IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-24-L60-935-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] 6-42 LED 22" ARRAYS 2'x4' RECESSED WHITE REFL LUMINAIRE
[MORE] FROSTED ACRYLIC LENS w/CLEAR ACRYLIC LENS IN DOOR
[LUMCAT] MCTVG-24-L60-935-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	5077
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	104
Total Luminaire Watts	48.9
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	3327	3338	3340
55	2913	2835	2889
65	2258	2201	2272
75	1445	1497	1384
85	286	541	440

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	2161.117	2161.117	2161.117	2161.117	2161.117
5	2169.790	2155.968	2144.856	2139.707	2140.249
10	2132.389	2120.735	2111.250	2106.913	2101.222
15	2069.513	2058.672	2055.148	2047.289	2043.766
20	1980.347	1975.468	1974.926	1953.787	1957.039
25	1867.060	1864.621	1860.285	1848.089	1852.967
30	1736.428	1731.008	1719.354	1719.354	1723.961
35	1578.694	1574.087	1569.209	1564.059	1565.685
40	1407.138	1407.138	1409.036	1400.905	1400.905
45	1229.620	1232.872	1233.414	1222.302	1234.498
50	1051.289	1042.345	1045.326	1025.813	1052.102
55	873.228	855.341	849.920	851.275	866.182
60	681.617	674.570	661.019	680.261	685.411
65	498.678	505.724	486.211	500.846	501.930
70	340.131	338.776	334.981	331.729	326.309
75	195.406	187.817	202.452	191.883	187.275
80	78.054	77.241	92.960	95.128	87.540
85	13.009	16.803	24.663	26.560	20.056
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	782.81	N.A.	15.40
0-30	1637.59	N.A.	32.30
0-40	2619.17	N.A.	51.60
0-60	4332.76	N.A.	85.30
0-80	5041.9	N.A.	99.30
0-90	5077.08	N.A.	100.00
10-90	4873.07	N.A.	96.00
20-40	1836.36	N.A.	36.20
20-50	2783.32	N.A.	54.80
40-70	2209.68	N.A.	43.50
60-80	709.15	N.A.	14.00
70-80	213.05	N.A.	4.20
80-90	35.18	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	5077.08	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	204.02
10-20	578.79
20-30	854.79
30-40	981.57
40-50	946.95
50-60	766.64
60-70	496.09
70-80	213.05
80-90	35.18
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

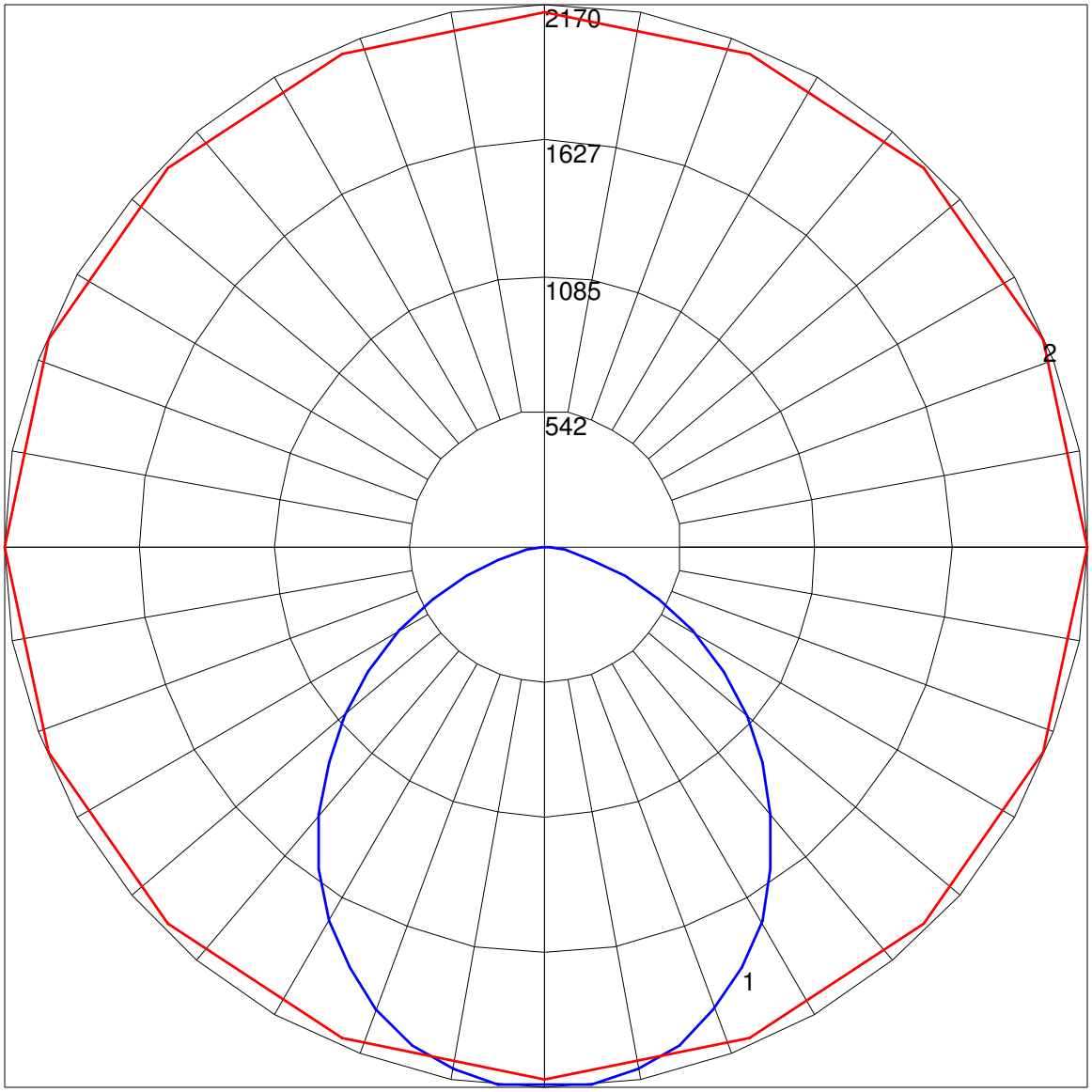
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	15.4	17.0	15.8	17.3	17.6	15.4	17.0	15.8	17.3	17.6
	3H	16.7	18.1	17.1	18.4	18.8	16.6	18.0	17.0	18.4	18.7
	4H	17.0	18.3	17.4	18.7	19.0	17.0	18.3	17.4	18.6	19.0
	6H	17.1	18.3	17.6	18.7	19.1	17.1	18.3	17.5	18.7	19.1
	8H	17.1	18.3	17.6	18.7	19.1	17.1	18.3	17.6	18.7	19.1
	12H	17.1	18.2	17.6	18.6	19.0	17.1	18.2	17.6	18.6	19.0
4H	2H	15.8	17.1	16.2	17.5	17.9	15.9	17.2	16.3	17.5	17.9
	3H	17.3	18.4	17.7	18.8	19.2	17.3	18.3	17.7	18.7	19.1
	4H	17.7	18.7	18.1	19.1	19.5	17.7	18.6	18.1	19.0	19.5
	6H	17.9	18.7	18.3	19.2	19.6	17.9	18.7	18.4	19.2	19.6
	8H	17.9	18.7	18.4	19.1	19.6	17.9	18.7	18.4	19.2	19.6
	12H	17.9	18.6	18.4	19.1	19.6	17.9	18.6	18.4	19.1	19.6
8H	4H	17.8	18.6	18.3	19.1	19.5	17.8	18.6	18.3	19.0	19.5
	6H	18.1	18.7	18.6	19.2	19.7	18.1	18.8	18.6	19.2	19.7
	8H	18.1	18.7	18.6	19.2	19.7	18.2	18.8	18.7	19.3	19.8
	12H	18.1	18.6	18.6	19.1	19.7	18.2	18.7	18.7	19.2	19.8
12H	4H	17.8	18.5	18.3	19.0	19.5	17.8	18.5	18.3	19.0	19.4
	6H	18.1	18.7	18.6	19.1	19.7	18.1	18.7	18.6	19.1	19.7
	8H	18.1	18.6	18.6	19.1	19.7	18.2	18.7	18.7	19.2	19.8

Maximum UGR = 19.8

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POLAR GRAPH



Maximum Candela = 2169.79 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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