

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: P303129

Luminaire Tested: **CTW-F-5050-20L935-UNV-STD-8**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P303129  
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-5050-20L935-UNV-STD-8  
Description: CORELITE CONTINUA LINEAR WALL LED LUMINAIRE  
50% UPLIGHT, 50% DOWNLIGHT, 2000 LUMEN PACKAGE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

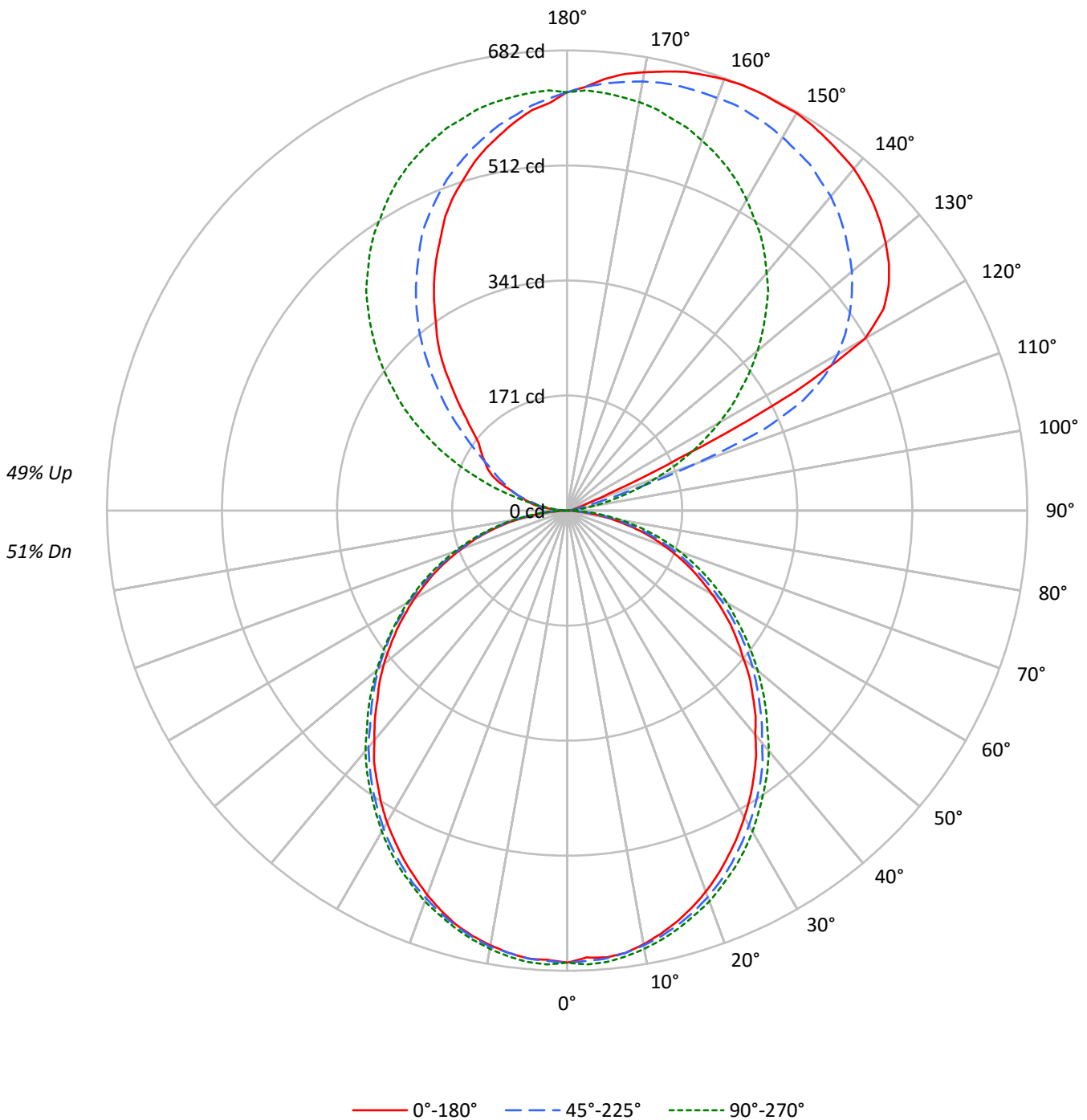
Lumens per Lamp: N/A  
Luminaire Lumens: 3526.3 lumens  
Efficiency: N/A  
Efficacy: 113.4 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.31  
Luminous Opening: Rectangular (W 8' x L: 0.12' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 31.1  
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°	7211	7211	7211
5°	7182	7257	7200
10°	7133	7208	7153
15°	7024	7139	7081
20°	6884	7062	6943
25°	6708	6954	6790
30°	6528	6827	6635
35°	6336	6675	6449
40°	6097	6532	6243
45°	5925	6343	6056
50°	5710	6171	5940
55°	5559	6011	5784
60°	5339	5894	5634
65°	5132	5746	5484
70°	4825	5583	5256
75°	4442	5373	5011
80°	3738	5015	4482
85°	2124	4471	3409



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.2	1.8
10°-20°	179.0	5.1
20°-30°	265.2	7.5
30°-40°	310.9	8.8
40°-50°	312.8	8.9
50°-60°	279.0	7.9
60°-70°	214.1	6.1
70°-80°	127.3	3.6
80°-90°	34.5	1.0
90°-100°	16.4	0.5
100°-110°	73.2	2.1
110°-120°	208.5	5.9
120°-130°	307.2	8.7
130°-140°	331.3	9.4
140°-150°	315.5	8.9
150°-160°	259.6	7.4
160°-170°	169.8	4.8
170°-180°	58.9	1.7
0°-30°	507.4	14.4
0°-40°	818.4	23.2
0°-60°	1410.1	40.0
0°-90°	1786.0	50.6
90°-120°	298.1	8.5
90°-150°	1252.1	35.5
90°-180°	1740.0	49.3
0°-180°	3526.3	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	670	670	670	670	670	
5°	665	666	672	666	666	63
15°	630	635	641	637	635	178
25°	565	577	586	580	572	260
35°	482	498	508	503	491	301
45°	389	403	417	410	398	300
55°	296	310	320	319	308	264
65°	202	212	226	220	215	199
75°	107	115	129	124	120	113
85°	17	24	36	33	28	23
90°	2	2	0	2	3	1
95°	3	3	12	22	21	4
105°	17	43	83	62	67	20
115°	182	386	202	110	122	223
125°	582	511	315	177	157	516
135°	642	582	417	282	229	496
145°	672	627	499	391	339	422
155°	682	648	561	484	444	315
165°	673	651	601	553	534	191
175°	642	635	622	603	596	62
180°	620	620	620	620	620	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	669.9	669.9	669.9	669.9	669.9	669.9	669.9	669.9	669.9	669.9	669.9
2.5°	663.0	663.0	664.7	666.4	668.1	668.1	669.9	669.9	669.9	669.9	668.1
5°	664.7	663.0	664.7	664.7	664.7	664.7	666.4	668.1	668.1	668.1	666.4
7.5°	661.2	659.5	661.2	661.2	659.5	659.5	661.2	663.0	663.0	663.0	661.2
10°	652.6	650.9	652.6	652.6	652.6	652.6	654.4	654.4	656.1	656.1	654.4
12.5°	642.3	642.3	642.3	644.0	642.3	644.0	644.0	645.8	647.5	647.5	645.8
15°	630.3	630.3	632.0	633.7	632.0	633.7	633.7	635.4	635.4	637.1	635.4
17.5°	616.5	616.5	618.2	619.9	619.9	619.9	621.6	621.6	623.4	623.4	623.4
20°	601.0	601.0	601.0	604.4	604.4	604.4	604.4	606.1	609.6	609.6	609.6
22.5°	583.8	583.8	583.8	587.2	587.2	587.2	587.2	588.9	592.4	594.1	594.1
25°	564.8	564.8	564.8	568.3	568.3	568.3	568.3	571.7	575.1	575.1	576.9
27.5°	545.9	545.9	547.6	549.3	549.3	549.3	551.0	552.8	556.2	557.9	557.9
30°	525.2	525.2	525.2	528.7	528.7	530.4	530.4	533.8	535.5	539.0	539.0
32.5°	504.5	504.5	506.3	508.0	508.0	508.0	509.7	513.2	514.9	516.6	518.3
35°	482.2	482.2	483.9	485.6	487.3	487.3	487.3	490.8	492.5	495.9	497.7
37.5°	459.8	459.8	461.5	463.2	464.9	464.9	464.9	468.4	470.1	473.6	475.3
40°	433.9	433.9	433.9	437.4	437.4	439.1	439.1	440.8	444.3	447.7	449.4
42.5°	413.3	411.6	411.6	413.3	415.0	416.7	416.7	418.4	421.9	425.3	427.1
45°	389.2	389.2	389.2	390.9	392.6	392.6	394.3	396.1	397.8	402.9	402.9
47.5°	366.8	365.1	365.1	368.5	368.5	370.2	370.2	372.0	375.4	378.8	380.6
50°	341.0	342.7	342.7	344.4	346.1	346.1	347.8	347.8	351.3	354.7	358.2
52.5°	318.6	318.6	318.6	320.3	322.0	323.7	323.7	325.5	327.2	330.6	334.1
55°	296.2	296.2	296.2	297.9	297.9	299.6	299.6	301.4	303.1	306.5	310.0
57.5°	272.1	272.1	272.1	273.8	275.5	275.5	277.2	277.2	279.0	282.4	285.9
60°	248.0	248.0	248.0	249.7	251.4	251.4	253.1	253.1	254.9	258.3	261.7
62.5°	223.9	225.6	223.9	225.6	227.3	227.3	229.0	229.0	232.5	232.5	235.9
65°	201.5	201.5	201.5	201.5	203.2	203.2	203.2	206.6	206.6	210.1	211.8
67.5°	177.4	177.4	177.4	177.4	179.1	180.8	180.8	182.5	184.3	184.3	187.7
70°	153.3	155.0	155.0	153.3	155.0	156.7	156.7	158.4	160.1	160.1	163.6
72.5°	130.9	130.9	130.9	130.9	130.9	132.6	134.3	134.3	136.0	137.8	139.5
75°	106.8	106.8	108.5	106.8	106.8	108.5	110.2	111.9	111.9	113.7	115.4
77.5°	82.7	84.4	84.4	84.4	86.1	86.1	86.1	87.8	89.5	89.5	91.3
80°	60.3	62.0	62.0	62.0	63.7	62.0	63.7	65.4	65.4	67.2	68.9
82.5°	37.9	37.9	39.6	39.6	39.6	39.6	41.3	43.1	43.1	43.1	46.5
85°	17.2	17.2	18.9	18.9	18.9	18.9	20.7	20.7	22.4	22.4	24.1
87.5°	1.7	1.7	1.7	1.7	3.4	1.7	3.4	3.4	3.4	3.4	5.2
90°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
92.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
95°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
97.5°	5.2	5.2	5.2	5.2	5.2	5.2	6.9	6.9	6.9	6.9	8.6
100°	8.6	8.6	8.6	8.6	8.6	8.6	8.6	10.3	10.3	12.1	13.8
102.5°	12.1	12.1	12.1	12.1	13.8	13.8	13.8	15.5	15.5	18.9	22.4
105°	17.2	17.2	17.2	18.9	18.9	18.9	20.7	22.4	25.8	32.7	43.1
107.5°	24.1	25.8	25.8	25.8	29.3	29.3	32.7	37.9	46.5	67.2	94.7
110°	37.9	39.6	39.6	43.1	49.9	53.4	60.3	79.2	106.8	149.8	201.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	74.0	77.5	80.9	91.3	110.2	124.0	142.9	187.7	237.6	294.5	316.8
115°	182.5	184.3	199.8	220.4	263.5	287.6	310.0	349.6	380.6	387.5	385.7
117.5°	380.6	389.2	397.8	411.6	430.5	439.1	449.4	458.1	451.2	442.6	428.8
120°	509.7	506.3	509.7	511.4	509.7	509.7	508.0	501.1	489.0	477.0	463.2
122.5°	556.2	554.5	552.8	551.0	544.2	542.4	539.0	528.7	516.6	502.8	489.0
125°	582.0	580.3	576.9	573.4	568.3	564.8	561.4	551.0	539.0	525.2	511.4
127.5°	601.0	599.3	595.8	592.4	587.2	583.8	578.6	570.0	557.9	545.9	532.1
130°	616.5	614.8	611.3	609.6	602.7	601.0	595.8	585.5	575.1	564.8	551.0
132.5°	630.3	628.5	625.1	623.4	618.2	614.8	611.3	601.0	588.9	578.6	566.5
135°	642.3	640.6	638.9	637.1	632.0	628.5	623.4	614.8	604.4	594.1	582.0
137.5°	652.6	650.9	649.2	645.8	642.3	638.9	633.7	625.1	618.2	607.9	595.8
140°	661.2	659.5	656.1	654.4	650.9	647.5	644.0	637.1	628.5	619.9	607.9
142.5°	666.4	666.4	663.0	663.0	657.8	654.4	650.9	644.0	638.9	630.3	616.5
145°	671.6	671.6	669.9	668.1	664.7	661.2	657.8	652.6	645.8	638.9	626.8
147.5°	676.7	675.0	675.0	673.3	669.9	666.4	664.7	659.5	652.6	645.8	632.0
150°	680.2	678.5	678.5	676.7	673.3	669.9	668.1	664.7	657.8	650.9	638.9
152.5°	680.2	680.2	681.9	678.5	675.0	673.3	671.6	666.4	663.0	654.4	644.0
155°	681.9	681.9	681.9	680.2	675.0	673.3	671.6	668.1	664.7	657.8	647.5
157.5°	681.9	681.9	681.9	680.2	675.0	673.3	671.6	669.9	666.4	659.5	650.9
160°	680.2	680.2	680.2	680.2	676.7	673.3	671.6	669.9	666.4	659.5	650.9
162.5°	676.7	676.7	676.7	676.7	673.3	671.6	669.9	668.1	666.4	657.8	650.9
165°	673.3	673.3	673.3	671.6	668.1	668.1	666.4	664.7	663.0	656.1	650.9
167.5°	666.4	666.4	666.4	664.7	661.2	661.2	661.2	659.5	657.8	652.6	649.2
170°	659.5	659.5	659.5	657.8	656.1	656.1	656.1	654.4	654.4	649.2	645.8
172.5°	652.6	652.6	652.6	650.9	647.5	647.5	647.5	649.2	647.5	644.0	640.6
175°	642.3	640.6	640.6	640.6	640.6	638.9	640.6	640.6	640.6	637.1	635.4
177.5°	628.5	628.5	628.5	630.3	630.3	630.3	630.3	632.0	632.0	630.3	628.5
180°	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9



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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	669.9	669.9	669.9	669.9	669.9	669.9	669.9	669.9	669.9	669.9	669.9
2.5°	666.4	668.1	666.4	666.4	666.4	666.4	666.4	668.1	671.6	673.3	671.6
5°	664.7	666.4	664.7	664.7	664.7	664.7	664.7	666.4	669.9	671.6	669.9
7.5°	659.5	661.2	659.5	659.5	659.5	659.5	659.5	661.2	666.4	666.4	666.4
10°	652.6	654.4	652.6	652.6	652.6	654.4	654.4	656.1	659.5	659.5	659.5
12.5°	644.0	645.8	644.0	644.0	645.8	645.8	644.0	647.5	650.9	650.9	650.9
15°	633.7	635.4	633.7	633.7	633.7	635.4	635.4	637.1	640.6	640.6	640.6
17.5°	619.9	621.6	621.6	621.6	623.4	623.4	623.4	625.1	628.5	628.5	628.5
20°	607.9	607.9	607.9	607.9	607.9	609.6	609.6	613.0	616.5	616.5	616.5
22.5°	592.4	592.4	594.1	592.4	594.1	595.8	594.1	597.5	601.0	601.0	601.0
25°	575.1	576.9	576.9	576.9	576.9	578.6	578.6	582.0	583.8	585.5	585.5
27.5°	557.9	557.9	559.7	559.7	559.7	561.4	561.4	564.8	568.3	568.3	568.3
30°	539.0	539.0	540.7	542.4	540.7	542.4	542.4	545.9	547.6	549.3	549.3
32.5°	518.3	518.3	521.8	521.8	521.8	523.5	523.5	525.2	528.7	528.7	530.4
35°	497.7	497.7	501.1	501.1	501.1	502.8	502.8	504.5	508.0	508.0	509.7
37.5°	475.3	477.0	478.7	480.4	478.7	480.4	480.4	483.9	485.6	487.3	487.3
40°	452.9	452.9	454.6	456.3	456.3	458.1	459.8	461.5	464.9	464.9	464.9
42.5°	427.1	428.8	430.5	432.2	432.2	433.9	435.7	435.7	437.4	439.1	439.1
45°	404.7	406.4	406.4	409.8	411.6	411.6	411.6	413.3	415.0	416.7	416.7
47.5°	382.3	384.0	385.7	389.2	387.5	387.5	389.2	389.2	390.9	392.6	394.3
50°	358.2	359.9	361.6	363.3	363.3	365.1	365.1	366.8	368.5	368.5	370.2
52.5°	334.1	335.8	339.2	339.2	341.0	341.0	342.7	342.7	344.4	344.4	346.1
55°	310.0	311.7	315.1	316.8	316.8	318.6	318.6	320.3	320.3	320.3	322.0
57.5°	285.9	287.6	291.0	292.7	292.7	294.5	294.5	296.2	296.2	296.2	297.9
60°	261.7	263.5	266.9	268.6	268.6	270.4	270.4	272.1	272.1	273.8	273.8
62.5°	239.4	239.4	242.8	244.5	244.5	244.5	246.2	248.0	248.0	249.7	251.4
65°	213.5	215.3	218.7	220.4	218.7	220.4	222.1	223.9	223.9	225.6	225.6
67.5°	189.4	191.1	194.6	194.6	194.6	196.3	198.0	199.8	199.8	201.5	201.5
70°	165.3	165.3	168.8	170.5	170.5	172.2	173.9	175.6	175.6	177.4	177.4
72.5°	139.5	141.2	144.6	146.4	148.1	148.1	149.8	149.8	153.3	153.3	153.3
75°	117.1	117.1	120.5	122.3	124.0	124.0	125.7	125.7	127.4	129.2	129.2
77.5°	93.0	94.7	96.4	98.2	99.9	99.9	101.6	101.6	103.3	105.0	105.0
80°	70.6	70.6	74.0	74.0	75.8	75.8	77.5	79.2	80.9	80.9	80.9
82.5°	46.5	48.2	51.7	51.7	53.4	53.4	55.1	55.1	56.8	56.8	58.5
85°	25.8	27.6	29.3	29.3	31.0	31.0	32.7	34.4	34.4	36.2	36.2
87.5°	5.2	8.6	8.6	10.3	10.3	12.1	12.1	13.8	15.5	15.5	15.5
90°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.0	1.7	0.0	1.7
92.5°	1.7	1.7	1.7	3.4	3.4	3.4	5.2	5.2	5.2	5.2	6.9
95°	5.2	5.2	6.9	8.6	10.3	12.1	15.5	17.2	15.5	12.1	12.1
97.5°	8.6	12.1	15.5	22.4	25.8	29.3	34.4	32.7	29.3	24.1	22.4
100°	17.2	24.1	32.7	46.5	53.4	58.5	60.3	56.8	48.2	39.6	36.2
102.5°	31.0	46.5	67.2	89.5	94.7	96.4	93.0	84.4	72.3	60.3	51.7
105°	63.7	96.4	125.7	142.9	144.6	141.2	132.6	115.4	99.9	82.7	72.3
107.5°	137.8	180.8	198.0	199.8	194.6	186.0	168.8	149.8	130.9	111.9	96.4
110°	244.5	263.5	260.0	244.5	235.9	227.3	204.9	184.3	161.9	139.5	124.0





TEST NUMBER: P303129

CATALOG NUMBER: CTW-F-5050-20L935-UNV-STD-8

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	325.5	320.3	304.8	284.1	273.8	263.5	241.1	218.7	191.1	170.5	153.3
115°	377.1	361.6	341.0	318.6	308.2	297.9	275.5	249.7	223.9	201.5	182.5
117.5°	413.3	394.3	373.7	351.3	339.2	328.9	304.8	279.0	254.9	230.7	213.5
120°	442.6	421.9	401.2	378.8	370.2	358.2	334.1	308.2	282.4	260.0	242.8
122.5°	470.1	449.4	427.1	408.1	396.1	385.7	359.9	335.8	311.7	289.3	272.1
125°	495.9	475.3	452.9	432.2	421.9	409.8	384.0	361.6	337.5	315.1	299.6
127.5°	514.9	497.7	478.7	458.1	446.0	433.9	408.1	385.7	363.3	342.7	325.5
130°	533.8	516.6	499.4	480.4	470.1	454.6	432.2	408.1	387.5	368.5	353.0
132.5°	549.3	535.5	516.6	499.4	487.3	475.3	452.9	430.5	411.6	392.6	377.1
135°	566.5	551.0	533.8	516.6	506.3	495.9	475.3	452.9	435.7	416.7	401.2
137.5°	580.3	564.8	549.3	532.1	521.8	511.4	494.2	473.6	456.3	440.8	423.6
140°	592.4	576.9	563.1	545.9	535.5	526.9	509.7	492.5	478.7	459.8	446.0
142.5°	602.7	587.2	575.1	557.9	547.6	540.7	525.2	508.0	495.9	480.4	468.4
145°	611.3	597.5	585.5	570.0	561.4	554.5	539.0	525.2	513.2	499.4	487.3
147.5°	621.6	606.1	595.8	580.3	573.4	566.5	552.8	539.0	528.7	514.9	504.5
150°	628.5	616.5	606.1	590.6	583.8	576.9	564.8	554.5	544.2	532.1	521.8
152.5°	633.7	623.4	613.0	599.3	594.1	588.9	576.9	566.5	557.9	547.6	537.3
155°	638.9	628.5	621.6	607.9	602.7	597.5	587.2	578.6	570.0	561.4	551.0
157.5°	642.3	633.7	626.8	614.8	611.3	606.1	597.5	588.9	582.0	573.4	564.8
160°	644.0	637.1	630.3	619.9	616.5	613.0	604.4	597.5	592.4	583.8	576.9
162.5°	644.0	638.9	632.0	623.4	619.9	616.5	611.3	604.4	601.0	594.1	587.2
165°	644.0	640.6	633.7	626.8	623.4	621.6	616.5	611.3	607.9	601.0	595.8
167.5°	642.3	638.9	633.7	628.5	626.8	623.4	619.9	614.8	613.0	609.6	602.7
170°	640.6	638.9	633.7	630.3	628.5	626.8	623.4	619.9	618.2	614.8	609.6
172.5°	637.1	637.1	633.7	630.3	628.5	626.8	623.4	621.6	621.6	618.2	614.8
175°	633.7	632.0	630.3	626.8	625.1	625.1	623.4	621.6	623.4	621.6	619.9
177.5°	625.1	626.8	623.4	623.4	621.6	621.6	621.6	621.6	623.4	623.4	621.6
180°	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9



TEST NUMBER: P303129

CATALOG NUMBER: CTW-F-5050-20L935-UNV-STD-8

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	669.9	669.9	669.9	669.9	669.9	669.9	669.9	669.9	669.9	669.9	669.9
2.5°	671.6	669.9	668.1	668.1	668.1	664.7	664.7	666.4	668.1	671.6	668.1
5°	669.9	668.1	666.4	666.4	666.4	663.0	663.0	664.7	666.4	669.9	666.4
7.5°	664.7	664.7	661.2	661.2	661.2	657.8	657.8	659.5	661.2	664.7	661.2
10°	659.5	657.8	654.4	654.4	654.4	652.6	650.9	652.6	656.1	657.8	654.4
12.5°	650.9	649.2	647.5	645.8	645.8	642.3	642.3	644.0	647.5	649.2	647.5
15°	640.6	638.9	637.1	635.4	635.4	633.7	632.0	633.7	637.1	638.9	635.4
17.5°	628.5	626.8	625.1	623.4	623.4	621.6	619.9	621.6	625.1	625.1	623.4
20°	614.8	613.0	611.3	611.3	611.3	607.9	607.9	607.9	611.3	611.3	607.9
22.5°	601.0	599.3	595.8	595.8	595.8	594.1	592.4	594.1	597.5	594.1	592.4
25°	585.5	582.0	580.3	580.3	578.6	575.1	576.9	576.9	580.3	578.6	575.1
27.5°	568.3	566.5	564.8	563.1	561.4	559.7	559.7	559.7	563.1	559.7	557.9
30°	549.3	547.6	545.9	544.2	544.2	540.7	540.7	542.4	544.2	540.7	539.0
32.5°	528.7	526.9	525.2	525.2	523.5	521.8	521.8	521.8	523.5	520.0	518.3
35°	509.7	506.3	504.5	504.5	502.8	501.1	501.1	502.8	502.8	499.4	497.7
37.5°	487.3	485.6	483.9	482.2	482.2	480.4	480.4	480.4	480.4	477.0	475.3
40°	466.7	463.2	461.5	459.8	459.8	459.8	459.8	459.8	458.1	454.6	451.2
42.5°	439.1	437.4	435.7	435.7	433.9	433.9	433.9	433.9	432.2	430.5	428.8
45°	416.7	415.0	413.3	411.6	413.3	413.3	411.6	411.6	409.8	408.1	406.4
47.5°	394.3	392.6	390.9	389.2	390.9	390.9	389.2	389.2	387.5	387.5	384.0
50°	370.2	368.5	366.8	366.8	366.8	366.8	366.8	365.1	365.1	363.3	359.9
52.5°	347.8	346.1	342.7	342.7	344.4	344.4	342.7	341.0	341.0	341.0	337.5
55°	323.7	322.0	320.3	320.3	322.0	320.3	318.6	316.8	318.6	316.8	313.4
57.5°	299.6	297.9	296.2	296.2	297.9	296.2	294.5	294.5	292.7	292.7	291.0
60°	275.5	273.8	272.1	273.8	273.8	272.1	270.4	270.4	270.4	266.9	266.9
62.5°	251.4	248.0	248.0	248.0	249.7	248.0	246.2	246.2	244.5	242.8	242.8
65°	225.6	223.9	225.6	223.9	223.9	223.9	222.1	222.1	220.4	218.7	218.7
67.5°	201.5	199.8	201.5	199.8	199.8	199.8	199.8	198.0	196.3	196.3	194.6
70°	177.4	175.6	177.4	175.6	175.6	175.6	175.6	173.9	172.2	170.5	170.5
72.5°	153.3	151.5	151.5	151.5	151.5	151.5	149.8	149.8	148.1	148.1	148.1
75°	129.2	127.4	127.4	127.4	127.4	125.7	125.7	125.7	124.0	124.0	124.0
77.5°	105.0	103.3	105.0	105.0	103.3	103.3	103.3	103.3	101.6	99.9	99.9
80°	80.9	80.9	80.9	80.9	80.9	80.9	79.2	79.2	79.2	77.5	77.5
82.5°	58.5	58.5	58.5	58.5	56.8	56.8	56.8	56.8	55.1	53.4	53.4
85°	36.2	36.2	36.2	36.2	34.4	36.2	34.4	32.7	32.7	31.0	29.3
87.5°	17.2	17.2	15.5	13.8	13.8	13.8	12.1	13.8	12.1	10.3	10.3
90°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
92.5°	8.6	10.3	12.1	12.1	12.1	10.3	10.3	10.3	10.3	10.3	8.6
95°	13.8	17.2	18.9	20.7	22.4	24.1	24.1	24.1	22.4	22.4	22.4
97.5°	22.4	24.1	25.8	25.8	27.6	29.3	32.7	34.4	36.2	37.9	36.2
100°	34.4	32.7	36.2	36.2	36.2	36.2	37.9	39.6	43.1	44.8	46.5
102.5°	48.2	44.8	44.8	46.5	46.5	48.2	48.2	48.2	49.9	51.7	53.4
105°	65.4	60.3	58.5	56.8	56.8	58.5	62.0	62.0	62.0	62.0	62.0
107.5°	86.1	79.2	72.3	70.6	68.9	70.6	72.3	75.8	77.5	77.5	75.8
110°	110.2	99.9	91.3	87.8	84.4	82.7	84.4	84.4	87.8	91.3	93.0



TEST NUMBER: P303129

CATALOG NUMBER: CTW-F-5050-20L935-UNV-STD-8

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
112.5°	137.8	122.3	110.2	108.5	103.3	98.2	96.4	96.4	98.2	99.9	103.3
115°	163.6	148.1	134.3	129.2	124.0	115.4	111.9	108.5	110.2	110.2	113.7
117.5°	194.6	175.6	160.1	153.3	146.4	136.0	127.4	124.0	122.3	122.3	122.3
120°	223.9	206.6	186.0	179.1	172.2	160.1	149.8	141.2	136.0	132.6	132.6
122.5°	251.4	234.2	215.3	206.6	198.0	186.0	173.9	161.9	155.0	148.1	144.6
125°	280.7	263.5	242.8	235.9	225.6	211.8	199.8	187.7	177.4	168.8	161.9
127.5°	308.2	291.0	270.4	261.7	254.9	241.1	225.6	213.5	201.5	192.9	182.5
130°	334.1	316.8	297.9	289.3	282.4	268.6	253.1	241.1	229.0	218.7	206.6
132.5°	359.9	342.7	325.5	316.8	308.2	296.2	280.7	268.6	254.9	244.5	235.9
135°	384.0	366.8	351.3	342.7	335.8	322.0	308.2	296.2	282.4	272.1	263.5
137.5°	408.1	390.9	375.4	366.8	359.9	347.8	335.8	323.7	310.0	299.6	289.3
140°	428.8	413.3	397.8	390.9	384.0	372.0	361.6	351.3	339.2	327.2	316.8
142.5°	451.2	435.7	421.9	413.3	406.4	394.3	384.0	375.4	365.1	353.0	344.4
145°	473.6	456.3	444.3	433.9	428.8	416.7	406.4	399.5	390.9	380.6	372.0
147.5°	490.8	477.0	466.7	459.8	451.2	439.1	428.8	421.9	415.0	404.7	397.8
150°	508.0	495.9	483.9	480.4	473.6	463.2	454.6	446.0	439.1	428.8	421.9
152.5°	526.9	513.2	504.5	497.7	492.5	482.2	473.6	468.4	464.9	452.9	447.7
155°	542.4	530.4	520.0	514.9	511.4	501.1	492.5	489.0	483.9	477.0	470.1
157.5°	556.2	545.9	535.5	530.4	528.7	518.3	511.4	506.3	502.8	497.7	490.8
160°	568.3	559.7	549.3	545.9	542.4	533.8	526.9	523.5	521.8	516.6	511.4
162.5°	580.3	571.7	563.1	559.7	556.2	549.3	542.4	539.0	537.3	533.8	528.7
165°	588.9	582.0	575.1	571.7	570.0	561.4	556.2	554.5	552.8	551.0	545.9
167.5°	599.3	592.4	585.5	583.8	580.3	575.1	570.0	568.3	566.5	566.5	561.4
170°	606.1	601.0	595.8	594.1	592.4	585.5	582.0	580.3	580.3	580.3	575.1
172.5°	613.0	609.6	602.7	602.7	601.0	595.8	592.4	592.4	590.6	592.4	587.2
175°	618.2	614.8	609.6	609.6	607.9	604.4	601.0	601.0	602.7	604.4	599.3
177.5°	621.6	618.2	614.8	614.8	613.0	611.3	607.9	609.6	611.3	613.0	609.6
180°	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9



TEST NUMBER: P303129

CATALOG NUMBER: CTW-F-5050-20L935-UNV-STD-8

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	669.9	669.9	669.9	669.9	669.9	669.9	669.9	669.9
2.5°	671.6	669.9	668.1	668.1	666.4	666.4	666.4	666.4
5°	668.1	666.4	666.4	664.7	664.7	664.7	666.4	666.4
7.5°	664.7	661.2	661.2	659.5	659.5	659.5	661.2	661.2
10°	656.1	656.1	654.4	652.6	652.6	652.6	652.6	654.4
12.5°	647.5	645.8	645.8	642.3	642.3	644.0	644.0	645.8
15°	637.1	635.4	633.7	633.7	633.7	633.7	633.7	635.4
17.5°	625.1	623.4	621.6	619.9	619.9	621.6	621.6	621.6
20°	609.6	606.1	606.1	604.4	604.4	604.4	606.1	606.1
22.5°	592.4	588.9	588.9	587.2	587.2	588.9	588.9	588.9
25°	575.1	573.4	571.7	570.0	570.0	570.0	571.7	571.7
27.5°	557.9	554.5	554.5	552.8	552.8	552.8	552.8	552.8
30°	539.0	535.5	533.8	533.8	532.1	532.1	533.8	533.8
32.5°	516.6	514.9	513.2	513.2	511.4	513.2	513.2	513.2
35°	495.9	492.5	492.5	492.5	490.8	492.5	490.8	490.8
37.5°	475.3	470.1	470.1	470.1	470.1	470.1	470.1	470.1
40°	449.4	446.0	446.0	444.3	444.3	444.3	444.3	444.3
42.5°	427.1	423.6	423.6	421.9	421.9	421.9	421.9	421.9
45°	404.7	401.2	401.2	401.2	399.5	399.5	399.5	397.8
47.5°	380.6	378.8	378.8	377.1	377.1	377.1	377.1	377.1
50°	358.2	356.5	356.5	354.7	356.5	354.7	354.7	354.7
52.5°	334.1	334.1	332.3	332.3	332.3	330.6	330.6	330.6
55°	311.7	310.0	310.0	308.2	310.0	308.2	308.2	308.2
57.5°	287.6	287.6	287.6	285.9	285.9	284.1	284.1	284.1
60°	263.5	263.5	263.5	261.7	263.5	261.7	261.7	261.7
62.5°	241.1	241.1	239.4	239.4	239.4	237.6	237.6	237.6
65°	217.0	215.3	215.3	217.0	215.3	215.3	215.3	215.3
67.5°	194.6	194.6	192.9	192.9	192.9	191.1	191.1	191.1
70°	170.5	170.5	168.8	168.8	168.8	167.0	168.8	167.0
72.5°	146.4	146.4	144.6	146.4	144.6	142.9	144.6	144.6
75°	122.3	122.3	122.3	122.3	122.3	120.5	120.5	120.5
77.5°	99.9	99.9	98.2	98.2	98.2	98.2	98.2	96.4
80°	75.8	75.8	74.0	74.0	74.0	74.0	74.0	72.3
82.5°	53.4	51.7	51.7	51.7	51.7	49.9	49.9	49.9
85°	29.3	29.3	29.3	29.3	27.6	29.3	27.6	27.6
87.5°	10.3	10.3	10.3	8.6	8.6	10.3	10.3	8.6
90°	1.7	1.7	3.4	3.4	3.4	3.4	3.4	3.4
92.5°	8.6	8.6	8.6	6.9	6.9	6.9	6.9	6.9
95°	22.4	22.4	22.4	20.7	20.7	22.4	20.7	20.7
97.5°	36.2	36.2	36.2	36.2	34.4	36.2	34.4	34.4
100°	46.5	48.2	48.2	48.2	48.2	48.2	48.2	49.9
102.5°	55.1	55.1	55.1	55.1	56.8	56.8	56.8	56.8
105°	63.7	63.7	63.7	65.4	65.4	67.2	67.2	67.2
107.5°	75.8	75.8	75.8	75.8	77.5	77.5	77.5	77.5
110°	93.0	93.0	91.3	91.3	89.5	89.5	89.5	89.5



TEST NUMBER: P303129

CATALOG NUMBER: CTW-F-5050-20L935-UNV-STD-8

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
112.5°	106.8	108.5	108.5	108.5	108.5	108.5	108.5	108.5
115°	115.4	118.8	118.8	120.5	120.5	122.3	122.3	122.3
117.5°	124.0	127.4	127.4	129.2	129.2	130.9	132.6	132.6
120°	134.3	136.0	136.0	137.8	137.8	139.5	139.5	139.5
122.5°	144.6	144.6	144.6	146.4	146.4	146.4	148.1	148.1
125°	158.4	156.7	156.7	155.0	155.0	155.0	155.0	156.7
127.5°	177.4	172.2	170.5	170.5	168.8	167.0	167.0	165.3
130°	198.0	194.6	191.1	189.4	186.0	184.3	182.5	182.5
132.5°	225.6	218.7	215.3	211.8	208.4	204.9	204.9	203.2
135°	254.9	246.2	244.5	239.4	235.9	232.5	229.0	229.0
137.5°	280.7	273.8	272.1	268.6	265.2	260.0	260.0	256.6
140°	308.2	301.4	297.9	294.5	291.0	287.6	287.6	287.6
142.5°	335.8	328.9	325.5	322.0	318.6	315.1	313.4	315.1
145°	363.3	356.5	353.0	349.6	346.1	342.7	341.0	339.2
147.5°	389.2	382.3	378.8	377.1	373.7	370.2	368.5	366.8
150°	415.0	408.1	406.4	402.9	399.5	396.1	394.3	394.3
152.5°	439.1	433.9	430.5	427.1	425.3	421.9	420.2	420.2
155°	464.9	459.8	456.3	454.6	451.2	447.7	447.7	444.3
157.5°	487.3	482.2	478.7	477.0	473.6	471.8	471.8	471.8
160°	508.0	502.8	501.1	497.7	494.2	494.2	494.2	494.2
162.5°	526.9	523.5	521.8	518.3	514.9	514.9	514.9	513.2
165°	544.2	540.7	539.0	535.5	533.8	533.8	533.8	533.8
167.5°	561.4	556.2	554.5	552.8	551.0	551.0	551.0	551.0
170°	575.1	571.7	570.0	568.3	566.5	566.5	566.5	566.5
172.5°	588.9	587.2	585.5	582.0	582.0	582.0	583.8	582.0
175°	601.0	599.3	597.5	595.8	594.1	595.8	595.8	595.8
177.5°	611.3	609.6	609.6	607.9	606.1	604.4	606.1	604.4
180°	619.9	619.9	619.9	619.9	619.9	619.9	619.9	619.9

(END OF REPORT)