

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: P241355

Luminaire Tested: **FVS8M-3-LD4-40-1HI-P125-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241355
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1711-410-18)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FVS8M-3-LD4-40-1HI-P125-UNV-EDC1
Description: FAILSAFE FVS8M LED FIXTURE
3FT LENGTH, 1-MODULE LED WITH P125 LENS
Light Source: (84) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

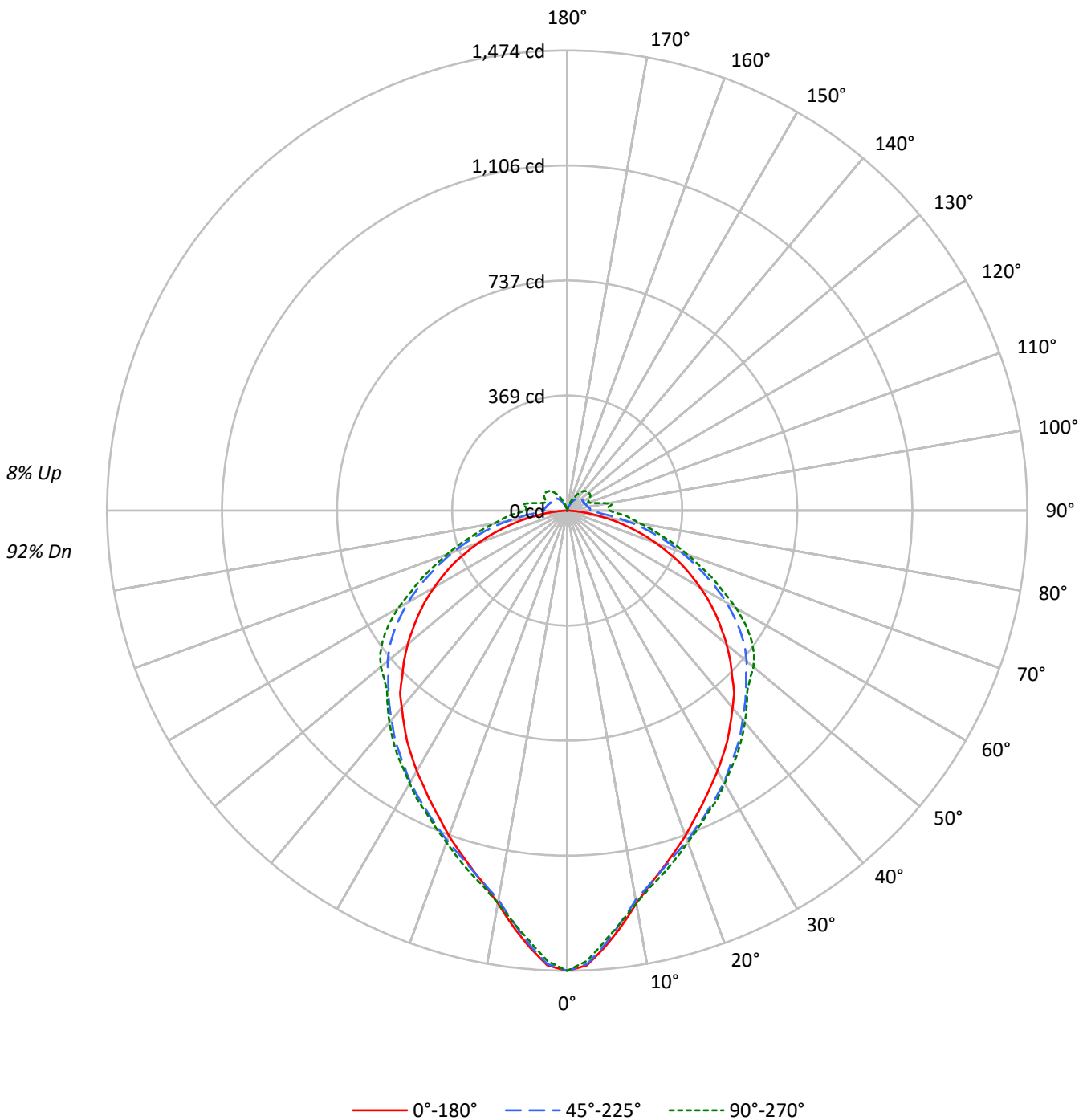
Lumens per Lamp: N/A
Luminaire Lumens: 3936.1 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Spacing Criteria (0/90/45): 0.98 / 1.03 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 2.85' x H: 0.15')
CIE Type: Direct

Input Watts (W): 36
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	95	95	95	92
1	106	101	97	92	103	98	94	90	92	89	86	87	84	82	82	80	78	76
2	96	88	81	75	93	85	79	73	80	75	70	76	71	68	72	68	65	62
3	88	77	68	62	84	75	67	61	70	64	59	67	61	57	63	59	55	52
4	80	68	59	52	77	66	58	51	62	55	50	59	53	48	56	51	47	44
5	74	60	51	45	71	59	50	44	56	49	43	53	47	42	50	45	41	38
6	68	54	45	39	65	53	45	38	50	43	37	48	41	37	46	40	36	33
7	63	49	40	34	61	48	40	34	46	38	33	44	37	32	42	36	32	29
8	59	45	36	31	57	44	36	30	42	35	30	40	34	29	38	33	28	26
9	55	41	33	27	53	40	33	27	39	32	27	37	31	26	35	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°	8607	8607	8607
5°	8181	8039	7955
10°	7504	7256	7281
15°	7066	6823	6846
20°	6759	6525	6494
25°	6494	6275	6225
30°	6307	6088	6018
35°	6166	5899	5853
40°	6023	5728	5677
45°	5869	5594	5497
50°	5712	5532	5576
55°	5513	5394	5543
60°	5279	5137	5247
65°	4994	4739	4785
70°	4521	4318	4309
75°	3847	3767	3845
80°	2920	3075	3480
85°	1523	2276	3517



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.2	3.3
10°-20°	335.8	8.5
20°-30°	488.7	12.4
30°-40°	584.8	14.9
40°-50°	617.9	15.7
50°-60°	591.7	15.0
60°-70°	466.7	11.9
70°-80°	291.7	7.4
80°-90°	127.2	3.2
90°-100°	72.6	1.8
100°-110°	61.2	1.6
110°-120°	49.3	1.3
120°-130°	46.5	1.2
130°-140°	37.5	1.0
140°-150°	23.9	0.6
150°-160°	9.5	0.2
160°-170°	1.9	0.0
170°-180°	0.0	0.0
0°-30°	953.6	24.2
0°-40°	1538.4	39.1
0°-60°	2748.0	69.8
0°-90°	3633.5	92.3
90°-120°	183.1	4.7
90°-150°	291.1	7.4
90°-180°	303.0	7.7
0°-180°	3936.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1474	1474	1474	1474	1474	
5°	1402	1398	1395	1388	1384	130
15°	1185	1178	1188	1200	1201	334
25°	1032	1047	1063	1074	1068	476
35°	896	919	941	958	951	560
45°	747	775	810	821	816	578
55°	581	619	678	711	720	519
65°	401	436	487	504	514	394
75°	203	240	289	310	314	216
85°	36	67	110	157	188	46
90°	0	30	73	106	136	2
95°	0	30	74	96	133	0
105°	0	30	65	90	92	0
115°	0	28	59	70	76	0
125°	0	26	59	79	90	0
135°	1	22	54	75	87	1
145°	1	14	43	61	69	1
155°	1	6	21	34	37	0
165°	1	2	5	10	12	0
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°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9
2.5°	1457.9	1453.9	1450.9	1453.9	1451.9	1452.9	1453.9	1455.9	1455.9	1457.9	1453.9
5°	1401.9	1401.9	1397.9	1400.9	1399.9	1397.9	1398.9	1399.9	1400.9	1398.9	1394.9
7.5°	1340.9	1335.9	1333.9	1330.9	1328.9	1330.9	1329.9	1330.9	1331.9	1331.9	1327.9
10°	1276.9	1274.9	1268.9	1269.9	1268.9	1269.9	1272.9	1273.9	1270.9	1267.9	1265.9
12.5°	1225.9	1219.9	1219.9	1221.9	1220.9	1221.9	1218.9	1215.9	1220.9	1224.9	1224.9
15°	1184.9	1179.9	1176.9	1180.9	1179.9	1177.9	1178.9	1179.9	1182.9	1185.9	1187.9
17.5°	1145.9	1141.9	1139.9	1143.9	1142.9	1142.9	1143.9	1147.9	1153.9	1153.9	1153.9
20°	1107.9	1102.9	1103.9	1109.9	1109.9	1111.9	1112.9	1115.9	1119.9	1123.9	1124.9
22.5°	1066.9	1065.9	1067.9	1073.9	1074.9	1076.9	1080.9	1086.9	1088.9	1090.9	1091.9
25°	1031.9	1029.9	1035.9	1038.9	1043.9	1046.9	1049.9	1052.9	1059.9	1062.9	1062.9
27.5°	995.9	995.9	999.9	1005.9	1010.9	1016.9	1019.9	1022.9	1027.9	1031.9	1033.9
30°	962.9	959.9	964.9	972.9	980.9	984.9	986.9	991.9	996.9	1001.9	1004.9
32.5°	928.9	926.9	932.9	937.9	946.9	948.9	951.9	960.9	964.9	967.9	970.9
35°	895.9	893.9	897.9	905.9	914.9	918.9	919.9	929.9	934.9	937.9	940.9
37.5°	859.0	862.0	864.0	871.9	877.9	881.9	886.9	894.9	901.9	904.9	909.9
40°	824.0	826.0	828.0	835.0	844.0	848.0	851.0	862.0	868.9	872.9	874.9
42.5°	792.0	788.0	792.0	801.0	807.0	812.0	816.0	825.0	833.0	842.0	843.0
45°	747.0	750.0	757.0	765.0	773.0	775.0	779.0	789.0	796.0	805.0	810.0
47.5°	708.0	712.0	715.0	724.0	734.0	737.0	742.0	752.0	764.0	773.0	777.0
50°	667.0	672.0	676.0	684.0	694.0	699.0	706.0	718.0	729.0	741.0	751.0
52.5°	623.0	629.0	636.0	641.0	654.0	659.0	665.0	680.0	695.0	707.0	717.0
55°	581.0	586.0	594.0	601.0	614.0	619.0	625.0	641.0	657.0	668.0	678.0
57.5°	538.0	540.0	547.0	556.0	569.0	578.0	583.0	598.0	612.0	624.0	635.0
60°	492.0	496.0	502.0	512.0	527.0	531.0	537.0	554.0	568.0	580.0	589.0
62.5°	446.0	450.0	456.0	468.0	476.0	483.0	492.0	507.0	518.0	528.0	540.0
65°	401.0	403.0	409.0	420.0	431.0	436.0	442.0	456.0	467.0	479.0	487.0
67.5°	350.0	355.0	362.0	370.0	381.0	388.0	393.0	404.0	418.0	432.0	437.0
70°	302.0	306.0	312.0	320.0	332.0	337.0	344.0	356.0	368.0	381.0	389.0
72.5°	254.0	257.0	261.0	271.0	282.0	288.0	294.0	306.0	321.0	330.0	338.0
75°	203.0	208.0	214.0	223.0	233.0	240.0	245.0	257.0	268.0	278.0	289.0
77.5°	157.0	161.0	167.0	174.0	187.0	194.0	198.0	209.0	221.0	228.0	241.0
80°	112.0	115.0	122.0	130.0	140.0	145.0	151.0	161.0	171.0	181.0	193.0
82.5°	71.0	73.0	80.0	88.0	98.0	103.0	108.0	118.0	127.0	139.0	149.0
85°	36.0	38.0	45.0	52.0	63.0	67.0	70.0	81.0	92.0	101.0	110.0
87.5°	11.0	14.0	20.0	28.0	37.0	41.0	45.0	55.0	64.0	74.0	85.0
90°	0.0	3.0	9.0	16.0	25.0	30.0	34.0	44.0	54.0	64.0	73.0
92.5°	0.0	3.0	8.0	16.0	25.0	30.0	34.0	44.0	54.0	63.0	74.0
95°	0.0	3.0	8.0	16.0	25.0	30.0	35.0	44.0	54.0	65.0	74.0
97.5°	0.0	2.0	8.0	16.0	25.0	30.0	35.0	44.0	55.0	64.0	70.0
100°	0.0	2.0	8.0	16.0	25.0	30.0	34.0	45.0	54.0	61.0	68.0
102.5°	0.0	2.0	8.0	16.0	25.0	30.0	35.0	44.0	51.0	59.0	66.0
105°	0.0	2.0	8.0	16.0	25.0	30.0	34.0	42.0	50.0	58.0	65.0
107.5°	0.0	2.0	8.0	16.0	24.0	29.0	33.0	41.0	49.0	57.0	63.0
110°	0.0	2.0	7.0	15.0	24.0	28.0	33.0	41.0	49.0	56.0	62.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.0	2.0	7.0	15.0	24.0	28.0	32.0	41.0	48.0	55.0	60.0
115°	0.0	2.0	7.0	15.0	23.0	28.0	32.0	41.0	48.0	55.0	59.0
117.5°	0.0	2.0	7.0	15.0	23.0	28.0	32.0	40.0	48.0	54.0	59.0
120°	0.0	1.0	7.0	14.0	23.0	27.0	32.0	40.0	48.0	54.0	59.0
122.5°	0.0	1.0	6.0	14.0	22.0	27.0	31.0	40.0	47.0	54.0	59.0
125°	0.0	1.0	6.0	14.0	22.0	26.0	30.0	39.0	47.0	54.0	59.0
127.5°	1.0	1.0	6.0	13.0	21.0	25.0	29.0	38.0	46.0	53.0	59.0
130°	0.0	1.0	5.0	12.0	20.0	24.0	28.0	37.0	45.0	51.0	57.0
132.5°	1.0	1.0	5.0	11.0	19.0	23.0	27.0	35.0	44.0	50.0	56.0
135°	1.0	1.0	4.0	10.0	18.0	22.0	26.0	33.0	42.0	48.0	54.0
137.5°	1.0	1.0	4.0	9.0	16.0	20.0	24.0	32.0	39.0	46.0	52.0
140°	1.0	1.0	3.0	8.0	15.0	18.0	22.0	30.0	37.0	44.0	50.0
142.5°	1.0	1.0	3.0	7.0	13.0	16.0	20.0	27.0	34.0	41.0	47.0
145°	1.0	1.0	2.0	6.0	11.0	14.0	17.0	24.0	31.0	37.0	43.0
147.5°	1.0	1.0	2.0	5.0	9.0	12.0	15.0	21.0	27.0	33.0	38.0
150°	1.0	1.0	1.0	4.0	7.0	9.0	12.0	17.0	22.0	27.0	32.0
152.5°	1.0	1.0	1.0	3.0	6.0	7.0	9.0	14.0	18.0	22.0	26.0
155°	1.0	1.0	1.0	2.0	4.0	6.0	7.0	10.0	14.0	17.0	21.0
157.5°	1.0	1.0	1.0	2.0	3.0	4.0	5.0	8.0	10.0	13.0	16.0
160°	1.0	1.0	1.0	1.0	2.0	3.0	4.0	5.0	7.0	9.0	11.0
162.5°	1.0	1.0	1.0	1.0	2.0	2.0	3.0	4.0	5.0	6.0	8.0
165°	1.0	1.0	1.0	1.0	1.0	2.0	2.0	3.0	4.0	4.0	5.0
167.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0	3.0	3.0
170°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0
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°	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9	1473.9
2.5°	1451.9	1449.9	1450.9	1450.9	1446.9	1449.9	1448.9	1446.9	1443.9	1443.9
5°	1391.9	1387.9	1387.9	1389.9	1387.9	1387.9	1388.9	1387.9	1388.9	1383.9
7.5°	1326.9	1323.9	1325.9	1326.9	1329.9	1328.9	1329.9	1328.9	1328.9	1328.9
10°	1266.9	1271.9	1270.9	1272.9	1275.9	1274.9	1276.9	1279.9	1278.9	1276.9
12.5°	1224.9	1229.9	1229.9	1234.9	1234.9	1235.9	1238.9	1238.9	1233.9	1233.9
15°	1190.9	1191.9	1192.9	1200.9	1199.9	1201.9	1203.9	1201.9	1200.9	1200.9
17.5°	1155.9	1156.9	1160.9	1160.9	1162.9	1163.9	1167.9	1166.9	1165.9	1165.9
20°	1125.9	1127.9	1132.9	1135.9	1136.9	1133.9	1136.9	1134.9	1134.9	1130.9
22.5°	1096.9	1102.9	1100.9	1102.9	1104.9	1106.9	1106.9	1104.9	1102.9	1098.9
25°	1066.9	1068.9	1071.9	1073.9	1073.9	1072.9	1072.9	1071.9	1069.9	1067.9
27.5°	1037.9	1040.9	1039.9	1045.9	1047.9	1048.9	1047.9	1043.9	1039.9	1041.9
30°	1006.9	1009.9	1013.9	1017.9	1018.9	1012.9	1011.9	1012.9	1008.9	1008.9
32.5°	974.9	978.9	985.9	984.9	984.9	987.9	987.9	984.9	979.9	977.9
35°	943.9	951.9	953.9	959.9	957.9	954.9	951.9	951.9	948.9	950.9
37.5°	912.9	917.9	923.9	922.9	922.9	923.9	923.9	919.9	920.9	918.9
40°	880.9	884.9	888.9	888.9	890.9	890.9	887.9	884.9	884.9	885.9
42.5°	845.0	851.0	856.0	856.0	857.0	856.0	857.0	855.0	851.0	851.0
45°	815.0	817.0	821.0	822.0	821.0	821.0	818.0	818.0	817.0	816.0
47.5°	784.0	791.0	792.0	794.0	792.0	792.0	794.0	795.0	797.0	795.0
50°	756.0	765.0	771.0	774.0	774.0	776.0	777.0	777.0	780.0	779.0
52.5°	728.0	734.0	740.0	748.0	750.0	750.0	754.0	753.0	755.0	755.0
55°	688.0	696.0	703.0	709.0	711.0	715.0	714.0	717.0	717.0	720.0
57.5°	645.0	649.0	659.0	663.0	662.0	665.0	666.0	671.0	677.0	677.0
60°	599.0	602.0	607.0	607.0	609.0	610.0	616.0	619.0	621.0	625.0
62.5°	543.0	550.0	554.0	555.0	557.0	562.0	562.0	562.0	564.0	565.0
65°	495.0	499.0	503.0	507.0	504.0	505.0	506.0	507.0	510.0	514.0
67.5°	446.0	450.0	454.0	456.0	452.0	453.0	451.0	454.0	457.0	457.0
70°	395.0	400.0	406.0	405.0	401.0	403.0	402.0	406.0	408.0	409.0
72.5°	346.0	353.0	357.0	357.0	357.0	357.0	358.0	360.0	361.0	362.0
75°	296.0	303.0	308.0	312.0	310.0	313.0	315.0	316.0	315.0	314.0
77.5°	250.0	257.0	261.0	267.0	269.0	271.0	273.0	273.0	275.0	275.0
80°	200.0	209.0	216.0	224.0	227.0	231.0	232.0	235.0	235.0	236.0
82.5°	158.0	168.0	176.0	184.0	188.0	190.0	196.0	201.0	206.0	209.0
85°	121.0	132.0	140.0	150.0	157.0	165.0	176.0	182.0	183.0	188.0
87.5°	95.0	106.0	120.0	131.0	131.0	132.0	135.0	140.0	147.0	152.0
90°	84.0	98.0	102.0	104.0	106.0	108.0	112.0	119.0	129.0	136.0
92.5°	85.0	89.0	93.0	96.0	98.0	101.0	106.0	113.0	123.0	130.0
95°	80.0	85.0	90.0	94.0	96.0	99.0	105.0	114.0	126.0	133.0
97.5°	77.0	83.0	87.0	93.0	96.0	100.0	110.0	123.0	138.0	144.0
100°	75.0	81.0	86.0	93.0	98.0	102.0	114.0	125.0	131.0	132.0
102.5°	73.0	79.0	85.0	92.0	96.0	100.0	106.0	110.0	109.0	109.0
105°	71.0	77.0	82.0	87.0	90.0	91.0	94.0	93.0	93.0	92.0
107.5°	69.0	74.0	78.0	80.0	81.0	82.0	82.0	82.0	81.0	81.0
110°	67.0	71.0	73.0	74.0	74.0	74.0	75.0	75.0	75.0	75.0



TEST NUMBER: P241355

CATALOG NUMBER: FVS8M-3-LD4-40-1HI-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	65.0	68.0	69.0	70.0	70.0	70.0	72.0	73.0	73.0	73.0
115°	63.0	66.0	68.0	69.0	70.0	71.0	73.0	75.0	76.0	76.0
117.5°	63.0	67.0	69.0	72.0	73.0	74.0	76.0	79.0	80.0	80.0
120°	64.0	68.0	72.0	75.0	76.0	77.0	80.0	83.0	84.0	85.0
122.5°	65.0	69.0	73.0	77.0	78.0	79.0	82.0	85.0	87.0	88.0
125°	65.0	70.0	74.0	78.0	79.0	81.0	83.0	86.0	88.0	90.0
127.5°	64.0	69.0	74.0	78.0	80.0	81.0	84.0	86.0	89.0	90.0
130°	63.0	68.0	72.0	76.0	78.0	80.0	84.0	87.0	89.0	90.0
132.5°	61.0	66.0	71.0	75.0	77.0	79.0	83.0	86.0	88.0	89.0
135°	59.0	65.0	69.0	73.0	75.0	77.0	81.0	84.0	86.0	87.0
137.5°	58.0	63.0	67.0	71.0	73.0	75.0	79.0	81.0	84.0	85.0
140°	55.0	60.0	64.0	68.0	70.0	72.0	75.0	78.0	80.0	81.0
142.5°	53.0	57.0	61.0	64.0	66.0	68.0	71.0	73.0	75.0	76.0
145°	49.0	53.0	57.0	60.0	61.0	63.0	65.0	67.0	69.0	69.0
147.5°	43.0	48.0	51.0	54.0	55.0	57.0	59.0	60.0	61.0	62.0
150°	37.0	41.0	45.0	47.0	48.0	49.0	51.0	52.0	53.0	53.0
152.5°	30.0	34.0	37.0	40.0	41.0	42.0	43.0	44.0	45.0	45.0
155°	24.0	27.0	31.0	32.0	34.0	34.0	36.0	37.0	37.0	37.0
157.5°	18.0	21.0	23.0	26.0	27.0	27.0	29.0	29.0	30.0	30.0
160°	13.0	15.0	17.0	20.0	21.0	21.0	22.0	23.0	23.0	23.0
162.5°	9.0	11.0	12.0	14.0	15.0	16.0	16.0	17.0	17.0	17.0
165°	6.0	7.0	8.0	9.0	10.0	10.0	11.0	12.0	12.0	12.0
167.5°	4.0	4.0	5.0	5.0	6.0	6.0	7.0	7.0	7.0	8.0
170°	2.0	2.0	2.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0
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)