

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: P937307

Luminaire Tested: SQ4-FB-075U-100D-B50-1D-UNV-W2A-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937307
REPORT IS A COMBINATION OF REPORTS P933511 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-100D-B50-1D-UNV-W2A-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

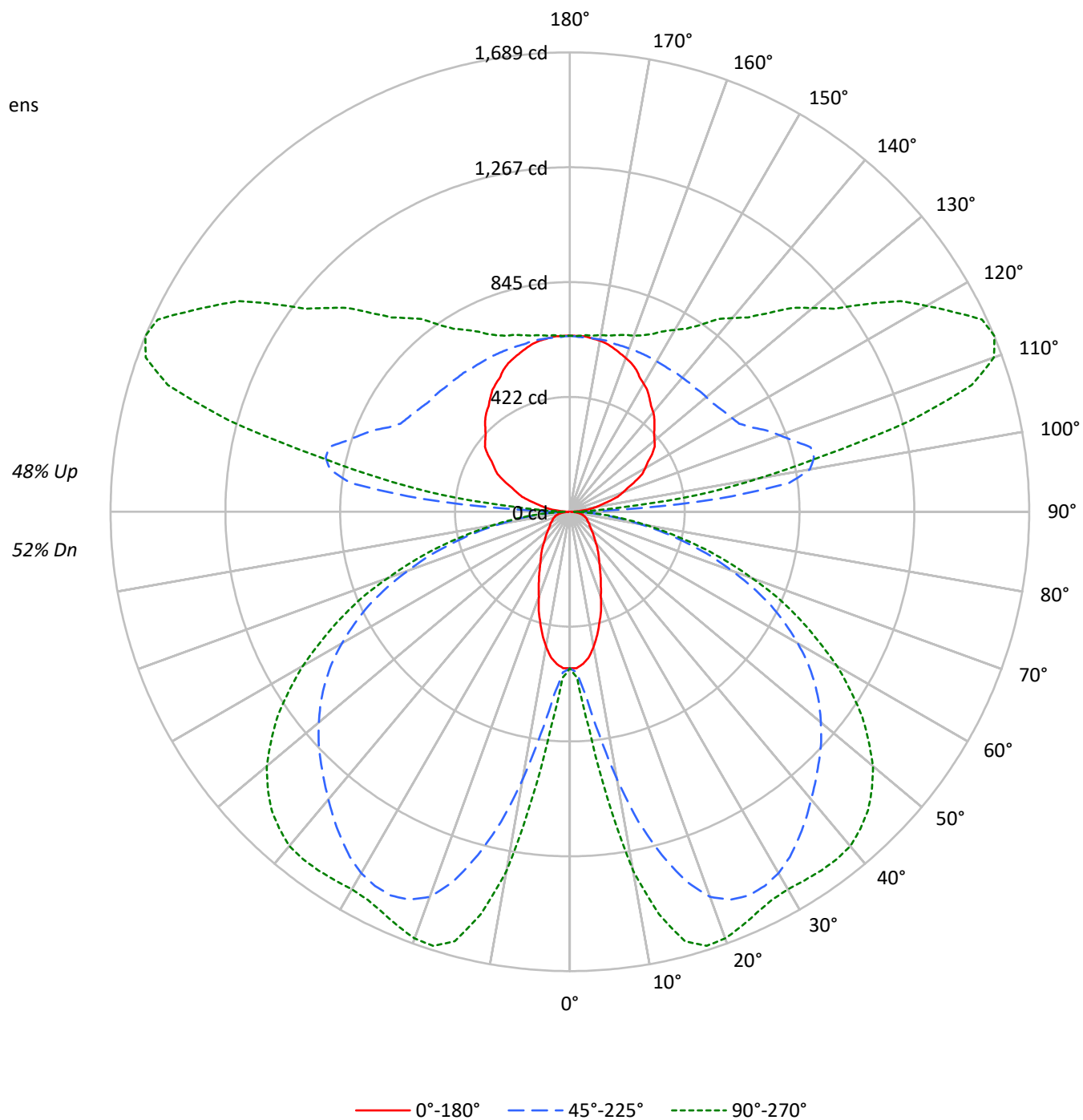
Lumens per Lamp: N/A
Luminaire Lumens: 8650.7 lumens
Efficiency: N/A
Efficacy: 112.6 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 76.8
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

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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	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58
1	98	93	89	85	90	86	82	79	73	70	68	61	59	57	50	49	47
2	88	80	74	69	81	74	69	64	63	59	55	53	50	47	43	41	39
3	80	70	62	56	74	65	58	53	55	50	46	46	42	39	38	35	32
4	73	62	53	47	67	57	50	44	49	43	38	41	36	33	33	30	27
5	67	55	46	40	61	51	43	37	43	37	33	36	32	28	30	26	23
6	61	49	40	34	56	45	38	32	39	33	28	32	28	24	27	23	20
7	56	44	35	30	52	41	33	28	35	29	24	29	25	21	24	20	18
8	52	39	31	26	48	37	29	24	31	26	21	27	22	19	22	18	16
9	49	36	28	23	45	33	26	22	29	23	19	24	20	16	20	17	14
10	45	33	25	20	42	31	24	19	26	21	17	22	18	15	19	15	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3561	3561	3561
5°	3478	4114	4787
10°	3153	5997	7935
15°	2679	7833	9582
20°	2180	9075	9766
25°	1818	9494	9567
30°	1532	9552	9549
35°	1354	9390	9796
40°	1179	9181	10051
45°	1067	9028	10090
50°	979	8889	9924
55°	935	8687	9484
60°	957	8302	8789
65°	994	7718	7834
70°	1057	6727	6618
75°	1166	5479	5165
80°	1266	3796	3481
85°	1103	2011	1781

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10090 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.5	0.9
10°-20°	330.0	3.8
20°-30°	577.3	6.7
30°-40°	743.1	8.6
40°-50°	830.0	9.6
50°-60°	795.0	9.2
60°-70°	630.0	7.3
70°-80°	370.5	4.3
80°-90°	105.4	1.2
90°-100°	315.4	3.6
100°-110°	829.3	9.6
110°-120°	859.9	9.9
120°-130°	689.7	8.0
130°-140°	541.2	6.3
140°-150°	415.4	4.8
150°-160°	299.2	3.5
160°-170°	183.0	2.1
170°-180°	61.8	0.7
0°-30°	981.8	11.3
0°-40°	1724.9	19.9
0°-60°	3349.9	38.7
0°-90°	4455.8	51.5
90°-120°	2004.6	23.2
90°-150°	3650.9	42.2
90°-180°	4195.0	48.5
0°-180°	8650.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	576	576	576	576	576	
5°	561	602	677	766	794	52
15°	420	776	1307	1584	1634	117
25°	268	879	1557	1625	1627	124
35°	181	840	1466	1549	1610	113
45°	124	670	1296	1484	1551	96
55°	89	426	1100	1277	1312	81
65°	70	226	816	918	931	70
75°	52	139	448	492	494	54
85°	18	43	111	122	124	20
90°	4	12	33	16	16	5
95°	42	163	543	280	191	46
105°	149	226	917	1392	1298	158
115°	265	322	734	1465	1672	262
125°	369	414	668	1129	1332	328
135°	440	484	647	911	1033	340
145°	510	543	639	777	838	320
155°	577	593	639	701	722	265
165°	622	631	639	664	672	176
175°	647	647	643	652	652	61
180°	647	647	647	647	647	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	575.6	575.6	575.6	575.6	575.6	575.6	575.6	575.6	575.6	575.6	575.6
2.5°	575.6	575.6	579.4	581.2	584.9	586.7	590.5	594.2	605.2	607.1	610.8
5°	560.9	568.2	592.3	601.6	627.5	662.7	677.4	701.5	751.5	766.3	775.6
7.5°	538.6	555.3	614.6	629.3	694.1	786.7	825.6	877.4	957.0	995.8	1027.3
10°	503.4	538.6	644.2	679.3	784.8	925.5	997.7	1069.9	1190.2	1243.9	1264.3
12.5°	464.6	522.0	675.7	723.8	875.5	1081.0	1168.0	1247.5	1384.6	1456.8	1467.9
15°	420.2	497.9	705.3	775.6	971.7	1210.6	1306.9	1404.9	1532.6	1584.4	1597.4
17.5°	381.4	479.4	733.0	807.1	1045.8	1327.2	1425.3	1506.7	1610.4	1645.5	1654.8
20°	333.2	449.8	751.5	847.8	1123.6	1412.3	1506.7	1569.7	1640.0	1662.2	1665.9
22.5°	298.0	418.3	762.6	862.5	1175.3	1464.1	1543.7	1593.7	1641.9	1649.3	1651.1
25°	268.4	383.1	760.7	879.3	1219.8	1495.6	1556.7	1593.7	1621.5	1625.2	1625.2
27.5°	240.6	344.3	753.4	882.9	1253.1	1503.0	1551.1	1577.1	1590.0	1597.4	1597.4
30°	216.6	307.3	734.9	875.5	1267.9	1495.6	1534.5	1547.5	1560.4	1571.5	1577.1
32.5°	198.1	272.1	707.0	860.7	1269.8	1477.1	1504.9	1512.2	1530.7	1556.7	1565.9
35°	181.4	237.0	675.7	840.3	1258.7	1447.5	1466.0	1473.4	1510.4	1549.3	1562.2
37.5°	164.8	211.0	634.9	805.2	1242.0	1412.3	1425.3	1438.3	1495.6	1541.8	1556.7
40°	148.0	188.8	586.7	766.3	1216.1	1369.7	1380.8	1401.2	1477.1	1530.7	1545.6
42.5°	135.1	170.3	534.9	725.6	1182.8	1321.6	1338.2	1367.8	1454.9	1512.2	1529.0
45°	124.0	151.8	479.4	670.1	1140.2	1271.6	1295.7	1336.5	1428.9	1484.5	1499.4
47.5°	112.9	138.8	422.1	612.7	1093.9	1221.7	1253.1	1299.4	1393.8	1447.5	1460.4
50°	103.7	125.9	364.6	551.6	1043.9	1168.0	1205.0	1253.1	1349.3	1399.3	1416.0
52.5°	96.3	114.8	310.9	490.5	986.6	1112.5	1155.0	1205.0	1295.7	1343.8	1355.0
55°	88.8	105.5	264.7	425.7	927.4	1053.2	1099.5	1147.6	1236.4	1277.2	1284.6
57.5°	85.2	98.1	225.8	364.6	864.4	986.6	1038.4	1082.9	1166.1	1197.6	1205.0
60°	79.6	92.6	196.2	312.8	796.0	923.6	968.1	1012.5	1082.9	1108.8	1114.3
62.5°	74.1	88.8	174.0	262.8	725.6	849.6	894.0	934.7	994.0	1012.5	1019.9
65°	70.3	85.2	157.4	225.8	653.4	771.9	816.3	851.4	899.6	918.1	921.8
67.5°	66.6	81.4	144.4	194.4	581.2	694.1	727.4	760.7	797.8	816.3	818.2
70°	61.1	77.7	133.3	172.1	507.2	605.2	633.1	668.2	697.8	707.0	712.6
72.5°	57.3	72.2	125.9	155.5	431.3	520.1	546.0	566.4	592.3	601.6	601.6
75°	51.8	64.8	118.4	138.8	353.5	425.7	447.9	468.3	488.7	492.4	486.8
77.5°	46.2	57.3	101.8	116.7	275.8	336.9	355.4	366.5	383.1	386.9	388.7
80°	38.9	50.0	79.6	90.7	199.9	248.1	261.0	270.2	285.1	285.1	288.8
82.5°	29.6	38.9	57.3	64.8	135.1	170.3	181.4	187.0	196.2	196.2	196.2
85°	18.5	24.1	37.0	42.6	81.4	103.7	111.1	112.9	120.3	122.2	122.2
87.5°	9.2	13.0	24.1	25.9	42.6	53.7	53.7	57.3	57.3	55.6	53.7
90°	4.3	7.8	11.3	12.1	19.1	28.3	33.0	29.3	22.0	16.5	16.5
92.5°	17.4	46.9	76.4	83.8	117.8	163.2	185.9	162.9	116.9	82.5	79.2
95°	41.7	95.7	149.7	163.3	289.9	458.9	543.3	484.8	367.8	280.1	270.2
97.5°	72.1	119.7	167.4	179.3	390.6	672.2	813.0	776.1	702.2	646.7	627.7
100°	95.5	138.8	182.0	192.9	427.2	739.7	896.0	898.7	904.1	908.1	885.6
102.5°	115.5	155.9	196.2	206.3	444.0	760.9	919.4	966.5	1060.7	1131.4	1112.0
105°	149.4	183.6	217.8	226.3	456.4	763.4	916.8	1022.4	1233.5	1391.9	1381.6
107.5°	184.2	216.0	247.9	255.8	458.8	729.4	864.7	1012.0	1306.6	1527.5	1530.0
110°	207.6	236.4	265.1	272.3	455.2	699.3	821.3	985.9	1315.3	1562.2	1573.0

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	230.6	258.0	285.4	292.2	455.4	672.9	781.8	950.3	1287.2	1540.0	1556.6
115°	265.3	290.7	315.9	322.2	459.6	642.8	734.4	896.7	1221.4	1464.9	1487.9
117.5°	299.6	322.6	345.6	351.4	468.2	623.9	701.8	848.4	1141.3	1361.1	1386.6
120°	319.6	341.3	362.9	368.3	475.1	617.6	688.8	822.7	1090.4	1291.2	1316.0
122.5°	339.2	361.0	382.8	388.3	485.1	614.3	678.8	799.3	1040.4	1221.2	1245.7
125°	369.1	389.0	408.9	413.9	498.6	611.5	668.0	770.4	975.2	1128.7	1151.2
127.5°	393.5	413.6	433.6	438.6	512.0	609.9	658.8	746.7	922.6	1054.5	1073.5
130°	406.5	428.1	449.7	455.1	521.9	610.9	655.4	733.7	890.2	1007.6	1025.2
132.5°	419.9	441.6	463.2	468.6	529.9	611.5	652.3	722.4	862.5	967.6	983.3
135°	439.9	459.6	479.3	484.3	538.5	610.9	647.1	705.7	823.1	911.1	924.7
137.5°	460.4	479.8	499.3	504.2	551.5	614.7	646.2	695.8	795.0	869.5	880.6
140°	477.3	495.2	513.2	517.7	559.6	615.3	643.2	686.0	771.8	836.0	846.4
142.5°	490.4	507.0	523.6	527.7	566.2	617.5	643.2	680.8	756.1	812.6	821.5
145°	510.3	524.8	539.2	542.8	574.9	617.6	638.9	669.7	731.2	777.4	784.1
147.5°	530.2	544.3	558.4	562.0	587.6	621.8	638.9	663.0	711.5	747.9	753.5
150°	543.3	556.0	568.8	572.0	594.3	624.0	638.9	659.3	700.2	730.9	735.5
152.5°	556.8	566.5	576.1	578.5	598.6	625.4	638.9	656.3	691.3	717.5	721.0
155°	576.7	583.8	591.0	592.8	608.1	628.6	638.9	652.8	680.6	701.4	703.7
157.5°	591.5	598.5	605.4	607.2	617.7	631.9	638.9	649.7	671.3	687.5	689.1
160°	601.5	606.9	612.3	613.6	622.0	633.3	638.9	648.1	666.6	680.5	681.4
162.5°	611.5	615.6	619.6	620.6	626.7	634.8	638.9	646.7	662.3	674.1	674.9
165°	622.3	626.1	629.7	630.6	633.3	637.0	638.9	644.5	655.7	664.1	665.0
167.5°	632.3	634.1	635.8	636.2	638.6	641.7	643.2	646.8	654.2	659.7	660.1
170°	638.9	640.6	642.3	642.8	642.9	643.1	643.2	646.8	654.2	659.7	659.7
172.5°	642.3	642.7	643.1	643.2	643.2	643.2	643.2	646.0	651.8	656.2	655.9
175°	647.1	647.1	647.1	647.1	645.8	644.0	643.2	645.0	648.7	651.5	651.5
177.5°	647.1	647.1	647.1	647.1	646.0	644.7	644.1	645.6	648.5	650.6	650.3
180°	647.1	647.1	647.1	647.1	647.1	647.1	647.1	647.1	647.1	647.1	647.1

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	575.6	575.6
2.5°	614.6	610.8
5°	790.4	794.1
7.5°	1064.3	1062.5
10°	1323.5	1340.1
12.5°	1512.2	1516.0
15°	1627.0	1634.4
17.5°	1671.5	1673.3
20°	1673.3	1669.6
22.5°	1652.9	1649.3
25°	1628.9	1627.0
27.5°	1606.7	1608.5
30°	1597.4	1602.9
32.5°	1597.4	1606.7
35°	1601.2	1610.4
37.5°	1599.3	1610.4
40°	1591.8	1604.8
42.5°	1571.5	1580.8
45°	1540.1	1551.1
47.5°	1499.4	1506.7
50°	1447.5	1454.9
52.5°	1382.7	1384.6
55°	1305.0	1312.4
57.5°	1221.7	1223.5
60°	1129.1	1134.6
62.5°	1031.0	1031.0
65°	927.4	931.0
67.5°	820.0	829.2
70°	710.8	712.6
72.5°	603.5	603.5
75°	492.4	494.2
77.5°	386.9	386.9
80°	286.9	288.8
82.5°	198.1	201.7
85°	124.0	124.0
87.5°	57.3	51.8
90°	16.5	16.5
92.5°	66.0	53.0
95°	230.4	190.6
97.5°	552.1	476.4
100°	795.4	705.3
102.5°	1034.9	957.6
105°	1340.0	1298.5
107.5°	1540.0	1550.0
110°	1616.2	1659.4

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1623.0	1689.4
115°	1580.0	1672.0
117.5°	1488.7	1590.8
120°	1415.2	1514.4
122.5°	1343.6	1441.4
125°	1241.5	1331.6
127.5°	1149.6	1225.6
130°	1095.4	1165.6
132.5°	1046.3	1109.2
135°	978.9	1033.2
137.5°	924.9	969.4
140°	888.0	929.4
142.5°	857.2	892.9
145°	811.2	838.2
147.5°	775.8	798.2
150°	753.6	771.8
152.5°	734.6	748.3
155°	712.7	721.8
157.5°	695.5	701.8
160°	685.1	688.8
162.5°	678.4	681.8
165°	668.7	672.3
167.5°	661.6	663.1
170°	659.7	659.7
172.5°	654.5	653.1
175°	651.5	651.5
177.5°	648.7	647.1
180°	647.1	647.1

(END OF REPORT)