

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: P241359

Luminaire Tested: **FVS8M-3-LD4-40-2LO-P125-UNV-EDC1**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P241359  
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-LD4-40-2LO-P125-UNV-EDC1  
Description: FAILSAFE FVS8M LED FIXTURE  
3FT LENGTH, 2-MODULE LED WITH P125 LENS  
Light Source: (168) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

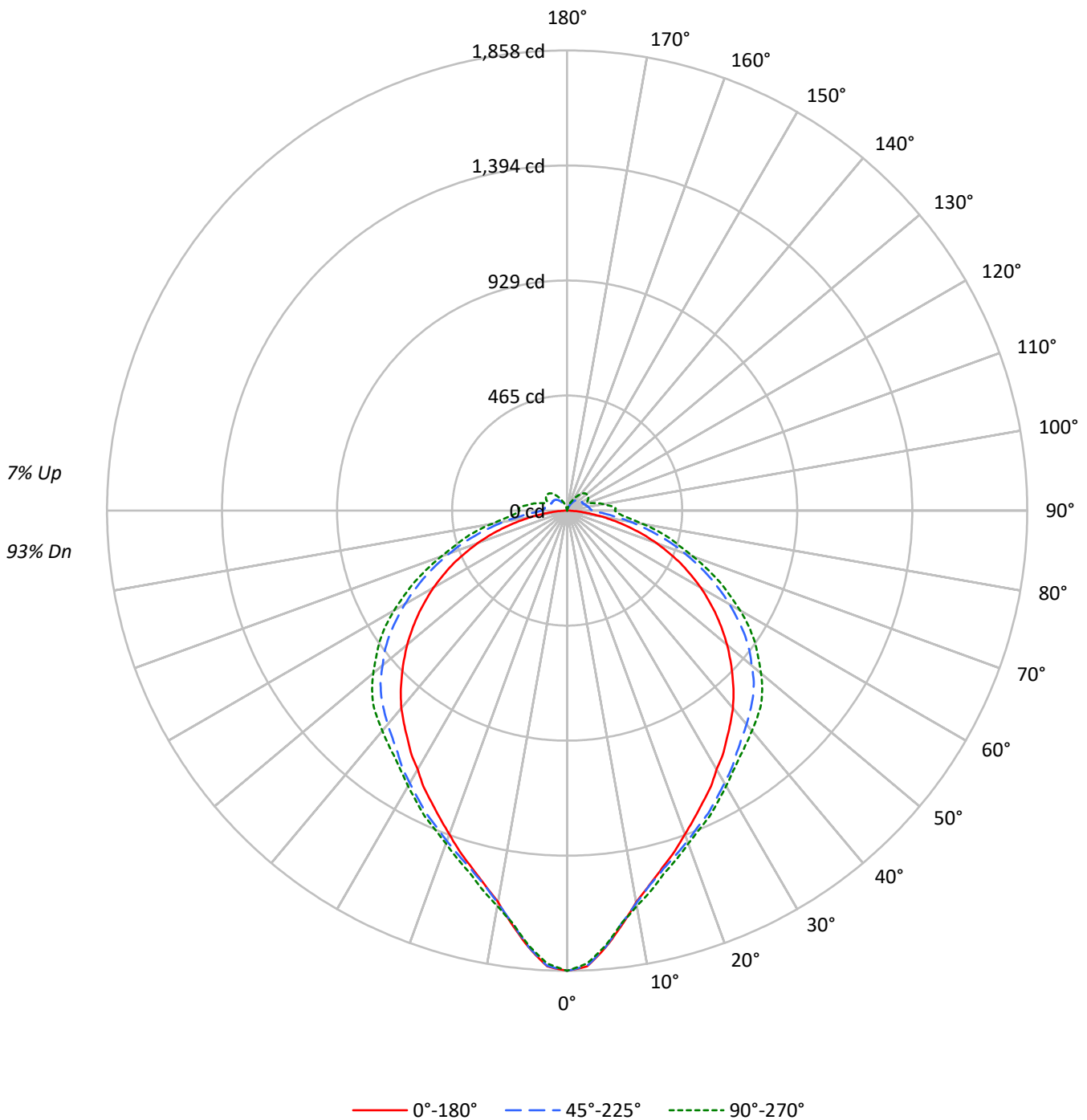
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5032.9 lumens  
Efficiency: N/A  
Efficacy: 123.7 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): 40.7  
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-LD4-40-2LO-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	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°	10851	10851	10851
5°	10339	10203	10139
10°	9434	9220	9243
15°	8891	8609	8636
20°	8486	8234	8214
25°	8168	7959	7937
30°	7905	7697	7661
35°	7734	7481	7477
40°	7611	7379	7439
45°	7419	7334	7461
50°	7219	7166	7318
55°	6981	6965	7125
60°	6688	6604	6777
65°	6305	6167	6316
70°	5742	5606	5697
75°	4927	4922	5244
80°	3796	4111	4562
85°	2089	3213	4159



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	163.6	3.3
10°-20°	424.2	8.4
20°-30°	618.1	12.3
30°-40°	743.8	14.8
40°-50°	804.8	16.0
50°-60°	760.7	15.1
60°-70°	603.9	12.0
70°-80°	383.1	7.6
80°-90°	166.9	3.3
90°-100°	95.9	1.9
100°-110°	74.9	1.5
110°-120°	58.4	1.2
120°-130°	53.7	1.1
130°-140°	42.6	0.8
140°-150°	25.3	0.5
150°-160°	10.4	0.2
160°-170°	2.5	0.0
170°-180°	0.1	0.0
0°-30°	1206.0	24.0
0°-40°	1949.8	38.7
0°-60°	3515.3	69.8
0°-90°	4669.2	92.8
90°-120°	229.2	4.6
90°-150°	350.7	7.0
90°-180°	364.0	7.2
0°-180°	5032.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1858	1858	1858	1858	1858	
5°	1772	1774	1770	1763	1764	164
15°	1491	1489	1499	1510	1515	421
25°	1298	1325	1348	1361	1362	599
35°	1124	1162	1193	1217	1215	705
45°	944	988	1062	1100	1108	729
55°	736	796	876	913	926	657
65°	506	560	634	658	678	499
75°	260	311	378	414	428	275
85°	49	88	155	194	222	60
90°	1	42	101	140	192	2
95°	1	40	92	131	185	0
105°	1	36	80	108	114	1
115°	1	33	70	84	90	1
125°	1	30	68	92	103	1
135°	1	25	62	86	99	1
145°	1	16	45	64	73	1
155°	1	7	23	36	40	1
165°	2	2	8	13	16	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°	1858.2	1858.2	1858.2	1858.2	1858.2	1858.2	1858.2	1858.2	1858.2	1858.2	1858.2
2.5°	1842.6	1840.0	1840.6	1837.4	1838.7	1840.6	1840.6	1842.6	1843.2	1841.9	1840.0
5°	1771.7	1775.6	1773.0	1771.1	1771.7	1774.3	1773.7	1775.6	1773.7	1774.3	1770.4
7.5°	1688.5	1689.8	1685.3	1682.0	1683.3	1684.0	1685.9	1687.2	1690.5	1684.0	1682.0
10°	1605.3	1611.2	1604.0	1602.7	1604.0	1603.4	1606.6	1602.7	1606.0	1606.0	1608.6
12.5°	1545.5	1546.2	1548.8	1540.3	1540.3	1541.0	1540.3	1539.7	1541.0	1544.9	1546.8
15°	1490.9	1492.9	1492.9	1488.3	1488.3	1489.0	1490.3	1491.6	1492.2	1500.0	1498.7
17.5°	1442.8	1440.9	1442.8	1441.5	1444.1	1448.0	1447.4	1450.0	1453.9	1453.9	1458.4
20°	1390.9	1394.1	1398.0	1394.1	1401.3	1404.5	1406.5	1409.1	1411.7	1418.8	1419.4
22.5°	1342.8	1349.3	1350.6	1349.3	1359.0	1362.3	1365.5	1368.1	1377.9	1377.2	1381.1
25°	1297.9	1303.8	1304.4	1309.0	1319.4	1324.6	1326.5	1332.4	1337.6	1340.8	1348.0
27.5°	1256.3	1259.6	1260.2	1269.3	1275.8	1281.0	1287.5	1296.6	1299.2	1306.4	1307.7
30°	1206.9	1214.1	1218.0	1225.8	1238.8	1241.4	1247.9	1253.7	1263.5	1266.7	1270.6
32.5°	1169.2	1172.5	1173.8	1184.2	1195.2	1202.4	1206.9	1210.8	1222.5	1229.7	1235.5
35°	1123.7	1129.6	1132.2	1143.2	1152.3	1162.1	1165.3	1176.4	1181.6	1191.3	1193.3
37.5°	1082.8	1087.3	1090.6	1099.0	1111.4	1121.1	1121.8	1134.1	1143.2	1150.4	1158.2
40°	1041.2	1042.5	1047.7	1054.8	1069.8	1073.0	1080.8	1093.8	1108.1	1117.2	1127.0
42.5°	994.4	995.0	1001.5	1010.6	1026.9	1031.4	1042.5	1056.1	1071.1	1087.3	1094.5
45°	944.3	946.9	956.0	967.7	981.4	987.9	998.3	1015.8	1032.7	1050.3	1062.0
47.5°	893.7	899.5	907.3	919.0	934.6	943.1	952.8	974.2	989.8	1006.1	1022.3
50°	843.0	848.2	856.0	869.6	886.5	895.6	904.1	926.8	948.2	962.5	972.9
52.5°	789.0	794.2	803.3	819.6	839.1	844.3	856.6	878.1	898.2	913.2	927.5
55°	735.7	739.0	751.3	765.0	785.1	796.2	804.0	825.4	843.0	863.1	875.5
57.5°	677.9	682.4	695.4	707.8	730.5	739.0	748.1	769.5	791.0	805.3	816.3
60°	623.3	626.5	637.6	651.2	670.1	681.1	690.2	711.0	727.9	744.2	757.2
62.5°	562.8	567.4	577.8	592.7	612.9	620.7	633.7	648.6	670.1	681.1	695.4
65°	506.3	510.8	519.3	532.9	548.5	559.6	570.0	585.6	603.1	618.1	633.7
67.5°	443.9	449.1	459.5	473.8	491.3	499.1	506.9	523.2	542.0	557.0	569.3
70°	383.5	386.7	397.8	409.5	424.4	433.5	441.3	460.2	476.4	492.6	505.0
72.5°	321.7	324.3	334.7	347.7	363.3	374.4	381.5	395.8	412.1	428.3	443.9
75°	260.0	265.2	273.0	284.7	300.9	310.7	316.5	334.1	348.4	365.3	377.6
77.5°	198.9	203.4	213.8	225.5	240.5	249.6	255.4	272.3	286.0	300.9	316.5
80°	145.6	145.6	157.9	166.4	182.0	189.8	196.3	209.9	225.5	240.5	258.0
82.5°	91.0	94.2	102.7	114.4	128.0	135.2	141.0	154.7	170.9	186.5	201.5
85°	49.4	50.0	58.5	68.9	83.2	88.4	96.2	110.5	124.8	139.1	155.3
87.5°	14.9	18.8	27.3	39.0	50.0	57.2	62.4	77.3	90.3	104.6	120.9
90°	1.3	4.5	13.0	23.4	35.7	41.6	48.7	61.7	74.7	89.7	101.4
92.5°	0.6	3.9	11.7	22.1	34.4	40.3	47.4	59.8	73.4	85.1	95.5
95°	0.6	3.2	11.0	22.1	33.8	40.3	46.1	59.1	71.5	81.9	91.6
97.5°	0.6	3.2	11.0	21.4	33.1	39.0	45.5	57.8	68.9	79.3	90.3
100°	0.6	3.2	10.4	20.8	32.5	39.0	44.8	55.9	66.3	77.3	86.4
102.5°	0.6	3.2	10.4	20.8	31.8	37.7	42.9	53.9	64.3	73.4	83.2
105°	0.6	2.6	9.7	20.1	30.5	36.4	41.6	52.0	61.7	71.5	79.9
107.5°	0.6	2.6	9.7	18.8	29.9	35.1	40.9	50.7	59.8	68.9	77.3
110°	0.6	2.6	9.1	18.8	28.6	34.4	39.6	49.4	58.5	66.9	74.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.6	2.6	9.1	18.2	27.9	33.1	38.3	48.7	57.2	65.0	72.1
115°	0.6	1.9	8.4	17.5	27.9	33.1	37.7	47.4	56.5	63.7	69.5
117.5°	0.6	1.9	8.4	16.9	26.6	31.8	37.0	46.8	55.2	63.0	68.9
120°	0.6	1.9	7.8	16.9	26.6	31.2	36.4	46.1	54.6	62.4	68.9
122.5°	0.6	1.9	7.8	16.2	25.3	30.5	35.7	45.5	53.9	61.7	68.9
125°	0.6	1.3	7.1	15.6	24.7	29.9	35.1	44.8	53.3	61.7	68.2
127.5°	0.6	1.3	6.5	14.9	24.0	28.6	33.8	43.5	52.0	60.4	67.6
130°	0.6	1.3	6.5	13.6	22.7	27.3	32.5	42.2	50.7	58.5	66.3
132.5°	0.6	1.3	5.8	13.0	21.4	26.0	30.5	40.3	48.7	56.5	63.7
135°	1.3	1.3	5.2	11.7	20.1	24.7	29.2	38.3	46.8	54.6	61.7
137.5°	1.3	1.3	4.5	11.0	18.2	22.7	26.6	35.7	43.5	51.3	58.5
140°	1.3	1.3	3.9	9.7	16.2	20.1	24.0	31.8	40.3	47.4	54.6
142.5°	1.3	1.3	3.2	8.4	14.3	18.2	21.4	28.6	35.7	43.5	50.0
145°	1.3	1.3	2.6	7.1	12.3	15.6	18.2	24.7	31.2	38.3	44.8
147.5°	1.3	1.3	2.6	5.8	10.4	13.0	15.6	21.4	27.3	33.1	39.0
150°	1.3	1.3	1.9	4.5	8.4	10.4	13.0	18.2	22.7	27.9	33.8
152.5°	1.3	1.3	1.3	3.9	7.1	9.1	10.4	14.9	18.8	23.4	27.9
155°	1.3	1.3	1.3	3.2	5.8	7.1	8.4	11.7	15.6	19.5	22.7
157.5°	1.3	1.3	1.3	2.6	4.5	5.2	6.5	9.7	12.3	15.6	18.2
160°	1.9	1.3	1.3	1.9	3.2	3.9	5.2	7.1	9.7	11.7	14.3
162.5°	1.9	1.3	1.3	1.3	2.6	3.2	3.9	5.2	7.1	9.1	10.4
165°	1.9	1.9	1.3	1.3	1.9	1.9	2.6	3.9	4.5	6.5	7.8
167.5°	1.9	1.9	1.3	1.3	1.3	1.3	1.9	2.6	3.2	3.9	4.5
170°	1.9	1.9	1.3	1.3	1.3	1.3	1.3	1.3	1.9	1.9	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°	1858.2	1858.2	1858.2	1858.2	1858.2	1858.2	1858.2	1858.2	1858.2	1858.2
2.5°	1838.0	1839.3	1836.1	1836.7	1835.4	1836.1	1834.1	1833.5	1834.8	1830.9
5°	1771.1	1767.8	1763.9	1763.9	1763.3	1762.0	1761.3	1762.6	1762.0	1763.9
7.5°	1684.0	1678.1	1679.4	1676.2	1680.1	1678.8	1680.1	1681.4	1681.4	1681.4
10°	1604.0	1609.9	1612.5	1615.1	1618.3	1616.4	1620.9	1622.2	1623.5	1620.9
12.5°	1551.4	1551.4	1555.9	1557.2	1557.2	1558.5	1563.7	1559.8	1565.7	1570.9
15°	1502.0	1505.9	1509.8	1510.4	1510.4	1516.9	1518.2	1516.3	1516.9	1515.0
17.5°	1462.3	1464.3	1465.6	1469.5	1473.4	1472.7	1474.0	1477.3	1476.0	1474.0
20°	1422.0	1427.9	1432.4	1431.8	1432.4	1434.4	1435.0	1435.7	1432.4	1430.5
22.5°	1385.7	1385.7	1393.5	1396.1	1398.7	1398.0	1396.7	1398.0	1398.0	1393.5
25°	1348.0	1354.5	1358.4	1357.1	1361.0	1364.2	1361.0	1360.3	1362.9	1361.6
27.5°	1316.8	1316.8	1321.3	1328.5	1327.8	1329.1	1326.5	1323.9	1322.0	1321.3
30°	1275.2	1281.7	1288.2	1286.9	1288.8	1291.4	1291.4	1288.8	1284.3	1284.3
32.5°	1238.8	1243.3	1245.9	1253.7	1256.3	1255.7	1249.8	1245.3	1247.2	1247.2
35°	1201.1	1206.3	1216.7	1215.4	1216.7	1218.0	1216.0	1214.1	1214.1	1214.7
37.5°	1160.8	1177.0	1176.4	1189.4	1192.0	1191.3	1189.4	1183.5	1184.8	1187.4
40°	1137.4	1143.9	1156.9	1159.5	1160.8	1162.1	1167.9	1164.0	1162.1	1160.8
42.5°	1107.5	1118.5	1125.0	1132.8	1138.7	1140.0	1136.7	1134.8	1136.1	1135.4
45°	1070.4	1085.4	1093.8	1101.0	1100.3	1101.6	1105.5	1110.1	1110.7	1107.5
47.5°	1035.3	1039.2	1056.8	1054.8	1062.6	1068.5	1067.2	1064.6	1069.1	1068.5
50°	986.6	1000.2	1004.8	1017.1	1018.4	1014.5	1019.1	1021.7	1022.3	1022.3
52.5°	938.5	946.9	959.9	960.6	965.1	967.1	969.7	971.0	973.6	972.3
55°	889.1	894.3	903.4	911.2	913.2	912.5	915.8	921.0	923.6	925.5
57.5°	830.0	841.7	844.3	852.1	850.8	855.3	861.2	863.8	867.7	869.6
60°	765.6	774.7	783.8	786.4	789.0	792.9	798.8	798.1	804.0	807.2
62.5°	707.1	711.0	718.8	724.0	724.7	724.7	730.5	733.1	739.0	740.3
65°	640.8	649.9	653.2	655.1	658.4	658.4	663.6	666.2	670.7	678.5
67.5°	579.1	587.5	594.0	595.3	597.9	599.2	597.9	601.2	604.4	608.3
70°	514.7	522.5	531.0	536.2	534.9	534.2	534.9	537.5	542.0	540.7
72.5°	453.0	465.4	469.3	477.0	477.7	479.0	475.7	474.4	478.3	476.4
75°	390.6	403.6	409.5	417.9	414.0	416.0	416.0	421.8	427.0	428.3
77.5°	331.5	344.5	352.3	356.2	362.7	369.2	370.5	373.7	370.5	370.5
80°	271.7	283.4	297.7	302.2	304.2	306.1	308.1	308.7	309.4	309.4
82.5°	219.0	234.0	241.8	243.1	244.4	247.0	250.2	254.1	259.3	260.0
85°	170.3	179.4	186.5	192.4	194.3	198.2	205.4	211.9	219.0	222.3
87.5°	131.9	139.1	146.9	153.4	158.6	161.8	170.9	181.3	194.3	200.8
90°	110.5	118.3	126.1	134.5	139.7	144.9	155.3	167.0	183.3	192.4
92.5°	104.0	113.1	122.2	130.0	133.9	137.8	148.2	163.8	184.6	196.9
95°	102.0	110.5	117.6	125.4	130.6	135.8	148.2	163.8	178.7	185.2
97.5°	98.8	105.9	113.7	123.5	128.0	133.2	144.3	154.7	161.2	163.8
100°	94.2	102.0	110.5	118.9	123.5	127.4	135.2	142.3	146.9	149.5
102.5°	91.0	98.1	105.9	113.7	117.0	120.2	126.7	131.9	133.9	134.5
105°	87.7	94.2	101.4	106.6	108.5	111.1	114.4	114.4	114.4	114.4
107.5°	83.8	89.7	94.9	97.5	98.8	99.4	100.1	99.4	99.4	98.8
110°	80.6	85.1	88.4	89.7	89.7	90.3	90.3	90.3	90.3	90.3





TEST NUMBER: P241359

CATALOG NUMBER: FVS8M-3-LD4-40-2LO-P125-UNV-EDC1

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	77.3	81.2	83.2	84.5	84.5	85.1	85.8	87.1	87.7	87.7
115°	74.7	78.6	80.6	82.5	83.8	84.5	86.4	89.0	90.3	90.3
117.5°	73.4	78.0	80.6	83.8	85.8	87.1	90.3	92.9	94.2	94.9
120°	74.1	78.6	82.5	86.4	88.4	89.7	93.6	96.2	98.1	98.8
122.5°	74.7	79.3	84.5	88.4	90.3	92.3	95.5	98.8	100.7	101.4
125°	74.1	79.9	85.1	89.7	91.6	93.6	96.8	100.1	102.0	102.7
127.5°	73.4	79.3	85.1	89.7	91.6	94.2	97.5	100.1	102.0	102.7
130°	72.1	78.0	83.8	89.0	91.0	92.9	96.2	99.4	101.4	102.7
132.5°	70.2	76.0	81.9	86.4	89.0	91.0	94.9	98.1	100.7	101.4
135°	67.6	73.4	79.3	84.5	86.4	89.0	92.3	95.5	97.5	98.8
137.5°	64.3	70.2	75.4	80.6	82.5	84.5	88.4	91.6	93.6	94.2
140°	60.4	65.6	70.8	75.4	77.3	79.3	82.5	85.1	87.7	89.0
142.5°	55.2	60.4	65.0	68.9	70.8	72.8	76.0	78.0	79.9	81.2
145°	50.0	54.6	58.5	61.7	63.7	65.6	68.2	70.2	72.1	72.8
147.5°	44.2	48.1	52.0	55.2	56.5	57.8	60.4	62.4	63.7	63.7
150°	38.3	42.2	45.5	48.7	49.4	50.7	52.6	53.9	55.2	54.6
152.5°	32.5	35.7	39.6	42.2	42.9	44.2	45.5	46.8	47.4	47.4
155°	26.6	29.9	33.1	35.7	36.4	37.7	38.3	39.6	40.3	40.3
157.5°	21.4	24.7	27.3	29.9	30.5	31.2	32.5	33.1	33.1	33.8
160°	16.9	18.8	21.4	23.4	24.7	25.3	26.6	26.6	27.3	27.3
162.5°	12.3	14.3	16.2	18.2	18.8	19.5	20.8	21.4	21.4	21.4
165°	8.4	10.4	11.0	12.3	13.0	14.3	15.6	15.6	16.2	15.6
167.5°	5.8	6.5	7.1	8.4	8.4	9.1	9.7	10.4	11.0	11.0
170°	3.2	3.9	3.9	4.5	4.5	4.5	5.2	5.8	5.8	5.8
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)