

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-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-125D-935-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

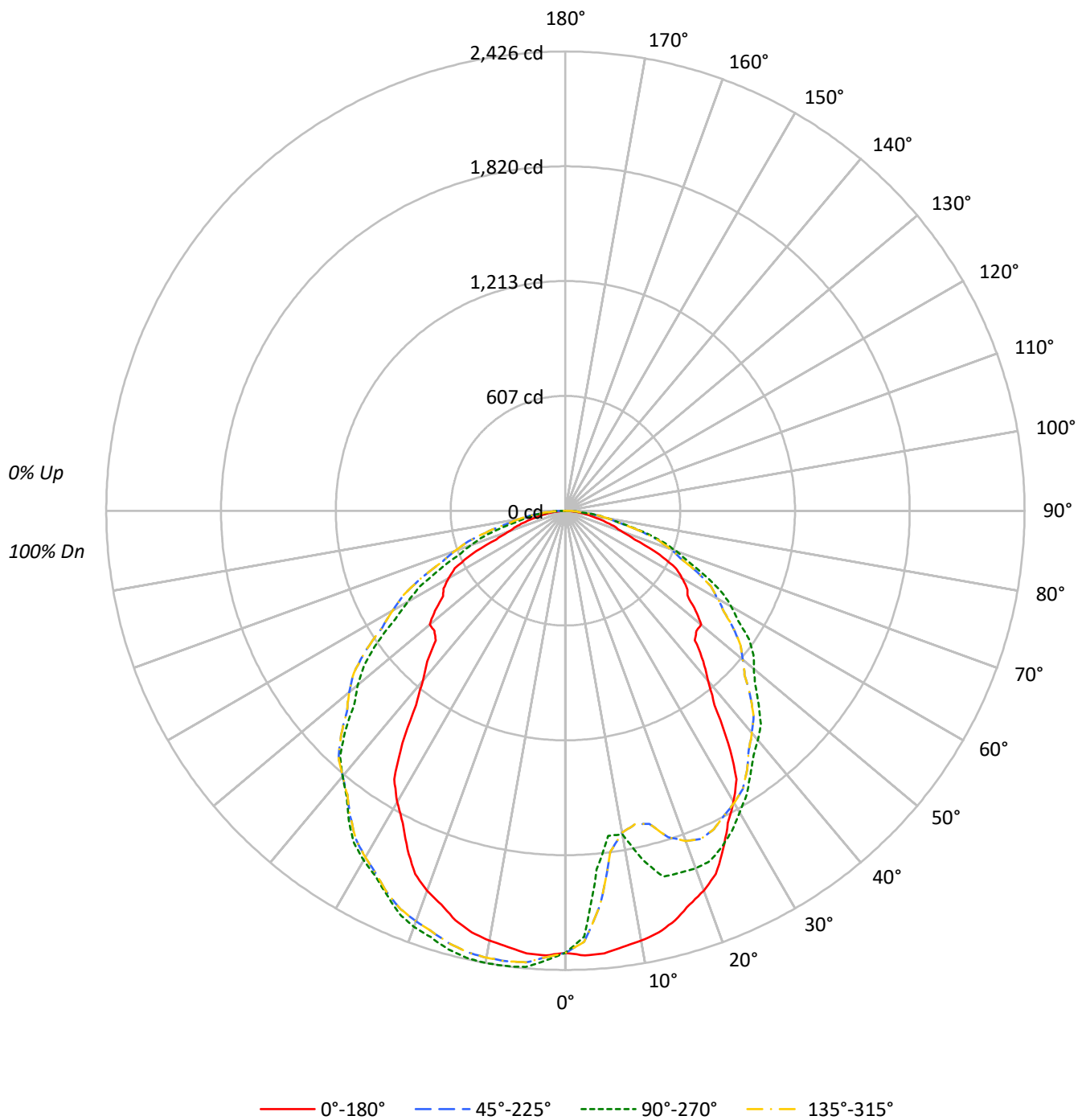
Lumens per Lamp: N/A
Luminaire Lumens: 6052.1 lumens
Efficiency: N/A
Efficacy: 86.8 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

Input Watts (W): 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				0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		0
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		100
1	109	105	100	97	106	102	98	95	98	95	92		94	92	89		85
2	99	91	85	79	97	90	83	78	86	81	76		83	78	75		71
3	91	81	73	66	88	79	72	66	76	70	64		73	68	63		60
4	83	71	63	56	81	70	62	56	68	61	55		65	59	54		51
5	77	64	55	49	75	63	54	48	61	53	48		59	52	47		45
6	71	58	49	42	69	57	48	42	55	47	42		53	47	41		39
7	66	52	44	38	64	51	43	37	50	43	37		48	42	37		35
8	61	48	39	33	60	47	39	33	46	38	33		44	38	33		31
9	57	44	36	30	56	43	35	30	42	35	30		41	34	30		28
10	54	40	33	27	52	40	32	27	39	32	27		38	32	27		25

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	14365	14365	14365	14365
5°	14488	11746	14488	14938
10°	14407	10833	14407	15153
15°	14267	12747	14267	15265
20°	13985	13161	13985	15316
25°	13391	13286	13391	15175
30°	12617	13072	12617	15144
35°	11265	12791	11265	14981
40°	9402	12702	9402	14707
45°	8418	12550	8418	14300
50°	8964	12432	8964	13701
55°	8459	12700	8459	13008
60°	8753	12449	8753	11823
65°	7976	11898	7976	10645
70°	5562	11166	5562	9497
75°	4936	9872	4936	8244
80°	4070	7669	4070	7045
85°	2498	5300	2498	6239

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 14607 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	210.5	3.5
10°-20°	598.3	9.9
20°-30°	924.6	15.3
30°-40°	1104.7	18.3
40°-50°	1111.9	18.4
50°-60°	965.3	16.0
60°-70°	683.3	11.3
70°-80°	361.4	6.0
80°-90°	91.9	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°	1733.5	28.6
0°-40°	2838.2	46.9
0°-60°	4915.4	81.2
0°-90°	6052.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6052.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2336	2336	2336	2336	2336	
5°	2346	1902	2346	2419	2346	222
15°	2240	2002	2240	2397	2240	630
25°	1973	1958	1973	2236	1973	905
35°	1500	1704	1500	1995	1500	926
45°	968	1443	968	1644	968	779
55°	789	1184	789	1213	789	726
65°	548	818	548	731	548	521
75°	208	415	208	347	208	219
85°	35	75	35	88	35	51
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°	2335.5	2335.5	2335.5	2335.5	2335.5	2335.5	2335.5	2335.5	2335.5	2335.5	2335.5
2.5°	2351.4	2333.7	2326.6	2312.5	2286.0	2271.8	2282.4	2264.8	2271.8	2252.4	2271.8
5°	2346.5	2306.7	2273.6	2218.4	2138.8	2046.0	2023.9	1966.5	1931.1	1902.4	1931.1
7.5°	2324.4	2256.4	2155.2	1986.4	1850.7	1784.4	1768.1	1751.7	1747.3	1732.7	1747.3
10°	2306.7	2213.9	2026.1	1836.1	1741.1	1710.2	1716.8	1723.4	1736.7	1734.5	1736.7
12.5°	2282.0	2139.7	1891.8	1760.1	1696.9	1696.0	1745.1	1833.0	1894.0	1890.0	1894.0
15°	2240.5	1997.4	1765.4	1681.4	1661.6	1763.2	1942.2	1984.2	1999.6	2001.8	1999.6
17.5°	2180.8	1858.2	1684.5	1629.3	1696.9	1917.9	1972.2	1991.2	2004.5	2005.4	2004.5
20°	2136.6	1787.5	1643.9	1606.3	1785.3	1926.7	1959.9	1984.2	2006.3	2010.7	2006.3
22.5°	2076.5	1738.0	1601.5	1590.4	1834.8	1917.9	1947.5	1984.2	2002.7	2001.8	2002.7
25°	1973.1	1677.0	1548.9	1573.2	1840.5	1871.5	1928.9	1953.2	1955.4	1957.6	1955.4
27.5°	1859.5	1623.6	1487.5	1584.7	1804.7	1826.8	1888.7	1901.1	1909.5	1905.9	1909.5
30°	1776.5	1586.4	1445.0	1586.4	1776.5	1789.7	1851.6	1860.4	1849.4	1840.5	1849.4
32.5°	1682.8	1540.5	1404.4	1574.1	1734.0	1752.6	1802.1	1798.6	1787.5	1780.4	1787.5
35°	1500.3	1462.7	1330.1	1533.4	1661.6	1685.9	1714.6	1712.4	1710.2	1703.5	1710.2
37.5°	1294.8	1370.8	1256.8	1470.2	1591.7	1590.0	1632.8	1642.1	1639.9	1631.5	1639.9
40°	1171.0	1294.8	1210.8	1420.7	1542.2	1524.6	1579.8	1590.9	1588.6	1582.0	1588.6
42.5°	1079.1	1194.0	1157.8	1360.6	1482.2	1460.9	1528.6	1539.6	1533.9	1529.0	1533.9
45°	967.8	987.7	1076.0	1263.8	1381.0	1378.7	1451.7	1462.7	1449.4	1442.8	1449.4
47.5°	938.6	796.3	986.8	1151.6	1280.6	1289.0	1367.3	1377.0	1365.0	1359.3	1365.0
50°	936.8	702.6	921.4	1065.0	1215.2	1230.7	1312.5	1316.9	1301.4	1299.2	1301.4
52.5°	867.9	649.6	845.4	989.0	1158.7	1177.7	1252.4	1251.5	1250.2	1253.2	1250.2
55°	788.8	585.5	713.7	877.2	1071.6	1095.9	1162.2	1164.4	1179.9	1184.3	1179.9
57.5°	762.7	513.1	591.7	780.4	984.1	1003.1	1065.4	1070.7	1081.3	1080.9	1081.3
60°	711.5	461.8	519.2	720.3	917.0	941.3	996.5	1005.3	1014.2	1012.0	1014.2
62.5°	658.4	426.4	483.9	670.8	853.3	879.4	917.0	932.9	936.4	932.4	936.4
65°	548.0	380.0	428.6	592.2	755.7	784.4	808.7	819.7	821.9	817.5	821.9
67.5°	395.9	337.2	385.3	514.4	643.4	675.7	689.8	696.4	694.2	702.2	694.2
70°	309.3	307.1	353.5	459.6	574.5	603.2	612.0	618.7	616.5	620.9	616.5
72.5°	266.9	282.4	319.9	403.0	496.7	525.4	530.7	532.1	538.7	534.3	538.7
75°	207.7	240.8	265.1	318.2	388.9	408.8	411.0	413.2	408.8	415.4	408.8
77.5°	144.9	183.4	205.0	235.5	283.3	295.6	295.2	296.5	293.0	292.5	293.0
80°	114.9	139.2	159.1	179.0	214.3	223.2	221.0	218.7	218.7	216.5	218.7
82.5°	84.8	98.5	116.7	131.2	154.2	156.0	159.1	155.1	155.1	158.2	155.1
85°	35.4	46.4	59.7	66.3	75.1	77.3	72.9	79.5	75.1	75.1	75.1
87.5°	8.8	14.1	21.2	24.7	26.5	24.7	24.7	21.2	21.2	21.2	21.2
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°	2335.5	2335.5	2335.5	2335.5	2335.5	2335.5	2335.5	2335.5	2335.5	2335.5	2335.5
2.5°	2264.8	2282.4	2271.8	2286.0	2312.5	2326.6	2333.7	2351.4	2351.4	2362.0	2365.5
5°	1966.5	2023.9	2046.0	2138.8	2218.4	2273.6	2306.7	2346.5	2364.2	2388.5	2397.3
7.5°	1751.7	1768.1	1784.4	1850.7	1986.4	2155.2	2256.4	2324.4	2360.2	2392.0	2404.8
10°	1723.4	1716.8	1710.2	1741.1	1836.1	2026.1	2213.9	2306.7	2353.1	2388.5	2399.5
12.5°	1833.0	1745.1	1696.0	1696.9	1760.1	1891.8	2139.7	2282.0	2342.5	2376.1	2388.9
15°	1984.2	1942.2	1763.2	1661.6	1681.4	1765.4	1997.4	2240.5	2315.6	2346.5	2366.4
17.5°	1991.2	1972.2	1917.9	1696.9	1629.3	1684.5	1858.2	2180.8	2276.3	2312.9	2330.6
20°	1984.2	1959.9	1926.7	1785.3	1606.3	1643.9	1787.5	2136.6	2242.7	2284.7	2302.3
22.5°	1984.2	1947.5	1917.9	1834.8	1590.4	1601.5	1738.0	2076.5	2207.3	2251.1	2268.7
25°	1953.2	1928.9	1871.5	1840.5	1573.2	1548.9	1677.0	1973.1	2149.9	2187.4	2213.9
27.5°	1901.1	1888.7	1826.8	1804.7	1584.7	1487.5	1623.6	1859.5	2070.8	2124.2	2153.0
30°	1860.4	1851.6	1789.7	1776.5	1586.4	1445.0	1586.4	1776.5	2001.8	2074.7	2112.3
32.5°	1798.6	1802.1	1752.6	1734.0	1574.1	1404.4	1540.5	1682.8	1899.3	2023.5	2068.1
35°	1712.4	1714.6	1685.9	1661.6	1533.4	1330.1	1462.7	1500.3	1774.2	1951.0	1988.6
37.5°	1642.1	1632.8	1590.0	1591.7	1470.2	1256.8	1370.8	1294.8	1661.1	1874.6	1902.0
40°	1590.9	1579.8	1524.6	1542.2	1420.7	1210.8	1294.8	1171.0	1553.3	1816.2	1838.3
42.5°	1539.6	1528.6	1460.9	1482.2	1360.6	1157.8	1194.0	1079.1	1434.9	1754.4	1760.6
45°	1462.7	1451.7	1378.7	1381.0	1263.8	1076.0	987.7	967.8	1365.5	1654.9	1654.9
47.5°	1377.0	1367.3	1289.0	1280.6	1151.6	986.8	796.3	938.6	1268.3	1548.0	1547.1
50°	1316.9	1312.5	1230.7	1215.2	1065.0	921.4	702.6	936.8	1197.6	1456.1	1478.2
52.5°	1251.5	1252.4	1177.7	1158.7	989.0	845.4	649.6	867.9	1111.0	1337.6	1407.5
55°	1164.4	1162.2	1095.9	1071.6	877.2	713.7	585.5	788.8	976.6	1173.3	1290.4
57.5°	1070.7	1065.4	1003.1	984.1	780.4	591.7	513.1	762.7	768.0	1023.0	1172.4
60°	1005.3	996.5	941.3	917.0	720.3	519.2	461.8	711.5	587.7	917.0	1080.5
62.5°	932.9	917.0	879.4	853.3	670.8	483.9	426.4	658.4	458.7	796.8	992.1
65°	819.7	808.7	784.4	755.7	592.2	428.6	380.0	548.0	357.9	545.8	861.7
67.5°	696.4	689.8	675.7	643.4	514.4	385.3	337.2	395.9	272.2	346.5	737.5
70°	618.7	612.0	603.2	574.5	459.6	353.5	307.1	309.3	194.4	256.3	656.2
72.5°	532.1	530.7	525.4	496.7	403.0	319.9	282.4	266.9	164.4	201.5	573.2
75°	413.2	411.0	408.8	388.9	318.2	265.1	240.8	207.7	165.7	143.6	448.5
77.5°	296.5	295.2	295.6	283.3	235.5	205.0	183.4	144.9	148.0	109.2	335.8
80°	218.7	221.0	223.2	214.3	179.0	159.1	139.2	114.9	121.5	86.2	256.3
82.5°	155.1	159.1	156.0	154.2	131.2	116.7	98.5	84.8	86.2	68.5	190.9
85°	79.5	72.9	77.3	75.1	66.3	59.7	46.4	35.4	44.2	39.8	95.0
87.5°	21.2	24.7	24.7	26.5	24.7	21.2	14.1	8.8	15.9	19.4	38.9
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°	2335.5	2335.5	2335.5	2335.5	2335.5	2335.5	2335.5	2335.5	2335.5	2335.5	2335.5
2.5°	2360.2	2360.2	2376.1	2379.7	2383.2	2377.9	2383.2	2379.7	2376.1	2360.2	2360.2
5°	2395.1	2395.1	2417.2	2423.9	2423.9	2419.4	2423.9	2423.9	2417.2	2395.1	2395.1
7.5°	2398.2	2401.8	2423.9	2428.7	2432.7	2426.1	2432.7	2428.7	2423.9	2401.8	2398.2
10°	2392.9	2401.8	2423.9	2430.5	2432.7	2426.1	2432.7	2430.5	2423.9	2401.8	2392.9
12.5°	2385.8	2392.9	2415.0	2419.9	2423.9	2419.0	2423.9	2419.9	2415.0	2392.9	2385.8
15°	2362.0	2370.8	2395.1	2399.5	2404.0	2397.3	2404.0	2399.5	2395.1	2370.8	2362.0
17.5°	2328.8	2339.9	2362.0	2369.1	2371.3	2362.9	2371.3	2369.1	2362.0	2339.9	2328.8
20°	2302.3	2313.4	2335.5	2344.3	2346.5	2339.9	2346.5	2344.3	2335.5	2313.4	2302.3
22.5°	2268.7	2286.9	2307.2	2310.7	2307.6	2301.0	2307.6	2310.7	2307.2	2286.9	2268.7
25°	2220.6	2236.0	2242.7	2242.7	2242.7	2236.0	2242.7	2242.7	2242.7	2236.0	2220.6
27.5°	2159.1	2167.1	2171.1	2174.6	2179.0	2174.6	2179.0	2174.6	2171.1	2167.1	2159.1
30°	2116.7	2112.3	2123.4	2132.2	2136.6	2132.2	2136.6	2132.2	2123.4	2112.3	2116.7
32.5°	2058.4	2061.0	2077.4	2082.7	2083.6	2079.2	2083.6	2082.7	2077.4	2061.0	2058.4
35°	1973.1	1984.2	1995.2	1999.6	2001.8	1995.2	2001.8	1999.6	1995.2	1984.2	1973.1
37.5°	1883.0	1902.4	1910.4	1905.5	1905.9	1898.9	1905.9	1905.5	1910.4	1902.4	1883.0
40°	1822.9	1840.5	1845.0	1838.3	1840.5	1831.7	1840.5	1838.3	1845.0	1840.5	1822.9
42.5°	1766.3	1780.4	1776.0	1767.6	1766.3	1762.8	1766.3	1767.6	1776.0	1780.4	1766.3
45°	1672.6	1679.2	1659.4	1652.7	1648.3	1643.9	1648.3	1652.7	1659.4	1679.2	1672.6
47.5°	1570.1	1561.3	1542.2	1532.1	1519.7	1511.3	1519.7	1532.1	1542.2	1561.3	1570.1
50°	1504.7	1478.2	1462.7	1438.4	1429.6	1431.8	1429.6	1438.4	1462.7	1478.2	1504.7
52.5°	1425.1	1393.3	1369.0	1348.3	1341.2	1339.9	1341.2	1348.3	1369.0	1393.3	1425.1
55°	1310.2	1261.6	1221.9	1210.8	1208.6	1213.0	1208.6	1210.8	1221.9	1261.6	1310.2
57.5°	1169.3	1121.6	1088.9	1080.0	1072.5	1065.4	1072.5	1080.0	1088.9	1121.6	1169.3
60°	1073.8	1029.6	998.7	989.9	970.0	961.1	970.0	989.9	998.7	1029.6	1073.8
62.5°	989.0	936.0	912.1	894.4	879.8	865.7	879.8	894.4	912.1	936.0	989.0
65°	866.1	804.3	780.0	764.5	738.0	731.4	738.0	764.5	780.0	804.3	866.1
67.5°	731.8	677.9	647.4	626.6	609.8	609.4	609.8	626.6	647.4	677.9	731.8
70°	645.2	596.6	567.8	543.5	530.3	528.1	530.3	543.5	567.8	596.6	645.2
72.5°	560.3	513.5	488.3	465.8	454.3	452.1	454.3	465.8	488.3	513.5	560.3
75°	439.7	395.5	375.6	360.2	351.3	346.9	351.3	360.2	375.6	395.5	439.7
77.5°	325.2	289.4	279.3	263.4	255.9	255.4	255.9	263.4	279.3	289.4	325.2
80°	256.3	227.6	212.1	203.3	201.1	198.9	201.1	203.3	212.1	227.6	256.3
82.5°	185.6	169.2	159.1	153.8	153.3	149.4	153.3	153.8	159.1	169.2	185.6
85°	99.4	95.0	92.8	90.6	88.4	88.4	88.4	90.6	92.8	95.0	99.4
87.5°	40.7	42.4	42.4	44.2	46.0	44.2	46.0	44.2	42.4	42.4	40.7
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-935-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	2335.5	2335.5	2335.5	2335.5
2.5°	2365.5	2362.0	2351.4	2351.4
5°	2397.3	2388.5	2364.2	2346.5
7.5°	2404.8	2392.0	2360.2	2324.4
10°	2399.5	2388.5	2353.1	2306.7
12.5°	2388.9	2376.1	2342.5	2282.0
15°	2366.4	2346.5	2315.6	2240.5
17.5°	2330.6	2312.9	2276.3	2180.8
20°	2302.3	2284.7	2242.7	2136.6
22.5°	2268.7	2251.1	2207.3	2076.5
25°	2213.9	2187.4	2149.9	1973.1
27.5°	2153.0	2124.2	2070.8	1859.5
30°	2112.3	2074.7	2001.8	1776.5
32.5°	2068.1	2023.5	1899.3	1682.8
35°	1988.6	1951.0	1774.2	1500.3
37.5°	1902.0	1874.6	1661.1	1294.8
40°	1838.3	1816.2	1553.3	1171.0
42.5°	1760.6	1754.4	1434.9	1079.1
45°	1654.9	1654.9	1365.5	967.8
47.5°	1547.1	1548.0	1268.3	938.6
50°	1478.2	1456.1	1197.6	936.8
52.5°	1407.5	1337.6	1111.0	867.9
55°	1290.4	1173.3	976.6	788.8
57.5°	1172.4	1023.0	768.0	762.7
60°	1080.5	917.0	587.7	711.5
62.5°	992.1	796.8	458.7	658.4
65°	861.7	545.8	357.9	548.0
67.5°	737.5	346.5	272.2	395.9
70°	656.2	256.3	194.4	309.3
72.5°	573.2	201.5	164.4	266.9
75°	448.5	143.6	165.7	207.7
77.5°	335.8	109.2	148.0	144.9
80°	256.3	86.2	121.5	114.9
82.5°	190.9	68.5	86.2	84.8
85°	95.0	39.8	44.2	35.4
87.5°	38.9	19.4	15.9	8.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)