

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: P938008

Luminaire Tested: SQ4-FB-125U-075D-B50-1D-UNV-W2A-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938008
REPORT IS A COMBINATION OF REPORTS P933614 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-075D-B50-1D-UNV-W2A-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

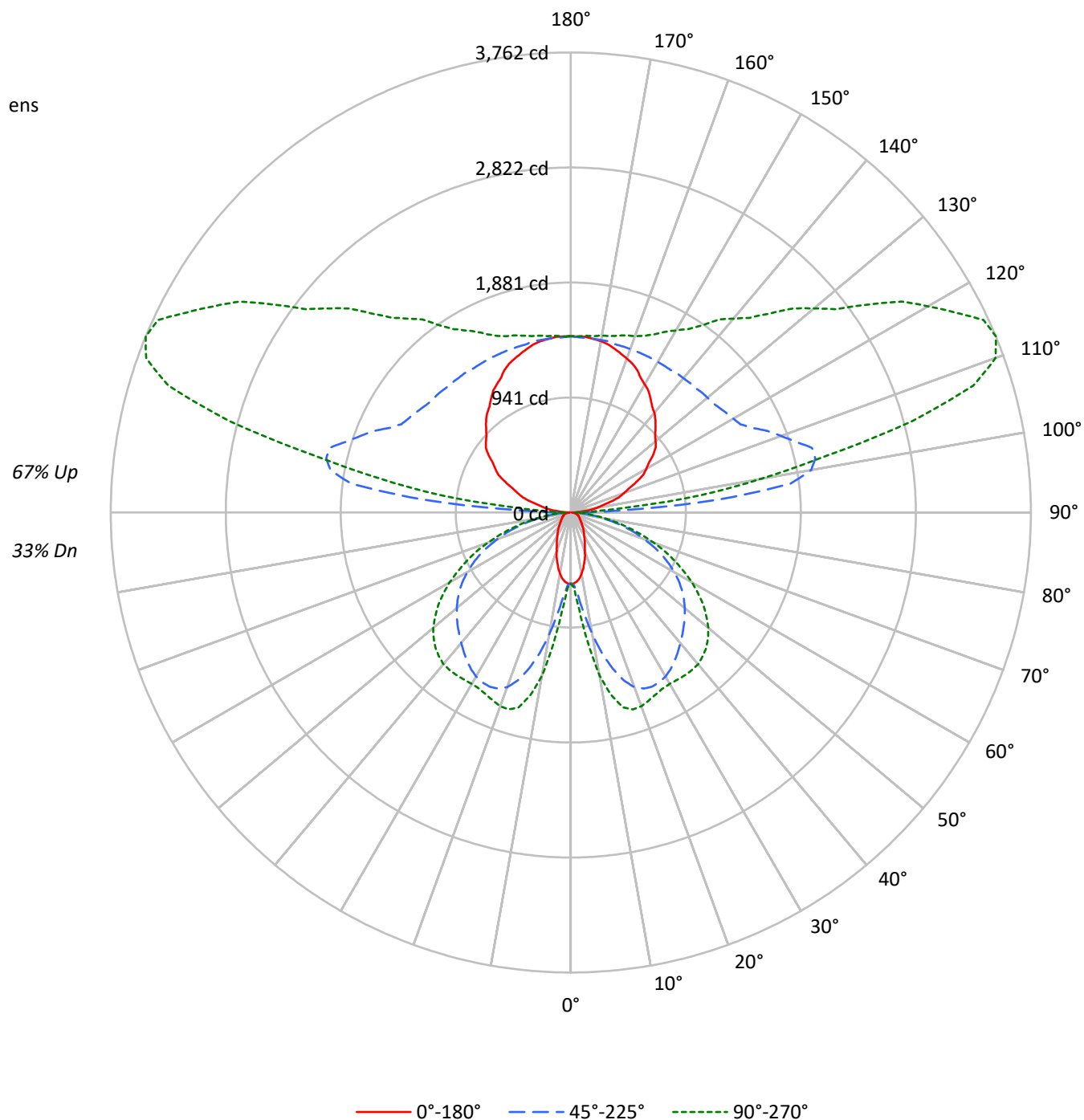
Lumens per Lamp: N/A
Luminaire Lumens: 13841.9 lumens
Efficiency: N/A
Efficacy: 124.5 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 111.2
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

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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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40
1	94	89	85	82	84	80	77	74	64	62	60	49	47	46	35	34	33
2	85	77	71	66	76	70	65	60	55	52	49	42	40	38	30	29	27
3	77	68	60	54	69	61	55	50	49	44	40	37	34	31	26	24	23
4	70	59	52	46	63	54	47	42	43	38	34	33	29	26	23	21	19
5	64	53	45	39	57	48	41	35	38	33	29	29	25	23	21	18	16
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	19	16	14
7	54	42	34	29	49	38	31	26	31	25	22	23	20	17	17	14	12
8	50	38	30	25	45	34	28	23	28	23	19	21	18	15	15	13	11
9	47	34	27	22	42	31	25	20	25	20	17	19	16	13	14	12	10
10	43	31	24	19	39	28	22	18	23	18	15	18	14	12	13	10	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2695	2695	2695
5°	2633	3115	3623
10°	2388	4541	6007
15°	2030	5933	7253
20°	1652	6875	7392
25°	1379	7195	7242
30°	1163	7241	7228
35°	1028	7120	7415
40°	895	6964	7608
45°	811	6850	7638
50°	744	6747	7511
55°	713	6596	7179
60°	729	6306	6653
65°	759	5866	5930
70°	808	5116	5010
75°	896	4171	3910
80°	978	2893	2634
85°	871	1535	1349

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7638 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.1	0.5
10°-20°	333.1	2.4
20°-30°	582.6	4.2
30°-40°	750.0	5.4
40°-50°	837.7	6.1
50°-60°	802.3	5.8
60°-70°	635.8	4.6
70°-80°	373.9	2.7
80°-90°	109.4	0.8
90°-100°	702.5	5.1
100°-110°	1846.8	13.3
110°-120°	1914.9	13.8
120°-130°	1536.0	11.1
130°-140°	1205.2	8.7
140°-150°	925.0	6.7
150°-160°	666.2	4.8
160°-170°	407.6	2.9
170°-180°	137.7	1.0
0°-30°	990.8	7.2
0°-40°	1740.8	12.6
0°-60°	3380.8	24.4
0°-90°	4499.9	32.5
90°-120°	4464.2	32.3
90°-150°	8130.5	58.7
90°-180°	9342.0	67.5
0°-180°	13841.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	581	581	581	581	581	
5°	566	607	684	773	801	52
15°	424	783	1319	1599	1650	118
25°	271	887	1571	1640	1642	125
35°	183	848	1480	1564	1625	114
45°	125	676	1308	1498	1566	97
55°	90	430	1110	1289	1324	82
65°	71	228	824	926	940	70
75°	52	140	452	497	499	55
85°	19	43	112	123	125	20
90°	10	27	74	37	37	9
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°	580.9	580.9	580.9	580.9	580.9	580.9	580.9	580.9	580.9	580.9	580.9
2.5°	580.9	580.9	584.7	586.6	590.3	592.2	595.9	599.6	610.8	612.7	616.4
5°	566.0	573.5	597.8	607.1	633.3	668.7	683.7	708.0	758.4	773.4	782.7
7.5°	543.6	560.4	620.2	635.1	700.5	793.9	833.1	885.4	965.8	1005.0	1036.7
10°	508.1	543.6	650.1	685.6	792.0	934.0	1006.9	1079.8	1201.2	1255.4	1275.9
12.5°	468.9	526.8	681.8	730.4	883.6	1091.0	1178.8	1259.1	1397.4	1470.2	1481.4
15°	424.0	502.5	711.7	782.7	980.7	1221.8	1318.9	1417.9	1546.8	1599.1	1612.2
17.5°	384.8	483.8	739.7	814.4	1055.4	1339.4	1438.5	1520.6	1625.3	1660.7	1670.1
20°	336.2	453.9	758.4	855.5	1134.0	1425.4	1520.6	1584.2	1655.1	1677.6	1681.3
22.5°	300.7	422.2	769.6	870.5	1186.3	1477.7	1558.0	1608.4	1657.0	1664.5	1666.3
25°	270.9	386.7	767.7	887.3	1231.1	1509.4	1571.1	1608.4	1636.5	1640.2	1640.2
27.5°	242.8	347.4	760.3	891.0	1264.7	1516.9	1565.5	1591.6	1604.7	1612.2	1612.2
30°	218.6	310.1	741.6	883.6	1279.7	1509.4	1548.7	1561.7	1574.8	1586.0	1591.6
32.5°	199.9	274.6	713.6	868.6	1281.5	1490.8	1518.8	1526.2	1544.9	1571.1	1580.4
35°	183.1	239.1	681.8	848.1	1270.3	1460.9	1479.5	1487.0	1524.4	1563.6	1576.7
37.5°	166.3	213.0	640.7	812.6	1253.5	1425.4	1438.5	1451.5	1509.4	1556.1	1571.1
40°	149.4	190.5	592.2	773.4	1227.4	1382.4	1393.6	1414.2	1490.8	1544.9	1559.9
42.5°	136.4	171.9	539.9	732.3	1193.7	1333.8	1350.7	1380.5	1468.3	1526.2	1543.1
45°	125.2	153.2	483.8	676.2	1150.8	1283.4	1307.7	1348.8	1442.2	1498.2	1513.2
47.5°	113.9	140.1	425.9	618.3	1104.1	1233.0	1264.7	1311.4	1406.7	1460.9	1473.9
50°	104.6	127.0	368.0	556.7	1053.6	1178.8	1216.2	1264.7	1361.9	1412.3	1429.1
52.5°	97.1	115.8	313.8	495.0	995.6	1122.8	1165.7	1216.2	1307.7	1356.3	1367.5
55°	89.7	106.5	267.1	429.6	935.9	1063.0	1109.7	1158.3	1247.9	1289.0	1296.5
57.5°	85.9	99.0	227.9	368.0	872.4	995.6	1047.9	1092.9	1176.9	1208.7	1216.2
60°	80.3	93.4	198.0	315.7	803.2	932.1	977.0	1021.8	1092.9	1119.0	1124.6
62.5°	74.7	89.7	175.6	265.3	732.3	857.4	902.2	943.3	1003.1	1021.8	1029.3
65°	71.0	85.9	158.8	227.9	659.4	779.0	823.8	859.3	907.8	926.5	930.3
67.5°	67.2	82.2	145.7	196.1	586.6	700.5	734.1	767.7	805.1	823.8	825.7
70°	61.6	78.5	134.5	173.7	511.8	610.8	638.9	674.3	704.2	713.6	719.2
72.5°	57.9	72.9	127.0	156.9	435.2	524.9	551.1	571.6	597.8	607.1	607.1
75°	52.3	65.4	119.6	140.1	356.8	429.6	452.1	472.6	493.2	496.9	491.3
77.5°	46.7	57.9	102.7	117.7	278.3	340.0	358.7	369.9	386.7	390.4	392.3
80°	39.2	50.4	80.3	91.5	201.7	250.3	263.4	272.7	287.7	287.7	291.4
82.5°	29.9	39.2	57.9	65.4	136.4	171.9	183.1	188.7	198.0	198.0	198.0
85°	18.7	24.3	37.4	43.0	82.2	104.6	112.1	113.9	121.4	123.3	123.3
87.5°	9.3	13.1	24.3	26.2	43.0	54.2	54.2	57.9	57.9	56.0	54.2
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°	580.9	580.9
2.5°	620.2	616.4
5°	797.6	801.4
7.5°	1074.2	1072.3
10°	1335.7	1352.5
12.5°	1526.2	1530.0
15°	1642.1	1649.5
17.5°	1686.9	1688.8
20°	1688.8	1685.0
22.5°	1668.2	1664.5
25°	1643.9	1642.1
27.5°	1621.5	1623.4
30°	1612.2	1617.8
32.5°	1612.2	1621.5
35°	1615.9	1625.3
37.5°	1614.0	1625.3
40°	1606.6	1619.6
42.5°	1586.0	1595.4
45°	1554.3	1565.5
47.5°	1513.2	1520.6
50°	1460.9	1468.3
52.5°	1395.5	1397.4
55°	1317.0	1324.5
57.5°	1233.0	1234.8
60°	1139.6	1145.2
62.5°	1040.5	1040.5
65°	935.9	939.6
67.5°	827.5	836.9
70°	717.3	719.2
72.5°	609.0	609.0
75°	496.9	498.8
77.5°	390.4	390.4
80°	289.5	291.4
82.5°	199.9	203.6
85°	125.2	125.2
87.5°	57.9	52.3
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)