IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-22-L85-940-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-L85-940-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	7282
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	94
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	7276	7298	7305
55	6370	6200	6319
65	4937	4814	4969
75	3159	3273	3028
85	625	1184	963

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	3099.726	3099.726	3099.726	3099.726	3099.726
5	3112.165	3092.340	3076.402	3069.016	3069.794
10	3058.521	3041.805	3028.200	3021.980	3013.817
15	2968.335	2952.786	2947.733	2936.460	2931.406
20	2840.444	2833.446	2832.669	2802.348	2807.013
25	2677.955	2674.456	2668.237	2650.744	2657.741
30	2490.587	2482.813	2466.097	2466.097	2472.706
35	2264.347	2257.739	2250.741	2243.356	2245.688
40	2018.281	2018.281	2021.003	2009.341	2009.341
45	1763.664	1768.329	1769.106	1753.168	1770.661
50	1507.880	1495.052	1499.328	1471.340	1509.046
55	1252.485	1226.829	1219.054	1220.998	1242.378
60	977.654	967.547	948.110	975.710	983.096
65	715.262	725.368	697.380	718.371	719.926
70	487.855	485.911	480.469	475.804	468.030
75	280.274	269.389	290.381	275.220	268.612
80	111.954	110.788	133.334	136.444	125.559
85	18.659	24.101	35.374	38.095	28.766
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1122.79	N.A.	15.40
0-30	2348.83	N.A.	32.30
0-40	3756.72	N.A.	51.60
0-60	6214.55	N.A.	85.30
0-80	7231.68	N.A.	99.30
0-90	7282.15	N.A.	100.00
10-90	6989.52	N.A.	96.00
20-40	2633.92	N.A.	36.20
20-50	3992.15	N.A.	54.80
40-70	3169.38	N.A.	43.50
60-80	1017.14	N.A.	14.00
70-80	305.58	N.A.	4.20
80-90	50.46	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	7282.15	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	292.63
10-20	830.16
20-30	1226.03
30-40	1407.89
40-50	1358.23
50-60	1099.6
60-70	711.55
70-80	305.58
80-90	50.46
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

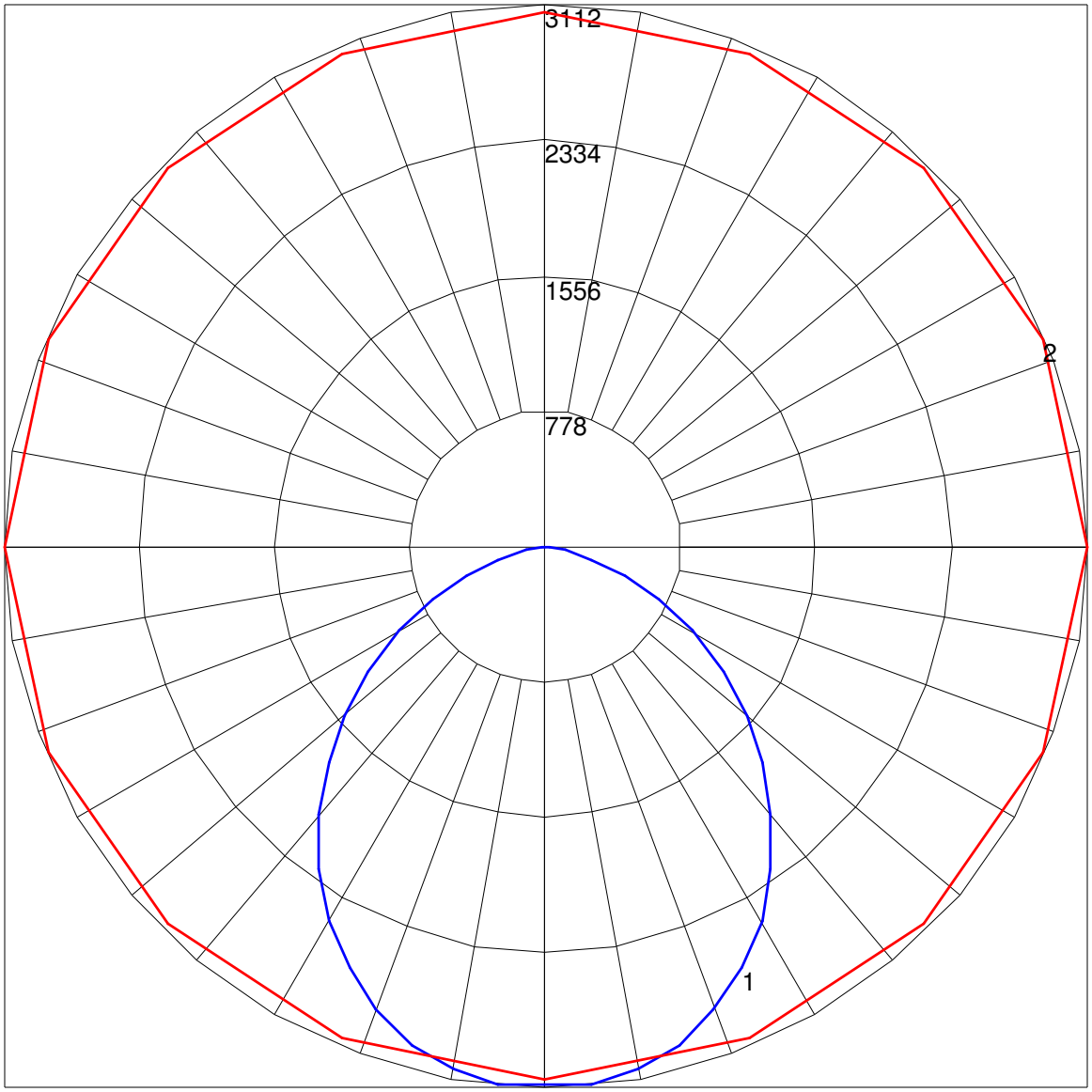
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	18.2	19.7	18.5	20.0	20.3	18.2	19.7	18.5	20.0	20.4
	3H	19.4	20.8	19.8	21.2	21.5	19.4	20.8	19.8	21.1	21.5
	4H	19.8	21.1	20.2	21.4	21.8	19.7	21.0	20.1	21.4	21.7
	6H	19.9	21.1	20.3	21.5	21.9	19.9	21.1	20.3	21.4	21.8
	8H	19.9	21.1	20.3	21.4	21.8	19.9	21.0	20.3	21.4	21.8
	12H	19.9	21.0	20.3	21.4	21.8	19.9	21.0	20.3	21.4	21.8
4H	2H	18.6	19.9	19.0	20.3	20.6	18.6	19.9	19.0	20.3	20.6
	3H	20.1	21.1	20.5	21.5	21.9	20.0	21.1	20.4	21.5	21.9
	4H	20.5	21.4	20.9	21.9	22.3	20.4	21.4	20.9	21.8	22.3
	6H	20.7	21.5	21.1	21.9	22.4	20.7	21.5	21.1	22.0	22.4
	8H	20.7	21.5	21.1	21.9	22.4	20.7	21.5	21.2	21.9	22.4
	12H	20.7	21.4	21.1	21.8	22.3	20.7	21.4	21.2	21.9	22.4
8H	4H	20.6	21.4	21.1	21.8	22.3	20.6	21.4	21.0	21.8	22.3
	6H	20.9	21.5	21.3	22.0	22.5	20.9	21.5	21.4	22.0	22.5
	8H	20.9	21.5	21.4	22.0	22.5	20.9	21.5	21.5	22.0	22.5
	12H	20.9	21.4	21.4	21.9	22.4	21.0	21.5	21.5	22.0	22.5
12H	4H	20.6	21.3	21.1	21.8	22.3	20.6	21.3	21.0	21.7	22.2
	6H	20.9	21.4	21.4	21.9	22.4	20.9	21.5	21.4	21.9	22.5
	8H	20.9	21.4	21.4	21.9	22.5	21.0	21.5	21.5	22.0	22.5

Maximum UGR = 22.5

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POLAR GRAPH



Maximum Candela = 3112.165 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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