

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: P241369

Luminaire Tested: **FVS8M-3-LD4-30-3LO-P125-UNV-EDC1**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P241369  
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-LD4-30-3LO-P125-UNV-EDC1  
Description: FAILSAFE FVS8M LED FIXTURE  
3FT LENGTH, 3-MODULE LED WITH P125 LENS  
Light Source: (252) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

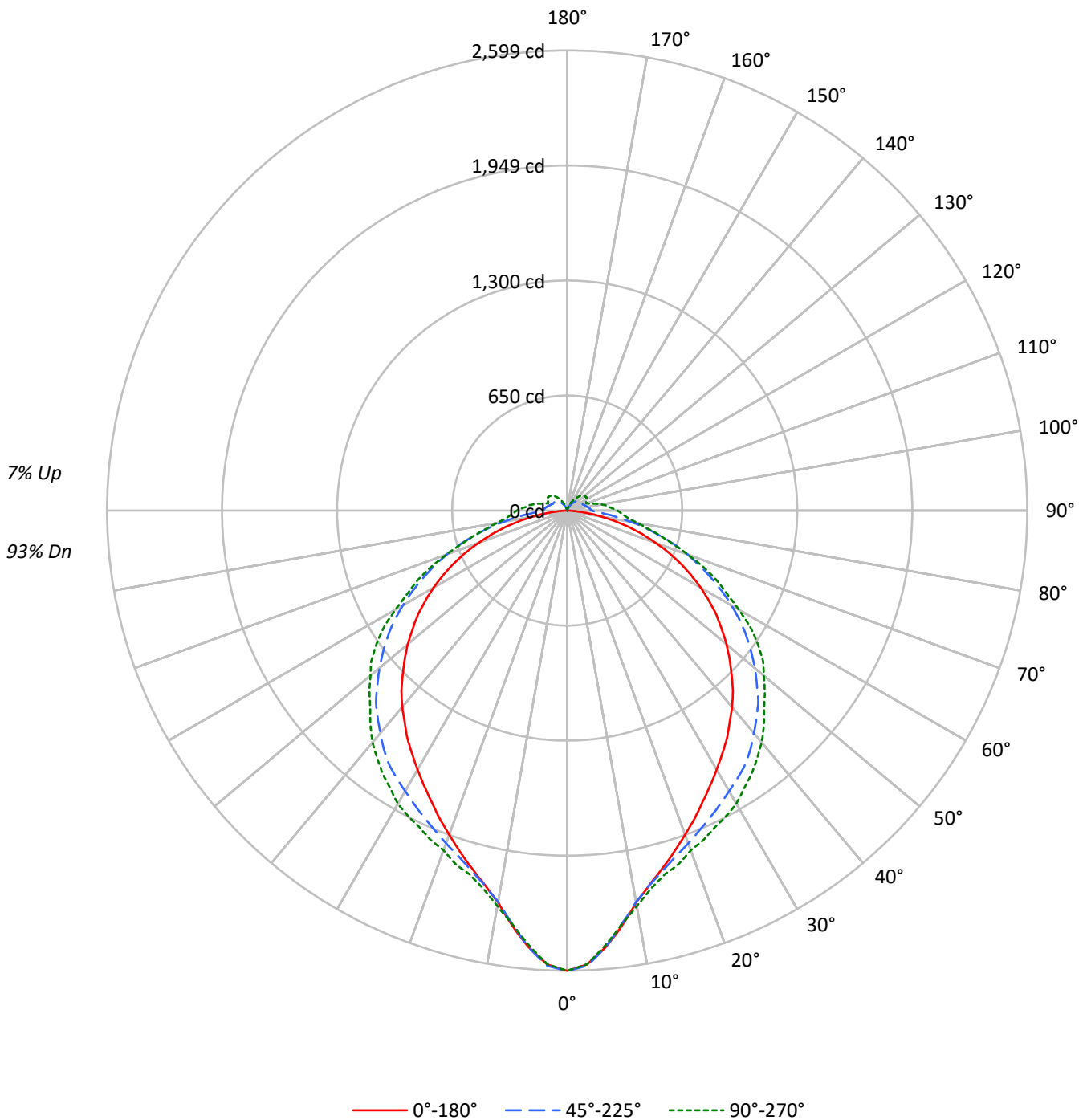
Lumens per Lamp: N/A  
Luminaire Lumens: 7083.0 lumens  
Efficiency: N/A  
Efficacy: 115.0 lumens/watt  
Spacing Criteria (0/90/45): 0.97 / 1.1 / 1.28  
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 2.85' x H: 0.15')  
CIE Type: Direct

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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CATALOG NUMBER: FVS8M-3-LD4-30-3LO-P125-UNV-EDC1

### 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	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°	15179	15179	15179
5°	14457	14277	14170
10°	13204	12865	12935
15°	12457	12065	12127
20°	11883	11601	11727
25°	11410	11290	11508
30°	11064	11084	11404
35°	10824	10989	11175
40°	10591	10743	10955
45°	10320	10544	10591
50°	10062	10199	10381
55°	9776	9836	10121
60°	9352	9349	9401
65°	8785	8714	8690
70°	7938	8029	7640
75°	6840	7007	6604
80°	5082	5811	5910
85°	2618	4438	6066



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	228.8	3.2
10°-20°	595.3	8.4
20°-30°	881.1	12.4
30°-40°	1078.6	15.2
40°-50°	1146.8	16.2
50°-60°	1075.2	15.2
60°-70°	846.6	12.0
70°-80°	525.2	7.4
80°-90°	233.5	3.3
90°-100°	132.6	1.9
100°-110°	99.6	1.4
110°-120°	76.0	1.1
120°-130°	68.0	1.0
130°-140°	51.6	0.7
140°-150°	29.8	0.4
150°-160°	11.8	0.2
160°-170°	2.6	0.0
170°-180°	0.1	0.0
0°-30°	1705.2	24.1
0°-40°	2783.8	39.3
0°-60°	5005.8	70.7
0°-90°	6611.0	93.3
90°-120°	308.1	4.3
90°-150°	457.5	6.5
90°-180°	472.0	6.7
0°-180°	7083.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2599	2599	2599	2599	2599	
5°	2477	2479	2477	2466	2465	229
15°	2089	2083	2100	2123	2127	589
25°	1813	1859	1912	1966	1974	837
35°	1573	1644	1753	1809	1816	983
45°	1314	1409	1527	1565	1572	1015
55°	1030	1121	1236	1293	1315	918
65°	706	784	896	921	934	696
75°	361	435	538	556	539	382
85°	62	131	214	273	324	79
90°	1	63	138	200	284	3
95°	1	58	129	182	233	0
105°	1	49	107	143	151	1
115°	1	43	91	108	119	1
125°	1	37	86	116	132	1
135°	1	29	74	104	120	1
145°	2	18	53	75	85	1
155°	2	7	25	42	47	1
165°	2	2	7	14	16	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°	2599.4	2599.4	2599.4	2599.4	2599.4	2599.4	2599.4	2599.4	2599.4	2599.4	2599.4
2.5°	2566.3	2570.6	2570.6	2571.2	2570.0	2573.6	2572.4	2573.0	2574.2	2576.1	2574.2
5°	2477.4	2479.9	2477.4	2479.9	2478.0	2479.2	2480.5	2477.4	2479.2	2474.3	2477.4
7.5°	2366.5	2364.0	2359.1	2354.8	2354.2	2354.2	2355.4	2358.5	2360.3	2358.5	2356.7
10°	2246.9	2250.6	2250.0	2246.9	2246.9	2246.9	2250.0	2248.8	2243.9	2245.1	2244.5
12.5°	2161.1	2163.0	2159.3	2157.5	2153.2	2157.5	2154.4	2152.6	2160.5	2164.2	2163.6
15°	2088.8	2086.4	2086.4	2083.3	2081.5	2083.3	2084.5	2086.4	2091.3	2096.8	2100.5
17.5°	2017.1	2018.9	2017.7	2017.7	2020.2	2018.9	2024.5	2031.8	2040.4	2044.7	2045.9
20°	1947.8	1949.1	1953.4	1953.4	1958.9	1963.2	1968.1	1976.7	1982.8	1993.2	1999.9
22.5°	1881.7	1881.7	1887.2	1895.7	1902.5	1909.2	1916.6	1928.2	1933.1	1944.8	1954.0
25°	1813.0	1816.7	1825.9	1835.7	1848.6	1859.0	1866.3	1876.1	1891.5	1900.0	1912.3
27.5°	1750.5	1758.5	1764.0	1779.9	1795.2	1805.0	1814.2	1828.3	1841.8	1856.5	1870.6
30°	1689.2	1694.1	1703.3	1721.7	1743.1	1753.6	1758.5	1779.3	1793.4	1815.5	1829.6
32.5°	1629.1	1635.3	1647.5	1662.2	1687.4	1697.8	1708.2	1731.5	1749.3	1770.7	1791.6
35°	1572.7	1573.4	1590.5	1609.5	1632.2	1644.5	1654.9	1678.8	1703.9	1727.2	1752.9
37.5°	1507.2	1515.7	1528.0	1550.1	1572.7	1588.7	1602.2	1626.1	1657.3	1682.5	1700.8
40°	1448.9	1455.7	1467.9	1488.8	1512.7	1529.2	1543.9	1575.2	1604.0	1627.9	1640.8
42.5°	1385.8	1387.6	1405.4	1429.3	1454.4	1469.2	1485.7	1518.2	1543.3	1564.2	1585.0
45°	1313.5	1323.3	1341.1	1364.4	1395.0	1409.1	1426.3	1456.9	1485.1	1505.9	1526.8
47.5°	1244.2	1254.0	1271.8	1298.2	1328.8	1342.3	1359.4	1385.8	1420.1	1441.0	1453.2
50°	1175.0	1185.4	1203.8	1228.3	1258.9	1271.2	1285.9	1320.8	1347.2	1367.4	1384.6
52.5°	1100.2	1111.8	1129.0	1157.2	1185.4	1200.1	1210.5	1243.6	1270.6	1297.5	1310.4
55°	1030.3	1032.8	1053.6	1080.0	1106.3	1121.0	1134.5	1165.2	1194.0	1216.0	1236.3
57.5°	950.6	955.5	972.7	1002.7	1026.6	1041.3	1054.2	1086.1	1108.8	1135.1	1156.6
60°	871.6	876.5	892.4	914.5	940.2	956.8	970.2	1001.5	1027.2	1051.8	1072.0
62.5°	788.8	796.8	810.9	831.1	856.9	872.8	885.7	914.5	941.4	960.4	985.0
65°	705.5	707.9	725.1	747.8	771.0	784.5	799.9	825.6	850.7	874.6	895.5
67.5°	619.7	623.9	636.2	659.5	684.0	699.3	712.2	737.3	766.1	787.6	807.2
70°	530.2	537.5	551.0	573.7	597.6	612.3	619.7	646.6	671.8	700.6	723.2
72.5°	446.2	452.3	468.3	483.6	509.3	521.0	534.5	558.4	584.7	608.6	633.8
75°	361.0	369.0	378.2	397.8	419.8	434.6	450.5	468.9	497.1	519.8	537.5
77.5°	277.7	280.7	296.0	316.9	337.1	350.6	358.6	382.5	410.0	435.2	451.7
80°	194.9	201.0	217.6	236.6	253.1	268.5	277.0	299.7	327.9	351.2	364.7
82.5°	122.6	128.7	144.6	161.2	181.4	194.9	203.5	228.0	253.1	273.4	286.2
85°	61.9	69.3	82.7	97.5	120.7	130.6	140.4	161.2	186.3	199.8	214.5
87.5°	20.2	25.7	39.2	54.5	73.5	84.6	93.2	115.8	133.6	150.2	163.6
90°	1.2	6.7	19.0	35.5	53.9	63.1	73.5	92.6	109.7	125.0	138.5
92.5°	0.6	5.5	17.2	33.1	50.9	60.1	69.3	87.0	102.4	117.1	132.4
95°	0.6	4.9	16.5	31.9	49.0	57.6	66.2	82.7	98.7	114.0	128.7
97.5°	0.6	4.3	15.3	30.6	47.2	55.2	63.1	79.1	95.0	109.7	123.2
100°	0.6	4.3	14.7	29.4	44.7	52.7	60.7	76.6	90.7	104.8	117.7
102.5°	0.6	4.3	14.1	28.2	42.9	50.3	58.2	72.9	87.0	100.5	112.2
105°	0.6	3.7	13.5	26.4	41.1	49.0	55.8	69.9	83.4	95.0	106.6
107.5°	0.6	3.7	12.9	25.7	39.8	46.6	53.9	67.4	79.7	91.3	101.7
110°	0.6	3.1	12.3	24.5	38.6	45.4	52.1	65.0	77.2	87.6	96.8



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.6	3.1	11.6	23.3	37.4	44.1	50.9	63.7	74.8	85.2	93.8
115°	0.6	3.1	11.0	22.7	36.2	42.9	49.6	61.9	72.9	82.7	90.7
117.5°	0.6	2.5	10.4	22.1	34.9	41.7	48.4	60.1	71.7	80.9	88.9
120°	0.6	2.5	9.8	20.8	33.7	40.5	46.6	58.8	70.5	79.7	87.6
122.5°	0.6	2.5	9.2	20.2	32.5	38.6	45.4	57.6	68.6	79.1	87.0
125°	0.6	1.8	9.2	19.6	31.3	37.4	44.1	55.8	67.4	77.2	85.8
127.5°	1.2	1.8	8.6	18.4	30.0	35.5	41.7	53.9	65.0	75.4	83.4
130°	1.2	1.8	7.4	17.2	28.2	33.7	39.8	51.5	62.5	72.3	80.9
132.5°	1.2	1.2	6.7	15.9	26.4	31.9	37.4	49.0	59.5	69.3	77.8
135°	1.2	1.2	6.1	14.1	24.5	29.4	34.9	46.0	56.4	65.6	74.2
137.5°	1.2	1.2	4.9	12.9	21.5	26.4	31.9	42.3	52.1	60.7	69.9
140°	1.2	1.2	4.3	11.0	19.0	23.3	28.2	38.0	47.8	56.4	64.4
142.5°	1.2	1.2	3.7	9.2	16.5	20.2	24.5	33.7	42.9	50.9	58.8
145°	1.8	1.2	3.1	8.0	14.1	17.8	20.8	29.4	37.4	44.7	52.7
147.5°	1.8	1.2	2.5	6.1	11.6	14.7	17.8	25.1	31.9	38.6	46.0
150°	1.8	1.8	1.8	4.9	9.2	11.6	14.7	20.8	26.4	32.5	38.6
152.5°	1.8	1.8	1.8	4.3	7.4	9.8	11.6	16.5	22.1	27.0	31.9
155°	1.8	1.8	1.8	3.1	5.5	7.4	9.2	12.9	17.2	21.5	25.1
157.5°	1.8	1.8	1.8	2.5	4.3	5.5	6.7	9.8	13.5	16.5	19.6
160°	2.5	1.8	1.8	1.8	3.1	4.3	5.5	7.4	9.8	12.3	14.7
162.5°	2.5	1.8	1.8	1.8	2.5	3.1	3.7	5.5	7.4	9.2	11.0
165°	2.5	2.5	1.8	1.2	1.8	2.5	2.5	3.7	4.9	6.1	7.4
167.5°	2.5	2.5	1.8	1.8	1.2	1.2	1.8	2.5	3.1	3.7	4.3
170°	2.5	2.5	1.8	1.2	1.2	1.2	1.2	1.2	1.8	1.8	2.5
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°	2599.4	2599.4	2599.4	2599.4	2599.4	2599.4	2599.4	2599.4	2599.4	2599.4
2.5°	2570.6	2569.3	2566.9	2566.9	2566.9	2565.1	2564.4	2561.4	2562.0	2565.1
5°	2469.4	2473.1	2465.8	2467.6	2466.4	2467.6	2467.6	2468.2	2463.9	2465.1
7.5°	2352.4	2352.4	2350.5	2354.8	2350.5	2351.8	2354.2	2354.2	2354.8	2357.3
10°	2246.3	2248.2	2250.6	2255.5	2257.4	2259.8	2258.6	2265.9	2266.6	2268.4
12.5°	2167.9	2174.0	2174.0	2180.1	2181.4	2181.4	2188.1	2188.7	2189.9	2186.3
15°	2104.1	2110.9	2116.4	2123.1	2123.1	2128.7	2138.5	2128.7	2133.6	2127.4
17.5°	2055.1	2061.2	2069.2	2071.7	2074.7	2079.0	2086.4	2088.8	2091.9	2094.3
20°	2007.9	2015.9	2025.1	2036.1	2041.6	2039.8	2035.5	2045.3	2039.8	2042.2
22.5°	1965.0	1979.1	1983.4	1990.1	1997.5	2002.4	2008.5	2014.0	2014.7	2013.4
25°	1923.9	1935.6	1951.5	1965.0	1966.2	1967.5	1967.5	1969.3	1972.4	1974.2
27.5°	1884.7	1904.9	1914.7	1928.2	1935.0	1942.9	1954.0	1950.3	1949.1	1944.8
30°	1849.2	1867.6	1887.8	1906.2	1907.4	1908.0	1904.3	1906.8	1906.8	1911.7
32.5°	1813.0	1835.1	1849.2	1852.2	1857.1	1863.9	1866.3	1862.7	1861.4	1859.6
35°	1768.9	1787.3	1790.3	1805.0	1809.3	1807.5	1803.8	1805.6	1809.3	1815.5
37.5°	1715.6	1726.0	1748.6	1750.5	1754.8	1759.7	1768.9	1766.4	1765.2	1762.7
40°	1659.2	1676.9	1688.6	1702.1	1705.7	1704.5	1699.0	1702.7	1707.0	1709.4
42.5°	1601.5	1615.6	1630.4	1634.0	1635.3	1638.3	1643.8	1650.6	1646.9	1644.5
45°	1539.0	1549.5	1554.4	1562.3	1565.4	1566.0	1565.4	1566.0	1570.3	1572.1
47.5°	1467.9	1480.2	1482.6	1490.6	1490.6	1494.3	1502.3	1507.8	1510.8	1514.5
50°	1395.0	1403.6	1418.3	1422.6	1429.3	1437.3	1437.3	1440.4	1445.3	1450.2
52.5°	1327.6	1338.0	1347.8	1362.5	1362.5	1365.0	1372.9	1384.6	1390.7	1394.4
55°	1248.5	1263.2	1280.4	1290.2	1292.6	1300.6	1308.0	1309.8	1311.0	1314.7
57.5°	1168.2	1186.0	1200.7	1217.9	1217.9	1217.9	1224.0	1228.3	1232.0	1227.7
60°	1089.8	1103.9	1115.5	1125.9	1120.4	1125.9	1127.2	1121.6	1119.2	1119.8
62.5°	1003.3	1016.8	1024.2	1022.3	1021.7	1021.7	1018.7	1013.8	1015.6	1016.2
65°	918.8	922.4	925.5	926.7	920.6	918.8	920.6	925.5	926.1	933.5
67.5°	825.0	831.1	829.3	831.7	829.9	829.9	826.8	826.2	819.5	831.1
70°	734.9	738.6	743.5	742.9	739.8	734.9	725.7	724.5	719.6	725.1
72.5°	640.5	651.5	650.9	649.7	647.2	642.9	632.5	628.9	623.3	622.1
75°	551.0	557.1	560.2	560.2	555.9	554.7	548.6	543.0	541.2	539.4
77.5°	462.8	471.3	474.4	475.6	472.6	474.4	469.5	464.6	462.1	466.4
80°	380.0	384.9	391.7	397.2	400.2	399.0	399.0	400.2	398.4	400.8
82.5°	298.5	308.3	319.9	324.2	331.0	333.4	338.9	345.7	350.6	352.4
85°	228.6	241.5	254.4	265.4	272.7	280.1	293.0	307.1	318.1	324.2
87.5°	179.6	193.1	208.4	223.1	228.6	233.5	243.9	262.9	286.8	302.2
90°	154.5	171.0	182.0	192.5	199.8	205.9	222.5	243.3	270.3	283.8
92.5°	147.7	158.7	171.0	183.3	191.2	198.6	213.3	230.5	248.2	259.3
95°	140.4	153.2	166.7	176.5	182.0	188.2	199.8	212.7	226.8	232.9
97.5°	136.1	148.3	158.1	167.9	173.5	179.6	190.6	203.5	215.1	220.6
100°	129.3	139.7	149.6	159.4	164.9	169.8	180.8	190.6	196.1	198.0
102.5°	122.6	132.4	142.2	150.8	155.1	159.4	166.7	172.8	174.1	175.9
105°	117.1	125.6	133.0	140.4	143.4	146.5	151.4	152.0	152.0	151.4
107.5°	110.9	118.3	124.4	128.7	129.9	131.2	132.4	131.2	130.6	130.6
110°	105.4	110.9	115.2	117.7	118.3	118.9	118.3	118.3	118.9	118.3





TEST NUMBER: P241369

CATALOG NUMBER: FVS8M-3-LD4-30-3LO-P125-UNV-EDC1

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	100.5	105.4	108.5	109.7	110.3	110.9	112.2	113.4	114.6	115.2
115°	96.8	101.1	104.2	107.3	108.5	109.7	112.8	115.8	118.3	118.9
117.5°	95.0	99.9	104.8	108.5	110.9	112.8	117.1	121.4	123.8	124.4
120°	95.0	101.1	106.6	111.6	114.0	116.5	121.4	125.6	128.1	129.3
122.5°	94.4	101.7	107.9	113.4	115.8	118.3	123.2	127.5	130.6	131.8
125°	93.8	101.1	107.9	114.0	116.5	118.9	123.8	127.5	130.6	131.8
127.5°	91.3	99.3	106.0	112.2	115.2	118.3	122.6	126.3	129.3	130.6
130°	88.9	96.2	103.0	109.7	112.8	115.8	120.7	124.4	127.5	128.7
132.5°	85.2	93.2	99.9	106.0	109.1	112.2	117.1	121.4	123.8	125.0
135°	81.5	89.5	95.6	101.1	104.2	107.3	112.2	115.8	118.9	119.5
137.5°	77.2	84.0	90.7	96.2	98.7	101.1	105.4	109.7	111.6	112.8
140°	71.7	78.5	84.6	89.5	91.9	94.4	98.1	101.1	103.6	104.8
142.5°	66.2	72.3	77.2	82.1	84.6	85.8	89.5	92.6	94.4	95.0
145°	59.5	65.0	69.9	74.2	75.4	77.2	80.3	82.7	84.0	85.2
147.5°	52.1	57.0	61.9	65.6	67.4	68.6	71.7	73.5	74.8	75.4
150°	44.7	49.6	53.9	57.0	58.2	60.1	61.9	64.4	65.0	65.6
152.5°	36.8	41.7	45.4	49.0	50.3	50.9	53.3	54.5	55.8	55.8
155°	30.0	33.7	37.4	40.5	41.7	42.3	44.1	45.4	46.0	46.6
157.5°	23.3	26.4	30.0	33.1	33.7	34.3	36.2	36.8	37.4	38.0
160°	17.8	20.2	22.7	25.1	26.4	27.6	28.8	29.4	30.0	29.4
162.5°	12.9	14.7	16.5	18.4	19.6	20.8	22.1	22.7	22.7	22.7
165°	8.6	10.4	11.6	12.9	13.5	14.1	15.9	15.9	15.9	15.9
167.5°	5.5	6.1	6.7	8.0	8.0	8.6	9.8	10.4	10.4	10.4
170°	2.5	3.1	3.7	3.7	4.3	4.3	4.9	5.5	5.5	4.9
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)