IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-24-L60-830-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-L60-830-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	5960
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	122
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	4032	4011	3902
55	3334	3268	3084
65	2417	2389	2216
75	1439	1481	1469
85	314	434	446

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-24-L60-830-CS-SAF12125-PC250-DIM-UNV_.IES

CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	2596.320	2596.320	2596.320	2596.320	2596.320
5	2609.202	2592.885	2577.714	2571.702	2572.275
10	2570.271	2552.523	2542.504	2535.921	2537.066
15	2507.009	2490.693	2486.113	2472.086	2479.242
20	2415.408	2402.240	2402.813	2383.061	2391.363
25	2290.315	2282.586	2278.579	2258.827	2269.705
30	2140.318	2136.311	2122.857	2097.666	2109.975
35	1953.395	1957.402	1932.498	1892.423	1915.323
40	1730.689	1749.868	1709.793	1665.137	1692.618
45	1490.236	1511.992	1482.221	1428.119	1441.859
50	1246.348	1235.184	1238.906	1178.792	1177.075
55	999.311	975.266	979.560	924.027	924.599
60	754.564	737.676	733.095	682.715	691.589
65	533.863	523.272	527.565	489.207	489.494
70	349.229	338.924	351.233	335.775	328.047
75	194.652	192.649	200.378	207.534	198.660
80	82.441	79.579	90.170	103.051	92.174
85	14.313	16.030	19.751	29.198	20.324
90	0.000	0.000	0.000	0.000	0.000

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-24-L60-830-CS-SAF12125-PC250-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	946.35	N.A.	15.90
0-30	1992.7	N.A.	33.40
0-40	3196.06	N.A.	53.60
0-60	5189.67	N.A.	87.10
0-80	5924.13	N.A.	99.40
0-90	5959.82	N.A.	100.00
10-90	5714.4	N.A.	95.90
20-40	2249.71	N.A.	37.70
20-50	3381.94	N.A.	56.70
40-70	2509.39	N.A.	42.10
60-80	734.46	N.A.	12.30
70-80	218.68	N.A.	3.70
80-90	35.69	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	5959.82	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	245.42
10-20	700.93
20-30	1046.35
30-40	1203.36
40-50	1132.23
50-60	861.39
60-70	515.78
70-80	218.68
80-90	35.69
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

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-24-L60-830-CS-SAF12125-PC250-DIM-UNV_.IES

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

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-24-L60-830-CS-SAF12125-PC250-DIM-UNV_.IES

UGR TABLE - CORRECTED

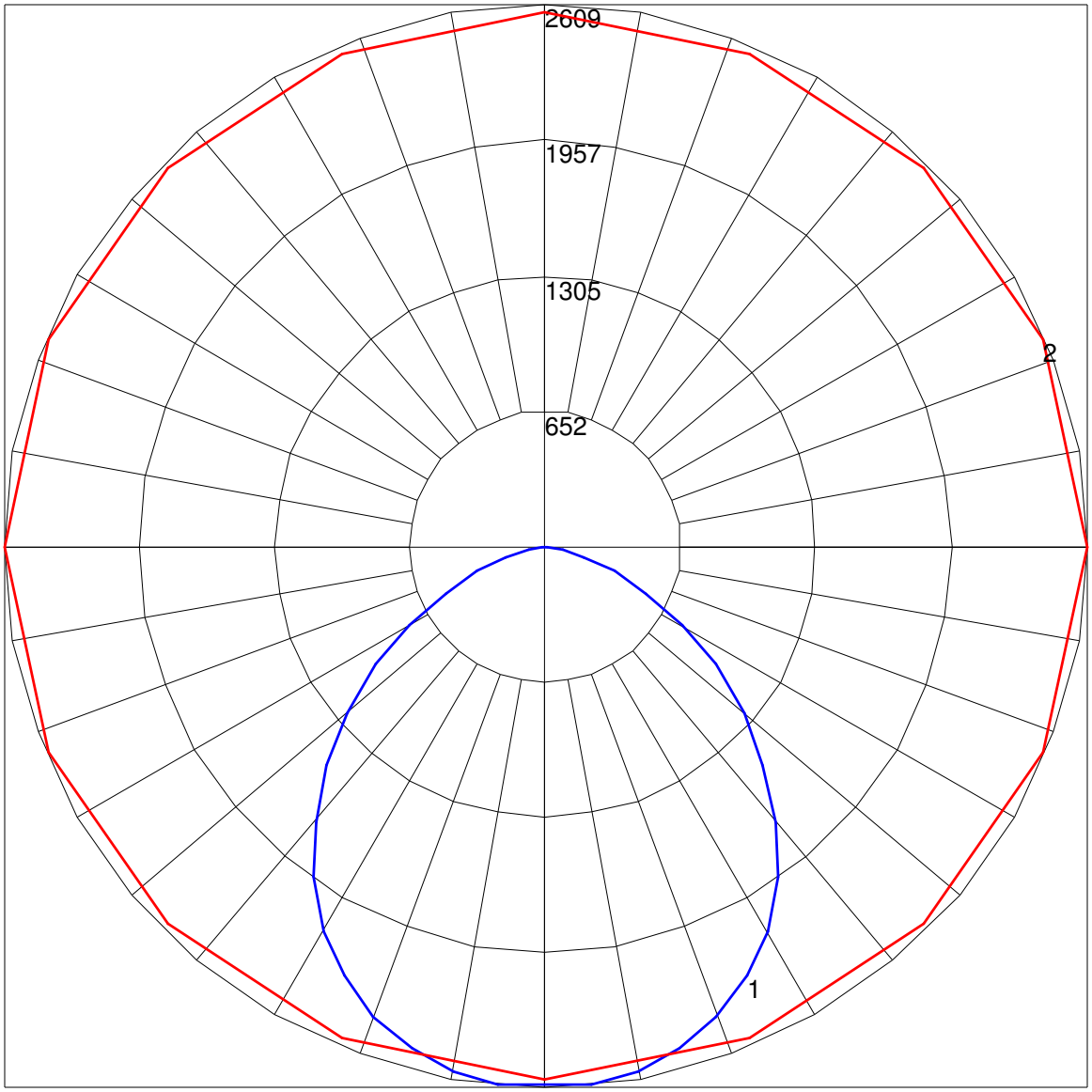
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	15.7	17.2	16.1	17.5	17.9	15.2	16.8	15.6	17.1	17.4
	3H	16.8	18.2	17.2	18.5	18.8	16.4	17.7	16.7	18.0	18.4
	4H	17.1	18.3	17.5	18.7	19.1	16.7	18.0	17.1	18.3	18.7
	6H	17.2	18.4	17.6	18.7	19.1	16.9	18.0	17.3	18.4	18.8
	8H	17.2	18.3	17.6	18.7	19.1	16.9	18.0	17.3	18.4	18.8
	12H	17.2	18.2	17.6	18.6	19.0	16.9	17.9	17.3	18.3	18.8
4H	2H	16.1	17.4	16.5	17.7	18.1	15.7	17.0	16.1	17.3	17.7
	3H	17.4	18.4	17.8	18.8	19.2	17.0	18.1	17.4	18.5	18.9
	4H	17.7	18.7	18.2	19.1	19.5	17.5	18.4	17.9	18.8	19.2
	6H	17.9	18.7	18.4	19.1	19.6	17.7	18.5	18.2	19.0	19.4
	8H	17.9	18.7	18.4	19.1	19.6	17.7	18.5	18.2	18.9	19.4
	12H	17.9	18.6	18.4	19.0	19.5	17.7	18.4	18.2	18.9	19.4
8H	4H	17.8	18.6	18.3	19.0	19.5	17.6	18.3	18.0	18.8	19.2
	6H	18.0	18.7	18.5	19.1	19.6	17.9	18.5	18.4	19.0	19.5
	8H	18.1	18.6	18.6	19.1	19.6	18.0	18.5	18.5	19.0	19.5
	12H	18.1	18.5	18.6	19.0	19.6	18.0	18.5	18.5	19.0	19.5
12H	4H	17.8	18.5	18.3	19.0	19.4	17.6	18.2	18.0	18.7	19.2
	6H	18.0	18.6	18.6	19.1	19.6	17.9	18.4	18.4	18.9	19.4
	8H	18.1	18.6	18.6	19.1	19.6	18.0	18.5	18.5	19.0	19.5

Maximum UGR = 19.6

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-24-L60-830-CS-SAF12125-PC250-DIM-UNV_.IES

POLAR GRAPH



Maximum Candela = 2609.202 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.)

Photometric Toolbox (R) Copyright 2002-2019 by Lighting Analysts, Inc.
Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.