

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: P1316593

Luminaire Tested: P3SQAS20R559827D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1316593
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-80)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS20R559827D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R55 optic, 2700K CCT AND, 98CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

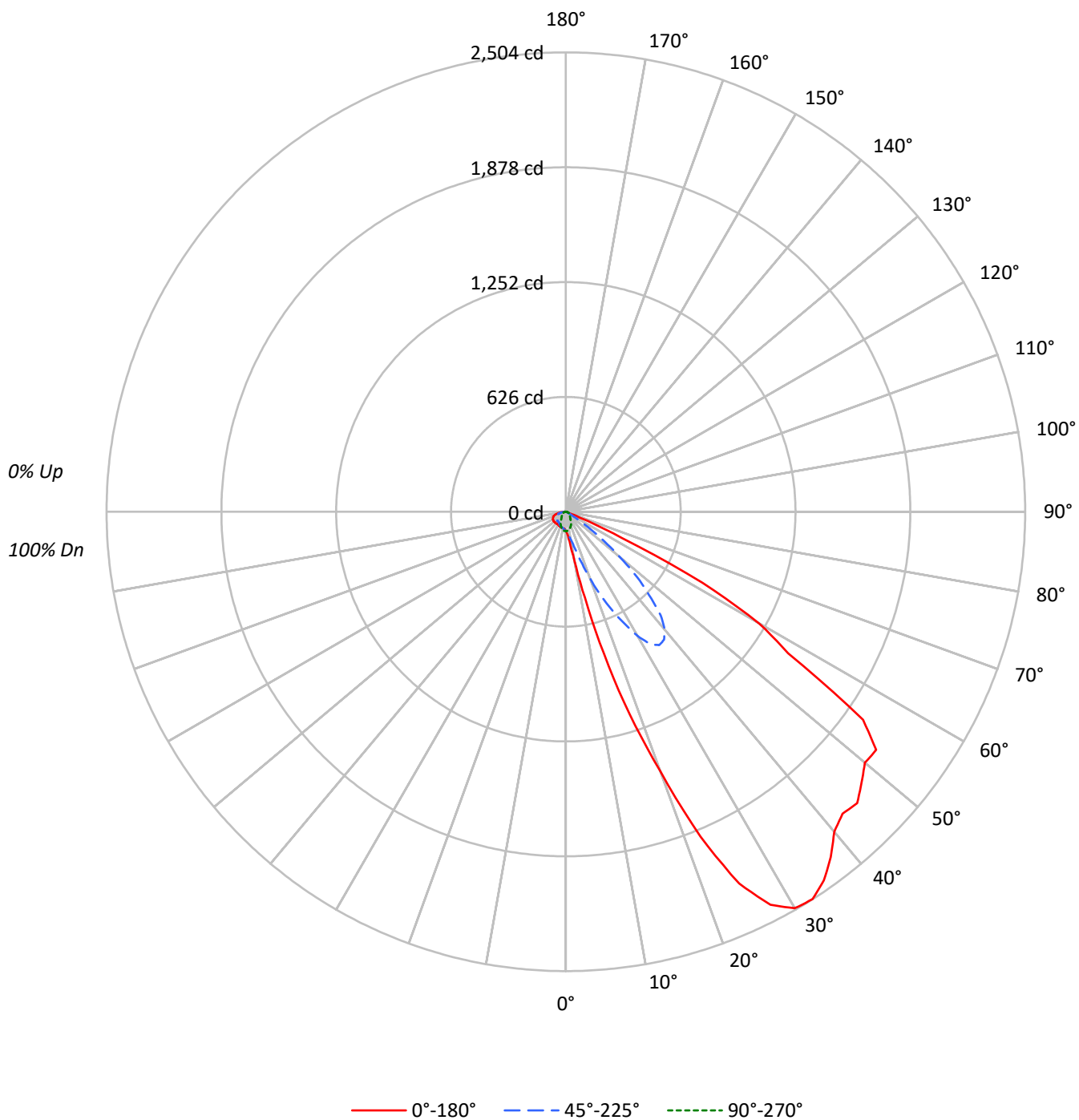
Lumens per Lamp: N/A
Luminaire Lumens: 1610.0 lumens
Efficiency: N/A
Efficacy: 58.8 lumens/watt
Spacing Criteria (0/90/45): 3.76 / 0.91 / 1.95
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 27.4
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: P1316593

CATALOG NUMBER: P3SQAS20R559827D010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1316593

CATALOG NUMBER: P3SQAS20R559827D010 E3SQCA451MMS

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	99	107	104	100	97	99	97	94	95	93	91	92	90	88	86		
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73		
3	91	81	73	67	89	80	72	67	77	71	65	74	69	64	72	67	63	61		
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51		
5	76	63	54	47	74	62	53	47	60	52	47	58	51	46	56	50	46	43		
6	69	56	47	40	68	55	46	40	53	46	40	51	45	39	50	44	39	37		
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	38	34	32		
8	59	45	36	30	57	44	36	30	43	35	30	41	35	29	40	34	29	27		
9	54	40	32	26	53	40	32	26	39	31	26	38	31	26	36	30	26	24		
10	50	37	28	23	49	36	28	23	35	28	23	34	27	23	33	27	23	21		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	17877	17877	17877	17877	17877
5°	22872	20901	17945	16718	16233
10°	46518	26617	17418	15914	15914
15°	142799	40830	16225	15476	15976
20°	276105	71441	14607	15120	15908
25°	424938	111109	12713	14594	15943
30°	496189	155314	10460	14418	16406
35°	515605	186635	8683	14360	17051
40°	511714	188377	8004	15041	18548
45°	547084	155902	7623	16294	20094
50°	570184	102912	7636	17523	22479
55°	593706	44859	7687	19217	24772
60°	419431	10299	7853	21080	27935
65°	136802	3464	7539	22617	31297
70°	4280	3575	7855	24372	35802
75°	3793	3793	6654	25552	39725
80°	2777	4265	7042	25390	42349
85°	2766	5533	8497	25293	42090

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 52.5°

Luminance: 603270 cd/sqm

TEST NUMBER: P1316593

CATALOG NUMBER: P3SQAS20R559827D010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	11.0	0.7
10°-20°	68.3	4.2
20°-30°	229.2	14.2
30°-40°	376.3	23.4
40°-50°	419.7	26.1
50°-60°	353.3	21.9
60°-70°	119.9	7.4
70°-80°	23.4	1.5
80°-90°	8.8	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°	308.5	19.2
0°-40°	684.9	42.5
0°-60°	1457.9	90.6
0°-90°	1610.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1610.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	104	104	104	104	104	
5°	132	121	104	97	94	16
15°	801	229	91	87	90	254
25°	2236	585	67	77	84	1005
35°	2452	888	41	68	81	1523
45°	2246	640	31	67	82	1715
55°	1977	149	26	64	82	1610
65°	336	8	18	56	77	455
75°	6	6	10	38	60	6
85°	1	3	4	13	21	2
90°	0	0	0	0	0	

TEST NUMBER: P1316593

CATALOG NUMBER: P3SQAS20R559827D010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	103.8	103.8	103.8	103.8	103.8	103.8	103.8	103.8	103.8	103.8	103.8
2.5°	113.8	113.8	113.8	113.8	113.8	113.8	112.4	108.1	105.3	101.0	99.6
5°	132.3	132.3	132.3	130.9	130.9	128.0	120.9	111.0	103.8	98.2	96.7
7.5°	170.7	169.3	166.4	165.0	160.7	159.3	133.7	113.8	102.4	95.3	93.9
10°	266.0	263.2	258.9	243.3	229.0	219.1	152.2	115.2	99.6	92.5	91.0
12.5°	479.4	473.7	452.4	419.6	379.8	359.9	182.1	116.6	95.3	89.6	89.6
15°	800.9	793.8	753.9	708.4	635.9	596.0	229.0	115.2	91.0	85.4	86.8
17.5°	1156.5	1136.6	1095.3	1035.6	937.4	890.5	298.7	112.4	85.4	82.5	85.4
20°	1506.5	1500.8	1432.5	1351.4	1230.5	1167.9	389.8	108.1	79.7	78.2	82.5
22.5°	1916.1	1892.0	1819.4	1732.6	1566.2	1483.7	487.9	102.4	74.0	74.0	79.7
25°	2236.2	2207.8	2150.9	2049.9	1892.0	1803.8	584.7	95.3	66.9	69.7	76.8
27.5°	2415.5	2382.7	2340.1	2253.3	2131.0	2052.7	681.4	86.8	59.7	65.4	74.0
30°	2495.1	2486.6	2455.3	2391.3	2278.9	2209.2	781.0	76.8	52.6	61.2	72.5
32.5°	2503.7	2507.9	2495.1	2453.9	2368.5	2308.8	854.9	68.3	46.9	58.3	69.7
35°	2452.4	2468.1	2476.6	2459.6	2404.1	2355.7	887.7	58.3	41.3	55.5	68.3
37.5°	2372.8	2401.2	2429.7	2434.0	2399.8	2368.5	879.1	49.8	38.4	54.1	68.3
40°	2276.1	2301.7	2360.0	2397.0	2385.6	2362.8	837.9	41.3	35.6	51.2	66.9
42.5°	2232.0	2237.6	2300.2	2362.8	2360.0	2341.5	765.3	32.7	32.7	51.2	66.9
45°	2246.2	2220.6	2261.8	2334.4	2330.1	2305.9	640.1	25.6	31.3	49.8	66.9
47.5°	2186.4	2150.9	2220.6	2305.9	2290.3	2254.7	529.2	18.5	29.9	48.4	65.4
50°	2128.1	2122.4	2176.5	2219.1	2197.8	2177.9	384.1	14.2	28.5	46.9	65.4
52.5°	2132.4	2122.4	2128.1	2126.7	2084.0	2062.7	263.2	11.4	27.0	45.5	65.4
55°	1977.3	1946.0	1916.1	1924.7	1927.5	1913.3	149.4	10.0	25.6	45.5	64.0
57.5°	1436.8	1428.2	1460.9	1553.4	1626.0	1634.5	72.5	10.0	24.2	44.1	62.6
60°	1217.7	1212.0	1213.4	1240.4	1278.9	1254.7	29.9	10.0	22.8	42.7	61.2
62.5°	839.3	894.8	917.5	980.1	954.5	920.4	11.4	11.4	21.3	39.8	59.7
65°	335.7	334.3	365.6	395.5	386.9	361.3	8.5	10.0	18.5	37.0	55.5
67.5°	78.2	71.1	61.2	52.6	44.1	35.6	8.5	10.0	17.1	34.1	52.6
70°	8.5	8.5	8.5	8.5	8.5	7.1	7.1	10.0	15.6	31.3	48.4
72.5°	7.1	7.1	7.1	7.1	7.1	7.1	7.1	8.5	12.8	27.0	44.1
75°	5.7	5.7	5.7	5.7	5.7	5.7	5.7	7.1	10.0	22.8	38.4
77.5°	4.3	4.3	4.3	5.7	4.3	5.7	5.7	7.1	8.5	18.5	32.7
80°	2.8	2.8	4.3	4.3	4.3	4.3	4.3	5.7	7.1	15.6	25.6
82.5°	2.8	2.8	2.8	2.8	2.8	2.8	4.3	4.3	5.7	11.4	18.5
85°	1.4	1.4	1.4	1.4	1.4	2.8	2.8	4.3	4.3	8.5	12.8
87.5°	1.4	1.4	1.4	1.4	1.4	1.4	2.8	2.8	4.3	4.3	5.7
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: P1316593

CATALOG NUMBER: P3SQAS20R559827D010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	103.8	103.8
2.5°	98.2	98.2
5°	95.3	93.9
7.5°	92.5	92.5
10°	91.0	91.0
12.5°	89.6	91.0
15°	89.6	89.6
17.5°	86.8	88.2
20°	85.4	86.8
22.5°	83.9	85.4
25°	82.5	83.9
27.5°	81.1	82.5
30°	79.7	82.5
32.5°	78.2	81.1
35°	78.2	81.1
37.5°	78.2	82.5
40°	78.2	82.5
42.5°	78.2	82.5
45°	78.2	82.5
47.5°	78.2	82.5
50°	78.2	83.9
52.5°	78.2	83.9
55°	78.2	82.5
57.5°	76.8	82.5
60°	76.8	81.1
62.5°	75.4	79.7
65°	72.5	76.8
67.5°	69.7	75.4
70°	65.4	71.1
72.5°	61.2	65.4
75°	55.5	59.7
77.5°	48.4	51.2
80°	38.4	42.7
82.5°	29.9	32.7
85°	19.9	21.3
87.5°	8.5	10.0
90°	0.0	0.0

(END OF REPORT)