IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-22-L30-850-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-L30-850-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	3195
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	117
Total Luminaire Watts	27.3
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	3192	3202	3205
55	2795	2720	2772
65	2166	2112	2180
75	1386	1436	1328
85	274	519	422

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	1359.938	1359.938	1359.938	1359.938	1359.938
5	1365.395	1356.697	1349.705	1346.465	1346.806
10	1341.860	1334.526	1328.557	1325.829	1322.247
15	1302.293	1295.471	1293.254	1288.308	1286.091
20	1246.183	1243.113	1242.772	1229.470	1231.516
25	1174.895	1173.360	1170.631	1162.957	1166.026
30	1092.691	1089.281	1081.947	1081.947	1084.846
35	993.433	990.534	987.464	984.224	985.247
40	885.477	885.477	886.671	881.555	881.555
45	773.769	775.816	776.157	769.165	776.839
50	661.550	655.922	657.798	645.519	662.062
55	549.501	538.245	534.834	535.687	545.067
60	428.924	424.490	415.963	428.072	431.312
65	313.806	318.240	305.960	315.170	315.852
70	214.036	213.183	210.795	208.749	205.338
75	122.964	118.189	127.398	120.747	117.848
80	49.117	48.606	58.497	59.862	55.087
85	8.186	10.574	15.520	16.714	12.620
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	492.60	N.A.	15.40
0-30	1030.5	N.A.	32.30
0-40	1648.18	N.A.	51.60
0-60	2726.5	N.A.	85.30
0-80	3172.75	N.A.	99.30
0-90	3194.88	N.A.	100.00
10-90	3066.5	N.A.	96.00
20-40	1155.58	N.A.	36.20
20-50	1751.47	N.A.	54.80
40-70	1390.5	N.A.	43.50
60-80	446.25	N.A.	14.00
70-80	134.07	N.A.	4.20
80-90	22.14	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	3194.88	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	128.38
10-20	364.22
20-30	537.90
30-40	617.68
40-50	595.89
50-60	482.43
60-70	312.18
70-80	134.07
80-90	22.14
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	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

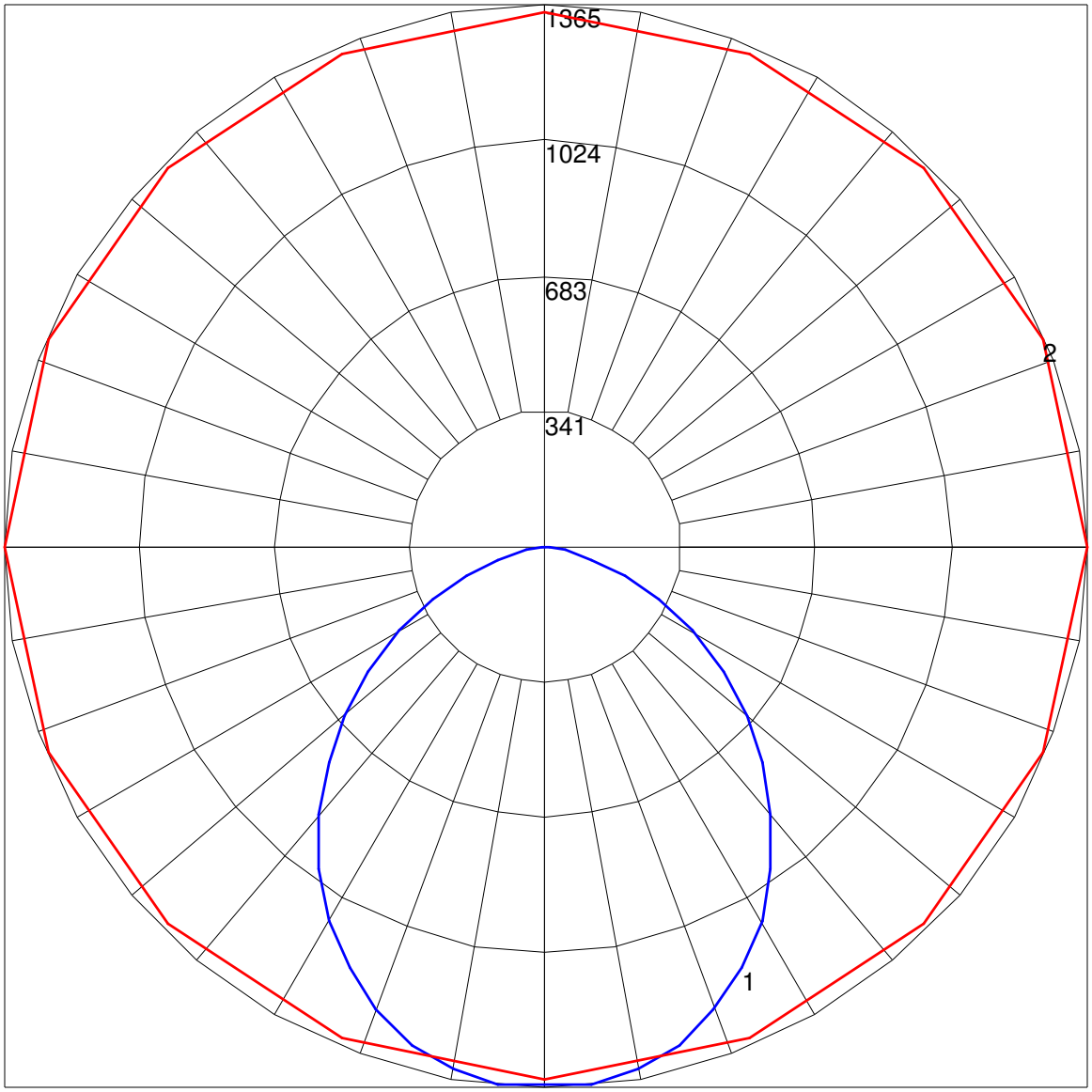
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	15.3	16.8	15.6	17.1	17.4	15.3	16.8	15.6	17.1	17.5
	3H	16.5	17.9	16.9	18.3	18.6	16.5	17.9	16.9	18.2	18.6
	4H	16.9	18.2	17.3	18.5	18.9	16.8	18.1	17.2	18.5	18.8
	6H	17.0	18.2	17.4	18.6	19.0	17.0	18.2	17.4	18.6	18.9
	8H	17.0	18.2	17.4	18.5	18.9	17.0	18.1	17.4	18.5	18.9
	12H	17.0	18.1	17.4	18.5	18.9	17.0	18.1	17.4	18.5	18.9
4H	2H	15.7	17.0	16.1	17.4	17.7	15.7	17.0	16.1	17.4	17.7
	3H	17.2	18.2	17.6	18.6	19.0	17.1	18.2	17.5	18.6	19.0
	4H	17.6	18.5	18.0	19.0	19.4	17.5	18.5	18.0	18.9	19.4
	6H	17.8	18.6	18.2	19.0	19.5	17.8	18.6	18.2	19.1	19.5
	8H	17.8	18.6	18.2	19.0	19.5	17.8	18.6	18.3	19.0	19.5
	12H	17.8	18.5	18.2	18.9	19.4	17.8	18.5	18.3	19.0	19.5
8H	4H	17.7	18.5	18.2	18.9	19.4	17.7	18.5	18.1	18.9	19.4
	6H	18.0	18.6	18.5	19.1	19.6	18.0	18.6	18.5	19.1	19.6
	8H	18.0	18.6	18.5	19.1	19.6	18.0	18.6	18.6	19.1	19.6
	12H	18.0	18.5	18.5	19.0	19.5	18.1	18.6	18.6	19.1	19.6
12H	4H	17.7	18.4	18.2	18.9	19.4	17.7	18.4	18.1	18.8	19.3
	6H	18.0	18.5	18.5	19.0	19.5	18.0	18.6	18.5	19.0	19.6
	8H	18.0	18.5	18.5	19.0	19.6	18.1	18.6	18.6	19.1	19.6

Maximum UGR = 19.6

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POLAR GRAPH



Maximum Candela = 1365.395 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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