

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4CR-XX-L12-835-XXX-DIM-UNV-OW-CS-XX_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST]GEN FROM 13131414.01
[TESTLAB] UL Verification Services Inc.
[ISSUE DATE] 11-18-2024
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO. 64836
[LUMCAT] 4CR-xx-L12-835-xxx-DIM-UNV-OW-CS-xx
[LUMINAIRE] Aluminum housing and reflector, no enclosure
[LAMP] One white LED
[SEARCH_SOURCETYPE] LED
[SEARCH_APPLICATION] Indoor, Downlight
[SEARCH_MOUNTING] Pendant, Surface, Suspended, Wall

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1267
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	89
Total Luminaire Watts	14.3
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.16
Spacing Criterion (90-270)	1.16
Spacing Criterion (Diagonal)	1.04
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.21 ft (Diameter)
Luminous Width (90-270)	0.21 ft (Diameter)
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	34381	34381	34381
55	9786	9786	9786
65	4440	4440	4440
75	1374	1374	1374
85	370	370	370

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CANDELA TABULATION

	<u>0</u>
0.0	1027.808
0.5	1027.808
1.0	1027.808
1.5	1028.320
2.0	1028.831
2.5	1029.342
3.0	1029.853
3.5	1031.386
4.0	1033.430
4.5	1035.986
5.0	1039.052
5.5	1042.630
6.0	1045.697
6.5	1049.785
7.0	1053.874
7.5	1057.963
8.0	1062.563
8.5	1066.140
9.0	1069.207
9.5	1071.251
10.0	1073.296
10.5	1074.829
11.0	1075.851
11.5	1076.362
12.0	1075.851
12.5	1075.340
13.0	1073.807
13.5	1072.274
14.0	1070.229
14.5	1068.696
15.0	1066.652
15.5	1064.607
16.0	1062.052
16.5	1060.518
17.0	1058.474
17.5	1056.941
18.0	1055.919
18.5	1054.385
19.0	1051.830
19.5	1047.230
20.0	1042.630
20.5	1036.497
21.0	1029.342
21.5	1021.675
22.0	1014.009
22.5	1004.809
23.0	995.098
23.5	984.366
24.0	973.633
24.5	962.388
25.0	950.122
25.5	936.834
26.0	922.523
26.5	906.679

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CANDELA TABULATION - (Cont.)

27.0	889.813
27.5	870.392
28.0	851.992
28.5	832.571
29.0	813.660
29.5	794.750
30.0	774.817
30.5	754.374
31.0	733.419
31.5	711.953
32.0	691.509
32.5	670.043
33.0	648.066
33.5	626.089
34.0	603.090
34.5	580.091
35.0	556.580
35.5	532.048
36.0	506.647
36.5	480.019
37.0	451.551
37.5	421.345
38.0	390.117
38.5	358.276
39.0	326.589
39.5	295.872
40.0	266.637
40.5	239.141
41.0	213.484
41.5	189.513
42.0	167.127
42.5	146.582
43.0	128.029
43.5	111.674
44.0	97.874
44.5	86.375
45.0	76.817
45.5	68.895
46.0	62.302
46.5	56.680
47.0	51.927
47.5	47.838
48.0	44.261
48.5	41.092
49.0	38.281
49.5	35.777
50.0	33.425
50.5	31.330
51.0	29.388
51.5	27.599
52.0	25.964
52.5	24.379
53.0	22.897
53.5	21.466
54.0	20.137
54.5	18.859

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CANDELA TABULATION - (Cont.)

55.0	17.735
55.5	16.713
56.0	15.793
56.5	14.924
57.0	14.157
57.5	13.442
58.0	12.777
58.5	12.164
59.0	11.602
59.5	10.989
60.0	10.477
60.5	9.915
61.0	9.455
61.5	8.944
62.0	8.484
62.5	8.024
63.0	7.615
63.5	7.155
64.0	6.746
64.5	6.338
65.0	5.929
65.5	5.571
66.0	5.213
66.5	4.804
67.0	4.498
67.5	4.140
68.0	3.833
68.5	3.578
69.0	3.271
69.5	3.015
70.0	2.760
70.5	2.555
71.0	2.351
71.5	2.147
72.0	1.942
72.5	1.789
73.0	1.635
73.5	1.482
74.0	1.380
74.5	1.227
75.0	1.124
75.5	1.022
76.0	0.920
76.5	0.869
77.0	0.767
77.5	0.664
78.0	0.613
78.5	0.562
79.0	0.511
79.5	0.460
80.0	0.409
80.5	0.358
81.0	0.307
81.5	0.307
82.0	0.256
82.5	0.204

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CANDELA TABULATION - (Cont.)

83.0	0.204
83.5	0.153
84.0	0.153
84.5	0.153
85.0	0.102
85.5	0.102
86.0	0.102
86.5	0.051
87.0	0.051
87.5	0.051
88.0	0.051
88.5	0.051
89.0	0.051
89.5	0.051
90.0	0.000
90.5	0.000
91.0	0.000
91.5	0.000
92.0	0.000
92.5	0.000
93.0	0.000
93.5	0.000
94.0	0.000
94.5	0.000
95.0	0.000
95.5	0.000
96.0	0.000
96.5	0.000
97.0	0.000
97.5	0.000
98.0	0.000
98.5	0.000
99.0	0.000
99.5	0.000
100.0	0.000
100.5	0.000
101.0	0.000
101.5	0.000
102.0	0.000
102.5	0.000
103.0	0.000
103.5	0.000
104.0	0.000
104.5	0.000
105.0	0.000
105.5	0.000
106.0	0.000
106.5	0.000
107.0	0.000
107.5	0.000
108.0	0.000
108.5	0.000
109.0	0.000
109.5	0.000
110.0	0.000
110.5	0.000

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CANDELA TABULATION - (Cont.)

111.0	0.000
111.5	0.000
112.0	0.000
112.5	0.000
113.0	0.000
113.5	0.000
114.0	0.000
114.5	0.000
115.0	0.000
115.5	0.000
116.0	0.000
116.5	0.000
117.0	0.000
117.5	0.000
118.0	0.000
118.5	0.000
119.0	0.000
119.5	0.000
120.0	0.000
120.5	0.000
121.0	0.000
121.5	0.000
122.0	0.000
122.5	0.000
123.0	0.000
123.5	0.000
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124.5	0.000
125.0	0.000
125.5	0.000
126.0	0.000
126.5	0.000
127.0	0.000
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128.0	0.000
128.5	0.000
129.0	0.000
129.5	0.000
130.0	0.000
130.5	0.000
131.0	0.000
131.5	0.000
132.0	0.000
132.5	0.000
133.0	0.000
133.5	0.000
134.0	0.000
134.5	0.000
135.0	0.000
135.5	0.000
136.0	0.000
136.5	0.000
137.0	0.000
137.5	0.000
138.0	0.000
138.5	0.000

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CANDELA TABULATION - (Cont.)

139.0	0.000
139.5	0.000
140.0	0.000
140.5	0.000
141.0	0.000
141.5	0.000
142.0	0.000
142.5	0.000
143.0	0.000
143.5	0.000
144.0	0.000
144.5	0.000
145.0	0.000
145.5	0.000
146.0	0.000
146.5	0.000
147.0	0.000
147.5	0.000
148.0	0.000
148.5	0.000
149.0	0.000
149.5	0.000
150.0	0.000
150.5	0.000
151.0	0.000
151.5	0.000
152.0	0.000
152.5	0.000
153.0	0.000
153.5	0.000
154.0	0.000
154.5	0.000
155.0	0.000
155.5	0.000
156.0	0.000
156.5	0.000
157.0	0.000
157.5	0.000
158.0	0.000
158.5	0.000
159.0	0.000
159.5	0.000
160.0	0.000
160.5	0.000
161.0	0.000
161.5	0.000
162.0	0.000
162.5	0.000
163.0	0.000
163.5	0.000
164.0	0.000
164.5	0.000
165.0	0.000
165.5	0.000
166.0	0.000
166.5	0.000

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167.0	0.000
167.5	0.000
168.0	0.000
168.5	0.000
169.0	0.000
169.5	0.000
170.0	0.000
170.5	0.000
171.0	0.000
171.5	0.000
172.0	0.000
172.5	0.000
173.0	0.000
173.5	0.000
174.0	0.000
174.5	0.000
175.0	0.000
175.5	0.000
176.0	0.000
176.5	0.000
177.0	0.000
177.5	0.000
178.0	0.000
178.5	0.000
179.0	0.000
179.5	0.000
180.0	0.000

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Zone	Lumens	%Lamp	%Fixt
0-20	401.88	N.A.	31.70
0-30	830.80	N.A.	65.60
0-40	1165.29	N.A.	92.00
0-60	1259.41	N.A.	99.40
0-80	1266.81	N.A.	100.00
0-90	1266.97	N.A.	100.00
10-90	1166.49	N.A.	92.10
20-40	763.41	N.A.	60.30
20-50	840.49	N.A.	66.30
40-70	100.17	N.A.	7.90
60-80	7.40	N.A.	0.60
70-80	1.34	N.A.	0.10
80-90	0.16	N.A.	0.00
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	1266.97	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	100.49
10-20	301.40
20-30	428.92
30-40	334.49
40-50	77.08
50-60	17.03
60-70	6.06
70-80	1.34
80-90	0.16
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

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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	118	118	118	118	115	115	115	115	110	110	110	105	105	105	101	101	101	99
1	112	109	107	104	110	107	105	103	103	101	100	99	98	97	96	95	94	92
2	106	101	97	94	104	100	96	93	96	93	91	93	91	89	91	89	87	85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	83	80	79
4	95	87	82	77	93	86	81	77	84	80	76	82	78	75	80	77	74	73
5	90	81	75	71	88	80	75	71	79	74	70	77	73	69	75	72	69	67
6	85	76	70	65	84	75	69	65	74	69	65	72	68	64	71	67	64	62
7	81	71	65	60	79	70	64	60	69	64	60	68	63	60	67	63	59	58
8	76	67	60	56	75	66	60	56	65	60	56	64	59	55	63	58	55	54
9	72	62	56	52	71	62	56	52	61	56	52	60	55	52	59	55	52	50
10	69	59	53	49	68	58	53	49	58	52	49	57	52	48	56	51	48	47

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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

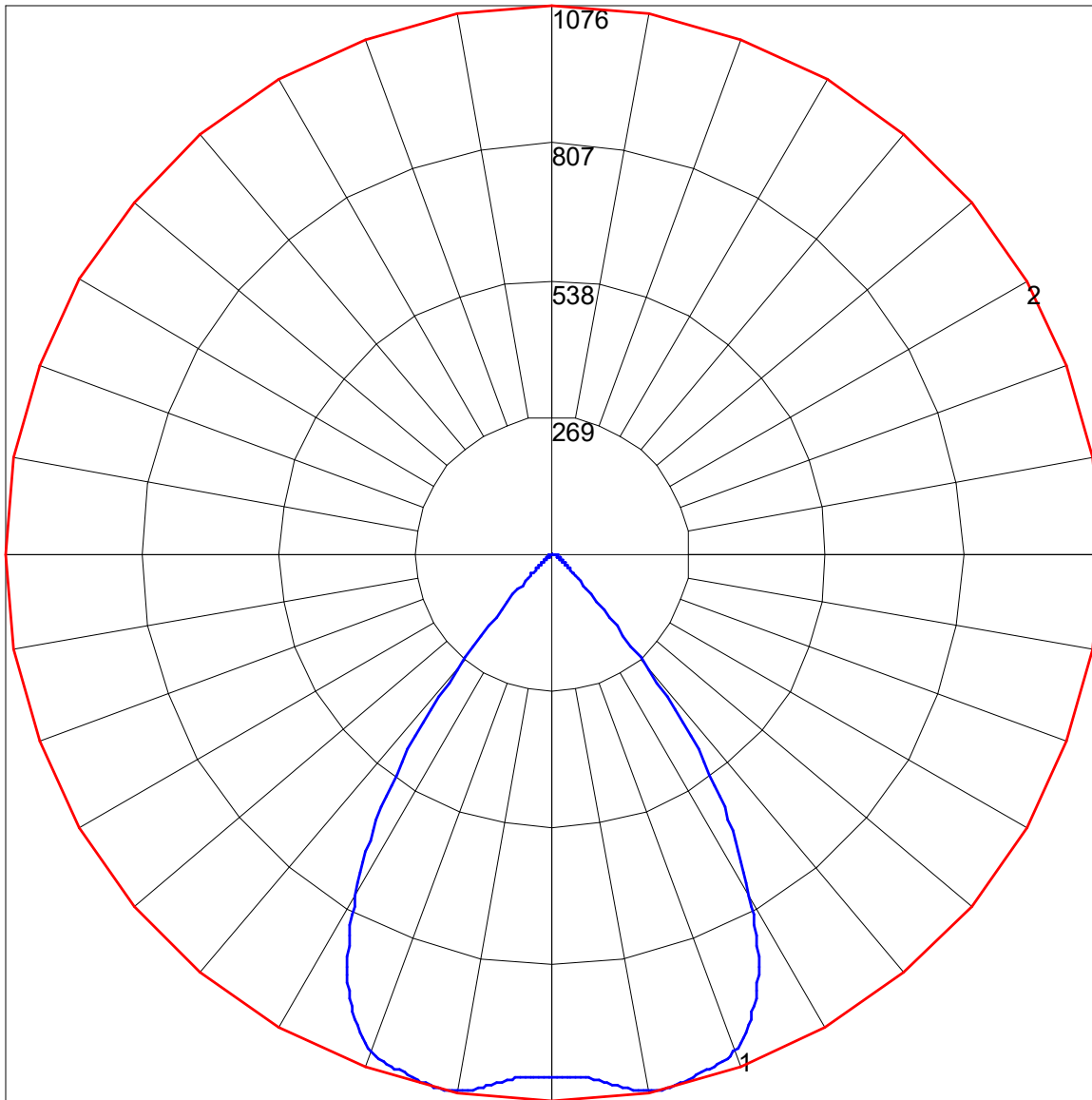
X=2H	Y=2H	9.7	10.7	10.1	11.1	11.4	9.7	10.7	10.1	11.1	11.4
	3H	10.0	10.9	10.4	11.2	11.6	10.0	10.9	10.4	11.2	11.6
	4H	10.0	10.8	10.4	11.1	11.5	10.0	10.8	10.4	11.1	11.5
	6H	9.9	10.6	10.3	11.0	11.4	9.9	10.6	10.3	11.0	11.4
	8H	9.8	10.5	10.3	10.9	11.3	9.8	10.5	10.3	10.9	11.3
	12H	9.8	10.4	10.2	10.8	11.3	9.8	10.4	10.2	10.8	11.3

UGR Viewed Endwise

4H	2H	9.8	10.6	10.2	11.0	11.3	9.8	10.6	10.2	11.0	11.3
	3H	10.1	10.8	10.5	11.2	11.6	10.1	10.8	10.5	11.2	11.6
	4H	10.1	10.7	10.5	11.1	11.5	10.1	10.7	10.5	11.1	11.5
	6H	10.0	10.5	10.4	10.9	11.4	10.0	10.5	10.4	10.9	11.4
	8H	9.9	10.4	10.4	10.8	11.3	9.9	10.4	10.4	10.8	11.3
	12H	9.9	10.3	10.4	10.8	11.2	9.9	10.3	10.4	10.8	11.2
8H	4H	9.9	10.4	10.4	10.8	11.3	9.9	10.4	10.4	10.8	11.3
	6H	9.8	10.2	10.4	10.7	11.2	9.8	10.2	10.4	10.7	11.2
	8H	9.8	10.1	10.3	10.6	11.1	9.8	10.1	10.3	10.6	11.1
	12H	9.7	10.0	10.2	10.5	11.1	9.7	10.0	10.2	10.5	11.1
12H	4H	9.9	10.3	10.4	10.8	11.2	9.9	10.3	10.4	10.8	11.2
	6H	9.8	10.1	10.3	10.6	11.1	9.8	10.1	10.3	10.6	11.1
	8H	9.7	10.0	10.2	10.5	11.1	9.7	10.0	10.2	10.5	11.1

Maximum UGR = 11.6

POLAR GRAPH



Maximum Candela = 1076.362 Located At Horizontal Angle = 0, Vertical Angle = 11.5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (11.5) (Through Max. Cd.)