

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: P241371

Luminaire Tested: **FVS8M-3-LD4-40-3LO-P125-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241371
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-LD4-40-3LO-P125-UNV-EDC1
Description: FAILSAFE FVS8M LED FIXTURE
3FT LENGTH, 3-MODULE LED WITH P125 LENS
Light Source: (252) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

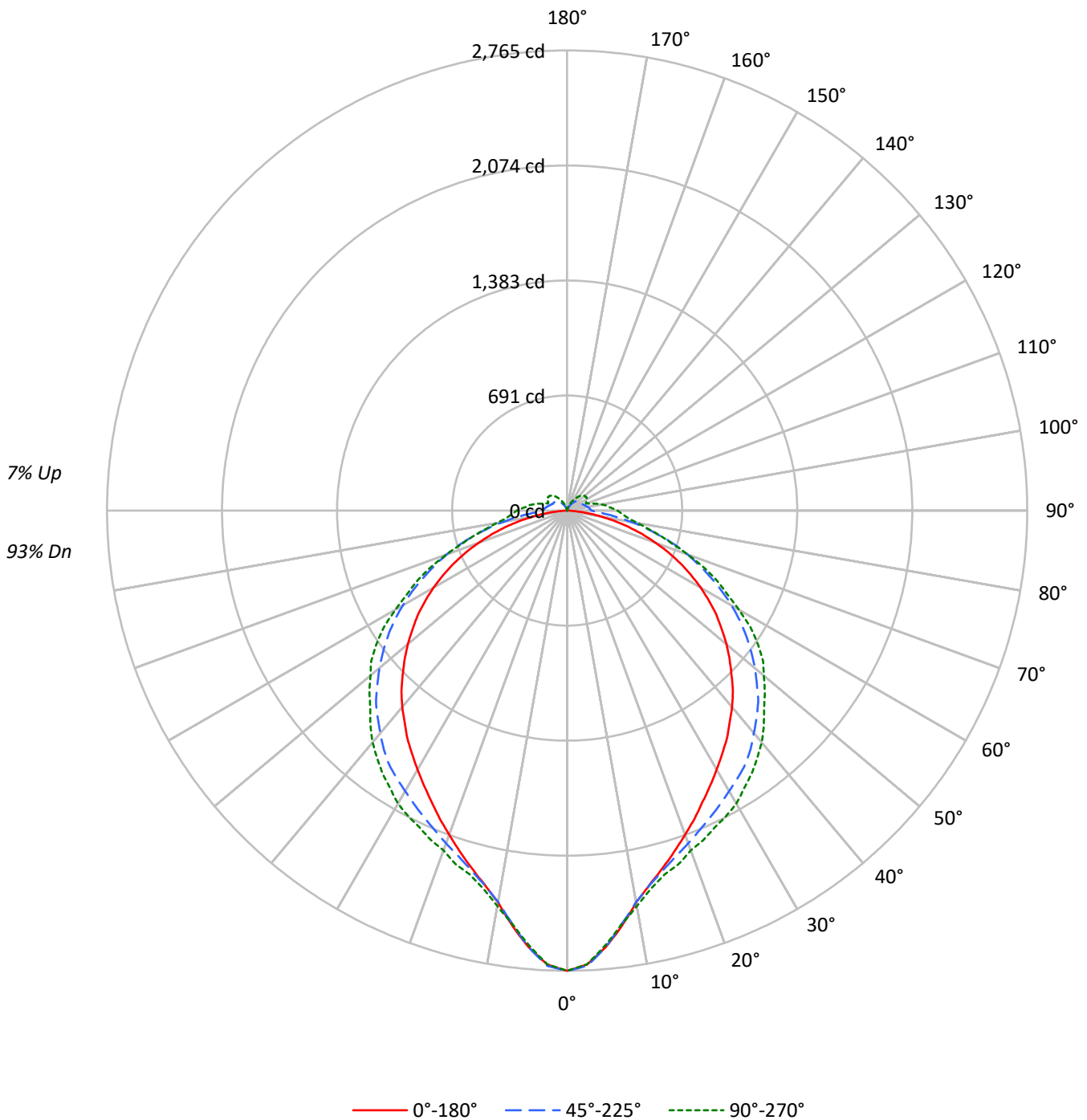
Lumens per Lamp: N/A
Luminaire Lumens: 7535.0 lumens
Efficiency: N/A
Efficacy: 122.3 lumens/watt
Spacing Criteria (0/90/45): 0.97 / 1.1 / 1.28
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 2.85' x H: 0.15')
CIE Type: Direct

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

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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					0
RW	70	50	30	10	70	50	30	10	50	30	10	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°	16148	16148	16148
5°	15380	15188	15075
10°	14047	13685	13761
15°	13252	12835	12901
20°	12641	12342	12476
25°	12138	12011	12243
30°	11770	11791	12131
35°	11515	11691	11888
40°	11267	11428	11654
45°	10978	11217	11268
50°	10703	10849	11043
55°	10400	10463	10767
60°	9948	9946	10001
65°	9346	9270	9244
70°	8444	8541	8127
75°	7276	7454	7025
80°	5405	6182	6287
85°	2787	4722	6453



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.4	3.2
10°-20°	633.3	8.4
20°-30°	937.3	12.4
30°-40°	1147.4	15.2
40°-50°	1220.0	16.2
50°-60°	1143.8	15.2
60°-70°	900.6	12.0
70°-80°	558.7	7.4
80°-90°	248.4	3.3
90°-100°	141.0	1.9
100°-110°	105.9	1.4
110°-120°	80.8	1.1
120°-130°	72.4	1.0
130°-140°	54.9	0.7
140°-150°	31.7	0.4
150°-160°	12.6	0.2
160°-170°	2.8	0.0
170°-180°	0.1	0.0
0°-30°	1814.0	24.1
0°-40°	2961.4	39.3
0°-60°	5325.2	70.7
0°-90°	7032.9	93.3
90°-120°	327.8	4.3
90°-150°	486.7	6.5
90°-180°	502.0	6.7
0°-180°	7535.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2765	2765	2765	2765	2765	
5°	2636	2638	2636	2624	2622	244
15°	2222	2216	2234	2259	2263	626
25°	1929	1978	2034	2092	2100	890
35°	1673	1749	1865	1925	1931	1046
45°	1397	1499	1624	1665	1672	1079
55°	1096	1193	1315	1375	1399	977
65°	750	835	953	979	993	741
75°	384	462	572	591	574	406
85°	66	139	228	290	345	84
90°	1	67	147	213	302	3
95°	1	61	137	194	248	1
105°	1	52	114	153	161	1
115°	1	46	96	115	126	1
125°	1	40	91	124	140	1
135°	1	31	79	111	127	1
145°	2	19	56	80	91	1
155°	2	8	27	44	50	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°	2765.3	2765.3	2765.3	2765.3	2765.3	2765.3	2765.3	2765.3	2765.3	2765.3	2765.3
2.5°	2730.0	2734.6	2734.6	2735.3	2734.0	2737.9	2736.6	2737.2	2738.5	2740.5	2738.5
5°	2635.5	2638.1	2635.5	2638.1	2636.2	2637.5	2638.8	2635.5	2637.5	2632.2	2635.5
7.5°	2517.5	2514.9	2509.7	2505.1	2504.4	2504.4	2505.7	2509.0	2511.0	2509.0	2507.1
10°	2390.3	2394.2	2393.6	2390.3	2390.3	2390.3	2393.6	2392.3	2387.1	2388.4	2387.7
12.5°	2299.1	2301.0	2297.1	2295.1	2290.6	2295.1	2291.9	2289.9	2298.4	2302.3	2301.7
15°	2222.1	2219.5	2219.5	2216.2	2214.3	2216.2	2217.5	2219.5	2224.7	2230.6	2234.5
17.5°	2145.8	2147.8	2146.5	2146.5	2149.1	2147.8	2153.7	2161.5	2170.6	2175.2	2176.5
20°	2072.1	2073.5	2078.0	2078.0	2083.9	2088.4	2093.7	2102.8	2109.3	2120.4	2127.6
22.5°	2001.7	2001.7	2007.6	2016.7	2023.9	2031.1	2038.9	2051.3	2056.5	2068.9	2078.7
25°	1928.7	1932.6	1942.4	1952.8	1966.5	1977.6	1985.4	1995.9	2012.2	2021.3	2034.3
27.5°	1862.2	1870.7	1876.5	1893.5	1909.8	1920.2	1930.0	1945.0	1959.3	1975.0	1990.0
30°	1797.0	1802.2	1812.0	1831.5	1854.4	1865.5	1870.7	1892.8	1907.8	1931.3	1946.3
32.5°	1733.1	1739.6	1752.7	1768.3	1795.0	1806.1	1817.2	1842.0	1860.9	1883.7	1905.9
35°	1673.1	1673.8	1692.0	1712.2	1736.4	1749.4	1760.5	1785.9	1812.6	1837.4	1864.8
37.5°	1603.3	1612.5	1625.5	1649.0	1673.1	1690.1	1704.4	1729.8	1763.1	1789.8	1809.4
40°	1541.4	1548.6	1561.6	1583.8	1609.2	1626.8	1642.5	1675.7	1706.4	1731.8	1745.5
42.5°	1474.2	1476.2	1495.1	1520.5	1547.3	1562.9	1580.5	1615.1	1641.8	1664.0	1686.1
45°	1397.3	1407.7	1426.6	1451.4	1484.0	1499.0	1517.3	1549.9	1579.9	1602.0	1624.2
47.5°	1323.6	1334.1	1353.0	1381.0	1413.6	1427.9	1446.2	1474.2	1510.8	1532.9	1546.0
50°	1249.9	1261.0	1280.6	1306.7	1339.3	1352.3	1368.0	1405.1	1433.2	1454.7	1472.9
52.5°	1170.4	1182.8	1201.0	1231.0	1261.0	1276.7	1287.8	1323.0	1351.7	1380.3	1394.0
55°	1096.1	1098.7	1120.8	1148.9	1176.9	1192.6	1206.9	1239.5	1270.2	1293.6	1315.1
57.5°	1011.3	1016.5	1034.8	1066.7	1092.1	1107.8	1121.5	1155.4	1179.5	1207.6	1230.4
60°	927.2	932.4	949.4	972.8	1000.2	1017.8	1032.2	1065.4	1092.8	1118.9	1140.4
62.5°	839.2	847.6	862.6	884.2	911.5	928.5	942.2	972.8	1001.5	1021.7	1047.8
65°	750.5	753.1	771.3	795.5	820.3	834.6	850.9	878.3	905.0	930.4	952.6
67.5°	659.2	663.8	676.8	701.6	727.7	744.0	757.7	784.4	815.0	837.9	858.7
70°	564.0	571.8	586.2	610.3	635.7	651.4	659.2	687.9	714.6	745.3	769.4
72.5°	474.7	481.2	498.1	514.5	541.8	554.2	568.6	594.0	622.0	647.5	674.2
75°	384.0	392.5	402.3	423.2	446.6	462.3	479.2	498.8	528.8	552.9	571.8
77.5°	295.4	298.6	314.9	337.1	358.6	373.0	381.4	406.9	436.2	462.9	480.5
80°	207.3	213.9	231.5	251.7	269.3	285.6	294.7	318.8	348.8	373.6	388.0
82.5°	130.4	136.9	153.9	171.5	193.0	207.3	216.5	242.6	269.3	290.8	304.5
85°	65.9	73.7	88.0	103.7	128.4	138.9	149.3	171.5	198.2	212.6	228.2
87.5°	21.5	27.4	41.7	58.0	78.2	90.0	99.1	123.2	142.1	159.7	174.1
90°	1.3	7.2	20.2	37.8	57.4	67.2	78.2	98.5	116.7	133.0	147.4
92.5°	0.7	5.9	18.3	35.2	54.1	63.9	73.7	92.6	108.9	124.5	140.8
95°	0.7	5.2	17.6	33.9	52.2	61.3	70.4	88.0	105.0	121.3	136.9
97.5°	0.7	4.6	16.3	32.6	50.2	58.7	67.2	84.1	101.1	116.7	131.1
100°	0.7	4.6	15.6	31.3	47.6	56.1	64.6	81.5	96.5	111.5	125.2
102.5°	0.7	4.6	15.0	30.0	45.6	53.5	61.9	77.6	92.6	106.9	119.3
105°	0.7	3.9	14.3	28.0	43.7	52.2	59.3	74.3	88.7	101.1	113.5
107.5°	0.7	3.9	13.7	27.4	42.4	49.6	57.4	71.7	84.8	97.2	108.2
110°	0.7	3.3	13.0	26.1	41.1	48.3	55.4	69.1	82.2	93.2	103.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.7	3.3	12.4	24.8	39.8	46.9	54.1	67.8	79.5	90.6	99.8
115°	0.7	3.3	11.7	24.1	38.5	45.6	52.8	65.9	77.6	88.0	96.5
117.5°	0.7	2.6	11.1	23.5	37.2	44.3	51.5	63.9	76.3	86.1	94.5
120°	0.7	2.6	10.4	22.2	35.9	43.0	49.6	62.6	75.0	84.8	93.2
122.5°	0.7	2.6	9.8	21.5	34.6	41.1	48.3	61.3	73.0	84.1	92.6
125°	0.7	2.0	9.8	20.9	33.3	39.8	46.9	59.3	71.7	82.2	91.3
127.5°	1.3	2.0	9.1	19.6	31.9	37.8	44.3	57.4	69.1	80.2	88.7
130°	1.3	2.0	7.8	18.3	30.0	35.9	42.4	54.8	66.5	76.9	86.1
132.5°	1.3	1.3	7.2	17.0	28.0	33.9	39.8	52.2	63.2	73.7	82.8
135°	1.3	1.3	6.5	15.0	26.1	31.3	37.2	48.9	60.0	69.8	78.9
137.5°	1.3	1.3	5.2	13.7	22.8	28.0	33.9	45.0	55.4	64.6	74.3
140°	1.3	1.3	4.6	11.7	20.2	24.8	30.0	40.4	50.9	60.0	68.5
142.5°	1.3	1.3	3.9	9.8	17.6	21.5	26.1	35.9	45.6	54.1	62.6
145°	2.0	1.3	3.3	8.5	15.0	18.9	22.2	31.3	39.8	47.6	56.1
147.5°	2.0	1.3	2.6	6.5	12.4	15.6	18.9	26.7	33.9	41.1	48.9
150°	2.0	2.0	2.0	5.2	9.8	12.4	15.6	22.2	28.0	34.6	41.1
152.5°	2.0	2.0	2.0	4.6	7.8	10.4	12.4	17.6	23.5	28.7	33.9
155°	2.0	2.0	2.0	3.3	5.9	7.8	9.8	13.7	18.3	22.8	26.7
157.5°	2.0	2.0	2.0	2.6	4.6	5.9	7.2	10.4	14.3	17.6	20.9
160°	2.6	2.0	2.0	2.0	3.3	4.6	5.9	7.8	10.4	13.0	15.6
162.5°	2.6	2.0	2.0	2.0	2.6	3.3	3.9	5.9	7.8	9.8	11.7
165°	2.6	2.6	2.0	1.3	2.0	2.6	2.6	3.9	5.2	6.5	7.8
167.5°	2.6	2.6	2.0	2.0	1.3	1.3	2.0	2.6	3.3	3.9	4.6
170°	2.6	2.6	2.0	1.3	1.3	1.3	1.3	1.3	2.0	2.0	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°	2765.3	2765.3	2765.3	2765.3	2765.3	2765.3	2765.3	2765.3	2765.3	2765.3
2.5°	2734.6	2733.3	2730.7	2730.7	2730.7	2728.7	2728.1	2724.8	2725.5	2728.7
5°	2627.0	2630.9	2623.1	2625.1	2623.8	2625.1	2625.1	2625.7	2621.2	2622.5
7.5°	2502.5	2502.5	2500.5	2505.1	2500.5	2501.8	2504.4	2504.4	2505.1	2507.7
10°	2389.7	2391.6	2394.2	2399.5	2401.4	2404.0	2402.7	2410.5	2411.2	2413.2
12.5°	2306.2	2312.7	2312.7	2319.3	2320.6	2320.6	2327.7	2328.4	2329.7	2325.8
15°	2238.4	2245.6	2251.5	2258.6	2258.6	2264.5	2274.9	2264.5	2269.7	2263.2
17.5°	2186.3	2192.8	2201.2	2203.9	2207.1	2211.7	2219.5	2222.1	2225.4	2228.0
20°	2136.0	2144.5	2154.3	2166.0	2171.9	2170.0	2165.4	2175.8	2170.0	2172.6
22.5°	2090.4	2105.4	2110.0	2117.1	2125.0	2130.2	2136.7	2142.6	2143.2	2141.9
25°	2046.7	2059.1	2076.1	2090.4	2091.7	2093.0	2093.0	2095.0	2098.2	2100.2
27.5°	2005.0	2026.5	2036.9	2051.3	2058.5	2066.9	2078.7	2074.8	2073.5	2068.9
30°	1967.2	1986.7	2008.2	2027.8	2029.1	2029.8	2025.9	2028.5	2028.5	2033.7
32.5°	1928.7	1952.2	1967.2	1970.4	1975.6	1982.8	1985.4	1981.5	1980.2	1978.3
35°	1881.8	1901.3	1904.6	1920.2	1924.8	1922.8	1918.9	1920.9	1924.8	1931.3
37.5°	1825.0	1836.1	1860.2	1862.2	1866.8	1872.0	1881.8	1879.1	1877.8	1875.2
40°	1765.0	1784.0	1796.3	1810.7	1814.6	1813.3	1807.4	1811.3	1815.9	1818.5
42.5°	1703.8	1718.7	1734.4	1738.3	1739.6	1742.9	1748.7	1755.9	1752.0	1749.4
45°	1637.2	1648.3	1653.5	1662.0	1665.3	1665.9	1665.3	1665.9	1670.5	1672.5
47.5°	1561.6	1574.6	1577.3	1585.7	1585.7	1589.6	1598.1	1604.0	1607.3	1611.2
50°	1484.0	1493.1	1508.8	1513.4	1520.5	1529.0	1529.0	1532.3	1537.5	1542.7
52.5°	1412.3	1423.4	1433.8	1449.5	1449.5	1452.1	1460.5	1472.9	1479.5	1483.4
55°	1328.2	1343.8	1362.1	1372.5	1375.1	1383.6	1391.4	1393.4	1394.7	1398.6
57.5°	1242.8	1261.7	1277.3	1295.6	1295.6	1295.6	1302.1	1306.7	1310.6	1306.0
60°	1159.3	1174.3	1186.7	1197.8	1191.9	1197.8	1199.1	1193.2	1190.6	1191.3
62.5°	1067.4	1081.7	1089.5	1087.6	1086.9	1086.9	1083.7	1078.5	1080.4	1081.1
65°	977.4	981.3	984.6	985.9	979.3	977.4	979.3	984.6	985.2	993.0
67.5°	877.6	884.2	882.2	884.8	882.8	882.8	879.6	878.9	871.8	884.2
70°	781.8	785.7	790.9	790.3	787.0	781.8	772.0	770.7	765.5	771.3
72.5°	681.4	693.1	692.5	691.2	688.5	684.0	672.9	669.0	663.1	661.8
75°	586.2	592.7	596.0	596.0	591.4	590.1	583.6	577.7	575.7	573.8
77.5°	492.3	501.4	504.7	506.0	502.7	504.7	499.5	494.2	491.6	496.2
80°	404.3	409.5	416.6	422.5	425.8	424.5	424.5	425.8	423.8	426.4
82.5°	317.5	328.0	340.4	344.9	352.1	354.7	360.6	367.7	373.0	374.9
85°	243.2	256.9	270.6	282.3	290.2	298.0	311.7	326.7	338.4	344.9
87.5°	191.0	205.4	221.7	237.3	243.2	248.4	259.5	279.7	305.1	321.5
90°	164.3	181.9	193.7	204.7	212.6	219.1	236.7	258.9	287.5	301.9
92.5°	157.1	168.9	181.9	195.0	203.4	211.3	226.9	245.2	264.1	275.8
95°	149.3	163.0	177.4	187.8	193.7	200.2	212.6	226.3	241.3	247.8
97.5°	144.8	157.8	168.2	178.7	184.5	191.0	202.8	216.5	228.9	234.7
100°	137.6	148.7	159.1	169.5	175.4	180.6	192.3	202.8	208.6	210.6
102.5°	130.4	140.8	151.3	160.4	165.0	169.5	177.4	183.9	185.2	187.1
105°	124.5	133.7	141.5	149.3	152.6	155.8	161.1	161.7	161.7	161.1
107.5°	118.0	125.8	132.4	136.9	138.2	139.5	140.8	139.5	138.9	138.9
110°	112.1	118.0	122.6	125.2	125.8	126.5	125.8	125.8	126.5	125.8



TEST NUMBER: P241371

CATALOG NUMBER: FVS8M-3-LD4-40-3LO-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	106.9	112.1	115.4	116.7	117.4	118.0	119.3	120.6	121.9	122.6
115°	103.0	107.6	110.8	114.1	115.4	116.7	120.0	123.2	125.8	126.5
117.5°	101.1	106.3	111.5	115.4	118.0	120.0	124.5	129.1	131.7	132.4
120°	101.1	107.6	113.5	118.7	121.3	123.9	129.1	133.7	136.3	137.6
122.5°	100.4	108.2	114.8	120.6	123.2	125.8	131.1	135.6	138.9	140.2
125°	99.8	107.6	114.8	121.3	123.9	126.5	131.7	135.6	138.9	140.2
127.5°	97.2	105.6	112.8	119.3	122.6	125.8	130.4	134.3	137.6	138.9
130°	94.5	102.4	109.5	116.7	120.0	123.2	128.4	132.4	135.6	136.9
132.5°	90.6	99.1	106.3	112.8	116.1	119.3	124.5	129.1	131.7	133.0
135°	86.7	95.2	101.7	107.6	110.8	114.1	119.3	123.2	126.5	127.1
137.5°	82.2	89.3	96.5	102.4	105.0	107.6	112.1	116.7	118.7	120.0
140°	76.3	83.5	90.0	95.2	97.8	100.4	104.3	107.6	110.2	111.5
142.5°	70.4	76.9	82.2	87.4	90.0	91.3	95.2	98.5	100.4	101.1
145°	63.2	69.1	74.3	78.9	80.2	82.2	85.4	88.0	89.3	90.6
147.5°	55.4	60.6	65.9	69.8	71.7	73.0	76.3	78.2	79.5	80.2
150°	47.6	52.8	57.4	60.6	61.9	63.9	65.9	68.5	69.1	69.8
152.5°	39.1	44.3	48.3	52.2	53.5	54.1	56.7	58.0	59.3	59.3
155°	31.9	35.9	39.8	43.0	44.3	45.0	46.9	48.3	48.9	49.6
157.5°	24.8	28.0	31.9	35.2	35.9	36.5	38.5	39.1	39.8	40.4
160°	18.9	21.5	24.1	26.7	28.0	29.3	30.6	31.3	31.9	31.3
162.5°	13.7	15.6	17.6	19.6	20.9	22.2	23.5	24.1	24.1	24.1
165°	9.1	11.1	12.4	13.7	14.3	15.0	17.0	17.0	17.0	17.0
167.5°	5.9	6.5	7.2	8.5	8.5	9.1	10.4	11.1	11.1	11.1
170°	2.6	3.3	3.9	3.9	4.6	4.6	5.2	5.9	5.9	5.2
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)