

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: P937007

Luminaire Tested: SQ4-FB-050U-125D-B50-1D-UNV-W2A-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937007
REPORT IS A COMBINATION OF REPORTS P933480 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-125D-B50-1D-UNV-W2A-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

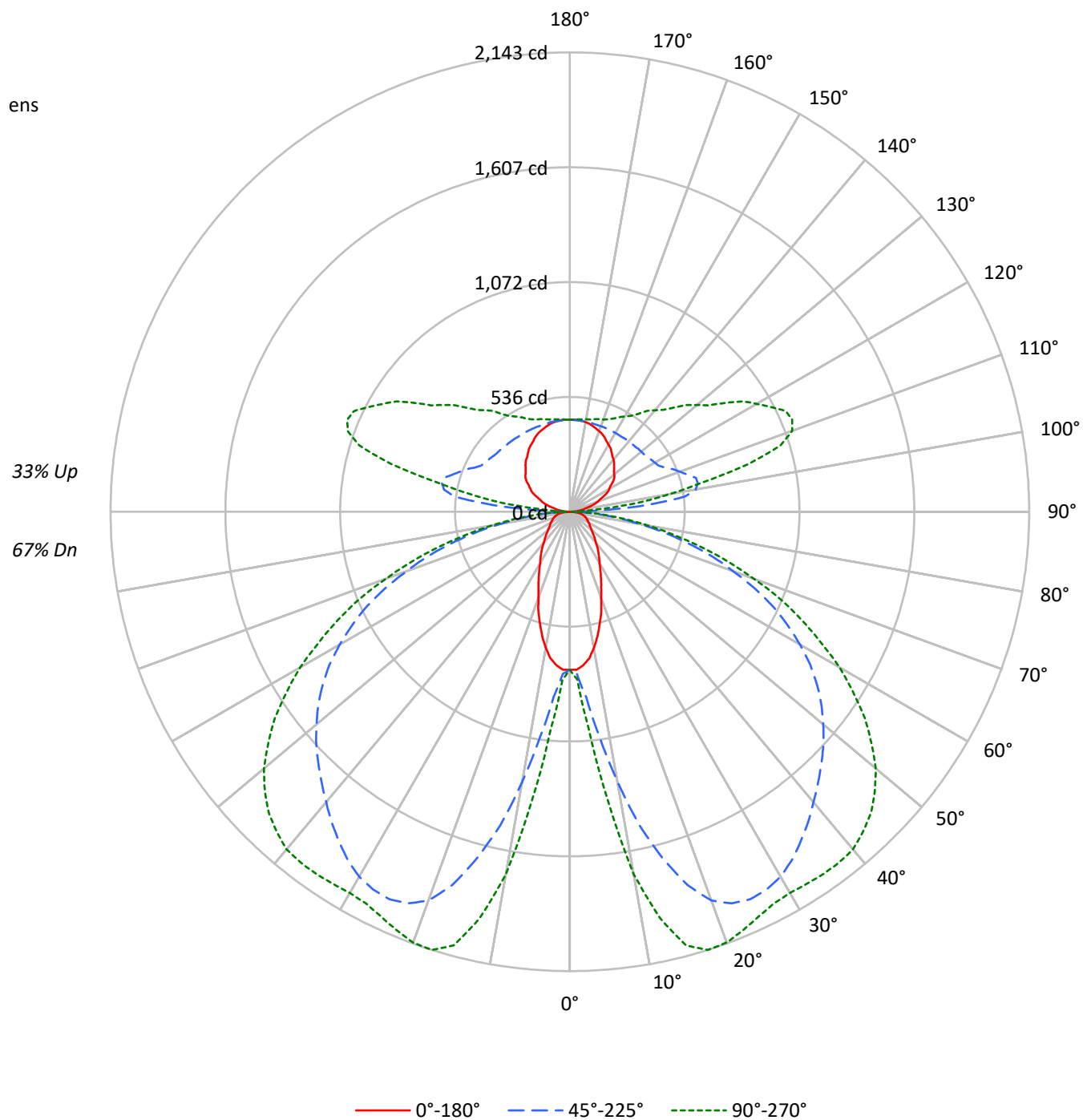
Lumens per Lamp: N/A
Luminaire Lumens: 8494.7 lumens
Efficiency: N/A
Efficacy: 101.1 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 84
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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72
1	101	96	92	88	95	91	87	83	80	78	75	71	69	67	62	61	59
2	91	83	76	71	86	78	72	67	70	65	61	61	58	55	54	51	49
3	83	72	64	58	77	68	61	55	61	55	50	54	49	45	47	44	41
4	75	64	55	48	70	60	52	46	53	47	42	47	42	38	42	38	34
5	69	56	47	41	64	53	45	39	47	41	36	42	37	32	37	33	29
6	63	50	41	35	59	47	39	34	42	36	31	38	32	28	33	29	25
7	58	45	36	30	55	43	35	29	38	32	27	34	29	24	30	26	22
8	54	41	32	27	51	39	31	26	35	28	24	31	26	22	27	23	20
9	50	37	29	24	47	35	28	23	32	25	21	28	23	19	25	21	17
10	47	34	26	21	44	32	25	20	29	23	19	26	21	17	23	19	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4561	4561	4561
5°	4454	5270	6131
10°	4039	7681	10164
15°	3432	10033	12274
20°	2792	11623	12508
25°	2329	12160	12254
30°	1963	12234	12231
35°	1735	12027	12547
40°	1511	11760	12874
45°	1367	11563	12924
50°	1252	11385	12710
55°	1199	11127	12147
60°	1225	10634	11257
65°	1273	9885	10035
70°	1354	8615	8478
75°	1494	7019	6616
80°	1621	4862	4458
85°	1413	2574	2282

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 12924 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.4	1.1
10°-20°	422.7	5.0
20°-30°	739.4	8.7
30°-40°	951.8	11.2
40°-50°	1063.1	12.5
50°-60°	1018.2	12.0
60°-70°	807.0	9.5
70°-80°	474.5	5.6
80°-90°	133.5	1.6
90°-100°	209.7	2.5
100°-110°	551.4	6.5
110°-120°	571.7	6.7
120°-130°	458.6	5.4
130°-140°	359.8	4.2
140°-150°	276.2	3.3
150°-160°	198.9	2.3
160°-170°	121.7	1.4
170°-180°	41.1	0.5
0°-30°	1257.5	14.8
0°-40°	2209.3	26.0
0°-60°	4290.6	50.5
0°-90°	5705.6	67.2
90°-120°	1332.8	15.7
90°-150°	2427.4	28.6
90°-180°	2789.0	32.8
0°-180°	8494.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	737	737	737	737	737	
5°	718	771	868	982	1017	66
15°	538	993	1674	2029	2094	150
25°	344	1126	1994	2082	2084	158
35°	232	1076	1878	1984	2063	145
45°	159	858	1660	1901	1987	123
55°	114	545	1408	1636	1681	104
65°	90	289	1046	1176	1192	89
75°	66	178	574	631	633	70
85°	24	54	142	156	159	25
90°	3	8	22	11	11	4
95°	28	108	361	186	127	31
105°	99	150	610	926	863	105
115°	176	214	488	974	1112	174
125°	246	275	444	750	885	218
135°	292	322	430	606	687	226
145°	339	361	425	517	557	213
155°	384	394	425	466	480	176
165°	414	419	425	442	447	117
175°	430	430	428	433	433	41
180°	430	430	430	430	430	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	737.3	737.3	737.3	737.3	737.3	737.3	737.3	737.3	737.3	737.3	737.3
2.5°	737.3	737.3	742.1	744.4	749.2	751.6	756.3	761.0	775.2	777.6	782.4
5°	718.3	727.9	758.7	770.6	803.7	848.7	867.7	898.5	962.6	981.5	993.4
7.5°	689.9	711.2	787.1	806.0	889.1	1007.6	1057.4	1123.8	1225.7	1275.5	1315.8
10°	644.8	689.9	825.0	870.1	1005.3	1185.4	1277.9	1370.4	1524.5	1593.2	1619.3
12.5°	595.1	668.6	865.4	927.0	1121.4	1384.6	1496.0	1597.9	1773.4	1865.9	1880.0
15°	538.2	637.7	903.3	993.4	1244.6	1550.5	1673.8	1799.4	1963.1	2029.4	2046.0
17.5°	488.4	614.0	938.9	1033.7	1339.5	1699.9	1825.5	1929.8	2062.6	2107.7	2119.5
20°	426.7	576.1	962.6	1085.9	1439.1	1809.0	1929.8	2010.4	2100.6	2129.0	2133.7
22.5°	381.7	535.8	976.8	1104.8	1505.5	1875.3	1977.3	2041.3	2102.9	2112.4	2114.8
25°	343.8	490.7	974.4	1126.1	1562.4	1915.6	1993.9	2041.3	2076.8	2081.6	2081.6
27.5°	308.2	440.9	964.9	1130.9	1605.1	1925.1	1986.7	2020.0	2036.5	2046.0	2046.0
30°	277.4	393.6	941.2	1121.4	1624.0	1915.6	1965.4	1982.0	1998.6	2012.9	2020.0
32.5°	253.7	348.5	905.6	1102.4	1626.4	1891.9	1927.5	1936.9	1960.7	1993.9	2005.7
35°	232.4	303.5	865.4	1076.3	1612.2	1854.0	1877.7	1887.1	1934.6	1984.4	2001.0
37.5°	211.0	270.3	813.2	1031.3	1590.8	1809.0	1825.5	1842.1	1915.6	1974.8	1993.9
40°	189.7	241.8	751.6	981.5	1557.6	1754.4	1768.6	1794.7	1891.9	1960.7	1979.6
42.5°	173.1	218.1	685.2	929.3	1514.9	1692.8	1714.1	1752.0	1863.4	1936.9	1958.3
45°	158.9	194.4	614.0	858.3	1460.4	1628.7	1659.5	1711.7	1830.3	1901.4	1920.4
47.5°	144.6	177.8	540.5	784.7	1401.2	1564.7	1605.1	1664.3	1785.2	1854.0	1870.6
50°	132.7	161.2	467.1	706.5	1337.1	1496.0	1543.4	1605.1	1728.4	1792.3	1813.6
52.5°	123.3	147.0	398.3	628.3	1263.6	1424.8	1479.4	1543.4	1659.5	1721.2	1735.5
55°	113.8	135.1	339.0	545.3	1187.8	1349.0	1408.3	1469.9	1583.7	1635.9	1645.3
57.5°	109.1	125.6	289.3	467.1	1107.2	1263.6	1330.0	1386.9	1493.7	1533.9	1543.4
60°	101.9	118.5	251.3	400.7	1019.5	1183.0	1240.0	1296.9	1386.9	1420.1	1427.2
62.5°	94.8	113.8	222.9	336.6	929.3	1088.2	1145.1	1197.3	1273.1	1296.9	1306.3
65°	90.1	109.1	201.6	289.3	836.9	988.6	1045.5	1090.5	1152.2	1175.9	1180.7
67.5°	85.4	104.3	184.9	248.9	744.4	889.1	931.8	974.4	1021.8	1045.5	1047.9
70°	78.3	99.6	170.7	220.5	649.6	775.2	810.8	855.8	893.8	905.6	912.8
72.5°	73.5	92.5	161.2	199.1	552.4	666.2	699.4	725.4	758.7	770.6	770.6
75°	66.4	82.9	151.8	177.8	452.8	545.3	573.8	599.8	625.9	630.6	623.5
77.5°	59.3	73.5	130.4	149.3	353.2	431.5	455.2	469.4	490.7	495.5	497.9
80°	49.8	64.0	101.9	116.2	256.0	317.7	334.3	346.1	365.1	365.1	369.9
82.5°	37.9	49.8	73.5	82.9	173.1	218.1	232.4	239.5	251.3	251.3	251.3
85°	23.7	30.8	47.4	54.5	104.3	132.7	142.2	144.6	154.1	156.4	156.4
87.5°	11.9	16.6	30.8	33.2	54.5	68.7	68.7	73.5	73.5	71.2	68.7
90°	2.9	5.2	7.6	8.1	12.7	18.9	21.9	19.5	14.6	10.9	10.9
92.5°	11.6	31.2	50.8	55.8	78.4	108.5	123.6	108.3	77.7	54.8	52.7
95°	27.7	63.6	99.6	108.5	192.8	305.1	361.3	322.4	244.6	186.2	179.6
97.5°	47.9	79.7	111.3	119.3	259.7	447.0	540.6	516.0	466.8	429.9	417.3
100°	63.5	92.3	121.0	128.2	284.0	491.8	595.7	597.5	601.1	603.8	588.9
102.5°	76.8	103.7	130.5	137.2	295.2	505.9	611.3	642.6	705.3	752.2	739.4
105°	99.4	122.1	144.8	150.5	303.5	507.5	609.5	679.8	820.1	925.5	918.6
107.5°	122.4	143.6	164.8	170.1	305.0	484.9	574.9	672.8	868.6	1015.5	1017.2
110°	138.0	157.1	176.2	181.0	302.7	464.9	546.0	655.5	874.5	1038.7	1045.9

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	153.4	171.6	189.8	194.4	302.8	447.5	519.8	631.9	855.9	1023.9	1035.0
115°	176.4	193.2	210.1	214.3	305.6	427.4	488.3	596.3	812.1	974.0	989.3
117.5°	199.2	214.5	229.8	233.6	311.3	414.9	466.6	564.0	758.9	905.0	922.0
120°	212.5	226.9	241.3	244.9	315.9	410.6	457.9	547.0	725.0	858.4	875.0
122.5°	225.6	240.0	254.5	258.2	322.5	408.3	451.3	531.4	691.8	812.0	828.3
125°	245.5	258.6	271.9	275.2	331.5	406.6	444.1	512.2	648.4	750.5	765.4
127.5°	261.6	275.0	288.3	291.7	340.4	405.5	438.0	496.5	613.4	701.1	713.7
130°	270.3	284.7	299.1	302.6	347.0	406.1	435.7	487.7	591.9	670.0	681.6
132.5°	279.3	293.6	308.0	311.6	352.3	406.6	433.7	480.4	573.5	643.3	653.8
135°	292.5	305.6	318.7	321.9	358.1	406.2	430.3	469.3	547.3	605.8	614.9
137.5°	306.1	319.1	331.9	335.2	366.7	408.6	429.6	462.6	528.6	578.1	585.4
140°	317.4	329.3	341.2	344.2	372.0	409.1	427.7	456.2	513.1	555.8	562.7
142.5°	326.0	337.0	348.0	350.8	376.4	410.6	427.7	452.7	502.7	540.2	546.2
145°	339.3	348.9	358.6	361.0	382.3	410.6	424.8	445.2	486.1	516.9	521.4
147.5°	352.6	361.9	371.4	373.7	390.7	413.4	424.8	440.8	473.1	497.3	501.0
150°	361.3	369.8	378.2	380.3	395.2	414.9	424.8	438.4	465.6	486.0	488.9
152.5°	370.1	376.6	383.0	384.6	398.0	415.8	424.8	436.4	459.6	477.0	479.2
155°	383.5	388.3	392.9	394.1	404.3	418.0	424.8	434.0	452.5	466.3	467.8
157.5°	393.3	397.9	402.6	403.7	410.7	420.1	424.8	432.0	446.4	457.1	458.1
160°	399.9	403.5	407.0	408.0	413.6	421.0	424.8	430.9	443.3	452.5	453.1
162.5°	406.6	409.3	412.0	412.6	416.7	422.1	424.8	430.0	440.4	448.1	448.7
165°	413.8	416.2	418.6	419.3	421.1	423.6	424.8	428.5	435.9	441.5	442.2
167.5°	420.4	421.5	422.7	423.0	424.6	426.7	427.7	430.1	435.0	438.6	438.9
170°	424.8	425.9	427.1	427.4	427.5	427.6	427.7	430.1	435.0	438.6	438.6
172.5°	427.1	427.4	427.6	427.7	427.7	427.7	427.7	429.5	433.4	436.3	436.1
175°	430.3	430.3	430.3	430.3	429.5	428.2	427.7	428.9	431.3	433.1	433.1
177.5°	430.3	430.3	430.3	430.3	429.6	428.7	428.2	429.2	431.1	432.5	432.3
180°	430.3	430.3	430.3	430.3	430.3	430.3	430.3	430.3	430.3	430.3	430.3

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	737.3	737.3
2.5°	787.1	782.4
5°	1012.4	1017.1
7.5°	1363.3	1360.8
10°	1695.1	1716.5
12.5°	1936.9	1941.7
15°	2083.9	2093.5
17.5°	2140.8	2143.2
20°	2143.2	2138.5
22.5°	2117.1	2112.4
25°	2086.3	2083.9
27.5°	2057.9	2060.2
30°	2046.0	2053.1
32.5°	2046.0	2057.9
35°	2050.8	2062.6
37.5°	2048.4	2062.6
40°	2038.9	2055.5
42.5°	2012.9	2024.7
45°	1972.5	1986.7
47.5°	1920.4	1929.8
50°	1854.0	1863.4
52.5°	1771.0	1773.4
55°	1671.4	1680.9
57.5°	1564.7	1567.1
60°	1446.2	1453.3
62.5°	1320.6	1320.6
65°	1187.8	1192.5
67.5°	1050.3	1062.1
70°	910.4	912.8
72.5°	772.9	772.9
75°	630.6	633.0
77.5°	495.5	495.5
80°	367.4	369.9
82.5°	253.7	258.4
85°	158.9	158.9
87.5°	73.5	66.4
90°	10.9	10.9
92.5°	43.9	35.2
95°	153.2	126.7
97.5°	367.1	316.8
100°	528.9	469.0
102.5°	688.1	636.7
105°	891.0	863.4
107.5°	1023.9	1030.6
110°	1074.6	1103.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1079.1	1123.2
115°	1050.5	1111.7
117.5°	989.9	1057.8
120°	940.9	1006.9
122.5°	893.4	958.4
125°	825.4	885.3
127.5°	764.3	814.9
130°	728.3	775.0
132.5°	695.6	737.5
135°	650.9	687.0
137.5°	615.0	644.6
140°	590.3	617.9
142.5°	569.9	593.7
145°	539.4	557.3
147.5°	515.8	530.7
150°	501.1	513.1
152.5°	488.4	497.5
155°	473.9	479.9
157.5°	462.4	466.6
160°	455.5	457.9
162.5°	451.0	453.4
165°	444.6	447.0
167.5°	439.9	440.9
170°	438.6	438.6
172.5°	435.2	434.3
175°	433.1	433.1
177.5°	431.3	430.3
180°	430.3	430.3

(END OF REPORT)