

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: P1335316

Luminaire Tested: P3A02R359030D2WDE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335316
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-77)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A02R359030D2WDE010 E3A451WMH
Description: 3in Adjustable Dim to Warm LED luminaire with, R35 optic, 3000K CCT AND, 90CRI ,
E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

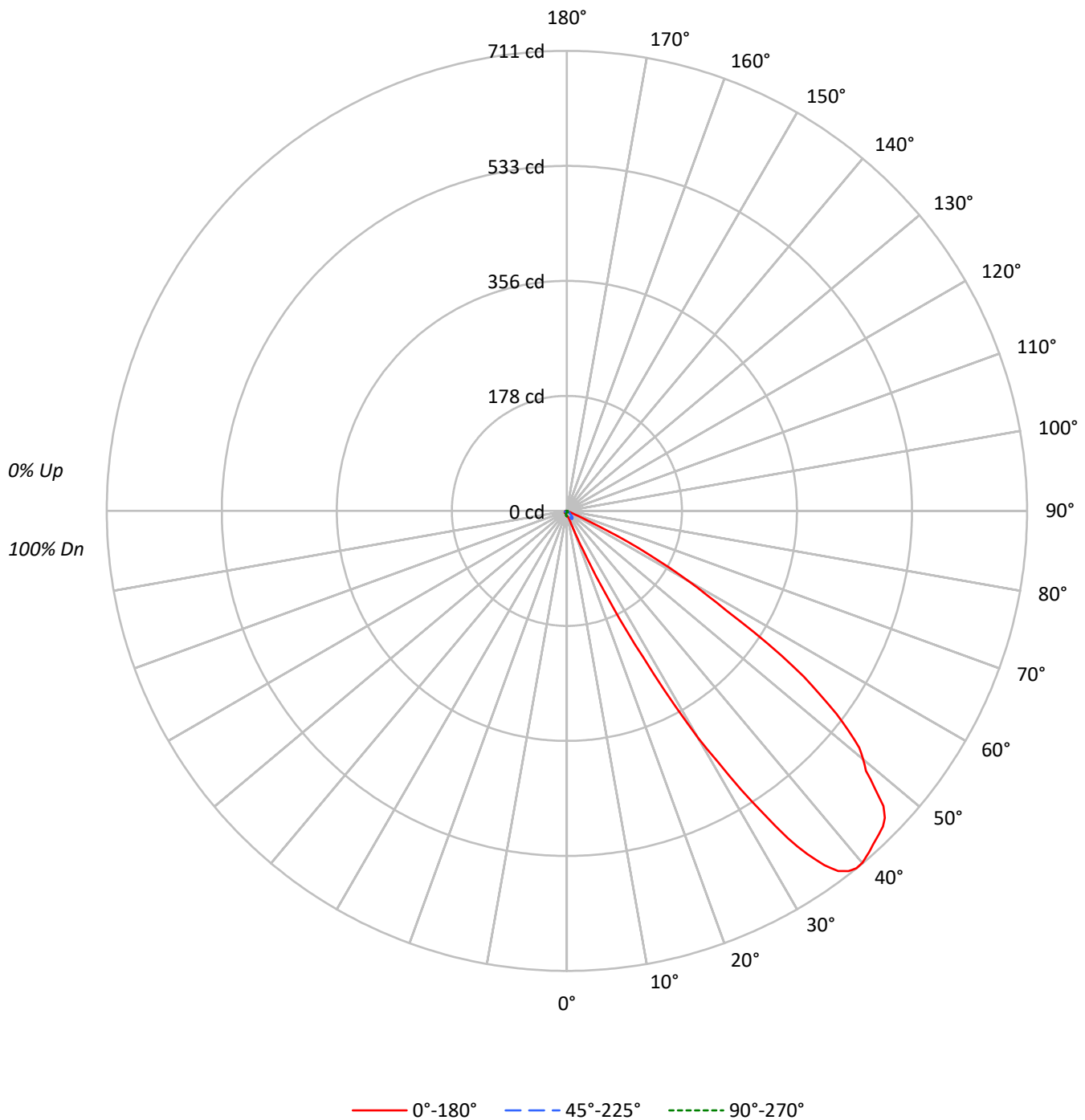
Lumens per Lamp: N/A
Luminaire Lumens: 177.0 lumens
Efficiency: N/A
Efficacy: 24.6 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.67 / 1.42
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1335316

CATALOG NUMBER: P3A02R359030D2WDE010 E3A451WMH

Luminous Intensity Polar Plot





TEST NUMBER: P1335316

CATALOG NUMBER: P3A02R359030D2WDE010 E3A451WMH

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	107	104	100	97	100	97	94	96	93	91	92	90	89	87			
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73			
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61			
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52	50			
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	49	44	42			
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35			
7	62	48	38	32	60	47	38	32	45	37	32	44	37	31	42	36	31	29			
8	57	42	33	27	55	41	33	27	40	32	27	39	32	26	38	31	26	24			
9	52	38	29	23	50	37	29	23	36	28	23	35	28	22	34	27	22	20			
10	48	34	25	19	46	33	25	19	32	25	19	31	24	19	30	24	19	17			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1776	1776	1776	1776	1776
5°	1937	1893	1761	1585	1541
10°	2026	1848	1559	1358	1358
15°	2906	1816	1271	1158	1203
20°	7281	1937	1003	1003	1120
25°	33752	2468	774	919	1040
30°	102598	3368	608	861	1063
35°	173384	3882	509	803	1017
40°	203267	3836	401	830	1088
45°	214069	2729	341	899	1178
50°	203763	1637	341	921	1296
55°	170737	688	382	1032	1529
60°	95563	132	439	1184	1667
65°	16500	104	415	1349	1920
70°	321	128	513	1410	2180
75°	254	169	678	1610	2457
80°	253	253	758	1768	2778
85°	0	503	1510	2013	3271

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 215569 cd/sqm

TEST NUMBER: P1335316

CATALOG NUMBER: P3A02R359030D2WDE010 E3A451WMH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.7	0.4
10°-20°	2.1	1.2
20°-30°	10.9	6.1
30°-40°	46.9	26.5
40°-50°	66.9	37.8
50°-60°	41.4	23.4
60°-70°	6.3	3.6
70°-80°	1.2	0.7
80°-90°	0.6	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°	13.7	7.7
0°-40°	60.6	34.2
0°-60°	168.9	95.4
0°-90°	177.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	177.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8	8	8	8	8	
5°	9	9	8	7	7	1
15°	13	8	6	5	5	5
25°	140	10	3	4	4	83
35°	648	14	2	3	4	389
45°	690	9	1	3	4	521
55°	447	2	1	3	4	380
65°	32	0	1	3	4	65
75°	0	0	1	2	3	0
85°	0	0	1	1	1	0
90°	0	0	0	0	0	

TEST NUMBER: P1335316

CATALOG NUMBER: P3A02R359030D2WDE010 E3A451WMH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
2.5°	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.1	8.0
5°	8.8	8.8	8.6	8.6	8.6	8.6	8.6	8.6	8.3	8.0	7.5
7.5°	8.9	8.9	8.8	8.8	8.8	8.8	8.6	8.5	8.1	7.5	7.0
10°	9.1	9.1	9.1	9.1	8.9	8.8	8.6	8.3	7.8	7.0	6.6
12.5°	10.2	10.2	10.1	9.7	9.4	9.1	8.8	8.1	7.2	6.4	5.9
15°	12.8	12.6	12.3	11.8	11.2	10.4	9.7	8.0	6.6	5.6	5.3
17.5°	17.9	17.6	17.1	15.5	14.1	12.6	11.3	8.0	5.9	5.0	4.6
20°	31.2	31.3	28.0	24.1	20.9	17.4	14.2	8.3	5.3	4.3	4.2
22.5°	65.0	62.5	54.5	45.2	34.5	26.7	20.1	9.1	4.6	3.7	3.7
25°	139.5	129.7	110.4	83.4	58.8	41.7	29.2	10.2	4.2	3.2	3.4
27.5°	254.7	245.9	207.1	155.9	103.5	63.0	39.6	11.7	3.7	2.7	3.0
30°	405.2	380.9	330.3	255.6	173.0	96.3	53.2	13.3	3.0	2.4	2.9
31°	452.2	441.0	379.3	295.8	202.8	114.4	59.0	13.7	2.9	2.4	2.7
32°	507.9	488.1	432.8	339.7	233.0	130.5	65.8	14.2	2.7	2.1	2.7
33°	557.8	538.6	471.4	378.4	263.5	148.9	73.2	14.4	2.4	2.1	2.6
34°	610.2	584.0	517.4	418.8	294.8	168.7	79.9	14.5	2.2	1.9	2.6
35°	647.7	621.5	557.0	450.7	321.8	186.3	87.6	14.5	2.1	1.9	2.4
36°	676.8	653.8	591.2	483.7	348.6	202.1	93.6	14.5	1.8	1.8	2.4
37°	696.8	674.9	614.2	511.9	369.1	216.2	99.1	14.5	1.6	1.8	2.4
38°	706.5	688.3	636.4	532.5	388.9	227.2	103.4	14.2	1.4	1.6	2.2
39°	710.7	695.8	650.0	550.0	403.8	236.8	106.6	13.9	1.3	1.6	2.2
40°	710.1	697.1	657.7	561.9	415.7	243.3	108.3	13.4	1.1	1.4	2.2
41°	706.4	695.2	661.7	572.2	422.9	247.8	108.8	12.9	1.0	1.4	2.1
42°	702.2	692.0	662.9	577.6	427.6	249.3	107.5	12.3	1.0	1.3	2.1
43°	697.9	688.5	662.9	579.4	428.7	248.3	105.5	11.2	0.8	1.3	2.1
44°	694.4	685.5	660.9	578.9	426.3	244.6	101.6	9.9	0.6	1.3	2.1
45°	690.3	681.5	658.1	575.8	421.7	238.4	96.8	8.8	0.5	1.1	2.1
46°	682.9	676.0	653.3	569.6	414.3	229.8	90.8	8.0	0.3	1.1	1.9
47°	668.7	662.8	644.1	560.3	404.6	219.5	84.5	7.2	0.3	1.1	1.9
48°	640.1	639.9	625.5	543.1	389.1	206.8	78.0	6.4	0.3	1.1	1.9
49°	612.4	609.6	591.7	512.7	366.9	191.4	71.1	5.8	0.2	1.1	1.9
50°	597.3	591.0	561.6	476.9	338.4	170.2	63.8	4.8	0.2	1.0	1.9
51°	581.4	572.5	537.8	444.7	304.5	149.7	55.8	3.8	0.2	1.0	1.8
52°	552.8	544.4	505.5	413.8	271.6	128.8	48.1	3.2	0.2	1.0	1.9
53°	522.0	509.9	467.7	380.0	242.7	110.2	40.3	2.7	0.2	1.0	1.8
54°	483.2	477.7	429.3	338.4	208.8	92.4	33.1	2.2	0.2	1.0	1.8
55°	446.6	438.6	388.3	295.9	178.2	75.7	27.6	1.8	0.2	1.0	1.8
56°	399.9	387.9	340.8	256.9	147.0	61.0	23.3	1.4	0.2	1.0	1.8
57°	344.3	331.5	294.3	213.6	115.4	46.5	19.5	1.1	0.2	1.0	1.8
58°	291.3	280.3	240.3	164.9	86.9	32.3	16.1	0.8	0.2	0.8	1.8
59°	251.7	239.5	199.9	126.9	60.4	23.8	12.1	0.6	0.2	1.0	1.8
60°	217.9	202.3	160.9	98.3	43.1	17.1	8.9	0.3	0.3	1.0	1.8
62.5°	125.6	110.9	76.9	39.9	17.7	8.8	4.3	0.2	0.3	1.0	1.8
65°	31.8	28.3	18.4	8.6	5.0	3.0	1.6	0.2	0.3	0.8	1.6



TEST NUMBER: P1335316

CATALOG NUMBER: P3A02R359030D2WDE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	1.1	1.1	1.1	1.0	0.8	0.6	0.3	0.2	0.3	0.8	1.6
70°	0.5	0.5	0.5	0.3	0.3	0.2	0.2	0.2	0.3	0.8	1.4
72.5°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.5	0.8	1.3
75°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.5	0.8	1.3
77.5°	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.6	1.1
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.6	1.0
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.6	0.8
85°	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.5	0.6	0.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.6	0.5
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: P1335316

CATALOG NUMBER: P3A02R359030D2WDE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	8.1	8.1	8.1
2.5°	7.7	7.7	7.7
5°	7.2	7.2	7.0
7.5°	6.7	6.6	6.6
10°	6.1	6.1	6.1
12.5°	5.6	5.6	5.6
15°	5.1	5.3	5.3
17.5°	4.6	5.0	5.0
20°	4.3	4.6	4.8
22.5°	4.0	4.3	4.5
25°	3.8	4.2	4.3
27.5°	3.5	4.0	4.3
30°	3.4	3.8	4.2
31°	3.4	3.8	4.0
32°	3.2	3.8	4.0
33°	3.2	3.8	4.0
34°	3.2	3.7	4.0
35°	3.0	3.7	3.8
36°	3.0	3.7	3.8
37°	3.0	3.7	4.0
38°	3.0	3.7	3.8
39°	2.9	3.7	3.8
40°	2.9	3.7	3.8
41°	2.9	3.7	3.8
42°	2.9	3.7	3.8
43°	2.9	3.7	3.8
44°	2.9	3.5	3.8
45°	2.9	3.5	3.8
46°	2.9	3.7	3.8
47°	2.9	3.7	4.0
48°	2.9	3.5	3.8
49°	2.7	3.5	3.8
50°	2.7	3.5	3.8
51°	2.7	3.7	4.0
52°	2.7	3.7	4.0
53°	2.7	3.7	4.0
54°	2.7	3.7	3.8
55°	2.7	3.7	4.0
56°	2.7	3.7	3.8
57°	2.7	3.7	3.8
58°	2.7	3.5	3.8
59°	2.7	3.5	3.8
60°	2.7	3.5	3.8
62.5°	2.6	3.5	3.8
65°	2.6	3.4	3.7

TEST NUMBER: P1335316

CATALOG NUMBER: P3A02R359030D2WDE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	2.4	3.4	3.5
70°	2.2	3.2	3.4
72.5°	2.1	3.0	3.2
75°	1.9	2.7	2.9
77.5°	1.6	2.4	2.7
80°	1.4	2.1	2.2
82.5°	1.1	1.8	1.9
85°	0.8	1.3	1.3
87.5°	0.3	0.6	0.6
90°	0.0	0.0	0.0

(END OF REPORT)