

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: CORELITE

Report Number: P1191400

Luminaire Tested: SQ2-FA-050D-L940-UNV-STD-W-4

Issue Date: 9/23/2025

Test Information

Test Method: LM-79-2019
Report Number: P1191400
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G2-2502-345-2)
Test Lab: INNOVATION CENTER
Issue Date: 9/23/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-FA-050D-L940-UNV-STD-W-4
Description: CORELITE SQ2 LED LUMINAIRE
FROSTED CONTINUOUS ASYMMETRIC ROLL LENS
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

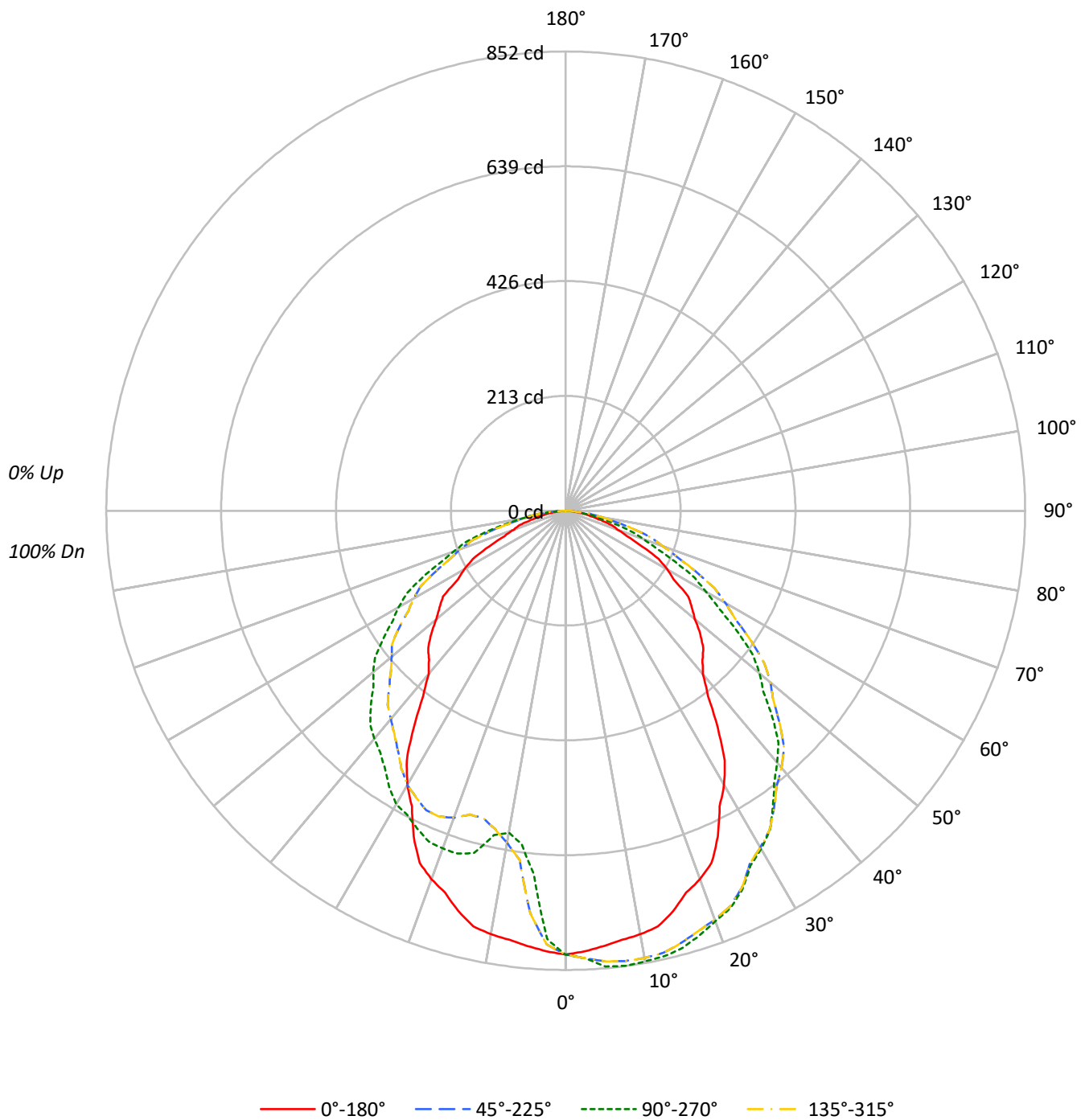
Lumens per Lamp: N/A
Luminaire Lumens: 2044.9 lumens
Efficiency: N/A
Efficacy: 114.9 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 1.23 / 1.34
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.8
Input Voltage (V): 120
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
RW	70	50	30	10	70	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
1	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54
5	77	64	55	49	75	63	55	49	61	54	48	59	53	47	57	52	47
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	52	46	41
7	66	53	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	33
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30
10	54	41	33	28	53	40	33	28	39	32	27	38	32	27	37	31	27

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	13294	13294	13294	13294
5°	13138	13759	13138	10966
10°	13082	13918	13082	9942
15°	12856	14029	12856	10989
20°	12502	13928	12502	11460
25°	11883	13816	11883	11598
30°	10948	13507	10948	11721
35°	9688	13210	9688	11511
40°	8340	12848	8340	11637
45°	8234	12387	8234	11659
50°	7857	11783	7857	11703
55°	7817	10871	7817	11589
60°	7007	9688	7007	11541
65°	5975	8535	5975	11217
70°	4820	7232	4820	10395
75°	4180	5970	4180	9557
80°	3561	4454	3561	7717
85°	2371	2371	2371	4724

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 12826 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.1	3.6
10°-20°	207.0	10.1
20°-30°	314.4	15.4
30°-40°	369.1	18.0
40°-50°	374.5	18.3
50°-60°	328.1	16.0
60°-70°	232.7	11.4
70°-80°	119.9	5.9
80°-90°	25.1	1.2
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°	595.5	29.1
0°-40°	964.6	47.2
0°-60°	1667.2	81.5
0°-90°	2044.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2044.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	823	823	823	823	823	
5°	811	849	811	677	811	77
15°	769	839	769	657	769	216
25°	667	776	667	651	667	304
35°	492	670	492	584	492	306
45°	361	542	361	511	361	276
55°	278	386	278	412	278	240
65°	156	223	156	294	156	156
75°	67	96	67	153	67	72
85°	13	13	13	26	13	16
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	823.4	823.4	823.4	823.4	823.4	823.4	823.4	823.4	823.4	823.4	823.4
2.5°	818.3	830.8	831.0	831.0	831.0	831.0	831.0	830.8	818.3	818.3	805.5
5°	810.6	832.5	839.3	842.7	848.9	842.7	839.3	832.5	810.6	801.3	750.0
7.5°	803.0	832.3	842.5	848.3	851.5	848.3	842.5	832.3	803.0	761.1	653.6
10°	797.9	832.2	842.5	845.8	848.9	845.8	842.5	832.2	797.9	713.6	625.5
12.5°	790.2	827.0	840.0	843.2	846.4	843.2	840.0	827.0	790.2	671.0	605.1
15°	769.1	819.1	829.8	836.2	839.3	836.2	829.8	819.1	769.1	634.9	590.4
17.5°	743.0	803.5	817.6	823.4	825.9	823.4	817.6	803.5	743.0	602.5	591.0
20°	727.6	793.2	807.4	810.6	810.6	810.6	807.4	793.2	727.6	587.2	606.4
22.5°	707.2	780.2	794.7	795.4	797.9	795.4	794.7	780.2	707.2	569.3	614.0
25°	667.0	751.3	772.3	769.3	775.5	769.3	772.3	751.3	667.0	545.3	612.8
27.5°	617.9	724.0	739.1	742.3	742.3	742.3	739.1	724.0	617.9	521.7	600.0
30°	587.2	705.8	721.3	724.5	724.5	724.5	721.3	705.8	587.2	506.1	587.2
32.5°	548.9	690.0	703.4	704.0	704.0	704.0	703.4	690.0	548.9	490.3	566.8
35°	491.5	663.1	673.4	673.3	670.2	673.3	673.4	663.1	491.5	466.5	542.5
37.5°	434.0	628.8	642.8	638.2	635.1	638.2	642.8	628.8	434.0	442.1	522.1
40°	395.7	607.9	622.3	612.7	609.6	612.7	622.3	607.9	395.7	423.8	504.2
42.5°	375.3	585.0	599.3	587.1	584.0	587.1	599.3	585.0	375.3	405.9	488.9
45°	360.6	547.9	561.7	548.8	542.5	548.8	561.7	547.9	360.6	379.4	462.8
47.5°	338.3	503.1	522.8	503.5	497.2	503.5	522.8	503.1	338.3	352.0	439.1
50°	312.8	475.0	494.7	475.4	469.1	475.4	494.7	475.0	312.8	331.5	421.3
52.5°	294.9	447.2	464.0	442.2	435.9	442.2	464.0	447.2	294.9	306.1	405.9
55°	277.7	405.6	418.1	395.5	386.2	395.5	418.1	405.6	277.7	268.3	376.6
57.5°	237.4	359.1	372.1	346.3	335.7	346.3	372.1	359.1	237.4	229.3	345.9
60°	217.0	326.2	341.5	315.6	300.0	315.6	341.5	326.2	217.0	201.4	325.5
62.5°	194.0	290.8	310.8	285.0	269.4	285.0	310.8	290.8	194.0	183.4	302.5
65°	156.4	240.6	264.9	239.0	223.4	239.0	264.9	240.6	156.4	162.6	264.9
67.5°	122.6	194.9	222.1	193.8	181.3	193.8	222.1	194.9	122.6	143.1	230.4
70°	102.1	164.5	191.5	165.7	153.2	165.7	191.5	164.5	102.1	130.2	207.4
72.5°	89.4	136.8	166.0	137.6	127.7	137.6	166.0	136.8	89.4	117.4	179.4
75°	67.0	95.1	127.7	102.0	95.7	102.0	127.7	95.1	67.0	95.1	140.4
77.5°	48.5	61.6	90.0	68.2	65.7	68.2	90.0	61.6	48.5	71.6	102.1
80°	38.3	41.4	67.0	47.9	47.9	47.9	67.0	41.4	38.3	53.9	76.6
82.5°	25.5	28.7	46.6	32.5	30.0	32.5	46.6	28.7	25.5	38.6	53.6
85°	12.8	12.8	19.1	12.8	12.8	12.8	19.1	12.8	12.8	19.0	25.5
87.5°	2.6	2.6	5.1	2.6	2.6	2.6	5.1	2.6	2.6	5.0	5.1
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):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	823.4	823.4	823.4	823.4	823.4	823.4
2.5°	797.8	795.3	797.8	805.5	818.3	818.3
5°	692.2	676.6	692.2	750.0	801.3	810.6
7.5°	629.2	624.2	629.2	653.6	761.1	803.0
10°	606.4	606.4	606.4	625.5	713.6	797.9
12.5°	604.1	616.6	604.1	605.1	671.0	790.2
15°	641.8	657.4	641.8	590.4	634.9	769.1
17.5°	654.5	667.0	654.5	591.0	602.5	743.0
20°	654.5	667.0	654.5	606.4	587.2	727.6
22.5°	652.0	664.5	652.0	614.0	569.3	707.2
25°	644.8	651.0	644.8	612.8	545.3	667.0
27.5°	632.0	636.4	632.0	600.0	521.7	617.9
30°	619.3	628.7	619.3	587.2	506.1	587.2
32.5°	606.4	608.3	606.4	566.8	490.3	548.9
35°	587.1	584.0	587.1	542.5	466.5	491.5
37.5°	561.1	564.9	561.1	522.1	442.1	434.0
40°	545.9	552.1	545.9	504.2	423.8	395.7
42.5°	530.6	536.8	530.6	488.9	405.9	375.3
45°	507.5	510.6	507.5	462.8	379.4	360.6
47.5°	480.7	483.8	480.7	439.1	352.0	338.3
50°	462.8	465.9	462.8	421.3	331.5	312.8
52.5°	442.4	445.5	442.4	405.9	306.1	294.9
55°	411.7	411.7	411.7	376.6	268.3	277.7
57.5°	376.7	380.4	376.7	345.9	229.3	237.4
60°	351.2	357.4	351.2	325.5	201.4	217.0
62.5°	328.2	331.9	328.2	302.5	183.4	194.0
65°	290.5	293.6	290.5	264.9	162.6	156.4
67.5°	248.3	250.8	248.3	230.4	143.1	122.6
70°	220.2	220.2	220.2	207.4	130.2	102.1
72.5°	192.2	194.7	192.2	179.4	117.4	89.4
75°	150.1	153.2	150.1	140.4	95.1	67.0
77.5°	107.9	111.1	107.9	102.1	71.6	48.5
80°	79.9	83.0	79.9	76.6	53.9	38.3
82.5°	56.8	57.4	56.8	53.6	38.6	25.5
85°	25.5	25.5	25.5	25.5	19.0	12.8
87.5°	5.1	5.1	5.1	5.1	5.0	2.6
90°	0.0	0.0	0.0	0.0	0.0	0.0

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	19.17	20.77	19.53	21.09	21.40	20.39	22.00	20.76	22.31	22.63
	3H	20.31	21.76	20.69	22.08	22.44	21.69	23.14	22.07	23.46	23.82
	4H	20.69	22.06	21.09	22.40	22.78	22.11	23.47	22.51	23.82	24.20
	6H	20.89	22.15	21.31	22.52	22.91	22.31	23.57	22.72	23.93	24.32
	8H	20.95	22.15	21.37	22.54	22.94	22.35	23.56	22.78	23.94	24.34
	12H	20.97	22.12	21.40	22.50	22.93	22.36	23.51	22.79	23.89	24.32
4H	2H	20.18	21.54	20.58	21.89	22.27	21.09	22.45	21.49	22.80	23.18
	3H	21.61	22.75	22.02	23.15	23.55	22.61	23.75	23.02	24.14	24.54
	4H	22.09	23.11	22.52	23.53	23.96	23.11	24.13	23.54	24.54	24.98
	6H	22.36	23.25	22.81	23.69	24.15	23.37	24.26	23.82	24.70	25.16
	8H	22.43	23.27	22.89	23.71	24.18	23.43	24.27	23.89	24.71	25.18
	12H	22.47	23.22	22.95	23.69	24.16	23.46	24.21	23.94	24.68	25.15
8H	4H	22.55	23.38	23.01	23.82	24.29	23.37	24.21	23.84	24.65	25.12
	6H	22.92	23.61	23.42	24.10	24.58	23.72	24.41	24.21	24.89	25.37
	8H	23.04	23.66	23.56	24.17	24.66	23.82	24.43	24.33	24.94	25.43
	12H	23.11	23.66	23.62	24.15	24.71	23.86	24.41	24.37	24.90	25.46
12H	4H	22.59	23.33	23.07	23.81	24.28	23.38	24.13	23.86	24.60	25.07
	6H	23.00	23.62	23.51	24.13	24.62	23.74	24.36	24.25	24.87	25.36
	8H	23.18	23.73	23.69	24.22	24.78	23.89	24.44	24.40	24.93	25.49