

Scaled data based on original data using
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: P241370

Luminaire Tested: **FVS8M-3-LD4-35-3LO-P125-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241370
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1711-410-28)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FVS8M-3-LD4-35-3LO-P125-UNV-EDC1
Description: FAILSAFE FVS8M LED FIXTURE
3FT LENGTH, 3-MODULE LED WITH P125 LENS
Light Source: (252) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

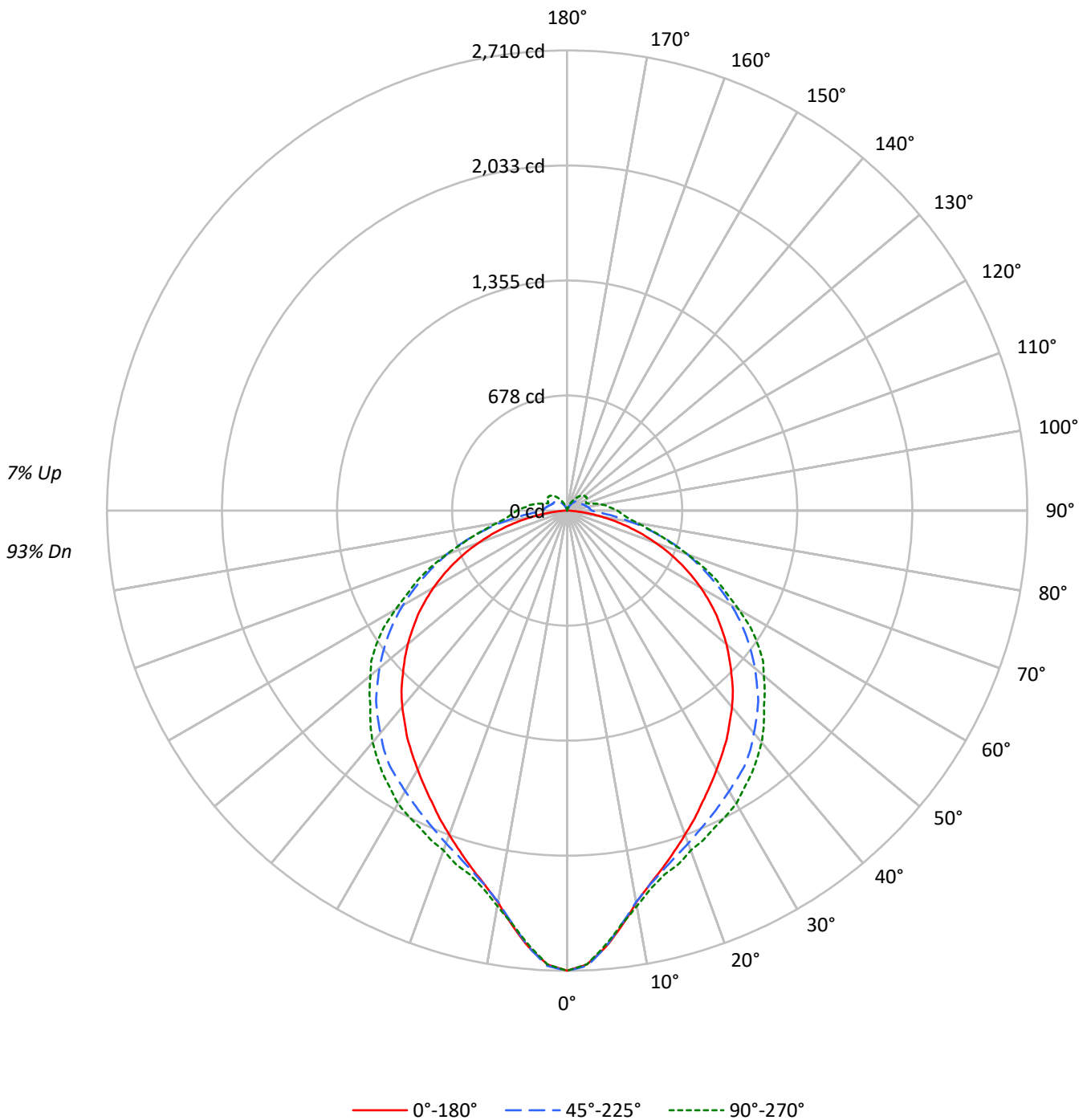
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7384.0 lumens
Efficiency: N/A
Efficacy: 119.9 lumens/watt
Spacing Criteria (0/90/45): 0.97 / 1.1 / 1.28
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 2.85' x H: 0.15')
CIE Type: Direct

Input Watts (W): 61.6
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: 25 FT

TEST NUMBER: P241370
CATALOG NUMBER: FVS8M-3-LD4-35-3LO-P125-UNV-EDC1

Luminous Intensity Polar Plot





TEST NUMBER: P241370

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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	117	117	117	117	114	114	114	114	107	107	107	101	101	101	96	96	96	93
1	106	101	97	93	103	98	94	90	93	90	86	88	85	83	83	81	79	76
2	96	88	81	75	93	85	79	73	81	75	71	76	72	68	72	69	66	63
3	88	77	68	62	85	75	67	61	71	64	59	67	62	57	64	59	55	53
4	80	68	59	52	77	66	58	51	63	56	50	60	53	48	57	51	47	45
5	74	61	51	45	71	59	50	44	56	49	43	53	47	42	51	45	41	39
6	68	54	45	39	66	53	45	38	51	43	38	48	42	37	46	40	36	34
7	63	49	40	34	61	48	40	34	46	39	33	44	37	32	42	36	32	30
8	59	45	36	30	57	44	36	30	42	35	30	40	34	29	39	33	28	26
9	55	41	33	27	53	40	32	27	39	32	27	37	31	26	36	30	26	24
10	51	38	30	25	50	37	30	25	36	29	24	34	28	24	33	27	23	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15824	15824	15824
5°	15072	14884	14772
10°	13765	13411	13485
15°	12987	12578	12643
20°	12388	12094	12225
25°	11894	11770	11997
30°	11534	11554	11888
35°	11284	11456	11650
40°	11041	11199	11421
45°	10758	10992	11041
50°	10489	10632	10822
55°	10191	10254	10551
60°	9749	9746	9801
65°	9158	9084	9059
70°	8275	8370	7965
75°	7130	7305	6885
80°	5298	6058	6162
85°	2728	4627	6324



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	238.5	3.2
10°-20°	620.6	8.4
20°-30°	918.6	12.4
30°-40°	1124.4	15.2
40°-50°	1195.6	16.2
50°-60°	1120.8	15.2
60°-70°	882.6	12.0
70°-80°	547.5	7.4
80°-90°	243.4	3.3
90°-100°	138.2	1.9
100°-110°	103.8	1.4
110°-120°	79.2	1.1
120°-130°	70.9	1.0
130°-140°	53.8	0.7
140°-150°	31.1	0.4
150°-160°	12.3	0.2
160°-170°	2.7	0.0
170°-180°	0.1	0.0
0°-30°	1777.7	24.1
0°-40°	2902.1	39.3
0°-60°	5218.5	70.7
0°-90°	6892.0	93.3
90°-120°	321.2	4.3
90°-150°	476.9	6.5
90°-180°	492.0	6.7
0°-180°	7384.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2710	2710	2710	2710	2710	
5°	2583	2585	2583	2571	2570	239
15°	2178	2172	2190	2213	2218	614
25°	1890	1938	1994	2050	2058	873
35°	1640	1714	1827	1886	1893	1025
45°	1369	1469	1592	1632	1639	1058
55°	1074	1169	1289	1348	1371	957
65°	735	818	934	960	973	726
75°	376	453	560	580	562	398
85°	64	136	224	284	338	83
90°	1	66	144	208	296	3
95°	1	60	134	190	243	0
105°	1	51	111	150	158	1
115°	1	45	95	113	124	1
125°	1	39	90	121	137	1
135°	1	31	77	109	125	1
145°	2	18	55	79	89	1
155°	2	8	26	43	49	1
165°	3	3	8	14	17	1
175°	0	0	0	0	0	0
180°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2709.8	2709.8	2709.8	2709.8	2709.8	2709.8	2709.8	2709.8	2709.8	2709.8	2709.8
2.5°	2675.3	2679.8	2679.8	2680.4	2679.2	2683.0	2681.7	2682.4	2683.6	2685.6	2683.6
5°	2582.7	2585.2	2582.7	2585.2	2583.3	2584.6	2585.9	2582.7	2584.6	2579.5	2582.7
7.5°	2467.0	2464.5	2459.4	2454.9	2454.3	2454.3	2455.5	2458.7	2460.6	2458.7	2456.8
10°	2342.4	2346.3	2345.6	2342.4	2342.4	2342.4	2345.6	2344.4	2339.2	2340.5	2339.9
12.5°	2253.0	2254.9	2251.1	2249.1	2244.7	2249.1	2246.0	2244.0	2252.3	2256.2	2255.5
15°	2177.6	2175.0	2175.0	2171.8	2169.9	2171.8	2173.1	2175.0	2180.1	2185.9	2189.7
17.5°	2102.8	2104.7	2103.5	2103.5	2106.0	2104.7	2110.5	2118.2	2127.1	2131.6	2132.9
20°	2030.6	2031.9	2036.4	2036.4	2042.1	2046.6	2051.7	2060.7	2067.0	2077.9	2084.9
22.5°	1961.6	1961.6	1967.4	1976.3	1983.3	1990.4	1998.0	2010.2	2015.3	2027.4	2037.0
25°	1890.0	1893.9	1903.5	1913.7	1927.1	1938.0	1945.6	1955.9	1971.8	1980.8	1993.6
27.5°	1824.9	1833.2	1838.9	1855.5	1871.5	1881.7	1891.3	1906.0	1920.1	1935.4	1950.1
30°	1761.0	1766.1	1775.7	1794.8	1817.2	1828.1	1833.2	1854.9	1869.6	1892.6	1907.3
32.5°	1698.4	1704.8	1717.5	1732.9	1759.1	1769.9	1780.8	1805.1	1823.6	1846.0	1867.7
35°	1639.6	1640.2	1658.1	1677.9	1701.6	1714.3	1725.2	1750.1	1776.3	1800.6	1827.4
37.5°	1571.2	1580.2	1592.9	1615.9	1639.6	1656.2	1670.2	1695.2	1727.8	1754.0	1773.1
40°	1510.5	1517.5	1530.3	1552.0	1577.0	1594.2	1609.5	1642.1	1672.2	1697.1	1710.5
42.5°	1444.7	1446.6	1465.1	1490.1	1516.3	1531.6	1548.8	1582.7	1608.9	1630.6	1652.4
45°	1369.3	1379.5	1398.0	1422.3	1454.3	1469.0	1486.9	1518.8	1548.2	1569.9	1591.7
47.5°	1297.1	1307.3	1325.8	1353.3	1385.3	1399.3	1417.2	1444.7	1480.5	1502.2	1515.0
50°	1224.9	1235.8	1254.9	1280.5	1312.4	1325.2	1340.5	1377.0	1404.4	1425.5	1443.4
52.5°	1146.9	1159.1	1177.0	1206.4	1235.8	1251.1	1262.0	1296.5	1324.6	1352.7	1366.1
55°	1074.1	1076.7	1098.4	1125.9	1153.3	1168.7	1182.7	1214.7	1244.7	1267.7	1288.8
57.5°	991.0	996.1	1014.0	1045.3	1070.3	1085.6	1099.0	1132.2	1155.9	1183.4	1205.7
60°	908.6	913.7	930.3	953.3	980.2	997.4	1011.5	1044.1	1070.9	1096.5	1117.5
62.5°	822.3	830.7	845.3	866.4	893.3	909.9	923.3	953.3	981.4	1001.3	1026.8
65°	735.4	738.0	755.9	779.5	803.8	817.9	833.8	860.7	886.9	911.8	933.5
67.5°	646.0	650.5	663.2	687.5	713.1	729.1	742.5	768.7	798.7	821.1	841.5
70°	552.7	560.4	574.4	598.1	623.0	638.3	646.0	674.1	700.3	730.3	754.0
72.5°	465.2	471.6	488.2	504.1	531.0	543.1	557.2	582.1	609.6	634.5	660.7
75°	376.3	384.7	394.2	414.7	437.7	453.0	469.6	488.8	518.2	541.8	560.4
77.5°	289.4	292.6	308.6	330.3	351.4	365.5	373.8	398.7	427.5	453.7	470.9
80°	203.2	209.6	226.8	246.6	263.9	279.9	288.8	312.5	341.8	366.1	380.2
82.5°	127.8	134.2	150.8	168.0	189.1	203.2	212.1	237.7	263.9	285.0	298.4
85°	64.5	72.2	86.3	101.6	125.9	136.1	146.3	168.0	194.2	208.3	223.6
87.5°	21.1	26.8	40.9	56.9	76.7	88.2	97.1	120.8	139.3	156.5	170.6
90°	1.3	7.0	19.8	37.1	56.2	65.8	76.7	96.5	114.4	130.3	144.4
92.5°	0.6	5.8	17.9	34.5	53.0	62.6	72.2	90.7	106.7	122.0	138.0
95°	0.6	5.1	17.3	33.2	51.1	60.1	69.0	86.3	102.9	118.8	134.2
97.5°	0.6	4.5	16.0	31.9	49.2	57.5	65.8	82.4	99.0	114.4	128.4
100°	0.6	4.5	15.3	30.7	46.6	55.0	63.3	79.9	94.6	109.3	122.7
102.5°	0.6	4.5	14.7	29.4	44.7	52.4	60.7	76.0	90.7	104.8	116.9
105°	0.6	3.8	14.1	27.5	42.8	51.1	58.1	72.8	86.9	99.0	111.2
107.5°	0.6	3.8	13.4	26.8	41.5	48.6	56.2	70.3	83.1	95.2	106.1
110°	0.6	3.2	12.8	25.6	40.3	47.3	54.3	67.7	80.5	91.4	101.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.6	3.2	12.1	24.3	39.0	46.0	53.0	66.5	78.0	88.8	97.8
115°	0.6	3.2	11.5	23.6	37.7	44.7	51.8	64.5	76.0	86.3	94.6
117.5°	0.6	2.6	10.9	23.0	36.4	43.4	50.5	62.6	74.8	84.3	92.6
120°	0.6	2.6	10.2	21.7	35.1	42.2	48.6	61.3	73.5	83.1	91.4
122.5°	0.6	2.6	9.6	21.1	33.9	40.3	47.3	60.1	71.6	82.4	90.7
125°	0.6	1.9	9.6	20.4	32.6	39.0	46.0	58.1	70.3	80.5	89.5
127.5°	1.3	1.9	8.9	19.2	31.3	37.1	43.4	56.2	67.7	78.6	86.9
130°	1.3	1.9	7.7	17.9	29.4	35.1	41.5	53.7	65.2	75.4	84.3
132.5°	1.3	1.3	7.0	16.6	27.5	33.2	39.0	51.1	62.0	72.2	81.1
135°	1.3	1.3	6.4	14.7	25.6	30.7	36.4	47.9	58.8	68.4	77.3
137.5°	1.3	1.3	5.1	13.4	22.4	27.5	33.2	44.1	54.3	63.3	72.8
140°	1.3	1.3	4.5	11.5	19.8	24.3	29.4	39.6	49.8	58.8	67.1
142.5°	1.3	1.3	3.8	9.6	17.3	21.1	25.6	35.1	44.7	53.0	61.3
145°	1.9	1.3	3.2	8.3	14.7	18.5	21.7	30.7	39.0	46.6	55.0
147.5°	1.9	1.3	2.6	6.4	12.1	15.3	18.5	26.2	33.2	40.3	47.9
150°	1.9	1.9	1.9	5.1	9.6	12.1	15.3	21.7	27.5	33.9	40.3
152.5°	1.9	1.9	1.9	4.5	7.7	10.2	12.1	17.3	23.0	28.1	33.2
155°	1.9	1.9	1.9	3.2	5.8	7.7	9.6	13.4	17.9	22.4	26.2
157.5°	1.9	1.9	1.9	2.6	4.5	5.8	7.0	10.2	14.1	17.3	20.4
160°	2.6	1.9	1.9	1.9	3.2	4.5	5.8	7.7	10.2	12.8	15.3
162.5°	2.6	1.9	1.9	1.9	2.6	3.2	3.8	5.8	7.7	9.6	11.5
165°	2.6	2.6	1.9	1.3	1.9	2.6	2.6	3.8	5.1	6.4	7.7
167.5°	2.6	2.6	1.9	1.9	1.3	1.3	1.9	2.6	3.2	3.8	4.5
170°	2.6	2.6	1.9	1.3	1.3	1.3	1.3	1.3	1.9	1.9	2.6
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	2709.8	2709.8	2709.8	2709.8	2709.8	2709.8	2709.8	2709.8	2709.8	2709.8
2.5°	2679.8	2678.5	2676.0	2676.0	2676.0	2674.1	2673.4	2670.2	2670.9	2674.1
5°	2574.4	2578.2	2570.5	2572.5	2571.2	2572.5	2572.5	2573.1	2568.6	2569.9
7.5°	2452.3	2452.3	2450.4	2454.9	2450.4	2451.7	2454.3	2454.3	2454.9	2457.4
10°	2341.8	2343.7	2346.3	2351.4	2353.3	2355.9	2354.6	2362.2	2362.9	2364.8
12.5°	2260.0	2266.4	2266.4	2272.8	2274.1	2274.1	2281.1	2281.7	2283.0	2279.2
15°	2193.6	2200.6	2206.3	2213.4	2213.4	2219.1	2229.3	2219.1	2224.2	2217.8
17.5°	2142.4	2148.8	2157.1	2159.7	2162.9	2167.4	2175.0	2177.6	2180.8	2183.3
20°	2093.2	2101.5	2111.1	2122.6	2128.4	2126.5	2122.0	2132.2	2126.5	2129.0
22.5°	2048.5	2063.2	2067.7	2074.7	2082.4	2087.5	2093.9	2099.6	2100.3	2099.0
25°	2005.7	2017.8	2034.5	2048.5	2049.8	2051.1	2051.1	2053.0	2056.2	2058.1
27.5°	1964.8	1985.9	1996.1	2010.2	2017.2	2025.5	2037.0	2033.2	2031.9	2027.4
30°	1927.7	1946.9	1968.0	1987.2	1988.5	1989.1	1985.3	1987.8	1987.8	1992.9
32.5°	1890.0	1913.1	1927.7	1930.9	1936.1	1943.1	1945.6	1941.8	1940.5	1938.6
35°	1844.0	1863.2	1866.4	1881.7	1886.2	1884.3	1880.5	1882.4	1886.2	1892.6
37.5°	1788.5	1799.3	1823.0	1824.9	1829.3	1834.5	1844.0	1841.5	1840.2	1837.7
40°	1729.7	1748.2	1760.3	1774.4	1778.2	1777.0	1771.2	1775.0	1779.5	1782.1
42.5°	1669.6	1684.3	1699.6	1703.5	1704.8	1707.9	1713.7	1720.7	1716.9	1714.3
45°	1604.4	1615.3	1620.4	1628.7	1631.9	1632.5	1631.9	1632.5	1637.0	1638.9
47.5°	1530.3	1543.1	1545.6	1554.0	1554.0	1557.8	1566.1	1571.8	1575.0	1578.9
50°	1454.3	1463.2	1478.6	1483.0	1490.1	1498.4	1498.4	1501.6	1506.7	1511.8
52.5°	1384.0	1394.9	1405.1	1420.4	1420.4	1423.0	1431.3	1443.4	1449.8	1453.6
55°	1301.6	1316.9	1334.8	1345.0	1347.6	1355.9	1363.5	1365.5	1366.7	1370.6
57.5°	1217.9	1236.4	1251.7	1269.6	1269.6	1269.6	1276.0	1280.5	1284.3	1279.8
60°	1136.1	1150.8	1162.9	1173.8	1168.0	1173.8	1175.1	1169.3	1166.7	1167.4
62.5°	1046.0	1060.0	1067.7	1065.8	1065.1	1065.1	1062.0	1056.8	1058.8	1059.4
65°	957.8	961.6	964.8	966.1	959.7	957.8	959.7	964.8	965.5	973.1
67.5°	860.0	866.4	864.5	867.1	865.2	865.2	862.0	861.3	854.3	866.4
70°	766.1	769.9	775.1	774.4	771.2	766.1	756.5	755.3	750.1	755.9
72.5°	667.7	679.2	678.6	677.3	674.7	670.3	659.4	655.6	649.8	648.5
75°	574.4	580.8	584.0	584.0	579.5	578.3	571.9	566.1	564.2	562.3
77.5°	482.4	491.4	494.6	495.8	492.6	494.6	489.4	484.3	481.8	486.3
80°	396.2	401.3	408.3	414.0	417.2	416.0	416.0	417.2	415.3	417.9
82.5°	311.2	321.4	333.5	338.0	345.0	347.6	353.3	360.4	365.5	367.4
85°	238.3	251.8	265.2	276.7	284.3	292.0	305.4	320.1	331.6	338.0
87.5°	187.2	201.3	217.2	232.6	238.3	243.4	254.3	274.1	299.0	315.0
90°	161.0	178.3	189.8	200.6	208.3	214.7	231.9	253.7	281.8	295.8
92.5°	154.0	165.5	178.3	191.0	199.4	207.0	222.4	240.2	258.8	270.3
95°	146.3	159.7	173.8	184.0	189.8	196.2	208.3	221.7	236.4	242.8
97.5°	141.8	154.6	164.9	175.1	180.8	187.2	198.7	212.1	224.3	230.0
100°	134.8	145.7	155.9	166.1	171.9	177.0	188.5	198.7	204.5	206.4
102.5°	127.8	138.0	148.2	157.2	161.7	166.1	173.8	180.2	181.5	183.4
105°	122.0	131.0	138.7	146.3	149.5	152.7	157.8	158.5	158.5	157.8
107.5°	115.7	123.3	129.7	134.2	135.5	136.7	138.0	136.7	136.1	136.1
110°	109.9	115.7	120.1	122.7	123.3	124.0	123.3	123.3	124.0	123.3



TEST NUMBER: P241370

CATALOG NUMBER: FVS8M-3-LD4-35-3LO-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	104.8	109.9	113.1	114.4	115.0	115.7	116.9	118.2	119.5	120.1
115°	101.0	105.4	108.6	111.8	113.1	114.4	117.6	120.8	123.3	124.0
117.5°	99.0	104.2	109.3	113.1	115.7	117.6	122.0	126.5	129.1	129.7
120°	99.0	105.4	111.2	116.3	118.8	121.4	126.5	131.0	133.5	134.8
122.5°	98.4	106.1	112.5	118.2	120.8	123.3	128.4	132.9	136.1	137.4
125°	97.8	105.4	112.5	118.8	121.4	124.0	129.1	132.9	136.1	137.4
127.5°	95.2	103.5	110.5	116.9	120.1	123.3	127.8	131.6	134.8	136.1
130°	92.6	100.3	107.3	114.4	117.6	120.8	125.9	129.7	132.9	134.2
132.5°	88.8	97.1	104.2	110.5	113.7	116.9	122.0	126.5	129.1	130.3
135°	85.0	93.3	99.7	105.4	108.6	111.8	116.9	120.8	124.0	124.6
137.5°	80.5	87.5	94.6	100.3	102.9	105.4	109.9	114.4	116.3	117.6
140°	74.8	81.8	88.2	93.3	95.8	98.4	102.2	105.4	108.0	109.3
142.5°	69.0	75.4	80.5	85.6	88.2	89.5	93.3	96.5	98.4	99.0
145°	62.0	67.7	72.8	77.3	78.6	80.5	83.7	86.3	87.5	88.8
147.5°	54.3	59.4	64.5	68.4	70.3	71.6	74.8	76.7	78.0	78.6
150°	46.6	51.8	56.2	59.4	60.7	62.6	64.5	67.1	67.7	68.4
152.5°	38.3	43.4	47.3	51.1	52.4	53.0	55.6	56.9	58.1	58.1
155°	31.3	35.1	39.0	42.2	43.4	44.1	46.0	47.3	47.9	48.6
157.5°	24.3	27.5	31.3	34.5	35.1	35.8	37.7	38.3	39.0	39.6
160°	18.5	21.1	23.6	26.2	27.5	28.8	30.0	30.7	31.3	30.7
162.5°	13.4	15.3	17.3	19.2	20.4	21.7	23.0	23.6	23.6	23.6
165°	8.9	10.9	12.1	13.4	14.1	14.7	16.6	16.6	16.6	16.6
167.5°	5.8	6.4	7.0	8.3	8.3	8.9	10.2	10.9	10.9	10.9
170°	2.6	3.2	3.8	3.8	4.5	4.5	5.1	5.8	5.8	5.1
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)