

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: P936899

Luminaire Tested: SQ4-FB-050U-100D-B35-1D-UNV-W2A-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936899
REPORT IS A COMBINATION OF REPORTS P933479 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-100D-B35-1D-UNV-W2A-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

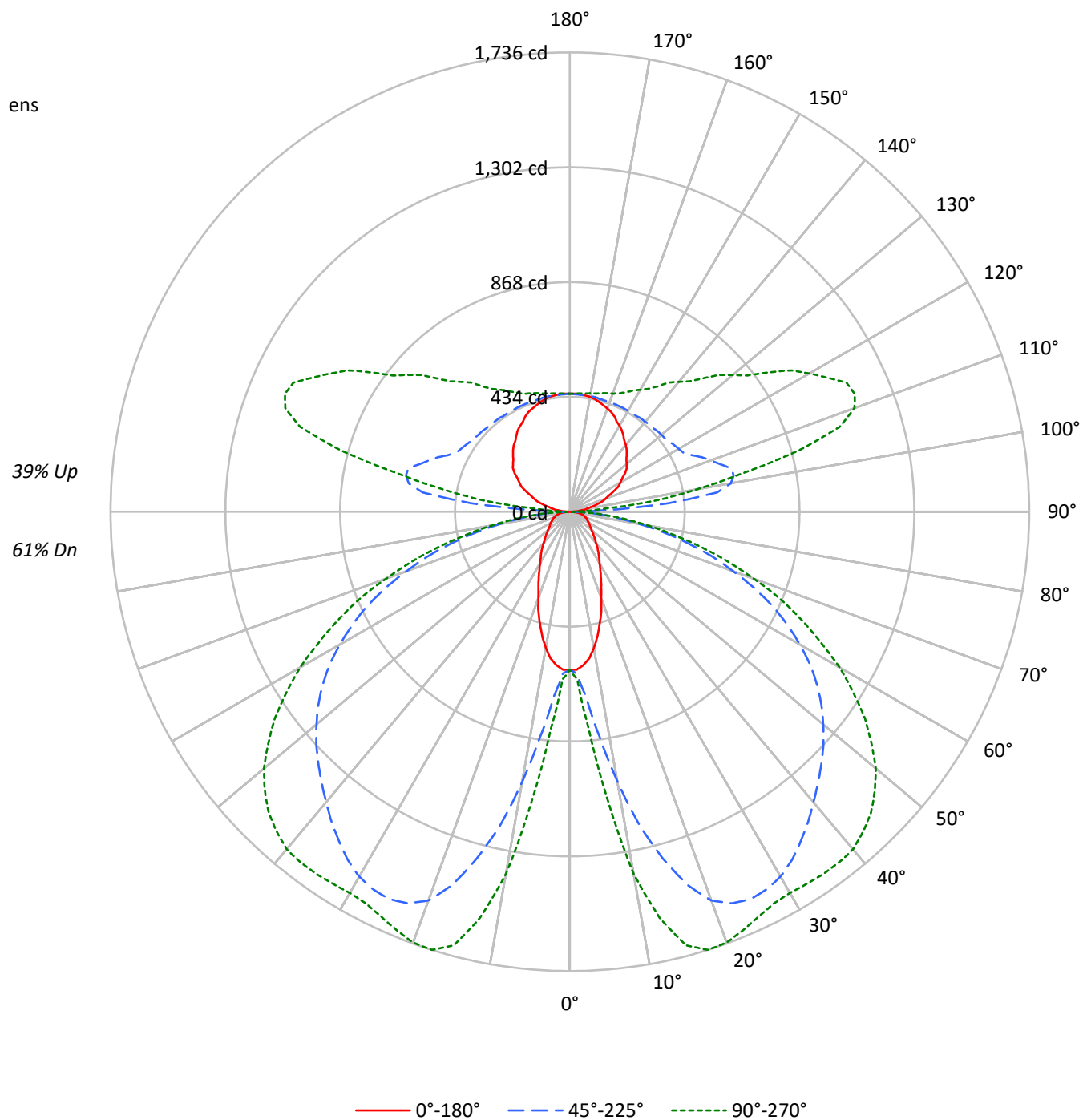
Lumens per Lamp: N/A
Luminaire Lumens: 7515.6 lumens
Efficiency: N/A
Efficacy: 110.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 67.8
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: P936899

CATALOG NUMBER: SQ4-FB-050U-100D-B35-1D-UNV-W2A-W-6

Luminous Intensity Polar Plot



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CATALOG NUMBER: SQ4-FB-050U-100D-B35-1D-UNV-W2A-W-6

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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67
1	100	95	91	87	93	89	85	82	78	75	72	67	65	63	58	56	55
2	90	82	75	70	84	77	71	66	67	63	59	58	55	52	50	48	45
3	82	72	64	57	76	67	60	54	59	53	49	51	47	43	44	40	38
4	74	63	54	48	69	59	51	45	52	46	41	45	40	36	39	35	32
5	68	56	47	41	63	52	44	39	46	40	35	40	35	31	34	30	27
6	63	50	41	35	58	47	39	33	41	35	30	36	31	27	31	27	23
7	58	45	36	30	54	42	34	29	37	31	26	32	27	23	28	24	21
8	53	40	32	26	50	38	30	25	34	27	23	29	24	20	25	21	18
9	50	37	29	23	46	35	27	22	31	24	20	27	22	18	23	19	16
10	46	33	26	21	43	32	25	20	28	22	18	25	20	16	21	17	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3694	3694	3694
5°	3608	4269	4966
10°	3271	6222	8233
15°	2780	8126	9941
20°	2261	9415	10132
25°	1886	9849	9926
30°	1590	9909	9907
35°	1405	9742	10163
40°	1223	9526	10428
45°	1107	9366	10468
50°	1015	9222	10295
55°	971	9013	9839
60°	993	8613	9118
65°	1032	8007	8128
70°	1097	6979	6866
75°	1211	5684	5358
80°	1312	3937	3611
85°	1145	2085	1849

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10468 cd/sqm

TEST NUMBER: P936899

CATALOG NUMBER: SQ4-FB-050U-100D-B35-1D-UNV-W2A-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.3	1.0
10°-20°	342.4	4.6
20°-30°	598.9	8.0
30°-40°	771.0	10.3
40°-50°	861.1	11.5
50°-60°	824.8	11.0
60°-70°	653.6	8.7
70°-80°	384.4	5.1
80°-90°	108.5	1.4
90°-100°	217.6	2.9
100°-110°	572.0	7.6
110°-120°	593.1	7.9
120°-130°	475.8	6.3
130°-140°	373.3	5.0
140°-150°	286.5	3.8
150°-160°	206.4	2.7
160°-170°	126.3	1.7
170°-180°	42.7	0.6
0°-30°	1018.6	13.6
0°-40°	1789.5	23.8
0°-60°	3475.4	46.2
0°-90°	4621.9	61.5
90°-120°	1382.8	18.4
90°-150°	2518.4	33.5
90°-180°	2894.0	38.5
0°-180°	7515.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	597	597	597	597	597	
5°	582	624	703	795	824	54
15°	436	805	1356	1644	1696	121
25°	278	912	1615	1686	1688	128
35°	188	872	1521	1607	1671	118
45°	129	695	1344	1540	1609	100
55°	92	442	1141	1325	1362	84
65°	73	234	847	952	966	72
75°	54	144	465	511	513	56
85°	19	44	115	127	129	20
90°	3	8	23	11	11	4
95°	29	113	375	193	132	32
105°	103	156	632	960	896	109
115°	183	222	507	1010	1153	181
125°	255	286	461	779	918	226
135°	304	334	446	628	713	235
145°	352	374	441	536	578	221
155°	398	409	441	484	498	183
165°	429	435	441	458	464	121
175°	446	446	444	449	449	42
180°	446	446	446	446	446	

TEST NUMBER: P936899

CATALOG NUMBER: SQ4-FB-050U-100D-B35-1D-UNV-W2A-W-6

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2
2.5°	597.2	597.2	601.1	603.0	606.8	608.7	612.6	616.5	627.9	629.8	633.7
5°	581.9	589.5	614.5	624.1	651.0	687.5	702.8	727.8	779.7	795.1	804.7
7.5°	558.8	576.1	637.6	652.9	720.2	816.2	856.5	910.3	992.8	1033.1	1065.8
10°	522.3	558.8	668.3	704.8	814.3	960.2	1035.1	1110.0	1234.8	1290.5	1311.6
12.5°	482.0	541.6	701.0	750.9	908.3	1121.5	1211.7	1294.3	1436.4	1511.3	1522.9
15°	436.0	516.6	731.7	804.7	1008.1	1255.9	1355.8	1457.6	1590.0	1643.8	1657.3
17.5°	395.6	497.4	760.5	837.3	1085.0	1376.9	1478.7	1563.2	1670.7	1707.2	1716.8
20°	345.6	466.7	779.7	879.6	1165.7	1465.2	1563.2	1628.5	1701.5	1724.5	1728.3
22.5°	309.2	434.0	791.2	894.9	1219.4	1519.0	1601.6	1653.4	1703.4	1711.1	1713.0
25°	278.5	397.5	789.3	912.2	1265.5	1551.7	1615.0	1653.4	1682.3	1686.1	1686.1
27.5°	249.6	357.2	781.6	916.0	1300.1	1559.3	1609.2	1636.2	1649.6	1657.3	1657.3
30°	224.7	318.8	762.4	908.3	1315.4	1551.7	1592.0	1605.4	1618.9	1630.3	1636.2
32.5°	205.5	282.3	733.5	892.9	1317.4	1532.5	1561.3	1568.9	1588.1	1615.0	1624.6
35°	188.2	245.8	701.0	871.8	1305.8	1501.8	1520.9	1528.6	1567.0	1607.4	1620.7
37.5°	170.9	218.9	658.7	835.4	1288.6	1465.2	1478.7	1492.2	1551.7	1599.6	1615.0
40°	153.6	195.8	608.7	795.1	1261.6	1421.0	1432.6	1453.7	1532.5	1588.1	1603.5
42.5°	140.2	176.6	554.9	752.8	1227.1	1371.1	1388.4	1419.1	1509.4	1568.9	1586.3
45°	128.7	157.5	497.4	695.2	1183.0	1319.3	1344.3	1386.5	1482.5	1540.1	1555.5
47.5°	117.2	144.0	437.9	635.7	1134.9	1267.5	1300.1	1348.1	1446.0	1501.8	1515.1
50°	107.6	130.6	378.3	572.3	1083.1	1211.7	1250.2	1300.1	1399.9	1451.8	1469.1
52.5°	99.9	119.1	322.6	508.9	1023.6	1154.2	1198.3	1250.2	1344.3	1394.2	1405.7
55°	92.2	109.5	274.6	441.7	962.1	1092.6	1140.7	1190.6	1282.8	1325.0	1332.8
57.5°	88.4	101.7	234.3	378.3	896.8	1023.6	1077.3	1123.5	1209.8	1242.5	1250.2
60°	82.6	96.0	203.6	324.5	825.8	958.2	1004.4	1050.4	1123.5	1150.3	1156.0
62.5°	76.8	92.2	180.5	272.7	752.8	881.4	927.5	969.8	1031.2	1050.4	1058.1
65°	73.0	88.4	163.3	234.3	677.9	800.8	846.9	883.3	933.3	952.5	956.3
67.5°	69.1	84.5	149.8	201.6	603.0	720.2	754.7	789.3	827.7	846.9	848.8
70°	63.4	80.6	138.3	178.6	526.2	627.9	656.8	693.2	723.9	733.5	739.3
72.5°	59.5	74.9	130.6	161.3	447.5	539.6	566.5	587.6	614.5	624.1	624.1
75°	53.8	67.2	122.9	144.0	366.8	441.7	464.7	485.9	507.0	510.9	505.0
77.5°	48.0	59.5	105.6	121.0	286.1	349.5	368.7	380.2	397.5	401.4	403.3
80°	40.3	51.8	82.6	94.1	207.4	257.4	270.7	280.3	295.7	295.7	299.6
82.5°	30.7	40.3	59.5	67.2	140.2	176.6	188.2	194.0	203.6	203.6	203.6
85°	19.2	25.0	38.4	44.2	84.5	107.6	115.2	117.2	124.8	126.7	126.7
87.5°	9.6	13.5	25.0	26.8	44.2	55.7	55.7	59.5	59.5	57.7	55.7
90°	3.0	5.4	7.8	8.4	13.2	19.6	22.8	20.3	15.1	11.3	11.3
92.5°	12.0	32.4	52.7	57.8	81.3	112.6	128.2	112.3	80.6	56.9	54.7
95°	28.8	66.0	103.3	112.6	200.0	316.6	374.8	334.5	253.8	193.2	186.3
97.5°	49.7	82.7	115.5	123.7	269.5	463.8	560.9	535.4	484.3	446.0	432.9
100°	65.9	95.7	125.6	133.0	294.7	510.3	618.0	619.9	623.6	626.5	611.0
102.5°	79.7	107.6	135.4	142.3	306.3	524.9	634.2	666.7	731.7	780.4	767.2
105°	103.1	126.6	150.2	156.1	314.8	526.6	632.4	705.2	850.9	960.2	953.0
107.5°	127.0	149.0	170.9	176.5	316.5	503.1	596.4	698.0	901.2	1053.6	1055.3
110°	143.2	163.0	182.9	187.8	314.1	482.4	566.5	680.0	907.3	1077.6	1085.1

TEST NUMBER: P936899

CATALOG NUMBER: SQ4-FB-050U-100D-B35-1D-UNV-W2A-W-6

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	159.1	178.0	196.9	201.6	314.1	464.2	539.2	655.5	888.0	1062.3	1073.7
115°	183.0	200.5	217.9	222.3	317.1	443.4	506.6	618.6	842.5	1010.5	1026.4
117.5°	206.7	222.6	238.4	242.3	323.0	430.4	484.1	585.2	787.3	938.9	956.5
120°	220.4	235.4	250.3	254.1	327.7	426.0	475.1	567.4	752.1	890.6	907.8
122.5°	234.0	249.0	264.1	267.8	334.6	423.6	468.2	551.4	717.7	842.4	859.3
125°	254.7	268.3	282.1	285.5	343.9	421.8	460.8	531.4	672.7	778.6	794.1
127.5°	271.4	285.3	299.1	302.6	353.2	420.7	454.5	515.1	636.3	727.3	740.4
130°	280.4	295.4	310.3	314.0	360.0	421.3	452.0	506.0	614.1	695.1	707.2
132.5°	289.7	304.7	319.6	323.3	365.5	421.8	450.0	498.4	595.0	667.4	678.3
135°	303.5	317.1	330.6	334.0	371.5	421.4	446.4	486.9	567.8	628.5	637.9
137.5°	317.5	331.0	344.4	347.8	380.4	423.9	445.7	479.9	548.4	599.7	607.4
140°	329.3	341.7	354.0	357.1	386.0	424.4	443.7	473.3	532.4	576.7	583.8
142.5°	338.2	349.6	361.0	364.0	390.5	426.0	443.7	469.7	521.5	560.5	566.7
145°	352.0	362.0	372.0	374.5	396.6	426.0	440.7	461.9	504.4	536.2	540.9
147.5°	365.8	375.5	385.3	387.7	405.3	428.9	440.7	457.4	490.8	515.9	519.8
150°	374.8	383.6	392.3	394.6	410.0	430.4	440.7	454.8	483.0	504.2	507.3
152.5°	384.0	390.7	397.4	399.0	412.9	431.4	440.7	452.7	476.8	494.9	497.2
155°	397.9	402.8	407.7	408.9	419.5	433.6	440.7	450.3	469.5	483.8	485.4
157.5°	408.0	412.8	417.6	418.8	426.1	435.9	440.7	448.2	463.1	474.2	475.3
160°	414.9	418.6	422.3	423.3	429.1	436.8	440.7	447.1	459.9	469.5	470.1
162.5°	421.8	424.6	427.4	428.1	432.3	437.9	440.7	446.1	456.9	464.9	465.5
165°	429.3	431.8	434.3	435.0	436.9	439.4	440.7	444.6	452.2	458.0	458.7
167.5°	436.1	437.3	438.6	438.9	440.5	442.6	443.7	446.2	451.3	455.0	455.3
170°	440.7	441.9	443.1	443.4	443.5	443.6	443.7	446.2	451.3	455.0	455.0
172.5°	443.1	443.4	443.6	443.7	443.7	443.7	443.7	445.6	449.6	452.6	452.4
175°	446.4	446.4	446.4	446.4	445.5	444.3	443.7	445.0	447.5	449.3	449.3
177.5°	446.4	446.4	446.4	446.4	445.7	444.8	444.3	445.3	447.3	448.7	448.5
180°	446.4	446.4	446.4	446.4	446.4	446.4	446.4	446.4	446.4	446.4	446.4

TEST NUMBER: P936899

CATALOG NUMBER: SQ4-FB-050U-100D-B35-1D-UNV-W2A-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	597.2	597.2
2.5°	637.6	633.7
5°	820.0	823.8
7.5°	1104.2	1102.3
10°	1373.1	1390.3
12.5°	1568.9	1572.8
15°	1688.0	1695.7
17.5°	1734.1	1736.0
20°	1736.0	1732.2
22.5°	1714.8	1711.1
25°	1689.9	1688.0
27.5°	1666.9	1668.8
30°	1657.3	1663.0
32.5°	1657.3	1666.9
35°	1661.2	1670.7
37.5°	1659.2	1670.7
40°	1651.5	1664.9
42.5°	1630.3	1640.0
45°	1597.8	1609.2
47.5°	1555.5	1563.2
50°	1501.8	1509.4
52.5°	1434.5	1436.4
55°	1353.9	1361.5
57.5°	1267.5	1269.4
60°	1171.4	1177.1
62.5°	1069.7	1069.7
65°	962.1	965.9
67.5°	850.7	860.3
70°	737.4	739.3
72.5°	626.1	626.1
75°	510.9	512.7
77.5°	401.4	401.4
80°	297.7	299.6
82.5°	205.5	209.3
85°	128.7	128.7
87.5°	59.5	53.8
90°	11.3	11.3
92.5°	45.5	36.5
95°	158.9	131.5
97.5°	380.8	328.7
100°	548.7	486.5
102.5°	713.9	660.6
105°	924.4	895.7
107.5°	1062.2	1069.2
110°	1114.8	1144.7

TEST NUMBER: P936899

CATALOG NUMBER: SQ4-FB-050U-100D-B35-1D-UNV-W2A-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1119.6	1165.3
115°	1089.8	1153.4
117.5°	1026.9	1097.4
120°	976.2	1044.7
122.5°	926.8	994.3
125°	856.3	918.5
127.5°	792.9	845.5
130°	755.6	804.1
132.5°	721.7	765.1
135°	675.3	712.7
137.5°	638.1	668.7
140°	612.4	641.1
142.5°	591.3	615.9
145°	559.6	578.2
147.5°	535.2	550.6
150°	519.9	532.4
152.5°	506.7	516.2
155°	491.7	497.9
157.5°	479.8	484.1
160°	472.6	475.1
162.5°	467.9	470.4
165°	461.2	463.8
167.5°	456.4	457.5
170°	455.0	455.0
172.5°	451.5	450.6
175°	449.3	449.3
177.5°	447.5	446.4
180°	446.4	446.4

(END OF REPORT)