

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: P303150

Luminaire Tested: **CTW-F-5050-40L930-UNV-STD-4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P303150
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-181-9)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: CTW-F-5050-40L930-UNV-STD-4
Description: CORELITE CONTINUA LINEAR WALL LED LUMINAIRE
50% UPLIGHT, 50% DOWNLIGHT, 4000 LUMEN PACKAGE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

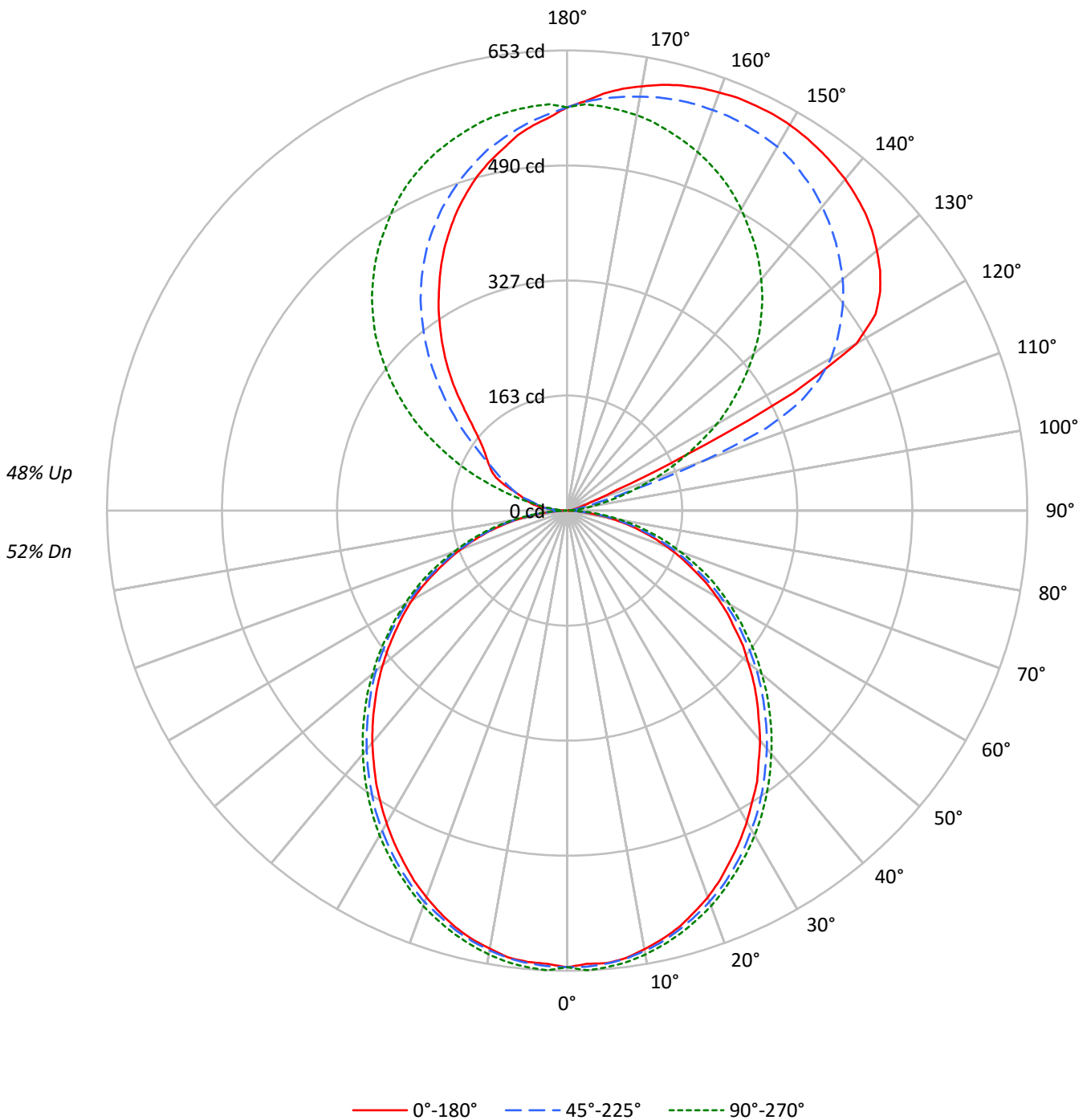
Lumens per Lamp: N/A
Luminaire Lumens: 3349.2 lumens
Efficiency: N/A
Efficacy: 104.3 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.32
Luminous Opening: Rectangular (W 4' x L: 0.12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 32.1
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	50	30	10	0	
RCR																						
0	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58	52				
1	98	94	90	86	90	87	83	80	74	71	69	62	60	58	51	50	48	43				
2	89	82	75	70	82	76	70	66	64	60	57	54	51	49	45	42	41	36				
3	81	72	64	58	75	67	60	55	57	52	48	48	44	41	39	37	34	30				
4	74	63	55	49	68	59	52	46	50	45	41	42	38	35	35	32	30	26				
5	68	56	48	42	63	52	45	40	45	39	35	38	34	30	32	28	26	23				
6	63	51	42	37	58	47	40	34	41	35	30	34	30	27	29	25	23	20				
7	58	46	38	32	54	43	35	30	37	31	27	31	27	23	26	23	20	18				
8	54	41	34	28	50	39	32	27	34	28	24	29	24	21	24	21	18	16				
9	50	38	30	25	46	35	29	24	31	25	21	26	22	19	22	19	16	14				
10	47	35	27	23	43	33	26	21	28	23	19	24	20	17	21	17	15	13				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	13948	13948	13948
5°	13930	14055	13893
10°	13818	13982	13800
15°	13644	13847	13644
20°	13377	13682	13377
25°	13019	13454	13060
30°	12675	13232	12735
35°	12349	12962	12415
40°	11966	12669	12084
45°	11596	12382	11749
50°	11226	12060	11447
55°	10862	11736	11143
60°	10566	11461	10923
65°	10040	11227	10463
70°	9530	10782	10102
75°	8784	10381	9549
80°	7525	9695	8666
85°	4718	8423	6570



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.2	1.8
10°-20°	173.1	5.2
20°-30°	256.3	7.7
30°-40°	300.9	9.0
40°-50°	305.0	9.1
50°-60°	272.0	8.1
60°-70°	207.6	6.2
70°-80°	122.6	3.7
80°-90°	33.1	1.0
90°-100°	16.7	0.5
100°-110°	69.4	2.1
110°-120°	195.7	5.8
120°-130°	285.2	8.5
130°-140°	307.2	9.2
140°-150°	292.3	8.7
150°-160°	239.9	7.2
160°-170°	156.8	4.7
170°-180°	54.4	1.6
0°-30°	490.6	14.6
0°-40°	791.4	23.6
0°-60°	1368.5	40.9
0°-90°	1731.7	51.7
90°-120°	281.7	8.4
90°-150°	1166.4	34.8
90°-180°	1617.0	48.3
0°-180°	3349.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	648	648	648	648	648	
5°	645	645	650	645	643	61
15°	612	616	621	616	612	172
25°	548	560	566	561	550	253
35°	470	483	493	485	472	293
45°	381	396	407	398	386	294
55°	289	303	313	308	297	260
65°	197	206	220	211	205	196
75°	106	112	125	118	115	112
85°	19	24	34	30	27	24
90°	1	1	1	3	5	1
95°	4	5	12	23	22	5
105°	18	47	76	55	62	22
115°	181	364	186	100	112	214
125°	542	475	296	160	142	480
135°	598	539	389	261	209	461
145°	625	582	463	363	314	392
155°	634	602	521	446	412	293
165°	625	603	557	510	492	177
175°	594	587	576	556	549	57
180°	572	572	572	572	572	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9
2.5°	643.8	642.9	644.6	646.3	646.3	647.1	647.9	648.8	648.8	650.4	647.9
5°	644.6	642.9	643.8	643.8	642.9	643.8	644.6	646.3	646.3	647.9	645.4
7.5°	640.4	639.6	640.4	639.6	638.8	639.6	640.4	641.3	641.3	642.9	641.3
10°	632.1	632.1	632.1	632.1	632.1	632.9	633.8	634.6	634.6	636.3	634.6
12.5°	623.0	623.0	623.0	623.8	622.1	623.0	624.6	626.3	626.3	628.0	626.3
15°	612.2	612.2	613.0	613.8	613.0	613.0	613.8	615.5	615.5	617.1	615.5
17.5°	598.0	598.0	598.8	600.5	599.7	600.5	601.3	603.0	603.8	603.8	603.8
20°	583.9	583.0	583.9	584.7	584.7	585.5	585.5	588.0	589.7	589.7	590.5
22.5°	567.2	565.6	567.2	568.1	568.1	568.9	568.9	571.4	573.1	573.9	576.4
25°	548.1	548.1	548.9	550.6	550.6	551.4	552.3	554.8	556.4	556.4	559.8
27.5°	529.8	529.0	529.8	531.5	533.1	534.0	534.0	536.5	539.0	540.6	542.3
30°	509.9	509.9	510.7	512.3	514.0	513.2	514.0	517.3	519.8	521.5	523.2
32.5°	489.1	489.1	489.9	491.6	494.0	494.0	494.9	497.4	499.0	500.7	504.0
35°	469.9	468.3	469.1	470.8	474.1	473.3	474.1	476.6	478.2	480.7	483.2
37.5°	446.6	446.6	447.5	449.1	452.5	451.6	453.3	455.0	457.5	459.9	461.6
40°	425.8	426.7	425.8	427.5	430.0	430.8	430.8	432.5	435.8	438.3	440.8
42.5°	402.6	403.4	404.2	405.9	408.4	408.4	409.2	410.9	413.4	415.9	418.4
45°	380.9	380.9	380.9	382.6	385.9	385.9	387.6	387.6	390.1	393.4	395.9
47.5°	358.5	358.5	358.5	361.0	363.5	363.5	365.1	365.1	368.5	371.0	373.4
50°	335.2	336.9	336.0	337.7	341.0	340.2	341.8	341.8	344.3	347.7	350.2
52.5°	314.4	314.4	312.7	315.2	317.7	317.7	318.6	318.6	321.9	324.4	326.9
55°	289.4	291.1	289.4	291.9	294.4	294.4	296.1	296.1	296.9	300.3	302.8
57.5°	268.6	268.6	267.0	268.6	271.1	271.1	272.8	272.8	274.5	276.1	280.3
60°	245.4	244.5	243.7	246.2	247.9	247.9	249.5	249.5	251.2	252.0	256.2
62.5°	222.1	221.2	221.2	222.9	224.6	223.7	226.2	226.2	227.9	229.6	232.1
65°	197.1	196.3	196.3	198.0	198.8	198.8	200.4	201.3	202.1	204.6	206.3
67.5°	174.7	173.8	173.0	174.7	175.5	175.5	177.2	178.0	179.7	180.5	182.1
70°	151.4	150.5	149.7	151.4	153.0	152.2	153.9	154.7	155.5	157.2	158.9
72.5°	128.1	128.1	128.1	128.9	129.8	129.8	130.6	131.4	133.1	134.7	135.6
75°	105.6	104.8	104.8	106.5	106.5	106.5	108.1	109.0	109.0	111.5	112.3
77.5°	83.2	84.0	83.2	83.2	83.2	84.0	84.8	85.7	87.3	89.0	89.8
80°	60.7	61.5	60.7	61.5	60.7	61.5	63.2	63.2	64.9	66.5	67.4
82.5°	39.1	39.9	39.1	39.9	39.9	39.9	40.8	41.6	43.3	44.1	45.7
85°	19.1	18.3	19.1	19.1	19.1	19.1	20.8	20.8	22.5	23.3	24.1
87.5°	2.5	2.5	2.5	2.5	3.3	2.5	3.3	4.2	4.2	5.0	5.0
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°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
95°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	5.0	5.0
97.5°	6.7	6.7	6.7	6.7	6.7	6.7	6.7	7.5	7.5	8.3	9.1
100°	9.1	9.1	10.0	10.0	10.0	10.0	10.0	10.8	11.6	13.3	15.0
102.5°	13.3	13.3	13.3	14.1	14.1	15.0	15.0	16.6	18.3	20.8	25.8
105°	18.3	19.1	19.1	19.1	20.8	20.8	21.6	24.1	28.3	34.9	46.6
107.5°	25.8	26.6	26.6	28.3	29.9	31.6	33.3	40.8	50.7	70.7	99.8
110°	39.9	40.8	41.6	45.7	51.6	56.6	63.2	82.3	112.3	156.4	204.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	74.9	79.0	84.0	95.6	115.6	128.1	142.2	192.1	240.4	282.8	306.1
115°	181.3	192.1	202.9	228.7	262.8	282.8	296.9	340.2	361.0	369.3	364.3
117.5°	361.8	371.0	378.4	392.6	409.2	415.0	417.5	426.7	422.5	415.9	403.4
120°	474.1	477.4	476.6	476.6	476.6	474.1	472.4	466.6	456.6	446.6	432.5
122.5°	519.0	519.8	516.5	512.3	507.4	504.9	501.5	492.4	481.6	469.9	455.0
125°	542.3	542.3	539.0	534.8	529.0	525.7	520.7	512.3	501.5	489.9	474.9
127.5°	559.8	558.9	556.4	553.1	546.4	544.0	539.0	529.8	519.0	509.0	494.0
130°	573.9	573.1	569.7	568.1	562.3	558.1	553.9	544.8	534.0	524.0	510.7
132.5°	587.2	585.5	582.2	580.5	574.7	571.4	567.2	558.9	548.1	539.0	524.8
135°	598.0	595.5	593.0	591.4	586.4	582.2	578.9	570.6	561.4	551.4	539.0
137.5°	606.3	604.7	601.3	599.7	594.7	591.4	588.0	581.4	573.1	563.1	551.4
140°	613.8	611.3	609.7	607.2	603.0	599.7	596.4	590.5	582.2	573.9	563.1
142.5°	619.6	618.0	616.3	614.6	609.7	607.2	603.8	598.8	592.2	583.9	573.9
145°	624.6	623.0	621.3	619.6	615.5	613.0	610.5	605.5	599.7	591.4	582.2
147.5°	628.8	627.1	625.5	624.6	620.5	618.0	615.5	612.2	605.5	597.2	590.5
150°	632.1	630.5	628.8	627.1	623.8	621.3	620.5	616.3	609.7	603.0	596.4
152.5°	633.8	632.1	631.3	629.6	626.3	623.8	623.0	618.8	613.0	605.5	599.7
155°	633.8	632.9	631.3	630.5	626.3	623.8	623.0	618.8	613.8	607.2	602.2
157.5°	633.8	632.1	631.3	629.6	625.5	623.8	623.0	619.6	615.5	609.7	604.7
160°	631.3	630.5	629.6	628.0	624.6	623.0	623.0	619.6	615.5	610.5	604.7
162.5°	628.8	627.1	626.3	625.5	623.0	622.1	621.3	618.8	614.6	610.5	604.7
165°	624.6	623.8	622.1	621.3	618.8	618.0	617.1	615.5	611.3	608.8	603.0
167.5°	618.8	617.1	616.3	614.6	612.2	612.2	612.2	610.5	608.0	606.3	600.5
170°	611.3	609.7	608.8	608.0	606.3	606.3	606.3	605.5	603.0	602.2	596.4
172.5°	603.8	603.0	602.2	601.3	598.8	598.8	598.8	598.8	597.2	597.2	592.2
175°	593.9	593.0	592.2	592.2	590.5	591.4	591.4	591.4	590.5	592.2	587.2
177.5°	581.4	579.7	581.4	583.0	582.2	583.0	583.9	583.9	583.0	584.7	580.5
180°	572.2	572.2	572.2	572.2	572.2	572.2	572.2	572.2	572.2	572.2	572.2



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9
2.5°	645.4	646.3	645.4	646.3	646.3	646.3	646.3	648.8	651.2	652.9	652.1
5°	642.9	643.8	642.9	643.8	643.8	643.8	643.8	646.3	649.6	650.4	648.8
7.5°	637.9	638.8	638.8	638.8	638.8	638.8	638.8	642.1	644.6	646.3	644.6
10°	631.3	632.1	632.1	632.1	632.9	632.9	632.9	635.4	638.8	639.6	637.9
12.5°	623.0	623.8	623.8	623.8	624.6	624.6	624.6	627.1	630.5	631.3	630.5
15°	613.0	613.8	613.8	613.8	614.6	614.6	614.6	617.1	620.5	621.3	620.5
17.5°	601.3	601.3	601.3	601.3	603.0	603.8	603.0	605.5	608.8	609.7	608.8
20°	587.2	588.0	588.0	588.9	589.7	590.5	590.5	593.0	596.4	597.2	595.5
22.5°	573.1	573.1	573.9	574.7	574.7	575.6	575.6	578.1	581.4	582.2	581.4
25°	557.3	557.3	558.1	559.8	559.8	560.6	560.6	563.1	565.6	566.4	565.6
27.5°	539.8	539.0	540.6	541.5	542.3	544.0	543.1	546.4	548.9	549.8	548.9
30°	522.3	521.5	523.2	524.0	524.8	525.7	525.7	529.0	531.5	532.3	531.5
32.5°	503.2	502.4	504.0	505.7	505.7	506.5	506.5	509.9	511.5	513.2	511.5
35°	483.2	481.6	484.1	485.7	484.9	486.6	486.6	489.9	491.6	493.2	491.6
37.5°	463.3	462.4	463.3	464.9	464.9	465.8	465.8	469.1	471.6	472.4	471.6
40°	442.5	441.6	442.5	445.0	444.1	445.0	445.8	448.3	450.0	450.8	450.0
42.5°	420.0	420.0	420.9	423.4	422.5	423.4	424.2	426.7	428.3	429.2	428.3
45°	397.6	398.4	397.6	401.7	400.1	400.9	402.6	403.4	405.9	406.7	405.1
47.5°	375.1	376.8	375.9	379.3	378.4	378.4	379.3	381.8	383.4	384.3	383.4
50°	351.8	353.5	352.7	356.8	355.1	356.0	356.8	358.5	359.3	360.1	360.1
52.5°	328.5	329.4	331.0	333.5	332.7	333.5	334.4	335.2	336.0	337.7	336.0
55°	305.2	306.1	307.7	309.4	310.2	310.2	311.1	312.7	311.9	312.7	313.6
57.5°	282.0	283.6	283.6	286.9	286.9	286.9	286.9	289.4	288.6	290.3	290.3
60°	257.8	257.8	259.5	262.0	262.8	262.8	263.7	265.3	264.5	266.2	267.0
62.5°	233.7	235.4	237.0	238.7	240.4	238.7	241.2	242.0	242.9	243.7	242.9
65°	207.9	209.6	211.3	212.9	212.9	212.9	213.8	217.1	217.1	220.4	219.6
67.5°	183.8	185.5	187.1	188.8	189.6	189.6	190.5	192.1	193.8	194.6	193.8
70°	159.7	161.4	164.7	165.5	167.2	165.5	168.0	168.8	170.5	171.3	170.5
72.5°	136.4	138.1	140.6	141.4	143.1	143.9	144.7	144.7	147.2	148.0	148.0
75°	113.1	114.8	117.3	118.1	119.8	120.6	121.4	121.4	123.9	124.8	123.9
77.5°	90.7	91.5	94.0	94.8	96.5	97.3	98.1	98.1	100.6	101.5	100.6
80°	68.2	69.0	71.5	72.4	74.0	74.0	74.9	75.7	77.4	78.2	77.4
82.5°	46.6	47.4	49.1	50.7	51.6	52.4	53.2	54.1	54.9	55.7	54.9
85°	25.0	25.8	28.3	29.1	30.8	31.6	31.6	32.4	34.1	34.1	34.1
87.5°	5.8	7.5	9.1	10.0	11.6	11.6	12.5	12.5	14.1	15.0	14.1
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°	2.5	2.5	3.3	3.3	4.2	4.2	5.8	6.7	5.8	5.0	5.0
95°	5.8	6.7	8.3	10.8	11.6	13.3	16.6	17.5	14.1	12.5	11.6
97.5°	10.8	13.3	17.5	24.1	26.6	29.9	34.1	32.4	26.6	22.5	20.8
100°	19.1	25.0	34.9	47.4	52.4	56.6	57.4	53.2	44.1	36.6	32.4
102.5°	34.1	48.2	69.0	86.5	89.8	92.3	88.2	79.0	65.7	54.1	47.4
105°	68.2	97.3	125.6	136.4	136.4	133.9	121.4	109.0	91.5	76.5	65.7
107.5°	140.6	173.8	190.5	187.1	181.3	173.0	156.4	140.6	119.8	101.5	88.2
110°	237.0	249.5	244.5	232.1	221.2	211.3	190.5	171.3	148.9	129.8	113.9



TEST NUMBER: P303150

CATALOG NUMBER: CTW-F-5050-40L930-UNV-STD-4

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	309.4	300.3	286.9	266.2	256.2	246.2	224.6	202.9	178.0	158.9	140.6
115°	355.1	338.5	320.2	299.4	288.6	277.8	257.0	233.7	207.1	186.3	168.0
117.5°	388.4	368.5	349.3	329.4	317.7	306.9	286.9	262.0	237.0	214.6	196.3
120°	415.0	394.2	375.1	355.1	345.2	335.2	314.4	289.4	265.3	245.4	225.4
122.5°	438.3	417.5	399.2	380.1	371.0	360.1	338.5	314.4	290.3	271.1	252.8
125°	459.1	440.0	421.7	404.2	394.2	382.6	361.0	337.7	315.2	296.1	278.6
127.5°	478.2	460.8	443.3	425.8	416.7	403.4	383.4	361.0	340.2	321.0	304.4
130°	495.7	479.9	462.4	445.0	435.0	423.4	403.4	382.6	363.5	345.2	328.5
132.5°	512.3	496.5	479.9	461.6	452.5	441.6	423.4	403.4	385.1	369.3	352.7
135°	527.3	511.5	494.9	477.4	467.4	458.3	440.8	422.5	405.1	389.3	372.6
137.5°	540.6	524.0	508.2	491.6	482.4	474.1	457.5	440.0	425.0	410.0	393.4
140°	552.3	534.8	519.8	503.2	495.7	489.1	471.6	457.5	443.3	428.3	414.2
142.5°	561.4	544.8	530.6	515.7	509.0	501.5	486.6	473.3	459.9	446.6	432.5
145°	569.7	553.1	540.6	526.5	519.8	514.0	499.9	486.6	475.8	463.3	449.1
147.5°	577.2	562.3	549.8	537.3	531.5	525.7	512.3	500.7	490.7	478.2	465.8
150°	582.2	569.7	558.9	546.4	542.3	536.5	524.0	514.0	504.0	494.0	481.6
152.5°	586.4	575.6	565.6	555.6	551.4	545.6	534.8	526.5	518.2	508.2	496.5
155°	588.9	580.5	571.4	562.3	558.1	553.9	544.8	536.5	529.0	520.7	509.0
157.5°	592.2	584.7	576.4	568.1	564.7	560.6	552.3	545.6	539.0	531.5	521.5
160°	593.9	587.2	579.7	573.1	569.7	567.2	558.1	553.9	548.1	541.5	532.3
162.5°	594.7	588.9	583.0	577.2	574.7	571.4	564.7	560.6	555.6	549.8	542.3
165°	594.7	590.5	584.7	580.5	578.1	574.7	569.7	566.4	562.3	557.3	550.6
167.5°	593.9	590.5	585.5	582.2	580.5	578.1	573.1	570.6	568.1	564.7	558.1
170°	591.4	588.9	585.5	583.0	580.5	578.9	575.6	573.9	572.2	569.7	563.9
172.5°	588.0	586.4	583.0	582.2	580.5	578.9	576.4	576.4	574.7	573.1	568.9
175°	583.9	583.0	580.5	579.7	579.7	578.1	576.4	576.4	577.2	575.6	572.2
177.5°	578.1	578.1	576.4	576.4	576.4	575.6	574.7	576.4	577.2	577.2	574.7
180°	572.2	572.2	572.2	572.2	572.2	572.2	572.2	572.2	572.2	572.2	572.2



TEST NUMBER: P303150

CATALOG NUMBER: CTW-F-5050-40L930-UNV-STD-4

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9
2.5°	650.4	647.9	646.3	646.3	646.3	644.6	643.8	644.6	647.1	651.2	647.1
5°	647.1	644.6	643.8	643.8	643.8	642.1	641.3	642.1	644.6	648.8	644.6
7.5°	642.9	640.4	639.6	639.6	638.8	637.1	637.1	637.1	640.4	642.9	639.6
10°	636.3	633.8	632.9	632.9	632.1	630.5	630.5	630.5	633.8	636.3	632.9
12.5°	628.0	625.5	624.6	624.6	623.8	622.1	622.1	622.1	625.5	627.1	624.6
15°	618.0	615.5	614.6	614.6	613.8	612.2	612.2	612.2	615.5	616.3	613.8
17.5°	606.3	603.8	603.0	603.0	601.3	600.5	599.7	599.7	603.0	603.8	601.3
20°	593.9	590.5	590.5	589.7	588.0	587.2	587.2	586.4	591.4	589.7	588.0
22.5°	578.9	576.4	576.4	575.6	573.9	573.1	572.2	572.2	576.4	573.1	571.4
25°	563.9	560.6	561.4	559.8	558.9	557.3	556.4	556.4	560.6	556.4	555.6
27.5°	548.1	544.8	543.1	543.1	542.3	539.8	539.0	539.0	543.1	539.0	538.1
30°	529.0	527.3	525.7	525.7	523.2	522.3	521.5	521.5	524.8	520.7	519.8
32.5°	510.7	508.2	507.4	506.5	505.7	503.2	502.4	503.2	505.7	500.7	499.9
35°	490.7	489.1	488.2	486.6	485.7	484.1	483.2	484.1	484.9	480.7	479.1
37.5°	469.1	468.3	467.4	465.8	464.9	464.1	463.3	464.1	464.1	459.9	458.3
40°	448.3	446.6	445.8	445.0	445.0	443.3	442.5	444.1	442.5	440.8	437.5
42.5°	427.5	425.0	425.0	423.4	423.4	421.7	421.7	422.5	420.9	419.2	415.9
45°	405.1	404.2	403.4	401.7	401.7	400.1	400.1	400.9	398.4	396.7	394.2
47.5°	382.6	382.6	380.9	379.3	380.1	379.3	378.4	378.4	376.8	375.1	372.6
50°	360.1	359.3	356.8	357.6	358.5	356.0	356.8	354.3	354.3	352.7	349.3
52.5°	336.9	336.0	335.2	334.4	335.2	333.5	333.5	331.9	331.0	329.4	326.9
55°	314.4	313.6	311.9	311.9	312.7	310.2	310.2	308.6	307.7	306.1	303.6
57.5°	291.1	290.3	289.4	288.6	289.4	287.8	286.9	286.1	284.5	282.8	281.1
60°	267.8	267.0	265.3	264.5	265.3	263.7	262.8	262.0	261.2	258.7	257.0
62.5°	243.7	242.0	242.0	241.2	242.0	240.4	239.5	238.7	237.0	235.4	235.4
65°	219.6	218.7	218.7	216.3	217.9	216.3	212.9	212.9	211.3	209.6	209.6
67.5°	193.8	193.0	193.0	192.1	192.1	192.1	191.3	189.6	187.1	187.1	187.1
70°	170.5	169.7	169.7	168.0	168.8	168.0	167.2	165.5	163.9	163.9	163.9
72.5°	146.4	145.6	145.6	144.7	145.6	144.7	143.9	142.2	140.6	141.4	140.6
75°	123.1	122.3	123.1	121.4	122.3	121.4	120.6	118.9	118.1	118.9	118.1
77.5°	99.8	99.8	99.8	99.8	99.0	98.1	97.3	96.5	96.5	96.5	94.8
80°	77.4	76.5	76.5	76.5	76.5	75.7	74.9	74.0	74.0	74.0	72.4
82.5°	54.9	54.9	54.9	54.9	54.1	54.9	52.4	51.6	51.6	51.6	49.9
85°	33.3	33.3	34.1	33.3	33.3	32.4	30.8	29.9	29.9	29.1	28.3
87.5°	15.0	13.3	13.3	13.3	12.5	12.5	12.5	10.8	10.8	10.8	9.1
90°	1.7	2.5	2.5	2.5	2.5	3.3	3.3	3.3	3.3	3.3	4.2
92.5°	7.5	10.0	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
95°	13.3	15.0	18.3	20.0	21.6	23.3	23.3	24.1	23.3	22.5	22.5
97.5°	20.0	22.5	23.3	24.1	25.8	29.1	31.6	34.1	35.8	36.6	36.6
100°	30.8	29.9	31.6	34.1	34.1	33.3	35.8	38.3	40.8	43.3	44.1
102.5°	44.1	40.8	39.9	40.8	42.4	45.7	44.1	44.9	45.7	47.4	49.9
105°	59.9	54.9	51.6	50.7	51.6	53.2	56.6	57.4	54.9	55.7	56.6
107.5°	78.2	70.7	65.7	64.0	63.2	63.2	64.9	68.2	70.7	69.9	68.2
110°	100.6	89.0	82.3	79.0	77.4	75.7	75.7	77.4	79.8	83.2	85.7



TEST NUMBER: P303150

CATALOG NUMBER: CTW-F-5050-40L930-UNV-STD-4

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
112.5°	125.6	111.5	101.5	96.5	94.0	88.2	87.3	88.2	89.0	91.5	94.8
115°	152.2	134.7	122.3	116.4	113.1	104.0	99.8	99.0	99.8	100.6	102.3
117.5°	178.8	161.4	145.6	138.9	133.9	123.1	115.6	113.1	110.6	111.5	111.5
120°	207.9	187.1	172.2	163.0	158.0	144.7	134.7	128.9	123.9	122.3	121.4
122.5°	234.5	216.3	198.0	191.3	183.0	168.0	157.2	148.0	140.6	135.6	133.1
125°	259.5	242.0	225.4	217.9	209.6	193.0	181.3	170.5	160.5	153.9	147.2
127.5°	286.9	268.6	252.0	245.4	237.0	220.4	206.3	196.3	185.5	175.5	166.3
130°	309.4	293.6	277.8	271.1	263.7	247.9	233.7	222.1	208.8	199.6	189.6
132.5°	334.4	317.7	302.8	295.3	287.8	272.8	259.5	247.9	235.4	227.1	216.3
135°	356.8	341.0	325.2	319.4	311.1	297.8	285.3	272.8	261.2	251.2	242.0
137.5°	378.4	362.6	348.5	341.8	334.4	321.9	310.2	301.1	287.8	277.8	267.8
140°	398.4	383.4	370.1	363.5	357.6	344.3	334.4	325.2	312.7	303.6	292.8
142.5°	417.5	403.4	391.7	385.1	378.4	366.0	356.0	347.7	337.7	327.7	318.6
145°	435.8	421.7	410.9	405.1	398.4	386.8	377.6	369.3	362.6	351.8	342.7
147.5°	453.3	439.2	429.2	424.2	418.4	407.5	399.2	390.9	385.1	375.1	366.8
150°	469.1	456.6	447.5	442.5	436.7	426.7	419.2	411.7	406.7	396.7	390.9
152.5°	484.9	473.3	464.9	459.9	455.0	445.0	437.5	430.0	427.5	417.5	412.5
155°	499.0	487.4	479.9	475.8	471.6	461.6	455.0	447.5	445.8	437.5	431.7
157.5°	512.3	501.5	494.0	490.7	486.6	477.4	471.6	464.9	464.1	456.6	451.6
160°	524.0	514.0	507.4	503.2	499.9	492.4	486.6	481.6	479.9	474.9	469.9
162.5°	534.8	526.5	519.8	516.5	514.0	506.5	501.5	496.5	495.7	492.4	486.6
165°	544.0	535.6	530.6	528.1	525.7	519.0	514.8	510.7	509.9	508.2	502.4
167.5°	552.3	544.8	540.6	538.1	535.6	530.6	527.3	524.0	524.0	522.3	517.3
170°	558.9	552.3	548.9	547.3	545.6	540.6	537.3	534.8	534.8	535.6	529.8
172.5°	564.7	559.8	556.4	553.9	553.1	549.8	547.3	544.8	545.6	547.3	542.3
175°	569.7	564.7	562.3	561.4	560.6	557.3	555.6	554.8	555.6	558.1	553.9
177.5°	573.1	569.7	568.1	567.2	567.2	563.9	563.1	563.1	563.9	568.1	563.1
180°	572.2	572.2	572.2	572.2	572.2	572.2	572.2	572.2	572.2	572.2	572.2



TEST NUMBER: P303150

CATALOG NUMBER: CTW-F-5050-40L930-UNV-STD-4

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	647.9	647.9	647.9	647.9	647.9	647.9	647.9	647.9
2.5°	648.8	647.9	647.1	646.3	645.4	644.6	642.9	643.8
5°	645.4	644.6	643.8	642.9	642.9	642.9	642.1	642.9
7.5°	640.4	639.6	638.8	637.9	637.9	638.8	637.9	639.6
10°	633.8	632.1	632.1	630.5	630.5	630.5	630.5	631.3
12.5°	624.6	623.0	623.0	621.3	621.3	621.3	622.1	623.0
15°	613.8	613.0	612.2	611.3	611.3	612.2	611.3	612.2
17.5°	601.3	599.7	599.7	598.8	598.8	598.0	598.0	598.8
20°	586.4	584.7	584.7	583.9	583.0	583.0	583.0	583.9
22.5°	569.7	568.9	568.1	566.4	567.2	567.2	566.4	568.1
25°	553.1	552.3	551.4	550.6	550.6	549.8	548.9	549.8
27.5°	536.5	534.8	534.0	533.1	532.3	531.5	530.6	531.5
30°	518.2	514.8	515.7	514.8	513.2	512.3	511.5	512.3
32.5°	498.2	496.5	494.9	494.9	493.2	492.4	491.6	492.4
35°	478.2	475.8	474.9	474.9	473.3	472.4	471.6	472.4
37.5°	457.5	455.0	454.1	454.1	452.5	450.8	450.8	450.8
40°	435.8	433.3	433.3	433.3	431.7	430.0	430.0	430.0
42.5°	414.2	412.5	411.7	411.7	410.0	407.5	407.5	408.4
45°	392.6	390.9	390.1	389.3	388.4	385.9	385.9	385.9
47.5°	369.3	369.3	367.6	367.6	366.0	365.1	364.3	364.3
50°	348.5	346.8	345.2	345.2	344.3	341.8	341.8	341.8
52.5°	325.2	324.4	322.7	322.7	321.0	319.4	319.4	319.4
55°	302.8	301.9	300.3	300.3	298.6	297.8	296.9	296.9
57.5°	279.5	279.5	277.8	277.8	275.3	275.3	274.5	276.1
60°	255.3	256.2	254.5	253.7	252.0	252.0	252.0	253.7
62.5°	233.7	232.9	231.2	231.2	230.4	229.6	230.4	230.4
65°	208.8	207.1	206.3	206.3	205.4	204.6	203.8	205.4
67.5°	185.5	184.6	183.0	183.0	183.0	182.1	182.1	183.0
70°	162.2	161.4	160.5	160.5	159.7	159.7	159.7	160.5
72.5°	138.9	138.9	138.9	138.1	137.2	136.4	138.1	137.2
75°	116.4	115.6	115.6	115.6	114.8	113.9	113.1	114.8
77.5°	94.0	93.2	93.2	93.2	92.3	91.5	91.5	92.3
80°	71.5	70.7	70.7	70.7	69.9	69.9	69.0	69.9
82.5°	48.2	48.2	48.2	48.2	46.6	47.4	47.4	46.6
85°	27.4	26.6	26.6	26.6	26.6	26.6	25.8	26.6
87.5°	8.3	8.3	8.3	9.1	8.3	9.1	9.1	9.1
90°	4.2	4.2	4.2	4.2	4.2	4.2	5.0	5.0
92.5°	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
95°	21.6	22.5	21.6	21.6	21.6	21.6	21.6	21.6
97.5°	36.6	36.6	36.6	36.6	35.8	34.9	34.9	34.9
100°	45.7	46.6	47.4	47.4	48.2	48.2	48.2	48.2
102.5°	51.6	52.4	52.4	53.2	54.1	54.1	54.1	54.1
105°	57.4	57.4	58.2	59.1	60.7	61.5	62.4	62.4
107.5°	67.4	67.4	68.2	68.2	68.2	69.0	69.0	69.0
110°	84.8	81.5	81.5	80.7	79.8	79.8	79.8	79.8



TEST NUMBER: P303150

CATALOG NUMBER: CTW-F-5050-40L930-UNV-STD-4

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
112.5°	97.3	98.1	99.0	99.8	99.0	97.3	97.3	97.3
115°	105.6	107.3	109.0	109.8	110.6	110.6	111.5	111.5
117.5°	113.9	115.6	116.4	117.3	118.9	118.9	120.6	120.6
120°	122.3	123.9	123.9	124.8	125.6	126.4	127.3	127.3
122.5°	132.2	133.1	133.1	133.1	133.9	133.9	134.7	134.7
125°	144.7	143.1	142.2	143.1	142.2	142.2	142.2	142.2
127.5°	160.5	157.2	156.4	155.5	153.9	152.2	152.2	152.2
130°	181.3	176.3	173.8	173.0	170.5	167.2	167.2	166.3
132.5°	205.4	199.6	196.3	195.5	191.3	187.1	185.5	184.6
135°	233.7	227.1	222.9	222.1	215.4	211.3	209.6	208.8
137.5°	258.7	252.0	249.5	247.9	243.7	239.5	237.0	236.2
140°	284.5	278.6	274.5	272.8	267.8	265.3	262.8	262.8
142.5°	310.2	304.4	300.3	298.6	294.4	291.1	288.6	288.6
145°	335.2	329.4	325.2	323.5	319.4	316.1	314.4	313.6
147.5°	360.1	354.3	351.0	349.3	345.2	341.8	339.3	339.3
150°	384.3	378.4	375.1	371.8	369.3	366.0	364.3	363.5
152.5°	406.7	401.7	398.4	395.1	392.6	390.9	388.4	388.4
155°	426.7	422.5	419.2	416.7	415.0	412.5	411.7	411.7
157.5°	447.5	442.5	440.0	437.5	435.8	435.0	433.3	433.3
160°	466.6	461.6	459.9	457.5	455.8	454.1	453.3	454.1
162.5°	484.9	481.6	479.1	476.6	475.8	474.1	473.3	473.3
165°	500.7	497.4	495.7	494.0	492.4	491.6	490.7	491.6
167.5°	515.7	512.3	510.7	509.0	508.2	508.2	507.4	507.4
170°	529.0	526.5	525.7	523.2	522.3	522.3	521.5	521.5
172.5°	541.5	539.8	539.0	537.3	537.3	537.3	536.5	537.3
175°	553.9	552.3	551.4	549.8	549.8	548.9	548.1	548.9
177.5°	564.7	563.9	562.3	561.4	560.6	559.8	558.1	558.9
180°	572.2	572.2	572.2	572.2	572.2	572.2	572.2	572.2

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