

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: P303123

Luminaire Tested: **CTW-F-5050-20L935-UNV-STD-6**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P303123
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-6
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

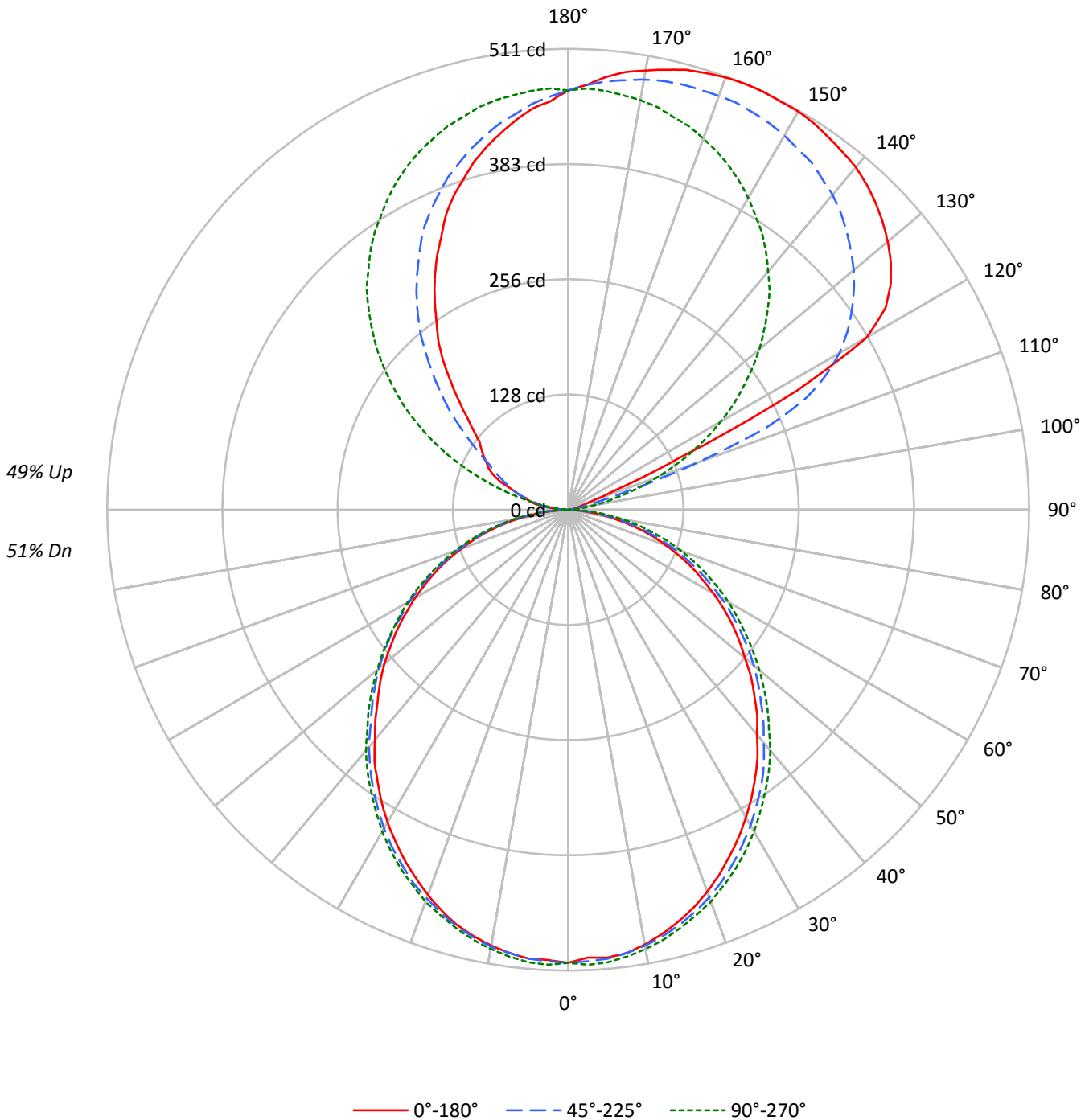
Lumens per Lamp: N/A
Luminaire Lumens: 2644.7 lumens
Efficiency: N/A
Efficacy: 110.2 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.31
Luminous Opening: Rectangular (W 6' x L: 0.12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 24
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°	7210	7210	7210
5°	7182	7257	7200
10°	7134	7208	7153
15°	7023	7138	7081
20°	6884	7062	6943
25°	6708	6953	6790
30°	6528	6828	6635
35°	6335	6675	6449
40°	6098	6533	6243
45°	5925	6343	6054
50°	5709	6171	5939
55°	5557	6010	5785
60°	5339	5893	5635
65°	5131	5746	5481
70°	4821	5581	5258
75°	4442	5373	5013
80°	3736	5017	4480
85°	2124	4463	3409



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.4	1.8
10°-20°	134.3	5.1
20°-30°	198.9	7.5
30°-40°	233.2	8.8
40°-50°	234.6	8.9
50°-60°	209.2	7.9
60°-70°	160.5	6.1
70°-80°	95.5	3.6
80°-90°	25.9	1.0
90°-100°	12.3	0.5
100°-110°	54.9	2.1
110°-120°	156.4	5.9
120°-130°	230.4	8.7
130°-140°	248.5	9.4
140°-150°	236.6	8.9
150°-160°	194.7	7.4
160°-170°	127.3	4.8
170°-180°	44.2	1.7
0°-30°	380.6	14.4
0°-40°	613.8	23.2
0°-60°	1057.6	40.0
0°-90°	1339.5	50.6
90°-120°	223.6	8.5
90°-150°	939.1	35.5
90°-180°	1305.0	49.3
0°-180°	2644.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	502	502	502	502	502	
5°	498	500	504	500	500	47
15°	473	477	480	478	477	133
25°	424	433	439	435	429	195
35°	362	373	381	377	368	226
45°	292	302	312	307	298	225
55°	222	232	240	239	231	198
65°	151	159	169	165	161	149
75°	80	86	97	93	90	84
85°	13	18	27	24	21	18
90°	1	1	0	1	3	1
95°	3	3	9	17	16	3
105°	13	32	62	46	50	15
115°	137	289	151	83	92	167
125°	436	384	236	133	118	387
135°	482	436	312	212	172	372
145°	504	470	374	293	254	316
155°	511	486	421	363	333	236
165°	505	488	451	415	400	143
175°	482	477	466	452	447	46
180°	465	465	465	465	465	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	502.4	502.4	502.4	502.4	502.4	502.4	502.4	502.4	502.4	502.4	502.4
2.5°	497.2	497.2	498.5	499.8	501.1	501.1	502.4	502.4	502.4	502.4	501.1
5°	498.5	497.2	498.5	498.5	498.5	498.5	499.8	501.1	501.1	501.1	499.8
7.5°	495.9	494.6	495.9	495.9	494.6	494.6	495.9	497.2	497.2	497.2	495.9
10°	489.5	488.2	489.5	489.5	489.5	489.5	490.8	490.8	492.1	492.1	490.8
12.5°	481.7	481.7	481.7	483.0	481.7	483.0	483.0	484.3	485.6	485.6	484.3
15°	472.7	472.7	474.0	475.3	474.0	475.3	475.3	476.6	476.6	477.9	476.6
17.5°	462.4	462.4	463.6	464.9	464.9	464.9	466.2	466.2	467.5	467.5	467.5
20°	450.7	450.7	450.7	453.3	453.3	453.3	453.3	454.6	457.2	457.2	457.2
22.5°	437.8	437.8	437.8	440.4	440.4	440.4	440.4	441.7	444.3	445.6	445.6
25°	423.6	423.6	423.6	426.2	426.2	426.2	426.2	428.8	431.4	431.4	432.7
27.5°	409.4	409.4	410.7	412.0	412.0	412.0	413.3	414.6	417.2	418.4	418.4
30°	393.9	393.9	393.9	396.5	396.5	397.8	397.8	400.4	401.7	404.2	404.2
32.5°	378.4	378.4	379.7	381.0	381.0	381.0	382.3	384.9	386.2	387.5	388.7
35°	361.6	361.6	362.9	364.2	365.5	365.5	365.5	368.1	369.4	372.0	373.2
37.5°	344.8	344.8	346.1	347.4	348.7	348.7	348.7	351.3	352.6	355.2	356.5
40°	325.5	325.5	325.5	328.0	328.0	329.3	329.3	330.6	333.2	335.8	337.1
42.5°	310.0	308.7	308.7	310.0	311.3	312.5	312.5	313.8	316.4	319.0	320.3
45°	291.9	291.9	291.9	293.2	294.5	294.5	295.8	297.0	298.3	302.2	302.2
47.5°	275.1	273.8	273.8	276.4	276.4	277.7	277.7	279.0	281.5	284.1	285.4
50°	255.7	257.0	257.0	258.3	259.6	259.6	260.9	260.9	263.5	266.0	268.6
52.5°	238.9	238.9	238.9	240.2	241.5	242.8	242.8	244.1	245.4	248.0	250.6
55°	222.1	222.1	222.1	223.4	223.4	224.7	224.7	226.0	227.3	229.9	232.5
57.5°	204.1	204.1	204.1	205.3	206.6	206.6	207.9	207.9	209.2	211.8	214.4
60°	186.0	186.0	186.0	187.3	188.6	188.6	189.9	189.9	191.1	193.7	196.3
62.5°	167.9	169.2	167.9	169.2	170.5	170.5	171.8	171.8	174.4	174.4	176.9
65°	151.1	151.1	151.1	151.1	152.4	152.4	152.4	155.0	155.0	157.6	158.9
67.5°	133.0	133.0	133.0	133.0	134.3	135.6	135.6	136.9	138.2	138.2	140.8
70°	114.9	116.2	116.2	114.9	116.2	117.5	117.5	118.8	120.1	120.1	122.7
72.5°	98.2	98.2	98.2	98.2	98.2	99.4	100.7	100.7	102.0	103.3	104.6
75°	80.1	80.1	81.4	80.1	80.1	81.4	82.7	83.9	83.9	85.2	86.5
77.5°	62.0	63.3	63.3	63.3	64.6	64.6	64.6	65.9	67.2	67.2	68.4
80°	45.2	46.5	46.5	46.5	47.8	46.5	47.8	49.1	49.1	50.4	51.7
82.5°	28.4	28.4	29.7	29.7	29.7	29.7	31.0	32.3	32.3	32.3	34.9
85°	12.9	12.9	14.2	14.2	14.2	14.2	15.5	15.5	16.8	16.8	18.1
87.5°	1.3	1.3	1.3	1.3	2.6	1.3	2.6	2.6	2.6	2.6	3.9
90°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
92.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
95°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
97.5°	3.9	3.9	3.9	3.9	3.9	3.9	5.2	5.2	5.2	5.2	6.5
100°	6.5	6.5	6.5	6.5	6.5	6.5	6.5	7.7	7.7	9.0	10.3
102.5°	9.0	9.0	9.0	9.0	10.3	10.3	10.3	11.6	11.6	14.2	16.8
105°	12.9	12.9	12.9	14.2	14.2	14.2	15.5	16.8	19.4	24.5	32.3
107.5°	18.1	19.4	19.4	19.4	22.0	22.0	24.5	28.4	34.9	50.4	71.0
110°	28.4	29.7	29.7	32.3	37.5	40.0	45.2	59.4	80.1	112.4	151.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	55.5	58.1	60.7	68.4	82.7	93.0	107.2	140.8	178.2	220.8	237.6
115°	136.9	138.2	149.8	165.3	197.6	215.7	232.5	262.2	285.4	290.6	289.3
117.5°	285.4	291.9	298.3	308.7	322.9	329.3	337.1	343.5	338.4	331.9	321.6
120°	382.3	379.7	382.3	383.6	382.3	382.3	381.0	375.8	366.8	357.7	347.4
122.5°	417.2	415.9	414.6	413.3	408.1	406.8	404.2	396.5	387.5	377.1	366.8
125°	436.5	435.2	432.7	430.1	426.2	423.6	421.0	413.3	404.2	393.9	383.6
127.5°	450.7	449.4	446.9	444.3	440.4	437.8	433.9	427.5	418.4	409.4	399.1
130°	462.4	461.1	458.5	457.2	452.0	450.7	446.9	439.1	431.4	423.6	413.3
132.5°	472.7	471.4	468.8	467.5	463.6	461.1	458.5	450.7	441.7	433.9	424.9
135°	481.7	480.4	479.1	477.9	474.0	471.4	467.5	461.1	453.3	445.6	436.5
137.5°	489.5	488.2	486.9	484.3	481.7	479.1	475.3	468.8	463.6	455.9	446.9
140°	495.9	494.6	492.1	490.8	488.2	485.6	483.0	477.9	471.4	464.9	455.9
142.5°	499.8	499.8	497.2	497.2	493.4	490.8	488.2	483.0	479.1	472.7	462.4
145°	503.7	503.7	502.4	501.1	498.5	495.9	493.4	489.5	484.3	479.1	470.1
147.5°	507.6	506.3	506.3	505.0	502.4	499.8	498.5	494.6	489.5	484.3	474.0
150°	510.1	508.9	508.9	507.6	505.0	502.4	501.1	498.5	493.4	488.2	479.1
152.5°	510.1	510.1	511.4	508.9	506.3	505.0	503.7	499.8	497.2	490.8	483.0
155°	511.4	511.4	511.4	510.1	506.3	505.0	503.7	501.1	498.5	493.4	485.6
157.5°	511.4	511.4	511.4	510.1	506.3	505.0	503.7	502.4	499.8	494.6	488.2
160°	510.1	510.1	510.1	510.1	507.6	505.0	503.7	502.4	499.8	494.6	488.2
162.5°	507.6	507.6	507.6	507.6	505.0	503.7	502.4	501.1	499.8	493.4	488.2
165°	505.0	505.0	505.0	503.7	501.1	501.1	499.8	498.5	497.2	492.1	488.2
167.5°	499.8	499.8	499.8	498.5	495.9	495.9	495.9	494.6	493.4	489.5	486.9
170°	494.6	494.6	494.6	493.4	492.1	492.1	492.1	490.8	490.8	486.9	484.3
172.5°	489.5	489.5	489.5	488.2	485.6	485.6	485.6	486.9	485.6	483.0	480.4
175°	481.7	480.4	480.4	480.4	480.4	479.1	480.4	480.4	480.4	477.9	476.6
177.5°	471.4	471.4	471.4	472.7	472.7	472.7	472.7	474.0	474.0	472.7	471.4
180°	464.9	464.9	464.9	464.9	464.9	464.9	464.9	464.9	464.9	464.9	464.9



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	502.4	502.4	502.4	502.4	502.4	502.4	502.4	502.4	502.4	502.4	502.4
2.5°	499.8	501.1	499.8	499.8	499.8	499.8	499.8	501.1	503.7	505.0	503.7
5°	498.5	499.8	498.5	498.5	498.5	498.5	498.5	499.8	502.4	503.7	502.4
7.5°	494.6	495.9	494.6	494.6	494.6	494.6	494.6	495.9	499.8	499.8	499.8
10°	489.5	490.8	489.5	489.5	489.5	490.8	490.8	492.1	494.6	494.6	494.6
12.5°	483.0	484.3	483.0	483.0	484.3	484.3	483.0	485.6	488.2	488.2	488.2
15°	475.3	476.6	475.3	475.3	475.3	476.6	476.6	477.9	480.4	480.4	480.4
17.5°	464.9	466.2	466.2	466.2	467.5	467.5	467.5	468.8	471.4	471.4	471.4
20°	455.9	455.9	455.9	455.9	455.9	457.2	457.2	459.8	462.4	462.4	462.4
22.5°	444.3	444.3	445.6	444.3	445.6	446.9	445.6	448.2	450.7	450.7	450.7
25°	431.4	432.7	432.7	432.7	432.7	433.9	433.9	436.5	437.8	439.1	439.1
27.5°	418.4	418.4	419.7	419.7	419.7	421.0	421.0	423.6	426.2	426.2	426.2
30°	404.2	404.2	405.5	406.8	405.5	406.8	406.8	409.4	410.7	412.0	412.0
32.5°	388.7	388.7	391.3	391.3	391.3	392.6	392.6	393.9	396.5	396.5	397.8
35°	373.2	373.2	375.8	375.8	375.8	377.1	377.1	378.4	381.0	381.0	382.3
37.5°	356.5	357.7	359.0	360.3	359.0	360.3	360.3	362.9	364.2	365.5	365.5
40°	339.7	339.7	341.0	342.2	342.2	343.5	344.8	346.1	348.7	348.7	348.7
42.5°	320.3	321.6	322.9	324.2	324.2	325.5	326.8	326.8	328.0	329.3	329.3
45°	303.5	304.8	304.8	307.4	308.7	308.7	308.7	310.0	311.3	312.5	312.5
47.5°	286.7	288.0	289.3	291.9	290.6	290.6	291.9	291.9	293.2	294.5	295.8
50°	268.6	269.9	271.2	272.5	272.5	273.8	273.8	275.1	276.4	276.4	277.7
52.5°	250.6	251.8	254.4	254.4	255.7	255.7	257.0	257.0	258.3	258.3	259.6
55°	232.5	233.8	236.3	237.6	237.6	238.9	238.9	240.2	240.2	240.2	241.5
57.5°	214.4	215.7	218.3	219.6	219.6	220.8	220.8	222.1	222.1	222.1	223.4
60°	196.3	197.6	200.2	201.5	201.5	202.8	202.8	204.1	204.1	205.3	205.3
62.5°	179.5	179.5	182.1	183.4	183.4	183.4	184.7	186.0	186.0	187.3	188.6
65°	160.1	161.4	164.0	165.3	164.0	165.3	166.6	167.9	167.9	169.2	169.2
67.5°	142.1	143.4	145.9	145.9	145.9	147.2	148.5	149.8	149.8	151.1	151.1
70°	124.0	124.0	126.6	127.9	127.9	129.2	130.4	131.7	131.7	133.0	133.0
72.5°	104.6	105.9	108.5	109.8	111.1	111.1	112.4	112.4	114.9	114.9	114.9
75°	87.8	87.8	90.4	91.7	93.0	93.0	94.3	94.3	95.6	96.9	96.9
77.5°	69.7	71.0	72.3	73.6	74.9	74.9	76.2	76.2	77.5	78.8	78.8
80°	53.0	53.0	55.5	55.5	56.8	56.8	58.1	59.4	60.7	60.7	60.7
82.5°	34.9	36.2	38.7	38.7	40.0	40.0	41.3	41.3	42.6	42.6	43.9
85°	19.4	20.7	22.0	22.0	23.2	23.2	24.5	25.8	25.8	27.1	27.1
87.5°	3.9	6.5	6.5	7.7	7.7	9.0	9.0	10.3	11.6	11.6	11.6
90°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.0	1.3	0.0	1.3
92.5°	1.3	1.3	1.3	2.6	2.6	2.6	3.9	3.9	3.9	3.9	5.2
95°	3.9	3.9	5.2	6.5	7.7	9.0	11.6	12.9	11.6	9.0	9.0
97.5°	6.5	9.0	11.6	16.8	19.4	22.0	25.8	24.5	22.0	18.1	16.8
100°	12.9	18.1	24.5	34.9	40.0	43.9	45.2	42.6	36.2	29.7	27.1
102.5°	23.2	34.9	50.4	67.2	71.0	72.3	69.7	63.3	54.2	45.2	38.7
105°	47.8	72.3	94.3	107.2	108.5	105.9	99.4	86.5	74.9	62.0	54.2
107.5°	103.3	135.6	148.5	149.8	145.9	139.5	126.6	112.4	98.2	83.9	72.3
110°	183.4	197.6	195.0	183.4	176.9	170.5	153.7	138.2	121.4	104.6	93.0



TEST NUMBER: P303123

CATALOG NUMBER: CTW-F-5050-20L935-UNV-STD-6

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	244.1	240.2	228.6	213.1	205.3	197.6	180.8	164.0	143.4	127.9	114.9
115°	282.8	271.2	255.7	238.9	231.2	223.4	206.6	187.3	167.9	151.1	136.9
117.5°	310.0	295.8	280.3	263.5	254.4	246.7	228.6	209.2	191.1	173.1	160.1
120°	331.9	316.4	300.9	284.1	277.7	268.6	250.6	231.2	211.8	195.0	182.1
122.5°	352.6	337.1	320.3	306.1	297.0	289.3	269.9	251.8	233.8	217.0	204.1
125°	372.0	356.5	339.7	324.2	316.4	307.4	288.0	271.2	253.1	236.3	224.7
127.5°	386.2	373.2	359.0	343.5	334.5	325.5	306.1	289.3	272.5	257.0	244.1
130°	400.4	387.5	374.5	360.3	352.6	341.0	324.2	306.1	290.6	276.4	264.8
132.5°	412.0	401.7	387.5	374.5	365.5	356.5	339.7	322.9	308.7	294.5	282.8
135°	424.9	413.3	400.4	387.5	379.7	372.0	356.5	339.7	326.8	312.5	300.9
137.5°	435.2	423.6	412.0	399.1	391.3	383.6	370.7	355.2	342.2	330.6	317.7
140°	444.3	432.7	422.3	409.4	401.7	395.2	382.3	369.4	359.0	344.8	334.5
142.5°	452.0	440.4	431.4	418.4	410.7	405.5	393.9	381.0	372.0	360.3	351.3
145°	458.5	448.2	439.1	427.5	421.0	415.9	404.2	393.9	384.9	374.5	365.5
147.5°	466.2	454.6	446.9	435.2	430.1	424.9	414.6	404.2	396.5	386.2	378.4
150°	471.4	462.4	454.6	443.0	437.8	432.7	423.6	415.9	408.1	399.1	391.3
152.5°	475.3	467.5	459.8	449.4	445.6	441.7	432.7	424.9	418.4	410.7	402.9
155°	479.1	471.4	466.2	455.9	452.0	448.2	440.4	433.9	427.5	421.0	413.3
157.5°	481.7	475.3	470.1	461.1	458.5	454.6	448.2	441.7	436.5	430.1	423.6
160°	483.0	477.9	472.7	464.9	462.4	459.8	453.3	448.2	444.3	437.8	432.7
162.5°	483.0	479.1	474.0	467.5	464.9	462.4	458.5	453.3	450.7	445.6	440.4
165°	483.0	480.4	475.3	470.1	467.5	466.2	462.4	458.5	455.9	450.7	446.9
167.5°	481.7	479.1	475.3	471.4	470.1	467.5	464.9	461.1	459.8	457.2	452.0
170°	480.4	479.1	475.3	472.7	471.4	470.1	467.5	464.9	463.6	461.1	457.2
172.5°	477.9	477.9	475.3	472.7	471.4	470.1	467.5	466.2	466.2	463.6	461.1
175°	475.3	474.0	472.7	470.1	468.8	468.8	467.5	466.2	467.5	466.2	464.9
177.5°	468.8	470.1	467.5	467.5	466.2	466.2	466.2	466.2	467.5	467.5	466.2
180°	464.9	464.9	464.9	464.9	464.9	464.9	464.9	464.9	464.9	464.9	464.9



TEST NUMBER: P303123

CATALOG NUMBER: CTW-F-5050-20L935-UNV-STD-6

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	502.4	502.4	502.4	502.4	502.4	502.4	502.4	502.4	502.4	502.4	502.4
2.5°	503.7	502.4	501.1	501.1	501.1	498.5	498.5	499.8	501.1	503.7	501.1
5°	502.4	501.1	499.8	499.8	499.8	497.2	497.2	498.5	499.8	502.4	499.8
7.5°	498.5	498.5	495.9	495.9	495.9	493.4	493.4	494.6	495.9	498.5	495.9
10°	494.6	493.4	490.8	490.8	490.8	489.5	488.2	489.5	492.1	493.4	490.8
12.5°	488.2	486.9	485.6	484.3	484.3	481.7	481.7	483.0	485.6	486.9	485.6
15°	480.4	479.1	477.9	476.6	476.6	475.3	474.0	475.3	477.9	479.1	476.6
17.5°	471.4	470.1	468.8	467.5	467.5	466.2	464.9	466.2	468.8	468.8	467.5
20°	461.1	459.8	458.5	458.5	458.5	455.9	455.9	455.9	458.5	458.5	455.9
22.5°	450.7	449.4	446.9	446.9	446.9	445.6	444.3	445.6	448.2	445.6	444.3
25°	439.1	436.5	435.2	435.2	433.9	431.4	432.7	432.7	435.2	433.9	431.4
27.5°	426.2	424.9	423.6	422.3	421.0	419.7	419.7	419.7	422.3	419.7	418.4
30°	412.0	410.7	409.4	408.1	408.1	405.5	405.5	406.8	408.1	405.5	404.2
32.5°	396.5	395.2	393.9	393.9	392.6	391.3	391.3	391.3	392.6	390.0	388.7
35°	382.3	379.7	378.4	378.4	377.1	375.8	375.8	377.1	377.1	374.5	373.2
37.5°	365.5	364.2	362.9	361.6	361.6	360.3	360.3	360.3	360.3	357.7	356.5
40°	350.0	347.4	346.1	344.8	344.8	344.8	344.8	344.8	343.5	341.0	338.4
42.5°	329.3	328.0	326.8	326.8	325.5	325.5	325.5	325.5	324.2	322.9	321.6
45°	312.5	311.3	310.0	308.7	310.0	310.0	308.7	308.7	307.4	306.1	304.8
47.5°	295.8	294.5	293.2	291.9	293.2	293.2	291.9	291.9	290.6	290.6	288.0
50°	277.7	276.4	275.1	275.1	276.4	275.1	275.1	273.8	273.8	272.5	269.9
52.5°	260.9	259.6	257.0	257.0	258.3	258.3	257.0	255.7	255.7	255.7	253.1
55°	242.8	241.5	240.2	240.2	241.5	240.2	238.9	237.6	238.9	237.6	235.1
57.5°	224.7	223.4	222.1	222.1	223.4	222.1	220.8	220.8	219.6	219.6	218.3
60°	206.6	205.3	204.1	205.3	205.3	204.1	202.8	202.8	202.8	200.2	200.2
62.5°	188.6	186.0	186.0	186.0	187.3	186.0	184.7	184.7	183.4	182.1	182.1
65°	169.2	167.9	169.2	167.9	167.9	167.9	166.6	166.6	165.3	164.0	164.0
67.5°	151.1	149.8	151.1	149.8	149.8	149.8	149.8	148.5	147.2	147.2	145.9
70°	133.0	131.7	133.0	131.7	131.7	131.7	131.7	130.4	129.2	127.9	127.9
72.5°	114.9	113.7	113.7	113.7	113.7	113.7	112.4	112.4	111.1	111.1	111.1
75°	96.9	95.6	95.6	95.6	95.6	94.3	94.3	94.3	93.0	93.0	93.0
77.5°	78.8	77.5	78.8	78.8	77.5	77.5	77.5	77.5	76.2	74.9	74.9
80°	60.7	60.7	60.7	60.7	60.7	60.7	59.4	59.4	59.4	58.1	58.1
82.5°	43.9	43.9	43.9	43.9	42.6	42.6	42.6	42.6	41.3	40.0	40.0
85°	27.1	27.1	27.1	27.1	25.8	27.1	25.8	24.5	24.5	23.2	22.0
87.5°	12.9	12.9	11.6	10.3	10.3	10.3	9.0	10.3	9.0	7.7	7.7
90°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
92.5°	6.5	7.7	9.0	9.0	9.0	7.7	7.7	7.7	7.7	7.7	6.5
95°	10.3	12.9	14.2	15.5	16.8	18.1	18.1	18.1	16.8	16.8	16.8
97.5°	16.8	18.1	19.4	19.4	20.7	22.0	24.5	25.8	27.1	28.4	27.1
100°	25.8	24.5	27.1	27.1	27.1	27.1	28.4	29.7	32.3	33.6	34.9
102.5°	36.2	33.6	33.6	34.9	34.9	36.2	36.2	36.2	37.5	38.7	40.0
105°	49.1	45.2	43.9	42.6	42.6	43.9	46.5	46.5	46.5	46.5	46.5
107.5°	64.6	59.4	54.2	53.0	51.7	53.0	54.2	56.8	58.1	58.1	56.8
110°	82.7	74.9	68.4	65.9	63.3	62.0	63.3	63.3	65.9	68.4	69.7



TEST NUMBER: P303123

CATALOG NUMBER: CTW-F-5050-20L935-UNV-STD-6

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
112.5°	103.3	91.7	82.7	81.4	77.5	73.6	72.3	72.3	73.6	74.9	77.5
115°	122.7	111.1	100.7	96.9	93.0	86.5	83.9	81.4	82.7	82.7	85.2
117.5°	145.9	131.7	120.1	114.9	109.8	102.0	95.6	93.0	91.7	91.7	91.7
120°	167.9	155.0	139.5	134.3	129.2	120.1	112.4	105.9	102.0	99.4	99.4
122.5°	188.6	175.6	161.4	155.0	148.5	139.5	130.4	121.4	116.2	111.1	108.5
125°	210.5	197.6	182.1	176.9	169.2	158.9	149.8	140.8	133.0	126.6	121.4
127.5°	231.2	218.3	202.8	196.3	191.1	180.8	169.2	160.1	151.1	144.6	136.9
130°	250.6	237.6	223.4	217.0	211.8	201.5	189.9	180.8	171.8	164.0	155.0
132.5°	269.9	257.0	244.1	237.6	231.2	222.1	210.5	201.5	191.1	183.4	176.9
135°	288.0	275.1	263.5	257.0	251.8	241.5	231.2	222.1	211.8	204.1	197.6
137.5°	306.1	293.2	281.5	275.1	269.9	260.9	251.8	242.8	232.5	224.7	217.0
140°	321.6	310.0	298.3	293.2	288.0	279.0	271.2	263.5	254.4	245.4	237.6
142.5°	338.4	326.8	316.4	310.0	304.8	295.8	288.0	281.5	273.8	264.8	258.3
145°	355.2	342.2	333.2	325.5	321.6	312.5	304.8	299.6	293.2	285.4	279.0
147.5°	368.1	357.7	350.0	344.8	338.4	329.3	321.6	316.4	311.3	303.5	298.3
150°	381.0	372.0	362.9	360.3	355.2	347.4	341.0	334.5	329.3	321.6	316.4
152.5°	395.2	384.9	378.4	373.2	369.4	361.6	355.2	351.3	348.7	339.7	335.8
155°	406.8	397.8	390.0	386.2	383.6	375.8	369.4	366.8	362.9	357.7	352.6
157.5°	417.2	409.4	401.7	397.8	396.5	388.7	383.6	379.7	377.1	373.2	368.1
160°	426.2	419.7	412.0	409.4	406.8	400.4	395.2	392.6	391.3	387.5	383.6
162.5°	435.2	428.8	422.3	419.7	417.2	412.0	406.8	404.2	402.9	400.4	396.5
165°	441.7	436.5	431.4	428.8	427.5	421.0	417.2	415.9	414.6	413.3	409.4
167.5°	449.4	444.3	439.1	437.8	435.2	431.4	427.5	426.2	424.9	424.9	421.0
170°	454.6	450.7	446.9	445.6	444.3	439.1	436.5	435.2	435.2	435.2	431.4
172.5°	459.8	457.2	452.0	452.0	450.7	446.9	444.3	444.3	443.0	444.3	440.4
175°	463.6	461.1	457.2	457.2	455.9	453.3	450.7	450.7	452.0	453.3	449.4
177.5°	466.2	463.6	461.1	461.1	459.8	458.5	455.9	457.2	458.5	459.8	457.2
180°	464.9	464.9	464.9	464.9	464.9	464.9	464.9	464.9	464.9	464.9	464.9



TEST NUMBER: P303123

CATALOG NUMBER: CTW-F-5050-20L935-UNV-STD-6

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	502.4	502.4	502.4	502.4	502.4	502.4	502.4	502.4
2.5°	503.7	502.4	501.1	501.1	499.8	499.8	499.8	499.8
5°	501.1	499.8	499.8	498.5	498.5	498.5	499.8	499.8
7.5°	498.5	495.9	495.9	494.6	494.6	494.6	495.9	495.9
10°	492.1	492.1	490.8	489.5	489.5	489.5	489.5	490.8
12.5°	485.6	484.3	484.3	481.7	481.7	483.0	483.0	484.3
15°	477.9	476.6	475.3	475.3	475.3	475.3	475.3	476.6
17.5°	468.8	467.5	466.2	464.9	464.9	466.2	466.2	466.2
20°	457.2	454.6	454.6	453.3	453.3	453.3	454.6	454.6
22.5°	444.3	441.7	441.7	440.4	440.4	441.7	441.7	441.7
25°	431.4	430.1	428.8	427.5	427.5	427.5	428.8	428.8
27.5°	418.4	415.9	415.9	414.6	414.6	414.6	414.6	414.6
30°	404.2	401.7	400.4	400.4	399.1	399.1	400.4	400.4
32.5°	387.5	386.2	384.9	384.9	383.6	384.9	384.9	384.9
35°	372.0	369.4	369.4	369.4	368.1	369.4	368.1	368.1
37.5°	356.5	352.6	352.6	352.6	352.6	352.6	352.6	352.6
40°	337.1	334.5	334.5	333.2	333.2	333.2	333.2	333.2
42.5°	320.3	317.7	317.7	316.4	316.4	316.4	316.4	316.4
45°	303.5	300.9	300.9	300.9	299.6	299.6	299.6	298.3
47.5°	285.4	284.1	284.1	282.8	282.8	282.8	282.8	282.8
50°	268.6	267.3	267.3	266.0	267.3	266.0	266.0	266.0
52.5°	250.6	250.6	249.3	249.3	249.3	248.0	248.0	248.0
55°	233.8	232.5	232.5	231.2	232.5	231.2	231.2	231.2
57.5°	215.7	215.7	215.7	214.4	214.4	213.1	213.1	213.1
60°	197.6	197.6	197.6	196.3	197.6	196.3	196.3	196.3
62.5°	180.8	180.8	179.5	179.5	179.5	178.2	178.2	178.2
65°	162.7	161.4	161.4	162.7	161.4	161.4	161.4	161.4
67.5°	145.9	145.9	144.6	144.6	144.6	143.4	143.4	143.4
70°	127.9	127.9	126.6	126.6	126.6	125.3	126.6	125.3
72.5°	109.8	109.8	108.5	109.8	108.5	107.2	108.5	108.5
75°	91.7	91.7	91.7	91.7	91.7	90.4	90.4	90.4
77.5°	74.9	74.9	73.6	73.6	73.6	73.6	73.6	72.3
80°	56.8	56.8	55.5	55.5	55.5	55.5	55.5	54.2
82.5°	40.0	38.7	38.7	38.7	38.7	37.5	37.5	37.5
85°	22.0	22.0	22.0	22.0	20.7	22.0	20.7	20.7
87.5°	7.7	7.7	7.7	6.5	6.5	7.7	7.7	6.5
90°	1.3	1.3	2.6	2.6	2.6	2.6	2.6	2.6
92.5°	6.5	6.5	6.5	5.2	5.2	5.2	5.2	5.2
95°	16.8	16.8	16.8	15.5	15.5	16.8	15.5	15.5
97.5°	27.1	27.1	27.1	27.1	25.8	27.1	25.8	25.8
100°	34.9	36.2	36.2	36.2	36.2	36.2	36.2	37.5
102.5°	41.3	41.3	41.3	41.3	42.6	42.6	42.6	42.6
105°	47.8	47.8	47.8	49.1	49.1	50.4	50.4	50.4
107.5°	56.8	56.8	56.8	56.8	58.1	58.1	58.1	58.1
110°	69.7	69.7	68.4	68.4	67.2	67.2	67.2	67.2



TEST NUMBER: P303123

CATALOG NUMBER: CTW-F-5050-20L935-UNV-STD-6

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
112.5°	80.1	81.4	81.4	81.4	81.4	81.4	81.4	81.4
115°	86.5	89.1	89.1	90.4	90.4	91.7	91.7	91.7
117.5°	93.0	95.6	95.6	96.9	96.9	98.2	99.4	99.4
120°	100.7	102.0	102.0	103.3	103.3	104.6	104.6	104.6
122.5°	108.5	108.5	108.5	109.8	109.8	109.8	111.1	111.1
125°	118.8	117.5	117.5	116.2	116.2	116.2	116.2	117.5
127.5°	133.0	129.2	127.9	127.9	126.6	125.3	125.3	124.0
130°	148.5	145.9	143.4	142.1	139.5	138.2	136.9	136.9
132.5°	169.2	164.0	161.4	158.9	156.3	153.7	153.7	152.4
135°	191.1	184.7	183.4	179.5	176.9	174.4	171.8	171.8
137.5°	210.5	205.3	204.1	201.5	198.9	195.0	195.0	192.4
140°	231.2	226.0	223.4	220.8	218.3	215.7	215.7	215.7
142.5°	251.8	246.7	244.1	241.5	238.9	236.3	235.1	236.3
145°	272.5	267.3	264.8	262.2	259.6	257.0	255.7	254.4
147.5°	291.9	286.7	284.1	282.8	280.3	277.7	276.4	275.1
150°	311.3	306.1	304.8	302.2	299.6	297.0	295.8	295.8
152.5°	329.3	325.5	322.9	320.3	319.0	316.4	315.1	315.1
155°	348.7	344.8	342.2	341.0	338.4	335.8	335.8	333.2
157.5°	365.5	361.6	359.0	357.7	355.2	353.9	353.9	353.9
160°	381.0	377.1	375.8	373.2	370.7	370.7	370.7	370.7
162.5°	395.2	392.6	391.3	388.7	386.2	386.2	386.2	384.9
165°	408.1	405.5	404.2	401.7	400.4	400.4	400.4	400.4
167.5°	421.0	417.2	415.9	414.6	413.3	413.3	413.3	413.3
170°	431.4	428.8	427.5	426.2	424.9	424.9	424.9	424.9
172.5°	441.7	440.4	439.1	436.5	436.5	436.5	437.8	436.5
175°	450.7	449.4	448.2	446.9	445.6	446.9	446.9	446.9
177.5°	458.5	457.2	457.2	455.9	454.6	453.3	454.6	453.3
180°	464.9	464.9	464.9	464.9	464.9	464.9	464.9	464.9

(END OF REPORT)