

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-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-100D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

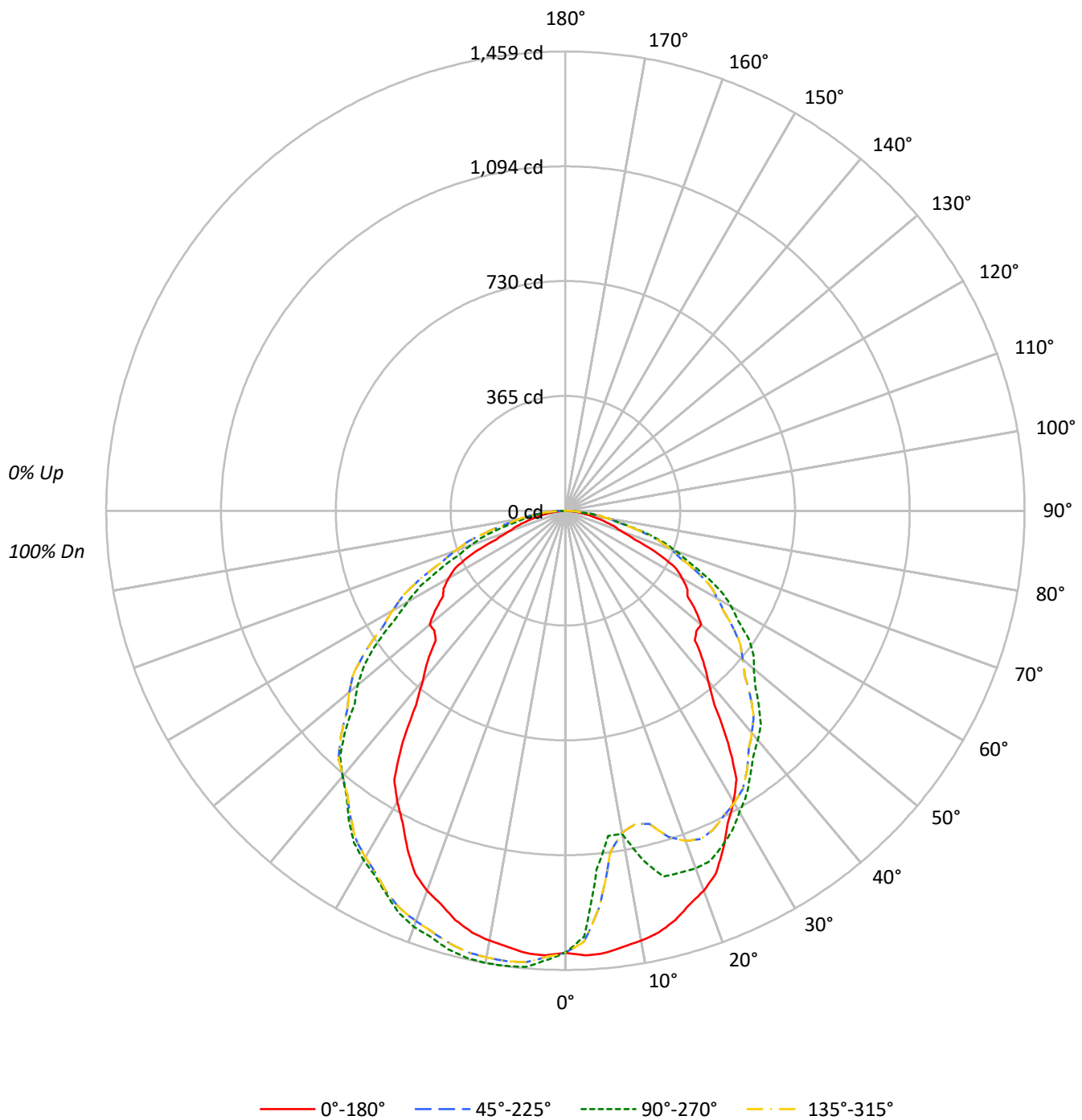
Lumens per Lamp: N/A
Luminaire Lumens: 3639.0 lumens
Efficiency: N/A
Efficacy: 110.9 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 32.8
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



TEST NUMBER:

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				0
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°	12956	12956	12956	12956
5°	13067	10594	13067	13474
10°	12994	9770	12994	13666
15°	12867	11497	12867	13769
20°	12614	11870	12614	13813
25°	12078	11983	12078	13687
30°	11379	11790	11379	13658
35°	10160	11537	10160	13512
40°	8480	11456	8480	13265
45°	7593	11319	7593	12896
50°	8085	11213	8085	12357
55°	7629	11454	7629	11733
60°	7894	11228	7894	10664
65°	7193	10732	7193	9599
70°	5017	10070	5017	8565
75°	4452	8905	4452	7436
80°	3671	6918	3671	6355
85°	2255	4785	2255	5621

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 13174 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.6	3.5
10°-20°	359.8	9.9
20°-30°	556.0	15.3
30°-40°	664.2	18.3
40°-50°	668.5	18.4
50°-60°	580.4	16.0
60°-70°	410.9	11.3
70°-80°	217.3	6.0
80°-90°	55.3	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°	1042.3	28.6
0°-40°	1706.6	46.9
0°-60°	2955.5	81.2
0°-90°	3639.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3639.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1404	1404	1404	1404	1404	
5°	1411	1144	1411	1455	1411	134
15°	1347	1204	1347	1442	1347	379
25°	1186	1177	1186	1344	1186	544
35°	902	1024	902	1200	902	557
45°	582	868	582	988	582	469
55°	474	712	474	729	474	436
65°	330	492	330	440	330	314
75°	125	250	125	209	125	132
85°	21	45	21	53	21	30
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°	1404.3	1404.3	1404.3	1404.3	1404.3	1404.3	1404.3	1404.3	1404.3	1404.3	1404.3
2.5°	1413.8	1403.2	1399.0	1390.5	1374.5	1366.0	1372.4	1361.8	1366.0	1354.3	1366.0
5°	1410.9	1387.0	1367.1	1333.9	1286.0	1230.2	1216.9	1182.4	1161.1	1143.9	1161.1
7.5°	1397.6	1356.7	1295.9	1194.4	1112.8	1072.9	1063.1	1053.3	1050.6	1041.8	1050.6
10°	1387.0	1331.2	1218.3	1104.0	1046.9	1028.3	1032.3	1036.3	1044.2	1042.9	1044.2
12.5°	1372.1	1286.6	1137.5	1058.3	1020.3	1019.8	1049.3	1102.2	1138.8	1136.4	1138.8
15°	1347.1	1201.0	1061.5	1011.0	999.1	1060.2	1167.8	1193.0	1202.3	1203.7	1202.3
17.5°	1311.3	1117.3	1012.9	979.7	1020.3	1153.2	1185.9	1197.3	1205.3	1205.8	1205.3
20°	1284.7	1074.8	988.4	965.8	1073.5	1158.5	1178.4	1193.0	1206.3	1209.0	1206.3
22.5°	1248.6	1045.0	962.9	956.3	1103.2	1153.2	1171.0	1193.0	1204.2	1203.7	1204.2
25°	1186.4	1008.4	931.3	945.9	1106.7	1125.3	1159.8	1174.4	1175.8	1177.1	1175.8
27.5°	1118.1	976.2	894.4	952.8	1085.2	1098.4	1135.6	1143.1	1148.1	1146.0	1148.1
30°	1068.1	953.9	868.9	953.9	1068.1	1076.1	1113.3	1118.6	1112.0	1106.7	1112.0
32.5°	1011.8	926.3	844.4	946.5	1042.6	1053.8	1083.6	1081.4	1074.8	1070.5	1074.8
35°	902.1	879.5	799.8	922.0	999.1	1013.7	1030.9	1029.6	1028.3	1024.3	1028.3
37.5°	778.5	824.2	755.7	884.0	957.1	956.0	981.8	987.4	986.0	981.0	986.0
40°	704.1	778.5	728.0	854.3	927.3	916.7	949.9	956.5	955.2	951.2	955.2
42.5°	648.9	717.9	696.2	818.1	891.2	878.4	919.1	925.7	922.3	919.4	922.3
45°	581.9	593.9	647.0	759.9	830.3	829.0	872.9	879.5	871.5	867.5	871.5
47.5°	564.4	478.8	593.3	692.4	770.0	775.1	822.1	827.9	820.8	817.3	820.8
50°	563.3	422.5	554.0	640.4	730.7	740.0	789.2	791.8	782.5	781.2	782.5
52.5°	521.9	390.6	508.3	594.7	696.7	708.1	753.0	752.5	751.7	753.5	751.7
55°	474.3	352.1	429.1	527.4	644.3	659.0	698.8	700.1	709.4	712.1	709.4
57.5°	458.6	308.5	355.8	469.2	591.7	603.2	640.6	643.8	650.2	649.9	650.2
60°	427.8	277.7	312.2	433.1	551.3	566.0	599.2	604.5	609.8	608.5	609.8
62.5°	395.9	256.4	291.0	403.3	513.1	528.8	551.3	560.9	563.0	560.6	563.0
65°	329.5	228.5	257.7	356.0	454.4	471.6	486.2	492.9	494.2	491.6	494.2
67.5°	238.1	202.7	231.7	309.3	386.9	406.3	414.8	418.8	417.4	422.2	417.4
70°	186.0	184.7	212.6	276.3	345.4	362.7	368.0	372.0	370.7	373.3	370.7
72.5°	160.5	169.8	192.4	242.3	298.7	315.9	319.1	319.9	323.9	321.2	323.9
75°	124.9	144.8	159.4	191.3	233.8	245.8	247.1	248.4	245.8	249.8	245.8
77.5°	87.2	110.3	123.3	141.6	170.3	177.8	177.5	178.3	176.2	175.9	176.2
80°	69.1	83.7	95.7	107.6	128.9	134.2	132.9	131.5	131.5	130.2	131.5
82.5°	51.0	59.3	70.1	78.9	92.7	93.8	95.7	93.3	93.3	95.1	93.3
85°	21.3	27.9	35.9	39.9	45.2	46.5	43.8	47.8	45.2	45.2	45.2
87.5°	5.3	8.5	12.8	14.9	15.9	14.9	14.9	12.8	12.8	12.8	12.8
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°	1404.3	1404.3	1404.3	1404.3	1404.3	1404.3	1404.3	1404.3	1404.3	1404.3	1404.3
2.5°	1361.8	1372.4	1366.0	1374.5	1390.5	1399.0	1403.2	1413.8	1413.8	1420.2	1422.3
5°	1182.4	1216.9	1230.2	1286.0	1333.9	1367.1	1387.0	1410.9	1421.5	1436.2	1441.5
7.5°	1053.3	1063.1	1072.9	1112.8	1194.4	1295.9	1356.7	1397.6	1419.1	1438.3	1446.0
10°	1036.3	1032.3	1028.3	1046.9	1104.0	1218.3	1331.2	1387.0	1414.9	1436.2	1442.8
12.5°	1102.2	1049.3	1019.8	1020.3	1058.3	1137.5	1286.6	1372.1	1408.5	1428.7	1436.4
15°	1193.0	1167.8	1060.2	999.1	1011.0	1061.5	1201.0	1347.1	1392.3	1410.9	1422.9
17.5°	1197.3	1185.9	1153.2	1020.3	979.7	1012.9	1117.3	1311.3	1368.7	1390.7	1401.3
20°	1193.0	1178.4	1158.5	1073.5	965.8	988.4	1074.8	1284.7	1348.5	1373.7	1384.3
22.5°	1193.0	1171.0	1153.2	1103.2	956.3	962.9	1045.0	1248.6	1327.2	1353.5	1364.1
25°	1174.4	1159.8	1125.3	1106.7	945.9	931.3	1008.4	1186.4	1292.7	1315.3	1331.2
27.5°	1143.1	1135.6	1098.4	1085.2	952.8	894.4	976.2	1118.1	1245.1	1277.3	1294.5
30°	1118.6	1113.3	1076.1	1068.1	953.9	868.9	953.9	1068.1	1203.7	1247.5	1270.1
32.5°	1081.4	1083.6	1053.8	1042.6	946.5	844.4	926.3	1011.8	1142.0	1216.7	1243.5
35°	1029.6	1030.9	1013.7	999.1	922.0	799.8	879.5	902.1	1066.8	1173.1	1195.7
37.5°	987.4	981.8	956.0	957.1	884.0	755.7	824.2	778.5	998.8	1127.1	1143.6
40°	956.5	949.9	916.7	927.3	854.3	728.0	778.5	704.1	934.0	1092.1	1105.3
42.5°	925.7	919.1	878.4	891.2	818.1	696.2	717.9	648.9	862.8	1054.9	1058.6
45°	879.5	872.9	829.0	830.3	759.9	647.0	593.9	581.9	821.0	995.1	995.1
47.5°	827.9	822.1	775.1	770.0	692.4	593.3	478.8	564.4	762.6	930.8	930.2
50°	791.8	789.2	740.0	730.7	640.4	554.0	422.5	563.3	720.1	875.5	888.8
52.5°	752.5	753.0	708.1	696.7	594.7	508.3	390.6	521.9	668.0	804.3	846.3
55°	700.1	698.8	659.0	644.3	527.4	429.1	352.1	474.3	587.2	705.5	775.9
57.5°	643.8	640.6	603.2	591.7	469.2	355.8	308.5	458.6	461.8	615.1	704.9
60°	604.5	599.2	566.0	551.3	433.1	312.2	277.7	427.8	353.4	551.3	649.7
62.5°	560.9	551.3	528.8	513.1	403.3	291.0	256.4	395.9	275.8	479.1	596.5
65°	492.9	486.2	471.6	454.4	356.0	257.7	228.5	329.5	215.2	328.1	518.1
67.5°	418.8	414.8	406.3	386.9	309.3	231.7	202.7	238.1	163.7	208.3	443.5
70°	372.0	368.0	362.7	345.4	276.3	212.6	184.7	186.0	116.9	154.1	394.6
72.5°	319.9	319.1	315.9	298.7	242.3	192.4	169.8	160.5	98.8	121.2	344.6
75°	248.4	247.1	245.8	233.8	191.3	159.4	144.8	124.9	99.6	86.4	269.7
77.5°	178.3	177.5	177.8	170.3	141.6	123.3	110.3	87.2	89.0	65.6	201.9
80°	131.5	132.9	134.2	128.9	107.6	95.7	83.7	69.1	73.1	51.8	154.1
82.5°	93.3	95.7	93.8	92.7	78.9	70.1	59.3	51.0	51.8	41.2	114.8
85°	47.8	43.8	46.5	45.2	39.9	35.9	27.9	21.3	26.6	23.9	57.1
87.5°	12.8	14.9	14.9	15.9	14.9	12.8	8.5	5.3	9.6	11.7	23.4
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°	1404.3	1404.3	1404.3	1404.3	1404.3	1404.3	1404.3	1404.3	1404.3	1404.3	1404.3
2.5°	1419.1	1419.1	1428.7	1430.8	1433.0	1429.8	1433.0	1430.8	1428.7	1419.1	1419.1
5°	1440.1	1440.1	1453.4	1457.4	1457.4	1454.8	1457.4	1457.4	1453.4	1440.1	1440.1
7.5°	1442.0	1444.1	1457.4	1460.3	1462.7	1458.7	1462.7	1460.3	1457.4	1444.1	1442.0
10°	1438.8	1444.1	1457.4	1461.4	1462.7	1458.7	1462.7	1461.4	1457.4	1444.1	1438.8
12.5°	1434.6	1438.8	1452.1	1455.0	1457.4	1454.5	1457.4	1455.0	1452.1	1438.8	1434.6
15°	1420.2	1425.5	1440.1	1442.8	1445.5	1441.5	1445.5	1442.8	1440.1	1425.5	1420.2
17.5°	1400.3	1406.9	1420.2	1424.5	1425.8	1420.7	1425.8	1424.5	1420.2	1406.9	1400.3
20°	1384.3	1391.0	1404.3	1409.6	1410.9	1406.9	1410.9	1409.6	1404.3	1391.0	1384.3
22.5°	1364.1	1375.0	1387.3	1389.4	1387.5	1383.5	1387.5	1389.4	1387.3	1375.0	1364.1
25°	1335.2	1344.5	1348.5	1348.5	1348.5	1344.5	1348.5	1348.5	1348.5	1344.5	1335.2
27.5°	1298.3	1303.0	1305.4	1307.6	1310.2	1307.6	1310.2	1307.6	1305.4	1303.0	1298.3
30°	1272.7	1270.1	1276.7	1282.0	1284.7	1282.0	1284.7	1282.0	1276.7	1270.1	1272.7
32.5°	1237.7	1239.3	1249.1	1252.3	1252.8	1250.2	1252.8	1252.3	1249.1	1239.3	1237.7
35°	1186.4	1193.0	1199.7	1202.3	1203.7	1199.7	1203.7	1202.3	1199.7	1193.0	1186.4
37.5°	1132.2	1143.9	1148.7	1145.7	1146.0	1141.7	1146.0	1145.7	1148.7	1143.9	1132.2
40°	1096.0	1106.7	1109.3	1105.3	1106.7	1101.4	1106.7	1105.3	1109.3	1106.7	1096.0
42.5°	1062.0	1070.5	1067.9	1062.8	1062.0	1059.9	1062.0	1062.8	1067.9	1070.5	1062.0
45°	1005.7	1009.7	997.7	993.7	991.1	988.4	991.1	993.7	997.7	1009.7	1005.7
47.5°	944.1	938.7	927.3	921.2	913.8	908.7	913.8	921.2	927.3	938.7	944.1
50°	904.7	888.8	879.5	864.9	859.6	860.9	859.6	864.9	879.5	888.8	904.7
52.5°	856.9	837.8	823.2	810.7	806.4	805.6	806.4	810.7	823.2	837.8	856.9
55°	787.8	758.6	734.7	728.0	726.7	729.4	726.7	728.0	734.7	758.6	787.8
57.5°	703.1	674.4	654.7	649.4	644.9	640.6	644.9	649.4	654.7	674.4	703.1
60°	645.7	619.1	600.5	595.2	583.2	577.9	583.2	595.2	600.5	619.1	645.7
62.5°	594.7	562.8	548.4	537.8	529.0	520.5	529.0	537.8	548.4	562.8	594.7
65°	520.8	483.6	469.0	459.7	443.7	439.7	443.7	459.7	469.0	483.6	520.8
67.5°	440.0	407.6	389.3	376.8	366.7	366.4	366.7	376.8	389.3	407.6	440.0
70°	387.9	358.7	341.4	326.8	318.8	317.5	318.8	326.8	341.4	358.7	387.9
72.5°	336.9	308.8	293.6	280.1	273.1	271.8	273.1	280.1	293.6	308.8	336.9
75°	264.4	237.8	225.9	216.6	211.2	208.6	211.2	216.6	225.9	237.8	264.4
77.5°	195.6	174.0	167.9	158.4	153.8	153.6	153.8	158.4	167.9	174.0	195.6
80°	154.1	136.8	127.5	122.2	120.9	119.6	120.9	122.2	127.5	136.8	154.1
82.5°	111.6	101.8	95.7	92.5	92.2	89.8	92.2	92.5	95.7	101.8	111.6
85°	59.8	57.1	55.8	54.5	53.1	53.1	53.1	54.5	55.8	57.1	59.8
87.5°	24.4	25.5	25.5	26.6	27.6	26.6	27.6	26.6	25.5	25.5	24.4
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-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	1404.3	1404.3	1404.3	1404.3
2.5°	1422.3	1420.2	1413.8	1413.8
5°	1441.5	1436.2	1421.5	1410.9
7.5°	1446.0	1438.3	1419.1	1397.6
10°	1442.8	1436.2	1414.9	1387.0
12.5°	1436.4	1428.7	1408.5	1372.1
15°	1422.9	1410.9	1392.3	1347.1
17.5°	1401.3	1390.7	1368.7	1311.3
20°	1384.3	1373.7	1348.5	1284.7
22.5°	1364.1	1353.5	1327.2	1248.6
25°	1331.2	1315.3	1292.7	1186.4
27.5°	1294.5	1277.3	1245.1	1118.1
30°	1270.1	1247.5	1203.7	1068.1
32.5°	1243.5	1216.7	1142.0	1011.8
35°	1195.7	1173.1	1066.8	902.1
37.5°	1143.6	1127.1	998.8	778.5
40°	1105.3	1092.1	934.0	704.1
42.5°	1058.6	1054.9	862.8	648.9
45°	995.1	995.1	821.0	581.9
47.5°	930.2	930.8	762.6	564.4
50°	888.8	875.5	720.1	563.3
52.5°	846.3	804.3	668.0	521.9
55°	775.9	705.5	587.2	474.3
57.5°	704.9	615.1	461.8	458.6
60°	649.7	551.3	353.4	427.8
62.5°	596.5	479.1	275.8	395.9
65°	518.1	328.1	215.2	329.5
67.5°	443.5	208.3	163.7	238.1
70°	394.6	154.1	116.9	186.0
72.5°	344.6	121.2	98.8	160.5
75°	269.7	86.4	99.6	124.9
77.5°	201.9	65.6	89.0	87.2
80°	154.1	51.8	73.1	69.1
82.5°	114.8	41.2	51.8	51.0
85°	57.1	23.9	26.6	21.3
87.5°	23.4	11.7	9.6	5.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)