

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-940-1D-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-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

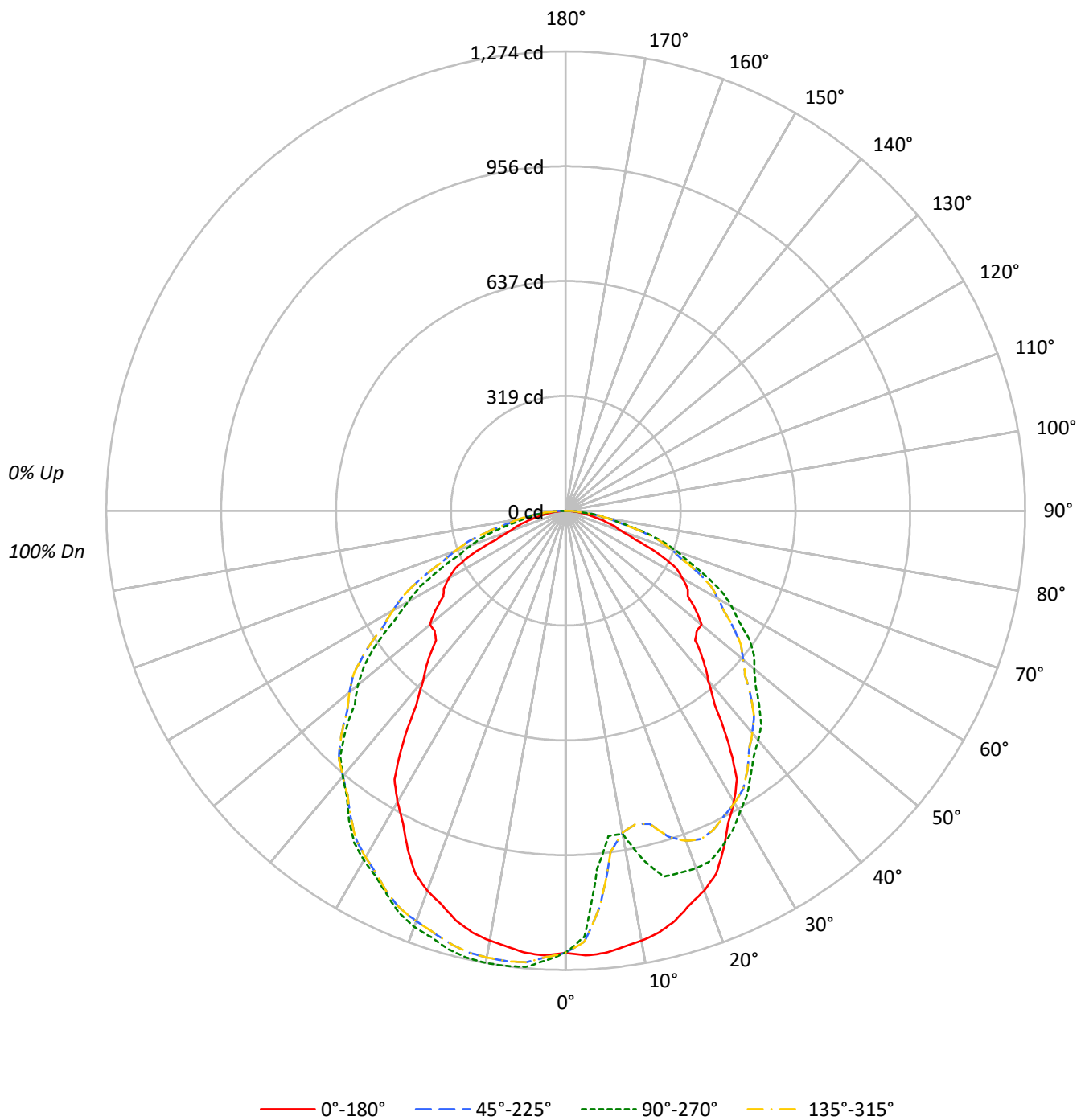
Lumens per Lamp: N/A
Luminaire Lumens: 3177.5 lumens
Efficiency: N/A
Efficacy: 96.9 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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				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°	11313	11313	11313	11313
5°	11410	9250	11410	11765
10°	11346	8531	11346	11933
15°	11236	10039	11236	12023
20°	11014	10365	11014	12062
25°	10545	10463	10545	11951
30°	9937	10294	9937	11927
35°	8872	10074	8872	11798
40°	7405	10004	7405	11583
45°	6630	9884	6630	11262
50°	7060	9790	7060	10789
55°	6661	10002	6661	10245
60°	6892	9804	6892	9311
65°	6281	9370	6281	8383
70°	4381	8794	4381	7480
75°	3886	7775	3886	6491
80°	3204	6041	3204	5547
85°	1969	4171	1969	4912

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 11503 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.5	3.5
10°-20°	314.1	9.9
20°-30°	485.5	15.3
30°-40°	580.0	18.3
40°-50°	583.8	18.4
50°-60°	506.8	16.0
60°-70°	358.8	11.3
70°-80°	189.8	6.0
80°-90°	48.3	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°	910.1	28.6
0°-40°	1490.1	46.9
0°-60°	2580.7	81.2
0°-90°	3177.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3177.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1226	1226	1226	1226	1226	
5°	1232	999	1232	1270	1232	117
15°	1176	1051	1176	1259	1176	331
25°	1036	1028	1036	1174	1036	475
35°	788	894	788	1048	788	486
45°	508	758	508	863	508	409
55°	414	622	414	637	414	381
65°	288	429	288	384	288	274
75°	109	218	109	182	109	115
85°	19	39	19	46	19	27
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°	1226.2	1226.2	1226.2	1226.2	1226.2	1226.2	1226.2	1226.2	1226.2	1226.2	1226.2
2.5°	1234.5	1225.3	1221.5	1214.1	1200.2	1192.8	1198.3	1189.1	1192.8	1182.6	1192.8
5°	1232.0	1211.1	1193.7	1164.7	1122.9	1074.2	1062.6	1032.4	1013.9	998.8	1013.9
7.5°	1220.4	1184.6	1131.5	1042.9	971.7	936.9	928.3	919.7	917.4	909.7	917.4
10°	1211.1	1162.4	1063.8	964.0	914.1	897.9	901.4	904.8	911.8	910.6	911.8
12.5°	1198.1	1123.4	993.2	924.1	890.9	890.5	916.2	962.4	994.4	992.3	994.4
15°	1176.3	1048.7	926.9	882.8	872.4	925.7	1019.7	1041.7	1049.9	1051.0	1049.9
17.5°	1145.0	975.6	884.4	855.4	890.9	1006.9	1035.5	1045.4	1052.4	1052.9	1052.4
20°	1121.8	938.5	863.1	843.4	937.3	1011.6	1029.0	1041.7	1053.3	1055.7	1053.3
22.5°	1090.2	912.5	840.8	835.0	963.3	1006.9	1022.5	1041.7	1051.5	1051.0	1051.5
25°	1035.9	880.5	813.2	826.0	966.3	982.6	1012.7	1025.5	1026.6	1027.8	1026.6
27.5°	976.3	852.4	780.9	832.0	947.5	959.1	991.6	998.1	1002.5	1000.7	1002.5
30°	932.7	832.9	758.7	832.9	932.7	939.6	972.1	976.8	971.0	966.3	971.0
32.5°	883.5	808.8	737.3	826.4	910.4	920.2	946.1	944.3	938.5	934.8	938.5
35°	787.7	768.0	698.4	805.1	872.4	885.1	900.2	899.0	897.9	894.4	897.9
37.5°	679.8	719.7	659.8	771.9	835.7	834.8	857.3	862.2	861.0	856.6	861.0
40°	614.8	679.8	635.7	745.9	809.7	800.4	829.4	835.2	834.1	830.6	834.1
42.5°	566.6	626.9	607.9	714.4	778.2	767.0	802.5	808.3	805.3	802.8	805.3
45°	508.1	518.5	564.9	663.6	725.0	723.9	762.2	768.0	761.0	757.5	761.0
47.5°	492.8	418.1	518.1	604.6	672.4	676.8	717.8	722.9	716.7	713.7	716.7
50°	491.9	368.9	483.7	559.1	638.0	646.2	689.1	691.4	683.3	682.1	683.3
52.5°	455.7	341.1	443.8	519.2	608.3	618.3	657.5	657.1	656.4	658.0	656.4
55°	414.1	307.4	374.7	460.5	562.6	575.4	610.2	611.3	619.5	621.8	619.5
57.5°	400.5	269.4	310.7	409.7	516.7	526.7	559.4	562.2	567.7	567.5	567.7
60°	373.5	242.5	272.6	378.2	481.4	494.2	523.2	527.8	532.5	531.3	532.5
62.5°	345.7	223.9	254.1	352.2	448.0	461.7	481.4	489.8	491.6	489.5	491.6
65°	287.7	199.5	225.1	310.9	396.7	411.8	424.6	430.4	431.5	429.2	431.5
67.5°	207.9	177.0	202.3	270.1	337.8	354.7	362.2	365.6	364.5	368.7	364.5
70°	162.4	161.2	185.6	241.3	301.6	316.7	321.3	324.8	323.7	326.0	323.7
72.5°	140.1	148.3	168.0	211.6	260.8	275.9	278.6	279.3	282.8	280.5	282.8
75°	109.0	126.4	139.2	167.0	204.2	214.6	215.8	216.9	214.6	218.1	214.6
77.5°	76.1	96.3	107.7	123.7	148.7	155.2	155.0	155.7	153.8	153.6	153.8
80°	60.3	73.1	83.5	94.0	112.5	117.2	116.0	114.8	114.8	113.7	114.8
82.5°	44.5	51.7	61.3	68.9	81.0	81.9	83.5	81.4	81.4	83.1	81.4
85°	18.6	24.4	31.3	34.8	39.4	40.6	38.3	41.8	39.4	39.4	39.4
87.5°	4.6	7.4	11.1	13.0	13.9	13.0	13.0	11.1	11.1	11.1	11.1
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°	1226.2	1226.2	1226.2	1226.2	1226.2	1226.2	1226.2	1226.2	1226.2	1226.2	1226.2
2.5°	1189.1	1198.3	1192.8	1200.2	1214.1	1221.5	1225.3	1234.5	1234.5	1240.1	1242.0
5°	1032.4	1062.6	1074.2	1122.9	1164.7	1193.7	1211.1	1232.0	1241.3	1254.0	1258.7
7.5°	919.7	928.3	936.9	971.7	1042.9	1131.5	1184.6	1220.4	1239.2	1255.9	1262.6
10°	904.8	901.4	897.9	914.1	964.0	1063.8	1162.4	1211.1	1235.5	1254.0	1259.8
12.5°	962.4	916.2	890.5	890.9	924.1	993.2	1123.4	1198.1	1229.9	1247.5	1254.3
15°	1041.7	1019.7	925.7	872.4	882.8	926.9	1048.7	1176.3	1215.7	1232.0	1242.4
17.5°	1045.4	1035.5	1006.9	890.9	855.4	884.4	975.6	1145.0	1195.1	1214.3	1223.6
20°	1041.7	1029.0	1011.6	937.3	843.4	863.1	938.5	1121.8	1177.5	1199.5	1208.8
22.5°	1041.7	1022.5	1006.9	963.3	835.0	840.8	912.5	1090.2	1158.9	1181.9	1191.1
25°	1025.5	1012.7	982.6	966.3	826.0	813.2	880.5	1035.9	1128.7	1148.5	1162.4
27.5°	998.1	991.6	959.1	947.5	832.0	780.9	852.4	976.3	1087.2	1115.3	1130.4
30°	976.8	972.1	939.6	932.7	832.9	758.7	832.9	932.7	1051.0	1089.3	1109.0
32.5°	944.3	946.1	920.2	910.4	826.4	737.3	808.8	883.5	997.2	1062.4	1085.8
35°	899.0	900.2	885.1	872.4	805.1	698.4	768.0	787.7	931.5	1024.3	1044.1
37.5°	862.2	857.3	834.8	835.7	771.9	659.8	719.7	679.8	872.1	984.2	998.6
40°	835.2	829.4	800.4	809.7	745.9	635.7	679.8	614.8	815.5	953.6	965.2
42.5°	808.3	802.5	767.0	778.2	714.4	607.9	626.9	566.6	753.3	921.1	924.3
45°	768.0	762.2	723.9	725.0	663.6	564.9	518.5	508.1	716.9	868.9	868.9
47.5°	722.9	717.8	676.8	672.4	604.6	518.1	418.1	492.8	665.9	812.7	812.3
50°	691.4	689.1	646.2	638.0	559.1	483.7	368.9	491.9	628.8	764.5	776.1
52.5°	657.1	657.5	618.3	608.3	519.2	443.8	341.1	455.7	583.3	702.3	739.0
55°	611.3	610.2	575.4	562.6	460.5	374.7	307.4	414.1	512.7	616.0	677.5
57.5°	562.2	559.4	526.7	516.7	409.7	310.7	269.4	400.5	403.2	537.1	615.5
60°	527.8	523.2	494.2	481.4	378.2	272.6	242.5	373.5	308.6	481.4	567.3
62.5°	489.8	481.4	461.7	448.0	352.2	254.1	223.9	345.7	240.8	418.3	520.9
65°	430.4	424.6	411.8	396.7	310.9	225.1	199.5	287.7	187.9	286.5	452.4
67.5°	365.6	362.2	354.7	337.8	270.1	202.3	177.0	207.9	142.9	181.9	387.2
70°	324.8	321.3	316.7	301.6	241.3	185.6	161.2	162.4	102.1	134.6	344.5
72.5°	279.3	278.6	275.9	260.8	211.6	168.0	148.3	140.1	86.3	105.8	300.9
75°	216.9	215.8	214.6	204.2	167.0	139.2	126.4	109.0	87.0	75.4	235.5
77.5°	155.7	155.0	155.2	148.7	123.7	107.7	96.3	76.1	77.7	57.3	176.3
80°	114.8	116.0	117.2	112.5	94.0	83.5	73.1	60.3	63.8	45.2	134.6
82.5°	81.4	83.5	81.9	81.0	68.9	61.3	51.7	44.5	45.2	36.0	100.2
85°	41.8	38.3	40.6	39.4	34.8	31.3	24.4	18.6	23.2	20.9	49.9
87.5°	11.1	13.0	13.0	13.9	13.0	11.1	7.4	4.6	8.4	10.2	20.4
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°	1226.2	1226.2	1226.2	1226.2	1226.2	1226.2	1226.2	1226.2	1226.2	1226.2	1226.2
2.5°	1239.2	1239.2	1247.5	1249.4	1251.2	1248.5	1251.2	1249.4	1247.5	1239.2	1239.2
5°	1257.5	1257.5	1269.1	1272.6	1272.6	1270.3	1272.6	1272.6	1269.1	1257.5	1257.5
7.5°	1259.1	1261.0	1272.6	1275.1	1277.2	1273.7	1277.2	1275.1	1272.6	1261.0	1259.1
10°	1256.3	1261.0	1272.6	1276.1	1277.2	1273.7	1277.2	1276.1	1272.6	1261.0	1256.3
12.5°	1252.6	1256.3	1267.9	1270.5	1272.6	1270.0	1272.6	1270.5	1267.9	1256.3	1252.6
15°	1240.1	1244.7	1257.5	1259.8	1262.1	1258.7	1262.1	1259.8	1257.5	1244.7	1240.1
17.5°	1222.7	1228.5	1240.1	1243.8	1245.0	1240.6	1245.0	1243.8	1240.1	1228.5	1222.7
20°	1208.8	1214.6	1226.2	1230.8	1232.0	1228.5	1232.0	1230.8	1226.2	1214.6	1208.8
22.5°	1191.1	1200.7	1211.3	1213.2	1211.6	1208.1	1211.6	1213.2	1211.3	1200.7	1191.1
25°	1165.9	1174.0	1177.5	1177.5	1177.5	1174.0	1177.5	1177.5	1177.5	1174.0	1165.9
27.5°	1133.6	1137.8	1139.9	1141.7	1144.0	1141.7	1144.0	1141.7	1139.9	1137.8	1133.6
30°	1111.3	1109.0	1114.8	1119.5	1121.8	1119.5	1121.8	1119.5	1114.8	1109.0	1111.3
32.5°	1080.7	1082.1	1090.7	1093.5	1093.9	1091.6	1093.9	1093.5	1090.7	1082.1	1080.7
35°	1035.9	1041.7	1047.5	1049.9	1051.0	1047.5	1051.0	1049.9	1047.5	1041.7	1035.9
37.5°	988.6	998.8	1003.0	1000.4	1000.7	997.0	1000.7	1000.4	1003.0	998.8	988.6
40°	957.0	966.3	968.6	965.2	966.3	961.7	966.3	965.2	968.6	966.3	957.0
42.5°	927.3	934.8	932.5	928.0	927.3	925.5	927.3	928.0	932.5	934.8	927.3
45°	878.2	881.6	871.2	867.7	865.4	863.1	865.4	867.7	871.2	881.6	878.2
47.5°	824.3	819.7	809.7	804.4	797.9	793.5	797.9	804.4	809.7	819.7	824.3
50°	790.0	776.1	768.0	755.2	750.6	751.7	750.6	755.2	768.0	776.1	790.0
52.5°	748.2	731.5	718.8	707.9	704.2	703.5	704.2	707.9	718.8	731.5	748.2
55°	687.9	662.4	641.5	635.7	634.6	636.9	634.6	635.7	641.5	662.4	687.9
57.5°	613.9	588.8	571.7	567.0	563.1	559.4	563.1	567.0	571.7	588.8	613.9
60°	563.8	540.6	524.3	519.7	509.3	504.6	509.3	519.7	524.3	540.6	563.8
62.5°	519.2	491.4	478.9	469.6	461.9	454.5	461.9	469.6	478.9	491.4	519.2
65°	454.7	422.3	409.5	401.4	387.5	384.0	387.5	401.4	409.5	422.3	454.7
67.5°	384.2	355.9	339.9	329.0	320.2	319.9	320.2	329.0	339.9	355.9	384.2
70°	338.7	313.2	298.1	285.4	278.4	277.3	278.4	285.4	298.1	313.2	338.7
72.5°	294.2	269.6	256.4	244.5	238.5	237.3	238.5	244.5	256.4	269.6	294.2
75°	230.9	207.6	197.2	189.1	184.4	182.1	184.4	189.1	197.2	207.6	230.9
77.5°	170.8	152.0	146.6	138.3	134.3	134.1	134.3	138.3	146.6	152.0	170.8
80°	134.6	119.5	111.4	106.7	105.6	104.4	105.6	106.7	111.4	119.5	134.6
82.5°	97.4	88.9	83.5	80.7	80.5	78.4	80.5	80.7	83.5	88.9	97.4
85°	52.2	49.9	48.7	47.6	46.4	46.4	46.4	47.6	48.7	49.9	52.2
87.5°	21.3	22.3	22.3	23.2	24.1	23.2	24.1	23.2	22.3	22.3	21.3
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-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	1226.2	1226.2	1226.2	1226.2
2.5°	1242.0	1240.1	1234.5	1234.5
5°	1258.7	1254.0	1241.3	1232.0
7.5°	1262.6	1255.9	1239.2	1220.4
10°	1259.8	1254.0	1235.5	1211.1
12.5°	1254.3	1247.5	1229.9	1198.1
15°	1242.4	1232.0	1215.7	1176.3
17.5°	1223.6	1214.3	1195.1	1145.0
20°	1208.8	1199.5	1177.5	1121.8
22.5°	1191.1	1181.9	1158.9	1090.2
25°	1162.4	1148.5	1128.7	1035.9
27.5°	1130.4	1115.3	1087.2	976.3
30°	1109.0	1089.3	1051.0	932.7
32.5°	1085.8	1062.4	997.2	883.5
35°	1044.1	1024.3	931.5	787.7
37.5°	998.6	984.2	872.1	679.8
40°	965.2	953.6	815.5	614.8
42.5°	924.3	921.1	753.3	566.6
45°	868.9	868.9	716.9	508.1
47.5°	812.3	812.7	665.9	492.8
50°	776.1	764.5	628.8	491.9
52.5°	739.0	702.3	583.3	455.7
55°	677.5	616.0	512.7	414.1
57.5°	615.5	537.1	403.2	400.5
60°	567.3	481.4	308.6	373.5
62.5°	520.9	418.3	240.8	345.7
65°	452.4	286.5	187.9	287.7
67.5°	387.2	181.9	142.9	207.9
70°	344.5	134.6	102.1	162.4
72.5°	300.9	105.8	86.3	140.1
75°	235.5	75.4	87.0	109.0
77.5°	176.3	57.3	77.7	76.1
80°	134.6	45.2	63.8	60.3
82.5°	100.2	36.0	45.2	44.5
85°	49.9	20.9	23.2	18.6
87.5°	20.4	10.2	8.4	4.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)