



IES INDOOR REPORT

PHOTOMETRIC FILENAME : MCTG-24-L176-AMB-SAF12125-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM BALLABS TEST NO. 19835.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 23-MAY-2020

[MANUFAC] WILLIAMS INDOOR

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

[LUMINAIRE] 6-42 LED 22" ARRAYS 2x4' RECESSED WHITE REFLECTOR LUMINAIRE

[MORE] PAT12 FROSTED PRISMATIC ACRYLIC LENS IN DOOR

[LUMCAT] MCTG-24-L176-AMB-SAF12125-DIM-UNV

[LAMPCAT] HLM AMBER LED

[_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	17550
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	65
Total Luminaire Watts	270.6
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.24
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.30
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.57 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	11875	11811	11489
55	9816	9622	9083
65	7118	7034	6526
75	4238	4362	4325
85	925	1277	1314

IES INDOOR REPORT
 PHOTOMETRIC FILENAME : MCTG-24-L176-AMB-SAF12125-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	7645.460	7645.460	7645.460	7645.460	7645.460
5	7683.392	7635.345	7590.669	7572.967	7574.653
10	7568.753	7516.490	7486.988	7467.600	7470.972
15	7382.463	7334.416	7320.928	7279.624	7300.698
20	7112.722	7073.947	7075.633	7017.470	7041.916
25	6744.358	6721.599	6709.797	6651.635	6683.666
30	6302.658	6290.857	6251.238	6177.060	6213.306
35	5752.218	5764.019	5690.684	5572.672	5640.107
40	5096.411	5152.888	5034.877	4903.378	4984.301
45	4388.342	4452.406	4364.740	4205.425	4245.886
50	3670.158	3637.283	3648.242	3471.224	3466.167
55	2942.701	2871.894	2884.539	2721.008	2722.694
60	2221.988	2172.255	2158.768	2010.410	2036.542
65	1572.082	1540.893	1553.537	1440.583	1441.426
70	1028.386	998.040	1034.287	988.768	966.009
75	573.199	567.298	590.058	611.131	585.000
80	242.767	234.337	265.526	303.458	271.426
85	42.147	47.205	58.163	85.980	59.849
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTG-24-L176-AMB-SAF12125-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	2786.74	N.A.	15.90
0-30	5867.97	N.A.	33.40
0-40	9411.54	N.A.	53.60
0-60	15282.19	N.A.	87.10
0-80	17444.96	N.A.	99.40
0-90	17550.05	N.A.	100.00
10-90	16827.37	N.A.	95.90
20-40	6624.8	N.A.	37.70
20-50	9958.9	N.A.	56.70
40-70	7389.47	N.A.	42.10
60-80	2162.78	N.A.	12.30
70-80	643.96	N.A.	3.70
80-90	105.09	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	17550.05	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	722.68
10-20	2064.06
20-30	3081.22
30-40	3543.57
40-50	3334.1
50-60	2536.55
60-70	1518.82
70-80	643.96
80-90	105.09
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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : MCTG-24-L176-AMB-SAF12125-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	116	116	116	116	114	114	114	114	109	109	109	104	104	104	100	100	100	98
1	108	104	100	97	105	102	98	95	97	95	92	94	91	89	90	88	87	85
2	99	92	86	81	97	90	85	80	87	82	78	84	80	76	81	78	75	73
3	91	82	75	69	89	80	74	68	77	72	67	75	70	66	72	68	65	63
4	84	73	65	59	82	72	65	59	69	63	58	67	62	57	65	60	57	55
5	78	66	58	52	76	65	57	51	63	56	51	61	55	50	59	54	50	48
6	72	60	51	46	70	59	51	45	57	50	45	55	49	45	54	49	44	42
7	67	54	46	41	65	54	46	40	52	45	40	51	45	40	49	44	40	38
8	62	50	42	36	61	49	42	36	48	41	36	47	40	36	46	40	36	34
9	58	46	38	33	57	45	38	33	44	37	33	43	37	33	42	37	32	31
10	55	42	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28

IES INDOOR REPORT

PHOTOMETRIC FILENAME : MCTG-24-L176-AMB-SAF12125-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

X=2H	Y=2H	19.5	21.0	19.9	21.3	21.7	19.0	20.6	19.4	20.9	21.2
	3H	20.6	22.0	21.0	22.3	22.6	20.2	21.5	20.5	21.8	22.2
	4H	20.9	22.1	21.3	22.5	22.9	20.5	21.8	20.9	22.1	22.5
	6H	21.0	22.2	21.4	22.5	22.9	20.7	21.8	21.1	22.2	22.6
	8H	21.0	22.1	21.4	22.5	22.9	20.7	21.8	21.1	22.2	22.6
	12H	21.0	22.0	21.4	22.4	22.8	20.7	21.7	21.1	22.1	22.6

UGR Viewed Endwise

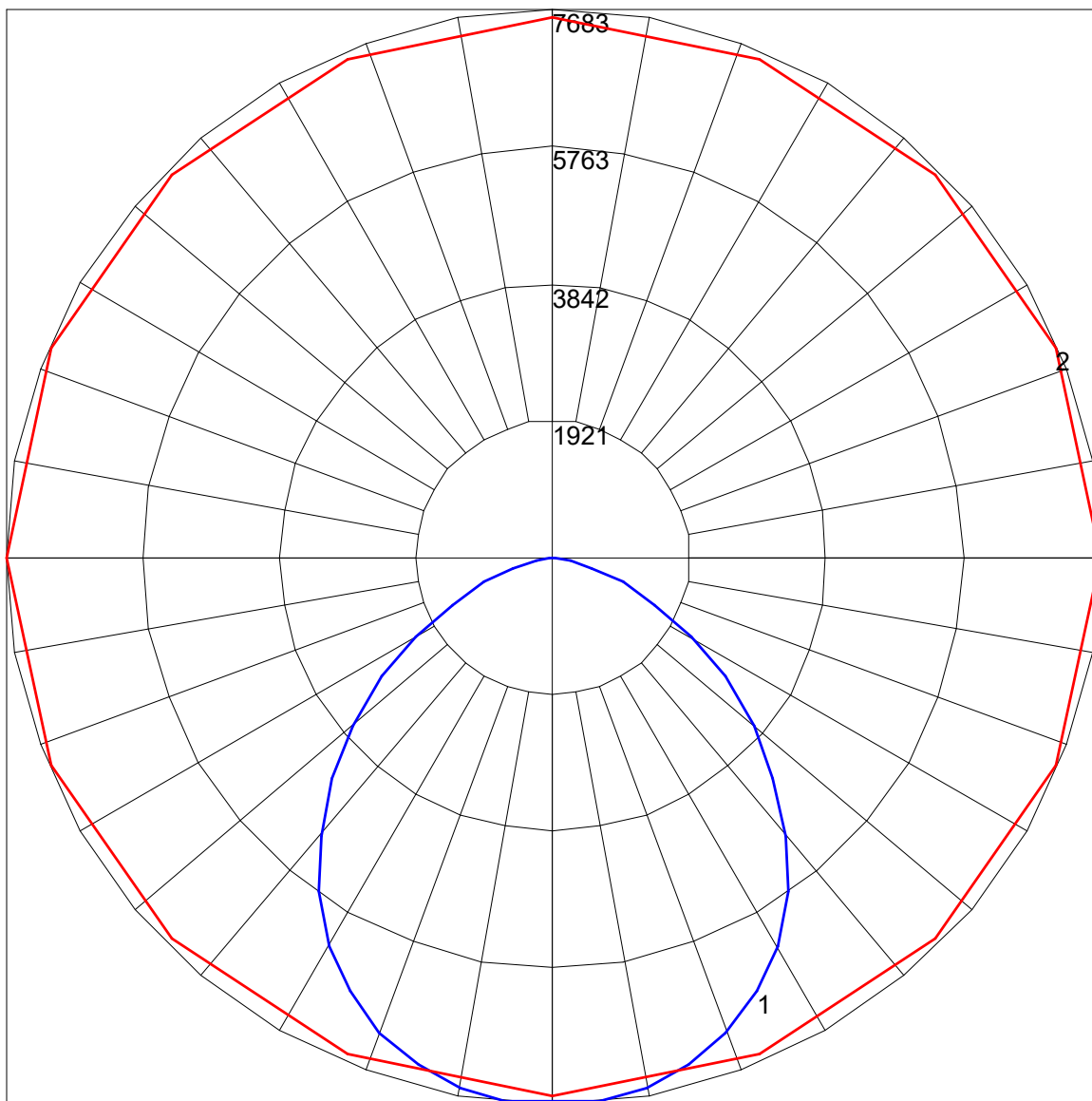
4H	2H	19.9	21.2	20.3	21.5	21.9	19.5	20.8	19.9	21.1	21.5
	3H	21.2	22.2	21.6	22.6	23.0	20.8	21.9	21.2	22.3	22.7
	4H	21.5	22.5	22.0	22.9	23.3	21.3	22.2	21.7	22.6	23.0
	6H	21.7	22.5	22.2	22.9	23.4	21.5	22.3	22.0	22.8	23.2
	8H	21.7	22.5	22.1	22.9	23.4	21.5	22.3	22.0	22.7	23.2
	12H	21.7	22.4	22.2	22.8	23.3	21.5	22.2	22.0	22.7	23.2

8H	4H	21.6	22.4	22.1	22.8	23.3	21.4	22.1	21.8	22.6	23.0
	6H	21.8	22.5	22.3	22.9	23.4	21.7	22.3	22.2	22.8	23.3
	8H	21.9	22.4	22.4	22.9	23.4	21.8	22.3	22.3	22.8	23.3
	12H	21.9	22.3	22.4	22.8	23.4	21.8	22.3	22.3	22.8	23.3

12H	4H	21.6	22.3	22.1	22.8	23.2	21.4	22.0	21.8	22.5	23.0
	6H	21.8	22.4	22.4	22.9	23.4	21.7	22.2	22.2	22.7	23.2
	8H	21.9	22.4	22.4	22.9	23.4	21.8	22.3	22.3	22.8	23.3

Maximum UGR = 23.4

POLAR GRAPH



Maximum Candela = 7683.392 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.)