



IES INDOOR REPORT

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

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #12326812.12

[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-RW-OF-WH 4000k

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

[MORE] s 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	1010
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	69
Total Luminaire Watts	14.6
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.04
Spacing Criterion (90-270)	1.04
Spacing Criterion (Diagonal)	0.94
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	13638	13638	13638
55	11374	11374	11374
65	8024	8024	8024
75	4915	4915	4915
85	3877	3877	3877

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CANDELA TABULATION

	<u>0</u>
0.0	747.190
0.5	746.491
1.0	745.792
1.5	745.093
2.0	743.695
2.5	741.599
3.0	739.502
3.5	736.706
4.0	733.910
4.5	731.813
5.0	729.017
5.5	726.221
6.0	723.426
6.5	720.630
7.0	717.834
7.5	715.038
8.0	711.543
8.5	708.747
9.0	705.952
9.5	702.457
10.0	699.661
10.5	696.236
11.0	692.881
11.5	689.526
12.0	686.171
12.5	682.886
13.0	679.531
13.5	676.036
14.0	672.611
14.5	669.256
15.0	666.111
15.5	662.895
16.0	659.750
16.5	656.675
17.0	653.809
17.5	650.943
18.0	648.147
18.5	645.491
19.0	642.835
19.5	640.109
20.0	637.313
20.5	634.308
21.0	630.883
21.5	626.969
22.0	622.565
22.5	617.673
23.0	612.361
23.5	606.349
24.0	599.779
24.5	592.580
25.0	584.612
25.5	576.015
26.0	566.439
26.5	555.954

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CANDELA TABULATION - (Cont.)

27.0	544.771
27.5	532.609
28.0	519.678
28.5	505.629
29.0	490.811
29.5	474.735
30.0	457.680
30.5	439.647
31.0	420.915
31.5	401.763
32.0	382.262
32.5	362.901
33.0	343.749
33.5	325.227
34.0	307.473
34.5	290.768
35.0	275.531
35.5	261.552
36.0	249.250
36.5	238.346
37.0	228.770
37.5	220.592
38.0	213.393
38.5	207.033
39.0	201.511
39.5	196.618
40.0	192.145
40.5	188.091
41.0	184.316
41.5	180.891
42.0	177.746
42.5	174.740
43.0	171.875
43.5	169.149
44.0	166.563
44.5	164.116
45.0	161.600
45.5	159.224
46.0	156.777
46.5	154.401
47.0	151.954
47.5	149.508
48.0	146.992
48.5	144.475
49.0	142.099
49.5	139.653
50.0	137.066
50.5	134.410
51.0	131.684
51.5	128.958
52.0	126.233
52.5	123.437
53.0	120.711
53.5	118.055
54.0	115.119
54.5	112.183

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CANDELA TABULATION - (Cont.)

55.0	109.318
55.5	106.382
56.0	103.516
56.5	100.651
57.0	97.785
57.5	94.919
58.0	92.193
58.5	89.397
59.0	86.671
59.5	84.015
60.0	81.359
60.5	78.703
61.0	76.117
61.5	73.601
62.0	71.084
62.5	68.638
63.0	66.192
63.5	63.745
64.0	61.439
64.5	59.062
65.0	56.826
65.5	54.519
66.0	52.352
66.5	50.185
67.0	48.089
67.5	45.992
68.0	43.965
68.5	41.938
69.0	40.051
69.5	38.093
70.0	36.276
70.5	34.459
71.0	32.711
71.5	31.034
72.0	29.356
72.5	27.819
73.0	26.351
73.5	25.023
74.0	23.695
74.5	22.507
75.0	21.318
75.5	20.270
76.0	19.221
76.5	18.313
77.0	17.474
77.5	16.635
78.0	15.797
78.5	14.958
79.0	14.189
79.5	13.420
80.0	12.651
80.5	11.882
81.0	11.113
81.5	10.415
82.0	9.646
82.5	8.947

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CANDELA TABULATION - (Cont.)

83.0	8.248
83.5	7.619
84.0	6.920
84.5	6.291
85.0	5.662
85.5	5.033
86.0	4.403
86.5	3.774
87.0	3.215
87.5	2.586
88.0	2.097
88.5	1.678
89.0	1.328
89.5	0.979
90.0	0.699
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

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
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119.0	0.000
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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
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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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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
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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	256.75	N.A.	25.40
0-30	519.05	N.A.	51.40
0-40	700.53	N.A.	69.40
0-60	923.23	N.A.	91.40
0-80	1003.62	N.A.	99.40
0-90	1010.07	N.A.	100.00
10-90	941.43	N.A.	93.20
20-40	443.78	N.A.	43.90
20-50	568.98	N.A.	56.30
40-70	279.44	N.A.	27.70
60-80	80.40	N.A.	8.00
70-80	23.65	N.A.	2.30
80-90	6.45	N.A.	0.60
90-110	0.02	N.A.	0.00
90-120	0.02	N.A.	0.00
90-130	0.02	N.A.	0.00
90-150	0.02	N.A.	0.00
90-180	0.02	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	1010.09	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	68.64
10-20	188.11
20-30	262.30
30-40	181.48
40-50	125.21
50-60	97.49
60-70	56.74
70-80	23.65
80-90	6.45
90-100	0.02
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	61	61	61	59	59	59	58
1	64	62	60	59	63	61	59	58	59	57	56	56	55	54	54	54	53	52
2	60	56	53	51	59	55	53	50	53	51	49	52	50	48	50	48	47	46
3	56	51	47	45	55	50	47	44	49	46	43	47	45	43	46	44	42	41
4	52	47	43	40	51	46	42	39	45	41	39	43	41	38	42	40	38	37
5	49	43	39	36	48	42	38	35	41	38	35	40	37	35	39	36	34	33
6	46	40	35	32	45	39	35	32	38	34	32	37	34	32	36	34	31	30
7	43	37	32	29	42	36	32	29	35	32	29	35	31	29	34	31	29	28
8	41	34	30	27	40	34	30	27	33	29	27	32	29	27	32	29	27	26
9	38	32	28	25	38	31	28	25	31	27	25	30	27	25	30	27	25	24
10	36	30	26	23	36	29	26	23	29	25	23	28	25	23	28	25	23	22

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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

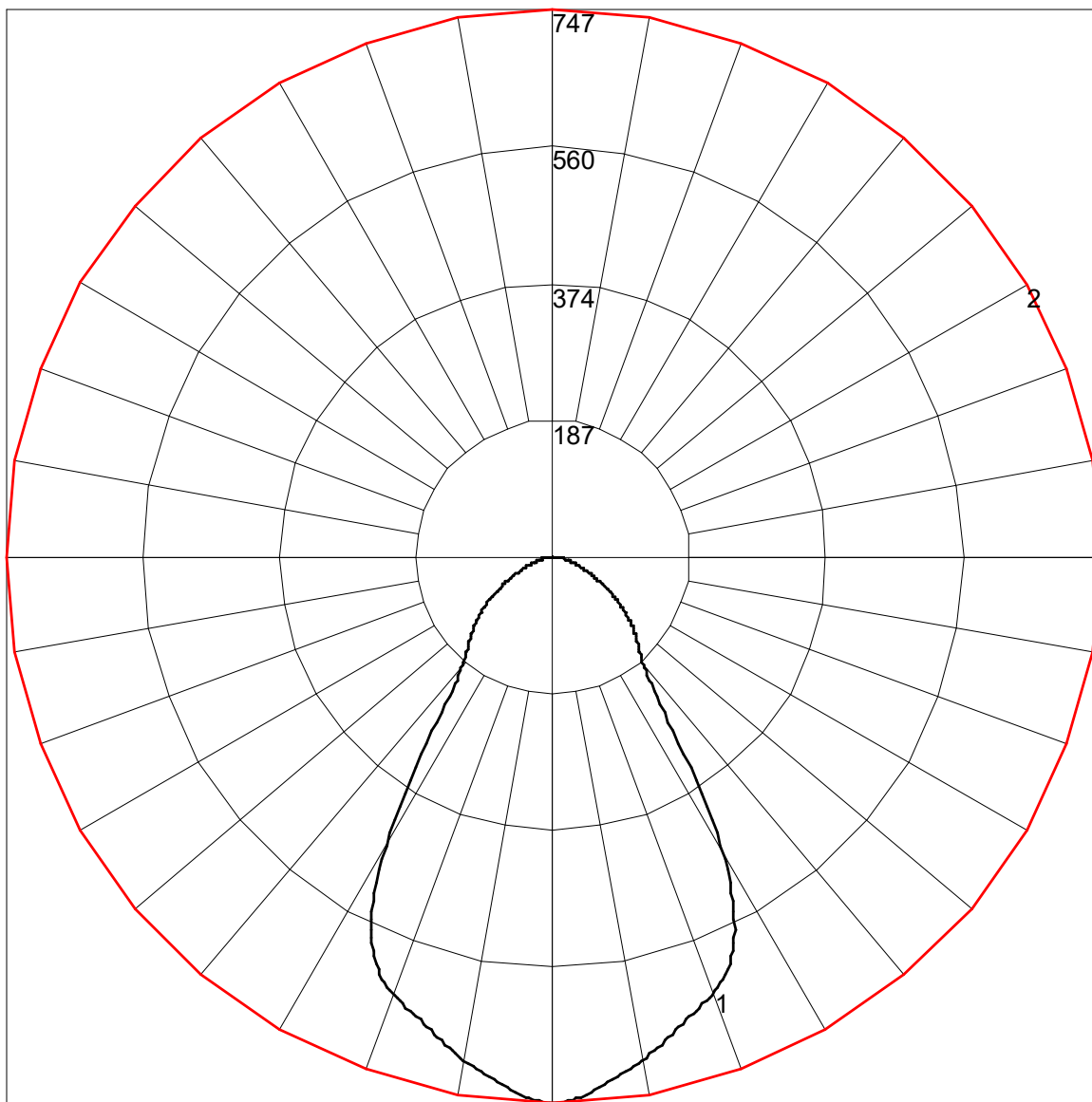
X=2H	Y=2H	19.9	21.2	20.3	21.5	21.8	19.9	21.2	20.3	21.5	21.8
	3H	20.9	22.0	21.3	22.4	22.7	20.9	22.0	21.3	22.4	22.7
	4H	21.1	22.2	21.5	22.6	23.0	21.1	22.2	21.5	22.6	23.0
	6H	21.3	22.3	21.7	22.7	23.1	21.3	22.3	21.7	22.7	23.1
	8H	21.3	22.3	21.8	22.7	23.1	21.3	22.3	21.8	22.7	23.1
	12H	21.4	22.3	21.8	22.7	23.1	21.4	22.3	21.8	22.7	23.1

UGR Viewed Endwise

4H	2H	20.2	21.3	20.6	21.7	22.1	20.2	21.3	20.6	21.7	22.1
	3H	21.4	22.3	21.8	22.7	23.1	21.4	22.3	21.8	22.7	23.1
	4H	21.7	22.5	22.1	22.9	23.4	21.7	22.5	22.1	22.9	23.4
	6H	22.0	22.7	22.4	23.1	23.6	22.0	22.7	22.4	23.1	23.6
	8H	22.0	22.7	22.5	23.1	23.6	22.0	22.7	22.5	23.1	23.6
	12H	22.1	22.7	22.6	23.2	23.6	22.1	22.7	22.6	23.2	23.6
8H	4H	21.8	22.4	22.2	22.9	23.3	21.8	22.4	22.2	22.9	23.3
	6H	22.1	22.6	22.6	23.1	23.6	22.1	22.6	22.6	23.1	23.6
	8H	22.3	22.7	22.8	23.2	23.7	22.3	22.7	22.8	23.2	23.7
	12H	22.4	22.8	22.9	23.3	23.8	22.4	22.8	22.9	23.3	23.8
12H	4H	21.8	22.3	22.3	22.8	23.3	21.8	22.3	22.3	22.8	23.3
	6H	22.1	22.6	22.7	23.1	23.6	22.1	22.6	22.7	23.1	23.6
	8H	22.3	22.7	22.8	23.2	23.8	22.3	22.7	22.8	23.2	23.8

Maximum UGR = 23.8

POLAR GRAPH



Maximum Candela = 747.19 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.)