IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-22-L85-830-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-L85-830-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	8447
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	109
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	12691	12658	12838
55	10097	9902	9949
65	7476	7075	7066
75	5025	4312	4431
85	1634	971	1589

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	3755.897	3755.897	3755.897	3755.897	3755.897
5	3746.158	3745.272	3742.616	3734.648	3734.648
10	3681.523	3692.148	3689.492	3684.179	3679.752
15	3581.472	3596.524	3594.753	3602.722	3596.524
20	3443.349	3461.057	3459.286	3493.817	3471.682
25	3251.215	3276.007	3295.486	3326.475	3292.829
30	3012.155	3057.311	3078.561	3090.957	3064.394
35	2729.710	2787.262	2797.887	2780.179	2770.439
40	2418.932	2444.609	2446.380	2434.870	2451.693
45	2064.770	2063.884	2059.457	2055.916	2088.676
50	1699.982	1674.305	1680.503	1666.336	1693.784
55	1332.538	1313.944	1306.861	1313.944	1313.059
60	996.969	977.490	976.604	989.885	987.229
65	726.919	714.524	687.961	712.753	687.076
70	488.745	486.974	442.704	482.547	443.589
75	299.268	287.757	256.768	283.330	263.851
80	135.467	132.811	109.790	121.301	128.384
85	32.760	35.416	19.479	24.791	31.875
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1369.45	N.A.	16.20
0-30	2883.2	N.A.	34.10
0-40	4614.71	N.A.	54.60
0-60	7387.39	N.A.	87.50
0-80	8398.31	N.A.	99.40
0-90	8447.26	N.A.	100.00
10-90	8091.94	N.A.	95.80
20-40	3245.26	N.A.	38.40
20-50	4835.7	N.A.	57.20
40-70	3480.97	N.A.	41.20
60-80	1010.92	N.A.	12.00
70-80	302.62	N.A.	3.60
80-90	48.96	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	8447.26	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	355.32
10-20	1014.13
20-30	1513.75
30-40	1731.51
40-50	1590.43
50-60	1182.24
60-70	708.30
70-80	302.62
80-90	48.96
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	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

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UGR TABLE - CORRECTED

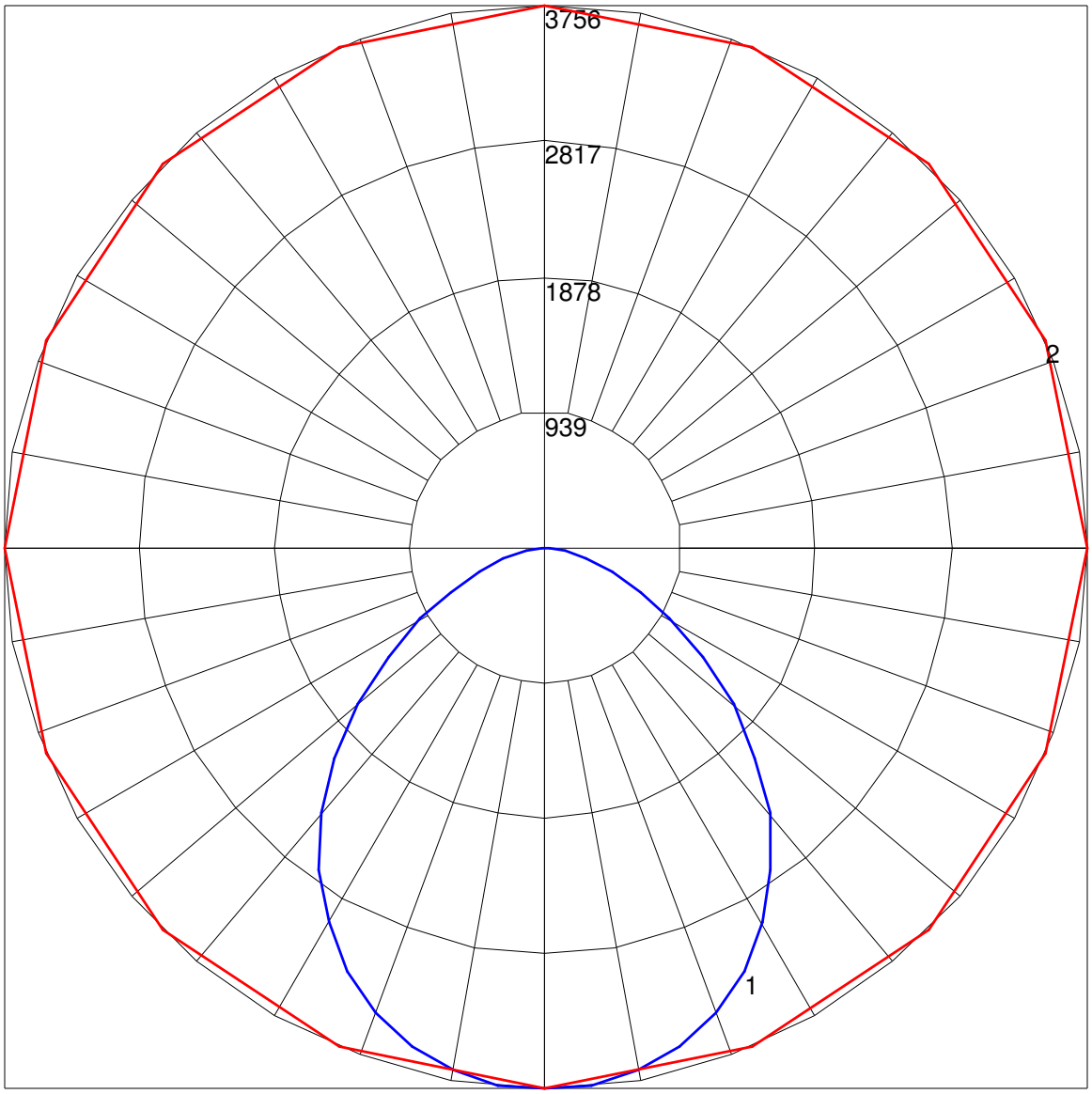
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	19.4	20.9	19.7	21.2	21.5	19.4	20.9	19.8	21.2	21.5
	3H	20.5	21.9	20.9	22.2	22.6	20.5	21.8	20.8	22.1	22.5
	4H	20.9	22.2	21.3	22.5	22.9	20.8	22.0	21.2	22.4	22.8
	6H	21.1	22.2	21.5	22.6	23.0	20.9	22.1	21.3	22.4	22.8
	8H	21.1	22.2	21.5	22.6	23.0	20.9	22.0	21.3	22.4	22.8
	12H	21.1	22.1	21.5	22.5	23.0	20.9	22.0	21.4	22.4	22.8
4H	2H	19.7	21.0	20.1	21.4	21.7	19.8	21.0	20.2	21.4	21.7
	3H	21.1	22.1	21.5	22.5	22.9	21.0	22.1	21.5	22.5	22.9
	4H	21.5	22.5	22.0	22.9	23.3	21.4	22.4	21.8	22.8	23.2
	6H	21.8	22.6	22.2	23.0	23.5	21.6	22.4	22.1	22.9	23.4
	8H	21.8	22.6	22.3	23.0	23.5	21.7	22.4	22.1	22.9	23.3
	12H	21.8	22.5	22.3	23.0	23.4	21.7	22.3	22.2	22.8	23.3
8H	4H	21.6	22.4	22.1	22.8	23.3	21.5	22.3	22.0	22.7	23.2
	6H	21.9	22.5	22.4	23.0	23.5	21.8	22.4	22.3	22.9	23.4
	8H	22.0	22.5	22.5	23.0	23.5	21.8	22.4	22.3	22.9	23.4
	12H	22.0	22.5	22.5	23.0	23.6	21.8	22.3	22.3	22.8	23.4
12H	4H	21.6	22.3	22.1	22.8	23.2	21.5	22.2	22.0	22.7	23.1
	6H	21.9	22.5	22.4	22.9	23.5	21.8	22.3	22.3	22.8	23.3
	8H	22.0	22.5	22.5	23.0	23.5	21.8	22.3	22.3	22.8	23.4

Maximum UGR = 23.6

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POLAR GRAPH



Maximum Candela = 3755.897 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.)

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