

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: P1312194

Luminaire Tested: P3SQAS05R709727DE010 E3SQCA451MB

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1312194
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: P3SQAS05R709727DE010 E3SQCA451MB
Description: 3in Adjustable LED luminaire with, R70 optic, 2700K CCT AND, 97CRI , E3SQCA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

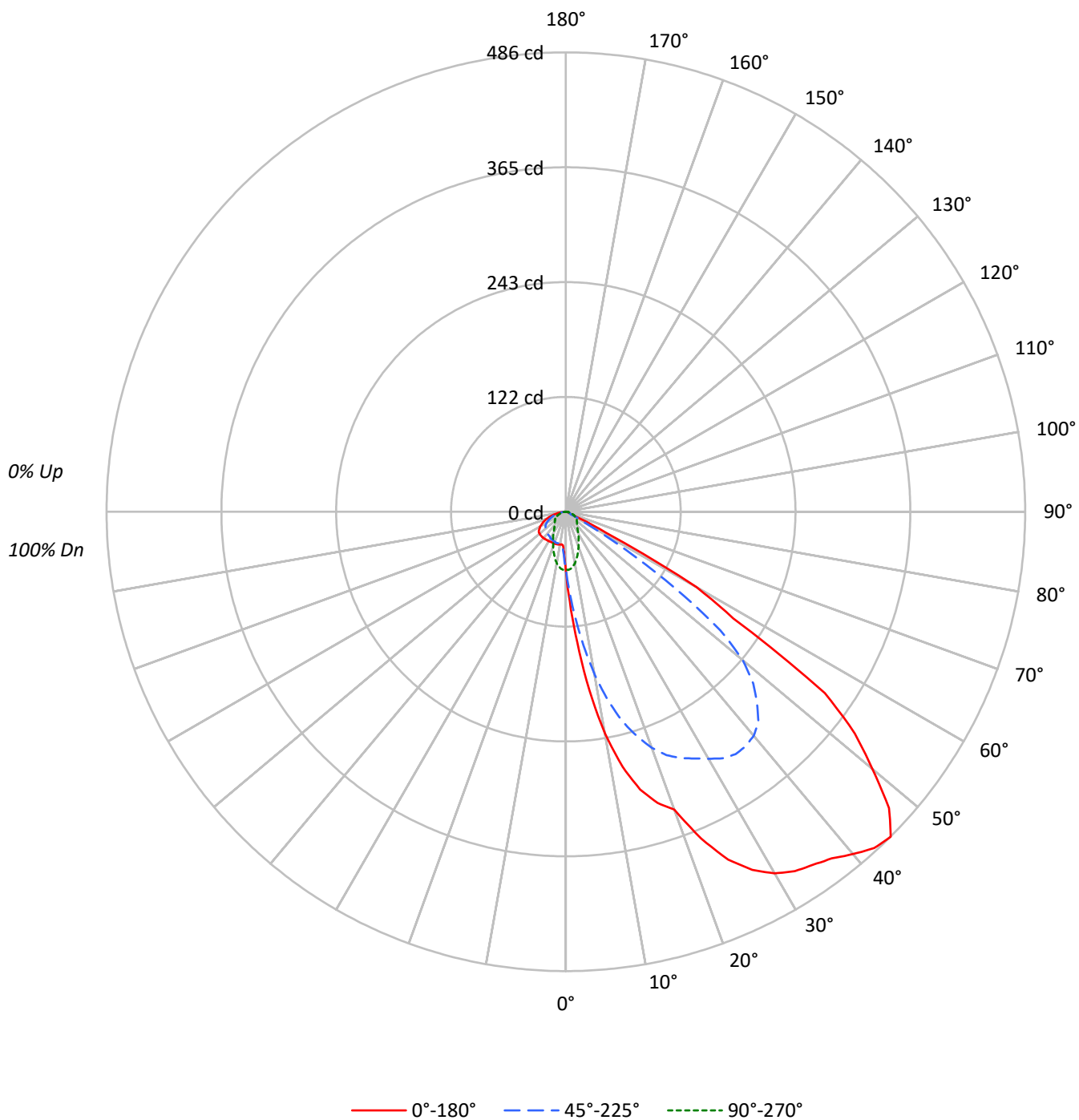
Lumens per Lamp: N/A
Luminaire Lumens: 420.0 lumens
Efficiency: N/A
Efficacy: 58.3 lumens/watt
Spacing Criteria (0/90/45): 2.92 / 0.77 / 2.03
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 7.2
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: P1312194

CATALOG NUMBER: P3SQAS05R709727DE010 E3SQCA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1312194

CATALOG NUMBER: P3SQAS05R709727DE010 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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	89	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	77	77	75
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	66	66	64
4	85	74	66	59	83	72	65	59	70	63	58	68	62	57	66	61	57	57	57	54
5	78	66	57	51	76	65	57	51	63	55	50	61	54	49	59	53	49	49	49	47
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	43	43	43	41
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	37	37	37	35
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	33	33	33	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	29	29	28
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26	26	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	10540	10540	10540	10540	10540
5°	23979	19190	10425	6587	6155
10°	41551	30481	9671	6016	6156
15°	54238	40723	8451	6133	6347
20°	61434	48696	7221	6213	6598
25°	77151	54633	6043	6290	6765
30°	87839	59998	5171	6423	7159
35°	95851	65807	4499	6518	7569
40°	106273	69515	4137	6790	8206
45°	118394	69609	4092	7136	8890
50°	113388	65456	4046	7529	9646
55°	100407	42397	4144	7927	10449
60°	55008	9093	4202	8094	10816
65°	3912	2201	4116	8028	10921
70°	1913	2115	3777	7604	10574
75°	1664	2262	3593	7253	9782
80°	1686	2083	3372	6645	9124
85°	1581	2569	3359	5730	8299

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 118394 cd/sqm

TEST NUMBER: P1312194

CATALOG NUMBER: P3SQAS05R709727DE010 E3SQCA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	8.0	1.9
10°-20°	34.1	8.1
20°-30°	65.5	15.6
30°-40°	92.6	22.0
40°-50°	104.8	24.9
50°-60°	83.0	19.8
60°-70°	22.4	5.3
70°-80°	7.4	1.8
80°-90°	2.3	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°	107.6	25.6
0°-40°	200.2	47.7
0°-60°	387.9	92.4
0°-90°	420.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	420.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	61	61	61	61	61	
5°	139	111	60	38	36	16
15°	304	228	47	34	36	86
25°	406	288	32	33	36	186
35°	456	313	21	31	36	287
45°	486	286	17	29	36	364
55°	334	141	14	26	35	271
65°	10	5	10	20	27	35
75°	2	3	5	11	15	3
85°	1	1	2	3	4	1
90°	0	0	0	0	0	

TEST NUMBER: P1312194

CATALOG NUMBER: P3SQAS05R709727DE010 E3SQCA451MB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2
2.5°	95.1	95.1	94.7	93.0	92.2	90.1	88.4	83.8	72.5	61.6	52.8
5°	138.7	140.8	137.9	137.4	134.9	131.2	128.6	111.0	83.8	60.3	45.3
7.5°	190.2	191.1	190.2	186.1	182.3	176.0	170.1	142.5	95.1	58.2	39.8
10°	237.6	236.3	233.8	230.9	225.4	218.7	208.7	174.3	106.0	55.3	36.5
12.5°	276.1	275.7	272.8	269.9	263.2	254.4	244.3	203.2	115.2	51.5	34.8
15°	304.2	304.2	301.3	297.9	291.6	284.5	273.2	228.4	122.8	47.4	33.1
17.5°	323.1	322.2	320.1	317.6	312.6	305.5	296.7	248.5	127.8	43.2	32.7
20°	335.2	334.8	333.1	329.4	325.2	319.7	311.8	265.7	129.9	39.4	32.3
22.5°	374.2	370.8	364.6	356.6	346.5	333.6	322.7	278.7	129.1	35.2	31.4
25°	406.0	404.8	398.1	388.4	375.0	358.3	340.3	287.5	124.9	31.8	30.6
27.5°	427.0	424.9	418.6	408.1	393.9	377.6	360.8	294.2	119.0	28.9	29.3
30°	441.7	440.4	434.1	422.4	407.7	389.7	372.5	301.7	111.0	26.0	28.1
32.5°	450.9	449.6	443.3	432.9	418.6	399.8	380.1	309.2	101.4	23.5	26.8
35°	455.9	454.7	447.5	438.3	424.9	406.5	385.5	313.0	89.7	21.4	25.6
37.5°	462.2	459.7	450.0	438.7	425.3	408.1	387.2	312.6	77.9	19.7	24.7
40°	472.7	466.0	452.1	437.1	423.2	406.0	385.9	309.2	65.0	18.4	23.9
42.5°	482.7	473.1	452.6	434.5	419.0	402.3	381.3	301.7	50.7	17.6	23.5
45°	486.1	471.8	446.7	428.7	414.0	396.8	375.0	285.8	34.4	16.8	22.6
47.5°	463.9	453.4	432.4	419.0	405.2	388.4	365.8	269.0	19.7	15.9	21.8
50°	423.2	416.5	404.8	396.4	388.9	377.1	354.9	244.3	11.7	15.1	21.0
52.5°	385.5	383.4	375.0	368.3	364.1	358.7	338.6	206.2	9.6	14.7	20.1
55°	334.4	327.7	325.6	323.1	331.9	331.5	304.2	141.2	9.2	13.8	19.3
57.5°	209.9	212.9	223.8	243.9	267.8	281.6	280.8	75.4	8.8	13.0	18.0
60°	159.7	159.2	162.6	171.0	188.6	208.3	226.7	26.4	8.4	12.2	17.2
62.5°	47.8	49.0	59.1	86.7	103.9	128.2	116.9	6.3	8.0	10.9	15.5
65°	9.6	10.1	10.1	11.3	13.8	21.0	25.6	5.4	7.5	10.1	14.2
67.5°	4.2	4.2	4.2	4.6	4.6	5.4	4.6	5.0	6.7	8.8	12.6
70°	3.8	3.8	3.8	3.8	3.8	3.8	4.2	4.2	5.9	7.5	10.9
72.5°	2.9	2.9	2.9	3.4	3.4	3.4	3.4	3.8	5.0	6.3	9.2
75°	2.5	2.5	2.5	2.5	2.9	2.9	2.9	3.4	4.2	5.4	7.5
77.5°	2.1	2.1	2.1	2.1	2.1	2.5	2.5	2.5	3.4	4.2	6.3
80°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	2.1	2.5	3.4	4.6
82.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.7	2.1	2.5	3.4
85°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.3	1.3	1.7	2.1
87.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8	0.8	0.8	1.3
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: P1312194

CATALOG NUMBER: P3SQAS05R709727DE010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	61.2	61.2	61.2
2.5°	46.5	44.0	42.7
5°	38.1	36.0	35.6
7.5°	35.2	34.8	34.8
10°	34.4	34.8	35.2
12.5°	34.4	35.2	35.6
15°	34.4	35.2	35.6
17.5°	34.4	35.2	35.6
20°	33.9	35.2	36.0
22.5°	33.5	35.2	35.6
25°	33.1	35.2	35.6
27.5°	32.7	34.8	35.6
30°	32.3	34.8	36.0
32.5°	31.4	34.8	36.0
35°	31.0	34.8	36.0
37.5°	30.6	34.8	36.5
40°	30.2	34.8	36.5
42.5°	29.8	34.8	36.5
45°	29.3	34.4	36.5
47.5°	28.5	34.4	36.5
50°	28.1	33.9	36.0
52.5°	27.2	33.5	36.0
55°	26.4	32.7	34.8
57.5°	25.1	31.4	33.1
60°	23.5	29.8	31.4
62.5°	21.4	27.7	28.9
65°	19.7	25.1	26.8
67.5°	17.2	22.2	23.9
70°	15.1	19.3	21.0
72.5°	13.0	16.3	18.0
75°	10.9	13.4	14.7
77.5°	8.4	10.9	11.7
80°	6.7	8.4	9.2
82.5°	4.6	5.9	6.3
85°	2.9	3.8	4.2
87.5°	1.3	1.7	1.7
90°	0.0	0.0	0.0

(END OF REPORT)