

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-927-1D-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-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

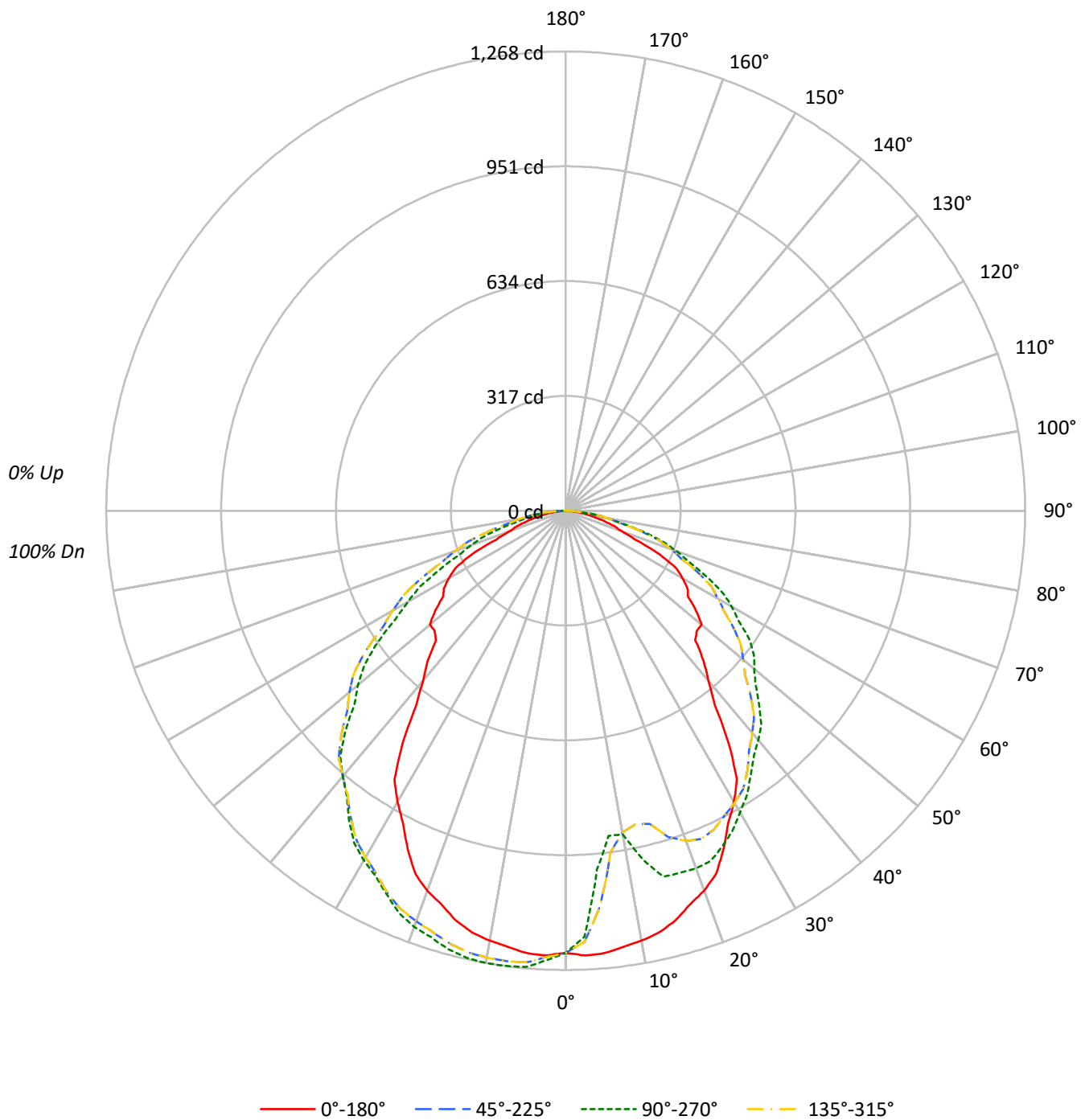
Lumens per Lamp: N/A
Luminaire Lumens: 3163.0 lumens
Efficiency: N/A
Efficacy: 78.3 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

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				0
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°	7508	7508	7508	7508
5°	7572	6138	7572	7807
10°	7530	5662	7530	7919
15°	7456	6662	7456	7978
20°	7309	6878	7309	8005
25°	6998	6943	6998	7931
30°	6594	6832	6594	7914
35°	5888	6685	5888	7829
40°	4914	6639	4914	7686
45°	4400	6560	4400	7473
50°	4685	6497	4685	7160
55°	4420	6637	4420	6799
60°	4574	6506	4574	6179
65°	4168	6219	4168	5563
70°	2908	5836	2908	4964
75°	2578	5159	2578	4309
80°	2125	4010	2125	3680
85°	1306	2774	1306	3260

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 7634 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.0	3.5
10°-20°	312.7	9.9
20°-30°	483.2	15.3
30°-40°	577.4	18.3
40°-50°	581.1	18.4
50°-60°	504.5	16.0
60°-70°	357.1	11.3
70°-80°	188.9	6.0
80°-90°	48.1	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°	906.0	28.6
0°-40°	1483.3	46.9
0°-60°	2568.9	81.2
0°-90°	3163.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3163.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1221	1221	1221	1221	1221	
5°	1226	994	1226	1264	1226	116
15°	1171	1046	1171	1253	1171	329
25°	1031	1023	1031	1169	1031	473
35°	784	890	784	1043	784	484
45°	506	754	506	859	506	407
55°	412	619	412	634	412	379
65°	286	427	286	382	286	273
75°	108	217	108	181	108	115
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°	1220.6	1220.6	1220.6	1220.6	1220.6	1220.6	1220.6	1220.6	1220.6	1220.6	1220.6
2.5°	1228.9	1219.7	1216.0	1208.6	1194.7	1187.3	1192.9	1183.6	1187.3	1177.2	1187.3
5°	1226.4	1205.6	1188.2	1159.4	1117.8	1069.3	1057.8	1027.7	1009.3	994.2	1009.3
7.5°	1214.8	1179.2	1126.3	1038.1	967.2	932.6	924.0	915.5	913.2	905.6	913.2
10°	1205.6	1157.1	1058.9	959.6	909.9	893.8	897.2	900.7	907.6	906.5	907.6
12.5°	1192.6	1118.3	988.7	919.9	886.9	886.4	912.0	958.0	989.9	987.8	989.9
15°	1170.9	1043.9	922.7	878.8	868.4	921.5	1015.0	1037.0	1045.1	1046.2	1045.1
17.5°	1139.7	971.2	880.4	851.5	886.9	1002.3	1030.7	1040.7	1047.6	1048.1	1047.6
20°	1116.6	934.2	859.1	839.5	933.0	1006.9	1024.3	1037.0	1048.5	1050.8	1048.5
22.5°	1085.2	908.3	837.0	831.2	958.9	1002.3	1017.8	1037.0	1046.7	1046.2	1046.7
25°	1031.2	876.5	809.5	822.2	961.9	978.1	1008.1	1020.8	1022.0	1023.1	1022.0
27.5°	971.8	848.5	777.4	828.2	943.2	954.8	987.1	993.6	997.9	996.1	997.9
30°	928.4	829.1	755.2	829.1	928.4	935.4	967.7	972.3	966.5	961.9	966.5
32.5°	879.5	805.1	734.0	822.6	906.3	916.0	941.8	940.0	934.2	930.5	934.2
35°	784.1	764.4	695.2	801.4	868.4	881.1	896.1	894.9	893.8	890.3	893.8
37.5°	676.7	716.4	656.8	768.4	831.9	831.0	853.4	858.2	857.1	852.7	857.1
40°	612.0	676.7	632.8	742.5	806.0	796.8	825.7	831.4	830.3	826.8	830.3
42.5°	564.0	624.0	605.1	711.1	774.6	763.5	798.9	804.6	801.6	799.1	801.6
45°	505.8	516.2	562.4	660.5	721.7	720.6	758.7	764.4	757.5	754.1	757.5
47.5°	490.5	416.2	515.7	601.9	669.3	673.7	714.6	719.6	713.4	710.4	713.4
50°	489.6	367.2	481.5	556.6	635.1	643.2	685.9	688.2	680.2	679.0	680.2
52.5°	453.6	339.5	441.8	516.9	605.6	615.5	654.5	654.1	653.4	655.0	653.4
55°	412.2	306.0	373.0	458.4	560.1	572.8	607.4	608.6	616.6	618.9	616.6
57.5°	398.6	268.1	309.2	407.9	514.3	524.3	556.8	559.6	565.1	564.9	565.1
60°	371.8	241.3	271.4	376.5	479.2	491.9	520.8	525.4	530.0	528.9	530.0
62.5°	344.1	222.9	252.9	350.6	446.0	459.6	479.2	487.5	489.4	487.3	489.4
65°	286.4	198.6	224.0	309.5	394.9	409.9	422.6	428.4	429.6	427.3	429.6
67.5°	206.9	176.2	201.4	268.8	336.3	353.1	360.5	364.0	362.8	367.0	362.8
70°	161.7	160.5	184.8	240.2	300.2	315.2	319.9	323.3	322.2	324.5	322.2
72.5°	139.5	147.6	167.2	210.6	259.6	274.6	277.4	278.1	281.5	279.2	281.5
75°	108.5	125.9	138.6	166.3	203.2	213.6	214.8	215.9	213.6	217.1	213.6
77.5°	75.8	95.8	107.2	123.1	148.0	154.5	154.3	155.0	153.1	152.9	153.1
80°	60.0	72.7	83.1	93.5	112.0	116.6	115.5	114.3	114.3	113.2	114.3
82.5°	44.3	51.5	61.0	68.6	80.6	81.5	83.1	81.1	81.1	82.7	81.1
85°	18.5	24.2	31.2	34.6	39.3	40.4	38.1	41.6	39.3	39.3	39.3
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°	1220.6	1220.6	1220.6	1220.6	1220.6	1220.6	1220.6	1220.6	1220.6	1220.6	1220.6
2.5°	1183.6	1192.9	1187.3	1194.7	1208.6	1216.0	1219.7	1228.9	1228.9	1234.4	1236.3
5°	1027.7	1057.8	1069.3	1117.8	1159.4	1188.2	1205.6	1226.4	1235.6	1248.3	1252.9
7.5°	915.5	924.0	932.6	967.2	1038.1	1126.3	1179.2	1214.8	1233.5	1250.1	1256.8
10°	900.7	897.2	893.8	909.9	959.6	1058.9	1157.1	1205.6	1229.8	1248.3	1254.1
12.5°	958.0	912.0	886.4	886.9	919.9	988.7	1118.3	1192.6	1224.3	1241.8	1248.5
15°	1037.0	1015.0	921.5	868.4	878.8	922.7	1043.9	1170.9	1210.2	1226.4	1236.7
17.5°	1040.7	1030.7	1002.3	886.9	851.5	880.4	971.2	1139.7	1189.6	1208.8	1218.0
20°	1037.0	1024.3	1006.9	933.0	839.5	859.1	934.2	1116.6	1172.1	1194.0	1203.3
22.5°	1037.0	1017.8	1002.3	958.9	831.2	837.0	908.3	1085.2	1153.6	1176.5	1185.7
25°	1020.8	1008.1	978.1	961.9	822.2	809.5	876.5	1031.2	1123.6	1143.2	1157.1
27.5°	993.6	987.1	954.8	943.2	828.2	777.4	848.5	971.8	1082.2	1110.2	1125.2
30°	972.3	967.7	935.4	928.4	829.1	755.2	829.1	928.4	1046.2	1084.3	1103.9
32.5°	940.0	941.8	916.0	906.3	822.6	734.0	805.1	879.5	992.6	1057.5	1080.9
35°	894.9	896.1	881.1	868.4	801.4	695.2	764.4	784.1	927.3	1019.7	1039.3
37.5°	858.2	853.4	831.0	831.9	768.4	656.8	716.4	676.7	868.1	979.7	994.0
40°	831.4	825.7	796.8	806.0	742.5	632.8	676.7	612.0	811.8	949.2	960.8
42.5°	804.6	798.9	763.5	774.6	711.1	605.1	624.0	564.0	749.9	916.9	920.1
45°	764.4	758.7	720.6	721.7	660.5	562.4	516.2	505.8	713.6	864.9	864.9
47.5°	719.6	714.6	673.7	669.3	601.9	515.7	416.2	490.5	662.8	809.0	808.6
50°	688.2	685.9	643.2	635.1	556.6	481.5	367.2	489.6	625.9	761.0	772.5
52.5°	654.1	654.5	615.5	605.6	516.9	441.8	339.5	453.6	580.6	699.1	735.6
55°	608.6	607.4	572.8	560.1	458.4	373.0	306.0	412.2	510.4	613.2	674.4
57.5°	559.6	556.8	524.3	514.3	407.9	309.2	268.1	398.6	401.4	534.7	612.7
60°	525.4	520.8	491.9	479.2	376.5	271.4	241.3	371.8	307.2	479.2	564.7
62.5°	487.5	479.2	459.6	446.0	350.6	252.9	222.9	344.1	239.7	416.4	518.5
65°	428.4	422.6	409.9	394.9	309.5	224.0	198.6	286.4	187.1	285.2	450.4
67.5°	364.0	360.5	353.1	336.3	268.8	201.4	176.2	206.9	142.3	181.1	385.5
70°	323.3	319.9	315.2	300.2	240.2	184.8	160.5	161.7	101.6	134.0	343.0
72.5°	278.1	277.4	274.6	259.6	210.6	167.2	147.6	139.5	85.9	105.3	299.5
75°	215.9	214.8	213.6	203.2	166.3	138.6	125.9	108.5	86.6	75.1	234.4
77.5°	155.0	154.3	154.5	148.0	123.1	107.2	95.8	75.8	77.4	57.0	175.5
80°	114.3	115.5	116.6	112.0	93.5	83.1	72.7	60.0	63.5	45.0	134.0
82.5°	81.1	83.1	81.5	80.6	68.6	61.0	51.5	44.3	45.0	35.8	99.8
85°	41.6	38.1	40.4	39.3	34.6	31.2	24.2	18.5	23.1	20.8	49.7
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°	1220.6	1220.6	1220.6	1220.6	1220.6	1220.6	1220.6	1220.6	1220.6	1220.6	1220.6
2.5°	1233.5	1233.5	1241.8	1243.7	1245.5	1242.7	1245.5	1243.7	1241.8	1233.5	1233.5
5°	1251.8	1251.8	1263.3	1266.8	1266.8	1264.5	1266.8	1266.8	1263.3	1251.8	1251.8
7.5°	1253.4	1255.2	1266.8	1269.3	1271.4	1267.9	1271.4	1269.3	1266.8	1255.2	1253.4
10°	1250.6	1255.2	1266.8	1270.2	1271.4	1267.9	1271.4	1270.2	1266.8	1255.2	1250.6
12.5°	1246.9	1250.6	1262.1	1264.7	1266.8	1264.2	1266.8	1264.7	1262.1	1250.6	1246.9
15°	1234.4	1239.1	1251.8	1254.1	1256.4	1252.9	1256.4	1254.1	1251.8	1239.1	1234.4
17.5°	1217.1	1222.9	1234.4	1238.1	1239.3	1234.9	1239.3	1238.1	1234.4	1222.9	1217.1
20°	1203.3	1209.0	1220.6	1225.2	1226.4	1222.9	1226.4	1225.2	1220.6	1209.0	1203.3
22.5°	1185.7	1195.2	1205.8	1207.6	1206.0	1202.6	1206.0	1207.6	1205.8	1195.2	1185.7
25°	1160.5	1168.6	1172.1	1172.1	1172.1	1168.6	1172.1	1172.1	1172.1	1168.6	1160.5
27.5°	1128.4	1132.6	1134.7	1136.5	1138.8	1136.5	1138.8	1136.5	1134.7	1132.6	1128.4
30°	1106.3	1103.9	1109.7	1114.3	1116.6	1114.3	1116.6	1114.3	1109.7	1103.9	1106.3
32.5°	1075.8	1077.2	1085.7	1088.5	1088.9	1086.6	1088.9	1088.5	1085.7	1077.2	1075.8
35°	1031.2	1037.0	1042.7	1045.1	1046.2	1042.7	1046.2	1045.1	1042.7	1037.0	1031.2
37.5°	984.1	994.2	998.4	995.9	996.1	992.4	996.1	995.9	998.4	994.2	984.1
40°	952.7	961.9	964.2	960.8	961.9	957.3	961.9	960.8	964.2	961.9	952.7
42.5°	923.1	930.5	928.2	923.8	923.1	921.3	923.1	923.8	928.2	930.5	923.1
45°	874.2	877.6	867.2	863.8	861.4	859.1	861.4	863.8	867.2	877.6	874.2
47.5°	820.6	816.0	806.0	800.7	794.2	789.9	794.2	800.7	806.0	816.0	820.6
50°	786.4	772.5	764.4	751.7	747.1	748.3	747.1	751.7	764.4	772.5	786.4
52.5°	744.8	728.2	715.5	704.6	700.9	700.2	700.9	704.6	715.5	728.2	744.8
55°	684.8	659.4	638.6	632.8	631.7	634.0	631.7	632.8	638.6	659.4	684.8
57.5°	611.1	586.2	569.1	564.4	560.5	556.8	560.5	564.4	569.1	586.2	611.1
60°	561.2	538.1	521.9	517.3	506.9	502.3	506.9	517.3	521.9	538.1	561.2
62.5°	516.9	489.2	476.7	467.4	459.8	452.4	459.8	467.4	476.7	489.2	516.9
65°	452.7	420.3	407.6	399.5	385.7	382.2	385.7	399.5	407.6	420.3	452.7
67.5°	382.5	354.3	338.3	327.5	318.7	318.5	318.7	327.5	338.3	354.3	382.5
70°	337.2	311.8	296.8	284.1	277.1	276.0	277.1	284.1	296.8	311.8	337.2
72.5°	292.8	268.4	255.2	243.4	237.4	236.3	237.4	243.4	255.2	268.4	292.8
75°	229.8	206.7	196.3	188.2	183.6	181.3	183.6	188.2	196.3	206.7	229.8
77.5°	170.0	151.3	146.0	137.6	133.7	133.5	133.7	137.6	146.0	151.3	170.0
80°	134.0	118.9	110.9	106.2	105.1	103.9	105.1	106.2	110.9	118.9	134.0
82.5°	97.0	88.5	83.1	80.4	80.1	78.1	80.1	80.4	83.1	88.5	97.0
85°	52.0	49.7	48.5	47.3	46.2	46.2	46.2	47.3	48.5	49.7	52.0
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-075D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	1220.6	1220.6	1220.6	1220.6
2.5°	1236.3	1234.4	1228.9	1228.9
5°	1252.9	1248.3	1235.6	1226.4
7.5°	1256.8	1250.1	1233.5	1214.8
10°	1254.1	1248.3	1229.8	1205.6
12.5°	1248.5	1241.8	1224.3	1192.6
15°	1236.7	1226.4	1210.2	1170.9
17.5°	1218.0	1208.8	1189.6	1139.7
20°	1203.3	1194.0	1172.1	1116.6
22.5°	1185.7	1176.5	1153.6	1085.2
25°	1157.1	1143.2	1123.6	1031.2
27.5°	1125.2	1110.2	1082.2	971.8
30°	1103.9	1084.3	1046.2	928.4
32.5°	1080.9	1057.5	992.6	879.5
35°	1039.3	1019.7	927.3	784.1
37.5°	994.0	979.7	868.1	676.7
40°	960.8	949.2	811.8	612.0
42.5°	920.1	916.9	749.9	564.0
45°	864.9	864.9	713.6	505.8
47.5°	808.6	809.0	662.8	490.5
50°	772.5	761.0	625.9	489.6
52.5°	735.6	699.1	580.6	453.6
55°	674.4	613.2	510.4	412.2
57.5°	612.7	534.7	401.4	398.6
60°	564.7	479.2	307.2	371.8
62.5°	518.5	416.4	239.7	344.1
65°	450.4	285.2	187.1	286.4
67.5°	385.5	181.1	142.3	206.9
70°	343.0	134.0	101.6	161.7
72.5°	299.5	105.3	85.9	139.5
75°	234.4	75.1	86.6	108.5
77.5°	175.5	57.0	77.4	75.8
80°	134.0	45.0	63.5	60.0
82.5°	99.8	35.8	45.0	44.3
85°	49.7	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)