

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: P1310294

Luminaire Tested: P3SQAS13R509040DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1310294
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-79)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS13R509040DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R50 optic, 4000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

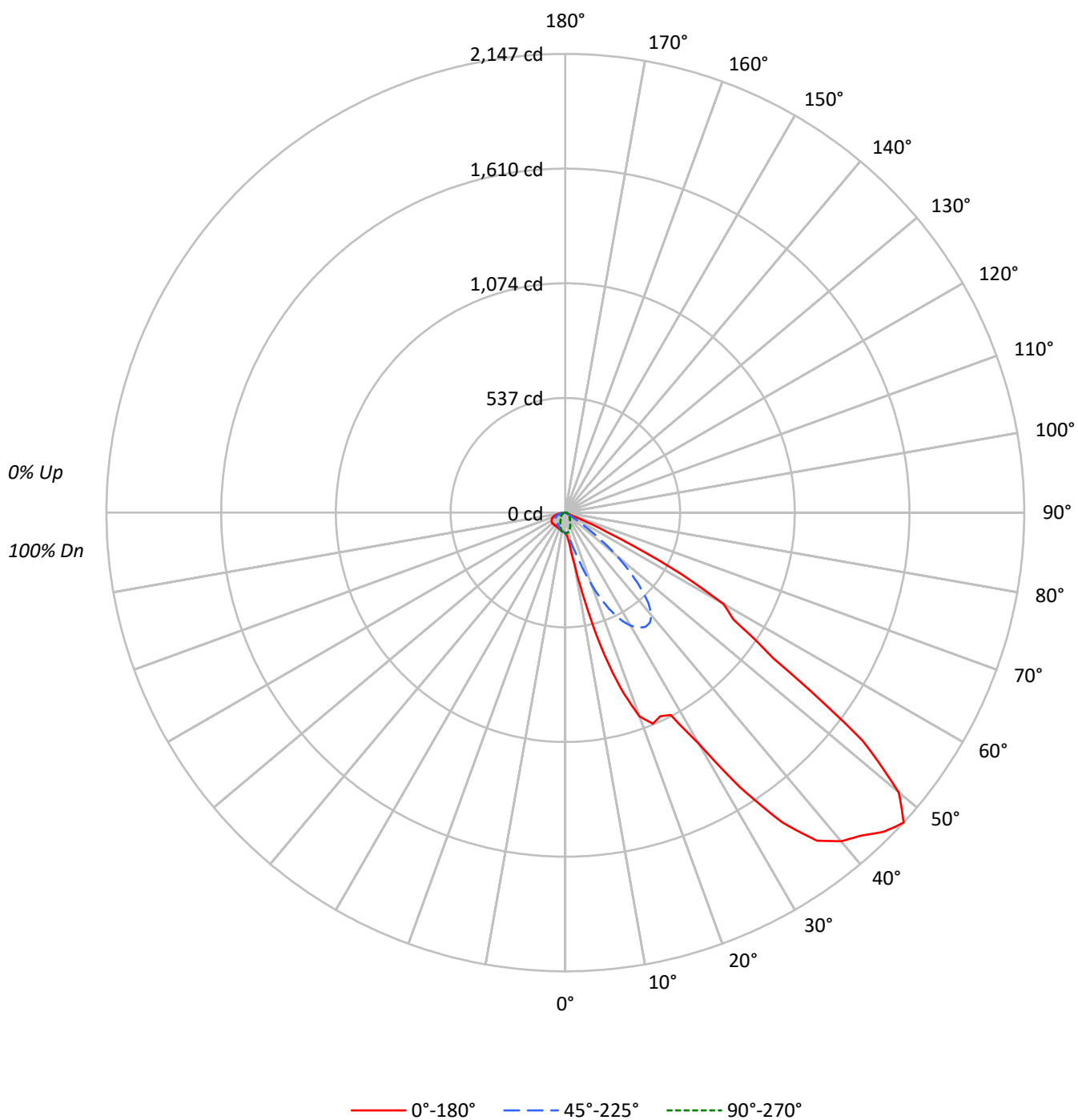
Lumens per Lamp: N/A
Luminaire Lumens: 1211.0 lumens
Efficiency: N/A
Efficacy: 82.9 lumens/watt
Spacing Criteria (0/90/45): 3.58 / 0.83 / 1.91
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.6
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

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Luminous Intensity Polar Plot



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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	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86		
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73		
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61		
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51		
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43		
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	50	43	39	37		
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31		
8	58	44	36	30	57	44	35	29	42	35	29	41	34	29	40	34	29	27		
9	54	40	31	26	53	39	31	26	38	31	25	37	30	25	36	30	25	23		
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22	20		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	16568	16568	16568	16568	16568
5°	19708	18446	16458	15732	15559
10°	42443	22857	15739	15180	15372
15°	117498	37478	14175	14549	15102
20°	185768	65759	12261	14002	14754
25°	199756	96610	10527	13511	14898
30°	247946	121268	9148	13304	15392
35°	372092	137227	7926	13414	16273
40°	451283	141097	7059	13871	17176
45°	514106	121000	6868	14784	18852
50°	545641	83514	6993	15969	21006
55°	356470	33599	6906	17265	23240
60°	293984	5752	6854	18738	25592
65°	88675	2975	6398	20050	28118
70°	3676	3172	6345	20545	30565
75°	3460	3460	6255	20894	33404
80°	3075	3075	6248	20728	34217
85°	1976	4150	8299	20748	33000

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47.5°

Luminance: 547419 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	10.0	0.8
10°-20°	57.3	4.7
20°-30°	147.4	12.2
30°-40°	264.8	21.9
40°-50°	353.7	29.2
50°-60°	269.4	22.2
60°-70°	81.8	6.8
70°-80°	19.5	1.6
80°-90°	7.1	0.6
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°	214.8	17.7
0°-40°	479.6	39.6
0°-60°	1102.6	91.1
0°-90°	1211.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1211.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	96	96	96	96	96	
5°	114	107	95	91	90	15
15°	659	210	80	82	85	194
25°	1051	508	55	71	78	502
35°	1770	653	38	64	77	1087
45°	2111	497	28	61	77	1614
55°	1187	112	23	58	77	1181
65°	218	7	16	49	69	301
75°	5	5	9	31	50	6
85°	1	2	4	10	17	2
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2
2.5°	102.5	102.5	102.5	102.5	102.5	102.5	101.5	101.5	101.5	99.4	97.3
5°	114.0	115.1	114.0	114.0	111.9	111.9	109.8	109.8	106.7	100.4	95.2
7.5°	149.6	148.5	147.5	143.3	140.2	132.8	129.7	124.5	115.1	100.4	93.1
10°	242.7	236.4	232.2	222.8	202.9	190.4	173.6	156.9	130.7	100.4	90.0
12.5°	421.5	420.5	407.9	376.6	348.3	309.6	268.8	228.0	161.1	98.3	85.8
15°	659.0	649.6	631.8	595.2	545.0	484.3	411.1	338.9	210.2	95.2	79.5
17.5°	861.9	850.4	836.8	800.2	742.7	666.3	578.4	479.1	277.2	91.0	73.2
20°	1013.6	1006.2	994.7	965.4	911.1	842.0	743.7	623.4	358.8	85.8	66.9
22.5°	1069.0	1068.0	1070.0	1059.6	1032.4	978.0	883.9	758.3	439.3	79.5	60.7
25°	1051.2	1050.2	1063.8	1077.4	1083.6	1061.7	989.5	867.1	508.4	74.3	55.4
27.5°	1068.0	1064.8	1058.5	1060.6	1078.4	1091.0	1057.5	950.8	568.0	66.9	50.2
30°	1246.8	1229.0	1200.8	1152.7	1117.1	1114.0	1099.3	1016.7	609.8	59.6	46.0
32.5°	1526.1	1504.1	1452.9	1364.0	1279.2	1214.4	1168.4	1072.1	639.1	52.3	40.8
35°	1769.8	1754.1	1694.5	1606.6	1485.3	1364.0	1280.3	1153.7	652.7	46.0	37.7
37.5°	1935.1	1928.8	1870.2	1776.1	1652.7	1509.4	1398.5	1237.4	649.6	38.7	34.5
40°	2007.3	1988.4	1939.3	1859.8	1735.3	1606.6	1489.5	1290.7	627.6	31.4	31.4
42.5°	2050.1	2029.2	1975.9	1900.6	1778.2	1641.2	1499.9	1267.7	575.3	25.1	30.3
45°	2110.8	2088.8	2018.8	1938.2	1814.8	1655.8	1459.2	1186.2	496.8	18.8	28.2
47.5°	2147.4	2132.8	2080.5	1999.9	1850.4	1634.9	1365.0	1109.8	410.0	14.6	27.2
50°	2036.5	2021.9	1983.2	1927.8	1827.3	1564.8	1282.4	986.4	311.7	11.5	26.1
52.5°	1753.1	1765.6	1773.0	1788.6	1715.4	1407.9	1159.0	888.0	210.2	9.4	24.1
55°	1187.2	1206.0	1226.9	1289.7	1375.5	1253.1	1029.3	767.8	111.9	9.4	23.0
57.5°	933.0	926.7	920.5	916.3	983.2	1033.4	904.8	614.0	48.1	9.4	20.9
60°	853.5	834.7	822.1	825.3	858.8	838.9	716.5	400.6	16.7	9.4	19.9
62.5°	559.6	574.2	602.5	650.6	627.6	538.7	416.3	159.0	8.4	9.4	17.8
65°	217.6	210.2	217.6	231.2	199.8	148.5	93.1	28.2	7.3	8.4	15.7
67.5°	29.3	26.1	19.9	12.6	11.5	10.5	8.4	7.3	7.3	8.4	14.6
70°	7.3	7.3	7.3	7.3	7.3	7.3	7.3	6.3	6.3	7.3	12.6
72.5°	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	7.3	10.5
75°	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	6.3	9.4
77.5°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	5.2	7.3
80°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	4.2	6.3
82.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	3.1	3.1	4.2	5.2
85°	1.0	2.1	1.0	2.1	2.1	2.1	2.1	2.1	2.1	3.1	4.2
87.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.1	3.1	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

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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	96.2	96.2	96.2	96.2
2.5°	95.2	93.1	93.1	93.1
5°	93.1	91.0	91.0	90.0
7.5°	90.0	88.9	88.9	88.9
10°	87.9	86.8	87.9	87.9
12.5°	83.7	84.7	85.8	85.8
15°	79.5	81.6	83.7	84.7
17.5°	75.3	79.5	81.6	82.6
20°	71.1	76.4	79.5	80.5
22.5°	68.0	73.2	77.4	79.5
25°	63.8	71.1	76.4	78.4
27.5°	59.6	68.0	74.3	77.4
30°	56.5	66.9	74.3	77.4
32.5°	53.3	64.9	73.2	76.4
35°	51.3	63.8	73.2	77.4
37.5°	49.2	62.8	73.2	76.4
40°	48.1	61.7	73.2	76.4
42.5°	47.1	61.7	73.2	77.4
45°	45.0	60.7	73.2	77.4
47.5°	43.9	60.7	73.2	77.4
50°	42.9	59.6	73.2	78.4
52.5°	41.8	58.6	73.2	78.4
55°	39.7	57.5	72.2	77.4
57.5°	38.7	56.5	71.1	75.3
60°	36.6	54.4	69.0	74.3
62.5°	34.5	52.3	66.9	71.1
65°	31.4	49.2	63.8	69.0
67.5°	28.2	45.0	60.7	65.9
70°	25.1	40.8	56.5	60.7
72.5°	22.0	36.6	52.3	55.4
75°	18.8	31.4	46.0	50.2
77.5°	15.7	27.2	38.7	41.8
80°	11.5	20.9	31.4	34.5
82.5°	9.4	15.7	23.0	25.1
85°	6.3	10.5	14.6	16.7
87.5°	3.1	5.2	7.3	8.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)