

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-12

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-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

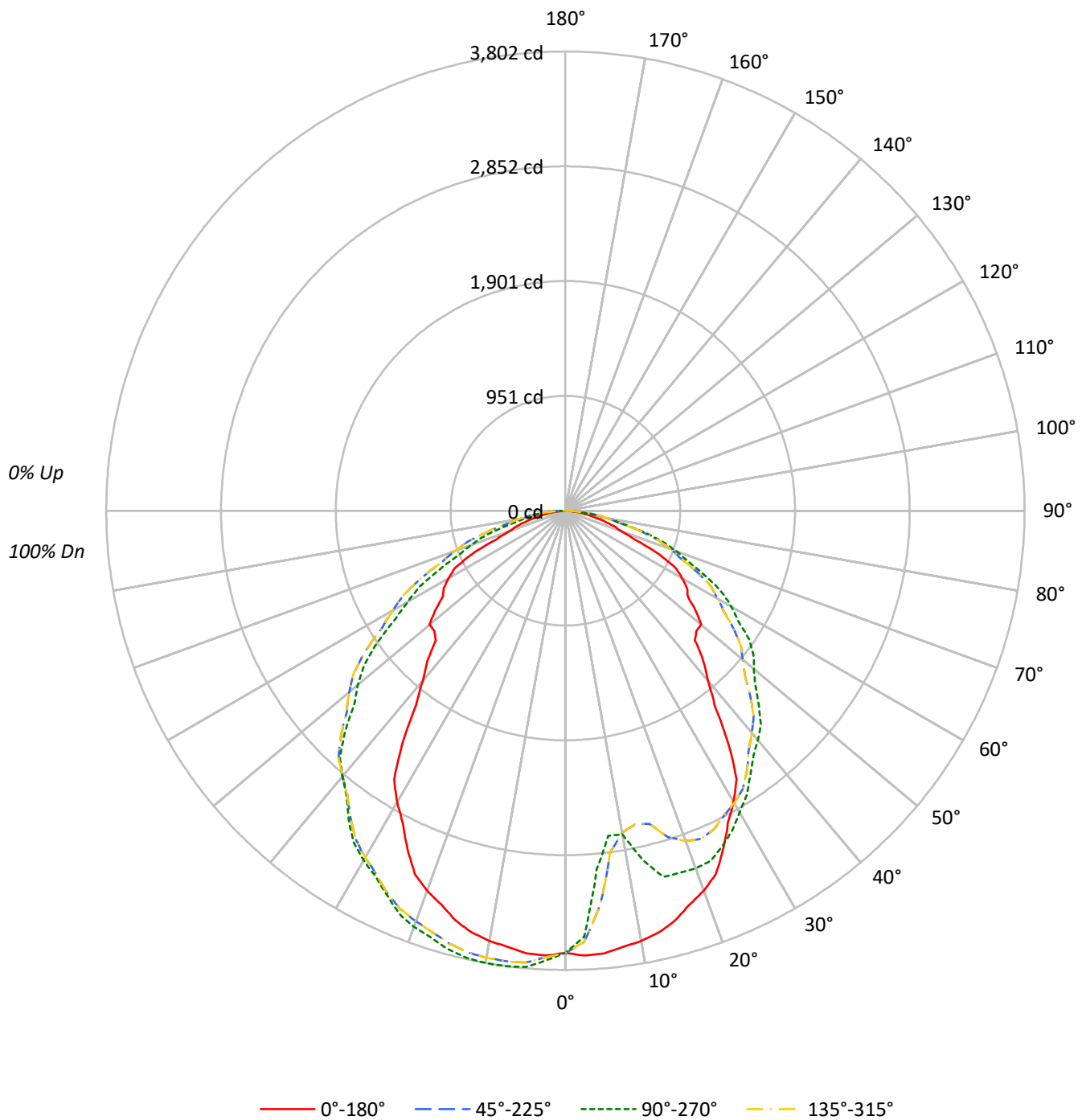
Lumens per Lamp: N/A
Luminaire Lumens: 9485.7 lumens
Efficiency: N/A
Efficacy: 87.7 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Direct

Input Watts (W): 108.2
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

TEST NUMBER:

CATALOG NUMBER: SQ4-FA-0U-100D-935-1D-UNV-STD-W-12

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	11707
10°	11291	8489	11291	11875
15°	11181	9990	11181	11963
20°	10960	10314	10960	12003
25°	10494	10412	10494	11892
30°	9888	10244	9888	11868
35°	8828	10024	8828	11741
40°	7368	9955	7368	11526
45°	6597	9835	6597	11206
50°	7025	9743	7025	10737
55°	6629	9953	6629	10194
60°	6859	9756	6859	9266
65°	6250	9324	6250	8342
70°	4359	8750	4359	7443
75°	3868	7737	3868	6460
80°	3190	6011	3190	5520
85°	1955	4153	1955	4887

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 11447 cd/sqm

TEST NUMBER:

CATALOG NUMBER: SQ4-FA-0U-100D-935-1D-UNV-STD-W-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	330.0	3.5
10°-20°	937.8	9.9
20°-30°	1449.2	15.3
30°-40°	1731.5	18.3
40°-50°	1742.7	18.4
50°-60°	1513.0	16.0
60°-70°	1071.0	11.3
70°-80°	566.5	6.0
80°-90°	144.1	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°	2717.0	28.6
0°-40°	4448.4	46.9
0°-60°	7704.1	81.2
0°-90°	9485.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9485.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	3660	3660	3660	3660	3660	
5°	3678	2982	3678	3792	3678	349
15°	3512	3138	3512	3757	3512	987
25°	3092	3068	3092	3505	3092	1418
35°	2351	2670	2351	3127	2351	1452
45°	1517	2261	1517	2576	1517	1222
55°	1236	1856	1236	1901	1236	1137
65°	859	1281	859	1146	859	817
75°	326	651	326	544	326	343
85°	55	118	55	138	55	79
90°	0	0	0	0	0	

TEST NUMBER:

CATALOG NUMBER: SQ4-FA-0U-100D-935-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	3660.5	3660.5	3660.5	3660.5	3660.5	3660.5	3660.5	3660.5	3660.5	3660.5	3660.5
2.5°	3685.4	3657.7	3646.6	3624.5	3582.9	3560.7	3577.4	3549.7	3560.7	3530.3	3560.7
5°	3677.8	3615.5	3563.5	3476.9	3352.3	3206.8	3172.2	3082.1	3026.7	2981.7	3026.7
7.5°	3643.2	3536.5	3377.9	3113.3	2900.7	2796.8	2771.2	2745.5	2738.6	2715.7	2738.6
10°	3615.5	3470.0	3175.6	2877.8	2728.9	2680.4	2690.8	2701.2	2722.0	2718.5	2722.0
12.5°	3576.7	3353.6	2965.1	2758.7	2659.6	2658.3	2735.1	2873.0	2968.6	2962.3	2968.6
15°	3511.6	3130.6	2767.0	2635.4	2604.2	2763.5	3044.0	3109.8	3134.1	3137.6	3134.1
17.5°	3418.1	2912.5	2640.3	2553.7	2659.6	3006.0	3091.1	3120.9	3141.7	3143.1	3141.7
20°	3348.8	2801.6	2576.5	2517.7	2798.2	3019.8	3071.8	3109.8	3144.5	3151.4	3144.5
22.5°	3254.6	2724.1	2510.0	2492.7	2875.7	3006.0	3052.4	3109.8	3138.9	3137.6	3138.9
25°	3092.5	2628.5	2427.6	2465.7	2884.7	2933.2	3023.3	3061.4	3064.8	3068.3	3064.8
27.5°	2914.5	2544.7	2331.3	2483.7	2828.6	2863.3	2960.2	2979.6	2992.8	2987.3	2992.8
30°	2784.3	2486.5	2264.9	2486.5	2784.3	2805.1	2902.1	2915.9	2898.6	2884.7	2898.6
32.5°	2637.5	2414.5	2201.1	2467.1	2717.8	2746.9	2824.5	2818.9	2801.6	2790.6	2801.6
35°	2351.4	2292.6	2084.8	2403.4	2604.2	2642.3	2687.4	2683.9	2680.4	2670.0	2680.4
37.5°	2029.4	2148.5	1969.8	2304.3	2494.8	2492.0	2559.2	2573.8	2570.3	2557.1	2570.3
40°	1835.4	2029.4	1897.8	2226.8	2417.2	2389.5	2476.1	2493.4	2490.0	2479.6	2490.0
42.5°	1691.4	1871.4	1814.7	2132.6	2323.0	2289.8	2395.8	2413.1	2404.1	2396.5	2404.1
45°	1516.8	1548.0	1686.5	1980.9	2164.4	2161.0	2275.2	2292.6	2271.8	2261.4	2271.8
47.5°	1471.1	1248.1	1546.6	1805.0	2007.2	2020.4	2143.0	2158.2	2139.5	2130.5	2139.5
50°	1468.3	1101.3	1444.1	1669.2	1904.7	1928.9	2057.1	2064.0	2039.8	2036.3	2039.8
52.5°	1360.3	1018.1	1325.0	1550.1	1816.0	1845.8	1962.9	1961.5	1959.4	1964.3	1959.4
55°	1236.3	917.7	1118.6	1374.8	1679.6	1717.7	1821.6	1825.0	1849.3	1856.2	1849.3
57.5°	1195.5	804.1	927.4	1223.2	1542.5	1572.2	1669.9	1678.2	1694.8	1694.1	1694.8
60°	1115.1	723.8	813.8	1129.0	1437.2	1475.3	1561.8	1575.7	1589.6	1586.1	1589.6
62.5°	1032.0	668.4	758.4	1051.4	1337.4	1378.3	1437.2	1462.1	1467.7	1461.4	1467.7
65°	858.8	595.6	671.8	928.1	1184.4	1229.4	1267.5	1284.8	1288.3	1281.3	1288.3
67.5°	620.6	528.5	604.0	806.2	1008.4	1059.0	1081.2	1091.6	1088.1	1100.6	1088.1
70°	484.8	481.4	554.1	720.3	900.4	945.4	959.3	969.7	966.2	973.1	966.2
72.5°	418.3	442.6	501.5	631.7	778.5	823.5	831.8	833.9	844.3	837.4	844.3
75°	325.5	377.5	415.6	498.7	609.5	640.7	644.1	647.6	640.7	651.1	640.7
77.5°	227.2	287.4	321.4	369.2	444.0	463.4	462.7	464.7	459.2	458.5	459.2
80°	180.1	218.2	249.3	280.5	335.9	349.8	346.3	342.8	342.8	339.4	342.8
82.5°	133.0	154.5	182.9	205.7	241.7	244.5	249.3	243.1	243.1	248.0	243.1
85°	55.4	72.7	93.5	103.9	117.7	121.2	114.3	124.7	117.7	117.7	117.7
87.5°	13.9	22.2	33.2	38.8	41.6	38.8	38.8	33.2	33.2	33.2	33.2
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-12

CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	3660.5	3660.5	3660.5	3660.5	3660.5	3660.5	3660.5	3660.5	3660.5	3660.5	3660.5
2.5°	3549.7	3577.4	3560.7	3582.9	3624.5	3646.6	3657.7	3685.4	3685.4	3702.0	3707.6
5°	3082.1	3172.2	3206.8	3352.3	3476.9	3563.5	3615.5	3677.8	3705.5	3743.6	3757.4
7.5°	2745.5	2771.2	2796.8	2900.7	3113.3	3377.9	3536.5	3643.2	3699.3	3749.1	3769.2
10°	2701.2	2690.8	2680.4	2728.9	2877.8	3175.6	3470.0	3615.5	3688.2	3743.6	3760.9
12.5°	2873.0	2735.1	2658.3	2659.6	2758.7	2965.1	3353.6	3576.7	3671.6	3724.2	3744.3
15°	3109.8	3044.0	2763.5	2604.2	2635.4	2767.0	3130.6	3511.6	3629.3	3677.8	3709.0
17.5°	3120.9	3091.1	3006.0	2659.6	2553.7	2640.3	2912.5	3418.1	3567.7	3625.2	3652.9
20°	3109.8	3071.8	3019.8	2798.2	2517.7	2576.5	2801.6	3348.8	3515.0	3580.8	3608.5
22.5°	3109.8	3052.4	3006.0	2875.7	2492.7	2510.0	2724.1	3254.6	3459.6	3528.2	3555.9
25°	3061.4	3023.3	2933.2	2884.7	2465.7	2427.6	2628.5	3092.5	3369.6	3428.4	3470.0
27.5°	2979.6	2960.2	2863.3	2828.6	2483.7	2331.3	2544.7	2914.5	3245.6	3329.4	3374.4
30°	2915.9	2902.1	2805.1	2784.3	2486.5	2264.9	2486.5	2784.3	3137.6	3251.8	3310.7
32.5°	2818.9	2824.5	2746.9	2717.8	2467.1	2201.1	2414.5	2637.5	2976.9	3171.5	3241.4
35°	2683.9	2687.4	2642.3	2604.2	2403.4	2084.8	2292.6	2351.4	2780.9	3057.9	3116.8
37.5°	2573.8	2559.2	2492.0	2494.8	2304.3	1969.8	2148.5	2029.4	2603.5	2938.1	2981.0
40°	2493.4	2476.1	2389.5	2417.2	2226.8	1897.8	2029.4	1835.4	2434.5	2846.7	2881.3
42.5°	2413.1	2395.8	2289.8	2323.0	2132.6	1814.7	1871.4	1691.4	2248.9	2749.7	2759.4
45°	2292.6	2275.2	2161.0	2164.4	1980.9	1686.5	1548.0	1516.8	2140.2	2593.8	2593.8
47.5°	2158.2	2143.0	2020.4	2007.2	1805.0	1546.6	1248.1	1471.1	1987.8	2426.2	2424.8
50°	2064.0	2057.1	1928.9	1904.7	1669.2	1444.1	1101.3	1468.3	1877.0	2282.2	2316.8
52.5°	1961.5	1962.9	1845.8	1816.0	1550.1	1325.0	1018.1	1360.3	1741.2	2096.5	2206.0
55°	1825.0	1821.6	1717.7	1679.6	1374.8	1118.6	917.7	1236.3	1530.7	1838.9	2022.4
57.5°	1678.2	1669.9	1572.2	1542.5	1223.2	927.4	804.1	1195.5	1203.8	1603.4	1837.5
60°	1575.7	1561.8	1475.3	1437.2	1129.0	813.8	723.8	1115.1	921.2	1437.2	1693.4
62.5°	1462.1	1437.2	1378.3	1337.4	1051.4	758.4	668.4	1032.0	718.9	1248.8	1554.9
65°	1284.8	1267.5	1229.4	1184.4	928.1	671.8	595.6	858.8	561.0	855.4	1350.6
67.5°	1091.6	1081.2	1059.0	1008.4	806.2	604.0	528.5	620.6	426.7	543.0	1156.0
70°	969.7	959.3	945.4	900.4	720.3	554.1	481.4	484.8	304.8	401.7	1028.5
72.5°	833.9	831.8	823.5	778.5	631.7	501.5	442.6	418.3	257.7	315.8	898.3
75°	647.6	644.1	640.7	609.5	498.7	415.6	377.5	325.5	259.7	225.1	703.0
77.5°	464.7	462.7	463.4	444.0	369.2	321.4	287.4	227.2	232.0	171.1	526.4
80°	342.8	346.3	349.8	335.9	280.5	249.3	218.2	180.1	190.5	135.1	401.7
82.5°	243.1	249.3	244.5	241.7	205.7	182.9	154.5	133.0	135.1	107.4	299.2
85°	124.7	114.3	121.2	117.7	103.9	93.5	72.7	55.4	69.3	62.3	148.9
87.5°	33.2	38.8	38.8	41.6	38.8	33.2	22.2	13.9	24.9	30.5	61.0
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-12

CANDELA DISTRIBUTION (continued):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	3660.5	3660.5	3660.5	3660.5	3660.5	3660.5	3660.5	3660.5	3660.5	3660.5	3660.5
2.5°	3699.3	3699.3	3724.2	3729.7	3735.3	3727.0	3735.3	3729.7	3724.2	3699.3	3699.3
5°	3754.0	3754.0	3788.6	3799.0	3799.0	3792.1	3799.0	3799.0	3788.6	3754.0	3754.0
7.5°	3758.8	3764.4	3799.0	3806.6	3812.9	3802.5	3812.9	3806.6	3799.0	3764.4	3758.8
10°	3750.5	3764.4	3799.0	3809.4	3812.9	3802.5	3812.9	3809.4	3799.0	3764.4	3750.5
12.5°	3739.4	3750.5	3785.1	3792.8	3799.0	3791.4	3799.0	3792.8	3785.1	3750.5	3739.4
15°	3702.0	3715.9	3754.0	3760.9	3767.8	3757.4	3767.8	3760.9	3754.0	3715.9	3702.0
17.5°	3650.1	3667.4	3702.0	3713.1	3716.6	3703.4	3716.6	3713.1	3702.0	3667.4	3650.1
20°	3608.5	3625.8	3660.5	3674.3	3677.8	3667.4	3677.8	3674.3	3660.5	3625.8	3608.5
22.5°	3555.9	3584.3	3616.1	3621.7	3616.8	3606.5	3616.8	3621.7	3616.1	3584.3	3555.9
25°	3480.4	3504.6	3515.0	3515.0	3515.0	3504.6	3515.0	3515.0	3515.0	3504.6	3480.4
27.5°	3384.1	3396.6	3402.8	3408.4	3415.3	3408.4	3415.3	3408.4	3402.8	3396.6	3384.1
30°	3317.6	3310.7	3328.0	3341.9	3348.8	3341.9	3348.8	3341.9	3328.0	3310.7	3317.6
32.5°	3226.2	3230.4	3256.0	3264.3	3265.7	3258.8	3265.7	3264.3	3256.0	3230.4	3226.2
35°	3092.5	3109.8	3127.2	3134.1	3137.6	3127.2	3137.6	3134.1	3127.2	3109.8	3092.5
37.5°	2951.2	2981.7	2994.2	2986.6	2987.3	2976.2	2987.3	2986.6	2994.2	2981.7	2951.2
40°	2857.0	2884.7	2891.7	2881.3	2884.7	2870.9	2884.7	2881.3	2891.7	2884.7	2857.0
42.5°	2768.4	2790.6	2783.6	2770.5	2768.4	2762.8	2768.4	2770.5	2783.6	2790.6	2768.4
45°	2621.6	2631.9	2600.8	2590.4	2583.5	2576.5	2583.5	2590.4	2600.8	2631.9	2621.6
47.5°	2460.9	2447.0	2417.2	2401.3	2381.9	2368.7	2381.9	2401.3	2417.2	2447.0	2460.9
50°	2358.4	2316.8	2292.6	2254.5	2240.6	2244.1	2240.6	2254.5	2292.6	2316.8	2358.4
52.5°	2233.7	2183.8	2145.7	2113.2	2102.1	2100.0	2102.1	2113.2	2145.7	2183.8	2233.7
55°	2053.6	1977.4	1915.1	1897.8	1894.3	1901.2	1894.3	1897.8	1915.1	1977.4	2053.6
57.5°	1832.7	1757.9	1706.6	1692.8	1681.0	1669.9	1681.0	1692.8	1706.6	1757.9	1832.7
60°	1683.1	1613.8	1565.3	1551.5	1520.3	1506.4	1520.3	1551.5	1565.3	1613.8	1683.1
62.5°	1550.1	1467.0	1429.6	1401.9	1379.0	1356.8	1379.0	1401.9	1429.6	1467.0	1550.1
65°	1357.5	1260.6	1222.5	1198.2	1156.7	1146.3	1156.7	1198.2	1222.5	1260.6	1357.5
67.5°	1147.0	1062.5	1014.7	982.1	955.8	955.1	955.8	982.1	1014.7	1062.5	1147.0
70°	1011.2	935.0	890.0	851.9	831.1	827.7	831.1	851.9	890.0	935.0	1011.2
72.5°	878.2	804.8	765.3	730.0	712.0	708.5	712.0	730.0	765.3	804.8	878.2
75°	689.2	619.9	588.7	564.5	550.6	543.7	550.6	564.5	588.7	619.9	689.2
77.5°	509.8	453.7	437.7	412.8	401.0	400.3	401.0	412.8	437.7	453.7	509.8
80°	401.7	356.7	332.5	318.6	315.1	311.7	315.1	318.6	332.5	356.7	401.7
82.5°	290.9	265.3	249.3	241.0	240.3	234.1	240.3	241.0	249.3	265.3	290.9
85°	155.8	148.9	145.4	142.0	138.5	138.5	138.5	142.0	145.4	148.9	155.8
87.5°	63.7	66.5	66.5	69.3	72.0	69.3	72.0	69.3	66.5	66.5	63.7
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-100D-935-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	3660.5	3660.5	3660.5	3660.5
2.5°	3707.6	3702.0	3685.4	3685.4
5°	3757.4	3743.6	3705.5	3677.8
7.5°	3769.2	3749.1	3699.3	3643.2
10°	3760.9	3743.6	3688.2	3615.5
12.5°	3744.3	3724.2	3671.6	3576.7
15°	3709.0	3677.8	3629.3	3511.6
17.5°	3652.9	3625.2	3567.7	3418.1
20°	3608.5	3580.8	3515.0	3348.8
22.5°	3555.9	3528.2	3459.6	3254.6
25°	3470.0	3428.4	3369.6	3092.5
27.5°	3374.4	3329.4	3245.6	2914.5
30°	3310.7	3251.8	3137.6	2784.3
32.5°	3241.4	3171.5	2976.9	2637.5
35°	3116.8	3057.9	2780.9	2351.4
37.5°	2981.0	2938.1	2603.5	2029.4
40°	2881.3	2846.7	2434.5	1835.4
42.5°	2759.4	2749.7	2248.9	1691.4
45°	2593.8	2593.8	2140.2	1516.8
47.5°	2424.8	2426.2	1987.8	1471.1
50°	2316.8	2282.2	1877.0	1468.3
52.5°	2206.0	2096.5	1741.2	1360.3
55°	2022.4	1838.9	1530.7	1236.3
57.5°	1837.5	1603.4	1203.8	1195.5
60°	1693.4	1437.2	921.2	1115.1
62.5°	1554.9	1248.8	718.9	1032.0
65°	1350.6	855.4	561.0	858.8
67.5°	1156.0	543.0	426.7	620.6
70°	1028.5	401.7	304.8	484.8
72.5°	898.3	315.8	257.7	418.3
75°	703.0	225.1	259.7	325.5
77.5°	526.4	171.1	232.0	227.2
80°	401.7	135.1	190.5	180.1
82.5°	299.2	107.4	135.1	133.0
85°	148.9	62.3	69.3	55.4
87.5°	61.0	30.5	24.9	13.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)