

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: P303169

Luminaire Tested: **CTW-F-5050-50L940-UNV-STD-4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P303169
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-5050-50L940-UNV-STD-4
Description: CORELITE CONTINUA LINEAR WALL LED LUMINAIRE
50% UPLIGHT, 50% DOWNLIGHT, 5000 LUMEN PACKAGE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

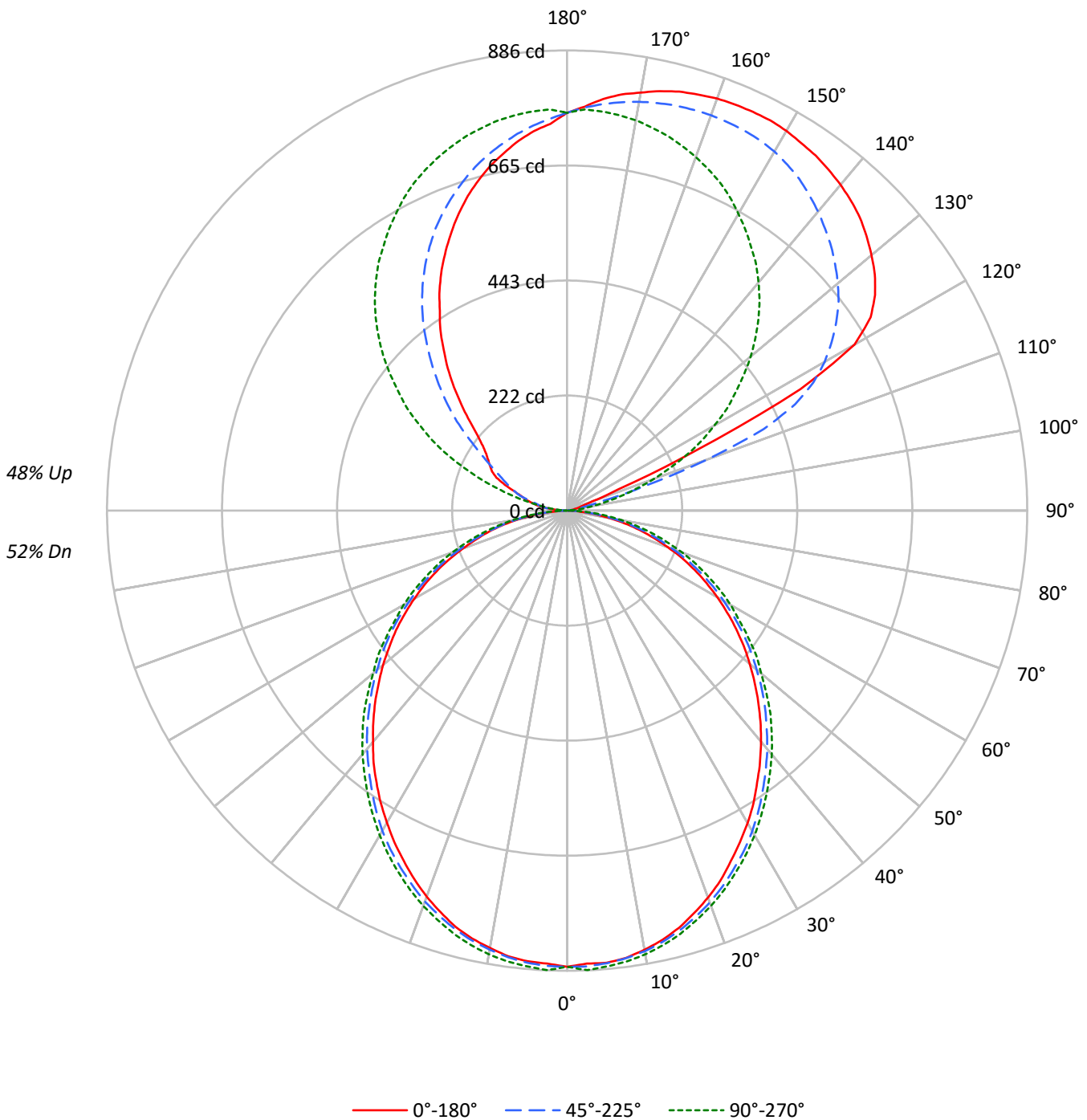
Lumens per Lamp: N/A
Luminaire Lumens: 4519.7 lumens
Efficiency: N/A
Efficacy: 113.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.32
Luminous Opening: Rectangular (W 4' x L: 0.12' x H: 0')
CIE Type: General Diffuse

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°	18910	18910	18910
5°	18885	19041	18827
10°	18769	18966	18690
15°	18534	18795	18494
20°	18165	18557	18124
25°	17701	18257	17680
30°	17271	17943	17249
35°	16770	17574	16817
40°	16314	17224	16339
45°	15837	16851	15920
50°	15373	16337	15493
55°	14897	15978	15099
60°	14376	15655	14648
65°	13799	15221	14166
70°	12973	14785	13426
75°	11978	14148	12876
80°	10265	13166	11604
85°	6447	11560	8448



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.9	1.8
10°-20°	234.9	5.2
20°-30°	347.7	7.7
30°-40°	408.4	9.0
40°-50°	414.1	9.2
50°-60°	369.3	8.2
60°-70°	283.1	6.3
70°-80°	166.7	3.7
80°-90°	44.9	1.0
90°-100°	21.8	0.5
100°-110°	94.1	2.1
110°-120°	263.7	5.8
120°-130°	381.2	8.4
130°-140°	411.5	9.1
140°-150°	391.4	8.7
150°-160°	321.2	7.1
160°-170°	210.0	4.6
170°-180°	72.8	1.6
0°-30°	665.6	14.7
0°-40°	1073.9	23.8
0°-60°	1857.3	41.1
0°-90°	2352.1	52.0
90°-120°	379.6	8.4
90°-150°	1563.7	34.6
90°-180°	2168.0	48.0
0°-180°	4519.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	878	878	878	878	878	
5°	874	875	881	874	871	83
15°	832	837	843	834	830	234
25°	745	760	769	759	744	344
35°	638	657	669	656	640	400
45°	520	539	554	539	523	401
55°	397	414	426	417	402	355
65°	271	284	299	288	278	268
75°	144	154	170	158	155	152
85°	26	34	47	39	34	34
90°	1	1	1	4	6	1
95°	5	6	16	30	27	6
105°	23	68	106	74	83	28
115°	273	484	255	132	150	301
125°	724	633	395	219	190	642
135°	797	719	521	353	287	615
145°	834	779	618	487	426	523
155°	847	807	697	599	553	392
165°	835	807	747	685	659	237
175°	796	786	771	744	734	77
180°	766	766	766	766	766	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	878.4	878.4	878.4	878.4	878.4	878.4	878.4	878.4	878.4	878.4	878.4
2.5°	873.0	872.1	874.8	876.6	876.6	877.5	879.3	880.2	879.3	882.9	878.4
5°	873.9	872.1	873.0	873.0	872.1	873.0	874.8	875.7	875.7	879.3	874.8
7.5°	868.5	867.6	868.5	867.6	866.7	867.6	868.5	870.3	869.4	873.0	869.4
10°	858.6	857.7	857.7	857.7	856.8	857.7	859.5	861.3	861.3	864.0	861.3
12.5°	846.9	845.1	846.0	846.9	845.1	846.0	847.8	849.6	849.6	853.2	850.5
15°	831.6	830.7	832.5	834.3	832.5	832.5	834.3	835.2	836.1	838.8	837.0
17.5°	812.7	812.7	814.5	817.2	815.4	815.4	817.2	819.0	819.0	820.8	820.8
20°	792.9	792.0	793.8	795.6	795.6	794.7	797.4	799.2	800.1	801.9	802.8
22.5°	771.3	769.5	770.4	773.1	772.2	772.2	773.1	776.7	778.5	780.3	783.0
25°	745.2	745.2	747.0	748.8	748.8	748.8	749.7	752.4	755.1	757.8	760.5
27.5°	720.0	720.0	720.9	724.5	724.5	723.6	725.4	729.9	732.6	734.4	738.0
30°	694.8	692.1	694.8	697.5	699.3	697.5	700.2	703.8	705.6	708.3	712.8
32.5°	667.8	666.9	666.9	670.5	672.3	671.4	672.3	676.8	680.4	681.3	685.8
35°	638.1	639.0	639.0	641.7	643.5	642.6	643.5	648.0	651.6	652.5	657.0
37.5°	610.2	610.2	610.2	612.9	614.7	614.7	614.7	619.2	622.8	625.5	628.2
40°	580.5	581.4	580.5	583.2	585.9	585.0	585.9	589.5	594.0	596.7	599.4
42.5°	550.8	549.9	549.9	552.6	556.2	555.3	556.2	559.8	563.4	567.0	568.8
45°	520.2	518.4	520.2	522.9	525.6	526.5	525.6	529.2	532.8	535.5	539.1
47.5°	489.6	488.7	488.7	491.4	494.1	494.1	495.0	497.7	502.2	504.0	508.5
50°	459.0	459.0	458.1	460.8	463.5	464.4	464.4	466.2	470.7	474.3	476.1
52.5°	428.4	428.4	428.4	429.3	431.1	433.8	433.8	435.6	438.3	442.8	445.5
55°	396.9	397.8	396.9	397.8	400.5	402.3	402.3	404.1	406.8	411.3	414.0
57.5°	365.4	366.3	365.4	366.3	369.0	369.9	370.8	372.6	374.4	378.0	380.7
60°	333.9	334.8	333.9	334.8	337.5	339.3	338.4	341.1	342.9	344.7	348.3
62.5°	302.4	304.2	303.3	305.1	306.0	307.8	306.9	309.6	311.4	313.2	316.8
65°	270.9	272.7	271.8	273.6	273.6	275.4	274.5	277.2	279.0	280.8	283.5
67.5°	239.4	241.2	240.3	241.2	242.1	243.9	242.1	245.7	247.5	248.4	251.1
70°	206.1	207.9	207.0	207.9	208.8	209.7	208.8	211.5	214.2	215.1	216.9
72.5°	174.6	176.4	176.4	177.3	177.3	179.1	179.1	179.1	180.9	183.6	184.5
75°	144.0	145.8	145.8	145.8	145.8	147.6	147.6	149.4	150.3	152.1	153.9
77.5°	113.4	115.2	115.2	115.2	115.2	117.0	117.0	118.8	119.7	121.5	123.3
80°	82.8	84.6	85.5	85.5	85.5	86.4	86.4	88.2	89.1	90.9	92.7
82.5°	54.0	54.9	55.8	54.9	55.8	56.7	58.5	58.5	59.4	61.2	63.0
85°	26.1	27.0	27.9	27.9	27.9	28.8	28.8	30.6	31.5	32.4	34.2
87.5°	3.6	4.5	4.5	4.5	4.5	5.4	5.4	5.4	6.3	6.3	8.1
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°	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	6.3
97.5°	8.1	8.1	9.0	8.1	9.0	9.0	9.0	9.0	9.9	9.9	11.7
100°	12.6	12.6	12.6	12.6	12.6	12.6	13.5	13.5	15.3	16.2	18.9
102.5°	17.1	17.1	17.1	18.0	18.0	18.9	18.9	19.8	22.5	26.1	34.2
105°	23.4	23.4	24.3	24.3	25.2	26.1	27.0	30.6	36.0	46.8	68.4
107.5°	32.4	33.3	34.2	35.1	37.8	40.5	43.2	53.1	69.3	102.6	153.0
110°	51.3	52.2	55.8	59.4	68.4	77.4	86.4	119.7	168.3	229.5	285.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	107.1	110.7	113.4	135.0	163.8	189.0	212.4	271.8	335.7	387.9	409.5
115°	272.7	279.0	283.5	325.8	370.8	399.6	417.6	458.1	484.2	492.3	484.2
117.5°	506.7	509.4	515.7	531.0	551.7	561.6	563.4	569.7	563.4	550.8	534.6
120°	639.0	639.0	635.4	636.3	633.6	633.6	630.0	620.1	606.6	591.3	572.4
122.5°	693.0	690.3	685.8	682.2	674.1	672.3	666.9	654.3	639.9	624.6	603.9
125°	723.6	720.9	717.3	712.8	703.8	700.2	694.8	682.2	667.8	651.6	632.7
127.5°	747.0	744.3	740.7	736.2	728.1	724.5	718.2	705.6	691.2	675.9	658.8
130°	765.0	764.1	759.6	756.9	748.8	745.2	738.9	726.3	712.8	697.5	680.4
132.5°	782.1	780.3	775.8	774.0	766.8	762.3	756.9	745.2	731.7	716.4	700.2
135°	797.4	795.6	790.2	788.4	782.1	776.7	772.2	761.4	749.7	734.4	719.1
137.5°	809.1	806.4	802.8	801.0	794.7	789.3	785.7	775.8	764.1	749.7	735.3
140°	819.0	816.3	813.6	811.8	806.4	801.9	797.4	787.5	777.6	765.9	751.5
142.5°	827.1	825.3	822.6	819.9	814.5	810.9	807.3	799.2	790.2	778.5	765.9
145°	834.3	832.5	829.8	828.0	821.7	819.0	815.4	808.2	800.1	788.4	779.4
147.5°	838.8	837.9	836.1	834.3	828.0	825.3	821.7	816.3	808.2	797.4	789.3
150°	844.2	842.4	840.6	839.7	833.4	830.7	828.9	822.6	815.4	805.5	798.3
152.5°	846.9	845.1	843.3	842.4	836.1	834.3	832.5	827.1	819.0	810.0	803.7
155°	846.9	846.0	844.2	843.3	837.0	834.3	833.4	828.0	820.8	813.6	807.3
157.5°	846.0	844.2	843.3	841.5	836.1	834.3	832.5	828.0	821.7	815.4	809.1
160°	844.2	842.4	841.5	839.7	835.2	833.4	832.5	828.0	823.5	817.2	810.0
162.5°	839.7	838.8	837.9	837.0	833.4	831.6	830.7	827.1	821.7	816.3	809.1
165°	835.2	833.4	832.5	830.7	827.1	827.1	826.2	823.5	818.1	815.4	807.3
167.5°	827.1	824.4	824.4	821.7	819.0	819.0	818.1	817.2	812.7	810.9	803.7
170°	817.2	816.3	814.5	813.6	811.8	811.8	810.9	810.0	806.4	806.4	799.2
172.5°	808.2	807.3	806.4	804.6	801.9	801.9	801.9	801.9	799.2	799.2	792.9
175°	795.6	793.8	793.8	792.9	791.1	792.0	792.0	792.0	790.2	792.0	785.7
177.5°	778.5	776.7	778.5	780.3	779.4	780.3	781.2	781.2	779.4	782.1	776.7
180°	765.9	765.9	765.9	765.9	765.9	765.9	765.9	765.9	765.9	765.9	765.9



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	878.4	878.4	878.4	878.4	878.4	878.4	878.4	878.4	878.4	878.4	878.4
2.5°	874.8	875.7	874.8	875.7	876.6	875.7	876.6	880.2	883.8	885.6	883.8
5°	871.2	872.1	871.2	872.1	873.0	872.1	873.0	875.7	880.2	881.1	880.2
7.5°	865.8	866.7	865.8	866.7	866.7	866.7	866.7	870.3	873.9	875.7	873.9
10°	856.8	857.7	856.8	858.6	858.6	858.6	858.6	862.2	865.8	867.6	864.9
12.5°	846.0	846.9	846.0	847.8	846.9	847.8	848.7	851.4	855.0	856.8	855.0
15°	831.6	833.4	832.5	834.3	834.3	834.3	834.3	837.9	841.5	843.3	841.5
17.5°	815.4	816.3	816.3	818.1	818.1	818.1	819.0	822.6	825.3	827.1	825.3
20°	797.4	799.2	799.2	800.1	800.1	801.0	801.9	804.6	808.2	810.0	808.2
22.5°	777.6	779.4	780.3	780.3	780.3	781.2	782.1	784.8	789.3	790.2	788.4
25°	756.9	756.9	758.7	758.7	759.6	760.5	761.4	763.2	767.7	768.6	767.7
27.5°	734.4	733.5	734.4	736.2	736.2	738.0	738.9	740.7	744.3	746.1	744.3
30°	709.2	709.2	711.0	711.9	711.9	712.8	714.6	716.4	720.0	721.8	720.0
32.5°	684.0	683.1	685.8	685.8	686.7	687.6	688.5	691.2	693.9	695.7	694.8
35°	657.9	655.2	658.8	658.8	659.7	661.5	661.5	663.3	666.9	668.7	666.9
37.5°	630.9	628.2	630.9	632.7	631.8	633.6	634.5	636.3	639.9	640.8	640.8
40°	603.0	600.3	603.0	603.9	603.9	604.8	606.6	607.5	610.2	612.9	611.1
42.5°	572.4	571.5	573.3	575.1	575.1	576.0	576.9	577.8	580.5	583.2	581.4
45°	541.8	541.8	543.6	545.4	546.3	546.3	547.2	548.1	549.9	553.5	550.8
47.5°	511.2	511.2	513.0	513.9	513.9	514.8	516.6	516.6	520.2	520.2	521.1
50°	478.8	480.6	482.4	485.1	483.3	484.2	486.0	486.0	487.8	487.8	490.5
52.5°	447.3	448.2	450.9	453.6	454.5	453.6	454.5	454.5	456.3	459.0	457.2
55°	415.8	415.8	419.4	422.1	422.1	422.1	422.1	423.0	425.7	425.7	425.7
57.5°	383.4	384.3	387.0	390.6	390.6	390.6	390.6	391.5	393.3	392.4	395.1
60°	351.9	351.9	355.5	357.3	357.3	359.1	359.1	360.0	360.9	363.6	363.6
62.5°	320.4	320.4	323.1	324.9	326.7	325.8	326.7	327.6	329.4	332.1	330.3
65°	288.0	288.0	290.7	291.6	294.3	293.4	294.3	297.0	297.9	298.8	297.9
67.5°	254.7	255.6	258.3	259.2	261.9	262.8	261.9	265.5	266.4	268.2	267.3
70°	219.6	220.5	224.1	225.0	226.8	225.9	227.7	232.2	234.0	234.9	233.1
72.5°	188.1	189.0	192.6	193.5	195.3	194.4	196.2	198.9	200.7	201.6	201.6
75°	155.7	157.5	159.3	161.1	163.8	162.9	164.7	167.4	169.2	170.1	170.1
77.5°	125.1	126.0	128.7	129.6	132.3	131.4	132.3	134.1	136.8	137.7	137.7
80°	94.5	96.3	97.2	99.0	100.8	99.9	101.7	104.4	105.3	106.2	106.2
82.5°	64.8	65.7	67.5	69.3	71.1	72.0	72.9	74.7	75.6	75.6	75.6
85°	36.0	37.8	39.6	40.5	42.3	41.4	44.1	45.9	46.8	46.8	47.7
87.5°	9.9	11.7	12.6	14.4	16.2	16.2	16.2	19.8	19.8	20.7	20.7
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°	2.7	3.6	3.6	4.5	5.4	6.3	9.0	9.0	7.2	6.3	7.2
95°	7.2	8.1	9.9	15.3	18.9	21.6	25.2	24.3	20.7	16.2	15.3
97.5°	13.5	17.1	24.3	36.9	44.1	47.7	51.3	45.9	38.7	31.5	28.8
100°	25.2	34.2	52.2	73.8	81.9	85.5	84.6	72.9	63.0	51.3	45.0
102.5°	47.7	72.9	103.5	127.8	133.2	128.7	121.5	107.1	92.7	76.5	66.6
105°	103.5	146.7	178.2	187.2	189.9	180.9	163.8	145.8	125.1	106.2	91.8
107.5°	206.1	245.7	257.4	251.1	247.5	232.2	210.6	187.2	162.9	139.5	121.5
110°	326.7	333.9	325.8	306.0	295.2	281.7	257.4	230.4	199.8	176.4	154.8



TEST NUMBER: P303169

CATALOG NUMBER: CTW-F-5050-50L940-UNV-STD-4

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	414.9	399.6	378.9	352.8	340.2	325.8	299.7	273.6	240.3	214.2	190.8
115°	471.6	449.1	423.9	396.0	382.5	367.2	341.1	312.3	279.0	254.7	227.7
117.5°	515.7	487.8	462.6	435.6	423.0	407.7	381.6	350.1	316.8	292.5	265.5
120°	549.9	523.8	497.7	472.5	458.1	445.5	418.5	387.0	353.7	326.7	301.5
122.5°	580.5	556.2	531.0	506.7	493.2	478.8	450.9	420.3	389.7	364.5	339.3
125°	609.3	586.8	561.6	537.3	523.8	509.4	482.4	452.7	422.1	395.1	373.5
127.5°	636.3	614.7	589.5	566.1	552.6	537.3	511.2	482.4	456.3	428.4	406.8
130°	660.6	640.8	616.5	593.1	579.6	565.2	539.1	511.2	486.0	461.7	438.3
132.5°	682.2	662.4	639.0	617.4	603.0	590.4	565.2	539.1	513.9	491.4	469.8
135°	702.9	682.2	660.6	638.1	625.5	613.8	589.5	565.2	541.8	521.1	501.3
137.5°	721.8	699.3	677.7	656.1	644.4	634.5	611.1	588.6	568.8	548.1	528.3
140°	738.0	714.6	694.8	674.1	663.3	653.4	631.8	610.2	593.1	573.3	554.4
142.5°	750.6	727.2	709.2	689.4	679.5	671.4	650.7	631.8	614.7	597.6	578.7
145°	760.5	739.8	722.7	703.8	695.7	686.7	667.8	650.7	635.4	618.3	601.2
147.5°	770.4	752.4	735.3	718.2	710.1	702.0	684.9	669.6	655.2	639.9	622.8
150°	778.5	762.3	747.0	731.7	724.5	716.4	701.1	686.7	674.1	659.7	643.5
152.5°	783.9	770.4	756.9	743.4	736.2	729.9	715.5	703.8	692.1	679.5	663.3
155°	788.4	777.6	765.0	753.3	747.0	741.6	728.1	717.3	707.4	696.6	682.2
157.5°	792.9	782.1	771.3	760.5	755.1	749.7	738.0	729.9	720.9	711.0	697.5
160°	794.7	786.6	775.8	766.8	762.3	757.8	747.9	740.7	733.5	724.5	711.9
162.5°	795.6	788.4	779.4	772.2	768.6	765.0	755.1	749.7	743.4	736.2	725.4
165°	795.6	790.2	783.0	776.7	773.1	770.4	762.3	757.8	753.3	747.0	737.1
167.5°	794.7	789.3	783.9	778.5	775.8	773.1	766.8	764.1	760.5	755.1	747.0
170°	792.0	788.4	783.0	779.4	777.6	774.9	770.4	768.6	766.8	763.2	755.1
172.5°	787.5	784.8	781.2	778.5	777.6	774.9	771.3	770.4	770.4	767.7	761.4
175°	781.2	780.3	777.6	775.8	774.0	773.1	770.4	771.3	772.2	771.3	765.9
177.5°	773.1	773.1	771.3	771.3	770.4	769.5	768.6	770.4	773.1	773.1	769.5
180°	765.9	765.9	765.9	765.9	765.9	765.9	765.9	765.9	765.9	765.9	765.9



TEST NUMBER: P303169

CATALOG NUMBER: CTW-F-5050-50L940-UNV-STD-4

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	878.4	878.4	878.4	878.4	878.4	878.4	878.4	878.4	878.4	878.4	878.4
2.5°	881.1	877.5	876.6	876.6	875.7	873.9	873.0	873.9	877.5	882.9	877.5
5°	877.5	873.9	872.1	872.1	872.1	869.4	869.4	869.4	873.9	878.4	873.0
7.5°	871.2	867.6	866.7	866.7	865.8	864.0	863.1	864.0	867.6	872.1	866.7
10°	863.1	859.5	858.6	857.7	856.8	855.0	854.1	855.0	858.6	862.2	857.7
12.5°	852.3	848.7	846.9	847.8	846.0	843.3	843.3	843.3	847.8	850.5	846.0
15°	838.8	834.3	833.4	833.4	832.5	829.8	829.8	829.8	834.3	836.1	830.7
17.5°	822.6	819.0	818.1	818.1	816.3	813.6	813.6	812.7	818.1	819.0	815.4
20°	805.5	801.9	800.1	800.1	798.3	795.6	795.6	794.7	801.0	799.2	796.5
22.5°	786.6	782.1	780.3	781.2	779.4	775.8	775.8	774.9	780.3	777.6	774.0
25°	765.9	760.5	759.6	758.7	757.8	753.3	753.3	753.3	758.7	754.2	751.5
27.5°	741.6	738.0	737.1	734.4	734.4	730.8	730.8	730.8	736.2	729.9	729.0
30°	717.3	713.7	713.7	711.0	710.1	706.5	706.5	706.5	711.9	705.6	703.8
32.5°	693.0	688.5	686.7	684.9	684.9	681.3	681.3	681.3	684.9	678.6	676.8
35°	666.0	661.5	661.5	657.9	657.9	654.3	653.4	655.2	656.1	650.7	648.9
37.5°	638.1	633.6	633.6	630.9	630.9	627.3	627.3	630.0	627.3	624.6	621.0
40°	610.2	606.6	604.8	602.1	603.0	600.3	599.4	601.2	599.4	596.7	592.2
42.5°	580.5	576.9	576.0	574.2	574.2	571.5	570.6	572.4	569.7	566.1	563.4
45°	550.8	548.1	547.2	545.4	545.4	541.8	541.8	542.7	539.1	537.3	533.7
47.5°	519.3	517.5	515.7	515.7	514.8	512.1	512.1	512.1	509.4	507.6	503.1
50°	488.7	486.0	485.1	485.1	485.1	482.4	481.5	479.7	477.9	477.0	472.5
52.5°	457.2	455.4	454.5	454.5	455.4	450.9	450.0	448.2	447.3	446.4	441.0
55°	425.7	423.9	422.1	423.9	423.0	419.4	418.5	419.4	416.7	414.0	409.5
57.5°	394.2	391.5	391.5	392.4	391.5	387.9	387.0	387.9	384.3	381.6	378.0
60°	362.7	360.0	359.1	360.0	359.1	355.5	354.6	354.6	351.9	350.1	346.5
62.5°	331.2	328.5	328.5	328.5	327.6	325.8	323.1	323.1	320.4	317.7	315.0
65°	297.9	295.2	296.1	296.1	296.1	294.3	291.6	292.5	288.0	286.2	283.5
67.5°	266.4	263.7	263.7	263.7	263.7	263.7	259.2	258.3	255.6	254.7	252.0
70°	233.1	229.5	230.4	229.5	228.6	227.7	225.0	224.1	221.4	221.4	218.7
72.5°	199.8	198.0	198.0	198.0	197.1	196.2	194.4	193.5	189.9	189.9	188.1
75°	166.5	166.5	165.6	165.6	165.6	164.7	162.9	162.0	158.4	159.3	157.5
77.5°	135.9	135.9	134.1	134.1	134.1	133.2	132.3	129.6	129.6	127.8	126.9
80°	104.4	104.4	103.5	103.5	103.5	102.6	101.7	100.8	99.0	98.1	96.3
82.5°	75.6	74.7	73.8	73.8	72.9	72.9	72.0	71.1	69.3	66.6	65.7
85°	45.9	45.9	45.0	45.0	44.1	44.1	42.3	40.5	38.7	36.9	36.0
87.5°	19.8	19.8	17.1	17.1	16.2	16.2	15.3	14.4	12.6	11.7	10.8
90°	1.8	2.7	2.7	2.7	3.6	3.6	3.6	4.5	4.5	4.5	4.5
92.5°	10.8	13.5	14.4	14.4	14.4	14.4	14.4	14.4	14.4	13.5	13.5
95°	18.0	19.8	24.3	26.1	27.9	29.7	29.7	29.7	29.7	28.8	27.0
97.5°	27.0	28.8	31.5	31.5	32.4	36.9	40.5	42.3	44.1	45.0	45.0
100°	42.3	38.7	42.3	45.0	44.1	44.1	45.9	49.5	53.1	54.9	55.8
102.5°	60.3	54.0	52.2	54.0	55.8	59.4	57.6	58.5	60.3	63.0	65.7
105°	82.8	74.7	68.4	67.5	67.5	71.1	75.6	74.7	73.8	73.8	73.8
107.5°	108.9	97.2	87.3	85.5	83.7	83.7	86.4	91.8	95.4	91.8	90.0
110°	138.6	122.4	112.5	107.1	103.5	99.9	99.9	102.6	107.1	111.6	113.4



TEST NUMBER: P303169

CATALOG NUMBER: CTW-F-5050-50L940-UNV-STD-4

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
112.5°	171.9	152.1	138.6	134.1	126.9	118.8	116.1	116.1	118.8	123.3	126.9
115°	206.1	185.4	166.5	161.1	153.9	141.3	134.1	132.3	132.3	134.1	137.7
117.5°	243.9	218.7	198.0	190.8	182.7	168.3	156.6	150.3	147.6	147.6	149.4
120°	277.2	255.6	234.0	224.1	214.2	198.0	182.7	172.8	166.5	162.9	162.0
122.5°	315.0	292.5	269.1	261.0	250.2	231.3	215.1	199.8	189.9	182.7	177.3
125°	349.2	328.5	304.2	294.3	284.4	265.5	249.3	232.2	218.7	207.0	198.0
127.5°	382.5	361.8	338.4	329.4	319.5	299.7	282.6	266.4	252.0	237.6	225.0
130°	415.8	396.0	372.6	362.7	353.7	334.8	315.9	299.7	287.1	272.7	258.3
132.5°	448.2	427.5	405.9	395.1	387.0	368.1	351.0	333.9	319.5	306.9	293.4
135°	478.8	459.0	437.4	426.6	418.5	401.4	384.3	369.0	352.8	340.2	327.6
137.5°	507.6	487.8	468.9	457.2	449.1	433.8	417.6	403.2	387.0	373.5	360.9
140°	534.6	515.7	497.7	487.8	478.8	463.5	449.1	437.4	420.3	407.7	395.1
142.5°	559.8	540.9	523.8	515.7	506.7	492.3	478.8	468.0	455.4	441.9	429.3
145°	582.3	566.1	549.9	541.8	533.7	520.2	507.6	497.7	486.9	473.4	461.7
147.5°	605.7	589.5	574.2	567.0	560.7	547.2	535.5	525.6	517.5	504.9	493.2
150°	627.3	612.0	598.5	591.3	585.9	571.5	562.5	552.6	546.3	534.6	524.7
152.5°	648.0	634.5	621.0	615.6	609.3	595.8	586.8	576.9	573.3	561.6	553.5
155°	667.8	653.4	642.6	637.2	630.9	618.3	611.1	602.1	599.4	588.6	580.5
157.5°	685.8	671.4	661.5	656.1	650.7	639.9	632.7	624.6	622.8	614.7	605.7
160°	701.1	687.6	678.6	675.0	669.6	659.7	652.5	646.2	644.4	639.0	630.0
162.5°	714.6	702.9	695.7	691.2	686.7	677.7	672.3	665.1	665.1	660.6	653.4
165°	728.1	717.3	710.1	706.5	702.9	695.7	689.4	684.9	684.9	681.3	674.1
167.5°	738.9	729.0	723.6	720.0	717.3	710.1	705.6	701.1	702.0	700.2	693.0
170°	748.8	739.8	735.3	732.6	729.9	723.6	720.9	716.4	717.3	717.3	711.0
172.5°	756.9	748.8	745.2	742.5	741.6	735.3	733.5	730.8	731.7	733.5	725.4
175°	762.3	756.0	752.4	751.5	749.7	746.1	743.4	742.5	744.3	747.0	739.8
177.5°	766.8	761.4	759.6	759.6	757.8	754.2	752.4	752.4	755.1	758.7	753.3
180°	765.9	765.9	765.9	765.9	765.9	765.9	765.9	765.9	765.9	765.9	765.9



TEST NUMBER: P303169

CATALOG NUMBER: CTW-F-5050-50L940-UNV-STD-4

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	878.4	878.4	878.4	878.4	878.4	878.4	878.4	878.4
2.5°	879.3	878.4	877.5	875.7	874.8	873.0	872.1	873.0
5°	873.9	873.0	872.1	871.2	871.2	870.3	870.3	871.2
7.5°	867.6	866.7	865.8	864.9	864.9	864.9	864.9	865.8
10°	858.6	856.8	855.9	855.0	854.1	854.1	854.1	855.0
12.5°	846.9	845.1	843.3	842.4	842.4	842.4	842.4	844.2
15°	831.6	830.7	829.8	828.9	828.9	828.0	828.0	829.8
17.5°	816.3	814.5	812.7	811.8	810.9	810.9	810.0	810.9
20°	795.6	793.8	792.0	791.1	791.1	790.2	790.2	791.1
22.5°	773.1	770.4	769.5	768.6	768.6	767.7	767.7	768.6
25°	750.6	747.0	746.1	745.2	745.2	744.3	744.3	744.3
27.5°	727.2	723.6	722.7	720.9	721.8	720.0	719.1	720.0
30°	702.0	698.4	697.5	695.7	695.7	693.9	693.0	693.9
32.5°	675.0	671.4	670.5	669.6	670.5	666.9	666.0	667.8
35°	647.1	643.5	643.5	641.7	642.6	639.0	639.0	639.9
37.5°	618.3	614.7	615.6	613.8	613.8	611.1	611.1	612.0
40°	589.5	586.8	585.0	585.0	585.9	582.3	582.3	581.4
42.5°	559.8	557.1	556.2	556.2	555.3	552.6	551.7	552.6
45°	530.1	527.4	527.4	526.5	526.5	522.9	523.8	522.9
47.5°	499.5	497.7	496.8	495.9	495.9	492.3	493.2	492.3
50°	468.9	468.0	467.1	466.2	466.2	462.6	464.4	462.6
52.5°	438.3	437.4	436.5	436.5	435.6	433.8	433.8	432.0
55°	407.7	405.9	405.9	405.9	405.0	402.3	404.1	402.3
57.5°	377.1	375.3	374.4	373.5	373.5	372.6	371.7	370.8
60°	345.6	343.8	343.8	342.0	342.0	342.0	341.1	340.2
62.5°	314.1	312.3	312.3	311.4	311.4	311.4	310.5	309.6
65°	283.5	280.8	280.8	279.9	279.9	279.9	279.0	278.1
67.5°	251.1	249.3	249.3	248.4	249.3	249.3	248.4	246.6
70°	217.8	216.0	216.0	215.1	216.0	216.0	215.1	213.3
72.5°	187.2	185.4	184.5	185.4	185.4	185.4	183.6	182.7
75°	156.6	153.9	153.9	154.8	153.9	154.8	153.0	154.8
77.5°	126.0	123.3	123.3	124.2	123.3	123.3	122.4	124.2
80°	94.5	92.7	92.7	93.6	92.7	92.7	91.8	93.6
82.5°	64.8	63.9	64.8	63.0	61.2	61.2	60.3	62.1
85°	36.0	35.1	34.2	34.2	33.3	33.3	32.4	34.2
87.5°	10.8	11.7	11.7	10.8	10.8	10.8	10.8	11.7
90°	4.5	4.5	4.5	5.4	5.4	6.3	6.3	6.3
92.5°	13.5	13.5	12.6	13.5	12.6	12.6	12.6	12.6
95°	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0
97.5°	45.0	45.9	45.0	45.9	45.0	44.1	45.0	44.1
100°	56.7	58.5	58.5	59.4	59.4	59.4	59.4	59.4
102.5°	67.5	69.3	69.3	70.2	70.2	71.1	71.1	70.2
105°	76.5	77.4	78.3	79.2	81.0	82.8	82.8	82.8
107.5°	89.1	90.9	90.0	90.9	91.8	91.8	91.8	91.8
110°	111.6	109.8	108.9	107.1	107.1	107.1	107.1	107.1



TEST NUMBER: P303169

CATALOG NUMBER: CTW-F-5050-50L940-UNV-STD-4

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
112.5°	130.5	132.3	132.3	132.3	132.3	131.4	129.6	129.6
115°	142.2	145.8	146.7	147.6	149.4	150.3	150.3	150.3
117.5°	151.2	154.8	155.7	157.5	159.3	161.1	162.0	162.9
120°	162.9	165.6	166.5	166.5	168.3	169.2	171.0	171.0
122.5°	176.4	177.3	177.3	177.3	178.2	179.1	180.0	180.0
125°	194.4	191.7	191.7	189.9	189.9	189.0	189.9	189.9
127.5°	216.9	213.3	211.5	208.8	207.0	204.3	204.3	204.3
130°	248.4	242.1	238.5	234.0	230.4	225.0	225.0	225.0
132.5°	282.6	272.7	270.0	265.5	260.1	254.7	253.8	253.8
135°	317.7	306.9	303.3	298.8	292.5	288.0	284.4	287.1
137.5°	351.0	341.1	340.2	336.6	328.5	323.1	322.2	322.2
140°	385.2	374.4	372.6	369.0	364.5	359.1	356.4	357.3
142.5°	418.5	407.7	405.9	403.2	396.9	392.4	389.7	390.6
145°	452.7	441.9	440.1	436.5	430.2	426.6	423.0	425.7
147.5°	485.1	475.2	472.5	468.0	464.4	459.9	457.2	456.3
150°	516.6	506.7	504.9	500.4	496.8	493.2	489.6	491.4
152.5°	546.3	539.1	535.5	531.0	528.3	524.7	522.0	522.9
155°	574.2	565.2	563.4	559.8	558.0	554.4	552.6	552.6
157.5°	598.5	593.1	590.4	587.7	585.0	583.2	580.5	581.4
160°	624.6	619.2	616.5	614.7	611.1	611.1	608.4	609.3
162.5°	648.9	644.4	641.7	639.9	638.1	637.2	634.5	635.4
165°	670.5	666.0	665.1	662.4	661.5	661.5	658.8	658.8
167.5°	690.3	686.7	684.0	683.1	681.3	681.3	679.5	680.4
170°	709.2	705.6	703.8	702.0	700.2	700.2	699.3	699.3
172.5°	725.4	722.7	721.8	720.0	719.1	719.1	718.2	718.2
175°	740.7	738.0	737.1	735.3	734.4	733.5	733.5	733.5
177.5°	754.2	753.3	751.5	751.5	749.7	747.9	746.1	745.2
180°	765.9	765.9	765.9	765.9	765.9	765.9	765.9	765.9

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