IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-22-L30-827-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-L30-827-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	2924
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	107
Total Luminaire Watts	27.3
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	2921	2930	2933
55	2557	2489	2537
65	1982	1933	1995
75	1268	1314	1215
85	251	475	387

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	1244.472	1244.472	1244.472	1244.472	1244.472
5	1249.466	1241.507	1235.108	1232.143	1232.455
10	1227.929	1221.218	1215.756	1213.259	1209.981
15	1191.721	1185.479	1183.450	1178.924	1176.895
20	1140.376	1137.566	1137.254	1125.081	1126.954
25	1075.140	1073.735	1071.238	1064.215	1067.025
30	999.916	996.795	990.084	990.084	992.737
35	909.086	906.432	903.623	900.658	901.594
40	810.296	810.296	811.388	806.706	806.706
45	708.072	709.945	710.257	703.859	710.882
50	605.381	600.231	601.947	590.711	605.849
55	502.845	492.545	489.424	490.204	498.788
60	392.506	388.449	380.645	391.726	394.691
65	287.162	291.220	279.983	288.410	289.035
70	195.863	195.083	192.898	191.025	187.904
75	112.524	108.154	116.581	110.495	107.842
80	44.947	44.479	53.531	54.779	50.409
85	7.491	9.676	14.202	15.294	11.549
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	450.78	N.A.	15.40
0-30	943.00	N.A.	32.30
0-40	1508.24	N.A.	51.60
0-60	2495.00	N.A.	85.30
0-80	2903.36	N.A.	99.30
0-90	2923.62	N.A.	100.00
10-90	2806.14	N.A.	96.00
20-40	1057.46	N.A.	36.20
20-50	1602.76	N.A.	54.80
40-70	1272.44	N.A.	43.50
60-80	408.36	N.A.	14.00
70-80	122.69	N.A.	4.20
80-90	20.26	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	2923.62	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	117.48
10-20	333.29
20-30	492.23
30-40	565.24
40-50	545.30
50-60	441.46
60-70	285.67
70-80	122.69
80-90	20.26
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	96	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	63	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	45	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

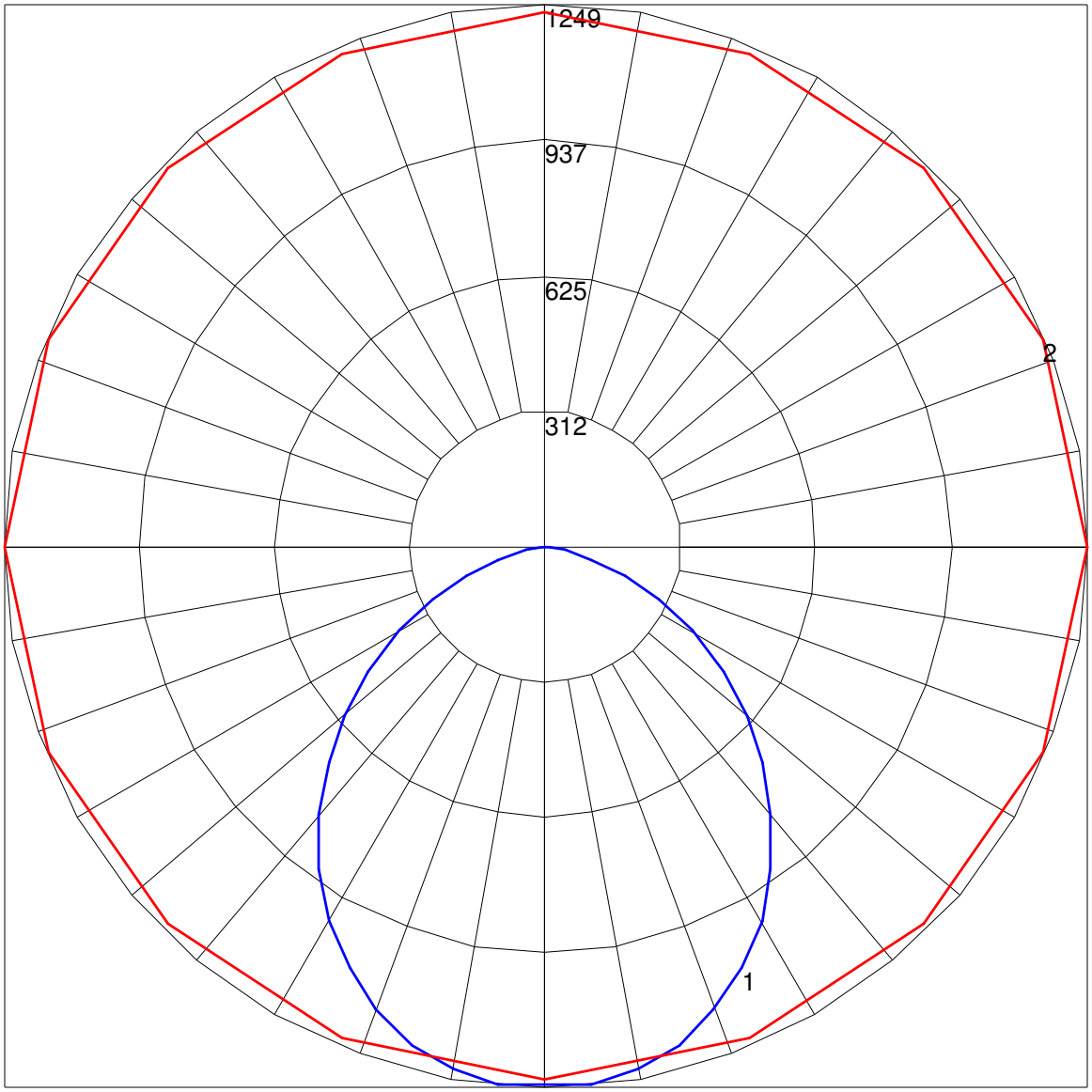
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	15.0	16.5	15.3	16.8	17.1	15.0	16.5	15.3	16.8	17.2
	3H	16.2	17.6	16.6	18.0	18.3	16.2	17.6	16.6	17.9	18.3
	4H	16.6	17.9	17.0	18.2	18.6	16.5	17.8	16.9	18.2	18.5
	6H	16.7	17.9	17.1	18.3	18.7	16.7	17.9	17.1	18.2	18.6
	8H	16.7	17.9	17.1	18.2	18.6	16.7	17.8	17.1	18.2	18.6
	12H	16.7	17.8	17.1	18.2	18.6	16.7	17.8	17.1	18.2	18.6
4H	2H	15.4	16.7	15.8	17.1	17.4	15.4	16.7	15.8	17.1	17.4
	3H	16.9	17.9	17.3	18.3	18.7	16.8	17.9	17.2	18.3	18.7
	4H	17.3	18.2	17.7	18.7	19.1	17.2	18.2	17.7	18.6	19.1
	6H	17.5	18.3	17.9	18.7	19.2	17.5	18.3	17.9	18.8	19.2
	8H	17.5	18.3	17.9	18.7	19.2	17.5	18.3	18.0	18.7	19.2
	12H	17.5	18.2	17.9	18.6	19.1	17.5	18.2	18.0	18.7	19.2
8H	4H	17.4	18.2	17.9	18.6	19.1	17.4	18.2	17.8	18.6	19.1
	6H	17.7	18.3	18.1	18.8	19.3	17.7	18.3	18.2	18.8	19.3
	8H	17.7	18.3	18.2	18.8	19.3	17.7	18.3	18.3	18.8	19.3
	12H	17.7	18.2	18.2	18.7	19.2	17.8	18.3	18.3	18.8	19.3
12H	4H	17.4	18.1	17.9	18.6	19.1	17.4	18.1	17.8	18.5	19.0
	6H	17.7	18.2	18.2	18.7	19.2	17.7	18.3	18.2	18.7	19.3
	8H	17.7	18.2	18.2	18.7	19.3	17.8	18.3	18.3	18.8	19.3

Maximum UGR = 19.3

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POLAR GRAPH



Maximum Candela = 1249.466 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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