

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: P303180

Luminaire Tested: **CTW-F-5050-50L935-UNV-STD-8**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P303180
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-5050-50L935-UNV-STD-8
Description: CORELITE CONTINUA LINEAR WALL LED LUMINAIRE
50% UPLIGHT, 50% DOWNLIGHT, 5000 LUMEN PACKAGE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

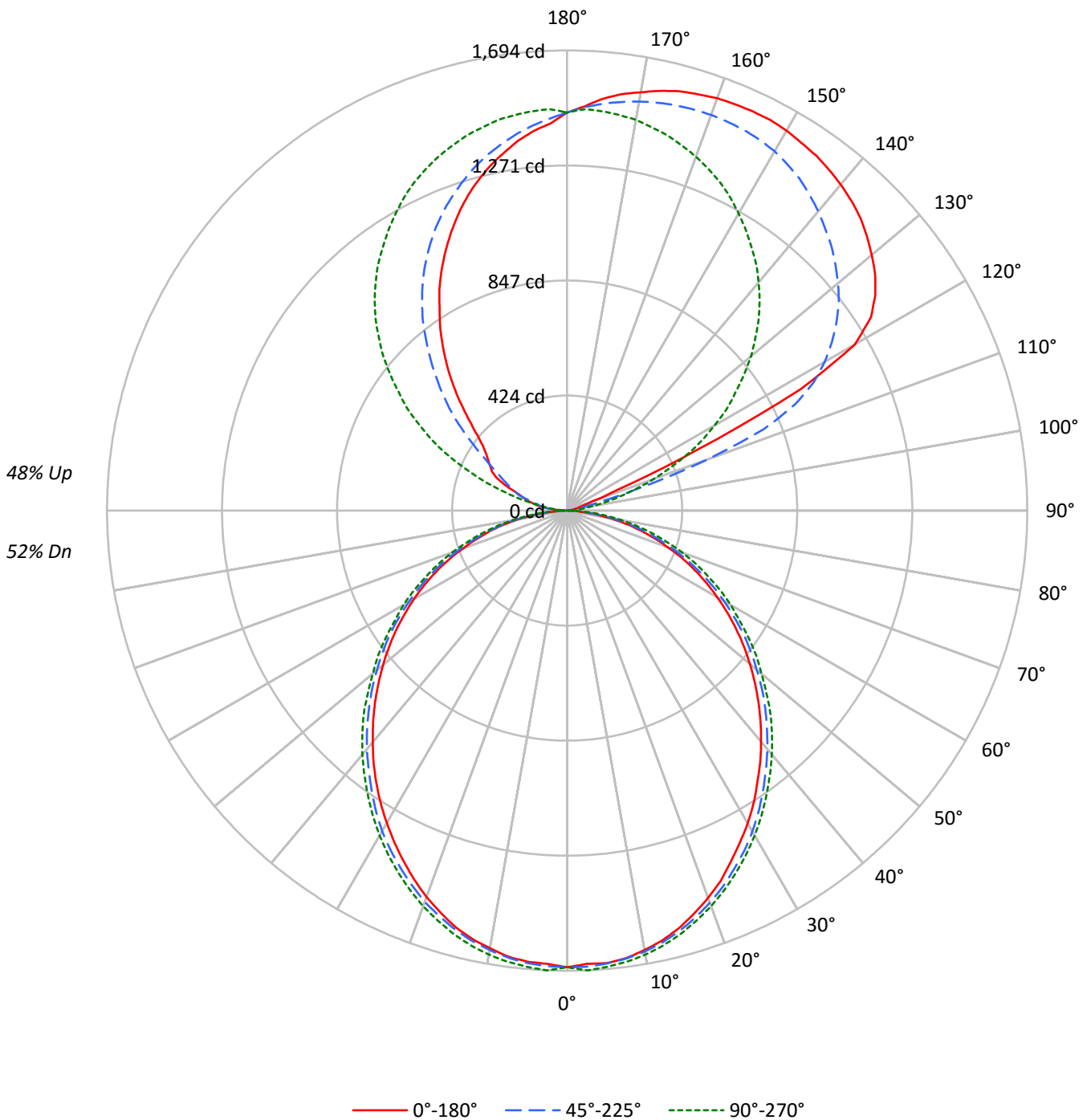
Lumens per Lamp: N/A
Luminaire Lumens: 8647.6 lumens
Efficiency: N/A
Efficacy: 110.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.32
Luminous Opening: Rectangular (W 8' x L: 0.12' x H: 0')
CIE Type: General Diffuse

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	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°	18091	18091	18091
5°	18067	18215	18011
10°	17956	18144	17880
15°	17731	17980	17693
20°	17378	17753	17338
25°	16934	17466	16914
30°	16523	17165	16502
35°	16043	16812	16088
40°	15607	16478	15631
45°	15151	16121	15230
50°	14706	15629	14822
55°	14251	15285	14444
60°	13754	14977	14012
65°	13201	14561	13552
70°	12409	14143	12844
75°	11458	13537	12319
80°	9819	12596	11102
85°	6163	11053	8077



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.7	1.8
10°-20°	449.4	5.2
20°-30°	665.4	7.7
30°-40°	781.3	9.0
40°-50°	792.2	9.2
50°-60°	706.7	8.2
60°-70°	541.7	6.3
70°-80°	318.9	3.7
80°-90°	86.0	1.0
90°-100°	41.7	0.5
100°-110°	180.0	2.1
110°-120°	504.5	5.8
120°-130°	729.4	8.4
130°-140°	787.3	9.1
140°-150°	748.8	8.7
150°-160°	614.6	7.1
160°-170°	401.7	4.6
170°-180°	139.2	1.6
0°-30°	1273.4	14.7
0°-40°	2054.8	23.8
0°-60°	3553.7	41.1
0°-90°	4500.3	52.0
90°-120°	726.3	8.4
90°-150°	2991.8	34.6
90°-180°	4147.0	48.0
0°-180°	8647.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1681	1681	1681	1681	1681	
5°	1672	1674	1686	1672	1667	159
15°	1591	1602	1614	1596	1588	448
25°	1426	1455	1471	1452	1424	657
35°	1221	1257	1279	1255	1224	765
45°	995	1032	1059	1032	1000	768
55°	759	792	814	797	770	679
65°	518	542	572	551	532	513
75°	276	294	326	303	296	291
85°	50	65	90	74	65	64
90°	2	2	2	9	12	2
95°	10	12	31	57	52	11
105°	45	131	203	141	158	53
115°	522	926	487	253	288	577
125°	1384	1211	756	418	363	1228
135°	1526	1376	997	675	549	1177
145°	1596	1491	1183	932	814	1001
155°	1620	1545	1333	1147	1057	749
165°	1598	1545	1429	1310	1260	453
175°	1522	1503	1476	1424	1403	146
180°	1465	1465	1465	1465	1465	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1680.7	1680.7	1680.7	1680.7	1680.7	1680.7	1680.7	1680.7	1680.7	1680.7	1680.7
2.5°	1670.3	1668.6	1673.8	1677.2	1677.2	1678.9	1682.4	1684.1	1682.4	1689.3	1680.7
5°	1672.1	1668.6	1670.3	1670.3	1668.6	1670.3	1673.8	1675.5	1675.5	1682.4	1673.8
7.5°	1661.7	1660.0	1661.7	1660.0	1658.3	1660.0	1661.7	1665.2	1663.5	1670.3	1663.5
10°	1642.8	1641.1	1641.1	1641.1	1639.3	1641.1	1644.5	1648.0	1648.0	1653.1	1648.0
12.5°	1620.4	1617.0	1618.7	1620.4	1617.0	1618.7	1622.1	1625.6	1625.6	1632.5	1627.3
15°	1591.1	1589.4	1592.8	1596.3	1592.8	1592.8	1596.3	1598.0	1599.7	1604.9	1601.5
17.5°	1555.0	1555.0	1558.4	1563.6	1560.1	1560.1	1563.6	1567.0	1567.0	1570.5	1570.5
20°	1517.1	1515.4	1518.8	1522.2	1522.2	1520.5	1525.7	1529.1	1530.9	1534.3	1536.0
22.5°	1475.8	1472.3	1474.0	1479.2	1477.5	1477.5	1479.2	1486.1	1489.5	1493.0	1498.1
25°	1425.8	1425.8	1429.3	1432.7	1432.7	1432.7	1434.4	1439.6	1444.8	1449.9	1455.1
27.5°	1377.6	1377.6	1379.3	1386.2	1386.2	1384.5	1387.9	1396.5	1401.7	1405.2	1412.0
30°	1329.4	1324.2	1329.4	1334.5	1338.0	1334.5	1339.7	1346.6	1350.0	1355.2	1363.8
32.5°	1277.7	1276.0	1276.0	1282.9	1286.3	1284.6	1286.3	1294.9	1301.8	1303.6	1312.2
35°	1220.9	1222.6	1222.6	1227.8	1231.2	1229.5	1231.2	1239.8	1246.7	1248.4	1257.1
37.5°	1167.5	1167.5	1167.5	1172.7	1176.1	1176.1	1176.1	1184.7	1191.6	1196.8	1202.0
40°	1110.7	1112.4	1110.7	1115.9	1121.0	1119.3	1121.0	1127.9	1136.5	1141.7	1146.9
42.5°	1053.9	1052.1	1052.1	1057.3	1064.2	1062.5	1064.2	1071.1	1078.0	1084.9	1088.3
45°	995.3	991.9	995.3	1000.5	1005.6	1007.4	1005.6	1012.5	1019.4	1024.6	1031.5
47.5°	936.8	935.0	935.0	940.2	945.4	945.4	947.1	952.3	960.9	964.3	972.9
50°	878.2	878.2	876.5	881.7	886.8	888.6	888.6	892.0	900.6	907.5	910.9
52.5°	819.7	819.7	819.7	821.4	824.8	830.0	830.0	833.4	838.6	847.2	852.4
55°	759.4	761.1	759.4	761.1	766.3	769.7	769.7	773.2	778.3	787.0	792.1
57.5°	699.1	700.9	699.1	700.9	706.0	707.7	709.5	712.9	716.4	723.2	728.4
60°	638.9	640.6	638.9	640.6	645.7	649.2	647.5	652.6	656.1	659.5	666.4
62.5°	578.6	582.0	580.3	583.8	585.5	588.9	587.2	592.4	595.8	599.3	606.1
65°	518.3	521.8	520.0	523.5	523.5	526.9	525.2	530.4	533.8	537.3	542.4
67.5°	458.1	461.5	459.8	461.5	463.2	466.7	463.2	470.1	473.5	475.3	480.4
70°	394.3	397.8	396.1	397.8	399.5	401.2	399.5	404.7	409.8	411.6	415.0
72.5°	334.1	337.5	337.5	339.2	339.2	342.7	342.7	342.7	346.1	351.3	353.0
75°	275.5	279.0	279.0	279.0	279.0	282.4	282.4	285.9	287.6	291.0	294.5
77.5°	217.0	220.4	220.4	220.4	220.4	223.9	223.9	227.3	229.0	232.5	235.9
80°	158.4	161.9	163.6	163.6	163.6	165.3	165.3	168.8	170.5	173.9	177.4
82.5°	103.3	105.0	106.8	105.0	106.8	108.5	111.9	111.9	113.7	117.1	120.5
85°	49.9	51.7	53.4	53.4	53.4	55.1	55.1	58.5	60.3	62.0	65.4
87.5°	6.9	8.6	8.6	8.6	8.6	10.3	10.3	10.3	12.1	12.1	15.5
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°	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
95°	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	12.1
97.5°	15.5	15.5	17.2	15.5	17.2	17.2	17.2	17.2	18.9	18.9	22.4
100°	24.1	24.1	24.1	24.1	24.1	24.1	25.8	25.8	29.3	31.0	36.2
102.5°	32.7	32.7	32.7	34.4	34.4	36.2	36.2	37.9	43.0	49.9	65.4
105°	44.8	44.8	46.5	46.5	48.2	49.9	51.7	58.5	68.9	89.5	130.9
107.5°	62.0	63.7	65.4	67.2	72.3	77.5	82.7	101.6	132.6	196.3	292.7
110°	98.2	99.9	106.8	113.7	130.9	148.1	165.3	229.0	322.0	439.1	545.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	204.9	211.8	217.0	258.3	313.4	361.6	406.4	520.0	642.3	742.2	783.5
115°	521.8	533.8	542.4	623.4	709.5	764.6	799.0	876.5	926.4	941.9	926.4
117.5°	969.5	974.7	986.7	1016.0	1055.6	1074.5	1078.0	1090.0	1078.0	1053.9	1022.9
120°	1222.6	1222.6	1215.7	1217.5	1212.3	1212.3	1205.4	1186.5	1160.6	1131.4	1095.2
122.5°	1325.9	1320.8	1312.2	1305.3	1289.8	1286.3	1276.0	1251.9	1224.3	1195.1	1155.5
125°	1384.5	1379.3	1372.4	1363.8	1346.6	1339.7	1329.4	1305.3	1277.7	1246.7	1210.6
127.5°	1429.3	1424.1	1417.2	1408.6	1393.1	1386.2	1374.2	1350.0	1322.5	1293.2	1260.5
130°	1463.7	1462.0	1453.4	1448.2	1432.7	1425.8	1413.8	1389.7	1363.8	1334.5	1301.8
132.5°	1496.4	1493.0	1484.4	1480.9	1467.1	1458.5	1448.2	1425.8	1400.0	1370.7	1339.7
135°	1525.7	1522.2	1511.9	1508.5	1496.4	1486.1	1477.5	1456.8	1434.4	1405.2	1375.9
137.5°	1548.1	1542.9	1536.0	1532.6	1520.5	1510.2	1503.3	1484.4	1462.0	1434.4	1406.9
140°	1567.0	1561.9	1556.7	1553.2	1542.9	1534.3	1525.7	1506.7	1487.8	1465.4	1437.9
142.5°	1582.5	1579.1	1573.9	1568.7	1558.4	1551.5	1544.6	1529.1	1511.9	1489.5	1465.4
145°	1596.3	1592.8	1587.7	1584.2	1572.2	1567.0	1560.1	1546.4	1530.9	1508.5	1491.3
147.5°	1604.9	1603.2	1599.7	1596.3	1584.2	1579.1	1572.2	1561.9	1546.4	1525.7	1510.2
150°	1615.2	1611.8	1608.3	1606.6	1594.6	1589.4	1586.0	1573.9	1560.1	1541.2	1527.4
152.5°	1620.4	1617.0	1613.5	1611.8	1599.7	1596.3	1592.8	1582.5	1567.0	1549.8	1537.7
155°	1620.4	1618.7	1615.2	1613.5	1601.5	1596.3	1594.6	1584.2	1570.5	1556.7	1544.6
157.5°	1618.7	1615.2	1613.5	1610.1	1599.7	1596.3	1592.8	1584.2	1572.2	1560.1	1548.1
160°	1615.2	1611.8	1610.1	1606.6	1598.0	1594.6	1592.8	1584.2	1575.6	1563.6	1549.8
162.5°	1606.6	1604.9	1603.2	1601.5	1594.6	1591.1	1589.4	1582.5	1572.2	1561.9	1548.1
165°	1598.0	1594.6	1592.8	1589.4	1582.5	1582.5	1580.8	1575.6	1565.3	1560.1	1544.6
167.5°	1582.5	1577.4	1577.4	1572.2	1567.0	1567.0	1565.3	1563.6	1555.0	1551.5	1537.7
170°	1563.6	1561.9	1558.4	1556.7	1553.2	1553.2	1551.5	1549.8	1542.9	1542.9	1529.1
172.5°	1546.4	1544.6	1542.9	1539.5	1534.3	1534.3	1534.3	1534.3	1529.1	1529.1	1517.1
175°	1522.2	1518.8	1518.8	1517.1	1513.6	1515.4	1515.4	1515.4	1511.9	1515.4	1503.3
177.5°	1489.5	1486.1	1489.5	1493.0	1491.3	1493.0	1494.7	1494.7	1491.3	1496.4	1486.1
180°	1465.4	1465.4	1465.4	1465.4	1465.4	1465.4	1465.4	1465.4	1465.4	1465.4	1465.4



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1680.7	1680.7	1680.7	1680.7	1680.7	1680.7	1680.7	1680.7	1680.7	1680.7	1680.7
2.5°	1673.8	1675.5	1673.8	1675.5	1677.2	1675.5	1677.2	1684.1	1691.0	1694.4	1691.0
5°	1666.9	1668.6	1666.9	1668.6	1670.3	1668.6	1670.3	1675.5	1684.1	1685.8	1684.1
7.5°	1656.6	1658.3	1656.6	1658.3	1658.3	1658.3	1658.3	1665.2	1672.1	1675.5	1672.1
10°	1639.3	1641.1	1639.3	1642.8	1642.8	1642.8	1642.8	1649.7	1656.6	1660.0	1654.8
12.5°	1618.7	1620.4	1618.7	1622.1	1620.4	1622.1	1623.8	1629.0	1635.9	1639.3	1635.9
15°	1591.1	1594.6	1592.8	1596.3	1596.3	1596.3	1596.3	1603.2	1610.1	1613.5	1610.1
17.5°	1560.1	1561.9	1561.9	1565.3	1565.3	1565.3	1567.0	1573.9	1579.1	1582.5	1579.1
20°	1525.7	1529.1	1529.1	1530.9	1530.9	1532.6	1534.3	1539.5	1546.4	1549.8	1546.4
22.5°	1487.8	1491.3	1493.0	1493.0	1493.0	1494.7	1496.4	1501.6	1510.2	1511.9	1508.5
25°	1448.2	1448.2	1451.6	1451.6	1453.4	1455.1	1456.8	1460.3	1468.9	1470.6	1468.9
27.5°	1405.2	1403.4	1405.2	1408.6	1408.6	1412.0	1413.8	1417.2	1424.1	1427.5	1424.1
30°	1356.9	1356.9	1360.4	1362.1	1362.1	1363.8	1367.3	1370.7	1377.6	1381.0	1377.6
32.5°	1308.7	1307.0	1312.2	1312.2	1313.9	1315.6	1317.3	1322.5	1327.7	1331.1	1329.4
35°	1258.8	1253.6	1260.5	1260.5	1262.2	1265.7	1265.7	1269.1	1276.0	1279.4	1276.0
37.5°	1207.1	1202.0	1207.1	1210.6	1208.8	1212.3	1214.0	1217.5	1224.3	1226.1	1226.1
40°	1153.7	1148.6	1153.7	1155.5	1155.5	1157.2	1160.6	1162.3	1167.5	1172.7	1169.2
42.5°	1095.2	1093.5	1096.9	1100.4	1100.4	1102.1	1103.8	1105.5	1110.7	1115.9	1112.4
45°	1036.6	1036.6	1040.1	1043.5	1045.3	1045.3	1047.0	1048.7	1052.1	1059.0	1053.9
47.5°	978.1	978.1	981.5	983.3	983.3	985.0	988.4	988.4	995.3	995.3	997.0
50°	916.1	919.5	923.0	928.2	924.7	926.4	929.9	929.9	933.3	933.3	938.5
52.5°	855.8	857.6	862.7	867.9	869.6	867.9	869.6	869.6	873.1	878.2	874.8
55°	795.6	795.6	802.5	807.6	807.6	807.6	807.6	809.3	814.5	814.5	814.5
57.5°	733.6	735.3	740.5	747.3	747.3	747.3	747.3	749.1	752.5	750.8	756.0
60°	673.3	673.3	680.2	683.6	683.6	687.1	687.1	688.8	690.5	695.7	695.7
62.5°	613.0	613.0	618.2	621.6	625.1	623.4	625.1	626.8	630.3	635.4	632.0
65°	551.0	551.0	556.2	557.9	563.1	561.4	563.1	568.3	570.0	571.7	570.0
67.5°	487.3	489.0	494.2	495.9	501.1	502.8	501.1	508.0	509.7	513.2	511.4
70°	420.2	421.9	428.8	430.5	433.9	432.2	435.7	444.3	447.7	449.4	446.0
72.5°	359.9	361.6	368.5	370.2	373.7	372.0	375.4	380.6	384.0	385.7	385.7
75°	297.9	301.3	304.8	308.2	313.4	311.7	315.1	320.3	323.7	325.5	325.5
77.5°	239.4	241.1	246.2	248.0	253.1	251.4	253.1	256.6	261.7	263.5	263.5
80°	180.8	184.3	186.0	189.4	192.9	191.1	194.6	199.8	201.5	203.2	203.2
82.5°	124.0	125.7	129.1	132.6	136.0	137.8	139.5	142.9	144.6	144.6	144.6
85°	68.9	72.3	75.8	77.5	80.9	79.2	84.4	87.8	89.5	89.5	91.3
87.5°	18.9	22.4	24.1	27.6	31.0	31.0	31.0	37.9	37.9	39.6	39.6
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°	5.2	6.9	6.9	8.6	10.3	12.1	17.2	17.2	13.8	12.1	13.8
95°	13.8	15.5	18.9	29.3	36.2	41.3	48.2	46.5	39.6	31.0	29.3
97.5°	25.8	32.7	46.5	70.6	84.4	91.3	98.2	87.8	74.0	60.3	55.1
100°	48.2	65.4	99.9	141.2	156.7	163.6	161.9	139.5	120.5	98.2	86.1
102.5°	91.3	139.5	198.0	244.5	254.9	246.2	232.5	204.9	177.4	146.4	127.4
105°	198.0	280.7	341.0	358.2	363.3	346.1	313.4	279.0	239.4	203.2	175.6
107.5°	394.3	470.1	492.5	480.4	473.5	444.3	402.9	358.2	311.7	266.9	232.5
110°	625.1	638.9	623.4	585.5	564.8	539.0	492.5	440.8	382.3	337.5	296.2



TEST NUMBER: P303180

CATALOG NUMBER: CTW-F-5050-50L935-UNV-STD-8

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	793.8	764.6	725.0	675.0	650.9	623.4	573.4	523.5	459.8	409.8	365.1
115°	902.3	859.3	811.1	757.7	731.8	702.6	652.6	597.5	533.8	487.3	435.7
117.5°	986.7	933.3	885.1	833.4	809.3	780.1	730.1	669.9	606.1	559.6	508.0
120°	1052.1	1002.2	952.3	904.0	876.5	852.4	800.7	740.5	676.7	625.1	576.9
122.5°	1110.7	1064.2	1016.0	969.5	943.7	916.1	862.7	804.2	745.6	697.4	649.2
125°	1165.8	1122.7	1074.5	1028.0	1002.2	974.7	923.0	866.2	807.6	756.0	714.6
127.5°	1217.5	1176.1	1127.9	1083.1	1057.3	1028.0	978.1	923.0	873.1	819.7	778.3
130°	1263.9	1226.1	1179.6	1134.8	1109.0	1081.4	1031.5	978.1	929.9	883.4	838.6
132.5°	1305.3	1267.4	1222.6	1181.3	1153.7	1129.6	1081.4	1031.5	983.3	940.2	898.9
135°	1344.9	1305.3	1263.9	1220.9	1196.8	1174.4	1127.9	1081.4	1036.6	997.0	959.2
137.5°	1381.0	1338.0	1296.7	1255.3	1233.0	1214.0	1169.2	1126.2	1088.3	1048.7	1010.8
140°	1412.0	1367.3	1329.4	1289.8	1269.1	1250.2	1208.8	1167.5	1134.8	1096.9	1060.8
142.5°	1436.1	1391.4	1356.9	1319.1	1300.1	1284.6	1245.0	1208.8	1176.1	1143.4	1107.2
145°	1455.1	1415.5	1382.8	1346.6	1331.1	1313.9	1277.7	1245.0	1215.7	1183.0	1150.3
147.5°	1474.0	1439.6	1406.9	1374.2	1358.7	1343.2	1310.4	1281.2	1253.6	1224.3	1191.6
150°	1489.5	1458.5	1429.3	1400.0	1386.2	1370.7	1341.4	1313.9	1289.8	1262.2	1231.2
152.5°	1499.9	1474.0	1448.2	1422.4	1408.6	1396.5	1369.0	1346.6	1324.2	1300.1	1269.1
155°	1508.5	1487.8	1463.7	1441.3	1429.3	1418.9	1393.1	1372.4	1353.5	1332.8	1305.3
157.5°	1517.1	1496.4	1475.8	1455.1	1444.8	1434.4	1412.0	1396.5	1379.3	1360.4	1334.5
160°	1520.5	1505.0	1484.4	1467.1	1458.5	1449.9	1431.0	1417.2	1403.4	1386.2	1362.1
162.5°	1522.2	1508.5	1491.3	1477.5	1470.6	1463.7	1444.8	1434.4	1422.4	1408.6	1387.9
165°	1522.2	1511.9	1498.1	1486.1	1479.2	1474.0	1458.5	1449.9	1441.3	1429.3	1410.3
167.5°	1520.5	1510.2	1499.9	1489.5	1484.4	1479.2	1467.1	1462.0	1455.1	1444.8	1429.3
170°	1515.4	1508.5	1498.1	1491.3	1487.8	1482.6	1474.0	1470.6	1467.1	1460.3	1444.8
172.5°	1506.7	1501.6	1494.7	1489.5	1487.8	1482.6	1475.8	1474.0	1474.0	1468.9	1456.8
175°	1494.7	1493.0	1487.8	1484.4	1480.9	1479.2	1474.0	1475.8	1477.5	1475.8	1465.4
177.5°	1479.2	1479.2	1475.8	1475.8	1474.0	1472.3	1470.6	1474.0	1479.2	1479.2	1472.3
180°	1465.4	1465.4	1465.4	1465.4	1465.4	1465.4	1465.4	1465.4	1465.4	1465.4	1465.4



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CATALOG NUMBER: CTW-F-5050-50L935-UNV-STD-8

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1680.7	1680.7	1680.7	1680.7	1680.7	1680.7	1680.7	1680.7	1680.7	1680.7	1680.7
2.5°	1685.8	1678.9	1677.2	1677.2	1675.5	1672.1	1670.3	1672.1	1678.9	1689.3	1678.9
5°	1678.9	1672.1	1668.6	1668.6	1668.6	1663.5	1663.5	1663.5	1672.1	1680.7	1670.3
7.5°	1666.9	1660.0	1658.3	1658.3	1656.6	1653.1	1651.4	1653.1	1660.0	1668.6	1658.3
10°	1651.4	1644.5	1642.8	1641.1	1639.3	1635.9	1634.2	1635.9	1642.8	1649.7	1641.1
12.5°	1630.7	1623.8	1620.4	1622.1	1618.7	1613.5	1613.5	1613.5	1622.1	1627.3	1618.7
15°	1604.9	1596.3	1594.6	1594.6	1592.8	1587.7	1587.7	1587.7	1596.3	1599.7	1589.4
17.5°	1573.9	1567.0	1565.3	1565.3	1561.9	1556.7	1556.7	1555.0	1565.3	1567.0	1560.1
20°	1541.2	1534.3	1530.9	1530.9	1527.4	1522.2	1522.2	1520.5	1532.6	1529.1	1524.0
22.5°	1505.0	1496.4	1493.0	1494.7	1491.3	1484.4	1484.4	1482.6	1493.0	1487.8	1480.9
25°	1465.4	1455.1	1453.4	1451.6	1449.9	1441.3	1441.3	1441.3	1451.6	1443.0	1437.9
27.5°	1418.9	1412.0	1410.3	1405.2	1405.2	1398.3	1398.3	1398.3	1408.6	1396.5	1394.8
30°	1372.4	1365.5	1365.5	1360.4	1358.7	1351.8	1351.8	1351.8	1362.1	1350.0	1346.6
32.5°	1325.9	1317.3	1313.9	1310.4	1310.4	1303.6	1303.6	1303.6	1310.4	1298.4	1294.9
35°	1274.3	1265.7	1265.7	1258.8	1258.8	1251.9	1250.2	1253.6	1255.3	1245.0	1241.6
37.5°	1220.9	1212.3	1212.3	1207.1	1207.1	1200.2	1200.2	1205.4	1200.2	1195.1	1188.2
40°	1167.5	1160.6	1157.2	1152.0	1153.7	1148.6	1146.9	1150.3	1146.9	1141.7	1133.1
42.5°	1110.7	1103.8	1102.1	1098.6	1098.6	1093.5	1091.7	1095.2	1090.0	1083.1	1078.0
45°	1053.9	1048.7	1047.0	1043.5	1043.5	1036.6	1036.6	1038.4	1031.5	1028.0	1021.1
47.5°	993.6	990.1	986.7	986.7	985.0	979.8	979.8	979.8	974.7	971.2	962.6
50°	935.0	929.9	928.2	928.2	928.2	923.0	921.3	917.8	914.4	912.7	904.0
52.5°	874.8	871.3	869.6	869.6	871.3	862.7	861.0	857.6	855.8	854.1	843.8
55°	814.5	811.1	807.6	811.1	809.3	802.5	800.7	802.5	797.3	792.1	783.5
57.5°	754.2	749.1	749.1	750.8	749.1	742.2	740.5	742.2	735.3	730.1	723.2
60°	694.0	688.8	687.1	688.8	687.1	680.2	678.5	678.5	673.3	669.9	663.0
62.5°	633.7	628.5	628.5	628.5	626.8	623.4	618.2	618.2	613.0	607.9	602.7
65°	570.0	564.8	566.5	566.5	566.5	563.1	557.9	559.6	551.0	547.6	542.4
67.5°	509.7	504.5	504.5	504.5	504.5	504.5	495.9	494.2	489.0	487.3	482.2
70°	446.0	439.1	440.8	439.1	437.4	435.7	430.5	428.8	423.6	423.6	418.4
72.5°	382.3	378.8	378.8	378.8	377.1	375.4	372.0	370.2	363.3	363.3	359.9
75°	318.6	318.6	316.8	316.8	316.8	315.1	311.7	310.0	303.1	304.8	301.3
77.5°	260.0	260.0	256.6	256.6	256.6	254.9	253.1	248.0	248.0	244.5	242.8
80°	199.8	199.8	198.0	198.0	198.0	196.3	194.6	192.9	189.4	187.7	184.3
82.5°	144.6	142.9	141.2	141.2	139.5	139.5	137.8	136.0	132.6	127.4	125.7
85°	87.8	87.8	86.1	86.1	84.4	84.4	80.9	77.5	74.0	70.6	68.9
87.5°	37.9	37.9	32.7	32.7	31.0	31.0	29.3	27.6	24.1	22.4	20.7
90°	3.4	5.2	5.2	5.2	6.9	6.9	6.9	8.6	8.6	8.6	8.6
92.5°	20.7	25.8	27.6	27.6	27.6	27.6	27.6	27.6	27.6	25.8	25.8
95°	34.4	37.9	46.5	49.9	53.4	56.8	56.8	56.8	56.8	55.1	51.7
97.5°	51.7	55.1	60.3	60.3	62.0	70.6	77.5	80.9	84.4	86.1	86.1
100°	80.9	74.0	80.9	86.1	84.4	84.4	87.8	94.7	101.6	105.0	106.8
102.5°	115.4	103.3	99.9	103.3	106.8	113.7	110.2	111.9	115.4	120.5	125.7
105°	158.4	142.9	130.9	129.1	129.1	136.0	144.6	142.9	141.2	141.2	141.2
107.5°	208.4	186.0	167.0	163.6	160.1	160.1	165.3	175.6	182.5	175.6	172.2
110°	265.2	234.2	215.2	204.9	198.0	191.1	191.1	196.3	204.9	213.5	217.0



TEST NUMBER: P303180

CATALOG NUMBER: CTW-F-5050-50L935-UNV-STD-8

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
112.5°	328.9	291.0	265.2	256.6	242.8	227.3	222.1	222.1	227.3	235.9	242.8
115°	394.3	354.7	318.6	308.2	294.5	270.4	256.6	253.1	253.1	256.6	263.5
117.5°	466.7	418.4	378.8	365.1	349.6	322.0	299.6	287.6	282.4	282.4	285.9
120°	530.4	489.0	447.7	428.8	409.8	378.8	349.6	330.6	318.6	311.7	310.0
122.5°	602.7	559.6	514.9	499.4	478.7	442.6	411.6	382.3	363.3	349.6	339.2
125°	668.1	628.5	582.0	563.1	544.2	508.0	477.0	444.3	418.4	396.1	378.8
127.5°	731.8	692.2	647.5	630.3	611.3	573.4	540.7	509.7	482.2	454.6	430.5
130°	795.6	757.7	712.9	694.0	676.7	640.6	604.4	573.4	549.3	521.8	494.2
132.5°	857.6	817.9	776.6	756.0	740.5	704.3	671.6	638.9	611.3	587.2	561.4
135°	916.1	878.2	836.9	816.2	800.7	768.0	735.3	706.0	675.0	650.9	626.8
137.5°	971.2	933.3	897.2	874.8	859.3	830.0	799.0	771.5	740.5	714.6	690.5
140°	1022.9	986.7	952.3	933.3	916.1	886.8	859.3	836.9	804.2	780.1	756.0
142.5°	1071.1	1034.9	1002.2	986.7	969.5	941.9	916.1	895.4	871.3	845.5	821.4
145°	1114.1	1083.1	1052.1	1036.6	1021.1	995.3	971.2	952.3	931.6	905.8	883.4
147.5°	1158.9	1127.9	1098.6	1084.9	1072.8	1047.0	1024.6	1005.6	990.1	966.0	943.7
150°	1200.2	1171.0	1145.1	1131.4	1121.0	1093.5	1076.2	1057.3	1045.3	1022.9	1003.9
152.5°	1239.8	1214.0	1188.2	1177.8	1165.8	1140.0	1122.7	1103.8	1096.9	1074.5	1059.0
155°	1277.7	1250.2	1229.5	1219.2	1207.1	1183.0	1169.2	1152.0	1146.9	1126.2	1110.7
157.5°	1312.2	1284.6	1265.7	1255.3	1245.0	1224.3	1210.6	1195.1	1191.6	1176.1	1158.9
160°	1341.4	1315.6	1298.4	1291.5	1281.2	1262.2	1248.4	1236.4	1233.0	1222.6	1205.4
162.5°	1367.3	1344.9	1331.1	1322.5	1313.9	1296.7	1286.3	1272.6	1272.6	1263.9	1250.2
165°	1393.1	1372.4	1358.7	1351.8	1344.9	1331.1	1319.1	1310.4	1310.4	1303.6	1289.8
167.5°	1413.8	1394.8	1384.5	1377.6	1372.4	1358.7	1350.0	1341.4	1343.2	1339.7	1325.9
170°	1432.7	1415.5	1406.9	1401.7	1396.5	1384.5	1379.3	1370.7	1372.4	1372.4	1360.4
172.5°	1448.2	1432.7	1425.8	1420.6	1418.9	1406.9	1403.4	1398.3	1400.0	1403.4	1387.9
175°	1458.5	1446.5	1439.6	1437.9	1434.4	1427.5	1422.4	1420.6	1424.1	1429.3	1415.5
177.5°	1467.1	1456.8	1453.4	1453.4	1449.9	1443.0	1439.6	1439.6	1444.8	1451.6	1441.3
180°	1465.4	1465.4	1465.4	1465.4	1465.4	1465.4	1465.4	1465.4	1465.4	1465.4	1465.4



TEST NUMBER: P303180

CATALOG NUMBER: CTW-F-5050-50L935-UNV-STD-8

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1680.7	1680.7	1680.7	1680.7	1680.7	1680.7	1680.7	1680.7
2.5°	1682.4	1680.7	1678.9	1675.5	1673.8	1670.3	1668.6	1670.3
5°	1672.1	1670.3	1668.6	1666.9	1666.9	1665.2	1665.2	1666.9
7.5°	1660.0	1658.3	1656.6	1654.8	1654.8	1654.8	1654.8	1656.6
10°	1642.8	1639.3	1637.6	1635.9	1634.2	1634.2	1634.2	1635.9
12.5°	1620.4	1617.0	1613.5	1611.8	1611.8	1611.8	1611.8	1615.2
15°	1591.1	1589.4	1587.7	1586.0	1586.0	1584.2	1584.2	1587.7
17.5°	1561.9	1558.4	1555.0	1553.2	1551.5	1551.5	1549.8	1551.5
20°	1522.2	1518.8	1515.4	1513.6	1513.6	1511.9	1511.9	1513.6
22.5°	1479.2	1474.0	1472.3	1470.6	1470.6	1468.9	1468.9	1470.6
25°	1436.1	1429.3	1427.5	1425.8	1425.8	1424.1	1424.1	1424.1
27.5°	1391.4	1384.5	1382.8	1379.3	1381.0	1377.6	1375.9	1377.6
30°	1343.2	1336.3	1334.5	1331.1	1331.1	1327.7	1325.9	1327.7
32.5°	1291.5	1284.6	1282.9	1281.2	1282.9	1276.0	1274.3	1277.7
35°	1238.1	1231.2	1231.2	1227.8	1229.5	1222.6	1222.6	1224.3
37.5°	1183.0	1176.1	1177.8	1174.4	1174.4	1169.2	1169.2	1171.0
40°	1127.9	1122.7	1119.3	1119.3	1121.0	1114.1	1114.1	1112.4
42.5°	1071.1	1065.9	1064.2	1064.2	1062.5	1057.3	1055.6	1057.3
45°	1014.3	1009.1	1009.1	1007.4	1007.4	1000.5	1002.2	1000.5
47.5°	955.7	952.3	950.5	948.8	948.8	941.9	943.7	941.9
50°	897.2	895.4	893.7	892.0	892.0	885.1	888.6	885.1
52.5°	838.6	836.9	835.2	835.2	833.4	830.0	830.0	826.6
55°	780.1	776.6	776.6	776.6	774.9	769.7	773.2	769.7
57.5°	721.5	718.1	716.4	714.6	714.6	712.9	711.2	709.5
60°	661.2	657.8	657.8	654.4	654.4	654.4	652.6	650.9
62.5°	601.0	597.5	597.5	595.8	595.8	595.8	594.1	592.4
65°	542.4	537.3	537.3	535.5	535.5	535.5	533.8	532.1
67.5°	480.4	477.0	477.0	475.3	477.0	477.0	475.3	471.8
70°	416.7	413.3	413.3	411.6	413.3	413.3	411.6	408.1
72.5°	358.2	354.7	353.0	354.7	354.7	354.7	351.3	349.6
75°	299.6	294.5	294.5	296.2	294.5	296.2	292.7	296.2
77.5°	241.1	235.9	235.9	237.6	235.9	235.9	234.2	237.6
80°	180.8	177.4	177.4	179.1	177.4	177.4	175.6	179.1
82.5°	124.0	122.3	124.0	120.5	117.1	117.1	115.4	118.8
85°	68.9	67.2	65.4	65.4	63.7	63.7	62.0	65.4
87.5°	20.7	22.4	22.4	20.7	20.7	20.7	20.7	22.4
90°	8.6	8.6	8.6	10.3	10.3	12.1	12.1	12.1
92.5°	25.8	25.8	24.1	25.8	24.1	24.1	24.1	24.1
95°	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7
97.5°	86.1	87.8	86.1	87.8	86.1	84.4	86.1	84.4
100°	108.5	111.9	111.9	113.7	113.7	113.7	113.7	113.7
102.5°	129.1	132.6	132.6	134.3	134.3	136.0	136.0	134.3
105°	146.4	148.1	149.8	151.5	155.0	158.4	158.4	158.4
107.5°	170.5	173.9	172.2	173.9	175.6	175.6	175.6	175.6
110°	213.5	210.1	208.4	204.9	204.9	204.9	204.9	204.9



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CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
112.5°	249.7	253.1	253.1	253.1	253.1	251.4	248.0	248.0
115°	272.1	279.0	280.7	282.4	285.9	287.6	287.6	287.6
117.5°	289.3	296.2	297.9	301.3	304.8	308.2	310.0	311.7
120°	311.7	316.8	318.6	318.6	322.0	323.7	327.2	327.2
122.5°	337.5	339.2	339.2	339.2	341.0	342.7	344.4	344.4
125°	372.0	366.8	366.8	363.3	363.3	361.6	363.3	363.3
127.5°	415.0	408.1	404.7	399.5	396.1	390.9	390.9	390.9
130°	475.3	463.2	456.3	447.7	440.8	430.5	430.5	430.5
132.5°	540.7	521.8	516.6	508.0	497.7	487.3	485.6	485.6
135°	607.9	587.2	580.3	571.7	559.6	551.0	544.2	549.3
137.5°	671.6	652.6	650.9	644.0	628.5	618.2	616.5	616.5
140°	737.0	716.4	712.9	706.0	697.4	687.1	681.9	683.6
142.5°	800.7	780.1	776.6	771.5	759.4	750.8	745.6	747.3
145°	866.2	845.5	842.1	835.2	823.1	816.2	809.3	814.5
147.5°	928.2	909.2	904.0	895.4	888.6	879.9	874.8	873.1
150°	988.4	969.5	966.0	957.4	950.5	943.7	936.8	940.2
152.5°	1045.3	1031.5	1024.6	1016.0	1010.8	1003.9	998.8	1000.5
155°	1098.6	1081.4	1078.0	1071.1	1067.6	1060.8	1057.3	1057.3
157.5°	1145.1	1134.8	1129.6	1124.5	1119.3	1115.9	1110.7	1112.4
160°	1195.1	1184.7	1179.6	1176.1	1169.2	1169.2	1164.1	1165.8
162.5°	1241.6	1233.0	1227.8	1224.3	1220.9	1219.2	1214.0	1215.7
165°	1282.9	1274.3	1272.6	1267.4	1265.7	1265.7	1260.5	1260.5
167.5°	1320.8	1313.9	1308.7	1307.0	1303.6	1303.6	1300.1	1301.8
170°	1356.9	1350.0	1346.6	1343.2	1339.7	1339.7	1338.0	1338.0
172.5°	1387.9	1382.8	1381.0	1377.6	1375.9	1375.9	1374.2	1374.2
175°	1417.2	1412.0	1410.3	1406.9	1405.2	1403.4	1403.4	1403.4
177.5°	1443.0	1441.3	1437.9	1437.9	1434.4	1431.0	1427.5	1425.8
180°	1465.4	1465.4	1465.4	1465.4	1465.4	1465.4	1465.4	1465.4

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