IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-24-L120-840-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] 6-42 LED 22" ARRAYS 2'x4' RECESSED WHITE REFL LUMINAIRE
[MORE] FROSTED ACRYLIC LENS w/CLEAR ACRYLIC LENS IN DOOR
[LUMCAT] MCTVG-24-L120-840-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	12410
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	122
Total Luminaire Watts	101.8
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)	3.57 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	8133	8158	8165
55	7120	6930	7063
65	5518	5380	5554
75	3531	3658	3384
85	698	1323	1076

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	5282.276	5282.276	5282.276	5282.276	5282.276
5	5303.474	5269.689	5242.529	5229.943	5231.268
10	5212.057	5183.572	5160.387	5149.788	5135.877
15	5058.372	5031.874	5023.263	5004.052	4995.440
20	4840.430	4828.506	4827.181	4775.511	4783.460
25	4563.531	4557.569	4546.970	4517.160	4529.084
30	4244.236	4230.988	4202.503	4202.503	4213.764
35	3858.698	3847.436	3835.512	3822.926	3826.901
40	3439.375	3439.375	3444.012	3424.139	3424.139
45	3005.478	3013.428	3014.753	2987.593	3017.402
50	2569.595	2547.734	2555.021	2507.325	2571.582
55	2134.373	2090.652	2077.404	2080.716	2117.150
60	1666.030	1648.807	1615.685	1662.718	1675.304
65	1218.885	1236.108	1188.413	1224.184	1226.834
70	831.359	828.047	818.773	810.823	797.575
75	477.617	459.069	494.841	469.006	457.744
80	190.782	188.795	227.216	232.516	213.967
85	31.797	41.071	60.282	64.919	49.020
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1913.36	N.A.	15.40
0-30	4002.66	N.A.	32.30
0-40	6401.86	N.A.	51.60
0-60	10590.27	N.A.	85.30
0-80	12323.59	N.A.	99.30
0-90	12409.58	N.A.	100.00
10-90	11910.91	N.A.	96.00
20-40	4488.5	N.A.	36.20
20-50	6803.07	N.A.	54.80
40-70	5400.98	N.A.	43.50
60-80	1733.32	N.A.	14.00
70-80	520.75	N.A.	4.20
80-90	85.99	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	12409.58	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	498.67
10-20	1414.69
20-30	2089.3
30-40	2399.2
40-50	2314.58
50-60	1873.84
60-70	1212.57
70-80	520.75
80-90	85.99
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	96	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	63	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

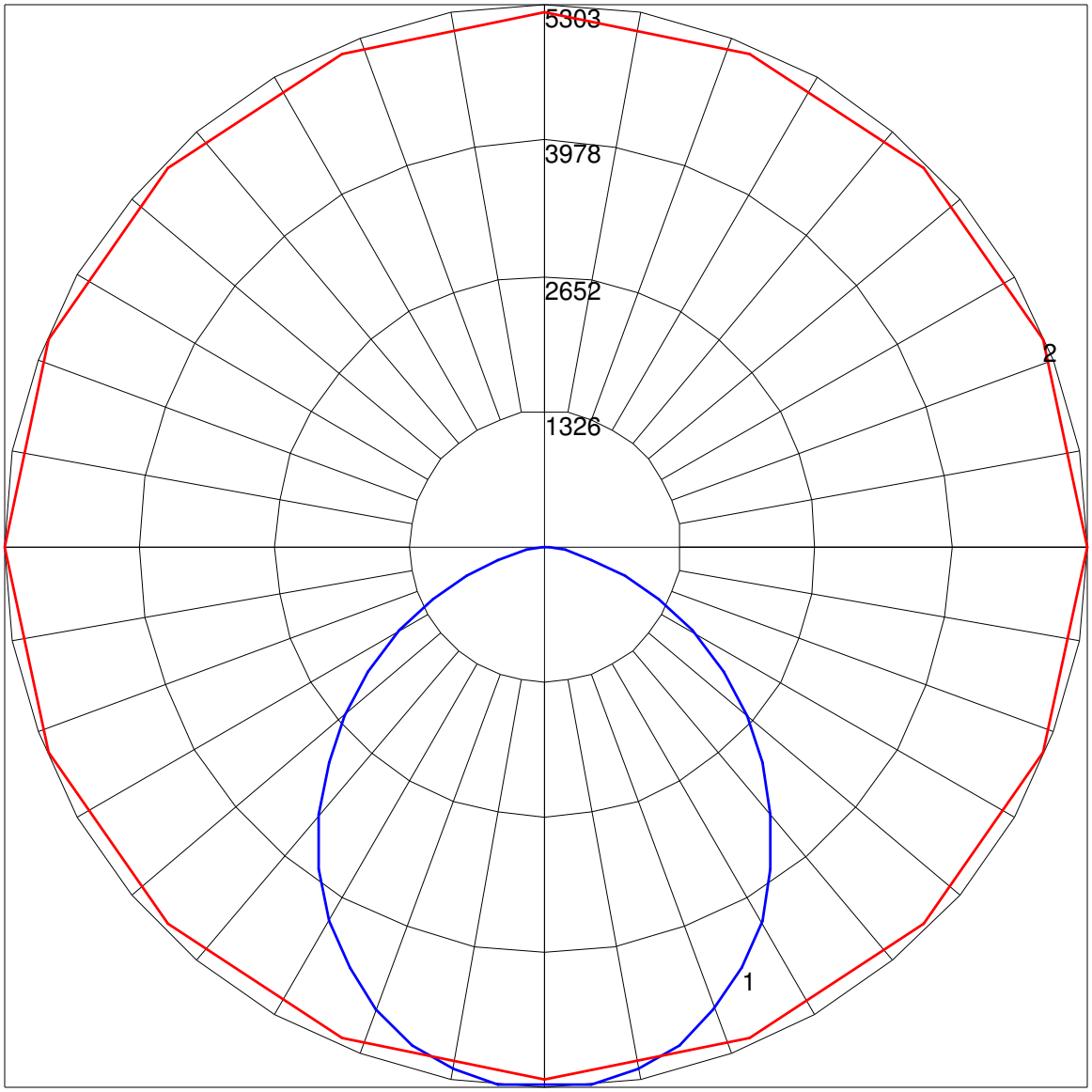
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	18.6	20.2	19.0	20.5	20.8	18.6	20.2	19.0	20.5	20.8
	3H	19.9	21.3	20.3	21.6	22.0	19.8	21.2	20.2	21.6	21.9
	4H	20.2	21.5	20.6	21.9	22.2	20.2	21.5	20.6	21.8	22.2
	6H	20.3	21.5	20.8	21.9	22.3	20.3	21.5	20.7	21.9	22.3
	8H	20.3	21.5	20.8	21.9	22.3	20.3	21.5	20.8	21.9	22.3
	12H	20.3	21.4	20.8	21.8	22.2	20.3	21.4	20.8	21.8	22.2
4H	2H	19.0	20.3	19.4	20.7	21.1	19.1	20.4	19.5	20.7	21.1
	3H	20.5	21.6	20.9	22.0	22.4	20.5	21.5	20.9	21.9	22.3
	4H	20.9	21.9	21.3	22.3	22.7	20.9	21.8	21.3	22.2	22.7
	6H	21.1	21.9	21.5	22.4	22.8	21.1	21.9	21.6	22.4	22.8
	8H	21.1	21.9	21.6	22.3	22.8	21.1	21.9	21.6	22.4	22.8
	12H	21.1	21.8	21.6	22.3	22.8	21.1	21.8	21.6	22.3	22.8
8H	4H	21.0	21.8	21.5	22.3	22.7	21.0	21.8	21.5	22.2	22.7
	6H	21.3	21.9	21.8	22.4	22.9	21.3	22.0	21.8	22.4	22.9
	8H	21.3	21.9	21.8	22.4	22.9	21.4	22.0	21.9	22.5	23.0
	12H	21.3	21.8	21.8	22.3	22.9	21.4	21.9	21.9	22.4	23.0
12H	4H	21.0	21.7	21.5	22.2	22.7	21.0	21.7	21.5	22.2	22.6
	6H	21.3	21.9	21.8	22.3	22.9	21.3	21.9	21.8	22.3	22.9
	8H	21.3	21.8	21.8	22.3	22.9	21.4	21.9	21.9	22.4	23.0

Maximum UGR = 23.0

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POLAR GRAPH



Maximum Candela = 5303.474 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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