IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-24-L60-930-CS-SAF12125-PC250-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN from BALLABS TEST NO. 19835.0
[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 2x4' RECESSED WHITE REFLECTOR LUMINAIRE
[MORE] PAT12 ACRYLIC LENS w/CLEAR ACRYLIC LENS IN DOOR
[LUMCAT] MCTVG-24-L60-930-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	4997
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	102
Total Luminaire Watts	48.9
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.24
Spacing Criterion (90-270)	1.22
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	3381	3363	3271
55	2795	2740	2586
65	2026	2002	1858
75	1206	1242	1231
85	263	364	374

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	2176.713	2176.713	2176.713	2176.713	2176.713
5	2187.512	2173.833	2161.114	2156.074	2156.554
10	2154.874	2139.994	2131.595	2126.075	2127.035
15	2101.836	2088.156	2084.317	2072.557	2078.557
20	2025.039	2013.999	2014.479	1997.920	2004.880
25	1920.163	1913.683	1910.324	1893.764	1902.884
30	1794.408	1791.048	1779.769	1758.650	1768.969
35	1637.694	1641.054	1620.175	1586.577	1605.776
40	1450.982	1467.061	1433.463	1396.024	1419.063
45	1249.390	1267.629	1242.670	1197.312	1208.832
50	1044.918	1035.559	1038.678	988.280	986.841
55	837.806	817.647	821.247	774.689	775.169
60	632.615	618.455	614.615	572.377	579.817
65	447.582	438.702	442.302	410.144	410.384
70	292.788	284.149	294.468	281.509	275.029
75	163.193	161.514	167.993	173.993	166.553
80	69.117	66.717	75.597	86.397	77.277
85	12.000	13.439	16.559	24.479	17.039
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	793.40	N.A.	15.90
0-30	1670.65	N.A.	33.40
0-40	2679.53	N.A.	53.60
0-60	4350.94	N.A.	87.10
0-80	4966.7	N.A.	99.40
0-90	4996.61	N.A.	100.00
10-90	4790.86	N.A.	95.90
20-40	1886.12	N.A.	37.70
20-50	2835.36	N.A.	56.70
40-70	2103.83	N.A.	42.10
60-80	615.76	N.A.	12.30
70-80	183.34	N.A.	3.70
80-90	29.92	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	4996.61	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	205.75
10-20	587.65
20-30	877.24
30-40	1008.88
40-50	949.24
50-60	722.17
60-70	432.42
70-80	183.34
80-90	29.92
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	108	104	101	98	100	97	94	96	94	92	92	91	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75
3	93	84	76	70	91	82	75	70	79	73	69	77	72	67	74	70	66	64
4	86	75	67	61	84	74	66	60	71	65	59	69	63	59	67	62	58	56
5	79	67	59	53	77	66	58	53	64	57	52	62	56	52	61	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	37	33	31
10	56	43	36	31	55	43	36	31	42	35	31	41	35	30	40	34	30	29

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UGR TABLE - CORRECTED

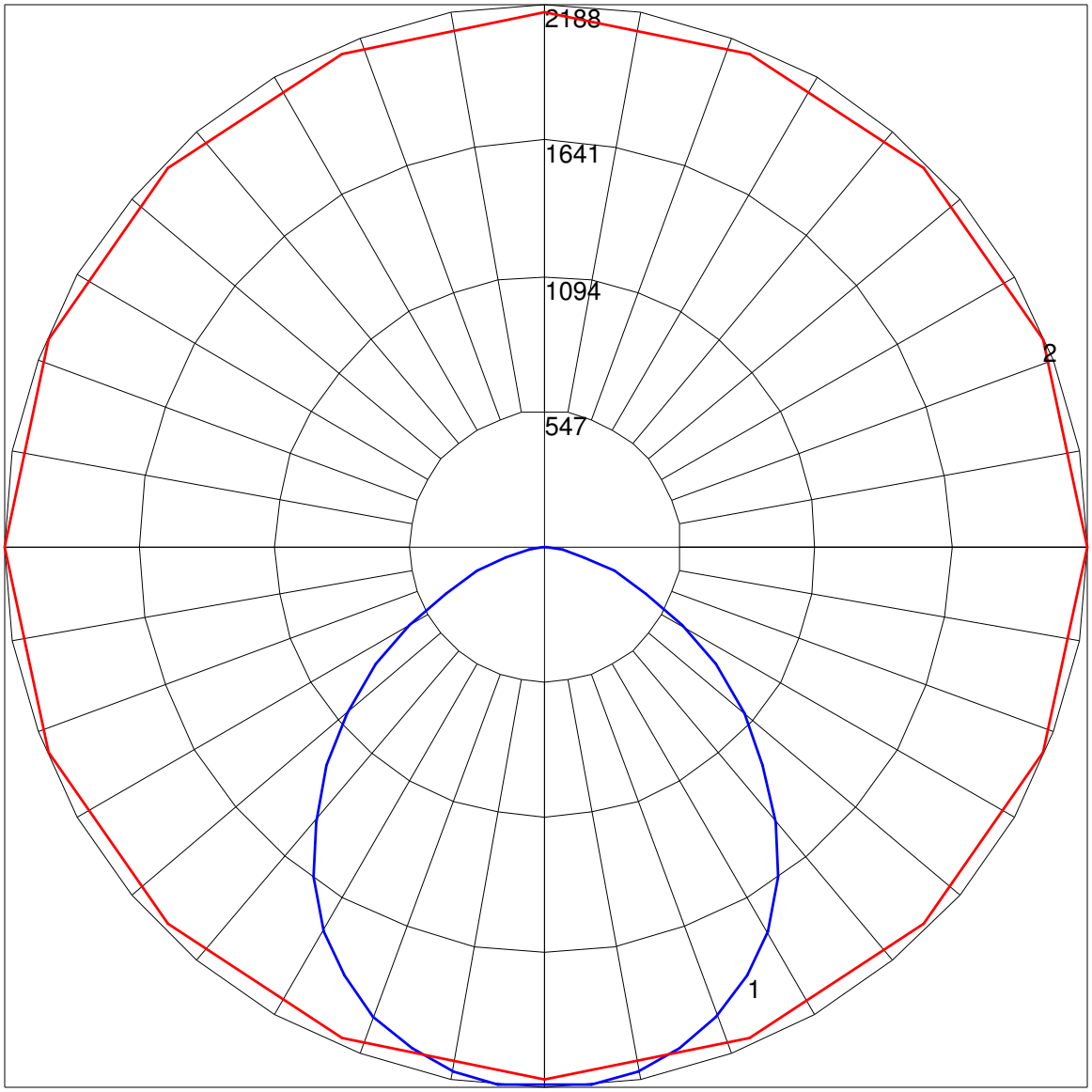
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	15.1	16.6	15.5	16.9	17.3	14.6	16.2	15.0	16.5	16.8
	3H	16.2	17.6	16.6	17.9	18.2	15.8	17.1	16.1	17.4	17.8
	4H	16.5	17.7	16.9	18.1	18.5	16.1	17.4	16.5	17.7	18.1
	6H	16.6	17.8	17.0	18.1	18.5	16.3	17.4	16.7	17.8	18.2
	8H	16.6	17.7	17.0	18.1	18.5	16.3	17.4	16.7	17.8	18.2
	12H	16.6	17.6	17.0	18.0	18.4	16.3	17.3	16.7	17.7	18.2
4H	2H	15.5	16.8	15.9	17.1	17.5	15.1	16.4	15.5	16.7	17.1
	3H	16.8	17.8	17.2	18.2	18.6	16.4	17.5	16.8	17.9	18.3
	4H	17.1	18.1	17.6	18.5	18.9	16.9	17.8	17.3	18.2	18.6
	6H	17.3	18.1	17.8	18.5	19.0	17.1	17.9	17.6	18.4	18.8
	8H	17.3	18.1	17.7	18.5	19.0	17.1	17.9	17.6	18.3	18.8
	12H	17.3	18.0	17.8	18.4	18.9	17.1	17.8	17.6	18.3	18.8
8H	4H	17.2	18.0	17.7	18.4	18.9	17.0	17.7	17.4	18.2	18.6
	6H	17.4	18.1	17.9	18.5	19.0	17.3	17.9	17.8	18.4	18.9
	8H	17.5	18.0	18.0	18.5	19.0	17.4	17.9	17.9	18.4	18.9
	12H	17.5	17.9	18.0	18.4	19.0	17.4	17.9	17.9	18.4	18.9
12H	4H	17.2	17.9	17.7	18.4	18.8	17.0	17.6	17.4	18.1	18.6
	6H	17.4	18.0	18.0	18.5	19.0	17.3	17.8	17.8	18.3	18.8
	8H	17.5	18.0	18.0	18.5	19.0	17.4	17.9	17.9	18.4	18.9

Maximum UGR = 19.0

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POLAR GRAPH



Maximum Candela = 2187.512 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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