

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: P241361

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241361
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-LD4-30-2STD-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

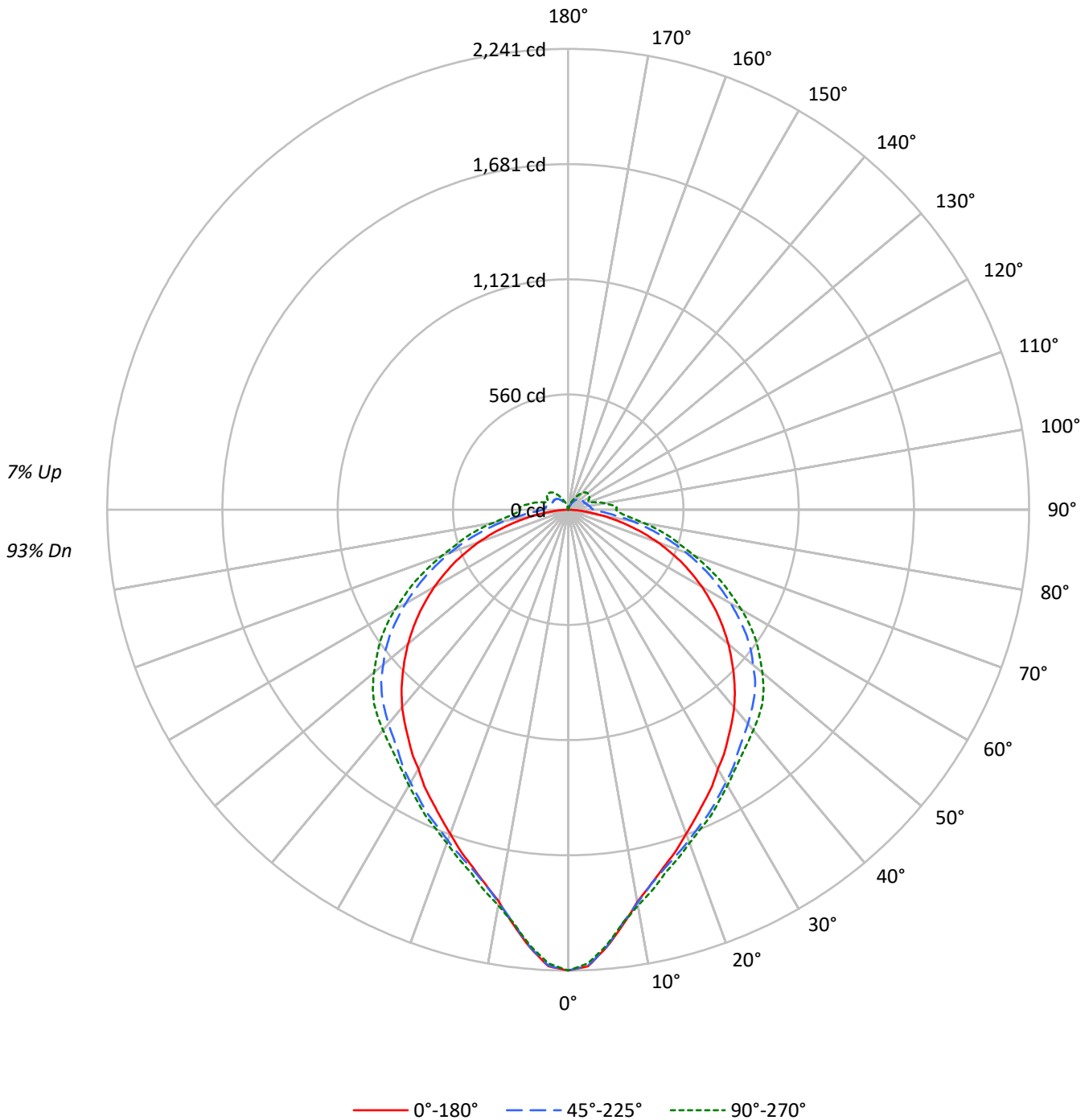
Lumens per Lamp: N/A
Luminaire Lumens: 6069.0 lumens
Efficiency: N/A
Efficacy: 111.0 lumens/watt
Spacing Criteria (0/90/45): 0.98 / 1.03 / 1.26
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 2.85' x H: 0.15')
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P241361

CATALOG NUMBER: FVS8M-3-LD4-30-2STD-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°	13084	13084	13084
5°	12467	12303	12226
10°	11376	11118	11146
15°	10722	10381	10414
20°	10232	9929	9905
25°	9849	9596	9571
30°	9532	9282	9238
35°	9326	9021	9016
40°	9177	8898	8970
45°	8946	8844	8997
50°	8704	8642	8825
55°	8418	8399	8591
60°	8064	7962	8172
65°	7602	7436	7617
70°	6923	6760	6870
75°	5940	5935	6324
80°	4578	4957	5500
85°	2521	3876	5014



TEST NUMBER: P241361

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.3	3.3
10°-20°	511.6	8.4
20°-30°	745.4	12.3
30°-40°	896.9	14.8
40°-50°	970.5	16.0
50°-60°	917.3	15.1
60°-70°	728.2	12.0
70°-80°	462.0	7.6
80°-90°	201.2	3.3
90°-100°	115.7	1.9
100°-110°	90.3	1.5
110°-120°	70.4	1.2
120°-130°	64.8	1.1
130°-140°	51.3	0.8
140°-150°	30.5	0.5
150°-160°	12.5	0.2
160°-170°	3.0	0.0
170°-180°	0.1	0.0
0°-30°	1454.2	24.0
0°-40°	2351.1	38.7
0°-60°	4238.9	69.8
0°-90°	5630.3	92.8
90°-120°	276.4	4.6
90°-150°	423.0	7.0
90°-180°	439.0	7.2
0°-180°	6069.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2241	2241	2241	2241	2241	
5°	2136	2140	2135	2126	2127	197
15°	1798	1796	1807	1821	1827	507
25°	1565	1597	1625	1641	1642	722
35°	1355	1401	1439	1467	1465	850
45°	1139	1191	1281	1327	1335	879
55°	887	960	1056	1101	1116	792
65°	610	675	764	794	818	602
75°	314	375	455	499	516	332
85°	60	107	187	234	268	72
90°	2	50	122	168	232	3
95°	1	49	110	158	223	1
105°	1	44	96	131	138	1
115°	1	40	84	101	109	1
125°	1	36	82	110	124	1
135°	2	30	74	104	119	1
145°	2	19	54	77	88	1
155°	2	9	27	44	49	1
165°	2	2	9	16	19	1
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P241361

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2240.6	2240.6	2240.6	2240.6	2240.6	2240.6	2240.6	2240.6	2240.6	2240.6	2240.6
2.5°	2221.8	2218.7	2219.5	2215.6	2217.1	2219.5	2219.5	2221.8	2222.6	2221.0	2218.7
5°	2136.4	2141.1	2138.0	2135.6	2136.4	2139.5	2138.8	2141.1	2138.8	2139.5	2134.8
7.5°	2036.1	2037.7	2032.2	2028.3	2029.8	2030.6	2033.0	2034.5	2038.4	2030.6	2028.3
10°	1935.8	1942.8	1934.2	1932.6	1934.2	1933.4	1937.3	1932.6	1936.6	1936.6	1939.7
12.5°	1863.7	1864.5	1867.6	1857.4	1857.4	1858.2	1857.4	1856.6	1858.2	1862.9	1865.2
15°	1797.8	1800.2	1800.2	1794.7	1794.7	1795.5	1797.1	1798.6	1799.4	1808.8	1807.2
17.5°	1739.8	1737.5	1739.8	1738.3	1741.4	1746.1	1745.3	1748.5	1753.2	1753.2	1758.7
20°	1677.1	1681.1	1685.8	1681.1	1689.7	1693.6	1696.0	1699.1	1702.2	1710.8	1711.6
22.5°	1619.2	1627.0	1628.6	1627.0	1638.7	1642.7	1646.6	1649.7	1661.5	1660.7	1665.4
25°	1565.1	1572.1	1572.9	1578.4	1590.9	1597.2	1599.6	1606.6	1612.9	1616.8	1625.4
27.5°	1514.9	1518.8	1519.6	1530.6	1538.4	1544.7	1552.5	1563.5	1566.6	1575.3	1576.8
30°	1455.4	1464.0	1468.7	1478.1	1493.8	1496.9	1504.7	1511.8	1523.5	1527.5	1532.2
32.5°	1409.9	1413.8	1415.4	1427.9	1441.2	1449.9	1455.4	1460.1	1474.2	1482.8	1489.8
35°	1355.0	1362.1	1365.2	1378.6	1389.5	1401.3	1405.2	1418.5	1424.8	1436.5	1438.9
37.5°	1305.7	1311.2	1315.1	1325.3	1340.2	1351.9	1352.7	1367.6	1378.6	1387.2	1396.6
40°	1255.5	1257.1	1263.3	1272.0	1290.0	1293.9	1303.3	1319.0	1336.2	1347.2	1359.0
42.5°	1199.1	1199.9	1207.7	1218.7	1238.3	1243.8	1257.1	1273.5	1291.6	1311.2	1319.8
45°	1138.7	1141.9	1152.8	1167.0	1183.4	1191.2	1203.8	1224.9	1245.3	1266.5	1280.6
47.5°	1077.6	1084.7	1094.1	1108.2	1127.0	1137.2	1148.9	1174.8	1193.6	1213.2	1232.8
50°	1016.5	1022.7	1032.2	1048.6	1069.0	1080.0	1090.1	1117.6	1143.4	1160.7	1173.2
52.5°	951.4	957.7	968.7	988.3	1011.8	1018.0	1032.9	1058.8	1083.1	1101.1	1118.4
55°	887.2	891.1	906.0	922.4	946.7	960.0	969.5	995.3	1016.5	1040.8	1055.7
57.5°	817.4	822.9	838.6	853.5	880.9	891.1	902.1	927.9	953.8	971.0	984.3
60°	751.6	755.5	768.8	785.3	808.0	821.3	832.3	857.4	877.8	897.4	913.0
62.5°	678.7	684.2	696.7	714.7	739.0	748.4	764.1	782.1	808.0	821.3	838.6
65°	610.5	616.0	626.2	642.6	661.5	674.8	687.3	706.1	727.3	745.3	764.1
67.5°	535.3	541.5	554.1	571.3	592.5	601.9	611.3	630.9	653.6	671.6	686.5
70°	462.4	466.3	479.6	493.7	511.8	522.7	532.1	554.9	574.5	594.1	608.9
72.5°	387.9	391.1	403.6	419.3	438.1	451.4	460.0	477.3	496.9	516.5	535.3
75°	313.5	319.8	329.2	343.3	362.9	374.6	381.7	402.8	420.1	440.4	455.3
77.5°	239.8	245.3	257.8	271.9	290.0	300.9	308.0	328.4	344.8	362.9	381.7
80°	175.6	175.6	190.4	200.6	219.4	228.8	236.7	253.1	271.9	290.0	311.1
82.5°	109.7	113.6	123.8	137.9	154.4	163.0	170.1	186.5	206.1	224.9	243.0
85°	59.6	60.3	70.5	83.1	100.3	106.6	116.0	133.2	150.5	167.7	187.3
87.5°	18.0	22.7	32.9	47.0	60.3	69.0	75.2	93.3	108.9	126.2	145.8
90°	1.6	5.5	15.7	28.2	43.1	50.2	58.8	74.5	90.1	108.2	122.3
92.5°	0.8	4.7	14.1	26.6	41.5	48.6	57.2	72.1	88.6	102.7	115.2
95°	0.8	3.9	13.3	26.6	40.8	48.6	55.6	71.3	86.2	98.7	110.5
97.5°	0.8	3.9	13.3	25.9	40.0	47.0	54.9	69.8	83.1	95.6	108.9
100°	0.8	3.9	12.5	25.1	39.2	47.0	54.1	67.4	79.9	93.3	104.2
102.5°	0.8	3.9	12.5	25.1	38.4	45.5	51.7	65.0	77.6	88.6	100.3
105°	0.8	3.1	11.8	24.3	36.8	43.9	50.2	62.7	74.5	86.2	96.4
107.5°	0.8	3.1	11.8	22.7	36.1	42.3	49.4	61.1	72.1	83.1	93.3
110°	0.8	3.1	11.0	22.7	34.5	41.5	47.8	59.6	70.5	80.7	89.3



TEST NUMBER: P241361

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

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.8	3.1	11.0	21.9	33.7	40.0	46.2	58.8	69.0	78.4	87.0
115°	0.8	2.4	10.2	21.2	33.7	40.0	45.5	57.2	68.2	76.8	83.9
117.5°	0.8	2.4	10.2	20.4	32.1	38.4	44.7	56.4	66.6	76.0	83.1
120°	0.8	2.4	9.4	20.4	32.1	37.6	43.9	55.6	65.8	75.2	83.1
122.5°	0.8	2.4	9.4	19.6	30.6	36.8	43.1	54.9	65.0	74.5	83.1
125°	0.8	1.6	8.6	18.8	29.8	36.1	42.3	54.1	64.3	74.5	82.3
127.5°	0.8	1.6	7.8	18.0	29.0	34.5	40.8	52.5	62.7	72.9	81.5
130°	0.8	1.6	7.8	16.5	27.4	32.9	39.2	50.9	61.1	70.5	79.9
132.5°	0.8	1.6	7.1	15.7	25.9	31.3	36.8	48.6	58.8	68.2	76.8
135°	1.6	1.6	6.3	14.1	24.3	29.8	35.3	46.2	56.4	65.8	74.5
137.5°	1.6	1.6	5.5	13.3	21.9	27.4	32.1	43.1	52.5	61.9	70.5
140°	1.6	1.6	4.7	11.8	19.6	24.3	29.0	38.4	48.6	57.2	65.8
142.5°	1.6	1.6	3.9	10.2	17.2	21.9	25.9	34.5	43.1	52.5	60.3
145°	1.6	1.6	3.1	8.6	14.9	18.8	21.9	29.8	37.6	46.2	54.1
147.5°	1.6	1.6	3.1	7.1	12.5	15.7	18.8	25.9	32.9	40.0	47.0
150°	1.6	1.6	2.4	5.5	10.2	12.5	15.7	21.9	27.4	33.7	40.8
152.5°	1.6	1.6	1.6	4.7	8.6	11.0	12.5	18.0	22.7	28.2	33.7
155°	1.6	1.6	1.6	3.9	7.1	8.6	10.2	14.1	18.8	23.5	27.4
157.5°	1.6	1.6	1.6	3.1	5.5	6.3	7.8	11.8	14.9	18.8	21.9
160°	2.4	1.6	1.6	2.4	3.9	4.7	6.3	8.6	11.8	14.1	17.2
162.5°	2.4	1.6	1.6	1.6	3.1	3.9	4.7	6.3	8.6	11.0	12.5
165°	2.4	2.4	1.6	1.6	2.4	2.4	3.1	4.7	5.5	7.8	9.4
167.5°	2.4	2.4	1.6	1.6	1.6	1.6	2.4	3.1	3.9	4.7	5.5
170°	2.4	2.4	1.6	1.6	1.6	1.6	1.6	1.6	2.4	2.4	3.1
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: P241361

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

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	2240.6	2240.6	2240.6	2240.6	2240.6	2240.6	2240.6	2240.6	2240.6	2240.6
2.5°	2216.3	2217.9	2214.0	2214.8	2213.2	2214.0	2211.6	2210.9	2212.4	2207.7
5°	2135.6	2131.7	2127.0	2127.0	2126.2	2124.6	2123.9	2125.4	2124.6	2127.0
7.5°	2030.6	2023.5	2025.1	2021.2	2025.9	2024.3	2025.9	2027.5	2027.5	2027.5
10°	1934.2	1941.3	1944.4	1947.5	1951.4	1949.1	1954.6	1956.1	1957.7	1954.6
12.5°	1870.7	1870.7	1876.2	1877.8	1877.8	1879.3	1885.6	1880.9	1888.0	1894.2
15°	1811.2	1815.9	1820.6	1821.4	1821.4	1829.2	1830.8	1828.4	1829.2	1826.8
17.5°	1763.4	1765.7	1767.3	1772.0	1776.7	1775.9	1777.5	1781.4	1779.8	1777.5
20°	1714.8	1721.8	1727.3	1726.5	1727.3	1729.7	1730.4	1731.2	1727.3	1725.0
22.5°	1670.9	1670.9	1680.3	1683.4	1686.6	1685.8	1684.2	1685.8	1685.8	1680.3
25°	1625.4	1633.3	1638.0	1636.4	1641.1	1645.0	1641.1	1640.3	1643.4	1641.9
27.5°	1587.8	1587.8	1593.3	1601.9	1601.1	1602.7	1599.6	1596.4	1594.1	1593.3
30°	1537.6	1545.5	1553.3	1551.8	1554.1	1557.2	1557.2	1554.1	1548.6	1548.6
32.5°	1493.8	1499.2	1502.4	1511.8	1514.9	1514.1	1507.1	1501.6	1503.9	1503.9
35°	1448.3	1454.6	1467.1	1465.5	1467.1	1468.7	1466.3	1464.0	1464.0	1464.8
37.5°	1399.7	1419.3	1418.5	1434.2	1437.3	1436.5	1434.2	1427.1	1428.7	1431.8
40°	1371.5	1379.3	1395.0	1398.1	1399.7	1401.3	1408.3	1403.6	1401.3	1399.7
42.5°	1335.4	1348.8	1356.6	1366.0	1373.1	1374.6	1370.7	1368.4	1369.9	1369.1
45°	1290.8	1308.8	1319.0	1327.6	1326.8	1328.4	1333.1	1338.6	1339.4	1335.4
47.5°	1248.5	1253.2	1274.3	1272.0	1281.4	1288.4	1286.9	1283.7	1289.2	1288.4
50°	1189.7	1206.1	1211.6	1226.5	1228.1	1223.4	1228.9	1232.0	1232.8	1232.8
52.5°	1131.7	1141.9	1157.5	1158.3	1163.8	1166.2	1169.3	1170.9	1174.0	1172.4
55°	1072.1	1078.4	1089.4	1098.8	1101.1	1100.3	1104.3	1110.5	1113.7	1116.0
57.5°	1000.8	1014.9	1018.0	1027.4	1025.9	1031.4	1038.4	1041.6	1046.3	1048.6
60°	923.2	934.2	945.2	948.3	951.4	956.1	963.2	962.4	969.5	973.4
62.5°	852.7	857.4	866.8	873.1	873.8	873.8	880.9	884.0	891.1	892.7
65°	772.7	783.7	787.6	790.0	793.9	793.9	800.2	803.3	808.8	818.2
67.5°	698.3	708.5	716.3	717.9	721.0	722.6	721.0	724.9	728.9	733.6
70°	620.7	630.1	640.3	646.6	645.0	644.2	645.0	648.1	653.6	652.0
72.5°	546.2	561.1	565.8	575.2	576.0	577.6	573.7	572.1	576.8	574.5
75°	471.0	486.7	493.7	503.9	499.2	501.6	501.6	508.6	514.9	516.5
77.5°	399.7	415.4	424.8	429.5	437.3	445.1	446.7	450.6	446.7	446.7
80°	327.6	341.7	358.9	364.4	366.8	369.1	371.5	372.3	373.0	373.0
82.5°	264.1	282.1	291.5	293.1	294.7	297.8	301.7	306.4	312.7	313.5
85°	205.3	216.3	224.9	232.0	234.3	239.0	247.7	255.5	264.1	268.0
87.5°	159.1	167.7	177.1	185.0	191.2	195.1	206.1	218.7	234.3	242.2
90°	133.2	142.6	152.0	162.2	168.5	174.8	187.3	201.4	221.0	232.0
92.5°	125.4	136.4	147.3	156.7	161.4	166.1	178.7	197.5	222.6	237.5
95°	123.0	133.2	141.9	151.3	157.5	163.8	178.7	197.5	215.5	223.4
97.5°	119.1	127.7	137.1	148.9	154.4	160.7	174.0	186.5	194.4	197.5
100°	113.6	123.0	133.2	143.4	148.9	153.6	163.0	171.6	177.1	180.3
102.5°	109.7	118.3	127.7	137.1	141.1	145.0	152.8	159.1	161.4	162.2
105°	105.8	113.6	122.3	128.5	130.9	134.0	137.9	137.9	137.9	137.9
107.5°	101.1	108.2	114.4	117.6	119.1	119.9	120.7	119.9	119.9	119.1
110°	97.2	102.7	106.6	108.2	108.2	108.9	108.9	108.9	108.9	108.9



TEST NUMBER: P241361

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

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	93.3	98.0	100.3	101.9	101.9	102.7	103.5	105.0	105.8	105.8
115°	90.1	94.8	97.2	99.5	101.1	101.9	104.2	107.4	108.9	108.9
117.5°	88.6	94.0	97.2	101.1	103.5	105.0	108.9	112.1	113.6	114.4
120°	89.3	94.8	99.5	104.2	106.6	108.2	112.9	116.0	118.3	119.1
122.5°	90.1	95.6	101.9	106.6	108.9	111.3	115.2	119.1	121.5	122.3
125°	89.3	96.4	102.7	108.2	110.5	112.9	116.8	120.7	123.0	123.8
127.5°	88.6	95.6	102.7	108.2	110.5	113.6	117.6	120.7	123.0	123.8
130°	87.0	94.0	101.1	107.4	109.7	112.1	116.0	119.9	122.3	123.8
132.5°	84.6	91.7	98.7	104.2	107.4	109.7	114.4	118.3	121.5	122.3
135°	81.5	88.6	95.6	101.9	104.2	107.4	111.3	115.2	117.6	119.1
137.5°	77.6	84.6	90.9	97.2	99.5	101.9	106.6	110.5	112.9	113.6
140°	72.9	79.2	85.4	90.9	93.3	95.6	99.5	102.7	105.8	107.4
142.5°	66.6	72.9	78.4	83.1	85.4	87.8	91.7	94.0	96.4	98.0
145°	60.3	65.8	70.5	74.5	76.8	79.2	82.3	84.6	87.0	87.8
147.5°	53.3	58.0	62.7	66.6	68.2	69.8	72.9	75.2	76.8	76.8
150°	46.2	50.9	54.9	58.8	59.6	61.1	63.5	65.0	66.6	65.8
152.5°	39.2	43.1	47.8	50.9	51.7	53.3	54.9	56.4	57.2	57.2
155°	32.1	36.1	40.0	43.1	43.9	45.5	46.2	47.8	48.6	48.6
157.5°	25.9	29.8	32.9	36.1	36.8	37.6	39.2	40.0	40.0	40.8
160°	20.4	22.7	25.9	28.2	29.8	30.6	32.1	32.1	32.9	32.9
162.5°	14.9	17.2	19.6	21.9	22.7	23.5	25.1	25.9	25.9	25.9
165°	10.2	12.5	13.3	14.9	15.7	17.2	18.8	18.8	19.6	18.8
167.5°	7.1	7.8	8.6	10.2	10.2	11.0	11.8	12.5	13.3	13.3
170°	3.9	4.7	4.7	5.5	5.5	5.5	6.3	7.1	7.1	7.1
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)