

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: P303170

Luminaire Tested: **CTW-F-5050-50L830-UNV-STD-6**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P303170  
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-5050-50L830-UNV-STD-6  
Description: CORELITE CONTINUA LINEAR WALL LED LUMINAIRE  
50% UPLIGHT, 50% DOWNLIGHT, 5000 LUMEN PACKAGE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7243.0 lumens  
Efficiency: N/A  
Efficacy: 123.8 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.32  
Luminous Opening: Rectangular (W 6' x L: 0.12' x H: 0')  
CIE Type: General Diffuse

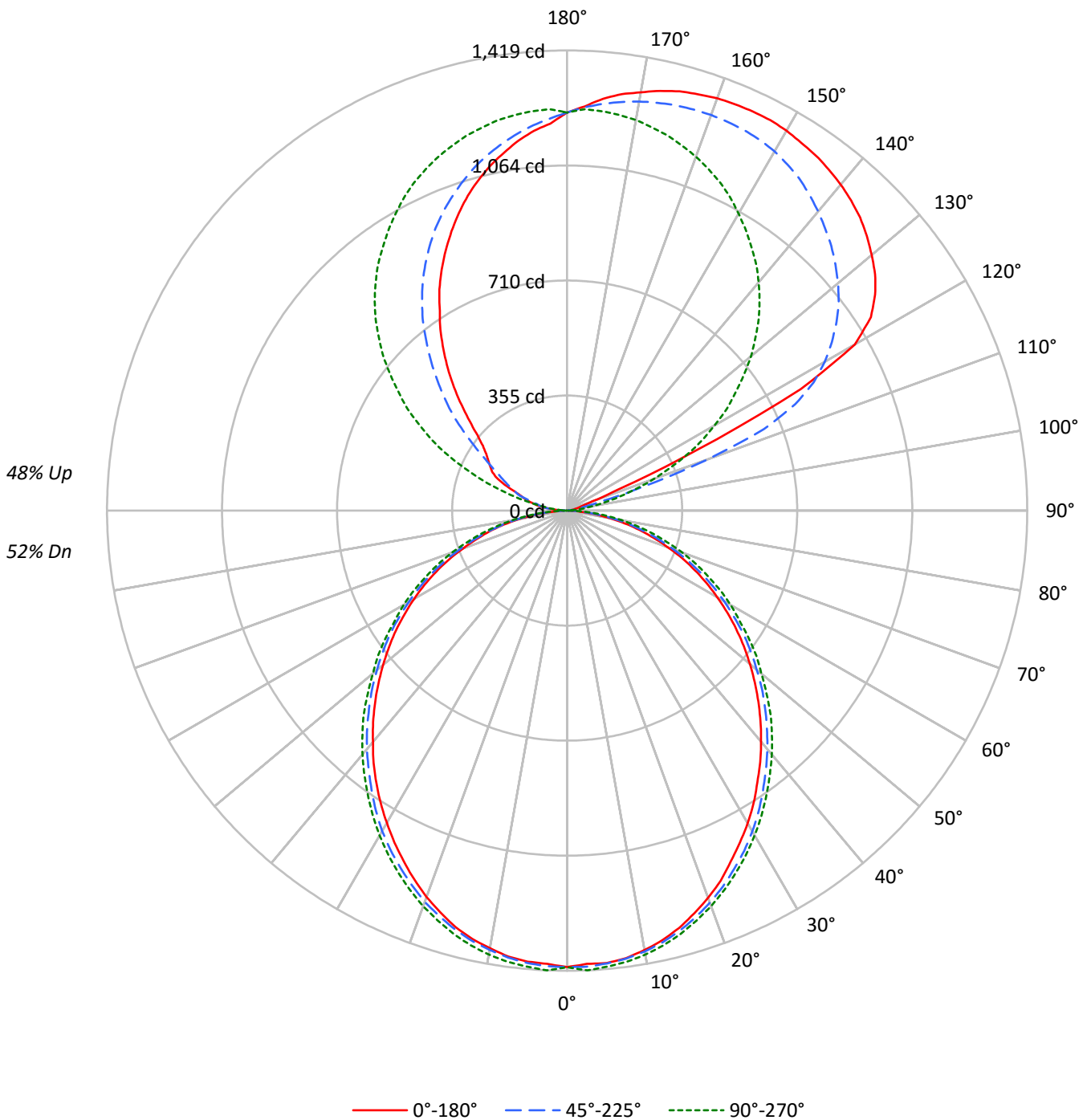
Input Watts (W): 58.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	20203	20203	20203
5°	20177	20342	20115
10°	20053	20263	19968
15°	19801	20079	19758
20°	19407	19826	19363
25°	18911	19505	18889
30°	18453	19169	18428
35°	17916	18775	17967
40°	17429	18402	17455
45°	16921	18003	17009
50°	16424	17453	16551
55°	15916	17070	16132
60°	15359	16726	15649
65°	14742	16260	15136
70°	13860	15795	14343
75°	12798	15116	13758
80°	10968	14067	12397
85°	6883	12350	9024



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	132.9	1.8
10°-20°	376.4	5.2
20°-30°	557.3	7.7
30°-40°	654.4	9.0
40°-50°	663.6	9.2
50°-60°	591.9	8.2
60°-70°	453.7	6.3
70°-80°	267.1	3.7
80°-90°	72.0	1.0
90°-100°	35.0	0.5
100°-110°	150.8	2.1
110°-120°	422.6	5.8
120°-130°	610.9	8.4
130°-140°	659.5	9.1
140°-150°	627.2	8.7
150°-160°	514.8	7.1
160°-170°	336.5	4.6
170°-180°	116.6	1.6
0°-30°	1066.6	14.7
0°-40°	1721.0	23.8
0°-60°	2976.5	41.1
0°-90°	3769.3	52.0
90°-120°	608.3	8.4
90°-150°	2505.9	34.6
90°-180°	3474.0	48.0
0°-180°	7243.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1408	1408	1408	1408	1408	
5°	1400	1402	1412	1400	1396	133
15°	1333	1341	1351	1337	1330	375
25°	1194	1219	1232	1216	1193	551
35°	1023	1053	1072	1051	1026	640
45°	834	864	887	864	838	643
55°	636	664	682	668	645	569
65°	434	454	479	462	446	429
75°	231	247	273	254	248	244
85°	42	55	75	62	55	54
90°	1	1	1	7	10	2
95°	9	10	26	48	43	9
105°	38	110	170	118	133	44
115°	437	776	408	212	241	483
125°	1160	1014	633	350	304	1028
135°	1278	1152	835	565	460	986
145°	1337	1249	991	780	682	838
155°	1357	1294	1116	961	886	628
165°	1338	1294	1197	1098	1056	379
175°	1275	1259	1236	1193	1176	123
180°	1227	1227	1227	1227	1227	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1407.7	1407.7	1407.7	1407.7	1407.7	1407.7	1407.7	1407.7	1407.7	1407.7	1407.7
2.5°	1399.0	1397.6	1401.9	1404.8	1404.8	1406.2	1409.1	1410.6	1409.1	1414.9	1407.7
5°	1400.5	1397.6	1399.0	1399.0	1397.6	1399.0	1401.9	1403.4	1403.4	1409.1	1401.9
7.5°	1391.8	1390.4	1391.8	1390.4	1388.9	1390.4	1391.8	1394.7	1393.3	1399.0	1393.3
10°	1376.0	1374.5	1374.5	1374.5	1373.1	1374.5	1377.4	1380.3	1380.3	1384.6	1380.3
12.5°	1357.2	1354.3	1355.8	1357.2	1354.3	1355.8	1358.7	1361.5	1361.5	1367.3	1363.0
15°	1332.7	1331.2	1334.1	1337.0	1334.1	1334.1	1337.0	1338.5	1339.9	1344.2	1341.3
17.5°	1302.4	1302.4	1305.3	1309.6	1306.7	1306.7	1309.6	1312.5	1312.5	1315.4	1315.4
20°	1270.7	1269.2	1272.1	1275.0	1275.0	1273.6	1277.9	1280.8	1282.2	1285.1	1286.5
22.5°	1236.1	1233.2	1234.6	1238.9	1237.5	1237.5	1238.9	1244.7	1247.6	1250.5	1254.8
25°	1194.2	1194.2	1197.1	1200.0	1200.0	1200.0	1201.4	1205.8	1210.1	1214.4	1218.7
27.5°	1153.8	1153.8	1155.3	1161.1	1161.1	1159.6	1162.5	1169.7	1174.0	1176.9	1182.7
30°	1113.5	1109.1	1113.5	1117.8	1120.7	1117.8	1122.1	1127.9	1130.8	1135.1	1142.3
32.5°	1070.2	1068.7	1068.7	1074.5	1077.4	1076.0	1077.4	1084.6	1090.4	1091.8	1099.0
35°	1022.6	1024.0	1024.0	1028.4	1031.2	1029.8	1031.2	1038.5	1044.2	1045.7	1052.9
37.5°	977.9	977.9	977.9	982.2	985.1	985.1	985.1	992.3	998.1	1002.4	1006.7
40°	930.3	931.7	930.3	934.6	938.9	937.5	938.9	944.7	951.9	956.2	960.6
42.5°	882.7	881.2	881.2	885.6	891.3	889.9	891.3	897.1	902.9	908.7	911.5
45°	833.7	830.8	833.7	838.0	842.3	843.7	842.3	848.1	853.8	858.2	863.9
47.5°	784.6	783.2	783.2	787.5	791.8	791.8	793.3	797.6	804.8	807.7	814.9
50°	735.6	735.6	734.1	738.5	742.8	744.2	744.2	747.1	754.3	760.1	763.0
52.5°	686.5	686.5	686.5	688.0	690.9	695.2	695.2	698.1	702.4	709.6	713.9
55°	636.1	637.5	636.1	637.5	641.8	644.7	644.7	647.6	651.9	659.1	663.5
57.5°	585.6	587.0	585.6	587.0	591.3	592.8	594.2	597.1	600.0	605.8	610.1
60°	535.1	536.5	535.1	536.5	540.9	543.7	542.3	546.6	549.5	552.4	558.2
62.5°	484.6	487.5	486.1	488.9	490.4	493.3	491.8	496.2	499.0	501.9	507.7
65°	434.1	437.0	435.6	438.5	438.5	441.3	439.9	444.2	447.1	450.0	454.3
67.5°	383.7	386.5	385.1	386.5	388.0	390.9	388.0	393.7	396.6	398.1	402.4
70°	330.3	333.2	331.7	333.2	334.6	336.1	334.6	338.9	343.3	344.7	347.6
72.5°	279.8	282.7	282.7	284.1	284.1	287.0	287.0	287.0	289.9	294.2	295.7
75°	230.8	233.7	233.7	233.7	233.7	236.5	236.5	239.4	240.9	243.7	246.6
77.5°	181.7	184.6	184.6	184.6	184.6	187.5	187.5	190.4	191.8	194.7	197.6
80°	132.7	135.6	137.0	137.0	137.0	138.5	138.5	141.3	142.8	145.7	148.6
82.5°	86.5	88.0	89.4	88.0	89.4	90.9	93.7	93.7	95.2	98.1	101.0
85°	41.8	43.3	44.7	44.7	44.7	46.2	46.2	49.0	50.5	51.9	54.8
87.5°	5.8	7.2	7.2	7.2	7.2	8.7	8.7	8.7	10.1	10.1	13.0
90°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
92.5°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
95°	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	10.1
97.5°	13.0	13.0	14.4	13.0	14.4	14.4	14.4	14.4	15.9	15.9	18.7
100°	20.2	20.2	20.2	20.2	20.2	20.2	21.6	21.6	24.5	26.0	30.3
102.5°	27.4	27.4	27.4	28.8	28.8	30.3	30.3	31.7	36.1	41.8	54.8
105°	37.5	37.5	38.9	38.9	40.4	41.8	43.3	49.0	57.7	75.0	109.6
107.5°	51.9	53.4	54.8	56.2	60.6	64.9	69.2	85.1	111.1	164.4	245.2
110°	82.2	83.7	89.4	95.2	109.6	124.0	138.5	191.8	269.7	367.8	457.2



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	171.6	177.4	181.7	216.3	262.5	302.9	340.4	435.6	538.0	621.6	656.2
115°	437.0	447.1	454.3	522.1	594.2	640.4	669.2	734.1	776.0	788.9	776.0
117.5°	812.0	816.3	826.4	851.0	884.1	900.0	902.9	913.0	902.9	882.7	856.7
120°	1024.0	1024.0	1018.3	1019.7	1015.4	1015.4	1009.6	993.7	972.1	947.6	917.3
122.5°	1110.6	1106.2	1099.0	1093.3	1080.3	1077.4	1068.7	1048.6	1025.5	1001.0	967.8
125°	1159.6	1155.3	1149.5	1142.3	1127.9	1122.1	1113.5	1093.3	1070.2	1044.2	1013.9
127.5°	1197.1	1192.8	1187.0	1179.8	1166.8	1161.1	1151.0	1130.8	1107.7	1083.2	1055.8
130°	1226.0	1224.5	1217.3	1213.0	1200.0	1194.2	1184.1	1163.9	1142.3	1117.8	1090.4
132.5°	1253.4	1250.5	1243.3	1240.4	1228.8	1221.6	1213.0	1194.2	1172.6	1148.1	1122.1
135°	1277.9	1275.0	1266.3	1263.5	1253.4	1244.7	1237.5	1220.2	1201.4	1176.9	1152.4
137.5°	1296.6	1292.3	1286.5	1283.7	1273.6	1264.9	1259.1	1243.3	1224.5	1201.4	1178.4
140°	1312.5	1308.2	1303.8	1301.0	1292.3	1285.1	1277.9	1262.0	1246.2	1227.4	1204.3
142.5°	1325.5	1322.6	1318.3	1313.9	1305.3	1299.5	1293.7	1280.8	1266.3	1247.6	1227.4
145°	1337.0	1334.1	1329.8	1326.9	1316.8	1312.5	1306.7	1295.2	1282.2	1263.5	1249.0
147.5°	1344.2	1342.8	1339.9	1337.0	1326.9	1322.6	1316.8	1308.2	1295.2	1277.9	1264.9
150°	1352.9	1350.0	1347.1	1345.7	1335.6	1331.2	1328.4	1318.3	1306.7	1290.9	1279.3
152.5°	1357.2	1354.3	1351.4	1350.0	1339.9	1337.0	1334.1	1325.5	1312.5	1298.1	1288.0
155°	1357.2	1355.8	1352.9	1351.4	1341.3	1337.0	1335.6	1326.9	1315.4	1303.8	1293.7
157.5°	1355.8	1352.9	1351.4	1348.6	1339.9	1337.0	1334.1	1326.9	1316.8	1306.7	1296.6
160°	1352.9	1350.0	1348.6	1345.7	1338.5	1335.6	1334.1	1326.9	1319.7	1309.6	1298.1
162.5°	1345.7	1344.2	1342.8	1341.3	1335.6	1332.7	1331.2	1325.5	1316.8	1308.2	1296.6
165°	1338.5	1335.6	1334.1	1331.2	1325.5	1325.5	1324.0	1319.7	1311.1	1306.7	1293.7
167.5°	1325.5	1321.2	1321.2	1316.8	1312.5	1312.5	1311.1	1309.6	1302.4	1299.5	1288.0
170°	1309.6	1308.2	1305.3	1303.8	1301.0	1301.0	1299.5	1298.1	1292.3	1292.3	1280.8
172.5°	1295.2	1293.7	1292.3	1289.4	1285.1	1285.1	1285.1	1285.1	1280.8	1280.8	1270.7
175°	1275.0	1272.1	1272.1	1270.7	1267.8	1269.2	1269.2	1269.2	1266.3	1269.2	1259.1
177.5°	1247.6	1244.7	1247.6	1250.5	1249.0	1250.5	1251.9	1251.9	1249.0	1253.4	1244.7
180°	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4



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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1407.7	1407.7	1407.7	1407.7	1407.7	1407.7	1407.7	1407.7	1407.7	1407.7	1407.7
2.5°	1401.9	1403.4	1401.9	1403.4	1404.8	1403.4	1404.8	1410.6	1416.3	1419.2	1416.3
5°	1396.2	1397.6	1396.2	1397.6	1399.0	1397.6	1399.0	1403.4	1410.6	1412.0	1410.6
7.5°	1387.5	1388.9	1387.5	1388.9	1388.9	1388.9	1388.9	1394.7	1400.5	1403.4	1400.5
10°	1373.1	1374.5	1373.1	1376.0	1376.0	1376.0	1376.0	1381.7	1387.5	1390.4	1386.1
12.5°	1355.8	1357.2	1355.8	1358.7	1357.2	1358.7	1360.1	1364.4	1370.2	1373.1	1370.2
15°	1332.7	1335.6	1334.1	1337.0	1337.0	1337.0	1337.0	1342.8	1348.6	1351.4	1348.6
17.5°	1306.7	1308.2	1308.2	1311.1	1311.1	1311.1	1312.5	1318.3	1322.6	1325.5	1322.6
20°	1277.9	1280.8	1280.8	1282.2	1282.2	1283.7	1285.1	1289.4	1295.2	1298.1	1295.2
22.5°	1246.2	1249.0	1250.5	1250.5	1250.5	1251.9	1253.4	1257.7	1264.9	1266.3	1263.5
25°	1213.0	1213.0	1215.9	1215.9	1217.3	1218.7	1220.2	1223.1	1230.3	1231.7	1230.3
27.5°	1176.9	1175.5	1176.9	1179.8	1179.8	1182.7	1184.1	1187.0	1192.8	1195.7	1192.8
30°	1136.5	1136.5	1139.4	1140.9	1140.9	1142.3	1145.2	1148.1	1153.8	1156.7	1153.8
32.5°	1096.2	1094.7	1099.0	1099.0	1100.5	1101.9	1103.4	1107.7	1112.0	1114.9	1113.5
35°	1054.3	1050.0	1055.8	1055.8	1057.2	1060.1	1060.1	1063.0	1068.7	1071.6	1068.7
37.5°	1011.1	1006.7	1011.1	1013.9	1012.5	1015.4	1016.8	1019.7	1025.5	1026.9	1026.9
40°	966.3	962.0	966.3	967.8	967.8	969.2	972.1	973.6	977.9	982.2	979.3
42.5°	917.3	915.9	918.7	921.6	921.6	923.1	924.5	926.0	930.3	934.6	931.7
45°	868.3	868.3	871.2	874.0	875.5	875.5	876.9	878.4	881.2	887.0	882.7
47.5°	819.2	819.2	822.1	823.6	823.6	825.0	827.9	827.9	833.7	833.7	835.1
50°	767.3	770.2	773.1	777.4	774.5	776.0	778.8	778.8	781.7	781.7	786.1
52.5°	716.8	718.3	722.6	726.9	728.4	726.9	728.4	728.4	731.2	735.6	732.7
55°	666.3	666.3	672.1	676.4	676.4	676.4	676.4	677.9	682.2	682.2	682.2
57.5°	614.4	615.9	620.2	626.0	626.0	626.0	626.0	627.4	630.3	628.8	633.2
60°	563.9	563.9	569.7	572.6	572.6	575.5	575.5	576.9	578.4	582.7	582.7
62.5°	513.5	513.5	517.8	520.7	523.6	522.1	523.6	525.0	527.9	532.2	529.3
65°	461.5	461.5	465.9	467.3	471.6	470.2	471.6	476.0	477.4	478.8	477.4
67.5°	408.2	409.6	413.9	415.4	419.7	421.2	419.7	425.5	426.9	429.8	428.4
70°	351.9	353.4	359.1	360.6	363.5	362.0	364.9	372.1	375.0	376.4	373.6
72.5°	301.4	302.9	308.7	310.1	313.0	311.5	314.4	318.7	321.6	323.1	323.1
75°	249.5	252.4	255.3	258.2	262.5	261.1	263.9	268.3	271.2	272.6	272.6
77.5°	200.5	201.9	206.2	207.7	212.0	210.6	212.0	214.9	219.2	220.7	220.7
80°	151.4	154.3	155.8	158.7	161.5	160.1	163.0	167.3	168.7	170.2	170.2
82.5°	103.8	105.3	108.2	111.1	113.9	115.4	116.8	119.7	121.2	121.2	121.2
85°	57.7	60.6	63.5	64.9	67.8	66.3	70.7	73.6	75.0	75.0	76.4
87.5°	15.9	18.7	20.2	23.1	26.0	26.0	26.0	31.7	31.7	33.2	33.2
90°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
92.5°	4.3	5.8	5.8	7.2	8.7	10.1	14.4	14.4	11.5	10.1	11.5
95°	11.5	13.0	15.9	24.5	30.3	34.6	40.4	38.9	33.2	26.0	24.5
97.5°	21.6	27.4	38.9	59.1	70.7	76.4	82.2	73.6	62.0	50.5	46.2
100°	40.4	54.8	83.7	118.3	131.2	137.0	135.6	116.8	101.0	82.2	72.1
102.5°	76.4	116.8	165.9	204.8	213.5	206.2	194.7	171.6	148.6	122.6	106.7
105°	165.9	235.1	285.6	300.0	304.3	289.9	262.5	233.7	200.5	170.2	147.1
107.5°	330.3	393.7	412.5	402.4	396.6	372.1	337.5	300.0	261.1	223.6	194.7
110°	523.6	535.1	522.1	490.4	473.1	451.4	412.5	369.2	320.2	282.7	248.1





TEST NUMBER: P303170

CATALOG NUMBER: CTW-F-5050-50L830-UNV-STD-6

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	664.9	640.4	607.2	565.4	545.2	522.1	480.3	438.5	385.1	343.3	305.8
115°	755.8	719.7	679.3	634.6	613.0	588.5	546.6	500.5	447.1	408.2	364.9
117.5°	826.4	781.7	741.3	698.1	677.9	653.4	611.5	561.1	507.7	468.7	425.5
120°	881.2	839.4	797.6	757.2	734.1	713.9	670.7	620.2	566.8	523.6	483.2
122.5°	930.3	891.3	851.0	812.0	790.4	767.3	722.6	673.6	624.5	584.1	543.7
125°	976.4	940.4	900.0	861.1	839.4	816.3	773.1	725.5	676.4	633.2	598.6
127.5°	1019.7	985.1	944.7	907.2	885.6	861.1	819.2	773.1	731.2	686.5	651.9
130°	1058.7	1026.9	988.0	950.5	928.8	905.8	863.9	819.2	778.8	739.9	702.4
132.5°	1093.3	1061.5	1024.0	989.4	966.3	946.2	905.8	863.9	823.6	787.5	752.9
135°	1126.4	1093.3	1058.7	1022.6	1002.4	983.7	944.7	905.8	868.3	835.1	803.4
137.5°	1156.7	1120.7	1086.1	1051.4	1032.7	1016.8	979.3	943.3	911.5	878.4	846.6
140°	1182.7	1145.2	1113.5	1080.3	1063.0	1047.1	1012.5	977.9	950.5	918.7	888.5
142.5°	1202.9	1165.4	1136.5	1104.8	1088.9	1076.0	1042.8	1012.5	985.1	957.7	927.4
145°	1218.7	1185.6	1158.2	1127.9	1114.9	1100.5	1070.2	1042.8	1018.3	990.9	963.5
147.5°	1234.6	1205.8	1178.4	1151.0	1138.0	1125.0	1097.6	1073.1	1050.0	1025.5	998.1
150°	1247.6	1221.6	1197.1	1172.6	1161.1	1148.1	1123.6	1100.5	1080.3	1057.2	1031.2
152.5°	1256.2	1234.6	1213.0	1191.3	1179.8	1169.7	1146.6	1127.9	1109.1	1088.9	1063.0
155°	1263.5	1246.2	1226.0	1207.2	1197.1	1188.5	1166.8	1149.5	1133.7	1116.3	1093.3
157.5°	1270.7	1253.4	1236.1	1218.7	1210.1	1201.4	1182.7	1169.7	1155.3	1139.4	1117.8
160°	1273.6	1260.6	1243.3	1228.8	1221.6	1214.4	1198.6	1187.0	1175.5	1161.1	1140.9
162.5°	1275.0	1263.5	1249.0	1237.5	1231.7	1226.0	1210.1	1201.4	1191.3	1179.8	1162.5
165°	1275.0	1266.3	1254.8	1244.7	1238.9	1234.6	1221.6	1214.4	1207.2	1197.1	1181.2
167.5°	1273.6	1264.9	1256.2	1247.6	1243.3	1238.9	1228.8	1224.5	1218.7	1210.1	1197.1
170°	1269.2	1263.5	1254.8	1249.0	1246.2	1241.8	1234.6	1231.7	1228.8	1223.1	1210.1
172.5°	1262.0	1257.7	1251.9	1247.6	1246.2	1241.8	1236.1	1234.6	1234.6	1230.3	1220.2
175°	1251.9	1250.5	1246.2	1243.3	1240.4	1238.9	1234.6	1236.1	1237.5	1236.1	1227.4
177.5°	1238.9	1238.9	1236.1	1236.1	1234.6	1233.2	1231.7	1234.6	1238.9	1238.9	1233.2
180°	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4



TEST NUMBER: P303170

CATALOG NUMBER: CTW-F-5050-50L830-UNV-STD-6

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1407.7	1407.7	1407.7	1407.7	1407.7	1407.7	1407.7	1407.7	1407.7	1407.7	1407.7
2.5°	1412.0	1406.2	1404.8	1404.8	1403.4	1400.5	1399.0	1400.5	1406.2	1414.9	1406.2
5°	1406.2	1400.5	1397.6	1397.6	1397.6	1393.3	1393.3	1393.3	1400.5	1407.7	1399.0
7.5°	1396.2	1390.4	1388.9	1388.9	1387.5	1384.6	1383.2	1384.6	1390.4	1397.6	1388.9
10°	1383.2	1377.4	1376.0	1374.5	1373.1	1370.2	1368.7	1370.2	1376.0	1381.7	1374.5
12.5°	1365.9	1360.1	1357.2	1358.7	1355.8	1351.4	1351.4	1351.4	1358.7	1363.0	1355.8
15°	1344.2	1337.0	1335.6	1335.6	1334.1	1329.8	1329.8	1329.8	1337.0	1339.9	1331.2
17.5°	1318.3	1312.5	1311.1	1311.1	1308.2	1303.8	1303.8	1302.4	1311.1	1312.5	1306.7
20°	1290.9	1285.1	1282.2	1282.2	1279.3	1275.0	1275.0	1273.6	1283.7	1280.8	1276.4
22.5°	1260.6	1253.4	1250.5	1251.9	1249.0	1243.3	1243.3	1241.8	1250.5	1246.2	1240.4
25°	1227.4	1218.7	1217.3	1215.9	1214.4	1207.2	1207.2	1207.2	1215.9	1208.7	1204.3
27.5°	1188.5	1182.7	1181.2	1176.9	1176.9	1171.2	1171.2	1171.2	1179.8	1169.7	1168.3
30°	1149.5	1143.7	1143.7	1139.4	1138.0	1132.2	1132.2	1132.2	1140.9	1130.8	1127.9
32.5°	1110.6	1103.4	1100.5	1097.6	1097.6	1091.8	1091.8	1091.8	1097.6	1087.5	1084.6
35°	1067.3	1060.1	1060.1	1054.3	1054.3	1048.6	1047.1	1050.0	1051.4	1042.8	1039.9
37.5°	1022.6	1015.4	1015.4	1011.1	1011.1	1005.3	1005.3	1009.6	1005.3	1001.0	995.2
40°	977.9	972.1	969.2	964.9	966.3	962.0	960.6	963.5	960.6	956.2	949.0
42.5°	930.3	924.5	923.1	920.2	920.2	915.9	914.4	917.3	913.0	907.2	902.9
45°	882.7	878.4	876.9	874.0	874.0	868.3	868.3	869.7	863.9	861.1	855.3
47.5°	832.2	829.3	826.4	826.4	825.0	820.7	820.7	820.7	816.3	813.5	806.2
50°	783.2	778.8	777.4	777.4	777.4	773.1	771.6	768.7	765.9	764.4	757.2
52.5°	732.7	729.8	728.4	728.4	729.8	722.6	721.2	718.3	716.8	715.4	706.7
55°	682.2	679.3	676.4	679.3	677.9	672.1	670.7	672.1	667.8	663.5	656.2
57.5°	631.7	627.4	627.4	628.8	627.4	621.6	620.2	621.6	615.9	611.5	605.8
60°	581.2	576.9	575.5	576.9	575.5	569.7	568.3	568.3	563.9	561.1	555.3
62.5°	530.8	526.4	526.4	526.4	525.0	522.1	517.8	517.8	513.5	509.1	504.8
65°	477.4	473.1	474.5	474.5	474.5	471.6	467.3	468.7	461.5	458.7	454.3
67.5°	426.9	422.6	422.6	422.6	422.6	422.6	415.4	413.9	409.6	408.2	403.8
70°	373.6	367.8	369.2	367.8	366.3	364.9	360.6	359.1	354.8	354.8	350.5
72.5°	320.2	317.3	317.3	317.3	315.9	314.4	311.5	310.1	304.3	304.3	301.4
75°	266.8	266.8	265.4	265.4	265.4	263.9	261.1	259.6	253.8	255.3	252.4
77.5°	217.8	217.8	214.9	214.9	214.9	213.5	212.0	207.7	207.7	204.8	203.4
80°	167.3	167.3	165.9	165.9	165.9	164.4	163.0	161.5	158.7	157.2	154.3
82.5°	121.2	119.7	118.3	118.3	116.8	116.8	115.4	113.9	111.1	106.7	105.3
85°	73.6	73.6	72.1	72.1	70.7	70.7	67.8	64.9	62.0	59.1	57.7
87.5°	31.7	31.7	27.4	27.4	26.0	26.0	24.5	23.1	20.2	18.7	17.3
90°	2.9	4.3	4.3	4.3	5.8	5.8	5.8	7.2	7.2	7.2	7.2
92.5°	17.3	21.6	23.1	23.1	23.1	23.1	23.1	23.1	23.1	21.6	21.6
95°	28.8	31.7	38.9	41.8	44.7	47.6	47.6	47.6	47.6	46.2	43.3
97.5°	43.3	46.2	50.5	50.5	51.9	59.1	64.9	67.8	70.7	72.1	72.1
100°	67.8	62.0	67.8	72.1	70.7	70.7	73.6	79.3	85.1	88.0	89.4
102.5°	96.6	86.5	83.7	86.5	89.4	95.2	92.3	93.7	96.6	101.0	105.3
105°	132.7	119.7	109.6	108.2	108.2	113.9	121.2	119.7	118.3	118.3	118.3
107.5°	174.5	155.8	139.9	137.0	134.1	134.1	138.5	147.1	152.9	147.1	144.2
110°	222.1	196.2	180.3	171.6	165.9	160.1	160.1	164.4	171.6	178.8	181.7



TEST NUMBER: P303170

CATALOG NUMBER: CTW-F-5050-50L830-UNV-STD-6

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
112.5°	275.5	243.7	222.1	214.9	203.4	190.4	186.1	186.1	190.4	197.6	203.4
115°	330.3	297.1	266.8	258.2	246.6	226.4	214.9	212.0	212.0	214.9	220.7
117.5°	390.9	350.5	317.3	305.8	292.8	269.7	251.0	240.9	236.5	236.5	239.4
120°	444.2	409.6	375.0	359.1	343.3	317.3	292.8	276.9	266.8	261.1	259.6
122.5°	504.8	468.7	431.2	418.3	401.0	370.7	344.7	320.2	304.3	292.8	284.1
125°	559.6	526.4	487.5	471.6	455.8	425.5	399.5	372.1	350.5	331.7	317.3
127.5°	613.0	579.8	542.3	527.9	512.0	480.3	452.9	426.9	403.8	380.8	360.6
130°	666.3	634.6	597.1	581.2	566.8	536.5	506.2	480.3	460.1	437.0	413.9
132.5°	718.3	685.1	650.5	633.2	620.2	589.9	562.5	535.1	512.0	491.8	470.2
135°	767.3	735.6	701.0	683.7	670.7	643.3	615.9	591.3	565.4	545.2	525.0
137.5°	813.5	781.7	751.4	732.7	719.7	695.2	669.2	646.2	620.2	598.6	578.4
140°	856.7	826.4	797.6	781.7	767.3	742.8	719.7	701.0	673.6	653.4	633.2
142.5°	897.1	866.8	839.4	826.4	812.0	788.9	767.3	750.0	729.8	708.2	688.0
145°	933.2	907.2	881.2	868.3	855.3	833.7	813.5	797.6	780.3	758.7	739.9
147.5°	970.7	944.7	920.2	908.7	898.6	876.9	858.2	842.3	829.3	809.1	790.4
150°	1005.3	980.8	959.1	947.6	938.9	915.9	901.4	885.6	875.5	856.7	840.9
152.5°	1038.5	1016.8	995.2	986.5	976.4	954.8	940.4	924.5	918.7	900.0	887.0
155°	1070.2	1047.1	1029.8	1021.2	1011.1	990.9	979.3	964.9	960.6	943.3	930.3
157.5°	1099.0	1076.0	1060.1	1051.4	1042.8	1025.5	1013.9	1001.0	998.1	985.1	970.7
160°	1123.6	1101.9	1087.5	1081.7	1073.1	1057.2	1045.7	1035.6	1032.7	1024.0	1009.6
162.5°	1145.2	1126.4	1114.9	1107.7	1100.5	1086.1	1077.4	1065.9	1065.9	1058.7	1047.1
165°	1166.8	1149.5	1138.0	1132.2	1126.4	1114.9	1104.8	1097.6	1097.6	1091.8	1080.3
167.5°	1184.1	1168.3	1159.6	1153.8	1149.5	1138.0	1130.8	1123.6	1125.0	1122.1	1110.6
170°	1200.0	1185.6	1178.4	1174.0	1169.7	1159.6	1155.3	1148.1	1149.5	1149.5	1139.4
172.5°	1213.0	1200.0	1194.2	1189.9	1188.5	1178.4	1175.5	1171.2	1172.6	1175.5	1162.5
175°	1221.6	1211.5	1205.8	1204.3	1201.4	1195.7	1191.3	1189.9	1192.8	1197.1	1185.6
177.5°	1228.8	1220.2	1217.3	1217.3	1214.4	1208.7	1205.8	1205.8	1210.1	1215.9	1207.2
180°	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4



TEST NUMBER: P303170

CATALOG NUMBER: CTW-F-5050-50L830-UNV-STD-6

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1407.7	1407.7	1407.7	1407.7	1407.7	1407.7	1407.7	1407.7
2.5°	1409.1	1407.7	1406.2	1403.4	1401.9	1399.0	1397.6	1399.0
5°	1400.5	1399.0	1397.6	1396.2	1396.2	1394.7	1394.7	1396.2
7.5°	1390.4	1388.9	1387.5	1386.1	1386.1	1386.1	1386.1	1387.5
10°	1376.0	1373.1	1371.6	1370.2	1368.7	1368.7	1368.7	1370.2
12.5°	1357.2	1354.3	1351.4	1350.0	1350.0	1350.0	1350.0	1352.9
15°	1332.7	1331.2	1329.8	1328.4	1328.4	1326.9	1326.9	1329.8
17.5°	1308.2	1305.3	1302.4	1301.0	1299.5	1299.5	1298.1	1299.5
20°	1275.0	1272.1	1269.2	1267.8	1267.8	1266.3	1266.3	1267.8
22.5°	1238.9	1234.6	1233.2	1231.7	1231.7	1230.3	1230.3	1231.7
25°	1202.9	1197.1	1195.7	1194.2	1194.2	1192.8	1192.8	1192.8
27.5°	1165.4	1159.6	1158.2	1155.3	1156.7	1153.8	1152.4	1153.8
30°	1125.0	1119.2	1117.8	1114.9	1114.9	1112.0	1110.6	1112.0
32.5°	1081.7	1076.0	1074.5	1073.1	1074.5	1068.7	1067.3	1070.2
35°	1037.0	1031.2	1031.2	1028.4	1029.8	1024.0	1024.0	1025.5
37.5°	990.9	985.1	986.5	983.7	983.7	979.3	979.3	980.8
40°	944.7	940.4	937.5	937.5	938.9	933.2	933.2	931.7
42.5°	897.1	892.8	891.3	891.3	889.9	885.6	884.1	885.6
45°	849.5	845.2	845.2	843.7	843.7	838.0	839.4	838.0
47.5°	800.5	797.6	796.2	794.7	794.7	788.9	790.4	788.9
50°	751.4	750.0	748.6	747.1	747.1	741.3	744.2	741.3
52.5°	702.4	701.0	699.5	699.5	698.1	695.2	695.2	692.3
55°	653.4	650.5	650.5	650.5	649.0	644.7	647.6	644.7
57.5°	604.3	601.4	600.0	598.6	598.6	597.1	595.7	594.2
60°	553.8	551.0	551.0	548.1	548.1	548.1	546.6	545.2
62.5°	503.4	500.5	500.5	499.0	499.0	499.0	497.6	496.2
65°	454.3	450.0	450.0	448.6	448.6	448.6	447.1	445.7
67.5°	402.4	399.5	399.5	398.1	399.5	399.5	398.1	395.2
70°	349.0	346.2	346.2	344.7	346.2	346.2	344.7	341.8
72.5°	300.0	297.1	295.7	297.1	297.1	297.1	294.2	292.8
75°	251.0	246.6	246.6	248.1	246.6	248.1	245.2	248.1
77.5°	201.9	197.6	197.6	199.0	197.6	197.6	196.2	199.0
80°	151.4	148.6	148.6	150.0	148.6	148.6	147.1	150.0
82.5°	103.8	102.4	103.8	101.0	98.1	98.1	96.6	99.5
85°	57.7	56.2	54.8	54.8	53.4	53.4	51.9	54.8
87.5°	17.3	18.7	18.7	17.3	17.3	17.3	17.3	18.7
90°	7.2	7.2	7.2	8.7	8.7	10.1	10.1	10.1
92.5°	21.6	21.6	20.2	21.6	20.2	20.2	20.2	20.2
95°	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3
97.5°	72.1	73.6	72.1	73.6	72.1	70.7	72.1	70.7
100°	90.9	93.7	93.7	95.2	95.2	95.2	95.2	95.2
102.5°	108.2	111.1	111.1	112.5	112.5	113.9	113.9	112.5
105°	122.6	124.0	125.5	126.9	129.8	132.7	132.7	132.7
107.5°	142.8	145.7	144.2	145.7	147.1	147.1	147.1	147.1
110°	178.8	176.0	174.5	171.6	171.6	171.6	171.6	171.6



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**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
112.5°	209.1	212.0	212.0	212.0	212.0	210.6	207.7	207.7
115°	227.9	233.7	235.1	236.5	239.4	240.9	240.9	240.9
117.5°	242.3	248.1	249.5	252.4	255.3	258.2	259.6	261.1
120°	261.1	265.4	266.8	266.8	269.7	271.2	274.0	274.0
122.5°	282.7	284.1	284.1	284.1	285.6	287.0	288.5	288.5
125°	311.5	307.2	307.2	304.3	304.3	302.9	304.3	304.3
127.5°	347.6	341.8	338.9	334.6	331.7	327.4	327.4	327.4
130°	398.1	388.0	382.2	375.0	369.2	360.6	360.6	360.6
132.5°	452.9	437.0	432.7	425.5	416.8	408.2	406.7	406.7
135°	509.1	491.8	486.1	478.8	468.7	461.5	455.8	460.1
137.5°	562.5	546.6	545.2	539.4	526.4	517.8	516.3	516.3
140°	617.3	600.0	597.1	591.3	584.1	575.5	571.2	572.6
142.5°	670.7	653.4	650.5	646.2	636.1	628.8	624.5	626.0
145°	725.5	708.2	705.3	699.5	689.4	683.7	677.9	682.2
147.5°	777.4	761.5	757.2	750.0	744.2	737.0	732.7	731.2
150°	827.9	812.0	809.1	801.9	796.2	790.4	784.6	787.5
152.5°	875.5	863.9	858.2	851.0	846.6	840.9	836.5	838.0
155°	920.2	905.8	902.9	897.1	894.2	888.5	885.6	885.6
157.5°	959.1	950.5	946.2	941.8	937.5	934.6	930.3	931.7
160°	1001.0	992.3	988.0	985.1	979.3	979.3	975.0	976.4
162.5°	1039.9	1032.7	1028.4	1025.5	1022.6	1021.2	1016.8	1018.3
165°	1074.5	1067.3	1065.9	1061.5	1060.1	1060.1	1055.8	1055.8
167.5°	1106.2	1100.5	1096.2	1094.7	1091.8	1091.8	1088.9	1090.4
170°	1136.5	1130.8	1127.9	1125.0	1122.1	1122.1	1120.7	1120.7
172.5°	1162.5	1158.2	1156.7	1153.8	1152.4	1152.4	1151.0	1151.0
175°	1187.0	1182.7	1181.2	1178.4	1176.9	1175.5	1175.5	1175.5
177.5°	1208.7	1207.2	1204.3	1204.3	1201.4	1198.6	1195.7	1194.2
180°	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4	1227.4

(END OF REPORT)