

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6RCD-LS-9CS-SS-DIM-UNV-17W-3500K_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #15006535.01

[TESTLAB] UL Verification Services Inc.

[ISSUE DATE] 17 NOV, 2023

[TEST DATE] 10/18/2023

[MANUFAC] H E Williams Inc

[LUMCAT] 6RCD-LS-9CS-SS-DIM-UNV-17W-3500k

[LUMINAIRE] Round housing with semi-specular reflector and frosted lens

[LAMP] White LEDs

[BALLAST] LED Driver

[OTHER] 24.7 C, 119.991 V, 0.1494 A, 17.765 W, 0.99098 PF, 59.971 Hz

[OTHER] This test was performed using the calibrated photodetector met

[MORE] hod of absolute photometry.

[OTHER] The reported results were measured in a facility that meets th

[MORE] e requirements of ANSI/IES LM-75-19. The device under test emits no de

[MORE] tectable uplight as defined by ANSI/IES LM-75-19.

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1415
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	102
Total Luminaire Watts	13.93
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.94
Spacing Criterion (90-270)	0.94
Spacing Criterion (Diagonal)	1.00
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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6RCD-LS-9CS-SS-DIM-UNV-17W-3500K_.IES

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	22549	22549	22549
55	10556	10556	10556
65	1384	1384	1384
75	279	279	279
85	230	230	230

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6RCD-LS-9CS-SS-DIM-UNV-17W-3500K_.IES

CANDELA TABULATION

	<u>0</u>
0.0	1153.812
0.5	1153.812
1.0	1153.081
1.5	1152.349
2.0	1150.154
2.5	1148.691
3.0	1147.227
3.5	1144.301
4.0	1142.106
4.5	1138.448
5.0	1135.521
5.5	1131.863
6.0	1127.473
6.5	1123.083
7.0	1118.693
7.5	1113.571
8.0	1108.450
8.5	1103.328
9.0	1098.207
9.5	1092.354
10.0	1086.500
10.5	1079.916
11.0	1073.331
11.5	1066.746
12.0	1059.429
12.5	1051.381
13.0	1044.065
13.5	1036.017
14.0	1027.237
14.5	1018.457
15.0	1008.946
15.5	999.434
16.0	989.923
16.5	979.680
17.0	969.436
17.5	958.462
18.0	947.487
18.5	935.780
19.0	924.074
19.5	913.099
20.0	900.661
20.5	888.223
21.0	876.517
21.5	864.810
22.0	853.104
22.5	840.666
23.0	828.960
23.5	817.985
24.0	806.278
24.5	793.840
25.0	781.402
25.5	768.964
26.0	756.526
26.5	744.088

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6RCD-LS-9CS-SS-DIM-UNV-17W-3500K_.IES

CANDELA TABULATION - (Cont.)

27.0	731.357
27.5	718.407
28.0	705.457
28.5	692.434
29.0	679.483
29.5	666.753
30.0	654.022
30.5	641.072
31.0	628.048
31.5	615.171
32.0	601.929
32.5	589.125
33.0	576.394
33.5	563.736
34.0	550.420
34.5	537.690
35.0	524.813
35.5	512.082
36.0	499.205
36.5	486.547
37.0	473.817
37.5	461.232
38.0	448.721
38.5	437.088
39.0	425.820
39.5	414.041
40.0	402.188
40.5	390.335
41.0	378.629
41.5	367.142
42.0	355.801
42.5	344.827
43.0	333.925
43.5	322.950
44.0	312.195
44.5	301.586
45.0	291.124
45.5	280.807
46.0	270.711
46.5	260.833
47.0	250.956
47.5	241.152
48.0	231.640
48.5	222.056
49.0	212.618
49.5	203.399
50.0	194.326
50.5	185.400
51.0	176.547
51.5	167.767
52.0	159.134
52.5	150.647
53.0	142.379
53.5	134.258
54.0	126.283
54.5	118.308

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6RCD-LS-9CS-SS-DIM-UNV-17W-3500K_.IES

CANDELA TABULATION - (Cont.)

55.0	110.552
55.5	103.090
56.0	95.773
56.5	88.676
57.0	81.725
57.5	74.994
58.0	68.482
58.5	62.337
59.0	56.410
59.5	50.850
60.0	45.582
60.5	40.607
61.0	35.997
61.5	31.754
62.0	27.803
62.5	24.218
63.0	20.925
63.5	17.925
64.0	15.218
64.5	12.804
65.0	10.682
65.5	8.853
66.0	7.243
66.5	5.853
67.0	4.756
67.5	3.658
68.0	2.780
68.5	2.268
69.0	2.195
69.5	2.122
70.0	2.049
70.5	1.902
71.0	1.829
71.5	1.756
72.0	1.683
72.5	1.683
73.0	1.610
73.5	1.536
74.0	1.463
74.5	1.390
75.0	1.317
75.5	1.244
76.0	1.244
76.5	1.171
77.0	1.097
77.5	1.024
78.0	1.024
78.5	0.951
79.0	0.878
79.5	0.878
80.0	0.805
80.5	0.732
81.0	0.732
81.5	0.658
82.0	0.585
82.5	0.585

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6RCD-LS-9CS-SS-DIM-UNV-17W-3500K_.IES

CANDELA TABULATION - (Cont.)

83.0	0.512
83.5	0.512
84.0	0.439
84.5	0.439
85.0	0.366
85.5	0.293
86.0	0.293
86.5	0.219
87.0	0.219
87.5	0.146
88.0	0.146
88.5	0.073
89.0	0.073
89.5	0.000
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-SS-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-SS-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-SS-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-SS-DIM-UNV-17W-3500K_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	388.48	N.A.	27.50
0-30	745.80	N.A.	52.70
0-40	1072.77	N.A.	75.80
0-60	1398.39	N.A.	98.80
0-80	1414.49	N.A.	100.00
0-90	1414.9	N.A.	100.00
10-90	1308.11	N.A.	92.50
20-40	684.29	N.A.	48.40
20-50	909.29	N.A.	64.30
40-70	340.29	N.A.	24.10
60-80	16.10	N.A.	1.10
70-80	1.43	N.A.	0.10
80-90	0.40	N.A.	0.00
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	1414.9	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	106.79
10-20	281.69
20-30	357.32
30-40	326.97
40-50	225.00
50-60	100.62
60-70	14.67
70-80	1.43
80-90	0.40
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-SS-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	88	88	88	88	86	86	86	86	82	82	82	79	79	79	76	76	76	74
1	83	81	79	77	82	79	78	76	76	75	74	74	72	71	71	70	69	68
2	78	74	71	68	77	73	70	67	70	68	66	68	66	64	66	64	63	62
3	74	68	64	60	72	67	63	60	65	62	59	63	60	58	61	59	57	56
4	69	62	58	54	68	62	57	54	60	56	53	58	55	52	57	54	52	51
5	65	58	53	49	63	57	52	49	55	51	48	54	51	48	53	50	47	46
6	61	53	48	44	60	53	48	44	51	47	44	50	46	44	49	46	43	42
7	57	49	44	41	56	49	44	40	48	43	40	47	43	40	46	42	40	39
8	54	46	41	37	53	45	41	37	45	40	37	44	40	37	43	39	37	36
9	51	43	38	34	50	42	38	34	42	37	34	41	37	34	40	37	34	33
10	48	40	35	32	47	40	35	32	39	35	32	38	34	32	38	34	32	30

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6RCD-LS-9CS-SS-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

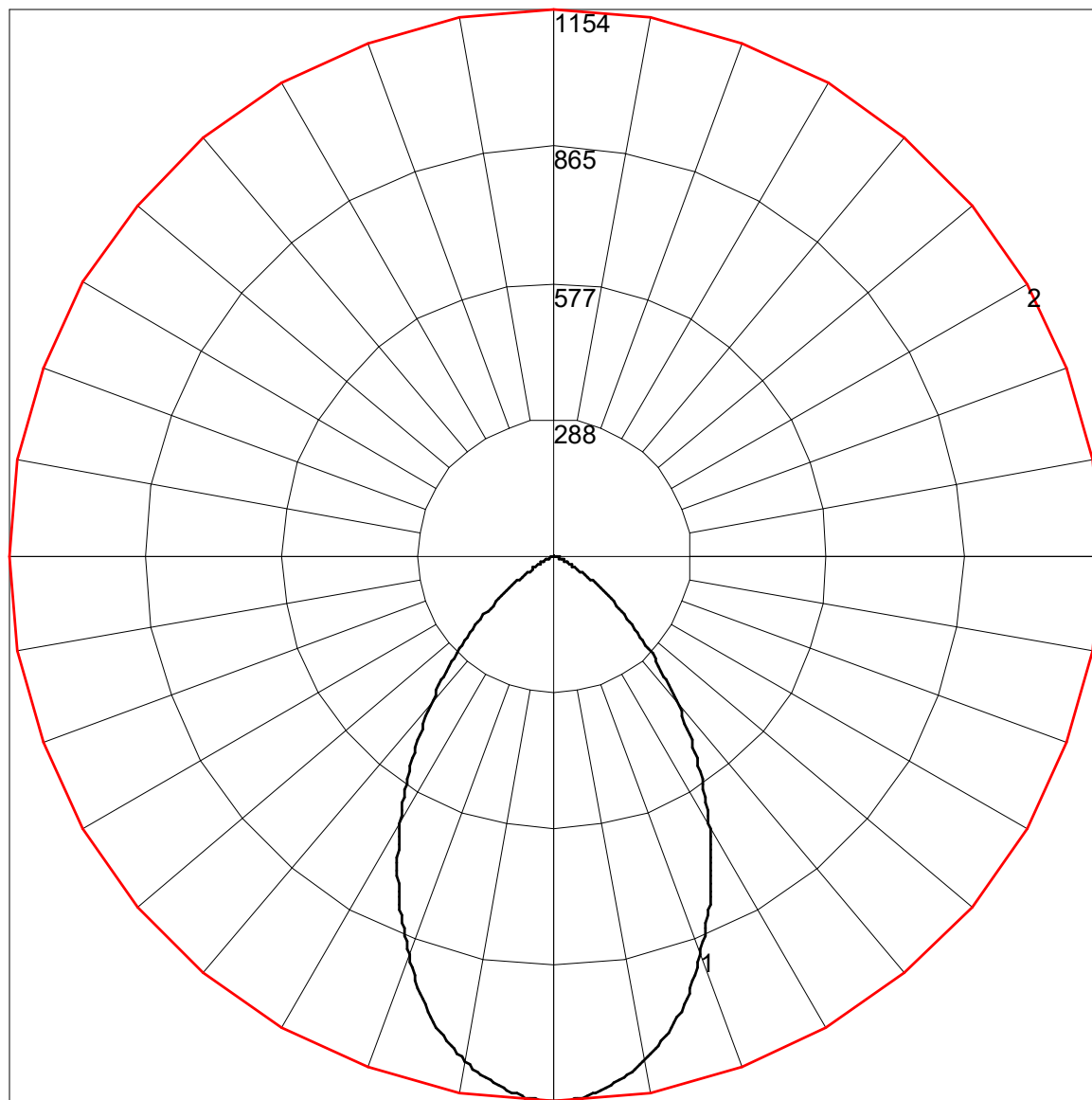
X=2H	Y=2H	15.9	17.1	16.3	17.4	17.7	15.9	17.1	16.3	17.4	17.7
	3H	15.8	16.8	16.1	17.1	17.5	15.8	16.8	16.1	17.1	17.5
	4H	15.7	16.7	16.1	17.0	17.4	15.7	16.7	16.1	17.0	17.4
	6H	15.6	16.5	16.0	16.9	17.3	15.6	16.5	16.0	16.9	17.3
	8H	15.6	16.4	16.0	16.8	17.2	15.6	16.4	16.0	16.8	17.2
	12H	15.5	16.3	15.9	16.7	17.1	15.5	16.3	15.9	16.7	17.1

UGR Viewed Endwise

4H	2H	15.7	16.7	16.1	17.0	17.4	15.7	16.7	16.1	17.0	17.4
	3H	15.6	16.3	16.0	16.8	17.2	15.6	16.3	16.0	16.8	17.2
	4H	15.5	16.2	15.9	16.6	17.0	15.5	16.2	15.9	16.6	17.0
	6H	15.4	16.0	15.9	16.4	16.9	15.4	16.0	15.9	16.4	16.9
	8H	15.3	15.9	15.8	16.3	16.8	15.3	15.9	15.8	16.3	16.8
	12H	15.3	15.7	15.7	16.2	16.7	15.3	15.7	15.7	16.2	16.7
8H	4H	15.3	15.9	15.8	16.3	16.8	15.3	15.9	15.8	16.3	16.8
	6H	15.2	15.7	15.7	16.2	16.6	15.2	15.7	15.7	16.2	16.6
	8H	15.1	15.5	15.7	16.1	16.6	15.1	15.5	15.7	16.1	16.6
	12H	15.1	15.4	15.6	15.9	16.5	15.1	15.4	15.6	15.9	16.5
12H	4H	15.3	15.7	15.7	16.2	16.7	15.3	15.7	15.7	16.2	16.7
	6H	15.2	15.5	15.7	16.0	16.6	15.2	15.5	15.7	16.0	16.6
	8H	15.1	15.4	15.6	15.9	16.5	15.1	15.4	15.6	15.9	16.5

Maximum UGR = 17.7

POLAR GRAPH



Maximum Candela = 1153.812 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.)