

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: P303164

Luminaire Tested: **CTW-F-5050-40L940-UNV-STD-8**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P303164
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-5050-40L940-UNV-STD-8
Description: CORELITE CONTINUA LINEAR WALL LED LUMINAIRE
50% UPLIGHT, 50% DOWNLIGHT, 4000 LUMEN PACKAGE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

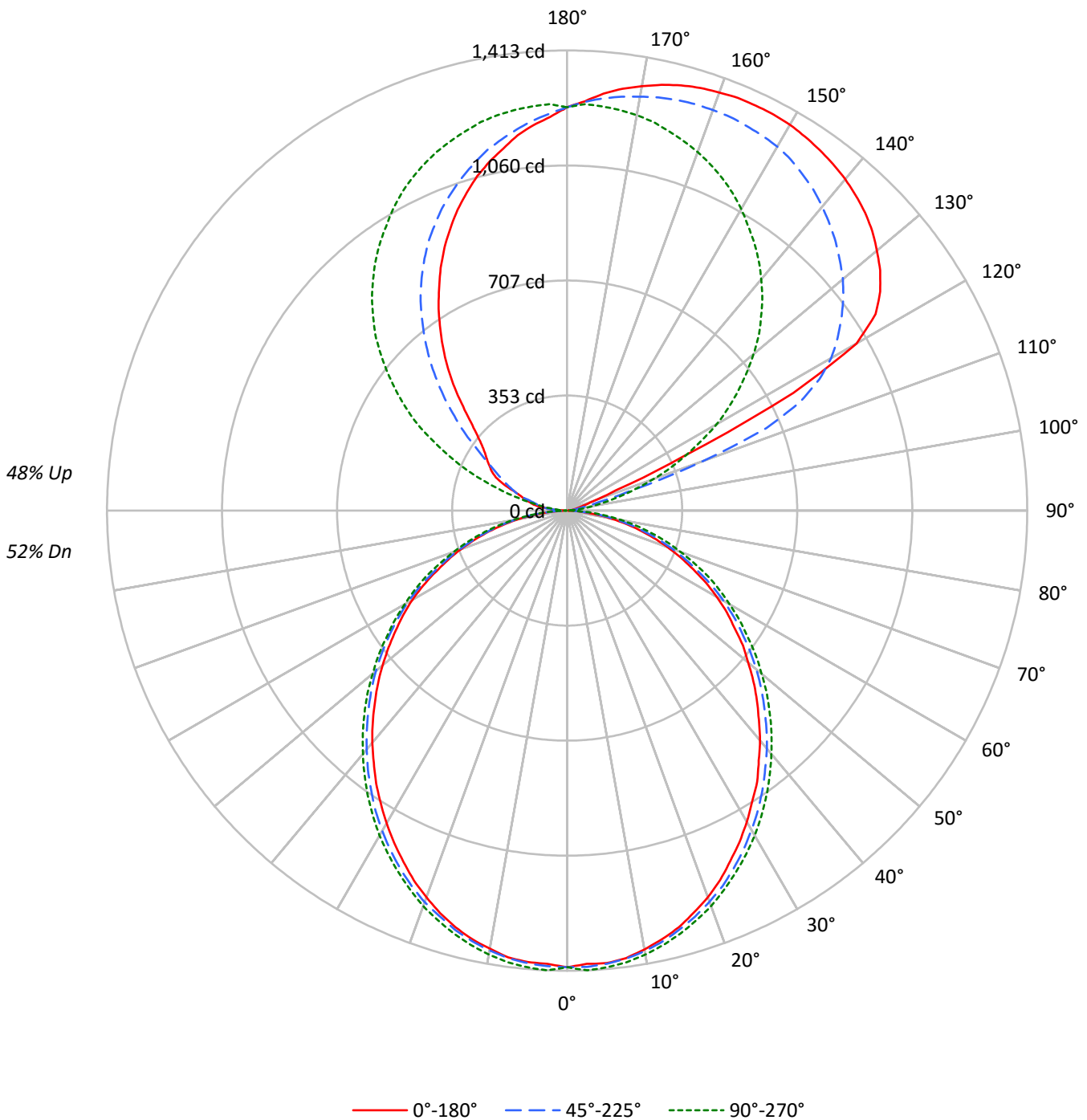
Lumens per Lamp: N/A
Luminaire Lumens: 7248.2 lumens
Efficiency: N/A
Efficacy: 117.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.32
Luminous Opening: Rectangular (W 8' x L: 0.12' x H: 0')
CIE Type: General Diffuse

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



TEST NUMBER: P303164
CATALOG NUMBER: CTW-F-5050-40L940-UNV-STD-8

Luminous Intensity Polar Plot





TEST NUMBER: P303164

CATALOG NUMBER: CTW-F-5050-40L940-UNV-STD-8

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	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°	15093	15093	15093
5°	15073	15209	15034
10°	14952	15129	14933
15°	14763	14984	14763
20°	14474	14804	14474
25°	14088	14558	14131
30°	13714	14318	13781
35°	13364	14026	13435
40°	12950	13708	13076
45°	12549	13399	12714
50°	12147	13052	12388
55°	11755	12701	12059
60°	11431	12400	11819
65°	10865	12149	11324
70°	10310	11670	10933
75°	9507	11229	10331
80°	8145	10488	9372
85°	5113	9114	7114



TEST NUMBER: P303164

CATALOG NUMBER: CTW-F-5050-40L940-UNV-STD-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.4	1.8
10°-20°	374.6	5.2
20°-30°	554.6	7.7
30°-40°	651.1	9.0
40°-50°	660.1	9.1
50°-60°	588.7	8.1
60°-70°	449.2	6.2
70°-80°	265.4	3.7
80°-90°	71.6	1.0
90°-100°	36.1	0.5
100°-110°	150.1	2.1
110°-120°	423.4	5.8
120°-130°	617.3	8.5
130°-140°	664.8	9.2
140°-150°	632.5	8.7
150°-160°	519.2	7.2
160°-170°	339.4	4.7
170°-180°	117.6	1.6
0°-30°	1061.7	14.6
0°-40°	1712.8	23.6
0°-60°	2961.6	40.9
0°-90°	3747.8	51.7
90°-120°	609.6	8.4
90°-150°	2524.2	34.8
90°-180°	3500.0	48.3
0°-180°	7248.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1402	1402	1402	1402	1402	
5°	1395	1397	1408	1395	1391	132
15°	1325	1332	1345	1332	1325	373
25°	1186	1211	1226	1213	1190	547
35°	1017	1046	1067	1049	1022	635
45°	824	857	880	862	835	636
55°	626	655	677	666	643	563
65°	427	446	477	457	445	424
75°	229	243	270	256	248	241
85°	41	52	74	65	58	53
90°	2	2	2	7	11	2
95°	9	11	27	50	47	10
105°	40	101	166	119	135	47
115°	392	788	403	216	241	463
125°	1174	1028	641	347	308	1039
135°	1294	1166	842	565	452	999
145°	1352	1260	1003	785	679	848
155°	1372	1303	1127	965	891	634
165°	1352	1305	1206	1103	1064	383
175°	1285	1271	1246	1202	1188	124
180°	1238	1238	1238	1238	1238	



TEST NUMBER: P303164

CATALOG NUMBER: CTW-F-5050-40L940-UNV-STD-8

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2
2.5°	1393.2	1391.4	1395.0	1398.6	1398.6	1400.4	1402.2	1404.0	1404.0	1407.6	1402.2
5°	1395.0	1391.4	1393.2	1393.2	1391.4	1393.2	1395.0	1398.6	1398.6	1402.2	1396.8
7.5°	1386.0	1384.2	1386.0	1384.2	1382.4	1384.2	1386.0	1387.8	1387.8	1391.4	1387.8
10°	1368.0	1368.0	1368.0	1368.0	1368.0	1369.8	1371.6	1373.4	1373.4	1377.0	1373.4
12.5°	1348.2	1348.2	1348.2	1350.0	1346.4	1348.2	1351.8	1355.4	1355.4	1359.0	1355.4
15°	1324.8	1324.8	1326.6	1328.4	1326.6	1326.6	1328.4	1332.0	1332.0	1335.6	1332.0
17.5°	1294.2	1294.2	1296.0	1299.6	1297.8	1299.6	1301.4	1305.0	1306.8	1306.8	1306.8
20°	1263.6	1261.8	1263.6	1265.4	1265.4	1267.2	1267.2	1272.6	1276.2	1276.2	1278.0
22.5°	1227.6	1224.0	1227.6	1229.4	1229.4	1231.2	1231.2	1236.6	1240.2	1242.0	1247.4
25°	1186.2	1186.2	1188.0	1191.6	1191.6	1193.4	1195.2	1200.6	1204.2	1204.2	1211.4
27.5°	1146.6	1144.8	1146.6	1150.2	1153.8	1155.6	1155.6	1161.0	1166.4	1170.0	1173.6
30°	1103.4	1103.4	1105.2	1108.8	1112.4	1110.6	1112.4	1119.6	1125.0	1128.6	1132.2
32.5°	1058.4	1058.4	1060.2	1063.8	1069.2	1069.2	1071.0	1076.4	1080.0	1083.6	1090.8
35°	1017.0	1013.4	1015.2	1018.8	1026.0	1024.2	1026.0	1031.4	1035.0	1040.4	1045.8
37.5°	966.6	966.6	968.4	972.0	979.2	977.4	981.0	984.6	990.0	995.4	999.0
40°	921.6	923.4	921.6	925.2	930.6	932.4	932.4	936.0	943.2	948.6	954.0
42.5°	871.2	873.0	874.8	878.4	883.8	883.8	885.6	889.2	894.6	900.0	905.4
45°	824.4	824.4	824.4	828.0	835.2	835.2	838.8	838.8	844.2	851.4	856.8
47.5°	775.8	775.8	775.8	781.2	786.6	786.6	790.2	790.2	797.4	802.8	808.2
50°	725.4	729.0	727.2	730.8	738.0	736.2	739.8	739.8	745.2	752.4	757.8
52.5°	680.4	680.4	676.8	682.2	687.6	687.6	689.4	689.4	696.6	702.0	707.4
55°	626.4	630.0	626.4	631.8	637.2	637.2	640.8	640.8	642.6	649.8	655.2
57.5°	581.4	581.4	577.8	581.4	586.8	586.8	590.4	590.4	594.0	597.6	606.6
60°	531.0	529.2	527.4	532.8	536.4	536.4	540.0	540.0	543.6	545.4	554.4
62.5°	480.6	478.8	478.8	482.4	486.0	484.2	489.6	489.6	493.2	496.8	502.2
65°	426.6	424.8	424.8	428.4	430.2	430.2	433.8	435.6	437.4	442.8	446.4
67.5°	378.0	376.2	374.4	378.0	379.8	379.8	383.4	385.2	388.8	390.6	394.2
70°	327.6	325.8	324.0	327.6	331.2	329.4	333.0	334.8	336.6	340.2	343.8
72.5°	277.2	277.2	277.2	279.0	280.8	280.8	282.6	284.4	288.0	291.6	293.4
75°	228.6	226.8	226.8	230.4	230.4	230.4	234.0	235.8	235.8	241.2	243.0
77.5°	180.0	181.8	180.0	180.0	180.0	181.8	183.6	185.4	189.0	192.6	194.4
80°	131.4	133.2	131.4	133.2	131.4	133.2	136.8	136.8	140.4	144.0	145.8
82.5°	84.6	86.4	84.6	86.4	86.4	86.4	88.2	90.0	93.6	95.4	99.0
85°	41.4	39.6	41.4	41.4	41.4	41.4	45.0	45.0	48.6	50.4	52.2
87.5°	5.4	5.4	5.4	5.4	7.2	5.4	7.2	9.0	9.0	10.8	10.8
90°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
92.5°	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
95°	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	10.8	10.8
97.5°	14.4	14.4	14.4	14.4	14.4	14.4	14.4	16.2	16.2	18.0	19.8
100°	19.8	19.8	21.6	21.6	21.6	21.6	21.6	23.4	25.2	28.8	32.4
102.5°	28.8	28.8	28.8	30.6	30.6	32.4	32.4	36.0	39.6	45.0	55.8
105°	39.6	41.4	41.4	41.4	45.0	45.0	46.8	52.2	61.2	75.6	100.8
107.5°	55.8	57.6	57.6	61.2	64.8	68.4	72.0	88.2	109.8	153.0	216.0
110°	86.4	88.2	90.0	99.0	111.6	122.4	136.8	178.2	243.0	338.4	442.8



TEST NUMBER: P303164

CATALOG NUMBER: CTW-F-5050-40L940-UNV-STD-8

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	162.0	171.0	181.8	207.0	250.2	277.2	307.8	415.8	520.2	612.0	662.4
115°	392.4	415.8	439.2	495.0	568.8	612.0	642.6	736.2	781.2	799.2	788.4
117.5°	783.0	802.8	819.0	849.6	885.6	898.2	903.6	923.4	914.4	900.0	873.0
120°	1026.0	1033.2	1031.4	1031.4	1031.4	1026.0	1022.4	1009.8	988.2	966.6	936.0
122.5°	1123.2	1125.0	1117.8	1108.8	1098.0	1092.6	1085.4	1065.6	1042.2	1017.0	984.6
125°	1173.6	1173.6	1166.4	1157.4	1144.8	1137.6	1126.8	1108.8	1085.4	1060.2	1027.8
127.5°	1211.4	1209.6	1204.2	1197.0	1182.6	1177.2	1166.4	1146.6	1123.2	1101.6	1069.2
130°	1242.0	1240.2	1233.0	1229.4	1216.8	1207.8	1198.8	1179.0	1155.6	1134.0	1105.2
132.5°	1270.8	1267.2	1260.0	1256.4	1243.8	1236.6	1227.6	1209.6	1186.2	1166.4	1135.8
135°	1294.2	1288.8	1283.4	1279.8	1269.0	1260.0	1252.8	1234.8	1215.0	1193.4	1166.4
137.5°	1312.2	1308.6	1301.4	1297.8	1287.0	1279.8	1272.6	1258.2	1240.2	1218.6	1193.4
140°	1328.4	1323.0	1319.4	1314.0	1305.0	1297.8	1290.6	1278.0	1260.0	1242.0	1218.6
142.5°	1341.0	1337.4	1333.8	1330.2	1319.4	1314.0	1306.8	1296.0	1281.6	1263.6	1242.0
145°	1351.8	1348.2	1344.6	1341.0	1332.0	1326.6	1321.2	1310.4	1297.8	1279.8	1260.0
147.5°	1360.8	1357.2	1353.6	1351.8	1342.8	1337.4	1332.0	1324.8	1310.4	1292.4	1278.0
150°	1368.0	1364.4	1360.8	1357.2	1350.0	1344.6	1342.8	1333.8	1319.4	1305.0	1290.6
152.5°	1371.6	1368.0	1366.2	1362.6	1355.4	1350.0	1348.2	1339.2	1326.6	1310.4	1297.8
155°	1371.6	1369.8	1366.2	1364.4	1355.4	1350.0	1348.2	1339.2	1328.4	1314.0	1303.2
157.5°	1371.6	1368.0	1366.2	1362.6	1353.6	1350.0	1348.2	1341.0	1332.0	1319.4	1308.6
160°	1366.2	1364.4	1362.6	1359.0	1351.8	1348.2	1348.2	1341.0	1332.0	1321.2	1308.6
162.5°	1360.8	1357.2	1355.4	1353.6	1348.2	1346.4	1344.6	1339.2	1330.2	1321.2	1308.6
165°	1351.8	1350.0	1346.4	1344.6	1339.2	1337.4	1335.6	1332.0	1323.0	1317.6	1305.0
167.5°	1339.2	1335.6	1333.8	1330.2	1324.8	1324.8	1324.8	1321.2	1315.8	1312.2	1299.6
170°	1323.0	1319.4	1317.6	1315.8	1312.2	1312.2	1312.2	1310.4	1305.0	1303.2	1290.6
172.5°	1306.8	1305.0	1303.2	1301.4	1296.0	1296.0	1296.0	1296.0	1292.4	1292.4	1281.6
175°	1285.2	1283.4	1281.6	1281.6	1278.0	1279.8	1279.8	1279.8	1278.0	1281.6	1270.8
177.5°	1258.2	1254.6	1258.2	1261.8	1260.0	1261.8	1263.6	1263.6	1261.8	1265.4	1256.4
180°	1238.4	1238.4	1238.4	1238.4	1238.4	1238.4	1238.4	1238.4	1238.4	1238.4	1238.4



TEST NUMBER: P303164

CATALOG NUMBER: CTW-F-5050-40L940-UNV-STD-8

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2
2.5°	1396.8	1398.6	1396.8	1398.6	1398.6	1398.6	1398.6	1404.0	1409.4	1413.0	1411.2
5°	1391.4	1393.2	1391.4	1393.2	1393.2	1393.2	1393.2	1398.6	1405.8	1407.6	1404.0
7.5°	1380.6	1382.4	1382.4	1382.4	1382.4	1382.4	1382.4	1389.6	1395.0	1398.6	1395.0
10°	1366.2	1368.0	1368.0	1368.0	1369.8	1369.8	1369.8	1375.2	1382.4	1384.2	1380.6
12.5°	1348.2	1350.0	1350.0	1350.0	1351.8	1351.8	1351.8	1357.2	1364.4	1366.2	1364.4
15°	1326.6	1328.4	1328.4	1328.4	1330.2	1330.2	1330.2	1335.6	1342.8	1344.6	1342.8
17.5°	1301.4	1301.4	1301.4	1301.4	1305.0	1306.8	1305.0	1310.4	1317.6	1319.4	1317.6
20°	1270.8	1272.6	1272.6	1274.4	1276.2	1278.0	1278.0	1283.4	1290.6	1292.4	1288.8
22.5°	1240.2	1240.2	1242.0	1243.8	1243.8	1245.6	1245.6	1251.0	1258.2	1260.0	1258.2
25°	1206.0	1206.0	1207.8	1211.4	1211.4	1213.2	1213.2	1218.6	1224.0	1225.8	1224.0
27.5°	1168.2	1166.4	1170.0	1171.8	1173.6	1177.2	1175.4	1182.6	1188.0	1189.8	1188.0
30°	1130.4	1128.6	1132.2	1134.0	1135.8	1137.6	1137.6	1144.8	1150.2	1152.0	1150.2
32.5°	1089.0	1087.2	1090.8	1094.4	1094.4	1096.2	1096.2	1103.4	1107.0	1110.6	1107.0
35°	1045.8	1042.2	1047.6	1051.2	1049.4	1053.0	1053.0	1060.2	1063.8	1067.4	1063.8
37.5°	1002.6	1000.8	1002.6	1006.2	1006.2	1008.0	1008.0	1015.2	1020.6	1022.4	1020.6
40°	957.6	955.8	957.6	963.0	961.2	963.0	964.8	970.2	973.8	975.6	973.8
42.5°	909.0	909.0	910.8	916.2	914.4	916.2	918.0	923.4	927.0	928.8	927.0
45°	860.4	862.2	860.4	869.4	865.8	867.6	871.2	873.0	878.4	880.2	876.6
47.5°	811.8	815.4	813.6	820.8	819.0	819.0	820.8	826.2	829.8	831.6	829.8
50°	761.4	765.0	763.2	772.2	768.6	770.4	772.2	775.8	777.6	779.4	779.4
52.5°	711.0	712.8	716.4	721.8	720.0	721.8	723.6	725.4	727.2	730.8	727.2
55°	660.6	662.4	666.0	669.6	671.4	671.4	673.2	676.8	675.0	676.8	678.6
57.5°	610.2	613.8	613.8	621.0	621.0	621.0	621.0	626.4	624.6	628.2	628.2
60°	558.0	558.0	561.6	567.0	568.8	568.8	570.6	574.2	572.4	576.0	577.8
62.5°	505.8	509.4	513.0	516.6	520.2	516.6	522.0	523.8	525.6	527.4	525.6
65°	450.0	453.6	457.2	460.8	460.8	460.8	462.6	469.8	469.8	477.0	475.2
67.5°	397.8	401.4	405.0	408.6	410.4	410.4	412.2	415.8	419.4	421.2	419.4
70°	345.6	349.2	356.4	358.2	361.8	358.2	363.6	365.4	369.0	370.8	369.0
72.5°	295.2	298.8	304.2	306.0	309.6	311.4	313.2	313.2	318.6	320.4	320.4
75°	244.8	248.4	253.8	255.6	259.2	261.0	262.8	262.8	268.2	270.0	268.2
77.5°	196.2	198.0	203.4	205.2	208.8	210.6	212.4	212.4	217.8	219.6	217.8
80°	147.6	149.4	154.8	156.6	160.2	160.2	162.0	163.8	167.4	169.2	167.4
82.5°	100.8	102.6	106.2	109.8	111.6	113.4	115.2	117.0	118.8	120.6	118.8
85°	54.0	55.8	61.2	63.0	66.6	68.4	68.4	70.2	73.8	73.8	73.8
87.5°	12.6	16.2	19.8	21.6	25.2	25.2	27.0	27.0	30.6	32.4	30.6
90°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
92.5°	5.4	5.4	7.2	7.2	9.0	9.0	12.6	14.4	12.6	10.8	10.8
95°	12.6	14.4	18.0	23.4	25.2	28.8	36.0	37.8	30.6	27.0	25.2
97.5°	23.4	28.8	37.8	52.2	57.6	64.8	73.8	70.2	57.6	48.6	45.0
100°	41.4	54.0	75.6	102.6	113.4	122.4	124.2	115.2	95.4	79.2	70.2
102.5°	73.8	104.4	149.4	187.2	194.4	199.8	190.8	171.0	142.2	117.0	102.6
105°	147.6	210.6	271.8	295.2	295.2	289.8	262.8	235.8	198.0	165.6	142.2
107.5°	304.2	376.2	412.2	405.0	392.4	374.4	338.4	304.2	259.2	219.6	190.8
110°	513.0	540.0	529.2	502.2	478.8	457.2	412.2	370.8	322.2	280.8	246.6



TEST NUMBER: P303164

CATALOG NUMBER: CTW-F-5050-40L940-UNV-STD-8

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	669.6	649.8	621.0	576.0	554.4	532.8	486.0	439.2	385.2	343.8	304.2
115°	768.6	732.6	693.0	648.0	624.6	601.2	556.2	505.8	448.2	403.2	363.6
117.5°	840.6	797.4	756.0	712.8	687.6	664.2	621.0	567.0	513.0	464.4	424.8
120°	898.2	853.2	811.8	768.6	747.0	725.4	680.4	626.4	574.2	531.0	487.8
122.5°	948.6	903.6	864.0	822.6	802.8	779.4	732.6	680.4	628.2	586.8	547.2
125°	993.6	952.2	912.6	874.8	853.2	828.0	781.2	730.8	682.2	640.8	603.0
127.5°	1035.0	997.2	959.4	921.6	901.8	873.0	829.8	781.2	736.2	694.8	658.8
130°	1072.8	1038.6	1000.8	963.0	941.4	916.2	873.0	828.0	786.6	747.0	711.0
132.5°	1108.8	1074.6	1038.6	999.0	979.2	955.8	916.2	873.0	833.4	799.2	763.2
135°	1141.2	1107.0	1071.0	1033.2	1011.6	991.8	954.0	914.4	876.6	842.4	806.4
137.5°	1170.0	1134.0	1099.8	1063.8	1044.0	1026.0	990.0	952.2	919.8	887.4	851.4
140°	1195.2	1157.4	1125.0	1089.0	1072.8	1058.4	1020.6	990.0	959.4	927.0	896.4
142.5°	1215.0	1179.0	1148.4	1116.0	1101.6	1085.4	1053.0	1024.2	995.4	966.6	936.0
145°	1233.0	1197.0	1170.0	1139.4	1125.0	1112.4	1081.8	1053.0	1029.6	1002.6	972.0
147.5°	1249.2	1216.8	1189.8	1162.8	1150.2	1137.6	1108.8	1083.6	1062.0	1035.0	1008.0
150°	1260.0	1233.0	1209.6	1182.6	1173.6	1161.0	1134.0	1112.4	1090.8	1069.2	1042.2
152.5°	1269.0	1245.6	1224.0	1202.4	1193.4	1180.8	1157.4	1139.4	1121.4	1099.8	1074.6
155°	1274.4	1256.4	1236.6	1216.8	1207.8	1198.8	1179.0	1161.0	1144.8	1126.8	1101.6
157.5°	1281.6	1265.4	1247.4	1229.4	1222.2	1213.2	1195.2	1180.8	1166.4	1150.2	1128.6
160°	1285.2	1270.8	1254.6	1240.2	1233.0	1227.6	1207.8	1198.8	1186.2	1171.8	1152.0
162.5°	1287.0	1274.4	1261.8	1249.2	1243.8	1236.6	1222.2	1213.2	1202.4	1189.8	1173.6
165°	1287.0	1278.0	1265.4	1256.4	1251.0	1243.8	1233.0	1225.8	1216.8	1206.0	1191.6
167.5°	1285.2	1278.0	1267.2	1260.0	1256.4	1251.0	1240.2	1234.8	1229.4	1222.2	1207.8
170°	1279.8	1274.4	1267.2	1261.8	1256.4	1252.8	1245.6	1242.0	1238.4	1233.0	1220.4
172.5°	1272.6	1269.0	1261.8	1260.0	1256.4	1252.8	1247.4	1247.4	1243.8	1240.2	1231.2
175°	1263.6	1261.8	1256.4	1254.6	1254.6	1251.0	1247.4	1247.4	1249.2	1245.6	1238.4
177.5°	1251.0	1251.0	1247.4	1247.4	1247.4	1245.6	1243.8	1247.4	1249.2	1249.2	1243.8
180°	1238.4	1238.4	1238.4	1238.4	1238.4	1238.4	1238.4	1238.4	1238.4	1238.4	1238.4



TEST NUMBER: P303164

CATALOG NUMBER: CTW-F-5050-40L940-UNV-STD-8

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2
2.5°	1407.6	1402.2	1398.6	1398.6	1398.6	1395.0	1393.2	1395.0	1400.4	1409.4	1400.4
5°	1400.4	1395.0	1393.2	1393.2	1393.2	1389.6	1387.8	1389.6	1395.0	1404.0	1395.0
7.5°	1391.4	1386.0	1384.2	1384.2	1382.4	1378.8	1378.8	1378.8	1386.0	1391.4	1384.2
10°	1377.0	1371.6	1369.8	1369.8	1368.0	1364.4	1364.4	1364.4	1371.6	1377.0	1369.8
12.5°	1359.0	1353.6	1351.8	1351.8	1350.0	1346.4	1346.4	1346.4	1353.6	1357.2	1351.8
15°	1337.4	1332.0	1330.2	1330.2	1328.4	1324.8	1324.8	1324.8	1332.0	1333.8	1328.4
17.5°	1312.2	1306.8	1305.0	1305.0	1301.4	1299.6	1297.8	1297.8	1305.0	1306.8	1301.4
20°	1285.2	1278.0	1278.0	1276.2	1272.6	1270.8	1270.8	1269.0	1279.8	1276.2	1272.6
22.5°	1252.8	1247.4	1247.4	1245.6	1242.0	1240.2	1238.4	1238.4	1247.4	1240.2	1236.6
25°	1220.4	1213.2	1215.0	1211.4	1209.6	1206.0	1204.2	1204.2	1213.2	1204.2	1202.4
27.5°	1186.2	1179.0	1175.4	1175.4	1173.6	1168.2	1166.4	1166.4	1175.4	1166.4	1164.6
30°	1144.8	1141.2	1137.6	1137.6	1132.2	1130.4	1128.6	1128.6	1135.8	1126.8	1125.0
32.5°	1105.2	1099.8	1098.0	1096.2	1094.4	1089.0	1087.2	1089.0	1094.4	1083.6	1081.8
35°	1062.0	1058.4	1056.6	1053.0	1051.2	1047.6	1045.8	1047.6	1049.4	1040.4	1036.8
37.5°	1015.2	1013.4	1011.6	1008.0	1006.2	1004.4	1002.6	1004.4	1004.4	995.4	991.8
40°	970.2	966.6	964.8	963.0	963.0	959.4	957.6	961.2	957.6	954.0	946.8
42.5°	925.2	919.8	919.8	916.2	916.2	912.6	912.6	914.4	910.8	907.2	900.0
45°	876.6	874.8	873.0	869.4	869.4	865.8	865.8	867.6	862.2	858.6	853.2
47.5°	828.0	828.0	824.4	820.8	822.6	820.8	819.0	819.0	815.4	811.8	806.4
50°	779.4	777.6	772.2	774.0	775.8	770.4	772.2	766.8	766.8	763.2	756.0
52.5°	729.0	727.2	725.4	723.6	725.4	721.8	721.8	718.2	716.4	712.8	707.4
55°	680.4	678.6	675.0	675.0	676.8	671.4	671.4	667.8	666.0	662.4	657.0
57.5°	630.0	628.2	626.4	624.6	626.4	622.8	621.0	619.2	615.6	612.0	608.4
60°	579.6	577.8	574.2	572.4	574.2	570.6	568.8	567.0	565.2	559.8	556.2
62.5°	527.4	523.8	523.8	522.0	523.8	520.2	518.4	516.6	513.0	509.4	509.4
65°	475.2	473.4	473.4	468.0	471.6	468.0	460.8	460.8	457.2	453.6	453.6
67.5°	419.4	417.6	417.6	415.8	415.8	415.8	414.0	410.4	405.0	405.0	405.0
70°	369.0	367.2	367.2	363.6	365.4	363.6	361.8	358.2	354.6	354.6	354.6
72.5°	316.8	315.0	315.0	313.2	315.0	313.2	311.4	307.8	304.2	306.0	304.2
75°	266.4	264.6	266.4	262.8	264.6	262.8	261.0	257.4	255.6	257.4	255.6
77.5°	216.0	216.0	216.0	216.0	214.2	212.4	210.6	208.8	208.8	208.8	205.2
80°	167.4	165.6	165.6	165.6	165.6	163.8	162.0	160.2	160.2	160.2	156.6
82.5°	118.8	118.8	118.8	118.8	117.0	118.8	113.4	111.6	111.6	111.6	108.0
85°	72.0	72.0	73.8	72.0	72.0	70.2	66.6	64.8	64.8	63.0	61.2
87.5°	32.4	28.8	28.8	28.8	27.0	27.0	27.0	23.4	23.4	23.4	19.8
90°	3.6	5.4	5.4	5.4	5.4	7.2	7.2	7.2	7.2	7.2	9.0
92.5°	16.2	21.6	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4
95°	28.8	32.4	39.6	43.2	46.8	50.4	50.4	52.2	50.4	48.6	48.6
97.5°	43.2	48.6	50.4	52.2	55.8	63.0	68.4	73.8	77.4	79.2	79.2
100°	66.6	64.8	68.4	73.8	73.8	72.0	77.4	82.8	88.2	93.6	95.4
102.5°	95.4	88.2	86.4	88.2	91.8	99.0	95.4	97.2	99.0	102.6	108.0
105°	129.6	118.8	111.6	109.8	111.6	115.2	122.4	124.2	118.8	120.6	122.4
107.5°	169.2	153.0	142.2	138.6	136.8	136.8	140.4	147.6	153.0	151.2	147.6
110°	217.8	192.6	178.2	171.0	167.4	163.8	163.8	167.4	172.8	180.0	185.4



TEST NUMBER: P303164

CATALOG NUMBER: CTW-F-5050-40L940-UNV-STD-8

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
112.5°	271.8	241.2	219.6	208.8	203.4	190.8	189.0	190.8	192.6	198.0	205.2
115°	329.4	291.6	264.6	252.0	244.8	225.0	216.0	214.2	216.0	217.8	221.4
117.5°	387.0	349.2	315.0	300.6	289.8	266.4	250.2	244.8	239.4	241.2	241.2
120°	450.0	405.0	372.6	352.8	342.0	313.2	291.6	279.0	268.2	264.6	262.8
122.5°	507.6	468.0	428.4	414.0	396.0	363.6	340.2	320.4	304.2	293.4	288.0
125°	561.6	523.8	487.8	471.6	453.6	417.6	392.4	369.0	347.4	333.0	318.6
127.5°	621.0	581.4	545.4	531.0	513.0	477.0	446.4	424.8	401.4	379.8	360.0
130°	669.6	635.4	601.2	586.8	570.6	536.4	505.8	480.6	451.8	432.0	410.4
132.5°	723.6	687.6	655.2	639.0	622.8	590.4	561.6	536.4	509.4	491.4	468.0
135°	772.2	738.0	703.8	691.2	673.2	644.4	617.4	590.4	565.2	543.6	523.8
137.5°	819.0	784.8	754.2	739.8	723.6	696.6	671.4	651.6	622.8	601.2	579.6
140°	862.2	829.8	801.0	786.6	774.0	745.2	723.6	703.8	676.8	657.0	633.6
142.5°	903.6	873.0	847.8	833.4	819.0	792.0	770.4	752.4	730.8	709.2	689.4
145°	943.2	912.6	889.2	876.6	862.2	837.0	817.2	799.2	784.8	761.4	741.6
147.5°	981.0	950.4	928.8	918.0	905.4	882.0	864.0	846.0	833.4	811.8	793.8
150°	1015.2	988.2	968.4	957.6	945.0	923.4	907.2	891.0	880.2	858.6	846.0
152.5°	1049.4	1024.2	1006.2	995.4	984.6	963.0	946.8	930.6	925.2	903.6	892.8
155°	1080.0	1054.8	1038.6	1029.6	1020.6	999.0	984.6	968.4	964.8	946.8	934.2
157.5°	1108.8	1085.4	1069.2	1062.0	1053.0	1033.2	1020.6	1006.2	1004.4	988.2	977.4
160°	1134.0	1112.4	1098.0	1089.0	1081.8	1065.6	1053.0	1042.2	1038.6	1027.8	1017.0
162.5°	1157.4	1139.4	1125.0	1117.8	1112.4	1096.2	1085.4	1074.6	1072.8	1065.6	1053.0
165°	1177.2	1159.2	1148.4	1143.0	1137.6	1123.2	1114.2	1105.2	1103.4	1099.8	1087.2
167.5°	1195.2	1179.0	1170.0	1164.6	1159.2	1148.4	1141.2	1134.0	1134.0	1130.4	1119.6
170°	1209.6	1195.2	1188.0	1184.4	1180.8	1170.0	1162.8	1157.4	1157.4	1159.2	1146.6
172.5°	1222.2	1211.4	1204.2	1198.8	1197.0	1189.8	1184.4	1179.0	1180.8	1184.4	1173.6
175°	1233.0	1222.2	1216.8	1215.0	1213.2	1206.0	1202.4	1200.6	1202.4	1207.8	1198.8
177.5°	1240.2	1233.0	1229.4	1227.6	1227.6	1220.4	1218.6	1218.6	1220.4	1229.4	1218.6
180°	1238.4	1238.4	1238.4	1238.4	1238.4	1238.4	1238.4	1238.4	1238.4	1238.4	1238.4



TEST NUMBER: P303164

CATALOG NUMBER: CTW-F-5050-40L940-UNV-STD-8

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2	1402.2
2.5°	1404.0	1402.2	1400.4	1398.6	1396.8	1395.0	1391.4	1393.2
5°	1396.8	1395.0	1393.2	1391.4	1391.4	1391.4	1389.6	1391.4
7.5°	1386.0	1384.2	1382.4	1380.6	1380.6	1382.4	1380.6	1384.2
10°	1371.6	1368.0	1368.0	1364.4	1364.4	1364.4	1364.4	1366.2
12.5°	1351.8	1348.2	1348.2	1344.6	1344.6	1344.6	1346.4	1348.2
15°	1328.4	1326.6	1324.8	1323.0	1323.0	1324.8	1323.0	1324.8
17.5°	1301.4	1297.8	1297.8	1296.0	1296.0	1294.2	1294.2	1296.0
20°	1269.0	1265.4	1265.4	1263.6	1261.8	1261.8	1261.8	1263.6
22.5°	1233.0	1231.2	1229.4	1225.8	1227.6	1227.6	1225.8	1229.4
25°	1197.0	1195.2	1193.4	1191.6	1191.6	1189.8	1188.0	1189.8
27.5°	1161.0	1157.4	1155.6	1153.8	1152.0	1150.2	1148.4	1150.2
30°	1121.4	1114.2	1116.0	1114.2	1110.6	1108.8	1107.0	1108.8
32.5°	1078.2	1074.6	1071.0	1071.0	1067.4	1065.6	1063.8	1065.6
35°	1035.0	1029.6	1027.8	1027.8	1024.2	1022.4	1020.6	1022.4
37.5°	990.0	984.6	982.8	982.8	979.2	975.6	975.6	975.6
40°	943.2	937.8	937.8	937.8	934.2	930.6	930.6	930.6
42.5°	896.4	892.8	891.0	891.0	887.4	882.0	882.0	883.8
45°	849.6	846.0	844.2	842.4	840.6	835.2	835.2	835.2
47.5°	799.2	799.2	795.6	795.6	792.0	790.2	788.4	788.4
50°	754.2	750.6	747.0	747.0	745.2	739.8	739.8	739.8
52.5°	703.8	702.0	698.4	698.4	694.8	691.2	691.2	691.2
55°	655.2	653.4	649.8	649.8	646.2	644.4	642.6	642.6
57.5°	604.8	604.8	601.2	601.2	595.8	595.8	594.0	597.6
60°	552.6	554.4	550.8	549.0	545.4	545.4	545.4	549.0
62.5°	505.8	504.0	500.4	500.4	498.6	496.8	498.6	498.6
65°	451.8	448.2	446.4	446.4	444.6	442.8	441.0	444.6
67.5°	401.4	399.6	396.0	396.0	396.0	394.2	394.2	396.0
70°	351.0	349.2	347.4	347.4	345.6	345.6	345.6	347.4
72.5°	300.6	300.6	300.6	298.8	297.0	295.2	298.8	297.0
75°	252.0	250.2	250.2	250.2	248.4	246.6	244.8	248.4
77.5°	203.4	201.6	201.6	201.6	199.8	198.0	198.0	199.8
80°	154.8	153.0	153.0	153.0	151.2	151.2	149.4	151.2
82.5°	104.4	104.4	104.4	104.4	100.8	102.6	102.6	100.8
85°	59.4	57.6	57.6	57.6	57.6	57.6	55.8	57.6
87.5°	18.0	18.0	18.0	19.8	18.0	19.8	19.8	19.8
90°	9.0	9.0	9.0	9.0	9.0	9.0	10.8	10.8
92.5°	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4
95°	46.8	48.6	46.8	46.8	46.8	46.8	46.8	46.8
97.5°	79.2	79.2	79.2	79.2	77.4	75.6	75.6	75.6
100°	99.0	100.8	102.6	102.6	104.4	104.4	104.4	104.4
102.5°	111.6	113.4	113.4	115.2	117.0	117.0	117.0	117.0
105°	124.2	124.2	126.0	127.8	131.4	133.2	135.0	135.0
107.5°	145.8	145.8	147.6	147.6	147.6	149.4	149.4	149.4
110°	183.6	176.4	176.4	174.6	172.8	172.8	172.8	172.8



TEST NUMBER: P303164

CATALOG NUMBER: CTW-F-5050-40L940-UNV-STD-8

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
112.5°	210.6	212.4	214.2	216.0	214.2	210.6	210.6	210.6
115°	228.6	232.2	235.8	237.6	239.4	239.4	241.2	241.2
117.5°	246.6	250.2	252.0	253.8	257.4	257.4	261.0	261.0
120°	264.6	268.2	268.2	270.0	271.8	273.6	275.4	275.4
122.5°	286.2	288.0	288.0	288.0	289.8	289.8	291.6	291.6
125°	313.2	309.6	307.8	309.6	307.8	307.8	307.8	307.8
127.5°	347.4	340.2	338.4	336.6	333.0	329.4	329.4	329.4
130°	392.4	381.6	376.2	374.4	369.0	361.8	361.8	360.0
132.5°	444.6	432.0	424.8	423.0	414.0	405.0	401.4	399.6
135°	505.8	491.4	482.4	480.6	466.2	457.2	453.6	451.8
137.5°	559.8	545.4	540.0	536.4	527.4	518.4	513.0	511.2
140°	615.6	603.0	594.0	590.4	579.6	574.2	568.8	568.8
142.5°	671.4	658.8	649.8	646.2	637.2	630.0	624.6	624.6
145°	725.4	712.8	703.8	700.2	691.2	684.0	680.4	678.6
147.5°	779.4	766.8	759.6	756.0	747.0	739.8	734.4	734.4
150°	831.6	819.0	811.8	804.6	799.2	792.0	788.4	786.6
152.5°	880.2	869.4	862.2	855.0	849.6	846.0	840.6	840.6
155°	923.4	914.4	907.2	901.8	898.2	892.8	891.0	891.0
157.5°	968.4	957.6	952.2	946.8	943.2	941.4	937.8	937.8
160°	1009.8	999.0	995.4	990.0	986.4	982.8	981.0	982.8
162.5°	1049.4	1042.2	1036.8	1031.4	1029.6	1026.0	1024.2	1024.2
165°	1083.6	1076.4	1072.8	1069.2	1065.6	1063.8	1062.0	1063.8
167.5°	1116.0	1108.8	1105.2	1101.6	1099.8	1099.8	1098.0	1098.0
170°	1144.8	1139.4	1137.6	1132.2	1130.4	1130.4	1128.6	1128.6
172.5°	1171.8	1168.2	1166.4	1162.8	1162.8	1162.8	1161.0	1162.8
175°	1198.8	1195.2	1193.4	1189.8	1189.8	1188.0	1186.2	1188.0
177.5°	1222.2	1220.4	1216.8	1215.0	1213.2	1211.4	1207.8	1209.6
180°	1238.4	1238.4	1238.4	1238.4	1238.4	1238.4	1238.4	1238.4

(END OF REPORT)