



IES INDOOR REPORT

PHOTOMETRIC FILENAME : V4DR-P17-835-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-P17-835-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	1654
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	71
Total Luminaire Watts	23.2
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	45633	45633	45633
55	37497	37497	37497
65	27431	27431	27431
75	18990	18990	18990
85	10353	10353	10353

IES INDOOR REPORT
PHOTOMETRIC FILENAME : V4DR-P17-835-POE-LW-OF-WH_.IES

CANDELA TABULATION

	<u>0</u>
0.0	1161.593
0.5	1161.226
1.0	1160.492
1.5	1159.513
2.0	1158.534
2.5	1157.433
3.0	1155.965
3.5	1155.109
4.0	1154.497
4.5	1154.130
5.0	1153.641
5.5	1153.151
6.0	1152.784
6.5	1152.295
7.0	1151.928
7.5	1151.683
8.0	1151.561
8.5	1151.194
9.0	1150.827
9.5	1150.093
10.0	1149.604
10.5	1148.747
11.0	1147.891
11.5	1146.790
12.0	1145.567
12.5	1144.098
13.0	1142.386
13.5	1140.428
14.0	1137.982
14.5	1135.046
15.0	1131.498
15.5	1127.216
16.0	1122.445
16.5	1116.817
17.0	1110.700
17.5	1103.850
18.0	1095.775
18.5	1087.456
19.0	1078.403
19.5	1068.249
20.0	1057.117
20.5	1045.005
21.0	1031.915
21.5	1017.846
22.0	1002.310
22.5	985.794
23.0	968.055
23.5	948.970
24.0	928.418
24.5	906.519
25.0	882.786
25.5	857.952
26.0	831.404
26.5	803.267

IES INDOOR REPORT
PHOTOMETRIC FILENAME : V4DR-P17-835-POE-LW-OF-WH_.IES

CANDELA TABULATION - (Cont.)

27.0	774.150
27.5	743.811
28.0	712.982
28.5	682.030
29.0	651.691
29.5	621.963
30.0	593.336
30.5	566.422
31.0	541.220
31.5	518.221
32.0	497.301
32.5	478.461
33.0	461.701
33.5	446.776
34.0	433.441
34.5	421.697
35.0	411.053
35.5	401.389
36.0	392.825
36.5	384.751
37.0	377.411
37.5	370.560
38.0	364.198
38.5	358.081
39.0	352.454
39.5	346.949
40.0	341.810
40.5	336.672
41.0	331.779
41.5	327.008
42.0	322.481
42.5	317.955
43.0	313.428
43.5	308.902
44.0	304.375
44.5	299.849
45.0	295.322
45.5	290.796
46.0	286.269
46.5	281.743
47.0	276.972
47.5	272.201
48.0	267.429
48.5	262.536
49.0	257.520
49.5	252.504
50.0	247.611
50.5	242.595
51.0	237.579
51.5	232.563
52.0	227.670
52.5	222.776
53.0	217.760
53.5	212.622
54.0	207.362
54.5	202.101

IES INDOOR REPORT
PHOTOMETRIC FILENAME : V4DR-P17-835-POE-LW-OF-WH_.IES

CANDELA TABULATION - (Cont.)

55.0	196.841
55.5	191.580
56.0	186.442
56.5	181.426
57.0	176.410
57.5	171.395
58.0	166.501
58.5	161.730
59.0	156.959
59.5	152.310
60.0	147.783
60.5	143.257
61.0	138.853
61.5	134.571
62.0	130.289
62.5	126.007
63.0	121.921
63.5	117.860
64.0	113.872
64.5	109.945
65.0	106.103
65.5	102.360
66.0	98.665
66.5	95.068
67.0	91.557
67.5	88.107
68.0	84.768
68.5	81.501
69.0	78.235
69.5	75.078
70.0	72.008
70.5	68.986
71.0	66.038
71.5	63.163
72.0	60.386
72.5	57.645
73.0	54.978
73.5	52.385
74.0	49.840
74.5	47.381
75.0	44.983
75.5	42.659
76.0	40.384
76.5	38.169
77.0	36.053
77.5	33.949
78.0	31.918
78.5	29.948
79.0	28.015
79.5	26.156
80.0	24.333
80.5	22.559
81.0	20.810
81.5	19.109
82.0	17.445
82.5	15.830

IES INDOOR REPORT
PHOTOMETRIC FILENAME : V4DR-P17-835-POE-LW-OF-WH_.IES

CANDELA TABULATION - (Cont.)

83.0	14.228
83.5	12.674
84.0	11.157
84.5	9.677
85.0	8.258
85.5	6.888
86.0	5.579
86.5	4.343
87.0	3.254
87.5	2.349
88.0	1.639
88.5	1.040
89.0	0.648
89.5	0.440
90.0	0.306
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-P17-835-POE-LW-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-P17-835-POE-LW-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-P17-835-POE-LW-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-P17-835-POE-LW-OF-WH_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	426.68	N.A.	25.80
0-30	818.41	N.A.	49.50
0-40	1085.25	N.A.	65.60
0-60	1488.61	N.A.	90.00
0-80	1643.23	N.A.	99.40
0-90	1653.57	N.A.	100.00
10-90	1543.55	N.A.	93.30
20-40	658.57	N.A.	39.80
20-50	886.01	N.A.	53.60
40-70	509.45	N.A.	30.80
60-80	154.62	N.A.	9.40
70-80	48.53	N.A.	2.90
80-90	10.34	N.A.	0.60
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	1653.58	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	110.02
10-20	316.65
20-30	391.74
30-40	266.84
40-50	227.44
50-60	175.92
60-70	106.09
70-80	48.53
80-90	10.34
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-P17-835-POE-LW-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	169	169	169	169	165	165	165	165	158	158	158	151	151	151	145	145	145	142
1	158	153	148	144	154	150	145	141	144	140	137	138	135	133	133	131	129	126
2	147	138	130	123	143	135	128	122	130	124	119	126	121	117	122	118	114	111
3	137	125	115	108	133	122	114	107	118	111	105	115	109	103	111	106	102	99
4	127	113	103	95	124	112	102	95	108	100	94	105	98	92	102	96	91	89
5	119	104	93	85	116	102	92	85	100	91	84	97	89	83	95	88	83	80
6	112	96	85	77	109	94	84	77	92	83	76	90	82	76	88	81	75	73
7	105	88	78	70	103	87	77	70	85	76	70	83	75	69	82	74	69	66
8	99	82	72	65	97	81	71	65	80	71	64	78	70	64	76	69	64	61
9	93	77	67	60	91	76	66	60	74	66	59	73	65	59	72	64	59	57
10	88	72	62	55	87	71	62	55	70	61	55	69	61	55	67	60	55	53

IES INDOOR REPORT
PHOTOMETRIC FILENAME : V4DR-P17-835-POE-LW-OF-WH_.IES

UGR TABLE - CORRECTED

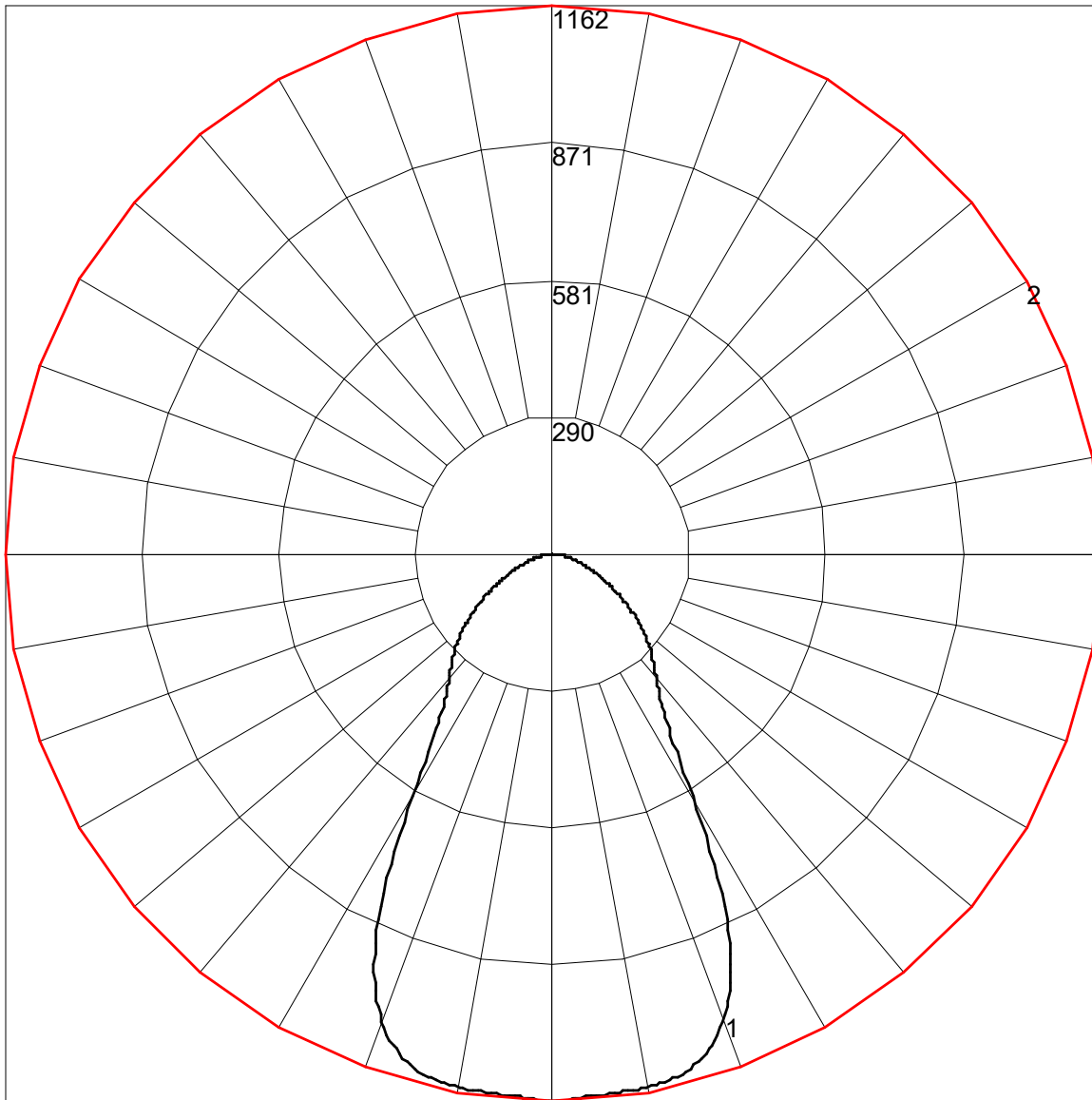
Reflectances

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					UGR Viewed Endwise				
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
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 = 1161.593 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.)