

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-075D-835-1D-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-075D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

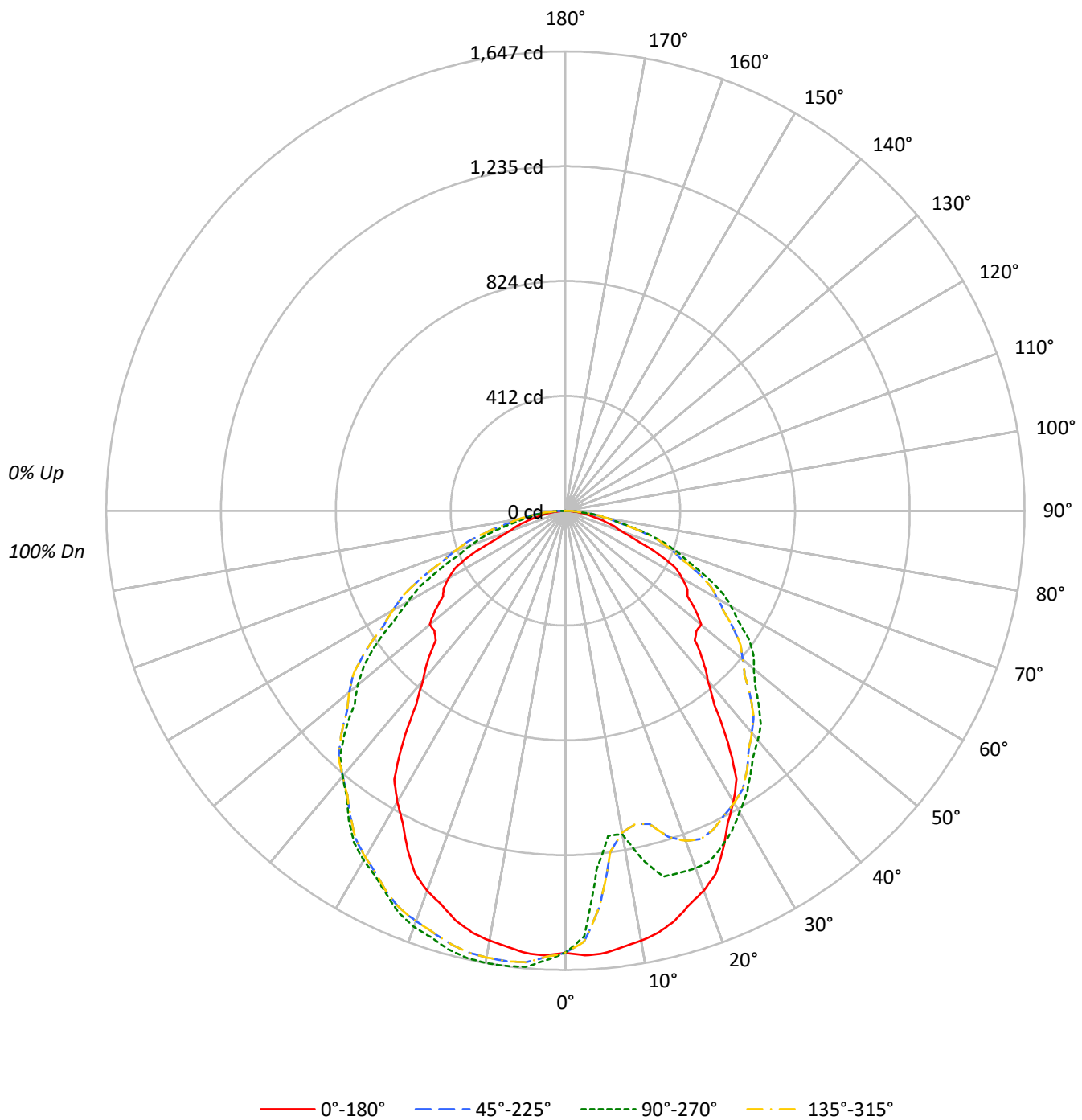
Lumens per Lamp: N/A
Luminaire Lumens: 4107.8 lumens
Efficiency: N/A
Efficacy: 101.7 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

Input Watts (W): 40.4
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°	9750	9750	9750	9750
5°	9834	7972	9834	10139
10°	9779	7353	9779	10285
15°	9683	8652	9683	10362
20°	9492	8933	9492	10396
25°	9089	9017	9089	10300
30°	8563	8872	8563	10278
35°	7646	8682	7646	10168
40°	6382	8622	6382	9982
45°	5714	8518	5714	9706
50°	6085	8438	6085	9299
55°	5741	8620	5741	8829
60°	5940	8450	5940	8026
65°	5413	8076	5413	7225
70°	3777	7578	3777	6445
75°	3351	6699	3351	5597
80°	2763	5207	2763	4782
85°	1694	3599	1694	4234

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 9915 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.9	3.5
10°-20°	406.1	9.9
20°-30°	627.6	15.3
30°-40°	749.8	18.3
40°-50°	754.7	18.4
50°-60°	655.2	15.9
60°-70°	463.8	11.3
70°-80°	245.3	6.0
80°-90°	62.4	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°	1176.6	28.6
0°-40°	1926.4	46.9
0°-60°	3336.3	81.2
0°-90°	4107.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4107.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1585	1585	1585	1585	1585	
5°	1593	1291	1593	1642	1593	151
15°	1521	1359	1521	1627	1521	428
25°	1339	1329	1339	1518	1339	614
35°	1018	1156	1018	1354	1018	629
45°	657	979	657	1116	657	529
55°	535	804	535	823	535	493
65°	372	555	372	496	372	354
75°	141	282	141	236	141	149
85°	24	51	24	60	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°	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2
2.5°	1596.0	1584.0	1579.2	1569.6	1551.6	1542.0	1549.2	1537.2	1542.0	1528.8	1542.0
5°	1592.7	1565.7	1543.2	1505.7	1451.7	1388.7	1373.7	1334.7	1310.7	1291.2	1310.7
7.5°	1577.7	1531.5	1462.8	1348.2	1256.1	1211.1	1200.0	1189.0	1186.0	1176.1	1186.0
10°	1565.7	1502.7	1375.2	1246.2	1181.8	1160.8	1165.3	1169.8	1178.8	1177.3	1178.8
12.5°	1548.9	1452.3	1284.0	1194.7	1151.8	1151.2	1184.5	1244.1	1285.5	1282.8	1285.5
15°	1520.7	1355.7	1198.2	1141.3	1127.8	1196.8	1318.2	1346.7	1357.2	1358.7	1357.2
17.5°	1480.2	1261.2	1143.4	1105.9	1151.8	1301.7	1338.6	1351.5	1360.5	1361.1	1360.5
20°	1450.2	1213.2	1115.8	1090.3	1211.7	1307.7	1330.2	1346.7	1361.7	1364.7	1361.7
22.5°	1409.4	1179.7	1087.0	1079.5	1245.3	1301.7	1321.8	1346.7	1359.3	1358.7	1359.3
25°	1339.2	1138.3	1051.3	1067.8	1249.2	1270.2	1309.2	1325.7	1327.2	1328.7	1327.2
27.5°	1262.1	1102.0	1009.6	1075.6	1224.9	1239.9	1281.9	1290.3	1296.0	1293.6	1296.0
30°	1205.7	1076.8	980.8	1076.8	1205.7	1214.7	1256.7	1262.7	1255.2	1249.2	1255.2
32.5°	1142.2	1045.6	953.2	1068.4	1177.0	1189.6	1223.1	1220.7	1213.2	1208.4	1213.2
35°	1018.3	992.8	902.8	1040.8	1127.8	1144.3	1163.8	1162.3	1160.8	1156.3	1160.8
37.5°	878.8	930.4	853.0	997.9	1080.4	1079.2	1108.3	1114.6	1113.1	1107.4	1113.1
40°	794.8	878.8	821.8	964.3	1046.8	1034.8	1072.3	1079.8	1078.3	1073.8	1078.3
42.5°	732.4	810.4	785.8	923.5	1006.0	991.6	1037.5	1045.0	1041.1	1037.8	1041.1
45°	656.9	670.4	730.3	857.8	937.3	935.8	985.3	992.8	983.8	979.3	983.8
47.5°	637.1	540.5	669.8	781.6	869.2	874.9	928.0	934.6	926.5	922.6	926.5
50°	635.9	476.9	625.4	722.8	824.8	835.3	890.8	893.8	883.3	881.8	883.3
52.5°	589.1	440.9	573.8	671.3	786.4	799.3	850.0	849.4	848.5	850.6	848.5
55°	535.4	397.4	484.4	595.4	727.3	743.8	788.8	790.3	800.8	803.8	800.8
57.5°	517.7	348.2	401.6	529.7	668.0	680.9	723.1	726.7	733.9	733.6	733.9
60°	482.9	313.4	352.4	488.9	622.4	638.9	676.4	682.4	688.4	686.9	688.4
62.5°	446.9	289.4	328.4	455.3	579.2	596.9	622.4	633.2	635.6	632.9	635.6
65°	371.9	257.9	290.9	401.9	512.9	532.4	548.9	556.4	557.9	554.9	557.9
67.5°	268.7	228.9	261.5	349.1	436.7	458.6	468.2	472.7	471.2	476.6	471.2
70°	210.0	208.5	239.9	311.9	389.9	409.4	415.4	419.9	418.4	421.4	418.4
72.5°	181.2	191.7	217.2	273.5	337.1	356.6	360.2	361.1	365.6	362.6	365.6
75°	141.0	163.5	180.0	216.0	263.9	277.4	278.9	280.4	277.4	281.9	277.4
77.5°	98.4	124.5	139.2	159.9	192.3	200.7	200.4	201.3	198.9	198.6	198.9
80°	78.0	94.5	108.0	121.5	145.5	151.5	150.0	148.5	148.5	147.0	148.5
82.5°	57.6	66.9	79.2	89.1	104.7	105.9	108.0	105.3	105.3	107.4	105.3
85°	24.0	31.5	40.5	45.0	51.0	52.5	49.5	54.0	51.0	51.0	51.0
87.5°	6.0	9.6	14.4	16.8	18.0	16.8	16.8	14.4	14.4	14.4	14.4
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°	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2
2.5°	1537.2	1549.2	1542.0	1551.6	1569.6	1579.2	1584.0	1596.0	1596.0	1603.2	1605.6
5°	1334.7	1373.7	1388.7	1451.7	1505.7	1543.2	1565.7	1592.7	1604.7	1621.2	1627.2
7.5°	1189.0	1200.0	1211.1	1256.1	1348.2	1462.8	1531.5	1577.7	1602.0	1623.6	1632.3
10°	1169.8	1165.3	1160.8	1181.8	1246.2	1375.2	1502.7	1565.7	1597.2	1621.2	1628.7
12.5°	1244.1	1184.5	1151.2	1151.8	1194.7	1284.0	1452.3	1548.9	1590.0	1612.8	1621.5
15°	1346.7	1318.2	1196.8	1127.8	1141.3	1198.2	1355.7	1520.7	1571.7	1592.7	1606.2
17.5°	1351.5	1338.6	1301.7	1151.8	1105.9	1143.4	1261.2	1480.2	1545.0	1569.9	1581.9
20°	1346.7	1330.2	1307.7	1211.7	1090.3	1115.8	1213.2	1450.2	1522.2	1550.7	1562.7
22.5°	1346.7	1321.8	1301.7	1245.3	1079.5	1087.0	1179.7	1409.4	1498.2	1527.9	1539.9
25°	1325.7	1309.2	1270.2	1249.2	1067.8	1051.3	1138.3	1339.2	1459.2	1484.7	1502.7
27.5°	1290.3	1281.9	1239.9	1224.9	1075.6	1009.6	1102.0	1262.1	1405.5	1441.8	1461.3
30°	1262.7	1256.7	1214.7	1205.7	1076.8	980.8	1076.8	1205.7	1358.7	1408.2	1433.7
32.5°	1220.7	1223.1	1189.6	1177.0	1068.4	953.2	1045.6	1142.2	1289.1	1373.4	1403.7
35°	1162.3	1163.8	1144.3	1127.8	1040.8	902.8	992.8	1018.3	1204.2	1324.2	1349.7
37.5°	1114.6	1108.3	1079.2	1080.4	997.9	853.0	930.4	878.8	1127.5	1272.3	1290.9
40°	1079.8	1072.3	1034.8	1046.8	964.3	821.8	878.8	794.8	1054.3	1232.7	1247.7
42.5°	1045.0	1037.5	991.6	1006.0	923.5	785.8	810.4	732.4	973.9	1190.8	1195.0
45°	992.8	985.3	935.8	937.3	857.8	730.3	670.4	656.9	926.8	1123.3	1123.3
47.5°	934.6	928.0	874.9	869.2	781.6	669.8	540.5	637.1	860.8	1050.7	1050.1
50°	893.8	890.8	835.3	824.8	722.8	625.4	476.9	635.9	812.8	988.3	1003.3
52.5°	849.4	850.0	799.3	786.4	671.3	573.8	440.9	589.1	754.0	907.9	955.3
55°	790.3	788.8	743.8	727.3	595.4	484.4	397.4	535.4	662.9	796.3	875.8
57.5°	726.7	723.1	680.9	668.0	529.7	401.6	348.2	517.7	521.3	694.4	795.7
60°	682.4	676.4	638.9	622.4	488.9	352.4	313.4	482.9	398.9	622.4	733.3
62.5°	633.2	622.4	596.9	579.2	455.3	328.4	289.4	446.9	311.3	540.8	673.4
65°	556.4	548.9	532.4	512.9	401.9	290.9	257.9	371.9	242.9	370.4	584.9
67.5°	472.7	468.2	458.6	436.7	349.1	261.5	228.9	268.7	184.8	235.2	500.6
70°	419.9	415.4	409.4	389.9	311.9	239.9	208.5	210.0	132.0	174.0	445.4
72.5°	361.1	360.2	356.6	337.1	273.5	217.2	191.7	181.2	111.6	136.8	389.0
75°	280.4	278.9	277.4	263.9	216.0	180.0	163.5	141.0	112.5	97.5	304.4
77.5°	201.3	200.4	200.7	192.3	159.9	139.2	124.5	98.4	100.5	74.1	228.0
80°	148.5	150.0	151.5	145.5	121.5	108.0	94.5	78.0	82.5	58.5	174.0
82.5°	105.3	108.0	105.9	104.7	89.1	79.2	66.9	57.6	58.5	46.5	129.6
85°	54.0	49.5	52.5	51.0	45.0	40.5	31.5	24.0	30.0	27.0	64.5
87.5°	14.4	16.8	16.8	18.0	16.8	14.4	9.6	6.0	10.8	13.2	26.4
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°	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2	1585.2
2.5°	1602.0	1602.0	1612.8	1615.2	1617.6	1614.0	1617.6	1615.2	1612.8	1602.0	1602.0
5°	1625.7	1625.7	1640.7	1645.2	1645.2	1642.2	1645.2	1645.2	1640.7	1625.7	1625.7
7.5°	1627.8	1630.2	1645.2	1648.5	1651.2	1646.7	1651.2	1648.5	1645.2	1630.2	1627.8
10°	1624.2	1630.2	1645.2	1649.7	1651.2	1646.7	1651.2	1649.7	1645.2	1630.2	1624.2
12.5°	1619.4	1624.2	1639.2	1642.5	1645.2	1641.9	1645.2	1642.5	1639.2	1624.2	1619.4
15°	1603.2	1609.2	1625.7	1628.7	1631.7	1627.2	1631.7	1628.7	1625.7	1609.2	1603.2
17.5°	1580.7	1588.2	1603.2	1608.0	1609.5	1603.8	1609.5	1608.0	1603.2	1588.2	1580.7
20°	1562.7	1570.2	1585.2	1591.2	1592.7	1588.2	1592.7	1591.2	1585.2	1570.2	1562.7
22.5°	1539.9	1552.2	1566.0	1568.4	1566.3	1561.8	1566.3	1568.4	1566.0	1552.2	1539.9
25°	1507.2	1517.7	1522.2	1522.2	1522.2	1517.7	1522.2	1522.2	1522.2	1517.7	1507.2
27.5°	1465.5	1470.9	1473.6	1476.0	1479.0	1476.0	1479.0	1476.0	1473.6	1470.9	1465.5
30°	1436.7	1433.7	1441.2	1447.2	1450.2	1447.2	1450.2	1447.2	1441.2	1433.7	1436.7
32.5°	1397.1	1398.9	1410.0	1413.6	1414.2	1411.2	1414.2	1413.6	1410.0	1398.9	1397.1
35°	1339.2	1346.7	1354.2	1357.2	1358.7	1354.2	1358.7	1357.2	1354.2	1346.7	1339.2
37.5°	1278.0	1291.2	1296.6	1293.3	1293.6	1288.8	1293.6	1293.3	1296.6	1291.2	1278.0
40°	1237.2	1249.2	1252.2	1247.7	1249.2	1243.2	1249.2	1247.7	1252.2	1249.2	1237.2
42.5°	1198.8	1208.4	1205.4	1199.7	1198.8	1196.5	1198.8	1199.7	1205.4	1208.4	1198.8
45°	1135.3	1139.8	1126.3	1121.8	1118.8	1115.8	1118.8	1121.8	1126.3	1139.8	1135.3
47.5°	1065.7	1059.7	1046.8	1039.9	1031.5	1025.8	1031.5	1039.9	1046.8	1059.7	1065.7
50°	1021.3	1003.3	992.8	976.3	970.3	971.8	970.3	976.3	992.8	1003.3	1021.3
52.5°	967.3	945.7	929.2	915.1	910.3	909.4	910.3	915.1	929.2	945.7	967.3
55°	889.3	856.3	829.3	821.8	820.3	823.3	820.3	821.8	829.3	856.3	889.3
57.5°	793.6	761.2	739.0	733.0	727.9	723.1	727.9	733.0	739.0	761.2	793.6
60°	728.8	698.9	677.9	671.9	658.4	652.4	658.4	671.9	677.9	698.9	728.8
62.5°	671.3	635.3	619.1	607.1	597.2	587.6	597.2	607.1	619.1	635.3	671.3
65°	587.9	545.9	529.4	518.9	500.9	496.4	500.9	518.9	529.4	545.9	587.9
67.5°	496.7	460.1	439.4	425.3	413.9	413.6	413.9	425.3	439.4	460.1	496.7
70°	437.9	404.9	385.4	368.9	359.9	358.4	359.9	368.9	385.4	404.9	437.9
72.5°	380.3	348.5	331.4	316.1	308.3	306.8	308.3	316.1	331.4	348.5	380.3
75°	298.4	268.4	254.9	244.4	238.5	235.5	238.5	244.4	254.9	268.4	298.4
77.5°	220.8	196.5	189.6	178.8	173.7	173.4	173.7	178.8	189.6	196.5	220.8
80°	174.0	154.5	144.0	138.0	136.5	135.0	136.5	138.0	144.0	154.5	174.0
82.5°	126.0	114.9	108.0	104.4	104.1	101.4	104.1	104.4	108.0	114.9	126.0
85°	67.5	64.5	63.0	61.5	60.0	60.0	60.0	61.5	63.0	64.5	67.5
87.5°	27.6	28.8	28.8	30.0	31.2	30.0	31.2	30.0	28.8	28.8	27.6
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-075D-835-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	1585.2	1585.2	1585.2	1585.2
2.5°	1605.6	1603.2	1596.0	1596.0
5°	1627.2	1621.2	1604.7	1592.7
7.5°	1632.3	1623.6	1602.0	1577.7
10°	1628.7	1621.2	1597.2	1565.7
12.5°	1621.5	1612.8	1590.0	1548.9
15°	1606.2	1592.7	1571.7	1520.7
17.5°	1581.9	1569.9	1545.0	1480.2
20°	1562.7	1550.7	1522.2	1450.2
22.5°	1539.9	1527.9	1498.2	1409.4
25°	1502.7	1484.7	1459.2	1339.2
27.5°	1461.3	1441.8	1405.5	1262.1
30°	1433.7	1408.2	1358.7	1205.7
32.5°	1403.7	1373.4	1289.1	1142.2
35°	1349.7	1324.2	1204.2	1018.3
37.5°	1290.9	1272.3	1127.5	878.8
40°	1247.7	1232.7	1054.3	794.8
42.5°	1195.0	1190.8	973.9	732.4
45°	1123.3	1123.3	926.8	656.9
47.5°	1050.1	1050.7	860.8	637.1
50°	1003.3	988.3	812.8	635.9
52.5°	955.3	907.9	754.0	589.1
55°	875.8	796.3	662.9	535.4
57.5°	795.7	694.4	521.3	517.7
60°	733.3	622.4	398.9	482.9
62.5°	673.4	540.8	311.3	446.9
65°	584.9	370.4	242.9	371.9
67.5°	500.6	235.2	184.8	268.7
70°	445.4	174.0	132.0	210.0
72.5°	389.0	136.8	111.6	181.2
75°	304.4	97.5	112.5	141.0
77.5°	228.0	74.1	100.5	98.4
80°	174.0	58.5	82.5	78.0
82.5°	129.6	46.5	58.5	57.6
85°	64.5	27.0	30.0	24.0
87.5°	26.4	13.2	10.8	6.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)