

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-835-1D-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-075D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

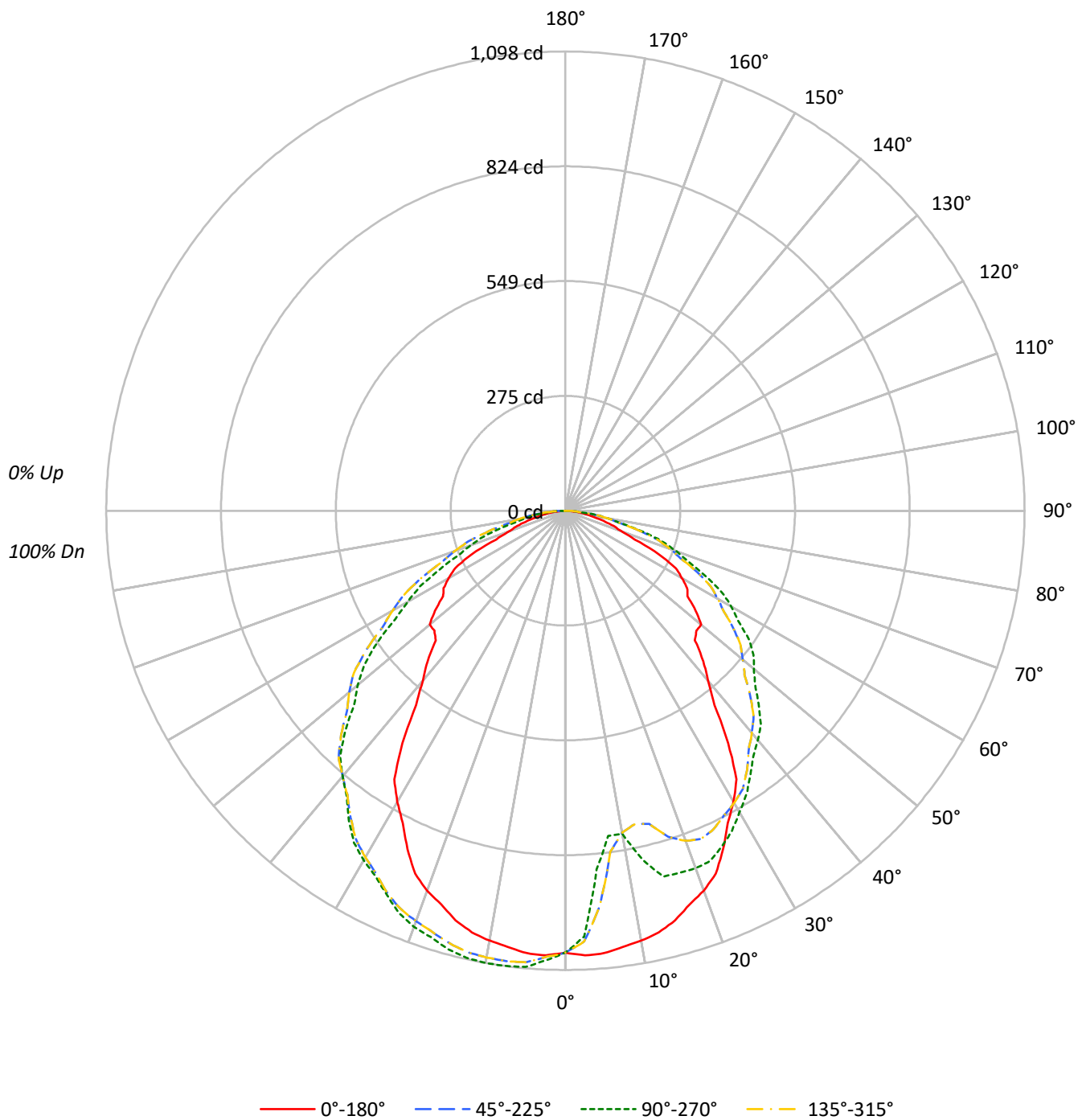
Lumens per Lamp: N/A
Luminaire Lumens: 2738.5 lumens
Efficiency: N/A
Efficacy: 114.1 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 24
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



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	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°	9750	9750	9750	9750
5°	9834	7972	9834	10139
10°	9779	7352	9779	10285
15°	9683	8652	9683	10362
20°	9492	8933	9492	10396
25°	9089	9017	9089	10300
30°	8563	8872	8563	10278
35°	7647	8682	7647	10168
40°	6382	8622	6382	9982
45°	5714	8519	5714	9705
50°	6084	8438	6084	9300
55°	5741	8620	5741	8829
60°	5940	8449	5940	8025
65°	5412	8075	5412	7224
70°	3777	7577	3777	6447
75°	3351	6702	3351	5597
80°	2763	5207	2763	4782
85°	1694	3599	1694	4234

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 9914 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.3	3.5
10°-20°	270.7	9.9
20°-30°	418.4	15.3
30°-40°	499.9	18.3
40°-50°	503.1	18.4
50°-60°	436.8	16.0
60°-70°	309.2	11.3
70°-80°	163.6	6.0
80°-90°	41.6	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°	784.4	28.6
0°-40°	1284.3	46.9
0°-60°	2224.2	81.2
0°-90°	2738.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2738.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1057	1057	1057	1057	1057	
5°	1062	861	1062	1095	1062	101
15°	1014	906	1014	1085	1014	285
25°	893	886	893	1012	893	409
35°	679	771	679	903	679	419
45°	438	653	438	744	438	353
55°	357	536	357	549	357	328
65°	248	370	248	331	248	236
75°	94	188	94	157	94	99
85°	16	34	16	40	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°	1056.8	1056.8	1056.8	1056.8	1056.8	1056.8	1056.8	1056.8	1056.8	1056.8	1056.8
2.5°	1064.0	1056.0	1052.8	1046.4	1034.4	1028.0	1032.8	1024.8	1028.0	1019.2	1028.0
5°	1061.8	1043.8	1028.8	1003.8	967.8	925.8	915.8	889.8	873.8	860.8	873.8
7.5°	1051.8	1021.0	975.2	898.8	837.4	807.4	800.0	792.6	790.6	784.0	790.6
10°	1043.8	1001.8	916.8	830.8	787.8	773.8	776.8	779.8	785.8	784.8	785.8
12.5°	1032.6	968.2	856.0	796.4	767.8	767.4	789.6	829.4	857.0	855.2	857.0
15°	1013.8	903.8	798.8	760.8	751.8	797.8	878.8	897.8	904.8	905.8	904.8
17.5°	986.8	840.8	762.2	737.2	767.8	867.8	892.4	901.0	907.0	907.4	907.0
20°	966.8	808.8	743.8	726.8	807.8	871.8	886.8	897.8	907.8	909.8	907.8
22.5°	939.6	786.4	724.6	719.6	830.2	867.8	881.2	897.8	906.2	905.8	906.2
25°	892.8	758.8	700.9	711.9	832.8	846.8	872.8	883.8	884.8	885.8	884.8
27.5°	841.4	734.6	673.1	717.1	816.6	826.6	854.6	860.2	864.0	862.4	864.0
30°	803.8	717.9	653.9	717.9	803.8	809.8	837.8	841.8	836.8	832.8	836.8
32.5°	761.4	697.1	635.5	712.3	784.6	793.0	815.4	813.8	808.8	805.6	808.8
35°	678.9	661.9	601.9	693.9	751.8	762.8	775.8	774.8	773.8	770.8	773.8
37.5°	585.9	620.3	568.7	665.3	720.2	719.4	738.8	743.0	742.0	738.2	742.0
40°	529.9	585.9	547.9	642.9	697.9	689.9	714.9	719.8	718.8	715.9	718.8
42.5°	488.3	540.3	523.9	615.7	670.7	661.1	691.7	696.7	694.1	691.9	694.1
45°	437.9	446.9	486.9	571.9	624.9	623.9	656.9	661.9	655.9	652.9	655.9
47.5°	424.7	360.3	446.5	521.1	579.5	583.3	618.7	623.1	617.7	615.1	617.7
50°	423.9	317.9	416.9	481.9	549.9	556.9	593.9	595.9	588.9	587.9	588.9
52.5°	392.7	293.9	382.5	447.5	524.3	532.9	566.7	566.3	565.7	567.1	565.7
55°	356.9	264.9	322.9	396.9	484.9	495.9	525.9	526.9	533.9	535.9	533.9
57.5°	345.1	232.2	267.7	353.1	445.3	453.9	482.1	484.5	489.3	489.1	489.3
60°	321.9	209.0	235.0	325.9	414.9	425.9	450.9	454.9	458.9	457.9	458.9
62.5°	297.9	193.0	219.0	303.5	386.1	397.9	414.9	422.1	423.7	421.9	423.7
65°	247.9	172.0	194.0	267.9	341.9	354.9	365.9	370.9	371.9	369.9	371.9
67.5°	179.2	152.6	174.4	232.8	291.1	305.7	312.1	315.1	314.1	317.7	314.1
70°	140.0	139.0	160.0	208.0	259.9	272.9	276.9	279.9	278.9	280.9	278.9
72.5°	120.8	127.8	144.8	182.4	224.8	237.8	240.1	240.7	243.7	241.7	243.7
75°	94.0	109.0	120.0	144.0	176.0	185.0	186.0	187.0	185.0	188.0	185.0
77.5°	65.6	83.0	92.8	106.6	128.2	133.8	133.6	134.2	132.6	132.4	132.6
80°	52.0	63.0	72.0	81.0	97.0	101.0	100.0	99.0	99.0	98.0	99.0
82.5°	38.4	44.6	52.8	59.4	69.8	70.6	72.0	70.2	70.2	71.6	70.2
85°	16.0	21.0	27.0	30.0	34.0	35.0	33.0	36.0	34.0	34.0	34.0
87.5°	4.0	6.4	9.6	11.2	12.0	11.2	11.2	9.6	9.6	9.6	9.6
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):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	1056.8	1056.8	1056.8	1056.8	1056.8	1056.8	1056.8	1056.8	1056.8	1056.8	1056.8
2.5°	1024.8	1032.8	1028.0	1034.4	1046.4	1052.8	1056.0	1064.0	1064.0	1068.8	1070.4
5°	889.8	915.8	925.8	967.8	1003.8	1028.8	1043.8	1061.8	1069.8	1080.8	1084.8
7.5°	792.6	800.0	807.4	837.4	898.8	975.2	1021.0	1051.8	1068.0	1082.4	1088.2
10°	779.8	776.8	773.8	787.8	830.8	916.8	1001.8	1043.8	1064.8	1080.8	1085.8
12.5°	829.4	789.6	767.4	767.8	796.4	856.0	968.2	1032.6	1060.0	1075.2	1081.0
15°	897.8	878.8	797.8	751.8	760.8	798.8	903.8	1013.8	1047.8	1061.8	1070.8
17.5°	901.0	892.4	867.8	767.8	737.2	762.2	840.8	986.8	1030.0	1046.6	1054.6
20°	897.8	886.8	871.8	807.8	726.8	743.8	808.8	966.8	1014.8	1033.8	1041.8
22.5°	897.8	881.2	867.8	830.2	719.6	724.6	786.4	939.6	998.8	1018.6	1026.6
25°	883.8	872.8	846.8	832.8	711.9	700.9	758.8	892.8	972.8	989.8	1001.8
27.5°	860.2	854.6	826.6	816.6	717.1	673.1	734.6	841.4	937.0	961.2	974.2
30°	841.8	837.8	809.8	803.8	717.9	653.9	717.9	803.8	905.8	938.8	955.8
32.5°	813.8	815.4	793.0	784.6	712.3	635.5	697.1	761.4	859.4	915.6	935.8
35°	774.8	775.8	762.8	751.8	693.9	601.9	661.9	678.9	802.8	882.8	899.8
37.5°	743.0	738.8	719.4	720.2	665.3	568.7	620.3	585.9	751.6	848.2	860.6
40°	719.8	714.9	689.9	697.9	642.9	547.9	585.9	529.9	702.9	821.8	831.8
42.5°	696.7	691.7	661.1	670.7	615.7	523.9	540.3	488.3	649.3	793.8	796.6
45°	661.9	656.9	623.9	624.9	571.9	486.9	446.9	437.9	617.9	748.8	748.8
47.5°	623.1	618.7	583.3	579.5	521.1	446.5	360.3	424.7	573.9	700.5	700.1
50°	595.9	593.9	556.9	549.9	481.9	416.9	317.9	423.9	541.9	658.9	668.9
52.5°	566.3	566.7	532.9	524.3	447.5	382.5	293.9	392.7	502.7	605.3	636.9
55°	526.9	525.9	495.9	484.9	396.9	322.9	264.9	356.9	441.9	530.9	583.9
57.5°	484.5	482.1	453.9	445.3	353.1	267.7	232.2	345.1	347.5	462.9	530.5
60°	454.9	450.9	425.9	414.9	325.9	235.0	209.0	321.9	265.9	414.9	488.9
62.5°	422.1	414.9	397.9	386.1	303.5	219.0	193.0	297.9	207.6	360.5	448.9
65°	370.9	365.9	354.9	341.9	267.9	194.0	172.0	247.9	162.0	246.9	389.9
67.5°	315.1	312.1	305.7	291.1	232.8	174.4	152.6	179.2	123.2	156.8	333.7
70°	279.9	276.9	272.9	259.9	208.0	160.0	139.0	140.0	88.0	116.0	296.9
72.5°	240.7	240.1	237.8	224.8	182.4	144.8	127.8	120.8	74.4	91.2	259.3
75°	187.0	186.0	185.0	176.0	144.0	120.0	109.0	94.0	75.0	65.0	203.0
77.5°	134.2	133.6	133.8	128.2	106.6	92.8	83.0	65.6	67.0	49.4	152.0
80°	99.0	100.0	101.0	97.0	81.0	72.0	63.0	52.0	55.0	39.0	116.0
82.5°	70.2	72.0	70.6	69.8	59.4	52.8	44.6	38.4	39.0	31.0	86.4
85°	36.0	33.0	35.0	34.0	30.0	27.0	21.0	16.0	20.0	18.0	43.0
87.5°	9.6	11.2	11.2	12.0	11.2	9.6	6.4	4.0	7.2	8.8	17.6
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°	1056.8	1056.8	1056.8	1056.8	1056.8	1056.8	1056.8	1056.8	1056.8	1056.8	1056.8
2.5°	1068.0	1068.0	1075.2	1076.8	1078.4	1076.0	1078.4	1076.8	1075.2	1068.0	1068.0
5°	1083.8	1083.8	1093.8	1096.8	1096.8	1094.8	1096.8	1096.8	1093.8	1083.8	1083.8
7.5°	1085.2	1086.8	1096.8	1099.0	1100.8	1097.8	1100.8	1099.0	1096.8	1086.8	1085.2
10°	1082.8	1086.8	1096.8	1099.8	1100.8	1097.8	1100.8	1099.8	1096.8	1086.8	1082.8
12.5°	1079.6	1082.8	1092.8	1095.0	1096.8	1094.6	1096.8	1095.0	1092.8	1082.8	1079.6
15°	1068.8	1072.8	1083.8	1085.8	1087.8	1084.8	1087.8	1085.8	1083.8	1072.8	1068.8
17.5°	1053.8	1058.8	1068.8	1072.0	1073.0	1069.2	1073.0	1072.0	1068.8	1058.8	1053.8
20°	1041.8	1046.8	1056.8	1060.8	1061.8	1058.8	1061.8	1060.8	1056.8	1046.8	1041.8
22.5°	1026.6	1034.8	1044.0	1045.6	1044.2	1041.2	1044.2	1045.6	1044.0	1034.8	1026.6
25°	1004.8	1011.8	1014.8	1014.8	1014.8	1011.8	1014.8	1014.8	1014.8	1011.8	1004.8
27.5°	977.0	980.6	982.4	984.0	986.0	984.0	986.0	984.0	982.4	980.6	977.0
30°	957.8	955.8	960.8	964.8	966.8	964.8	966.8	964.8	960.8	955.8	957.8
32.5°	931.4	932.6	940.0	942.4	942.8	940.8	942.8	942.4	940.0	932.6	931.4
35°	892.8	897.8	902.8	904.8	905.8	902.8	905.8	904.8	902.8	897.8	892.8
37.5°	852.0	860.8	864.4	862.2	862.4	859.2	862.4	862.2	864.4	860.8	852.0
40°	824.8	832.8	834.8	831.8	832.8	828.8	832.8	831.8	834.8	832.8	824.8
42.5°	799.2	805.6	803.6	799.8	799.2	797.6	799.2	799.8	803.6	805.6	799.2
45°	756.8	759.8	750.8	747.8	745.8	743.8	745.8	747.8	750.8	759.8	756.8
47.5°	710.5	706.5	697.9	693.3	687.7	683.9	687.7	693.3	697.9	706.5	710.5
50°	680.9	668.9	661.9	650.9	646.9	647.9	646.9	650.9	661.9	668.9	680.9
52.5°	644.9	630.5	619.5	610.1	606.9	606.3	606.9	610.1	619.5	630.5	644.9
55°	592.9	570.9	552.9	547.9	546.9	548.9	546.9	547.9	552.9	570.9	592.9
57.5°	529.1	507.5	492.7	488.7	485.3	482.1	485.3	488.7	492.7	507.5	529.1
60°	485.9	465.9	451.9	447.9	438.9	434.9	438.9	447.9	451.9	465.9	485.9
62.5°	447.5	423.5	412.7	404.7	398.1	391.7	398.1	404.7	412.7	423.5	447.5
65°	391.9	363.9	352.9	345.9	333.9	330.9	333.9	345.9	352.9	363.9	391.9
67.5°	331.1	306.7	292.9	283.5	275.9	275.7	275.9	283.5	292.9	306.7	331.1
70°	291.9	269.9	256.9	245.9	239.9	239.0	239.9	245.9	256.9	269.9	291.9
72.5°	253.5	232.4	221.0	210.8	205.6	204.6	205.6	210.8	221.0	232.4	253.5
75°	199.0	179.0	170.0	163.0	159.0	157.0	159.0	163.0	170.0	179.0	199.0
77.5°	147.2	131.0	126.4	119.2	115.8	115.6	115.8	119.2	126.4	131.0	147.2
80°	116.0	103.0	96.0	92.0	91.0	90.0	91.0	92.0	96.0	103.0	116.0
82.5°	84.0	76.6	72.0	69.6	69.4	67.6	69.4	69.6	72.0	76.6	84.0
85°	45.0	43.0	42.0	41.0	40.0	40.0	40.0	41.0	42.0	43.0	45.0
87.5°	18.4	19.2	19.2	20.0	20.8	20.0	20.8	20.0	19.2	19.2	18.4
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-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	1056.8	1056.8	1056.8	1056.8
2.5°	1070.4	1068.8	1064.0	1064.0
5°	1084.8	1080.8	1069.8	1061.8
7.5°	1088.2	1082.4	1068.0	1051.8
10°	1085.8	1080.8	1064.8	1043.8
12.5°	1081.0	1075.2	1060.0	1032.6
15°	1070.8	1061.8	1047.8	1013.8
17.5°	1054.6	1046.6	1030.0	986.8
20°	1041.8	1033.8	1014.8	966.8
22.5°	1026.6	1018.6	998.8	939.6
25°	1001.8	989.8	972.8	892.8
27.5°	974.2	961.2	937.0	841.4
30°	955.8	938.8	905.8	803.8
32.5°	935.8	915.6	859.4	761.4
35°	899.8	882.8	802.8	678.9
37.5°	860.6	848.2	751.6	585.9
40°	831.8	821.8	702.9	529.9
42.5°	796.6	793.8	649.3	488.3
45°	748.8	748.8	617.9	437.9
47.5°	700.1	700.5	573.9	424.7
50°	668.9	658.9	541.9	423.9
52.5°	636.9	605.3	502.7	392.7
55°	583.9	530.9	441.9	356.9
57.5°	530.5	462.9	347.5	345.1
60°	488.9	414.9	265.9	321.9
62.5°	448.9	360.5	207.6	297.9
65°	389.9	246.9	162.0	247.9
67.5°	333.7	156.8	123.2	179.2
70°	296.9	116.0	88.0	140.0
72.5°	259.3	91.2	74.4	120.8
75°	203.0	65.0	75.0	94.0
77.5°	152.0	49.4	67.0	65.6
80°	116.0	39.0	55.0	52.0
82.5°	86.4	31.0	39.0	38.4
85°	43.0	18.0	20.0	16.0
87.5°	17.6	8.8	7.2	4.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)