IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-24-L200-827-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-L200-827-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	19531
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	105
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	12800	12839	12851
55	11206	10907	11116
65	8685	8468	8742
75	5557	5758	5326
85	1099	2083	1694

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	8313.748	8313.748	8313.748	8313.748	8313.748
5	8347.111	8293.938	8251.191	8231.382	8233.467
10	8203.231	8158.399	8121.908	8105.226	8083.332
15	7961.347	7919.642	7906.089	7875.853	7862.299
20	7618.329	7599.562	7597.477	7516.154	7528.665
25	7182.519	7173.136	7156.454	7109.537	7128.304
30	6679.983	6659.131	6614.298	6614.298	6632.023
35	6073.185	6055.461	6036.694	6016.885	6023.140
40	5413.215	5413.215	5420.514	5389.235	5389.235
45	4730.308	4742.819	4744.904	4702.157	4749.075
50	4044.272	4009.866	4021.335	3946.267	4047.400
55	3359.280	3290.468	3269.615	3274.828	3332.172
60	2622.156	2595.049	2542.918	2616.943	2636.753
65	1918.397	1945.505	1870.437	1926.738	1930.908
70	1308.472	1303.259	1288.662	1276.151	1255.299
75	751.720	722.527	778.827	738.166	720.441
80	300.271	297.143	357.614	365.955	336.762
85	50.045	64.642	94.877	102.175	77.153
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	3011.43	N.A.	15.40
0-30	6299.77	N.A.	32.30
0-40	10075.86	N.A.	51.60
0-60	16667.98	N.A.	85.30
0-80	19396.04	N.A.	99.30
0-90	19531.38	N.A.	100.00
10-90	18746.52	N.A.	96.00
20-40	7064.42	N.A.	36.20
20-50	10707.32	N.A.	54.80
40-70	8500.58	N.A.	43.50
60-80	2728.06	N.A.	14.00
70-80	819.60	N.A.	4.20
80-90	135.34	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	19531.38	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	784.85
10-20	2226.58
20-30	3288.34
30-40	3776.09
40-50	3642.9
50-60	2949.22
60-70	1908.46
70-80	819.60
80-90	135.34
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

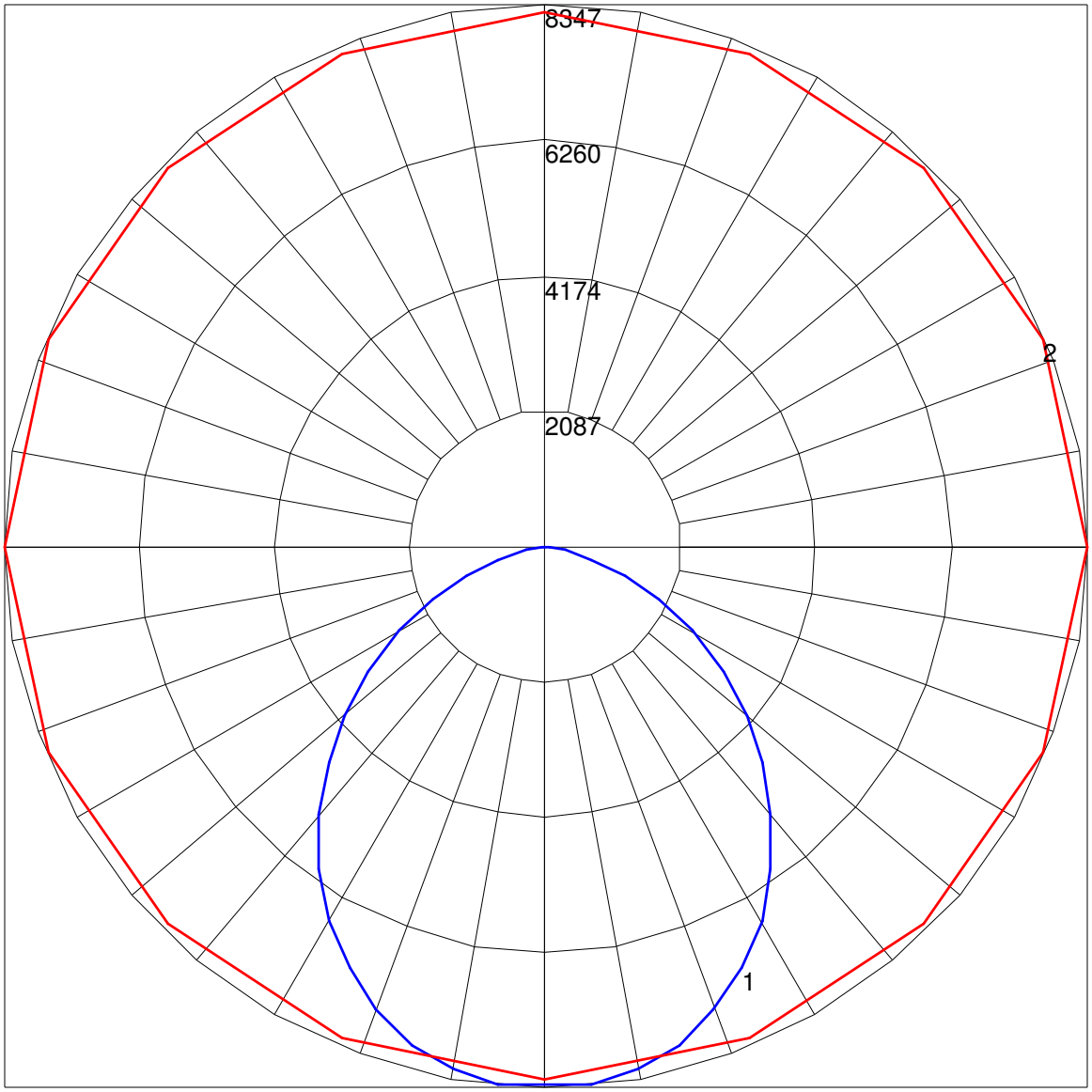
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	20.1	21.7	20.5	22.0	22.3	20.1	21.7	20.5	22.0	22.3
	3H	21.4	22.8	21.8	23.1	23.5	21.3	22.7	21.7	23.1	23.4
	4H	21.7	23.0	22.1	23.4	23.7	21.7	23.0	22.1	23.3	23.7
	6H	21.8	23.0	22.3	23.4	23.8	21.8	23.0	22.2	23.4	23.8
	8H	21.8	23.0	22.3	23.4	23.8	21.8	23.0	22.3	23.4	23.8
	12H	21.8	22.9	22.3	23.3	23.7	21.8	22.9	22.3	23.3	23.7
4H	2H	20.5	21.8	20.9	22.2	22.6	20.6	21.9	21.0	22.2	22.6
	3H	22.0	23.1	22.4	23.5	23.9	22.0	23.0	22.4	23.4	23.8
	4H	22.4	23.4	22.8	23.8	24.2	22.4	23.3	22.8	23.7	24.2
	6H	22.6	23.4	23.0	23.9	24.3	22.6	23.4	23.1	23.9	24.3
	8H	22.6	23.4	23.1	23.8	24.3	22.6	23.4	23.1	23.9	24.3
	12H	22.6	23.3	23.1	23.8	24.3	22.6	23.3	23.1	23.8	24.3
8H	4H	22.5	23.3	23.0	23.8	24.2	22.5	23.3	23.0	23.7	24.2
	6H	22.8	23.4	23.3	23.9	24.4	22.8	23.5	23.3	23.9	24.4
	8H	22.8	23.4	23.3	23.9	24.4	22.9	23.5	23.4	24.0	24.5
	12H	22.8	23.3	23.3	23.8	24.4	22.9	23.4	23.4	23.9	24.5
12H	4H	22.5	23.2	23.0	23.7	24.2	22.5	23.2	23.0	23.7	24.1
	6H	22.8	23.4	23.3	23.8	24.4	22.8	23.4	23.3	23.8	24.4
	8H	22.8	23.3	23.3	23.8	24.4	22.9	23.4	23.4	23.9	24.5

Maximum UGR = 24.5

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POLAR GRAPH



Maximum Candela = 8347.111 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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