



IES INDOOR REPORT

PHOTOMETRIC FILENAME : MCTG-14-L6-RED-SAF125-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] 17 Feb. 2020

[TESTDATE] Wed Jan 24 15:50:54 2018

[MANUFAC] WILLIAMS INDOOR

[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.

[LUMCAT] MCTG-14-L6-RED-SAF125-DIM-UNV

[LUMINAIRE] 1x4 LED CLEANROOM LUMINAIRE

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	542
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	39
Total Luminaire Watts	14
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	481	355	312
55	391	262	221
65	293	175	145
75	191	96	81
85	98	36	32

IES INDOOR REPORT
 PHOTOMETRIC FILENAME : MCTG-14-L6-RED-SAF125-DIM-UNV_.IES

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0	272.230	272.230	272.230	272.230	272.230
10	261.494	261.318	260.140	257.207	257.587
20	234.957	232.946	229.922	227.031	223.524
30	199.306	197.031	189.517	183.795	180.636
40	157.712	154.682	144.152	136.347	133.342
50	113.664	109.533	100.271	92.207	88.628
60	71.942	68.932	61.893	55.971	53.842
70	36.652	34.984	30.899	28.275	27.189
80	12.134	10.955	10.077	9.629	9.760
90	0.805	0.947	1.054	1.096	1.133
100	0.220	0.314	0.365	0.363	0.320
110	0.108	0.154	0.166	0.183	0.188
120	0.046	0.055	0.066	0.084	0.080
130	0.071	0.042	0.044	0.054	0.045
140	0.042	0.039	0.047	0.050	0.054
150	0.065	0.049	0.054	0.045	0.035
160	0.031	0.040	0.038	0.046	0.048
170	0.021	0.034	0.053	0.058	0.050
180	0.064	0.064	0.064	0.064	0.064

IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTG-14-L6-RED-SAF125-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	94.74	N.A.	17.50
0-30	191.91	N.A.	35.40
0-40	297.21	N.A.	54.80
0-60	465.67	N.A.	85.90
0-80	534.47	N.A.	98.60
0-90	540.69	N.A.	99.80
10-90	515.31	N.A.	95.10
20-40	202.47	N.A.	37.40
20-50	297.72	N.A.	54.90
40-70	215.08	N.A.	39.70
60-80	68.80	N.A.	12.70
70-80	22.17	N.A.	4.10
80-90	6.23	N.A.	1.10
90-110	0.99	N.A.	0.20
90-120	1.11	N.A.	0.20
90-130	1.16	N.A.	0.20
90-150	1.23	N.A.	0.20
90-180	1.26	N.A.	0.20
110-180	0.27	N.A.	0.00
0-180	541.96	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	25.38
10-20	69.36
20-30	97.17
30-40	105.30
40-50	95.24
50-60	73.21
60-70	46.62
70-80	22.17
80-90	6.23
90-100	0.73
100-110	0.26
110-120	0.11
120-130	0.05
130-140	0.04
140-150	0.03
150-160	0.02
160-170	0.01
170-180	0.01

IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTG-14-L6-RED-SAF125-DIM-UNV_.IES

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	18	18	18	18	17	17	17	17	17	17	17	16	16	16	15	15	15	15
1	17	16	15	15	16	16	15	15	15	14	14	14	14	14	14	14	13	13
2	15	14	13	12	15	14	13	12	13	13	12	13	12	12	12	12	11	11
3	14	13	11	11	14	12	11	10	12	11	10	11	11	10	11	10	10	10
4	13	11	10	9	13	11	10	9	11	10	9	10	10	9	10	9	9	8
5	12	10	9	8	12	10	9	8	10	9	8	9	8	8	9	8	8	7
6	11	9	8	7	11	9	8	7	9	8	7	9	8	7	8	8	7	7
7	10	8	7	6	10	8	7	6	8	7	6	8	7	6	8	7	6	6
8	10	8	7	6	9	8	7	6	7	6	6	7	6	6	7	6	6	5
9	9	7	6	5	9	7	6	5	7	6	5	7	6	5	7	6	5	5
10	9	7	6	5	8	7	5	5	6	5	5	6	5	5	6	5	5	4

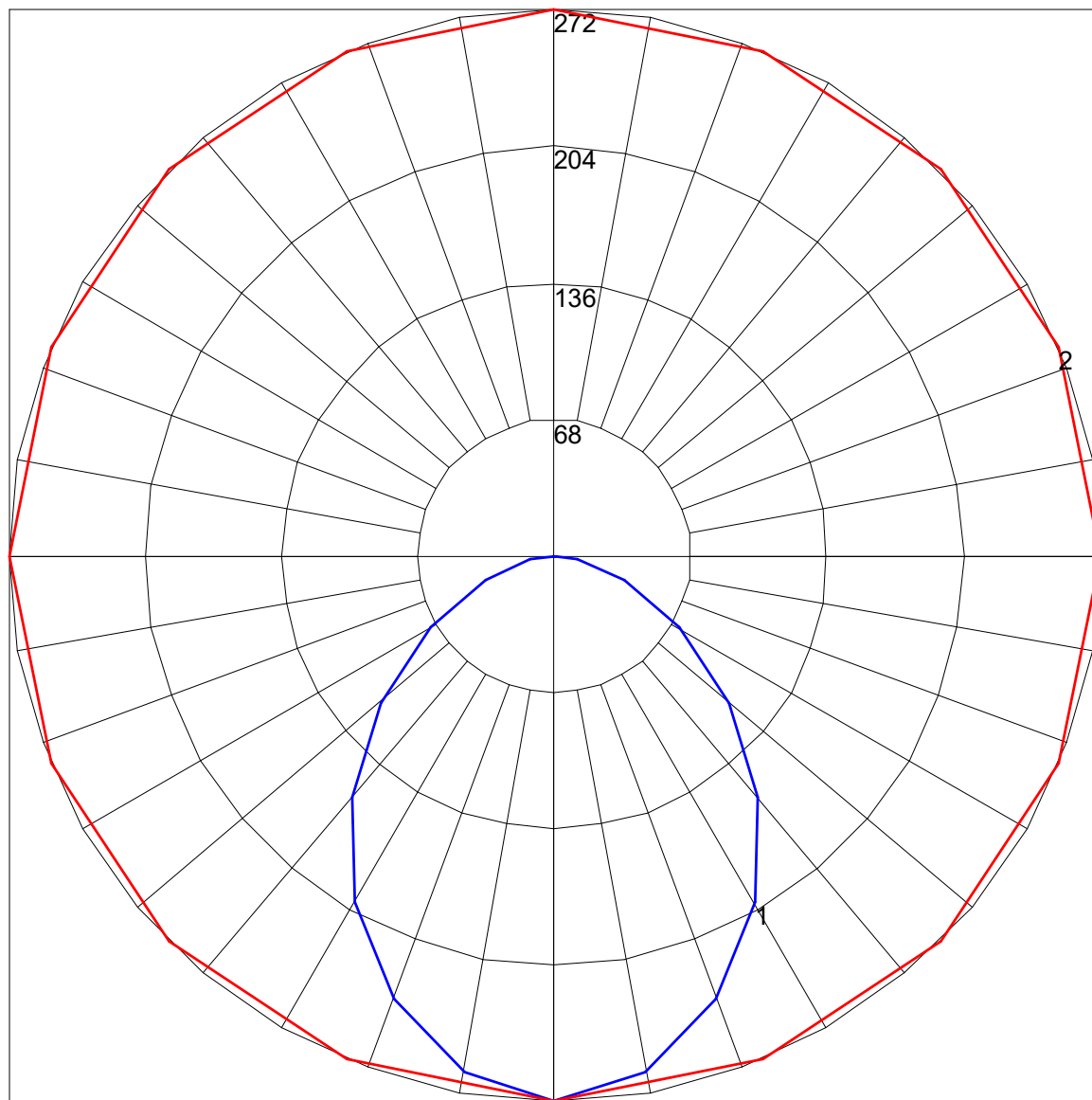
IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTG-14-L6-RED-SAF125-DIM-UNV_.IES

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	14.4	15.9	14.7	16.2	16.5	12.9	14.4	13.3	14.7	15.0
	3H	15.6	16.9	16.0	17.3	17.6	14.0	15.4	14.4	15.7	16.1
	4H	16.0	17.2	16.4	17.6	18.0	14.4	15.7	14.8	16.0	16.4
	6H	16.2	17.3	16.6	17.7	18.1	14.6	15.8	15.0	16.1	16.5
	8H	16.2	17.3	16.7	17.7	18.1	14.7	15.8	15.1	16.2	16.6
	12H	16.3	17.3	16.7	17.7	18.1	14.7	15.8	15.1	16.1	16.6
4H	2H	14.6	15.8	15.0	16.2	16.6	13.3	14.6	13.7	14.9	15.3
	3H	15.9	17.0	16.4	17.4	17.8	14.6	15.6	15.0	16.0	16.4
	4H	16.4	17.4	16.9	17.8	18.2	15.0	16.0	15.5	16.4	16.8
	6H	16.7	17.5	17.2	18.0	18.4	15.3	16.1	15.8	16.6	17.0
	8H	16.8	17.5	17.2	18.0	18.5	15.4	16.2	15.8	16.6	17.1
	12H	16.8	17.5	17.3	18.0	18.5	15.5	16.1	15.9	16.6	17.1
8H	4H	16.5	17.2	16.9	17.7	18.1	15.1	15.9	15.6	16.4	16.8
	6H	16.8	17.4	17.3	17.9	18.4	15.5	16.1	16.0	16.6	17.1
	8H	16.9	17.4	17.4	18.0	18.4	15.6	16.1	16.1	16.7	17.1
	12H	17.0	17.5	17.5	18.0	18.5	15.7	16.2	16.2	16.7	17.2
12H	4H	16.4	17.1	16.9	17.6	18.1	15.1	15.8	15.6	16.3	16.8
	6H	16.8	17.3	17.3	17.8	18.3	15.5	16.0	16.0	16.5	17.0
	8H	16.9	17.4	17.4	17.9	18.4	15.6	16.1	16.1	16.6	17.2

Maximum UGR = 18.5

POLAR GRAPH



Maximum Candela = 272.23 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.)