

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-940-1D-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-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

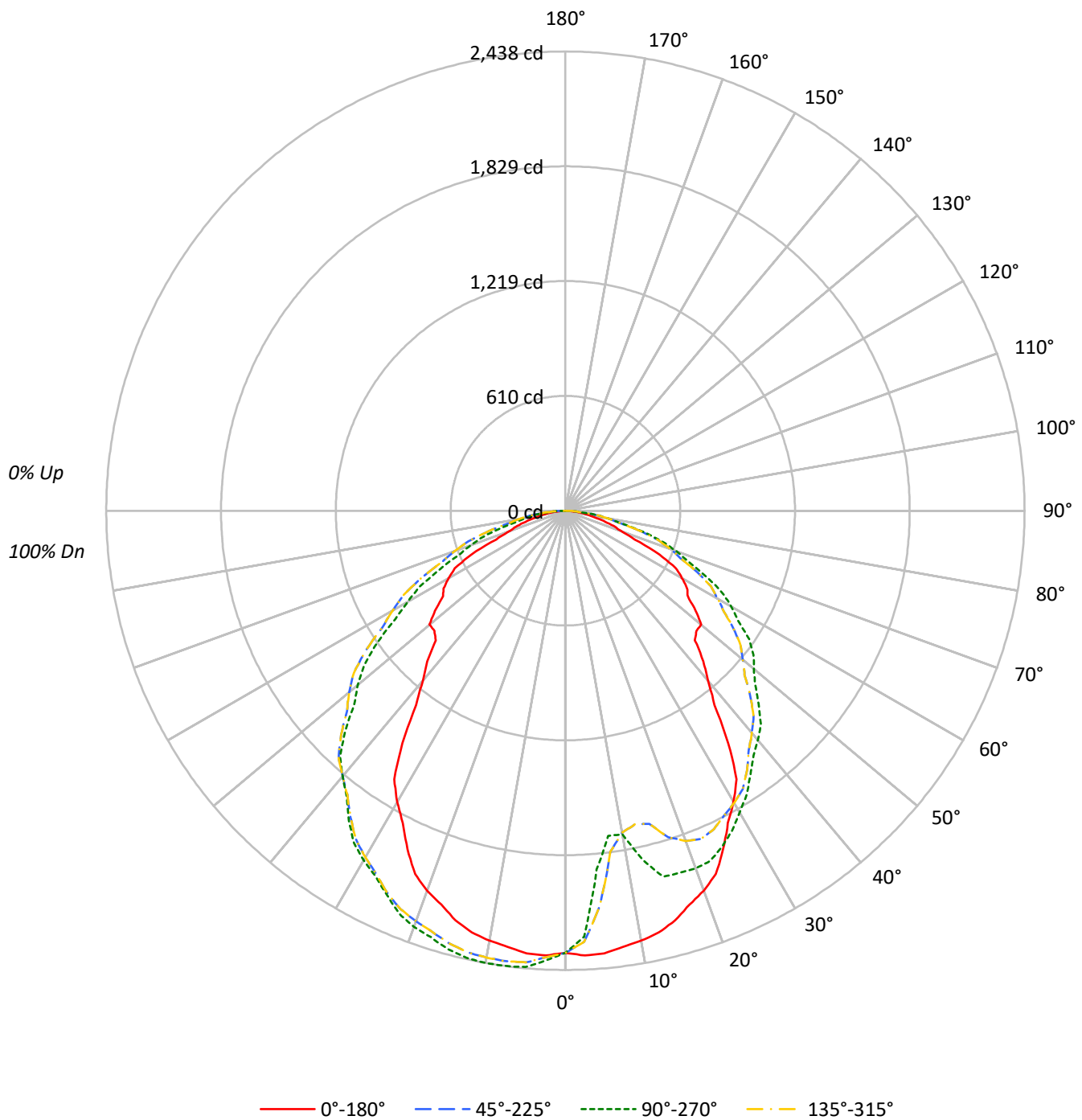
Lumens per Lamp: N/A
Luminaire Lumens: 6082.0 lumens
Efficiency: N/A
Efficacy: 87.3 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.26 / 1.36
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Direct

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°	14436	14436	14436	14436
5°	14560	11804	14560	15012
10°	14478	10886	14478	15227
15°	14337	12810	14337	15341
20°	14055	13226	14055	15391
25°	13457	13351	13457	15250
30°	12679	13136	12679	15218
35°	11321	12855	11321	15055
40°	9449	12765	9449	14780
45°	8459	12612	8459	14370
50°	9009	12493	9009	13768
55°	8501	12762	8501	13072
60°	8796	12511	8796	11882
65°	8015	11958	8015	10697
70°	5591	11220	5591	9544
75°	4960	9919	4960	8284
80°	4091	7708	4091	7077
85°	2505	5328	2505	6267

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 230°

Vertical Angle: 45°

Luminance: 14679 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	211.6	3.5
10°-20°	601.3	9.9
20°-30°	929.2	15.3
30°-40°	1110.2	18.3
40°-50°	1117.3	18.4
50°-60°	970.1	16.0
60°-70°	686.7	11.3
70°-80°	363.2	6.0
80°-90°	92.4	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°	1742.0	28.6
0°-40°	2852.2	46.9
0°-60°	4939.6	81.2
0°-90°	6082.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6082.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2347	2347	2347	2347	2347	
5°	2358	1912	2358	2431	2358	223
15°	2252	2012	2252	2409	2252	633
25°	1983	1967	1983	2247	1983	909
35°	1508	1712	1508	2005	1508	931
45°	972	1450	972	1652	972	783
55°	793	1190	793	1219	793	729
65°	551	822	551	735	551	524
75°	209	417	209	349	209	220
85°	36	76	36	89	36	51
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°	2347.0	2347.0	2347.0	2347.0	2347.0	2347.0	2347.0	2347.0	2347.0	2347.0	2347.0
2.5°	2363.0	2345.2	2338.1	2323.9	2297.3	2283.0	2293.7	2275.9	2283.0	2263.5	2283.0
5°	2358.1	2318.1	2284.8	2229.3	2149.4	2056.1	2033.9	1976.2	1940.7	1911.8	1940.7
7.5°	2335.9	2267.5	2165.8	1996.2	1859.8	1793.2	1776.8	1760.4	1755.9	1741.3	1755.9
10°	2318.1	2224.9	2036.1	1845.2	1749.7	1718.6	1725.3	1731.9	1745.3	1743.0	1745.3
12.5°	2293.3	2150.3	1901.1	1768.8	1705.3	1704.4	1753.7	1842.1	1903.4	1899.4	1903.4
15°	2251.5	2007.3	1774.1	1689.7	1669.8	1771.9	1951.8	1993.9	2009.5	2011.7	2009.5
17.5°	2191.6	1867.4	1692.9	1637.3	1705.3	1927.3	1982.0	2001.0	2014.4	2015.3	2014.4
20°	2147.2	1796.3	1652.0	1614.3	1794.1	1936.2	1969.5	1993.9	2016.1	2020.6	2016.1
22.5°	2086.8	1746.6	1609.4	1598.3	1843.8	1927.3	1957.1	1993.9	2012.6	2011.7	2012.6
25°	1982.8	1685.3	1556.5	1580.9	1849.6	1880.7	1938.4	1962.9	1965.1	1967.3	1965.1
27.5°	1868.7	1631.6	1494.8	1592.5	1813.6	1835.8	1898.0	1910.5	1918.9	1915.3	1918.9
30°	1785.2	1594.3	1452.2	1594.3	1785.2	1798.5	1860.7	1869.6	1858.5	1849.6	1858.5
32.5°	1691.1	1548.1	1411.3	1581.8	1742.6	1761.2	1811.0	1807.4	1796.3	1789.2	1796.3
35°	1507.7	1469.9	1336.7	1541.0	1669.8	1694.2	1723.1	1720.8	1718.6	1712.0	1718.6
37.5°	1301.2	1377.6	1263.0	1477.5	1599.6	1597.8	1640.9	1650.2	1648.0	1639.6	1648.0
40°	1176.8	1301.2	1216.8	1427.7	1549.9	1532.1	1587.6	1598.7	1596.5	1589.8	1596.5
42.5°	1084.5	1199.9	1163.5	1367.3	1489.5	1468.1	1536.1	1547.2	1541.4	1536.5	1541.4
45°	972.5	992.5	1081.3	1270.1	1387.8	1385.5	1458.8	1469.9	1456.6	1449.9	1456.6
47.5°	943.2	800.2	991.6	1157.3	1287.0	1295.4	1374.0	1383.8	1371.8	1366.0	1371.8
50°	941.5	706.1	925.9	1070.2	1221.2	1236.8	1318.9	1323.4	1307.8	1305.6	1307.8
52.5°	872.2	652.8	849.5	993.9	1164.4	1183.5	1258.5	1257.7	1256.3	1259.4	1256.3
55°	792.7	588.4	717.2	881.5	1076.9	1101.3	1167.9	1170.2	1185.7	1190.1	1185.7
57.5°	766.5	515.6	594.6	784.3	989.0	1008.1	1070.7	1076.0	1086.7	1086.2	1086.7
60°	715.0	464.1	521.8	723.9	921.5	945.9	1001.4	1010.3	1019.2	1017.0	1019.2
62.5°	661.7	428.5	486.3	674.1	857.5	883.7	921.5	937.5	941.0	937.0	941.0
65°	550.7	381.9	430.8	595.1	759.4	788.3	812.7	823.8	826.0	821.6	826.0
67.5°	397.9	338.8	387.2	516.9	646.6	679.0	693.2	699.9	697.7	705.7	697.7
70°	310.9	308.6	355.3	461.8	577.3	606.2	615.1	621.7	619.5	623.9	619.5
72.5°	268.2	283.8	321.5	405.0	499.2	528.0	533.3	534.7	541.3	536.9	541.3
75°	208.7	242.0	266.5	319.7	390.8	410.8	413.0	415.2	410.8	417.4	410.8
77.5°	145.7	184.3	206.1	236.7	284.7	297.1	296.6	298.0	294.4	294.0	294.4
80°	115.5	139.9	159.9	179.9	215.4	224.3	222.0	219.8	219.8	217.6	219.8
82.5°	85.3	99.0	117.2	131.9	155.0	156.8	159.9	155.9	155.9	159.0	155.9
85°	35.5	46.6	60.0	66.6	75.5	77.7	73.3	79.9	75.5	75.5	75.5
87.5°	8.9	14.2	21.3	24.9	26.6	24.9	24.9	21.3	21.3	21.3	21.3
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°	2347.0	2347.0	2347.0	2347.0	2347.0	2347.0	2347.0	2347.0	2347.0	2347.0	2347.0
2.5°	2275.9	2293.7	2283.0	2297.3	2323.9	2338.1	2345.2	2363.0	2363.0	2373.6	2377.2
5°	1976.2	2033.9	2056.1	2149.4	2229.3	2284.8	2318.1	2358.1	2375.9	2400.3	2409.2
7.5°	1760.4	1776.8	1793.2	1859.8	1996.2	2165.8	2267.5	2335.9	2371.9	2403.8	2416.7
10°	1731.9	1725.3	1718.6	1749.7	1845.2	2036.1	2224.9	2318.1	2364.8	2400.3	2411.4
12.5°	1842.1	1753.7	1704.4	1705.3	1768.8	1901.1	2150.3	2293.3	2354.1	2387.8	2400.7
15°	1993.9	1951.8	1771.9	1669.8	1689.7	1774.1	2007.3	2251.5	2327.0	2358.1	2378.1
17.5°	2001.0	1982.0	1927.3	1705.3	1637.3	1692.9	1867.4	2191.6	2287.5	2324.3	2342.1
20°	1993.9	1969.5	1936.2	1794.1	1614.3	1652.0	1796.3	2147.2	2253.7	2295.9	2313.7
22.5°	1993.9	1957.1	1927.3	1843.8	1598.3	1609.4	1746.6	2086.8	2218.2	2262.2	2279.9
25°	1962.9	1938.4	1880.7	1849.6	1580.9	1556.5	1685.3	1982.8	2160.5	2198.2	2224.9
27.5°	1910.5	1898.0	1835.8	1813.6	1592.5	1494.8	1631.6	1868.7	2081.0	2134.7	2163.6
30°	1869.6	1860.7	1798.5	1785.2	1594.3	1452.2	1594.3	1785.2	2011.7	2085.0	2122.7
32.5°	1807.4	1811.0	1761.2	1742.6	1581.8	1411.3	1548.1	1691.1	1908.7	2033.5	2078.3
35°	1720.8	1723.1	1694.2	1669.8	1541.0	1336.7	1469.9	1507.7	1783.0	1960.6	1998.4
37.5°	1650.2	1640.9	1597.8	1599.6	1477.5	1263.0	1377.6	1301.2	1669.3	1883.8	1911.3
40°	1598.7	1587.6	1532.1	1549.9	1427.7	1216.8	1301.2	1176.8	1561.0	1825.2	1847.4
42.5°	1547.2	1536.1	1468.1	1489.5	1367.3	1163.5	1199.9	1084.5	1441.9	1763.0	1769.2
45°	1469.9	1458.8	1385.5	1387.8	1270.1	1081.3	992.5	972.5	1372.2	1663.1	1663.1
47.5°	1383.8	1374.0	1295.4	1287.0	1157.3	991.6	800.2	943.2	1274.5	1555.6	1554.7
50°	1323.4	1318.9	1236.8	1221.2	1070.2	925.9	706.1	941.5	1203.5	1463.3	1485.5
52.5°	1257.7	1258.5	1183.5	1164.4	993.9	849.5	652.8	872.2	1116.4	1344.2	1414.4
55°	1170.2	1167.9	1101.3	1076.9	881.5	717.2	588.4	792.7	981.4	1179.0	1296.7
57.5°	1076.0	1070.7	1008.1	989.0	784.3	594.6	515.6	766.5	771.8	1028.1	1178.2
60°	1010.3	1001.4	945.9	921.5	723.9	521.8	464.1	715.0	590.6	921.5	1085.8
62.5°	937.5	921.5	883.7	857.5	674.1	486.3	428.5	661.7	461.0	800.7	997.0
65°	823.8	812.7	788.3	759.4	595.1	430.8	381.9	550.7	359.7	548.4	866.0
67.5°	699.9	693.2	679.0	646.6	516.9	387.2	338.8	397.9	273.6	348.2	741.2
70°	621.7	615.1	606.2	577.3	461.8	355.3	308.6	310.9	195.4	257.6	659.5
72.5°	534.7	533.3	528.0	499.2	405.0	321.5	283.8	268.2	165.2	202.5	576.0
75°	415.2	413.0	410.8	390.8	319.7	266.5	242.0	208.7	166.5	144.3	450.7
77.5°	298.0	296.6	297.1	284.7	236.7	206.1	184.3	145.7	148.8	109.7	337.5
80°	219.8	222.0	224.3	215.4	179.9	159.9	139.9	115.5	122.1	86.6	257.6
82.5°	155.9	159.9	156.8	155.0	131.9	117.2	99.0	85.3	86.6	68.8	191.8
85°	79.9	73.3	77.7	75.5	66.6	60.0	46.6	35.5	44.4	40.0	95.5
87.5°	21.3	24.9	24.9	26.6	24.9	21.3	14.2	8.9	16.0	19.5	39.1
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°	2347.0	2347.0	2347.0	2347.0	2347.0	2347.0	2347.0	2347.0	2347.0	2347.0	2347.0
2.5°	2371.9	2371.9	2387.8	2391.4	2395.0	2389.6	2395.0	2391.4	2387.8	2371.9	2371.9
5°	2406.9	2406.9	2429.1	2435.8	2435.8	2431.4	2435.8	2435.8	2429.1	2406.9	2406.9
7.5°	2410.1	2413.6	2435.8	2440.7	2444.7	2438.0	2444.7	2440.7	2435.8	2413.6	2410.1
10°	2404.7	2413.6	2435.8	2442.5	2444.7	2438.0	2444.7	2442.5	2435.8	2413.6	2404.7
12.5°	2397.6	2404.7	2426.9	2431.8	2435.8	2430.9	2435.8	2431.8	2426.9	2404.7	2397.6
15°	2373.6	2382.5	2406.9	2411.4	2415.8	2409.2	2415.8	2411.4	2406.9	2382.5	2373.6
17.5°	2340.3	2351.4	2373.6	2380.7	2383.0	2374.5	2383.0	2380.7	2373.6	2351.4	2340.3
20°	2313.7	2324.8	2347.0	2355.9	2358.1	2351.4	2358.1	2355.9	2347.0	2324.8	2313.7
22.5°	2279.9	2298.1	2318.6	2322.1	2319.0	2312.4	2319.0	2322.1	2318.6	2298.1	2279.9
25°	2231.5	2247.1	2253.7	2253.7	2253.7	2247.1	2253.7	2253.7	2253.7	2247.1	2231.5
27.5°	2169.8	2177.8	2181.8	2185.3	2189.8	2185.3	2189.8	2185.3	2181.8	2177.8	2169.8
30°	2127.2	2122.7	2133.8	2142.7	2147.2	2142.7	2147.2	2142.7	2133.8	2122.7	2127.2
32.5°	2068.6	2071.2	2087.6	2093.0	2093.9	2089.4	2093.9	2093.0	2087.6	2071.2	2068.6
35°	1982.8	1993.9	2005.0	2009.5	2011.7	2005.0	2011.7	2009.5	2005.0	1993.9	1982.8
37.5°	1892.2	1911.8	1919.8	1914.9	1915.3	1908.2	1915.3	1914.9	1919.8	1911.8	1892.2
40°	1831.9	1849.6	1854.1	1847.4	1849.6	1840.7	1849.6	1847.4	1854.1	1849.6	1831.9
42.5°	1775.0	1789.2	1784.8	1776.3	1775.0	1771.5	1775.0	1776.3	1784.8	1789.2	1775.0
45°	1680.9	1687.5	1667.5	1660.9	1656.4	1652.0	1656.4	1660.9	1667.5	1687.5	1680.9
47.5°	1577.8	1569.0	1549.9	1539.6	1527.2	1518.8	1527.2	1539.6	1549.9	1569.0	1577.8
50°	1512.1	1485.5	1469.9	1445.5	1436.6	1438.8	1436.6	1445.5	1469.9	1485.5	1512.1
52.5°	1432.2	1400.2	1375.8	1354.9	1347.8	1346.5	1347.8	1354.9	1375.8	1400.2	1432.2
55°	1316.7	1267.9	1227.9	1216.8	1214.6	1219.0	1214.6	1216.8	1227.9	1267.9	1316.7
57.5°	1175.1	1127.1	1094.2	1085.3	1077.8	1070.7	1077.8	1085.3	1094.2	1127.1	1175.1
60°	1079.1	1034.7	1003.6	994.8	974.8	965.9	974.8	994.8	1003.6	1034.7	1079.1
62.5°	993.9	940.6	916.6	898.8	884.2	870.0	884.2	898.8	916.6	940.6	993.9
65°	870.4	808.2	783.8	768.3	741.6	735.0	741.6	768.3	783.8	808.2	870.4
67.5°	735.4	681.2	650.6	629.7	612.8	612.4	612.8	629.7	650.6	681.2	735.4
70°	648.4	599.5	570.7	546.2	532.9	530.7	532.9	546.2	570.7	599.5	648.4
72.5°	563.1	516.0	490.7	468.1	456.5	454.3	456.5	468.1	490.7	516.0	563.1
75°	441.9	397.5	377.5	361.9	353.0	348.6	353.0	361.9	377.5	397.5	441.9
77.5°	326.8	290.9	280.7	264.7	257.1	256.7	257.1	264.7	280.7	290.9	326.8
80°	257.6	228.7	213.2	204.3	202.1	199.8	202.1	204.3	213.2	228.7	257.6
82.5°	186.5	170.1	159.9	154.5	154.1	150.1	154.1	154.5	159.9	170.1	186.5
85°	99.9	95.5	93.3	91.0	88.8	88.8	88.8	91.0	93.3	95.5	99.9
87.5°	40.9	42.6	42.6	44.4	46.2	44.4	46.2	44.4	42.6	42.6	40.9
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-940-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	2347.0	2347.0	2347.0	2347.0
2.5°	2377.2	2373.6	2363.0	2363.0
5°	2409.2	2400.3	2375.9	2358.1
7.5°	2416.7	2403.8	2371.9	2335.9
10°	2411.4	2400.3	2364.8	2318.1
12.5°	2400.7	2387.8	2354.1	2293.3
15°	2378.1	2358.1	2327.0	2251.5
17.5°	2342.1	2324.3	2287.5	2191.6
20°	2313.7	2295.9	2253.7	2147.2
22.5°	2279.9	2262.2	2218.2	2086.8
25°	2224.9	2198.2	2160.5	1982.8
27.5°	2163.6	2134.7	2081.0	1868.7
30°	2122.7	2085.0	2011.7	1785.2
32.5°	2078.3	2033.5	1908.7	1691.1
35°	1998.4	1960.6	1783.0	1507.7
37.5°	1911.3	1883.8	1669.3	1301.2
40°	1847.4	1825.2	1561.0	1176.8
42.5°	1769.2	1763.0	1441.9	1084.5
45°	1663.1	1663.1	1372.2	972.5
47.5°	1554.7	1555.6	1274.5	943.2
50°	1485.5	1463.3	1203.5	941.5
52.5°	1414.4	1344.2	1116.4	872.2
55°	1296.7	1179.0	981.4	792.7
57.5°	1178.2	1028.1	771.8	766.5
60°	1085.8	921.5	590.6	715.0
62.5°	997.0	800.7	461.0	661.7
65°	866.0	548.4	359.7	550.7
67.5°	741.2	348.2	273.6	397.9
70°	659.5	257.6	195.4	310.9
72.5°	576.0	202.5	165.2	268.2
75°	450.7	144.3	166.5	208.7
77.5°	337.5	109.7	148.8	145.7
80°	257.6	86.6	122.1	115.5
82.5°	191.8	68.8	86.6	85.3
85°	95.5	40.0	44.4	35.5
87.5°	39.1	19.5	16.0	8.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)