

IES INDOOR REPORT

PHOTOMETRIC FILENAME : V2DR-L5-830-DIM-UNV-RW-OF-CS_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM 13257153.03
[TESTLAB] UL Verification Services Inc.
[ISSUE DATE] 2025-05-20
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] V2DR-L5-830-DIM-UNV-RW-OF-CS_
[LUMINAIRE] Aluminum housing, optics, and trim enclosure
[LAMP] One white LED
[OTHER] This test was performed using the calibrated photodetector method of absolute photometry.
[SEARCH_SOURCETYPE] LED
[SEARCH_APPLICATION] Indoor, Downlight
[SEARCH_MOUNTING] Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	471
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	70
Total Luminaire Watts	6.7
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.88
Spacing Criterion (90-270)	0.88
Spacing Criterion (Diagonal)	0.80
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	16871	16871	16871
55	13350	13350	13350
65	9979	9979	9979
75	5196	5196	5196
85	3148	3148	3148

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CANDELA TABULATION

	<u>0</u>
0.0	560.784
0.5	560.784
1.0	560.495
1.5	560.206
2.0	560.206
2.5	559.628
3.0	558.761
3.5	557.604
4.0	556.448
4.5	555.292
5.0	553.557
5.5	552.112
6.0	550.378
6.5	548.354
7.0	546.331
7.5	544.307
8.0	542.284
8.5	539.971
9.0	537.370
9.5	535.057
10.0	532.456
10.5	529.565
11.0	526.385
11.5	523.206
12.0	519.737
12.5	516.268
13.0	512.510
13.5	508.463
14.0	504.127
14.5	499.791
15.0	494.877
15.5	489.963
16.0	484.471
16.5	478.979
17.0	473.198
17.5	467.127
18.0	460.768
18.5	453.830
19.0	446.604
19.5	438.799
20.0	430.705
20.5	422.322
21.0	413.361
21.5	404.111
22.0	393.994
22.5	383.877
23.0	373.181
23.5	362.197
24.0	350.635
24.5	339.072
25.0	327.220
25.5	314.791
26.0	302.072
26.5	289.353

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CANDELA TABULATION - (Cont.)

27.0	276.721
27.5	264.031
28.0	251.225
28.5	238.478
29.0	225.441
29.5	212.317
30.0	199.310
30.5	186.504
31.0	173.872
31.5	161.673
32.0	149.937
32.5	138.837
33.0	128.547
33.5	119.008
34.0	110.133
34.5	102.011
35.0	94.640
35.5	87.875
36.0	81.747
36.5	76.255
37.0	71.370
37.5	67.005
38.0	63.045
38.5	59.518
39.0	56.425
39.5	53.708
40.0	51.280
40.5	49.170
41.0	47.291
41.5	45.614
42.0	44.111
42.5	42.781
43.0	41.567
43.5	40.498
44.0	39.486
44.5	38.561
45.0	37.694
45.5	36.856
46.0	36.075
46.5	35.295
47.0	34.572
47.5	33.849
48.0	33.127
48.5	32.433
49.0	31.739
49.5	31.045
50.0	30.381
50.5	29.745
51.0	29.080
51.5	28.444
52.0	27.837
52.5	27.201
53.0	26.594
53.5	25.987
54.0	25.380
54.5	24.773

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CANDELA TABULATION - (Cont.)

55.0	24.195
55.5	23.617
56.0	23.038
56.5	22.460
57.0	21.882
57.5	21.333
58.0	20.755
58.5	20.206
59.0	19.656
59.5	19.136
60.0	18.587
60.5	18.038
61.0	17.488
61.5	16.968
62.0	16.419
62.5	15.899
63.0	15.378
63.5	14.858
64.0	14.338
64.5	13.817
65.0	13.326
65.5	12.834
66.0	12.343
66.5	11.823
67.0	11.360
67.5	10.898
68.0	10.406
68.5	9.944
69.0	9.481
69.5	9.019
70.0	8.585
70.5	8.123
71.0	7.689
71.5	7.227
72.0	6.793
72.5	6.359
73.0	5.926
73.5	5.492
74.0	5.088
74.5	4.654
75.0	4.249
75.5	3.873
76.0	3.498
76.5	3.209
77.0	2.948
77.5	2.717
78.0	2.544
78.5	2.399
79.0	2.284
79.5	2.168
80.0	2.023
80.5	1.908
81.0	1.792
81.5	1.677
82.0	1.532
82.5	1.416

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CANDELA TABULATION - (Cont.)

83.0	1.330
83.5	1.214
84.0	1.098
84.5	0.983
85.0	0.867
85.5	0.780
86.0	0.665
86.5	0.578
87.0	0.463
87.5	0.376
88.0	0.289
88.5	0.202
89.0	0.116
89.5	0.087
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
124.0	0.000
124.5	0.000
125.0	0.000
125.5	0.000
126.0	0.000
126.5	0.000
127.0	0.000
127.5	0.000
128.0	0.000
128.5	0.000
129.0	0.000
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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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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	189.67	N.A.	40.30
0-30	335.77	N.A.	71.40
0-40	400.06	N.A.	85.00
0-60	451.44	N.A.	95.90
0-80	469.55	N.A.	99.80
0-90	470.55	N.A.	100.00
10-90	418.39	N.A.	88.90
20-40	210.38	N.A.	44.70
20-50	240.08	N.A.	51.00
40-70	64.63	N.A.	13.70
60-80	18.11	N.A.	3.80
70-80	4.87	N.A.	1.00
80-90	1.00	N.A.	0.20
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	470.55	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	52.16
10-20	137.51
20-30	146.10
30-40	64.28
40-50	29.70
50-60	21.68
60-70	13.24
70-80	4.87
80-90	1.00
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	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92
2	107	102	97	94	105	100	96	93	97	93	90	94	91	89	91	89	87	85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	83	80	78
4	96	88	82	77	94	87	81	77	84	80	76	82	78	75	81	77	74	73
5	91	82	76	71	89	81	75	71	79	74	70	78	73	70	76	72	69	68
6	86	77	71	66	85	76	70	66	75	69	66	73	69	65	72	68	65	63
7	82	72	66	62	81	72	66	62	70	65	61	69	65	61	68	64	61	59
8	78	68	62	58	77	68	62	58	67	61	58	66	61	57	65	60	57	56
9	74	65	59	55	73	64	58	54	63	58	54	62	58	54	61	57	54	53
10	71	61	55	51	70	61	55	51	60	55	51	59	54	51	58	54	51	50

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UGR TABLE - CORRECTED

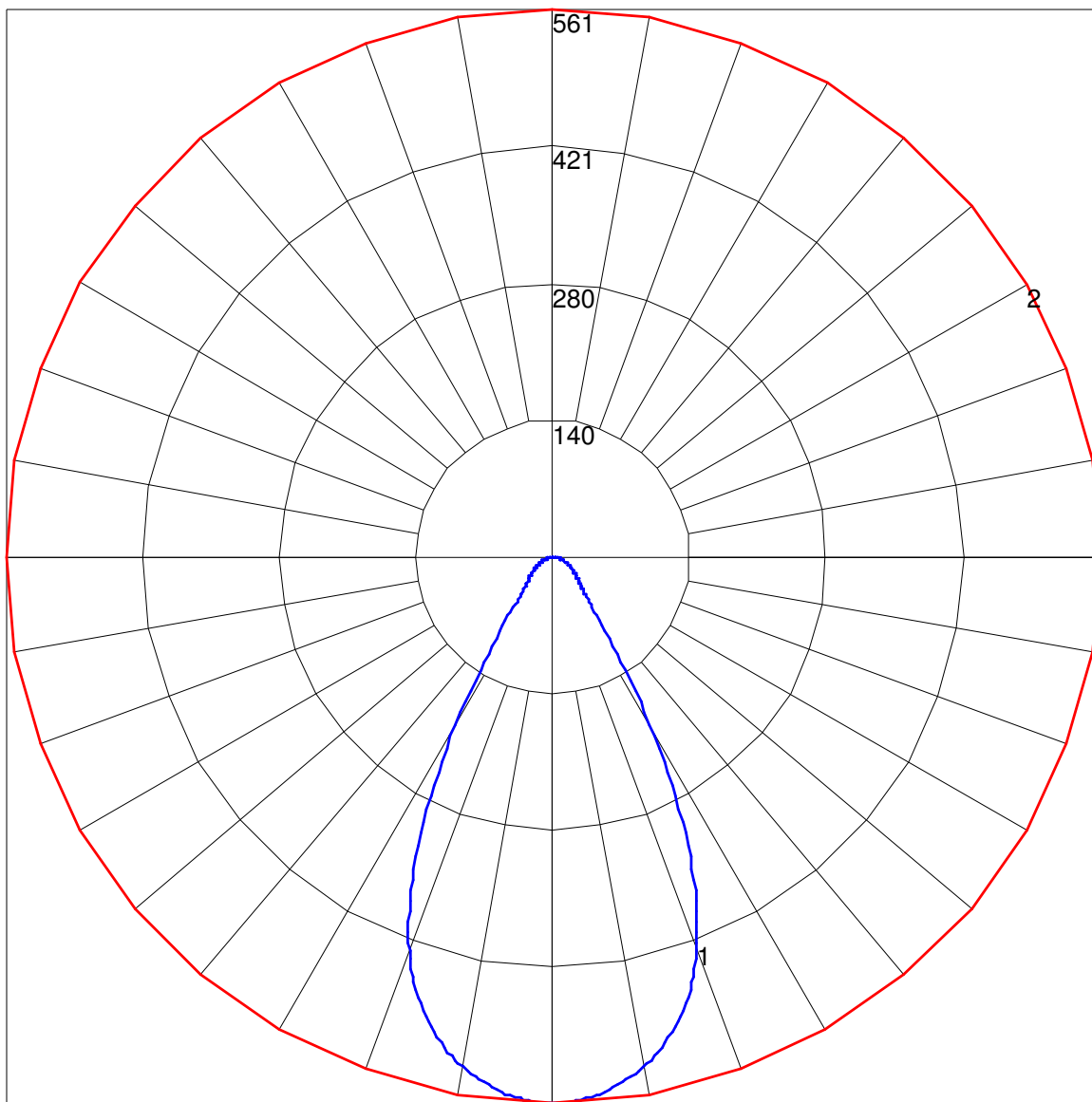
Reflectances

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	16.3	17.4	16.7	17.7	18.0	16.3	17.4	16.7	17.7	18.0
	3H	17.3	18.3	17.7	18.6	19.0	17.3	18.3	17.7	18.6	19.0
	4H	17.5	18.4	17.9	18.8	19.2	17.5	18.4	17.9	18.8	19.2
	6H	17.6	18.4	18.0	18.8	19.2	17.6	18.4	18.0	18.8	19.2
	8H	17.6	18.3	18.0	18.7	19.1	17.6	18.3	18.0	18.7	19.1
	12H	17.5	18.3	18.0	18.7	19.1	17.5	18.3	18.0	18.7	19.1
4H	2H	16.6	17.5	17.0	17.9	18.3	16.6	17.5	17.0	17.9	18.3
	3H	17.8	18.6	18.2	19.0	19.4	17.8	18.6	18.2	19.0	19.4
	4H	18.0	18.7	18.5	19.1	19.6	18.0	18.7	18.5	19.1	19.6
	6H	18.1	18.7	18.6	19.1	19.6	18.1	18.7	18.6	19.1	19.6
	8H	18.1	18.7	18.6	19.1	19.6	18.1	18.7	18.6	19.1	19.6
	12H	18.1	18.6	18.6	19.1	19.5	18.1	18.6	18.6	19.1	19.5
8H	4H	18.0	18.6	18.5	19.0	19.5	18.0	18.6	18.5	19.0	19.5
	6H	18.2	18.6	18.7	19.1	19.6	18.2	18.6	18.7	19.1	19.6
	8H	18.2	18.6	18.7	19.1	19.6	18.2	18.6	18.7	19.1	19.6
	12H	18.2	18.6	18.7	19.1	19.6	18.2	18.6	18.7	19.1	19.6
12H	4H	18.0	18.5	18.5	18.9	19.4	18.0	18.5	18.5	18.9	19.4
	6H	18.1	18.5	18.7	19.0	19.5	18.1	18.5	18.7	19.0	19.5
	8H	18.2	18.5	18.7	19.0	19.6	18.2	18.5	18.7	19.0	19.6

Maximum UGR = 19.6

POLAR GRAPH



Maximum Candela = 560.784 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.)