IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-24-L200-940-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-L200-940-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	17047
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	91
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	11534	11472	11160
55	9535	9347	8822
65	6913	6832	6339
75	4116	4237	4201
85	899	1240	1276

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	7426.226	7426.226	7426.226	7426.226	7426.226
5	7463.071	7416.401	7373.006	7355.812	7357.449
10	7351.718	7300.954	7272.298	7253.466	7256.741
15	7170.770	7124.101	7111.000	7070.881	7091.350
20	6908.765	6871.101	6872.739	6816.244	6839.988
25	6550.963	6528.856	6517.393	6460.898	6492.012
30	6121.929	6110.466	6071.984	5999.932	6035.139
35	5587.273	5598.736	5527.503	5412.875	5478.377
40	4950.271	5005.129	4890.501	4762.774	4841.375
45	4262.506	4324.733	4239.581	4084.834	4124.135
50	3564.916	3532.984	3543.628	3371.687	3366.774
55	2858.319	2789.543	2801.824	2642.983	2644.621
60	2158.273	2109.965	2096.865	1952.762	1978.144
65	1527.002	1496.708	1508.989	1399.275	1400.093
70	998.897	969.421	1004.628	960.415	938.308
75	556.762	551.031	573.138	593.607	568.225
80	235.805	227.618	257.912	294.756	263.643
85	40.938	45.851	56.495	83.514	58.133
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	2706.83	N.A.	15.90
0-30	5699.7	N.A.	33.40
0-40	9141.66	N.A.	53.60
0-60	14843.97	N.A.	87.10
0-80	16944.73	N.A.	99.40
0-90	17046.8	N.A.	100.00
10-90	16344.84	N.A.	95.90
20-40	6434.83	N.A.	37.70
20-50	9673.32	N.A.	56.70
40-70	7177.57	N.A.	42.10
60-80	2100.76	N.A.	12.30
70-80	625.49	N.A.	3.70
80-90	102.07	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	17046.8	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	701.96
10-20	2004.87
20-30	2992.87
30-40	3441.96
40-50	3238.49
50-60	2463.81
60-70	1475.27
70-80	625.49
80-90	102.07
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

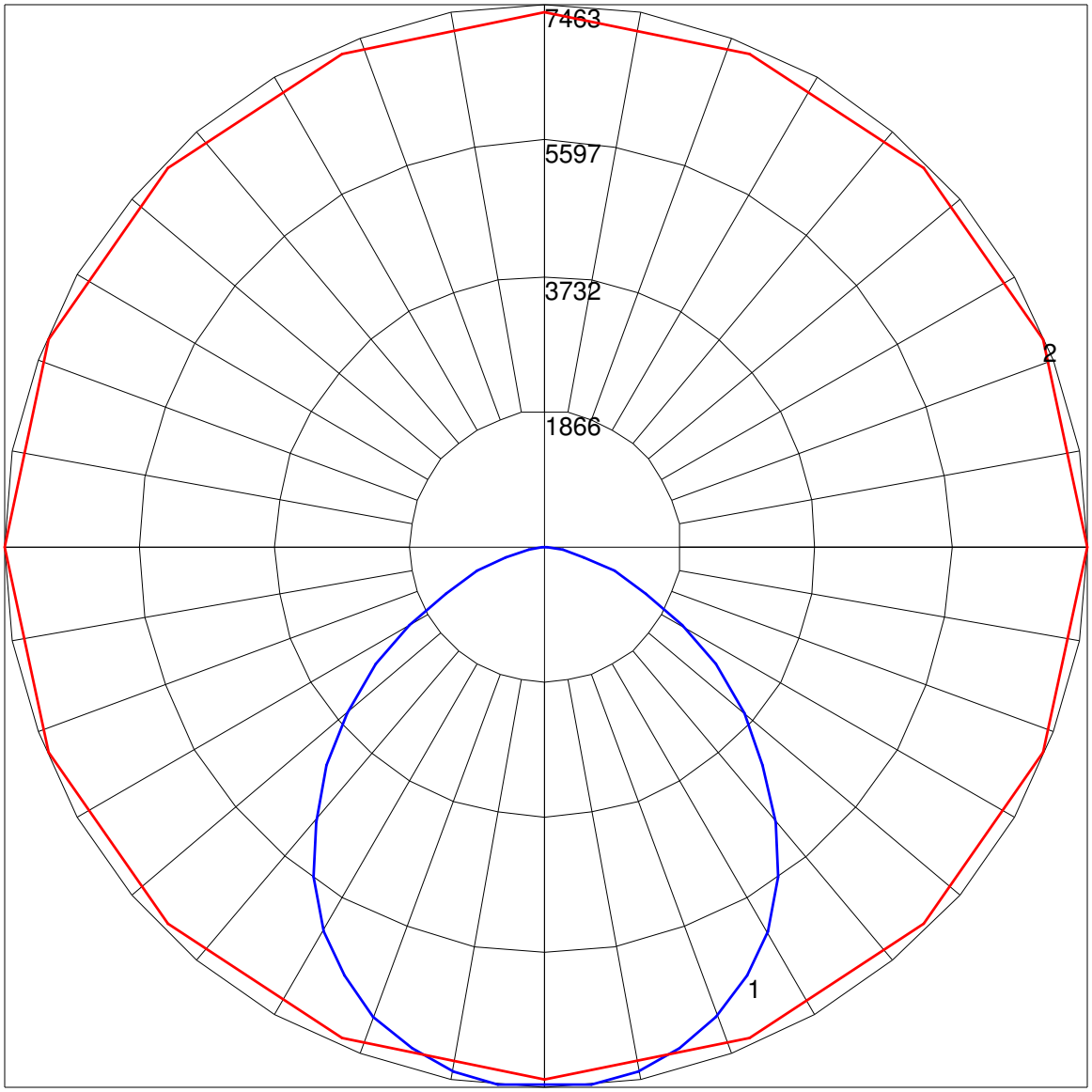
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	19.4	20.9	19.8	21.2	21.6	18.9	20.5	19.3	20.8	21.1
	3H	20.5	21.9	20.9	22.2	22.5	20.1	21.4	20.4	21.7	22.1
	4H	20.8	22.0	21.2	22.4	22.8	20.4	21.7	20.8	22.0	22.4
	6H	20.9	22.1	21.3	22.4	22.8	20.6	21.7	21.0	22.1	22.5
	8H	20.9	22.0	21.3	22.4	22.8	20.6	21.7	21.0	22.1	22.5
	12H	20.9	21.9	21.3	22.3	22.7	20.6	21.6	21.0	22.0	22.5
4H	2H	19.8	21.1	20.2	21.4	21.8	19.4	20.7	19.8	21.0	21.4
	3H	21.1	22.1	21.5	22.5	22.9	20.7	21.8	21.1	22.2	22.6
	4H	21.4	22.4	21.9	22.8	23.2	21.2	22.1	21.6	22.5	22.9
	6H	21.6	22.4	22.1	22.8	23.3	21.4	22.2	21.9	22.7	23.1
	8H	21.6	22.4	22.1	22.8	23.3	21.4	22.2	21.9	22.6	23.1
	12H	21.6	22.3	22.1	22.7	23.2	21.4	22.1	21.9	22.6	23.1
8H	4H	21.5	22.3	22.0	22.7	23.2	21.3	22.0	21.7	22.5	22.9
	6H	21.7	22.4	22.2	22.8	23.3	21.6	22.2	22.1	22.7	23.2
	8H	21.8	22.3	22.3	22.8	23.3	21.7	22.2	22.2	22.7	23.2
	12H	21.8	22.2	22.3	22.7	23.3	21.7	22.2	22.2	22.7	23.2
12H	4H	21.5	22.2	22.0	22.7	23.1	21.3	21.9	21.7	22.4	22.9
	6H	21.7	22.3	22.3	22.8	23.3	21.6	22.1	22.1	22.6	23.1
	8H	21.8	22.3	22.3	22.8	23.3	21.7	22.2	22.2	22.7	23.2

Maximum UGR = 23.3

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POLAR GRAPH



Maximum Candela = 7463.071 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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