



IES INDOOR REPORT

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

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #12316380.14

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 6 OCT 2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] V4DR-P8-835-PoE x-RM-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, 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	1093
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	95
Total Luminaire Watts	11.5
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.52
Spacing Criterion (90-270)	0.52
Spacing Criterion (Diagonal)	0.52
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.38 ft (Diameter)
Luminous Width (90-270)	0.38 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	6272	6272	6272
55	4362	4362	4362
65	3114	3114	3114
75	2085	2085	2085
85	1700	1700	1700

IES INDOOR REPORT
PHOTOMETRIC FILENAME : V4DR-P8-835-POE-RM-OF-WH_.IES

CANDELA TABULATION

	<u>0</u>
0.0	3151.737
0.5	3149.301
1.0	3141.994
1.5	3130.425
2.0	3114.593
2.5	3094.499
3.0	3070.751
3.5	3042.741
4.0	3010.469
4.5	2975.761
5.0	2937.399
5.5	2894.775
6.0	2849.107
6.5	2800.394
7.0	2748.027
7.5	2692.007
8.0	2633.551
8.5	2571.442
9.0	2507.506
9.5	2441.135
10.0	2372.327
10.5	2301.693
11.0	2229.233
11.5	2155.554
12.0	2080.658
12.5	2006.370
13.0	1932.083
13.5	1857.186
14.0	1781.681
14.5	1706.176
15.0	1631.888
15.5	1558.210
16.0	1484.531
16.5	1412.680
17.0	1341.437
17.5	1271.412
18.0	1202.604
18.5	1135.624
19.0	1071.688
19.5	1008.970
20.0	948.078
20.5	890.232
21.0	834.212
21.5	780.627
22.0	730.087
22.5	681.983
23.0	636.924
23.5	593.813
24.0	553.015
24.5	514.593
25.0	478.667
25.5	445.238
26.0	414.061
26.5	384.833

IES INDOOR REPORT
PHOTOMETRIC FILENAME : V4DR-P8-835-POE-RM-OF-WH_.IES

CANDELA TABULATION - (Cont.)

27.0	357.676
27.5	332.528
28.0	309.145
28.5	287.346
29.0	267.374
29.5	248.741
30.0	231.509
30.5	215.677
31.0	201.063
31.5	187.545
32.0	175.063
32.5	163.615
33.0	153.020
33.5	143.156
34.0	134.144
34.5	125.741
35.0	118.007
35.5	110.883
36.0	104.246
36.5	98.157
37.0	92.494
37.5	87.379
38.0	82.630
38.5	78.367
39.0	74.409
39.5	70.817
40.0	67.589
40.5	64.545
41.0	61.805
41.5	59.247
42.0	56.873
42.5	54.680
43.0	52.610
43.5	50.662
44.0	48.835
44.5	47.130
45.0	45.547
45.5	44.085
46.0	42.685
46.5	41.345
47.0	40.067
47.5	38.910
48.0	37.814
48.5	36.717
49.0	35.682
49.5	34.708
50.0	33.795
50.5	32.881
51.0	32.029
51.5	31.115
52.0	30.324
52.5	29.471
53.0	28.741
53.5	27.949
54.0	27.158
54.5	26.427

IES INDOOR REPORT
PHOTOMETRIC FILENAME : V4DR-P8-835-POE-RM-OF-WH_.IES

CANDELA TABULATION - (Cont.)

55.0	25.696
55.5	24.965
56.0	24.296
56.5	23.626
57.0	22.956
57.5	22.286
58.0	21.616
58.5	21.008
59.0	20.399
59.5	19.790
60.0	19.181
60.5	18.572
61.0	17.963
61.5	17.415
62.0	16.806
62.5	16.258
63.0	15.649
63.5	15.101
64.0	14.553
64.5	14.005
65.0	13.518
65.5	12.970
66.0	12.483
66.5	11.935
67.0	11.448
67.5	10.960
68.0	10.473
68.5	10.047
69.0	9.560
69.5	9.134
70.0	8.707
70.5	8.342
71.0	7.977
71.5	7.611
72.0	7.246
72.5	6.942
73.0	6.637
73.5	6.333
74.0	6.089
74.5	5.785
75.0	5.541
75.5	5.298
76.0	5.054
76.5	4.871
77.0	4.628
77.5	4.384
78.0	4.202
78.5	3.958
79.0	3.775
79.5	3.593
80.0	3.349
80.5	3.166
81.0	2.984
81.5	2.801
82.0	2.557
82.5	2.375

IES INDOOR REPORT
PHOTOMETRIC FILENAME : V4DR-P8-835-POE-RM-OF-WH_.IES

CANDELA TABULATION - (Cont.)

83.0	2.192
83.5	2.009
84.0	1.827
84.5	1.644
85.0	1.522
85.5	1.340
86.0	1.157
86.5	0.974
87.0	0.852
87.5	0.731
88.0	0.609
88.5	0.487
89.0	0.426
89.5	0.304
90.0	0.244
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 : V4DR-P8-835-POE-RM-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
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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : V4DR-P8-835-POE-RM-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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : V4DR-P8-835-POE-RM-OF-WH_.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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : V4DR-P8-835-POE-RM-OF-WH_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	705.25	N.A.	64.50
0-30	934.13	N.A.	85.40
0-40	1012.66	N.A.	92.60
0-60	1072.03	N.A.	98.10
0-80	1091.53	N.A.	99.80
0-90	1093.25	N.A.	100.00
10-90	831.06	N.A.	76.00
20-40	307.41	N.A.	28.10
20-50	343.62	N.A.	31.40
40-70	72.84	N.A.	6.70
60-80	19.49	N.A.	1.80
70-80	6.02	N.A.	0.60
80-90	1.73	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	1093.26	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	262.20
10-20	443.05
20-30	228.88
30-40	78.53
40-50	36.21
50-60	23.16
60-70	13.47
70-80	6.02
80-90	1.73
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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : V4DR-P8-835-POE-RM-OF-WH_.IES

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	81	79	77	76	79	77	76	75	75	73	72	72	71	70	70	69	68	67
2	77	74	72	70	76	73	71	69	71	69	67	69	67	66	67	66	65	63
3	74	70	67	65	73	69	66	64	67	65	63	66	64	62	64	63	61	60
4	71	67	63	61	70	66	63	60	64	62	60	63	61	59	62	60	58	57
5	68	63	60	57	67	63	60	57	62	59	57	61	58	56	59	57	56	55
6	66	61	57	55	65	60	57	54	59	56	54	58	56	54	57	55	53	52
7	64	58	55	52	63	58	54	52	57	54	52	56	53	51	55	53	51	50
8	61	56	52	50	61	55	52	50	55	52	49	54	51	49	53	51	49	48
9	59	54	50	48	59	53	50	48	53	50	48	52	49	47	52	49	47	46
10	57	52	48	46	57	51	48	46	51	48	46	50	48	46	50	47	46	45

IES INDOOR REPORT
PHOTOMETRIC FILENAME : V4DR-P8-835-POE-RM-OF-WH_.IES

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	10.9	11.9	11.3	12.2	12.5	UGR Viewed Endwise			
	3H	11.9	12.8	12.3	13.1	13.5	10.9	11.9	11.3	12.2
	4H	12.2	13.0	12.6	13.3	13.7	11.9	12.8	12.3	13.1
	6H	12.4	13.1	12.8	13.5	13.9	12.2	13.0	12.6	13.3
	8H	12.4	13.1	12.9	13.5	13.9	12.4	13.1	12.8	13.5
	12H	12.5	13.1	12.9	13.5	13.9	12.4	13.1	12.9	13.5

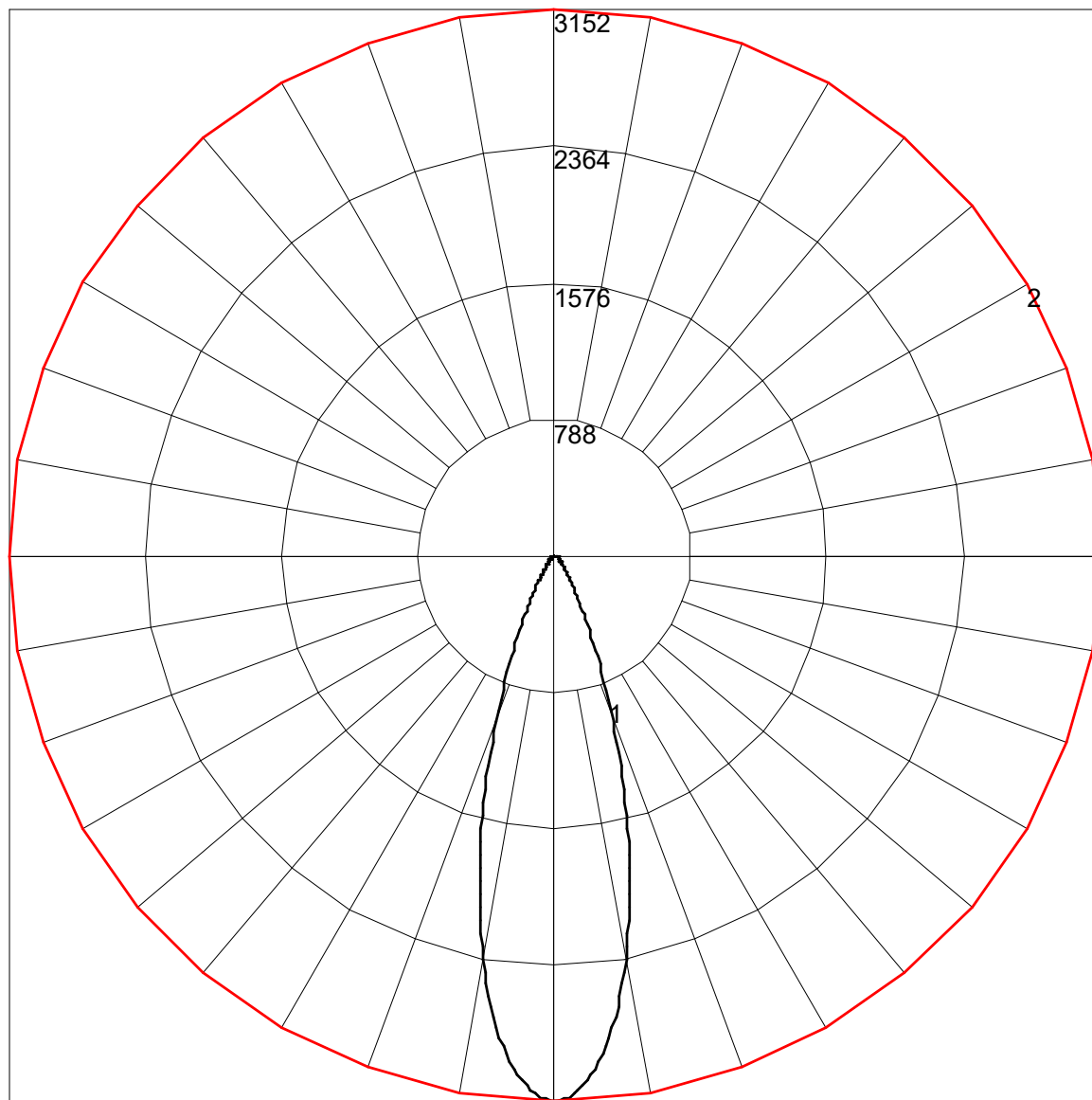
4H	2H	11.2	12.0	11.6	12.4	12.7	10.9	11.9	11.3	12.2
	3H	12.3	13.0	12.7	13.4	13.8	11.9	12.8	12.3	13.1
	4H	12.7	13.3	13.1	13.7	14.1	12.2	13.0	12.6	13.3
	6H	13.0	13.5	13.5	14.0	14.4	12.4	13.1	12.8	13.5
	8H	13.1	13.6	13.6	14.0	14.5	12.4	13.1	12.9	13.5
	12H	13.1	13.5	13.6	14.0	14.5	12.5	13.1	12.9	13.5

8H	4H	12.8	13.2	13.2	13.7	14.2	12.4	13.1	12.8	13.5
	6H	13.2	13.5	13.7	14.0	14.5	12.4	13.1	12.9	13.5
	8H	13.3	13.7	13.9	14.2	14.7	12.5	13.1	12.9	13.5
	12H	13.5	13.7	14.0	14.2	14.8	12.5	13.1	12.9	13.5

12H	4H	12.7	13.1	13.2	13.6	14.1	12.4	13.1	12.8	13.5
	6H	13.2	13.5	13.7	14.0	14.5	12.4	13.1	12.9	13.5
	8H	13.4	13.6	13.9	14.1	14.7	12.5	13.1	12.9	13.5

Maximum UGR = 14.8

POLAR GRAPH



Maximum Candela = 3151.737 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.)