



IES INDOOR REPORT

PHOTOMETRIC FILENAME : V6DR-L10-8TW-DIM-UNV-RN-OF-WH_4000K.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #12326812.15

[TESTLAB] UL Verification Services Inc.

[ISSUE DATE] 21 SEP 2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] V6DR-L10-8TW-DIM-UNV-RN-OF-WH 4000k

[LUMINAIRE] Black formed aluminum housing, white reflector, clear plas

[MORE] tic 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	1103
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	76
Total Luminaire Watts	14.6
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.44
Spacing Criterion (90-270)	0.44
Spacing Criterion (Diagonal)	0.46
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	3612	3612	3612
55	2362	2362	2362
65	1607	1607	1607
75	1039	1039	1039
85	833	833	833

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CANDELA TABULATION

	<u>0</u>
0.0	4096.074
0.5	4092.422
1.0	4080.856
1.5	4060.768
2.0	4032.767
2.5	3996.244
3.0	3952.416
3.5	3901.893
4.0	3845.282
4.5	3781.975
5.0	3713.189
5.5	3637.708
6.0	3556.140
6.5	3469.702
7.0	3378.394
7.5	3282.216
8.0	3181.777
8.5	3077.686
9.0	2969.334
9.5	2858.547
10.0	2744.717
10.5	2630.277
11.0	2514.621
11.5	2398.355
12.0	2282.698
12.5	2167.042
13.0	2053.820
13.5	1940.598
14.0	1831.029
14.5	1724.503
15.0	1620.412
15.5	1521.190
16.0	1426.839
16.5	1337.357
17.0	1250.919
17.5	1168.742
18.0	1090.826
18.5	1018.388
19.0	949.603
19.5	887.513
20.0	826.641
20.5	769.422
21.0	716.463
21.5	667.157
22.0	620.285
22.5	576.214
23.0	535.308
23.5	497.263
24.0	461.775
24.5	428.721
25.0	397.981
25.5	369.493
26.0	343.196
26.5	318.786

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CANDELA TABULATION - (Cont.)

27.0	296.264
27.5	275.567
28.0	256.514
28.5	238.983
29.0	222.852
29.5	208.060
30.0	194.364
30.5	181.825
31.0	170.320
31.5	159.667
32.0	149.867
32.5	140.797
33.0	132.457
33.5	124.727
34.0	117.605
34.5	110.970
35.0	104.822
35.5	99.160
36.0	93.925
36.5	88.995
37.0	84.490
37.5	80.229
38.0	76.333
38.5	72.742
39.0	69.394
39.5	66.229
40.0	63.368
40.5	60.628
41.0	58.133
41.5	55.759
42.0	53.567
42.5	51.498
43.0	49.550
43.5	47.724
44.0	45.958
44.5	44.315
45.0	42.793
45.5	41.332
46.0	39.932
46.5	38.593
47.0	37.315
47.5	36.036
48.0	34.880
48.5	33.723
49.0	32.688
49.5	31.653
50.0	30.679
50.5	29.706
51.0	28.792
51.5	27.940
52.0	27.088
52.5	26.297
53.0	25.505
53.5	24.775
54.0	24.044
54.5	23.375

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55.0	22.705
55.5	22.036
56.0	21.427
56.5	20.818
57.0	20.149
57.5	19.540
58.0	18.992
58.5	18.383
59.0	17.835
59.5	17.227
60.0	16.679
60.5	16.070
61.0	15.522
61.5	14.975
62.0	14.427
62.5	13.940
63.0	13.392
63.5	12.905
64.0	12.357
64.5	11.870
65.0	11.383
65.5	10.896
66.0	10.470
66.5	10.044
67.0	9.618
67.5	9.192
68.0	8.766
68.5	8.400
69.0	8.035
69.5	7.670
70.0	7.305
70.5	7.000
71.0	6.635
71.5	6.331
72.0	6.026
72.5	5.722
73.0	5.478
73.5	5.235
74.0	4.992
74.5	4.748
75.0	4.505
75.5	4.261
76.0	4.078
76.5	3.896
77.0	3.713
77.5	3.531
78.0	3.348
78.5	3.226
79.0	3.044
79.5	2.861
80.0	2.739
80.5	2.557
81.0	2.374
81.5	2.252
82.0	2.070
82.5	1.948

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CANDELA TABULATION - (Cont.)

83.0	1.826
83.5	1.644
84.0	1.522
84.5	1.339
85.0	1.217
85.5	1.096
86.0	0.974
86.5	0.852
87.0	0.730
87.5	0.609
88.0	0.487
88.5	0.365
89.0	0.304
89.5	0.243
90.0	0.183
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
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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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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Zone	Lumens	%Lamp	%Fixt
0-20	769.11	N.A.	69.70
0-30	961.82	N.A.	87.20
0-40	1030.95	N.A.	93.50
0-60	1085.31	N.A.	98.40
0-80	1101.7	N.A.	99.90
0-90	1103.1	N.A.	100.00
10-90	780.12	N.A.	70.70
20-40	261.84	N.A.	23.70
20-50	295.68	N.A.	26.80
40-70	65.81	N.A.	6.00
60-80	16.38	N.A.	1.50
70-80	4.94	N.A.	0.40
80-90	1.41	N.A.	0.10
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	1103.11	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	322.98
10-20	446.12
20-30	192.71
30-40	69.14
40-50	33.84
50-60	20.52
60-70	11.45
70-80	4.94
80-90	1.41
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 RW	80				70				50			30			10			0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	72	72	72	72	71	71	71	71	68	68	68	65	65	65	62	62	62	61
1	70	68	67	66	68	67	66	65	64	64	63	62	61	61	60	60	59	58
2	67	64	62	61	66	63	62	60	61	60	59	60	58	57	58	57	56	55
3	64	61	59	57	63	60	58	56	59	57	55	57	56	54	56	55	54	53
4	62	58	55	53	61	58	55	53	56	54	52	55	53	52	54	53	51	51
5	60	56	53	51	59	55	52	51	54	52	50	53	51	50	52	51	49	48
6	58	53	51	48	57	53	50	48	52	50	48	51	49	48	51	49	47	47
7	56	51	48	46	55	51	48	46	50	48	46	50	47	46	49	47	46	45
8	54	49	47	45	53	49	46	45	49	46	44	48	46	44	47	46	44	43
9	52	48	45	43	52	47	45	43	47	45	43	47	44	43	46	44	43	42
10	51	46	43	42	50	46	43	42	46	43	41	45	43	41	45	43	41	41

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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

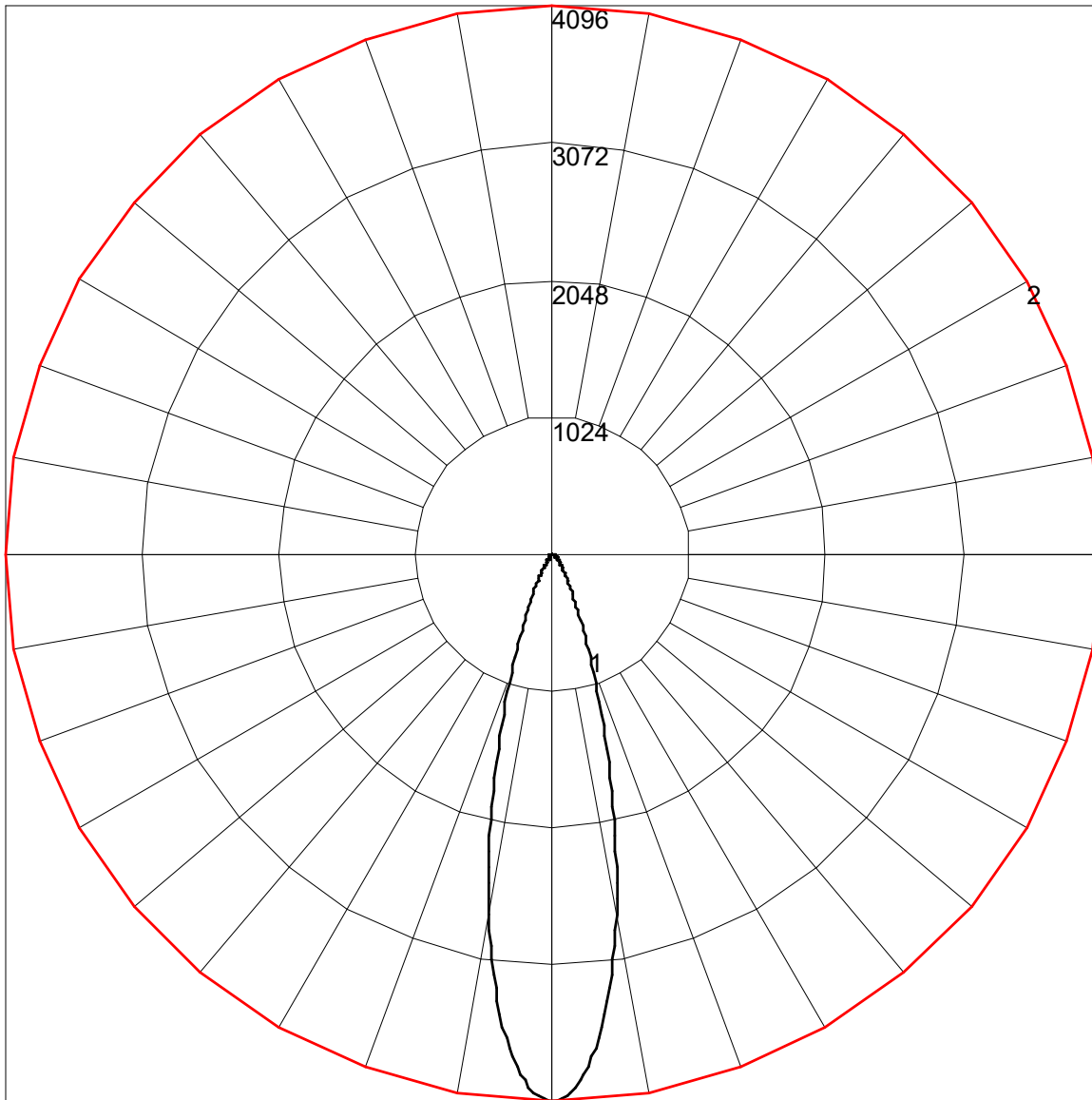
X=2H	Y=2H	8.9	9.8	9.2	10.1	10.5	8.9	9.8	9.2	10.1	10.5
	3H	9.7	10.6	10.1	10.9	11.3	9.7	10.6	10.1	10.9	11.3
	4H	10.0	10.8	10.4	11.1	11.5	10.0	10.8	10.4	11.1	11.5
	6H	10.1	10.9	10.6	11.2	11.6	10.1	10.9	10.6	11.2	11.6
	8H	10.2	10.9	10.6	11.3	11.7	10.2	10.9	10.6	11.3	11.7
	12H	10.2	10.8	10.6	11.2	11.7	10.2	10.8	10.6	11.2	11.7

UGR Viewed Endwise

4H	2H	9.1	9.9	9.5	10.2	10.6	9.1	9.9	9.5	10.2	10.6
	3H	10.1	10.8	10.5	11.2	11.6	10.1	10.8	10.5	11.2	11.6
	4H	10.4	11.0	10.9	11.4	11.9	10.4	11.0	10.9	11.4	11.9
	6H	10.7	11.2	11.2	11.6	12.1	10.7	11.2	11.2	11.6	12.1
	8H	10.8	11.2	11.2	11.7	12.2	10.8	11.2	11.2	11.7	12.2
	12H	10.8	11.2	11.3	11.7	12.2	10.8	11.2	11.3	11.7	12.2
8H	4H	10.5	10.9	11.0	11.4	11.9	10.5	10.9	11.0	11.4	11.9
	6H	10.8	11.2	11.3	11.7	12.2	10.8	11.2	11.3	11.7	12.2
	8H	11.0	11.3	11.5	11.8	12.3	11.0	11.3	11.5	11.8	12.3
	12H	11.1	11.4	11.6	11.9	12.4	11.1	11.4	11.6	11.9	12.4
12H	4H	10.5	10.8	10.9	11.3	11.8	10.5	10.8	10.9	11.3	11.8
	6H	10.8	11.2	11.4	11.6	12.2	10.8	11.2	11.4	11.6	12.2
	8H	11.0	11.3	11.5	11.8	12.4	11.0	11.3	11.5	11.8	12.4

Maximum UGR = 12.4

POLAR GRAPH



Maximum Candela = 4096.074 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.)