IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-24-L200-830-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-L200-830-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	19855
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	106
Total Luminaire Watts	186.5
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	13434	13362	12998
55	11105	10886	10275
65	8052	7957	7383
75	4794	4935	4893
85	1047	1445	1486

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-L200-830-CS-SAF12125-PC250-DIM-UNV_.IES

CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	8649.369	8649.369	8649.369	8649.369	8649.369
5	8692.282	8637.925	8587.383	8567.357	8569.264
10	8562.589	8503.464	8470.087	8448.154	8451.969
15	8351.838	8297.481	8282.223	8235.496	8259.337
20	8046.678	8002.812	8004.719	7938.919	7966.574
25	7629.945	7604.197	7590.846	7525.046	7561.284
30	7130.246	7116.895	7072.075	6988.156	7029.162
35	6507.529	6520.880	6437.915	6304.408	6380.697
40	5765.610	5829.503	5695.996	5547.230	5638.778
45	4964.566	5037.041	4937.865	4757.630	4803.404
50	4152.078	4114.887	4127.284	3927.023	3921.301
55	3329.101	3248.997	3263.301	3078.298	3080.205
60	2513.753	2457.489	2442.231	2274.393	2303.955
65	1778.509	1743.224	1757.529	1629.743	1630.697
70	1163.421	1129.091	1170.097	1118.601	1092.853
75	648.464	641.789	667.537	691.377	661.815
80	274.644	265.107	300.392	343.305	307.067
85	47.681	53.403	65.800	97.270	67.707
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-L200-830-CS-SAF12125-PC250-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	3152.66	N.A.	15.90
0-30	6638.48	N.A.	33.40
0-40	10647.35	N.A.	53.60
0-60	17288.86	N.A.	87.10
0-80	19735.62	N.A.	99.40
0-90	19854.51	N.A.	100.00
10-90	19036.93	N.A.	95.90
20-40	7494.69	N.A.	37.70
20-50	11266.58	N.A.	56.70
40-70	8359.76	N.A.	42.10
60-80	2446.77	N.A.	12.30
70-80	728.51	N.A.	3.70
80-90	118.89	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	19854.51	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	817.58
10-20	2335.09
20-30	3485.81
30-40	4008.87
40-50	3771.89
50-60	2869.62
60-70	1718.25
70-80	728.51
80-90	118.89
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-L200-830-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-L200-830-CS-SAF12125-PC250-DIM-UNV_.IES

UGR TABLE - CORRECTED

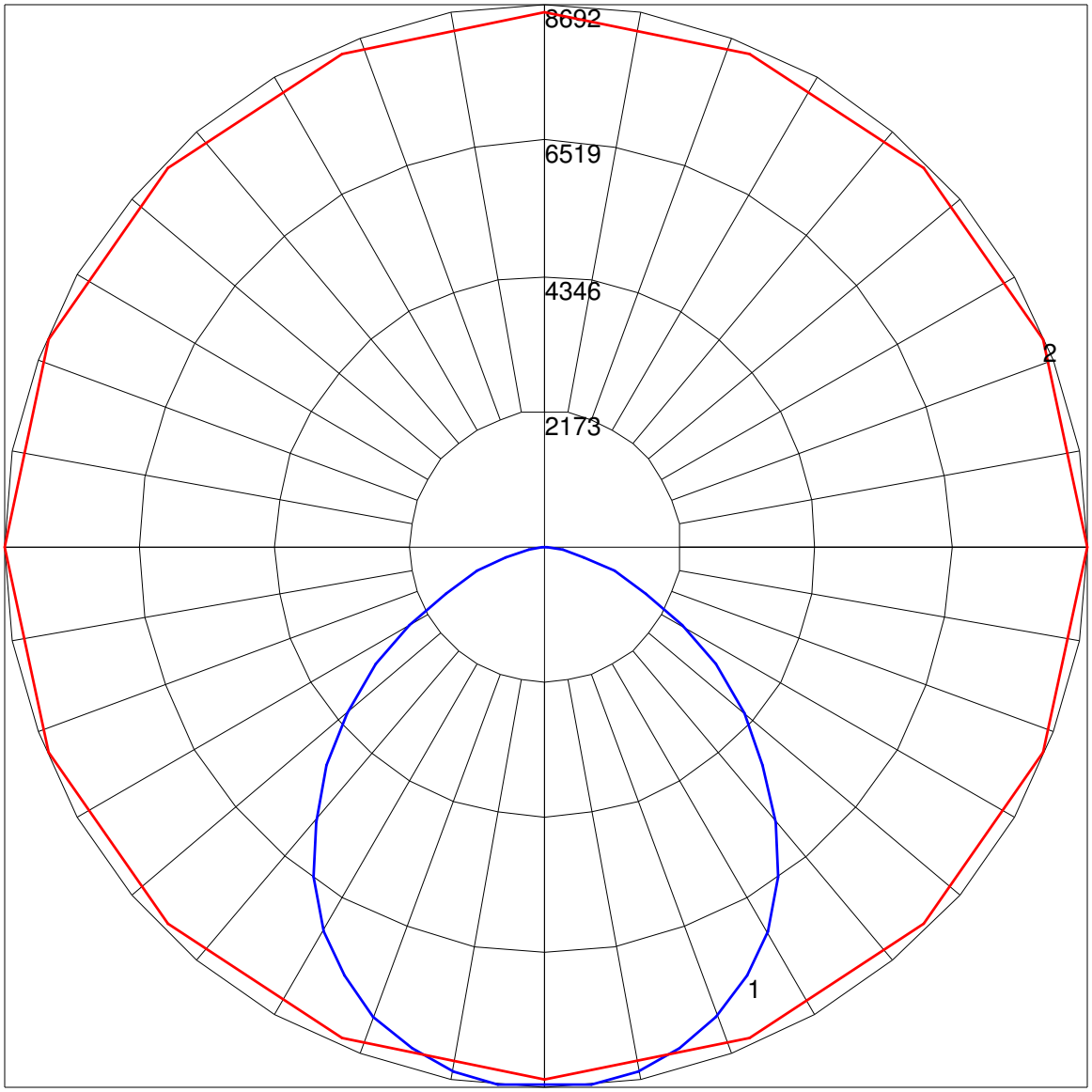
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	19.9	21.4	20.3	21.7	22.1	19.4	21.0	19.8	21.3	21.6
	3H	21.0	22.4	21.4	22.7	23.0	20.6	21.9	20.9	22.2	22.6
	4H	21.3	22.5	21.7	22.9	23.3	20.9	22.2	21.3	22.5	22.9
	6H	21.4	22.6	21.8	22.9	23.3	21.1	22.2	21.5	22.6	23.0
	8H	21.4	22.5	21.8	22.9	23.3	21.1	22.2	21.5	22.6	23.0
	12H	21.4	22.4	21.8	22.8	23.2	21.1	22.1	21.5	22.5	23.0
4H	2H	20.3	21.6	20.7	21.9	22.3	19.9	21.2	20.3	21.5	21.9
	3H	21.6	22.6	22.0	23.0	23.4	21.2	22.3	21.6	22.7	23.1
	4H	21.9	22.9	22.4	23.3	23.7	21.7	22.6	22.1	23.0	23.4
	6H	22.1	22.9	22.6	23.3	23.8	21.9	22.7	22.4	23.2	23.6
	8H	22.1	22.9	22.6	23.3	23.8	21.9	22.7	22.4	23.1	23.6
	12H	22.1	22.8	22.6	23.2	23.7	21.9	22.6	22.4	23.1	23.6
8H	4H	22.0	22.8	22.5	23.2	23.7	21.8	22.5	22.2	23.0	23.4
	6H	22.2	22.9	22.7	23.3	23.8	22.1	22.7	22.6	23.2	23.7
	8H	22.3	22.8	22.8	23.3	23.8	22.2	22.7	22.7	23.2	23.7
	12H	22.3	22.7	22.8	23.2	23.8	22.2	22.7	22.7	23.2	23.7
12H	4H	22.0	22.7	22.5	23.2	23.6	21.8	22.4	22.2	22.9	23.4
	6H	22.2	22.8	22.8	23.3	23.8	22.1	22.6	22.6	23.1	23.6
	8H	22.3	22.8	22.8	23.3	23.8	22.2	22.7	22.7	23.2	23.7

Maximum UGR = 23.8

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-L200-830-CS-SAF12125-PC250-DIM-UNV_.IES

POLAR GRAPH



Maximum Candela = 8692.282 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.