

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-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-100D-930-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

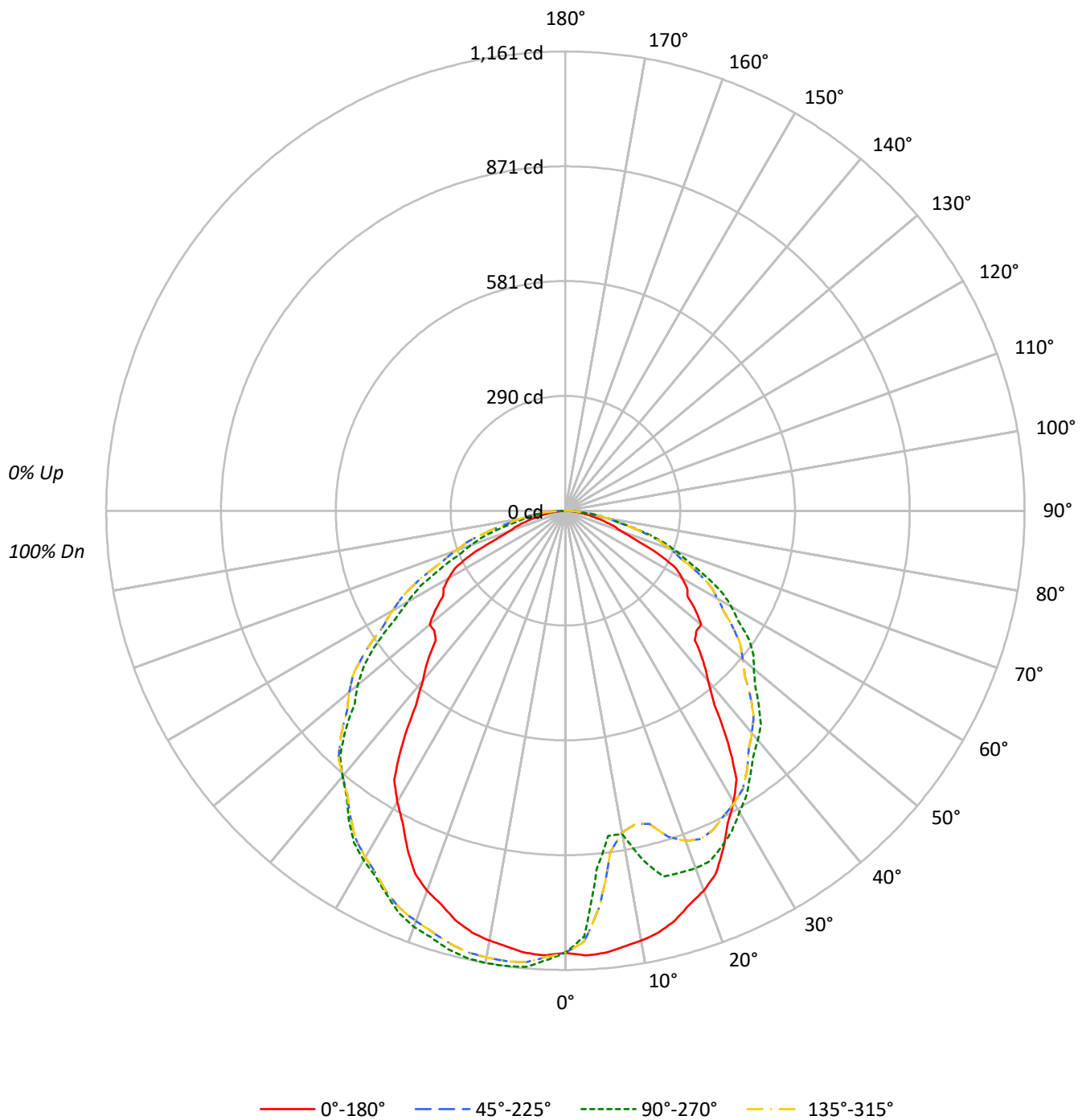
Lumens per Lamp: N/A
Luminaire Lumens: 2895.7 lumens
Efficiency: N/A
Efficacy: 88.3 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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



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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°	10310	10310	10310	10310
5°	10398	8430	10398	10721
10°	10340	7775	10340	10875
15°	10239	9149	10239	10957
20°	10037	9445	10037	10993
25°	9611	9536	9611	10892
30°	9055	9381	9055	10869
35°	8085	9181	8085	10752
40°	6748	9117	6748	10555
45°	6042	9007	6042	10263
50°	6435	8922	6435	9834
55°	6071	9116	6071	9336
60°	6281	8935	6281	8486
65°	5724	8540	5724	7639
70°	3992	8014	3992	6817
75°	3543	7087	3543	5917
80°	2922	5504	2922	5053
85°	1789	3800	1789	4478

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 10484 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.7	3.5
10°-20°	286.3	9.9
20°-30°	442.4	15.3
30°-40°	528.6	18.3
40°-50°	532.0	18.4
50°-60°	461.9	16.0
60°-70°	327.0	11.3
70°-80°	172.9	6.0
80°-90°	44.0	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°	829.4	28.6
0°-40°	1358.0	46.9
0°-60°	2351.9	81.2
0°-90°	2895.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2895.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1118	1118	1118	1118	1118	
5°	1123	910	1123	1158	1123	106
15°	1072	958	1072	1147	1072	301
25°	944	937	944	1070	944	433
35°	718	815	718	955	718	443
45°	463	690	463	787	463	373
55°	377	567	377	580	377	347
65°	262	391	262	350	262	249
75°	99	199	99	166	99	105
85°	17	36	17	42	17	24
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°	1117.5	1117.5	1117.5	1117.5	1117.5	1117.5	1117.5	1117.5	1117.5	1117.5	1117.5
2.5°	1125.1	1116.6	1113.2	1106.5	1093.8	1087.0	1092.1	1083.6	1087.0	1077.7	1087.0
5°	1122.7	1103.7	1087.9	1061.4	1023.4	979.0	968.4	940.9	924.0	910.2	924.0
7.5°	1112.2	1079.6	1031.2	950.4	885.5	853.8	846.0	838.1	836.0	829.1	836.0
10°	1103.7	1059.3	969.4	878.5	833.1	818.3	821.4	824.6	831.0	829.9	831.0
12.5°	1091.9	1023.8	905.2	842.2	811.9	811.5	835.0	877.0	906.2	904.3	906.2
15°	1072.0	955.7	844.7	804.5	795.0	843.6	929.3	949.4	956.8	957.8	956.8
17.5°	1043.5	889.1	806.0	779.6	811.9	917.6	943.7	952.7	959.1	959.5	959.1
20°	1022.3	855.3	786.6	768.6	854.2	921.9	937.7	949.4	959.9	962.0	959.9
22.5°	993.6	831.6	766.3	761.0	877.9	917.6	931.8	949.4	958.2	957.8	958.2
25°	944.1	802.4	741.1	752.7	880.6	895.4	922.9	934.6	935.6	936.7	935.6
27.5°	889.7	776.8	711.7	758.2	863.5	874.1	903.7	909.6	913.6	911.9	913.6
30°	850.0	759.1	691.4	759.1	850.0	856.3	885.9	890.2	884.9	880.6	884.9
32.5°	805.2	737.1	672.0	753.1	829.7	838.6	862.2	860.6	855.3	851.9	855.3
35°	717.8	699.9	636.4	733.7	795.0	806.6	820.4	819.3	818.3	815.1	818.3
37.5°	619.5	655.9	601.3	703.5	761.6	760.8	781.3	785.7	784.6	780.6	784.6
40°	560.3	619.5	579.3	679.8	737.9	729.5	755.9	761.2	760.1	757.0	760.1
42.5°	516.3	571.3	554.0	651.0	709.2	699.0	731.4	736.7	733.9	731.6	733.9
45°	463.1	472.6	514.9	604.7	660.7	659.7	694.6	699.9	693.5	690.3	693.5
47.5°	449.1	381.0	472.1	551.0	612.7	616.8	654.2	658.8	653.1	650.4	653.1
50°	448.3	336.2	440.8	509.6	581.5	588.9	628.0	630.1	622.7	621.6	622.7
52.5°	415.3	310.8	404.5	473.2	554.4	563.5	599.2	598.8	598.2	599.6	598.2
55°	377.4	280.2	341.5	419.7	512.7	524.4	556.1	557.1	564.5	566.7	564.5
57.5°	364.9	245.5	283.1	373.4	470.9	480.0	509.8	512.3	517.4	517.2	517.4
60°	340.4	221.0	248.4	344.6	438.7	450.4	476.8	481.0	485.3	484.2	485.3
62.5°	315.0	204.0	231.5	321.0	408.3	420.8	438.7	446.3	448.0	446.1	448.0
65°	262.2	181.8	205.1	283.3	361.6	375.3	386.9	392.2	393.3	391.2	393.3
67.5°	189.4	161.3	184.4	246.1	307.9	323.3	330.1	333.2	332.2	336.0	332.2
70°	148.0	146.9	169.2	219.9	274.9	288.6	292.8	296.0	295.0	297.1	295.0
72.5°	127.7	135.1	153.1	192.8	237.7	251.4	253.9	254.6	257.7	255.6	257.7
75°	99.4	115.2	126.9	152.2	186.1	195.6	196.6	197.7	195.6	198.8	195.6
77.5°	69.4	87.7	98.1	112.7	135.5	141.5	141.2	141.9	140.2	140.0	140.2
80°	55.0	66.6	76.1	85.6	102.5	106.8	105.7	104.7	104.7	103.6	104.7
82.5°	40.6	47.2	55.8	62.8	73.8	74.6	76.1	74.2	74.2	75.7	74.2
85°	16.9	22.2	28.5	31.7	35.9	37.0	34.9	38.1	35.9	35.9	35.9
87.5°	4.2	6.8	10.1	11.8	12.7	11.8	11.8	10.1	10.1	10.1	10.1
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°	1117.5	1117.5	1117.5	1117.5	1117.5	1117.5	1117.5	1117.5	1117.5	1117.5	1117.5
2.5°	1083.6	1092.1	1087.0	1093.8	1106.5	1113.2	1116.6	1125.1	1125.1	1130.1	1131.8
5°	940.9	968.4	979.0	1023.4	1061.4	1087.9	1103.7	1122.7	1131.2	1142.8	1147.1
7.5°	838.1	846.0	853.8	885.5	950.4	1031.2	1079.6	1112.2	1129.3	1144.5	1150.6
10°	824.6	821.4	818.3	833.1	878.5	969.4	1059.3	1103.7	1125.9	1142.8	1148.1
12.5°	877.0	835.0	811.5	811.9	842.2	905.2	1023.8	1091.9	1120.8	1136.9	1143.0
15°	949.4	929.3	843.6	795.0	804.5	844.7	955.7	1072.0	1107.9	1122.7	1132.3
17.5°	952.7	943.7	917.6	811.9	779.6	806.0	889.1	1043.5	1089.1	1106.7	1115.1
20°	949.4	937.7	921.9	854.2	768.6	786.6	855.3	1022.3	1073.1	1093.1	1101.6
22.5°	949.4	931.8	917.6	877.9	761.0	766.3	831.6	993.6	1056.1	1077.1	1085.5
25°	934.6	922.9	895.4	880.6	752.7	741.1	802.4	944.1	1028.6	1046.6	1059.3
27.5°	909.6	903.7	874.1	863.5	758.2	711.7	776.8	889.7	990.8	1016.4	1030.1
30°	890.2	885.9	856.3	850.0	759.1	691.4	759.1	850.0	957.8	992.7	1010.7
32.5°	860.6	862.2	838.6	829.7	753.1	672.0	737.1	805.2	908.8	968.2	989.5
35°	819.3	820.4	806.6	795.0	733.7	636.4	699.9	717.8	848.9	933.5	951.5
37.5°	785.7	781.3	760.8	761.6	703.5	601.3	655.9	619.5	794.8	896.9	910.0
40°	761.2	755.9	729.5	737.9	679.8	579.3	619.5	560.3	743.2	869.0	879.6
42.5°	736.7	731.4	699.0	709.2	651.0	554.0	571.3	516.3	686.5	839.4	842.4
45°	699.9	694.6	659.7	660.7	604.7	514.9	472.6	463.1	653.3	791.8	791.8
47.5°	658.8	654.2	616.8	612.7	551.0	472.1	381.0	449.1	606.8	740.7	740.2
50°	630.1	628.0	588.9	581.5	509.6	440.8	336.2	448.3	573.0	696.7	707.3
52.5°	598.8	599.2	563.5	554.4	473.2	404.5	310.8	415.3	531.6	640.0	673.4
55°	557.1	556.1	524.4	512.7	419.7	341.5	280.2	377.4	467.3	561.4	617.4
57.5°	512.3	509.8	480.0	470.9	373.4	283.1	245.5	364.9	367.5	489.5	560.9
60°	481.0	476.8	450.4	438.7	344.6	248.4	221.0	340.4	281.2	438.7	517.0
62.5°	446.3	438.7	420.8	408.3	321.0	231.5	204.0	315.0	219.5	381.2	474.7
65°	392.2	386.9	375.3	361.6	283.3	205.1	181.8	262.2	171.3	261.1	412.3
67.5°	333.2	330.1	323.3	307.9	246.1	184.4	161.3	189.4	130.2	165.8	352.9
70°	296.0	292.8	288.6	274.9	219.9	169.2	146.9	148.0	93.0	122.6	314.0
72.5°	254.6	253.9	251.4	237.7	192.8	153.1	135.1	127.7	78.7	96.4	274.2
75°	197.7	196.6	195.6	186.1	152.2	126.9	115.2	99.4	79.3	68.7	214.6
77.5°	141.9	141.2	141.5	135.5	112.7	98.1	87.7	69.4	70.8	52.2	160.7
80°	104.7	105.7	106.8	102.5	85.6	76.1	66.6	55.0	58.1	41.2	122.6
82.5°	74.2	76.1	74.6	73.8	62.8	55.8	47.2	40.6	41.2	32.8	91.3
85°	38.1	34.9	37.0	35.9	31.7	28.5	22.2	16.9	21.1	19.0	45.5
87.5°	10.1	11.8	11.8	12.7	11.8	10.1	6.8	4.2	7.6	9.3	18.6
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):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	1117.5	1117.5	1117.5	1117.5	1117.5	1117.5	1117.5	1117.5	1117.5	1117.5	1117.5
2.5°	1129.3	1129.3	1136.9	1138.6	1140.3	1137.8	1140.3	1138.6	1136.9	1129.3	1129.3
5°	1146.0	1146.0	1156.6	1159.7	1159.7	1157.6	1159.7	1159.7	1156.6	1146.0	1146.0
7.5°	1147.5	1149.2	1159.7	1162.1	1164.0	1160.8	1164.0	1162.1	1159.7	1149.2	1147.5
10°	1144.9	1149.2	1159.7	1162.9	1164.0	1160.8	1164.0	1162.9	1159.7	1149.2	1144.9
12.5°	1141.6	1144.9	1155.5	1157.8	1159.7	1157.4	1159.7	1157.8	1155.5	1144.9	1141.6
15°	1130.1	1134.4	1146.0	1148.1	1150.2	1147.1	1150.2	1148.1	1146.0	1134.4	1130.1
17.5°	1114.3	1119.6	1130.1	1133.5	1134.6	1130.6	1134.6	1133.5	1130.1	1119.6	1114.3
20°	1101.6	1106.9	1117.5	1121.7	1122.7	1119.6	1122.7	1121.7	1117.5	1106.9	1101.6
22.5°	1085.5	1094.2	1103.9	1105.6	1104.1	1101.0	1104.1	1105.6	1103.9	1094.2	1085.5
25°	1062.5	1069.9	1073.1	1073.1	1073.1	1069.9	1073.1	1073.1	1073.1	1069.9	1062.5
27.5°	1033.1	1036.9	1038.8	1040.5	1042.6	1040.5	1042.6	1040.5	1038.8	1036.9	1033.1
30°	1012.8	1010.7	1016.0	1020.2	1022.3	1020.2	1022.3	1020.2	1016.0	1010.7	1012.8
32.5°	984.9	986.2	994.0	996.5	996.9	994.8	996.9	996.5	994.0	986.2	984.9
35°	944.1	949.4	954.6	956.8	957.8	954.6	957.8	956.8	954.6	949.4	944.1
37.5°	900.9	910.2	914.0	911.7	911.9	908.6	911.9	911.7	914.0	910.2	900.9
40°	872.2	880.6	882.8	879.6	880.6	876.4	880.6	879.6	882.8	880.6	872.2
42.5°	845.1	851.9	849.8	845.8	845.1	843.4	845.1	845.8	849.8	851.9	845.1
45°	800.3	803.5	794.0	790.8	788.7	786.6	788.7	790.8	794.0	803.5	800.3
47.5°	751.2	747.0	737.9	733.1	727.1	723.1	727.1	733.1	737.9	747.0	751.2
50°	719.9	707.3	699.9	688.2	684.0	685.1	684.0	688.2	699.9	707.3	719.9
52.5°	681.9	666.7	655.0	645.1	641.7	641.1	641.7	645.1	655.0	666.7	681.9
55°	626.9	603.7	584.6	579.3	578.3	580.4	578.3	579.3	584.6	603.7	626.9
57.5°	559.5	536.6	521.0	516.8	513.2	509.8	513.2	516.8	521.0	536.6	559.5
60°	513.8	492.7	477.9	473.6	464.1	459.9	464.1	473.6	477.9	492.7	513.8
62.5°	473.2	447.8	436.4	428.0	421.0	414.2	421.0	428.0	436.4	447.8	473.2
65°	414.4	384.8	373.2	365.8	353.1	349.9	353.1	365.8	373.2	384.8	414.4
67.5°	350.1	324.3	309.8	299.8	291.8	291.6	291.8	299.8	309.8	324.3	350.1
70°	308.7	285.4	271.7	260.1	253.7	252.7	253.7	260.1	271.7	285.4	308.7
72.5°	268.1	245.7	233.6	222.9	217.4	216.3	217.4	222.9	233.6	245.7	268.1
75°	210.4	189.2	179.7	172.3	168.1	166.0	168.1	172.3	179.7	189.2	210.4
77.5°	155.6	138.5	133.6	126.0	122.4	122.2	122.4	126.0	133.6	138.5	155.6
80°	122.6	108.9	101.5	97.3	96.2	95.1	96.2	97.3	101.5	108.9	122.6
82.5°	88.8	81.0	76.1	73.6	73.4	71.5	73.4	73.6	76.1	81.0	88.8
85°	47.6	45.5	44.4	43.3	42.3	42.3	42.3	43.3	44.4	45.5	47.6
87.5°	19.5	20.3	20.3	21.1	22.0	21.1	22.0	21.1	20.3	20.3	19.5
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-930-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	1117.5	1117.5	1117.5	1117.5
2.5°	1131.8	1130.1	1125.1	1125.1
5°	1147.1	1142.8	1131.2	1122.7
7.5°	1150.6	1144.5	1129.3	1112.2
10°	1148.1	1142.8	1125.9	1103.7
12.5°	1143.0	1136.9	1120.8	1091.9
15°	1132.3	1122.7	1107.9	1072.0
17.5°	1115.1	1106.7	1089.1	1043.5
20°	1101.6	1093.1	1073.1	1022.3
22.5°	1085.5	1077.1	1056.1	993.6
25°	1059.3	1046.6	1028.6	944.1
27.5°	1030.1	1016.4	990.8	889.7
30°	1010.7	992.7	957.8	850.0
32.5°	989.5	968.2	908.8	805.2
35°	951.5	933.5	848.9	717.8
37.5°	910.0	896.9	794.8	619.5
40°	879.6	869.0	743.2	560.3
42.5°	842.4	839.4	686.5	516.3
45°	791.8	791.8	653.3	463.1
47.5°	740.2	740.7	606.8	449.1
50°	707.3	696.7	573.0	448.3
52.5°	673.4	640.0	531.6	415.3
55°	617.4	561.4	467.3	377.4
57.5°	560.9	489.5	367.5	364.9
60°	517.0	438.7	281.2	340.4
62.5°	474.7	381.2	219.5	315.0
65°	412.3	261.1	171.3	262.2
67.5°	352.9	165.8	130.2	189.4
70°	314.0	122.6	93.0	148.0
72.5°	274.2	96.4	78.7	127.7
75°	214.6	68.7	79.3	99.4
77.5°	160.7	52.2	70.8	69.4
80°	122.6	41.2	58.1	55.0
82.5°	91.3	32.8	41.2	40.6
85°	45.5	19.0	21.1	16.9
87.5°	18.6	9.3	7.6	4.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)