

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: P1312351

Luminaire Tested: P3SQAS09R709727DE010 E3SQCA451MB

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1312351
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-83)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS09R709727DE010 E3SQCA451MB
Description: 3in Adjustable LED luminaire with, R70 optic, 2700K CCT AND, 97CRI , E3SQCA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

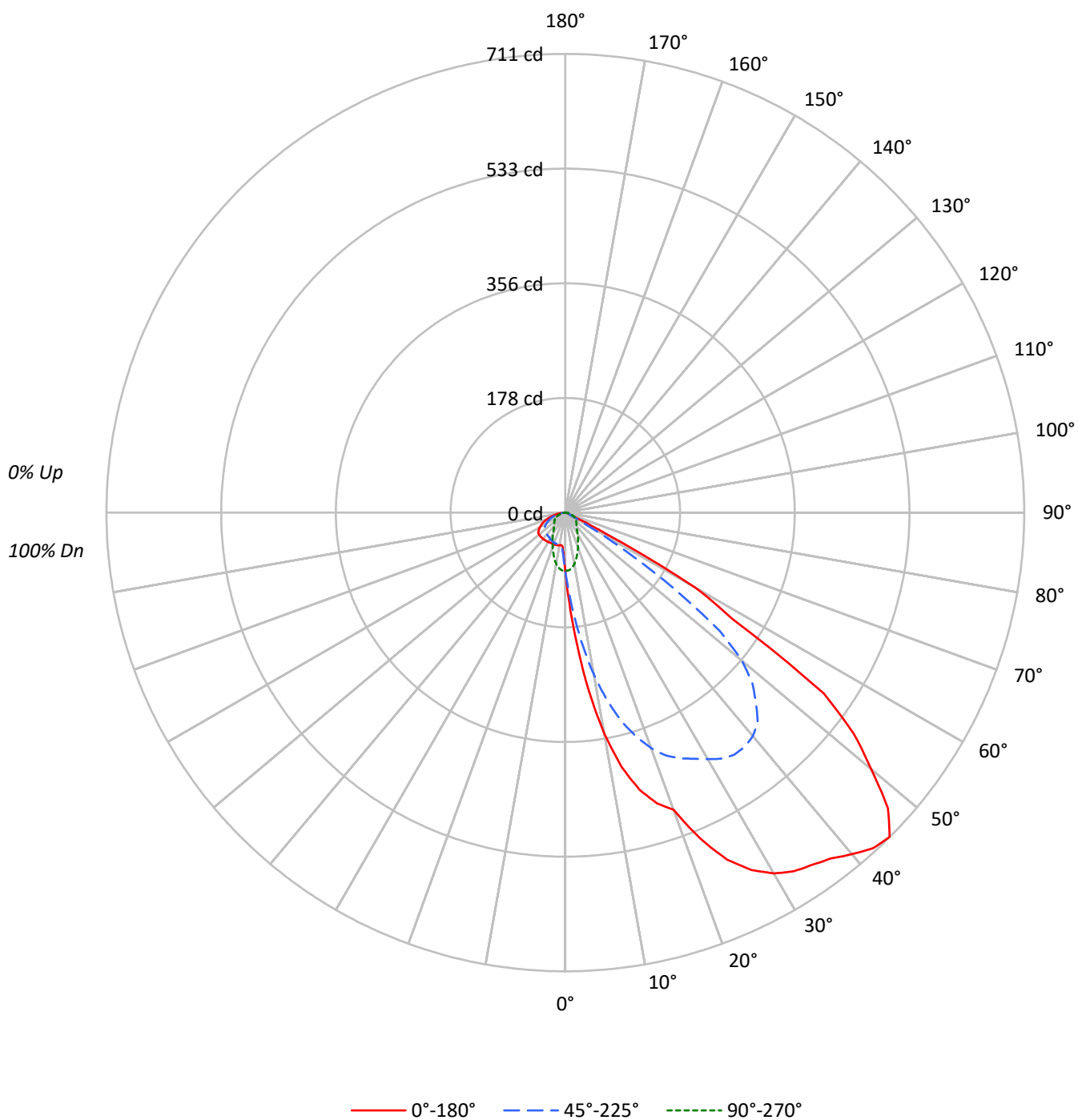
Lumens per Lamp: N/A
Luminaire Lumens: 614.0 lumens
Efficiency: N/A
Efficacy: 55.3 lumens/watt
Spacing Criteria (0/90/45): 2.92 / 0.77 / 2.03
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1312351

CATALOG NUMBER: P3SQAS09R709727DE010 E3SQCA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1312351

CATALOG NUMBER: P3SQAS09R709727DE010 E3SQCA451MB

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	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66
4	85	74	66	59	83	72	65	59	70	63	58	68	62	57	66	61	57
5	78	66	57	51	76	65	57	51	63	55	50	61	54	49	59	53	49
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	43
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	37
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	33
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	15397	15397	15397	15397	15397
5°	35060	28059	15248	9629	9007
10°	60736	44559	14148	8779	9006
15°	79289	59534	12338	8951	9289
20°	89823	71184	10557	9090	9659
25°	112800	79849	8855	9197	9900
30°	128408	87720	7557	9386	10480
35°	140128	96208	6560	9524	11080
40°	155351	101641	6070	9915	11983
45°	173073	101759	5967	10449	12982
50°	165769	95678	5921	10985	14120
55°	146768	61974	6065	11590	15253
60°	80394	13296	6131	11814	15810
65°	5746	3260	5990	11736	15975
70°	2769	3072	5539	11128	15408
75°	2462	3261	5323	10580	14240
80°	2479	3075	4860	9720	13389
85°	2371	3557	4940	8497	12054

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 173073 cd/sqm

TEST NUMBER: P1312351

CATALOG NUMBER: P3SQAS09R709727DE010 E3SQCA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	11.7	1.9
10°-20°	49.9	8.1
20°-30°	95.7	15.6
30°-40°	135.4	22.0
40°-50°	153.1	24.9
50°-60°	121.3	19.8
60°-70°	32.7	5.3
70°-80°	10.9	1.8
80°-90°	3.3	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°	157.3	25.6
0°-40°	292.7	47.7
0°-60°	567.1	92.4
0°-90°	614.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	614.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	89	89	89	89	89	
5°	203	162	88	56	52	24
15°	445	334	69	50	52	125
25°	594	420	47	48	52	272
35°	666	458	31	45	53	420
45°	711	418	24	43	53	532
55°	489	206	20	39	51	397
65°	14	8	15	29	39	51
75°	4	5	8	16	21	4
85°	1	2	2	4	6	1
90°	0	0	0	0	0	

TEST NUMBER: P1312351

CATALOG NUMBER: P3SQAS09R709727DE010 E3SQCA451MB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4
2.5°	139.1	139.1	138.4	136.0	134.8	131.7	129.3	122.5	106.0	90.1	77.2
5°	202.8	205.8	201.5	200.9	197.3	191.7	188.1	162.3	122.5	88.2	66.2
7.5°	278.1	279.3	278.1	272.0	266.5	257.3	248.7	208.3	139.1	85.1	58.2
10°	347.3	345.5	341.8	337.5	329.6	319.8	305.1	254.8	155.0	80.9	53.3
12.5°	403.7	403.1	398.8	394.5	384.7	371.8	357.1	297.1	168.5	75.3	50.8
15°	444.7	444.7	440.5	435.6	426.4	415.9	399.4	333.9	179.5	69.2	48.4
17.5°	472.3	471.1	468.0	464.3	457.0	446.6	433.7	363.3	186.8	63.1	47.8
20°	490.1	489.5	487.0	481.5	475.4	467.4	455.8	388.4	189.9	57.6	47.2
22.5°	547.0	542.1	533.0	521.3	506.6	487.6	471.7	407.4	188.7	51.5	45.9
25°	593.6	591.8	582.0	567.9	548.3	523.8	497.4	420.2	182.6	46.6	44.7
27.5°	624.2	621.2	612.0	596.7	575.8	551.9	527.4	430.0	174.0	42.3	42.9
30°	645.7	643.8	634.6	617.5	596.0	569.7	544.6	441.1	162.3	38.0	41.0
32.5°	659.1	657.3	648.1	632.8	612.0	584.4	555.6	452.1	148.2	34.3	39.2
35°	666.5	664.7	654.2	640.8	621.2	594.2	563.6	457.6	131.1	31.2	37.4
37.5°	675.7	672.0	657.9	641.4	621.8	596.7	566.0	457.0	113.9	28.8	36.1
40°	691.0	681.2	661.0	638.9	618.7	593.6	564.2	452.1	95.0	27.0	34.9
42.5°	705.7	691.6	661.6	635.3	612.6	588.1	557.5	441.1	74.1	25.7	34.3
45°	710.6	689.8	653.0	626.7	605.2	580.1	548.3	417.8	50.2	24.5	33.1
47.5°	678.1	662.8	632.2	612.6	592.4	567.9	534.8	393.3	28.8	23.3	31.9
50°	618.7	608.9	591.8	579.5	568.5	551.3	518.9	357.1	17.2	22.1	30.6
52.5°	563.6	560.5	548.3	538.5	532.3	524.4	495.0	301.4	14.1	21.4	29.4
55°	488.8	479.0	476.0	472.3	485.2	484.6	444.7	206.4	13.5	20.2	28.2
57.5°	306.9	311.2	327.1	356.5	391.4	411.7	410.4	110.3	12.9	19.0	26.3
60°	233.4	232.8	237.7	249.9	275.7	304.5	331.4	38.6	12.3	17.8	25.1
62.5°	69.8	71.7	86.4	126.8	151.9	187.5	170.9	9.2	11.6	15.9	22.7
65°	14.1	14.7	14.7	16.5	20.2	30.6	37.4	8.0	11.0	14.7	20.8
67.5°	6.1	6.1	6.1	6.7	6.7	8.0	6.7	7.4	9.8	12.9	18.4
70°	5.5	5.5	5.5	5.5	5.5	5.5	6.1	6.1	8.6	11.0	15.9
72.5°	4.3	4.3	4.3	4.9	4.9	4.9	4.9	5.5	7.4	9.2	13.5
75°	3.7	3.7	3.7	3.7	4.3	4.3	4.3	4.9	6.1	8.0	11.0
77.5°	3.1	3.1	3.1	3.1	3.1	3.7	3.7	3.7	4.9	6.1	9.2
80°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.1	3.7	4.9	6.7
82.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.5	3.1	3.7	4.9
85°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.8	1.8	2.5	3.1
87.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.2	1.2	1.2	1.8
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: P1312351

CATALOG NUMBER: P3SQAS09R709727DE010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	89.4	89.4	89.4
2.5°	68.0	64.3	62.5
5°	55.7	52.7	52.1
7.5°	51.5	50.8	50.8
10°	50.2	50.8	51.5
12.5°	50.2	51.5	52.1
15°	50.2	51.5	52.1
17.5°	50.2	51.5	52.1
20°	49.6	51.5	52.7
22.5°	49.0	51.5	52.1
25°	48.4	51.5	52.1
27.5°	47.8	50.8	52.1
30°	47.2	50.8	52.7
32.5°	45.9	50.8	52.7
35°	45.3	50.8	52.7
37.5°	44.7	50.8	53.3
40°	44.1	50.8	53.3
42.5°	43.5	50.8	53.3
45°	42.9	50.2	53.3
47.5°	41.7	50.2	53.3
50°	41.0	49.6	52.7
52.5°	39.8	49.0	52.7
55°	38.6	47.8	50.8
57.5°	36.8	45.9	48.4
60°	34.3	43.5	45.9
62.5°	31.2	40.4	42.3
65°	28.8	36.8	39.2
67.5°	25.1	32.5	34.9
70°	22.1	28.2	30.6
72.5°	19.0	23.9	26.3
75°	15.9	19.6	21.4
77.5°	12.3	15.9	17.2
80°	9.8	12.3	13.5
82.5°	6.7	8.6	9.2
85°	4.3	5.5	6.1
87.5°	1.8	2.5	2.5
90°	0.0	0.0	0.0

(END OF REPORT)