

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-6

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-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

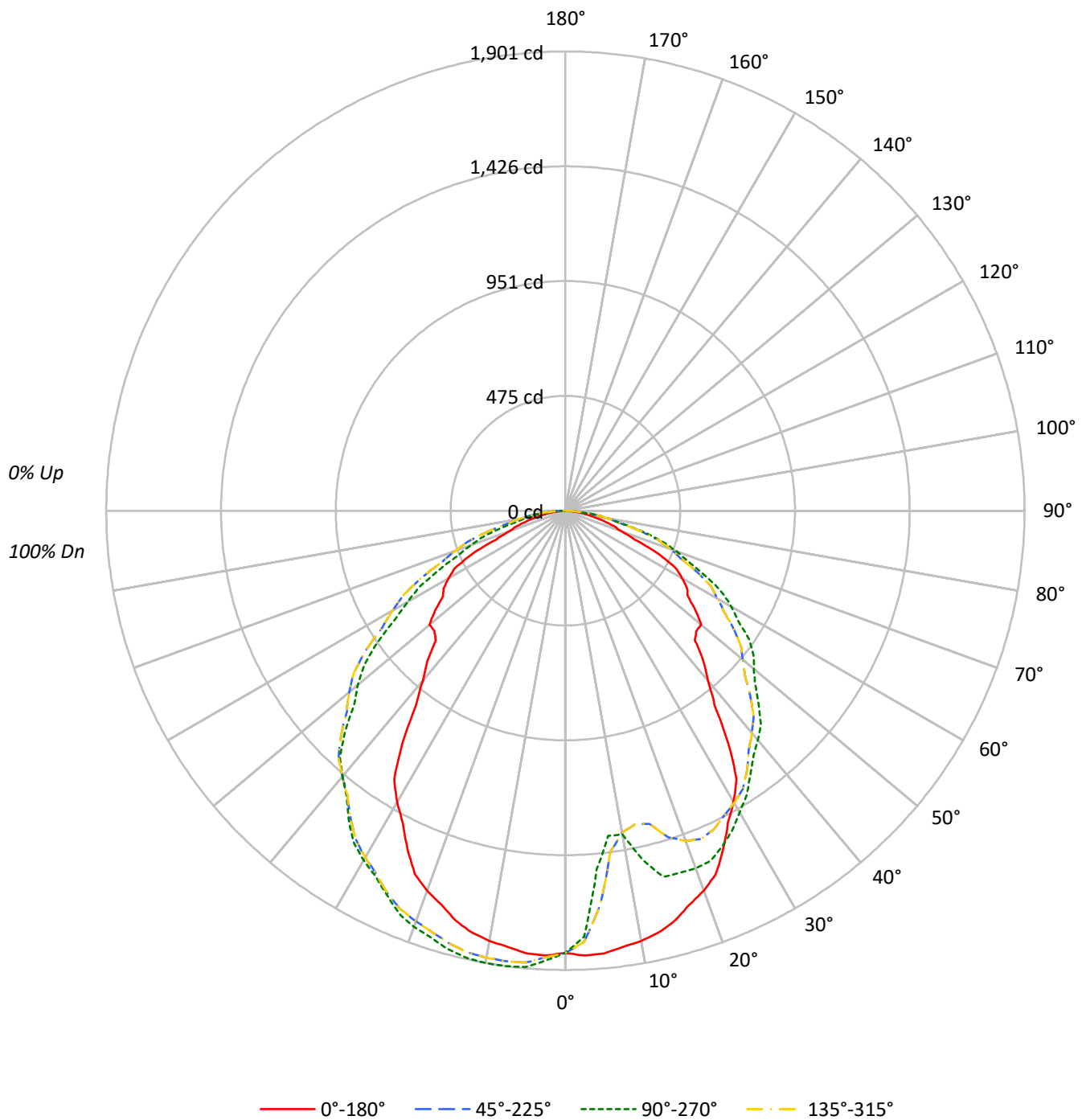
Lumens per Lamp: N/A
Luminaire Lumens: 4742.8 lumens
Efficiency: N/A
Efficacy: 85.8 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

Input Watts (W): 55.3
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



TEST NUMBER:

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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	8490	11290	11874
15°	11181	9990	11181	11963
20°	10960	10314	10960	12003
25°	10494	10411	10494	11892
30°	9888	10244	9888	11867
35°	8828	10024	8828	11741
40°	7368	9955	7368	11525
45°	6597	9835	6597	11206
50°	7026	9742	7026	10736
55°	6629	9953	6629	10194
60°	6859	9755	6859	9266
65°	6250	9325	6250	8341
70°	4359	8751	4359	7442
75°	3869	7735	3869	6462
80°	3188	6011	3188	5519
85°	1955	4157	1955	4891

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°	165.0	3.5
10°-20°	468.9	9.9
20°-30°	724.6	15.3
30°-40°	865.7	18.3
40°-50°	871.3	18.4
50°-60°	756.5	16.0
60°-70°	535.5	11.3
70°-80°	283.3	6.0
80°-90°	72.1	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°	1358.5	28.6
0°-40°	2224.2	46.9
0°-60°	3852.0	81.2
0°-90°	4742.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4742.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1830	1830	1830	1830	1830	
5°	1839	1491	1839	1896	1839	174
15°	1756	1569	1756	1879	1756	494
25°	1546	1534	1546	1752	1546	709
35°	1176	1335	1176	1564	1176	726
45°	758	1131	758	1288	758	611
55°	618	928	618	951	618	569
65°	429	641	429	573	429	409
75°	163	326	163	272	163	172
85°	28	59	28	69	28	40
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°	1830.2	1830.2	1830.2	1830.2	1830.2	1830.2	1830.2	1830.2	1830.2	1830.2	1830.2
2.5°	1842.7	1828.9	1823.3	1812.2	1791.5	1780.4	1788.7	1774.8	1780.4	1765.1	1780.4
5°	1838.9	1807.7	1781.8	1738.5	1676.1	1603.4	1586.1	1541.1	1513.4	1490.9	1513.4
7.5°	1821.6	1768.2	1688.9	1556.7	1450.3	1398.4	1385.6	1372.8	1369.3	1357.9	1369.3
10°	1807.7	1735.0	1587.8	1438.9	1364.5	1340.2	1345.4	1350.6	1361.0	1359.3	1361.0
12.5°	1788.3	1676.8	1482.5	1379.3	1329.8	1329.1	1367.6	1436.5	1484.3	1481.2	1484.3
15°	1755.8	1565.3	1383.5	1317.7	1302.1	1381.8	1522.0	1554.9	1567.0	1568.8	1567.0
17.5°	1709.0	1456.2	1320.1	1276.8	1329.8	1503.0	1545.6	1560.5	1570.9	1571.5	1570.9
20°	1674.4	1400.8	1288.3	1258.8	1399.1	1509.9	1535.9	1554.9	1572.2	1575.7	1572.2
22.5°	1627.3	1362.0	1255.0	1246.4	1437.9	1503.0	1526.2	1554.9	1569.5	1568.8	1569.5
25°	1546.3	1314.2	1213.8	1232.9	1442.4	1466.6	1511.6	1530.7	1532.4	1534.1	1532.4
27.5°	1457.3	1272.3	1165.7	1241.9	1414.3	1431.6	1480.1	1489.8	1496.4	1493.6	1496.4
30°	1392.2	1243.2	1132.4	1243.2	1392.2	1402.5	1451.0	1458.0	1449.3	1442.4	1449.3
32.5°	1318.7	1207.2	1100.6	1233.5	1358.9	1373.5	1412.2	1409.5	1400.8	1395.3	1400.8
35°	1175.7	1146.3	1042.4	1201.7	1302.1	1321.2	1343.7	1341.9	1340.2	1335.0	1340.2
37.5°	1014.7	1074.2	984.9	1152.2	1247.4	1246.0	1279.6	1286.9	1285.1	1278.6	1285.1
40°	917.7	1014.7	948.9	1113.4	1208.6	1194.8	1238.1	1246.7	1245.0	1239.8	1245.0
42.5°	845.7	935.7	907.3	1066.3	1161.5	1144.9	1197.9	1206.5	1202.0	1198.2	1202.0
45°	758.4	774.0	843.3	990.4	1082.2	1080.5	1137.6	1146.3	1135.9	1130.7	1135.9
47.5°	735.6	624.0	773.3	902.5	1003.6	1010.2	1071.5	1079.1	1069.7	1065.2	1069.7
50°	734.2	550.6	722.1	834.6	952.3	964.5	1028.5	1032.0	1019.9	1018.1	1019.9
52.5°	680.1	509.1	662.5	775.0	908.0	922.9	981.4	980.7	979.7	982.1	979.7
55°	618.2	458.9	559.3	687.4	839.8	858.8	910.8	912.5	924.6	928.1	924.6
57.5°	597.7	402.1	463.7	611.6	771.2	786.1	834.9	839.1	847.4	847.1	847.4
60°	557.6	361.9	406.9	564.5	718.6	737.6	780.9	787.9	794.8	793.0	794.8
62.5°	516.0	334.2	379.2	525.7	668.7	689.2	718.6	731.1	733.8	730.7	733.8
65°	429.4	297.8	335.9	464.1	592.2	614.7	633.7	642.4	644.1	640.7	644.1
67.5°	310.3	264.2	302.0	403.1	504.2	529.5	540.6	545.8	544.0	550.3	544.0
70°	242.4	240.7	277.0	360.2	450.2	472.7	479.6	484.8	483.1	486.6	483.1
72.5°	209.2	221.3	250.7	315.8	389.3	411.8	415.9	417.0	422.1	418.7	422.1
75°	162.8	188.7	207.8	249.3	304.8	320.3	322.1	323.8	320.3	325.5	320.3
77.5°	113.6	143.7	160.7	184.6	222.0	231.7	231.3	232.4	229.6	229.3	229.6
80°	90.0	109.1	124.7	140.3	168.0	174.9	173.2	171.4	171.4	169.7	171.4
82.5°	66.5	77.2	91.4	102.9	120.9	122.2	124.7	121.6	121.6	124.0	121.6
85°	27.7	36.4	46.8	51.9	58.9	60.6	57.1	62.3	58.9	58.9	58.9
87.5°	6.9	11.1	16.6	19.4	20.8	19.4	19.4	16.6	16.6	16.6	16.6
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):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	1830.2	1830.2	1830.2	1830.2	1830.2	1830.2	1830.2	1830.2	1830.2	1830.2	1830.2
2.5°	1774.8	1788.7	1780.4	1791.5	1812.2	1823.3	1828.9	1842.7	1842.7	1851.0	1853.8
5°	1541.1	1586.1	1603.4	1676.1	1738.5	1781.8	1807.7	1838.9	1852.7	1871.8	1878.7
7.5°	1372.8	1385.6	1398.4	1450.3	1556.7	1688.9	1768.2	1821.6	1849.6	1874.6	1884.6
10°	1350.6	1345.4	1340.2	1364.5	1438.9	1587.8	1735.0	1807.7	1844.1	1871.8	1880.5
12.5°	1436.5	1367.6	1329.1	1329.8	1379.3	1482.5	1676.8	1788.3	1835.8	1862.1	1872.1
15°	1554.9	1522.0	1381.8	1302.1	1317.7	1383.5	1565.3	1755.8	1814.7	1838.9	1854.5
17.5°	1560.5	1545.6	1503.0	1329.8	1276.8	1320.1	1456.2	1709.0	1783.8	1812.6	1826.4
20°	1554.9	1535.9	1509.9	1399.1	1258.8	1288.3	1400.8	1674.4	1757.5	1790.4	1804.3
22.5°	1554.9	1526.2	1503.0	1437.9	1246.4	1255.0	1362.0	1627.3	1729.8	1764.1	1777.9
25°	1530.7	1511.6	1466.6	1442.4	1232.9	1213.8	1314.2	1546.3	1684.8	1714.2	1735.0
27.5°	1489.8	1480.1	1431.6	1414.3	1241.9	1165.7	1272.3	1457.3	1622.8	1664.7	1687.2
30°	1458.0	1451.0	1402.5	1392.2	1243.2	1132.4	1243.2	1392.2	1568.8	1625.9	1655.4
32.5°	1409.5	1412.2	1373.5	1358.9	1233.5	1100.6	1207.2	1318.7	1488.4	1585.7	1620.7
35°	1341.9	1343.7	1321.2	1302.1	1201.7	1042.4	1146.3	1175.7	1390.4	1529.0	1558.4
37.5°	1286.9	1279.6	1246.0	1247.4	1152.2	984.9	1074.2	1014.7	1301.8	1469.0	1490.5
40°	1246.7	1238.1	1194.8	1208.6	1113.4	948.9	1014.7	917.7	1217.3	1423.3	1440.6
42.5°	1206.5	1197.9	1144.9	1161.5	1066.3	907.3	935.7	845.7	1124.5	1374.8	1379.7
45°	1146.3	1137.6	1080.5	1082.2	990.4	843.3	774.0	758.4	1070.1	1296.9	1296.9
47.5°	1079.1	1071.5	1010.2	1003.6	902.5	773.3	624.0	735.6	993.9	1213.1	1212.4
50°	1032.0	1028.5	964.5	952.3	834.6	722.1	550.6	734.2	938.5	1141.1	1158.4
52.5°	980.7	981.4	922.9	908.0	775.0	662.5	509.1	680.1	870.6	1048.3	1103.0
55°	912.5	910.8	858.8	839.8	687.4	559.3	458.9	618.2	765.3	919.4	1011.2
57.5°	839.1	834.9	786.1	771.2	611.6	463.7	402.1	597.7	601.9	801.7	918.8
60°	787.9	780.9	737.6	718.6	564.5	406.9	361.9	557.6	460.6	718.6	846.7
62.5°	731.1	718.6	689.2	668.7	525.7	379.2	334.2	516.0	359.5	624.4	777.5
65°	642.4	633.7	614.7	592.2	464.1	335.9	297.8	429.4	280.5	427.7	675.3
67.5°	545.8	540.6	529.5	504.2	403.1	302.0	264.2	310.3	213.3	271.5	578.0
70°	484.8	479.6	472.7	450.2	360.2	277.0	240.7	242.4	152.4	200.9	514.3
72.5°	417.0	415.9	411.8	389.3	315.8	250.7	221.3	209.2	128.8	157.9	449.2
75°	323.8	322.1	320.3	304.8	249.3	207.8	188.7	162.8	129.9	112.6	351.5
77.5°	232.4	231.3	231.7	222.0	184.6	160.7	143.7	113.6	116.0	85.5	263.2
80°	171.4	173.2	174.9	168.0	140.3	124.7	109.1	90.0	95.2	67.5	200.9
82.5°	121.6	124.7	122.2	120.9	102.9	91.4	77.2	66.5	67.5	53.7	149.6
85°	62.3	57.1	60.6	58.9	51.9	46.8	36.4	27.7	34.6	31.2	74.5
87.5°	16.6	19.4	19.4	20.8	19.4	16.6	11.1	6.9	12.5	15.2	30.5
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°	1830.2	1830.2	1830.2	1830.2	1830.2	1830.2	1830.2	1830.2	1830.2	1830.2	1830.2
2.5°	1849.6	1849.6	1862.1	1864.9	1867.6	1863.5	1867.6	1864.9	1862.1	1849.6	1849.6
5°	1877.0	1877.0	1894.3	1899.5	1899.5	1896.0	1899.5	1899.5	1894.3	1877.0	1877.0
7.5°	1879.4	1882.2	1899.5	1903.3	1906.4	1901.2	1906.4	1903.3	1899.5	1882.2	1879.4
10°	1875.3	1882.2	1899.5	1904.7	1906.4	1901.2	1906.4	1904.7	1899.5	1882.2	1875.3
12.5°	1869.7	1875.3	1892.6	1896.4	1899.5	1895.7	1899.5	1896.4	1892.6	1875.3	1869.7
15°	1851.0	1857.9	1877.0	1880.5	1883.9	1878.7	1883.9	1880.5	1877.0	1857.9	1851.0
17.5°	1825.0	1833.7	1851.0	1856.6	1858.3	1851.7	1858.3	1856.6	1851.0	1833.7	1825.0
20°	1804.3	1812.9	1830.2	1837.2	1838.9	1833.7	1838.9	1837.2	1830.2	1812.9	1804.3
22.5°	1777.9	1792.1	1808.1	1810.8	1808.4	1803.2	1808.4	1810.8	1808.1	1792.1	1777.9
25°	1740.2	1752.3	1757.5	1757.5	1757.5	1752.3	1757.5	1757.5	1757.5	1752.3	1740.2
27.5°	1692.1	1698.3	1701.4	1704.2	1707.6	1704.2	1707.6	1704.2	1701.4	1698.3	1692.1
30°	1658.8	1655.4	1664.0	1670.9	1674.4	1670.9	1674.4	1670.9	1664.0	1655.4	1658.8
32.5°	1613.1	1615.2	1628.0	1632.1	1632.8	1629.4	1632.8	1632.1	1628.0	1615.2	1613.1
35°	1546.3	1554.9	1563.6	1567.0	1568.8	1563.6	1568.8	1567.0	1563.6	1554.9	1546.3
37.5°	1475.6	1490.9	1497.1	1493.3	1493.6	1488.1	1493.6	1493.3	1497.1	1490.9	1475.6
40°	1428.5	1442.4	1445.8	1440.6	1442.4	1435.4	1442.4	1440.6	1445.8	1442.4	1428.5
42.5°	1384.2	1395.3	1391.8	1385.2	1384.2	1381.4	1384.2	1385.2	1391.8	1395.3	1384.2
45°	1310.8	1316.0	1300.4	1295.2	1291.7	1288.3	1291.7	1295.2	1300.4	1316.0	1310.8
47.5°	1230.4	1223.5	1208.6	1200.7	1191.0	1184.4	1191.0	1200.7	1208.6	1223.5	1230.4
50°	1179.2	1158.4	1146.3	1127.2	1120.3	1122.0	1120.3	1127.2	1146.3	1158.4	1179.2
52.5°	1116.8	1091.9	1072.9	1056.6	1051.0	1050.0	1051.0	1056.6	1072.9	1091.9	1116.8
55°	1026.8	988.7	957.5	948.9	947.2	950.6	947.2	948.9	957.5	988.7	1026.8
57.5°	916.3	878.9	853.3	846.4	840.5	834.9	840.5	846.4	853.3	878.9	916.3
60°	841.5	806.9	782.7	775.7	760.1	753.2	760.1	775.7	782.7	806.9	841.5
62.5°	775.0	733.5	714.8	700.9	689.5	678.4	689.5	700.9	714.8	733.5	775.0
65°	678.8	630.3	611.2	599.1	578.3	573.1	578.3	599.1	611.2	630.3	678.8
67.5°	573.5	531.2	507.3	491.1	477.9	477.6	477.9	491.1	507.3	531.2	573.5
70°	505.6	467.5	445.0	426.0	415.6	413.8	415.6	426.0	445.0	467.5	505.6
72.5°	439.1	402.4	382.7	365.0	356.0	354.3	356.0	365.0	382.7	402.4	439.1
75°	344.6	309.9	294.4	282.2	275.3	271.9	275.3	282.2	294.4	309.9	344.6
77.5°	254.9	226.8	218.9	206.4	200.5	200.2	200.5	206.4	218.9	226.8	254.9
80°	200.9	178.3	166.2	159.3	157.6	155.8	157.6	159.3	166.2	178.3	200.9
82.5°	145.4	132.6	124.7	120.5	120.2	117.1	120.2	120.5	124.7	132.6	145.4
85°	77.9	74.5	72.7	71.0	69.3	69.3	69.3	71.0	72.7	74.5	77.9
87.5°	31.9	33.2	33.2	34.6	36.0	34.6	36.0	34.6	33.2	33.2	31.9
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-6

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	1830.2	1830.2	1830.2	1830.2
2.5°	1853.8	1851.0	1842.7	1842.7
5°	1878.7	1871.8	1852.7	1838.9
7.5°	1884.6	1874.6	1849.6	1821.6
10°	1880.5	1871.8	1844.1	1807.7
12.5°	1872.1	1862.1	1835.8	1788.3
15°	1854.5	1838.9	1814.7	1755.8
17.5°	1826.4	1812.6	1783.8	1709.0
20°	1804.3	1790.4	1757.5	1674.4
22.5°	1777.9	1764.1	1729.8	1627.3
25°	1735.0	1714.2	1684.8	1546.3
27.5°	1687.2	1664.7	1622.8	1457.3
30°	1655.4	1625.9	1568.8	1392.2
32.5°	1620.7	1585.7	1488.4	1318.7
35°	1558.4	1529.0	1390.4	1175.7
37.5°	1490.5	1469.0	1301.8	1014.7
40°	1440.6	1423.3	1217.3	917.7
42.5°	1379.7	1374.8	1124.5	845.7
45°	1296.9	1296.9	1070.1	758.4
47.5°	1212.4	1213.1	993.9	735.6
50°	1158.4	1141.1	938.5	734.2
52.5°	1103.0	1048.3	870.6	680.1
55°	1011.2	919.4	765.3	618.2
57.5°	918.8	801.7	601.9	597.7
60°	846.7	718.6	460.6	557.6
62.5°	777.5	624.4	359.5	516.0
65°	675.3	427.7	280.5	429.4
67.5°	578.0	271.5	213.3	310.3
70°	514.3	200.9	152.4	242.4
72.5°	449.2	157.9	128.8	209.2
75°	351.5	112.6	129.9	162.8
77.5°	263.2	85.5	116.0	113.6
80°	200.9	67.5	95.2	90.0
82.5°	149.6	53.7	67.5	66.5
85°	74.5	31.2	34.6	27.7
87.5°	30.5	15.2	12.5	6.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)