

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: P938299

Luminaire Tested: SQ4-FB-150U-050D-B35-1D-UNV-W2A-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938299
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-B35-1D-UNV-W2A-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

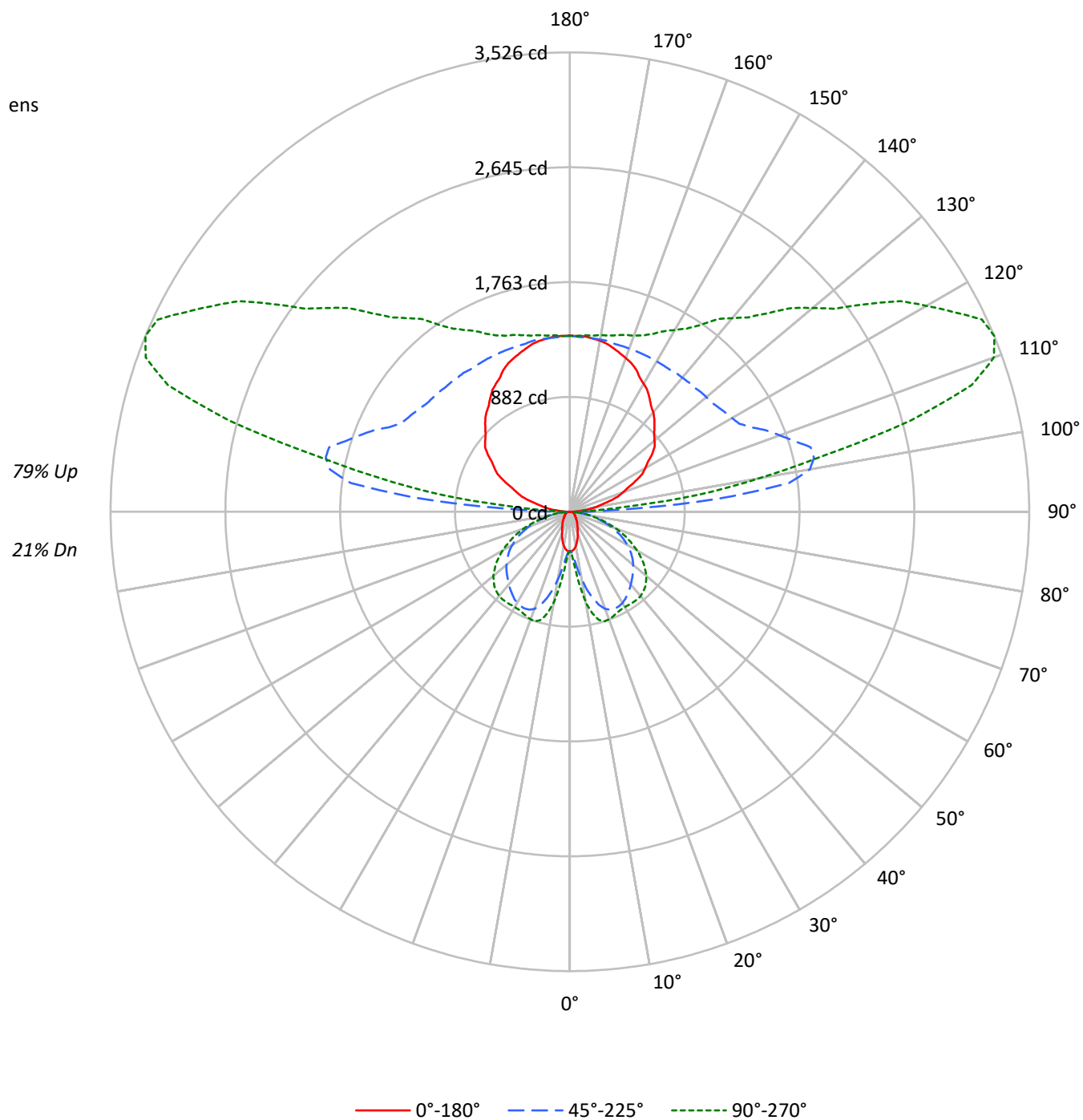
Lumens per Lamp: N/A
Luminaire Lumens: 11106.7 lumens
Efficiency: N/A
Efficacy: 133.2 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

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°	1875	1875	1875
5°	1832	2167	2520
10°	1660	3158	4178
15°	1410	4124	5046
20°	1148	4779	5143
25°	958	4999	5038
30°	807	5029	5028
35°	713	4944	5158
40°	621	4835	5293
45°	562	4754	5314
50°	515	4681	5225
55°	493	4575	4994
60°	505	4372	4628
65°	523	4064	4125
70°	557	3541	3486
75°	614	2886	2721
80°	664	1998	1832
85°	584	1059	938

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5314 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.2	0.4
10°-20°	173.8	1.6
20°-30°	304.0	2.7
30°-40°	391.3	3.5
40°-50°	437.1	3.9
50°-60°	418.6	3.8
60°-70°	331.7	3.0
70°-80°	195.1	1.8
80°-90°	59.4	0.5
90°-100°	658.4	5.9
100°-110°	1731.1	15.6
110°-120°	1794.9	16.2
120°-130°	1439.7	13.0
130°-140°	1129.7	10.2
140°-150°	867.1	7.8
150°-160°	624.4	5.6
160°-170°	382.1	3.4
170°-180°	129.1	1.2
0°-30°	517.0	4.7
0°-40°	908.3	8.2
0°-60°	1764.0	15.9
0°-90°	2350.1	21.2
90°-120°	4184.4	37.7
90°-150°	7621.0	68.6
90°-180°	8757.0	78.8
0°-180°	11106.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	303	303	303	303	303	
5°	295	317	357	404	418	27
15°	221	408	688	834	861	62
25°	141	463	820	856	857	65
35°	96	442	772	816	848	60
45°	65	353	682	782	817	51
55°	47	224	579	672	691	43
65°	37	119	430	483	490	37
75°	27	73	236	259	260	29
85°	10	22	58	64	65	10
90°	9	25	69	34	34	8
95°	87	341	1134	585	398	97
105°	312	472	1914	2906	2711	331
115°	554	673	1533	3058	3490	547
125°	770	864	1394	2356	2780	684
135°	918	1011	1351	1902	2157	711
145°	1065	1133	1334	1623	1750	667
155°	1204	1237	1334	1464	1507	553
165°	1299	1316	1334	1386	1403	367
175°	1351	1351	1343	1360	1360	128
180°	1351	1351	1351	1351	1351	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	303.1	303.1	303.1	303.1	303.1	303.1	303.1	303.1	303.1	303.1	303.1
2.5°	303.1	303.1	305.0	306.0	308.0	309.0	311.0	312.9	318.7	319.7	321.6
5°	295.4	299.2	311.9	316.8	330.4	348.9	356.7	369.4	395.7	403.5	408.4
7.5°	283.6	292.4	323.5	331.4	365.5	414.2	434.7	462.0	503.9	524.4	541.0
10°	265.1	283.6	339.2	357.8	413.3	487.3	525.4	563.4	626.7	654.9	665.7
12.5°	244.7	274.9	355.7	381.1	461.1	569.2	615.0	657.0	729.1	767.1	772.9
15°	221.2	262.2	371.3	408.4	511.7	637.4	688.1	739.8	807.1	834.3	841.2
17.5°	200.8	252.4	386.0	425.0	550.7	698.8	750.5	793.4	848.0	866.5	871.3
20°	175.5	236.8	395.7	446.4	591.7	743.7	793.4	826.6	863.6	875.3	877.2
22.5°	156.9	220.3	401.6	454.2	618.9	770.9	812.9	839.2	864.5	868.4	869.4
25°	141.4	201.7	400.6	463.0	642.4	787.5	819.7	839.2	853.8	855.7	855.7
27.5°	126.7	181.3	396.7	464.9	659.9	791.5	816.8	830.4	837.2	841.2	841.2
30°	114.1	161.8	386.9	461.1	667.6	787.5	808.0	814.8	821.6	827.5	830.4
32.5°	104.3	143.3	372.3	453.2	668.6	777.8	792.4	796.3	806.0	819.7	824.6
35°	95.5	124.8	355.7	442.5	662.8	762.2	771.9	775.9	795.4	815.8	822.6
37.5°	86.7	111.1	334.3	424.0	654.0	743.7	750.5	757.4	787.5	811.9	819.7
40°	78.0	99.4	309.0	403.5	640.4	721.2	727.1	737.8	777.8	806.0	813.9
42.5°	71.1	89.6	281.7	382.1	622.8	695.9	704.7	720.3	766.1	796.3	805.0
45°	65.3	79.9	252.4	352.8	600.4	669.6	682.3	703.7	752.4	781.7	789.4
47.5°	59.5	73.1	222.2	322.6	576.1	643.3	659.9	684.2	733.9	762.2	769.0
50°	54.6	66.3	192.1	290.4	549.7	615.0	634.5	659.9	710.6	736.8	745.6
52.5°	50.7	60.5	163.8	258.3	519.5	585.8	608.2	634.5	682.3	707.7	713.5
55°	46.8	55.5	139.3	224.1	488.3	554.6	579.0	604.3	651.1	672.5	676.5
57.5°	44.9	51.6	118.9	192.1	455.1	519.5	546.8	570.2	614.1	630.6	634.5
60°	42.0	48.7	103.3	164.7	419.1	486.3	509.8	533.1	570.2	583.8	586.7
62.5°	39.0	46.8	91.7	138.4	382.1	447.4	470.7	492.3	523.4	533.1	537.0
65°	37.0	44.9	82.8	118.9	344.1	406.4	429.8	448.4	473.6	483.4	485.4
67.5°	35.1	42.9	76.1	102.3	306.0	365.5	383.0	400.6	420.1	429.8	430.8
70°	32.2	40.9	70.2	90.6	267.1	318.7	333.3	351.8	367.4	372.3	375.3
72.5°	30.2	38.0	66.3	81.9	227.1	273.8	287.5	298.3	311.9	316.8	316.8
75°	27.3	34.1	62.4	73.1	186.1	224.1	235.9	246.6	257.3	259.3	256.3
77.5°	24.3	30.2	53.6	61.4	145.3	177.4	187.1	193.0	201.7	203.7	204.7
80°	20.4	26.4	42.0	47.8	105.2	130.6	137.4	142.3	150.1	150.1	152.0
82.5°	15.6	20.4	30.2	34.1	71.1	89.6	95.5	98.5	103.3	103.3	103.3
85°	9.8	12.7	19.5	22.4	42.9	54.6	58.5	59.5	63.4	64.3	64.3
87.5°	4.8	6.8	12.7	13.7	22.4	28.3	28.3	30.2	30.2	29.3	28.3
90°	9.1	16.4	23.5	25.4	39.9	59.2	68.9	61.2	45.9	34.5	34.5
92.5°	36.2	97.9	159.6	175.0	246.0	340.7	388.0	340.0	244.2	172.3	165.4
95°	87.0	199.8	312.7	340.9	605.3	957.9	1134.1	1012.0	767.8	584.7	564.0
97.5°	150.5	250.0	349.5	374.4	815.3	1403.2	1697.1	1620.0	1465.6	1349.9	1310.4
100°	199.4	289.7	379.9	402.5	891.8	1544.1	1870.3	1875.9	1887.2	1895.7	1848.7
102.5°	241.2	325.4	409.6	430.6	926.8	1588.4	1919.2	2017.5	2214.1	2361.5	2321.2
105°	311.8	383.1	454.5	472.3	952.8	1593.4	1913.8	2134.1	2574.9	2905.5	2883.8
107.5°	384.4	450.9	517.3	533.9	957.6	1522.5	1805.0	2112.4	2727.3	3188.4	3193.6
110°	433.3	493.4	553.4	568.4	950.4	1459.6	1714.3	2058.0	2745.4	3260.9	3283.5

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	481.4	538.6	595.7	610.1	950.7	1404.8	1631.8	1983.5	2687.0	3214.7	3249.3
115°	553.9	606.7	659.5	672.7	959.4	1341.8	1533.0	1871.8	2549.5	3057.8	3105.8
117.5°	625.5	673.5	721.4	733.4	977.3	1302.4	1465.0	1770.8	2382.4	2841.1	2894.4
120°	667.3	712.4	757.6	768.8	991.8	1289.2	1437.8	1717.3	2276.1	2695.2	2746.9
122.5°	708.0	753.6	799.1	810.5	1012.6	1282.2	1417.0	1668.6	2171.8	2549.2	2600.3
125°	770.5	812.0	853.6	864.0	1040.7	1276.5	1394.3	1608.1	2035.5	2356.1	2403.1
127.5°	821.3	863.2	905.1	915.6	1068.8	1273.1	1375.2	1558.7	1925.8	2201.1	2240.8
130°	848.6	893.7	938.9	950.1	1089.4	1275.2	1368.0	1531.4	1858.2	2103.2	2139.8
132.5°	876.7	921.8	967.0	978.2	1106.0	1276.5	1361.6	1507.9	1800.4	2019.8	2052.6
135°	918.3	959.4	1000.6	1010.9	1124.1	1275.2	1350.8	1473.3	1718.2	1902.0	1930.2
137.5°	961.0	1001.7	1042.4	1052.5	1151.4	1283.1	1348.9	1452.5	1659.6	1814.9	1838.1
140°	996.3	1033.8	1071.2	1080.6	1167.9	1284.4	1342.6	1432.1	1611.0	1745.2	1766.8
142.5°	1023.5	1058.1	1092.8	1101.5	1181.9	1289.1	1342.6	1421.2	1578.3	1696.1	1714.7
145°	1065.2	1095.5	1125.7	1133.2	1200.0	1289.1	1333.5	1397.8	1526.4	1622.8	1636.8
147.5°	1106.9	1136.3	1165.7	1173.1	1226.6	1297.9	1333.5	1384.1	1485.2	1561.1	1572.8
150°	1134.1	1160.7	1187.2	1193.9	1240.4	1302.5	1333.5	1376.3	1461.6	1525.7	1535.2
152.5°	1162.2	1182.4	1202.5	1207.6	1249.5	1305.5	1333.5	1370.0	1442.9	1497.6	1504.8
155°	1203.9	1218.8	1233.7	1237.4	1269.5	1312.2	1333.5	1362.5	1420.6	1464.1	1468.8
157.5°	1234.7	1249.2	1263.8	1267.4	1289.4	1318.8	1333.5	1356.1	1401.3	1435.1	1438.4
160°	1255.6	1266.9	1278.1	1280.9	1298.5	1321.8	1333.5	1352.9	1391.6	1420.6	1422.5
162.5°	1276.5	1284.9	1293.3	1295.5	1308.1	1325.1	1333.5	1349.8	1382.5	1407.0	1408.8
165°	1299.1	1306.8	1314.4	1316.3	1322.0	1329.7	1333.5	1345.3	1368.6	1386.2	1388.1
167.5°	1320.0	1323.6	1327.2	1328.1	1333.0	1339.4	1342.6	1350.3	1365.6	1377.0	1377.8
170°	1333.5	1337.1	1340.8	1341.7	1342.0	1342.5	1342.6	1350.3	1365.6	1377.0	1377.0
172.5°	1340.8	1341.6	1342.5	1342.6	1342.6	1342.6	1342.6	1348.7	1360.8	1369.8	1369.1
175°	1350.8	1350.8	1350.8	1350.8	1348.1	1344.5	1342.6	1346.4	1354.1	1359.8	1359.8
177.5°	1350.8	1350.8	1350.8	1350.8	1348.7	1345.8	1344.4	1347.4	1353.5	1358.1	1357.3
180°	1350.8	1350.8	1350.8	1350.8	1350.8	1350.8	1350.8	1350.8	1350.8	1350.8	1350.8

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	303.1	303.1
2.5°	323.5	321.6
5°	416.2	418.1
7.5°	560.5	559.5
10°	696.9	705.6
12.5°	796.3	798.3
15°	856.8	860.7
17.5°	880.1	881.1
20°	881.1	879.2
22.5°	870.4	868.4
25°	857.8	856.8
27.5°	846.0	847.0
30°	841.2	844.1
32.5°	841.2	846.0
35°	843.1	848.0
37.5°	842.2	848.0
40°	838.2	845.1
42.5°	827.5	832.4
45°	811.0	816.8
47.5°	789.4	793.4
50°	762.2	766.1
52.5°	728.1	729.1
55°	687.1	691.1
57.5°	643.3	644.3
60°	594.6	597.5
62.5°	542.9	542.9
65°	488.3	490.2
67.5°	431.8	436.6
70°	374.3	375.3
72.5°	317.7	317.7
75°	259.3	260.3
77.5°	203.7	203.7
80°	151.1	152.0
82.5°	104.3	106.2
85°	65.3	65.3
87.5°	30.2	27.3
90°	34.5	34.5
92.5°	138.0	110.6
95°	480.9	398.0
97.5°	1152.4	994.5
100°	1660.5	1472.3
102.5°	2160.1	1999.0
105°	2797.2	2710.6
107.5°	3214.6	3235.5
110°	3373.7	3464.0

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3387.9	3526.5
115°	3298.0	3490.2
117.5°	3107.6	3320.8
120°	2954.1	3161.2
122.5°	2804.6	3008.8
125°	2591.3	2779.5
127.5°	2399.5	2558.4
130°	2286.5	2433.2
132.5°	2183.9	2315.3
135°	2043.5	2156.7
137.5°	1930.8	2023.5
140°	1853.4	1940.0
142.5°	1789.4	1863.9
145°	1693.2	1749.6
147.5°	1619.5	1666.3
150°	1573.1	1611.0
152.5°	1533.3	1562.0
155°	1487.7	1506.7
157.5°	1451.8	1465.0
160°	1430.1	1437.8
162.5°	1416.0	1423.3
165°	1395.7	1403.3
167.5°	1381.1	1384.3
170°	1377.0	1377.0
172.5°	1366.3	1363.5
175°	1359.8	1359.8
177.5°	1354.0	1350.8
180°	1350.8	1350.8

(END OF REPORT)