

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: P1341880

Luminaire Tested: P3A09R359030D2WDE010 E3A451WMH

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1341880
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: P3A09R359030D2WDE010 E3A451WMH
Description: 3in Adjustable Dim to Warm LED luminaire with, R35 optic, 3000K CCT AND, 90CRI ,
E3A451WMH TRIM
Light Source: -
Ballast/Driver: -

Summary

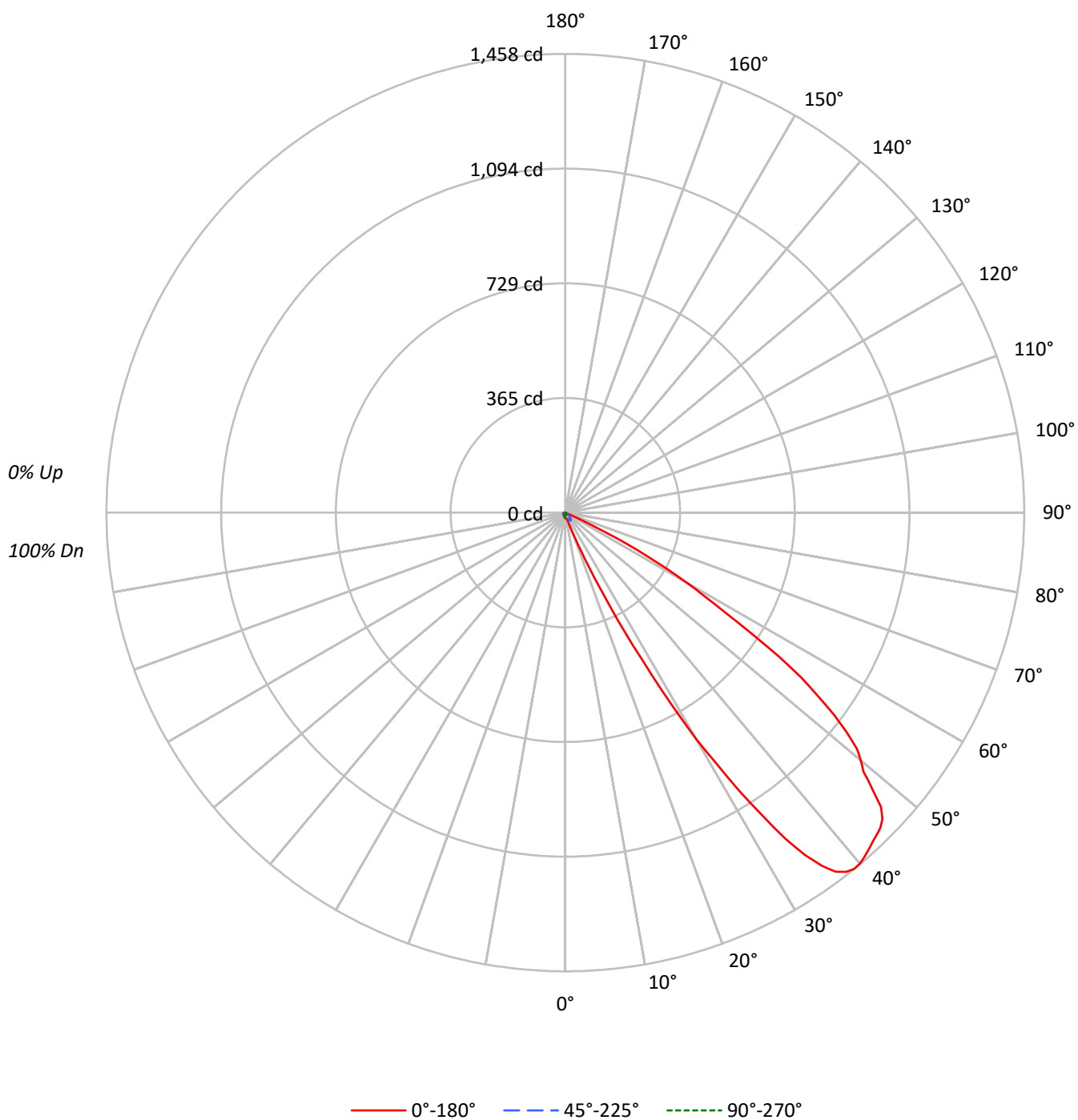
Lumens per Lamp: N/A
Luminaire Lumens: 363.0 lumens
Efficiency: N/A
Efficacy: 24.7 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.7
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: P1341880

CATALOG NUMBER: P3A09R359030D2WDE010 E3A451WMH

Luminous Intensity Polar Plot



TEST NUMBER: P1341880

CATALOG NUMBER: P3A09R359030D2WDE010 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	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	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°	3662	3662	3662	3662	3662
5°	3962	3896	3610	3236	3170
10°	4164	3785	3206	2783	2783
15°	5948	3723	2611	2384	2452
20°	14911	3967	2054	2054	2287
25°	69222	5081	1597	1911	2129
30°	210412	6887	1241	1747	2152
35°	355602	7977	1044	1660	2115
40°	416838	7872	830	1689	2261
45°	438991	5582	713	1830	2450
50°	417863	3343	682	1910	2695
55°	350152	1376	765	2141	3135
60°	196037	307	877	2456	3465
65°	33830	156	830	2698	3891
70°	641	192	1026	2949	4424
75°	593	254	1356	3304	4999
80°	379	379	1642	3662	5809
85°	0	755	3271	4026	6542

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 442092 cd/sqm

TEST NUMBER: P1341880

CATALOG NUMBER: P3A09R359030D2WDE010 E3A451WMH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.5	0.4
10°-20°	4.3	1.2
20°-30°	22.3	6.1
30°-40°	96.2	26.5
40°-50°	137.2	37.8
50°-60°	85.0	23.4
60°-70°	12.9	3.6
70°-80°	2.4	0.7
80°-90°	1.2	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°	28.1	7.7
0°-40°	124.2	34.2
0°-60°	346.4	95.4
0°-90°	363.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	363.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	17	17	17	17	17	
5°	18	18	16	15	14	2
15°	26	16	12	10	11	9
25°	286	21	7	8	9	171
35°	1328	30	4	6	8	798
45°	1416	18	2	6	8	1069
55°	916	4	2	6	8	780
65°	65	0	2	5	8	133
75°	1	0	2	4	6	1
85°	0	0	1	2	3	0
90°	0	0	0	0	0	

TEST NUMBER: P1341880

CATALOG NUMBER: P3A09R359030D2WDE010 E3A451WMH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7
2.5°	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4	16.7	16.4
5°	18.0	18.0	17.7	17.7	17.7	17.7	17.7	17.7	17.0	16.4	15.4
7.5°	18.4	18.4	18.0	18.0	18.0	18.0	17.7	17.4	16.7	15.4	14.4
10°	18.7	18.7	18.7	18.7	18.4	18.0	17.7	17.0	16.1	14.4	13.4
12.5°	21.0	21.0	20.6	20.0	19.3	18.7	18.0	16.7	14.7	13.1	12.1
15°	26.2	25.9	25.2	24.2	22.9	21.3	20.0	16.4	13.4	11.5	10.8
17.5°	36.7	36.0	35.1	31.8	28.8	25.9	23.3	16.4	12.1	10.2	9.5
20°	63.9	64.2	57.3	49.5	42.9	35.7	29.2	17.0	10.8	8.8	8.5
22.5°	133.4	128.1	111.7	92.7	70.8	54.7	41.3	18.7	9.5	7.5	7.5
25°	286.1	266.1	226.4	171.1	120.6	85.5	60.0	21.0	8.5	6.6	6.9
27.5°	522.3	504.3	424.7	319.8	212.3	129.1	81.3	23.9	7.5	5.6	6.2
30°	831.0	781.2	677.3	524.3	354.9	197.6	109.1	27.2	6.2	4.9	5.9
31°	927.3	904.4	777.9	606.5	415.8	234.6	120.9	28.2	5.9	4.9	5.6
32°	1041.7	1001.1	887.7	696.7	477.8	267.7	135.0	29.2	5.6	4.3	5.6
33°	1143.9	1104.6	966.7	776.0	540.4	305.4	150.1	29.5	4.9	4.3	5.2
34°	1251.4	1197.7	1061.0	858.9	604.6	346.0	163.8	29.8	4.6	3.9	5.2
35°	1328.4	1274.7	1142.3	924.4	660.0	382.1	179.6	29.8	4.3	3.9	4.9
36°	1388.1	1340.9	1212.4	991.9	715.0	414.5	192.0	29.8	3.6	3.6	4.9
37°	1429.0	1384.1	1259.6	1049.9	757.0	443.4	203.2	29.8	3.3	3.6	4.9
38°	1449.0	1411.7	1305.2	1092.2	797.6	466.0	212.0	29.2	2.9	3.3	4.6
39°	1457.5	1427.1	1333.0	1127.9	828.1	485.6	218.6	28.5	2.6	3.3	4.6
40°	1456.2	1429.7	1348.8	1152.5	852.6	499.1	222.2	27.5	2.3	2.9	4.6
41°	1448.7	1425.8	1356.9	1173.4	867.4	508.2	223.2	26.5	2.0	2.9	4.3
42°	1440.2	1419.2	1359.6	1184.6	876.9	511.2	220.5	25.2	2.0	2.6	4.3
43°	1431.3	1412.0	1359.6	1188.2	879.2	509.2	216.3	22.9	1.6	2.6	4.3
44°	1424.1	1405.8	1355.3	1187.2	874.3	501.7	208.4	20.3	1.3	2.6	4.3
45°	1415.6	1397.6	1349.7	1181.0	864.8	488.9	198.6	18.0	1.0	2.3	4.3
46°	1400.5	1386.4	1339.9	1168.2	849.7	471.2	186.1	16.4	0.7	2.3	3.9
47°	1371.4	1359.2	1320.9	1149.2	829.7	450.2	173.3	14.7	0.7	2.3	3.9
48°	1312.7	1312.4	1282.9	1113.8	797.9	424.0	159.9	13.1	0.7	2.3	3.9
49°	1256.0	1250.1	1213.4	1051.5	752.4	392.6	145.8	11.8	0.3	2.3	3.9
50°	1224.9	1212.1	1151.8	978.1	694.0	349.0	130.7	9.8	0.3	2.0	3.9
51°	1192.4	1174.1	1103.0	911.9	624.6	307.0	114.4	7.9	0.3	2.0	3.6
52°	1133.8	1116.4	1036.8	848.7	557.1	264.1	98.6	6.6	0.3	2.0	3.9
53°	1070.5	1045.6	959.1	779.2	497.8	226.1	82.6	5.6	0.3	2.0	3.6
54°	990.9	979.8	880.5	694.0	428.3	189.4	67.8	4.6	0.3	2.0	3.6
55°	915.9	899.5	796.3	606.9	365.4	155.3	56.7	3.6	0.3	2.0	3.6
56°	820.2	795.6	699.0	526.9	301.5	125.2	47.8	2.9	0.3	2.0	3.6
57°	706.2	679.9	603.6	438.1	236.6	95.4	40.0	2.3	0.3	2.0	3.6
58°	597.4	574.8	492.8	338.2	178.3	66.2	33.1	1.6	0.3	1.6	3.6
59°	516.1	491.2	409.9	260.2	123.9	48.8	24.9	1.3	0.3	2.0	3.6
60°	447.0	414.8	330.0	201.5	88.5	35.1	18.4	0.7	0.7	2.0	3.6
62.5°	257.6	227.4	157.6	81.9	36.4	18.0	8.8	0.3	0.7	2.0	3.6
65°	65.2	58.0	37.7	17.7	10.2	6.2	3.3	0.3	0.7	1.6	3.3



TEST NUMBER: P1341880

CATALOG NUMBER: P3A09R359030D2WDE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	2.3	2.3	2.3	2.0	1.6	1.3	0.7	0.3	0.7	1.6	3.3
70°	1.0	1.0	1.0	0.7	0.7	0.3	0.3	0.3	0.7	1.6	2.9
72.5°	0.7	0.7	0.7	0.7	0.3	0.3	0.3	0.3	1.0	1.6	2.6
75°	0.7	0.7	0.7	0.7	0.3	0.3	0.3	0.3	1.0	1.6	2.6
77.5°	0.7	0.7	0.3	0.3	0.3	0.3	0.3	0.3	1.0	1.3	2.3
80°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	1.0	1.3	2.0
82.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	1.0	1.3	1.6
85°	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	1.0	1.3	1.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.0	1.3	1.0
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: P1341880

CATALOG NUMBER: P3A09R359030D2WDE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	16.7	16.7	16.7
2.5°	15.7	15.7	15.7
5°	14.7	14.7	14.4
7.5°	13.8	13.4	13.4
10°	12.5	12.5	12.5
12.5°	11.5	11.5	11.5
15°	10.5	10.8	10.8
17.5°	9.5	10.2	10.2
20°	8.8	9.5	9.8
22.5°	8.2	8.8	9.2
25°	7.9	8.5	8.8
27.5°	7.2	8.2	8.8
30°	6.9	7.9	8.5
31°	6.9	7.9	8.2
32°	6.6	7.9	8.2
33°	6.6	7.9	8.2
34°	6.6	7.5	8.2
35°	6.2	7.5	7.9
36°	6.2	7.5	7.9
37°	6.2	7.5	8.2
38°	6.2	7.5	7.9
39°	5.9	7.5	7.9
40°	5.9	7.5	7.9
41°	5.9	7.5	7.9
42°	5.9	7.5	7.9
43°	5.9	7.5	7.9
44°	5.9	7.2	7.9
45°	5.9	7.2	7.9
46°	5.9	7.5	7.9
47°	5.9	7.5	8.2
48°	5.9	7.2	7.9
49°	5.6	7.2	7.9
50°	5.6	7.2	7.9
51°	5.6	7.5	8.2
52°	5.6	7.5	8.2
53°	5.6	7.5	8.2
54°	5.6	7.5	7.9
55°	5.6	7.5	8.2
56°	5.6	7.5	7.9
57°	5.6	7.5	7.9
58°	5.6	7.2	7.9
59°	5.6	7.2	7.9
60°	5.6	7.2	7.9
62.5°	5.2	7.2	7.9
65°	5.2	6.9	7.5



TEST NUMBER: P1341880

CATALOG NUMBER: P3A09R359030D2WDE010 E3A451WMH

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	4.9	6.9	7.2
70°	4.6	6.6	6.9
72.5°	4.3	6.2	6.6
75°	3.9	5.6	5.9
77.5°	3.3	4.9	5.6
80°	2.9	4.3	4.6
82.5°	2.3	3.6	3.9
85°	1.6	2.6	2.6
87.5°	0.7	1.3	1.3
90°	0.0	0.0	0.0

(END OF REPORT)