IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-22-L85-827-CS-SAF125-PC250-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM BALLABS TEST NO. 19834.0
[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 REFL LUMINAIRE
[MORE] FROSTED ACRYLIC LENS w/CLEAR ACRYLIC LENS IN DOOR
[LUMCAT] MCTVG-22-L85-827-CS-SAF125-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	8310
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	107
Total Luminaire Watts	77.8
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.20
Spacing Criterion (Diagonal)	1.30
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	1.92 ft
Luminous Width (90-270)	1.92 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	8303	8329	8336
55	7269	7075	7211
65	5634	5493	5671
75	3605	3735	3455
85	713	1351	1099

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-L85-827-CS-SAF125-PC250-DIM-UNV_.IES

CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	3537.334	3537.334	3537.334	3537.334	3537.334
5	3551.530	3528.906	3510.718	3502.289	3503.176
10	3490.312	3471.236	3455.710	3448.612	3439.297
15	3387.394	3369.650	3363.883	3351.019	3345.252
20	3241.447	3233.462	3232.575	3197.974	3203.297
25	3056.019	3052.026	3044.929	3024.966	3032.951
30	2842.200	2833.327	2814.252	2814.252	2821.794
35	2584.019	2576.478	2568.493	2560.065	2562.726
40	2303.215	2303.215	2306.321	2293.012	2293.012
45	2012.652	2017.975	2018.862	2000.674	2020.637
50	1720.757	1706.118	1710.998	1679.058	1722.088
55	1429.307	1400.028	1391.156	1393.374	1417.773
60	1115.675	1104.142	1081.961	1113.457	1121.886
65	816.240	827.773	795.834	819.788	821.563
70	556.729	554.511	548.300	542.977	534.105
75	319.842	307.421	331.376	314.075	306.533
80	127.759	126.428	152.158	155.707	143.286
85	21.293	27.504	40.368	43.474	32.827
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-L85-827-CS-SAF125-PC250-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1281.3	N.A.	15.40
0-30	2680.43	N.A.	32.30
0-40	4287.08	N.A.	51.60
0-60	7091.89	N.A.	85.30
0-80	8252.63	N.A.	99.30
0-90	8310.21	N.A.	100.00
10-90	7976.27	N.A.	96.00
20-40	3005.77	N.A.	36.20
20-50	4555.75	N.A.	54.80
40-70	3616.83	N.A.	43.50
60-80	1160.74	N.A.	14.00
70-80	348.73	N.A.	4.20
80-90	57.58	N.A.	0.70
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	8310.21	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	333.94
10-20	947.36
20-30	1399.12
30-40	1606.65
40-50	1549.98
50-60	1254.84
60-70	812.01
70-80	348.73
80-90	57.58
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-L85-827-CS-SAF125-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	107	104	100	97	99	97	94	95	93	91	92	90	88	86
2	101	93	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76	74
3	93	83	75	69	90	81	74	69	78	72	67	76	71	66	73	69	65	63
4	85	74	66	59	83	73	65	59	70	64	58	68	62	57	66	61	57	55
5	79	66	58	52	77	65	57	51	63	56	51	61	55	50	60	54	50	48
6	73	60	52	45	71	59	51	45	57	50	45	56	49	45	54	49	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	45	40	50	44	39	38
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34
9	59	46	38	33	58	46	38	33	44	37	33	43	37	32	42	37	32	30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	29	28

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-L85-827-CS-SAF125-PC250-DIM-UNV_.IES

UGR TABLE - CORRECTED

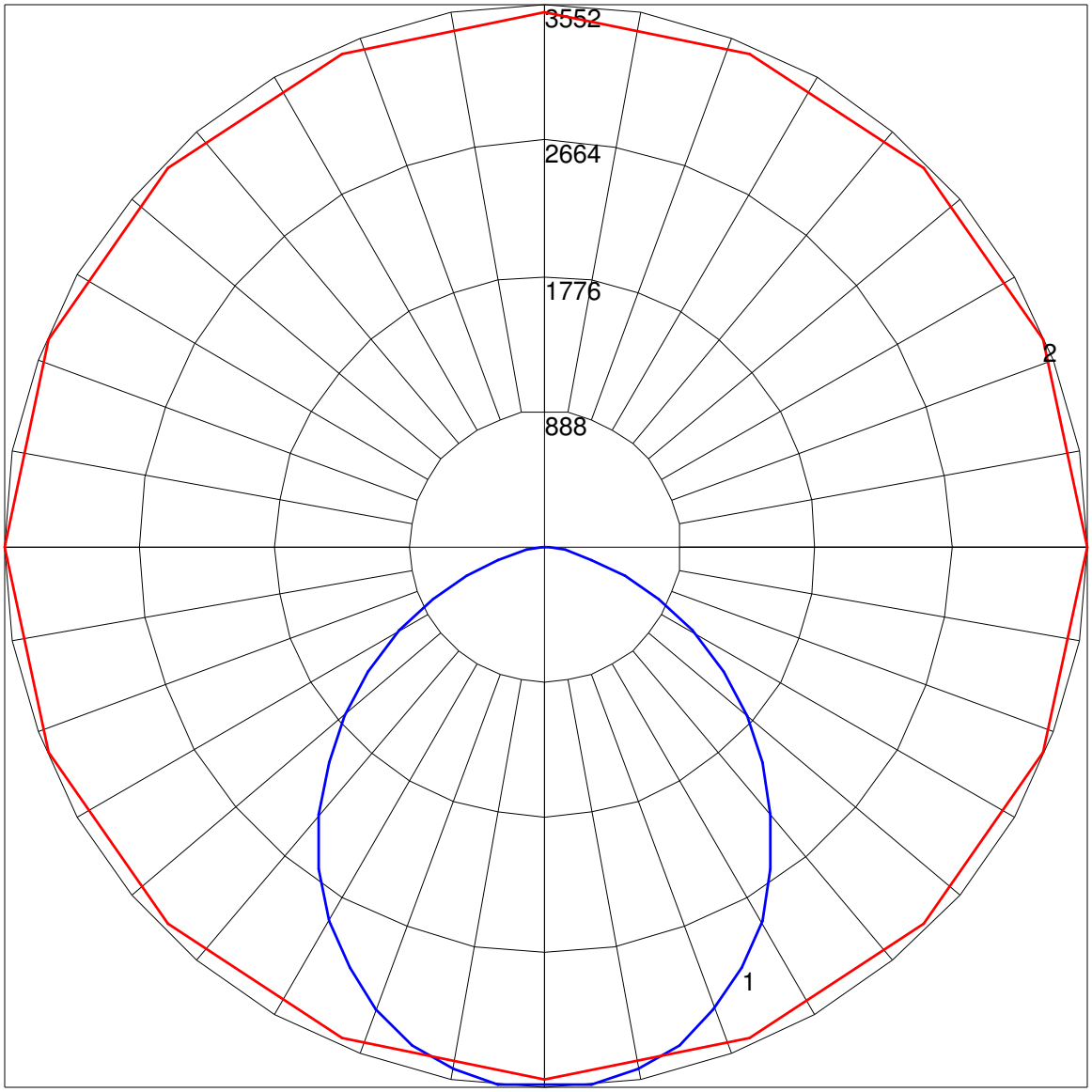
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	18.7	20.2	19.0	20.5	20.8	18.7	20.2	19.0	20.5	20.9
	3H	19.9	21.3	20.3	21.7	22.0	19.9	21.3	20.3	21.6	22.0
	4H	20.3	21.6	20.7	21.9	22.3	20.2	21.5	20.6	21.9	22.2
	6H	20.4	21.6	20.8	22.0	22.4	20.4	21.6	20.8	21.9	22.3
	8H	20.4	21.6	20.8	21.9	22.3	20.4	21.5	20.8	21.9	22.3
	12H	20.4	21.5	20.8	21.9	22.3	20.4	21.5	20.8	21.9	22.3
4H	2H	19.1	20.4	19.5	20.8	21.1	19.1	20.4	19.5	20.8	21.1
	3H	20.6	21.6	21.0	22.0	22.4	20.5	21.6	20.9	22.0	22.4
	4H	21.0	21.9	21.4	22.4	22.8	20.9	21.9	21.4	22.3	22.8
	6H	21.2	22.0	21.6	22.4	22.9	21.2	22.0	21.6	22.5	22.9
	8H	21.2	22.0	21.6	22.4	22.9	21.2	22.0	21.7	22.4	22.9
	12H	21.2	21.9	21.6	22.3	22.8	21.2	21.9	21.7	22.4	22.9
8H	4H	21.1	21.9	21.6	22.3	22.8	21.1	21.9	21.5	22.3	22.8
	6H	21.4	22.0	21.8	22.5	23.0	21.4	22.0	21.9	22.5	23.0
	8H	21.4	22.0	21.9	22.5	23.0	21.4	22.0	22.0	22.5	23.0
	12H	21.4	21.9	21.9	22.4	22.9	21.5	22.0	22.0	22.5	23.0
12H	4H	21.1	21.8	21.6	22.3	22.8	21.1	21.8	21.5	22.2	22.7
	6H	21.4	21.9	21.9	22.4	22.9	21.4	22.0	21.9	22.4	23.0
	8H	21.4	21.9	21.9	22.4	23.0	21.5	22.0	22.0	22.5	23.0

Maximum UGR = 23.0

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-L85-827-CS-SAF125-PC250-DIM-UNV_.IES

POLAR GRAPH



Maximum Candela = 3551.53 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.