

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6RCD-LS-9CS-SS-DIM-UNV-12W-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-12W-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	1022
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	98
Total Luminaire Watts	10.41
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	16293	16293	16293
55	7627	7627	7627
65	1000	1000	1000
75	201	201	201
85	166	166	166

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CANDELA TABULATION

	<u>0</u>
0.0	833.676
0.5	833.676
1.0	833.147
1.5	832.619
2.0	831.033
2.5	829.976
3.0	828.918
3.5	826.804
4.0	825.218
4.5	822.574
5.0	820.460
5.5	817.817
6.0	814.645
6.5	811.473
7.0	808.301
7.5	804.600
8.0	800.900
8.5	797.199
9.0	793.499
9.5	789.270
10.0	785.041
10.5	780.283
11.0	775.525
11.5	770.767
12.0	765.481
12.5	759.665
13.0	754.379
13.5	748.564
14.0	742.220
14.5	735.876
15.0	729.004
15.5	722.132
16.0	715.259
16.5	707.858
17.0	700.457
17.5	692.527
18.0	684.598
18.5	676.139
19.0	667.681
19.5	659.751
20.0	650.764
20.5	641.777
21.0	633.319
21.5	624.861
22.0	616.402
22.5	607.415
23.0	598.957
23.5	591.027
24.0	582.569
24.5	573.582
25.0	564.595
25.5	555.608
26.0	546.621
26.5	537.634

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CANDELA TABULATION - (Cont.)

27.0	528.435
27.5	519.078
28.0	509.721
28.5	500.311
29.0	490.954
29.5	481.756
30.0	472.557
30.5	463.200
31.0	453.790
31.5	444.486
32.0	434.918
32.5	425.666
33.0	416.468
33.5	407.322
34.0	397.701
34.5	388.503
35.0	379.198
35.5	370.000
36.0	360.696
36.5	351.550
37.0	342.352
37.5	333.259
38.0	324.219
38.5	315.814
39.0	307.672
39.5	299.161
40.0	290.597
40.5	282.033
41.0	273.575
41.5	265.275
42.0	257.081
42.5	249.151
43.0	241.274
43.5	233.345
44.0	225.574
44.5	217.908
45.0	210.349
45.5	202.895
46.0	195.599
46.5	188.463
47.0	181.326
47.5	174.242
48.0	167.370
48.5	160.444
49.0	153.625
49.5	146.964
50.0	140.409
50.5	133.959
51.0	127.562
51.5	121.219
52.0	114.981
52.5	108.848
53.0	102.875
53.5	97.007
54.0	91.244
54.5	85.482

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CANDELA TABULATION - (Cont.)

55.0	79.879
55.5	74.486
56.0	69.200
56.5	64.072
57.0	59.050
57.5	54.186
58.0	49.481
58.5	45.041
59.0	40.759
59.5	36.741
60.0	32.935
60.5	29.340
61.0	26.009
61.5	22.943
62.0	20.089
62.5	17.498
63.0	15.119
63.5	12.952
64.0	10.996
64.5	9.251
65.0	7.718
65.5	6.397
66.0	5.234
66.5	4.229
67.0	3.436
67.5	2.643
68.0	2.009
68.5	1.639
69.0	1.586
69.5	1.533
70.0	1.480
70.5	1.374
71.0	1.322
71.5	1.269
72.0	1.216
72.5	1.216
73.0	1.163
73.5	1.110
74.0	1.057
74.5	1.004
75.0	0.952
75.5	0.899
76.0	0.899
76.5	0.846
77.0	0.793
77.5	0.740
78.0	0.740
78.5	0.687
79.0	0.634
79.5	0.634
80.0	0.582
80.5	0.529
81.0	0.529
81.5	0.476
82.0	0.423
82.5	0.423

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CANDELA TABULATION - (Cont.)

83.0	0.370
83.5	0.370
84.0	0.317
84.5	0.317
85.0	0.264
85.5	0.211
86.0	0.211
86.5	0.159
87.0	0.159
87.5	0.106
88.0	0.106
88.5	0.053
89.0	0.053
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
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	280.69	N.A.	27.50
0-30	538.87	N.A.	52.70
0-40	775.12	N.A.	75.80
0-60	1010.39	N.A.	98.80
0-80	1022.03	N.A.	100.00
0-90	1022.32	N.A.	100.00
10-90	945.16	N.A.	92.50
20-40	494.43	N.A.	48.40
20-50	657.00	N.A.	64.30
40-70	245.87	N.A.	24.10
60-80	11.64	N.A.	1.10
70-80	1.03	N.A.	0.10
80-90	0.29	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	1022.32	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	77.16
10-20	203.53
20-30	258.18
30-40	236.25
40-50	162.57
50-60	72.70
60-70	10.60
70-80	1.03
80-90	0.29
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	64	64	64	64	62	62	62	62	59	59	59	57	57	57	55	55	55	53
1	60	59	57	56	59	57	56	55	55	54	53	53	52	52	51	51	50	49
2	57	54	51	49	55	53	50	48	51	49	47	49	48	46	48	47	45	44
3	53	49	46	44	52	48	46	43	47	45	43	46	44	42	44	43	41	40
4	50	45	42	39	49	45	41	39	43	41	38	42	40	38	41	39	37	37
5	47	42	38	35	46	41	38	35	40	37	35	39	37	34	38	36	34	33
6	44	38	35	32	43	38	34	32	37	34	32	36	34	31	36	33	31	30
7	41	36	32	29	41	35	32	29	35	31	29	34	31	29	33	31	29	28
8	39	33	29	27	38	33	29	27	32	29	27	32	29	27	31	28	26	26
9	37	31	27	25	36	31	27	25	30	27	25	30	27	25	29	26	25	24
10	35	29	25	23	34	29	25	23	28	25	23	28	25	23	27	25	23	22

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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	UGR Viewed Endwise	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

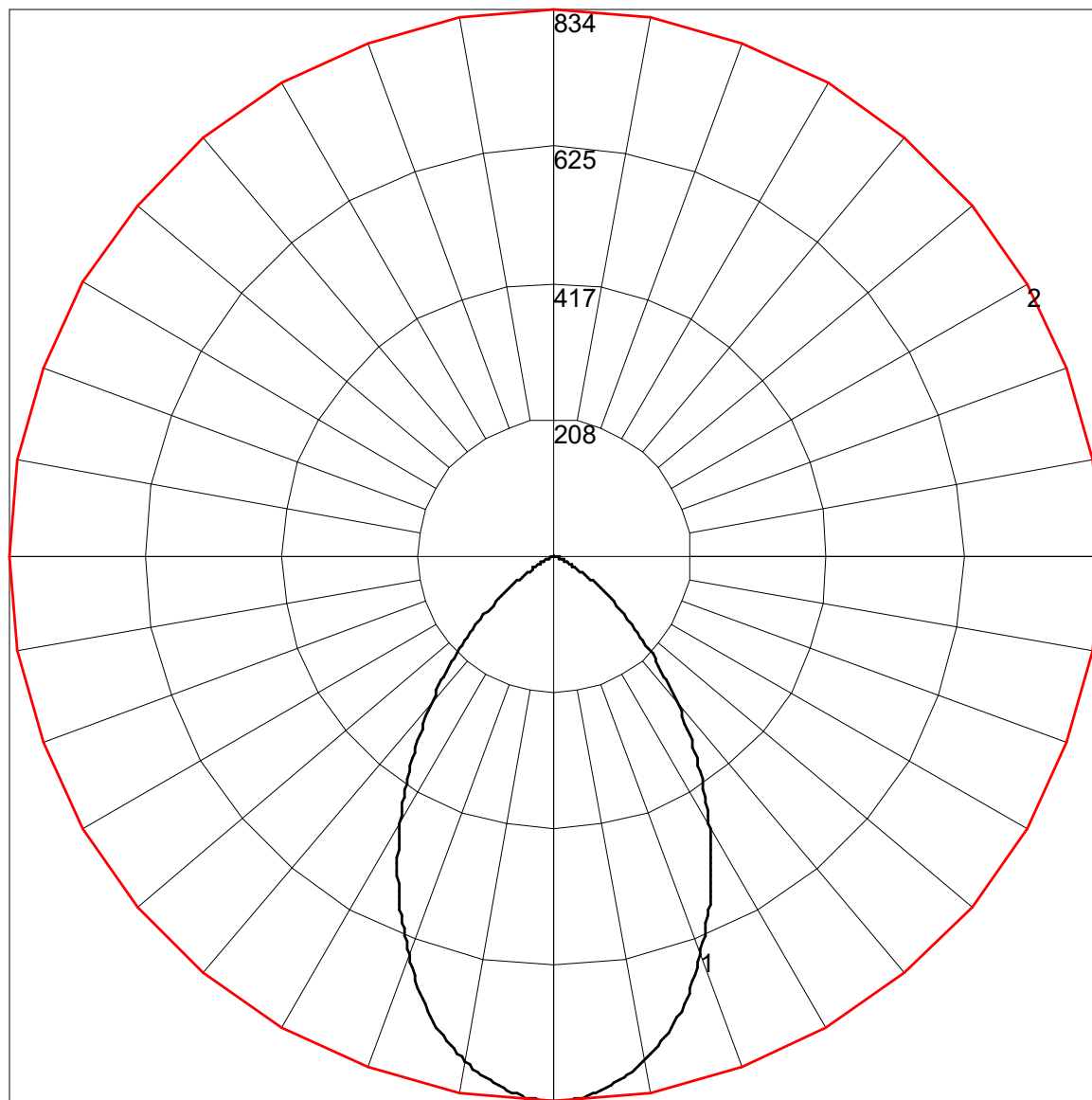
4H	2H	15.7	16.7	16.1	17.0	17.4	15.7	16.7	16.1	17.0	17.4
	3H	15.6	16.3	16.0	16.8	17.2	15.6	16.3	16.0	16.8	17.2
	4H	15.5	16.2	15.9	16.6	17.0	15.5	16.2	15.9	16.6	17.0
	6H	15.4	16.0	15.9	16.4	16.9	15.4	16.0	15.9	16.4	16.9
	8H	15.3	15.9	15.8	16.3	16.8	15.3	15.9	15.8	16.3	16.8
	12H	15.3	15.7	15.7	16.2	16.7	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 = 833.676 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.)