

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: P1344550

Luminaire Tested: P3A13R259827DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1344550
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: P3A13R259827DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R25 optic, 2700K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

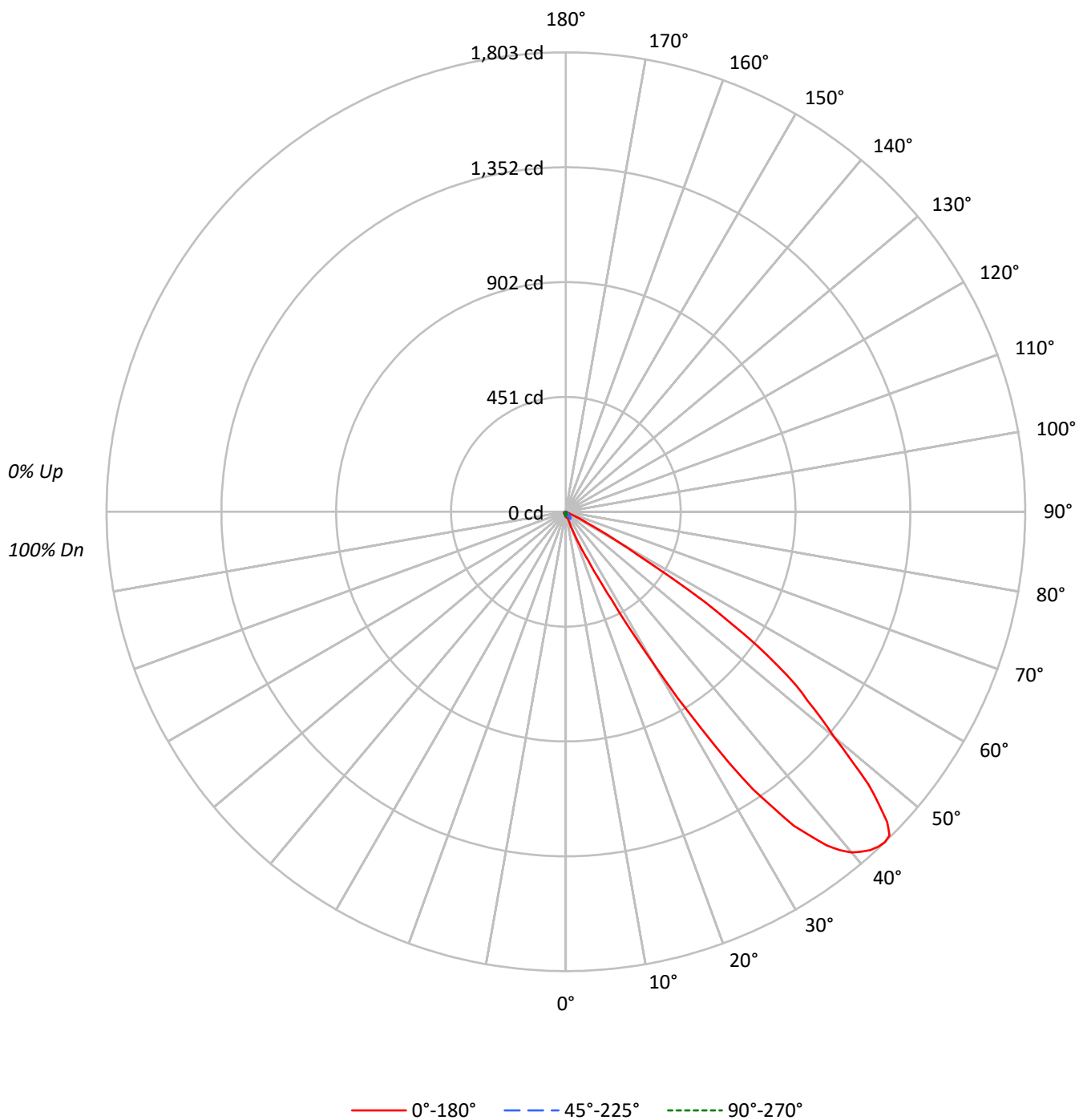
Lumens per Lamp: N/A
Luminaire Lumens: 376.0 lumens
Efficiency: N/A
Efficacy: 25.9 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.61 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.5
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°	4210	4210	4210	4210	4210
5°	4799	4578	4072	3632	3566
10°	4787	4342	3474	3028	3028
15°	5335	3746	2701	2543	2701
20°	18832	3710	2077	2170	2404
25°	54197	4718	1669	2008	2323
30°	172913	7292	1342	1924	2355
35°	378731	8593	1151	1847	2382
40°	499593	7757	945	1889	2548
45°	557143	5427	930	2047	2760
50°	469000	2831	887	2149	3036
55°	350649	1147	879	2409	3403
60°	108544	307	877	2631	3772
65°	9288	0	1038	2750	4099
70°	641	192	1090	3206	4680
75°	593	254	1440	3389	5338
80°	379	379	2147	3788	6314
85°	755	755	3271	4277	6542

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 557143 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.7	0.5
10°-20°	4.4	1.2
20°-30°	20.8	5.5
30°-40°	100.2	26.6
40°-50°	157.0	41.8
50°-60°	80.5	21.4
60°-70°	7.6	2.0
70°-80°	2.6	0.7
80°-90°	1.3	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°	27.0	7.2
0°-40°	127.1	33.8
0°-60°	364.6	97.0
0°-90°	376.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	376.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	19	19	19	19	19	
5°	22	21	18	16	16	2
15°	24	16	12	11	12	10
25°	224	20	7	8	10	139
35°	1415	32	4	7	9	859
45°	1797	18	3	7	9	1315
55°	917	3	2	6	9	764
65°	18	0	2	5	8	56
75°	1	0	2	4	6	1
85°	0	0	1	2	3	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°	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2
2.5°	20.8	20.8	20.8	20.8	20.8	20.8	20.5	20.5	20.8	20.5	20.5
5°	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.5	21.5	21.5	20.8
7.5°	22.2	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.5	21.5	20.5
10°	21.5	21.5	21.5	21.5	21.2	21.2	21.2	20.8	20.8	20.8	19.5
12.5°	21.5	21.5	21.5	21.5	21.2	21.2	20.8	20.8	20.5	20.2	17.9
15°	23.5	23.5	23.5	23.2	22.8	22.5	22.2	21.8	21.5	20.8	16.5
17.5°	34.4	33.4	33.1	31.8	30.1	28.5	27.1	25.8	24.5	23.5	15.9
20°	80.7	80.4	78.7	74.8	70.5	65.5	60.5	54.9	47.0	41.7	15.9
22.5°	140.0	138.0	135.0	132.0	124.4	115.5	106.2	95.6	85.4	74.4	16.9
25°	224.0	228.6	218.7	210.8	197.5	181.3	163.8	149.2	130.7	113.5	19.5
27.5°	389.4	392.4	372.9	347.1	316.3	282.2	249.1	224.3	193.2	164.8	24.5
30°	682.9	685.9	653.1	598.2	534.7	478.8	403.0	336.5	275.3	228.0	28.8
31°	852.3	829.2	791.1	737.8	657.4	573.1	482.1	401.7	324.3	262.0	30.1
32°	999.6	997.6	953.2	872.5	791.8	687.6	574.7	469.8	374.9	296.5	31.1
33°	1173.3	1160.0	1097.5	1021.4	914.5	809.6	664.1	544.3	426.8	334.8	31.8
34°	1312.6	1276.8	1251.0	1164.0	1051.2	917.5	761.7	623.0	491.7	371.9	32.1
35°	1414.8	1407.2	1356.9	1275.8	1161.0	1024.4	866.9	704.8	545.9	414.9	32.1
36°	1523.0	1499.5	1450.5	1377.1	1265.3	1124.0	947.3	775.6	609.1	453.6	31.8
37°	1590.8	1576.9	1528.3	1452.5	1343.0	1208.0	1037.3	850.3	659.4	492.3	31.1
38°	1660.6	1632.5	1584.5	1512.1	1404.5	1277.8	1102.5	907.9	705.7	526.4	30.1
39°	1708.9	1679.8	1630.9	1558.7	1453.5	1327.8	1154.1	956.9	746.1	551.9	28.8
40°	1745.3	1717.2	1667.6	1593.5	1489.6	1367.2	1197.1	1000.2	779.9	574.1	27.1
41°	1767.8	1741.7	1692.4	1618.6	1514.4	1389.7	1225.2	1028.3	802.7	589.0	25.5
42°	1786.7	1759.9	1709.6	1634.2	1529.6	1408.8	1242.4	1046.2	818.2	596.6	24.2
43°	1797.3	1770.5	1721.5	1644.4	1538.9	1417.8	1251.7	1054.5	823.5	595.6	21.8
44°	1803.2	1775.5	1726.2	1649.1	1542.9	1420.1	1252.3	1052.8	819.9	587.6	19.9
45°	1796.6	1769.2	1721.5	1644.4	1535.9	1412.8	1245.7	1043.9	806.0	572.1	17.5
46°	1753.6	1732.4	1688.8	1618.0	1514.1	1394.3	1228.9	1026.7	784.5	552.9	14.9
47°	1677.8	1661.0	1618.6	1566.0	1472.0	1360.2	1197.8	993.9	754.4	524.1	11.9
48°	1598.8	1574.0	1534.6	1480.6	1401.2	1299.0	1146.5	946.0	708.7	486.4	10.6
49°	1482.0	1467.4	1432.7	1372.5	1306.6	1216.6	1074.0	884.4	652.8	445.4	9.3
50°	1374.8	1364.8	1316.2	1271.9	1202.1	1118.0	975.7	803.4	583.3	394.4	8.3
51°	1291.1	1279.1	1244.1	1188.8	1114.4	1016.8	882.8	698.1	503.6	333.8	6.6
52°	1203.7	1197.1	1166.0	1109.1	1036.0	938.7	792.4	608.8	426.2	282.2	5.3
53°	1132.2	1122.6	1084.6	1034.0	954.9	854.3	694.5	525.8	361.0	237.2	4.6
54°	1028.0	1024.0	999.6	946.6	860.9	751.4	605.8	442.7	301.1	201.2	4.0
55°	917.2	903.9	879.1	837.1	758.4	656.1	503.3	366.9	243.5	169.4	3.0
56°	782.2	781.5	737.2	702.1	632.3	523.8	402.0	286.5	197.9	141.3	2.6
57°	653.1	632.3	589.6	554.9	479.8	397.4	298.4	214.7	154.8	114.5	2.0
58°	483.1	472.2	460.9	409.9	340.5	281.6	213.1	150.9	114.5	87.3	1.3
59°	327.9	327.6	314.3	275.6	235.6	175.4	133.0	102.6	78.7	64.2	1.0
60°	247.5	241.5	215.1	189.6	148.2	110.8	78.7	60.5	49.0	41.4	0.7
62.5°	86.7	90.0	79.1	65.5	50.0	41.0	31.4	25.5	20.8	16.9	0.0
65°	17.9	19.5	16.9	15.9	12.6	10.9	9.6	8.3	6.9	6.0	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°	2.3	2.0	2.0	2.0	1.7	1.7	1.7	1.7	1.3	1.3	0.3
70°	1.0	1.0	1.0	1.0	1.0	1.0	0.7	0.7	0.7	0.7	0.3
72.5°	1.0	1.0	1.0	0.7	0.7	0.7	0.7	0.7	0.7	0.3	0.3
75°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.3	0.3	0.3	0.3
77.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.3	0.3	0.3	0.3	0.3
80°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
82.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.7
85°	0.3	0.3	0.3	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
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°	19.2	19.2	19.2	19.2	19.2	19.2
2.5°	20.2	19.5	18.5	18.2	17.9	17.9
5°	19.9	18.5	17.5	16.5	16.2	16.2
7.5°	18.9	17.2	15.9	15.2	14.9	14.6
10°	17.9	15.6	14.2	13.6	13.6	13.6
12.5°	15.9	13.9	12.6	12.2	12.6	12.6
15°	14.2	11.9	11.2	11.2	11.6	11.9
17.5°	12.2	10.6	9.9	10.3	10.6	10.9
20°	10.9	8.9	8.9	9.3	10.3	10.3
22.5°	9.6	7.9	7.9	8.9	9.6	9.9
25°	8.6	6.9	7.3	8.3	9.3	9.6
27.5°	7.3	6.0	6.6	7.9	8.9	9.3
30°	6.3	5.3	6.3	7.6	8.6	9.3
31°	6.0	5.0	6.3	7.3	8.6	9.3
32°	5.3	5.0	6.0	7.3	8.6	8.9
33°	5.0	4.6	6.0	7.3	8.6	8.9
34°	4.6	4.3	5.6	7.3	8.6	8.9
35°	4.0	4.3	5.6	6.9	8.3	8.9
36°	3.6	4.0	5.6	6.9	8.3	8.9
37°	3.3	4.0	5.3	6.9	8.3	8.9
38°	3.0	3.6	5.3	6.9	8.3	8.9
39°	2.6	3.6	5.0	6.9	8.3	8.9
40°	2.3	3.3	5.0	6.6	8.3	8.9
41°	2.3	3.3	5.0	6.6	8.3	8.9
42°	2.0	3.3	5.0	6.6	8.3	8.9
43°	1.7	3.0	5.0	6.6	8.3	8.9
44°	1.3	3.0	4.6	6.6	8.3	8.9
45°	1.3	3.0	4.6	6.6	8.3	8.9
46°	1.0	2.6	4.6	6.6	8.3	8.9
47°	0.7	2.6	4.6	6.3	8.3	8.9
48°	0.7	2.6	4.6	6.3	8.3	8.9
49°	0.7	2.6	4.3	6.3	8.3	8.9
50°	0.7	2.6	4.3	6.3	8.3	8.9
51°	0.3	2.3	4.3	6.3	8.3	8.9
52°	0.3	2.3	4.3	6.3	8.3	9.3
53°	0.3	2.3	4.3	6.3	8.3	8.9
54°	0.3	2.3	4.0	6.3	8.3	8.9
55°	0.3	2.3	4.0	6.3	8.3	8.9
56°	0.3	2.0	4.0	6.0	8.3	8.9
57°	0.7	2.0	4.0	6.0	8.3	8.6
58°	0.7	2.0	4.0	6.0	7.9	8.6
59°	0.7	2.0	4.0	6.0	7.9	8.6
60°	0.7	2.0	3.6	6.0	7.9	8.6
62.5°	0.7	2.0	3.6	5.6	7.6	8.3
65°	0.7	2.0	3.3	5.3	7.6	7.9



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.7	1.7	3.3	5.0	7.3	7.6
70°	1.0	1.7	3.0	5.0	6.9	7.3
72.5°	1.0	1.7	3.0	4.3	6.3	6.9
75°	1.0	1.7	2.6	4.0	6.0	6.3
77.5°	1.0	1.7	2.3	3.6	5.3	5.6
80°	1.3	1.7	2.0	3.0	4.6	5.0
82.5°	1.3	1.7	1.7	2.3	3.6	4.0
85°	1.0	1.3	1.3	1.7	2.3	2.6
87.5°	1.0	1.3	1.0	0.7	1.3	1.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)