

## IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6RCD-LS-9CS-SS-DIM-UNV-22W-3000K\_.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-22W-3000k

[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	1833
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	97
Total Luminaire Watts	18.83
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-22W-3000K\_.IES**

**LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	29220	29220	29220
55	13679	13679	13679
65	1794	1794	1794
75	361	361	361
85	298	298	298

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : 6RCD-LS-9CS-SS-DIM-UNV-22W-3000K\_.IES

CANDELA TABULATION

	<u>0</u>
0.0	1495.168
0.5	1495.168
1.0	1494.220
1.5	1493.272
2.0	1490.427
2.5	1488.531
3.0	1486.635
3.5	1482.842
4.0	1479.998
4.5	1475.258
5.0	1471.465
5.5	1466.725
6.0	1461.036
6.5	1455.347
7.0	1449.659
7.5	1443.022
8.0	1436.385
8.5	1429.748
9.0	1423.112
9.5	1415.527
10.0	1407.942
10.5	1399.409
11.0	1390.876
11.5	1382.343
12.0	1372.862
12.5	1362.433
13.0	1352.952
13.5	1342.522
14.0	1331.145
14.5	1319.768
15.0	1307.442
15.5	1295.117
16.0	1282.791
16.5	1269.518
17.0	1256.244
17.5	1242.023
18.0	1227.801
18.5	1212.631
19.0	1197.462
19.5	1183.240
20.0	1167.122
20.5	1151.004
21.0	1135.835
21.5	1120.665
22.0	1105.495
22.5	1089.377
23.0	1074.207
23.5	1059.986
24.0	1044.816
24.5	1028.698
25.0	1012.580
25.5	996.463
26.0	980.345
26.5	964.227

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : 6RCD-LS-9CS-SS-DIM-UNV-22W-3000K\_.IES

CANDELA TABULATION - (Cont.)

27.0	947.730
27.5	930.948
28.0	914.167
28.5	897.290
29.0	880.509
29.5	864.012
30.0	847.515
30.5	830.733
31.0	813.857
31.5	797.170
32.0	780.009
32.5	763.417
33.0	746.920
33.5	730.518
34.0	713.262
34.5	696.765
35.0	680.079
35.5	663.581
36.0	646.895
36.5	630.492
37.0	613.995
37.5	597.688
38.0	581.475
38.5	566.400
39.0	551.799
39.5	536.535
40.0	521.176
40.5	505.816
41.0	490.646
41.5	475.761
42.0	461.065
42.5	446.844
43.0	432.717
43.5	418.495
44.0	404.558
44.5	390.811
45.0	377.253
45.5	363.884
46.0	350.800
46.5	338.001
47.0	325.201
47.5	312.497
48.0	300.171
48.5	287.751
49.0	275.520
49.5	263.574
50.0	251.818
50.5	240.251
51.0	228.779
51.5	217.401
52.0	206.214
52.5	195.216
53.0	184.502
53.5	173.978
54.0	163.644
54.5	153.309

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : 6RCD-LS-9CS-SS-DIM-UNV-22W-3000K\_.IES

CANDELA TABULATION - (Cont.)

55.0	143.259
55.5	133.589
56.0	124.107
56.5	114.911
57.0	105.904
57.5	97.181
58.0	88.743
58.5	80.779
59.0	73.099
59.5	65.894
60.0	59.067
60.5	52.620
61.0	46.647
61.5	41.148
62.0	36.028
62.5	31.382
63.0	27.116
63.5	23.229
64.0	19.721
64.5	16.592
65.0	13.842
65.5	11.472
66.0	9.386
66.5	7.585
67.0	6.163
67.5	4.741
68.0	3.603
68.5	2.939
69.0	2.844
69.5	2.750
70.0	2.655
70.5	2.465
71.0	2.370
71.5	2.275
72.0	2.181
72.5	2.181
73.0	2.086
73.5	1.991
74.0	1.896
74.5	1.801
75.0	1.707
75.5	1.612
76.0	1.612
76.5	1.517
77.0	1.422
77.5	1.327
78.0	1.327
78.5	1.233
79.0	1.138
79.5	1.138
80.0	1.043
80.5	0.948
81.0	0.948
81.5	0.853
82.0	0.758
82.5	0.758

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : 6RCD-LS-9CS-SS-DIM-UNV-22W-3000K\_.IES

CANDELA TABULATION - (Cont.)

83.0	0.664
83.5	0.664
84.0	0.569
84.5	0.569
85.0	0.474
85.5	0.379
86.0	0.379
86.5	0.284
87.0	0.284
87.5	0.190
88.0	0.190
88.5	0.095
89.0	0.095
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-22W-3000K\_.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-22W-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



IES INDOOR REPORT  
PHOTOMETRIC FILENAME : 6RCD-LS-9CS-SS-DIM-UNV-22W-3000K\_.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-22W-3000K\_.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	503.41	N.A.	27.50
0-30	966.44	N.A.	52.70
0-40	1390.15	N.A.	75.80
0-60	1812.1	N.A.	98.80
0-80	1832.97	N.A.	100.00
0-90	1833.49	N.A.	100.00
10-90	1695.11	N.A.	92.50
20-40	886.74	N.A.	48.40
20-50	1178.31	N.A.	64.30
40-70	440.97	N.A.	24.10
60-80	20.87	N.A.	1.10
70-80	1.85	N.A.	0.10
80-90	0.52	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	1833.49	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	138.38
10-20	365.03
20-30	463.03
30-40	423.71
40-50	291.57
50-60	130.38
60-70	19.02
70-80	1.85
80-90	0.52
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-22W-3000K\_.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	114	114	114	114	112	112	112	112	107	107	107	102	102	102	98	98	98	96
1	108	105	102	100	106	103	101	98	99	97	95	95	94	92	92	91	90	88
2	102	96	92	88	99	95	90	87	91	88	85	88	86	83	86	83	81	80
3	95	88	83	78	93	87	82	78	84	80	76	82	78	75	80	76	74	72
4	89	81	75	70	88	80	74	70	78	73	69	76	71	68	74	70	67	66
5	84	75	68	63	82	74	68	63	72	66	62	70	65	62	69	65	61	60
6	79	69	62	58	77	68	62	57	67	61	57	65	60	56	64	59	56	54
7	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50
8	70	59	53	48	69	59	53	48	58	52	48	57	52	48	56	51	48	46
9	66	55	49	45	65	55	49	45	54	48	44	53	48	44	52	47	44	43
10	62	52	46	41	61	51	45	41	51	45	41	50	45	41	49	44	41	40

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : 6RCD-LS-9CS-SS-DIM-UNV-22W-3000K\_.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	UGR Viewed Endwise			
	3H	15.8	16.8	16.1	17.1	17.5	15.9	17.1	16.3	17.4
	4H	15.7	16.7	16.1	17.0	17.4	15.8	16.8	16.1	17.1
	6H	15.6	16.5	16.0	16.9	17.3	15.7	16.7	16.1	17.0
	8H	15.6	16.4	16.0	16.8	17.2	15.6	16.5	16.0	16.9
	12H	15.5	16.3	15.9	16.7	17.1	15.6	16.4	16.0	16.8

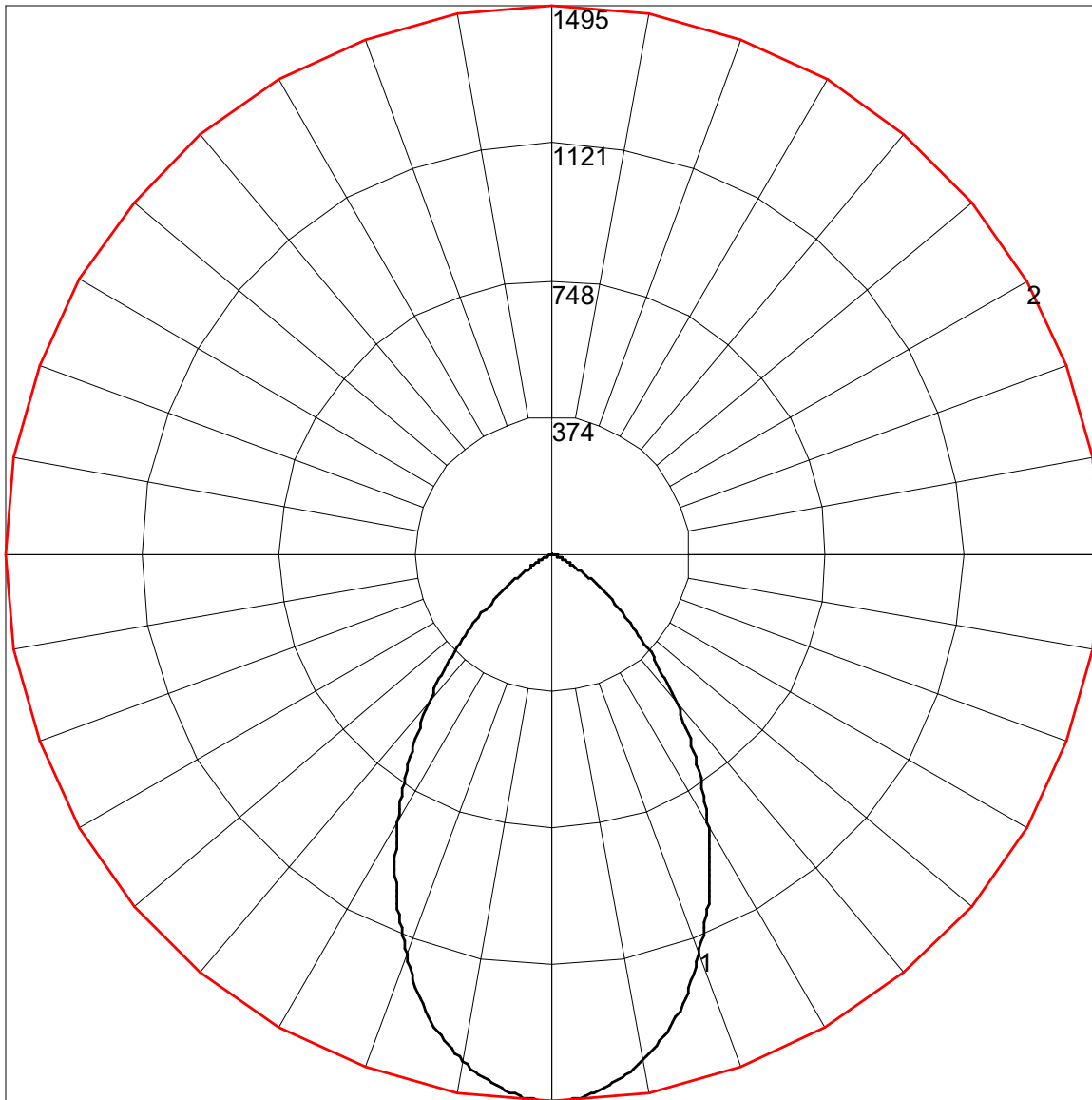
4H	2H	15.7	16.7	16.1	17.0	17.4	15.5	16.2	15.9	16.6
	3H	15.6	16.3	16.0	16.8	17.2	15.4	16.0	15.9	16.4
	4H	15.5	16.2	15.9	16.6	17.0	15.3	15.9	15.8	16.3
	6H	15.4	16.0	15.9	16.4	16.9	15.3	15.7	15.7	16.2
	8H	15.3	15.9	15.8	16.3	16.8	15.3	15.7	15.6	15.9
	12H	15.3	15.7	15.7	16.2	16.7	15.1	15.5	15.7	16.1

8H	4H	15.3	15.9	15.8	16.3	16.8	15.1	15.4	15.6	15.9
	6H	15.2	15.7	15.7	16.2	16.6	15.1	15.4	15.6	15.9
	8H	15.1	15.5	15.7	16.1	16.6	15.1	15.4	15.6	15.9
	12H	15.1	15.4	15.6	15.9	16.5	15.1	15.4	15.6	15.9

12H	4H	15.3	15.7	15.7	16.2	16.7	15.1	15.4	15.6	15.9
	6H	15.2	15.5	15.7	16.0	16.6	15.1	15.4	15.6	15.9
	8H	15.1	15.4	15.6	15.9	16.5	15.1	15.4	15.6	15.9

Maximum UGR = 17.7

POLAR GRAPH



Maximum Candela = 1495.168 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.)