IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-22-L30-835-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-L30-835-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	3014
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	110
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	3011	3021	3023
55	2637	2566	2615
65	2043	1992	2057
75	1307	1355	1253
85	258	490	399

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	1282.961	1282.961	1282.961	1282.961	1282.961
5	1288.109	1279.904	1273.307	1270.250	1270.572
10	1265.906	1258.988	1253.356	1250.782	1247.403
15	1228.579	1222.143	1220.052	1215.386	1213.294
20	1175.645	1172.749	1172.427	1159.878	1161.808
25	1108.392	1106.944	1104.370	1097.129	1100.025
30	1030.841	1027.624	1020.705	1020.705	1023.440
35	937.202	934.467	931.570	928.513	929.479
40	835.356	835.356	836.483	831.656	831.656
45	729.972	731.902	732.224	725.627	732.868
50	624.104	618.794	620.564	608.980	624.587
55	518.397	507.778	504.560	505.365	514.214
60	404.646	400.463	392.418	403.841	406.898
65	296.043	300.226	288.642	297.330	297.974
70	201.921	201.116	198.864	196.933	193.715
75	116.004	111.499	120.187	113.912	111.177
80	46.337	45.855	55.186	56.473	51.968
85	7.723	9.975	14.641	15.768	11.906
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	464.72	N.A.	15.40
0-30	972.17	N.A.	32.30
0-40	1554.89	N.A.	51.60
0-60	2572.17	N.A.	85.30
0-80	2993.16	N.A.	99.30
0-90	3014.04	N.A.	100.00
10-90	2892.93	N.A.	96.00
20-40	1090.17	N.A.	36.20
20-50	1652.33	N.A.	54.80
40-70	1311.79	N.A.	43.50
60-80	420.99	N.A.	14.00
70-80	126.48	N.A.	4.20
80-90	20.89	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	3014.04	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	121.12
10-20	343.60
20-30	507.45
30-40	582.72
40-50	562.16
50-60	455.12
60-70	294.51
70-80	126.48
80-90	20.89
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

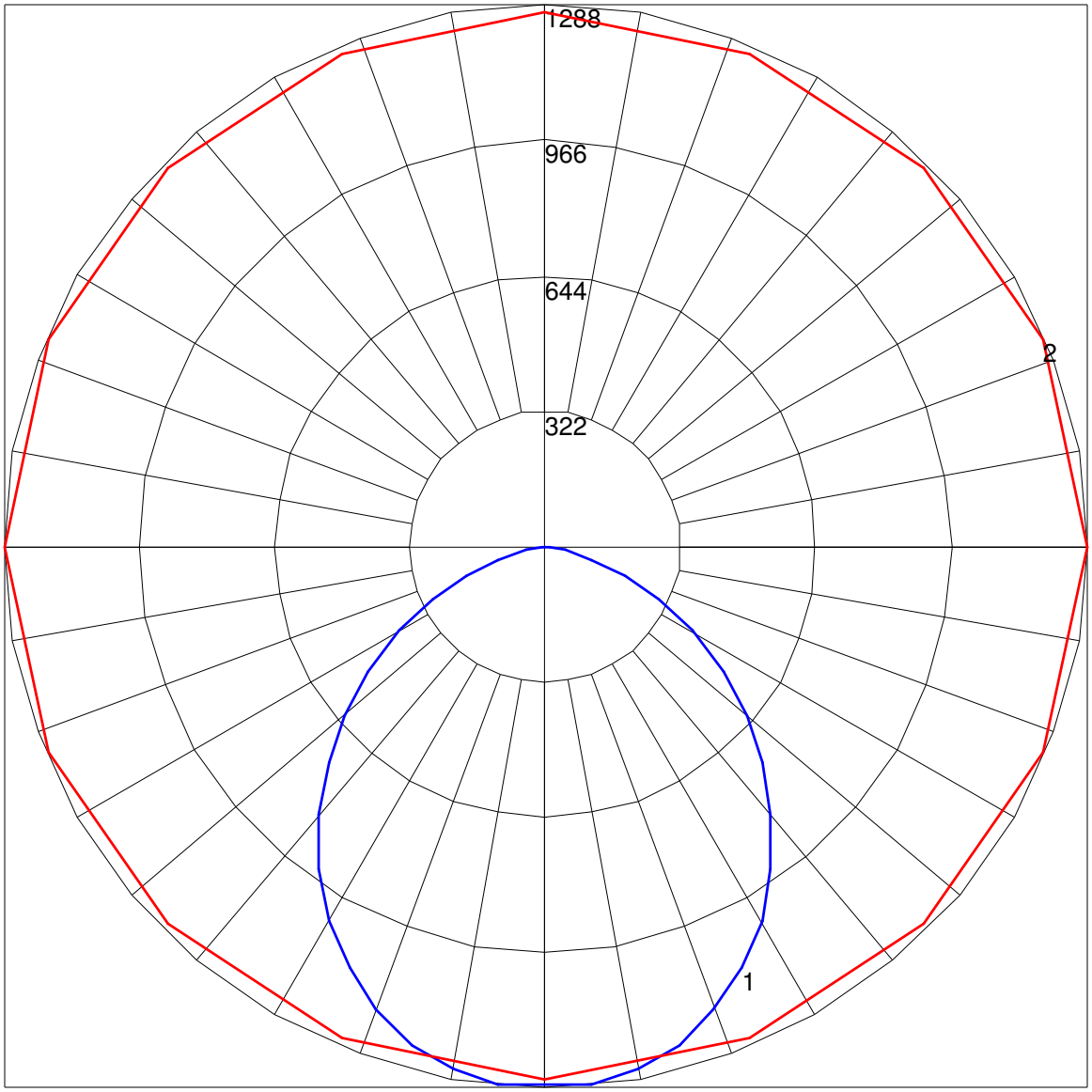
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	15.1	16.6	15.4	16.9	17.2	15.1	16.6	15.4	16.9	17.3
	3H	16.3	17.7	16.7	18.1	18.4	16.3	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 = 1288.109 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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