

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: P1316283

Luminaire Tested: P3SQAS13R459827DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1316283
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: P3SQAS13R459827DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R45 optic, 2700K CCT AND, 98CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

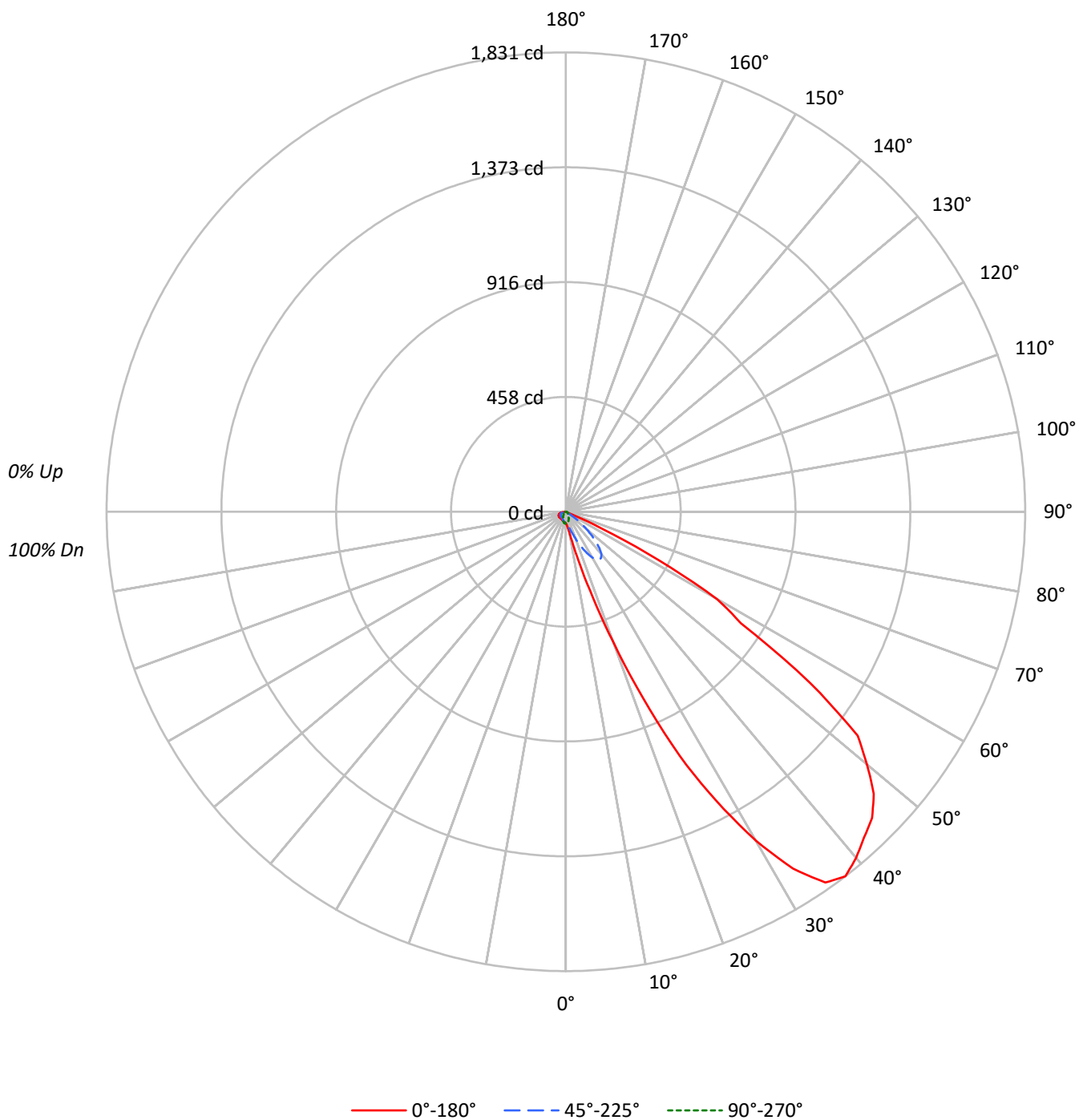
Lumens per Lamp: N/A
Luminaire Lumens: 818.0 lumens
Efficiency: N/A
Efficacy: 56.4 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.5
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: P1316283

CATALOG NUMBER: P3SQAS13R459827DE010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1316283

CATALOG NUMBER: P3SQAS13R459827DE010 E3SQCA451MMS

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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53
5	76	63	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38
7	63	49	40	34	61	48	40	33	47	39	33	45	38	33	44	37	33
8	58	44	35	29	56	43	35	29	42	34	29	40	33	28	39	33	28
9	53	39	31	25	52	39	30	25	38	30	25	36	29	25	35	29	24
10	49	36	27	22	48	35	27	22	34	27	21	33	26	21	32	26	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	8146	8146	8146	8146	8146
5°	9699	8990	8056	7486	7486
10°	15477	10528	7572	7100	7100
15°	38566	14103	6864	6633	6864
20°	101571	21058	5938	6323	6690
25°	203956	31202	5131	5910	6556
30°	300685	41802	4176	5787	6722
35°	379282	49029	3553	5677	6959
40°	404655	49528	3192	5935	7442
45°	420433	41308	2971	6430	8062
50°	419767	28803	2894	6886	9056
55°	356770	12791	3033	7717	9939
60°	239803	2549	3031	8611	11401
65°	63613	1100	3016	9373	12959
70°	1712	1360	3072	10222	14653
75°	1331	1331	3127	10780	16635
80°	1389	1984	3372	11406	18745
85°	1383	2766	5335	12054	18772

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 431277 cd/sqm

TEST NUMBER: P1316283

CATALOG NUMBER: P3SQAS13R459827DE010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.7	0.6
10°-20°	23.1	2.8
20°-30°	95.2	11.6
30°-40°	200.5	24.5
40°-50°	247.4	30.2
50°-60°	185.5	22.7
60°-70°	47.7	5.8
70°-80°	9.9	1.2
80°-90°	4.0	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°	122.9	15.0
0°-40°	323.5	39.5
0°-60°	756.4	92.5
0°-90°	818.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	818.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	47	47	47	47	47	
5°	56	52	47	43	43	6
15°	216	79	38	37	38	79
25°	1073	164	27	31	34	500
35°	1804	233	17	27	33	1099
45°	1726	170	12	26	33	1321
55°	1188	43	10	26	33	1026
65°	156	3	7	23	32	225
75°	2	2	5	16	25	2
85°	1	1	3	6	10	1
90°	0	0	0	0	0	

TEST NUMBER: P1316283

CATALOG NUMBER: P3SQAS13R459827DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.3
2.5°	50.0	50.0	50.0	50.0	50.0	50.0	50.0	49.3	48.7	47.3	46.0
5°	56.1	55.4	55.4	55.4	54.7	54.1	54.1	52.0	49.3	46.6	44.6
7.5°	66.2	66.2	65.6	64.2	63.5	62.2	60.8	55.4	49.3	45.3	42.6
10°	88.5	87.2	85.2	83.8	80.4	75.7	72.3	60.2	48.7	43.3	41.2
12.5°	132.5	135.2	128.4	121.7	112.2	103.4	92.6	68.3	48.7	41.2	39.2
15°	216.3	221.0	208.2	194.7	171.7	150.0	129.8	79.1	47.3	38.5	36.5
17.5°	353.5	359.6	337.9	306.2	270.4	227.1	189.9	93.9	46.0	35.8	34.5
20°	554.2	553.6	511.7	471.8	402.8	339.3	269.7	114.9	43.9	32.4	32.4
22.5°	800.9	803.6	752.3	680.6	582.6	480.6	369.7	139.2	41.2	29.7	30.4
25°	1073.3	1050.3	989.5	902.3	777.3	636.0	490.0	164.2	38.5	27.0	28.4
27.5°	1300.4	1278.1	1208.5	1105.1	970.6	803.0	612.4	189.3	35.1	24.3	26.4
30°	1512.0	1483.6	1399.8	1282.8	1122.7	941.5	727.3	210.2	31.1	21.0	24.3
32.5°	1686.4	1660.7	1565.4	1429.5	1255.1	1060.5	824.6	226.4	27.0	18.9	23.0
35°	1804.0	1777.6	1689.7	1540.4	1350.4	1147.0	903.7	233.2	23.7	16.9	22.3
37.5°	1831.0	1816.8	1753.9	1614.0	1416.0	1202.4	954.4	231.2	19.6	15.5	21.0
40°	1799.9	1803.3	1773.5	1657.3	1451.1	1226.1	975.3	220.3	16.2	14.2	20.3
42.5°	1760.0	1768.8	1766.8	1674.9	1466.0	1227.4	966.5	198.7	12.8	12.8	19.6
45°	1726.2	1735.0	1747.2	1667.4	1455.9	1209.8	938.8	169.6	9.5	12.2	19.6
47.5°	1664.7	1674.2	1691.8	1608.0	1404.5	1164.6	888.8	137.9	6.8	11.5	18.9
50°	1566.7	1571.5	1566.7	1472.8	1305.8	1091.6	807.7	107.5	4.7	10.8	18.9
52.5°	1466.0	1456.6	1417.3	1298.4	1149.0	976.0	705.6	76.4	3.4	10.1	18.2
55°	1188.2	1173.4	1144.3	1071.3	986.1	834.1	570.5	42.6	3.4	10.1	17.6
57.5°	828.0	836.1	846.2	831.3	792.1	657.0	433.2	18.9	3.4	9.5	17.6
60°	696.2	689.4	690.1	680.6	615.7	479.2	298.1	7.4	3.4	8.8	16.9
62.5°	415.7	420.4	429.2	431.2	367.0	267.7	156.1	3.4	3.4	8.1	16.2
65°	156.1	163.6	143.3	124.4	98.7	72.3	36.5	2.7	4.1	7.4	14.9
67.5°	4.7	5.4	6.8	6.1	6.1	5.4	4.1	2.7	4.1	6.8	14.2
70°	3.4	3.4	3.4	3.4	3.4	2.7	2.7	2.7	3.4	6.1	12.8
72.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	3.4	5.4	11.5
75°	2.0	2.7	2.0	2.0	2.0	2.0	2.0	2.0	3.4	4.7	9.5
77.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.7	4.1	8.1
80°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.0	2.7	3.4	6.8
82.5°	1.4	1.4	1.4	0.7	1.4	1.4	1.4	1.4	2.7	2.7	5.4
85°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.4	2.0	2.7	3.4
87.5°	0.0	0.0	0.0	0.0	0.7	0.7	0.7	1.4	2.0	2.0	2.0
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: P1316283

CATALOG NUMBER: P3SQAS13R459827DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	47.3	47.3	47.3
2.5°	44.6	44.6	44.6
5°	43.3	43.3	43.3
7.5°	41.9	41.9	41.9
10°	40.6	40.6	40.6
12.5°	39.2	39.2	39.9
15°	37.2	38.5	38.5
17.5°	35.8	37.2	37.9
20°	34.5	35.8	36.5
22.5°	32.4	34.5	35.8
25°	31.1	33.8	34.5
27.5°	29.7	33.1	34.5
30°	29.1	32.4	33.8
32.5°	27.7	31.8	33.1
35°	27.0	31.8	33.1
37.5°	27.0	31.1	33.1
40°	26.4	31.1	33.1
42.5°	26.4	31.1	33.1
45°	26.4	31.1	33.1
47.5°	25.7	31.1	33.8
50°	25.7	31.8	33.8
52.5°	25.7	31.8	33.8
55°	25.7	31.8	33.1
57.5°	25.0	31.1	33.1
60°	25.0	31.1	33.1
62.5°	23.7	30.4	32.4
65°	23.0	29.7	31.8
67.5°	21.6	29.1	30.4
70°	20.3	27.0	29.1
72.5°	18.2	25.7	27.7
75°	16.2	23.7	25.0
77.5°	14.2	21.0	22.3
80°	11.5	17.6	18.9
82.5°	8.8	13.5	14.2
85°	6.1	8.8	9.5
87.5°	2.7	4.1	4.7
90°	0.0	0.0	0.0

(END OF REPORT)