

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-835-1D-UNV-STD-W-4

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-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

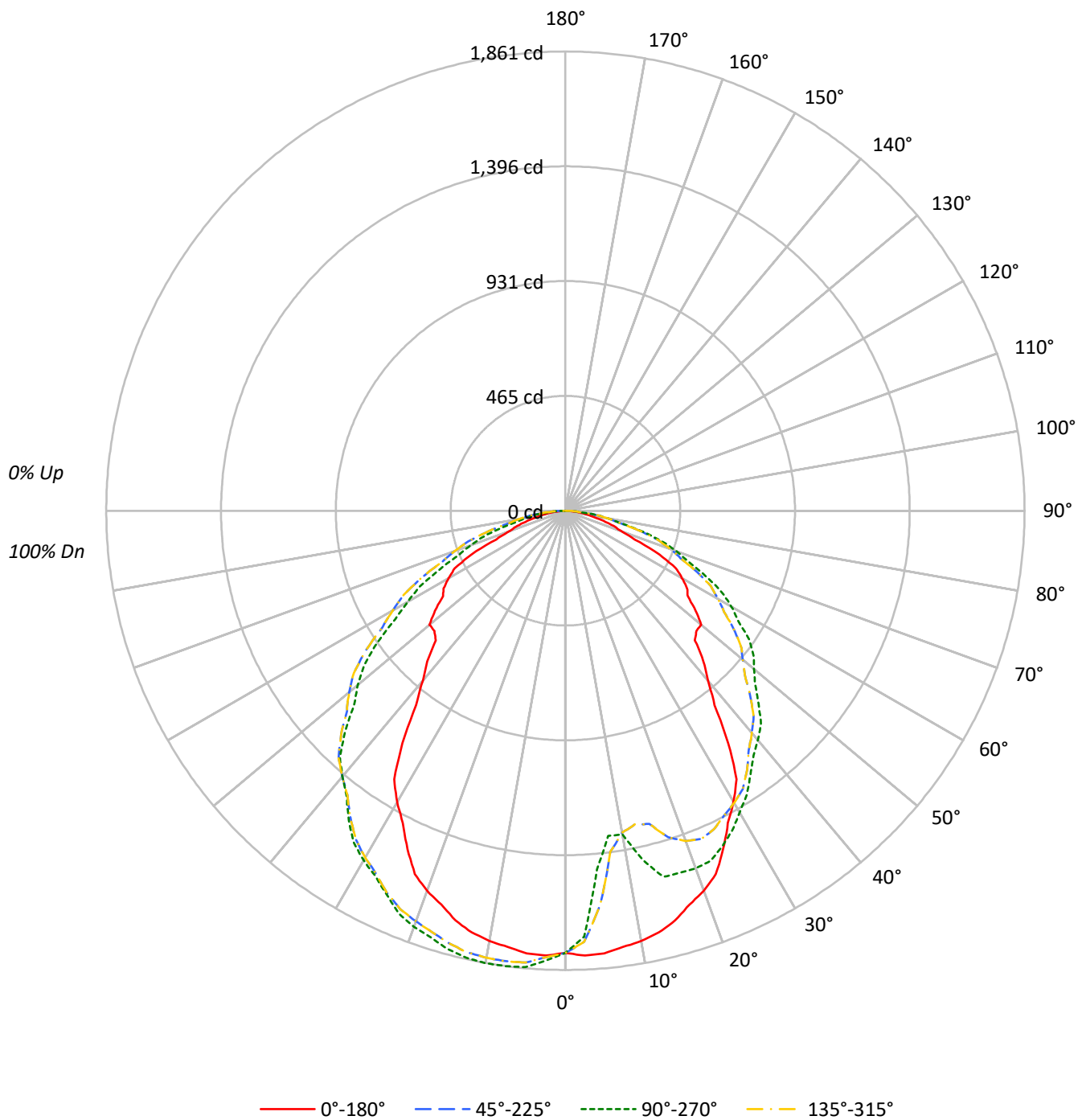
Lumens per Lamp: N/A
Luminaire Lumens: 4643.5 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 43.6
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

TEST NUMBER:

CATALOG NUMBER: SQ4-FA-0U-125D-835-1D-UNV-STD-W-4

Luminous Intensity Polar Plot



TEST NUMBER:

CATALOG NUMBER: SQ4-FA-0U-125D-835-1D-UNV-STD-W-4

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°	16532	16532	16532	16532
5°	16674	13518	16674	17192
10°	16581	12468	16581	17439
15°	16419	14670	16419	17569
20°	16095	15147	16095	17627
25°	15411	15290	15411	17465
30°	14521	15045	14521	17428
35°	12965	14722	12965	17242
40°	10821	14619	10821	16927
45°	9688	14444	9688	16457
50°	10317	14307	10317	15767
55°	9735	14617	9735	14971
60°	10073	14326	10073	13607
65°	9178	13695	9178	12249
70°	6401	12851	6401	10931
75°	5682	11361	5682	9489
80°	4686	8825	4686	8108
85°	2869	6097	2869	7177

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 16811 cd/sqm

TEST NUMBER:

CATALOG NUMBER: SQ4-FA-0U-125D-835-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.5	3.5
10°-20°	459.1	9.9
20°-30°	709.4	15.3
30°-40°	847.6	18.3
40°-50°	853.1	18.4
50°-60°	740.6	16.0
60°-70°	524.3	11.3
70°-80°	277.3	6.0
80°-90°	70.5	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°	1330.0	28.6
0°-40°	2177.6	46.9
0°-60°	3771.4	81.2
0°-90°	4643.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4643.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1792	1792	1792	1792	1792	
5°	1800	1460	1800	1856	1800	171
15°	1719	1536	1719	1839	1719	483
25°	1514	1502	1514	1716	1514	694
35°	1151	1307	1151	1531	1151	711
45°	742	1107	742	1261	742	598
55°	605	909	605	931	605	557
65°	420	627	420	561	420	400
75°	159	319	159	266	159	168
85°	27	58	27	68	27	39
90°	0	0	0	0	0	

TEST NUMBER:

CATALOG NUMBER: SQ4-FA-0U-125D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	1791.9	1791.9	1791.9	1791.9	1791.9	1791.9	1791.9	1791.9	1791.9	1791.9	1791.9
2.5°	1804.1	1790.6	1785.1	1774.3	1753.9	1743.1	1751.2	1737.7	1743.1	1728.2	1743.1
5°	1800.4	1769.9	1744.4	1702.1	1641.0	1569.8	1552.9	1508.8	1481.7	1459.6	1481.7
7.5°	1783.4	1731.2	1653.6	1524.1	1420.0	1369.1	1356.6	1344.0	1340.6	1329.4	1340.6
10°	1769.9	1698.7	1554.6	1408.8	1335.9	1312.1	1317.2	1322.3	1332.5	1330.8	1332.5
12.5°	1750.9	1641.7	1451.5	1350.5	1302.0	1301.3	1338.9	1406.4	1453.2	1450.1	1453.2
15°	1719.0	1532.5	1354.5	1290.1	1274.9	1352.8	1490.2	1522.4	1534.2	1535.9	1534.2
17.5°	1673.2	1425.7	1292.5	1250.1	1302.0	1471.5	1513.2	1527.8	1538.0	1538.6	1538.0
20°	1639.3	1371.5	1261.3	1232.5	1369.8	1478.3	1503.7	1522.4	1539.3	1542.7	1539.3
22.5°	1593.2	1333.5	1228.7	1220.3	1407.8	1471.5	1494.2	1522.4	1536.6	1535.9	1536.6
25°	1513.9	1286.7	1188.4	1207.0	1412.2	1435.9	1480.0	1498.6	1500.3	1502.0	1500.3
27.5°	1426.7	1245.7	1141.3	1215.9	1384.7	1401.7	1449.1	1458.6	1465.1	1462.3	1465.1
30°	1363.0	1217.2	1108.7	1217.2	1363.0	1373.2	1420.6	1427.4	1419.0	1412.2	1419.0
32.5°	1291.1	1182.0	1077.5	1207.7	1330.5	1344.7	1382.7	1380.0	1371.5	1366.1	1371.5
35°	1151.1	1122.3	1020.6	1176.5	1274.9	1293.5	1315.5	1313.8	1312.1	1307.1	1312.1
37.5°	993.4	1051.8	964.3	1128.0	1221.3	1219.9	1252.8	1259.9	1258.2	1251.8	1258.2
40°	898.5	993.4	929.0	1090.1	1183.3	1169.7	1212.1	1220.6	1218.9	1213.8	1218.9
42.5°	828.0	916.1	888.3	1044.0	1137.2	1120.9	1172.8	1181.3	1176.9	1173.1	1176.9
45°	742.5	757.8	825.6	969.7	1059.6	1057.9	1113.8	1122.3	1112.1	1107.0	1112.1
47.5°	720.2	611.0	757.1	883.6	982.6	989.0	1049.0	1056.5	1047.3	1042.9	1047.3
50°	718.8	539.1	706.9	817.1	932.4	944.3	1007.0	1010.4	998.5	996.8	998.5
52.5°	665.9	498.4	648.6	758.8	889.0	903.6	960.9	960.2	959.2	961.6	959.2
55°	605.2	449.2	547.6	673.0	822.2	840.9	891.7	893.4	905.3	908.7	905.3
57.5°	585.2	393.6	454.0	598.8	755.1	769.7	817.5	821.5	829.7	829.3	829.7
60°	545.9	354.3	398.4	552.7	703.5	722.2	764.6	771.4	778.1	776.4	778.1
62.5°	505.2	327.2	371.3	514.7	654.7	674.7	703.5	715.7	718.5	715.4	718.5
65°	420.4	291.6	328.9	454.3	579.8	601.8	620.5	628.9	630.6	627.3	630.6
67.5°	303.8	258.7	295.7	394.7	493.7	518.4	529.3	534.4	532.7	538.8	532.7
70°	237.3	235.6	271.2	352.6	440.8	462.8	469.6	474.7	473.0	476.4	473.0
72.5°	204.8	216.7	245.5	309.2	381.1	403.1	407.2	408.2	413.3	409.9	413.3
75°	159.4	184.8	203.4	244.1	298.4	313.6	315.3	317.0	313.6	318.7	313.6
77.5°	111.2	140.7	157.3	180.7	217.3	226.8	226.5	227.5	224.8	224.5	224.8
80°	88.2	106.8	122.1	137.3	164.4	171.2	169.5	167.8	167.8	166.1	167.8
82.5°	65.1	75.6	89.5	100.7	118.3	119.7	122.1	119.0	119.0	121.4	119.0
85°	27.1	35.6	45.8	50.9	57.6	59.3	55.9	61.0	57.6	57.6	57.6
87.5°	6.8	10.8	16.3	19.0	20.3	19.0	19.0	16.3	16.3	16.3	16.3
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-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	1791.9	1791.9	1791.9	1791.9	1791.9	1791.9	1791.9	1791.9	1791.9	1791.9	1791.9
2.5°	1737.7	1751.2	1743.1	1753.9	1774.3	1785.1	1790.6	1804.1	1804.1	1812.3	1815.0
5°	1508.8	1552.9	1569.8	1641.0	1702.1	1744.4	1769.9	1800.4	1814.0	1832.6	1839.4
7.5°	1344.0	1356.6	1369.1	1420.0	1524.1	1653.6	1731.2	1783.4	1810.9	1835.3	1845.1
10°	1322.3	1317.2	1312.1	1335.9	1408.8	1554.6	1698.7	1769.9	1805.5	1832.6	1841.1
12.5°	1406.4	1338.9	1301.3	1302.0	1350.5	1451.5	1641.7	1750.9	1797.3	1823.1	1832.9
15°	1522.4	1490.2	1352.8	1274.9	1290.1	1354.5	1532.5	1719.0	1776.7	1800.4	1815.6
17.5°	1527.8	1513.2	1471.5	1302.0	1250.1	1292.5	1425.7	1673.2	1746.5	1774.6	1788.2
20°	1522.4	1503.7	1478.3	1369.8	1232.5	1261.3	1371.5	1639.3	1720.7	1752.9	1766.5
22.5°	1522.4	1494.2	1471.5	1407.8	1220.3	1228.7	1333.5	1593.2	1693.6	1727.2	1740.7
25°	1498.6	1480.0	1435.9	1412.2	1207.0	1188.4	1286.7	1513.9	1649.5	1678.3	1698.7
27.5°	1458.6	1449.1	1401.7	1384.7	1215.9	1141.3	1245.7	1426.7	1588.8	1629.8	1651.9
30°	1427.4	1420.6	1373.2	1363.0	1217.2	1108.7	1217.2	1363.0	1535.9	1591.9	1620.7
32.5°	1380.0	1382.7	1344.7	1330.5	1207.7	1077.5	1182.0	1291.1	1457.3	1552.5	1586.8
35°	1313.8	1315.5	1293.5	1274.9	1176.5	1020.6	1122.3	1151.1	1361.3	1496.9	1525.8
37.5°	1259.9	1252.8	1219.9	1221.3	1128.0	964.3	1051.8	993.4	1274.5	1438.3	1459.3
40°	1220.6	1212.1	1169.7	1183.3	1090.1	929.0	993.4	898.5	1191.8	1393.5	1410.5
42.5°	1181.3	1172.8	1120.9	1137.2	1044.0	888.3	916.1	828.0	1100.9	1346.1	1350.8
45°	1122.3	1113.8	1057.9	1059.6	969.7	825.6	757.8	742.5	1047.7	1269.8	1269.8
47.5°	1056.5	1049.0	989.0	982.6	883.6	757.1	611.0	720.2	973.1	1187.7	1187.0
50°	1010.4	1007.0	944.3	932.4	817.1	706.9	539.1	718.8	918.8	1117.2	1134.1
52.5°	960.2	960.9	903.6	889.0	758.8	648.6	498.4	665.9	852.4	1026.3	1079.9
55°	893.4	891.7	840.9	822.2	673.0	547.6	449.2	605.2	749.3	900.2	990.0
57.5°	821.5	817.5	769.7	755.1	598.8	454.0	393.6	585.2	589.3	784.9	899.5
60°	771.4	764.6	722.2	703.5	552.7	398.4	354.3	545.9	450.9	703.5	829.0
62.5°	715.7	703.5	674.7	654.7	514.7	371.3	327.2	505.2	351.9	611.3	761.2
65°	628.9	620.5	601.8	579.8	454.3	328.9	291.6	420.4	274.6	418.7	661.2
67.5°	534.4	529.3	518.4	493.7	394.7	295.7	258.7	303.8	208.9	265.8	565.9
70°	474.7	469.6	462.8	440.8	352.6	271.2	235.6	237.3	149.2	196.7	503.5
72.5°	408.2	407.2	403.1	381.1	309.2	245.5	216.7	204.8	126.1	154.6	439.8
75°	317.0	315.3	313.6	298.4	244.1	203.4	184.8	159.4	127.1	110.2	344.1
77.5°	227.5	226.5	226.8	217.3	180.7	157.3	140.7	111.2	113.6	83.7	257.7
80°	167.8	169.5	171.2	164.4	137.3	122.1	106.8	88.2	93.2	66.1	196.7
82.5°	119.0	122.1	119.7	118.3	100.7	89.5	75.6	65.1	66.1	52.6	146.5
85°	61.0	55.9	59.3	57.6	50.9	45.8	35.6	27.1	33.9	30.5	72.9
87.5°	16.3	19.0	19.0	20.3	19.0	16.3	10.8	6.8	12.2	14.9	29.8
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-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	1791.9	1791.9	1791.9	1791.9	1791.9	1791.9	1791.9	1791.9	1791.9	1791.9	1791.9
2.5°	1810.9	1810.9	1823.1	1825.8	1828.5	1824.5	1828.5	1825.8	1823.1	1810.9	1810.9
5°	1837.7	1837.7	1854.6	1859.7	1859.7	1856.3	1859.7	1859.7	1854.6	1837.7	1837.7
7.5°	1840.1	1842.8	1859.7	1863.5	1866.5	1861.4	1866.5	1863.5	1859.7	1842.8	1840.1
10°	1836.0	1842.8	1859.7	1864.8	1866.5	1861.4	1866.5	1864.8	1859.7	1842.8	1836.0
12.5°	1830.6	1836.0	1852.9	1856.7	1859.7	1856.0	1859.7	1856.7	1852.9	1836.0	1830.6
15°	1812.3	1819.0	1837.7	1841.1	1844.5	1839.4	1844.5	1841.1	1837.7	1819.0	1812.3
17.5°	1786.8	1795.3	1812.3	1817.7	1819.4	1812.9	1819.4	1817.7	1812.3	1795.3	1786.8
20°	1766.5	1775.0	1791.9	1798.7	1800.4	1795.3	1800.4	1798.7	1791.9	1775.0	1766.5
22.5°	1740.7	1754.6	1770.2	1772.9	1770.6	1765.5	1770.6	1772.9	1770.2	1754.6	1740.7
25°	1703.8	1715.6	1720.7	1720.7	1720.7	1715.6	1720.7	1720.7	1720.7	1715.6	1703.8
27.5°	1656.6	1662.7	1665.8	1668.5	1671.9	1668.5	1671.9	1668.5	1665.8	1662.7	1656.6
30°	1624.1	1620.7	1629.2	1635.9	1639.3	1635.9	1639.3	1635.9	1629.2	1620.7	1624.1
32.5°	1579.3	1581.4	1593.9	1598.0	1598.7	1595.3	1598.7	1598.0	1593.9	1581.4	1579.3
35°	1513.9	1522.4	1530.8	1534.2	1535.9	1530.8	1535.9	1534.2	1530.8	1522.4	1513.9
37.5°	1444.7	1459.6	1465.7	1462.0	1462.3	1456.9	1462.3	1462.0	1465.7	1459.6	1444.7
40°	1398.6	1412.2	1415.6	1410.5	1412.2	1405.4	1412.2	1410.5	1415.6	1412.2	1398.6
42.5°	1355.2	1366.1	1362.7	1356.2	1355.2	1352.5	1355.2	1356.2	1362.7	1366.1	1355.2
45°	1283.3	1288.4	1273.2	1268.1	1264.7	1261.3	1264.7	1268.1	1273.2	1288.4	1283.3
47.5°	1204.7	1197.9	1183.3	1175.5	1166.0	1159.6	1166.0	1175.5	1183.3	1197.9	1204.7
50°	1154.5	1134.1	1122.3	1103.6	1096.8	1098.5	1096.8	1103.6	1122.3	1134.1	1154.5
52.5°	1093.5	1069.0	1050.4	1034.5	1029.0	1028.0	1029.0	1034.5	1050.4	1069.0	1093.5
55°	1005.3	968.0	937.5	929.0	927.3	930.7	927.3	929.0	937.5	968.0	1005.3
57.5°	897.1	860.5	835.4	828.7	822.9	817.5	822.9	828.7	835.4	860.5	897.1
60°	823.9	790.0	766.3	759.5	744.2	737.4	744.2	759.5	766.3	790.0	823.9
62.5°	758.8	718.1	699.8	686.2	675.1	664.2	675.1	686.2	699.8	718.1	758.8
65°	664.6	617.1	598.4	586.6	566.2	561.1	566.2	586.6	598.4	617.1	664.6
67.5°	561.5	520.1	496.7	480.8	467.9	467.6	467.9	480.8	496.7	520.1	561.5
70°	495.0	457.7	435.7	417.0	406.9	405.2	406.9	417.0	435.7	457.7	495.0
72.5°	429.9	394.0	374.7	357.4	348.5	346.9	348.5	357.4	374.7	394.0	429.9
75°	337.4	303.5	288.2	276.3	269.5	266.2	269.5	276.3	288.2	303.5	337.4
77.5°	249.5	222.1	214.3	202.1	196.3	196.0	196.3	202.1	214.3	222.1	249.5
80°	196.7	174.6	162.7	156.0	154.3	152.6	154.3	156.0	162.7	174.6	196.7
82.5°	142.4	129.9	122.1	118.0	117.7	114.6	117.7	118.0	122.1	129.9	142.4
85°	76.3	72.9	71.2	69.5	67.8	67.8	67.8	69.5	71.2	72.9	76.3
87.5°	31.2	32.5	32.5	33.9	35.3	33.9	35.3	33.9	32.5	32.5	31.2
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-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	1791.9	1791.9	1791.9	1791.9
2.5°	1815.0	1812.3	1804.1	1804.1
5°	1839.4	1832.6	1814.0	1800.4
7.5°	1845.1	1835.3	1810.9	1783.4
10°	1841.1	1832.6	1805.5	1769.9
12.5°	1832.9	1823.1	1797.3	1750.9
15°	1815.6	1800.4	1776.7	1719.0
17.5°	1788.2	1774.6	1746.5	1673.2
20°	1766.5	1752.9	1720.7	1639.3
22.5°	1740.7	1727.2	1693.6	1593.2
25°	1698.7	1678.3	1649.5	1513.9
27.5°	1651.9	1629.8	1588.8	1426.7
30°	1620.7	1591.9	1535.9	1363.0
32.5°	1586.8	1552.5	1457.3	1291.1
35°	1525.8	1496.9	1361.3	1151.1
37.5°	1459.3	1438.3	1274.5	993.4
40°	1410.5	1393.5	1191.8	898.5
42.5°	1350.8	1346.1	1100.9	828.0
45°	1269.8	1269.8	1047.7	742.5
47.5°	1187.0	1187.7	973.1	720.2
50°	1134.1	1117.2	918.8	718.8
52.5°	1079.9	1026.3	852.4	665.9
55°	990.0	900.2	749.3	605.2
57.5°	899.5	784.9	589.3	585.2
60°	829.0	703.5	450.9	545.9
62.5°	761.2	611.3	351.9	505.2
65°	661.2	418.7	274.6	420.4
67.5°	565.9	265.8	208.9	303.8
70°	503.5	196.7	149.2	237.3
72.5°	439.8	154.6	126.1	204.8
75°	344.1	110.2	127.1	159.4
77.5°	257.7	83.7	113.6	111.2
80°	196.7	66.1	93.2	88.2
82.5°	146.5	52.6	66.1	65.1
85°	72.9	30.5	33.9	27.1
87.5°	29.8	14.9	12.2	6.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)