IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-22-L30-830-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-L30-830-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	2984
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	109
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	2981	2991	2993
55	2610	2540	2589
65	2023	1972	2036
75	1294	1341	1241
85	256	485	395

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	1270.131	1270.131	1270.131	1270.131	1270.131
5	1275.228	1267.104	1260.574	1257.547	1257.866
10	1253.246	1246.397	1240.822	1238.274	1234.929
15	1216.293	1209.921	1207.851	1203.231	1201.161
20	1163.888	1161.021	1160.702	1148.278	1150.190
25	1097.307	1095.874	1093.325	1086.158	1089.025
30	1020.533	1017.347	1010.498	1010.498	1013.205
35	927.829	925.121	922.254	919.228	920.184
40	827.003	827.003	828.117	823.339	823.339
45	722.671	724.583	724.901	718.371	725.539
50	617.863	612.606	614.358	602.890	618.340
55	513.213	502.700	499.515	500.311	509.072
60	400.599	396.458	388.494	399.803	402.829
65	293.083	297.224	285.755	294.357	294.994
70	199.901	199.105	196.875	194.964	191.778
75	114.844	110.384	118.985	112.773	110.065
80	45.874	45.396	54.634	55.909	51.449
85	7.646	9.876	14.495	15.610	11.787
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	460.07	N.A.	15.40
0-30	962.45	N.A.	32.30
0-40	1539.34	N.A.	51.60
0-60	2546.45	N.A.	85.30
0-80	2963.22	N.A.	99.30
0-90	2983.9	N.A.	100.00
10-90	2864.00	N.A.	96.00
20-40	1079.27	N.A.	36.20
20-50	1635.81	N.A.	54.80
40-70	1298.67	N.A.	43.50
60-80	416.78	N.A.	14.00
70-80	125.21	N.A.	4.20
80-90	20.68	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	2983.9	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	119.91
10-20	340.16
20-30	502.37
30-40	576.89
40-50	556.54
50-60	450.57
60-70	291.56
70-80	125.21
80-90	20.68
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	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

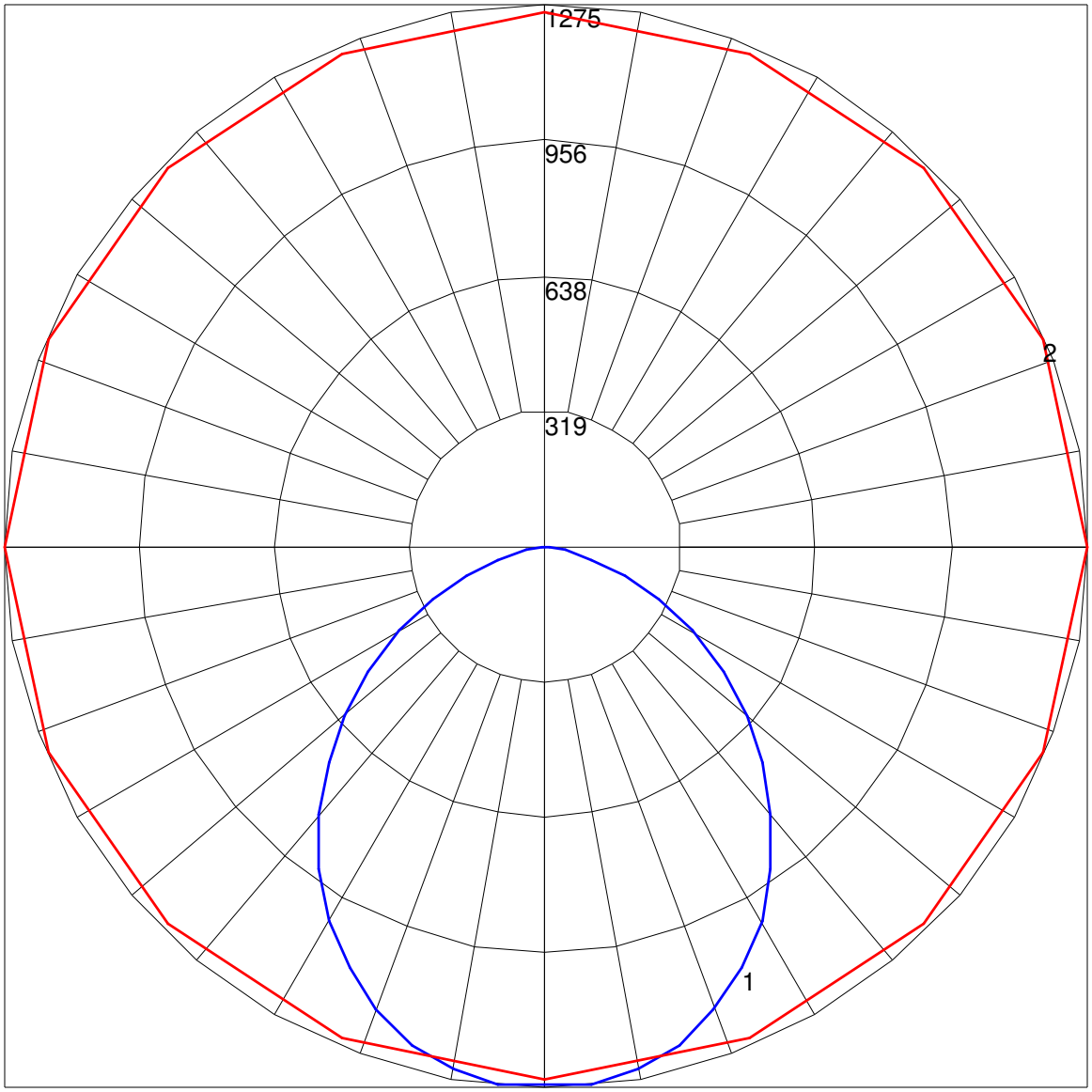
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	15.1	16.6	15.4	16.9	17.2	15.1	16.6	15.4	16.9	17.3
	3H	16.3	17.7	16.7	18.1	18.4	16.3	17.7	16.7	18.0	18.4
	4H	16.7	18.0	17.1	18.3	18.7	16.6	17.9	17.0	18.3	18.6
	6H	16.8	18.0	17.2	18.4	18.8	16.8	18.0	17.2	18.4	18.7
	8H	16.8	18.0	17.2	18.3	18.7	16.8	17.9	17.2	18.3	18.7
	12H	16.8	17.9	17.2	18.3	18.7	16.8	17.9	17.2	18.3	18.7
4H	2H	15.5	16.8	15.9	17.2	17.5	15.5	16.8	15.9	17.2	17.5
	3H	17.0	18.0	17.4	18.4	18.8	16.9	18.0	17.3	18.4	18.8
	4H	17.4	18.3	17.8	18.8	19.2	17.3	18.3	17.8	18.7	19.2
	6H	17.6	18.4	18.0	18.8	19.3	17.6	18.4	18.0	18.9	19.3
	8H	17.6	18.4	18.0	18.8	19.3	17.6	18.4	18.1	18.8	19.3
	12H	17.6	18.3	18.0	18.7	19.2	17.6	18.3	18.1	18.8	19.3
8H	4H	17.5	18.3	18.0	18.7	19.2	17.5	18.3	17.9	18.7	19.2
	6H	17.8	18.4	18.3	18.9	19.4	17.8	18.4	18.3	18.9	19.4
	8H	17.8	18.4	18.3	18.9	19.4	17.8	18.4	18.4	18.9	19.4
	12H	17.8	18.3	18.3	18.8	19.3	17.9	18.4	18.4	18.9	19.4
12H	4H	17.5	18.2	18.0	18.7	19.2	17.5	18.2	17.9	18.6	19.1
	6H	17.8	18.3	18.3	18.8	19.3	17.8	18.4	18.3	18.8	19.4
	8H	17.8	18.3	18.3	18.8	19.4	17.9	18.4	18.4	18.9	19.4

Maximum UGR = 19.4

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POLAR GRAPH



Maximum Candela = 1275.228 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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