

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: P1306172

Luminaire Tested: P3SQASS20R159024D010 E3SQCA451MW

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1306172
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-73)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQASS20R159024D010 E3SQCA451MW
Description: 3in Adjustable LED luminaire with, R15 optic, 2400K CCT AND, 90CRI , E3SQCA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

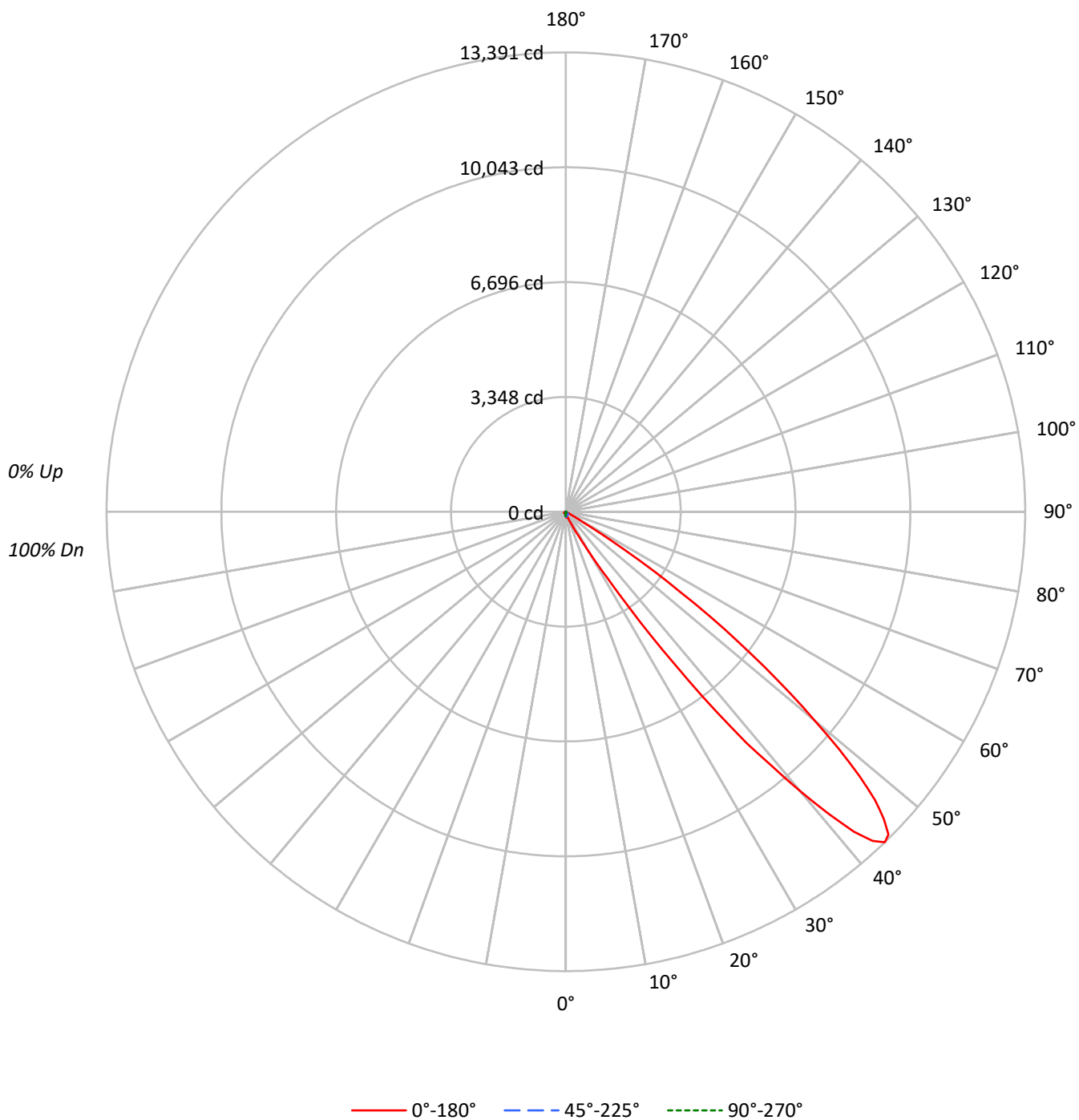
Lumens per Lamp: N/A
Luminaire Lumens: 1495.0 lumens
Efficiency: N/A
Efficacy: 51.9 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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: P1306172

CATALOG NUMBER: P3SQASS20R159024D010 E3SQCA451MW

Luminous Intensity Polar Plot



TEST NUMBER: P1306172

CATALOG NUMBER: P3SQASS20R159024D010 E3SQCA451MW

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	102	99	107	104	100	97	100	97	94		96	93	91		92	90	89	87
2	101	93	87	81	98	91	85	80	87	83	78		84	80	77		81	78	75	73
3	91	81	73	67	89	79	72	66	76	70	65		74	68	64		71	67	63	61
4	83	71	62	55	80	69	61	55	67	60	54		64	58	53		62	57	53	50
5	75	62	52	46	73	61	52	45	58	51	45		56	50	44		55	49	44	42
6	68	54	45	38	66	53	44	38	51	43	37		49	42	37		48	42	37	35
7	62	47	38	32	60	47	38	32	45	37	31		44	36	31		42	36	31	29
8	56	42	33	27	55	41	33	27	40	32	26		39	31	26		37	31	26	24
9	52	37	28	22	50	37	28	22	35	28	22		34	27	22		33	27	22	20
10	48	33	25	19	46	33	25	19	32	24	19		31	24	19		30	23	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	22854	22854	22854	22854	22854
5°	28352	25258	20625	18031	17789
10°	27893	21633	15897	14078	14340
15°	23125	15423	11429	11696	12499
20°	40156	12298	8742	10117	11473
25°	89503	14727	7088	9349	10756
30°	267693	18077	6224	9188	11256
35°	1030474	20373	5635	9398	11900
40°	2391822	17761	5373	9712	12725
45°	3239611	13444	4725	10522	13785
50°	2540145	7984	4796	11173	15165
55°	1219210	3573	4474	12070	16574
60°	111428	517	4099	12848	18497
65°	12144	0	3627	13366	20050
70°	3021	0	4482	14250	21753
75°	2994	998	5922	15903	24820
80°	2975	2975	7438	16265	26580
85°	2964	2964	11856	14820	29443

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3239611 cd/sqm

TEST NUMBER: P1306172

CATALOG NUMBER: P3SQASS20R159024D010 E3SQCA451MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	11.3	0.8
10°-20°	23.6	1.6
20°-30°	56.5	3.8
30°-40°	309.2	20.7
40°-50°	748.8	50.1
50°-60°	298.7	20.0
60°-70°	25.8	1.7
70°-80°	14.6	1.0
80°-90°	6.4	0.4
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°	91.4	6.1
0°-40°	400.6	26.8
0°-60°	1448.2	96.9
0°-90°	1495.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1495.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	133	133	133	133	133	
5°	164	146	119	104	103	16
15°	130	86	64	66	70	45
25°	471	78	37	49	57	284
35°	4901	97	27	45	57	3463
45°	13301	55	19	43	57	9383
55°	4060	12	15	40	55	3783
65°	30	0	9	33	49	76
75°	4	2	9	24	37	4
85°	2	2	6	8	15	1
90°	0	0	0	0	0	

TEST NUMBER: P1306172

CATALOG NUMBER: P3SQASS20R159024D010 E3SQCA451MW

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	132.7	132.7	132.7	132.7	132.7	132.7	132.7	132.7	132.7	132.7	132.7
2.5°	149.1	149.1	150.6	149.1	149.1	149.1	149.1	147.6	147.6	147.6	143.1
5°	164.0	164.0	164.0	164.0	162.5	162.5	162.5	161.0	161.0	159.5	146.1
7.5°	169.9	169.9	168.4	168.4	167.0	167.0	165.5	164.0	162.5	161.0	140.1
10°	159.5	159.5	159.5	158.0	158.0	156.5	155.0	153.5	152.0	149.1	123.7
12.5°	141.6	141.6	143.1	141.6	140.1	138.6	135.6	134.2	132.7	129.7	102.9
15°	129.7	129.7	129.7	128.2	126.7	123.7	122.2	119.3	117.8	113.3	86.5
17.5°	165.5	165.5	164.0	161.0	155.0	150.6	143.1	137.1	129.7	120.7	74.5
20°	219.1	219.1	216.1	213.2	205.7	198.3	186.3	175.9	164.0	153.5	67.1
22.5°	317.5	322.0	313.0	302.6	292.2	274.3	257.9	241.5	220.6	202.7	68.6
25°	471.0	475.5	471.0	447.2	427.8	404.0	372.7	339.9	304.1	271.3	77.5
27.5°	763.2	766.2	758.7	700.6	669.3	606.7	551.5	497.9	438.3	378.6	85.0
30°	1346.1	1347.6	1299.9	1183.6	1080.7	943.6	827.3	715.5	621.6	526.2	90.9
31°	1772.4	1730.7	1629.3	1489.2	1325.2	1140.4	980.9	836.3	696.1	593.3	92.4
32°	2250.9	2244.9	2076.5	1833.5	1614.4	1383.3	1143.3	958.5	797.5	657.4	93.9
33°	2884.4	2887.4	2622.1	2335.9	1976.6	1666.6	1352.0	1098.6	904.8	733.4	96.9
34°	3874.2	3641.7	3330.1	2942.6	2453.6	1987.0	1578.6	1261.1	1001.7	806.4	96.9
35°	4901.3	4667.2	4324.4	3737.1	3066.3	2413.4	1848.4	1435.5	1118.0	885.4	96.9
36°	6052.1	5853.8	5335.1	4585.3	3729.6	2815.8	2134.6	1636.7	1232.8	957.0	95.4
37°	7295.3	7004.6	6429.2	5610.8	4466.0	3382.3	2483.4	1836.5	1347.6	1034.5	92.4
38°	8557.9	8295.5	7569.5	6578.3	5345.5	3980.1	2832.2	2028.8	1453.4	1092.7	87.9
39°	9514.9	9371.8	8651.8	7544.2	6047.6	4546.5	3191.5	2234.5	1565.2	1150.8	83.5
40°	10638.8	10407.8	9725.0	8355.1	6877.9	5123.4	3543.3	2416.4	1657.6	1197.0	79.0
41°	11664.4	11372.2	10510.6	9186.9	7542.7	5642.1	3877.2	2604.2	1732.1	1223.8	76.0
42°	12543.9	12204.0	11303.6	9899.4	8098.7	6056.5	4144.0	2738.3	1802.2	1246.2	71.6
43°	13113.3	12819.6	11934.2	10434.6	8574.3	6436.7	4393.0	2878.5	1845.4	1261.1	65.6
44°	13390.6	13093.9	12236.8	10770.0	8866.4	6664.7	4554.0	2975.3	1893.1	1280.5	61.1
45°	13301.1	13000.0	12171.2	10775.9	8957.3	6746.7	4622.5	3018.6	1918.5	1298.4	55.2
46°	12891.2	12679.5	11844.7	10495.7	8784.4	6658.8	4583.8	2985.8	1909.5	1298.4	49.2
47°	12315.8	12074.3	11279.8	10014.2	8365.6	6432.2	4427.2	2885.9	1854.4	1268.5	43.2
48°	11531.7	11326.0	10491.2	9249.5	7723.1	5938.8	4074.0	2723.4	1767.9	1210.4	37.3
49°	10547.9	10261.7	9485.0	8271.6	6885.3	5238.2	3610.4	2449.1	1629.3	1128.4	32.8
50°	9480.6	9127.3	8528.0	7292.3	6019.3	4491.3	3000.7	2070.5	1434.0	1021.1	29.8
51°	8435.6	8076.4	7505.5	6454.5	5095.1	3726.6	2420.8	1653.1	1180.6	873.5	25.3
52°	7351.9	7050.8	6411.3	5585.5	4361.7	3020.1	2016.9	1398.2	980.9	733.4	20.9
53°	6272.7	6067.0	5458.8	4622.5	3504.5	2467.0	1647.2	1197.0	855.6	627.6	16.4
54°	5192.0	4966.9	4504.8	3759.4	2824.8	1946.8	1396.7	1001.7	742.3	547.1	14.9
55°	4060.5	3944.3	3517.9	2866.5	2140.6	1553.3	1132.9	861.6	621.6	457.6	11.9
56°	3127.4	2996.2	2607.2	2079.5	1590.5	1216.4	916.8	703.6	526.2	383.1	8.9
57°	2048.2	1914.0	1656.1	1451.9	1158.2	886.9	700.6	554.5	427.8	317.5	7.5
58°	1210.4	1088.2	1047.9	894.4	772.2	602.2	517.3	412.9	316.0	250.4	4.5
59°	556.0	565.0	502.4	471.0	427.8	383.1	314.5	275.8	216.1	180.4	3.0
60°	323.5	305.6	298.1	266.8	237.0	210.2	189.3	167.0	135.6	116.3	1.5
62.5°	110.3	105.8	108.8	98.4	92.4	89.4	82.0	70.1	58.1	47.7	0.0
65°	29.8	29.8	28.3	26.8	25.3	23.9	22.4	19.4	17.9	14.9	0.0



TEST NUMBER: P1306172

CATALOG NUMBER: P3SQASS20R159024D010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	10.4	10.4	8.9	8.9	7.5	7.5	6.0	6.0	4.5	4.5	0.0
70°	6.0	6.0	6.0	4.5	4.5	4.5	3.0	3.0	3.0	1.5	0.0
72.5°	4.5	4.5	4.5	4.5	4.5	4.5	3.0	3.0	3.0	1.5	1.5
75°	4.5	4.5	4.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	1.5
77.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
80°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	1.5	3.0
82.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.0
85°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
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: P1306172

CATALOG NUMBER: P3SQASS20R159024D010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	132.7	132.7	132.7	132.7	132.7	132.7
2.5°	137.1	131.2	123.7	119.3	117.8	116.3
5°	131.2	119.3	110.3	104.3	102.9	102.9
7.5°	117.8	104.3	95.4	92.4	90.9	90.9
10°	102.9	90.9	83.5	80.5	82.0	82.0
12.5°	86.5	76.0	73.0	73.0	74.5	76.0
15°	70.1	64.1	64.1	65.6	68.6	70.1
17.5°	58.1	55.2	56.6	59.6	62.6	65.6
20°	47.7	47.7	50.7	55.2	59.6	62.6
22.5°	40.2	41.7	46.2	50.7	56.6	59.6
25°	34.3	37.3	41.7	49.2	55.2	56.6
27.5°	29.8	34.3	40.2	47.7	53.7	56.6
30°	25.3	31.3	38.8	46.2	53.7	56.6
31°	23.9	29.8	37.3	46.2	53.7	56.6
32°	22.4	29.8	37.3	46.2	53.7	56.6
33°	20.9	28.3	37.3	44.7	53.7	56.6
34°	19.4	28.3	37.3	46.2	53.7	56.6
35°	17.9	26.8	35.8	44.7	52.2	56.6
36°	16.4	26.8	35.8	44.7	53.7	56.6
37°	14.9	26.8	35.8	44.7	52.2	56.6
38°	14.9	25.3	34.3	44.7	52.2	56.6
39°	13.4	23.9	34.3	44.7	52.2	56.6
40°	11.9	23.9	32.8	43.2	52.2	56.6
41°	10.4	22.4	32.8	43.2	52.2	56.6
42°	8.9	22.4	32.8	43.2	52.2	56.6
43°	7.5	20.9	31.3	43.2	52.2	56.6
44°	7.5	20.9	31.3	43.2	52.2	56.6
45°	6.0	19.4	29.8	43.2	52.2	56.6
46°	6.0	19.4	29.8	41.7	52.2	56.6
47°	4.5	19.4	29.8	41.7	52.2	56.6
48°	4.5	17.9	29.8	41.7	52.2	56.6
49°	3.0	17.9	29.8	41.7	52.2	56.6
50°	3.0	17.9	28.3	41.7	52.2	56.6
51°	3.0	17.9	28.3	41.7	52.2	56.6
52°	3.0	16.4	28.3	41.7	52.2	56.6
53°	3.0	16.4	28.3	41.7	52.2	56.6
54°	3.0	16.4	26.8	41.7	52.2	56.6
55°	3.0	14.9	26.8	40.2	52.2	55.2
56°	3.0	14.9	26.8	40.2	52.2	55.2
57°	3.0	14.9	25.3	40.2	52.2	55.2
58°	3.0	13.4	25.3	38.8	50.7	55.2
59°	3.0	13.4	23.9	38.8	50.7	53.7
60°	3.0	11.9	23.9	37.3	49.2	53.7
62.5°	3.0	10.4	20.9	35.8	47.7	50.7
65°	3.0	8.9	19.4	32.8	46.2	49.2



TEST NUMBER: P1306172

CATALOG NUMBER: P3SQASS20R159024D010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	3.0	8.9	17.9	31.3	43.2	47.7
70°	3.0	8.9	16.4	28.3	41.7	43.2
72.5°	4.5	8.9	14.9	26.8	38.8	40.2
75°	6.0	8.9	13.4	23.9	35.8	37.3
77.5°	6.0	8.9	11.9	20.9	31.3	32.8
80°	6.0	7.5	10.4	16.4	25.3	26.8
82.5°	6.0	7.5	7.5	13.4	19.4	20.9
85°	4.5	6.0	6.0	7.5	13.4	14.9
87.5°	4.5	6.0	3.0	4.5	6.0	6.0
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)