IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-24-L200-850-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-L200-850-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	21258
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)	1.24
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	14384	14306	13917
55	11891	11656	11002
65	8621	8520	7905
75	5133	5284	5239
85	1121	1547	1592

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	9260.942	9260.942	9260.942	9260.942	9260.942
5	9306.889	9248.689	9194.573	9173.131	9175.173
10	9168.026	9104.721	9068.984	9045.500	9049.584
15	8942.373	8884.173	8867.837	8817.805	8843.331
20	8615.637	8568.668	8570.711	8500.258	8529.868
25	8169.437	8141.869	8127.574	8057.121	8095.921
30	7634.406	7620.111	7572.122	7482.269	7526.174
35	6967.659	6981.954	6893.122	6750.175	6831.859
40	6173.280	6241.691	6098.744	5939.460	6037.480
45	5315.597	5393.197	5287.007	5094.028	5143.039
50	4445.660	4405.839	4419.113	4204.692	4198.566
55	3564.493	3478.724	3494.040	3295.956	3297.998
60	2691.493	2631.251	2614.914	2435.209	2466.862
65	1904.262	1866.483	1881.799	1744.978	1745.999
70	1245.683	1208.926	1252.831	1197.694	1170.126
75	694.315	687.168	714.736	740.263	708.610
80	294.063	283.852	321.631	367.579	328.779
85	51.053	57.179	70.453	104.147	72.495
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	3375.58	N.A.	15.90
0-30	7107.86	N.A.	33.40
0-40	11400.19	N.A.	53.60
0-60	18511.3	N.A.	87.10
0-80	21131.08	N.A.	99.40
0-90	21258.37	N.A.	100.00
10-90	20382.98	N.A.	95.90
20-40	8024.61	N.A.	37.70
20-50	12063.21	N.A.	56.70
40-70	8950.86	N.A.	42.10
60-80	2619.77	N.A.	12.30
70-80	780.02	N.A.	3.70
80-90	127.29	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	21258.37	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	875.39
10-20	2500.19
20-30	3732.28
30-40	4292.33
40-50	4038.59
50-60	3072.52
60-70	1839.75
70-80	780.02
80-90	127.29
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

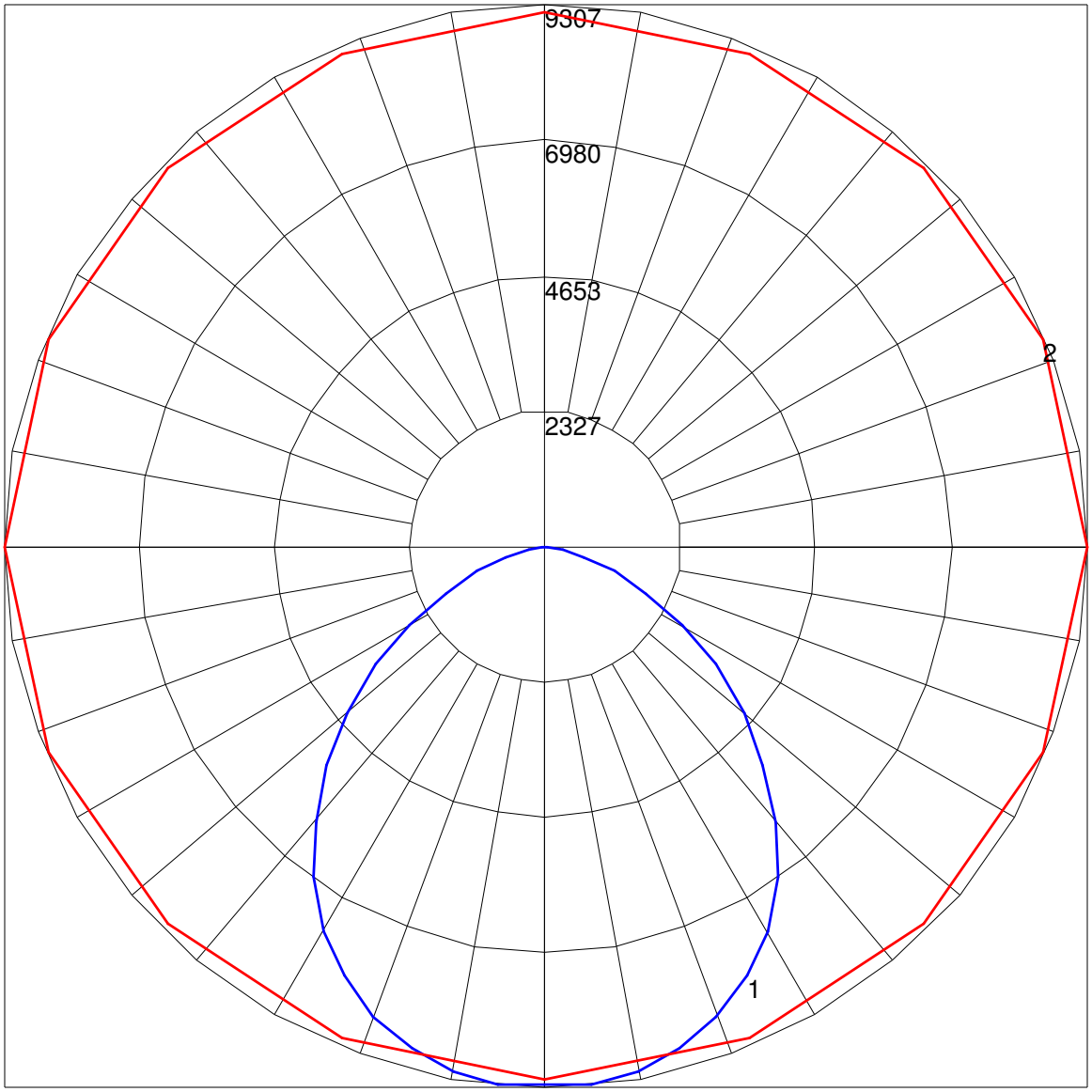
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	20.1	21.6	20.5	21.9	22.3	19.6	21.2	20.0	21.5	21.8
	3H	21.2	22.6	21.6	22.9	23.2	20.8	22.1	21.1	22.4	22.8
	4H	21.5	22.7	21.9	23.1	23.5	21.1	22.4	21.5	22.7	23.1
	6H	21.6	22.8	22.0	23.1	23.5	21.3	22.4	21.7	22.8	23.2
	8H	21.6	22.7	22.0	23.1	23.5	21.3	22.4	21.7	22.8	23.2
	12H	21.6	22.6	22.0	23.0	23.4	21.3	22.3	21.7	22.7	23.2
4H	2H	20.5	21.8	20.9	22.1	22.5	20.1	21.4	20.5	21.7	22.1
	3H	21.8	22.8	22.2	23.2	23.6	21.4	22.5	21.8	22.9	23.3
	4H	22.1	23.1	22.6	23.5	23.9	21.9	22.8	22.3	23.2	23.6
	6H	22.3	23.1	22.8	23.5	24.0	22.1	22.9	22.6	23.4	23.8
	8H	22.3	23.1	22.8	23.5	24.0	22.1	22.9	22.6	23.3	23.8
	12H	22.3	23.0	22.8	23.4	23.9	22.1	22.8	22.6	23.3	23.8
8H	4H	22.2	23.0	22.7	23.4	23.9	22.0	22.7	22.4	23.2	23.6
	6H	22.4	23.1	22.9	23.5	24.0	22.3	22.9	22.8	23.4	23.9
	8H	22.5	23.0	23.0	23.5	24.0	22.4	22.9	22.9	23.4	23.9
	12H	22.5	22.9	23.0	23.4	24.0	22.4	22.9	22.9	23.4	23.9
12H	4H	22.2	22.9	22.7	23.4	23.8	22.0	22.6	22.4	23.1	23.6
	6H	22.4	23.0	23.0	23.5	24.0	22.3	22.8	22.8	23.3	23.8
	8H	22.5	23.0	23.0	23.5	24.0	22.4	22.9	22.9	23.4	23.9

Maximum UGR = 24.0

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POLAR GRAPH



Maximum Candela = 9306.889 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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