

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: P1310351

Luminaire Tested: P3SQAS17R159040DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1310351
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-73)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS17R159040DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R15 optic, 4000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

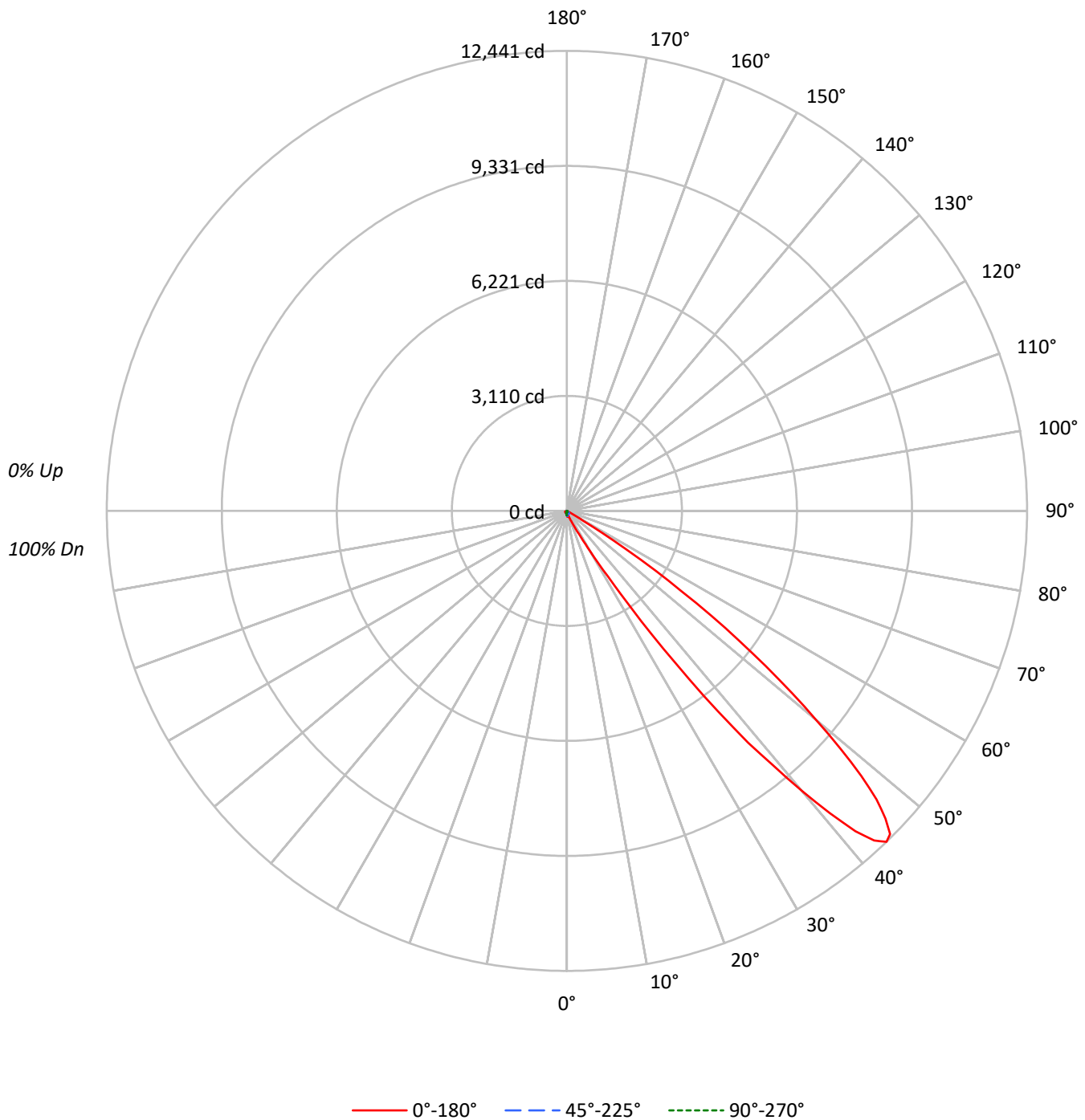
Lumens per Lamp: N/A
Luminaire Lumens: 1389.0 lumens
Efficiency: N/A
Efficacy: 65.5 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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: P1310351

CATALOG NUMBER: P3SQAS17R159040DE010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1310351

CATALOG NUMBER: P3SQAS17R159040DE010 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	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	100	97	94	96	93	91	92	90	89	87		
2	101	93	87	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	53	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	37	49	42	37	48	42	37	35		
7	62	47	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	29		
8	56	42	33	27	55	41	33	27	40	32	26	39	31	26	37	31	26	24		
9	52	37	28	22	50	37	28	22	35	28	22	34	27	22	33	27	22	20		
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	23	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	21235	21235	21235	21235	21235
5°	26330	23460	19155	16752	16527
10°	25917	20111	14777	13081	13326
15°	21485	14317	10627	10858	11607
20°	37315	11418	8119	9384	10667
25°	83156	13682	6575	8684	9995
30°	248701	16804	5787	8531	10460
35°	957414	18922	5235	8725	11059
40°	2222240	16502	4991	9038	11826
45°	3009909	12470	4384	9791	12811
50°	2360042	7422	4448	10396	14093
55°	1132765	3333	4144	11230	15373
60°	103506	482	3823	11918	17188
65°	11288	0	3382	12429	18623
70°	2769	0	4179	13243	20243
75°	2795	932	5523	14772	23023
80°	2777	2777	6843	15075	24696
85°	2766	2766	10868	13635	27269

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3009909 cd/sqm

TEST NUMBER: P1310351

CATALOG NUMBER: P3SQAS17R159040DE010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	10.5	0.8
10°-20°	21.9	1.6
20°-30°	52.5	3.8
30°-40°	287.3	20.7
40°-50°	695.7	50.1
50°-60°	277.6	20.0
60°-70°	24.0	1.7
70°-80°	13.5	1.0
80°-90°	6.0	0.4
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°	84.9	6.1
0°-40°	372.2	26.8
0°-60°	1345.5	96.9
0°-90°	1389.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1389.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	123	123	123	123	123	
5°	152	136	111	97	96	14
15°	120	80	60	61	65	42
25°	438	72	35	46	53	264
35°	4554	90	25	42	53	3218
45°	12358	51	18	40	53	8718
55°	3773	11	14	37	51	3515
65°	28	0	8	30	46	71
75°	4	1	8	22	35	4
85°	1	1	6	7	14	1
90°	0	0	0	0	0	

TEST NUMBER: P1310351

CATALOG NUMBER: P3SQAS17R159040DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	123.3	123.3	123.3	123.3	123.3	123.3	123.3	123.3	123.3	123.3	123.3
2.5°	138.5	138.5	139.9	138.5	138.5	138.5	138.5	137.1	137.1	137.1	133.0
5°	152.3	152.3	152.3	152.3	151.0	151.0	151.0	149.6	149.6	148.2	135.7
7.5°	157.9	157.9	156.5	156.5	155.1	155.1	153.7	152.3	151.0	149.6	130.2
10°	148.2	148.2	148.2	146.8	146.8	145.4	144.0	142.7	141.3	138.5	115.0
12.5°	131.6	131.6	133.0	131.6	130.2	128.8	126.0	124.6	123.3	120.5	95.6
15°	120.5	120.5	120.5	119.1	117.7	115.0	113.6	110.8	109.4	105.3	80.3
17.5°	153.7	153.7	152.3	149.6	144.0	139.9	133.0	127.4	120.5	112.2	69.2
20°	203.6	203.6	200.8	198.0	191.1	184.2	173.1	163.4	152.3	142.7	62.3
22.5°	295.0	299.2	290.8	281.1	271.5	254.8	239.6	224.4	205.0	188.4	63.7
25°	437.6	441.8	437.6	415.5	397.5	375.3	346.2	315.8	282.5	252.1	72.0
27.5°	709.1	711.9	704.9	650.9	621.8	563.7	512.4	462.6	407.2	351.8	78.9
30°	1250.6	1252.0	1207.7	1099.7	1004.1	876.7	768.7	664.8	577.5	488.9	84.5
31°	1646.7	1607.9	1513.8	1383.6	1231.2	1059.5	911.3	777.0	646.8	551.2	85.9
32°	2091.3	2085.8	1929.3	1703.5	1499.9	1285.2	1062.3	890.5	741.0	610.8	87.3
33°	2679.9	2682.7	2436.2	2170.2	1836.5	1548.4	1256.2	1020.7	840.7	681.4	90.0
34°	3599.5	3383.5	3094.0	2733.9	2279.7	1846.2	1466.7	1171.7	930.7	749.3	90.0
35°	4553.8	4336.3	4017.8	3472.1	2848.9	2242.3	1717.4	1333.7	1038.7	822.7	90.0
36°	5623.0	5438.8	4956.8	4260.1	3465.2	2616.2	1983.3	1520.7	1145.4	889.1	88.6
37°	6778.0	6507.9	5973.3	5213.0	4149.4	3142.5	2307.3	1706.3	1252.0	961.2	85.9
38°	7951.1	7707.3	7032.8	6111.8	4966.5	3697.9	2631.4	1884.9	1350.3	1015.2	81.7
39°	8840.2	8707.3	8038.3	7009.3	5618.8	4224.1	2965.2	2076.1	1454.2	1069.2	77.6
40°	9884.5	9669.8	9035.5	7762.7	6390.2	4760.1	3292.1	2245.0	1540.1	1112.1	73.4
41°	10837.3	10565.9	9765.4	8535.5	7007.9	5242.1	3602.3	2419.5	1609.3	1137.1	70.6
42°	11654.5	11338.7	10502.2	9197.5	7524.5	5627.1	3850.2	2544.2	1674.4	1157.8	66.5
43°	12183.5	11910.7	11088.0	9694.7	7966.3	5980.3	4081.5	2674.4	1714.6	1171.7	60.9
44°	12441.1	12165.5	11369.2	10006.4	8237.8	6192.2	4231.1	2764.4	1758.9	1189.7	56.8
45°	12358.0	12078.3	11308.2	10011.9	8322.2	6268.3	4294.8	2804.6	1782.4	1206.3	51.2
46°	11977.2	11780.5	11004.9	9751.5	8161.6	6186.6	4258.8	2774.1	1774.1	1206.3	45.7
47°	11442.6	11218.2	10480.0	9304.2	7772.4	5976.1	4113.3	2681.3	1722.9	1178.6	40.2
48°	10714.1	10523.0	9747.4	8593.7	7175.5	5517.7	3785.1	2530.3	1642.6	1124.6	34.6
49°	9800.0	9534.1	8812.5	7685.2	6397.1	4866.8	3354.4	2275.5	1513.8	1048.4	30.5
50°	8808.4	8480.1	7923.4	6775.2	5592.5	4172.9	2787.9	1923.7	1332.3	948.7	27.7
51°	7837.5	7503.7	6973.3	5996.9	4733.8	3462.4	2249.2	1535.9	1096.9	811.6	23.5
52°	6830.6	6550.9	5956.7	5189.5	4052.4	2805.9	1873.9	1299.1	911.3	681.4	19.4
53°	5827.9	5636.8	5071.7	4294.8	3256.0	2292.1	1530.4	1112.1	795.0	583.1	15.2
54°	4823.8	4614.7	4185.4	3492.9	2624.5	1808.8	1297.7	930.7	689.7	508.3	13.8
55°	3772.6	3664.6	3268.5	2663.3	1988.8	1443.1	1052.6	800.5	577.5	425.2	11.1
56°	2905.7	2783.8	2422.3	1932.0	1477.8	1130.1	851.8	653.7	488.9	355.9	8.3
57°	1902.9	1778.3	1538.7	1349.0	1076.1	824.1	650.9	515.2	397.5	295.0	6.9
58°	1124.6	1011.0	973.6	831.0	717.4	559.5	480.6	383.6	293.6	232.7	4.2
59°	516.6	524.9	466.7	437.6	397.5	355.9	292.2	256.2	200.8	167.6	2.8
60°	300.5	283.9	277.0	247.9	220.2	195.3	175.9	155.1	126.0	108.0	1.4
62.5°	102.5	98.3	101.1	91.4	85.9	83.1	76.2	65.1	54.0	44.3	0.0
65°	27.7	27.7	26.3	24.9	23.5	22.2	20.8	18.0	16.6	13.8	0.0



TEST NUMBER: P1310351

CATALOG NUMBER: P3SQAS17R159040DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	9.7	9.7	8.3	8.3	6.9	6.9	5.5	5.5	4.2	4.2	0.0
70°	5.5	5.5	5.5	4.2	4.2	4.2	2.8	2.8	2.8	1.4	0.0
72.5°	4.2	4.2	4.2	4.2	4.2	4.2	2.8	2.8	2.8	1.4	1.4
75°	4.2	4.2	4.2	2.8	2.8	2.8	2.8	2.8	2.8	2.8	1.4
77.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
80°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	1.4	2.8
82.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.8
85°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
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: P1310351

CATALOG NUMBER: P3SQAS17R159040DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	123.3	123.3	123.3	123.3	123.3	123.3
2.5°	127.4	121.9	115.0	110.8	109.4	108.0
5°	121.9	110.8	102.5	96.9	95.6	95.6
7.5°	109.4	96.9	88.6	85.9	84.5	84.5
10°	95.6	84.5	77.6	74.8	76.2	76.2
12.5°	80.3	70.6	67.9	67.9	69.2	70.6
15°	65.1	59.6	59.6	60.9	63.7	65.1
17.5°	54.0	51.2	52.6	55.4	58.2	60.9
20°	44.3	44.3	47.1	51.2	55.4	58.2
22.5°	37.4	38.8	42.9	47.1	52.6	55.4
25°	31.9	34.6	38.8	45.7	51.2	52.6
27.5°	27.7	31.9	37.4	44.3	49.9	52.6
30°	23.5	29.1	36.0	42.9	49.9	52.6
31°	22.2	27.7	34.6	42.9	49.9	52.6
32°	20.8	27.7	34.6	42.9	49.9	52.6
33°	19.4	26.3	34.6	41.5	49.9	52.6
34°	18.0	26.3	34.6	42.9	49.9	52.6
35°	16.6	24.9	33.2	41.5	48.5	52.6
36°	15.2	24.9	33.2	41.5	49.9	52.6
37°	13.8	24.9	33.2	41.5	48.5	52.6
38°	13.8	23.5	31.9	41.5	48.5	52.6
39°	12.5	22.2	31.9	41.5	48.5	52.6
40°	11.1	22.2	30.5	40.2	48.5	52.6
41°	9.7	20.8	30.5	40.2	48.5	52.6
42°	8.3	20.8	30.5	40.2	48.5	52.6
43°	6.9	19.4	29.1	40.2	48.5	52.6
44°	6.9	19.4	29.1	40.2	48.5	52.6
45°	5.5	18.0	27.7	40.2	48.5	52.6
46°	5.5	18.0	27.7	38.8	48.5	52.6
47°	4.2	18.0	27.7	38.8	48.5	52.6
48°	4.2	16.6	27.7	38.8	48.5	52.6
49°	2.8	16.6	27.7	38.8	48.5	52.6
50°	2.8	16.6	26.3	38.8	48.5	52.6
51°	2.8	16.6	26.3	38.8	48.5	52.6
52°	2.8	15.2	26.3	38.8	48.5	52.6
53°	2.8	15.2	26.3	38.8	48.5	52.6
54°	2.8	15.2	24.9	38.8	48.5	52.6
55°	2.8	13.8	24.9	37.4	48.5	51.2
56°	2.8	13.8	24.9	37.4	48.5	51.2
57°	2.8	13.8	23.5	37.4	48.5	51.2
58°	2.8	12.5	23.5	36.0	47.1	51.2
59°	2.8	12.5	22.2	36.0	47.1	49.9
60°	2.8	11.1	22.2	34.6	45.7	49.9
62.5°	2.8	9.7	19.4	33.2	44.3	47.1
65°	2.8	8.3	18.0	30.5	42.9	45.7



TEST NUMBER: P1310351

CATALOG NUMBER: P3SQAS17R159040DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	2.8	8.3	16.6	29.1	40.2	44.3
70°	2.8	8.3	15.2	26.3	38.8	40.2
72.5°	4.2	8.3	13.8	24.9	36.0	37.4
75°	5.5	8.3	12.5	22.2	33.2	34.6
77.5°	5.5	8.3	11.1	19.4	29.1	30.5
80°	5.5	6.9	9.7	15.2	23.5	24.9
82.5°	5.5	6.9	6.9	12.5	18.0	19.4
85°	4.2	5.5	5.5	6.9	12.5	13.8
87.5°	4.2	5.5	2.8	4.2	5.5	5.5
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)