



IES INDOOR REPORT

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

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #12326812.10

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 21 SEP 2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] V6DR-L10-8TW-DIM-UNV-LN-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	1133
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	78
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)	0.44
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.46 ft (Diameter)
Luminous Width (90-270)	0.46 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	4261	4261	4261
55	3118	3118	3118
65	2535	2535	2535
75	2070	2070	2070
85	1341	1341	1341

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CANDELA TABULATION

	<u>0</u>
0.0	4237.642
0.5	4233.939
1.0	4221.597
1.5	4199.998
2.0	4170.378
2.5	4132.734
3.0	4087.686
3.5	4034.615
4.0	3974.139
4.5	3907.492
5.0	3835.291
5.5	3756.302
6.0	3671.142
6.5	3580.428
7.0	3484.160
7.5	3382.955
8.0	3276.196
8.5	3166.352
9.0	3054.039
9.5	2938.024
10.0	2820.775
10.5	2701.674
11.0	2580.722
11.5	2459.153
12.0	2337.584
12.5	2217.249
13.0	2098.148
13.5	1980.898
14.0	1866.117
14.5	1754.422
15.0	1647.046
15.5	1543.990
16.0	1445.871
16.5	1352.688
17.0	1263.826
17.5	1179.283
18.0	1099.676
18.5	1025.624
19.0	955.892
19.5	891.096
20.0	829.386
20.5	770.761
21.0	716.456
21.5	665.853
22.0	617.719
22.5	573.103
23.0	531.263
23.5	492.509
24.0	456.224
24.5	422.592
25.0	391.490
25.5	362.671
26.0	336.012
26.5	311.452

IES INDOOR REPORT**PHOTOMETRIC FILENAME : V6DR-L10-8TW-DIM-UNV-LN-OF-WH_4000K.IES****CANDELA TABULATION - (Cont.)**

27.0	288.927
27.5	268.193
28.0	249.186
28.5	231.845
29.0	215.862
29.5	201.175
30.0	187.723
30.5	175.442
31.0	164.149
31.5	153.844
32.0	144.340
32.5	135.639
33.0	127.617
33.5	120.273
34.0	113.485
34.5	107.314
35.0	101.575
35.5	96.330
36.0	91.516
36.5	87.011
37.0	82.939
37.5	79.174
38.0	75.718
38.5	72.448
39.0	69.486
39.5	66.709
40.0	64.179
40.5	61.772
41.0	59.612
41.5	57.514
42.0	55.601
42.5	53.811
43.0	52.083
43.5	50.479
44.0	48.936
44.5	47.517
45.0	46.159
45.5	44.863
46.0	43.629
46.5	42.395
47.0	41.284
47.5	40.173
48.0	39.063
48.5	38.014
49.0	37.026
49.5	36.100
50.0	35.175
50.5	34.249
51.0	33.385
51.5	32.583
52.0	31.781
52.5	30.979
53.0	30.176
53.5	29.497
54.0	28.757
54.5	28.078

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CANDELA TABULATION - (Cont.)

55.0	27.399
55.5	26.721
56.0	26.042
56.5	25.425
57.0	24.808
57.5	24.252
58.0	23.635
58.5	23.080
59.0	22.524
59.5	21.907
60.0	21.413
60.5	20.858
61.0	20.303
61.5	19.809
62.0	19.315
62.5	18.822
63.0	18.328
63.5	17.834
64.0	17.341
64.5	16.847
65.0	16.415
65.5	15.921
66.0	15.489
66.5	14.996
67.0	14.564
67.5	14.132
68.0	13.700
68.5	13.268
69.0	12.836
69.5	12.404
70.0	11.972
70.5	11.602
71.0	11.170
71.5	10.799
72.0	10.429
72.5	9.997
73.0	9.627
73.5	9.257
74.0	8.886
74.5	8.516
75.0	8.207
75.5	7.837
76.0	7.467
76.5	7.097
77.0	6.788
77.5	6.418
78.0	6.109
78.5	5.801
79.0	5.431
79.5	5.122
80.0	4.813
80.5	4.505
81.0	4.196
81.5	3.888
82.0	3.579
82.5	3.271

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CANDELA TABULATION - (Cont.)

83.0	2.962
83.5	2.654
84.0	2.407
84.5	2.098
85.0	1.790
85.5	1.543
86.0	1.296
86.5	1.049
87.0	0.864
87.5	0.679
88.0	0.494
88.5	0.370
89.0	0.309
89.5	0.185
90.0	0.123
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 : V6DR-L10-8TW-DIM-UNV-LN-OF-WH_4000K.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
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

IES INDOOR REPORT**PHOTOMETRIC FILENAME : V6DR-L10-8TW-DIM-UNV-LN-OF-WH_4000K.IES****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	786.90	N.A.	69.50
0-30	977.19	N.A.	86.30
0-40	1044.47	N.A.	92.20
0-60	1105.48	N.A.	97.60
0-80	1130.48	N.A.	99.80
0-90	1132.69	N.A.	100.00
10-90	799.61	N.A.	70.60
20-40	257.57	N.A.	22.70
20-50	293.87	N.A.	25.90
40-70	77.32	N.A.	6.80
60-80	25.00	N.A.	2.20
70-80	8.70	N.A.	0.80
80-90	2.21	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	1132.7	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	333.08
10-20	453.82
20-30	190.29
30-40	67.28
40-50	36.30
50-60	24.71
60-70	16.31
70-80	8.70
80-90	2.21
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 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	69	69	69	69	67	67	67	67	64	64	64	62	62	62	59	59	59	58
1	66	65	63	62	65	63	62	61	61	60	59	59	58	58	57	56	56	55
2	63	61	59	57	62	60	58	57	58	57	55	57	55	54	55	54	53	52
3	61	58	55	53	60	57	55	53	56	54	52	54	53	51	53	52	51	50
4	59	55	52	50	58	54	52	50	53	51	50	52	50	49	51	50	48	48
5	57	53	50	48	56	52	50	48	51	49	47	50	48	47	49	48	46	46
6	55	50	48	46	54	50	47	46	49	47	45	49	46	45	48	46	45	44
7	53	49	46	44	52	48	46	44	48	45	43	47	45	43	46	44	43	42
8	51	47	44	42	51	46	44	42	46	44	42	45	43	42	45	43	42	41
9	50	45	42	41	49	45	42	41	44	42	40	44	42	40	44	42	40	40
10	48	44	41	39	48	43	41	39	43	41	39	43	41	39	42	40	39	38

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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

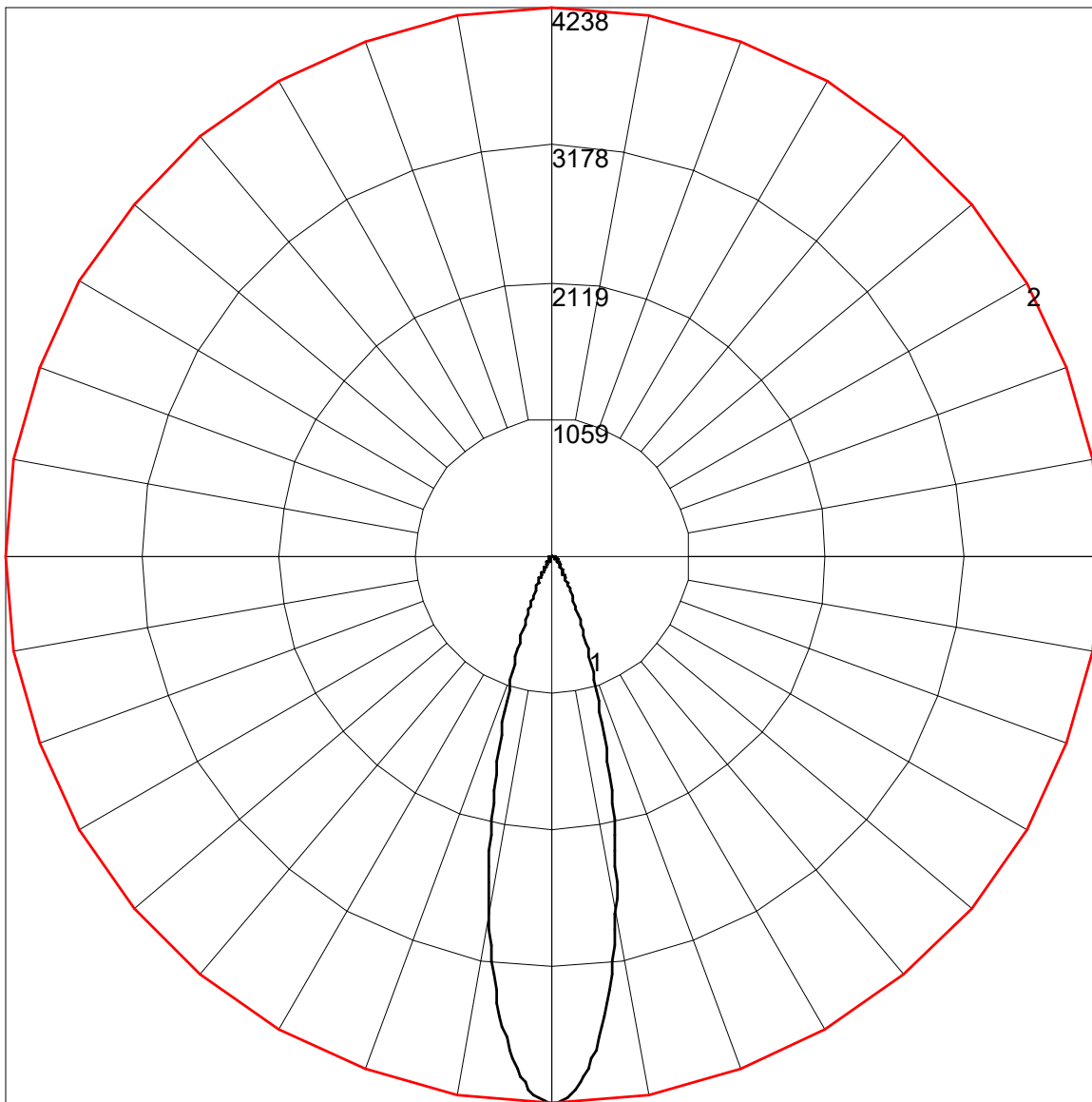
X=2H	Y=2H	10.7	11.7	11.0	12.0	12.3	10.7	11.7	11.0	12.0	12.3
	3H	12.1	12.9	12.5	13.3	13.6	12.1	12.9	12.5	13.3	13.6
	4H	12.6	13.4	13.0	13.7	14.1	12.6	13.4	13.0	13.7	14.1
	6H	12.9	13.6	13.3	14.0	14.4	12.9	13.6	13.3	14.0	14.4
	8H	13.0	13.7	13.4	14.1	14.5	13.0	13.7	13.4	14.1	14.5
	12H	13.0	13.7	13.5	14.1	14.5	13.0	13.7	13.5	14.1	14.5

UGR Viewed Endwise

4H	2H	11.1	11.9	11.5	12.2	12.6	11.1	11.9	11.5	12.2	12.6
	3H	12.7	13.3	13.1	13.7	14.1	12.7	13.3	13.1	13.7	14.1
	4H	13.3	13.9	13.7	14.3	14.7	13.3	13.9	13.7	14.3	14.7
	6H	13.7	14.2	14.2	14.7	15.2	13.7	14.2	14.2	14.7	15.2
	8H	13.9	14.3	14.3	14.8	15.3	13.9	14.3	14.3	14.8	15.3
	12H	13.9	14.3	14.4	14.8	15.3	13.9	14.3	14.4	14.8	15.3
8H	4H	13.4	13.9	13.9	14.4	14.8	13.4	13.9	13.9	14.4	14.8
	6H	14.0	14.4	14.5	14.9	15.4	14.0	14.4	14.5	14.9	15.4
	8H	14.2	14.5	14.8	15.1	15.6	14.2	14.5	14.8	15.1	15.6
	12H	14.3	14.6	14.9	15.1	15.7	14.3	14.6	14.9	15.1	15.7
12H	4H	13.4	13.8	13.9	14.3	14.8	13.4	13.8	13.9	14.3	14.8
	6H	14.0	14.4	14.6	14.8	15.4	14.0	14.4	14.6	14.8	15.4
	8H	14.3	14.6	14.8	15.0	15.6	14.3	14.6	14.8	15.0	15.6

Maximum UGR = 15.7

POLAR GRAPH



Maximum Candela = 4237.642 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.)