IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-24-L200-935-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-L200-935-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	16846
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	90
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	11398	11337	11028
55	9423	9237	8718
65	6832	6751	6264
75	4068	4187	4151
85	888	1226	1261

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	7338.858	7338.858	7338.858	7338.858	7338.858
5	7375.269	7329.148	7286.264	7269.272	7270.891
10	7265.227	7215.060	7186.740	7168.130	7171.367
15	7086.408	7040.287	7027.341	6987.693	7007.922
20	6827.484	6790.264	6791.882	6736.052	6759.517
25	6473.892	6452.045	6440.718	6384.887	6415.634
30	6049.905	6038.577	6000.548	5929.344	5964.137
35	5521.540	5532.868	5462.473	5349.194	5413.925
40	4892.032	4946.245	4832.966	4706.740	4784.417
45	4212.359	4273.853	4189.703	4036.776	4075.615
50	3522.975	3491.419	3501.938	3332.019	3327.165
55	2824.692	2756.724	2768.861	2611.889	2613.507
60	2132.881	2085.142	2072.196	1929.788	1954.871
65	1509.037	1479.099	1491.237	1382.812	1383.621
70	987.145	958.016	992.809	949.116	927.269
75	550.212	544.548	566.395	586.623	561.540
80	233.031	224.940	254.878	291.289	260.542
85	40.457	45.312	55.830	82.532	57.449
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	2674.99	N.A.	15.90
0-30	5632.65	N.A.	33.40
0-40	9034.11	N.A.	53.60
0-60	14669.33	N.A.	87.10
0-80	16745.38	N.A.	99.40
0-90	16846.25	N.A.	100.00
10-90	16152.55	N.A.	95.90
20-40	6359.13	N.A.	37.70
20-50	9559.52	N.A.	56.70
40-70	7093.13	N.A.	42.10
60-80	2076.04	N.A.	12.30
70-80	618.13	N.A.	3.70
80-90	100.87	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	16846.25	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	693.70
10-20	1981.29
20-30	2957.66
30-40	3401.47
40-50	3200.39
50-60	2434.83
60-70	1457.91
70-80	618.13
80-90	100.87
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

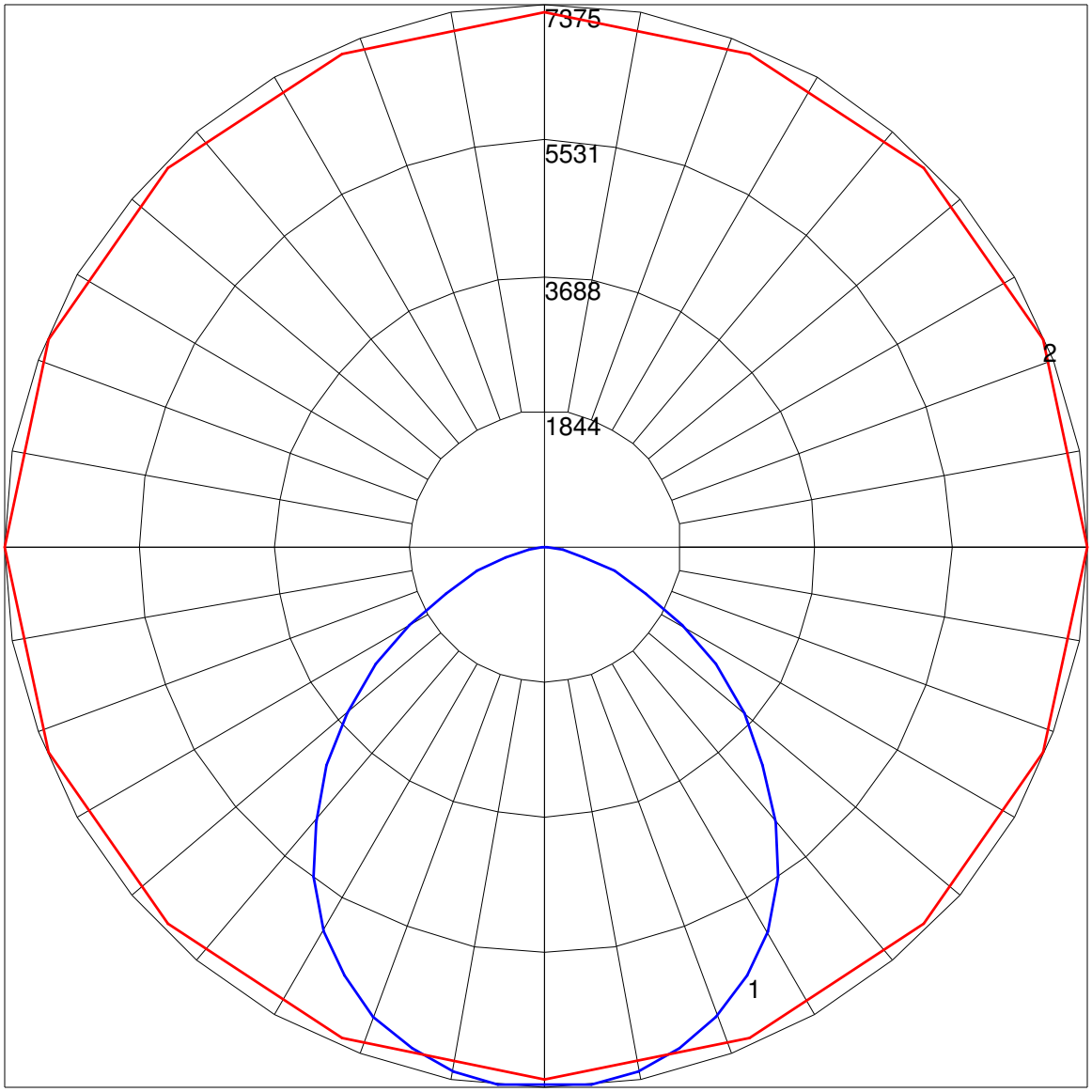
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	19.3	20.8	19.7	21.1	21.5	18.8	20.4	19.2	20.7	21.0
	3H	20.4	21.8	20.8	22.1	22.4	20.0	21.3	20.3	21.6	22.0
	4H	20.7	21.9	21.1	22.3	22.7	20.3	21.6	20.7	21.9	22.3
	6H	20.8	22.0	21.2	22.3	22.7	20.5	21.6	20.9	22.0	22.4
	8H	20.8	21.9	21.2	22.3	22.7	20.5	21.6	20.9	22.0	22.4
	12H	20.8	21.8	21.2	22.2	22.6	20.5	21.5	20.9	21.9	22.4
4H	2H	19.7	21.0	20.1	21.3	21.7	19.3	20.6	19.7	20.9	21.3
	3H	21.0	22.0	21.4	22.4	22.8	20.6	21.7	21.0	22.1	22.5
	4H	21.3	22.3	21.8	22.7	23.1	21.1	22.0	21.5	22.4	22.8
	6H	21.5	22.3	22.0	22.7	23.2	21.3	22.1	21.8	22.6	23.0
	8H	21.5	22.3	22.0	22.7	23.2	21.3	22.1	21.8	22.5	23.0
	12H	21.5	22.2	22.0	22.6	23.1	21.3	22.0	21.8	22.5	23.0
8H	4H	21.4	22.2	21.9	22.6	23.1	21.2	21.9	21.6	22.4	22.8
	6H	21.6	22.3	22.1	22.7	23.2	21.5	22.1	22.0	22.6	23.1
	8H	21.7	22.2	22.2	22.7	23.2	21.6	22.1	22.1	22.6	23.1
	12H	21.7	22.1	22.2	22.6	23.2	21.6	22.1	22.1	22.6	23.1
12H	4H	21.4	22.1	21.9	22.6	23.0	21.2	21.8	21.6	22.3	22.8
	6H	21.6	22.2	22.2	22.7	23.2	21.5	22.0	22.0	22.5	23.0
	8H	21.7	22.2	22.2	22.7	23.2	21.6	22.1	22.1	22.6	23.1

Maximum UGR = 23.2

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POLAR GRAPH



Maximum Candela = 7375.269 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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