



IES INDOOR REPORT

PHOTOMETRIC FILENAME : MCTG-14-L12-RED-L45-835-SAF125-DIM-UNV BOTH ON_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TESTLAB] GEN from Photopia 2017.0.4 see: www.ltiopics.com/ies

[ISSUEDATE] 13 MAY 2020

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

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] MCTG-14-L12/RED-L40/835-SAF125-DIM-UNV BOTH ON

[LUMINAIRE] 1x4 LED CLEANROOM LUMINAIRE

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5727
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	82
Total Luminaire Watts	69.58
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	5081	3748	3293
55	4132	2768	2330
65	3097	1849	1529
75	2021	1018	854
85	1036	382	338

IES INDOOR REPORT**PHOTOMETRIC FILENAME : MCTG-14-L12-RED-L45-835-SAF125-DIM-UNV BOTH ON_.IES****CANDELA TABULATION**

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0	2876.495	2876.495	2876.495	2876.495	2876.495
10	2763.054	2761.202	2748.747	2717.760	2721.773
20	2482.657	2461.405	2429.453	2398.909	2361.845
30	2105.950	2081.908	2002.519	1942.060	1908.681
40	1666.455	1634.440	1523.169	1440.697	1408.948
50	1201.022	1157.377	1059.508	974.299	936.482
60	760.172	728.370	653.985	591.409	568.917
70	387.283	369.655	326.497	298.770	287.289
80	128.217	115.754	106.479	101.740	103.130
90	8.504	10.001	11.135	11.578	11.977
100	2.330	3.322	3.853	3.836	3.384
110	1.143	1.630	1.754	1.931	1.984
120	0.487	0.585	0.700	0.886	0.842
130	0.753	0.443	0.461	0.567	0.478
140	0.443	0.416	0.496	0.532	0.576
150	0.691	0.514	0.567	0.478	0.372
160	0.328	0.425	0.399	0.487	0.505
170	0.221	0.354	0.558	0.611	0.532
180	0.673	0.673	0.673	0.673	0.673

IES INDOOR REPORT**PHOTOMETRIC FILENAME : MCTG-14-L12-RED-L45-835-SAF125-DIM-UNV BOTH ON_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	1001.02	N.A.	17.50
0-30	2027.76	N.A.	35.40
0-40	3140.44	N.A.	54.80
0-60	4920.43	N.A.	85.90
0-80	5647.39	N.A.	98.60
0-90	5713.21	N.A.	99.80
10-90	5445.03	N.A.	95.10
20-40	2139.42	N.A.	37.40
20-50	3145.81	N.A.	54.90
40-70	2272.64	N.A.	39.70
60-80	726.96	N.A.	12.70
70-80	234.31	N.A.	4.10
80-90	65.82	N.A.	1.10
90-110	10.49	N.A.	0.20
90-120	11.70	N.A.	0.20
90-130	12.25	N.A.	0.20
90-150	12.96	N.A.	0.20
90-180	13.36	N.A.	0.20
110-180	2.87	N.A.	0.10
0-180	5726.57	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	268.18
10-20	732.84
20-30	1026.74
30-40	1112.68
40-50	1006.39
50-60	773.60
60-70	492.65
70-80	234.31
80-90	65.82
90-100	7.75
100-110	2.74
110-120	1.21
120-130	0.55
130-140	0.39
140-150	0.32
150-160	0.22
160-170	0.13
170-180	0.05

IES INDOOR REPORT

PHOTOMETRIC FILENAME : MCTG-14-L12-RED-L45-835-SAF125-DIM-UNV BOTH ON_.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	188	188	188	188	184	184	184	184	176	176	176	168	168	168	161	161	161	158
1	174	168	162	156	170	164	159	154	157	153	149	151	148	144	146	143	140	137
2	160	149	139	131	156	146	137	129	140	133	126	135	129	124	130	125	121	118
3	148	133	121	112	144	130	119	111	125	116	109	121	113	107	117	111	105	102
4	136	119	106	97	133	117	105	96	113	103	95	109	100	93	106	98	92	89
5	126	107	94	85	123	106	93	84	102	92	83	99	90	82	96	88	81	78
6	117	98	84	75	114	96	84	75	93	82	74	91	81	73	88	80	73	70
7	109	89	76	67	107	88	76	67	86	74	66	83	73	66	81	72	65	62
8	102	82	69	61	100	81	69	60	79	68	60	77	67	60	75	66	59	56
9	96	76	63	55	94	75	63	55	73	62	55	71	61	54	70	61	54	51
10	90	70	58	50	88	69	58	50	68	57	50	66	57	50	65	56	50	47

IES INDOOR REPORT

PHOTOMETRIC FILENAME : MCTG-14-L12-RED-L45-835-SAF125-DIM-UNV BOTH ON_.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

X=2H	Y=2H	13.7	15.2	14.0	15.5	15.8	12.9	14.4	13.3	14.7	15.0
	3H	14.7	16.1	15.1	16.4	16.8	14.0	15.4	14.4	15.7	16.1
	4H	15.1	16.3	15.5	16.7	17.0	14.4	15.7	14.8	16.0	16.4
	6H	15.2	16.4	15.6	16.7	17.1	14.6	15.8	15.0	16.1	16.5
	8H	15.2	16.3	15.6	16.7	17.1	14.7	15.8	15.1	16.2	16.6
	12H	15.2	16.3	15.7	16.7	17.1	14.7	15.8	15.1	16.1	16.6

UGR Viewed Endwise

4H	2H	14.0	15.2	14.4	15.6	16.0	13.3	14.6	13.7	14.9	15.3
	3H	15.2	16.3	15.6	16.7	17.1	14.6	15.6	15.0	16.0	16.4
	4H	15.6	16.6	16.1	17.0	17.4	15.0	16.0	15.5	16.4	16.8
	6H	15.8	16.6	16.3	17.1	17.5	15.3	16.1	15.8	16.6	17.0
	8H	15.8	16.6	16.3	17.1	17.5	15.4	16.2	15.8	16.6	17.1
	12H	15.9	16.6	16.4	17.0	17.5	15.5	16.1	15.9	16.6	17.1

8H	4H	15.7	16.5	16.1	16.9	17.4	15.1	15.9	15.6	16.4	16.8
	6H	15.9	16.6	16.4	17.0	17.5	15.5	16.1	16.0	16.6	17.1
	8H	16.0	16.6	16.5	17.1	17.6	15.6	16.1	16.1	16.7	17.1
	12H	16.1	16.5	16.6	17.0	17.6	15.7	16.2	16.2	16.7	17.2

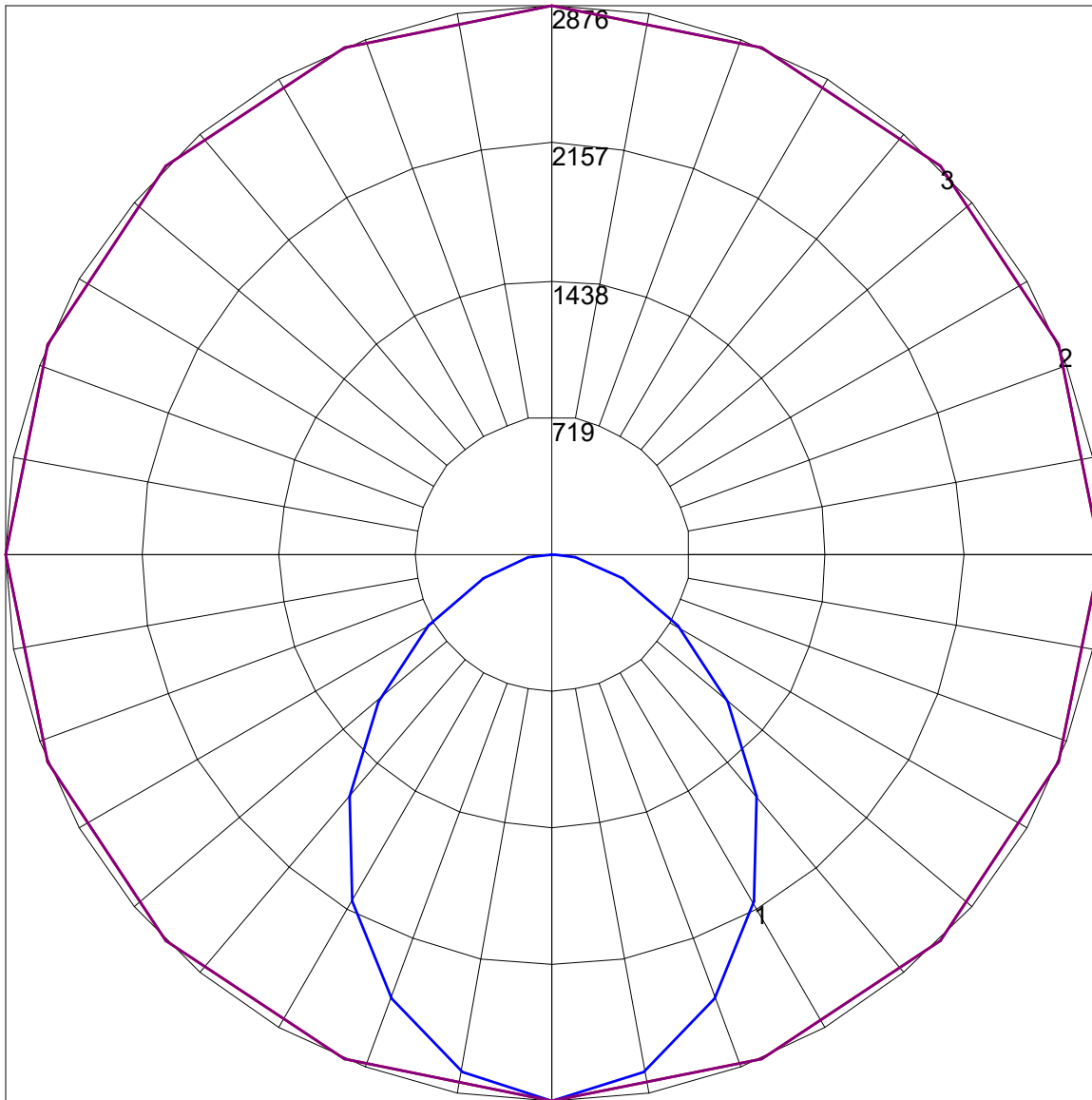
12H	4H	15.7	16.4	16.2	16.8	17.3	15.1	15.8	15.6	16.3	16.8
	6H	15.9	16.5	16.5	17.0	17.5	15.5	16.0	16.0	16.5	17.0
	8H	16.0	16.5	16.5	17.0	17.6	15.6	16.1	16.1	16.6	17.2

Maximum UGR = 17.6

IES INDOOR REPORT

PHOTOMETRIC FILENAME : MCTG-14-L12-RED-L45-835-SAF125-DIM-UNV BOTH ON_.IES

POLAR GRAPH



Maximum Candela = 2876.495 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.)

3 - Horizontal Cone Through Vertical Angle (0)