

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: P303179

Luminaire Tested: **CTW-F-5050-50L930-UNV-STD-8**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P303179
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-181-10)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: CTW-F-5050-50L930-UNV-STD-8
Description: CORELITE CONTINUA LINEAR WALL LED LUMINAIRE
50% UPLIGHT, 50% DOWNLIGHT, 5000 LUMEN PACKAGE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

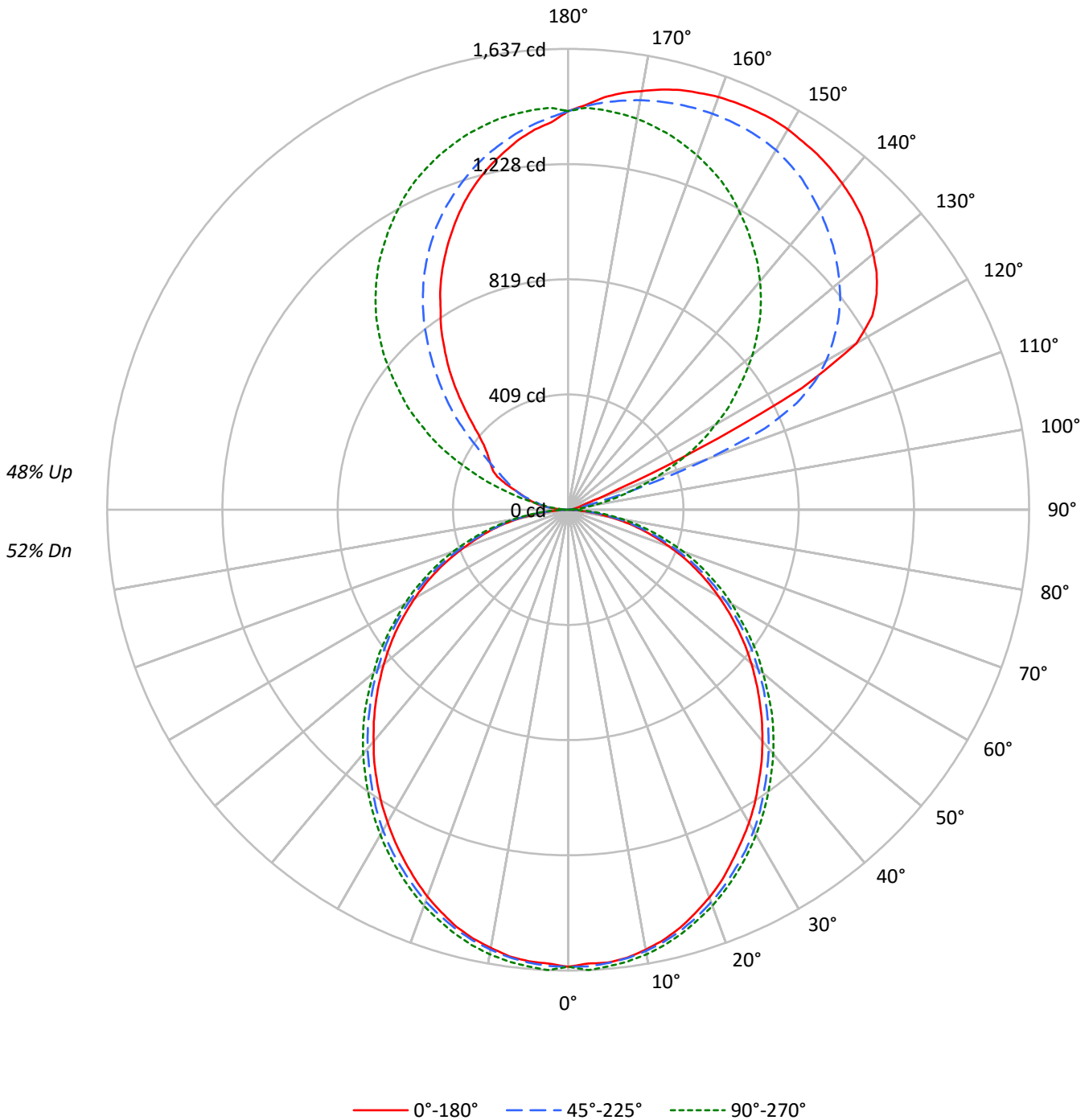
Lumens per Lamp: N/A
Luminaire Lumens: 8353.7 lumens
Efficiency: N/A
Efficacy: 106.3 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.32
Luminous Opening: Rectangular (W 8' x L: 0.12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 78.6
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	50	30	10	0	
RCR																						
0	108	108	108	108	100	100	100	100	84	84	84	71	71	71	58	58	58	52				
1	98	94	90	86	91	87	83	80	74	71	69	62	60	59	51	50	49	44				
2	89	82	75	70	82	76	70	66	65	61	57	54	51	49	45	43	41	36				
3	81	72	64	58	75	67	60	55	57	52	48	48	44	41	40	37	35	31				
4	74	63	55	49	68	59	52	46	50	45	41	43	39	35	35	32	30	26				
5	68	56	48	42	63	53	45	40	45	39	35	38	34	30	32	29	26	23				
6	63	51	42	37	58	47	40	35	41	35	31	35	30	27	29	25	23	20				
7	58	46	38	32	54	43	35	30	37	31	27	31	27	24	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°	17475	17475	17475
5°	17452	17596	17398
10°	17345	17527	17273
15°	17128	17370	17091
20°	16787	17149	16749
25°	16358	16872	16339
30°	15961	16582	15940
35°	15498	16241	15541
40°	15076	15917	15100
45°	14636	15573	14713
50°	14207	15098	14318
55°	13767	14765	13955
60°	13285	14467	13537
65°	12753	14067	13091
70°	11988	13665	12406
75°	11071	13075	11898
80°	9484	12168	10724
85°	5953	10683	7805



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.3	1.8
10°-20°	434.1	5.2
20°-30°	642.7	7.7
30°-40°	754.8	9.0
40°-50°	765.3	9.2
50°-60°	682.7	8.2
60°-70°	523.3	6.3
70°-80°	308.1	3.7
80°-90°	83.0	1.0
90°-100°	40.3	0.5
100°-110°	173.9	2.1
110°-120°	487.4	5.8
120°-130°	704.6	8.4
130°-140°	760.6	9.1
140°-150°	723.4	8.7
150°-160°	593.7	7.1
160°-170°	388.1	4.6
170°-180°	134.5	1.6
0°-30°	1230.2	14.7
0°-40°	1984.9	23.8
0°-60°	3432.9	41.1
0°-90°	4347.3	52.0
90°-120°	701.6	8.4
90°-150°	2890.1	34.6
90°-180°	4006.0	48.0
0°-180°	8353.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1624	1624	1624	1624	1624	
5°	1615	1617	1628	1615	1610	153
15°	1537	1547	1559	1542	1534	433
25°	1377	1406	1421	1402	1376	635
35°	1179	1214	1236	1213	1183	739
45°	962	996	1023	996	966	742
55°	734	765	787	770	744	656
65°	501	524	552	532	514	495
75°	266	284	314	293	286	281
85°	48	63	86	72	63	62
90°	2	2	2	8	12	2
95°	10	12	30	55	50	11
105°	43	126	196	136	153	51
115°	504	895	471	244	278	557
125°	1337	1169	730	404	351	1186
135°	1474	1329	963	652	531	1137
145°	1542	1441	1143	900	787	967
155°	1565	1492	1288	1108	1021	724
165°	1544	1492	1381	1266	1218	437
175°	1470	1452	1426	1376	1356	141
180°	1416	1416	1416	1416	1416	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1623.5	1623.5	1623.5	1623.5	1623.5	1623.5	1623.5	1623.5	1623.5	1623.5	1623.5
2.5°	1613.6	1611.9	1616.9	1620.2	1620.2	1621.9	1625.2	1626.9	1625.2	1631.9	1623.5
5°	1615.2	1611.9	1613.6	1613.6	1611.9	1613.6	1616.9	1618.5	1618.5	1625.2	1616.9
7.5°	1605.2	1603.6	1605.2	1603.6	1601.9	1603.6	1605.2	1608.6	1606.9	1613.6	1606.9
10°	1586.9	1585.3	1585.3	1585.3	1583.6	1585.3	1588.6	1591.9	1591.9	1596.9	1591.9
12.5°	1565.3	1562.0	1563.7	1565.3	1562.0	1563.7	1567.0	1570.3	1570.3	1577.0	1572.0
15°	1537.0	1535.4	1538.7	1542.0	1538.7	1538.7	1542.0	1543.7	1545.4	1550.3	1547.0
17.5°	1502.1	1502.1	1505.4	1510.4	1507.1	1507.1	1510.4	1513.7	1513.7	1517.1	1517.1
20°	1465.5	1463.8	1467.2	1470.5	1470.5	1468.8	1473.8	1477.2	1478.8	1482.1	1483.8
22.5°	1425.6	1422.3	1423.9	1428.9	1427.2	1427.2	1428.9	1435.6	1438.9	1442.2	1447.2
25°	1377.3	1377.3	1380.7	1384.0	1384.0	1384.0	1385.7	1390.7	1395.6	1400.6	1405.6
27.5°	1330.8	1330.8	1332.4	1339.1	1339.1	1337.4	1340.7	1349.1	1354.1	1357.4	1364.0
30°	1284.2	1279.2	1284.2	1289.2	1292.5	1289.2	1294.2	1300.8	1304.2	1309.1	1317.5
32.5°	1234.3	1232.6	1232.6	1239.3	1242.6	1240.9	1242.6	1250.9	1257.6	1259.2	1267.6
35°	1179.4	1181.1	1181.1	1186.0	1189.4	1187.7	1189.4	1197.7	1204.3	1206.0	1214.3
37.5°	1127.8	1127.8	1127.8	1132.8	1136.1	1136.1	1136.1	1144.5	1151.1	1156.1	1161.1
40°	1072.9	1074.6	1072.9	1077.9	1082.9	1081.2	1082.9	1089.6	1097.9	1102.9	1107.9
42.5°	1018.0	1016.4	1016.4	1021.4	1028.0	1026.4	1028.0	1034.7	1041.3	1048.0	1051.3
45°	961.5	958.2	961.5	966.5	971.5	973.1	971.5	978.1	984.8	989.8	996.4
47.5°	904.9	903.3	903.3	908.2	913.2	913.2	914.9	919.9	928.2	931.5	939.9
50°	848.4	848.4	846.7	851.7	856.7	858.3	858.3	861.7	870.0	876.6	880.0
52.5°	791.8	791.8	791.8	793.5	796.8	801.8	801.8	805.1	810.1	818.4	823.4
55°	733.6	735.2	733.6	735.2	740.2	743.6	743.6	746.9	751.9	760.2	765.2
57.5°	675.4	677.0	675.4	677.0	682.0	683.7	685.3	688.7	692.0	698.7	703.6
60°	617.1	618.8	617.1	618.8	623.8	627.1	625.5	630.5	633.8	637.1	643.8
62.5°	558.9	562.2	560.6	563.9	565.6	568.9	567.2	572.2	575.6	578.9	585.5
65°	500.7	504.0	502.4	505.7	505.7	509.0	507.4	512.3	515.7	519.0	524.0
67.5°	442.5	445.8	444.1	445.8	447.5	450.8	447.5	454.1	457.5	459.1	464.1
70°	380.9	384.3	382.6	384.3	385.9	387.6	385.9	390.9	395.9	397.6	400.9
72.5°	322.7	326.0	326.0	327.7	327.7	331.0	331.0	331.0	334.4	339.3	341.0
75°	266.2	269.5	269.5	269.5	269.5	272.8	272.8	276.1	277.8	281.1	284.5
77.5°	209.6	212.9	212.9	212.9	212.9	216.2	216.2	219.6	221.2	224.6	227.9
80°	153.0	156.4	158.0	158.0	158.0	159.7	159.7	163.0	164.7	168.0	171.3
82.5°	99.8	101.5	103.1	101.5	103.1	104.8	108.1	108.1	109.8	113.1	116.4
85°	48.2	49.9	51.6	51.6	51.6	53.2	53.2	56.6	58.2	59.9	63.2
87.5°	6.7	8.3	8.3	8.3	8.3	10.0	10.0	10.0	11.6	11.6	15.0
90°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
92.5°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
95°	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	11.6
97.5°	15.0	15.0	16.6	15.0	16.6	16.6	16.6	16.6	18.3	18.3	21.6
100°	23.3	23.3	23.3	23.3	23.3	23.3	25.0	25.0	28.3	29.9	34.9
102.5°	31.6	31.6	31.6	33.3	33.3	34.9	34.9	36.6	41.6	48.2	63.2
105°	43.2	43.2	44.9	44.9	46.6	48.2	49.9	56.6	66.5	86.5	126.4
107.5°	59.9	61.5	63.2	64.9	69.9	74.9	79.8	98.1	128.1	189.6	282.8
110°	94.8	96.5	103.1	109.8	126.4	143.1	159.7	221.2	311.1	424.2	527.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	198.0	204.6	209.6	249.5	302.7	349.3	392.6	502.4	620.5	717.0	756.9
115°	504.0	515.7	524.0	602.2	685.3	738.6	771.8	846.7	894.9	909.9	894.9
117.5°	936.5	941.5	953.2	981.4	1019.7	1038.0	1041.3	1053.0	1041.3	1018.0	988.1
120°	1181.1	1181.1	1174.4	1176.1	1171.1	1171.1	1164.4	1146.1	1121.2	1092.9	1058.0
122.5°	1280.9	1275.9	1267.6	1260.9	1245.9	1242.6	1232.6	1209.3	1182.7	1154.4	1116.2
125°	1337.4	1332.4	1325.8	1317.5	1300.8	1294.2	1284.2	1260.9	1234.3	1204.3	1169.4
127.5°	1380.7	1375.7	1369.0	1360.7	1345.7	1339.1	1327.4	1304.2	1277.5	1249.3	1217.7
130°	1413.9	1412.3	1404.0	1399.0	1384.0	1377.3	1365.7	1342.4	1317.5	1289.2	1257.6
132.5°	1445.5	1442.2	1433.9	1430.6	1417.3	1409.0	1399.0	1377.3	1352.4	1324.1	1294.2
135°	1473.8	1470.5	1460.5	1457.2	1445.5	1435.6	1427.2	1407.3	1385.7	1357.4	1329.1
137.5°	1495.5	1490.5	1483.8	1480.5	1468.8	1458.9	1452.2	1433.9	1412.3	1385.7	1359.0
140°	1513.7	1508.8	1503.8	1500.4	1490.5	1482.1	1473.8	1455.5	1437.2	1415.6	1389.0
142.5°	1528.7	1525.4	1520.4	1515.4	1505.4	1498.8	1492.1	1477.2	1460.5	1438.9	1415.6
145°	1542.0	1538.7	1533.7	1530.4	1518.7	1513.7	1507.1	1493.8	1478.8	1457.2	1440.6
147.5°	1550.3	1548.7	1545.4	1542.0	1530.4	1525.4	1518.7	1508.8	1493.8	1473.8	1458.9
150°	1560.3	1557.0	1553.7	1552.0	1540.4	1535.4	1532.0	1520.4	1507.1	1488.8	1475.5
152.5°	1565.3	1562.0	1558.7	1557.0	1545.4	1542.0	1538.7	1528.7	1513.7	1497.1	1485.5
155°	1565.3	1563.7	1560.3	1558.7	1547.0	1542.0	1540.4	1530.4	1517.1	1503.8	1492.1
157.5°	1563.7	1560.3	1558.7	1555.3	1545.4	1542.0	1538.7	1530.4	1518.7	1507.1	1495.5
160°	1560.3	1557.0	1555.3	1552.0	1543.7	1540.4	1538.7	1530.4	1522.1	1510.4	1497.1
162.5°	1552.0	1550.3	1548.7	1547.0	1540.4	1537.0	1535.4	1528.7	1518.7	1508.8	1495.5
165°	1543.7	1540.4	1538.7	1535.4	1528.7	1528.7	1527.1	1522.1	1512.1	1507.1	1492.1
167.5°	1528.7	1523.7	1523.7	1518.7	1513.7	1513.7	1512.1	1510.4	1502.1	1498.8	1485.5
170°	1510.4	1508.8	1505.4	1503.8	1500.4	1500.4	1498.8	1497.1	1490.5	1490.5	1477.2
172.5°	1493.8	1492.1	1490.5	1487.1	1482.1	1482.1	1482.1	1482.1	1477.2	1477.2	1465.5
175°	1470.5	1467.2	1467.2	1465.5	1462.2	1463.8	1463.8	1463.8	1460.5	1463.8	1452.2
177.5°	1438.9	1435.6	1438.9	1442.2	1440.6	1442.2	1443.9	1443.9	1440.6	1445.5	1435.6
180°	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1623.5	1623.5	1623.5	1623.5	1623.5	1623.5	1623.5	1623.5	1623.5	1623.5	1623.5
2.5°	1616.9	1618.5	1616.9	1618.5	1620.2	1618.5	1620.2	1626.9	1633.5	1636.8	1633.5
5°	1610.2	1611.9	1610.2	1611.9	1613.6	1611.9	1613.6	1618.5	1626.9	1628.5	1626.9
7.5°	1600.2	1601.9	1600.2	1601.9	1601.9	1601.9	1601.9	1608.6	1615.2	1618.5	1615.2
10°	1583.6	1585.3	1583.6	1586.9	1586.9	1586.9	1586.9	1593.6	1600.2	1603.6	1598.6
12.5°	1563.7	1565.3	1563.7	1567.0	1565.3	1567.0	1568.6	1573.6	1580.3	1583.6	1580.3
15°	1537.0	1540.4	1538.7	1542.0	1542.0	1542.0	1542.0	1548.7	1555.3	1558.7	1555.3
17.5°	1507.1	1508.8	1508.8	1512.1	1512.1	1512.1	1513.7	1520.4	1525.4	1528.7	1525.4
20°	1473.8	1477.2	1477.2	1478.8	1478.8	1480.5	1482.1	1487.1	1493.8	1497.1	1493.8
22.5°	1437.2	1440.6	1442.2	1442.2	1442.2	1443.9	1445.5	1450.5	1458.9	1460.5	1457.2
25°	1399.0	1399.0	1402.3	1402.3	1404.0	1405.6	1407.3	1410.6	1418.9	1420.6	1418.9
27.5°	1357.4	1355.7	1357.4	1360.7	1360.7	1364.0	1365.7	1369.0	1375.7	1379.0	1375.7
30°	1310.8	1310.8	1314.1	1315.8	1315.8	1317.5	1320.8	1324.1	1330.8	1334.1	1330.8
32.5°	1264.2	1262.6	1267.6	1267.6	1269.2	1270.9	1272.5	1277.5	1282.5	1285.9	1284.2
35°	1216.0	1211.0	1217.7	1217.7	1219.3	1222.6	1222.6	1226.0	1232.6	1236.0	1232.6
37.5°	1166.1	1161.1	1166.1	1169.4	1167.7	1171.1	1172.7	1176.1	1182.7	1184.4	1184.4
40°	1114.5	1109.5	1114.5	1116.2	1116.2	1117.8	1121.2	1122.8	1127.8	1132.8	1129.5
42.5°	1058.0	1056.3	1059.6	1063.0	1063.0	1064.6	1066.3	1067.9	1072.9	1077.9	1074.6
45°	1001.4	1001.4	1004.7	1008.1	1009.7	1009.7	1011.4	1013.0	1016.4	1023.0	1018.0
47.5°	944.8	944.8	948.2	949.8	949.8	951.5	954.8	954.8	961.5	961.5	963.1
50°	885.0	888.3	891.6	896.6	893.3	894.9	898.3	898.3	901.6	901.6	906.6
52.5°	826.7	828.4	833.4	838.4	840.0	838.4	840.0	840.0	843.4	848.4	845.0
55°	768.5	768.5	775.2	780.2	780.2	780.2	780.2	781.8	786.8	786.8	786.8
57.5°	708.6	710.3	715.3	721.9	721.9	721.9	721.9	723.6	726.9	725.3	730.3
60°	650.4	650.4	657.1	660.4	660.4	663.7	663.7	665.4	667.0	672.0	672.0
62.5°	592.2	592.2	597.2	600.5	603.8	602.2	603.8	605.5	608.8	613.8	610.5
65°	532.3	532.3	537.3	539.0	544.0	542.3	544.0	548.9	550.6	552.3	550.6
67.5°	470.8	472.4	477.4	479.1	484.1	485.7	484.1	490.7	492.4	495.7	494.0
70°	405.9	407.5	414.2	415.9	419.2	417.5	420.9	429.2	432.5	434.2	430.8
72.5°	347.7	349.3	356.0	357.6	361.0	359.3	362.6	367.6	371.0	372.6	372.6
75°	287.8	291.1	294.4	297.8	302.7	301.1	304.4	309.4	312.7	314.4	314.4
77.5°	231.2	232.9	237.9	239.5	244.5	242.9	244.5	247.9	252.8	254.5	254.5
80°	174.7	178.0	179.7	183.0	186.3	184.6	188.0	193.0	194.6	196.3	196.3
82.5°	119.8	121.4	124.8	128.1	131.4	133.1	134.7	138.1	139.7	139.7	139.7
85°	66.5	69.9	73.2	74.9	78.2	76.5	81.5	84.8	86.5	86.5	88.2
87.5°	18.3	21.6	23.3	26.6	29.9	29.9	29.9	36.6	36.6	38.3	38.3
90°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
92.5°	5.0	6.7	6.7	8.3	10.0	11.6	16.6	16.6	13.3	11.6	13.3
95°	13.3	15.0	18.3	28.3	34.9	39.9	46.6	44.9	38.3	29.9	28.3
97.5°	25.0	31.6	44.9	68.2	81.5	88.2	94.8	84.8	71.5	58.2	53.2
100°	46.6	63.2	96.5	136.4	151.4	158.0	156.4	134.7	116.4	94.8	83.2
102.5°	88.2	134.7	191.3	236.2	246.2	237.9	224.6	198.0	171.3	141.4	123.1
105°	191.3	271.1	329.4	346.0	351.0	334.4	302.7	269.5	231.2	196.3	169.7
107.5°	380.9	454.1	475.7	464.1	457.5	429.2	389.2	346.0	301.1	257.8	224.6
110°	603.8	617.1	602.2	565.6	545.6	520.7	475.7	425.8	369.3	326.0	286.1



TEST NUMBER: P303179

CATALOG NUMBER: CTW-F-5050-50L930-UNV-STD-8

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	766.9	738.6	700.3	652.1	628.8	602.2	553.9	505.7	444.1	395.9	352.7
115°	871.7	830.1	783.5	731.9	707.0	678.7	630.5	577.2	515.7	470.8	420.9
117.5°	953.2	901.6	855.0	805.1	781.8	753.5	705.3	647.1	585.5	540.6	490.7
120°	1016.4	968.1	919.9	873.3	846.7	823.4	773.5	715.3	653.7	603.8	557.3
122.5°	1072.9	1028.0	981.4	936.5	911.6	885.0	833.4	776.8	720.3	673.7	627.1
125°	1126.2	1084.6	1038.0	993.1	968.1	941.5	891.6	836.7	780.2	730.3	690.3
127.5°	1176.1	1136.1	1089.6	1046.3	1021.4	993.1	944.8	891.6	843.4	791.8	751.9
130°	1221.0	1184.4	1139.5	1096.2	1071.3	1044.7	996.4	944.8	898.3	853.4	810.1
132.5°	1260.9	1224.3	1181.1	1141.1	1114.5	1091.2	1044.7	996.4	949.8	908.2	868.3
135°	1299.2	1260.9	1221.0	1179.4	1156.1	1134.5	1089.6	1044.7	1001.4	963.1	926.5
137.5°	1334.1	1292.5	1252.6	1212.7	1191.0	1172.7	1129.5	1087.9	1051.3	1013.0	976.5
140°	1364.0	1320.8	1284.2	1245.9	1226.0	1207.7	1167.7	1127.8	1096.2	1059.6	1024.7
142.5°	1387.3	1344.1	1310.8	1274.2	1255.9	1240.9	1202.7	1167.7	1136.1	1104.5	1069.6
145°	1405.6	1367.4	1335.8	1300.8	1285.9	1269.2	1234.3	1202.7	1174.4	1142.8	1111.2
147.5°	1423.9	1390.7	1359.0	1327.4	1312.5	1297.5	1265.9	1237.6	1211.0	1182.7	1151.1
150°	1438.9	1409.0	1380.7	1352.4	1339.1	1324.1	1295.8	1269.2	1245.9	1219.3	1189.4
152.5°	1448.9	1423.9	1399.0	1374.0	1360.7	1349.1	1322.5	1300.8	1279.2	1255.9	1226.0
155°	1457.2	1437.2	1413.9	1392.3	1380.7	1370.7	1345.7	1325.8	1307.5	1287.5	1260.9
157.5°	1465.5	1445.5	1425.6	1405.6	1395.6	1385.7	1364.0	1349.1	1332.4	1314.1	1289.2
160°	1468.8	1453.9	1433.9	1417.3	1409.0	1400.6	1382.3	1369.0	1355.7	1339.1	1315.8
162.5°	1470.5	1457.2	1440.6	1427.2	1420.6	1413.9	1395.6	1385.7	1374.0	1360.7	1340.7
165°	1470.5	1460.5	1447.2	1435.6	1428.9	1423.9	1409.0	1400.6	1392.3	1380.7	1362.4
167.5°	1468.8	1458.9	1448.9	1438.9	1433.9	1428.9	1417.3	1412.3	1405.6	1395.6	1380.7
170°	1463.8	1457.2	1447.2	1440.6	1437.2	1432.2	1423.9	1420.6	1417.3	1410.6	1395.6
172.5°	1455.5	1450.5	1443.9	1438.9	1437.2	1432.2	1425.6	1423.9	1423.9	1418.9	1407.3
175°	1443.9	1442.2	1437.2	1433.9	1430.6	1428.9	1423.9	1425.6	1427.2	1425.6	1415.6
177.5°	1428.9	1428.9	1425.6	1425.6	1423.9	1422.3	1420.6	1423.9	1428.9	1428.9	1422.3
180°	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6



TEST NUMBER: P303179

CATALOG NUMBER: CTW-F-5050-50L930-UNV-STD-8

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1623.5	1623.5	1623.5	1623.5	1623.5	1623.5	1623.5	1623.5	1623.5	1623.5	1623.5
2.5°	1628.5	1621.9	1620.2	1620.2	1618.5	1615.2	1613.6	1615.2	1621.9	1631.9	1621.9
5°	1621.9	1615.2	1611.9	1611.9	1611.9	1606.9	1606.9	1606.9	1615.2	1623.5	1613.6
7.5°	1610.2	1603.6	1601.9	1601.9	1600.2	1596.9	1595.3	1596.9	1603.6	1611.9	1601.9
10°	1595.3	1588.6	1586.9	1585.3	1583.6	1580.3	1578.6	1580.3	1586.9	1593.6	1585.3
12.5°	1575.3	1568.6	1565.3	1567.0	1563.7	1558.7	1558.7	1558.7	1567.0	1572.0	1563.7
15°	1550.3	1542.0	1540.4	1540.4	1538.7	1533.7	1533.7	1533.7	1542.0	1545.4	1535.4
17.5°	1520.4	1513.7	1512.1	1512.1	1508.8	1503.8	1503.8	1502.1	1512.1	1513.7	1507.1
20°	1488.8	1482.1	1478.8	1478.8	1475.5	1470.5	1470.5	1468.8	1480.5	1477.2	1472.2
22.5°	1453.9	1445.5	1442.2	1443.9	1440.6	1433.9	1433.9	1432.2	1442.2	1437.2	1430.6
25°	1415.6	1405.6	1404.0	1402.3	1400.6	1392.3	1392.3	1392.3	1402.3	1394.0	1389.0
27.5°	1370.7	1364.0	1362.4	1357.4	1357.4	1350.7	1350.7	1350.7	1360.7	1349.1	1347.4
30°	1325.8	1319.1	1319.1	1314.1	1312.5	1305.8	1305.8	1305.8	1315.8	1304.2	1300.8
32.5°	1280.9	1272.5	1269.2	1265.9	1265.9	1259.2	1259.2	1259.2	1265.9	1254.2	1250.9
35°	1231.0	1222.6	1222.6	1216.0	1216.0	1209.3	1207.7	1211.0	1212.7	1202.7	1199.4
37.5°	1179.4	1171.1	1171.1	1166.1	1166.1	1159.4	1159.4	1164.4	1159.4	1154.4	1147.8
40°	1127.8	1121.2	1117.8	1112.9	1114.5	1109.5	1107.9	1111.2	1107.9	1102.9	1094.6
42.5°	1072.9	1066.3	1064.6	1061.3	1061.3	1056.3	1054.6	1058.0	1053.0	1046.3	1041.3
45°	1018.0	1013.0	1011.4	1008.1	1008.1	1001.4	1001.4	1003.1	996.4	993.1	986.4
47.5°	959.8	956.5	953.2	953.2	951.5	946.5	946.5	946.5	941.5	938.2	929.9
50°	903.3	898.3	896.6	896.6	896.6	891.6	890.0	886.6	883.3	881.6	873.3
52.5°	845.0	841.7	840.0	840.0	841.7	833.4	831.7	828.4	826.7	825.1	815.1
55°	786.8	783.5	780.2	783.5	781.8	775.2	773.5	775.2	770.2	765.2	756.9
57.5°	728.6	723.6	723.6	725.3	723.6	717.0	715.3	717.0	710.3	705.3	698.7
60°	670.4	665.4	663.7	665.4	663.7	657.1	655.4	655.4	650.4	647.1	640.4
62.5°	612.2	607.2	607.2	607.2	605.5	602.2	597.2	597.2	592.2	587.2	582.2
65°	550.6	545.6	547.3	547.3	547.3	544.0	539.0	540.6	532.3	529.0	524.0
67.5°	492.4	487.4	487.4	487.4	487.4	487.4	479.1	477.4	472.4	470.8	465.8
70°	430.8	424.2	425.8	424.2	422.5	420.9	415.9	414.2	409.2	409.2	404.2
72.5°	369.3	366.0	366.0	366.0	364.3	362.6	359.3	357.6	351.0	351.0	347.7
75°	307.7	307.7	306.1	306.1	306.1	304.4	301.1	299.4	292.8	294.4	291.1
77.5°	251.2	251.2	247.9	247.9	247.9	246.2	244.5	239.5	239.5	236.2	234.5
80°	193.0	193.0	191.3	191.3	191.3	189.6	188.0	186.3	183.0	181.3	178.0
82.5°	139.7	138.1	136.4	136.4	134.7	134.7	133.1	131.4	128.1	123.1	121.4
85°	84.8	84.8	83.2	83.2	81.5	81.5	78.2	74.9	71.5	68.2	66.5
87.5°	36.6	36.6	31.6	31.6	29.9	29.9	28.3	26.6	23.3	21.6	20.0
90°	3.3	5.0	5.0	5.0	6.7	6.7	6.7	8.3	8.3	8.3	8.3
92.5°	20.0	25.0	26.6	26.6	26.6	26.6	26.6	26.6	26.6	25.0	25.0
95°	33.3	36.6	44.9	48.2	51.6	54.9	54.9	54.9	54.9	53.2	49.9
97.5°	49.9	53.2	58.2	58.2	59.9	68.2	74.9	78.2	81.5	83.2	83.2
100°	78.2	71.5	78.2	83.2	81.5	81.5	84.8	91.5	98.1	101.5	103.1
102.5°	111.5	99.8	96.5	99.8	103.1	109.8	106.5	108.1	111.5	116.4	121.4
105°	153.0	138.1	126.4	124.8	124.8	131.4	139.7	138.1	136.4	136.4	136.4
107.5°	201.3	179.7	161.4	158.0	154.7	154.7	159.7	169.7	176.3	169.7	166.3
110°	256.2	226.2	207.9	198.0	191.3	184.6	184.6	189.6	198.0	206.3	209.6



TEST NUMBER: P303179

CATALOG NUMBER: CTW-F-5050-50L930-UNV-STD-8

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
112.5°	317.7	281.1	256.2	247.9	234.5	219.6	214.6	214.6	219.6	227.9	234.5
115°	380.9	342.7	307.7	297.8	284.5	261.2	247.9	244.5	244.5	247.9	254.5
117.5°	450.8	404.2	366.0	352.7	337.7	311.1	289.4	277.8	272.8	272.8	276.1
120°	512.3	472.4	432.5	414.2	395.9	366.0	337.7	319.4	307.7	301.1	299.4
122.5°	582.2	540.6	497.4	482.4	462.4	427.5	397.6	369.3	351.0	337.7	327.7
125°	645.4	607.2	562.2	544.0	525.7	490.7	460.8	429.2	404.2	382.6	366.0
127.5°	707.0	668.7	625.5	608.8	590.5	553.9	522.3	492.4	465.8	439.2	415.9
130°	768.5	731.9	688.7	670.4	653.7	618.8	583.9	553.9	530.6	504.0	477.4
132.5°	828.4	790.1	750.2	730.3	715.3	680.4	648.7	617.1	590.5	567.2	542.3
135°	885.0	848.4	808.4	788.5	773.5	741.9	710.3	682.0	652.1	628.8	605.5
137.5°	938.2	901.6	866.7	845.0	830.1	801.8	771.8	745.2	715.3	690.3	667.0
140°	988.1	953.2	919.9	901.6	885.0	856.7	830.1	808.4	776.8	753.5	730.3
142.5°	1034.7	999.7	968.1	953.2	936.5	909.9	885.0	865.0	841.7	816.8	793.5
145°	1076.3	1046.3	1016.4	1001.4	986.4	961.5	938.2	919.9	899.9	875.0	853.4
147.5°	1119.5	1089.6	1061.3	1048.0	1036.3	1011.4	989.8	971.5	956.5	933.2	911.6
150°	1159.4	1131.2	1106.2	1092.9	1082.9	1056.3	1039.7	1021.4	1009.7	988.1	969.8
152.5°	1197.7	1172.7	1147.8	1137.8	1126.2	1101.2	1084.6	1066.3	1059.6	1038.0	1023.0
155°	1234.3	1207.7	1187.7	1177.7	1166.1	1142.8	1129.5	1112.9	1107.9	1087.9	1072.9
157.5°	1267.6	1240.9	1222.6	1212.7	1202.7	1182.7	1169.4	1154.4	1151.1	1136.1	1119.5
160°	1295.8	1270.9	1254.2	1247.6	1237.6	1219.3	1206.0	1194.4	1191.0	1181.1	1164.4
162.5°	1320.8	1299.2	1285.9	1277.5	1269.2	1252.6	1242.6	1229.3	1229.3	1221.0	1207.7
165°	1345.7	1325.8	1312.5	1305.8	1299.2	1285.9	1274.2	1265.9	1265.9	1259.2	1245.9
167.5°	1365.7	1347.4	1337.4	1330.8	1325.8	1312.5	1304.2	1295.8	1297.5	1294.2	1280.9
170°	1384.0	1367.4	1359.0	1354.1	1349.1	1337.4	1332.4	1324.1	1325.8	1325.8	1314.1
172.5°	1399.0	1384.0	1377.3	1372.4	1370.7	1359.0	1355.7	1350.7	1352.4	1355.7	1340.7
175°	1409.0	1397.3	1390.7	1389.0	1385.7	1379.0	1374.0	1372.4	1375.7	1380.7	1367.4
177.5°	1417.3	1407.3	1404.0	1404.0	1400.6	1394.0	1390.7	1390.7	1395.6	1402.3	1392.3
180°	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6



TEST NUMBER: P303179

CATALOG NUMBER: CTW-F-5050-50L930-UNV-STD-8

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1623.5	1623.5	1623.5	1623.5	1623.5	1623.5	1623.5	1623.5
2.5°	1625.2	1623.5	1621.9	1618.5	1616.9	1613.6	1611.9	1613.6
5°	1615.2	1613.6	1611.9	1610.2	1610.2	1608.6	1608.6	1610.2
7.5°	1603.6	1601.9	1600.2	1598.6	1598.6	1598.6	1598.6	1600.2
10°	1586.9	1583.6	1582.0	1580.3	1578.6	1578.6	1578.6	1580.3
12.5°	1565.3	1562.0	1558.7	1557.0	1557.0	1557.0	1557.0	1560.3
15°	1537.0	1535.4	1533.7	1532.0	1532.0	1530.4	1530.4	1533.7
17.5°	1508.8	1505.4	1502.1	1500.4	1498.8	1498.8	1497.1	1498.8
20°	1470.5	1467.2	1463.8	1462.2	1462.2	1460.5	1460.5	1462.2
22.5°	1428.9	1423.9	1422.3	1420.6	1420.6	1418.9	1418.9	1420.6
25°	1387.3	1380.7	1379.0	1377.3	1377.3	1375.7	1375.7	1375.7
27.5°	1344.1	1337.4	1335.8	1332.4	1334.1	1330.8	1329.1	1330.8
30°	1297.5	1290.8	1289.2	1285.9	1285.9	1282.5	1280.9	1282.5
32.5°	1247.6	1240.9	1239.3	1237.6	1239.3	1232.6	1231.0	1234.3
35°	1196.0	1189.4	1189.4	1186.0	1187.7	1181.1	1181.1	1182.7
37.5°	1142.8	1136.1	1137.8	1134.5	1134.5	1129.5	1129.5	1131.2
40°	1089.6	1084.6	1081.2	1081.2	1082.9	1076.3	1076.3	1074.6
42.5°	1034.7	1029.7	1028.0	1028.0	1026.4	1021.4	1019.7	1021.4
45°	979.8	974.8	974.8	973.1	973.1	966.5	968.1	966.5
47.5°	923.2	919.9	918.2	916.6	916.6	909.9	911.6	909.9
50°	866.7	865.0	863.3	861.7	861.7	855.0	858.3	855.0
52.5°	810.1	808.4	806.8	806.8	805.1	801.8	801.8	798.5
55°	753.5	750.2	750.2	750.2	748.6	743.6	746.9	743.6
57.5°	697.0	693.7	692.0	690.3	690.3	688.7	687.0	685.3
60°	638.8	635.4	635.4	632.1	632.1	632.1	630.5	628.8
62.5°	580.5	577.2	577.2	575.6	575.6	575.6	573.9	572.2
65°	524.0	519.0	519.0	517.3	517.3	517.3	515.7	514.0
67.5°	464.1	460.8	460.8	459.1	460.8	460.8	459.1	455.8
70°	402.6	399.2	399.2	397.6	399.2	399.2	397.6	394.2
72.5°	346.0	342.7	341.0	342.7	342.7	342.7	339.3	337.7
75°	289.4	284.5	284.5	286.1	284.5	286.1	282.8	286.1
77.5°	232.9	227.9	227.9	229.6	227.9	227.9	226.2	229.6
80°	174.7	171.3	171.3	173.0	171.3	171.3	169.7	173.0
82.5°	119.8	118.1	119.8	116.4	113.1	113.1	111.5	114.8
85°	66.5	64.9	63.2	63.2	61.5	61.5	59.9	63.2
87.5°	20.0	21.6	21.6	20.0	20.0	20.0	20.0	21.6
90°	8.3	8.3	8.3	10.0	10.0	11.6	11.6	11.6
92.5°	25.0	25.0	23.3	25.0	23.3	23.3	23.3	23.3
95°	49.9	49.9	49.9	49.9	49.9	49.9	49.9	49.9
97.5°	83.2	84.8	83.2	84.8	83.2	81.5	83.2	81.5
100°	104.8	108.1	108.1	109.8	109.8	109.8	109.8	109.8
102.5°	124.8	128.1	128.1	129.7	129.7	131.4	131.4	129.7
105°	141.4	143.1	144.7	146.4	149.7	153.0	153.0	153.0
107.5°	164.7	168.0	166.3	168.0	169.7	169.7	169.7	169.7
110°	206.3	202.9	201.3	198.0	198.0	198.0	198.0	198.0



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CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
112.5°	241.2	244.5	244.5	244.5	244.5	242.9	239.5	239.5
115°	262.8	269.5	271.1	272.8	276.1	277.8	277.8	277.8
117.5°	279.5	286.1	287.8	291.1	294.4	297.8	299.4	301.1
120°	301.1	306.1	307.7	307.7	311.1	312.7	316.1	316.1
122.5°	326.0	327.7	327.7	327.7	329.4	331.0	332.7	332.7
125°	359.3	354.3	354.3	351.0	351.0	349.3	351.0	351.0
127.5°	400.9	394.2	390.9	385.9	382.6	377.6	377.6	377.6
130°	459.1	447.5	440.8	432.5	425.8	415.9	415.9	415.9
132.5°	522.3	504.0	499.0	490.7	480.7	470.8	469.1	469.1
135°	587.2	567.2	560.6	552.3	540.6	532.3	525.7	530.6
137.5°	648.7	630.5	628.8	622.1	607.2	597.2	595.5	595.5
140°	712.0	692.0	688.7	682.0	673.7	663.7	658.7	660.4
142.5°	773.5	753.5	750.2	745.2	733.6	725.3	720.3	721.9
145°	836.7	816.8	813.4	806.8	795.1	788.5	781.8	786.8
147.5°	896.6	878.3	873.3	865.0	858.3	850.0	845.0	843.4
150°	954.8	936.5	933.2	924.9	918.2	911.6	904.9	908.2
152.5°	1009.7	996.4	989.8	981.4	976.5	969.8	964.8	966.5
155°	1061.3	1044.7	1041.3	1034.7	1031.3	1024.7	1021.4	1021.4
157.5°	1106.2	1096.2	1091.2	1086.2	1081.2	1077.9	1072.9	1074.6
160°	1154.4	1144.5	1139.5	1136.1	1129.5	1129.5	1124.5	1126.2
162.5°	1199.4	1191.0	1186.0	1182.7	1179.4	1177.7	1172.7	1174.4
165°	1239.3	1231.0	1229.3	1224.3	1222.6	1222.6	1217.7	1217.7
167.5°	1275.9	1269.2	1264.2	1262.6	1259.2	1259.2	1255.9	1257.6
170°	1310.8	1304.2	1300.8	1297.5	1294.2	1294.2	1292.5	1292.5
172.5°	1340.7	1335.8	1334.1	1330.8	1329.1	1329.1	1327.4	1327.4
175°	1369.0	1364.0	1362.4	1359.0	1357.4	1355.7	1355.7	1355.7
177.5°	1394.0	1392.3	1389.0	1389.0	1385.7	1382.3	1379.0	1377.3
180°	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6

(END OF REPORT)