

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: IRiS

Report Number: P1342395

Luminaire Tested: P3A09R409030D2WDE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1342395
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-78)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A09R409030D2WDE010 E3CA451MMS
Description: 3in Adjustable Dim to Warm LED luminaire with, R40 optic, 3000K CCT AND, 90CRI ,
E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

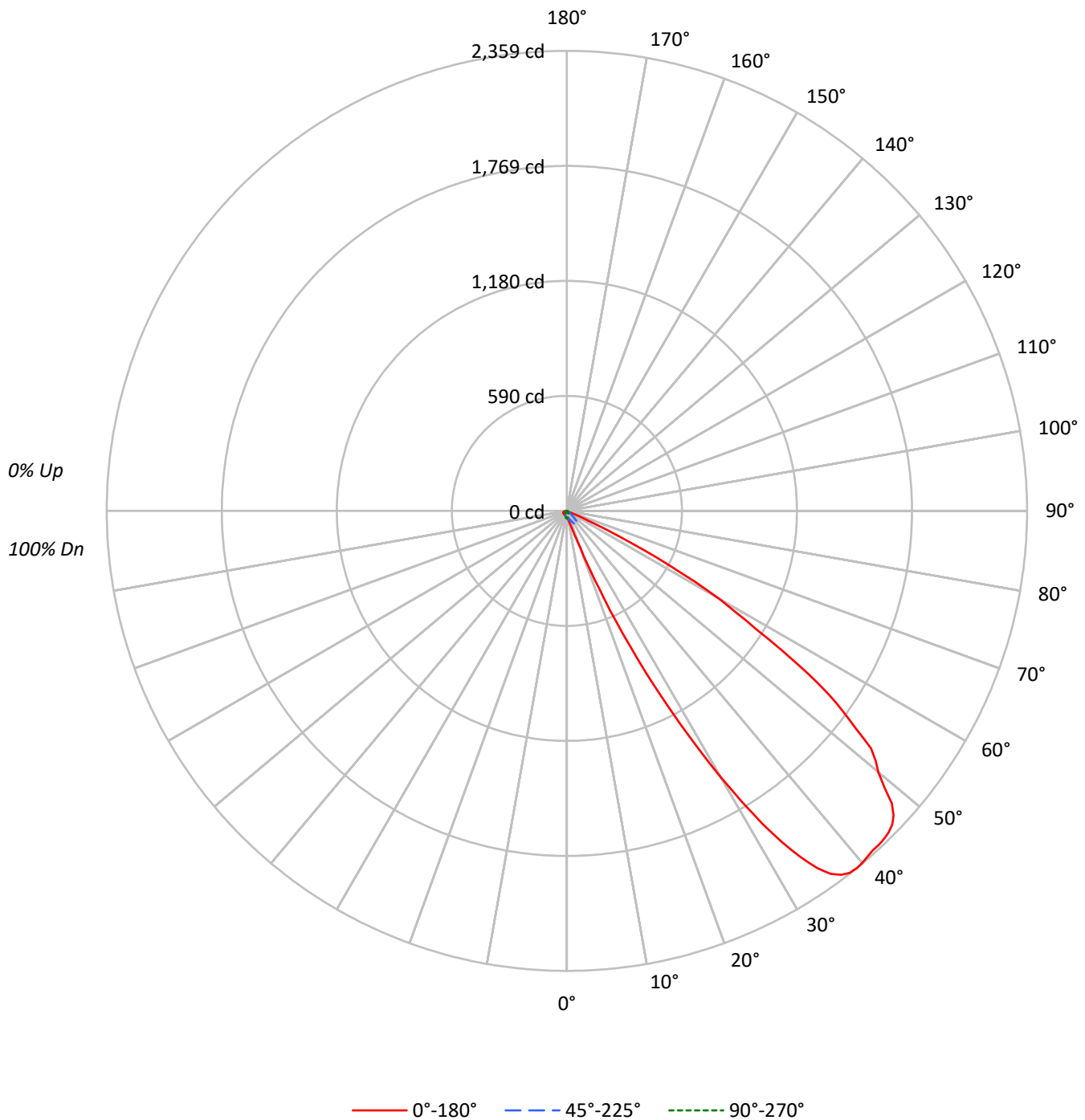
Lumens per Lamp: N/A
Luminaire Lumens: 729.0 lumens
Efficiency: N/A
Efficacy: 49.6 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P1342395

CATALOG NUMBER: P3A09R409030D2WDE010 E3CA451MMS

Luminous Intensity Polar Plot





TEST NUMBER: P1342395

CATALOG NUMBER: P3A09R409030D2WDE010 E3CA451MMS

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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			
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72			
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62	60			
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50			
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	42			
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35			
7	62	48	39	32	60	47	38	32	45	37	32	44	37	31	42	36	31	29			
8	57	42	33	27	55	42	33	27	40	32	27	39	32	27	38	31	26	24			
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21			
10	48	34	25	20	47	33	25	20	32	25	20	31	24	20	30	24	19	18			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	8223	8223	8223	8223	8223
5°	9135	8849	8100	7374	7220
10°	11022	9396	7459	6702	6569
15°	18093	10193	6379	5925	6084
20°	47814	12041	5320	5320	5787
25°	184341	14904	4210	4863	5662
30°	397681	19826	3393	4735	5596
35°	598587	23477	2864	4658	5729
40°	674378	23558	2490	4780	6126
45°	723114	18265	2295	4993	6636
50°	710731	11428	2047	5254	7300
55°	625297	5620	2064	5887	8181
60°	395802	1184	2368	6447	9122
65°	80943	363	2439	6953	10066
70°	1731	449	2565	7758	11605
75°	1694	1101	2796	8472	13047
80°	1642	884	3410	9345	15280
85°	1761	1761	6793	10064	16857

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 736168 cd/sqm

TEST NUMBER: P1342395

CATALOG NUMBER: P3A09R409030D2WDE010 E3CA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.5	0.5
10°-20°	11.5	1.6
20°-30°	56.6	7.8
30°-40°	184.2	25.3
40°-50°	253.9	34.8
50°-60°	176.9	24.3
60°-70°	33.5	4.6
70°-80°	6.1	0.8
80°-90°	2.8	0.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	71.7	9.8
0°-40°	255.9	35.1
0°-60°	686.6	94.2
0°-90°	729.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	729.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	38	38	38	38	38	
5°	42	40	37	34	33	4
15°	80	45	28	26	27	29
25°	762	62	17	20	23	392
35°	2236	88	11	17	21	1351
45°	2332	59	7	16	21	1773
55°	1636	15	5	15	21	1398
65°	156	1	5	13	19	276
75°	2	1	3	10	15	2
85°	1	1	3	4	7	1
90°	0	0	0	0	0	

TEST NUMBER: P1342395

CATALOG NUMBER: P3A09R409030D2WDE010 E3CA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5
2.5°	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.2	37.5
5°	41.5	41.5	41.5	41.5	40.8	40.8	40.8	40.2	40.2	38.8	36.8
7.5°	44.2	44.2	44.2	44.2	43.5	42.8	42.2	42.2	41.5	38.2	35.5
10°	49.5	49.5	48.9	48.2	47.5	46.2	45.5	44.2	42.2	37.5	33.5
12.5°	60.3	58.9	58.2	56.9	54.9	52.2	49.5	47.5	42.8	36.2	31.5
15°	79.7	78.3	75.7	71.6	67.6	62.3	57.6	52.9	44.9	34.1	28.1
17.5°	113.8	109.8	105.8	99.1	89.0	79.7	69.6	60.9	47.5	32.1	25.4
20°	204.9	202.2	178.1	159.3	129.2	107.8	87.7	73.0	51.6	30.1	22.8
22.5°	422.4	394.3	354.8	290.6	226.3	166.7	121.2	91.7	55.6	27.4	20.1
25°	761.9	717.7	632.7	508.8	375.6	265.8	175.4	119.8	61.6	24.8	17.4
27.5°	1153.5	1108.7	976.8	806.1	588.5	401.0	250.4	158.7	69.6	22.1	15.4
30°	1570.6	1532.5	1365.1	1128.8	829.5	561.7	335.4	198.2	78.3	19.4	13.4
31°	1738.7	1689.8	1509.0	1257.3	942.6	628.0	369.6	214.9	81.7	18.7	12.7
32°	1893.3	1837.7	1650.3	1380.5	1034.4	699.6	407.0	229.6	84.4	17.4	12.1
33°	2026.5	1961.6	1780.8	1497.0	1135.4	766.6	445.9	243.7	86.4	16.1	11.4
34°	2139.7	2083.4	1889.3	1614.1	1225.2	830.8	484.0	257.8	87.7	15.4	10.7
35°	2236.1	2185.2	1993.1	1703.2	1312.9	893.1	518.9	271.1	87.7	14.1	10.7
36°	2301.0	2256.8	2082.8	1794.2	1386.5	946.0	548.3	283.2	87.7	12.7	10.0
37°	2336.5	2293.7	2141.7	1869.2	1458.8	998.2	575.1	292.6	87.0	12.1	9.4
38°	2354.6	2317.1	2185.2	1930.1	1509.0	1035.7	598.5	299.9	86.4	10.7	9.4
39°	2359.3	2327.8	2212.6	1974.3	1557.9	1073.2	615.3	303.9	84.4	10.0	8.7
40°	2355.9	2328.5	2227.4	2013.8	1595.4	1102.6	627.3	305.3	82.3	8.7	8.7
41°	2349.2	2327.8	2238.1	2041.3	1625.5	1121.4	632.0	302.6	79.7	7.4	8.0
42°	2343.2	2319.8	2242.8	2060.0	1646.3	1130.8	631.3	297.3	75.7	6.7	8.0
43°	2343.2	2316.4	2243.4	2072.1	1656.3	1131.4	623.3	287.2	70.3	6.0	7.4
44°	2339.2	2314.4	2246.8	2080.1	1659.0	1125.4	610.6	276.5	64.3	5.4	7.4
45°	2331.8	2305.7	2246.1	2080.8	1654.3	1110.7	589.8	262.4	58.9	4.0	7.4
46°	2317.8	2294.3	2240.1	2076.1	1640.2	1089.3	565.0	248.4	52.9	3.3	6.7
47°	2289.6	2271.6	2224.0	2060.0	1618.8	1057.8	535.6	232.3	48.2	2.7	6.7
48°	2241.4	2228.7	2196.6	2024.5	1578.0	1019.0	504.1	214.9	43.5	2.7	6.7
49°	2153.1	2143.0	2124.3	1967.6	1525.8	971.4	470.0	195.5	38.8	2.0	6.7
50°	2083.4	2072.7	2034.6	1871.9	1450.8	911.2	432.5	176.1	33.5	1.3	6.0
51°	2037.2	2019.8	1959.6	1760.7	1341.6	830.8	391.6	156.7	28.1	1.3	6.0
52°	1979.0	1952.9	1877.9	1661.0	1241.9	750.5	347.5	137.2	24.8	1.3	6.0
53°	1857.2	1847.8	1773.5	1553.9	1142.1	673.5	301.9	121.2	21.4	1.3	6.0
54°	1750.7	1736.6	1635.6	1405.2	1033.7	587.8	255.1	107.1	18.1	1.3	6.0
55°	1635.6	1608.1	1518.4	1280.1	906.5	508.8	210.2	92.4	14.7	1.3	5.4
56°	1490.3	1466.2	1369.8	1146.2	789.3	428.5	176.1	75.7	11.4	1.3	5.4
57°	1313.5	1291.4	1217.1	981.5	667.5	350.1	143.3	60.9	8.7	1.3	5.4
58°	1142.8	1118.0	1033.0	823.5	538.9	277.8	119.8	49.5	6.7	1.3	5.4
59°	1011.6	978.1	868.3	691.6	421.8	210.9	95.1	39.5	4.7	1.3	5.4
60°	902.5	875.0	761.2	575.8	330.7	155.3	70.3	30.1	2.7	1.3	5.4
62.5°	522.9	515.5	413.1	296.6	156.0	72.3	34.8	14.1	1.3	2.0	5.4
65°	156.0	135.9	105.8	62.9	40.2	24.1	12.7	4.7	0.7	2.0	4.7



TEST NUMBER: P1342395

CATALOG NUMBER: P3A09R409030D2WDE010 E3CA451MMS

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	4.7	4.7	4.7	4.7	4.7	4.7	2.7	1.3	0.7	2.0	4.7
70°	2.7	2.0	2.0	2.0	2.0	1.3	1.3	0.7	0.7	2.0	4.0
72.5°	2.0	2.0	2.0	2.0	1.3	1.3	1.3	0.7	1.3	2.0	3.3
75°	2.0	1.3	1.3	1.3	1.3	0.7	0.7	0.7	1.3	2.0	3.3
77.5°	1.3	1.3	1.3	1.3	0.7	0.7	0.7	0.7	1.3	2.0	3.3
80°	1.3	1.3	0.7	0.7	0.7	0.7	0.7	0.7	0.7	2.0	2.7
82.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	2.0	2.7
85°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	2.0	2.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1342395

CATALOG NUMBER: P3A09R409030D2WDE010 E3CA451MMS

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	37.5	37.5	37.5	37.5
2.5°	36.2	35.5	34.8	34.8
5°	34.8	33.5	33.5	32.8
7.5°	32.8	31.5	31.5	31.5
10°	30.8	30.1	30.1	29.5
12.5°	28.1	28.1	28.1	28.1
15°	26.1	26.1	26.8	26.8
17.5°	23.4	24.1	25.4	26.1
20°	21.4	22.8	24.1	24.8
22.5°	20.1	21.4	23.4	24.1
25°	18.1	20.1	22.8	23.4
27.5°	16.7	19.4	21.4	22.8
30°	15.4	18.7	20.8	22.1
31°	15.4	18.1	20.8	22.1
32°	14.7	17.4	20.8	21.4
33°	14.7	17.4	20.8	21.4
34°	14.1	17.4	20.1	21.4
35°	14.1	17.4	20.1	21.4
36°	13.4	16.7	20.1	21.4
37°	13.4	16.7	20.1	21.4
38°	12.7	16.7	20.1	21.4
39°	12.7	16.7	20.1	21.4
40°	12.7	16.7	20.1	21.4
41°	12.1	16.7	20.1	21.4
42°	12.1	16.7	20.1	21.4
43°	12.1	16.1	20.1	21.4
44°	12.1	16.1	20.1	21.4
45°	11.4	16.1	20.1	21.4
46°	11.4	16.1	20.1	21.4
47°	11.4	16.1	20.1	21.4
48°	11.4	16.1	20.1	21.4
49°	11.4	16.1	20.1	21.4
50°	10.7	15.4	20.1	21.4
51°	10.7	15.4	20.1	21.4
52°	10.7	15.4	20.1	21.4
53°	10.7	15.4	20.1	21.4
54°	10.0	15.4	20.1	21.4
55°	10.0	15.4	20.1	21.4
56°	10.0	15.4	20.1	20.8
57°	10.0	15.4	19.4	20.8
58°	10.0	14.7	19.4	20.8
59°	10.0	14.7	19.4	20.8
60°	10.0	14.7	19.4	20.8
62.5°	9.4	14.7	18.7	20.1
65°	8.7	13.4	18.7	19.4



TEST NUMBER: P1342395

CATALOG NUMBER: P3A09R409030D2WDE010 E3CA451MMS

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	8.7	12.7	17.4	18.7
70°	8.0	12.1	16.7	18.1
72.5°	6.7	11.4	15.4	16.7
75°	6.0	10.0	14.1	15.4
77.5°	5.4	8.7	12.7	13.4
80°	4.7	7.4	10.7	12.1
82.5°	3.3	5.4	8.7	9.4
85°	2.7	4.0	6.0	6.7
87.5°	2.0	2.0	3.3	3.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)