

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-927-1D-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-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

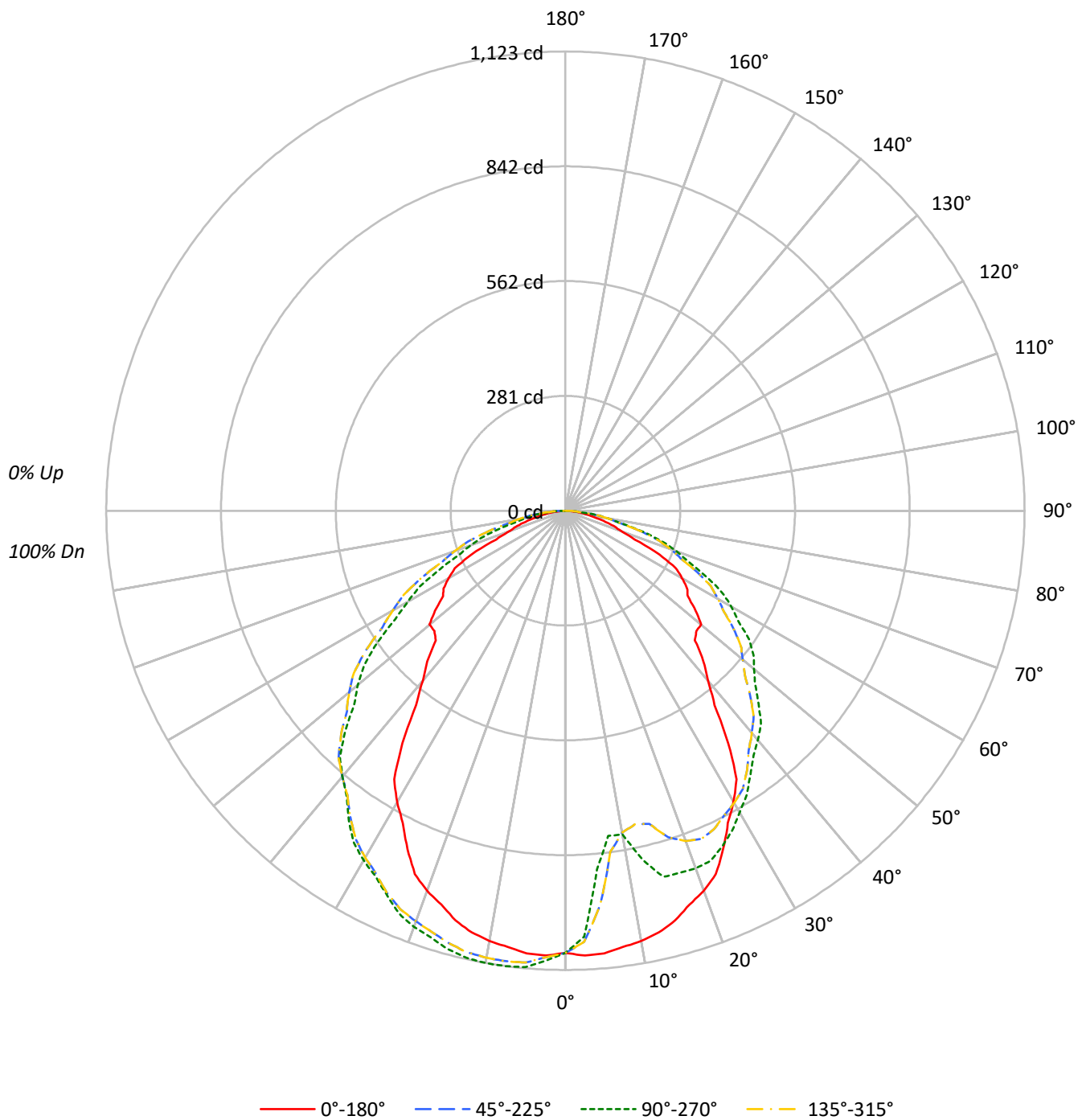
Lumens per Lamp: N/A
Luminaire Lumens: 2802.0 lumens
Efficiency: N/A
Efficacy: 85.4 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER:

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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
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°	9976	9976	9976	9976
5°	10062	8157	10062	10375
10°	10006	7523	10006	10523
15°	9908	8852	9908	10601
20°	9712	9140	9712	10636
25°	9299	9227	9299	10539
30°	8763	9078	8763	10517
35°	7823	8883	7823	10404
40°	6530	8822	6530	10213
45°	5847	8716	5847	9931
50°	6225	8634	6225	9515
55°	5874	8820	5874	9034
60°	6078	8645	6078	8211
65°	5539	8263	5539	7392
70°	3863	7755	3863	6596
75°	3429	6855	3429	5725
80°	2827	5329	2827	4893
85°	1736	3684	1736	4330

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 10145 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.5	3.5
10°-20°	277.0	9.9
20°-30°	428.1	15.3
30°-40°	511.5	18.3
40°-50°	514.8	18.4
50°-60°	446.9	15.9
60°-70°	316.4	11.3
70°-80°	167.3	6.0
80°-90°	42.6	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°	802.6	28.6
0°-40°	1314.0	46.9
0°-60°	2275.7	81.2
0°-90°	2802.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2802.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1081	1081	1081	1081	1081	
5°	1086	881	1086	1120	1086	103
15°	1037	927	1037	1110	1037	292
25°	914	906	914	1035	914	419
35°	695	789	695	924	695	429
45°	448	668	448	761	448	361
55°	365	548	365	562	365	336
65°	254	378	254	339	254	241
75°	96	192	96	161	96	101
85°	16	35	16	41	16	23
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°	1081.3	1081.3	1081.3	1081.3	1081.3	1081.3	1081.3	1081.3	1081.3	1081.3	1081.3
2.5°	1088.6	1080.5	1077.2	1070.6	1058.4	1051.8	1056.7	1048.5	1051.8	1042.8	1051.8
5°	1086.4	1068.0	1052.6	1027.1	990.2	947.3	937.0	910.4	894.1	880.8	894.1
7.5°	1076.2	1044.7	997.8	919.7	856.8	826.2	818.6	811.0	809.0	802.2	809.0
10°	1068.0	1025.0	938.1	850.1	806.1	791.8	794.9	797.9	804.1	803.0	804.1
12.5°	1056.5	990.6	875.9	814.9	785.6	785.2	807.9	848.7	876.9	875.1	876.9
15°	1037.3	924.8	817.4	778.5	769.3	816.3	899.2	918.6	925.8	926.8	925.8
17.5°	1009.7	860.3	779.9	754.3	785.6	887.9	913.1	921.9	928.0	928.5	928.0
20°	989.2	827.6	761.1	743.7	826.6	892.0	907.4	918.6	928.9	930.9	928.9
22.5°	961.4	804.7	741.5	736.3	849.5	887.9	901.7	918.6	927.2	926.8	927.2
25°	913.5	776.4	717.1	728.4	852.1	866.5	893.1	904.3	905.3	906.4	905.3
27.5°	860.9	751.7	688.7	733.7	835.6	845.8	874.4	880.2	884.1	882.4	884.1
30°	822.5	734.5	669.0	734.5	822.5	828.6	857.3	861.3	856.2	852.1	856.2
32.5°	779.1	713.2	650.2	728.8	802.8	811.4	834.3	832.7	827.6	824.3	827.6
35°	694.6	677.2	615.8	709.9	769.3	780.5	793.8	792.8	791.8	788.7	791.8
37.5°	599.5	634.7	581.9	680.7	737.0	736.1	756.0	760.3	759.3	755.4	759.3
40°	542.2	599.5	560.6	657.8	714.0	705.9	731.4	736.5	735.5	732.5	735.5
42.5°	499.6	552.8	536.0	629.9	686.2	676.4	707.7	712.8	710.1	707.9	710.1
45°	448.1	457.3	498.2	585.1	639.4	638.3	672.1	677.2	671.1	668.0	671.1
47.5°	434.6	368.7	456.9	533.2	592.9	596.8	633.0	637.5	632.0	629.3	632.0
50°	433.7	325.3	426.6	493.1	562.6	569.8	607.6	609.7	602.5	601.5	602.5
52.5°	401.8	300.8	391.4	457.9	536.4	545.2	579.8	579.4	578.8	580.2	578.8
55°	365.2	271.1	330.4	406.1	496.1	507.4	538.1	539.1	546.3	548.3	546.3
57.5°	353.1	237.5	274.0	361.3	455.6	464.4	493.3	495.7	500.6	500.4	500.6
60°	329.4	213.8	240.4	333.5	424.5	435.8	461.4	465.5	469.5	468.5	469.5
62.5°	304.8	197.4	224.0	310.6	395.1	407.1	424.5	431.9	433.5	431.7	433.5
65°	253.7	176.0	198.5	274.2	349.9	363.2	374.4	379.5	380.5	378.5	380.5
67.5°	183.3	156.1	178.4	238.1	297.9	312.8	319.4	322.4	321.4	325.1	321.4
70°	143.2	142.2	163.7	212.8	266.0	279.3	283.4	286.4	285.4	287.5	285.4
72.5°	123.6	130.7	148.1	186.6	230.0	243.3	245.7	246.3	249.4	247.4	249.4
75°	96.2	111.5	122.8	147.3	180.0	189.3	190.3	191.3	189.3	192.3	189.3
77.5°	67.1	84.9	94.9	109.0	131.1	136.9	136.7	137.3	135.6	135.4	135.6
80°	53.2	64.4	73.7	82.9	99.2	103.3	102.3	101.3	101.3	100.3	101.3
82.5°	39.3	45.6	54.0	60.8	71.4	72.2	73.7	71.8	71.8	73.2	71.8
85°	16.4	21.5	27.6	30.7	34.8	35.8	33.8	36.8	34.8	34.8	34.8
87.5°	4.1	6.5	9.8	11.5	12.3	11.5	11.5	9.8	9.8	9.8	9.8
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°	1081.3	1081.3	1081.3	1081.3	1081.3	1081.3	1081.3	1081.3	1081.3	1081.3	1081.3
2.5°	1048.5	1056.7	1051.8	1058.4	1070.6	1077.2	1080.5	1088.6	1088.6	1093.6	1095.2
5°	910.4	937.0	947.3	990.2	1027.1	1052.6	1068.0	1086.4	1094.6	1105.8	1109.9
7.5°	811.0	818.6	826.2	856.8	919.7	997.8	1044.7	1076.2	1092.7	1107.5	1113.4
10°	797.9	794.9	791.8	806.1	850.1	938.1	1025.0	1068.0	1089.5	1105.8	1111.0
12.5°	848.7	807.9	785.2	785.6	814.9	875.9	990.6	1056.5	1084.6	1100.1	1106.0
15°	918.6	899.2	816.3	769.3	778.5	817.4	924.8	1037.3	1072.1	1086.4	1095.6
17.5°	921.9	913.1	887.9	785.6	754.3	779.9	860.3	1009.7	1053.9	1070.9	1079.0
20°	918.6	907.4	892.0	826.6	743.7	761.1	827.6	989.2	1038.3	1057.8	1065.9
22.5°	918.6	901.7	887.9	849.5	736.3	741.5	804.7	961.4	1022.0	1042.2	1050.4
25°	904.3	893.1	866.5	852.1	728.4	717.1	776.4	913.5	995.4	1012.7	1025.0
27.5°	880.2	874.4	845.8	835.6	733.7	688.7	751.7	860.9	958.7	983.5	996.8
30°	861.3	857.3	828.6	822.5	734.5	669.0	734.5	822.5	926.8	960.6	978.0
32.5°	832.7	834.3	811.4	802.8	728.8	650.2	713.2	779.1	879.3	936.8	957.5
35°	792.8	793.8	780.5	769.3	709.9	615.8	677.2	694.6	821.4	903.3	920.7
37.5°	760.3	756.0	736.1	737.0	680.7	581.9	634.7	599.5	769.1	867.9	880.6
40°	736.5	731.4	705.9	714.0	657.8	560.6	599.5	542.2	719.2	840.9	851.1
42.5°	712.8	707.7	676.4	686.2	629.9	536.0	552.8	499.6	664.3	812.2	815.1
45°	677.2	672.1	638.3	639.4	585.1	498.2	457.3	448.1	632.2	766.2	766.2
47.5°	637.5	633.0	596.8	592.9	533.2	456.9	368.7	434.6	587.2	716.7	716.3
50°	609.7	607.6	569.8	562.6	493.1	426.6	325.3	433.7	554.5	674.1	684.4
52.5°	579.4	579.8	545.2	536.4	457.9	391.4	300.8	401.8	514.4	619.3	651.6
55°	539.1	538.1	507.4	496.1	406.1	330.4	271.1	365.2	452.2	543.2	597.4
57.5°	495.7	493.3	464.4	455.6	361.3	274.0	237.5	353.1	355.6	473.6	542.8
60°	465.5	461.4	435.8	424.5	333.5	240.4	213.8	329.4	272.1	424.5	500.2
62.5°	431.9	424.5	407.1	395.1	310.6	224.0	197.4	304.8	212.4	368.9	459.3
65°	379.5	374.4	363.2	349.9	274.2	198.5	176.0	253.7	165.7	252.7	399.0
67.5°	322.4	319.4	312.8	297.9	238.1	178.4	156.1	183.3	126.0	160.4	341.5
70°	286.4	283.4	279.3	266.0	212.8	163.7	142.2	143.2	90.0	118.7	303.8
72.5°	246.3	245.7	243.3	230.0	186.6	148.1	130.7	123.6	76.1	93.3	265.4
75°	191.3	190.3	189.3	180.0	147.3	122.8	111.5	96.2	76.7	66.5	207.7
77.5°	137.3	136.7	136.9	131.1	109.0	94.9	84.9	67.1	68.5	50.5	155.5
80°	101.3	102.3	103.3	99.2	82.9	73.7	64.4	53.2	56.3	39.9	118.7
82.5°	71.8	73.7	72.2	71.4	60.8	54.0	45.6	39.3	39.9	31.7	88.4
85°	36.8	33.8	35.8	34.8	30.7	27.6	21.5	16.4	20.5	18.4	44.0
87.5°	9.8	11.5	11.5	12.3	11.5	9.8	6.5	4.1	7.4	9.0	18.0
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°	1081.3	1081.3	1081.3	1081.3	1081.3	1081.3	1081.3	1081.3	1081.3	1081.3	1081.3
2.5°	1092.7	1092.7	1100.1	1101.7	1103.4	1100.9	1103.4	1101.7	1100.1	1092.7	1092.7
5°	1108.9	1108.9	1119.1	1122.2	1122.2	1120.2	1122.2	1122.2	1119.1	1108.9	1108.9
7.5°	1110.3	1112.0	1122.2	1124.5	1126.3	1123.2	1126.3	1124.5	1122.2	1112.0	1110.3
10°	1107.9	1112.0	1122.2	1125.3	1126.3	1123.2	1126.3	1125.3	1122.2	1112.0	1107.9
12.5°	1104.6	1107.9	1118.1	1120.4	1122.2	1120.0	1122.2	1120.4	1118.1	1107.9	1104.6
15°	1093.6	1097.7	1108.9	1111.0	1113.0	1109.9	1113.0	1111.0	1108.9	1097.7	1093.6
17.5°	1078.2	1083.3	1093.6	1096.8	1097.9	1094.0	1097.9	1096.8	1093.6	1083.3	1078.2
20°	1065.9	1071.1	1081.3	1085.4	1086.4	1083.3	1086.4	1085.4	1081.3	1071.1	1065.9
22.5°	1050.4	1058.8	1068.2	1069.8	1068.4	1065.3	1068.4	1069.8	1068.2	1058.8	1050.4
25°	1028.1	1035.3	1038.3	1038.3	1038.3	1035.3	1038.3	1038.3	1038.3	1035.3	1028.1
27.5°	999.7	1003.3	1005.2	1006.8	1008.9	1006.8	1008.9	1006.8	1005.2	1003.3	999.7
30°	980.0	978.0	983.1	987.2	989.2	987.2	989.2	987.2	983.1	978.0	980.0
32.5°	953.0	954.2	961.8	964.3	964.7	962.6	964.7	964.3	961.8	954.2	953.0
35°	913.5	918.6	923.7	925.8	926.8	923.7	926.8	925.8	923.7	918.6	913.5
37.5°	871.8	880.8	884.5	882.2	882.4	879.1	882.4	882.2	884.5	880.8	871.8
40°	844.0	852.1	854.2	851.1	852.1	848.0	852.1	851.1	854.2	852.1	844.0
42.5°	817.8	824.3	822.3	818.4	817.8	816.1	817.8	818.4	822.3	824.3	817.8
45°	774.4	777.5	768.3	765.2	763.1	761.1	763.1	765.2	768.3	777.5	774.4
47.5°	726.9	722.8	714.0	709.3	703.6	699.7	703.6	709.3	714.0	722.8	726.9
50°	696.6	684.4	677.2	666.0	661.9	662.9	661.9	666.0	677.2	684.4	696.6
52.5°	659.8	645.1	633.8	624.2	620.9	620.3	620.9	624.2	633.8	645.1	659.8
55°	606.6	584.1	565.7	560.6	559.6	561.6	559.6	560.6	565.7	584.1	606.6
57.5°	541.4	519.3	504.1	500.0	496.6	493.3	496.6	500.0	504.1	519.3	541.4
60°	497.2	476.7	462.4	458.3	449.1	445.0	449.1	458.3	462.4	476.7	497.2
62.5°	457.9	433.3	422.3	414.1	407.3	400.8	407.3	414.1	422.3	433.3	457.9
65°	401.0	372.4	361.1	353.9	341.7	338.6	341.7	353.9	361.1	372.4	401.0
67.5°	338.8	313.8	299.7	290.1	282.3	282.1	282.3	290.1	299.7	313.8	338.8
70°	298.7	276.2	262.9	251.7	245.5	244.5	245.5	251.7	262.9	276.2	298.7
72.5°	259.4	237.7	226.1	215.6	210.3	209.3	210.3	215.6	226.1	237.7	259.4
75°	203.6	183.1	173.9	166.7	162.7	160.6	162.7	166.7	173.9	183.1	203.6
77.5°	150.6	134.0	129.3	121.9	118.5	118.3	118.5	121.9	129.3	134.0	150.6
80°	118.7	105.4	98.2	94.1	93.1	92.1	93.1	94.1	98.2	105.4	118.7
82.5°	85.9	78.4	73.7	71.2	71.0	69.2	71.0	71.2	73.7	78.4	85.9
85°	46.0	44.0	43.0	41.9	40.9	40.9	40.9	41.9	43.0	44.0	46.0
87.5°	18.8	19.6	19.6	20.5	21.3	20.5	21.3	20.5	19.6	19.6	18.8
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-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	1081.3	1081.3	1081.3	1081.3
2.5°	1095.2	1093.6	1088.6	1088.6
5°	1109.9	1105.8	1094.6	1086.4
7.5°	1113.4	1107.5	1092.7	1076.2
10°	1111.0	1105.8	1089.5	1068.0
12.5°	1106.0	1100.1	1084.6	1056.5
15°	1095.6	1086.4	1072.1	1037.3
17.5°	1079.0	1070.9	1053.9	1009.7
20°	1065.9	1057.8	1038.3	989.2
22.5°	1050.4	1042.2	1022.0	961.4
25°	1025.0	1012.7	995.4	913.5
27.5°	996.8	983.5	958.7	860.9
30°	978.0	960.6	926.8	822.5
32.5°	957.5	936.8	879.3	779.1
35°	920.7	903.3	821.4	694.6
37.5°	880.6	867.9	769.1	599.5
40°	851.1	840.9	719.2	542.2
42.5°	815.1	812.2	664.3	499.6
45°	766.2	766.2	632.2	448.1
47.5°	716.3	716.7	587.2	434.6
50°	684.4	674.1	554.5	433.7
52.5°	651.6	619.3	514.4	401.8
55°	597.4	543.2	452.2	365.2
57.5°	542.8	473.6	355.6	353.1
60°	500.2	424.5	272.1	329.4
62.5°	459.3	368.9	212.4	304.8
65°	399.0	252.7	165.7	253.7
67.5°	341.5	160.4	126.0	183.3
70°	303.8	118.7	90.0	143.2
72.5°	265.4	93.3	76.1	123.6
75°	207.7	66.5	76.7	96.2
77.5°	155.5	50.5	68.5	67.1
80°	118.7	39.9	56.3	53.2
82.5°	88.4	31.7	39.9	39.3
85°	44.0	18.4	20.5	16.4
87.5°	18.0	9.0	7.4	4.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)