

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: **FLDSQ4C80D010 FEU4C809030 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: FLDSQ4C80D010 FEU4C809030 F4LC-SQLWW-LI
 Description: 4 INCH 8000 LUMEN FAIL-SAFE LED DOWNLIGHT WITH, 3000K, 90CRI LEDS AND F4LC-SQLWW TRIM WITH LI FINISH
 Light Source: -
 Ballast/Driver: -

Summary

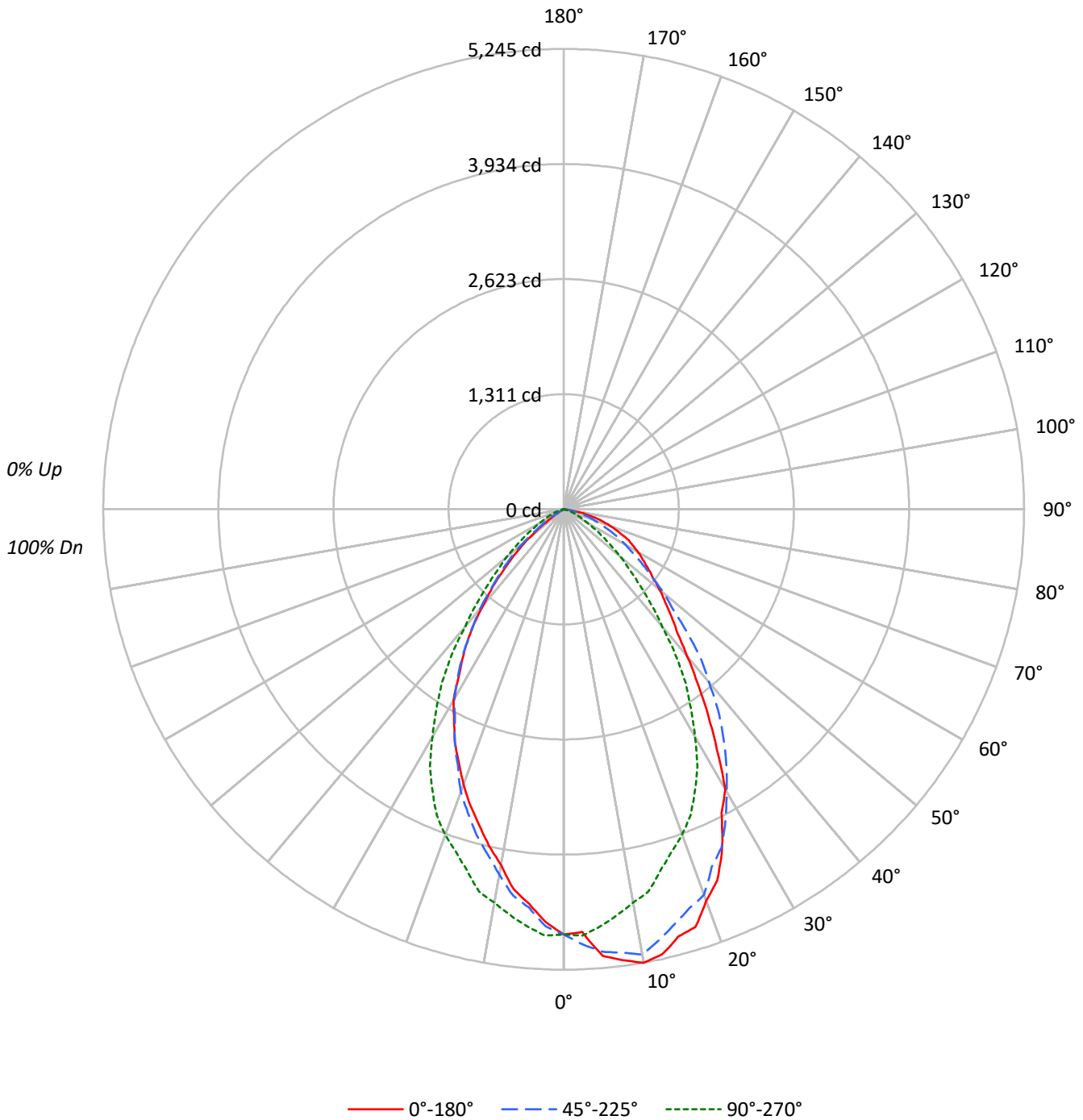
Lumens per Lamp: N/A
 Luminaire Lumens: 6944.0 lumens
 Efficiency: N/A
 Efficacy: 77.6 lumens/watt
 Spacing Criteria (0/90/45): 1.01 / 1 / 1.06
 Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
 CIE Type: Direct

Input Watts (W): 89.5
 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: FLDSQ4C80D010 FEU4C809030 F4LC-SQLWW-LI

Luminous Intensity Polar Plot



TEST NUMBER: P#

CATALOG NUMBER: FLDSQ4C80D010 FEU4C809030 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	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°	467421	467421	467421
5°	494535	461913	437156
10°	513921	445621	402922
15°	503639	425303	371930
20°	487305	404975	342350
25°	454547	376605	312301
30°	410322	333289	279587
35°	337990	285326	231954
40°	275834	220224	178519
45°	236997	167254	128405
50°	214492	127323	81104
55°	197393	91833	29321
60°	189446	62756	4477
65°	182992	42443	1347
70°	163852	29481	1664
75°	134284	15173	0
80°	83960	6446	0
85°	0	0	0

TEST NUMBER: P#
 CATALOG NUMBER: FLDSQ4C80D010 FEU4C809030 F4LC-SQLWW-LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	453.9	6.5
10°-20°	1222.8	17.6
20°-30°	1632.9	23.5
30°-40°	1550.1	22.3
40°-50°	1071.5	15.4
50°-60°	592.0	8.5
60°-70°	294.0	4.2
70°-80°	115.8	1.7
80°-90°	11.0	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°	3309.6	47.7
0°-40°	4859.7	70.0
0°-60°	6523.2	93.9
0°-90°	6944.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6944.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4844	4844	4844	4844	4844	
5°	5106	5059	4769	4554	4513	489
15°	5042	4891	4258	3840	3723	1426
25°	4270	4252	3537	2933	2933	1946
35°	2869	3171	2422	1992	1969	1798
45°	1737	1992	1226	1005	941	1355
55°	1173	1104	546	279	174	1056
65°	802	581	186	6	6	778
75°	360	221	41	0	0	384
85°	0	6	0	0	0	33
90°	0	0	0	0	0	

TEST NUMBER: P#
 CATALOG NUMBER: FLDSQ4C80D010 FEU4C809030 F4LC-SQLWW-LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	4844.3	4844.3	4844.3	4844.3	4844.3	4844.3	4844.3	4844.3	4844.3	4844.3	4844.3
2.5°	4821.1	4954.7	4966.3	4954.7	4972.2	4966.3	4995.4	4966.3	5001.3	4949.0	4960.6
5°	5105.8	5053.4	5163.8	5105.8	5105.8	5100.1	5082.6	5076.6	5100.1	5024.5	5059.3
7.5°	5181.3	5256.9	5355.6	5233.7	5239.4	5239.4	5204.5	5192.9	5192.9	5053.4	5094.2
10°	5245.3	5198.6	5251.0	5204.5	5245.3	5239.4	5262.6	5187.0	5239.4	5158.1	5152.2
12.5°	5192.9	5175.4	5245.3	5169.7	5146.5	5152.2	5123.3	5105.8	5123.3	5030.2	5024.5
15°	5041.8	5059.3	5163.8	5082.6	5071.0	5059.3	5024.5	4966.3	5012.9	4885.0	4890.9
17.5°	4989.7	4960.6	4978.1	4908.2	4925.8	4914.2	4908.2	4856.1	4844.3	4763.1	4763.1
20°	4745.8	4809.5	4809.5	4763.1	4763.1	4757.4	4681.8	4728.2	4675.9	4652.7	4675.9
22.5°	4577.1	4583.0	4583.0	4542.3	4548.2	4525.0	4484.3	4455.1	4484.3	4455.1	4408.7
25°	4269.5	4281.1	4350.7	4275.1	4263.5	4286.7	4251.9	4234.4	4228.7	4159.1	4251.9
27.5°	3897.6	4013.7	4008.0	3978.8	4013.7	3967.2	3949.9	3955.6	3973.2	3967.2	3990.4
30°	3682.8	3700.1	3717.6	3694.4	3700.1	3682.8	3682.8	3688.5	3734.9	3717.6	3711.7
32.5°	3247.0	3305.0	3351.7	3351.7	3357.3	3374.9	3369.0	3490.9	3520.1	3462.0	3450.4
35°	2869.4	2910.2	2950.7	2956.6	3032.1	3037.8	3043.8	3078.6	3159.8	3177.3	3171.4
37.5°	2509.4	2549.9	2561.5	2613.9	2654.6	2695.1	2741.8	2788.2	2857.8	2915.9	2887.0
40°	2189.9	2207.2	2236.3	2259.5	2340.8	2340.8	2364.0	2457.1	2532.6	2579.1	2573.1
42.5°	1922.7	1928.4	1951.6	1992.4	2067.9	2050.4	2067.9	2131.9	2242.0	2247.9	2311.9
45°	1736.8	1730.9	1748.4	1754.1	1800.8	1824.0	1835.6	1882.0	1974.9	1986.5	1992.4
47.5°	1568.4	1562.5	1591.6	1603.2	1620.5	1643.7	1643.7	1649.7	1684.5	1713.6	1690.4
50°	1428.9	1428.9	1428.9	1440.5	1469.7	1463.7	1469.7	1492.9	1510.2	1498.6	1492.9
52.5°	1277.8	1301.0	1318.5	1324.5	1330.1	1330.1	1336.1	1324.5	1318.5	1301.0	1266.2
55°	1173.4	1196.6	1196.6	1196.6	1196.6	1219.8	1190.9	1196.6	1196.6	1150.1	1103.7
57.5°	1068.9	1092.1	1109.4	1086.2	1109.4	1086.2	1074.6	1068.9	1057.1	1010.6	941.0
60°	981.7	993.3	987.4	981.7	993.3	975.8	964.2	941.0	929.4	865.5	819.0
62.5°	883.0	888.7	894.6	883.0	871.4	865.5	842.2	807.4	784.2	731.9	691.1
65°	801.5	784.2	778.3	772.6	761.0	743.5	726.2	685.4	667.9	621.5	580.8
67.5°	679.5	673.8	685.4	667.9	639.0	639.0	621.5	586.7	545.9	517.0	476.3
70°	580.8	575.1	563.5	545.9	540.3	517.0	517.0	476.3	464.7	412.4	377.5
72.5°	476.3	476.3	458.8	441.5	424.0	412.4	406.7	377.5	360.2	331.1	302.0
75°	360.2	360.2	354.3	336.8	325.2	313.6	307.9	284.7	267.2	238.3	220.7
77.5°	255.6	255.6	232.3	220.7	226.4	214.8	203.2	197.5	191.6	174.3	151.1
80°	151.1	145.2	127.9	133.6	127.9	127.9	122.0	116.1	104.5	92.8	81.2
82.5°	40.7	46.4	46.4	46.4	52.3	40.7	40.7	40.7	46.4	46.4	29.1
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	5.9	5.9
87.5°	5.9	11.6	23.2	23.2	23.2	23.2	23.2	17.5	17.5	17.5	11.6
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: FLDSQ4C80D010 FEU4C809030 F4LC-SQLWW-LI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	4844.3	4844.3	4844.3	4844.3	4844.3	4844.3	4844.3	4844.3	4844.3	4844.3	4844.3
2.5°	4902.6	4896.6	4902.6	4861.8	4954.7	4885.0	4873.4	4861.8	4902.6	4861.8	4803.8
5°	5007.0	4949.0	4931.5	4914.2	4966.3	4885.0	4867.7	4873.4	4844.3	4769.0	4774.7
7.5°	5041.8	4989.7	4937.4	4827.0	4873.4	4856.1	4809.5	4774.7	4728.2	4664.3	4652.7
10°	5053.4	4995.4	4919.8	4885.0	4815.4	4792.2	4774.7	4716.6	4658.6	4548.2	4519.1
12.5°	5018.6	4949.0	4856.1	4827.0	4774.7	4699.1	4658.6	4600.3	4548.2	4461.1	4397.1
15°	4867.7	4809.5	4780.6	4681.8	4658.6	4611.9	4530.7	4449.5	4373.9	4257.6	4222.8
17.5°	4693.4	4670.2	4641.1	4565.5	4559.8	4513.4	4437.9	4368.0	4269.5	4089.2	4031.2
20°	4513.4	4513.4	4420.3	4391.4	4449.5	4356.4	4298.4	4234.4	4031.2	3944.0	3839.6
22.5°	4379.8	4315.9	4263.5	4217.1	4222.8	4164.8	4083.5	3955.6	3880.1	3775.6	3653.6
25°	4118.3	4141.6	4025.5	4008.0	4025.5	3891.7	3851.2	3746.5	3636.1	3537.4	3444.5
27.5°	3955.6	3891.7	3816.4	3752.4	3752.4	3700.1	3584.0	3560.8	3392.2	3299.3	3183.0
30°	3711.7	3665.3	3601.3	3508.5	3496.8	3456.1	3363.3	3305.0	3130.9	2991.4	2927.5
32.5°	3403.8	3386.5	3334.1	3229.7	3194.9	3148.2	3032.1	2933.4	2852.1	2695.1	2619.8
35°	3183.0	3119.3	3008.9	2921.8	2892.6	2811.4	2718.3	2648.7	2561.5	2422.3	2323.5
37.5°	2852.1	2788.2	2683.5	2579.1	2579.1	2497.8	2369.9	2300.3	2178.3	2096.8	2015.6
40°	2561.5	2480.3	2375.8	2253.9	2236.3	2120.0	2067.9	1951.6	1876.1	1748.4	1736.8
42.5°	2236.3	2160.8	2067.9	1974.9	1905.2	1847.2	1713.6	1626.4	1545.2	1481.3	1463.7
45°	1940.0	1841.3	1760.0	1643.7	1574.1	1504.5	1417.3	1359.3	1295.3	1225.7	1185.0
47.5°	1684.5	1603.2	1486.9	1382.5	1312.9	1277.8	1179.0	1115.3	1063.0	1016.6	987.4
50°	1423.2	1324.5	1260.5	1144.2	1132.6	1051.4	970.1	917.8	888.7	848.2	807.4
52.5°	1225.7	1132.6	1045.5	958.5	911.9	883.0	807.4	755.1	714.6	685.4	662.2
55°	1033.9	952.6	883.0	795.8	766.7	726.2	639.0	627.4	586.7	545.9	517.0
57.5°	888.7	813.1	731.9	673.8	621.5	592.6	522.7	476.3	453.1	418.3	389.1
60°	755.1	673.8	609.9	540.3	517.0	476.3	424.0	383.5	354.3	325.2	296.3
62.5°	633.1	563.5	493.8	435.6	400.8	377.5	336.8	302.0	273.1	249.9	226.4
65°	522.7	458.8	400.8	342.7	325.2	296.3	267.2	238.3	214.8	185.9	162.7
67.5°	429.9	371.9	313.6	273.1	255.6	244.0	209.1	180.0	162.7	145.2	122.0
70°	336.8	296.3	249.9	214.8	197.5	180.0	156.8	139.5	116.1	104.5	87.2
72.5°	261.5	226.4	185.9	156.8	145.2	133.6	110.4	92.8	81.2	69.6	58.0
75°	185.9	156.8	133.6	104.5	98.8	92.8	75.6	63.9	52.3	40.7	34.8
77.5°	127.9	104.5	81.2	69.6	63.9	52.3	46.4	34.8	29.1	23.2	17.5
80°	69.6	52.3	40.7	34.8	29.1	23.2	23.2	17.5	11.6	11.6	5.9
82.5°	23.2	17.5	11.6	5.9	5.9	5.9	5.9	5.9	5.9	0.0	5.9
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°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	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: FLDSQ4C80D010 FEU4C809030 F4LC-SQLWW-LI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	4844.3	4844.3	4844.3	4844.3	4844.3	4844.3	4844.3	4844.3	4844.3	4844.3	4844.3
2.5°	4838.6	4774.7	4792.2	4792.2	4780.6	4780.6	4769.0	4751.4	4757.4	4722.3	4647.0
5°	4786.3	4705.0	4693.4	4705.0	4658.6	4647.0	4623.8	4658.6	4553.9	4594.6	4548.2
7.5°	4635.4	4559.8	4542.3	4583.0	4525.0	4490.0	4484.3	4530.7	4437.9	4391.4	4339.1
10°	4466.8	4437.9	4385.5	4356.4	4339.1	4344.8	4298.4	4240.3	4222.8	4211.2	4164.8
12.5°	4315.9	4251.9	4205.5	4170.7	4159.1	4159.1	4083.5	4071.9	4019.6	4008.0	3938.3
15°	4135.6	4060.3	4031.2	3984.8	3944.0	3967.2	3880.1	3856.9	3839.6	3764.0	3775.6
17.5°	3978.8	3897.6	3828.0	3798.8	3764.0	3729.2	3647.7	3665.3	3624.5	3624.5	3520.1
20°	3775.6	3688.5	3636.1	3578.1	3578.1	3531.7	3473.6	3479.3	3427.0	3374.9	3281.8
22.5°	3560.8	3467.7	3403.8	3380.6	3322.5	3310.9	3241.3	3223.8	3154.1	3159.8	3078.6
25°	3334.1	3241.3	3154.1	3159.8	3107.7	3084.5	3043.8	2962.5	2933.4	2898.6	2875.4
27.5°	3067.0	3003.0	2927.5	2921.8	2823.0	2828.7	2776.6	2753.4	2683.5	2701.0	2648.7
30°	2823.0	2730.2	2660.3	2643.0	2602.3	2590.7	2509.4	2474.4	2486.2	2439.6	2410.7
32.5°	2573.1	2433.9	2404.7	2369.9	2346.7	2317.6	2259.5	2282.8	2230.4	2242.0	2195.6
35°	2242.0	2184.0	2108.4	2108.4	2085.2	2062.0	2021.5	2044.7	1992.4	1969.2	1922.7
37.5°	1963.3	1911.1	1835.6	1858.8	1818.1	1783.2	1748.4	1754.1	1707.7	1702.0	1655.3
40°	1661.3	1632.1	1580.0	1580.0	1550.9	1550.9	1533.4	1516.1	1486.9	1452.1	1399.8
42.5°	1376.6	1353.4	1330.1	1336.1	1295.3	1330.1	1283.7	1312.9	1219.8	1214.1	1179.0
45°	1167.4	1115.3	1121.0	1097.8	1074.6	1086.2	1045.5	1057.1	1005.0	993.3	958.5
47.5°	946.9	929.4	894.6	883.0	883.0	865.5	848.2	842.2	819.0	789.9	743.5
50°	778.3	714.6	702.7	685.4	673.8	673.8	650.6	615.8	621.5	592.6	545.9
52.5°	609.9	557.5	534.3	528.6	505.4	493.8	464.7	441.5	424.0	412.4	383.5
55°	470.4	424.0	395.1	395.1	360.2	360.2	319.5	302.0	278.8	255.6	238.3
57.5°	354.3	331.1	302.0	278.8	267.2	238.3	214.8	185.9	168.4	133.6	110.4
60°	267.2	244.0	214.8	197.5	185.9	156.8	127.9	104.5	63.9	52.3	46.4
62.5°	197.5	174.3	145.2	133.6	122.0	98.8	69.6	34.8	17.5	17.5	17.5
65°	145.2	116.1	92.8	81.2	69.6	52.3	23.2	11.6	5.9	5.9	5.9
67.5°	98.8	75.6	52.3	46.4	34.8	17.5	5.9	5.9	5.9	5.9	5.9
70°	63.9	46.4	23.2	17.5	11.6	5.9	5.9	5.9	5.9	5.9	5.9
72.5°	40.7	23.2	11.6	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	23.2	11.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	11.6	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	5.9	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	5.9	5.9	5.9
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: FLDSQ4C80D010 FEU4C809030 F4LC-SQLWW-LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	4844.3	4844.3	4844.3	4844.3	4844.3	4844.3	4844.3	4844.3
2.5°	4728.2	4687.5	4710.7	4658.6	4681.8	4722.3	4693.4	4705.0
5°	4565.5	4542.3	4513.4	4437.9	4495.9	4542.3	4519.1	4513.4
7.5°	4391.4	4310.0	4350.7	4327.5	4315.9	4362.3	4310.0	4368.0
10°	4211.2	4153.2	4147.5	4106.7	4106.7	4141.6	4147.5	4112.4
12.5°	3944.0	3915.1	3915.1	3909.2	3903.3	3938.3	3944.0	3926.7
15°	3752.4	3740.8	3711.7	3706.0	3671.2	3723.3	3729.2	3723.3
17.5°	3520.1	3525.7	3496.8	3496.8	3520.1	3537.4	3490.9	3537.4
20°	3363.3	3334.1	3322.5	3270.2	3299.3	3328.4	3328.4	3334.1
22.5°	3136.6	3090.2	3107.7	3078.6	3061.1	3101.8	3101.8	3119.3
25°	2881.0	2881.0	2892.6	2875.4	2887.0	2910.2	2892.6	2933.4
27.5°	2637.1	2660.3	2660.3	2637.1	2648.7	2718.3	2747.5	2701.0
30°	2410.7	2416.3	2433.9	2422.3	2457.1	2480.3	2474.4	2509.4
32.5°	2155.1	2184.0	2195.6	2178.3	2189.9	2242.0	2213.1	2207.2
35°	1957.6	1905.2	1899.5	1905.2	1928.4	1940.0	1928.4	1969.2
37.5°	1672.9	1655.3	1632.1	1638.1	1655.3	1678.8	1690.4	1719.3
40°	1399.8	1376.6	1376.6	1370.9	1353.4	1417.3	1417.3	1417.3
42.5°	1161.7	1155.8	1126.9	1126.9	1150.1	1167.4	1155.8	1196.6
45°	952.6	929.4	911.9	911.9	929.4	929.4	946.9	941.0
47.5°	749.4	726.2	731.9	714.6	731.9	755.1	726.2	731.9
50°	563.5	563.5	551.9	563.5	557.5	563.5	551.9	540.3
52.5°	383.5	435.6	441.5	418.3	365.9	319.5	290.4	313.6
55°	220.7	197.5	197.5	191.6	180.0	174.3	156.8	174.3
57.5°	110.4	98.8	98.8	98.8	92.8	87.2	75.6	75.6
60°	46.4	40.7	40.7	34.8	29.1	23.2	17.5	23.2
62.5°	17.5	11.6	11.6	11.6	11.6	11.6	11.6	11.6
65°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
67.5°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
70°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
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)