

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: METALUX

Report Number: P237832

Luminaire Tested: **4VT2-LD5-6-DR100-W-UNV-L850-CD1-WL-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P237832  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-20)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4VT2-LD5-6-DR100-W-UNV-L850-CD1-WL-U  
Description: METALUX VT2 LED LUMINAIRE  
INTERNAL PRISMATIC LENS/100% DR HIGH IMPACT ADDITIVE WIDE DISTRIBUTION  
4FT FIXTURE  
Light Source: (112) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6302.0 lumens  
Efficiency: N/A  
Efficacy: 124.5 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.58 / 1.57  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 4.17' x H: 0.17')  
CIE Type: Semi-Direct

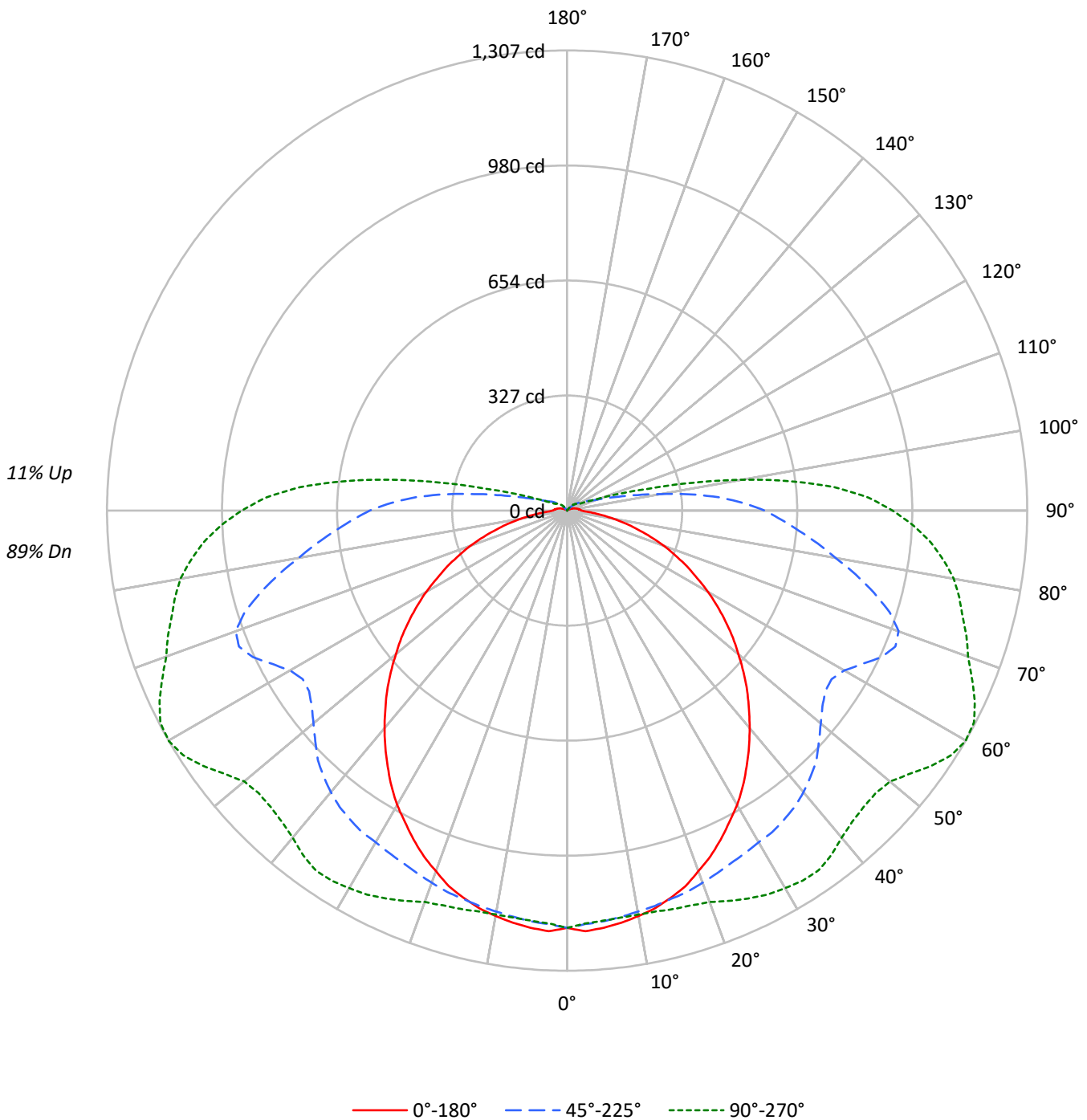
Input Watts (W): 50.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92	89
1	101	94	88	82	97	91	85	80	84	80	75	78	74	71	73	70	67	64
2	90	79	70	63	86	76	68	61	71	64	58	66	60	55	61	56	52	49
3	81	68	58	50	77	65	56	49	61	53	47	56	50	44	52	47	42	39
4	73	59	49	41	70	57	48	40	53	45	38	49	42	37	46	40	35	32
5	67	52	42	35	64	50	41	34	47	39	32	44	37	31	41	35	30	27
6	62	47	37	30	59	45	36	29	42	34	28	39	32	27	37	30	26	23
7	57	42	32	26	54	41	32	25	38	30	24	36	29	23	33	27	22	20
8	53	38	29	23	51	37	28	22	35	27	21	32	26	21	30	24	20	18
9	49	35	26	20	47	34	25	20	32	24	19	30	23	18	28	22	18	16
10	46	32	24	18	44	31	23	18	29	22	17	28	21	17	26	20	16	14

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

	0°	45°	90°
0°	6124	6124	6124
5°	6147	5938	5893
10°	6092	5798	5773
15°	6025	5703	5752
20°	5906	5642	5801
25°	5773	5602	5999
30°	5631	5630	6195
35°	5451	5711	6375
40°	5264	5766	6391
45°	5080	5791	6524
50°	4872	5749	6885
55°	4679	5853	7711
60°	4467	6442	8563
65°	4226	7688	9107
70°	3982	8772	9554
75°	3590	9071	10345
80°	3213	9221	11480
85°	2933	9761	12778



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.0	1.8
10°-20°	325.4	5.2
20°-30°	516.2	8.2
30°-40°	669.1	10.6
40°-50°	754.8	12.0
50°-60°	817.7	13.0
60°-70°	879.5	14.0
70°-80°	837.4	13.3
80°-90°	686.5	10.9
90°-100°	454.5	7.2
100°-110°	163.5	2.6
110°-120°	49.6	0.8
120°-130°	24.1	0.4
130°-140°	10.1	0.2
140°-150°	1.7	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	953.6	15.1
0°-40°	1622.7	25.7
0°-60°	3195.1	50.7
0°-90°	5598.6	88.8
90°-120°	667.6	10.6
90°-150°	703.4	11.2
90°-180°	703.0	11.2
0°-180°	6302.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1185	1185	1185	1185	1185	
5°	1189	1184	1171	1174	1169	113
15°	1138	1136	1142	1165	1171	321
25°	1032	1046	1104	1192	1216	475
35°	888	937	1073	1203	1247	556
45°	723	809	1002	1135	1190	557
55°	549	668	895	1166	1264	491
65°	375	524	985	1241	1277	371
75°	207	497	902	1089	1163	222
85°	72	360	662	937	1037	72
90°	40	274	561	829	924	23
95°	35	195	432	669	762	28
105°	23	72	152	211	240	25
115°	12	32	64	60	56	12
125°	4	11	37	38	34	4
135°	2	0	15	22	22	1
145°	1	0	0	5	5	1
155°	0	0	0	0	0	0
165°	0	0	0	0	0	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°	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2
2.5°	1195.8	1193.7	1190.5	1189.4	1189.4	1189.4	1189.4	1187.3	1184.1	1179.9	1175.6
5°	1189.4	1187.3	1184.1	1184.1	1183.1	1184.1	1184.1	1182.0	1179.9	1175.6	1171.4
7.5°	1180.9	1179.9	1175.6	1173.5	1173.5	1173.5	1175.6	1173.5	1172.5	1168.2	1164.0
10°	1169.3	1167.2	1165.0	1165.0	1166.1	1166.1	1166.1	1167.2	1165.0	1159.7	1156.6
12.5°	1156.6	1153.4	1151.3	1151.3	1152.3	1152.3	1153.4	1153.4	1153.4	1150.2	1150.2
15°	1138.5	1137.5	1133.2	1134.3	1134.3	1136.4	1137.5	1138.5	1137.5	1140.7	1141.7
17.5°	1118.4	1117.3	1113.1	1113.1	1115.2	1116.3	1119.5	1123.7	1125.8	1130.1	1135.4
20°	1089.8	1089.8	1087.6	1089.8	1094.0	1096.1	1098.2	1105.7	1109.9	1118.4	1124.8
22.5°	1063.3	1061.1	1061.1	1063.3	1067.5	1072.8	1077.0	1087.6	1095.1	1105.7	1114.2
25°	1031.5	1030.4	1029.3	1034.6	1041.0	1046.3	1053.7	1066.4	1077.0	1089.8	1103.6
27.5°	997.5	996.5	998.6	1002.8	1014.5	1021.9	1028.3	1045.2	1058.0	1078.1	1096.1
30°	965.7	962.6	964.7	971.0	985.9	996.5	1002.8	1021.9	1039.9	1063.3	1087.6
32.5°	928.6	925.5	929.7	939.2	956.2	966.8	978.5	998.6	1019.8	1048.4	1083.4
35°	888.4	889.4	891.5	906.4	924.4	937.1	948.8	975.3	1001.8	1036.8	1072.8
37.5°	848.1	845.9	854.4	871.4	892.6	908.5	920.2	947.7	984.8	1023.0	1061.1
40°	806.7	808.8	815.2	834.3	856.6	876.7	889.4	925.5	965.7	1005.0	1044.2
42.5°	764.3	769.6	776.0	798.2	825.8	841.7	860.8	900.0	942.4	983.8	1024.0
45°	723.0	727.2	736.8	761.1	787.6	808.8	830.0	871.4	918.0	961.5	1001.8
47.5°	679.5	683.8	696.5	721.9	751.6	774.9	797.2	841.7	889.4	933.9	970.0
50°	635.0	641.4	654.1	679.5	718.7	739.9	762.2	811.0	855.5	899.0	940.3
52.5°	593.6	596.8	617.0	641.4	681.6	706.0	727.2	777.0	819.4	868.2	913.8
55°	549.1	555.5	573.5	597.9	642.4	667.9	692.2	739.9	787.6	838.5	894.7
57.5°	505.7	511.0	530.0	557.6	605.3	629.7	653.0	705.0	753.7	817.3	890.5
60°	462.2	468.6	487.6	519.4	567.1	592.6	617.0	672.1	735.7	814.1	908.5
62.5°	416.6	427.2	441.0	480.2	529.0	554.4	584.1	647.7	731.5	831.1	943.5
65°	375.3	380.6	401.8	442.1	494.0	523.7	557.6	639.2	745.2	867.2	984.8
67.5°	331.8	339.2	362.5	407.1	465.4	500.4	542.8	647.7	777.0	906.4	1009.2
70°	292.6	297.9	326.5	375.3	445.2	490.8	542.8	668.9	807.8	921.2	1001.8
72.5°	249.1	257.6	292.6	351.9	436.8	491.9	553.4	691.2	814.1	901.1	960.4
75°	206.7	219.4	265.0	332.9	434.6	497.2	562.9	688.0	784.5	850.2	902.1
77.5°	171.7	187.6	238.5	320.1	430.4	491.9	552.3	650.9	728.3	790.8	839.6
80°	132.5	156.9	216.3	304.2	411.3	464.3	513.1	597.9	660.4	720.9	773.9
82.5°	100.7	128.3	192.9	279.9	372.1	416.6	454.8	530.0	595.8	653.0	717.7
85°	72.1	101.8	166.4	243.8	321.2	360.4	395.4	466.4	531.1	595.8	661.5
87.5°	49.8	79.5	141.0	208.8	277.7	309.5	343.5	411.3	474.9	537.5	609.5
90°	40.3	64.7	117.7	179.2	238.5	273.5	303.2	364.7	428.3	494.0	560.8
92.5°	38.2	54.1	98.6	151.6	206.7	235.3	262.9	319.1	378.5	439.9	499.3
95°	35.0	43.5	77.4	123.0	169.6	195.1	217.3	270.3	320.1	374.2	431.5
97.5°	32.9	35.0	59.4	95.4	134.6	155.8	173.9	215.2	259.7	301.1	353.0
100°	29.7	30.7	45.6	74.2	102.8	120.8	135.7	169.6	201.4	234.3	269.3
102.5°	26.5	26.5	35.0	55.1	80.6	92.2	104.9	132.5	155.8	177.0	203.5
105°	23.3	23.3	27.6	42.4	60.4	72.1	80.6	100.7	118.7	134.6	151.6
107.5°	21.2	20.1	22.3	32.9	47.7	56.2	64.7	79.5	93.3	103.9	115.5
110°	17.0	17.0	18.0	26.5	39.2	45.6	53.0	64.7	76.3	83.7	90.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	14.8	13.8	13.8	21.2	31.8	38.2	43.5	55.1	64.7	71.0	74.2
115°	11.7	11.7	10.6	15.9	25.4	31.8	36.0	46.6	55.1	60.4	63.6
117.5°	9.5	9.5	9.5	11.7	21.2	25.4	30.7	40.3	47.7	53.0	56.2
120°	7.4	7.4	7.4	7.4	15.9	20.1	25.4	33.9	41.3	46.6	49.8
122.5°	6.4	5.3	5.3	5.3	10.6	15.9	19.1	27.6	35.0	40.3	44.5
125°	4.2	4.2	4.2	3.2	7.4	10.6	14.8	22.3	28.6	33.9	37.1
127.5°	3.2	3.2	3.2	3.2	3.2	6.4	9.5	17.0	23.3	28.6	31.8
130°	3.2	3.2	2.1	2.1	1.1	3.2	5.3	11.7	17.0	22.3	26.5
132.5°	2.1	2.1	2.1	1.1	1.1	1.1	2.1	7.4	12.7	17.0	20.1
135°	2.1	2.1	1.1	1.1	0.0	0.0	0.0	4.2	8.5	11.7	14.8
137.5°	1.1	1.1	1.1	1.1	0.0	0.0	0.0	1.1	4.2	7.4	10.6
140°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	1.1	3.2	6.4
142.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.1
145°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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°	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2	1185.2
2.5°	1175.6	1177.8	1177.8	1177.8	1177.8	1177.8	1175.6	1174.6	1173.5	1173.5
5°	1170.3	1172.5	1173.5	1173.5	1173.5	1173.5	1172.5	1171.4	1170.3	1169.3
7.5°	1164.0	1167.2	1169.3	1170.3	1170.3	1170.3	1169.3	1169.3	1167.2	1166.1
10°	1157.6	1160.8	1164.0	1166.1	1167.2	1167.2	1167.2	1167.2	1166.1	1165.0
12.5°	1153.4	1158.7	1162.9	1165.0	1165.0	1166.1	1168.2	1168.2	1167.2	1166.1
15°	1148.1	1156.6	1161.9	1165.0	1165.0	1167.2	1171.4	1171.4	1170.3	1171.4
17.5°	1143.8	1152.3	1160.8	1166.1	1168.2	1171.4	1174.6	1175.6	1176.7	1175.6
20°	1135.4	1149.1	1160.8	1167.2	1171.4	1172.5	1179.9	1185.2	1185.2	1183.1
22.5°	1132.2	1148.1	1161.9	1175.6	1177.8	1182.0	1191.5	1196.8	1200.0	1200.0
25°	1125.8	1147.0	1167.2	1184.1	1191.5	1196.8	1206.4	1214.9	1212.7	1215.9
27.5°	1122.6	1148.1	1168.2	1189.4	1200.0	1205.3	1219.1	1224.4	1227.6	1229.7
30°	1120.5	1149.1	1171.4	1194.7	1203.2	1213.8	1226.5	1235.0	1239.2	1238.2
32.5°	1117.3	1146.0	1174.6	1194.7	1207.4	1215.9	1228.6	1238.2	1244.5	1245.6
35°	1109.9	1142.8	1169.3	1193.7	1203.2	1213.8	1228.6	1233.9	1244.5	1246.7
37.5°	1100.4	1132.2	1157.6	1184.1	1193.7	1202.1	1220.2	1225.5	1229.7	1232.9
40°	1085.5	1115.2	1142.8	1168.2	1176.7	1186.2	1199.0	1207.4	1213.8	1212.7
42.5°	1066.4	1094.0	1120.5	1148.1	1154.4	1165.0	1180.9	1190.5	1196.8	1199.0
45°	1035.7	1067.5	1098.2	1122.6	1135.4	1147.0	1165.0	1175.6	1183.1	1190.5
47.5°	1006.0	1045.2	1080.2	1107.8	1122.6	1134.3	1156.6	1172.5	1184.1	1188.4
50°	982.7	1023.0	1063.3	1104.6	1120.5	1135.4	1160.8	1177.8	1190.5	1196.8
52.5°	963.6	1012.4	1063.3	1114.2	1136.4	1154.4	1184.1	1205.3	1222.3	1227.6
55°	956.2	1017.7	1082.3	1140.7	1166.1	1189.4	1223.3	1243.5	1260.4	1263.6
57.5°	968.9	1051.6	1122.6	1183.1	1208.5	1227.6	1260.4	1277.4	1291.2	1293.3
60°	1003.9	1090.8	1165.0	1217.0	1243.5	1260.4	1284.8	1297.5	1307.1	1307.1
62.5°	1047.4	1125.8	1190.5	1233.9	1253.0	1265.7	1280.6	1295.4	1298.6	1302.8
65°	1080.2	1148.1	1192.6	1224.4	1241.4	1246.7	1262.6	1268.9	1277.4	1277.4
67.5°	1082.3	1136.4	1168.2	1193.7	1203.2	1210.6	1229.7	1237.1	1243.5	1244.5
70°	1053.7	1090.8	1126.9	1149.1	1159.7	1174.6	1192.6	1204.3	1210.6	1211.7
72.5°	1008.1	1042.1	1078.1	1112.0	1126.9	1139.6	1162.9	1178.8	1185.2	1189.4
75°	953.0	990.1	1033.6	1073.9	1088.7	1101.4	1134.3	1149.1	1161.9	1162.9
77.5°	893.7	938.2	989.1	1032.5	1051.6	1073.9	1100.4	1122.6	1132.2	1140.7
80°	834.3	891.5	943.5	994.4	1012.4	1037.8	1069.6	1095.1	1105.7	1115.2
82.5°	778.1	842.8	906.4	958.3	978.5	1000.7	1033.6	1062.2	1071.7	1078.1
85°	729.3	796.1	858.7	911.7	937.1	956.2	993.3	1017.7	1031.5	1036.8
87.5°	677.4	745.2	806.7	864.0	885.2	904.3	942.4	968.9	981.6	984.8
90°	626.5	696.5	753.7	803.5	829.0	852.3	887.3	911.7	924.4	924.4
92.5°	561.8	628.6	689.1	734.6	759.0	778.1	816.3	834.3	855.5	855.5
95°	487.6	545.9	602.1	648.8	668.9	689.1	720.9	745.2	756.9	762.2
97.5°	403.9	448.4	499.3	537.5	565.0	571.4	606.4	630.8	643.5	639.2
100°	304.2	339.2	379.5	411.3	432.5	444.2	468.6	482.3	501.4	503.5
102.5°	226.9	252.3	275.6	293.6	310.6	315.9	332.9	346.6	355.1	364.7
105°	166.4	181.3	195.1	207.8	211.0	220.5	234.3	243.8	238.5	239.6
107.5°	124.0	131.5	138.9	143.1	148.4	154.8	158.0	158.0	163.3	165.4
110°	94.3	98.6	101.8	102.8	104.9	104.9	104.9	104.9	106.0	108.1





TEST NUMBER: P237832

CATALOG NUMBER: 4VT2-LD5-6-DR100-W-UNV-L850-CD1-WL-U

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	75.3	77.4	77.4	77.4	76.3	76.3	75.3	74.2	72.1	74.2
115°	64.7	64.7	62.5	61.5	60.4	59.4	57.2	55.1	54.1	56.2
117.5°	57.2	56.2	55.1	51.9	50.9	49.8	47.7	46.6	44.5	43.5
120°	50.9	50.9	48.8	47.7	46.6	44.5	42.4	41.3	39.2	38.2
122.5°	45.6	45.6	44.5	43.5	42.4	41.3	39.2	38.2	36.0	36.0
125°	39.2	40.3	40.3	39.2	38.2	38.2	36.0	35.0	33.9	33.9
127.5°	33.9	35.0	36.0	36.0	35.0	35.0	33.9	32.9	31.8	30.7
130°	28.6	30.7	30.7	31.8	31.8	30.7	30.7	29.7	28.6	28.6
132.5°	23.3	25.4	26.5	26.5	27.6	27.6	27.6	26.5	26.5	25.4
135°	18.0	20.1	21.2	22.3	22.3	23.3	23.3	22.3	22.3	22.3
137.5°	13.8	14.8	17.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
140°	8.5	10.6	12.7	12.7	13.8	13.8	13.8	13.8	13.8	13.8
142.5°	4.2	6.4	7.4	8.5	8.5	9.5	9.5	9.5	9.5	9.5
145°	1.1	2.1	3.2	4.2	5.3	5.3	5.3	5.3	5.3	5.3
147.5°	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	1.1
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)