IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-22-L65-850-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-L65-850-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	6946
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	119
Total Luminaire Watts	58.5
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	6940	6962	6968
55	6076	5914	6027
65	4710	4592	4740
75	3013	3122	2888
85	596	1129	918

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	2956.801	2956.801	2956.801	2956.801	2956.801
5	2968.666	2949.755	2934.552	2927.507	2928.249
10	2917.495	2901.551	2888.573	2882.640	2874.853
15	2831.469	2816.636	2811.816	2801.063	2796.242
20	2709.474	2702.799	2702.058	2673.135	2677.584
25	2554.477	2551.140	2545.207	2528.521	2535.195
30	2375.749	2368.333	2352.388	2352.388	2358.692
35	2159.940	2153.637	2146.962	2139.917	2142.142
40	1925.221	1925.221	1927.816	1916.692	1916.692
45	1682.343	1686.793	1687.534	1672.331	1689.018
50	1438.353	1426.117	1430.196	1403.498	1439.466
55	1194.734	1170.261	1162.845	1164.699	1185.093
60	932.575	922.934	904.394	930.721	937.766
65	682.282	691.923	665.225	685.248	686.731
70	465.361	463.507	458.315	453.866	446.449
75	267.351	256.968	276.991	262.530	256.226
80	106.792	105.679	127.186	130.153	119.770
85	17.799	22.990	33.743	36.339	27.440
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1071.02	N.A.	15.40
0-30	2240.53	N.A.	32.30
0-40	3583.5	N.A.	51.60
0-60	5928.00	N.A.	85.30
0-80	6898.24	N.A.	99.30
0-90	6946.37	N.A.	100.00
10-90	6667.24	N.A.	96.00
20-40	2512.48	N.A.	36.20
20-50	3808.08	N.A.	54.80
40-70	3023.25	N.A.	43.50
60-80	970.24	N.A.	14.00
70-80	291.49	N.A.	4.20
80-90	48.13	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	6946.37	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	279.14
10-20	791.89
20-30	1169.5
30-40	1342.97
40-50	1295.6
50-60	1048.9
60-70	678.75
70-80	291.49
80-90	48.13
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

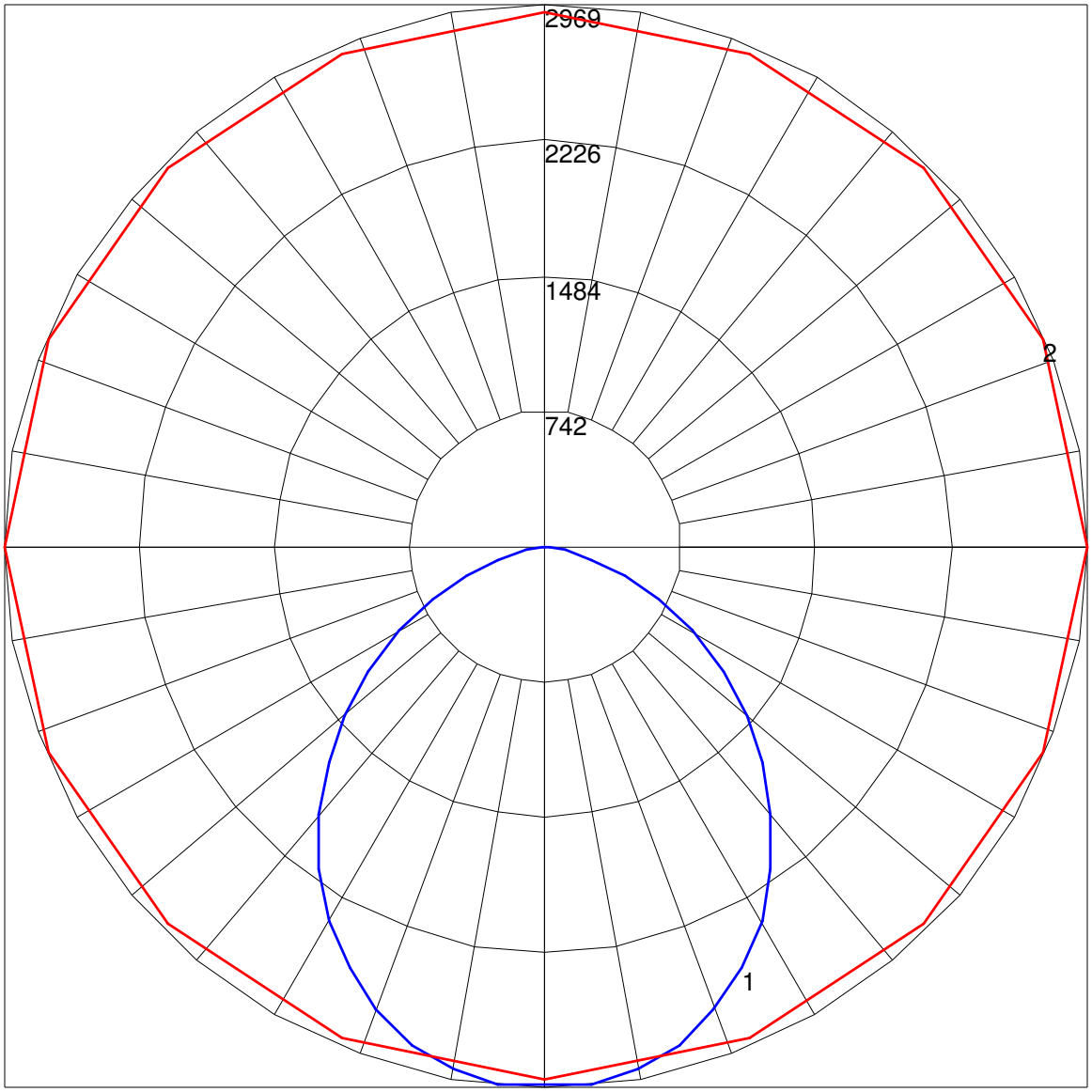
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	18.0	19.5	18.3	19.8	20.1	18.0	19.5	18.3	19.8	20.2
	3H	19.2	20.6	19.6	21.0	21.3	19.2	20.6	19.6	20.9	21.3
	4H	19.6	20.9	20.0	21.2	21.6	19.5	20.8	19.9	21.2	21.5
	6H	19.7	20.9	20.1	21.3	21.7	19.7	20.9	20.1	21.3	21.6
	8H	19.7	20.9	20.1	21.2	21.6	19.7	20.8	20.1	21.2	21.6
	12H	19.7	20.8	20.1	21.2	21.6	19.7	20.8	20.1	21.2	21.6
4H	2H	18.4	19.7	18.8	20.1	20.4	18.4	19.7	18.8	20.1	20.4
	3H	19.9	20.9	20.3	21.3	21.7	19.8	20.9	20.2	21.3	21.7
	4H	20.3	21.2	20.7	21.7	22.1	20.2	21.2	20.7	21.6	22.1
	6H	20.5	21.3	20.9	21.7	22.2	20.5	21.3	20.9	21.8	22.2
	8H	20.5	21.3	20.9	21.7	22.2	20.5	21.3	21.0	21.7	22.2
	12H	20.5	21.2	20.9	21.6	22.1	20.5	21.2	21.0	21.7	22.2
8H	4H	20.4	21.2	20.9	21.6	22.1	20.4	21.2	20.8	21.6	22.1
	6H	20.7	21.3	21.1	21.8	22.3	20.7	21.3	21.2	21.8	22.3
	8H	20.7	21.3	21.2	21.8	22.3	20.7	21.3	21.3	21.8	22.3
	12H	20.7	21.2	21.2	21.7	22.2	20.8	21.3	21.3	21.8	22.3
12H	4H	20.4	21.1	20.9	21.6	22.1	20.4	21.1	20.8	21.5	22.0
	6H	20.7	21.2	21.2	21.7	22.2	20.7	21.3	21.2	21.7	22.3
	8H	20.7	21.2	21.2	21.7	22.3	20.8	21.3	21.3	21.8	22.3

Maximum UGR = 22.3

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POLAR GRAPH



Maximum Candela = 2968.666 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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