

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: P936507

Luminaire Tested: SQ4-FB-025U-100D-B50-1D-UNV-W2A-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936507
REPORT IS A COMBINATION OF REPORTS P933447 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-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

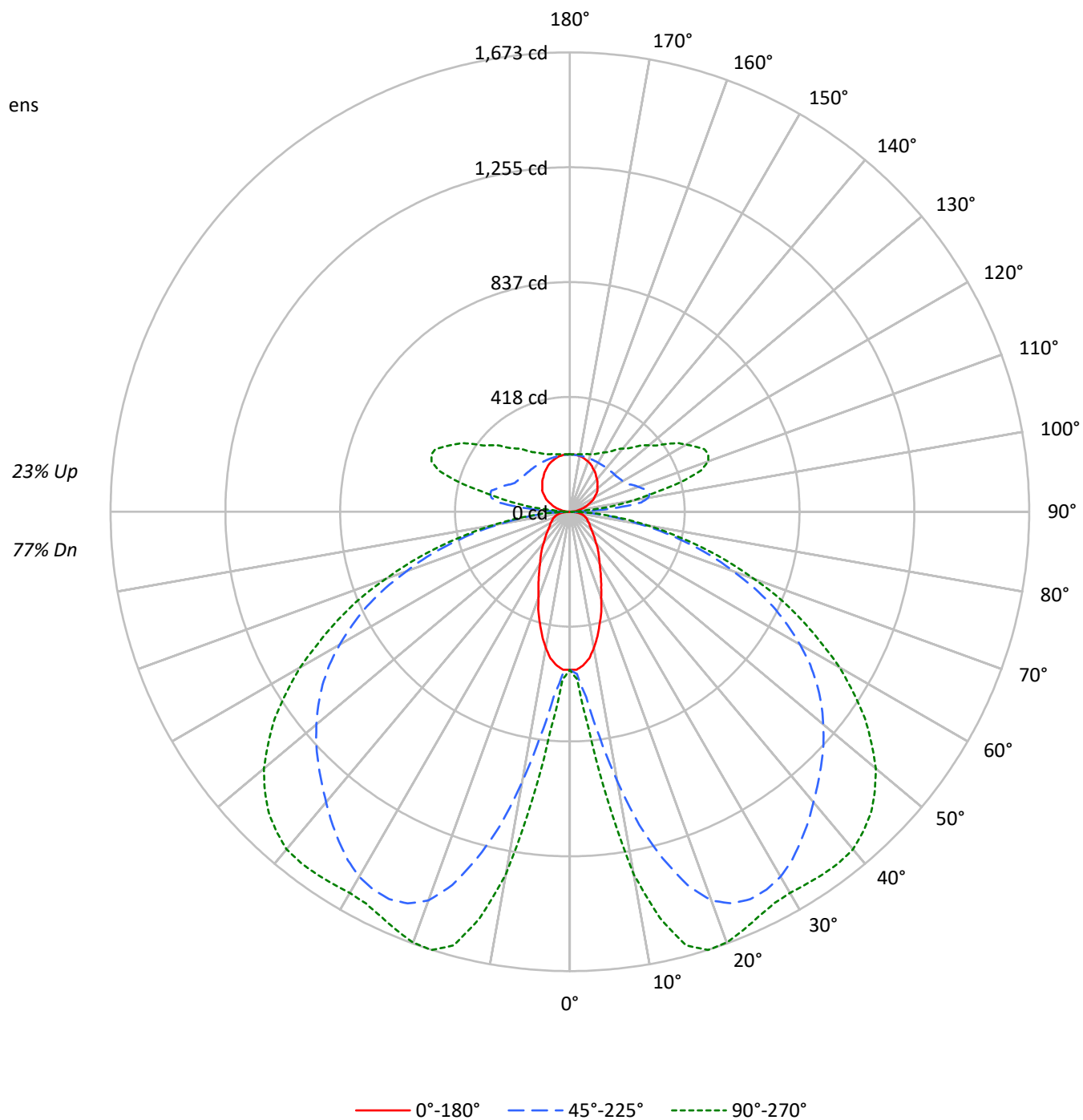
Lumens per Lamp: N/A
Luminaire Lumens: 5809.4 lumens
Efficiency: N/A
Efficacy: 99.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 58.2
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	113	113	113	113	108	108	108	108	98	98	98	89	89	89	81	81	81
1	103	98	94	90	98	94	90	86	85	82	79	77	75	73	70	68	66
2	93	85	78	72	88	81	75	69	73	68	64	67	63	59	61	57	55
3	84	74	65	59	80	70	63	57	64	58	53	58	53	49	53	49	45
4	77	65	56	49	73	62	54	47	56	50	44	51	46	41	47	42	38
5	70	57	48	42	66	55	46	40	50	43	38	46	40	35	41	37	33
6	64	51	42	36	61	49	41	35	45	38	32	41	35	30	37	32	28
7	59	46	37	31	56	44	36	30	40	33	28	37	31	27	34	29	25
8	55	42	33	27	52	40	32	26	37	30	25	34	28	23	31	26	22
9	51	38	30	24	49	36	29	23	33	27	22	31	25	21	28	23	20
10	48	35	27	21	45	33	26	21	31	24	20	28	23	19	26	21	17

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	1.3
10°-20°	330.0	5.7
20°-30°	577.3	9.9
30°-40°	743.1	12.8
40°-50°	830.0	14.3
50°-60°	795.0	13.7
60°-70°	630.0	10.8
70°-80°	370.5	6.4
80°-90°	103.7	1.8
90°-100°	101.9	1.8
100°-110°	267.9	4.6
110°-120°	277.8	4.8
120°-130°	222.9	3.8
130°-140°	174.9	3.0
140°-150°	134.2	2.3
150°-160°	96.7	1.7
160°-170°	59.1	1.0
170°-180°	20.0	0.3
0°-30°	981.8	16.9
0°-40°	1724.9	29.7
0°-60°	3349.9	57.7
0°-90°	4454.1	76.7
90°-120°	647.6	11.1
90°-150°	1179.6	20.3
90°-180°	1355.0	23.3
0°-180°	5809.4	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°	1	4	11	5	5	2
95°	13	53	176	90	62	15
105°	48	73	296	450	420	51
115°	86	104	237	473	540	85
125°	119	134	216	365	430	106
135°	142	156	209	294	334	110
145°	165	175	206	251	271	103
155°	186	192	206	227	233	86
165°	201	204	206	214	217	57
175°	209	209	208	210	210	20
180°	209	209	209	209	209	

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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°	1.4	2.5	3.6	3.9	6.2	9.2	10.6	9.4	7.1	5.3	5.3
92.5°	5.6	15.1	24.7	27.1	38.1	52.8	60.1	52.6	37.7	26.6	25.6
95°	13.4	30.9	48.4	52.8	93.7	148.2	175.5	156.6	118.8	90.5	87.3
97.5°	23.3	38.7	54.1	57.9	126.2	217.2	262.6	250.7	226.9	208.9	202.9
100°	30.9	44.8	58.8	62.3	138.0	239.0	289.4	290.3	292.1	293.4	286.1
102.5°	37.4	50.4	63.4	66.7	143.5	245.8	297.0	312.2	342.7	365.6	359.3
105°	48.3	59.3	70.3	73.1	147.5	246.6	296.2	330.3	398.5	449.7	446.4
107.5°	59.5	69.8	80.0	82.7	148.2	235.6	279.4	327.0	422.2	493.5	494.4
110°	67.1	76.4	85.6	88.0	147.1	225.9	265.3	318.6	425.0	504.7	508.2

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	74.5	83.4	92.2	94.4	147.1	217.4	252.6	307.0	415.9	497.5	502.9
115°	85.7	94.0	102.1	104.1	148.5	207.6	237.2	289.7	394.6	473.3	480.7
117.5°	96.9	104.2	111.6	113.5	151.2	201.6	226.8	274.1	368.7	439.7	447.9
120°	103.3	110.3	117.2	119.0	153.5	199.6	222.6	265.8	352.3	417.2	425.3
122.5°	109.6	116.7	123.7	125.4	156.7	198.5	219.3	258.3	336.1	394.6	402.6
125°	119.3	125.7	132.2	133.7	161.1	197.6	215.8	248.9	315.1	364.7	372.0
127.5°	127.1	133.6	140.1	141.7	165.4	197.1	212.9	241.3	298.1	340.7	346.9
130°	131.3	138.3	145.2	147.0	168.6	197.4	211.7	237.0	287.6	325.5	331.2
132.5°	135.7	142.7	149.6	151.4	171.2	197.6	210.8	233.4	278.7	312.6	317.7
135°	142.2	148.5	154.9	156.4	174.0	197.4	209.1	228.1	266.0	294.4	298.8
137.5°	148.8	155.0	161.3	162.9	178.2	198.7	208.8	224.9	256.9	280.9	284.5
140°	154.2	160.0	165.8	167.3	180.8	198.8	207.8	221.6	249.4	270.1	273.5
142.5°	158.4	163.7	169.1	170.5	182.9	199.5	207.8	220.0	244.3	262.5	265.4
145°	164.9	169.5	174.2	175.4	185.8	199.5	206.4	216.3	236.2	251.2	253.3
147.5°	171.3	175.9	180.4	181.6	189.9	200.9	206.4	214.3	229.9	241.6	243.4
150°	175.5	179.6	183.8	184.8	192.0	201.7	206.4	213.0	226.2	236.1	237.6
152.5°	179.9	183.0	186.1	186.9	193.4	202.1	206.4	212.0	223.3	231.8	232.9
155°	186.3	188.7	191.0	191.6	196.5	203.1	206.4	210.9	219.9	226.6	227.3
157.5°	191.1	193.3	195.6	196.1	199.6	204.2	206.4	209.9	216.9	222.1	222.7
160°	194.4	196.1	197.8	198.3	201.0	204.6	206.4	209.4	215.4	219.9	220.1
162.5°	197.5	198.8	200.2	200.5	202.5	205.1	206.4	208.9	214.0	217.8	218.1
165°	201.1	202.2	203.4	203.7	204.6	205.9	206.4	208.2	211.8	214.5	214.8
167.5°	204.3	204.8	205.4	205.6	206.3	207.3	207.8	209.0	211.4	213.1	213.2
170°	206.4	207.0	207.5	207.6	207.7	207.8	207.8	209.0	211.4	213.1	213.1
172.5°	207.5	207.6	207.8	207.8	207.8	207.8	207.8	208.7	210.6	212.0	211.9
175°	209.1	209.1	209.1	209.1	208.7	208.1	207.8	208.4	209.6	210.5	210.5
177.5°	209.1	209.1	209.1	209.1	208.7	208.3	208.1	208.6	209.5	210.2	210.2
180°	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1

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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°	5.3	5.3
92.5°	21.3	17.1
95°	74.4	61.6
97.5°	178.4	153.9
100°	257.0	227.9
102.5°	334.4	309.4
105°	433.0	419.6
107.5°	497.5	500.8
110°	522.2	536.2

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	524.3	545.8
115°	510.4	540.2
117.5°	481.0	514.0
120°	457.3	489.3
122.5°	434.1	465.7
125°	401.1	430.2
127.5°	371.5	396.0
130°	353.9	376.6
132.5°	338.0	358.4
135°	316.3	333.8
137.5°	298.9	313.2
140°	286.8	300.3
142.5°	276.9	288.5
145°	262.1	270.9
147.5°	250.7	257.9
150°	243.5	249.4
152.5°	237.3	241.8
155°	230.2	233.2
157.5°	224.7	226.8
160°	221.4	222.6
162.5°	219.2	220.3
165°	216.0	217.2
167.5°	213.8	214.3
170°	213.1	213.1
172.5°	211.5	211.1
175°	210.5	210.5
177.5°	209.6	209.1
180°	209.1	209.1

(END OF REPORT)