

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: P303152

Luminaire Tested: **CTW-F-5050-40L940-UNV-STD-4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P303152
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-5050-40L940-UNV-STD-4
Description: CORELITE CONTINUA LINEAR WALL LED LUMINAIRE
50% UPLIGHT, 50% DOWNLIGHT, 4000 LUMEN PACKAGE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

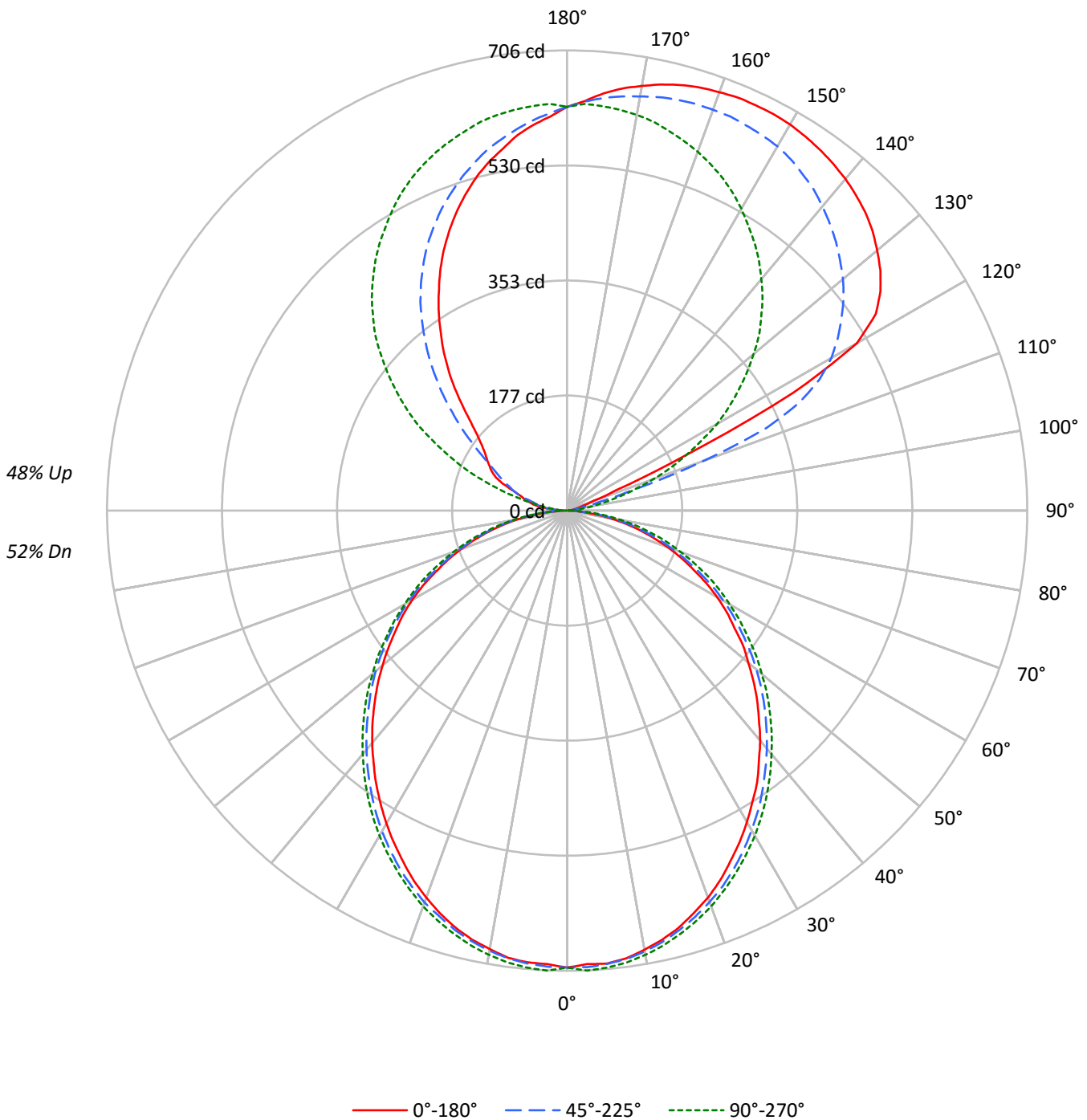
Lumens per Lamp: N/A
Luminaire Lumens: 3624.1 lumens
Efficiency: N/A
Efficacy: 112.9 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.32
Luminous Opening: Rectangular (W 4' x L: 0.12' x H: 0')
CIE Type: General Diffuse

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°	15093	15093	15093
5°	15073	15209	15034
10°	14952	15129	14933
15°	14763	14984	14763
20°	14474	14804	14474
25°	14088	14558	14131
30°	13714	14318	13781
35°	13364	14026	13435
40°	12950	13708	13076
45°	12549	13399	12714
50°	12147	13052	12388
55°	11755	12701	12059
60°	11431	12400	11819
65°	10865	12149	11324
70°	10310	11670	10933
75°	9507	11229	10331
80°	8145	10488	9372
85°	5113	9114	7114



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.2	1.8
10°-20°	187.3	5.2
20°-30°	277.3	7.7
30°-40°	325.5	9.0
40°-50°	330.0	9.1
50°-60°	294.4	8.1
60°-70°	224.6	6.2
70°-80°	132.7	3.7
80°-90°	35.8	1.0
90°-100°	18.0	0.5
100°-110°	75.1	2.1
110°-120°	211.7	5.8
120°-130°	308.6	8.5
130°-140°	332.4	9.2
140°-150°	316.3	8.7
150°-160°	259.6	7.2
160°-170°	169.7	4.7
170°-180°	58.8	1.6
0°-30°	530.8	14.6
0°-40°	856.4	23.6
0°-60°	1480.8	40.9
0°-90°	1873.9	51.7
90°-120°	304.8	8.4
90°-150°	1262.1	34.8
90°-180°	1750.0	48.3
0°-180°	3624.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	701	701	701	701	701	
5°	698	698	704	698	696	66
15°	662	666	672	666	662	186
25°	593	606	613	607	595	273
35°	508	523	534	525	511	317
45°	412	428	440	431	418	318
55°	313	328	338	333	321	281
65°	213	223	238	229	222	212
75°	114	122	135	128	124	121
85°	21	26	37	32	29	26
90°	1	1	1	4	5	1
95°	4	5	14	25	23	5
105°	20	50	83	59	68	23
115°	196	394	202	108	121	232
125°	587	514	320	174	154	520
135°	647	583	421	283	226	499
145°	676	630	501	392	339	424
155°	686	652	563	482	446	317
165°	676	652	603	552	532	192
175°	643	635	623	601	594	62
180°	619	619	619	619	619	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	701.1	701.1	701.1	701.1	701.1	701.1	701.1	701.1	701.1	701.1	701.1
2.5°	696.6	695.7	697.5	699.3	699.3	700.2	701.1	702.0	702.0	703.8	701.1
5°	697.5	695.7	696.6	696.6	695.7	696.6	697.5	699.3	699.3	701.1	698.4
7.5°	693.0	692.1	693.0	692.1	691.2	692.1	693.0	693.9	693.9	695.7	693.9
10°	684.0	684.0	684.0	684.0	684.0	684.9	685.8	686.7	686.7	688.5	686.7
12.5°	674.1	674.1	674.1	675.0	673.2	674.1	675.9	677.7	677.7	679.5	677.7
15°	662.4	662.4	663.3	664.2	663.3	663.3	664.2	666.0	666.0	667.8	666.0
17.5°	647.1	647.1	648.0	649.8	648.9	649.8	650.7	652.5	653.4	653.4	653.4
20°	631.8	630.9	631.8	632.7	632.7	633.6	633.6	636.3	638.1	638.1	639.0
22.5°	613.8	612.0	613.8	614.7	614.7	615.6	615.6	618.3	620.1	621.0	623.7
25°	593.1	593.1	594.0	595.8	595.8	596.7	597.6	600.3	602.1	602.1	605.7
27.5°	573.3	572.4	573.3	575.1	576.9	577.8	577.8	580.5	583.2	585.0	586.8
30°	551.7	551.7	552.6	554.4	556.2	555.3	556.2	559.8	562.5	564.3	566.1
32.5°	529.2	529.2	530.1	531.9	534.6	534.6	535.5	538.2	540.0	541.8	545.4
35°	508.5	506.7	507.6	509.4	513.0	512.1	513.0	515.7	517.5	520.2	522.9
37.5°	483.3	483.3	484.2	486.0	489.6	488.7	490.5	492.3	495.0	497.7	499.5
40°	460.8	461.7	460.8	462.6	465.3	466.2	466.2	468.0	471.6	474.3	477.0
42.5°	435.6	436.5	437.4	439.2	441.9	441.9	442.8	444.6	447.3	450.0	452.7
45°	412.2	412.2	412.2	414.0	417.6	417.6	419.4	419.4	422.1	425.7	428.4
47.5°	387.9	387.9	387.9	390.6	393.3	393.3	395.1	395.1	398.7	401.4	404.1
50°	362.7	364.5	363.6	365.4	369.0	368.1	369.9	369.9	372.6	376.2	378.9
52.5°	340.2	340.2	338.4	341.1	343.8	343.8	344.7	344.7	348.3	351.0	353.7
55°	313.2	315.0	313.2	315.9	318.6	318.6	320.4	320.4	321.3	324.9	327.6
57.5°	290.7	290.7	288.9	290.7	293.4	293.4	295.2	295.2	297.0	298.8	303.3
60°	265.5	264.6	263.7	266.4	268.2	268.2	270.0	270.0	271.8	272.7	277.2
62.5°	240.3	239.4	239.4	241.2	243.0	242.1	244.8	244.8	246.6	248.4	251.1
65°	213.3	212.4	212.4	214.2	215.1	215.1	216.9	217.8	218.7	221.4	223.2
67.5°	189.0	188.1	187.2	189.0	189.9	189.9	191.7	192.6	194.4	195.3	197.1
70°	163.8	162.9	162.0	163.8	165.6	164.7	166.5	167.4	168.3	170.1	171.9
72.5°	138.6	138.6	138.6	139.5	140.4	140.4	141.3	142.2	144.0	145.8	146.7
75°	114.3	113.4	113.4	115.2	115.2	115.2	117.0	117.9	117.9	120.6	121.5
77.5°	90.0	90.9	90.0	90.0	90.0	90.9	91.8	92.7	94.5	96.3	97.2
80°	65.7	66.6	65.7	66.6	65.7	66.6	68.4	68.4	70.2	72.0	72.9
82.5°	42.3	43.2	42.3	43.2	43.2	43.2	44.1	45.0	46.8	47.7	49.5
85°	20.7	19.8	20.7	20.7	20.7	20.7	22.5	22.5	24.3	25.2	26.1
87.5°	2.7	2.7	2.7	2.7	3.6	2.7	3.6	4.5	4.5	5.4	5.4
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°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
95°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	5.4	5.4
97.5°	7.2	7.2	7.2	7.2	7.2	7.2	7.2	8.1	8.1	9.0	9.9
100°	9.9	9.9	10.8	10.8	10.8	10.8	10.8	11.7	12.6	14.4	16.2
102.5°	14.4	14.4	14.4	15.3	15.3	16.2	16.2	18.0	19.8	22.5	27.9
105°	19.8	20.7	20.7	20.7	22.5	22.5	23.4	26.1	30.6	37.8	50.4
107.5°	27.9	28.8	28.8	30.6	32.4	34.2	36.0	44.1	54.9	76.5	108.0
110°	43.2	44.1	45.0	49.5	55.8	61.2	68.4	89.1	121.5	169.2	221.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	81.0	85.5	90.9	103.5	125.1	138.6	153.9	207.9	260.1	306.0	331.2
115°	196.2	207.9	219.6	247.5	284.4	306.0	321.3	368.1	390.6	399.6	394.2
117.5°	391.5	401.4	409.5	424.8	442.8	449.1	451.8	461.7	457.2	450.0	436.5
120°	513.0	516.6	515.7	515.7	515.7	513.0	511.2	504.9	494.1	483.3	468.0
122.5°	561.6	562.5	558.9	554.4	549.0	546.3	542.7	532.8	521.1	508.5	492.3
125°	586.8	586.8	583.2	578.7	572.4	568.8	563.4	554.4	542.7	530.1	513.9
127.5°	605.7	604.8	602.1	598.5	591.3	588.6	583.2	573.3	561.6	550.8	534.6
130°	621.0	620.1	616.5	614.7	608.4	603.9	599.4	589.5	577.8	567.0	552.6
132.5°	635.4	633.6	630.0	628.2	621.9	618.3	613.8	604.8	593.1	583.2	567.9
135°	647.1	644.4	641.7	639.9	634.5	630.0	626.4	617.4	607.5	596.7	583.2
137.5°	656.1	654.3	650.7	648.9	643.5	639.9	636.3	629.1	620.1	609.3	596.7
140°	664.2	661.5	659.7	657.0	652.5	648.9	645.3	639.0	630.0	621.0	609.3
142.5°	670.5	668.7	666.9	665.1	659.7	657.0	653.4	648.0	640.8	631.8	621.0
145°	675.9	674.1	672.3	670.5	666.0	663.3	660.6	655.2	648.9	639.9	630.0
147.5°	680.4	678.6	676.8	675.9	671.4	668.7	666.0	662.4	655.2	646.2	639.0
150°	684.0	682.2	680.4	678.6	675.0	672.3	671.4	666.9	659.7	652.5	645.3
152.5°	685.8	684.0	683.1	681.3	677.7	675.0	674.1	669.6	663.3	655.2	648.9
155°	685.8	684.9	683.1	682.2	677.7	675.0	674.1	669.6	664.2	657.0	651.6
157.5°	685.8	684.0	683.1	681.3	676.8	675.0	674.1	670.5	666.0	659.7	654.3
160°	683.1	682.2	681.3	679.5	675.9	674.1	674.1	670.5	666.0	660.6	654.3
162.5°	680.4	678.6	677.7	676.8	674.1	673.2	672.3	669.6	665.1	660.6	654.3
165°	675.9	675.0	673.2	672.3	669.6	668.7	667.8	666.0	661.5	658.8	652.5
167.5°	669.6	667.8	666.9	665.1	662.4	662.4	662.4	660.6	657.9	656.1	649.8
170°	661.5	659.7	658.8	657.9	656.1	656.1	656.1	655.2	652.5	651.6	645.3
172.5°	653.4	652.5	651.6	650.7	648.0	648.0	648.0	648.0	646.2	646.2	640.8
175°	642.6	641.7	640.8	640.8	639.0	639.9	639.9	639.9	639.0	640.8	635.4
177.5°	629.1	627.3	629.1	630.9	630.0	630.9	631.8	631.8	630.9	632.7	628.2
180°	619.2	619.2	619.2	619.2	619.2	619.2	619.2	619.2	619.2	619.2	619.2



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	701.1	701.1	701.1	701.1	701.1	701.1	701.1	701.1	701.1	701.1	701.1
2.5°	698.4	699.3	698.4	699.3	699.3	699.3	699.3	702.0	704.7	706.5	705.6
5°	695.7	696.6	695.7	696.6	696.6	696.6	696.6	699.3	702.9	703.8	702.0
7.5°	690.3	691.2	691.2	691.2	691.2	691.2	691.2	694.8	697.5	699.3	697.5
10°	683.1	684.0	684.0	684.0	684.9	684.9	684.9	687.6	691.2	692.1	690.3
12.5°	674.1	675.0	675.0	675.0	675.9	675.9	675.9	678.6	682.2	683.1	682.2
15°	663.3	664.2	664.2	664.2	665.1	665.1	665.1	667.8	671.4	672.3	671.4
17.5°	650.7	650.7	650.7	650.7	652.5	653.4	652.5	655.2	658.8	659.7	658.8
20°	635.4	636.3	636.3	637.2	638.1	639.0	639.0	641.7	645.3	646.2	644.4
22.5°	620.1	620.1	621.0	621.9	621.9	622.8	622.8	625.5	629.1	630.0	629.1
25°	603.0	603.0	603.9	605.7	605.7	606.6	606.6	609.3	612.0	612.9	612.0
27.5°	584.1	583.2	585.0	585.9	586.8	588.6	587.7	591.3	594.0	594.9	594.0
30°	565.2	564.3	566.1	567.0	567.9	568.8	568.8	572.4	575.1	576.0	575.1
32.5°	544.5	543.6	545.4	547.2	547.2	548.1	548.1	551.7	553.5	555.3	553.5
35°	522.9	521.1	523.8	525.6	524.7	526.5	526.5	530.1	531.9	533.7	531.9
37.5°	501.3	500.4	501.3	503.1	503.1	504.0	504.0	507.6	510.3	511.2	510.3
40°	478.8	477.9	478.8	481.5	480.6	481.5	482.4	485.1	486.9	487.8	486.9
42.5°	454.5	454.5	455.4	458.1	457.2	458.1	459.0	461.7	463.5	464.4	463.5
45°	430.2	431.1	430.2	434.7	432.9	433.8	435.6	436.5	439.2	440.1	438.3
47.5°	405.9	407.7	406.8	410.4	409.5	409.5	410.4	413.1	414.9	415.8	414.9
50°	380.7	382.5	381.6	386.1	384.3	385.2	386.1	387.9	388.8	389.7	389.7
52.5°	355.5	356.4	358.2	360.9	360.0	360.9	361.8	362.7	363.6	365.4	363.6
55°	330.3	331.2	333.0	334.8	335.7	335.7	336.6	338.4	337.5	338.4	339.3
57.5°	305.1	306.9	306.9	310.5	310.5	310.5	310.5	313.2	312.3	314.1	314.1
60°	279.0	279.0	280.8	283.5	284.4	284.4	285.3	287.1	286.2	288.0	288.9
62.5°	252.9	254.7	256.5	258.3	260.1	258.3	261.0	261.9	262.8	263.7	262.8
65°	225.0	226.8	228.6	230.4	230.4	230.4	231.3	234.9	234.9	238.5	237.6
67.5°	198.9	200.7	202.5	204.3	205.2	205.2	206.1	207.9	209.7	210.6	209.7
70°	172.8	174.6	178.2	179.1	180.9	179.1	181.8	182.7	184.5	185.4	184.5
72.5°	147.6	149.4	152.1	153.0	154.8	155.7	156.6	156.6	159.3	160.2	160.2
75°	122.4	124.2	126.9	127.8	129.6	130.5	131.4	131.4	134.1	135.0	134.1
77.5°	98.1	99.0	101.7	102.6	104.4	105.3	106.2	106.2	108.9	109.8	108.9
80°	73.8	74.7	77.4	78.3	80.1	80.1	81.0	81.9	83.7	84.6	83.7
82.5°	50.4	51.3	53.1	54.9	55.8	56.7	57.6	58.5	59.4	60.3	59.4
85°	27.0	27.9	30.6	31.5	33.3	34.2	34.2	35.1	36.9	36.9	36.9
87.5°	6.3	8.1	9.9	10.8	12.6	12.6	13.5	13.5	15.3	16.2	15.3
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°	2.7	2.7	3.6	3.6	4.5	4.5	6.3	7.2	6.3	5.4	5.4
95°	6.3	7.2	9.0	11.7	12.6	14.4	18.0	18.9	15.3	13.5	12.6
97.5°	11.7	14.4	18.9	26.1	28.8	32.4	36.9	35.1	28.8	24.3	22.5
100°	20.7	27.0	37.8	51.3	56.7	61.2	62.1	57.6	47.7	39.6	35.1
102.5°	36.9	52.2	74.7	93.6	97.2	99.9	95.4	85.5	71.1	58.5	51.3
105°	73.8	105.3	135.9	147.6	147.6	144.9	131.4	117.9	99.0	82.8	71.1
107.5°	152.1	188.1	206.1	202.5	196.2	187.2	169.2	152.1	129.6	109.8	95.4
110°	256.5	270.0	264.6	251.1	239.4	228.6	206.1	185.4	161.1	140.4	123.3



TEST NUMBER: P303152

CATALOG NUMBER: CTW-F-5050-40L940-UNV-STD-4

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	334.8	324.9	310.5	288.0	277.2	266.4	243.0	219.6	192.6	171.9	152.1
115°	384.3	366.3	346.5	324.0	312.3	300.6	278.1	252.9	224.1	201.6	181.8
117.5°	420.3	398.7	378.0	356.4	343.8	332.1	310.5	283.5	256.5	232.2	212.4
120°	449.1	426.6	405.9	384.3	373.5	362.7	340.2	313.2	287.1	265.5	243.9
122.5°	474.3	451.8	432.0	411.3	401.4	389.7	366.3	340.2	314.1	293.4	273.6
125°	496.8	476.1	456.3	437.4	426.6	414.0	390.6	365.4	341.1	320.4	301.5
127.5°	517.5	498.6	479.7	460.8	450.9	436.5	414.9	390.6	368.1	347.4	329.4
130°	536.4	519.3	500.4	481.5	470.7	458.1	436.5	414.0	393.3	373.5	355.5
132.5°	554.4	537.3	519.3	499.5	489.6	477.9	458.1	436.5	416.7	399.6	381.6
135°	570.6	553.5	535.5	516.6	505.8	495.9	477.0	457.2	438.3	421.2	403.2
137.5°	585.0	567.0	549.9	531.9	522.0	513.0	495.0	476.1	459.9	443.7	425.7
140°	597.6	578.7	562.5	544.5	536.4	529.2	510.3	495.0	479.7	463.5	448.2
142.5°	607.5	589.5	574.2	558.0	550.8	542.7	526.5	512.1	497.7	483.3	468.0
145°	616.5	598.5	585.0	569.7	562.5	556.2	540.9	526.5	514.8	501.3	486.0
147.5°	624.6	608.4	594.9	581.4	575.1	568.8	554.4	541.8	531.0	517.5	504.0
150°	630.0	616.5	604.8	591.3	586.8	580.5	567.0	556.2	545.4	534.6	521.1
152.5°	634.5	622.8	612.0	601.2	596.7	590.4	578.7	569.7	560.7	549.9	537.3
155°	637.2	628.2	618.3	608.4	603.9	599.4	589.5	580.5	572.4	563.4	550.8
157.5°	640.8	632.7	623.7	614.7	611.1	606.6	597.6	590.4	583.2	575.1	564.3
160°	642.6	635.4	627.3	620.1	616.5	613.8	603.9	599.4	593.1	585.9	576.0
162.5°	643.5	637.2	630.9	624.6	621.9	618.3	611.1	606.6	601.2	594.9	586.8
165°	643.5	639.0	632.7	628.2	625.5	621.9	616.5	612.9	608.4	603.0	595.8
167.5°	642.6	639.0	633.6	630.0	628.2	625.5	620.1	617.4	614.7	611.1	603.9
170°	639.9	637.2	633.6	630.9	628.2	626.4	622.8	621.0	619.2	616.5	610.2
172.5°	636.3	634.5	630.9	630.0	628.2	626.4	623.7	623.7	621.9	620.1	615.6
175°	631.8	630.9	628.2	627.3	627.3	625.5	623.7	623.7	624.6	622.8	619.2
177.5°	625.5	625.5	623.7	623.7	623.7	622.8	621.9	623.7	624.6	624.6	621.9
180°	619.2	619.2	619.2	619.2	619.2	619.2	619.2	619.2	619.2	619.2	619.2



TEST NUMBER: P303152

CATALOG NUMBER: CTW-F-5050-40L940-UNV-STD-4

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	701.1	701.1	701.1	701.1	701.1	701.1	701.1	701.1	701.1	701.1	701.1
2.5°	703.8	701.1	699.3	699.3	699.3	697.5	696.6	697.5	700.2	704.7	700.2
5°	700.2	697.5	696.6	696.6	696.6	694.8	693.9	694.8	697.5	702.0	697.5
7.5°	695.7	693.0	692.1	692.1	691.2	689.4	689.4	689.4	693.0	695.7	692.1
10°	688.5	685.8	684.9	684.9	684.0	682.2	682.2	682.2	685.8	688.5	684.9
12.5°	679.5	676.8	675.9	675.9	675.0	673.2	673.2	673.2	676.8	678.6	675.9
15°	668.7	666.0	665.1	665.1	664.2	662.4	662.4	662.4	666.0	666.9	664.2
17.5°	656.1	653.4	652.5	652.5	650.7	649.8	648.9	648.9	652.5	653.4	650.7
20°	642.6	639.0	639.0	638.1	636.3	635.4	635.4	634.5	639.9	638.1	636.3
22.5°	626.4	623.7	623.7	622.8	621.0	620.1	619.2	619.2	623.7	620.1	618.3
25°	610.2	606.6	607.5	605.7	604.8	603.0	602.1	602.1	606.6	602.1	601.2
27.5°	593.1	589.5	587.7	587.7	586.8	584.1	583.2	583.2	587.7	583.2	582.3
30°	572.4	570.6	568.8	568.8	566.1	565.2	564.3	564.3	567.9	563.4	562.5
32.5°	552.6	549.9	549.0	548.1	547.2	544.5	543.6	544.5	547.2	541.8	540.9
35°	531.0	529.2	528.3	526.5	525.6	523.8	522.9	523.8	524.7	520.2	518.4
37.5°	507.6	506.7	505.8	504.0	503.1	502.2	501.3	502.2	502.2	497.7	495.9
40°	485.1	483.3	482.4	481.5	481.5	479.7	478.8	480.6	478.8	477.0	473.4
42.5°	462.6	459.9	459.9	458.1	458.1	456.3	456.3	457.2	455.4	453.6	450.0
45°	438.3	437.4	436.5	434.7	434.7	432.9	432.9	433.8	431.1	429.3	426.6
47.5°	414.0	414.0	412.2	410.4	411.3	410.4	409.5	409.5	407.7	405.9	403.2
50°	389.7	388.8	386.1	387.0	387.9	385.2	386.1	383.4	383.4	381.6	378.0
52.5°	364.5	363.6	362.7	361.8	362.7	360.9	360.9	359.1	358.2	356.4	353.7
55°	340.2	339.3	337.5	337.5	338.4	335.7	335.7	333.9	333.0	331.2	328.5
57.5°	315.0	314.1	313.2	312.3	313.2	311.4	310.5	309.6	307.8	306.0	304.2
60°	289.8	288.9	287.1	286.2	287.1	285.3	284.4	283.5	282.6	279.9	278.1
62.5°	263.7	261.9	261.9	261.0	261.9	260.1	259.2	258.3	256.5	254.7	254.7
65°	237.6	236.7	236.7	234.0	235.8	234.0	230.4	230.4	228.6	226.8	226.8
67.5°	209.7	208.8	208.8	207.9	207.9	207.9	207.0	205.2	202.5	202.5	202.5
70°	184.5	183.6	183.6	181.8	182.7	181.8	180.9	179.1	177.3	177.3	177.3
72.5°	158.4	157.5	157.5	156.6	157.5	156.6	155.7	153.9	152.1	153.0	152.1
75°	133.2	132.3	133.2	131.4	132.3	131.4	130.5	128.7	127.8	128.7	127.8
77.5°	108.0	108.0	108.0	108.0	107.1	106.2	105.3	104.4	104.4	104.4	102.6
80°	83.7	82.8	82.8	82.8	82.8	81.9	81.0	80.1	80.1	80.1	78.3
82.5°	59.4	59.4	59.4	59.4	58.5	59.4	56.7	55.8	55.8	55.8	54.0
85°	36.0	36.0	36.9	36.0	36.0	35.1	33.3	32.4	32.4	31.5	30.6
87.5°	16.2	14.4	14.4	14.4	13.5	13.5	13.5	11.7	11.7	11.7	9.9
90°	1.8	2.7	2.7	2.7	2.7	3.6	3.6	3.6	3.6	3.6	4.5
92.5°	8.1	10.8	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7
95°	14.4	16.2	19.8	21.6	23.4	25.2	25.2	26.1	25.2	24.3	24.3
97.5°	21.6	24.3	25.2	26.1	27.9	31.5	34.2	36.9	38.7	39.6	39.6
100°	33.3	32.4	34.2	36.9	36.9	36.0	38.7	41.4	44.1	46.8	47.7
102.5°	47.7	44.1	43.2	44.1	45.9	49.5	47.7	48.6	49.5	51.3	54.0
105°	64.8	59.4	55.8	54.9	55.8	57.6	61.2	62.1	59.4	60.3	61.2
107.5°	84.6	76.5	71.1	69.3	68.4	68.4	70.2	73.8	76.5	75.6	73.8
110°	108.9	96.3	89.1	85.5	83.7	81.9	81.9	83.7	86.4	90.0	92.7



TEST NUMBER: P303152

CATALOG NUMBER: CTW-F-5050-40L940-UNV-STD-4

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
112.5°	135.9	120.6	109.8	104.4	101.7	95.4	94.5	95.4	96.3	99.0	102.6
115°	164.7	145.8	132.3	126.0	122.4	112.5	108.0	107.1	108.0	108.9	110.7
117.5°	193.5	174.6	157.5	150.3	144.9	133.2	125.1	122.4	119.7	120.6	120.6
120°	225.0	202.5	186.3	176.4	171.0	156.6	145.8	139.5	134.1	132.3	131.4
122.5°	253.8	234.0	214.2	207.0	198.0	181.8	170.1	160.2	152.1	146.7	144.0
125°	280.8	261.9	243.9	235.8	226.8	208.8	196.2	184.5	173.7	166.5	159.3
127.5°	310.5	290.7	272.7	265.5	256.5	238.5	223.2	212.4	200.7	189.9	180.0
130°	334.8	317.7	300.6	293.4	285.3	268.2	252.9	240.3	225.9	216.0	205.2
132.5°	361.8	343.8	327.6	319.5	311.4	295.2	280.8	268.2	254.7	245.7	234.0
135°	386.1	369.0	351.9	345.6	336.6	322.2	308.7	295.2	282.6	271.8	261.9
137.5°	409.5	392.4	377.1	369.9	361.8	348.3	335.7	325.8	311.4	300.6	289.8
140°	431.1	414.9	400.5	393.3	387.0	372.6	361.8	351.9	338.4	328.5	316.8
142.5°	451.8	436.5	423.9	416.7	409.5	396.0	385.2	376.2	365.4	354.6	344.7
145°	471.6	456.3	444.6	438.3	431.1	418.5	408.6	399.6	392.4	380.7	370.8
147.5°	490.5	475.2	464.4	459.0	452.7	441.0	432.0	423.0	416.7	405.9	396.9
150°	507.6	494.1	484.2	478.8	472.5	461.7	453.6	445.5	440.1	429.3	423.0
152.5°	524.7	512.1	503.1	497.7	492.3	481.5	473.4	465.3	462.6	451.8	446.4
155°	540.0	527.4	519.3	514.8	510.3	499.5	492.3	484.2	482.4	473.4	467.1
157.5°	554.4	542.7	534.6	531.0	526.5	516.6	510.3	503.1	502.2	494.1	488.7
160°	567.0	556.2	549.0	544.5	540.9	532.8	526.5	521.1	519.3	513.9	508.5
162.5°	578.7	569.7	562.5	558.9	556.2	548.1	542.7	537.3	536.4	532.8	526.5
165°	588.6	579.6	574.2	571.5	568.8	561.6	557.1	552.6	551.7	549.9	543.6
167.5°	597.6	589.5	585.0	582.3	579.6	574.2	570.6	567.0	567.0	565.2	559.8
170°	604.8	597.6	594.0	592.2	590.4	585.0	581.4	578.7	578.7	579.6	573.3
172.5°	611.1	605.7	602.1	599.4	598.5	594.9	592.2	589.5	590.4	592.2	586.8
175°	616.5	611.1	608.4	607.5	606.6	603.0	601.2	600.3	601.2	603.9	599.4
177.5°	620.1	616.5	614.7	613.8	613.8	610.2	609.3	609.3	610.2	614.7	609.3
180°	619.2	619.2	619.2	619.2	619.2	619.2	619.2	619.2	619.2	619.2	619.2



TEST NUMBER: P303152

CATALOG NUMBER: CTW-F-5050-40L940-UNV-STD-4

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	701.1	701.1	701.1	701.1	701.1	701.1	701.1	701.1
2.5°	702.0	701.1	700.2	699.3	698.4	697.5	695.7	696.6
5°	698.4	697.5	696.6	695.7	695.7	695.7	694.8	695.7
7.5°	693.0	692.1	691.2	690.3	690.3	691.2	690.3	692.1
10°	685.8	684.0	684.0	682.2	682.2	682.2	682.2	683.1
12.5°	675.9	674.1	674.1	672.3	672.3	672.3	673.2	674.1
15°	664.2	663.3	662.4	661.5	661.5	662.4	661.5	662.4
17.5°	650.7	648.9	648.9	648.0	648.0	647.1	647.1	648.0
20°	634.5	632.7	632.7	631.8	630.9	630.9	630.9	631.8
22.5°	616.5	615.6	614.7	612.9	613.8	613.8	612.9	614.7
25°	598.5	597.6	596.7	595.8	595.8	594.9	594.0	594.9
27.5°	580.5	578.7	577.8	576.9	576.0	575.1	574.2	575.1
30°	560.7	557.1	558.0	557.1	555.3	554.4	553.5	554.4
32.5°	539.1	537.3	535.5	535.5	533.7	532.8	531.9	532.8
35°	517.5	514.8	513.9	513.9	512.1	511.2	510.3	511.2
37.5°	495.0	492.3	491.4	491.4	489.6	487.8	487.8	487.8
40°	471.6	468.9	468.9	468.9	467.1	465.3	465.3	465.3
42.5°	448.2	446.4	445.5	445.5	443.7	441.0	441.0	441.9
45°	424.8	423.0	422.1	421.2	420.3	417.6	417.6	417.6
47.5°	399.6	399.6	397.8	397.8	396.0	395.1	394.2	394.2
50°	377.1	375.3	373.5	373.5	372.6	369.9	369.9	369.9
52.5°	351.9	351.0	349.2	349.2	347.4	345.6	345.6	345.6
55°	327.6	326.7	324.9	324.9	323.1	322.2	321.3	321.3
57.5°	302.4	302.4	300.6	300.6	297.9	297.9	297.0	298.8
60°	276.3	277.2	275.4	274.5	272.7	272.7	272.7	274.5
62.5°	252.9	252.0	250.2	250.2	249.3	248.4	249.3	249.3
65°	225.9	224.1	223.2	223.2	222.3	221.4	220.5	222.3
67.5°	200.7	199.8	198.0	198.0	198.0	197.1	197.1	198.0
70°	175.5	174.6	173.7	173.7	172.8	172.8	172.8	173.7
72.5°	150.3	150.3	150.3	149.4	148.5	147.6	149.4	148.5
75°	126.0	125.1	125.1	125.1	124.2	123.3	122.4	124.2
77.5°	101.7	100.8	100.8	100.8	99.9	99.0	99.0	99.9
80°	77.4	76.5	76.5	76.5	75.6	75.6	74.7	75.6
82.5°	52.2	52.2	52.2	52.2	50.4	51.3	51.3	50.4
85°	29.7	28.8	28.8	28.8	28.8	28.8	27.9	28.8
87.5°	9.0	9.0	9.0	9.9	9.0	9.9	9.9	9.9
90°	4.5	4.5	4.5	4.5	4.5	4.5	5.4	5.4
92.5°	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7
95°	23.4	24.3	23.4	23.4	23.4	23.4	23.4	23.4
97.5°	39.6	39.6	39.6	39.6	38.7	37.8	37.8	37.8
100°	49.5	50.4	51.3	51.3	52.2	52.2	52.2	52.2
102.5°	55.8	56.7	56.7	57.6	58.5	58.5	58.5	58.5
105°	62.1	62.1	63.0	63.9	65.7	66.6	67.5	67.5
107.5°	72.9	72.9	73.8	73.8	73.8	74.7	74.7	74.7
110°	91.8	88.2	88.2	87.3	86.4	86.4	86.4	86.4



TEST NUMBER: P303152

CATALOG NUMBER: CTW-F-5050-40L940-UNV-STD-4

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
112.5°	105.3	106.2	107.1	108.0	107.1	105.3	105.3	105.3
115°	114.3	116.1	117.9	118.8	119.7	119.7	120.6	120.6
117.5°	123.3	125.1	126.0	126.9	128.7	128.7	130.5	130.5
120°	132.3	134.1	134.1	135.0	135.9	136.8	137.7	137.7
122.5°	143.1	144.0	144.0	144.0	144.9	144.9	145.8	145.8
125°	156.6	154.8	153.9	154.8	153.9	153.9	153.9	153.9
127.5°	173.7	170.1	169.2	168.3	166.5	164.7	164.7	164.7
130°	196.2	190.8	188.1	187.2	184.5	180.9	180.9	180.0
132.5°	222.3	216.0	212.4	211.5	207.0	202.5	200.7	199.8
135°	252.9	245.7	241.2	240.3	233.1	228.6	226.8	225.9
137.5°	279.9	272.7	270.0	268.2	263.7	259.2	256.5	255.6
140°	307.8	301.5	297.0	295.2	289.8	287.1	284.4	284.4
142.5°	335.7	329.4	324.9	323.1	318.6	315.0	312.3	312.3
145°	362.7	356.4	351.9	350.1	345.6	342.0	340.2	339.3
147.5°	389.7	383.4	379.8	378.0	373.5	369.9	367.2	367.2
150°	415.8	409.5	405.9	402.3	399.6	396.0	394.2	393.3
152.5°	440.1	434.7	431.1	427.5	424.8	423.0	420.3	420.3
155°	461.7	457.2	453.6	450.9	449.1	446.4	445.5	445.5
157.5°	484.2	478.8	476.1	473.4	471.6	470.7	468.9	468.9
160°	504.9	499.5	497.7	495.0	493.2	491.4	490.5	491.4
162.5°	524.7	521.1	518.4	515.7	514.8	513.0	512.1	512.1
165°	541.8	538.2	536.4	534.6	532.8	531.9	531.0	531.9
167.5°	558.0	554.4	552.6	550.8	549.9	549.9	549.0	549.0
170°	572.4	569.7	568.8	566.1	565.2	565.2	564.3	564.3
172.5°	585.9	584.1	583.2	581.4	581.4	581.4	580.5	581.4
175°	599.4	597.6	596.7	594.9	594.9	594.0	593.1	594.0
177.5°	611.1	610.2	608.4	607.5	606.6	605.7	603.9	604.8
180°	619.2	619.2	619.2	619.2	619.2	619.2	619.2	619.2

(END OF REPORT)