

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: P1311371

Luminaire Tested: P3SQAS13R509050DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1311371
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-79)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS13R509050DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R50 optic, 5000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

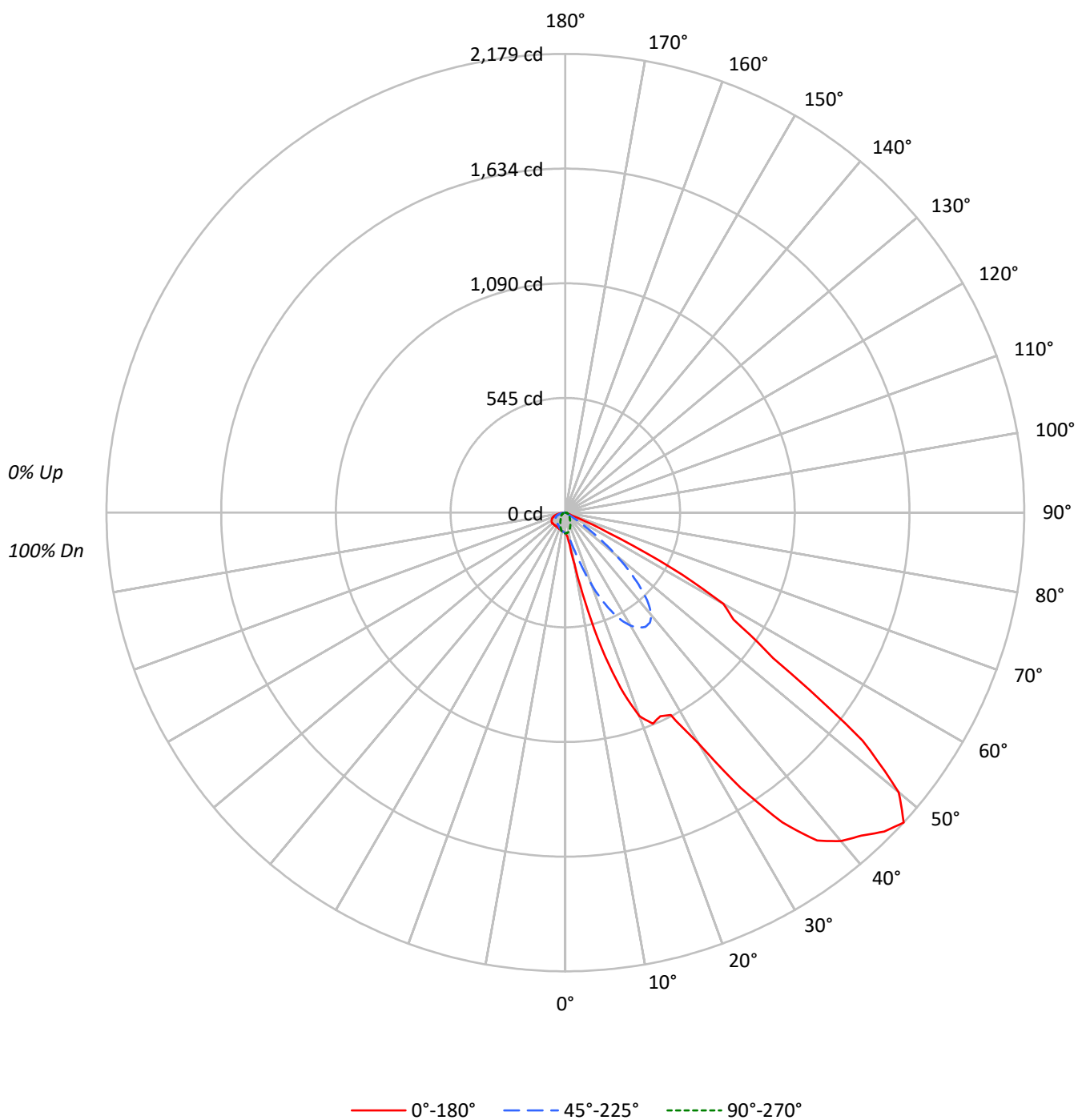
Lumens per Lamp: N/A
Luminaire Lumens: 1229.0 lumens
Efficiency: N/A
Efficacy: 84.2 lumens/watt
Spacing Criteria (0/90/45): 3.58 / 0.82 / 1.91
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.6
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: P1311371

CATALOG NUMBER: P3SQAS13R509050DE010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1311371

CATALOG NUMBER: P3SQAS13R509050DE010 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	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86		
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	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	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51		
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43		
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	50	43	39	37		
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31		
8	58	44	36	30	57	44	35	29	42	35	29	41	34	29	40	34	29	27		
9	54	40	31	26	53	39	31	26	38	31	25	37	30	25	36	30	25	23		
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22	20		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	16826	16826	16826	16826	16826
5°	20002	18723	16700	15974	15784
10°	43073	23207	15966	15407	15599
15°	119246	38049	14389	14763	15334
20°	188517	66731	12444	14204	14974
25°	202720	98035	10699	13720	15126
30°	251644	123078	9287	13503	15631
35°	377621	139266	8031	13624	16525
40°	457982	143188	7149	14074	17424
45°	521753	122803	6990	15003	19144
50°	553760	84747	7100	16210	21327
55°	361754	34110	7026	17535	23601
60°	298359	5856	6958	19013	25971
65°	89979	3016	6479	20335	28567
70°	3726	3223	6395	20847	31018
75°	3527	3527	6388	21160	33936
80°	3174	3174	6347	21026	34713
85°	2174	4150	8299	20946	33593

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47.5°

Luminance: 555551 cd/sqm

TEST NUMBER: P1311371

CATALOG NUMBER: P3SQAS13R509050DE010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	10.2	0.8
10°-20°	58.2	4.7
20°-30°	149.6	12.2
30°-40°	268.7	21.9
40°-50°	358.9	29.2
50°-60°	273.4	22.2
60°-70°	83.0	6.8
70°-80°	19.8	1.6
80°-90°	7.2	0.6
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°	218.0	17.7
0°-40°	486.7	39.6
0°-60°	1119.0	91.1
0°-90°	1229.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1229.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	98	98	98	98	98	
5°	116	108	97	92	91	15
15°	669	213	81	83	86	197
25°	1067	516	56	72	80	509
35°	1796	662	38	65	79	1103
45°	2142	504	29	62	79	1638
55°	1205	114	23	58	79	1199
65°	221	7	16	50	70	305
75°	5	5	10	32	51	6
85°	1	2	4	11	17	2
90°	0	0	0	0	0	

TEST NUMBER: P1311371

CATALOG NUMBER: P3SQAS13R509050DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
2.5°	104.0	104.0	104.0	104.0	104.0	104.0	103.0	103.0	103.0	100.8	98.7
5°	115.7	116.8	115.7	115.7	113.6	113.6	111.5	111.5	108.3	101.9	96.6
7.5°	151.8	150.7	149.7	145.4	142.2	134.8	131.6	126.3	116.8	101.9	94.5
10°	246.3	239.9	235.7	226.1	205.9	193.2	176.2	159.2	132.7	101.9	91.3
12.5°	427.8	426.7	414.0	382.2	353.5	314.2	272.8	231.4	163.5	99.8	87.0
15°	668.8	659.2	641.2	604.0	553.1	491.5	417.2	343.9	213.4	96.6	80.7
17.5°	874.7	863.0	849.2	812.1	753.7	676.2	587.0	486.2	281.3	92.4	74.3
20°	1028.6	1021.2	1009.5	979.8	924.6	854.5	754.8	632.7	364.1	87.0	67.9
22.5°	1084.9	1083.8	1086.0	1075.3	1047.7	992.5	897.0	769.6	445.8	80.7	61.6
25°	1066.8	1065.8	1079.6	1093.4	1099.8	1077.5	1004.2	880.0	515.9	75.4	56.3
27.5°	1083.8	1080.6	1074.3	1076.4	1094.4	1107.2	1073.2	964.9	576.4	67.9	51.0
30°	1265.4	1247.3	1218.6	1169.8	1133.7	1130.5	1115.7	1031.8	618.9	60.5	46.7
32.5°	1548.8	1526.5	1474.5	1384.2	1298.3	1232.4	1185.7	1088.1	648.6	53.1	41.4
35°	1796.1	1780.2	1719.7	1630.5	1507.4	1384.2	1299.3	1170.9	662.4	46.7	38.2
37.5°	1963.8	1957.5	1898.0	1802.5	1677.2	1531.8	1419.3	1255.8	659.2	39.3	35.0
40°	2037.1	2018.0	1968.1	1887.4	1761.1	1630.5	1511.6	1309.9	636.9	31.8	31.8
42.5°	2080.6	2059.4	2005.2	1928.8	1804.6	1665.5	1522.2	1286.6	583.8	25.5	30.8
45°	2142.2	2119.9	2048.8	1967.0	1841.8	1680.4	1480.8	1203.8	504.2	19.1	28.7
47.5°	2179.3	2164.5	2111.4	2029.7	1877.9	1659.2	1385.3	1126.3	416.1	14.9	27.6
50°	2066.8	2051.9	2012.7	1956.4	1854.5	1588.1	1301.4	1001.0	316.3	11.7	26.5
52.5°	1779.1	1791.9	1799.3	1815.2	1740.9	1428.8	1176.2	901.2	213.4	9.6	24.4
55°	1204.8	1224.0	1245.2	1308.9	1395.9	1271.7	1044.6	779.2	113.6	9.6	23.4
57.5°	946.9	940.5	934.2	929.9	997.8	1048.8	918.2	623.1	48.8	9.6	21.2
60°	866.2	847.1	834.4	837.6	871.5	851.4	727.2	406.6	17.0	9.6	20.2
62.5°	567.9	582.8	611.4	660.3	636.9	546.7	422.5	161.4	8.5	9.6	18.0
65°	220.8	213.4	220.8	234.6	202.8	150.7	94.5	28.7	7.4	8.5	15.9
67.5°	29.7	26.5	20.2	12.7	11.7	10.6	8.5	7.4	7.4	8.5	14.9
70°	7.4	7.4	7.4	7.4	7.4	7.4	7.4	6.4	6.4	7.4	12.7
72.5°	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	7.4	10.6
75°	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	6.4	9.6
77.5°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	5.3	7.4
80°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	4.2	6.4
82.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	3.2	3.2	4.2	5.3
85°	1.1	2.1	1.1	2.1	2.1	2.1	2.1	2.1	2.1	3.2	4.2
87.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.1	3.2	3.2
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: P1311371

CATALOG NUMBER: P3SQAS13R509050DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	97.7	97.7	97.7	97.7
2.5°	96.6	94.5	94.5	94.5
5°	94.5	92.4	92.4	91.3
7.5°	91.3	90.2	90.2	90.2
10°	89.2	88.1	89.2	89.2
12.5°	84.9	86.0	87.0	87.0
15°	80.7	82.8	84.9	86.0
17.5°	76.4	80.7	82.8	83.9
20°	72.2	77.5	80.7	81.7
22.5°	69.0	74.3	78.6	80.7
25°	64.8	72.2	77.5	79.6
27.5°	60.5	69.0	75.4	78.6
30°	57.3	67.9	75.4	78.6
32.5°	54.1	65.8	74.3	77.5
35°	52.0	64.8	74.3	78.6
37.5°	49.9	63.7	74.3	77.5
40°	48.8	62.6	74.3	77.5
42.5°	47.8	62.6	74.3	78.6
45°	45.6	61.6	74.3	78.6
47.5°	44.6	61.6	74.3	78.6
50°	43.5	60.5	74.3	79.6
52.5°	42.5	59.4	74.3	79.6
55°	40.3	58.4	73.2	78.6
57.5°	39.3	57.3	72.2	76.4
60°	37.2	55.2	70.1	75.4
62.5°	35.0	53.1	67.9	72.2
65°	31.8	49.9	64.8	70.1
67.5°	28.7	45.6	61.6	66.9
70°	25.5	41.4	57.3	61.6
72.5°	22.3	37.2	53.1	56.3
75°	19.1	31.8	46.7	51.0
77.5°	15.9	27.6	39.3	42.5
80°	11.7	21.2	31.8	35.0
82.5°	9.6	15.9	23.4	25.5
85°	6.4	10.6	14.9	17.0
87.5°	3.2	5.3	7.4	8.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)