



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6RCD-LS-9CS-WH-DIM-UNV_17W_3500K.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_3500K
 [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	1756
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	103
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	33871	33871	33871
55	28273	28273	28273
65	20673	20673	20673
75	9851	9851	9851
85	6100	6100	6100

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6RCD-LS-9CS-WH-DIM-UNV_17W_3500K.IES

CANDELA TABULATION

	0
0.0	768.714
0.5	768.868
1.0	768.714
1.5	768.791
2.0	768.405
2.5	768.173
3.0	767.709
3.5	767.013
4.0	766.240
4.5	765.390
5.0	764.231
5.5	762.994
6.0	761.603
6.5	760.367
7.0	759.130
7.5	757.971
8.0	756.811
8.5	755.729
9.0	754.415
9.5	753.256
10.0	751.787
10.5	750.242
11.0	748.464
11.5	746.455
12.0	744.445
12.5	742.126
13.0	739.808
13.5	737.412
14.0	735.093
14.5	732.465
15.0	730.069
15.5	727.210
16.0	724.659
16.5	721.722
17.0	719.094
17.5	716.157
18.0	713.220
18.5	710.052
19.0	707.037
19.5	703.714
20.0	700.390
20.5	697.067
21.0	693.512
21.5	689.956
22.0	686.015
22.5	682.073
23.0	677.745
23.5	673.262
24.0	668.702
24.5	664.297
25.0	659.659
25.5	655.331
26.0	651.003
26.5	646.752

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6RCD-LS-9CS-WH-DIM-UNV_17W_3500K.IES

CANDELA TABULATION - (Cont.)

27.0	642.656
27.5	638.405
28.0	634.309
28.5	630.058
29.0	625.730
29.5	621.092
30.0	616.378
30.5	611.354
31.0	606.253
31.5	600.688
32.0	594.969
32.5	589.095
33.0	582.989
33.5	576.806
34.0	570.545
34.5	564.208
35.0	557.793
35.5	551.610
36.0	545.427
36.5	539.630
37.0	536.306
37.5	531.360
38.0	525.641
38.5	519.999
39.0	513.893
39.5	507.942
40.0	501.913
40.5	495.884
41.0	489.701
41.5	483.518
42.0	477.103
42.5	470.611
43.0	463.887
43.5	457.240
44.0	450.516
44.5	443.946
45.0	437.300
45.5	430.730
46.0	424.083
46.5	417.514
47.0	410.635
47.5	403.911
48.0	397.032
48.5	390.231
49.0	383.198
49.5	376.164
50.0	369.054
50.5	361.943
51.0	354.678
51.5	347.490
52.0	340.148
52.5	332.728
53.0	325.308
53.5	317.889
54.0	310.546
54.5	303.281

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 6RCD-LS-9CS-WH-DIM-UNV_17W_3500K.IES****CANDELA TABULATION - (Cont.)**

55.0	296.093
55.5	288.983
56.0	281.872
56.5	274.839
57.0	267.960
57.5	260.927
58.0	253.971
58.5	247.015
59.0	240.136
59.5	233.103
60.0	226.147
60.5	219.191
61.0	212.312
61.5	205.356
62.0	198.477
62.5	191.676
63.0	184.952
63.5	178.382
64.0	171.967
64.5	165.784
65.0	159.524
65.5	153.341
66.0	147.080
66.5	140.743
67.0	134.328
67.5	127.836
68.0	121.266
68.5	114.696
69.0	108.127
69.5	101.635
70.0	95.297
70.5	89.114
71.0	83.240
71.5	77.675
72.0	72.335
72.5	67.311
73.0	62.573
73.5	58.129
74.0	54.009
74.5	50.160
75.0	46.551
75.5	43.173
76.0	40.020
76.5	37.099
77.0	34.378
77.5	31.874
78.0	29.540
78.5	27.399
79.0	25.443
79.5	23.689
80.0	22.143
80.5	20.744
81.0	19.515
81.5	18.379
82.0	17.158
82.5	15.860

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6RCD-LS-9CS-WH-DIM-UNV_17W_3500K.IES

CANDELA TABULATION - (Cont.)

83.0	14.638
83.5	13.433
84.0	12.173
84.5	10.921
85.0	9.707
85.5	8.440
86.0	7.180
86.5	6.005
87.0	4.823
87.5	3.663
88.0	2.697
88.5	1.901
89.0	1.121
89.5	0.502
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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6RCD-LS-9CS-WH-DIM-UNV_17W_3500K.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 : 6RCD-LS-9CS-WH-DIM-UNV_17W_3500K.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 : 6RCD-LS-9CS-WH-DIM-UNV_17W_3500K.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 : 6RCD-LS-9CS-WH-DIM-UNV_17W_3500K.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	278.31	N.A.	15.80
0-30	582.48	N.A.	33.20
0-40	932.31	N.A.	53.10
0-60	1534.19	N.A.	87.40
0-80	1745.26	N.A.	99.40
0-90	1756.14	N.A.	100.00
10-90	1683.62	N.A.	95.90
20-40	654.00	N.A.	37.20
20-50	990.89	N.A.	56.40
40-70	759.70	N.A.	43.30
60-80	211.07	N.A.	12.00
70-80	53.25	N.A.	3.00
80-90	10.87	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	1756.14	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	72.52
10-20	205.79
20-30	304.17
30-40	349.83
40-50	336.89
50-60	264.99
60-70	157.82
70-80	53.25
80-90	10.87
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

IES INDOOR REPORT
 PHOTOMETRIC FILENAME : 6RCD-LS-9CS-WH-DIM-UNV_17W_3500K.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	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

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6RCD-LS-9CS-WH-DIM-UNV_17W_3500K.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	22.5	24.0	22.9	24.4	24.7	22.5	24.0	22.9	24.4	24.7
	3H	23.5	24.9	23.9	25.2	25.6	23.5	24.9	23.9	25.2	25.6
	4H	23.7	24.9	24.1	25.3	25.7	23.7	24.9	24.1	25.3	25.7
	6H	23.7	24.9	24.1	25.3	25.7	23.7	24.9	24.1	25.3	25.7
	8H	23.7	24.8	24.2	25.2	25.6	23.7	24.8	24.2	25.2	25.6
	12H	23.7	24.8	24.2	25.2	25.6	23.7	24.8	24.2	25.2	25.6

UGR Viewed Endwise

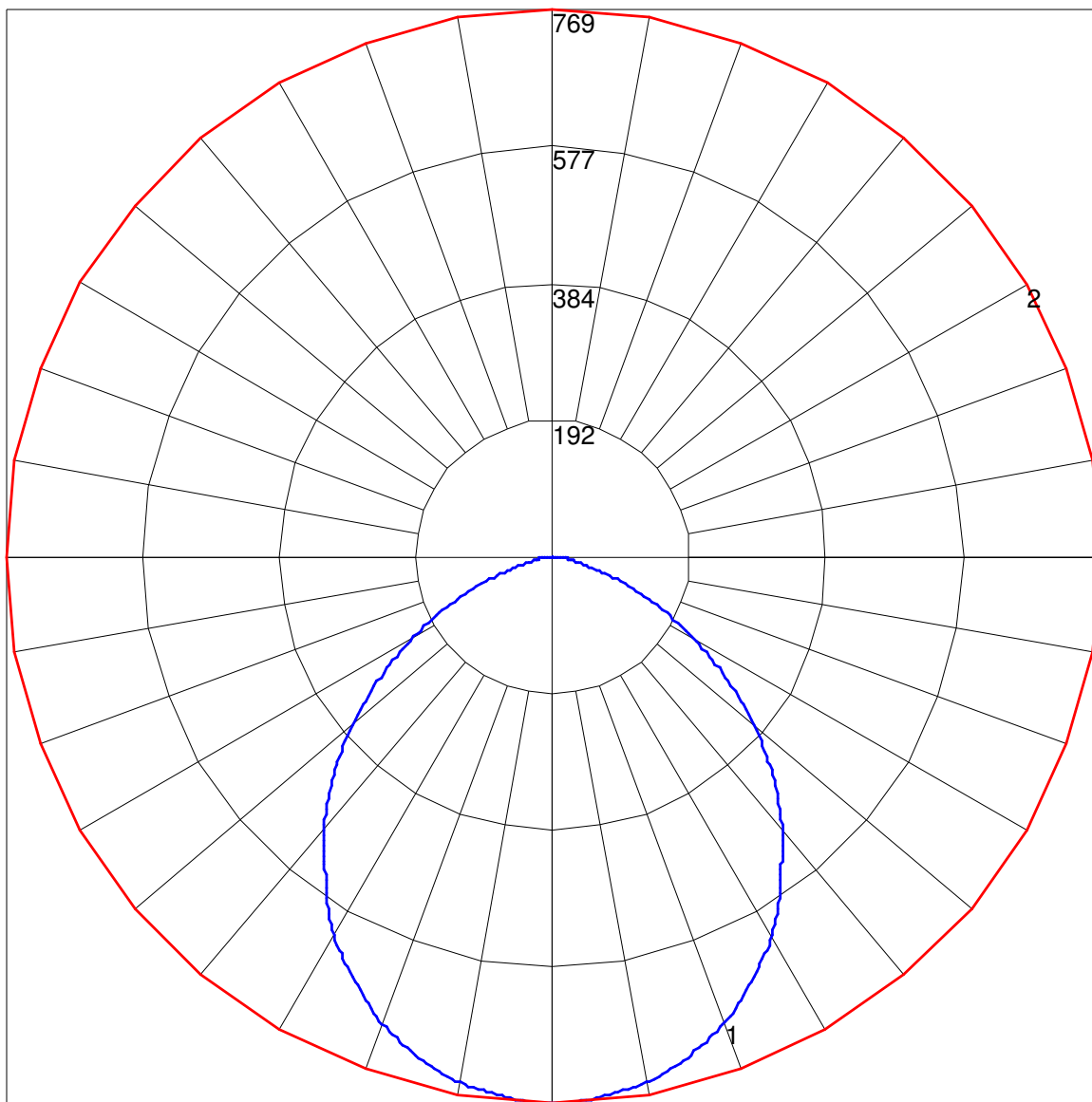
4H	2H	22.9	24.2	23.3	24.5	24.9	22.9	24.2	23.3	24.5	24.9
	3H	24.0	25.1	24.4	25.5	25.9	24.0	25.1	24.4	25.5	25.9
	4H	24.2	25.2	24.7	25.6	26.0	24.2	25.2	24.7	25.6	26.0
	6H	24.3	25.2	24.8	25.6	26.1	24.3	25.2	24.8	25.6	26.1
	8H	24.3	25.1	24.8	25.6	26.0	24.3	25.1	24.8	25.6	26.0
	12H	24.4	25.0	24.8	25.5	26.0	24.4	25.0	24.8	25.5	26.0

8H	4H	24.3	25.0	24.7	25.5	25.9	24.3	25.0	24.7	25.5	25.9
	6H	24.4	25.0	24.9	25.5	26.0	24.4	25.0	24.9	25.5	26.0
	8H	24.5	25.0	25.0	25.5	26.0	24.5	25.0	25.0	25.5	26.0
	12H	24.5	25.0	25.0	25.5	26.0	24.5	25.0	25.0	25.5	26.0

12H	4H	24.2	24.9	24.7	25.4	25.9	24.2	24.9	24.7	25.4	25.9
	6H	24.4	25.0	24.9	25.4	26.0	24.4	25.0	24.9	25.4	26.0
	8H	24.5	25.0	25.0	25.4	26.0	24.5	25.0	25.0	25.4	26.0

Maximum UGR = 26.1

POLAR GRAPH



Maximum Candela = 768.868 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.)