

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: P1310628

Luminaire Tested: P3SQAS20R709040D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1310628
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: P3SQAS20R709040D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R70 optic, 4000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

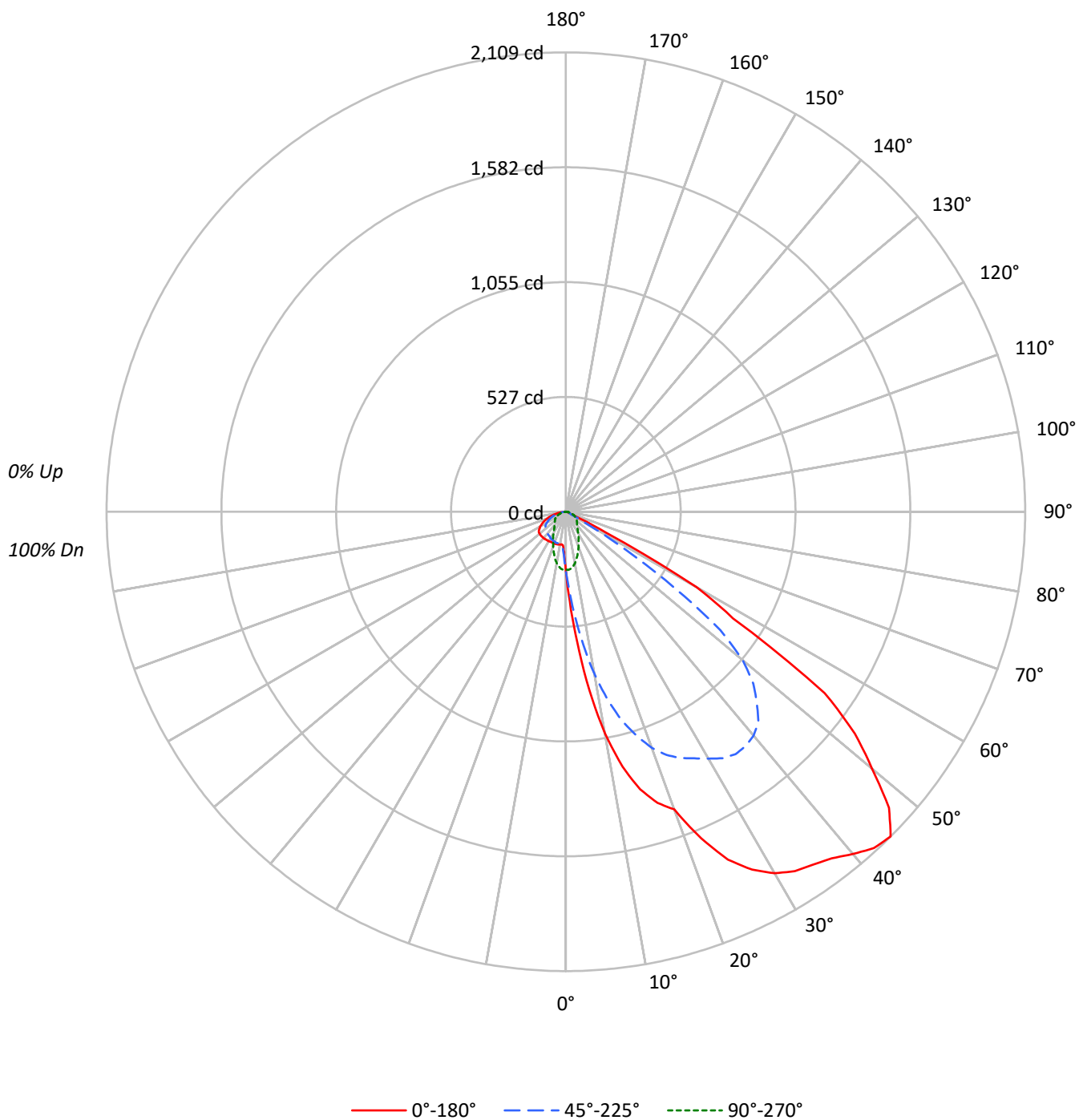
Lumens per Lamp: N/A
Luminaire Lumens: 1822.0 lumens
Efficiency: N/A
Efficacy: 63.3 lumens/watt
Spacing Criteria (0/90/45): 2.92 / 0.77 / 2.03
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P1310628

CATALOG NUMBER: P3SQAS20R709040D010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1310628

CATALOG NUMBER: P3SQAS20R709040D010 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°	45708	45708	45708	45708	45708
5°	104022	83277	45260	28594	26710
10°	180248	132244	41971	26075	26704
15°	235300	176640	36622	26584	27547
20°	266519	211225	31322	26978	28646
25°	334732	236963	26262	27288	29359
30°	381026	260275	22412	27841	31083
35°	415823	285492	19490	28278	32861
40°	460995	301597	17986	29429	35544
45°	513594	301941	17707	30981	38507
50°	491921	283953	17523	32634	41878
55°	435559	183940	18016	34380	45309
60°	238563	39439	18152	35065	46948
65°	17034	9617	17768	34802	47394
70°	8258	9165	16466	32932	45772
75°	7253	9649	15704	31474	42321
80°	7240	9025	14381	28861	39672
85°	7114	10868	14425	25096	35964

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 513594 cd/sqm

TEST NUMBER: P1310628

CATALOG NUMBER: P3SQAS20R709040D010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.6	1.9
10°-20°	148.1	8.1
20°-30°	284.1	15.6
30°-40°	401.7	22.0
40°-50°	454.4	24.9
50°-60°	359.9	19.8
60°-70°	97.0	5.3
70°-80°	32.2	1.8
80°-90°	9.9	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°	466.8	25.6
0°-40°	868.5	47.7
0°-60°	1682.9	92.4
0°-90°	1822.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1822.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	265	265	265	265	265	
5°	602	482	262	165	154	71
15°	1320	991	205	149	154	372
25°	1762	1247	138	144	154	807
35°	1978	1358	93	134	156	1246
45°	2109	1240	73	127	158	1578
55°	1451	613	60	114	151	1177
65°	42	24	44	85	116	151
75°	11	14	24	47	64	12
85°	4	6	7	13	18	4
90°	0	0	0	0	0	

TEST NUMBER: P1310628

CATALOG NUMBER: P3SQAS20R709040D010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	265.4	265.4	265.4	265.4	265.4	265.4	265.4	265.4	265.4	265.4	265.4
2.5°	412.6	412.6	410.8	403.6	399.9	390.8	383.6	363.6	314.5	267.2	229.0
5°	601.7	610.8	598.1	596.2	585.3	569.0	558.1	481.7	363.6	261.8	196.3
7.5°	825.3	828.9	825.3	807.1	790.7	763.5	738.0	618.1	412.6	252.7	172.7
10°	1030.7	1025.2	1014.3	1001.6	978.0	948.9	905.3	756.2	459.9	240.0	158.1
12.5°	1197.9	1196.1	1183.4	1170.7	1141.6	1103.4	1059.8	881.6	499.9	223.6	150.9
15°	1319.7	1319.7	1307.0	1292.5	1265.2	1234.3	1185.2	990.7	532.6	205.4	143.6
17.5°	1401.5	1397.9	1388.8	1377.9	1356.1	1325.2	1287.0	1078.0	554.4	187.2	141.8
20°	1454.2	1452.4	1445.2	1428.8	1410.6	1387.0	1352.5	1152.5	563.5	170.9	140.0
22.5°	1623.3	1608.8	1581.5	1547.0	1503.3	1447.0	1399.7	1208.8	559.9	152.7	136.3
25°	1761.5	1756.0	1726.9	1685.1	1626.9	1554.2	1476.1	1247.0	541.7	138.2	132.7
27.5°	1852.4	1843.3	1816.0	1770.5	1708.7	1637.8	1565.1	1276.1	516.3	125.4	127.2
30°	1916.0	1910.5	1883.3	1832.4	1768.7	1690.6	1616.0	1308.8	481.7	112.7	121.8
32.5°	1956.0	1950.5	1923.2	1877.8	1816.0	1734.2	1648.8	1341.5	439.9	101.8	116.3
35°	1977.8	1972.3	1941.4	1901.4	1843.3	1763.3	1672.4	1357.9	389.0	92.7	110.9
37.5°	2005.0	1994.1	1952.3	1903.2	1845.1	1770.5	1679.7	1356.1	338.1	85.4	107.3
40°	2050.5	2021.4	1961.4	1896.0	1836.0	1761.5	1674.2	1341.5	281.8	80.0	103.6
42.5°	2094.1	2052.3	1963.2	1885.1	1817.8	1745.1	1654.2	1308.8	220.0	76.3	101.8
45°	2108.7	2046.9	1937.8	1859.6	1796.0	1721.5	1626.9	1239.7	149.1	72.7	98.2
47.5°	2012.3	1966.9	1876.0	1817.8	1757.8	1685.1	1586.9	1167.0	85.4	69.1	94.5
50°	1836.0	1806.9	1756.0	1719.7	1686.9	1636.0	1539.7	1059.8	50.9	65.4	90.9
52.5°	1672.4	1663.3	1626.9	1597.9	1579.7	1556.0	1468.8	894.4	41.8	63.6	87.3
55°	1450.6	1421.5	1412.4	1401.5	1439.7	1437.9	1319.7	612.6	40.0	60.0	83.6
57.5°	910.7	923.4	970.7	1058.0	1161.6	1221.6	1217.9	327.2	38.2	56.4	78.2
60°	692.6	690.8	705.3	741.7	818.0	903.5	983.4	114.5	36.4	52.7	74.5
62.5°	207.2	212.7	256.3	376.3	450.8	556.3	507.2	27.3	34.5	47.3	67.3
65°	41.8	43.6	43.6	49.1	60.0	90.9	110.9	23.6	32.7	43.6	61.8
67.5°	18.2	18.2	18.2	20.0	20.0	23.6	20.0	21.8	29.1	38.2	54.5
70°	16.4	16.4	16.4	16.4	16.4	16.4	18.2	18.2	25.4	32.7	47.3
72.5°	12.7	12.7	12.7	14.5	14.5	14.5	14.5	16.4	21.8	27.3	40.0
75°	10.9	10.9	10.9	10.9	12.7	12.7	12.7	14.5	18.2	23.6	32.7
77.5°	9.1	9.1	9.1	9.1	9.1	10.9	10.9	10.9	14.5	18.2	27.3
80°	7.3	7.3	7.3	7.3	7.3	7.3	7.3	9.1	10.9	14.5	20.0
82.5°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	7.3	9.1	10.9	14.5
85°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	5.5	5.5	7.3	9.1
87.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	3.6	3.6	3.6	5.5
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: P1310628

CATALOG NUMBER: P3SQAS20R709040D010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	265.4	265.4	265.4
2.5°	201.8	190.9	185.4
5°	165.4	156.3	154.5
7.5°	152.7	150.9	150.9
10°	149.1	150.9	152.7
12.5°	149.1	152.7	154.5
15°	149.1	152.7	154.5
17.5°	149.1	152.7	154.5
20°	147.2	152.7	156.3
22.5°	145.4	152.7	154.5
25°	143.6	152.7	154.5
27.5°	141.8	150.9	154.5
30°	140.0	150.9	156.3
32.5°	136.3	150.9	156.3
35°	134.5	150.9	156.3
37.5°	132.7	150.9	158.1
40°	130.9	150.9	158.1
42.5°	129.1	150.9	158.1
45°	127.2	149.1	158.1
47.5°	123.6	149.1	158.1
50°	121.8	147.2	156.3
52.5°	118.2	145.4	156.3
55°	114.5	141.8	150.9
57.5°	109.1	136.3	143.6
60°	101.8	129.1	136.3
62.5°	92.7	120.0	125.4
65°	85.4	109.1	116.3
67.5°	74.5	96.3	103.6
70°	65.4	83.6	90.9
72.5°	56.4	70.9	78.2
75°	47.3	58.2	63.6
77.5°	36.4	47.3	50.9
80°	29.1	36.4	40.0
82.5°	20.0	25.4	27.3
85°	12.7	16.4	18.2
87.5°	5.5	7.3	7.3
90°	0.0	0.0	0.0

(END OF REPORT)