IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-22-L85-840-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-L85-840-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	8789
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	113
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	13204	13170	13357
55	10505	10303	10351
65	7778	7361	7351
75	5228	4486	4610
85	1700	1011	1654

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	3907.651	3907.651	3907.651	3907.651	3907.651
5	3897.518	3896.596	3893.833	3885.542	3885.542
10	3830.271	3841.326	3838.562	3833.035	3828.429
15	3726.178	3741.838	3739.996	3748.286	3741.838
20	3582.474	3600.897	3599.055	3634.981	3611.951
25	3382.577	3408.370	3428.636	3460.878	3425.873
30	3133.858	3180.839	3202.947	3215.844	3188.208
35	2840.002	2899.878	2910.933	2892.509	2882.376
40	2516.667	2543.381	2545.224	2533.248	2550.751
45	2148.195	2147.273	2142.667	2138.983	2173.066
50	1768.668	1741.954	1748.402	1733.663	1762.220
55	1386.378	1367.033	1359.663	1367.033	1366.112
60	1037.250	1016.984	1016.063	1029.881	1027.117
65	756.290	743.393	715.758	741.551	714.837
70	508.492	506.650	460.591	502.044	461.512
75	311.359	299.384	267.143	294.778	274.512
80	140.941	138.177	114.226	126.202	133.571
85	34.084	36.847	20.266	25.793	33.163
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1424.78	N.A.	16.20
0-30	2999.69	N.A.	34.10
0-40	4801.16	N.A.	54.60
0-60	7685.87	N.A.	87.50
0-80	8737.63	N.A.	99.40
0-90	8788.57	N.A.	100.00
10-90	8418.89	N.A.	95.80
20-40	3376.38	N.A.	38.40
20-50	5031.08	N.A.	57.20
40-70	3621.62	N.A.	41.20
60-80	1051.76	N.A.	12.00
70-80	314.85	N.A.	3.60
80-90	50.94	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	8788.57	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	369.68
10-20	1055.11
20-30	1574.91
30-40	1801.47
40-50	1654.69
50-60	1230.01
60-70	736.92
70-80	314.85
80-90	50.94
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

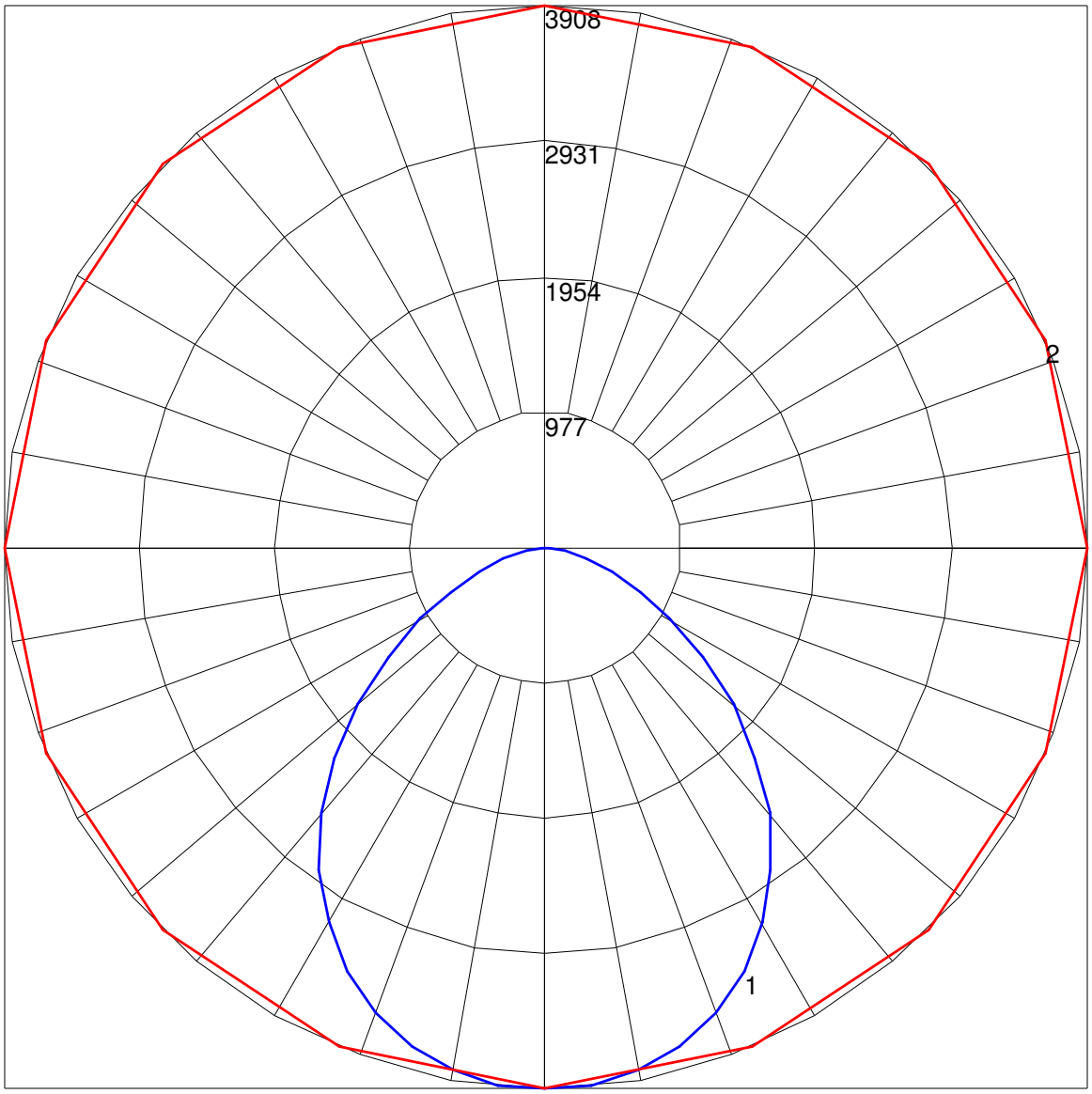
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	19.6	21.1	19.9	21.4	21.7	19.6	21.1	20.0	21.4	21.7
	3H	20.7	22.1	21.1	22.4	22.8	20.7	22.0	21.0	22.3	22.7
	4H	21.1	22.4	21.5	22.7	23.1	21.0	22.2	21.4	22.6	23.0
	6H	21.3	22.4	21.7	22.8	23.2	21.1	22.3	21.5	22.6	23.0
	8H	21.3	22.4	21.7	22.8	23.2	21.1	22.2	21.5	22.6	23.0
	12H	21.3	22.3	21.7	22.7	23.2	21.1	22.2	21.6	22.6	23.0
4H	2H	19.9	21.2	20.3	21.6	21.9	20.0	21.2	20.4	21.6	21.9
	3H	21.3	22.3	21.7	22.7	23.1	21.2	22.3	21.7	22.7	23.1
	4H	21.7	22.7	22.2	23.1	23.5	21.6	22.6	22.0	23.0	23.4
	6H	22.0	22.8	22.4	23.2	23.7	21.8	22.6	22.3	23.1	23.6
	8H	22.0	22.8	22.5	23.2	23.7	21.9	22.6	22.3	23.1	23.5
	12H	22.0	22.7	22.5	23.2	23.6	21.9	22.5	22.4	23.0	23.5
8H	4H	21.8	22.6	22.3	23.0	23.5	21.7	22.5	22.2	22.9	23.4
	6H	22.1	22.7	22.6	23.2	23.7	22.0	22.6	22.5	23.1	23.6
	8H	22.2	22.7	22.7	23.2	23.7	22.0	22.6	22.5	23.1	23.6
	12H	22.2	22.7	22.7	23.2	23.8	22.0	22.5	22.5	23.0	23.6
12H	4H	21.8	22.5	22.3	23.0	23.4	21.7	22.4	22.2	22.9	23.3
	6H	22.1	22.7	22.6	23.1	23.7	22.0	22.5	22.5	23.0	23.5
	8H	22.2	22.7	22.7	23.2	23.7	22.0	22.5	22.5	23.0	23.6

Maximum UGR = 23.8

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POLAR GRAPH



Maximum Candela = 3907.651 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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