

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: P937105

Luminaire Tested: SQ4-FB-075U-050D-B50-1D-UNV-W2A-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937105
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-B50-1D-UNV-W2A-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

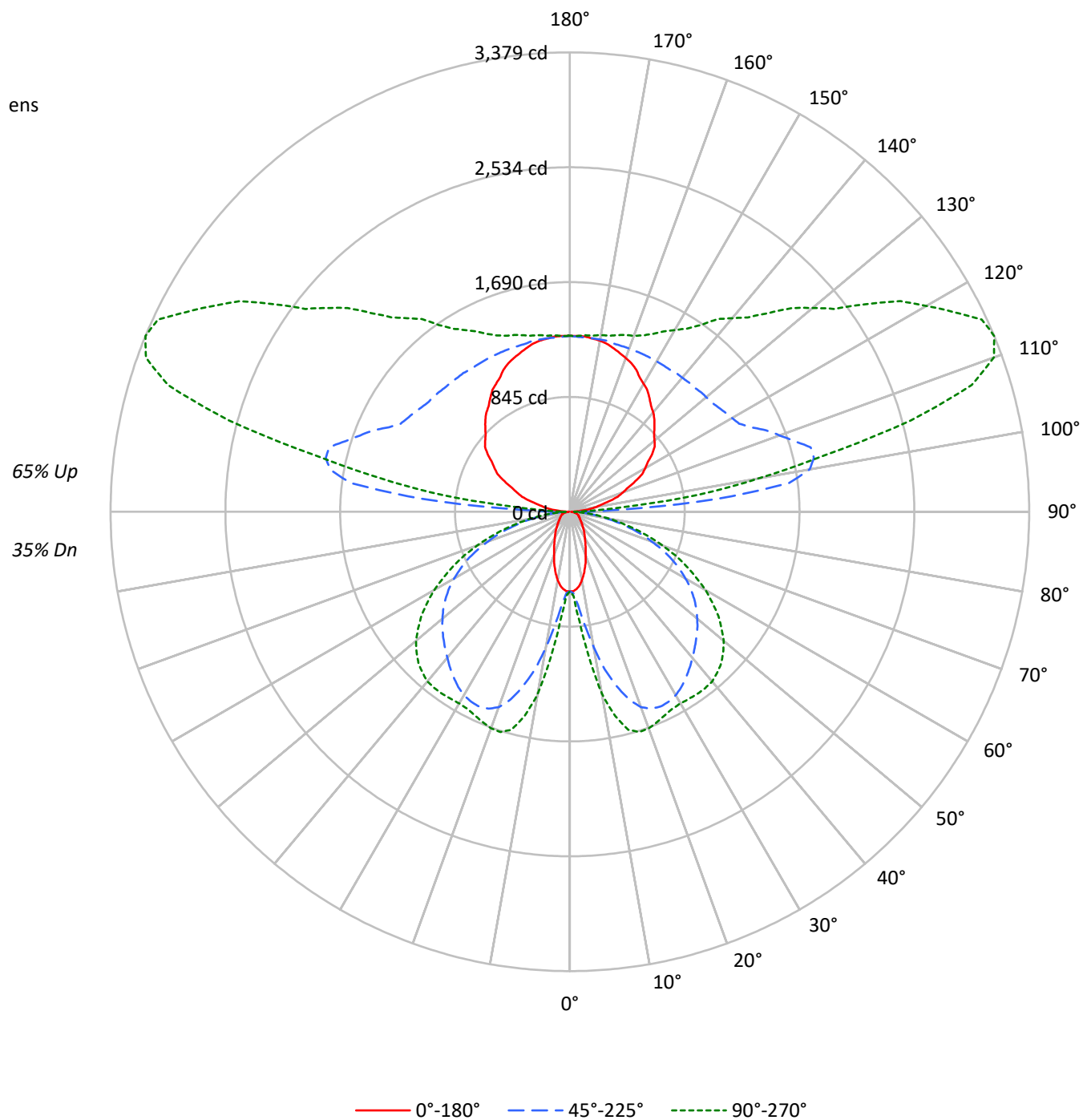
Lumens per Lamp: N/A
Luminaire Lumens: 12916.3 lumens
Efficiency: N/A
Efficacy: 125.2 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: Semi-Indirect

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°	1808	1808	1808
5°	1767	2090	2430
10°	1603	3047	4029
15°	1363	3982	4864
20°	1110	4616	4958
25°	926	4831	4857
30°	782	4863	4848
35°	691	4784	4973
40°	603	4680	5103
45°	546	4605	5123
50°	502	4537	5038
55°	481	4437	4814
60°	493	4244	4462
65°	514	3950	3977
70°	548	3448	3360
75°	610	2813	2622
80°	672	1954	1767
85°	609	1038	904

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5123 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.6	0.6
10°-20°	335.1	2.6
20°-30°	586.1	4.5
30°-40°	754.5	5.8
40°-50°	842.7	6.5
50°-60°	807.2	6.2
60°-70°	639.7	5.0
70°-80°	376.1	2.9
80°-90°	109.4	0.8
90°-100°	630.9	4.9
100°-110°	1658.6	12.8
110°-120°	1719.8	13.3
120°-130°	1379.5	10.7
130°-140°	1082.4	8.4
140°-150°	830.8	6.4
150°-160°	598.3	4.6
160°-170°	366.1	2.8
170°-180°	123.7	1.0
0°-30°	996.8	7.7
0°-40°	1751.3	13.6
0°-60°	3401.2	26.3
0°-90°	4526.4	35.0
90°-120°	4009.2	31.0
90°-150°	7301.8	56.5
90°-180°	8390.0	65.0
0°-180°	12916.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	584	584	584	584	584	
5°	570	611	688	778	806	53
15°	427	788	1327	1609	1659	119
25°	272	893	1580	1650	1652	126
35°	184	853	1488	1573	1635	115
45°	126	680	1316	1507	1575	97
55°	90	432	1116	1297	1332	82
65°	72	229	829	932	945	71
75°	53	141	455	500	502	55
85°	19	43	113	124	126	20
90°	9	24	66	33	33	8
95°	83	327	1087	560	381	93
105°	299	452	1834	2784	2597	317
115°	531	644	1469	2930	3344	524
125°	738	828	1336	2258	2663	656
135°	880	968	1294	1822	2066	681
145°	1021	1086	1278	1555	1676	639
155°	1154	1186	1278	1403	1444	530
165°	1245	1261	1278	1328	1345	351
175°	1294	1294	1286	1303	1303	123
180°	1294	1294	1294	1294	1294	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	584.5	584.5	584.5	584.5	584.5	584.5	584.5	584.5	584.5	584.5	584.5
2.5°	584.5	584.5	588.2	590.1	593.8	595.7	599.5	603.3	614.6	616.4	620.2
5°	569.5	576.9	601.4	610.7	637.1	672.8	687.8	712.3	763.0	778.0	787.5
7.5°	546.9	563.8	623.9	638.9	704.8	798.8	838.2	890.8	971.6	1011.1	1043.0
10°	511.2	546.9	654.0	689.8	796.8	939.7	1012.9	1086.2	1208.4	1263.0	1283.6
12.5°	471.7	530.0	685.9	734.8	888.9	1097.5	1185.9	1266.7	1405.8	1479.1	1490.3
15°	426.7	505.6	716.0	787.5	986.7	1229.1	1326.8	1426.4	1556.1	1608.7	1621.9
17.5°	387.1	486.7	744.2	819.4	1061.9	1347.5	1447.0	1529.8	1635.1	1670.7	1680.2
20°	338.3	456.7	763.0	860.8	1140.8	1434.0	1529.8	1593.7	1665.1	1687.6	1691.4
22.5°	302.6	424.7	774.3	875.8	1193.4	1486.6	1567.3	1618.2	1667.0	1674.5	1676.3
25°	272.5	389.0	772.4	892.7	1238.5	1518.5	1580.5	1618.2	1646.3	1650.1	1650.1
27.5°	244.3	349.6	764.9	896.5	1272.3	1526.1	1574.9	1601.2	1614.3	1621.9	1621.9
30°	219.9	312.0	746.1	888.9	1287.3	1518.5	1558.0	1571.2	1584.3	1595.6	1601.2
32.5°	201.1	276.3	717.9	873.9	1289.2	1499.7	1527.9	1535.4	1554.2	1580.5	1589.9
35°	184.2	240.6	685.9	853.2	1278.0	1469.6	1488.4	1496.0	1533.5	1573.0	1586.1
37.5°	167.3	214.3	644.6	817.5	1261.0	1434.0	1447.0	1460.2	1518.5	1565.5	1580.5
40°	150.4	191.7	595.7	778.0	1234.7	1390.7	1402.0	1422.7	1499.7	1554.2	1569.2
42.5°	137.2	172.9	543.1	736.7	1200.9	1341.9	1358.8	1388.9	1477.1	1535.4	1552.3
45°	125.9	154.1	486.7	680.3	1157.7	1291.1	1315.5	1356.9	1450.9	1507.2	1522.2
47.5°	114.6	140.9	428.5	622.0	1110.7	1240.4	1272.3	1319.3	1415.1	1469.6	1482.8
50°	105.3	127.8	370.2	560.0	1059.9	1185.9	1223.4	1272.3	1370.1	1420.8	1437.7
52.5°	97.7	116.6	315.7	498.0	1001.7	1129.5	1172.7	1223.4	1315.5	1364.4	1375.7
55°	90.2	107.1	268.7	432.3	941.6	1069.3	1116.3	1165.2	1255.4	1296.8	1304.2
57.5°	86.5	99.6	229.3	370.2	877.7	1001.7	1054.3	1099.4	1183.9	1216.0	1223.4
60°	80.8	94.0	199.2	317.7	808.1	937.8	982.9	1028.0	1099.4	1125.8	1131.4
62.5°	75.2	90.2	176.6	266.8	736.7	862.6	907.8	949.0	1009.2	1028.0	1035.5
65°	71.5	86.5	159.7	229.3	663.4	783.7	828.8	864.5	913.4	932.1	935.9
67.5°	67.6	82.7	146.5	197.4	590.1	704.8	738.6	772.4	810.0	828.8	830.7
70°	62.0	78.9	135.3	174.8	514.9	614.6	642.8	678.5	708.5	717.9	723.6
72.5°	58.3	73.3	127.8	157.8	437.9	528.1	554.4	575.1	601.4	610.7	610.7
75°	52.6	65.8	120.3	140.9	358.9	432.3	454.8	475.5	496.1	499.9	494.3
77.5°	47.0	58.3	103.4	118.4	280.0	342.0	360.8	372.1	389.0	392.7	394.6
80°	39.5	50.7	80.8	92.1	203.0	251.8	265.0	274.4	289.4	289.4	293.2
82.5°	30.1	39.5	58.3	65.8	137.2	172.9	184.2	189.8	199.2	199.2	199.2
85°	18.8	24.5	37.5	43.2	82.7	105.3	112.7	114.6	122.2	124.0	124.0
87.5°	9.4	13.2	24.5	26.3	43.2	54.5	54.5	58.3	58.3	56.4	54.5
90°	8.7	15.6	22.5	24.3	38.2	56.8	66.0	58.7	44.0	33.0	33.0
92.5°	34.7	93.8	152.9	167.7	235.6	326.3	371.7	325.8	234.0	165.0	158.5
95°	83.4	191.5	299.6	326.6	579.9	917.7	1086.6	969.7	735.7	560.2	540.3
97.5°	144.2	239.6	334.9	358.7	781.2	1344.4	1626.0	1552.0	1404.2	1293.3	1255.5
100°	191.1	277.6	364.1	385.6	854.4	1479.4	1791.9	1797.3	1808.1	1816.3	1771.1
102.5°	231.1	311.8	392.4	412.5	888.0	1521.9	1838.9	1933.0	2121.4	2262.7	2224.1
105°	298.8	367.2	435.4	452.5	912.9	1526.7	1833.6	2044.8	2467.2	2783.9	2763.1
107.5°	368.3	432.0	495.7	511.6	917.6	1458.8	1729.4	2024.0	2613.1	3054.8	3059.9
110°	415.2	472.7	530.2	544.6	910.6	1398.6	1642.5	1971.9	2630.4	3124.3	3145.9

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	461.2	516.0	570.9	584.6	910.9	1346.0	1563.5	1900.5	2574.6	3080.1	3113.2
115°	530.7	581.2	631.9	644.5	919.2	1285.7	1468.8	1793.5	2442.8	2929.8	2975.8
117.5°	599.3	645.3	691.2	702.6	936.3	1247.8	1403.6	1696.6	2282.6	2722.1	2773.2
120°	639.3	682.6	725.7	736.6	950.3	1235.1	1377.6	1645.2	2180.7	2582.3	2631.9
122.5°	678.4	722.0	765.6	776.5	970.2	1228.5	1357.6	1598.6	2080.9	2442.5	2491.4
125°	738.3	778.1	817.9	827.8	997.1	1223.0	1335.9	1540.7	1950.3	2257.5	2302.6
127.5°	787.0	827.2	867.3	877.3	1024.1	1219.8	1317.7	1493.6	1845.2	2109.0	2147.0
130°	813.0	856.3	899.4	910.3	1043.7	1221.7	1310.7	1467.2	1780.3	2015.1	2050.2
132.5°	839.9	883.2	926.3	937.2	1059.6	1223.0	1304.6	1444.7	1725.0	1935.2	1966.7
135°	879.9	919.2	958.7	968.5	1077.1	1221.9	1294.2	1411.6	1646.3	1822.3	1849.4
137.5°	920.7	959.7	998.7	1008.4	1103.1	1229.3	1292.5	1391.7	1590.1	1738.9	1761.2
140°	954.5	990.4	1026.4	1035.3	1119.0	1230.6	1286.4	1372.1	1543.5	1672.0	1692.8
142.5°	980.6	1013.9	1047.0	1055.3	1132.4	1235.0	1286.4	1361.7	1512.2	1625.2	1643.0
145°	1020.6	1049.5	1078.5	1085.8	1149.8	1235.0	1277.7	1339.3	1462.5	1554.8	1568.4
147.5°	1060.6	1088.8	1117.0	1124.0	1175.3	1243.5	1277.7	1326.2	1423.0	1495.7	1506.9
150°	1086.6	1112.1	1137.6	1144.0	1188.5	1248.0	1277.7	1318.6	1400.4	1461.8	1470.9
152.5°	1113.5	1132.8	1152.1	1156.9	1197.2	1250.9	1277.7	1312.6	1382.5	1434.9	1441.7
155°	1153.5	1167.8	1182.1	1185.6	1216.3	1257.3	1277.7	1305.5	1361.1	1402.8	1407.4
157.5°	1183.0	1196.9	1210.8	1214.3	1235.4	1263.6	1277.7	1299.3	1342.5	1374.9	1378.1
160°	1203.0	1213.8	1224.7	1227.4	1244.2	1266.5	1277.7	1296.2	1333.3	1361.1	1363.0
162.5°	1223.0	1231.1	1239.1	1241.2	1253.3	1269.6	1277.7	1293.3	1324.6	1348.0	1349.8
165°	1244.7	1252.0	1259.3	1261.2	1266.7	1274.1	1277.7	1288.9	1311.2	1328.1	1329.9
167.5°	1264.6	1268.1	1271.6	1272.5	1277.2	1283.3	1286.4	1293.7	1308.3	1319.4	1320.1
170°	1277.7	1281.2	1284.7	1285.6	1285.8	1286.2	1286.4	1293.7	1308.3	1319.4	1319.4
172.5°	1284.6	1285.4	1286.2	1286.4	1286.4	1286.4	1286.4	1292.2	1303.8	1312.5	1311.8
175°	1294.2	1294.2	1294.2	1294.2	1291.6	1288.2	1286.4	1290.0	1297.4	1302.9	1302.9
177.5°	1294.2	1294.2	1294.2	1294.2	1292.2	1289.5	1288.2	1291.1	1296.9	1301.2	1300.4
180°	1294.2	1294.2	1294.2	1294.2	1294.2	1294.2	1294.2	1294.2	1294.2	1294.2	1294.2

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	584.5	584.5
2.5°	623.9	620.2
5°	802.5	806.2
7.5°	1080.6	1078.8
10°	1343.7	1360.7
12.5°	1535.4	1539.1
15°	1652.0	1659.4
17.5°	1697.1	1698.9
20°	1698.9	1695.2
22.5°	1678.2	1674.5
25°	1653.8	1652.0
27.5°	1631.2	1633.2
30°	1621.9	1627.5
32.5°	1621.9	1631.2
35°	1625.6	1635.1
37.5°	1623.8	1635.1
40°	1616.2	1629.4
42.5°	1595.6	1605.0
45°	1563.6	1574.9
47.5°	1522.2	1529.8
50°	1469.6	1477.1
52.5°	1403.9	1405.8
55°	1325.0	1332.4
57.5°	1240.4	1242.2
60°	1146.4	1152.0
62.5°	1046.8	1046.8
65°	941.6	945.3
67.5°	832.6	841.9
70°	721.7	723.6
72.5°	612.7	612.7
75°	499.9	501.7
77.5°	392.7	392.7
80°	291.3	293.2
82.5°	201.1	204.8
85°	125.9	125.9
87.5°	58.3	52.6
90°	33.0	33.0
92.5°	132.3	106.0
95°	460.8	381.4
97.5°	1104.2	952.9
100°	1590.9	1410.6
102.5°	2069.7	1915.3
105°	2680.1	2597.1
107.5°	3080.0	3100.0
110°	3232.4	3318.9

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3246.0	3378.8
115°	3159.9	3344.1
117.5°	2977.4	3181.7
120°	2830.4	3028.8
122.5°	2687.1	2882.9
125°	2482.9	2663.1
127.5°	2299.1	2451.2
130°	2190.8	2331.4
132.5°	2092.5	2218.4
135°	1957.9	2066.4
137.5°	1849.9	1938.7
140°	1775.8	1858.8
142.5°	1714.5	1785.8
145°	1622.4	1676.3
147.5°	1551.7	1596.5
150°	1507.2	1543.5
152.5°	1469.2	1496.5
155°	1425.5	1443.6
157.5°	1390.9	1403.6
160°	1370.3	1377.6
162.5°	1356.7	1363.7
165°	1337.2	1344.6
167.5°	1323.3	1326.4
170°	1319.4	1319.4
172.5°	1309.1	1306.4
175°	1302.9	1302.9
177.5°	1297.3	1294.2
180°	1294.2	1294.2

(END OF REPORT)