IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-22-L85-827-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-L85-827-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	8277
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	106
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	12435	12403	12578
55	9893	9702	9748
65	7325	6932	6923
75	4924	4225	4341
85	1601	952	1557

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	3680.021	3680.021	3680.021	3680.021	3680.021
5	3670.478	3669.611	3667.008	3659.200	3659.200
10	3607.149	3617.559	3614.957	3609.752	3605.414
15	3509.119	3523.867	3522.132	3529.940	3523.867
20	3373.786	3391.137	3389.401	3423.235	3401.547
25	3185.534	3209.825	3228.910	3259.273	3226.308
30	2951.304	2995.547	3016.368	3028.513	3002.487
35	2674.565	2730.954	2741.364	2724.013	2714.471
40	2370.065	2395.223	2396.958	2385.681	2402.163
45	2023.057	2022.190	2017.852	2014.382	2046.480
50	1665.639	1640.481	1646.553	1632.673	1659.566
55	1305.618	1287.400	1280.460	1287.400	1286.532
60	976.828	957.742	956.875	969.888	967.285
65	712.234	700.089	674.063	698.354	673.196
70	478.871	477.136	433.760	472.799	434.628
75	293.222	281.944	251.581	277.606	258.521
80	132.731	130.128	107.573	118.850	125.790
85	32.098	34.701	19.085	24.291	31.231
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1341.78	N.A.	16.20
0-30	2824.95	N.A.	34.10
0-40	4521.48	N.A.	54.60
0-60	7238.15	N.A.	87.50
0-80	8228.64	N.A.	99.40
0-90	8276.61	N.A.	100.00
10-90	7928.47	N.A.	95.80
20-40	3179.7	N.A.	38.40
20-50	4738.01	N.A.	57.20
40-70	3410.65	N.A.	41.20
60-80	990.50	N.A.	12.00
70-80	296.51	N.A.	3.60
80-90	47.97	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	8276.61	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	348.14
10-20	993.64
20-30	1483.17
30-40	1696.53
40-50	1558.31
50-60	1158.36
60-70	693.99
70-80	296.51
80-90	47.97
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

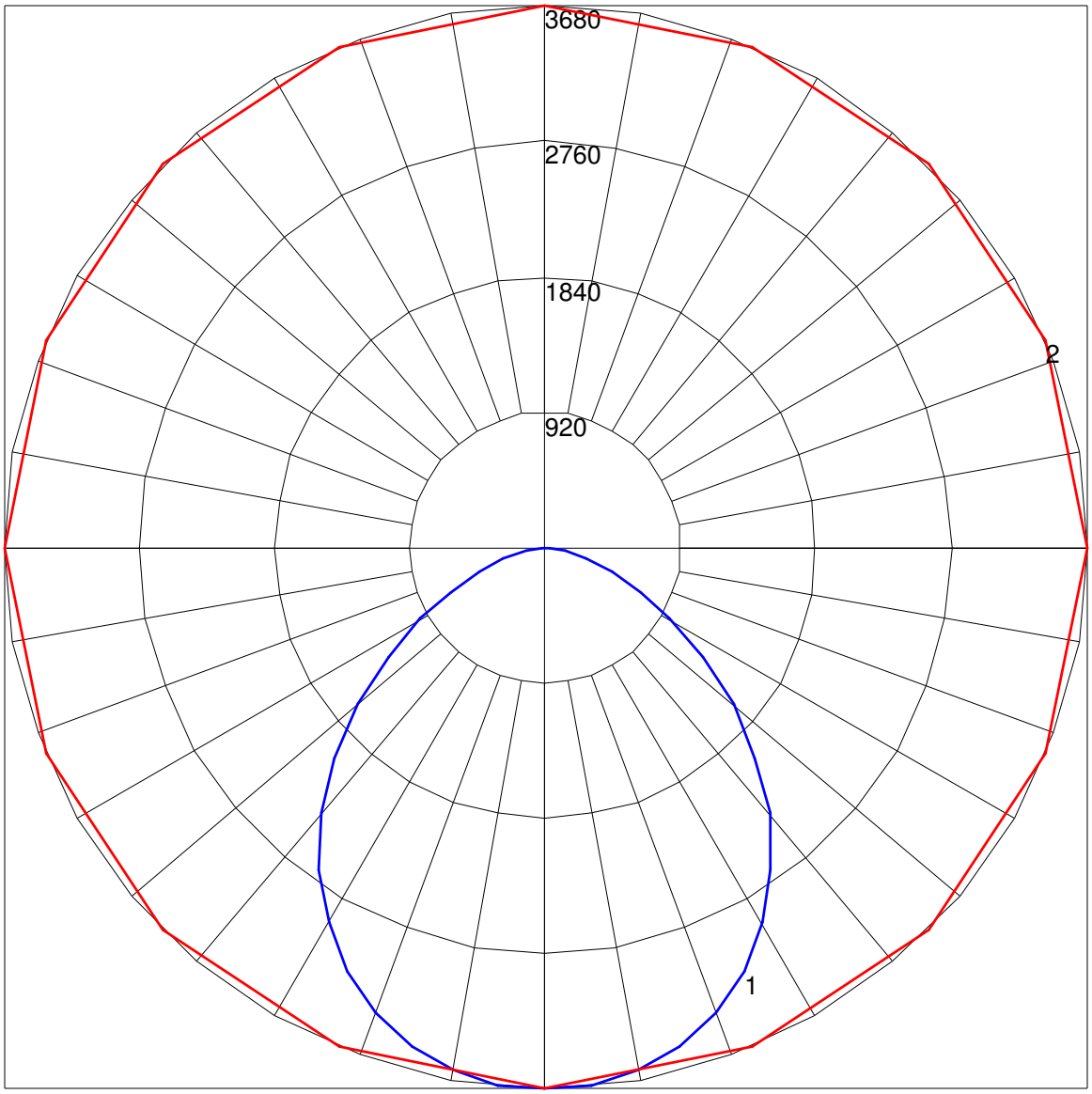
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	19.3	20.8	19.6	21.1	21.4	19.3	20.8	19.7	21.1	21.4
	3H	20.4	21.8	20.8	22.1	22.5	20.4	21.7	20.7	22.0	22.4
	4H	20.8	22.1	21.2	22.4	22.8	20.7	21.9	21.1	22.3	22.7
	6H	21.0	22.1	21.4	22.5	22.9	20.8	22.0	21.2	22.3	22.7
	8H	21.0	22.1	21.4	22.5	22.9	20.8	21.9	21.2	22.3	22.7
	12H	21.0	22.0	21.4	22.4	22.9	20.8	21.9	21.3	22.3	22.7
4H	2H	19.6	20.9	20.0	21.3	21.6	19.7	20.9	20.1	21.3	21.6
	3H	21.0	22.0	21.4	22.4	22.8	20.9	22.0	21.4	22.4	22.8
	4H	21.4	22.4	21.9	22.8	23.2	21.3	22.3	21.7	22.7	23.1
	6H	21.7	22.5	22.1	22.9	23.4	21.5	22.3	22.0	22.8	23.3
	8H	21.7	22.5	22.2	22.9	23.4	21.6	22.3	22.0	22.8	23.2
	12H	21.7	22.4	22.2	22.9	23.3	21.6	22.2	22.1	22.7	23.2
8H	4H	21.5	22.3	22.0	22.7	23.2	21.4	22.2	21.9	22.6	23.1
	6H	21.8	22.4	22.3	22.9	23.4	21.7	22.3	22.2	22.8	23.3
	8H	21.9	22.4	22.4	22.9	23.4	21.7	22.3	22.2	22.8	23.3
	12H	21.9	22.4	22.4	22.9	23.5	21.7	22.2	22.2	22.7	23.3
12H	4H	21.5	22.2	22.0	22.7	23.1	21.4	22.1	21.9	22.6	23.0
	6H	21.8	22.4	22.3	22.8	23.4	21.7	22.2	22.2	22.7	23.2
	8H	21.9	22.4	22.4	22.9	23.4	21.7	22.2	22.2	22.7	23.3

Maximum UGR = 23.5

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POLAR GRAPH



Maximum Candela = 3680.021 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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