

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: P303149

Luminaire Tested: **CTW-F-5050-40L840-UNV-STD-4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P303149  
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-5050-40L840-UNV-STD-4  
Description: CORELITE CONTINUA LINEAR WALL LED LUMINAIRE  
50% UPLIGHT, 50% DOWNLIGHT, 4000 LUMEN PACKAGE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

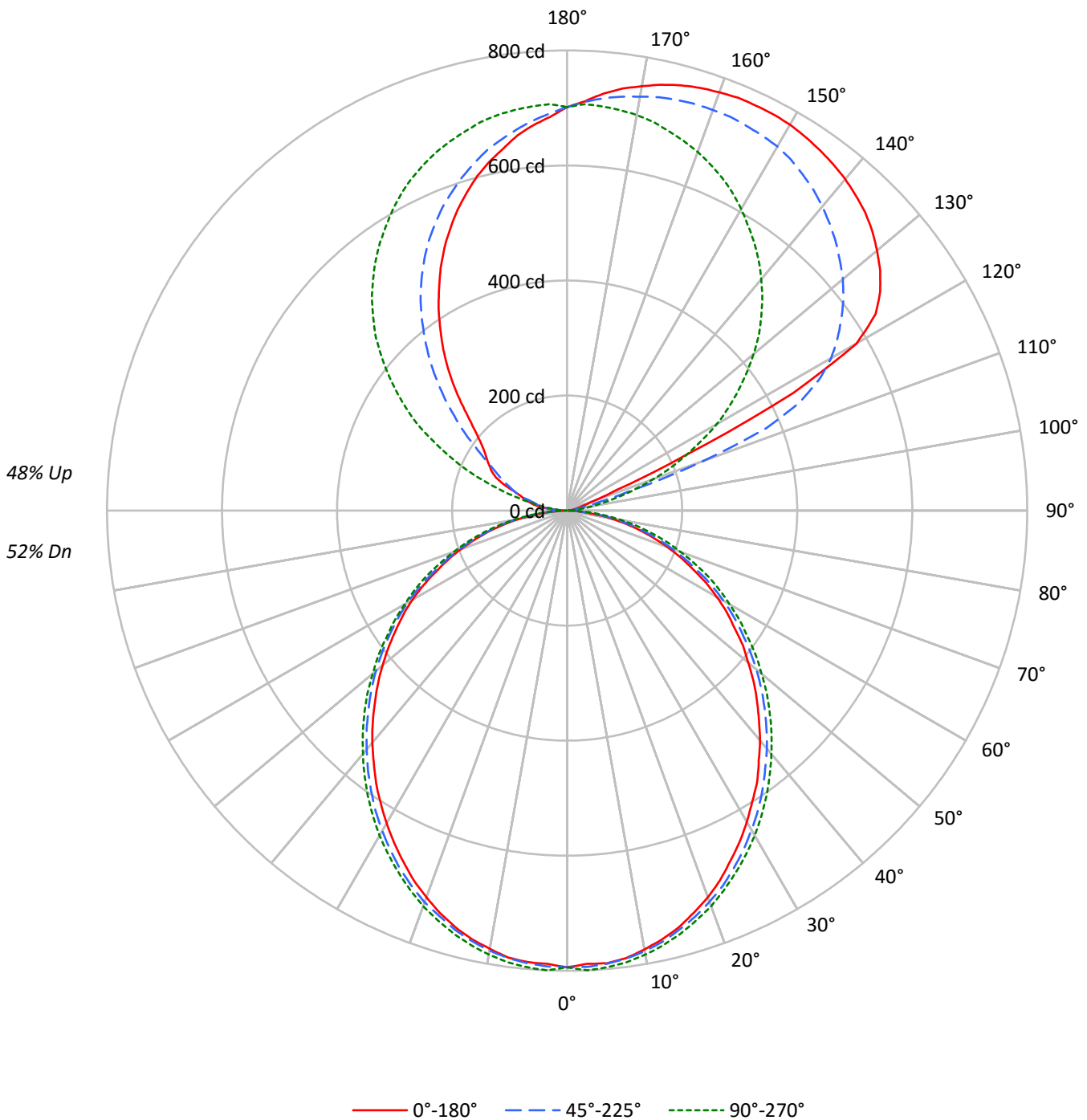
Lumens per Lamp: N/A  
Luminaire Lumens: 4104.2 lumens  
Efficiency: N/A  
Efficacy: 127.9 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.32  
Luminous Opening: Rectangular (W 4' x L: 0.12' x H: 0')  
CIE Type: General Diffuse

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	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°	17093	17093	17093
5°	17070	17223	17027
10°	16933	17134	16911
15°	16720	16970	16720
20°	16392	16765	16392
25°	15955	16487	16003
30°	15531	16215	15606
35°	15135	15884	15214
40°	14664	15524	14807
45°	14212	15174	14397
50°	13758	14780	14030
55°	13313	14383	13658
60°	12947	14045	13386
65°	12307	13759	12826
70°	11676	13218	12381
75°	10763	12718	11703
80°	9224	11877	10612
85°	5780	10325	8052



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.0	1.8
10°-20°	212.1	5.2
20°-30°	314.1	7.7
30°-40°	368.7	9.0
40°-50°	373.8	9.1
50°-60°	333.4	8.1
60°-70°	254.4	6.2
70°-80°	150.3	3.7
80°-90°	40.5	1.0
90°-100°	20.4	0.5
100°-110°	85.0	2.1
110°-120°	239.8	5.8
120°-130°	349.5	8.5
130°-140°	376.4	9.2
140°-150°	358.2	8.7
150°-160°	294.0	7.2
160°-170°	192.2	4.7
170°-180°	66.6	1.6
0°-30°	601.2	14.6
0°-40°	969.8	23.6
0°-60°	1677.0	40.9
0°-90°	2122.1	51.7
90°-120°	345.2	8.4
90°-150°	1429.3	34.8
90°-180°	1982.0	48.3
0°-180°	4104.2	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	794	794	794	794	794	
5°	790	791	797	790	788	75
15°	750	754	761	754	750	211
25°	672	686	694	687	674	310
35°	576	592	604	594	579	359
45°	467	485	498	488	473	360
55°	355	371	383	377	364	319
65°	242	253	270	259	252	240
75°	129	138	153	145	141	137
85°	23	30	42	37	33	30
90°	1	1	1	4	6	1
95°	5	6	15	28	26	6
105°	22	57	94	67	76	26
115°	222	446	228	122	137	262
125°	664	582	363	197	174	589
135°	733	660	477	320	256	565
145°	765	714	568	444	384	480
155°	777	738	638	546	504	359
165°	765	739	683	625	602	217
175°	728	720	705	681	673	70
180°	701	701	701	701	701	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	794.0	794.0	794.0	794.0	794.0	794.0	794.0	794.0	794.0	794.0	794.0
2.5°	788.9	787.9	789.9	791.9	791.9	793.0	794.0	795.0	795.0	797.0	794.0
5°	789.9	787.9	788.9	788.9	787.9	788.9	789.9	791.9	791.9	794.0	790.9
7.5°	784.8	783.8	784.8	783.8	782.8	783.8	784.8	785.8	785.8	787.9	785.8
10°	774.6	774.6	774.6	774.6	774.6	775.6	776.7	777.7	777.7	779.7	777.7
12.5°	763.4	763.4	763.4	764.4	762.4	763.4	765.4	767.5	767.5	769.5	767.5
15°	750.2	750.2	751.2	752.2	751.2	751.2	752.2	754.2	754.2	756.3	754.2
17.5°	732.8	732.8	733.8	735.9	734.9	735.9	736.9	738.9	740.0	740.0	740.0
20°	715.5	714.5	715.5	716.5	716.5	717.5	717.5	720.6	722.6	722.6	723.7
22.5°	695.1	693.1	695.1	696.1	696.1	697.2	697.2	700.2	702.3	703.3	706.3
25°	671.7	671.7	672.7	674.7	674.7	675.8	676.8	679.8	681.9	681.9	685.9
27.5°	649.3	648.2	649.3	651.3	653.3	654.3	654.3	657.4	660.5	662.5	664.5
30°	624.8	624.8	625.8	627.8	629.9	628.9	629.9	634.0	637.0	639.1	641.1
32.5°	599.3	599.3	600.3	602.4	605.4	605.4	606.4	609.5	611.5	613.6	617.7
35°	575.9	573.8	574.8	576.9	581.0	579.9	581.0	584.0	586.1	589.1	592.2
37.5°	547.3	547.3	548.3	550.4	554.5	553.4	555.5	557.5	560.6	563.6	565.7
40°	521.8	522.9	521.8	523.9	526.9	528.0	528.0	530.0	534.1	537.1	540.2
42.5°	493.3	494.3	495.3	497.4	500.4	500.4	501.5	503.5	506.6	509.6	512.7
45°	466.8	466.8	466.8	468.8	472.9	472.9	475.0	475.0	478.0	482.1	485.2
47.5°	439.3	439.3	439.3	442.3	445.4	445.4	447.4	447.4	451.5	454.6	457.6
50°	410.8	412.8	411.8	413.8	417.9	416.9	418.9	418.9	422.0	426.0	429.1
52.5°	385.3	385.3	383.2	386.3	389.3	389.3	390.4	390.4	394.4	397.5	400.6
55°	354.7	356.7	354.7	357.8	360.8	360.8	362.8	362.8	363.9	367.9	371.0
57.5°	329.2	329.2	327.2	329.2	332.3	332.3	334.3	334.3	336.3	338.4	343.5
60°	300.7	299.7	298.6	301.7	303.7	303.7	305.8	305.8	307.8	308.8	313.9
62.5°	272.1	271.1	271.1	273.2	275.2	274.2	277.2	277.2	279.3	281.3	284.4
65°	241.6	240.5	240.5	242.6	243.6	243.6	245.6	246.7	247.7	250.7	252.8
67.5°	214.0	213.0	212.0	214.0	215.1	215.1	217.1	218.1	220.2	221.2	223.2
70°	185.5	184.5	183.5	185.5	187.5	186.5	188.6	189.6	190.6	192.6	194.7
72.5°	157.0	157.0	157.0	158.0	159.0	159.0	160.0	161.0	163.1	165.1	166.1
75°	129.4	128.4	128.4	130.5	130.5	130.5	132.5	133.5	133.5	136.6	137.6
77.5°	101.9	102.9	101.9	101.9	101.9	102.9	104.0	105.0	107.0	109.1	110.1
80°	74.4	75.4	74.4	75.4	74.4	75.4	77.5	77.5	79.5	81.5	82.6
82.5°	47.9	48.9	47.9	48.9	48.9	48.9	49.9	51.0	53.0	54.0	56.1
85°	23.4	22.4	23.4	23.4	23.4	23.4	25.5	25.5	27.5	28.5	29.6
87.5°	3.1	3.1	3.1	3.1	4.1	3.1	4.1	5.1	5.1	6.1	6.1
90°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
92.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
95°	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	6.1	6.1
97.5°	8.2	8.2	8.2	8.2	8.2	8.2	8.2	9.2	9.2	10.2	11.2
100°	11.2	11.2	12.2	12.2	12.2	12.2	12.2	13.3	14.3	16.3	18.3
102.5°	16.3	16.3	16.3	17.3	17.3	18.3	18.3	20.4	22.4	25.5	31.6
105°	22.4	23.4	23.4	23.4	25.5	25.5	26.5	29.6	34.7	42.8	57.1
107.5°	31.6	32.6	32.6	34.7	36.7	38.7	40.8	49.9	62.2	86.6	122.3
110°	48.9	49.9	51.0	56.1	63.2	69.3	77.5	100.9	137.6	191.6	250.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	91.7	96.8	102.9	117.2	141.7	157.0	174.3	235.4	294.6	346.5	375.1
115°	222.2	235.4	248.7	280.3	322.1	346.5	363.9	416.9	442.3	452.5	446.4
117.5°	443.4	454.6	463.8	481.1	501.5	508.6	511.7	522.9	517.8	509.6	494.3
120°	581.0	585.0	584.0	584.0	584.0	581.0	578.9	571.8	559.6	547.3	530.0
122.5°	636.0	637.0	632.9	627.8	621.7	618.7	614.6	603.4	590.1	575.9	557.5
125°	664.5	664.5	660.5	655.4	648.2	644.2	638.0	627.8	614.6	600.3	582.0
127.5°	685.9	684.9	681.9	677.8	669.6	666.6	660.5	649.3	636.0	623.8	605.4
130°	703.3	702.3	698.2	696.1	689.0	683.9	678.8	667.6	654.3	642.1	625.8
132.5°	719.6	717.5	713.5	711.4	704.3	700.2	695.1	684.9	671.7	660.5	643.1
135°	732.8	729.8	726.7	724.7	718.6	713.5	709.4	699.2	688.0	675.8	660.5
137.5°	743.0	741.0	736.9	734.9	728.8	724.7	720.6	712.4	702.3	690.0	675.8
140°	752.2	749.1	747.1	744.0	738.9	734.9	730.8	723.7	713.5	703.3	690.0
142.5°	759.3	757.3	755.3	753.2	747.1	744.0	740.0	733.8	725.7	715.5	703.3
145°	765.4	763.4	761.4	759.3	754.2	751.2	748.1	742.0	734.9	724.7	713.5
147.5°	770.5	768.5	766.5	765.4	760.3	757.3	754.2	750.2	742.0	731.8	723.7
150°	774.6	772.6	770.5	768.5	764.4	761.4	760.3	755.3	747.1	738.9	730.8
152.5°	776.7	774.6	773.6	771.6	767.5	764.4	763.4	758.3	751.2	742.0	734.9
155°	776.7	775.6	773.6	772.6	767.5	764.4	763.4	758.3	752.2	744.0	737.9
157.5°	776.7	774.6	773.6	771.6	766.5	764.4	763.4	759.3	754.2	747.1	741.0
160°	773.6	772.6	771.6	769.5	765.4	763.4	763.4	759.3	754.2	748.1	741.0
162.5°	770.5	768.5	767.5	766.5	763.4	762.4	761.4	758.3	753.2	748.1	741.0
165°	765.4	764.4	762.4	761.4	758.3	757.3	756.3	754.2	749.1	746.1	738.9
167.5°	758.3	756.3	755.3	753.2	750.2	750.2	750.2	748.1	745.1	743.0	735.9
170°	749.1	747.1	746.1	745.1	743.0	743.0	743.0	742.0	738.9	737.9	730.8
172.5°	740.0	738.9	737.9	736.9	733.8	733.8	733.8	733.8	731.8	731.8	725.7
175°	727.7	726.7	725.7	725.7	723.7	724.7	724.7	724.7	723.7	725.7	719.6
177.5°	712.4	710.4	712.4	714.5	713.5	714.5	715.5	715.5	714.5	716.5	711.4
180°	701.2	701.2	701.2	701.2	701.2	701.2	701.2	701.2	701.2	701.2	701.2



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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	794.0	794.0	794.0	794.0	794.0	794.0	794.0	794.0	794.0	794.0	794.0
2.5°	790.9	791.9	790.9	791.9	791.9	791.9	791.9	795.0	798.1	800.1	799.1
5°	787.9	788.9	787.9	788.9	788.9	788.9	788.9	791.9	796.0	797.0	795.0
7.5°	781.8	782.8	782.8	782.8	782.8	782.8	782.8	786.8	789.9	791.9	789.9
10°	773.6	774.6	774.6	774.6	775.6	775.6	775.6	778.7	782.8	783.8	781.8
12.5°	763.4	764.4	764.4	764.4	765.4	765.4	765.4	768.5	772.6	773.6	772.6
15°	751.2	752.2	752.2	752.2	753.2	753.2	753.2	756.3	760.3	761.4	760.3
17.5°	736.9	736.9	736.9	736.9	738.9	740.0	738.9	742.0	746.1	747.1	746.1
20°	719.6	720.6	720.6	721.6	722.6	723.7	723.7	726.7	730.8	731.8	729.8
22.5°	702.3	702.3	703.3	704.3	704.3	705.3	705.3	708.4	712.4	713.5	712.4
25°	682.9	682.9	683.9	685.9	685.9	687.0	687.0	690.0	693.1	694.1	693.1
27.5°	661.5	660.5	662.5	663.5	664.5	666.6	665.6	669.6	672.7	673.7	672.7
30°	640.1	639.1	641.1	642.1	643.1	644.2	644.2	648.2	651.3	652.3	651.3
32.5°	616.6	615.6	617.7	619.7	619.7	620.7	620.7	624.8	626.8	628.9	626.8
35°	592.2	590.1	593.2	595.2	594.2	596.3	596.3	600.3	602.4	604.4	602.4
37.5°	567.7	566.7	567.7	569.8	569.8	570.8	570.8	574.8	577.9	578.9	577.9
40°	542.2	541.2	542.2	545.3	544.3	545.3	546.3	549.4	551.4	552.4	551.4
42.5°	514.7	514.7	515.7	518.8	517.8	518.8	519.8	522.9	524.9	525.9	524.9
45°	487.2	488.2	487.2	492.3	490.3	491.3	493.3	494.3	497.4	498.4	496.4
47.5°	459.7	461.7	460.7	464.8	463.8	463.8	464.8	467.8	469.9	470.9	469.9
50°	431.1	433.2	432.2	437.3	435.2	436.2	437.3	439.3	440.3	441.3	441.3
52.5°	402.6	403.6	405.7	408.7	407.7	408.7	409.7	410.8	411.8	413.8	411.8
55°	374.1	375.1	377.1	379.2	380.2	380.2	381.2	383.2	382.2	383.2	384.3
57.5°	345.5	347.6	347.6	351.6	351.6	351.6	351.6	354.7	353.7	355.7	355.7
60°	316.0	316.0	318.0	321.1	322.1	322.1	323.1	325.1	324.1	326.2	327.2
62.5°	286.4	288.4	290.5	292.5	294.6	292.5	295.6	296.6	297.6	298.6	297.6
65°	254.8	256.8	258.9	260.9	260.9	260.9	261.9	266.0	266.0	270.1	269.1
67.5°	225.3	227.3	229.3	231.4	232.4	232.4	233.4	235.4	237.5	238.5	237.5
70°	195.7	197.7	201.8	202.8	204.9	202.8	205.9	206.9	208.9	210.0	208.9
72.5°	167.2	169.2	172.3	173.3	175.3	176.3	177.3	177.3	180.4	181.4	181.4
75°	138.6	140.7	143.7	144.7	146.8	147.8	148.8	148.8	151.9	152.9	151.9
77.5°	111.1	112.1	115.2	116.2	118.2	119.3	120.3	120.3	123.3	124.3	123.3
80°	83.6	84.6	87.7	88.7	90.7	90.7	91.7	92.8	94.8	95.8	94.8
82.5°	57.1	58.1	60.1	62.2	63.2	64.2	65.2	66.3	67.3	68.3	67.3
85°	30.6	31.6	34.7	35.7	37.7	38.7	38.7	39.8	41.8	41.8	41.8
87.5°	7.1	9.2	11.2	12.2	14.3	14.3	15.3	15.3	17.3	18.3	17.3
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	4.1	4.1	5.1	5.1	7.1	8.2	7.1	6.1	6.1
95°	7.1	8.2	10.2	13.3	14.3	16.3	20.4	21.4	17.3	15.3	14.3
97.5°	13.3	16.3	21.4	29.6	32.6	36.7	41.8	39.8	32.6	27.5	25.5
100°	23.4	30.6	42.8	58.1	64.2	69.3	70.3	65.2	54.0	44.8	39.8
102.5°	41.8	59.1	84.6	106.0	110.1	113.1	108.0	96.8	80.5	66.3	58.1
105°	83.6	119.3	153.9	167.2	167.2	164.1	148.8	133.5	112.1	93.8	80.5
107.5°	172.3	213.0	233.4	229.3	222.2	212.0	191.6	172.3	146.8	124.3	108.0
110°	290.5	305.8	299.7	284.4	271.1	258.9	233.4	210.0	182.4	159.0	139.6





TEST NUMBER: P303149

CATALOG NUMBER: CTW-F-5050-40L840-UNV-STD-4

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	379.2	367.9	351.6	326.2	313.9	301.7	275.2	248.7	218.1	194.7	172.3
115°	435.2	414.8	392.4	366.9	353.7	340.4	314.9	286.4	253.8	228.3	205.9
117.5°	476.0	451.5	428.1	403.6	389.3	376.1	351.6	321.1	290.5	263.0	240.5
120°	508.6	483.1	459.7	435.2	423.0	410.8	385.3	354.7	325.1	300.7	276.2
122.5°	537.1	511.7	489.2	465.8	454.6	441.3	414.8	385.3	355.7	332.3	309.8
125°	562.6	539.2	516.8	495.3	483.1	468.8	442.3	413.8	386.3	362.8	341.4
127.5°	586.1	564.7	543.3	521.8	510.6	494.3	469.9	442.3	416.9	393.4	373.0
130°	607.5	588.1	566.7	545.3	533.1	518.8	494.3	468.8	445.4	423.0	402.6
132.5°	627.8	608.5	588.1	565.7	554.5	541.2	518.8	494.3	471.9	452.5	432.2
135°	646.2	626.8	606.4	585.0	572.8	561.6	540.2	517.8	496.4	477.0	456.6
137.5°	662.5	642.1	622.8	602.4	591.2	581.0	560.6	539.2	520.8	502.5	482.1
140°	676.8	655.4	637.0	616.6	607.5	599.3	577.9	560.6	543.3	524.9	507.6
142.5°	688.0	667.6	650.3	631.9	623.8	614.6	596.3	579.9	563.6	547.3	530.0
145°	698.2	677.8	662.5	645.2	637.0	629.9	612.6	596.3	583.0	567.7	550.4
147.5°	707.3	689.0	673.7	658.4	651.3	644.2	627.8	613.6	601.3	586.1	570.8
150°	713.5	698.2	684.9	669.6	664.5	657.4	642.1	629.9	617.7	605.4	590.1
152.5°	718.6	705.3	693.1	680.8	675.8	668.6	655.4	645.2	635.0	622.8	608.5
155°	721.6	711.4	700.2	689.0	683.9	678.8	667.6	657.4	648.2	638.0	623.8
157.5°	725.7	716.5	706.3	696.1	692.1	687.0	676.8	668.6	660.5	651.3	639.1
160°	727.7	719.6	710.4	702.3	698.2	695.1	683.9	678.8	671.7	663.5	652.3
162.5°	728.8	721.6	714.5	707.3	704.3	700.2	692.1	687.0	680.8	673.7	664.5
165°	728.8	723.7	716.5	711.4	708.4	704.3	698.2	694.1	689.0	682.9	674.7
167.5°	727.7	723.7	717.5	713.5	711.4	708.4	702.3	699.2	696.1	692.1	683.9
170°	724.7	721.6	717.5	714.5	711.4	709.4	705.3	703.3	701.2	698.2	691.0
172.5°	720.6	718.6	714.5	713.5	711.4	709.4	706.3	706.3	704.3	702.3	697.2
175°	715.5	714.5	711.4	710.4	710.4	708.4	706.3	706.3	707.3	705.3	701.2
177.5°	708.4	708.4	706.3	706.3	706.3	705.3	704.3	706.3	707.3	707.3	704.3
180°	701.2	701.2	701.2	701.2	701.2	701.2	701.2	701.2	701.2	701.2	701.2



TEST NUMBER: P303149

CATALOG NUMBER: CTW-F-5050-40L840-UNV-STD-4

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	794.0	794.0	794.0	794.0	794.0	794.0	794.0	794.0	794.0	794.0	794.0
2.5°	797.0	794.0	791.9	791.9	791.9	789.9	788.9	789.9	793.0	798.1	793.0
5°	793.0	789.9	788.9	788.9	788.9	786.8	785.8	786.8	789.9	795.0	789.9
7.5°	787.9	784.8	783.8	783.8	782.8	780.7	780.7	780.7	784.8	787.9	783.8
10°	779.7	776.7	775.6	775.6	774.6	772.6	772.6	772.6	776.7	779.7	775.6
12.5°	769.5	766.5	765.4	765.4	764.4	762.4	762.4	762.4	766.5	768.5	765.4
15°	757.3	754.2	753.2	753.2	752.2	750.2	750.2	750.2	754.2	755.3	752.2
17.5°	743.0	740.0	738.9	738.9	736.9	735.9	734.9	734.9	738.9	740.0	736.9
20°	727.7	723.7	723.7	722.6	720.6	719.6	719.6	718.6	724.7	722.6	720.6
22.5°	709.4	706.3	706.3	705.3	703.3	702.3	701.2	701.2	706.3	702.3	700.2
25°	691.0	687.0	688.0	685.9	684.9	682.9	681.9	681.9	687.0	681.9	680.8
27.5°	671.7	667.6	665.6	665.6	664.5	661.5	660.5	660.5	665.6	660.5	659.4
30°	648.2	646.2	644.2	644.2	641.1	640.1	639.1	639.1	643.1	638.0	637.0
32.5°	625.8	622.8	621.7	620.7	619.7	616.6	615.6	616.6	619.7	613.6	612.6
35°	601.3	599.3	598.3	596.3	595.2	593.2	592.2	593.2	594.2	589.1	587.1
37.5°	574.8	573.8	572.8	570.8	569.8	568.7	567.7	568.7	568.7	563.6	561.6
40°	549.4	547.3	546.3	545.3	545.3	543.3	542.2	544.3	542.2	540.2	536.1
42.5°	523.9	520.8	520.8	518.8	518.8	516.8	516.8	517.8	515.7	513.7	509.6
45°	496.4	495.3	494.3	492.3	492.3	490.3	490.3	491.3	488.2	486.2	483.1
47.5°	468.8	468.8	466.8	464.8	465.8	464.8	463.8	463.8	461.7	459.7	456.6
50°	441.3	440.3	437.3	438.3	439.3	436.2	437.3	434.2	434.2	432.2	428.1
52.5°	412.8	411.8	410.8	409.7	410.8	408.7	408.7	406.7	405.7	403.6	400.6
55°	385.3	384.3	382.2	382.2	383.2	380.2	380.2	378.1	377.1	375.1	372.0
57.5°	356.7	355.7	354.7	353.7	354.7	352.7	351.6	350.6	348.6	346.5	344.5
60°	328.2	327.2	325.1	324.1	325.1	323.1	322.1	321.1	320.0	317.0	314.9
62.5°	298.6	296.6	296.6	295.6	296.6	294.6	293.5	292.5	290.5	288.4	288.4
65°	269.1	268.1	268.1	265.0	267.0	265.0	260.9	260.9	258.9	256.8	256.8
67.5°	237.5	236.5	236.5	235.4	235.4	235.4	234.4	232.4	229.3	229.3	229.3
70°	208.9	207.9	207.9	205.9	206.9	205.9	204.9	202.8	200.8	200.8	200.8
72.5°	179.4	178.4	178.4	177.3	178.4	177.3	176.3	174.3	172.3	173.3	172.3
75°	150.8	149.8	150.8	148.8	149.8	148.8	147.8	145.8	144.7	145.8	144.7
77.5°	122.3	122.3	122.3	122.3	121.3	120.3	119.3	118.2	118.2	118.2	116.2
80°	94.8	93.8	93.8	93.8	93.8	92.8	91.7	90.7	90.7	90.7	88.7
82.5°	67.3	67.3	67.3	67.3	66.3	67.3	64.2	63.2	63.2	63.2	61.2
85°	40.8	40.8	41.8	40.8	40.8	39.8	37.7	36.7	36.7	35.7	34.7
87.5°	18.3	16.3	16.3	16.3	15.3	15.3	15.3	13.3	13.3	13.3	11.2
90°	2.0	3.1	3.1	3.1	3.1	4.1	4.1	4.1	4.1	4.1	5.1
92.5°	9.2	12.2	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3
95°	16.3	18.3	22.4	24.5	26.5	28.5	28.5	29.6	28.5	27.5	27.5
97.5°	24.5	27.5	28.5	29.6	31.6	35.7	38.7	41.8	43.8	44.8	44.8
100°	37.7	36.7	38.7	41.8	41.8	40.8	43.8	46.9	49.9	53.0	54.0
102.5°	54.0	49.9	48.9	49.9	52.0	56.1	54.0	55.0	56.1	58.1	61.2
105°	73.4	67.3	63.2	62.2	63.2	65.2	69.3	70.3	67.3	68.3	69.3
107.5°	95.8	86.6	80.5	78.5	77.5	77.5	79.5	83.6	86.6	85.6	83.6
110°	123.3	109.1	100.9	96.8	94.8	92.8	92.8	94.8	97.8	101.9	105.0



TEST NUMBER: P303149

CATALOG NUMBER: CTW-F-5050-40L840-UNV-STD-4

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
112.5°	153.9	136.6	124.3	118.2	115.2	108.0	107.0	108.0	109.1	112.1	116.2
115°	186.5	165.1	149.8	142.7	138.6	127.4	122.3	121.3	122.3	123.3	125.4
117.5°	219.1	197.7	178.4	170.2	164.1	150.8	141.7	138.6	135.6	136.6	136.6
120°	254.8	229.3	211.0	199.8	193.7	177.3	165.1	158.0	151.9	149.8	148.8
122.5°	287.4	265.0	242.6	234.4	224.2	205.9	192.6	181.4	172.3	166.1	163.1
125°	318.0	296.6	276.2	267.0	256.8	236.5	222.2	208.9	196.7	188.6	180.4
127.5°	351.6	329.2	308.8	300.7	290.5	270.1	252.8	240.5	227.3	215.1	203.8
130°	379.2	359.8	340.4	332.3	323.1	303.7	286.4	272.1	255.8	244.6	232.4
132.5°	409.7	389.3	371.0	361.8	352.7	334.3	318.0	303.7	288.4	278.3	265.0
135°	437.3	417.9	398.5	391.4	381.2	364.9	349.6	334.3	320.0	307.8	296.6
137.5°	463.8	444.4	427.1	418.9	409.7	394.4	380.2	369.0	352.7	340.4	328.2
140°	488.2	469.9	453.6	445.4	438.3	422.0	409.7	398.5	383.2	372.0	358.8
142.5°	511.7	494.3	480.1	471.9	463.8	448.5	436.2	426.0	413.8	401.6	390.4
145°	534.1	516.8	503.5	496.4	488.2	473.9	462.7	452.5	444.4	431.1	419.9
147.5°	555.5	538.2	525.9	519.8	512.7	499.4	489.2	479.0	471.9	459.7	449.5
150°	574.8	559.6	548.3	542.2	535.1	522.9	513.7	504.5	498.4	486.2	479.0
152.5°	594.2	579.9	569.8	563.6	557.5	545.3	536.1	526.9	523.9	511.7	505.5
155°	611.5	597.3	588.1	583.0	577.9	565.7	557.5	548.3	546.3	536.1	529.0
157.5°	627.8	614.6	605.4	601.3	596.3	585.0	577.9	569.8	568.7	559.6	553.4
160°	642.1	629.9	621.7	616.6	612.6	603.4	596.3	590.1	588.1	582.0	575.9
162.5°	655.4	645.2	637.0	632.9	629.9	620.7	614.6	608.5	607.5	603.4	596.3
165°	666.6	656.4	650.3	647.2	644.2	636.0	630.9	625.8	624.8	622.8	615.6
167.5°	676.8	667.6	662.5	659.4	656.4	650.3	646.2	642.1	642.1	640.1	634.0
170°	684.9	676.8	672.7	670.7	668.6	662.5	658.4	655.4	655.4	656.4	649.3
172.5°	692.1	685.9	681.9	678.8	677.8	673.7	670.7	667.6	668.6	670.7	664.5
175°	698.2	692.1	689.0	688.0	687.0	682.9	680.8	679.8	680.8	683.9	678.8
177.5°	702.3	698.2	696.1	695.1	695.1	691.0	690.0	690.0	691.0	696.1	690.0
180°	701.2	701.2	701.2	701.2	701.2	701.2	701.2	701.2	701.2	701.2	701.2



TEST NUMBER: P303149

CATALOG NUMBER: CTW-F-5050-40L840-UNV-STD-4

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	794.0	794.0	794.0	794.0	794.0	794.0	794.0	794.0
2.5°	795.0	794.0	793.0	791.9	790.9	789.9	787.9	788.9
5°	790.9	789.9	788.9	787.9	787.9	787.9	786.8	787.9
7.5°	784.8	783.8	782.8	781.8	781.8	782.8	781.8	783.8
10°	776.7	774.6	774.6	772.6	772.6	772.6	772.6	773.6
12.5°	765.4	763.4	763.4	761.4	761.4	761.4	762.4	763.4
15°	752.2	751.2	750.2	749.1	749.1	750.2	749.1	750.2
17.5°	736.9	734.9	734.9	733.8	733.8	732.8	732.8	733.8
20°	718.6	716.5	716.5	715.5	714.5	714.5	714.5	715.5
22.5°	698.2	697.2	696.1	694.1	695.1	695.1	694.1	696.1
25°	677.8	676.8	675.8	674.7	674.7	673.7	672.7	673.7
27.5°	657.4	655.4	654.3	653.3	652.3	651.3	650.3	651.3
30°	635.0	630.9	631.9	630.9	628.9	627.8	626.8	627.8
32.5°	610.5	608.5	606.4	606.4	604.4	603.4	602.4	603.4
35°	586.1	583.0	582.0	582.0	579.9	578.9	577.9	578.9
37.5°	560.6	557.5	556.5	556.5	554.5	552.4	552.4	552.4
40°	534.1	531.0	531.0	531.0	529.0	526.9	526.9	526.9
42.5°	507.6	505.5	504.5	504.5	502.5	499.4	499.4	500.4
45°	481.1	479.0	478.0	477.0	476.0	472.9	472.9	472.9
47.5°	452.5	452.5	450.5	450.5	448.5	447.4	446.4	446.4
50°	427.1	425.0	423.0	423.0	422.0	418.9	418.9	418.9
52.5°	398.5	397.5	395.5	395.5	393.4	391.4	391.4	391.4
55°	371.0	370.0	367.9	367.9	365.9	364.9	363.9	363.9
57.5°	342.5	342.5	340.4	340.4	337.4	337.4	336.3	338.4
60°	312.9	313.9	311.9	310.9	308.8	308.8	308.8	310.9
62.5°	286.4	285.4	283.3	283.3	282.3	281.3	282.3	282.3
65°	255.8	253.8	252.8	252.8	251.8	250.7	249.7	251.8
67.5°	227.3	226.3	224.2	224.2	224.2	223.2	223.2	224.2
70°	198.8	197.7	196.7	196.7	195.7	195.7	195.7	196.7
72.5°	170.2	170.2	170.2	169.2	168.2	167.2	169.2	168.2
75°	142.7	141.7	141.7	141.7	140.7	139.6	138.6	140.7
77.5°	115.2	114.2	114.2	114.2	113.1	112.1	112.1	113.1
80°	87.7	86.6	86.6	86.6	85.6	85.6	84.6	85.6
82.5°	59.1	59.1	59.1	59.1	57.1	58.1	58.1	57.1
85°	33.6	32.6	32.6	32.6	32.6	32.6	31.6	32.6
87.5°	10.2	10.2	10.2	11.2	10.2	11.2	11.2	11.2
90°	5.1	5.1	5.1	5.1	5.1	5.1	6.1	6.1
92.5°	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3
95°	26.5	27.5	26.5	26.5	26.5	26.5	26.5	26.5
97.5°	44.8	44.8	44.8	44.8	43.8	42.8	42.8	42.8
100°	56.1	57.1	58.1	58.1	59.1	59.1	59.1	59.1
102.5°	63.2	64.2	64.2	65.2	66.3	66.3	66.3	66.3
105°	70.3	70.3	71.3	72.4	74.4	75.4	76.4	76.4
107.5°	82.6	82.6	83.6	83.6	83.6	84.6	84.6	84.6
110°	104.0	99.9	99.9	98.9	97.8	97.8	97.8	97.8



TEST NUMBER: P303149

CATALOG NUMBER: CTW-F-5050-40L840-UNV-STD-4

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
112.5°	119.3	120.3	121.3	122.3	121.3	119.3	119.3	119.3
115°	129.4	131.5	133.5	134.5	135.6	135.6	136.6	136.6
117.5°	139.6	141.7	142.7	143.7	145.8	145.8	147.8	147.8
120°	149.8	151.9	151.9	152.9	153.9	154.9	155.9	155.9
122.5°	162.1	163.1	163.1	163.1	164.1	164.1	165.1	165.1
125°	177.3	175.3	174.3	175.3	174.3	174.3	174.3	174.3
127.5°	196.7	192.6	191.6	190.6	188.6	186.5	186.5	186.5
130°	222.2	216.1	213.0	212.0	208.9	204.9	204.9	203.8
132.5°	251.8	244.6	240.5	239.5	234.4	229.3	227.3	226.3
135°	286.4	278.3	273.2	272.1	264.0	258.9	256.8	255.8
137.5°	317.0	308.8	305.8	303.7	298.6	293.5	290.5	289.5
140°	348.6	341.4	336.3	334.3	328.2	325.1	322.1	322.1
142.5°	380.2	373.0	367.9	365.9	360.8	356.7	353.7	353.7
145°	410.8	403.6	398.5	396.5	391.4	387.3	385.3	384.3
147.5°	441.3	434.2	430.1	428.1	423.0	418.9	415.8	415.8
150°	470.9	463.8	459.7	455.6	452.5	448.5	446.4	445.4
152.5°	498.4	492.3	488.2	484.1	481.1	479.0	476.0	476.0
155°	522.9	517.8	513.7	510.6	508.6	505.5	504.5	504.5
157.5°	548.3	542.2	539.2	536.1	534.1	533.1	531.0	531.0
160°	571.8	565.7	563.6	560.6	558.5	556.5	555.5	556.5
162.5°	594.2	590.1	587.1	584.0	583.0	581.0	579.9	579.9
165°	613.6	609.5	607.5	605.4	603.4	602.4	601.3	602.4
167.5°	631.9	627.8	625.8	623.8	622.8	622.8	621.7	621.7
170°	648.2	645.2	644.2	641.1	640.1	640.1	639.1	639.1
172.5°	663.5	661.5	660.5	658.4	658.4	658.4	657.4	658.4
175°	678.8	676.8	675.8	673.7	673.7	672.7	671.7	672.7
177.5°	692.1	691.0	689.0	688.0	687.0	685.9	683.9	684.9
180°	701.2	701.2	701.2	701.2	701.2	701.2	701.2	701.2

(END OF REPORT)