IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-24-L120-930-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-L120-930-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	9960
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	98
Total Luminaire Watts	101.8
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	6739	6703	6520
55	5571	5461	5155
65	4039	3992	3704
75	2405	2476	2454
85	525	725	746

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-L120-930-CS-SAF12125-PC250-DIM-UNV_.IES

CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	4338.963	4338.963	4338.963	4338.963	4338.963
5	4360.490	4333.222	4307.868	4297.822	4298.778
10	4295.430	4265.770	4249.026	4238.023	4239.937
15	4189.706	4162.438	4154.784	4131.343	4143.303
20	4036.623	4014.617	4015.574	3982.565	3996.438
25	3827.568	3814.652	3807.954	3774.945	3793.124
30	3576.894	3570.196	3547.712	3505.614	3526.185
35	3264.507	3271.205	3229.585	3162.611	3200.882
40	2892.323	2924.375	2857.401	2782.772	2828.698
45	2490.479	2526.836	2477.084	2386.669	2409.631
50	2082.893	2064.236	2070.455	1969.994	1967.124
55	1670.046	1629.862	1637.038	1544.231	1545.187
60	1261.026	1232.801	1225.147	1140.951	1155.781
65	892.190	874.490	881.666	817.562	818.040
70	583.631	566.409	586.980	561.147	548.231
75	325.303	321.954	334.870	346.830	332.000
80	137.775	132.991	150.692	172.219	154.040
85	23.919	26.790	33.009	48.795	33.965
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-L120-930-CS-SAF12125-PC250-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1581.54	N.A.	15.90
0-30	3330.2	N.A.	33.40
0-40	5341.25	N.A.	53.60
0-60	8672.97	N.A.	87.10
0-80	9900.39	N.A.	99.40
0-90	9960.03	N.A.	100.00
10-90	9549.89	N.A.	95.90
20-40	3759.72	N.A.	37.70
20-50	5651.89	N.A.	56.70
40-70	4193.68	N.A.	42.10
60-80	1227.42	N.A.	12.30
70-80	365.46	N.A.	3.70
80-90	59.64	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	9960.03	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	410.14
10-20	1171.4
20-30	1748.66
30-40	2011.05
40-50	1892.17
50-60	1439.55
60-70	861.96
70-80	365.46
80-90	59.64
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-L120-930-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-L120-930-CS-SAF12125-PC250-DIM-UNV_.IES

UGR TABLE - CORRECTED

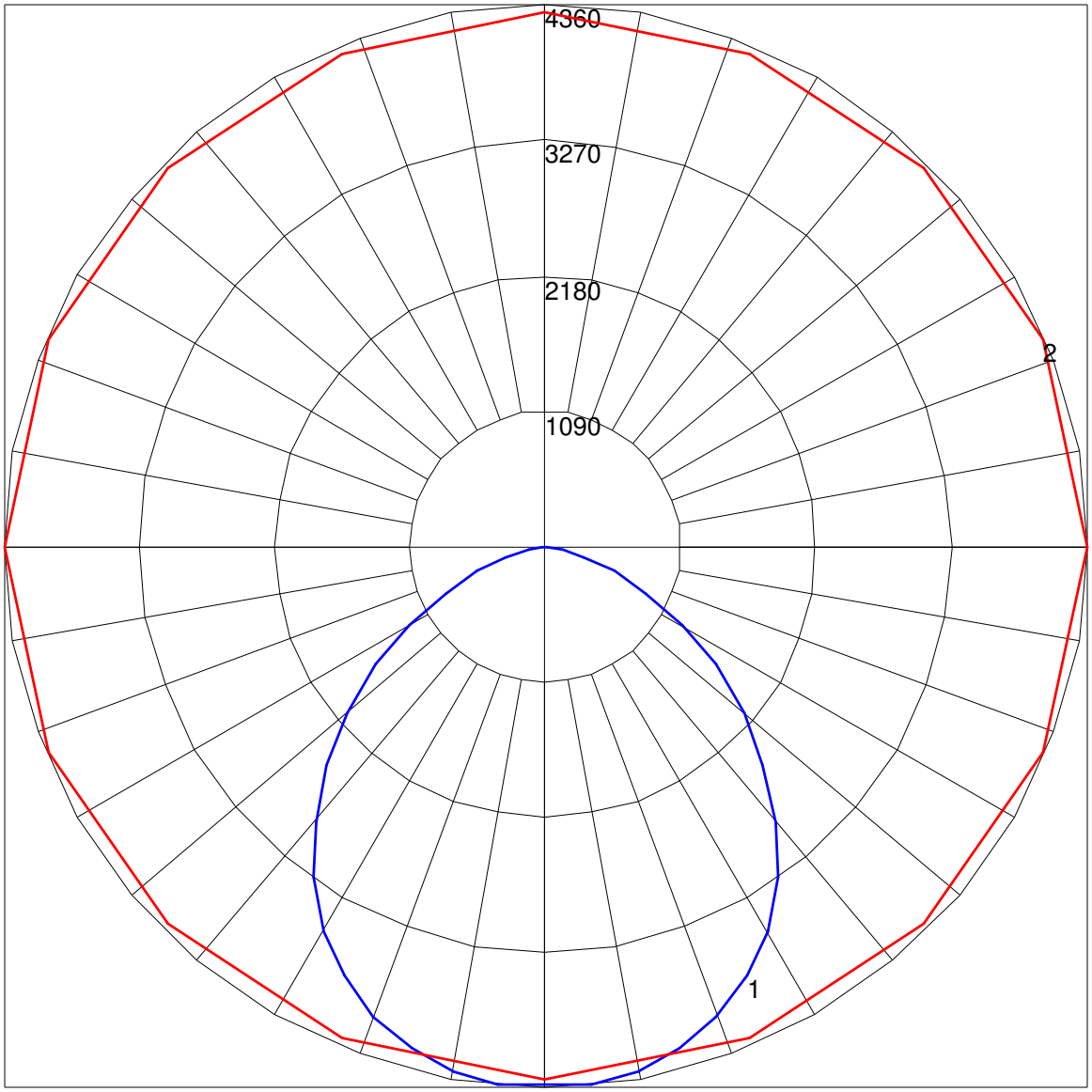
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	17.5	19.0	17.9	19.3	19.7	17.0	18.6	17.4	18.9	19.2
	3H	18.6	20.0	19.0	20.3	20.6	18.2	19.5	18.5	19.8	20.2
	4H	18.9	20.1	19.3	20.5	20.9	18.5	19.8	18.9	20.1	20.5
	6H	19.0	20.2	19.4	20.5	20.9	18.7	19.8	19.1	20.2	20.6
	8H	19.0	20.1	19.4	20.5	20.9	18.7	19.8	19.1	20.2	20.6
	12H	19.0	20.0	19.4	20.4	20.8	18.7	19.7	19.1	20.1	20.6
4H	2H	17.9	19.2	18.3	19.5	19.9	17.5	18.8	17.9	19.1	19.5
	3H	19.2	20.2	19.6	20.6	21.0	18.8	19.9	19.2	20.3	20.7
	4H	19.5	20.5	20.0	20.9	21.3	19.3	20.2	19.7	20.6	21.0
	6H	19.7	20.5	20.2	20.9	21.4	19.5	20.3	20.0	20.8	21.2
	8H	19.7	20.5	20.2	20.9	21.4	19.5	20.3	20.0	20.7	21.2
	12H	19.7	20.4	20.2	20.8	21.3	19.5	20.2	20.0	20.7	21.2
8H	4H	19.6	20.4	20.1	20.8	21.3	19.4	20.1	19.8	20.6	21.0
	6H	19.8	20.5	20.3	20.9	21.4	19.7	20.3	20.2	20.8	21.3
	8H	19.9	20.4	20.4	20.9	21.4	19.8	20.3	20.3	20.8	21.3
	12H	19.9	20.3	20.4	20.8	21.4	19.8	20.3	20.3	20.8	21.3
12H	4H	19.6	20.3	20.1	20.8	21.2	19.4	20.0	19.8	20.5	21.0
	6H	19.8	20.4	20.4	20.9	21.4	19.7	20.2	20.2	20.7	21.2
	8H	19.9	20.4	20.4	20.9	21.4	19.8	20.3	20.3	20.8	21.3

Maximum UGR = 21.4

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-L120-930-CS-SAF12125-PC250-DIM-UNV_.IES

POLAR GRAPH



Maximum Candela = 4360.49 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.