

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: P1309510

Luminaire Tested: P3SQAS20R709035D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1309510
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: P3SQAS20R709035D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R70 optic, 3500K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

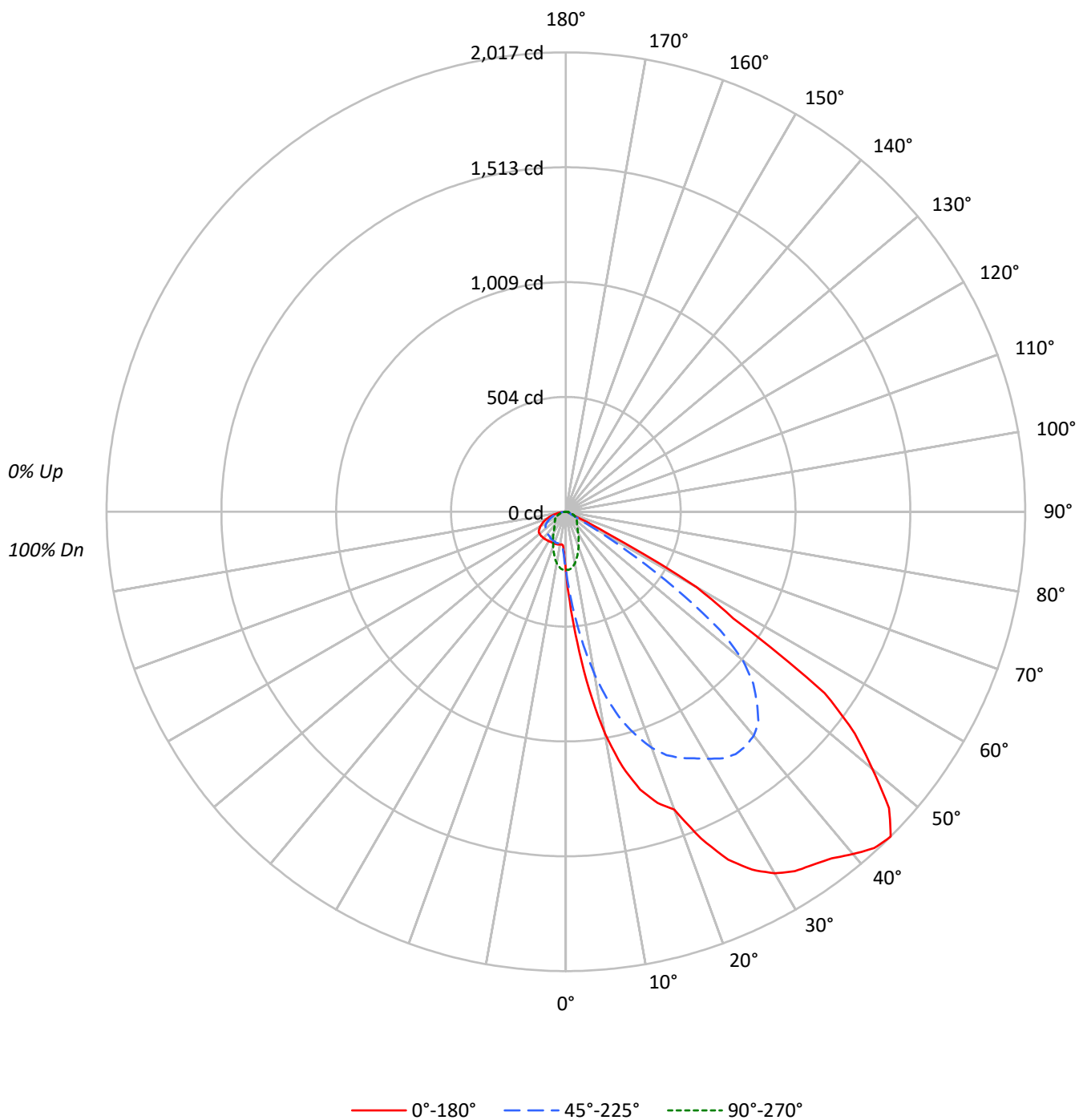
Lumens per Lamp: N/A
Luminaire Lumens: 1743.0 lumens
Efficiency: N/A
Efficacy: 60.5 lumens/watt
Spacing Criteria (0/90/45): 2.92 / 0.77 / 2.03
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 28.8
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: P1309510

CATALOG NUMBER: P3SQAS20R709035D010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1309510

CATALOG NUMBER: P3SQAS20R709035D010 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	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°	43727	43727	43727	43727	43727
5°	99510	79663	43289	27350	25552
10°	172431	126508	40135	24938	25550
15°	225101	168991	35036	25425	26352
20°	254973	202061	29966	25824	27418
25°	320214	226683	25122	26110	28086
30°	364501	249000	21438	26628	29750
35°	397784	273108	18649	27059	31453
40°	441008	288535	17199	28148	34015
45°	491308	288862	16952	29641	36851
50°	470594	271628	16772	31214	40082
55°	416672	175953	17235	32909	43328
60°	228229	37751	17360	33549	44916
65°	16301	9210	16993	33294	45356
70°	7906	8762	15761	31522	43758
75°	6920	9249	15038	30077	40524
80°	6943	8629	13786	27572	37986
85°	6916	10275	13832	24108	34383

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 491308 cd/sqm

TEST NUMBER: P1309510

CATALOG NUMBER: P3SQAS20R709035D010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.1	1.9
10°-20°	141.7	8.1
20°-30°	271.8	15.6
30°-40°	384.3	22.0
40°-50°	434.7	24.9
50°-60°	344.3	19.8
60°-70°	92.8	5.3
70°-80°	30.8	1.8
80°-90°	9.4	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°	446.5	25.6
0°-40°	830.9	47.7
0°-60°	1609.9	92.4
0°-90°	1743.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1743.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	254	254	254	254	254	
5°	576	461	250	158	148	68
15°	1262	948	196	143	148	356
25°	1685	1193	132	137	148	772
35°	1892	1299	89	129	150	1192
45°	2017	1186	70	122	151	1509
55°	1388	586	57	110	144	1126
65°	40	23	42	82	111	144
75°	10	14	23	45	61	11
85°	4	5	7	12	17	4
90°	0	0	0	0	0	

TEST NUMBER: P1309510

CATALOG NUMBER: P3SQAS20R709035D010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	253.9	253.9	253.9	253.9	253.9	253.9	253.9	253.9	253.9	253.9	253.9
2.5°	394.8	394.8	393.0	386.1	382.6	373.9	366.9	347.8	300.8	255.6	219.1
5°	575.6	584.3	572.1	570.4	560.0	544.3	533.9	460.8	347.8	250.4	187.8
7.5°	789.5	793.0	789.5	772.1	756.5	730.4	706.0	591.3	394.8	241.7	165.2
10°	986.0	980.8	970.4	958.2	935.6	907.8	866.0	723.4	440.0	229.5	151.3
12.5°	1146.0	1144.3	1132.1	1119.9	1092.1	1055.6	1013.8	843.4	478.2	213.9	144.3
15°	1262.5	1262.5	1250.3	1236.4	1210.3	1180.8	1133.8	947.8	509.5	196.5	137.4
17.5°	1340.8	1337.3	1328.6	1318.2	1297.3	1267.7	1231.2	1031.2	530.4	179.1	135.6
20°	1391.2	1389.5	1382.5	1366.8	1349.5	1326.9	1293.8	1102.5	539.1	163.5	133.9
22.5°	1552.9	1539.0	1512.9	1479.9	1438.1	1384.2	1339.0	1156.4	535.6	146.1	130.4
25°	1685.1	1679.9	1652.0	1612.0	1556.4	1486.8	1412.1	1192.9	518.2	132.2	126.9
27.5°	1772.0	1763.3	1737.3	1693.8	1634.7	1566.8	1497.3	1220.8	493.9	120.0	121.7
30°	1832.9	1827.7	1801.6	1752.9	1692.0	1617.3	1546.0	1252.1	460.8	107.8	116.5
32.5°	1871.2	1865.9	1839.9	1796.4	1737.3	1659.0	1577.3	1283.4	420.8	97.4	111.3
35°	1892.0	1886.8	1857.2	1819.0	1763.3	1686.8	1599.9	1299.0	372.1	88.7	106.1
37.5°	1918.1	1907.7	1867.7	1820.7	1765.1	1693.8	1606.8	1297.3	323.5	81.7	102.6
40°	1961.6	1933.8	1876.4	1813.8	1756.4	1685.1	1601.6	1283.4	269.5	76.5	99.1
42.5°	2003.3	1963.3	1878.1	1803.3	1739.0	1669.4	1582.5	1252.1	210.4	73.0	97.4
45°	2017.2	1958.1	1853.8	1779.0	1718.1	1646.8	1556.4	1186.0	142.6	69.6	93.9
47.5°	1925.1	1881.6	1794.6	1739.0	1681.6	1612.0	1518.1	1116.4	81.7	66.1	90.4
50°	1756.4	1728.6	1679.9	1645.1	1613.8	1565.1	1472.9	1013.8	48.7	62.6	86.9
52.5°	1599.9	1591.2	1556.4	1528.6	1511.2	1488.6	1405.1	855.6	40.0	60.9	83.5
55°	1387.7	1359.9	1351.2	1340.8	1377.3	1375.5	1262.5	586.0	38.3	57.4	80.0
57.5°	871.2	883.4	928.6	1012.1	1111.2	1168.6	1165.1	313.0	36.5	53.9	74.8
60°	662.6	660.8	674.7	709.5	782.5	864.3	940.8	109.6	34.8	50.4	71.3
62.5°	198.2	203.5	245.2	360.0	431.3	532.1	485.2	26.1	33.0	45.2	64.3
65°	40.0	41.7	41.7	47.0	57.4	86.9	106.1	22.6	31.3	41.7	59.1
67.5°	17.4	17.4	17.4	19.1	19.1	22.6	19.1	20.9	27.8	36.5	52.2
70°	15.7	15.7	15.7	15.7	15.7	15.7	17.4	17.4	24.3	31.3	45.2
72.5°	12.2	12.2	12.2	13.9	13.9	13.9	13.9	15.7	20.9	26.1	38.3
75°	10.4	10.4	10.4	10.4	12.2	12.2	12.2	13.9	17.4	22.6	31.3
77.5°	8.7	8.7	8.7	8.7	8.7	10.4	10.4	10.4	13.9	17.4	26.1
80°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	8.7	10.4	13.9	19.1
82.5°	5.2	5.2	5.2	5.2	5.2	5.2	5.2	7.0	8.7	10.4	13.9
85°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	5.2	5.2	7.0	8.7
87.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	3.5	3.5	3.5	5.2
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: P1309510

CATALOG NUMBER: P3SQAS20R709035D010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	253.9	253.9	253.9
2.5°	193.0	182.6	177.4
5°	158.2	149.6	147.8
7.5°	146.1	144.3	144.3
10°	142.6	144.3	146.1
12.5°	142.6	146.1	147.8
15°	142.6	146.1	147.8
17.5°	142.6	146.1	147.8
20°	140.9	146.1	149.6
22.5°	139.1	146.1	147.8
25°	137.4	146.1	147.8
27.5°	135.6	144.3	147.8
30°	133.9	144.3	149.6
32.5°	130.4	144.3	149.6
35°	128.7	144.3	149.6
37.5°	126.9	144.3	151.3
40°	125.2	144.3	151.3
42.5°	123.5	144.3	151.3
45°	121.7	142.6	151.3
47.5°	118.3	142.6	151.3
50°	116.5	140.9	149.6
52.5°	113.0	139.1	149.6
55°	109.6	135.6	144.3
57.5°	104.3	130.4	137.4
60°	97.4	123.5	130.4
62.5°	88.7	114.8	120.0
65°	81.7	104.3	111.3
67.5°	71.3	92.2	99.1
70°	62.6	80.0	86.9
72.5°	53.9	67.8	74.8
75°	45.2	55.6	60.9
77.5°	34.8	45.2	48.7
80°	27.8	34.8	38.3
82.5°	19.1	24.3	26.1
85°	12.2	15.7	17.4
87.5°	5.2	7.0	7.0
90°	0.0	0.0	0.0

(END OF REPORT)