

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: P1306763

Luminaire Tested: P3SQAS09R459027DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1306763
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: P3SQAS09R459027DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R45 optic, 2700K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

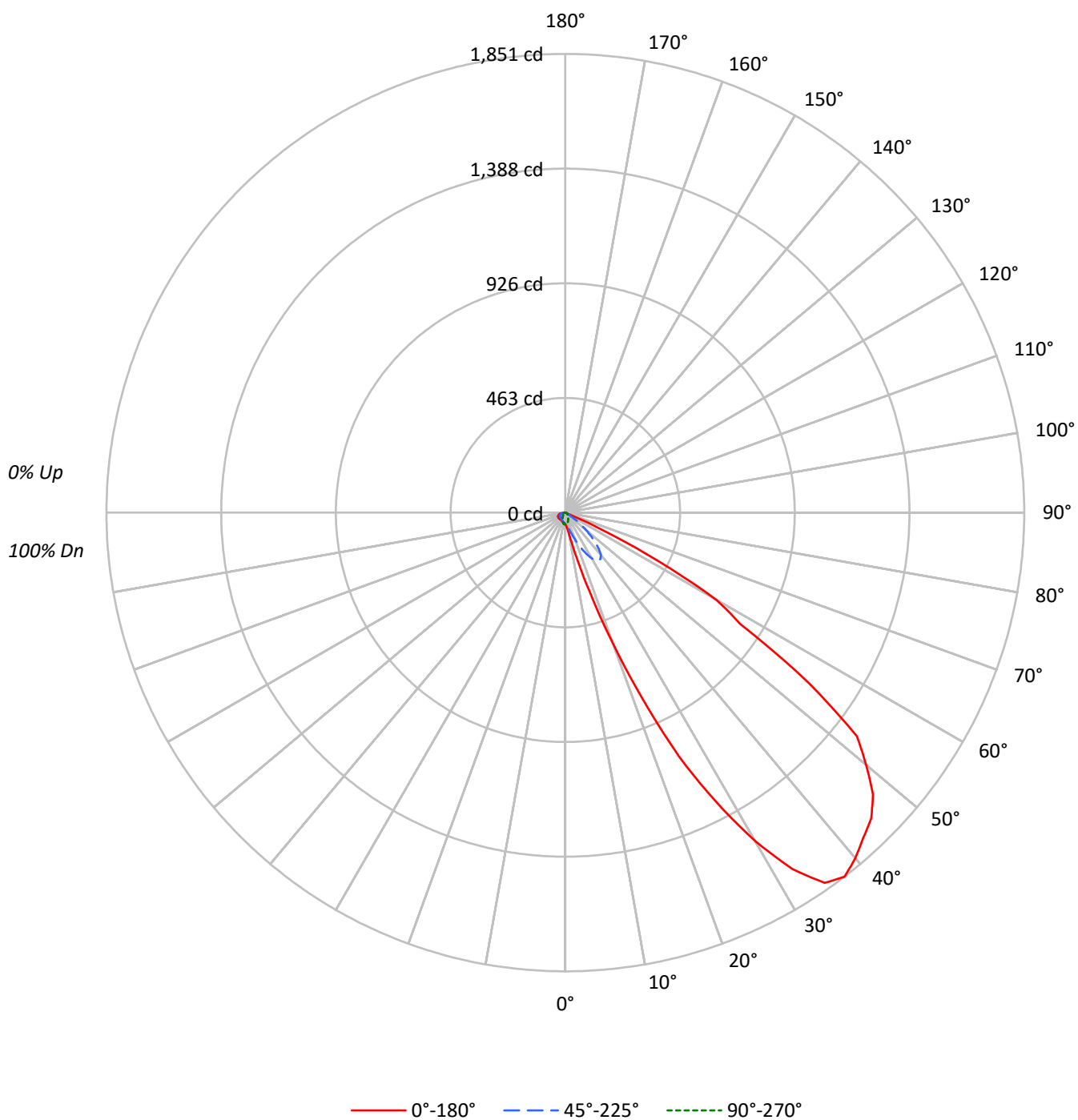
Lumens per Lamp: N/A
Luminaire Lumens: 826.9 lumens
Efficiency: N/A
Efficacy: 74.5 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11.1
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

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Luminous Intensity Polar Plot



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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°	8232	8232	8232	8232	8232
5°	9802	9094	8143	7555	7555
10°	15652	10633	7642	7170	7170
15°	38994	14246	6936	6704	6936
20°	102689	21297	6011	6378	6763
25°	206198	31544	5188	5967	6613
30°	303986	42259	4216	5847	6801
35°	383445	49555	3595	5740	7043
40°	409106	50090	3215	5980	7531
45°	425060	41770	2996	6479	8159
50°	424402	29097	2920	6966	9163
55°	360704	12911	3063	7807	10059
60°	242421	2583	3066	8714	11539
65°	64306	1100	3056	9454	13081
70°	1712	1360	3072	10323	14804
75°	1331	1331	3194	10913	16835
80°	1389	1984	3372	11505	18943
85°	1383	2766	5335	12054	18970

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 436018 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.8	0.6
10°-20°	23.3	2.8
20°-30°	96.2	11.6
30°-40°	202.7	24.5
40°-50°	250.1	30.2
50°-60°	187.5	22.7
60°-70°	48.2	5.8
70°-80°	10.0	1.2
80°-90°	4.1	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°	124.3	15.0
0°-40°	327.0	39.5
0°-60°	764.7	92.5
0°-90°	826.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	826.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	48	48	48	48	48	
5°	57	53	47	44	44	6
15°	219	80	39	38	39	80
25°	1085	166	27	31	35	506
35°	1824	236	17	27	34	1111
45°	1745	172	12	27	34	1335
55°	1201	43	10	26	34	1037
65°	158	3	8	23	32	228
75°	2	2	5	16	25	2
85°	1	1	3	6	10	1
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8
2.5°	50.6	50.6	50.6	50.6	50.6	50.6	50.6	49.9	49.2	47.8	46.5
5°	56.7	56.0	56.0	56.0	55.3	54.7	54.7	52.6	49.9	47.1	45.1
7.5°	67.0	67.0	66.3	64.9	64.2	62.9	61.5	56.0	49.9	45.8	43.0
10°	89.5	88.1	86.1	84.7	81.3	76.5	73.1	60.8	49.2	43.7	41.7
12.5°	133.9	136.7	129.8	123.0	113.4	104.5	93.6	69.0	49.2	41.7	39.6
15°	218.7	223.4	210.5	196.8	173.6	151.7	131.2	79.9	47.8	38.9	36.9
17.5°	357.4	363.5	341.7	309.5	273.3	229.6	192.0	95.0	46.5	36.2	34.8
20°	560.3	559.6	517.3	477.0	407.3	343.0	272.6	116.2	44.4	32.8	32.8
22.5°	809.7	812.5	760.5	688.1	589.0	485.8	373.8	140.8	41.7	30.1	30.7
25°	1085.1	1061.9	1000.4	912.2	785.8	643.0	495.4	166.0	38.9	27.3	28.7
27.5°	1314.7	1292.2	1221.8	1117.2	981.3	811.8	619.1	191.3	35.5	24.6	26.6
30°	1528.6	1499.9	1415.2	1297.0	1135.0	951.9	735.3	212.5	31.4	21.2	24.6
32.5°	1704.9	1678.9	1582.6	1445.2	1268.9	1072.1	833.7	228.9	27.3	19.1	23.2
35°	1823.8	1797.2	1708.3	1557.3	1365.3	1159.6	913.6	235.7	23.9	17.1	22.5
37.5°	1851.1	1836.8	1773.2	1631.8	1431.6	1215.6	964.9	233.7	19.8	15.7	21.2
40°	1819.7	1823.1	1793.1	1675.5	1467.1	1239.6	986.0	222.8	16.4	14.3	20.5
42.5°	1779.4	1788.3	1786.2	1693.3	1482.1	1240.9	977.2	200.9	13.0	13.0	19.8
45°	1745.2	1754.1	1766.4	1685.8	1471.9	1223.2	949.1	171.5	9.6	12.3	19.8
47.5°	1683.0	1692.6	1710.4	1625.6	1420.0	1177.4	898.6	139.4	6.8	11.6	19.1
50°	1584.0	1588.7	1584.0	1489.0	1320.2	1103.6	816.6	108.6	4.8	10.9	19.1
52.5°	1482.1	1472.6	1432.9	1312.7	1161.7	986.7	713.4	77.2	3.4	10.2	18.4
55°	1201.3	1186.3	1156.9	1083.1	997.0	843.2	576.7	43.0	3.4	10.2	17.8
57.5°	837.1	845.3	855.5	840.5	800.9	664.2	438.0	19.1	3.4	9.6	17.8
60°	703.8	697.0	697.7	688.1	622.5	484.5	301.3	7.5	3.4	8.9	17.1
62.5°	420.2	425.0	433.9	436.0	371.0	270.6	157.8	3.4	3.4	8.2	16.4
65°	157.8	165.4	144.9	125.7	99.8	73.1	36.9	2.7	4.1	7.5	15.0
67.5°	4.8	5.5	6.8	6.1	6.1	5.5	4.1	2.7	4.1	6.8	14.3
70°	3.4	3.4	3.4	3.4	3.4	2.7	2.7	2.7	3.4	6.1	13.0
72.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	3.4	5.5	11.6
75°	2.0	2.7	2.0	2.0	2.0	2.0	2.0	2.0	3.4	4.8	9.6
77.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.7	4.1	8.2
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	5.5
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

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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	47.8	47.8	47.8
2.5°	45.1	45.1	45.1
5°	43.7	43.7	43.7
7.5°	42.4	42.4	42.4
10°	41.0	41.0	41.0
12.5°	39.6	39.6	40.3
15°	37.6	38.9	38.9
17.5°	36.2	37.6	38.3
20°	34.8	36.2	36.9
22.5°	32.8	34.8	36.2
25°	31.4	34.2	34.8
27.5°	30.1	33.5	34.8
30°	29.4	32.8	34.2
32.5°	28.0	32.1	33.5
35°	27.3	32.1	33.5
37.5°	27.3	31.4	33.5
40°	26.6	31.4	33.5
42.5°	26.6	31.4	33.5
45°	26.6	31.4	33.5
47.5°	26.0	31.4	34.2
50°	26.0	32.1	34.2
52.5°	26.0	32.1	34.2
55°	26.0	32.1	33.5
57.5°	25.3	31.4	33.5
60°	25.3	31.4	33.5
62.5°	23.9	30.7	32.8
65°	23.2	30.1	32.1
67.5°	21.9	29.4	30.7
70°	20.5	27.3	29.4
72.5°	18.4	26.0	28.0
75°	16.4	23.9	25.3
77.5°	14.3	21.2	22.5
80°	11.6	17.8	19.1
82.5°	8.9	13.7	14.3
85°	6.1	8.9	9.6
87.5°	2.7	4.1	4.8
90°	0.0	0.0	0.0

(END OF REPORT)