

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: P241337

Luminaire Tested: **FVS8M-2-LD4-30-3STD-P125-UNV-EDC1**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P241337  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1711-410-13)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FVS8M-2-LD4-30-3STD-P125-UNV-EDC1  
Description: FAILSAFE FVS8M LED FIXTURE  
2FT LENGTH, 3-MODULE LED WITH P125 LENS  
Light Source: (126) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

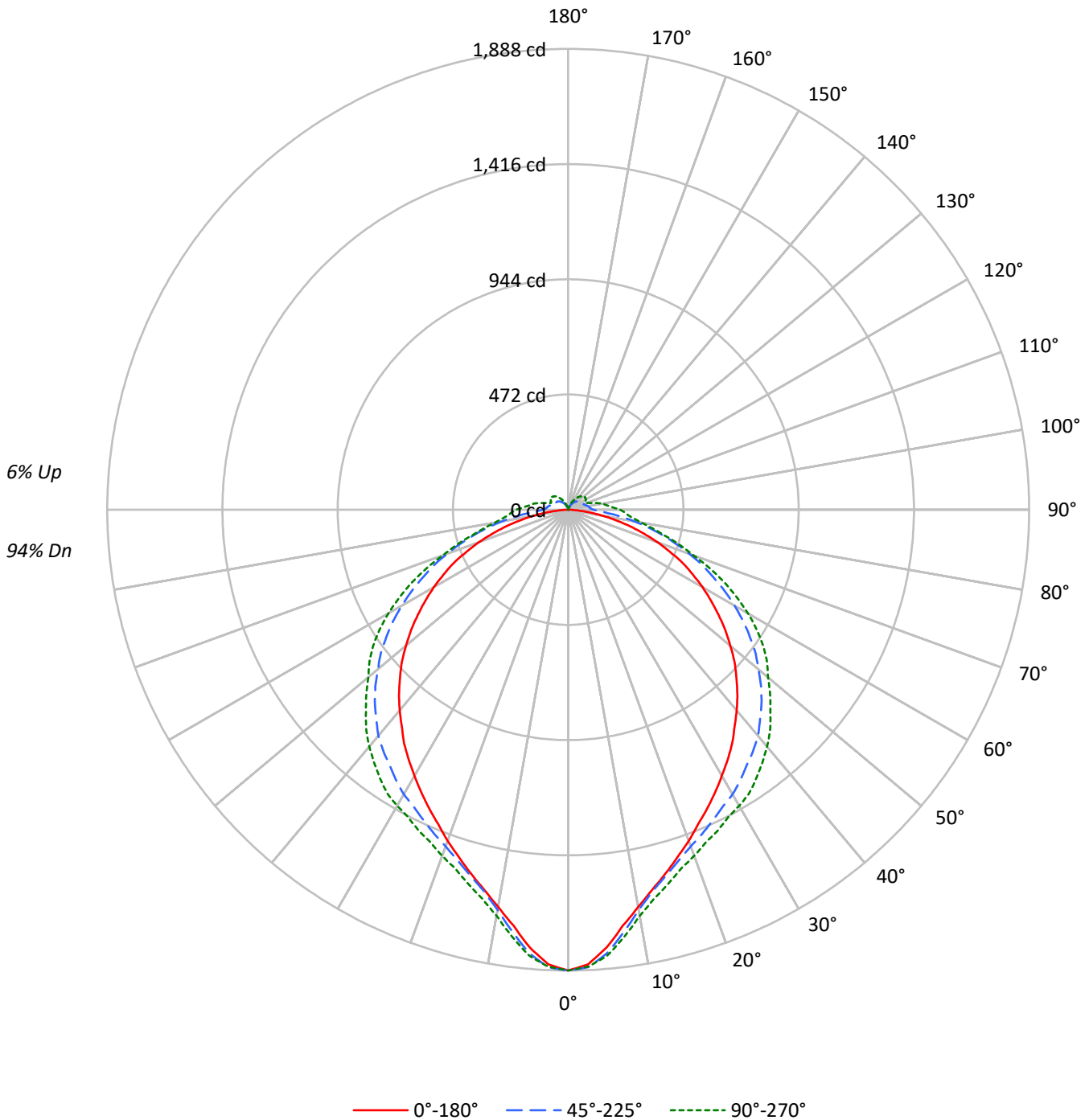
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5205.0 lumens  
Efficiency: N/A  
Efficacy: 102.9 lumens/watt  
Spacing Criteria (0/90/45): 1 / 1.11 / 1.29  
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 1.85' x H: 0.15')  
CIE Type: Direct  
  
Input Watts (W): 50.6  
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: P241337

CATALOG NUMBER: FVS8M-2-LD4-30-3STD-P125-UNV-EDC1

### Luminous Intensity Polar Plot





TEST NUMBER: P241337

CATALOG NUMBER: FVS8M-2-LD4-30-3STD-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	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	94
1	106	101	97	93	103	98	94	91	93	90	87	88	85	83	84	81	79	77
2	96	88	81	75	93	85	79	73	81	75	71	77	72	68	73	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	54	49	57	52	47	45
5	74	61	51	45	71	59	50	44	56	49	43	54	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	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	16971	16971	16971
5°	16138	16160	16228
10°	14872	14635	14826
15°	14058	13645	13914
20°	13426	13018	13341
25°	12905	12645	13010
30°	12496	12432	12860
35°	12176	12164	12730
40°	11817	12019	12500
45°	11480	11713	12149
50°	11084	11312	11769
55°	10593	10889	11570
60°	10055	10302	10994
65°	9433	9562	10123
70°	8400	8711	8831
75°	7018	7649	7718
80°	5191	6400	6898
85°	2515	4917	7042



TEST NUMBER: P241337

CATALOG NUMBER: FVS8M-2-LD4-30-3STD-P125-UNV-EDC1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	168.7	3.2
10°-20°	439.8	8.4
20°-30°	647.8	12.4
30°-40°	795.3	15.3
40°-50°	846.0	16.3
50°-60°	791.6	15.2
60°-70°	627.7	12.1
70°-80°	391.8	7.5
80°-90°	175.9	3.4
90°-100°	94.4	1.8
100°-110°	68.8	1.3
110°-120°	50.3	1.0
120°-130°	44.4	0.9
130°-140°	33.4	0.6
140°-150°	19.7	0.4
150°-160°	7.9	0.2
160°-170°	1.6	0.0
170°-180°	0.0	0.0
0°-30°	1256.3	24.1
0°-40°	2051.6	39.4
0°-60°	3689.1	70.9
0°-90°	4884.6	93.8
90°-120°	213.4	4.1
90°-150°	310.9	6.0
90°-180°	320.0	6.1
0°-180°	5205.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1888	1888	1888	1888	1888	
5°	1801	1810	1825	1829	1834	167
15°	1542	1544	1551	1567	1586	435
25°	1349	1366	1403	1440	1450	622
35°	1171	1212	1276	1340	1344	731
45°	974	1033	1120	1161	1172	752
55°	752	819	908	954	976	672
65°	518	572	657	696	706	508
75°	261	316	397	426	410	278
85°	46	96	165	206	244	59
90°	1	46	103	151	213	3
95°	0	40	90	130	169	0
105°	0	32	73	99	106	0
115°	0	28	60	72	77	0
125°	0	24	56	77	86	0
135°	1	18	48	68	78	1
145°	1	12	35	50	57	1
155°	1	4	18	28	32	0
165°	1	1	4	8	10	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P241337

CATALOG NUMBER: FVS8M-2-LD4-30-3STD-P125-UNV-EDC1

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1888.0	1888.0	1888.0	1888.0	1888.0	1888.0	1888.0	1888.0	1888.0	1888.0	1888.0
2.5°	1864.1	1866.4	1867.1	1867.9	1867.9	1870.2	1870.2	1871.8	1874.1	1875.6	1876.4
5°	1800.8	1805.4	1801.6	1805.4	1808.5	1810.1	1812.4	1813.9	1818.6	1823.2	1824.7
7.5°	1718.3	1719.8	1722.1	1724.5	1727.5	1726.8	1728.3	1733.7	1739.1	1746.1	1745.3
10°	1652.0	1652.0	1652.0	1652.0	1652.0	1654.3	1655.1	1657.4	1661.2	1668.2	1664.3
12.5°	1593.4	1594.9	1597.2	1596.4	1594.9	1594.1	1591.8	1594.9	1595.7	1600.3	1598.8
15°	1542.5	1540.1	1542.5	1544.0	1542.5	1544.0	1543.2	1545.5	1544.8	1546.3	1550.9
17.5°	1490.8	1496.2	1497.7	1493.9	1495.4	1496.9	1497.7	1496.9	1496.9	1503.1	1506.2
20°	1443.7	1446.0	1446.0	1445.3	1448.4	1449.1	1453.0	1453.0	1456.8	1464.6	1467.6
22.5°	1392.8	1397.5	1400.5	1399.8	1408.3	1408.3	1409.0	1412.1	1422.9	1426.0	1436.0
25°	1348.9	1353.5	1355.0	1358.1	1364.3	1365.8	1365.8	1379.0	1382.8	1392.1	1402.9
27.5°	1304.1	1307.2	1308.8	1314.2	1324.2	1324.2	1328.1	1341.2	1349.6	1360.4	1371.2
30°	1258.6	1265.6	1265.6	1274.1	1282.5	1284.9	1294.1	1305.7	1319.6	1328.8	1346.6
32.5°	1214.7	1217.8	1220.9	1234.0	1243.2	1250.2	1257.1	1271.8	1283.3	1299.5	1312.6
35°	1170.7	1174.6	1177.7	1191.5	1200.0	1211.6	1220.1	1238.6	1250.2	1265.6	1275.6
37.5°	1119.0	1125.2	1132.2	1143.0	1159.9	1169.2	1176.9	1199.3	1212.4	1226.2	1244.8
40°	1073.5	1079.7	1087.4	1099.0	1117.5	1124.4	1134.5	1153.0	1174.6	1190.8	1209.3
42.5°	1025.7	1032.7	1040.4	1054.3	1068.9	1078.2	1089.7	1109.0	1130.6	1150.7	1163.0
45°	974.1	980.2	990.3	1003.4	1021.9	1033.4	1042.7	1065.8	1082.8	1103.6	1119.8
47.5°	924.7	927.8	938.6	956.3	972.5	986.4	995.7	1015.7	1038.1	1053.5	1071.2
50°	866.9	870.7	882.3	900.0	921.6	934.7	940.1	964.8	983.3	1003.4	1016.5
52.5°	810.6	816.7	830.6	846.8	866.9	878.4	888.5	906.2	930.1	947.8	967.9
55°	751.9	759.7	772.0	789.7	807.5	819.0	830.6	850.7	872.3	893.1	908.5
57.5°	693.3	701.0	713.4	731.1	748.9	758.1	769.7	790.5	815.2	835.2	849.9
60°	635.5	640.9	654.0	669.4	687.2	698.7	707.2	728.8	751.9	769.7	786.7
62.5°	575.3	580.7	591.5	606.2	626.2	636.3	644.0	666.3	687.9	704.9	723.4
65°	518.3	518.3	531.4	543.7	560.7	572.2	583.8	603.1	621.6	640.1	657.1
67.5°	449.6	456.6	465.8	479.7	499.0	509.0	520.6	539.1	556.1	578.4	594.6
70°	388.7	391.8	402.6	418.0	433.4	443.5	455.0	472.0	491.3	511.3	527.5
72.5°	323.1	329.3	338.6	356.3	368.6	378.7	389.5	407.2	425.7	445.8	462.0
75°	261.4	266.8	276.1	290.0	306.2	316.2	324.7	343.2	360.9	383.3	397.2
77.5°	202.8	205.1	215.2	228.3	248.3	253.7	263.8	280.7	300.8	318.5	335.5
80°	145.0	149.6	157.3	169.7	187.4	195.9	204.4	222.9	239.9	259.1	274.6
82.5°	91.0	97.9	104.1	120.3	134.2	141.1	151.2	167.4	186.6	202.8	216.7
85°	46.3	51.7	60.9	72.5	87.9	96.4	103.3	121.1	137.3	152.7	165.0
87.5°	17.7	21.6	29.3	41.6	55.5	62.5	71.0	85.6	101.0	113.4	125.7
90°	0.8	5.4	13.9	25.5	38.6	45.5	52.4	67.1	80.2	91.8	102.6
92.5°	0.0	3.9	11.6	23.1	35.5	41.6	48.6	60.9	71.7	82.5	93.3
95°	0.0	3.1	10.8	21.6	33.2	40.1	46.3	57.8	68.6	78.7	89.5
97.5°	0.0	3.1	10.0	20.8	32.4	38.6	44.0	54.8	64.8	75.6	85.6
100°	0.0	3.1	10.0	20.1	30.8	36.2	41.6	51.7	62.5	72.5	81.7
102.5°	0.0	2.3	9.3	18.5	29.3	34.7	39.3	49.4	59.4	68.6	77.9
105°	0.0	2.3	8.5	17.7	27.8	32.4	37.8	47.8	57.1	65.6	73.3
107.5°	0.0	2.3	8.5	17.0	26.2	31.6	36.2	45.5	54.8	62.5	69.4
110°	0.0	1.5	7.7	16.2	25.5	30.1	34.7	44.0	52.4	59.4	66.3



TEST NUMBER: P241337

CATALOG NUMBER: FVS8M-2-LD4-30-3STD-P125-UNV-EDC1

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.0	1.5	6.9	15.4	23.9	28.5	33.2	42.4	50.1	57.1	62.5
115°	0.0	1.5	6.9	14.7	23.1	27.8	32.4	40.9	48.6	54.8	60.2
117.5°	0.0	1.5	6.2	13.9	22.4	27.0	30.8	39.3	47.0	53.2	58.6
120°	0.0	1.5	6.2	13.1	21.6	26.2	30.1	38.6	45.5	52.4	57.8
122.5°	0.0	0.8	5.4	12.3	20.8	24.7	29.3	37.0	44.7	51.7	57.1
125°	0.0	0.8	5.4	11.6	20.1	23.9	28.5	36.2	44.0	50.9	56.3
127.5°	0.0	0.8	4.6	10.8	18.5	22.4	27.0	34.7	42.4	49.4	54.8
130°	0.0	0.8	3.9	10.0	17.7	21.6	25.5	33.2	40.1	47.0	52.4
132.5°	0.8	0.8	3.9	9.3	16.2	20.1	23.9	30.8	37.8	44.7	50.1
135°	0.8	0.8	3.1	8.5	14.7	18.5	21.6	29.3	35.5	42.4	47.8
137.5°	0.8	0.8	3.1	7.7	13.9	17.0	20.1	27.0	33.2	39.3	44.7
140°	0.8	0.8	2.3	6.9	12.3	15.4	18.5	24.7	30.8	36.2	41.6
142.5°	0.8	0.8	1.5	5.4	10.8	13.1	16.2	22.4	27.8	33.2	37.8
145°	0.8	0.8	1.5	4.6	9.3	11.6	13.9	19.3	24.7	29.3	34.7
147.5°	0.8	0.8	0.8	3.9	6.9	9.3	11.6	17.0	21.6	26.2	30.8
150°	0.8	0.8	0.8	2.3	5.4	7.7	9.3	13.9	17.7	22.4	26.2
152.5°	0.8	0.8	0.8	1.5	4.6	5.4	7.7	10.8	14.7	18.5	22.4
155°	0.8	0.8	0.8	1.5	3.1	3.9	5.4	8.5	11.6	14.7	17.7
157.5°	0.8	0.8	0.8	0.8	2.3	3.1	3.9	6.2	8.5	10.8	13.9
160°	0.8	0.8	0.8	0.8	1.5	1.5	2.3	3.9	6.2	7.7	10.0
162.5°	0.8	0.8	0.8	0.8	0.8	0.8	1.5	2.3	3.9	5.4	6.9
165°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.5	2.3	3.1	3.9
167.5°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.8	0.8	1.5	2.3
170°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8
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: P241337

CATALOG NUMBER: FVS8M-2-LD4-30-3STD-P125-UNV-EDC1

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	1888.0	1888.0	1888.0	1888.0	1888.0	1888.0	1888.0	1888.0	1888.0	1888.0
2.5°	1877.2	1876.4	1877.2	1876.4	1876.4	1875.6	1876.4	1875.6	1874.1	1874.1
5°	1824.7	1830.1	1830.9	1832.4	1828.6	1830.9	1830.9	1830.9	1830.9	1834.0
7.5°	1749.9	1757.6	1757.6	1757.6	1761.5	1762.3	1764.6	1764.6	1763.8	1763.8
10°	1670.5	1676.6	1679.0	1679.7	1684.4	1684.4	1688.2	1686.7	1689.0	1689.0
12.5°	1599.5	1602.6	1611.1	1618.8	1618.0	1621.9	1625.7	1628.8	1626.5	1631.1
15°	1552.5	1557.9	1561.7	1564.0	1567.1	1571.8	1575.6	1580.2	1581.8	1585.6
17.5°	1506.2	1513.9	1520.9	1528.6	1532.4	1534.0	1536.3	1538.6	1540.9	1540.9
20°	1475.4	1481.5	1486.9	1490.0	1493.9	1497.7	1498.5	1503.1	1504.7	1509.3
22.5°	1443.7	1448.4	1455.3	1463.0	1465.3	1468.4	1470.0	1472.3	1476.1	1474.6
25°	1412.9	1421.4	1430.6	1434.5	1439.9	1444.5	1447.6	1452.2	1453.8	1449.9
27.5°	1385.1	1390.5	1408.3	1416.7	1420.6	1420.6	1420.6	1425.2	1424.5	1419.8
30°	1354.3	1369.7	1382.0	1385.9	1389.0	1392.8	1397.5	1399.8	1398.2	1400.5
32.5°	1325.7	1336.5	1352.7	1363.5	1366.6	1370.5	1372.8	1376.6	1378.2	1379.0
35°	1293.3	1309.5	1329.6	1335.0	1340.4	1345.8	1347.3	1345.0	1348.1	1343.5
37.5°	1260.2	1282.5	1287.2	1301.1	1303.4	1303.4	1304.1	1305.7	1307.2	1305.7
40°	1224.7	1232.4	1249.4	1254.0	1255.6	1257.9	1262.5	1263.3	1264.0	1267.1
42.5°	1179.2	1192.3	1200.0	1215.5	1216.2	1216.2	1216.2	1218.5	1222.4	1224.7
45°	1128.3	1143.0	1153.8	1161.5	1160.7	1164.6	1168.4	1168.4	1170.7	1171.5
47.5°	1083.6	1090.5	1096.7	1104.4	1110.6	1110.6	1112.9	1116.0	1119.0	1122.1
50°	1028.0	1040.4	1047.3	1055.0	1053.5	1056.6	1064.3	1068.1	1066.6	1068.1
52.5°	977.1	986.4	998.0	1002.6	1008.0	1011.8	1012.6	1018.8	1023.4	1026.5
55°	923.2	930.1	941.7	954.0	954.0	955.5	964.8	970.2	976.4	976.4
57.5°	863.8	875.3	888.5	892.3	898.5	905.4	912.4	914.7	917.0	916.2
60°	798.2	814.4	826.8	835.2	838.3	841.4	841.4	849.9	850.7	850.7
62.5°	738.1	751.9	761.2	764.3	765.1	769.7	771.2	774.3	772.8	778.9
65°	672.5	684.8	691.0	694.1	696.4	695.6	698.0	701.0	707.2	706.4
67.5°	610.8	615.4	621.6	626.2	626.2	630.1	632.4	636.3	629.3	628.5
70°	542.9	553.0	556.1	564.5	561.5	561.5	555.3	549.9	542.9	544.5
72.5°	476.6	485.1	494.4	491.3	491.3	489.0	484.3	479.7	475.1	478.2
75°	410.3	421.9	427.3	426.5	426.5	424.9	419.5	416.5	413.4	409.5
77.5°	350.1	356.3	363.2	366.3	367.1	366.3	360.9	355.5	354.8	353.2
80°	285.4	293.1	300.0	305.4	306.2	306.2	304.6	304.6	302.3	303.9
82.5°	226.0	234.5	244.5	250.6	252.2	256.0	257.6	259.9	264.5	268.4
85°	173.5	185.9	195.1	202.8	205.9	208.2	216.7	226.7	237.5	244.5
87.5°	137.3	148.1	158.9	167.4	172.0	178.2	188.2	202.8	219.8	231.4
90°	114.1	124.9	136.5	146.5	151.2	156.6	168.9	183.6	203.6	212.9
92.5°	103.3	114.9	124.2	132.7	137.3	141.9	153.5	165.8	180.5	186.6
95°	99.5	108.0	115.7	124.9	129.6	135.0	144.2	154.2	163.5	168.9
97.5°	94.1	102.6	111.1	118.8	123.4	127.3	134.2	143.4	151.2	154.2
100°	90.2	97.9	104.9	111.8	115.7	118.8	127.3	135.7	140.4	142.7
102.5°	85.6	92.5	98.7	104.9	108.0	111.1	118.0	122.6	124.2	124.2
105°	80.2	87.1	92.5	97.9	98.7	101.0	104.9	106.4	106.4	106.4
107.5°	75.6	81.0	85.6	88.7	89.5	90.2	91.0	91.0	89.5	89.5
110°	71.7	75.6	78.7	80.2	79.4	80.2	80.2	79.4	79.4	79.4





TEST NUMBER: P241337

CATALOG NUMBER: FVS8M-2-LD4-30-3STD-P125-UNV-EDC1

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	67.9	71.0	72.5	74.0	74.0	74.0	74.0	75.6	75.6	75.6
115°	64.8	67.9	70.2	71.7	71.7	72.5	74.0	76.4	77.1	77.1
117.5°	63.2	67.1	69.4	71.7	73.3	74.0	77.1	78.7	80.2	80.2
120°	62.5	67.1	71.0	74.0	75.6	77.1	79.4	81.7	83.3	83.3
122.5°	62.5	67.1	71.7	74.8	77.1	77.9	81.0	83.3	84.8	84.8
125°	61.7	67.1	71.7	75.6	77.1	78.7	81.0	83.3	84.8	85.6
127.5°	60.2	65.6	70.2	74.0	75.6	77.9	80.2	82.5	84.1	84.8
130°	57.8	63.2	67.9	71.7	74.0	75.6	78.7	81.0	82.5	82.5
132.5°	55.5	60.9	64.8	69.4	71.7	73.3	76.4	78.7	80.2	80.2
135°	53.2	57.8	61.7	66.3	67.9	70.2	73.3	75.6	77.1	77.9
137.5°	50.1	54.8	58.6	62.5	64.8	66.3	69.4	71.7	73.3	74.0
140°	46.3	50.9	54.8	58.6	60.9	62.5	64.8	67.1	68.6	68.6
142.5°	42.4	47.0	50.9	54.0	55.5	57.1	59.4	61.7	62.5	63.2
145°	38.6	42.4	46.3	49.4	50.1	51.7	54.0	55.5	57.1	57.1
147.5°	33.9	37.8	40.9	43.2	44.7	45.5	47.8	49.4	50.1	50.9
150°	29.3	33.2	35.5	37.8	39.3	40.1	41.6	43.2	44.0	44.7
152.5°	25.5	27.8	30.8	32.4	33.9	34.7	36.2	37.0	37.8	37.8
155°	20.8	23.1	25.5	27.0	28.5	28.5	30.1	30.8	31.6	31.6
157.5°	16.2	18.5	20.8	22.4	23.1	23.9	24.7	25.5	25.5	26.2
160°	11.6	13.9	16.2	17.0	17.7	18.5	19.3	19.3	20.1	20.1
162.5°	8.5	10.0	11.6	12.3	13.1	13.1	13.9	14.7	14.7	14.7
165°	5.4	6.2	7.7	8.5	8.5	9.3	9.3	10.0	10.0	10.0
167.5°	2.3	3.1	3.9	4.6	4.6	5.4	5.4	5.4	6.2	5.4
170°	0.8	0.8	1.5	1.5	1.5	1.5	2.3	2.3	2.3	2.3
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)