

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: P241358

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241358
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-LD4-35-2LO-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

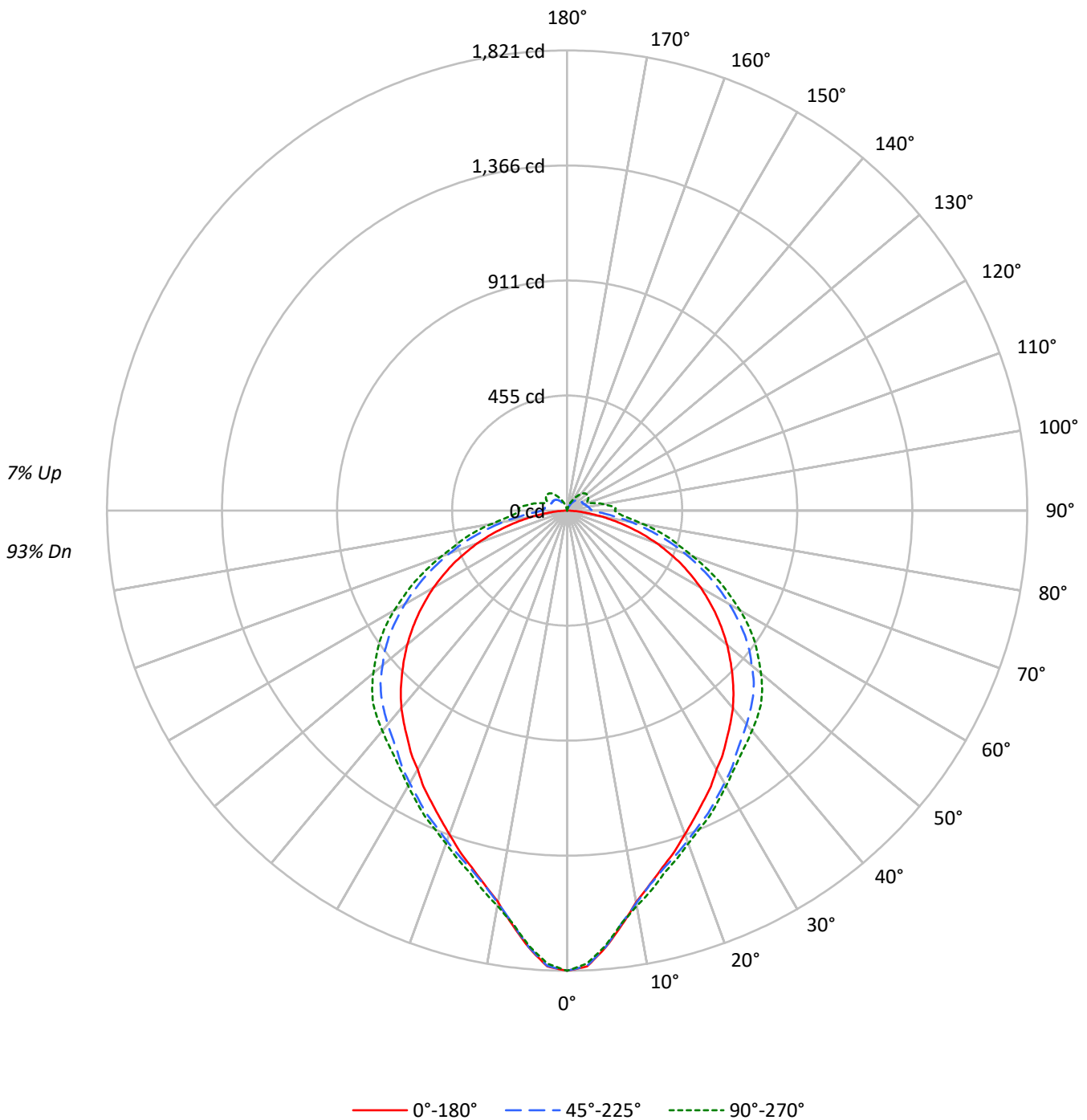
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4932.0 lumens
Efficiency: N/A
Efficacy: 121.2 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-LD4-35-2LO-P125-UNV-EDC1

Luminous Intensity Polar Plot





TEST NUMBER: P241358

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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°	10633	10633	10633
5°	10132	9998	9936
10°	9244	9035	9058
15°	8713	8436	8463
20°	8315	8069	8049
25°	8004	7799	7778
30°	7746	7543	7507
35°	7579	7330	7327
40°	7458	7231	7290
45°	7271	7187	7312
50°	7073	7023	7171
55°	6841	6825	6981
60°	6553	6471	6641
65°	6178	6043	6190
70°	5626	5494	5583
75°	4828	4823	5139
80°	3721	4028	4471
85°	2047	3149	4075



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.3	3.3
10°-20°	415.7	8.4
20°-30°	605.7	12.3
30°-40°	728.9	14.8
40°-50°	788.7	16.0
50°-60°	745.4	15.1
60°-70°	591.8	12.0
70°-80°	375.4	7.6
80°-90°	163.5	3.3
90°-100°	94.0	1.9
100°-110°	73.4	1.5
110°-120°	57.2	1.2
120°-130°	52.6	1.1
130°-140°	41.7	0.8
140°-150°	24.8	0.5
150°-160°	10.2	0.2
160°-170°	2.5	0.0
170°-180°	0.1	0.0
0°-30°	1181.8	24.0
0°-40°	1910.6	38.7
0°-60°	3444.8	69.8
0°-90°	4575.5	92.8
90°-120°	224.6	4.6
90°-150°	343.7	7.0
90°-180°	356.0	7.2
0°-180°	4932.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1821	1821	1821	1821	1821	
5°	1736	1739	1735	1728	1728	160
15°	1461	1459	1469	1480	1485	412
25°	1272	1298	1321	1334	1334	587
35°	1101	1139	1169	1192	1190	691
45°	925	968	1041	1078	1085	714
55°	721	780	858	895	907	643
65°	496	548	621	645	665	489
75°	255	304	370	406	420	270
85°	48	87	152	190	218	59
90°	1	41	99	137	188	2
95°	1	40	90	128	182	0
105°	1	36	78	106	112	1
115°	1	32	68	82	88	1
125°	1	29	67	90	101	1
135°	1	24	60	85	97	1
145°	1	15	44	62	71	1
155°	1	7	22	36	40	1
165°	2	2	8	13	15	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°	1820.9	1820.9	1820.9	1820.9	1820.9	1820.9	1820.9	1820.9	1820.9	1820.9	1820.9
2.5°	1805.6	1803.0	1803.7	1800.5	1801.8	1803.7	1803.7	1805.6	1806.2	1804.9	1803.0
5°	1736.2	1740.0	1737.4	1735.5	1736.2	1738.7	1738.1	1740.0	1738.1	1738.7	1734.9
7.5°	1654.6	1655.9	1651.5	1648.3	1649.5	1650.2	1652.1	1653.4	1656.5	1650.2	1648.3
10°	1573.1	1578.8	1571.8	1570.6	1571.8	1571.2	1574.4	1570.6	1573.8	1573.8	1576.3
12.5°	1514.5	1515.2	1517.7	1509.4	1509.4	1510.1	1509.4	1508.8	1510.1	1513.9	1515.8
15°	1461.0	1462.9	1462.9	1458.5	1458.5	1459.1	1460.4	1461.7	1462.3	1469.9	1468.7
17.5°	1413.9	1412.0	1413.9	1412.6	1415.2	1419.0	1418.4	1420.9	1424.7	1424.7	1429.2
20°	1362.9	1366.1	1369.9	1366.1	1373.1	1376.3	1378.2	1380.8	1383.3	1390.3	1391.0
22.5°	1315.8	1322.2	1323.5	1322.2	1331.7	1334.9	1338.1	1340.7	1350.2	1349.6	1353.4
25°	1271.9	1277.6	1278.2	1282.7	1292.9	1298.0	1299.9	1305.6	1310.7	1313.9	1320.9
27.5°	1231.1	1234.3	1234.9	1243.8	1250.2	1255.3	1261.7	1270.6	1273.1	1280.1	1281.4
30°	1182.7	1189.7	1193.5	1201.2	1213.9	1216.5	1222.8	1228.6	1238.1	1241.3	1245.1
32.5°	1145.8	1148.9	1150.2	1160.4	1171.2	1178.2	1182.7	1186.5	1198.0	1205.0	1210.7
35°	1101.2	1106.9	1109.5	1120.3	1129.2	1138.8	1141.9	1152.8	1157.9	1167.4	1169.3
37.5°	1061.1	1065.5	1068.7	1077.0	1089.1	1098.6	1099.3	1111.4	1120.3	1127.3	1134.9
40°	1020.3	1021.6	1026.7	1033.7	1048.3	1051.5	1059.1	1071.9	1085.9	1094.8	1104.4
42.5°	974.4	975.1	981.4	990.4	1006.3	1010.7	1021.6	1034.9	1049.6	1065.5	1072.5
45°	925.4	927.9	936.9	948.3	961.7	968.1	978.3	995.5	1012.0	1029.2	1040.7
47.5°	875.7	881.5	889.1	900.6	915.8	924.1	933.7	954.7	970.0	985.9	1001.8
50°	826.0	831.1	838.8	852.2	868.7	877.6	885.9	908.2	929.2	943.2	953.4
52.5°	773.2	778.3	787.2	803.1	822.2	827.3	839.4	860.4	880.2	894.8	908.8
55°	721.0	724.1	736.2	749.6	769.4	780.2	787.8	808.8	826.0	845.8	857.9
57.5°	664.3	668.7	681.5	693.6	715.9	724.1	733.1	754.1	775.1	789.1	799.9
60°	610.8	614.0	624.8	638.2	656.6	667.5	676.4	696.8	713.3	729.2	742.0
62.5°	551.5	556.0	566.2	580.8	600.6	608.2	621.0	635.6	656.6	667.5	681.5
65°	496.1	500.6	508.9	522.2	537.5	548.4	558.6	573.8	591.0	605.7	621.0
67.5°	435.0	440.1	450.3	464.3	481.5	489.1	496.8	512.7	531.2	545.8	557.9
70°	375.8	378.9	389.8	401.2	415.9	424.8	432.4	450.9	466.8	482.8	494.9
72.5°	315.3	317.8	328.0	340.7	356.0	366.8	373.9	387.9	403.8	419.7	435.0
75°	254.8	259.9	267.5	279.0	294.9	304.4	310.2	327.4	341.4	357.9	370.0
77.5°	194.9	199.3	209.5	221.0	235.6	244.6	250.3	266.9	280.2	294.9	310.2
80°	142.7	142.7	154.8	163.0	178.3	186.0	192.3	205.7	221.0	235.6	252.8
82.5°	89.2	92.3	100.6	112.1	125.5	132.5	138.2	151.6	167.5	182.8	197.4
85°	48.4	49.0	57.3	67.5	81.5	86.6	94.3	108.3	122.3	136.3	152.2
87.5°	14.6	18.5	26.7	38.2	49.0	56.0	61.1	75.8	88.5	102.5	118.5
90°	1.3	4.5	12.7	22.9	35.0	40.8	47.8	60.5	73.2	87.9	99.4
92.5°	0.6	3.8	11.5	21.7	33.8	39.5	46.5	58.6	72.0	83.4	93.6
95°	0.6	3.2	10.8	21.7	33.1	39.5	45.2	58.0	70.1	80.2	89.8
97.5°	0.6	3.2	10.8	21.0	32.5	38.2	44.6	56.7	67.5	77.7	88.5
100°	0.6	3.2	10.2	20.4	31.8	38.2	43.9	54.8	65.0	75.8	84.7
102.5°	0.6	3.2	10.2	20.4	31.2	36.9	42.0	52.9	63.1	72.0	81.5
105°	0.6	2.5	9.6	19.7	29.9	35.7	40.8	51.0	60.5	70.1	78.3
107.5°	0.6	2.5	9.6	18.5	29.3	34.4	40.1	49.7	58.6	67.5	75.8
110°	0.6	2.5	8.9	18.5	28.0	33.8	38.9	48.4	57.3	65.6	72.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.6	2.5	8.9	17.8	27.4	32.5	37.6	47.8	56.0	63.7	70.7
115°	0.6	1.9	8.3	17.2	27.4	32.5	36.9	46.5	55.4	62.4	68.1
117.5°	0.6	1.9	8.3	16.6	26.1	31.2	36.3	45.9	54.1	61.8	67.5
120°	0.6	1.9	7.6	16.6	26.1	30.6	35.7	45.2	53.5	61.1	67.5
122.5°	0.6	1.9	7.6	15.9	24.8	29.9	35.0	44.6	52.9	60.5	67.5
125°	0.6	1.3	7.0	15.3	24.2	29.3	34.4	43.9	52.2	60.5	66.9
127.5°	0.6	1.3	6.4	14.6	23.6	28.0	33.1	42.7	51.0	59.2	66.2
130°	0.6	1.3	6.4	13.4	22.3	26.7	31.8	41.4	49.7	57.3	65.0
132.5°	0.6	1.3	5.7	12.7	21.0	25.5	29.9	39.5	47.8	55.4	62.4
135°	1.3	1.3	5.1	11.5	19.7	24.2	28.7	37.6	45.9	53.5	60.5
137.5°	1.3	1.3	4.5	10.8	17.8	22.3	26.1	35.0	42.7	50.3	57.3
140°	1.3	1.3	3.8	9.6	15.9	19.7	23.6	31.2	39.5	46.5	53.5
142.5°	1.3	1.3	3.2	8.3	14.0	17.8	21.0	28.0	35.0	42.7	49.0
145°	1.3	1.3	2.5	7.0	12.1	15.3	17.8	24.2	30.6	37.6	43.9
147.5°	1.3	1.3	2.5	5.7	10.2	12.7	15.3	21.0	26.7	32.5	38.2
150°	1.3	1.3	1.9	4.5	8.3	10.2	12.7	17.8	22.3	27.4	33.1
152.5°	1.3	1.3	1.3	3.8	7.0	8.9	10.2	14.6	18.5	22.9	27.4
155°	1.3	1.3	1.3	3.2	5.7	7.0	8.3	11.5	15.3	19.1	22.3
157.5°	1.3	1.3	1.3	2.5	4.5	5.1	6.4	9.6	12.1	15.3	17.8
160°	1.9	1.3	1.3	1.9	3.2	3.8	5.1	7.0	9.6	11.5	14.0
162.5°	1.9	1.3	1.3	1.3	2.5	3.2	3.8	5.1	7.0	8.9	10.2
165°	1.9	1.9	1.3	1.3	1.9	1.9	2.5	3.8	4.5	6.4	7.6
167.5°	1.9	1.9	1.3	1.3	1.3	1.3	1.9	2.5	3.2	3.8	4.5
170°	1.9	1.9	1.3	1.3	1.3	1.3	1.3	1.3	1.9	1.9	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°	1820.9	1820.9	1820.9	1820.9	1820.9	1820.9	1820.9	1820.9	1820.9	1820.9
2.5°	1801.1	1802.4	1799.2	1799.8	1798.6	1799.2	1797.3	1796.7	1797.9	1794.1
5°	1735.5	1732.3	1728.5	1728.5	1727.9	1726.6	1726.0	1727.2	1726.6	1728.5
7.5°	1650.2	1644.4	1645.7	1642.5	1646.4	1645.1	1646.4	1647.6	1647.6	1647.6
10°	1571.8	1577.6	1580.1	1582.7	1585.9	1583.9	1588.4	1589.7	1590.9	1588.4
12.5°	1520.3	1520.3	1524.7	1526.0	1526.0	1527.3	1532.4	1528.5	1534.3	1539.4
15°	1471.8	1475.7	1479.5	1480.1	1480.1	1486.5	1487.8	1485.9	1486.5	1484.6
17.5°	1433.0	1434.9	1436.2	1440.0	1443.8	1443.2	1444.5	1447.6	1446.4	1444.5
20°	1393.5	1399.2	1403.7	1403.1	1403.7	1405.6	1406.3	1406.9	1403.7	1401.8
22.5°	1357.8	1357.8	1365.5	1368.0	1370.6	1369.9	1368.7	1369.9	1369.9	1365.5
25°	1320.9	1327.3	1331.1	1329.8	1333.6	1336.8	1333.6	1333.0	1335.6	1334.3
27.5°	1290.3	1290.3	1294.8	1301.8	1301.2	1302.4	1299.9	1297.3	1295.4	1294.8
30°	1249.6	1255.9	1262.3	1261.0	1263.0	1265.5	1265.5	1263.0	1258.5	1258.5
32.5°	1213.9	1218.4	1220.9	1228.6	1231.1	1230.5	1224.7	1220.3	1222.2	1222.2
35°	1177.0	1182.1	1192.3	1191.0	1192.3	1193.5	1191.6	1189.7	1189.7	1190.3
37.5°	1137.5	1153.4	1152.8	1165.5	1168.1	1167.4	1165.5	1159.8	1161.0	1163.6
40°	1114.6	1120.9	1133.7	1136.2	1137.5	1138.8	1144.5	1140.7	1138.8	1137.5
42.5°	1085.3	1096.1	1102.5	1110.1	1115.8	1117.1	1113.9	1112.0	1113.3	1112.6
45°	1049.0	1063.6	1071.9	1078.9	1078.3	1079.5	1083.3	1087.8	1088.4	1085.3
47.5°	1014.6	1018.4	1035.6	1033.7	1041.3	1047.0	1045.8	1043.2	1047.7	1047.0
50°	966.8	980.2	984.6	996.7	998.0	994.2	998.6	1001.2	1001.8	1001.8
52.5°	919.7	927.9	940.7	941.3	945.8	947.7	950.2	951.5	954.1	952.8
55°	871.3	876.4	885.3	892.9	894.8	894.2	897.4	902.5	905.0	906.9
57.5°	813.3	824.8	827.3	835.0	833.7	838.1	843.9	846.4	850.2	852.2
60°	750.3	759.2	768.1	770.6	773.2	777.0	782.7	782.1	787.8	791.0
62.5°	692.9	696.8	704.4	709.5	710.1	710.1	715.9	718.4	724.1	725.4
65°	628.0	636.9	640.1	642.0	645.2	645.2	650.3	652.8	657.3	664.9
67.5°	567.5	575.7	582.1	583.4	585.9	587.2	585.9	589.1	592.3	596.1
70°	504.4	512.1	520.3	525.4	524.2	523.5	524.2	526.7	531.2	529.9
72.5°	443.9	456.0	459.8	467.5	468.1	469.4	466.2	464.9	468.8	466.8
75°	382.8	395.5	401.2	409.5	405.7	407.6	407.6	413.3	418.4	419.7
77.5°	324.8	337.6	345.2	349.0	355.4	361.8	363.0	366.2	363.0	363.0
80°	266.2	277.7	291.7	296.2	298.1	300.0	301.9	302.5	303.2	303.2
82.5°	214.6	229.3	236.9	238.2	239.5	242.0	245.2	249.0	254.1	254.8
85°	166.9	175.8	182.8	188.5	190.4	194.3	201.3	207.6	214.6	217.8
87.5°	129.3	136.3	143.9	150.3	155.4	158.6	167.5	177.7	190.4	196.8
90°	108.3	115.9	123.6	131.8	136.9	142.0	152.2	163.7	179.6	188.5
92.5°	101.9	110.8	119.7	127.4	131.2	135.0	145.2	160.5	180.9	193.0
95°	100.0	108.3	115.3	122.9	128.0	133.1	145.2	160.5	175.1	181.5
97.5°	96.8	103.8	111.5	121.0	125.5	130.6	141.4	151.6	157.9	160.5
100°	92.3	100.0	108.3	116.6	121.0	124.8	132.5	139.5	143.9	146.5
102.5°	89.2	96.2	103.8	111.5	114.6	117.8	124.2	129.3	131.2	131.8
105°	86.0	92.3	99.4	104.4	106.4	108.9	112.1	112.1	112.1	112.1
107.5°	82.2	87.9	93.0	95.5	96.8	97.4	98.1	97.4	97.4	96.8
110°	79.0	83.4	86.6	87.9	87.9	88.5	88.5	88.5	88.5	88.5



TEST NUMBER: P241358

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

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	75.8	79.6	81.5	82.8	82.8	83.4	84.1	85.3	86.0	86.0
115°	73.2	77.1	79.0	80.9	82.2	82.8	84.7	87.3	88.5	88.5
117.5°	72.0	76.4	79.0	82.2	84.1	85.3	88.5	91.1	92.3	93.0
120°	72.6	77.1	80.9	84.7	86.6	87.9	91.7	94.3	96.2	96.8
122.5°	73.2	77.7	82.8	86.6	88.5	90.4	93.6	96.8	98.7	99.4
125°	72.6	78.3	83.4	87.9	89.8	91.7	94.9	98.1	100.0	100.6
127.5°	72.0	77.7	83.4	87.9	89.8	92.3	95.5	98.1	100.0	100.6
130°	70.7	76.4	82.2	87.3	89.2	91.1	94.3	97.4	99.4	100.6
132.5°	68.8	74.5	80.2	84.7	87.3	89.2	93.0	96.2	98.7	99.4
135°	66.2	72.0	77.7	82.8	84.7	87.3	90.4	93.6	95.5	96.8
137.5°	63.1	68.8	73.9	79.0	80.9	82.8	86.6	89.8	91.7	92.3
140°	59.2	64.3	69.4	73.9	75.8	77.7	80.9	83.4	86.0	87.3
142.5°	54.1	59.2	63.7	67.5	69.4	71.3	74.5	76.4	78.3	79.6
145°	49.0	53.5	57.3	60.5	62.4	64.3	66.9	68.8	70.7	71.3
147.5°	43.3	47.1	51.0	54.1	55.4	56.7	59.2	61.1	62.4	62.4
150°	37.6	41.4	44.6	47.8	48.4	49.7	51.6	52.9	54.1	53.5
152.5°	31.8	35.0	38.9	41.4	42.0	43.3	44.6	45.9	46.5	46.5
155°	26.1	29.3	32.5	35.0	35.7	36.9	37.6	38.9	39.5	39.5
157.5°	21.0	24.2	26.7	29.3	29.9	30.6	31.8	32.5	32.5	33.1
160°	16.6	18.5	21.0	22.9	24.2	24.8	26.1	26.1	26.7	26.7
162.5°	12.1	14.0	15.9	17.8	18.5	19.1	20.4	21.0	21.0	21.0
165°	8.3	10.2	10.8	12.1	12.7	14.0	15.3	15.3	15.9	15.3
167.5°	5.7	6.4	7.0	8.3	8.3	8.9	9.6	10.2	10.8	10.8
170°	3.2	3.8	3.8	4.5	4.5	4.5	5.1	5.7	5.7	5.7
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)