

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: P1310135

Luminaire Tested: P3SQAS09R559040DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1310135
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: P3SQAS09R559040DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R55 optic, 4000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

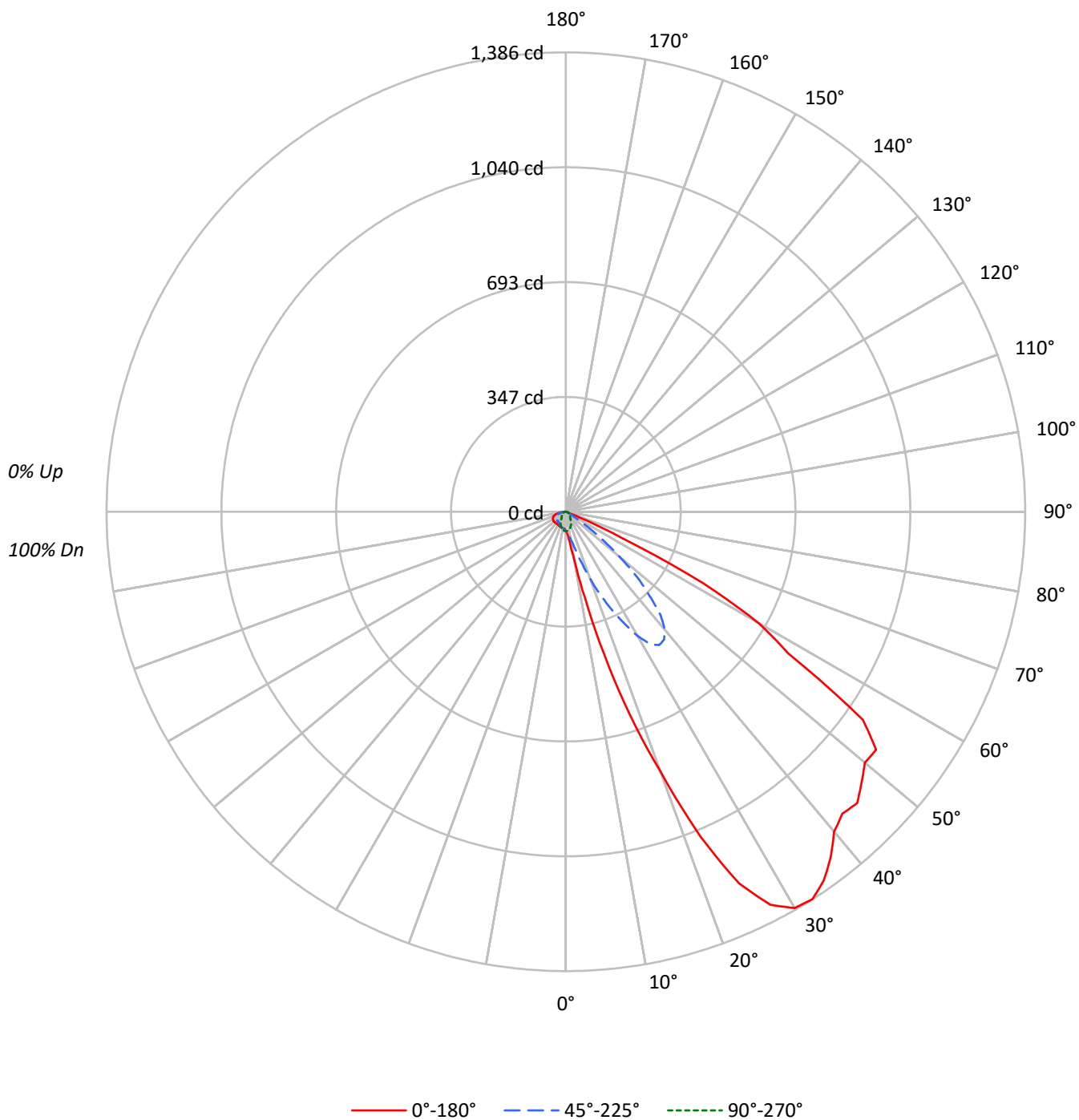
Lumens per Lamp: N/A
Luminaire Lumens: 891.0 lumens
Efficiency: N/A
Efficacy: 80.3 lumens/watt
Spacing Criteria (0/90/45): 3.76 / 0.9 / 1.95
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11.1
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: P1310135

CATALOG NUMBER: P3SQAS09R559040DE010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1310135

CATALOG NUMBER: P3SQAS09R559040DE010 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°	9903	9903	9903	9903	9903
5°	12655	11566	9941	9249	8990
10°	25742	14725	9636	8814	8814
15°	79022	22590	8986	8558	8844
20°	152797	39533	8082	8376	8797
25°	235177	61493	7031	8076	8817
30°	274594	85950	5787	7975	9088
35°	285345	103272	4794	7947	9440
40°	283184	104249	4429	8318	10274
45°	302769	86293	4214	9012	11131
50°	315542	56962	4207	9699	12432
55°	328576	24832	4264	10629	13722
60°	232122	5683	4340	11677	15466
65°	75716	1915	4157	12511	17319
70°	2367	1964	4381	13495	19840
75°	2063	2063	3660	14173	22025
80°	1587	2380	3868	14083	23406
85°	1581	3162	4742	14030	23317

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 52.5°

Luminance: 333858 cd/sqm

TEST NUMBER: P1310135

CATALOG NUMBER: P3SQAS09R559040DE010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	6.1	0.7
10°-20°	37.8	4.2
20°-30°	126.8	14.2
30°-40°	208.3	23.4
40°-50°	232.3	26.1
50°-60°	195.5	21.9
60°-70°	66.3	7.4
70°-80°	13.0	1.5
80°-90°	4.9	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°	170.7	19.2
0°-40°	379.0	42.5
0°-60°	806.8	90.6
0°-90°	891.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	891.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	58	58	58	58	58	
5°	73	67	58	54	52	9
15°	443	127	50	48	50	141
25°	1238	324	37	42	46	556
35°	1357	491	23	38	45	843
45°	1243	354	17	37	46	949
55°	1094	83	14	35	46	891
65°	186	5	10	31	42	252
75°	3	3	6	21	33	3
85°	1	2	2	7	12	1
90°	0	0	0	0	0	

TEST NUMBER: P1310135

CATALOG NUMBER: P3SQAS09R559040DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	45°	67.5°	90°	112.5°	135°
0°	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5
2.5°	63.0	63.0	63.0	63.0	63.0	63.0	62.2	59.8	58.3	55.9	55.1
5°	73.2	73.2	73.2	72.4	72.4	70.9	66.9	61.4	57.5	54.3	53.5
7.5°	94.5	93.7	92.1	91.3	89.0	88.2	74.0	63.0	56.7	52.7	52.0
10°	147.2	145.6	143.3	134.6	126.7	121.2	84.2	63.8	55.1	51.2	50.4
12.5°	265.3	262.2	250.3	232.2	210.2	199.2	100.8	64.6	52.7	49.6	49.6
15°	443.2	439.3	417.2	392.1	351.9	329.9	126.7	63.8	50.4	47.2	48.0
17.5°	640.0	629.0	606.2	573.1	518.8	492.8	165.3	62.2	47.2	45.7	47.2
20°	833.7	830.6	792.8	747.9	681.0	646.3	215.7	59.8	44.1	43.3	45.7
22.5°	1060.4	1047.0	1006.9	958.9	866.8	821.1	270.0	56.7	40.9	40.9	44.1
25°	1237.6	1221.8	1190.3	1134.4	1047.0	998.2	323.6	52.7	37.0	38.6	42.5
27.5°	1336.8	1318.6	1295.0	1247.0	1179.3	1136.0	377.1	48.0	33.1	36.2	40.9
30°	1380.8	1376.1	1358.8	1323.4	1261.2	1222.6	432.2	42.5	29.1	33.9	40.1
32.5°	1385.6	1387.9	1380.8	1358.0	1310.8	1277.7	473.1	37.8	26.0	32.3	38.6
35°	1357.2	1365.9	1370.6	1361.2	1330.5	1303.7	491.2	32.3	22.8	30.7	37.8
37.5°	1313.1	1328.9	1344.6	1347.0	1328.1	1310.8	486.5	27.6	21.3	29.9	37.8
40°	1259.6	1273.8	1306.1	1326.5	1320.2	1307.6	463.7	22.8	19.7	28.3	37.0
42.5°	1235.2	1238.3	1273.0	1307.6	1306.1	1295.8	423.5	18.1	18.1	28.3	37.0
45°	1243.1	1228.9	1251.7	1291.9	1289.5	1276.1	354.3	14.2	17.3	27.6	37.0
47.5°	1210.0	1190.3	1228.9	1276.1	1267.5	1247.8	292.9	10.2	16.5	26.8	36.2
50°	1177.7	1174.6	1204.5	1228.1	1216.3	1205.3	212.6	7.9	15.7	26.0	36.2
52.5°	1180.1	1174.6	1177.7	1176.9	1153.3	1141.5	145.6	6.3	15.0	25.2	36.2
55°	1094.3	1077.0	1060.4	1065.2	1066.7	1058.9	82.7	5.5	14.2	25.2	35.4
57.5°	795.1	790.4	808.5	859.7	899.8	904.6	40.1	5.5	13.4	24.4	34.6
60°	673.9	670.7	671.5	686.5	707.7	694.4	16.5	5.5	12.6	23.6	33.9
62.5°	464.5	495.2	507.8	542.4	528.2	509.4	6.3	6.3	11.8	22.0	33.1
65°	185.8	185.0	202.3	218.9	214.1	200.0	4.7	5.5	10.2	20.5	30.7
67.5°	43.3	39.4	33.9	29.1	24.4	19.7	4.7	5.5	9.4	18.9	29.1
70°	4.7	4.7	4.7	4.7	4.7	3.9	3.9	5.5	8.7	17.3	26.8
72.5°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	4.7	7.1	15.0	24.4
75°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.9	5.5	12.6	21.3
77.5°	2.4	2.4	2.4	3.1	2.4	3.1	3.1	3.9	4.7	10.2	18.1
80°	1.6	1.6	2.4	2.4	2.4	2.4	2.4	3.1	3.9	8.7	14.2
82.5°	1.6	1.6	1.6	1.6	1.6	1.6	2.4	2.4	3.1	6.3	10.2
85°	0.8	0.8	0.8	0.8	0.8	1.6	1.6	2.4	2.4	4.7	7.1
87.5°	0.8	0.8	0.8	0.8	0.8	0.8	1.6	1.6	2.4	2.4	3.1
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: P1310135

CATALOG NUMBER: P3SQAS09R559040DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	157.5°	180°
0°	57.5	57.5
2.5°	54.3	54.3
5°	52.7	52.0
7.5°	51.2	51.2
10°	50.4	50.4
12.5°	49.6	50.4
15°	49.6	49.6
17.5°	48.0	48.8
20°	47.2	48.0
22.5°	46.4	47.2
25°	45.7	46.4
27.5°	44.9	45.7
30°	44.1	45.7
32.5°	43.3	44.9
35°	43.3	44.9
37.5°	43.3	45.7
40°	43.3	45.7
42.5°	43.3	45.7
45°	43.3	45.7
47.5°	43.3	45.7
50°	43.3	46.4
52.5°	43.3	46.4
55°	43.3	45.7
57.5°	42.5	45.7
60°	42.5	44.9
62.5°	41.7	44.1
65°	40.1	42.5
67.5°	38.6	41.7
70°	36.2	39.4
72.5°	33.9	36.2
75°	30.7	33.1
77.5°	26.8	28.3
80°	21.3	23.6
82.5°	16.5	18.1
85°	11.0	11.8
87.5°	4.7	5.5
90°	0.0	0.0

(END OF REPORT)