IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-22-L85-935-CS-SAF125-PC250-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM BALLABS TEST NO. 19834.0
[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 REFL LUMINAIRE
[MORE] FROSTED ACRYLIC LENS w/CLEAR ACRYLIC LENS IN DOOR
[LUMCAT] MCTVG-22-L85-935-CS-SAF125-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	7196
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	92
Total Luminaire Watts	77.8
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.20
Spacing Criterion (Diagonal)	1.30
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	1.92 ft
Luminous Width (90-270)	1.92 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	7190	7213	7219
55	6295	6127	6244
65	4879	4757	4911
75	3122	3234	2992
85	617	1170	952

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	3063.258	3063.258	3063.258	3063.258	3063.258
5	3075.551	3055.959	3040.209	3032.910	3033.678
10	3022.538	3006.019	2992.574	2986.427	2978.360
15	2933.414	2918.048	2913.054	2901.913	2896.919
20	2807.027	2800.112	2799.343	2769.379	2773.989
25	2646.449	2642.992	2636.845	2619.558	2626.473
30	2461.286	2453.603	2437.084	2437.084	2443.615
35	2237.708	2231.177	2224.262	2216.963	2219.268
40	1994.537	1994.537	1997.226	1985.701	1985.701
45	1742.915	1747.525	1748.293	1732.543	1749.830
50	1490.140	1477.463	1481.689	1454.030	1491.293
55	1237.750	1212.396	1204.713	1206.633	1227.762
60	966.152	956.164	936.956	964.231	971.530
65	706.847	716.835	689.176	709.920	711.457
70	482.116	480.195	474.817	470.207	462.524
75	276.976	266.220	286.964	271.982	265.452
80	110.637	109.484	131.765	134.839	124.082
85	18.439	23.818	34.958	37.647	28.428
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1109.58	N.A.	15.40
0-30	2321.19	N.A.	32.30
0-40	3712.52	N.A.	51.60
0-60	6141.43	N.A.	85.30
0-80	7146.61	N.A.	99.30
0-90	7196.47	N.A.	100.00
10-90	6907.29	N.A.	96.00
20-40	2602.94	N.A.	36.20
20-50	3945.19	N.A.	54.80
40-70	3132.1	N.A.	43.50
60-80	1005.17	N.A.	14.00
70-80	301.99	N.A.	4.20
80-90	49.87	N.A.	0.70
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	7196.47	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	289.19
10-20	820.40
20-30	1211.61
30-40	1391.33
40-50	1342.25
50-60	1086.66
60-70	703.18
70-80	301.99
80-90	49.87
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	107	104	100	97	99	97	94	95	93	91	92	90	88	86
2	101	93	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76	74
3	93	83	75	69	90	81	74	69	78	72	67	76	71	66	73	69	65	63
4	85	74	66	59	83	73	65	59	70	64	58	68	62	57	66	61	57	55
5	79	66	58	52	77	65	57	51	63	56	51	61	55	50	60	54	50	48
6	73	60	52	45	71	59	51	45	57	50	45	56	49	45	54	49	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	45	40	50	44	39	38
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34
9	59	46	38	33	58	46	38	33	44	37	33	43	37	32	42	37	32	30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	29	28

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UGR TABLE - CORRECTED

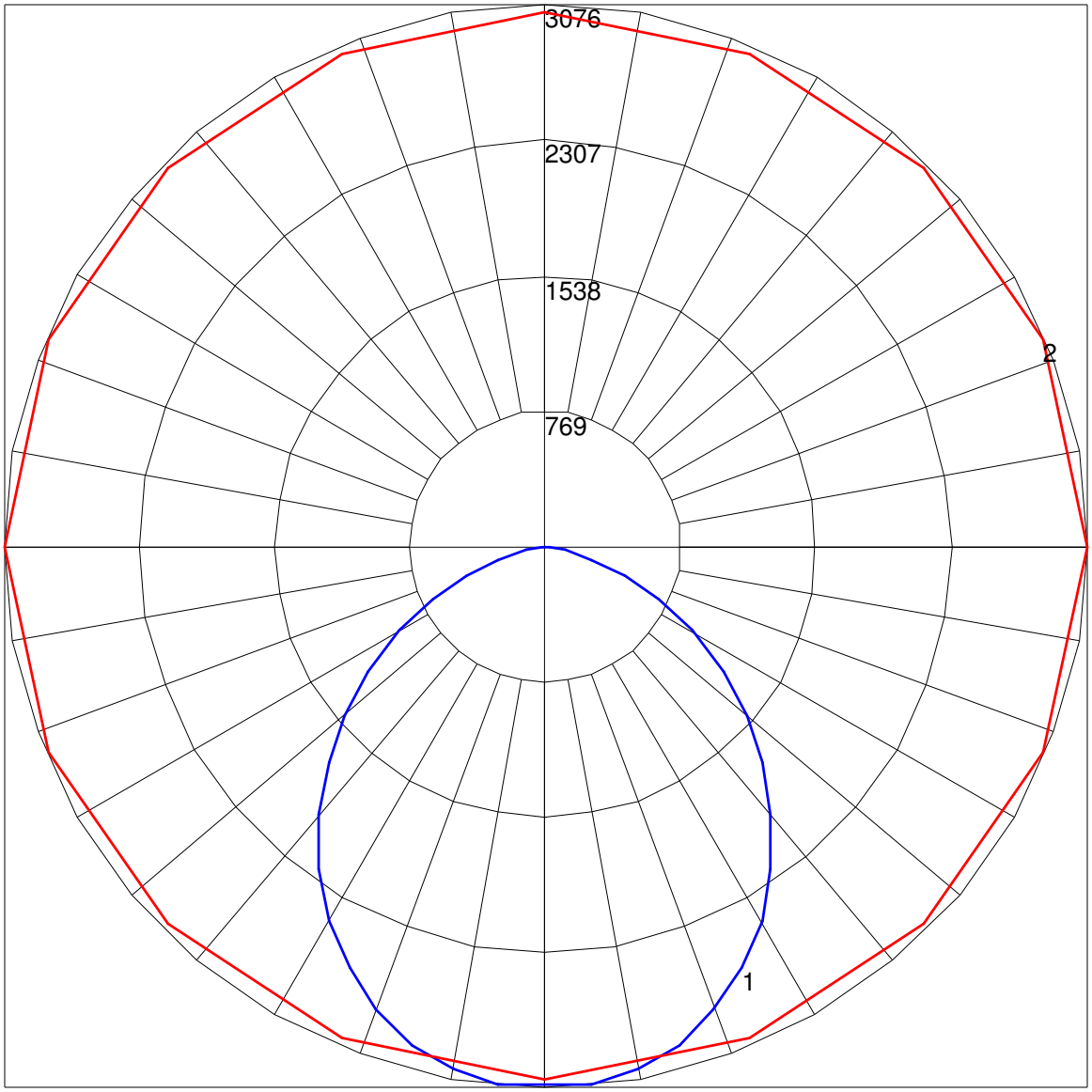
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	18.2	19.7	18.5	20.0	20.3	18.2	19.7	18.5	20.0	20.4
	3H	19.4	20.8	19.8	21.2	21.5	19.4	20.8	19.8	21.1	21.5
	4H	19.8	21.1	20.2	21.4	21.8	19.7	21.0	20.1	21.4	21.7
	6H	19.9	21.1	20.3	21.5	21.9	19.9	21.1	20.3	21.5	21.8
	8H	19.9	21.1	20.3	21.4	21.8	19.9	21.0	20.3	21.4	21.8
	12H	19.9	21.0	20.3	21.4	21.8	19.9	21.0	20.3	21.4	21.8
4H	2H	18.6	19.9	19.0	20.3	20.6	18.6	19.9	19.0	20.3	20.6
	3H	20.1	21.1	20.5	21.5	21.9	20.0	21.1	20.4	21.5	21.9
	4H	20.5	21.4	20.9	21.9	22.3	20.4	21.4	20.9	21.8	22.3
	6H	20.7	21.5	21.1	21.9	22.4	20.7	21.5	21.1	22.0	22.4
	8H	20.7	21.5	21.1	21.9	22.4	20.7	21.5	21.2	21.9	22.4
	12H	20.7	21.4	21.1	21.8	22.3	20.7	21.4	21.2	21.9	22.4
8H	4H	20.6	21.4	21.1	21.8	22.3	20.6	21.4	21.0	21.8	22.3
	6H	20.9	21.5	21.3	22.0	22.5	20.9	21.5	21.4	22.0	22.5
	8H	20.9	21.5	21.4	22.0	22.5	20.9	21.5	21.5	22.0	22.5
	12H	20.9	21.4	21.4	21.9	22.4	21.0	21.5	21.5	22.0	22.5
12H	4H	20.6	21.3	21.1	21.8	22.3	20.6	21.3	21.0	21.7	22.2
	6H	20.9	21.4	21.4	21.9	22.4	20.9	21.5	21.4	21.9	22.5
	8H	20.9	21.4	21.4	21.9	22.5	21.0	21.5	21.5	22.0	22.5

Maximum UGR = 22.5

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POLAR GRAPH



Maximum Candela = 3075.551 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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