

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: P937097

Luminaire Tested: SQ4-FB-075U-050D-B35-1D-UNV-W2A-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937097
REPORT IS A COMBINATION OF REPORTS P933493 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-050D-B35-1D-UNV-W2A-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

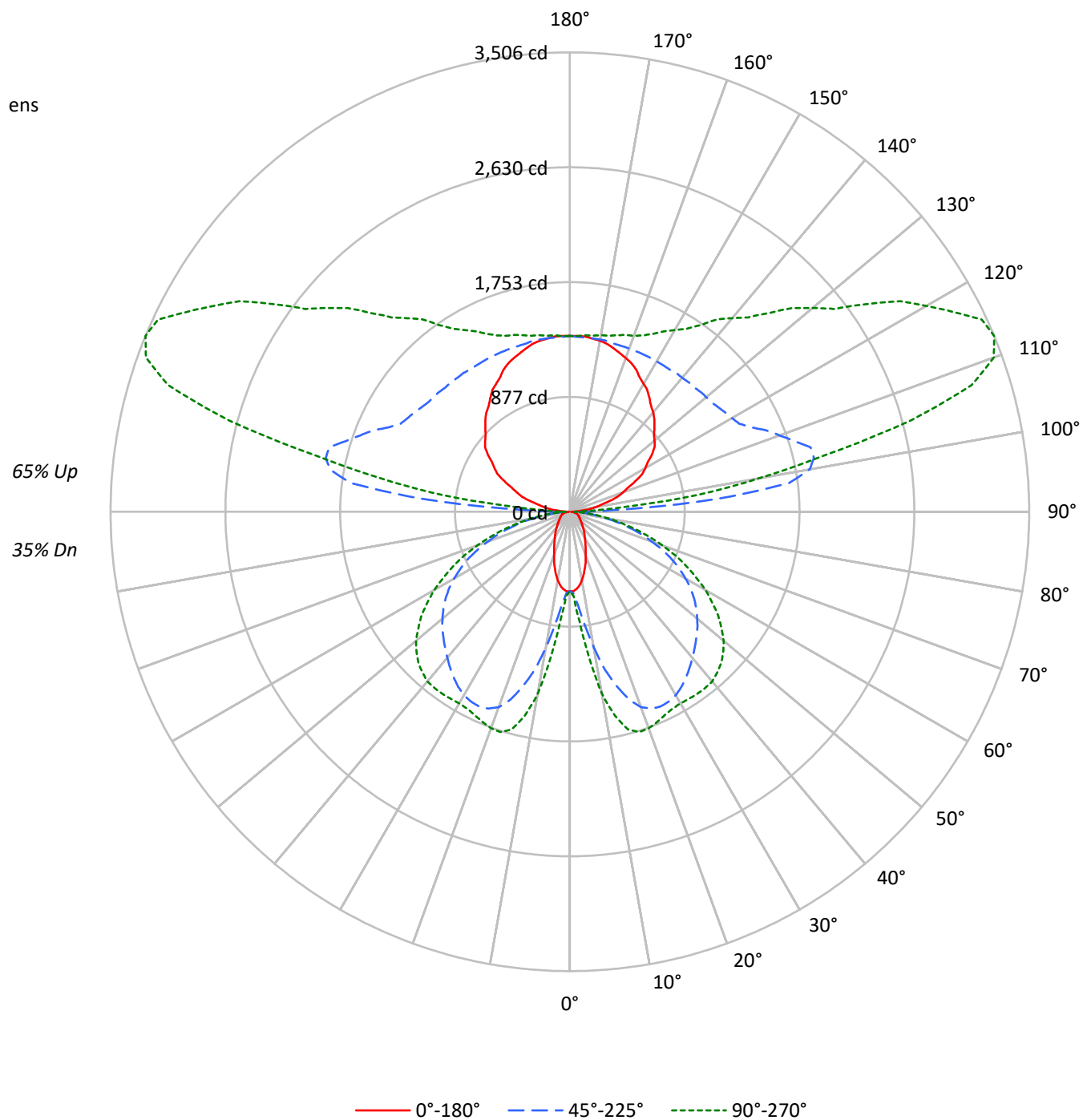
Lumens per Lamp: N/A
Luminaire Lumens: 13400.3 lumens
Efficiency: N/A
Efficacy: 129.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 103.2
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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42
1	94	90	86	82	85	81	78	75	65	63	61	50	49	47	37	36	35
2	85	78	72	66	77	70	65	61	57	53	50	44	41	39	32	30	29
3	77	68	61	55	70	62	55	50	49	45	41	38	35	32	28	26	24
4	71	60	52	46	63	54	47	42	44	39	35	34	30	27	25	22	20
5	65	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17
6	59	47	39	33	53	43	36	31	35	29	25	27	23	20	20	17	15
7	55	42	34	29	49	38	31	26	31	26	22	24	20	17	18	15	13
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	16	14	12
9	47	35	27	22	42	32	25	20	26	21	17	20	16	14	15	12	10
10	44	32	24	20	39	29	22	18	23	18	15	18	15	12	14	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1876	1876	1876
5°	1833	2168	2521
10°	1663	3161	4179
15°	1414	4132	5047
20°	1152	4789	5143
25°	961	5012	5039
30°	811	5046	5029
35°	717	4963	5159
40°	626	4856	5294
45°	567	4777	5315
50°	520	4707	5227
55°	499	4603	4995
60°	511	4404	4629
65°	533	4099	4126
70°	568	3577	3486
75°	633	2918	2720
80°	697	2027	1833
85°	632	1077	938

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5315 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.4	0.6
10°-20°	347.6	2.6
20°-30°	608.1	4.5
30°-40°	782.8	5.8
40°-50°	874.3	6.5
50°-60°	837.4	6.2
60°-70°	663.6	5.0
70°-80°	390.2	2.9
80°-90°	113.5	0.8
90°-100°	654.5	4.9
100°-110°	1720.7	12.8
110°-120°	1784.2	13.3
120°-130°	1431.2	10.7
130°-140°	1122.9	8.4
140°-150°	861.9	6.4
150°-160°	620.7	4.6
160°-170°	379.8	2.8
170°-180°	128.3	1.0
0°-30°	1034.2	7.7
0°-40°	1816.9	13.6
0°-60°	3528.6	26.3
0°-90°	4696.1	35.0
90°-120°	4159.4	31.0
90°-150°	7575.4	56.5
90°-180°	8704.0	65.0
0°-180°	13400.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	606	606	606	606	606	
5°	591	634	714	807	836	55
15°	443	817	1377	1669	1722	123
25°	283	926	1640	1712	1714	130
35°	191	885	1544	1632	1696	119
45°	131	706	1365	1564	1634	101
55°	94	448	1158	1345	1382	85
65°	74	238	860	967	981	73
75°	55	146	472	519	520	57
85°	20	45	117	129	131	21
90°	9	25	68	34	34	9
95°	86	339	1127	581	396	96
105°	310	470	1902	2888	2694	329
115°	551	669	1524	3040	3469	544
125°	766	859	1386	2342	2763	680
135°	913	1005	1343	1891	2144	706
145°	1059	1126	1326	1613	1739	663
155°	1197	1230	1326	1455	1498	550
165°	1291	1308	1326	1378	1395	364
175°	1343	1343	1335	1352	1352	127
180°	1343	1343	1343	1343	1343	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	606.4	606.4	606.4	606.4	606.4	606.4	606.4	606.4	606.4	606.4	606.4
2.5°	606.4	606.4	610.3	612.2	616.1	618.0	622.0	625.9	637.6	639.5	643.4
5°	590.8	598.6	623.9	633.6	661.0	698.0	713.6	739.0	791.6	807.2	817.0
7.5°	567.3	584.9	647.3	662.9	731.2	828.7	869.6	924.2	1008.1	1048.9	1082.1
10°	530.3	567.3	678.5	715.6	826.7	974.9	1050.9	1126.9	1253.7	1310.3	1331.7
12.5°	489.3	549.8	711.6	762.3	922.2	1138.7	1230.3	1314.2	1458.4	1534.5	1546.1
15°	442.6	524.5	742.8	817.0	1023.7	1275.1	1376.6	1479.9	1614.5	1669.0	1682.7
17.5°	401.7	504.9	772.1	850.1	1101.7	1398.0	1501.3	1587.1	1696.3	1733.3	1743.1
20°	351.0	473.8	791.6	893.0	1183.5	1487.7	1587.1	1653.4	1727.5	1750.9	1754.8
22.5°	314.0	440.6	803.3	908.6	1238.1	1542.3	1626.1	1678.8	1729.5	1737.2	1739.2
25°	282.8	403.6	801.4	926.2	1284.9	1575.4	1639.7	1678.8	1708.0	1711.9	1711.9
27.5°	253.5	362.7	793.5	930.0	1320.0	1583.2	1633.9	1661.2	1674.8	1682.7	1682.7
30°	228.1	323.6	774.0	922.2	1335.6	1575.4	1616.4	1630.1	1643.6	1655.3	1661.2
32.5°	208.6	286.6	744.8	906.6	1337.5	1555.9	1585.2	1592.9	1612.4	1639.7	1649.5
35°	191.1	249.6	711.6	885.2	1325.9	1524.7	1544.2	1552.0	1591.0	1632.0	1645.6
37.5°	173.5	222.3	668.8	848.2	1308.2	1487.7	1501.3	1514.9	1575.4	1624.1	1639.7
40°	156.0	198.8	618.0	807.2	1281.0	1442.8	1454.6	1476.0	1555.9	1612.4	1628.0
42.5°	142.3	179.4	563.5	764.3	1245.9	1392.2	1409.7	1440.9	1532.5	1592.9	1610.5
45°	130.6	159.9	504.9	705.8	1201.1	1339.4	1364.8	1407.8	1505.2	1563.7	1579.3
47.5°	118.9	146.2	444.6	645.4	1152.3	1286.8	1320.0	1368.7	1468.1	1524.7	1538.4
50°	109.2	132.6	384.1	581.0	1099.6	1230.3	1269.3	1320.0	1421.4	1474.0	1491.6
52.5°	101.4	120.9	327.5	516.7	1039.3	1171.8	1216.7	1269.3	1364.8	1415.5	1427.2
55°	93.6	111.1	278.8	448.5	976.8	1109.4	1158.1	1208.8	1302.4	1345.4	1353.1
57.5°	89.7	103.3	237.9	384.1	910.6	1039.3	1093.8	1140.6	1228.3	1261.5	1269.3
60°	83.8	97.5	206.7	329.6	838.4	973.0	1019.8	1066.5	1140.6	1167.9	1173.7
62.5°	78.0	93.6	183.2	276.8	764.3	895.0	941.8	984.6	1047.0	1066.5	1074.3
65°	74.1	89.7	165.7	237.9	688.3	813.1	859.9	896.9	947.6	967.1	970.9
67.5°	70.2	85.8	152.0	204.7	612.2	731.2	766.3	801.4	840.3	859.9	861.8
70°	64.3	81.9	140.4	181.3	534.2	637.6	666.9	703.9	735.1	744.8	750.7
72.5°	60.5	76.1	132.6	163.8	454.3	547.9	575.2	596.6	623.9	633.6	633.6
75°	54.6	68.2	124.8	146.2	372.4	448.5	471.8	493.3	514.7	518.6	512.8
77.5°	48.7	60.5	107.3	122.9	290.5	354.8	374.3	386.0	403.6	407.5	409.4
80°	41.0	52.6	83.8	95.5	210.6	261.2	274.9	284.7	300.3	300.3	304.2
82.5°	31.2	41.0	60.5	68.2	142.3	179.4	191.1	196.9	206.7	206.7	206.7
85°	19.5	25.4	39.0	44.9	85.8	109.2	117.0	118.9	126.7	128.7	128.7
87.5°	9.8	13.7	25.4	27.3	44.9	56.6	56.6	60.5	60.5	58.5	56.6
90°	9.0	16.2	23.4	25.2	39.6	58.9	68.5	60.9	45.6	34.2	34.2
92.5°	36.0	97.3	158.6	173.9	244.5	338.6	385.7	338.0	242.7	171.2	164.4
95°	86.5	198.6	310.9	338.9	601.7	952.1	1127.3	1006.0	763.3	581.2	560.6
97.5°	149.6	248.5	347.5	372.2	810.5	1394.8	1686.9	1610.2	1456.8	1341.8	1302.5
100°	198.3	288.0	377.7	400.1	886.4	1534.8	1859.0	1864.6	1875.9	1884.3	1837.5
102.5°	239.7	323.5	407.1	428.0	921.2	1578.9	1907.8	2005.4	2200.9	2347.5	2307.5
105°	310.0	380.9	451.7	469.5	947.1	1583.9	1902.3	2121.4	2559.6	2888.2	2866.7
107.5°	382.1	448.2	514.2	530.8	951.9	1513.5	1794.2	2099.8	2711.0	3169.3	3174.5
110°	430.7	490.4	550.1	565.0	944.7	1451.0	1704.1	2045.8	2729.0	3241.4	3263.8

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	478.5	535.4	592.3	606.5	945.1	1396.4	1622.1	1971.7	2671.0	3195.5	3229.9
115°	550.6	603.0	655.5	668.6	953.7	1333.8	1523.8	1860.7	2534.3	3039.6	3087.3
117.5°	621.8	669.5	717.1	729.0	971.4	1294.6	1456.2	1760.2	2368.1	2824.2	2877.2
120°	663.3	708.1	752.9	764.2	985.9	1281.4	1429.2	1706.9	2262.4	2679.1	2730.5
122.5°	703.8	749.0	794.3	805.6	1006.6	1274.5	1408.4	1658.5	2158.8	2534.0	2584.8
125°	766.0	807.3	848.6	858.8	1034.5	1268.8	1386.0	1598.5	2023.4	2342.1	2388.9
127.5°	816.5	858.1	899.8	910.2	1062.5	1265.5	1367.1	1549.5	1914.4	2188.0	2227.4
130°	843.5	888.4	933.1	944.4	1082.9	1267.5	1359.8	1522.2	1847.0	2090.6	2127.1
132.5°	871.4	916.3	961.1	972.3	1099.3	1268.8	1353.5	1498.8	1789.6	2007.8	2040.4
135°	912.9	953.7	994.6	1004.8	1117.5	1267.6	1342.7	1464.4	1708.0	1890.6	1918.7
137.5°	955.2	995.6	1036.2	1046.2	1144.5	1275.4	1340.9	1443.8	1649.7	1804.1	1827.1
140°	990.3	1027.5	1064.8	1074.1	1161.0	1276.8	1334.6	1423.6	1601.4	1734.7	1756.2
142.5°	1017.4	1051.8	1086.2	1094.9	1174.8	1281.3	1334.6	1412.7	1568.9	1686.1	1704.6
145°	1058.8	1088.9	1118.9	1126.5	1192.8	1281.3	1325.6	1389.4	1517.3	1613.1	1627.1
147.5°	1100.3	1129.6	1158.8	1166.1	1219.3	1290.1	1325.6	1375.9	1476.4	1551.8	1563.4
150°	1127.3	1153.8	1180.2	1186.8	1233.1	1294.8	1325.6	1368.0	1452.9	1516.6	1526.0
152.5°	1155.2	1175.3	1195.3	1200.3	1242.1	1297.8	1325.6	1361.8	1434.3	1488.7	1495.7
155°	1196.7	1211.5	1226.4	1230.0	1261.9	1304.4	1325.6	1354.5	1412.1	1455.3	1460.1
157.5°	1227.3	1241.8	1256.2	1259.8	1281.7	1311.0	1325.6	1348.0	1392.8	1426.5	1429.8
160°	1248.1	1259.3	1270.6	1273.4	1290.8	1314.0	1325.6	1344.8	1383.2	1412.1	1414.1
162.5°	1268.8	1277.2	1285.6	1287.7	1300.3	1317.2	1325.6	1341.8	1374.2	1398.6	1400.4
165°	1291.4	1298.9	1306.5	1308.4	1314.2	1321.8	1325.6	1337.2	1360.4	1377.8	1379.8
167.5°	1312.0	1315.6	1319.3	1320.2	1325.0	1331.4	1334.6	1342.2	1357.4	1368.8	1369.6
170°	1325.6	1329.2	1332.9	1333.7	1334.0	1334.4	1334.6	1342.2	1357.4	1368.8	1368.8
172.5°	1332.8	1333.5	1334.4	1334.6	1334.6	1334.6	1334.6	1340.6	1352.6	1361.6	1361.0
175°	1342.7	1342.7	1342.7	1342.7	1340.0	1336.4	1334.6	1338.4	1346.0	1351.8	1351.8
177.5°	1342.7	1342.7	1342.7	1342.7	1340.6	1337.8	1336.4	1339.4	1345.5	1349.9	1349.1
180°	1342.7	1342.7	1342.7	1342.7	1342.7	1342.7	1342.7	1342.7	1342.7	1342.7	1342.7

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	606.4	606.4
2.5°	647.3	643.4
5°	832.6	836.4
7.5°	1121.1	1119.2
10°	1394.1	1411.6
12.5°	1592.9	1596.8
15°	1713.9	1721.6
17.5°	1760.7	1762.6
20°	1762.6	1758.7
22.5°	1741.1	1737.2
25°	1715.8	1713.9
27.5°	1692.4	1694.4
30°	1682.7	1688.5
32.5°	1682.7	1692.4
35°	1686.5	1696.3
37.5°	1684.6	1696.3
40°	1676.8	1690.4
42.5°	1655.3	1665.1
45°	1622.2	1633.9
47.5°	1579.3	1587.1
50°	1524.7	1532.5
52.5°	1456.5	1458.4
55°	1374.6	1382.4
57.5°	1286.8	1288.8
60°	1189.4	1195.2
62.5°	1086.1	1086.1
65°	976.8	980.7
67.5°	863.8	873.5
70°	748.7	750.7
72.5°	635.7	635.7
75°	518.6	520.5
77.5°	407.5	407.5
80°	302.2	304.2
82.5°	208.6	212.5
85°	130.6	130.6
87.5°	60.5	54.6
90°	34.2	34.2
92.5°	137.2	110.0
95°	478.1	395.6
97.5°	1145.6	988.6
100°	1650.5	1463.5
102.5°	2147.2	1987.0
105°	2780.5	2694.4
107.5°	3195.4	3216.2
110°	3353.5	3443.2

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3367.7	3505.5
115°	3278.3	3469.4
117.5°	3089.0	3300.9
120°	2936.5	3142.3
122.5°	2787.8	2990.9
125°	2575.9	2762.9
127.5°	2385.3	2543.0
130°	2272.9	2418.7
132.5°	2170.9	2301.6
135°	2031.3	2143.8
137.5°	1919.2	2011.4
140°	1842.4	1928.4
142.5°	1778.7	1852.7
145°	1683.2	1739.2
147.5°	1609.8	1656.3
150°	1563.7	1601.4
152.5°	1524.2	1552.6
155°	1478.9	1497.7
157.5°	1443.0	1456.2
160°	1421.6	1429.2
162.5°	1407.6	1414.8
165°	1387.3	1395.0
167.5°	1372.9	1376.1
170°	1368.8	1368.8
172.5°	1358.2	1355.3
175°	1351.8	1351.8
177.5°	1345.9	1342.7
180°	1342.7	1342.7

(END OF REPORT)