

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: P303118

Luminaire Tested: **CTW-F-5050-20L940-UNV-STD-4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P303118  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-181-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: CTW-F-5050-20L940-UNV-STD-4  
Description: CORELITE CONTINUA LINEAR WALL LED LUMINAIRE  
50% UPLIGHT, 50% DOWNLIGHT, 2000 LUMEN PACKAGE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

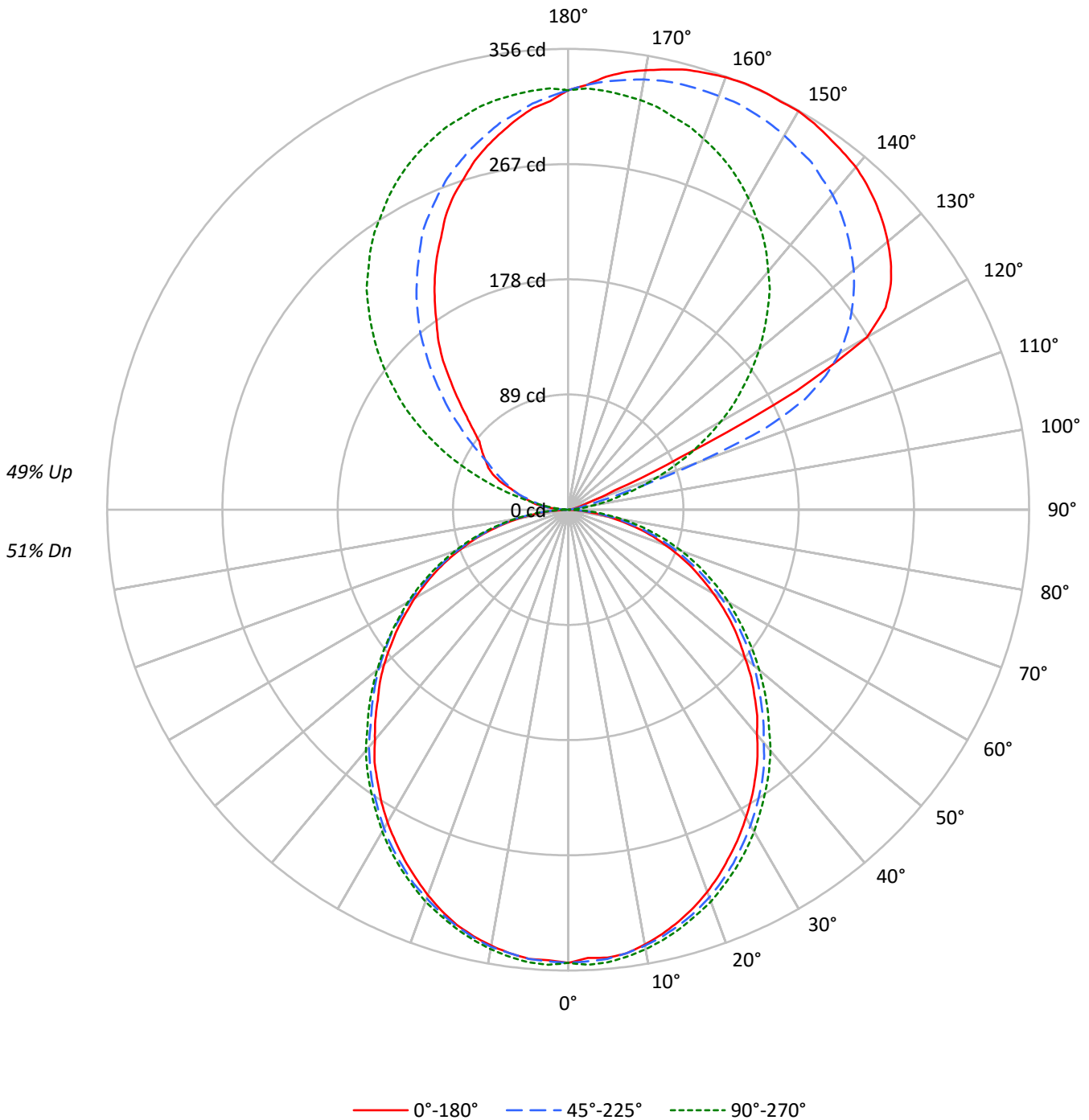
Lumens per Lamp: N/A  
Luminaire Lumens: 1843.0 lumens  
Efficiency: N/A  
Efficacy: 107.8 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.31  
Luminous Opening: Rectangular (W 4' x L: 0.12' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 17.1  
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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	98	93	89	86	90	86	83	80	73	71	68	61	59	58	50	49	48	42
2	89	81	75	70	82	75	70	65	64	60	57	54	51	48	44	42	40	35
3	81	72	64	58	75	66	60	55	56	51	47	47	44	41	39	36	34	30
4	74	63	55	49	68	59	52	46	50	45	40	42	38	35	35	32	29	26
5	68	56	48	42	63	52	45	40	45	39	35	38	33	30	31	28	25	22
6	63	50	42	36	58	47	40	34	40	35	30	34	30	26	28	25	22	19
7	58	46	38	32	53	42	35	30	37	31	27	31	27	23	26	22	20	17
8	54	41	34	28	50	39	32	27	33	28	24	28	24	21	24	20	18	15
9	50	38	30	25	46	35	28	24	31	25	21	26	22	19	22	18	16	14
10	47	35	27	23	43	32	26	21	28	23	19	24	20	17	20	17	15	13

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	7537	7537	7537
5°	7507	7585	7527
10°	7456	7535	7476
15°	7341	7462	7402
20°	7196	7381	7258
25°	7012	7269	7097
30°	6824	7137	6935
35°	6623	6978	6741
40°	6374	6829	6525
45°	6193	6631	6330
50°	5968	6450	6209
55°	5810	6283	6047
60°	5580	6161	5890
65°	5364	6006	5731
70°	5042	5835	5495
75°	4641	5614	5240
80°	3905	5244	4686
85°	2223	4668	3557



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	33.0	1.8
10°-20°	93.6	5.1
20°-30°	138.6	7.5
30°-40°	162.5	8.8
40°-50°	163.5	8.9
50°-60°	145.8	7.9
60°-70°	111.9	6.1
70°-80°	66.5	3.6
80°-90°	18.0	1.0
90°-100°	8.6	0.5
100°-110°	38.3	2.1
110°-120°	109.0	5.9
120°-130°	160.6	8.7
130°-140°	173.2	9.4
140°-150°	164.9	8.9
150°-160°	135.7	7.4
160°-170°	88.7	4.8
170°-180°	30.8	1.7
0°-30°	265.2	14.4
0°-40°	427.7	23.2
0°-60°	737.0	40.0
0°-90°	933.4	50.6
90°-120°	155.8	8.5
90°-150°	654.4	35.5
90°-180°	910.0	49.4
0°-180°	1843.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	350	350	350	350	350	
5°	347	348	351	348	348	33
15°	329	332	335	333	332	93
25°	295	302	306	303	299	136
35°	252	260	266	263	256	158
45°	203	211	218	214	208	157
55°	155	162	167	166	161	138
65°	105	111	118	115	112	104
75°	56	60	68	65	63	59
85°	9	13	19	17	14	12
90°	1	1	0	1	2	0
95°	2	2	6	12	11	2
105°	9	22	43	32	35	11
115°	95	202	105	58	64	116
125°	304	267	165	93	82	269
135°	336	304	218	148	120	259
145°	351	328	261	204	177	220
155°	356	338	293	253	232	165
165°	352	340	314	289	279	100
175°	336	332	325	315	311	32
180°	324	324	324	324	324	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	350.1	350.1	350.1	350.1	350.1	350.1	350.1	350.1	350.1	350.1	350.1
2.5°	346.5	346.5	347.4	348.3	349.2	349.2	350.1	350.1	350.1	350.1	349.2
5°	347.4	346.5	347.4	347.4	347.4	347.4	348.3	349.2	349.2	349.2	348.3
7.5°	345.6	344.7	345.6	345.6	344.7	344.7	345.6	346.5	346.5	346.5	345.6
10°	341.1	340.2	341.1	341.1	341.1	341.1	342.0	342.0	342.9	342.9	342.0
12.5°	335.7	335.7	335.7	336.6	335.7	336.6	336.6	337.5	338.4	338.4	337.5
15°	329.4	329.4	330.3	331.2	330.3	331.2	331.2	332.1	332.1	333.0	332.1
17.5°	322.2	322.2	323.1	324.0	324.0	324.0	324.9	324.9	325.8	325.8	325.8
20°	314.1	314.1	314.1	315.9	315.9	315.9	315.9	316.8	318.6	318.6	318.6
22.5°	305.1	305.1	305.1	306.9	306.9	306.9	306.9	307.8	309.6	310.5	310.5
25°	295.2	295.2	295.2	297.0	297.0	297.0	297.0	298.8	300.6	300.6	301.5
27.5°	285.3	285.3	286.2	287.1	287.1	287.1	288.0	288.9	290.7	291.6	291.6
30°	274.5	274.5	274.5	276.3	276.3	277.2	277.2	279.0	279.9	281.7	281.7
32.5°	263.7	263.7	264.6	265.5	265.5	265.5	266.4	268.2	269.1	270.0	270.9
35°	252.0	252.0	252.9	253.8	254.7	254.7	254.7	256.5	257.4	259.2	260.1
37.5°	240.3	240.3	241.2	242.1	243.0	243.0	243.0	244.8	245.7	247.5	248.4
40°	226.8	226.8	226.8	228.6	228.6	229.5	229.5	230.4	232.2	234.0	234.9
42.5°	216.0	215.1	215.1	216.0	216.9	217.8	217.8	218.7	220.5	222.3	223.2
45°	203.4	203.4	203.4	204.3	205.2	205.2	206.1	207.0	207.9	210.6	210.6
47.5°	191.7	190.8	190.8	192.6	192.6	193.5	193.5	194.4	196.2	198.0	198.9
50°	178.2	179.1	179.1	180.0	180.9	180.9	181.8	181.8	183.6	185.4	187.2
52.5°	166.5	166.5	166.5	167.4	168.3	169.2	169.2	170.1	171.0	172.8	174.6
55°	154.8	154.8	154.8	155.7	155.7	156.6	156.6	157.5	158.4	160.2	162.0
57.5°	142.2	142.2	142.2	143.1	144.0	144.0	144.9	144.9	145.8	147.6	149.4
60°	129.6	129.6	129.6	130.5	131.4	131.4	132.3	132.3	133.2	135.0	136.8
62.5°	117.0	117.9	117.0	117.9	118.8	118.8	119.7	119.7	121.5	121.5	123.3
65°	105.3	105.3	105.3	105.3	106.2	106.2	106.2	108.0	108.0	109.8	110.7
67.5°	92.7	92.7	92.7	92.7	93.6	94.5	94.5	95.4	96.3	96.3	98.1
70°	80.1	81.0	81.0	80.1	81.0	81.9	81.9	82.8	83.7	83.7	85.5
72.5°	68.4	68.4	68.4	68.4	68.4	69.3	70.2	70.2	71.1	72.0	72.9
75°	55.8	55.8	56.7	55.8	55.8	56.7	57.6	58.5	58.5	59.4	60.3
77.5°	43.2	44.1	44.1	44.1	45.0	45.0	45.0	45.9	46.8	46.8	47.7
80°	31.5	32.4	32.4	32.4	33.3	32.4	33.3	34.2	34.2	35.1	36.0
82.5°	19.8	19.8	20.7	20.7	20.7	20.7	21.6	22.5	22.5	22.5	24.3
85°	9.0	9.0	9.9	9.9	9.9	9.9	10.8	10.8	11.7	11.7	12.6
87.5°	0.9	0.9	0.9	0.9	1.8	0.9	1.8	1.8	1.8	1.8	2.7
90°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
92.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
95°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
97.5°	2.7	2.7	2.7	2.7	2.7	2.7	3.6	3.6	3.6	3.6	4.5
100°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	5.4	5.4	6.3	7.2
102.5°	6.3	6.3	6.3	6.3	7.2	7.2	7.2	8.1	8.1	9.9	11.7
105°	9.0	9.0	9.0	9.9	9.9	9.9	10.8	11.7	13.5	17.1	22.5
107.5°	12.6	13.5	13.5	13.5	15.3	15.3	17.1	19.8	24.3	35.1	49.5
110°	19.8	20.7	20.7	22.5	26.1	27.9	31.5	41.4	55.8	78.3	105.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	38.7	40.5	42.3	47.7	57.6	64.8	74.7	98.1	124.2	153.9	165.6
115°	95.4	96.3	104.4	115.2	137.7	150.3	162.0	182.7	198.9	202.5	201.6
117.5°	198.9	203.4	207.9	215.1	225.0	229.5	234.9	239.4	235.8	231.3	224.1
120°	266.4	264.6	266.4	267.3	266.4	266.4	265.5	261.9	255.6	249.3	242.1
122.5°	290.7	289.8	288.9	288.0	284.4	283.5	281.7	276.3	270.0	262.8	255.6
125°	304.2	303.3	301.5	299.7	297.0	295.2	293.4	288.0	281.7	274.5	267.3
127.5°	314.1	313.2	311.4	309.6	306.9	305.1	302.4	297.9	291.6	285.3	278.1
130°	322.2	321.3	319.5	318.6	315.0	314.1	311.4	306.0	300.6	295.2	288.0
132.5°	329.4	328.5	326.7	325.8	323.1	321.3	319.5	314.1	307.8	302.4	296.1
135°	335.7	334.8	333.9	333.0	330.3	328.5	325.8	321.3	315.9	310.5	304.2
137.5°	341.1	340.2	339.3	337.5	335.7	333.9	331.2	326.7	323.1	317.7	311.4
140°	345.6	344.7	342.9	342.0	340.2	338.4	336.6	333.0	328.5	324.0	317.7
142.5°	348.3	348.3	346.5	346.5	343.8	342.0	340.2	336.6	333.9	329.4	322.2
145°	351.0	351.0	350.1	349.2	347.4	345.6	343.8	341.1	337.5	333.9	327.6
147.5°	353.7	352.8	352.8	351.9	350.1	348.3	347.4	344.7	341.1	337.5	330.3
150°	355.5	354.6	354.6	353.7	351.9	350.1	349.2	347.4	343.8	340.2	333.9
152.5°	355.5	355.5	356.4	354.6	352.8	351.9	351.0	348.3	346.5	342.0	336.6
155°	356.4	356.4	356.4	355.5	352.8	351.9	351.0	349.2	347.4	343.8	338.4
157.5°	356.4	356.4	356.4	355.5	352.8	351.9	351.0	350.1	348.3	344.7	340.2
160°	355.5	355.5	355.5	355.5	353.7	351.9	351.0	350.1	348.3	344.7	340.2
162.5°	353.7	353.7	353.7	353.7	351.9	351.0	350.1	349.2	348.3	343.8	340.2
165°	351.9	351.9	351.9	351.0	349.2	349.2	348.3	347.4	346.5	342.9	340.2
167.5°	348.3	348.3	348.3	347.4	345.6	345.6	345.6	344.7	343.8	341.1	339.3
170°	344.7	344.7	344.7	343.8	342.9	342.9	342.9	342.0	342.0	339.3	337.5
172.5°	341.1	341.1	341.1	340.2	338.4	338.4	338.4	339.3	338.4	336.6	334.8
175°	335.7	334.8	334.8	334.8	334.8	333.9	334.8	334.8	334.8	333.0	332.1
177.5°	328.5	328.5	328.5	329.4	329.4	329.4	329.4	330.3	330.3	329.4	328.5
180°	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0



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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	350.1	350.1	350.1	350.1	350.1	350.1	350.1	350.1	350.1	350.1	350.1
2.5°	348.3	349.2	348.3	348.3	348.3	348.3	348.3	349.2	351.0	351.9	351.0
5°	347.4	348.3	347.4	347.4	347.4	347.4	347.4	348.3	350.1	351.0	350.1
7.5°	344.7	345.6	344.7	344.7	344.7	344.7	344.7	345.6	348.3	348.3	348.3
10°	341.1	342.0	341.1	341.1	341.1	342.0	342.0	342.9	344.7	344.7	344.7
12.5°	336.6	337.5	336.6	336.6	337.5	337.5	336.6	338.4	340.2	340.2	340.2
15°	331.2	332.1	331.2	331.2	331.2	332.1	332.1	333.0	334.8	334.8	334.8
17.5°	324.0	324.9	324.9	324.9	325.8	325.8	325.8	326.7	328.5	328.5	328.5
20°	317.7	317.7	317.7	317.7	317.7	318.6	318.6	320.4	322.2	322.2	322.2
22.5°	309.6	309.6	310.5	309.6	310.5	311.4	310.5	312.3	314.1	314.1	314.1
25°	300.6	301.5	301.5	301.5	301.5	302.4	302.4	304.2	305.1	306.0	306.0
27.5°	291.6	291.6	292.5	292.5	292.5	293.4	293.4	295.2	297.0	297.0	297.0
30°	281.7	281.7	282.6	283.5	282.6	283.5	283.5	285.3	286.2	287.1	287.1
32.5°	270.9	270.9	272.7	272.7	272.7	273.6	273.6	274.5	276.3	276.3	277.2
35°	260.1	260.1	261.9	261.9	261.9	262.8	262.8	263.7	265.5	265.5	266.4
37.5°	248.4	249.3	250.2	251.1	250.2	251.1	251.1	252.9	253.8	254.7	254.7
40°	236.7	236.7	237.6	238.5	238.5	239.4	240.3	241.2	243.0	243.0	243.0
42.5°	223.2	224.1	225.0	225.9	225.9	226.8	227.7	227.7	228.6	229.5	229.5
45°	211.5	212.4	212.4	214.2	215.1	215.1	215.1	216.0	216.9	217.8	217.8
47.5°	199.8	200.7	201.6	203.4	202.5	202.5	203.4	203.4	204.3	205.2	206.1
50°	187.2	188.1	189.0	189.9	189.9	190.8	190.8	191.7	192.6	192.6	193.5
52.5°	174.6	175.5	177.3	177.3	178.2	178.2	179.1	179.1	180.0	180.0	180.9
55°	162.0	162.9	164.7	165.6	165.6	166.5	166.5	167.4	167.4	167.4	168.3
57.5°	149.4	150.3	152.1	153.0	153.0	153.9	153.9	154.8	154.8	154.8	155.7
60°	136.8	137.7	139.5	140.4	140.4	141.3	141.3	142.2	142.2	143.1	143.1
62.5°	125.1	125.1	126.9	127.8	127.8	127.8	128.7	129.6	129.6	130.5	131.4
65°	111.6	112.5	114.3	115.2	114.3	115.2	116.1	117.0	117.0	117.9	117.9
67.5°	99.0	99.9	101.7	101.7	101.7	102.6	103.5	104.4	104.4	105.3	105.3
70°	86.4	86.4	88.2	89.1	89.1	90.0	90.9	91.8	91.8	92.7	92.7
72.5°	72.9	73.8	75.6	76.5	77.4	77.4	78.3	78.3	80.1	80.1	80.1
75°	61.2	61.2	63.0	63.9	64.8	64.8	65.7	65.7	66.6	67.5	67.5
77.5°	48.6	49.5	50.4	51.3	52.2	52.2	53.1	53.1	54.0	54.9	54.9
80°	36.9	36.9	38.7	38.7	39.6	39.6	40.5	41.4	42.3	42.3	42.3
82.5°	24.3	25.2	27.0	27.0	27.9	27.9	28.8	28.8	29.7	29.7	30.6
85°	13.5	14.4	15.3	15.3	16.2	16.2	17.1	18.0	18.0	18.9	18.9
87.5°	2.7	4.5	4.5	5.4	5.4	6.3	6.3	7.2	8.1	8.1	8.1
90°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.9	0.0	0.9
92.5°	0.9	0.9	0.9	1.8	1.8	1.8	2.7	2.7	2.7	2.7	3.6
95°	2.7	2.7	3.6	4.5	5.4	6.3	8.1	9.0	8.1	6.3	6.3
97.5°	4.5	6.3	8.1	11.7	13.5	15.3	18.0	17.1	15.3	12.6	11.7
100°	9.0	12.6	17.1	24.3	27.9	30.6	31.5	29.7	25.2	20.7	18.9
102.5°	16.2	24.3	35.1	46.8	49.5	50.4	48.6	44.1	37.8	31.5	27.0
105°	33.3	50.4	65.7	74.7	75.6	73.8	69.3	60.3	52.2	43.2	37.8
107.5°	72.0	94.5	103.5	104.4	101.7	97.2	88.2	78.3	68.4	58.5	50.4
110°	127.8	137.7	135.9	127.8	123.3	118.8	107.1	96.3	84.6	72.9	64.8





TEST NUMBER: P303118

CATALOG NUMBER: CTW-F-5050-20L940-UNV-STD-4

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	170.1	167.4	159.3	148.5	143.1	137.7	126.0	114.3	99.9	89.1	80.1
115°	197.1	189.0	178.2	166.5	161.1	155.7	144.0	130.5	117.0	105.3	95.4
117.5°	216.0	206.1	195.3	183.6	177.3	171.9	159.3	145.8	133.2	120.6	111.6
120°	231.3	220.5	209.7	198.0	193.5	187.2	174.6	161.1	147.6	135.9	126.9
122.5°	245.7	234.9	223.2	213.3	207.0	201.6	188.1	175.5	162.9	151.2	142.2
125°	259.2	248.4	236.7	225.9	220.5	214.2	200.7	189.0	176.4	164.7	156.6
127.5°	269.1	260.1	250.2	239.4	233.1	226.8	213.3	201.6	189.9	179.1	170.1
130°	279.0	270.0	261.0	251.1	245.7	237.6	225.9	213.3	202.5	192.6	184.5
132.5°	287.1	279.9	270.0	261.0	254.7	248.4	236.7	225.0	215.1	205.2	197.1
135°	296.1	288.0	279.0	270.0	264.6	259.2	248.4	236.7	227.7	217.8	209.7
137.5°	303.3	295.2	287.1	278.1	272.7	267.3	258.3	247.5	238.5	230.4	221.4
140°	309.6	301.5	294.3	285.3	279.9	275.4	266.4	257.4	250.2	240.3	233.1
142.5°	315.0	306.9	300.6	291.6	286.2	282.6	274.5	265.5	259.2	251.1	244.8
145°	319.5	312.3	306.0	297.9	293.4	289.8	281.7	274.5	268.2	261.0	254.7
147.5°	324.9	316.8	311.4	303.3	299.7	296.1	288.9	281.7	276.3	269.1	263.7
150°	328.5	322.2	316.8	308.7	305.1	301.5	295.2	289.8	284.4	278.1	272.7
152.5°	331.2	325.8	320.4	313.2	310.5	307.8	301.5	296.1	291.6	286.2	280.8
155°	333.9	328.5	324.9	317.7	315.0	312.3	306.9	302.4	297.9	293.4	288.0
157.5°	335.7	331.2	327.6	321.3	319.5	316.8	312.3	307.8	304.2	299.7	295.2
160°	336.6	333.0	329.4	324.0	322.2	320.4	315.9	312.3	309.6	305.1	301.5
162.5°	336.6	333.9	330.3	325.8	324.0	322.2	319.5	315.9	314.1	310.5	306.9
165°	336.6	334.8	331.2	327.6	325.8	324.9	322.2	319.5	317.7	314.1	311.4
167.5°	335.7	333.9	331.2	328.5	327.6	325.8	324.0	321.3	320.4	318.6	315.0
170°	334.8	333.9	331.2	329.4	328.5	327.6	325.8	324.0	323.1	321.3	318.6
172.5°	333.0	333.0	331.2	329.4	328.5	327.6	325.8	324.9	324.9	323.1	321.3
175°	331.2	330.3	329.4	327.6	326.7	326.7	325.8	324.9	325.8	324.9	324.0
177.5°	326.7	327.6	325.8	325.8	324.9	324.9	324.9	324.9	325.8	325.8	324.9
180°	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0



TEST NUMBER: P303118

CATALOG NUMBER: CTW-F-5050-20L940-UNV-STD-4

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	350.1	350.1	350.1	350.1	350.1	350.1	350.1	350.1	350.1	350.1	350.1
2.5°	351.0	350.1	349.2	349.2	349.2	347.4	347.4	348.3	349.2	351.0	349.2
5°	350.1	349.2	348.3	348.3	348.3	346.5	346.5	347.4	348.3	350.1	348.3
7.5°	347.4	347.4	345.6	345.6	345.6	343.8	343.8	344.7	345.6	347.4	345.6
10°	344.7	343.8	342.0	342.0	342.0	341.1	340.2	341.1	342.9	343.8	342.0
12.5°	340.2	339.3	338.4	337.5	337.5	335.7	335.7	336.6	338.4	339.3	338.4
15°	334.8	333.9	333.0	332.1	332.1	331.2	330.3	331.2	333.0	333.9	332.1
17.5°	328.5	327.6	326.7	325.8	325.8	324.9	324.0	324.9	326.7	326.7	325.8
20°	321.3	320.4	319.5	319.5	319.5	317.7	317.7	317.7	319.5	319.5	317.7
22.5°	314.1	313.2	311.4	311.4	311.4	310.5	309.6	310.5	312.3	310.5	309.6
25°	306.0	304.2	303.3	303.3	302.4	300.6	301.5	301.5	303.3	302.4	300.6
27.5°	297.0	296.1	295.2	294.3	293.4	292.5	292.5	292.5	294.3	292.5	291.6
30°	287.1	286.2	285.3	284.4	284.4	282.6	282.6	283.5	284.4	282.6	281.7
32.5°	276.3	275.4	274.5	274.5	273.6	272.7	272.7	272.7	273.6	271.8	270.9
35°	266.4	264.6	263.7	263.7	262.8	261.9	261.9	262.8	262.8	261.0	260.1
37.5°	254.7	253.8	252.9	252.0	252.0	251.1	251.1	251.1	251.1	249.3	248.4
40°	243.9	242.1	241.2	240.3	240.3	240.3	240.3	240.3	239.4	237.6	235.8
42.5°	229.5	228.6	227.7	227.7	226.8	226.8	226.8	226.8	225.9	225.0	224.1
45°	217.8	216.9	216.0	215.1	216.0	216.0	215.1	215.1	214.2	213.3	212.4
47.5°	206.1	205.2	204.3	203.4	204.3	204.3	203.4	203.4	202.5	202.5	200.7
50°	193.5	192.6	191.7	191.7	192.6	191.7	191.7	190.8	190.8	189.9	188.1
52.5°	181.8	180.9	179.1	179.1	180.0	180.0	179.1	178.2	178.2	178.2	176.4
55°	169.2	168.3	167.4	167.4	168.3	167.4	166.5	165.6	166.5	165.6	163.8
57.5°	156.6	155.7	154.8	154.8	155.7	154.8	153.9	153.9	153.0	153.0	152.1
60°	144.0	143.1	142.2	143.1	143.1	142.2	141.3	141.3	141.3	139.5	139.5
62.5°	131.4	129.6	129.6	129.6	130.5	129.6	128.7	128.7	127.8	126.9	126.9
65°	117.9	117.0	117.9	117.0	117.0	117.0	116.1	116.1	115.2	114.3	114.3
67.5°	105.3	104.4	105.3	104.4	104.4	104.4	104.4	103.5	102.6	102.6	101.7
70°	92.7	91.8	92.7	91.8	91.8	91.8	91.8	90.9	90.0	89.1	89.1
72.5°	80.1	79.2	79.2	79.2	79.2	79.2	78.3	78.3	77.4	77.4	77.4
75°	67.5	66.6	66.6	66.6	66.6	65.7	65.7	65.7	64.8	64.8	64.8
77.5°	54.9	54.0	54.9	54.9	54.0	54.0	54.0	54.0	53.1	52.2	52.2
80°	42.3	42.3	42.3	42.3	42.3	42.3	41.4	41.4	41.4	40.5	40.5
82.5°	30.6	30.6	30.6	30.6	29.7	29.7	29.7	29.7	28.8	27.9	27.9
85°	18.9	18.9	18.9	18.9	18.0	18.9	18.0	17.1	17.1	16.2	15.3
87.5°	9.0	9.0	8.1	7.2	7.2	7.2	6.3	7.2	6.3	5.4	5.4
90°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
92.5°	4.5	5.4	6.3	6.3	6.3	5.4	5.4	5.4	5.4	5.4	4.5
95°	7.2	9.0	9.9	10.8	11.7	12.6	12.6	12.6	11.7	11.7	11.7
97.5°	11.7	12.6	13.5	13.5	14.4	15.3	17.1	18.0	18.9	19.8	18.9
100°	18.0	17.1	18.9	18.9	18.9	18.9	19.8	20.7	22.5	23.4	24.3
102.5°	25.2	23.4	23.4	24.3	24.3	25.2	25.2	25.2	26.1	27.0	27.9
105°	34.2	31.5	30.6	29.7	29.7	30.6	32.4	32.4	32.4	32.4	32.4
107.5°	45.0	41.4	37.8	36.9	36.0	36.9	37.8	39.6	40.5	40.5	39.6
110°	57.6	52.2	47.7	45.9	44.1	43.2	44.1	44.1	45.9	47.7	48.6



TEST NUMBER: P303118

CATALOG NUMBER: CTW-F-5050-20L940-UNV-STD-4

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
112.5°	72.0	63.9	57.6	56.7	54.0	51.3	50.4	50.4	51.3	52.2	54.0
115°	85.5	77.4	70.2	67.5	64.8	60.3	58.5	56.7	57.6	57.6	59.4
117.5°	101.7	91.8	83.7	80.1	76.5	71.1	66.6	64.8	63.9	63.9	63.9
120°	117.0	108.0	97.2	93.6	90.0	83.7	78.3	73.8	71.1	69.3	69.3
122.5°	131.4	122.4	112.5	108.0	103.5	97.2	90.9	84.6	81.0	77.4	75.6
125°	146.7	137.7	126.9	123.3	117.9	110.7	104.4	98.1	92.7	88.2	84.6
127.5°	161.1	152.1	141.3	136.8	133.2	126.0	117.9	111.6	105.3	100.8	95.4
130°	174.6	165.6	155.7	151.2	147.6	140.4	132.3	126.0	119.7	114.3	108.0
132.5°	188.1	179.1	170.1	165.6	161.1	154.8	146.7	140.4	133.2	127.8	123.3
135°	200.7	191.7	183.6	179.1	175.5	168.3	161.1	154.8	147.6	142.2	137.7
137.5°	213.3	204.3	196.2	191.7	188.1	181.8	175.5	169.2	162.0	156.6	151.2
140°	224.1	216.0	207.9	204.3	200.7	194.4	189.0	183.6	177.3	171.0	165.6
142.5°	235.8	227.7	220.5	216.0	212.4	206.1	200.7	196.2	190.8	184.5	180.0
145°	247.5	238.5	232.2	226.8	224.1	217.8	212.4	208.8	204.3	198.9	194.4
147.5°	256.5	249.3	243.9	240.3	235.8	229.5	224.1	220.5	216.9	211.5	207.9
150°	265.5	259.2	252.9	251.1	247.5	242.1	237.6	233.1	229.5	224.1	220.5
152.5°	275.4	268.2	263.7	260.1	257.4	252.0	247.5	244.8	243.0	236.7	234.0
155°	283.5	277.2	271.8	269.1	267.3	261.9	257.4	255.6	252.9	249.3	245.7
157.5°	290.7	285.3	279.9	277.2	276.3	270.9	267.3	264.6	262.8	260.1	256.5
160°	297.0	292.5	287.1	285.3	283.5	279.0	275.4	273.6	272.7	270.0	267.3
162.5°	303.3	298.8	294.3	292.5	290.7	287.1	283.5	281.7	280.8	279.0	276.3
165°	307.8	304.2	300.6	298.8	297.9	293.4	290.7	289.8	288.9	288.0	285.3
167.5°	313.2	309.6	306.0	305.1	303.3	300.6	297.9	297.0	296.1	296.1	293.4
170°	316.8	314.1	311.4	310.5	309.6	306.0	304.2	303.3	303.3	303.3	300.6
172.5°	320.4	318.6	315.0	315.0	314.1	311.4	309.6	309.6	308.7	309.6	306.9
175°	323.1	321.3	318.6	318.6	317.7	315.9	314.1	314.1	315.0	315.9	313.2
177.5°	324.9	323.1	321.3	321.3	320.4	319.5	317.7	318.6	319.5	320.4	318.6
180°	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0



TEST NUMBER: P303118

CATALOG NUMBER: CTW-F-5050-20L940-UNV-STD-4

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	350.1	350.1	350.1	350.1	350.1	350.1	350.1	350.1
2.5°	351.0	350.1	349.2	349.2	348.3	348.3	348.3	348.3
5°	349.2	348.3	348.3	347.4	347.4	347.4	348.3	348.3
7.5°	347.4	345.6	345.6	344.7	344.7	344.7	345.6	345.6
10°	342.9	342.9	342.0	341.1	341.1	341.1	341.1	342.0
12.5°	338.4	337.5	337.5	335.7	335.7	336.6	336.6	337.5
15°	333.0	332.1	331.2	331.2	331.2	331.2	331.2	332.1
17.5°	326.7	325.8	324.9	324.0	324.0	324.9	324.9	324.9
20°	318.6	316.8	316.8	315.9	315.9	315.9	316.8	316.8
22.5°	309.6	307.8	307.8	306.9	306.9	307.8	307.8	307.8
25°	300.6	299.7	298.8	297.9	297.9	297.9	298.8	298.8
27.5°	291.6	289.8	289.8	288.9	288.9	288.9	288.9	288.9
30°	281.7	279.9	279.0	279.0	278.1	278.1	279.0	279.0
32.5°	270.0	269.1	268.2	268.2	267.3	268.2	268.2	268.2
35°	259.2	257.4	257.4	257.4	256.5	257.4	256.5	256.5
37.5°	248.4	245.7	245.7	245.7	245.7	245.7	245.7	245.7
40°	234.9	233.1	233.1	232.2	232.2	232.2	232.2	232.2
42.5°	223.2	221.4	221.4	220.5	220.5	220.5	220.5	220.5
45°	211.5	209.7	209.7	209.7	208.8	208.8	208.8	207.9
47.5°	198.9	198.0	198.0	197.1	197.1	197.1	197.1	197.1
50°	187.2	186.3	186.3	185.4	186.3	185.4	185.4	185.4
52.5°	174.6	174.6	173.7	173.7	173.7	172.8	172.8	172.8
55°	162.9	162.0	162.0	161.1	162.0	161.1	161.1	161.1
57.5°	150.3	150.3	150.3	149.4	149.4	148.5	148.5	148.5
60°	137.7	137.7	137.7	136.8	137.7	136.8	136.8	136.8
62.5°	126.0	126.0	125.1	125.1	125.1	124.2	124.2	124.2
65°	113.4	112.5	112.5	113.4	112.5	112.5	112.5	112.5
67.5°	101.7	101.7	100.8	100.8	100.8	99.9	99.9	99.9
70°	89.1	89.1	88.2	88.2	88.2	87.3	88.2	87.3
72.5°	76.5	76.5	75.6	76.5	75.6	74.7	75.6	75.6
75°	63.9	63.9	63.9	63.9	63.9	63.0	63.0	63.0
77.5°	52.2	52.2	51.3	51.3	51.3	51.3	51.3	50.4
80°	39.6	39.6	38.7	38.7	38.7	38.7	38.7	37.8
82.5°	27.9	27.0	27.0	27.0	27.0	26.1	26.1	26.1
85°	15.3	15.3	15.3	15.3	14.4	15.3	14.4	14.4
87.5°	5.4	5.4	5.4	4.5	4.5	5.4	5.4	4.5
90°	0.9	0.9	1.8	1.8	1.8	1.8	1.8	1.8
92.5°	4.5	4.5	4.5	3.6	3.6	3.6	3.6	3.6
95°	11.7	11.7	11.7	10.8	10.8	11.7	10.8	10.8
97.5°	18.9	18.9	18.9	18.9	18.0	18.9	18.0	18.0
100°	24.3	25.2	25.2	25.2	25.2	25.2	25.2	26.1
102.5°	28.8	28.8	28.8	28.8	29.7	29.7	29.7	29.7
105°	33.3	33.3	33.3	34.2	34.2	35.1	35.1	35.1
107.5°	39.6	39.6	39.6	39.6	40.5	40.5	40.5	40.5
110°	48.6	48.6	47.7	47.7	46.8	46.8	46.8	46.8



TEST NUMBER: P303118

CATALOG NUMBER: CTW-F-5050-20L940-UNV-STD-4

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
112.5°	55.8	56.7	56.7	56.7	56.7	56.7	56.7	56.7
115°	60.3	62.1	62.1	63.0	63.0	63.9	63.9	63.9
117.5°	64.8	66.6	66.6	67.5	67.5	68.4	69.3	69.3
120°	70.2	71.1	71.1	72.0	72.0	72.9	72.9	72.9
122.5°	75.6	75.6	75.6	76.5	76.5	76.5	77.4	77.4
125°	82.8	81.9	81.9	81.0	81.0	81.0	81.0	81.9
127.5°	92.7	90.0	89.1	89.1	88.2	87.3	87.3	86.4
130°	103.5	101.7	99.9	99.0	97.2	96.3	95.4	95.4
132.5°	117.9	114.3	112.5	110.7	108.9	107.1	107.1	106.2
135°	133.2	128.7	127.8	125.1	123.3	121.5	119.7	119.7
137.5°	146.7	143.1	142.2	140.4	138.6	135.9	135.9	134.1
140°	161.1	157.5	155.7	153.9	152.1	150.3	150.3	150.3
142.5°	175.5	171.9	170.1	168.3	166.5	164.7	163.8	164.7
145°	189.9	186.3	184.5	182.7	180.9	179.1	178.2	177.3
147.5°	203.4	199.8	198.0	197.1	195.3	193.5	192.6	191.7
150°	216.9	213.3	212.4	210.6	208.8	207.0	206.1	206.1
152.5°	229.5	226.8	225.0	223.2	222.3	220.5	219.6	219.6
155°	243.0	240.3	238.5	237.6	235.8	234.0	234.0	232.2
157.5°	254.7	252.0	250.2	249.3	247.5	246.6	246.6	246.6
160°	265.5	262.8	261.9	260.1	258.3	258.3	258.3	258.3
162.5°	275.4	273.6	272.7	270.9	269.1	269.1	269.1	268.2
165°	284.4	282.6	281.7	279.9	279.0	279.0	279.0	279.0
167.5°	293.4	290.7	289.8	288.9	288.0	288.0	288.0	288.0
170°	300.6	298.8	297.9	297.0	296.1	296.1	296.1	296.1
172.5°	307.8	306.9	306.0	304.2	304.2	304.2	305.1	304.2
175°	314.1	313.2	312.3	311.4	310.5	311.4	311.4	311.4
177.5°	319.5	318.6	318.6	317.7	316.8	315.9	316.8	315.9
180°	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0

(END OF REPORT)