

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6RCD-LS-9CS-SS-DIM-UNV-12W-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-12W-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	993
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	94
Total Luminaire Watts	10.53
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	15831	15831	15831
55	7411	7411	7411
65	972	972	972
75	196	196	196
85	161	161	161

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CANDELA TABULATION

	<u>0</u>
0.0	810.061
0.5	810.061
1.0	809.547
1.5	809.034
2.0	807.493
2.5	806.465
3.0	805.438
3.5	803.383
4.0	801.842
4.5	799.274
5.0	797.219
5.5	794.651
6.0	791.569
6.5	788.487
7.0	785.405
7.5	781.809
8.0	778.213
8.5	774.618
9.0	771.022
9.5	766.913
10.0	762.803
10.5	758.180
11.0	753.557
11.5	748.934
12.0	743.797
12.5	738.147
13.0	733.010
13.5	727.360
14.0	721.196
14.5	715.032
15.0	708.354
15.5	701.676
16.0	694.998
16.5	687.807
17.0	680.616
17.5	672.911
18.0	665.205
18.5	656.987
19.0	648.768
19.5	641.063
20.0	632.330
20.5	623.598
21.0	615.379
21.5	607.161
22.0	598.942
22.5	590.209
23.0	581.991
23.5	574.285
24.0	566.067
24.5	557.334
25.0	548.602
25.5	539.869
26.0	531.137
26.5	522.405

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CANDELA TABULATION - (Cont.)

27.0	513.467
27.5	504.375
28.0	495.283
28.5	486.139
29.0	477.047
29.5	468.109
30.0	459.172
30.5	450.080
31.0	440.936
31.5	431.896
32.0	422.598
32.5	413.609
33.0	404.671
33.5	395.784
34.0	386.436
34.5	377.498
35.0	368.457
35.5	359.519
36.0	350.479
36.5	341.592
37.0	332.654
37.5	323.819
38.0	315.035
38.5	306.868
39.0	298.957
39.5	290.687
40.0	282.366
40.5	274.044
41.0	265.825
41.5	257.761
42.0	249.799
42.5	242.094
43.0	234.440
43.5	226.735
44.0	219.184
44.5	211.736
45.0	204.390
45.5	197.147
46.0	190.059
46.5	183.124
47.0	176.190
47.5	169.306
48.0	162.629
48.5	155.900
49.0	149.273
49.5	142.801
50.0	136.431
50.5	130.165
51.0	123.949
51.5	117.785
52.0	111.724
52.5	105.765
53.0	99.961
53.5	94.259
54.0	88.660
54.5	83.061

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CANDELA TABULATION - (Cont.)

55.0	77.616
55.5	72.376
56.0	67.240
56.5	62.257
57.0	57.377
57.5	52.651
58.0	48.080
58.5	43.765
59.0	39.604
59.5	35.700
60.0	32.002
60.5	28.509
61.0	25.273
61.5	22.293
62.0	19.520
62.5	17.003
63.0	14.691
63.5	12.585
64.0	10.684
64.5	8.989
65.0	7.500
65.5	6.215
66.0	5.085
66.5	4.109
67.0	3.339
67.5	2.568
68.0	1.952
68.5	1.592
69.0	1.541
69.5	1.490
70.0	1.438
70.5	1.336
71.0	1.284
71.5	1.233
72.0	1.181
72.5	1.181
73.0	1.130
73.5	1.079
74.0	1.027
74.5	0.976
75.0	0.925
75.5	0.873
76.0	0.873
76.5	0.822
77.0	0.771
77.5	0.719
78.0	0.719
78.5	0.668
79.0	0.616
79.5	0.616
80.0	0.565
80.5	0.514
81.0	0.514
81.5	0.462
82.0	0.411
82.5	0.411

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CANDELA TABULATION - (Cont.)

83.0	0.360
83.5	0.360
84.0	0.308
84.5	0.308
85.0	0.257
85.5	0.205
86.0	0.205
86.5	0.154
87.0	0.154
87.5	0.103
88.0	0.103
88.5	0.051
89.0	0.051
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
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121.0	0.000
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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
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132.5	0.000
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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	272.74	N.A.	27.50
0-30	523.60	N.A.	52.70
0-40	753.16	N.A.	75.80
0-60	981.77	N.A.	98.80
0-80	993.08	N.A.	100.00
0-90	993.36	N.A.	100.00
10-90	918.39	N.A.	92.50
20-40	480.42	N.A.	48.40
20-50	638.39	N.A.	64.30
40-70	238.91	N.A.	24.10
60-80	11.31	N.A.	1.10
70-80	1.00	N.A.	0.10
80-90	0.28	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	993.36	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	74.97
10-20	197.77
20-30	250.86
30-40	229.56
40-50	157.97
50-60	70.64
60-70	10.30
70-80	1.00
80-90	0.28
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 RW	80				70				50			30			10			0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	62	62	62	62	60	60	60	60	58	58	58	55	55	55	53	53	53	52
1	59	57	55	54	57	56	54	53	54	53	52	52	51	50	50	49	49	48
2	55	52	50	48	54	51	49	47	49	48	46	48	46	45	46	45	44	43
3	52	48	45	42	51	47	44	42	46	43	41	44	42	41	43	41	40	39
4	48	44	41	38	47	43	40	38	42	39	37	41	39	37	40	38	36	36
5	45	40	37	34	45	40	37	34	39	36	34	38	35	33	37	35	33	32
6	43	37	34	31	42	37	34	31	36	33	31	35	33	31	35	32	30	30
7	40	35	31	28	39	34	31	28	34	30	28	33	30	28	32	30	28	27
8	38	32	29	26	37	32	28	26	31	28	26	31	28	26	30	28	26	25
9	36	30	27	24	35	30	26	24	29	26	24	29	26	24	28	26	24	23
10	34	28	25	22	33	28	25	22	27	24	22	27	24	22	27	24	22	21

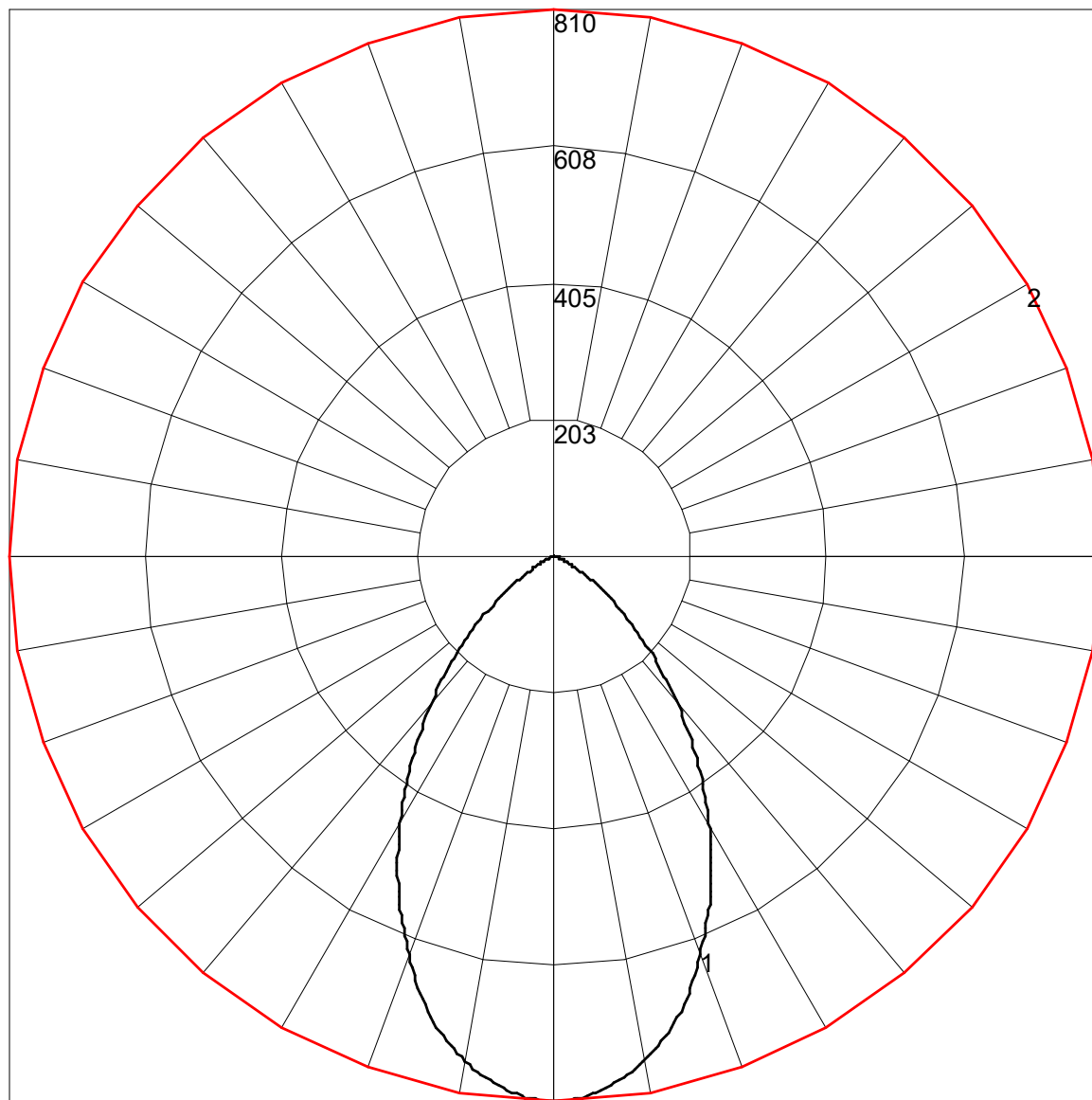
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UGR TABLE - CORRECTED

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	15.9	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
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 = 810.061 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.)