

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: P1309969

Luminaire Tested: P3SQAS05R509040DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1309969
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-79)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS05R509040DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R50 optic, 4000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

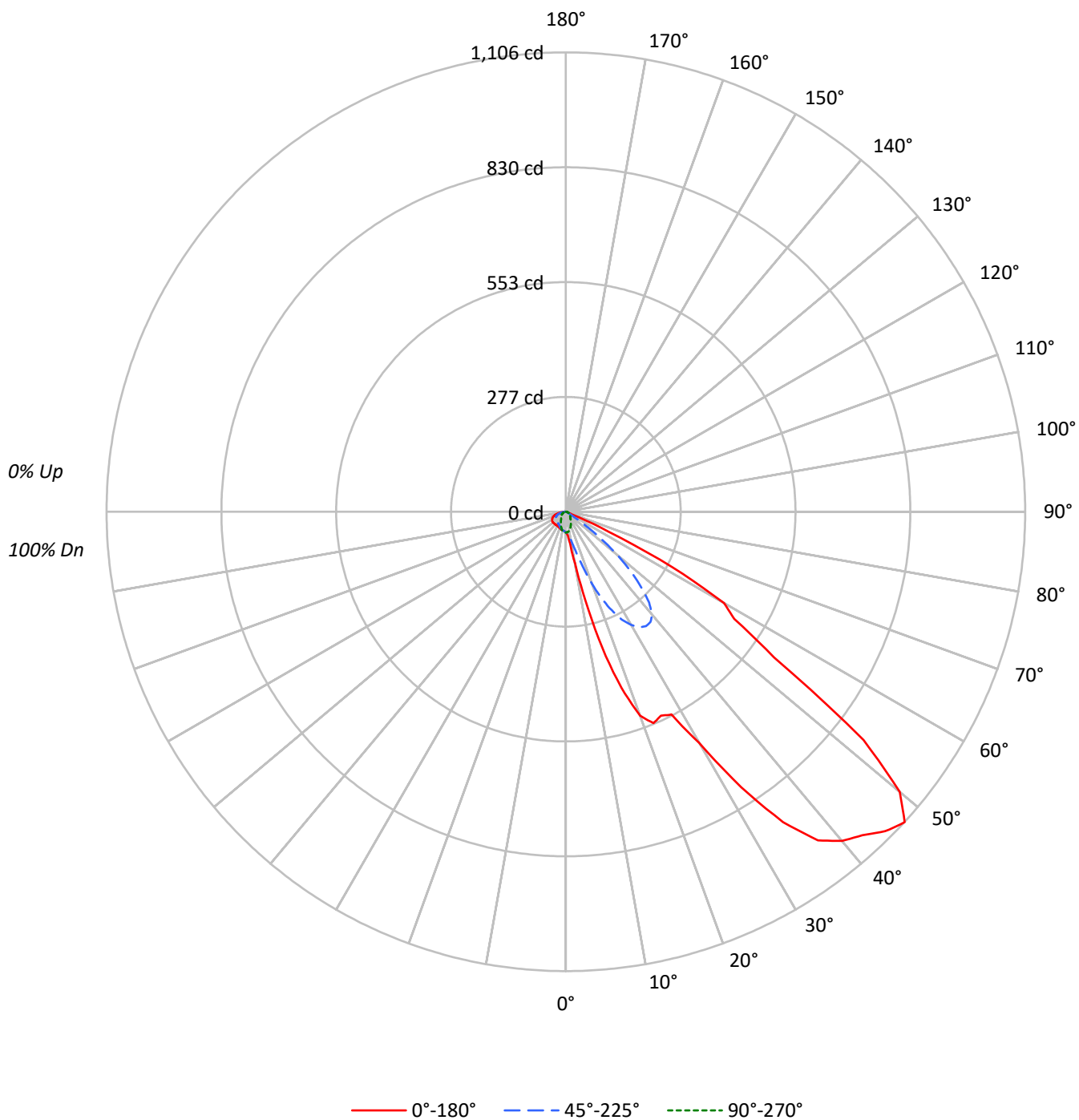
Lumens per Lamp: N/A
Luminaire Lumens: 624.0 lumens
Efficiency: N/A
Efficacy: 86.7 lumens/watt
Spacing Criteria (0/90/45): 3.58 / 0.83 / 1.91
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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: P1309969

CATALOG NUMBER: P3SQAS05R509040DE010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1309969

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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	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	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86		
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73		
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61		
4	83	71	63	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43		
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	50	43	39	37		
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31		
8	58	44	36	30	57	44	35	29	42	35	29	41	34	29	40	34	29	27		
9	54	40	31	26	53	39	31	26	38	31	25	37	30	25	36	30	25	23		
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22	20		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	8542	8542	8542	8542	8542
5°	10148	9508	8471	8108	8022
10°	21860	11787	8114	7817	7922
15°	60550	19310	7310	7489	7792
20°	95725	33888	6323	7203	7606
25°	102937	49768	5435	6974	7677
30°	127771	62484	4713	6861	7935
35°	191722	70705	4079	6917	8389
40°	232532	72707	3642	7149	8835
45°	264895	62351	3556	7623	9718
50°	281167	43030	3617	8225	10824
55°	183670	17325	3573	8888	11980
60°	151487	2962	3513	9644	13192
65°	45682	1549	3301	10310	14507
70°	1913	1611	3273	10574	15761
75°	1797	1797	3261	10780	17234
80°	1587	1587	3174	10711	17654
85°	988	2174	4347	10671	16994

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47.5°

Luminance: 282071 cd/sqm

TEST NUMBER: P1309969

CATALOG NUMBER: P3SQAS05R509040DE010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.2	0.8
10°-20°	29.5	4.7
20°-30°	76.0	12.2
30°-40°	136.4	21.9
40°-50°	182.2	29.2
50°-60°	138.8	22.2
60°-70°	42.1	6.8
70°-80°	10.1	1.6
80°-90°	3.6	0.6
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°	110.7	17.7
0°-40°	247.1	39.6
0°-60°	568.2	91.1
0°-90°	624.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	624.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	50	50	50	50	50	
5°	59	55	49	47	46	8
15°	340	108	41	42	44	100
25°	542	262	29	37	40	258
35°	912	336	19	33	40	560
45°	1088	256	15	31	40	832
55°	612	58	12	30	40	609
65°	112	4	8	25	36	155
75°	3	3	5	16	26	3
85°	0	1	2	5	9	1
90°	0	0	0	0	0	

TEST NUMBER: P1309969

CATALOG NUMBER: P3SQAS05R509040DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6
2.5°	52.8	52.8	52.8	52.8	52.8	52.8	52.3	52.3	52.3	51.2	50.1
5°	58.7	59.3	58.7	58.7	57.7	57.7	56.6	56.6	55.0	51.7	49.0
7.5°	77.1	76.5	76.0	73.8	72.2	68.4	66.8	64.1	59.3	51.7	48.0
10°	125.0	121.8	119.7	114.8	104.6	98.1	89.5	80.8	67.4	51.7	46.4
12.5°	217.2	216.7	210.2	194.0	179.5	159.5	138.5	117.5	83.0	50.7	44.2
15°	339.6	334.7	325.5	306.7	280.8	249.5	211.8	174.6	108.3	49.0	41.0
17.5°	444.1	438.2	431.2	412.3	382.7	343.3	298.1	246.8	142.8	46.9	37.7
20°	522.3	518.5	512.6	497.5	469.4	433.9	383.2	321.2	184.9	44.2	34.5
22.5°	550.8	550.3	551.4	546.0	532.0	503.9	455.4	390.8	226.4	41.0	31.3
25°	541.7	541.1	548.1	555.1	558.4	547.1	509.9	446.8	261.9	38.3	28.6
27.5°	550.3	548.7	545.4	546.5	555.7	562.1	544.9	489.9	292.7	34.5	25.9
30°	642.5	633.3	618.7	593.9	575.6	574.0	566.5	523.9	314.2	30.7	23.7
32.5°	786.4	775.0	748.6	702.8	659.2	625.7	602.0	552.4	329.3	26.9	21.0
35°	911.9	903.9	873.1	827.9	765.3	702.8	659.7	594.5	336.3	23.7	19.4
37.5°	997.1	993.9	963.7	915.2	851.6	777.7	720.6	637.6	334.7	19.9	17.8
40°	1034.3	1024.6	999.3	958.3	894.2	827.9	767.5	665.1	323.4	16.2	16.2
42.5°	1056.4	1045.6	1018.1	979.3	916.3	845.6	772.9	653.2	296.4	12.9	15.6
45°	1087.6	1076.3	1040.2	998.7	935.1	853.2	751.9	611.2	256.0	9.7	14.6
47.5°	1106.5	1099.0	1072.0	1030.5	953.4	842.4	703.4	571.9	211.3	7.5	14.0
50°	1049.4	1041.8	1021.9	993.3	941.6	806.3	660.8	508.3	160.6	5.9	13.5
52.5°	903.3	909.8	913.6	921.6	883.9	725.5	597.2	457.6	108.3	4.9	12.4
55°	611.7	621.4	632.2	664.6	708.7	645.7	530.3	395.6	57.7	4.9	11.9
57.5°	480.8	477.5	474.3	472.1	506.6	532.5	466.2	316.4	24.8	4.9	10.8
60°	439.8	430.1	423.6	425.2	442.5	432.3	369.2	206.4	8.6	4.9	10.2
62.5°	288.4	295.9	310.4	335.2	323.4	277.6	214.5	81.9	4.3	4.9	9.2
65°	112.1	108.3	112.1	119.1	102.9	76.5	48.0	14.6	3.8	4.3	8.1
67.5°	15.1	13.5	10.2	6.5	5.9	5.4	4.3	3.8	3.8	4.3	7.5
70°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.2	3.2	3.8	6.5
72.5°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.8	5.4
75°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	3.2	4.9
77.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.7	3.8
80°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.2	3.2
82.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.6	1.6	2.2	2.7
85°	0.5	1.1	0.5	1.1	1.1	1.1	1.1	1.1	1.1	1.6	2.2
87.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.1	1.6	1.6
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: P1309969

CATALOG NUMBER: P3SQAS05R509040DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	49.6	49.6	49.6	49.6
2.5°	49.0	48.0	48.0	48.0
5°	48.0	46.9	46.9	46.4
7.5°	46.4	45.8	45.8	45.8
10°	45.3	44.7	45.3	45.3
12.5°	43.1	43.7	44.2	44.2
15°	41.0	42.0	43.1	43.7
17.5°	38.8	41.0	42.0	42.6
20°	36.7	39.3	41.0	41.5
22.5°	35.0	37.7	39.9	41.0
25°	32.9	36.7	39.3	40.4
27.5°	30.7	35.0	38.3	39.9
30°	29.1	34.5	38.3	39.9
32.5°	27.5	33.4	37.7	39.3
35°	26.4	32.9	37.7	39.9
37.5°	25.3	32.3	37.7	39.3
40°	24.8	31.8	37.7	39.3
42.5°	24.3	31.8	37.7	39.9
45°	23.2	31.3	37.7	39.9
47.5°	22.6	31.3	37.7	39.9
50°	22.1	30.7	37.7	40.4
52.5°	21.6	30.2	37.7	40.4
55°	20.5	29.6	37.2	39.9
57.5°	19.9	29.1	36.7	38.8
60°	18.9	28.0	35.6	38.3
62.5°	17.8	26.9	34.5	36.7
65°	16.2	25.3	32.9	35.6
67.5°	14.6	23.2	31.3	34.0
70°	12.9	21.0	29.1	31.3
72.5°	11.3	18.9	26.9	28.6
75°	9.7	16.2	23.7	25.9
77.5°	8.1	14.0	19.9	21.6
80°	5.9	10.8	16.2	17.8
82.5°	4.9	8.1	11.9	12.9
85°	3.2	5.4	7.5	8.6
87.5°	1.6	2.7	3.8	4.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)