

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: P1344459

Luminaire Tested: P3A13R259040DE010 E3CA451MMS

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344459
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: P3A13R259040DE010 E3CA451MMS
Description: 3in Adjustable LED luminaire with, R25 optic, 4000K CCT AND, 90CRI , E3CA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

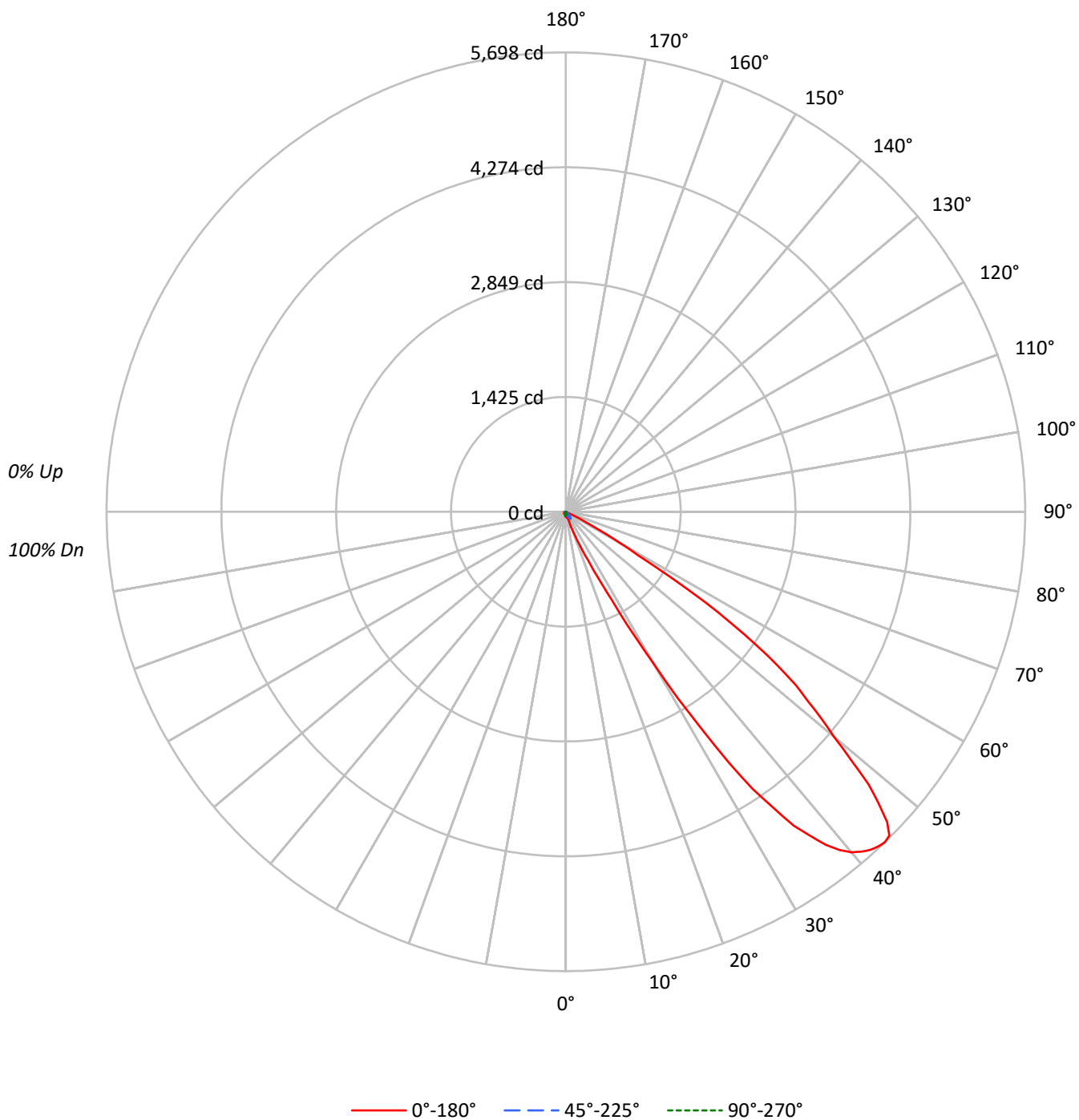
Lumens per Lamp: N/A
Luminaire Lumens: 1188.0 lumens
Efficiency: N/A
Efficacy: 81.4 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P1344459

CATALOG NUMBER: P3A13R259040DE010 E3CA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1344459

CATALOG NUMBER: P3A13R259040DE010 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°	13288	13288	13288	13288	13288
5°	15188	14506	12877	11512	11270
10°	15141	13738	10933	9552	9552
15°	16845	11873	8536	8059	8536
20°	59529	11714	6581	6837	7561
25°	171228	14928	5323	6315	7331
30°	546337	23042	4228	6077	7419
35°	1196638	27144	3641	5889	7549
40°	1578529	24532	3006	5983	8072
45°	1760369	17180	2915	6481	8745
50°	1481811	8904	2866	6789	9620
55°	1107879	3594	2791	7608	10781
60°	342955	921	2763	8245	11929
65°	29316	0	3269	8665	13023
70°	1988	641	3334	10066	14746
75°	1779	847	4406	10590	16860
80°	1263	1263	6566	11870	19826
85°	2516	2516	10567	13083	21134

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1760369 cd/sqm

TEST NUMBER: P1344459

CATALOG NUMBER: P3A13R259040DE010 E3CA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.4	0.5
10°-20°	14.0	1.2
20°-30°	65.7	5.5
30°-40°	316.4	26.6
40°-50°	496.0	41.8
50°-60°	254.3	21.4
60°-70°	24.0	2.0
70°-80°	8.1	0.7
80°-90°	4.0	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°	85.2	7.2
0°-40°	401.6	33.8
0°-60°	1151.9	97.0
0°-90°	1188.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1188.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	61	61	61	61	61	
5°	69	66	58	52	51	7
15°	74	52	38	36	38	31
25°	708	62	22	26	30	439
35°	4470	101	14	22	28	2714
45°	5677	55	9	21	28	4154
55°	2898	9	7	20	28	2413
65°	56	0	6	17	25	177
75°	2	1	5	12	20	2
85°	1	1	4	5	8	1
90°	0	0	0	0	0	

TEST NUMBER: P1344459

CATALOG NUMBER: P3A13R259040DE010 E3CA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	60.6	60.6	60.6	60.6	60.6	60.6	60.6	60.6	60.6	60.6	60.6
2.5°	65.9	65.9	65.9	65.9	65.9	65.9	64.8	64.8	65.9	64.8	64.8
5°	69.0	69.0	69.0	69.0	69.0	69.0	69.0	68.0	68.0	68.0	65.9
7.5°	70.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	68.0	68.0	64.8
10°	68.0	68.0	68.0	68.0	66.9	66.9	66.9	65.9	65.9	65.9	61.7
12.5°	68.0	68.0	68.0	68.0	66.9	66.9	65.9	65.9	64.8	63.8	56.5
15°	74.2	74.2	74.2	73.2	72.1	71.1	70.0	69.0	68.0	65.9	52.3
17.5°	108.7	105.6	104.5	100.4	95.1	89.9	85.7	81.5	77.4	74.2	50.2
20°	255.1	254.0	248.8	236.3	222.7	207.0	191.3	173.5	148.4	131.7	50.2
22.5°	442.2	435.9	426.5	417.1	393.1	364.8	335.6	302.1	269.7	235.2	53.3
25°	707.7	722.4	691.0	665.9	624.1	572.9	517.5	471.5	412.9	358.6	61.7
27.5°	1230.4	1239.9	1178.2	1096.6	999.4	891.7	787.2	708.8	610.5	520.6	77.4
30°	2157.7	2167.1	2063.6	1890.1	1689.4	1512.7	1273.3	1063.2	869.8	720.3	91.0
31°	2693.0	2619.8	2499.6	2331.3	2077.2	1810.7	1523.2	1269.1	1024.5	828.0	95.1
32°	3158.2	3151.9	3011.8	2756.8	2501.7	2172.4	1815.9	1484.5	1184.5	936.7	98.3
33°	3707.0	3665.2	3467.6	3227.2	2889.5	2558.1	2098.1	1719.7	1348.6	1058.0	100.4
34°	4147.1	4034.2	3952.7	3677.8	3321.3	2898.9	2406.5	1968.5	1553.5	1175.0	101.4
35°	4470.2	4446.1	4287.2	4031.1	3668.4	3236.6	2739.0	2226.7	1724.9	1310.9	101.4
36°	4812.0	4737.8	4583.1	4351.0	3997.7	3551.3	2993.0	2450.4	1924.6	1433.3	100.4
37°	5026.3	4982.4	4828.8	4589.4	4243.3	3816.8	3277.4	2686.7	2083.5	1555.6	98.3
38°	5246.9	5158.1	5006.5	4777.5	4437.8	4037.4	3483.3	2868.6	2229.9	1663.3	95.1
39°	5399.6	5307.6	5152.8	4924.9	4592.5	4195.2	3646.4	3023.3	2357.4	1743.7	91.0
40°	5514.5	5425.7	5268.9	5034.7	4706.4	4319.6	3782.3	3160.3	2464.0	1813.8	85.7
41°	5585.6	5503.0	5347.3	5114.2	4784.9	4390.7	3871.2	3249.1	2536.2	1860.8	80.5
42°	5645.2	5560.5	5401.6	5163.3	4832.9	4451.4	3925.5	3305.6	2585.3	1884.9	76.3
43°	5678.7	5594.0	5439.3	5195.7	4862.2	4479.6	3954.8	3331.7	2602.0	1881.7	69.0
44°	5697.5	5609.7	5453.9	5210.3	4874.8	4486.9	3956.9	3326.5	2590.5	1856.7	62.7
45°	5676.6	5589.8	5439.3	5195.7	4852.8	4463.9	3936.0	3298.3	2546.6	1807.5	55.4
46°	5540.7	5473.8	5335.8	5112.1	4783.8	4405.4	3882.7	3243.9	2478.7	1746.9	47.0
47°	5301.3	5248.0	5114.2	4947.9	4651.0	4297.7	3784.4	3140.4	2383.5	1655.9	37.6
48°	5051.4	4973.0	4848.6	4678.2	4427.3	4104.3	3622.4	2988.8	2239.3	1536.8	33.5
49°	4682.4	4636.4	4526.6	4336.4	4128.3	3844.0	3393.4	2794.4	2062.6	1407.1	29.3
50°	4343.7	4312.3	4158.6	4018.6	3798.0	3532.4	3082.9	2538.3	1843.1	1246.1	26.1
51°	4079.2	4041.6	3930.7	3756.2	3520.9	3212.6	2789.2	2205.8	1591.1	1054.8	20.9
52°	3803.2	3782.3	3684.0	3504.2	3273.2	2965.8	2503.8	1923.6	1346.5	891.7	16.7
53°	3577.4	3547.1	3426.9	3266.9	3017.1	2699.3	2194.3	1661.2	1140.5	749.6	14.6
54°	3248.1	3235.6	3158.2	2990.9	2720.2	2374.1	1914.1	1398.8	951.3	635.6	12.5
55°	2897.9	2856.1	2777.7	2644.9	2396.1	2073.1	1590.1	1159.4	769.4	535.3	9.4
56°	2471.4	2469.3	2329.2	2218.4	1997.8	1654.9	1270.2	905.3	625.2	446.4	8.4
57°	2063.6	1997.8	1862.9	1753.2	1515.8	1255.5	943.0	678.5	489.3	361.7	6.3
58°	1526.3	1491.8	1456.3	1295.3	1075.7	889.6	673.2	476.7	361.7	276.0	4.2
59°	1036.0	1035.0	993.1	870.8	744.3	554.1	420.3	324.1	248.8	202.8	3.1
60°	782.0	763.2	679.5	599.0	468.3	350.2	248.8	191.3	154.7	130.7	2.1
62.5°	273.9	284.4	249.9	207.0	157.9	129.6	99.3	80.5	65.9	53.3	0.0
65°	56.5	61.7	53.3	50.2	39.7	34.5	30.3	26.1	22.0	18.8	0.0



TEST NUMBER: P1344459

CATALOG NUMBER: P3A13R259040DE010 E3CA451MMS

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	7.3	6.3	6.3	6.3	5.2	5.2	5.2	5.2	4.2	4.2	1.0
70°	3.1	3.1	3.1	3.1	3.1	3.1	2.1	2.1	2.1	2.1	1.0
72.5°	3.1	3.1	3.1	2.1	2.1	2.1	2.1	2.1	2.1	1.0	1.0
75°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	1.0	1.0	1.0	1.0
77.5°	2.1	2.1	2.1	2.1	2.1	2.1	1.0	1.0	1.0	1.0	1.0
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
82.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.1
85°	1.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
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: P1344459

CATALOG NUMBER: P3A13R259040DE010 E3CA451MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	60.6	60.6	60.6	60.6	60.6	60.6
2.5°	63.8	61.7	58.5	57.5	56.5	56.5
5°	62.7	58.5	55.4	52.3	51.2	51.2
7.5°	59.6	54.4	50.2	48.1	47.0	46.0
10°	56.5	49.1	45.0	42.9	42.9	42.9
12.5°	50.2	43.9	39.7	38.7	39.7	39.7
15°	45.0	37.6	35.5	35.5	36.6	37.6
17.5°	38.7	33.5	31.4	32.4	33.5	34.5
20°	34.5	28.2	28.2	29.3	32.4	32.4
22.5°	30.3	25.1	25.1	28.2	30.3	31.4
25°	27.2	22.0	23.0	26.1	29.3	30.3
27.5°	23.0	18.8	20.9	25.1	28.2	29.3
30°	19.9	16.7	19.9	24.0	27.2	29.3
31°	18.8	15.7	19.9	23.0	27.2	29.3
32°	16.7	15.7	18.8	23.0	27.2	28.2
33°	15.7	14.6	18.8	23.0	27.2	28.2
34°	14.6	13.6	17.8	23.0	27.2	28.2
35°	12.5	13.6	17.8	22.0	26.1	28.2
36°	11.5	12.5	17.8	22.0	26.1	28.2
37°	10.5	12.5	16.7	22.0	26.1	28.2
38°	9.4	11.5	16.7	22.0	26.1	28.2
39°	8.4	11.5	15.7	22.0	26.1	28.2
40°	7.3	10.5	15.7	20.9	26.1	28.2
41°	7.3	10.5	15.7	20.9	26.1	28.2
42°	6.3	10.5	15.7	20.9	26.1	28.2
43°	5.2	9.4	15.7	20.9	26.1	28.2
44°	4.2	9.4	14.6	20.9	26.1	28.2
45°	4.2	9.4	14.6	20.9	26.1	28.2
46°	3.1	8.4	14.6	20.9	26.1	28.2
47°	2.1	8.4	14.6	19.9	26.1	28.2
48°	2.1	8.4	14.6	19.9	26.1	28.2
49°	2.1	8.4	13.6	19.9	26.1	28.2
50°	2.1	8.4	13.6	19.9	26.1	28.2
51°	1.0	7.3	13.6	19.9	26.1	28.2
52°	1.0	7.3	13.6	19.9	26.1	29.3
53°	1.0	7.3	13.6	19.9	26.1	28.2
54°	1.0	7.3	12.5	19.9	26.1	28.2
55°	1.0	7.3	12.5	19.9	26.1	28.2
56°	1.0	6.3	12.5	18.8	26.1	28.2
57°	2.1	6.3	12.5	18.8	26.1	27.2
58°	2.1	6.3	12.5	18.8	25.1	27.2
59°	2.1	6.3	12.5	18.8	25.1	27.2
60°	2.1	6.3	11.5	18.8	25.1	27.2
62.5°	2.1	6.3	11.5	17.8	24.0	26.1
65°	2.1	6.3	10.5	16.7	24.0	25.1



TEST NUMBER: P1344459

CATALOG NUMBER: P3A13R259040DE010 E3CA451MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	2.1	5.2	10.5	15.7	23.0	24.0
70°	3.1	5.2	9.4	15.7	22.0	23.0
72.5°	3.1	5.2	9.4	13.6	19.9	22.0
75°	3.1	5.2	8.4	12.5	18.8	19.9
77.5°	3.1	5.2	7.3	11.5	16.7	17.8
80°	4.2	5.2	6.3	9.4	14.6	15.7
82.5°	4.2	5.2	5.2	7.3	11.5	12.5
85°	3.1	4.2	4.2	5.2	7.3	8.4
87.5°	3.1	4.2	3.1	2.1	4.2	4.2
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)