

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: P1311493

Luminaire Tested: P3SQAS17R359050DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1311493
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-77)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS17R359050DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R35 optic, 5000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

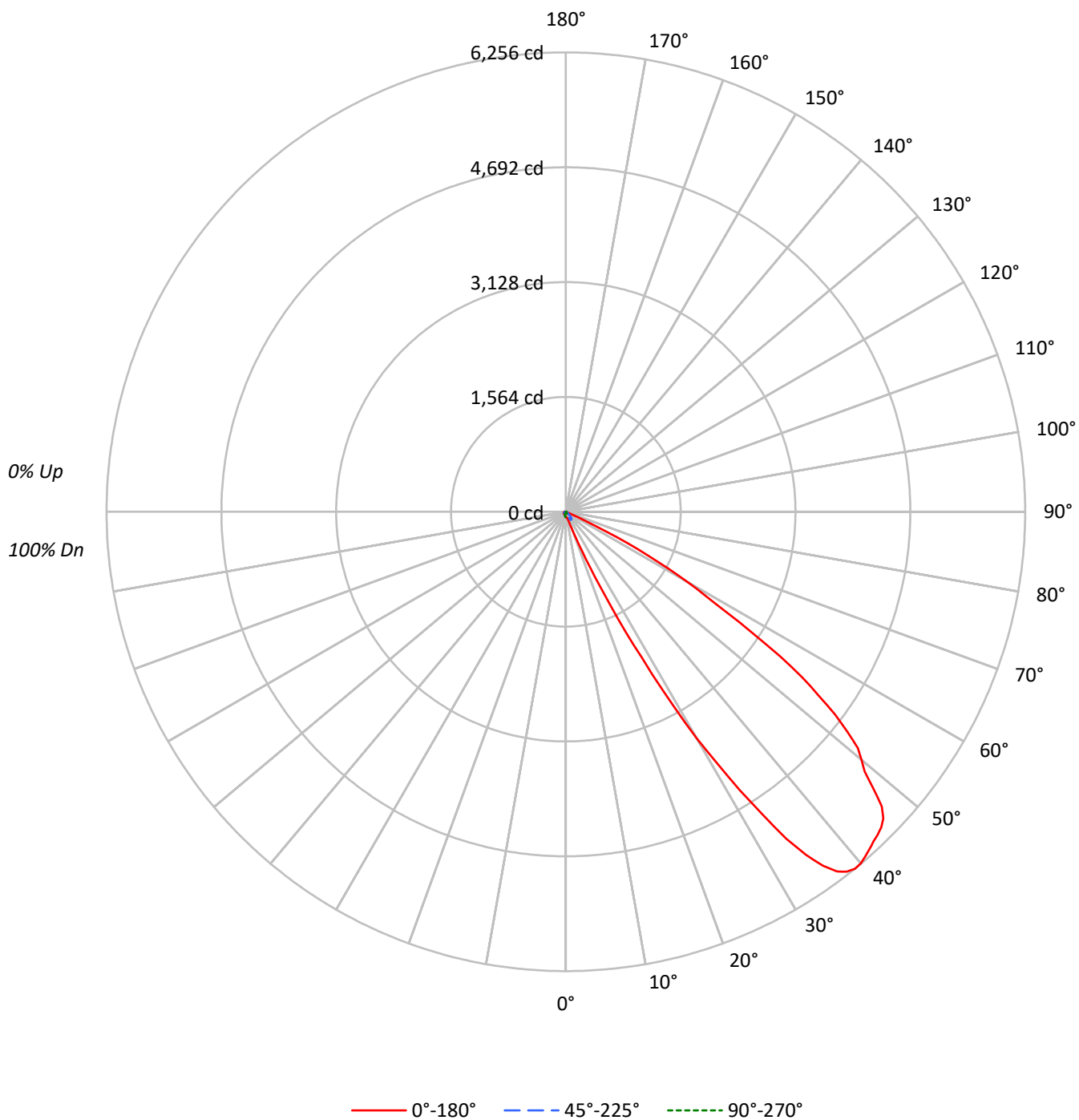
Lumens per Lamp: N/A
Luminaire Lumens: 1558.0 lumens
Efficiency: N/A
Efficacy: 73.5 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 21.2
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: P1311493

CATALOG NUMBER: P3SQAS17R359050DE010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1311493

CATALOG NUMBER: P3SQAS17R359050DE010 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	0
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	100	97	94		96	93	91		92	90	89	87
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	79	72	66	76	70	65		74	68	64		71	67	63	61
4	83	71	62	55	80	69	61	55	67	60	54		64	58	53		62	57	52	50
5	75	62	52	46	73	61	52	45	58	51	45		56	50	44		55	49	44	42
6	68	54	45	38	66	53	44	38	51	43	38		50	43	37		48	42	37	35
7	62	48	38	32	60	47	38	32	45	37	32		44	37	31		42	36	31	29
8	57	42	33	27	55	41	33	27	40	32	27		39	32	26		38	31	26	24
9	52	38	29	23	50	37	29	23	36	28	23		35	28	22		34	27	22	20
10	48	34	25	19	46	33	25	19	32	25	19		31	24	19		30	24	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	12348	12348	12348	12348	12348
5°	13381	13122	12153	10943	10701
10°	14025	12784	10825	9339	9339
15°	20059	12534	8772	8023	8273
20°	50272	13397	6964	6964	7734
25°	233315	17102	5340	6423	7221
30°	709294	23208	4196	5867	7278
35°	1198754	26911	3553	5614	7106
40°	1405174	26551	2855	5688	7599
45°	1479819	18852	2387	6162	8232
50°	1408566	11307	2251	6404	9056
55°	1180326	4654	2522	7176	10569
60°	660784	964	2893	8232	11642
65°	114063	571	2853	9169	13163
70°	2115	705	3525	9920	14855
75°	1863	932	4658	11246	16835
80°	1389	1389	5554	12596	19538
85°	0	2766	11066	13832	22329

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 1490297 cd/sqm

TEST NUMBER: P1311493

CATALOG NUMBER: P3SQAS17R359050DE010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	6.5	0.4
10°-20°	18.4	1.2
20°-30°	95.6	6.1
30°-40°	412.8	26.5
40°-50°	588.9	37.8
50°-60°	364.7	23.4
60°-70°	55.5	3.6
70°-80°	10.4	0.7
80°-90°	5.2	0.3
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°	120.4	7.7
0°-40°	533.3	34.2
0°-60°	1486.9	95.4
0°-90°	1558.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1558.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	72	72	72	72	72	
5°	77	76	70	63	62	7
15°	112	70	49	45	46	41
25°	1228	90	28	34	38	735
35°	5702	128	17	27	34	3423
45°	6076	77	10	25	34	4590
55°	3931	16	8	24	35	3348
65°	280	1	7	22	32	572
75°	3	1	7	17	25	3
85°	0	1	6	7	11	1
90°	0	0	0	0	0	

TEST NUMBER: P1311493

CATALOG NUMBER: P3SQAS17R359050DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	71.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7
2.5°	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	71.7	70.3
5°	77.4	77.4	75.9	75.9	75.9	75.9	75.9	75.9	73.1	70.3	66.1
7.5°	78.8	78.8	77.4	77.4	77.4	77.4	75.9	74.5	71.7	66.1	61.9
10°	80.2	80.2	80.2	80.2	78.8	77.4	75.9	73.1	68.9	61.9	57.7
12.5°	90.0	90.0	88.6	85.8	83.0	80.2	77.4	71.7	63.3	56.3	52.0
15°	112.5	111.1	108.3	104.1	98.4	91.4	85.8	70.3	57.7	49.2	46.4
17.5°	157.5	154.7	150.5	136.4	123.8	111.1	99.9	70.3	52.0	43.6	40.8
20°	274.3	275.7	246.1	212.4	184.2	153.3	125.2	73.1	46.4	38.0	36.6
22.5°	572.4	549.9	479.6	398.0	303.8	234.9	177.2	80.2	40.8	32.3	32.3
25°	1227.8	1142.0	971.8	734.2	517.6	367.1	257.4	90.0	36.6	28.1	29.5
27.5°	2241.8	2164.5	1822.7	1372.7	911.4	554.1	348.8	102.7	32.3	23.9	26.7
30°	3566.7	3352.9	2907.1	2250.3	1523.2	848.1	468.3	116.7	26.7	21.1	25.3
31°	3980.2	3881.7	3338.9	2603.3	1784.8	1007.0	519.0	121.0	25.3	21.1	23.9
32°	4471.0	4296.6	3810.0	2990.1	2050.6	1149.1	579.4	125.2	23.9	18.3	23.9
33°	4909.8	4741.1	4149.0	3330.4	2319.2	1310.8	644.1	126.6	21.1	18.3	22.5
34°	5371.2	5140.5	4554.0	3686.2	2594.9	1485.2	703.2	128.0	19.7	16.9	22.5
35°	5701.7	5471.0	4902.8	3967.5	2832.5	1639.9	770.7	128.0	18.3	16.9	21.1
36°	5957.6	5755.1	5203.8	4257.3	3068.8	1779.1	824.2	128.0	15.5	15.5	21.1
37°	6133.4	5940.8	5406.3	4506.2	3248.8	1902.9	872.0	128.0	14.1	15.5	21.1
38°	6219.2	6058.9	5601.8	4687.6	3423.2	1999.9	910.0	125.2	12.7	14.1	19.7
39°	6255.8	6125.0	5721.4	4840.9	3554.0	2084.3	938.1	122.4	11.3	14.1	19.7
40°	6250.2	6136.2	5788.9	4946.4	3659.5	2142.0	953.6	118.1	9.8	12.7	19.7
41°	6217.8	6119.4	5824.0	5036.4	3722.8	2181.4	957.8	113.9	8.4	12.7	18.3
42°	6181.3	6091.2	5835.3	5084.2	3763.6	2194.0	946.5	108.3	8.4	11.3	18.3
43°	6143.3	6060.3	5835.3	5099.7	3773.4	2185.6	928.2	98.4	7.0	11.3	18.3
44°	6112.3	6033.6	5817.0	5095.5	3752.4	2153.2	894.5	87.2	5.6	11.3	18.3
45°	6075.8	5998.4	5793.1	5068.8	3711.6	2098.4	852.3	77.4	4.2	9.8	18.3
46°	6011.1	5950.6	5750.9	5013.9	3646.9	2022.4	798.9	70.3	2.8	9.8	16.9
47°	5885.9	5833.9	5669.3	4932.3	3561.1	1932.4	744.0	63.3	2.8	9.8	16.9
48°	5634.2	5632.7	5506.2	4780.5	3424.7	1819.9	686.3	56.3	2.8	9.8	16.9
49°	5390.8	5365.5	5208.0	4513.2	3229.2	1684.9	625.9	50.6	1.4	9.8	16.9
50°	5257.2	5202.4	4943.6	4198.2	2978.8	1497.8	561.2	42.2	1.4	8.4	16.9
51°	5118.0	5039.2	4734.0	3914.1	2680.7	1317.8	490.8	33.8	1.4	8.4	15.5
52°	4866.2	4791.7	4449.9	3642.6	2390.9	1133.6	423.3	28.1	1.4	8.4	16.9
53°	4594.8	4487.9	4116.6	3344.5	2136.4	970.4	354.4	23.9	1.4	8.4	15.5
54°	4253.0	4205.2	3779.1	2978.8	1838.2	812.9	291.1	19.7	1.4	8.4	15.5
55°	3931.0	3860.6	3417.6	2604.7	1568.2	666.6	243.3	15.5	1.4	8.4	15.5
56°	3520.3	3414.8	2999.9	2261.5	1293.9	537.3	205.3	12.7	1.4	8.4	15.5
57°	3030.9	2918.3	2590.6	1880.4	1015.4	409.3	171.6	9.8	1.4	8.4	15.5
58°	2563.9	2466.9	2115.3	1451.4	765.1	284.1	142.0	7.0	1.4	7.0	15.5
59°	2215.1	2108.2	1759.4	1116.7	531.6	209.6	106.9	5.6	1.4	8.4	15.5
60°	1918.4	1780.5	1416.3	865.0	379.7	150.5	78.8	2.8	2.8	8.4	15.5
62.5°	1105.5	976.1	676.5	351.6	156.1	77.4	38.0	1.4	2.8	8.4	15.5
65°	279.9	248.9	161.7	75.9	43.6	26.7	14.1	1.4	2.8	7.0	14.1



TEST NUMBER: P1311493

CATALOG NUMBER: P3SQAS17R359050DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	9.8	9.8	9.8	8.4	7.0	5.6	2.8	1.4	2.8	7.0	14.1
70°	4.2	4.2	4.2	2.8	2.8	1.4	1.4	1.4	2.8	7.0	12.7
72.5°	2.8	2.8	2.8	2.8	1.4	1.4	1.4	1.4	4.2	7.0	11.3
75°	2.8	2.8	2.8	2.8	1.4	1.4	1.4	1.4	4.2	7.0	11.3
77.5°	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4	4.2	5.6	9.8
80°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	4.2	5.6	8.4
82.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	4.2	5.6	7.0
85°	0.0	0.0	0.0	0.0	0.0	1.4	0.0	1.4	4.2	5.6	5.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	4.2	5.6	4.2
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: P1311493

CATALOG NUMBER: P3SQAS17R359050DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	71.7	71.7	71.7
2.5°	67.5	67.5	67.5
5°	63.3	63.3	61.9
7.5°	59.1	57.7	57.7
10°	53.4	53.4	53.4
12.5°	49.2	49.2	49.2
15°	45.0	46.4	46.4
17.5°	40.8	43.6	43.6
20°	38.0	40.8	42.2
22.5°	35.2	38.0	39.4
25°	33.8	36.6	38.0
27.5°	30.9	35.2	38.0
30°	29.5	33.8	36.6
31°	29.5	33.8	35.2
32°	28.1	33.8	35.2
33°	28.1	33.8	35.2
34°	28.1	32.3	35.2
35°	26.7	32.3	33.8
36°	26.7	32.3	33.8
37°	26.7	32.3	35.2
38°	26.7	32.3	33.8
39°	25.3	32.3	33.8
40°	25.3	32.3	33.8
41°	25.3	32.3	33.8
42°	25.3	32.3	33.8
43°	25.3	32.3	33.8
44°	25.3	30.9	33.8
45°	25.3	30.9	33.8
46°	25.3	32.3	33.8
47°	25.3	32.3	35.2
48°	25.3	30.9	33.8
49°	23.9	30.9	33.8
50°	23.9	30.9	33.8
51°	23.9	32.3	35.2
52°	23.9	32.3	35.2
53°	23.9	32.3	35.2
54°	23.9	32.3	33.8
55°	23.9	32.3	35.2
56°	23.9	32.3	33.8
57°	23.9	32.3	33.8
58°	23.9	30.9	33.8
59°	23.9	30.9	33.8
60°	23.9	30.9	33.8
62.5°	22.5	30.9	33.8
65°	22.5	29.5	32.3



TEST NUMBER: P1311493

CATALOG NUMBER: P3SQAS17R359050DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	21.1	29.5	30.9
70°	19.7	28.1	29.5
72.5°	18.3	26.7	28.1
75°	16.9	23.9	25.3
77.5°	14.1	21.1	23.9
80°	12.7	18.3	19.7
82.5°	9.8	15.5	16.9
85°	7.0	11.3	11.3
87.5°	2.8	5.6	5.6
90°	0.0	0.0	0.0

(END OF REPORT)