

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6RCD-LS-9CS-SS-DIM-UNV-22W-4000K_.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-4000k

[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	1975
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	106
Total Luminaire Watts	18.58
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	31475	31475	31475
55	14735	14735	14735
65	1932	1932	1932
75	389	389	389
85	321	321	321

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CANDELA TABULATION

	<u>0</u>
0.0	1610.573
0.5	1610.573
1.0	1609.551
1.5	1608.530
2.0	1605.466
2.5	1603.424
3.0	1601.381
3.5	1597.296
4.0	1594.232
4.5	1589.126
5.0	1585.041
5.5	1579.934
6.0	1573.806
6.5	1567.679
7.0	1561.551
7.5	1554.402
8.0	1547.253
8.5	1540.104
9.0	1532.955
9.5	1524.784
10.0	1516.614
10.5	1507.423
11.0	1498.231
11.5	1489.039
12.0	1478.826
12.5	1467.592
13.0	1457.379
13.5	1446.145
14.0	1433.890
14.5	1421.634
15.0	1408.358
15.5	1395.081
16.0	1381.804
16.5	1367.506
17.0	1353.208
17.5	1337.889
18.0	1322.569
18.5	1306.229
19.0	1289.888
19.5	1274.569
20.0	1257.207
20.5	1239.845
21.0	1223.504
21.5	1207.164
22.0	1190.823
22.5	1173.461
23.0	1157.120
23.5	1141.801
24.0	1125.460
24.5	1108.099
25.0	1090.737
25.5	1073.375
26.0	1056.013
26.5	1038.651

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CANDELA TABULATION - (Cont.)

27.0	1020.880
27.5	1002.804
28.0	984.727
28.5	966.548
29.0	948.471
29.5	930.701
30.0	912.930
30.5	894.853
31.0	876.674
31.5	858.700
32.0	840.214
32.5	822.342
33.0	804.571
33.5	786.903
34.0	768.316
34.5	750.545
35.0	732.571
35.5	714.800
36.0	696.825
36.5	679.157
37.0	661.387
37.5	643.821
38.0	626.357
38.5	610.118
39.0	594.390
39.5	577.947
40.0	561.403
40.5	544.858
41.0	528.517
41.5	512.483
42.0	496.653
42.5	481.334
43.0	466.116
43.5	450.797
44.0	435.784
44.5	420.975
45.0	406.371
45.5	391.971
46.0	377.877
46.5	364.090
47.0	350.302
47.5	336.617
48.0	323.340
48.5	309.961
49.0	296.787
49.5	283.918
50.0	271.254
50.5	258.795
51.0	246.437
51.5	234.182
52.0	222.130
52.5	210.283
53.0	198.743
53.5	187.407
54.0	176.274
54.5	165.142

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CANDELA TABULATION - (Cont.)

55.0	154.317
55.5	143.900
56.0	133.687
56.5	123.780
57.0	114.078
57.5	104.682
58.0	95.593
58.5	87.014
59.0	78.741
59.5	70.980
60.0	63.626
60.5	56.682
61.0	50.247
61.5	44.324
62.0	38.809
62.5	33.805
63.0	29.209
63.5	25.022
64.0	21.243
64.5	17.873
65.0	14.911
65.5	12.358
66.0	10.111
66.5	8.170
67.0	6.638
67.5	5.106
68.0	3.881
68.5	3.166
69.0	3.064
69.5	2.962
70.0	2.860
70.5	2.655
71.0	2.553
71.5	2.451
72.0	2.349
72.5	2.349
73.0	2.247
73.5	2.145
74.0	2.043
74.5	1.940
75.0	1.838
75.5	1.736
76.0	1.736
76.5	1.634
77.0	1.532
77.5	1.430
78.0	1.430
78.5	1.328
79.0	1.226
79.5	1.226
80.0	1.123
80.5	1.021
81.0	1.021
81.5	0.919
82.0	0.817
82.5	0.817

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CANDELA TABULATION - (Cont.)

83.0	0.715
83.5	0.715
84.0	0.613
84.5	0.613
85.0	0.511
85.5	0.409
86.0	0.409
86.5	0.306
87.0	0.306
87.5	0.204
88.0	0.204
88.5	0.102
89.0	0.102
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

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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
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123.5	0.000
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125.0	0.000
125.5	0.000
126.0	0.000
126.5	0.000
127.0	0.000
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128.0	0.000
128.5	0.000
129.0	0.000
129.5	0.000
130.0	0.000
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133.0	0.000
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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	542.27	N.A.	27.50
0-30	1041.04	N.A.	52.70
0-40	1497.45	N.A.	75.80
0-60	1951.97	N.A.	98.80
0-80	1974.45	N.A.	100.00
0-90	1975.01	N.A.	100.00
10-90	1825.95	N.A.	92.50
20-40	955.18	N.A.	48.40
20-50	1269.26	N.A.	64.30
40-70	475.00	N.A.	24.10
60-80	22.48	N.A.	1.10
70-80	1.99	N.A.	0.10
80-90	0.56	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	1975.01	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	149.06
10-20	393.21
20-30	498.77
30-40	456.41
40-50	314.07
50-60	140.45
60-70	20.48
70-80	1.99
80-90	0.56
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	128	128	128	128	125	125	125	125	120	120	120	115	115	115	110	110	110	108
1	121	118	115	112	119	116	113	110	111	109	107	107	105	104	103	102	101	99
2	114	108	103	99	112	106	102	98	103	99	96	99	96	93	96	94	91	90
3	107	99	93	88	105	97	92	87	95	90	86	92	88	84	89	86	83	81
4	100	91	84	79	98	90	83	78	87	82	77	85	80	76	83	79	75	74
5	94	84	76	71	92	83	76	71	81	75	70	79	74	69	77	72	69	67
6	89	77	70	65	87	76	69	64	75	69	64	73	68	63	72	67	63	61
7	83	72	64	59	82	71	64	59	69	63	59	68	62	58	67	62	58	56
8	78	67	59	54	77	66	59	54	65	58	54	64	58	54	62	57	53	52
9	74	62	55	50	73	62	55	50	61	54	50	60	54	50	59	53	49	48
10	70	58	51	46	69	58	51	46	57	51	46	56	50	46	55	50	46	44

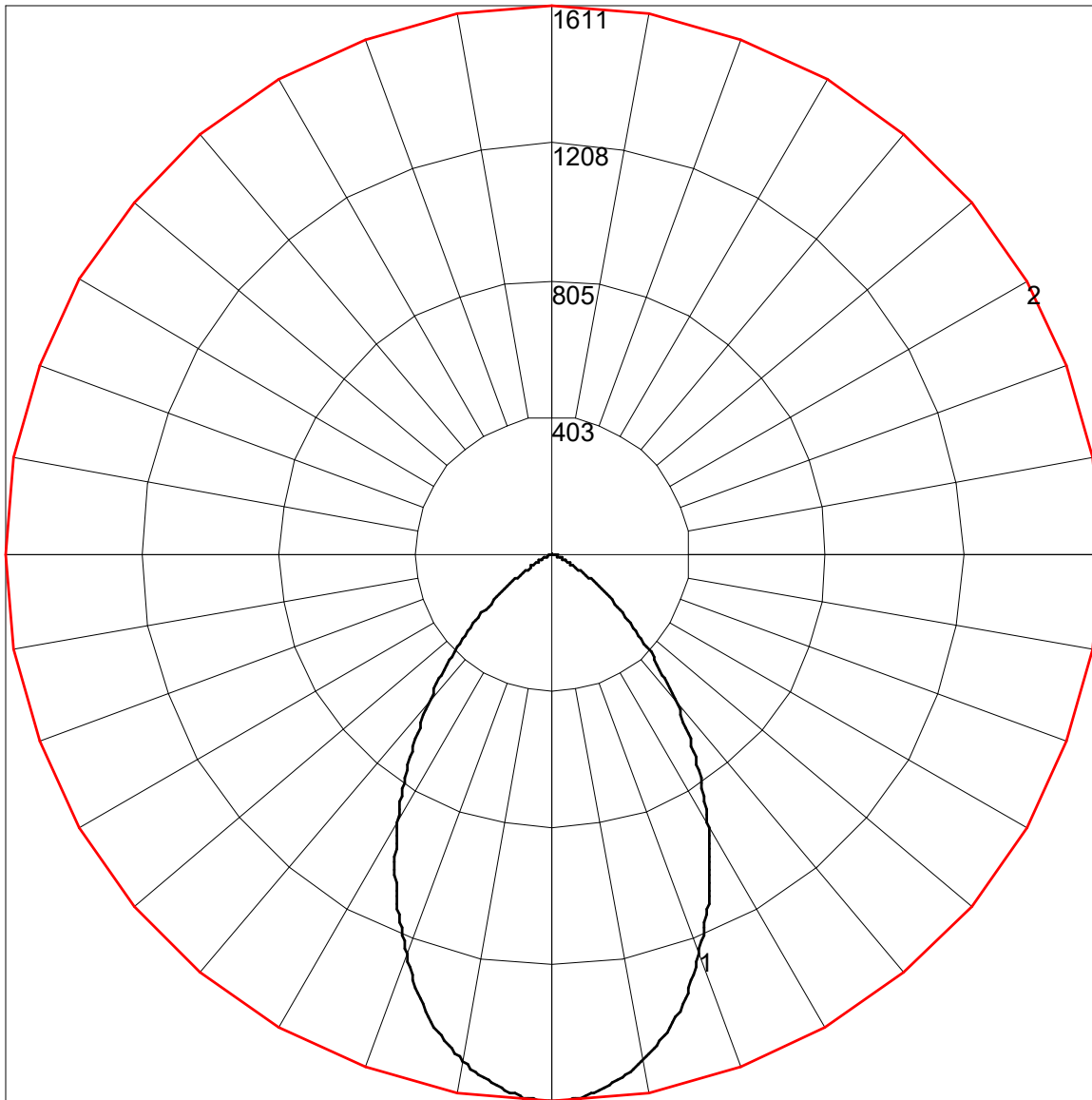
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UGR TABLE - CORRECTED

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					UGR Viewed Endwise				
X=2H	Y=2H	15.7	16.9	16.1	17.2	17.5	15.7	16.9	16.1	17.2	17.5
	3H	15.6	16.6	15.9	16.9	17.3	15.6	16.6	15.9	16.9	17.3
	4H	15.5	16.5	15.9	16.8	17.2	15.5	16.5	15.9	16.8	17.2
	6H	15.4	16.3	15.8	16.7	17.1	15.4	16.3	15.8	16.7	17.1
	8H	15.4	16.2	15.8	16.6	17.0	15.4	16.2	15.8	16.6	17.0
	12H	15.3	16.1	15.7	16.5	16.9	15.3	16.1	15.7	16.5	16.9
4H	2H	15.5	16.5	15.9	16.8	17.2	15.5	16.5	15.9	16.8	17.2
	3H	15.4	16.1	15.8	16.6	17.0	15.4	16.1	15.8	16.6	17.0
	4H	15.3	16.0	15.7	16.4	16.8	15.3	16.0	15.7	16.4	16.8
	6H	15.2	15.8	15.7	16.2	16.7	15.2	15.8	15.7	16.2	16.7
	8H	15.1	15.7	15.6	16.1	16.6	15.1	15.7	15.6	16.1	16.6
	12H	15.1	15.5	15.5	16.0	16.5	15.1	15.5	15.5	16.0	16.5
8H	4H	15.1	15.7	15.6	16.1	16.6	15.1	15.7	15.6	16.1	16.6
	6H	15.0	15.5	15.5	16.0	16.4	15.0	15.5	15.5	16.0	16.4
	8H	14.9	15.3	15.5	15.9	16.4	14.9	15.3	15.5	15.9	16.4
	12H	14.9	15.2	15.4	15.7	16.3	14.9	15.2	15.4	15.7	16.3
12H	4H	15.1	15.5	15.5	16.0	16.5	15.1	15.5	15.5	16.0	16.5
	6H	15.0	15.3	15.5	15.8	16.4	15.0	15.3	15.5	15.8	16.4
	8H	14.9	15.2	15.4	15.7	16.3	14.9	15.2	15.4	15.7	16.3

Maximum UGR = 17.5

POLAR GRAPH



Maximum Candela = 1610.573 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.)