

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-940-1D-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-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

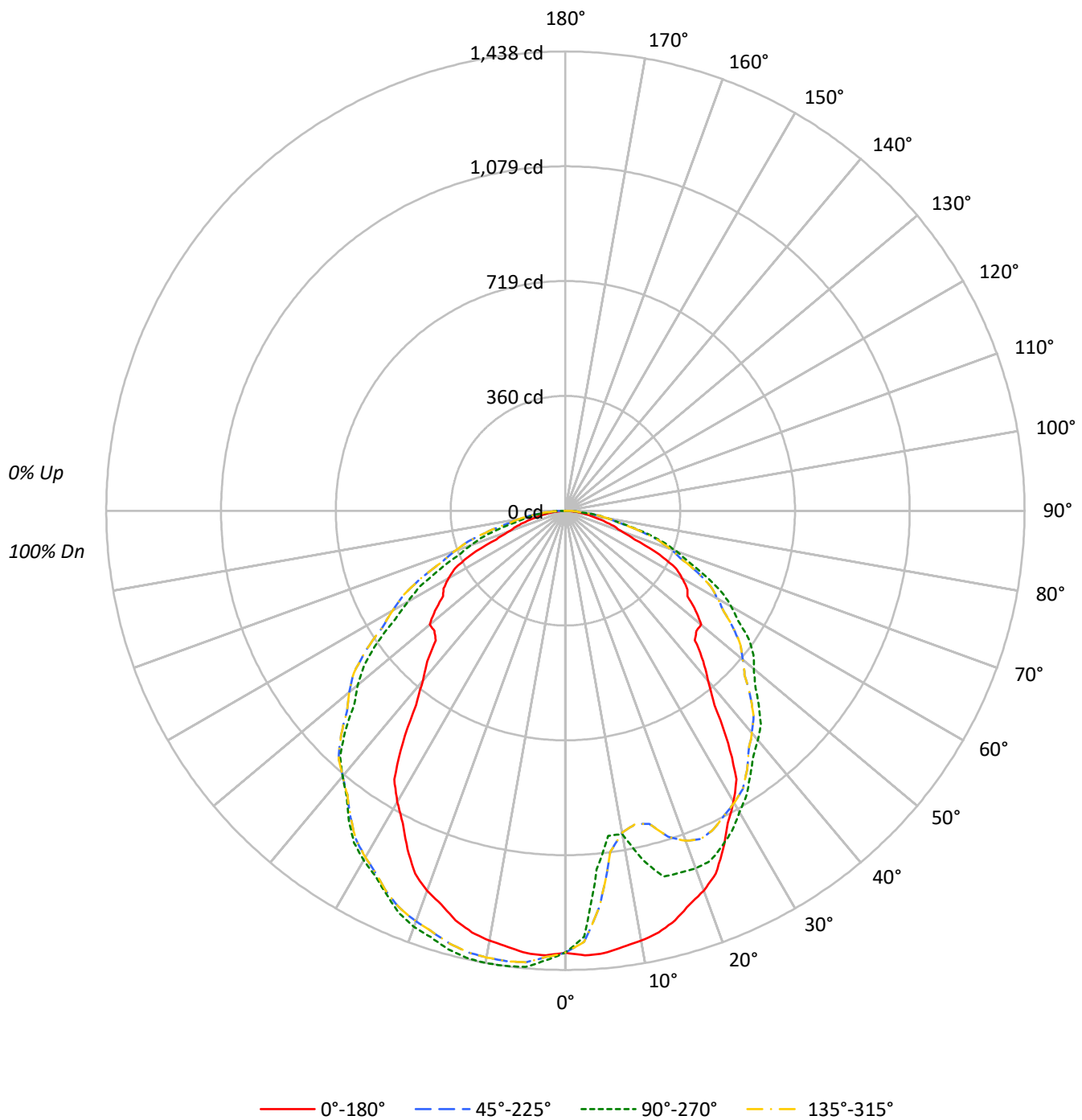
Lumens per Lamp: N/A
Luminaire Lumens: 3586.8 lumens
Efficiency: N/A
Efficacy: 88.8 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

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	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°	8513	8513	8513	8513
5°	8587	6962	8587	8853
10°	8538	6421	8538	8980
15°	8455	7555	8455	9047
20°	8289	7800	8289	9077
25°	7936	7874	7936	8994
30°	7477	7747	7477	8975
35°	6676	7581	6676	8879
40°	5572	7528	5572	8717
45°	4989	7438	4989	8475
50°	5313	7368	5313	8120
55°	5013	7527	5013	7709
60°	5188	7377	5188	7007
65°	4727	7051	4727	6308
70°	3296	6618	3296	5629
75°	2925	5851	2925	4886
80°	2412	4545	2412	4176
85°	1482	3140	1482	3698

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 8657 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.8	3.5
10°-20°	354.6	9.9
20°-30°	548.0	15.3
30°-40°	654.7	18.3
40°-50°	659.0	18.4
50°-60°	572.1	16.0
60°-70°	405.0	11.3
70°-80°	214.2	6.0
80°-90°	54.5	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°	1027.4	28.6
0°-40°	1682.1	46.9
0°-60°	2913.1	81.2
0°-90°	3586.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3586.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1384	1384	1384	1384	1384	
5°	1391	1128	1391	1434	1391	132
15°	1328	1186	1328	1421	1328	373
25°	1169	1160	1169	1325	1169	536
35°	889	1010	889	1182	889	549
45°	574	855	574	974	574	462
55°	468	702	468	719	468	430
65°	325	484	325	433	325	309
75°	123	246	123	206	123	130
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°	1384.1	1384.1	1384.1	1384.1	1384.1	1384.1	1384.1	1384.1	1384.1	1384.1	1384.1
2.5°	1393.6	1383.1	1378.9	1370.5	1354.8	1346.4	1352.7	1342.2	1346.4	1334.9	1346.4
5°	1390.7	1367.1	1347.5	1314.7	1267.6	1212.6	1199.5	1165.5	1144.5	1127.5	1144.5
7.5°	1377.6	1337.3	1277.3	1177.2	1096.8	1057.5	1047.9	1038.2	1035.5	1026.9	1035.5
10°	1367.1	1312.1	1200.8	1088.2	1031.9	1013.6	1017.5	1021.4	1029.3	1028.0	1029.3
12.5°	1352.4	1268.1	1121.2	1043.1	1005.7	1005.2	1034.2	1086.4	1122.5	1120.1	1122.5
15°	1327.8	1183.8	1046.3	996.5	984.7	1045.0	1151.0	1175.9	1185.1	1186.4	1185.1
17.5°	1292.5	1101.3	998.4	965.6	1005.7	1136.6	1168.9	1180.1	1188.0	1188.5	1188.0
20°	1266.3	1059.4	974.3	952.0	1058.1	1141.9	1161.5	1175.9	1189.0	1191.6	1189.0
22.5°	1230.7	1030.0	949.1	942.6	1087.4	1136.6	1154.2	1175.9	1186.9	1186.4	1186.9
25°	1169.4	993.9	918.0	932.4	1090.8	1109.1	1143.2	1157.6	1158.9	1160.2	1158.9
27.5°	1102.1	962.2	881.6	939.2	1069.6	1082.7	1119.4	1126.7	1131.7	1129.6	1131.7
30°	1052.8	940.2	856.4	940.2	1052.8	1060.7	1097.4	1102.6	1096.0	1090.8	1096.0
32.5°	997.3	913.0	832.3	932.9	1027.7	1038.7	1068.0	1065.9	1059.4	1055.2	1059.4
35°	889.1	866.9	788.3	908.8	984.7	999.1	1016.2	1014.9	1013.6	1009.6	1013.6
37.5°	767.4	812.4	744.8	871.3	943.4	942.3	967.7	973.2	971.9	966.9	971.9
40°	694.0	767.4	717.6	842.0	914.0	903.6	936.3	942.8	941.5	937.6	941.5
42.5°	639.6	707.7	686.2	806.4	878.4	865.8	905.9	912.5	909.1	906.2	909.1
45°	573.6	585.3	637.7	749.0	818.4	817.1	860.3	866.9	859.0	855.1	859.0
47.5°	556.3	471.9	584.8	682.5	759.0	764.0	810.3	816.1	809.0	805.6	809.0
50°	555.2	416.4	546.1	631.2	720.2	729.4	777.8	780.5	771.3	770.0	771.3
52.5°	514.4	385.0	501.0	586.1	686.7	698.0	742.2	741.7	740.9	742.7	740.9
55°	467.5	347.0	423.0	519.9	635.1	649.5	688.8	690.1	699.3	701.9	699.3
57.5°	452.0	304.1	350.7	462.5	583.2	594.5	631.4	634.6	640.9	640.6	640.9
60°	421.7	273.7	307.7	426.9	543.4	557.8	590.6	595.8	601.1	599.7	601.1
62.5°	390.2	252.7	286.8	397.6	505.7	521.2	543.4	552.9	555.0	552.6	555.0
65°	324.8	225.2	254.0	350.9	447.8	464.9	479.3	485.8	487.1	484.5	487.1
67.5°	234.7	199.8	228.4	304.9	381.3	400.4	408.8	412.8	411.4	416.2	411.4
70°	183.3	182.0	209.5	272.4	340.5	357.5	362.7	366.7	365.3	368.0	365.3
72.5°	158.2	167.4	189.6	238.9	294.4	311.4	314.5	315.3	319.3	316.6	319.3
75°	123.1	142.7	157.1	188.6	230.5	242.3	243.6	244.9	242.3	246.2	242.3
77.5°	85.9	108.7	121.5	139.6	167.9	175.2	174.9	175.7	173.6	173.4	173.6
80°	68.1	82.5	94.3	106.1	127.0	132.3	130.9	129.6	129.6	128.3	129.6
82.5°	50.3	58.4	69.1	77.8	91.4	92.5	94.3	91.9	91.9	93.8	91.9
85°	21.0	27.5	35.4	39.3	44.5	45.8	43.2	47.1	44.5	44.5	44.5
87.5°	5.2	8.4	12.6	14.7	15.7	14.7	14.7	12.6	12.6	12.6	12.6
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°	1384.1	1384.1	1384.1	1384.1	1384.1	1384.1	1384.1	1384.1	1384.1	1384.1	1384.1
2.5°	1342.2	1352.7	1346.4	1354.8	1370.5	1378.9	1383.1	1393.6	1393.6	1399.9	1401.9
5°	1165.5	1199.5	1212.6	1267.6	1314.7	1347.5	1367.1	1390.7	1401.2	1415.6	1420.8
7.5°	1038.2	1047.9	1057.5	1096.8	1177.2	1277.3	1337.3	1377.6	1398.8	1417.7	1425.3
10°	1021.4	1017.5	1013.6	1031.9	1088.2	1200.8	1312.1	1367.1	1394.6	1415.6	1422.1
12.5°	1086.4	1034.2	1005.2	1005.7	1043.1	1121.2	1268.1	1352.4	1388.3	1408.2	1415.8
15°	1175.9	1151.0	1045.0	984.7	996.5	1046.3	1183.8	1327.8	1372.4	1390.7	1402.5
17.5°	1180.1	1168.9	1136.6	1005.7	965.6	998.4	1101.3	1292.5	1349.0	1370.8	1381.3
20°	1175.9	1161.5	1141.9	1058.1	952.0	974.3	1059.4	1266.3	1329.1	1354.0	1364.5
22.5°	1175.9	1154.2	1136.6	1087.4	942.6	949.1	1030.0	1230.7	1308.2	1334.1	1344.6
25°	1157.6	1143.2	1109.1	1090.8	932.4	918.0	993.9	1169.4	1274.1	1296.4	1312.1
27.5°	1126.7	1119.4	1082.7	1069.6	939.2	881.6	962.2	1102.1	1227.3	1258.9	1276.0
30°	1102.6	1097.4	1060.7	1052.8	940.2	856.4	940.2	1052.8	1186.4	1229.6	1251.9
32.5°	1065.9	1068.0	1038.7	1027.7	932.9	832.3	913.0	997.3	1125.6	1199.2	1225.7
35°	1014.9	1016.2	999.1	984.7	908.8	788.3	866.9	889.1	1051.5	1156.3	1178.5
37.5°	973.2	967.7	942.3	943.4	871.3	744.8	812.4	767.4	984.5	1111.0	1127.2
40°	942.8	936.3	903.6	914.0	842.0	717.6	767.4	694.0	920.6	1076.4	1089.5
42.5°	912.5	905.9	865.8	878.4	806.4	686.2	707.7	639.6	850.4	1039.7	1043.4
45°	866.9	860.3	817.1	818.4	749.0	637.7	585.3	573.6	809.3	980.8	980.8
47.5°	816.1	810.3	764.0	759.0	682.5	584.8	471.9	556.3	751.7	917.4	916.9
50°	780.5	777.8	729.4	720.2	631.2	546.1	416.4	555.2	709.7	863.0	876.1
52.5°	741.7	742.2	698.0	686.7	586.1	501.0	385.0	514.4	658.4	792.8	834.1
55°	690.1	688.8	649.5	635.1	519.9	423.0	347.0	467.5	578.8	695.3	764.7
57.5°	634.6	631.4	594.5	583.2	462.5	350.7	304.1	452.0	455.2	606.3	694.8
60°	595.8	590.6	557.8	543.4	426.9	307.7	273.7	421.7	348.3	543.4	640.3
62.5°	552.9	543.4	521.2	505.7	397.6	286.8	252.7	390.2	271.9	472.2	588.0
65°	485.8	479.3	464.9	447.8	350.9	254.0	225.2	324.8	212.1	323.4	510.7
67.5°	412.8	408.8	400.4	381.3	304.9	228.4	199.8	234.7	161.3	205.3	437.1
70°	366.7	362.7	357.5	340.5	272.4	209.5	182.0	183.3	115.2	151.9	388.9
72.5°	315.3	314.5	311.4	294.4	238.9	189.6	167.4	158.2	97.4	119.4	339.7
75°	244.9	243.6	242.3	230.5	188.6	157.1	142.7	123.1	98.2	85.1	265.8
77.5°	175.7	174.9	175.2	167.9	139.6	121.5	108.7	85.9	87.7	64.7	199.0
80°	129.6	130.9	132.3	127.0	106.1	94.3	82.5	68.1	72.0	51.1	151.9
82.5°	91.9	94.3	92.5	91.4	77.8	69.1	58.4	50.3	51.1	40.6	113.1
85°	47.1	43.2	45.8	44.5	39.3	35.4	27.5	21.0	26.2	23.6	56.3
87.5°	12.6	14.7	14.7	15.7	14.7	12.6	8.4	5.2	9.4	11.5	23.0
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):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	1384.1	1384.1	1384.1	1384.1	1384.1	1384.1	1384.1	1384.1	1384.1	1384.1	1384.1
2.5°	1398.8	1398.8	1408.2	1410.3	1412.4	1409.3	1412.4	1410.3	1408.2	1398.8	1398.8
5°	1419.5	1419.5	1432.6	1436.5	1436.5	1433.9	1436.5	1436.5	1432.6	1419.5	1419.5
7.5°	1421.3	1423.4	1436.5	1439.4	1441.8	1437.8	1441.8	1439.4	1436.5	1423.4	1421.3
10°	1418.2	1423.4	1436.5	1440.4	1441.8	1437.8	1441.8	1440.4	1436.5	1423.4	1418.2
12.5°	1414.0	1418.2	1431.3	1434.2	1436.5	1433.6	1436.5	1434.2	1431.3	1418.2	1414.0
15°	1399.9	1405.1	1419.5	1422.1	1424.7	1420.8	1424.7	1422.1	1419.5	1405.1	1399.9
17.5°	1380.2	1386.8	1399.9	1404.0	1405.4	1400.4	1405.4	1404.0	1399.9	1386.8	1380.2
20°	1364.5	1371.0	1384.1	1389.4	1390.7	1386.8	1390.7	1389.4	1384.1	1371.0	1364.5
22.5°	1344.6	1355.3	1367.4	1369.5	1367.6	1363.7	1367.6	1369.5	1367.4	1355.3	1344.6
25°	1316.0	1325.2	1329.1	1329.1	1329.1	1325.2	1329.1	1329.1	1329.1	1325.2	1316.0
27.5°	1279.6	1284.4	1286.7	1288.8	1291.4	1288.8	1291.4	1288.8	1286.7	1284.4	1279.6
30°	1254.5	1251.9	1258.4	1263.7	1266.3	1263.7	1266.3	1263.7	1258.4	1251.9	1254.5
32.5°	1219.9	1221.5	1231.2	1234.3	1234.9	1232.2	1234.9	1234.3	1231.2	1221.5	1219.9
35°	1169.4	1175.9	1182.5	1185.1	1186.4	1182.5	1186.4	1185.1	1182.5	1175.9	1169.4
37.5°	1116.0	1127.5	1132.2	1129.3	1129.6	1125.4	1129.6	1129.3	1132.2	1127.5	1116.0
40°	1080.3	1090.8	1093.4	1089.5	1090.8	1085.6	1090.8	1089.5	1093.4	1090.8	1080.3
42.5°	1046.8	1055.2	1052.6	1047.6	1046.8	1044.7	1046.8	1047.6	1052.6	1055.2	1046.8
45°	991.3	995.2	983.4	979.5	976.9	974.3	976.9	979.5	983.4	995.2	991.3
47.5°	930.5	925.3	914.0	908.0	900.7	895.7	900.7	908.0	914.0	925.3	930.5
50°	891.8	876.1	866.9	852.5	847.2	848.6	847.2	852.5	866.9	876.1	891.8
52.5°	844.6	825.8	811.4	799.1	794.9	794.1	794.9	799.1	811.4	825.8	844.6
55°	776.5	747.7	724.2	717.6	716.3	718.9	716.3	717.6	724.2	747.7	776.5
57.5°	693.0	664.7	645.3	640.1	635.6	631.4	635.6	640.1	645.3	664.7	693.0
60°	636.4	610.2	591.9	586.7	574.9	569.6	574.9	586.7	591.9	610.2	636.4
62.5°	586.1	554.7	540.6	530.1	521.4	513.1	521.4	530.1	540.6	554.7	586.1
65°	513.3	476.7	462.3	453.1	437.4	433.4	437.4	453.1	462.3	476.7	513.3
67.5°	433.7	401.8	383.7	371.4	361.4	361.2	361.4	371.4	383.7	401.8	433.7
70°	382.4	353.6	336.5	322.1	314.3	313.0	314.3	322.1	336.5	353.6	382.4
72.5°	332.1	304.3	289.4	276.0	269.2	267.9	269.2	276.0	289.4	304.3	332.1
75°	260.6	234.4	222.6	213.4	208.2	205.6	208.2	213.4	222.6	234.4	260.6
77.5°	192.8	171.5	165.5	156.1	151.6	151.4	151.6	156.1	165.5	171.5	192.8
80°	151.9	134.9	125.7	120.5	119.2	117.9	119.2	120.5	125.7	134.9	151.9
82.5°	110.0	100.3	94.3	91.1	90.9	88.5	90.9	91.1	94.3	100.3	110.0
85°	58.9	56.3	55.0	53.7	52.4	52.4	52.4	53.7	55.0	56.3	58.9
87.5°	24.1	25.1	25.1	26.2	27.2	26.2	27.2	26.2	25.1	25.1	24.1
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-075D-940-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	1384.1	1384.1	1384.1	1384.1
2.5°	1401.9	1399.9	1393.6	1393.6
5°	1420.8	1415.6	1401.2	1390.7
7.5°	1425.3	1417.7	1398.8	1377.6
10°	1422.1	1415.6	1394.6	1367.1
12.5°	1415.8	1408.2	1388.3	1352.4
15°	1402.5	1390.7	1372.4	1327.8
17.5°	1381.3	1370.8	1349.0	1292.5
20°	1364.5	1354.0	1329.1	1266.3
22.5°	1344.6	1334.1	1308.2	1230.7
25°	1312.1	1296.4	1274.1	1169.4
27.5°	1276.0	1258.9	1227.3	1102.1
30°	1251.9	1229.6	1186.4	1052.8
32.5°	1225.7	1199.2	1125.6	997.3
35°	1178.5	1156.3	1051.5	889.1
37.5°	1127.2	1111.0	984.5	767.4
40°	1089.5	1076.4	920.6	694.0
42.5°	1043.4	1039.7	850.4	639.6
45°	980.8	980.8	809.3	573.6
47.5°	916.9	917.4	751.7	556.3
50°	876.1	863.0	709.7	555.2
52.5°	834.1	792.8	658.4	514.4
55°	764.7	695.3	578.8	467.5
57.5°	694.8	606.3	455.2	452.0
60°	640.3	543.4	348.3	421.7
62.5°	588.0	472.2	271.9	390.2
65°	510.7	323.4	212.1	324.8
67.5°	437.1	205.3	161.3	234.7
70°	388.9	151.9	115.2	183.3
72.5°	339.7	119.4	97.4	158.2
75°	265.8	85.1	98.2	123.1
77.5°	199.0	64.7	87.7	85.9
80°	151.9	51.1	72.0	68.1
82.5°	113.1	40.6	51.1	50.3
85°	56.3	23.6	26.2	21.0
87.5°	23.0	11.5	9.4	5.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)