

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: P936705

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

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936705
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-B50-1D-UNV-W2A-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

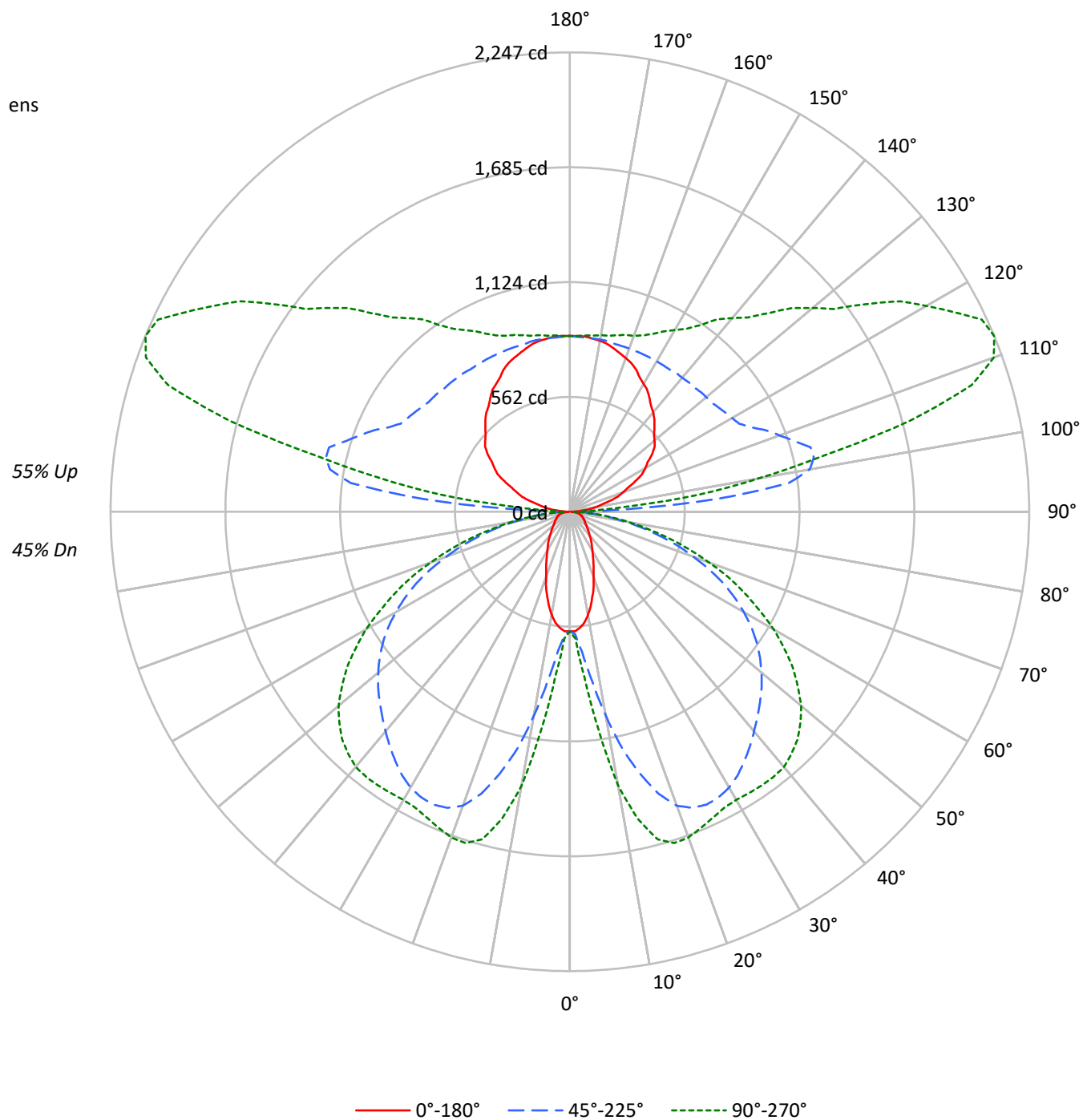
Lumens per Lamp: N/A
Luminaire Lumens: 10103.1 lumens
Efficiency: N/A
Efficacy: 118.6 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: General Diffuse

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°	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	0.7
10°-20°	335.1	3.3
20°-30°	586.1	5.8
30°-40°	754.5	7.5
40°-50°	842.7	8.3
50°-60°	807.2	8.0
60°-70°	639.7	6.3
70°-80°	376.1	3.7
80°-90°	107.8	1.1
90°-100°	419.4	4.2
100°-110°	1102.8	10.9
110°-120°	1143.4	11.3
120°-130°	917.2	9.1
130°-140°	719.7	7.1
140°-150°	552.4	5.5
150°-160°	397.8	3.9
160°-170°	243.4	2.4
170°-180°	82.2	0.8
0°-30°	996.8	9.9
0°-40°	1751.3	17.3
0°-60°	3401.2	33.7
0°-90°	4524.8	44.8
90°-120°	2665.6	26.4
90°-150°	4854.8	48.1
90°-180°	5578.0	55.2
0°-180°	10103.1	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°	6	16	44	22	22	6
95°	56	217	722	372	254	62
105°	199	301	1219	1851	1727	211
115°	353	428	977	1948	2224	348
125°	491	550	888	1501	1771	436
135°	585	644	860	1212	1374	453
145°	679	722	850	1034	1115	425
155°	767	788	850	933	960	352
165°	828	838	850	883	894	234
175°	860	860	855	866	866	82
180°	860	860	860	860	860	

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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°	5.8	10.4	15.0	16.2	25.4	37.7	43.9	39.0	29.2	21.9	21.9
92.5°	23.1	62.3	101.6	111.4	156.6	217.0	247.1	216.6	155.5	109.7	105.4
95°	55.5	127.3	199.2	217.2	385.6	610.2	722.4	644.6	489.1	372.5	359.2
97.5°	95.8	159.2	222.7	238.5	519.4	893.8	1081.1	1032.0	933.6	859.9	834.8
100°	127.0	184.6	242.0	256.4	568.1	983.6	1191.4	1195.0	1202.2	1207.6	1177.6
102.5°	153.6	207.3	260.9	274.3	590.4	1011.9	1222.6	1285.2	1410.4	1504.4	1478.7
105°	198.7	244.1	289.4	300.8	606.9	1015.1	1219.2	1359.5	1640.3	1850.9	1837.1
107.5°	244.9	287.2	329.6	340.2	610.1	970.0	1149.8	1345.7	1737.4	2031.2	2034.5
110°	276.1	314.3	352.6	362.1	605.4	929.9	1092.1	1311.1	1748.9	2077.3	2091.7

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	306.6	343.1	379.5	388.6	605.6	894.9	1039.5	1263.6	1711.7	2047.9	2069.9
115°	352.9	386.5	420.1	428.5	611.2	854.8	976.6	1192.4	1624.1	1948.0	1978.6
117.5°	398.4	429.0	459.5	467.2	622.5	829.7	933.3	1128.1	1517.7	1809.9	1843.8
120°	425.1	453.8	482.5	489.7	631.8	821.3	916.0	1094.0	1449.9	1717.0	1749.9
122.5°	451.0	480.1	509.0	516.3	645.1	816.8	902.6	1062.9	1383.5	1623.9	1656.4
125°	490.9	517.3	543.8	550.4	663.0	813.1	888.2	1024.4	1296.7	1500.9	1530.9
127.5°	523.2	549.9	576.7	583.3	680.9	811.0	876.1	993.0	1226.8	1402.2	1427.5
130°	540.6	569.4	598.0	605.2	694.0	812.3	871.5	975.6	1183.8	1339.8	1363.2
132.5°	558.4	587.2	616.0	623.2	704.6	813.1	867.4	960.6	1147.0	1286.7	1307.6
135°	585.1	611.2	637.4	643.9	716.1	812.4	860.5	938.6	1094.6	1211.7	1229.7
137.5°	612.1	638.1	664.1	670.5	733.5	817.4	859.4	925.3	1057.3	1156.2	1171.0
140°	634.7	658.6	682.4	688.4	744.0	818.2	855.3	912.2	1026.3	1111.7	1125.6
142.5°	652.0	674.1	696.2	701.7	752.9	821.2	855.3	905.3	1005.5	1080.5	1092.4
145°	678.6	697.8	717.0	721.9	764.5	821.2	849.6	890.5	972.4	1033.8	1042.7
147.5°	705.2	723.8	742.6	747.3	781.4	826.9	849.6	881.8	946.2	994.5	1002.0
150°	722.4	739.4	756.4	760.6	790.3	829.8	849.6	876.7	931.1	971.9	978.0
152.5°	740.4	753.2	766.1	769.2	796.0	831.7	849.6	872.8	919.2	954.1	958.7
155°	766.9	776.4	786.0	788.3	808.8	835.9	849.6	868.1	905.0	932.7	935.7
157.5°	786.6	795.9	805.0	807.3	821.5	840.2	849.6	864.0	892.6	914.2	916.3
160°	799.9	807.1	814.3	816.0	827.2	842.1	849.6	861.9	886.5	905.0	906.2
162.5°	813.1	818.6	824.0	825.3	833.4	844.1	849.6	859.9	880.7	896.3	897.4
165°	827.6	832.5	837.3	838.5	842.2	847.1	849.6	857.0	871.9	883.0	884.2
167.5°	840.9	843.1	845.5	846.0	849.1	853.2	855.3	860.1	869.9	877.2	877.8
170°	849.6	851.8	854.1	854.7	854.9	855.2	855.3	860.1	869.9	877.2	877.2
172.5°	854.1	854.6	855.2	855.3	855.3	855.3	855.3	859.1	866.8	872.6	872.2
175°	860.5	860.5	860.5	860.5	858.7	856.4	855.3	857.7	862.6	866.3	866.3
177.5°	860.5	860.5	860.5	860.5	859.2	857.4	856.5	858.4	862.3	865.2	864.6
180°	860.5	860.5	860.5	860.5	860.5	860.5	860.5	860.5	860.5	860.5	860.5

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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°	21.9	21.9
92.5°	87.9	70.4
95°	306.4	253.5
97.5°	734.1	633.5
100°	1057.8	937.9
102.5°	1376.1	1273.4
105°	1782.0	1726.8
107.5°	2047.8	2061.2
110°	2149.1	2206.7

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2158.3	2246.6
115°	2101.0	2223.5
117.5°	1979.6	2115.4
120°	1881.9	2013.8
122.5°	1786.6	1916.8
125°	1650.8	1770.7
127.5°	1528.6	1629.7
130°	1456.7	1550.1
132.5°	1391.3	1475.0
135°	1301.8	1373.9
137.5°	1230.0	1289.0
140°	1180.7	1235.9
142.5°	1139.9	1187.4
145°	1078.7	1114.6
147.5°	1031.7	1061.5
150°	1002.1	1026.3
152.5°	976.9	995.1
155°	947.8	959.9
157.5°	924.8	933.3
160°	911.1	916.0
162.5°	902.1	906.7
165°	889.2	894.0
167.5°	879.8	881.9
170°	877.2	877.2
172.5°	870.4	868.6
175°	866.3	866.3
177.5°	862.5	860.5
180°	860.5	860.5

(END OF REPORT)