

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: P303168

Luminaire Tested: **CTW-F-5050-50L935-UNV-STD-4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P303168  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-181-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: CTW-F-5050-50L935-UNV-STD-4  
Description: CORELITE CONTINUA LINEAR WALL LED LUMINAIRE  
50% UPLIGHT, 50% DOWNLIGHT, 5000 LUMEN PACKAGE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

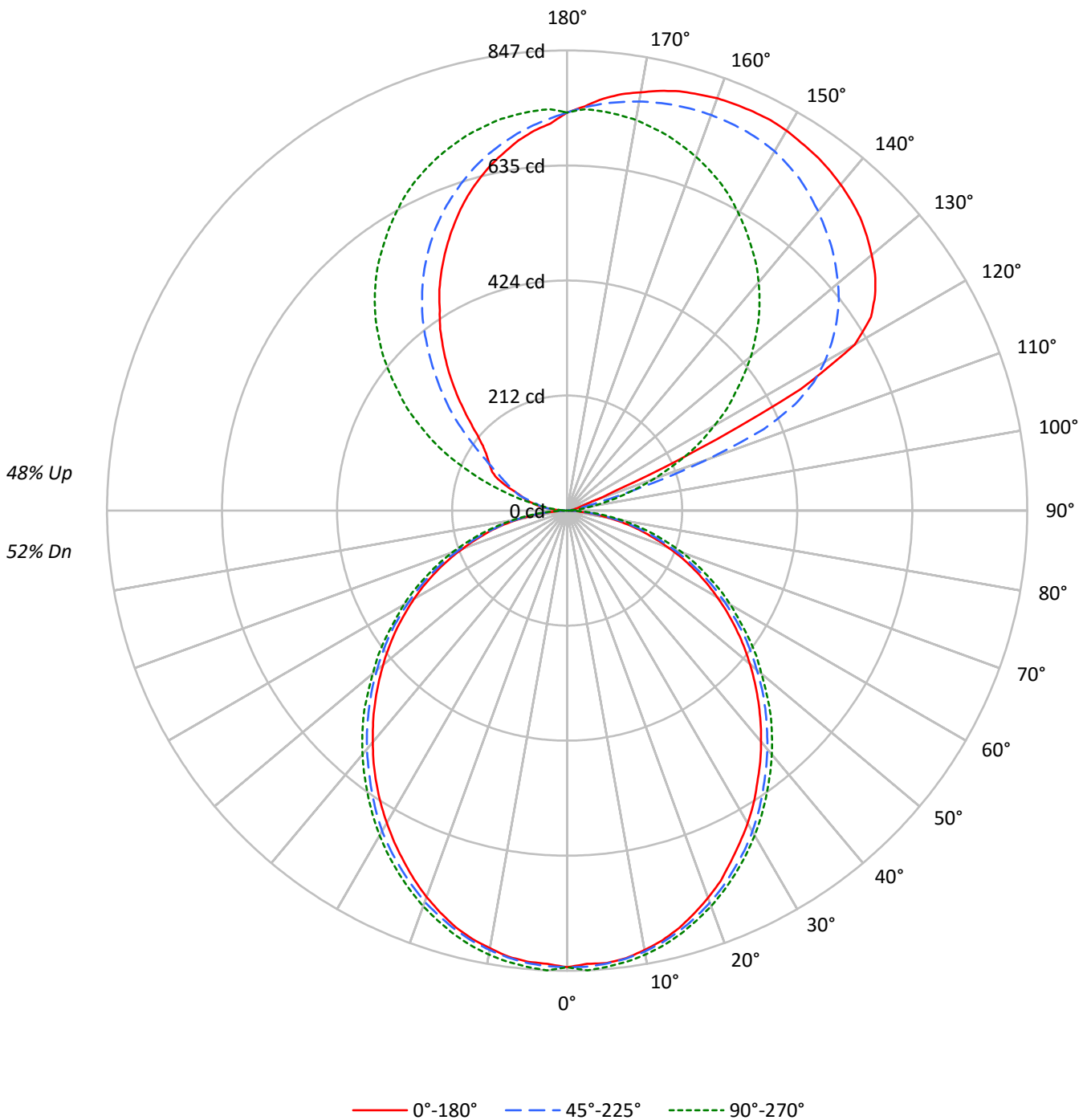
Lumens per Lamp: N/A  
Luminaire Lumens: 4323.8 lumens  
Efficiency: N/A  
Efficacy: 108.1 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.32  
Luminous Opening: Rectangular (W 4' x L: 0.12' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 40  
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	108	108	108	108	100	100	100	100	84	84	84	71	71	71	58	58	58	52
1	98	94	90	86	91	87	83	80	74	71	69	62	60	59	51	50	49	44
2	89	82	75	70	82	76	70	66	65	61	57	54	51	49	45	43	41	36
3	81	72	64	58	75	67	60	55	57	52	48	48	44	41	40	37	35	31
4	74	63	55	49	68	59	52	46	50	45	41	43	39	35	35	32	30	26
5	68	56	48	42	63	53	45	40	45	39	35	38	34	30	32	29	26	23
6	63	51	42	37	58	47	40	35	41	35	31	35	30	27	29	25	23	20
7	58	46	38	32	54	43	35	30	37	31	27	31	27	24	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°	18090	18090	18090
5°	18066	18215	18010
10°	17956	18144	17879
15°	17732	17981	17692
20°	17377	17753	17338
25°	16934	17466	16912
30°	16523	17165	16501
35°	16042	16812	16089
40°	15605	16477	15631
45°	15152	16121	15229
50°	14706	15630	14823
55°	14251	15287	14446
60°	13752	14975	14015
65°	13203	14564	13550
70°	12412	14143	12847
75°	11462	13533	12319
80°	9819	12596	11096
85°	6175	11066	8077



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.3	1.8
10°-20°	224.7	5.2
20°-30°	332.7	7.7
30°-40°	390.7	9.0
40°-50°	396.1	9.2
50°-60°	353.3	8.2
60°-70°	270.8	6.3
70°-80°	159.5	3.7
80°-90°	43.0	1.0
90°-100°	20.9	0.5
100°-110°	90.0	2.1
110°-120°	252.3	5.8
120°-130°	364.7	8.4
130°-140°	393.7	9.1
140°-150°	374.4	8.7
150°-160°	307.3	7.1
160°-170°	200.9	4.6
170°-180°	69.6	1.6
0°-30°	636.7	14.7
0°-40°	1027.4	23.8
0°-60°	1776.9	41.1
0°-90°	2250.1	52.0
90°-120°	363.2	8.4
90°-150°	1495.9	34.6
90°-180°	2074.0	48.0
0°-180°	4323.8	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	840	840	840	840	840	
5°	836	837	843	836	833	79
15°	796	801	807	798	794	224
25°	713	728	735	726	712	329
35°	610	628	640	628	612	382
45°	498	516	530	516	500	384
55°	380	396	407	399	385	340
65°	259	271	286	276	266	256
75°	138	147	163	152	148	145
85°	25	33	45	37	33	32
90°	1	1	1	4	6	1
95°	5	6	16	28	26	6
105°	22	65	102	71	79	26
115°	261	463	244	127	144	288
125°	692	605	378	209	182	614
135°	763	688	498	338	275	589
145°	798	746	592	466	407	500
155°	810	772	666	573	529	375
165°	799	772	715	655	630	226
175°	761	752	738	712	702	73
180°	733	733	733	733	733	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	840.3	840.3	840.3	840.3	840.3	840.3	840.3	840.3	840.3	840.3	840.3
2.5°	835.2	834.3	836.9	838.6	838.6	839.5	841.2	842.1	841.2	844.6	840.3
5°	836.0	834.3	835.2	835.2	834.3	835.2	836.9	837.8	837.8	841.2	836.9
7.5°	830.9	830.0	830.9	830.0	829.1	830.0	830.9	832.6	831.7	835.2	831.7
10°	821.4	820.5	820.5	820.5	819.7	820.5	822.3	824.0	824.0	826.6	824.0
12.5°	810.2	808.5	809.3	810.2	808.5	809.3	811.1	812.8	812.8	816.2	813.6
15°	795.6	794.7	796.4	798.1	796.4	796.4	798.1	799.0	799.9	802.5	800.7
17.5°	777.5	777.5	779.2	781.8	780.1	780.1	781.8	783.5	783.5	785.2	785.2
20°	758.5	757.7	759.4	761.1	761.1	760.3	762.8	764.6	765.4	767.2	768.0
22.5°	737.9	736.2	737.0	739.6	738.7	738.7	739.6	743.0	744.8	746.5	749.1
25°	712.9	712.9	714.6	716.4	716.4	716.4	717.2	719.8	722.4	725.0	727.5
27.5°	688.8	688.8	689.7	693.1	693.1	692.2	694.0	698.3	700.9	702.6	706.0
30°	664.7	662.1	664.7	667.3	669.0	667.3	669.9	673.3	675.0	677.6	681.9
32.5°	638.9	638.0	638.0	641.4	643.2	642.3	643.2	647.5	650.9	651.8	656.1
35°	610.4	611.3	611.3	613.9	615.6	614.8	615.6	619.9	623.4	624.2	628.5
37.5°	583.8	583.8	583.8	586.3	588.1	588.1	588.1	592.4	595.8	598.4	601.0
40°	555.3	556.2	555.3	557.9	560.5	559.6	560.5	564.0	568.3	570.8	573.4
42.5°	526.9	526.1	526.1	528.7	532.1	531.2	532.1	535.5	539.0	542.4	544.2
45°	497.7	495.9	497.7	500.2	502.8	503.7	502.8	506.3	509.7	512.3	515.7
47.5°	468.4	467.5	467.5	470.1	472.7	472.7	473.5	476.1	480.4	482.2	486.5
50°	439.1	439.1	438.2	440.8	443.4	444.3	444.3	446.0	450.3	453.7	455.5
52.5°	409.8	409.8	409.8	410.7	412.4	415.0	415.0	416.7	419.3	423.6	426.2
55°	379.7	380.6	379.7	380.6	383.1	384.9	384.9	386.6	389.2	393.5	396.1
57.5°	349.6	350.4	349.6	350.4	353.0	353.9	354.7	356.5	358.2	361.6	364.2
60°	319.4	320.3	319.4	320.3	322.9	324.6	323.7	326.3	328.0	329.8	333.2
62.5°	289.3	291.0	290.2	291.9	292.7	294.5	293.6	296.2	297.9	299.6	303.1
65°	259.2	260.9	260.0	261.7	261.7	263.5	262.6	265.2	266.9	268.6	271.2
67.5°	229.0	230.7	229.9	230.7	231.6	233.3	231.6	235.1	236.8	237.6	240.2
70°	197.2	198.9	198.0	198.9	199.8	200.6	199.8	202.3	204.9	205.8	207.5
72.5°	167.0	168.8	168.8	169.6	169.6	171.3	171.3	171.3	173.1	175.6	176.5
75°	137.8	139.5	139.5	139.5	139.5	141.2	141.2	142.9	143.8	145.5	147.2
77.5°	108.5	110.2	110.2	110.2	110.2	111.9	111.9	113.7	114.5	116.2	118.0
80°	79.2	80.9	81.8	81.8	81.8	82.7	82.7	84.4	85.2	87.0	88.7
82.5°	51.7	52.5	53.4	52.5	53.4	54.2	56.0	56.0	56.8	58.5	60.3
85°	25.0	25.8	26.7	26.7	26.7	27.6	27.6	29.3	30.1	31.0	32.7
87.5°	3.4	4.3	4.3	4.3	4.3	5.2	5.2	5.2	6.0	6.0	7.7
90°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
92.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
95°	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	6.0
97.5°	7.7	7.7	8.6	7.7	8.6	8.6	8.6	8.6	9.5	9.5	11.2
100°	12.1	12.1	12.1	12.1	12.1	12.1	12.9	12.9	14.6	15.5	18.1
102.5°	16.4	16.4	16.4	17.2	17.2	18.1	18.1	18.9	21.5	25.0	32.7
105°	22.4	22.4	23.2	23.2	24.1	25.0	25.8	29.3	34.4	44.8	65.4
107.5°	31.0	31.9	32.7	33.6	36.2	38.7	41.3	50.8	66.3	98.2	146.4
110°	49.1	49.9	53.4	56.8	65.4	74.0	82.7	114.5	161.0	219.6	272.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	102.5	105.9	108.5	129.1	156.7	180.8	203.2	260.0	321.2	371.1	391.8
115°	260.9	266.9	271.2	311.7	354.7	382.3	399.5	438.2	463.2	471.0	463.2
117.5°	484.7	487.3	493.4	508.0	527.8	537.3	539.0	545.0	539.0	526.9	511.4
120°	611.3	611.3	607.9	608.7	606.1	606.1	602.7	593.2	580.3	565.7	547.6
122.5°	663.0	660.4	656.1	652.6	644.9	643.2	638.0	625.9	612.2	597.5	577.7
125°	692.2	689.7	686.2	681.9	673.3	669.9	664.7	652.6	638.9	623.4	605.3
127.5°	714.6	712.0	708.6	704.3	696.5	693.1	687.1	675.0	661.2	646.6	630.3
130°	731.8	731.0	726.7	724.1	716.4	712.9	706.9	694.8	681.9	667.3	650.9
132.5°	748.2	746.5	742.2	740.5	733.6	729.3	724.1	712.9	700.0	685.4	669.9
135°	762.8	761.1	756.0	754.2	748.2	743.0	738.7	728.4	717.2	702.6	687.9
137.5°	774.0	771.5	768.0	766.3	760.3	755.1	751.7	742.2	731.0	717.2	703.4
140°	783.5	780.9	778.3	776.6	771.5	767.2	762.8	753.4	743.9	732.7	718.9
142.5°	791.3	789.5	787.0	784.4	779.2	775.8	772.3	764.6	756.0	744.8	732.7
145°	798.1	796.4	793.8	792.1	786.1	783.5	780.1	773.2	765.4	754.2	745.6
147.5°	802.5	801.6	799.9	798.1	792.1	789.5	786.1	780.9	773.2	762.8	755.1
150°	807.6	805.9	804.2	803.3	797.3	794.7	793.0	787.0	780.1	770.6	763.7
152.5°	810.2	808.5	806.8	805.9	799.9	798.1	796.4	791.3	783.5	774.9	768.9
155°	810.2	809.3	807.6	806.8	800.7	798.1	797.3	792.1	785.2	778.3	772.3
157.5°	809.3	807.6	806.8	805.0	799.9	798.1	796.4	792.1	786.1	780.1	774.0
160°	807.6	805.9	805.0	803.3	799.0	797.3	796.4	792.1	787.8	781.8	774.9
162.5°	803.3	802.5	801.6	800.7	797.3	795.6	794.7	791.3	786.1	780.9	774.0
165°	799.0	797.3	796.4	794.7	791.3	791.3	790.4	787.8	782.6	780.1	772.3
167.5°	791.3	788.7	788.7	786.1	783.5	783.5	782.6	781.8	777.5	775.8	768.9
170°	781.8	780.9	779.2	778.3	776.6	776.6	775.8	774.9	771.5	771.5	764.6
172.5°	773.2	772.3	771.5	769.7	767.2	767.2	767.2	767.2	764.6	764.6	758.5
175°	761.1	759.4	759.4	758.5	756.8	757.7	757.7	757.7	756.0	757.7	751.7
177.5°	744.8	743.0	744.8	746.5	745.6	746.5	747.3	747.3	745.6	748.2	743.0
180°	732.7	732.7	732.7	732.7	732.7	732.7	732.7	732.7	732.7	732.7	732.7



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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	840.3	840.3	840.3	840.3	840.3	840.3	840.3	840.3	840.3	840.3	840.3
2.5°	836.9	837.8	836.9	837.8	838.6	837.8	838.6	842.1	845.5	847.2	845.5
5°	833.4	834.3	833.4	834.3	835.2	834.3	835.2	837.8	842.1	842.9	842.1
7.5°	828.3	829.1	828.3	829.1	829.1	829.1	829.1	832.6	836.0	837.8	836.0
10°	819.7	820.5	819.7	821.4	821.4	821.4	821.4	824.8	828.3	830.0	827.4
12.5°	809.3	810.2	809.3	811.1	810.2	811.1	811.9	814.5	817.9	819.7	817.9
15°	795.6	797.3	796.4	798.1	798.1	798.1	798.1	801.6	805.0	806.8	805.0
17.5°	780.1	780.9	780.9	782.6	782.6	782.6	783.5	787.0	789.5	791.3	789.5
20°	762.8	764.6	764.6	765.4	765.4	766.3	767.2	769.7	773.2	774.9	773.2
22.5°	743.9	745.6	746.5	746.5	746.5	747.3	748.2	750.8	755.1	756.0	754.2
25°	724.1	724.1	725.8	725.8	726.7	727.5	728.4	730.1	734.4	735.3	734.4
27.5°	702.6	701.7	702.6	704.3	704.3	706.0	706.9	708.6	712.0	713.8	712.0
30°	678.5	678.5	680.2	681.1	681.1	681.9	683.6	685.4	688.8	690.5	688.8
32.5°	654.4	653.5	656.1	656.1	656.9	657.8	658.7	661.2	663.8	665.6	664.7
35°	629.4	626.8	630.3	630.3	631.1	632.8	632.8	634.6	638.0	639.7	638.0
37.5°	603.6	601.0	603.6	605.3	604.4	606.1	607.0	608.7	612.2	613.0	613.0
40°	576.9	574.3	576.9	577.7	577.7	578.6	580.3	581.2	583.8	586.3	584.6
42.5°	547.6	546.7	548.5	550.2	550.2	551.0	551.9	552.8	555.3	557.9	556.2
45°	518.3	518.3	520.0	521.8	522.6	522.6	523.5	524.3	526.1	529.5	526.9
47.5°	489.0	489.0	490.8	491.6	491.6	492.5	494.2	494.2	497.7	497.7	498.5
50°	458.1	459.8	461.5	464.1	462.4	463.2	464.9	464.9	466.7	466.7	469.2
52.5°	427.9	428.8	431.4	433.9	434.8	433.9	434.8	434.8	436.5	439.1	437.4
55°	397.8	397.8	401.2	403.8	403.8	403.8	403.8	404.7	407.3	407.3	407.3
57.5°	366.8	367.6	370.2	373.7	373.7	373.7	373.7	374.5	376.3	375.4	378.0
60°	336.7	336.7	340.1	341.8	341.8	343.5	343.5	344.4	345.3	347.8	347.8
62.5°	306.5	306.5	309.1	310.8	312.5	311.7	312.5	313.4	315.1	317.7	316.0
65°	275.5	275.5	278.1	279.0	281.5	280.7	281.5	284.1	285.0	285.9	285.0
67.5°	243.7	244.5	247.1	248.0	250.6	251.4	250.6	254.0	254.9	256.6	255.7
70°	210.1	210.9	214.4	215.2	217.0	216.1	217.8	222.1	223.9	224.7	223.0
72.5°	179.9	180.8	184.3	185.1	186.8	186.0	187.7	190.3	192.0	192.9	192.9
75°	149.0	150.7	152.4	154.1	156.7	155.8	157.6	160.1	161.9	162.7	162.7
77.5°	119.7	120.5	123.1	124.0	126.6	125.7	126.6	128.3	130.9	131.7	131.7
80°	90.4	92.1	93.0	94.7	96.4	95.6	97.3	99.9	100.7	101.6	101.6
82.5°	62.0	62.9	64.6	66.3	68.0	68.9	69.7	71.5	72.3	72.3	72.3
85°	34.4	36.2	37.9	38.7	40.5	39.6	42.2	43.9	44.8	44.8	45.6
87.5°	9.5	11.2	12.1	13.8	15.5	15.5	15.5	18.9	18.9	19.8	19.8
90°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
92.5°	2.6	3.4	3.4	4.3	5.2	6.0	8.6	8.6	6.9	6.0	6.9
95°	6.9	7.7	9.5	14.6	18.1	20.7	24.1	23.2	19.8	15.5	14.6
97.5°	12.9	16.4	23.2	35.3	42.2	45.6	49.1	43.9	37.0	30.1	27.6
100°	24.1	32.7	49.9	70.6	78.4	81.8	80.9	69.7	60.3	49.1	43.0
102.5°	45.6	69.7	99.0	122.3	127.4	123.1	116.2	102.5	88.7	73.2	63.7
105°	99.0	140.3	170.5	179.1	181.7	173.1	156.7	139.5	119.7	101.6	87.8
107.5°	197.2	235.1	246.2	240.2	236.8	222.1	201.5	179.1	155.8	133.5	116.2
110°	312.5	319.4	311.7	292.7	282.4	269.5	246.2	220.4	191.1	168.8	148.1





TEST NUMBER: P303168

CATALOG NUMBER: CTW-F-5050-50L935-UNV-STD-4

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	396.9	382.3	362.5	337.5	325.5	311.7	286.7	261.7	229.9	204.9	182.5
115°	451.2	429.6	405.5	378.8	365.9	351.3	326.3	298.8	266.9	243.7	217.8
117.5°	493.4	466.7	442.6	416.7	404.7	390.0	365.1	334.9	303.1	279.8	254.0
120°	526.1	501.1	476.1	452.0	438.2	426.2	400.4	370.2	338.4	312.5	288.4
122.5°	555.3	532.1	508.0	484.7	471.8	458.1	431.4	402.1	372.8	348.7	324.6
125°	582.9	561.4	537.3	514.0	501.1	487.3	461.5	433.1	403.8	378.0	357.3
127.5°	608.7	588.1	564.0	541.6	528.7	514.0	489.0	461.5	436.5	409.8	389.2
130°	632.0	613.0	589.8	567.4	554.5	540.7	515.7	489.0	464.9	441.7	419.3
132.5°	652.6	633.7	611.3	590.6	576.9	564.8	540.7	515.7	491.6	470.1	449.4
135°	672.4	652.6	632.0	610.4	598.4	587.2	564.0	540.7	518.3	498.5	479.6
137.5°	690.5	669.0	648.3	627.7	616.5	607.0	584.6	563.1	544.2	524.3	505.4
140°	706.0	683.6	664.7	644.9	634.6	625.1	604.4	583.8	567.4	548.5	530.4
142.5°	718.1	695.7	678.5	659.5	650.1	642.3	622.5	604.4	588.1	571.7	553.6
145°	727.5	707.7	691.4	673.3	665.6	656.9	638.9	622.5	607.9	591.5	575.1
147.5°	737.0	719.8	703.4	687.1	679.3	671.6	655.2	640.6	626.8	612.2	595.8
150°	744.8	729.3	714.6	700.0	693.1	685.4	670.7	656.9	644.9	631.1	615.6
152.5°	749.9	737.0	724.1	711.2	704.3	698.3	684.5	673.3	662.1	650.1	634.6
155°	754.2	743.9	731.8	720.7	714.6	709.5	696.5	686.2	676.7	666.4	652.6
157.5°	758.5	748.2	737.9	727.5	722.4	717.2	706.0	698.3	689.7	680.2	667.3
160°	760.3	752.5	742.2	733.6	729.3	725.0	715.5	708.6	701.7	693.1	681.1
162.5°	761.1	754.2	745.6	738.7	735.3	731.8	722.4	717.2	711.2	704.3	694.0
165°	761.1	756.0	749.1	743.0	739.6	737.0	729.3	725.0	720.7	714.6	705.2
167.5°	760.3	755.1	749.9	744.8	742.2	739.6	733.6	731.0	727.5	722.4	714.6
170°	757.7	754.2	749.1	745.6	743.9	741.3	737.0	735.3	733.6	730.1	722.4
172.5°	753.4	750.8	747.3	744.8	743.9	741.3	737.9	737.0	737.0	734.4	728.4
175°	747.3	746.5	743.9	742.2	740.5	739.6	737.0	737.9	738.7	737.9	732.7
177.5°	739.6	739.6	737.9	737.9	737.0	736.2	735.3	737.0	739.6	739.6	736.2
180°	732.7	732.7	732.7	732.7	732.7	732.7	732.7	732.7	732.7	732.7	732.7



TEST NUMBER: P303168

CATALOG NUMBER: CTW-F-5050-50L935-UNV-STD-4

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	840.3	840.3	840.3	840.3	840.3	840.3	840.3	840.3	840.3	840.3	840.3
2.5°	842.9	839.5	838.6	838.6	837.8	836.0	835.2	836.0	839.5	844.6	839.5
5°	839.5	836.0	834.3	834.3	834.3	831.7	831.7	831.7	836.0	840.3	835.2
7.5°	833.4	830.0	829.1	829.1	828.3	826.6	825.7	826.6	830.0	834.3	829.1
10°	825.7	822.3	821.4	820.5	819.7	817.9	817.1	817.9	821.4	824.8	820.5
12.5°	815.4	811.9	810.2	811.1	809.3	806.8	806.8	806.8	811.1	813.6	809.3
15°	802.5	798.1	797.3	797.3	796.4	793.8	793.8	793.8	798.1	799.9	794.7
17.5°	787.0	783.5	782.6	782.6	780.9	778.3	778.3	777.5	782.6	783.5	780.1
20°	770.6	767.2	765.4	765.4	763.7	761.1	761.1	760.3	766.3	764.6	762.0
22.5°	752.5	748.2	746.5	747.3	745.6	742.2	742.2	741.3	746.5	743.9	740.5
25°	732.7	727.5	726.7	725.8	725.0	720.7	720.7	720.7	725.8	721.5	718.9
27.5°	709.5	706.0	705.2	702.6	702.6	699.1	699.1	699.1	704.3	698.3	697.4
30°	686.2	682.8	682.8	680.2	679.3	675.9	675.9	675.9	681.1	675.0	673.3
32.5°	663.0	658.7	656.9	655.2	655.2	651.8	651.8	651.8	655.2	649.2	647.5
35°	637.1	632.8	632.8	629.4	629.4	625.9	625.1	626.8	627.7	622.5	620.8
37.5°	610.4	606.1	606.1	603.6	603.6	600.1	600.1	602.7	600.1	597.5	594.1
40°	583.8	580.3	578.6	576.0	576.9	574.3	573.4	575.1	573.4	570.8	566.5
42.5°	555.3	551.9	551.0	549.3	549.3	546.7	545.9	547.6	545.0	541.6	539.0
45°	526.9	524.3	523.5	521.8	521.8	518.3	518.3	519.2	515.7	514.0	510.6
47.5°	496.8	495.1	493.4	493.4	492.5	489.9	489.9	489.9	487.3	485.6	481.3
50°	467.5	464.9	464.1	464.1	464.1	461.5	460.6	458.9	457.2	456.3	452.0
52.5°	437.4	435.7	434.8	434.8	435.7	431.4	430.5	428.8	427.9	427.1	421.9
55°	407.3	405.5	403.8	405.5	404.7	401.2	400.4	401.2	398.6	396.1	391.8
57.5°	377.1	374.5	374.5	375.4	374.5	371.1	370.2	371.1	367.6	365.1	361.6
60°	347.0	344.4	343.5	344.4	343.5	340.1	339.2	339.2	336.7	334.9	331.5
62.5°	316.8	314.3	314.3	314.3	313.4	311.7	309.1	309.1	306.5	303.9	301.3
65°	285.0	282.4	283.3	283.3	283.3	281.5	279.0	279.8	275.5	273.8	271.2
67.5°	254.9	252.3	252.3	252.3	252.3	252.3	248.0	247.1	244.5	243.7	241.1
70°	223.0	219.6	220.4	219.6	218.7	217.8	215.2	214.4	211.8	211.8	209.2
72.5°	191.1	189.4	189.4	189.4	188.6	187.7	186.0	185.1	181.7	181.7	179.9
75°	159.3	159.3	158.4	158.4	158.4	157.6	155.8	155.0	151.5	152.4	150.7
77.5°	130.0	130.0	128.3	128.3	128.3	127.4	126.6	124.0	124.0	122.3	121.4
80°	99.9	99.9	99.0	99.0	99.0	98.2	97.3	96.4	94.7	93.8	92.1
82.5°	72.3	71.5	70.6	70.6	69.7	69.7	68.9	68.0	66.3	63.7	62.9
85°	43.9	43.9	43.0	43.0	42.2	42.2	40.5	38.7	37.0	35.3	34.4
87.5°	18.9	18.9	16.4	16.4	15.5	15.5	14.6	13.8	12.1	11.2	10.3
90°	1.7	2.6	2.6	2.6	3.4	3.4	3.4	4.3	4.3	4.3	4.3
92.5°	10.3	12.9	13.8	13.8	13.8	13.8	13.8	13.8	13.8	12.9	12.9
95°	17.2	18.9	23.2	25.0	26.7	28.4	28.4	28.4	28.4	27.6	25.8
97.5°	25.8	27.6	30.1	30.1	31.0	35.3	38.7	40.5	42.2	43.0	43.0
100°	40.5	37.0	40.5	43.0	42.2	42.2	43.9	47.4	50.8	52.5	53.4
102.5°	57.7	51.7	49.9	51.7	53.4	56.8	55.1	56.0	57.7	60.3	62.9
105°	79.2	71.5	65.4	64.6	64.6	68.0	72.3	71.5	70.6	70.6	70.6
107.5°	104.2	93.0	83.5	81.8	80.1	80.1	82.7	87.8	91.3	87.8	86.1
110°	132.6	117.1	107.6	102.5	99.0	95.6	95.6	98.2	102.5	106.8	108.5



TEST NUMBER: P303168

CATALOG NUMBER: CTW-F-5050-50L935-UNV-STD-4

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
112.5°	164.5	145.5	132.6	128.3	121.4	113.7	111.1	111.1	113.7	118.0	121.4
115°	197.2	177.4	159.3	154.1	147.2	135.2	128.3	126.6	126.6	128.3	131.7
117.5°	233.3	209.2	189.4	182.5	174.8	161.0	149.8	143.8	141.2	141.2	142.9
120°	265.2	244.5	223.9	214.4	204.9	189.4	174.8	165.3	159.3	155.8	155.0
122.5°	301.3	279.8	257.4	249.7	239.4	221.3	205.8	191.1	181.7	174.8	169.6
125°	334.1	314.3	291.0	281.5	272.1	254.0	238.5	222.1	209.2	198.0	189.4
127.5°	365.9	346.1	323.7	315.1	305.7	286.7	270.4	254.9	241.1	227.3	215.2
130°	397.8	378.8	356.5	347.0	338.4	320.3	302.2	286.7	274.7	260.9	247.1
132.5°	428.8	409.0	388.3	378.0	370.2	352.1	335.8	319.4	305.7	293.6	280.7
135°	458.1	439.1	418.4	408.1	400.4	384.0	367.6	353.0	337.5	325.5	313.4
137.5°	485.6	466.7	448.6	437.4	429.6	415.0	399.5	385.7	370.2	357.3	345.3
140°	511.4	493.4	476.1	466.7	458.1	443.4	429.6	418.4	402.1	390.0	378.0
142.5°	535.5	517.5	501.1	493.4	484.7	471.0	458.1	447.7	435.7	422.8	410.7
145°	557.1	541.6	526.1	518.3	510.6	497.7	485.6	476.1	465.8	452.9	441.7
147.5°	579.5	564.0	549.3	542.4	536.4	523.5	512.3	502.8	495.1	483.0	471.8
150°	600.1	585.5	572.6	565.7	560.5	546.7	538.1	528.7	522.6	511.4	502.0
152.5°	619.9	607.0	594.1	588.9	582.9	570.0	561.4	551.9	548.5	537.3	529.5
155°	638.9	625.1	614.8	609.6	603.6	591.5	584.6	576.0	573.4	563.1	555.3
157.5°	656.1	642.3	632.8	627.7	622.5	612.2	605.3	597.5	595.8	588.1	579.5
160°	670.7	657.8	649.2	645.7	640.6	631.1	624.2	618.2	616.5	611.3	602.7
162.5°	683.6	672.4	665.6	661.2	656.9	648.3	643.2	636.3	636.3	632.0	625.1
165°	696.5	686.2	679.3	675.9	672.4	665.6	659.5	655.2	655.2	651.8	644.9
167.5°	706.9	697.4	692.2	688.8	686.2	679.3	675.0	670.7	671.6	669.9	663.0
170°	716.4	707.7	703.4	700.9	698.3	692.2	689.7	685.4	686.2	686.2	680.2
172.5°	724.1	716.4	712.9	710.3	709.5	703.4	701.7	699.1	700.0	701.7	694.0
175°	729.3	723.2	719.8	718.9	717.2	713.8	711.2	710.3	712.0	714.6	707.7
177.5°	733.6	728.4	726.7	726.7	725.0	721.5	719.8	719.8	722.4	725.8	720.7
180°	732.7	732.7	732.7	732.7	732.7	732.7	732.7	732.7	732.7	732.7	732.7



TEST NUMBER: P303168

CATALOG NUMBER: CTW-F-5050-50L935-UNV-STD-4

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	840.3	840.3	840.3	840.3	840.3	840.3	840.3	840.3
2.5°	841.2	840.3	839.5	837.8	836.9	835.2	834.3	835.2
5°	836.0	835.2	834.3	833.4	833.4	832.6	832.6	833.4
7.5°	830.0	829.1	828.3	827.4	827.4	827.4	827.4	828.3
10°	821.4	819.7	818.8	817.9	817.1	817.1	817.1	817.9
12.5°	810.2	808.5	806.8	805.9	805.9	805.9	805.9	807.6
15°	795.6	794.7	793.8	793.0	793.0	792.1	792.1	793.8
17.5°	780.9	779.2	777.5	776.6	775.8	775.8	774.9	775.8
20°	761.1	759.4	757.7	756.8	756.8	756.0	756.0	756.8
22.5°	739.6	737.0	736.2	735.3	735.3	734.4	734.4	735.3
25°	718.1	714.6	713.8	712.9	712.9	712.0	712.0	712.0
27.5°	695.7	692.2	691.4	689.7	690.5	688.8	687.9	688.8
30°	671.6	668.1	667.3	665.6	665.6	663.8	663.0	663.8
32.5°	645.7	642.3	641.4	640.6	641.4	638.0	637.1	638.9
35°	619.1	615.6	615.6	613.9	614.8	611.3	611.3	612.2
37.5°	591.5	588.1	588.9	587.2	587.2	584.6	584.6	585.5
40°	564.0	561.4	559.6	559.6	560.5	557.1	557.1	556.2
42.5°	535.5	533.0	532.1	532.1	531.2	528.7	527.8	528.7
45°	507.1	504.5	504.5	503.7	503.7	500.2	501.1	500.2
47.5°	477.9	476.1	475.3	474.4	474.4	471.0	471.8	471.0
50°	448.6	447.7	446.9	446.0	446.0	442.6	444.3	442.6
52.5°	419.3	418.4	417.6	417.6	416.7	415.0	415.0	413.3
55°	390.0	388.3	388.3	388.3	387.4	384.9	386.6	384.9
57.5°	360.8	359.0	358.2	357.3	357.3	356.5	355.6	354.7
60°	330.6	328.9	328.9	327.2	327.2	327.2	326.3	325.5
62.5°	300.5	298.8	298.8	297.9	297.9	297.9	297.0	296.2
65°	271.2	268.6	268.6	267.8	267.8	267.8	266.9	266.0
67.5°	240.2	238.5	238.5	237.6	238.5	238.5	237.6	235.9
70°	208.4	206.6	206.6	205.8	206.6	206.6	205.8	204.1
72.5°	179.1	177.4	176.5	177.4	177.4	177.4	175.6	174.8
75°	149.8	147.2	147.2	148.1	147.2	148.1	146.4	148.1
77.5°	120.5	118.0	118.0	118.8	118.0	118.0	117.1	118.8
80°	90.4	88.7	88.7	89.5	88.7	88.7	87.8	89.5
82.5°	62.0	61.1	62.0	60.3	58.5	58.5	57.7	59.4
85°	34.4	33.6	32.7	32.7	31.9	31.9	31.0	32.7
87.5°	10.3	11.2	11.2	10.3	10.3	10.3	10.3	11.2
90°	4.3	4.3	4.3	5.2	5.2	6.0	6.0	6.0
92.5°	12.9	12.9	12.1	12.9	12.1	12.1	12.1	12.1
95°	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8
97.5°	43.0	43.9	43.0	43.9	43.0	42.2	43.0	42.2
100°	54.2	56.0	56.0	56.8	56.8	56.8	56.8	56.8
102.5°	64.6	66.3	66.3	67.2	67.2	68.0	68.0	67.2
105°	73.2	74.0	74.9	75.8	77.5	79.2	79.2	79.2
107.5°	85.2	87.0	86.1	87.0	87.8	87.8	87.8	87.8
110°	106.8	105.0	104.2	102.5	102.5	102.5	102.5	102.5



TEST NUMBER: P303168

CATALOG NUMBER: CTW-F-5050-50L935-UNV-STD-4

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
112.5°	124.8	126.6	126.6	126.6	126.6	125.7	124.0	124.0
115°	136.0	139.5	140.3	141.2	142.9	143.8	143.8	143.8
117.5°	144.6	148.1	149.0	150.7	152.4	154.1	155.0	155.8
120°	155.8	158.4	159.3	159.3	161.0	161.9	163.6	163.6
122.5°	168.8	169.6	169.6	169.6	170.5	171.3	172.2	172.2
125°	186.0	183.4	183.4	181.7	181.7	180.8	181.7	181.7
127.5°	207.5	204.1	202.3	199.8	198.0	195.4	195.4	195.4
130°	237.6	231.6	228.2	223.9	220.4	215.2	215.2	215.2
132.5°	270.4	260.9	258.3	254.0	248.8	243.7	242.8	242.8
135°	303.9	293.6	290.2	285.9	279.8	275.5	272.1	274.7
137.5°	335.8	326.3	325.5	322.0	314.3	309.1	308.2	308.2
140°	368.5	358.2	356.5	353.0	348.7	343.5	341.0	341.8
142.5°	400.4	390.0	388.3	385.7	379.7	375.4	372.8	373.7
145°	433.1	422.8	421.0	417.6	411.6	408.1	404.7	407.3
147.5°	464.1	454.6	452.0	447.7	444.3	440.0	437.4	436.5
150°	494.2	484.7	483.0	478.7	475.3	471.8	468.4	470.1
152.5°	522.6	515.7	512.3	508.0	505.4	502.0	499.4	500.2
155°	549.3	540.7	539.0	535.5	533.8	530.4	528.7	528.7
157.5°	572.6	567.4	564.8	562.2	559.6	557.9	555.3	556.2
160°	597.5	592.4	589.8	588.1	584.6	584.6	582.0	582.9
162.5°	620.8	616.5	613.9	612.2	610.4	609.6	607.0	607.9
165°	641.4	637.1	636.3	633.7	632.8	632.8	630.3	630.3
167.5°	660.4	656.9	654.4	653.5	651.8	651.8	650.1	650.9
170°	678.5	675.0	673.3	671.6	669.9	669.9	669.0	669.0
172.5°	694.0	691.4	690.5	688.8	687.9	687.9	687.1	687.1
175°	708.6	706.0	705.2	703.4	702.6	701.7	701.7	701.7
177.5°	721.5	720.7	718.9	718.9	717.2	715.5	713.8	712.9
180°	732.7	732.7	732.7	732.7	732.7	732.7	732.7	732.7

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