

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: P1343100

Luminaire Tested: P3A09R459840DE010 E3CA451MW

Issue Date: 2/13/2026

Test Information

Test Method: LM-79-2019
Report Number: P1343100
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-84)
Test Lab: INNOVATION CENTER
Issue Date: 2/13/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3A09R459840DE010 E3CA451MW
Description: 3in Adjustable LED luminaire with, R45 optic, 4000K CCT AND, 98CRI , E3CA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

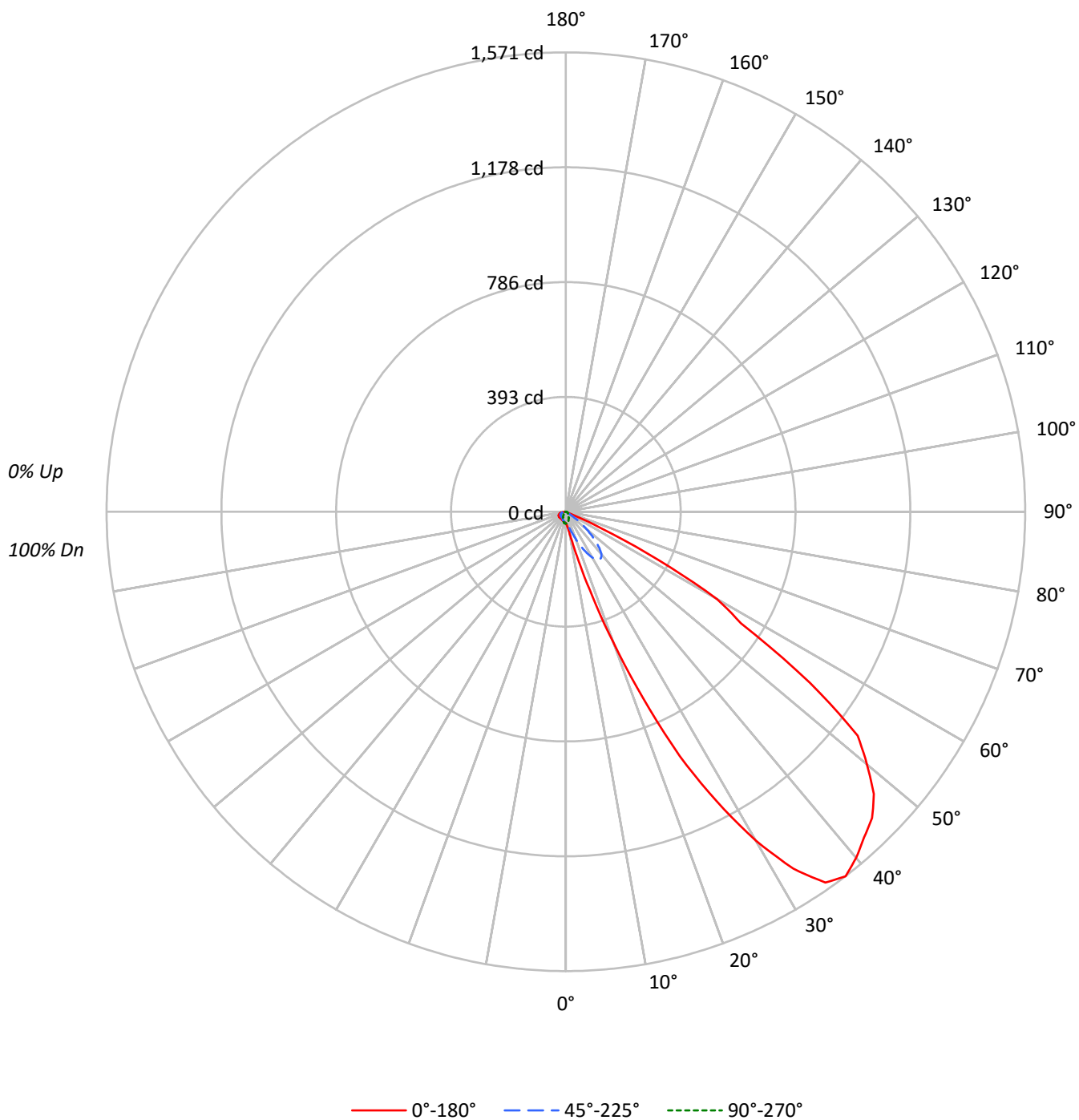
Lumens per Lamp: N/A
Luminaire Lumens: 702.0 lumens
Efficiency: N/A
Efficacy: 63.8 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11
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: P1343100

CATALOG NUMBER: P3A09R459840DE010 E3CA451MW

Luminous Intensity Polar Plot



TEST NUMBER: P1343100

CATALOG NUMBER: P3A09R459840DE010 E3CA451MW

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	100		
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86		
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	80	72	66	77	70	65	74	69	64	71	67	63	61		
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	76	63	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43		
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36		
7	63	49	40	34	61	48	40	33	47	39	33	45	38	33	44	37	33	31		
8	58	44	35	29	56	43	35	29	42	34	29	40	33	28	39	33	28	26		
9	53	39	31	25	52	39	30	25	38	30	25	36	29	25	35	29	24	22		
10	49	36	27	22	48	35	27	22	34	27	21	33	26	21	32	26	21	19		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	8903	8903	8903	8903	8903
5°	10588	9839	8805	8166	8166
10°	16922	11489	8261	7749	7749
15°	42134	15414	7514	7242	7514
20°	110983	23009	6487	6907	7304
25°	222860	34115	5613	6460	7162
30°	328557	45678	4558	6305	7343
35°	414414	53565	3882	6210	7602
40°	442171	54130	3492	6469	8130
45°	459397	45152	3225	7008	8807
50°	458663	31453	3173	7505	9893
55°	389836	13954	3326	8411	10857
60°	261997	2807	3289	9429	12455
65°	69528	1193	3321	10222	14165
70°	1859	1475	3334	11156	15964
75°	1440	1440	3474	11777	18216
80°	1515	2147	3662	12502	20457
85°	1510	3019	5787	13083	20379

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 471253 cd/sqm

TEST NUMBER: P1343100

CATALOG NUMBER: P3A09R459840DE010 E3CA451MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.0	0.6
10°-20°	19.8	2.8
20°-30°	81.7	11.6
30°-40°	172.1	24.5
40°-50°	212.3	30.2
50°-60°	159.2	22.7
60°-70°	41.0	5.8
70°-80°	8.5	1.2
80°-90°	3.4	0.5
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°	105.5	15.0
0°-40°	277.6	39.5
0°-60°	649.1	92.5
0°-90°	702.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	702.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	41	41	41	41	41	
5°	48	45	40	37	37	5
15°	186	68	33	32	33	68
25°	921	141	23	27	30	429
35°	1548	200	14	23	28	943
45°	1481	146	10	23	28	1134
55°	1020	36	9	22	28	880
65°	134	2	6	20	27	193
75°	2	2	4	14	22	2
85°	1	1	2	5	8	1
90°	0	0	0	0	0	

TEST NUMBER: P1343100

CATALOG NUMBER: P3A09R459840DE010 E3CA451MW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	40.6	40.6	40.6	40.6	40.6	40.6	40.6	40.6	40.6	40.6	40.6
2.5°	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.3	41.8	40.6	39.4
5°	48.1	47.6	47.6	47.6	47.0	46.4	46.4	44.7	42.3	40.0	38.3
7.5°	56.8	56.8	56.3	55.1	54.5	53.4	52.2	47.6	42.3	38.9	36.5
10°	76.0	74.8	73.1	71.9	69.0	65.0	62.1	51.6	41.8	37.1	35.4
12.5°	113.7	116.0	110.2	104.4	96.3	88.7	79.5	58.6	41.8	35.4	33.6
15°	185.6	189.7	178.7	167.1	147.3	128.8	111.4	67.9	40.6	33.1	31.3
17.5°	303.4	308.6	290.0	262.8	232.0	194.9	163.0	80.6	39.4	30.7	29.6
20°	475.6	475.1	439.1	404.9	345.7	291.2	231.4	98.6	37.7	27.8	27.8
22.5°	687.4	689.7	645.6	584.1	500.0	412.4	317.3	119.5	35.4	25.5	26.1
25°	921.1	901.4	849.2	774.4	667.1	545.8	420.5	141.0	33.1	23.2	24.4
27.5°	1116.0	1096.9	1037.1	948.4	832.9	689.1	525.5	162.4	30.2	20.9	22.6
30°	1297.6	1273.2	1201.3	1100.9	963.5	808.0	624.1	180.4	26.7	18.0	20.9
32.5°	1447.2	1425.2	1343.4	1226.8	1077.1	910.1	707.7	194.3	23.2	16.2	19.7
35°	1548.1	1525.5	1450.1	1321.9	1158.9	984.3	775.5	200.1	20.3	14.5	19.1
37.5°	1571.3	1559.2	1505.2	1385.1	1215.2	1031.9	819.0	198.4	16.8	13.3	18.0
40°	1544.7	1547.6	1522.0	1422.3	1245.4	1052.2	837.0	189.1	13.9	12.2	17.4
42.5°	1510.4	1518.0	1516.2	1437.4	1258.1	1053.4	829.5	170.5	11.0	11.0	16.8
45°	1481.4	1489.0	1499.4	1431.0	1249.4	1038.3	805.7	145.6	8.1	10.4	16.8
47.5°	1428.7	1436.8	1451.9	1379.9	1205.3	999.4	762.8	118.3	5.8	9.9	16.2
50°	1344.5	1348.6	1344.5	1263.9	1120.6	936.8	693.2	92.2	4.1	9.3	16.2
52.5°	1258.1	1250.0	1216.4	1114.3	986.1	837.6	605.6	65.5	2.9	8.7	15.7
55°	1019.7	1007.0	982.0	919.4	846.3	715.8	489.6	36.5	2.9	8.7	15.1
57.5°	710.6	717.5	726.2	713.5	679.8	563.8	371.8	16.2	2.9	8.1	15.1
60°	597.4	591.6	592.2	584.1	528.4	411.3	255.8	6.4	2.9	7.5	14.5
62.5°	356.7	360.8	368.3	370.1	315.0	229.7	134.0	2.9	2.9	7.0	13.9
65°	134.0	140.4	123.0	106.7	84.7	62.1	31.3	2.3	3.5	6.4	12.8
67.5°	4.1	4.6	5.8	5.2	5.2	4.6	3.5	2.3	3.5	5.8	12.2
70°	2.9	2.9	2.9	2.9	2.9	2.3	2.3	2.3	2.9	5.2	11.0
72.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.9	4.6	9.9
75°	1.7	2.3	1.7	1.7	1.7	1.7	1.7	1.7	2.9	4.1	8.1
77.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	2.3	3.5	7.0
80°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.7	2.3	2.9	5.8
82.5°	1.2	1.2	1.2	0.6	1.2	1.2	1.2	1.2	2.3	2.3	4.6
85°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.2	1.7	2.3	2.9
87.5°	0.0	0.0	0.0	0.0	0.6	0.6	0.6	1.2	1.7	1.7	1.7
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: P1343100

CATALOG NUMBER: P3A09R459840DE010 E3CA451MW

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	40.6	40.6	40.6
2.5°	38.3	38.3	38.3
5°	37.1	37.1	37.1
7.5°	36.0	36.0	36.0
10°	34.8	34.8	34.8
12.5°	33.6	33.6	34.2
15°	31.9	33.1	33.1
17.5°	30.7	31.9	32.5
20°	29.6	30.7	31.3
22.5°	27.8	29.6	30.7
25°	26.7	29.0	29.6
27.5°	25.5	28.4	29.6
30°	24.9	27.8	29.0
32.5°	23.8	27.3	28.4
35°	23.2	27.3	28.4
37.5°	23.2	26.7	28.4
40°	22.6	26.7	28.4
42.5°	22.6	26.7	28.4
45°	22.6	26.7	28.4
47.5°	22.0	26.7	29.0
50°	22.0	27.3	29.0
52.5°	22.0	27.3	29.0
55°	22.0	27.3	28.4
57.5°	21.5	26.7	28.4
60°	21.5	26.7	28.4
62.5°	20.3	26.1	27.8
65°	19.7	25.5	27.3
67.5°	18.6	24.9	26.1
70°	17.4	23.2	24.9
72.5°	15.7	22.0	23.8
75°	13.9	20.3	21.5
77.5°	12.2	18.0	19.1
80°	9.9	15.1	16.2
82.5°	7.5	11.6	12.2
85°	5.2	7.5	8.1
87.5°	2.3	3.5	4.1
90°	0.0	0.0	0.0

(END OF REPORT)