

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: P937807

Luminaire Tested: SQ4-FB-100U-125D-B50-1D-UNV-W2A-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937807
REPORT IS A COMBINATION OF REPORTS P933576 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-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

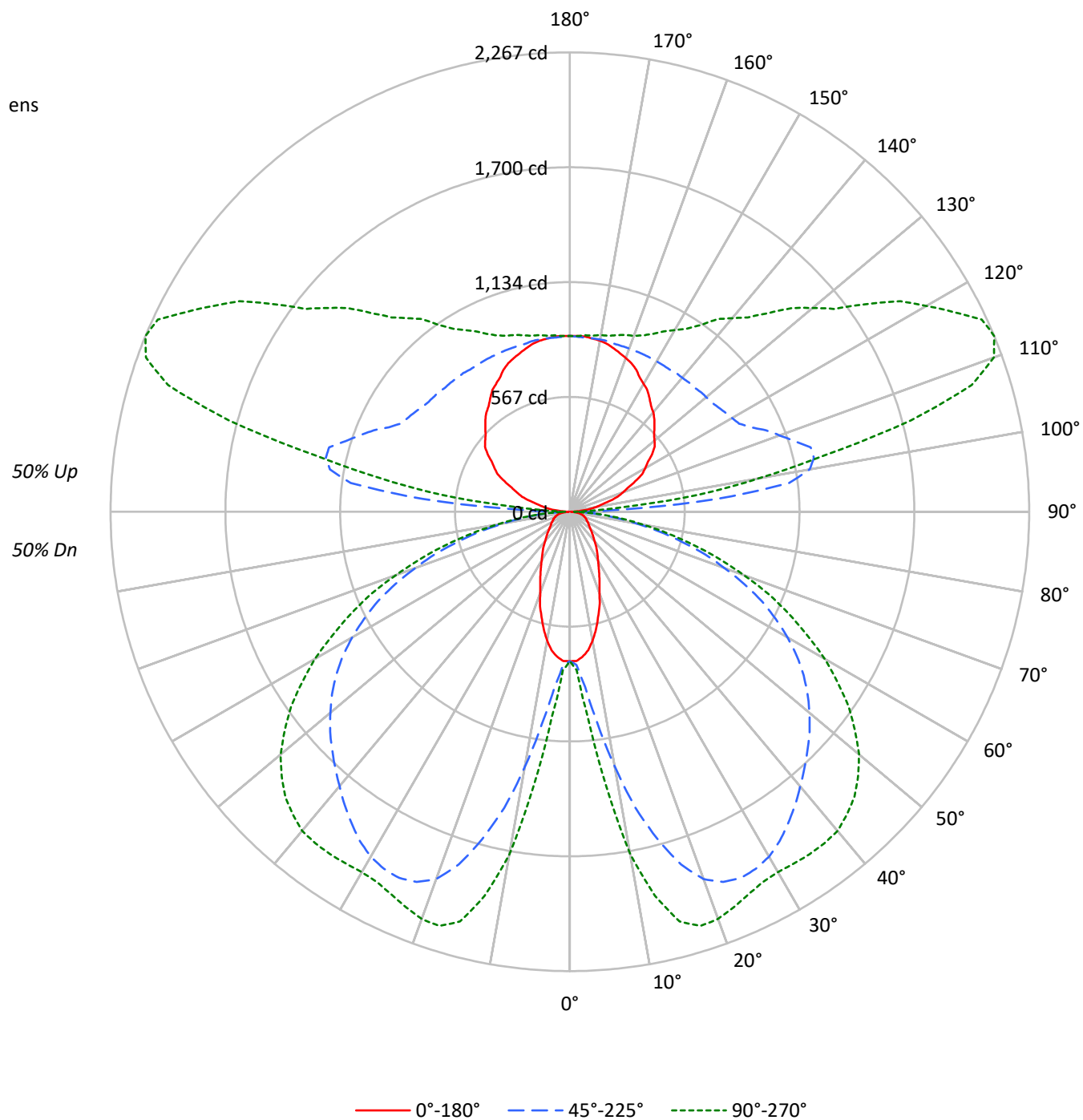
Lumens per Lamp: N/A
Luminaire Lumens: 11335.9 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 103.2
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

TEST NUMBER: P937807

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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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	47
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38
3	80	70	62	56	73	65	58	53	55	50	45	46	42	39	37	34	32
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27
5	67	54	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23
6	61	49	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20
7	56	44	35	30	52	40	33	28	34	29	24	29	24	21	24	20	17
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	22	18	15
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	20	16	14
10	45	33	25	20	41	30	24	19	26	21	17	22	18	15	18	15	12

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	0.8
10°-20°	422.7	3.7
20°-30°	739.4	6.5
30°-40°	951.8	8.4
40°-50°	1063.1	9.4
50°-60°	1018.2	9.0
60°-70°	807.0	7.1
70°-80°	474.5	4.2
80°-90°	135.1	1.2
90°-100°	423.2	3.7
100°-110°	1112.7	9.8
110°-120°	1153.8	10.2
120°-130°	925.5	8.2
130°-140°	726.2	6.4
140°-150°	557.4	4.9
150°-160°	401.4	3.5
160°-170°	245.6	2.2
170°-180°	83.0	0.7
0°-30°	1257.5	11.1
0°-40°	2209.3	19.5
0°-60°	4290.6	37.8
0°-90°	5707.2	50.3
90°-120°	2689.7	23.7
90°-150°	4898.7	43.2
90°-180°	5629.0	49.7
0°-180°	11335.9	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°	6	16	44	22	22	6
95°	56	219	729	376	256	62
105°	200	304	1230	1868	1742	212
115°	356	432	985	1966	2244	352
125°	495	555	896	1515	1787	440
135°	590	650	868	1223	1386	457
145°	685	728	857	1043	1125	429
155°	774	795	857	941	968	356
165°	835	846	857	891	902	236
175°	868	868	863	874	874	82
180°	868	868	868	868	868	

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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°	5.8	10.5	15.1	16.3	25.7	38.1	44.3	39.3	29.5	22.1	22.1
92.5°	23.4	63.0	102.6	112.5	158.1	218.9	249.4	218.6	156.9	110.7	106.3
95°	55.9	128.4	201.0	219.1	389.1	615.7	729.0	650.5	493.5	375.8	362.5
97.5°	96.8	160.7	224.7	240.7	524.1	902.0	1090.9	1041.3	942.1	867.7	842.3
100°	128.2	186.2	244.2	258.7	573.2	992.5	1202.2	1205.8	1213.1	1218.5	1188.2
102.5°	155.0	209.2	263.3	276.8	595.8	1021.0	1233.6	1296.9	1423.2	1518.0	1492.2
105°	200.4	246.3	292.2	303.6	612.5	1024.3	1230.2	1371.9	1655.1	1867.6	1853.7
107.5°	247.0	289.8	332.6	343.2	615.6	978.6	1160.2	1357.8	1753.0	2049.5	2052.8
110°	278.5	317.1	355.8	365.4	610.9	938.3	1101.9	1322.8	1764.7	2096.1	2110.6

TEST NUMBER: P937807

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	309.4	346.2	383.0	392.2	611.1	903.0	1048.9	1275.0	1727.2	2066.4	2088.6
115°	356.0	389.9	423.8	432.3	616.7	862.5	985.4	1203.2	1638.9	1965.6	1996.5
117.5°	402.1	432.9	463.7	471.4	628.1	837.1	941.7	1138.3	1531.4	1826.3	1860.5
120°	428.9	457.9	486.9	494.2	637.5	828.6	924.2	1103.8	1463.0	1732.5	1765.7
122.5°	455.1	484.4	513.7	521.0	650.9	824.2	910.8	1072.6	1396.0	1638.6	1671.5
125°	495.3	522.0	548.7	555.4	669.0	820.5	896.3	1033.7	1308.4	1514.6	1544.8
127.5°	528.0	554.9	581.9	588.6	687.1	818.4	884.0	1002.0	1237.9	1414.9	1440.4
130°	545.5	574.5	603.5	610.7	700.3	819.7	879.4	984.3	1194.4	1352.0	1375.5
132.5°	563.5	592.5	621.5	628.8	711.0	820.5	875.3	969.3	1157.3	1298.4	1319.5
135°	590.3	616.7	643.2	649.8	722.6	819.7	868.2	947.0	1104.5	1222.6	1240.8
137.5°	617.7	643.8	670.1	676.6	740.1	824.8	867.1	933.7	1066.8	1166.7	1181.5
140°	640.4	664.5	688.6	694.6	750.7	825.6	863.0	920.6	1035.5	1121.7	1135.7
142.5°	657.9	680.2	702.5	708.1	759.7	828.6	863.0	913.5	1014.5	1090.3	1102.2
145°	684.7	704.1	723.6	728.4	771.4	828.6	857.2	898.5	981.2	1043.1	1052.2
147.5°	711.5	730.4	749.3	754.0	788.4	834.2	857.2	889.7	954.7	1003.5	1011.0
150°	729.0	746.1	763.2	767.5	797.4	837.2	857.2	884.7	939.5	980.7	986.8
152.5°	747.1	760.1	773.0	776.2	803.2	839.2	857.2	880.7	927.6	962.7	967.3
155°	773.9	783.4	793.0	795.4	816.0	843.5	857.2	875.9	913.2	941.1	944.2
157.5°	793.7	803.1	812.3	814.6	828.8	847.8	857.2	871.7	900.7	922.5	924.7
160°	807.1	814.4	821.6	823.4	834.7	849.8	857.2	869.6	894.5	913.2	914.4
162.5°	820.5	825.9	831.4	832.8	840.9	851.8	857.2	867.7	888.7	904.4	905.5
165°	835.1	839.9	844.9	846.1	849.8	854.8	857.2	864.7	879.7	891.0	892.3
167.5°	848.4	850.8	853.1	853.7	856.8	861.0	863.0	868.0	877.8	885.2	885.7
170°	857.2	859.6	861.9	862.5	862.6	862.9	863.0	868.0	877.8	885.2	885.2
172.5°	861.9	862.4	862.9	863.0	863.0	863.0	863.0	866.9	874.7	880.5	880.0
175°	868.2	868.2	868.2	868.2	866.5	864.1	863.0	865.4	870.4	874.1	874.1
177.5°	868.2	868.2	868.2	868.2	866.9	865.2	864.2	866.2	870.0	872.9	872.4
180°	868.2	868.2	868.2	868.2	868.2	868.2	868.2	868.2	868.2	868.2	868.2

TEST NUMBER: P937807

CATALOG NUMBER: SQ4-FB-100U-125D-B50-1D-UNV-W2A-W-6

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°	22.1	22.1
92.5°	88.6	71.1
95°	309.2	255.8
97.5°	740.8	639.2
100°	1067.3	946.3
102.5°	1388.5	1284.9
105°	1798.0	1742.4
107.5°	2066.4	2079.8
110°	2168.7	2226.7

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2177.7	2266.8
115°	2120.0	2243.6
117.5°	1997.5	2134.6
120°	1898.9	2032.0
122.5°	1802.8	1934.1
125°	1665.7	1786.6
127.5°	1542.5	1644.5
130°	1469.8	1564.1
132.5°	1403.9	1488.3
135°	1313.6	1386.3
137.5°	1241.1	1300.7
140°	1191.4	1247.1
142.5°	1150.2	1198.1
145°	1088.5	1124.7
147.5°	1041.0	1071.1
150°	1011.1	1035.5
152.5°	985.7	1004.0
155°	956.3	968.5
157.5°	933.2	941.7
160°	919.3	924.2
162.5°	910.2	914.9
165°	897.2	902.1
167.5°	887.8	889.8
170°	885.2	885.2
172.5°	878.2	876.5
175°	874.1	874.1
177.5°	870.3	868.2
180°	868.2	868.2

(END OF REPORT)