

## IES INDOOR REPORT

PHOTOMETRIC FILENAME : 2DR-L15-835-DIM-UNV-OW-OF-SG-WETCC\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]GEN FROM 13131414.01

[TESTLAB] UL Verification Services Inc.

[ISSUE DATE] 06-05-2023

[MANUFAC] WILLIAMS INDOOR

[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO. 64836

[LUMCAT] 2DR-L15-835-DIM-UNV-OW-OF-SG-WETCC

[LUMINAIRE] Aluminum housing and reflector, no enclosure

[LAMP] One white LED

[BALLAST] Philips Advance XI036C100V054DSM1

[OTHER] 24.8 C, 120.1 V, 0.251684 A, 30.1187 W, 0.996411 PF, 59.9999 H

[OTHER] This test was performed using the calibrated photodetector met

[MORE] hod of absolute photometry.

[\_SEARCH\_SOURCE TYPE] LED

[\_SEARCH\_APPLICATION] Indoor, Downlight

[\_SEARCH\_MOUNTING] Recessed

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1228
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	69
Total Luminaire Watts	17.7
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

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**LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	33337	33337	33337
55	9488	9488	9488
65	4305	4305	4305
75	1333	1333	1333
85	359	359	359

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CANDELA TABULATION

	<u>0</u>
0.0	996.593
0.5	996.593
1.0	996.593
1.5	997.088
2.0	997.584
2.5	998.080
3.0	998.575
3.5	1000.062
4.0	1002.044
4.5	1004.522
5.0	1007.495
5.5	1010.964
6.0	1013.938
6.5	1017.902
7.0	1021.867
7.5	1025.832
8.0	1030.292
8.5	1033.761
9.0	1036.734
9.5	1038.716
10.0	1040.699
10.5	1042.185
11.0	1043.177
11.5	1043.672
12.0	1043.177
12.5	1042.681
13.0	1041.194
13.5	1039.708
14.0	1037.725
14.5	1036.239
15.0	1034.256
15.5	1032.274
16.0	1029.796
16.5	1028.309
17.0	1026.327
17.5	1024.840
18.0	1023.849
18.5	1022.363
19.0	1019.885
19.5	1015.425
20.0	1010.964
20.5	1005.018
21.0	998.080
21.5	990.646
22.0	983.212
22.5	974.292
23.0	964.876
23.5	954.469
24.0	944.062
24.5	933.160
25.0	921.266
25.5	908.381
26.0	894.505
26.5	879.143

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**CANDELA TABULATION - (Cont.)**

27.0	862.789
27.5	843.957
28.0	826.117
28.5	807.285
29.0	788.949
29.5	770.613
30.0	751.285
30.5	731.463
31.0	711.144
31.5	690.330
32.0	670.507
32.5	649.693
33.0	628.384
33.5	607.074
34.0	584.774
34.5	562.473
35.0	539.677
35.5	515.889
36.0	491.259
36.5	465.440
37.0	437.837
37.5	408.549
38.0	378.269
38.5	347.395
39.0	316.670
39.5	286.886
40.0	258.539
40.5	231.878
41.0	207.000
41.5	183.758
42.0	162.052
42.5	142.130
43.0	124.140
43.5	108.282
44.0	94.902
44.5	83.751
45.0	74.484
45.5	66.803
46.0	60.410
46.5	54.959
47.0	50.350
47.5	46.385
48.0	42.916
48.5	39.844
49.0	37.118
49.5	34.690
50.0	32.410
50.5	30.378
51.0	28.495
51.5	26.761
52.0	25.175
52.5	23.639
53.0	22.202
53.5	20.814
54.0	19.525
54.5	18.287

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CANDELA TABULATION - (Cont.)

55.0	17.196
55.5	16.205
56.0	15.313
56.5	14.471
57.0	13.727
57.5	13.034
58.0	12.389
58.5	11.795
59.0	11.249
59.5	10.655
60.0	10.159
60.5	9.614
61.0	9.168
61.5	8.672
62.0	8.226
62.5	7.780
63.0	7.384
63.5	6.938
64.0	6.542
64.5	6.145
65.0	5.749
65.5	5.402
66.0	5.055
66.5	4.658
67.0	4.361
67.5	4.014
68.0	3.717
68.5	3.469
69.0	3.172
69.5	2.924
70.0	2.676
70.5	2.478
71.0	2.280
71.5	2.081
72.0	1.883
72.5	1.734
73.0	1.586
73.5	1.437
74.0	1.338
74.5	1.189
75.0	1.090
75.5	0.991
76.0	0.892
76.5	0.842
77.0	0.743
77.5	0.644
78.0	0.595
78.5	0.545
79.0	0.496
79.5	0.446
80.0	0.396
80.5	0.347
81.0	0.297
81.5	0.297
82.0	0.248
82.5	0.198

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CANDELA TABULATION - (Cont.)

83.0	0.198
83.5	0.149
84.0	0.149
84.5	0.149
85.0	0.099
85.5	0.099
86.0	0.099
86.5	0.050
87.0	0.050
87.5	0.050
88.0	0.050
88.5	0.050
89.0	0.050
89.5	0.050
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

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : 2DR-L15-835-DIM-UNV-OW-OF-SG-WETCC\_.IES

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
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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

IES INDOOR REPORT  
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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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CANDELA TABULATION - (Cont.)

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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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	389.68	N.A.	31.70
0-30	805.57	N.A.	65.60
0-40	1129.9	N.A.	92.00
0-60	1221.16	N.A.	99.40
0-80	1228.34	N.A.	100.00
0-90	1228.49	N.A.	100.00
10-90	1131.06	N.A.	92.10
20-40	740.23	N.A.	60.30
20-50	814.97	N.A.	66.30
40-70	97.13	N.A.	7.90
60-80	7.18	N.A.	0.60
70-80	1.30	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	1228.49	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	97.44
10-20	292.24
20-30	415.89
30-40	324.34
40-50	74.74
50-60	16.52
60-70	5.88
70-80	1.30
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	110	108	106	111	108	106	104	104	102	101	101	99	98	97	96	95	93
2	107	102	98	95	105	101	97	94	97	94	92	94	92	90	92	90	88	86
3	102	95	90	86	100	94	89	85	91	87	84	89	85	82	86	83	81	79
4	96	88	83	78	94	87	82	78	85	80	77	83	79	76	81	78	75	73
5	91	82	76	72	89	81	76	71	79	75	71	78	73	70	76	72	69	68
6	86	77	71	66	85	76	70	66	74	69	65	73	68	65	72	68	64	63
7	82	72	66	61	80	71	65	61	70	64	61	69	64	60	67	63	60	58
8	77	67	61	57	76	67	61	57	66	60	56	65	60	56	64	59	56	54
9	73	63	57	53	72	63	57	53	62	56	53	61	56	52	60	55	52	51
10	70	59	53	49	69	59	53	49	58	53	49	57	52	49	57	52	49	47

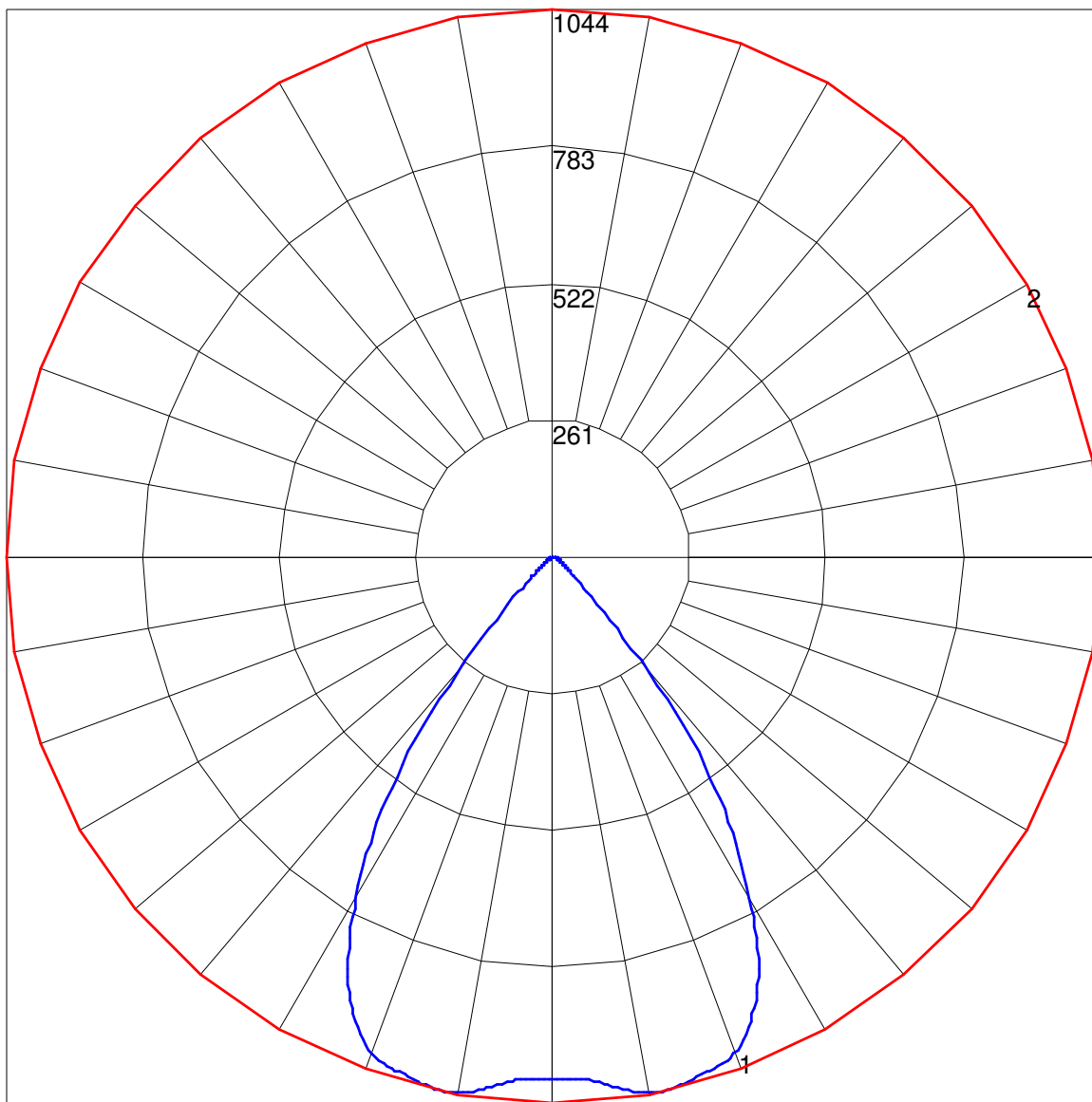
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**UGR TABLE - CORRECTED**

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					UGR Viewed Endwise				
X=2H	Y=2H	9.5	10.5	9.9	10.9	11.2	9.5	10.5	9.9	10.9	11.2
	3H	9.8	10.7	10.2	11.0	11.4	9.8	10.7	10.2	11.0	11.4
	4H	9.8	10.6	10.2	10.9	11.3	9.8	10.6	10.2	10.9	11.3
	6H	9.7	10.4	10.1	10.8	11.2	9.7	10.4	10.1	10.8	11.2
	8H	9.7	10.3	10.1	10.7	11.1	9.7	10.3	10.1	10.7	11.1
	12H	9.6	10.3	10.0	10.6	11.1	9.6	10.3	10.0	10.6	11.1
4H	2H	9.6	10.4	10.0	10.8	11.1	9.6	10.4	10.0	10.8	11.1
	3H	9.9	10.6	10.3	11.0	11.4	9.9	10.6	10.3	11.0	11.4
	4H	9.9	10.5	10.3	10.9	11.3	9.9	10.5	10.3	10.9	11.3
	6H	9.8	10.3	10.3	10.7	11.2	9.8	10.3	10.3	10.7	11.2
	8H	9.7	10.2	10.2	10.6	11.1	9.7	10.2	10.2	10.6	11.1
	12H	9.7	10.1	10.2	10.6	11.0	9.7	10.1	10.2	10.6	11.0
8H	4H	9.7	10.2	10.2	10.7	11.1	9.7	10.2	10.2	10.7	11.1
	6H	9.6	10.0	10.2	10.5	11.0	9.6	10.0	10.2	10.5	11.0
	8H	9.6	9.9	10.1	10.4	10.9	9.6	9.9	10.1	10.4	10.9
	12H	9.5	9.8	10.0	10.3	10.9	9.5	9.8	10.0	10.3	10.9
12H	4H	9.7	10.1	10.2	10.6	11.0	9.7	10.1	10.2	10.6	11.0
	6H	9.6	9.9	10.1	10.4	10.9	9.6	9.9	10.1	10.4	10.9
	8H	9.5	9.8	10.0	10.3	10.9	9.5	9.8	10.0	10.3	10.9

Maximum UGR = 11.4

POLAR GRAPH



Maximum Candela = 1043.672 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.)