

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: P303133

Luminaire Tested: **CTW-F-5050-30L930-UNV-STD-4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P303133  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-181-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: CTW-F-5050-30L930-UNV-STD-4  
Description: CORELITE CONTINUA LINEAR WALL LED LUMINAIRE  
50% UPLIGHT, 50% DOWNLIGHT, 3000 LUMEN PACKAGE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

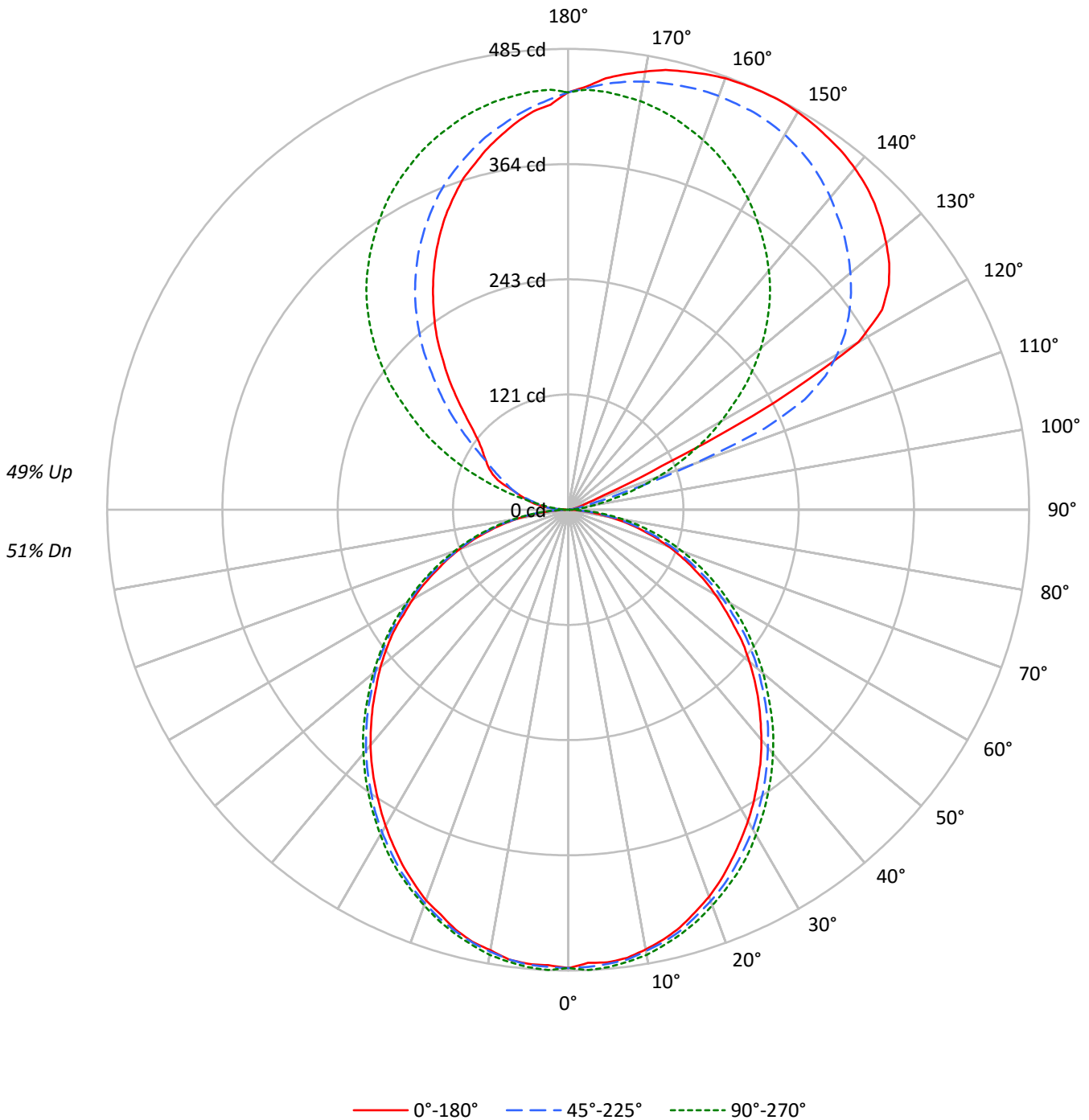
Lumens per Lamp: N/A  
Luminaire Lumens: 2522.2 lumens  
Efficiency: N/A  
Efficacy: 103.8 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.32  
Luminous Opening: Rectangular (W 4' x L: 0.12' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 24.3  
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	94	90	86	90	87	83	80	73	71	69	61	60	58	50	49	48	43
2	89	82	75	70	82	76	70	66	64	60	57	54	51	48	44	42	40	36
3	81	72	64	58	75	66	60	55	57	52	48	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	34	30	31	28	26	22
6	63	51	42	36	58	47	40	34	40	35	30	34	30	26	28	25	22	20
7	58	46	38	32	53	43	35	30	37	31	27	31	27	23	26	23	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	19	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°	10385	10385	10385
5°	10334	10442	10371
10°	10272	10399	10292
15°	10141	10288	10196
20°	9927	10156	10023
25°	9660	10017	9798
30°	9406	9821	9553
35°	9138	9619	9311
40°	8883	9420	9091
45°	8610	9191	8838
50°	8329	8969	8634
55°	7991	8741	8430
60°	7698	8452	8129
65°	7371	8262	7840
70°	7018	8013	7641
75°	6438	7752	7195
80°	5467	7215	6595
85°	3285	6373	4940



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.6	1.8
10°-20°	129.0	5.1
20°-30°	190.9	7.6
30°-40°	224.2	8.9
40°-50°	227.4	9.0
50°-60°	202.2	8.0
60°-70°	154.2	6.1
70°-80°	91.6	3.6
80°-90°	24.7	1.0
90°-100°	12.1	0.5
100°-110°	51.4	2.0
110°-120°	145.6	5.8
120°-130°	217.9	8.6
130°-140°	235.5	9.3
140°-150°	224.2	8.9
150°-160°	183.9	7.3
160°-170°	120.2	4.8
170°-180°	41.7	1.7
0°-30°	365.5	14.5
0°-40°	589.7	23.4
0°-60°	1019.2	40.4
0°-90°	1289.7	51.1
90°-120°	209.1	8.3
90°-150°	886.7	35.2
90°-180°	1232.0	48.8
0°-180°	2522.2	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	482	482	482	482	482	
5°	478	480	483	481	480	45
15°	455	458	462	459	458	128
25°	407	415	422	418	412	187
35°	348	358	366	362	354	218
45°	283	294	302	298	290	218
55°	213	225	233	230	225	191
65°	145	151	162	159	154	144
75°	77	82	93	90	86	82
85°	13	18	26	23	20	18
90°	1	1	1	2	2	1
95°	2	2	9	18	17	3
105°	12	30	59	45	48	14
115°	108	274	144	78	87	143
125°	412	361	227	127	111	364
135°	456	410	299	203	165	352
145°	477	445	354	281	245	300
155°	485	462	398	344	319	224
165°	477	462	428	392	378	135
175°	456	450	442	426	421	44
180°	439	439	439	439	439	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	482.4	482.4	482.4	482.4	482.4	482.4	482.4	482.4	482.4	482.4	482.4
2.5°	477.4	477.4	479.9	480.7	480.7	481.6	482.4	483.2	483.2	483.2	481.6
5°	478.2	478.2	478.2	478.2	478.2	479.1	479.9	480.7	481.6	480.7	479.9
7.5°	475.7	475.7	475.7	475.7	474.9	475.7	475.7	477.4	477.4	477.4	477.4
10°	469.9	469.9	469.9	470.8	469.9	470.8	471.6	472.4	473.3	473.3	471.6
12.5°	463.3	463.3	463.3	464.1	463.3	463.3	464.9	464.9	466.6	465.8	465.8
15°	455.0	455.0	455.0	456.6	455.8	455.8	456.6	457.5	458.3	458.3	458.3
17.5°	444.1	444.1	445.8	446.6	445.8	446.6	446.6	447.5	449.1	449.1	448.3
20°	433.3	433.3	433.3	435.0	434.2	435.0	435.0	436.7	438.3	438.3	438.3
22.5°	420.9	420.0	420.9	421.7	421.7	422.5	422.5	424.2	425.8	426.7	427.5
25°	406.7	406.7	407.5	409.2	409.2	409.2	410.0	411.7	413.4	414.2	415.0
27.5°	392.6	392.6	393.4	395.1	395.9	395.9	395.9	398.4	400.9	401.7	401.7
30°	378.4	378.4	378.4	380.1	380.9	380.9	380.9	383.4	385.9	388.4	388.4
32.5°	363.5	363.5	363.5	366.0	366.8	366.8	366.8	368.5	371.0	372.6	373.4
35°	347.7	347.7	348.5	350.2	351.0	351.0	351.0	352.7	354.3	357.6	358.5
37.5°	332.7	331.9	332.7	334.4	335.2	335.2	334.4	336.9	339.3	341.8	342.7
40°	316.1	315.2	316.9	317.7	318.6	318.6	318.6	321.0	323.5	326.0	326.9
42.5°	299.4	299.4	300.3	301.1	301.9	301.9	302.7	304.4	306.1	309.4	311.1
45°	282.8	282.0	283.6	284.5	286.1	285.3	286.1	286.9	289.4	291.9	294.4
47.5°	266.2	266.2	266.2	267.0	268.6	269.5	269.5	270.3	272.8	275.3	277.0
50°	248.7	248.7	249.5	250.4	252.0	252.0	252.8	253.7	254.5	258.7	260.3
52.5°	232.1	232.1	232.1	232.9	235.4	235.4	235.4	237.0	238.7	240.4	242.9
55°	212.9	213.8	213.8	213.8	216.2	216.2	217.1	217.9	219.6	222.9	225.4
57.5°	195.5	196.3	196.3	197.1	198.0	198.8	199.6	199.6	201.3	202.9	205.4
60°	178.8	179.7	179.7	179.7	181.3	181.3	182.1	183.0	183.8	185.5	188.0
62.5°	162.2	162.2	162.2	162.2	163.9	163.9	164.7	166.3	166.3	168.0	170.5
65°	144.7	145.6	144.7	145.6	146.4	146.4	147.2	148.9	148.9	150.5	151.4
67.5°	128.1	128.1	128.1	128.9	128.9	129.7	129.7	131.4	132.2	133.1	133.9
70°	111.5	111.5	110.6	111.5	112.3	113.1	113.1	113.9	114.8	115.6	117.3
72.5°	94.0	94.0	94.0	94.8	94.8	95.6	95.6	97.3	98.1	99.0	99.8
75°	77.4	77.4	77.4	78.2	78.2	78.2	79.0	79.8	80.7	81.5	82.3
77.5°	60.7	60.7	60.7	61.5	60.7	61.5	61.5	63.2	64.0	64.9	65.7
80°	44.1	44.1	44.1	44.9	45.7	45.7	45.7	46.6	47.4	48.2	49.1
82.5°	28.3	27.4	27.4	28.3	29.1	29.1	29.9	29.9	30.8	31.6	33.3
85°	13.3	13.3	12.5	13.3	14.1	14.1	15.0	15.0	15.8	16.6	17.5
87.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	2.5	2.5	2.5	3.3
90°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
92.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
95°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
97.5°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	5.0	5.0
100°	5.8	5.8	5.8	5.8	5.8	6.7	6.7	6.7	7.5	8.3	9.1
102.5°	8.3	8.3	8.3	8.3	9.1	9.1	9.1	10.0	10.8	13.3	15.8
105°	11.6	11.6	12.5	12.5	13.3	13.3	14.1	15.0	17.5	21.6	29.9
107.5°	16.6	16.6	17.5	17.5	19.1	20.0	21.6	24.1	30.8	43.2	64.0
110°	24.1	25.0	26.6	27.4	31.6	34.1	37.4	48.2	69.0	101.5	138.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	44.1	44.9	51.6	55.7	68.2	77.4	86.5	117.3	159.7	198.8	223.7
115°	108.1	113.1	122.3	138.9	165.5	184.6	202.1	236.2	263.7	273.6	274.5
117.5°	245.4	249.5	262.0	275.3	292.8	304.4	309.4	316.9	317.7	311.9	305.2
120°	352.7	352.7	352.7	356.0	356.0	357.6	355.1	351.8	344.3	335.2	326.9
122.5°	391.7	390.1	389.2	386.8	383.4	380.9	378.4	371.8	365.1	355.1	345.2
125°	411.7	409.2	408.4	405.1	400.1	398.4	395.1	388.4	380.9	371.0	361.0
127.5°	425.8	423.4	421.7	419.2	414.2	411.7	408.4	401.7	394.2	385.1	375.1
130°	436.7	434.2	432.5	430.8	425.0	423.4	420.0	413.4	405.9	397.6	387.6
132.5°	446.6	445.0	442.5	440.0	436.7	434.2	430.8	425.0	417.5	409.2	399.2
135°	455.8	453.3	451.6	450.0	445.0	443.3	440.0	434.2	427.5	418.4	410.0
137.5°	463.3	460.8	459.1	456.6	453.3	450.0	447.5	442.5	435.8	428.3	419.2
140°	469.1	466.6	464.9	462.4	459.1	456.6	454.1	450.0	444.1	436.7	429.2
142.5°	474.1	470.8	469.9	467.4	464.1	462.4	459.9	455.8	450.8	443.3	437.5
145°	477.4	474.9	474.1	471.6	469.1	466.6	465.8	462.4	456.6	449.1	445.0
147.5°	480.7	478.2	477.4	475.7	472.4	470.8	469.9	465.8	460.8	454.1	450.8
150°	483.2	480.7	479.9	478.2	474.9	474.1	473.3	469.9	464.9	458.3	455.8
152.5°	484.9	481.6	480.7	479.1	476.6	475.7	474.9	471.6	467.4	461.6	459.1
155°	484.9	482.4	481.6	479.9	477.4	476.6	474.9	472.4	468.3	464.1	461.6
157.5°	484.1	482.4	481.6	479.9	476.6	476.6	474.9	472.4	469.1	465.8	462.4
160°	483.2	480.7	480.7	479.1	476.6	476.6	474.9	473.3	469.1	466.6	463.3
162.5°	480.7	479.1	479.1	477.4	475.7	475.7	474.1	472.4	468.3	467.4	463.3
165°	477.4	475.7	475.7	474.9	472.4	472.4	471.6	469.1	466.6	465.8	461.6
167.5°	474.1	471.6	471.6	470.8	468.3	468.3	468.3	466.6	464.1	464.9	459.9
170°	468.3	465.8	465.8	464.9	464.1	464.1	464.1	462.4	459.9	461.6	457.5
172.5°	462.4	461.6	460.8	459.9	459.1	459.1	459.1	458.3	456.6	458.3	454.1
175°	455.8	454.1	454.1	453.3	453.3	453.3	453.3	453.3	451.6	454.1	450.0
177.5°	445.8	444.1	445.0	445.8	445.8	446.6	446.6	446.6	445.8	448.3	444.1
180°	439.2	439.2	439.2	439.2	439.2	439.2	439.2	439.2	439.2	439.2	439.2



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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	482.4	482.4	482.4	482.4	482.4	482.4	482.4	482.4	482.4	482.4	482.4
2.5°	479.9	481.6	480.7	480.7	480.7	480.7	480.7	481.6	484.1	484.9	484.9
5°	478.2	479.9	479.1	478.2	478.2	478.2	478.2	479.9	482.4	483.2	482.4
7.5°	474.9	476.6	475.7	474.9	475.7	475.7	475.7	477.4	479.9	479.9	479.9
10°	469.9	471.6	470.8	470.8	470.8	470.8	471.6	472.4	474.9	475.7	474.9
12.5°	464.1	464.9	464.1	464.9	464.9	464.9	464.9	465.8	468.3	469.1	469.1
15°	456.6	457.5	456.6	457.5	456.6	457.5	457.5	459.1	460.8	461.6	462.4
17.5°	447.5	447.5	447.5	448.3	448.3	448.3	448.3	450.0	452.5	453.3	453.3
20°	436.7	437.5	438.3	438.3	438.3	439.2	439.2	440.0	443.3	443.3	444.1
22.5°	426.7	426.7	427.5	427.5	428.3	428.3	428.3	429.2	432.5	432.5	432.5
25°	414.2	414.2	415.9	416.7	416.7	416.7	417.5	418.4	421.7	421.7	421.7
27.5°	400.9	400.9	403.4	402.6	403.4	404.2	405.1	406.7	408.4	409.2	409.2
30°	387.6	387.6	389.2	389.2	390.1	390.1	390.9	392.6	395.1	395.1	395.9
32.5°	374.3	374.3	375.1	375.9	376.8	375.9	376.8	378.4	380.9	380.9	381.8
35°	359.3	358.5	360.1	361.0	361.0	361.8	361.8	363.5	366.0	366.0	366.8
37.5°	344.3	343.5	345.2	346.0	346.8	346.8	346.8	348.5	350.2	351.0	351.8
40°	328.5	327.7	330.2	331.0	331.0	331.0	331.0	332.7	334.4	335.2	336.0
42.5°	311.1	311.9	313.6	315.2	315.2	315.2	316.1	316.1	318.6	319.4	320.2
45°	295.3	296.1	296.9	299.4	298.6	297.8	299.4	299.4	301.9	301.9	302.7
47.5°	278.6	279.5	279.5	282.0	282.0	281.1	282.8	282.8	284.5	284.5	286.1
50°	262.0	262.8	262.8	265.3	265.3	264.5	266.2	266.2	267.8	267.8	269.5
52.5°	243.7	245.4	245.4	247.9	248.7	247.9	248.7	248.7	250.4	250.4	252.0
55°	226.2	227.9	228.7	229.6	231.2	230.4	231.2	232.1	233.7	232.9	234.5
57.5°	207.9	207.9	209.6	210.4	211.3	211.3	213.8	212.9	212.9	215.4	216.2
60°	189.6	190.5	192.1	193.0	193.8	193.8	194.6	195.5	196.3	196.3	198.0
62.5°	172.2	173.8	174.7	175.5	176.3	175.5	178.0	178.8	179.7	179.7	179.7
65°	154.7	155.5	157.2	158.0	158.0	158.0	160.5	161.4	161.4	162.2	162.2
67.5°	136.4	138.1	139.7	139.7	141.4	140.6	143.1	143.9	143.9	144.7	145.6
70°	118.9	119.8	121.4	122.3	123.9	123.1	124.8	125.6	126.4	127.3	128.1
72.5°	101.5	102.3	104.0	104.8	105.6	106.5	107.3	109.0	109.8	110.6	110.6
75°	84.0	84.8	86.5	87.3	88.2	89.0	89.8	91.5	91.5	93.2	93.2
77.5°	67.4	68.2	69.0	69.9	71.5	72.4	73.2	74.0	74.9	75.7	75.7
80°	50.7	50.7	52.4	53.2	54.9	54.9	55.7	56.6	58.2	58.2	58.2
82.5°	34.1	34.9	35.8	36.6	38.3	38.3	39.1	40.8	41.6	41.6	41.6
85°	18.3	19.1	20.8	21.6	22.5	22.5	24.1	25.0	25.8	25.8	25.8
87.5°	4.2	5.0	5.8	6.7	8.3	9.1	9.1	10.0	10.8	10.8	10.8
90°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
92.5°	1.7	1.7	1.7	1.7	1.7	2.5	3.3	4.2	4.2	3.3	4.2
95°	3.3	3.3	4.2	5.8	7.5	8.3	11.6	12.5	10.8	9.1	9.1
97.5°	5.8	7.5	10.0	15.0	18.3	20.8	25.0	23.3	20.0	17.5	15.8
100°	11.6	15.8	21.6	31.6	36.6	40.8	42.4	38.3	33.3	28.3	25.0
102.5°	20.8	31.6	44.9	60.7	65.7	67.4	66.5	58.2	49.9	41.6	36.6
105°	43.2	63.2	86.5	98.1	100.6	99.0	90.7	81.5	69.9	59.1	50.7
107.5°	93.2	121.4	136.4	138.1	135.6	130.6	118.1	105.6	91.5	79.0	67.4
110°	165.5	180.5	180.5	173.0	166.3	160.5	144.7	130.6	114.8	99.8	87.3





TEST NUMBER: P303133

CATALOG NUMBER: CTW-F-5050-30L930-UNV-STD-4

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	227.9	225.4	214.6	201.3	193.8	186.3	169.7	154.7	137.2	122.3	107.3
115°	267.0	255.3	242.0	227.1	218.7	209.6	194.6	177.2	158.9	143.9	128.1
117.5°	292.8	279.5	264.5	250.4	242.0	235.4	217.9	198.0	181.3	165.5	149.7
120°	313.6	299.4	285.3	271.1	263.7	256.2	237.9	220.4	201.3	185.5	170.5
122.5°	331.0	317.7	303.6	290.3	282.8	274.5	257.8	240.4	224.6	205.4	191.3
125°	348.5	336.0	321.0	308.6	300.3	291.1	276.1	258.7	242.9	227.1	212.1
127.5°	363.5	351.0	338.5	324.4	316.1	307.7	292.8	276.1	261.2	246.2	232.1
130°	376.8	366.0	352.7	338.5	330.2	322.7	307.7	292.8	278.6	264.5	250.4
132.5°	390.9	378.4	366.0	351.8	344.3	336.9	323.5	309.4	295.3	282.0	268.6
135°	402.6	390.1	376.8	362.6	356.8	350.2	337.7	324.4	311.1	298.6	286.1
137.5°	413.4	399.2	386.8	373.4	368.5	362.6	350.2	337.7	326.0	314.4	301.9
140°	421.7	407.5	395.9	384.3	379.3	373.4	361.0	351.0	340.2	328.5	316.9
142.5°	428.3	415.0	403.4	393.4	388.4	384.3	372.6	362.6	352.7	341.8	331.0
145°	434.2	422.5	411.7	401.7	398.4	393.4	382.6	374.3	365.1	354.3	344.3
147.5°	439.2	429.2	419.2	410.0	405.9	401.7	391.7	384.3	375.1	366.8	356.8
150°	444.1	435.0	425.8	417.5	414.2	410.0	400.1	393.4	386.8	378.4	369.3
152.5°	447.5	439.2	430.8	424.2	420.9	417.5	408.4	403.4	395.9	388.4	380.1
155°	450.8	443.3	435.8	430.0	427.5	424.2	416.7	411.7	405.1	397.6	390.1
157.5°	453.3	446.6	440.0	435.0	432.5	430.0	422.5	419.2	413.4	406.7	399.2
160°	454.1	448.3	443.3	439.2	436.7	434.2	428.3	425.0	420.0	414.2	407.5
162.5°	454.1	450.0	445.0	442.5	440.0	437.5	432.5	430.0	425.8	420.9	415.0
165°	454.1	450.8	446.6	444.1	442.5	440.8	436.7	434.2	430.0	427.5	421.7
167.5°	454.1	450.8	447.5	445.8	444.1	442.5	440.0	438.3	435.0	432.5	427.5
170°	452.5	449.1	447.5	446.6	445.0	444.1	441.6	440.8	438.3	436.7	432.5
172.5°	450.0	447.5	446.6	445.8	445.0	444.1	442.5	441.6	440.0	439.2	436.7
175°	446.6	445.0	444.1	444.1	444.1	443.3	441.6	442.5	441.6	441.6	439.2
177.5°	441.6	440.8	440.8	440.8	441.6	440.8	440.8	441.6	441.6	442.5	440.8
180°	439.2	439.2	439.2	439.2	439.2	439.2	439.2	439.2	439.2	439.2	439.2



TEST NUMBER: P303133

CATALOG NUMBER: CTW-F-5050-30L930-UNV-STD-4

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	482.4	482.4	482.4	482.4	482.4	482.4	482.4	482.4	482.4	482.4	482.4
2.5°	484.1	482.4	481.6	481.6	480.7	479.1	479.1	479.9	481.6	484.9	482.4
5°	482.4	481.6	479.1	479.1	479.1	478.2	476.6	478.2	480.7	483.2	479.9
7.5°	479.1	478.2	476.6	476.6	476.6	474.9	474.1	475.7	477.4	479.1	476.6
10°	474.9	473.3	472.4	471.6	471.6	469.9	469.1	470.8	472.4	474.1	472.4
12.5°	469.1	467.4	465.8	465.8	464.9	464.1	463.3	464.9	466.6	468.3	466.6
15°	461.6	459.9	458.3	458.3	458.3	455.8	455.8	456.6	459.1	459.9	457.5
17.5°	453.3	450.8	449.1	450.0	449.1	446.6	447.5	447.5	450.8	450.8	449.1
20°	443.3	440.8	440.0	440.0	439.2	437.5	437.5	438.3	440.8	440.0	438.3
22.5°	432.5	430.0	430.0	429.2	429.2	426.7	426.7	427.5	430.0	428.3	426.7
25°	420.9	419.2	418.4	418.4	416.7	415.0	415.0	415.9	418.4	415.9	415.0
27.5°	407.5	406.7	405.9	405.9	404.2	402.6	403.4	403.4	405.1	403.4	401.7
30°	395.1	393.4	392.6	392.6	390.9	388.4	389.2	389.2	391.7	389.2	389.2
32.5°	381.8	379.3	379.3	378.4	376.8	375.1	375.9	376.8	377.6	374.3	375.1
35°	366.8	364.3	364.3	363.5	361.8	361.0	361.0	361.8	361.8	359.3	359.3
37.5°	351.8	350.2	349.3	348.5	346.8	346.0	346.8	347.7	346.8	344.3	344.3
40°	336.0	334.4	332.7	332.7	331.9	331.0	331.0	332.7	331.0	328.5	328.5
42.5°	320.2	318.6	316.9	316.9	316.1	316.1	316.1	316.9	314.4	313.6	311.9
45°	303.6	301.9	300.3	300.3	299.4	299.4	299.4	299.4	297.8	296.9	296.1
47.5°	286.9	285.3	283.6	283.6	282.8	283.6	283.6	282.8	280.3	280.3	279.5
50°	270.3	268.6	267.0	267.0	267.0	267.0	267.0	266.2	264.5	263.7	262.8
52.5°	252.8	251.2	249.5	250.4	249.5	250.4	249.5	248.7	247.0	246.2	245.4
55°	235.4	233.7	232.9	233.7	232.9	232.9	232.1	231.2	229.6	229.6	227.9
57.5°	217.1	214.6	214.6	215.4	214.6	214.6	212.9	212.1	210.4	210.4	208.8
60°	198.0	197.1	197.1	197.1	197.1	196.3	195.5	195.5	193.8	193.0	191.3
62.5°	180.5	180.5	179.7	180.5	178.8	178.8	178.0	177.2	176.3	175.5	174.7
65°	163.0	162.2	162.2	161.4	161.4	161.4	160.5	159.7	158.9	158.0	157.2
67.5°	144.7	144.7	144.7	144.7	143.9	143.9	143.1	142.2	140.6	141.4	139.7
70°	127.3	127.3	127.3	127.3	126.4	126.4	125.6	124.8	123.1	123.9	123.1
72.5°	109.8	109.8	109.8	109.8	109.0	109.0	107.3	107.3	107.3	106.5	105.6
75°	92.3	92.3	92.3	91.5	91.5	91.5	89.8	89.8	89.8	89.8	88.2
77.5°	74.9	75.7	74.9	74.9	74.0	74.0	74.0	73.2	73.2	72.4	71.5
80°	57.4	58.2	58.2	58.2	57.4	57.4	57.4	56.6	55.7	55.7	54.9
82.5°	42.4	41.6	41.6	41.6	40.8	40.8	40.8	39.9	39.9	39.1	38.3
85°	25.8	25.8	25.8	25.8	25.0	25.0	24.1	23.3	23.3	21.6	21.6
87.5°	11.6	10.8	10.8	10.8	10.8	10.0	9.1	8.3	8.3	7.5	7.5
90°	0.8	0.8	1.7	0.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7
92.5°	5.8	7.5	8.3	9.1	8.3	9.1	9.1	9.1	8.3	8.3	8.3
95°	10.0	11.6	14.1	15.0	15.8	17.5	18.3	18.3	18.3	17.5	17.5
97.5°	15.8	17.5	18.3	19.1	19.1	21.6	23.3	25.0	26.6	26.6	27.4
100°	24.1	23.3	25.0	26.6	26.6	26.6	27.4	29.1	30.8	31.6	33.3
102.5°	34.1	31.6	31.6	32.4	33.3	35.8	34.9	35.8	36.6	37.4	38.3
105°	45.7	43.2	40.8	40.8	40.8	42.4	44.9	46.6	44.9	44.9	45.7
107.5°	60.7	55.7	51.6	50.7	50.7	49.9	51.6	54.1	55.7	56.6	55.7
110°	77.4	69.9	65.7	61.5	60.7	59.9	59.9	60.7	63.2	65.7	67.4



TEST NUMBER: P303133

CATALOG NUMBER: CTW-F-5050-30L930-UNV-STD-4

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
112.5°	96.5	87.3	79.8	76.5	73.2	69.9	69.0	69.0	69.9	72.4	74.0
115°	116.4	105.6	95.6	91.5	89.0	82.3	79.0	77.4	78.2	79.0	80.7
117.5°	137.2	125.6	113.9	109.0	105.6	98.1	91.5	89.0	87.3	86.5	88.2
120°	158.0	146.4	134.7	128.1	123.1	114.8	107.3	100.6	97.3	95.6	94.8
122.5°	178.0	166.3	154.7	148.0	143.1	132.2	124.8	116.4	110.6	106.5	104.0
125°	198.0	186.3	174.7	168.0	163.0	151.4	142.2	134.7	127.3	120.6	115.6
127.5°	217.9	205.4	193.8	188.0	183.0	170.5	160.5	153.0	145.6	138.1	131.4
130°	237.9	227.1	214.6	207.1	202.9	190.5	180.5	171.3	164.7	157.2	148.9
132.5°	255.3	245.4	233.7	227.9	222.1	209.6	201.3	191.3	183.8	176.3	168.8
135°	273.6	262.8	251.2	246.2	241.2	231.2	221.2	211.3	202.9	195.5	188.0
137.5°	289.4	280.3	268.6	263.7	258.7	249.5	240.4	232.9	224.6	216.2	207.1
140°	305.2	295.3	285.3	280.3	275.3	267.8	258.7	252.0	243.7	237.0	227.9
142.5°	319.4	309.4	301.1	296.1	291.1	283.6	275.3	269.5	262.8	255.3	249.5
145°	333.5	324.4	316.1	311.1	306.9	299.4	291.1	286.9	281.1	273.6	267.0
147.5°	346.0	337.7	329.4	325.2	321.9	314.4	307.7	302.7	297.8	291.1	285.3
150°	358.5	350.2	342.7	339.3	335.2	329.4	323.5	317.7	314.4	307.7	302.7
152.5°	370.1	362.6	355.1	352.7	349.3	342.7	336.9	331.9	329.4	323.5	319.4
155°	381.8	374.3	366.8	365.1	361.8	356.0	350.2	346.0	343.5	337.7	333.5
157.5°	391.7	384.3	378.4	375.9	372.6	367.6	362.6	359.3	357.6	352.7	348.5
160°	400.9	394.2	388.4	385.9	383.4	378.4	375.1	371.0	370.1	366.0	362.6
162.5°	408.4	402.6	397.6	395.9	393.4	389.2	385.9	381.8	380.9	378.4	375.1
165°	415.9	410.0	405.9	404.2	402.6	398.4	395.9	392.6	391.7	390.1	386.8
167.5°	422.5	417.5	413.4	412.5	410.9	407.5	405.9	402.6	401.7	400.9	397.6
170°	427.5	423.4	420.0	419.2	417.5	415.0	413.4	410.9	410.0	410.9	407.5
172.5°	431.7	428.3	425.8	425.0	424.2	422.5	420.9	419.2	418.4	420.0	416.7
175°	435.8	432.5	430.8	430.0	430.0	428.3	427.5	425.8	425.8	427.5	425.0
177.5°	438.3	435.8	434.2	434.2	433.3	432.5	432.5	430.8	432.5	434.2	431.7
180°	439.2	439.2	439.2	439.2	439.2	439.2	439.2	439.2	439.2	439.2	439.2



TEST NUMBER: P303133

CATALOG NUMBER: CTW-F-5050-30L930-UNV-STD-4

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	482.4	482.4	482.4	482.4	482.4	482.4	482.4	482.4
2.5°	484.1	482.4	482.4	481.6	480.7	479.9	479.9	479.9
5°	481.6	480.7	479.9	478.2	478.2	479.1	479.9	479.9
7.5°	477.4	477.4	476.6	475.7	474.9	476.6	476.6	477.4
10°	473.3	472.4	471.6	470.8	469.9	470.8	470.8	470.8
12.5°	466.6	465.8	464.9	463.3	463.3	464.1	464.1	465.8
15°	459.1	458.3	456.6	456.6	455.8	456.6	456.6	457.5
17.5°	450.0	448.3	447.5	446.6	446.6	447.5	447.5	446.6
20°	439.2	437.5	435.8	435.0	435.0	435.8	435.8	437.5
22.5°	426.7	425.0	424.2	423.4	423.4	424.2	424.2	425.0
25°	415.0	413.4	412.5	411.7	411.7	411.7	411.7	412.5
27.5°	402.6	400.1	398.4	398.4	397.6	397.6	397.6	398.4
30°	387.6	385.1	384.3	384.3	383.4	383.4	383.4	384.3
32.5°	372.6	371.0	370.1	369.3	368.5	369.3	368.5	369.3
35°	357.6	355.1	355.1	355.1	354.3	354.3	353.5	354.3
37.5°	342.7	340.2	339.3	339.3	338.5	338.5	338.5	339.3
40°	326.9	324.4	324.4	323.5	322.7	322.7	322.7	323.5
42.5°	310.2	308.6	307.7	307.7	306.9	306.9	306.9	306.9
45°	293.6	291.1	291.1	291.9	290.3	290.3	290.3	290.3
47.5°	277.0	275.3	275.3	275.3	273.6	273.6	273.6	273.6
50°	260.3	259.5	258.7	258.7	258.7	257.8	257.8	257.8
52.5°	243.7	242.9	242.0	242.9	241.2	241.2	241.2	241.2
55°	226.2	225.4	225.4	226.2	224.6	224.6	223.7	224.6
57.5°	207.1	206.3	206.3	206.3	206.3	205.4	205.4	205.4
60°	190.5	189.6	189.6	189.6	188.8	188.8	188.8	188.8
62.5°	173.0	173.0	173.0	172.2	172.2	171.3	171.3	172.2
65°	156.4	155.5	155.5	155.5	154.7	154.7	153.9	153.9
67.5°	138.9	138.9	138.9	138.1	138.1	137.2	137.2	138.1
70°	122.3	122.3	121.4	121.4	121.4	120.6	120.6	121.4
72.5°	105.6	104.8	104.8	104.0	104.8	103.1	103.1	104.0
75°	88.2	88.2	87.3	87.3	87.3	86.5	86.5	86.5
77.5°	71.5	71.5	70.7	70.7	70.7	69.9	69.9	69.9
80°	54.9	54.1	54.1	54.1	54.1	53.2	52.4	53.2
82.5°	37.4	37.4	37.4	37.4	36.6	35.8	34.9	35.8
85°	21.6	20.8	20.8	21.6	20.8	20.8	20.8	20.0
87.5°	7.5	6.7	6.7	6.7	6.7	7.5	6.7	6.7
90°	1.7	1.7	1.7	2.5	2.5	2.5	2.5	2.5
92.5°	8.3	8.3	7.5	7.5	7.5	7.5	6.7	6.7
95°	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6
97.5°	27.4	27.4	26.6	26.6	26.6	26.6	26.6	26.6
100°	34.1	34.9	34.9	34.9	35.8	35.8	35.8	35.8
102.5°	39.9	39.9	40.8	40.8	40.8	41.6	41.6	41.6
105°	45.7	46.6	46.6	46.6	47.4	47.4	48.2	48.2
107.5°	54.9	54.9	54.9	54.9	55.7	55.7	55.7	55.7
110°	67.4	67.4	66.5	65.7	65.7	65.7	64.9	64.9



TEST NUMBER: P303133

CATALOG NUMBER: CTW-F-5050-30L930-UNV-STD-4

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
112.5°	75.7	77.4	77.4	78.2	79.0	79.0	79.0	79.0
115°	82.3	84.0	84.8	85.7	86.5	86.5	87.3	87.3
117.5°	89.0	89.8	90.7	91.5	92.3	93.2	93.2	94.0
120°	95.6	96.5	97.3	97.3	98.1	99.0	99.0	99.0
122.5°	103.1	104.0	103.1	103.1	104.0	104.0	104.0	104.8
125°	113.1	112.3	111.5	111.5	110.6	110.6	110.6	110.6
127.5°	126.4	124.8	123.1	121.4	120.6	119.8	118.9	118.9
130°	143.1	139.7	137.2	135.6	133.9	132.2	130.6	130.6
132.5°	162.2	158.0	155.5	153.0	150.5	148.0	145.6	146.4
135°	182.1	178.8	175.5	173.0	169.7	166.3	164.7	164.7
137.5°	201.3	197.1	194.6	193.0	190.5	187.1	184.6	185.5
140°	222.9	215.4	213.8	212.1	209.6	206.3	204.6	204.6
142.5°	242.0	236.2	234.5	233.7	230.4	227.1	225.4	226.2
145°	261.2	255.3	254.5	252.8	250.4	247.0	245.4	245.4
147.5°	279.5	274.5	273.6	272.0	269.5	266.2	264.5	264.5
150°	297.8	292.8	291.1	290.3	287.8	284.5	282.8	283.6
152.5°	314.4	309.4	308.6	307.7	304.4	302.7	301.1	301.9
155°	330.2	325.2	324.4	323.5	321.9	319.4	318.6	319.4
157.5°	345.2	341.0	340.2	339.3	337.7	335.2	334.4	336.0
160°	359.3	356.0	355.1	354.3	353.5	351.8	350.2	351.0
162.5°	372.6	369.3	369.3	368.5	367.6	366.0	365.1	366.0
165°	385.1	382.6	381.8	380.9	380.1	379.3	378.4	377.6
167.5°	396.7	393.4	393.4	391.7	391.7	390.9	390.1	390.1
170°	406.7	404.2	404.2	402.6	402.6	401.7	400.9	400.9
172.5°	415.9	414.2	413.4	413.4	413.4	412.5	411.7	411.7
175°	425.0	423.4	422.5	421.7	421.7	420.9	420.0	420.9
177.5°	432.5	431.7	430.8	430.0	430.0	428.3	427.5	426.7
180°	439.2	439.2	439.2	439.2	439.2	439.2	439.2	439.2

(END OF REPORT)