

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: P303132

Luminaire Tested: **CTW-F-5050-30L840-UNV-STD-4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P303132  
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-5050-30L840-UNV-STD-4  
Description: CORELITE CONTINUA LINEAR WALL LED LUMINAIRE  
50% UPLIGHT, 50% DOWNLIGHT, 3000 LUMEN PACKAGE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

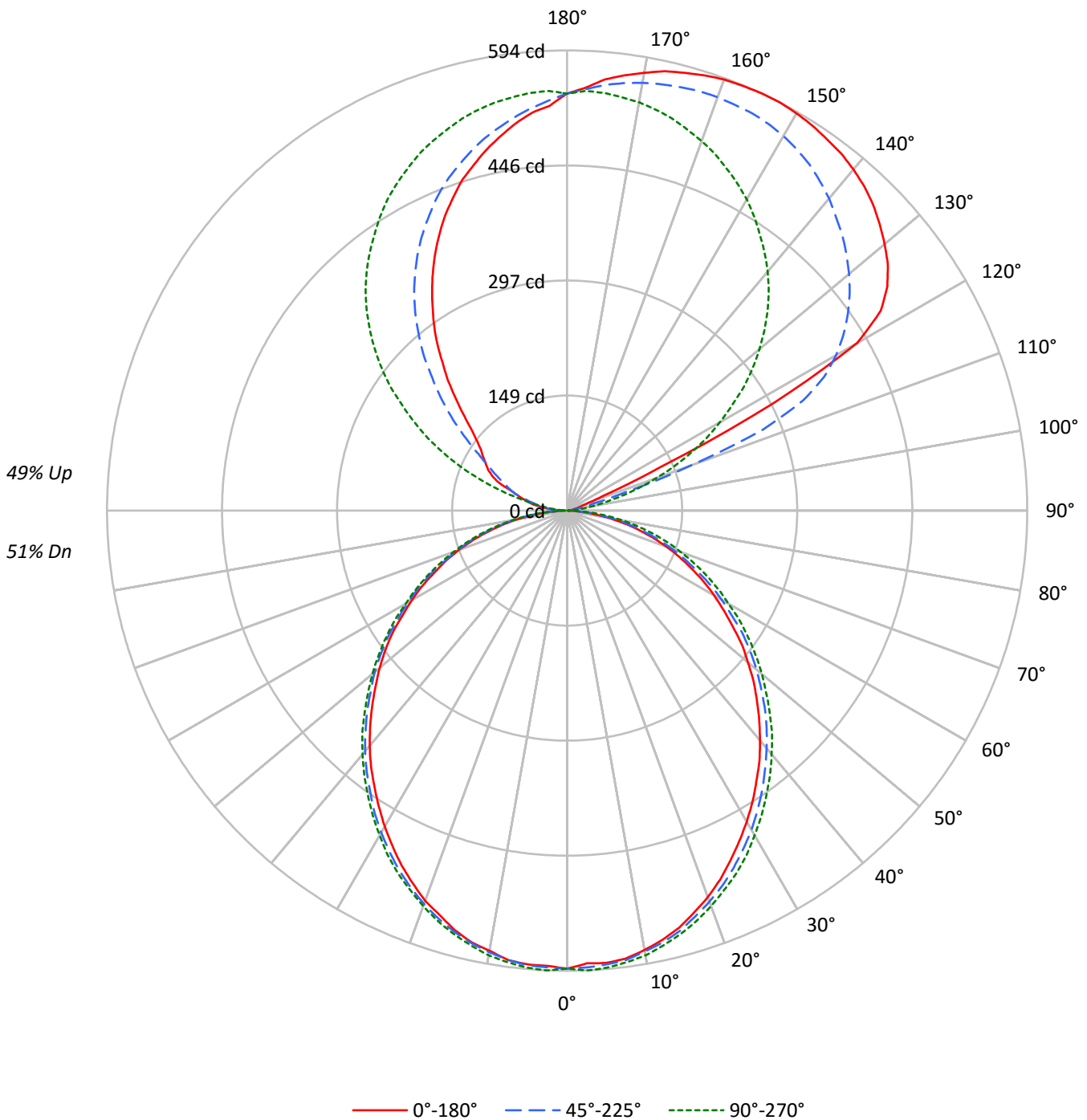
Lumens per Lamp: N/A  
Luminaire Lumens: 3090.7 lumens  
Efficiency: N/A  
Efficacy: 127.2 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.32  
Luminous Opening: Rectangular (W 4' x L: 0.12' x H: 0')  
CIE Type: General Diffuse

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°	12727	12727	12727
5°	12666	12797	12709
10°	12589	12744	12611
15°	12425	12608	12494
20°	12165	12444	12282
25°	11839	12273	12007
30°	11527	12034	11706
35°	11196	11787	11411
40°	10884	11542	11143
45°	10549	11265	10829
50°	10205	10992	10583
55°	9792	10712	10329
60°	9433	10355	9963
65°	9032	10122	9607
70°	8598	9813	9366
75°	7885	9499	8817
80°	6695	8839	8083
85°	4026	7805	6052



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.8	1.8
10°-20°	158.0	5.1
20°-30°	234.0	7.6
30°-40°	274.8	8.9
40°-50°	278.6	9.0
50°-60°	247.8	8.0
60°-70°	188.9	6.1
70°-80°	112.2	3.6
80°-90°	30.3	1.0
90°-100°	14.8	0.5
100°-110°	63.0	2.0
110°-120°	178.4	5.8
120°-130°	267.0	8.6
130°-140°	288.6	9.3
140°-150°	274.8	8.9
150°-160°	225.4	7.3
160°-170°	147.3	4.8
170°-180°	51.1	1.7
0°-30°	447.8	14.5
0°-40°	722.6	23.4
0°-60°	1249.0	40.4
0°-90°	1580.4	51.1
90°-120°	256.2	8.3
90°-150°	1086.6	35.2
90°-180°	1510.0	48.9
0°-180°	3090.7	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	591	591	591	591	591	
5°	586	588	592	589	588	56
15°	558	562	566	563	561	157
25°	498	509	517	513	506	230
35°	426	439	448	443	434	267
45°	346	361	370	365	356	267
55°	261	276	285	281	275	234
65°	177	186	199	195	189	176
75°	95	101	114	110	106	100
85°	16	21	32	28	24	21
90°	1	1	1	2	3	1
95°	3	3	11	22	20	3
105°	14	37	72	55	59	17
115°	132	336	176	96	107	175
125°	504	442	278	156	136	446
135°	558	502	366	249	202	431
145°	585	545	434	344	301	367
155°	594	566	487	421	391	275
165°	585	566	524	480	463	166
175°	558	551	541	522	516	54
180°	538	538	538	538	538	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	591.2	591.2	591.2	591.2	591.2	591.2	591.2	591.2	591.2	591.2	591.2
2.5°	585.0	585.0	588.1	589.1	589.1	590.1	591.2	592.2	592.2	592.2	590.1
5°	586.1	586.1	586.1	586.1	586.1	587.1	588.1	589.1	590.1	589.1	588.1
7.5°	583.0	583.0	583.0	583.0	582.0	583.0	583.0	585.0	585.0	585.0	585.0
10°	575.9	575.9	575.9	576.9	575.9	576.9	577.9	578.9	579.9	579.9	577.9
12.5°	567.7	567.7	567.7	568.7	567.7	567.7	569.7	569.7	571.8	570.8	570.8
15°	557.5	557.5	557.5	559.6	558.5	558.5	559.6	560.6	561.6	561.6	561.6
17.5°	544.3	544.3	546.3	547.3	546.3	547.3	547.3	548.3	550.4	550.4	549.4
20°	531.0	531.0	531.0	533.1	532.0	533.1	533.1	535.1	537.1	537.1	537.1
22.5°	515.7	514.7	515.7	516.7	516.7	517.8	517.8	519.8	521.8	522.9	523.9
25°	498.4	498.4	499.4	501.5	501.5	501.5	502.5	504.5	506.6	507.6	508.6
27.5°	481.1	481.1	482.1	484.1	485.2	485.2	485.2	488.2	491.3	492.3	492.3
30°	463.7	463.7	463.7	465.8	466.8	466.8	466.8	469.9	472.9	476.0	476.0
32.5°	445.4	445.4	445.4	448.5	449.5	449.5	449.5	451.5	454.6	456.6	457.6
35°	426.0	426.0	427.1	429.1	430.1	430.1	430.1	432.2	434.2	438.3	439.3
37.5°	407.7	406.7	407.7	409.7	410.7	410.7	409.7	412.8	415.8	418.9	419.9
40°	387.3	386.3	388.3	389.3	390.4	390.4	390.4	393.4	396.5	399.5	400.6
42.5°	366.9	366.9	367.9	369.0	370.0	370.0	371.0	373.0	375.1	379.2	381.2
45°	346.5	345.5	347.6	348.6	350.6	349.6	350.6	351.6	354.7	357.7	360.8
47.5°	326.2	326.2	326.2	327.2	329.2	330.2	330.2	331.2	334.3	337.4	339.4
50°	304.7	304.7	305.8	306.8	308.8	308.8	309.8	310.9	311.9	317.0	319.0
52.5°	284.4	284.4	284.4	285.4	288.4	288.4	288.4	290.5	292.5	294.6	297.6
55°	260.9	261.9	261.9	261.9	265.0	265.0	266.0	267.0	269.1	273.2	276.2
57.5°	239.5	240.5	240.5	241.6	242.6	243.6	244.6	244.6	246.7	248.7	251.7
60°	219.1	220.2	220.2	220.2	222.2	222.2	223.2	224.2	225.2	227.3	230.3
62.5°	198.7	198.7	198.7	198.7	200.8	200.8	201.8	203.8	203.8	205.9	208.9
65°	177.3	178.4	177.3	178.4	179.4	179.4	180.4	182.4	182.4	184.5	185.5
67.5°	157.0	157.0	157.0	158.0	158.0	159.0	159.0	161.0	162.1	163.1	164.1
70°	136.6	136.6	135.6	136.6	137.6	138.6	138.6	139.6	140.7	141.7	143.7
72.5°	115.2	115.2	115.2	116.2	116.2	117.2	117.2	119.2	120.3	121.3	122.3
75°	94.8	94.8	94.8	95.8	95.8	95.8	96.8	97.8	98.9	99.9	100.9
77.5°	74.4	74.4	74.4	75.4	74.4	75.4	75.4	77.5	78.5	79.5	80.5
80°	54.0	54.0	54.0	55.0	56.1	56.1	56.1	57.1	58.1	59.1	60.1
82.5°	34.7	33.6	33.6	34.7	35.7	35.7	36.7	36.7	37.7	38.7	40.8
85°	16.3	16.3	15.3	16.3	17.3	17.3	18.3	18.3	19.4	20.4	21.4
87.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.1	3.1	3.1	4.1
90°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
92.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
95°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
97.5°	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	6.1	6.1
100°	7.1	7.1	7.1	7.1	7.1	8.2	8.2	8.2	9.2	10.2	11.2
102.5°	10.2	10.2	10.2	10.2	11.2	11.2	11.2	12.2	13.2	16.3	19.4
105°	14.3	14.3	15.3	15.3	16.3	16.3	17.3	18.3	21.4	26.5	36.7
107.5°	20.4	20.4	21.4	21.4	23.4	24.5	26.5	29.6	37.7	53.0	78.5
110°	29.6	30.6	32.6	33.6	38.7	41.8	45.9	59.1	84.6	124.3	170.2



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	54.0	55.0	63.2	68.3	83.6	94.8	106.0	143.7	195.7	243.6	274.2
115°	132.5	138.6	149.8	170.2	202.8	226.3	247.7	289.5	323.1	335.3	336.3
117.5°	300.7	305.8	321.1	337.4	358.8	373.0	379.2	388.3	389.3	382.2	374.1
120°	432.2	432.2	432.2	436.2	436.2	438.3	435.2	431.1	422.0	410.7	400.6
122.5°	480.1	478.0	477.0	473.9	469.9	466.8	463.7	455.6	447.4	435.2	423.0
125°	504.5	501.5	500.4	496.4	490.2	488.2	484.1	476.0	466.8	454.6	442.3
127.5°	521.8	518.8	516.7	513.7	507.6	504.5	500.4	492.3	483.1	471.9	459.7
130°	535.1	532.0	530.0	528.0	520.8	518.8	514.7	506.6	497.4	487.2	475.0
132.5°	547.3	545.3	542.2	539.2	535.1	532.0	528.0	520.8	511.7	501.5	489.2
135°	558.5	555.5	553.4	551.4	545.3	543.2	539.2	532.0	523.9	512.7	502.5
137.5°	567.7	564.7	562.6	559.6	555.5	551.4	548.3	542.2	534.1	524.9	513.7
140°	574.8	571.8	569.7	566.7	562.6	559.6	556.5	551.4	544.3	535.1	525.9
142.5°	581.0	576.9	575.9	572.8	568.7	566.7	563.6	558.5	552.4	543.2	536.1
145°	585.0	582.0	581.0	577.9	574.8	571.8	570.8	566.7	559.6	550.4	545.3
147.5°	589.1	586.1	585.0	583.0	578.9	576.9	575.9	570.8	564.7	556.5	552.4
150°	592.2	589.1	588.1	586.1	582.0	581.0	579.9	575.9	569.7	561.6	558.5
152.5°	594.2	590.1	589.1	587.1	584.0	583.0	582.0	577.9	572.8	565.7	562.6
155°	594.2	591.2	590.1	588.1	585.0	584.0	582.0	578.9	573.8	568.7	565.7
157.5°	593.2	591.2	590.1	588.1	584.0	584.0	582.0	578.9	574.8	570.8	566.7
160°	592.2	589.1	589.1	587.1	584.0	584.0	582.0	579.9	574.8	571.8	567.7
162.5°	589.1	587.1	587.1	585.0	583.0	583.0	581.0	578.9	573.8	572.8	567.7
165°	585.0	583.0	583.0	582.0	578.9	578.9	577.9	574.8	571.8	570.8	565.7
167.5°	581.0	577.9	577.9	576.9	573.8	573.8	573.8	571.8	568.7	569.7	563.6
170°	573.8	570.8	570.8	569.7	568.7	568.7	568.7	566.7	563.6	565.7	560.6
172.5°	566.7	565.7	564.7	563.6	562.6	562.6	562.6	561.6	559.6	561.6	556.5
175°	558.5	556.5	556.5	555.5	555.5	555.5	555.5	555.5	553.4	556.5	551.4
177.5°	546.3	544.3	545.3	546.3	546.3	547.3	547.3	547.3	546.3	549.4	544.3
180°	538.2	538.2	538.2	538.2	538.2	538.2	538.2	538.2	538.2	538.2	538.2



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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	591.2	591.2	591.2	591.2	591.2	591.2	591.2	591.2	591.2	591.2	591.2
2.5°	588.1	590.1	589.1	589.1	589.1	589.1	589.1	590.1	593.2	594.2	594.2
5°	586.1	588.1	587.1	586.1	586.1	586.1	586.1	588.1	591.2	592.2	591.2
7.5°	582.0	584.0	583.0	582.0	583.0	583.0	583.0	585.0	588.1	588.1	588.1
10°	575.9	577.9	576.9	576.9	576.9	576.9	577.9	578.9	582.0	583.0	582.0
12.5°	568.7	569.7	568.7	569.7	569.7	569.7	569.7	570.8	573.8	574.8	574.8
15°	559.6	560.6	559.6	560.6	559.6	560.6	560.6	562.6	564.7	565.7	566.7
17.5°	548.3	548.3	548.3	549.4	549.4	549.4	549.4	551.4	554.5	555.5	555.5
20°	535.1	536.1	537.1	537.1	537.1	538.2	538.2	539.2	543.2	543.2	544.3
22.5°	522.9	522.9	523.9	523.9	524.9	524.9	524.9	525.9	530.0	530.0	530.0
25°	507.6	507.6	509.6	510.6	510.6	510.6	511.7	512.7	516.7	516.7	516.7
27.5°	491.3	491.3	494.3	493.3	494.3	495.3	496.4	498.4	500.4	501.5	501.5
30°	475.0	475.0	477.0	477.0	478.0	478.0	479.0	481.1	484.1	484.1	485.2
32.5°	458.7	458.7	459.7	460.7	461.7	460.7	461.7	463.7	466.8	466.8	467.8
35°	440.3	439.3	441.3	442.3	442.3	443.4	443.4	445.4	448.5	448.5	449.5
37.5°	422.0	420.9	423.0	424.0	425.0	425.0	425.0	427.1	429.1	430.1	431.1
40°	402.6	401.6	404.6	405.7	405.7	405.7	405.7	407.7	409.7	410.7	411.8
42.5°	381.2	382.2	384.2	386.3	386.3	386.3	387.3	387.3	390.4	391.4	392.4
45°	361.8	362.8	363.9	366.9	365.9	364.9	366.9	366.9	370.0	370.0	371.0
47.5°	341.4	342.5	342.5	345.5	345.5	344.5	346.5	346.5	348.6	348.6	350.6
50°	321.1	322.1	322.1	325.1	325.1	324.1	326.2	326.2	328.2	328.2	330.2
52.5°	298.6	300.7	300.7	303.7	304.7	303.7	304.7	304.7	306.8	306.8	308.8
55°	277.2	279.3	280.3	281.3	283.3	282.3	283.3	284.4	286.4	285.4	287.4
57.5°	254.8	254.8	256.8	257.9	258.9	258.9	261.9	260.9	260.9	264.0	265.0
60°	232.4	233.4	235.4	236.5	237.5	237.5	238.5	239.5	240.5	240.5	242.6
62.5°	211.0	213.0	214.0	215.1	216.1	215.1	218.1	219.1	220.2	220.2	220.2
65°	189.6	190.6	192.6	193.7	193.7	193.7	196.7	197.7	197.7	198.7	198.7
67.5°	167.2	169.2	171.2	171.2	173.3	172.2	175.3	176.3	176.3	177.3	178.4
70°	145.7	146.8	148.8	149.8	151.9	150.8	152.9	153.9	154.9	155.9	157.0
72.5°	124.3	125.4	127.4	128.4	129.4	130.5	131.5	133.5	134.5	135.6	135.6
75°	102.9	104.0	106.0	107.0	108.0	109.1	110.1	112.1	112.1	114.2	114.2
77.5°	82.6	83.6	84.6	85.6	87.7	88.7	89.7	90.7	91.7	92.7	92.7
80°	62.2	62.2	64.2	65.2	67.3	67.3	68.3	69.3	71.3	71.3	71.3
82.5°	41.8	42.8	43.8	44.8	46.9	46.9	47.9	49.9	51.0	51.0	51.0
85°	22.4	23.4	25.5	26.5	27.5	27.5	29.6	30.6	31.6	31.6	31.6
87.5°	5.1	6.1	7.1	8.2	10.2	11.2	11.2	12.2	13.2	13.2	13.2
90°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
92.5°	2.0	2.0	2.0	2.0	2.0	3.1	4.1	5.1	5.1	4.1	5.1
95°	4.1	4.1	5.1	7.1	9.2	10.2	14.3	15.3	13.2	11.2	11.2
97.5°	7.1	9.2	12.2	18.3	22.4	25.5	30.6	28.5	24.5	21.4	19.4
100°	14.3	19.4	26.5	38.7	44.8	49.9	52.0	46.9	40.8	34.7	30.6
102.5°	25.5	38.7	55.0	74.4	80.5	82.6	81.5	71.3	61.2	51.0	44.8
105°	53.0	77.5	106.0	120.3	123.3	121.3	111.1	99.9	85.6	72.4	62.2
107.5°	114.2	148.8	167.2	169.2	166.1	160.0	144.7	129.4	112.1	96.8	82.6
110°	202.8	221.2	221.2	212.0	203.8	196.7	177.3	160.0	140.7	122.3	107.0





TEST NUMBER: P303132

CATALOG NUMBER: CTW-F-5050-30L840-UNV-STD-4

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	279.3	276.2	263.0	246.7	237.5	228.3	207.9	189.6	168.2	149.8	131.5
115°	327.2	312.9	296.6	278.2	268.1	256.8	238.5	217.1	194.7	176.3	157.0
117.5°	358.8	342.5	324.1	306.8	296.6	288.4	267.0	242.6	222.2	202.8	183.5
120°	384.2	366.9	349.6	332.3	323.1	313.9	291.5	270.1	246.7	227.3	208.9
122.5°	405.7	389.3	372.0	355.7	346.5	336.3	316.0	294.6	275.2	251.7	234.4
125°	427.1	411.8	393.4	378.1	367.9	356.7	338.4	317.0	297.6	278.2	259.9
127.5°	445.4	430.1	414.8	397.5	387.3	377.1	358.8	338.4	320.0	301.7	284.4
130°	461.7	448.5	432.2	414.8	404.6	395.5	377.1	358.8	341.4	324.1	306.8
132.5°	479.0	463.7	448.5	431.1	422.0	412.8	396.5	379.2	361.8	345.5	329.2
135°	493.3	478.0	461.7	444.4	437.2	429.1	413.8	397.5	381.2	365.9	350.6
137.5°	506.6	489.2	473.9	457.6	451.5	444.4	429.1	413.8	399.5	385.3	370.0
140°	516.7	499.4	485.2	470.9	464.8	457.6	442.3	430.1	416.9	402.6	388.3
142.5°	524.9	508.6	494.3	482.1	476.0	470.9	456.6	444.4	432.2	418.9	405.7
145°	532.0	517.8	504.5	492.3	488.2	482.1	468.8	458.7	447.4	434.2	422.0
147.5°	538.2	525.9	513.7	502.5	497.4	492.3	480.1	470.9	459.7	449.5	437.2
150°	544.3	533.1	521.8	511.7	507.6	502.5	490.2	482.1	473.9	463.7	452.5
152.5°	548.3	538.2	528.0	519.8	515.7	511.7	500.4	494.3	485.2	476.0	465.8
155°	552.4	543.2	534.1	526.9	523.9	519.8	510.6	504.5	496.4	487.2	478.0
157.5°	555.5	547.3	539.2	533.1	530.0	526.9	517.8	513.7	506.6	498.4	489.2
160°	556.5	549.4	543.2	538.2	535.1	532.0	524.9	520.8	514.7	507.6	499.4
162.5°	556.5	551.4	545.3	542.2	539.2	536.1	530.0	526.9	521.8	515.7	508.6
165°	556.5	552.4	547.3	544.3	542.2	540.2	535.1	532.0	526.9	523.9	516.7
167.5°	556.5	552.4	548.3	546.3	544.3	542.2	539.2	537.1	533.1	530.0	523.9
170°	554.5	550.4	548.3	547.3	545.3	544.3	541.2	540.2	537.1	535.1	530.0
172.5°	551.4	548.3	547.3	546.3	545.3	544.3	542.2	541.2	539.2	538.2	535.1
175°	547.3	545.3	544.3	544.3	544.3	543.2	541.2	542.2	541.2	541.2	538.2
177.5°	541.2	540.2	540.2	540.2	541.2	540.2	540.2	541.2	541.2	542.2	540.2
180°	538.2	538.2	538.2	538.2	538.2	538.2	538.2	538.2	538.2	538.2	538.2



TEST NUMBER: P303132

CATALOG NUMBER: CTW-F-5050-30L840-UNV-STD-4

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	591.2	591.2	591.2	591.2	591.2	591.2	591.2	591.2	591.2	591.2	591.2
2.5°	593.2	591.2	590.1	590.1	589.1	587.1	587.1	588.1	590.1	594.2	591.2
5°	591.2	590.1	587.1	587.1	587.1	586.1	584.0	586.1	589.1	592.2	588.1
7.5°	587.1	586.1	584.0	584.0	584.0	582.0	581.0	583.0	585.0	587.1	584.0
10°	582.0	579.9	578.9	577.9	577.9	575.9	574.8	576.9	578.9	581.0	578.9
12.5°	574.8	572.8	570.8	570.8	569.7	568.7	567.7	569.7	571.8	573.8	571.8
15°	565.7	563.6	561.6	561.6	561.6	558.5	558.5	559.6	562.6	563.6	560.6
17.5°	555.5	552.4	550.4	551.4	550.4	547.3	548.3	548.3	552.4	552.4	550.4
20°	543.2	540.2	539.2	539.2	538.2	536.1	536.1	537.1	540.2	539.2	537.1
22.5°	530.0	526.9	526.9	525.9	525.9	522.9	522.9	523.9	526.9	524.9	522.9
25°	515.7	513.7	512.7	512.7	510.6	508.6	508.6	509.6	512.7	509.6	508.6
27.5°	499.4	498.4	497.4	497.4	495.3	493.3	494.3	494.3	496.4	494.3	492.3
30°	484.1	482.1	481.1	481.1	479.0	476.0	477.0	477.0	480.1	477.0	477.0
32.5°	467.8	464.8	464.8	463.7	461.7	459.7	460.7	461.7	462.7	458.7	459.7
35°	449.5	446.4	446.4	445.4	443.4	442.3	442.3	443.4	443.4	440.3	440.3
37.5°	431.1	429.1	428.1	427.1	425.0	424.0	425.0	426.0	425.0	422.0	422.0
40°	411.8	409.7	407.7	407.7	406.7	405.7	405.7	407.7	405.7	402.6	402.6
42.5°	392.4	390.4	388.3	388.3	387.3	387.3	387.3	388.3	385.3	384.2	382.2
45°	372.0	370.0	367.9	367.9	366.9	366.9	366.9	366.9	364.9	363.9	362.8
47.5°	351.6	349.6	347.6	347.6	346.5	347.6	347.6	346.5	343.5	343.5	342.5
50°	331.2	329.2	327.2	327.2	327.2	327.2	327.2	326.2	324.1	323.1	322.1
52.5°	309.8	307.8	305.8	306.8	305.8	306.8	305.8	304.7	302.7	301.7	300.7
55°	288.4	286.4	285.4	286.4	285.4	285.4	284.4	283.3	281.3	281.3	279.3
57.5°	266.0	263.0	263.0	264.0	263.0	263.0	260.9	259.9	257.9	257.9	255.8
60°	242.6	241.6	241.6	241.6	241.6	240.5	239.5	239.5	237.5	236.5	234.4
62.5°	221.2	221.2	220.2	221.2	219.1	219.1	218.1	217.1	216.1	215.1	214.0
65°	199.8	198.7	198.7	197.7	197.7	197.7	196.7	195.7	194.7	193.7	192.6
67.5°	177.3	177.3	177.3	177.3	176.3	176.3	175.3	174.3	172.2	173.3	171.2
70°	155.9	155.9	155.9	155.9	154.9	154.9	153.9	152.9	150.8	151.9	150.8
72.5°	134.5	134.5	134.5	134.5	133.5	133.5	131.5	131.5	131.5	130.5	129.4
75°	113.1	113.1	113.1	112.1	112.1	112.1	110.1	110.1	110.1	110.1	108.0
77.5°	91.7	92.7	91.7	91.7	90.7	90.7	90.7	89.7	89.7	88.7	87.7
80°	70.3	71.3	71.3	71.3	70.3	70.3	70.3	69.3	68.3	68.3	67.3
82.5°	52.0	51.0	51.0	51.0	49.9	49.9	49.9	48.9	48.9	47.9	46.9
85°	31.6	31.6	31.6	31.6	30.6	30.6	29.6	28.5	28.5	26.5	26.5
87.5°	14.3	13.2	13.2	13.2	13.2	12.2	11.2	10.2	10.2	9.2	9.2
90°	1.0	1.0	2.0	1.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
92.5°	7.1	9.2	10.2	11.2	10.2	11.2	11.2	11.2	10.2	10.2	10.2
95°	12.2	14.3	17.3	18.3	19.4	21.4	22.4	22.4	22.4	21.4	21.4
97.5°	19.4	21.4	22.4	23.4	23.4	26.5	28.5	30.6	32.6	32.6	33.6
100°	29.6	28.5	30.6	32.6	32.6	32.6	33.6	35.7	37.7	38.7	40.8
102.5°	41.8	38.7	38.7	39.7	40.8	43.8	42.8	43.8	44.8	45.9	46.9
105°	56.1	53.0	49.9	49.9	49.9	52.0	55.0	57.1	55.0	55.0	56.1
107.5°	74.4	68.3	63.2	62.2	62.2	61.2	63.2	66.2	68.3	69.3	68.3
110°	94.8	85.6	80.5	75.4	74.4	73.4	73.4	74.4	77.5	80.5	82.6



TEST NUMBER: P303132

CATALOG NUMBER: CTW-F-5050-30L840-UNV-STD-4

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
112.5°	118.2	107.0	97.8	93.8	89.7	85.6	84.6	84.6	85.6	88.7	90.7
115°	142.7	129.4	117.2	112.1	109.1	100.9	96.8	94.8	95.8	96.8	98.9
117.5°	168.2	153.9	139.6	133.5	129.4	120.3	112.1	109.1	107.0	106.0	108.0
120°	193.7	179.4	165.1	157.0	150.8	140.7	131.5	123.3	119.2	117.2	116.2
122.5°	218.1	203.8	189.6	181.4	175.3	162.1	152.9	142.7	135.6	130.5	127.4
125°	242.6	228.3	214.0	205.9	199.8	185.5	174.3	165.1	155.9	147.8	141.7
127.5°	267.0	251.7	237.5	230.3	224.2	208.9	196.7	187.5	178.4	169.2	161.0
130°	291.5	278.2	263.0	253.8	248.7	233.4	221.2	210.0	201.8	192.6	182.4
132.5°	312.9	300.7	286.4	279.3	272.1	256.8	246.7	234.4	225.2	216.1	206.9
135°	335.3	322.1	307.8	301.7	295.6	283.3	271.1	258.9	248.7	239.5	230.3
137.5°	354.7	343.5	329.2	323.1	317.0	305.8	294.6	285.4	275.2	265.0	253.8
140°	374.1	361.8	349.6	343.5	337.4	328.2	317.0	308.8	298.6	290.5	279.3
142.5°	391.4	379.2	369.0	362.8	356.7	347.6	337.4	330.2	322.1	312.9	305.8
145°	408.7	397.5	387.3	381.2	376.1	366.9	356.7	351.6	344.5	335.3	327.2
147.5°	424.0	413.8	403.6	398.5	394.4	385.3	377.1	371.0	364.9	356.7	349.6
150°	439.3	429.1	419.9	415.8	410.7	403.6	396.5	389.3	385.3	377.1	371.0
152.5°	453.6	444.4	435.2	432.2	428.1	419.9	412.8	406.7	403.6	396.5	391.4
155°	467.8	458.7	449.5	447.4	443.4	436.2	429.1	424.0	420.9	413.8	408.7
157.5°	480.1	470.9	463.7	460.7	456.6	450.5	444.4	440.3	438.3	432.2	427.1
160°	491.3	483.1	476.0	472.9	469.9	463.7	459.7	454.6	453.6	448.5	444.4
162.5°	500.4	493.3	487.2	485.2	482.1	477.0	472.9	467.8	466.8	463.7	459.7
165°	509.6	502.5	497.4	495.3	493.3	488.2	485.2	481.1	480.1	478.0	473.9
167.5°	517.8	511.7	506.6	505.5	503.5	499.4	497.4	493.3	492.3	491.3	487.2
170°	523.9	518.8	514.7	513.7	511.7	508.6	506.6	503.5	502.5	503.5	499.4
172.5°	529.0	524.9	521.8	520.8	519.8	517.8	515.7	513.7	512.7	514.7	510.6
175°	534.1	530.0	528.0	526.9	526.9	524.9	523.9	521.8	521.8	523.9	520.8
177.5°	537.1	534.1	532.0	532.0	531.0	530.0	530.0	528.0	530.0	532.0	529.0
180°	538.2	538.2	538.2	538.2	538.2	538.2	538.2	538.2	538.2	538.2	538.2



TEST NUMBER: P303132

CATALOG NUMBER: CTW-F-5050-30L840-UNV-STD-4

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	591.2	591.2	591.2	591.2	591.2	591.2	591.2	591.2
2.5°	593.2	591.2	591.2	590.1	589.1	588.1	588.1	588.1
5°	590.1	589.1	588.1	586.1	586.1	587.1	588.1	588.1
7.5°	585.0	585.0	584.0	583.0	582.0	584.0	584.0	585.0
10°	579.9	578.9	577.9	576.9	575.9	576.9	576.9	576.9
12.5°	571.8	570.8	569.7	567.7	567.7	568.7	568.7	570.8
15°	562.6	561.6	559.6	559.6	558.5	559.6	559.6	560.6
17.5°	551.4	549.4	548.3	547.3	547.3	548.3	548.3	547.3
20°	538.2	536.1	534.1	533.1	533.1	534.1	534.1	536.1
22.5°	522.9	520.8	519.8	518.8	518.8	519.8	519.8	520.8
25°	508.6	506.6	505.5	504.5	504.5	504.5	504.5	505.5
27.5°	493.3	490.2	488.2	488.2	487.2	487.2	487.2	488.2
30°	475.0	471.9	470.9	470.9	469.9	469.9	469.9	470.9
32.5°	456.6	454.6	453.6	452.5	451.5	452.5	451.5	452.5
35°	438.3	435.2	435.2	435.2	434.2	434.2	433.2	434.2
37.5°	419.9	416.9	415.8	415.8	414.8	414.8	414.8	415.8
40°	400.6	397.5	397.5	396.5	395.5	395.5	395.5	396.5
42.5°	380.2	378.1	377.1	377.1	376.1	376.1	376.1	376.1
45°	359.8	356.7	356.7	357.7	355.7	355.7	355.7	355.7
47.5°	339.4	337.4	337.4	337.4	335.3	335.3	335.3	335.3
50°	319.0	318.0	317.0	317.0	317.0	316.0	316.0	316.0
52.5°	298.6	297.6	296.6	297.6	295.6	295.6	295.6	295.6
55°	277.2	276.2	276.2	277.2	275.2	275.2	274.2	275.2
57.5°	253.8	252.8	252.8	252.8	252.8	251.7	251.7	251.7
60°	233.4	232.4	232.4	232.4	231.4	231.4	231.4	231.4
62.5°	212.0	212.0	212.0	211.0	211.0	210.0	210.0	211.0
65°	191.6	190.6	190.6	190.6	189.6	189.6	188.6	188.6
67.5°	170.2	170.2	170.2	169.2	169.2	168.2	168.2	169.2
70°	149.8	149.8	148.8	148.8	148.8	147.8	147.8	148.8
72.5°	129.4	128.4	128.4	127.4	128.4	126.4	126.4	127.4
75°	108.0	108.0	107.0	107.0	107.0	106.0	106.0	106.0
77.5°	87.7	87.7	86.6	86.6	86.6	85.6	85.6	85.6
80°	67.3	66.2	66.2	66.2	66.2	65.2	64.2	65.2
82.5°	45.9	45.9	45.9	45.9	44.8	43.8	42.8	43.8
85°	26.5	25.5	25.5	26.5	25.5	25.5	25.5	24.5
87.5°	9.2	8.2	8.2	8.2	8.2	9.2	8.2	8.2
90°	2.0	2.0	2.0	3.1	3.1	3.1	3.1	3.1
92.5°	10.2	10.2	9.2	9.2	9.2	9.2	8.2	8.2
95°	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4
97.5°	33.6	33.6	32.6	32.6	32.6	32.6	32.6	32.6
100°	41.8	42.8	42.8	42.8	43.8	43.8	43.8	43.8
102.5°	48.9	48.9	49.9	49.9	49.9	51.0	51.0	51.0
105°	56.1	57.1	57.1	57.1	58.1	58.1	59.1	59.1
107.5°	67.3	67.3	67.3	67.3	68.3	68.3	68.3	68.3
110°	82.6	82.6	81.5	80.5	80.5	80.5	79.5	79.5



TEST NUMBER: P303132

CATALOG NUMBER: CTW-F-5050-30L840-UNV-STD-4

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
112.5°	92.7	94.8	94.8	95.8	96.8	96.8	96.8	96.8
115°	100.9	102.9	104.0	105.0	106.0	106.0	107.0	107.0
117.5°	109.1	110.1	111.1	112.1	113.1	114.2	114.2	115.2
120°	117.2	118.2	119.2	119.2	120.3	121.3	121.3	121.3
122.5°	126.4	127.4	126.4	126.4	127.4	127.4	127.4	128.4
125°	138.6	137.6	136.6	136.6	135.6	135.6	135.6	135.6
127.5°	154.9	152.9	150.8	148.8	147.8	146.8	145.7	145.7
130°	175.3	171.2	168.2	166.1	164.1	162.1	160.0	160.0
132.5°	198.7	193.7	190.6	187.5	184.5	181.4	178.4	179.4
135°	223.2	219.1	215.1	212.0	207.9	203.8	201.8	201.8
137.5°	246.7	241.6	238.5	236.5	233.4	229.3	226.3	227.3
140°	273.2	264.0	261.9	259.9	256.8	252.8	250.7	250.7
142.5°	296.6	289.5	287.4	286.4	282.3	278.2	276.2	277.2
145°	320.0	312.9	311.9	309.8	306.8	302.7	300.7	300.7
147.5°	342.5	336.3	335.3	333.3	330.2	326.2	324.1	324.1
150°	364.9	358.8	356.7	355.7	352.7	348.6	346.5	347.6
152.5°	385.3	379.2	378.1	377.1	373.0	371.0	369.0	370.0
155°	404.6	398.5	397.5	396.5	394.4	391.4	390.4	391.4
157.5°	423.0	417.9	416.9	415.8	413.8	410.7	409.7	411.8
160°	440.3	436.2	435.2	434.2	433.2	431.1	429.1	430.1
162.5°	456.6	452.5	452.5	451.5	450.5	448.5	447.4	448.5
165°	471.9	468.8	467.8	466.8	465.8	464.8	463.7	462.7
167.5°	486.2	482.1	482.1	480.1	480.1	479.0	478.0	478.0
170°	498.4	495.3	495.3	493.3	493.3	492.3	491.3	491.3
172.5°	509.6	507.6	506.6	506.6	506.6	505.5	504.5	504.5
175°	520.8	518.8	517.8	516.7	516.7	515.7	514.7	515.7
177.5°	530.0	529.0	528.0	526.9	526.9	524.9	523.9	522.9
180°	538.2	538.2	538.2	538.2	538.2	538.2	538.2	538.2

(END OF REPORT)