IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-24-L200-835-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-L200-835-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	20135
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	108
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	13196	13236	13248
55	11553	11244	11460
65	8954	8730	9012
75	5729	5936	5491
85	1133	2147	1746

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	8570.877	8570.877	8570.877	8570.877	8570.877
5	8605.273	8550.455	8506.386	8485.964	8488.114
10	8456.943	8410.724	8373.104	8355.907	8333.335
15	8207.577	8164.583	8150.610	8119.439	8105.466
20	7853.950	7834.603	7832.453	7748.615	7761.513
25	7404.662	7394.988	7377.791	7329.422	7348.770
30	6886.583	6865.086	6818.867	6818.867	6837.140
35	6261.018	6242.746	6223.399	6202.976	6209.425
40	5580.636	5580.636	5588.160	5555.915	5555.915
45	4876.608	4889.506	4891.656	4847.587	4895.955
50	4169.355	4133.884	4145.708	4068.318	4172.579
55	3463.176	3392.236	3370.739	3376.113	3435.230
60	2703.255	2675.309	2621.566	2697.881	2718.303
65	1977.729	2005.676	1928.286	1986.328	1990.628
70	1348.940	1343.566	1328.518	1315.620	1294.123
75	774.969	744.873	802.915	760.996	742.723
80	309.558	306.333	368.675	377.273	347.178
85	51.593	66.641	97.812	105.336	79.539
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	3104.57	N.A.	15.40
0-30	6494.61	N.A.	32.30
0-40	10387.48	N.A.	51.60
0-60	17183.49	N.A.	85.30
0-80	19995.92	N.A.	99.30
0-90	20135.45	N.A.	100.00
10-90	19326.32	N.A.	96.00
20-40	7282.91	N.A.	36.20
20-50	11038.48	N.A.	54.80
40-70	8763.49	N.A.	43.50
60-80	2812.43	N.A.	14.00
70-80	844.95	N.A.	4.20
80-90	139.53	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	20135.45	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	809.13
10-20	2295.44
20-30	3390.04
30-40	3892.87
40-50	3755.57
50-60	3040.44
60-70	1967.48
70-80	844.95
80-90	139.53
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

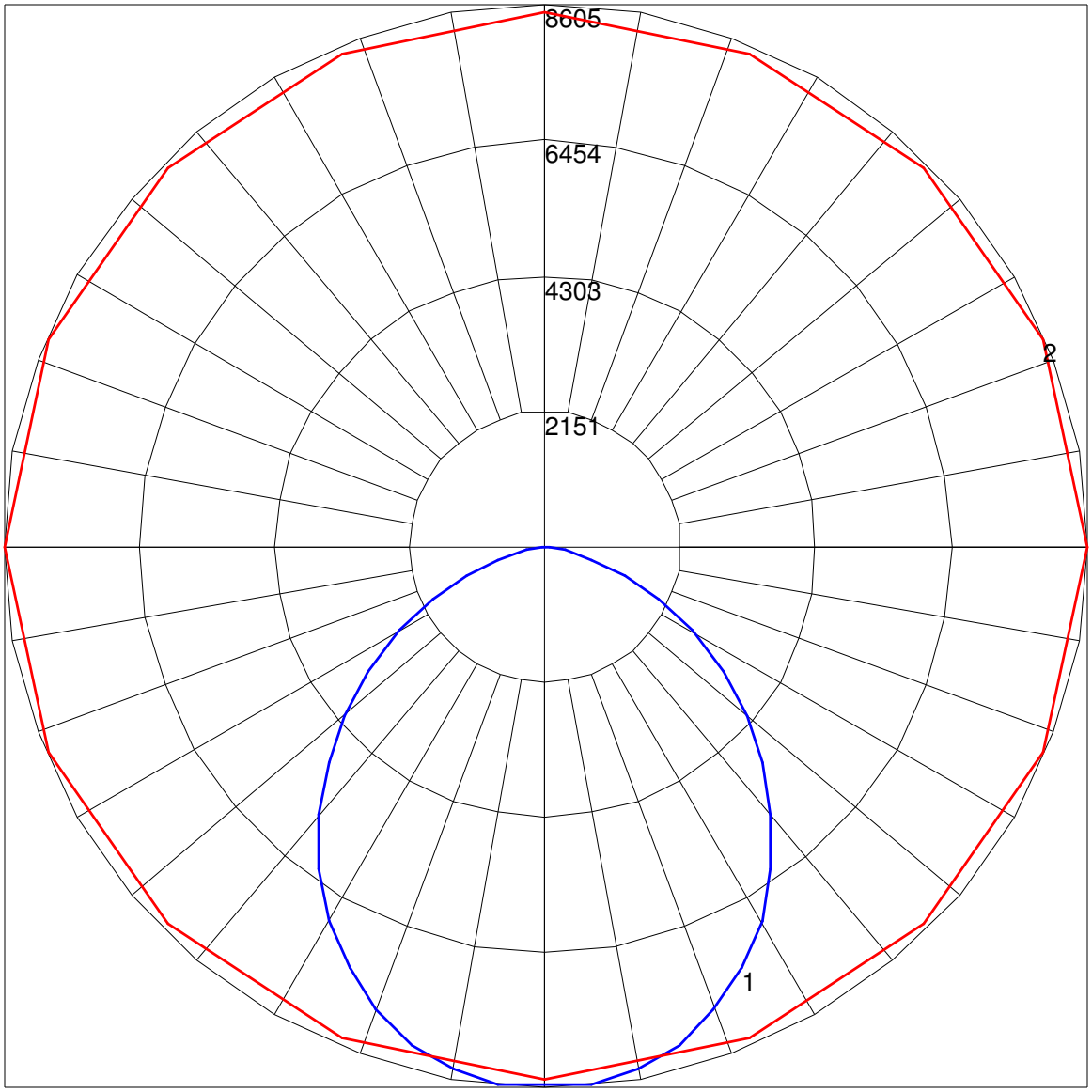
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	20.2	21.8	20.6	22.1	22.4	20.2	21.8	20.6	22.1	22.4
	3H	21.5	22.9	21.9	23.2	23.6	21.4	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 = 8605.273 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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