

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: P241483

Luminaire Tested: **FVS8M-3-LD4-40-3STD-PA187-UNV-EDC1**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P241483  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1711-410-30)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FVS8M-3-LD4-40-3STD-PA187-UNV-EDC1  
Description: FAILSAFE FVS8M LED FIXTURE  
3FT LENGTH, 3-MODULE LED WITH PA187 LENS  
Light Source: (252) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

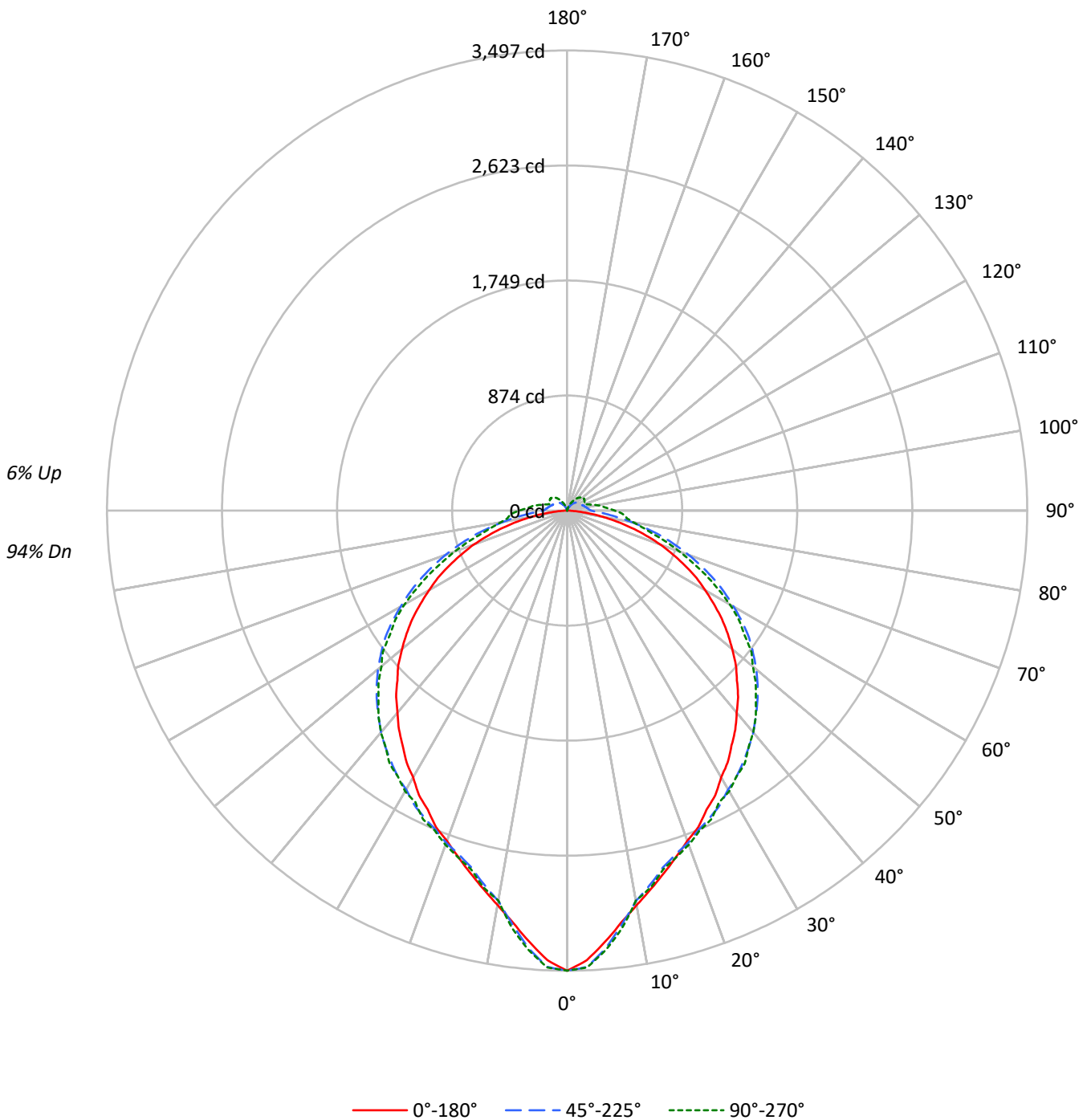
Lumens per Lamp: N/A  
Luminaire Lumens: 9452.0 lumens  
Efficiency: N/A  
Efficacy: 114.0 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 1.04 / 1.28  
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 2.85' x H: 0.15')  
CIE Type: Direct

Input Watts (W): 82.9  
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: P241483

CATALOG NUMBER: FVS8M-3-LD4-40-3STD-PA187-UNV-EDC1

### Luminous Intensity Polar Plot





TEST NUMBER: P241483

CATALOG NUMBER: FVS8M-3-LD4-40-3STD-PA187-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	107	101	97	93	103	99	94	91	93	90	87	88	85	83	84	81	79	77
2	97	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	51	44	56	49	43	54	47	42	51	46	41	39
6	68	54	45	39	66	53	45	38	51	43	38	48	42	37	46	41	36	34
7	63	49	40	34	61	48	40	34	46	39	33	44	37	33	42	36	32	30
8	59	45	36	30	57	44	36	30	42	35	30	40	34	29	39	33	29	27
9	55	41	33	27	53	40	33	27	39	32	27	37	31	26	36	30	26	24
10	51	38	30	25	50	37	30	25	36	29	24	35	28	24	33	28	23	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	20419	20419	20419
5°	19202	19246	19278
10°	17883	17265	17167
15°	16993	16132	16085
20°	16298	15588	15517
25°	15781	15190	15100
30°	15330	14827	14694
35°	14993	14616	14474
40°	14654	14411	14101
45°	14334	14128	13658
50°	14020	13826	13185
55°	13617	13431	12655
60°	12995	12757	11999
65°	12275	11958	10856
70°	11293	10887	9567
75°	9577	9605	8192
80°	7295	7852	7513
85°	3676	6119	8236



TEST NUMBER: P241483

CATALOG NUMBER: FVS8M-3-LD4-40-3STD-PA187-UNV-EDC1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	308.1	3.3
10°-20°	799.9	8.5
20°-30°	1181.8	12.5
30°-40°	1441.5	15.3
40°-50°	1534.5	16.2
50°-60°	1442.5	15.3
60°-70°	1142.4	12.1
70°-80°	710.5	7.5
80°-90°	313.3	3.3
90°-100°	166.6	1.8
100°-110°	122.7	1.3
110°-120°	95.7	1.0
120°-130°	83.0	0.9
130°-140°	59.8	0.6
140°-150°	33.6	0.4
150°-160°	13.3	0.1
160°-170°	2.7	0.0
170°-180°	0.1	0.0
0°-30°	2289.8	24.2
0°-40°	3731.3	39.5
0°-60°	6708.4	71.0
0°-90°	8874.6	93.9
90°-120°	384.9	4.1
90°-150°	561.4	5.9
90°-180°	577.0	6.1
0°-180°	9452.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3497	3497	3497	3497	3497	
5°	3290	3314	3340	3358	3354	306
15°	2849	2835	2808	2810	2822	803
25°	2508	2541	2573	2579	2590	1159
35°	2178	2267	2331	2353	2351	1365
45°	1824	1935	2046	2043	2027	1411
55°	1435	1554	1688	1676	1644	1279
65°	986	1101	1229	1215	1166	977
75°	505	617	737	733	669	537
85°	87	185	296	357	440	113
90°	2	85	182	261	362	5
95°	1	71	160	231	285	1
105°	1	60	134	179	177	1
115°	1	52	114	143	145	1
125°	1	43	105	146	156	1
135°	2	32	84	124	140	1
145°	2	17	57	88	101	2
155°	2	7	28	48	56	1
165°	3	2	7	13	18	1
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P241483

CATALOG NUMBER: FVS8M-3-LD4-40-3STD-PA187-UNV-EDC1

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	3496.7	3496.7	3496.7	3496.7	3496.7	3496.7	3496.7	3496.7	3496.7	3496.7	3496.7
2.5°	3420.7	3427.3	3433.2	3436.5	3439.9	3449.1	3455.8	3456.6	3466.6	3474.1	3471.6
5°	3290.4	3296.2	3307.9	3313.7	3309.6	3313.7	3322.9	3326.3	3328.8	3332.1	3339.6
7.5°	3156.7	3153.4	3163.4	3160.9	3165.1	3162.6	3164.2	3163.4	3171.7	3173.4	3174.2
10°	3043.1	3046.4	3048.1	3041.4	3040.6	3043.1	3038.1	3033.1	3030.6	3018.0	3012.2
12.5°	2944.5	2944.5	2945.4	2932.8	2927.0	2922.8	2928.7	2927.0	2916.1	2905.3	2912.0
15°	2849.3	2851.8	2853.5	2844.3	2836.8	2835.1	2837.6	2820.9	2822.6	2828.4	2808.4
17.5°	2758.3	2768.3	2764.1	2753.2	2753.2	2753.2	2750.7	2747.4	2750.7	2744.9	2739.0
20°	2671.4	2673.9	2673.0	2678.1	2678.1	2677.2	2676.4	2678.1	2684.7	2671.4	2687.2
22.5°	2603.7	2606.2	2610.4	2601.2	2598.7	2595.4	2602.0	2621.3	2615.4	2625.4	2621.3
25°	2507.7	2508.5	2507.7	2516.8	2531.9	2541.1	2547.7	2549.4	2554.4	2569.5	2572.8
27.5°	2438.3	2439.2	2450.0	2454.2	2462.5	2472.6	2474.2	2487.6	2501.0	2506.8	2519.3
30°	2340.6	2352.3	2354.0	2375.7	2398.2	2405.7	2410.8	2425.0	2435.0	2450.9	2447.5
32.5°	2270.4	2277.1	2293.0	2306.3	2322.2	2328.1	2341.4	2363.1	2378.2	2394.0	2396.6
35°	2178.5	2181.9	2197.7	2220.3	2254.5	2267.1	2282.1	2286.3	2308.8	2326.4	2331.4
37.5°	2099.2	2105.0	2125.9	2146.0	2165.2	2182.7	2202.8	2224.5	2242.9	2257.1	2267.9
40°	2004.8	2009.0	2033.2	2059.1	2095.8	2113.4	2120.1	2152.6	2172.7	2185.2	2201.1
42.5°	1923.8	1927.9	1949.7	1975.5	2002.3	2027.3	2043.2	2074.1	2095.0	2110.0	2121.7
45°	1824.4	1833.5	1853.6	1888.7	1925.4	1934.6	1952.2	1982.2	2010.6	2036.5	2045.7
47.5°	1740.0	1743.3	1767.6	1791.8	1828.5	1848.6	1869.5	1895.4	1929.6	1947.1	1963.0
50°	1637.2	1648.1	1668.1	1699.9	1733.3	1751.7	1775.9	1809.3	1836.9	1861.1	1877.0
52.5°	1538.7	1544.5	1567.9	1601.3	1638.9	1660.6	1678.2	1712.4	1750.0	1771.7	1781.8
55°	1435.1	1441.8	1467.7	1500.2	1536.2	1553.7	1575.4	1613.0	1650.6	1670.7	1688.2
57.5°	1322.3	1336.5	1359.9	1395.0	1426.7	1444.3	1467.7	1510.3	1542.9	1564.6	1577.9
60°	1211.2	1221.2	1246.3	1277.2	1322.3	1342.4	1360.7	1398.3	1425.9	1450.1	1462.7
62.5°	1109.3	1114.3	1136.9	1166.1	1203.7	1222.1	1243.0	1283.9	1312.3	1333.2	1348.2
65°	985.7	999.1	1019.9	1047.5	1083.4	1101.0	1121.8	1162.8	1193.7	1218.7	1228.8
67.5°	870.4	873.8	900.5	932.2	968.1	984.9	1002.4	1041.7	1071.7	1091.8	1104.3
70°	754.3	756.0	784.4	807.8	847.0	865.4	880.4	914.7	949.8	966.5	980.7
72.5°	627.3	634.8	664.1	689.1	720.9	737.6	760.1	793.6	822.0	842.8	853.7
75°	505.4	512.1	532.9	566.4	598.9	617.3	639.0	670.8	694.2	720.1	736.8
77.5°	387.6	406.0	416.8	446.1	482.8	504.5	519.6	548.8	572.2	593.1	606.4
80°	279.8	284.0	306.6	333.3	368.4	382.6	399.3	431.0	454.4	477.8	492.8
82.5°	175.4	183.8	206.3	231.4	261.5	275.7	291.5	321.6	347.5	365.9	385.9
85°	86.9	95.2	116.1	139.5	172.1	185.4	200.5	228.0	252.3	272.3	295.7
87.5°	29.2	35.9	54.3	77.7	105.3	117.8	131.1	156.2	177.9	202.1	221.4
90°	1.7	8.4	25.1	47.6	72.7	85.2	97.7	117.8	140.3	161.2	182.1
92.5°	0.8	6.7	21.7	42.6	66.0	76.9	86.9	107.8	129.5	148.7	167.9
95°	0.8	5.8	20.0	39.3	60.1	71.0	81.9	102.7	123.6	142.8	160.4
97.5°	0.8	5.0	18.4	36.8	56.8	67.7	77.7	98.6	117.8	136.2	152.9
100°	0.8	5.0	17.5	35.1	54.3	64.3	74.3	94.4	112.8	129.5	145.3
102.5°	0.8	5.0	16.7	33.4	52.6	61.8	71.8	90.2	107.8	123.6	139.5
105°	0.8	4.2	15.9	32.6	51.0	60.1	68.5	86.9	102.7	118.6	133.7
107.5°	0.8	4.2	15.0	30.9	48.4	57.6	66.8	83.5	99.4	114.4	127.8
110°	0.8	3.3	14.2	30.1	46.8	56.0	64.3	81.0	96.1	110.3	122.0



TEST NUMBER: P241483

CATALOG NUMBER: FVS8M-3-LD4-40-3STD-PA187-UNV-EDC1

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.8	3.3	13.4	28.4	45.1	54.3	62.6	78.5	93.6	106.1	117.8
115°	0.8	2.5	12.5	26.7	43.4	51.8	60.1	76.0	90.2	102.7	114.4
117.5°	0.8	2.5	11.7	25.9	41.8	50.1	57.6	73.5	87.7	101.1	111.9
120°	0.8	2.5	10.9	24.2	40.1	47.6	56.0	71.0	86.0	98.6	110.3
122.5°	0.8	1.7	10.0	22.6	37.6	45.1	53.5	68.5	82.7	96.1	108.6
125°	0.8	1.7	9.2	21.7	35.9	43.4	51.0	65.2	80.2	92.7	105.3
127.5°	1.7	1.7	8.4	20.0	33.4	40.9	47.6	62.6	76.0	88.5	101.1
130°	1.7	1.7	7.5	17.5	30.9	38.4	45.1	58.5	71.8	83.5	96.1
132.5°	1.7	1.7	6.7	15.9	28.4	35.1	41.8	54.3	66.8	78.5	90.2
135°	1.7	1.7	5.0	14.2	25.1	31.7	37.6	50.1	61.8	72.7	83.5
137.5°	1.7	1.7	4.2	11.7	21.7	27.6	33.4	45.1	56.8	66.8	77.7
140°	1.7	1.7	3.3	10.0	19.2	24.2	29.2	40.1	51.0	61.0	71.0
142.5°	2.5	1.7	3.3	8.4	15.9	20.9	25.1	34.2	44.3	54.3	63.5
145°	2.5	1.7	2.5	6.7	13.4	16.7	20.9	29.2	38.4	47.6	56.8
147.5°	2.5	2.5	2.5	5.0	10.9	14.2	17.5	25.1	32.6	40.9	48.4
150°	2.5	2.5	1.7	4.2	8.4	10.9	14.2	20.0	26.7	34.2	40.9
152.5°	2.5	2.5	1.7	3.3	6.7	8.4	10.9	16.7	21.7	27.6	34.2
155°	2.5	2.5	2.5	2.5	5.0	6.7	8.4	12.5	17.5	21.7	27.6
157.5°	2.5	2.5	2.5	2.5	3.3	5.0	5.8	9.2	12.5	16.7	20.9
160°	3.3	2.5	2.5	1.7	2.5	3.3	4.2	6.7	9.2	12.5	15.0
162.5°	3.3	3.3	2.5	2.5	1.7	2.5	3.3	4.2	5.8	8.4	10.0
165°	3.3	3.3	2.5	2.5	1.7	1.7	2.5	2.5	4.2	5.0	6.7
167.5°	3.3	3.3	2.5	2.5	1.7	1.7	1.7	1.7	2.5	2.5	3.3
170°	3.3	3.3	2.5	2.5	1.7	1.7	1.7	1.7	0.8	0.8	1.7
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: P241483

CATALOG NUMBER: FVS8M-3-LD4-40-3STD-PA187-UNV-EDC1

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	3496.7	3496.7	3496.7	3496.7	3496.7	3496.7	3496.7	3496.7	3496.7	3496.7
2.5°	3476.6	3470.8	3474.1	3475.0	3477.5	3480.8	3472.5	3471.6	3474.1	3474.1
5°	3340.5	3348.0	3347.2	3353.8	3358.0	3354.7	3355.5	3358.0	3361.4	3353.8
7.5°	3167.6	3172.6	3181.8	3175.1	3183.4	3179.3	3191.8	3184.3	3198.5	3201.0
10°	3012.2	3013.0	3023.9	3028.1	3038.1	3023.1	3018.9	3015.5	3006.3	3010.5
12.5°	2898.6	2882.7	2870.2	2877.7	2890.2	2899.4	2916.1	2927.0	2932.0	2933.7
15°	2800.9	2816.7	2824.2	2823.4	2810.0	2805.9	2803.4	2806.7	2815.9	2821.7
17.5°	2757.4	2745.7	2734.9	2759.9	2775.0	2784.1	2785.0	2779.1	2775.8	2760.8
20°	2673.0	2696.4	2719.0	2699.8	2686.4	2682.2	2678.1	2692.3	2701.4	2702.3
22.5°	2638.0	2653.8	2622.9	2652.2	2667.2	2671.4	2661.4	2648.8	2639.6	2632.1
25°	2579.5	2572.8	2605.4	2587.0	2578.7	2570.3	2582.8	2588.7	2587.0	2590.4
27.5°	2507.7	2532.7	2509.3	2526.9	2544.4	2551.1	2531.0	2514.3	2501.8	2498.5
30°	2466.7	2448.3	2490.1	2479.3	2464.2	2456.7	2454.2	2460.0	2461.7	2463.4
32.5°	2400.7	2419.9	2401.6	2395.7	2412.4	2419.1	2422.4	2407.4	2403.2	2394.9
35°	2338.9	2343.1	2339.8	2364.8	2353.1	2347.3	2343.9	2349.8	2353.1	2351.4
37.5°	2291.3	2269.6	2303.0	2280.4	2289.6	2293.8	2298.0	2282.1	2277.1	2264.6
40°	2203.6	2221.1	2204.4	2222.8	2222.8	2211.9	2194.4	2191.1	2194.4	2200.3
42.5°	2131.8	2133.4	2156.8	2128.4	2121.7	2120.9	2131.8	2129.2	2116.7	2122.6
45°	2058.2	2065.8	2042.4	2037.4	2043.2	2038.2	2022.3	2019.8	2026.5	2027.3
47.5°	1968.9	1978.9	1954.7	1953.0	1945.5	1938.0	1947.1	1953.0	1945.5	1943.8
50°	1885.3	1866.1	1872.8	1860.3	1863.6	1869.5	1850.3	1838.6	1838.6	1841.9
52.5°	1785.9	1791.8	1778.4	1793.4	1780.9	1770.1	1770.9	1766.7	1765.9	1765.9
55°	1687.4	1694.0	1703.2	1677.3	1675.7	1674.0	1668.1	1654.8	1645.6	1643.9
57.5°	1587.1	1588.0	1590.5	1582.1	1585.5	1577.9	1552.9	1556.2	1553.7	1548.7
60°	1471.8	1481.9	1466.8	1461.0	1456.8	1454.3	1451.8	1438.4	1429.2	1429.2
62.5°	1352.4	1344.9	1348.2	1335.7	1340.7	1341.5	1317.3	1307.3	1296.4	1293.1
65°	1232.9	1222.9	1220.4	1222.1	1215.4	1196.2	1187.8	1182.0	1169.5	1166.1
67.5°	1106.8	1108.5	1103.5	1090.9	1080.9	1075.9	1060.0	1045.0	1034.1	1030.8
70°	980.7	979.0	981.5	966.5	970.7	960.6	940.6	923.0	918.0	908.0
72.5°	857.9	860.4	859.6	858.7	850.4	838.7	825.3	811.9	804.4	786.9
75°	741.8	751.8	744.3	737.6	732.6	725.9	718.4	692.5	678.3	669.1
77.5°	619.8	631.5	635.7	626.5	624.0	624.0	609.8	592.2	586.4	583.9
80°	501.2	514.6	524.6	525.4	524.6	520.4	517.1	514.6	512.1	509.5
82.5°	401.0	416.8	423.5	426.9	432.7	431.9	440.2	446.9	454.4	458.6
85°	309.9	324.1	338.3	350.0	356.7	365.0	375.1	391.8	417.7	440.2
87.5°	240.6	257.3	276.5	292.4	298.2	305.7	324.1	351.7	385.9	408.5
90°	201.3	219.7	238.1	253.9	260.6	270.6	291.5	316.6	346.7	361.7
92.5°	185.4	203.0	219.7	235.6	244.8	253.9	271.5	289.0	307.4	317.4
95°	177.1	193.0	208.8	223.9	231.4	239.7	251.4	266.5	279.0	284.8
97.5°	168.7	183.8	198.0	212.2	218.9	225.5	238.9	252.3	264.8	264.0
100°	161.2	175.4	187.9	200.5	206.3	212.2	223.0	228.9	232.2	233.1
102.5°	154.5	166.2	177.9	187.9	192.1	198.0	205.5	206.3	206.3	202.1
105°	146.2	157.9	167.9	174.6	178.8	181.3	182.9	182.1	178.8	177.1
107.5°	139.5	148.7	157.0	162.1	163.7	163.7	161.2	159.5	156.2	157.0
110°	132.8	141.2	147.0	149.5	150.4	150.4	148.7	146.2	144.5	144.5





TEST NUMBER: P241483

CATALOG NUMBER: FVS8M-3-LD4-40-3STD-PA187-UNV-EDC1

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	127.8	135.3	140.3	142.8	143.7	143.7	143.7	142.8	142.0	141.2
115°	123.6	132.0	137.0	141.2	142.8	143.7	145.3	146.2	145.3	145.3
117.5°	122.8	130.3	137.8	142.8	145.3	147.0	149.5	151.2	150.4	149.5
120°	121.1	130.3	137.8	144.5	147.0	149.5	152.9	154.5	153.7	152.9
122.5°	120.3	129.5	137.8	145.3	147.9	150.4	154.5	156.2	155.4	155.4
125°	116.9	127.0	136.2	143.7	146.2	148.7	153.7	155.4	156.2	156.2
127.5°	112.8	122.8	132.0	139.5	142.8	146.2	150.4	152.9	154.5	154.5
130°	106.9	117.8	127.0	134.5	137.8	141.2	145.3	149.5	151.2	152.0
132.5°	101.1	111.1	120.3	128.6	132.0	135.3	140.3	143.7	146.2	147.0
135°	94.4	103.6	112.8	120.3	123.6	127.8	132.8	137.0	139.5	140.3
137.5°	86.9	96.1	104.4	111.9	115.3	118.6	125.3	129.5	132.0	132.8
140°	79.4	88.5	96.1	103.6	106.9	110.3	116.1	120.3	122.8	123.6
142.5°	72.7	80.2	87.7	94.4	97.7	101.1	106.1	110.3	111.9	113.6
145°	64.3	71.8	78.5	85.2	87.7	90.2	95.2	98.6	100.2	101.1
147.5°	56.8	63.5	70.2	75.2	77.7	80.2	84.4	86.9	89.4	89.4
150°	48.4	55.1	61.0	66.0	68.5	70.2	73.5	76.0	76.9	77.7
152.5°	40.1	45.9	51.8	56.0	57.6	60.1	62.6	65.2	66.0	66.8
155°	31.7	37.6	42.6	46.8	48.4	50.1	51.8	54.3	55.1	56.0
157.5°	25.1	29.2	33.4	37.6	38.4	40.1	41.8	43.4	44.3	44.3
160°	18.4	21.7	25.1	28.4	30.1	30.9	33.4	33.4	35.1	35.1
162.5°	12.5	15.0	17.5	20.0	20.9	22.6	24.2	25.1	25.9	25.9
165°	8.4	9.2	11.7	13.4	13.4	14.2	16.7	16.7	16.7	17.5
167.5°	4.2	5.0	5.8	7.5	7.5	8.4	9.2	10.0	10.0	10.0
170°	1.7	1.7	2.5	2.5	2.5	3.3	3.3	4.2	4.2	4.2
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)