

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:

Luminaire Tested: SQ4-FA-0U-100D-935-1D-UNV-STD-W-8

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2301-892-4)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FA-0U-100D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

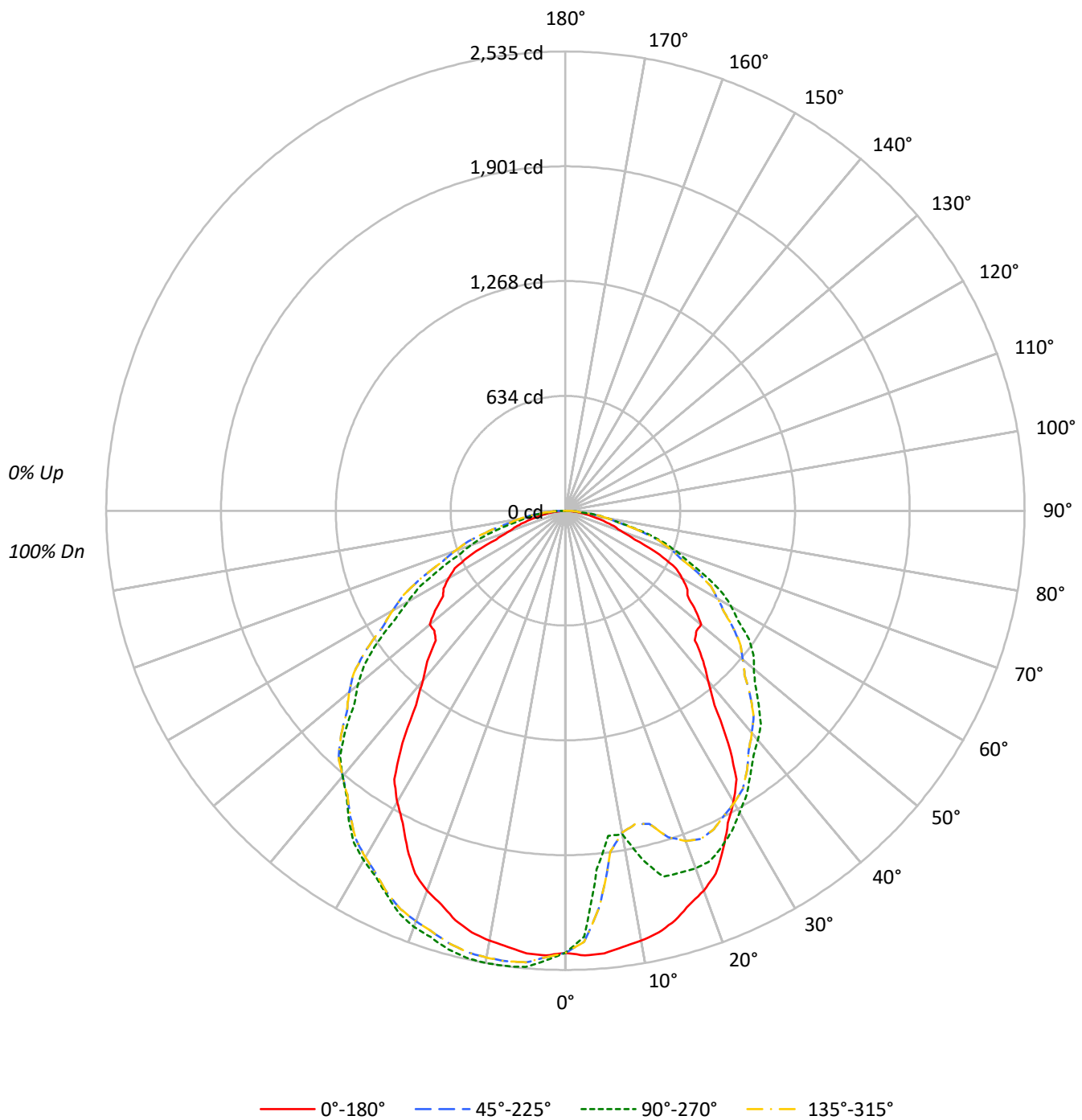
Lumens per Lamp: N/A
Luminaire Lumens: 6323.8 lumens
Efficiency: N/A
Efficacy: 88.2 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 71.7
Input Voltage (V): 120
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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	105	100	97	106	102	98	95	98	95	92		94	92	89		91
2	99	91	85	79	97	90	83	78	86	81	76		83	78	75		80
3	91	81	73	66	88	79	72	66	76	70	64		73	68	63		71
4	83	71	63	56	81	70	62	56	68	61	55		65	59	54		63
5	77	64	55	49	75	63	54	48	61	53	48		59	52	47		57
6	71	58	49	42	69	57	48	42	55	47	42		53	47	41		52
7	66	52	44	38	64	51	43	37	50	43	37		48	42	37		47
8	61	48	39	33	60	47	39	33	46	38	33		44	38	33		43
9	57	44	36	30	56	43	35	30	42	35	30		41	34	30		40
10	54	40	33	27	52	40	32	27	39	32	27		38	32	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	11257	11257	11257	11257
5°	11354	9205	11354	11706
10°	11290	8489	11290	11875
15°	11180	9990	11180	11963
20°	10960	10314	10960	12002
25°	10494	10412	10494	11892
30°	9888	10244	9888	11867
35°	8828	10024	8828	11741
40°	7368	9954	7368	11525
45°	6597	9835	6597	11206
50°	7025	9742	7025	10737
55°	6629	9953	6629	10194
60°	6859	9756	6859	9266
65°	6250	9324	6250	8342
70°	4359	8751	4359	7443
75°	3868	7735	3868	6461
80°	3191	6012	3191	5520
85°	1953	4155	1953	4885

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 11447 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	220.0	3.5
10°-20°	625.2	9.9
20°-30°	966.2	15.3
30°-40°	1154.3	18.3
40°-50°	1161.8	18.4
50°-60°	1008.7	16.0
60°-70°	714.0	11.3
70°-80°	377.7	6.0
80°-90°	96.1	1.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1811.3	28.6
0°-40°	2965.6	46.9
0°-60°	5136.1	81.2
0°-90°	6323.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6323.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2440	2440	2440	2440	2440	
5°	2452	1988	2452	2528	2452	232
15°	2341	2092	2341	2505	2341	658
25°	2062	2046	2062	2336	2062	946
35°	1568	1780	1568	2085	1568	968
45°	1011	1508	1011	1718	1011	814
55°	824	1238	824	1268	824	758
65°	573	854	573	764	573	545
75°	217	434	217	362	217	229
85°	37	78	37	92	37	53
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	2440.3	2440.3	2440.3	2440.3	2440.3	2440.3	2440.3	2440.3	2440.3	2440.3	2440.3
2.5°	2456.9	2438.5	2431.1	2416.3	2388.6	2373.8	2384.9	2366.4	2373.8	2353.5	2373.8
5°	2451.9	2410.3	2375.7	2318.0	2234.8	2137.9	2114.8	2054.8	2017.8	1987.8	2017.8
7.5°	2428.8	2357.7	2251.9	2075.5	1933.8	1864.5	1847.4	1830.4	1825.7	1810.5	1825.7
10°	2410.3	2313.3	2117.1	1918.5	1819.3	1786.9	1793.9	1800.8	1814.7	1812.3	1814.7
12.5°	2384.4	2235.8	1976.7	1839.1	1773.1	1772.2	1823.4	1915.3	1979.0	1974.9	1979.0
15°	2341.0	2087.1	1844.7	1756.9	1736.2	1842.4	2029.4	2073.2	2089.4	2091.7	2089.4
17.5°	2278.7	1941.6	1760.2	1702.5	1773.1	2004.0	2060.8	2080.6	2094.5	2095.4	2094.5
20°	2232.5	1867.8	1717.7	1678.4	1865.4	2013.2	2047.8	2073.2	2096.3	2100.9	2096.3
22.5°	2169.7	1816.0	1673.4	1661.8	1917.2	2004.0	2034.9	2073.2	2092.6	2091.7	2092.6
25°	2061.7	1752.3	1618.4	1643.8	1923.2	1955.5	2015.5	2040.9	2043.2	2045.5	2043.2
27.5°	1943.0	1696.4	1554.2	1655.8	1885.8	1908.9	1973.5	1986.4	1995.2	1991.5	1995.2
30°	1856.2	1657.7	1509.9	1657.7	1856.2	1870.1	1934.7	1943.9	1932.4	1923.2	1932.4
32.5°	1758.3	1609.6	1467.4	1644.7	1811.9	1831.3	1883.0	1879.3	1867.8	1860.4	1867.8
35°	1567.6	1528.4	1389.8	1602.3	1736.2	1761.6	1791.6	1789.3	1786.9	1780.0	1786.9
37.5°	1352.9	1432.3	1313.2	1536.2	1663.2	1661.4	1706.1	1715.8	1713.5	1704.8	1713.5
40°	1223.6	1352.9	1265.2	1484.5	1611.5	1593.0	1650.7	1662.3	1660.0	1653.0	1660.0
42.5°	1127.6	1247.6	1209.8	1421.7	1548.7	1526.5	1597.2	1608.7	1602.7	1597.6	1602.7
45°	1011.2	1032.0	1124.3	1320.6	1443.0	1440.6	1516.8	1528.4	1514.5	1507.6	1514.5
47.5°	980.7	832.1	1031.1	1203.3	1338.1	1346.9	1428.6	1438.8	1426.3	1420.3	1426.3
50°	978.9	734.2	962.7	1112.8	1269.8	1286.0	1371.4	1376.0	1359.8	1357.5	1359.8
52.5°	906.9	678.8	883.3	1033.4	1210.7	1230.5	1308.6	1307.7	1306.3	1309.5	1306.3
55°	824.2	611.8	745.7	916.6	1119.7	1145.1	1214.4	1216.7	1232.9	1237.5	1232.9
57.5°	797.0	536.1	618.3	815.4	1028.3	1048.2	1113.3	1118.8	1129.9	1129.4	1129.9
60°	743.4	482.5	542.5	752.6	958.1	983.5	1041.2	1050.5	1059.7	1057.4	1059.7
62.5°	688.0	445.6	505.6	700.9	891.6	918.9	958.1	974.7	978.4	974.3	978.4
65°	572.6	397.1	447.9	618.7	789.6	819.6	845.0	856.5	858.8	854.2	858.8
67.5°	413.7	352.3	402.6	537.5	672.3	706.0	720.8	727.7	725.4	733.7	725.4
70°	323.2	320.9	369.4	480.2	600.3	630.3	639.5	646.4	644.1	648.8	644.1
72.5°	278.9	295.1	334.3	421.1	519.0	549.0	554.6	555.9	562.9	558.2	562.9
75°	217.0	251.7	277.0	332.5	406.3	427.1	429.4	431.7	427.1	434.0	427.1
77.5°	151.5	191.6	214.2	246.1	296.0	308.9	308.4	309.8	306.1	305.7	306.1
80°	120.1	145.4	166.2	187.0	223.9	233.2	230.9	228.6	228.6	226.3	228.6
82.5°	88.7	103.0	121.9	137.1	161.1	163.0	166.2	162.1	162.1	165.3	162.1
85°	36.9	48.5	62.3	69.3	78.5	80.8	76.2	83.1	78.5	78.5	78.5
87.5°	9.2	14.8	22.2	25.9	27.7	25.9	25.9	22.2	22.2	22.2	22.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	2440.3	2440.3	2440.3	2440.3	2440.3	2440.3	2440.3	2440.3	2440.3	2440.3	2440.3
2.5°	2366.4	2384.9	2373.8	2388.6	2416.3	2431.1	2438.5	2456.9	2456.9	2468.0	2471.7
5°	2054.8	2114.8	2137.9	2234.8	2318.0	2375.7	2410.3	2451.9	2470.3	2495.7	2505.0
7.5°	1830.4	1847.4	1864.5	1933.8	2075.5	2251.9	2357.7	2428.8	2466.2	2499.4	2512.8
10°	1800.8	1793.9	1786.9	1819.3	1918.5	2117.1	2313.3	2410.3	2458.8	2495.7	2507.3
12.5°	1915.3	1823.4	1772.2	1773.1	1839.1	1976.7	2235.8	2384.4	2447.7	2482.8	2496.2
15°	2073.2	2029.4	1842.4	1736.2	1756.9	1844.7	2087.1	2341.0	2419.5	2451.9	2472.6
17.5°	2080.6	2060.8	2004.0	1773.1	1702.5	1760.2	1941.6	2278.7	2378.4	2416.8	2435.2
20°	2073.2	2047.8	2013.2	1865.4	1678.4	1717.7	1867.8	2232.5	2343.4	2387.2	2405.7
22.5°	2073.2	2034.9	2004.0	1917.2	1661.8	1673.4	1816.0	2169.7	2306.4	2352.1	2370.6
25°	2040.9	2015.5	1955.5	1923.2	1643.8	1618.4	1752.3	2061.7	2246.4	2285.6	2313.3
27.5°	1986.4	1973.5	1908.9	1885.8	1655.8	1554.2	1696.4	1943.0	2163.7	2219.6	2249.6
30°	1943.9	1934.7	1870.1	1856.2	1657.7	1509.9	1657.7	1856.2	2091.7	2167.9	2207.1
32.5°	1879.3	1883.0	1831.3	1811.9	1644.7	1467.4	1609.6	1758.3	1984.6	2114.3	2161.0
35°	1789.3	1791.6	1761.6	1736.2	1602.3	1389.8	1528.4	1567.6	1853.9	2038.6	2077.8
37.5°	1715.8	1706.1	1661.4	1663.2	1536.2	1313.2	1432.3	1352.9	1735.7	1958.7	1987.3
40°	1662.3	1650.7	1593.0	1611.5	1484.5	1265.2	1352.9	1223.6	1623.0	1897.8	1920.9
42.5°	1608.7	1597.2	1526.5	1548.7	1421.7	1209.8	1247.6	1127.6	1499.3	1833.1	1839.6
45°	1528.4	1516.8	1440.6	1443.0	1320.6	1124.3	1032.0	1011.2	1426.8	1729.2	1729.2
47.5°	1438.8	1428.6	1346.9	1338.1	1203.3	1031.1	832.1	980.7	1325.2	1617.5	1616.6
50°	1376.0	1371.4	1286.0	1269.8	1112.8	962.7	734.2	978.9	1251.3	1521.4	1544.5
52.5°	1307.7	1308.6	1230.5	1210.7	1033.4	883.3	678.8	906.9	1160.8	1397.7	1470.7
55°	1216.7	1214.4	1145.1	1119.7	916.6	745.7	611.8	824.2	1020.5	1225.9	1348.3
57.5°	1118.8	1113.3	1048.2	1028.3	815.4	618.3	536.1	797.0	802.5	1068.9	1225.0
60°	1050.5	1041.2	983.5	958.1	752.6	542.5	482.5	743.4	614.1	958.1	1129.0
62.5°	974.7	958.1	918.9	891.6	700.9	505.6	445.6	688.0	479.3	832.5	1036.6
65°	856.5	845.0	819.6	789.6	618.7	447.9	397.1	572.6	374.0	570.3	900.4
67.5°	727.7	720.8	706.0	672.3	537.5	402.6	352.3	413.7	284.4	362.0	770.7
70°	646.4	639.5	630.3	600.3	480.2	369.4	320.9	323.2	203.2	267.8	685.7
72.5°	555.9	554.6	549.0	519.0	421.1	334.3	295.1	278.9	171.8	210.6	598.9
75°	431.7	429.4	427.1	406.3	332.5	277.0	251.7	217.0	173.2	150.1	468.7
77.5°	309.8	308.4	308.9	296.0	246.1	214.2	191.6	151.5	154.7	114.1	350.9
80°	228.6	230.9	233.2	223.9	187.0	166.2	145.4	120.1	127.0	90.0	267.8
82.5°	162.1	166.2	163.0	161.1	137.1	121.9	103.0	88.7	90.0	71.6	199.5
85°	83.1	76.2	80.8	78.5	69.3	62.3	48.5	36.9	46.2	41.6	99.3
87.5°	22.2	25.9	25.9	27.7	25.9	22.2	14.8	9.2	16.6	20.3	40.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	2440.3	2440.3	2440.3	2440.3	2440.3	2440.3	2440.3	2440.3	2440.3	2440.3	2440.3
2.5°	2466.2	2466.2	2482.8	2486.5	2490.2	2484.6	2490.2	2486.5	2482.8	2466.2	2466.2
5°	2502.7	2502.7	2525.7	2532.7	2532.7	2528.0	2532.7	2532.7	2525.7	2502.7	2502.7
7.5°	2505.9	2509.6	2532.7	2537.7	2541.9	2535.0	2541.9	2537.7	2532.7	2509.6	2505.9
10°	2500.3	2509.6	2532.7	2539.6	2541.9	2535.0	2541.9	2539.6	2532.7	2509.6	2500.3
12.5°	2493.0	2500.3	2523.4	2528.5	2532.7	2527.6	2532.7	2528.5	2523.4	2500.3	2493.0
15°	2468.0	2477.3	2502.7	2507.3	2511.9	2505.0	2511.9	2507.3	2502.7	2477.3	2468.0
17.5°	2433.4	2444.9	2468.0	2475.4	2477.7	2468.9	2477.7	2475.4	2468.0	2444.9	2433.4
20°	2405.7	2417.2	2440.3	2449.6	2451.9	2444.9	2451.9	2449.6	2440.3	2417.2	2405.7
22.5°	2370.6	2389.5	2410.8	2414.5	2411.2	2404.3	2411.2	2414.5	2410.8	2389.5	2370.6
25°	2320.3	2336.4	2343.4	2343.4	2343.4	2336.4	2343.4	2343.4	2343.4	2336.4	2320.3
27.5°	2256.1	2264.4	2268.5	2272.2	2276.9	2272.2	2276.9	2272.2	2268.5	2264.4	2256.1
30°	2211.8	2207.1	2218.7	2227.9	2232.5	2227.9	2232.5	2227.9	2218.7	2207.1	2211.8
32.5°	2150.8	2153.6	2170.7	2176.2	2177.1	2172.5	2177.1	2176.2	2170.7	2153.6	2150.8
35°	2061.7	2073.2	2084.8	2089.4	2091.7	2084.8	2091.7	2089.4	2084.8	2073.2	2061.7
37.5°	1967.5	1987.8	1996.1	1991.0	1991.5	1984.1	1991.5	1991.0	1996.1	1987.8	1967.5
40°	1904.7	1923.2	1927.8	1920.9	1923.2	1913.9	1923.2	1920.9	1927.8	1923.2	1904.7
42.5°	1845.6	1860.4	1855.7	1847.0	1845.6	1841.9	1845.6	1847.0	1855.7	1860.4	1845.6
45°	1747.7	1754.6	1733.8	1726.9	1722.3	1717.7	1722.3	1726.9	1733.8	1754.6	1747.7
47.5°	1640.6	1631.3	1611.5	1600.9	1587.9	1579.2	1587.9	1600.9	1611.5	1631.3	1640.6
50°	1572.2	1544.5	1528.4	1503.0	1493.7	1496.1	1493.7	1503.0	1528.4	1544.5	1572.2
52.5°	1489.1	1455.9	1430.5	1408.8	1401.4	1400.0	1401.4	1408.8	1430.5	1455.9	1489.1
55°	1369.1	1318.3	1276.7	1265.2	1262.9	1267.5	1262.9	1265.2	1276.7	1318.3	1369.1
57.5°	1221.8	1171.9	1137.7	1128.5	1120.7	1113.3	1120.7	1128.5	1137.7	1171.9	1221.8
60°	1122.0	1075.9	1043.5	1034.3	1013.5	1004.3	1013.5	1034.3	1043.5	1075.9	1122.0
62.5°	1033.4	978.0	953.0	934.6	919.3	904.6	919.3	934.6	953.0	978.0	1033.4
65°	905.0	840.4	815.0	798.8	771.1	764.2	771.1	798.8	815.0	840.4	905.0
67.5°	764.6	708.3	676.5	654.8	637.2	636.7	637.2	654.8	676.5	708.3	764.6
70°	674.1	623.4	593.3	567.9	554.1	551.8	554.1	567.9	593.3	623.4	674.1
72.5°	585.5	536.5	510.2	486.7	474.7	472.4	474.7	486.7	510.2	536.5	585.5
75°	459.4	413.3	392.5	376.3	367.1	362.5	367.1	376.3	392.5	413.3	459.4
77.5°	339.8	302.4	291.8	275.2	267.3	266.9	267.3	275.2	291.8	302.4	339.8
80°	267.8	237.8	221.6	212.4	210.1	207.8	210.1	212.4	221.6	237.8	267.8
82.5°	193.9	176.8	166.2	160.7	160.2	156.1	160.2	160.7	166.2	176.8	193.9
85°	103.9	99.3	97.0	94.7	92.3	92.3	92.3	94.7	97.0	99.3	103.9
87.5°	42.5	44.3	44.3	46.2	48.0	46.2	48.0	46.2	44.3	44.3	42.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER:

CATALOG NUMBER: SQ4-FA-0U-100D-935-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	2440.3	2440.3	2440.3	2440.3
2.5°	2471.7	2468.0	2456.9	2456.9
5°	2505.0	2495.7	2470.3	2451.9
7.5°	2512.8	2499.4	2466.2	2428.8
10°	2507.3	2495.7	2458.8	2410.3
12.5°	2496.2	2482.8	2447.7	2384.4
15°	2472.6	2451.9	2419.5	2341.0
17.5°	2435.2	2416.8	2378.4	2278.7
20°	2405.7	2387.2	2343.4	2232.5
22.5°	2370.6	2352.1	2306.4	2169.7
25°	2313.3	2285.6	2246.4	2061.7
27.5°	2249.6	2219.6	2163.7	1943.0
30°	2207.1	2167.9	2091.7	1856.2
32.5°	2161.0	2114.3	1984.6	1758.3
35°	2077.8	2038.6	1853.9	1567.6
37.5°	1987.3	1958.7	1735.7	1352.9
40°	1920.9	1897.8	1623.0	1223.6
42.5°	1839.6	1833.1	1499.3	1127.6
45°	1729.2	1729.2	1426.8	1011.2
47.5°	1616.6	1617.5	1325.2	980.7
50°	1544.5	1521.4	1251.3	978.9
52.5°	1470.7	1397.7	1160.8	906.9
55°	1348.3	1225.9	1020.5	824.2
57.5°	1225.0	1068.9	802.5	797.0
60°	1129.0	958.1	614.1	743.4
62.5°	1036.6	832.5	479.3	688.0
65°	900.4	570.3	374.0	572.6
67.5°	770.7	362.0	284.4	413.7
70°	685.7	267.8	203.2	323.2
72.5°	598.9	210.6	171.8	278.9
75°	468.7	150.1	173.2	217.0
77.5°	350.9	114.1	154.7	151.5
80°	267.8	90.0	127.0	120.1
82.5°	199.5	71.6	90.0	88.7
85°	99.3	41.6	46.2	36.9
87.5°	40.6	20.3	16.6	9.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)