

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-125D-927-1D-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-125D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

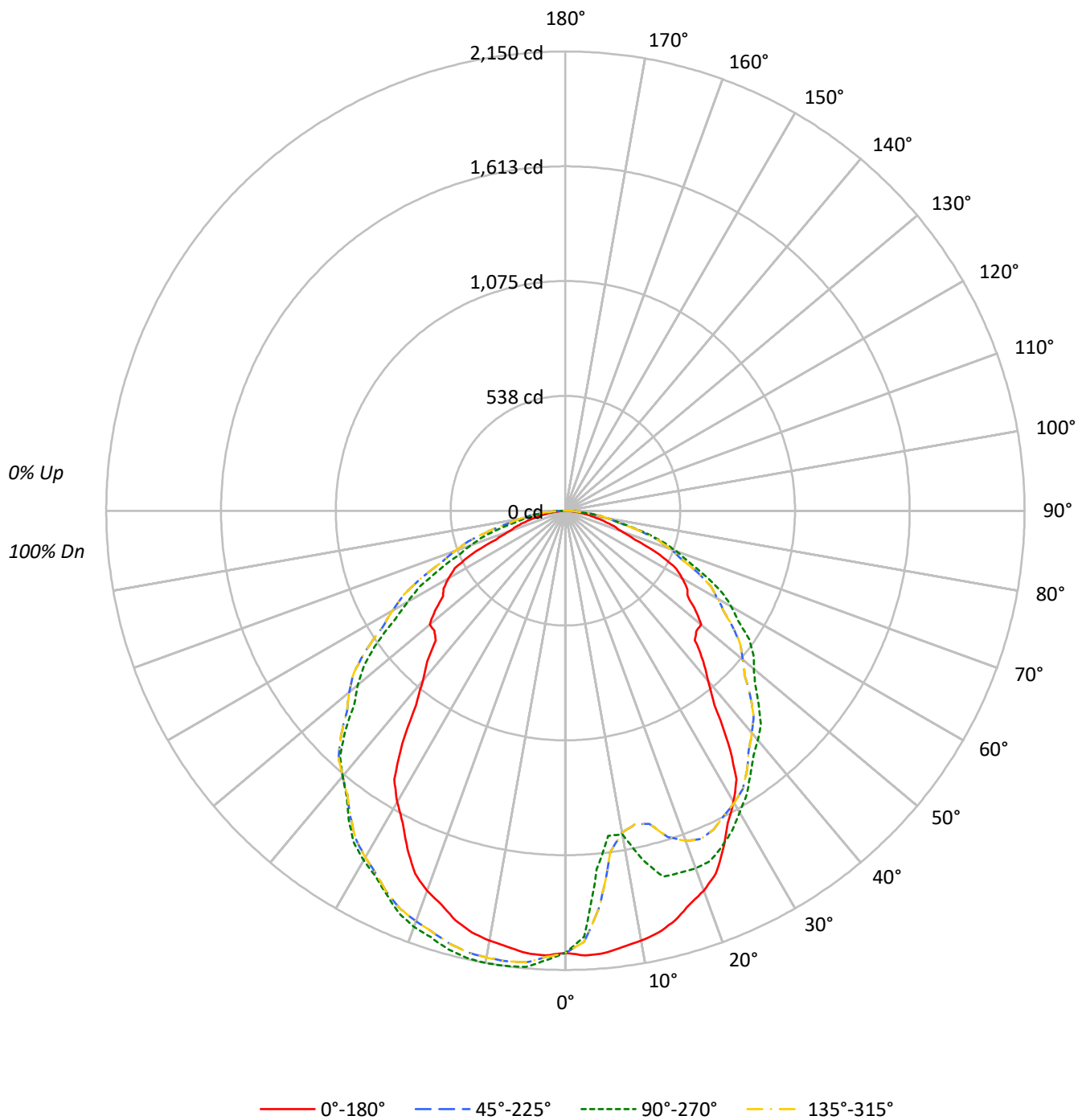
Lumens per Lamp: N/A
Luminaire Lumens: 5363.3 lumens
Efficiency: N/A
Efficacy: 76.9 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

Input Watts (W): 69.7
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°	12730	12730	12730	12730
5°	12839	10409	12839	13238
10°	12767	9600	12767	13428
15°	12643	11296	12643	13528
20°	12393	11663	12393	13573
25°	11866	11773	11866	13448
30°	11181	11585	11181	13420
35°	9983	11336	9983	13276
40°	8333	11257	8333	13033
45°	7460	11122	7460	12672
50°	7944	11017	7944	12141
55°	7496	11254	7496	11528
60°	7756	11032	7756	10477
65°	7067	10544	7067	9432
70°	4929	9895	4929	8416
75°	4375	8748	4375	7305
80°	3606	6797	3606	6241
85°	2209	4700	2209	5526

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 12944 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.6	3.5
10°-20°	530.2	9.9
20°-30°	819.4	15.3
30°-40°	979.0	18.3
40°-50°	985.3	18.4
50°-60°	855.4	16.0
60°-70°	605.6	11.3
70°-80°	320.3	6.0
80°-90°	81.5	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°	1536.2	28.6
0°-40°	2515.2	46.9
0°-60°	4355.9	81.2
0°-90°	5363.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5363.3	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2070	2070	2070	2070	2070	
5°	2079	1686	2079	2144	2079	197
15°	1986	1774	1986	2124	1986	558
25°	1748	1735	1748	1982	1748	802
35°	1330	1510	1330	1768	1330	821
45°	858	1279	858	1457	858	691
55°	699	1050	699	1075	699	643
65°	486	724	486	648	486	462
75°	184	368	184	307	184	194
85°	31	67	31	78	31	45
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°	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7
2.5°	2083.8	2068.1	2061.8	2049.3	2025.8	2013.3	2022.7	2007.0	2013.3	1996.0	2013.3
5°	2079.4	2044.2	2014.8	1965.9	1895.4	1813.2	1793.6	1742.7	1711.3	1685.9	1711.3
7.5°	2059.9	1999.6	1909.9	1760.3	1640.1	1581.3	1566.8	1552.3	1548.4	1535.5	1548.4
10°	2044.2	1962.0	1795.5	1627.1	1542.9	1515.5	1521.4	1527.3	1539.0	1537.1	1539.0
12.5°	2022.3	1896.2	1676.5	1559.8	1503.8	1503.0	1546.5	1624.4	1678.4	1674.9	1678.4
15°	1985.5	1770.1	1564.5	1490.1	1472.5	1562.5	1721.1	1758.3	1772.0	1774.0	1772.0
17.5°	1932.6	1646.7	1492.8	1443.9	1503.8	1699.6	1747.8	1764.6	1776.3	1777.1	1776.3
20°	1893.4	1584.1	1456.8	1423.5	1582.1	1707.4	1736.8	1758.3	1777.9	1781.8	1777.9
22.5°	1840.2	1540.2	1419.2	1409.4	1626.0	1699.6	1725.8	1758.3	1774.8	1774.0	1774.8
25°	1748.5	1486.2	1372.6	1394.1	1631.1	1658.5	1709.4	1730.9	1732.9	1734.8	1732.9
27.5°	1647.9	1438.8	1318.2	1404.3	1599.3	1618.9	1673.7	1684.7	1692.1	1689.0	1692.1
30°	1574.3	1405.9	1280.6	1405.9	1574.3	1586.0	1640.8	1648.7	1638.9	1631.1	1638.9
32.5°	1491.2	1365.1	1244.5	1394.9	1536.7	1553.1	1597.0	1593.8	1584.1	1577.8	1584.1
35°	1329.5	1296.2	1178.7	1358.9	1472.5	1494.0	1519.4	1517.5	1515.5	1509.7	1515.5
37.5°	1147.4	1214.8	1113.7	1302.9	1410.6	1409.0	1447.0	1455.2	1453.3	1445.8	1453.3
40°	1037.8	1147.4	1073.0	1259.0	1366.7	1351.1	1400.0	1409.8	1407.8	1402.0	1407.8
42.5°	956.3	1058.1	1026.0	1205.8	1313.5	1294.7	1354.6	1364.4	1359.3	1355.0	1359.3
45°	857.6	875.2	953.6	1120.0	1223.8	1221.8	1286.4	1296.2	1284.5	1278.6	1284.5
47.5°	831.8	705.7	874.5	1020.5	1134.9	1142.3	1211.6	1220.3	1209.7	1204.6	1209.7
50°	830.2	622.7	816.5	943.8	1076.9	1090.6	1163.1	1167.0	1153.3	1151.3	1153.3
52.5°	769.1	575.7	749.1	876.4	1026.8	1043.6	1109.8	1109.0	1107.9	1110.6	1107.9
55°	699.0	518.9	632.4	777.3	949.7	971.2	1029.9	1031.9	1045.6	1049.5	1045.6
57.5°	675.9	454.7	524.4	691.6	872.1	889.0	944.2	948.9	958.3	957.9	958.3
60°	630.5	409.2	460.1	638.3	812.6	834.1	883.1	890.9	898.7	896.8	898.7
62.5°	583.5	377.9	428.8	594.5	756.2	779.3	812.6	826.7	829.8	826.3	829.8
65°	485.6	336.8	379.9	524.8	669.7	695.1	716.6	726.4	728.4	724.5	728.4
67.5°	350.9	298.8	341.5	455.8	570.2	598.8	611.3	617.2	615.2	622.3	615.2
70°	274.1	272.2	313.3	407.3	509.1	534.5	542.4	548.3	546.3	550.2	546.3
72.5°	236.5	250.2	283.5	357.1	440.2	465.6	470.3	471.5	477.4	473.5	477.4
75°	184.1	213.4	235.0	282.0	344.6	362.2	364.2	366.2	362.2	368.1	362.2
77.5°	128.4	162.5	181.7	208.7	251.0	262.0	261.6	262.8	259.6	259.2	259.6
80°	101.8	123.4	141.0	158.6	189.9	197.8	195.8	193.8	193.8	191.9	193.8
82.5°	75.2	87.3	103.4	116.3	136.7	138.2	141.0	137.5	137.5	140.2	137.5
85°	31.3	41.1	52.9	58.7	66.6	68.5	64.6	70.5	66.6	66.6	66.6
87.5°	7.8	12.5	18.8	21.9	23.5	21.9	21.9	18.8	18.8	18.8	18.8
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°	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7
2.5°	2007.0	2022.7	2013.3	2025.8	2049.3	2061.8	2068.1	2083.8	2083.8	2093.2	2096.3
5°	1742.7	1793.6	1813.2	1895.4	1965.9	2014.8	2044.2	2079.4	2095.1	2116.6	2124.5
7.5°	1552.3	1566.8	1581.3	1640.1	1760.3	1909.9	1999.6	2059.9	2091.6	2119.8	2131.1
10°	1527.3	1521.4	1515.5	1542.9	1627.1	1795.5	1962.0	2044.2	2085.3	2116.6	2126.4
12.5°	1624.4	1546.5	1503.0	1503.8	1559.8	1676.5	1896.2	2022.3	2075.9	2105.7	2117.0
15°	1758.3	1721.1	1562.5	1472.5	1490.1	1564.5	1770.1	1985.5	2052.0	2079.4	2097.1
17.5°	1764.6	1747.8	1699.6	1503.8	1443.9	1492.8	1646.7	1932.6	2017.2	2049.7	2065.3
20°	1758.3	1736.8	1707.4	1582.1	1423.5	1456.8	1584.1	1893.4	1987.4	2024.6	2040.3
22.5°	1758.3	1725.8	1699.6	1626.0	1409.4	1419.2	1540.2	1840.2	1956.1	1994.9	2010.5
25°	1730.9	1709.4	1658.5	1631.1	1394.1	1372.6	1486.2	1748.5	1905.2	1938.5	1962.0
27.5°	1684.7	1673.7	1618.9	1599.3	1404.3	1318.2	1438.8	1647.9	1835.1	1882.5	1907.9
30°	1648.7	1640.8	1586.0	1574.3	1405.9	1280.6	1405.9	1574.3	1774.0	1838.6	1871.9
32.5°	1593.8	1597.0	1553.1	1536.7	1394.9	1244.5	1365.1	1491.2	1683.1	1793.2	1832.7
35°	1517.5	1519.4	1494.0	1472.5	1358.9	1178.7	1296.2	1329.5	1572.3	1729.0	1762.2
37.5°	1455.2	1447.0	1409.0	1410.6	1302.9	1113.7	1214.8	1147.4	1472.1	1661.2	1685.5
40°	1409.8	1400.0	1351.1	1366.7	1259.0	1073.0	1147.4	1037.8	1376.5	1609.5	1629.1
42.5°	1364.4	1354.6	1294.7	1313.5	1205.8	1026.0	1058.1	956.3	1271.6	1554.7	1560.2
45°	1296.2	1286.4	1221.8	1223.8	1120.0	953.6	875.2	857.6	1210.1	1466.6	1466.6
47.5°	1220.3	1211.6	1142.3	1134.9	1020.5	874.5	705.7	831.8	1123.9	1371.8	1371.0
50°	1167.0	1163.1	1090.6	1076.9	943.8	816.5	622.7	830.2	1061.3	1290.4	1309.9
52.5°	1109.0	1109.8	1043.6	1026.8	876.4	749.1	575.7	769.1	984.5	1185.4	1247.3
55°	1031.9	1029.9	971.2	949.7	777.3	632.4	518.9	699.0	865.5	1039.7	1143.5
57.5°	948.9	944.2	889.0	872.1	691.6	524.4	454.7	675.9	680.6	906.6	1038.9
60°	890.9	883.1	834.1	812.6	638.3	460.1	409.2	630.5	520.8	812.6	957.5
62.5°	826.7	812.6	779.3	756.2	594.5	428.8	377.9	583.5	406.5	706.1	879.2
65°	726.4	716.6	695.1	669.7	524.8	379.9	336.8	485.6	317.2	483.6	763.6
67.5°	617.2	611.3	598.8	570.2	455.8	341.5	298.8	350.9	241.2	307.0	653.6
70°	548.3	542.4	534.5	509.1	407.3	313.3	272.2	274.1	172.3	227.1	581.5
72.5°	471.5	470.3	465.6	440.2	357.1	283.5	250.2	236.5	145.7	178.6	507.9
75°	366.2	364.2	362.2	344.6	282.0	235.0	213.4	184.1	146.9	127.3	397.5
77.5°	262.8	261.6	262.0	251.0	208.7	181.7	162.5	128.4	131.2	96.7	297.6
80°	193.8	195.8	197.8	189.9	158.6	141.0	123.4	101.8	107.7	76.4	227.1
82.5°	137.5	141.0	138.2	136.7	116.3	103.4	87.3	75.2	76.4	60.7	169.2
85°	70.5	64.6	68.5	66.6	58.7	52.9	41.1	31.3	39.2	35.2	84.2
87.5°	18.8	21.9	21.9	23.5	21.9	18.8	12.5	7.8	14.1	17.2	34.5
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°	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7	2069.7
2.5°	2091.6	2091.6	2105.7	2108.8	2111.9	2107.2	2111.9	2108.8	2105.7	2091.6	2091.6
5°	2122.5	2122.5	2142.1	2148.0	2148.0	2144.1	2148.0	2148.0	2142.1	2122.5	2122.5
7.5°	2125.3	2128.4	2148.0	2152.3	2155.8	2149.9	2155.8	2152.3	2148.0	2128.4	2125.3
10°	2120.6	2128.4	2148.0	2153.9	2155.8	2149.9	2155.8	2153.9	2148.0	2128.4	2120.6
12.5°	2114.3	2120.6	2140.1	2144.5	2148.0	2143.7	2148.0	2144.5	2140.1	2120.6	2114.3
15°	2093.2	2101.0	2122.5	2126.4	2130.4	2124.5	2130.4	2126.4	2122.5	2101.0	2093.2
17.5°	2063.8	2073.6	2093.2	2099.4	2101.4	2093.9	2101.4	2099.4	2093.2	2073.6	2063.8
20°	2040.3	2050.1	2069.7	2077.5	2079.4	2073.6	2079.4	2077.5	2069.7	2050.1	2040.3
22.5°	2010.5	2026.6	2044.6	2047.7	2045.0	2039.1	2045.0	2047.7	2044.6	2026.6	2010.5
25°	1967.8	1981.5	1987.4	1987.4	1987.4	1981.5	1987.4	1987.4	1987.4	1981.5	1967.8
27.5°	1913.4	1920.5	1924.0	1927.1	1931.0	1927.1	1931.0	1927.1	1924.0	1920.5	1913.4
30°	1875.8	1871.9	1881.7	1889.5	1893.4	1889.5	1893.4	1889.5	1881.7	1871.9	1875.8
32.5°	1824.1	1826.5	1841.0	1845.7	1846.4	1842.5	1846.4	1845.7	1841.0	1826.5	1824.1
35°	1748.5	1758.3	1768.1	1772.0	1774.0	1768.1	1774.0	1772.0	1768.1	1758.3	1748.5
37.5°	1668.6	1685.9	1692.9	1688.6	1689.0	1682.7	1689.0	1688.6	1692.9	1685.9	1668.6
40°	1615.4	1631.1	1635.0	1629.1	1631.1	1623.2	1631.1	1629.1	1635.0	1631.1	1615.4
42.5°	1565.3	1577.8	1573.9	1566.4	1565.3	1562.1	1565.3	1566.4	1573.9	1577.8	1565.3
45°	1482.2	1488.1	1470.5	1464.6	1460.7	1456.8	1460.7	1464.6	1470.5	1488.1	1482.2
47.5°	1391.4	1383.6	1366.7	1357.7	1346.7	1339.3	1346.7	1357.7	1366.7	1383.6	1391.4
50°	1333.4	1309.9	1296.2	1274.7	1266.9	1268.8	1266.9	1274.7	1296.2	1309.9	1333.4
52.5°	1262.9	1234.7	1213.2	1194.8	1188.5	1187.4	1188.5	1194.8	1213.2	1234.7	1262.9
55°	1161.1	1118.0	1082.8	1073.0	1071.1	1075.0	1071.1	1073.0	1082.8	1118.0	1161.1
57.5°	1036.2	993.9	964.9	957.1	950.4	944.2	950.4	957.1	964.9	993.9	1036.2
60°	951.6	912.4	885.0	877.2	859.6	851.7	859.6	877.2	885.0	912.4	951.6
62.5°	876.4	829.4	808.3	792.6	779.7	767.2	779.7	792.6	808.3	829.4	876.4
65°	767.6	712.7	691.2	677.5	654.0	648.1	654.0	677.5	691.2	712.7	767.6
67.5°	648.5	600.7	573.7	555.3	540.4	540.0	540.4	555.3	573.7	600.7	648.5
70°	571.7	528.7	503.2	481.7	469.9	468.0	469.9	481.7	503.2	528.7	571.7
72.5°	496.6	455.0	432.7	412.8	402.6	400.6	402.6	412.8	432.7	455.0	496.6
75°	389.7	350.5	332.9	319.2	311.3	307.4	311.3	319.2	332.9	350.5	389.7
77.5°	288.2	256.5	247.5	233.4	226.7	226.4	226.7	233.4	247.5	256.5	288.2
80°	227.1	201.7	188.0	180.1	178.2	176.2	178.2	180.1	188.0	201.7	227.1
82.5°	164.5	150.0	141.0	136.3	135.9	132.4	135.9	136.3	141.0	150.0	164.5
85°	88.1	84.2	82.2	80.3	78.3	78.3	78.3	80.3	82.2	84.2	88.1
87.5°	36.0	37.6	37.6	39.2	40.7	39.2	40.7	39.2	37.6	37.6	36.0
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-125D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	2069.7	2069.7	2069.7	2069.7
2.5°	2096.3	2093.2	2083.8	2083.8
5°	2124.5	2116.6	2095.1	2079.4
7.5°	2131.1	2119.8	2091.6	2059.9
10°	2126.4	2116.6	2085.3	2044.2
12.5°	2117.0	2105.7	2075.9	2022.3
15°	2097.1	2079.4	2052.0	1985.5
17.5°	2065.3	2049.7	2017.2	1932.6
20°	2040.3	2024.6	1987.4	1893.4
22.5°	2010.5	1994.9	1956.1	1840.2
25°	1962.0	1938.5	1905.2	1748.5
27.5°	1907.9	1882.5	1835.1	1647.9
30°	1871.9	1838.6	1774.0	1574.3
32.5°	1832.7	1793.2	1683.1	1491.2
35°	1762.2	1729.0	1572.3	1329.5
37.5°	1685.5	1661.2	1472.1	1147.4
40°	1629.1	1609.5	1376.5	1037.8
42.5°	1560.2	1554.7	1271.6	956.3
45°	1466.6	1466.6	1210.1	857.6
47.5°	1371.0	1371.8	1123.9	831.8
50°	1309.9	1290.4	1061.3	830.2
52.5°	1247.3	1185.4	984.5	769.1
55°	1143.5	1039.7	865.5	699.0
57.5°	1038.9	906.6	680.6	675.9
60°	957.5	812.6	520.8	630.5
62.5°	879.2	706.1	406.5	583.5
65°	763.6	483.6	317.2	485.6
67.5°	653.6	307.0	241.2	350.9
70°	581.5	227.1	172.3	274.1
72.5°	507.9	178.6	145.7	236.5
75°	397.5	127.3	146.9	184.1
77.5°	297.6	96.7	131.2	128.4
80°	227.1	76.4	107.7	101.8
82.5°	169.2	60.7	76.4	75.2
85°	84.2	35.2	39.2	31.3
87.5°	34.5	17.2	14.1	7.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)