

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: P303121

Luminaire Tested: **CTW-F-5050-20L840-UNV-STD-6**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P303121
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-181-7)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: CTW-F-5050-20L840-UNV-STD-6
Description: CORELITE CONTINUA LINEAR WALL LED LUMINAIRE
50% UPLIGHT, 50% DOWNLIGHT, 2000 LUMEN PACKAGE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

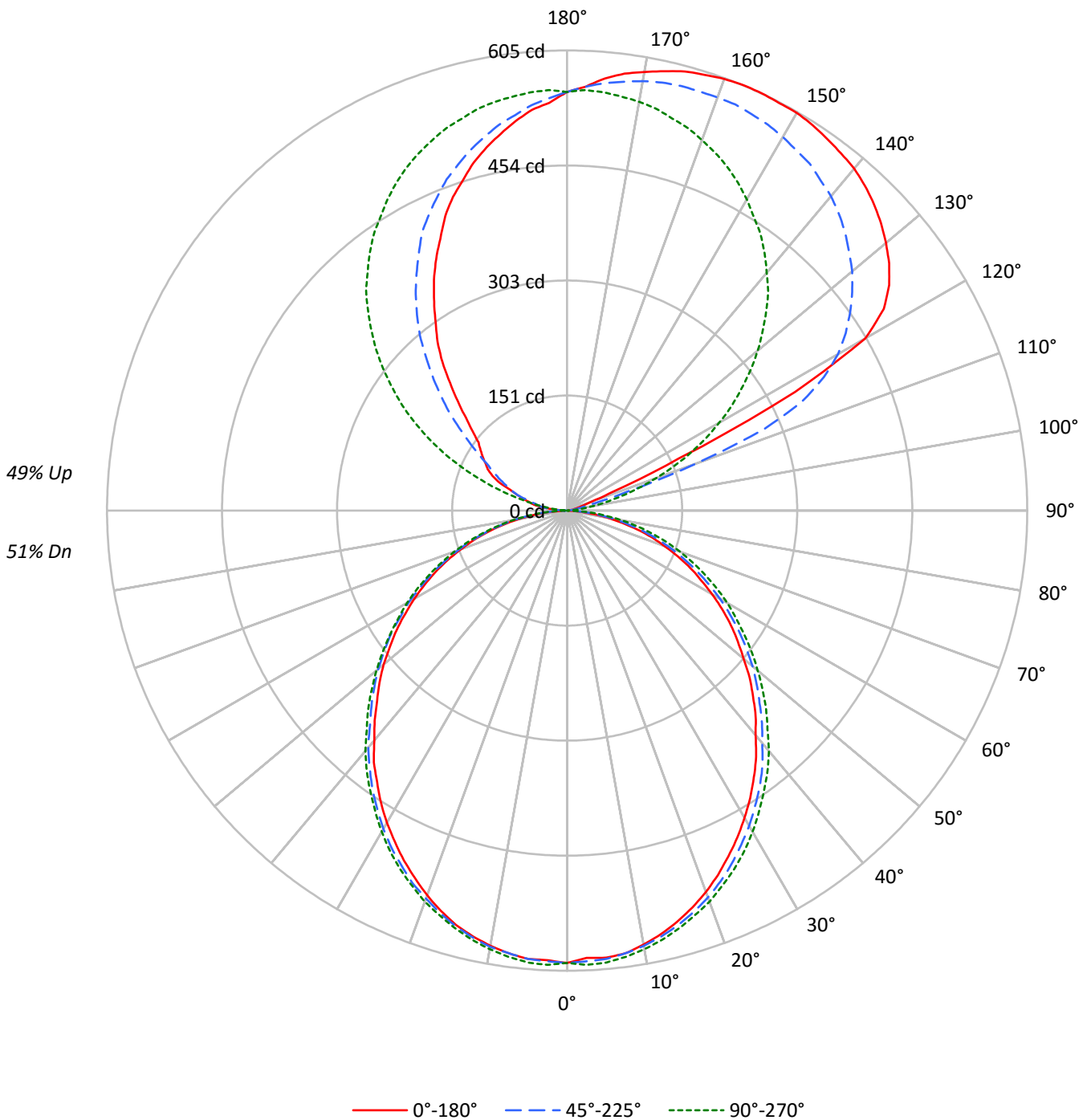
Lumens per Lamp: N/A
Luminaire Lumens: 3130.7 lumens
Efficiency: N/A
Efficacy: 130.4 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.31
Luminous Opening: Rectangular (W 6' x L: 0.12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 24
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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	98	93	89	86	90	86	83	80	73	71	68	61	59	58	50	49	48	42
2	89	81	75	70	82	75	70	65	64	60	57	54	51	48	44	42	40	35
3	81	72	64	58	75	66	60	55	56	51	47	47	44	41	39	36	34	30
4	74	63	55	49	68	59	52	46	50	45	40	42	38	35	35	32	29	26
5	68	56	48	42	63	52	45	40	45	39	35	38	33	30	31	28	25	22
6	63	50	42	36	58	47	40	34	40	35	30	34	30	26	28	25	22	19
7	58	46	38	32	53	42	35	30	37	31	27	31	27	23	26	22	20	17
8	54	41	34	28	50	39	32	27	33	28	24	28	24	21	24	20	18	15
9	50	38	30	25	46	35	28	24	31	25	21	26	22	19	22	18	16	14
10	47	35	27	23	43	32	26	21	28	23	19	24	20	17	20	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	8535	8535	8535
5°	8501	8591	8524
10°	8444	8533	8467
15°	8315	8450	8381
20°	8150	8359	8220
25°	7942	8231	8038
30°	7728	8082	7854
35°	7500	7902	7634
40°	7219	7734	7389
45°	7012	7510	7169
50°	6759	7306	7031
55°	6581	7116	6848
60°	6321	6978	6671
65°	6075	6802	6490
70°	5711	6609	6223
75°	5257	6360	5933
80°	4422	5942	5306
85°	2519	5286	4034



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.1	1.8
10°-20°	158.9	5.1
20°-30°	235.4	7.5
30°-40°	276.1	8.8
40°-50°	277.7	8.9
50°-60°	247.7	7.9
60°-70°	190.0	6.1
70°-80°	113.0	3.6
80°-90°	30.6	1.0
90°-100°	14.6	0.5
100°-110°	65.0	2.1
110°-120°	185.1	5.9
120°-130°	272.7	8.7
130°-140°	294.2	9.4
140°-150°	280.1	8.9
150°-160°	230.5	7.4
160°-170°	150.7	4.8
170°-180°	52.3	1.7
0°-30°	450.5	14.4
0°-40°	726.6	23.2
0°-60°	1251.9	40.0
0°-90°	1585.6	50.6
90°-120°	264.7	8.5
90°-150°	1111.6	35.5
90°-180°	1545.0	49.3
0°-180°	3130.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	595	595	595	595	595	
5°	590	592	596	592	592	56
15°	560	564	569	566	564	158
25°	502	512	520	515	508	231
35°	428	442	451	446	436	268
45°	346	358	370	364	353	267
55°	263	275	284	283	274	235
65°	179	188	200	196	191	176
75°	95	102	115	110	107	100
85°	15	21	32	29	24	21
90°	2	2	0	2	3	1
95°	3	3	11	20	18	3
105°	15	38	73	55	60	18
115°	162	342	179	98	108	198
125°	517	454	280	158	139	458
135°	570	517	370	251	203	440
145°	596	556	443	347	301	374
155°	605	575	498	430	394	280
165°	598	578	534	491	474	169
175°	570	564	552	535	529	55
180°	550	550	550	550	550	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	594.7	594.7	594.7	594.7	594.7	594.7	594.7	594.7	594.7	594.7	594.7
2.5°	588.6	588.6	590.1	591.7	593.2	593.2	594.7	594.7	594.7	594.7	593.2
5°	590.1	588.6	590.1	590.1	590.1	590.1	591.7	593.2	593.2	593.2	591.7
7.5°	587.1	585.5	587.1	587.1	585.5	585.5	587.1	588.6	588.6	588.6	587.1
10°	579.4	577.9	579.4	579.4	579.4	579.4	581.0	581.0	582.5	582.5	581.0
12.5°	570.3	570.3	570.3	571.8	570.3	571.8	571.8	573.3	574.8	574.8	573.3
15°	559.6	559.6	561.1	562.6	561.1	562.6	562.6	564.1	564.1	565.7	564.1
17.5°	547.3	547.3	548.9	550.4	550.4	550.4	551.9	551.9	553.4	553.4	553.4
20°	533.6	533.6	533.6	536.6	536.6	536.6	536.6	538.2	541.2	541.2	541.2
22.5°	518.3	518.3	518.3	521.3	521.3	521.3	521.3	522.9	525.9	527.5	527.5
25°	501.5	501.5	501.5	504.5	504.5	504.5	504.5	507.6	510.6	510.6	512.2
27.5°	484.6	484.6	486.2	487.7	487.7	487.7	489.2	490.8	493.8	495.3	495.3
30°	466.3	466.3	466.3	469.4	469.4	470.9	470.9	473.9	475.5	478.5	478.5
32.5°	448.0	448.0	449.5	451.0	451.0	451.0	452.5	455.6	457.1	458.7	460.2
35°	428.1	428.1	429.6	431.1	432.7	432.7	432.7	435.7	437.3	440.3	441.8
37.5°	408.2	408.2	409.7	411.3	412.8	412.8	412.8	415.8	417.4	420.4	422.0
40°	385.3	385.3	385.3	388.3	388.3	389.9	389.9	391.4	394.4	397.5	399.0
42.5°	366.9	365.4	365.4	366.9	368.5	370.0	370.0	371.5	374.6	377.6	379.2
45°	345.5	345.5	345.5	347.0	348.6	348.6	350.1	351.6	353.2	357.8	357.8
47.5°	325.6	324.1	324.1	327.2	327.2	328.7	328.7	330.2	333.3	336.3	337.9
50°	302.7	304.2	304.2	305.8	307.3	307.3	308.8	308.8	311.9	314.9	318.0
52.5°	282.8	282.8	282.8	284.4	285.9	287.4	287.4	289.0	290.5	293.5	296.6
55°	263.0	263.0	263.0	264.5	264.5	266.0	266.0	267.5	269.1	272.1	275.2
57.5°	241.6	241.6	241.6	243.1	244.6	244.6	246.1	246.1	247.7	250.7	253.8
60°	220.2	220.2	220.2	221.7	223.2	223.2	224.7	224.7	226.3	229.3	232.4
62.5°	198.8	200.3	198.8	200.3	201.8	201.8	203.3	203.3	206.4	206.4	209.5
65°	178.9	178.9	178.9	178.9	180.4	180.4	180.4	183.5	183.5	186.5	188.0
67.5°	157.5	157.5	157.5	157.5	159.0	160.5	160.5	162.1	163.6	163.6	166.6
70°	136.1	137.6	137.6	136.1	137.6	139.1	139.1	140.7	142.2	142.2	145.2
72.5°	116.2	116.2	116.2	116.2	116.2	117.7	119.3	119.3	120.8	122.3	123.8
75°	94.8	94.8	96.3	94.8	94.8	96.3	97.8	99.4	99.4	100.9	102.4
77.5°	73.4	74.9	74.9	74.9	76.4	76.4	76.4	78.0	79.5	79.5	81.0
80°	53.5	55.0	55.0	55.0	56.6	55.0	56.6	58.1	58.1	59.6	61.2
82.5°	33.6	33.6	35.2	35.2	35.2	35.2	36.7	38.2	38.2	38.2	41.3
85°	15.3	15.3	16.8	16.8	16.8	16.8	18.3	18.3	19.9	19.9	21.4
87.5°	1.5	1.5	1.5	1.5	3.1	1.5	3.1	3.1	3.1	3.1	4.6
90°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
92.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
95°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
97.5°	4.6	4.6	4.6	4.6	4.6	4.6	6.1	6.1	6.1	6.1	7.6
100°	7.6	7.6	7.6	7.6	7.6	7.6	7.6	9.2	9.2	10.7	12.2
102.5°	10.7	10.7	10.7	10.7	12.2	12.2	12.2	13.8	13.8	16.8	19.9
105°	15.3	15.3	15.3	16.8	16.8	16.8	18.3	19.9	22.9	29.0	38.2
107.5°	21.4	22.9	22.9	22.9	26.0	26.0	29.0	33.6	41.3	59.6	84.1
110°	33.6	35.2	35.2	38.2	44.3	47.4	53.5	70.3	94.8	133.0	178.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	65.7	68.8	71.9	81.0	97.8	110.1	126.9	166.6	211.0	261.4	281.3
115°	162.1	163.6	177.3	195.7	233.9	255.3	275.2	310.4	337.9	344.0	342.5
117.5°	337.9	345.5	353.2	365.4	382.2	389.9	399.0	406.7	400.6	392.9	380.7
120°	452.5	449.5	452.5	454.1	452.5	452.5	451.0	444.9	434.2	423.5	411.3
122.5°	493.8	492.3	490.8	489.2	483.1	481.6	478.5	469.4	458.7	446.4	434.2
125°	516.8	515.2	512.2	509.1	504.5	501.5	498.4	489.2	478.5	466.3	454.1
127.5°	533.6	532.0	529.0	525.9	521.3	518.3	513.7	506.0	495.3	484.6	472.4
130°	547.3	545.8	542.7	541.2	535.1	533.6	529.0	519.8	510.6	501.5	489.2
132.5°	559.6	558.0	555.0	553.4	548.9	545.8	542.7	533.6	522.9	513.7	503.0
135°	570.3	568.7	567.2	565.7	561.1	558.0	553.4	545.8	536.6	527.5	516.8
137.5°	579.4	577.9	576.4	573.3	570.3	567.2	562.6	555.0	548.9	539.7	529.0
140°	587.1	585.5	582.5	581.0	577.9	574.8	571.8	565.7	558.0	550.4	539.7
142.5°	591.7	591.7	588.6	588.6	584.0	581.0	577.9	571.8	567.2	559.6	547.3
145°	596.3	596.3	594.7	593.2	590.1	587.1	584.0	579.4	573.3	567.2	556.5
147.5°	600.8	599.3	599.3	597.8	594.7	591.7	590.1	585.5	579.4	573.3	561.1
150°	603.9	602.4	602.4	600.8	597.8	594.7	593.2	590.1	584.0	577.9	567.2
152.5°	603.9	603.9	605.4	602.4	599.3	597.8	596.3	591.7	588.6	581.0	571.8
155°	605.4	605.4	605.4	603.9	599.3	597.8	596.3	593.2	590.1	584.0	574.8
157.5°	605.4	605.4	605.4	603.9	599.3	597.8	596.3	594.7	591.7	585.5	577.9
160°	603.9	603.9	603.9	603.9	600.8	597.8	596.3	594.7	591.7	585.5	577.9
162.5°	600.8	600.8	600.8	600.8	597.8	596.3	594.7	593.2	591.7	584.0	577.9
165°	597.8	597.8	597.8	596.3	593.2	593.2	591.7	590.1	588.6	582.5	577.9
167.5°	591.7	591.7	591.7	590.1	587.1	587.1	587.1	585.5	584.0	579.4	576.4
170°	585.5	585.5	585.5	584.0	582.5	582.5	582.5	581.0	581.0	576.4	573.3
172.5°	579.4	579.4	579.4	577.9	574.8	574.8	574.8	576.4	574.8	571.8	568.7
175°	570.3	568.7	568.7	568.7	568.7	567.2	568.7	568.7	568.7	565.7	564.1
177.5°	558.0	558.0	558.0	559.6	559.6	559.6	559.6	561.1	561.1	559.6	558.0
180°	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	594.7	594.7	594.7	594.7	594.7	594.7	594.7	594.7	594.7	594.7	594.7
2.5°	591.7	593.2	591.7	591.7	591.7	591.7	591.7	593.2	596.3	597.8	596.3
5°	590.1	591.7	590.1	590.1	590.1	590.1	590.1	591.7	594.7	596.3	594.7
7.5°	585.5	587.1	585.5	585.5	585.5	585.5	585.5	587.1	591.7	591.7	591.7
10°	579.4	581.0	579.4	579.4	579.4	581.0	581.0	582.5	585.5	585.5	585.5
12.5°	571.8	573.3	571.8	571.8	573.3	573.3	571.8	574.8	577.9	577.9	577.9
15°	562.6	564.1	562.6	562.6	562.6	564.1	564.1	565.7	568.7	568.7	568.7
17.5°	550.4	551.9	551.9	551.9	553.4	553.4	553.4	555.0	558.0	558.0	558.0
20°	539.7	539.7	539.7	539.7	539.7	541.2	541.2	544.3	547.3	547.3	547.3
22.5°	525.9	525.9	527.5	525.9	527.5	529.0	527.5	530.5	533.6	533.6	533.6
25°	510.6	512.2	512.2	512.2	512.2	513.7	513.7	516.8	518.3	519.8	519.8
27.5°	495.3	495.3	496.9	496.9	496.9	498.4	498.4	501.5	504.5	504.5	504.5
30°	478.5	478.5	480.1	481.6	480.1	481.6	481.6	484.6	486.2	487.7	487.7
32.5°	460.2	460.2	463.2	463.2	463.2	464.8	464.8	466.3	469.4	469.4	470.9
35°	441.8	441.8	444.9	444.9	444.9	446.4	446.4	448.0	451.0	451.0	452.5
37.5°	422.0	423.5	425.0	426.5	425.0	426.5	426.5	429.6	431.1	432.7	432.7
40°	402.1	402.1	403.6	405.1	405.1	406.7	408.2	409.7	412.8	412.8	412.8
42.5°	379.2	380.7	382.2	383.7	383.7	385.3	386.8	386.8	388.3	389.9	389.9
45°	359.3	360.8	360.8	363.9	365.4	365.4	365.4	366.9	368.5	370.0	370.0
47.5°	339.4	340.9	342.5	345.5	344.0	344.0	345.5	345.5	347.0	348.6	350.1
50°	318.0	319.5	321.1	322.6	322.6	324.1	324.1	325.6	327.2	327.2	328.7
52.5°	296.6	298.1	301.2	301.2	302.7	302.7	304.2	304.2	305.8	305.8	307.3
55°	275.2	276.7	279.8	281.3	281.3	282.8	282.8	284.4	284.4	284.4	285.9
57.5°	253.8	255.3	258.4	259.9	259.9	261.4	261.4	263.0	263.0	263.0	264.5
60°	232.4	233.9	237.0	238.5	238.5	240.0	240.0	241.6	241.6	243.1	243.1
62.5°	212.5	212.5	215.6	217.1	217.1	217.1	218.6	220.2	220.2	221.7	223.2
65°	189.6	191.1	194.2	195.7	194.2	195.7	197.2	198.8	198.8	200.3	200.3
67.5°	168.2	169.7	172.8	172.8	172.8	174.3	175.8	177.3	177.3	178.9	178.9
70°	146.8	146.8	149.8	151.4	151.4	152.9	154.4	155.9	155.9	157.5	157.5
72.5°	123.8	125.4	128.4	130.0	131.5	131.5	133.0	133.0	136.1	136.1	136.1
75°	104.0	104.0	107.0	108.5	110.1	110.1	111.6	111.6	113.1	114.7	114.7
77.5°	82.6	84.1	85.6	87.1	88.7	88.7	90.2	90.2	91.7	93.3	93.3
80°	62.7	62.7	65.7	65.7	67.3	67.3	68.8	70.3	71.9	71.9	71.9
82.5°	41.3	42.8	45.9	45.9	47.4	47.4	48.9	48.9	50.5	50.5	52.0
85°	22.9	24.5	26.0	26.0	27.5	27.5	29.0	30.6	30.6	32.1	32.1
87.5°	4.6	7.6	7.6	9.2	9.2	10.7	10.7	12.2	13.8	13.8	13.8
90°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	1.5	0.0	1.5
92.5°	1.5	1.5	1.5	3.1	3.1	3.1	4.6	4.6	4.6	4.6	6.1
95°	4.6	4.6	6.1	7.6	9.2	10.7	13.8	15.3	13.8	10.7	10.7
97.5°	7.6	10.7	13.8	19.9	22.9	26.0	30.6	29.0	26.0	21.4	19.9
100°	15.3	21.4	29.0	41.3	47.4	52.0	53.5	50.5	42.8	35.2	32.1
102.5°	27.5	41.3	59.6	79.5	84.1	85.6	82.6	74.9	64.2	53.5	45.9
105°	56.6	85.6	111.6	126.9	128.4	125.4	117.7	102.4	88.7	73.4	64.2
107.5°	122.3	160.5	175.8	177.3	172.8	165.1	149.8	133.0	116.2	99.4	85.6
110°	217.1	233.9	230.9	217.1	209.5	201.8	181.9	163.6	143.7	123.8	110.1



TEST NUMBER: P303121

CATALOG NUMBER: CTW-F-5050-20L840-UNV-STD-6

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	289.0	284.4	270.6	252.3	243.1	233.9	214.0	194.2	169.7	151.4	136.1
115°	334.8	321.1	302.7	282.8	273.7	264.5	244.6	221.7	198.8	178.9	162.1
117.5°	366.9	350.1	331.8	311.9	301.2	292.0	270.6	247.7	226.3	204.9	189.6
120°	392.9	374.6	356.2	336.3	328.7	318.0	296.6	273.7	250.7	230.9	215.6
122.5°	417.4	399.0	379.2	362.3	351.6	342.5	319.5	298.1	276.7	256.8	241.6
125°	440.3	422.0	402.1	383.7	374.6	363.9	340.9	321.1	299.7	279.8	266.0
127.5°	457.1	441.8	425.0	406.7	396.0	385.3	362.3	342.5	322.6	304.2	289.0
130°	473.9	458.7	443.4	426.5	417.4	403.6	383.7	362.3	344.0	327.2	313.4
132.5°	487.7	475.5	458.7	443.4	432.7	422.0	402.1	382.2	365.4	348.6	334.8
135°	503.0	489.2	473.9	458.7	449.5	440.3	422.0	402.1	386.8	370.0	356.2
137.5°	515.2	501.5	487.7	472.4	463.2	454.1	438.8	420.4	405.1	391.4	376.1
140°	525.9	512.2	499.9	484.6	475.5	467.8	452.5	437.3	425.0	408.2	396.0
142.5°	535.1	521.3	510.6	495.3	486.2	480.1	466.3	451.0	440.3	426.5	415.8
145°	542.7	530.5	519.8	506.0	498.4	492.3	478.5	466.3	455.6	443.4	432.7
147.5°	551.9	538.2	529.0	515.2	509.1	503.0	490.8	478.5	469.4	457.1	448.0
150°	558.0	547.3	538.2	524.4	518.3	512.2	501.5	492.3	483.1	472.4	463.2
152.5°	562.6	553.4	544.3	532.0	527.5	522.9	512.2	503.0	495.3	486.2	477.0
155°	567.2	558.0	551.9	539.7	535.1	530.5	521.3	513.7	506.0	498.4	489.2
157.5°	570.3	562.6	556.5	545.8	542.7	538.2	530.5	522.9	516.8	509.1	501.5
160°	571.8	565.7	559.6	550.4	547.3	544.3	536.6	530.5	525.9	518.3	512.2
162.5°	571.8	567.2	561.1	553.4	550.4	547.3	542.7	536.6	533.6	527.5	521.3
165°	571.8	568.7	562.6	556.5	553.4	551.9	547.3	542.7	539.7	533.6	529.0
167.5°	570.3	567.2	562.6	558.0	556.5	553.4	550.4	545.8	544.3	541.2	535.1
170°	568.7	567.2	562.6	559.6	558.0	556.5	553.4	550.4	548.9	545.8	541.2
172.5°	565.7	565.7	562.6	559.6	558.0	556.5	553.4	551.9	551.9	548.9	545.8
175°	562.6	561.1	559.6	556.5	555.0	555.0	553.4	551.9	553.4	551.9	550.4
177.5°	555.0	556.5	553.4	553.4	551.9	551.9	551.9	551.9	553.4	553.4	551.9
180°	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4



TEST NUMBER: P303121

CATALOG NUMBER: CTW-F-5050-20L840-UNV-STD-6

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	594.7	594.7	594.7	594.7	594.7	594.7	594.7	594.7	594.7	594.7	594.7
2.5°	596.3	594.7	593.2	593.2	593.2	590.1	590.1	591.7	593.2	596.3	593.2
5°	594.7	593.2	591.7	591.7	591.7	588.6	588.6	590.1	591.7	594.7	591.7
7.5°	590.1	590.1	587.1	587.1	587.1	584.0	584.0	585.5	587.1	590.1	587.1
10°	585.5	584.0	581.0	581.0	581.0	579.4	577.9	579.4	582.5	584.0	581.0
12.5°	577.9	576.4	574.8	573.3	573.3	570.3	570.3	571.8	574.8	576.4	574.8
15°	568.7	567.2	565.7	564.1	564.1	562.6	561.1	562.6	565.7	567.2	564.1
17.5°	558.0	556.5	555.0	553.4	553.4	551.9	550.4	551.9	555.0	555.0	553.4
20°	545.8	544.3	542.7	542.7	542.7	539.7	539.7	539.7	542.7	542.7	539.7
22.5°	533.6	532.0	529.0	529.0	529.0	527.5	525.9	527.5	530.5	527.5	525.9
25°	519.8	516.8	515.2	515.2	513.7	510.6	512.2	512.2	515.2	513.7	510.6
27.5°	504.5	503.0	501.5	499.9	498.4	496.9	496.9	496.9	499.9	496.9	495.3
30°	487.7	486.2	484.6	483.1	483.1	480.1	480.1	481.6	483.1	480.1	478.5
32.5°	469.4	467.8	466.3	466.3	464.8	463.2	463.2	463.2	464.8	461.7	460.2
35°	452.5	449.5	448.0	448.0	446.4	444.9	444.9	446.4	446.4	443.4	441.8
37.5°	432.7	431.1	429.6	428.1	428.1	426.5	426.5	426.5	426.5	423.5	422.0
40°	414.3	411.3	409.7	408.2	408.2	408.2	408.2	408.2	406.7	403.6	400.6
42.5°	389.9	388.3	386.8	386.8	385.3	385.3	385.3	385.3	383.7	382.2	380.7
45°	370.0	368.5	366.9	365.4	366.9	366.9	365.4	365.4	363.9	362.3	360.8
47.5°	350.1	348.6	347.0	345.5	347.0	347.0	345.5	345.5	344.0	344.0	340.9
50°	328.7	327.2	325.6	325.6	327.2	325.6	325.6	324.1	324.1	322.6	319.5
52.5°	308.8	307.3	304.2	304.2	305.8	305.8	304.2	302.7	302.7	302.7	299.7
55°	287.4	285.9	284.4	284.4	285.9	284.4	282.8	281.3	282.8	281.3	278.3
57.5°	266.0	264.5	263.0	263.0	264.5	263.0	261.4	261.4	259.9	259.9	258.4
60°	244.6	243.1	241.6	243.1	243.1	241.6	240.0	240.0	240.0	237.0	237.0
62.5°	223.2	220.2	220.2	220.2	221.7	220.2	218.6	218.6	217.1	215.6	215.6
65°	200.3	198.8	200.3	198.8	198.8	198.8	197.2	197.2	195.7	194.2	194.2
67.5°	178.9	177.3	178.9	177.3	177.3	177.3	177.3	175.8	174.3	174.3	172.8
70°	157.5	155.9	157.5	155.9	155.9	155.9	155.9	154.4	152.9	151.4	151.4
72.5°	136.1	134.5	134.5	134.5	134.5	134.5	133.0	133.0	131.5	131.5	131.5
75°	114.7	113.1	113.1	113.1	113.1	111.6	111.6	111.6	110.1	110.1	110.1
77.5°	93.3	91.7	93.3	93.3	91.7	91.7	91.7	91.7	90.2	88.7	88.7
80°	71.9	71.9	71.9	71.9	71.9	71.9	70.3	70.3	70.3	68.8	68.8
82.5°	52.0	52.0	52.0	52.0	50.5	50.5	50.5	50.5	48.9	47.4	47.4
85°	32.1	32.1	32.1	32.1	30.6	32.1	30.6	29.0	29.0	27.5	26.0
87.5°	15.3	15.3	13.8	12.2	12.2	12.2	10.7	12.2	10.7	9.2	9.2
90°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
92.5°	7.6	9.2	10.7	10.7	10.7	9.2	9.2	9.2	9.2	9.2	7.6
95°	12.2	15.3	16.8	18.3	19.9	21.4	21.4	21.4	19.9	19.9	19.9
97.5°	19.9	21.4	22.9	22.9	24.5	26.0	29.0	30.6	32.1	33.6	32.1
100°	30.6	29.0	32.1	32.1	32.1	32.1	33.6	35.2	38.2	39.8	41.3
102.5°	42.8	39.8	39.8	41.3	41.3	42.8	42.8	42.8	44.3	45.9	47.4
105°	58.1	53.5	52.0	50.5	50.5	52.0	55.0	55.0	55.0	55.0	55.0
107.5°	76.4	70.3	64.2	62.7	61.2	62.7	64.2	67.3	68.8	68.8	67.3
110°	97.8	88.7	81.0	78.0	74.9	73.4	74.9	74.9	78.0	81.0	82.6



TEST NUMBER: P303121

CATALOG NUMBER: CTW-F-5050-20L840-UNV-STD-6

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
112.5°	122.3	108.5	97.8	96.3	91.7	87.1	85.6	85.6	87.1	88.7	91.7
115°	145.2	131.5	119.3	114.7	110.1	102.4	99.4	96.3	97.8	97.8	100.9
117.5°	172.8	155.9	142.2	136.1	130.0	120.8	113.1	110.1	108.5	108.5	108.5
120°	198.8	183.5	165.1	159.0	152.9	142.2	133.0	125.4	120.8	117.7	117.7
122.5°	223.2	207.9	191.1	183.5	175.8	165.1	154.4	143.7	137.6	131.5	128.4
125°	249.2	233.9	215.6	209.5	200.3	188.0	177.3	166.6	157.5	149.8	143.7
127.5°	273.7	258.4	240.0	232.4	226.3	214.0	200.3	189.6	178.9	171.2	162.1
130°	296.6	281.3	264.5	256.8	250.7	238.5	224.7	214.0	203.3	194.2	183.5
132.5°	319.5	304.2	289.0	281.3	273.7	263.0	249.2	238.5	226.3	217.1	209.5
135°	340.9	325.6	311.9	304.2	298.1	285.9	273.7	263.0	250.7	241.6	233.9
137.5°	362.3	347.0	333.3	325.6	319.5	308.8	298.1	287.4	275.2	266.0	256.8
140°	380.7	366.9	353.2	347.0	340.9	330.2	321.1	311.9	301.2	290.5	281.3
142.5°	400.6	386.8	374.6	366.9	360.8	350.1	340.9	333.3	324.1	313.4	305.8
145°	420.4	405.1	394.4	385.3	380.7	370.0	360.8	354.7	347.0	337.9	330.2
147.5°	435.7	423.5	414.3	408.2	400.6	389.9	380.7	374.6	368.5	359.3	353.2
150°	451.0	440.3	429.6	426.5	420.4	411.3	403.6	396.0	389.9	380.7	374.6
152.5°	467.8	455.6	448.0	441.8	437.3	428.1	420.4	415.8	412.8	402.1	397.5
155°	481.6	470.9	461.7	457.1	454.1	444.9	437.3	434.2	429.6	423.5	417.4
157.5°	493.8	484.6	475.5	470.9	469.4	460.2	454.1	449.5	446.4	441.8	435.7
160°	504.5	496.9	487.7	484.6	481.6	473.9	467.8	464.8	463.2	458.7	454.1
162.5°	515.2	507.6	499.9	496.9	493.8	487.7	481.6	478.5	477.0	473.9	469.4
165°	522.9	516.8	510.6	507.6	506.0	498.4	493.8	492.3	490.8	489.2	484.6
167.5°	532.0	525.9	519.8	518.3	515.2	510.6	506.0	504.5	503.0	503.0	498.4
170°	538.2	533.6	529.0	527.5	525.9	519.8	516.8	515.2	515.2	515.2	510.6
172.5°	544.3	541.2	535.1	535.1	533.6	529.0	525.9	525.9	524.4	525.9	521.3
175°	548.9	545.8	541.2	541.2	539.7	536.6	533.6	533.6	535.1	536.6	532.0
177.5°	551.9	548.9	545.8	545.8	544.3	542.7	539.7	541.2	542.7	544.3	541.2
180°	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4



TEST NUMBER: P303121

CATALOG NUMBER: CTW-F-5050-20L840-UNV-STD-6

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	594.7	594.7	594.7	594.7	594.7	594.7	594.7	594.7
2.5°	596.3	594.7	593.2	593.2	591.7	591.7	591.7	591.7
5°	593.2	591.7	591.7	590.1	590.1	590.1	591.7	591.7
7.5°	590.1	587.1	587.1	585.5	585.5	585.5	587.1	587.1
10°	582.5	582.5	581.0	579.4	579.4	579.4	579.4	581.0
12.5°	574.8	573.3	573.3	570.3	570.3	571.8	571.8	573.3
15°	565.7	564.1	562.6	562.6	562.6	562.6	562.6	564.1
17.5°	555.0	553.4	551.9	550.4	550.4	551.9	551.9	551.9
20°	541.2	538.2	538.2	536.6	536.6	536.6	538.2	538.2
22.5°	525.9	522.9	522.9	521.3	521.3	522.9	522.9	522.9
25°	510.6	509.1	507.6	506.0	506.0	506.0	507.6	507.6
27.5°	495.3	492.3	492.3	490.8	490.8	490.8	490.8	490.8
30°	478.5	475.5	473.9	473.9	472.4	472.4	473.9	473.9
32.5°	458.7	457.1	455.6	455.6	454.1	455.6	455.6	455.6
35°	440.3	437.3	437.3	437.3	435.7	437.3	435.7	435.7
37.5°	422.0	417.4	417.4	417.4	417.4	417.4	417.4	417.4
40°	399.0	396.0	396.0	394.4	394.4	394.4	394.4	394.4
42.5°	379.2	376.1	376.1	374.6	374.6	374.6	374.6	374.6
45°	359.3	356.2	356.2	356.2	354.7	354.7	354.7	353.2
47.5°	337.9	336.3	336.3	334.8	334.8	334.8	334.8	334.8
50°	318.0	316.5	316.5	314.9	316.5	314.9	314.9	314.9
52.5°	296.6	296.6	295.1	295.1	295.1	293.5	293.5	293.5
55°	276.7	275.2	275.2	273.7	275.2	273.7	273.7	273.7
57.5°	255.3	255.3	255.3	253.8	253.8	252.3	252.3	252.3
60°	233.9	233.9	233.9	232.4	233.9	232.4	232.4	232.4
62.5°	214.0	214.0	212.5	212.5	212.5	211.0	211.0	211.0
65°	192.6	191.1	191.1	192.6	191.1	191.1	191.1	191.1
67.5°	172.8	172.8	171.2	171.2	171.2	169.7	169.7	169.7
70°	151.4	151.4	149.8	149.8	149.8	148.3	149.8	148.3
72.5°	130.0	130.0	128.4	130.0	128.4	126.9	128.4	128.4
75°	108.5	108.5	108.5	108.5	108.5	107.0	107.0	107.0
77.5°	88.7	88.7	87.1	87.1	87.1	87.1	87.1	85.6
80°	67.3	67.3	65.7	65.7	65.7	65.7	65.7	64.2
82.5°	47.4	45.9	45.9	45.9	45.9	44.3	44.3	44.3
85°	26.0	26.0	26.0	26.0	24.5	26.0	24.5	24.5
87.5°	9.2	9.2	9.2	7.6	7.6	9.2	9.2	7.6
90°	1.5	1.5	3.1	3.1	3.1	3.1	3.1	3.1
92.5°	7.6	7.6	7.6	6.1	6.1	6.1	6.1	6.1
95°	19.9	19.9	19.9	18.3	18.3	19.9	18.3	18.3
97.5°	32.1	32.1	32.1	32.1	30.6	32.1	30.6	30.6
100°	41.3	42.8	42.8	42.8	42.8	42.8	42.8	44.3
102.5°	48.9	48.9	48.9	48.9	50.5	50.5	50.5	50.5
105°	56.6	56.6	56.6	58.1	58.1	59.6	59.6	59.6
107.5°	67.3	67.3	67.3	67.3	68.8	68.8	68.8	68.8
110°	82.6	82.6	81.0	81.0	79.5	79.5	79.5	79.5



TEST NUMBER: P303121

CATALOG NUMBER: CTW-F-5050-20L840-UNV-STD-6

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
112.5°	94.8	96.3	96.3	96.3	96.3	96.3	96.3	96.3
115°	102.4	105.5	105.5	107.0	107.0	108.5	108.5	108.5
117.5°	110.1	113.1	113.1	114.7	114.7	116.2	117.7	117.7
120°	119.3	120.8	120.8	122.3	122.3	123.8	123.8	123.8
122.5°	128.4	128.4	128.4	130.0	130.0	130.0	131.5	131.5
125°	140.7	139.1	139.1	137.6	137.6	137.6	137.6	139.1
127.5°	157.5	152.9	151.4	151.4	149.8	148.3	148.3	146.8
130°	175.8	172.8	169.7	168.2	165.1	163.6	162.1	162.1
132.5°	200.3	194.2	191.1	188.0	185.0	181.9	181.9	180.4
135°	226.3	218.6	217.1	212.5	209.5	206.4	203.3	203.3
137.5°	249.2	243.1	241.6	238.5	235.4	230.9	230.9	227.8
140°	273.7	267.5	264.5	261.4	258.4	255.3	255.3	255.3
142.5°	298.1	292.0	289.0	285.9	282.8	279.8	278.3	279.8
145°	322.6	316.5	313.4	310.4	307.3	304.2	302.7	301.2
147.5°	345.5	339.4	336.3	334.8	331.8	328.7	327.2	325.6
150°	368.5	362.3	360.8	357.8	354.7	351.6	350.1	350.1
152.5°	389.9	385.3	382.2	379.2	377.6	374.6	373.0	373.0
155°	412.8	408.2	405.1	403.6	400.6	397.5	397.5	394.4
157.5°	432.7	428.1	425.0	423.5	420.4	418.9	418.9	418.9
160°	451.0	446.4	444.9	441.8	438.8	438.8	438.8	438.8
162.5°	467.8	464.8	463.2	460.2	457.1	457.1	457.1	455.6
165°	483.1	480.1	478.5	475.5	473.9	473.9	473.9	473.9
167.5°	498.4	493.8	492.3	490.8	489.2	489.2	489.2	489.2
170°	510.6	507.6	506.0	504.5	503.0	503.0	503.0	503.0
172.5°	522.9	521.3	519.8	516.8	516.8	516.8	518.3	516.8
175°	533.6	532.0	530.5	529.0	527.5	529.0	529.0	529.0
177.5°	542.7	541.2	541.2	539.7	538.2	536.6	538.2	536.6
180°	550.4	550.4	550.4	550.4	550.4	550.4	550.4	550.4

(END OF REPORT)