

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: P241374

Luminaire Tested: **FVS8M-3-LD4-35-3STD-P125-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241374
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-LD4-35-3STD-P125-UNV-EDC1
Description: FAILSAFE FVS8M LED FIXTURE
3FT LENGTH, 3-MODULE LED WITH P125 LENS
Light Source: (252) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

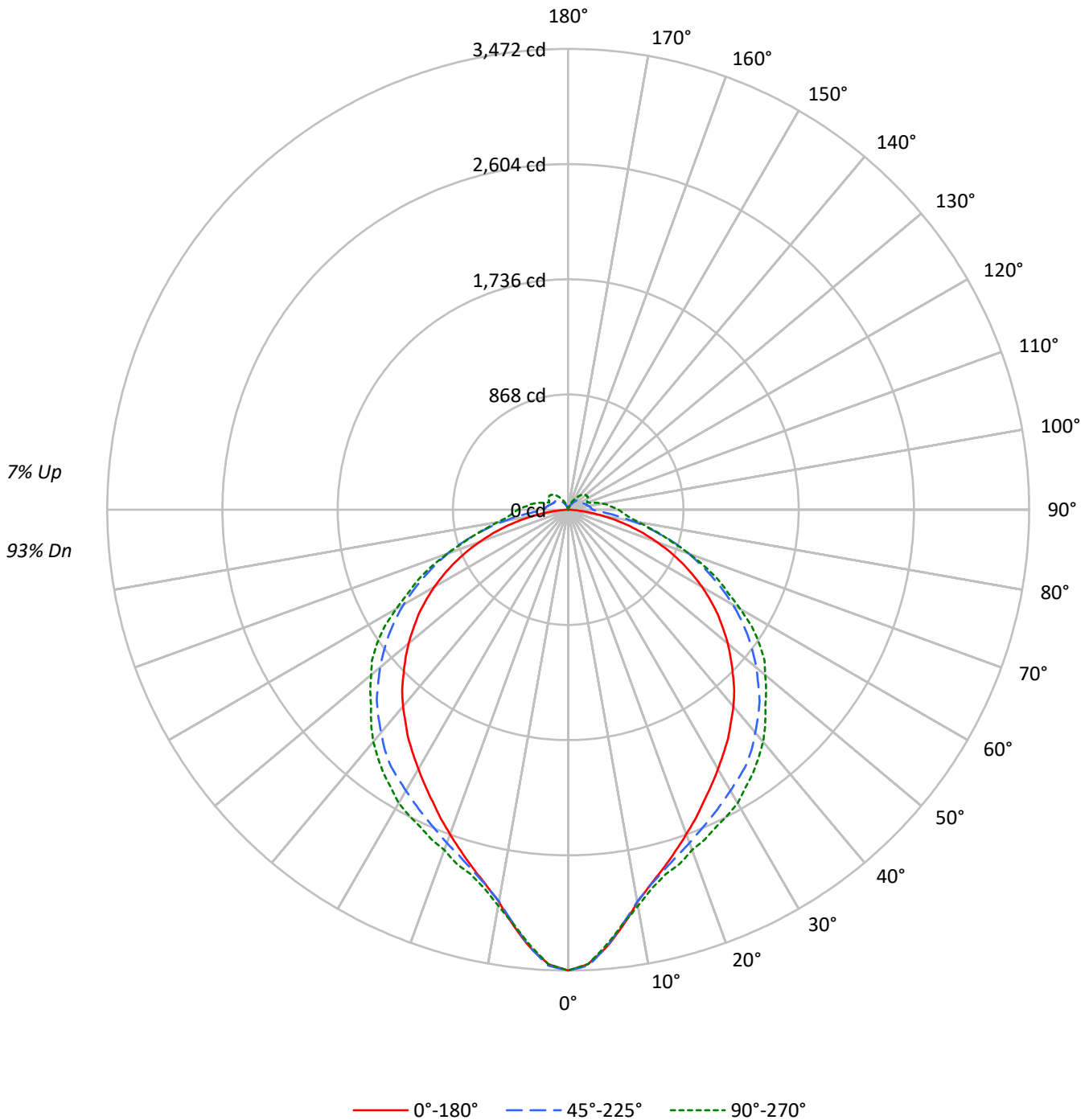
Lumens per Lamp: N/A
Luminaire Lumens: 9460.0 lumens
Efficiency: N/A
Efficacy: 114.1 lumens/watt
Spacing Criteria (0/90/45): 0.97 / 1.1 / 1.28
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 2.85' x H: 0.15')
CIE Type: Direct

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°	20273	20273	20273
5°	19309	19069	18925
10°	17636	17182	17277
15°	16638	16114	16197
20°	15871	15495	15663
25°	15238	15079	15370
30°	14777	14803	15230
35°	14456	14677	14925
40°	14145	14347	14631
45°	13783	14082	14146
50°	13438	13621	13864
55°	13057	13136	13517
60°	12490	12486	12556
65°	11733	11639	11606
70°	10601	10724	10204
75°	9137	9359	8820
80°	6787	7762	7895
85°	3498	5928	8101



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	305.6	3.2
10°-20°	795.1	8.4
20°-30°	1176.8	12.4
30°-40°	1440.5	15.2
40°-50°	1531.7	16.2
50°-60°	1436.0	15.2
60°-70°	1130.7	12.0
70°-80°	701.5	7.4
80°-90°	311.8	3.3
90°-100°	177.1	1.9
100°-110°	133.0	1.4
110°-120°	101.5	1.1
120°-130°	90.9	1.0
130°-140°	68.9	0.7
140°-150°	39.8	0.4
150°-160°	15.8	0.2
160°-170°	3.5	0.0
170°-180°	0.1	0.0
0°-30°	2277.5	24.1
0°-40°	3718.0	39.3
0°-60°	6685.6	70.7
0°-90°	8829.6	93.3
90°-120°	411.5	4.3
90°-150°	611.0	6.5
90°-180°	630.0	6.7
0°-180°	9460.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3472	3472	3472	3472	3472	
5°	3309	3311	3309	3294	3292	306
15°	2790	2782	2805	2836	2841	786
25°	2421	2483	2554	2626	2637	1118
35°	2100	2196	2341	2416	2425	1313
45°	1754	1882	2039	2091	2100	1355
55°	1376	1497	1651	1726	1756	1226
65°	942	1048	1196	1230	1247	930
75°	482	580	718	742	720	510
85°	83	174	286	364	433	106
90°	2	84	185	267	379	4
95°	1	77	172	243	311	1
105°	1	66	142	192	202	1
115°	1	57	121	145	159	1
125°	1	50	115	156	176	1
135°	2	39	99	139	160	1
145°	2	24	70	101	114	1
155°	2	10	34	56	62	1
165°	3	3	10	18	21	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°	3471.7	3471.7	3471.7	3471.7	3471.7	3471.7	3471.7	3471.7	3471.7	3471.7	3471.7
2.5°	3427.5	3433.2	3433.2	3434.0	3432.4	3437.3	3435.7	3436.5	3438.1	3440.6	3438.1
5°	3308.8	3312.1	3308.8	3312.1	3309.6	3311.3	3312.9	3308.8	3311.3	3304.7	3308.8
7.5°	3160.6	3157.4	3150.8	3145.1	3144.3	3144.3	3145.9	3150.0	3152.4	3150.0	3147.5
10°	3001.0	3005.9	3005.1	3001.0	3001.0	3001.0	3005.1	3003.5	2996.9	2998.6	2997.7
12.5°	2886.4	2888.9	2883.9	2881.5	2875.8	2881.5	2877.4	2874.9	2885.6	2890.5	2889.7
15°	2789.8	2786.5	2786.5	2782.4	2780.0	2782.4	2784.1	2786.5	2793.1	2800.4	2805.4
17.5°	2694.0	2696.5	2694.8	2694.8	2698.1	2696.5	2703.9	2713.7	2725.1	2730.9	2732.5
20°	2601.5	2603.2	2608.9	2608.9	2616.3	2622.0	2628.5	2640.0	2648.2	2662.1	2671.1
22.5°	2513.1	2513.1	2520.5	2531.9	2541.0	2550.0	2559.8	2575.3	2581.9	2597.4	2609.7
25°	2421.4	2426.3	2438.6	2451.7	2468.9	2482.8	2492.7	2505.8	2526.2	2537.7	2554.0
27.5°	2337.9	2348.6	2355.9	2377.2	2397.7	2410.8	2423.1	2441.9	2459.9	2479.6	2498.4
30°	2256.1	2262.6	2274.9	2299.5	2328.1	2342.0	2348.6	2376.4	2395.2	2424.7	2443.5
32.5°	2175.9	2184.0	2200.4	2220.1	2253.6	2267.5	2281.5	2312.6	2336.3	2365.0	2392.8
35°	2100.5	2101.4	2124.3	2149.7	2179.9	2196.3	2210.2	2242.2	2275.7	2306.8	2341.2
37.5°	2013.0	2024.4	2040.8	2070.3	2100.5	2121.8	2139.8	2171.8	2213.5	2247.1	2271.6
40°	1935.2	1944.2	1960.6	1988.4	2020.3	2042.4	2062.1	2103.8	2142.3	2174.2	2191.4
42.5°	1850.9	1853.3	1877.1	1909.0	1942.6	1962.2	1984.3	2027.7	2061.2	2089.1	2116.9
45°	1754.3	1767.4	1791.1	1822.2	1863.1	1882.0	1904.9	1945.8	1983.5	2011.3	2039.1
47.5°	1661.8	1674.9	1698.6	1733.8	1774.7	1792.7	1815.7	1850.9	1896.7	1924.5	1940.9
50°	1569.3	1583.2	1607.7	1640.5	1681.4	1697.8	1717.4	1764.1	1799.3	1826.3	1849.2
52.5°	1469.4	1485.0	1507.9	1545.5	1583.2	1602.8	1616.7	1661.0	1697.0	1733.0	1750.2
55°	1376.1	1379.3	1407.2	1442.4	1477.6	1497.2	1515.2	1556.2	1594.6	1624.1	1651.1
57.5°	1269.7	1276.2	1299.1	1339.2	1371.2	1390.8	1408.0	1450.6	1480.9	1516.1	1544.7
60°	1164.1	1170.6	1191.9	1221.4	1255.7	1277.8	1295.9	1337.6	1372.0	1404.7	1431.7
62.5°	1053.5	1064.2	1083.0	1110.0	1144.4	1165.7	1182.9	1221.4	1257.4	1282.8	1315.5
65°	942.2	945.5	968.4	998.7	1029.8	1047.8	1068.3	1102.7	1136.2	1168.1	1196.0
67.5°	827.6	833.3	849.7	880.8	913.6	934.0	951.2	984.8	1023.3	1051.9	1078.1
70°	708.1	717.9	735.9	766.2	798.1	817.8	827.6	863.6	897.2	935.7	966.0
72.5°	595.9	604.1	625.4	645.9	680.3	695.8	713.8	745.7	780.9	812.9	846.4
75°	482.2	492.8	505.1	531.3	560.7	580.4	601.7	626.2	663.9	694.2	717.9
77.5°	370.8	374.9	395.4	423.2	450.2	468.2	478.9	510.8	547.6	581.2	603.3
80°	260.3	268.5	290.6	316.0	338.1	358.5	370.0	400.3	438.0	469.1	487.1
82.5°	163.7	171.9	193.2	215.3	242.3	260.3	271.8	304.5	338.1	365.1	382.3
85°	82.7	92.5	110.5	130.2	161.3	174.4	187.5	215.3	248.9	266.9	286.5
87.5°	27.0	34.4	52.4	72.9	98.2	113.0	124.4	154.7	178.5	200.6	218.6
90°	1.6	9.0	25.4	47.5	72.0	84.3	98.2	123.6	146.5	167.0	185.0
92.5°	0.8	7.4	22.9	44.2	67.9	80.2	92.5	116.2	136.7	156.4	176.8
95°	0.8	6.5	22.1	42.6	65.5	76.9	88.4	110.5	131.8	152.3	171.9
97.5°	0.8	5.7	20.5	40.9	63.0	73.7	84.3	105.6	126.9	146.5	164.5
100°	0.8	5.7	19.6	39.3	59.8	70.4	81.0	102.3	121.2	140.0	157.2
102.5°	0.8	5.7	18.8	37.7	57.3	67.1	77.8	97.4	116.2	134.3	149.8
105°	0.8	4.9	18.0	35.2	54.8	65.5	74.5	93.3	111.3	126.9	142.4
107.5°	0.8	4.9	17.2	34.4	53.2	62.2	72.0	90.0	106.4	122.0	135.9
110°	0.8	4.1	16.4	32.7	51.6	60.6	69.6	86.8	103.1	117.1	129.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.8	4.1	15.6	31.1	49.9	58.9	67.9	85.1	99.9	113.8	125.2
115°	0.8	4.1	14.7	30.3	48.3	57.3	66.3	82.7	97.4	110.5	121.2
117.5°	0.8	3.3	13.9	29.5	46.7	55.7	64.7	80.2	95.8	108.1	118.7
120°	0.8	3.3	13.1	27.8	45.0	54.0	62.2	78.6	94.1	106.4	117.1
122.5°	0.8	3.3	12.3	27.0	43.4	51.6	60.6	76.9	91.7	105.6	116.2
125°	0.8	2.5	12.3	26.2	41.7	49.9	58.9	74.5	90.0	103.1	114.6
127.5°	1.6	2.5	11.5	24.6	40.1	47.5	55.7	72.0	86.8	100.7	111.3
130°	1.6	2.5	9.8	22.9	37.7	45.0	53.2	68.8	83.5	96.6	108.1
132.5°	1.6	1.6	9.0	21.3	35.2	42.6	49.9	65.5	79.4	92.5	104.0
135°	1.6	1.6	8.2	18.8	32.7	39.3	46.7	61.4	75.3	87.6	99.1
137.5°	1.6	1.6	6.5	17.2	28.7	35.2	42.6	56.5	69.6	81.0	93.3
140°	1.6	1.6	5.7	14.7	25.4	31.1	37.7	50.8	63.9	75.3	86.0
142.5°	1.6	1.6	4.9	12.3	22.1	27.0	32.7	45.0	57.3	67.9	78.6
145°	2.5	1.6	4.1	10.6	18.8	23.7	27.8	39.3	49.9	59.8	70.4
147.5°	2.5	1.6	3.3	8.2	15.6	19.6	23.7	33.6	42.6	51.6	61.4
150°	2.5	2.5	2.5	6.5	12.3	15.6	19.6	27.8	35.2	43.4	51.6
152.5°	2.5	2.5	2.5	5.7	9.8	13.1	15.6	22.1	29.5	36.0	42.6
155°	2.5	2.5	2.5	4.1	7.4	9.8	12.3	17.2	22.9	28.7	33.6
157.5°	2.5	2.5	2.5	3.3	5.7	7.4	9.0	13.1	18.0	22.1	26.2
160°	3.3	2.5	2.5	2.5	4.1	5.7	7.4	9.8	13.1	16.4	19.6
162.5°	3.3	2.5	2.5	2.5	3.3	4.1	4.9	7.4	9.8	12.3	14.7
165°	3.3	3.3	2.5	1.6	2.5	3.3	3.3	4.9	6.5	8.2	9.8
167.5°	3.3	3.3	2.5	2.5	1.6	1.6	2.5	3.3	4.1	4.9	5.7
170°	3.3	3.3	2.5	1.6	1.6	1.6	1.6	1.6	2.5	2.5	3.3
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°	3471.7	3471.7	3471.7	3471.7	3471.7	3471.7	3471.7	3471.7	3471.7	3471.7
2.5°	3433.2	3431.6	3428.3	3428.3	3428.3	3425.9	3425.0	3421.0	3421.8	3425.9
5°	3298.2	3303.1	3293.2	3295.7	3294.1	3295.7	3295.7	3296.5	3290.8	3292.4
7.5°	3141.8	3141.8	3139.4	3145.1	3139.4	3141.0	3144.3	3144.3	3145.1	3148.4
10°	3000.2	3002.6	3005.9	3012.5	3014.9	3018.2	3016.6	3026.4	3027.2	3029.7
12.5°	2895.4	2903.6	2903.6	2911.8	2913.4	2913.4	2922.4	2923.2	2924.9	2920.0
15°	2810.3	2819.3	2826.6	2835.6	2835.6	2843.0	2856.1	2843.0	2849.6	2841.4
17.5°	2744.8	2753.0	2763.6	2766.9	2771.0	2776.7	2786.5	2789.8	2793.9	2797.2
20°	2681.8	2692.4	2704.7	2719.4	2726.8	2724.3	2718.6	2731.7	2724.3	2727.6
22.5°	2624.4	2643.3	2649.0	2658.0	2667.8	2674.4	2682.6	2689.9	2690.8	2689.1
25°	2569.6	2585.2	2606.4	2624.4	2626.1	2627.7	2627.7	2630.2	2634.3	2636.7
27.5°	2517.2	2544.2	2557.3	2575.3	2584.3	2595.0	2609.7	2604.8	2603.2	2597.4
30°	2469.7	2494.3	2521.3	2545.9	2547.5	2548.3	2543.4	2546.7	2546.7	2553.2
32.5°	2421.4	2450.9	2469.7	2473.8	2480.4	2489.4	2492.7	2487.7	2486.1	2483.6
35°	2362.5	2387.1	2391.1	2410.8	2416.5	2414.1	2409.2	2411.6	2416.5	2424.7
37.5°	2291.3	2305.2	2335.5	2337.9	2343.7	2350.2	2362.5	2359.2	2357.6	2354.3
40°	2216.0	2239.7	2255.3	2273.3	2278.2	2276.5	2269.2	2274.1	2279.8	2283.1
42.5°	2139.0	2157.8	2177.5	2182.4	2184.0	2188.1	2195.5	2204.5	2199.6	2196.3
45°	2055.5	2069.4	2076.0	2086.6	2090.7	2091.5	2090.7	2091.5	2097.3	2099.7
47.5°	1960.6	1976.9	1980.2	1990.8	1990.8	1995.8	2006.4	2013.8	2017.9	2022.8
50°	1863.1	1874.6	1894.3	1900.0	1909.0	1919.6	1919.6	1923.7	1930.3	1936.8
52.5°	1773.1	1787.0	1800.1	1819.8	1819.8	1823.0	1833.7	1849.2	1857.4	1862.3
55°	1667.5	1687.1	1710.1	1723.2	1726.4	1737.1	1746.9	1749.4	1751.0	1755.9
57.5°	1560.3	1584.0	1603.6	1626.6	1626.6	1626.6	1634.8	1640.5	1645.4	1639.7
60°	1455.5	1474.3	1489.9	1503.8	1496.4	1503.8	1505.4	1498.0	1494.8	1495.6
62.5°	1340.1	1358.1	1367.9	1365.4	1364.6	1364.6	1360.5	1354.0	1356.4	1357.2
65°	1227.1	1232.0	1236.1	1237.7	1229.5	1227.1	1229.5	1236.1	1236.9	1246.7
67.5°	1101.8	1110.0	1107.6	1110.8	1108.4	1108.4	1104.3	1103.5	1094.5	1110.0
70°	981.5	986.4	993.0	992.1	988.1	981.5	969.2	967.6	961.0	968.4
72.5°	855.4	870.2	869.4	867.7	864.4	858.7	844.8	839.9	832.5	830.9
75°	735.9	744.1	748.2	748.2	742.5	740.8	732.7	725.3	722.8	720.4
77.5°	618.0	629.5	633.6	635.2	631.1	633.6	627.1	620.5	617.2	623.0
80°	507.5	514.1	523.1	530.5	534.5	532.9	532.9	534.5	532.1	535.4
82.5°	398.7	411.8	427.3	433.0	442.0	445.3	452.7	461.7	468.2	470.7
85°	305.3	322.5	339.7	354.5	364.3	374.1	391.3	410.1	424.9	433.0
87.5°	239.9	257.9	278.3	298.0	305.3	311.9	325.8	351.2	383.1	403.6
90°	206.3	228.4	243.1	257.0	266.9	275.1	297.2	325.0	361.0	379.0
92.5°	197.3	212.0	228.4	244.8	255.4	265.2	284.9	307.8	331.5	346.3
95°	187.5	204.7	222.7	235.8	243.1	251.3	266.9	284.1	302.9	311.1
97.5°	181.7	198.1	211.2	224.3	231.7	239.9	254.6	271.8	287.3	294.7
100°	172.7	186.6	199.7	212.8	220.2	226.8	241.5	254.6	262.0	264.4
102.5°	163.7	176.8	189.9	201.4	207.1	212.8	222.7	230.8	232.5	234.9
105°	156.4	167.8	177.6	187.5	191.6	195.6	202.2	203.0	203.0	202.2
107.5°	148.2	158.0	166.2	171.9	173.5	175.2	176.8	175.2	174.4	174.4
110°	140.8	148.2	153.9	157.2	158.0	158.8	158.0	158.0	158.8	158.0



TEST NUMBER: P241374

CATALOG NUMBER: FVS8M-3-LD4-35-3STD-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	134.3	140.8	144.9	146.5	147.3	148.2	149.8	151.4	153.1	153.9
115°	129.3	135.1	139.2	143.3	144.9	146.5	150.6	154.7	158.0	158.8
117.5°	126.9	133.4	140.0	144.9	148.2	150.6	156.4	162.1	165.4	166.2
120°	126.9	135.1	142.4	149.0	152.3	155.5	162.1	167.8	171.1	172.7
122.5°	126.1	135.9	144.1	151.4	154.7	158.0	164.5	170.3	174.4	176.0
125°	125.2	135.1	144.1	152.3	155.5	158.8	165.4	170.3	174.4	176.0
127.5°	122.0	132.6	141.6	149.8	153.9	158.0	163.7	168.6	172.7	174.4
130°	118.7	128.5	137.5	146.5	150.6	154.7	161.3	166.2	170.3	171.9
132.5°	113.8	124.4	133.4	141.6	145.7	149.8	156.4	162.1	165.4	167.0
135°	108.9	119.5	127.7	135.1	139.2	143.3	149.8	154.7	158.8	159.6
137.5°	103.1	112.1	121.2	128.5	131.8	135.1	140.8	146.5	149.0	150.6
140°	95.8	104.8	113.0	119.5	122.8	126.1	131.0	135.1	138.3	140.0
142.5°	88.4	96.6	103.1	109.7	113.0	114.6	119.5	123.6	126.1	126.9
145°	79.4	86.8	93.3	99.1	100.7	103.1	107.2	110.5	112.1	113.8
147.5°	69.6	76.1	82.7	87.6	90.0	91.7	95.8	98.2	99.9	100.7
150°	59.8	66.3	72.0	76.1	77.8	80.2	82.7	86.0	86.8	87.6
152.5°	49.1	55.7	60.6	65.5	67.1	67.9	71.2	72.9	74.5	74.5
155°	40.1	45.0	49.9	54.0	55.7	56.5	58.9	60.6	61.4	62.2
157.5°	31.1	35.2	40.1	44.2	45.0	45.8	48.3	49.1	49.9	50.8
160°	23.7	27.0	30.3	33.6	35.2	36.8	38.5	39.3	40.1	39.3
162.5°	17.2	19.6	22.1	24.6	26.2	27.8	29.5	30.3	30.3	30.3
165°	11.5	13.9	15.6	17.2	18.0	18.8	21.3	21.3	21.3	21.3
167.5°	7.4	8.2	9.0	10.6	10.6	11.5	13.1	13.9	13.9	13.9
170°	3.3	4.1	4.9	4.9	5.7	5.7	6.5	7.4	7.4	6.5
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)