IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-22-L85-930-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-L85-930-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	7111
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	91
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	7105	7127	7133
55	6220	6054	6170
65	4821	4700	4852
75	3085	3196	2956
85	610	1156	940

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	3026.791	3026.791	3026.791	3026.791	3026.791
5	3038.937	3019.579	3004.016	2996.804	2997.563
10	2986.555	2970.233	2956.948	2950.874	2942.903
15	2898.492	2883.309	2878.374	2867.366	2862.432
20	2773.609	2766.777	2766.018	2736.410	2740.965
25	2614.944	2611.528	2605.454	2588.373	2595.206
30	2431.985	2424.393	2408.071	2408.071	2414.524
35	2211.068	2204.615	2197.783	2190.571	2192.848
40	1970.792	1970.792	1973.449	1962.062	1962.062
45	1722.166	1726.721	1727.480	1711.917	1728.998
50	1472.400	1459.874	1464.050	1436.720	1473.539
55	1223.015	1197.962	1190.371	1192.269	1213.146
60	954.650	944.781	925.802	952.752	959.964
65	698.432	708.301	680.971	701.468	702.987
70	476.376	474.478	469.164	464.609	457.017
75	273.679	263.051	283.548	268.744	262.292
80	109.320	108.181	130.197	133.233	122.605
85	18.220	23.534	34.542	37.199	28.089
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1096.37	N.A.	15.40
0-30	2293.56	N.A.	32.30
0-40	3668.32	N.A.	51.60
0-60	6068.32	N.A.	85.30
0-80	7061.53	N.A.	99.30
0-90	7110.8	N.A.	100.00
10-90	6825.06	N.A.	96.00
20-40	2571.95	N.A.	36.20
20-50	3898.22	N.A.	54.80
40-70	3094.81	N.A.	43.50
60-80	993.21	N.A.	14.00
70-80	298.39	N.A.	4.20
80-90	49.27	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	7110.8	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	285.74
10-20	810.63
20-30	1197.19
30-40	1374.76
40-50	1326.27
50-60	1073.73
60-70	694.81
70-80	298.39
80-90	49.27
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	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

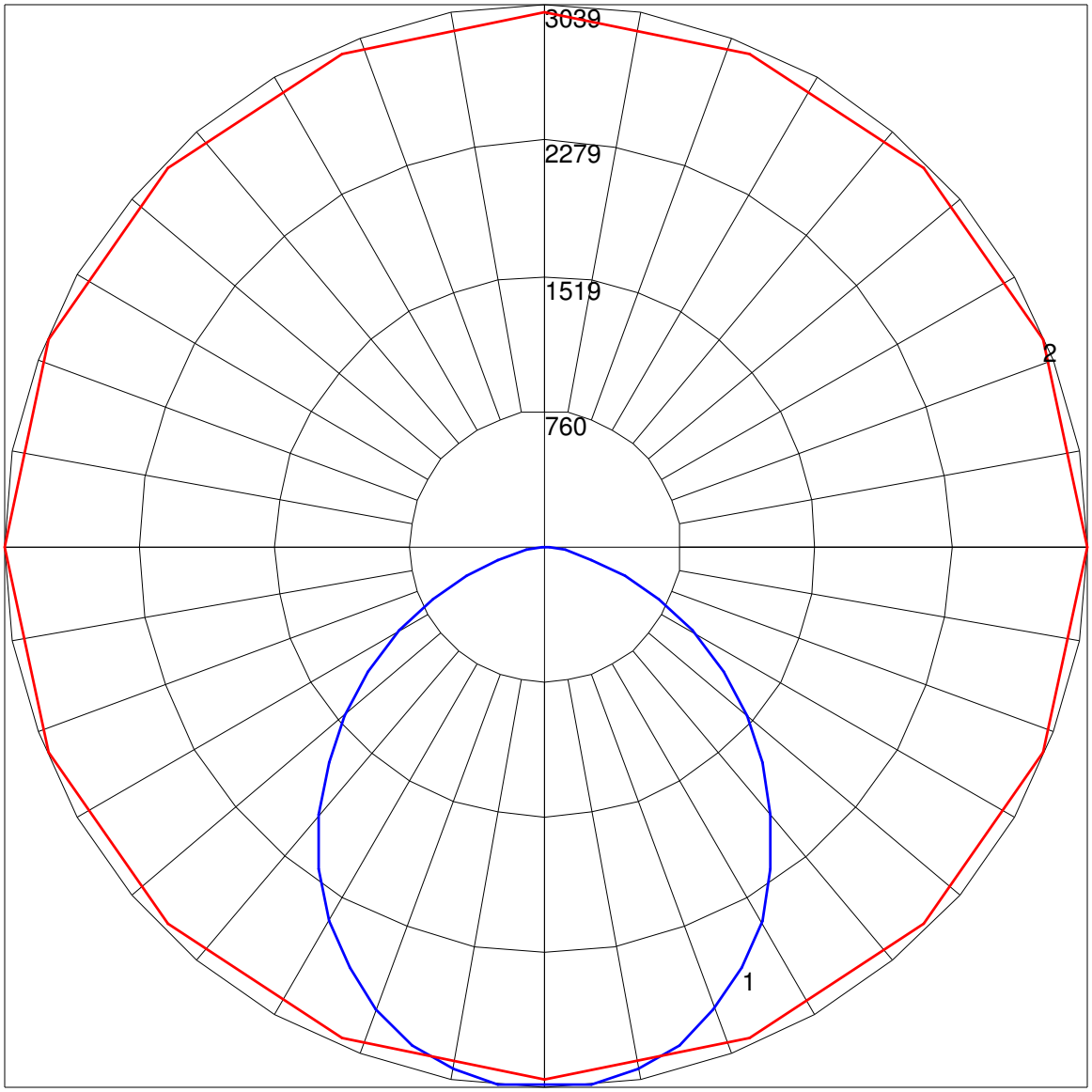
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	18.1	19.6	18.4	19.9	20.2	18.1	19.6	18.4	19.9	20.3
	3H	19.3	20.7	19.7	21.1	21.4	19.3	20.7	19.7	21.0	21.4
	4H	19.7	21.0	20.1	21.3	21.7	19.6	20.9	20.0	21.3	21.6
	6H	19.8	21.0	20.2	21.4	21.8	19.8	21.0	20.2	21.3	21.7
	8H	19.8	21.0	20.2	21.3	21.7	19.8	20.9	20.2	21.3	21.7
	12H	19.8	20.9	20.2	21.3	21.7	19.8	20.9	20.2	21.3	21.7
4H	2H	18.5	19.8	18.9	20.2	20.5	18.5	19.8	18.9	20.2	20.5
	3H	20.0	21.0	20.4	21.4	21.8	19.9	21.0	20.3	21.4	21.8
	4H	20.4	21.3	20.8	21.8	22.2	20.3	21.3	20.8	21.7	22.2
	6H	20.6	21.4	21.0	21.8	22.3	20.6	21.4	21.0	21.8	22.3
	8H	20.6	21.4	21.0	21.8	22.3	20.6	21.4	21.1	21.8	22.3
	12H	20.6	21.3	21.0	21.7	22.2	20.6	21.3	21.1	21.8	22.3
8H	4H	20.5	21.3	21.0	21.7	22.2	20.5	21.3	20.9	21.7	22.2
	6H	20.8	21.4	21.2	21.9	22.4	20.8	21.4	21.3	21.9	22.4
	8H	20.8	21.4	21.3	21.9	22.4	20.8	21.4	21.4	21.9	22.4
	12H	20.8	21.3	21.3	21.8	22.3	20.9	21.4	21.4	21.9	22.4
12H	4H	20.5	21.2	21.0	21.7	22.1	20.5	21.2	20.9	21.6	22.1
	6H	20.8	21.3	21.3	21.8	22.3	20.8	21.4	21.3	21.8	22.4
	8H	20.8	21.3	21.3	21.8	22.4	20.9	21.4	21.4	21.9	22.4

Maximum UGR = 22.4

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POLAR GRAPH



Maximum Candela = 3038.937 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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