

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-125D-930-1D-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-125D-930-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

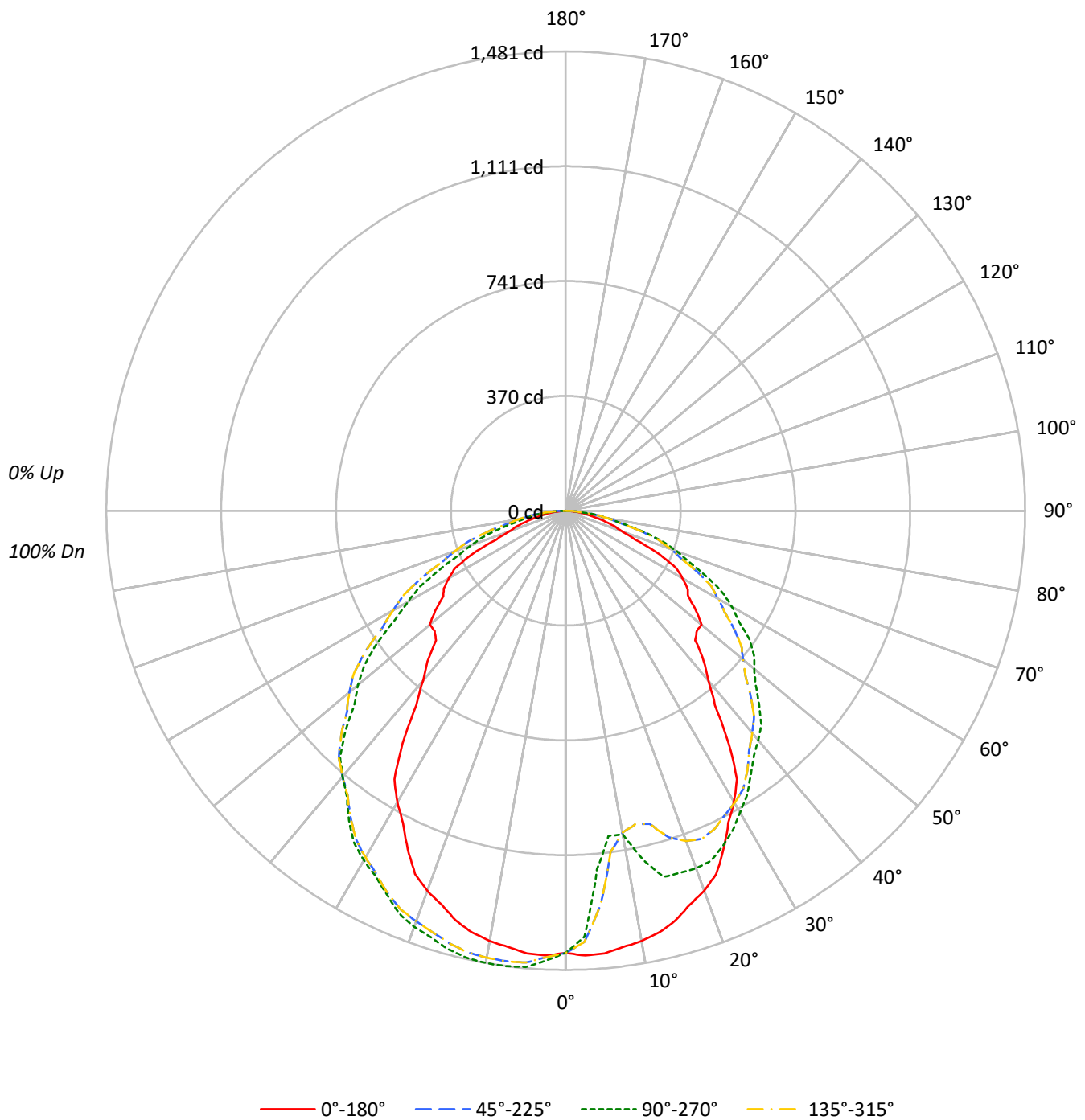
Lumens per Lamp: N/A
Luminaire Lumens: 3695.1 lumens
Efficiency: N/A
Efficacy: 84.8 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 43.6
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				0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		0
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		100
1	109	105	100	97	106	102	98	95	98	95	92		94	92	89		85
2	99	91	85	79	97	90	83	78	86	81	76		83	78	75		71
3	91	81	73	66	88	79	72	66	76	70	64		73	68	63		60
4	83	71	63	56	81	70	62	56	68	61	55		65	59	54		51
5	77	64	55	49	75	63	54	48	61	53	48		59	52	47		45
6	71	58	49	42	69	57	48	42	55	47	42		53	47	41		39
7	66	52	44	38	64	51	43	37	50	43	37		48	42	37		35
8	61	48	39	33	60	47	39	33	46	38	33		44	38	33		31
9	57	44	36	30	56	43	35	30	42	35	30		41	34	30		28
10	54	40	33	27	52	40	32	27	39	32	27		38	32	27		25

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	13156	13156	13156	13156
5°	13269	10757	13269	13681
10°	13195	9921	13195	13877
15°	13066	11674	13066	13981
20°	12808	12053	12808	14026
25°	12264	12167	12264	13898
30°	11555	11971	11555	13869
35°	10317	11715	10317	13721
40°	8611	11633	8611	13469
45°	7710	11494	7710	13096
50°	8210	11385	8210	12548
55°	7747	11631	7747	11913
60°	8016	11402	8016	10828
65°	7305	10896	7305	9748
70°	5096	10226	5096	8697
75°	4520	9040	4520	7550
80°	3725	7024	3725	6450
85°	2287	4859	2287	5716

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 13378 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.5	3.5
10°-20°	365.3	9.9
20°-30°	564.5	15.3
30°-40°	674.5	18.3
40°-50°	678.8	18.4
50°-60°	589.4	16.0
60°-70°	417.2	11.3
70°-80°	220.7	6.0
80°-90°	56.1	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°	1058.4	28.6
0°-40°	1732.9	46.9
0°-60°	3001.1	81.2
0°-90°	3695.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3695.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1426	1426	1426	1426	1426	
5°	1433	1162	1433	1477	1433	136
15°	1368	1222	1368	1464	1368	385
25°	1205	1195	1205	1365	1205	552
35°	916	1040	916	1218	916	566
45°	591	881	591	1004	591	476
55°	482	723	482	741	482	443
65°	335	499	335	446	335	318
75°	127	254	127	212	127	134
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°	1425.9	1425.9	1425.9	1425.9	1425.9	1425.9	1425.9	1425.9	1425.9	1425.9	1425.9
2.5°	1435.6	1424.8	1420.5	1411.9	1395.7	1387.1	1393.5	1382.8	1387.1	1375.2	1387.1
5°	1432.7	1408.4	1388.2	1354.4	1305.9	1249.2	1235.7	1200.6	1179.1	1161.5	1179.1
7.5°	1419.2	1377.6	1315.8	1212.8	1129.9	1089.5	1079.5	1069.5	1066.8	1057.9	1066.8
10°	1408.4	1351.7	1237.1	1121.0	1063.0	1044.1	1048.2	1052.2	1060.3	1059.0	1060.3
12.5°	1393.3	1306.4	1155.0	1074.6	1036.1	1035.5	1065.5	1119.2	1156.4	1154.0	1156.4
15°	1367.9	1219.5	1077.9	1026.6	1014.5	1076.5	1185.8	1211.4	1220.9	1222.2	1220.9
17.5°	1331.5	1134.5	1028.5	994.8	1036.1	1171.0	1204.1	1215.7	1223.8	1224.4	1223.8
20°	1304.5	1091.4	1003.7	980.7	1090.0	1176.4	1196.6	1211.4	1224.9	1227.6	1224.9
22.5°	1267.8	1061.1	977.8	971.0	1120.2	1171.0	1189.0	1211.4	1222.8	1222.2	1222.8
25°	1204.7	1023.9	945.7	960.5	1123.7	1142.6	1177.7	1192.5	1193.9	1195.2	1193.9
27.5°	1135.3	991.3	908.2	967.5	1101.9	1115.4	1153.1	1160.7	1165.8	1163.7	1165.8
30°	1084.6	968.6	882.3	968.6	1084.6	1092.7	1130.5	1135.9	1129.1	1123.7	1129.1
32.5°	1027.4	940.5	857.4	961.0	1058.7	1070.0	1100.3	1098.1	1091.4	1087.0	1091.4
35°	916.0	893.1	812.1	936.2	1014.5	1029.3	1046.8	1045.5	1044.1	1040.1	1044.1
37.5°	790.5	836.9	767.3	897.6	971.8	970.8	996.9	1002.6	1001.2	996.1	1001.2
40°	715.0	790.5	739.3	867.4	941.6	930.8	964.6	971.3	970.0	965.9	970.0
42.5°	658.9	729.0	706.9	830.7	904.9	892.0	933.3	940.0	936.5	933.5	936.5
45°	590.9	603.0	657.0	771.6	843.1	841.8	886.3	893.1	885.0	880.9	885.0
47.5°	573.1	486.2	602.5	703.1	781.9	787.0	834.8	840.7	833.4	829.9	833.4
50°	572.0	429.0	562.5	650.2	742.0	751.4	801.3	804.0	794.6	793.2	794.6
52.5°	529.9	396.6	516.1	603.8	707.4	719.0	764.6	764.1	763.3	765.2	763.3
55°	481.6	357.5	435.7	535.6	654.3	669.1	709.6	710.9	720.4	723.1	720.4
57.5°	465.7	313.2	361.3	476.5	600.9	612.5	650.5	653.7	660.2	659.9	660.2
60°	434.4	281.9	317.0	439.8	559.8	574.7	608.4	613.8	619.2	617.9	619.2
62.5°	402.0	260.4	295.4	409.6	521.0	536.9	559.8	569.6	571.7	569.3	571.7
65°	334.6	232.0	261.7	361.5	461.4	478.9	493.7	500.5	501.8	499.1	501.8
67.5°	241.7	205.9	235.3	314.1	392.8	412.5	421.2	425.2	423.9	428.7	423.9
70°	188.9	187.5	215.8	280.6	350.7	368.3	373.7	377.7	376.4	379.1	376.4
72.5°	163.0	172.4	195.3	246.1	303.3	320.8	324.0	324.8	328.9	326.2	328.9
75°	126.8	147.0	161.9	194.3	237.4	249.6	250.9	252.3	249.6	253.6	249.6
77.5°	88.5	112.0	125.2	143.8	172.9	180.5	180.2	181.0	178.9	178.6	178.9
80°	70.1	85.0	97.1	109.3	130.9	136.3	134.9	133.6	133.6	132.2	133.6
82.5°	51.8	60.2	71.2	80.1	94.2	95.2	97.1	94.7	94.7	96.6	94.7
85°	21.6	28.3	36.4	40.5	45.9	47.2	44.5	48.6	45.9	45.9	45.9
87.5°	5.4	8.6	13.0	15.1	16.2	15.1	15.1	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°	1425.9	1425.9	1425.9	1425.9	1425.9	1425.9	1425.9	1425.9	1425.9	1425.9	1425.9
2.5°	1382.8	1393.5	1387.1	1395.7	1411.9	1420.5	1424.8	1435.6	1435.6	1442.1	1444.3
5°	1200.6	1235.7	1249.2	1305.9	1354.4	1388.2	1408.4	1432.7	1443.5	1458.3	1463.7
7.5°	1069.5	1079.5	1089.5	1129.9	1212.8	1315.8	1377.6	1419.2	1441.0	1460.5	1468.3
10°	1052.2	1048.2	1044.1	1063.0	1121.0	1237.1	1351.7	1408.4	1436.7	1458.3	1465.0
12.5°	1119.2	1065.5	1035.5	1036.1	1074.6	1155.0	1306.4	1393.3	1430.2	1450.7	1458.6
15°	1211.4	1185.8	1076.5	1014.5	1026.6	1077.9	1219.5	1367.9	1413.8	1432.7	1444.8
17.5°	1215.7	1204.1	1171.0	1036.1	994.8	1028.5	1134.5	1331.5	1389.8	1412.2	1423.0
20°	1211.4	1196.6	1176.4	1090.0	980.7	1003.7	1091.4	1304.5	1369.3	1394.9	1405.7
22.5°	1211.4	1189.0	1171.0	1120.2	971.0	977.8	1061.1	1267.8	1347.7	1374.4	1385.2
25°	1192.5	1177.7	1142.6	1123.7	960.5	945.7	1023.9	1204.7	1312.6	1335.5	1351.7
27.5°	1160.7	1153.1	1115.4	1101.9	967.5	908.2	991.3	1135.3	1264.3	1297.0	1314.5
30°	1135.9	1130.5	1092.7	1084.6	968.6	882.3	968.6	1084.6	1222.2	1266.7	1289.7
32.5°	1098.1	1100.3	1070.0	1058.7	961.0	857.4	940.5	1027.4	1159.6	1235.4	1262.7
35°	1045.5	1046.8	1029.3	1014.5	936.2	812.1	893.1	916.0	1083.3	1191.2	1214.1
37.5°	1002.6	996.9	970.8	971.8	897.6	767.3	836.9	790.5	1014.2	1144.5	1161.2
40°	971.3	964.6	930.8	941.6	867.4	739.3	790.5	715.0	948.4	1108.9	1122.4
42.5°	940.0	933.3	892.0	904.9	830.7	706.9	729.0	658.9	876.1	1071.1	1074.9
45°	893.1	886.3	841.8	843.1	771.6	657.0	603.0	590.9	833.7	1010.4	1010.4
47.5°	840.7	834.8	787.0	781.9	703.1	602.5	486.2	573.1	774.3	945.1	944.6
50°	804.0	801.3	751.4	742.0	650.2	562.5	429.0	572.0	731.2	889.0	902.5
52.5°	764.1	764.6	719.0	707.4	603.8	516.1	396.6	529.9	678.3	816.7	859.3
55°	710.9	709.6	669.1	654.3	535.6	435.7	357.5	481.6	596.3	716.3	787.8
57.5°	653.7	650.5	612.5	600.9	476.5	361.3	313.2	465.7	468.9	624.6	715.8
60°	613.8	608.4	574.7	559.8	439.8	317.0	281.9	434.4	358.8	559.8	659.7
62.5°	569.6	559.8	536.9	521.0	409.6	295.4	260.4	402.0	280.1	486.5	605.7
65°	500.5	493.7	478.9	461.4	361.5	261.7	232.0	334.6	218.5	333.2	526.1
67.5°	425.2	421.2	412.5	392.8	314.1	235.3	205.9	241.7	166.2	211.5	450.3
70°	377.7	373.7	368.3	350.7	280.6	215.8	187.5	188.9	118.7	156.5	400.7
72.5°	324.8	324.0	320.8	303.3	246.1	195.3	172.4	163.0	100.4	123.0	349.9
75°	252.3	250.9	249.6	237.4	194.3	161.9	147.0	126.8	101.2	87.7	273.9
77.5°	181.0	180.2	180.5	172.9	143.8	125.2	112.0	88.5	90.4	66.6	205.1
80°	133.6	134.9	136.3	130.9	109.3	97.1	85.0	70.1	74.2	52.6	156.5
82.5°	94.7	97.1	95.2	94.2	80.1	71.2	60.2	51.8	52.6	41.8	116.6
85°	48.6	44.5	47.2	45.9	40.5	36.4	28.3	21.6	27.0	24.3	58.0
87.5°	13.0	15.1	15.1	16.2	15.1	13.0	8.6	5.4	9.7	11.9	23.7
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°	1425.9	1425.9	1425.9	1425.9	1425.9	1425.9	1425.9	1425.9	1425.9	1425.9	1425.9
2.5°	1441.0	1441.0	1450.7	1452.9	1455.1	1451.8	1455.1	1452.9	1450.7	1441.0	1441.0
5°	1462.3	1462.3	1475.8	1479.9	1479.9	1477.2	1479.9	1479.9	1475.8	1462.3	1462.3
7.5°	1464.2	1466.4	1479.9	1482.9	1485.3	1481.2	1485.3	1482.9	1479.9	1466.4	1464.2
10°	1461.0	1466.4	1479.9	1483.9	1485.3	1481.2	1485.3	1483.9	1479.9	1466.4	1461.0
12.5°	1456.7	1461.0	1474.5	1477.5	1479.9	1476.9	1479.9	1477.5	1474.5	1461.0	1456.7
15°	1442.1	1447.5	1462.3	1465.0	1467.7	1463.7	1467.7	1465.0	1462.3	1447.5	1442.1
17.5°	1421.9	1428.6	1442.1	1446.4	1447.8	1442.7	1447.8	1446.4	1442.1	1428.6	1421.9
20°	1405.7	1412.4	1425.9	1431.3	1432.7	1428.6	1432.7	1431.3	1425.9	1412.4	1405.7
22.5°	1385.2	1396.2	1408.7	1410.8	1408.9	1404.9	1408.9	1410.8	1408.7	1396.2	1385.2
25°	1355.8	1365.2	1369.3	1369.3	1369.3	1365.2	1369.3	1369.3	1369.3	1365.2	1355.8
27.5°	1318.3	1323.1	1325.6	1327.7	1330.4	1327.7	1330.4	1327.7	1325.6	1323.1	1318.3
30°	1292.4	1289.7	1296.4	1301.8	1304.5	1301.8	1304.5	1301.8	1296.4	1289.7	1292.4
32.5°	1256.8	1258.4	1268.4	1271.6	1272.1	1269.4	1272.1	1271.6	1268.4	1258.4	1256.8
35°	1204.7	1211.4	1218.2	1220.9	1222.2	1218.2	1222.2	1220.9	1218.2	1211.4	1204.7
37.5°	1149.6	1161.5	1166.4	1163.4	1163.7	1159.4	1163.7	1163.4	1166.4	1161.5	1149.6
40°	1112.9	1123.7	1126.4	1122.4	1123.7	1118.3	1123.7	1122.4	1126.4	1123.7	1112.9
42.5°	1078.4	1087.0	1084.3	1079.2	1078.4	1076.3	1078.4	1079.2	1084.3	1087.0	1078.4
45°	1021.2	1025.3	1013.1	1009.1	1006.4	1003.7	1006.4	1009.1	1013.1	1025.3	1021.2
47.5°	958.6	953.2	941.6	935.4	927.9	922.7	927.9	935.4	941.6	953.2	958.6
50°	918.7	902.5	893.1	878.2	872.8	874.2	872.8	878.2	893.1	902.5	918.7
52.5°	870.1	850.7	835.9	823.2	818.9	818.1	818.9	823.2	835.9	850.7	870.1
55°	800.0	770.3	746.0	739.3	737.9	740.6	737.9	739.3	746.0	770.3	800.0
57.5°	713.9	684.8	664.8	659.4	654.8	650.5	654.8	659.4	664.8	684.8	713.9
60°	655.6	628.6	609.8	604.4	592.2	586.8	592.2	604.4	609.8	628.6	655.6
62.5°	603.8	571.4	556.9	546.1	537.2	528.5	537.2	546.1	556.9	571.4	603.8
65°	528.8	491.0	476.2	466.8	450.6	446.5	450.6	466.8	476.2	491.0	528.8
67.5°	446.8	413.9	395.3	382.6	372.3	372.1	372.3	382.6	395.3	413.9	446.8
70°	393.9	364.2	346.7	331.9	323.8	322.4	323.8	331.9	346.7	364.2	393.9
72.5°	342.1	313.5	298.1	284.4	277.4	276.0	277.4	284.4	298.1	313.5	342.1
75°	268.5	241.5	229.3	219.9	214.5	211.8	214.5	219.9	229.3	241.5	268.5
77.5°	198.6	176.7	170.5	160.8	156.2	155.9	156.2	160.8	170.5	176.7	198.6
80°	156.5	138.9	129.5	124.1	122.8	121.4	122.8	124.1	129.5	138.9	156.5
82.5°	113.3	103.3	97.1	93.9	93.6	91.2	93.6	93.9	97.1	103.3	113.3
85°	60.7	58.0	56.7	55.3	54.0	54.0	54.0	55.3	56.7	58.0	60.7
87.5°	24.8	25.9	25.9	27.0	28.1	27.0	28.1	27.0	25.9	25.9	24.8
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-125D-930-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	1425.9	1425.9	1425.9	1425.9
2.5°	1444.3	1442.1	1435.6	1435.6
5°	1463.7	1458.3	1443.5	1432.7
7.5°	1468.3	1460.5	1441.0	1419.2
10°	1465.0	1458.3	1436.7	1408.4
12.5°	1458.6	1450.7	1430.2	1393.3
15°	1444.8	1432.7	1413.8	1367.9
17.5°	1423.0	1412.2	1389.8	1331.5
20°	1405.7	1394.9	1369.3	1304.5
22.5°	1385.2	1374.4	1347.7	1267.8
25°	1351.7	1335.5	1312.6	1204.7
27.5°	1314.5	1297.0	1264.3	1135.3
30°	1289.7	1266.7	1222.2	1084.6
32.5°	1262.7	1235.4	1159.6	1027.4
35°	1214.1	1191.2	1083.3	916.0
37.5°	1161.2	1144.5	1014.2	790.5
40°	1122.4	1108.9	948.4	715.0
42.5°	1074.9	1071.1	876.1	658.9
45°	1010.4	1010.4	833.7	590.9
47.5°	944.6	945.1	774.3	573.1
50°	902.5	889.0	731.2	572.0
52.5°	859.3	816.7	678.3	529.9
55°	787.8	716.3	596.3	481.6
57.5°	715.8	624.6	468.9	465.7
60°	659.7	559.8	358.8	434.4
62.5°	605.7	486.5	280.1	402.0
65°	526.1	333.2	218.5	334.6
67.5°	450.3	211.5	166.2	241.7
70°	400.7	156.5	118.7	188.9
72.5°	349.9	123.0	100.4	163.0
75°	273.9	87.7	101.2	126.8
77.5°	205.1	66.6	90.4	88.5
80°	156.5	52.6	74.2	70.1
82.5°	116.6	41.8	52.6	51.8
85°	58.0	24.3	27.0	21.6
87.5°	23.7	11.9	9.7	5.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)