

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: P303166

Luminaire Tested: **CTW-F-5050-50L840-UNV-STD-4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P303166
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-5050-50L840-UNV-STD-4
Description: CORELITE CONTINUA LINEAR WALL LED LUMINAIRE
50% UPLIGHT, 50% DOWNLIGHT, 5000 LUMEN PACKAGE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

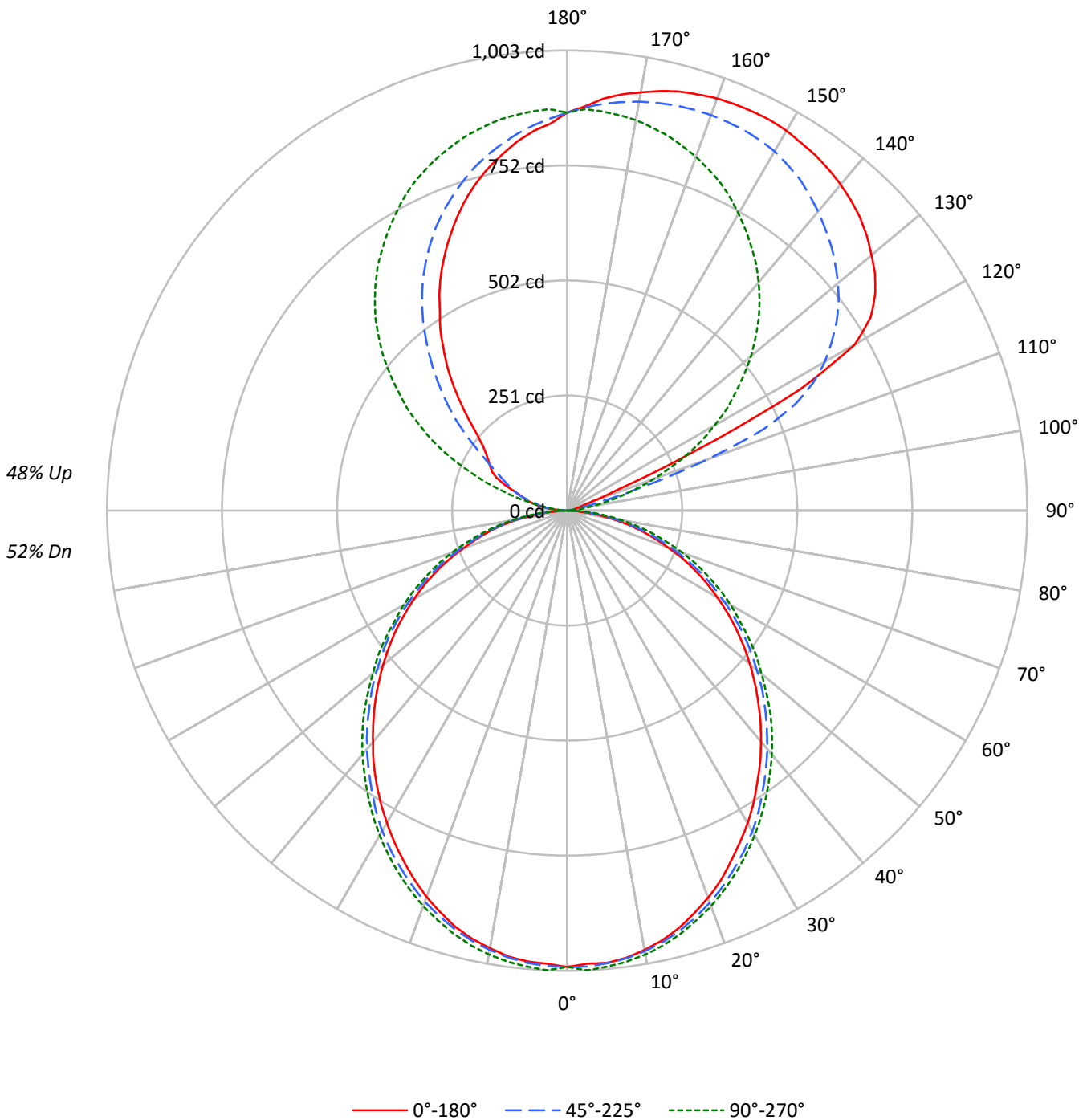
Lumens per Lamp: N/A
Luminaire Lumens: 5118.4 lumens
Efficiency: N/A
Efficacy: 128.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.32
Luminous Opening: Rectangular (W 4' x L: 0.12' x H: 0')
CIE Type: General Diffuse

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°	21416	21416	21416
5°	21387	21563	21320
10°	21254	21477	21167
15°	20990	21284	20943
20°	20570	21015	20525
25°	20045	20675	20022
30°	19558	20319	19534
35°	18990	19902	19046
40°	18475	19506	18503
45°	17935	19083	18029
50°	17409	18501	17546
55°	16871	18094	17100
60°	16279	17730	16589
65°	15628	17238	16041
70°	14691	16743	15207
75°	13566	16020	14581
80°	11629	14914	13141
85°	7311	13091	9559



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.9	1.8
10°-20°	266.0	5.2
20°-30°	393.8	7.7
30°-40°	462.5	9.0
40°-50°	468.9	9.2
50°-60°	418.3	8.2
60°-70°	320.6	6.3
70°-80°	188.8	3.7
80°-90°	50.9	1.0
90°-100°	24.7	0.5
100°-110°	106.6	2.1
110°-120°	298.6	5.8
120°-130°	431.7	8.4
130°-140°	466.0	9.1
140°-150°	443.2	8.7
150°-160°	363.8	7.1
160°-170°	237.8	4.6
170°-180°	82.4	1.6
0°-30°	753.7	14.7
0°-40°	1216.2	23.8
0°-60°	2103.4	41.1
0°-90°	2663.6	52.0
90°-120°	429.9	8.4
90°-150°	1770.8	34.6
90°-180°	2455.0	48.0
0°-180°	5118.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	995	995	995	995	995	
5°	990	991	998	990	987	94
15°	942	948	955	945	940	265
25°	844	861	870	859	843	389
35°	723	744	757	743	725	453
45°	589	610	627	610	592	455
55°	450	469	482	472	456	402
65°	307	321	338	326	315	303
75°	163	174	193	179	175	172
85°	30	39	53	44	39	38
90°	1	1	1	5	7	1
95°	6	7	18	34	31	7
105°	26	78	120	84	94	31
115°	309	548	288	150	170	341
125°	820	716	447	248	215	727
135°	903	814	590	400	325	697
145°	945	883	700	551	482	592
155°	959	914	789	679	626	443
165°	946	914	846	776	746	268
175°	901	890	874	843	831	87
180°	867	867	867	867	867	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	994.8	994.8	994.8	994.8	994.8	994.8	994.8	994.8	994.8	994.8	994.8
2.5°	988.7	987.6	990.7	992.7	992.7	993.7	995.8	996.8	995.8	999.9	994.8
5°	989.7	987.6	988.7	988.7	987.6	988.7	990.7	991.7	991.7	995.8	990.7
7.5°	983.6	982.5	983.6	982.5	981.5	982.5	983.6	985.6	984.6	988.7	984.6
10°	972.3	971.3	971.3	971.3	970.3	971.3	973.4	975.4	975.4	978.5	975.4
12.5°	959.1	957.1	958.1	959.1	957.1	958.1	960.1	962.2	962.2	966.2	963.2
15°	941.8	940.7	942.8	944.8	942.8	942.8	944.8	945.8	946.9	949.9	947.9
17.5°	920.4	920.4	922.4	925.5	923.4	923.4	925.5	927.5	927.5	929.5	929.5
20°	897.9	896.9	899.0	901.0	901.0	900.0	903.0	905.1	906.1	908.1	909.2
22.5°	873.5	871.4	872.5	875.5	874.5	874.5	875.5	879.6	881.6	883.7	886.7
25°	843.9	843.9	846.0	848.0	848.0	848.0	849.0	852.1	855.1	858.2	861.2
27.5°	815.4	815.4	816.4	820.5	820.5	819.5	821.5	826.6	829.7	831.7	835.8
30°	786.8	783.8	786.8	789.9	791.9	789.9	793.0	797.0	799.1	802.1	807.2
32.5°	756.3	755.2	755.2	759.3	761.4	760.3	761.4	766.5	770.5	771.6	776.7
35°	722.6	723.7	723.7	726.7	728.7	727.7	728.7	733.8	737.9	738.9	744.0
37.5°	691.0	691.0	691.0	694.1	696.1	696.1	696.1	701.2	705.3	708.4	711.4
40°	657.4	658.4	657.4	660.5	663.5	662.5	663.5	667.6	672.7	675.7	678.8
42.5°	623.8	622.7	622.7	625.8	629.9	628.9	629.9	634.0	638.0	642.1	644.2
45°	589.1	587.1	589.1	592.2	595.2	596.2	595.2	599.3	603.4	606.4	610.5
47.5°	554.5	553.4	553.4	556.5	559.6	559.6	560.6	563.6	568.7	570.8	575.9
50°	519.8	519.8	518.8	521.8	524.9	525.9	525.9	528.0	533.1	537.1	539.2
52.5°	485.2	485.2	485.2	486.2	488.2	491.3	491.3	493.3	496.4	501.5	504.5
55°	449.5	450.5	449.5	450.5	453.6	455.6	455.6	457.6	460.7	465.8	468.8
57.5°	413.8	414.8	413.8	414.8	417.9	418.9	419.9	422.0	424.0	428.1	431.1
60°	378.1	379.2	378.1	379.2	382.2	384.2	383.2	386.3	388.3	390.4	394.4
62.5°	342.5	344.5	343.5	345.5	346.5	348.6	347.6	350.6	352.7	354.7	358.8
65°	306.8	308.8	307.8	309.8	309.8	311.9	310.9	313.9	316.0	318.0	321.1
67.5°	271.1	273.2	272.1	273.2	274.2	276.2	274.2	278.2	280.3	281.3	284.4
70°	233.4	235.4	234.4	235.4	236.5	237.5	236.5	239.5	242.6	243.6	245.6
72.5°	197.7	199.8	199.8	200.8	200.8	202.8	202.8	202.8	204.9	207.9	208.9
75°	163.1	165.1	165.1	165.1	165.1	167.2	167.2	169.2	170.2	172.2	174.3
77.5°	128.4	130.5	130.5	130.5	130.5	132.5	132.5	134.5	135.6	137.6	139.6
80°	93.8	95.8	96.8	96.8	96.8	97.8	97.8	99.9	100.9	102.9	105.0
82.5°	61.2	62.2	63.2	62.2	63.2	64.2	66.2	66.2	67.3	69.3	71.3
85°	29.6	30.6	31.6	31.6	31.6	32.6	32.6	34.7	35.7	36.7	38.7
87.5°	4.1	5.1	5.1	5.1	5.1	6.1	6.1	6.1	7.1	7.1	9.2
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°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
95°	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	7.1
97.5°	9.2	9.2	10.2	9.2	10.2	10.2	10.2	10.2	11.2	11.2	13.2
100°	14.3	14.3	14.3	14.3	14.3	14.3	15.3	15.3	17.3	18.3	21.4
102.5°	19.4	19.4	19.4	20.4	20.4	21.4	21.4	22.4	25.5	29.6	38.7
105°	26.5	26.5	27.5	27.5	28.5	29.6	30.6	34.7	40.8	53.0	77.5
107.5°	36.7	37.7	38.7	39.7	42.8	45.9	48.9	60.1	78.5	116.2	173.3
110°	58.1	59.1	63.2	67.3	77.5	87.7	97.8	135.6	190.6	259.9	323.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	121.3	125.4	128.4	152.9	185.5	214.0	240.5	307.8	380.2	439.3	463.7
115°	308.8	316.0	321.1	369.0	419.9	452.5	472.9	518.8	548.3	557.5	548.3
117.5°	573.8	576.9	584.0	601.3	624.8	636.0	638.0	645.2	638.0	623.8	605.4
120°	723.7	723.7	719.6	720.6	717.5	717.5	713.5	702.2	687.0	669.6	648.2
122.5°	784.8	781.7	776.7	772.6	763.4	761.4	755.2	741.0	724.7	707.3	683.9
125°	819.5	816.4	812.3	807.2	797.0	793.0	786.8	772.6	756.3	737.9	716.5
127.5°	846.0	842.9	838.8	833.7	824.6	820.5	813.3	799.1	782.8	765.4	746.1
130°	866.3	865.3	860.2	857.2	848.0	843.9	836.8	822.5	807.2	789.9	770.5
132.5°	885.7	883.7	878.6	876.5	868.4	863.3	857.2	843.9	828.6	811.3	793.0
135°	903.0	901.0	894.9	892.8	885.7	879.6	874.5	862.3	849.0	831.7	814.4
137.5°	916.3	913.2	909.2	907.1	900.0	893.9	889.8	878.6	865.3	849.0	832.7
140°	927.5	924.4	921.4	919.3	913.2	908.1	903.0	891.8	880.6	867.4	851.1
142.5°	936.7	934.6	931.6	928.5	922.4	918.3	914.2	905.1	894.9	881.6	867.4
145°	944.8	942.8	939.7	937.7	930.6	927.5	923.4	915.3	906.1	892.8	882.7
147.5°	949.9	948.9	946.9	944.8	937.7	934.6	930.6	924.4	915.3	903.0	893.9
150°	956.0	954.0	952.0	950.9	943.8	940.7	938.7	931.6	923.4	912.2	904.1
152.5°	959.1	957.1	955.0	954.0	946.9	944.8	942.8	936.7	927.5	917.3	910.2
155°	959.1	958.1	956.0	955.0	947.9	944.8	943.8	937.7	929.5	921.4	914.2
157.5°	958.1	956.0	955.0	953.0	946.9	944.8	942.8	937.7	930.6	923.4	916.3
160°	956.0	954.0	953.0	950.9	945.8	943.8	942.8	937.7	932.6	925.5	917.3
162.5°	950.9	949.9	948.9	947.9	943.8	941.8	940.7	936.7	930.6	924.4	916.3
165°	945.8	943.8	942.8	940.7	936.7	936.7	935.7	932.6	926.5	923.4	914.2
167.5°	936.7	933.6	933.6	930.6	927.5	927.5	926.5	925.5	920.4	918.3	910.2
170°	925.5	924.4	922.4	921.4	919.3	919.3	918.3	917.3	913.2	913.2	905.1
172.5°	915.3	914.2	913.2	911.2	908.1	908.1	908.1	908.1	905.1	905.1	897.9
175°	901.0	899.0	899.0	897.9	895.9	896.9	896.9	896.9	894.9	896.9	889.8
177.5°	881.6	879.6	881.6	883.7	882.7	883.7	884.7	884.7	882.7	885.7	879.6
180°	867.4	867.4	867.4	867.4	867.4	867.4	867.4	867.4	867.4	867.4	867.4



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	994.8	994.8	994.8	994.8	994.8	994.8	994.8	994.8	994.8	994.8	994.8
2.5°	990.7	991.7	990.7	991.7	992.7	991.7	992.7	996.8	1000.9	1002.9	1000.9
5°	986.6	987.6	986.6	987.6	988.7	987.6	988.7	991.7	996.8	997.8	996.8
7.5°	980.5	981.5	980.5	981.5	981.5	981.5	981.5	985.6	989.7	991.7	989.7
10°	970.3	971.3	970.3	972.3	972.3	972.3	972.3	976.4	980.5	982.5	979.5
12.5°	958.1	959.1	958.1	960.1	959.1	960.1	961.1	964.2	968.3	970.3	968.3
15°	941.8	943.8	942.8	944.8	944.8	944.8	944.8	948.9	953.0	955.0	953.0
17.5°	923.4	924.4	924.4	926.5	926.5	926.5	927.5	931.6	934.6	936.7	934.6
20°	903.0	905.1	905.1	906.1	906.1	907.1	908.1	911.2	915.3	917.3	915.3
22.5°	880.6	882.7	883.7	883.7	883.7	884.7	885.7	888.8	893.9	894.9	892.8
25°	857.2	857.2	859.2	859.2	860.2	861.2	862.3	864.3	869.4	870.4	869.4
27.5°	831.7	830.7	831.7	833.7	833.7	835.8	836.8	838.8	842.9	844.9	842.9
30°	803.2	803.2	805.2	806.2	806.2	807.2	809.3	811.3	815.4	817.4	815.4
32.5°	774.6	773.6	776.7	776.7	777.7	778.7	779.7	782.8	785.8	787.9	786.8
35°	745.1	742.0	746.1	746.1	747.1	749.1	749.1	751.2	755.2	757.3	755.2
37.5°	714.5	711.4	714.5	716.5	715.5	717.5	718.6	720.6	724.7	725.7	725.7
40°	682.9	679.8	682.9	683.9	683.9	684.9	687.0	688.0	691.0	694.1	692.1
42.5°	648.2	647.2	649.2	651.3	651.3	652.3	653.3	654.3	657.4	660.5	658.4
45°	613.6	613.6	615.6	617.7	618.7	618.7	619.7	620.7	622.7	626.8	623.8
47.5°	578.9	578.9	581.0	582.0	582.0	583.0	585.0	585.0	589.1	589.1	590.1
50°	542.2	544.3	546.3	549.4	547.3	548.3	550.4	550.4	552.4	552.4	555.5
52.5°	506.6	507.6	510.6	513.7	514.7	513.7	514.7	514.7	516.7	519.8	517.8
55°	470.9	470.9	475.0	478.0	478.0	478.0	478.0	479.0	482.1	482.1	482.1
57.5°	434.2	435.2	438.3	442.3	442.3	442.3	442.3	443.4	445.4	444.4	447.4
60°	398.5	398.5	402.6	404.6	404.6	406.7	406.7	407.7	408.7	411.8	411.8
62.5°	362.8	362.8	365.9	367.9	370.0	369.0	370.0	371.0	373.0	376.1	374.1
65°	326.2	326.2	329.2	330.2	333.3	332.3	333.3	336.3	337.4	338.4	337.4
67.5°	288.4	289.5	292.5	293.5	296.6	297.6	296.6	300.7	301.7	303.7	302.7
70°	248.7	249.7	253.8	254.8	256.8	255.8	257.9	263.0	265.0	266.0	264.0
72.5°	213.0	214.0	218.1	219.1	221.2	220.2	222.2	225.2	227.3	228.3	228.3
75°	176.3	178.4	180.4	182.4	185.5	184.5	186.5	189.6	191.6	192.6	192.6
77.5°	141.7	142.7	145.7	146.8	149.8	148.8	149.8	151.9	154.9	155.9	155.9
80°	107.0	109.1	110.1	112.1	114.2	113.1	115.2	118.2	119.2	120.3	120.3
82.5°	73.4	74.4	76.4	78.5	80.5	81.5	82.6	84.6	85.6	85.6	85.6
85°	40.8	42.8	44.8	45.9	47.9	46.9	49.9	52.0	53.0	53.0	54.0
87.5°	11.2	13.2	14.3	16.3	18.3	18.3	18.3	22.4	22.4	23.4	23.4
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°	3.1	4.1	4.1	5.1	6.1	7.1	10.2	10.2	8.2	7.1	8.2
95°	8.2	9.2	11.2	17.3	21.4	24.5	28.5	27.5	23.4	18.3	17.3
97.5°	15.3	19.4	27.5	41.8	49.9	54.0	58.1	52.0	43.8	35.7	32.6
100°	28.5	38.7	59.1	83.6	92.7	96.8	95.8	82.6	71.3	58.1	51.0
102.5°	54.0	82.6	117.2	144.7	150.8	145.7	137.6	121.3	105.0	86.6	75.4
105°	117.2	166.1	201.8	212.0	215.1	204.9	185.5	165.1	141.7	120.3	104.0
107.5°	233.4	278.2	291.5	284.4	280.3	263.0	238.5	212.0	184.5	158.0	137.6
110°	370.0	378.1	369.0	346.5	334.3	319.0	291.5	260.9	226.3	199.8	175.3



TEST NUMBER: P303166

CATALOG NUMBER: CTW-F-5050-50L840-UNV-STD-4

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	469.9	452.5	429.1	399.5	385.3	369.0	339.4	309.8	272.1	242.6	216.1
115°	534.1	508.6	480.1	448.5	433.2	415.8	386.3	353.7	316.0	288.4	257.9
117.5°	584.0	552.4	523.9	493.3	479.0	461.7	432.2	396.5	358.8	331.2	300.7
120°	622.7	593.2	563.6	535.1	518.8	504.5	473.9	438.3	400.6	370.0	341.4
122.5°	657.4	629.9	601.3	573.8	558.5	542.2	510.6	476.0	441.3	412.8	384.2
125°	690.0	664.5	636.0	608.5	593.2	576.9	546.3	512.7	478.0	447.4	423.0
127.5°	720.6	696.1	667.6	641.1	625.8	608.5	578.9	546.3	516.7	485.2	460.7
130°	748.1	725.7	698.2	671.7	656.4	640.1	610.5	578.9	550.4	522.9	496.4
132.5°	772.6	750.2	723.7	699.2	682.9	668.6	640.1	610.5	582.0	556.5	532.0
135°	796.0	772.6	748.1	722.6	708.4	695.1	667.6	640.1	613.6	590.1	567.7
137.5°	817.4	791.9	767.5	743.0	729.8	718.6	692.1	666.6	644.2	620.7	598.3
140°	835.8	809.3	786.8	763.4	751.2	740.0	715.5	691.0	671.7	649.2	627.8
142.5°	850.0	823.5	803.2	780.7	769.5	760.3	736.9	715.5	696.1	676.8	655.4
145°	861.2	837.8	818.4	797.0	787.9	777.7	756.3	736.9	719.6	700.2	680.8
147.5°	872.5	852.1	832.7	813.3	804.2	795.0	775.6	758.3	742.0	724.7	705.3
150°	881.6	863.3	846.0	828.6	820.5	811.3	794.0	777.7	763.4	747.1	728.7
152.5°	887.7	872.5	857.2	841.9	833.7	826.6	810.3	797.0	783.8	769.5	751.2
155°	892.8	880.6	866.3	853.1	846.0	839.8	824.6	812.3	801.1	788.9	772.6
157.5°	897.9	885.7	873.5	861.2	855.1	849.0	835.8	826.6	816.4	805.2	789.9
160°	900.0	890.8	878.6	868.4	863.3	858.2	847.0	838.8	830.7	820.5	806.2
162.5°	901.0	892.8	882.7	874.5	870.4	866.3	855.1	849.0	841.9	833.7	821.5
165°	901.0	894.9	886.7	879.6	875.5	872.5	863.3	858.2	853.1	846.0	834.7
167.5°	900.0	893.9	887.7	881.6	878.6	875.5	868.4	865.3	861.2	855.1	846.0
170°	896.9	892.8	886.7	882.7	880.6	877.6	872.5	870.4	868.4	864.3	855.1
172.5°	891.8	888.8	884.7	881.6	880.6	877.6	873.5	872.5	872.5	869.4	862.3
175°	884.7	883.7	880.6	878.6	876.5	875.5	872.5	873.5	874.5	873.5	867.4
177.5°	875.5	875.5	873.5	873.5	872.5	871.4	870.4	872.5	875.5	875.5	871.4
180°	867.4	867.4	867.4	867.4	867.4	867.4	867.4	867.4	867.4	867.4	867.4



TEST NUMBER: P303166

CATALOG NUMBER: CTW-F-5050-50L840-UNV-STD-4

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	994.8	994.8	994.8	994.8	994.8	994.8	994.8	994.8	994.8	994.8	994.8
2.5°	997.8	993.7	992.7	992.7	991.7	989.7	988.7	989.7	993.7	999.9	993.7
5°	993.7	989.7	987.6	987.6	987.6	984.6	984.6	984.6	989.7	994.8	988.7
7.5°	986.6	982.5	981.5	981.5	980.5	978.5	977.4	978.5	982.5	987.6	981.5
10°	977.4	973.4	972.3	971.3	970.3	968.3	967.2	968.3	972.3	976.4	971.3
12.5°	965.2	961.1	959.1	960.1	958.1	955.0	955.0	955.0	960.1	963.2	958.1
15°	949.9	944.8	943.8	943.8	942.8	939.7	939.7	939.7	944.8	946.9	940.7
17.5°	931.6	927.5	926.5	926.5	924.4	921.4	921.4	920.4	926.5	927.5	923.4
20°	912.2	908.1	906.1	906.1	904.1	901.0	901.0	900.0	907.1	905.1	902.0
22.5°	890.8	885.7	883.7	884.7	882.7	878.6	878.6	877.6	883.7	880.6	876.5
25°	867.4	861.2	860.2	859.2	858.2	853.1	853.1	853.1	859.2	854.1	851.1
27.5°	839.8	835.8	834.7	831.7	831.7	827.6	827.6	827.6	833.7	826.6	825.6
30°	812.3	808.2	808.2	805.2	804.2	800.1	800.1	800.1	806.2	799.1	797.0
32.5°	784.8	779.7	777.7	775.6	775.6	771.6	771.6	771.6	775.6	768.5	766.5
35°	754.2	749.1	749.1	745.1	745.1	741.0	740.0	742.0	743.0	736.9	734.9
37.5°	722.6	717.5	717.5	714.5	714.5	710.4	710.4	713.5	710.4	707.3	703.3
40°	691.0	687.0	684.9	681.9	682.9	679.8	678.8	680.8	678.8	675.7	670.7
42.5°	657.4	653.3	652.3	650.3	650.3	647.2	646.2	648.2	645.2	641.1	638.0
45°	623.8	620.7	619.7	617.7	617.7	613.6	613.6	614.6	610.5	608.5	604.4
47.5°	588.1	586.1	584.0	584.0	583.0	579.9	579.9	579.9	576.9	574.8	569.7
50°	553.4	550.4	549.4	549.4	549.4	546.3	545.3	543.2	541.2	540.2	535.1
52.5°	517.8	515.7	514.7	514.7	515.7	510.6	509.6	507.6	506.6	505.5	499.4
55°	482.1	480.1	478.0	480.1	479.0	475.0	473.9	475.0	471.9	468.8	463.7
57.5°	446.4	443.4	443.4	444.4	443.4	439.3	438.3	439.3	435.2	432.2	428.1
60°	410.7	407.7	406.7	407.7	406.7	402.6	401.6	401.6	398.5	396.5	392.4
62.5°	375.1	372.0	372.0	372.0	371.0	369.0	365.9	365.9	362.8	359.8	356.7
65°	337.4	334.3	335.3	335.3	335.3	333.3	330.2	331.2	326.2	324.1	321.1
67.5°	301.7	298.6	298.6	298.6	298.6	298.6	293.5	292.5	289.5	288.4	285.4
70°	264.0	259.9	260.9	259.9	258.9	257.9	254.8	253.8	250.7	250.7	247.7
72.5°	226.3	224.2	224.2	224.2	223.2	222.2	220.2	219.1	215.1	215.1	213.0
75°	188.6	188.6	187.5	187.5	187.5	186.5	184.5	183.5	179.4	180.4	178.4
77.5°	153.9	153.9	151.9	151.9	151.9	150.8	149.8	146.8	146.8	144.7	143.7
80°	118.2	118.2	117.2	117.2	117.2	116.2	115.2	114.2	112.1	111.1	109.1
82.5°	85.6	84.6	83.6	83.6	82.6	82.6	81.5	80.5	78.5	75.4	74.4
85°	52.0	52.0	51.0	51.0	49.9	49.9	47.9	45.9	43.8	41.8	40.8
87.5°	22.4	22.4	19.4	19.4	18.3	18.3	17.3	16.3	14.3	13.2	12.2
90°	2.0	3.1	3.1	3.1	4.1	4.1	4.1	5.1	5.1	5.1	5.1
92.5°	12.2	15.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	15.3	15.3
95°	20.4	22.4	27.5	29.6	31.6	33.6	33.6	33.6	33.6	32.6	30.6
97.5°	30.6	32.6	35.7	35.7	36.7	41.8	45.9	47.9	49.9	51.0	51.0
100°	47.9	43.8	47.9	51.0	49.9	49.9	52.0	56.1	60.1	62.2	63.2
102.5°	68.3	61.2	59.1	61.2	63.2	67.3	65.2	66.2	68.3	71.3	74.4
105°	93.8	84.6	77.5	76.4	76.4	80.5	85.6	84.6	83.6	83.6	83.6
107.5°	123.3	110.1	98.9	96.8	94.8	94.8	97.8	104.0	108.0	104.0	101.9
110°	157.0	138.6	127.4	121.3	117.2	113.1	113.1	116.2	121.3	126.4	128.4



TEST NUMBER: P303166

CATALOG NUMBER: CTW-F-5050-50L840-UNV-STD-4

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
112.5°	194.7	172.2	157.0	151.9	143.7	134.5	131.5	131.5	134.5	139.6	143.7
115°	233.4	210.0	188.6	182.4	174.3	160.0	151.9	149.8	149.8	151.9	155.9
117.5°	276.2	247.7	224.2	216.1	206.9	190.6	177.3	170.2	167.2	167.2	169.2
120°	313.9	289.5	265.0	253.8	242.6	224.2	206.9	195.7	188.6	184.5	183.5
122.5°	356.7	331.2	304.7	295.6	283.3	261.9	243.6	226.3	215.1	206.9	200.8
125°	395.5	372.0	344.5	333.3	322.1	300.7	282.3	263.0	247.7	234.4	224.2
127.5°	433.2	409.7	383.2	373.0	361.8	339.4	320.0	301.7	285.4	269.1	254.8
130°	470.9	448.5	422.0	410.7	400.6	379.2	357.7	339.4	325.1	308.8	292.5
132.5°	507.6	484.1	459.7	447.4	438.3	416.9	397.5	378.1	361.8	347.6	332.3
135°	542.2	519.8	495.3	483.1	473.9	454.6	435.2	417.9	399.5	385.3	371.0
137.5°	574.8	552.4	531.0	517.8	508.6	491.3	472.9	456.6	438.3	423.0	408.7
140°	605.4	584.0	563.6	552.4	542.2	524.9	508.6	495.3	476.0	461.7	447.4
142.5°	634.0	612.6	593.2	584.0	573.8	557.5	542.2	530.0	515.7	500.4	486.2
145°	659.4	641.1	622.7	613.6	604.4	589.1	574.8	563.6	551.4	536.1	522.9
147.5°	685.9	667.6	650.3	642.1	635.0	619.7	606.4	595.2	586.1	571.8	558.5
150°	710.4	693.1	677.8	669.6	663.5	647.2	637.0	625.8	618.7	605.4	594.2
152.5°	733.8	718.6	703.3	697.2	690.0	674.7	664.5	653.3	649.2	636.0	626.8
155°	756.3	740.0	727.7	721.6	714.5	700.2	692.1	681.9	678.8	666.6	657.4
157.5°	776.7	760.3	749.1	743.0	736.9	724.7	716.5	707.3	705.3	696.1	685.9
160°	794.0	778.7	768.5	764.4	758.3	747.1	738.9	731.8	729.8	723.7	713.5
162.5°	809.3	796.0	787.9	782.8	777.7	767.5	761.4	753.2	753.2	748.1	740.0
165°	824.6	812.3	804.2	800.1	796.0	787.9	780.7	775.6	775.6	771.6	763.4
167.5°	836.8	825.6	819.5	815.4	812.3	804.2	799.1	794.0	795.0	793.0	784.8
170°	848.0	837.8	832.7	829.7	826.6	819.5	816.4	811.3	812.3	812.3	805.2
172.5°	857.2	848.0	843.9	840.9	839.8	832.7	830.7	827.6	828.6	830.7	821.5
175°	863.3	856.2	852.1	851.1	849.0	844.9	841.9	840.9	842.9	846.0	837.8
177.5°	868.4	862.3	860.2	860.2	858.2	854.1	852.1	852.1	855.1	859.2	853.1
180°	867.4	867.4	867.4	867.4	867.4	867.4	867.4	867.4	867.4	867.4	867.4



TEST NUMBER: P303166

CATALOG NUMBER: CTW-F-5050-50L840-UNV-STD-4

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	994.8	994.8	994.8	994.8	994.8	994.8	994.8	994.8
2.5°	995.8	994.8	993.7	991.7	990.7	988.7	987.6	988.7
5°	989.7	988.7	987.6	986.6	986.6	985.6	985.6	986.6
7.5°	982.5	981.5	980.5	979.5	979.5	979.5	979.5	980.5
10°	972.3	970.3	969.3	968.3	967.2	967.2	967.2	968.3
12.5°	959.1	957.1	955.0	954.0	954.0	954.0	954.0	956.0
15°	941.8	940.7	939.7	938.7	938.7	937.7	937.7	939.7
17.5°	924.4	922.4	920.4	919.3	918.3	918.3	917.3	918.3
20°	901.0	899.0	896.9	895.9	895.9	894.9	894.9	895.9
22.5°	875.5	872.5	871.4	870.4	870.4	869.4	869.4	870.4
25°	850.0	846.0	844.9	843.9	843.9	842.9	842.9	842.9
27.5°	823.5	819.5	818.4	816.4	817.4	815.4	814.4	815.4
30°	795.0	790.9	789.9	787.9	787.9	785.8	784.8	785.8
32.5°	764.4	760.3	759.3	758.3	759.3	755.2	754.2	756.3
35°	732.8	728.7	728.7	726.7	727.7	723.7	723.7	724.7
37.5°	700.2	696.1	697.2	695.1	695.1	692.1	692.1	693.1
40°	667.6	664.5	662.5	662.5	663.5	659.4	659.4	658.4
42.5°	634.0	630.9	629.9	629.9	628.9	625.8	624.8	625.8
45°	600.3	597.3	597.3	596.2	596.2	592.2	593.2	592.2
47.5°	565.7	563.6	562.6	561.6	561.6	557.5	558.5	557.5
50°	531.0	530.0	529.0	528.0	528.0	523.9	525.9	523.9
52.5°	496.4	495.3	494.3	494.3	493.3	491.3	491.3	489.2
55°	461.7	459.7	459.7	459.7	458.7	455.6	457.6	455.6
57.5°	427.1	425.0	424.0	423.0	423.0	422.0	420.9	419.9
60°	391.4	389.3	389.3	387.3	387.3	387.3	386.3	385.3
62.5°	355.7	353.7	353.7	352.7	352.7	352.7	351.6	350.6
65°	321.1	318.0	318.0	317.0	317.0	317.0	316.0	314.9
67.5°	284.4	282.3	282.3	281.3	282.3	282.3	281.3	279.3
70°	246.7	244.6	244.6	243.6	244.6	244.6	243.6	241.6
72.5°	212.0	210.0	208.9	210.0	210.0	210.0	207.9	206.9
75°	177.3	174.3	174.3	175.3	174.3	175.3	173.3	175.3
77.5°	142.7	139.6	139.6	140.7	139.6	139.6	138.6	140.7
80°	107.0	105.0	105.0	106.0	105.0	105.0	104.0	106.0
82.5°	73.4	72.4	73.4	71.3	69.3	69.3	68.3	70.3
85°	40.8	39.7	38.7	38.7	37.7	37.7	36.7	38.7
87.5°	12.2	13.2	13.2	12.2	12.2	12.2	12.2	13.2
90°	5.1	5.1	5.1	6.1	6.1	7.1	7.1	7.1
92.5°	15.3	15.3	14.3	15.3	14.3	14.3	14.3	14.3
95°	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6
97.5°	51.0	52.0	51.0	52.0	51.0	49.9	51.0	49.9
100°	64.2	66.2	66.2	67.3	67.3	67.3	67.3	67.3
102.5°	76.4	78.5	78.5	79.5	79.5	80.5	80.5	79.5
105°	86.6	87.7	88.7	89.7	91.7	93.8	93.8	93.8
107.5°	100.9	102.9	101.9	102.9	104.0	104.0	104.0	104.0
110°	126.4	124.3	123.3	121.3	121.3	121.3	121.3	121.3



TEST NUMBER: P303166

CATALOG NUMBER: CTW-F-5050-50L840-UNV-STD-4

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
112.5°	147.8	149.8	149.8	149.8	149.8	148.8	146.8	146.8
115°	161.0	165.1	166.1	167.2	169.2	170.2	170.2	170.2
117.5°	171.2	175.3	176.3	178.4	180.4	182.4	183.5	184.5
120°	184.5	187.5	188.6	188.6	190.6	191.6	193.7	193.7
122.5°	199.8	200.8	200.8	200.8	201.8	202.8	203.8	203.8
125°	220.2	217.1	217.1	215.1	215.1	214.0	215.1	215.1
127.5°	245.6	241.6	239.5	236.5	234.4	231.4	231.4	231.4
130°	281.3	274.2	270.1	265.0	260.9	254.8	254.8	254.8
132.5°	320.0	308.8	305.8	300.7	294.6	288.4	287.4	287.4
135°	359.8	347.6	343.5	338.4	331.2	326.2	322.1	325.1
137.5°	397.5	386.3	385.3	381.2	372.0	365.9	364.9	364.9
140°	436.2	424.0	422.0	417.9	412.8	406.7	403.6	404.6
142.5°	473.9	461.7	459.7	456.6	449.5	444.4	441.3	442.3
145°	512.7	500.4	498.4	494.3	487.2	483.1	479.0	482.1
147.5°	549.4	538.2	535.1	530.0	525.9	520.8	517.8	516.7
150°	585.0	573.8	571.8	566.7	562.6	558.5	554.5	556.5
152.5°	618.7	610.5	606.4	601.3	598.3	594.2	591.2	592.2
155°	650.3	640.1	638.0	634.0	631.9	627.8	625.8	625.8
157.5°	677.8	671.7	668.6	665.6	662.5	660.5	657.4	658.4
160°	707.3	701.2	698.2	696.1	692.1	692.1	689.0	690.0
162.5°	734.9	729.8	726.7	724.7	722.6	721.6	718.6	719.6
165°	759.3	754.2	753.2	750.2	749.1	749.1	746.1	746.1
167.5°	781.7	777.7	774.6	773.6	771.6	771.6	769.5	770.5
170°	803.2	799.1	797.0	795.0	793.0	793.0	791.9	791.9
172.5°	821.5	818.4	817.4	815.4	814.4	814.4	813.3	813.3
175°	838.8	835.8	834.7	832.7	831.7	830.7	830.7	830.7
177.5°	854.1	853.1	851.1	851.1	849.0	847.0	844.9	843.9
180°	867.4	867.4	867.4	867.4	867.4	867.4	867.4	867.4

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