

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: P241366

Luminaire Tested: **FVS8M-3-LD4-35-2HI-P125-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241366
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1711-410-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FVS8M-3-LD4-35-2HI-P125-UNV-EDC1
Description: FAILSAFE FVS8M LED FIXTURE
3FT LENGTH, 2-MODULE LED WITH P125 LENS
Light Source: (168) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

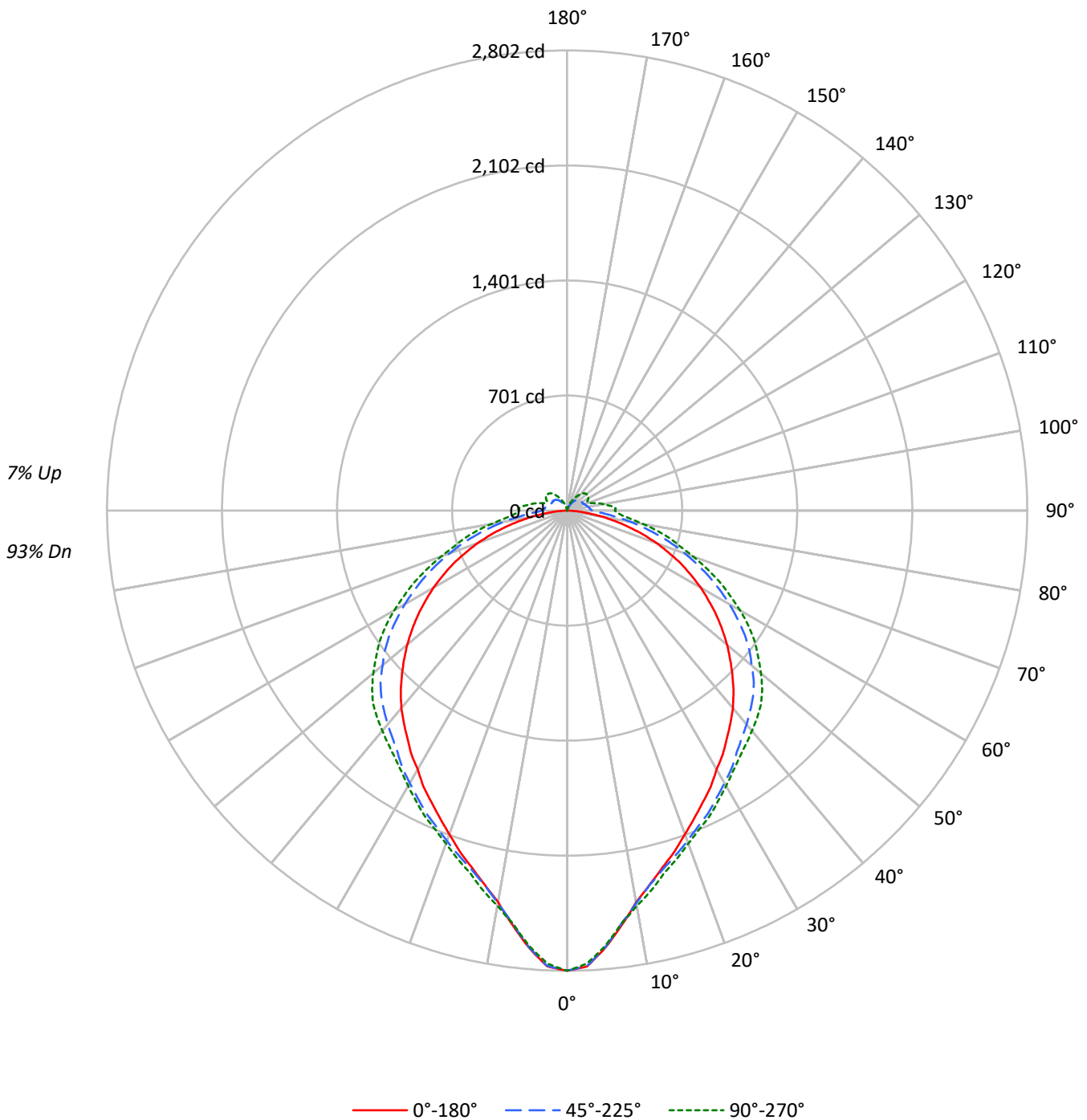
Lumens per Lamp: N/A
Luminaire Lumens: 7589.0 lumens
Efficiency: N/A
Efficacy: 109.5 lumens/watt
Spacing Criteria (0/90/45): 0.98 / 1.03 / 1.26
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 2.85' x H: 0.15')
CIE Type: Direct

Input Watts (W): 69.3
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: P241366

CATALOG NUMBER: FVS8M-3-LD4-35-2HI-P125-UNV-EDC1

Luminous Intensity Polar Plot





TEST NUMBER: P241366

CATALOG NUMBER: FVS8M-3-LD4-35-2HI-P125-UNV-EDC1

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	95	95	95	93
1	106	101	97	92	103	98	94	90	93	89	86	87	85	82	83	80	78	76
2	96	88	80	74	93	85	79	73	80	75	70	76	71	68	72	68	65	62
3	87	77	68	61	84	74	67	60	70	64	58	67	61	57	63	59	55	52
4	80	68	59	52	77	66	57	51	62	55	50	59	53	48	56	51	47	44
5	73	60	51	44	71	59	50	44	56	48	43	53	47	42	50	45	40	38
6	68	54	45	39	65	53	44	38	50	43	37	48	41	36	46	40	35	33
7	63	49	40	34	61	48	40	34	46	38	33	44	37	32	42	36	31	29
8	58	45	36	30	56	44	36	30	42	35	29	40	34	29	38	33	28	26
9	55	41	33	27	53	40	32	27	38	31	26	37	31	26	35	30	25	24
10	51	38	30	25	49	37	30	24	36	29	24	34	28	24	33	27	23	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16361	16361	16361
5°	15590	15384	15288
10°	14225	13902	13937
15°	13407	12981	13022
20°	12794	12415	12386
25°	12316	12000	11968
30°	11920	11606	11551
35°	11662	11280	11274
40°	11476	11126	11217
45°	11187	11059	11250
50°	10885	10806	11034
55°	10526	10503	10743
60°	10083	9957	10219
65°	9506	9298	9524
70°	8657	8454	8591
75°	7428	7423	7907
80°	5723	6200	6879
85°	3151	4846	6272



TEST NUMBER: P241366

CATALOG NUMBER: FVS8M-3-LD4-35-2HI-P125-UNV-EDC1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	246.7	3.3
10°-20°	639.7	8.4
20°-30°	932.0	12.3
30°-40°	1121.6	14.8
40°-50°	1213.6	16.0
50°-60°	1147.1	15.1
60°-70°	910.6	12.0
70°-80°	577.7	7.6
80°-90°	251.6	3.3
90°-100°	144.7	1.9
100°-110°	112.9	1.5
110°-120°	88.1	1.2
120°-130°	81.0	1.1
130°-140°	64.2	0.8
140°-150°	38.1	0.5
150°-160°	15.7	0.2
160°-170°	3.8	0.0
170°-180°	0.1	0.0
0°-30°	1818.4	24.0
0°-40°	2940.0	38.7
0°-60°	5300.6	69.8
0°-90°	7040.5	92.8
90°-120°	345.7	4.6
90°-150°	528.9	7.0
90°-180°	549.0	7.2
0°-180°	7589.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2802	2802	2802	2802	2802	
5°	2672	2675	2670	2659	2660	247
15°	2248	2245	2260	2278	2284	634
25°	1957	1997	2032	2052	2053	903
35°	1694	1752	1799	1835	1832	1062
45°	1424	1490	1601	1659	1670	1099
55°	1109	1200	1320	1377	1396	990
65°	763	844	956	993	1023	752
75°	392	468	569	624	646	415
85°	74	133	234	293	335	90
90°	2	63	153	211	290	4
95°	1	61	138	197	279	1
105°	1	55	120	164	172	1
115°	1	50	105	126	136	1
125°	1	45	103	138	155	1
135°	2	37	93	130	149	1
145°	2	24	68	96	110	1
155°	2	11	34	55	61	1
165°	3	3	12	20	24	1
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P241366

CATALOG NUMBER: FVS8M-3-LD4-35-2HI-P125-UNV-EDC1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2801.8	2801.8	2801.8	2801.8	2801.8	2801.8	2801.8	2801.8	2801.8	2801.8	2801.8
2.5°	2778.3	2774.4	2775.4	2770.5	2772.4	2775.4	2775.4	2778.3	2779.3	2777.3	2774.4
5°	2671.5	2677.4	2673.4	2670.5	2671.5	2675.4	2674.4	2677.4	2674.4	2675.4	2669.5
7.5°	2546.0	2548.0	2541.1	2536.2	2538.2	2539.2	2542.1	2544.1	2549.0	2539.2	2536.2
10°	2420.6	2429.4	2418.6	2416.7	2418.6	2417.7	2422.6	2416.7	2421.6	2421.6	2425.5
12.5°	2330.4	2331.4	2335.3	2322.6	2322.6	2323.6	2322.6	2321.6	2323.6	2329.5	2332.4
15°	2248.1	2251.1	2251.1	2244.2	2244.2	2245.2	2247.1	2249.1	2250.1	2261.8	2259.9
17.5°	2175.6	2172.7	2175.6	2173.6	2177.6	2183.4	2182.5	2186.4	2192.3	2192.3	2199.1
20°	2097.2	2102.1	2108.0	2102.1	2112.9	2117.8	2120.7	2124.6	2128.6	2139.3	2140.3
22.5°	2024.7	2034.5	2036.4	2034.5	2049.2	2054.1	2059.0	2062.9	2077.6	2076.6	2082.5
25°	1957.1	1965.9	1966.9	1973.7	1989.4	1997.2	2000.2	2009.0	2016.8	2021.7	2032.5
27.5°	1894.3	1899.2	1900.2	1913.9	1923.7	1931.6	1941.4	1955.1	1959.0	1969.8	1971.8
30°	1819.9	1830.6	1836.5	1848.3	1867.9	1871.8	1881.6	1890.4	1905.1	1910.0	1915.9
32.5°	1763.0	1767.9	1769.9	1785.6	1802.2	1813.0	1819.9	1825.7	1843.4	1854.2	1863.0
35°	1694.4	1703.2	1707.2	1723.8	1737.5	1752.2	1757.1	1773.8	1781.6	1796.3	1799.3
37.5°	1632.7	1639.5	1644.4	1657.2	1675.8	1690.5	1691.5	1710.1	1723.8	1734.6	1746.4
40°	1570.0	1571.9	1579.8	1590.5	1613.1	1618.0	1629.7	1649.3	1670.9	1684.6	1699.3
42.5°	1499.4	1500.4	1510.2	1523.9	1548.4	1555.3	1571.9	1592.5	1615.0	1639.5	1650.3
45°	1423.9	1427.9	1441.6	1459.2	1479.8	1489.6	1505.3	1531.7	1557.2	1583.7	1601.3
47.5°	1347.5	1356.3	1368.1	1385.7	1409.2	1422.0	1436.7	1469.0	1492.5	1517.0	1541.5
50°	1271.1	1278.9	1290.7	1311.2	1336.7	1350.4	1363.2	1397.5	1429.8	1451.4	1467.1
52.5°	1189.7	1197.6	1211.3	1235.8	1265.2	1273.0	1291.6	1324.0	1354.4	1376.9	1398.5
55°	1109.4	1114.3	1132.9	1153.5	1183.8	1200.5	1212.3	1244.6	1271.1	1301.4	1320.1
57.5°	1022.1	1029.0	1048.6	1067.2	1101.5	1114.3	1128.0	1160.3	1192.7	1214.2	1230.9
60°	939.8	944.7	961.4	982.0	1010.4	1027.0	1040.8	1072.1	1097.6	1122.1	1141.7
62.5°	848.7	855.5	871.2	893.8	924.1	935.9	955.5	978.0	1010.4	1027.0	1048.6
65°	763.4	770.3	783.0	803.6	827.1	843.8	859.5	883.0	909.4	932.0	955.5
67.5°	669.3	677.2	692.9	714.4	740.9	752.6	764.4	788.9	817.3	839.9	858.5
70°	578.2	583.1	599.8	617.4	639.9	653.7	665.4	693.8	718.3	742.8	761.5
72.5°	485.1	489.0	504.7	524.3	547.8	564.5	575.3	596.8	621.3	645.8	669.3
75°	392.0	399.8	411.6	429.2	453.7	468.4	477.3	503.7	525.3	550.8	569.4
77.5°	299.9	306.7	322.4	340.1	362.6	376.3	385.1	410.6	431.2	453.7	477.3
80°	219.5	219.5	238.1	250.9	274.4	286.2	296.0	316.5	340.1	362.6	389.1
82.5°	137.2	142.1	154.8	172.5	193.1	203.8	212.7	233.2	257.7	281.3	303.8
85°	74.5	75.5	88.2	103.9	125.4	133.3	145.0	166.6	188.2	209.7	234.2
87.5°	22.5	28.4	41.2	58.8	75.5	86.2	94.1	116.6	136.2	157.8	182.3
90°	2.0	6.9	19.6	35.3	53.9	62.7	73.5	93.1	112.7	135.2	152.9
92.5°	1.0	5.9	17.6	33.3	51.9	60.8	71.5	90.2	110.7	128.4	144.1
95°	1.0	4.9	16.7	33.3	51.0	60.8	69.6	89.2	107.8	123.5	138.2
97.5°	1.0	4.9	16.7	32.3	50.0	58.8	68.6	87.2	103.9	119.6	136.2
100°	1.0	4.9	15.7	31.4	49.0	58.8	67.6	84.3	100.0	116.6	130.3
102.5°	1.0	4.9	15.7	31.4	48.0	56.8	64.7	81.3	97.0	110.7	125.4
105°	1.0	3.9	14.7	30.4	46.1	54.9	62.7	78.4	93.1	107.8	120.5
107.5°	1.0	3.9	14.7	28.4	45.1	52.9	61.7	76.4	90.2	103.9	116.6
110°	1.0	3.9	13.7	28.4	43.1	51.9	59.8	74.5	88.2	100.9	111.7



TEST NUMBER: P241366

CATALOG NUMBER: FVS8M-3-LD4-35-2HI-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	1.0	3.9	13.7	27.4	42.1	50.0	57.8	73.5	86.2	98.0	108.8
115°	1.0	2.9	12.7	26.5	42.1	50.0	56.8	71.5	85.3	96.0	104.9
117.5°	1.0	2.9	12.7	25.5	40.2	48.0	55.9	70.6	83.3	95.1	103.9
120°	1.0	2.9	11.8	25.5	40.2	47.0	54.9	69.6	82.3	94.1	103.9
122.5°	1.0	2.9	11.8	24.5	38.2	46.1	53.9	68.6	81.3	93.1	103.9
125°	1.0	2.0	10.8	23.5	37.2	45.1	52.9	67.6	80.4	93.1	102.9
127.5°	1.0	2.0	9.8	22.5	36.3	43.1	51.0	65.7	78.4	91.1	101.9
130°	1.0	2.0	9.8	20.6	34.3	41.2	49.0	63.7	76.4	88.2	100.0
132.5°	1.0	2.0	8.8	19.6	32.3	39.2	46.1	60.8	73.5	85.3	96.0
135°	2.0	2.0	7.8	17.6	30.4	37.2	44.1	57.8	70.6	82.3	93.1
137.5°	2.0	2.0	6.9	16.7	27.4	34.3	40.2	53.9	65.7	77.4	88.2
140°	2.0	2.0	5.9	14.7	24.5	30.4	36.3	48.0	60.8	71.5	82.3
142.5°	2.0	2.0	4.9	12.7	21.6	27.4	32.3	43.1	53.9	65.7	75.5
145°	2.0	2.0	3.9	10.8	18.6	23.5	27.4	37.2	47.0	57.8	67.6
147.5°	2.0	2.0	3.9	8.8	15.7	19.6	23.5	32.3	41.2	50.0	58.8
150°	2.0	2.0	2.9	6.9	12.7	15.7	19.6	27.4	34.3	42.1	51.0
152.5°	2.0	2.0	2.0	5.9	10.8	13.7	15.7	22.5	28.4	35.3	42.1
155°	2.0	2.0	2.0	4.9	8.8	10.8	12.7	17.6	23.5	29.4	34.3
157.5°	2.0	2.0	2.0	3.9	6.9	7.8	9.8	14.7	18.6	23.5	27.4
160°	2.9	2.0	2.0	2.9	4.9	5.9	7.8	10.8	14.7	17.6	21.6
162.5°	2.9	2.0	2.0	2.0	3.9	4.9	5.9	7.8	10.8	13.7	15.7
165°	2.9	2.9	2.0	2.0	2.9	2.9	3.9	5.9	6.9	9.8	11.8
167.5°	2.9	2.9	2.0	2.0	2.0	2.0	2.9	3.9	4.9	5.9	6.9
170°	2.9	2.9	2.0	2.0	2.0	2.0	2.0	2.0	2.9	2.9	3.9
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



TEST NUMBER: P241366

CATALOG NUMBER: FVS8M-3-LD4-35-2HI-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	2801.8	2801.8	2801.8	2801.8	2801.8	2801.8	2801.8	2801.8	2801.8	2801.8
2.5°	2771.4	2773.4	2768.5	2769.5	2767.5	2768.5	2765.6	2764.6	2766.5	2760.7
5°	2670.5	2665.6	2659.7	2659.7	2658.7	2656.8	2655.8	2657.8	2656.8	2659.7
7.5°	2539.2	2530.4	2532.3	2527.4	2533.3	2531.3	2533.3	2535.3	2535.3	2535.3
10°	2418.6	2427.5	2431.4	2435.3	2440.2	2437.3	2444.1	2446.1	2448.0	2444.1
12.5°	2339.3	2339.3	2346.1	2348.1	2348.1	2350.0	2357.9	2352.0	2360.8	2368.7
15°	2264.8	2270.7	2276.5	2277.5	2277.5	2287.3	2289.3	2286.3	2287.3	2284.4
17.5°	2205.0	2207.9	2209.9	2215.8	2221.7	2220.7	2222.6	2227.5	2225.6	2222.6
20°	2144.2	2153.1	2159.9	2158.9	2159.9	2162.9	2163.8	2164.8	2159.9	2157.0
22.5°	2089.4	2089.4	2101.1	2105.0	2109.0	2108.0	2106.0	2108.0	2108.0	2101.1
25°	2032.5	2042.3	2048.2	2046.2	2052.1	2057.0	2052.1	2051.1	2055.1	2053.1
27.5°	1985.5	1985.5	1992.3	2003.1	2002.1	2004.1	2000.2	1996.3	1993.3	1992.3
30°	1922.8	1932.6	1942.4	1940.4	1943.3	1947.3	1947.3	1943.3	1936.5	1936.5
32.5°	1867.9	1874.7	1878.7	1890.4	1894.3	1893.4	1884.5	1877.7	1880.6	1880.6
35°	1811.0	1818.9	1834.6	1832.6	1834.6	1836.5	1833.6	1830.6	1830.6	1831.6
37.5°	1750.3	1774.8	1773.8	1793.4	1797.3	1796.3	1793.4	1784.6	1786.5	1790.5
40°	1715.0	1724.8	1744.4	1748.3	1750.3	1752.2	1761.1	1755.2	1752.2	1750.3
42.5°	1669.9	1686.6	1696.4	1708.1	1717.0	1718.9	1714.0	1711.1	1713.0	1712.1
45°	1614.1	1636.6	1649.3	1660.1	1659.1	1661.1	1667.0	1673.8	1674.8	1669.9
47.5°	1561.1	1567.0	1593.5	1590.5	1602.3	1611.1	1609.2	1605.2	1612.1	1611.1
50°	1487.6	1508.2	1515.1	1533.7	1535.7	1529.8	1536.6	1540.6	1541.5	1541.5
52.5°	1415.1	1427.9	1447.5	1448.4	1455.3	1458.2	1462.2	1464.1	1468.0	1466.1
55°	1340.6	1348.5	1362.2	1374.0	1376.9	1375.9	1380.8	1388.7	1392.6	1395.5
57.5°	1251.5	1269.1	1273.0	1284.8	1282.8	1289.7	1298.5	1302.4	1308.3	1311.2
60°	1154.4	1168.2	1181.9	1185.8	1189.7	1195.6	1204.4	1203.4	1212.3	1217.2
62.5°	1066.2	1072.1	1083.9	1091.7	1092.7	1092.7	1101.5	1105.4	1114.3	1116.2
65°	966.3	980.0	984.9	987.8	992.7	992.7	1000.6	1004.5	1011.4	1023.1
67.5°	873.2	885.9	895.7	897.7	901.6	903.6	901.6	906.5	911.4	917.3
70°	776.2	787.9	800.7	808.5	806.5	805.6	806.5	810.5	817.3	815.4
72.5°	683.1	701.7	707.6	719.3	720.3	722.3	717.4	715.4	721.3	718.3
75°	589.0	608.6	617.4	630.1	624.3	627.2	627.2	636.0	643.9	645.8
77.5°	499.8	519.4	531.2	537.0	546.8	556.6	558.6	563.5	558.6	558.6
80°	409.6	427.3	448.8	455.7	458.6	461.6	464.5	465.5	466.5	466.5
82.5°	330.3	352.8	364.6	366.5	368.5	372.4	377.3	383.2	391.0	392.0
85°	256.8	270.5	281.3	290.1	293.0	298.9	309.7	319.5	330.3	335.2
87.5°	198.9	209.7	221.5	231.3	239.1	244.0	257.7	273.4	293.0	302.8
90°	166.6	178.4	190.1	202.9	210.7	218.5	234.2	251.9	276.4	290.1
92.5°	156.8	170.5	184.2	196.0	201.9	207.8	223.4	247.0	278.3	296.9
95°	153.9	166.6	177.4	189.1	197.0	204.8	223.4	247.0	269.5	279.3
97.5°	149.0	159.7	171.5	186.2	193.1	200.9	217.6	233.2	243.0	247.0
100°	142.1	153.9	166.6	179.3	186.2	192.1	203.8	214.6	221.5	225.4
102.5°	137.2	148.0	159.7	171.5	176.4	181.3	191.1	198.9	201.9	202.9
105°	132.3	142.1	152.9	160.7	163.7	167.6	172.5	172.5	172.5	172.5
107.5°	126.4	135.2	143.1	147.0	149.0	149.9	150.9	149.9	149.9	149.0
110°	121.5	128.4	133.3	135.2	135.2	136.2	136.2	136.2	136.2	136.2



TEST NUMBER: P241366

CATALOG NUMBER: FVS8M-3-LD4-35-2HI-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	116.6	122.5	125.4	127.4	127.4	128.4	129.4	131.3	132.3	132.3
115°	112.7	118.6	121.5	124.5	126.4	127.4	130.3	134.3	136.2	136.2
117.5°	110.7	117.6	121.5	126.4	129.4	131.3	136.2	140.1	142.1	143.1
120°	111.7	118.6	124.5	130.3	133.3	135.2	141.1	145.0	148.0	149.0
122.5°	112.7	119.6	127.4	133.3	136.2	139.2	144.1	149.0	151.9	152.9
125°	111.7	120.5	128.4	135.2	138.2	141.1	146.0	150.9	153.9	154.8
127.5°	110.7	119.6	128.4	135.2	138.2	142.1	147.0	150.9	153.9	154.8
130°	108.8	117.6	126.4	134.3	137.2	140.1	145.0	149.9	152.9	154.8
132.5°	105.8	114.7	123.5	130.3	134.3	137.2	143.1	148.0	151.9	152.9
135°	101.9	110.7	119.6	127.4	130.3	134.3	139.2	144.1	147.0	149.0
137.5°	97.0	105.8	113.7	121.5	124.5	127.4	133.3	138.2	141.1	142.1
140°	91.1	99.0	106.8	113.7	116.6	119.6	124.5	128.4	132.3	134.3
142.5°	83.3	91.1	98.0	103.9	106.8	109.8	114.7	117.6	120.5	122.5
145°	75.5	82.3	88.2	93.1	96.0	99.0	102.9	105.8	108.8	109.8
147.5°	66.6	72.5	78.4	83.3	85.3	87.2	91.1	94.1	96.0	96.0
150°	57.8	63.7	68.6	73.5	74.5	76.4	79.4	81.3	83.3	82.3
152.5°	49.0	53.9	59.8	63.7	64.7	66.6	68.6	70.6	71.5	71.5
155°	40.2	45.1	50.0	53.9	54.9	56.8	57.8	59.8	60.8	60.8
157.5°	32.3	37.2	41.2	45.1	46.1	47.0	49.0	50.0	50.0	51.0
160°	25.5	28.4	32.3	35.3	37.2	38.2	40.2	40.2	41.2	41.2
162.5°	18.6	21.6	24.5	27.4	28.4	29.4	31.4	32.3	32.3	32.3
165°	12.7	15.7	16.7	18.6	19.6	21.6	23.5	23.5	24.5	23.5
167.5°	8.8	9.8	10.8	12.7	12.7	13.7	14.7	15.7	16.7	16.7
170°	4.9	5.9	5.9	6.9	6.9	6.9	7.8	8.8	8.8	8.8
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)