

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: P1335284

Luminaire Tested: P3A02R359024DE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1335284
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: P3A02R359024DE010 E3A451WMH
Description: 3in Adjustable LED luminaire with, R35 optic, 2400K CCT AND, 90CRI , E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

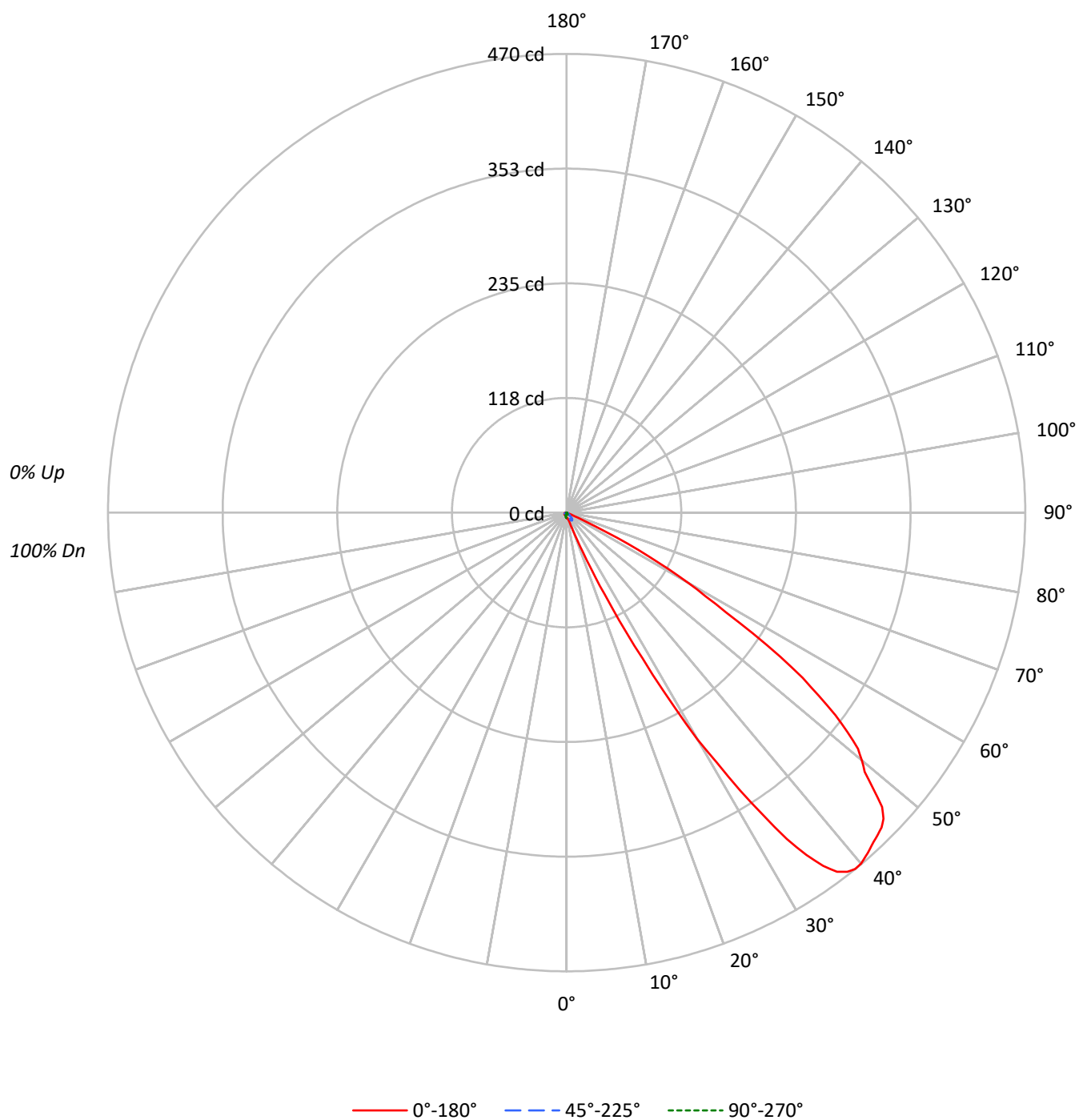
Lumens per Lamp: N/A
Luminaire Lumens: 117.0 lumens
Efficiency: N/A
Efficacy: 32.5 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 3.6
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: P1335284

CATALOG NUMBER: P3A02R359024DE010 E3A451WMH

Luminous Intensity Polar Plot



TEST NUMBER: P1335284

CATALOG NUMBER: P3A02R359024DE010 E3A451WMH

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
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	102	102	100
1	110	106	102	99	107	104	100	97	100	97	94	96	93	91	92	90	89	89	89	87
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	75	75	73
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	63	63	61
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52	52	52	50
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	49	44	44	44	42
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	37	37	35
7	62	48	38	32	60	47	38	32	45	37	32	44	37	31	42	36	31	31	31	29
8	57	42	33	27	55	41	33	27	40	32	27	39	32	26	38	31	26	26	26	24
9	52	38	29	23	50	37	29	23	36	28	23	35	28	22	34	27	22	22	22	20
10	48	34	25	19	46	33	25	19	32	25	19	31	24	19	30	24	19	19	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	1184	1184	1184	1184	1184
5°	1277	1255	1167	1057	1013
10°	1336	1225	1024	891	891
15°	1907	1203	840	772	795
20°	4807	1283	677	677	747
25°	22308	1645	508	605	702
30°	67808	2228	405	557	684
35°	114626	2570	348	535	669
40°	134366	2548	286	544	716
45°	141503	1799	217	589	775
50°	134682	1092	205	614	853
55°	112856	459	229	688	994
60°	63197	88	263	789	1096
65°	10896	52	259	882	1245
70°	192	64	321	962	1410
75°	169	85	424	1101	1610
80°	126	126	505	1263	1894
85°	0	252	1006	1258	2013

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 142492 cd/sqm

TEST NUMBER: P1335284

CATALOG NUMBER: P3A02R359024DE010 E3A451WMH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.5	0.4
10°-20°	1.4	1.2
20°-30°	7.2	6.1
30°-40°	31.0	26.5
40°-50°	44.2	37.8
50°-60°	27.4	23.4
60°-70°	4.2	3.6
70°-80°	0.8	0.7
80°-90°	0.4	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°	9.0	7.7
0°-40°	40.0	34.2
0°-60°	111.7	95.5
0°-90°	117.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	117.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5	5	5	5	5	
5°	6	6	5	5	5	1
15°	8	5	4	3	4	3
25°	92	7	2	2	3	55
35°	428	10	1	2	2	257
45°	456	6	1	2	2	345
55°	295	1	1	2	3	251
65°	21	0	0	2	2	43
75°	0	0	0	1	2	0
85°	0	0	0	0	1	0
90°	0	0	0	0	0	

TEST NUMBER: P1335284

CATALOG NUMBER: P3A02R359024DE010 E3A451WMH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
2.5°	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.4	5.3
5°	5.8	5.8	5.7	5.7	5.7	5.7	5.7	5.7	5.5	5.3	5.0
7.5°	5.9	5.9	5.8	5.8	5.8	5.8	5.7	5.6	5.4	5.0	4.6
10°	6.0	6.0	6.0	6.0	5.9	5.8	5.7	5.5	5.2	4.6	4.3
12.5°	6.8	6.8	6.7	6.4	6.2	6.0	5.8	5.4	4.8	4.2	3.9
15°	8.4	8.3	8.1	7.8	7.4	6.9	6.4	5.3	4.3	3.7	3.5
17.5°	11.8	11.6	11.3	10.2	9.3	8.3	7.5	5.3	3.9	3.3	3.1
20°	20.6	20.7	18.5	15.9	13.8	11.5	9.4	5.5	3.5	2.9	2.7
22.5°	43.0	41.3	36.0	29.9	22.8	17.6	13.3	6.0	3.1	2.4	2.4
25°	92.2	85.8	73.0	55.1	38.9	27.6	19.3	6.8	2.7	2.1	2.2
27.5°	168.4	162.5	136.9	103.1	68.4	41.6	26.2	7.7	2.4	1.8	2.0
30°	267.8	251.8	218.3	169.0	114.4	63.7	35.2	8.8	2.0	1.6	1.9
31°	298.9	291.5	250.7	195.5	134.0	75.6	39.0	9.1	1.9	1.6	1.8
32°	335.8	322.7	286.1	224.5	154.0	86.3	43.5	9.4	1.8	1.4	1.8
33°	368.7	356.0	311.6	250.1	174.2	98.4	48.4	9.5	1.6	1.4	1.7
34°	403.4	386.0	342.0	276.8	194.9	111.5	52.8	9.6	1.5	1.3	1.7
35°	428.2	410.9	368.2	297.9	212.7	123.2	57.9	9.6	1.4	1.3	1.6
36°	447.4	432.2	390.8	319.7	230.5	133.6	61.9	9.6	1.2	1.2	1.6
37°	460.6	446.1	406.0	338.4	244.0	142.9	65.5	9.6	1.1	1.2	1.6
38°	467.0	455.0	420.7	352.0	257.1	150.2	68.3	9.4	1.0	1.1	1.5
39°	469.8	460.0	429.7	363.5	266.9	156.5	70.4	9.2	0.8	1.1	1.5
40°	469.4	460.8	434.7	371.5	274.8	160.9	71.6	8.9	0.7	1.0	1.5
41°	466.9	459.5	437.4	378.2	279.6	163.8	71.9	8.6	0.6	1.0	1.4
42°	464.2	457.4	438.2	381.8	282.6	164.8	71.1	8.1	0.6	0.8	1.4
43°	461.3	455.1	438.2	383.0	283.4	164.1	69.7	7.4	0.5	0.8	1.4
44°	459.0	453.1	436.8	382.7	281.8	161.7	67.2	6.5	0.4	0.8	1.4
45°	456.3	450.5	435.0	380.6	278.7	157.6	64.0	5.8	0.3	0.7	1.4
46°	451.4	446.9	431.9	376.5	273.9	151.9	60.0	5.3	0.2	0.7	1.3
47°	442.0	438.1	425.7	370.4	267.4	145.1	55.9	4.8	0.2	0.7	1.3
48°	423.1	423.0	413.5	359.0	257.2	136.7	51.5	4.2	0.2	0.7	1.3
49°	404.8	402.9	391.1	338.9	242.5	126.5	47.0	3.8	0.1	0.7	1.3
50°	394.8	390.7	371.2	315.3	223.7	112.5	42.1	3.2	0.1	0.6	1.3
51°	384.3	378.4	355.5	293.9	201.3	99.0	36.9	2.5	0.1	0.6	1.2
52°	365.4	359.8	334.2	273.5	179.5	85.1	31.8	2.1	0.1	0.6	1.3
53°	345.1	337.0	309.1	251.2	160.4	72.9	26.6	1.8	0.1	0.6	1.2
54°	319.4	315.8	283.8	223.7	138.0	61.0	21.9	1.5	0.1	0.6	1.2
55°	295.2	289.9	256.7	195.6	117.8	50.1	18.3	1.2	0.1	0.6	1.2
56°	264.4	256.4	225.3	169.8	97.2	40.3	15.4	1.0	0.1	0.6	1.2
57°	227.6	219.2	194.5	141.2	76.3	30.7	12.9	0.7	0.1	0.6	1.2
58°	192.5	185.3	158.8	109.0	57.5	21.3	10.7	0.5	0.1	0.5	1.2
59°	166.3	158.3	132.1	83.9	39.9	15.7	8.0	0.4	0.1	0.6	1.2
60°	144.1	133.7	106.4	65.0	28.5	11.3	5.9	0.2	0.2	0.6	1.2
62.5°	83.0	73.3	50.8	26.4	11.7	5.8	2.9	0.1	0.2	0.6	1.2
65°	21.0	18.7	12.1	5.7	3.3	2.0	1.1	0.1	0.2	0.5	1.1



TEST NUMBER: P1335284

CATALOG NUMBER: P3A02R359024DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	0.7	0.7	0.7	0.6	0.5	0.4	0.2	0.1	0.2	0.5	1.1
70°	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.5	1.0
72.5°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.3	0.5	0.8
75°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.3	0.5	0.8
77.5°	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.7
80°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.6
82.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.5
85°	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.3	0.4	0.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.4	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

TEST NUMBER: P1335284

CATALOG NUMBER: P3A02R359024DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	5.4	5.4	5.4
2.5°	5.1	5.1	5.1
5°	4.8	4.8	4.6
7.5°	4.4	4.3	4.3
10°	4.0	4.0	4.0
12.5°	3.7	3.7	3.7
15°	3.4	3.5	3.5
17.5°	3.1	3.3	3.3
20°	2.9	3.1	3.2
22.5°	2.6	2.9	3.0
25°	2.5	2.7	2.9
27.5°	2.3	2.6	2.9
30°	2.2	2.5	2.7
31°	2.2	2.5	2.6
32°	2.1	2.5	2.6
33°	2.1	2.5	2.6
34°	2.1	2.4	2.6
35°	2.0	2.4	2.5
36°	2.0	2.4	2.5
37°	2.0	2.4	2.6
38°	2.0	2.4	2.5
39°	1.9	2.4	2.5
40°	1.9	2.4	2.5
41°	1.9	2.4	2.5
42°	1.9	2.4	2.5
43°	1.9	2.4	2.5
44°	1.9	2.3	2.5
45°	1.9	2.3	2.5
46°	1.9	2.4	2.5
47°	1.9	2.4	2.6
48°	1.9	2.3	2.5
49°	1.8	2.3	2.5
50°	1.8	2.3	2.5
51°	1.8	2.4	2.6
52°	1.8	2.4	2.6
53°	1.8	2.4	2.6
54°	1.8	2.4	2.5
55°	1.8	2.4	2.6
56°	1.8	2.4	2.5
57°	1.8	2.4	2.5
58°	1.8	2.3	2.5
59°	1.8	2.3	2.5
60°	1.8	2.3	2.5
62.5°	1.7	2.3	2.5
65°	1.7	2.2	2.4



TEST NUMBER: P1335284

CATALOG NUMBER: P3A02R359024DE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	1.6	2.2	2.3
70°	1.5	2.1	2.2
72.5°	1.4	2.0	2.1
75°	1.3	1.8	1.9
77.5°	1.1	1.6	1.8
80°	1.0	1.4	1.5
82.5°	0.7	1.2	1.3
85°	0.5	0.8	0.8
87.5°	0.2	0.4	0.4
90°	0.0	0.0	0.0

(END OF REPORT)