

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: P938108

Luminaire Tested: SQ4-FB-125U-100D-B50-1D-UNV-W2A-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938108
REPORT IS A COMBINATION OF REPORTS P933615 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-100D-B50-1D-UNV-W2A-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

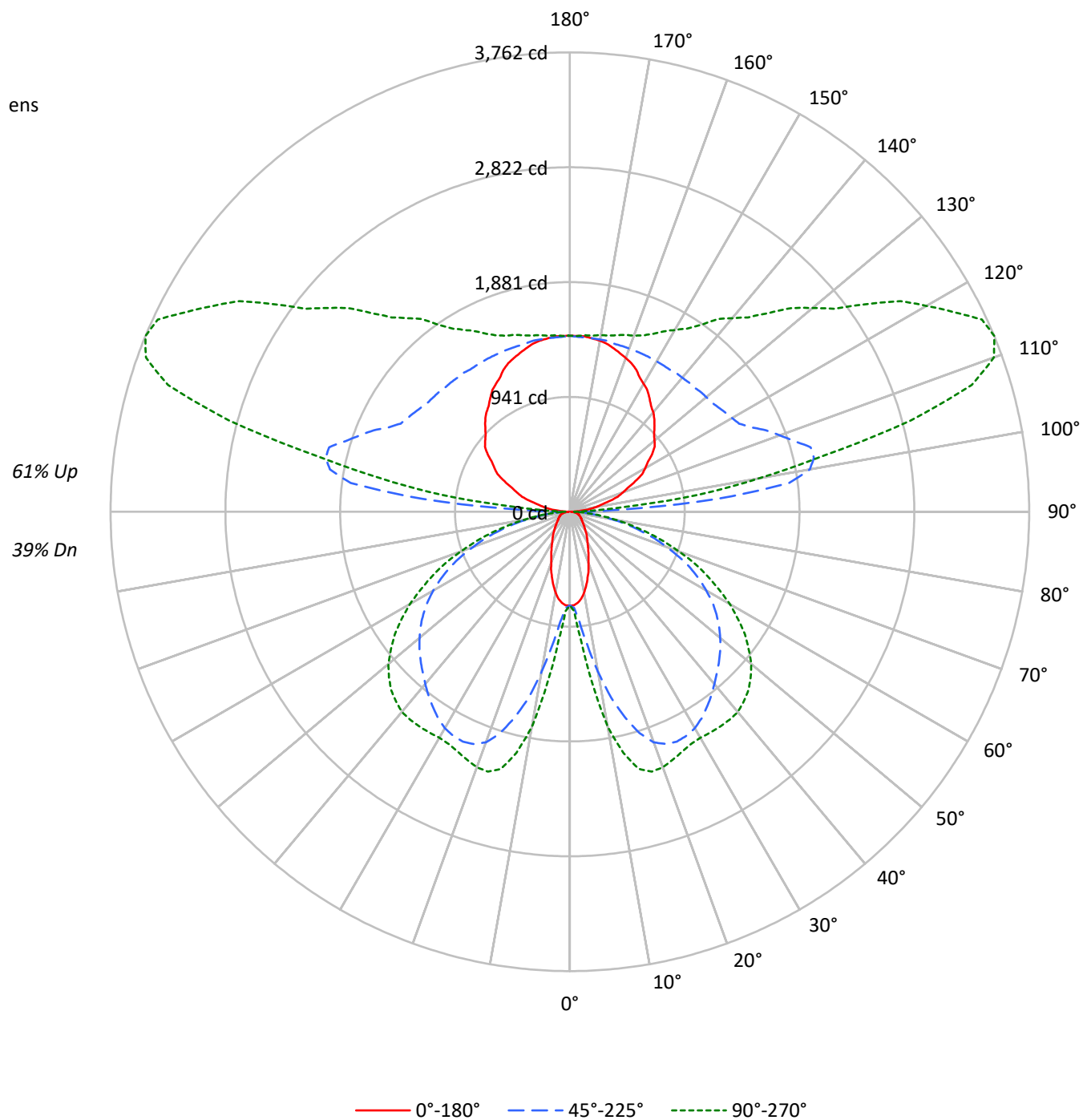
Lumens per Lamp: N/A
Luminaire Lumens: 15285.9 lumens
Efficiency: N/A
Efficacy: 118.7 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 128.8
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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46
1	95	90	86	83	86	82	79	76	67	65	62	53	51	50	40	39	38
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	35	33	31
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26
4	71	60	52	46	64	55	48	42	45	40	35	35	32	29	27	24	22
5	65	53	45	39	59	49	41	36	40	34	30	31	27	24	24	21	19
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16
7	55	43	35	29	50	39	32	27	32	26	23	25	21	18	19	16	14
8	51	38	31	25	46	35	28	23	29	24	20	23	19	16	18	15	13
9	47	35	27	22	43	32	25	21	26	21	17	21	17	14	16	13	11
10	44	32	25	20	40	29	23	18	24	19	16	19	15	13	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3562	3562	3562
5°	3479	4116	4787
10°	3156	6000	7936
15°	2682	7839	9583
20°	2184	9084	9767
25°	1822	9506	9568
30°	1536	9567	9551
35°	1358	9408	9797
40°	1183	9201	10052
45°	1072	9050	10092
50°	983	8914	9924
55°	941	8715	9485
60°	964	8332	8790
65°	1003	7750	7836
70°	1068	6759	6620
75°	1183	5511	5166
80°	1292	3822	3481
85°	1150	2028	1782

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10092 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.3	0.6
10°-20°	440.1	2.9
20°-30°	769.8	5.0
30°-40°	990.9	6.5
40°-50°	1106.8	7.2
50°-60°	1060.1	6.9
60°-70°	840.1	5.5
70°-80°	494.0	3.2
80°-90°	142.7	0.9
90°-100°	702.5	4.6
100°-110°	1846.8	12.1
110°-120°	1914.9	12.5
120°-130°	1536.0	10.0
130°-140°	1205.2	7.9
140°-150°	925.0	6.1
150°-160°	666.2	4.4
160°-170°	407.6	2.7
170°-180°	137.7	0.9
0°-30°	1309.2	8.6
0°-40°	2300.1	15.0
0°-60°	4467.0	29.2
0°-90°	5943.9	38.9
90°-120°	4464.2	29.2
90°-150°	8130.5	53.2
90°-180°	9342.0	61.1
0°-180°	15285.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	768	768	768	768	768	
5°	748	802	903	1022	1059	69
15°	560	1034	1743	2113	2180	156
25°	358	1172	2076	2167	2170	165
35°	242	1121	1955	2066	2147	151
45°	165	894	1728	1980	2068	128
55°	118	568	1466	1703	1750	108
65°	94	301	1088	1224	1242	93
75°	69	185	597	657	659	72
85°	25	57	148	163	165	26
90°	10	27	74	37	37	10
95°	93	364	1210	624	425	103
105°	333	504	2042	3100	2892	353
115°	591	718	1636	3262	3724	584
125°	822	922	1488	2514	2965	730
135°	980	1078	1441	2029	2301	758
145°	1136	1209	1423	1731	1867	712
155°	1284	1320	1423	1562	1607	590
165°	1386	1404	1423	1479	1497	391
175°	1441	1441	1432	1451	1451	137
180°	1441	1441	1441	1441	1441	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	767.7	767.7	767.7	767.7	767.7	767.7	767.7	767.7	767.7	767.7	767.7
2.5°	767.7	767.7	772.6	775.0	780.0	782.4	787.4	792.3	807.2	809.6	814.5
5°	747.9	757.8	789.9	802.2	836.8	883.7	903.4	935.5	1002.1	1021.9	1034.2
7.5°	718.2	740.5	819.5	839.2	925.6	1049.0	1100.8	1169.9	1276.1	1328.0	1369.9
10°	671.4	718.2	859.0	905.9	1046.5	1234.1	1330.4	1426.7	1587.1	1658.7	1685.8
12.5°	619.5	696.0	900.9	965.1	1167.5	1441.4	1557.4	1663.6	1846.2	1942.5	1957.3
15°	560.3	664.0	940.4	1034.2	1295.8	1614.2	1742.6	1873.4	2043.7	2112.8	2130.1
17.5°	508.5	639.3	977.4	1076.2	1394.6	1769.7	1900.6	2009.1	2147.4	2194.2	2206.7
20°	444.3	599.8	1002.1	1130.4	1498.2	1883.3	2009.1	2093.1	2186.9	2216.5	2221.4
22.5°	397.4	557.8	1016.9	1150.2	1567.3	1952.4	2058.5	2125.1	2189.4	2199.2	2201.7
25°	357.9	510.9	1014.4	1172.5	1626.6	1994.4	2075.8	2125.1	2162.2	2167.2	2167.2
27.5°	320.8	459.1	1004.6	1177.4	1671.0	2004.3	2068.4	2103.0	2120.3	2130.1	2130.1
30°	288.8	409.7	979.9	1167.5	1690.7	1994.4	2046.2	2063.5	2080.8	2095.5	2103.0
32.5°	264.1	362.9	942.9	1147.7	1693.2	1969.7	2006.7	2016.6	2041.3	2075.8	2088.1
35°	241.9	316.0	900.9	1120.6	1678.4	1930.2	1954.9	1964.8	2014.1	2065.9	2083.2
37.5°	219.7	281.4	846.6	1073.7	1656.2	1883.3	1900.6	1917.9	1994.4	2056.0	2075.8
40°	197.4	251.8	782.4	1021.9	1621.6	1826.5	1841.3	1868.5	1969.7	2041.3	2061.0
42.5°	180.2	227.1	713.3	967.5	1577.2	1762.4	1784.6	1824.0	1940.0	2016.6	2038.8
45°	165.4	202.4	639.3	893.5	1520.5	1695.7	1727.8	1782.1	1905.5	1979.5	1999.3
47.5°	150.6	185.1	562.7	817.0	1458.7	1629.1	1671.0	1732.8	1858.6	1930.2	1947.5
50°	138.2	167.8	486.2	735.5	1392.1	1557.4	1606.9	1671.0	1799.4	1866.0	1888.2
52.5°	128.3	153.0	414.7	654.1	1315.5	1483.4	1540.2	1606.9	1727.8	1792.0	1806.7
55°	118.4	140.7	353.0	567.7	1236.6	1404.5	1466.1	1530.4	1648.8	1703.1	1713.0
57.5°	113.6	130.9	301.1	486.2	1152.6	1315.5	1384.7	1444.0	1555.0	1597.0	1606.9
60°	106.1	123.4	261.6	417.1	1061.4	1231.7	1290.9	1350.1	1444.0	1478.5	1485.9
62.5°	98.7	118.4	232.0	350.5	967.5	1132.9	1192.2	1246.5	1325.4	1350.1	1360.0
65°	93.8	113.6	209.8	301.1	871.3	1029.3	1088.5	1135.4	1199.5	1224.3	1229.2
67.5°	88.8	108.6	192.5	259.2	775.0	925.6	970.1	1014.4	1063.8	1088.5	1091.0
70°	81.4	103.7	177.7	229.6	676.3	807.2	844.1	891.0	930.5	942.9	950.3
72.5°	76.5	96.3	167.8	207.3	575.1	693.6	728.1	755.3	789.9	802.2	802.2
75°	69.1	86.4	157.9	185.1	471.5	567.7	597.3	624.5	651.7	656.6	649.1
77.5°	61.7	76.5	135.7	155.5	367.8	449.3	473.9	488.7	510.9	515.8	518.4
80°	51.8	66.7	106.1	121.0	266.6	330.7	348.0	360.3	380.1	380.1	385.1
82.5°	39.5	51.8	76.5	86.4	180.2	227.1	241.9	249.3	261.6	261.6	261.6
85°	24.7	32.1	49.4	56.8	108.6	138.2	148.1	150.6	160.5	162.9	162.9
87.5°	12.3	17.3	32.1	34.6	56.8	71.5	71.5	76.5	76.5	74.1	71.5
90°	9.7	17.5	25.1	27.1	42.6	63.2	73.5	65.3	48.9	36.7	36.7
92.5°	38.7	104.4	170.3	186.7	262.5	363.4	413.9	362.8	260.5	183.7	176.4
95°	92.8	213.2	333.6	363.7	645.8	1021.9	1209.9	1079.7	819.2	623.8	601.7
97.5°	160.6	266.8	372.9	399.5	869.8	1497.0	1810.6	1728.3	1563.6	1440.1	1398.0
100°	212.8	309.1	405.4	429.5	951.4	1647.3	1995.3	2001.3	2013.3	2022.4	1972.2
102.5°	257.2	347.1	436.9	459.4	988.8	1694.6	2047.5	2152.4	2362.2	2519.5	2476.5
105°	332.7	408.8	484.8	503.9	1016.5	1700.0	2041.7	2276.8	2747.1	3099.8	3076.7
107.5°	410.1	481.0	551.9	569.6	1021.6	1624.3	1925.6	2253.6	2909.6	3401.5	3407.1
110°	462.3	526.4	590.5	606.4	1014.0	1557.3	1829.0	2195.6	2928.9	3478.9	3503.0

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	513.6	574.6	635.7	650.9	1014.2	1498.7	1740.9	2116.2	2866.6	3429.6	3466.5
115°	590.9	647.3	703.5	717.6	1023.6	1431.5	1635.5	1997.0	2720.0	3262.3	3313.6
117.5°	667.3	718.5	769.6	782.4	1042.6	1389.5	1563.0	1889.2	2541.7	3031.1	3088.0
120°	711.8	760.0	808.1	820.1	1058.0	1375.3	1533.9	1832.0	2428.2	2875.4	2930.6
122.5°	755.3	803.9	852.5	864.6	1080.3	1367.8	1511.7	1780.1	2317.1	2719.7	2774.2
125°	822.1	866.4	910.6	921.7	1110.2	1361.8	1487.5	1715.6	2171.6	2513.7	2563.8
127.5°	876.3	921.0	965.7	976.9	1140.3	1358.2	1467.2	1663.0	2054.6	2348.3	2390.6
130°	905.2	953.4	1001.5	1013.6	1162.2	1360.4	1459.5	1633.8	1982.4	2243.8	2283.0
132.5°	935.2	983.4	1031.5	1043.6	1179.9	1361.8	1452.7	1608.7	1920.8	2154.8	2189.9
135°	979.8	1023.6	1067.5	1078.4	1199.3	1360.5	1441.1	1571.7	1833.1	2029.1	2059.3
137.5°	1025.2	1068.6	1112.0	1122.9	1228.3	1368.9	1439.1	1549.6	1770.6	1936.3	1961.0
140°	1062.9	1102.9	1142.8	1152.8	1246.0	1370.3	1432.4	1527.8	1718.7	1861.8	1884.9
142.5°	1091.9	1128.9	1165.8	1175.1	1260.8	1375.2	1432.4	1516.2	1683.8	1809.5	1829.4
145°	1136.4	1168.6	1200.9	1209.0	1280.2	1375.2	1422.7	1491.2	1628.4	1731.3	1746.3
147.5°	1180.9	1212.3	1243.7	1251.6	1308.6	1384.7	1422.7	1476.7	1584.5	1665.5	1677.9
150°	1209.9	1238.3	1266.7	1273.8	1323.4	1389.6	1422.7	1468.2	1559.4	1627.8	1637.9
152.5°	1239.9	1261.4	1282.8	1288.3	1333.1	1392.8	1422.7	1461.6	1539.4	1597.8	1605.5
155°	1284.4	1300.3	1316.2	1320.2	1354.4	1399.9	1422.7	1453.7	1515.6	1562.0	1567.1
157.5°	1317.3	1332.7	1348.2	1352.1	1375.6	1407.0	1422.7	1446.8	1494.9	1531.0	1534.6
160°	1339.5	1351.6	1363.6	1366.6	1385.3	1410.2	1422.7	1443.3	1484.6	1515.5	1517.6
162.5°	1361.8	1370.7	1379.8	1382.0	1395.6	1413.6	1422.7	1440.0	1474.9	1501.0	1503.0
165°	1386.0	1394.2	1402.3	1404.4	1410.4	1418.6	1422.7	1435.2	1460.1	1478.8	1480.9
167.5°	1408.2	1412.0	1415.9	1416.9	1422.0	1428.9	1432.4	1440.5	1456.9	1469.1	1469.9
170°	1422.7	1426.6	1430.5	1431.4	1431.7	1432.2	1432.4	1440.5	1456.9	1469.1	1469.1
172.5°	1430.4	1431.3	1432.2	1432.4	1432.4	1432.4	1432.4	1438.8	1451.7	1461.4	1460.7
175°	1441.1	1441.1	1441.1	1441.1	1438.2	1434.3	1432.4	1436.5	1444.6	1450.8	1450.8
177.5°	1441.1	1441.1	1441.1	1441.1	1438.8	1435.8	1434.3	1437.5	1444.0	1448.8	1448.0
180°	1441.1	1441.1	1441.1	1441.1	1441.1	1441.1	1441.1	1441.1	1441.1	1441.1	1441.1

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	767.7	767.7
2.5°	819.5	814.5
5°	1053.9	1058.9
7.5°	1419.2	1416.8
10°	1764.8	1787.0
12.5°	2016.6	2021.5
15°	2169.6	2179.5
17.5°	2228.8	2231.3
20°	2231.3	2226.4
22.5°	2204.1	2199.2
25°	2172.1	2169.6
27.5°	2142.4	2144.9
30°	2130.1	2137.6
32.5°	2130.1	2142.4
35°	2135.0	2147.4
37.5°	2132.6	2147.4
40°	2122.7	2140.0
42.5°	2095.5	2107.9
45°	2053.6	2068.4
47.5°	1999.3	2009.1
50°	1930.2	1940.0
52.5°	1843.8	1846.2
55°	1740.1	1750.0
57.5°	1629.1	1631.5
60°	1505.6	1513.1
62.5°	1374.8	1374.8
65°	1236.6	1241.6
67.5°	1093.4	1105.8
70°	947.8	950.3
72.5°	804.6	804.6
75°	656.6	659.0
77.5°	515.8	515.8
80°	382.6	385.1
82.5°	264.1	269.1
85°	165.4	165.4
87.5°	76.5	69.1
90°	36.7	36.7
92.5°	147.2	118.0
95°	513.1	424.6
97.5°	1229.5	1061.0
100°	1771.4	1570.7
102.5°	2304.6	2132.6
105°	2984.2	2891.9
107.5°	3429.5	3451.8
110°	3599.3	3695.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3614.4	3762.2
115°	3518.6	3723.6
117.5°	3315.3	3542.8
120°	3151.6	3372.5
122.5°	2992.2	3210.1
125°	2764.6	2965.4
127.5°	2560.0	2729.3
130°	2439.4	2595.9
132.5°	2330.0	2470.1
135°	2180.1	2300.9
137.5°	2059.8	2158.8
140°	1977.4	2069.7
142.5°	1908.9	1988.5
145°	1806.4	1866.6
147.5°	1727.8	1777.7
150°	1678.3	1718.7
152.5°	1635.9	1666.4
155°	1587.2	1607.4
157.5°	1548.8	1563.0
160°	1525.7	1533.9
162.5°	1510.7	1518.5
165°	1489.0	1497.2
167.5°	1473.4	1476.8
170°	1469.1	1469.1
172.5°	1457.6	1454.6
175°	1450.8	1450.8
177.5°	1444.5	1441.1
180°	1441.1	1441.1

(END OF REPORT)