



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 192_168_37_234-16_50_43-MERGED.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #13537338.04 & #12326812.12

[TESTLAB] UL Verification Services Inc.

[ISSUE DATE] 19-FEB-2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] 8CRDI-TL-L20-8TWU-L20-8TWD-xxx-DALI-UNV-LW-CS-RW-WHD-WM 4000k

[LUMINAIRE] White formed aluminum housing, wide distribution reflector

[MORE] trims, flush upright frosted lens enclosure, no downlight enclosure

[LAMP] Two white LEDs (one up/one down)

[_SEARCH_SOURCETYPE] LED

[_SEARCH_APPLICATION] INDOOR, DIRECT, INDIRECT

[_SEARCH_MOUNTING] WALL

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3850
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	80
Total Luminaire Watts	48
Ballast Factor	1.00
CIE Type	General Diffuse
Spacing Criterion (0-180)	N.A.
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	N.A.
Basic Luminous Shape	Circular w/ Sides
Luminous Length (0-180)	0.65 ft (Diameter)
Luminous Width (90-270)	0.65 ft (Diameter)
Luminous Height	2.17 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2676	2676	2676
55	1657	1657	1657
65	817	817	817
75	300	300	300
85	80	80	80

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 192_168_37_234-16_50_43-MERGED.IES

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	1405.606	1405.606	1405.606	1405.606	1405.606
2.5	1395.087	1395.087	1395.087	1395.087	1395.087
5.0	1371.419	1371.419	1371.419	1371.419	1371.419
7.5	1345.121	1345.121	1345.121	1345.121	1345.121
10.0	1316.194	1316.194	1316.194	1316.194	1316.194
12.5	1284.637	1284.637	1284.637	1284.637	1284.637
15.0	1253.080	1253.080	1253.080	1253.080	1253.080
17.5	1224.547	1224.547	1224.547	1224.547	1224.547
20.0	1198.907	1198.907	1198.907	1198.907	1198.907
22.5	1161.959	1161.959	1161.959	1161.959	1161.959
25.0	1099.765	1099.765	1099.765	1099.765	1099.765
27.5	1001.938	1001.938	1001.938	1001.938	1001.938
30.0	860.983	860.983	860.983	860.983	860.983
32.5	682.685	682.685	682.685	682.685	682.685
35.0	518.325	518.325	518.325	518.325	518.325
37.5	414.976	414.976	414.976	414.976	414.976
40.0	361.460	361.460	361.460	361.460	361.460
42.5	328.720	328.720	328.720	328.720	328.720
45.0	304.000	304.000	304.000	304.000	304.000
47.5	281.253	281.253	281.253	281.253	281.253
50.0	257.848	257.848	257.848	257.848	257.848
52.5	232.208	232.208	232.208	232.208	232.208
55.0	205.647	205.647	205.647	205.647	205.647
57.5	178.561	178.561	178.561	178.561	178.561
60.0	153.052	153.052	153.052	153.052	153.052
62.5	129.121	129.121	129.121	129.121	129.121
65.0	106.900	106.900	106.900	106.900	106.900
67.5	86.519	86.519	86.519	86.519	86.519
70.0	68.242	68.242	68.242	68.242	68.242
72.5	52.332	52.332	52.332	52.332	52.332
75.0	40.104	40.104	40.104	40.104	40.104
77.5	31.294	31.294	31.294	31.294	31.294
80.0	23.799	23.799	23.799	23.799	23.799
82.5	16.830	16.830	16.830	16.830	16.830
85.0	10.651	10.651	10.651	10.651	10.651
87.5	4.865	4.865	4.865	4.865	4.865
90.0	5.937	5.937	5.937	5.937	5.937
92.5	7.118	7.118	7.118	7.118	7.118
95.0	12.438	12.438	12.438	12.438	12.438
97.5	21.096	21.096	21.096	21.096	21.096
100.0	31.405	31.405	31.405	31.405	31.405
102.5	42.228	42.228	42.228	42.228	42.228
105.0	53.896	53.896	53.896	53.896	53.896
107.5	67.067	67.067	67.067	67.067	67.067
110.0	82.403	82.403	82.403	82.403	82.403
112.5	99.646	99.646	99.646	99.646	99.646
115.0	119.165	119.165	119.165	119.165	119.165
117.5	141.032	141.032	141.032	141.032	141.032
120.0	165.503	165.503	165.503	165.503	165.503
122.5	192.726	192.726	192.726	192.726	192.726
125.0	222.811	222.811	222.811	222.811	222.811
127.5	254.913	254.913	254.913	254.913	254.913
130.0	288.300	288.300	288.300	288.300	288.300
132.5	321.870	321.870	321.870	321.870	321.870

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 192_168_37_234-16_50_43-MERGED.IES

CANDELA TABULATION - (Cont.)

135.0	355.405	355.405	355.405	355.405	355.405
137.5	390.369	390.369	390.369	390.369	390.369
140.0	430.726	430.726	430.726	430.726	430.726
142.5	482.458	482.458	482.458	482.458	482.458
145.0	552.166	552.166	552.166	552.166	552.166
147.5	642.421	642.421	642.421	642.421	642.421
150.0	754.322	754.322	754.322	754.322	754.322
152.5	870.992	870.992	870.992	870.992	870.992
155.0	989.497	989.497	989.497	989.497	989.497
157.5	1095.160	1095.160	1095.160	1095.160	1095.160
160.0	1177.710	1177.710	1177.710	1177.710	1177.710
162.5	1233.110	1233.110	1233.110	1233.110	1233.110
165.0	1264.663	1264.663	1264.663	1264.663	1264.663
167.5	1281.539	1281.539	1281.539	1281.539	1281.539
170.0	1291.078	1291.078	1291.078	1291.078	1291.078
172.5	1298.049	1298.049	1298.049	1298.049	1298.049
175.0	1304.286	1304.286	1304.286	1304.286	1304.286
177.5	1307.222	1307.222	1307.222	1307.222	1307.222
180.0	1306.570	1306.570	1306.570	1306.570	1306.570

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 192_168_37_234-16_50_43-MERGED.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	483.23	N.A.	12.60
0-30	975.60	N.A.	25.30
0-40	1319.08	N.A.	34.30
0-60	1738.36	N.A.	45.20
0-80	1890.04	N.A.	49.10
0-90	1902.89	N.A.	49.40
10-90	1773.69	N.A.	46.10
20-40	835.85	N.A.	21.70
20-50	1071.7	N.A.	27.80
40-70	526.24	N.A.	13.70
60-80	151.69	N.A.	3.90
70-80	44.73	N.A.	1.20
80-90	12.85	N.A.	0.30
90-110	74.16	N.A.	1.90
90-120	193.69	N.A.	5.00
90-130	393.90	N.A.	10.20
90-150	1021.22	N.A.	26.50
90-180	1946.96	N.A.	50.60
110-180	1872.8	N.A.	48.60
0-180	3849.85	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	129.20
10-20	354.03
20-30	492.37
30-40	343.48
40-50	235.85
50-60	183.43
60-70	106.96
70-80	44.73
80-90	12.85
90-100	16.15
100-110	58.01
110-120	119.53
120-130	200.21
130-140	274.83
140-150	352.49
150-160	447.93
160-170	353.77
170-180	124.04

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 192_168_37_234-16_50_43-MERGED.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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	49
1	99	95	92	89	91	88	85	82	75	73	71	62	61	60	51	50	49	44
2	91	85	79	75	84	79	74	70	67	64	61	56	54	52	47	45	44	39
3	84	76	69	64	78	70	65	60	60	56	53	51	48	46	43	41	39	35
4	78	68	61	56	72	63	57	52	55	50	46	47	43	41	39	37	35	31
5	72	62	54	49	67	58	51	46	50	45	41	43	39	36	36	34	32	28
6	67	56	49	43	62	52	46	41	46	41	37	39	36	33	34	31	29	26
7	62	51	44	39	58	48	42	37	42	37	33	36	33	30	31	28	26	24
8	58	47	40	35	54	44	38	33	39	34	30	34	30	27	29	26	24	22
9	55	43	36	32	51	41	35	30	36	31	28	31	28	25	27	24	22	20
10	51	40	33	29	48	38	32	28	34	29	25	29	26	23	26	23	21	19

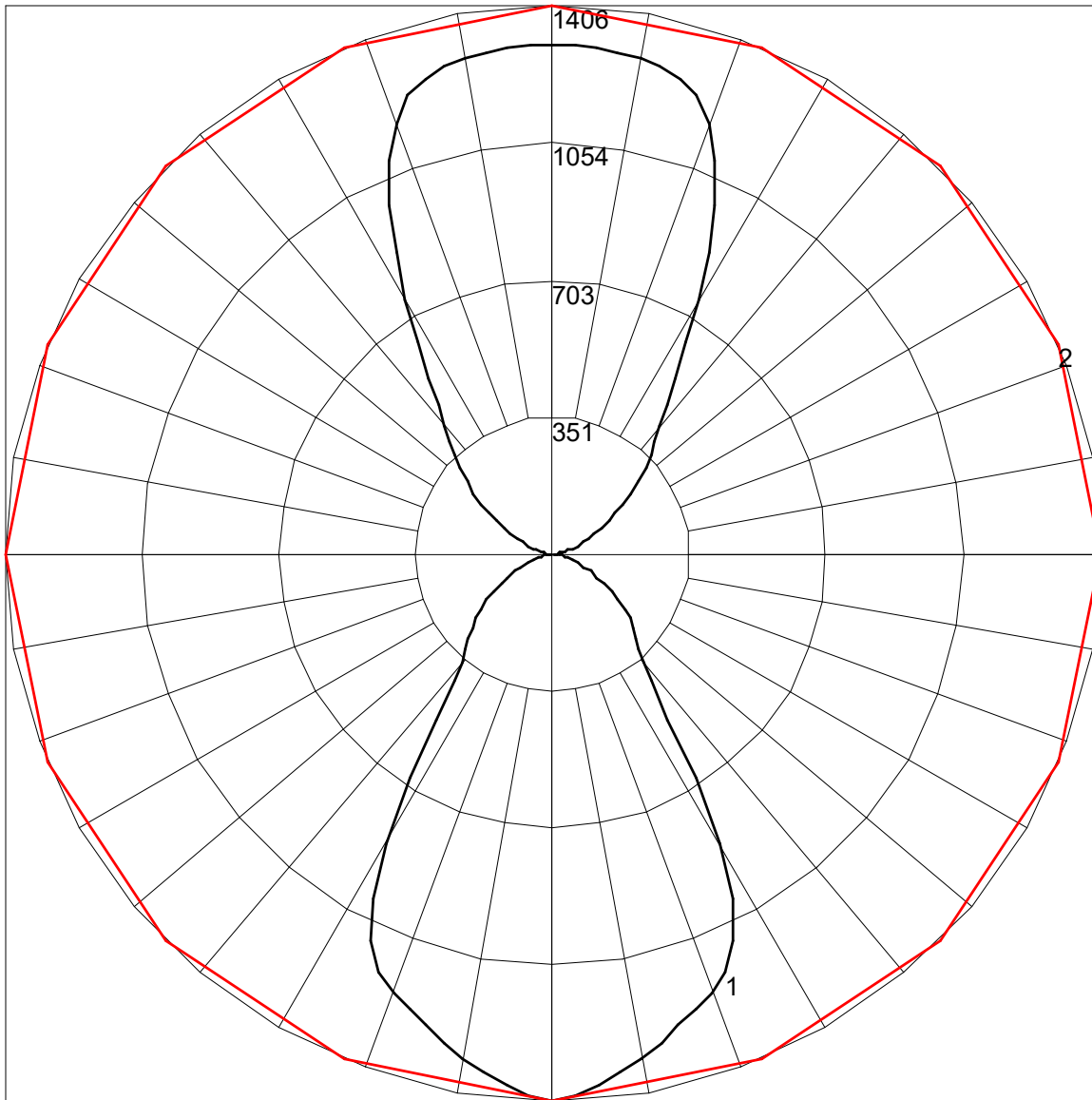
IES INDOOR REPORT
PHOTOMETRIC FILENAME : 192_168_37_234-16_50_43-MERGED.IES

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	6.8	7.6	7.8	8.5	9.8	6.8	7.6	7.8	8.5	9.8
	3H	7.4	8.1	8.4	9.1	10.4	7.4	8.1	8.4	9.1	10.4
	4H	7.5	8.2	8.5	9.2	10.5	7.5	8.2	8.5	9.2	10.5
	6H	7.5	8.1	8.6	9.1	10.5	7.5	8.1	8.6	9.1	10.5
	8H	7.5	8.1	8.5	9.1	10.4	7.5	8.1	8.5	9.1	10.4
	12H	7.5	8.0	8.5	9.0	10.4	7.5	8.0	8.5	9.0	10.4
4H	2H	6.9	7.6	7.9	8.5	9.9	6.9	7.6	7.9	8.5	9.9
	3H	7.6	8.2	8.7	9.2	10.5	7.6	8.2	8.7	9.2	10.5
	4H	7.8	8.3	8.8	9.3	10.6	7.8	8.3	8.8	9.3	10.6
	6H	7.8	8.3	8.9	9.3	10.7	7.8	8.3	8.9	9.3	10.7
	8H	7.8	8.2	8.9	9.3	10.6	7.8	8.2	8.9	9.3	10.6
	12H	7.8	8.1	8.8	9.2	10.6	7.8	8.1	8.8	9.2	10.6
8H	4H	7.7	8.1	8.8	9.2	10.5	7.7	8.1	8.8	9.2	10.5
	6H	7.8	8.1	8.9	9.2	10.6	7.8	8.1	8.9	9.2	10.6
	8H	7.8	8.1	8.9	9.2	10.6	7.8	8.1	8.9	9.2	10.6
	12H	7.8	8.1	8.9	9.1	10.5	7.8	8.1	8.9	9.1	10.5
12H	4H	7.7	8.0	8.7	9.1	10.4	7.7	8.0	8.7	9.1	10.4
	6H	7.8	8.1	8.9	9.1	10.5	7.8	8.1	8.9	9.1	10.5
	8H	7.8	8.0	8.9	9.1	10.5	7.8	8.0	8.9	9.1	10.5

Maximum UGR = 10.7

POLAR GRAPH



Maximum Candela = 1405.606 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)
2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)