

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-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-075D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

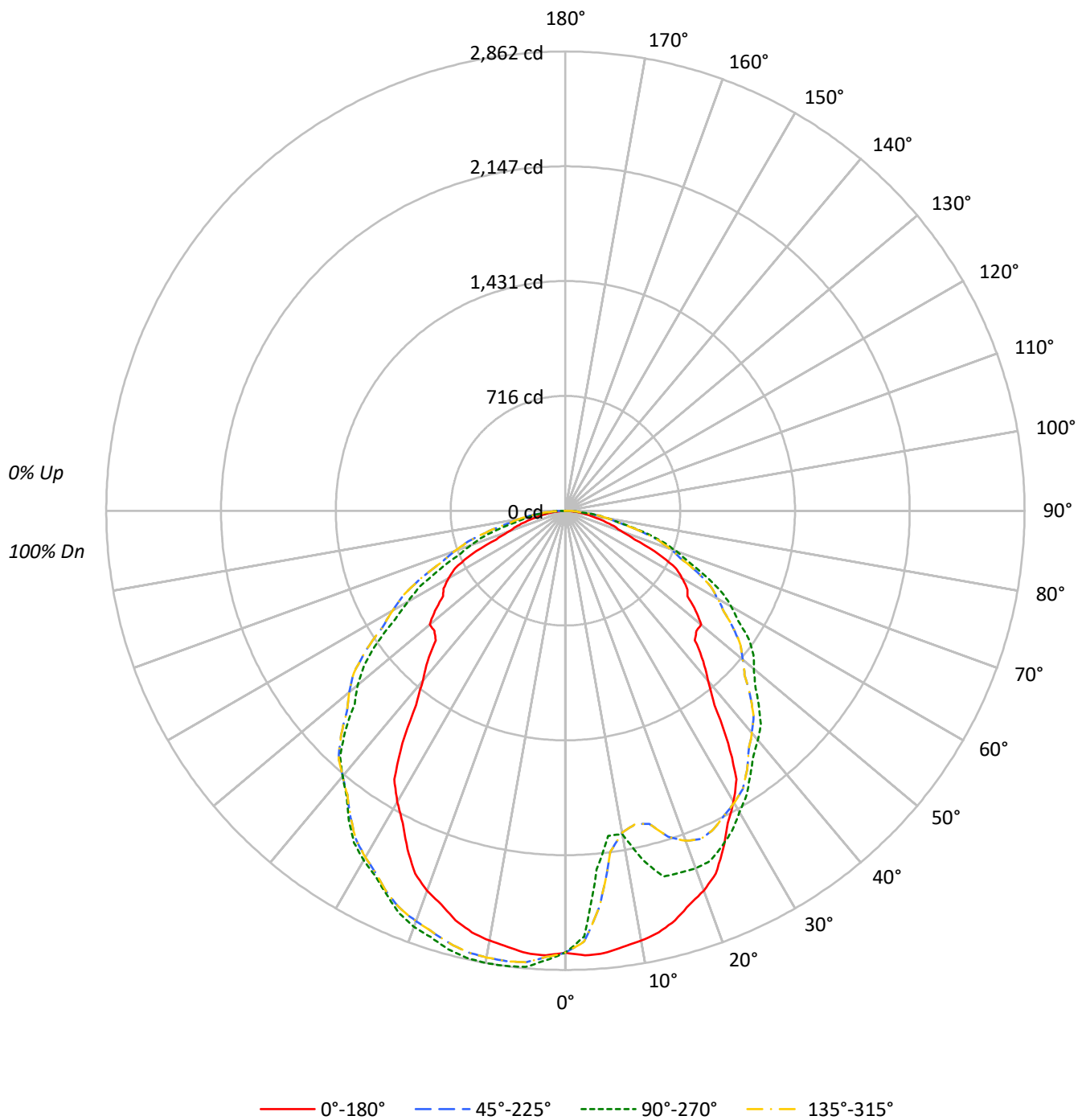
Lumens per Lamp: N/A
Luminaire Lumens: 7138.5 lumens
Efficiency: N/A
Efficacy: 89.9 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Direct

Input Watts (W): 79.4
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				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°	8472	8472	8472	8472
5°	8544	6927	8544	8810
10°	8497	6389	8497	8936
15°	8414	7518	8414	9003
20°	8248	7762	8248	9033
25°	7897	7835	7897	8950
30°	7441	7709	7441	8931
35°	6644	7544	6644	8835
40°	5545	7491	5545	8674
45°	4965	7402	4965	8433
50°	5287	7332	5287	8080
55°	4989	7490	4989	7672
60°	5162	7342	5162	6973
65°	4703	7017	4703	6277
70°	3281	6585	3281	5601
75°	2911	5822	2911	4862
80°	2400	4523	2400	4155
85°	1471	3126	1471	3677

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 8615 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	248.3	3.5
10°-20°	705.7	9.9
20°-30°	1090.6	15.3
30°-40°	1303.0	18.3
40°-50°	1311.4	18.4
50°-60°	1138.6	16.0
60°-70°	806.0	11.3
70°-80°	426.3	6.0
80°-90°	108.5	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°	2044.7	28.6
0°-40°	3347.7	46.9
0°-60°	5797.7	81.2
0°-90°	7138.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7138.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2755	2755	2755	2755	2755	
5°	2768	2244	2768	2854	2768	262
15°	2643	2361	2643	2828	2643	743
25°	2327	2309	2327	2637	2327	1067
35°	1770	2009	1770	2353	1770	1093
45°	1142	1702	1142	1939	1142	919
55°	930	1397	930	1431	930	856
65°	646	964	646	863	646	615
75°	245	490	245	409	245	258
85°	42	89	42	104	42	60
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°	2754.7	2754.7	2754.7	2754.7	2754.7	2754.7	2754.7	2754.7	2754.7	2754.7	2754.7
2.5°	2773.4	2752.6	2744.3	2727.6	2696.3	2679.6	2692.1	2671.3	2679.6	2656.7	2679.6
5°	2767.7	2720.8	2681.7	2616.6	2522.7	2413.3	2387.2	2319.5	2277.8	2243.9	2277.8
7.5°	2741.7	2661.4	2542.0	2342.9	2182.9	2104.7	2085.4	2066.1	2060.9	2043.7	2060.9
10°	2720.8	2611.3	2389.8	2165.7	2053.6	2017.1	2025.0	2032.8	2048.4	2045.8	2048.4
12.5°	2691.6	2523.8	2231.4	2076.0	2001.5	2000.5	2058.3	2162.0	2234.0	2229.3	2234.0
15°	2642.6	2355.9	2082.3	1983.3	1959.8	2079.7	2290.8	2340.3	2358.6	2361.2	2358.6
17.5°	2572.3	2191.8	1986.9	1921.8	2001.5	2262.1	2326.2	2348.6	2364.3	2365.3	2364.3
20°	2520.1	2108.4	1939.0	1894.7	2105.8	2272.5	2311.6	2340.3	2366.4	2371.6	2366.4
22.5°	2449.2	2050.0	1888.9	1875.9	2164.1	2262.1	2297.0	2340.3	2362.2	2361.2	2362.2
25°	2327.3	1978.1	1826.9	1855.6	2170.9	2207.4	2275.2	2303.8	2306.4	2309.0	2306.4
27.5°	2193.3	1915.0	1754.4	1869.1	2128.7	2154.8	2227.7	2242.3	2252.2	2248.1	2252.2
30°	2095.3	1871.2	1704.4	1871.2	2095.3	2111.0	2183.9	2194.4	2181.3	2170.9	2181.3
32.5°	1984.8	1817.0	1656.5	1856.6	2045.3	2067.2	2125.6	2121.4	2108.4	2100.0	2108.4
35°	1769.6	1725.3	1568.9	1808.7	1959.8	1988.5	2022.4	2019.8	2017.1	2009.3	2017.1
37.5°	1527.2	1616.8	1482.4	1734.1	1877.5	1875.4	1925.9	1936.9	1934.3	1924.4	1934.3
40°	1381.3	1527.2	1428.2	1675.7	1819.1	1798.2	1863.4	1876.4	1873.8	1866.0	1873.8
42.5°	1272.8	1408.4	1365.6	1604.9	1748.2	1723.2	1802.9	1816.0	1809.2	1803.4	1809.2
45°	1141.5	1164.9	1269.2	1490.7	1628.8	1626.2	1712.2	1725.3	1709.6	1701.8	1709.6
47.5°	1107.1	939.3	1163.9	1358.3	1510.5	1520.4	1612.7	1624.1	1610.1	1603.3	1610.1
50°	1105.0	828.8	1086.8	1256.2	1433.4	1451.6	1548.0	1553.3	1535.0	1532.4	1535.0
52.5°	1023.7	766.2	997.1	1166.5	1366.7	1389.1	1477.2	1476.1	1474.6	1478.2	1474.6
55°	930.4	690.6	841.8	1034.6	1264.0	1292.6	1370.8	1373.4	1391.7	1396.9	1391.7
57.5°	899.6	605.1	697.9	920.5	1160.8	1183.2	1256.7	1262.9	1275.4	1274.9	1275.4
60°	839.2	544.7	612.4	849.6	1081.5	1110.2	1175.4	1185.8	1196.2	1193.6	1196.2
62.5°	776.6	503.0	570.7	791.2	1006.5	1037.2	1081.5	1100.3	1104.5	1099.8	1104.5
65°	646.3	448.3	505.6	698.4	891.3	925.2	953.8	966.9	969.5	964.3	969.5
67.5°	467.0	397.7	454.5	606.7	758.9	797.0	813.6	821.5	818.8	828.2	818.8
70°	364.9	362.3	417.0	542.1	677.6	711.5	721.9	729.7	727.1	732.3	727.1
72.5°	314.8	333.1	377.4	475.4	585.9	619.7	626.0	627.6	635.4	630.2	635.4
75°	245.0	284.1	312.7	375.3	458.7	482.1	484.7	487.3	482.1	490.0	482.1
77.5°	171.0	216.3	241.8	277.8	334.1	348.7	348.2	349.7	345.6	345.1	345.6
80°	135.5	164.2	187.6	211.1	252.8	263.2	260.6	258.0	258.0	255.4	258.0
82.5°	100.1	116.2	137.6	154.8	181.9	184.0	187.6	183.0	183.0	186.6	183.0
85°	41.7	54.7	70.4	78.2	88.6	91.2	86.0	93.8	88.6	88.6	88.6
87.5°	10.4	16.7	25.0	29.2	31.3	29.2	29.2	25.0	25.0	25.0	25.0
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):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	2754.7	2754.7	2754.7	2754.7	2754.7	2754.7	2754.7	2754.7	2754.7	2754.7	2754.7
2.5°	2671.3	2692.1	2679.6	2696.3	2727.6	2744.3	2752.6	2773.4	2773.4	2786.0	2790.1
5°	2319.5	2387.2	2413.3	2522.7	2616.6	2681.7	2720.8	2767.7	2788.6	2817.2	2827.7
7.5°	2066.1	2085.4	2104.7	2182.9	2342.9	2542.0	2661.4	2741.7	2783.9	2821.4	2836.5
10°	2032.8	2025.0	2017.1	2053.6	2165.7	2389.8	2611.3	2720.8	2775.5	2817.2	2830.3
12.5°	2162.0	2058.3	2000.5	2001.5	2076.0	2231.4	2523.8	2691.6	2763.0	2802.6	2817.8
15°	2340.3	2290.8	2079.7	1959.8	1983.3	2082.3	2355.9	2642.6	2731.2	2767.7	2791.2
17.5°	2348.6	2326.2	2262.1	2001.5	1921.8	1986.9	2191.8	2572.3	2684.8	2728.1	2749.0
20°	2340.3	2311.6	2272.5	2105.8	1894.7	1939.0	2108.4	2520.1	2645.2	2694.7	2715.6
22.5°	2340.3	2297.0	2262.1	2164.1	1875.9	1888.9	2050.0	2449.2	2603.5	2655.1	2676.0
25°	2303.8	2275.2	2207.4	2170.9	1855.6	1826.9	1978.1	2327.3	2535.8	2580.1	2611.3
27.5°	2242.3	2227.7	2154.8	2128.7	1869.1	1754.4	1915.0	2193.3	2442.5	2505.5	2539.4
30°	2194.4	2183.9	2111.0	2095.3	1871.2	1704.4	1871.2	2095.3	2361.2	2447.2	2491.5
32.5°	2121.4	2125.6	2067.2	2045.3	1856.6	1656.5	1817.0	1984.8	2240.2	2386.7	2439.3
35°	2019.8	2022.4	1988.5	1959.8	1808.7	1568.9	1725.3	1769.6	2092.7	2301.2	2345.5
37.5°	1936.9	1925.9	1875.4	1877.5	1734.1	1482.4	1616.8	1527.2	1959.3	2211.0	2243.4
40°	1876.4	1863.4	1798.2	1819.1	1675.7	1428.2	1527.2	1381.3	1832.1	2142.2	2168.3
42.5°	1816.0	1802.9	1723.2	1748.2	1604.9	1365.6	1408.4	1272.8	1692.4	2069.3	2076.6
45°	1725.3	1712.2	1626.2	1628.8	1490.7	1269.2	1164.9	1141.5	1610.6	1952.0	1952.0
47.5°	1624.1	1612.7	1520.4	1510.5	1358.3	1163.9	939.3	1107.1	1495.9	1825.9	1824.8
50°	1553.3	1548.0	1451.6	1433.4	1256.2	1086.8	828.8	1105.0	1412.5	1717.4	1743.5
52.5°	1476.1	1477.2	1389.1	1366.7	1166.5	997.1	766.2	1023.7	1310.4	1577.8	1660.1
55°	1373.4	1370.8	1292.6	1264.0	1034.6	841.8	690.6	930.4	1151.9	1383.9	1522.0
57.5°	1262.9	1256.7	1183.2	1160.8	920.5	697.9	605.1	899.6	905.9	1206.6	1382.8
60°	1185.8	1175.4	1110.2	1081.5	849.6	612.4	544.7	839.2	693.2	1081.5	1274.4
62.5°	1100.3	1081.5	1037.2	1006.5	791.2	570.7	503.0	776.6	541.0	939.8	1170.2
65°	966.9	953.8	925.2	891.3	698.4	505.6	448.3	646.3	422.2	643.7	1016.4
67.5°	821.5	813.6	797.0	758.9	606.7	454.5	397.7	467.0	321.1	408.6	869.9
70°	729.7	721.9	711.5	677.6	542.1	417.0	362.3	364.9	229.3	302.3	774.0
72.5°	627.6	626.0	619.7	585.9	475.4	377.4	333.1	314.8	193.9	237.7	676.0
75°	487.3	484.7	482.1	458.7	375.3	312.7	284.1	245.0	195.5	169.4	529.0
77.5°	349.7	348.2	348.7	334.1	277.8	241.8	216.3	171.0	174.6	128.7	396.1
80°	258.0	260.6	263.2	252.8	211.1	187.6	164.2	135.5	143.3	101.6	302.3
82.5°	183.0	187.6	184.0	181.9	154.8	137.6	116.2	100.1	101.6	80.8	225.2
85°	93.8	86.0	91.2	88.6	78.2	70.4	54.7	41.7	52.1	46.9	112.1
87.5°	25.0	29.2	29.2	31.3	29.2	25.0	16.7	10.4	18.8	22.9	45.9
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°	2754.7	2754.7	2754.7	2754.7	2754.7	2754.7	2754.7	2754.7	2754.7	2754.7	2754.7
2.5°	2783.9	2783.9	2802.6	2806.8	2811.0	2804.7	2811.0	2806.8	2802.6	2783.9	2783.9
5°	2825.0	2825.0	2851.1	2858.9	2858.9	2853.7	2858.9	2858.9	2851.1	2825.0	2825.0
7.5°	2828.7	2832.9	2858.9	2864.7	2869.4	2861.5	2869.4	2864.7	2858.9	2832.9	2828.7
10°	2822.4	2832.9	2858.9	2866.7	2869.4	2861.5	2869.4	2866.7	2858.9	2832.9	2822.4
12.5°	2814.1	2822.4	2848.5	2854.2	2858.9	2853.2	2858.9	2854.2	2848.5	2822.4	2814.1
15°	2786.0	2796.4	2825.0	2830.3	2835.5	2827.7	2835.5	2830.3	2825.0	2796.4	2786.0
17.5°	2746.9	2759.9	2786.0	2794.3	2796.9	2787.0	2796.9	2794.3	2786.0	2759.9	2746.9
20°	2715.6	2728.6	2754.7	2765.1	2767.7	2759.9	2767.7	2765.1	2754.7	2728.6	2715.6
22.5°	2676.0	2697.3	2721.3	2725.5	2721.8	2714.0	2721.8	2725.5	2721.3	2697.3	2676.0
25°	2619.2	2637.4	2645.2	2645.2	2645.2	2637.4	2645.2	2645.2	2645.2	2637.4	2619.2
27.5°	2546.7	2556.1	2560.8	2565.0	2570.2	2565.0	2570.2	2565.0	2560.8	2556.1	2546.7
30°	2496.7	2491.5	2504.5	2514.9	2520.1	2514.9	2520.1	2514.9	2504.5	2491.5	2496.7
32.5°	2427.9	2431.0	2450.3	2456.5	2457.6	2452.4	2457.6	2456.5	2450.3	2431.0	2427.9
35°	2327.3	2340.3	2353.3	2358.6	2361.2	2353.3	2361.2	2358.6	2353.3	2340.3	2327.3
37.5°	2220.9	2243.9	2253.3	2247.5	2248.1	2239.7	2248.1	2247.5	2253.3	2243.9	2220.9
40°	2150.1	2170.9	2176.1	2168.3	2170.9	2160.5	2170.9	2168.3	2176.1	2170.9	2150.1
42.5°	2083.3	2100.0	2094.8	2084.9	2083.3	2079.2	2083.3	2084.9	2094.8	2100.0	2083.3
45°	1972.8	1980.7	1957.2	1949.4	1944.2	1939.0	1944.2	1949.4	1957.2	1980.7	1972.8
47.5°	1851.9	1841.5	1819.1	1807.1	1792.5	1782.6	1792.5	1807.1	1819.1	1841.5	1851.9
50°	1774.8	1743.5	1725.3	1696.6	1686.2	1688.8	1686.2	1696.6	1725.3	1743.5	1774.8
52.5°	1681.0	1643.4	1614.8	1590.3	1581.9	1580.4	1581.9	1590.3	1614.8	1643.4	1681.0
55°	1545.4	1488.1	1441.2	1428.2	1425.6	1430.8	1425.6	1428.2	1441.2	1488.1	1545.4
57.5°	1379.2	1322.9	1284.3	1273.9	1265.0	1256.7	1265.0	1273.9	1284.3	1322.9	1379.2
60°	1266.6	1214.5	1178.0	1167.5	1144.1	1133.7	1144.1	1167.5	1178.0	1214.5	1266.6
62.5°	1166.5	1104.0	1075.8	1055.0	1037.8	1021.1	1037.8	1055.0	1075.8	1104.0	1166.5
65°	1021.6	948.6	920.0	901.7	870.4	862.6	870.4	901.7	920.0	948.6	1021.6
67.5°	863.2	799.6	763.6	739.1	719.3	718.8	719.3	739.1	763.6	799.6	863.2
70°	761.0	703.7	669.8	641.1	625.5	622.9	625.5	641.1	669.8	703.7	761.0
72.5°	660.9	605.7	576.0	549.4	535.8	533.2	535.8	549.4	576.0	605.7	660.9
75°	518.6	466.5	443.0	424.8	414.4	409.2	414.4	424.8	443.0	466.5	518.6
77.5°	383.6	341.4	329.4	310.7	301.8	301.3	301.8	310.7	329.4	341.4	383.6
80°	302.3	268.4	250.2	239.8	237.2	234.6	237.2	239.8	250.2	268.4	302.3
82.5°	218.9	199.6	187.6	181.4	180.9	176.2	180.9	181.4	187.6	199.6	218.9
85°	117.3	112.1	109.5	106.9	104.2	104.2	104.2	106.9	109.5	112.1	117.3
87.5°	48.0	50.0	50.0	52.1	54.2	52.1	54.2	52.1	50.0	50.0	48.0
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-075D-935-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	2754.7	2754.7	2754.7	2754.7
2.5°	2790.1	2786.0	2773.4	2773.4
5°	2827.7	2817.2	2788.6	2767.7
7.5°	2836.5	2821.4	2783.9	2741.7
10°	2830.3	2817.2	2775.5	2720.8
12.5°	2817.8	2802.6	2763.0	2691.6
15°	2791.2	2767.7	2731.2	2642.6
17.5°	2749.0	2728.1	2684.8	2572.3
20°	2715.6	2694.7	2645.2	2520.1
22.5°	2676.0	2655.1	2603.5	2449.2
25°	2611.3	2580.1	2535.8	2327.3
27.5°	2539.4	2505.5	2442.5	2193.3
30°	2491.5	2447.2	2361.2	2095.3
32.5°	2439.3	2386.7	2240.2	1984.8
35°	2345.5	2301.2	2092.7	1769.6
37.5°	2243.4	2211.0	1959.3	1527.2
40°	2168.3	2142.2	1832.1	1381.3
42.5°	2076.6	2069.3	1692.4	1272.8
45°	1952.0	1952.0	1610.6	1141.5
47.5°	1824.8	1825.9	1495.9	1107.1
50°	1743.5	1717.4	1412.5	1105.0
52.5°	1660.1	1577.8	1310.4	1023.7
55°	1522.0	1383.9	1151.9	930.4
57.5°	1382.8	1206.6	905.9	899.6
60°	1274.4	1081.5	693.2	839.2
62.5°	1170.2	939.8	541.0	776.6
65°	1016.4	643.7	422.2	646.3
67.5°	869.9	408.6	321.1	467.0
70°	774.0	302.3	229.3	364.9
72.5°	676.0	237.7	193.9	314.8
75°	529.0	169.4	195.5	245.0
77.5°	396.1	128.7	174.6	171.0
80°	302.3	101.6	143.3	135.5
82.5°	225.2	80.8	101.6	100.1
85°	112.1	46.9	52.1	41.7
87.5°	45.9	22.9	18.8	10.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)