

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: P938503

Luminaire Tested: SQ4-FB-150U-100D-B40-1D-UNV-W2A-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938503
REPORT IS A COMBINATION OF REPORTS P933639 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-100D-B40-1D-UNV-W2A-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

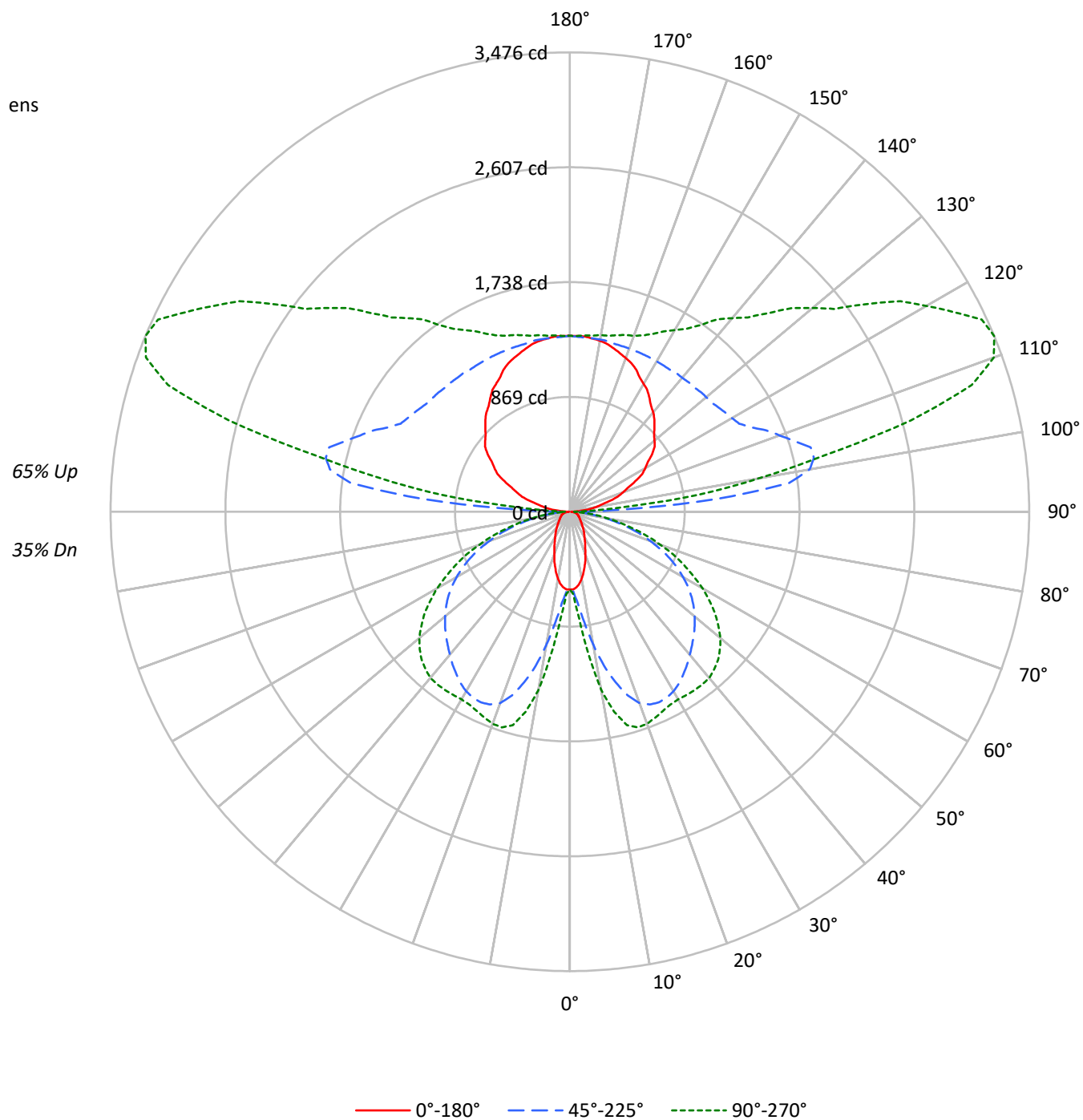
Lumens per Lamp: N/A
Luminaire Lumens: 13188.6 lumens
Efficiency: N/A
Efficacy: 121.4 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 108.6
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

TEST NUMBER: P938503

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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	75	75	75	58	58	58	42	42	42
1	94	90	86	82	85	81	78	75	65	63	60	50	49	47	36	35	35
2	85	78	72	66	77	70	65	61	56	53	49	43	41	39	32	30	29
3	77	68	61	55	69	61	55	50	49	45	41	38	35	32	28	26	24
4	71	60	52	46	63	54	47	42	43	38	34	34	30	27	24	22	20
5	64	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17
6	59	47	39	33	53	43	36	30	34	29	25	27	23	20	19	17	15
7	54	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	13	11
9	47	35	27	22	42	31	25	20	26	20	17	20	16	14	15	12	10
10	43	31	24	20	39	29	22	18	23	18	15	18	15	12	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3641	3641	3641
5°	3556	4207	4894
10°	3224	6131	8114
15°	2740	8009	9798
20°	2229	9279	9986
25°	1859	9707	9782
30°	1567	9766	9764
35°	1385	9602	10016
40°	1206	9388	10277
45°	1091	9231	10317
50°	1000	9089	10147
55°	957	8882	9697
60°	979	8489	8986
65°	1016	7892	8010
70°	1081	6878	6768
75°	1193	5602	5281
80°	1292	3880	3559
85°	1127	2054	1821

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10317 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.1	0.6
10°-20°	337.5	2.6
20°-30°	590.2	4.5
30°-40°	759.8	5.8
40°-50°	848.7	6.4
50°-60°	812.9	6.2
60°-70°	644.2	4.9
70°-80°	378.8	2.9
80°-90°	110.3	0.8
90°-100°	648.9	4.9
100°-110°	1706.1	12.9
110°-120°	1769.0	13.4
120°-130°	1418.9	10.8
130°-140°	1113.4	8.4
140°-150°	854.6	6.5
150°-160°	615.4	4.7
160°-170°	376.6	2.9
170°-180°	127.2	1.0
0°-30°	1003.8	7.6
0°-40°	1763.7	13.4
0°-60°	3425.2	26.0
0°-90°	4558.5	34.6
90°-120°	4124.0	31.3
90°-150°	7510.9	56.9
90°-180°	8630.0	65.4
0°-180°	13188.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	589	589	589	589	589	
5°	574	615	693	784	812	53
15°	430	793	1336	1620	1671	120
25°	274	899	1592	1662	1664	126
35°	186	859	1499	1584	1647	116
45°	127	685	1325	1518	1586	98
55°	91	435	1124	1306	1342	83
65°	72	231	835	939	952	71
75°	53	142	458	504	505	55
85°	19	44	114	125	127	20
90°	9	25	68	34	34	9
95°	86	336	1118	576	392	95
105°	307	466	1886	2864	2671	326
115°	546	663	1511	3014	3440	539
125°	759	852	1374	2322	2739	674
135°	905	996	1331	1874	2126	700
145°	1050	1117	1314	1599	1724	658
155°	1186	1220	1314	1443	1485	545
165°	1280	1297	1314	1366	1383	361
175°	1331	1331	1323	1340	1340	126
180°	1331	1331	1331	1331	1331	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	588.6	588.6	588.6	588.6	588.6	588.6	588.6	588.6	588.6	588.6	588.6
2.5°	588.6	588.6	592.4	594.3	598.0	599.9	603.8	607.6	618.8	620.8	624.6
5°	573.5	581.0	605.7	615.1	641.6	677.6	692.7	717.3	768.4	783.6	793.0
7.5°	550.7	567.7	628.4	643.5	709.8	804.4	844.1	897.1	978.5	1018.2	1050.4
10°	514.7	550.7	658.7	694.6	802.5	946.3	1020.1	1094.0	1217.0	1271.9	1292.7
12.5°	475.0	533.7	690.8	740.0	895.2	1105.3	1194.2	1275.6	1415.7	1489.5	1500.9
15°	429.7	509.1	721.1	793.0	993.6	1237.8	1336.2	1436.5	1567.1	1620.1	1633.3
17.5°	389.9	490.2	749.5	825.2	1069.3	1357.1	1457.3	1540.6	1646.6	1682.5	1692.0
20°	340.6	459.9	768.4	866.9	1148.9	1444.1	1540.6	1605.0	1676.9	1699.6	1703.3
22.5°	304.7	427.7	779.8	881.9	1201.8	1497.1	1578.4	1629.5	1678.8	1686.3	1688.2
25°	274.5	391.7	777.8	899.0	1247.2	1529.2	1591.7	1629.5	1658.0	1661.7	1661.7
27.5°	246.0	352.0	770.3	902.8	1281.3	1536.8	1586.0	1612.5	1625.8	1633.3	1633.3
30°	221.5	314.2	751.4	895.2	1296.4	1529.2	1569.0	1582.2	1595.5	1606.8	1612.5
32.5°	202.6	278.2	722.9	880.0	1298.3	1510.3	1538.7	1546.2	1565.1	1591.7	1601.2
35°	185.5	242.3	690.8	859.2	1287.0	1480.1	1499.0	1506.5	1544.3	1584.2	1597.3
37.5°	168.5	215.7	649.2	823.3	1270.0	1444.1	1457.3	1470.6	1529.2	1576.5	1591.7
40°	151.4	193.0	599.9	783.6	1243.4	1400.5	1411.9	1432.7	1510.3	1565.1	1580.3
42.5°	138.2	174.1	546.9	741.9	1209.4	1351.3	1368.3	1398.6	1487.6	1546.2	1563.3
45°	126.8	155.2	490.2	685.1	1165.9	1300.2	1324.9	1366.5	1461.1	1517.9	1533.1
47.5°	115.5	141.9	431.6	626.5	1118.5	1249.1	1281.3	1328.6	1425.1	1480.1	1493.2
50°	106.0	128.7	372.8	564.0	1067.4	1194.2	1232.1	1281.3	1379.7	1430.8	1447.9
52.5°	98.5	117.4	317.9	501.6	1008.8	1137.5	1181.0	1232.1	1324.9	1374.1	1385.4
55°	90.8	107.9	270.6	435.3	948.2	1076.9	1124.2	1173.4	1264.2	1305.9	1313.5
57.5°	87.1	100.3	230.9	372.8	883.9	1008.8	1061.8	1107.2	1192.3	1224.5	1232.1
60°	81.4	94.6	200.6	319.8	813.9	944.4	989.9	1035.2	1107.2	1133.7	1139.3
62.5°	75.7	90.8	177.9	268.7	741.9	868.7	914.1	955.8	1016.3	1035.2	1042.9
65°	71.9	87.1	160.9	230.9	668.1	789.2	834.7	870.6	919.9	938.8	942.5
67.5°	68.1	83.3	147.6	198.7	594.3	709.8	743.8	777.8	815.8	834.7	836.6
70°	62.5	79.5	136.3	176.0	518.6	618.8	647.3	683.2	713.5	722.9	728.7
72.5°	58.6	73.8	128.7	159.0	441.0	531.8	558.3	579.1	605.7	615.1	615.1
75°	53.0	66.3	121.1	141.9	361.5	435.3	458.0	478.8	499.7	503.5	497.7
77.5°	47.3	58.6	104.1	119.3	282.0	344.5	363.4	374.7	391.7	395.6	397.5
80°	39.7	51.1	81.4	92.7	204.4	253.6	266.8	276.3	291.5	291.5	295.3
82.5°	30.3	39.7	58.6	66.3	138.2	174.1	185.5	191.2	200.6	200.6	200.6
85°	18.9	24.6	37.8	43.5	83.3	106.0	113.5	115.5	123.0	124.9	124.9
87.5°	9.5	13.3	24.6	26.5	43.5	54.9	54.9	58.6	58.6	56.8	54.9
90°	9.0	16.1	23.2	25.0	39.3	58.4	67.9	60.4	45.3	34.0	34.0
92.5°	35.7	96.5	157.3	172.5	242.5	335.8	382.4	335.1	240.7	169.8	163.0
95°	85.8	196.9	308.2	336.0	596.6	944.0	1117.7	997.4	756.7	576.2	555.8
97.5°	148.3	246.4	344.5	369.0	803.5	1382.9	1672.6	1596.6	1444.4	1330.4	1291.4
100°	196.5	285.5	374.5	396.7	878.9	1521.8	1843.2	1848.8	1860.0	1868.3	1821.9
102.5°	237.7	320.7	403.7	424.4	913.5	1565.4	1891.5	1988.3	2182.1	2327.4	2287.7
105°	307.3	377.6	447.9	465.5	939.1	1570.4	1886.1	2103.3	2537.7	2863.6	2842.2
107.5°	378.8	444.4	509.9	526.2	943.7	1500.5	1778.9	2081.9	2687.8	3142.3	3147.5
110°	427.1	486.3	545.4	560.2	936.7	1438.5	1689.5	2028.2	2705.7	3213.8	3236.0

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	474.4	530.8	587.1	601.3	937.0	1384.5	1608.2	1954.9	2648.2	3168.2	3202.4
115°	545.9	597.9	650.0	663.0	945.5	1322.4	1510.8	1844.8	2512.7	3013.6	3061.0
117.5°	616.5	663.7	711.0	722.8	963.2	1283.6	1443.9	1745.3	2348.0	2800.1	2852.6
120°	657.6	702.1	746.6	757.7	977.4	1270.5	1417.0	1692.5	2243.2	2656.2	2707.2
122.5°	697.8	742.7	787.6	798.8	998.0	1263.7	1396.5	1644.5	2140.4	2512.4	2562.7
125°	759.4	800.3	841.3	851.5	1025.7	1258.0	1374.1	1584.8	2006.1	2322.1	2368.4
127.5°	809.5	850.7	892.1	902.4	1053.4	1254.7	1355.3	1536.2	1898.0	2169.3	2208.4
130°	836.3	880.8	925.3	936.4	1073.7	1256.8	1348.3	1509.3	1831.3	2072.8	2108.9
132.5°	864.0	908.5	953.0	964.1	1090.0	1258.0	1342.0	1486.1	1774.4	1990.6	2023.0
135°	905.1	945.5	986.1	996.3	1107.9	1256.8	1331.3	1452.0	1693.4	1874.5	1902.4
137.5°	947.1	987.2	1027.3	1037.3	1134.7	1264.5	1329.5	1431.5	1635.6	1788.7	1811.5
140°	981.9	1018.9	1055.8	1065.0	1151.1	1265.9	1323.2	1411.4	1587.7	1720.0	1741.3
142.5°	1008.7	1042.9	1077.0	1085.5	1164.8	1270.4	1323.2	1400.7	1555.5	1671.6	1690.0
145°	1049.8	1079.6	1109.4	1116.9	1182.7	1270.4	1314.3	1377.6	1504.3	1599.3	1613.2
147.5°	1090.9	1119.9	1148.9	1156.1	1208.8	1279.1	1314.3	1364.1	1463.7	1538.5	1550.1
150°	1117.7	1143.9	1170.1	1176.7	1222.5	1283.7	1314.3	1356.4	1440.5	1503.6	1513.0
152.5°	1145.4	1165.3	1185.2	1190.1	1231.5	1286.7	1314.3	1350.2	1422.1	1476.0	1483.0
155°	1186.5	1201.2	1215.9	1219.5	1251.1	1293.3	1314.3	1342.8	1400.0	1442.9	1447.6
157.5°	1216.9	1231.2	1245.5	1249.0	1270.8	1299.8	1314.3	1336.5	1381.0	1414.4	1417.6
160°	1237.5	1248.6	1259.6	1262.4	1279.7	1302.7	1314.3	1333.4	1371.5	1400.0	1401.9
162.5°	1258.0	1266.3	1274.6	1276.7	1289.2	1306.0	1314.3	1330.3	1362.5	1386.7	1388.5
165°	1280.4	1287.9	1295.4	1297.3	1302.9	1310.5	1314.3	1325.8	1348.8	1366.1	1368.0
167.5°	1300.9	1304.4	1308.1	1308.9	1313.7	1320.1	1323.2	1330.8	1345.9	1357.2	1357.9
170°	1314.3	1317.8	1321.4	1322.3	1322.6	1323.1	1323.2	1330.8	1345.9	1357.2	1357.2
172.5°	1321.4	1322.2	1323.1	1323.2	1323.2	1323.2	1323.2	1329.2	1341.1	1350.0	1349.3
175°	1331.3	1331.3	1331.3	1331.3	1328.6	1325.1	1323.2	1327.0	1334.5	1340.2	1340.2
177.5°	1331.3	1331.3	1331.3	1331.3	1329.2	1326.4	1325.0	1327.9	1333.9	1338.4	1337.7
180°	1331.3	1331.3	1331.3	1331.3	1331.3	1331.3	1331.3	1331.3	1331.3	1331.3	1331.3

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	588.6	588.6
2.5°	628.4	624.6
5°	808.1	811.9
7.5°	1088.2	1086.4
10°	1353.2	1370.2
12.5°	1546.2	1550.1
15°	1663.6	1671.2
17.5°	1709.1	1710.9
20°	1710.9	1707.2
22.5°	1690.1	1686.3
25°	1665.5	1663.6
27.5°	1642.8	1644.7
30°	1633.3	1639.0
32.5°	1633.3	1642.8
35°	1637.2	1646.6
37.5°	1635.2	1646.6
40°	1627.6	1640.9
42.5°	1606.8	1616.3
45°	1574.7	1586.0
47.5°	1533.1	1540.6
50°	1480.1	1487.6
52.5°	1413.8	1415.7
55°	1334.3	1341.9
57.5°	1249.1	1251.0
60°	1154.5	1160.1
62.5°	1054.2	1054.2
65°	948.2	951.9
67.5°	838.4	847.8
70°	726.8	728.7
72.5°	617.0	617.0
75°	503.5	505.3
77.5°	395.6	395.6
80°	293.4	295.3
82.5°	202.6	206.3
85°	126.8	126.8
87.5°	58.6	53.0
90°	34.0	34.0
92.5°	136.0	109.0
95°	474.0	392.2
97.5°	1135.8	980.1
100°	1636.5	1451.0
102.5°	2128.9	1970.1
105°	2756.8	2671.4
107.5°	3168.1	3188.7
110°	3324.9	3413.9

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3339.0	3475.5
115°	3250.3	3439.8
117.5°	3062.7	3272.8
120°	2911.4	3115.5
122.5°	2764.1	2965.4
125°	2553.9	2739.3
127.5°	2364.9	2521.4
130°	2253.5	2398.0
132.5°	2152.4	2281.9
135°	2014.0	2125.5
137.5°	1902.9	1994.2
140°	1826.6	1912.0
142.5°	1763.5	1836.9
145°	1668.8	1724.3
147.5°	1596.1	1642.2
150°	1550.3	1587.7
152.5°	1511.2	1539.5
155°	1466.2	1484.9
157.5°	1430.8	1443.9
160°	1409.5	1417.0
162.5°	1395.5	1402.7
165°	1375.5	1383.0
167.5°	1361.2	1364.3
170°	1357.2	1357.2
172.5°	1346.6	1343.8
175°	1340.2	1340.2
177.5°	1334.4	1331.3
180°	1331.3	1331.3

(END OF REPORT)