IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTVG-14-L31-830-CS-SAF125-PC250-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TESTLAB] GEN from Photopia 2017.0.4 see: www.ltioptics.com/ies
[ISSUEDATE] 2026-04-29
[TESTDATE] Wed Jan 24 15:50:54 2018
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] MCTVG-14-L31-830-CS-SAF125-PC250-DIM-UNV_
[LUMINAIRE] 1x4 LED VANDAL RESISTANT CLEANROOM LUMINAIRE

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3100
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	123
Total Luminaire Watts	25.3
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.12
Spacing Criterion (90-270)	1.04
Spacing Criterion (Diagonal)	1.16
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	3.98 ft
Luminous Width (90-270)	0.98 ft
Luminous Height	0.38 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2750	2029	1782
55	2237	1498	1261
65	1676	1001	827
75	1094	551	462
85	561	207	183

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CANDELA TABULATION

	0.0	22.5	45.0	67.5	90.0
0	1557.115	1557.115	1557.115	1557.115	1557.115
10	1495.707	1494.705	1487.962	1471.188	1473.361
20	1343.921	1332.417	1315.121	1298.586	1278.523
30	1140.001	1126.987	1084.011	1051.283	1033.215
40	902.092	884.762	824.528	779.884	762.697
50	650.142	626.516	573.537	527.411	506.940
60	411.499	394.284	354.018	320.144	307.969
70	209.646	200.103	176.740	161.731	155.516
80	69.407	62.660	57.640	55.074	55.827
90	4.603	5.414	6.028	6.267	6.483
100	1.261	1.798	2.086	2.076	1.832
110	0.619	0.882	0.949	1.045	1.074
120	0.264	0.316	0.379	0.480	0.456
130	0.408	0.240	0.249	0.307	0.259
140	0.240	0.225	0.269	0.288	0.312
150	0.374	0.278	0.307	0.259	0.201
160	0.177	0.230	0.216	0.264	0.273
170	0.120	0.192	0.302	0.331	0.288
180	0.364	0.364	0.364	0.364	0.364

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	541.88	N.A.	17.50
0-30	1097.68	N.A.	35.40
0-40	1700.00	N.A.	54.80
0-60	2663.55	N.A.	85.90
0-80	3057.07	N.A.	98.60
0-90	3092.7	N.A.	99.80
10-90	2947.52	N.A.	95.10
20-40	1158.12	N.A.	37.40
20-50	1702.9	N.A.	54.90
40-70	1230.23	N.A.	39.70
60-80	393.52	N.A.	12.70
70-80	126.84	N.A.	4.10
80-90	35.63	N.A.	1.10
90-110	5.68	N.A.	0.20
90-120	6.33	N.A.	0.20
90-130	6.63	N.A.	0.20
90-150	7.01	N.A.	0.20
90-180	7.23	N.A.	0.20
110-180	1.55	N.A.	0.10
0-180	3099.93	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	145.17
10-20	396.70
20-30	555.80
30-40	602.32
40-50	544.78
50-60	418.77
60-70	266.68
70-80	126.84
80-90	35.63
90-100	4.19
100-110	1.48
110-120	0.65
120-130	0.30
130-140	0.21
140-150	0.17
150-160	0.12
160-170	0.07
170-180	0.03

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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	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74
3	93	84	76	70	91	82	75	70	79	73	69	76	72	67	74	70	66	64
4	86	75	67	61	84	74	66	61	71	65	60	69	63	59	67	62	58	56
5	80	68	60	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39
8	64	52	44	38	63	51	43	38	50	43	38	49	42	38	47	42	37	36
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32
10	57	44	37	32	56	44	37	32	43	36	32	42	36	31	41	35	31	30

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UGR TABLE - CORRECTED

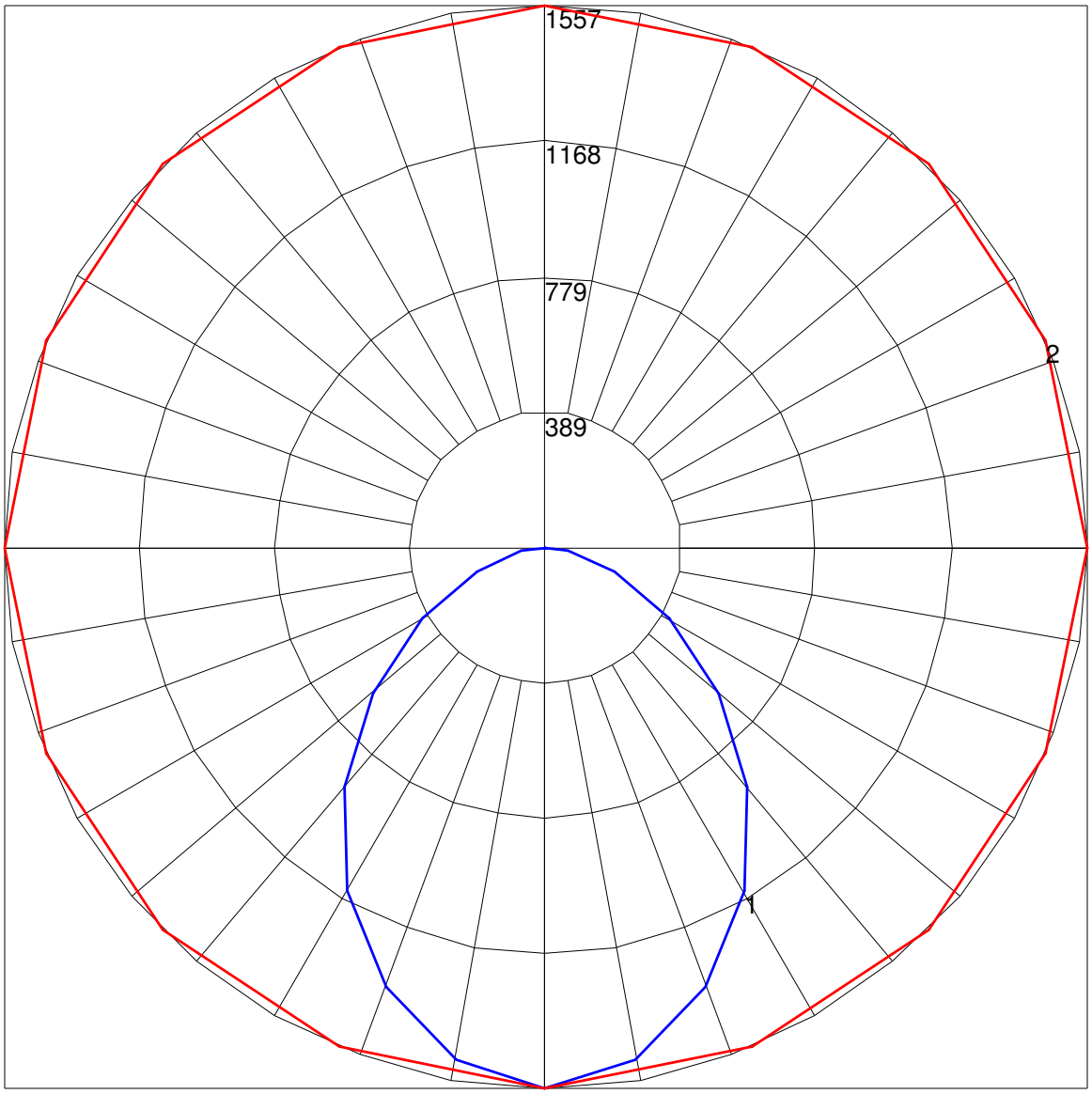
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	13.2	14.7	13.5	15.0	15.3	12.4	13.9	12.8	14.2	14.5
	3H	14.2	15.6	14.6	15.9	16.3	13.5	14.9	13.9	15.2	15.6
	4H	14.6	15.8	15.0	16.2	16.5	13.9	15.2	14.3	15.5	15.9
	6H	14.7	15.9	15.1	16.2	16.6	14.1	15.3	14.5	15.6	16.0
	8H	14.7	15.8	15.1	16.2	16.6	14.2	15.3	14.6	15.7	16.1
	12H	14.7	15.8	15.2	16.2	16.6	14.2	15.3	14.6	15.6	16.1
4H	2H	13.5	14.7	13.9	15.1	15.5	12.8	14.1	13.2	14.4	14.8
	3H	14.7	15.8	15.1	16.2	16.6	14.1	15.1	14.5	15.5	15.9
	4H	15.1	16.1	15.5	16.5	16.9	14.5	15.5	15.0	15.9	16.3
	6H	15.3	16.1	15.8	16.6	17.0	14.8	15.6	15.3	16.1	16.5
	8H	15.3	16.1	15.8	16.6	17.0	14.9	15.7	15.3	16.1	16.6
	12H	15.4	16.1	15.9	16.5	17.0	15.0	15.6	15.4	16.1	16.6
8H	4H	15.2	15.9	15.6	16.4	16.9	14.6	15.4	15.1	15.9	16.3
	6H	15.4	16.1	15.9	16.5	17.0	15.0	15.6	15.5	16.1	16.6
	8H	15.5	16.1	16.0	16.6	17.1	15.1	15.6	15.6	16.2	16.6
	12H	15.6	16.0	16.1	16.5	17.1	15.2	15.7	15.7	16.2	16.7
12H	4H	15.2	15.9	15.7	16.3	16.8	14.6	15.3	15.1	15.8	16.3
	6H	15.4	16.0	15.9	16.4	17.0	15.0	15.5	15.5	16.0	16.5
	8H	15.5	16.0	16.0	16.5	17.1	15.1	15.6	15.6	16.1	16.7

Maximum UGR = 17.1

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POLAR GRAPH



Maximum Candela = 1557.115 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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