

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-075D-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-075D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

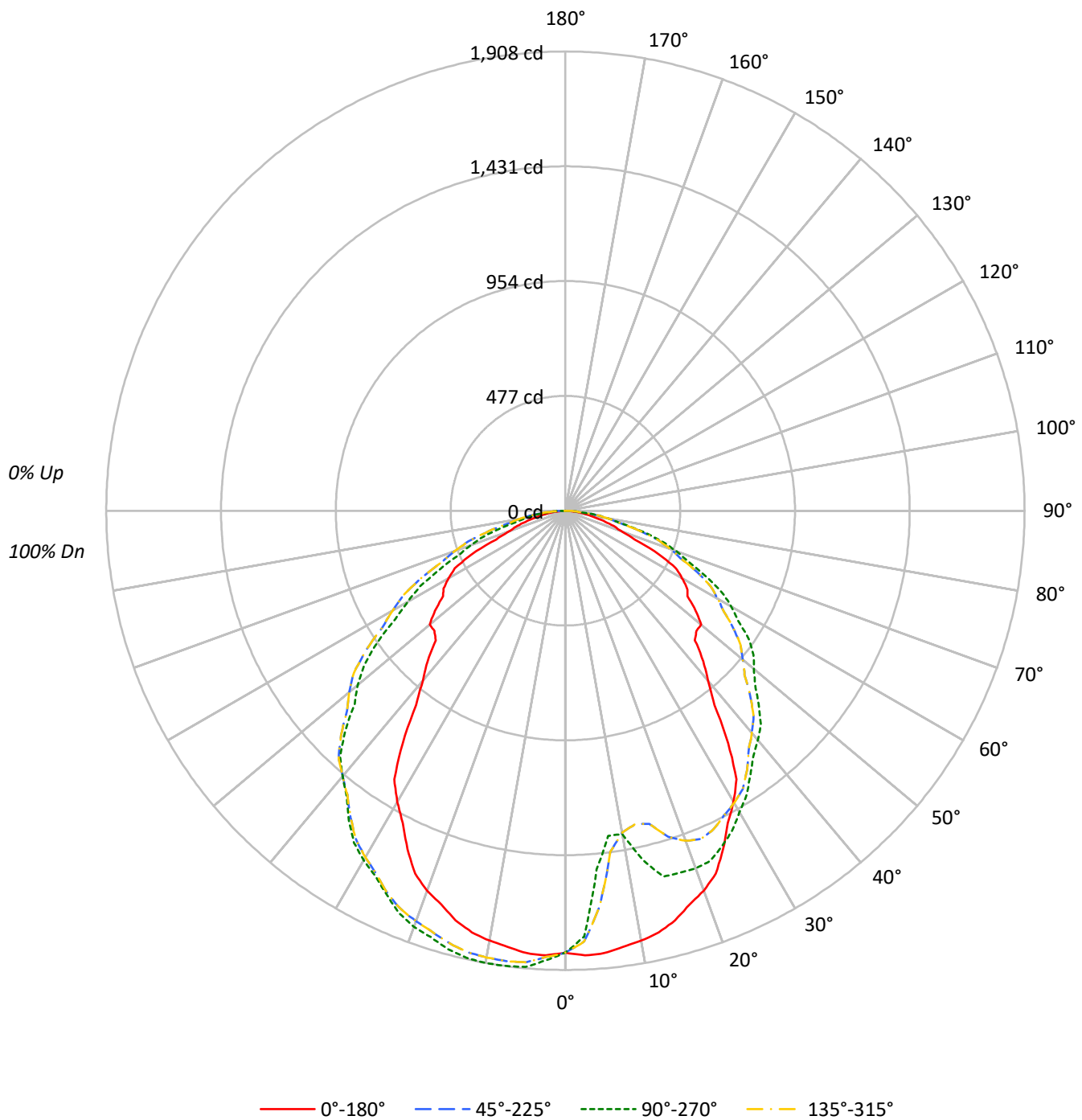
Lumens per Lamp: N/A
Luminaire Lumens: 4759.0 lumens
Efficiency: N/A
Efficacy: 87.5 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 54.4
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	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	109	105	100	97	106	102	98	95	98	95	92	94	92	89	91	88	87
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73
3	91	81	73	66	88	79	72	66	76	70	64	73	68	63	71	66	62
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54
5	77	64	55	49	75	63	54	48	61	53	48	59	52	47	57	51	47
6	71	58	49	42	69	57	48	42	55	47	42	53	47	41	52	46	41
7	66	52	44	38	64	51	43	37	50	43	37	48	42	37	47	41	37
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	8472	8472	8472	8472
5°	8544	6927	8544	8810
10°	8497	6389	8497	8936
15°	8414	7518	8414	9003
20°	8248	7762	8248	9032
25°	7897	7836	7897	8950
30°	7441	7709	7441	8931
35°	6644	7544	6644	8835
40°	5545	7491	5545	8673
45°	4965	7401	4965	8433
50°	5287	7332	5287	8080
55°	4989	7490	4989	7671
60°	5162	7341	5162	6973
65°	4704	7017	4704	6278
70°	3280	6585	3280	5600
75°	2911	5821	2911	4862
80°	2399	4524	2399	4155
85°	1471	3128	1471	3679

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 8614 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.6	3.5
10°-20°	470.5	9.9
20°-30°	727.1	15.3
30°-40°	868.7	18.3
40°-50°	874.3	18.4
50°-60°	759.1	16.0
60°-70°	537.3	11.3
70°-80°	284.2	6.0
80°-90°	72.3	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°	1363.1	28.6
0°-40°	2231.8	46.9
0°-60°	3865.1	81.2
0°-90°	4759.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4759.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1836	1836	1836	1836	1836	
5°	1845	1496	1845	1902	1845	175
15°	1762	1574	1762	1885	1762	495
25°	1552	1539	1552	1758	1552	712
35°	1180	1340	1180	1569	1180	728
45°	761	1134	761	1293	761	613
55°	620	931	620	954	620	571
65°	431	643	431	575	431	410
75°	163	327	163	273	163	172
85°	28	59	28	70	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°	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5
2.5°	1849.0	1835.1	1829.5	1818.4	1797.5	1786.4	1794.8	1780.9	1786.4	1771.1	1786.4
5°	1845.1	1813.9	1787.8	1744.4	1681.8	1608.9	1591.5	1546.3	1518.5	1495.9	1518.5
7.5°	1827.8	1774.3	1694.7	1561.9	1455.3	1403.1	1390.3	1377.4	1374.0	1362.5	1374.0
10°	1813.9	1740.9	1593.2	1443.8	1369.1	1344.8	1350.0	1355.2	1365.6	1363.9	1365.6
12.5°	1794.4	1682.5	1487.6	1384.0	1334.3	1333.6	1372.2	1441.4	1489.3	1486.2	1489.3
15°	1761.7	1570.6	1388.2	1322.2	1306.5	1386.5	1527.2	1560.2	1572.4	1574.1	1572.4
17.5°	1714.8	1461.2	1324.6	1281.2	1334.3	1508.1	1550.8	1565.8	1576.2	1576.9	1576.2
20°	1680.1	1405.6	1292.6	1263.1	1403.8	1515.0	1541.1	1560.2	1577.6	1581.1	1577.6
22.5°	1632.8	1366.7	1259.3	1250.6	1442.8	1508.1	1531.4	1560.2	1574.8	1574.1	1574.8
25°	1551.5	1318.7	1217.9	1237.0	1447.3	1471.6	1516.8	1535.9	1537.6	1539.4	1537.6
27.5°	1462.2	1276.7	1169.6	1246.1	1419.1	1436.5	1485.1	1494.9	1501.5	1498.7	1501.5
30°	1396.9	1247.5	1136.3	1247.5	1396.9	1407.3	1456.0	1462.9	1454.2	1447.3	1454.2
32.5°	1323.2	1211.3	1104.3	1237.7	1363.5	1378.1	1417.0	1414.3	1405.6	1400.0	1405.6
35°	1179.7	1150.2	1045.9	1205.8	1306.5	1325.7	1348.2	1346.5	1344.8	1339.6	1344.8
37.5°	1018.1	1077.9	988.2	1156.1	1251.6	1250.2	1284.0	1291.3	1289.5	1282.9	1289.5
40°	920.8	1018.1	952.1	1117.2	1212.7	1198.8	1242.3	1250.9	1249.2	1244.0	1249.2
42.5°	848.6	938.9	910.4	1069.9	1165.5	1148.8	1201.9	1210.6	1206.1	1202.3	1206.1
45°	761.0	776.6	846.1	993.8	1085.9	1084.2	1141.5	1150.2	1139.7	1134.5	1139.7
47.5°	738.1	626.2	775.9	905.5	1007.0	1013.6	1075.1	1082.8	1073.4	1068.9	1073.4
50°	736.7	552.5	724.5	837.4	955.6	967.7	1032.0	1035.5	1023.3	1021.6	1023.3
52.5°	682.5	510.8	664.7	777.7	911.1	926.0	984.8	984.1	983.0	985.5	983.0
55°	620.3	460.4	561.2	689.8	842.7	861.8	913.9	915.6	927.8	931.3	927.8
57.5°	599.8	403.4	465.3	613.7	773.8	788.8	837.8	842.0	850.3	849.9	850.3
60°	559.5	363.1	408.3	566.4	721.0	740.1	783.6	790.5	797.5	795.7	797.5
62.5°	517.8	335.3	380.5	527.5	671.0	691.5	721.0	733.5	736.3	733.2	736.3
65°	430.9	298.8	337.1	465.6	594.2	616.8	635.9	644.6	646.3	642.8	646.3
67.5°	311.3	265.1	303.0	404.5	505.9	531.3	542.4	547.6	545.9	552.2	545.9
70°	243.2	241.5	278.0	361.4	451.7	474.3	481.3	486.5	484.7	488.2	484.7
72.5°	209.9	222.0	251.6	316.9	390.6	413.2	417.3	418.4	423.6	420.1	423.6
75°	163.3	189.4	208.5	250.2	305.8	321.4	323.2	324.9	321.4	326.6	321.4
77.5°	114.0	144.2	161.2	185.2	222.7	232.5	232.1	233.2	230.4	230.0	230.4
80°	90.3	109.5	125.1	140.7	168.5	175.5	173.7	172.0	172.0	170.3	172.0
82.5°	66.7	77.5	91.7	103.2	121.3	122.7	125.1	122.0	122.0	124.4	122.0
85°	27.8	36.5	46.9	52.1	59.1	60.8	57.3	62.5	59.1	59.1	59.1
87.5°	6.9	11.1	16.7	19.5	20.8	19.5	19.5	16.7	16.7	16.7	16.7
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°	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5
2.5°	1780.9	1794.8	1786.4	1797.5	1818.4	1829.5	1835.1	1849.0	1849.0	1857.3	1860.1
5°	1546.3	1591.5	1608.9	1681.8	1744.4	1787.8	1813.9	1845.1	1859.0	1878.2	1885.1
7.5°	1377.4	1390.3	1403.1	1455.3	1561.9	1694.7	1774.3	1827.8	1855.9	1880.9	1891.0
10°	1355.2	1350.0	1344.8	1369.1	1443.8	1593.2	1740.9	1813.9	1850.4	1878.2	1886.8
12.5°	1441.4	1372.2	1333.6	1334.3	1384.0	1487.6	1682.5	1794.4	1842.0	1868.4	1878.5
15°	1560.2	1527.2	1386.5	1306.5	1322.2	1388.2	1570.6	1761.7	1820.8	1845.1	1860.8
17.5°	1565.8	1550.8	1508.1	1334.3	1281.2	1324.6	1461.2	1714.8	1789.9	1818.7	1832.6
20°	1560.2	1541.1	1515.0	1403.8	1263.1	1292.6	1405.6	1680.1	1763.5	1796.5	1810.4
22.5°	1560.2	1531.4	1508.1	1442.8	1250.6	1259.3	1366.7	1632.8	1735.7	1770.1	1784.0
25°	1535.9	1516.8	1471.6	1447.3	1237.0	1217.9	1318.7	1551.5	1690.5	1720.0	1740.9
27.5°	1494.9	1485.1	1436.5	1419.1	1246.1	1169.6	1276.7	1462.2	1628.3	1670.4	1692.9
30°	1462.9	1456.0	1407.3	1396.9	1247.5	1136.3	1247.5	1396.9	1574.1	1631.4	1661.0
32.5°	1414.3	1417.0	1378.1	1363.5	1237.7	1104.3	1211.3	1323.2	1493.5	1591.1	1626.2
35°	1346.5	1348.2	1325.7	1306.5	1205.8	1045.9	1150.2	1179.7	1395.2	1534.1	1563.7
37.5°	1291.3	1284.0	1250.2	1251.6	1156.1	988.2	1077.9	1018.1	1306.2	1474.0	1495.6
40°	1250.9	1242.3	1198.8	1212.7	1117.2	952.1	1018.1	920.8	1221.4	1428.2	1445.5
42.5°	1210.6	1201.9	1148.8	1165.5	1069.9	910.4	938.9	848.6	1128.3	1379.5	1384.4
45°	1150.2	1141.5	1084.2	1085.9	993.8	846.1	776.6	761.0	1073.7	1301.3	1301.3
47.5°	1082.8	1075.1	1013.6	1007.0	905.5	775.9	626.2	738.1	997.3	1217.2	1216.5
50°	1035.5	1032.0	967.7	955.6	837.4	724.5	552.5	736.7	941.7	1145.0	1162.3
52.5°	984.1	984.8	926.0	911.1	777.7	664.7	510.8	682.5	873.6	1051.8	1106.7
55°	915.6	913.9	861.8	842.7	689.8	561.2	460.4	620.3	767.9	922.6	1014.7
57.5°	842.0	837.8	788.8	773.8	613.7	465.3	403.4	599.8	603.9	804.4	921.9
60°	790.5	783.6	740.1	721.0	566.4	408.3	363.1	559.5	462.2	721.0	849.6
62.5°	733.5	721.0	691.5	671.0	527.5	380.5	335.3	517.8	360.7	626.5	780.1
65°	644.6	635.9	616.8	594.2	465.6	337.1	298.8	430.9	281.5	429.1	677.6
67.5°	547.6	542.4	531.3	505.9	404.5	303.0	265.1	311.3	214.1	272.4	580.0
70°	486.5	481.3	474.3	451.7	361.4	278.0	241.5	243.2	152.9	201.5	516.0
72.5°	418.4	417.3	413.2	390.6	316.9	251.6	222.0	209.9	129.3	158.5	450.7
75°	324.9	323.2	321.4	305.8	250.2	208.5	189.4	163.3	130.3	112.9	352.7
77.5°	233.2	232.1	232.5	222.7	185.2	161.2	144.2	114.0	116.4	85.8	264.1
80°	172.0	173.7	175.5	168.5	140.7	125.1	109.5	90.3	95.6	67.8	201.5
82.5°	122.0	125.1	122.7	121.3	103.2	91.7	77.5	66.7	67.8	53.9	150.1
85°	62.5	57.3	60.8	59.1	52.1	46.9	36.5	27.8	34.7	31.3	74.7
87.5°	16.7	19.5	19.5	20.8	19.5	16.7	11.1	6.9	12.5	15.3	30.6
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°	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5	1836.5
2.5°	1855.9	1855.9	1868.4	1871.2	1874.0	1869.8	1874.0	1871.2	1868.4	1855.9	1855.9
5°	1883.4	1883.4	1900.7	1906.0	1906.0	1902.5	1906.0	1906.0	1900.7	1883.4	1883.4
7.5°	1885.8	1888.6	1906.0	1909.8	1912.9	1907.7	1912.9	1909.8	1906.0	1888.6	1885.8
10°	1881.6	1888.6	1906.0	1911.2	1912.9	1907.7	1912.9	1911.2	1906.0	1888.6	1881.6
12.5°	1876.1	1881.6	1899.0	1902.8	1906.0	1902.1	1906.0	1902.8	1899.0	1881.6	1876.1
15°	1857.3	1864.3	1883.4	1886.8	1890.3	1885.1	1890.3	1886.8	1883.4	1864.3	1857.3
17.5°	1831.2	1839.9	1857.3	1862.9	1864.6	1858.0	1864.6	1862.9	1857.3	1839.9	1831.2
20°	1810.4	1819.1	1836.5	1843.4	1845.1	1839.9	1845.1	1843.4	1836.5	1819.1	1810.4
22.5°	1784.0	1798.2	1814.2	1817.0	1814.6	1809.4	1814.6	1817.0	1814.2	1798.2	1784.0
25°	1746.1	1758.3	1763.5	1763.5	1763.5	1758.3	1763.5	1763.5	1763.5	1758.3	1746.1
27.5°	1697.8	1704.1	1707.2	1710.0	1713.4	1710.0	1713.4	1710.0	1707.2	1704.1	1697.8
30°	1664.5	1661.0	1669.7	1676.6	1680.1	1676.6	1680.1	1676.6	1669.7	1661.0	1664.5
32.5°	1618.6	1620.7	1633.5	1637.7	1638.4	1634.9	1638.4	1637.7	1633.5	1620.7	1618.6
35°	1551.5	1560.2	1568.9	1572.4	1574.1	1568.9	1574.1	1572.4	1568.9	1560.2	1551.5
37.5°	1480.6	1495.9	1502.2	1498.4	1498.7	1493.1	1498.7	1498.4	1502.2	1495.9	1480.6
40°	1433.4	1447.3	1450.7	1445.5	1447.3	1440.3	1447.3	1445.5	1450.7	1447.3	1433.4
42.5°	1388.9	1400.0	1396.5	1389.9	1388.9	1386.1	1388.9	1389.9	1396.5	1400.0	1388.9
45°	1315.2	1320.4	1304.8	1299.6	1296.1	1292.6	1296.1	1299.6	1304.8	1320.4	1315.2
47.5°	1234.6	1227.7	1212.7	1204.7	1195.0	1188.4	1195.0	1204.7	1212.7	1227.7	1234.6
50°	1183.2	1162.3	1150.2	1131.1	1124.1	1125.9	1124.1	1131.1	1150.2	1162.3	1183.2
52.5°	1120.6	1095.6	1076.5	1060.2	1054.6	1053.6	1054.6	1060.2	1076.5	1095.6	1120.6
55°	1030.3	992.1	960.8	952.1	950.4	953.8	950.4	952.1	960.8	992.1	1030.3
57.5°	919.4	881.9	856.2	849.3	843.3	837.8	843.3	849.3	856.2	881.9	919.4
60°	844.4	809.6	785.3	778.4	762.7	755.8	762.7	778.4	785.3	809.6	844.4
62.5°	777.7	736.0	717.2	703.3	691.8	680.7	691.8	703.3	717.2	736.0	777.7
65°	681.1	632.4	613.3	601.1	580.3	575.1	580.3	601.1	613.3	632.4	681.1
67.5°	575.4	533.0	509.1	492.7	479.5	479.2	479.5	492.7	509.1	533.0	575.4
70°	507.3	469.1	446.5	427.4	417.0	415.2	417.0	427.4	446.5	469.1	507.3
72.5°	440.6	403.8	384.0	366.2	357.2	355.5	357.2	366.2	384.0	403.8	440.6
75°	345.7	311.0	295.4	283.2	276.3	272.8	276.3	283.2	295.4	311.0	345.7
77.5°	255.7	227.6	219.6	207.1	201.2	200.8	201.2	207.1	219.6	227.6	255.7
80°	201.5	179.0	166.8	159.8	158.1	156.4	158.1	159.8	166.8	179.0	201.5
82.5°	145.9	133.1	125.1	120.9	120.6	117.4	120.6	120.9	125.1	133.1	145.9
85°	78.2	74.7	73.0	71.2	69.5	69.5	69.5	71.2	73.0	74.7	78.2
87.5°	32.0	33.4	33.4	34.7	36.1	34.7	36.1	34.7	33.4	33.4	32.0
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-075D-935-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	1836.5	1836.5	1836.5	1836.5
2.5°	1860.1	1857.3	1849.0	1849.0
5°	1885.1	1878.2	1859.0	1845.1
7.5°	1891.0	1880.9	1855.9	1827.8
10°	1886.8	1878.2	1850.4	1813.9
12.5°	1878.5	1868.4	1842.0	1794.4
15°	1860.8	1845.1	1820.8	1761.7
17.5°	1832.6	1818.7	1789.9	1714.8
20°	1810.4	1796.5	1763.5	1680.1
22.5°	1784.0	1770.1	1735.7	1632.8
25°	1740.9	1720.0	1690.5	1551.5
27.5°	1692.9	1670.4	1628.3	1462.2
30°	1661.0	1631.4	1574.1	1396.9
32.5°	1626.2	1591.1	1493.5	1323.2
35°	1563.7	1534.1	1395.2	1179.7
37.5°	1495.6	1474.0	1306.2	1018.1
40°	1445.5	1428.2	1221.4	920.8
42.5°	1384.4	1379.5	1128.3	848.6
45°	1301.3	1301.3	1073.7	761.0
47.5°	1216.5	1217.2	997.3	738.1
50°	1162.3	1145.0	941.7	736.7
52.5°	1106.7	1051.8	873.6	682.5
55°	1014.7	922.6	767.9	620.3
57.5°	921.9	804.4	603.9	599.8
60°	849.6	721.0	462.2	559.5
62.5°	780.1	626.5	360.7	517.8
65°	677.6	429.1	281.5	430.9
67.5°	580.0	272.4	214.1	311.3
70°	516.0	201.5	152.9	243.2
72.5°	450.7	158.5	129.3	209.9
75°	352.7	112.9	130.3	163.3
77.5°	264.1	85.8	116.4	114.0
80°	201.5	67.8	95.6	90.3
82.5°	150.1	53.9	67.8	66.7
85°	74.7	31.3	34.7	27.8
87.5°	30.6	15.3	12.5	6.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)