

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: P938303

Luminaire Tested: SQ4-FB-150U-050D-B40-1D-UNV-W2A-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938303
REPORT IS A COMBINATION OF REPORTS P933637 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-050D-B40-1D-UNV-W2A-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

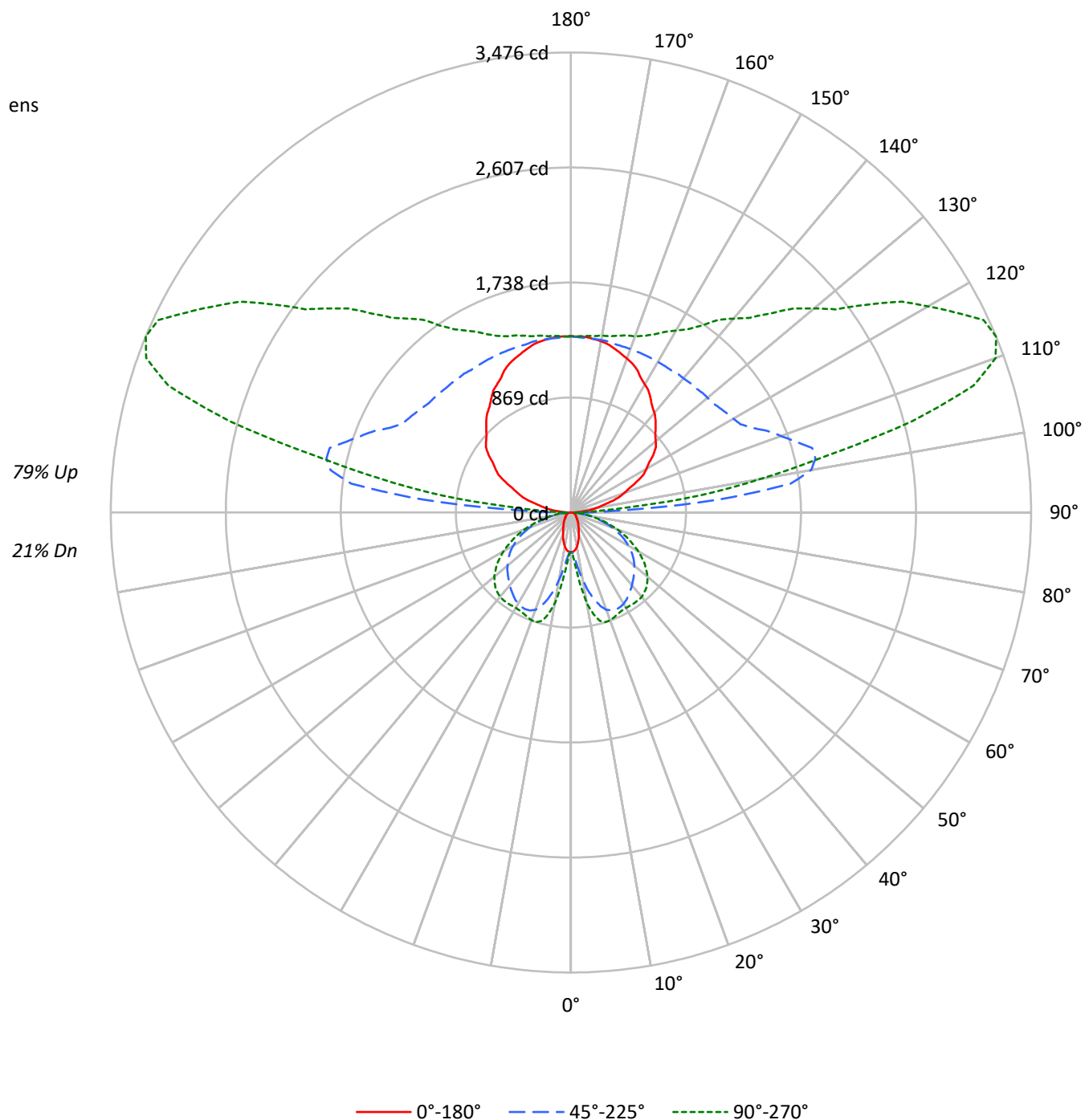
Lumens per Lamp: N/A
Luminaire Lumens: 10946.2 lumens
Efficiency: N/A
Efficacy: 131.2 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 83.4
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	100	100	100	100	89	89	89	89	67	67	67	48	48	48	30	30	30
1	91	87	83	80	80	77	74	71	58	56	54	41	40	39	26	25	24
2	83	75	70	65	73	67	62	58	51	48	45	36	34	32	22	21	20
3	75	66	59	53	66	59	53	48	45	40	37	32	29	27	20	18	17
4	69	58	50	45	60	52	45	40	39	35	31	28	25	23	17	16	14
5	63	51	44	38	55	46	39	34	35	30	27	25	22	19	15	14	12
6	57	46	38	32	51	41	34	29	31	26	23	22	19	17	14	12	11
7	53	41	33	28	47	37	30	25	28	23	20	20	17	14	12	11	9
8	49	37	30	24	43	33	27	22	25	21	17	18	15	13	11	9	8
9	45	34	26	21	40	30	24	19	23	18	15	16	13	11	10	9	7
10	42	31	24	19	37	27	21	17	21	17	14	15	12	10	10	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1848	1848	1848
5°	1805	2135	2484
10°	1637	3112	4118
15°	1390	4064	4973
20°	1132	4710	5068
25°	943	4927	4965
30°	795	4957	4956
35°	703	4873	5084
40°	612	4765	5217
45°	554	4685	5237
50°	508	4613	5150
55°	486	4508	4922
60°	498	4308	4562
65°	516	4005	4065
70°	548	3490	3436
75°	605	2843	2681
80°	657	1969	1806
85°	572	1044	925

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5237 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.6	0.4
10°-20°	171.3	1.6
20°-30°	299.6	2.7
30°-40°	385.6	3.5
40°-50°	430.7	3.9
50°-60°	412.6	3.8
60°-70°	327.0	3.0
70°-80°	192.3	1.8
80°-90°	58.5	0.5
90°-100°	648.9	5.9
100°-110°	1706.1	15.6
110°-120°	1769.0	16.2
120°-130°	1418.9	13.0
130°-140°	1113.4	10.2
140°-150°	854.6	7.8
150°-160°	615.4	5.6
160°-170°	376.6	3.4
170°-180°	127.2	1.2
0°-30°	509.5	4.7
0°-40°	895.1	8.2
0°-60°	1738.5	15.9
0°-90°	2316.2	21.2
90°-120°	4124.0	37.7
90°-150°	7510.9	68.6
90°-180°	8630.0	78.8
0°-180°	10946.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	299	299	299	299	299	
5°	291	312	352	398	412	27
15°	218	402	678	822	848	61
25°	139	456	808	843	844	64
35°	94	436	761	804	836	59
45°	64	348	672	770	805	50
55°	46	221	571	663	681	42
65°	36	117	424	476	483	36
75°	27	72	232	256	256	28
85°	10	22	58	63	64	10
90°	9	25	68	34	34	8
95°	86	336	1118	576	392	95
105°	307	466	1886	2864	2671	326
115°	546	663	1511	3014	3440	539
125°	759	852	1374	2322	2739	674
135°	905	996	1331	1874	2126	700
145°	1050	1117	1314	1599	1724	658
155°	1186	1220	1314	1443	1485	545
165°	1280	1297	1314	1366	1383	361
175°	1331	1331	1323	1340	1340	126
180°	1331	1331	1331	1331	1331	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	298.7	298.7	298.7	298.7	298.7	298.7	298.7	298.7	298.7	298.7	298.7
2.5°	298.7	298.7	300.6	301.6	303.6	304.5	306.5	308.4	314.1	315.1	317.0
5°	291.1	294.9	307.4	312.2	325.7	343.9	351.5	364.0	390.0	397.7	402.5
7.5°	279.5	288.2	318.9	326.6	360.2	408.3	428.4	455.3	496.6	516.8	533.2
10°	261.3	279.5	334.2	352.6	407.3	480.3	517.8	555.2	617.7	645.5	656.1
12.5°	241.1	270.9	350.6	375.6	454.4	561.0	606.1	647.5	718.5	756.0	761.7
15°	218.0	258.4	366.0	402.5	504.3	628.2	678.1	729.1	795.4	822.3	829.0
17.5°	197.9	248.8	380.4	418.9	542.7	688.7	739.6	782.0	835.7	854.0	858.7
20°	173.0	233.4	390.0	440.0	583.1	733.0	782.0	814.6	851.1	862.7	864.6
22.5°	154.6	217.1	395.8	447.6	610.0	759.8	801.1	827.0	852.1	855.9	856.8
25°	139.3	198.8	394.8	456.3	633.1	776.1	807.8	827.0	841.5	843.4	843.4
27.5°	124.9	178.7	391.0	458.2	650.4	780.0	805.0	818.4	825.1	829.0	829.0
30°	112.4	159.5	381.3	454.4	658.0	776.1	796.4	803.1	809.7	815.6	818.4
32.5°	102.8	141.2	366.9	446.7	658.9	766.6	781.0	784.8	794.4	807.8	812.7
35°	94.2	123.0	350.6	436.1	653.2	751.2	760.8	764.7	783.9	804.0	810.7
37.5°	85.5	109.5	329.5	417.9	644.5	733.0	739.6	746.4	776.1	800.2	807.8
40°	76.9	98.0	304.5	397.7	631.2	710.8	716.6	727.1	766.6	794.4	802.1
42.5°	70.1	88.3	277.6	376.6	613.8	685.9	694.5	709.9	755.0	784.8	793.4
45°	64.4	78.8	248.8	347.7	591.7	659.9	672.4	693.5	741.6	770.4	778.0
47.5°	58.6	72.0	219.0	317.9	567.7	634.0	650.4	674.3	723.3	751.2	757.9
50°	53.8	65.3	189.3	286.2	541.8	606.1	625.3	650.4	700.3	726.2	734.9
52.5°	49.9	59.6	161.4	254.6	512.0	577.3	599.5	625.3	672.4	697.4	703.2
55°	46.1	54.7	137.3	220.9	481.2	546.5	570.6	595.5	641.7	662.8	666.7
57.5°	44.2	50.9	117.2	189.3	448.6	512.0	538.9	561.9	605.2	621.5	625.3
60°	41.4	48.0	101.8	162.4	413.0	479.3	502.4	525.4	561.9	575.4	578.3
62.5°	38.4	46.1	90.3	136.4	376.6	440.9	463.9	485.1	515.8	525.4	529.3
65°	36.5	44.2	81.7	117.2	339.1	400.5	423.6	441.9	466.8	476.4	478.4
67.5°	34.6	42.3	75.0	100.8	301.6	360.2	377.5	394.8	414.0	423.6	424.6
70°	31.7	40.3	69.1	89.3	263.2	314.1	328.5	346.8	362.1	366.9	369.9
72.5°	29.8	37.4	65.3	80.7	223.9	269.9	283.3	293.9	307.4	312.2	312.2
75°	26.9	33.6	61.5	72.0	183.5	220.9	232.4	243.0	253.6	255.6	252.6
77.5°	24.0	29.8	52.8	60.5	143.2	174.9	184.4	190.2	198.8	200.7	201.7
80°	20.2	26.0	41.4	47.1	103.7	128.7	135.4	140.3	147.9	147.9	149.8
82.5°	15.4	20.2	29.8	33.6	70.1	88.3	94.2	97.0	101.8	101.8	101.8
85°	9.6	12.5	19.2	22.1	42.3	53.8	57.7	58.6	62.5	63.4	63.4
87.5°	4.8	6.7	12.5	13.5	22.1	27.9	27.9	29.8	29.8	28.8	27.9
90°	9.0	16.1	23.2	25.0	39.3	58.4	67.9	60.4	45.3	34.0	34.0
92.5°	35.7	96.5	157.3	172.5	242.5	335.8	382.4	335.1	240.7	169.8	163.0
95°	85.8	196.9	308.2	336.0	596.6	944.0	1117.7	997.4	756.7	576.2	555.8
97.5°	148.3	246.4	344.5	369.0	803.5	1382.9	1672.6	1596.6	1444.4	1330.4	1291.4
100°	196.5	285.5	374.5	396.7	878.9	1521.8	1843.2	1848.8	1860.0	1868.3	1821.9
102.5°	237.7	320.7	403.7	424.4	913.5	1565.4	1891.5	1988.3	2182.1	2327.4	2287.7
105°	307.3	377.6	447.9	465.5	939.1	1570.4	1886.1	2103.3	2537.7	2863.6	2842.2
107.5°	378.8	444.4	509.9	526.2	943.7	1500.5	1778.9	2081.9	2687.8	3142.3	3147.5
110°	427.1	486.3	545.4	560.2	936.7	1438.5	1689.5	2028.2	2705.7	3213.8	3236.0

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	474.4	530.8	587.1	601.3	937.0	1384.5	1608.2	1954.9	2648.2	3168.2	3202.4
115°	545.9	597.9	650.0	663.0	945.5	1322.4	1510.8	1844.8	2512.7	3013.6	3061.0
117.5°	616.5	663.7	711.0	722.8	963.2	1283.6	1443.9	1745.3	2348.0	2800.1	2852.6
120°	657.6	702.1	746.6	757.7	977.4	1270.5	1417.0	1692.5	2243.2	2656.2	2707.2
122.5°	697.8	742.7	787.6	798.8	998.0	1263.7	1396.5	1644.5	2140.4	2512.4	2562.7
125°	759.4	800.3	841.3	851.5	1025.7	1258.0	1374.1	1584.8	2006.1	2322.1	2368.4
127.5°	809.5	850.7	892.1	902.4	1053.4	1254.7	1355.3	1536.2	1898.0	2169.3	2208.4
130°	836.3	880.8	925.3	936.4	1073.7	1256.8	1348.3	1509.3	1831.3	2072.8	2108.9
132.5°	864.0	908.5	953.0	964.1	1090.0	1258.0	1342.0	1486.1	1774.4	1990.6	2023.0
135°	905.1	945.5	986.1	996.3	1107.9	1256.8	1331.3	1452.0	1693.4	1874.5	1902.4
137.5°	947.1	987.2	1027.3	1037.3	1134.7	1264.5	1329.5	1431.5	1635.6	1788.7	1811.5
140°	981.9	1018.9	1055.8	1065.0	1151.1	1265.9	1323.2	1411.4	1587.7	1720.0	1741.3
142.5°	1008.7	1042.9	1077.0	1085.5	1164.8	1270.4	1323.2	1400.7	1555.5	1671.6	1690.0
145°	1049.8	1079.6	1109.4	1116.9	1182.7	1270.4	1314.3	1377.6	1504.3	1599.3	1613.2
147.5°	1090.9	1119.9	1148.9	1156.1	1208.8	1279.1	1314.3	1364.1	1463.7	1538.5	1550.1
150°	1117.7	1143.9	1170.1	1176.7	1222.5	1283.7	1314.3	1356.4	1440.5	1503.6	1513.0
152.5°	1145.4	1165.3	1185.2	1190.1	1231.5	1286.7	1314.3	1350.2	1422.1	1476.0	1483.0
155°	1186.5	1201.2	1215.9	1219.5	1251.1	1293.3	1314.3	1342.8	1400.0	1442.9	1447.6
157.5°	1216.9	1231.2	1245.5	1249.0	1270.8	1299.8	1314.3	1336.5	1381.0	1414.4	1417.6
160°	1237.5	1248.6	1259.6	1262.4	1279.7	1302.7	1314.3	1333.4	1371.5	1400.0	1401.9
162.5°	1258.0	1266.3	1274.6	1276.7	1289.2	1306.0	1314.3	1330.3	1362.5	1386.7	1388.5
165°	1280.4	1287.9	1295.4	1297.3	1302.9	1310.5	1314.3	1325.8	1348.8	1366.1	1368.0
167.5°	1300.9	1304.4	1308.1	1308.9	1313.7	1320.1	1323.2	1330.8	1345.9	1357.2	1357.9
170°	1314.3	1317.8	1321.4	1322.3	1322.6	1323.1	1323.2	1330.8	1345.9	1357.2	1357.2
172.5°	1321.4	1322.2	1323.1	1323.2	1323.2	1323.2	1323.2	1329.2	1341.1	1350.0	1349.3
175°	1331.3	1331.3	1331.3	1331.3	1328.6	1325.1	1323.2	1327.0	1334.5	1340.2	1340.2
177.5°	1331.3	1331.3	1331.3	1331.3	1329.2	1326.4	1325.0	1327.9	1333.9	1338.4	1337.7
180°	1331.3	1331.3	1331.3	1331.3	1331.3	1331.3	1331.3	1331.3	1331.3	1331.3	1331.3

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	298.7	298.7
2.5°	318.9	317.0
5°	410.2	412.1
7.5°	552.4	551.4
10°	686.8	695.4
12.5°	784.8	786.7
15°	844.4	848.2
17.5°	867.4	868.4
20°	868.4	866.5
22.5°	857.8	855.9
25°	845.4	844.4
27.5°	833.8	834.8
30°	829.0	831.9
32.5°	829.0	833.8
35°	830.9	835.7
37.5°	830.0	835.7
40°	826.1	832.9
42.5°	815.6	820.3
45°	799.2	805.0
47.5°	778.0	782.0
50°	751.2	755.0
52.5°	717.6	718.5
55°	677.2	681.1
57.5°	634.0	635.0
60°	586.0	588.9
62.5°	535.1	535.1
65°	481.2	483.1
67.5°	425.5	430.3
70°	368.9	369.9
72.5°	313.1	313.1
75°	255.6	256.5
77.5°	200.7	200.7
80°	148.9	149.8
82.5°	102.8	104.7
85°	64.4	64.4
87.5°	29.8	26.9
90°	34.0	34.0
92.5°	136.0	109.0
95°	474.0	392.2
97.5°	1135.8	980.1
100°	1636.5	1451.0
102.5°	2128.9	1970.1
105°	2756.8	2671.4
107.5°	3168.1	3188.7
110°	3324.9	3413.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3339.0	3475.5
115°	3250.3	3439.8
117.5°	3062.7	3272.8
120°	2911.4	3115.5
122.5°	2764.1	2965.4
125°	2553.9	2739.3
127.5°	2364.9	2521.4
130°	2253.5	2398.0
132.5°	2152.4	2281.9
135°	2014.0	2125.5
137.5°	1902.9	1994.2
140°	1826.6	1912.0
142.5°	1763.5	1836.9
145°	1668.8	1724.3
147.5°	1596.1	1642.2
150°	1550.3	1587.7
152.5°	1511.2	1539.5
155°	1466.2	1484.9
157.5°	1430.8	1443.9
160°	1409.5	1417.0
162.5°	1395.5	1402.7
165°	1375.5	1383.0
167.5°	1361.2	1364.3
170°	1357.2	1357.2
172.5°	1346.6	1343.8
175°	1340.2	1340.2
177.5°	1334.4	1331.3
180°	1331.3	1331.3

(END OF REPORT)