IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-22-L85-835-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-L85-835-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	8567
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	110
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	8560	8586	8594
55	7494	7294	7434
65	5808	5663	5846
75	3716	3850	3562
85	735	1393	1133

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	3646.736	3646.736	3646.736	3646.736	3646.736
5	3661.370	3638.047	3619.296	3610.607	3611.522
10	3598.259	3578.594	3562.587	3555.270	3545.666
15	3492.159	3473.866	3467.920	3454.658	3448.713
20	3341.698	3333.466	3332.551	3296.880	3302.368
25	3150.535	3146.419	3139.101	3118.522	3126.754
30	2930.102	2920.956	2901.291	2901.291	2909.065
35	2663.937	2656.163	2647.931	2639.242	2641.986
40	2374.448	2374.448	2377.650	2363.930	2363.930
45	2074.898	2080.386	2081.301	2062.551	2083.130
50	1773.976	1758.885	1763.915	1730.988	1775.348
55	1473.512	1443.328	1434.182	1436.468	1461.621
60	1150.181	1138.290	1115.424	1147.894	1156.583
65	841.484	853.375	820.447	845.143	846.972
70	573.947	571.660	565.258	559.770	550.623
75	329.734	316.929	341.624	323.788	316.014
80	131.711	130.339	156.864	160.522	147.717
85	21.952	28.354	41.617	44.818	33.842
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1320.93	N.A.	15.40
0-30	2763.33	N.A.	32.30
0-40	4419.67	N.A.	51.60
0-60	7311.23	N.A.	85.30
0-80	8507.86	N.A.	99.30
0-90	8567.23	N.A.	100.00
10-90	8222.96	N.A.	96.00
20-40	3098.73	N.A.	36.20
20-50	4696.65	N.A.	54.80
40-70	3728.69	N.A.	43.50
60-80	1196.63	N.A.	14.00
70-80	359.51	N.A.	4.20
80-90	59.37	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	8567.23	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	344.27
10-20	976.66
20-30	1442.39
30-40	1656.34
40-50	1597.92
50-60	1293.65
60-70	837.12
70-80	359.51
80-90	59.37
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

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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

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UGR TABLE - CORRECTED

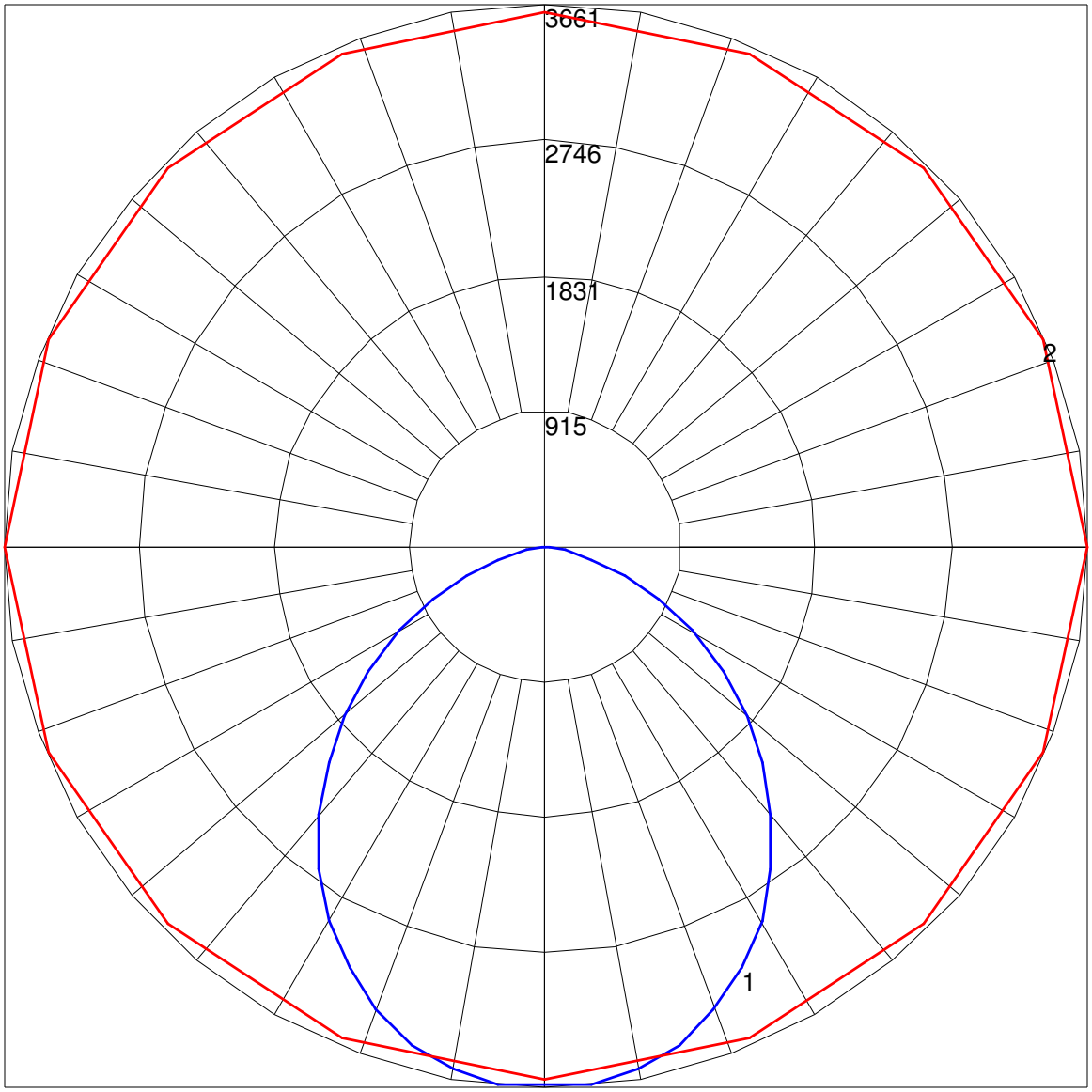
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	18.8	20.3	19.1	20.6	20.9	18.8	20.3	19.1	20.6	21.0
	3H	20.0	21.4	20.4	21.8	22.1	20.0	21.4	20.4	21.7	22.1
	4H	20.4	21.7	20.8	22.0	22.4	20.3	21.6	20.7	22.0	22.3
	6H	20.5	21.7	20.9	22.1	22.5	20.5	21.7	20.9	22.1	22.4
	8H	20.5	21.7	20.9	22.0	22.4	20.5	21.6	20.9	22.0	22.4
	12H	20.5	21.6	20.9	22.0	22.4	20.5	21.6	20.9	22.0	22.4
4H	2H	19.2	20.5	19.6	20.9	21.2	19.2	20.5	19.6	20.9	21.2
	3H	20.7	21.7	21.1	22.1	22.5	20.6	21.7	21.0	22.1	22.5
	4H	21.1	22.0	21.5	22.5	22.9	21.0	22.0	21.5	22.4	22.9
	6H	21.3	22.1	21.7	22.5	23.0	21.3	22.1	21.7	22.6	23.0
	8H	21.3	22.1	21.7	22.5	23.0	21.3	22.1	21.8	22.5	23.0
	12H	21.3	22.0	21.7	22.4	22.9	21.3	22.0	21.8	22.5	23.0
8H	4H	21.2	22.0	21.7	22.4	22.9	21.2	22.0	21.6	22.4	22.9
	6H	21.5	22.1	21.9	22.6	23.1	21.5	22.1	22.0	22.6	23.1
	8H	21.5	22.1	22.0	22.6	23.1	21.5	22.1	22.1	22.6	23.1
	12H	21.5	22.0	22.0	22.5	23.0	21.6	22.1	22.1	22.6	23.1
12H	4H	21.2	21.9	21.7	22.4	22.9	21.2	21.9	21.6	22.3	22.8
	6H	21.5	22.0	22.0	22.5	23.0	21.5	22.1	22.0	22.5	23.1
	8H	21.5	22.0	22.0	22.5	23.1	21.6	22.1	22.1	22.6	23.1

Maximum UGR = 23.1

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POLAR GRAPH



Maximum Candela = 3661.37 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.)

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