IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-24-L120-850-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-L120-850-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	12771
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	125
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	8369	8395	8403
55	7327	7132	7268
65	5679	5537	5716
75	3634	3765	3483
85	718	1362	1108

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	5436.129	5436.129	5436.129	5436.129	5436.129
5	5457.944	5423.176	5395.225	5382.272	5383.635
10	5363.865	5334.551	5310.690	5299.782	5285.466
15	5205.703	5178.434	5169.571	5149.801	5140.939
20	4981.414	4969.142	4967.779	4914.604	4922.785
25	4696.450	4690.314	4679.406	4648.728	4661.000
30	4367.855	4354.220	4324.906	4324.906	4336.495
35	3971.087	3959.498	3947.227	3934.274	3938.364
40	3539.551	3539.551	3544.323	3523.871	3523.871
45	3093.017	3101.198	3102.561	3074.610	3105.288
50	2644.437	2621.940	2629.439	2580.354	2646.482
55	2196.540	2151.545	2137.911	2141.319	2178.815
60	1714.555	1696.830	1662.744	1711.147	1724.099
65	1254.386	1272.111	1223.027	1259.840	1262.567
70	855.573	852.165	842.620	834.440	820.805
75	491.529	472.440	509.254	482.666	471.077
80	196.339	194.294	233.834	239.288	220.199
85	32.723	42.267	62.038	66.810	50.448
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1969.09	N.A.	15.40
0-30	4119.24	N.A.	32.30
0-40	6588.32	N.A.	51.60
0-60	10898.73	N.A.	85.30
0-80	12682.53	N.A.	99.30
0-90	12771.03	N.A.	100.00
10-90	12257.83	N.A.	96.00
20-40	4619.23	N.A.	36.20
20-50	7001.22	N.A.	54.80
40-70	5558.29	N.A.	43.50
60-80	1783.8	N.A.	14.00
70-80	535.92	N.A.	4.20
80-90	88.49	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	12771.03	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	513.19
10-20	1455.9
20-30	2150.15
30-40	2469.08
40-50	2381.99
50-60	1928.42
60-70	1247.89
70-80	535.92
80-90	88.49
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	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

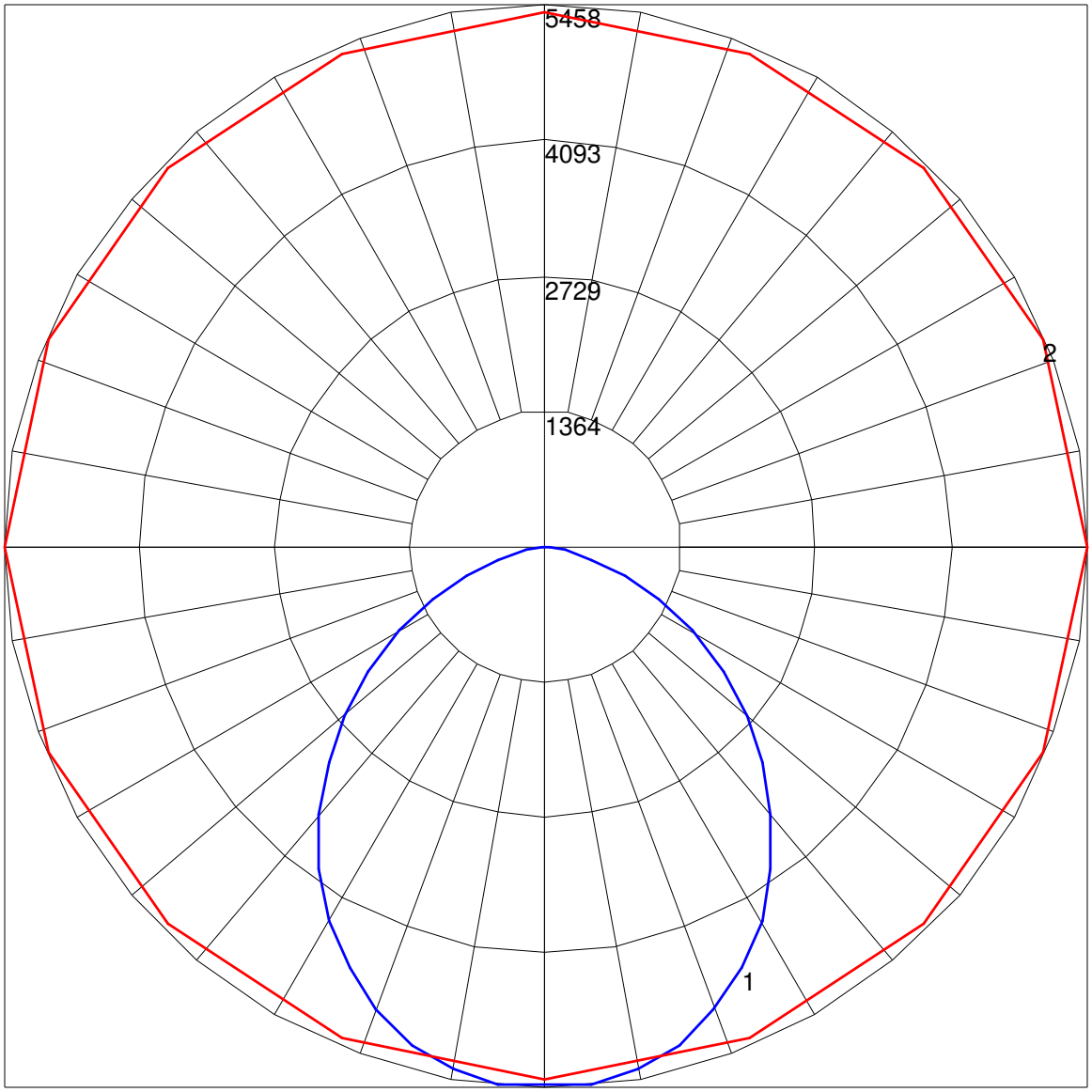
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	18.7	20.3	19.1	20.6	20.9	18.7	20.3	19.1	20.6	20.9
	3H	20.0	21.4	20.4	21.7	22.1	19.9	21.3	20.3	21.7	22.0
	4H	20.3	21.6	20.7	22.0	22.3	20.3	21.6	20.7	21.9	22.3
	6H	20.4	21.6	20.9	22.0	22.4	20.4	21.6	20.8	22.0	22.4
	8H	20.4	21.6	20.9	22.0	22.4	20.4	21.6	20.9	22.0	22.4
	12H	20.4	21.5	20.9	21.9	22.3	20.4	21.5	20.9	21.9	22.3
4H	2H	19.1	20.4	19.5	20.8	21.2	19.2	20.5	19.6	20.8	21.2
	3H	20.6	21.7	21.0	22.1	22.5	20.6	21.6	21.0	22.0	22.4
	4H	21.0	22.0	21.4	22.4	22.8	21.0	21.9	21.4	22.3	22.8
	6H	21.2	22.0	21.6	22.5	22.9	21.2	22.0	21.7	22.5	22.9
	8H	21.2	22.0	21.7	22.4	22.9	21.2	22.0	21.7	22.5	22.9
	12H	21.2	21.9	21.7	22.4	22.9	21.2	21.9	21.7	22.4	22.9
8H	4H	21.1	21.9	21.6	22.4	22.8	21.1	21.9	21.6	22.3	22.8
	6H	21.4	22.0	21.9	22.5	23.0	21.4	22.1	21.9	22.5	23.0
	8H	21.4	22.0	21.9	22.5	23.0	21.5	22.1	22.0	22.6	23.1
	12H	21.4	21.9	21.9	22.4	23.0	21.5	22.0	22.0	22.5	23.1
12H	4H	21.1	21.8	21.6	22.3	22.8	21.1	21.8	21.6	22.3	22.7
	6H	21.4	22.0	21.9	22.4	23.0	21.4	22.0	21.9	22.4	23.0
	8H	21.4	21.9	21.9	22.4	23.0	21.5	22.0	22.0	22.5	23.1

Maximum UGR = 23.1

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POLAR GRAPH



Maximum Candela = 5457.944 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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