



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6RCD-LS-9CS-WH-DIM-UNV\_17W\_3000K.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] GEN FROM 14879730.01  
[TESTLAB] UL Verification Services Inc.  
[ISSUEDATE] 2023-07-21  
[TESTDATE] 7/10/2023  
[MANUFAC] H.E. WILLIAMS, INC. - CARTHAGE, MO.  
[LUMCAT] 6RCD-LS-9CS-WH-DIM-UNV\_17W\_3000K  
[LUMINAIRE] 6 INCH DIAMETER LED DOWNLIGHT  
[MORE] WHITE TRIM WITH FLAT DIFFUSED LENS  
[LAMP] White LEDs  
[BALLAST] 0-10V DIMMING DRIVER

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1682
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	98
Total Luminaire Watts	17.1
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.20
Spacing Criterion (Diagonal)	1.30
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.50 ft (Diameter)
Luminous Width (90-270)	0.50 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	32444	32444	32444
55	27081	27081	27081
65	19802	19802	19802
75	9436	9436	9436
85	5843	5843	5843

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CANDELA TABULATION

	<u>0</u>
0.0	736.319
0.5	736.467
1.0	736.319
1.5	736.393
2.0	736.023
2.5	735.801
3.0	735.357
3.5	734.691
4.0	733.950
4.5	733.136
5.0	732.025
5.5	730.841
6.0	729.508
6.5	728.324
7.0	727.139
7.5	726.029
8.0	724.918
8.5	723.882
9.0	722.623
9.5	721.513
10.0	720.106
10.5	718.626
11.0	716.923
11.5	714.998
12.0	713.073
12.5	710.852
13.0	708.631
13.5	706.336
14.0	704.115
14.5	701.598
15.0	699.303
15.5	696.564
16.0	694.121
16.5	691.308
17.0	688.791
17.5	685.978
18.0	683.164
18.5	680.129
19.0	677.242
19.5	674.059
20.0	670.875
20.5	667.692
21.0	664.286
21.5	660.881
22.0	657.105
22.5	653.330
23.0	649.184
23.5	644.890
24.0	640.522
24.5	636.302
25.0	631.860
25.5	627.715
26.0	623.569
26.5	619.497

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CANDELA TABULATION - (Cont.)

27.0	615.574
27.5	611.502
28.0	607.578
28.5	603.506
29.0	599.361
29.5	594.919
30.0	590.403
30.5	585.591
31.0	580.705
31.5	575.374
32.0	569.896
32.5	564.270
33.0	558.421
33.5	552.499
34.0	546.502
34.5	540.431
35.0	534.287
35.5	528.364
36.0	522.442
36.5	516.889
37.0	513.706
37.5	508.968
38.0	503.490
38.5	498.085
39.0	492.237
39.5	486.536
40.0	480.762
40.5	474.987
41.0	469.065
41.5	463.142
42.0	456.998
42.5	450.779
43.0	444.338
43.5	437.971
44.0	431.531
44.5	425.238
45.0	418.871
45.5	412.579
46.0	406.212
46.5	399.919
47.0	393.330
47.5	386.890
48.0	380.301
48.5	373.786
49.0	367.049
49.5	360.312
50.0	353.501
50.5	346.690
51.0	339.731
51.5	332.846
52.0	325.813
52.5	318.706
53.0	311.599
53.5	304.492
54.0	297.459
54.5	290.500

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CANDELA TABULATION - (Cont.)

55.0	283.615
55.5	276.804
56.0	269.994
56.5	263.257
57.0	256.668
57.5	249.931
58.0	243.268
58.5	236.605
59.0	230.016
59.5	223.280
60.0	216.617
60.5	209.954
61.0	203.365
61.5	196.702
62.0	190.113
62.5	183.599
63.0	177.158
63.5	170.865
64.0	164.721
64.5	158.798
65.0	152.801
65.5	146.879
66.0	140.882
66.5	134.812
67.0	128.667
67.5	122.448
68.0	116.156
68.5	109.863
69.0	103.570
69.5	97.352
70.0	91.281
70.5	85.359
71.0	79.732
71.5	74.402
72.0	69.286
72.5	64.474
73.0	59.936
73.5	55.679
74.0	51.733
74.5	48.047
75.0	44.589
75.5	41.354
76.0	38.334
76.5	35.535
77.0	32.929
77.5	30.531
78.0	28.295
78.5	26.244
79.0	24.371
79.5	22.691
80.0	21.210
80.5	19.870
81.0	18.693
81.5	17.605
82.0	16.435
82.5	15.191

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CANDELA TABULATION - (Cont.)

83.0	14.022
83.5	12.867
84.0	11.660
84.5	10.461
85.0	9.298
85.5	8.084
86.0	6.878
86.5	5.752
87.0	4.620
87.5	3.509
88.0	2.584
88.5	1.821
89.0	1.073
89.5	0.481
90.0	0.000
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
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 : 6RCD-LS-9CS-WH-DIM-UNV\_17W\_3000K.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

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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	266.58	N.A.	15.80
0-30	557.93	N.A.	33.20
0-40	893.03	N.A.	53.10
0-60	1469.54	N.A.	87.40
0-80	1671.72	N.A.	99.40
0-90	1682.13	N.A.	100.00
10-90	1612.67	N.A.	95.90
20-40	626.44	N.A.	37.20
20-50	949.13	N.A.	56.40
40-70	727.68	N.A.	43.30
60-80	202.18	N.A.	12.00
70-80	51.01	N.A.	3.00
80-90	10.42	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	1682.13	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	69.47
10-20	197.12
20-30	291.35
30-40	335.09
40-50	322.69
50-60	253.83
60-70	151.17
70-80	51.01
80-90	10.42
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75
3	93	84	76	70	91	82	75	70	79	73	69	77	72	67	74	70	66	64
4	86	75	67	61	84	74	66	60	71	65	59	69	63	59	67	62	58	56
5	79	67	59	53	77	66	58	53	64	57	52	62	56	51	60	55	51	49
6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	41	67	55	47	41	53	46	41	52	45	41	51	45	40	39
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	47	41	36	35
9	60	47	39	34	58	46	39	34	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	29

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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

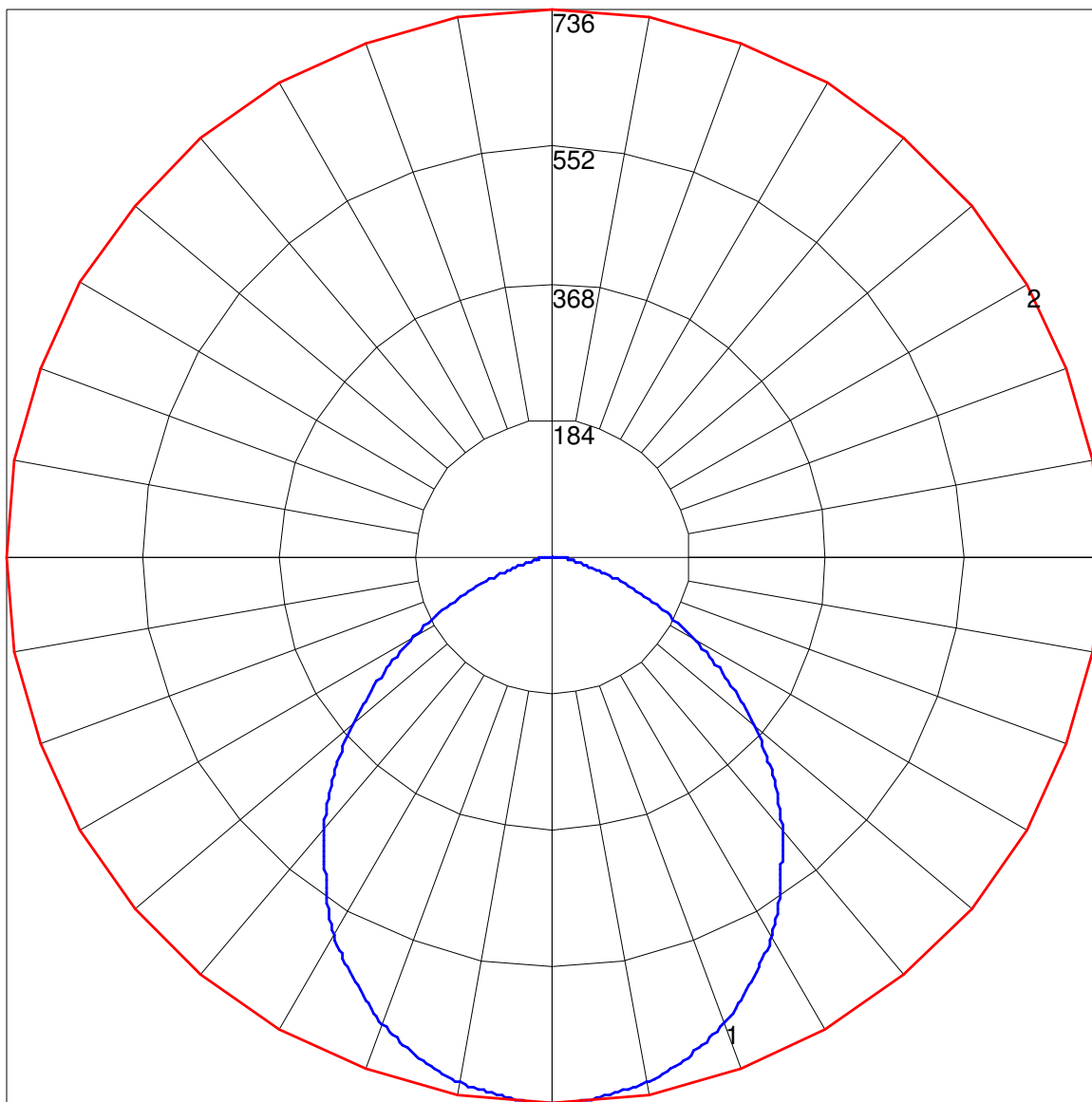
X=2H	Y=2H	22.3	23.8	22.7	24.2	24.5	22.3	23.8	22.7	24.2	24.5
	3H	23.3	24.7	23.7	25.0	25.4	23.3	24.7	23.7	25.0	25.4
	4H	23.5	24.7	23.9	25.1	25.5	23.5	24.7	23.9	25.1	25.5
	6H	23.5	24.7	23.9	25.1	25.5	23.5	24.7	23.9	25.1	25.5
	8H	23.5	24.6	24.0	25.0	25.4	23.5	24.6	24.0	25.0	25.4
	12H	23.5	24.6	24.0	25.0	25.4	23.5	24.6	24.0	25.0	25.4

### UGR Viewed Endwise

4H	2H	22.7	24.0	23.1	24.3	24.7	22.7	24.0	23.1	24.3	24.7
	3H	23.8	24.9	24.2	25.3	25.7	23.8	24.9	24.2	25.3	25.7
	4H	24.0	25.0	24.5	25.4	25.8	24.0	25.0	24.5	25.4	25.8
	6H	24.1	25.0	24.6	25.4	25.9	24.1	25.0	24.6	25.4	25.9
	8H	24.1	24.9	24.6	25.4	25.8	24.1	24.9	24.6	25.4	25.8
	12H	24.2	24.8	24.6	25.3	25.8	24.2	24.8	24.6	25.3	25.8
8H	4H	24.1	24.8	24.5	25.3	25.7	24.1	24.8	24.5	25.3	25.7
	6H	24.2	24.8	24.7	25.3	25.8	24.2	24.8	24.7	25.3	25.8
	8H	24.3	24.8	24.8	25.3	25.8	24.3	24.8	24.8	25.3	25.8
	12H	24.3	24.8	24.8	25.3	25.8	24.3	24.8	24.8	25.3	25.8
12H	4H	24.0	24.7	24.5	25.2	25.7	24.0	24.7	24.5	25.2	25.7
	6H	24.2	24.8	24.7	25.2	25.8	24.2	24.8	24.7	25.2	25.8
	8H	24.3	24.8	24.8	25.2	25.8	24.3	24.8	24.8	25.2	25.8

Maximum UGR = 25.9

POLAR GRAPH



Maximum Candela = 736.467 Located At Horizontal Angle = 0, Vertical Angle = .5  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (.5) (Through Max. Cd.)