

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: P1344898

Luminaire Tested: P3A13R309027DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344898
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-76)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A13R309027DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R30 optic, 2700K CCT AND, 90CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

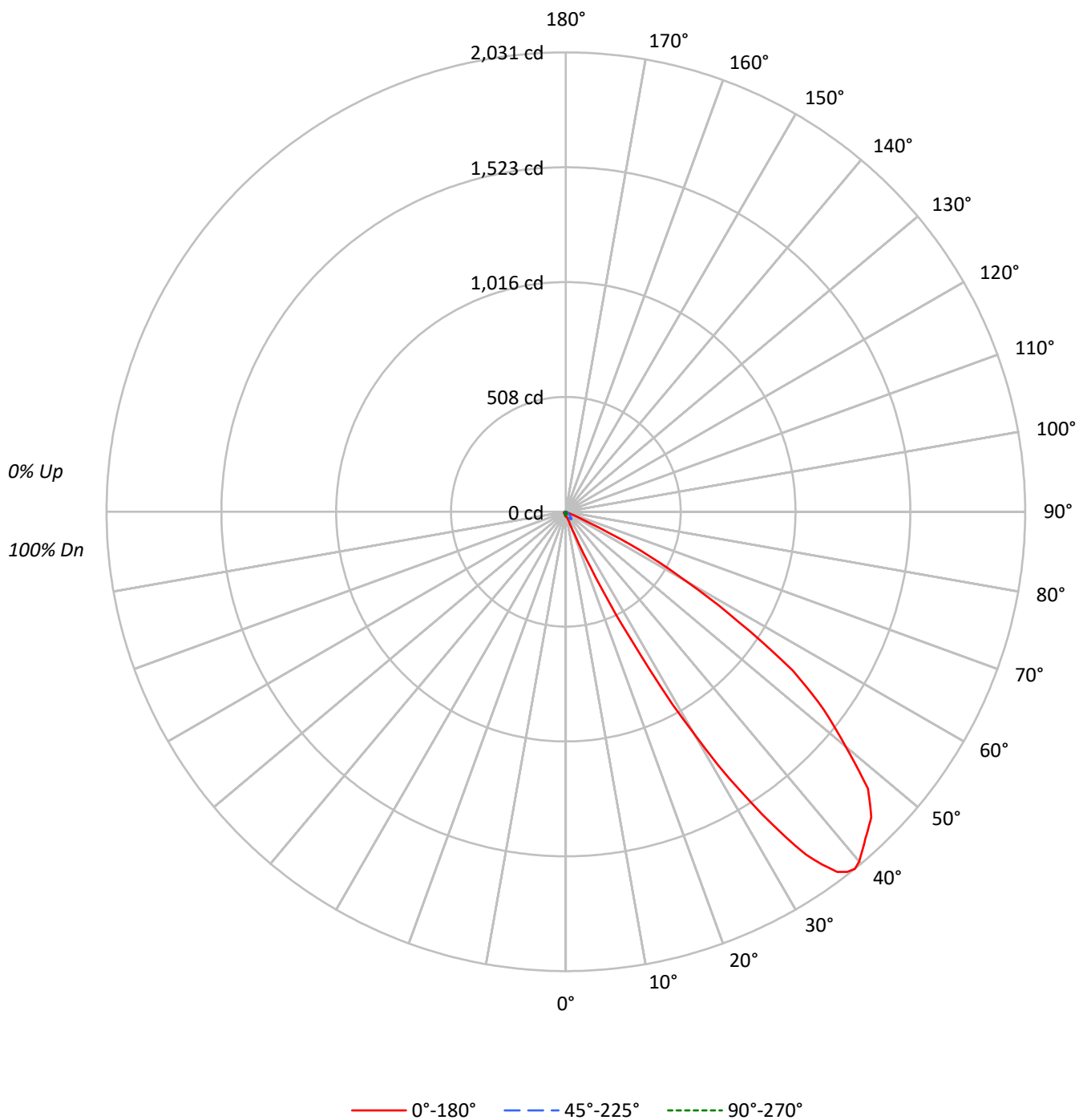
Lumens per Lamp: N/A
Luminaire Lumens: 528.0 lumens
Efficiency: N/A
Efficacy: 36.2 lumens/watt
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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: P1344898

CATALOG NUMBER: P3A13R309027DE010 E3A451WMH

Luminous Intensity Polar Plot



TEST NUMBER: P1344898

CATALOG NUMBER: P3A13R309027DE010 E3A451WMH

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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37
7	62	48	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31
8	56	42	33	27	55	41	33	27	40	32	26	39	32	26	37	31	26
9	52	37	29	23	50	37	28	23	36	28	22	34	27	22	33	27	22
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	4495	4495	4495	4495	4495
5°	4799	4689	4402	4006	3918
10°	5255	4654	3852	3474	3362
15°	7673	4654	3224	2929	3019
20°	19298	5087	2497	2497	2800
25°	89642	6339	1936	2250	2589
30°	285360	8786	1469	2152	2583
35°	495177	10708	1178	2034	2623
40°	577511	10706	887	2032	2662
45°	592248	7598	961	2202	2884
50°	550771	4264	751	2286	3343
55°	468093	2217	841	2561	3747
60°	270329	570	965	2719	4079
65°	55155	0	1141	3217	4618
70°	833	256	1410	3719	5450
75°	763	339	1525	3728	6439
80°	505	505	2273	4546	7324
85°	0	1006	4529	4529	9057

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 592248 cd/sqm

TEST NUMBER: P1344898

CATALOG NUMBER: P3A13R309027DE010 E3A451WMH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.8	0.4
10°-20°	5.3	1.0
20°-30°	30.4	5.8
30°-40°	142.2	26.9
40°-50°	201.1	38.1
50°-60°	123.7	23.4
60°-70°	18.8	3.6
70°-80°	3.0	0.6
80°-90°	1.5	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°	37.6	7.1
0°-40°	179.8	34.1
0°-60°	504.7	95.6
0°-90°	528.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	528.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	20	20	20	20	20	
5°	22	21	20	18	18	2
15°	34	20	14	13	13	12
25°	370	26	8	9	11	228
35°	1850	40	4	8	10	1110
45°	1910	24	3	7	9	1448
55°	1224	6	2	7	10	1042
65°	106	0	2	6	9	192
75°	1	0	2	4	8	1
85°	0	0	2	2	4	0
90°	0	0	0	0	0	

TEST NUMBER: P1344898

CATALOG NUMBER: P3A13R309027DE010 E3A451WMH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5
2.5°	20.9	20.9	21.3	21.3	20.9	21.3	21.3	21.3	20.5	20.0	19.1
5°	21.8	21.8	21.8	22.2	21.8	21.8	21.3	20.9	20.0	18.7	18.2
7.5°	22.7	22.7	22.2	22.7	22.2	22.2	21.3	20.5	19.1	17.8	16.9
10°	23.6	23.6	23.1	23.1	22.7	22.7	20.9	19.6	17.3	16.0	15.6
12.5°	26.2	26.2	25.8	25.4	24.5	24.0	20.5	18.2	15.6	14.2	13.8
15°	33.8	33.4	32.5	31.1	28.9	28.5	20.5	16.9	14.2	12.9	12.9
17.5°	46.3	45.8	44.5	40.9	36.9	35.6	20.5	15.1	12.5	11.6	11.6
20°	82.7	79.2	72.5	63.6	54.3	49.4	21.8	13.3	10.7	10.2	10.7
21°	108.1	104.5	96.1	81.4	64.9	59.6	22.7	12.9	10.2	9.8	10.7
22°	147.2	143.2	125.9	105.9	82.3	72.9	23.1	12.0	9.3	9.3	10.2
23°	205.5	198.8	169.5	137.4	102.7	89.4	24.0	11.6	8.9	9.3	9.8
24°	269.1	263.3	229.9	181.9	131.2	112.1	24.9	11.1	8.5	8.5	9.3
25°	370.5	363.8	304.7	229.5	166.3	134.8	26.2	10.2	8.0	8.0	9.3
26°	501.7	471.0	392.3	295.8	205.0	169.0	27.6	9.8	7.6	8.0	8.9
27°	626.2	600.9	512.4	379.4	253.5	207.7	29.4	9.3	7.1	7.6	8.9
28°	789.9	754.3	642.7	479.9	319.3	251.3	31.1	8.9	6.7	7.6	8.5
29°	973.1	923.3	788.6	592.9	393.6	300.2	32.9	8.5	6.2	7.1	8.5
30°	1127.0	1080.3	945.6	726.7	479.0	364.7	34.7	8.0	5.8	7.1	8.5
31°	1307.6	1236.9	1073.7	840.2	552.4	429.2	36.5	7.1	5.3	6.7	8.0
32°	1453.9	1404.6	1231.1	968.3	648.9	500.4	37.8	6.7	5.3	6.7	8.0
33°	1595.4	1529.1	1361.4	1091.0	736.1	573.3	39.1	6.2	4.9	6.2	8.0
34°	1730.6	1669.6	1484.6	1190.2	818.4	642.7	40.0	5.3	4.9	6.2	7.6
35°	1849.8	1779.1	1593.1	1287.1	902.9	705.8	40.0	4.9	4.4	5.8	7.6
36°	1927.2	1876.5	1687.4	1382.8	979.4	765.9	40.0	4.4	4.0	5.8	7.1
37°	1993.4	1934.3	1763.0	1456.2	1035.9	813.9	40.0	4.0	4.0	5.8	7.1
38°	2020.6	1969.9	1815.1	1521.1	1088.8	862.8	39.6	3.6	3.6	5.3	7.1
39°	2031.2	1985.9	1854.2	1567.8	1127.9	895.8	38.7	3.1	3.6	5.3	7.1
40°	2017.5	1983.2	1874.2	1598.0	1159.1	919.8	37.4	2.7	3.1	5.3	7.1
42.5°	1960.5	1937.8	1869.8	1628.3	1185.7	937.6	32.5	1.8	3.1	4.9	7.1
45°	1909.8	1884.9	1824.9	1596.7	1151.1	902.4	24.5	0.9	3.1	4.9	7.1
47.5°	1811.5	1796.0	1748.8	1516.2	1075.0	823.3	17.3	0.4	2.7	4.4	6.7
50°	1614.5	1599.8	1537.6	1316.5	924.7	696.1	12.5	0.4	2.2	4.4	6.7
52.5°	1437.9	1422.4	1333.0	1094.6	710.3	510.1	8.0	0.4	2.2	4.4	6.7
55°	1224.4	1197.3	1079.9	830.8	503.5	342.0	5.8	0.4	2.2	4.0	6.7
57.5°	906.4	866.8	761.9	566.6	290.0	185.5	3.1	0.4	2.2	4.0	6.7
60°	616.4	592.9	476.8	298.9	123.6	78.3	1.3	0.4	2.2	4.0	6.2
62.5°	373.6	343.8	239.7	127.2	53.4	35.6	0.0	0.9	2.2	4.0	6.2
65°	106.3	94.3	62.7	28.9	15.1	11.6	0.0	0.9	2.2	4.0	6.2
67.5°	3.6	3.6	3.6	3.1	2.2	2.2	0.4	0.9	2.2	4.0	5.8
70°	1.3	1.3	1.3	0.9	0.9	0.4	0.4	0.9	2.2	3.6	5.8
72.5°	0.9	0.9	0.9	0.9	0.4	0.4	0.4	0.9	1.8	3.1	5.3
75°	0.9	0.9	0.9	0.4	0.4	0.4	0.4	1.3	1.8	3.1	4.4
77.5°	0.9	0.9	0.9	0.4	0.4	0.4	0.4	1.3	1.8	2.7	4.4
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.3	1.8	2.7	3.6



TEST NUMBER: P1344898

CATALOG NUMBER: P3A13R309027DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
82.5°	0.4	0.4	0.4	0.0	0.0	0.0	0.4	1.3	1.8	1.8	2.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.3	1.8	1.3	1.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.3	1.3	1.3	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: P1344898

CATALOG NUMBER: P3A13R309027DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	20.5	20.5
2.5°	19.1	19.1
5°	17.8	17.8
7.5°	16.5	16.5
10°	15.1	15.1
12.5°	14.2	14.2
15°	12.9	13.3
17.5°	12.0	12.5
20°	11.6	12.0
21°	11.6	12.0
22°	11.1	11.6
23°	11.1	11.6
24°	10.7	11.1
25°	10.2	10.7
26°	10.2	10.7
27°	10.2	10.7
28°	9.8	10.7
29°	9.8	10.2
30°	9.8	10.2
31°	9.3	10.2
32°	9.3	10.2
33°	9.3	9.8
34°	8.9	9.8
35°	8.9	9.8
36°	8.9	9.8
37°	8.9	9.3
38°	8.9	9.8
39°	8.9	9.3
40°	8.9	9.3
42.5°	8.9	9.3
45°	8.9	9.3
47.5°	8.9	9.8
50°	8.9	9.8
52.5°	8.9	9.8
55°	8.9	9.8
57.5°	8.9	9.3
60°	8.9	9.3
62.5°	8.5	9.3
65°	8.5	8.9
67.5°	8.5	8.9
70°	8.0	8.5
72.5°	7.6	8.0
75°	6.7	7.6
77.5°	6.2	6.7
80°	5.3	5.8

TEST NUMBER: P1344898

CATALOG NUMBER: P3A13R309027DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	157.5°	180°
82.5°	4.4	4.4
85°	3.1	3.6
87.5°	1.8	1.8
90°	0.0	0.0

(END OF REPORT)