

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: P936900

Luminaire Tested: SQ4-FB-050U-100D-B35-1D-UNV-W2A-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936900
REPORT IS A COMBINATION OF REPORTS P933487 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-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

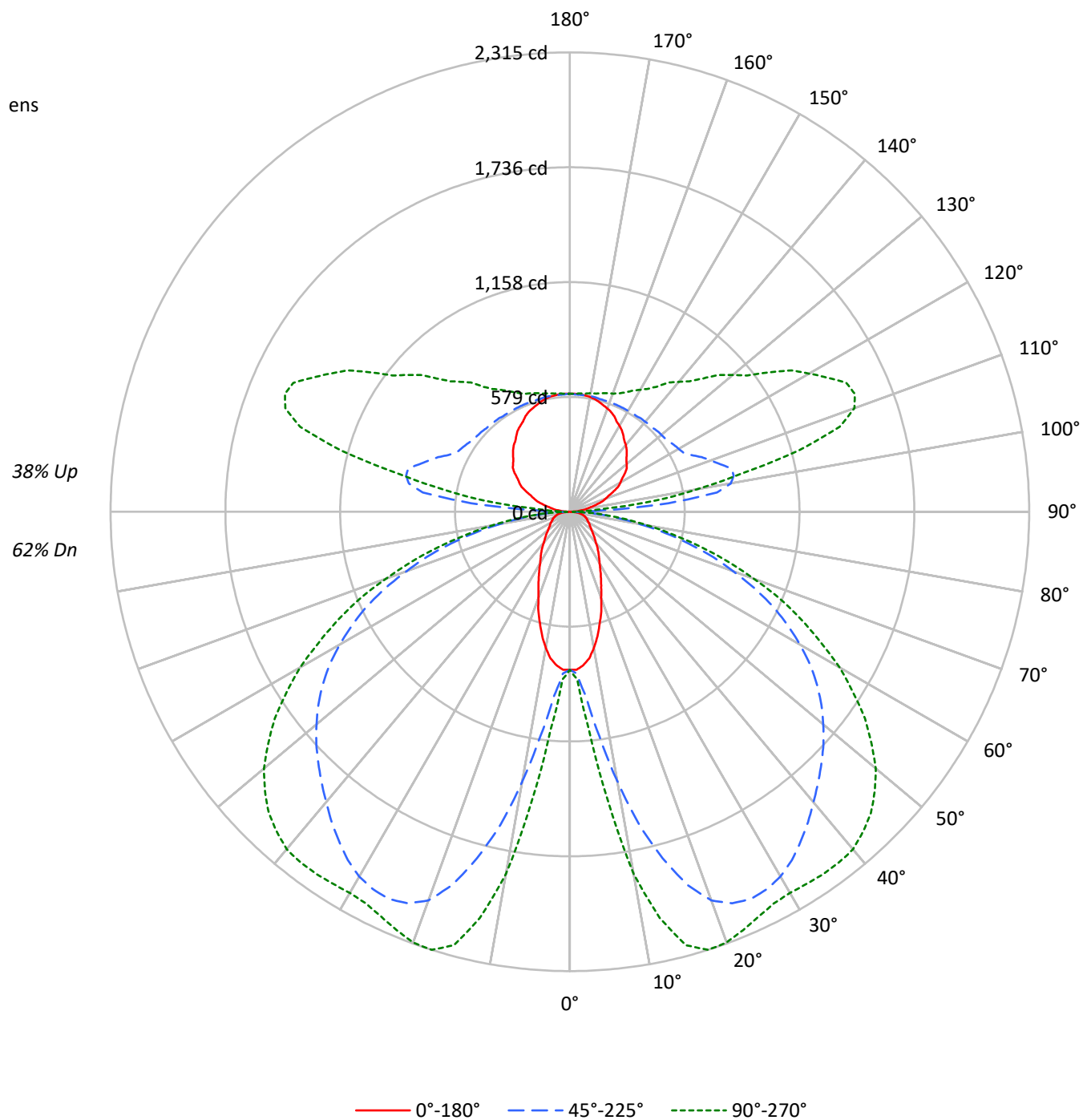
Lumens per Lamp: N/A
Luminaire Lumens: 10021.4 lumens
Efficiency: N/A
Efficacy: 110.9 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 90.4
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	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°	3695	3695	3695
5°	3610	4270	4967
10°	3274	6225	8234
15°	2783	8133	9943
20°	2266	9425	10133
25°	1890	9863	9927
30°	1594	9925	9908
35°	1409	9760	10164
40°	1228	9546	10429
45°	1112	9390	10470
50°	1020	9248	10296
55°	977	9041	9840
60°	1000	8645	9120
65°	1040	8041	8129
70°	1108	7012	6868
75°	1228	5717	5359
80°	1342	3964	3611
85°	1192	2104	1849

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10470 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.0	1.0
10°-20°	456.6	4.6
20°-30°	798.6	8.0
30°-40°	1028.1	10.3
40°-50°	1148.3	11.5
50°-60°	1099.8	11.0
60°-70°	871.6	8.7
70°-80°	512.5	5.1
80°-90°	144.7	1.4
90°-100°	290.1	2.9
100°-110°	762.7	7.6
110°-120°	790.9	7.9
120°-130°	634.4	6.3
130°-140°	497.8	5.0
140°-150°	382.1	3.8
150°-160°	275.1	2.7
160°-170°	168.3	1.7
170°-180°	56.9	0.6
0°-30°	1358.2	13.6
0°-40°	2386.3	23.8
0°-60°	4634.4	46.2
0°-90°	6163.2	61.5
90°-120°	1843.7	18.4
90°-150°	3357.9	33.5
90°-180°	3858.0	38.5
0°-180°	10021.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	796	796	796	796	796	
5°	776	832	937	1060	1099	72
15°	581	1073	1808	2192	2261	162
25°	371	1216	2154	2248	2251	171
35°	251	1163	2028	2143	2228	157
45°	172	927	1793	2054	2146	133
55°	123	589	1521	1767	1816	112
65°	97	312	1129	1270	1288	96
75°	72	192	620	681	684	75
85°	26	59	154	169	172	27
90°	4	11	30	15	15	5
95°	38	150	500	258	175	43
105°	137	208	843	1280	1194	146
115°	244	296	676	1347	1538	241
125°	340	381	614	1038	1225	301
135°	405	445	595	838	950	313
145°	469	499	588	715	771	294
155°	530	545	588	645	664	244
165°	572	580	588	611	618	162
175°	595	595	592	599	599	56
180°	595	595	595	595	595	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	796.4	796.4	796.4	796.4	796.4	796.4	796.4	796.4	796.4	796.4	796.4
2.5°	796.4	796.4	801.6	804.1	809.2	811.7	816.9	822.0	837.4	839.9	845.1
5°	775.9	786.1	819.5	832.3	868.1	916.8	937.2	970.6	1039.6	1060.2	1073.0
7.5°	745.2	768.2	850.2	870.6	960.3	1088.3	1142.1	1213.8	1323.9	1377.7	1421.2
10°	696.5	745.2	891.2	939.8	1085.8	1280.3	1380.2	1480.1	1646.5	1720.8	1748.9
12.5°	642.7	722.1	934.7	1001.3	1211.2	1495.5	1615.8	1726.0	1915.4	2015.3	2030.6
15°	581.3	688.9	975.7	1073.0	1344.4	1674.7	1807.9	1943.6	2120.3	2192.0	2209.9
17.5°	527.5	663.3	1014.1	1116.5	1446.8	1836.1	1971.8	2084.4	2227.8	2276.5	2289.4
20°	461.0	622.3	1039.6	1172.8	1554.4	1953.9	2084.4	2171.5	2268.8	2299.5	2304.7
22.5°	412.3	578.7	1055.0	1193.3	1626.1	2025.6	2135.7	2204.8	2271.4	2281.6	2284.2
25°	371.3	530.0	1052.4	1216.4	1687.5	2069.1	2153.6	2204.8	2243.2	2248.4	2248.4
27.5°	332.9	476.3	1042.3	1221.5	1733.6	2079.4	2145.9	2181.8	2199.7	2209.9	2209.9
30°	299.6	425.1	1016.6	1211.2	1754.1	2069.1	2122.9	2140.8	2158.7	2174.0	2181.8
32.5°	274.0	376.5	978.2	1190.7	1756.7	2043.5	2081.9	2092.2	2117.7	2153.6	2166.4
35°	251.0	327.8	934.7	1162.6	1741.3	2002.5	2028.1	2038.4	2089.6	2143.3	2161.3
37.5°	227.9	292.0	878.3	1114.0	1718.2	1953.9	1971.8	1989.7	2069.1	2133.1	2153.6
40°	204.8	261.2	811.7	1060.2	1682.4	1895.0	1910.3	1938.5	2043.5	2117.7	2138.2
42.5°	186.9	235.6	740.0	1003.8	1636.4	1828.4	1851.5	1892.4	2012.7	2092.2	2115.2
45°	171.6	210.0	663.3	926.9	1577.4	1759.2	1792.6	1848.9	1976.9	2053.7	2074.2
47.5°	156.2	192.1	583.8	847.6	1513.4	1690.1	1733.6	1797.7	1928.2	2002.5	2020.5
50°	143.4	174.1	504.5	763.1	1444.3	1615.8	1667.1	1733.6	1866.8	1936.0	1958.9
52.5°	133.1	158.7	430.2	678.6	1364.8	1539.0	1597.9	1667.1	1792.6	1859.1	1874.4
55°	122.9	145.9	366.2	589.0	1283.0	1457.1	1521.0	1587.7	1710.6	1766.9	1777.1
57.5°	117.8	135.8	312.4	504.5	1195.8	1364.8	1436.5	1498.1	1613.3	1656.8	1667.1
60°	110.1	128.0	271.4	432.8	1101.2	1277.8	1339.3	1400.7	1498.1	1533.9	1541.6
62.5°	102.4	122.9	240.7	363.7	1003.8	1175.4	1236.8	1293.2	1375.1	1400.7	1411.0
65°	97.3	117.8	217.6	312.4	904.0	1067.8	1129.3	1177.9	1244.5	1270.2	1275.3
67.5°	92.2	112.7	199.7	268.9	804.1	960.3	1006.4	1052.4	1103.7	1129.3	1131.9
70°	84.5	107.6	184.4	238.2	701.7	837.4	875.8	924.4	965.4	978.2	985.9
72.5°	79.4	99.9	174.1	215.1	596.6	719.6	755.4	783.6	819.5	832.3	832.3
75°	71.7	89.6	163.9	192.1	489.2	589.0	619.7	647.9	676.1	681.2	673.5
77.5°	64.1	79.4	140.8	161.3	381.6	466.1	491.7	507.0	530.0	535.2	537.8
80°	53.8	69.2	110.1	125.5	276.6	343.1	361.0	373.8	394.4	394.4	399.5
82.5°	41.0	53.8	79.4	89.6	186.9	235.6	251.0	258.6	271.4	271.4	271.4
85°	25.6	33.3	51.3	58.9	112.7	143.4	153.7	156.2	166.5	169.0	169.0
87.5°	12.8	17.9	33.3	35.9	58.9	74.2	74.2	79.4	79.4	76.8	74.2
90°	4.0	7.2	10.4	11.1	17.5	26.1	30.3	26.9	20.3	15.2	15.2
92.5°	16.0	43.1	70.3	77.1	108.4	150.1	170.9	149.8	107.6	75.9	72.9
95°	38.4	88.1	137.8	150.2	266.7	422.0	499.7	445.9	338.4	257.7	248.5
97.5°	66.3	110.1	154.0	164.9	359.2	618.2	747.8	713.8	645.7	594.8	577.3
100°	87.9	127.6	167.3	177.3	392.9	680.3	824.0	826.6	831.5	835.2	814.4
102.5°	106.3	143.4	180.4	189.7	408.3	699.9	845.6	889.0	975.6	1040.5	1022.8
105°	137.4	168.8	200.3	208.1	419.9	702.1	843.2	940.3	1134.6	1280.2	1270.6
107.5°	169.4	198.6	227.9	235.3	421.9	670.8	795.3	930.7	1201.7	1404.9	1407.2
110°	190.9	217.3	243.9	250.5	418.8	643.1	755.3	906.8	1209.6	1436.7	1446.7

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	212.1	237.3	262.5	268.8	418.9	619.0	719.0	873.9	1183.9	1416.4	1431.7
115°	244.1	267.3	290.6	296.4	422.8	591.3	675.5	824.8	1123.4	1347.3	1368.4
117.5°	275.6	296.7	317.8	323.2	430.6	573.8	645.5	780.2	1049.7	1251.9	1275.3
120°	294.0	313.9	333.8	338.8	437.0	568.0	633.5	756.6	1002.8	1187.5	1210.3
122.5°	311.9	332.0	352.0	357.1	446.1	564.9	624.3	735.2	957.0	1123.3	1145.7
125°	339.5	357.8	376.1	380.6	458.5	562.4	614.3	708.5	896.9	1038.2	1058.9
127.5°	361.9	380.3	398.7	403.4	470.9	561.0	605.9	686.8	848.6	969.9	987.3
130°	373.8	393.7	413.7	418.6	479.9	561.8	602.7	674.7	818.7	926.7	942.8
132.5°	386.2	406.1	426.1	431.0	487.3	562.4	600.0	664.4	793.3	889.9	904.4
135°	404.7	422.8	440.8	445.4	495.3	561.8	595.2	649.1	757.1	838.0	850.5
137.5°	423.5	441.4	459.3	463.8	507.3	565.3	594.4	640.0	731.3	799.7	809.9
140°	439.0	455.5	472.0	476.2	514.6	565.9	591.6	631.0	709.8	768.9	778.4
142.5°	451.0	466.2	481.5	485.3	520.7	567.9	591.6	626.2	695.5	747.4	755.6
145°	469.4	482.7	496.0	499.3	528.8	568.0	587.6	615.9	672.6	715.0	721.2
147.5°	487.7	500.7	513.7	516.9	540.4	571.9	587.6	609.9	654.4	687.8	692.9
150°	499.7	511.4	523.2	526.1	546.6	573.9	587.6	606.4	644.1	672.3	676.5
152.5°	512.1	521.0	529.8	532.1	550.6	575.3	587.6	603.7	635.8	659.9	663.1
155°	530.4	537.0	543.6	545.3	559.4	578.2	587.6	600.4	625.9	645.1	647.2
157.5°	544.0	550.4	556.8	558.4	568.1	581.1	587.6	597.5	617.3	632.3	633.7
160°	553.2	558.2	563.2	564.4	572.2	582.5	587.6	596.1	613.1	625.9	626.7
162.5°	562.4	566.2	569.9	570.8	576.5	583.9	587.6	594.8	609.2	620.0	620.7
165°	572.4	575.8	579.1	579.9	582.5	585.9	587.6	592.7	603.0	610.8	611.6
167.5°	581.6	583.1	584.8	585.2	587.3	590.1	591.6	595.0	601.7	606.8	607.2
170°	587.6	589.2	590.8	591.2	591.3	591.5	591.6	595.0	601.7	606.8	606.8
172.5°	590.8	591.2	591.5	591.6	591.6	591.6	591.6	594.3	599.6	603.6	603.3
175°	595.2	595.2	595.2	595.2	594.0	592.3	591.6	593.2	596.6	599.1	599.1
177.5°	595.2	595.2	595.2	595.2	594.2	592.9	592.3	593.7	596.3	598.4	598.0
180°	595.2	595.2	595.2	595.2	595.2	595.2	595.2	595.2	595.2	595.2	595.2

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	796.4	796.4
2.5°	850.2	845.1
5°	1093.4	1098.6
7.5°	1472.4	1469.9
10°	1830.9	1854.0
12.5°	2092.2	2097.3
15°	2250.9	2261.2
17.5°	2312.3	2314.9
20°	2314.9	2309.8
22.5°	2286.7	2281.6
25°	2253.5	2250.9
27.5°	2222.7	2225.3
30°	2209.9	2217.7
32.5°	2209.9	2222.7
35°	2215.0	2227.8
37.5°	2212.5	2227.8
40°	2202.2	2220.2
42.5°	2174.0	2186.8
45°	2130.5	2145.9
47.5°	2074.2	2084.4
50°	2002.5	2012.7
52.5°	1912.9	1915.4
55°	1805.3	1815.6
57.5°	1690.1	1692.6
60°	1562.0	1569.8
62.5°	1426.4	1426.4
65°	1283.0	1288.1
67.5°	1134.4	1147.2
70°	983.3	985.9
72.5°	834.8	834.8
75°	681.2	683.7
77.5°	535.2	535.2
80°	396.9	399.5
82.5°	274.0	279.2
85°	171.6	171.6
87.5°	79.4	71.7
90°	15.2	15.2
92.5°	60.8	48.7
95°	211.9	175.4
97.5°	507.8	438.2
100°	731.6	648.6
102.5°	951.8	880.7
105°	1232.5	1194.3
107.5°	1416.4	1425.6
110°	1486.4	1526.3

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1492.7	1553.8
115°	1453.1	1537.8
117.5°	1369.3	1463.2
120°	1301.6	1392.8
122.5°	1235.8	1325.8
125°	1141.8	1224.7
127.5°	1057.3	1127.2
130°	1007.5	1072.1
132.5°	962.3	1020.2
135°	900.4	950.3
137.5°	850.8	891.6
140°	816.6	854.8
142.5°	788.4	821.2
145°	746.1	770.9
147.5°	713.6	734.2
150°	693.1	709.8
152.5°	675.7	688.3
155°	655.5	663.9
157.5°	639.6	645.5
160°	630.1	633.5
162.5°	623.9	627.1
165°	614.9	618.3
167.5°	608.5	610.0
170°	606.8	606.8
172.5°	602.0	600.8
175°	599.1	599.1
177.5°	596.6	595.2
180°	595.2	595.2

(END OF REPORT)