

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-125D-835-1D-UNV-STD-W-6

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-125D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

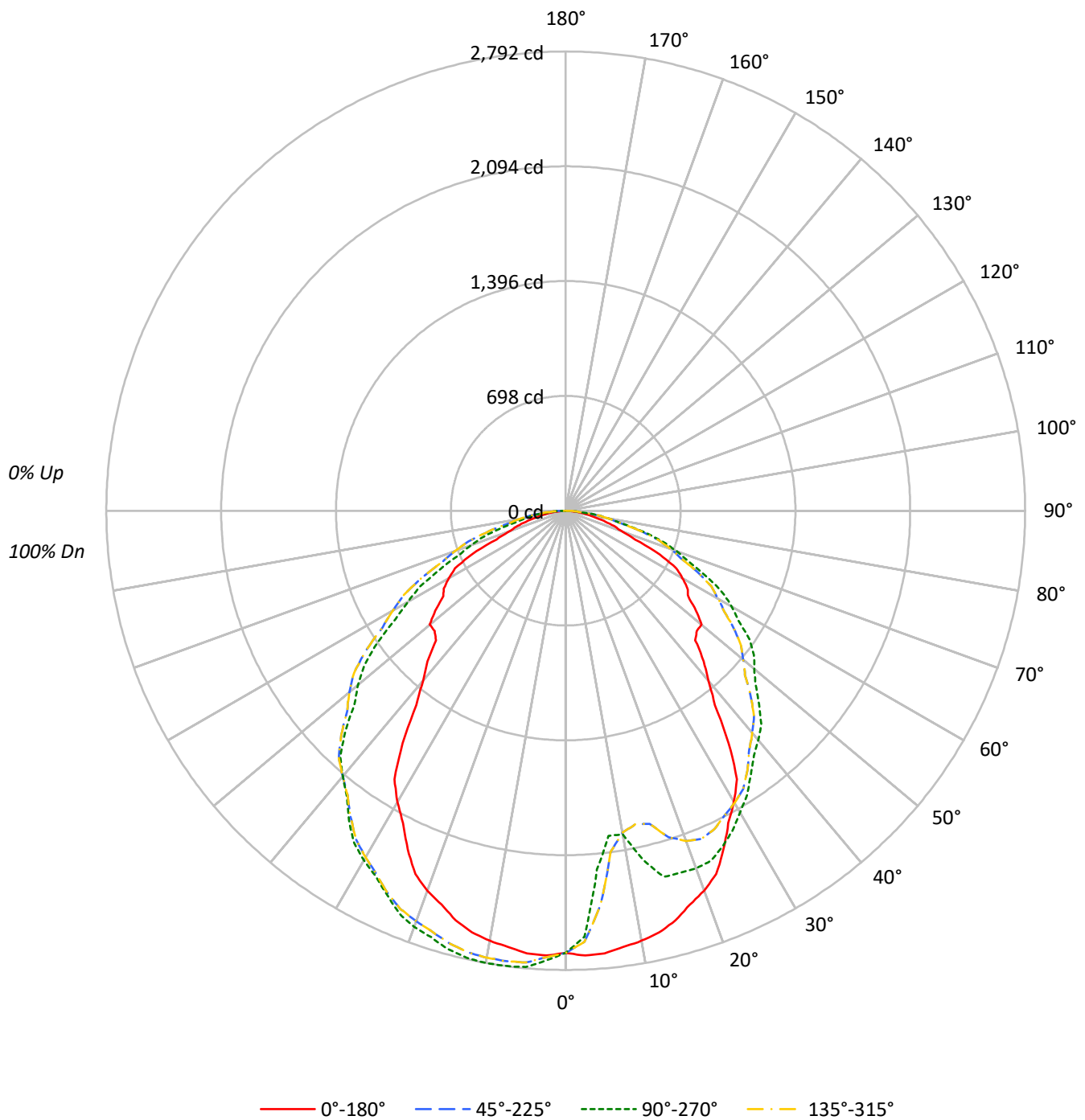
Lumens per Lamp: N/A
Luminaire Lumens: 6965.3 lumens
Efficiency: N/A
Efficacy: 99.9 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

Input Watts (W): 69.7
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°	16533	16533	16533	16533
5°	16674	13519	16674	17192
10°	16581	12468	16581	17439
15°	16419	14671	16419	17569
20°	16095	15147	16095	17627
25°	15411	15290	15411	17465
30°	14521	15045	14521	17428
35°	12965	14722	12965	17242
40°	10821	14619	10821	16927
45°	9688	14444	9688	16457
50°	10317	14307	10317	15768
55°	9735	14616	9735	14971
60°	10073	14328	10073	13608
65°	9178	13694	9178	12250
70°	6402	12851	6402	10931
75°	5680	11362	5680	9487
80°	4683	8827	4683	8108
85°	2872	6105	2872	7177

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 16811 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.3	3.5
10°-20°	688.6	9.9
20°-30°	1064.2	15.3
30°-40°	1271.4	18.3
40°-50°	1279.6	18.4
50°-60°	1111.0	16.0
60°-70°	786.4	11.3
70°-80°	416.0	6.0
80°-90°	105.8	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°	1995.1	28.6
0°-40°	3266.5	46.9
0°-60°	5657.1	81.2
0°-90°	6965.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6965.3	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2688	2688	2688	2688	2688	
5°	2701	2190	2701	2784	2701	256
15°	2578	2304	2578	2759	2578	725
25°	2271	2253	2271	2573	2271	1041
35°	1727	1961	1727	2296	1727	1066
45°	1114	1660	1114	1892	1114	897
55°	908	1363	908	1396	908	835
65°	631	941	631	842	631	600
75°	239	478	239	399	239	252
85°	41	86	41	102	41	58
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°	2687.9	2687.9	2687.9	2687.9	2687.9	2687.9	2687.9	2687.9	2687.9	2687.9	2687.9
2.5°	2706.2	2685.8	2677.7	2661.4	2630.9	2614.6	2626.8	2606.5	2614.6	2592.3	2614.6
5°	2700.6	2654.8	2616.7	2553.1	2461.5	2354.7	2329.3	2263.2	2222.5	2189.5	2222.5
7.5°	2675.2	2596.8	2480.4	2286.1	2130.0	2053.7	2034.8	2016.0	2010.9	1994.2	2010.9
10°	2654.8	2548.0	2331.9	2113.2	2003.8	1968.2	1975.9	1983.5	1998.7	1996.2	1998.7
12.5°	2626.3	2462.6	2177.3	2025.7	1953.0	1951.9	2008.4	2109.6	2179.8	2175.2	2179.8
15°	2578.5	2298.8	2031.8	1935.2	1912.3	2029.3	2235.2	2283.5	2301.3	2303.9	2301.3
17.5°	2509.9	2138.6	1938.7	1875.2	1953.0	2207.3	2269.8	2291.7	2306.9	2308.0	2306.9
20°	2459.0	2057.2	1891.9	1848.7	2054.7	2217.4	2255.6	2283.5	2309.0	2314.1	2309.0
22.5°	2389.8	2000.3	1843.1	1830.4	2111.6	2207.3	2241.3	2283.5	2304.9	2303.9	2304.9
25°	2270.8	1930.1	1782.6	1810.6	2118.3	2153.9	2220.0	2247.9	2250.5	2253.0	2250.5
27.5°	2140.1	1868.5	1711.9	1823.8	2077.1	2102.5	2173.7	2187.9	2197.6	2193.5	2197.6
30°	2044.5	1825.8	1663.1	1825.8	2044.5	2059.8	2131.0	2141.1	2128.4	2118.3	2128.4
32.5°	1936.7	1772.9	1616.3	1811.6	1995.7	2017.0	2074.0	2069.9	2057.2	2049.1	2057.2
35°	1726.6	1683.4	1530.8	1764.8	1912.3	1940.2	1973.3	1970.8	1968.2	1960.6	1968.2
37.5°	1490.2	1577.6	1446.4	1692.1	1831.9	1829.9	1879.2	1889.9	1887.4	1877.7	1887.4
40°	1347.7	1490.2	1393.5	1635.1	1775.0	1754.6	1818.2	1830.9	1828.4	1820.7	1828.4
42.5°	1242.0	1374.2	1332.5	1565.9	1705.8	1681.4	1759.2	1771.9	1765.3	1759.7	1765.3
45°	1113.8	1136.7	1238.4	1454.6	1589.3	1586.8	1670.7	1683.4	1668.2	1660.5	1668.2
47.5°	1080.2	916.5	1135.7	1325.4	1473.9	1483.5	1573.6	1584.7	1571.0	1564.4	1571.0
50°	1078.2	808.6	1060.4	1225.7	1398.6	1416.4	1510.5	1515.6	1497.8	1495.2	1497.8
52.5°	998.9	747.6	972.9	1138.2	1333.5	1355.4	1441.3	1440.3	1438.8	1442.3	1438.8
55°	907.8	673.9	821.4	1009.5	1233.3	1261.3	1337.6	1340.1	1357.9	1363.0	1357.9
57.5°	877.8	590.5	681.0	898.2	1132.6	1154.5	1226.2	1232.3	1244.5	1244.0	1244.5
60°	818.8	531.5	597.6	829.0	1055.3	1083.3	1146.9	1157.0	1167.2	1164.7	1167.2
62.5°	757.8	490.8	556.9	772.0	982.1	1012.1	1055.3	1073.6	1077.7	1073.1	1077.7
65°	630.6	437.4	493.3	681.5	869.7	902.7	930.7	943.4	946.0	940.9	946.0
67.5°	455.7	388.0	443.5	592.0	740.5	777.6	793.9	801.5	799.0	808.1	799.0
70°	356.0	353.5	406.9	528.9	661.2	694.2	704.4	712.0	709.5	714.6	709.5
72.5°	307.2	325.0	368.2	463.8	571.6	604.7	610.8	612.3	620.0	614.9	620.0
75°	239.0	277.2	305.2	366.2	447.6	470.4	473.0	475.5	470.4	478.1	470.4
77.5°	166.8	211.1	236.0	271.1	326.0	340.2	339.7	341.3	337.2	336.7	337.2
80°	132.2	160.2	183.1	206.0	246.7	256.8	254.3	251.7	251.7	249.2	251.7
82.5°	97.6	113.4	134.3	151.0	177.5	179.5	183.1	178.5	178.5	182.1	178.5
85°	40.7	53.4	68.7	76.3	86.5	89.0	83.9	91.5	86.5	86.5	86.5
87.5°	10.2	16.3	24.4	28.5	30.5	28.5	28.5	24.4	24.4	24.4	24.4
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°	2687.9	2687.9	2687.9	2687.9	2687.9	2687.9	2687.9	2687.9	2687.9	2687.9	2687.9
2.5°	2606.5	2626.8	2614.6	2630.9	2661.4	2677.7	2685.8	2706.2	2706.2	2718.4	2722.5
5°	2263.2	2329.3	2354.7	2461.5	2553.1	2616.7	2654.8	2700.6	2720.9	2748.9	2759.1
7.5°	2016.0	2034.8	2053.7	2130.0	2286.1	2480.4	2596.8	2675.2	2716.3	2753.0	2767.7
10°	1983.5	1975.9	1968.2	2003.8	2113.2	2331.9	2548.0	2654.8	2708.2	2748.9	2761.6
12.5°	2109.6	2008.4	1951.9	1953.0	2025.7	2177.3	2462.6	2626.3	2696.0	2734.7	2749.4
15°	2283.5	2235.2	2029.3	1912.3	1935.2	2031.8	2298.8	2578.5	2665.0	2700.6	2723.5
17.5°	2291.7	2269.8	2207.3	1953.0	1875.2	1938.7	2138.6	2509.9	2619.7	2661.9	2682.3
20°	2283.5	2255.6	2217.4	2054.7	1848.7	1891.9	2057.2	2459.0	2581.1	2629.4	2649.7
22.5°	2283.5	2241.3	2207.3	2111.6	1830.4	1843.1	2000.3	2389.8	2540.4	2590.7	2611.1
25°	2247.9	2220.0	2153.9	2118.3	1810.6	1782.6	1930.1	2270.8	2474.3	2517.5	2548.0
27.5°	2187.9	2173.7	2102.5	2077.1	1823.8	1711.9	1868.5	2140.1	2383.2	2444.8	2477.8
30°	2141.1	2131.0	2059.8	2044.5	1825.8	1663.1	1825.8	2044.5	2303.9	2387.8	2431.0
32.5°	2069.9	2074.0	2017.0	1995.7	1811.6	1616.3	1772.9	1936.7	2185.9	2328.8	2380.2
35°	1970.8	1973.3	1940.2	1912.3	1764.8	1530.8	1683.4	1726.6	2042.0	2245.4	2288.6
37.5°	1889.9	1879.2	1829.9	1831.9	1692.1	1446.4	1577.6	1490.2	1911.8	2157.4	2188.9
40°	1830.9	1818.2	1754.6	1775.0	1635.1	1393.5	1490.2	1347.7	1787.7	2090.3	2115.7
42.5°	1771.9	1759.2	1681.4	1705.8	1565.9	1332.5	1374.2	1242.0	1651.4	2019.1	2026.2
45°	1683.4	1670.7	1586.8	1589.3	1454.6	1238.4	1136.7	1113.8	1571.5	1904.6	1904.6
47.5°	1584.7	1573.6	1483.5	1473.9	1325.4	1135.7	916.5	1080.2	1459.6	1781.6	1780.6
50°	1515.6	1510.5	1416.4	1398.6	1225.7	1060.4	808.6	1078.2	1378.3	1675.8	1701.2
52.5°	1440.3	1441.3	1355.4	1333.5	1138.2	972.9	747.6	998.9	1278.6	1539.5	1619.8
55°	1340.1	1337.6	1261.3	1233.3	1009.5	821.4	673.9	907.8	1124.0	1350.3	1485.1
57.5°	1232.3	1226.2	1154.5	1132.6	898.2	681.0	590.5	877.8	883.9	1177.4	1349.3
60°	1157.0	1146.9	1083.3	1055.3	829.0	597.6	531.5	818.8	676.4	1055.3	1243.5
62.5°	1073.6	1055.3	1012.1	982.1	772.0	556.9	490.8	757.8	527.9	917.0	1141.8
65°	943.4	930.7	902.7	869.7	681.5	493.3	437.4	630.6	412.0	628.1	991.7
67.5°	801.5	793.9	777.6	740.5	592.0	443.5	388.0	455.7	313.3	398.7	848.8
70°	712.0	704.4	694.2	661.2	528.9	406.9	353.5	356.0	223.8	295.0	755.2
72.5°	612.3	610.8	604.7	571.6	463.8	368.2	325.0	307.2	189.2	231.9	659.6
75°	475.5	473.0	470.4	447.6	366.2	305.2	277.2	239.0	190.7	165.3	516.2
77.5°	341.3	339.7	340.2	326.0	271.1	236.0	211.1	166.8	170.4	125.6	386.5
80°	251.7	254.3	256.8	246.7	206.0	183.1	160.2	132.2	139.9	99.2	295.0
82.5°	178.5	183.1	179.5	177.5	151.0	134.3	113.4	97.6	99.2	78.8	219.7
85°	91.5	83.9	89.0	86.5	76.3	68.7	53.4	40.7	50.9	45.8	109.3
87.5°	24.4	28.5	28.5	30.5	28.5	24.4	16.3	10.2	18.3	22.4	44.8
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):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	2687.9	2687.9	2687.9	2687.9	2687.9	2687.9	2687.9	2687.9	2687.9	2687.9	2687.9
2.5°	2716.3	2716.3	2734.7	2738.7	2742.8	2736.7	2742.8	2738.7	2734.7	2716.3	2716.3
5°	2756.5	2756.5	2782.0	2789.6	2789.6	2784.5	2789.6	2789.6	2782.0	2756.5	2756.5
7.5°	2760.1	2764.2	2789.6	2795.2	2799.8	2792.1	2799.8	2795.2	2789.6	2764.2	2760.1
10°	2754.0	2764.2	2789.6	2797.2	2799.8	2792.1	2799.8	2797.2	2789.6	2764.2	2754.0
12.5°	2745.8	2754.0	2779.4	2785.0	2789.6	2784.0	2789.6	2785.0	2779.4	2754.0	2745.8
15°	2718.4	2728.6	2756.5	2761.6	2766.7	2759.1	2766.7	2761.6	2756.5	2728.6	2718.4
17.5°	2680.2	2693.0	2718.4	2726.5	2729.1	2719.4	2729.1	2726.5	2718.4	2693.0	2680.2
20°	2649.7	2662.4	2687.9	2698.0	2700.6	2693.0	2700.6	2698.0	2687.9	2662.4	2649.7
22.5°	2611.1	2631.9	2655.3	2659.4	2655.8	2648.2	2655.8	2659.4	2655.3	2631.9	2611.1
25°	2555.6	2573.4	2581.1	2581.1	2581.1	2573.4	2581.1	2581.1	2581.1	2573.4	2555.6
27.5°	2484.9	2494.1	2498.7	2502.7	2507.8	2502.7	2507.8	2502.7	2498.7	2494.1	2484.9
30°	2436.1	2431.0	2443.7	2453.9	2459.0	2453.9	2459.0	2453.9	2443.7	2431.0	2436.1
32.5°	2369.0	2372.0	2390.9	2397.0	2398.0	2392.9	2398.0	2397.0	2390.9	2372.0	2369.0
35°	2270.8	2283.5	2296.3	2301.3	2303.9	2296.3	2303.9	2301.3	2296.3	2283.5	2270.8
37.5°	2167.1	2189.5	2198.6	2193.0	2193.5	2185.4	2193.5	2193.0	2198.6	2189.5	2167.1
40°	2097.9	2118.3	2123.3	2115.7	2118.3	2108.1	2118.3	2115.7	2123.3	2118.3	2097.9
42.5°	2032.8	2049.1	2044.0	2034.3	2032.8	2028.7	2032.8	2034.3	2044.0	2049.1	2032.8
45°	1925.0	1932.6	1909.7	1902.1	1897.0	1891.9	1897.0	1902.1	1909.7	1932.6	1925.0
47.5°	1807.0	1796.8	1775.0	1763.3	1749.0	1739.4	1749.0	1763.3	1775.0	1796.8	1807.0
50°	1731.7	1701.2	1683.4	1655.4	1645.3	1647.8	1645.3	1655.4	1683.4	1701.2	1731.7
52.5°	1640.2	1603.6	1575.6	1551.7	1543.6	1542.0	1543.6	1551.7	1575.6	1603.6	1640.2
55°	1508.0	1452.0	1406.2	1393.5	1391.0	1396.1	1391.0	1393.5	1406.2	1452.0	1508.0
57.5°	1345.7	1290.8	1253.2	1243.0	1234.3	1226.2	1234.3	1243.0	1253.2	1290.8	1345.7
60°	1235.9	1185.0	1149.4	1139.2	1116.3	1106.2	1116.3	1139.2	1149.4	1185.0	1235.9
62.5°	1138.2	1077.2	1049.7	1029.4	1012.6	996.3	1012.6	1029.4	1049.7	1077.2	1138.2
65°	996.8	925.6	897.7	879.9	849.3	841.7	849.3	879.9	897.7	925.6	996.8
67.5°	842.2	780.2	745.1	721.2	701.8	701.3	701.8	721.2	745.1	780.2	842.2
70°	742.5	686.6	653.5	625.6	610.3	607.8	610.3	625.6	653.5	686.6	742.5
72.5°	644.9	591.0	562.0	536.0	522.8	520.3	522.8	536.0	562.0	591.0	644.9
75°	506.0	455.2	432.3	414.5	404.3	399.2	404.3	414.5	432.3	455.2	506.0
77.5°	374.3	333.1	321.4	303.1	294.5	294.0	294.5	303.1	321.4	333.1	374.3
80°	295.0	261.9	244.1	233.9	231.4	228.9	231.4	233.9	244.1	261.9	295.0
82.5°	213.6	194.8	183.1	177.0	176.5	171.9	176.5	177.0	183.1	194.8	213.6
85°	114.4	109.3	106.8	104.3	101.7	101.7	101.7	104.3	106.8	109.3	114.4
87.5°	46.8	48.8	48.8	50.9	52.9	50.9	52.9	50.9	48.8	48.8	46.8
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-125D-835-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	2687.9	2687.9	2687.9	2687.9
2.5°	2722.5	2718.4	2706.2	2706.2
5°	2759.1	2748.9	2720.9	2700.6
7.5°	2767.7	2753.0	2716.3	2675.2
10°	2761.6	2748.9	2708.2	2654.8
12.5°	2749.4	2734.7	2696.0	2626.3
15°	2723.5	2700.6	2665.0	2578.5
17.5°	2682.3	2661.9	2619.7	2509.9
20°	2649.7	2629.4	2581.1	2459.0
22.5°	2611.1	2590.7	2540.4	2389.8
25°	2548.0	2517.5	2474.3	2270.8
27.5°	2477.8	2444.8	2383.2	2140.1
30°	2431.0	2387.8	2303.9	2044.5
32.5°	2380.2	2328.8	2185.9	1936.7
35°	2288.6	2245.4	2042.0	1726.6
37.5°	2188.9	2157.4	1911.8	1490.2
40°	2115.7	2090.3	1787.7	1347.7
42.5°	2026.2	2019.1	1651.4	1242.0
45°	1904.6	1904.6	1571.5	1113.8
47.5°	1780.6	1781.6	1459.6	1080.2
50°	1701.2	1675.8	1378.3	1078.2
52.5°	1619.8	1539.5	1278.6	998.9
55°	1485.1	1350.3	1124.0	907.8
57.5°	1349.3	1177.4	883.9	877.8
60°	1243.5	1055.3	676.4	818.8
62.5°	1141.8	917.0	527.9	757.8
65°	991.7	628.1	412.0	630.6
67.5°	848.8	398.7	313.3	455.7
70°	755.2	295.0	223.8	356.0
72.5°	659.6	231.9	189.2	307.2
75°	516.2	165.3	190.7	239.0
77.5°	386.5	125.6	170.4	166.8
80°	295.0	99.2	139.9	132.2
82.5°	219.7	78.8	99.2	97.6
85°	109.3	45.8	50.9	40.7
87.5°	44.8	22.4	18.3	10.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)