

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: P1310117

Luminaire Tested: P3SQAS09R459040DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1310117
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-84)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS09R459040DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R45 optic, 4000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

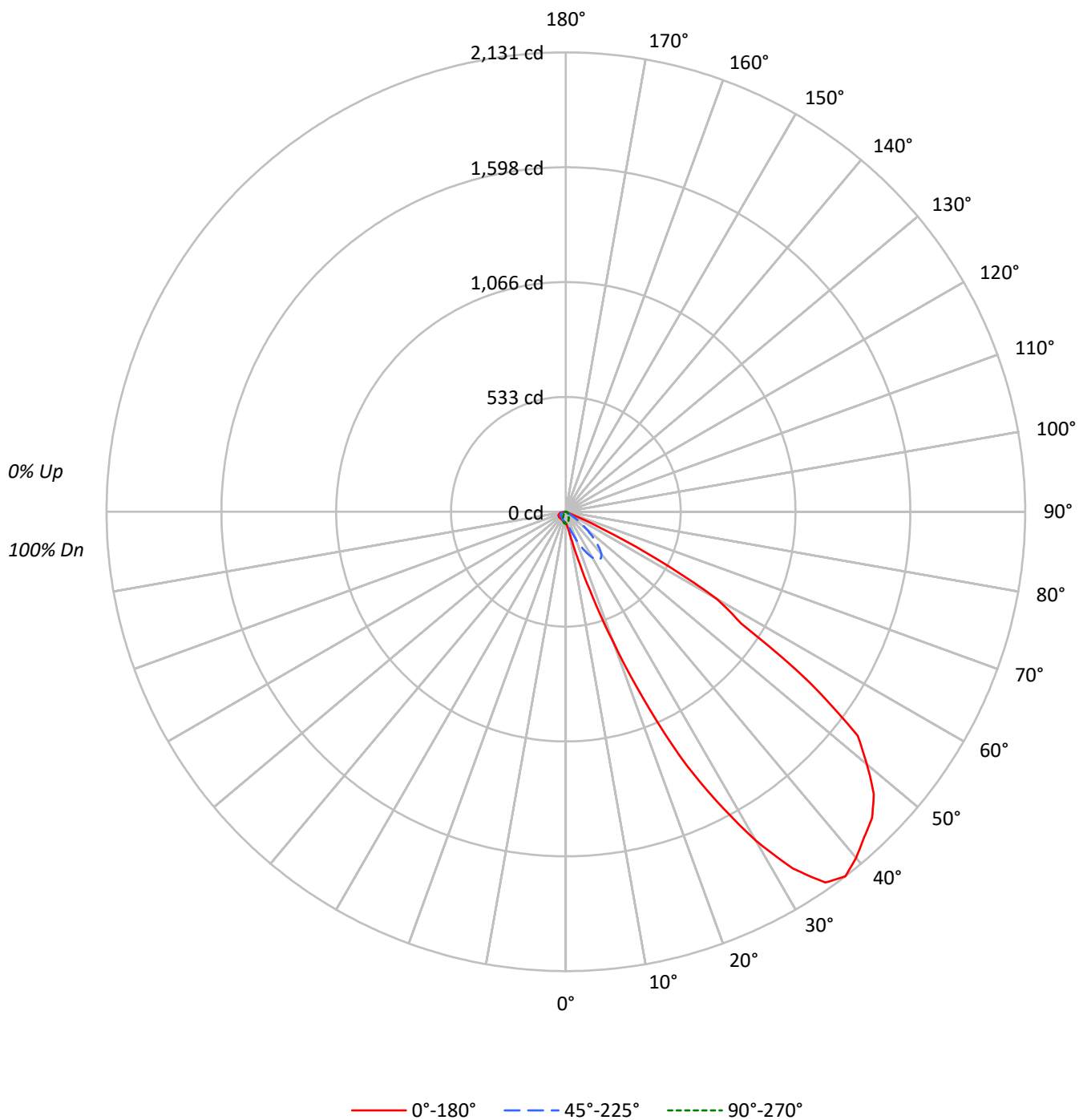
Lumens per Lamp: N/A
Luminaire Lumens: 952.0 lumens
Efficiency: N/A
Efficacy: 85.8 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11.1
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: P1310117

CATALOG NUMBER: P3SQAS09R459040DE010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1310117

CATALOG NUMBER: P3SQAS09R459040DE010 E3SQCA451MMS

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	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°	9489	9489	9489	9489	9489
5°	11289	10477	9387	8696	8696
10°	18013	12242	8796	8254	8254
15°	44878	16403	7988	7720	7988
20°	118213	24504	6928	7349	7789
25°	237362	36314	5986	6879	7620
30°	349944	48643	4852	6722	7815
35°	441409	57060	4142	6623	8094
40°	470954	57644	3710	6902	8656
45°	489311	48079	3459	7477	9377
50°	488545	33518	3376	8011	10530
55°	415231	14893	3543	8978	11560
60°	279070	2997	3513	10023	13261
65°	74045	1263	3545	10881	15078
70°	1964	1561	3575	11884	17020
75°	1597	1597	3660	12576	19364
80°	1587	2380	3868	13290	21819
85°	1581	3162	6126	14030	21736

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 501915 cd/sqm

TEST NUMBER: P1310117

CATALOG NUMBER: P3SQAS09R459040DE010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.5	0.6
10°-20°	26.9	2.8
20°-30°	110.7	11.6
30°-40°	233.4	24.5
40°-50°	288.0	30.2
50°-60°	215.8	22.7
60°-70°	55.5	5.8
70°-80°	11.5	1.2
80°-90°	4.7	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°	143.1	15.0
0°-40°	376.5	39.5
0°-60°	880.3	92.5
0°-90°	952.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	952.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	55	55	55	55	55	
5°	65	61	54	50	50	7
15°	252	92	45	43	45	92
25°	1249	191	32	36	40	582
35°	2100	271	20	32	38	1279
45°	2009	197	14	31	38	1537
55°	1383	50	12	30	38	1194
65°	182	3	9	27	37	262
75°	2	2	6	19	29	3
85°	1	2	3	7	11	1
90°	0	0	0	0	0	

TEST NUMBER: P1310117

CATALOG NUMBER: P3SQAS09R459040DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	55.1	55.1	55.1	55.1	55.1	55.1	55.1	55.1	55.1	55.1	55.1
2.5°	58.2	58.2	58.2	58.2	58.2	58.2	58.2	57.4	56.6	55.1	53.5
5°	65.3	64.5	64.5	64.5	63.7	62.9	62.9	60.6	57.4	54.3	51.9
7.5°	77.1	77.1	76.3	74.7	73.9	72.4	70.8	64.5	57.4	52.7	49.6
10°	103.0	101.5	99.1	97.5	93.6	88.1	84.2	70.0	56.6	50.3	48.0
12.5°	154.2	157.3	149.5	141.6	130.6	120.4	107.8	79.4	56.6	48.0	45.6
15°	251.7	257.2	242.3	226.5	199.8	174.6	151.0	92.0	55.1	44.8	42.5
17.5°	411.4	418.5	393.3	356.3	314.6	264.3	221.0	109.3	53.5	41.7	40.1
20°	645.0	644.2	595.5	549.1	468.8	394.9	313.9	133.7	51.1	37.8	37.8
22.5°	932.1	935.3	875.5	792.1	678.1	559.3	430.3	162.0	48.0	34.6	35.4
25°	1249.1	1222.4	1151.6	1050.1	904.6	740.2	570.3	191.1	44.8	31.5	33.0
27.5°	1513.4	1487.5	1406.5	1286.1	1129.6	934.5	712.7	220.3	40.9	28.3	30.7
30°	1759.7	1726.6	1629.1	1493.0	1306.6	1095.8	846.4	244.6	36.2	24.4	28.3
32.5°	1962.6	1932.7	1821.8	1663.7	1460.7	1234.2	959.7	263.5	31.5	22.0	26.7
35°	2099.5	2068.8	1966.5	1792.7	1571.7	1334.9	1051.7	271.4	27.5	19.7	26.0
37.5°	2130.9	2114.4	2041.3	1878.4	1648.0	1399.4	1110.7	269.0	22.8	18.1	24.4
40°	2094.8	2098.7	2064.1	1928.8	1688.9	1426.9	1135.1	256.4	18.9	16.5	23.6
42.5°	2048.3	2058.6	2056.2	1949.2	1706.2	1428.5	1124.9	231.3	14.9	14.9	22.8
45°	2009.0	2019.2	2033.4	1940.6	1694.4	1408.0	1092.6	197.4	11.0	14.2	22.8
47.5°	1937.4	1948.4	1968.9	1871.4	1634.6	1355.3	1034.4	160.5	7.9	13.4	22.0
50°	1823.4	1828.9	1823.4	1714.0	1519.7	1270.4	940.0	125.1	5.5	12.6	22.0
52.5°	1706.2	1695.2	1649.5	1511.1	1337.2	1135.9	821.2	88.9	3.9	11.8	21.2
55°	1382.9	1365.6	1331.7	1246.8	1147.7	970.7	663.9	49.6	3.9	11.8	20.5
57.5°	963.6	973.0	984.8	967.5	921.9	764.6	504.2	22.0	3.9	11.0	20.5
60°	810.2	802.3	803.1	792.1	716.6	557.7	346.9	8.7	3.9	10.2	19.7
62.5°	483.8	489.3	499.5	501.9	427.1	311.5	181.7	3.9	3.9	9.4	18.9
65°	181.7	190.4	166.8	144.7	114.8	84.2	42.5	3.1	4.7	8.7	17.3
67.5°	5.5	6.3	7.9	7.1	7.1	6.3	4.7	3.1	4.7	7.9	16.5
70°	3.9	3.9	3.9	3.9	3.9	3.1	3.1	3.1	3.9	7.1	14.9
72.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.9	6.3	13.4
75°	2.4	3.1	2.4	2.4	2.4	2.4	2.4	2.4	3.9	5.5	11.0
77.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	3.1	4.7	9.4
80°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.4	3.1	3.9	7.9
82.5°	1.6	1.6	1.6	0.8	1.6	1.6	1.6	1.6	3.1	3.1	6.3
85°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6	2.4	3.1	3.9
87.5°	0.0	0.0	0.0	0.0	0.8	0.8	0.8	1.6	2.4	2.4	2.4
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: P1310117

CATALOG NUMBER: P3SQAS09R459040DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	55.1	55.1	55.1
2.5°	51.9	51.9	51.9
5°	50.3	50.3	50.3
7.5°	48.8	48.8	48.8
10°	47.2	47.2	47.2
12.5°	45.6	45.6	46.4
15°	43.3	44.8	44.8
17.5°	41.7	43.3	44.1
20°	40.1	41.7	42.5
22.5°	37.8	40.1	41.7
25°	36.2	39.3	40.1
27.5°	34.6	38.5	40.1
30°	33.8	37.8	39.3
32.5°	32.3	37.0	38.5
35°	31.5	37.0	38.5
37.5°	31.5	36.2	38.5
40°	30.7	36.2	38.5
42.5°	30.7	36.2	38.5
45°	30.7	36.2	38.5
47.5°	29.9	36.2	39.3
50°	29.9	37.0	39.3
52.5°	29.9	37.0	39.3
55°	29.9	37.0	38.5
57.5°	29.1	36.2	38.5
60°	29.1	36.2	38.5
62.5°	27.5	35.4	37.8
65°	26.7	34.6	37.0
67.5°	25.2	33.8	35.4
70°	23.6	31.5	33.8
72.5°	21.2	29.9	32.3
75°	18.9	27.5	29.1
77.5°	16.5	24.4	26.0
80°	13.4	20.5	22.0
82.5°	10.2	15.7	16.5
85°	7.1	10.2	11.0
87.5°	3.1	4.7	5.5
90°	0.0	0.0	0.0

(END OF REPORT)