

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: P1316322

Luminaire Tested: P3SQAS13R709827DE010 E3SQCA451MB

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1316322
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: P3SQAS13R709827DE010 E3SQCA451MB
Description: 3in Adjustable LED luminaire with, R70 optic, 2700K CCT AND, 98CRI , E3SQCA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

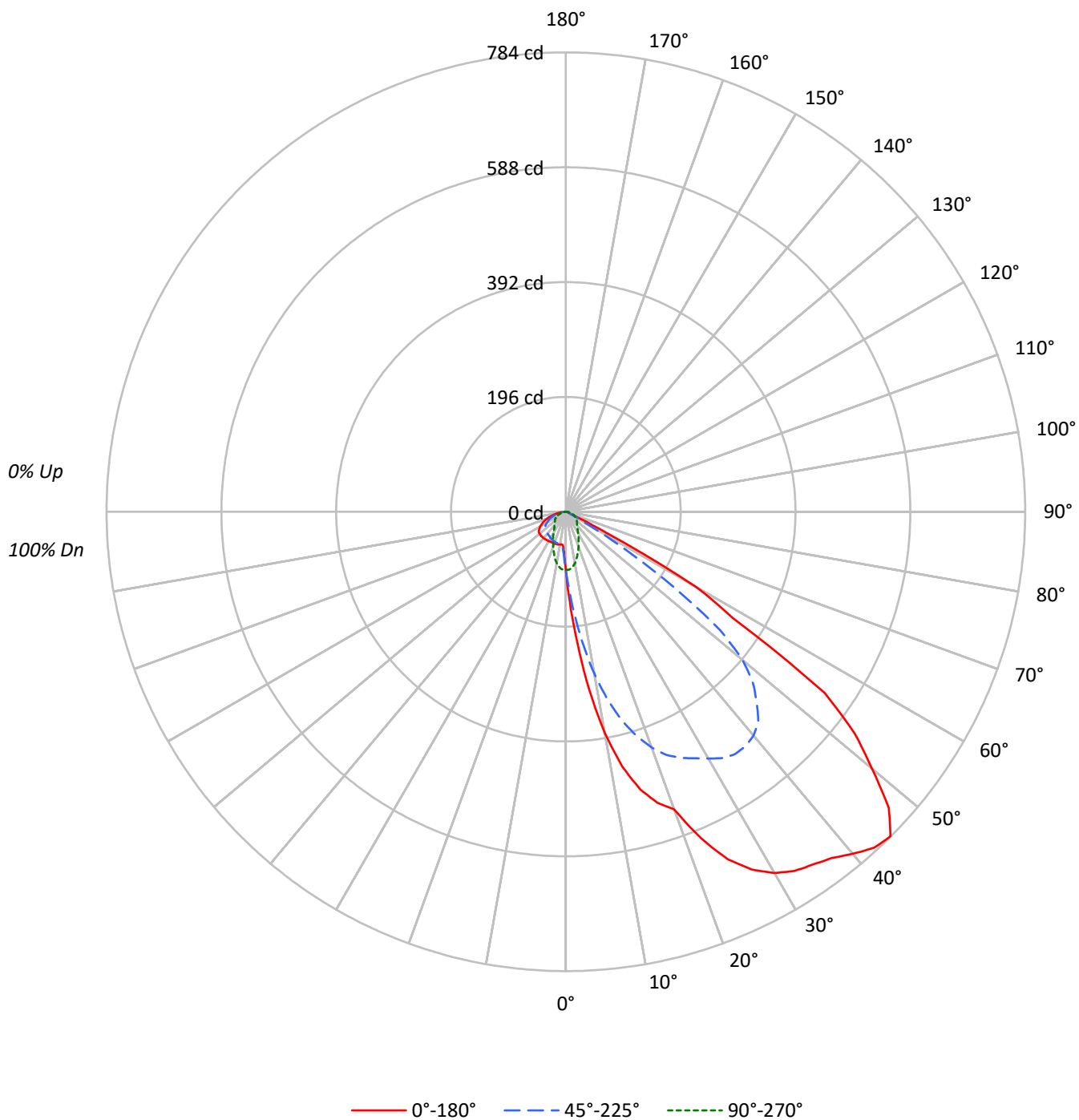
Lumens per Lamp: N/A
Luminaire Lumens: 677.0 lumens
Efficiency: N/A
Efficacy: 46.7 lumens/watt
Spacing Criteria (0/90/45): 2.92 / 0.77 / 2.03
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.5
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: P1316322

CATALOG NUMBER: P3SQAS13R709827DE010 E3SQCA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1316322

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	16981	16981	16981	16981	16981
5°	38656	30946	16821	10632	9923
10°	66979	49141	15599	9688	9916
15°	87437	65631	13604	9878	10234
20°	99042	78479	11638	10025	10648
25°	124372	88058	9748	10147	10908
30°	141572	96708	8332	10341	11554
35°	154509	106090	7232	10512	12215
40°	171291	112073	6677	10926	13219
45°	190829	112208	6576	11520	14321
50°	182782	105511	6511	12137	15567
55°	161841	68339	6696	12791	16845
60°	88626	14673	6751	13020	17463
65°	6316	3586	6602	12918	17605
70°	3072	3424	6143	12236	17020
75°	2728	3593	5856	11711	15704
80°	2678	3372	5356	10711	14778
85°	2766	3952	5335	9287	13437

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 190829 cd/sqm

TEST NUMBER: P1316322

CATALOG NUMBER: P3SQAS13R709827DE010 E3SQCA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	12.9	1.9
10°-20°	55.0	8.1
20°-30°	105.6	15.6
30°-40°	149.3	22.0
40°-50°	168.9	24.9
50°-60°	133.7	19.8
60°-70°	36.1	5.3
70°-80°	12.0	1.8
80°-90°	3.7	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°	173.4	25.6
0°-40°	322.7	47.7
0°-60°	625.3	92.4
0°-90°	677.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	677.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	99	99	99	99	99	
5°	224	179	97	62	57	26
15°	490	368	76	55	57	138
25°	654	463	51	53	57	300
35°	735	505	34	50	58	463
45°	784	461	27	47	59	586
55°	539	228	22	43	56	437
65°	16	9	16	32	43	56
75°	4	5	9	18	24	4
85°	1	2	3	5	7	1
90°	0	0	0	0	0	

TEST NUMBER: P1316322

CATALOG NUMBER: P3SQAS13R709827DE010 E3SQCA451MB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
2.5°	153.3	153.3	152.7	149.9	148.6	145.2	142.5	135.1	116.9	99.3	85.1
5°	223.6	226.9	222.2	221.5	217.5	211.4	207.4	179.0	135.1	97.3	72.9
7.5°	306.7	308.0	306.7	299.9	293.8	283.7	274.2	229.7	153.3	93.9	64.2
10°	383.0	381.0	376.9	372.2	363.4	352.6	336.4	281.0	170.9	89.2	58.8
12.5°	445.1	444.4	439.7	435.0	424.2	410.0	393.8	327.6	185.7	83.1	56.1
15°	490.4	490.4	485.6	480.2	470.1	458.6	440.4	368.1	197.9	76.3	53.4
17.5°	520.8	519.4	516.0	512.0	503.9	492.4	478.2	400.5	206.0	69.6	52.7
20°	540.4	539.7	537.0	530.9	524.1	515.4	502.5	428.2	209.4	63.5	52.0
22.5°	603.2	597.8	587.6	574.8	558.6	537.7	520.1	449.2	208.0	56.7	50.7
25°	654.5	652.5	641.7	626.1	604.5	577.5	548.5	463.4	201.3	51.3	49.3
27.5°	688.3	684.9	674.8	657.9	634.9	608.6	581.6	474.2	191.8	46.6	47.3
30°	711.9	709.9	699.8	680.8	657.2	628.2	600.5	486.3	179.0	41.9	45.3
32.5°	726.8	724.8	714.6	697.7	674.8	644.4	612.6	498.5	163.5	37.8	43.2
35°	734.9	732.9	721.4	706.5	684.9	655.2	621.4	504.6	144.5	34.4	41.2
37.5°	745.0	741.0	725.4	707.2	685.6	657.9	624.1	503.9	125.6	31.7	39.9
40°	761.9	751.1	728.8	704.5	682.2	654.5	622.1	498.5	104.7	29.7	38.5
42.5°	778.1	762.6	729.5	700.4	675.4	648.4	614.7	486.3	81.7	28.4	37.8
45°	783.5	760.5	720.0	691.0	667.3	639.6	604.5	460.7	55.4	27.0	36.5
47.5°	747.7	730.8	697.1	675.4	653.2	626.1	589.7	433.6	31.7	25.7	35.1
50°	682.2	671.4	652.5	639.0	626.8	607.9	572.1	393.8	18.9	24.3	33.8
52.5°	621.4	618.0	604.5	593.7	587.0	578.2	545.8	332.3	15.5	23.6	32.4
55°	539.0	528.2	524.8	520.8	535.0	534.3	490.4	227.6	14.9	22.3	31.1
57.5°	338.4	343.1	360.7	393.1	431.6	453.9	452.5	121.6	14.2	20.9	29.0
60°	257.3	256.7	262.1	275.6	303.9	335.7	365.4	42.6	13.5	19.6	27.7
62.5°	77.0	79.0	95.2	139.8	167.5	206.7	188.4	10.1	12.8	17.6	25.0
65°	15.5	16.2	16.2	18.2	22.3	33.8	41.2	8.8	12.2	16.2	23.0
67.5°	6.8	6.8	6.8	7.4	7.4	8.8	7.4	8.1	10.8	14.2	20.3
70°	6.1	6.1	6.1	6.1	6.1	6.1	6.8	6.8	9.5	12.2	17.6
72.5°	4.7	4.7	4.7	5.4	5.4	5.4	5.4	6.1	8.1	10.1	14.9
75°	4.1	4.1	4.1	4.1	4.7	4.7	4.7	5.4	6.8	8.8	12.2
77.5°	3.4	3.4	3.4	3.4	3.4	4.1	4.1	4.1	5.4	6.8	10.1
80°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	3.4	4.1	5.4	7.4
82.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.7	3.4	4.1	5.4
85°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.0	2.0	2.7	3.4
87.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.4	1.4	1.4	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

TEST NUMBER: P1316322

CATALOG NUMBER: P3SQAS13R709827DE010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	98.6	98.6	98.6
2.5°	75.0	70.9	68.9
5°	61.5	58.1	57.4
7.5°	56.7	56.1	56.1
10°	55.4	56.1	56.7
12.5°	55.4	56.7	57.4
15°	55.4	56.7	57.4
17.5°	55.4	56.7	57.4
20°	54.7	56.7	58.1
22.5°	54.0	56.7	57.4
25°	53.4	56.7	57.4
27.5°	52.7	56.1	57.4
30°	52.0	56.1	58.1
32.5°	50.7	56.1	58.1
35°	50.0	56.1	58.1
37.5°	49.3	56.1	58.8
40°	48.6	56.1	58.8
42.5°	48.0	56.1	58.8
45°	47.3	55.4	58.8
47.5°	45.9	55.4	58.8
50°	45.3	54.7	58.1
52.5°	43.9	54.0	58.1
55°	42.6	52.7	56.1
57.5°	40.5	50.7	53.4
60°	37.8	48.0	50.7
62.5°	34.4	44.6	46.6
65°	31.7	40.5	43.2
67.5°	27.7	35.8	38.5
70°	24.3	31.1	33.8
72.5°	20.9	26.3	29.0
75°	17.6	21.6	23.6
77.5°	13.5	17.6	18.9
80°	10.8	13.5	14.9
82.5°	7.4	9.5	10.1
85°	4.7	6.1	6.8
87.5°	2.0	2.7	2.7
90°	0.0	0.0	0.0

(END OF REPORT)