



IES INDOOR REPORT

PHOTOMETRIC FILENAME : V4DR-P8-835-POE-LW-OF-WH_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #12316380.07

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 6 OCT 2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] V4DR-P8-835-PoE-LW-OF-WH

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

[MORE] erved glass lens enclosure

[LAMP] One white LED

[_SEARCH_SOURCETYPE] LED

[_SEARCH_APPLICATION] Indoor, Classroom, Commercial, Corridor, Hotel, Industrial, Office, Downlight

[_SEARCH_MOUNTING] Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	823
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	72
Total Luminaire Watts	11.5
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.00
Spacing Criterion (90-270)	1.00
Spacing Criterion (Diagonal)	0.90
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.35 ft (Diameter)
Luminous Width (90-270)	0.35 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	22706	22706	22706
55	18657	18657	18657
65	13649	13649	13649
75	9449	9449	9449
85	5151	5151	5151

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CANDELA TABULATION

	<u>0</u>
0.0	577.987
0.5	577.804
1.0	577.439
1.5	576.952
2.0	576.465
2.5	575.917
3.0	575.187
3.5	574.761
4.0	574.456
4.5	574.274
5.0	574.030
5.5	573.787
6.0	573.604
6.5	573.361
7.0	573.178
7.5	573.056
8.0	572.995
8.5	572.813
9.0	572.630
9.5	572.265
10.0	572.022
10.5	571.595
11.0	571.169
11.5	570.621
12.0	570.013
12.5	569.282
13.0	568.430
13.5	567.456
14.0	566.239
14.5	564.778
15.0	563.012
15.5	560.882
16.0	558.508
16.5	555.708
17.0	552.664
17.5	549.255
18.0	545.238
18.5	541.098
19.0	536.594
19.5	531.541
20.0	526.002
20.5	519.975
21.0	513.462
21.5	506.462
22.0	498.731
22.5	490.513
23.0	481.686
23.5	472.190
24.0	461.964
24.5	451.067
25.0	439.258
25.5	426.901
26.0	413.691
26.5	399.691

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CANDELA TABULATION - (Cont.)

27.0	385.203
27.5	370.107
28.0	354.767
28.5	339.366
29.0	324.269
29.5	309.477
30.0	295.233
30.5	281.841
31.0	269.301
31.5	257.857
32.0	247.448
32.5	238.073
33.0	229.734
33.5	222.307
34.0	215.672
34.5	209.828
35.0	204.533
35.5	199.724
36.0	195.463
36.5	191.445
37.0	187.793
37.5	184.384
38.0	181.218
38.5	178.175
39.0	175.374
39.5	172.635
40.0	170.079
40.5	167.522
41.0	165.087
41.5	162.713
42.0	160.461
42.5	158.208
43.0	155.956
43.5	153.704
44.0	151.451
44.5	149.199
45.0	146.947
45.5	144.695
46.0	142.442
46.5	140.190
47.0	137.816
47.5	135.442
48.0	133.068
48.5	130.633
49.0	128.137
49.5	125.641
50.0	123.207
50.5	120.711
51.0	118.215
51.5	115.719
52.0	113.284
52.5	110.849
53.0	108.354
53.5	105.797
54.0	103.179
54.5	100.562

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CANDELA TABULATION - (Cont.)

55.0	97.944
55.5	95.327
56.0	92.770
56.5	90.274
57.0	87.779
57.5	85.283
58.0	82.848
58.5	80.474
59.0	78.100
59.5	75.787
60.0	73.534
60.5	71.282
61.0	69.091
61.5	66.960
62.0	64.830
62.5	62.699
63.0	60.666
63.5	58.645
64.0	56.660
64.5	54.706
65.0	52.795
65.5	50.932
66.0	49.094
66.5	47.304
67.0	45.557
67.5	43.841
68.0	42.179
68.5	40.553
69.0	38.928
69.5	37.358
70.0	35.830
70.5	34.326
71.0	32.859
71.5	31.429
72.0	30.047
72.5	28.683
73.0	27.356
73.5	26.066
74.0	24.800
74.5	23.576
75.0	22.383
75.5	21.226
76.0	20.094
76.5	18.992
77.0	17.939
77.5	16.892
78.0	15.882
78.5	14.902
79.0	13.940
79.5	13.015
80.0	12.108
80.5	11.225
81.0	10.354
81.5	9.508
82.0	8.680
82.5	7.877

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CANDELA TABULATION - (Cont.)

83.0	7.080
83.5	6.306
84.0	5.552
84.5	4.815
85.0	4.109
85.5	3.427
86.0	2.776
86.5	2.161
87.0	1.619
87.5	1.169
88.0	0.816
88.5	0.517
89.0	0.323
89.5	0.219
90.0	0.152
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
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131.5	0.000
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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
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149.5	0.000
150.0	0.000
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151.0	0.000
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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	212.31	N.A.	25.80
0-30	407.23	N.A.	49.50
0-40	540.00	N.A.	65.60
0-60	740.70	N.A.	90.00
0-80	817.64	N.A.	99.40
0-90	822.79	N.A.	100.00
10-90	768.04	N.A.	93.30
20-40	327.69	N.A.	39.80
20-50	440.86	N.A.	53.60
40-70	253.49	N.A.	30.80
60-80	76.94	N.A.	9.40
70-80	24.15	N.A.	2.90
80-90	5.15	N.A.	0.60
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	822.79	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	54.75
10-20	157.56
20-30	194.92
30-40	132.77
40-50	113.17
50-60	87.54
60-70	52.79
70-80	24.15
80-90	5.15
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	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	84	84	84	84	82	82	82	82	79	79	79	75	75	75	72	72	72	71
1	79	76	74	72	77	74	72	70	71	70	68	69	67	66	66	65	64	63
2	73	68	65	61	71	67	64	61	65	62	59	63	60	58	61	59	57	55
3	68	62	57	54	66	61	57	53	59	55	52	57	54	51	55	53	51	49
4	63	56	51	47	62	56	51	47	54	50	47	52	49	46	51	48	45	44
5	59	52	46	43	58	51	46	42	50	45	42	48	44	41	47	44	41	40
6	56	48	42	38	54	47	42	38	46	41	38	45	41	38	44	40	37	36
7	52	44	39	35	51	43	38	35	42	38	35	42	38	35	41	37	34	33
8	49	41	36	32	48	40	36	32	40	35	32	39	35	32	38	34	32	30
9	46	38	33	30	45	38	33	30	37	33	30	36	32	29	36	32	29	28
10	44	36	31	28	43	35	31	28	35	30	27	34	30	27	34	30	27	26

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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	21.1	22.5	21.5	22.8	23.1	21.1	22.5	21.5	22.8	23.1
	3H	22.2	23.4	22.6	23.8	24.1	22.2	23.4	22.6	23.8	24.1
	4H	22.6	23.7	23.0	24.0	24.4	22.6	23.7	23.0	24.0	24.4
	6H	22.8	23.8	23.2	24.2	24.6	22.8	23.8	23.2	24.2	24.6
	8H	22.8	23.8	23.3	24.2	24.6	22.8	23.8	23.3	24.2	24.6
	12H	22.8	23.8	23.3	24.2	24.6	22.8	23.8	23.3	24.2	24.6

UGR Viewed Endwise

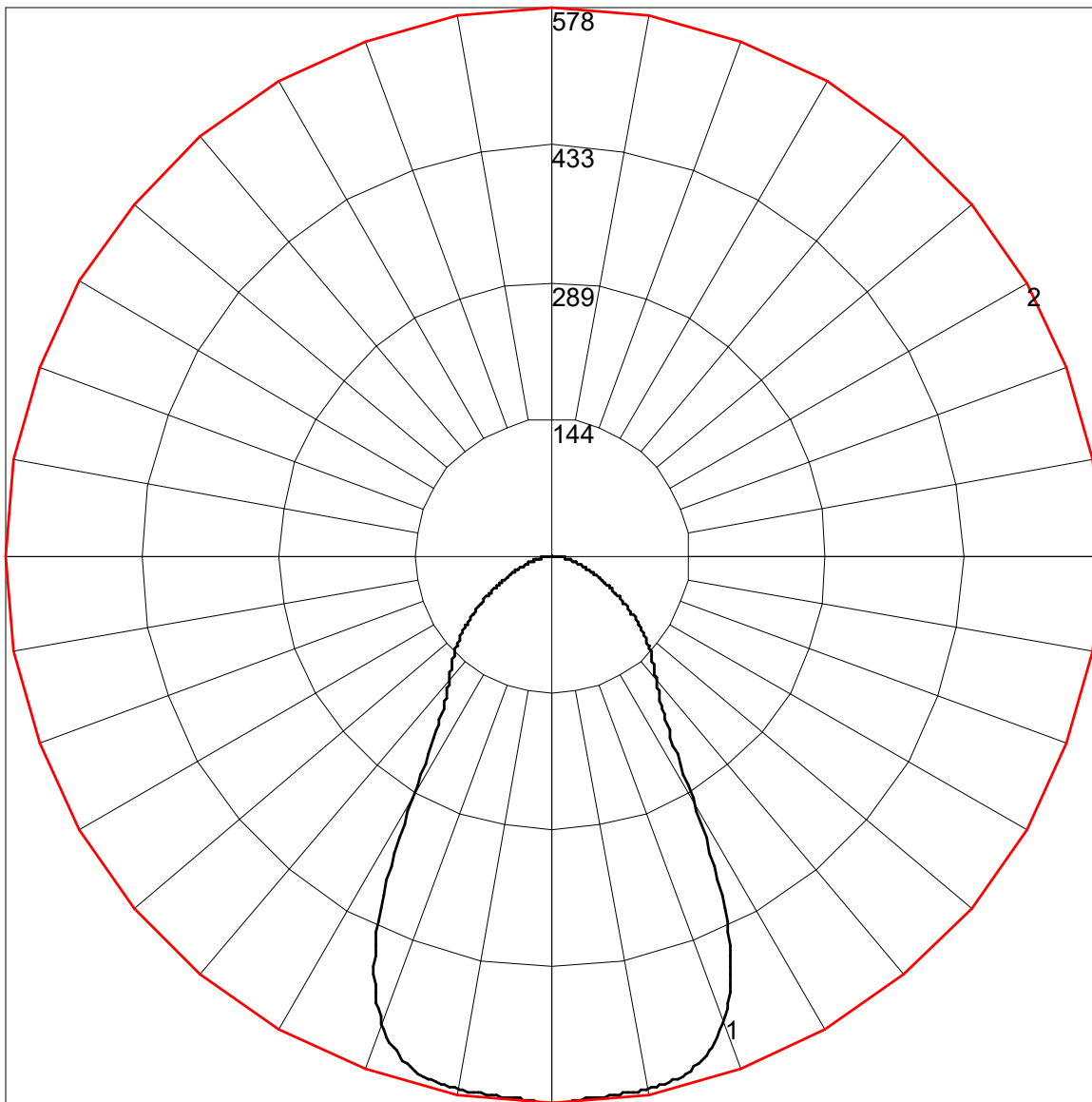
4H	2H	21.5	22.6	21.9	23.0	23.3	21.5	22.6	21.9	23.0	23.3
	3H	22.8	23.7	23.2	24.1	24.5	22.8	23.7	23.2	24.1	24.5
	4H	23.2	24.1	23.6	24.5	24.9	23.2	24.1	23.6	24.5	24.9
	6H	23.5	24.3	24.0	24.7	25.2	23.5	24.3	24.0	24.7	25.2
	8H	23.6	24.3	24.1	24.7	25.2	23.6	24.3	24.1	24.7	25.2
	12H	23.6	24.2	24.1	24.7	25.2	23.6	24.2	24.1	24.7	25.2

8H	4H	23.3	24.0	23.8	24.5	24.9	23.3	24.0	23.8	24.5	24.9
	6H	23.7	24.3	24.2	24.8	25.3	23.7	24.3	24.2	24.8	25.3
	8H	23.8	24.3	24.3	24.9	25.3	23.8	24.3	24.3	24.9	25.3
	12H	23.9	24.3	24.4	24.8	25.4	23.9	24.3	24.4	24.8	25.4

12H	4H	23.3	23.9	23.8	24.4	24.9	23.3	23.9	23.8	24.4	24.9
	6H	23.7	24.2	24.3	24.7	25.2	23.7	24.2	24.3	24.7	25.2
	8H	23.9	24.3	24.4	24.8	25.4	23.9	24.3	24.4	24.8	25.4

Maximum UGR = 25.4

POLAR GRAPH



Maximum Candela = 577.987 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.)