

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-935-1D-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-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

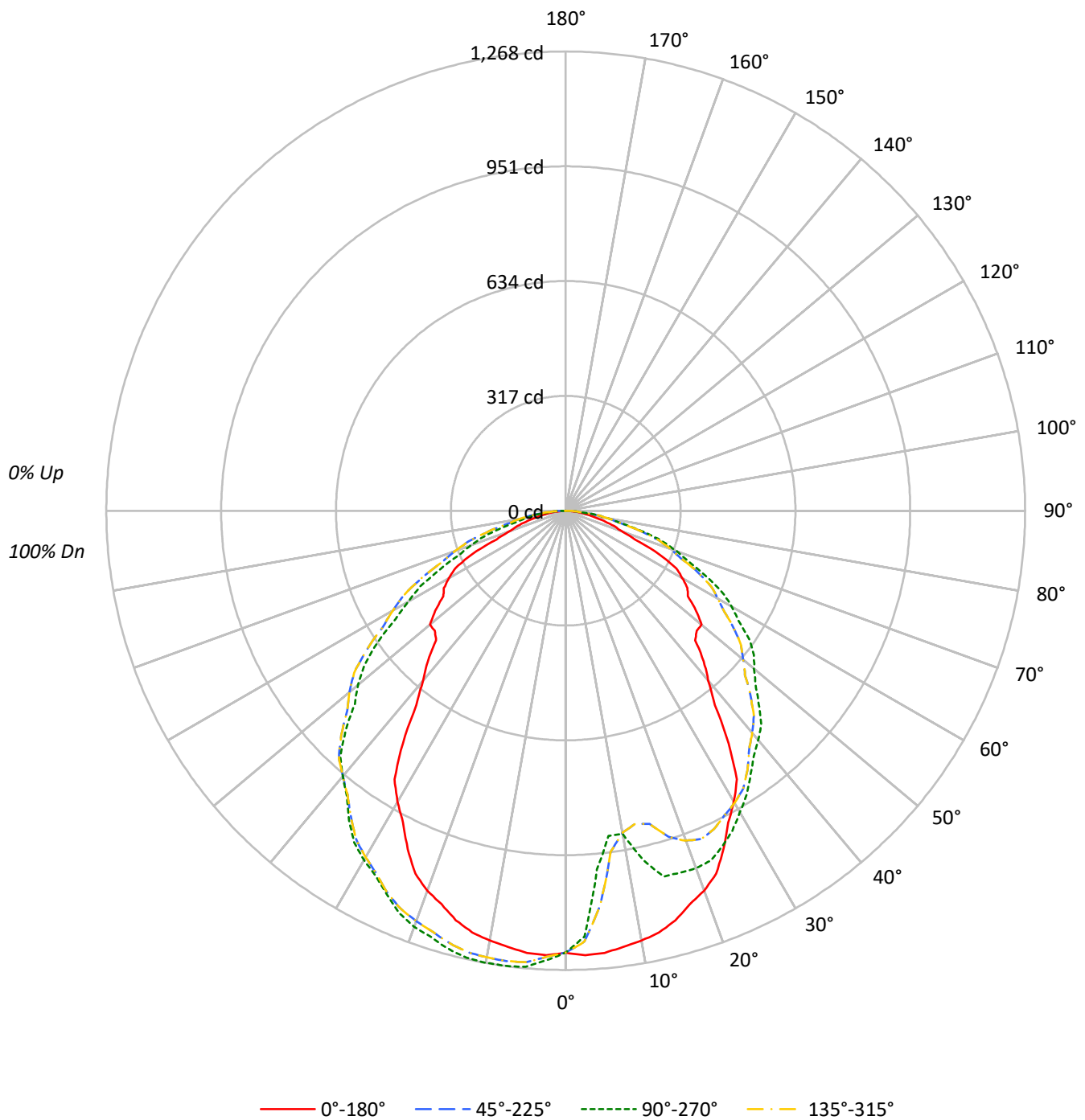
Lumens per Lamp: N/A
Luminaire Lumens: 3161.9 lumens
Efficiency: N/A
Efficacy: 96.4 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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°	11258	11258	11258	11258
5°	11354	9205	11354	11706
10°	11291	8490	11291	11875
15°	11180	9990	11180	11963
20°	10960	10314	10960	12003
25°	10494	10412	10494	11892
30°	9888	10244	9888	11868
35°	8828	10024	8828	11741
40°	7368	9954	7368	11526
45°	6597	9835	6597	11205
50°	7025	9743	7025	10736
55°	6629	9952	6629	10193
60°	6859	9756	6859	9265
65°	6250	9324	6250	8342
70°	4359	8751	4359	7443
75°	3868	7735	3868	6459
80°	3188	6009	3188	5520
85°	1958	4150	1958	4891

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 11447 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.0	3.5
10°-20°	312.6	9.9
20°-30°	483.1	15.3
30°-40°	577.2	18.3
40°-50°	580.9	18.4
50°-60°	504.3	16.0
60°-70°	357.0	11.3
70°-80°	188.8	6.0
80°-90°	48.0	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°	905.7	28.6
0°-40°	1482.8	46.9
0°-60°	2568.0	81.2
0°-90°	3161.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3161.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1220	1220	1220	1220	1220	
5°	1226	994	1226	1264	1226	116
15°	1170	1046	1170	1252	1170	329
25°	1031	1023	1031	1168	1031	473
35°	784	890	784	1042	784	484
45°	506	754	506	859	506	407
55°	412	619	412	634	412	379
65°	286	427	286	382	286	272
75°	108	217	108	181	108	114
85°	18	39	18	46	18	26
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°	1220.2	1220.2	1220.2	1220.2	1220.2	1220.2	1220.2	1220.2	1220.2	1220.2	1220.2
2.5°	1228.5	1219.2	1215.5	1208.2	1194.3	1186.9	1192.5	1183.2	1186.9	1176.8	1186.9
5°	1225.9	1205.2	1187.8	1159.0	1117.4	1068.9	1057.4	1027.4	1008.9	993.9	1008.9
7.5°	1214.4	1178.8	1126.0	1037.8	966.9	932.3	923.7	915.2	912.9	905.2	912.9
10°	1205.2	1156.7	1058.5	959.3	909.6	893.5	896.9	900.4	907.3	906.2	907.3
12.5°	1192.2	1117.9	988.4	919.6	886.5	886.1	911.7	957.7	989.5	987.4	989.5
15°	1170.5	1043.5	922.3	878.5	868.1	921.2	1014.7	1036.6	1044.7	1045.9	1044.7
17.5°	1139.4	970.8	880.1	851.2	886.5	1002.0	1030.4	1040.3	1047.2	1047.7	1047.2
20°	1116.3	933.9	858.8	839.2	932.7	1006.6	1023.9	1036.6	1048.2	1050.5	1048.2
22.5°	1084.9	908.0	836.7	830.9	958.6	1002.0	1017.5	1036.6	1046.3	1045.9	1046.3
25°	1030.8	876.2	809.2	821.9	961.6	977.7	1007.8	1020.5	1021.6	1022.8	1021.6
27.5°	971.5	848.2	777.1	827.9	942.9	954.4	986.7	993.2	997.6	995.8	997.6
30°	928.1	828.8	755.0	828.8	928.1	935.0	967.4	972.0	966.2	961.6	966.2
32.5°	879.2	804.8	733.7	822.4	905.9	915.6	941.5	939.6	933.9	930.2	933.9
35°	783.8	764.2	694.9	801.1	868.1	880.8	895.8	894.6	893.5	890.0	893.5
37.5°	676.5	716.2	656.6	768.1	831.6	830.7	853.1	857.9	856.8	852.4	856.8
40°	611.8	676.5	632.6	742.3	805.7	796.5	825.4	831.1	830.0	826.5	830.0
42.5°	563.8	623.8	604.9	710.9	774.3	763.3	798.6	804.4	801.4	798.8	801.4
45°	505.6	516.0	562.2	660.3	721.5	720.3	758.4	764.2	757.3	753.8	757.3
47.5°	490.4	416.0	515.5	601.7	669.1	673.5	714.3	719.4	713.2	710.2	713.2
50°	489.4	367.1	481.4	556.4	634.9	643.0	685.7	688.0	679.9	678.8	679.9
52.5°	453.4	339.4	441.7	516.7	605.3	615.3	654.3	653.8	653.1	654.8	653.1
55°	412.1	305.9	372.9	458.3	559.9	572.6	607.2	608.3	616.4	618.7	616.4
57.5°	398.5	268.0	309.1	407.7	514.2	524.1	556.6	559.4	564.9	564.7	564.9
60°	371.7	241.3	271.3	376.3	479.1	491.8	520.6	525.2	529.9	528.7	529.9
62.5°	344.0	222.8	252.8	350.5	445.8	459.4	479.1	487.4	489.2	487.1	489.2
65°	286.3	198.5	223.9	309.4	394.8	409.8	422.5	428.3	429.4	427.1	429.4
67.5°	206.9	176.2	201.3	268.7	336.1	353.0	360.4	363.9	362.7	366.9	362.7
70°	161.6	160.5	184.7	240.1	300.1	315.1	319.8	323.2	322.1	324.4	322.1
72.5°	139.4	147.5	167.2	210.6	259.5	274.5	277.3	278.0	281.4	279.1	281.4
75°	108.5	125.8	138.5	166.2	203.2	213.6	214.7	215.9	213.6	217.0	213.6
77.5°	75.7	95.8	107.1	123.1	148.0	154.5	154.2	154.9	153.1	152.8	153.1
80°	60.0	72.7	83.1	93.5	112.0	116.6	115.4	114.3	114.3	113.1	114.3
82.5°	44.3	51.5	61.0	68.6	80.6	81.5	83.1	81.0	81.0	82.7	81.0
85°	18.5	24.2	31.2	34.6	39.2	40.4	38.1	41.6	39.2	39.2	39.2
87.5°	4.6	7.4	11.1	12.9	13.9	12.9	12.9	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°	1220.2	1220.2	1220.2	1220.2	1220.2	1220.2	1220.2	1220.2	1220.2	1220.2	1220.2
2.5°	1183.2	1192.5	1186.9	1194.3	1208.2	1215.5	1219.2	1228.5	1228.5	1234.0	1235.9
5°	1027.4	1057.4	1068.9	1117.4	1159.0	1187.8	1205.2	1225.9	1235.2	1247.9	1252.5
7.5°	915.2	923.7	932.3	966.9	1037.8	1126.0	1178.8	1214.4	1233.1	1249.7	1256.4
10°	900.4	896.9	893.5	909.6	959.3	1058.5	1156.7	1205.2	1229.4	1247.9	1253.6
12.5°	957.7	911.7	886.1	886.5	919.6	988.4	1117.9	1192.2	1223.9	1241.4	1248.1
15°	1036.6	1014.7	921.2	868.1	878.5	922.3	1043.5	1170.5	1209.8	1225.9	1236.3
17.5°	1040.3	1030.4	1002.0	886.5	851.2	880.1	970.8	1139.4	1189.2	1208.4	1217.6
20°	1036.6	1023.9	1006.6	932.7	839.2	858.8	933.9	1116.3	1171.7	1193.6	1202.8
22.5°	1036.6	1017.5	1002.0	958.6	830.9	836.7	908.0	1084.9	1153.2	1176.1	1185.3
25°	1020.5	1007.8	977.7	961.6	821.9	809.2	876.2	1030.8	1123.2	1142.8	1156.7
27.5°	993.2	986.7	954.4	942.9	827.9	777.1	848.2	971.5	1081.9	1109.8	1124.8
30°	972.0	967.4	935.0	928.1	828.8	755.0	828.8	928.1	1045.9	1083.9	1103.6
32.5°	939.6	941.5	915.6	905.9	822.4	733.7	804.8	879.2	992.3	1057.2	1080.5
35°	894.6	895.8	880.8	868.1	801.1	694.9	764.2	783.8	927.0	1019.3	1038.9
37.5°	857.9	853.1	830.7	831.6	768.1	656.6	716.2	676.5	867.8	979.4	993.7
40°	831.1	825.4	796.5	805.7	742.3	632.6	676.5	611.8	811.5	948.9	960.4
42.5°	804.4	798.6	763.3	774.3	710.9	604.9	623.8	563.8	749.6	916.6	919.8
45°	764.2	758.4	720.3	721.5	660.3	562.2	516.0	505.6	713.4	864.6	864.6
47.5°	719.4	714.3	673.5	669.1	601.7	515.5	416.0	490.4	662.6	808.7	808.3
50°	688.0	685.7	643.0	634.9	556.4	481.4	367.1	489.4	625.7	760.7	772.3
52.5°	653.8	654.3	615.3	605.3	516.7	441.7	339.4	453.4	580.4	698.8	735.3
55°	608.3	607.2	572.6	559.9	458.3	372.9	305.9	412.1	510.2	613.0	674.1
57.5°	559.4	556.6	524.1	514.2	407.7	309.1	268.0	398.5	401.3	534.5	612.5
60°	525.2	520.6	491.8	479.1	376.3	271.3	241.3	371.7	307.1	479.1	564.5
62.5°	487.4	479.1	459.4	445.8	350.5	252.8	222.8	344.0	239.6	416.3	518.3
65°	428.3	422.5	409.8	394.8	309.4	223.9	198.5	286.3	187.0	285.1	450.2
67.5°	363.9	360.4	353.0	336.1	268.7	201.3	176.2	206.9	142.2	181.0	385.3
70°	323.2	319.8	315.1	300.1	240.1	184.7	160.5	161.6	101.6	133.9	342.8
72.5°	278.0	277.3	274.5	259.5	210.6	167.2	147.5	139.4	85.9	105.3	299.4
75°	215.9	214.7	213.6	203.2	166.2	138.5	125.8	108.5	86.6	75.0	234.3
77.5°	154.9	154.2	154.5	148.0	123.1	107.1	95.8	75.7	77.3	57.0	175.5
80°	114.3	115.4	116.6	112.0	93.5	83.1	72.7	60.0	63.5	45.0	133.9
82.5°	81.0	83.1	81.5	80.6	68.6	61.0	51.5	44.3	45.0	35.8	99.7
85°	41.6	38.1	40.4	39.2	34.6	31.2	24.2	18.5	23.1	20.8	49.6
87.5°	11.1	12.9	12.9	13.9	12.9	11.1	7.4	4.6	8.3	10.2	20.3
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°	1220.2	1220.2	1220.2	1220.2	1220.2	1220.2	1220.2	1220.2	1220.2	1220.2	1220.2
2.5°	1233.1	1233.1	1241.4	1243.2	1245.1	1242.3	1245.1	1243.2	1241.4	1233.1	1233.1
5°	1251.3	1251.3	1262.9	1266.3	1266.3	1264.0	1266.3	1266.3	1262.9	1251.3	1251.3
7.5°	1252.9	1254.8	1266.3	1268.9	1271.0	1267.5	1271.0	1268.9	1266.3	1254.8	1252.9
10°	1250.2	1254.8	1266.3	1269.8	1271.0	1267.5	1271.0	1269.8	1266.3	1254.8	1250.2
12.5°	1246.5	1250.2	1261.7	1264.3	1266.3	1263.8	1266.3	1264.3	1261.7	1250.2	1246.5
15°	1234.0	1238.6	1251.3	1253.6	1255.9	1252.5	1255.9	1253.6	1251.3	1238.6	1234.0
17.5°	1216.7	1222.5	1234.0	1237.7	1238.9	1234.5	1238.9	1237.7	1234.0	1222.5	1216.7
20°	1202.8	1208.6	1220.2	1224.8	1225.9	1222.5	1225.9	1224.8	1220.2	1208.6	1202.8
22.5°	1185.3	1194.8	1205.4	1207.2	1205.6	1202.2	1205.6	1207.2	1205.4	1194.8	1185.3
25°	1160.1	1168.2	1171.7	1171.7	1171.7	1168.2	1171.7	1171.7	1171.7	1168.2	1160.1
27.5°	1128.0	1132.2	1134.3	1136.1	1138.4	1136.1	1138.4	1136.1	1134.3	1132.2	1128.0
30°	1105.9	1103.6	1109.3	1114.0	1116.3	1114.0	1116.3	1114.0	1109.3	1103.6	1105.9
32.5°	1075.4	1076.8	1085.3	1088.1	1088.6	1086.3	1088.6	1088.1	1085.3	1076.8	1075.4
35°	1030.8	1036.6	1042.4	1044.7	1045.9	1042.4	1045.9	1044.7	1042.4	1036.6	1030.8
37.5°	983.7	993.9	998.1	995.5	995.8	992.1	995.8	995.5	998.1	993.9	983.7
40°	952.3	961.6	963.9	960.4	961.6	957.0	961.6	960.4	963.9	961.6	952.3
42.5°	922.8	930.2	927.9	923.5	922.8	920.9	922.8	923.5	927.9	930.2	922.8
45°	873.9	877.3	866.9	863.5	861.2	858.8	861.2	863.5	866.9	877.3	873.9
47.5°	820.3	815.7	805.7	800.4	794.0	789.6	794.0	800.4	805.7	815.7	820.3
50°	786.1	772.3	764.2	751.5	746.9	748.0	746.9	751.5	764.2	772.3	786.1
52.5°	744.6	727.9	715.2	704.4	700.7	700.0	700.7	704.4	715.2	727.9	744.6
55°	684.5	659.1	638.4	632.6	631.4	633.7	631.4	632.6	638.4	659.1	684.5
57.5°	610.9	586.0	568.9	564.3	560.3	556.6	560.3	564.3	568.9	586.0	610.9
60°	561.0	537.9	521.8	517.2	506.8	502.1	506.8	517.2	521.8	537.9	561.0
62.5°	516.7	489.0	476.5	467.3	459.7	452.3	459.7	467.3	476.5	489.0	516.7
65°	452.5	420.2	407.5	399.4	385.6	382.1	385.6	399.4	407.5	420.2	452.5
67.5°	382.3	354.2	338.2	327.4	318.6	318.4	318.6	327.4	338.2	354.2	382.3
70°	337.1	311.7	296.7	284.0	277.0	275.9	277.0	284.0	296.7	311.7	337.1
72.5°	292.7	268.3	255.1	243.3	237.3	236.2	237.3	243.3	255.1	268.3	292.7
75°	229.7	206.6	196.2	188.2	183.5	181.2	183.5	188.2	196.2	206.6	229.7
77.5°	169.9	151.2	145.9	137.6	133.7	133.4	133.7	137.6	145.9	151.2	169.9
80°	133.9	118.9	110.8	106.2	105.0	103.9	105.0	106.2	110.8	118.9	133.9
82.5°	97.0	88.4	83.1	80.3	80.1	78.0	80.1	80.3	83.1	88.4	97.0
85°	51.9	49.6	48.5	47.3	46.2	46.2	46.2	47.3	48.5	49.6	51.9
87.5°	21.2	22.2	22.2	23.1	24.0	23.1	24.0	23.1	22.2	22.2	21.2
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-935-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	1220.2	1220.2	1220.2	1220.2
2.5°	1235.9	1234.0	1228.5	1228.5
5°	1252.5	1247.9	1235.2	1225.9
7.5°	1256.4	1249.7	1233.1	1214.4
10°	1253.6	1247.9	1229.4	1205.2
12.5°	1248.1	1241.4	1223.9	1192.2
15°	1236.3	1225.9	1209.8	1170.5
17.5°	1217.6	1208.4	1189.2	1139.4
20°	1202.8	1193.6	1171.7	1116.3
22.5°	1185.3	1176.1	1153.2	1084.9
25°	1156.7	1142.8	1123.2	1030.8
27.5°	1124.8	1109.8	1081.9	971.5
30°	1103.6	1083.9	1045.9	928.1
32.5°	1080.5	1057.2	992.3	879.2
35°	1038.9	1019.3	927.0	783.8
37.5°	993.7	979.4	867.8	676.5
40°	960.4	948.9	811.5	611.8
42.5°	919.8	916.6	749.6	563.8
45°	864.6	864.6	713.4	505.6
47.5°	808.3	808.7	662.6	490.4
50°	772.3	760.7	625.7	489.4
52.5°	735.3	698.8	580.4	453.4
55°	674.1	613.0	510.2	412.1
57.5°	612.5	534.5	401.3	398.5
60°	564.5	479.1	307.1	371.7
62.5°	518.3	416.3	239.6	344.0
65°	450.2	285.1	187.0	286.3
67.5°	385.3	181.0	142.2	206.9
70°	342.8	133.9	101.6	161.6
72.5°	299.4	105.3	85.9	139.4
75°	234.3	75.0	86.6	108.5
77.5°	175.5	57.0	77.3	75.7
80°	133.9	45.0	63.5	60.0
82.5°	99.7	35.8	45.0	44.3
85°	49.6	20.8	23.1	18.5
87.5°	20.3	10.2	8.3	4.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)