IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-22-L85-950-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-L85-950-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	7711
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	99
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	7704	7728	7735
55	6745	6565	6690
65	5228	5097	5262
75	3345	3465	3206
85	661	1254	1019

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	3282.062	3282.062	3282.062	3282.062	3282.062
5	3295.234	3274.242	3257.367	3249.546	3250.370
10	3238.433	3220.735	3206.329	3199.743	3191.100
15	3142.943	3126.479	3121.129	3109.192	3103.842
20	3007.528	3000.120	2999.296	2967.192	2972.131
25	2835.481	2831.777	2825.191	2806.670	2814.078
30	2637.092	2628.860	2611.162	2611.162	2618.159
35	2397.544	2390.547	2383.138	2375.318	2377.787
40	2137.004	2137.004	2139.885	2127.537	2127.537
45	1867.409	1872.348	1873.171	1856.296	1874.817
50	1596.579	1582.996	1587.524	1557.889	1597.814
55	1326.161	1298.995	1290.763	1292.821	1315.459
60	1035.163	1024.461	1003.881	1033.105	1040.925
65	757.336	768.037	738.402	760.628	762.275
70	516.552	514.494	508.732	503.793	495.561
75	296.760	285.236	307.462	291.410	284.412
80	118.540	117.305	141.177	144.470	132.945
85	19.757	25.519	37.455	40.336	30.458
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1188.84	N.A.	15.40
0-30	2486.99	N.A.	32.30
0-40	3977.7	N.A.	51.60
0-60	6580.11	N.A.	85.30
0-80	7657.08	N.A.	99.30
0-90	7710.51	N.A.	100.00
10-90	7400.67	N.A.	96.00
20-40	2788.86	N.A.	36.20
20-50	4226.99	N.A.	54.80
40-70	3355.82	N.A.	43.50
60-80	1076.97	N.A.	14.00
70-80	323.56	N.A.	4.20
80-90	53.43	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	7710.51	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	309.84
10-20	879.00
20-30	1298.15
30-40	1490.71
40-50	1438.13
50-60	1164.28
60-70	753.41
70-80	323.56
80-90	53.43
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

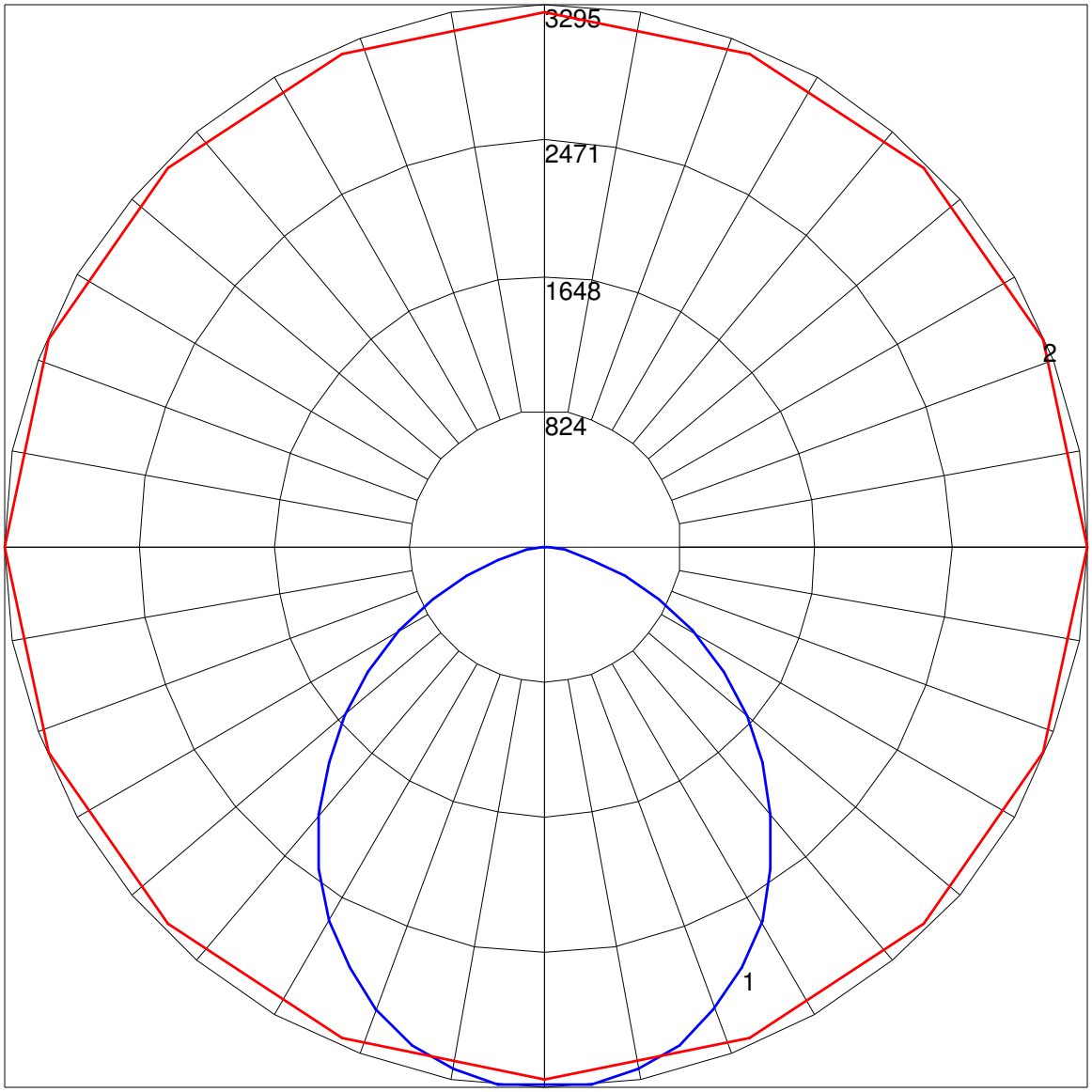
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	18.4	19.9	18.7	20.2	20.5	18.4	19.9	18.7	20.2	20.6
	3H	19.6	21.0	20.0	21.4	21.7	19.6	21.0	20.0	21.3	21.7
	4H	20.0	21.3	20.4	21.6	22.0	19.9	21.2	20.3	21.6	21.9
	6H	20.1	21.3	20.5	21.7	22.1	20.1	21.3	20.5	21.7	22.0
	8H	20.1	21.3	20.5	21.6	22.0	20.1	21.2	20.5	21.6	22.0
	12H	20.1	21.2	20.5	21.6	22.0	20.1	21.2	20.5	21.6	22.0
4H	2H	18.8	20.1	19.2	20.5	20.8	18.8	20.1	19.2	20.5	20.8
	3H	20.3	21.3	20.7	21.7	22.1	20.2	21.3	20.6	21.7	22.1
	4H	20.7	21.6	21.1	22.1	22.5	20.6	21.6	21.1	22.0	22.5
	6H	20.9	21.7	21.3	22.1	22.6	20.9	21.7	21.3	22.2	22.6
	8H	20.9	21.7	21.3	22.1	22.6	20.9	21.7	21.4	22.1	22.6
	12H	20.9	21.6	21.3	22.0	22.5	20.9	21.6	21.4	22.1	22.6
8H	4H	20.8	21.6	21.3	22.0	22.5	20.8	21.6	21.2	22.0	22.5
	6H	21.1	21.7	21.5	22.2	22.7	21.1	21.7	21.6	22.2	22.7
	8H	21.1	21.7	21.6	22.2	22.7	21.1	21.7	21.7	22.2	22.7
	12H	21.1	21.6	21.6	22.1	22.6	21.2	21.7	21.7	22.2	22.7
12H	4H	20.8	21.5	21.3	22.0	22.5	20.8	21.5	21.2	21.9	22.4
	6H	21.1	21.6	21.6	22.1	22.6	21.1	21.7	21.6	22.1	22.7
	8H	21.1	21.6	21.6	22.1	22.7	21.2	21.7	21.7	22.2	22.7

Maximum UGR = 22.7

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POLAR GRAPH



Maximum Candela = 3295.234 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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