

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P1212246

Luminaire Tested: 4VT3-LD5-6-P-UNV-L830-CD1-U

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2019
Report Number: P1212246
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1709-268-6)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4VT3-LD5-6-P-UNV-L830-CD1-U
Description: 4FT VT3 GENERAL APPLICATION, 6000LM
Light Source: (392) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

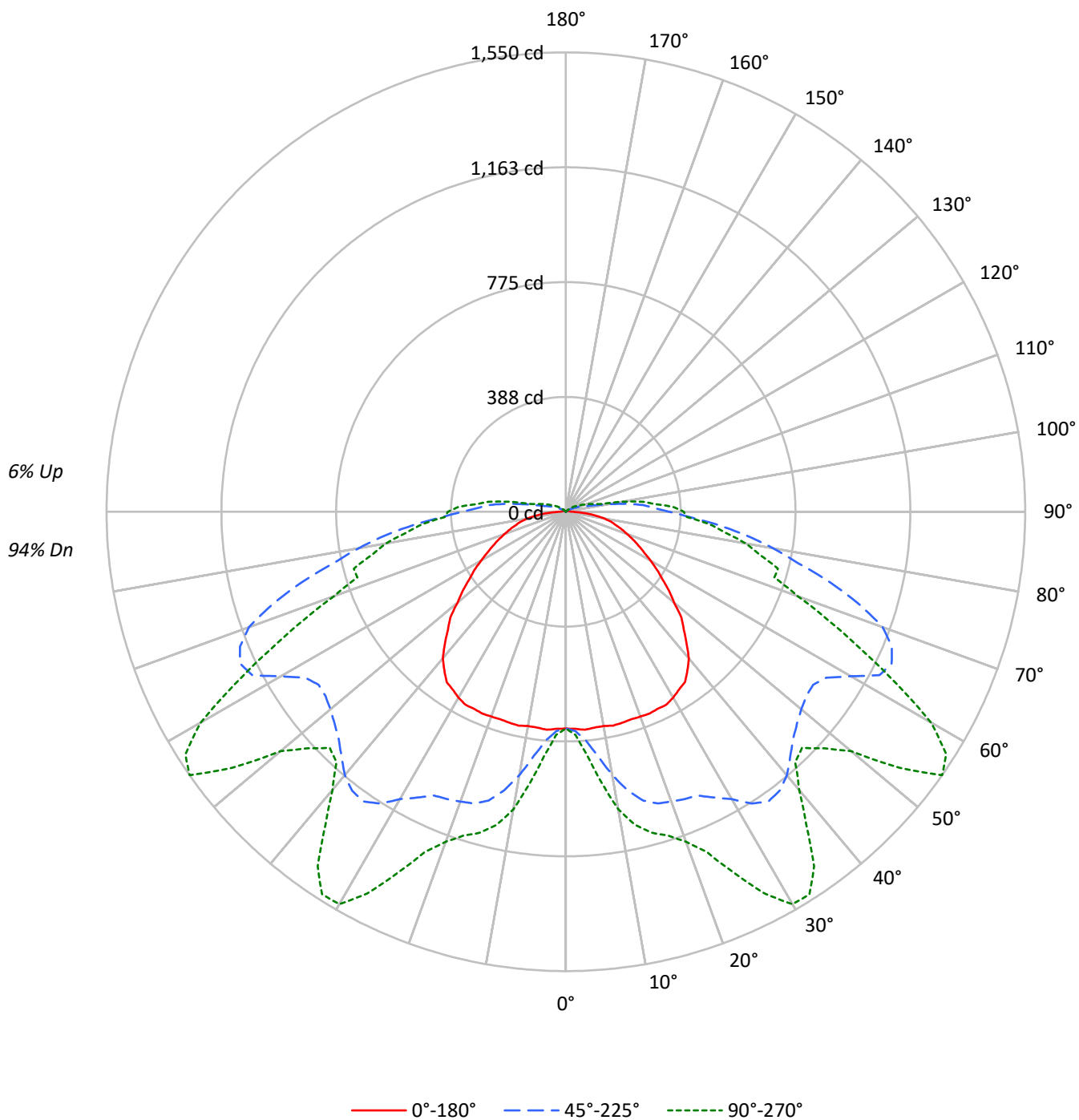
Lumens per Lamp: N/A
Luminaire Lumens: 5650.7 lumens
Efficiency: N/A
Efficacy: 114.6 lumens/watt
Spacing Criteria (0/90/45): 1.45 / 2.17 / 2.13
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.17')
CIE Type: Direct

Input Watts (W): 49.3
Input Voltage (V): NR
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: 24 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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96
1	103	96	90	85	99	93	88	83	88	83	79	82	79	75	78	75	72
2	91	81	72	65	88	78	70	64	74	67	61	69	64	59	65	60	56
3	82	69	59	52	79	67	58	51	63	55	49	59	53	47	56	50	45
4	74	60	50	42	71	58	49	41	55	47	40	52	44	39	49	42	37
5	68	53	43	35	65	51	42	35	48	40	34	46	38	33	43	37	32
6	62	47	37	30	60	46	36	29	43	35	29	41	33	28	39	32	27
7	57	42	33	26	55	41	32	25	39	31	25	37	30	24	35	28	23
8	53	38	29	23	51	37	28	22	35	27	22	33	26	21	32	25	21
9	49	35	26	20	48	34	25	20	32	25	19	31	24	19	29	23	18
10	46	32	23	18	44	31	23	18	30	22	17	28	22	17	27	21	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4722	4722	4722
5°	4768	4884	5164
10°	4778	5604	6245
15°	4872	6224	6770
20°	4979	6421	7104
25°	5126	6567	8076
30°	5274	7074	9264
35°	5371	7715	8994
40°	5260	7751	7731
45°	4936	7544	7350
50°	4563	7592	8544
55°	4232	7927	11108
60°	3978	9303	10859
65°	3806	11101	9048
70°	3729	11563	7499
75°	3786	10663	7417
80°	3986	9541	7020
85°	3624	8379	6480

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 20°

Vertical Angle: 90°

Luminance: 14101 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.9	1.4
10°-20°	274.4	4.9
20°-30°	495.3	8.8
30°-40°	700.1	12.4
40°-50°	747.8	13.2
50°-60°	878.1	15.5
60°-70°	888.0	15.7
70°-80°	724.8	12.8
80°-90°	497.4	8.8
90°-100°	251.2	4.4
100°-110°	74.5	1.3
110°-120°	29.3	0.5
120°-130°	10.4	0.2
130°-140°	1.5	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	847.7	15.0
0°-40°	1547.7	27.4
0°-60°	3173.7	56.2
0°-90°	5283.9	93.5
90°-120°	355.0	6.3
90°-150°	366.8	6.5
90°-180°	367.0	6.5
0°-180°	5650.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	731	731	731	731	731	
5°	738	747	774	810	824	70
15°	737	848	1009	1097	1121	209
25°	733	892	1056	1252	1345	339
35°	701	827	1192	1447	1460	434
45°	563	739	1084	1147	1127	435
55°	398	582	1018	1403	1550	359
65°	271	494	1213	1195	1100	270
75°	175	648	925	745	741	186
85°	72	554	517	489	487	72
90°	20	411	348	382	398	14
95°	14	208	261	301	300	11
105°	7	22	76	102	100	7
115°	3	3	30	53	53	3
125°	1	1	8	24	25	1
135°	0	0	0	4	4	0
145°	0	0	0	0	0	0
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°	731.2	731.2	731.2	731.2	731.2	731.2	731.2	731.2	731.2	731.2	731.2
2.5°	733.3	736.8	738.2	734.7	736.8	738.2	736.8	738.9	740.3	742.4	741.0
5°	738.2	737.5	741.0	737.5	741.8	747.4	750.2	757.8	761.4	770.5	774.0
7.5°	734.7	739.6	739.6	743.2	750.8	771.9	774.7	788.0	804.2	819.6	830.8
10°	734.0	739.6	749.4	759.2	772.6	790.1	802.0	826.6	856.8	879.2	901.6
12.5°	738.9	741.0	757.8	771.2	797.8	816.8	832.2	870.0	902.2	931.0	962.6
15°	736.8	742.4	761.4	784.5	822.4	847.6	863.8	910.0	949.2	977.3	1008.8
17.5°	734.0	744.6	768.4	798.6	842.7	875.0	892.4	938.0	975.2	1011.6	1032.0
20°	735.4	747.4	774.7	816.0	859.6	890.4	908.6	955.6	992.0	1022.8	1040.4
22.5°	736.8	750.2	777.5	824.4	865.8	897.4	916.3	959.0	991.3	1027.1	1048.8
25°	733.3	748.0	781.0	819.6	870.0	892.4	912.1	953.4	987.8	1029.2	1055.8
27.5°	734.0	745.2	776.1	818.2	857.4	888.2	898.8	945.8	988.5	1034.8	1087.4
30°	724.2	737.5	771.2	800.6	839.2	868.0	884.0	936.0	992.0	1053.0	1119.6
32.5°	710.9	724.9	755.0	776.1	821.6	846.2	869.4	934.6	1007.4	1083.9	1167.3
35°	701.1	705.3	720.0	743.2	794.3	826.6	856.0	934.6	1020.0	1104.2	1192.5
37.5°	673.7	675.8	688.5	722.8	769.1	814.6	847.6	935.2	1025.0	1107.0	1185.5
40°	645.7	646.4	659.7	694.1	746.6	797.1	833.6	926.2	1011.0	1086.7	1160.3
42.5°	603.6	609.2	628.2	662.5	729.8	772.6	814.6	897.4	976.6	1050.9	1120.3
45°	562.9	570.7	586.1	626.7	696.2	738.9	780.3	861.0	933.8	1014.4	1083.9
47.5°	529.3	528.6	548.9	593.8	655.5	699.7	737.5	814.6	895.2	984.3	1057.9
50°	476.7	487.9	509.7	554.5	612.7	661.1	694.8	771.2	858.2	947.2	1036.9
52.5°	438.9	445.9	471.9	513.1	574.2	614.1	653.4	738.2	832.8	941.6	1022.2
55°	398.2	407.3	433.9	475.3	543.3	581.9	621.9	716.5	826.6	933.8	1018.0
57.5°	365.3	372.3	396.8	443.1	512.5	558.1	604.3	701.1	818.2	927.6	1041.8
60°	330.2	337.2	368.7	415.1	488.7	536.3	580.5	688.5	815.4	953.4	1109.8
62.5°	298.7	308.5	337.2	385.6	459.9	507.5	558.7	684.2	847.6	1029.2	1193.2
65°	271.3	281.8	313.4	361.7	434.7	493.5	555.3	720.7	912.1	1090.2	1212.9
67.5°	245.4	256.6	288.9	338.6	431.1	504.7	588.9	780.3	958.4	1114.0	1190.4
70°	220.1	234.2	268.5	337.9	467.7	563.7	649.2	821.6	982.2	1091.6	1137.8
72.5°	197.7	214.5	263.6	362.5	527.2	619.1	696.2	837.1	957.0	1035.5	1037.6
75°	175.3	201.2	273.4	404.5	565.7	647.8	718.6	823.8	911.4	949.2	925.4
77.5°	156.4	194.9	288.9	424.1	581.9	659.0	713.7	791.5	838.5	839.2	803.4
80°	132.5	180.9	284.6	424.1	573.5	645.0	692.0	734.0	746.6	736.8	710.9
82.5°	103.8	157.8	266.4	402.5	546.1	609.2	645.0	663.2	654.8	644.3	615.5
85°	72.2	126.9	235.6	373.7	501.9	554.5	584.0	584.0	562.3	531.4	516.7
87.5°	42.0	92.6	202.6	329.5	445.9	492.9	513.9	480.3	446.5	430.5	419.3
90°	20.4	61.7	163.4	290.3	384.2	410.9	411.5	367.3	344.3	347.1	347.7
92.5°	16.8	36.4	128.3	217.3	285.3	298.7	298.7	280.4	275.5	281.1	295.9
95°	14.0	15.4	67.3	144.4	194.9	207.5	214.5	218.7	232.1	248.2	260.8
97.5°	12.0	12.0	21.0	77.8	130.4	150.7	164.8	175.3	187.9	194.9	204.0
100°	9.8	9.8	11.2	26.0	72.9	91.8	102.4	109.4	120.6	132.5	145.8
102.5°	8.4	8.4	8.4	13.4	27.4	35.8	44.8	60.3	72.9	88.4	100.2
105°	7.0	7.0	7.0	8.4	16.8	21.8	28.8	41.4	52.6	65.9	75.7
107.5°	5.6	5.6	5.6	5.6	11.2	16.2	20.4	30.8	42.8	53.2	61.0
110°	4.2	4.2	4.2	5.0	7.0	10.6	14.0	23.2	32.2	41.4	49.8

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	3.5	3.5	3.5	3.5	4.2	5.6	9.2	16.8	23.8	31.6	38.6
115°	2.8	2.8	2.8	2.8	2.8	2.8	4.2	10.6	16.8	22.4	30.2
117.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	5.6	12.0	17.6	22.4
120°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.1	7.0	12.6	17.6
122.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.7	2.8	7.8	12.6
125°	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	3.5	7.8
127.5°	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	2.8
130°	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	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°	731.2	731.2	731.2	731.2	731.2	731.2	731.2	731.2	731.2	731.2
2.5°	741.8	743.8	745.2	752.2	748.0	755.8	748.8	748.0	751.6	753.6
5°	783.8	794.3	802.8	812.6	809.8	814.6	814.0	814.0	829.4	824.4
7.5°	852.5	863.0	878.4	893.8	890.4	908.6	910.6	913.5	912.8	920.6
10°	923.4	943.6	959.0	984.3	982.2	992.7	1006.8	1002.6	1013.8	1019.4
12.5°	987.1	1010.2	1034.8	1057.9	1056.5	1062.8	1069.1	1073.4	1079.6	1082.4
15°	1034.8	1057.2	1078.2	1099.3	1097.2	1105.6	1109.1	1112.6	1121.0	1121.0
17.5°	1064.2	1079.0	1098.6	1121.7	1130.1	1134.3	1130.1	1142.1	1150.5	1145.6
20°	1070.6	1092.3	1123.1	1135.7	1149.8	1157.5	1161.7	1176.4	1175.7	1184.1
22.5°	1083.2	1112.6	1141.3	1180.6	1184.1	1203.1	1215.7	1231.1	1240.2	1242.3
25°	1104.2	1151.2	1193.2	1236.7	1252.1	1275.3	1301.9	1320.9	1336.3	1344.7
27.5°	1147.7	1205.9	1269.7	1322.9	1332.1	1360.1	1398.7	1426.7	1441.4	1451.9
30°	1203.1	1271.7	1337.7	1393.7	1419.7	1443.5	1479.3	1493.3	1517.1	1529.1
32.5°	1243.0	1311.7	1381.9	1435.1	1459.7	1481.3	1501.7	1514.3	1519.2	1530.5
35°	1261.9	1327.1	1399.3	1429.5	1447.0	1454.1	1463.1	1461.1	1461.7	1460.3
37.5°	1252.1	1312.5	1356.5	1381.1	1384.7	1383.3	1372.7	1348.9	1331.3	1332.7
40°	1226.2	1276.7	1304.7	1304.0	1295.6	1282.9	1259.1	1229.0	1217.7	1224.8
42.5°	1193.9	1226.9	1231.1	1222.0	1201.7	1199.5	1165.9	1156.1	1144.9	1145.6
45°	1153.3	1172.2	1178.5	1158.9	1147.0	1144.9	1129.4	1123.8	1125.9	1126.6
47.5°	1116.1	1136.4	1139.9	1135.0	1132.2	1136.4	1142.1	1156.1	1157.5	1180.6
50°	1093.0	1114.7	1138.5	1156.8	1163.8	1186.9	1218.5	1233.2	1250.7	1255.7
52.5°	1088.1	1125.2	1182.7	1228.3	1261.9	1292.7	1330.7	1384.7	1402.1	1418.9
55°	1102.1	1181.3	1273.1	1347.5	1402.9	1440.0	1491.9	1517.1	1535.3	1550.1
57.5°	1167.3	1291.3	1402.9	1455.5	1472.3	1491.2	1501.0	1508.0	1513.6	1522.0
60°	1272.5	1362.1	1421.7	1447.7	1454.1	1457.5	1451.2	1439.3	1428.1	1423.1
62.5°	1304.7	1357.3	1381.1	1369.9	1358.7	1349.5	1296.3	1273.9	1252.1	1258.5
65°	1284.3	1294.2	1266.9	1228.3	1195.3	1188.3	1140.6	1121.7	1093.7	1100.0
67.5°	1204.5	1172.2	1133.6	1082.4	1066.3	1042.5	1001.8	984.3	970.3	960.4
70°	1124.5	1061.4	1010.2	954.2	936.6	918.4	868.0	844.1	837.1	833.6
72.5°	992.7	931.8	872.8	825.2	811.8	789.4	767.0	745.2	736.8	737.5
75°	858.8	802.8	764.9	743.2	744.6	741.8	737.5	732.6	735.4	741.0
77.5°	758.6	727.7	723.5	727.0	723.5	717.9	691.3	680.7	668.1	670.2
80°	687.1	671.6	646.4	633.8	638.7	633.1	627.5	613.5	619.1	616.9
82.5°	595.9	584.0	573.5	563.7	564.3	559.5	544.1	539.9	532.1	543.3
85°	510.3	493.5	490.7	487.3	489.3	487.3	486.5	480.9	482.3	487.3
87.5°	423.5	422.1	421.3	417.9	415.7	414.3	412.3	410.1	410.1	409.5
90°	351.3	356.1	368.7	375.1	382.1	386.3	394.7	395.4	398.2	397.5
92.5°	311.3	326.0	346.3	358.3	362.5	363.1	368.7	365.9	364.5	363.9
95°	274.1	280.4	288.9	294.5	300.7	301.5	302.1	298.7	299.3	300.1
97.5°	213.8	222.9	233.5	245.4	251.0	250.3	257.3	256.6	256.6	260.1
100°	157.8	169.6	177.4	190.7	187.9	185.1	190.0	187.2	199.1	194.9
102.5°	110.0	114.3	121.3	122.7	123.4	122.0	123.4	120.6	120.6	119.2
105°	84.2	90.4	96.8	101.0	101.6	101.6	102.4	100.2	100.2	99.6
107.5°	69.4	75.7	80.6	83.4	87.0	86.2	87.6	87.0	87.6	86.2
110°	56.0	62.4	68.0	70.8	73.6	73.6	74.3	74.3	73.6	73.6

TEST NUMBER: P1212246

CATALOG NUMBER: 4VT3-LD5-6-P-UNV-L830-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	45.6	51.2	55.4	59.6	61.7	62.4	62.4	63.1	63.1	63.1
115°	35.8	41.4	47.0	50.4	52.6	53.2	54.0	53.2	52.6	52.6
117.5°	28.0	33.0	37.8	42.0	44.2	44.8	46.2	45.6	45.6	44.8
120°	22.4	26.6	31.6	35.0	36.4	37.8	39.2	38.6	37.8	38.6
122.5°	17.6	21.0	25.2	28.8	30.2	30.8	31.6	30.8	31.6	30.8
125°	12.6	16.2	19.6	22.4	23.8	25.2	26.0	25.2	25.2	25.2
127.5°	7.0	10.6	14.0	16.8	18.2	19.0	20.4	19.6	19.0	19.0
130°	2.1	6.4	9.8	12.0	13.4	14.8	14.8	14.8	14.0	13.4
132.5°	0.0	1.4	5.0	7.8	9.2	9.8	9.8	9.8	9.2	9.2
135°	0.0	0.0	0.7	2.8	4.2	5.0	5.6	5.0	5.0	4.2
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	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
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)