

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-050D-935-1D-UNV-STD-W-8

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-050D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

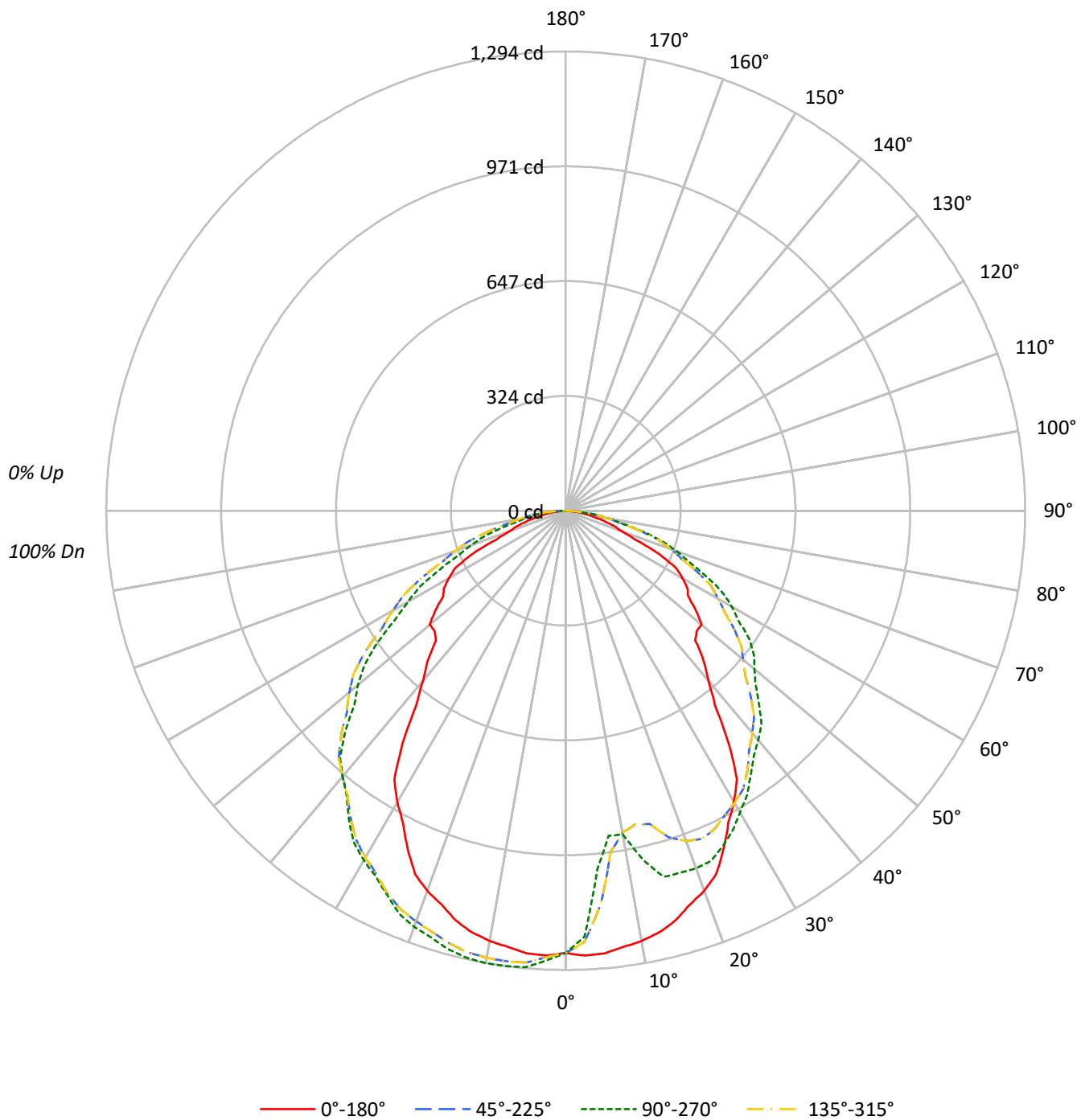
Lumens per Lamp: N/A
Luminaire Lumens: 3228.8 lumens
Efficiency: N/A
Efficacy: 91.7 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 35.2
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°	5748	5748	5748	5748
5°	5797	4700	5797	5977
10°	5764	4334	5764	6063
15°	5709	5101	5709	6108
20°	5596	5266	5596	6128
25°	5358	5316	5358	6072
30°	5048	5230	5048	6059
35°	4507	5118	4507	5994
40°	3762	5083	3762	5885
45°	3368	5021	3368	5721
50°	3587	4974	3587	5482
55°	3384	5081	3384	5204
60°	3502	4981	3502	4731
65°	3191	4760	3191	4259
70°	2225	4467	2225	3800
75°	1975	3950	1975	3299
80°	1628	3068	1628	2819
85°	1000	2122	1000	2498

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 5845 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.3	3.5
10°-20°	319.2	9.9
20°-30°	493.3	15.3
30°-40°	589.4	18.3
40°-50°	593.2	18.4
50°-60°	515.0	16.0
60°-70°	364.6	11.3
70°-80°	192.8	6.0
80°-90°	49.1	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°	924.8	28.6
0°-40°	1514.2	46.9
0°-60°	2622.3	81.2
0°-90°	3228.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3228.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1246	1246	1246	1246	1246	
5°	1252	1015	1252	1291	1252	119
15°	1195	1068	1195	1279	1195	336
25°	1053	1044	1053	1193	1053	483
35°	800	909	800	1064	800	494
45°	516	770	516	877	516	416
55°	421	632	421	647	421	387
65°	292	436	292	390	292	278
75°	111	222	111	185	111	117
85°	19	40	19	47	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°	1246.0	1246.0	1246.0	1246.0	1246.0	1246.0	1246.0	1246.0	1246.0	1246.0	1246.0
2.5°	1254.5	1245.0	1241.2	1233.7	1219.6	1212.0	1217.7	1208.2	1212.0	1201.6	1212.0
5°	1251.9	1230.6	1213.0	1183.5	1141.1	1091.5	1079.8	1049.1	1030.2	1014.9	1030.2
7.5°	1240.1	1203.8	1149.8	1059.7	987.3	952.0	943.3	934.5	932.2	924.4	932.2
10°	1230.6	1181.1	1080.9	979.6	928.9	912.4	915.9	919.4	926.5	925.3	926.5
12.5°	1217.4	1141.5	1009.3	939.0	905.3	904.8	931.0	977.9	1010.4	1008.3	1010.4
15°	1195.3	1065.6	941.8	897.0	886.4	940.7	1036.1	1058.5	1066.8	1068.0	1066.8
17.5°	1163.4	991.3	898.7	869.2	905.3	1023.2	1052.2	1062.3	1069.4	1069.9	1069.4
20°	1139.9	953.6	877.0	857.0	952.4	1027.9	1045.6	1058.5	1070.3	1072.7	1070.3
22.5°	1107.8	927.2	854.4	848.5	978.9	1023.2	1039.0	1058.5	1068.4	1068.0	1068.4
25°	1052.6	894.7	826.3	839.3	981.9	998.4	1029.1	1042.0	1043.2	1044.4	1043.2
27.5°	992.1	866.2	793.6	845.4	962.8	974.6	1007.6	1014.2	1018.7	1016.8	1018.7
30°	947.7	846.4	770.9	846.4	947.7	954.8	987.8	992.5	986.6	981.9	986.6
32.5°	897.8	821.8	749.2	839.8	925.1	935.0	961.4	959.5	953.6	949.9	953.6
35°	800.4	780.3	709.6	818.1	886.4	899.4	914.7	913.5	912.4	908.8	912.4
37.5°	690.8	731.3	670.5	784.4	849.2	848.2	871.1	876.1	874.9	870.4	874.9
40°	624.7	690.8	646.0	758.0	822.8	813.4	842.8	848.7	847.5	844.0	847.5
42.5°	575.7	637.0	617.7	725.9	790.7	779.4	815.5	821.4	818.3	815.7	818.3
45°	516.3	526.9	574.1	674.3	736.7	735.6	774.5	780.3	773.3	769.7	773.3
47.5°	500.7	424.8	526.4	614.4	683.2	687.7	729.4	734.6	728.2	725.2	728.2
50°	499.8	374.8	491.5	568.2	648.3	656.6	700.2	702.5	694.3	693.1	694.3
52.5°	463.0	346.6	451.0	527.6	618.1	628.3	668.1	667.7	666.9	668.6	666.9
55°	420.8	312.4	380.7	468.0	571.7	584.7	620.0	621.2	629.5	631.8	629.5
57.5°	406.9	273.7	315.7	416.3	525.0	535.2	568.4	571.2	576.9	576.7	576.9
60°	379.6	246.4	277.0	384.3	489.2	502.2	531.6	536.3	541.1	539.9	541.1
62.5°	351.3	227.5	258.2	357.9	455.2	469.2	489.2	497.7	499.6	497.4	499.6
65°	292.3	202.7	228.7	315.9	403.1	418.5	431.4	437.3	438.5	436.1	438.5
67.5°	211.2	179.9	205.6	274.4	343.3	360.5	368.0	371.5	370.4	374.6	370.4
70°	165.0	163.8	188.6	245.2	306.5	321.8	326.5	330.1	328.9	331.2	328.9
72.5°	142.4	150.6	170.7	215.0	265.0	280.3	283.1	283.8	287.4	285.0	287.4
75°	110.8	128.5	141.5	169.7	207.5	218.1	219.3	220.4	218.1	221.6	218.1
77.5°	77.3	97.8	109.4	125.7	151.1	157.7	157.5	158.2	156.3	156.1	156.3
80°	61.3	74.3	84.9	95.5	114.3	119.1	117.9	116.7	116.7	115.5	116.7
82.5°	45.3	52.6	62.2	70.0	82.3	83.2	84.9	82.7	82.7	84.4	82.7
85°	18.9	24.8	31.8	35.4	40.1	41.3	38.9	42.4	40.1	40.1	40.1
87.5°	4.7	7.5	11.3	13.2	14.1	13.2	13.2	11.3	11.3	11.3	11.3
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):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	1246.0	1246.0	1246.0	1246.0	1246.0	1246.0	1246.0	1246.0	1246.0	1246.0	1246.0
2.5°	1208.2	1217.7	1212.0	1219.6	1233.7	1241.2	1245.0	1254.5	1254.5	1260.1	1262.0
5°	1049.1	1079.8	1091.5	1141.1	1183.5	1213.0	1230.6	1251.9	1261.3	1274.3	1279.0
7.5°	934.5	943.3	952.0	987.3	1059.7	1149.8	1203.8	1240.1	1259.2	1276.1	1283.0
10°	919.4	915.9	912.4	928.9	979.6	1080.9	1181.1	1230.6	1255.4	1274.3	1280.1
12.5°	977.9	931.0	904.8	905.3	939.0	1009.3	1141.5	1217.4	1249.7	1267.7	1274.5
15°	1058.5	1036.1	940.7	886.4	897.0	941.8	1065.6	1195.3	1235.4	1251.9	1262.5
17.5°	1062.3	1052.2	1023.2	905.3	869.2	898.7	991.3	1163.4	1214.4	1233.9	1243.4
20°	1058.5	1045.6	1027.9	952.4	857.0	877.0	953.6	1139.9	1196.5	1218.9	1228.3
22.5°	1058.5	1039.0	1023.2	978.9	848.5	854.4	927.2	1107.8	1177.6	1200.9	1210.4
25°	1042.0	1029.1	998.4	981.9	839.3	826.3	894.7	1052.6	1146.9	1167.0	1181.1
27.5°	1014.2	1007.6	974.6	962.8	845.4	793.6	866.2	992.1	1104.7	1133.3	1148.6
30°	992.5	987.8	954.8	947.7	846.4	770.9	846.4	947.7	1068.0	1106.9	1126.9
32.5°	959.5	961.4	935.0	925.1	839.8	749.2	821.8	897.8	1013.3	1079.5	1103.3
35°	913.5	914.7	899.4	886.4	818.1	709.6	780.3	800.4	946.6	1040.9	1060.9
37.5°	876.1	871.1	848.2	849.2	784.4	670.5	731.3	690.8	886.2	1000.1	1014.7
40°	848.7	842.8	813.4	822.8	758.0	646.0	690.8	624.7	828.7	969.0	980.7
42.5°	821.4	815.5	779.4	790.7	725.9	617.7	637.0	575.7	765.5	935.9	939.2
45°	780.3	774.5	735.6	736.7	674.3	574.1	526.9	516.3	728.5	882.9	882.9
47.5°	734.6	729.4	687.7	683.2	614.4	526.4	424.8	500.7	676.6	825.8	825.4
50°	702.5	700.2	656.6	648.3	568.2	491.5	374.8	499.8	638.9	776.8	788.6
52.5°	667.7	668.1	628.3	618.1	527.6	451.0	346.6	463.0	592.7	713.6	750.9
55°	621.2	620.0	584.7	571.7	468.0	380.7	312.4	420.8	521.0	625.9	688.4
57.5°	571.2	568.4	535.2	525.0	416.3	315.7	273.7	406.9	409.7	545.8	625.5
60°	536.3	531.6	502.2	489.2	384.3	277.0	246.4	379.6	313.6	489.2	576.4
62.5°	497.7	489.2	469.2	455.2	357.9	258.2	227.5	351.3	244.7	425.1	529.3
65°	437.3	431.4	418.5	403.1	315.9	228.7	202.7	292.3	191.0	291.2	459.7
67.5°	371.5	368.0	360.5	343.3	274.4	205.6	179.9	211.2	145.2	184.8	393.5
70°	330.1	326.5	321.8	306.5	245.2	188.6	163.8	165.0	103.7	136.7	350.1
72.5°	283.8	283.1	280.3	265.0	215.0	170.7	150.6	142.4	87.7	107.5	305.8
75°	220.4	219.3	218.1	207.5	169.7	141.5	128.5	110.8	88.4	76.6	239.3
77.5°	158.2	157.5	157.7	151.1	125.7	109.4	97.8	77.3	79.0	58.2	179.2
80°	116.7	117.9	119.1	114.3	95.5	84.9	74.3	61.3	64.8	46.0	136.7
82.5°	82.7	84.9	83.2	82.3	70.0	62.2	52.6	45.3	46.0	36.5	101.8
85°	42.4	38.9	41.3	40.1	35.4	31.8	24.8	18.9	23.6	21.2	50.7
87.5°	11.3	13.2	13.2	14.1	13.2	11.3	7.5	4.7	8.5	10.4	20.7
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°	1246.0	1246.0	1246.0	1246.0	1246.0	1246.0	1246.0	1246.0	1246.0	1246.0	1246.0
2.5°	1259.2	1259.2	1267.7	1269.5	1271.4	1268.6	1271.4	1269.5	1267.7	1259.2	1259.2
5°	1277.8	1277.8	1289.6	1293.1	1293.1	1290.8	1293.1	1293.1	1289.6	1277.8	1277.8
7.5°	1279.4	1281.3	1293.1	1295.7	1297.8	1294.3	1297.8	1295.7	1293.1	1281.3	1279.4
10°	1276.6	1281.3	1293.1	1296.7	1297.8	1294.3	1297.8	1296.7	1293.1	1281.3	1276.6
12.5°	1272.8	1276.6	1288.4	1291.0	1293.1	1290.5	1293.1	1291.0	1288.4	1276.6	1272.8
15°	1260.1	1264.8	1277.8	1280.1	1282.5	1279.0	1282.5	1280.1	1277.8	1264.8	1260.1
17.5°	1242.4	1248.3	1260.1	1263.9	1265.1	1260.6	1265.1	1263.9	1260.1	1248.3	1242.4
20°	1228.3	1234.2	1246.0	1250.7	1251.9	1248.3	1251.9	1250.7	1246.0	1234.2	1228.3
22.5°	1210.4	1220.0	1230.9	1232.8	1231.1	1227.6	1231.1	1232.8	1230.9	1220.0	1210.4
25°	1184.7	1192.9	1196.5	1196.5	1196.5	1192.9	1196.5	1196.5	1196.5	1192.9	1184.7
27.5°	1151.9	1156.1	1158.3	1160.1	1162.5	1160.1	1162.5	1160.1	1158.3	1156.1	1151.9
30°	1129.3	1126.9	1132.8	1137.5	1139.9	1137.5	1139.9	1137.5	1132.8	1126.9	1129.3
32.5°	1098.1	1099.6	1108.3	1111.1	1111.6	1109.2	1111.6	1111.1	1108.3	1099.6	1098.1
35°	1052.6	1058.5	1064.4	1066.8	1068.0	1064.4	1068.0	1066.8	1064.4	1058.5	1052.6
37.5°	1004.6	1014.9	1019.2	1016.6	1016.8	1013.0	1016.8	1016.6	1019.2	1014.9	1004.6
40°	972.5	981.9	984.3	980.7	981.9	977.2	981.9	980.7	984.3	981.9	972.5
42.5°	942.3	949.9	947.5	943.0	942.3	940.4	942.3	943.0	947.5	949.9	942.3
45°	892.3	895.9	885.3	881.7	879.4	877.0	879.4	881.7	885.3	895.9	892.3
47.5°	837.6	832.9	822.8	817.4	810.8	806.3	810.8	817.4	822.8	832.9	837.6
50°	802.7	788.6	780.3	767.4	762.7	763.8	762.7	767.4	780.3	788.6	802.7
52.5°	760.3	743.3	730.4	719.3	715.5	714.8	715.5	719.3	730.4	743.3	760.3
55°	699.0	673.1	651.9	646.0	644.8	647.1	644.8	646.0	651.9	673.1	699.0
57.5°	623.8	598.3	580.9	576.2	572.2	568.4	572.2	576.2	580.9	598.3	623.8
60°	572.9	549.3	532.8	528.1	517.5	512.8	517.5	528.1	532.8	549.3	572.9
62.5°	527.6	499.3	486.6	477.2	469.4	461.8	469.4	477.2	486.6	499.3	527.6
65°	462.1	429.1	416.1	407.9	393.7	390.2	393.7	407.9	416.1	429.1	462.1
67.5°	390.4	361.6	345.4	334.3	325.3	325.1	325.3	334.3	345.4	361.6	390.4
70°	344.2	318.3	302.9	290.0	282.9	281.7	282.9	290.0	302.9	318.3	344.2
72.5°	298.9	273.9	260.5	248.5	242.4	241.2	242.4	248.5	260.5	273.9	298.9
75°	234.6	211.0	200.4	192.1	187.4	185.1	187.4	192.1	200.4	211.0	234.6
77.5°	173.5	154.4	149.0	140.5	136.5	136.3	136.5	140.5	149.0	154.4	173.5
80°	136.7	121.4	113.2	108.4	107.3	106.1	107.3	108.4	113.2	121.4	136.7
82.5°	99.0	90.3	84.9	82.0	81.8	79.7	81.8	82.0	84.9	90.3	99.0
85°	53.0	50.7	49.5	48.3	47.2	47.2	47.2	48.3	49.5	50.7	53.0
87.5°	21.7	22.6	22.6	23.6	24.5	23.6	24.5	23.6	22.6	22.6	21.7
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-050D-935-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	1246.0	1246.0	1246.0	1246.0
2.5°	1262.0	1260.1	1254.5	1254.5
5°	1279.0	1274.3	1261.3	1251.9
7.5°	1283.0	1276.1	1259.2	1240.1
10°	1280.1	1274.3	1255.4	1230.6
12.5°	1274.5	1267.7	1249.7	1217.4
15°	1262.5	1251.9	1235.4	1195.3
17.5°	1243.4	1233.9	1214.4	1163.4
20°	1228.3	1218.9	1196.5	1139.9
22.5°	1210.4	1200.9	1177.6	1107.8
25°	1181.1	1167.0	1146.9	1052.6
27.5°	1148.6	1133.3	1104.7	992.1
30°	1126.9	1106.9	1068.0	947.7
32.5°	1103.3	1079.5	1013.3	897.8
35°	1060.9	1040.9	946.6	800.4
37.5°	1014.7	1000.1	886.2	690.8
40°	980.7	969.0	828.7	624.7
42.5°	939.2	935.9	765.5	575.7
45°	882.9	882.9	728.5	516.3
47.5°	825.4	825.8	676.6	500.7
50°	788.6	776.8	638.9	499.8
52.5°	750.9	713.6	592.7	463.0
55°	688.4	625.9	521.0	420.8
57.5°	625.5	545.8	409.7	406.9
60°	576.4	489.2	313.6	379.6
62.5°	529.3	425.1	244.7	351.3
65°	459.7	291.2	191.0	292.3
67.5°	393.5	184.8	145.2	211.2
70°	350.1	136.7	103.7	165.0
72.5°	305.8	107.5	87.7	142.4
75°	239.3	76.6	88.4	110.8
77.5°	179.2	58.2	79.0	77.3
80°	136.7	46.0	64.8	61.3
82.5°	101.8	36.5	46.0	45.3
85°	50.7	21.2	23.6	18.9
87.5°	20.7	10.4	8.5	4.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)