IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-22-L85-930-CS-SAF12125-PC250-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN from BALLABS TEST NO. 19833.0
[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 REFLECTOR LUMINAIRE
[MORE] PAT12 ACRYLIC LENS w/CLEAR ACRYLIC LENS IN DOOR
[LUMCAT] MCTVG-22-L85-930-CS-SAF12125-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	7082
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)	1.22
Spacing Criterion (Diagonal)	1.28
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	1.57 ft
Luminous Width (90-270)	1.57 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	10640	10612	10763
55	8465	8302	8341
65	6267	5932	5924
75	4213	3615	3715
85	1370	814	1333

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	3148.884	3148.884	3148.884	3148.884	3148.884
5	3140.718	3139.976	3137.749	3131.068	3131.068
10	3086.530	3095.437	3093.210	3088.757	3085.045
15	3002.648	3015.268	3013.783	3020.464	3015.268
20	2886.848	2901.694	2900.210	2929.160	2910.602
25	2725.766	2746.551	2762.882	2788.863	2760.655
30	2525.342	2563.200	2581.016	2591.408	2569.139
35	2288.545	2336.795	2345.703	2330.857	2322.691
40	2027.994	2049.521	2051.006	2041.356	2055.459
45	1731.070	1730.327	1726.616	1723.646	1751.112
50	1425.237	1403.710	1408.907	1397.030	1420.041
55	1117.178	1101.590	1095.651	1101.590	1100.847
60	835.842	819.511	818.769	829.904	827.677
65	609.437	599.045	576.776	597.560	576.033
70	409.756	408.271	371.156	404.560	371.898
75	250.901	241.251	215.270	237.540	221.209
80	113.574	111.347	92.047	101.697	107.635
85	27.466	29.692	16.331	20.785	26.723
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1148.12	N.A.	16.20
0-30	2417.23	N.A.	34.10
0-40	3868.9	N.A.	54.60
0-60	6193.47	N.A.	87.50
0-80	7041.00	N.A.	99.40
0-90	7082.05	N.A.	100.00
10-90	6784.16	N.A.	95.80
20-40	2720.77	N.A.	38.40
20-50	4054.17	N.A.	57.20
40-70	2918.39	N.A.	41.20
60-80	847.54	N.A.	12.00
70-80	253.71	N.A.	3.60
80-90	41.05	N.A.	0.60
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	7082.05	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	297.89
10-20	850.23
20-30	1269.1
30-40	1451.67
40-50	1333.4
50-60	991.17
60-70	593.82
70-80	253.71
80-90	41.05
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	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	53	78	67	59	53	65	58	53	63	57	52	61	56	51	50
6	74	61	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44
7	69	56	48	42	67	55	47	42	54	47	42	52	46	41	51	45	41	39
8	64	51	43	38	63	51	43	38	49	42	38	48	42	37	47	41	37	35
9	60	47	40	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29

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UGR TABLE - CORRECTED

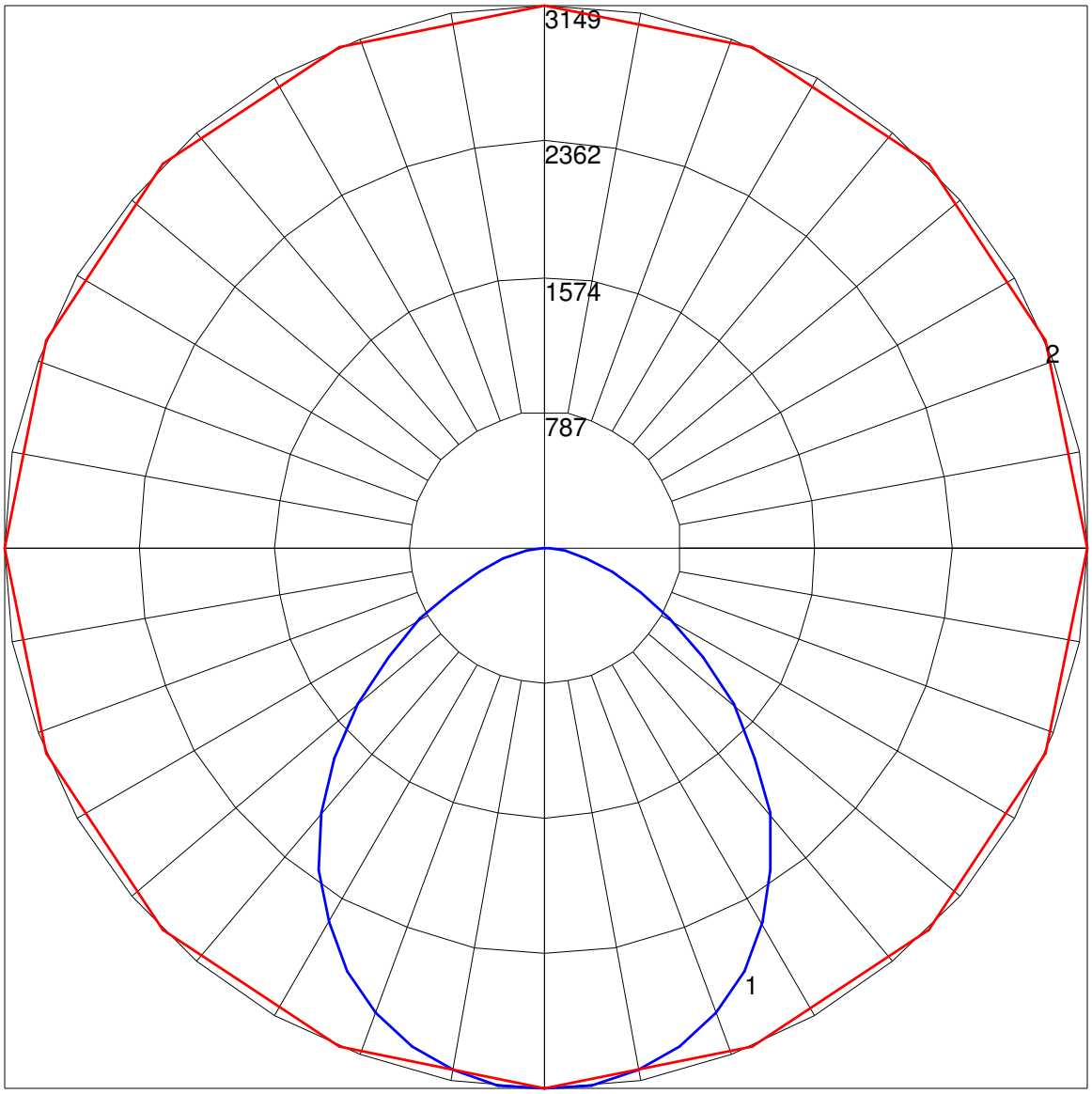
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	18.8	20.3	19.1	20.6	20.9	18.8	20.3	19.2	20.6	20.9
	3H	19.9	21.3	20.3	21.6	22.0	19.9	21.2	20.2	21.5	21.9
	4H	20.3	21.6	20.7	21.9	22.3	20.2	21.4	20.6	21.8	22.2
	6H	20.5	21.6	20.9	22.0	22.4	20.3	21.5	20.7	21.8	22.2
	8H	20.5	21.6	20.9	22.0	22.4	20.3	21.4	20.7	21.8	22.2
	12H	20.5	21.5	20.9	21.9	22.4	20.3	21.4	20.8	21.8	22.2
4H	2H	19.1	20.4	19.5	20.8	21.1	19.2	20.4	19.6	20.8	21.1
	3H	20.5	21.5	20.9	21.9	22.3	20.4	21.5	20.9	21.9	22.3
	4H	20.9	21.9	21.4	22.3	22.7	20.8	21.8	21.2	22.2	22.6
	6H	21.2	22.0	21.6	22.4	22.9	21.0	21.8	21.5	22.3	22.8
	8H	21.2	22.0	21.7	22.4	22.9	21.1	21.8	21.5	22.3	22.7
	12H	21.2	21.9	21.7	22.4	22.8	21.1	21.7	21.6	22.2	22.7
8H	4H	21.0	21.8	21.5	22.2	22.7	20.9	21.7	21.4	22.1	22.6
	6H	21.3	21.9	21.8	22.4	22.9	21.2	21.8	21.7	22.3	22.8
	8H	21.4	21.9	21.9	22.4	22.9	21.2	21.8	21.7	22.3	22.8
	12H	21.4	21.9	21.9	22.4	23.0	21.2	21.7	21.7	22.2	22.8
12H	4H	21.0	21.7	21.5	22.2	22.6	20.9	21.6	21.4	22.1	22.5
	6H	21.3	21.9	21.8	22.3	22.9	21.2	21.7	21.7	22.2	22.7
	8H	21.4	21.9	21.9	22.4	22.9	21.2	21.7	21.7	22.2	22.8

Maximum UGR = 23.0

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POLAR GRAPH



Maximum Candela = 3148.884 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)

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