

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: CORELITE

Report Number: P303159

Luminaire Tested: **CTW-F-5050-40L830-UNV-STD-8**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P303159
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-181-9)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: CTW-F-5050-40L830-UNV-STD-8
Description: CORELITE CONTINUA LINEAR WALL LED LUMINAIRE
50% UPLIGHT, 50% DOWNLIGHT, 4000 LUMEN PACKAGE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

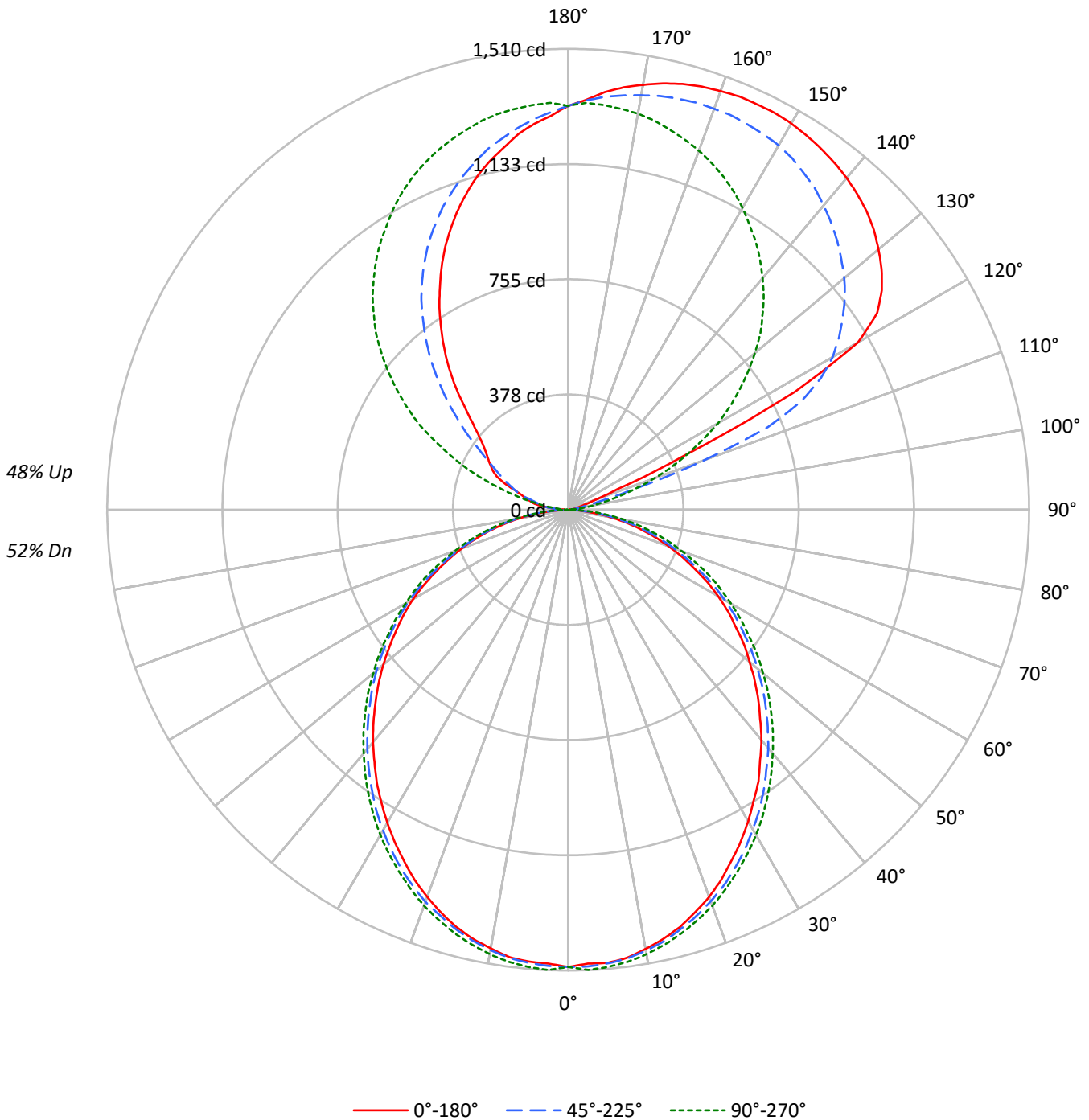
Lumens per Lamp: N/A
Luminaire Lumens: 7743.8 lumens
Efficiency: N/A
Efficacy: 125.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.32
Luminous Opening: Rectangular (W 8' x L: 0.12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 61.9
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	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58	52
1	98	94	90	86	90	87	83	80	74	71	69	62	60	58	51	50	48	43
2	89	82	75	70	82	76	70	66	64	60	57	54	51	49	45	42	41	36
3	81	72	64	58	75	67	60	55	57	52	48	48	44	41	39	37	34	30
4	74	63	55	49	68	59	52	46	50	45	41	42	38	35	35	32	30	26
5	68	56	48	42	63	52	45	40	45	39	35	38	34	30	32	28	26	23
6	63	51	42	37	58	47	40	34	41	35	30	34	30	27	29	25	23	20
7	58	46	38	32	54	43	35	30	37	31	27	31	27	23	26	23	20	18
8	54	41	34	28	50	39	32	27	34	28	24	29	24	21	24	21	18	16
9	50	38	30	25	46	35	29	24	31	25	21	26	22	19	22	19	16	14
10	47	35	27	23	43	33	26	21	28	23	19	24	20	17	21	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	16125	16125	16125
5°	16104	16249	16062
10°	15974	16163	15953
15°	15773	16008	15773
20°	15464	15817	15464
25°	15051	15554	15098
30°	14651	15298	14724
35°	14277	14985	14353
40°	13835	14646	13970
45°	13408	14315	13583
50°	12978	13944	13236
55°	12558	13570	12883
60°	12213	13248	12626
65°	11609	12979	12098
70°	11015	12469	11682
75°	10156	11998	11038
80°	8703	11207	10011
85°	5459	9732	7595



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.4	1.8
10°-20°	400.3	5.2
20°-30°	592.6	7.7
30°-40°	695.6	9.0
40°-50°	705.2	9.1
50°-60°	629.0	8.1
60°-70°	479.9	6.2
70°-80°	283.5	3.7
80°-90°	76.4	1.0
90°-100°	38.5	0.5
100°-110°	160.4	2.1
110°-120°	452.4	5.8
120°-130°	659.5	8.5
130°-140°	710.3	9.2
140°-150°	675.8	8.7
150°-160°	554.7	7.2
160°-170°	362.6	4.7
170°-180°	125.7	1.6
0°-30°	1134.3	14.6
0°-40°	1829.9	23.6
0°-60°	3164.1	40.9
0°-90°	4004.0	51.7
90°-120°	651.3	8.4
90°-150°	2696.8	34.8
90°-180°	3740.0	48.3
0°-180°	7743.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1498	1498	1498	1498	1498	
5°	1490	1492	1504	1490	1486	141
15°	1415	1423	1436	1423	1415	398
25°	1267	1294	1310	1296	1271	584
35°	1086	1117	1140	1121	1092	678
45°	881	915	940	921	892	679
55°	669	700	723	712	686	601
65°	456	477	510	488	475	453
75°	244	260	288	273	265	258
85°	44	56	79	69	62	56
90°	2	2	2	8	12	2
95°	10	12	29	54	50	10
105°	42	108	177	127	144	50
115°	419	842	431	231	258	495
125°	1254	1098	685	371	329	1111
135°	1383	1246	900	604	483	1067
145°	1444	1346	1071	838	725	906
155°	1465	1392	1204	1031	952	678
165°	1444	1394	1288	1179	1136	409
175°	1373	1358	1331	1285	1269	132
180°	1323	1323	1323	1323	1323	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1
2.5°	1488.5	1486.5	1490.4	1494.2	1494.2	1496.2	1498.1	1500.0	1500.0	1503.8	1498.1
5°	1490.4	1486.5	1488.5	1488.5	1486.5	1488.5	1490.4	1494.2	1494.2	1498.1	1492.3
7.5°	1480.8	1478.8	1480.8	1478.8	1476.9	1478.8	1480.8	1482.7	1482.7	1486.5	1482.7
10°	1461.5	1461.5	1461.5	1461.5	1461.5	1463.5	1465.4	1467.3	1467.3	1471.2	1467.3
12.5°	1440.4	1440.4	1440.4	1442.3	1438.5	1440.4	1444.2	1448.1	1448.1	1451.9	1448.1
15°	1415.4	1415.4	1417.3	1419.2	1417.3	1417.3	1419.2	1423.1	1423.1	1426.9	1423.1
17.5°	1382.7	1382.7	1384.6	1388.5	1386.5	1388.5	1390.4	1394.2	1396.2	1396.2	1396.2
20°	1350.0	1348.1	1350.0	1351.9	1351.9	1353.8	1353.8	1359.6	1363.5	1363.5	1365.4
22.5°	1311.5	1307.7	1311.5	1313.5	1313.5	1315.4	1315.4	1321.2	1325.0	1326.9	1332.7
25°	1267.3	1267.3	1269.2	1273.1	1273.1	1275.0	1276.9	1282.7	1286.5	1286.5	1294.2
27.5°	1225.0	1223.1	1225.0	1228.8	1232.7	1234.6	1234.6	1240.4	1246.2	1250.0	1253.8
30°	1178.8	1178.8	1180.8	1184.6	1188.5	1186.5	1188.5	1196.2	1201.9	1205.8	1209.6
32.5°	1130.8	1130.8	1132.7	1136.5	1142.3	1142.3	1144.2	1150.0	1153.8	1157.7	1165.4
35°	1086.5	1082.7	1084.6	1088.5	1096.2	1094.2	1096.2	1101.9	1105.8	1111.5	1117.3
37.5°	1032.7	1032.7	1034.6	1038.5	1046.2	1044.2	1048.1	1051.9	1057.7	1063.5	1067.3
40°	984.6	986.5	984.6	988.5	994.2	996.2	996.2	1000.0	1007.7	1013.5	1019.2
42.5°	930.8	932.7	934.6	938.5	944.2	944.2	946.2	950.0	955.8	961.5	967.3
45°	880.8	880.8	880.8	884.6	892.3	892.3	896.2	896.2	901.9	909.6	915.4
47.5°	828.8	828.8	828.8	834.6	840.4	840.4	844.2	844.2	851.9	857.7	863.5
50°	775.0	778.8	776.9	780.8	788.5	786.5	790.4	790.4	796.2	803.8	809.6
52.5°	726.9	726.9	723.1	728.8	734.6	734.6	736.5	736.5	744.2	750.0	755.8
55°	669.2	673.1	669.2	675.0	680.8	680.8	684.6	684.6	686.5	694.2	700.0
57.5°	621.2	621.2	617.3	621.2	626.9	626.9	630.8	630.8	634.6	638.5	648.1
60°	567.3	565.4	563.5	569.2	573.1	573.1	576.9	576.9	580.8	582.7	592.3
62.5°	513.5	511.5	511.5	515.4	519.2	517.3	523.1	523.1	526.9	530.8	536.5
65°	455.8	453.8	453.8	457.7	459.6	459.6	463.5	465.4	467.3	473.1	476.9
67.5°	403.8	401.9	400.0	403.8	405.8	405.8	409.6	411.5	415.4	417.3	421.2
70°	350.0	348.1	346.2	350.0	353.8	351.9	355.8	357.7	359.6	363.5	367.3
72.5°	296.2	296.2	296.2	298.1	300.0	300.0	301.9	303.8	307.7	311.5	313.5
75°	244.2	242.3	242.3	246.2	246.2	246.2	250.0	251.9	251.9	257.7	259.6
77.5°	192.3	194.2	192.3	192.3	192.3	194.2	196.2	198.1	201.9	205.8	207.7
80°	140.4	142.3	140.4	142.3	140.4	142.3	146.2	146.2	150.0	153.8	155.8
82.5°	90.4	92.3	90.4	92.3	92.3	92.3	94.2	96.2	100.0	101.9	105.8
85°	44.2	42.3	44.2	44.2	44.2	44.2	48.1	48.1	51.9	53.8	55.8
87.5°	5.8	5.8	5.8	5.8	7.7	5.8	7.7	9.6	9.6	11.5	11.5
90°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
92.5°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
95°	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	11.5	11.5
97.5°	15.4	15.4	15.4	15.4	15.4	15.4	15.4	17.3	17.3	19.2	21.2
100°	21.2	21.2	23.1	23.1	23.1	23.1	23.1	25.0	26.9	30.8	34.6
102.5°	30.8	30.8	30.8	32.7	32.7	34.6	34.6	38.5	42.3	48.1	59.6
105°	42.3	44.2	44.2	44.2	48.1	48.1	50.0	55.8	65.4	80.8	107.7
107.5°	59.6	61.5	61.5	65.4	69.2	73.1	76.9	94.2	117.3	163.5	230.8
110°	92.3	94.2	96.2	105.8	119.2	130.8	146.2	190.4	259.6	361.5	473.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	173.1	182.7	194.2	221.2	267.3	296.2	328.8	444.2	555.8	653.8	707.7
115°	419.2	444.2	469.2	528.8	607.7	653.8	686.5	786.5	834.6	853.8	842.3
117.5°	836.5	857.7	875.0	907.7	946.2	959.6	965.4	986.5	976.9	961.5	932.7
120°	1096.2	1103.8	1101.9	1101.9	1101.9	1096.2	1092.3	1078.8	1055.8	1032.7	1000.0
122.5°	1200.0	1201.9	1194.2	1184.6	1173.1	1167.3	1159.6	1138.5	1113.5	1086.5	1051.9
125°	1253.8	1253.8	1246.2	1236.5	1223.1	1215.4	1203.8	1184.6	1159.6	1132.7	1098.1
127.5°	1294.2	1292.3	1286.5	1278.8	1263.5	1257.7	1246.2	1225.0	1200.0	1176.9	1142.3
130°	1326.9	1325.0	1317.3	1313.5	1300.0	1290.4	1280.8	1259.6	1234.6	1211.5	1180.8
132.5°	1357.7	1353.8	1346.2	1342.3	1328.8	1321.2	1311.5	1292.3	1267.3	1246.2	1213.5
135°	1382.7	1376.9	1371.2	1367.3	1355.8	1346.2	1338.5	1319.2	1298.1	1275.0	1246.2
137.5°	1401.9	1398.1	1390.4	1386.5	1375.0	1367.3	1359.6	1344.2	1325.0	1301.9	1275.0
140°	1419.2	1413.5	1409.6	1403.8	1394.2	1386.5	1378.8	1365.4	1346.2	1326.9	1301.9
142.5°	1432.7	1428.8	1425.0	1421.2	1409.6	1403.8	1396.2	1384.6	1369.2	1350.0	1326.9
145°	1444.2	1440.4	1436.5	1432.7	1423.1	1417.3	1411.5	1400.0	1386.5	1367.3	1346.2
147.5°	1453.8	1450.0	1446.2	1444.2	1434.6	1428.8	1423.1	1415.4	1400.0	1380.8	1365.4
150°	1461.5	1457.7	1453.8	1450.0	1442.3	1436.5	1434.6	1425.0	1409.6	1394.2	1378.8
152.5°	1465.4	1461.5	1459.6	1455.8	1448.1	1442.3	1440.4	1430.8	1417.3	1400.0	1386.5
155°	1465.4	1463.5	1459.6	1457.7	1448.1	1442.3	1440.4	1430.8	1419.2	1403.8	1392.3
157.5°	1465.4	1461.5	1459.6	1455.8	1446.2	1442.3	1440.4	1432.7	1423.1	1409.6	1398.1
160°	1459.6	1457.7	1455.8	1451.9	1444.2	1440.4	1440.4	1432.7	1423.1	1411.5	1398.1
162.5°	1453.8	1450.0	1448.1	1446.2	1440.4	1438.5	1436.5	1430.8	1421.2	1411.5	1398.1
165°	1444.2	1442.3	1438.5	1436.5	1430.8	1428.8	1426.9	1423.1	1413.5	1407.7	1394.2
167.5°	1430.8	1426.9	1425.0	1421.2	1415.4	1415.4	1415.4	1411.5	1405.8	1401.9	1388.5
170°	1413.5	1409.6	1407.7	1405.8	1401.9	1401.9	1401.9	1400.0	1394.2	1392.3	1378.8
172.5°	1396.2	1394.2	1392.3	1390.4	1384.6	1384.6	1384.6	1384.6	1380.8	1380.8	1369.2
175°	1373.1	1371.2	1369.2	1369.2	1365.4	1367.3	1367.3	1367.3	1365.4	1369.2	1357.7
177.5°	1344.2	1340.4	1344.2	1348.1	1346.2	1348.1	1350.0	1350.0	1348.1	1351.9	1342.3
180°	1323.1	1323.1	1323.1	1323.1	1323.1	1323.1	1323.1	1323.1	1323.1	1323.1	1323.1



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1
2.5°	1492.3	1494.2	1492.3	1494.2	1494.2	1494.2	1494.2	1500.0	1505.8	1509.6	1507.7
5°	1486.5	1488.5	1486.5	1488.5	1488.5	1488.5	1488.5	1494.2	1501.9	1503.8	1500.0
7.5°	1475.0	1476.9	1476.9	1476.9	1476.9	1476.9	1476.9	1484.6	1490.4	1494.2	1490.4
10°	1459.6	1461.5	1461.5	1461.5	1463.5	1463.5	1463.5	1469.2	1476.9	1478.8	1475.0
12.5°	1440.4	1442.3	1442.3	1442.3	1444.2	1444.2	1444.2	1450.0	1457.7	1459.6	1457.7
15°	1417.3	1419.2	1419.2	1419.2	1421.2	1421.2	1421.2	1426.9	1434.6	1436.5	1434.6
17.5°	1390.4	1390.4	1390.4	1390.4	1394.2	1396.2	1394.2	1400.0	1407.7	1409.6	1407.7
20°	1357.7	1359.6	1359.6	1361.5	1363.5	1365.4	1365.4	1371.2	1378.8	1380.8	1376.9
22.5°	1325.0	1325.0	1326.9	1328.8	1328.8	1330.8	1330.8	1336.5	1344.2	1346.2	1344.2
25°	1288.5	1288.5	1290.4	1294.2	1294.2	1296.2	1296.2	1301.9	1307.7	1309.6	1307.7
27.5°	1248.1	1246.2	1250.0	1251.9	1253.8	1257.7	1255.8	1263.5	1269.2	1271.2	1269.2
30°	1207.7	1205.8	1209.6	1211.5	1213.5	1215.4	1215.4	1223.1	1228.8	1230.8	1228.8
32.5°	1163.5	1161.5	1165.4	1169.2	1169.2	1171.2	1171.2	1178.8	1182.7	1186.5	1182.7
35°	1117.3	1113.5	1119.2	1123.1	1121.2	1125.0	1125.0	1132.7	1136.5	1140.4	1136.5
37.5°	1071.2	1069.2	1071.2	1075.0	1075.0	1076.9	1076.9	1084.6	1090.4	1092.3	1090.4
40°	1023.1	1021.2	1023.1	1028.8	1026.9	1028.8	1030.8	1036.5	1040.4	1042.3	1040.4
42.5°	971.2	971.2	973.1	978.8	976.9	978.8	980.8	986.5	990.4	992.3	990.4
45°	919.2	921.2	919.2	928.8	925.0	926.9	930.8	932.7	938.5	940.4	936.5
47.5°	867.3	871.2	869.2	876.9	875.0	875.0	876.9	882.7	886.5	888.5	886.5
50°	813.5	817.3	815.4	825.0	821.2	823.1	825.0	828.8	830.8	832.7	832.7
52.5°	759.6	761.5	765.4	771.2	769.2	771.2	773.1	775.0	776.9	780.8	776.9
55°	705.8	707.7	711.5	715.4	717.3	717.3	719.2	723.1	721.2	723.1	725.0
57.5°	651.9	655.8	655.8	663.5	663.5	663.5	663.5	669.2	667.3	671.2	671.2
60°	596.2	596.2	600.0	605.8	607.7	607.7	609.6	613.5	611.5	615.4	617.3
62.5°	540.4	544.2	548.1	551.9	555.8	551.9	557.7	559.6	561.5	563.5	561.5
65°	480.8	484.6	488.5	492.3	492.3	492.3	494.2	501.9	501.9	509.6	507.7
67.5°	425.0	428.8	432.7	436.5	438.5	438.5	440.4	444.2	448.1	450.0	448.1
70°	369.2	373.1	380.8	382.7	386.5	382.7	388.5	390.4	394.2	396.2	394.2
72.5°	315.4	319.2	325.0	326.9	330.8	332.7	334.6	334.6	340.4	342.3	342.3
75°	261.5	265.4	271.2	273.1	276.9	278.8	280.8	280.8	286.5	288.5	286.5
77.5°	209.6	211.5	217.3	219.2	223.1	225.0	226.9	226.9	232.7	234.6	232.7
80°	157.7	159.6	165.4	167.3	171.2	171.2	173.1	175.0	178.8	180.8	178.8
82.5°	107.7	109.6	113.5	117.3	119.2	121.2	123.1	125.0	126.9	128.8	126.9
85°	57.7	59.6	65.4	67.3	71.2	73.1	73.1	75.0	78.8	78.8	78.8
87.5°	13.5	17.3	21.2	23.1	26.9	26.9	28.8	28.8	32.7	34.6	32.7
90°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
92.5°	5.8	5.8	7.7	7.7	9.6	9.6	13.5	15.4	13.5	11.5	11.5
95°	13.5	15.4	19.2	25.0	26.9	30.8	38.5	40.4	32.7	28.8	26.9
97.5°	25.0	30.8	40.4	55.8	61.5	69.2	78.8	75.0	61.5	51.9	48.1
100°	44.2	57.7	80.8	109.6	121.2	130.8	132.7	123.1	101.9	84.6	75.0
102.5°	78.8	111.5	159.6	200.0	207.7	213.5	203.8	182.7	151.9	125.0	109.6
105°	157.7	225.0	290.4	315.4	315.4	309.6	280.8	251.9	211.5	176.9	151.9
107.5°	325.0	401.9	440.4	432.7	419.2	400.0	361.5	325.0	276.9	234.6	203.8
110°	548.1	576.9	565.4	536.5	511.5	488.5	440.4	396.2	344.2	300.0	263.5



TEST NUMBER: P303159

CATALOG NUMBER: CTW-F-5050-40L830-UNV-STD-8

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	715.4	694.2	663.5	615.4	592.3	569.2	519.2	469.2	411.5	367.3	325.0
115°	821.2	782.7	740.4	692.3	667.3	642.3	594.2	540.4	478.8	430.8	388.5
117.5°	898.1	851.9	807.7	761.5	734.6	709.6	663.5	605.8	548.1	496.2	453.8
120°	959.6	911.5	867.3	821.2	798.1	775.0	726.9	669.2	613.5	567.3	521.2
122.5°	1013.5	965.4	923.1	878.8	857.7	832.7	782.7	726.9	671.2	626.9	584.6
125°	1061.5	1017.3	975.0	934.6	911.5	884.6	834.6	780.8	728.8	684.6	644.2
127.5°	1105.8	1065.4	1025.0	984.6	963.5	932.7	886.5	834.6	786.5	742.3	703.8
130°	1146.2	1109.6	1069.2	1028.8	1005.8	978.8	932.7	884.6	840.4	798.1	759.6
132.5°	1184.6	1148.1	1109.6	1067.3	1046.2	1021.2	978.8	932.7	890.4	853.8	815.4
135°	1219.2	1182.7	1144.2	1103.8	1080.8	1059.6	1019.2	976.9	936.5	900.0	861.5
137.5°	1250.0	1211.5	1175.0	1136.5	1115.4	1096.2	1057.7	1017.3	982.7	948.1	909.6
140°	1276.9	1236.5	1201.9	1163.5	1146.2	1130.8	1090.4	1057.7	1025.0	990.4	957.7
142.5°	1298.1	1259.6	1226.9	1192.3	1176.9	1159.6	1125.0	1094.2	1063.5	1032.7	1000.0
145°	1317.3	1278.8	1250.0	1217.3	1201.9	1188.5	1155.8	1125.0	1100.0	1071.2	1038.5
147.5°	1334.6	1300.0	1271.2	1242.3	1228.8	1215.4	1184.6	1157.7	1134.6	1105.8	1076.9
150°	1346.2	1317.3	1292.3	1263.5	1253.8	1240.4	1211.5	1188.5	1165.4	1142.3	1113.5
152.5°	1355.8	1330.8	1307.7	1284.6	1275.0	1261.5	1236.5	1217.3	1198.1	1175.0	1148.1
155°	1361.5	1342.3	1321.2	1300.0	1290.4	1280.8	1259.6	1240.4	1223.1	1203.8	1176.9
157.5°	1369.2	1351.9	1332.7	1313.5	1305.8	1296.2	1276.9	1261.5	1246.2	1228.8	1205.8
160°	1373.1	1357.7	1340.4	1325.0	1317.3	1311.5	1290.4	1280.8	1267.3	1251.9	1230.8
162.5°	1375.0	1361.5	1348.1	1334.6	1328.8	1321.2	1305.8	1296.2	1284.6	1271.2	1253.8
165°	1375.0	1365.4	1351.9	1342.3	1336.5	1328.8	1317.3	1309.6	1300.0	1288.5	1273.1
167.5°	1373.1	1365.4	1353.8	1346.2	1342.3	1336.5	1325.0	1319.2	1313.5	1305.8	1290.4
170°	1367.3	1361.5	1353.8	1348.1	1342.3	1338.5	1330.8	1326.9	1323.1	1317.3	1303.8
172.5°	1359.6	1355.8	1348.1	1346.2	1342.3	1338.5	1332.7	1332.7	1328.8	1325.0	1315.4
175°	1350.0	1348.1	1342.3	1340.4	1340.4	1336.5	1332.7	1332.7	1334.6	1330.8	1323.1
177.5°	1336.5	1336.5	1332.7	1332.7	1332.7	1330.8	1328.8	1332.7	1334.6	1334.6	1328.8
180°	1323.1	1323.1	1323.1	1323.1	1323.1	1323.1	1323.1	1323.1	1323.1	1323.1	1323.1



TEST NUMBER: P303159

CATALOG NUMBER: CTW-F-5050-40L830-UNV-STD-8

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1
2.5°	1503.8	1498.1	1494.2	1494.2	1494.2	1490.4	1488.5	1490.4	1496.2	1505.8	1496.2
5°	1496.2	1490.4	1488.5	1488.5	1488.5	1484.6	1482.7	1484.6	1490.4	1500.0	1490.4
7.5°	1486.5	1480.8	1478.8	1478.8	1476.9	1473.1	1473.1	1473.1	1480.8	1486.5	1478.8
10°	1471.2	1465.4	1463.5	1463.5	1461.5	1457.7	1457.7	1457.7	1465.4	1471.2	1463.5
12.5°	1451.9	1446.2	1444.2	1444.2	1442.3	1438.5	1438.5	1438.5	1446.2	1450.0	1444.2
15°	1428.8	1423.1	1421.2	1421.2	1419.2	1415.4	1415.4	1415.4	1423.1	1425.0	1419.2
17.5°	1401.9	1396.2	1394.2	1394.2	1390.4	1388.5	1386.5	1386.5	1394.2	1396.2	1390.4
20°	1373.1	1365.4	1365.4	1363.5	1359.6	1357.7	1357.7	1355.8	1367.3	1363.5	1359.6
22.5°	1338.5	1332.7	1332.7	1330.8	1326.9	1325.0	1323.1	1323.1	1332.7	1325.0	1321.2
25°	1303.8	1296.2	1298.1	1294.2	1292.3	1288.5	1286.5	1286.5	1296.2	1286.5	1284.6
27.5°	1267.3	1259.6	1255.8	1255.8	1253.8	1248.1	1246.2	1246.2	1255.8	1246.2	1244.2
30°	1223.1	1219.2	1215.4	1215.4	1209.6	1207.7	1205.8	1205.8	1213.5	1203.8	1201.9
32.5°	1180.8	1175.0	1173.1	1171.2	1169.2	1163.5	1161.5	1163.5	1169.2	1157.7	1155.8
35°	1134.6	1130.8	1128.8	1125.0	1123.1	1119.2	1117.3	1119.2	1121.2	1111.5	1107.7
37.5°	1084.6	1082.7	1080.8	1076.9	1075.0	1073.1	1071.2	1073.1	1073.1	1063.5	1059.6
40°	1036.5	1032.7	1030.8	1028.8	1028.8	1025.0	1023.1	1026.9	1023.1	1019.2	1011.5
42.5°	988.5	982.7	982.7	978.8	978.8	975.0	975.0	976.9	973.1	969.2	961.5
45°	936.5	934.6	932.7	928.8	928.8	925.0	925.0	926.9	921.2	917.3	911.5
47.5°	884.6	884.6	880.8	876.9	878.8	876.9	875.0	875.0	871.2	867.3	861.5
50°	832.7	830.8	825.0	826.9	828.8	823.1	825.0	819.2	819.2	815.4	807.7
52.5°	778.8	776.9	775.0	773.1	775.0	771.2	771.2	767.3	765.4	761.5	755.8
55°	726.9	725.0	721.2	721.2	723.1	717.3	717.3	713.5	711.5	707.7	701.9
57.5°	673.1	671.2	669.2	667.3	669.2	665.4	663.5	661.5	657.7	653.8	650.0
60°	619.2	617.3	613.5	611.5	613.5	609.6	607.7	605.8	603.8	598.1	594.2
62.5°	563.5	559.6	559.6	557.7	559.6	555.8	553.8	551.9	548.1	544.2	544.2
65°	507.7	505.8	505.8	500.0	503.8	500.0	492.3	492.3	488.5	484.6	484.6
67.5°	448.1	446.2	446.2	444.2	444.2	444.2	442.3	438.5	432.7	432.7	432.7
70°	394.2	392.3	392.3	388.5	390.4	388.5	386.5	382.7	378.8	378.8	378.8
72.5°	338.5	336.5	336.5	334.6	336.5	334.6	332.7	328.8	325.0	326.9	325.0
75°	284.6	282.7	284.6	280.8	282.7	280.8	278.8	275.0	273.1	275.0	273.1
77.5°	230.8	230.8	230.8	230.8	228.8	226.9	225.0	223.1	223.1	223.1	219.2
80°	178.8	176.9	176.9	176.9	176.9	175.0	173.1	171.2	171.2	171.2	167.3
82.5°	126.9	126.9	126.9	126.9	125.0	126.9	121.2	119.2	119.2	119.2	115.4
85°	76.9	76.9	78.8	76.9	76.9	75.0	71.2	69.2	69.2	67.3	65.4
87.5°	34.6	30.8	30.8	30.8	28.8	28.8	28.8	25.0	25.0	25.0	21.2
90°	3.8	5.8	5.8	5.8	5.8	7.7	7.7	7.7	7.7	7.7	9.6
92.5°	17.3	23.1	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
95°	30.8	34.6	42.3	46.2	50.0	53.8	53.8	55.8	53.8	51.9	51.9
97.5°	46.2	51.9	53.8	55.8	59.6	67.3	73.1	78.8	82.7	84.6	84.6
100°	71.2	69.2	73.1	78.8	78.8	76.9	82.7	88.5	94.2	100.0	101.9
102.5°	101.9	94.2	92.3	94.2	98.1	105.8	101.9	103.8	105.8	109.6	115.4
105°	138.5	126.9	119.2	117.3	119.2	123.1	130.8	132.7	126.9	128.8	130.8
107.5°	180.8	163.5	151.9	148.1	146.2	146.2	150.0	157.7	163.5	161.5	157.7
110°	232.7	205.8	190.4	182.7	178.8	175.0	175.0	178.8	184.6	192.3	198.1



TEST NUMBER: P303159

CATALOG NUMBER: CTW-F-5050-40L830-UNV-STD-8

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
112.5°	290.4	257.7	234.6	223.1	217.3	203.8	201.9	203.8	205.8	211.5	219.2
115°	351.9	311.5	282.7	269.2	261.5	240.4	230.8	228.8	230.8	232.7	236.5
117.5°	413.5	373.1	336.5	321.2	309.6	284.6	267.3	261.5	255.8	257.7	257.7
120°	480.8	432.7	398.1	376.9	365.4	334.6	311.5	298.1	286.5	282.7	280.8
122.5°	542.3	500.0	457.7	442.3	423.1	388.5	363.5	342.3	325.0	313.5	307.7
125°	600.0	559.6	521.2	503.8	484.6	446.2	419.2	394.2	371.2	355.8	340.4
127.5°	663.5	621.2	582.7	567.3	548.1	509.6	476.9	453.8	428.8	405.8	384.6
130°	715.4	678.8	642.3	626.9	609.6	573.1	540.4	513.5	482.7	461.5	438.5
132.5°	773.1	734.6	700.0	682.7	665.4	630.8	600.0	573.1	544.2	525.0	500.0
135°	825.0	788.5	751.9	738.5	719.2	688.5	659.6	630.8	603.8	580.8	559.6
137.5°	875.0	838.5	805.8	790.4	773.1	744.2	717.3	696.2	665.4	642.3	619.2
140°	921.2	886.5	855.8	840.4	826.9	796.2	773.1	751.9	723.1	701.9	676.9
142.5°	965.4	932.7	905.8	890.4	875.0	846.2	823.1	803.8	780.8	757.7	736.5
145°	1007.7	975.0	950.0	936.5	921.2	894.2	873.1	853.8	838.5	813.5	792.3
147.5°	1048.1	1015.4	992.3	980.8	967.3	942.3	923.1	903.8	890.4	867.3	848.1
150°	1084.6	1055.8	1034.6	1023.1	1009.6	986.5	969.2	951.9	940.4	917.3	903.8
152.5°	1121.2	1094.2	1075.0	1063.5	1051.9	1028.8	1011.5	994.2	988.5	965.4	953.8
155°	1153.8	1126.9	1109.6	1100.0	1090.4	1067.3	1051.9	1034.6	1030.8	1011.5	998.1
157.5°	1184.6	1159.6	1142.3	1134.6	1125.0	1103.8	1090.4	1075.0	1073.1	1055.8	1044.2
160°	1211.5	1188.5	1173.1	1163.5	1155.8	1138.5	1125.0	1113.5	1109.6	1098.1	1086.5
162.5°	1236.5	1217.3	1201.9	1194.2	1188.5	1171.2	1159.6	1148.1	1146.2	1138.5	1125.0
165°	1257.7	1238.5	1226.9	1221.2	1215.4	1200.0	1190.4	1180.8	1178.8	1175.0	1161.5
167.5°	1276.9	1259.6	1250.0	1244.2	1238.5	1226.9	1219.2	1211.5	1211.5	1207.7	1196.2
170°	1292.3	1276.9	1269.2	1265.4	1261.5	1250.0	1242.3	1236.5	1236.5	1238.5	1225.0
172.5°	1305.8	1294.2	1286.5	1280.8	1278.8	1271.2	1265.4	1259.6	1261.5	1265.4	1253.8
175°	1317.3	1305.8	1300.0	1298.1	1296.2	1288.5	1284.6	1282.7	1284.6	1290.4	1280.8
177.5°	1325.0	1317.3	1313.5	1311.5	1311.5	1303.8	1301.9	1301.9	1303.8	1313.5	1301.9
180°	1323.1	1323.1	1323.1	1323.1	1323.1	1323.1	1323.1	1323.1	1323.1	1323.1	1323.1



TEST NUMBER: P303159

CATALOG NUMBER: CTW-F-5050-40L830-UNV-STD-8

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1
2.5°	1500.0	1498.1	1496.2	1494.2	1492.3	1490.4	1486.5	1488.5
5°	1492.3	1490.4	1488.5	1486.5	1486.5	1486.5	1484.6	1486.5
7.5°	1480.8	1478.8	1476.9	1475.0	1475.0	1476.9	1475.0	1478.8
10°	1465.4	1461.5	1461.5	1457.7	1457.7	1457.7	1457.7	1459.6
12.5°	1444.2	1440.4	1440.4	1436.5	1436.5	1436.5	1438.5	1440.4
15°	1419.2	1417.3	1415.4	1413.5	1413.5	1415.4	1413.5	1415.4
17.5°	1390.4	1386.5	1386.5	1384.6	1384.6	1382.7	1382.7	1384.6
20°	1355.8	1351.9	1351.9	1350.0	1348.1	1348.1	1348.1	1350.0
22.5°	1317.3	1315.4	1313.5	1309.6	1311.5	1311.5	1309.6	1313.5
25°	1278.8	1276.9	1275.0	1273.1	1273.1	1271.2	1269.2	1271.2
27.5°	1240.4	1236.5	1234.6	1232.7	1230.8	1228.8	1226.9	1228.8
30°	1198.1	1190.4	1192.3	1190.4	1186.5	1184.6	1182.7	1184.6
32.5°	1151.9	1148.1	1144.2	1144.2	1140.4	1138.5	1136.5	1138.5
35°	1105.8	1100.0	1098.1	1098.1	1094.2	1092.3	1090.4	1092.3
37.5°	1057.7	1051.9	1050.0	1050.0	1046.2	1042.3	1042.3	1042.3
40°	1007.7	1001.9	1001.9	1001.9	998.1	994.2	994.2	994.2
42.5°	957.7	953.8	951.9	951.9	948.1	942.3	942.3	944.2
45°	907.7	903.8	901.9	900.0	898.1	892.3	892.3	892.3
47.5°	853.8	853.8	850.0	850.0	846.2	844.2	842.3	842.3
50°	805.8	801.9	798.1	798.1	796.2	790.4	790.4	790.4
52.5°	751.9	750.0	746.2	746.2	742.3	738.5	738.5	738.5
55°	700.0	698.1	694.2	694.2	690.4	688.5	686.5	686.5
57.5°	646.2	646.2	642.3	642.3	636.5	636.5	634.6	638.5
60°	590.4	592.3	588.5	586.5	582.7	582.7	582.7	586.5
62.5°	540.4	538.5	534.6	534.6	532.7	530.8	532.7	532.7
65°	482.7	478.8	476.9	476.9	475.0	473.1	471.2	475.0
67.5°	428.8	426.9	423.1	423.1	423.1	421.2	421.2	423.1
70°	375.0	373.1	371.2	371.2	369.2	369.2	369.2	371.2
72.5°	321.2	321.2	321.2	319.2	317.3	315.4	319.2	317.3
75°	269.2	267.3	267.3	267.3	265.4	263.5	261.5	265.4
77.5°	217.3	215.4	215.4	215.4	213.5	211.5	211.5	213.5
80°	165.4	163.5	163.5	163.5	161.5	161.5	159.6	161.5
82.5°	111.5	111.5	111.5	111.5	107.7	109.6	109.6	107.7
85°	63.5	61.5	61.5	61.5	61.5	61.5	59.6	61.5
87.5°	19.2	19.2	19.2	21.2	19.2	21.2	21.2	21.2
90°	9.6	9.6	9.6	9.6	9.6	9.6	11.5	11.5
92.5°	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
95°	50.0	51.9	50.0	50.0	50.0	50.0	50.0	50.0
97.5°	84.6	84.6	84.6	84.6	82.7	80.8	80.8	80.8
100°	105.8	107.7	109.6	109.6	111.5	111.5	111.5	111.5
102.5°	119.2	121.2	121.2	123.1	125.0	125.0	125.0	125.0
105°	132.7	132.7	134.6	136.5	140.4	142.3	144.2	144.2
107.5°	155.8	155.8	157.7	157.7	157.7	159.6	159.6	159.6
110°	196.2	188.5	188.5	186.5	184.6	184.6	184.6	184.6



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CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
112.5°	225.0	226.9	228.8	230.8	228.8	225.0	225.0	225.0
115°	244.2	248.1	251.9	253.8	255.8	255.8	257.7	257.7
117.5°	263.5	267.3	269.2	271.2	275.0	275.0	278.8	278.8
120°	282.7	286.5	286.5	288.5	290.4	292.3	294.2	294.2
122.5°	305.8	307.7	307.7	307.7	309.6	309.6	311.5	311.5
125°	334.6	330.8	328.8	330.8	328.8	328.8	328.8	328.8
127.5°	371.2	363.5	361.5	359.6	355.8	351.9	351.9	351.9
130°	419.2	407.7	401.9	400.0	394.2	386.5	386.5	384.6
132.5°	475.0	461.5	453.8	451.9	442.3	432.7	428.8	426.9
135°	540.4	525.0	515.4	513.5	498.1	488.5	484.6	482.7
137.5°	598.1	582.7	576.9	573.1	563.5	553.8	548.1	546.2
140°	657.7	644.2	634.6	630.8	619.2	613.5	607.7	607.7
142.5°	717.3	703.8	694.2	690.4	680.8	673.1	667.3	667.3
145°	775.0	761.5	751.9	748.1	738.5	730.8	726.9	725.0
147.5°	832.7	819.2	811.5	807.7	798.1	790.4	784.6	784.6
150°	888.5	875.0	867.3	859.6	853.8	846.2	842.3	840.4
152.5°	940.4	928.8	921.2	913.5	907.7	903.8	898.1	898.1
155°	986.5	976.9	969.2	963.5	959.6	953.8	951.9	951.9
157.5°	1034.6	1023.1	1017.3	1011.5	1007.7	1005.8	1001.9	1001.9
160°	1078.8	1067.3	1063.5	1057.7	1053.8	1050.0	1048.1	1050.0
162.5°	1121.2	1113.5	1107.7	1101.9	1100.0	1096.2	1094.2	1094.2
165°	1157.7	1150.0	1146.2	1142.3	1138.5	1136.5	1134.6	1136.5
167.5°	1192.3	1184.6	1180.8	1176.9	1175.0	1175.0	1173.1	1173.1
170°	1223.1	1217.3	1215.4	1209.6	1207.7	1207.7	1205.8	1205.8
172.5°	1251.9	1248.1	1246.2	1242.3	1242.3	1242.3	1240.4	1242.3
175°	1280.8	1276.9	1275.0	1271.2	1271.2	1269.2	1267.3	1269.2
177.5°	1305.8	1303.8	1300.0	1298.1	1296.2	1294.2	1290.4	1292.3
180°	1323.1	1323.1	1323.1	1323.1	1323.1	1323.1	1323.1	1323.1

(END OF REPORT)