IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-22-L85-940-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-L85-940-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	7253
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	93
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	10896	10868	11022
55	8669	8502	8542
65	6418	6074	6067
75	4315	3702	3804
85	1403	834	1365

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	3224.760	3224.760	3224.760	3224.760	3224.760
5	3216.398	3215.638	3213.357	3206.516	3206.516
10	3160.904	3170.026	3167.746	3163.184	3159.383
15	3075.001	3087.925	3086.404	3093.246	3087.925
20	2956.410	2971.614	2970.094	2999.742	2980.737
25	2791.447	2812.733	2829.457	2856.064	2827.177
30	2586.194	2624.964	2643.209	2653.852	2631.046
35	2343.691	2393.104	2402.226	2387.022	2378.660
40	2076.861	2098.907	2100.427	2090.545	2104.989
45	1772.782	1772.022	1768.221	1765.180	1793.307
50	1459.580	1437.535	1442.856	1430.693	1454.259
55	1144.098	1128.134	1122.052	1128.134	1127.374
60	855.983	839.259	838.499	849.901	847.621
65	624.123	613.480	590.674	611.959	589.914
70	419.629	418.109	380.099	414.308	380.859
75	256.947	247.064	220.457	243.263	226.539
80	116.310	114.030	94.265	104.147	110.229
85	28.127	30.408	16.724	21.286	27.367
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1175.79	N.A.	16.20
0-30	2475.48	N.A.	34.10
0-40	3962.13	N.A.	54.60
0-60	6342.71	N.A.	87.50
0-80	7210.67	N.A.	99.40
0-90	7252.7	N.A.	100.00
10-90	6947.63	N.A.	95.80
20-40	2786.34	N.A.	38.40
20-50	4151.86	N.A.	57.20
40-70	2988.72	N.A.	41.20
60-80	867.96	N.A.	12.00
70-80	259.83	N.A.	3.60
80-90	42.03	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	7252.7	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	305.07
10-20	870.72
20-30	1299.69
30-40	1486.65
40-50	1365.52
50-60	1015.06
60-70	608.13
70-80	259.83
80-90	42.03
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

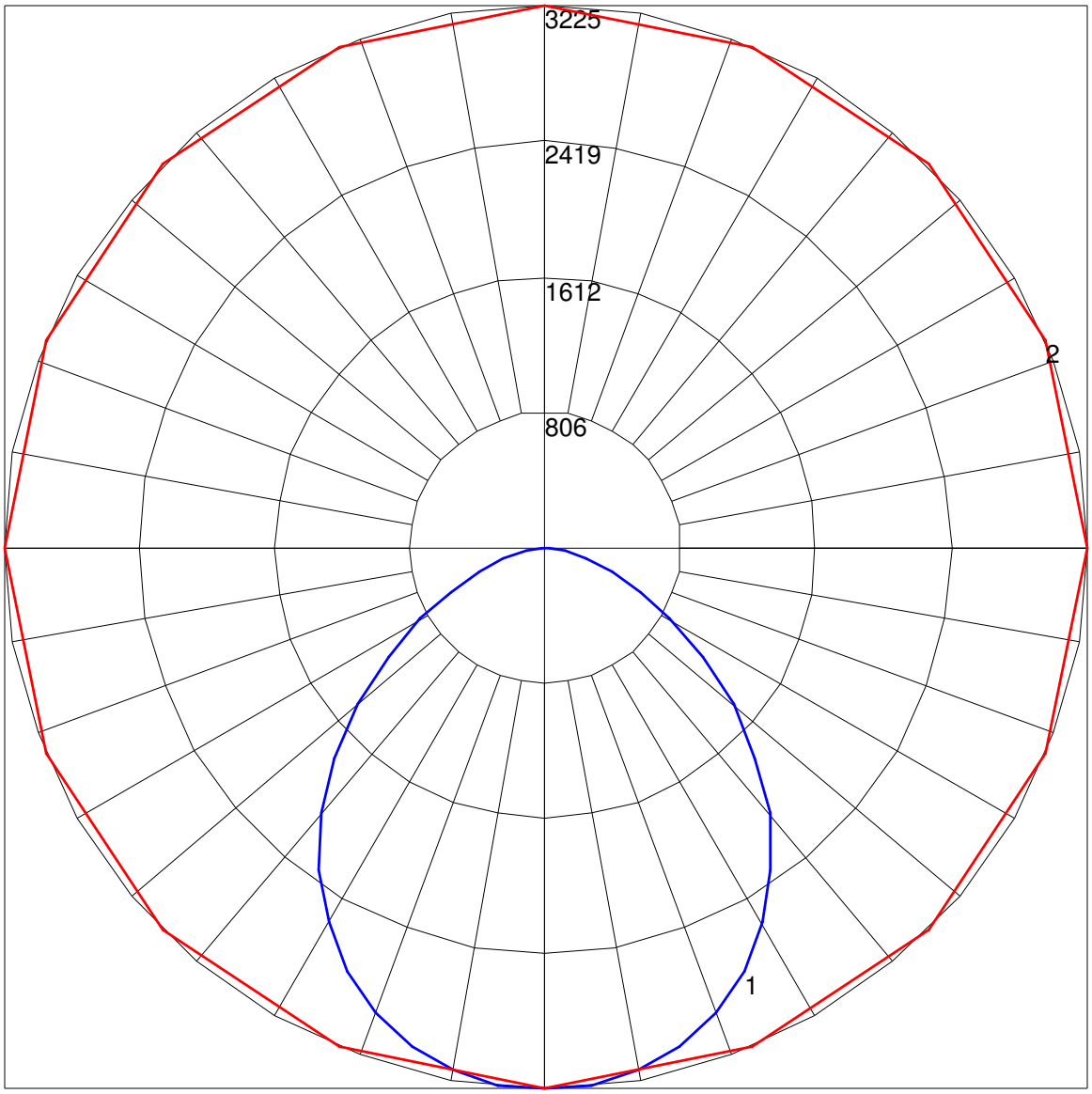
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	18.9	20.4	19.2	20.7	21.0	18.9	20.4	19.3	20.7	21.0
	3H	20.0	21.4	20.4	21.7	22.1	20.0	21.3	20.3	21.6	22.0
	4H	20.4	21.7	20.8	22.0	22.4	20.3	21.5	20.7	21.9	22.3
	6H	20.6	21.7	21.0	22.1	22.5	20.4	21.6	20.8	21.9	22.3
	8H	20.6	21.7	21.0	22.1	22.5	20.4	21.5	20.8	21.9	22.3
	12H	20.6	21.6	21.0	22.0	22.5	20.4	21.5	20.9	21.9	22.3
4H	2H	19.2	20.5	19.6	20.9	21.2	19.3	20.5	19.7	20.9	21.2
	3H	20.6	21.6	21.0	22.0	22.4	20.5	21.6	21.0	22.0	22.4
	4H	21.0	22.0	21.5	22.4	22.8	20.9	21.9	21.3	22.3	22.7
	6H	21.3	22.1	21.7	22.5	23.0	21.1	21.9	21.6	22.4	22.8
	8H	21.3	22.1	21.8	22.5	23.0	21.2	21.9	21.6	22.4	22.8
	12H	21.3	22.0	21.8	22.5	22.9	21.2	21.8	21.7	22.3	22.8
8H	4H	21.1	21.9	21.6	22.3	22.8	21.0	21.8	21.5	22.2	22.7
	6H	21.4	22.0	21.9	22.5	23.0	21.3	21.9	21.8	22.4	22.9
	8H	21.5	22.0	22.0	22.5	23.0	21.3	21.9	21.8	22.4	22.9
	12H	21.5	22.0	22.0	22.5	23.1	21.3	21.8	21.8	22.3	22.9
12H	4H	21.1	21.8	21.6	22.3	22.7	21.0	21.7	21.5	22.2	22.6
	6H	21.4	22.0	21.9	22.4	23.0	21.3	21.8	21.8	22.3	22.8
	8H	21.5	22.0	22.0	22.5	23.0	21.3	21.8	21.8	22.3	22.9

Maximum UGR = 23.1

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POLAR GRAPH



Maximum Candela = 3224.76 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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