

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: P237820

Luminaire Tested: **4VRVT2-LD5-6-DR-W-UNV-L850-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237820
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-19)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4VRVT2-LD5-6-DR-W-UNV-L850-CD1-WL-U
Description: METALUX VRVT2 LED LUMINAIRE
INTERNAL PRISMATIC LENS/15% 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: 6287.0 lumens
Efficiency: N/A
Efficacy: 124.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.6 / 1.58
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 4.17' x H: 0.17')
CIE Type: Semi-Direct

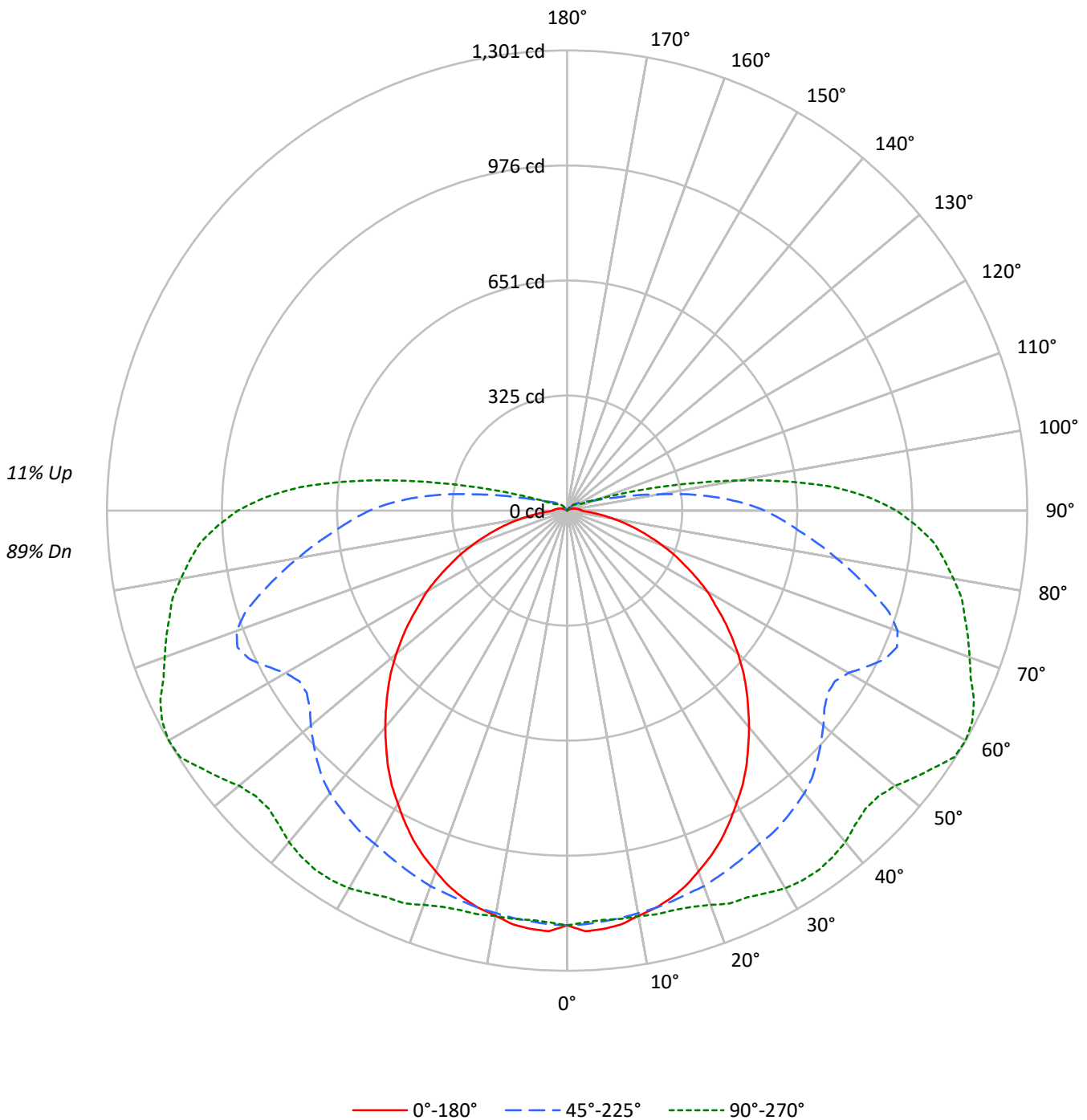
Input Watts (W): 50.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	75	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	51	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	33	26	21	31	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°	6057	6057	6057
5°	6136	5911	5855
10°	6058	5793	5767
15°	6003	5714	5741
20°	5883	5668	5816
25°	5755	5628	5952
30°	5582	5630	6168
35°	5418	5694	6343
40°	5222	5760	6447
45°	5035	5778	6536
50°	4839	5782	6964
55°	4616	5880	7731
60°	4425	6510	8521
65°	4141	7745	9046
70°	3882	8706	9546
75°	3590	8986	10354
80°	3187	9208	11414
85°	2933	9714	12830



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.6	1.8
10°-20°	325.3	5.2
20°-30°	515.7	8.2
30°-40°	667.8	10.6
40°-50°	756.1	12.0
50°-60°	821.1	13.1
60°-70°	877.9	14.0
70°-80°	835.7	13.3
80°-90°	686.5	10.9
90°-100°	451.6	7.2
100°-110°	157.0	2.5
110°-120°	46.4	0.7
120°-130°	23.1	0.4
130°-140°	9.8	0.2
140°-150°	1.6	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	952.5	15.2
0°-40°	1620.3	25.8
0°-60°	3197.5	50.9
0°-90°	5597.5	89.0
90°-120°	655.0	10.4
90°-150°	689.5	11.0
90°-180°	690.0	11.0
0°-180°	6287.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1172	1172	1172	1172	1172	
5°	1187	1180	1166	1167	1162	113
15°	1134	1135	1144	1169	1169	319
25°	1028	1050	1109	1183	1206	473
35°	883	938	1070	1198	1240	552
45°	717	808	1000	1144	1193	553
55°	542	664	899	1178	1267	485
65°	368	524	992	1228	1269	366
75°	207	498	894	1089	1164	218
85°	72	360	658	938	1041	72
90°	40	268	559	838	931	23
95°	35	192	427	662	758	27
105°	23	68	144	200	238	24
115°	12	31	60	56	48	12
125°	4	11	36	37	32	4
135°	2	0	15	22	21	1
145°	1	0	0	4	4	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°	1172.4	1172.4	1172.4	1172.4	1172.4	1172.4	1172.4	1172.4	1172.4	1172.4	1172.4
2.5°	1190.4	1187.3	1184.1	1183.0	1183.0	1183.0	1183.0	1180.9	1177.7	1174.5	1170.3
5°	1187.3	1185.1	1182.0	1179.8	1179.8	1179.8	1179.8	1177.7	1174.5	1170.3	1166.1
7.5°	1179.8	1176.7	1172.4	1171.4	1170.3	1170.3	1171.4	1170.3	1167.1	1165.0	1161.8
10°	1162.9	1161.8	1158.6	1157.6	1159.7	1160.8	1160.8	1160.8	1159.7	1157.6	1155.5
12.5°	1151.2	1147.0	1144.9	1145.9	1147.0	1147.0	1149.1	1150.2	1150.2	1151.2	1151.2
15°	1134.3	1130.0	1129.0	1132.1	1133.2	1135.3	1135.3	1137.4	1138.5	1141.7	1143.8
17.5°	1113.1	1112.0	1107.8	1110.9	1116.2	1119.4	1119.4	1123.7	1126.8	1130.0	1135.3
20°	1085.5	1084.4	1082.3	1086.6	1092.9	1096.1	1101.4	1107.8	1112.0	1123.7	1130.0
22.5°	1059.0	1057.9	1054.8	1061.1	1067.5	1074.9	1081.3	1089.7	1099.3	1109.9	1119.4
25°	1028.3	1027.2	1026.1	1036.7	1044.2	1049.5	1056.9	1069.6	1081.3	1096.1	1108.8
27.5°	993.3	994.3	996.4	1006.0	1017.7	1025.1	1032.5	1050.5	1063.2	1079.1	1098.2
30°	957.2	957.2	963.6	973.1	990.1	997.5	1007.0	1028.3	1041.0	1065.4	1087.6
32.5°	922.2	922.2	925.4	937.1	959.3	968.9	980.5	1000.7	1021.9	1051.6	1081.3
35°	883.0	883.0	889.4	905.3	927.5	938.1	950.9	976.3	1002.8	1036.7	1069.6
37.5°	840.6	842.7	853.3	870.3	896.8	910.6	921.2	949.8	982.7	1019.8	1056.9
40°	800.3	802.5	815.2	834.3	862.9	875.6	889.4	925.4	959.3	999.6	1043.1
42.5°	757.9	764.3	776.0	798.2	825.8	839.6	858.6	895.7	933.9	977.4	1025.1
45°	716.6	721.9	734.6	760.1	790.8	807.8	827.9	867.1	909.5	953.0	999.6
47.5°	675.3	679.5	695.4	719.8	752.6	774.9	796.1	837.4	883.0	931.8	973.1
50°	630.7	636.0	651.9	678.4	715.5	737.8	759.0	804.6	851.2	900.0	945.6
52.5°	586.2	591.5	612.7	642.4	680.6	700.7	725.1	773.8	820.5	870.3	916.9
55°	541.7	548.0	570.3	596.8	639.2	663.6	685.9	737.8	788.7	841.7	898.9
57.5°	496.1	505.6	525.8	558.6	598.9	624.4	648.8	703.9	757.9	822.6	897.9
60°	457.9	461.1	481.3	516.2	560.8	586.2	614.8	671.0	738.9	821.5	918.0
62.5°	412.4	423.0	439.9	476.0	521.5	553.3	582.0	650.9	734.6	844.9	955.1
65°	367.8	378.4	399.6	438.9	491.9	523.7	557.6	643.5	751.6	879.8	992.2
67.5°	328.6	337.1	360.4	406.0	465.4	501.4	547.0	654.1	783.4	912.7	1009.2
70°	285.2	295.8	323.3	375.3	448.4	492.9	549.1	677.4	809.9	922.2	994.3
72.5°	242.8	256.5	291.5	353.0	438.9	494.0	559.7	693.3	813.1	896.8	954.0
75°	206.7	218.4	261.8	333.9	436.7	498.2	566.1	686.9	780.2	840.6	893.6
77.5°	168.5	184.4	239.6	321.2	432.5	494.0	551.2	647.7	724.0	782.3	833.2
80°	131.4	154.8	215.2	304.2	412.4	459.0	505.6	587.3	658.3	717.7	772.8
82.5°	100.7	126.1	191.9	280.9	368.9	411.3	452.6	525.8	589.4	656.2	715.5
85°	72.1	100.7	167.5	244.9	320.1	360.4	393.3	462.2	523.7	592.6	658.3
87.5°	49.8	79.5	137.8	206.7	275.6	307.4	340.3	406.0	470.7	540.6	609.5
90°	40.3	64.7	115.5	177.0	238.5	268.2	301.1	363.6	424.0	490.8	558.6
92.5°	38.2	53.0	96.5	148.4	204.6	233.2	259.7	315.9	375.3	439.9	497.2
95°	35.0	42.4	77.4	120.8	167.5	191.9	215.2	265.0	317.0	375.3	427.2
97.5°	31.8	35.0	59.4	93.3	132.5	152.6	171.7	209.9	256.5	297.9	349.8
100°	28.6	29.7	44.5	72.1	100.7	117.7	132.5	166.4	197.2	230.0	264.0
102.5°	25.4	25.4	33.9	54.1	78.4	89.0	101.8	126.1	149.5	170.7	198.2
105°	23.3	23.3	27.6	40.3	58.3	67.8	77.4	96.5	114.5	129.3	144.2
107.5°	20.1	20.1	22.3	31.8	45.6	54.1	60.4	75.3	89.0	99.6	108.1
110°	17.0	17.0	17.0	25.4	37.1	43.5	50.9	62.5	72.1	79.5	84.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	13.8	13.8	13.8	21.2	30.7	36.0	42.4	51.9	60.4	65.7	70.0
115°	11.7	11.7	10.6	15.9	25.4	30.7	36.0	44.5	51.9	57.2	60.4
117.5°	9.5	9.5	8.5	11.7	20.1	25.4	29.7	38.2	45.6	50.9	53.0
120°	7.4	7.4	6.4	7.4	15.9	20.1	25.4	32.9	39.2	44.5	47.7
122.5°	5.3	5.3	5.3	5.3	10.6	14.8	19.1	26.5	33.9	39.2	42.4
125°	4.2	4.2	4.2	3.2	7.4	10.6	14.8	22.3	27.6	32.9	36.0
127.5°	3.2	3.2	3.2	3.2	3.2	6.4	9.5	17.0	22.3	27.6	30.7
130°	3.2	3.2	2.1	2.1	2.1	3.2	6.4	11.7	17.0	21.2	25.4
132.5°	2.1	2.1	2.1	1.1	1.1	1.1	3.2	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	1.1	0.0	0.0	0.0	0.0	1.1	4.2	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	1.1	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°	1172.4	1172.4	1172.4	1172.4	1172.4	1172.4	1172.4	1172.4	1172.4	1172.4
2.5°	1169.2	1170.3	1171.4	1171.4	1170.3	1170.3	1168.2	1168.2	1166.1	1165.0
5°	1165.0	1167.1	1168.2	1168.2	1167.1	1167.1	1166.1	1165.0	1162.9	1161.8
7.5°	1161.8	1165.0	1167.1	1167.1	1167.1	1167.1	1166.1	1166.1	1165.0	1163.9
10°	1157.6	1160.8	1163.9	1168.2	1169.2	1169.2	1168.2	1167.1	1165.0	1163.9
12.5°	1153.3	1157.6	1161.8	1166.1	1167.1	1168.2	1170.3	1170.3	1169.2	1169.2
15°	1149.1	1156.5	1162.9	1168.2	1169.2	1172.4	1173.5	1174.5	1172.4	1169.2
17.5°	1144.9	1154.4	1159.7	1168.2	1170.3	1172.4	1174.5	1175.6	1175.6	1174.5
20°	1140.6	1152.3	1161.8	1170.3	1172.4	1175.6	1179.8	1183.0	1186.2	1186.2
22.5°	1134.3	1149.1	1159.7	1172.4	1179.8	1183.0	1191.5	1195.7	1197.9	1202.1
25°	1125.8	1141.7	1162.9	1177.7	1183.0	1189.4	1202.1	1208.5	1208.5	1206.3
27.5°	1121.5	1145.9	1167.1	1182.0	1189.4	1196.8	1208.5	1218.0	1221.2	1219.1
30°	1116.2	1142.7	1167.1	1186.2	1194.7	1204.2	1215.9	1230.7	1232.8	1232.8
32.5°	1109.9	1138.5	1167.1	1188.3	1198.9	1207.4	1221.2	1235.0	1240.3	1239.2
35°	1103.5	1135.3	1162.9	1186.2	1197.9	1208.5	1224.4	1235.0	1239.2	1240.3
37.5°	1094.0	1127.9	1155.5	1180.9	1193.6	1203.2	1220.1	1227.5	1233.9	1233.9
40°	1080.2	1115.2	1145.9	1170.3	1179.8	1189.4	1205.3	1213.8	1219.1	1223.3
42.5°	1064.3	1098.2	1127.9	1149.1	1161.8	1169.2	1187.3	1195.7	1204.2	1205.3
45°	1039.9	1077.0	1105.6	1132.1	1143.8	1151.2	1171.4	1185.1	1192.6	1192.6
47.5°	1014.5	1049.5	1083.4	1116.2	1130.0	1142.7	1166.1	1183.0	1191.5	1194.7
50°	985.8	1029.3	1069.6	1112.0	1130.0	1145.9	1173.5	1192.6	1203.2	1210.6
52.5°	967.8	1024.0	1073.8	1123.7	1143.8	1165.0	1200.0	1220.1	1235.0	1239.2
55°	965.7	1033.6	1095.0	1154.4	1177.7	1197.9	1235.0	1257.2	1268.9	1266.8
57.5°	981.6	1064.3	1136.4	1190.4	1215.9	1235.0	1268.9	1289.0	1297.5	1297.5
60°	1016.6	1104.6	1174.5	1222.2	1242.4	1260.4	1284.8	1298.6	1302.8	1300.7
62.5°	1052.6	1133.2	1191.5	1230.7	1245.6	1254.0	1274.2	1284.8	1289.0	1291.1
65°	1081.3	1147.0	1187.3	1215.9	1227.5	1236.0	1251.9	1264.6	1266.8	1268.9
67.5°	1078.1	1123.7	1159.7	1186.2	1195.7	1204.2	1220.1	1229.7	1237.1	1235.0
70°	1048.4	1084.4	1118.4	1145.9	1156.5	1168.2	1187.3	1202.1	1205.3	1210.6
72.5°	996.4	1033.6	1074.9	1102.5	1121.5	1133.2	1156.5	1175.6	1183.0	1188.3
75°	942.4	985.8	1027.2	1068.5	1088.7	1107.8	1135.3	1149.1	1167.1	1163.9
77.5°	885.1	941.3	990.1	1036.7	1057.9	1078.1	1106.7	1125.8	1137.4	1142.7
80°	836.4	895.7	949.8	999.6	1019.8	1043.1	1072.8	1092.9	1105.6	1108.8
82.5°	781.3	845.9	907.4	959.3	980.5	1000.7	1034.6	1055.8	1071.7	1076.0
85°	727.2	796.1	859.7	915.9	938.1	960.4	996.4	1019.8	1034.6	1041.0
87.5°	681.6	746.3	810.9	863.9	890.4	911.6	947.7	975.2	989.0	989.0
90°	625.4	691.2	755.8	808.8	838.5	853.3	889.4	914.8	931.8	930.7
92.5°	566.1	628.6	682.7	735.7	760.1	779.1	817.3	836.4	851.2	854.4
95°	485.5	541.7	597.9	642.4	661.5	691.2	719.8	744.2	753.7	757.9
97.5°	391.2	447.3	486.6	540.6	553.3	573.5	603.2	623.3	632.9	629.7
100°	300.0	337.1	367.8	401.8	421.9	434.6	460.1	480.2	490.8	489.7
102.5°	213.1	242.8	265.0	291.5	293.6	305.3	321.2	341.3	345.6	350.9
105°	157.9	169.6	186.6	196.1	200.3	214.1	217.3	225.8	226.9	237.5
107.5°	117.7	124.0	130.4	135.7	138.9	139.9	148.4	147.3	149.5	151.6
110°	89.0	92.2	96.5	94.3	98.6	95.4	97.5	96.5	97.5	97.5



TEST NUMBER: P237820

CATALOG NUMBER: 4VRVT2-LD5-6-DR-W-UNV-L850-CD1-WL-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	72.1	72.1	71.0	70.0	70.0	68.9	68.9	65.7	66.8	65.7
115°	61.5	60.4	58.3	56.2	56.2	54.1	53.0	49.8	48.8	47.7
117.5°	54.1	53.0	50.9	48.8	47.7	46.6	44.5	41.3	40.3	40.3
120°	48.8	47.7	46.6	44.5	43.5	42.4	39.2	38.2	36.0	36.0
122.5°	43.5	43.5	42.4	40.3	40.3	39.2	37.1	35.0	33.9	33.9
125°	38.2	39.2	38.2	37.1	37.1	36.0	35.0	32.9	31.8	31.8
127.5°	32.9	33.9	33.9	33.9	33.9	32.9	31.8	30.7	29.7	29.7
130°	27.6	29.7	29.7	29.7	30.7	29.7	29.7	28.6	27.6	27.6
132.5°	22.3	24.4	25.4	26.5	26.5	26.5	25.4	25.4	24.4	24.4
135°	17.0	19.1	21.2	21.2	22.3	22.3	22.3	22.3	21.2	21.2
137.5°	12.7	14.8	15.9	17.0	17.0	18.0	18.0	18.0	17.0	17.0
140°	8.5	10.6	11.7	12.7	12.7	13.8	13.8	13.8	12.7	12.7
142.5°	4.2	6.4	7.4	8.5	8.5	8.5	9.5	9.5	9.5	8.5
145°	1.1	2.1	3.2	4.2	4.2	4.2	5.3	5.3	5.3	4.2
147.5°	0.0	0.0	0.0	1.1	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)