

IES INDOOR REPORT

PHOTOMETRIC FILENAME : V2DR-L5-940-DIM-UNV-RW-OF-WH_.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-L5-940-DIM-UNV-RW-OF-WH_
[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	412
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	61
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	14756	14756	14756
55	11676	11676	11676
65	8728	8728	8728
75	4545	4545	4545
85	2752	2752	2752

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CANDELA TABULATION

	<u>0</u>
0.0	490.482
0.5	490.482
1.0	490.229
1.5	489.976
2.0	489.976
2.5	489.470
3.0	488.712
3.5	487.701
4.0	486.689
4.5	485.678
5.0	484.161
5.5	482.897
6.0	481.380
6.5	479.610
7.0	477.840
7.5	476.071
8.0	474.301
8.5	472.278
9.0	470.003
9.5	467.980
10.0	465.705
10.5	463.176
11.0	460.395
11.5	457.614
12.0	454.580
12.5	451.547
13.0	448.260
13.5	444.720
14.0	440.928
14.5	437.135
15.0	432.837
15.5	428.539
16.0	423.736
16.5	418.932
17.0	413.875
17.5	408.566
18.0	403.004
18.5	396.936
19.0	390.616
19.5	383.789
20.0	376.710
20.5	369.378
21.0	361.541
21.5	353.450
22.0	344.601
22.5	335.752
23.0	326.398
23.5	316.790
24.0	306.677
24.5	296.564
25.0	286.199
25.5	275.327
26.0	264.203
26.5	253.078

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CANDELA TABULATION - (Cont.)

27.0	242.030
27.5	230.931
28.0	219.731
28.5	208.581
29.0	197.179
29.5	185.700
30.0	174.323
30.5	163.123
31.0	152.075
31.5	141.405
32.0	131.141
32.5	121.432
33.0	112.432
33.5	104.088
34.0	96.327
34.5	89.222
35.0	82.775
35.5	76.859
36.0	71.499
36.5	66.695
37.0	62.423
37.5	58.605
38.0	55.141
38.5	52.057
39.0	49.352
39.5	46.975
40.0	44.851
40.5	43.006
41.0	41.362
41.5	39.896
42.0	38.581
42.5	37.418
43.0	36.356
43.5	35.421
44.0	34.536
44.5	33.727
45.0	32.968
45.5	32.235
46.0	31.553
46.5	30.870
47.0	30.238
47.5	29.606
48.0	28.974
48.5	28.367
49.0	27.760
49.5	27.153
50.0	26.572
50.5	26.016
51.0	25.434
51.5	24.878
52.0	24.347
52.5	23.791
53.0	23.260
53.5	22.729
54.0	22.198
54.5	21.667

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CANDELA TABULATION - (Cont.)

55.0	21.162
55.5	20.656
56.0	20.150
56.5	19.645
57.0	19.139
57.5	18.659
58.0	18.153
58.5	17.673
59.0	17.192
59.5	16.737
60.0	16.257
60.5	15.776
61.0	15.296
61.5	14.841
62.0	14.360
62.5	13.905
63.0	13.450
63.5	12.995
64.0	12.540
64.5	12.085
65.0	11.655
65.5	11.225
66.0	10.796
66.5	10.341
67.0	9.936
67.5	9.532
68.0	9.102
68.5	8.697
69.0	8.293
69.5	7.888
70.0	7.509
70.5	7.104
71.0	6.725
71.5	6.321
72.0	5.941
72.5	5.562
73.0	5.183
73.5	4.804
74.0	4.450
74.5	4.070
75.0	3.717
75.5	3.388
76.0	3.059
76.5	2.806
77.0	2.579
77.5	2.377
78.0	2.225
78.5	2.098
79.0	1.997
79.5	1.896
80.0	1.770
80.5	1.669
81.0	1.568
81.5	1.466
82.0	1.340
82.5	1.239

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CANDELA TABULATION - (Cont.)

83.0	1.163
83.5	1.062
84.0	0.961
84.5	0.860
85.0	0.758
85.5	0.683
86.0	0.581
86.5	0.506
87.0	0.405
87.5	0.329
88.0	0.253
88.5	0.177
89.0	0.101
89.5	0.076
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
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125.5	0.000
126.0	0.000
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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
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152.0	0.000
152.5	0.000
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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	165.90	N.A.	40.30
0-30	293.68	N.A.	71.40
0-40	349.90	N.A.	85.00
0-60	394.85	N.A.	95.90
0-80	410.69	N.A.	99.80
0-90	411.56	N.A.	100.00
10-90	365.94	N.A.	88.90
20-40	184.01	N.A.	44.70
20-50	209.98	N.A.	51.00
40-70	56.53	N.A.	13.70
60-80	15.84	N.A.	3.80
70-80	4.26	N.A.	1.00
80-90	0.87	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	411.56	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	45.62
10-20	120.27
20-30	127.78
30-40	56.22
40-50	25.98
50-60	18.97
60-70	11.58
70-80	4.26
80-90	0.87
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	80	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	57	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

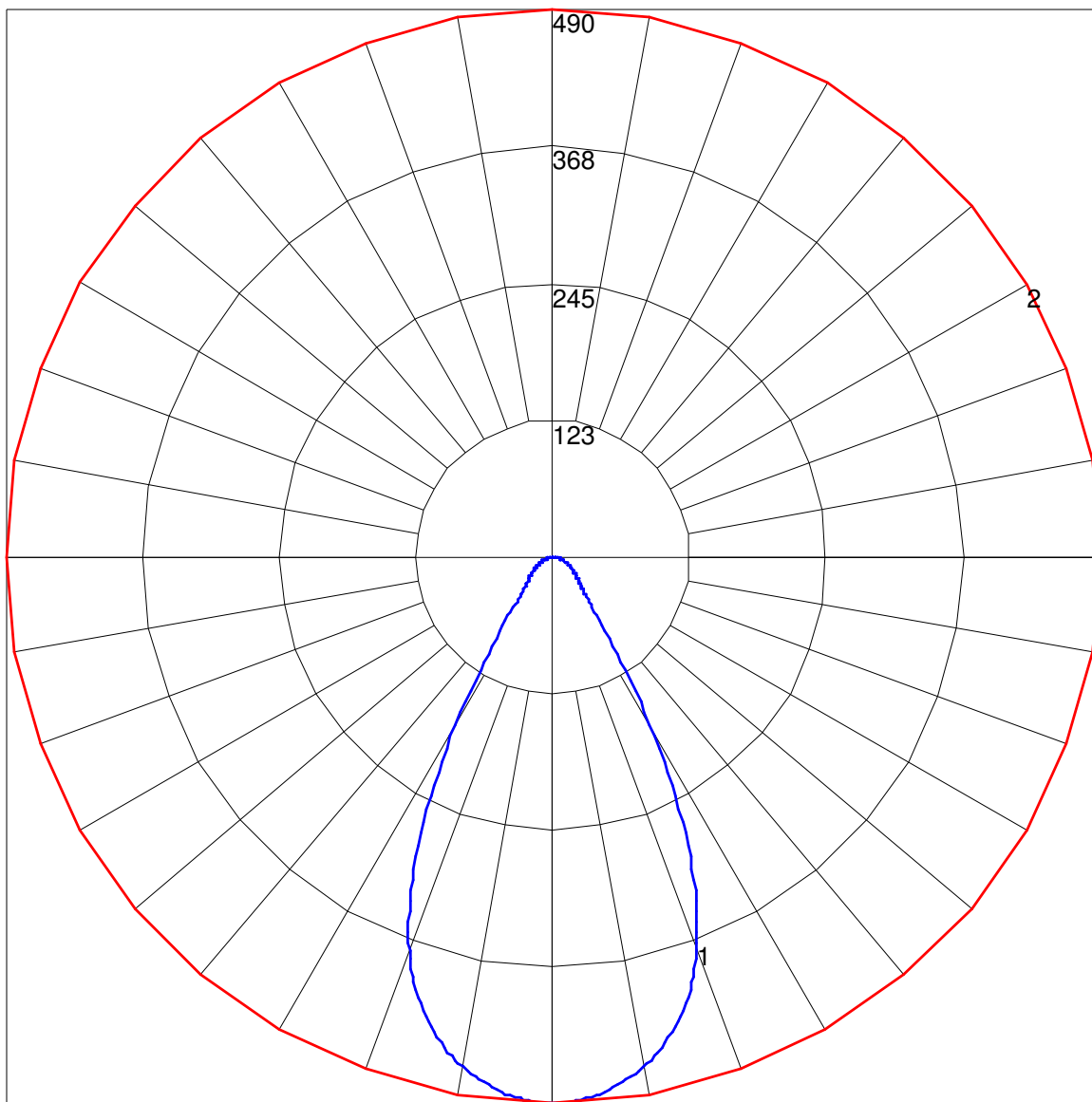
Reflectances

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	15.8	16.9	16.2	17.2	17.5	15.8	16.9	16.2	17.2	17.5
	3H	16.8	17.8	17.2	18.1	18.5	16.8	17.8	17.2	18.1	18.5
	4H	17.0	17.9	17.4	18.3	18.7	17.0	17.9	17.4	18.3	18.7
	6H	17.0	17.9	17.5	18.3	18.7	17.0	17.9	17.5	18.3	18.7
	8H	17.0	17.8	17.5	18.2	18.6	17.0	17.8	17.5	18.2	18.6
	12H	17.0	17.8	17.5	18.2	18.6	17.0	17.8	17.5	18.2	18.6
4H	2H	16.1	17.0	16.5	17.4	17.8	16.1	17.0	16.5	17.4	17.8
	3H	17.3	18.0	17.7	18.5	18.9	17.3	18.0	17.7	18.5	18.9
	4H	17.5	18.2	18.0	18.6	19.1	17.5	18.2	18.0	18.6	19.1
	6H	17.6	18.2	18.1	18.6	19.1	17.6	18.2	18.1	18.6	19.1
	8H	17.6	18.1	18.1	18.6	19.1	17.6	18.1	18.1	18.6	19.1
	12H	17.6	18.1	18.1	18.6	19.0	17.6	18.1	18.1	18.6	19.0
8H	4H	17.5	18.1	18.0	18.5	19.0	17.5	18.1	18.0	18.5	19.0
	6H	17.7	18.1	18.2	18.6	19.1	17.7	18.1	18.2	18.6	19.1
	8H	17.7	18.1	18.2	18.6	19.1	17.7	18.1	18.2	18.6	19.1
	12H	17.7	18.0	18.2	18.5	19.1	17.7	18.0	18.2	18.5	19.1
12H	4H	17.5	17.9	18.0	18.4	18.9	17.5	17.9	18.0	18.4	18.9
	6H	17.6	18.0	18.2	18.5	19.0	17.6	18.0	18.2	18.5	19.0
	8H	17.7	18.0	18.2	18.5	19.1	17.7	18.0	18.2	18.5	19.1

Maximum UGR = 19.1

POLAR GRAPH



Maximum Candela = 490.482 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.)