

LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P#

Luminaire Tested: **FLDSQ4C30D010 FEU4C309040 F4LC-SQLWW-LI**

Issue Date: 12/13/2022

Tested By:

Approved By:



Cooper Lighting Solutions laboratories have been accredited by National Voluntary Laboratory Accreditation Program (NVLAP) that it adheres to the requirements of ISO/IEC 17025:2005 and appropriate IESNA test methods. This report must not be used to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the Federal Government. Results contained in this report are valid for luminaire sample tested, as supplied by requestor. Information related to the luminaire tested has been supplied by requestor and can affect the validity of the test results. Report shall not be reproduced except in full without approval of Cooper Lighting Solutions Lighting Laboratory. Test performed at address noted above.

**Test Information**

Test Method: LM-79-08  
 Report Number: P#  
 Test Lab: INNOVATION CENTER  
 Issue Date: 12/13/2022  
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
 Product Line: FAIL-SAFE  
 Catalog Number: FLDSQ4C30D010 FEU4C309040 F4LC-SQLWW-LI  
 Description: 4 INCH 3000 LUMEN FAIL-SAFE LED DOWNLIGHT WITH, 4000K, 90CRI LEDS AND F4LC-SQLWW TRIM WITH LI FINISH  
 Light Source: -  
 Ballast/Driver: -

**Summary**

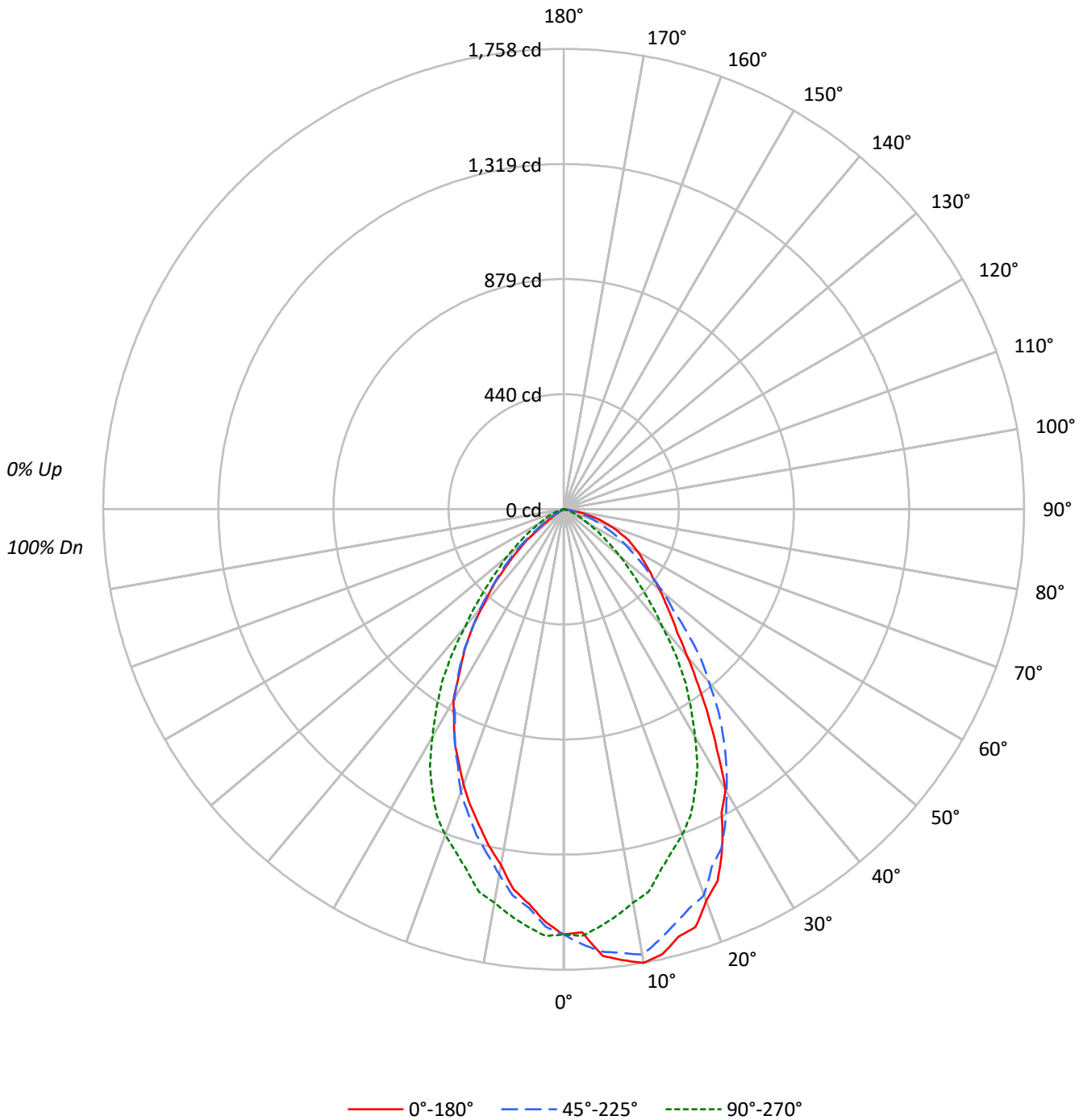
Lumens per Lamp: N/A  
 Luminaire Lumens: 2328.0 lumens  
 Efficiency: N/A  
 Efficacy: 73.7 lumens/watt  
 Spacing Criteria (0/90/45): 1.01 / 1 / 1.06  
 Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
 CIE Type: Direct

Input Watts (W): 31.6  
 Input Voltage (V):  
 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: 25 FT

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	GONIO 1 IN0055	4/22/2021	10/22/2021
Power Meter	XITRON 2801 IN0197	12/1/2020	12/1/2021
AC Power Source	CHROMA 61505 IN0196	12/1/2020	12/1/2021
DC Power Supply	AGILENT E3634A IN0198	11/30/2020	11/30/2021
Room Thermometer	ONSET IN0143	12/1/2020	12/1/2021

TEST NUMBER: P#  
CATALOG NUMBER: FLDSQ4C30D010 FEU4C309040 F4LC-SQLWW-LI

### Luminous Intensity Polar Plot



TEST NUMBER: P#

CATALOG NUMBER: FLDSQ4C30D010 FEU4C309040 F4LC-SQLWW-LI

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				90
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80				80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72				72
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64				64
5	85	75	67	62	83	74	67	62	72	66	61	70	65	60	68	64	60	58				58
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	54	53				53
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48				48
8	70	59	52	47	69	58	51	46	57	51	46	56	50	46	55	50	46	44				44
9	66	55	48	43	65	54	47	43	53	47	43	52	46	42	51	46	42	41				41
10	62	51	44	40	61	51	44	40	50	44	39	49	43	39	48	43	39	38				38

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	156708	156708	156708
5°	165791	154856	146555
10°	172293	149396	135081
15°	168849	142587	124686
20°	163366	135765	114777
25°	152382	126255	104696
30°	137565	111739	93734
35°	113315	95658	77766
40°	92478	73836	59855
45°	79458	56070	43052
50°	71903	42676	27185
55°	66179	30785	9824
60°	63509	21035	1505
65°	61347	14224	457
70°	54928	9874	564
75°	45035	5107	0
80°	28172	2167	0
85°	0	0	0

TEST NUMBER: P#  
 CATALOG NUMBER: FLDSQ4C30D010 FEU4C309040 F4LC-SQLWW-LI

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	152.2	6.5
10°-20°	410.0	17.6
20°-30°	547.4	23.5
30°-40°	519.7	22.3
40°-50°	359.2	15.4
50°-60°	198.5	8.5
60°-70°	98.6	4.2
70°-80°	38.8	1.7
80°-90°	3.7	0.2
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°	1109.6	47.7
0°-40°	1629.2	70.0
0°-60°	2186.9	93.9
0°-90°	2328.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2328.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1624	1624	1624	1624	1624	
5°	1712	1696	1599	1527	1513	164
15°	1690	1640	1427	1287	1248	478
25°	1431	1426	1186	983	983	653
35°	962	1063	812	668	660	603
45°	582	668	411	337	316	454
55°	393	370	183	94	58	354
65°	269	195	62	2	2	261
75°	121	74	14	0	0	129
85°	0	2	0	0	0	11
90°	0	0	0	0	0	

TEST NUMBER: P#  
 CATALOG NUMBER: FLDSQ4C30D010 FEU4C309040 F4LC-SQLWW-LI

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1624.1	1624.1	1624.1	1624.1	1624.1	1624.1	1624.1	1624.1	1624.1	1624.1	1624.1
2.5°	1616.3	1661.1	1665.0	1661.1	1666.9	1665.0	1674.7	1665.0	1676.7	1659.2	1663.1
5°	1711.7	1694.2	1731.2	1711.7	1711.7	1709.8	1703.9	1702.0	1709.8	1684.5	1696.2
7.5°	1737.1	1762.4	1795.5	1754.6	1756.5	1756.5	1744.8	1740.9	1740.9	1694.2	1707.8
10°	1758.5	1742.9	1760.4	1744.8	1758.5	1756.5	1764.3	1739.0	1756.5	1729.3	1727.3
12.5°	1740.9	1735.1	1758.5	1733.2	1725.4	1727.3	1717.6	1711.7	1717.6	1686.4	1684.5
15°	1690.3	1696.2	1731.2	1703.9	1700.1	1696.2	1684.5	1665.0	1680.6	1637.7	1639.7
17.5°	1672.8	1663.1	1668.9	1645.5	1651.4	1647.5	1645.5	1628.0	1624.1	1596.8	1596.8
20°	1591.0	1612.4	1612.4	1596.8	1596.8	1594.9	1569.6	1585.2	1567.6	1559.8	1567.6
22.5°	1534.5	1536.5	1536.5	1522.8	1524.8	1517.0	1503.4	1493.6	1503.4	1493.6	1478.0
25°	1431.3	1435.2	1458.6	1433.3	1429.4	1437.1	1425.5	1419.6	1417.7	1394.3	1425.5
27.5°	1306.7	1345.6	1343.7	1333.9	1345.6	1330.0	1324.2	1326.1	1332.0	1330.0	1337.8
30°	1234.7	1240.5	1246.3	1238.6	1240.5	1234.7	1234.7	1236.6	1252.1	1246.3	1244.4
32.5°	1088.6	1108.0	1123.7	1123.7	1125.6	1131.4	1129.5	1170.3	1180.1	1160.7	1156.8
35°	962.0	975.6	989.2	991.2	1016.5	1018.4	1020.4	1032.1	1059.3	1065.2	1063.2
37.5°	841.3	854.9	858.8	876.3	890.0	903.5	919.2	934.8	958.1	977.6	967.9
40°	734.2	740.0	749.7	757.5	784.8	784.8	792.5	823.7	849.1	864.6	862.7
42.5°	644.6	646.5	654.3	668.0	693.3	687.4	693.3	714.7	751.6	753.6	775.1
45°	582.3	580.3	586.2	588.1	603.7	611.5	615.4	630.9	662.1	666.0	668.0
47.5°	525.8	523.8	533.6	537.5	543.3	551.1	551.1	553.1	564.7	574.5	566.7
50°	479.0	479.0	479.0	482.9	492.7	490.7	492.7	500.5	506.3	502.4	500.5
52.5°	428.4	436.2	442.0	444.0	445.9	445.9	447.9	444.0	442.0	436.2	424.5
55°	393.4	401.2	401.2	401.2	401.2	408.9	399.2	401.2	401.2	385.6	370.0
57.5°	358.4	366.1	371.9	364.2	371.9	364.2	360.3	358.4	354.4	338.8	315.5
60°	329.1	333.0	331.0	329.1	333.0	327.1	323.3	315.5	311.6	290.1	274.6
62.5°	296.0	297.9	299.9	296.0	292.1	290.1	282.4	270.7	262.9	245.4	231.7
65°	268.7	262.9	260.9	259.0	255.1	249.3	243.5	229.8	223.9	208.4	194.7
67.5°	227.8	225.9	229.8	223.9	214.2	214.2	208.4	196.7	183.0	173.3	159.7
70°	194.7	192.8	188.9	183.0	181.1	173.3	173.3	159.7	155.8	138.2	126.6
72.5°	159.7	159.7	153.8	148.0	142.1	138.2	136.3	126.6	120.8	111.0	101.2
75°	120.8	120.8	118.8	112.9	109.0	105.1	103.2	95.4	89.6	79.9	74.0
77.5°	85.7	85.7	77.9	74.0	75.9	72.0	68.1	66.2	64.2	58.4	50.7
80°	50.7	48.7	42.9	44.8	42.9	42.9	40.9	38.9	35.0	31.1	27.2
82.5°	13.7	15.6	15.6	15.6	17.5	13.7	13.7	13.7	15.6	15.6	9.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0
87.5°	2.0	3.9	7.8	7.8	7.8	7.8	7.8	5.9	5.9	5.9	3.9
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: P#  
 CATALOG NUMBER: FLDSQ4C30D010 FEU4C309040 F4LC-SQLWW-LI

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1624.1	1624.1	1624.1	1624.1	1624.1	1624.1	1624.1	1624.1	1624.1	1624.1	1624.1
2.5°	1643.6	1641.6	1643.6	1629.9	1661.1	1637.7	1633.8	1629.9	1643.6	1629.9	1610.5
5°	1678.6	1659.2	1653.3	1647.5	1665.0	1637.7	1631.9	1633.8	1624.1	1598.8	1600.7
7.5°	1690.3	1672.8	1655.3	1618.3	1633.8	1628.0	1612.4	1600.7	1585.2	1563.7	1559.8
10°	1694.2	1674.7	1649.4	1637.7	1614.4	1606.6	1600.7	1581.3	1561.8	1524.8	1515.0
12.5°	1682.5	1659.2	1628.0	1618.3	1600.7	1575.4	1561.8	1542.3	1524.8	1495.6	1474.1
15°	1631.9	1612.4	1602.7	1569.6	1561.8	1546.2	1518.9	1491.7	1466.4	1427.4	1415.7
17.5°	1573.5	1565.7	1555.9	1530.6	1528.7	1513.1	1487.8	1464.4	1431.3	1370.9	1351.5
20°	1513.1	1513.1	1481.9	1472.2	1491.7	1460.5	1441.0	1419.6	1351.5	1322.2	1287.2
22.5°	1468.4	1446.9	1429.4	1413.8	1415.7	1396.3	1369.0	1326.1	1300.8	1265.8	1224.9
25°	1380.7	1388.5	1349.6	1343.7	1349.6	1304.7	1291.1	1256.0	1219.0	1185.9	1154.8
27.5°	1326.1	1304.7	1279.4	1258.0	1258.0	1240.5	1201.6	1193.8	1137.2	1106.1	1067.1
30°	1244.4	1228.8	1207.3	1176.2	1172.3	1158.7	1127.5	1108.0	1049.7	1002.9	981.4
32.5°	1141.1	1135.3	1117.8	1082.8	1071.1	1055.4	1016.5	983.4	956.2	903.5	878.3
35°	1067.1	1045.8	1008.8	979.5	969.8	942.5	911.3	888.0	858.8	812.1	779.0
37.5°	956.2	934.8	899.7	864.6	864.6	837.4	794.5	771.2	730.3	703.0	675.7
40°	858.8	831.5	796.5	755.6	749.7	710.8	693.3	654.3	629.0	586.2	582.3
42.5°	749.7	724.4	693.3	662.1	638.7	619.3	574.5	545.3	518.0	496.6	490.7
45°	650.4	617.3	590.1	551.1	527.7	504.4	475.2	455.7	434.3	410.9	397.3
47.5°	564.7	537.5	498.5	463.5	440.1	428.4	395.3	373.9	356.4	340.8	331.0
50°	477.1	444.0	422.6	383.6	379.7	352.5	325.2	307.7	297.9	284.3	270.7
52.5°	410.9	379.7	350.5	321.3	305.7	296.0	270.7	253.1	239.6	229.8	222.0
55°	346.6	319.4	296.0	266.8	257.0	243.5	214.2	210.3	196.7	183.0	173.3
57.5°	297.9	272.6	245.4	225.9	208.4	198.7	175.2	159.7	151.9	140.2	130.5
60°	253.1	225.9	204.5	181.1	173.3	159.7	142.1	128.6	118.8	109.0	99.3
62.5°	212.2	188.9	165.6	146.0	134.4	126.6	112.9	101.2	91.6	83.8	75.9
65°	175.2	153.8	134.4	114.9	109.0	99.3	89.6	79.9	72.0	62.3	54.6
67.5°	144.1	124.7	105.1	91.6	85.7	81.8	70.1	60.3	54.6	48.7	40.9
70°	112.9	99.3	83.8	72.0	66.2	60.3	52.6	46.8	38.9	35.0	29.2
72.5°	87.7	75.9	62.3	52.6	48.7	44.8	37.0	31.1	27.2	23.3	19.5
75°	62.3	52.6	44.8	35.0	33.1	31.1	25.3	21.4	17.5	13.7	11.7
77.5°	42.9	35.0	27.2	23.3	21.4	17.5	15.6	11.7	9.8	7.8	5.9
80°	23.3	17.5	13.7	11.7	9.8	7.8	7.8	5.9	3.9	3.9	2.0
82.5°	7.8	5.9	3.9	2.0	2.0	2.0	2.0	2.0	2.0	0.0	2.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0
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: P#  
 CATALOG NUMBER: FLDSQ4C30D010 FEU4C309040 F4LC-SQLWW-LI

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1624.1	1624.1	1624.1	1624.1	1624.1	1624.1	1624.1	1624.1	1624.1	1624.1	1624.1
2.5°	1622.2	1600.7	1606.6	1606.6	1602.7	1602.7	1598.8	1592.9	1594.9	1583.2	1557.9
5°	1604.6	1577.4	1573.5	1577.4	1561.8	1557.9	1550.1	1561.8	1526.7	1540.4	1524.8
7.5°	1554.0	1528.7	1522.8	1536.5	1517.0	1505.3	1503.4	1518.9	1487.8	1472.2	1454.7
10°	1497.5	1487.8	1470.3	1460.5	1454.7	1456.6	1441.0	1421.6	1415.7	1411.8	1396.3
12.5°	1446.9	1425.5	1409.9	1398.2	1394.3	1394.3	1369.0	1365.1	1347.6	1343.7	1320.3
15°	1386.5	1361.2	1351.5	1335.9	1322.2	1330.0	1300.8	1293.0	1287.2	1261.9	1265.8
17.5°	1333.9	1306.7	1283.3	1273.6	1261.9	1250.2	1222.9	1228.8	1215.1	1215.1	1180.1
20°	1265.8	1236.6	1219.0	1199.6	1199.6	1184.0	1164.5	1166.5	1148.9	1131.4	1100.2
22.5°	1193.8	1162.6	1141.1	1133.3	1113.9	1110.0	1086.7	1080.8	1057.4	1059.3	1032.1
25°	1117.8	1086.7	1057.4	1059.3	1041.9	1034.1	1020.4	993.2	983.4	971.8	964.0
27.5°	1028.2	1006.8	981.4	979.5	946.4	948.3	930.9	923.1	899.7	905.5	888.0
30°	946.4	915.3	891.9	886.1	872.4	868.5	841.3	829.5	833.5	817.9	808.2
32.5°	862.7	816.0	806.2	794.5	786.7	777.0	757.5	765.3	747.8	751.6	736.1
35°	751.6	732.2	706.9	706.9	699.1	691.3	677.7	685.5	668.0	660.2	644.6
37.5°	658.2	640.7	615.4	623.2	609.5	597.8	586.2	588.1	572.5	570.6	555.0
40°	556.9	547.2	529.7	529.7	519.9	519.9	514.1	508.3	498.5	486.8	469.3
42.5°	461.5	453.7	445.9	447.9	434.3	445.9	430.4	440.1	408.9	407.0	395.3
45°	391.4	373.9	375.8	368.0	360.3	364.2	350.5	354.4	336.9	333.0	321.3
47.5°	317.5	311.6	299.9	296.0	296.0	290.1	284.3	282.4	274.6	264.8	249.3
50°	260.9	239.6	235.6	229.8	225.9	225.9	218.1	206.5	208.4	198.7	183.0
52.5°	204.5	186.9	179.1	177.2	169.4	165.6	155.8	148.0	142.1	138.2	128.6
55°	157.7	142.1	132.4	132.4	120.8	120.8	107.1	101.2	93.5	85.7	79.9
57.5°	118.8	111.0	101.2	93.5	89.6	79.9	72.0	62.3	56.5	44.8	37.0
60°	89.6	81.8	72.0	66.2	62.3	52.6	42.9	35.0	21.4	17.5	15.6
62.5°	66.2	58.4	48.7	44.8	40.9	33.1	23.3	11.7	5.9	5.9	5.9
65°	48.7	38.9	31.1	27.2	23.3	17.5	7.8	3.9	2.0	2.0	2.0
67.5°	33.1	25.3	17.5	15.6	11.7	5.9	2.0	2.0	2.0	2.0	2.0
70°	21.4	15.6	7.8	5.9	3.9	2.0	2.0	2.0	2.0	2.0	2.0
72.5°	13.7	7.8	3.9	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	7.8	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	3.9	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0
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: P#  
 CATALOG NUMBER: FLDSQ4C30D010 FEU4C309040 F4LC-SQLWW-LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1624.1	1624.1	1624.1	1624.1	1624.1	1624.1	1624.1	1624.1
2.5°	1585.2	1571.5	1579.3	1561.8	1569.6	1583.2	1573.5	1577.4
5°	1530.6	1522.8	1513.1	1487.8	1507.3	1522.8	1515.0	1513.1
7.5°	1472.2	1444.9	1458.6	1450.8	1446.9	1462.5	1444.9	1464.4
10°	1411.8	1392.4	1390.5	1376.8	1376.8	1388.5	1390.5	1378.7
12.5°	1322.2	1312.6	1312.6	1310.6	1308.6	1320.3	1322.2	1316.4
15°	1258.0	1254.1	1244.4	1242.4	1230.8	1248.2	1250.2	1248.2
17.5°	1180.1	1182.0	1172.3	1172.3	1180.1	1185.9	1170.3	1185.9
20°	1127.5	1117.8	1113.9	1096.3	1106.1	1115.9	1115.9	1117.8
22.5°	1051.6	1036.0	1041.9	1032.1	1026.2	1039.9	1039.9	1045.8
25°	965.9	965.9	969.8	964.0	967.9	975.6	969.8	983.4
27.5°	884.1	891.9	891.9	884.1	888.0	911.3	921.1	905.5
30°	808.2	810.1	816.0	812.1	823.7	831.5	829.5	841.3
32.5°	722.5	732.2	736.1	730.3	734.2	751.6	742.0	740.0
35°	656.3	638.7	636.8	638.7	646.5	650.4	646.5	660.2
37.5°	560.8	555.0	547.2	549.2	555.0	562.8	566.7	576.4
40°	469.3	461.5	461.5	459.6	453.7	475.2	475.2	475.2
42.5°	389.5	387.5	377.8	377.8	385.6	391.4	387.5	401.2
45°	319.4	311.6	305.7	305.7	311.6	311.6	317.5	315.5
47.5°	251.2	243.5	245.4	239.6	245.4	253.1	243.5	245.4
50°	188.9	188.9	185.0	188.9	186.9	188.9	185.0	181.1
52.5°	128.6	146.0	148.0	140.2	122.7	107.1	97.4	105.1
55°	74.0	66.2	66.2	64.2	60.3	58.4	52.6	58.4
57.5°	37.0	33.1	33.1	33.1	31.1	29.2	25.3	25.3
60°	15.6	13.7	13.7	11.7	9.8	7.8	5.9	7.8
62.5°	5.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
65°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
67.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
70°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)