

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-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-100D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

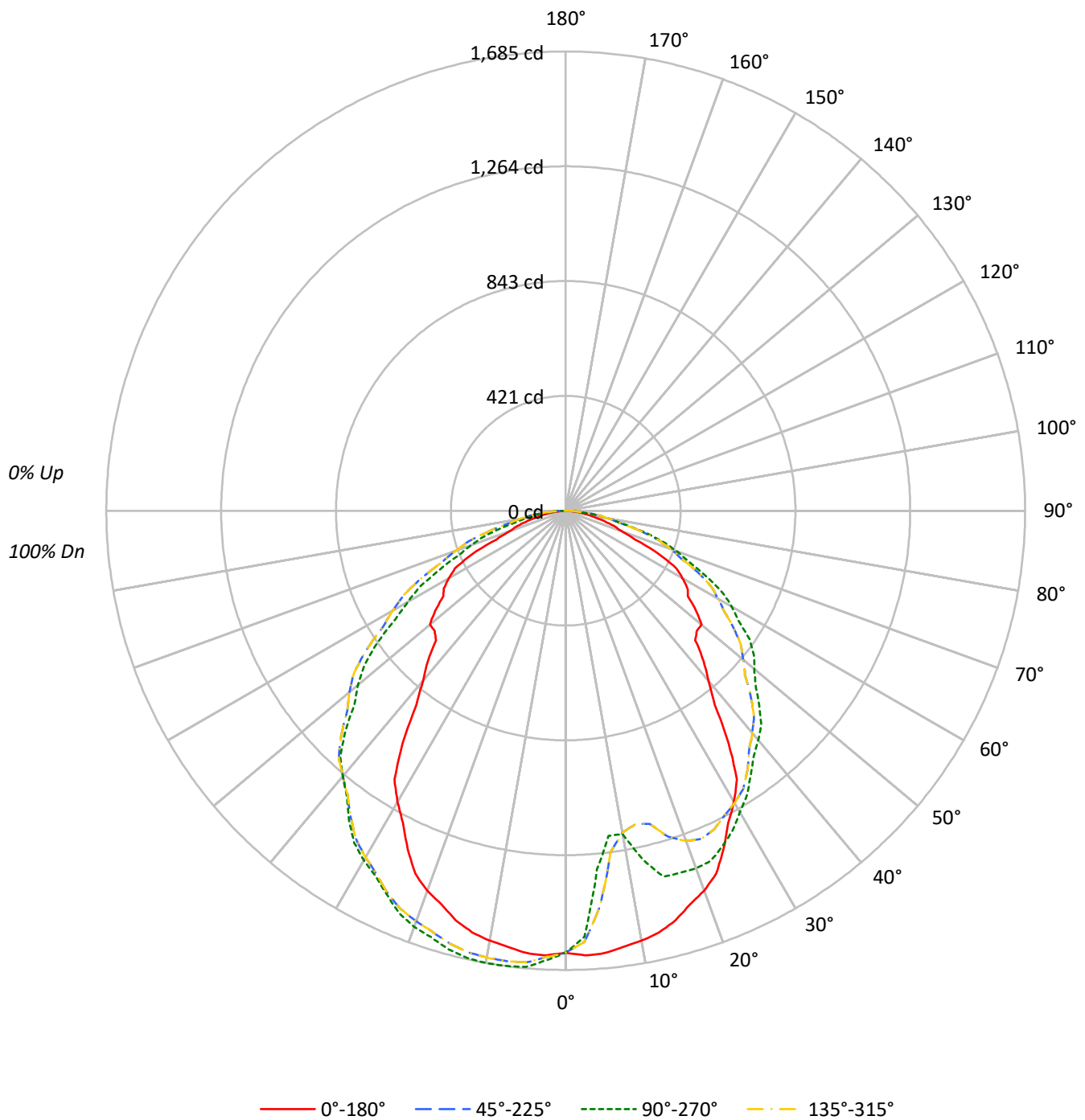
Lumens per Lamp: N/A
Luminaire Lumens: 4203.0 lumens
Efficiency: N/A
Efficacy: 76.0 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

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

TEST NUMBER:

CATALOG NUMBER: SQ4-FA-0U-100D-927-1D-UNV-STD-W-6

Luminous Intensity Polar Plot



TEST NUMBER:

CATALOG NUMBER: SQ4-FA-0U-100D-927-1D-UNV-STD-W-6

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°	9976	9976	9976	9976
5°	10062	8157	10062	10374
10°	10006	7524	10006	10523
15°	9908	8852	9908	10602
20°	9712	9140	9712	10637
25°	9300	9226	9300	10539
30°	8762	9078	8762	10517
35°	7823	8884	7823	10404
40°	6530	8822	6530	10214
45°	5846	8716	5846	9930
50°	6226	8634	6226	9514
55°	5874	8820	5874	9034
60°	6078	8646	6078	8211
65°	5538	8264	5538	7392
70°	3863	7755	3863	6595
75°	3427	6856	3427	5725
80°	2827	5327	2827	4892
85°	1736	3684	1736	4333

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 10144 cd/sqm

TEST NUMBER:

CATALOG NUMBER: SQ4-FA-0U-100D-927-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.2	3.5
10°-20°	415.5	9.9
20°-30°	642.1	15.3
30°-40°	767.2	18.3
40°-50°	772.2	18.4
50°-60°	670.4	16.0
60°-70°	474.6	11.3
70°-80°	251.0	6.0
80°-90°	63.9	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°	1203.9	28.6
0°-40°	1971.1	46.9
0°-60°	3413.6	81.2
0°-90°	4203.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4203.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1622	1622	1622	1622	1622	
5°	1630	1321	1630	1680	1630	154
15°	1556	1390	1556	1665	1556	437
25°	1370	1360	1370	1553	1370	628
35°	1042	1183	1042	1386	1042	643
45°	672	1002	672	1142	672	541
55°	548	822	548	842	548	504
65°	380	568	380	508	380	362
75°	144	288	144	241	144	152
85°	25	52	25	61	25	35
90°	0	0	0	0	0	

TEST NUMBER:

CATALOG NUMBER: SQ4-FA-0U-100D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	1621.9	1621.9	1621.9	1621.9	1621.9	1621.9	1621.9	1621.9	1621.9	1621.9	1621.9
2.5°	1633.0	1620.7	1615.8	1606.0	1587.6	1577.7	1585.1	1572.8	1577.7	1564.2	1577.7
5°	1629.6	1602.0	1579.0	1540.6	1485.4	1420.9	1405.6	1365.7	1341.1	1321.2	1341.1
7.5°	1614.3	1567.0	1496.7	1379.5	1285.3	1239.2	1227.9	1216.5	1213.5	1203.3	1213.5
10°	1602.0	1537.5	1407.1	1275.1	1209.2	1187.7	1192.3	1196.9	1206.1	1204.6	1206.1
12.5°	1584.8	1486.0	1313.8	1222.4	1178.5	1177.9	1211.9	1273.0	1315.3	1312.6	1315.3
15°	1555.9	1387.2	1226.0	1167.7	1153.9	1224.5	1348.8	1377.9	1388.7	1390.2	1388.7
17.5°	1514.5	1290.5	1169.9	1131.5	1178.5	1331.9	1369.7	1382.9	1392.1	1392.7	1392.1
20°	1483.8	1241.4	1141.6	1115.6	1239.8	1338.1	1361.1	1377.9	1393.3	1396.4	1393.3
22.5°	1442.1	1207.0	1112.2	1104.5	1274.2	1331.9	1352.5	1377.9	1390.8	1390.2	1390.8
25°	1370.3	1164.7	1075.7	1092.5	1278.2	1299.7	1339.6	1356.5	1358.0	1359.5	1358.0
27.5°	1291.4	1127.5	1033.0	1100.5	1253.3	1268.7	1311.7	1320.3	1326.1	1323.6	1326.1
30°	1233.7	1101.7	1003.5	1101.7	1233.7	1242.9	1285.9	1292.0	1284.3	1278.2	1284.3
32.5°	1168.6	1069.8	975.3	1093.2	1204.2	1217.1	1251.5	1249.1	1241.4	1236.5	1241.4
35°	1041.9	1015.8	923.7	1064.9	1153.9	1170.8	1190.7	1189.2	1187.7	1183.1	1187.7
37.5°	899.2	952.0	872.8	1021.0	1105.4	1104.2	1134.0	1140.4	1138.9	1133.0	1138.9
40°	813.3	899.2	840.9	986.7	1071.1	1058.8	1097.1	1104.8	1103.3	1098.7	1103.3
42.5°	749.4	829.2	804.1	944.9	1029.3	1014.6	1061.5	1069.2	1065.2	1061.8	1065.2
45°	672.1	685.9	747.3	877.7	959.0	957.5	1008.1	1015.8	1006.6	1002.0	1006.6
47.5°	651.8	553.0	685.3	799.8	889.4	895.2	949.5	956.3	948.0	944.0	948.0
50°	650.6	488.0	639.9	739.6	844.0	854.7	911.5	914.5	903.8	902.3	903.8
52.5°	602.7	451.1	587.1	686.8	804.7	817.9	869.7	869.1	868.2	870.3	868.2
55°	547.8	406.6	495.6	609.2	744.2	761.1	807.1	808.7	819.4	822.5	819.4
57.5°	529.7	356.3	410.9	542.0	683.4	696.6	739.9	743.6	751.0	750.7	751.0
60°	494.1	320.7	360.6	500.2	636.8	653.7	692.0	698.2	704.3	702.8	704.3
62.5°	457.3	296.2	336.0	465.9	592.6	610.7	636.8	647.8	650.3	647.5	650.3
65°	380.5	263.9	297.7	411.2	524.8	544.7	561.6	569.3	570.8	567.8	570.8
67.5°	275.0	234.2	267.6	357.2	446.8	469.2	479.1	483.7	482.1	487.7	482.1
70°	214.8	213.3	245.5	319.2	399.0	418.9	425.0	429.6	428.1	431.2	428.1
72.5°	185.4	196.1	222.2	279.9	344.9	364.9	368.6	369.5	374.1	371.0	374.1
75°	144.2	167.3	184.1	221.0	270.1	283.9	285.4	286.9	283.9	288.5	283.9
77.5°	100.7	127.4	142.4	163.6	196.7	205.3	205.0	205.9	203.5	203.2	203.5
80°	79.8	96.7	110.5	124.3	148.8	155.0	153.4	151.9	151.9	150.4	151.9
82.5°	58.9	68.4	81.0	91.1	107.1	108.3	110.5	107.7	107.7	109.9	107.7
85°	24.6	32.2	41.4	46.0	52.2	53.7	50.6	55.2	52.2	52.2	52.2
87.5°	6.1	9.8	14.7	17.2	18.4	17.2	17.2	14.7	14.7	14.7	14.7
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-100D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	1621.9	1621.9	1621.9	1621.9	1621.9	1621.9	1621.9	1621.9	1621.9	1621.9	1621.9
2.5°	1572.8	1585.1	1577.7	1587.6	1606.0	1615.8	1620.7	1633.0	1633.0	1640.3	1642.8
5°	1365.7	1405.6	1420.9	1485.4	1540.6	1579.0	1602.0	1629.6	1641.9	1658.8	1664.9
7.5°	1216.5	1227.9	1239.2	1285.3	1379.5	1496.7	1567.0	1614.3	1639.1	1661.2	1670.1
10°	1196.9	1192.3	1187.7	1209.2	1275.1	1407.1	1537.5	1602.0	1634.2	1658.8	1666.4
12.5°	1273.0	1211.9	1177.9	1178.5	1222.4	1313.8	1486.0	1584.8	1626.8	1650.2	1659.1
15°	1377.9	1348.8	1224.5	1153.9	1167.7	1226.0	1387.2	1555.9	1608.1	1629.6	1643.4
17.5°	1382.9	1369.7	1331.9	1178.5	1131.5	1169.9	1290.5	1514.5	1580.8	1606.3	1618.6
20°	1377.9	1361.1	1338.1	1239.8	1115.6	1141.6	1241.4	1483.8	1557.5	1586.6	1598.9
22.5°	1377.9	1352.5	1331.9	1274.2	1104.5	1112.2	1207.0	1442.1	1532.9	1563.3	1575.6
25°	1356.5	1339.6	1299.7	1278.2	1092.5	1075.7	1164.7	1370.3	1493.0	1519.1	1537.5
27.5°	1320.3	1311.7	1268.7	1253.3	1100.5	1033.0	1127.5	1291.4	1438.1	1475.2	1495.2
30°	1292.0	1285.9	1242.9	1233.7	1101.7	1003.5	1101.7	1233.7	1390.2	1440.9	1466.9
32.5°	1249.1	1251.5	1217.1	1204.2	1093.2	975.3	1069.8	1168.6	1319.0	1405.3	1436.3
35°	1189.2	1190.7	1170.8	1153.9	1064.9	923.7	1015.8	1041.9	1232.2	1354.9	1381.0
37.5°	1140.4	1134.0	1104.2	1105.4	1021.0	872.8	952.0	899.2	1153.6	1301.8	1320.9
40°	1104.8	1097.1	1058.8	1071.1	986.7	840.9	899.2	813.3	1078.7	1261.3	1276.7
42.5°	1069.2	1061.5	1014.6	1029.3	944.9	804.1	829.2	749.4	996.5	1218.4	1222.7
45°	1015.8	1008.1	957.5	959.0	877.7	747.3	685.9	672.1	948.3	1149.3	1149.3
47.5°	956.3	949.5	895.2	889.4	799.8	685.3	553.0	651.8	880.8	1075.0	1074.4
50°	914.5	911.5	854.7	844.0	739.6	639.9	488.0	650.6	831.7	1011.2	1026.6
52.5°	869.1	869.7	817.9	804.7	686.8	587.1	451.1	602.7	771.5	929.0	977.5
55°	808.7	807.1	761.1	744.2	609.2	495.6	406.6	547.8	678.2	814.8	896.1
57.5°	743.6	739.9	696.6	683.4	542.0	410.9	356.3	529.7	533.4	710.5	814.2
60°	698.2	692.0	653.7	636.8	500.2	360.6	320.7	494.1	408.2	636.8	750.4
62.5°	647.8	636.8	610.7	592.6	465.9	336.0	296.2	457.3	318.6	553.3	689.0
65°	569.3	561.6	544.7	524.8	411.2	297.7	263.9	380.5	248.6	379.0	598.4
67.5°	483.7	479.1	469.2	446.8	357.2	267.6	234.2	275.0	189.0	240.6	512.2
70°	429.6	425.0	418.9	399.0	319.2	245.5	213.3	214.8	135.0	178.0	455.7
72.5°	369.5	368.6	364.9	344.9	279.9	222.2	196.1	185.4	114.2	139.9	398.0
75°	286.9	285.4	283.9	270.1	221.0	184.1	167.3	144.2	115.1	99.7	311.5
77.5°	205.9	205.0	205.3	196.7	163.6	142.4	127.4	100.7	102.8	75.8	233.2
80°	151.9	153.4	155.0	148.8	124.3	110.5	96.7	79.8	84.4	59.8	178.0
82.5°	107.7	110.5	108.3	107.1	91.1	81.0	68.4	58.9	59.8	47.6	132.6
85°	55.2	50.6	53.7	52.2	46.0	41.4	32.2	24.6	30.7	27.6	66.0
87.5°	14.7	17.2	17.2	18.4	17.2	14.7	9.8	6.1	11.0	13.5	27.0
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-100D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	1621.9	1621.9	1621.9	1621.9	1621.9	1621.9	1621.9	1621.9	1621.9	1621.9	1621.9
2.5°	1639.1	1639.1	1650.2	1652.6	1655.1	1651.4	1655.1	1652.6	1650.2	1639.1	1639.1
5°	1663.4	1663.4	1678.7	1683.3	1683.3	1680.2	1683.3	1683.3	1678.7	1663.4	1663.4
7.5°	1665.5	1668.0	1683.3	1686.7	1689.4	1684.8	1689.4	1686.7	1683.3	1668.0	1665.5
10°	1661.8	1668.0	1683.3	1687.9	1689.4	1684.8	1689.4	1687.9	1683.3	1668.0	1661.8
12.5°	1656.9	1661.8	1677.2	1680.5	1683.3	1679.9	1683.3	1680.5	1677.2	1661.8	1656.9
15°	1640.3	1646.5	1663.4	1666.4	1669.5	1664.9	1669.5	1666.4	1663.4	1646.5	1640.3
17.5°	1617.3	1625.0	1640.3	1645.3	1646.8	1641.0	1646.8	1645.3	1640.3	1625.0	1617.3
20°	1598.9	1606.6	1621.9	1628.1	1629.6	1625.0	1629.6	1628.1	1621.9	1606.6	1598.9
22.5°	1575.6	1588.2	1602.3	1604.7	1602.6	1598.0	1602.6	1604.7	1602.3	1588.2	1575.6
25°	1542.1	1552.9	1557.5	1557.5	1557.5	1552.9	1557.5	1557.5	1557.5	1552.9	1542.1
27.5°	1499.5	1505.0	1507.8	1510.2	1513.3	1510.2	1513.3	1510.2	1507.8	1505.0	1499.5
30°	1470.0	1466.9	1474.6	1480.8	1483.8	1480.8	1483.8	1480.8	1474.6	1466.9	1470.0
32.5°	1429.5	1431.3	1442.7	1446.4	1447.0	1443.9	1447.0	1446.4	1442.7	1431.3	1429.5
35°	1370.3	1377.9	1385.6	1388.7	1390.2	1385.6	1390.2	1388.7	1385.6	1377.9	1370.3
37.5°	1307.7	1321.2	1326.7	1323.3	1323.6	1318.7	1323.6	1323.3	1326.7	1321.2	1307.7
40°	1265.9	1278.2	1281.3	1276.7	1278.2	1272.1	1278.2	1276.7	1281.3	1278.2	1265.9
42.5°	1226.6	1236.5	1233.4	1227.6	1226.6	1224.2	1226.6	1227.6	1233.4	1236.5	1226.6
45°	1161.6	1166.2	1152.4	1147.8	1144.7	1141.6	1144.7	1147.8	1152.4	1166.2	1161.6
47.5°	1090.4	1084.3	1071.1	1064.0	1055.4	1049.6	1055.4	1064.0	1071.1	1084.3	1090.4
50°	1045.0	1026.6	1015.8	998.9	992.8	994.3	992.8	998.9	1015.8	1026.6	1045.0
52.5°	989.7	967.6	950.8	936.3	931.4	930.5	931.4	936.3	950.8	967.6	989.7
55°	909.9	876.2	848.6	840.9	839.4	842.4	839.4	840.9	848.6	876.2	909.9
57.5°	812.0	778.9	756.2	750.0	744.8	739.9	744.8	750.0	756.2	778.9	812.0
60°	745.7	715.1	693.6	687.4	673.6	667.5	673.6	687.4	693.6	715.1	745.7
62.5°	686.8	650.0	633.4	621.2	611.0	601.2	611.0	621.2	633.4	650.0	686.8
65°	601.5	558.5	541.7	530.9	512.5	507.9	512.5	530.9	541.7	558.5	601.5
67.5°	508.2	470.8	449.6	435.2	423.5	423.2	423.5	435.2	449.6	470.8	508.2
70°	448.1	414.3	394.4	377.5	368.3	366.7	368.3	377.5	394.4	414.3	448.1
72.5°	389.1	356.6	339.1	323.5	315.5	314.0	315.5	323.5	339.1	356.6	389.1
75°	305.4	274.7	260.9	250.1	244.0	240.9	244.0	250.1	260.9	274.7	305.4
77.5°	225.9	201.0	194.0	182.9	177.7	177.4	177.7	182.9	194.0	201.0	225.9
80°	178.0	158.0	147.3	141.2	139.6	138.1	139.6	141.2	147.3	158.0	178.0
82.5°	128.9	117.5	110.5	106.8	106.5	103.7	106.5	106.8	110.5	117.5	128.9
85°	69.1	66.0	64.4	62.9	61.4	61.4	61.4	62.9	64.4	66.0	69.1
87.5°	28.2	29.5	29.5	30.7	31.9	30.7	31.9	30.7	29.5	29.5	28.2
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-100D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	1621.9	1621.9	1621.9	1621.9
2.5°	1642.8	1640.3	1633.0	1633.0
5°	1664.9	1658.8	1641.9	1629.6
7.5°	1670.1	1661.2	1639.1	1614.3
10°	1666.4	1658.8	1634.2	1602.0
12.5°	1659.1	1650.2	1626.8	1584.8
15°	1643.4	1629.6	1608.1	1555.9
17.5°	1618.6	1606.3	1580.8	1514.5
20°	1598.9	1586.6	1557.5	1483.8
22.5°	1575.6	1563.3	1532.9	1442.1
25°	1537.5	1519.1	1493.0	1370.3
27.5°	1495.2	1475.2	1438.1	1291.4
30°	1466.9	1440.9	1390.2	1233.7
32.5°	1436.3	1405.3	1319.0	1168.6
35°	1381.0	1354.9	1232.2	1041.9
37.5°	1320.9	1301.8	1153.6	899.2
40°	1276.7	1261.3	1078.7	813.3
42.5°	1222.7	1218.4	996.5	749.4
45°	1149.3	1149.3	948.3	672.1
47.5°	1074.4	1075.0	880.8	651.8
50°	1026.6	1011.2	831.7	650.6
52.5°	977.5	929.0	771.5	602.7
55°	896.1	814.8	678.2	547.8
57.5°	814.2	710.5	533.4	529.7
60°	750.4	636.8	408.2	494.1
62.5°	689.0	553.3	318.6	457.3
65°	598.4	379.0	248.6	380.5
67.5°	512.2	240.6	189.0	275.0
70°	455.7	178.0	135.0	214.8
72.5°	398.0	139.9	114.2	185.4
75°	311.5	99.7	115.1	144.2
77.5°	233.2	75.8	102.8	100.7
80°	178.0	59.8	84.4	79.8
82.5°	132.6	47.6	59.8	58.9
85°	66.0	27.6	30.7	24.6
87.5°	27.0	13.5	11.0	6.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)