

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-050D-835-1D-UNV-STD-W-8

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-050D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

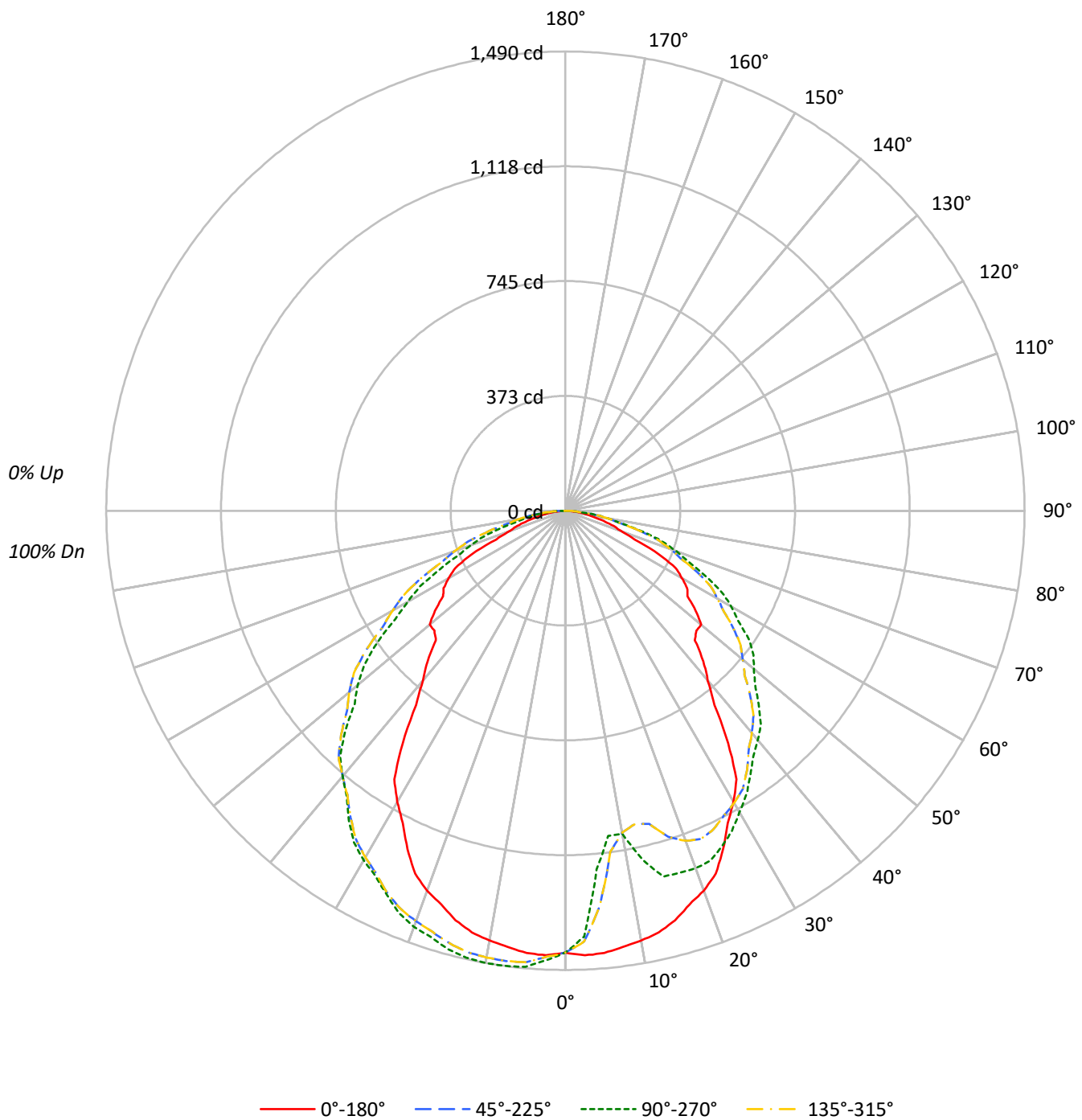
Lumens per Lamp: N/A
Luminaire Lumens: 3716.0 lumens
Efficiency: N/A
Efficacy: 105.6 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 35.2
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°	6615	6615	6615	6615
5°	6671	5409	6671	6879
10°	6634	4989	6634	6978
15°	6570	5870	6570	7030
20°	6440	6060	6440	7053
25°	6167	6118	6167	6988
30°	5810	6020	5810	6974
35°	5188	5891	5188	6899
40°	4330	5850	4330	6773
45°	3877	5780	3877	6585
50°	4128	5725	4128	6309
55°	3895	5849	3895	5990
60°	4030	5732	4030	5444
65°	3672	5480	3672	4901
70°	2561	5142	2561	4373
75°	2273	4545	2273	3796
80°	1873	3533	1873	3244
85°	1149	2440	1149	2874

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 6726 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.3	3.5
10°-20°	367.4	9.9
20°-30°	567.7	15.3
30°-40°	678.3	18.3
40°-50°	682.7	18.4
50°-60°	592.7	16.0
60°-70°	419.6	11.3
70°-80°	221.9	6.0
80°-90°	56.5	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°	1064.4	28.6
0°-40°	1742.7	46.9
0°-60°	3018.0	81.2
0°-90°	3716.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3716.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1434	1434	1434	1434	1434	
5°	1441	1168	1441	1486	1441	137
15°	1376	1229	1376	1472	1376	387
25°	1212	1202	1212	1373	1212	556
35°	921	1046	921	1225	921	569
45°	594	886	594	1009	594	479
55°	484	727	484	745	484	446
65°	336	502	336	449	336	320
75°	128	255	128	213	128	135
85°	22	46	22	54	22	31
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°	1434.0	1434.0	1434.0	1434.0	1434.0	1434.0	1434.0	1434.0	1434.0	1434.0	1434.0
2.5°	1443.7	1432.9	1428.5	1419.9	1403.6	1394.9	1401.4	1390.6	1394.9	1383.0	1394.9
5°	1440.7	1416.3	1396.0	1362.1	1313.2	1256.2	1242.7	1207.4	1185.7	1168.1	1185.7
7.5°	1427.2	1385.4	1323.3	1219.6	1136.3	1095.6	1085.6	1075.5	1072.8	1063.9	1072.8
10°	1416.3	1359.4	1244.0	1127.4	1069.0	1050.0	1054.1	1058.2	1066.3	1065.0	1066.3
12.5°	1401.1	1313.8	1161.6	1080.7	1041.9	1041.4	1071.5	1125.5	1162.9	1160.5	1162.9
15°	1375.6	1226.4	1084.0	1032.4	1020.2	1082.6	1192.5	1218.3	1227.8	1229.1	1227.8
17.5°	1339.0	1140.9	1034.3	1000.4	1041.9	1177.6	1210.9	1222.6	1230.7	1231.3	1230.7
20°	1311.9	1097.5	1009.3	986.3	1096.2	1183.0	1203.3	1218.3	1231.8	1234.5	1231.8
22.5°	1275.0	1067.1	983.3	976.5	1126.6	1177.6	1195.7	1218.3	1229.7	1229.1	1229.7
25°	1211.5	1029.7	951.0	965.9	1130.1	1149.1	1184.3	1199.3	1200.6	1202.0	1200.6
27.5°	1141.7	996.9	913.3	973.0	1108.1	1121.7	1159.7	1167.3	1172.4	1170.2	1172.4
30°	1090.7	974.1	887.2	974.1	1090.7	1098.9	1136.9	1142.3	1135.5	1130.1	1135.5
32.5°	1033.2	945.8	862.3	966.5	1064.7	1076.1	1106.5	1104.3	1097.5	1093.2	1097.5
35°	921.2	898.1	816.7	941.5	1020.2	1035.1	1052.8	1051.4	1050.0	1046.0	1050.0
37.5°	795.0	841.7	771.7	902.7	977.3	976.2	1002.6	1008.3	1006.9	1001.7	1006.9
40°	719.0	795.0	743.4	872.3	946.9	936.1	970.0	976.8	975.4	971.4	975.4
42.5°	662.6	733.1	710.9	835.4	910.0	897.0	938.5	945.3	941.8	938.8	941.8
45°	594.2	606.4	660.7	776.0	847.9	846.5	891.3	898.1	890.0	885.9	890.0
47.5°	576.3	488.9	605.9	707.1	786.3	791.5	839.5	845.5	838.1	834.6	838.1
50°	575.2	431.4	565.7	653.9	746.2	755.6	805.8	808.6	799.1	797.7	799.1
52.5°	532.9	398.9	519.0	607.2	711.4	723.1	768.9	768.4	767.6	769.5	767.6
55°	484.3	359.5	438.2	538.6	658.0	672.9	713.6	714.9	724.4	727.2	724.4
57.5°	468.3	315.0	363.3	479.2	604.2	615.9	654.2	657.4	663.9	663.7	663.9
60°	436.8	283.5	318.8	442.3	563.0	577.9	611.8	617.3	622.7	621.3	622.7
62.5°	404.3	261.8	297.1	411.9	523.9	539.9	563.0	572.8	574.9	572.5	574.9
65°	336.4	233.3	263.2	363.6	464.0	481.6	496.5	503.3	504.7	502.0	504.7
67.5°	243.1	207.0	236.6	315.8	395.1	414.9	423.5	427.6	426.3	431.1	426.3
70°	189.9	188.6	217.1	282.2	352.7	370.4	375.8	379.9	378.5	381.2	378.5
72.5°	163.9	173.4	196.4	247.5	305.0	322.6	325.9	326.7	330.7	328.0	330.7
75°	127.5	147.9	162.8	195.4	238.8	251.0	252.3	253.7	251.0	255.0	251.0
77.5°	89.0	112.6	125.9	144.6	173.9	181.5	181.2	182.1	179.9	179.6	179.9
80°	70.5	85.5	97.7	109.9	131.6	137.0	135.7	134.3	134.3	133.0	134.3
82.5°	52.1	60.5	71.6	80.6	94.7	95.8	97.7	95.2	95.2	97.1	95.2
85°	21.7	28.5	36.6	40.7	46.1	47.5	44.8	48.8	46.1	46.1	46.1
87.5°	5.4	8.7	13.0	15.2	16.3	15.2	15.2	13.0	13.0	13.0	13.0
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°	1434.0	1434.0	1434.0	1434.0	1434.0	1434.0	1434.0	1434.0	1434.0	1434.0	1434.0
2.5°	1390.6	1401.4	1394.9	1403.6	1419.9	1428.5	1432.9	1443.7	1443.7	1450.2	1452.4
5°	1207.4	1242.7	1256.2	1313.2	1362.1	1396.0	1416.3	1440.7	1451.6	1466.5	1472.0
7.5°	1075.5	1085.6	1095.6	1136.3	1219.6	1323.3	1385.4	1427.2	1449.2	1468.7	1476.6
10°	1058.2	1054.1	1050.0	1069.0	1127.4	1244.0	1359.4	1416.3	1444.8	1466.5	1473.3
12.5°	1125.5	1071.5	1041.4	1041.9	1080.7	1161.6	1313.8	1401.1	1438.3	1458.9	1466.8
15°	1218.3	1192.5	1082.6	1020.2	1032.4	1084.0	1226.4	1375.6	1421.8	1440.7	1453.0
17.5°	1222.6	1210.9	1177.6	1041.9	1000.4	1034.3	1140.9	1339.0	1397.6	1420.1	1431.0
20°	1218.3	1203.3	1183.0	1096.2	986.3	1009.3	1097.5	1311.9	1377.0	1402.8	1413.6
22.5°	1218.3	1195.7	1177.6	1126.6	976.5	983.3	1067.1	1275.0	1355.3	1382.1	1393.0
25°	1199.3	1184.3	1149.1	1130.1	965.9	951.0	1029.7	1211.5	1320.0	1343.1	1359.4
27.5°	1167.3	1159.7	1121.7	1108.1	973.0	913.3	996.9	1141.7	1271.4	1304.3	1321.9
30°	1142.3	1136.9	1098.9	1090.7	974.1	887.2	974.1	1090.7	1229.1	1273.9	1296.9
32.5°	1104.3	1106.5	1076.1	1064.7	966.5	862.3	945.8	1033.2	1166.2	1242.4	1269.8
35°	1051.4	1052.8	1035.1	1020.2	941.5	816.7	898.1	921.2	1089.4	1197.9	1221.0
37.5°	1008.3	1002.6	976.2	977.3	902.7	771.7	841.7	795.0	1019.9	1151.0	1167.8
40°	976.8	970.0	936.1	946.9	872.3	743.4	795.0	719.0	953.7	1115.2	1128.7
42.5°	945.3	938.5	897.0	910.0	835.4	710.9	733.1	662.6	881.0	1077.2	1081.0
45°	898.1	891.3	846.5	847.9	776.0	660.7	606.4	594.2	838.4	1016.1	1016.1
47.5°	845.5	839.5	791.5	786.3	707.1	605.9	488.9	576.3	778.7	950.5	949.9
50°	808.6	805.8	755.6	746.2	653.9	565.7	431.4	575.2	735.3	894.0	907.6
52.5°	768.4	768.9	723.1	711.4	607.2	519.0	398.9	532.9	682.1	821.3	864.2
55°	714.9	713.6	672.9	658.0	538.6	438.2	359.5	484.3	599.6	720.4	792.3
57.5°	657.4	654.2	615.9	604.2	479.2	363.3	315.0	468.3	471.6	628.1	719.8
60°	617.3	611.8	577.9	563.0	442.3	318.8	283.5	436.8	360.9	563.0	663.4
62.5°	572.8	563.0	539.9	523.9	411.9	297.1	261.8	404.3	281.6	489.2	609.1
65°	503.3	496.5	481.6	464.0	363.6	263.2	233.3	336.4	219.8	335.1	529.1
67.5°	427.6	423.5	414.9	395.1	315.8	236.6	207.0	243.1	167.1	212.7	452.8
70°	379.9	375.8	370.4	352.7	282.2	217.1	188.6	189.9	119.4	157.4	402.9
72.5°	326.7	325.9	322.6	305.0	247.5	196.4	173.4	163.9	100.9	123.7	351.9
75°	253.7	252.3	251.0	238.8	195.4	162.8	147.9	127.5	101.7	88.2	275.4
77.5°	182.1	181.2	181.5	173.9	144.6	125.9	112.6	89.0	90.9	67.0	206.2
80°	134.3	135.7	137.0	131.6	109.9	97.7	85.5	70.5	74.6	52.9	157.4
82.5°	95.2	97.7	95.8	94.7	80.6	71.6	60.5	52.1	52.9	42.1	117.2
85°	48.8	44.8	47.5	46.1	40.7	36.6	28.5	21.7	27.1	24.4	58.3
87.5°	13.0	15.2	15.2	16.3	15.2	13.0	8.7	5.4	9.8	11.9	23.9
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°	1434.0	1434.0	1434.0	1434.0	1434.0	1434.0	1434.0	1434.0	1434.0	1434.0	1434.0
2.5°	1449.2	1449.2	1458.9	1461.1	1463.3	1460.0	1463.3	1461.1	1458.9	1449.2	1449.2
5°	1470.6	1470.6	1484.2	1488.2	1488.2	1485.5	1488.2	1488.2	1484.2	1470.6	1470.6
7.5°	1472.5	1474.7	1488.2	1491.2	1493.7	1489.6	1493.7	1491.2	1488.2	1474.7	1472.5
10°	1469.2	1474.7	1488.2	1492.3	1493.7	1489.6	1493.7	1492.3	1488.2	1474.7	1469.2
12.5°	1464.9	1469.2	1482.8	1485.8	1488.2	1485.2	1488.2	1485.8	1482.8	1469.2	1464.9
15°	1450.2	1455.7	1470.6	1473.3	1476.0	1472.0	1476.0	1473.3	1470.6	1455.7	1450.2
17.5°	1429.9	1436.7	1450.2	1454.6	1455.9	1450.8	1455.9	1454.6	1450.2	1436.7	1429.9
20°	1413.6	1420.4	1434.0	1439.4	1440.7	1436.7	1440.7	1439.4	1434.0	1420.4	1413.6
22.5°	1393.0	1404.1	1416.6	1418.8	1416.9	1412.8	1416.9	1418.8	1416.6	1404.1	1393.0
25°	1363.4	1372.9	1377.0	1377.0	1377.0	1372.9	1377.0	1377.0	1377.0	1372.9	1363.4
27.5°	1325.7	1330.6	1333.0	1335.2	1337.9	1335.2	1337.9	1335.2	1333.0	1330.6	1325.7
30°	1299.7	1296.9	1303.7	1309.2	1311.9	1309.2	1311.9	1309.2	1303.7	1296.9	1299.7
32.5°	1263.8	1265.5	1275.5	1278.8	1279.3	1276.6	1279.3	1278.8	1275.5	1265.5	1263.8
35°	1211.5	1218.3	1225.0	1227.8	1229.1	1225.0	1229.1	1227.8	1225.0	1218.3	1211.5
37.5°	1156.1	1168.1	1172.9	1170.0	1170.2	1165.9	1170.2	1170.0	1172.9	1168.1	1156.1
40°	1119.2	1130.1	1132.8	1128.7	1130.1	1124.7	1130.1	1128.7	1132.8	1130.1	1119.2
42.5°	1084.5	1093.2	1090.5	1085.3	1084.5	1082.3	1084.5	1085.3	1090.5	1093.2	1084.5
45°	1027.0	1031.0	1018.8	1014.8	1012.1	1009.3	1012.1	1014.8	1018.8	1031.0	1027.0
47.5°	964.0	958.6	946.9	940.7	933.1	927.9	933.1	940.7	946.9	958.6	964.0
50°	923.9	907.6	898.1	883.2	877.7	879.1	877.7	883.2	898.1	907.6	923.9
52.5°	875.0	855.5	840.6	827.8	823.5	822.7	823.5	827.8	840.6	855.5	875.0
55°	804.5	774.6	750.2	743.4	742.1	744.8	742.1	743.4	750.2	774.6	804.5
57.5°	717.9	688.6	668.6	663.1	658.5	654.2	658.5	663.1	668.6	688.6	717.9
60°	659.3	632.2	613.2	607.8	595.6	590.1	595.6	607.8	613.2	632.2	659.3
62.5°	607.2	574.7	560.0	549.2	540.2	531.5	540.2	549.2	560.0	574.7	607.2
65°	531.8	493.8	478.9	469.4	453.1	449.0	453.1	469.4	478.9	493.8	531.8
67.5°	449.3	416.2	397.5	384.7	374.4	374.2	374.4	384.7	397.5	416.2	449.3
70°	396.1	366.3	348.7	333.7	325.6	324.2	325.6	333.7	348.7	366.3	396.1
72.5°	344.0	315.3	299.8	286.0	278.9	277.6	278.9	286.0	299.8	315.3	344.0
75°	270.0	242.8	230.6	221.1	215.7	213.0	215.7	221.1	230.6	242.8	270.0
77.5°	199.7	177.7	171.5	161.7	157.1	156.8	157.1	161.7	171.5	177.7	199.7
80°	157.4	139.7	130.2	124.8	123.5	122.1	123.5	124.8	130.2	139.7	157.4
82.5°	114.0	103.9	97.7	94.4	94.2	91.7	94.2	94.4	97.7	103.9	114.0
85°	61.0	58.3	57.0	55.6	54.3	54.3	54.3	55.6	57.0	58.3	61.0
87.5°	25.0	26.0	26.0	27.1	28.2	27.1	28.2	27.1	26.0	26.0	25.0
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-050D-835-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	1434.0	1434.0	1434.0	1434.0
2.5°	1452.4	1450.2	1443.7	1443.7
5°	1472.0	1466.5	1451.6	1440.7
7.5°	1476.6	1468.7	1449.2	1427.2
10°	1473.3	1466.5	1444.8	1416.3
12.5°	1466.8	1458.9	1438.3	1401.1
15°	1453.0	1440.7	1421.8	1375.6
17.5°	1431.0	1420.1	1397.6	1339.0
20°	1413.6	1402.8	1377.0	1311.9
22.5°	1393.0	1382.1	1355.3	1275.0
25°	1359.4	1343.1	1320.0	1211.5
27.5°	1321.9	1304.3	1271.4	1141.7
30°	1296.9	1273.9	1229.1	1090.7
32.5°	1269.8	1242.4	1166.2	1033.2
35°	1221.0	1197.9	1089.4	921.2
37.5°	1167.8	1151.0	1019.9	795.0
40°	1128.7	1115.2	953.7	719.0
42.5°	1081.0	1077.2	881.0	662.6
45°	1016.1	1016.1	838.4	594.2
47.5°	949.9	950.5	778.7	576.3
50°	907.6	894.0	735.3	575.2
52.5°	864.2	821.3	682.1	532.9
55°	792.3	720.4	599.6	484.3
57.5°	719.8	628.1	471.6	468.3
60°	663.4	563.0	360.9	436.8
62.5°	609.1	489.2	281.6	404.3
65°	529.1	335.1	219.8	336.4
67.5°	452.8	212.7	167.1	243.1
70°	402.9	157.4	119.4	189.9
72.5°	351.9	123.7	100.9	163.9
75°	275.4	88.2	101.7	127.5
77.5°	206.2	67.0	90.9	89.0
80°	157.4	52.9	74.6	70.5
82.5°	117.2	42.1	52.9	52.1
85°	58.3	24.4	27.1	21.7
87.5°	23.9	11.9	9.8	5.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)