

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6RCD-LS-9CS-SS-DIM-UNV-12W-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-12W-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	1050
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	101
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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6RCD-LS-9CS-SS-DIM-UNV-12W-4000K_.IES

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	16740	16740	16740
55	7837	7837	7837
65	1028	1028	1028
75	207	207	207
85	171	171	171

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6RCD-LS-9CS-SS-DIM-UNV-12W-4000K_.IES

CANDELA TABULATION

	<u>0</u>
0.0	856.581
0.5	856.581
1.0	856.038
1.5	855.495
2.0	853.866
2.5	852.779
3.0	851.693
3.5	849.520
4.0	847.891
4.5	845.175
5.0	843.002
5.5	840.286
6.0	837.027
6.5	833.768
7.0	830.509
7.5	826.707
8.0	822.905
8.5	819.103
9.0	815.300
9.5	810.955
10.0	806.610
10.5	801.721
11.0	796.833
11.5	791.944
12.0	786.512
12.5	780.537
13.0	775.106
13.5	769.131
14.0	762.613
14.5	756.095
15.0	749.034
15.5	741.972
16.0	734.911
16.5	727.307
17.0	719.702
17.5	711.555
18.0	703.407
18.5	694.716
19.0	686.026
19.5	677.878
20.0	668.644
20.5	659.410
21.0	650.719
21.5	642.029
22.0	633.338
22.5	624.104
23.0	615.413
23.5	607.266
24.0	598.575
24.5	589.341
25.0	580.107
25.5	570.873
26.0	561.639
26.5	552.405

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6RCD-LS-9CS-SS-DIM-UNV-12W-4000K_.IES

CANDELA TABULATION - (Cont.)

27.0	542.954
27.5	533.340
28.0	523.726
28.5	514.058
29.0	504.443
29.5	494.992
30.0	485.541
30.5	475.927
31.0	466.258
31.5	456.699
32.0	446.867
32.5	437.362
33.0	427.911
33.5	418.514
34.0	408.628
34.5	399.177
35.0	389.617
35.5	380.166
36.0	370.606
36.5	361.209
37.0	351.758
37.5	342.415
38.0	333.127
38.5	324.491
39.0	316.126
39.5	307.381
40.0	298.581
40.5	289.782
41.0	281.091
41.5	272.563
42.0	264.144
42.5	255.997
43.0	247.903
43.5	239.756
44.0	231.771
44.5	223.895
45.0	216.128
45.5	208.469
46.0	200.973
46.5	193.641
47.0	186.308
47.5	179.029
48.0	171.968
48.5	164.853
49.0	157.846
49.5	151.002
50.0	144.266
50.5	137.640
51.0	131.067
51.5	124.549
52.0	118.140
52.5	111.839
53.0	105.701
53.5	99.672
54.0	93.751
54.5	87.831

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6RCD-LS-9CS-SS-DIM-UNV-12W-4000K_.IES

CANDELA TABULATION - (Cont.)

55.0	82.073
55.5	76.533
56.0	71.101
56.5	65.832
57.0	60.672
57.5	55.675
58.0	50.841
58.5	46.278
59.0	41.879
59.5	37.750
60.0	33.840
60.5	30.146
61.0	26.724
61.5	23.574
62.0	20.641
62.5	17.979
63.0	15.535
63.5	13.308
64.0	11.298
64.5	9.506
65.0	7.930
65.5	6.572
66.0	5.377
66.5	4.345
67.0	3.531
67.5	2.716
68.0	2.064
68.5	1.684
69.0	1.630
69.5	1.575
70.0	1.521
70.5	1.412
71.0	1.358
71.5	1.304
72.0	1.249
72.5	1.249
73.0	1.195
73.5	1.141
74.0	1.086
74.5	1.032
75.0	0.978
75.5	0.923
76.0	0.923
76.5	0.869
77.0	0.815
77.5	0.760
78.0	0.760
78.5	0.706
79.0	0.652
79.5	0.652
80.0	0.597
80.5	0.543
81.0	0.543
81.5	0.489
82.0	0.435
82.5	0.435

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6RCD-LS-9CS-SS-DIM-UNV-12W-4000K_.IES

CANDELA TABULATION - (Cont.)

83.0	0.380
83.5	0.380
84.0	0.326
84.5	0.326
85.0	0.272
85.5	0.217
86.0	0.217
86.5	0.163
87.0	0.163
87.5	0.109
88.0	0.109
88.5	0.054
89.0	0.054
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-12W-4000K_.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-12W-4000K_.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-12W-4000K_.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-12W-4000K_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	288.40	N.A.	27.50
0-30	553.67	N.A.	52.70
0-40	796.42	N.A.	75.80
0-60	1038.15	N.A.	98.80
0-80	1050.11	N.A.	100.00
0-90	1050.41	N.A.	100.00
10-90	971.13	N.A.	92.50
20-40	508.01	N.A.	48.40
20-50	675.05	N.A.	64.30
40-70	252.63	N.A.	24.10
60-80	11.96	N.A.	1.10
70-80	1.06	N.A.	0.10
80-90	0.30	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	1050.41	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	79.28
10-20	209.13
20-30	265.27
30-40	242.74
40-50	167.04
50-60	74.70
60-70	10.89
70-80	1.06
80-90	0.30
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-12W-4000K_.IES

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	68	68	68	68	67	67	67	67	64	64	64	61	61	61	58	58	58	57
1	65	63	61	60	63	61	60	59	59	58	57	57	56	55	55	54	54	53
2	61	57	55	53	59	56	54	52	55	53	51	53	51	50	51	50	49	48
3	57	53	49	47	56	52	49	46	50	48	46	49	47	45	48	46	44	43
4	53	48	45	42	52	48	44	42	46	43	41	45	43	41	44	42	40	39
5	50	45	41	38	49	44	40	38	43	40	37	42	39	37	41	39	37	36
6	47	41	37	34	46	41	37	34	40	36	34	39	36	34	38	36	33	33
7	44	38	34	31	43	38	34	31	37	34	31	36	33	31	36	33	31	30
8	42	35	32	29	41	35	31	29	34	31	29	34	31	29	33	30	28	27
9	39	33	29	27	39	33	29	27	32	29	26	32	29	26	31	28	26	25
10	37	31	27	25	37	31	27	25	30	27	25	30	27	25	29	26	24	24

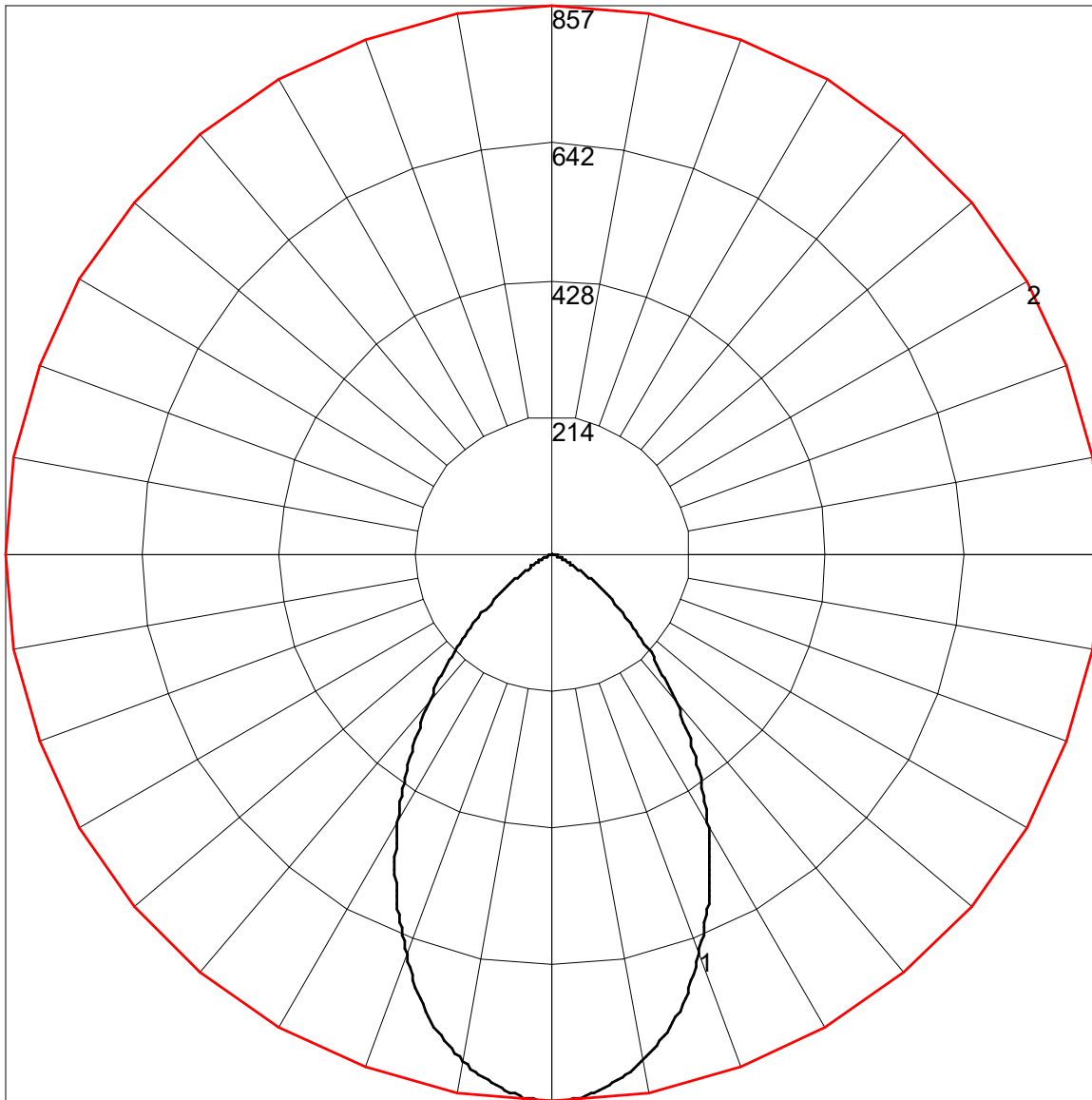
IES INDOOR REPORT
PHOTOMETRIC FILENAME : 6RCD-LS-9CS-SS-DIM-UNV-12W-4000K_.IES

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					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 = 856.581 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.)