

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: P241365

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241365
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-LD4-30-2HI-P125-UNV-EDC1
Description: FAILSAFE FVS8M LED FIXTURE
3FT LENGTH, 2-MODULE LED WITH P125 LENS
Light Source: (168) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

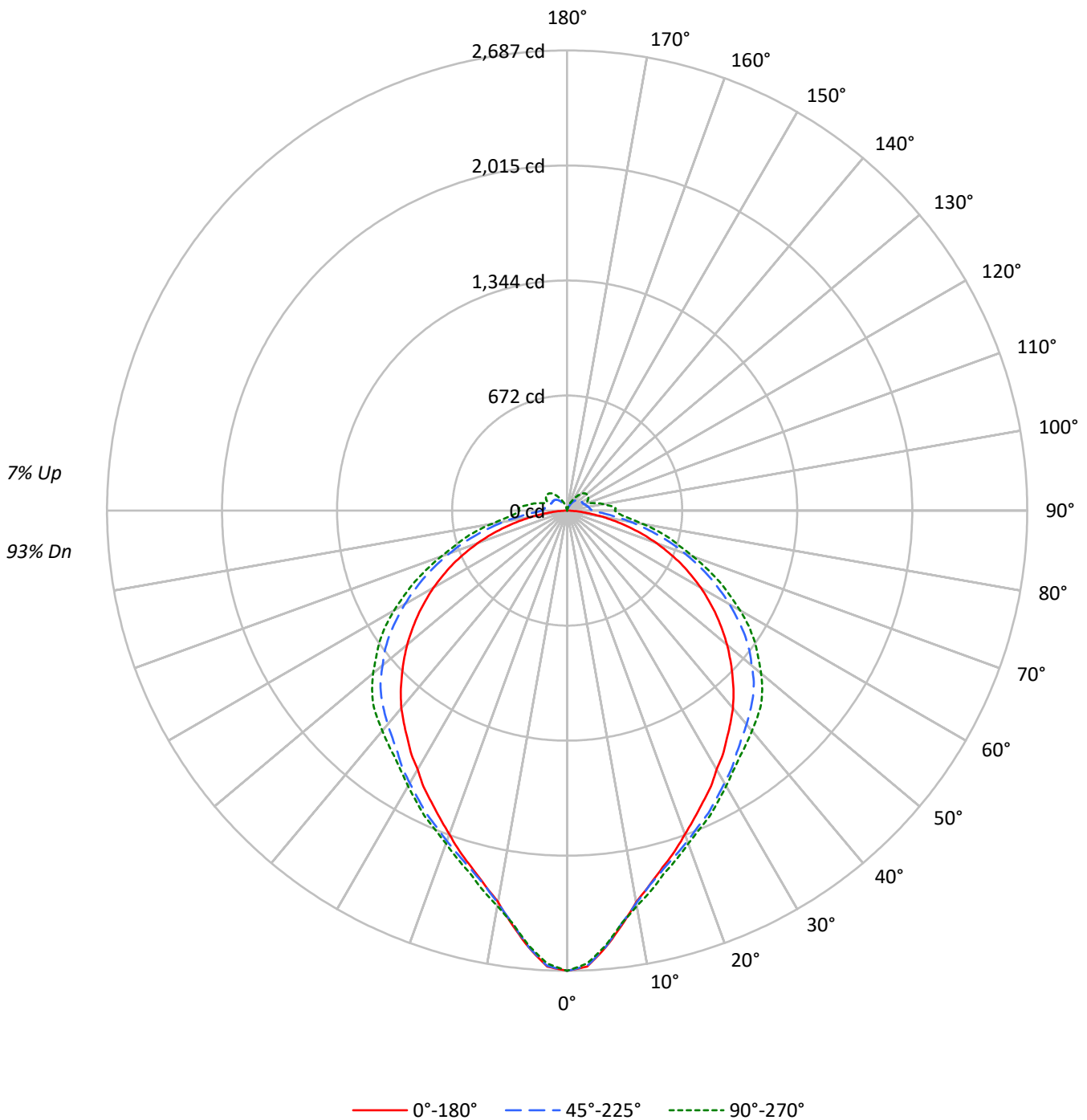
Lumens per Lamp: N/A
Luminaire Lumens: 7279.0 lumens
Efficiency: N/A
Efficacy: 105.0 lumens/watt
Spacing Criteria (0/90/45): 0.98 / 1.03 / 1.26
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 2.85' x H: 0.15')
CIE Type: Direct

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: P241365

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

Luminous Intensity Polar Plot





TEST NUMBER: P241365

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

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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°	15693	15693	15693
5°	14953	14756	14664
10°	13644	13334	13368
15°	12860	12451	12490
20°	12272	11908	11880
25°	11813	11510	11479
30°	11432	11132	11080
35°	11185	10819	10814
40°	11007	10671	10759
45°	10731	10607	10791
50°	10439	10364	10584
55°	10096	10073	10304
60°	9671	9551	9801
65°	9118	8919	9135
70°	8303	8108	8241
75°	7125	7119	7584
80°	5491	5947	6597
85°	3020	4649	6015



TEST NUMBER: P241365

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	236.6	3.3
10°-20°	613.6	8.4
20°-30°	894.0	12.3
30°-40°	1075.8	14.8
40°-50°	1164.0	16.0
50°-60°	1100.2	15.1
60°-70°	873.4	12.0
70°-80°	554.1	7.6
80°-90°	241.3	3.3
90°-100°	138.7	1.9
100°-110°	108.3	1.5
110°-120°	84.5	1.2
120°-130°	77.7	1.1
130°-140°	61.6	0.8
140°-150°	36.6	0.5
150°-160°	15.0	0.2
160°-170°	3.6	0.0
170°-180°	0.1	0.0
0°-30°	1744.1	24.0
0°-40°	2819.9	38.7
0°-60°	5084.1	69.8
0°-90°	6752.9	92.8
90°-120°	331.6	4.6
90°-150°	507.3	7.0
90°-180°	526.0	7.2
0°-180°	7279.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2687	2687	2687	2687	2687	
5°	2562	2566	2560	2550	2551	237
15°	2156	2154	2168	2184	2191	608
25°	1877	1916	1950	1968	1969	866
35°	1625	1681	1726	1760	1757	1019
45°	1366	1429	1536	1591	1602	1054
55°	1064	1152	1266	1321	1338	950
65°	732	809	916	952	981	721
75°	376	449	546	599	619	398
85°	71	128	225	281	322	87
90°	2	60	147	202	278	4
95°	1	58	132	189	268	1
105°	1	53	116	157	165	1
115°	1	48	101	121	131	1
125°	1	43	99	132	148	1
135°	2	36	89	125	143	1
145°	2	23	65	92	105	1
155°	2	10	33	53	58	1
165°	3	3	11	19	23	1
175°	0	0	0	0	0	0
180°	0	0	0	0	0	



TEST NUMBER: P241365

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2687.4	2687.4	2687.4	2687.4	2687.4	2687.4	2687.4	2687.4	2687.4	2687.4	2687.4
2.5°	2664.8	2661.0	2662.0	2657.3	2659.2	2662.0	2662.0	2664.8	2665.7	2663.9	2661.0
5°	2562.3	2568.0	2564.2	2561.4	2562.3	2566.1	2565.2	2568.0	2565.2	2566.1	2560.5
7.5°	2442.0	2443.9	2437.3	2432.6	2434.5	2435.5	2438.3	2440.2	2444.9	2435.5	2432.6
10°	2321.7	2330.2	2319.8	2318.0	2319.8	2318.9	2323.6	2318.0	2322.7	2322.7	2326.4
12.5°	2235.2	2236.2	2239.9	2227.7	2227.7	2228.7	2227.7	2226.8	2228.7	2234.3	2237.1
15°	2156.3	2159.1	2159.1	2152.5	2152.5	2153.5	2155.3	2157.2	2158.2	2169.4	2167.6
17.5°	2086.7	2083.9	2086.7	2084.8	2088.6	2094.2	2093.3	2097.1	2102.7	2102.7	2109.3
20°	2011.5	2016.2	2021.9	2016.2	2026.6	2031.3	2034.1	2037.8	2041.6	2051.9	2052.9
22.5°	1942.0	1951.4	1953.2	1951.4	1965.5	1970.2	1974.9	1978.6	1992.7	1991.8	1997.4
25°	1877.1	1885.6	1886.5	1893.1	1908.1	1915.7	1918.5	1926.9	1934.5	1939.1	1949.5
27.5°	1817.0	1821.7	1822.6	1835.8	1845.2	1852.7	1862.1	1875.2	1879.0	1889.3	1891.2
30°	1745.5	1755.9	1761.5	1772.8	1791.6	1795.3	1804.7	1813.2	1827.3	1832.0	1837.6
32.5°	1691.0	1695.7	1697.6	1712.6	1728.6	1738.9	1745.5	1751.2	1768.1	1778.4	1786.9
35°	1625.2	1633.7	1637.4	1653.4	1666.6	1680.7	1685.4	1701.3	1708.9	1723.0	1725.8
37.5°	1566.0	1572.6	1577.3	1589.5	1607.3	1621.4	1622.4	1640.2	1653.4	1663.7	1675.0
40°	1505.8	1507.7	1515.2	1525.6	1547.2	1551.9	1563.2	1582.0	1602.6	1615.8	1629.9
42.5°	1438.1	1439.1	1448.5	1461.6	1485.1	1491.7	1507.7	1527.4	1549.1	1572.6	1582.9
45°	1365.8	1369.5	1382.7	1399.6	1419.3	1428.7	1443.8	1469.2	1493.6	1519.0	1535.9
47.5°	1292.5	1300.9	1312.2	1329.1	1351.7	1363.9	1378.0	1409.0	1431.6	1455.1	1478.6
50°	1219.1	1226.7	1237.9	1257.7	1282.1	1295.3	1307.5	1340.4	1371.4	1392.1	1407.1
52.5°	1141.1	1148.6	1161.8	1185.3	1213.5	1221.0	1238.9	1269.9	1299.0	1320.7	1341.3
55°	1064.0	1068.7	1086.6	1106.3	1135.5	1151.5	1162.7	1193.8	1219.1	1248.3	1266.1
57.5°	980.4	987.0	1005.8	1023.6	1056.5	1068.7	1081.9	1112.9	1143.9	1164.6	1180.6
60°	901.4	906.1	922.1	941.8	969.1	985.1	998.2	1028.3	1052.8	1076.3	1095.1
62.5°	814.0	820.6	835.6	857.2	886.4	897.7	916.5	938.1	969.1	985.1	1005.8
65°	732.2	738.8	751.0	770.8	793.3	809.3	824.4	846.9	872.3	893.9	916.5
67.5°	642.0	649.5	664.6	685.2	710.6	721.9	733.2	756.7	783.9	805.6	823.4
70°	554.6	559.3	575.3	592.2	613.8	627.0	638.2	665.5	689.0	712.5	730.4
72.5°	465.3	469.0	484.1	502.9	525.4	541.4	551.8	572.4	595.9	619.4	642.0
75°	376.0	383.5	394.8	411.7	435.2	449.3	457.8	483.1	503.8	528.3	546.1
77.5°	287.6	294.2	309.2	326.2	347.8	360.9	369.4	393.8	413.6	435.2	457.8
80°	210.6	210.6	228.4	240.6	263.2	274.5	283.9	303.6	326.2	347.8	373.2
82.5°	131.6	136.3	148.5	165.4	185.2	195.5	204.0	223.7	247.2	269.8	291.4
85°	71.4	72.4	84.6	99.6	120.3	127.8	139.1	159.8	180.5	201.2	224.7
87.5°	21.6	27.3	39.5	56.4	72.4	82.7	90.2	111.9	130.7	151.3	174.8
90°	1.9	6.6	18.8	33.8	51.7	60.2	70.5	89.3	108.1	129.7	146.6
92.5°	0.9	5.6	16.9	32.0	49.8	58.3	68.6	86.5	106.2	123.1	138.2
95°	0.9	4.7	16.0	32.0	48.9	58.3	66.7	85.5	103.4	118.4	132.5
97.5°	0.9	4.7	16.0	31.0	47.9	56.4	65.8	83.7	99.6	114.7	130.7
100°	0.9	4.7	15.0	30.1	47.0	56.4	64.9	80.8	95.9	111.9	125.0
102.5°	0.9	4.7	15.0	30.1	46.1	54.5	62.0	78.0	93.1	106.2	120.3
105°	0.9	3.8	14.1	29.1	44.2	52.6	60.2	75.2	89.3	103.4	115.6
107.5°	0.9	3.8	14.1	27.3	43.2	50.8	59.2	73.3	86.5	99.6	111.9
110°	0.9	3.8	13.2	27.3	41.4	49.8	57.3	71.4	84.6	96.8	107.2



TEST NUMBER: P241365

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

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.9	3.8	13.2	26.3	40.4	47.9	55.5	70.5	82.7	94.0	104.3
115°	0.9	2.8	12.2	25.4	40.4	47.9	54.5	68.6	81.8	92.1	100.6
117.5°	0.9	2.8	12.2	24.4	38.5	46.1	53.6	67.7	79.9	91.2	99.6
120°	0.9	2.8	11.3	24.4	38.5	45.1	52.6	66.7	79.0	90.2	99.6
122.5°	0.9	2.8	11.3	23.5	36.7	44.2	51.7	65.8	78.0	89.3	99.6
125°	0.9	1.9	10.3	22.6	35.7	43.2	50.8	64.9	77.1	89.3	98.7
127.5°	0.9	1.9	9.4	21.6	34.8	41.4	48.9	63.0	75.2	87.4	97.8
130°	0.9	1.9	9.4	19.7	32.9	39.5	47.0	61.1	73.3	84.6	95.9
132.5°	0.9	1.9	8.5	18.8	31.0	37.6	44.2	58.3	70.5	81.8	92.1
135°	1.9	1.9	7.5	16.9	29.1	35.7	42.3	55.5	67.7	79.0	89.3
137.5°	1.9	1.9	6.6	16.0	26.3	32.9	38.5	51.7	63.0	74.3	84.6
140°	1.9	1.9	5.6	14.1	23.5	29.1	34.8	46.1	58.3	68.6	79.0
142.5°	1.9	1.9	4.7	12.2	20.7	26.3	31.0	41.4	51.7	63.0	72.4
145°	1.9	1.9	3.8	10.3	17.9	22.6	26.3	35.7	45.1	55.5	64.9
147.5°	1.9	1.9	3.8	8.5	15.0	18.8	22.6	31.0	39.5	47.9	56.4
150°	1.9	1.9	2.8	6.6	12.2	15.0	18.8	26.3	32.9	40.4	48.9
152.5°	1.9	1.9	1.9	5.6	10.3	13.2	15.0	21.6	27.3	33.8	40.4
155°	1.9	1.9	1.9	4.7	8.5	10.3	12.2	16.9	22.6	28.2	32.9
157.5°	1.9	1.9	1.9	3.8	6.6	7.5	9.4	14.1	17.9	22.6	26.3
160°	2.8	1.9	1.9	2.8	4.7	5.6	7.5	10.3	14.1	16.9	20.7
162.5°	2.8	1.9	1.9	1.9	3.8	4.7	5.6	7.5	10.3	13.2	15.0
165°	2.8	2.8	1.9	1.9	2.8	2.8	3.8	5.6	6.6	9.4	11.3
167.5°	2.8	2.8	1.9	1.9	1.9	1.9	2.8	3.8	4.7	5.6	6.6
170°	2.8	2.8	1.9	1.9	1.9	1.9	1.9	1.9	2.8	2.8	3.8
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: P241365

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

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	2687.4	2687.4	2687.4	2687.4	2687.4	2687.4	2687.4	2687.4	2687.4	2687.4
2.5°	2658.2	2660.1	2655.4	2656.3	2654.5	2655.4	2652.6	2651.6	2653.5	2647.9
5°	2561.4	2556.7	2551.1	2551.1	2550.1	2548.2	2547.3	2549.2	2548.2	2551.1
7.5°	2435.5	2427.0	2428.9	2424.2	2429.8	2427.9	2429.8	2431.7	2431.7	2431.7
10°	2319.8	2328.3	2332.1	2335.8	2340.5	2337.7	2344.3	2346.2	2348.0	2344.3
12.5°	2243.7	2243.7	2250.3	2252.2	2252.2	2254.0	2261.6	2255.9	2264.4	2271.9
15°	2172.3	2177.9	2183.5	2184.5	2184.5	2193.9	2195.8	2192.9	2193.9	2191.1
17.5°	2114.9	2117.7	2119.6	2125.3	2130.9	2130.0	2131.8	2136.5	2134.7	2131.8
20°	2056.6	2065.1	2071.7	2070.7	2071.7	2074.5	2075.4	2076.4	2071.7	2068.9
22.5°	2004.0	2004.0	2015.3	2019.0	2022.8	2021.9	2020.0	2021.9	2021.9	2015.3
25°	1949.5	1958.9	1964.5	1962.6	1968.3	1973.0	1968.3	1967.3	1971.1	1969.2
27.5°	1904.4	1904.4	1911.0	1921.3	1920.4	1922.2	1918.5	1914.7	1911.9	1911.0
30°	1844.2	1853.6	1863.0	1861.1	1864.0	1867.7	1867.7	1864.0	1857.4	1857.4
32.5°	1791.6	1798.2	1801.9	1813.2	1817.0	1816.0	1807.6	1801.0	1803.8	1803.8
35°	1737.1	1744.6	1759.6	1757.7	1759.6	1761.5	1758.7	1755.9	1755.9	1756.8
37.5°	1678.8	1702.3	1701.3	1720.1	1723.9	1723.0	1720.1	1711.7	1713.6	1717.3
40°	1644.9	1654.3	1673.1	1676.9	1678.8	1680.7	1689.1	1683.5	1680.7	1678.8
42.5°	1601.7	1617.7	1627.1	1638.4	1646.8	1648.7	1644.0	1641.2	1643.1	1642.1
45°	1548.1	1569.7	1582.0	1592.3	1591.4	1593.2	1598.9	1605.5	1606.4	1601.7
47.5°	1497.4	1503.0	1528.4	1525.6	1536.8	1545.3	1543.4	1539.7	1546.2	1545.3
50°	1426.9	1446.6	1453.2	1471.0	1472.9	1467.3	1473.9	1477.6	1478.6	1478.6
52.5°	1357.3	1369.5	1388.3	1389.3	1395.8	1398.7	1402.4	1404.3	1408.1	1406.2
55°	1285.9	1293.4	1306.6	1317.8	1320.7	1319.7	1324.4	1331.9	1335.7	1338.5
57.5°	1200.3	1217.3	1221.0	1232.3	1230.4	1237.0	1245.5	1249.2	1254.9	1257.7
60°	1107.3	1120.4	1133.6	1137.4	1141.1	1146.8	1155.2	1154.3	1162.7	1167.4
62.5°	1022.7	1028.3	1039.6	1047.1	1048.1	1048.1	1056.5	1060.3	1068.7	1070.6
65°	926.8	940.0	944.7	947.5	952.2	952.2	959.7	963.5	970.0	981.3
67.5°	837.5	849.7	859.1	861.0	864.8	866.6	864.8	869.5	874.2	879.8
70°	744.5	755.7	768.0	775.5	773.6	772.7	773.6	777.4	783.9	782.1
72.5°	655.2	673.0	678.7	689.9	690.9	692.8	688.1	686.2	691.8	689.0
75°	564.9	583.7	592.2	604.4	598.8	601.6	601.6	610.0	617.6	619.4
77.5°	479.4	498.2	509.5	515.1	524.5	533.9	535.8	540.5	535.8	535.8
80°	392.9	409.8	430.5	437.1	439.9	442.7	445.5	446.5	447.4	447.4
82.5°	316.8	338.4	349.7	351.5	353.4	357.2	361.9	367.5	375.0	376.0
85°	246.3	259.4	269.8	278.2	281.0	286.7	297.0	306.4	316.8	321.5
87.5°	190.8	201.2	212.4	221.8	229.4	234.1	247.2	262.3	281.0	290.4
90°	159.8	171.1	182.4	194.6	202.1	209.6	224.7	241.6	265.1	278.2
92.5°	150.4	163.6	176.7	188.0	193.6	199.3	214.3	236.9	267.0	284.8
95°	147.6	159.8	170.1	181.4	188.9	196.5	214.3	236.9	258.5	267.9
97.5°	142.9	153.2	164.5	178.6	185.2	192.7	208.7	223.7	233.1	236.9
100°	136.3	147.6	159.8	172.0	178.6	184.2	195.5	205.9	212.4	216.2
102.5°	131.6	141.9	153.2	164.5	169.2	173.9	183.3	190.8	193.6	194.6
105°	126.9	136.3	146.6	154.2	157.0	160.7	165.4	165.4	165.4	165.4
107.5°	121.3	129.7	137.2	141.0	142.9	143.8	144.8	143.8	143.8	142.9
110°	116.6	123.1	127.8	129.7	129.7	130.7	130.7	130.7	130.7	130.7



TEST NUMBER: P241365

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

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	111.9	117.5	120.3	122.2	122.2	123.1	124.1	126.0	126.9	126.9
115°	108.1	113.7	116.6	119.4	121.3	122.2	125.0	128.8	130.7	130.7
117.5°	106.2	112.8	116.6	121.3	124.1	126.0	130.7	134.4	136.3	137.2
120°	107.2	113.7	119.4	125.0	127.8	129.7	135.4	139.1	141.9	142.9
122.5°	108.1	114.7	122.2	127.8	130.7	133.5	138.2	142.9	145.7	146.6
125°	107.2	115.6	123.1	129.7	132.5	135.4	140.1	144.8	147.6	148.5
127.5°	106.2	114.7	123.1	129.7	132.5	136.3	141.0	144.8	147.6	148.5
130°	104.3	112.8	121.3	128.8	131.6	134.4	139.1	143.8	146.6	148.5
132.5°	101.5	110.0	118.4	125.0	128.8	131.6	137.2	141.9	145.7	146.6
135°	97.8	106.2	114.7	122.2	125.0	128.8	133.5	138.2	141.0	142.9
137.5°	93.1	101.5	109.0	116.6	119.4	122.2	127.8	132.5	135.4	136.3
140°	87.4	94.9	102.5	109.0	111.9	114.7	119.4	123.1	126.9	128.8
142.5°	79.9	87.4	94.0	99.6	102.5	105.3	110.0	112.8	115.6	117.5
145°	72.4	79.0	84.6	89.3	92.1	94.9	98.7	101.5	104.3	105.3
147.5°	63.9	69.6	75.2	79.9	81.8	83.7	87.4	90.2	92.1	92.1
150°	55.5	61.1	65.8	70.5	71.4	73.3	76.1	78.0	79.9	79.0
152.5°	47.0	51.7	57.3	61.1	62.0	63.9	65.8	67.7	68.6	68.6
155°	38.5	43.2	47.9	51.7	52.6	54.5	55.5	57.3	58.3	58.3
157.5°	31.0	35.7	39.5	43.2	44.2	45.1	47.0	47.9	47.9	48.9
160°	24.4	27.3	31.0	33.8	35.7	36.7	38.5	38.5	39.5	39.5
162.5°	17.9	20.7	23.5	26.3	27.3	28.2	30.1	31.0	31.0	31.0
165°	12.2	15.0	16.0	17.9	18.8	20.7	22.6	22.6	23.5	22.6
167.5°	8.5	9.4	10.3	12.2	12.2	13.2	14.1	15.0	16.0	16.0
170°	4.7	5.6	5.6	6.6	6.6	6.6	7.5	8.5	8.5	8.5
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)