

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: P1309960

Luminaire Tested: P3SQAS05R459040DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1309960
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-84)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS05R459040DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R45 optic, 4000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

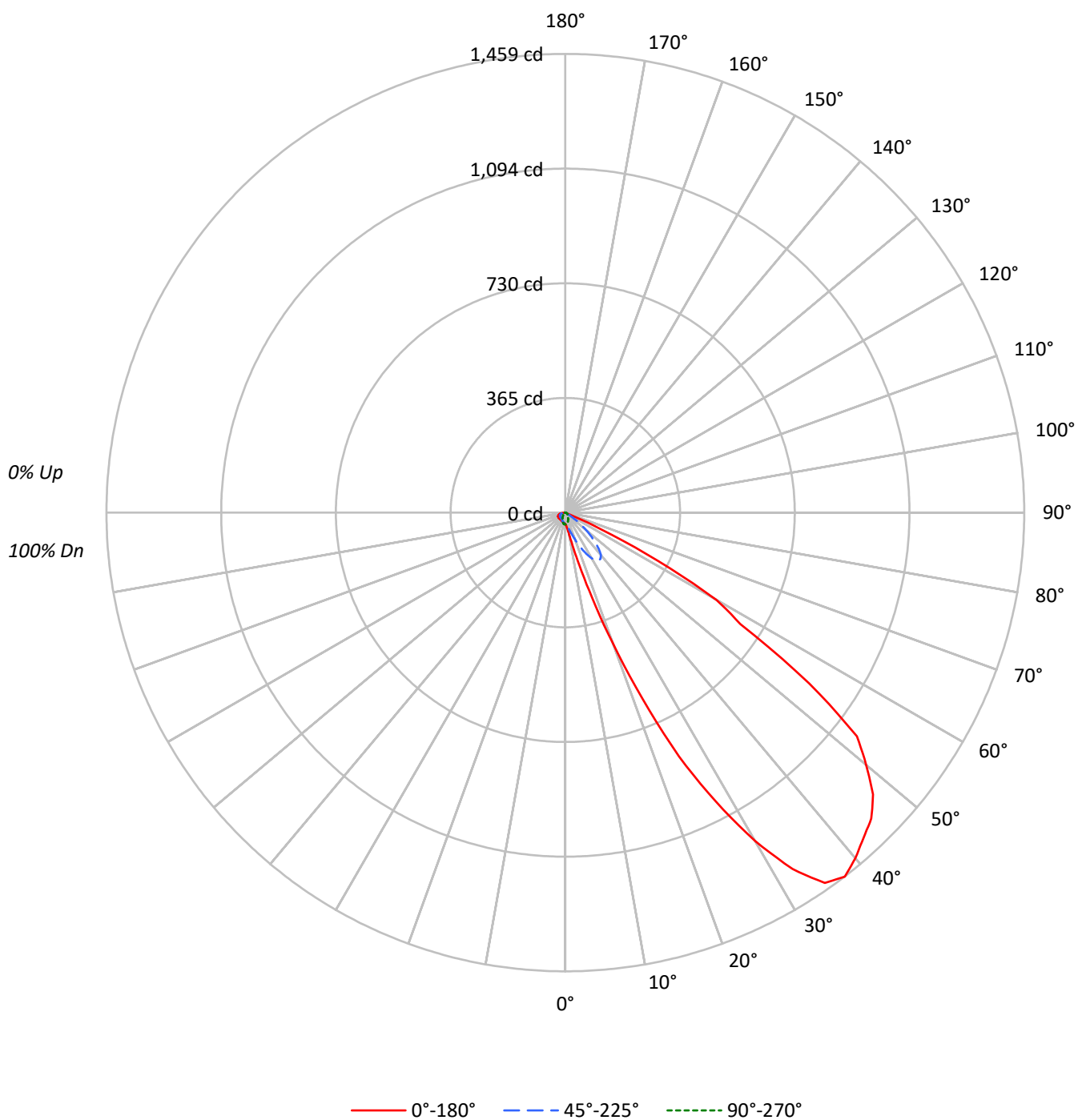
Lumens per Lamp: N/A
Luminaire Lumens: 652.0 lumens
Efficiency: N/A
Efficacy: 90.6 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 7.2
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: P1309960

CATALOG NUMBER: P3SQAS05R459040DE010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1309960

CATALOG NUMBER: P3SQAS05R459040DE010 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	96	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	66	77	70	65	74	69	64	71	67	63	61		
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	76	63	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43		
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36		
7	63	49	40	34	61	48	40	33	47	39	33	45	38	33	44	37	33	31		
8	58	44	35	29	56	43	35	29	42	34	29	40	33	28	39	33	28	26		
9	53	39	31	25	52	39	30	25	38	30	25	36	29	25	35	29	24	22		
10	49	36	27	22	48	35	27	22	34	27	21	33	26	21	32	26	21	19		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	6493	6493	6493	6493	6493
5°	7728	7175	6431	5964	5964
10°	12346	8377	6033	5649	5649
15°	30739	11233	5474	5278	5474
20°	80971	16788	4747	5040	5333
25°	162568	24874	4086	4713	5226
30°	239653	33310	3321	4614	5349
35°	302311	39085	2838	4520	5550
40°	322528	39479	2540	4721	5935
45°	335114	32929	2363	5115	6430
50°	334592	22962	2304	5493	7207
55°	284377	10179	2432	6155	7927
60°	191133	2032	2411	6854	9093
65°	50695	897	2404	7457	10310
70°	1360	1108	2417	8157	11682
75°	1065	1065	2529	8584	13242
80°	1091	1587	2678	9124	14976
85°	988	2174	4347	9485	14820

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 343736 cd/sqm

TEST NUMBER: P1309960

CATALOG NUMBER: P3SQAS05R459040DE010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.7	0.6
10°-20°	18.4	2.8
20°-30°	75.8	11.6
30°-40°	159.8	24.5
40°-50°	197.2	30.2
50°-60°	147.8	22.7
60°-70°	38.0	5.8
70°-80°	7.9	1.2
80°-90°	3.2	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°	98.0	15.0
0°-40°	257.8	39.5
0°-60°	602.9	92.5
0°-90°	652.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	652.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	38	38	38	38	38	
5°	45	42	37	34	34	5
15°	172	63	31	30	31	63
25°	856	131	22	25	28	399
35°	1438	186	14	22	26	876
45°	1376	135	10	21	26	1053
55°	947	34	8	20	26	818
65°	124	2	6	18	25	179
75°	2	2	4	13	20	2
85°	0	1	2	5	8	1
90°	0	0	0	0	0	

TEST NUMBER: P1309960

CATALOG NUMBER: P3SQAS05R459040DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.7
2.5°	39.9	39.9	39.9	39.9	39.9	39.9	39.9	39.3	38.8	37.7	36.6
5°	44.7	44.2	44.2	44.2	43.6	43.1	43.1	41.5	39.3	37.2	35.6
7.5°	52.8	52.8	52.3	51.2	50.6	49.6	48.5	44.2	39.3	36.1	33.9
10°	70.6	69.5	67.9	66.8	64.1	60.3	57.6	47.9	38.8	34.5	32.9
12.5°	105.6	107.7	102.4	97.0	89.4	82.4	73.8	54.4	38.8	32.9	31.2
15°	172.4	176.2	165.9	155.2	136.8	119.6	103.4	63.0	37.7	30.7	29.1
17.5°	281.8	286.6	269.4	244.0	215.5	181.0	151.4	74.9	36.6	28.6	27.5
20°	441.8	441.2	407.8	376.0	321.1	270.4	215.0	91.6	35.0	25.9	25.9
22.5°	638.4	640.6	599.6	542.5	464.4	383.0	294.7	111.0	32.9	23.7	24.2
25°	855.5	837.2	788.7	719.2	619.5	506.9	390.6	130.9	30.7	21.5	22.6
27.5°	1036.5	1018.7	963.3	880.8	773.6	640.0	488.1	150.8	28.0	19.4	21.0
30°	1205.1	1182.5	1115.7	1022.5	894.8	750.5	579.7	167.5	24.8	16.7	19.4
32.5°	1344.1	1323.7	1247.7	1139.4	1000.4	845.3	657.3	180.5	21.5	15.1	18.3
35°	1437.9	1416.9	1346.8	1227.8	1076.4	914.2	720.3	185.9	18.9	13.5	17.8
37.5°	1459.4	1448.1	1398.0	1286.5	1128.6	958.4	760.7	184.2	15.6	12.4	16.7
40°	1434.6	1437.3	1413.6	1321.0	1156.7	977.3	777.4	175.6	12.9	11.3	16.2
42.5°	1402.9	1409.9	1408.2	1335.0	1168.5	978.3	770.4	158.4	10.2	10.2	15.6
45°	1375.9	1382.9	1392.6	1329.1	1160.4	964.3	748.3	135.2	7.5	9.7	15.6
47.5°	1326.9	1334.4	1348.4	1281.6	1119.5	928.2	708.4	109.9	5.4	9.2	15.1
50°	1248.8	1252.6	1248.8	1173.9	1040.8	870.1	643.8	85.7	3.8	8.6	15.1
52.5°	1168.5	1161.0	1129.7	1034.9	915.8	777.9	562.4	60.9	2.7	8.1	14.5
55°	947.1	935.2	912.1	853.9	786.0	664.8	454.7	33.9	2.7	8.1	14.0
57.5°	659.9	666.4	674.5	662.6	631.4	523.6	345.3	15.1	2.7	7.5	14.0
60°	554.9	549.5	550.0	542.5	490.8	382.0	237.6	5.9	2.7	7.0	13.5
62.5°	331.3	335.1	342.1	343.7	292.5	213.3	124.4	2.7	2.7	6.5	12.9
65°	124.4	130.4	114.2	99.1	78.7	57.6	29.1	2.2	3.2	5.9	11.9
67.5°	3.8	4.3	5.4	4.8	4.8	4.3	3.2	2.2	3.2	5.4	11.3
70°	2.7	2.7	2.7	2.7	2.7	2.2	2.2	2.2	2.7	4.8	10.2
72.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.7	4.3	9.2
75°	1.6	2.2	1.6	1.6	1.6	1.6	1.6	1.6	2.7	3.8	7.5
77.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.2	3.2	6.5
80°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.6	2.2	2.7	5.4
82.5°	1.1	1.1	1.1	0.5	1.1	1.1	1.1	1.1	2.2	2.2	4.3
85°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.1	1.6	2.2	2.7
87.5°	0.0	0.0	0.0	0.0	0.5	0.5	0.5	1.1	1.6	1.6	1.6
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: P1309960

CATALOG NUMBER: P3SQAS05R459040DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	37.7	37.7	37.7
2.5°	35.6	35.6	35.6
5°	34.5	34.5	34.5
7.5°	33.4	33.4	33.4
10°	32.3	32.3	32.3
12.5°	31.2	31.2	31.8
15°	29.6	30.7	30.7
17.5°	28.6	29.6	30.2
20°	27.5	28.6	29.1
22.5°	25.9	27.5	28.6
25°	24.8	26.9	27.5
27.5°	23.7	26.4	27.5
30°	23.2	25.9	26.9
32.5°	22.1	25.3	26.4
35°	21.5	25.3	26.4
37.5°	21.5	24.8	26.4
40°	21.0	24.8	26.4
42.5°	21.0	24.8	26.4
45°	21.0	24.8	26.4
47.5°	20.5	24.8	26.9
50°	20.5	25.3	26.9
52.5°	20.5	25.3	26.9
55°	20.5	25.3	26.4
57.5°	19.9	24.8	26.4
60°	19.9	24.8	26.4
62.5°	18.9	24.2	25.9
65°	18.3	23.7	25.3
67.5°	17.2	23.2	24.2
70°	16.2	21.5	23.2
72.5°	14.5	20.5	22.1
75°	12.9	18.9	19.9
77.5°	11.3	16.7	17.8
80°	9.2	14.0	15.1
82.5°	7.0	10.8	11.3
85°	4.8	7.0	7.5
87.5°	2.2	3.2	3.8
90°	0.0	0.0	0.0

(END OF REPORT)