IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-22-L85-850-CS-SAF12125-PC250-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN from BALLABS TEST NO. 19833.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUEDATE] 2026-05-06
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 3-42 LED 22" ARRAYS 2x2' RECESSED WHITE REFLECTOR LUMINAIRE
[MORE] PAT12 ACRYLIC LENS w/CLEAR ACRYLIC LENS IN DOOR
[LUMCAT] MCTVG-22-L85-850-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	9045
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	116
Total Luminaire Watts	77.8
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.28
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	1.57 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	13588	13553	13746
55	10811	10603	10653
65	8004	7575	7565
75	5381	4617	4744
85	1749	1040	1702

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-22-L85-850-CS-SAF12125-PC250-DIM-UNV_.IES

CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	4021.466	4021.466	4021.466	4021.466	4021.466
5	4011.038	4010.090	4007.246	3998.714	3998.714
10	3941.833	3953.209	3950.365	3944.677	3939.937
15	3834.708	3850.824	3848.928	3857.460	3850.824
20	3686.818	3705.778	3703.882	3740.855	3717.154
25	3481.099	3507.644	3528.500	3561.680	3525.656
30	3225.136	3273.485	3296.237	3309.509	3281.069
35	2922.720	2984.341	2995.717	2976.757	2966.329
40	2589.968	2617.461	2619.357	2607.032	2625.045
45	2210.764	2209.816	2205.075	2201.283	2236.360
50	1820.183	1792.690	1799.326	1784.158	1813.547
55	1426.758	1406.850	1399.265	1406.850	1405.902
60	1067.461	1046.605	1045.657	1059.877	1057.033
65	778.318	765.046	736.605	763.150	735.657
70	523.303	521.406	474.006	516.666	474.954
75	320.428	308.104	274.923	303.364	282.508
80	145.046	142.202	117.553	129.878	137.462
85	35.076	37.920	20.856	26.544	34.128
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-22-L85-850-CS-SAF12125-PC250-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1466.28	N.A.	16.20
0-30	3087.06	N.A.	34.10
0-40	4941.00	N.A.	54.60
0-60	7909.73	N.A.	87.50
0-80	8992.13	N.A.	99.40
0-90	9044.55	N.A.	100.00
10-90	8664.1	N.A.	95.80
20-40	3474.72	N.A.	38.40
20-50	5177.61	N.A.	57.20
40-70	3727.1	N.A.	41.20
60-80	1082.4	N.A.	12.00
70-80	324.02	N.A.	3.60
80-90	52.42	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	9044.55	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	380.44
10-20	1085.84
20-30	1620.78
30-40	1853.94
40-50	1702.89
50-60	1265.84
60-70	758.38
70-80	324.02
80-90	52.42
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-22-L85-850-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	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	53	78	67	59	53	65	58	53	63	57	52	61	56	51	50
6	74	61	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44
7	69	56	48	42	67	55	47	42	54	47	42	52	46	41	51	45	41	39
8	64	51	43	38	63	51	43	38	49	42	38	48	42	37	47	41	37	35
9	60	47	40	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	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-22-L85-850-CS-SAF12125-PC250-DIM-UNV_.IES

UGR TABLE - CORRECTED

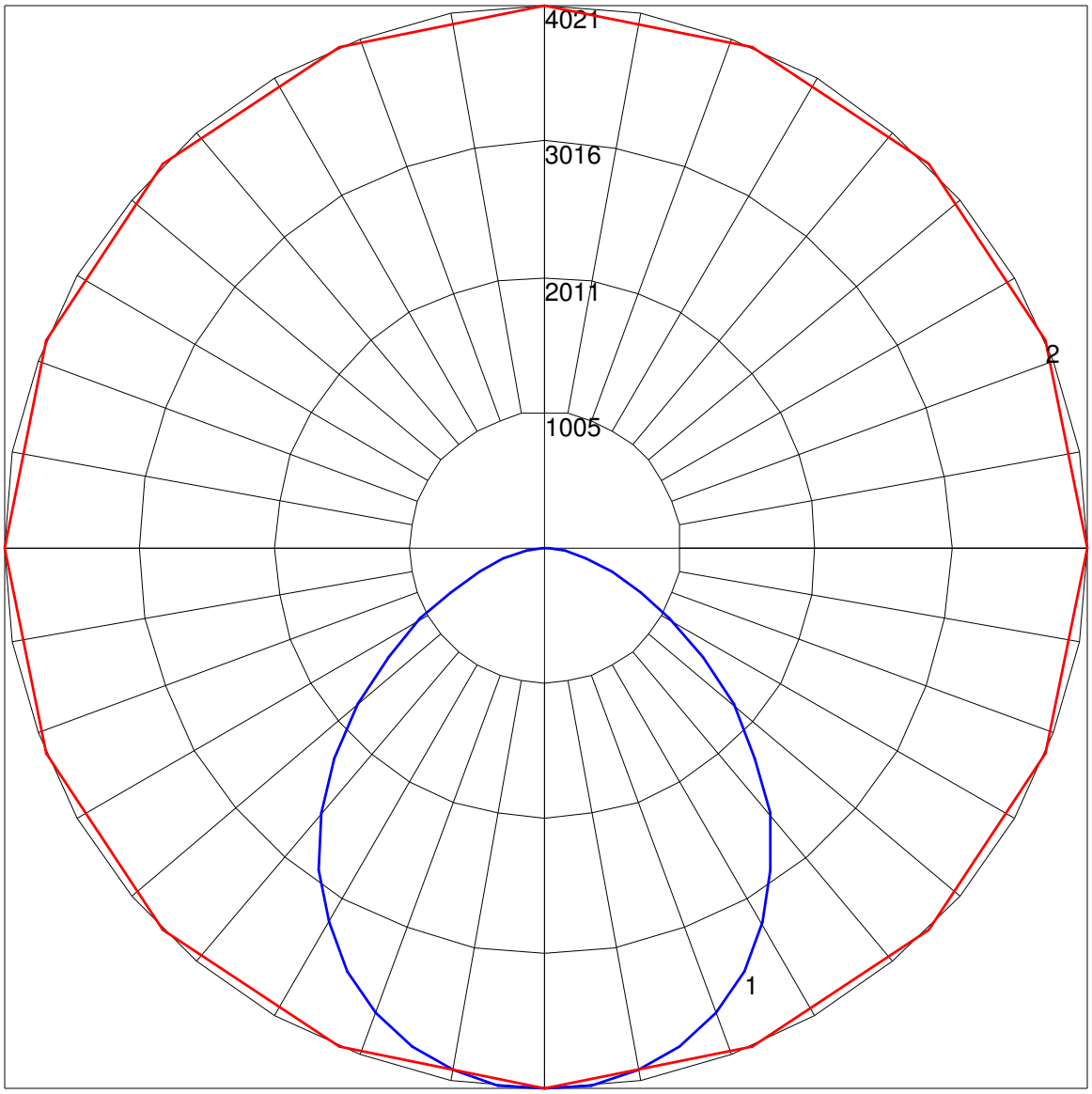
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	19.7	21.2	20.0	21.5	21.8	19.7	21.2	20.1	21.5	21.8
	3H	20.8	22.2	21.2	22.5	22.9	20.8	22.1	21.1	22.4	22.8
	4H	21.2	22.5	21.6	22.8	23.2	21.1	22.3	21.5	22.7	23.1
	6H	21.4	22.5	21.8	22.9	23.3	21.2	22.4	21.6	22.7	23.1
	8H	21.4	22.5	21.8	22.9	23.3	21.2	22.3	21.6	22.7	23.1
	12H	21.4	22.4	21.8	22.8	23.3	21.2	22.3	21.7	22.7	23.1
4H	2H	20.0	21.3	20.4	21.7	22.0	20.1	21.3	20.5	21.7	22.0
	3H	21.4	22.4	21.8	22.8	23.2	21.3	22.4	21.8	22.8	23.2
	4H	21.8	22.8	22.3	23.2	23.6	21.7	22.7	22.1	23.1	23.5
	6H	22.1	22.9	22.5	23.3	23.8	21.9	22.7	22.4	23.2	23.7
	8H	22.1	22.9	22.6	23.3	23.8	22.0	22.7	22.4	23.2	23.6
	12H	22.1	22.8	22.6	23.3	23.7	22.0	22.6	22.5	23.1	23.6
8H	4H	21.9	22.7	22.4	23.1	23.6	21.8	22.6	22.3	23.0	23.5
	6H	22.2	22.8	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	22.1	22.7	22.6	23.2	23.7
	12H	22.3	22.8	22.8	23.3	23.9	22.1	22.6	22.6	23.1	23.7
12H	4H	21.9	22.6	22.4	23.1	23.5	21.8	22.5	22.3	23.0	23.4
	6H	22.2	22.8	22.7	23.2	23.8	22.1	22.6	22.6	23.1	23.6
	8H	22.3	22.8	22.8	23.3	23.8	22.1	22.6	22.6	23.1	23.7

Maximum UGR = 23.9

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-22-L85-850-CS-SAF12125-PC250-DIM-UNV_.IES

POLAR GRAPH



Maximum Candela = 4021.466 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (0) (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.