

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: P241372

Luminaire Tested: **FVS8M-3-LD4-50-3LO-P125-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241372
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-LD4-50-3LO-P125-UNV-EDC1
Description: FAILSAFE FVS8M LED FIXTURE
3FT LENGTH, 3-MODULE LED WITH P125 LENS
Light Source: (252) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

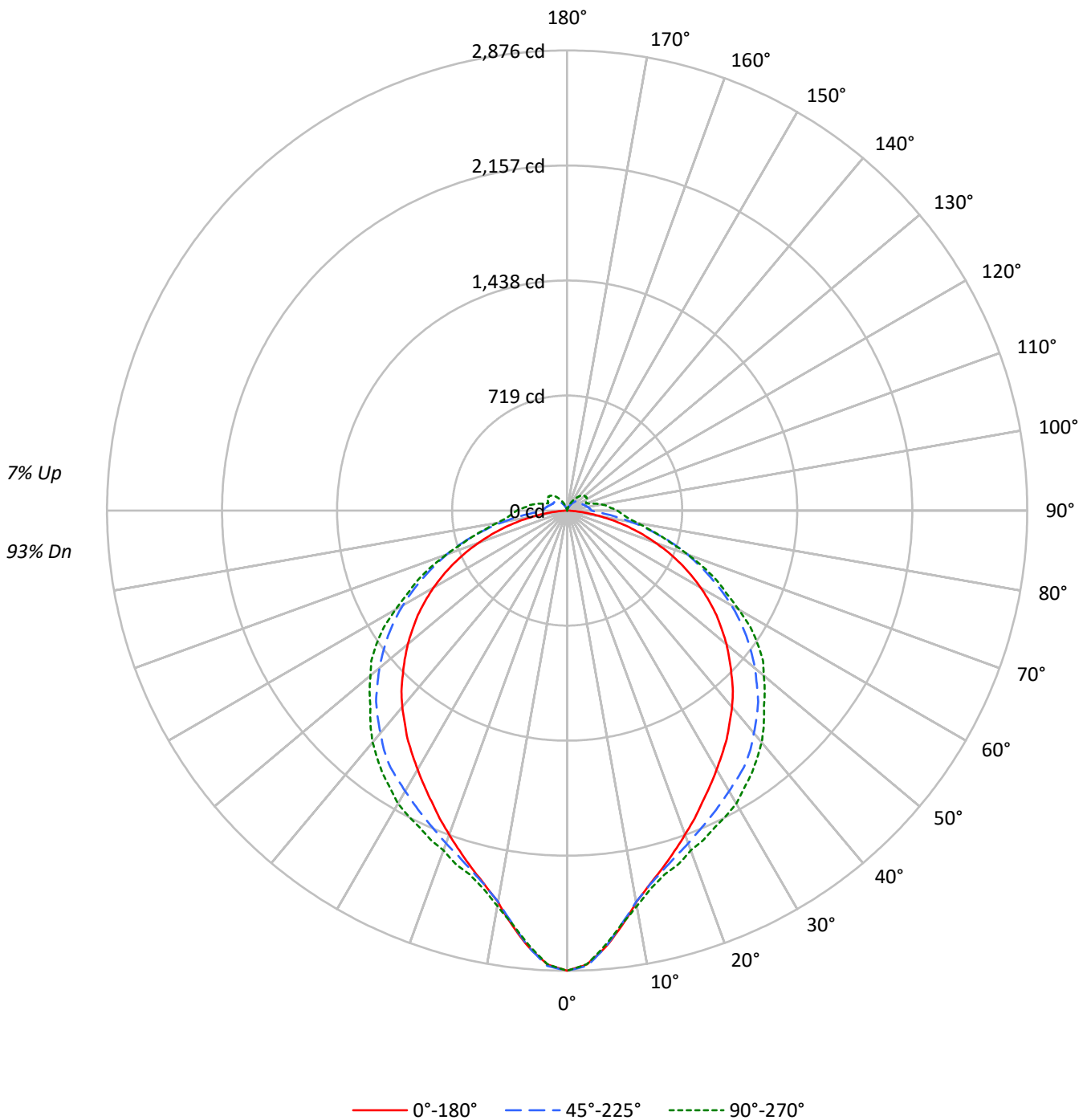
Lumens per Lamp: N/A
Luminaire Lumens: 7836.0 lumens
Efficiency: N/A
Efficacy: 127.2 lumens/watt
Spacing Criteria (0/90/45): 0.97 / 1.1 / 1.28
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 2.85' x H: 0.15')
CIE Type: Direct

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-LD4-50-3LO-P125-UNV-EDC1

Luminous Intensity Polar Plot





TEST NUMBER: P241372

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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°	16792	16792	16792
5°	15994	15795	15676
10°	14608	14232	14311
15°	13782	13348	13417
20°	13146	12835	12973
25°	12622	12491	12732
30°	12240	12262	12616
35°	11975	12158	12363
40°	11717	11884	12120
45°	11417	11665	11718
50°	11131	11283	11484
55°	10815	10881	11197
60°	10345	10343	10400
65°	9719	9641	9614
70°	8781	8882	8452
75°	7568	7753	7306
80°	5621	6429	6539
85°	2897	4910	6711



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	253.1	3.2
10°-20°	658.6	8.4
20°-30°	974.8	12.4
30°-40°	1193.2	15.2
40°-50°	1268.7	16.2
50°-60°	1189.5	15.2
60°-70°	936.6	12.0
70°-80°	581.0	7.4
80°-90°	258.3	3.3
90°-100°	146.7	1.9
100°-110°	110.1	1.4
110°-120°	84.1	1.1
120°-130°	75.3	1.0
130°-140°	57.0	0.7
140°-150°	33.0	0.4
150°-160°	13.1	0.2
160°-170°	2.9	0.0
170°-180°	0.1	0.0
0°-30°	1886.5	24.1
0°-40°	3079.7	39.3
0°-60°	5537.9	70.7
0°-90°	7313.9	93.3
90°-120°	340.9	4.3
90°-150°	506.1	6.5
90°-180°	522.0	6.7
0°-180°	7836.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2876	2876	2876	2876	2876	
5°	2741	2743	2741	2729	2727	253
15°	2311	2305	2324	2349	2354	651
25°	2006	2057	2116	2175	2184	926
35°	1740	1819	1939	2002	2008	1088
45°	1453	1559	1689	1732	1739	1122
55°	1140	1240	1368	1430	1454	1016
65°	780	868	991	1018	1033	770
75°	399	481	595	615	597	422
85°	68	144	237	302	359	88
90°	1	70	153	221	314	4
95°	1	64	142	201	258	1
105°	1	54	118	159	168	1
115°	1	48	100	120	132	1
125°	1	41	95	129	146	1
135°	1	32	82	115	132	1
145°	2	20	58	83	94	1
155°	2	8	28	46	52	1
165°	3	3	8	15	18	1
175°	0	0	0	0	0	0
180°	0	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°	2875.7	2875.7	2875.7	2875.7	2875.7	2875.7	2875.7	2875.7	2875.7	2875.7	2875.7
2.5°	2839.1	2843.8	2843.8	2844.5	2843.2	2847.2	2845.9	2846.6	2847.9	2849.9	2847.9
5°	2740.8	2743.5	2740.8	2743.5	2741.5	2742.8	2744.2	2740.8	2742.8	2737.4	2740.8
7.5°	2618.0	2615.3	2609.9	2605.2	2604.5	2604.5	2605.8	2609.2	2611.3	2609.2	2607.2
10°	2485.8	2489.9	2489.2	2485.8	2485.8	2485.8	2489.2	2487.9	2482.4	2483.8	2483.1
12.5°	2390.9	2392.9	2388.9	2386.8	2382.1	2386.8	2383.4	2381.4	2390.2	2394.3	2393.6
15°	2310.9	2308.2	2308.2	2304.8	2302.7	2304.8	2306.1	2308.2	2313.6	2319.7	2323.8
17.5°	2231.5	2233.6	2232.2	2232.2	2234.9	2233.6	2239.7	2247.8	2257.3	2262.1	2263.4
20°	2154.9	2156.3	2161.0	2161.0	2167.1	2171.9	2177.3	2186.8	2193.6	2205.1	2212.6
22.5°	2081.7	2081.7	2087.8	2097.3	2104.7	2112.2	2120.3	2133.2	2138.6	2151.5	2161.7
25°	2005.7	2009.8	2020.0	2030.8	2045.1	2056.6	2064.7	2075.6	2092.5	2102.0	2115.6
27.5°	1936.6	1945.4	1951.5	1969.1	1986.1	1996.9	2007.1	2022.7	2037.6	2053.9	2069.5
30°	1868.8	1874.2	1884.4	1904.7	1928.4	1940.0	1945.4	1968.5	1984.0	2008.5	2024.1
32.5°	1802.3	1809.1	1822.7	1838.9	1866.7	1878.3	1889.8	1915.6	1935.2	1959.0	1982.0
35°	1739.9	1740.6	1759.6	1780.6	1805.7	1819.3	1830.8	1857.2	1885.0	1910.8	1939.3
37.5°	1667.4	1676.9	1690.4	1714.9	1739.9	1757.6	1772.5	1798.9	1833.5	1861.3	1881.7
40°	1603.0	1610.4	1624.0	1647.0	1673.5	1691.8	1708.1	1742.7	1774.5	1801.0	1815.2
42.5°	1533.1	1535.2	1554.8	1581.3	1609.1	1625.3	1643.7	1679.6	1707.4	1730.4	1753.5
45°	1453.1	1464.0	1483.6	1509.4	1543.3	1558.9	1577.9	1611.8	1643.0	1666.0	1689.1
47.5°	1376.5	1387.3	1407.0	1436.2	1470.1	1485.0	1504.0	1533.1	1571.1	1594.2	1607.7
50°	1299.9	1311.4	1331.7	1358.9	1392.8	1406.3	1422.6	1461.3	1490.4	1512.8	1531.8
52.5°	1217.1	1230.0	1249.0	1280.2	1311.4	1327.7	1339.2	1375.8	1405.6	1435.5	1449.7
55°	1139.8	1142.6	1165.6	1194.8	1223.9	1240.2	1255.1	1289.0	1320.9	1345.3	1367.7
57.5°	1051.7	1057.1	1076.1	1109.3	1135.8	1152.0	1166.3	1201.5	1226.6	1255.8	1279.5
60°	964.2	969.6	987.3	1011.7	1040.2	1058.5	1073.4	1108.0	1136.5	1163.6	1186.0
62.5°	872.7	881.5	897.1	919.5	947.9	965.6	979.8	1011.7	1041.5	1062.5	1089.7
65°	780.5	783.2	802.2	827.3	853.0	867.9	884.9	913.4	941.2	967.6	990.7
67.5°	685.5	690.3	703.8	729.6	756.7	773.7	787.9	815.7	847.6	871.3	893.0
70°	586.5	594.7	609.6	634.7	661.1	677.4	685.5	715.4	743.2	775.0	800.1
72.5°	493.6	500.4	518.0	535.0	563.5	576.4	591.3	617.7	646.9	673.3	701.1
75°	399.4	408.2	418.4	440.1	464.5	480.8	498.4	518.7	549.9	575.0	594.7
77.5°	307.2	310.6	327.5	350.6	372.9	387.9	396.7	423.1	453.6	481.4	499.7
80°	215.6	222.4	240.7	261.7	280.0	297.0	306.5	331.6	362.8	388.5	403.5
82.5°	135.6	142.4	160.0	178.3	200.7	215.6	225.1	252.2	280.0	302.4	316.7
85°	68.5	76.6	91.5	107.8	133.6	144.4	155.3	178.3	206.1	221.1	237.3
87.5°	22.4	28.5	43.4	60.3	81.4	93.6	103.1	128.2	147.8	166.1	181.0
90°	1.4	7.5	21.0	39.3	59.7	69.8	81.4	102.4	121.4	138.3	153.2
92.5°	0.7	6.1	19.0	36.6	56.3	66.5	76.6	96.3	113.2	129.5	146.5
95°	0.7	5.4	18.3	35.3	54.2	63.7	73.2	91.5	109.2	126.1	142.4
97.5°	0.7	4.7	17.0	33.9	52.2	61.0	69.8	87.5	105.1	121.4	136.3
100°	0.7	4.7	16.3	32.5	49.5	58.3	67.1	84.8	100.4	116.0	130.2
102.5°	0.7	4.7	15.6	31.2	47.5	55.6	64.4	80.7	96.3	111.2	124.1
105°	0.7	4.1	14.9	29.2	45.4	54.2	61.7	77.3	92.2	105.1	118.0
107.5°	0.7	4.1	14.2	28.5	44.1	51.5	59.7	74.6	88.1	101.0	112.6
110°	0.7	3.4	13.6	27.1	42.7	50.2	57.6	71.9	85.4	97.0	107.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.7	3.4	12.9	25.8	41.4	48.8	56.3	70.5	82.7	94.3	103.7
115°	0.7	3.4	12.2	25.1	40.0	47.5	54.9	68.5	80.7	91.5	100.4
117.5°	0.7	2.7	11.5	24.4	38.7	46.1	53.6	66.5	79.3	89.5	98.3
120°	0.7	2.7	10.8	23.1	37.3	44.8	51.5	65.1	78.0	88.1	97.0
122.5°	0.7	2.7	10.2	22.4	35.9	42.7	50.2	63.7	75.9	87.5	96.3
125°	0.7	2.0	10.2	21.7	34.6	41.4	48.8	61.7	74.6	85.4	94.9
127.5°	1.4	2.0	9.5	20.3	33.2	39.3	46.1	59.7	71.9	83.4	92.2
130°	1.4	2.0	8.1	19.0	31.2	37.3	44.1	57.0	69.2	80.0	89.5
132.5°	1.4	1.4	7.5	17.6	29.2	35.3	41.4	54.2	65.8	76.6	86.1
135°	1.4	1.4	6.8	15.6	27.1	32.5	38.7	50.9	62.4	72.6	82.0
137.5°	1.4	1.4	5.4	14.2	23.7	29.2	35.3	46.8	57.6	67.1	77.3
140°	1.4	1.4	4.7	12.2	21.0	25.8	31.2	42.0	52.9	62.4	71.2
142.5°	1.4	1.4	4.1	10.2	18.3	22.4	27.1	37.3	47.5	56.3	65.1
145°	2.0	1.4	3.4	8.8	15.6	19.7	23.1	32.5	41.4	49.5	58.3
147.5°	2.0	1.4	2.7	6.8	12.9	16.3	19.7	27.8	35.3	42.7	50.9
150°	2.0	2.0	2.0	5.4	10.2	12.9	16.3	23.1	29.2	35.9	42.7
152.5°	2.0	2.0	2.0	4.7	8.1	10.8	12.9	18.3	24.4	29.8	35.3
155°	2.0	2.0	2.0	3.4	6.1	8.1	10.2	14.2	19.0	23.7	27.8
157.5°	2.0	2.0	2.0	2.7	4.7	6.1	7.5	10.8	14.9	18.3	21.7
160°	2.7	2.0	2.0	2.0	3.4	4.7	6.1	8.1	10.8	13.6	16.3
162.5°	2.7	2.0	2.0	2.0	2.7	3.4	4.1	6.1	8.1	10.2	12.2
165°	2.7	2.7	2.0	1.4	2.0	2.7	2.7	4.1	5.4	6.8	8.1
167.5°	2.7	2.7	2.0	2.0	1.4	1.4	2.0	2.7	3.4	4.1	4.7
170°	2.7	2.7	2.0	1.4	1.4	1.4	1.4	1.4	2.0	2.0	2.7
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°	2875.7	2875.7	2875.7	2875.7	2875.7	2875.7	2875.7	2875.7	2875.7	2875.7
2.5°	2843.8	2842.5	2839.8	2839.8	2839.8	2837.7	2837.1	2833.7	2834.4	2837.7
5°	2732.0	2736.0	2727.9	2729.9	2728.6	2729.9	2729.9	2730.6	2725.9	2727.2
7.5°	2602.5	2602.5	2600.4	2605.2	2600.4	2601.8	2604.5	2604.5	2605.2	2607.9
10°	2485.1	2487.2	2489.9	2495.3	2497.4	2500.1	2498.7	2506.8	2507.5	2509.6
12.5°	2398.4	2405.1	2405.1	2411.9	2413.3	2413.3	2420.7	2421.4	2422.8	2418.7
15°	2327.8	2335.3	2341.4	2348.9	2348.9	2355.0	2365.8	2355.0	2360.4	2353.6
17.5°	2273.6	2280.4	2289.2	2291.9	2295.3	2300.0	2308.2	2310.9	2314.3	2317.0
20°	2221.4	2230.2	2240.4	2252.6	2258.7	2256.6	2251.9	2262.7	2256.6	2259.3
22.5°	2173.9	2189.5	2194.3	2201.7	2209.8	2215.3	2222.1	2228.2	2228.8	2227.5
25°	2128.5	2141.4	2159.0	2173.9	2175.3	2176.6	2176.6	2178.7	2182.0	2184.1
27.5°	2085.1	2107.5	2118.3	2133.2	2140.7	2149.5	2161.7	2157.6	2156.3	2151.5
30°	2045.8	2066.1	2088.5	2108.8	2110.2	2110.8	2106.8	2109.5	2109.5	2114.9
32.5°	2005.7	2030.2	2045.8	2049.1	2054.6	2062.0	2064.7	2060.7	2059.3	2057.3
35°	1956.9	1977.3	1980.7	1996.9	2001.7	1999.6	1995.6	1997.6	2001.7	2008.5
37.5°	1897.9	1909.5	1934.5	1936.6	1941.3	1946.8	1956.9	1954.2	1952.9	1950.1
40°	1835.5	1855.2	1868.1	1883.0	1887.1	1885.7	1879.6	1883.7	1888.4	1891.2
42.5°	1771.8	1787.4	1803.7	1807.7	1809.1	1812.5	1818.6	1826.1	1822.0	1819.3
45°	1702.6	1714.2	1719.6	1728.4	1731.8	1732.5	1731.8	1732.5	1737.2	1739.3
47.5°	1624.0	1637.6	1640.3	1649.1	1649.1	1653.1	1662.0	1668.1	1671.5	1675.5
50°	1543.3	1552.8	1569.1	1573.8	1581.3	1590.1	1590.1	1593.5	1598.9	1604.3
52.5°	1468.7	1480.2	1491.1	1507.4	1507.4	1510.1	1518.9	1531.8	1538.6	1542.6
55°	1381.2	1397.5	1416.5	1427.3	1430.1	1438.9	1447.0	1449.0	1450.4	1454.5
57.5°	1292.4	1312.1	1328.3	1347.3	1347.3	1347.3	1354.1	1358.9	1362.9	1358.2
60°	1205.6	1221.2	1234.1	1245.6	1239.5	1245.6	1247.0	1240.9	1238.2	1238.8
62.5°	1110.0	1124.9	1133.1	1131.0	1130.4	1130.4	1127.0	1121.5	1123.6	1124.2
65°	1016.4	1020.5	1023.9	1025.2	1018.5	1016.4	1018.5	1023.9	1024.6	1032.7
67.5°	912.7	919.5	917.4	920.1	918.1	918.1	914.7	914.0	906.6	919.5
70°	813.0	817.1	822.5	821.8	818.4	813.0	802.8	801.5	796.1	802.2
72.5°	708.6	720.8	720.1	718.8	716.0	711.3	699.8	695.7	689.6	688.2
75°	609.6	616.4	619.8	619.8	615.0	613.7	606.9	600.8	598.7	596.7
77.5°	511.9	521.4	524.8	526.2	522.8	524.8	519.4	514.0	511.3	516.0
80°	420.4	425.8	433.3	439.4	442.8	441.4	441.4	442.8	440.7	443.5
82.5°	330.2	341.1	354.0	358.7	366.2	368.9	375.0	382.4	387.9	389.9
85°	252.9	267.2	281.4	293.6	301.7	309.9	324.1	339.7	351.9	358.7
87.5°	198.7	213.6	230.5	246.8	252.9	258.3	269.9	290.9	317.3	334.3
90°	170.9	189.2	201.4	212.9	221.1	227.8	246.1	269.2	299.0	313.9
92.5°	163.4	175.6	189.2	202.7	211.6	219.7	236.0	255.0	274.6	286.8
95°	155.3	169.5	184.4	195.3	201.4	208.2	221.1	235.3	250.9	257.7
97.5°	150.5	164.1	174.9	185.8	191.9	198.7	210.9	225.1	238.0	244.1
100°	143.1	154.6	165.5	176.3	182.4	187.8	200.0	210.9	217.0	219.0
102.5°	135.6	146.5	157.3	166.8	171.6	176.3	184.4	191.2	192.6	194.6
105°	129.5	139.0	147.1	155.3	158.7	162.1	167.5	168.2	168.2	167.5
107.5°	122.7	130.9	137.6	142.4	143.8	145.1	146.5	145.1	144.4	144.4
110°	116.6	122.7	127.5	130.2	130.9	131.5	130.9	130.9	131.5	130.9



TEST NUMBER: P241372

CATALOG NUMBER: FVS8M-3-LD4-50-3LO-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	111.2	116.6	120.0	121.4	122.1	122.7	124.1	125.4	126.8	127.5
115°	107.1	111.9	115.3	118.7	120.0	121.4	124.8	128.2	130.9	131.5
117.5°	105.1	110.5	116.0	120.0	122.7	124.8	129.5	134.3	137.0	137.6
120°	105.1	111.9	118.0	123.4	126.1	128.8	134.3	139.0	141.7	143.1
122.5°	104.4	112.6	119.3	125.4	128.2	130.9	136.3	141.0	144.4	145.8
125°	103.7	111.9	119.3	126.1	128.8	131.5	137.0	141.0	144.4	145.8
127.5°	101.0	109.8	117.3	124.1	127.5	130.9	135.6	139.7	143.1	144.4
130°	98.3	106.5	113.9	121.4	124.8	128.2	133.6	137.6	141.0	142.4
132.5°	94.3	103.1	110.5	117.3	120.7	124.1	129.5	134.3	137.0	138.3
135°	90.2	99.0	105.8	111.9	115.3	118.7	124.1	128.2	131.5	132.2
137.5°	85.4	92.9	100.4	106.5	109.2	111.9	116.6	121.4	123.4	124.8
140°	79.3	86.8	93.6	99.0	101.7	104.4	108.5	111.9	114.6	116.0
142.5°	73.2	80.0	85.4	90.9	93.6	94.9	99.0	102.4	104.4	105.1
145°	65.8	71.9	77.3	82.0	83.4	85.4	88.8	91.5	92.9	94.3
147.5°	57.6	63.1	68.5	72.6	74.6	75.9	79.3	81.4	82.7	83.4
150°	49.5	54.9	59.7	63.1	64.4	66.5	68.5	71.2	71.9	72.6
152.5°	40.7	46.1	50.2	54.2	55.6	56.3	59.0	60.3	61.7	61.7
155°	33.2	37.3	41.4	44.8	46.1	46.8	48.8	50.2	50.9	51.5
157.5°	25.8	29.2	33.2	36.6	37.3	38.0	40.0	40.7	41.4	42.0
160°	19.7	22.4	25.1	27.8	29.2	30.5	31.9	32.5	33.2	32.5
162.5°	14.2	16.3	18.3	20.3	21.7	23.1	24.4	25.1	25.1	25.1
165°	9.5	11.5	12.9	14.2	14.9	15.6	17.6	17.6	17.6	17.6
167.5°	6.1	6.8	7.5	8.8	8.8	9.5	10.8	11.5	11.5	11.5
170°	2.7	3.4	4.1	4.1	4.7	4.7	5.4	6.1	6.1	5.4
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)