



IES INDOOR REPORT

PHOTOMETRIC FILENAME : V6DR-P20-835-POE-RN-OF-WH_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from 12326812.15

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 11 OCT 2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] V6DR-P20-835-PoE-RN-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	2335
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	101
Total Luminaire Watts	23.2
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	7645	7645	7645
55	5001	5001	5001
65	3403	3403	3403
75	2199	2199	2199
85	1764	1764	1764

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CANDELA TABULATION

	<u>0</u>
0.0	8671.198
0.5	8663.466
1.0	8638.982
1.5	8596.457
2.0	8537.180
2.5	8459.862
3.0	8367.081
3.5	8260.124
4.0	8140.282
4.5	8006.264
5.0	7860.649
5.5	7700.859
6.0	7528.182
6.5	7345.196
7.0	7151.902
7.5	6948.298
8.0	6735.674
8.5	6515.318
9.0	6285.942
9.5	6051.411
10.0	5810.437
10.5	5568.174
11.0	5323.335
11.5	5077.206
12.0	4832.366
12.5	4587.526
13.0	4347.841
13.5	4108.156
14.0	3876.202
14.5	3650.692
15.0	3430.336
15.5	3220.289
16.0	3020.551
16.5	2831.122
17.0	2648.137
17.5	2474.171
18.0	2309.227
18.5	2155.880
19.0	2010.264
19.5	1878.824
20.0	1749.961
20.5	1628.830
21.0	1516.719
21.5	1412.340
22.0	1313.115
22.5	1219.818
23.0	1133.222
23.5	1052.683
24.0	977.555
24.5	907.583
25.0	842.507
25.5	782.199
26.0	726.530
26.5	674.856

IES INDOOR REPORT
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CANDELA TABULATION - (Cont.)

27.0	627.177
27.5	583.363
28.0	543.029
28.5	505.917
29.0	471.768
29.5	440.454
30.0	411.460
30.5	384.914
31.0	360.559
31.5	338.008
32.0	317.261
32.5	298.060
33.0	280.406
33.5	264.040
34.0	248.964
34.5	234.917
35.0	221.902
35.5	209.918
36.0	198.836
36.5	188.398
37.0	178.862
37.5	169.842
38.0	161.594
38.5	153.991
39.0	146.904
39.5	140.203
40.0	134.146
40.5	128.348
41.0	123.064
41.5	118.039
42.0	113.400
42.5	109.018
43.0	104.895
43.5	101.029
44.0	97.292
44.5	93.812
45.0	90.591
45.5	87.498
46.0	84.534
46.5	81.699
47.0	78.993
47.5	76.287
48.0	73.839
48.5	71.390
49.0	69.199
49.5	67.009
50.0	64.947
50.5	62.885
51.0	60.952
51.5	59.148
52.0	57.344
52.5	55.669
53.0	53.994
53.5	52.447
54.0	50.901
54.5	49.483

IES INDOOR REPORT
PHOTOMETRIC FILENAME : V6DR-P20-835-POE-RN-OF-WH_.IES

CANDELA TABULATION - (Cont.)

55.0	48.066
55.5	46.648
56.0	45.360
56.5	44.071
57.0	42.654
57.5	41.365
58.0	40.205
58.5	38.917
59.0	37.757
59.5	36.468
60.0	35.308
60.5	34.020
61.0	32.860
61.5	31.700
62.0	30.541
62.5	29.510
63.0	28.350
63.5	27.319
64.0	26.159
64.5	25.128
65.0	24.097
65.5	23.066
66.0	22.164
66.5	21.262
67.0	20.360
67.5	19.458
68.0	18.556
68.5	17.783
69.0	17.010
69.5	16.237
70.0	15.464
70.5	14.819
71.0	14.046
71.5	13.402
72.0	12.757
72.5	12.113
73.0	11.598
73.5	11.082
74.0	10.567
74.5	10.051
75.0	9.536
75.5	9.020
76.0	8.634
76.5	8.247
77.0	7.861
77.5	7.474
78.0	7.087
78.5	6.830
79.0	6.443
79.5	6.057
80.0	5.799
80.5	5.412
81.0	5.026
81.5	4.768
82.0	4.381
82.5	4.124

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PHOTOMETRIC FILENAME : V6DR-P20-835-POE-RN-OF-WH_.IES

CANDELA TABULATION - (Cont.)

83.0	3.866
83.5	3.479
84.0	3.222
84.5	2.835
85.0	2.577
85.5	2.320
86.0	2.062
86.5	1.804
87.0	1.546
87.5	1.289
88.0	1.031
88.5	0.773
89.0	0.644
89.5	0.515
90.0	0.387
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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PHOTOMETRIC FILENAME : V6DR-P20-835-POE-RN-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
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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-P20-835-POE-RN-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
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153.0	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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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1628.17	N.A.	69.70
0-30	2036.12	N.A.	87.20
0-40	2182.48	N.A.	93.50
0-60	2297.56	N.A.	98.40
0-80	2332.24	N.A.	99.90
0-90	2335.22	N.A.	100.00
10-90	1651.48	N.A.	70.70
20-40	554.31	N.A.	23.70
20-50	625.94	N.A.	26.80
40-70	139.31	N.A.	6.00
60-80	34.68	N.A.	1.50
70-80	10.45	N.A.	0.40
80-90	2.98	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	2335.23	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	683.74
10-20	944.43
20-30	407.95
30-40	146.36
40-50	71.63
50-60	43.45
60-70	24.23
70-80	10.45
80-90	2.98
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	239	239	239	239	234	234	234	234	223	223	223	214	214	214	205	205	205	201
1	230	225	221	217	225	221	217	214	213	210	207	205	203	201	199	197	195	192
2	221	213	206	200	217	209	203	198	203	198	194	197	193	190	192	189	186	183
3	213	202	194	187	209	199	192	186	194	188	183	189	184	180	185	181	177	174
4	205	192	183	176	201	190	182	175	186	179	173	182	176	171	179	174	170	167
5	198	184	175	168	195	182	173	167	179	171	165	176	169	164	173	167	163	160
6	191	176	167	160	188	175	166	159	172	164	158	170	163	157	167	161	156	154
7	184	170	160	153	182	168	159	153	166	158	152	164	157	151	162	156	151	148
8	178	163	154	148	176	162	153	147	160	152	147	159	151	146	157	150	146	143
9	173	158	149	142	171	157	148	142	155	147	142	154	146	141	152	146	141	139
10	168	153	144	137	166	152	143	137	150	142	137	149	142	137	148	141	136	134

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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	7.3	8.2	7.6	8.5	8.9	7.3	8.2	7.6	8.5	8.9
	3H	8.1	9.0	8.5	9.3	9.7	8.1	9.0	8.5	9.3	9.7
	4H	8.4	9.2	8.8	9.5	9.9	8.4	9.2	8.8	9.5	9.9
	6H	8.5	9.3	8.9	9.6	10.0	8.5	9.3	8.9	9.6	10.0
	8H	8.6	9.3	9.0	9.7	10.1	8.6	9.3	9.0	9.7	10.1
	12H	8.6	9.2	9.0	9.6	10.1	8.6	9.2	9.0	9.6	10.1

UGR Viewed Endwise

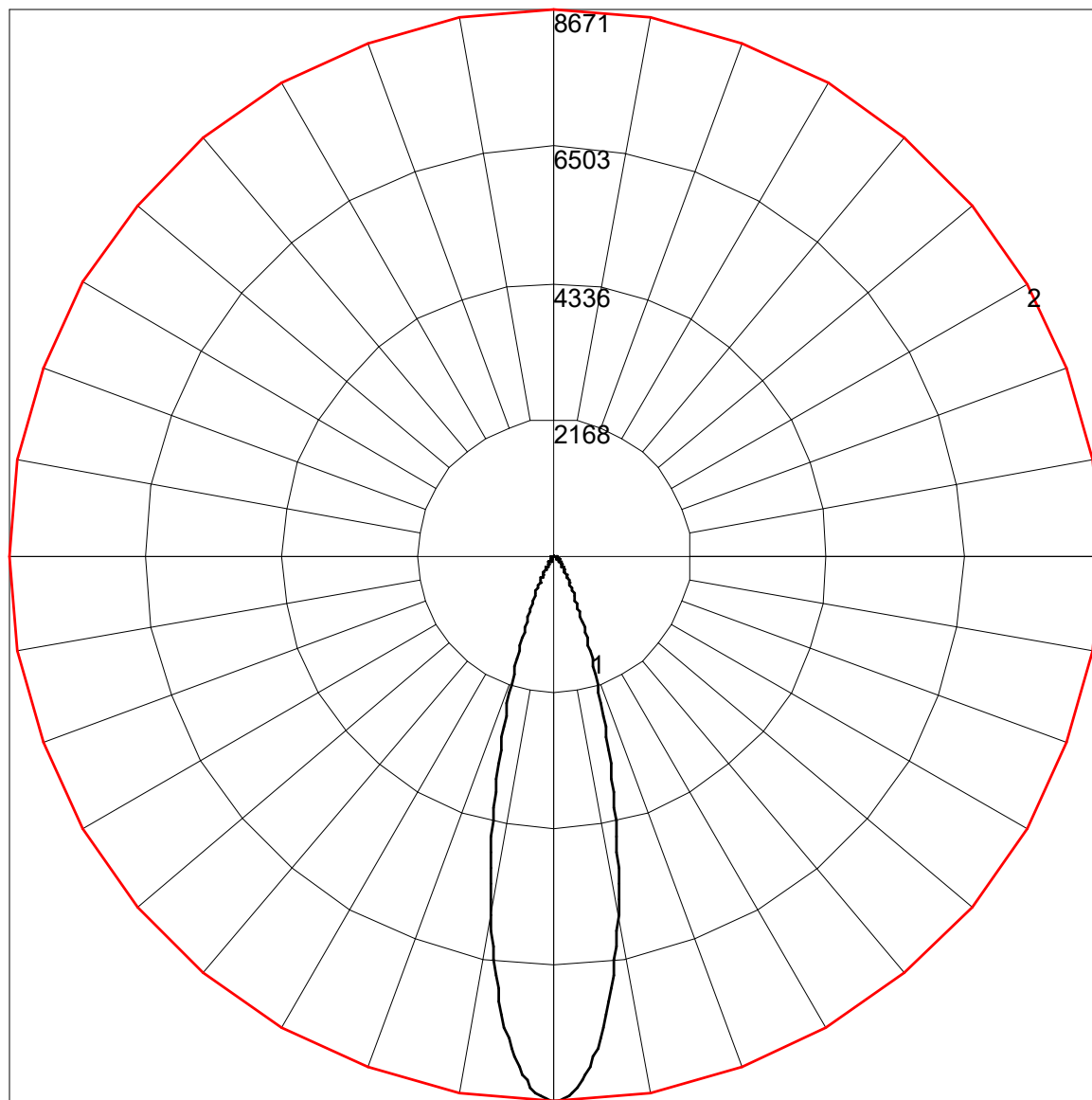
4H	2H	7.5	8.3	7.9	8.6	9.0	7.5	8.3	7.9	8.6	9.0
	3H	8.5	9.2	8.9	9.6	10.0	8.5	9.2	8.9	9.6	10.0
	4H	8.8	9.4	9.3	9.8	10.3	8.8	9.4	9.3	9.8	10.3
	6H	9.1	9.6	9.6	10.0	10.5	9.1	9.6	9.6	10.0	10.5
	8H	9.2	9.6	9.6	10.1	10.6	9.2	9.6	9.6	10.1	10.6
	12H	9.2	9.6	9.7	10.1	10.6	9.2	9.6	9.7	10.1	10.6

8H	4H	8.9	9.3	9.4	9.8	10.3	8.9	9.3	9.4	9.8	10.3
	6H	9.2	9.6	9.7	10.1	10.6	9.2	9.6	9.7	10.1	10.6
	8H	9.4	9.7	9.9	10.2	10.7	9.4	9.7	9.9	10.2	10.7
	12H	9.5	9.8	10.0	10.3	10.8	9.5	9.8	10.0	10.3	10.8

12H	4H	8.8	9.2	9.3	9.7	10.2	8.8	9.2	9.3	9.7	10.2
	6H	9.2	9.6	9.8	10.0	10.6	9.2	9.6	9.8	10.0	10.6
	8H	9.4	9.7	9.9	10.2	10.8	9.4	9.7	9.9	10.2	10.8

Maximum UGR = 10.8

POLAR GRAPH



Maximum Candela = 8671.198 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.)