

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: P241373

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241373
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1711-410-28)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FVS8M-3-LD4-30-3STD-P125-UNV-EDC1
Description: FAILSAFE FVS8M LED FIXTURE
3FT LENGTH, 3-MODULE LED WITH P125 LENS
Light Source: (252) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

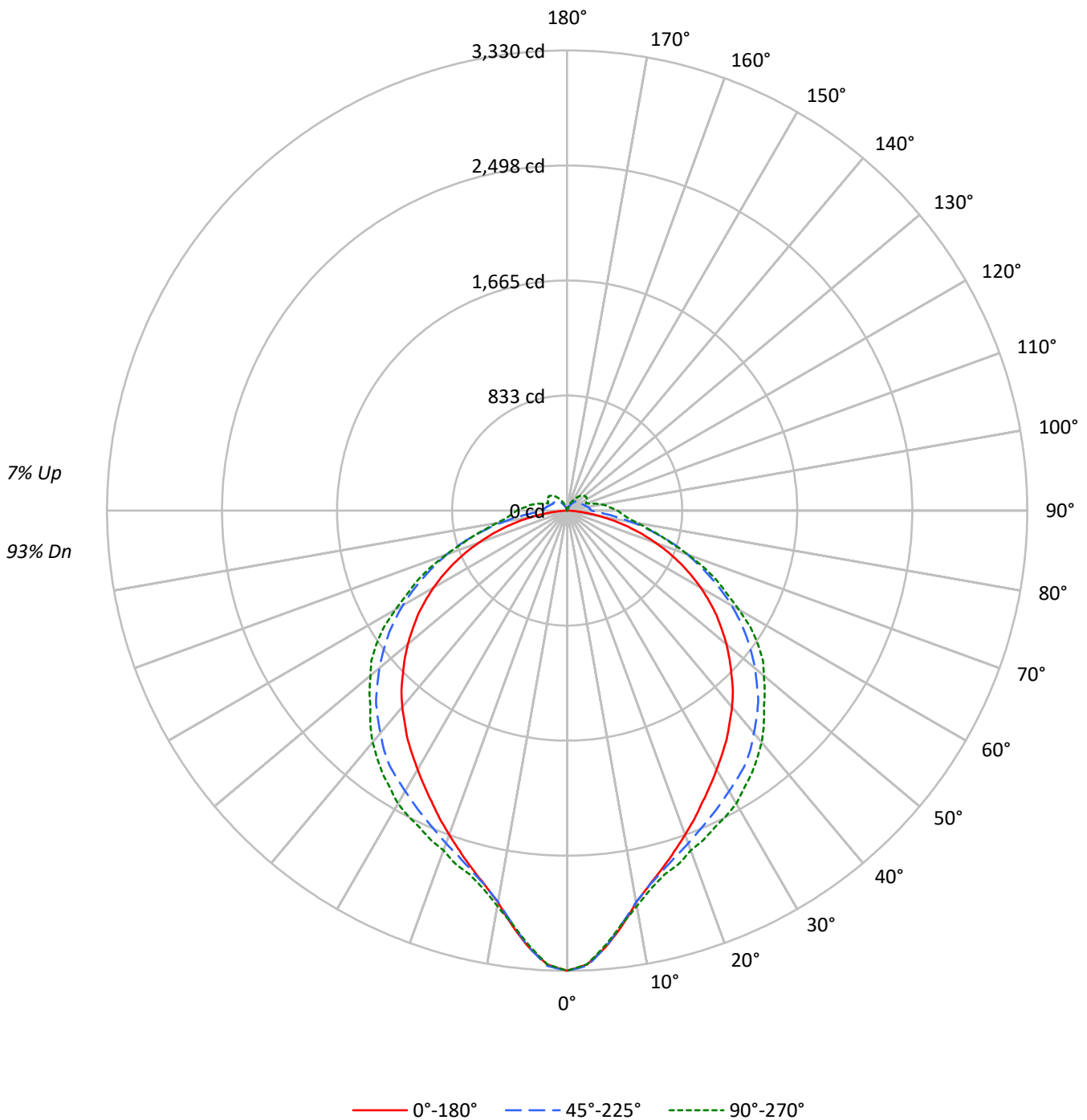
Lumens per Lamp: N/A
Luminaire Lumens: 9074.0 lumens
Efficiency: N/A
Efficacy: 109.5 lumens/watt
Spacing Criteria (0/90/45): 0.97 / 1.1 / 1.28
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 2.85' x H: 0.15')
CIE Type: Direct

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

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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	96	96	96	93
1	106	101	97	93	103	98	94	90	93	90	86	88	85	83	83	81	79	76
2	96	88	81	75	93	85	79	73	81	75	71	76	72	68	72	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	53	48	57	51	47	45
5	74	61	51	45	71	59	50	44	56	49	43	53	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	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19445	19445	19445
5°	18521	18291	18153
10°	16916	16481	16571
15°	15959	15457	15536
20°	15224	14862	15023
25°	14616	14464	14743
30°	14173	14199	14609
35°	13867	14079	14316
40°	13568	13762	14034
45°	13221	13507	13568
50°	12889	13065	13299
55°	12524	12601	12966
60°	11980	11977	12044
65°	11255	11164	11133
70°	10169	10285	9787
75°	8764	8977	8460
80°	6510	7444	7572
85°	3354	5686	7772



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	293.1	3.2
10°-20°	762.6	8.4
20°-30°	1128.8	12.4
30°-40°	1381.7	15.2
40°-50°	1469.2	16.2
50°-60°	1377.4	15.2
60°-70°	1084.6	12.0
70°-80°	672.8	7.4
80°-90°	299.1	3.3
90°-100°	169.8	1.9
100°-110°	127.5	1.4
110°-120°	97.3	1.1
120°-130°	87.2	1.0
130°-140°	66.1	0.7
140°-150°	38.2	0.4
150°-160°	15.1	0.2
160°-170°	3.3	0.0
170°-180°	0.1	0.0
0°-30°	2184.6	24.1
0°-40°	3566.3	39.3
0°-60°	6412.8	70.7
0°-90°	8469.4	93.3
90°-120°	394.7	4.3
90°-150°	586.1	6.5
90°-180°	605.0	6.7
0°-180°	9074.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3330	3330	3330	3330	3330	
5°	3174	3176	3174	3160	3158	294
15°	2676	2669	2691	2720	2725	754
25°	2323	2382	2450	2519	2529	1072
35°	2015	2107	2246	2318	2326	1259
45°	1683	1805	1956	2005	2014	1300
55°	1320	1436	1584	1656	1684	1176
65°	904	1005	1147	1179	1196	892
75°	462	557	689	712	691	489
85°	79	167	275	349	415	102
90°	2	81	178	256	364	4
95°	1	74	165	233	298	1
105°	1	63	137	184	194	1
115°	1	55	116	139	152	1
125°	1	48	110	149	169	1
135°	2	38	95	134	153	1
145°	2	23	68	97	109	1
155°	2	9	32	53	60	1
165°	3	3	9	17	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°	3330.0	3330.0	3330.0	3330.0	3330.0	3330.0	3330.0	3330.0	3330.0	3330.0	3330.0
2.5°	3287.6	3293.1	3293.1	3293.9	3292.4	3297.1	3295.5	3296.3	3297.9	3300.2	3297.9
5°	3173.8	3176.9	3173.8	3176.9	3174.6	3176.1	3177.7	3173.8	3176.1	3169.9	3173.8
7.5°	3031.7	3028.5	3022.2	3016.8	3016.0	3016.0	3017.5	3021.5	3023.8	3021.5	3019.1
10°	2878.6	2883.3	2882.5	2878.6	2878.6	2878.6	2882.5	2880.9	2874.6	2876.2	2875.4
12.5°	2768.6	2771.0	2766.3	2763.9	2758.4	2763.9	2760.0	2757.6	2767.8	2772.6	2771.8
15°	2676.0	2672.8	2672.8	2668.9	2666.6	2668.9	2670.5	2672.8	2679.1	2686.2	2690.9
17.5°	2584.1	2586.5	2584.9	2584.9	2588.0	2586.5	2593.5	2602.9	2613.9	2619.4	2621.0
20°	2495.4	2496.9	2502.4	2502.4	2509.5	2515.0	2521.3	2532.3	2540.1	2553.5	2562.1
22.5°	2410.6	2410.6	2417.6	2428.6	2437.3	2445.9	2455.3	2470.2	2476.5	2491.5	2503.2
25°	2322.6	2327.3	2339.1	2351.7	2368.2	2381.5	2390.9	2403.5	2423.1	2434.1	2449.8
27.5°	2242.5	2252.7	2259.8	2280.2	2299.9	2312.4	2324.2	2342.3	2359.5	2378.4	2396.4
30°	2164.0	2170.3	2182.1	2205.6	2233.1	2246.5	2252.7	2279.4	2297.5	2325.8	2343.8
32.5°	2087.1	2094.9	2110.6	2129.5	2161.7	2175.0	2188.4	2218.2	2241.0	2268.5	2295.1
35°	2014.8	2015.6	2037.6	2061.9	2091.0	2106.7	2120.0	2150.7	2182.9	2212.7	2245.7
37.5°	1930.8	1941.8	1957.5	1985.8	2014.8	2035.2	2052.5	2083.1	2123.2	2155.4	2178.9
40°	1856.2	1864.9	1880.6	1907.3	1937.9	1959.1	1977.9	2018.0	2054.9	2085.5	2102.0
42.5°	1775.3	1777.7	1800.5	1831.1	1863.3	1882.1	1903.3	1944.9	1977.1	2003.8	2030.5
45°	1682.7	1695.3	1718.0	1747.9	1787.1	1805.2	1827.2	1866.4	1902.5	1929.2	1955.9
47.5°	1594.0	1606.5	1629.3	1663.1	1702.3	1719.6	1741.6	1775.3	1819.3	1846.0	1861.7
50°	1505.2	1518.6	1542.1	1573.5	1612.8	1628.5	1647.4	1692.1	1725.9	1751.8	1773.8
52.5°	1409.4	1424.4	1446.3	1482.5	1518.6	1537.4	1550.8	1593.2	1627.7	1662.3	1678.8
55°	1319.9	1323.1	1349.8	1383.5	1417.3	1436.1	1453.4	1492.7	1529.6	1557.8	1583.8
57.5°	1217.9	1224.1	1246.1	1284.6	1315.2	1334.1	1350.5	1391.4	1420.4	1454.2	1481.7
60°	1116.6	1122.8	1143.3	1171.5	1204.5	1225.7	1243.0	1283.0	1316.0	1347.4	1373.3
62.5°	1010.6	1020.8	1038.8	1064.7	1097.7	1118.1	1134.6	1171.5	1206.1	1230.4	1261.8
65°	903.8	906.9	928.9	957.9	987.8	1005.1	1024.7	1057.7	1089.9	1120.5	1147.2
67.5°	793.8	799.3	815.0	844.9	876.3	895.9	912.4	944.6	981.5	1009.0	1034.1
70°	679.2	688.6	705.9	735.0	765.6	784.4	793.8	828.4	860.6	897.5	926.5
72.5°	571.6	579.5	599.9	619.5	652.5	667.4	684.7	715.3	749.1	779.7	811.9
75°	462.5	472.7	484.5	509.6	537.9	556.7	577.1	600.7	636.8	665.9	688.6
77.5°	355.7	359.6	379.3	406.0	431.9	449.1	459.3	490.0	525.3	557.5	578.7
80°	249.7	257.5	278.7	303.1	324.3	343.9	354.9	384.0	420.1	449.9	467.2
82.5°	157.0	164.9	185.3	206.5	232.4	249.7	260.7	292.1	324.3	350.2	366.7
85°	79.3	88.7	106.0	124.8	154.7	167.2	179.8	206.5	238.7	256.0	274.8
87.5°	25.9	33.0	50.3	69.9	94.2	108.4	119.4	148.4	171.2	192.4	209.6
90°	1.6	8.6	24.3	45.5	69.1	80.9	94.2	118.6	140.6	160.2	177.5
92.5°	0.8	7.1	22.0	42.4	65.2	76.9	88.7	111.5	131.1	150.0	169.6
95°	0.8	6.3	21.2	40.8	62.8	73.8	84.8	106.0	126.4	146.0	164.9
97.5°	0.8	5.5	19.6	39.3	60.5	70.7	80.9	101.3	121.7	140.6	157.8
100°	0.8	5.5	18.8	37.7	57.3	67.5	77.7	98.2	116.2	134.3	150.8
102.5°	0.8	5.5	18.1	36.1	55.0	64.4	74.6	93.4	111.5	128.8	143.7
105°	0.8	4.7	17.3	33.8	52.6	62.8	71.5	89.5	106.8	121.7	136.6
107.5°	0.8	4.7	16.5	33.0	51.0	59.7	69.1	86.4	102.1	117.0	130.3
110°	0.8	3.9	15.7	31.4	49.5	58.1	66.7	83.2	98.9	112.3	124.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.8	3.9	14.9	29.8	47.9	56.5	65.2	81.7	95.8	109.1	120.1
115°	0.8	3.9	14.1	29.1	46.3	55.0	63.6	79.3	93.4	106.0	116.2
117.5°	0.8	3.1	13.3	28.3	44.8	53.4	62.0	76.9	91.9	103.6	113.9
120°	0.8	3.1	12.6	26.7	43.2	51.8	59.7	75.4	90.3	102.1	112.3
122.5°	0.8	3.1	11.8	25.9	41.6	49.5	58.1	73.8	87.9	101.3	111.5
125°	0.8	2.4	11.8	25.1	40.0	47.9	56.5	71.5	86.4	98.9	109.9
127.5°	1.6	2.4	11.0	23.6	38.5	45.5	53.4	69.1	83.2	96.6	106.8
130°	1.6	2.4	9.4	22.0	36.1	43.2	51.0	66.0	80.1	92.7	103.6
132.5°	1.6	1.6	8.6	20.4	33.8	40.8	47.9	62.8	76.2	88.7	99.7
135°	1.6	1.6	7.9	18.1	31.4	37.7	44.8	58.9	72.2	84.0	95.0
137.5°	1.6	1.6	6.3	16.5	27.5	33.8	40.8	54.2	66.7	77.7	89.5
140°	1.6	1.6	5.5	14.1	24.3	29.8	36.1	48.7	61.2	72.2	82.4
142.5°	1.6	1.6	4.7	11.8	21.2	25.9	31.4	43.2	55.0	65.2	75.4
145°	2.4	1.6	3.9	10.2	18.1	22.8	26.7	37.7	47.9	57.3	67.5
147.5°	2.4	1.6	3.1	7.9	14.9	18.8	22.8	32.2	40.8	49.5	58.9
150°	2.4	2.4	2.4	6.3	11.8	14.9	18.8	26.7	33.8	41.6	49.5
152.5°	2.4	2.4	2.4	5.5	9.4	12.6	14.9	21.2	28.3	34.5	40.8
155°	2.4	2.4	2.4	3.9	7.1	9.4	11.8	16.5	22.0	27.5	32.2
157.5°	2.4	2.4	2.4	3.1	5.5	7.1	8.6	12.6	17.3	21.2	25.1
160°	3.1	2.4	2.4	2.4	3.9	5.5	7.1	9.4	12.6	15.7	18.8
162.5°	3.1	2.4	2.4	2.4	3.1	3.9	4.7	7.1	9.4	11.8	14.1
165°	3.1	3.1	2.4	1.6	2.4	3.1	3.1	4.7	6.3	7.9	9.4
167.5°	3.1	3.1	2.4	2.4	1.6	1.6	2.4	3.1	3.9	4.7	5.5
170°	3.1	3.1	2.4	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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	3330.0	3330.0	3330.0	3330.0	3330.0	3330.0	3330.0	3330.0	3330.0	3330.0
2.5°	3293.1	3291.6	3288.4	3288.4	3288.4	3286.1	3285.3	3281.4	3282.2	3286.1
5°	3163.6	3168.3	3158.9	3161.2	3159.7	3161.2	3161.2	3162.0	3156.5	3158.1
7.5°	3013.6	3013.6	3011.3	3016.8	3011.3	3012.8	3016.0	3016.0	3016.8	3019.9
10°	2877.8	2880.1	2883.3	2889.5	2891.9	2895.0	2893.5	2902.9	2903.7	2906.0
12.5°	2777.3	2785.1	2785.1	2793.0	2794.5	2794.5	2803.2	2804.0	2805.5	2800.8
15°	2695.6	2704.2	2711.3	2719.9	2719.9	2727.0	2739.6	2727.0	2733.3	2725.4
17.5°	2632.8	2640.6	2650.8	2654.0	2657.9	2663.4	2672.8	2676.0	2679.9	2683.0
20°	2572.3	2582.5	2594.3	2608.4	2615.5	2613.2	2607.7	2620.2	2613.2	2616.3
22.5°	2517.4	2535.4	2540.9	2549.6	2559.0	2565.3	2573.1	2580.2	2581.0	2579.4
25°	2464.8	2479.7	2500.1	2517.4	2518.9	2520.5	2520.5	2522.9	2526.8	2529.1
27.5°	2414.5	2440.4	2453.0	2470.2	2478.9	2489.1	2503.2	2498.5	2496.9	2491.5
30°	2369.0	2392.5	2418.4	2442.0	2443.6	2444.3	2439.6	2442.8	2442.8	2449.0
32.5°	2322.6	2350.9	2369.0	2372.9	2379.2	2387.8	2390.9	2386.2	2384.7	2382.3
35°	2266.1	2289.7	2293.6	2312.4	2317.9	2315.6	2310.9	2313.2	2317.9	2325.8
37.5°	2197.8	2211.1	2240.2	2242.5	2248.0	2254.3	2266.1	2263.0	2261.4	2258.2
40°	2125.5	2148.3	2163.2	2180.5	2185.2	2183.7	2176.6	2181.3	2186.8	2189.9
42.5°	2051.7	2069.8	2088.6	2093.4	2094.9	2098.8	2105.9	2114.6	2109.8	2106.7
45°	1971.6	1985.0	1991.3	2001.5	2005.4	2006.2	2005.4	2006.2	2011.7	2014.0
47.5°	1880.6	1896.3	1899.4	1909.6	1909.6	1914.3	1924.5	1931.6	1935.5	1940.2
50°	1787.1	1798.1	1817.0	1822.5	1831.1	1841.3	1841.3	1845.2	1851.5	1857.8
52.5°	1700.8	1714.1	1726.7	1745.5	1745.5	1748.6	1758.9	1773.8	1781.6	1786.3
55°	1599.5	1618.3	1640.3	1652.9	1656.0	1666.2	1675.6	1678.0	1679.6	1684.3
57.5°	1496.6	1519.4	1538.2	1560.2	1560.2	1560.2	1568.1	1573.5	1578.3	1572.8
60°	1396.1	1414.2	1429.1	1442.4	1435.4	1442.4	1444.0	1436.9	1433.8	1434.6
62.5°	1285.4	1302.7	1312.1	1309.7	1308.9	1308.9	1305.0	1298.7	1301.1	1301.9
65°	1177.0	1181.7	1185.7	1187.2	1179.4	1177.0	1179.4	1185.7	1186.4	1195.9
67.5°	1056.9	1064.7	1062.4	1065.5	1063.2	1063.2	1059.2	1058.5	1049.8	1064.7
70°	941.5	946.2	952.5	951.7	947.7	941.5	929.7	928.1	921.8	928.9
72.5°	820.5	834.7	833.9	832.3	829.2	823.7	810.3	805.6	798.6	797.0
75°	705.9	713.7	717.7	717.7	712.2	710.6	702.8	695.7	693.3	691.0
77.5°	592.8	603.8	607.7	609.3	605.4	607.7	601.5	595.2	592.0	597.5
80°	486.8	493.1	501.7	508.8	512.7	511.2	511.2	512.7	510.4	513.5
82.5°	382.4	395.0	409.9	415.4	424.0	427.2	434.2	442.9	449.1	451.5
85°	292.9	309.4	325.9	340.0	349.4	358.8	375.3	393.4	407.5	415.4
87.5°	230.1	247.3	267.0	285.8	292.9	299.2	312.5	336.9	367.5	387.1
90°	197.9	219.1	233.2	246.6	256.0	263.8	285.0	311.7	346.3	363.5
92.5°	189.2	203.4	219.1	234.8	245.0	254.4	273.3	295.2	318.0	332.1
95°	179.8	196.3	213.6	226.1	233.2	241.1	256.0	272.5	290.5	298.4
97.5°	174.3	190.0	202.6	215.1	222.2	230.1	244.2	260.7	275.6	282.7
100°	165.7	179.0	191.6	204.2	211.2	217.5	231.6	244.2	251.3	253.6
102.5°	157.0	169.6	182.2	193.2	198.7	204.2	213.6	221.4	223.0	225.4
105°	150.0	161.0	170.4	179.8	183.7	187.7	193.9	194.7	194.7	193.9
107.5°	142.1	151.5	159.4	164.9	166.5	168.0	169.6	168.0	167.2	167.2
110°	135.1	142.1	147.6	150.8	151.5	152.3	151.5	151.5	152.3	151.5



TEST NUMBER: P241373

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

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	128.8	135.1	139.0	140.6	141.3	142.1	143.7	145.3	146.8	147.6
115°	124.1	129.6	133.5	137.4	139.0	140.6	144.5	148.4	151.5	152.3
117.5°	121.7	128.0	134.3	139.0	142.1	144.5	150.0	155.5	158.6	159.4
120°	121.7	129.6	136.6	142.9	146.0	149.2	155.5	161.0	164.1	165.7
122.5°	120.9	130.3	138.2	145.3	148.4	151.5	157.8	163.3	167.2	168.8
125°	120.1	129.6	138.2	146.0	149.2	152.3	158.6	163.3	167.2	168.8
127.5°	117.0	127.2	135.8	143.7	147.6	151.5	157.0	161.8	165.7	167.2
130°	113.9	123.3	131.9	140.6	144.5	148.4	154.7	159.4	163.3	164.9
132.5°	109.1	119.4	128.0	135.8	139.8	143.7	150.0	155.5	158.6	160.2
135°	104.4	114.6	122.5	129.6	133.5	137.4	143.7	148.4	152.3	153.1
137.5°	98.9	107.6	116.2	123.3	126.4	129.6	135.1	140.6	142.9	144.5
140°	91.9	100.5	108.4	114.6	117.8	120.9	125.6	129.6	132.7	134.3
142.5°	84.8	92.7	98.9	105.2	108.4	109.9	114.6	118.6	120.9	121.7
145°	76.2	83.2	89.5	95.0	96.6	98.9	102.9	106.0	107.6	109.1
147.5°	66.7	73.0	79.3	84.0	86.4	87.9	91.9	94.2	95.8	96.6
150°	57.3	63.6	69.1	73.0	74.6	76.9	79.3	82.4	83.2	84.0
152.5°	47.1	53.4	58.1	62.8	64.4	65.2	68.3	69.9	71.5	71.5
155°	38.5	43.2	47.9	51.8	53.4	54.2	56.5	58.1	58.9	59.7
157.5°	29.8	33.8	38.5	42.4	43.2	44.0	46.3	47.1	47.9	48.7
160°	22.8	25.9	29.1	32.2	33.8	35.3	36.9	37.7	38.5	37.7
162.5°	16.5	18.8	21.2	23.6	25.1	26.7	28.3	29.1	29.1	29.1
165°	11.0	13.3	14.9	16.5	17.3	18.1	20.4	20.4	20.4	20.4
167.5°	7.1	7.9	8.6	10.2	10.2	11.0	12.6	13.3	13.3	13.3
170°	3.1	3.9	4.7	4.7	5.5	5.5	6.3	7.1	7.1	6.3
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)