

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: P241362

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241362
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-LD4-35-2STD-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

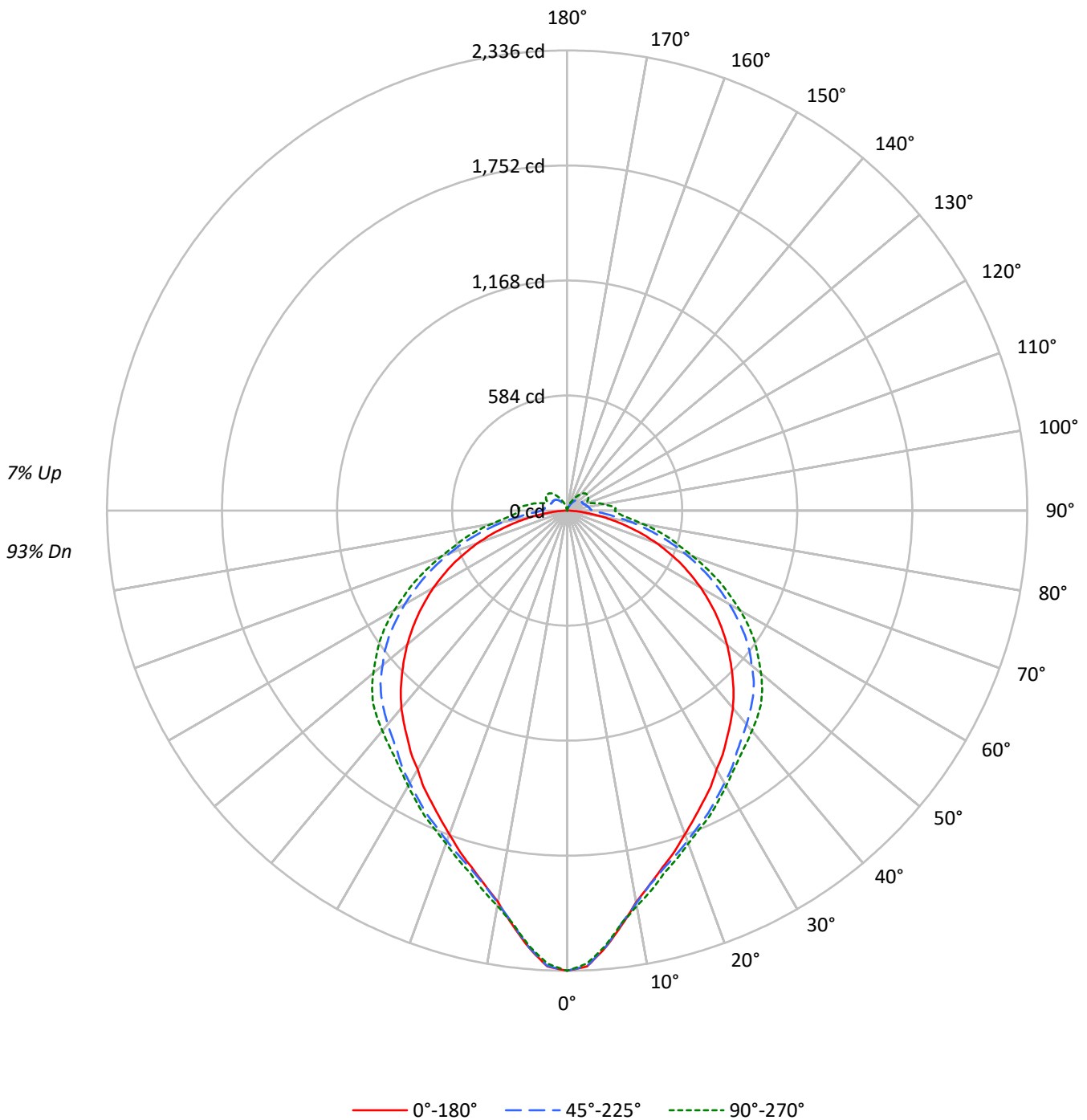
Lumens per Lamp: N/A
Luminaire Lumens: 6327.0 lumens
Efficiency: N/A
Efficacy: 115.7 lumens/watt
Spacing Criteria (0/90/45): 0.98 / 1.03 / 1.26
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 2.85' x H: 0.15')
CIE Type: Direct

Input Watts (W): 54.7
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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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°	13640	13640	13640
5°	12997	12826	12746
10°	11860	11591	11620
15°	11178	10822	10857
20°	10667	10351	10326
25°	10268	10004	9978
30°	9937	9676	9631
35°	9722	9404	9399
40°	9567	9275	9351
45°	9327	9220	9379
50°	9074	9009	9200
55°	8776	8756	8957
60°	8406	8301	8520
65°	7926	7752	7941
70°	7216	7047	7163
75°	6192	6188	6592
80°	4771	5169	5734
85°	2627	4041	5228



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	205.6	3.3
10°-20°	533.3	8.4
20°-30°	777.1	12.3
30°-40°	935.1	14.8
40°-50°	1011.8	16.0
50°-60°	956.3	15.1
60°-70°	759.2	12.0
70°-80°	481.6	7.6
80°-90°	209.8	3.3
90°-100°	120.6	1.9
100°-110°	94.2	1.5
110°-120°	73.4	1.2
120°-130°	67.5	1.1
130°-140°	53.5	0.8
140°-150°	31.8	0.5
150°-160°	13.1	0.2
160°-170°	3.2	0.0
170°-180°	0.1	0.0
0°-30°	1516.0	24.0
0°-40°	2451.1	38.7
0°-60°	4419.1	69.8
0°-90°	5869.7	92.8
90°-120°	288.2	4.6
90°-150°	441.0	7.0
90°-180°	457.0	7.2
0°-180°	6327.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2336	2336	2336	2336	2336	
5°	2227	2230	2226	2217	2217	206
15°	1874	1872	1884	1899	1904	529
25°	1632	1665	1694	1711	1712	753
35°	1413	1461	1500	1530	1527	886
45°	1187	1242	1335	1383	1392	916
55°	925	1001	1100	1148	1164	825
65°	636	704	797	828	853	627
75°	327	390	475	520	538	346
85°	62	111	195	244	279	75
90°	2	52	128	176	242	3
95°	1	51	115	164	233	1
105°	1	46	100	136	144	1
115°	1	42	87	105	114	1
125°	1	38	86	115	129	1
135°	2	31	78	109	124	1
145°	2	20	56	80	92	1
155°	2	9	29	46	51	1
165°	2	2	10	16	20	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°	2335.9	2335.9	2335.9	2335.9	2335.9	2335.9	2335.9	2335.9	2335.9	2335.9	2335.9
2.5°	2316.3	2313.0	2313.8	2309.7	2311.4	2313.8	2313.8	2316.3	2317.1	2315.5	2313.0
5°	2227.2	2232.1	2228.9	2226.4	2227.2	2230.5	2229.7	2232.1	2229.7	2230.5	2225.6
7.5°	2122.6	2124.3	2118.6	2114.5	2116.1	2116.9	2119.4	2121.0	2125.1	2116.9	2114.5
10°	2018.1	2025.4	2016.4	2014.8	2016.4	2015.6	2019.7	2014.8	2018.9	2018.9	2022.2
12.5°	1942.9	1943.7	1947.0	1936.4	1936.4	1937.2	1936.4	1935.5	1937.2	1942.1	1944.5
15°	1874.3	1876.7	1876.7	1871.0	1871.0	1871.8	1873.5	1875.1	1875.9	1885.7	1884.1
17.5°	1813.8	1811.4	1813.8	1812.2	1815.4	1820.3	1819.5	1822.8	1827.7	1827.7	1833.4
20°	1748.4	1752.5	1757.4	1752.5	1761.5	1765.6	1768.1	1771.3	1774.6	1783.6	1784.4
22.5°	1688.0	1696.2	1697.8	1696.2	1708.4	1712.5	1716.6	1719.8	1732.1	1731.3	1736.2
25°	1631.6	1639.0	1639.8	1645.5	1658.6	1665.1	1667.6	1674.9	1681.4	1685.5	1694.5
27.5°	1579.3	1583.4	1584.2	1595.7	1603.8	1610.4	1618.5	1630.0	1633.2	1642.2	1643.9
30°	1517.2	1526.2	1531.1	1540.9	1557.3	1560.5	1568.7	1576.1	1588.3	1592.4	1597.3
32.5°	1469.8	1473.9	1475.6	1488.6	1502.5	1511.5	1517.2	1522.1	1536.8	1545.8	1553.2
35°	1412.6	1420.0	1423.3	1437.2	1448.6	1460.9	1464.9	1478.8	1485.4	1497.6	1500.1
37.5°	1361.2	1366.9	1371.0	1381.6	1397.1	1409.4	1410.2	1425.7	1437.2	1446.1	1455.9
40°	1308.9	1310.5	1317.1	1326.0	1344.8	1348.9	1358.7	1375.1	1393.0	1404.5	1416.7
42.5°	1250.1	1250.9	1259.0	1270.5	1290.9	1296.6	1310.5	1327.7	1346.5	1366.9	1375.9
45°	1187.1	1190.4	1201.9	1216.6	1233.7	1241.9	1255.0	1277.0	1298.3	1320.3	1335.0
47.5°	1123.4	1130.8	1140.6	1155.3	1174.9	1185.5	1197.8	1224.7	1244.3	1264.8	1285.2
50°	1059.7	1066.2	1076.0	1093.2	1114.4	1125.9	1136.5	1165.1	1192.0	1210.0	1223.1
52.5°	991.9	998.4	1009.8	1030.3	1054.8	1061.3	1076.8	1103.8	1129.1	1147.9	1165.9
55°	924.9	929.0	944.5	961.6	987.0	1000.9	1010.7	1037.6	1059.7	1085.0	1100.5
57.5°	852.2	857.9	874.2	889.7	918.3	929.0	940.4	967.4	994.3	1012.3	1026.2
60°	783.5	787.6	801.5	818.7	842.4	856.2	867.7	893.8	915.1	935.5	951.8
62.5°	707.5	713.3	726.3	745.1	770.5	780.3	796.6	815.4	842.4	856.2	874.2
65°	636.5	642.2	652.8	670.0	689.6	703.5	716.5	736.1	758.2	777.0	796.6
67.5°	558.0	564.6	577.6	595.6	617.7	627.5	637.3	657.7	681.4	700.2	715.7
70°	482.0	486.1	500.0	514.7	533.5	545.0	554.8	578.5	598.9	619.3	634.8
72.5°	404.4	407.7	420.8	437.1	456.7	470.6	479.6	497.6	518.0	538.4	558.0
75°	326.8	333.3	343.2	357.9	378.3	390.5	397.9	420.0	437.9	459.2	474.7
77.5°	250.0	255.7	268.8	283.5	302.3	313.7	321.1	342.3	359.5	378.3	397.9
80°	183.0	183.0	198.5	209.2	228.8	238.6	246.7	263.9	283.5	302.3	324.4
82.5°	114.4	118.5	129.1	143.8	161.0	169.9	177.3	194.5	214.9	234.5	253.3
85°	62.1	62.9	73.5	86.6	104.6	111.1	120.9	138.9	156.9	174.8	195.3
87.5°	18.8	23.7	34.3	49.0	62.9	71.9	78.4	97.2	113.6	131.5	152.0
90°	1.6	5.7	16.3	29.4	44.9	52.3	61.3	77.6	94.0	112.8	127.5
92.5°	0.8	4.9	14.7	27.8	43.3	50.7	59.6	75.2	92.3	107.0	120.1
95°	0.8	4.1	13.9	27.8	42.5	50.7	58.0	74.3	89.9	102.9	115.2
97.5°	0.8	4.1	13.9	27.0	41.7	49.0	57.2	72.7	86.6	99.7	113.6
100°	0.8	4.1	13.1	26.1	40.9	49.0	56.4	70.3	83.3	97.2	108.7
102.5°	0.8	4.1	13.1	26.1	40.0	47.4	53.9	67.8	80.9	92.3	104.6
105°	0.8	3.3	12.3	25.3	38.4	45.8	52.3	65.4	77.6	89.9	100.5
107.5°	0.8	3.3	12.3	23.7	37.6	44.1	51.5	63.7	75.2	86.6	97.2
110°	0.8	3.3	11.4	23.7	35.9	43.3	49.8	62.1	73.5	84.2	93.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.8	3.3	11.4	22.9	35.1	41.7	48.2	61.3	71.9	81.7	90.7
115°	0.8	2.5	10.6	22.1	35.1	41.7	47.4	59.6	71.1	80.1	87.4
117.5°	0.8	2.5	10.6	21.2	33.5	40.0	46.6	58.8	69.4	79.3	86.6
120°	0.8	2.5	9.8	21.2	33.5	39.2	45.8	58.0	68.6	78.4	86.6
122.5°	0.8	2.5	9.8	20.4	31.9	38.4	44.9	57.2	67.8	77.6	86.6
125°	0.8	1.6	9.0	19.6	31.0	37.6	44.1	56.4	67.0	77.6	85.8
127.5°	0.8	1.6	8.2	18.8	30.2	35.9	42.5	54.7	65.4	76.0	85.0
130°	0.8	1.6	8.2	17.2	28.6	34.3	40.9	53.1	63.7	73.5	83.3
132.5°	0.8	1.6	7.4	16.3	27.0	32.7	38.4	50.7	61.3	71.1	80.1
135°	1.6	1.6	6.5	14.7	25.3	31.0	36.8	48.2	58.8	68.6	77.6
137.5°	1.6	1.6	5.7	13.9	22.9	28.6	33.5	44.9	54.7	64.5	73.5
140°	1.6	1.6	4.9	12.3	20.4	25.3	30.2	40.0	50.7	59.6	68.6
142.5°	1.6	1.6	4.1	10.6	18.0	22.9	27.0	35.9	44.9	54.7	62.9
145°	1.6	1.6	3.3	9.0	15.5	19.6	22.9	31.0	39.2	48.2	56.4
147.5°	1.6	1.6	3.3	7.4	13.1	16.3	19.6	27.0	34.3	41.7	49.0
150°	1.6	1.6	2.5	5.7	10.6	13.1	16.3	22.9	28.6	35.1	42.5
152.5°	1.6	1.6	1.6	4.9	9.0	11.4	13.1	18.8	23.7	29.4	35.1
155°	1.6	1.6	1.6	4.1	7.4	9.0	10.6	14.7	19.6	24.5	28.6
157.5°	1.6	1.6	1.6	3.3	5.7	6.5	8.2	12.3	15.5	19.6	22.9
160°	2.5	1.6	1.6	2.5	4.1	4.9	6.5	9.0	12.3	14.7	18.0
162.5°	2.5	1.6	1.6	1.6	3.3	4.1	4.9	6.5	9.0	11.4	13.1
165°	2.5	2.5	1.6	1.6	2.5	2.5	3.3	4.9	5.7	8.2	9.8
167.5°	2.5	2.5	1.6	1.6	1.6	1.6	2.5	3.3	4.1	4.9	5.7
170°	2.5	2.5	1.6	1.6	1.6	1.6	1.6	1.6	2.5	2.5	3.3
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°	2335.9	2335.9	2335.9	2335.9	2335.9	2335.9	2335.9	2335.9	2335.9	2335.9
2.5°	2310.6	2312.2	2308.1	2308.9	2307.3	2308.1	2305.7	2304.8	2306.5	2301.6
5°	2226.4	2222.3	2217.4	2217.4	2216.6	2215.0	2214.2	2215.8	2215.0	2217.4
7.5°	2116.9	2109.6	2111.2	2107.1	2112.0	2110.4	2112.0	2113.7	2113.7	2113.7
10°	2016.4	2023.8	2027.1	2030.3	2034.4	2032.0	2037.7	2039.3	2040.9	2037.7
12.5°	1950.3	1950.3	1956.0	1957.6	1957.6	1959.2	1965.8	1960.9	1968.2	1974.8
15°	1888.2	1893.1	1898.0	1898.8	1898.8	1906.9	1908.6	1906.1	1906.9	1904.5
17.5°	1838.3	1840.8	1842.4	1847.3	1852.2	1851.4	1853.0	1857.1	1855.5	1853.0
20°	1787.7	1795.0	1800.7	1799.9	1800.7	1803.2	1804.0	1804.8	1800.7	1798.3
22.5°	1741.9	1741.9	1751.7	1755.0	1758.2	1757.4	1755.8	1757.4	1757.4	1751.7
25°	1694.5	1702.7	1707.6	1706.0	1710.9	1714.9	1710.9	1710.0	1713.3	1711.7
27.5°	1655.3	1655.3	1661.0	1670.0	1669.2	1670.8	1667.6	1664.3	1661.8	1661.0
30°	1603.0	1611.2	1619.4	1617.7	1620.2	1623.4	1623.4	1620.2	1614.5	1614.5
32.5°	1557.3	1563.0	1566.2	1576.1	1579.3	1578.5	1571.1	1565.4	1567.9	1567.9
35°	1509.9	1516.4	1529.5	1527.8	1529.5	1531.1	1528.7	1526.2	1526.2	1527.0
37.5°	1459.2	1479.6	1478.8	1495.2	1498.4	1497.6	1495.2	1487.8	1489.4	1492.7
40°	1429.8	1438.0	1454.3	1457.6	1459.2	1460.9	1468.2	1463.3	1460.9	1459.2
42.5°	1392.2	1406.1	1414.3	1424.1	1431.4	1433.1	1429.0	1426.5	1428.2	1427.4
45°	1345.6	1364.4	1375.1	1384.0	1383.2	1384.9	1389.8	1395.5	1396.3	1392.2
47.5°	1301.5	1306.4	1328.5	1326.0	1335.8	1343.2	1341.6	1338.3	1344.0	1343.2
50°	1240.3	1257.4	1263.1	1278.7	1280.3	1275.4	1281.1	1284.4	1285.2	1285.2
52.5°	1179.8	1190.4	1206.8	1207.6	1213.3	1215.7	1219.0	1220.6	1223.9	1222.3
55°	1117.7	1124.2	1135.7	1145.5	1147.9	1147.1	1151.2	1157.7	1161.0	1163.5
57.5°	1043.3	1058.1	1061.3	1071.1	1069.5	1075.2	1082.6	1085.8	1090.7	1093.2
60°	962.5	973.9	985.3	988.6	991.9	996.8	1004.1	1003.3	1010.7	1014.8
62.5°	888.9	893.8	903.6	910.2	911.0	911.0	918.3	921.6	929.0	930.6
65°	805.6	817.0	821.1	823.6	827.7	827.7	834.2	837.5	843.2	853.0
67.5°	728.0	738.6	746.8	748.4	751.7	753.3	751.7	755.8	759.8	764.7
70°	647.1	656.9	667.5	674.1	672.4	671.6	672.4	675.7	681.4	679.8
72.5°	569.5	585.0	589.9	599.7	600.5	602.2	598.1	596.4	601.3	598.9
75°	491.0	507.4	514.7	525.4	520.4	522.9	522.9	530.3	536.8	538.4
77.5°	416.7	433.0	442.8	447.7	455.9	464.1	465.7	469.8	465.7	465.7
80°	341.5	356.2	374.2	379.9	382.4	384.8	387.3	388.1	388.9	388.9
82.5°	275.3	294.1	303.9	305.6	307.2	310.5	314.6	319.5	326.0	326.8
85°	214.1	225.5	234.5	241.8	244.3	249.2	258.2	266.4	275.3	279.4
87.5°	165.9	174.8	184.6	192.8	199.4	203.4	214.9	228.0	244.3	252.5
90°	138.9	148.7	158.5	169.1	175.7	182.2	195.3	210.0	230.4	241.8
92.5°	130.7	142.2	153.6	163.4	168.3	173.2	186.3	205.9	232.0	247.6
95°	128.3	138.9	147.9	157.7	164.2	170.8	186.3	205.9	224.7	232.9
97.5°	124.2	133.2	143.0	155.2	161.0	167.5	181.4	194.5	202.6	205.9
100°	118.5	128.3	138.9	149.5	155.2	160.1	169.9	178.9	184.6	187.9
102.5°	114.4	123.4	133.2	143.0	147.1	151.2	159.3	165.9	168.3	169.1
105°	110.3	118.5	127.5	134.0	136.4	139.7	143.8	143.8	143.8	143.8
107.5°	105.4	112.8	119.3	122.6	124.2	125.0	125.8	125.0	125.0	124.2
110°	101.3	107.0	111.1	112.8	112.8	113.6	113.6	113.6	113.6	113.6



TEST NUMBER: P241362

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

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	97.2	102.1	104.6	106.2	106.2	107.0	107.8	109.5	110.3	110.3
115°	94.0	98.9	101.3	103.8	105.4	106.2	108.7	111.9	113.6	113.6
117.5°	92.3	98.0	101.3	105.4	107.8	109.5	113.6	116.8	118.5	119.3
120°	93.1	98.9	103.8	108.7	111.1	112.8	117.7	120.9	123.4	124.2
122.5°	94.0	99.7	106.2	111.1	113.6	116.0	120.1	124.2	126.6	127.5
125°	93.1	100.5	107.0	112.8	115.2	117.7	121.7	125.8	128.3	129.1
127.5°	92.3	99.7	107.0	112.8	115.2	118.5	122.6	125.8	128.3	129.1
130°	90.7	98.0	105.4	111.9	114.4	116.8	120.9	125.0	127.5	129.1
132.5°	88.2	95.6	102.9	108.7	111.9	114.4	119.3	123.4	126.6	127.5
135°	85.0	92.3	99.7	106.2	108.7	111.9	116.0	120.1	122.6	124.2
137.5°	80.9	88.2	94.8	101.3	103.8	106.2	111.1	115.2	117.7	118.5
140°	76.0	82.5	89.1	94.8	97.2	99.7	103.8	107.0	110.3	111.9
142.5°	69.4	76.0	81.7	86.6	89.1	91.5	95.6	98.0	100.5	102.1
145°	62.9	68.6	73.5	77.6	80.1	82.5	85.8	88.2	90.7	91.5
147.5°	55.6	60.5	65.4	69.4	71.1	72.7	76.0	78.4	80.1	80.1
150°	48.2	53.1	57.2	61.3	62.1	63.7	66.2	67.8	69.4	68.6
152.5°	40.9	44.9	49.8	53.1	53.9	55.6	57.2	58.8	59.6	59.6
155°	33.5	37.6	41.7	44.9	45.8	47.4	48.2	49.8	50.7	50.7
157.5°	27.0	31.0	34.3	37.6	38.4	39.2	40.9	41.7	41.7	42.5
160°	21.2	23.7	27.0	29.4	31.0	31.9	33.5	33.5	34.3	34.3
162.5°	15.5	18.0	20.4	22.9	23.7	24.5	26.1	27.0	27.0	27.0
165°	10.6	13.1	13.9	15.5	16.3	18.0	19.6	19.6	20.4	19.6
167.5°	7.4	8.2	9.0	10.6	10.6	11.4	12.3	13.1	13.9	13.9
170°	4.1	4.9	4.9	5.7	5.7	5.7	6.5	7.4	7.4	7.4
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)