

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: P936701

Luminaire Tested: SQ4-FB-050U-050D-B40-1D-UNV-W2A-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936701
REPORT IS A COMBINATION OF REPORTS P933461 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-050D-B40-1D-UNV-W2A-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

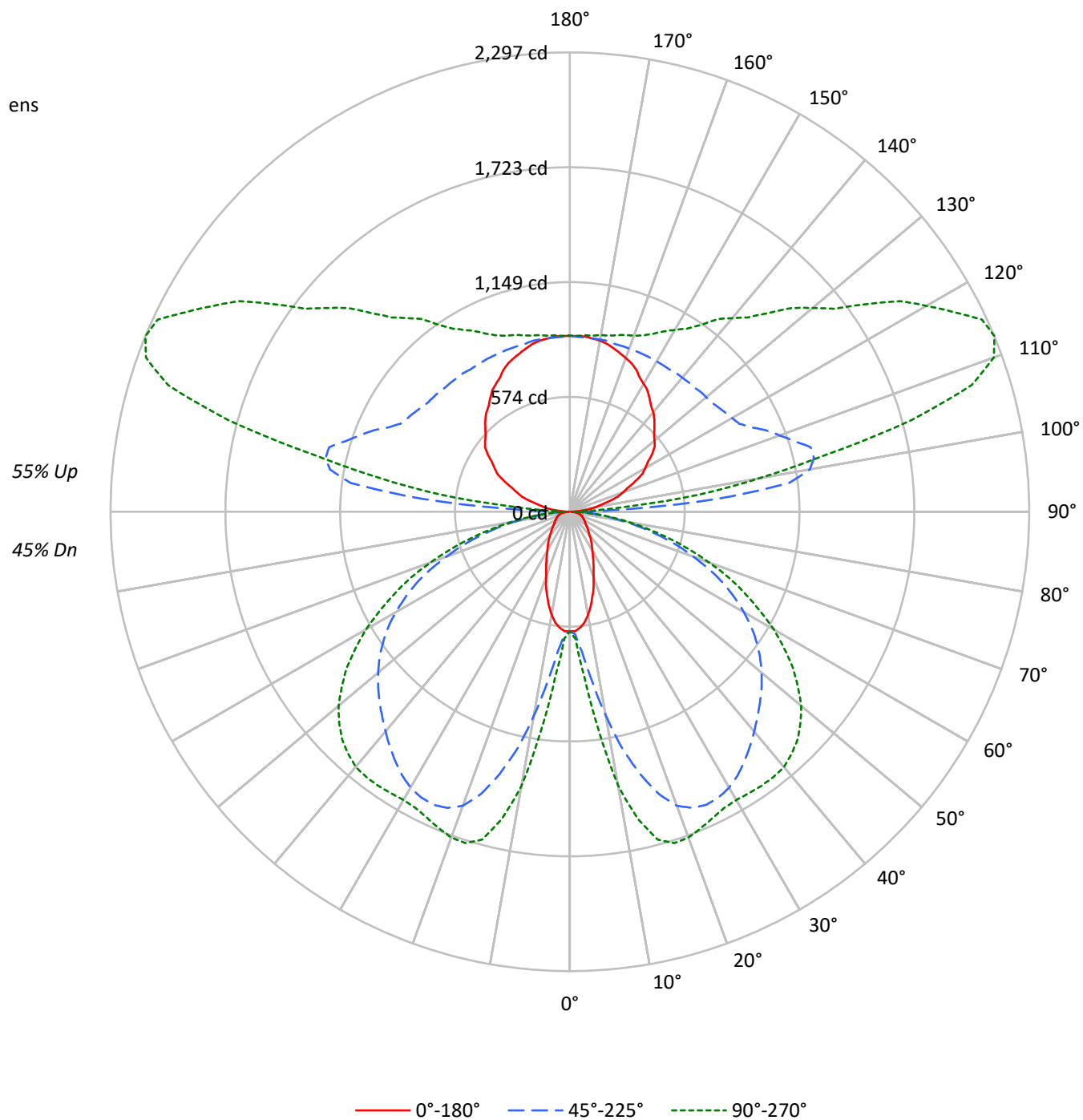
Lumens per Lamp: N/A
Luminaire Lumens: 10330.2 lumens
Efficiency: N/A
Efficacy: 121.2 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 85.2
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	43	42
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	39	37	35
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16
8	51	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1848	1848	1848
5°	1807	2137	2485
10°	1639	3116	4119
15°	1394	4072	4974
20°	1135	4720	5069
25°	947	4940	4966
30°	799	4973	4957
35°	707	4891	5085
40°	617	4786	5217
45°	558	4708	5238
50°	513	4639	5151
55°	492	4537	4923
60°	504	4340	4562
65°	526	4039	4067
70°	561	3525	3436
75°	624	2876	2681
80°	687	1997	1807
85°	622	1062	924

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5238 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.3	0.7
10°-20°	342.6	3.3
20°-30°	599.3	5.8
30°-40°	771.5	7.5
40°-50°	861.7	8.3
50°-60°	825.3	8.0
60°-70°	654.1	6.3
70°-80°	384.6	3.7
80°-90°	110.2	1.1
90°-100°	428.9	4.2
100°-110°	1127.5	10.9
110°-120°	1169.1	11.3
120°-130°	937.8	9.1
130°-140°	735.9	7.1
140°-150°	564.8	5.5
150°-160°	406.7	3.9
160°-170°	248.9	2.4
170°-180°	84.1	0.8
0°-30°	1019.2	9.9
0°-40°	1790.7	17.3
0°-60°	3477.7	33.7
0°-90°	4626.5	44.8
90°-120°	2725.5	26.4
90°-150°	4964.0	48.1
90°-180°	5704.0	55.2
0°-180°	10330.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	598	598	598	598	598	
5°	582	624	703	796	824	54
15°	436	805	1357	1645	1697	121
25°	279	913	1616	1687	1689	128
35°	188	872	1522	1608	1672	118
45°	129	696	1345	1541	1610	100
55°	92	442	1141	1326	1362	84
65°	73	234	848	953	967	72
75°	54	144	465	511	513	56
85°	19	44	115	127	129	20
90°	6	16	45	22	22	6
95°	57	222	739	381	259	63
105°	203	308	1247	1892	1766	215
115°	361	438	998	1992	2274	356
125°	502	563	908	1535	1810	446
135°	598	658	880	1239	1405	463
145°	694	738	869	1057	1140	435
155°	784	806	869	954	982	360
165°	846	857	869	903	914	239
175°	880	880	874	886	886	84
180°	880	880	880	880	880	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	597.6	597.6	597.6	597.6	597.6	597.6	597.6	597.6	597.6	597.6	597.6
2.5°	597.6	597.6	601.5	603.4	607.2	609.1	613.0	616.8	628.4	630.3	634.1
5°	582.3	589.9	614.9	624.5	651.4	687.9	703.3	728.3	780.1	795.5	805.2
7.5°	559.2	576.4	637.9	653.3	720.6	816.7	857.0	910.9	993.5	1033.8	1066.4
10°	522.7	559.2	668.7	705.3	814.7	960.8	1035.7	1110.7	1235.6	1291.4	1312.5
12.5°	482.3	541.9	701.4	751.3	908.9	1122.2	1212.6	1295.2	1437.4	1512.3	1523.8
15°	436.2	516.9	732.1	805.2	1008.9	1256.7	1356.7	1458.5	1591.1	1644.9	1658.4
17.5°	395.8	497.7	760.9	837.8	1085.7	1377.8	1479.6	1564.2	1671.8	1708.3	1717.9
20°	345.9	467.0	780.1	880.1	1166.4	1466.2	1564.2	1629.5	1702.6	1725.6	1729.4
22.5°	309.4	434.2	791.7	895.5	1220.2	1520.0	1602.6	1654.5	1704.5	1712.1	1714.0
25°	278.7	397.8	789.8	912.8	1266.3	1552.6	1616.1	1654.5	1683.3	1687.2	1687.2
27.5°	249.8	357.5	782.0	916.6	1300.9	1560.4	1610.3	1637.2	1650.6	1658.4	1658.4
30°	224.8	319.0	762.9	908.9	1316.3	1552.6	1593.0	1606.5	1619.9	1631.4	1637.2
32.5°	205.6	282.5	734.0	893.5	1318.2	1533.4	1562.3	1569.9	1589.1	1616.1	1625.7
35°	188.3	246.0	701.4	872.4	1306.7	1502.7	1521.9	1529.6	1568.0	1608.4	1621.8
37.5°	171.0	219.1	659.1	835.9	1289.3	1466.2	1479.6	1493.0	1552.6	1600.7	1616.1
40°	153.8	196.0	609.1	795.5	1262.5	1422.0	1433.6	1454.7	1533.4	1589.1	1604.5
42.5°	140.3	176.8	555.3	753.3	1227.9	1372.0	1389.3	1420.1	1510.3	1569.9	1587.2
45°	128.7	157.6	497.7	695.6	1183.7	1320.1	1345.1	1387.4	1483.5	1541.1	1556.5
47.5°	117.2	144.1	438.2	636.0	1135.7	1268.2	1300.9	1348.9	1446.9	1502.7	1516.2
50°	107.6	130.6	378.6	572.6	1083.7	1212.6	1251.0	1300.9	1400.9	1452.7	1470.0
52.5°	99.9	119.2	322.8	509.2	1024.2	1154.9	1199.1	1251.0	1345.1	1395.1	1406.6
55°	92.3	109.5	274.8	442.0	962.7	1093.4	1141.4	1191.4	1283.6	1325.9	1333.6
57.5°	88.4	101.8	234.5	378.6	897.4	1024.2	1078.0	1124.1	1210.6	1243.3	1251.0
60°	82.6	96.1	203.7	324.8	826.3	958.9	1005.0	1051.1	1124.1	1151.1	1156.8
62.5°	76.9	92.3	180.6	272.8	753.3	882.0	928.2	970.4	1031.9	1051.1	1058.8
65°	73.1	88.4	163.3	234.5	678.3	801.3	847.5	883.9	933.9	953.1	956.9
67.5°	69.1	84.5	149.8	201.8	603.4	720.6	755.2	789.8	828.2	847.5	849.4
70°	63.4	80.7	138.4	178.7	526.5	628.4	657.2	693.7	724.5	734.0	739.8
72.5°	59.6	75.0	130.6	161.4	447.7	540.0	566.9	588.0	614.9	624.5	624.5
75°	53.8	67.2	123.0	144.1	367.0	442.0	465.0	486.2	507.3	511.1	505.4
77.5°	48.0	59.6	105.7	121.1	286.3	349.7	368.9	380.5	397.8	401.6	403.5
80°	40.4	51.9	82.6	94.2	207.5	257.5	270.9	280.6	296.0	296.0	299.8
82.5°	30.8	40.4	59.6	67.2	140.3	176.8	188.3	194.1	203.7	203.7	203.7
85°	19.2	25.0	38.4	44.2	84.5	107.6	115.3	117.2	124.9	126.8	126.8
87.5°	9.6	13.5	25.0	26.9	44.2	55.8	55.8	59.6	59.6	57.7	55.8
90°	5.9	10.6	15.4	16.5	26.0	38.6	44.9	39.9	29.9	22.4	22.4
92.5°	23.6	63.7	103.9	113.9	160.2	221.8	252.7	221.5	159.0	112.2	107.7
95°	56.7	130.2	203.7	222.0	394.2	623.9	738.7	659.1	500.1	380.9	367.3
97.5°	98.0	162.8	227.7	243.9	531.1	913.9	1105.4	1055.2	954.6	879.3	853.6
100°	129.9	188.7	247.4	262.1	580.8	1005.7	1218.2	1221.8	1229.2	1234.7	1204.1
102.5°	157.1	211.9	266.7	280.5	603.7	1034.6	1250.1	1314.1	1442.1	1538.2	1512.0
105°	203.1	249.5	296.0	307.6	620.6	1037.9	1246.6	1390.1	1677.2	1892.5	1878.4
107.5°	250.4	293.7	337.0	347.8	623.8	991.8	1175.7	1376.0	1776.5	2076.8	2080.3
110°	282.3	321.4	360.5	370.3	619.0	950.8	1116.7	1340.5	1788.2	2124.0	2138.7

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	313.5	350.8	388.0	397.4	619.2	915.0	1062.9	1292.0	1750.2	2093.9	2116.5
115°	360.8	395.2	429.6	438.2	625.0	874.0	998.5	1219.2	1660.6	1991.7	2023.1
117.5°	407.4	438.6	469.9	477.7	636.5	848.3	954.2	1153.4	1551.8	1850.6	1885.3
120°	434.6	464.0	493.4	500.7	646.0	839.7	936.6	1118.6	1482.5	1755.6	1789.3
122.5°	461.2	490.9	520.5	527.9	659.6	835.1	922.9	1086.8	1414.6	1660.5	1693.7
125°	501.9	529.0	556.0	562.8	678.0	831.4	908.2	1047.4	1325.8	1534.7	1565.3
127.5°	535.0	562.3	589.6	596.4	696.2	829.2	895.8	1015.4	1254.4	1433.7	1459.6
130°	552.8	582.2	611.5	618.8	709.6	830.6	891.1	997.5	1210.4	1369.9	1393.8
132.5°	571.0	600.4	629.8	637.2	720.5	831.4	886.9	982.2	1172.7	1315.6	1337.0
135°	598.2	625.0	651.7	658.4	732.2	830.7	879.8	959.7	1119.3	1238.9	1257.4
137.5°	625.9	652.5	679.0	685.6	750.0	835.8	878.7	946.1	1081.1	1182.2	1197.3
140°	648.9	673.4	697.7	703.8	760.8	836.6	874.5	932.7	1049.4	1136.7	1150.9
142.5°	666.7	689.2	711.9	717.5	769.8	839.6	874.5	925.7	1028.1	1104.8	1117.0
145°	693.8	713.5	733.2	738.1	781.7	839.6	868.7	910.5	994.3	1057.0	1066.2
147.5°	721.0	740.1	759.3	764.1	799.0	845.5	868.7	901.6	967.5	1016.9	1024.5
150°	738.7	756.0	773.4	777.7	808.0	848.4	868.7	896.5	952.0	993.8	1000.0
152.5°	757.0	770.1	783.3	786.5	813.9	850.4	868.7	892.4	939.9	975.5	980.2
155°	784.2	793.9	803.6	806.0	826.9	854.7	868.7	887.6	925.3	953.7	956.7
157.5°	804.3	813.8	823.1	825.5	839.9	859.1	868.7	883.4	912.7	934.8	937.0
160°	817.9	825.2	832.6	834.4	845.8	861.0	868.7	881.3	906.4	925.3	926.5
162.5°	831.4	837.0	842.5	843.8	852.1	863.1	868.7	879.3	900.5	916.4	917.6
165°	846.2	851.2	856.2	857.4	861.1	866.2	868.7	876.3	891.5	902.9	904.1
167.5°	859.8	862.1	864.5	865.0	868.2	872.4	874.5	879.5	889.5	896.9	897.5
170°	868.7	871.0	873.3	873.9	874.1	874.4	874.5	879.5	889.5	896.9	896.9
172.5°	873.3	873.8	874.4	874.5	874.5	874.5	874.5	878.4	886.3	892.3	891.8
175°	879.8	879.8	879.8	879.8	878.0	875.6	874.5	877.0	882.0	885.8	885.8
177.5°	879.8	879.8	879.8	879.8	878.5	876.7	875.7	877.7	881.7	884.6	884.0
180°	879.8	879.8	879.8	879.8	879.8	879.8	879.8	879.8	879.8	879.8	879.8

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	597.6	597.6
2.5°	637.9	634.1
5°	820.5	824.4
7.5°	1104.9	1103.0
10°	1374.0	1391.2
12.5°	1569.9	1573.7
15°	1689.1	1696.7
17.5°	1735.2	1737.1
20°	1737.1	1733.3
22.5°	1715.9	1712.1
25°	1691.0	1689.1
27.5°	1667.9	1669.9
30°	1658.4	1664.1
32.5°	1658.4	1667.9
35°	1662.2	1671.8
37.5°	1660.3	1671.8
40°	1652.5	1666.0
42.5°	1631.4	1641.1
45°	1598.8	1610.3
47.5°	1556.5	1564.2
50°	1502.7	1510.3
52.5°	1435.5	1437.4
55°	1354.8	1362.4
57.5°	1268.2	1270.1
60°	1172.2	1177.9
62.5°	1070.4	1070.4
65°	962.7	966.6
67.5°	851.3	860.8
70°	737.9	739.8
72.5°	626.5	626.5
75°	511.1	513.0
77.5°	401.6	401.6
80°	297.9	299.8
82.5°	205.6	209.4
85°	128.7	128.7
87.5°	59.6	53.8
90°	22.4	22.4
92.5°	89.9	72.0
95°	313.2	259.2
97.5°	750.6	647.8
100°	1081.5	959.0
102.5°	1407.0	1302.0
105°	1822.0	1765.6
107.5°	2093.8	2107.5
110°	2197.5	2256.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2206.8	2297.1
115°	2148.3	2273.5
117.5°	2024.1	2163.0
120°	1924.2	2059.1
122.5°	1826.8	1959.9
125°	1687.9	1810.5
127.5°	1563.0	1666.4
130°	1489.4	1584.9
132.5°	1422.6	1508.1
135°	1331.1	1404.8
137.5°	1257.6	1318.0
140°	1207.2	1263.7
142.5°	1165.6	1214.1
145°	1102.9	1139.7
147.5°	1054.9	1085.4
150°	1024.6	1049.4
152.5°	998.8	1017.5
155°	969.1	981.5
157.5°	945.5	954.2
160°	931.6	936.6
162.5°	922.3	927.1
165°	909.2	914.1
167.5°	899.6	901.7
170°	896.9	896.9
172.5°	890.0	888.2
175°	885.8	885.8
177.5°	881.9	879.8
180°	879.8	879.8

(END OF REPORT)