



IES INDOOR REPORT

PHOTOMETRIC FILENAME : V6DR-L18-8TW-DIM-UNV-RM-OF-WH_4000K.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #12326812.14

[TESTLAB] UL Verification Services Inc.

[ISSUE DATE] 21 SEP 2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] V6DR-L18-8TW-DIM-UNV-RM-OF-WH 4000k

[LUMINAIRE] Black formed aluminum housing, white reflector, frosted pl

[MORE] astic optic, clear glass patterned lens enclosure

[LAMP] One white LED

[_SEARCH_SOURCETYPE] LED

[_SEARCH_APPLICATION] Indoor, Architectural, Classroom, Commercial, Healthcare, Office, Downlight

[_SEARCH_MOUNTING] Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1894
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	79
Total Luminaire Watts	24
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.58
Spacing Criterion (90-270)	0.58
Spacing Criterion (Diagonal)	0.56
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.48 ft (Diameter)
Luminous Width (90-270)	0.48 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	6808	6808	6808
55	4578	4578	4578
65	3407	3407	3407
75	2353	2353	2353
85	1965	1965	1965

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CANDELA TABULATION

	<u>0</u>
0.0	4584.076
0.5	4581.950
1.0	4575.573
1.5	4564.945
2.0	4550.065
2.5	4531.996
3.0	4509.677
3.5	4484.168
4.0	4456.534
4.5	4424.649
5.0	4390.637
5.5	4353.438
6.0	4311.986
6.5	4266.284
7.0	4217.393
7.5	4164.250
8.0	4106.856
8.5	4045.211
9.0	3979.314
9.5	3908.103
10.0	3833.703
10.5	3753.990
11.0	3668.961
11.5	3579.682
12.0	3486.151
12.5	3386.243
13.0	3284.209
13.5	3176.861
14.0	3066.325
14.5	2953.663
15.0	2836.749
15.5	2719.836
16.0	2600.796
16.5	2481.757
17.0	2364.843
17.5	2253.244
18.0	2138.456
18.5	2024.731
19.0	1913.132
19.5	1806.847
20.0	1705.876
20.5	1608.093
21.0	1512.437
21.5	1421.032
22.0	1332.815
22.5	1249.913
23.0	1171.262
23.5	1096.862
24.0	1026.927
24.5	961.349
25.0	899.597
25.5	841.672
26.0	787.573
26.5	736.768

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CANDELA TABULATION - (Cont.)

27.0	689.471
27.5	645.257
28.0	603.806
28.5	565.330
29.0	529.193
29.5	495.395
30.0	463.616
30.5	433.962
31.0	406.222
31.5	380.182
32.0	355.842
32.5	332.991
33.0	311.522
33.5	291.434
34.0	272.515
34.5	254.978
35.0	238.610
35.5	223.305
36.0	209.063
36.5	195.883
37.0	183.661
37.5	172.394
38.0	161.978
38.5	152.413
39.0	143.591
39.5	135.513
40.0	128.180
40.5	121.484
41.0	115.319
41.5	109.686
42.0	104.478
42.5	99.695
43.0	95.231
43.5	91.193
44.0	87.366
44.5	83.965
45.0	80.670
45.5	77.694
46.0	74.825
46.5	72.168
47.0	69.723
47.5	67.491
48.0	65.365
48.5	63.346
49.0	61.433
49.5	59.520
50.0	57.819
50.5	56.225
51.0	54.631
51.5	53.143
52.0	51.761
52.5	50.273
53.0	48.997
53.5	47.722
54.0	46.447
54.5	45.171

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CANDELA TABULATION - (Cont.)

55.0	44.002
55.5	42.833
56.0	41.770
56.5	40.601
57.0	39.538
57.5	38.475
58.0	37.412
58.5	36.350
59.0	35.393
59.5	34.330
60.0	33.374
60.5	32.417
61.0	31.460
61.5	30.504
62.0	29.547
62.5	28.591
63.0	27.740
63.5	26.784
64.0	25.934
64.5	24.977
65.0	24.127
65.5	23.276
66.0	22.426
66.5	21.576
67.0	20.726
67.5	19.982
68.0	19.131
68.5	18.387
69.0	17.643
69.5	16.793
70.0	16.155
70.5	15.411
71.0	14.774
71.5	14.030
72.0	13.392
72.5	12.754
73.0	12.223
73.5	11.691
74.0	11.160
74.5	10.629
75.0	10.203
75.5	9.672
76.0	9.247
76.5	8.928
77.0	8.503
77.5	8.078
78.0	7.759
78.5	7.334
79.0	7.015
79.5	6.696
80.0	6.271
80.5	5.952
81.0	5.527
81.5	5.208
82.0	4.889
82.5	4.570

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CANDELA TABULATION - (Cont.)

83.0	4.251
83.5	3.826
84.0	3.507
84.5	3.189
85.0	2.870
85.5	2.551
86.0	2.338
86.5	2.019
87.0	1.701
87.5	1.382
88.0	1.063
88.5	0.850
89.0	0.744
89.5	0.531
90.0	0.425
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
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128.0	0.000
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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
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149.5	0.000
150.0	0.000
150.5	0.000
151.0	0.000
151.5	0.000
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152.5	0.000
153.0	0.000
153.5	0.000
154.0	0.000
154.5	0.000
155.0	0.000
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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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Zone	Lumens	%Lamp	%Fixt
0-20	1165.37	N.A.	61.50
0-30	1593.4	N.A.	84.10
0-40	1750.94	N.A.	92.40
0-60	1855.5	N.A.	98.00
0-80	1890.65	N.A.	99.80
0-90	1893.93	N.A.	100.00
10-90	1492.22	N.A.	78.80
20-40	585.57	N.A.	30.90
20-50	650.40	N.A.	34.30
40-70	128.60	N.A.	6.80
60-80	35.15	N.A.	1.90
70-80	11.11	N.A.	0.60
80-90	3.28	N.A.	0.20
90-110	0.01	N.A.	0.00
90-120	0.01	N.A.	0.00
90-130	0.01	N.A.	0.00
90-150	0.01	N.A.	0.00
90-180	0.01	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	1893.94	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	401.71
10-20	763.66
20-30	428.03
30-40	157.54
40-50	64.82
50-60	39.73
60-70	24.04
70-80	11.11
80-90	3.28
90-100	0.01
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	110	110	110	110	107	107	107	107	102	102	102	98	98	98	94	94	94	92
1	105	102	100	98	103	101	99	97	97	95	94	93	92	91	90	89	89	87
2	100	96	93	90	98	95	92	89	92	89	87	89	87	85	87	85	84	82
3	96	91	87	83	94	90	86	83	87	84	82	85	82	80	83	81	79	78
4	92	86	82	78	91	85	81	78	83	80	77	81	78	76	80	77	75	74
5	88	82	77	74	87	81	77	73	79	76	73	78	75	72	77	74	71	70
6	85	78	73	70	84	77	73	69	76	72	69	75	71	69	74	71	68	67
7	82	74	70	66	81	74	69	66	73	69	66	72	68	65	71	68	65	64
8	79	71	67	63	78	71	66	63	70	66	63	69	65	63	68	65	62	61
9	76	68	64	61	75	68	64	61	67	63	60	66	63	60	66	62	60	59
10	73	66	61	58	72	65	61	58	65	61	58	64	60	58	63	60	58	57

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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	10.2	11.2	10.6	11.5	11.8	10.2	11.2	10.6	11.5	11.8
	3H	11.3	12.2	11.7	12.5	12.9	11.3	12.2	11.7	12.5	12.9
	4H	11.6	12.4	12.0	12.8	13.2	11.6	12.4	12.0	12.8	13.2
	6H	11.8	12.6	12.3	13.0	13.4	11.8	12.6	12.3	13.0	13.4
	8H	11.9	12.6	12.4	13.0	13.4	11.9	12.6	12.4	13.0	13.4
	12H	12.0	12.6	12.4	13.0	13.4	12.0	12.6	12.4	13.0	13.4

UGR Viewed Endwise

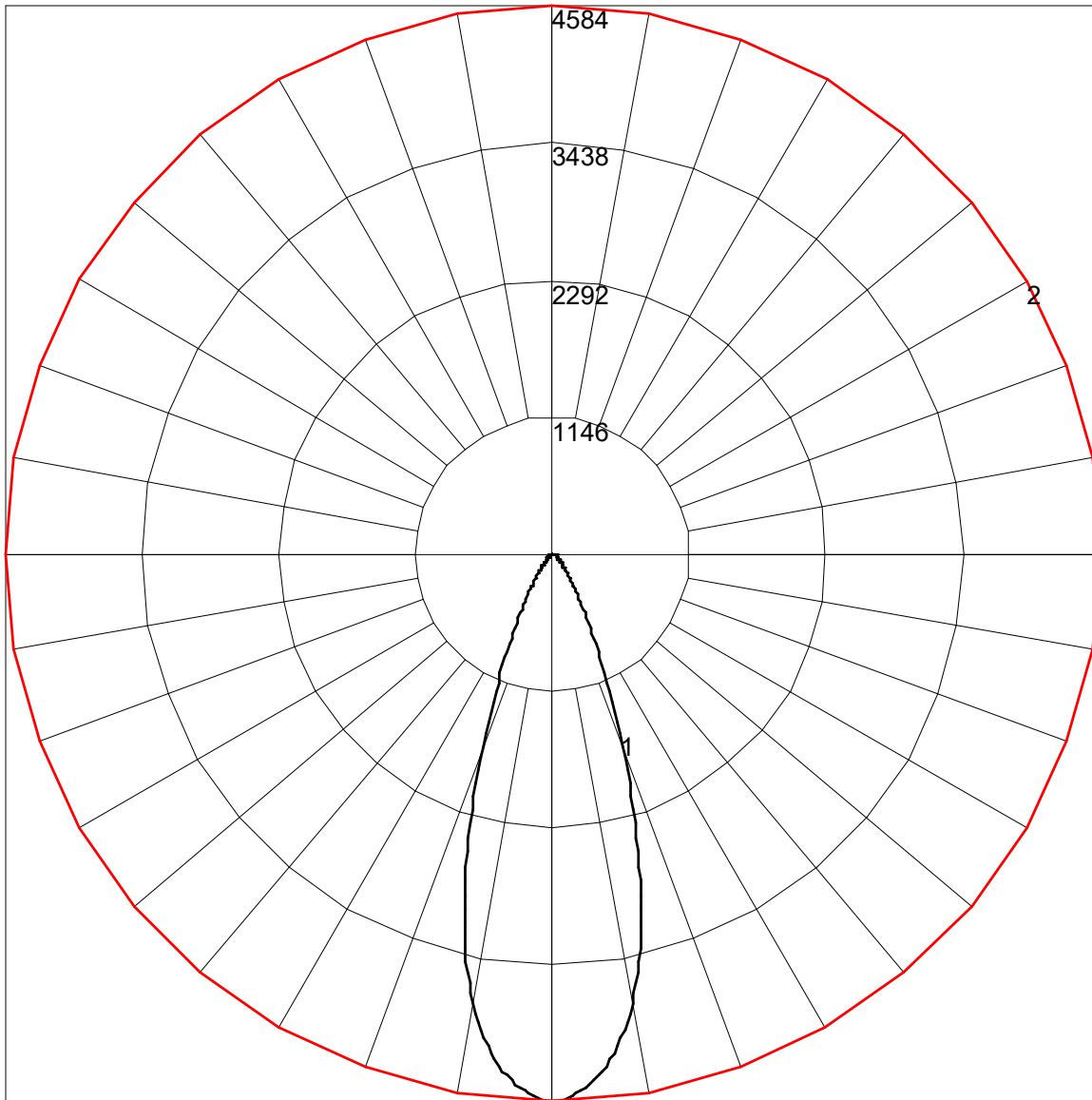
4H	2H	10.5	11.3	10.9	11.7	12.1	10.5	11.3	10.9	11.7	12.1
	3H	11.8	12.4	12.2	12.9	13.3	11.8	12.4	12.2	12.9	13.3
	4H	12.2	12.8	12.6	13.2	13.6	12.2	12.8	12.6	13.2	13.6
	6H	12.5	13.0	13.0	13.5	14.0	12.5	13.0	13.0	13.5	14.0
	8H	12.7	13.1	13.1	13.6	14.0	12.7	13.1	13.1	13.6	14.0
	12H	12.7	13.1	13.2	13.6	14.1	12.7	13.1	13.2	13.6	14.1

8H	4H	12.3	12.7	12.8	13.2	13.7	12.3	12.7	12.8	13.2	13.7
	6H	12.7	13.1	13.3	13.6	14.1	12.7	13.1	13.3	13.6	14.1
	8H	12.9	13.2	13.5	13.8	14.3	12.9	13.2	13.5	13.8	14.3
	12H	13.1	13.3	13.6	13.8	14.4	13.1	13.3	13.6	13.8	14.4

12H	4H	12.3	12.7	12.8	13.1	13.6	12.3	12.7	12.8	13.1	13.6
	6H	12.7	13.1	13.3	13.5	14.1	12.7	13.1	13.3	13.5	14.1
	8H	13.0	13.2	13.5	13.7	14.3	13.0	13.2	13.5	13.7	14.3

Maximum UGR = 14.4

POLAR GRAPH



Maximum Candela = 4584.076 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.)