

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: **FLDSQ4C70D010 FEU4C709040 F4LC-SQLWW-H**

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: FLDSQ4C70D010 FEU4C709040 F4LC-SQLWW-H
 Description: 4 INCH 7000 LUMEN FAIL-SAFE LED DOWNLIGHT WITH, 4000K, 90CRI LEDS AND F4LC-SQLWW TRIM WITH H FINISH
 Light Source: -
 Ballast/Driver: -

Summary

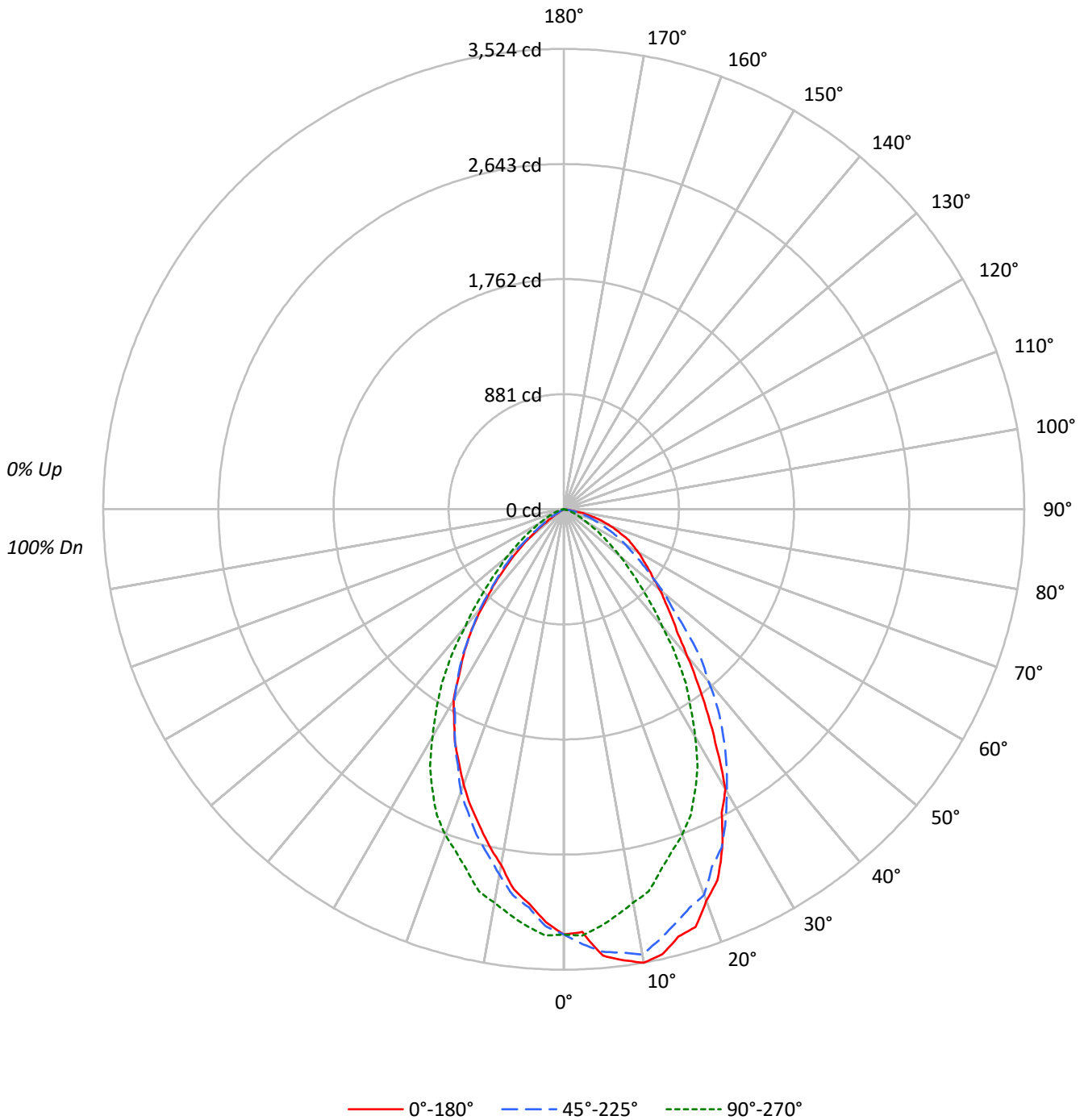
Lumens per Lamp: N/A
 Luminaire Lumens: 4665.0 lumens
 Efficiency: N/A
 Efficacy: 59.8 lumens/watt
 Spacing Criteria (0/90/45): 1.01 / 1 / 1.06
 Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
 CIE Type: Direct

Input Watts (W): 78
 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: FLDSQ4C70D010 FEU4C709040 F4LC-SQLWW-H

Luminous Intensity Polar Plot



TEST NUMBER: P#

CATALOG NUMBER: FLDSQ4C70D010 FEU4C709040 F4LC-SQLWW-H

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	314013	314013	314013
5°	332231	310312	293682
10°	345253	299370	270682
15°	338346	285723	249861
20°	327369	272064	229996
25°	305359	253000	209808
30°	275654	223901	187825
35°	227066	191682	155826
40°	185308	147949	119937
45°	159217	112358	86267
50°	144091	85533	54475
55°	132610	61704	19699
60°	127269	42166	3010
65°	122946	28516	913
70°	110081	19804	1128
75°	90219	10215	0
80°	56399	4334	0
85°	0	0	0

TEST NUMBER: P#
 CATALOG NUMBER: FLDSQ4C70D010 FEU4C709040 F4LC-SQLWW-H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	304.9	6.5
10°-20°	821.5	17.6
20°-30°	1097.0	23.5
30°-40°	1041.3	22.3
40°-50°	719.8	15.4
50°-60°	397.7	8.5
60°-70°	197.5	4.2
70°-80°	77.8	1.7
80°-90°	7.4	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°	2223.4	47.7
0°-40°	3264.7	70.0
0°-60°	4382.3	93.9
0°-90°	4665.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4665.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3254	3254	3254	3254	3254	
5°	3430	3399	3204	3059	3032	328
15°	3387	3286	2860	2579	2501	958
25°	2868	2856	2376	1971	1971	1308
35°	1928	2131	1627	1338	1323	1208
45°	1167	1338	823	675	632	910
55°	788	742	367	187	117	709
65°	538	390	125	4	4	523
75°	242	148	27	0	0	258
85°	0	4	0	0	0	22
90°	0	0	0	0	0	

TEST NUMBER: P#
 CATALOG NUMBER: FLDSQ4C70D010 FEU4C709040 F4LC-SQLWW-H

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4
2.5°	3238.8	3328.6	3336.4	3328.6	3340.3	3336.4	3355.9	3336.4	3359.9	3324.7	3332.5
5°	3430.1	3394.9	3469.1	3430.1	3430.1	3426.3	3414.5	3410.5	3426.3	3375.5	3398.9
7.5°	3480.8	3531.6	3597.9	3516.0	3519.8	3519.8	3496.4	3488.6	3488.6	3394.9	3422.3
10°	3523.8	3492.4	3527.6	3496.4	3523.8	3519.8	3535.4	3484.7	3519.8	3465.2	3461.3
12.5°	3488.6	3476.9	3523.8	3473.0	3457.4	3461.3	3441.8	3430.1	3441.8	3379.3	3375.5
15°	3387.1	3398.9	3469.1	3414.5	3406.7	3398.9	3375.5	3336.4	3367.7	3281.8	3285.8
17.5°	3352.1	3332.5	3344.3	3297.4	3309.1	3301.3	3297.4	3262.4	3254.4	3199.8	3199.8
20°	3188.2	3231.0	3231.0	3199.8	3199.8	3196.0	3145.3	3176.4	3141.3	3125.7	3141.3
22.5°	3074.9	3078.9	3078.9	3051.5	3055.5	3039.9	3012.6	2993.0	3012.6	2993.0	2961.8
25°	2868.2	2876.0	2922.8	2872.1	2864.3	2879.8	2856.5	2844.7	2840.9	2794.1	2856.5
27.5°	2618.4	2696.4	2692.6	2673.0	2696.4	2665.2	2653.6	2657.4	2669.2	2665.2	2680.8
30°	2474.1	2485.7	2497.5	2481.9	2485.7	2474.1	2474.1	2477.9	2509.1	2497.5	2493.5
32.5°	2181.3	2220.3	2251.7	2251.7	2255.5	2267.2	2263.3	2345.2	2364.8	2325.8	2318.0
35°	1927.7	1955.1	1982.3	1986.3	2037.0	2040.8	2044.8	2068.2	2122.8	2134.5	2130.6
37.5°	1685.8	1713.0	1720.8	1756.0	1783.4	1810.6	1841.9	1873.1	1919.9	1958.9	1939.5
40°	1471.2	1482.8	1502.4	1518.0	1572.5	1572.5	1588.1	1650.7	1701.4	1732.6	1728.6
42.5°	1291.7	1295.5	1311.1	1338.5	1389.2	1377.5	1389.2	1432.2	1506.2	1510.2	1553.1
45°	1166.8	1162.8	1174.6	1178.4	1209.8	1225.4	1233.2	1264.3	1326.7	1334.5	1338.5
47.5°	1053.7	1049.7	1069.3	1077.1	1088.7	1104.3	1104.3	1108.2	1131.6	1151.2	1135.6
50°	959.9	959.9	959.9	967.7	987.3	983.3	987.3	1002.9	1014.5	1006.7	1002.9
52.5°	858.4	874.0	885.8	889.8	893.6	893.6	897.6	889.8	885.8	874.0	850.6
55°	788.3	803.9	803.9	803.9	803.9	819.5	800.0	803.9	803.9	772.7	741.5
57.5°	718.1	733.7	745.3	729.7	745.3	729.7	721.9	718.1	710.1	679.0	632.2
60°	659.5	667.3	663.4	659.5	667.3	655.6	647.8	632.2	624.4	581.4	550.2
62.5°	593.2	597.0	601.0	593.2	585.4	581.4	565.8	542.4	526.8	491.7	464.3
65°	538.5	526.8	522.9	519.0	511.2	499.5	487.8	460.5	448.7	417.5	390.2
67.5°	456.5	452.7	460.5	448.7	429.3	429.3	417.5	394.1	366.8	347.3	320.0
70°	390.2	386.3	378.5	366.8	362.9	347.3	347.3	320.0	312.2	277.0	253.6
72.5°	320.0	320.0	308.2	296.6	284.8	277.0	273.2	253.6	242.0	222.4	202.9
75°	242.0	242.0	238.0	226.3	218.5	210.7	206.9	191.3	179.5	160.1	148.3
77.5°	171.7	171.7	156.1	148.3	152.1	144.3	136.5	132.7	128.7	117.1	101.5
80°	101.5	97.5	85.9	89.7	85.9	85.9	81.9	78.0	70.2	62.4	54.6
82.5°	27.4	31.2	31.2	31.2	35.2	27.4	27.4	27.4	31.2	31.2	19.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0	4.0
87.5°	4.0	7.8	15.6	15.6	15.6	15.6	15.6	11.8	11.8	11.8	7.8
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: P#
 CATALOG NUMBER: FLDSQ4C70D010 FEU4C709040 F4LC-SQLWW-H

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4
2.5°	3293.5	3289.6	3293.5	3266.2	3328.6	3281.8	3274.0	3266.2	3293.5	3266.2	3227.2
5°	3363.7	3324.7	3313.0	3301.3	3336.4	3281.8	3270.2	3274.0	3254.4	3203.8	3207.6
7.5°	3387.1	3352.1	3316.9	3242.8	3274.0	3262.4	3231.0	3207.6	3176.4	3133.5	3125.7
10°	3394.9	3355.9	3305.2	3281.8	3235.0	3219.4	3207.6	3168.6	3129.7	3055.5	3035.9
12.5°	3371.5	3324.7	3262.4	3242.8	3207.6	3156.9	3129.7	3090.5	3055.5	2997.0	2954.0
15°	3270.2	3231.0	3211.6	3145.3	3129.7	3098.3	3043.7	2989.2	2938.4	2860.3	2836.9
17.5°	3153.0	3137.5	3117.9	3067.1	3063.3	3032.1	2981.4	2934.4	2868.2	2747.1	2708.2
20°	3032.1	3032.1	2969.6	2950.2	2989.2	2926.6	2887.6	2844.7	2708.2	2649.6	2579.4
22.5°	2942.4	2899.4	2864.3	2833.1	2836.9	2797.9	2743.3	2657.4	2606.6	2536.5	2454.5
25°	2766.7	2782.3	2704.3	2692.6	2704.3	2614.4	2587.2	2516.9	2442.8	2376.4	2314.0
27.5°	2657.4	2614.4	2563.8	2520.9	2520.9	2485.7	2407.7	2392.2	2278.9	2216.5	2138.4
30°	2493.5	2462.3	2419.4	2357.0	2349.2	2321.8	2259.5	2220.3	2103.4	2009.6	1966.7
32.5°	2286.7	2275.0	2239.9	2169.7	2146.3	2115.0	2037.0	1970.7	1916.1	1810.6	1760.0
35°	2138.4	2095.6	2021.4	1962.9	1943.3	1888.7	1826.2	1779.4	1720.8	1627.3	1560.9
37.5°	1916.1	1873.1	1802.8	1732.6	1732.6	1678.0	1592.1	1545.3	1463.4	1408.7	1354.1
40°	1720.8	1666.3	1596.1	1514.1	1502.4	1424.3	1389.2	1311.1	1260.4	1174.6	1166.8
42.5°	1502.4	1451.6	1389.2	1326.7	1279.9	1240.9	1151.2	1092.7	1038.1	995.1	983.3
45°	1303.3	1237.0	1182.4	1104.3	1057.5	1010.7	952.2	913.2	870.2	823.4	796.1
47.5°	1131.6	1077.1	998.9	928.8	882.0	858.4	792.1	749.3	714.1	682.9	663.4
50°	956.1	889.8	846.8	768.7	760.9	706.3	651.7	616.6	597.0	569.8	542.4
52.5°	823.4	760.9	702.3	643.9	612.6	593.2	542.4	507.3	480.1	460.5	444.9
55°	694.5	640.0	593.2	534.6	515.1	487.8	429.3	421.5	394.1	366.8	347.3
57.5°	597.0	546.2	491.7	452.7	417.5	398.1	351.2	320.0	304.4	281.0	261.4
60°	507.3	452.7	409.7	362.9	347.3	320.0	284.8	257.6	238.0	218.5	199.1
62.5°	425.3	378.5	331.8	292.6	269.2	253.6	226.3	202.9	183.5	167.9	152.1
65°	351.2	308.2	269.2	230.2	218.5	199.1	179.5	160.1	144.3	124.9	109.3
67.5°	288.8	249.8	210.7	183.5	171.7	163.9	140.5	120.9	109.3	97.5	81.9
70°	226.3	199.1	167.9	144.3	132.7	120.9	105.3	93.7	78.0	70.2	58.6
72.5°	175.7	152.1	124.9	105.3	97.5	89.7	74.1	62.4	54.6	46.8	39.0
75°	124.9	105.3	89.7	70.2	66.4	62.4	50.8	43.0	35.2	27.4	23.4
77.5°	85.9	70.2	54.6	46.8	43.0	35.2	31.2	23.4	19.6	15.6	11.8
80°	46.8	35.2	27.4	23.4	19.6	15.6	15.6	11.8	7.8	7.8	4.0
82.5°	15.6	11.8	7.8	4.0	4.0	4.0	4.0	4.0	4.0	0.0	4.0
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°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	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: FLDSQ4C70D010 FEU4C709040 F4LC-SQLWW-H

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4
2.5°	3250.6	3207.6	3219.4	3219.4	3211.6	3211.6	3203.8	3192.0	3196.0	3172.5	3121.9
5°	3215.4	3160.8	3153.0	3160.8	3129.7	3121.9	3106.3	3129.7	3059.3	3086.7	3055.5
7.5°	3114.1	3063.3	3051.5	3078.9	3039.9	3016.4	3012.6	3043.7	2981.4	2950.2	2915.0
10°	3000.8	2981.4	2946.2	2926.6	2915.0	2918.8	2887.6	2848.7	2836.9	2829.1	2797.9
12.5°	2899.4	2856.5	2825.3	2801.9	2794.1	2794.1	2743.3	2735.5	2700.4	2692.6	2645.8
15°	2778.3	2727.7	2708.2	2677.0	2649.6	2665.2	2606.6	2591.1	2579.4	2528.7	2536.5
17.5°	2673.0	2618.4	2571.6	2552.1	2528.7	2505.3	2450.6	2462.3	2435.0	2435.0	2364.8
20°	2536.5	2477.9	2442.8	2403.8	2403.8	2372.6	2333.6	2337.4	2302.3	2267.2	2204.7
22.5°	2392.2	2329.6	2286.7	2271.1	2232.1	2224.3	2177.5	2165.7	2119.0	2122.8	2068.2
25°	2239.9	2177.5	2119.0	2122.8	2087.8	2072.2	2044.8	1990.2	1970.7	1947.3	1931.7
27.5°	2060.4	2017.4	1966.7	1962.9	1896.5	1900.3	1865.3	1849.7	1802.8	1814.6	1779.4
30°	1896.5	1834.1	1787.2	1775.6	1748.2	1740.4	1685.8	1662.3	1670.2	1638.9	1619.5
32.5°	1728.6	1635.1	1615.5	1592.1	1576.5	1557.0	1518.0	1533.6	1498.4	1506.2	1475.0
35°	1506.2	1467.2	1416.5	1416.5	1400.9	1385.3	1358.1	1373.6	1338.5	1322.9	1291.7
37.5°	1318.9	1283.9	1233.2	1248.7	1221.4	1198.0	1174.6	1178.4	1147.2	1143.4	1112.1
40°	1116.0	1096.5	1061.5	1061.5	1041.9	1041.9	1030.1	1018.5	998.9	975.5	940.4
42.5°	924.8	909.2	893.6	897.6	870.2	893.6	862.4	882.0	819.5	815.6	792.1
45°	784.3	749.3	753.1	737.5	721.9	729.7	702.3	710.1	675.1	667.3	643.9
47.5°	636.1	624.4	601.0	593.2	593.2	581.4	569.8	565.8	550.2	530.7	499.5
50°	522.9	480.1	472.1	460.5	452.7	452.7	437.1	413.7	417.5	398.1	366.8
52.5°	409.7	374.6	359.0	355.1	339.6	331.8	312.2	296.6	284.8	277.0	257.6
55°	316.0	284.8	265.4	265.4	242.0	242.0	214.6	202.9	187.3	171.7	160.1
57.5°	238.0	222.4	202.9	187.3	179.5	160.1	144.3	124.9	113.1	89.7	74.1
60°	179.5	163.9	144.3	132.7	124.9	105.3	85.9	70.2	43.0	35.2	31.2
62.5°	132.7	117.1	97.5	89.7	81.9	66.4	46.8	23.4	11.8	11.8	11.8
65°	97.5	78.0	62.4	54.6	46.8	35.2	15.6	7.8	4.0	4.0	4.0
67.5°	66.4	50.8	35.2	31.2	23.4	11.8	4.0	4.0	4.0	4.0	4.0
70°	43.0	31.2	15.6	11.8	7.8	4.0	4.0	4.0	4.0	4.0	4.0
72.5°	27.4	15.6	7.8	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	15.6	7.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	7.8	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	4.0	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	4.0	4.0	4.0
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: FLDSQ4C70D010 FEU4C709040 F4LC-SQLWW-H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4
2.5°	3176.4	3149.1	3164.7	3129.7	3145.3	3172.5	3153.0	3160.8
5°	3067.1	3051.5	3032.1	2981.4	3020.3	3051.5	3035.9	3032.1
7.5°	2950.2	2895.4	2922.8	2907.2	2899.4	2930.6	2895.4	2934.4
10°	2829.1	2790.1	2786.3	2758.9	2758.9	2782.3	2786.3	2762.7
12.5°	2649.6	2630.2	2630.2	2626.2	2622.2	2645.8	2649.6	2638.0
15°	2520.9	2513.1	2493.5	2489.7	2466.3	2501.3	2505.3	2501.3
17.5°	2364.8	2368.6	2349.2	2349.2	2364.8	2376.4	2345.2	2376.4
20°	2259.5	2239.9	2232.1	2196.9	2216.5	2236.1	2236.1	2239.9
22.5°	2107.2	2076.0	2087.8	2068.2	2056.4	2083.8	2083.8	2095.6
25°	1935.5	1935.5	1943.3	1931.7	1939.5	1955.1	1943.3	1970.7
27.5°	1771.6	1787.2	1787.2	1771.6	1779.4	1826.2	1845.8	1814.6
30°	1619.5	1623.3	1635.1	1627.3	1650.7	1666.3	1662.3	1685.8
32.5°	1447.8	1467.2	1475.0	1463.4	1471.2	1506.2	1486.8	1482.8
35°	1315.1	1279.9	1276.1	1279.9	1295.5	1303.3	1295.5	1322.9
37.5°	1123.8	1112.1	1096.5	1100.4	1112.1	1127.8	1135.6	1155.0
40°	940.4	924.8	924.8	921.0	909.2	952.2	952.2	952.2
42.5°	780.5	776.5	757.1	757.1	772.7	784.3	776.5	803.9
45°	640.0	624.4	612.6	612.6	624.4	624.4	636.1	632.2
47.5°	503.4	487.8	491.7	480.1	491.7	507.3	487.8	491.7
50°	378.5	378.5	370.7	378.5	374.6	378.5	370.7	362.9
52.5°	257.6	292.6	296.6	281.0	245.8	214.6	195.1	210.7
55°	148.3	132.7	132.7	128.7	120.9	117.1	105.3	117.1
57.5°	74.1	66.4	66.4	66.4	62.4	58.6	50.8	50.8
60°	31.2	27.4	27.4	23.4	19.6	15.6	11.8	15.6
62.5°	11.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
65°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
67.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
70°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
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)