



IES INDOOR REPORT

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

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from 12326812.15

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 9 SEP 2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] V6DR-L23-835-DIM-UNV-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	2683
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	91
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)	0.46
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	8785	8785	8785
55	5746	5746	5746
65	3910	3910	3910
75	2526	2526	2526
85	2027	2027	2027

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CANDELA TABULATION

	<u>0</u>
0.0	9963.496
0.5	9954.612
1.0	9926.479
1.5	9877.616
2.0	9809.505
2.5	9720.664
3.0	9614.055
3.5	9491.159
4.0	9353.455
4.5	9199.465
5.0	9032.148
5.5	8848.544
6.0	8650.132
6.5	8439.876
7.0	8217.774
7.5	7983.826
8.0	7739.514
8.5	7486.318
9.0	7222.757
9.5	6953.273
10.0	6676.386
10.5	6398.018
11.0	6116.689
11.5	5833.879
12.0	5552.550
12.5	5271.221
13.0	4995.814
13.5	4720.408
14.0	4453.885
14.5	4194.766
15.0	3941.570
15.5	3700.219
16.0	3470.714
16.5	3253.054
17.0	3042.797
17.5	2842.906
18.0	2653.379
18.5	2477.178
19.0	2309.861
19.5	2158.831
20.0	2010.763
20.5	1871.580
21.0	1742.760
21.5	1622.825
22.0	1508.813
22.5	1401.612
23.0	1302.110
23.5	1209.567
24.0	1123.244
24.5	1042.843
25.0	968.069
25.5	898.773
26.0	834.807
26.5	775.432

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CANDELA TABULATION - (Cont.)

27.0	720.647
27.5	670.304
28.0	623.959
28.5	581.315
29.0	542.077
29.5	506.096
30.0	472.781
30.5	442.279
31.0	414.294
31.5	388.382
32.0	364.543
32.5	342.481
33.0	322.196
33.5	303.391
34.0	286.067
34.5	269.928
35.0	254.973
35.5	241.203
36.0	228.469
36.5	216.475
37.0	205.518
37.5	195.154
38.0	185.677
38.5	176.941
39.0	168.798
39.5	161.098
40.0	154.139
40.5	147.476
41.0	141.405
41.5	135.630
42.0	130.300
42.5	125.266
43.0	120.527
43.5	116.085
44.0	111.791
44.5	107.794
45.0	104.092
45.5	100.538
46.0	97.133
46.5	93.875
47.0	90.766
47.5	87.656
48.0	84.843
48.5	82.030
49.0	79.513
49.5	76.995
50.0	74.626
50.5	72.257
51.0	70.036
51.5	67.963
52.0	65.890
52.5	63.965
53.0	62.040
53.5	60.264
54.0	58.487
54.5	56.858

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CANDELA TABULATION - (Cont.)

55.0	55.229
55.5	53.601
56.0	52.120
56.5	50.639
57.0	49.011
57.5	47.530
58.0	46.197
58.5	44.717
59.0	43.384
59.5	41.903
60.0	40.571
60.5	39.090
61.0	37.757
61.5	36.425
62.0	35.092
62.5	33.908
63.0	32.575
63.5	31.390
64.0	30.058
64.5	28.873
65.0	27.689
65.5	26.504
66.0	25.468
66.5	24.431
67.0	23.395
67.5	22.358
68.0	21.322
68.5	20.433
69.0	19.545
69.5	18.657
70.0	17.768
70.5	17.028
71.0	16.139
71.5	15.399
72.0	14.659
72.5	13.918
73.0	13.326
73.5	12.734
74.0	12.142
74.5	11.549
75.0	10.957
75.5	10.365
76.0	9.921
76.5	9.476
77.0	9.032
77.5	8.588
78.0	8.144
78.5	7.848
79.0	7.403
79.5	6.959
80.0	6.663
80.5	6.219
81.0	5.775
81.5	5.479
82.0	5.034
82.5	4.738

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CANDELA TABULATION - (Cont.)

83.0	4.442
83.5	3.998
84.0	3.702
84.5	3.257
85.0	2.961
85.5	2.665
86.0	2.369
86.5	2.073
87.0	1.777
87.5	1.481
88.0	1.185
88.5	0.888
89.0	0.740
89.5	0.592
90.0	0.444
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
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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

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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
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147.0	0.000
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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	1870.82	N.A.	69.70
0-30	2339.57	N.A.	87.20
0-40	2507.74	N.A.	93.50
0-60	2639.97	N.A.	98.40
0-80	2679.82	N.A.	99.90
0-90	2683.25	N.A.	100.00
10-90	1897.6	N.A.	70.70
20-40	636.92	N.A.	23.70
20-50	719.23	N.A.	26.80
40-70	160.08	N.A.	6.00
60-80	39.85	N.A.	1.50
70-80	12.00	N.A.	0.40
80-90	3.42	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	2683.26	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	785.64
10-20	1085.18
20-30	468.75
30-40	168.17
40-50	82.31
50-60	49.92
60-70	27.84
70-80	12.00
80-90	3.42
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	106	102	100	108	104	101	98	101	98	96	98	96	94	95	94	92	91
3	106	100	96	93	104	99	95	92	97	93	91	94	92	89	92	90	88	87
4	102	96	91	88	100	95	90	87	93	89	86	91	88	85	89	86	84	83
5	98	91	87	83	97	91	86	83	89	85	82	87	84	82	86	83	81	80
6	95	88	83	80	94	87	83	79	86	82	79	84	81	78	83	80	78	77
7	92	84	80	76	91	84	79	76	83	79	76	81	78	75	80	77	75	74
8	89	81	77	73	88	81	76	73	80	76	73	79	75	73	78	75	72	71
9	86	78	74	71	85	78	74	71	77	73	70	76	73	70	76	72	70	69
10	83	76	71	68	83	76	71	68	75	71	68	74	70	68	73	70	68	67

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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	10.2	11.1	10.5	11.4	11.8	UGR Viewed Endwise			
	3H	11.0	11.9	11.4	12.2	12.6	10.2	11.1	10.5	11.4
	4H	11.3	12.1	11.7	12.4	12.8	11.0	11.9	11.4	12.2
	6H	11.4	12.2	11.9	12.5	12.9	11.3	12.1	11.7	12.4
	8H	11.5	12.2	11.9	12.6	13.0	11.4	12.2	11.9	12.5
	12H	11.5	12.1	11.9	12.5	13.0	11.5	12.2	11.9	12.6

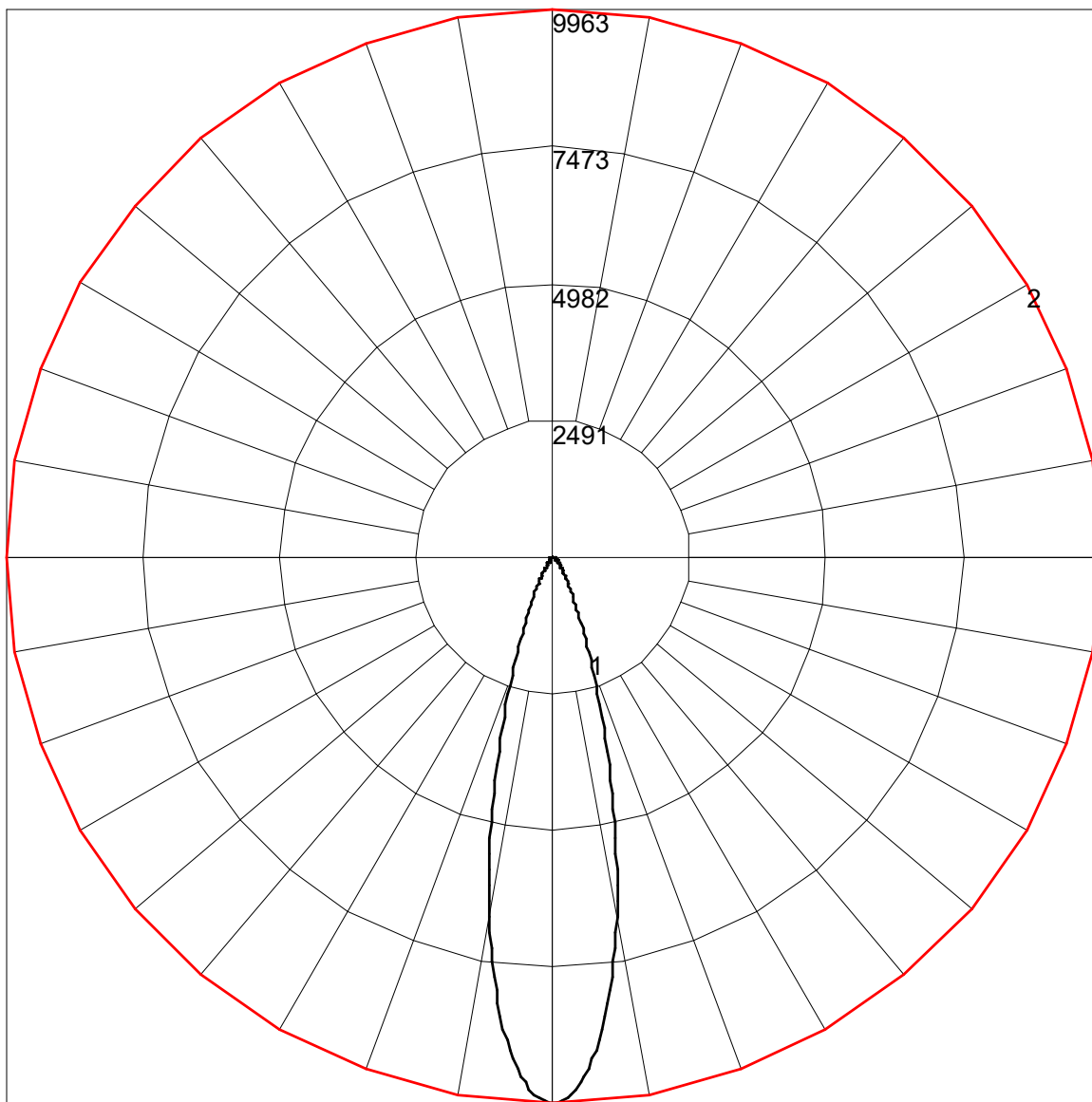
4H	2H	10.4	11.2	10.8	11.5	11.9	10.4	11.2	10.8	11.5
	3H	11.4	12.1	11.8	12.5	12.9	11.4	12.1	11.8	12.5
	4H	11.8	12.3	12.2	12.7	13.2	11.8	12.3	12.2	12.7
	6H	12.0	12.5	12.5	12.9	13.4	12.0	12.5	12.5	12.9
	8H	12.1	12.5	12.6	13.0	13.5	12.1	12.5	12.6	13.0
	12H	12.1	12.5	12.6	13.0	13.5	12.1	12.5	12.6	13.0

8H	4H	11.8	12.2	12.3	12.7	13.2	11.8	12.2	12.3	12.7
	6H	12.1	12.5	12.7	13.0	13.5	12.1	12.5	12.7	13.0
	8H	12.3	12.6	12.8	13.1	13.6	12.3	12.6	12.8	13.1
	12H	12.4	12.7	12.9	13.2	13.7	12.4	12.7	12.9	13.2

12H	4H	11.8	12.1	12.2	12.6	13.1	11.8	12.1	12.2	12.6
	6H	12.1	12.5	12.7	12.9	13.5	12.1	12.5	12.7	12.9
	8H	12.3	12.6	12.8	13.1	13.7	12.3	12.6	12.8	13.1

Maximum UGR = 13.7

POLAR GRAPH



Maximum Candela = 9963.496 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.)