

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: P1336822

Luminaire Tested: P3A05R209030D2WDE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1336822
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-74)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A05R209030D2WDE010 E3A451WMH
Description: 3in Adjustable Dim to Warm LED luminaire with, R20 optic, 3000K CCT AND, 90CRI ,
E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

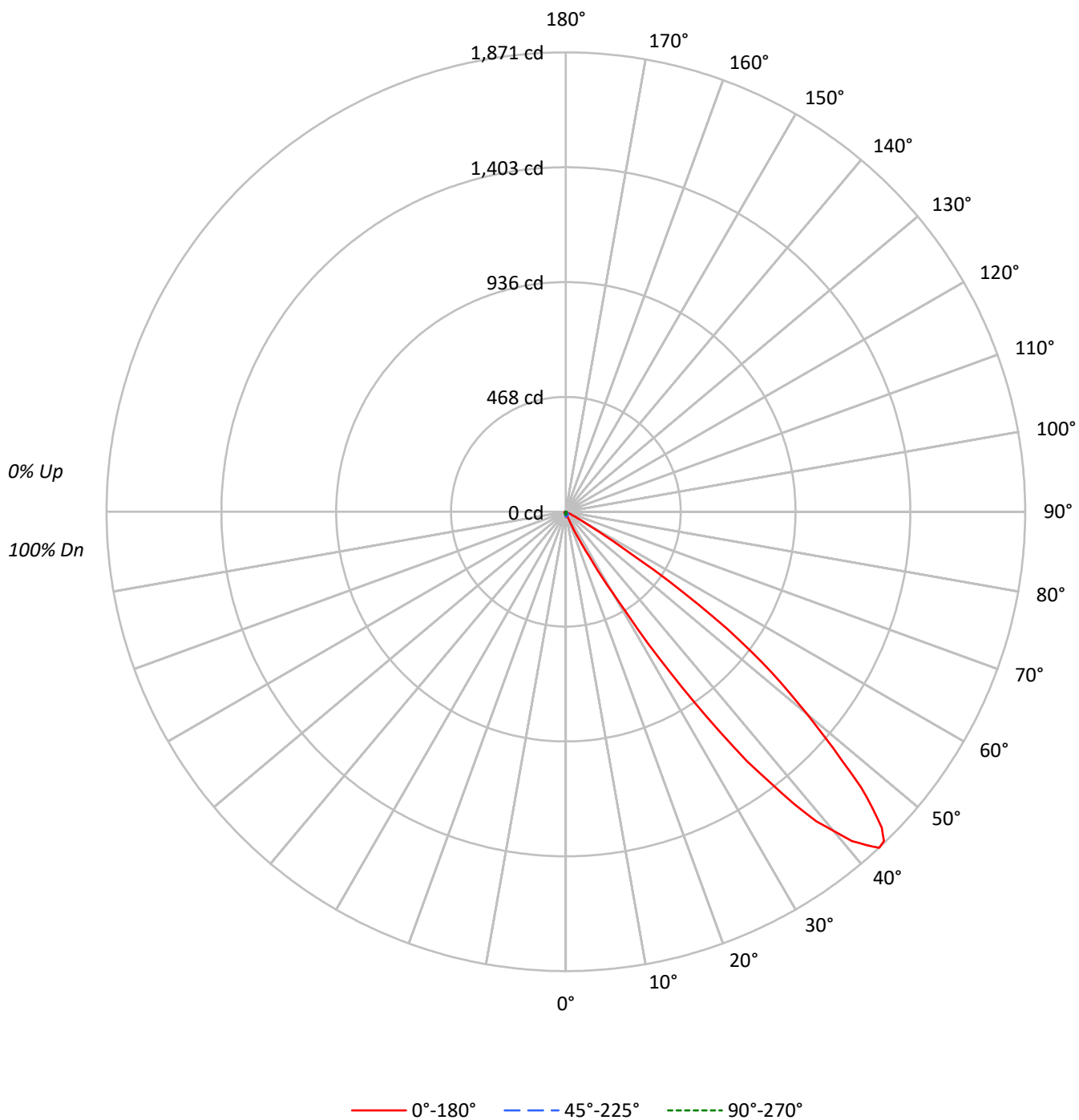
Lumens per Lamp: N/A
Luminaire Lumens: 260.0 lumens
Efficiency: N/A
Efficacy: 23.4 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.13
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11.1
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	65	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	38	52	44	38	50	43	38	48	42	37	35		
7	62	48	39	32	60	47	38	32	46	38	32	44	37	32	43	36	31	29		
8	57	42	33	27	55	42	33	27	40	33	27	39	32	27	38	31	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	19	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	3969	3969	3969	3969	3969
5°	4622	4292	3720	3236	3126
10°	4565	3919	2939	2494	2449
15°	3995	2997	2157	1998	2111
20°	5927	2520	1587	1703	1890
25°	25550	2613	1234	1548	1839
30°	96572	3165	1063	1494	1798
35°	292775	3801	990	1499	1901
40°	485481	3779	830	1603	2032
45°	564276	2574	744	1675	2202
50°	438024	1433	751	1740	2490
55°	253506	918	765	1950	2714
60°	42847	219	658	2017	2982
65°	3321	0	778	2283	3424
70°	449	0	962	2500	3911
75°	424	169	1017	2881	4575
80°	253	253	1515	3031	5304
85°	503	503	2516	3019	5535

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 564276 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.6	0.6
10°-20°	3.3	1.3
20°-30°	10.4	4.0
30°-40°	66.3	25.5
40°-50°	121.4	46.7
50°-60°	49.9	19.2
60°-70°	4.2	1.6
70°-80°	2.1	0.8
80°-90°	1.0	0.4
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°	15.2	5.8
0°-40°	81.5	31.3
0°-60°	252.7	97.2
0°-90°	260.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	260.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	18	18	18	18	18	
5°	21	20	17	15	14	2
15°	18	13	10	9	9	6
25°	106	11	5	6	8	69
35°	1094	14	4	6	7	692
45°	1820	8	2	5	7	1306
55°	663	2	2	5	7	580
65°	6	0	2	4	7	21
75°	0	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°	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1
2.5°	19.8	19.8	19.8	19.5	19.5	19.8	19.5	19.5	19.5	19.5	19.3
5°	21.0	21.0	21.0	21.0	21.0	21.0	21.0	20.8	20.8	20.5	19.5
7.5°	21.5	21.5	21.5	21.5	21.3	21.3	21.3	21.3	21.0	20.8	19.1
10°	20.5	20.5	20.5	20.3	20.3	20.3	20.0	20.0	19.8	19.5	17.6
12.5°	18.6	18.6	18.6	18.6	18.3	18.3	18.1	18.1	17.8	17.6	15.4
15°	17.6	17.6	17.6	17.3	17.3	17.1	16.9	16.6	16.4	15.9	13.2
17.5°	19.1	19.1	18.8	18.8	18.3	17.8	17.6	16.9	16.4	15.6	11.7
20°	25.4	25.7	24.7	23.9	23.5	22.0	21.3	20.0	19.1	17.8	10.8
22.5°	51.3	50.3	48.6	45.9	42.8	40.1	35.2	31.3	28.6	24.9	10.5
25°	105.6	104.6	99.9	96.0	86.3	78.7	68.2	59.6	50.8	42.3	10.8
27.5°	200.6	194.0	192.8	174.9	161.3	141.7	121.4	104.3	88.7	71.3	11.5
30°	381.4	373.8	347.2	320.3	283.4	241.7	201.8	164.7	133.7	105.6	12.5
31°	484.0	491.4	460.1	406.1	351.6	298.1	243.6	196.4	156.4	121.4	12.9
32°	636.3	604.3	571.3	515.8	436.6	368.2	299.8	231.9	179.1	138.5	13.4
33°	780.2	761.4	711.0	641.9	546.8	450.8	362.1	273.7	207.0	159.3	13.7
34°	933.6	912.9	872.0	772.8	668.5	542.7	424.4	321.8	240.2	179.6	13.9
35°	1093.7	1084.9	1006.2	920.2	791.9	640.2	499.4	374.6	272.7	198.2	14.2
36°	1254.7	1226.3	1164.8	1039.2	905.3	730.3	578.1	423.7	305.7	220.1	14.2
37°	1375.9	1369.5	1287.9	1165.5	1008.1	826.6	646.0	478.2	338.9	239.0	14.2
38°	1509.5	1484.4	1401.5	1276.9	1104.9	914.8	717.1	525.6	370.4	256.1	13.9
39°	1622.2	1584.8	1501.2	1378.1	1189.4	981.8	773.6	571.5	398.3	270.2	13.7
40°	1696.0	1670.1	1582.8	1444.3	1266.2	1045.0	830.8	609.4	419.0	281.0	13.2
41°	1777.3	1734.3	1648.1	1508.8	1321.9	1100.7	866.7	634.3	435.2	288.1	12.7
42°	1825.9	1790.8	1688.4	1552.0	1361.7	1132.5	896.0	653.4	444.9	291.7	11.7
43°	1871.4	1823.5	1723.8	1577.2	1388.1	1155.0	909.4	662.2	447.1	291.7	10.5
44°	1865.3	1819.8	1716.5	1580.6	1394.0	1161.6	915.0	662.4	443.7	288.1	9.3
45°	1819.6	1774.4	1681.3	1550.8	1372.9	1148.6	903.8	652.6	434.2	281.7	8.3
46°	1735.8	1690.8	1619.5	1501.0	1333.8	1119.3	877.7	631.4	418.3	271.5	7.3
47°	1644.6	1600.9	1527.9	1420.6	1267.1	1067.0	839.8	601.6	396.1	256.6	6.6
48°	1512.5	1485.1	1411.8	1320.2	1174.5	985.2	773.3	552.9	366.3	237.3	5.6
49°	1395.7	1366.8	1302.6	1204.1	1053.8	889.9	693.9	493.8	327.4	215.8	4.9
50°	1284.0	1258.8	1199.5	1088.3	944.9	774.8	586.7	419.3	278.5	189.1	4.2
51°	1174.8	1156.0	1095.4	993.2	847.6	686.3	508.2	349.2	230.2	156.9	3.9
52°	1065.1	1062.9	997.1	893.8	753.1	598.1	432.0	294.7	195.2	131.7	3.7
53°	947.1	932.9	875.5	782.6	647.5	506.3	366.3	248.5	168.1	112.2	3.2
54°	812.7	796.8	735.2	651.4	529.0	414.6	295.2	200.8	140.0	94.8	2.9
55°	663.1	636.0	591.3	505.3	413.2	316.4	228.0	159.1	111.9	78.9	2.4
56°	503.1	476.0	450.8	387.5	303.2	236.0	169.8	121.9	87.5	62.3	2.2
57°	349.9	348.4	307.1	258.5	202.8	160.8	116.3	86.0	61.8	48.4	1.7
58°	227.0	219.4	193.0	164.9	132.7	100.4	74.8	58.4	42.0	33.0	1.5
59°	159.1	143.9	129.7	110.0	83.6	63.3	48.1	37.4	29.1	23.0	1.0
60°	97.7	94.6	85.0	66.9	54.2	44.7	35.9	27.6	21.3	16.4	0.5
62.5°	27.9	28.3	25.7	22.7	19.5	16.9	15.1	12.9	10.8	8.6	0.0
65°	6.4	6.1	6.6	6.1	5.6	5.6	4.9	4.4	3.9	3.7	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	2.0	1.7	1.7	1.7	1.5	1.5	1.2	1.2	1.0	0.0
70°	0.7	0.7	0.7	0.7	0.7	0.5	0.5	0.5	0.2	0.2	0.0
72.5°	0.7	0.7	0.7	0.5	0.5	0.5	0.5	0.5	0.2	0.2	0.2
75°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2
77.5°	0.5	0.5	0.5	0.5	0.5	0.2	0.5	0.2	0.2	0.2	0.2
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
85°	0.2	0.2	0.2	0.2	0.0	0.0	0.2	0.2	0.2	0.0	0.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
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°	18.1	18.1	18.1	18.1	18.1	18.1
2.5°	18.8	17.8	17.1	16.4	16.1	16.1
5°	18.3	16.9	15.4	14.7	14.2	14.2
7.5°	16.9	15.1	13.7	12.9	12.7	12.7
10°	15.1	13.2	11.7	11.2	11.2	11.0
12.5°	13.2	11.2	10.3	10.0	10.0	10.0
15°	11.0	9.5	8.8	8.8	9.0	9.3
17.5°	9.3	7.8	7.6	8.1	8.6	8.6
20°	7.8	6.8	6.8	7.3	7.8	8.1
22.5°	6.6	5.9	6.1	6.8	7.6	7.8
25°	5.9	5.1	5.6	6.4	7.1	7.6
27.5°	4.9	4.6	5.1	6.1	7.1	7.3
30°	4.2	4.2	4.9	5.9	6.8	7.1
31°	3.9	3.9	4.9	5.9	6.8	7.1
32°	3.7	3.9	4.6	5.9	6.8	7.1
33°	3.4	3.7	4.6	5.6	6.8	7.1
34°	3.2	3.7	4.6	5.6	6.8	7.1
35°	2.9	3.7	4.6	5.6	6.8	7.1
36°	2.7	3.4	4.4	5.6	6.8	7.1
37°	2.4	3.4	4.4	5.6	6.8	7.1
38°	2.2	3.2	4.4	5.6	6.8	7.1
39°	2.2	3.2	4.2	5.6	6.6	7.1
40°	2.0	2.9	4.2	5.6	6.6	7.1
41°	1.7	2.9	4.2	5.4	6.6	7.1
42°	1.5	2.7	3.9	5.4	6.6	7.1
43°	1.2	2.7	3.9	5.4	6.6	7.1
44°	1.2	2.4	3.9	5.4	6.6	7.1
45°	1.0	2.4	3.9	5.4	6.6	7.1
46°	0.7	2.4	3.9	5.4	6.6	7.1
47°	0.7	2.2	3.7	5.4	6.6	7.1
48°	0.5	2.2	3.7	5.4	6.6	7.1
49°	0.5	2.2	3.7	5.4	6.6	7.3
50°	0.5	2.2	3.7	5.1	6.6	7.3
51°	0.2	2.2	3.7	5.1	6.6	7.3
52°	0.2	2.2	3.4	5.1	6.8	7.3
53°	0.2	2.0	3.4	5.1	6.8	7.3
54°	0.2	2.0	3.4	5.1	6.8	7.1
55°	0.2	2.0	3.4	5.1	6.6	7.1
56°	0.2	1.7	3.4	5.1	6.6	7.1
57°	0.2	1.7	3.2	4.9	6.6	6.8
58°	0.2	1.7	3.2	4.9	6.6	6.8
59°	0.2	1.7	3.2	4.9	6.4	6.8
60°	0.5	1.5	2.9	4.6	6.4	6.8
62.5°	0.5	1.5	2.9	4.6	6.1	6.6
65°	0.5	1.5	2.7	4.4	6.1	6.6



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.5	1.2	2.4	4.2	5.9	6.4
70°	0.5	1.5	2.4	3.9	5.6	6.1
72.5°	0.7	1.2	2.2	3.7	5.4	5.9
75°	0.7	1.2	2.2	3.4	5.1	5.4
77.5°	1.0	1.2	2.0	2.9	4.6	4.9
80°	1.0	1.2	1.7	2.4	3.9	4.2
82.5°	1.0	1.2	1.2	2.0	2.9	3.2
85°	0.7	1.0	1.0	1.2	2.0	2.2
87.5°	0.7	1.0	0.7	0.5	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)