

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: P1341006

Luminaire Tested: P3A09R259827DE010 E3CA451MB

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1341006
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-75)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A09R259827DE010 E3CA451MB
Description: 3in Adjustable LED luminaire with, R25 optic, 2700K CCT AND, 98CRI , E3CA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

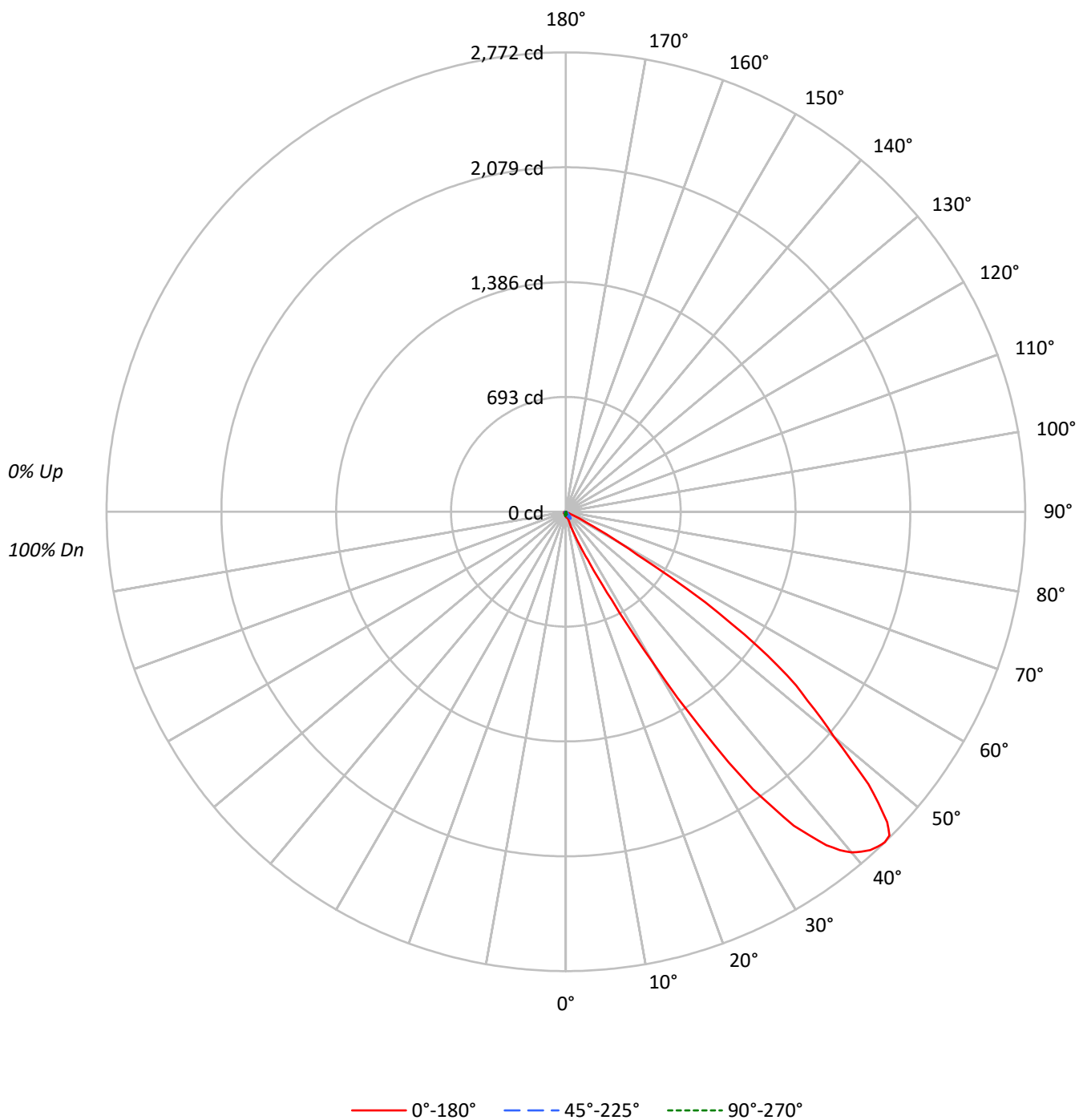
Lumens per Lamp: N/A
Luminaire Lumens: 578.0 lumens
Efficiency: N/A
Efficacy: 52.5 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11
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

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Luminous Intensity Polar Plot



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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	50	30	10
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	108	104	101	97	100	97	94	96	94	92	92	91	89	87		
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73		
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61		
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42		
6	68	55	45	39	66	54	45	39	52	44	38	50	43	38	48	42	37	35		
7	62	48	39	32	60	47	39	32	46	38	32	44	37	32	43	36	32	29		
8	57	43	34	27	55	42	33	27	40	33	27	39	32	27	38	32	27	25		
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	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	6469	6469	6469	6469	6469
5°	7396	7044	6273	5591	5481
10°	7370	6680	5322	4654	4654
15°	8195	5766	4154	3927	4154
20°	28959	5694	3197	3314	3687
25°	83303	7258	2589	3073	3581
30°	265813	11217	2051	2962	3595
35°	582204	13197	1767	2864	3667
40°	768010	11937	1460	2920	3922
45°	856461	8373	1427	3163	4249
50°	720932	4332	1399	3309	4674
55°	539011	1759	1376	3708	5238
60°	166873	439	1360	4035	5789
65°	14269	0	1608	4203	6330
70°	962	321	1603	4873	7181
75°	847	424	2118	5168	8218
80°	631	631	3157	5809	9597
85°	1258	1258	5032	6290	10315

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 856461 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.6	0.5
10°-20°	6.8	1.2
20°-30°	32.0	5.5
30°-40°	154.0	26.6
40°-50°	241.3	41.8
50°-60°	123.7	21.4
60°-70°	11.7	2.0
70°-80°	3.9	0.7
80°-90°	2.0	0.3
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°	41.4	7.2
0°-40°	195.4	33.8
0°-60°	560.4	97.0
0°-90°	578.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	578.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	30	30	30	30	30	
5°	34	32	28	25	25	3
15°	36	25	18	17	18	15
25°	344	30	11	13	15	214
35°	2175	49	7	11	14	1320
45°	2762	27	5	10	14	2021
55°	1410	5	4	10	14	1174
65°	28	0	3	8	12	86
75°	1	0	2	6	10	1
85°	0	0	2	2	4	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
2.5°	32.0	32.0	32.0	32.0	32.0	32.0	31.5	31.5	32.0	31.5	31.5
5°	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.1	33.1	33.1	32.0
7.5°	34.1	33.6	33.6	33.6	33.6	33.6	33.6	33.6	33.1	33.1	31.5
10°	33.1	33.1	33.1	33.1	32.6	32.6	32.6	32.0	32.0	32.0	30.0
12.5°	33.1	33.1	33.1	33.1	32.6	32.6	32.0	32.0	31.5	31.0	27.5
15°	36.1	36.1	36.1	35.6	35.1	34.6	34.1	33.6	33.1	32.0	25.4
17.5°	52.9	51.4	50.9	48.8	46.3	43.7	41.7	39.7	37.6	36.1	24.4
20°	124.1	123.6	121.1	114.9	108.3	100.7	93.1	84.4	72.2	64.1	24.4
22.5°	215.1	212.1	207.5	202.9	191.2	177.5	163.3	147.0	131.2	114.4	25.9
25°	344.3	351.5	336.2	324.0	303.6	278.7	251.8	229.4	200.9	174.5	30.0
27.5°	598.7	603.2	573.2	533.5	486.2	433.9	383.0	344.8	297.0	253.3	37.6
30°	1049.8	1054.4	1004.0	919.6	821.9	736.0	619.5	517.3	423.2	350.4	44.3
31°	1310.2	1274.6	1216.1	1134.2	1010.6	880.9	741.1	617.5	498.5	402.8	46.3
32°	1536.6	1533.5	1465.4	1341.2	1217.1	1056.9	883.5	722.2	576.3	455.7	47.8
33°	1803.6	1783.2	1687.1	1570.1	1405.8	1244.6	1020.8	836.7	656.1	514.7	48.8
34°	2017.7	1962.8	1923.1	1789.3	1615.9	1410.4	1170.9	957.7	755.8	571.7	49.3
35°	2174.9	2163.2	2085.9	1961.3	1784.8	1574.7	1332.6	1083.4	839.2	637.8	49.3
36°	2341.2	2305.1	2229.8	2116.9	1945.0	1727.8	1456.2	1192.2	936.4	697.3	48.8
37°	2445.5	2424.1	2349.3	2232.9	2064.5	1857.0	1594.5	1307.2	1013.7	756.8	47.8
38°	2552.8	2509.6	2435.8	2324.4	2159.1	1964.3	1694.7	1395.7	1084.9	809.2	46.3
39°	2627.1	2582.3	2507.0	2396.1	2234.4	2041.1	1774.1	1470.9	1147.0	848.4	44.3
40°	2683.0	2639.8	2563.5	2449.5	2289.8	2101.6	1840.2	1537.6	1198.8	882.5	41.7
41°	2717.6	2677.4	2601.6	2488.2	2328.0	2136.2	1883.4	1580.8	1233.9	905.4	39.2
42°	2746.6	2705.4	2628.1	2512.1	2351.4	2165.7	1909.9	1608.3	1257.8	917.1	37.1
43°	2762.9	2721.7	2646.4	2527.9	2365.6	2179.5	1924.1	1621.0	1266.0	915.5	33.6
44°	2772.0	2729.3	2653.5	2535.0	2371.7	2183.0	1925.2	1618.4	1260.4	903.3	30.5
45°	2761.8	2719.6	2646.4	2527.9	2361.0	2171.8	1915.0	1604.7	1239.0	879.4	27.0
46°	2695.7	2663.2	2596.0	2487.2	2327.5	2143.4	1889.0	1578.3	1206.0	849.9	22.9
47°	2579.2	2553.3	2488.2	2407.3	2262.9	2091.0	1841.2	1527.9	1159.7	805.7	18.3
48°	2457.7	2419.5	2359.0	2276.1	2154.0	1996.9	1762.4	1454.2	1089.5	747.7	16.3
49°	2278.1	2255.8	2202.4	2109.8	2008.6	1870.2	1651.0	1359.6	1003.5	684.6	14.2
50°	2113.3	2098.1	2023.3	1955.2	1847.8	1718.6	1499.9	1234.9	896.7	606.3	12.7
51°	1984.7	1966.3	1912.4	1827.5	1713.1	1563.0	1357.0	1073.2	774.1	513.2	10.2
52°	1850.4	1840.2	1792.4	1704.9	1592.5	1443.0	1218.2	935.9	655.1	433.9	8.1
53°	1740.5	1725.8	1667.3	1589.5	1467.9	1313.3	1067.6	808.2	554.9	364.7	7.1
54°	1580.3	1574.2	1536.6	1455.2	1323.4	1155.1	931.3	680.5	462.9	309.2	6.1
55°	1409.9	1389.6	1351.4	1286.8	1165.8	1008.6	773.6	564.1	374.3	260.4	4.6
56°	1202.4	1201.4	1133.2	1079.3	972.0	805.2	618.0	440.5	304.2	217.2	4.1
57°	1004.0	972.0	906.4	853.0	737.5	610.9	458.8	330.1	238.0	176.0	3.1
58°	742.6	725.8	708.5	630.2	523.4	432.8	327.6	231.9	176.0	134.3	2.0
59°	504.0	503.5	483.2	423.7	362.1	269.6	204.5	157.7	121.1	98.7	1.5
60°	380.5	371.3	330.6	291.4	227.9	170.4	121.1	93.1	75.3	63.6	1.0
62.5°	133.3	138.3	121.6	100.7	76.8	63.1	48.3	39.2	32.0	25.9	0.0
65°	27.5	30.0	25.9	24.4	19.3	16.8	14.8	12.7	10.7	9.2	0.0



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	3.6	3.1	3.1	3.1	2.5	2.5	2.5	2.5	2.0	2.0	0.5
70°	1.5	1.5	1.5	1.5	1.5	1.5	1.0	1.0	1.0	1.0	0.5
72.5°	1.5	1.5	1.5	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5
75°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
77.5°	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
82.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0
85°	0.5	0.5	0.5	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	29.5	29.5	29.5	29.5	29.5	29.5
2.5°	31.0	30.0	28.5	28.0	27.5	27.5
5°	30.5	28.5	27.0	25.4	24.9	24.9
7.5°	29.0	26.4	24.4	23.4	22.9	22.4
10°	27.5	23.9	21.9	20.9	20.9	20.9
12.5°	24.4	21.4	19.3	18.8	19.3	19.3
15°	21.9	18.3	17.3	17.3	17.8	18.3
17.5°	18.8	16.3	15.3	15.8	16.3	16.8
20°	16.8	13.7	13.7	14.2	15.8	15.8
22.5°	14.8	12.2	12.2	13.7	14.8	15.3
25°	13.2	10.7	11.2	12.7	14.2	14.8
27.5°	11.2	9.2	10.2	12.2	13.7	14.2
30°	9.7	8.1	9.7	11.7	13.2	14.2
31°	9.2	7.6	9.7	11.2	13.2	14.2
32°	8.1	7.6	9.2	11.2	13.2	13.7
33°	7.6	7.1	9.2	11.2	13.2	13.7
34°	7.1	6.6	8.6	11.2	13.2	13.7
35°	6.1	6.6	8.6	10.7	12.7	13.7
36°	5.6	6.1	8.6	10.7	12.7	13.7
37°	5.1	6.1	8.1	10.7	12.7	13.7
38°	4.6	5.6	8.1	10.7	12.7	13.7
39°	4.1	5.6	7.6	10.7	12.7	13.7
40°	3.6	5.1	7.6	10.2	12.7	13.7
41°	3.6	5.1	7.6	10.2	12.7	13.7
42°	3.1	5.1	7.6	10.2	12.7	13.7
43°	2.5	4.6	7.6	10.2	12.7	13.7
44°	2.0	4.6	7.1	10.2	12.7	13.7
45°	2.0	4.6	7.1	10.2	12.7	13.7
46°	1.5	4.1	7.1	10.2	12.7	13.7
47°	1.0	4.1	7.1	9.7	12.7	13.7
48°	1.0	4.1	7.1	9.7	12.7	13.7
49°	1.0	4.1	6.6	9.7	12.7	13.7
50°	1.0	4.1	6.6	9.7	12.7	13.7
51°	0.5	3.6	6.6	9.7	12.7	13.7
52°	0.5	3.6	6.6	9.7	12.7	14.2
53°	0.5	3.6	6.6	9.7	12.7	13.7
54°	0.5	3.6	6.1	9.7	12.7	13.7
55°	0.5	3.6	6.1	9.7	12.7	13.7
56°	0.5	3.1	6.1	9.2	12.7	13.7
57°	1.0	3.1	6.1	9.2	12.7	13.2
58°	1.0	3.1	6.1	9.2	12.2	13.2
59°	1.0	3.1	6.1	9.2	12.2	13.2
60°	1.0	3.1	5.6	9.2	12.2	13.2
62.5°	1.0	3.1	5.6	8.6	11.7	12.7
65°	1.0	3.1	5.1	8.1	11.7	12.2



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.0	2.5	5.1	7.6	11.2	11.7
70°	1.5	2.5	4.6	7.6	10.7	11.2
72.5°	1.5	2.5	4.6	6.6	9.7	10.7
75°	1.5	2.5	4.1	6.1	9.2	9.7
77.5°	1.5	2.5	3.6	5.6	8.1	8.6
80°	2.0	2.5	3.1	4.6	7.1	7.6
82.5°	2.0	2.5	2.5	3.6	5.6	6.1
85°	1.5	2.0	2.0	2.5	3.6	4.1
87.5°	1.5	2.0	1.5	1.0	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)