



IES INDOOR REPORT

PHOTOMETRIC FILENAME : V6DR-L31-835-DIM-UNV-RM-OF-WH_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from 12326812.14

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 9 SEP 2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] V6DR-L31-835-DIM-UNV-RM-OF-WH

[LUMINAIRE] Black formed aluminum housing, white reflector, frosted pl

[MORE] astic 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	3609
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	88
Total Luminaire Watts	41
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.58
Spacing Criterion (90-270)	0.58
Spacing Criterion (Diagonal)	0.56
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	12973	12973	12973
55	8723	8723	8723
65	6492	6492	6492
75	4483	4483	4483
85	3744	3744	3744

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CANDELA TABULATION

	<u>0</u>
0.0	8734.916
0.5	8730.866
1.0	8718.714
1.5	8698.462
2.0	8670.108
2.5	8635.679
3.0	8593.149
3.5	8544.543
4.0	8491.886
4.5	8431.128
5.0	8366.320
5.5	8295.437
6.0	8216.452
6.5	8129.366
7.0	8036.204
7.5	7934.941
8.0	7825.578
8.5	7708.113
9.0	7582.547
9.5	7446.855
10.0	7305.088
10.5	7153.194
11.0	6991.174
11.5	6821.052
12.0	6642.830
12.5	6452.456
13.0	6258.032
13.5	6053.481
14.0	5842.855
14.5	5628.178
15.0	5405.400
15.5	5182.623
16.0	4955.794
16.5	4728.966
17.0	4506.188
17.5	4293.536
18.0	4074.809
18.5	3858.107
19.0	3645.456
19.5	3442.930
20.0	3250.531
20.5	3064.208
21.0	2881.935
21.5	2707.763
22.0	2539.667
22.5	2381.698
23.0	2231.829
23.5	2090.061
24.0	1956.800
24.5	1831.841
25.0	1714.174
25.5	1603.798
26.0	1500.713
26.5	1403.905

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CANDELA TABULATION - (Cont.)

27.0	1313.782
27.5	1229.531
28.0	1150.546
28.5	1077.232
29.0	1008.373
29.5	943.970
30.0	883.415
30.5	826.911
31.0	774.052
31.5	724.433
32.0	678.055
32.5	634.512
33.0	593.602
33.5	555.324
34.0	519.275
34.5	485.858
35.0	454.669
35.5	425.506
36.0	398.367
36.5	373.254
37.0	349.964
37.5	328.496
38.0	308.649
38.5	290.421
39.0	273.612
39.5	258.220
40.0	244.246
40.5	231.486
41.0	219.740
41.5	209.006
42.0	199.082
42.5	189.969
43.0	181.463
43.5	173.767
44.0	166.476
44.5	159.995
45.0	153.717
45.5	148.046
46.0	142.578
46.5	137.515
47.0	132.857
47.5	128.604
48.0	124.553
48.5	120.705
49.0	117.060
49.5	113.414
50.0	110.174
50.5	107.136
51.0	104.098
51.5	101.263
52.0	98.630
52.5	95.794
53.0	93.364
53.5	90.934
54.0	88.504
54.5	86.073

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CANDELA TABULATION - (Cont.)

55.0	83.845
55.5	81.618
56.0	79.592
56.5	77.365
57.0	75.339
57.5	73.314
58.0	71.289
58.5	69.264
59.0	67.441
59.5	65.416
60.0	63.593
60.5	61.770
61.0	59.947
61.5	58.125
62.0	56.302
62.5	54.479
63.0	52.859
63.5	51.036
64.0	49.416
64.5	47.593
65.0	45.973
65.5	44.353
66.0	42.733
66.5	41.113
67.0	39.492
67.5	38.075
68.0	36.455
68.5	35.037
69.0	33.619
69.5	31.999
70.0	30.784
70.5	29.366
71.0	28.151
71.5	26.733
72.0	25.518
72.5	24.303
73.0	23.290
73.5	22.278
74.0	21.265
74.5	20.253
75.0	19.442
75.5	18.430
76.0	17.620
76.5	17.012
77.0	16.202
77.5	15.392
78.0	14.784
78.5	13.974
79.0	13.367
79.5	12.759
80.0	11.949
80.5	11.341
81.0	10.531
81.5	9.924
82.0	9.316
82.5	8.709

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CANDELA TABULATION - (Cont.)

83.0	8.101
83.5	7.291
84.0	6.683
84.5	6.076
85.0	5.468
85.5	4.861
86.0	4.456
86.5	3.848
87.0	3.240
87.5	2.633
88.0	2.025
88.5	1.620
89.0	1.418
89.5	1.013
90.0	0.810
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
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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
148.0	0.000
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149.0	0.000
149.5	0.000
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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
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157.0	0.000
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158.0	0.000
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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	2220.6	N.A.	61.50
0-30	3036.21	N.A.	84.10
0-40	3336.4	N.A.	92.40
0-60	3535.64	N.A.	98.00
0-80	3602.61	N.A.	99.80
0-90	3608.87	N.A.	100.00
10-90	2843.42	N.A.	78.80
20-40	1115.8	N.A.	30.90
20-50	1239.32	N.A.	34.30
40-70	245.05	N.A.	6.80
60-80	66.98	N.A.	1.90
70-80	21.16	N.A.	0.60
80-90	6.25	N.A.	0.20
90-110	0.02	N.A.	0.00
90-120	0.02	N.A.	0.00
90-130	0.02	N.A.	0.00
90-150	0.02	N.A.	0.00
90-180	0.02	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	3608.89	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	765.45
10-20	1455.15
20-30	815.61
30-40	300.20
40-50	123.52
50-60	75.71
60-70	45.81
70-80	21.16
80-90	6.25
90-100	0.02
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	111	109	107	112	109	107	105	105	104	102	102	100	99	98	97	96	94
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89
3	104	99	94	91	103	97	93	90	95	91	89	92	90	87	90	88	86	84
4	100	94	89	85	98	92	88	84	90	86	83	88	85	83	87	84	82	80
5	96	89	84	80	95	88	83	80	86	82	79	85	81	78	83	80	78	76
6	92	85	80	76	91	84	79	76	83	78	75	81	77	75	80	77	74	73
7	89	81	76	72	88	80	75	72	79	75	72	78	74	71	77	73	71	70
8	86	77	72	69	85	77	72	69	76	72	68	75	71	68	74	71	68	67
9	83	74	69	66	82	74	69	66	73	69	66	72	68	65	71	68	65	64
10	80	71	67	63	79	71	66	63	70	66	63	70	66	63	69	65	63	62

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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	12.1	13.1	12.5	13.4	13.7	12.1	13.1	12.5	13.4	13.7
	3H	13.2	14.1	13.6	14.4	14.8	13.2	14.1	13.6	14.4	14.8
	4H	13.5	14.3	13.9	14.7	15.1	13.5	14.3	13.9	14.7	15.1
	6H	13.8	14.5	14.2	14.9	15.3	13.8	14.5	14.2	14.9	15.3
	8H	13.8	14.5	14.3	14.9	15.3	13.8	14.5	14.3	14.9	15.3
	12H	13.9	14.5	14.3	14.9	15.3	13.9	14.5	14.3	14.9	15.3

UGR Viewed Endwise

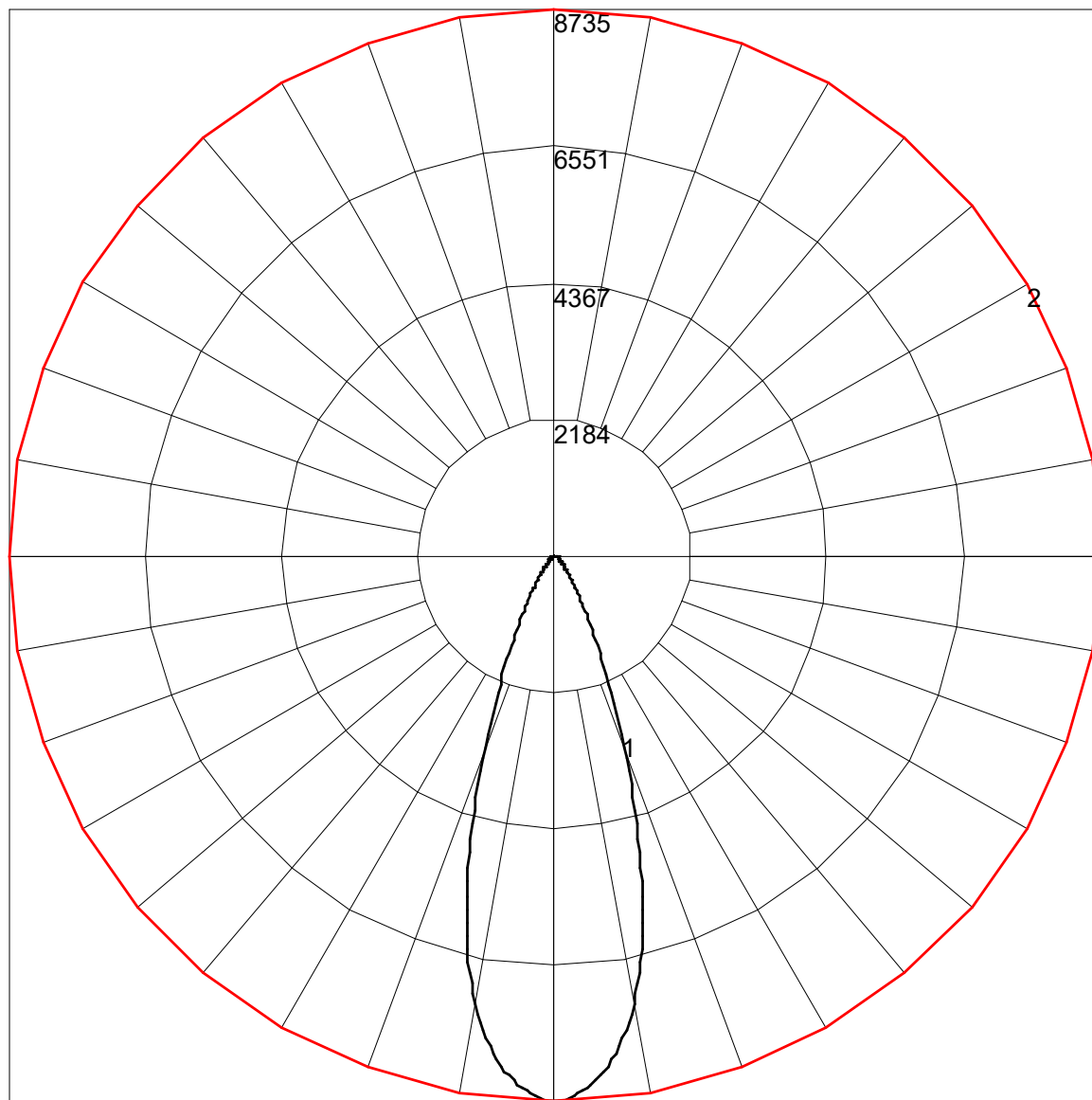
4H	2H	12.4	13.2	12.8	13.6	14.0	12.4	13.2	12.8	13.6	14.0
	3H	13.7	14.3	14.1	14.8	15.2	13.7	14.3	14.1	14.8	15.2
	4H	14.1	14.7	14.5	15.1	15.5	14.1	14.7	14.5	15.1	15.5
	6H	14.4	14.9	14.9	15.4	15.9	14.4	14.9	14.9	15.4	15.9
	8H	14.6	15.0	15.0	15.5	15.9	14.6	15.0	15.0	15.5	15.9
	12H	14.6	15.0	15.1	15.5	16.0	14.6	15.0	15.1	15.5	16.0

8H	4H	14.2	14.6	14.7	15.1	15.6	14.2	14.6	14.7	15.1	15.6
	6H	14.6	15.0	15.2	15.5	16.0	14.6	15.0	15.2	15.5	16.0
	8H	14.8	15.1	15.4	15.7	16.2	14.8	15.1	15.4	15.7	16.2
	12H	15.0	15.2	15.5	15.7	16.3	15.0	15.2	15.5	15.7	16.3

12H	4H	14.2	14.6	14.7	15.0	15.5	14.2	14.6	14.7	15.0	15.5
	6H	14.6	15.0	15.2	15.4	16.0	14.6	15.0	15.2	15.4	16.0
	8H	14.9	15.1	15.4	15.6	16.2	14.9	15.1	15.4	15.6	16.2

Maximum UGR = 16.3

POLAR GRAPH



Maximum Candela = 8734.916 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.)