

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: P1309177

Luminaire Tested: P3SQAS13R509035DE010 E3SQCA451MW

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1309177
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: P3SQAS13R509035DE010 E3SQCA451MW
Description: 3in Adjustable LED luminaire with, R50 optic, 3500K CCT AND, 90CRI , E3SQCA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

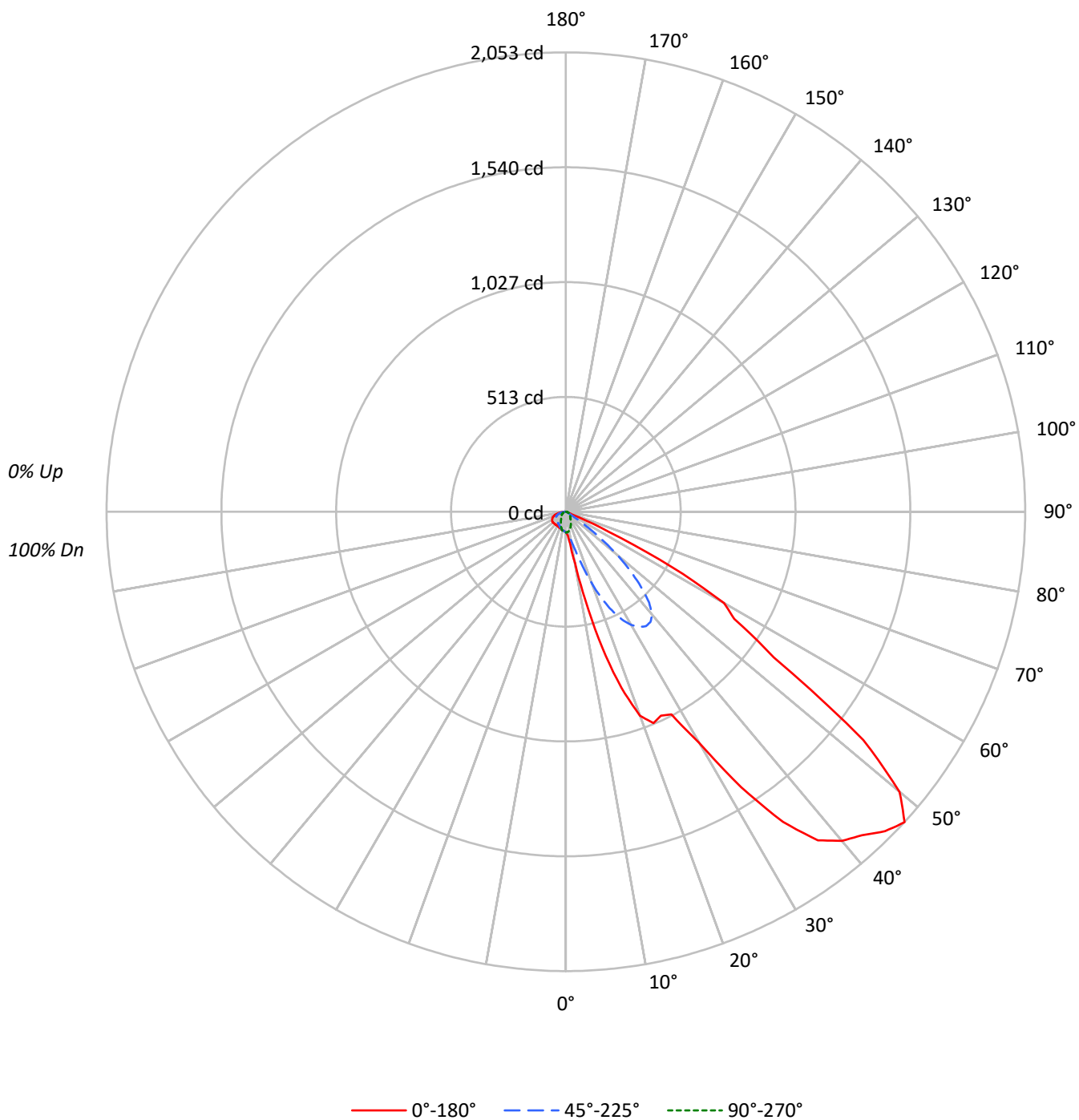
Lumens per Lamp: N/A
Luminaire Lumens: 1158.0 lumens
Efficiency: N/A
Efficacy: 79.3 lumens/watt
Spacing Criteria (0/90/45): 3.58 / 0.82 / 1.91
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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: P1309177

CATALOG NUMBER: P3SQAS13R509035DE010 E3SQCA451MW

Luminous Intensity Polar Plot



TEST NUMBER: P1309177

CATALOG NUMBER: P3SQAS13R509035DE010 E3SQCA451MW

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°	15844	15844	15844	15844	15844
5°	18844	17634	15732	15041	14868
10°	40572	21860	15040	14515	14690
15°	112346	35838	13551	13907	14442
20°	177631	62882	11730	13379	14112
25°	191015	92372	10071	12922	14252
30°	237107	115959	8750	12727	14716
35°	355819	131214	7569	12825	15558
40°	431521	134915	6745	13264	16412
45°	491601	115715	6576	14126	18023
50°	521769	79870	6698	15272	20095
55°	340856	32128	6606	16514	22219
60°	281136	5511	6544	17911	24456
65°	84763	2853	6113	19153	26896
70°	3525	3021	6043	19638	29206
75°	3327	3327	5989	19963	31940
80°	2975	2975	5951	19836	32729
85°	1976	3952	7904	19760	31617

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47.5°

Luminance: 523456 cd/sqm

TEST NUMBER: P1309177

CATALOG NUMBER: P3SQAS13R509035DE010 E3SQCA451MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	9.6	0.8
10°-20°	54.8	4.7
20°-30°	141.0	12.2
30°-40°	253.2	21.9
40°-50°	338.2	29.2
50°-60°	257.6	22.2
60°-70°	78.2	6.8
70°-80°	18.7	1.6
80°-90°	6.8	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°	205.4	17.7
0°-40°	458.6	39.6
0°-60°	1054.4	91.1
0°-90°	1158.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1158.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	92	92	92	92	92	
5°	109	102	91	87	86	14
15°	630	201	76	78	81	185
25°	1005	486	53	68	75	480
35°	1692	624	36	61	74	1039
45°	2018	475	27	58	74	1543
55°	1135	107	22	55	74	1129
65°	208	7	15	47	66	288
75°	5	5	9	30	48	5
85°	1	2	4	10	16	1
90°	0	0	0	0	0	

TEST NUMBER: P1309177

CATALOG NUMBER: P3SQAS13R509035DE010 E3SQCA451MW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
2.5°	98.0	98.0	98.0	98.0	98.0	98.0	97.0	97.0	97.0	95.0	93.0
5°	109.0	110.0	109.0	109.0	107.0	107.0	105.0	105.0	102.0	96.0	91.0
7.5°	143.0	142.0	141.0	137.0	134.0	127.0	124.0	119.0	110.0	96.0	89.0
10°	232.0	226.0	222.0	213.0	194.0	182.0	166.0	150.0	125.0	96.0	86.0
12.5°	403.1	402.1	390.1	360.1	333.1	296.1	257.1	218.0	154.0	94.0	82.0
15°	630.1	621.1	604.1	569.1	521.1	463.1	393.1	324.1	201.0	91.0	76.0
17.5°	824.2	813.2	800.2	765.2	710.1	637.1	553.1	458.1	265.1	87.0	70.0
20°	969.2	962.2	951.2	923.2	871.2	805.2	711.1	596.1	343.1	82.0	64.0
22.5°	1022.2	1021.2	1023.2	1013.2	987.2	935.2	845.2	725.2	420.1	76.0	58.0
25°	1005.2	1004.2	1017.2	1030.2	1036.2	1015.2	946.2	829.2	486.1	71.0	53.0
27.5°	1021.2	1018.2	1012.2	1014.2	1031.2	1043.2	1011.2	909.2	543.1	64.0	48.0
30°	1192.3	1175.2	1148.2	1102.2	1068.2	1065.2	1051.2	972.2	583.1	57.0	44.0
32.5°	1459.3	1438.3	1389.3	1304.3	1223.3	1161.2	1117.2	1025.2	611.1	50.0	39.0
35°	1692.4	1677.4	1620.3	1536.3	1420.3	1304.3	1224.3	1103.2	624.1	44.0	36.0
37.5°	1850.4	1844.4	1788.4	1698.4	1580.3	1443.3	1337.3	1183.2	621.1	37.0	33.0
40°	1919.4	1901.4	1854.4	1778.4	1659.3	1536.3	1424.3	1234.3	600.1	30.0	30.0
42.5°	1960.4	1940.4	1889.4	1817.4	1700.4	1569.3	1434.3	1212.3	550.1	24.0	29.0
45°	2018.4	1997.4	1930.4	1853.4	1735.4	1583.3	1395.3	1134.2	475.1	18.0	27.0
47.5°	2053.4	2039.4	1989.4	1912.4	1769.4	1563.3	1305.3	1061.2	392.1	14.0	26.0
50°	1947.4	1933.4	1896.4	1843.4	1747.4	1496.3	1226.3	943.2	298.1	11.0	25.0
52.5°	1676.4	1688.4	1695.4	1710.4	1640.3	1346.3	1108.2	849.2	201.0	9.0	23.0
55°	1135.2	1153.2	1173.2	1233.3	1315.3	1198.3	984.2	734.2	107.0	9.0	22.0
57.5°	892.2	886.2	880.2	876.2	940.2	988.2	865.2	587.1	46.0	9.0	20.0
60°	816.2	798.2	786.2	789.2	821.2	802.2	685.1	383.1	16.0	9.0	19.0
62.5°	535.1	549.1	576.1	622.1	600.1	515.1	398.1	152.0	8.0	9.0	17.0
65°	208.0	201.0	208.0	221.0	191.0	142.0	89.0	27.0	7.0	8.0	15.0
67.5°	28.0	25.0	19.0	12.0	11.0	10.0	8.0	7.0	7.0	8.0	14.0
70°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.0	6.0	7.0	12.0
72.5°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	7.0	10.0
75°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	6.0	9.0
77.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.0	7.0
80°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.0	6.0
82.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	4.0	5.0
85°	1.0	2.0	1.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	4.0
87.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0	3.0
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: P1309177

CATALOG NUMBER: P3SQAS13R509035DE010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	92.0	92.0	92.0	92.0
2.5°	91.0	89.0	89.0	89.0
5°	89.0	87.0	87.0	86.0
7.5°	86.0	85.0	85.0	85.0
10°	84.0	83.0	84.0	84.0
12.5°	80.0	81.0	82.0	82.0
15°	76.0	78.0	80.0	81.0
17.5°	72.0	76.0	78.0	79.0
20°	68.0	73.0	76.0	77.0
22.5°	65.0	70.0	74.0	76.0
25°	61.0	68.0	73.0	75.0
27.5°	57.0	65.0	71.0	74.0
30°	54.0	64.0	71.0	74.0
32.5°	51.0	62.0	70.0	73.0
35°	49.0	61.0	70.0	74.0
37.5°	47.0	60.0	70.0	73.0
40°	46.0	59.0	70.0	73.0
42.5°	45.0	59.0	70.0	74.0
45°	43.0	58.0	70.0	74.0
47.5°	42.0	58.0	70.0	74.0
50°	41.0	57.0	70.0	75.0
52.5°	40.0	56.0	70.0	75.0
55°	38.0	55.0	69.0	74.0
57.5°	37.0	54.0	68.0	72.0
60°	35.0	52.0	66.0	71.0
62.5°	33.0	50.0	64.0	68.0
65°	30.0	47.0	61.0	66.0
67.5°	27.0	43.0	58.0	63.0
70°	24.0	39.0	54.0	58.0
72.5°	21.0	35.0	50.0	53.0
75°	18.0	30.0	44.0	48.0
77.5°	15.0	26.0	37.0	40.0
80°	11.0	20.0	30.0	33.0
82.5°	9.0	15.0	22.0	24.0
85°	6.0	10.0	14.0	16.0
87.5°	3.0	5.0	7.0	8.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)