

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: P241341

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241341
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-LD4-30-3HI-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

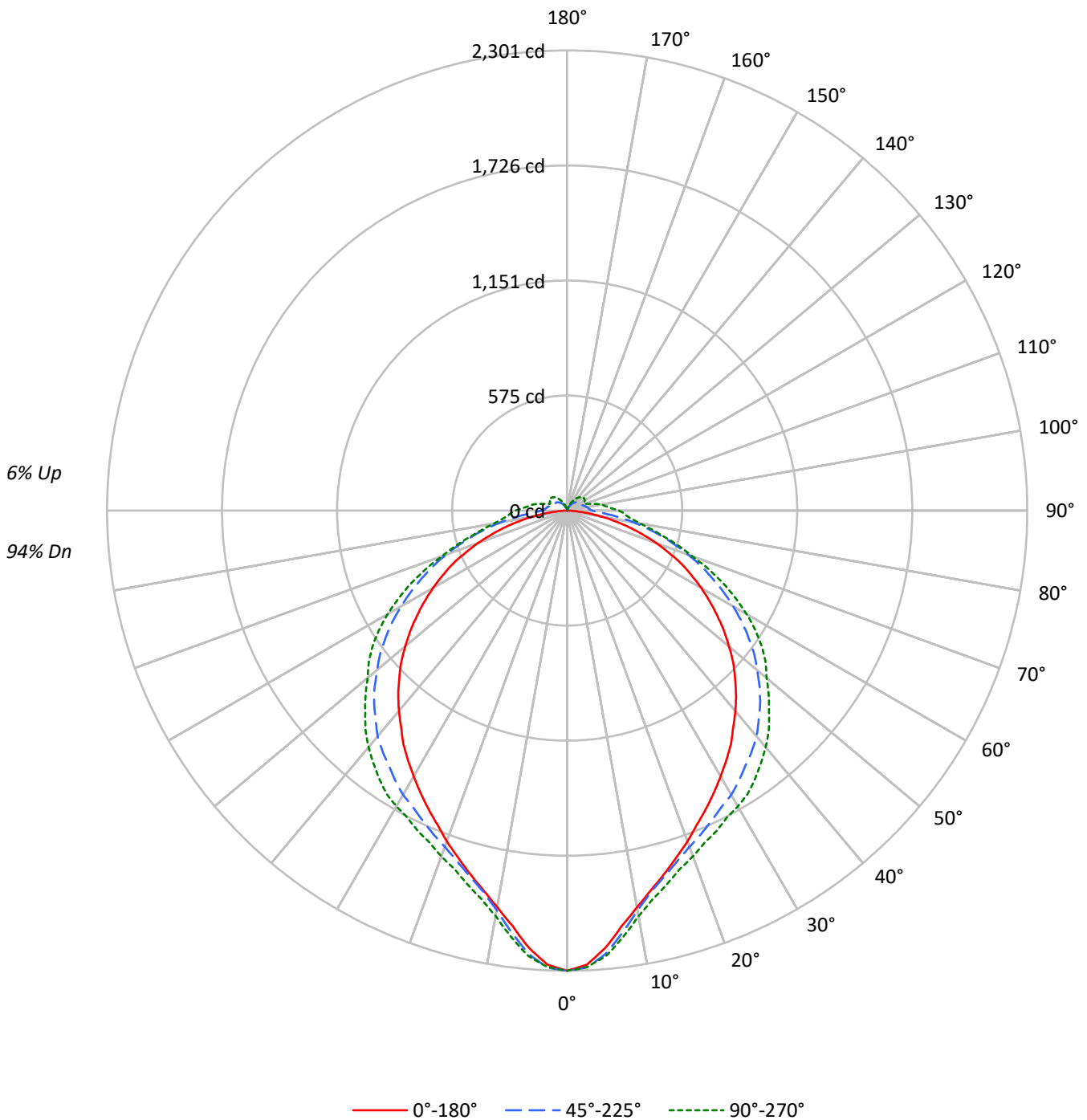
Lumens per Lamp: N/A
Luminaire Lumens: 6344.0 lumens
Efficiency: N/A
Efficacy: 95.4 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.11 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 1.85' x H: 0.15')
CIE Type: Direct

Input Watts (W): 66.5
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: P241341

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

Luminous Intensity Polar Plot





TEST NUMBER: P241341

CATALOG NUMBER: FVS8M-2-LD4-30-3HI-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°	20684	20684	20684
5°	19670	19696	19779
10°	18127	17838	18070
15°	17134	16632	16958
20°	16364	15868	16261
25°	15728	15411	15857
30°	15231	15151	15674
35°	14840	14825	15516
40°	14403	14649	15235
45°	13991	14277	14807
50°	13509	13787	14345
55°	12912	13272	14102
60°	12256	12555	13399
65°	11497	11654	12338
70°	10239	10618	10763
75°	8557	9323	9407
80°	6325	7799	8407
85°	3063	5996	8583



TEST NUMBER: P241341

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	205.7	3.2
10°-20°	536.0	8.4
20°-30°	789.5	12.4
30°-40°	969.3	15.3
40°-50°	1031.1	16.3
50°-60°	964.8	15.2
60°-70°	765.1	12.1
70°-80°	477.6	7.5
80°-90°	214.4	3.4
90°-100°	115.0	1.8
100°-110°	83.8	1.3
110°-120°	61.3	1.0
120°-130°	54.1	0.9
130°-140°	40.7	0.6
140°-150°	24.0	0.4
150°-160°	9.7	0.2
160°-170°	1.9	0.0
170°-180°	0.0	0.0
0°-30°	1531.2	24.1
0°-40°	2500.5	39.4
0°-60°	4496.4	70.9
0°-90°	5953.5	93.8
90°-120°	260.1	4.1
90°-150°	378.9	6.0
90°-180°	390.0	6.1
0°-180°	6344.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2301	2301	2301	2301	2301	
5°	2195	2206	2224	2229	2235	203
15°	1880	1882	1890	1910	1933	530
25°	1644	1665	1710	1755	1767	758
35°	1427	1477	1555	1634	1638	891
45°	1187	1260	1365	1415	1428	916
55°	916	998	1107	1163	1190	820
65°	632	698	801	849	861	620
75°	319	385	484	520	499	339
85°	56	118	201	251	298	72
90°	1	56	125	184	259	3
95°	0	49	109	158	206	0
105°	0	40	89	120	130	0
115°	0	34	73	87	94	0
125°	0	29	69	94	104	0
135°	1	23	58	83	95	1
145°	1	14	42	61	70	1
155°	1	5	22	35	38	0
165°	1	1	5	10	12	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P241341

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2301.1	2301.1	2301.1	2301.1	2301.1	2301.1	2301.1	2301.1	2301.1	2301.1	2301.1
2.5°	2272.0	2274.8	2275.7	2276.7	2276.7	2279.5	2279.5	2281.4	2284.2	2286.1	2287.0
5°	2194.9	2200.5	2195.8	2200.5	2204.3	2206.2	2209.0	2210.9	2216.5	2222.1	2224.0
7.5°	2094.3	2096.2	2099.0	2101.8	2105.6	2104.6	2106.5	2113.1	2119.7	2128.1	2127.2
10°	2013.5	2013.5	2013.5	2013.5	2013.5	2016.3	2017.2	2020.0	2024.7	2033.2	2028.5
12.5°	1942.0	1943.9	1946.7	1945.8	1943.9	1943.0	1940.1	1943.9	1944.8	1950.5	1948.6
15°	1880.0	1877.2	1880.0	1881.9	1880.0	1881.9	1880.9	1883.7	1882.8	1884.7	1890.3
17.5°	1817.0	1823.6	1825.5	1820.8	1822.6	1824.5	1825.5	1824.5	1824.5	1832.0	1835.8
20°	1759.7	1762.5	1762.5	1761.5	1765.3	1766.2	1770.9	1770.9	1775.6	1785.0	1788.8
22.5°	1697.6	1703.3	1707.0	1706.1	1716.4	1716.4	1717.4	1721.1	1734.3	1738.0	1750.3
25°	1644.0	1649.7	1651.6	1655.3	1662.8	1664.7	1664.7	1680.7	1685.4	1696.7	1709.8
27.5°	1589.5	1593.3	1595.2	1601.7	1614.0	1614.0	1618.7	1634.6	1645.0	1658.1	1671.3
30°	1534.1	1542.5	1542.5	1552.9	1563.2	1566.0	1577.3	1591.4	1608.3	1619.6	1641.2
32.5°	1480.5	1484.2	1488.0	1504.0	1515.3	1523.7	1532.2	1550.0	1564.1	1583.9	1599.9
35°	1426.9	1431.6	1435.4	1452.3	1462.6	1476.7	1487.1	1509.6	1523.7	1542.5	1554.7
37.5°	1363.9	1371.4	1379.9	1393.1	1413.7	1425.0	1434.4	1461.7	1477.7	1494.6	1517.1
40°	1308.5	1316.0	1325.4	1339.5	1362.0	1370.5	1382.7	1405.3	1431.6	1451.3	1473.9
42.5°	1250.2	1258.6	1268.0	1285.0	1302.8	1314.1	1328.2	1351.7	1378.0	1402.5	1417.5
45°	1187.2	1194.7	1206.9	1222.9	1245.5	1259.6	1270.9	1299.1	1319.7	1345.1	1364.9
47.5°	1127.0	1130.8	1144.0	1165.6	1185.3	1202.2	1213.5	1238.0	1265.2	1284.0	1305.6
50°	1056.6	1061.3	1075.4	1097.0	1123.3	1139.3	1145.8	1175.9	1198.5	1222.9	1238.9
52.5°	987.9	995.5	1012.4	1032.1	1056.6	1070.7	1082.9	1104.5	1133.6	1155.2	1179.7
55°	916.5	925.9	940.9	962.6	984.2	998.3	1012.4	1036.8	1063.1	1088.5	1107.3
57.5°	845.1	854.5	869.5	891.1	912.7	924.0	938.1	963.5	993.6	1018.0	1035.9
60°	774.6	781.1	797.1	815.9	837.5	851.6	862.0	888.3	916.5	938.1	958.8
62.5°	701.2	707.8	721.0	738.8	763.3	775.5	784.9	812.2	838.5	859.2	881.7
65°	631.7	631.7	647.7	662.7	683.4	697.5	711.6	735.1	757.6	780.2	800.9
67.5°	548.0	556.5	567.8	584.7	608.2	620.4	634.5	657.1	677.7	705.0	724.7
70°	473.8	477.5	490.7	509.5	528.3	540.5	554.6	575.3	598.8	623.2	643.0
72.5°	393.9	401.4	412.7	434.3	449.3	461.5	474.7	496.3	518.9	543.3	563.1
75°	318.7	325.2	336.5	353.4	373.2	385.4	395.7	418.3	439.9	467.2	484.1
77.5°	247.2	250.0	262.3	278.2	302.7	309.3	321.5	342.2	366.6	388.2	408.9
80°	176.7	182.4	191.8	206.8	228.4	238.8	249.1	271.7	292.3	315.8	334.6
82.5°	110.9	119.4	126.9	146.6	163.6	172.0	184.2	204.0	227.5	247.2	264.1
85°	56.4	63.0	74.3	88.4	107.2	117.5	126.0	147.6	167.3	186.1	201.2
87.5°	21.6	26.3	35.7	50.8	67.7	76.1	86.5	104.3	123.1	138.2	153.2
90°	0.9	6.6	16.9	31.0	47.0	55.5	63.9	81.8	97.8	111.9	125.0
92.5°	0.0	4.7	14.1	28.2	43.2	50.8	59.2	74.3	87.4	100.6	113.7
95°	0.0	3.8	13.2	26.3	40.4	48.9	56.4	70.5	83.7	95.9	109.0
97.5°	0.0	3.8	12.2	25.4	39.5	47.0	53.6	66.7	79.0	92.1	104.3
100°	0.0	3.8	12.2	24.4	37.6	44.2	50.8	63.0	76.1	88.4	99.6
102.5°	0.0	2.8	11.3	22.6	35.7	42.3	47.9	60.2	72.4	83.7	94.9
105°	0.0	2.8	10.3	21.6	33.8	39.5	46.1	58.3	69.6	79.9	89.3
107.5°	0.0	2.8	10.3	20.7	32.0	38.5	44.2	55.5	66.7	76.1	84.6
110°	0.0	1.9	9.4	19.7	31.0	36.7	42.3	53.6	63.9	72.4	80.8



TEST NUMBER: P241341

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

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.0	1.9	8.5	18.8	29.1	34.8	40.4	51.7	61.1	69.6	76.1
115°	0.0	1.9	8.5	17.9	28.2	33.8	39.5	49.8	59.2	66.7	73.3
117.5°	0.0	1.9	7.5	16.9	27.3	32.9	37.6	47.9	57.3	64.9	71.4
120°	0.0	1.9	7.5	16.0	26.3	32.0	36.7	47.0	55.5	63.9	70.5
122.5°	0.0	0.9	6.6	15.0	25.4	30.1	35.7	45.1	54.5	63.0	69.6
125°	0.0	0.9	6.6	14.1	24.4	29.1	34.8	44.2	53.6	62.0	68.6
127.5°	0.0	0.9	5.6	13.2	22.6	27.3	32.9	42.3	51.7	60.2	66.7
130°	0.0	0.9	4.7	12.2	21.6	26.3	31.0	40.4	48.9	57.3	63.9
132.5°	0.9	0.9	4.7	11.3	19.7	24.4	29.1	37.6	46.1	54.5	61.1
135°	0.9	0.9	3.8	10.3	17.9	22.6	26.3	35.7	43.2	51.7	58.3
137.5°	0.9	0.9	3.8	9.4	16.9	20.7	24.4	32.9	40.4	47.9	54.5
140°	0.9	0.9	2.8	8.5	15.0	18.8	22.6	30.1	37.6	44.2	50.8
142.5°	0.9	0.9	1.9	6.6	13.2	16.0	19.7	27.3	33.8	40.4	46.1
145°	0.9	0.9	1.9	5.6	11.3	14.1	16.9	23.5	30.1	35.7	42.3
147.5°	0.9	0.9	0.9	4.7	8.5	11.3	14.1	20.7	26.3	32.0	37.6
150°	0.9	0.9	0.9	2.8	6.6	9.4	11.3	16.9	21.6	27.3	32.0
152.5°	0.9	0.9	0.9	1.9	5.6	6.6	9.4	13.2	17.9	22.6	27.3
155°	0.9	0.9	0.9	1.9	3.8	4.7	6.6	10.3	14.1	17.9	21.6
157.5°	0.9	0.9	0.9	0.9	2.8	3.8	4.7	7.5	10.3	13.2	16.9
160°	0.9	0.9	0.9	0.9	1.9	1.9	2.8	4.7	7.5	9.4	12.2
162.5°	0.9	0.9	0.9	0.9	0.9	0.9	1.9	2.8	4.7	6.6	8.5
165°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.9	2.8	3.8	4.7
167.5°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.9	0.9	1.9	2.8
170°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9
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: P241341

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

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	2301.1	2301.1	2301.1	2301.1	2301.1	2301.1	2301.1	2301.1	2301.1	2301.1
2.5°	2287.9	2287.0	2287.9	2287.0	2287.0	2286.1	2287.0	2286.1	2284.2	2284.2
5°	2224.0	2230.6	2231.5	2233.4	2228.7	2231.5	2231.5	2231.5	2231.5	2235.3
7.5°	2132.8	2142.2	2142.2	2142.2	2146.9	2147.9	2150.7	2150.7	2149.8	2149.8
10°	2036.0	2043.5	2046.4	2047.3	2052.9	2052.9	2057.6	2055.8	2058.6	2058.6
12.5°	1949.5	1953.3	1963.6	1973.0	1972.1	1976.8	1981.5	1985.3	1982.4	1988.1
15°	1892.2	1898.8	1903.5	1906.3	1910.1	1915.7	1920.4	1926.0	1927.9	1932.6
17.5°	1835.8	1845.2	1853.7	1863.1	1867.8	1869.6	1872.5	1875.3	1878.1	1878.1
20°	1798.2	1805.7	1812.3	1816.1	1820.8	1825.5	1826.4	1832.0	1833.9	1839.6
22.5°	1759.7	1765.3	1773.8	1783.2	1786.0	1789.7	1791.6	1794.4	1799.1	1797.3
25°	1722.1	1732.4	1743.7	1748.4	1755.0	1760.6	1764.4	1770.0	1771.9	1767.2
27.5°	1688.2	1694.8	1716.4	1726.8	1731.5	1731.5	1731.5	1737.1	1736.2	1730.5
30°	1650.6	1669.4	1684.5	1689.2	1692.9	1697.6	1703.3	1706.1	1704.2	1707.0
32.5°	1615.8	1629.0	1648.7	1661.9	1665.7	1670.4	1673.2	1677.9	1679.8	1680.7
35°	1576.4	1596.1	1620.5	1627.1	1633.7	1640.3	1642.2	1639.3	1643.1	1637.5
37.5°	1535.9	1563.2	1568.8	1585.8	1588.6	1588.6	1589.5	1591.4	1593.3	1591.4
40°	1492.7	1502.1	1522.8	1528.4	1530.3	1533.1	1538.8	1539.7	1540.6	1544.4
42.5°	1437.2	1453.2	1462.6	1481.4	1482.4	1482.4	1482.4	1485.2	1489.9	1492.7
45°	1375.2	1393.1	1406.2	1415.6	1414.7	1419.4	1424.1	1424.1	1426.9	1427.8
47.5°	1320.7	1329.1	1336.7	1346.1	1353.6	1353.6	1356.4	1360.2	1363.9	1367.7
50°	1253.0	1268.0	1276.5	1285.9	1284.0	1287.8	1297.2	1301.9	1300.0	1301.9
52.5°	1191.0	1202.2	1216.3	1222.0	1228.6	1233.3	1234.2	1241.7	1247.4	1251.1
55°	1125.2	1133.6	1147.7	1162.8	1162.8	1164.6	1175.9	1182.5	1190.0	1190.0
57.5°	1052.8	1066.9	1082.9	1087.6	1095.1	1103.5	1112.0	1114.8	1117.6	1116.7
60°	972.9	992.6	1007.7	1018.0	1021.8	1025.5	1025.5	1035.9	1036.8	1036.8
62.5°	899.6	916.5	927.8	931.5	932.5	938.1	940.0	943.8	941.9	949.4
65°	819.7	834.7	842.2	846.0	848.8	847.9	850.7	854.5	862.0	861.0
67.5°	744.5	750.1	757.6	763.3	763.3	768.0	770.8	775.5	767.0	766.1
70°	661.8	674.0	677.7	688.1	684.3	684.3	676.8	670.2	661.8	663.6
72.5°	580.9	591.3	602.5	598.8	598.8	596.0	590.3	584.7	579.0	582.8
75°	500.1	514.2	520.8	519.8	519.8	517.9	511.4	507.6	503.8	499.1
77.5°	426.8	434.3	442.7	446.5	447.4	446.5	439.9	433.3	432.4	430.5
80°	347.8	357.2	365.7	372.2	373.2	373.2	371.3	371.3	368.5	370.4
82.5°	275.4	285.8	298.0	305.5	307.4	312.1	314.0	316.8	322.4	327.1
85°	211.5	226.5	237.8	247.2	251.0	253.8	264.1	276.4	289.5	298.0
87.5°	167.3	180.5	193.6	204.0	209.6	217.1	229.4	247.2	267.9	282.0
90°	139.1	152.3	166.4	178.6	184.2	190.8	205.9	223.7	248.2	259.4
92.5°	126.0	140.1	151.3	161.7	167.3	173.0	187.1	202.1	220.0	227.5
95°	121.3	131.6	141.0	152.3	157.9	164.5	175.8	188.0	199.3	205.9
97.5°	114.7	125.0	135.4	144.8	150.4	155.1	163.6	174.8	184.2	188.0
100°	110.0	119.4	127.8	136.3	141.0	144.8	155.1	165.4	171.1	173.9
102.5°	104.3	112.8	120.3	127.8	131.6	135.4	143.8	149.5	151.3	151.3
105°	97.8	106.2	112.8	119.4	120.3	123.1	127.8	129.7	129.7	129.7
107.5°	92.1	98.7	104.3	108.1	109.0	110.0	110.9	110.9	109.0	109.0
110°	87.4	92.1	95.9	97.8	96.8	97.8	97.8	96.8	96.8	96.8



TEST NUMBER: P241341

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

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	82.7	86.5	88.4	90.2	90.2	90.2	90.2	92.1	92.1	92.1
115°	79.0	82.7	85.5	87.4	87.4	88.4	90.2	93.1	94.0	94.0
117.5°	77.1	81.8	84.6	87.4	89.3	90.2	94.0	95.9	97.8	97.8
120°	76.1	81.8	86.5	90.2	92.1	94.0	96.8	99.6	101.5	101.5
122.5°	76.1	81.8	87.4	91.2	94.0	94.9	98.7	101.5	103.4	103.4
125°	75.2	81.8	87.4	92.1	94.0	95.9	98.7	101.5	103.4	104.3
127.5°	73.3	79.9	85.5	90.2	92.1	94.9	97.8	100.6	102.5	103.4
130°	70.5	77.1	82.7	87.4	90.2	92.1	95.9	98.7	100.6	100.6
132.5°	67.7	74.3	79.0	84.6	87.4	89.3	93.1	95.9	97.8	97.8
135°	64.9	70.5	75.2	80.8	82.7	85.5	89.3	92.1	94.0	94.9
137.5°	61.1	66.7	71.4	76.1	79.0	80.8	84.6	87.4	89.3	90.2
140°	56.4	62.0	66.7	71.4	74.3	76.1	79.0	81.8	83.7	83.7
142.5°	51.7	57.3	62.0	65.8	67.7	69.6	72.4	75.2	76.1	77.1
145°	47.0	51.7	56.4	60.2	61.1	63.0	65.8	67.7	69.6	69.6
147.5°	41.4	46.1	49.8	52.6	54.5	55.5	58.3	60.2	61.1	62.0
150°	35.7	40.4	43.2	46.1	47.9	48.9	50.8	52.6	53.6	54.5
152.5°	31.0	33.8	37.6	39.5	41.4	42.3	44.2	45.1	46.1	46.1
155°	25.4	28.2	31.0	32.9	34.8	34.8	36.7	37.6	38.5	38.5
157.5°	19.7	22.6	25.4	27.3	28.2	29.1	30.1	31.0	31.0	32.0
160°	14.1	16.9	19.7	20.7	21.6	22.6	23.5	23.5	24.4	24.4
162.5°	10.3	12.2	14.1	15.0	16.0	16.0	16.9	17.9	17.9	17.9
165°	6.6	7.5	9.4	10.3	10.3	11.3	11.3	12.2	12.2	12.2
167.5°	2.8	3.8	4.7	5.6	5.6	6.6	6.6	6.6	7.5	6.6
170°	0.9	0.9	1.9	1.9	1.9	1.9	2.8	2.8	2.8	2.8
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)