

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: P1336909

Luminaire Tested: P3A05R209730DE010 E3A451WH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1336909
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: P3A05R209730DE010 E3A451WH
Description: 3in Adjustable LED luminaire with, R20 optic, 3000K CCT AND, 97CRI , E3A451WH TRIM
Light Source: -
Ballast/Driver: -

Summary

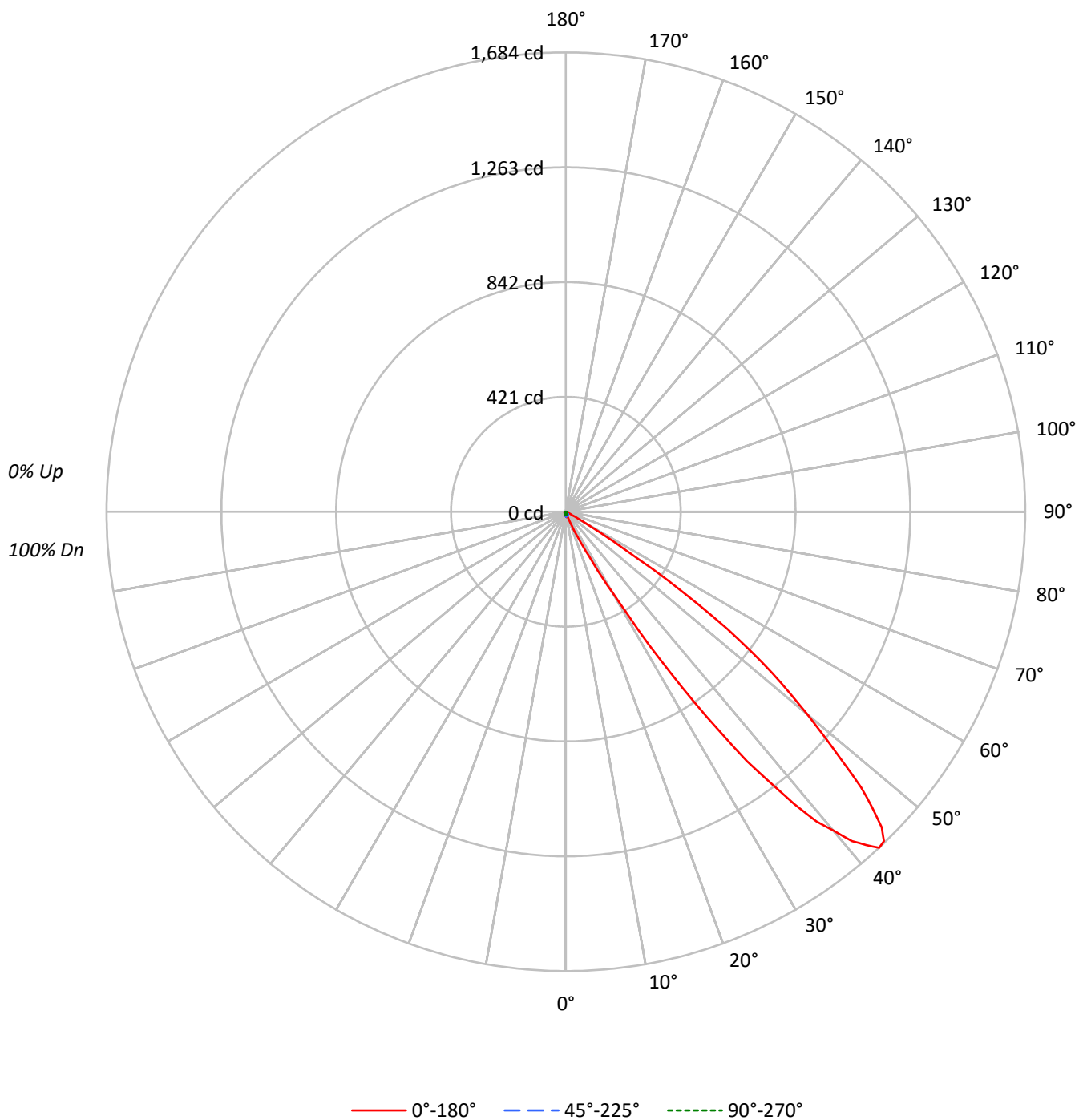
Lumens per Lamp: N/A
Luminaire Lumens: 234.0 lumens
Efficiency: N/A
Efficacy: 32.5 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.13
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 7.2
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	0
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°	3574	3574	3574	3574	3574
5°	4160	3874	3346	2906	2818
10°	4119	3518	2650	2249	2204
15°	3587	2701	1952	1793	1907
20°	5344	2264	1447	1540	1703
25°	22985	2347	1113	1379	1645
30°	86925	2836	937	1342	1621
35°	263490	3426	883	1365	1713
40°	436933	3406	744	1460	1832
45°	507836	2326	682	1489	1985
50°	394222	1262	682	1569	2252
55°	228159	841	688	1759	2447
60°	38593	175	570	1842	2719
65°	2958	0	675	2075	3061
70°	449	0	833	2244	3526
75°	339	169	932	2626	4067
80°	253	253	1389	2778	4672
85°	503	503	2264	2768	5032

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 507836 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.4	0.6
10°-20°	2.9	1.3
20°-30°	9.3	4.0
30°-40°	59.7	25.5
40°-50°	109.2	46.7
50°-60°	44.9	19.2
60°-70°	3.8	1.6
70°-80°	1.9	0.8
80°-90°	0.9	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°	13.7	5.8
0°-40°	73.4	31.3
0°-60°	227.4	97.2
0°-90°	234.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	234.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	16	16	16	16	16	
5°	19	18	15	13	13	2
15°	16	12	9	8	8	5
25°	95	10	5	6	7	62
35°	984	13	3	5	6	623
45°	1638	8	2	5	6	1176
55°	597	2	2	5	6	522
65°	6	0	1	4	6	19
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°	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3
2.5°	17.8	17.8	17.8	17.6	17.6	17.8	17.6	17.6	17.6	17.6	17.4
5°	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.7	18.7	18.5	17.6
7.5°	19.4	19.4	19.4	19.4	19.1	19.1	19.1	19.1	18.9	18.7	17.2
10°	18.5	18.5	18.5	18.3	18.3	18.3	18.0	18.0	17.8	17.6	15.8
12.5°	16.7	16.7	16.7	16.7	16.5	16.5	16.3	16.3	16.1	15.8	13.9
15°	15.8	15.8	15.8	15.6	15.6	15.4	15.2	15.0	14.7	14.3	11.9
17.5°	17.2	17.2	16.9	16.9	16.5	16.1	15.8	15.2	14.7	14.1	10.6
20°	22.9	23.1	22.2	21.6	21.1	19.8	19.1	18.0	17.2	16.1	9.7
22.5°	46.2	45.3	43.8	41.3	38.5	36.1	31.7	28.1	25.7	22.4	9.5
25°	95.0	94.1	89.9	86.4	77.6	70.8	61.4	53.7	45.7	38.0	9.7
27.5°	180.5	174.6	173.5	157.5	145.1	127.5	109.3	93.9	79.8	64.2	10.3
30°	343.3	336.5	312.5	288.3	255.1	217.5	181.6	148.2	120.3	95.0	11.2
31°	435.6	442.2	414.1	365.5	316.4	268.3	219.2	176.8	140.7	109.3	11.7
32°	572.6	543.8	514.1	464.2	393.0	331.4	269.8	208.7	161.2	124.7	12.1
33°	702.2	685.2	639.9	577.7	492.1	405.7	325.9	246.3	186.3	143.4	12.3
34°	840.3	821.6	784.8	695.6	601.7	488.4	382.0	289.6	216.2	161.6	12.5
35°	984.3	976.4	905.6	828.2	712.7	576.2	449.5	337.1	245.4	178.3	12.8
36°	1129.2	1103.7	1048.3	935.3	814.7	657.3	520.3	381.3	275.1	198.1	12.8
37°	1238.3	1232.6	1159.1	1048.9	907.3	743.9	581.4	430.4	305.0	215.1	12.8
38°	1358.6	1335.9	1261.4	1149.2	994.4	823.3	645.4	473.0	333.4	230.5	12.5
39°	1459.9	1426.3	1351.1	1240.3	1070.5	883.6	696.2	514.4	358.4	243.2	12.3
40°	1526.4	1503.1	1424.5	1299.9	1139.5	940.5	747.7	548.4	377.1	252.9	11.9
41°	1599.6	1560.9	1483.3	1357.9	1189.7	990.7	780.0	570.9	391.7	259.3	11.4
42°	1643.4	1611.7	1519.5	1396.8	1225.5	1019.3	806.4	588.0	400.4	262.6	10.6
43°	1684.3	1641.2	1551.4	1419.5	1249.3	1039.5	818.5	595.9	402.4	262.6	9.5
44°	1678.8	1637.9	1544.8	1422.6	1254.6	1045.4	823.5	596.2	399.3	259.3	8.4
45°	1637.6	1597.0	1513.2	1395.7	1235.6	1033.8	813.4	587.4	390.8	253.6	7.5
46°	1562.2	1521.7	1457.5	1350.9	1200.5	1007.4	789.9	568.2	376.5	244.3	6.6
47°	1480.2	1440.8	1375.1	1278.5	1140.4	960.3	755.8	541.4	356.5	230.9	5.9
48°	1361.2	1336.6	1270.6	1188.1	1057.1	886.7	696.0	497.6	329.6	213.5	5.1
49°	1256.1	1230.1	1172.3	1083.7	948.5	800.9	624.5	444.4	294.7	194.2	4.4
50°	1155.6	1133.0	1079.5	979.5	850.4	697.3	528.0	377.4	250.7	170.2	3.7
51°	1057.3	1040.4	985.8	893.9	762.9	617.7	457.4	314.2	207.2	141.2	3.5
52°	958.6	956.6	897.4	804.4	677.7	538.3	388.8	265.2	175.7	118.5	3.3
53°	852.4	839.6	787.9	704.4	582.7	455.6	329.6	223.6	151.3	100.9	2.9
54°	731.4	717.1	661.7	586.3	476.1	373.2	265.6	180.8	126.0	85.3	2.6
55°	596.8	572.4	532.2	454.8	371.9	284.8	205.2	143.2	100.7	71.0	2.2
56°	452.8	428.4	405.7	348.8	272.9	212.4	152.8	109.7	78.7	56.1	2.0
57°	314.9	313.6	276.4	232.7	182.5	144.7	104.7	77.4	55.6	43.5	1.5
58°	204.3	197.5	173.7	148.4	119.4	90.4	67.3	52.6	37.8	29.7	1.3
59°	143.2	129.5	116.8	99.0	75.2	57.0	43.3	33.6	26.2	20.7	0.9
60°	88.0	85.1	76.5	60.3	48.8	40.2	32.3	24.8	19.1	14.7	0.4
62.5°	25.1	25.5	23.1	20.5	17.6	15.2	13.6	11.7	9.7	7.7	0.0
65°	5.7	5.5	5.9	5.5	5.1	5.1	4.4	4.0	3.5	3.3	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°	1.8	1.8	1.5	1.5	1.5	1.3	1.3	1.1	1.1	0.9	0.0
70°	0.7	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.2	0.2	0.0
72.5°	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.2	0.2	0.2
75°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2
77.5°	0.4	0.4	0.4	0.4	0.4	0.2	0.4	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°	16.3	16.3	16.3	16.3	16.3	16.3
2.5°	16.9	16.1	15.4	14.7	14.5	14.5
5°	16.5	15.2	13.9	13.2	12.8	12.8
7.5°	15.2	13.6	12.3	11.7	11.4	11.4
10°	13.6	11.9	10.6	10.1	10.1	9.9
12.5°	11.9	10.1	9.2	9.0	9.0	9.0
15°	9.9	8.6	7.9	7.9	8.1	8.4
17.5°	8.4	7.0	6.8	7.3	7.7	7.7
20°	7.0	6.2	6.2	6.6	7.0	7.3
22.5°	5.9	5.3	5.5	6.2	6.8	7.0
25°	5.3	4.6	5.1	5.7	6.4	6.8
27.5°	4.4	4.2	4.6	5.5	6.4	6.6
30°	3.7	3.7	4.4	5.3	6.2	6.4
31°	3.5	3.5	4.4	5.3	6.2	6.4
32°	3.3	3.5	4.2	5.3	6.2	6.4
33°	3.1	3.3	4.2	5.1	6.2	6.4
34°	2.9	3.3	4.2	5.1	6.2	6.4
35°	2.6	3.3	4.2	5.1	6.2	6.4
36°	2.4	3.1	4.0	5.1	6.2	6.4
37°	2.2	3.1	4.0	5.1	6.2	6.4
38°	2.0	2.9	4.0	5.1	6.2	6.4
39°	2.0	2.9	3.7	5.1	5.9	6.4
40°	1.8	2.6	3.7	5.1	5.9	6.4
41°	1.5	2.6	3.7	4.8	5.9	6.4
42°	1.3	2.4	3.5	4.8	5.9	6.4
43°	1.1	2.4	3.5	4.8	5.9	6.4
44°	1.1	2.2	3.5	4.8	5.9	6.4
45°	0.9	2.2	3.5	4.8	5.9	6.4
46°	0.7	2.2	3.5	4.8	5.9	6.4
47°	0.7	2.0	3.3	4.8	5.9	6.4
48°	0.4	2.0	3.3	4.8	5.9	6.4
49°	0.4	2.0	3.3	4.8	5.9	6.6
50°	0.4	2.0	3.3	4.6	5.9	6.6
51°	0.2	2.0	3.3	4.6	5.9	6.6
52°	0.2	2.0	3.1	4.6	6.2	6.6
53°	0.2	1.8	3.1	4.6	6.2	6.6
54°	0.2	1.8	3.1	4.6	6.2	6.4
55°	0.2	1.8	3.1	4.6	5.9	6.4
56°	0.2	1.5	3.1	4.6	5.9	6.4
57°	0.2	1.5	2.9	4.4	5.9	6.2
58°	0.2	1.5	2.9	4.4	5.9	6.2
59°	0.2	1.5	2.9	4.4	5.7	6.2
60°	0.4	1.3	2.6	4.2	5.7	6.2
62.5°	0.4	1.3	2.6	4.2	5.5	5.9
65°	0.4	1.3	2.4	4.0	5.5	5.9



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	0.4	1.1	2.2	3.7	5.3	5.7
70°	0.4	1.3	2.2	3.5	5.1	5.5
72.5°	0.7	1.1	2.0	3.3	4.8	5.3
75°	0.7	1.1	2.0	3.1	4.6	4.8
77.5°	0.9	1.1	1.8	2.6	4.2	4.4
80°	0.9	1.1	1.5	2.2	3.5	3.7
82.5°	0.9	1.1	1.1	1.8	2.6	2.9
85°	0.7	0.9	0.9	1.1	1.8	2.0
87.5°	0.7	0.9	0.7	0.4	0.9	0.9
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)