

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-935-1D-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-935-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

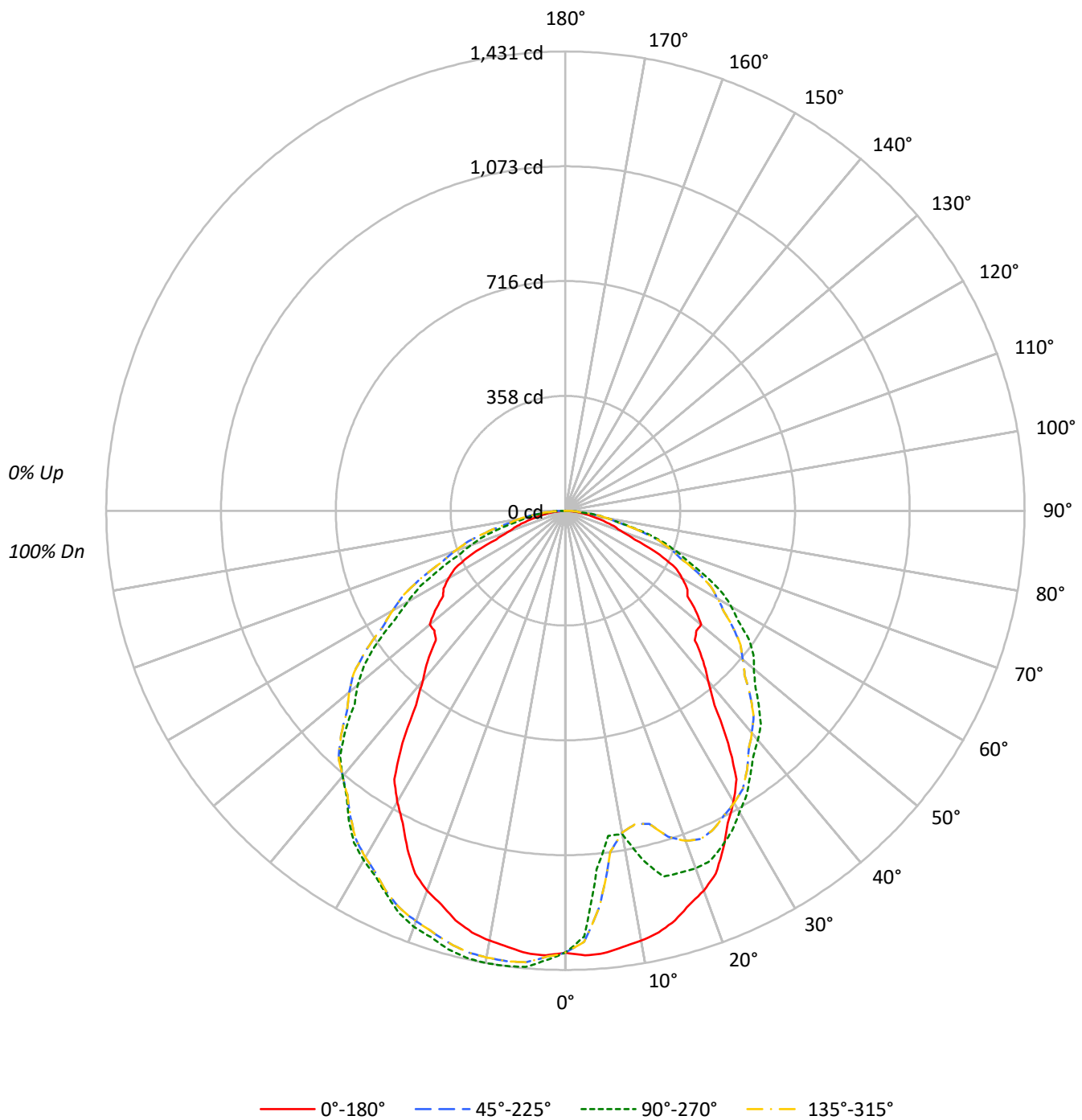
Lumens per Lamp: N/A
Luminaire Lumens: 3569.2 lumens
Efficiency: N/A
Efficacy: 88.3 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

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°	8471	8471	8471	8471
5°	8545	6927	8545	8810
10°	8497	6389	8497	8936
15°	8414	7518	8414	9003
20°	8248	7762	8248	9032
25°	7897	7835	7897	8950
30°	7441	7710	7441	8931
35°	6644	7544	6644	8836
40°	5545	7491	5545	8673
45°	4964	7402	4964	8433
50°	5287	7332	5287	8080
55°	4989	7489	4989	7672
60°	5162	7342	5162	6973
65°	4704	7017	4704	6277
70°	3280	6586	3280	5600
75°	2911	5822	2911	4862
80°	2402	4523	2402	4155
85°	1468	3126	1468	3677

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 8614 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.2	3.5
10°-20°	352.9	9.9
20°-30°	545.3	15.3
30°-40°	651.5	18.3
40°-50°	655.7	18.4
50°-60°	569.3	16.0
60°-70°	403.0	11.3
70°-80°	213.2	6.0
80°-90°	54.2	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°	1022.3	28.6
0°-40°	1673.8	46.9
0°-60°	2898.9	81.2
0°-90°	3569.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3569.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1377	1377	1377	1377	1377	
5°	1384	1122	1384	1427	1384	131
15°	1321	1181	1321	1414	1321	371
25°	1164	1154	1164	1319	1164	534
35°	885	1005	885	1177	885	546
45°	571	851	571	970	571	460
55°	465	698	465	715	465	428
65°	323	482	323	431	323	308
75°	122	245	122	205	122	129
85°	21	44	21	52	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°	1377.3	1377.3	1377.3	1377.3	1377.3	1377.3	1377.3	1377.3	1377.3	1377.3	1377.3
2.5°	1386.7	1376.3	1372.1	1363.8	1348.2	1339.8	1346.1	1335.6	1339.8	1328.3	1339.8
5°	1383.9	1360.4	1340.9	1308.3	1261.4	1206.6	1193.6	1159.7	1138.9	1121.9	1138.9
7.5°	1370.8	1330.7	1271.0	1171.5	1091.4	1052.4	1042.7	1033.1	1030.5	1021.9	1030.5
10°	1360.4	1305.7	1194.9	1082.8	1026.8	1008.6	1012.5	1016.4	1024.2	1022.9	1024.2
12.5°	1345.8	1261.9	1115.7	1038.0	1000.8	1000.2	1029.2	1081.0	1117.0	1114.6	1117.0
15°	1321.3	1178.0	1041.2	991.6	979.9	1039.8	1145.4	1170.2	1179.3	1180.6	1179.3
17.5°	1286.1	1095.9	993.5	960.9	1000.8	1131.1	1163.1	1174.3	1182.1	1182.7	1182.1
20°	1260.1	1054.2	969.5	947.3	1052.9	1136.3	1155.8	1170.2	1183.2	1185.8	1183.2
22.5°	1224.6	1025.0	944.5	937.9	1082.1	1131.1	1148.5	1170.2	1181.1	1180.6	1181.1
25°	1163.6	989.0	913.5	927.8	1085.5	1103.7	1137.6	1151.9	1153.2	1154.5	1153.2
27.5°	1096.7	957.5	877.2	934.6	1064.3	1077.4	1113.9	1121.2	1126.1	1124.0	1126.1
30°	1047.7	935.6	852.2	935.6	1047.7	1055.5	1092.0	1097.2	1090.7	1085.5	1090.7
32.5°	992.4	908.5	828.2	928.3	1022.6	1033.6	1062.8	1060.7	1054.2	1050.0	1054.2
35°	884.8	862.6	784.4	904.3	979.9	994.2	1011.2	1009.9	1008.6	1004.7	1008.6
37.5°	763.6	808.4	741.2	867.1	938.7	937.7	963.0	968.4	967.1	962.2	967.1
40°	690.6	763.6	714.1	837.9	909.5	899.1	931.7	938.2	936.9	933.0	936.9
42.5°	636.4	704.2	682.8	802.4	874.1	861.6	901.5	908.0	904.6	901.7	904.6
45°	570.7	582.5	634.6	745.4	814.4	813.1	856.1	862.6	854.8	850.9	854.8
47.5°	553.5	469.6	581.9	679.2	755.3	760.2	806.3	812.1	805.0	801.6	805.0
50°	552.5	414.4	543.4	628.1	716.7	725.8	774.0	776.6	767.5	766.2	767.5
52.5°	511.8	383.1	498.6	583.3	683.3	694.5	738.6	738.1	737.3	739.1	737.3
55°	465.2	345.3	420.9	517.3	632.0	646.3	685.4	686.7	695.8	698.4	695.8
57.5°	449.8	302.6	349.0	460.2	580.4	591.6	628.3	631.5	637.7	637.5	637.7
60°	419.6	272.3	306.2	424.8	540.8	555.1	587.7	592.9	598.1	596.8	598.1
62.5°	388.3	251.5	285.4	395.6	503.2	518.6	540.8	550.2	552.2	549.9	552.2
65°	323.2	224.1	252.8	349.2	445.6	462.6	476.9	483.4	484.7	482.1	484.7
67.5°	233.5	198.8	227.3	303.4	379.5	398.5	406.8	410.7	409.4	414.1	409.4
70°	182.4	181.1	208.5	271.0	338.8	355.7	360.9	364.9	363.6	366.2	363.6
72.5°	157.4	166.5	188.7	237.7	292.9	309.9	313.0	313.8	317.7	315.1	317.7
75°	122.5	142.0	156.4	187.6	229.3	241.1	242.4	243.7	241.1	245.0	241.1
77.5°	85.5	108.2	120.9	138.9	167.1	174.4	174.1	174.9	172.8	172.5	172.8
80°	67.8	82.1	93.8	105.5	126.4	131.6	130.3	129.0	129.0	127.7	129.0
82.5°	50.0	58.1	68.8	77.4	91.0	92.0	93.8	91.5	91.5	93.3	91.5
85°	20.8	27.4	35.2	39.1	44.3	45.6	43.0	46.9	44.3	44.3	44.3
87.5°	5.2	8.3	12.5	14.6	15.6	14.6	14.6	12.5	12.5	12.5	12.5
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°	1377.3	1377.3	1377.3	1377.3	1377.3	1377.3	1377.3	1377.3	1377.3	1377.3	1377.3
2.5°	1335.6	1346.1	1339.8	1348.2	1363.8	1372.1	1376.3	1386.7	1386.7	1393.0	1395.1
5°	1159.7	1193.6	1206.6	1261.4	1308.3	1340.9	1360.4	1383.9	1394.3	1408.6	1413.8
7.5°	1033.1	1042.7	1052.4	1091.4	1171.5	1271.0	1330.7	1370.8	1391.9	1410.7	1418.3
10°	1016.4	1012.5	1008.6	1026.8	1082.8	1194.9	1305.7	1360.4	1387.8	1408.6	1415.1
12.5°	1081.0	1029.2	1000.2	1000.8	1038.0	1115.7	1261.9	1345.8	1381.5	1401.3	1408.9
15°	1170.2	1145.4	1039.8	979.9	991.6	1041.2	1178.0	1321.3	1365.6	1383.9	1395.6
17.5°	1174.3	1163.1	1131.1	1000.8	960.9	993.5	1095.9	1286.1	1342.4	1364.1	1374.5
20°	1170.2	1155.8	1136.3	1052.9	947.3	969.5	1054.2	1260.1	1322.6	1347.4	1357.8
22.5°	1170.2	1148.5	1131.1	1082.1	937.9	944.5	1025.0	1224.6	1301.8	1327.6	1338.0
25°	1151.9	1137.6	1103.7	1085.5	927.8	913.5	989.0	1163.6	1267.9	1290.0	1305.7
27.5°	1121.2	1113.9	1077.4	1064.3	934.6	877.2	957.5	1096.7	1221.2	1252.8	1269.7
30°	1097.2	1092.0	1055.5	1047.7	935.6	852.2	935.6	1047.7	1180.6	1223.6	1245.7
32.5°	1060.7	1062.8	1033.6	1022.6	928.3	828.2	908.5	992.4	1120.1	1193.3	1219.7
35°	1009.9	1011.2	994.2	979.9	904.3	784.4	862.6	884.8	1046.4	1150.6	1172.8
37.5°	968.4	963.0	937.7	938.7	867.1	741.2	808.4	763.6	979.6	1105.5	1121.7
40°	938.2	931.7	899.1	909.5	837.9	714.1	763.6	690.6	916.1	1071.1	1084.2
42.5°	908.0	901.5	861.6	874.1	802.4	682.8	704.2	636.4	846.2	1034.6	1038.3
45°	862.6	856.1	813.1	814.4	745.4	634.6	582.5	570.7	805.3	976.0	976.0
47.5°	812.1	806.3	760.2	755.3	679.2	581.9	469.6	553.5	748.0	912.9	912.4
50°	776.6	774.0	725.8	716.7	628.1	543.4	414.4	552.5	706.3	858.7	871.8
52.5°	738.1	738.6	694.5	683.3	583.3	498.6	383.1	511.8	655.2	788.9	830.1
55°	686.7	685.4	646.3	632.0	517.3	420.9	345.3	465.2	576.0	691.9	761.0
57.5°	631.5	628.3	591.6	580.4	460.2	349.0	302.6	449.8	452.9	603.3	691.4
60°	592.9	587.7	555.1	540.8	424.8	306.2	272.3	419.6	346.6	540.8	637.2
62.5°	550.2	540.8	518.6	503.2	395.6	285.4	251.5	388.3	270.5	469.9	585.1
65°	483.4	476.9	462.6	445.6	349.2	252.8	224.1	323.2	211.1	321.9	508.2
67.5°	410.7	406.8	398.5	379.5	303.4	227.3	198.8	233.5	160.5	204.3	435.0
70°	364.9	360.9	355.7	338.8	271.0	208.5	181.1	182.4	114.7	151.2	387.0
72.5°	313.8	313.0	309.9	292.9	237.7	188.7	166.5	157.4	96.9	118.8	338.0
75°	243.7	242.4	241.1	229.3	187.6	156.4	142.0	122.5	97.7	84.7	264.5
77.5°	174.9	174.1	174.4	167.1	138.9	120.9	108.2	85.5	87.3	64.4	198.1
80°	129.0	130.3	131.6	126.4	105.5	93.8	82.1	67.8	71.7	50.8	151.2
82.5°	91.5	93.8	92.0	91.0	77.4	68.8	58.1	50.0	50.8	40.4	112.6
85°	46.9	43.0	45.6	44.3	39.1	35.2	27.4	20.8	26.1	23.5	56.0
87.5°	12.5	14.6	14.6	15.6	14.6	12.5	8.3	5.2	9.4	11.5	22.9
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°	1377.3	1377.3	1377.3	1377.3	1377.3	1377.3	1377.3	1377.3	1377.3	1377.3	1377.3
2.5°	1391.9	1391.9	1401.3	1403.4	1405.5	1402.4	1405.5	1403.4	1401.3	1391.9	1391.9
5°	1412.5	1412.5	1425.6	1429.5	1429.5	1426.9	1429.5	1429.5	1425.6	1412.5	1412.5
7.5°	1414.3	1416.4	1429.5	1432.3	1434.7	1430.8	1434.7	1432.3	1429.5	1416.4	1414.3
10°	1411.2	1416.4	1429.5	1433.4	1434.7	1430.8	1434.7	1433.4	1429.5	1416.4	1411.2
12.5°	1407.1	1411.2	1424.3	1427.1	1429.5	1426.6	1429.5	1427.1	1424.3	1411.2	1407.1
15°	1393.0	1398.2	1412.5	1415.1	1417.7	1413.8	1417.7	1415.1	1412.5	1398.2	1393.0
17.5°	1373.4	1379.9	1393.0	1397.1	1398.5	1393.5	1398.5	1397.1	1393.0	1379.9	1373.4
20°	1357.8	1364.3	1377.3	1382.6	1383.9	1379.9	1383.9	1382.6	1377.3	1364.3	1357.8
22.5°	1338.0	1348.7	1360.7	1362.7	1360.9	1357.0	1360.9	1362.7	1360.7	1348.7	1338.0
25°	1309.6	1318.7	1322.6	1322.6	1322.6	1318.7	1322.6	1322.6	1322.6	1318.7	1309.6
27.5°	1273.4	1278.0	1280.4	1282.5	1285.1	1282.5	1285.1	1282.5	1280.4	1278.0	1273.4
30°	1248.3	1245.7	1252.2	1257.5	1260.1	1257.5	1260.1	1257.5	1252.2	1245.7	1248.3
32.5°	1213.9	1215.5	1225.1	1228.3	1228.8	1226.2	1228.8	1228.3	1225.1	1215.5	1213.9
35°	1163.6	1170.2	1176.7	1179.3	1180.6	1176.7	1180.6	1179.3	1176.7	1170.2	1163.6
37.5°	1110.5	1121.9	1126.6	1123.8	1124.0	1119.9	1124.0	1123.8	1126.6	1121.9	1110.5
40°	1075.0	1085.5	1088.1	1084.2	1085.5	1080.2	1085.5	1084.2	1088.1	1085.5	1075.0
42.5°	1041.7	1050.0	1047.4	1042.5	1041.7	1039.6	1041.7	1042.5	1047.4	1050.0	1041.7
45°	986.4	990.3	978.6	974.7	972.1	969.5	972.1	974.7	978.6	990.3	986.4
47.5°	926.0	920.7	909.5	903.5	896.2	891.3	896.2	903.5	909.5	920.7	926.0
50°	887.4	871.8	862.6	848.3	843.1	844.4	843.1	848.3	862.6	871.8	887.4
52.5°	840.5	821.7	807.4	795.1	791.0	790.2	791.0	795.1	807.4	821.7	840.5
55°	772.7	744.1	720.6	714.1	712.8	715.4	712.8	714.1	720.6	744.1	772.7
57.5°	689.6	661.4	642.2	636.9	632.5	628.3	632.5	636.9	642.2	661.4	689.6
60°	633.3	607.2	589.0	583.8	572.0	566.8	572.0	583.8	589.0	607.2	633.3
62.5°	583.3	552.0	537.9	527.5	518.9	510.5	518.9	527.5	537.9	552.0	583.3
65°	510.8	474.3	460.0	450.9	435.2	431.3	435.2	450.9	460.0	474.3	510.8
67.5°	431.6	399.8	381.8	369.5	359.6	359.4	359.6	369.5	381.8	399.8	431.6
70°	380.5	351.8	334.9	320.6	312.7	311.4	312.7	320.6	334.9	351.8	380.5
72.5°	330.5	302.8	288.0	274.7	267.9	266.6	267.9	274.7	288.0	302.8	330.5
75°	259.3	233.2	221.5	212.4	207.2	204.6	207.2	212.4	221.5	233.2	259.3
77.5°	191.8	170.7	164.7	155.3	150.9	150.6	150.9	155.3	164.7	170.7	191.8
80°	151.2	134.2	125.1	119.9	118.6	117.3	118.6	119.9	125.1	134.2	151.2
82.5°	109.5	99.8	93.8	90.7	90.4	88.1	90.4	90.7	93.8	99.8	109.5
85°	58.6	56.0	54.7	53.4	52.1	52.1	52.1	53.4	54.7	56.0	58.6
87.5°	24.0	25.0	25.0	26.1	27.1	26.1	27.1	26.1	25.0	25.0	24.0
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-075D-935-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	1377.3	1377.3	1377.3	1377.3
2.5°	1395.1	1393.0	1386.7	1386.7
5°	1413.8	1408.6	1394.3	1383.9
7.5°	1418.3	1410.7	1391.9	1370.8
10°	1415.1	1408.6	1387.8	1360.4
12.5°	1408.9	1401.3	1381.5	1345.8
15°	1395.6	1383.9	1365.6	1321.3
17.5°	1374.5	1364.1	1342.4	1286.1
20°	1357.8	1347.4	1322.6	1260.1
22.5°	1338.0	1327.6	1301.8	1224.6
25°	1305.7	1290.0	1267.9	1163.6
27.5°	1269.7	1252.8	1221.2	1096.7
30°	1245.7	1223.6	1180.6	1047.7
32.5°	1219.7	1193.3	1120.1	992.4
35°	1172.8	1150.6	1046.4	884.8
37.5°	1121.7	1105.5	979.6	763.6
40°	1084.2	1071.1	916.1	690.6
42.5°	1038.3	1034.6	846.2	636.4
45°	976.0	976.0	805.3	570.7
47.5°	912.4	912.9	748.0	553.5
50°	871.8	858.7	706.3	552.5
52.5°	830.1	788.9	655.2	511.8
55°	761.0	691.9	576.0	465.2
57.5°	691.4	603.3	452.9	449.8
60°	637.2	540.8	346.6	419.6
62.5°	585.1	469.9	270.5	388.3
65°	508.2	321.9	211.1	323.2
67.5°	435.0	204.3	160.5	233.5
70°	387.0	151.2	114.7	182.4
72.5°	338.0	118.8	96.9	157.4
75°	264.5	84.7	97.7	122.5
77.5°	198.1	64.4	87.3	85.5
80°	151.2	50.8	71.7	67.8
82.5°	112.6	40.4	50.8	50.0
85°	56.0	23.5	26.1	20.8
87.5°	22.9	11.5	9.4	5.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)