

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: P1344537

Luminaire Tested: P3A13R259740DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344537
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: P3A13R259740DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R25 optic, 4000K CCT AND, 97CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

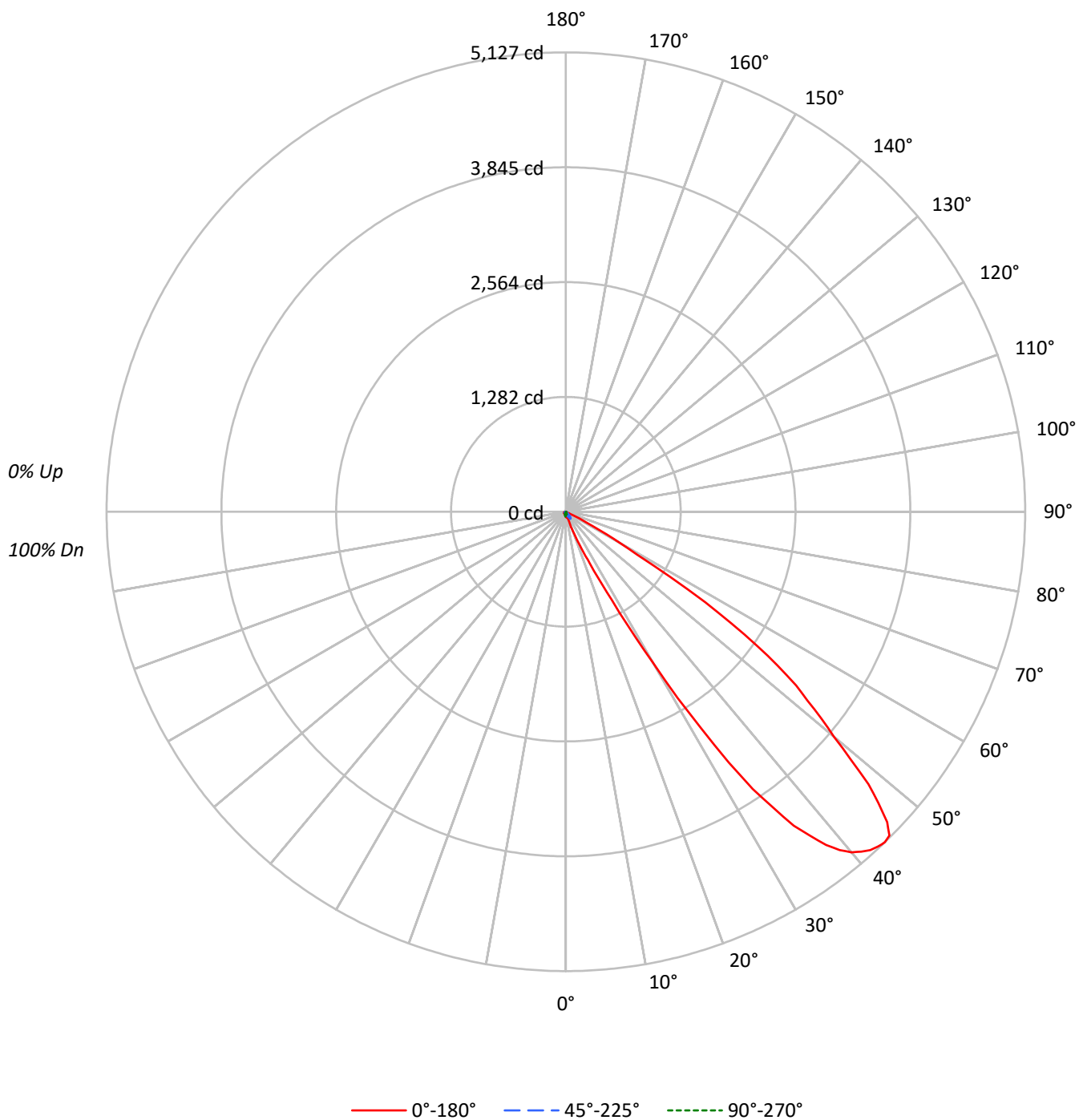
Lumens per Lamp: N/A
Luminaire Lumens: 1069.0 lumens
Efficiency: N/A
Efficacy: 73.2 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.6 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.6
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: P1344537

CATALOG NUMBER: P3A13R259740DE010 E3CA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1344537

CATALOG NUMBER: P3A13R259740DE010 E3CA451MMS

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
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°	11973	11973	11973	11973	11973
5°	13669	13053	11600	10346	10147
10°	13605	12358	9842	8595	8595
15°	15165	10670	7696	7265	7696
20°	53555	10548	5927	6137	6814
25°	154098	13428	4791	5686	6605
30°	491620	20712	3823	5469	6659
35°	1076765	24414	3266	5300	6799
40°	1420433	22070	2691	5382	7271
45°	1584040	15474	2636	5830	7877
50°	1333380	8017	2559	6106	8665
55°	996896	3250	2523	6843	9711
60°	308572	833	2456	7412	10745
65°	26358	0	2906	7835	11726
70°	1795	577	3013	9040	13271
75°	1610	763	3982	9574	15166
80°	1137	1137	5935	10734	17805
85°	2264	2264	9561	11825	18870

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1584040 cd/sqm

TEST NUMBER: P1344537

CATALOG NUMBER: P3A13R259740DE010 E3CA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.9	0.5
10°-20°	12.6	1.2
20°-30°	59.1	5.5
30°-40°	284.7	26.6
40°-50°	446.3	41.8
50°-60°	228.8	21.4
60°-70°	21.6	2.0
70°-80°	7.3	0.7
80°-90°	3.6	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°	76.6	7.2
0°-40°	361.4	33.8
0°-60°	1036.5	97.0
0°-90°	1069.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1069.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	55	55	55	55	55	
5°	62	59	53	47	46	6
15°	67	47	34	32	34	28
25°	637	56	20	24	27	395
35°	4022	91	12	20	25	2442
45°	5108	50	8	19	25	3738
55°	2608	8	7	18	25	2171
65°	51	0	6	15	23	159
75°	2	1	5	11	18	2
85°	1	1	4	5	8	1
90°	0	0	0	0	0	

TEST NUMBER: P1344537

CATALOG NUMBER: P3A13R259740DE010 E3CA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
2.5°	59.3	59.3	59.3	59.3	59.3	59.3	58.3	58.3	59.3	58.3	58.3
5°	62.1	62.1	62.1	62.1	62.1	62.1	62.1	61.1	61.1	61.1	59.3
7.5°	63.0	62.1	62.1	62.1	62.1	62.1	62.1	62.1	61.1	61.1	58.3
10°	61.1	61.1	61.1	61.1	60.2	60.2	60.2	59.3	59.3	59.3	55.5
12.5°	61.1	61.1	61.1	61.1	60.2	60.2	59.3	59.3	58.3	57.4	50.8
15°	66.8	66.8	66.8	65.8	64.9	64.0	63.0	62.1	61.1	59.3	47.0
17.5°	97.8	95.0	94.1	90.3	85.6	80.9	77.1	73.4	69.6	66.8	45.2
20°	229.5	228.6	223.9	212.6	200.4	186.3	172.1	156.2	133.6	118.5	45.2
22.5°	397.9	392.3	383.8	375.3	353.7	328.3	302.0	271.9	242.7	211.7	48.0
25°	636.9	650.0	621.8	599.2	561.6	515.5	465.6	424.3	371.6	322.7	55.5
27.5°	1107.2	1115.7	1060.2	986.8	899.3	802.4	708.3	637.8	549.4	468.5	69.6
30°	1941.6	1950.1	1856.9	1700.8	1520.2	1361.2	1145.8	956.7	782.7	648.1	81.8
31°	2423.2	2357.4	2249.2	2097.7	1869.2	1629.3	1370.6	1142.0	921.9	745.0	85.6
32°	2841.8	2836.2	2710.1	2480.6	2251.1	1954.8	1634.0	1335.8	1065.8	842.9	88.4
33°	3335.7	3298.1	3120.3	2903.9	2600.1	2301.9	1888.0	1547.4	1213.5	952.0	90.3
34°	3731.7	3630.1	3556.8	3309.4	2988.6	2608.5	2165.5	1771.3	1397.9	1057.3	91.2
35°	4022.4	4000.8	3857.8	3627.3	3300.9	2912.4	2464.6	2003.7	1552.1	1179.6	91.2
36°	4330.0	4263.2	4124.0	3915.2	3597.2	3195.5	2693.2	2205.0	1731.8	1289.7	90.3
37°	4522.9	4483.4	4345.1	4129.7	3818.3	3434.5	2949.1	2417.6	1874.8	1399.8	88.4
38°	4721.3	4641.4	4505.0	4299.0	3993.2	3633.0	3134.4	2581.3	2006.5	1496.6	85.6
39°	4858.7	4775.9	4636.7	4431.6	4132.5	3775.0	3281.1	2720.5	2121.3	1569.1	81.8
40°	4962.2	4882.2	4741.1	4530.4	4235.0	3887.0	3403.4	2843.7	2217.2	1632.1	77.1
41°	5026.1	4951.8	4811.7	4601.9	4305.6	3950.9	3483.4	2923.7	2282.1	1674.4	72.4
42°	5079.8	5003.6	4860.6	4646.1	4348.8	4005.5	3532.3	2974.5	2326.3	1696.1	68.7
43°	5109.9	5033.7	4894.4	4675.3	4375.2	4030.9	3558.6	2998.0	2341.4	1693.3	62.1
44°	5126.8	5047.8	4907.6	4688.4	4386.5	4037.5	3560.5	2993.3	2331.0	1670.7	56.4
45°	5108.0	5029.9	4894.4	4675.3	4366.7	4016.8	3541.7	2967.9	2291.5	1626.5	49.9
46°	4985.7	4925.5	4801.3	4600.0	4304.6	3964.1	3493.7	2919.0	2230.4	1571.9	42.3
47°	4770.3	4722.3	4601.9	4452.3	4185.2	3867.2	3405.3	2825.8	2144.8	1490.1	33.9
48°	4545.4	4474.9	4362.9	4209.6	3983.8	3693.2	3259.5	2689.4	2015.0	1382.8	30.1
49°	4213.4	4172.0	4073.2	3902.0	3714.8	3458.9	3053.5	2514.5	1856.0	1266.2	26.3
50°	3908.6	3880.4	3742.1	3616.0	3417.5	3178.6	2774.1	2284.0	1658.4	1121.3	23.5
51°	3670.6	3636.7	3537.0	3379.9	3168.3	2890.8	2509.8	1984.9	1431.7	949.2	18.8
52°	3422.2	3403.4	3315.0	3153.2	2945.3	2668.8	2253.0	1730.9	1211.6	802.4	15.1
53°	3219.1	3191.8	3083.6	2939.7	2714.8	2428.9	1974.5	1494.8	1026.3	674.5	13.2
54°	2922.7	2911.5	2841.8	2691.3	2447.7	2136.3	1722.4	1258.6	856.0	571.9	11.3
55°	2607.6	2570.0	2499.4	2380.0	2156.1	1865.4	1430.8	1043.2	692.4	481.6	8.5
56°	2223.8	2221.9	2095.9	1996.2	1797.7	1489.1	1142.9	814.6	562.5	401.7	7.5
57°	1856.9	1797.7	1676.3	1577.5	1364.0	1129.8	848.5	610.5	440.2	325.5	5.6
58°	1373.4	1342.4	1310.4	1165.5	968.0	800.5	605.8	429.0	325.5	248.3	3.8
59°	932.2	931.3	893.7	783.6	669.8	498.6	378.2	291.6	223.9	182.5	2.8
60°	703.6	686.7	611.5	539.0	421.4	315.1	223.9	172.1	139.2	117.6	1.9
62.5°	246.5	255.9	224.8	186.3	142.0	116.6	89.4	72.4	59.3	48.0	0.0
65°	50.8	55.5	48.0	45.2	35.7	31.0	27.3	23.5	19.8	16.9	0.0



TEST NUMBER: P1344537

CATALOG NUMBER: P3A13R259740DE010 E3CA451MMS

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	6.6	5.6	5.6	5.6	4.7	4.7	4.7	4.7	3.8	3.8	0.9
70°	2.8	2.8	2.8	2.8	2.8	2.8	1.9	1.9	1.9	1.9	0.9
72.5°	2.8	2.8	2.8	1.9	1.9	1.9	1.9	1.9	1.9	0.9	0.9
75°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	0.9	0.9	0.9	0.9
77.5°	1.9	1.9	1.9	1.9	1.9	1.9	0.9	0.9	0.9	0.9	0.9
80°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
82.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.9
85°	0.9	0.9	0.9	0.0	0.0	0.9	0.9	0.9	0.9	0.9	0.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
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: P1344537

CATALOG NUMBER: P3A13R259740DE010 E3CA451MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	54.6	54.6	54.6	54.6	54.6	54.6
2.5°	57.4	55.5	52.7	51.7	50.8	50.8
5°	56.4	52.7	49.9	47.0	46.1	46.1
7.5°	53.6	48.9	45.2	43.3	42.3	41.4
10°	50.8	44.2	40.4	38.6	38.6	38.6
12.5°	45.2	39.5	35.7	34.8	35.7	35.7
15°	40.4	33.9	32.0	32.0	32.9	33.9
17.5°	34.8	30.1	28.2	29.2	30.1	31.0
20°	31.0	25.4	25.4	26.3	29.2	29.2
22.5°	27.3	22.6	22.6	25.4	27.3	28.2
25°	24.5	19.8	20.7	23.5	26.3	27.3
27.5°	20.7	16.9	18.8	22.6	25.4	26.3
30°	17.9	15.1	17.9	21.6	24.5	26.3
31°	16.9	14.1	17.9	20.7	24.5	26.3
32°	15.1	14.1	16.9	20.7	24.5	25.4
33°	14.1	13.2	16.9	20.7	24.5	25.4
34°	13.2	12.2	16.0	20.7	24.5	25.4
35°	11.3	12.2	16.0	19.8	23.5	25.4
36°	10.3	11.3	16.0	19.8	23.5	25.4
37°	9.4	11.3	15.1	19.8	23.5	25.4
38°	8.5	10.3	15.1	19.8	23.5	25.4
39°	7.5	10.3	14.1	19.8	23.5	25.4
40°	6.6	9.4	14.1	18.8	23.5	25.4
41°	6.6	9.4	14.1	18.8	23.5	25.4
42°	5.6	9.4	14.1	18.8	23.5	25.4
43°	4.7	8.5	14.1	18.8	23.5	25.4
44°	3.8	8.5	13.2	18.8	23.5	25.4
45°	3.8	8.5	13.2	18.8	23.5	25.4
46°	2.8	7.5	13.2	18.8	23.5	25.4
47°	1.9	7.5	13.2	17.9	23.5	25.4
48°	1.9	7.5	13.2	17.9	23.5	25.4
49°	1.9	7.5	12.2	17.9	23.5	25.4
50°	1.9	7.5	12.2	17.9	23.5	25.4
51°	0.9	6.6	12.2	17.9	23.5	25.4
52°	0.9	6.6	12.2	17.9	23.5	26.3
53°	0.9	6.6	12.2	17.9	23.5	25.4
54°	0.9	6.6	11.3	17.9	23.5	25.4
55°	0.9	6.6	11.3	17.9	23.5	25.4
56°	0.9	5.6	11.3	16.9	23.5	25.4
57°	1.9	5.6	11.3	16.9	23.5	24.5
58°	1.9	5.6	11.3	16.9	22.6	24.5
59°	1.9	5.6	11.3	16.9	22.6	24.5
60°	1.9	5.6	10.3	16.9	22.6	24.5
62.5°	1.9	5.6	10.3	16.0	21.6	23.5
65°	1.9	5.6	9.4	15.1	21.6	22.6



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.9	4.7	9.4	14.1	20.7	21.6
70°	2.8	4.7	8.5	14.1	19.8	20.7
72.5°	2.8	4.7	8.5	12.2	17.9	19.8
75°	2.8	4.7	7.5	11.3	16.9	17.9
77.5°	2.8	4.7	6.6	10.3	15.1	16.0
80°	3.8	4.7	5.6	8.5	13.2	14.1
82.5°	3.8	4.7	4.7	6.6	10.3	11.3
85°	2.8	3.8	3.8	4.7	6.6	7.5
87.5°	2.8	3.8	2.8	1.9	3.8	3.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)