IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-22-L85-835-CS-SAF12125-PC250-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN from BALLABS TEST NO. 19833.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUEDATE] 2026-05-06
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 3-42 LED 22" ARRAYS 2x2' RECESSED WHITE REFLECTOR LUMINAIRE
[MORE] PAT12 ACRYLIC LENS w/CLEAR ACRYLIC LENS IN DOOR
[LUMCAT] MCTVG-22-L85-835-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	8533
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	110
Total Luminaire Watts	77.8
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.28
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	1.57 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	12819	12786	12968
55	10199	10003	10050
65	7551	7146	7137
75	5076	4355	4475
85	1650	981	1606

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	3793.836	3793.836	3793.836	3793.836	3793.836
5	3783.998	3783.103	3780.420	3772.371	3772.371
10	3718.710	3729.442	3726.759	3721.393	3716.922
15	3617.649	3632.853	3631.064	3639.113	3632.853
20	3478.130	3496.017	3494.228	3529.108	3506.749
25	3284.056	3309.098	3328.773	3360.076	3326.090
30	3042.581	3088.193	3109.657	3122.178	3095.348
35	2757.283	2815.416	2826.148	2808.261	2798.423
40	2443.366	2469.302	2471.091	2459.464	2476.457
45	2085.626	2084.731	2080.260	2076.682	2109.773
50	1717.153	1691.217	1697.478	1683.168	1710.893
55	1345.998	1327.216	1320.062	1327.216	1326.322
60	1007.039	987.363	986.469	999.884	997.201
65	734.262	721.741	694.910	719.952	694.016
70	493.682	491.893	447.175	487.421	448.070
75	302.291	290.664	259.362	286.192	266.517
80	136.836	134.153	110.899	122.526	129.681
85	33.091	35.774	19.676	25.042	32.197
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1383.28	N.A.	16.20
0-30	2912.32	N.A.	34.10
0-40	4661.32	N.A.	54.60
0-60	7462.01	N.A.	87.50
0-80	8483.14	N.A.	99.40
0-90	8532.59	N.A.	100.00
10-90	8173.68	N.A.	95.80
20-40	3278.04	N.A.	38.40
20-50	4884.54	N.A.	57.20
40-70	3516.14	N.A.	41.20
60-80	1021.13	N.A.	12.00
70-80	305.68	N.A.	3.60
80-90	49.45	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	8532.59	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	358.91
10-20	1024.37
20-30	1529.04
30-40	1749.00
40-50	1606.5
50-60	1194.18
60-70	715.45
70-80	305.68
80-90	49.45
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	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	53	78	67	59	53	65	58	53	63	57	52	61	56	51	50
6	74	61	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44
7	69	56	48	42	67	55	47	42	54	47	42	52	46	41	51	45	41	39
8	64	51	43	38	63	51	43	38	49	42	38	48	42	37	47	41	37	35
9	60	47	40	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29

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UGR TABLE - CORRECTED

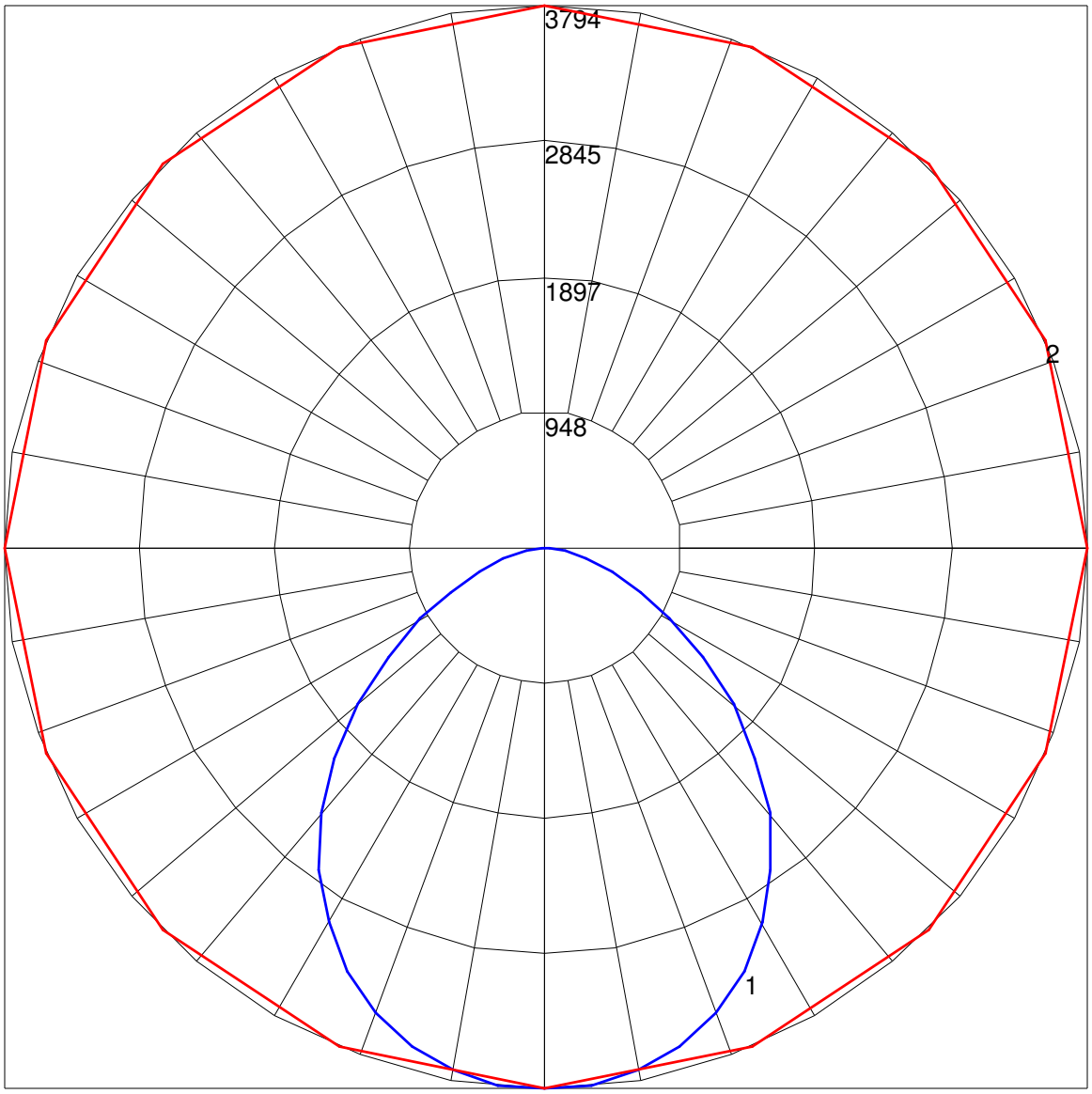
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	19.4	20.9	19.7	21.2	21.5	19.4	20.9	19.8	21.2	21.5
	3H	20.5	21.9	20.9	22.2	22.6	20.5	21.8	20.8	22.1	22.5
	4H	20.9	22.2	21.3	22.5	22.9	20.8	22.0	21.2	22.4	22.8
	6H	21.1	22.2	21.5	22.6	23.0	20.9	22.1	21.3	22.4	22.8
	8H	21.1	22.2	21.5	22.6	23.0	20.9	22.0	21.3	22.4	22.8
	12H	21.1	22.1	21.5	22.5	23.0	20.9	22.0	21.4	22.4	22.8
4H	2H	19.7	21.0	20.1	21.4	21.7	19.8	21.0	20.2	21.4	21.7
	3H	21.1	22.1	21.5	22.5	22.9	21.0	22.1	21.5	22.5	22.9
	4H	21.5	22.5	22.0	22.9	23.3	21.4	22.4	21.8	22.8	23.2
	6H	21.8	22.6	22.2	23.0	23.5	21.6	22.4	22.1	22.9	23.4
	8H	21.8	22.6	22.3	23.0	23.5	21.7	22.4	22.1	22.9	23.3
	12H	21.8	22.5	22.3	23.0	23.4	21.7	22.3	22.2	22.8	23.3
8H	4H	21.6	22.4	22.1	22.8	23.3	21.5	22.3	22.0	22.7	23.2
	6H	21.9	22.5	22.4	23.0	23.5	21.8	22.4	22.3	22.9	23.4
	8H	22.0	22.5	22.5	23.0	23.5	21.8	22.4	22.3	22.9	23.4
	12H	22.0	22.5	22.5	23.0	23.6	21.8	22.3	22.3	22.8	23.4
12H	4H	21.6	22.3	22.1	22.8	23.2	21.5	22.2	22.0	22.7	23.1
	6H	21.9	22.5	22.4	22.9	23.5	21.8	22.3	22.3	22.8	23.3
	8H	22.0	22.5	22.5	23.0	23.5	21.8	22.3	22.3	22.8	23.4

Maximum UGR = 23.6

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POLAR GRAPH



Maximum Candela = 3793.836 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)

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