



IES INDOOR REPORT

PHOTOMETRIC FILENAME : V6DR-L23-835-DIM-UNV-LN-OF-WH_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM 12326812.10

[TESTLAB] UL Verification Services Inc.

[ISSUE DATE] 9 SEP 2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] V6DR-L23-835-DIM-UNV-LN-OF-WH

[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	2717
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	92
Total Luminaire Watts	29.5
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	10222	10222	10222
55	7480	7480	7480
65	6082	6082	6082
75	4966	4966	4966
85	3215	3215	3215

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CANDELA TABULATION

	<u>0</u>
0.0	10165.852
0.5	10156.969
1.0	10127.362
1.5	10075.548
2.0	10004.489
2.5	9914.185
3.0	9806.116
3.5	9678.803
4.0	9533.724
4.5	9373.842
5.0	9200.636
5.5	9011.146
6.0	8806.852
6.5	8589.234
7.0	8358.293
7.5	8115.509
8.0	7859.401
8.5	7595.891
9.0	7326.460
9.5	7048.146
10.0	6766.872
10.5	6481.156
11.0	6190.999
11.5	5899.362
12.0	5607.725
12.5	5319.048
13.0	5033.333
13.5	4752.058
14.0	4476.705
14.5	4208.754
15.0	3951.166
15.5	3703.941
16.0	3468.558
16.5	3245.019
17.0	3031.843
17.5	2829.029
18.0	2638.059
18.5	2460.411
19.0	2293.127
19.5	2137.686
20.0	1989.647
20.5	1849.010
21.0	1718.735
21.5	1597.343
22.0	1481.872
22.5	1374.840
23.0	1274.469
23.5	1181.501
24.0	1094.454
24.5	1013.772
25.0	939.161
25.5	870.026
26.0	806.073
26.5	747.154

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CANDELA TABULATION - (Cont.)

27.0	693.120
27.5	643.378
28.0	597.782
28.5	556.183
29.0	517.841
29.5	482.608
30.0	450.335
30.5	420.875
31.0	393.784
31.5	369.062
32.0	346.264
32.5	325.390
33.0	306.145
33.5	288.528
34.0	272.244
34.5	257.440
35.0	243.673
35.5	231.089
36.0	219.542
36.5	208.735
37.0	198.965
37.5	189.934
38.0	181.644
38.5	173.798
39.0	166.692
39.5	160.030
40.0	153.961
40.5	148.187
41.0	143.006
41.5	137.973
42.0	133.383
42.5	129.090
43.0	124.945
43.5	121.096
44.0	117.395
44.5	113.990
45.0	110.733
45.5	107.624
46.0	104.664
46.5	101.703
47.0	99.038
47.5	96.374
48.0	93.709
48.5	91.192
49.0	88.824
49.5	86.603
50.0	84.382
50.5	82.162
51.0	80.089
51.5	78.165
52.0	76.240
52.5	74.316
53.0	72.391
53.5	70.763
54.0	68.986
54.5	67.358

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55.0	65.729
55.5	64.101
56.0	62.473
56.5	60.992
57.0	59.512
57.5	58.179
58.0	56.699
58.5	55.367
59.0	54.034
59.5	52.554
60.0	51.370
60.5	50.037
61.0	48.705
61.5	47.521
62.0	46.336
62.5	45.152
63.0	43.968
63.5	42.783
64.0	41.599
64.5	40.415
65.0	39.378
65.5	38.194
66.0	37.158
66.5	35.974
67.0	34.937
67.5	33.901
68.0	32.865
68.5	31.828
69.0	30.792
69.5	29.756
70.0	28.720
70.5	27.831
71.0	26.795
71.5	25.907
72.0	25.019
72.5	23.982
73.0	23.094
73.5	22.206
74.0	21.318
74.5	20.429
75.0	19.689
75.5	18.801
76.0	17.913
76.5	17.025
77.0	16.284
77.5	15.396
78.0	14.656
78.5	13.916
79.0	13.027
79.5	12.287
80.0	11.547
80.5	10.807
81.0	10.067
81.5	9.326
82.0	8.586
82.5	7.846

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83.0	7.106
83.5	6.366
84.0	5.774
84.5	5.033
85.0	4.293
85.5	3.701
86.0	3.109
86.5	2.517
87.0	2.073
87.5	1.628
88.0	1.184
88.5	0.888
89.0	0.740
89.5	0.444
90.0	0.296
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-L23-835-DIM-UNV-LN-OF-WH_.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
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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

IES INDOOR REPORT**PHOTOMETRIC FILENAME : V6DR-L23-835-DIM-UNV-LN-OF-WH_.IES****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
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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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	1887.73	N.A.	69.50
0-30	2344.22	N.A.	86.30
0-40	2505.62	N.A.	92.20
0-60	2651.98	N.A.	97.60
0-80	2711.96	N.A.	99.80
0-90	2717.26	N.A.	100.00
10-90	1918.23	N.A.	70.60
20-40	617.89	N.A.	22.70
20-50	704.98	N.A.	25.90
40-70	185.49	N.A.	6.80
60-80	59.98	N.A.	2.20
70-80	20.86	N.A.	0.80
80-90	5.30	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	2717.27	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	799.03
10-20	1088.7
20-30	456.49
30-40	161.39
40-50	87.09
50-60	59.27
60-70	39.12
70-80	20.86
80-90	5.30
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95
2	110	105	102	99	108	104	101	98	101	98	96	98	96	94	95	93	92	90
3	105	100	96	92	104	99	95	92	96	93	90	94	91	89	92	89	88	86
4	101	95	91	87	100	94	90	87	92	88	86	90	87	85	88	86	84	82
5	98	91	86	83	96	90	86	82	88	85	82	87	84	81	85	83	80	79
6	94	87	82	79	93	86	82	79	85	81	78	84	80	78	83	80	77	76
7	91	84	79	76	90	83	79	75	82	78	75	81	77	75	80	77	74	73
8	88	81	76	73	87	80	76	73	79	75	72	78	75	72	78	74	72	71
9	86	78	73	70	85	78	73	70	77	73	70	76	72	70	75	72	69	68
10	83	75	71	68	82	75	71	68	74	70	68	74	70	67	73	70	67	66

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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	11.9	12.9	12.2	13.2	13.5	11.9	12.9	12.2	13.2	13.5
	3H	13.3	14.1	13.7	14.5	14.8	13.3	14.1	13.7	14.5	14.8
	4H	13.8	14.6	14.2	14.9	15.3	13.8	14.6	14.2	14.9	15.3
	6H	14.1	14.8	14.5	15.2	15.6	14.1	14.8	14.5	15.2	15.6
	8H	14.2	14.9	14.6	15.3	15.7	14.2	14.9	14.6	15.3	15.7
	12H	14.2	14.9	14.7	15.3	15.7	14.2	14.9	14.7	15.3	15.7

UGR Viewed Endwise

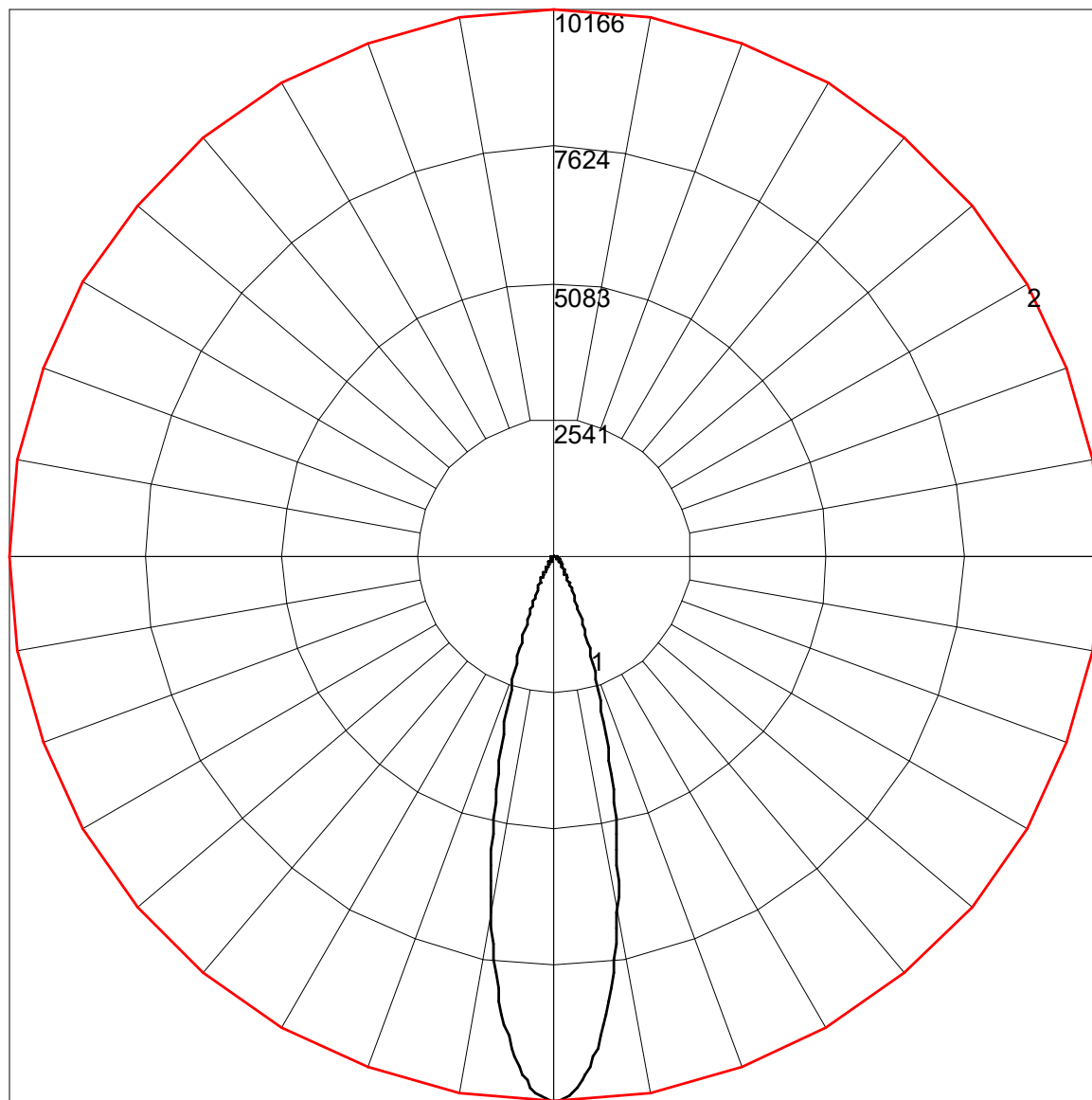
4H	2H	12.3	13.1	12.7	13.4	13.8	12.3	13.1	12.7	13.4	13.8
	3H	13.9	14.5	14.3	14.9	15.3	13.9	14.5	14.3	14.9	15.3
	4H	14.5	15.1	14.9	15.5	15.9	14.5	15.1	14.9	15.5	15.9
	6H	14.9	15.4	15.4	15.9	16.4	14.9	15.4	15.4	15.9	16.4
	8H	15.1	15.5	15.5	16.0	16.5	15.1	15.5	15.5	16.0	16.5
	12H	15.1	15.5	15.6	16.0	16.5	15.1	15.5	15.6	16.0	16.5

8H	4H	14.6	15.1	15.1	15.6	16.0	14.6	15.1	15.1	15.6	16.0
	6H	15.2	15.6	15.7	16.1	16.6	15.2	15.6	15.7	16.1	16.6
	8H	15.4	15.7	16.0	16.3	16.8	15.4	15.7	16.0	16.3	16.8
	12H	15.5	15.8	16.1	16.3	16.9	15.5	15.8	16.1	16.3	16.9

12H	4H	14.6	15.0	15.1	15.5	16.0	14.6	15.0	15.1	15.5	16.0
	6H	15.2	15.6	15.8	16.0	16.6	15.2	15.6	15.8	16.0	16.6
	8H	15.5	15.8	16.0	16.3	16.8	15.5	15.8	16.0	16.3	16.8

Maximum UGR = 16.9

POLAR GRAPH



Maximum Candela = 10165.852 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.)