

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6RCD-LS-9CS-SS-DIM-UNV-22W-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-22W-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	1911
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	103
Total Luminaire Watts	18.56
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

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LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	30459	30459	30459
55	14259	14259	14259
65	1870	1870	1870
75	376	376	376
85	310	310	310

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CANDELA TABULATION

	<u>0</u>
0.0	1558.582
0.5	1558.582
1.0	1557.594
1.5	1556.605
2.0	1553.640
2.5	1551.664
3.0	1549.687
3.5	1545.734
4.0	1542.769
4.5	1537.827
5.0	1533.874
5.5	1528.932
6.0	1523.002
6.5	1517.072
7.0	1511.143
7.5	1504.224
8.0	1497.306
8.5	1490.388
9.0	1483.470
9.5	1475.563
10.0	1467.656
10.5	1458.762
11.0	1449.867
11.5	1440.972
12.0	1431.089
12.5	1420.217
13.0	1410.334
13.5	1399.462
14.0	1387.602
14.5	1375.743
15.0	1362.894
15.5	1350.046
16.0	1337.198
16.5	1323.362
17.0	1309.525
17.5	1294.700
18.0	1279.875
18.5	1264.062
19.0	1248.249
19.5	1233.424
20.0	1216.623
20.5	1199.821
21.0	1184.008
21.5	1168.195
22.0	1152.382
22.5	1135.581
23.0	1119.767
23.5	1104.943
24.0	1089.130
24.5	1072.328
25.0	1055.527
25.5	1038.725
26.0	1021.924
26.5	1005.122

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CANDELA TABULATION - (Cont.)

27.0	987.925
27.5	970.432
28.0	952.939
28.5	935.347
29.0	917.854
29.5	900.657
30.0	883.460
30.5	865.967
31.0	848.375
31.5	830.980
32.0	813.092
32.5	795.796
33.0	778.599
33.5	761.501
34.0	743.514
34.5	726.317
35.0	708.923
35.5	691.726
36.0	674.331
36.5	657.233
37.0	640.037
37.5	623.037
38.0	606.137
38.5	590.423
39.0	575.203
39.5	559.291
40.0	543.280
40.5	527.269
41.0	511.456
41.5	495.939
42.0	480.620
42.5	465.796
43.0	451.070
43.5	436.245
44.0	421.716
44.5	407.386
45.0	393.253
45.5	379.318
46.0	365.679
46.5	352.336
47.0	338.994
47.5	325.751
48.0	312.902
48.5	299.955
49.0	287.206
49.5	274.753
50.0	262.498
50.5	250.440
51.0	238.482
51.5	226.622
52.0	214.960
52.5	203.495
53.0	192.327
53.5	181.357
54.0	170.584
54.5	159.811

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CANDELA TABULATION - (Cont.)

55.0	149.335
55.5	139.254
56.0	129.371
56.5	119.784
57.0	110.395
57.5	101.303
58.0	92.507
58.5	84.205
59.0	76.200
59.5	68.688
60.0	61.572
60.5	54.852
61.0	48.625
61.5	42.893
62.0	37.556
62.5	32.713
63.0	28.266
63.5	24.214
64.0	20.557
64.5	17.296
65.0	14.429
65.5	11.959
66.0	9.784
66.5	7.907
67.0	6.424
67.5	4.942
68.0	3.756
68.5	3.064
69.0	2.965
69.5	2.866
70.0	2.767
70.5	2.570
71.0	2.471
71.5	2.372
72.0	2.273
72.5	2.273
73.0	2.174
73.5	2.075
74.0	1.977
74.5	1.878
75.0	1.779
75.5	1.680
76.0	1.680
76.5	1.581
77.0	1.482
77.5	1.384
78.0	1.384
78.5	1.285
79.0	1.186
79.5	1.186
80.0	1.087
80.5	0.988
81.0	0.988
81.5	0.889
82.0	0.791
82.5	0.791

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CANDELA TABULATION - (Cont.)

83.0	0.692
83.5	0.692
84.0	0.593
84.5	0.593
85.0	0.494
85.5	0.395
86.0	0.395
86.5	0.296
87.0	0.296
87.5	0.198
88.0	0.198
88.5	0.099
89.0	0.099
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
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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

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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
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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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	524.76	N.A.	27.50
0-30	1007.43	N.A.	52.70
0-40	1449.11	N.A.	75.80
0-60	1888.96	N.A.	98.80
0-80	1910.71	N.A.	100.00
0-90	1911.26	N.A.	100.00
10-90	1767.01	N.A.	92.50
20-40	924.35	N.A.	48.40
20-50	1228.29	N.A.	64.30
40-70	459.67	N.A.	24.10
60-80	21.75	N.A.	1.10
70-80	1.93	N.A.	0.10
80-90	0.55	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	1911.26	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	144.25
10-20	380.51
20-30	482.67
30-40	441.68
40-50	303.94
50-60	135.91
60-70	19.82
70-80	1.93
80-90	0.55
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	118	118	118	118	115	115	115	115	110	110	110	105	105	105	101	101	101	99
1	111	108	105	103	109	106	104	101	102	100	98	98	97	95	95	94	92	91
2	105	99	94	91	102	97	93	90	94	91	88	91	88	86	88	86	84	82
3	98	91	85	81	96	89	84	80	87	82	79	84	80	77	82	79	76	74
4	92	83	77	72	90	82	76	72	80	75	71	78	74	70	76	72	69	68
5	86	77	70	65	85	76	70	65	74	68	64	72	67	64	71	66	63	61
6	81	71	64	59	80	70	64	59	69	63	59	67	62	58	66	61	58	56
7	76	66	59	54	75	65	59	54	64	58	54	62	57	53	61	57	53	51
8	72	61	54	50	71	61	54	50	59	54	49	58	53	49	57	53	49	47
9	68	57	50	46	67	57	50	46	56	50	46	55	49	46	54	49	45	44
10	64	53	47	43	63	53	47	43	52	46	42	51	46	42	50	46	42	41

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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

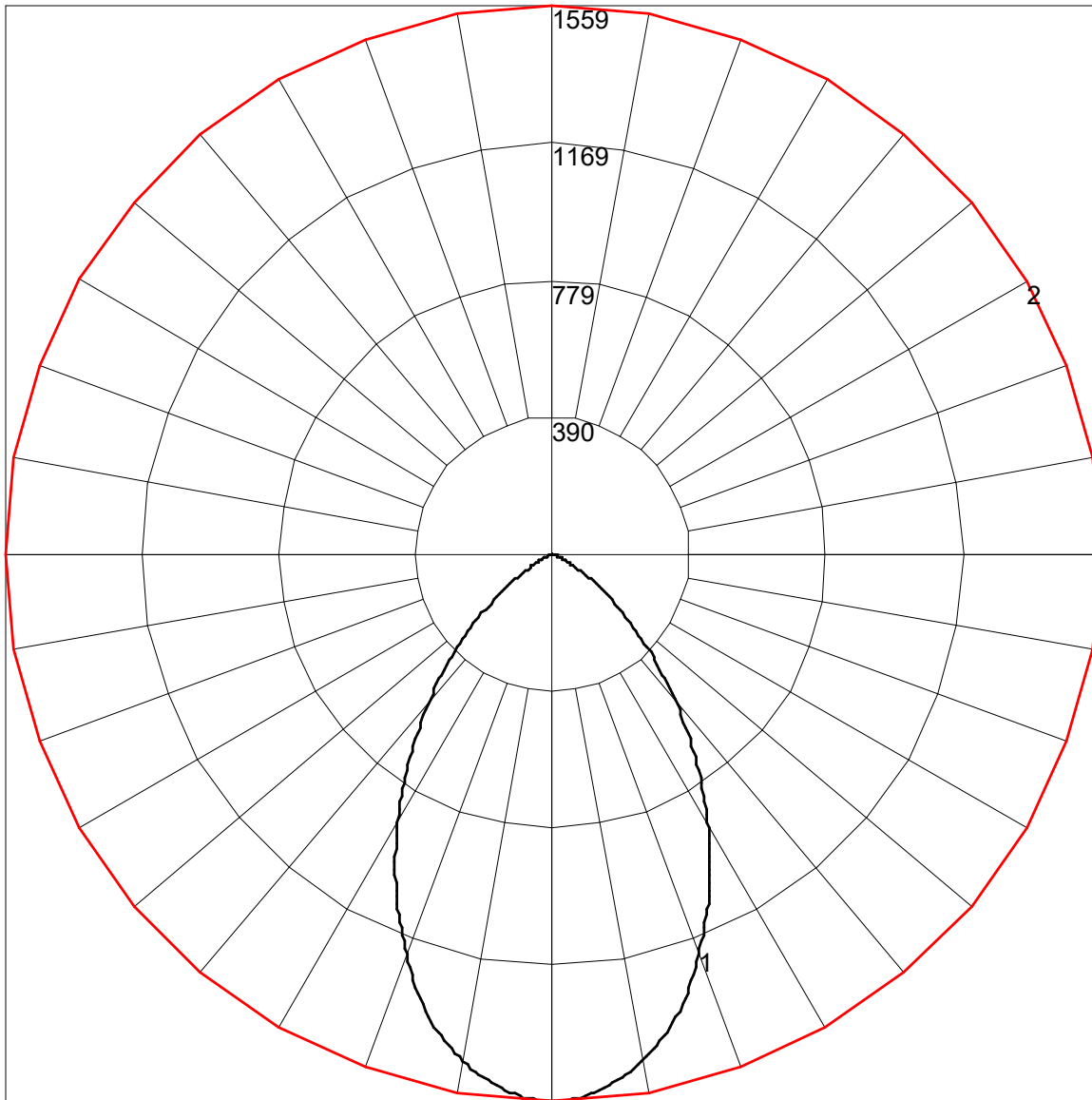
X=2H	Y=2H	15.9	17.1	16.3	17.4	17.7	15.9	17.1	16.3	17.4	17.7
	3H	15.8	16.8	16.1	17.1	17.5	15.8	16.8	16.1	17.1	17.5
	4H	15.7	16.7	16.1	17.0	17.4	15.7	16.7	16.1	17.0	17.4
	6H	15.6	16.5	16.0	16.9	17.3	15.6	16.5	16.0	16.9	17.3
	8H	15.6	16.4	16.0	16.8	17.2	15.6	16.4	16.0	16.8	17.2
	12H	15.5	16.3	15.9	16.7	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 = 1558.582 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.)