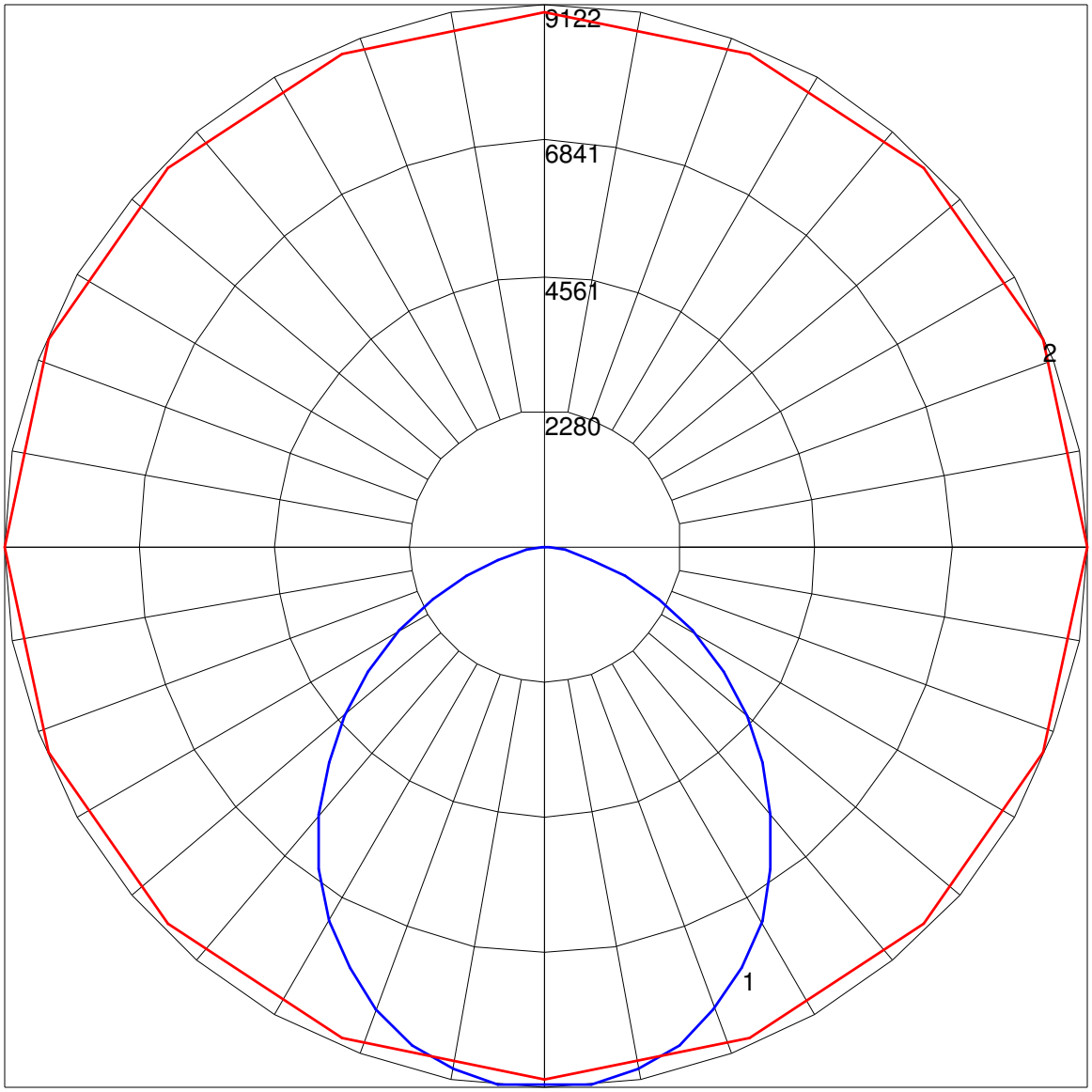
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	20.4	22.0	20.8	22.3	22.6	20.4	22.0	20.8	22.3	22.6
	3H	21.7	23.1	22.1	23.4	23.8	21.6	23.0	22.0	23.4	23.7
	4H	22.0	23.3	22.4	23.7	24.0	22.0	23.3	22.4	23.6	24.0
	6H	22.1	23.3	22.6	23.7	24.1	22.1	23.3	22.5	23.7	24.1
	8H	22.1	23.3	22.6	23.7	24.1	22.1	23.3	22.6	23.7	24.1
	12H	22.1	23.2	22.6	23.6	24.0	22.1	23.2	22.6	23.6	24.0
4H	2H	20.8	22.1	21.2	22.5	22.9	20.9	22.2	21.3	22.5	22.9
	3H	22.3	23.4	22.7	23.8	24.2	22.3	23.3	22.7	23.7	24.1
	4H	22.7	23.7	23.1	24.1	24.5	22.7	23.6	23.1	24.0	24.5
	6H	22.9	23.7	23.3	24.2	24.6	22.9	23.7	23.4	24.2	24.6
	8H	22.9	23.7	23.4	24.1	24.6	22.9	23.7	23.4	24.2	24.6
	12H	22.9	23.6	23.4	24.1	24.6	22.9	23.6	23.4	24.1	24.6
8H	4H	22.8	23.6	23.3	24.1	24.5	22.8	23.6	23.3	24.0	24.5
	6H	23.1	23.7	23.6	24.2	24.7	23.1	23.8	23.6	24.2	24.7
	8H	23.1	23.7	23.6	24.2	24.7	23.2	23.8	23.7	24.3	24.8
	12H	23.1	23.6	23.6	24.1	24.7	23.2	23.7	23.7	24.2	24.8
12H	4H	22.8	23.5	23.3	24.0	24.5	22.8	23.5	23.3	24.0	24.4
	6H	23.1	23.7	23.6	24.1	24.7	23.1	23.7	23.6	24.1	24.7
	8H	23.1	23.6	23.6	24.1	24.7	23.2	23.7	23.7	24.2	24.8

Maximum UGR = 24.8

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POLAR GRAPH



Maximum Candela = 9121.588 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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