

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-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-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

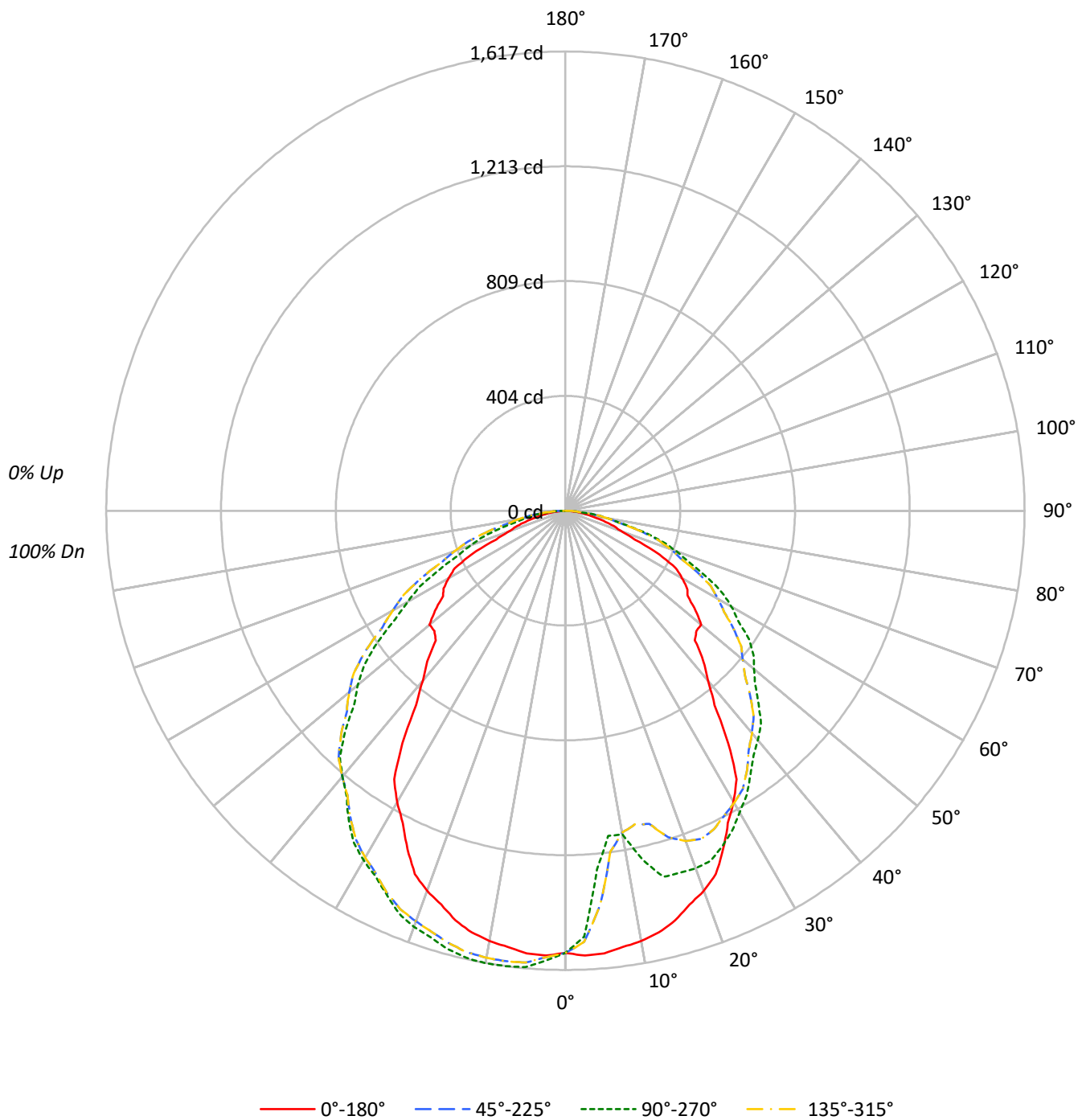
Lumens per Lamp: N/A
Luminaire Lumens: 4034.7 lumens
Efficiency: N/A
Efficacy: 92.5 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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

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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°	14365	14365	14365	14365
5°	14488	11746	14488	14939
10°	14407	10833	14407	15153
15°	14266	12748	14266	15265
20°	13985	13160	13985	15316
25°	13391	13286	13391	15175
30°	12617	13072	12617	15144
35°	11265	12792	11265	14981
40°	9403	12703	9403	14707
45°	8418	12551	8418	14299
50°	8965	12431	8965	13700
55°	8459	12699	8459	13008
60°	8752	12448	8752	11824
65°	7975	11898	7975	10645
70°	5562	11165	5562	9498
75°	4937	9871	4937	8245
80°	4070	7672	4070	7045
85°	2498	5304	2498	6235

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°	140.4	3.5
10°-20°	398.9	9.9
20°-30°	616.4	15.3
30°-40°	736.5	18.3
40°-50°	741.2	18.4
50°-60°	643.5	16.0
60°-70°	455.6	11.3
70°-80°	241.0	6.0
80°-90°	61.3	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°	1155.7	28.6
0°-40°	1892.1	46.9
0°-60°	3276.9	81.2
0°-90°	4034.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4034.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1557	1557	1557	1557	1557	
5°	1564	1268	1564	1613	1564	148
15°	1494	1335	1494	1598	1494	420
25°	1315	1305	1315	1491	1315	603
35°	1000	1136	1000	1330	1000	618
45°	645	962	645	1096	645	520
55°	526	790	526	809	526	484
65°	365	545	365	488	365	348
75°	138	277	138	231	138	146
85°	24	50	24	59	24	34
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°	1557.0	1557.0	1557.0	1557.0	1557.0	1557.0	1557.0	1557.0	1557.0	1557.0	1557.0
2.5°	1567.6	1555.8	1551.1	1541.7	1524.0	1514.6	1521.6	1509.8	1514.6	1501.6	1514.6
5°	1564.3	1537.8	1515.7	1478.9	1425.9	1364.0	1349.3	1311.0	1287.4	1268.3	1287.4
7.5°	1549.6	1504.2	1436.8	1324.2	1233.8	1189.6	1178.7	1167.8	1164.9	1155.1	1164.9
10°	1537.8	1476.0	1350.8	1224.1	1160.7	1140.1	1144.5	1149.0	1157.8	1156.3	1157.8
12.5°	1521.3	1426.5	1261.2	1173.4	1131.3	1130.7	1163.4	1222.0	1262.7	1260.0	1262.7
15°	1493.6	1331.6	1176.9	1121.0	1107.7	1175.5	1294.8	1322.8	1333.1	1334.6	1333.1
17.5°	1453.9	1238.8	1123.0	1086.2	1131.3	1278.6	1314.8	1327.5	1336.3	1336.9	1336.3
20°	1424.4	1191.7	1095.9	1070.9	1190.2	1284.5	1306.6	1322.8	1337.5	1340.4	1337.5
22.5°	1384.3	1158.7	1067.6	1060.3	1223.2	1278.6	1298.3	1322.8	1335.1	1334.6	1335.1
25°	1315.4	1118.0	1032.6	1048.8	1227.0	1247.6	1285.9	1302.1	1303.6	1305.1	1303.6
27.5°	1239.7	1082.4	991.6	1056.4	1203.2	1217.9	1259.1	1267.4	1273.0	1270.6	1273.0
30°	1184.3	1057.6	963.4	1057.6	1184.3	1193.1	1234.4	1240.3	1232.9	1227.0	1232.9
32.5°	1121.9	1027.0	936.3	1049.4	1156.0	1168.4	1201.4	1199.0	1191.7	1187.0	1191.7
35°	1000.2	975.1	886.8	1022.3	1107.7	1123.9	1143.1	1141.6	1140.1	1135.7	1140.1
37.5°	863.2	913.9	837.9	980.1	1061.2	1060.0	1088.6	1094.7	1093.3	1087.7	1093.3
40°	780.7	863.2	807.2	947.2	1028.2	1016.4	1053.2	1060.6	1059.1	1054.7	1059.1
42.5°	719.4	796.0	771.9	907.1	988.1	974.0	1019.0	1026.4	1022.6	1019.3	1022.6
45°	645.2	658.4	717.4	842.6	920.6	919.2	967.8	975.1	966.3	961.9	966.3
47.5°	625.7	530.9	657.8	767.7	853.8	859.4	911.5	918.0	910.0	906.2	910.0
50°	624.6	468.4	614.2	710.0	810.2	820.5	875.0	877.9	867.6	866.1	867.6
52.5°	578.6	433.1	563.6	659.3	772.5	785.1	834.9	834.3	833.4	835.5	833.4
55°	525.9	390.3	475.8	584.8	714.4	730.6	774.8	776.3	786.6	789.5	786.6
57.5°	508.5	342.0	394.5	520.3	656.1	668.8	710.3	713.8	720.9	720.6	720.9
60°	474.3	307.9	346.2	480.2	611.3	627.5	664.3	670.2	676.1	674.6	676.1
62.5°	439.0	284.3	322.6	447.2	568.9	586.3	611.3	621.9	624.3	621.6	624.3
65°	365.3	253.4	285.8	394.8	503.8	522.9	539.1	546.5	548.0	545.0	548.0
67.5°	264.0	224.8	256.9	342.9	428.9	450.4	459.9	464.3	462.8	468.1	462.8
70°	206.2	204.7	235.7	306.4	383.0	402.1	408.0	412.4	411.0	413.9	411.0
72.5°	177.9	188.3	213.3	268.7	331.1	350.3	353.8	354.7	359.1	356.2	359.1
75°	138.5	160.6	176.8	212.1	259.3	272.5	274.0	275.5	272.5	276.9	272.5
77.5°	96.6	122.3	136.7	157.0	188.8	197.1	196.8	197.7	195.3	195.0	195.3
80°	76.6	92.8	106.1	119.3	142.9	148.8	147.3	145.8	145.8	144.4	145.8
82.5°	56.6	65.7	77.8	87.5	102.8	104.0	106.1	103.4	103.4	105.5	103.4
85°	23.6	30.9	39.8	44.2	50.1	51.6	48.6	53.0	50.1	50.1	50.1
87.5°	5.9	9.4	14.1	16.5	17.7	16.5	16.5	14.1	14.1	14.1	14.1
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°	1557.0	1557.0	1557.0	1557.0	1557.0	1557.0	1557.0	1557.0	1557.0	1557.0	1557.0
2.5°	1509.8	1521.6	1514.6	1524.0	1541.7	1551.1	1555.8	1567.6	1567.6	1574.7	1577.0
5°	1311.0	1349.3	1364.0	1425.9	1478.9	1515.7	1537.8	1564.3	1576.1	1592.3	1598.2
7.5°	1167.8	1178.7	1189.6	1233.8	1324.2	1436.8	1504.2	1549.6	1573.5	1594.7	1603.2
10°	1149.0	1144.5	1140.1	1160.7	1224.1	1350.8	1476.0	1537.8	1568.8	1592.3	1599.7
12.5°	1222.0	1163.4	1130.7	1131.3	1173.4	1261.2	1426.5	1521.3	1561.7	1584.1	1592.6
15°	1322.8	1294.8	1175.5	1107.7	1121.0	1176.9	1331.6	1493.6	1543.7	1564.3	1577.6
17.5°	1327.5	1314.8	1278.6	1131.3	1086.2	1123.0	1238.8	1453.9	1517.5	1542.0	1553.7
20°	1322.8	1306.6	1284.5	1190.2	1070.9	1095.9	1191.7	1424.4	1495.1	1523.1	1534.9
22.5°	1322.8	1298.3	1278.6	1223.2	1060.3	1067.6	1158.7	1384.3	1471.5	1500.7	1512.5
25°	1302.1	1285.9	1247.6	1227.0	1048.8	1032.6	1118.0	1315.4	1433.2	1458.3	1476.0
27.5°	1267.4	1259.1	1217.9	1203.2	1056.4	991.6	1082.4	1239.7	1380.5	1416.2	1435.3
30°	1240.3	1234.4	1193.1	1184.3	1057.6	963.4	1057.6	1184.3	1334.6	1383.2	1408.2
32.5°	1199.0	1201.4	1168.4	1156.0	1049.4	936.3	1027.0	1121.9	1266.2	1349.0	1378.7
35°	1141.6	1143.1	1123.9	1107.7	1022.3	886.8	975.1	1000.2	1182.8	1300.7	1325.7
37.5°	1094.7	1088.6	1060.0	1061.2	980.1	837.9	913.9	863.2	1107.4	1249.7	1268.0
40°	1060.6	1053.2	1016.4	1028.2	947.2	807.2	863.2	780.7	1035.5	1210.8	1225.6
42.5°	1026.4	1019.0	974.0	988.1	907.1	771.9	796.0	719.4	956.6	1169.6	1173.7
45°	975.1	967.8	919.2	920.6	842.6	717.4	658.4	645.2	910.3	1103.3	1103.3
47.5°	918.0	911.5	859.4	853.8	767.7	657.8	530.9	625.7	845.5	1032.0	1031.4
50°	877.9	875.0	820.5	810.2	710.0	614.2	468.4	624.6	798.4	970.7	985.4
52.5°	834.3	834.9	785.1	772.5	659.3	563.6	433.1	578.6	740.6	891.8	938.3
55°	776.3	774.8	730.6	714.4	584.8	475.8	390.3	525.9	651.1	782.2	860.2
57.5°	713.8	710.3	668.8	656.1	520.3	394.5	342.0	508.5	512.0	682.0	781.6
60°	670.2	664.3	627.5	611.3	480.2	346.2	307.9	474.3	391.8	611.3	720.3
62.5°	621.9	611.3	586.3	568.9	447.2	322.6	284.3	439.0	305.8	531.2	661.4
65°	546.5	539.1	522.9	503.8	394.8	285.8	253.4	365.3	238.6	363.8	574.5
67.5°	464.3	459.9	450.4	428.9	342.9	256.9	224.8	264.0	181.5	231.0	491.7
70°	412.4	408.0	402.1	383.0	306.4	235.7	204.7	206.2	129.6	170.9	437.5
72.5°	354.7	353.8	350.3	331.1	268.7	213.3	188.3	177.9	109.6	134.3	382.1
75°	275.5	274.0	272.5	259.3	212.1	176.8	160.6	138.5	110.5	95.7	299.0
77.5°	197.7	196.8	197.1	188.8	157.0	136.7	122.3	96.6	98.7	72.8	223.9
80°	145.8	147.3	148.8	142.9	119.3	106.1	92.8	76.6	81.0	57.4	170.9
82.5°	103.4	106.1	104.0	102.8	87.5	77.8	65.7	56.6	57.4	45.7	127.3
85°	53.0	48.6	51.6	50.1	44.2	39.8	30.9	23.6	29.5	26.5	63.3
87.5°	14.1	16.5	16.5	17.7	16.5	14.1	9.4	5.9	10.6	13.0	25.9
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°	1557.0	1557.0	1557.0	1557.0	1557.0	1557.0	1557.0	1557.0	1557.0	1557.0	1557.0
2.5°	1573.5	1573.5	1584.1	1586.4	1588.8	1585.3	1588.8	1586.4	1584.1	1573.5	1573.5
5°	1596.8	1596.8	1611.5	1615.9	1615.9	1613.0	1615.9	1615.9	1611.5	1596.8	1596.8
7.5°	1598.8	1601.2	1615.9	1619.1	1621.8	1617.4	1621.8	1619.1	1615.9	1601.2	1598.8
10°	1595.3	1601.2	1615.9	1620.3	1621.8	1617.4	1621.8	1620.3	1615.9	1601.2	1595.3
12.5°	1590.6	1595.3	1610.0	1613.2	1615.9	1612.7	1615.9	1613.2	1610.0	1595.3	1590.6
15°	1574.7	1580.5	1596.8	1599.7	1602.6	1598.2	1602.6	1599.7	1596.8	1580.5	1574.7
17.5°	1552.6	1559.9	1574.7	1579.4	1580.8	1575.2	1580.8	1579.4	1574.7	1559.9	1552.6
20°	1534.9	1542.2	1557.0	1562.9	1564.3	1559.9	1564.3	1562.9	1557.0	1542.2	1534.9
22.5°	1512.5	1524.6	1538.1	1540.5	1538.4	1534.0	1538.4	1540.5	1538.1	1524.6	1512.5
25°	1480.4	1490.7	1495.1	1495.1	1495.1	1490.7	1495.1	1495.1	1495.1	1490.7	1480.4
27.5°	1439.4	1444.7	1447.4	1449.7	1452.7	1449.7	1452.7	1449.7	1447.4	1444.7	1439.4
30°	1411.2	1408.2	1415.6	1421.5	1424.4	1421.5	1424.4	1421.5	1415.6	1408.2	1411.2
32.5°	1372.3	1374.0	1384.9	1388.5	1389.1	1386.1	1389.1	1388.5	1384.9	1374.0	1372.3
35°	1315.4	1322.8	1330.1	1333.1	1334.6	1330.1	1334.6	1333.1	1330.1	1322.8	1315.4
37.5°	1255.3	1268.3	1273.6	1270.3	1270.6	1265.9	1270.6	1270.3	1273.6	1268.3	1255.3
40°	1215.2	1227.0	1230.0	1225.6	1227.0	1221.1	1227.0	1225.6	1230.0	1227.0	1215.2
42.5°	1177.5	1187.0	1184.0	1178.4	1177.5	1175.2	1177.5	1178.4	1184.0	1187.0	1177.5
45°	1115.1	1119.5	1106.2	1101.8	1098.9	1095.9	1098.9	1101.8	1106.2	1119.5	1115.1
47.5°	1046.7	1040.8	1028.2	1021.4	1013.1	1007.5	1013.1	1021.4	1028.2	1040.8	1046.7
50°	1003.1	985.4	975.1	958.9	953.0	954.5	953.0	958.9	975.1	985.4	1003.1
52.5°	950.1	928.9	912.7	898.8	894.1	893.2	894.1	898.8	912.7	928.9	950.1
55°	873.5	841.1	814.6	807.2	805.7	808.7	805.7	807.2	814.6	841.1	873.5
57.5°	779.5	747.7	725.9	720.0	715.0	710.3	715.0	720.0	725.9	747.7	779.5
60°	715.9	686.4	665.8	659.9	646.7	640.8	646.7	659.9	665.8	686.4	715.9
62.5°	659.3	624.0	608.1	596.3	586.6	577.1	586.6	596.3	608.1	624.0	659.3
65°	577.4	536.2	520.0	509.7	492.0	487.6	492.0	509.7	520.0	536.2	577.4
67.5°	487.9	451.9	431.6	417.7	406.6	406.3	406.6	417.7	431.6	451.9	487.9
70°	430.1	397.7	378.6	362.4	353.5	352.1	353.5	362.4	378.6	397.7	430.1
72.5°	373.6	342.3	325.5	310.5	302.9	301.4	302.9	310.5	325.5	342.3	373.6
75°	293.1	263.7	250.4	240.1	234.2	231.3	234.2	240.1	250.4	263.7	293.1
77.5°	216.8	193.0	186.2	175.6	170.6	170.3	170.6	175.6	186.2	193.0	216.8
80°	170.9	151.7	141.4	135.5	134.0	132.6	134.0	135.5	141.4	151.7	170.9
82.5°	123.7	112.8	106.1	102.5	102.2	99.6	102.2	102.5	106.1	112.8	123.7
85°	66.3	63.3	61.9	60.4	58.9	58.9	58.9	60.4	61.9	63.3	66.3
87.5°	27.1	28.3	28.3	29.5	30.6	29.5	30.6	29.5	28.3	28.3	27.1
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-4

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	1557.0	1557.0	1557.0	1557.0
2.5°	1577.0	1574.7	1567.6	1567.6
5°	1598.2	1592.3	1576.1	1564.3
7.5°	1603.2	1594.7	1573.5	1549.6
10°	1599.7	1592.3	1568.8	1537.8
12.5°	1592.6	1584.1	1561.7	1521.3
15°	1577.6	1564.3	1543.7	1493.6
17.5°	1553.7	1542.0	1517.5	1453.9
20°	1534.9	1523.1	1495.1	1424.4
22.5°	1512.5	1500.7	1471.5	1384.3
25°	1476.0	1458.3	1433.2	1315.4
27.5°	1435.3	1416.2	1380.5	1239.7
30°	1408.2	1383.2	1334.6	1184.3
32.5°	1378.7	1349.0	1266.2	1121.9
35°	1325.7	1300.7	1182.8	1000.2
37.5°	1268.0	1249.7	1107.4	863.2
40°	1225.6	1210.8	1035.5	780.7
42.5°	1173.7	1169.6	956.6	719.4
45°	1103.3	1103.3	910.3	645.2
47.5°	1031.4	1032.0	845.5	625.7
50°	985.4	970.7	798.4	624.6
52.5°	938.3	891.8	740.6	578.6
55°	860.2	782.2	651.1	525.9
57.5°	781.6	682.0	512.0	508.5
60°	720.3	611.3	391.8	474.3
62.5°	661.4	531.2	305.8	439.0
65°	574.5	363.8	238.6	365.3
67.5°	491.7	231.0	181.5	264.0
70°	437.5	170.9	129.6	206.2
72.5°	382.1	134.3	109.6	177.9
75°	299.0	95.7	110.5	138.5
77.5°	223.9	72.8	98.7	96.6
80°	170.9	57.4	81.0	76.6
82.5°	127.3	45.7	57.4	56.6
85°	63.3	26.5	29.5	23.6
87.5°	25.9	13.0	10.6	5.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)