

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: P1341052

Luminaire Tested: P3A09R259840DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1341052
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: P3A09R259840DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R25 optic, 4000K CCT AND, 98CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

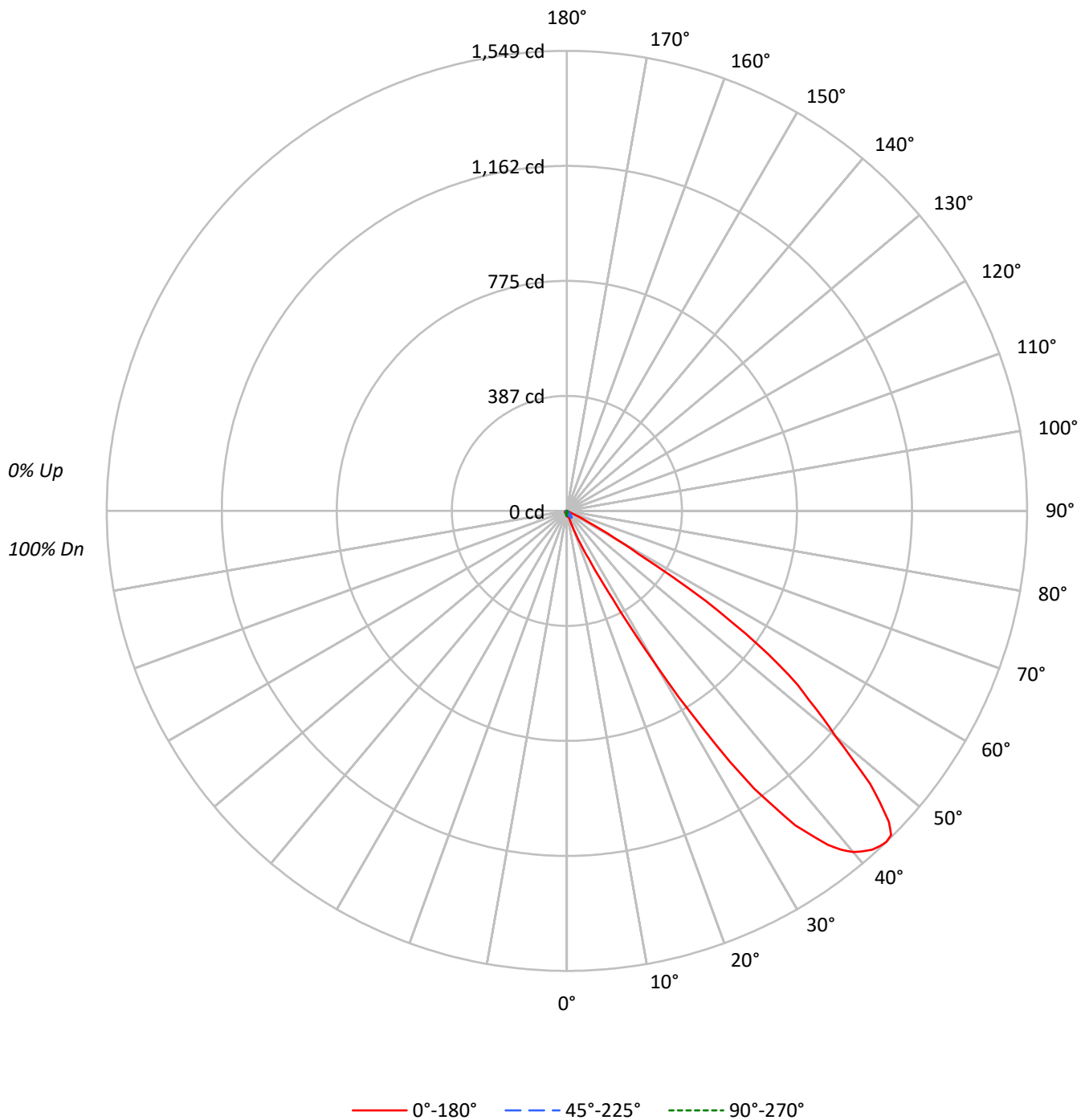
Lumens per Lamp: N/A
Luminaire Lumens: 323.0 lumens
Efficiency: N/A
Efficacy: 29.4 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.6 / 1.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	3618	3618	3618	3618	3618
5°	4138	3940	3500	3126	3060
10°	4119	3741	2984	2605	2605
15°	4586	3224	2316	2202	2316
20°	16195	3174	1797	1867	2054
25°	46551	4065	1452	1718	1984
30°	148555	6254	1139	1646	2026
35°	325353	7388	990	1606	2061
40°	429176	6670	802	1632	2204
45°	478623	4683	806	1768	2388
50°	402887	2422	785	1842	2627
55°	301217	994	765	2064	2944
60°	93238	263	746	2237	3245
65°	7939	0	882	2335	3528
70°	577	192	898	2757	4039
75°	508	254	1186	2881	4575
80°	379	379	1768	3283	5430
85°	755	755	2768	3522	5787

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 478623 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.5	0.5
10°-20°	3.8	1.2
20°-30°	17.9	5.5
30°-40°	86.0	26.6
40°-50°	134.9	41.8
50°-60°	69.1	21.4
60°-70°	6.5	2.0
70°-80°	2.2	0.7
80°-90°	1.1	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°	23.2	7.2
0°-40°	109.2	33.8
0°-60°	313.2	97.0
0°-90°	323.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	323.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	16	16	16	16	16	
5°	19	18	16	14	14	2
15°	20	14	10	10	10	9
25°	192	17	6	7	8	119
35°	1215	28	4	6	8	738
45°	1543	15	3	6	8	1129
55°	788	3	2	5	8	656
65°	15	0	2	4	7	48
75°	1	0	1	3	5	1
85°	0	0	1	1	2	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°	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5
2.5°	17.9	17.9	17.9	17.9	17.9	17.9	17.6	17.6	17.9	17.6	17.6
5°	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.5	18.5	18.5	17.9
7.5°	19.0	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.5	18.5	17.6
10°	18.5	18.5	18.5	18.5	18.2	18.2	18.2	17.9	17.9	17.9	16.8
12.5°	18.5	18.5	18.5	18.5	18.2	18.2	17.9	17.9	17.6	17.3	15.3
15°	20.2	20.2	20.2	19.9	19.6	19.3	19.0	18.8	18.5	17.9	14.2
17.5°	29.6	28.7	28.4	27.3	25.9	24.4	23.3	22.2	21.0	20.2	13.6
20°	69.4	69.1	67.6	64.2	60.5	56.3	52.0	47.2	40.4	35.8	13.6
22.5°	120.2	118.5	116.0	113.4	106.9	99.2	91.2	82.1	73.3	64.0	14.5
25°	192.4	196.4	187.9	181.1	169.7	155.8	140.7	128.2	112.3	97.5	16.8
27.5°	334.5	337.1	320.3	298.2	271.7	242.5	214.0	192.7	166.0	141.5	21.0
30°	586.7	589.2	561.1	513.9	459.3	411.3	346.2	289.1	236.5	195.8	24.7
31°	732.2	712.3	679.6	633.8	564.8	492.3	414.1	345.1	278.5	225.1	25.9
32°	858.7	857.0	818.9	749.5	680.2	590.6	493.7	403.6	322.0	254.7	26.7
33°	1007.9	996.5	942.8	877.4	785.6	695.5	570.5	467.6	366.7	287.6	27.3
34°	1127.5	1096.9	1074.7	999.9	903.0	788.2	654.3	535.2	422.4	319.5	27.6
35°	1215.4	1208.8	1165.6	1096.0	997.4	880.0	744.7	605.4	469.0	356.4	27.6
36°	1308.3	1288.1	1246.1	1183.0	1086.9	965.5	813.8	666.2	523.3	389.7	27.3
37°	1366.6	1354.7	1312.9	1247.8	1153.7	1037.7	891.1	730.5	566.5	422.9	26.7
38°	1426.6	1402.4	1361.2	1298.9	1206.6	1097.7	947.1	779.9	606.3	452.2	25.9
39°	1468.1	1443.0	1401.0	1339.0	1248.6	1140.6	991.4	822.0	640.9	474.1	24.7
40°	1499.3	1475.2	1432.5	1368.9	1279.6	1174.4	1028.4	859.2	669.9	493.1	23.3
41°	1518.7	1496.2	1453.8	1390.5	1300.9	1193.8	1052.5	883.4	689.5	505.9	21.9
42°	1534.9	1511.8	1468.6	1403.8	1314.0	1210.3	1067.3	898.7	702.9	512.5	20.7
43°	1544.0	1520.9	1478.9	1412.6	1322.0	1217.9	1075.3	905.8	707.5	511.6	18.8
44°	1549.1	1525.2	1482.8	1416.6	1325.4	1219.9	1075.8	904.4	704.3	504.8	17.1
45°	1543.4	1519.8	1478.9	1412.6	1319.4	1213.7	1070.1	896.8	692.4	491.4	15.1
46°	1506.4	1488.2	1450.7	1389.9	1300.6	1197.8	1055.6	882.0	673.9	475.0	12.8
47°	1441.3	1426.8	1390.5	1345.3	1264.5	1168.5	1028.9	853.8	648.0	450.2	10.2
48°	1373.4	1352.1	1318.3	1271.9	1203.7	1115.9	984.9	812.6	608.8	417.8	9.1
49°	1273.1	1260.6	1230.7	1179.0	1122.4	1045.1	922.6	759.8	560.8	382.6	8.0
50°	1181.0	1172.5	1130.7	1092.6	1032.6	960.4	838.2	690.1	501.1	338.8	7.1
51°	1109.1	1098.8	1068.7	1021.2	957.3	873.4	758.3	599.7	432.6	286.8	5.7
52°	1034.0	1028.4	1001.6	952.7	889.9	806.4	680.7	523.0	366.1	242.5	4.5
53°	972.6	964.4	931.7	888.2	820.3	733.9	596.6	451.6	310.1	203.8	4.0
54°	883.1	879.7	858.7	813.2	739.6	645.5	520.4	380.3	258.7	172.8	3.4
55°	787.9	776.5	755.2	719.1	651.5	563.6	432.3	315.2	209.2	145.5	2.6
56°	671.9	671.4	633.3	603.1	543.2	449.9	345.3	246.1	170.0	121.4	2.3
57°	561.1	543.2	506.5	476.7	412.1	341.4	256.4	184.5	133.0	98.3	1.7
58°	415.0	405.6	395.9	352.2	292.5	241.9	183.0	129.6	98.3	75.0	1.1
59°	281.7	281.4	270.0	236.8	202.4	150.6	114.3	88.1	67.6	55.1	0.9
60°	212.6	207.5	184.8	162.9	127.3	95.2	67.6	52.0	42.1	35.5	0.6
62.5°	74.5	77.3	67.9	56.3	42.9	35.2	27.0	21.9	17.9	14.5	0.0
65°	15.3	16.8	14.5	13.6	10.8	9.4	8.2	7.1	6.0	5.1	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°	2.0	1.7	1.7	1.7	1.4	1.4	1.4	1.4	1.1	1.1	0.3
70°	0.9	0.9	0.9	0.9	0.9	0.9	0.6	0.6	0.6	0.6	0.3
72.5°	0.9	0.9	0.9	0.6	0.6	0.6	0.6	0.6	0.6	0.3	0.3
75°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.3	0.3	0.3	0.3
77.5°	0.6	0.6	0.6	0.6	0.6	0.6	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	0.6
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°	16.5	16.5	16.5	16.5	16.5	16.5
2.5°	17.3	16.8	15.9	15.6	15.3	15.3
5°	17.1	15.9	15.1	14.2	13.9	13.9
7.5°	16.2	14.8	13.6	13.1	12.8	12.5
10°	15.3	13.4	12.2	11.7	11.7	11.7
12.5°	13.6	11.9	10.8	10.5	10.8	10.8
15°	12.2	10.2	9.7	9.7	9.9	10.2
17.5°	10.5	9.1	8.5	8.8	9.1	9.4
20°	9.4	7.7	7.7	8.0	8.8	8.8
22.5°	8.2	6.8	6.8	7.7	8.2	8.5
25°	7.4	6.0	6.3	7.1	8.0	8.2
27.5°	6.3	5.1	5.7	6.8	7.7	8.0
30°	5.4	4.5	5.4	6.5	7.4	8.0
31°	5.1	4.3	5.4	6.3	7.4	8.0
32°	4.5	4.3	5.1	6.3	7.4	7.7
33°	4.3	4.0	5.1	6.3	7.4	7.7
34°	4.0	3.7	4.8	6.3	7.4	7.7
35°	3.4	3.7	4.8	6.0	7.1	7.7
36°	3.1	3.4	4.8	6.0	7.1	7.7
37°	2.8	3.4	4.5	6.0	7.1	7.7
38°	2.6	3.1	4.5	6.0	7.1	7.7
39°	2.3	3.1	4.3	6.0	7.1	7.7
40°	2.0	2.8	4.3	5.7	7.1	7.7
41°	2.0	2.8	4.3	5.7	7.1	7.7
42°	1.7	2.8	4.3	5.7	7.1	7.7
43°	1.4	2.6	4.3	5.7	7.1	7.7
44°	1.1	2.6	4.0	5.7	7.1	7.7
45°	1.1	2.6	4.0	5.7	7.1	7.7
46°	0.9	2.3	4.0	5.7	7.1	7.7
47°	0.6	2.3	4.0	5.4	7.1	7.7
48°	0.6	2.3	4.0	5.4	7.1	7.7
49°	0.6	2.3	3.7	5.4	7.1	7.7
50°	0.6	2.3	3.7	5.4	7.1	7.7
51°	0.3	2.0	3.7	5.4	7.1	7.7
52°	0.3	2.0	3.7	5.4	7.1	8.0
53°	0.3	2.0	3.7	5.4	7.1	7.7
54°	0.3	2.0	3.4	5.4	7.1	7.7
55°	0.3	2.0	3.4	5.4	7.1	7.7
56°	0.3	1.7	3.4	5.1	7.1	7.7
57°	0.6	1.7	3.4	5.1	7.1	7.4
58°	0.6	1.7	3.4	5.1	6.8	7.4
59°	0.6	1.7	3.4	5.1	6.8	7.4
60°	0.6	1.7	3.1	5.1	6.8	7.4
62.5°	0.6	1.7	3.1	4.8	6.5	7.1
65°	0.6	1.7	2.8	4.5	6.5	6.8



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.6	1.4	2.8	4.3	6.3	6.5
70°	0.9	1.4	2.6	4.3	6.0	6.3
72.5°	0.9	1.4	2.6	3.7	5.4	6.0
75°	0.9	1.4	2.3	3.4	5.1	5.4
77.5°	0.9	1.4	2.0	3.1	4.5	4.8
80°	1.1	1.4	1.7	2.6	4.0	4.3
82.5°	1.1	1.4	1.4	2.0	3.1	3.4
85°	0.9	1.1	1.1	1.4	2.0	2.3
87.5°	0.9	1.1	0.9	0.6	1.1	1.1
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)