

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: P937799

Luminaire Tested: SQ4-FB-100U-125D-B35-1D-UNV-W2A-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937799
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-B35-1D-UNV-W2A-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

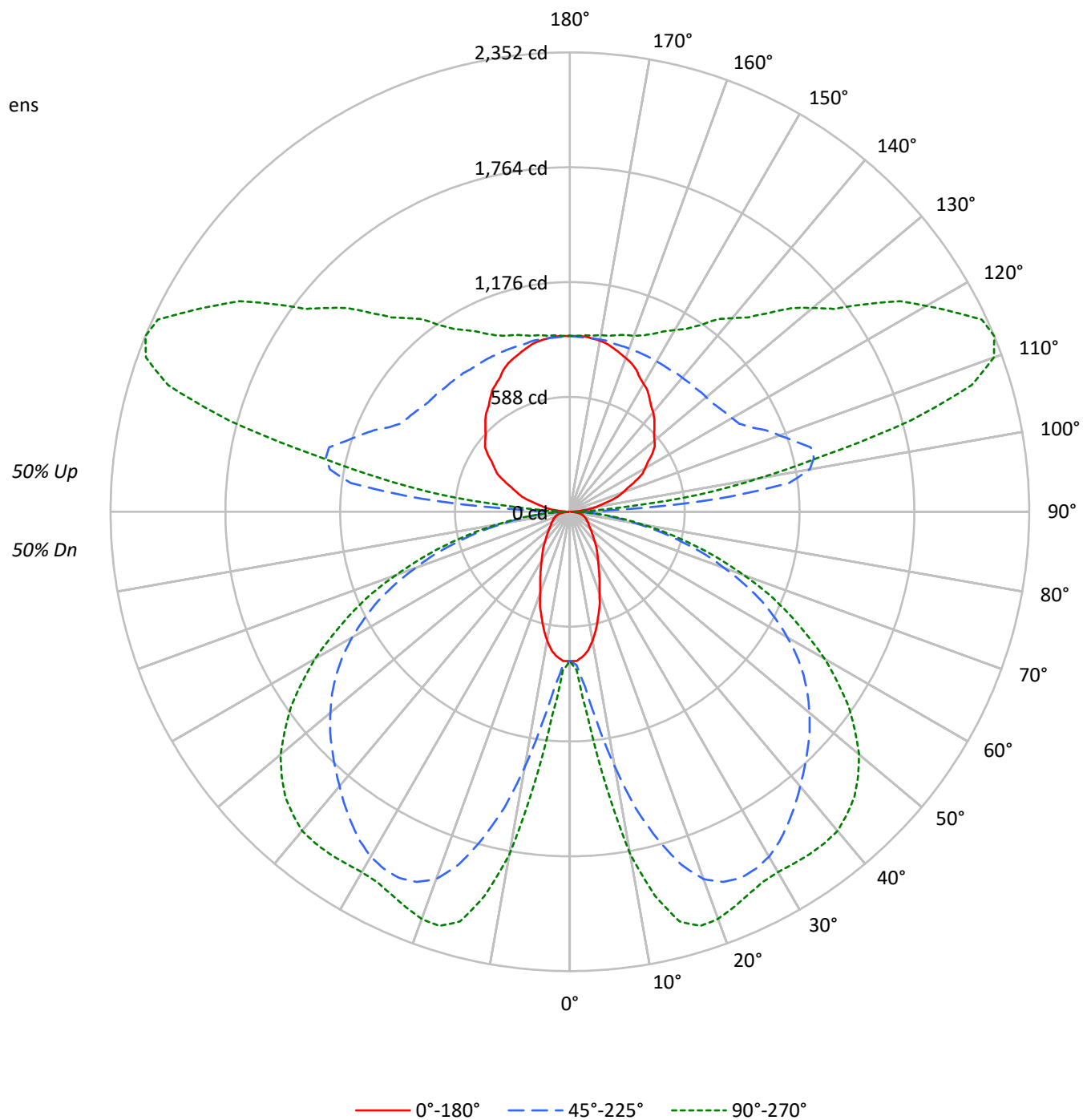
Lumens per Lamp: N/A
Luminaire Lumens: 11760.8 lumens
Efficiency: N/A
Efficacy: 114.0 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: General Diffuse

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

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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°	4732	4732	4732
5°	4621	5468	6361
10°	4190	7969	10545
15°	3560	10408	12733
20°	2897	12058	12977
25°	2416	12616	12713
30°	2036	12692	12689
35°	1800	12478	13017
40°	1567	12201	13356
45°	1418	11996	13409
50°	1299	11812	13187
55°	1243	11544	12602
60°	1271	11032	11679
65°	1321	10256	10411
70°	1404	8938	8796
75°	1550	7282	6863
80°	1679	5043	4625
85°	1467	2671	2367

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 13409 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.0	0.8
10°-20°	438.5	3.7
20°-30°	767.1	6.5
30°-40°	987.5	8.4
40°-50°	1103.0	9.4
50°-60°	1056.4	9.0
60°-70°	837.2	7.1
70°-80°	492.3	4.2
80°-90°	140.2	1.2
90°-100°	439.1	3.7
100°-110°	1154.4	9.8
110°-120°	1197.0	10.2
120°-130°	960.2	8.2
130°-140°	753.4	6.4
140°-150°	578.2	4.9
150°-160°	416.4	3.5
160°-170°	254.8	2.2
170°-180°	86.1	0.7
0°-30°	1304.6	11.1
0°-40°	2292.1	19.5
0°-60°	4451.4	37.8
0°-90°	5921.1	50.3
90°-120°	2790.5	23.7
90°-150°	5082.3	43.2
90°-180°	5840.0	49.7
0°-180°	11760.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	765	765	765	765	765	
5°	745	799	900	1018	1055	69
15°	558	1031	1736	2105	2172	155
25°	357	1168	2069	2160	2162	164
35°	241	1117	1948	2059	2140	151
45°	165	890	1722	1973	2061	127
55°	118	566	1461	1697	1744	108
65°	94	300	1085	1220	1237	93
75°	69	184	595	654	657	72
85°	25	57	148	162	165	26
90°	6	17	46	23	23	7
95°	58	227	756	390	265	64
105°	208	315	1276	1938	1808	220
115°	369	449	1022	2039	2328	365
125°	514	576	930	1571	1854	456
135°	612	674	901	1268	1438	474
145°	710	756	889	1082	1167	445
155°	803	825	889	976	1005	369
165°	866	878	889	924	936	244
175°	901	901	895	907	907	86
180°	901	901	901	901	901	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	764.9	764.9	764.9	764.9	764.9	764.9	764.9	764.9	764.9	764.9	764.9
2.5°	764.9	764.9	769.9	772.3	777.2	779.8	784.6	789.5	804.3	806.8	811.7
5°	745.3	755.1	787.1	799.4	833.8	880.5	900.2	932.2	998.7	1018.3	1030.6
7.5°	715.8	737.9	816.6	836.2	922.4	1045.4	1097.0	1165.9	1271.6	1323.3	1365.1
10°	669.0	715.8	855.9	902.7	1042.9	1229.9	1325.8	1421.7	1581.6	1652.9	1680.0
12.5°	617.3	693.6	897.8	961.7	1163.4	1436.4	1552.0	1657.8	1839.8	1935.8	1950.5
15°	558.3	661.6	937.1	1030.6	1291.3	1608.6	1736.5	1866.9	2036.6	2105.4	2122.7
17.5°	506.7	637.0	974.0	1072.4	1389.7	1763.6	1893.9	2002.1	2139.9	2186.6	2199.0
20°	442.7	597.7	998.7	1126.6	1493.0	1876.8	2002.1	2085.8	2179.3	2208.7	2213.7
22.5°	396.0	555.9	1013.4	1146.2	1561.9	1945.6	2051.4	2117.7	2181.7	2191.6	2194.0
25°	356.7	509.1	1011.0	1168.3	1620.9	1987.4	2068.6	2117.7	2154.7	2159.6	2159.6
27.5°	319.8	457.5	1001.1	1173.3	1665.2	1997.2	2061.2	2095.7	2112.8	2122.7	2122.7
30°	287.8	408.3	976.5	1163.4	1684.9	1987.4	2039.1	2056.3	2073.5	2088.3	2095.7
32.5°	263.2	361.5	939.5	1143.7	1687.3	1962.8	1999.7	2009.5	2034.1	2068.6	2080.8
35°	241.1	314.8	897.8	1116.7	1672.6	1923.5	1948.1	1957.9	2007.1	2058.7	2076.0
37.5°	218.9	280.4	843.7	1070.0	1650.4	1876.8	1893.9	1911.2	1987.4	2048.9	2068.6
40°	196.8	250.9	779.8	1018.3	1616.0	1820.2	1834.9	1861.9	1962.8	2034.1	2053.8
42.5°	179.6	226.3	710.9	964.2	1571.7	1756.2	1778.3	1817.7	1933.3	2009.5	2031.7
45°	164.8	201.6	637.0	890.4	1515.1	1689.7	1721.7	1775.9	1898.9	1972.7	1992.4
47.5°	150.0	184.5	560.8	814.2	1453.7	1623.4	1665.2	1726.7	1852.1	1923.5	1940.7
50°	137.7	167.2	484.6	733.0	1387.2	1552.0	1601.3	1665.2	1793.1	1859.5	1881.6
52.5°	127.9	152.5	413.2	651.8	1311.0	1478.2	1534.8	1601.3	1721.7	1785.7	1800.5
55°	118.0	140.2	351.7	565.7	1232.3	1399.5	1461.1	1525.0	1643.0	1697.2	1707.0
57.5°	113.2	130.3	300.1	484.6	1148.7	1311.0	1379.9	1438.9	1549.6	1591.4	1601.3
60°	105.7	123.0	260.8	415.7	1057.7	1227.3	1286.4	1345.5	1438.9	1473.4	1480.7
62.5°	98.4	118.0	231.2	349.2	964.2	1129.0	1188.0	1242.2	1320.8	1345.5	1355.2
65°	93.5	113.2	209.1	300.1	868.2	1025.7	1084.7	1131.4	1195.4	1220.0	1224.9
67.5°	88.6	108.2	191.9	258.2	772.3	922.4	966.7	1011.0	1060.1	1084.7	1087.2
70°	81.2	103.3	177.1	228.8	673.9	804.3	841.2	887.9	927.3	939.5	947.0
72.5°	76.3	95.9	167.2	206.6	573.1	691.2	725.6	752.6	787.1	799.4	799.4
75°	68.9	86.0	157.5	184.5	469.8	565.7	595.3	622.3	649.3	654.3	646.9
77.5°	61.5	76.3	135.3	154.9	366.5	447.7	472.3	487.0	509.1	514.1	516.6
80°	51.6	66.4	105.7	120.5	265.6	329.6	346.8	359.1	378.8	378.8	383.7
82.5°	39.3	51.6	76.3	86.0	179.6	226.3	241.1	248.5	260.8	260.8	260.8
85°	24.6	32.0	49.2	56.6	108.2	137.7	147.6	150.0	159.9	162.3	162.3
87.5°	12.3	17.2	32.0	34.4	56.6	71.3	71.3	76.3	76.3	73.8	71.3
90°	6.0	10.9	15.7	17.0	26.6	39.5	45.9	40.8	30.6	23.0	23.0
92.5°	24.2	65.3	106.4	116.7	164.1	227.1	258.7	226.7	162.8	114.8	110.3
95°	58.0	133.2	208.5	227.3	403.7	638.8	756.3	674.9	512.0	389.9	376.1
97.5°	100.4	166.8	233.1	249.7	543.7	935.8	1131.8	1080.3	977.4	900.2	873.8
100°	133.0	193.2	253.4	268.4	594.7	1029.7	1247.2	1251.0	1258.5	1264.2	1232.8
102.5°	160.9	217.1	273.2	287.2	618.1	1059.3	1279.9	1345.5	1476.6	1574.9	1548.1
105°	207.9	255.5	303.1	315.0	635.5	1062.7	1276.3	1423.3	1717.2	1937.6	1923.2
107.5°	256.3	300.7	345.1	356.1	638.7	1015.3	1203.7	1408.7	1818.7	2126.3	2129.8
110°	289.0	329.0	369.1	379.1	633.8	973.5	1143.2	1372.4	1830.8	2174.6	2189.6

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	321.0	359.2	397.4	406.9	634.0	936.8	1088.2	1322.8	1792.0	2143.8	2166.9
115°	369.4	404.6	439.7	448.6	639.8	894.8	1022.3	1248.3	1700.3	2039.3	2071.3
117.5°	417.2	449.1	481.1	489.1	651.7	868.5	976.9	1180.9	1588.8	1894.7	1930.2
120°	445.0	475.1	505.1	512.7	661.4	859.7	958.8	1145.2	1517.8	1797.4	1831.9
122.5°	472.2	502.5	532.9	540.5	675.3	855.0	945.0	1112.8	1448.4	1700.0	1734.1
125°	513.9	541.6	569.3	576.2	694.1	851.3	929.9	1072.4	1357.5	1571.3	1602.7
127.5°	547.8	575.7	603.7	610.7	712.8	849.0	917.2	1039.5	1284.3	1467.9	1494.4
130°	565.9	596.0	626.1	633.6	726.6	850.4	912.3	1021.2	1239.2	1402.6	1427.0
132.5°	584.6	614.7	644.8	652.3	737.6	851.3	908.0	1005.6	1200.7	1347.0	1368.9
135°	612.4	639.8	667.3	674.1	749.7	850.4	900.8	982.5	1145.8	1268.4	1287.3
137.5°	640.8	667.9	695.2	701.9	767.8	855.7	899.6	968.7	1106.8	1210.4	1225.8
140°	664.4	689.4	714.4	720.6	778.9	856.5	895.4	955.0	1074.3	1163.8	1178.2
142.5°	682.6	705.7	728.8	734.6	788.2	859.6	895.4	947.8	1052.5	1131.1	1143.5
145°	710.4	730.5	750.7	755.7	800.3	859.7	889.3	932.2	1017.9	1082.2	1091.6
147.5°	738.2	757.8	777.3	782.3	817.9	865.5	889.3	923.1	990.5	1041.1	1048.8
150°	756.3	774.0	791.8	796.2	827.2	868.6	889.3	917.8	974.7	1017.4	1023.7
152.5°	775.1	788.6	801.9	805.3	833.3	870.6	889.3	913.7	962.3	998.7	1003.5
155°	802.9	812.8	822.7	825.2	846.6	875.1	889.3	908.7	947.4	976.4	979.6
157.5°	823.5	833.1	842.7	845.2	859.9	879.6	889.3	904.4	934.5	957.1	959.3
160°	837.3	844.9	852.4	854.3	866.0	881.6	889.3	902.2	928.0	947.4	948.7
162.5°	851.3	856.9	862.5	864.0	872.4	883.7	889.3	900.2	922.0	938.3	939.4
165°	866.4	871.4	876.6	877.8	881.7	886.8	889.3	897.1	912.7	924.4	925.7
167.5°	880.2	882.7	885.1	885.7	888.9	893.2	895.4	900.5	910.7	918.3	918.9
170°	889.3	891.8	894.2	894.8	895.0	895.3	895.4	900.5	910.7	918.3	918.3
172.5°	894.2	894.7	895.3	895.4	895.4	895.4	895.4	899.4	907.5	913.5	913.0
175°	900.8	900.8	900.8	900.8	898.9	896.5	895.4	897.9	903.0	906.9	906.9
177.5°	900.8	900.8	900.8	900.8	899.4	897.6	896.6	898.7	902.6	905.6	905.0
180°	900.8	900.8	900.8	900.8	900.8	900.8	900.8	900.8	900.8	900.8	900.8

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	764.9	764.9
2.5°	816.6	811.7
5°	1050.3	1055.2
7.5°	1414.4	1411.8
10°	1758.6	1780.8
12.5°	2009.5	2014.5
15°	2162.0	2171.9
17.5°	2221.0	2223.6
20°	2223.6	2218.6
22.5°	2196.4	2191.6
25°	2164.5	2162.0
27.5°	2135.0	2137.4
30°	2122.7	2130.1
32.5°	2122.7	2135.0
35°	2127.6	2139.9
37.5°	2125.1	2139.9
40°	2115.3	2132.5
42.5°	2088.3	2100.6
45°	2046.4	2061.2
47.5°	1992.4	2002.1
50°	1923.5	1933.3
52.5°	1837.3	1839.8
55°	1734.0	1743.9
57.5°	1623.4	1625.8
60°	1500.4	1507.8
62.5°	1370.1	1370.1
65°	1232.3	1237.2
67.5°	1089.6	1101.9
70°	944.5	947.0
72.5°	801.8	801.8
75°	654.3	656.7
77.5°	514.1	514.1
80°	381.2	383.7
82.5°	263.2	268.1
85°	164.8	164.8
87.5°	76.3	68.9
90°	23.0	23.0
92.5°	92.0	73.7
95°	320.7	265.4
97.5°	768.5	663.2
100°	1107.3	981.8
102.5°	1440.5	1333.1
105°	1865.4	1807.7
107.5°	2143.8	2157.8
110°	2249.9	2310.1

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2259.3	2351.8
115°	2199.4	2327.6
117.5°	2072.4	2214.6
120°	1970.1	2108.2
122.5°	1870.4	2006.6
125°	1728.1	1853.6
127.5°	1600.3	1706.1
130°	1524.9	1622.7
132.5°	1456.5	1544.1
135°	1362.8	1438.3
137.5°	1287.6	1349.4
140°	1236.1	1293.8
142.5°	1193.3	1243.0
145°	1129.3	1166.9
147.5°	1080.0	1111.2
150°	1049.0	1074.3
152.5°	1022.6	1041.7
155°	992.2	1004.8
157.5°	968.1	976.9
160°	953.8	958.8
162.5°	944.3	949.1
165°	930.8	935.9
167.5°	921.0	923.2
170°	918.3	918.3
172.5°	911.2	909.3
175°	906.9	906.9
177.5°	902.9	900.8
180°	900.8	900.8

(END OF REPORT)