

Thbase -4.00 ms Trigger C1 D0
1.00 ms/div Normal -1.55 V
500 kS 50 MS/s Edge Positive

F3 peris...
500 #
1.0 ms
15.3 k#

F2 peris...
20.0 #
1.0 ms
1.22 k#

C4 D1
10.0 V
25.30 V

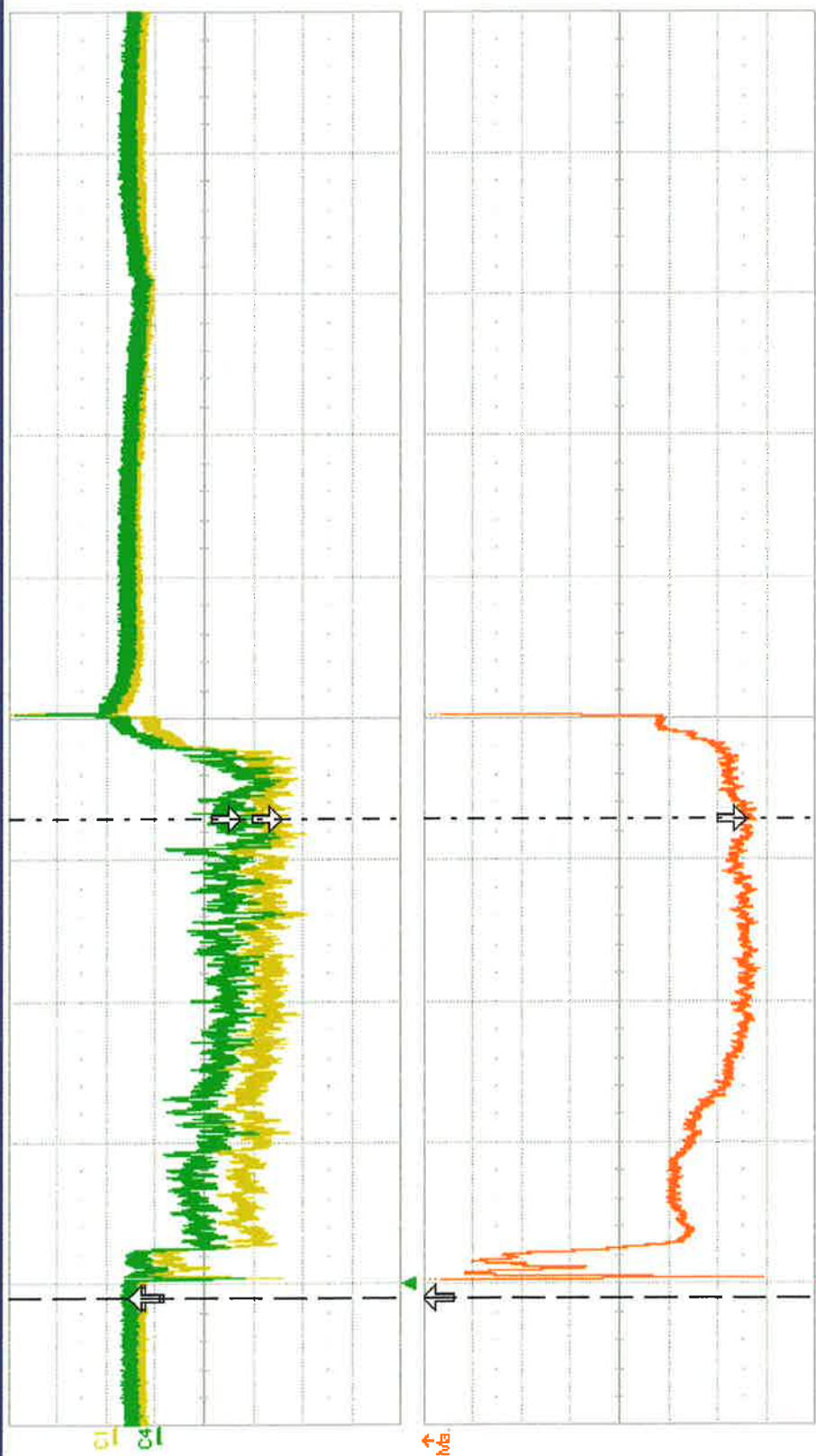
C3 D0
5.00 V
-11.0 V

C2 D1
5.00 V
5.95 V

C1 D1
5.00 V
12.70 V

TELEDYNE LECROY

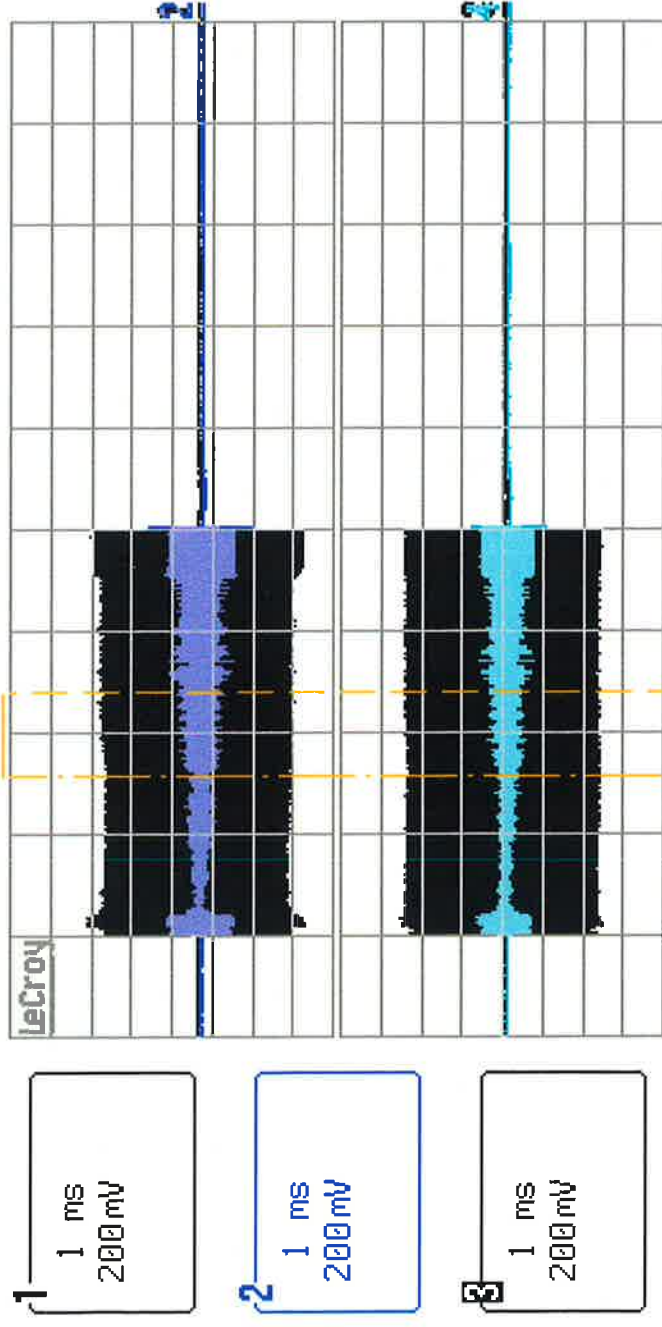
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C1	C4	Math
5.00 mV/div	5.00 mV/div	2.00 mV/div
9.00 mV/div	4.50 mV/div	1.00 mV/div
-16.76 mV	-8.05 mV	41.1#
-1.87 mV	3.10 mV	-15.2482 mV
14.89 mV	11.15 mV	-2.3005 mV
Δy	Δy	Δy

Timebase	Trigger	Edge
-4.00 ms	Normal	700 mV
1.00 ms/div	Edge	Negative
2.00 MS	200 MS/s	
X1= 3.293210 ms	ΔX = -3.396850 ms	
X2= -103.640 μ s	1/ ΔX = -294.3904 Hz	

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12:22:56



41 sweeps:				
rms(1)	average	low	high	sigma
rms(2)	327.6mV	324.4	331.6	1.8
rms(3)	46.3mV	40.9	53.2	2.0
rms(4)	329.9mV	327.9	332.6	1.3
phase(1,3)	37.3mV	33.0	42.5	1.7
	0.08 k°	0.03	0.13	0.04

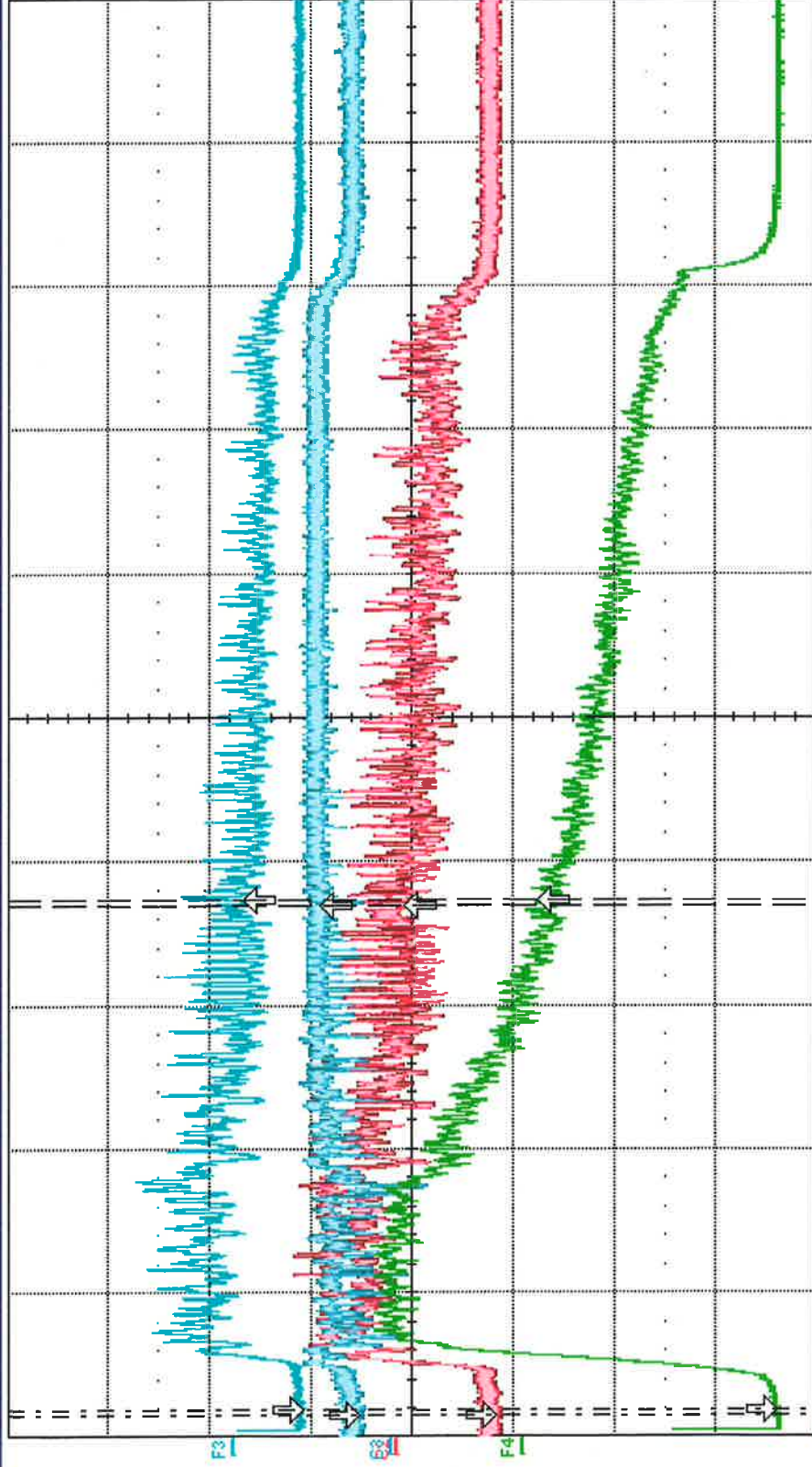
1 ms

- 1 .2 V AC
- 2 .2 V AC
- 3 .2 V AC
- 4 .2 V AC

10 MS/s

Ext10 DC 0.15 V 50Ω

☐ NORMAL



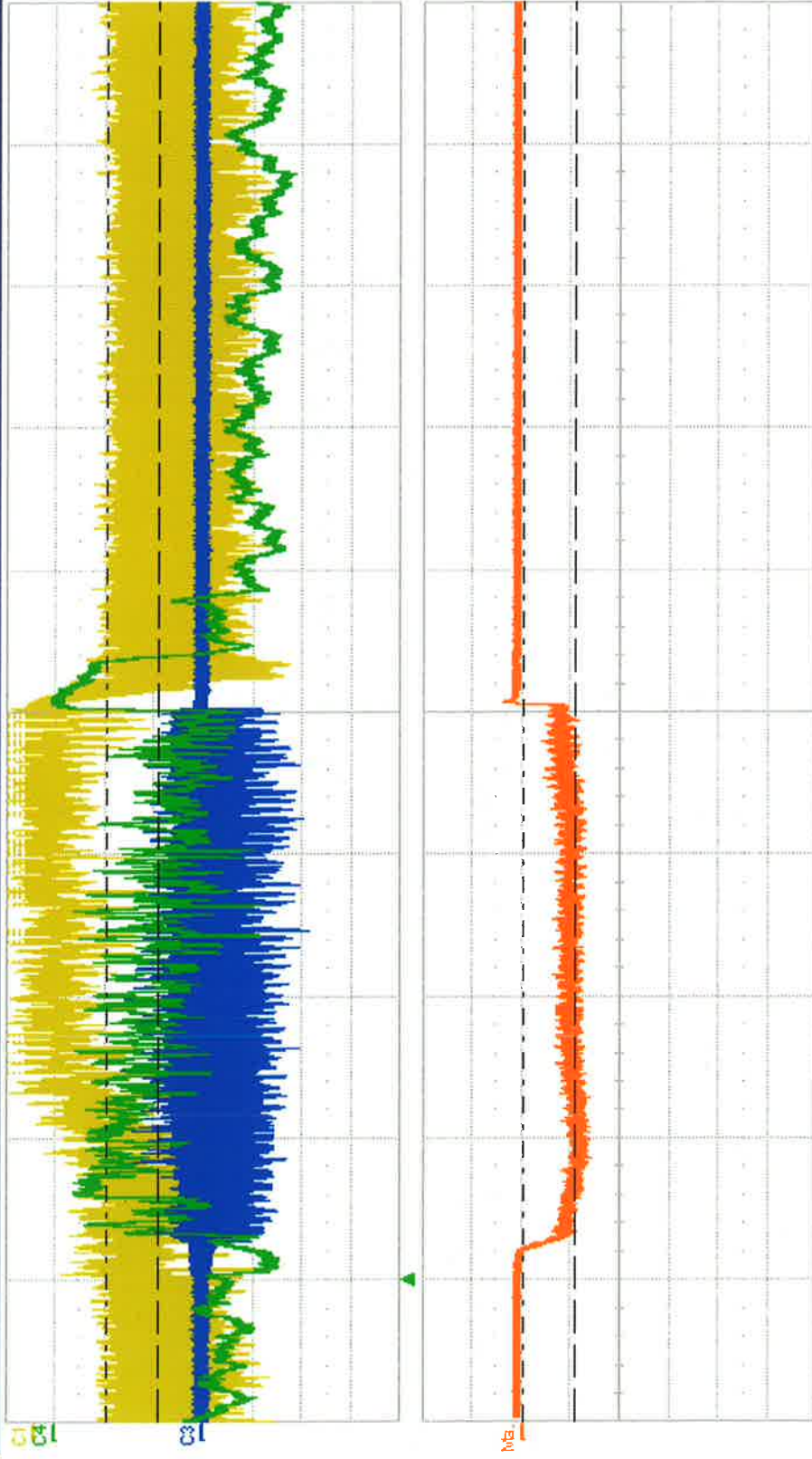
C2	DC1M
500 mV/div	75 mV offset
↓ -481 mV	↑ 438 mV
↑ -43 mV	Δy

C3	DC1M
500 mV/div	100 mV offset
↓ 169 mV	↑ 345 mV
↑ 176 mV	Δy

F3	script(C3,C2)
2.00/div	500 μs/div
↓ -1.332	↑ -224e-3
↑ 1.108	Δy

F4	<F3>
500e-3/div	500 μs/div
↓ -1.24840	↑ -83.92e-3
↑ 1.16448	Δy

Thase	-2.50 ms	Trigger	Ext10	DC
WStream	500 μs	Normal	30 mV	
50.0 kS	10 MS/s	Edge	Negative	
X1=	76.1 μs	ΔX=	1.7676 ms	
X2=	1.8437 ms	1/ΔX=	565.74 Hz	



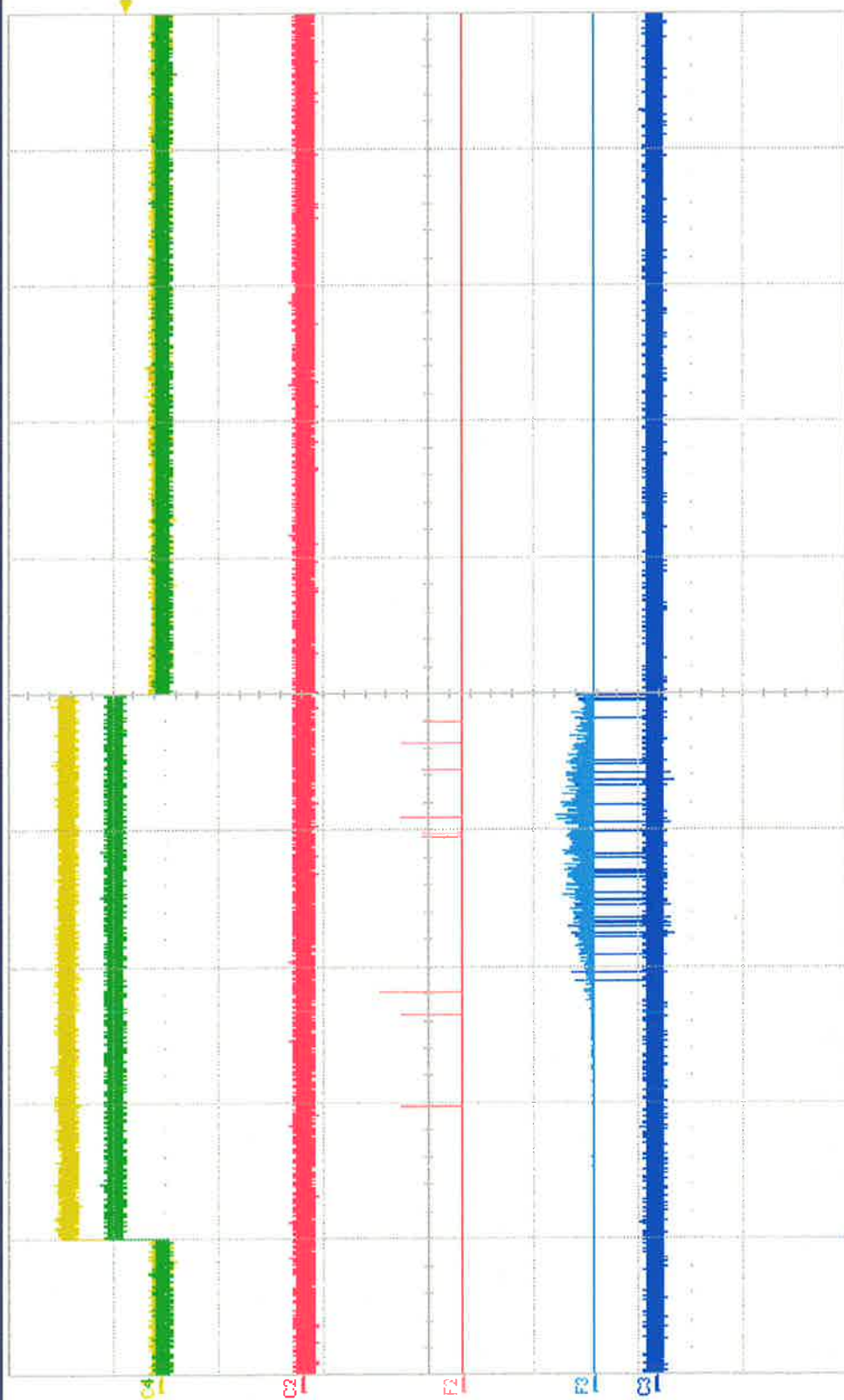
Timebase 4.00 ms
1.00 ms/div
1.00 MS
Trigger Normal
Edge
Negative

C1 DCIM 200 mV/div
680.0 mV offset
268 mV
-502 mV
-214 mV
Δy

C3 5.00 A/div
0.00 A offset
9.80 A
4.45 A
-5.35 A
Δy

C4 100 V/div
300.0 V offset
-104 V
-211 V
-107 V
Δy

Math <C3>
1.00 A/div
1.00 ms/div
142 #
0.00 A
-1.07 A
-1.07 A
Δy

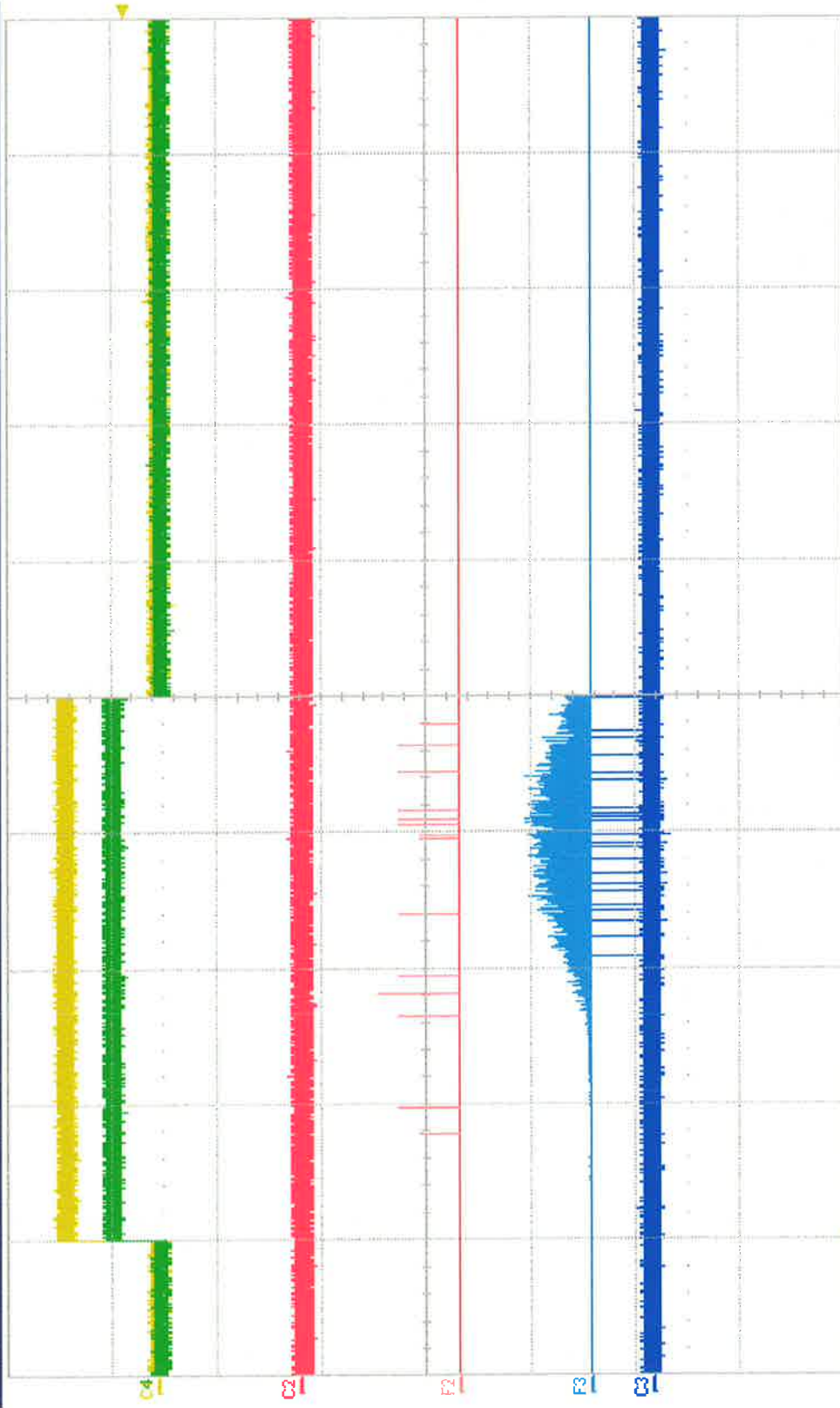


Thase -4.00 ms Trigger C1 DC
1.00 ms/div Normal 1.65 V
500 kS 50 MS/s Edge Positive

C1 D1 5.00 V 12.70 V
C2 D2 5.00 V 5.95 V
C3 D3 5.00 V -11.0 V
C4 D4 10.0 V 25.30 V
F2 peris... 5.00 # 1.0 ms 24 #
F3 peris... 1.00 k# 1.0 ms 40.3 k#

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Thase -4.00 ms
1.00 ms/div
500 kS

Trigger Normal
Edge
Positive

6100
1.65 V

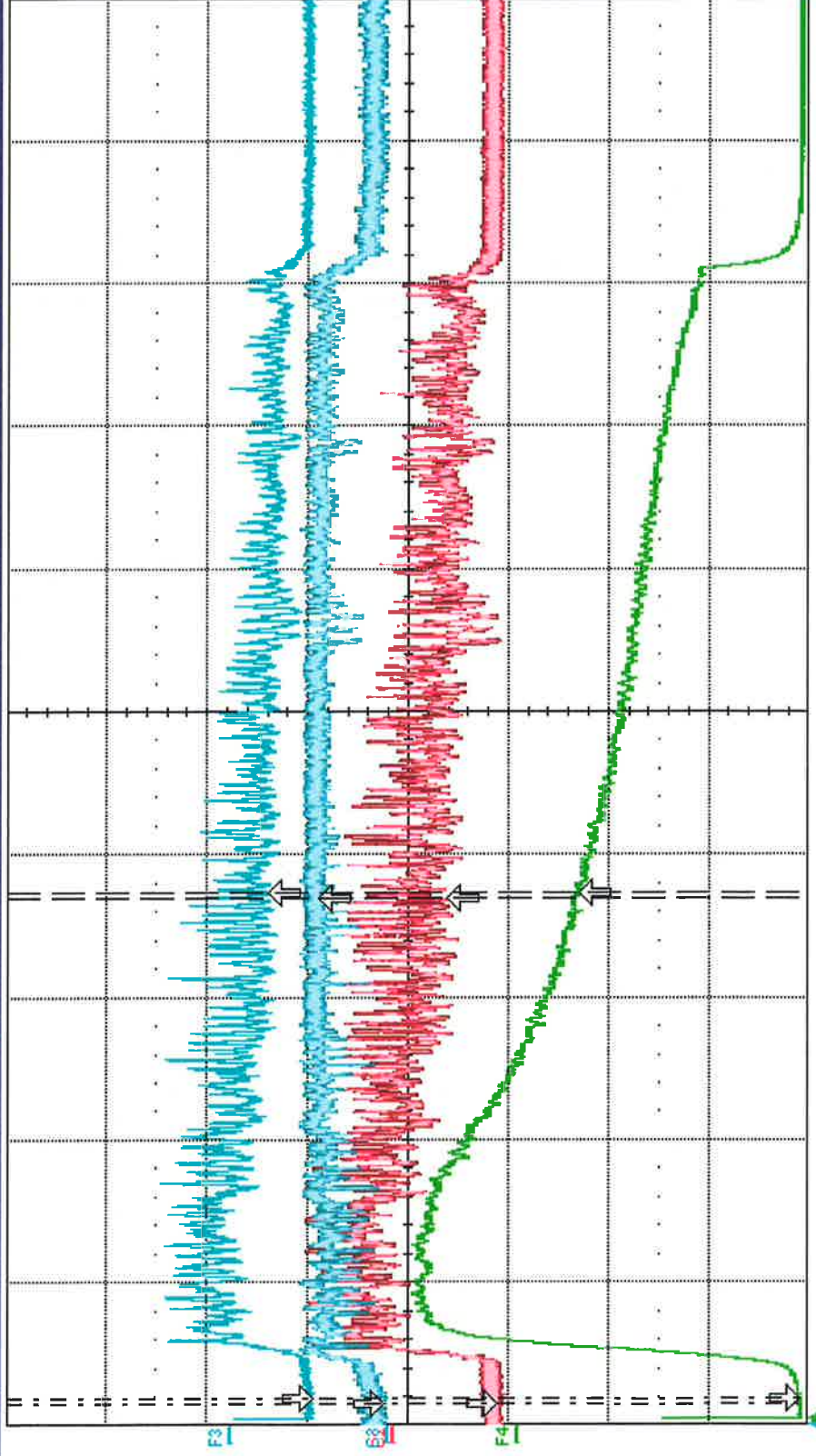
C1 5.00 V 12.70 V
C2 5.00 V 5.95 V
C3 5.00 V -11.0 V
C4 10.0 V 25.30 V

F2 peris... 5.00 # 1.0 ms 41 #

F3 peris... 1.00 k# 1.0 ms 88.9 k#

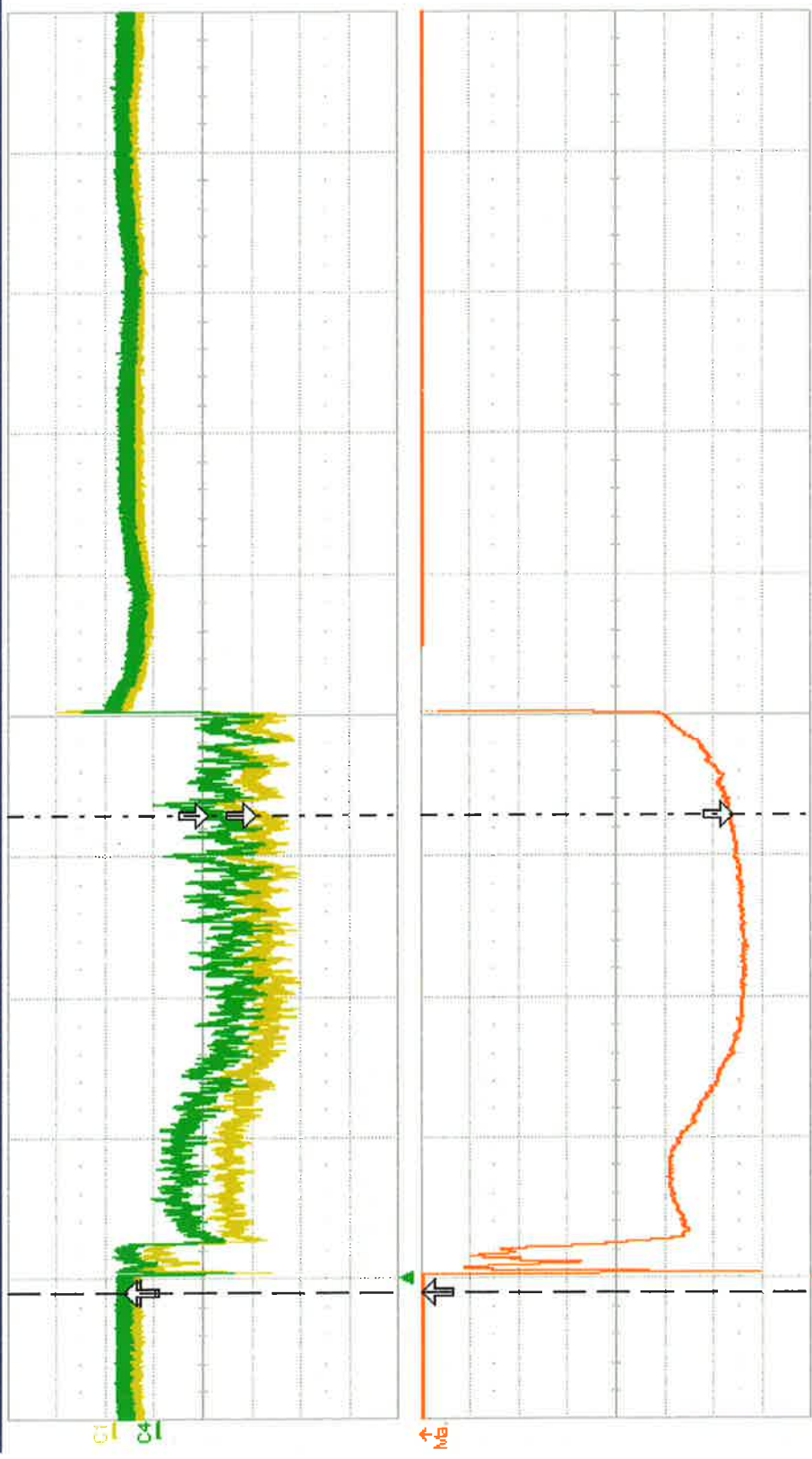
TELEDYNE LECROY

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C2 DCIM		C3 DCIM		F3 script(C3,C2)		F4 <F3>	
500 mV/div	500 mV/div	500 mV/div	500 mV/div	500e-3/div	500e-3/div	500e-3/div	500e-3/div
75 mV offset	100 mV offset	100 mV offset	100 mV offset	500 μ S/div	500 μ S/div	500 μ S/div	500 μ S/div
↓ -507 mV	↓ -507 mV	↓ -507 mV	↓ -507 mV	↓ -1.605	↓ -1.605	↓ -1.40473	↓ -1.40473
↑ -279 mV	↑ -279 mV	↑ -279 mV	↑ -279 mV	↑ -799e-3	↑ -799e-3	↑ -311.52e-3	↑ -311.52e-3
Δ 228 mV	Δ 228 mV	Δ 228 mV	Δ 228 mV	Δ 806e-3	Δ 806e-3	Δ 1.09321	Δ 1.09321

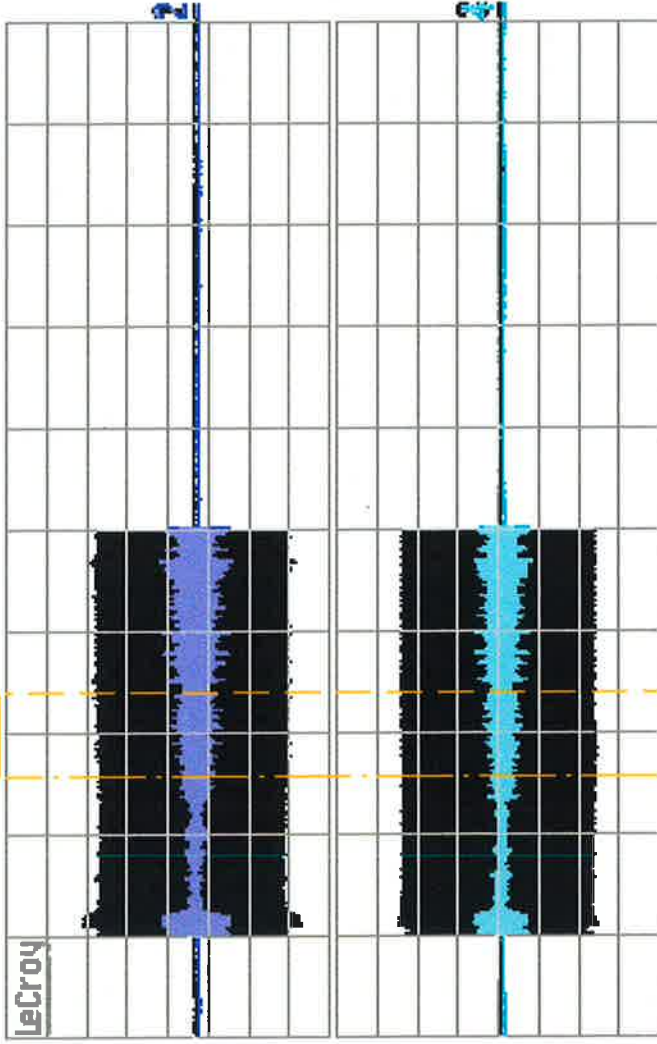
Tbase -2.50 ms		Trigger Ext10 DC	
WStream 500 μ S	Normal	30 mV	
50.0 kS	10 MS/s	Edge	Negative
X1= 76.1 μ S	Δ X= 1.7676 ms		
X2= 1.8437 ms	1/ Δ X= 565.74 Hz		



C1	DCIM	C4	DCIM	Math	eC1A
5.00 mV/div	9.00 mV/div	5.00 mV/div	5.00 mV/div	2.00 mV/div	2.00 mV/div
-14.19 mV	-1.56 mV	-4.94 mV	-14.9339 mV	1.00 mV/div	1.00 mV/div
12.62 mV	12.62 mV	3.44 mV	-2.3175 mV	464 #	464 #
Δy	Δy	Δy	Δy	Δy	Δy

Timebase	-4.00 ms	Trigger	Edge	Normal	700 mV	DC
2.00 MS	200 MS/s	Edge	Normal	700 mV	DC	Negative
X1=	3.293210 ms	ΔX=	-3.396850 ms			
X2=	-103.640 μs	1/ΔX=	-294.3904 Hz			

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1 1 ms
200 mV

2 1 ms
200 mV

3 1 ms
200 mV

4 1 ms
200 mV

464 sweeps:				
rms(1)	average	low	high	sigma
rms(2)	327.8mV	323.3	331.8	1.6
rms(3)	45.8mV	39.7	53.2	1.9
rms(4)	330.0mV	327.6	332.6	1.2
phase(1,3)	36.9mV	31.6	42.5	1.6
	76 °	27	132	36

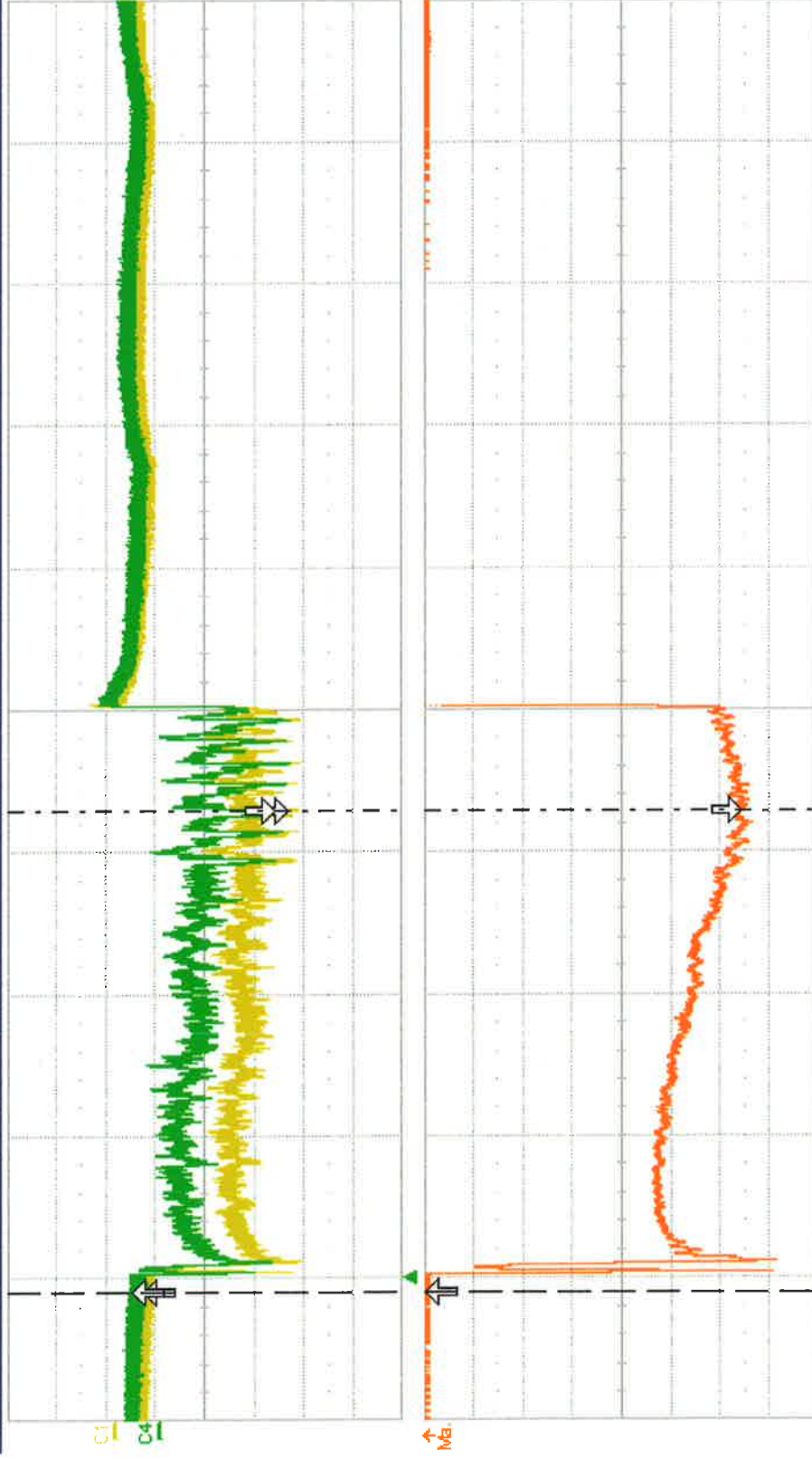
1 ms

1 .2 V AC
2 .2 V AC
3 .2 V AC
4 .2 V AC

10 MS/s

Ext10 DC 0.15 V 50Ω

☐ NORMAL

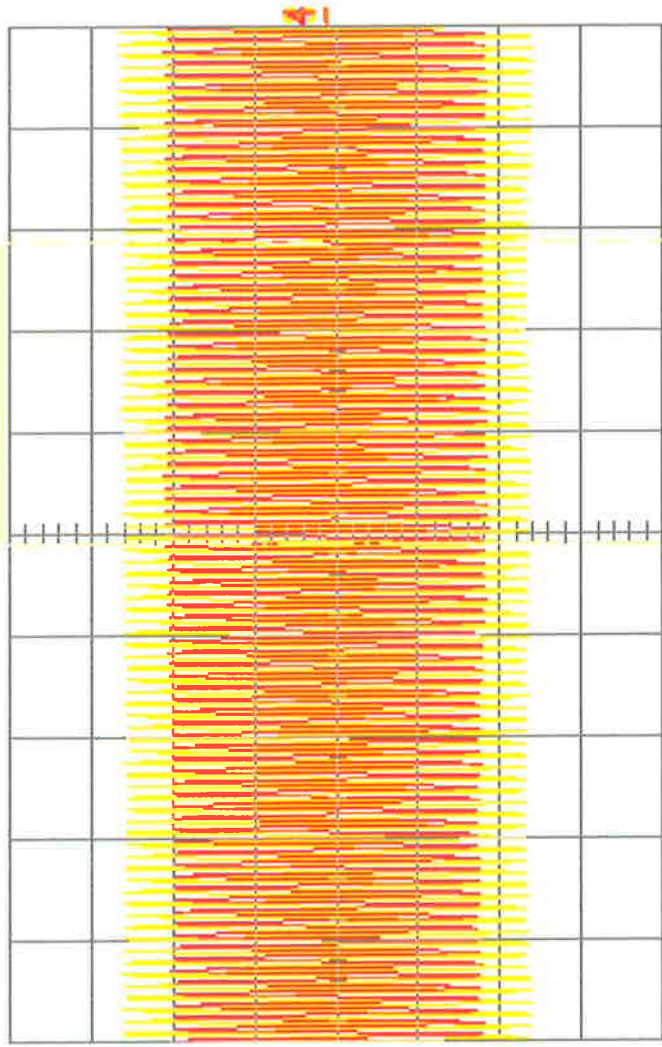


C1	C4	Math	<C1>
5.00 mV/div	5.00 mV/div	2.00 mV/div	2.00 mV/div
9.00 mV ofst	4.50 mV ofst	1.00 ms/div	1.00 ms/div
ΔY	ΔY	71 #	71 #
↑	↑	↑	↑
↓	↓	↓	↓
-17.28 mV	-11.37 mV	-15.0672 mV	-15.0672 mV
-2.91 mV	2.61 mV	-2.3211 mV	-2.3211 mV
14.38 mV	13.99 mV	12.2461 mV	12.2461 mV

Timebase	-4.00 ms	Trigger	Edge	700 mV	Negative
1.00 ms/div	Normal	Edge	700 mV	Negative	
2.00 MS	200 MS/s				
X1=	3.293210 ms	ΔX=	-3.396850 ms		
X2=	-103.640 μs	1/ΔX=	-294.3904 Hz		

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3 2 μ s
0.50 V



← 2.2200 ms

4 2 μ s
0.50 V

135 sweeps:		average	low	high	sigma
phase(4,3)		-97.9°	-103.6	-89.1	1.9
rms(1)		12.1 mV	11.8	12.3	0.1
rms(2)		128 mV	126	131	1
rms(4)		678.6 mV	628.0	744.9	23.7
rms(3)		870.0 mV	804.5	929.0	18.7

2 μ s

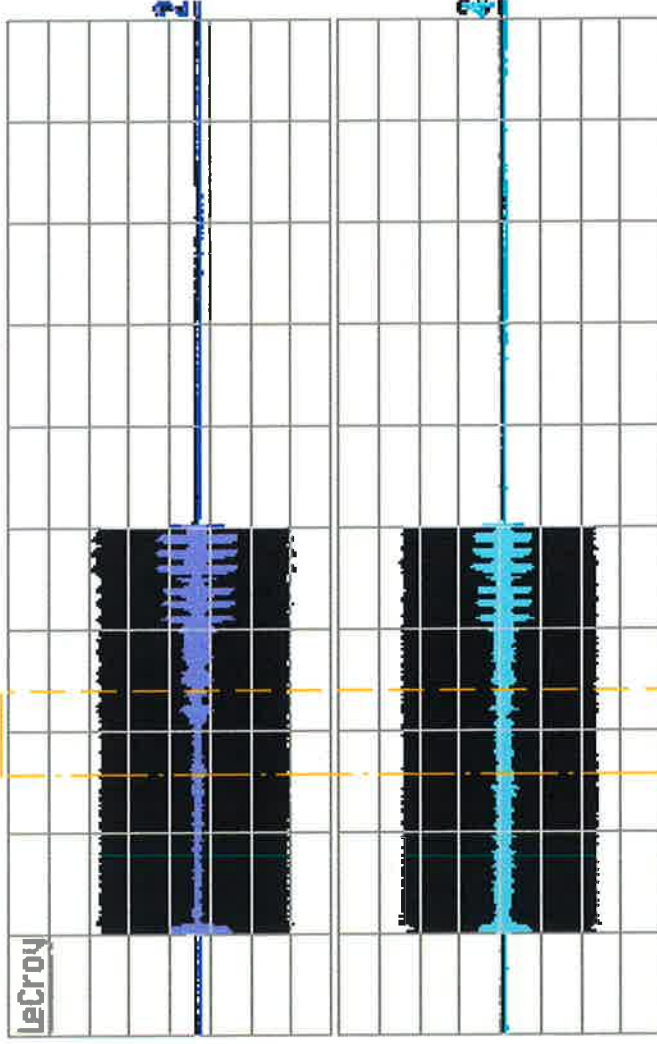
- 1 .5 V DC
- 2 .5 V DC
- 3 .5 V DC
- 4 .5 V DC

1 GS/s

Ext10 DC 0.15 V 50 Ω

☐ NORMAL

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12:35:05



1
1 ms
200 mV

2
1 ms
200 mV

3
1 ms
200 mV

4
1 ms
200 mV

144 sweeps:

rms(1)	average	low	high	sigma
rms(2)	326.2 mV	322.8	330.9	1.7
rms(3)	21.5 mV	18.4	26.3	1.5
rms(4)	330.7 mV	327.7	333.2	1.3
phase(1,3)	25.7 mV	21.8	35.5	1.7
	0.08 k°	0.03	0.13	0.04

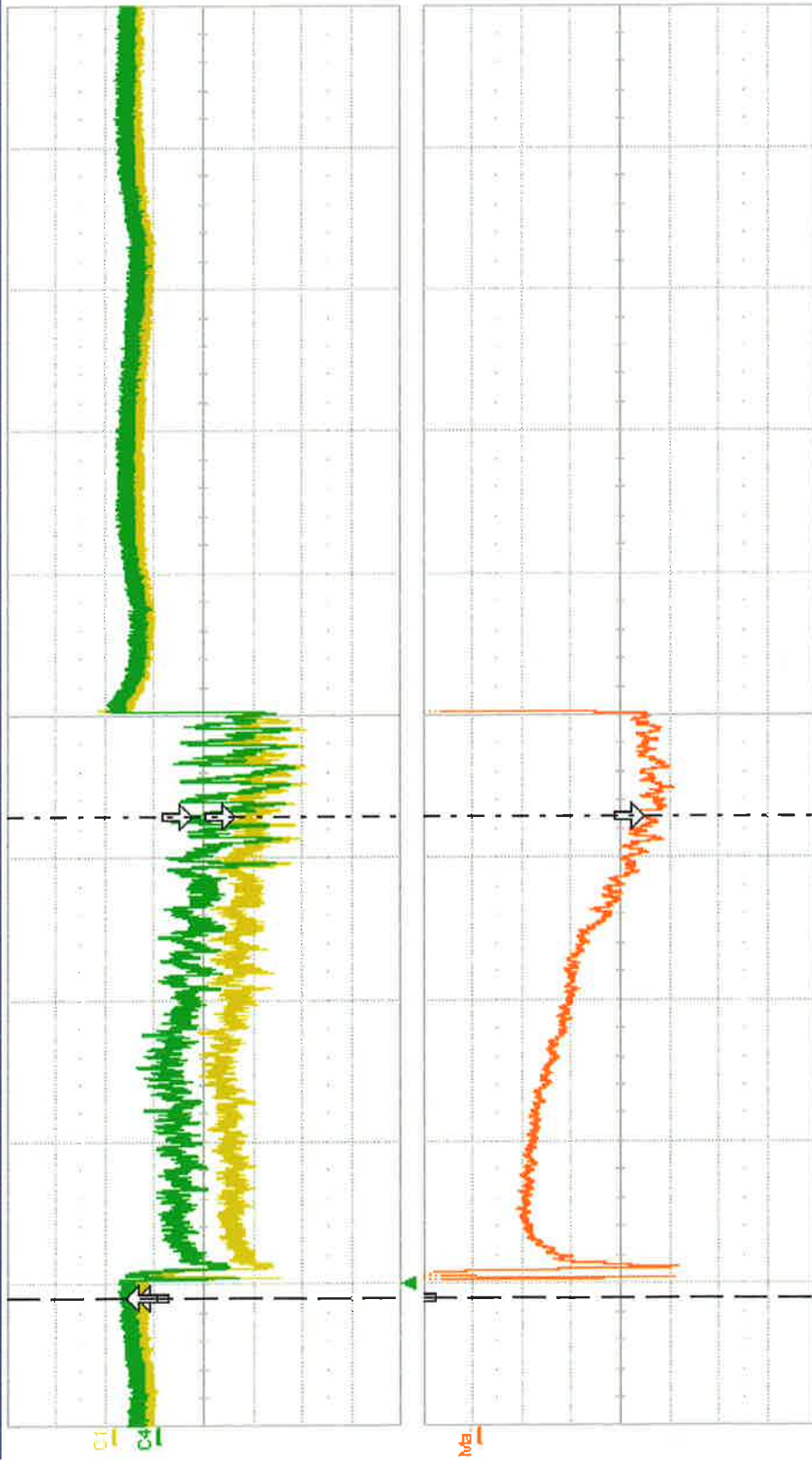
1 ms

1 -2 V AC
2 -2 V AC
3 -2 V AC
4 -2 V AC

Ext10 DC 0.15 V 50Ω

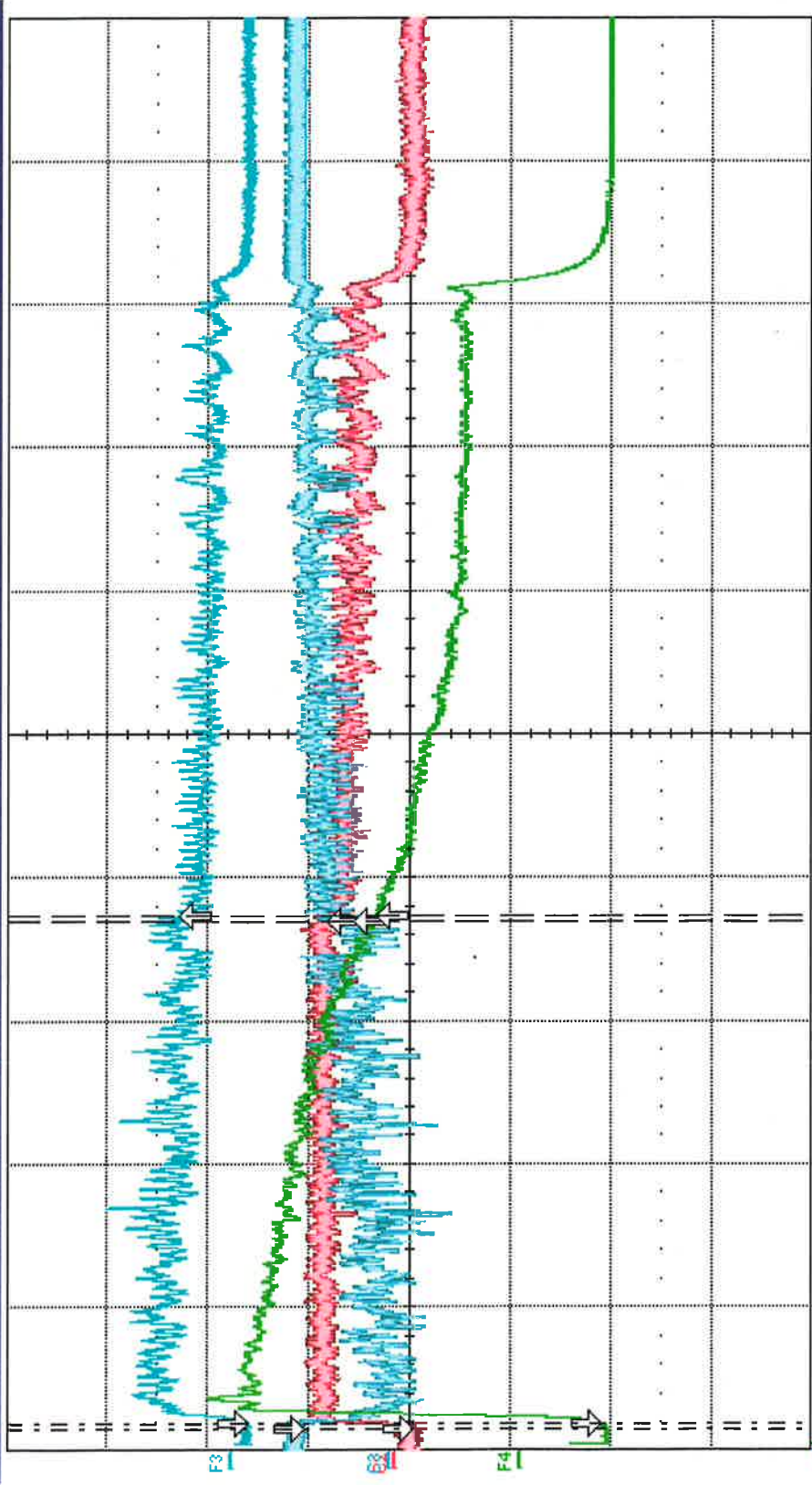
10 MS/s

☐ NORMAL



C1	C4	Math	<C4>
5.00 mV/div	5.00 mV/div	2.00 mV/div	2.00 mV/div
9.00 mV/div	4.50 mV/div	1.00 mV/div	1.00 mV/div
-14.31 mV	-3.10 mV	63.4	63.4
-2.57 mV	3.16 mV	-16.5332 mV	-16.5332 mV
11.74 mV	6.26 mV	2.9432 mV	2.9432 mV
Δy	Δy	Δy	Δy

Timebase	-4.00 ms	Trigger	Ext/IO DC
1.00 ms/div	Normal	Edge	Negative
2.00 MS	200 MS/s		
X1=	3.293210 ms	$\Delta X=$	-3.396850 ms
X2=	-103.640 μ s	1/ $\Delta X=$	-294.3904 Hz



C2

DCIM

500 mV/div

75 mV offset

↓

↑

Δy

-83 mV

324 mV

407 mV

C3

DCIM

500 mV/div

100 mV offset

↓

↑

Δy

429 mV

173 mV

-256 mV

F3

script(C3,C2)

2.00/div

500 μs/div

↓

↑

Δy

-292e-3

979e-3

1.270

F4

<F3>

500e-3/div

500 μs/div

↓

↑

Δy

-395.44e-3

705.24e-3

1.10068

169 #

Tbase

-2.50 ms

TriggerExt

IO

DC

WStream

500 μs

Normal

30 mV

50.0 kS

10 MS/s

Edge

Negative

X1=

76.1 μs

ΔX=

1.7676 ms

X2=

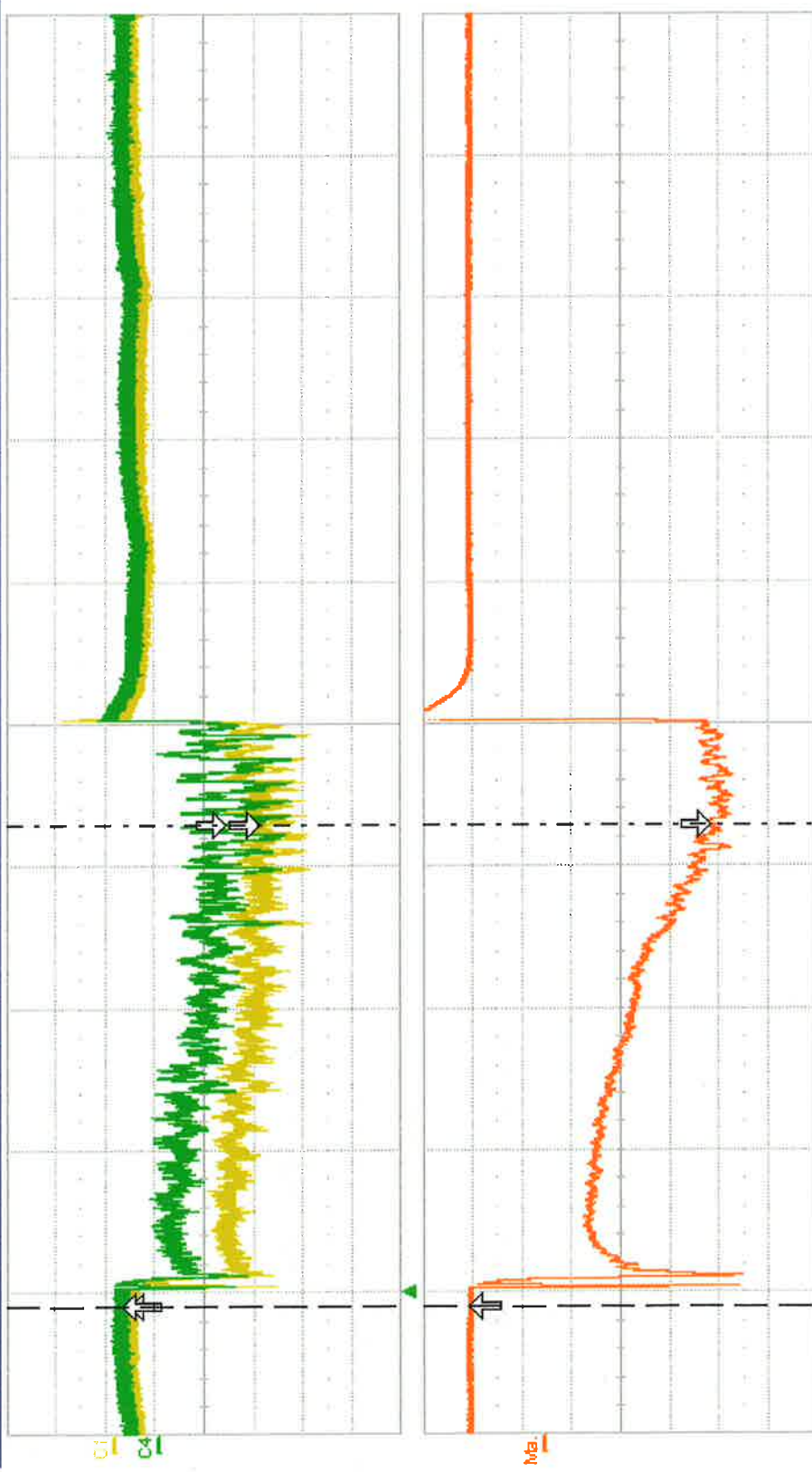
1.8437 ms

1/ΔX=

565.74 Hz

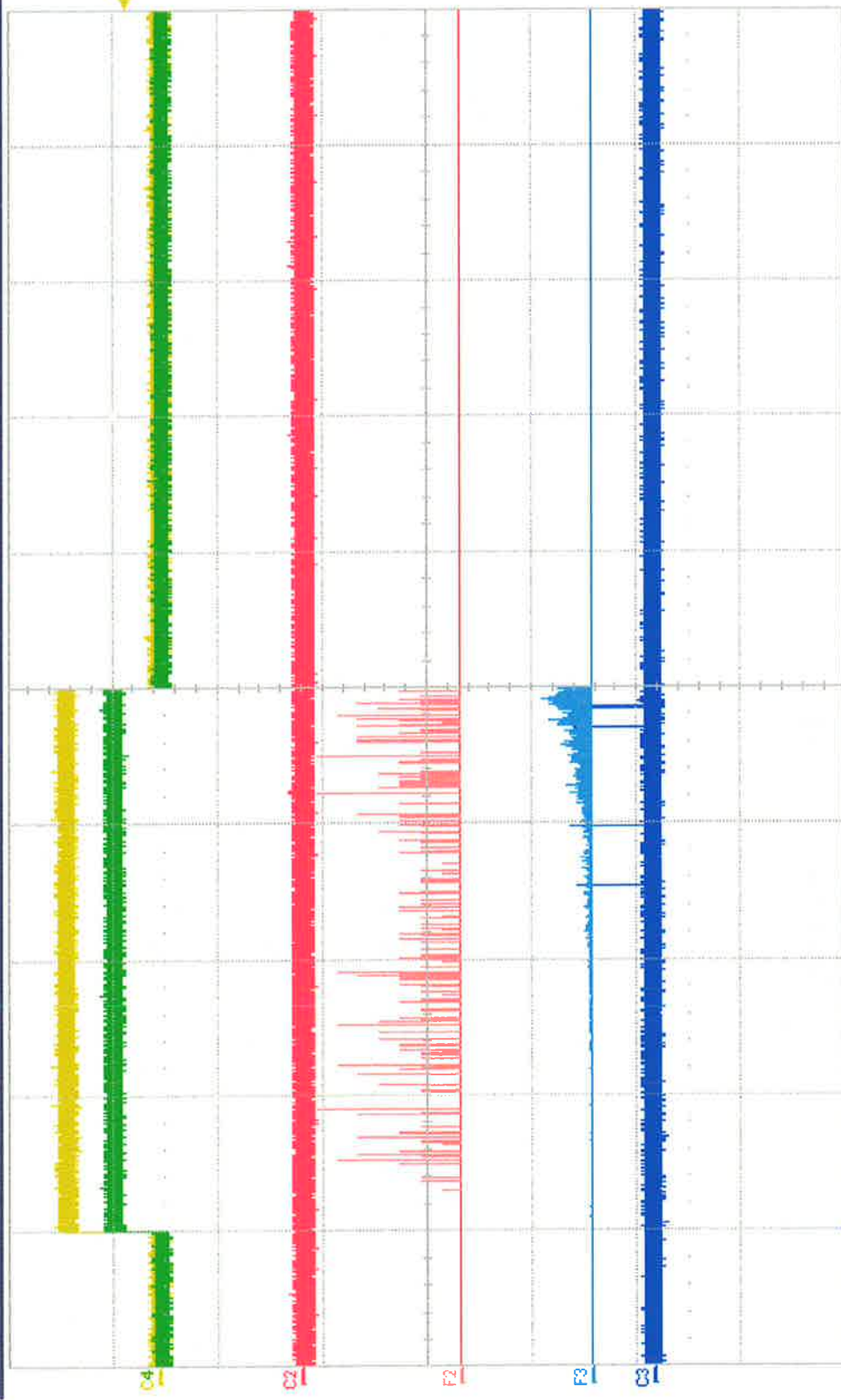
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C1	DCIM	C4	DCIM	Math	<C4>
5.00 mV/div	5.00 mV/div	5.00 mV/div	2.00 mV/div	2.00 mV/div	2.00 mV/div
9.00 mV ofst	9.00 mV ofst	4.50 mV ofst	1.00 mV ofst	1.00 mV ofst	1.00 mV ofst
↑	↑	↑	↑	↑	↑
-13.23 mV	-13.23 mV	-4.19 mV	-6.7156 mV	-6.7156 mV	-6.7156 mV
↑	↑	↑	↑	↑	↑
-1.97 mV	-1.97 mV	3.31 mV	2.9659 mV	2.9659 mV	2.9659 mV
Δy	Δy	Δy	Δy	Δy	Δy
11.26 mV	11.26 mV	7.51 mV	9.6715 mV	9.6715 mV	9.6715 mV

Timebase	-4.00 ms	Trigger	Ext:10 DC
1.00 ms/div	1.00 ms/div	Normal	700 mV
2.00 MS	200 MS/s	Edge	Negative
X1=	3.293210 ms	ΔX=	-3.396850 ms
X2=	-103.640 μs	1/ΔX=	-294.3904 Hz

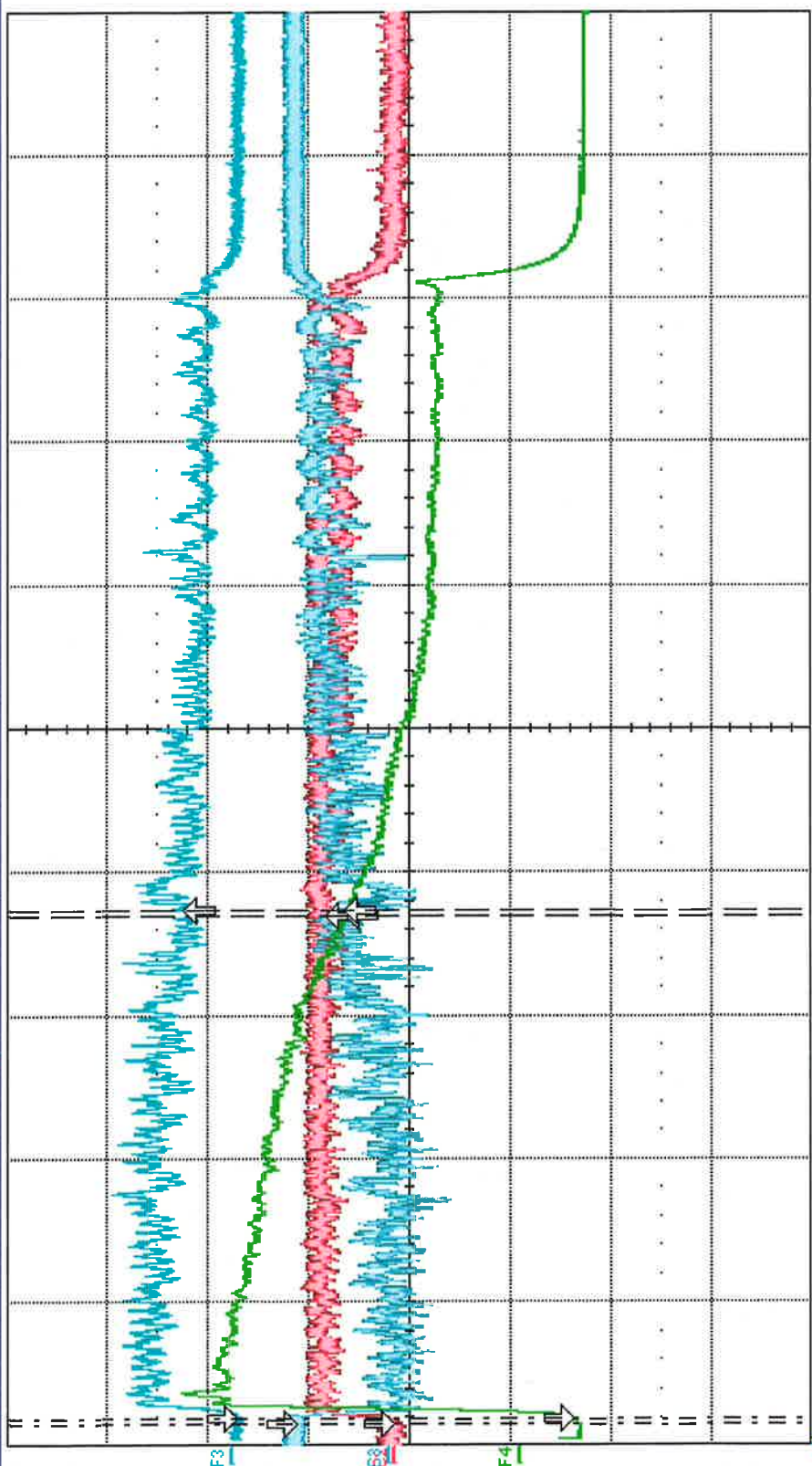


Thase -4.00 ms Trigger Normal 1.65 V
500 kS 50 MS/s Edge Positive

C1 D1 5.00 V 12.70 V
C2 D1 5.00 V 5.95 V
C3 D1 5.00 V -11.0 V
C4 D1 10.0 V 25.30 V
F2 peris... 5.00 # 1.0 ms 408 #
F3 peris... 1.00 k# 1.0 ms 28.8 k#

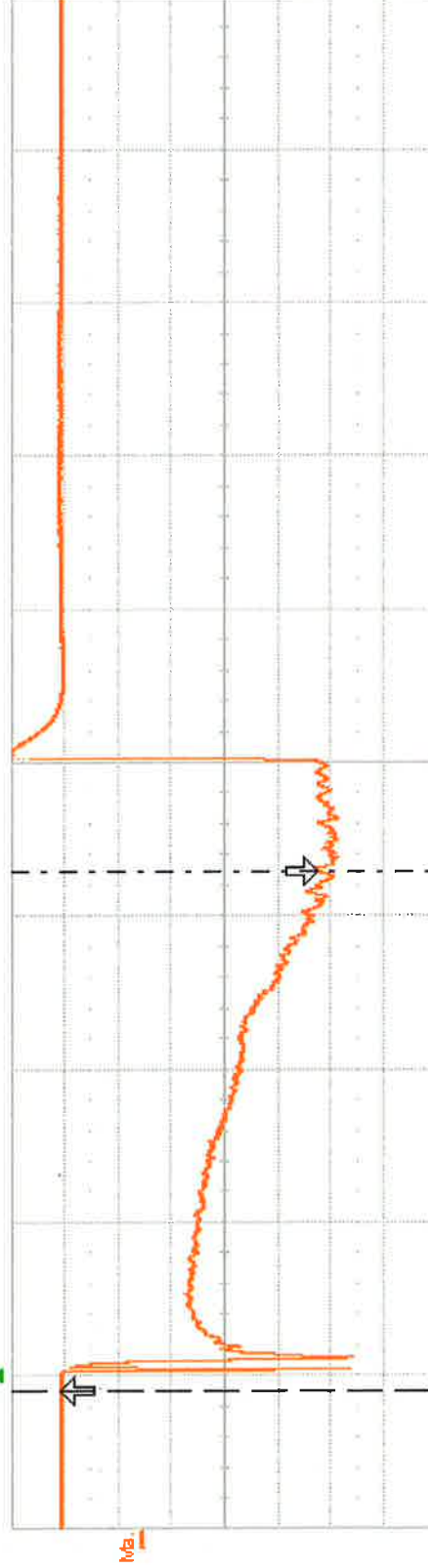
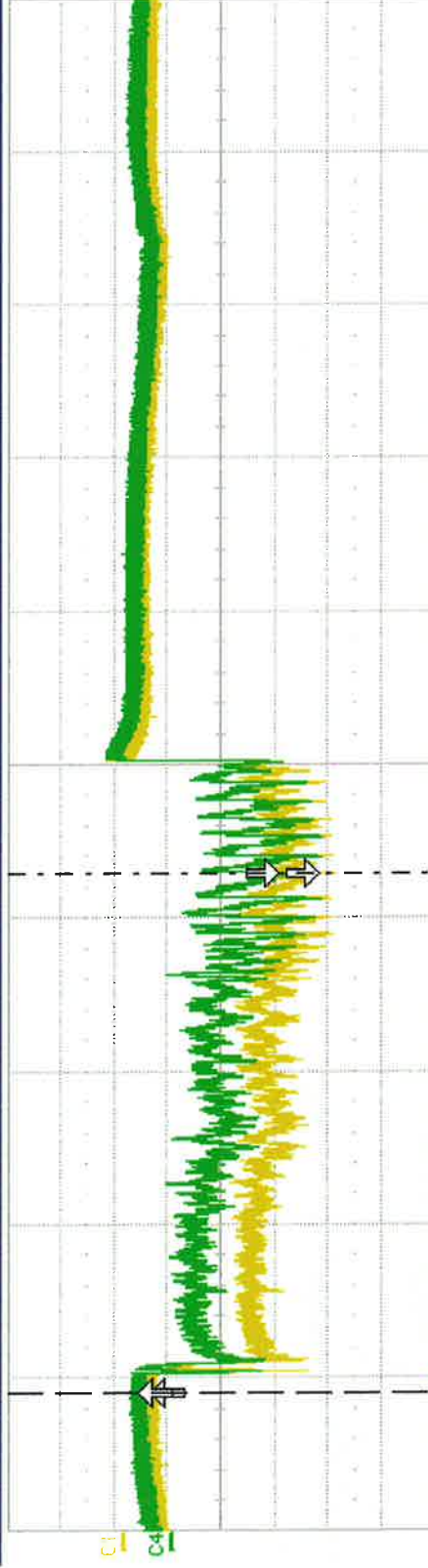
TELEDYNE LECROY

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Tbase -2.50 ms
 WStream 500 μ s
 50.0 kS 10 MS/s
 Trigger Ext10 DC
 Normal 30 mV
 Edge Negative
 X1= 76.1 μ s Δ X= 1.7676 ms
 X2= 1.8437 ms 1/ Δ X= 565.74 Hz

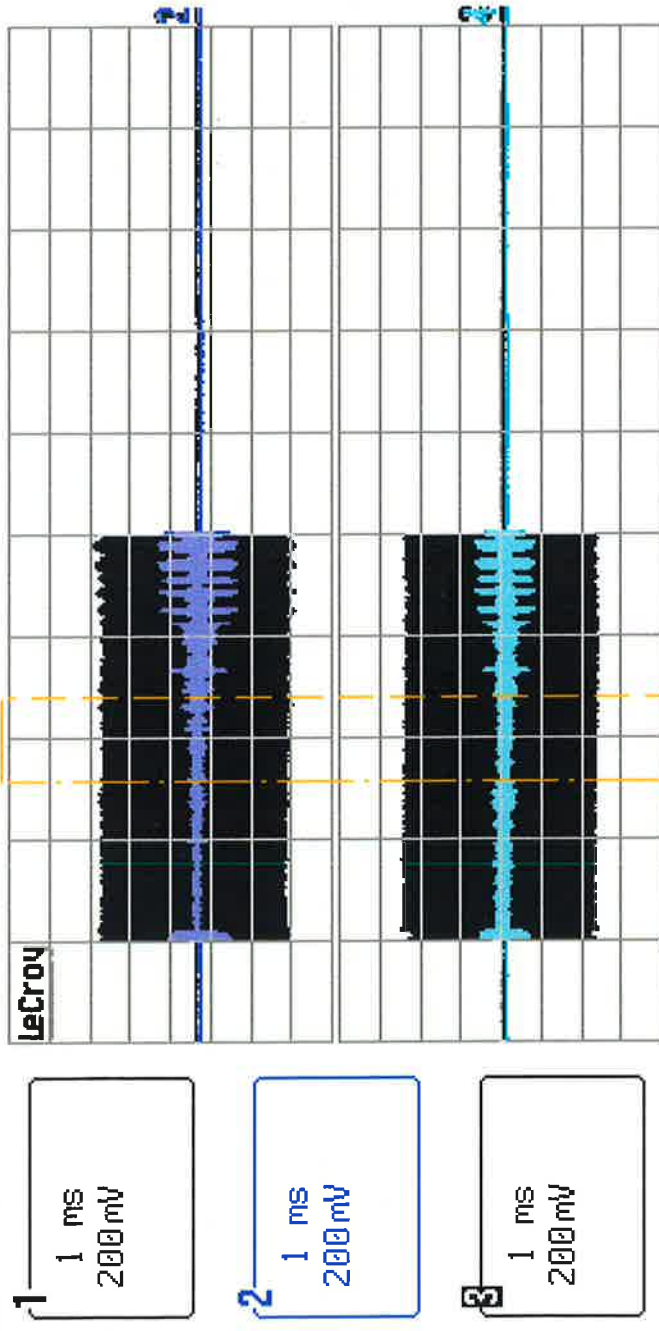
C2	DC1M	C3	DC1M	F3 script(C3,C2)	F4	<F3>
500 mV/div	500 mV/div	500 mV/div	500 mV/div	2.00/div	500e-3/div	500e-3/div
75 mV offset	100 mV offset	100 mV offset	100 mV offset	500 μ s/div	500 μ s/div	500 μ s/div
-3 mV	452 mV	-75e-3	-75e-3	379 #	-256.35e-3	379 #
301 mV	300 mV	925e-3	925e-3		859.28e-3	
304 mV	-152 mV	1.000	1.000	Δ y	1.11562	



C1	C4	Math
5.00 mV/div	5.00 mV/div	2.00 mV/div
9.00 mV ofst	4.50 mV ofst	1.00 mV/div
-18.06 mV	-9.74 mV	300 #
-2.59 mV	2.93 mV	-6.5920 mV
15.46 mV	12.67 mV	2.9000 mV
Δy	Δy	Δy

Timebase	-4.00 ms	Trigger	Ext10	DC
1.00 ms/div	Normal	Edge	700 mV	Negative
2.00 MS	200 MS/s			
X1=	3.293210 ms	ΔX=	-3.396850 ms	
X2=	-103.640 μs	1/ΔX=	-294.3904 Hz	

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385 sweeps:

rms(1)	average	low	high	sigma
rms(2)	326.1mV	322.6	332.2	1.6
rms(3)	21.7mV	16.7	26.4	1.6
rms(4)	330.6mV	327.4	333.2	1.3
phase(1,3)	25.9mV	20.7	35.5	1.7
	77°	27	132	36

1 ms

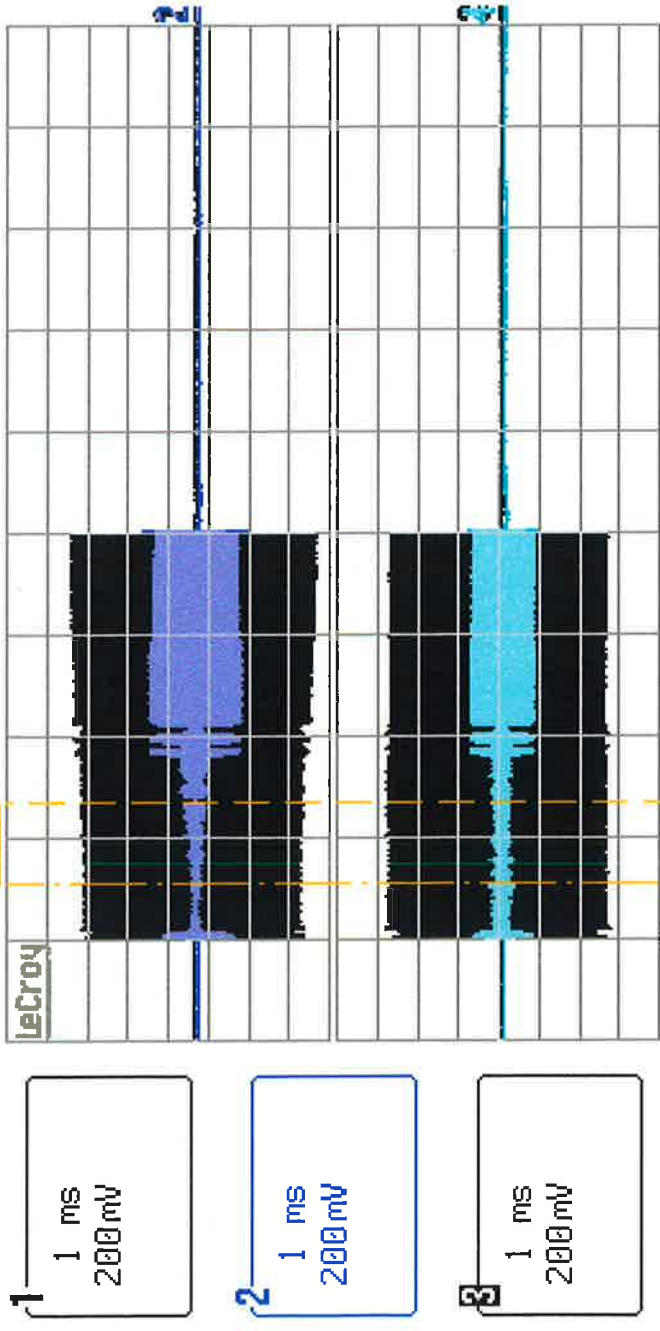
1	.2	V	AC
2	.2	V	AC
3	.2	V	AC
4	.2	V	AC

10 MS/s

☐ NORMAL

Ext10 DC 0.15 V 50Ω

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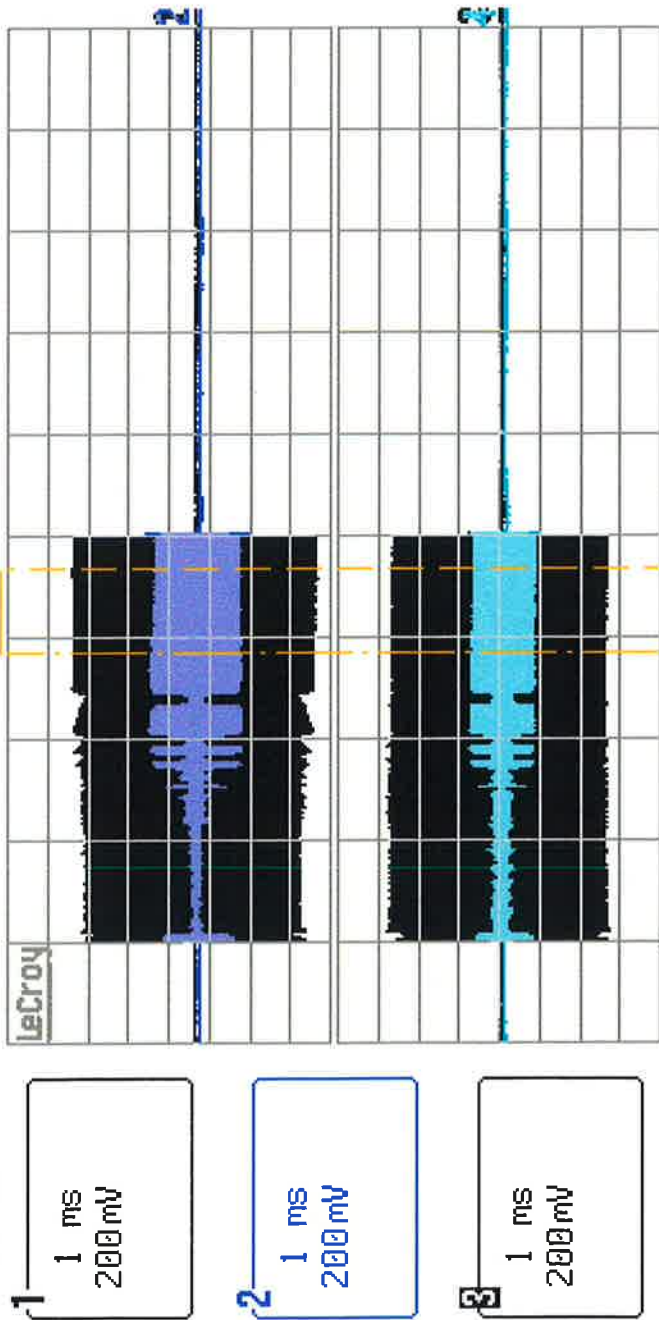


11 sweeps:				
rms(1)	average	low	high	sigma
rms(2)	378.5mV	376.4	381.0	1.8
rms(3)	22.3mV	20.0	24.7	1.5
rms(4)	372.2mV	370.7	374.1	1.4
phase(1,3)	29.3mV	26.6	31.6	1.8
	0.08 k°	0.03	0.13	0.04

1 ms
1 .2 V AC
2 .2 V AC
3 .2 V AC
4 .2 V AC

10 MS/s
NORMAL

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12:44:12



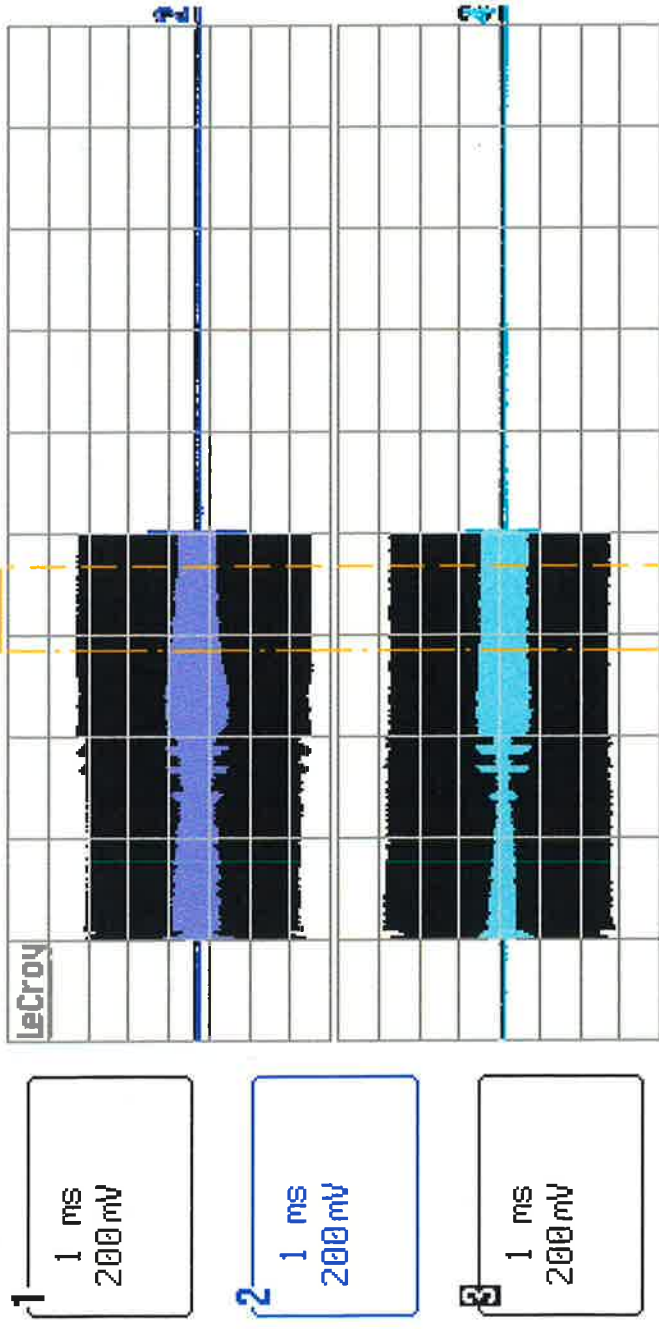
		15 sweeps:			
		average	low	high	sigma
rms(1)		425.1mV	422.5	427.1	1.6
rms(2)		149.2mV	147.9	150.3	0.7
rms(3)		370.5mV	368.7	371.9	1.1
rms(4)		113.8mV	112.9	114.4	0.4
phase(1,3)		0.07 k°	0.03	0.12	0.03

- 1 .2 V AC
- 2 .2 V AC
- 3 .2 V AC
- 4 .2 V AC

10 MS/s

☐ NORMAL

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12:46:57



89 sweeps:

	average	low	high	sigma
rms(1)	408.0 mV	404.9	411.0	1.7
rms(2)	70.2 mV	66.9	77.1	2.3
rms(3)	376.4 mV	372.9	378.8	1.4
rms(4)	83.5 mV	81.6	85.7	0.9
phase(1,3)	0.07 k°	0.03	0.13	0.04

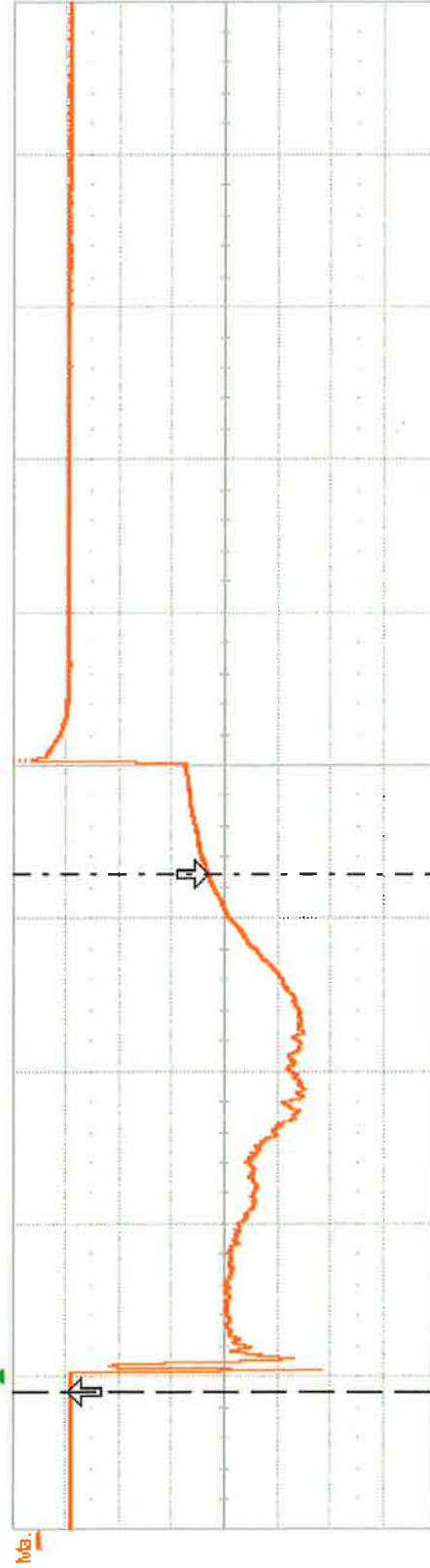
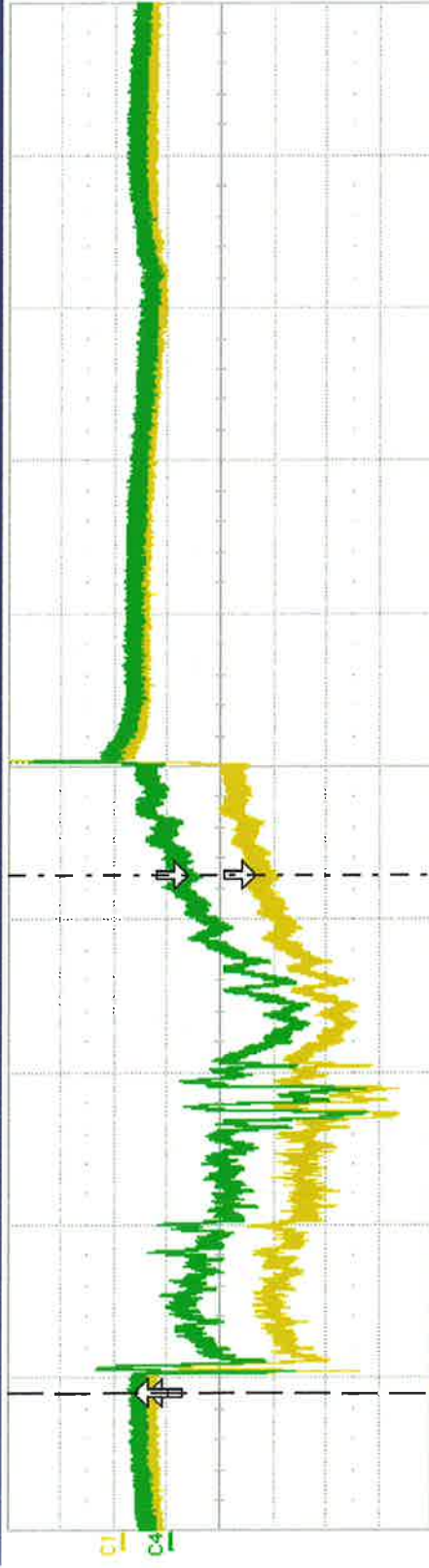
1 ms

1 .2 V AC
2 .2 V AC
3 .2 V AC
4 .2 V AC

10 MS/s

Ext10 DC 0.15 V 50Ω

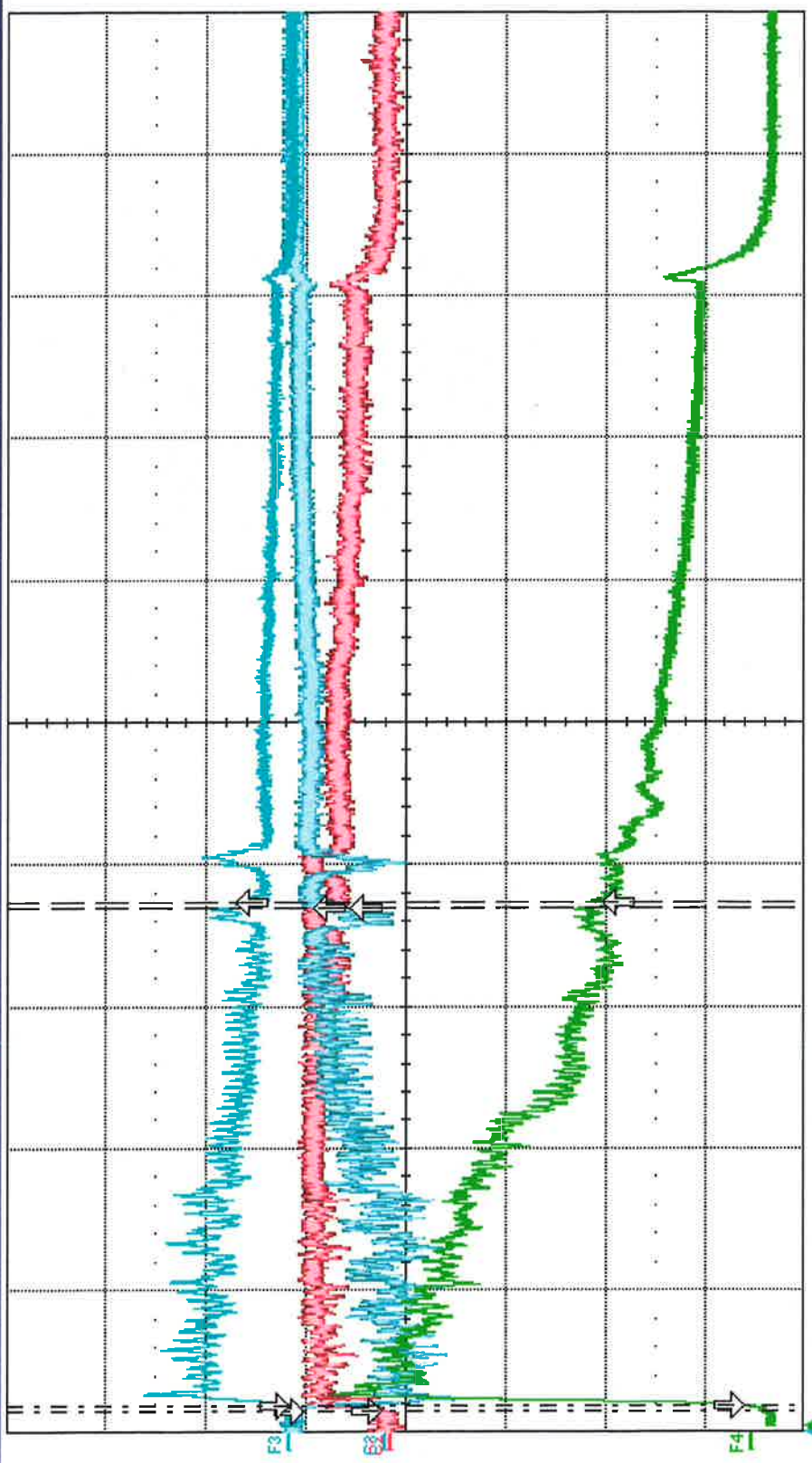
☐ NORMAL



Channel	Scale	Offset	Math	Unit
C1	5.00 mV/div	9.00 mV ofst	DC1M	mV
C4	5.00 mV/div	4.50 mV ofst	DC1M	mV
Ma	5.00 mV/div	4.50 mV ofst	DC1M	mV

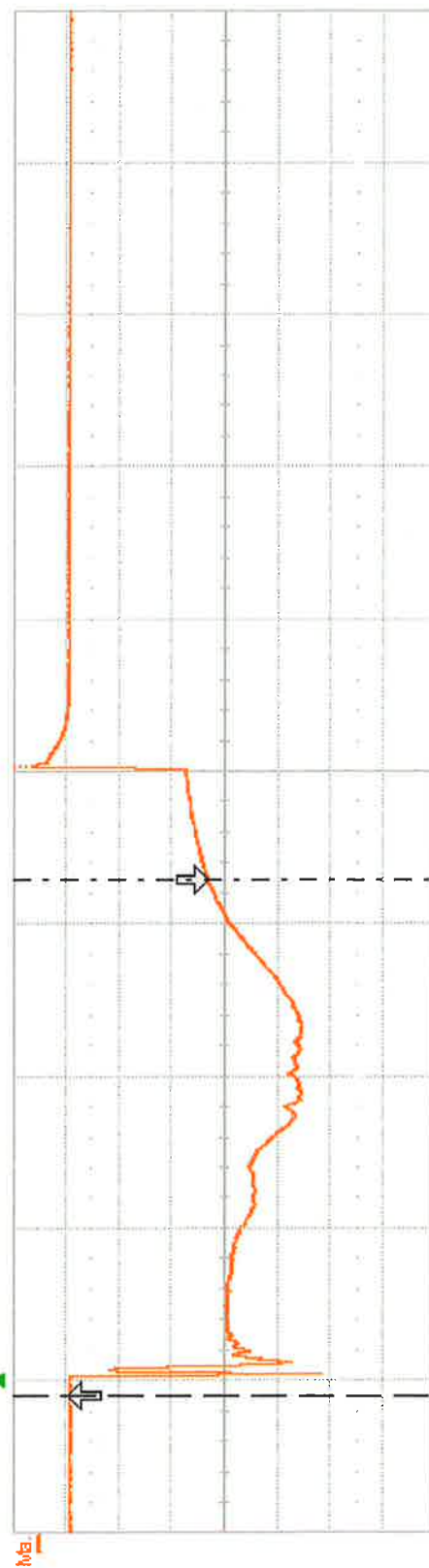
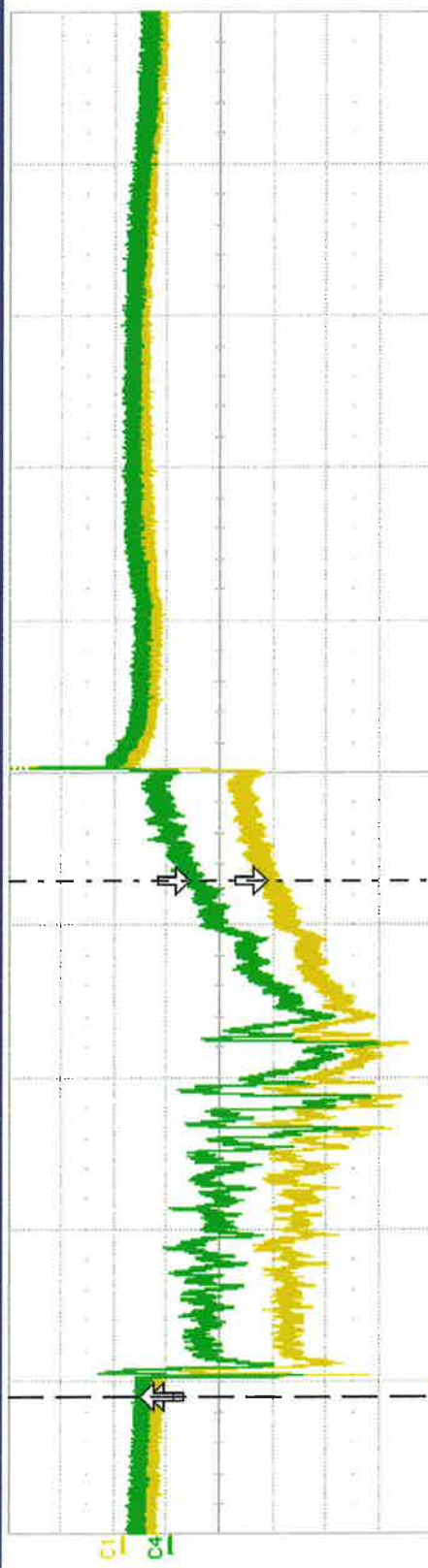
Timebase	Scale	Unit	Trigger	Level
Timebase	4.00 ms	ms	Normal	700 mV
Scale	1.00 ms/div	ms/div	Edge	Negative
Math	2.00 MS	200 MS/s		

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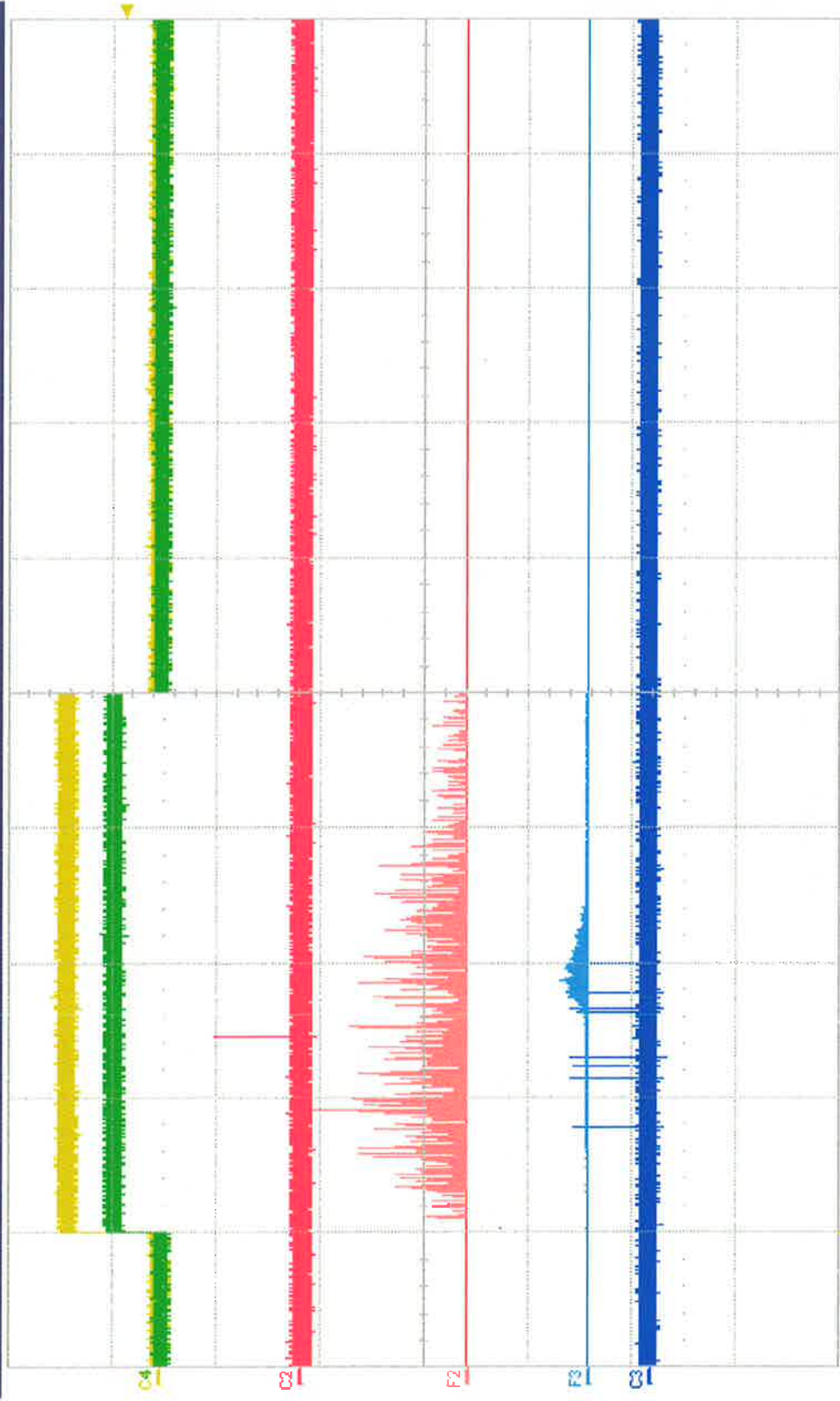
Tbase -2.50 ms
 WStream 500 μ s
 50.0 kS 10 MS/s
 X1= 76.1 μ s Δ X= 1.7676 ms
 X2= 1.8437 ms 1/ Δ X= 565.74 Hz

C2	C3	F3	F4
500 mV/div	500 mV/div	500e-3/div	500e-3/div
75 mV offset	100 mV offset	2.00/div	2.00/div
53 mV	423 mV	500 μ s/div	500 μ s/div
378 mV	172 mV	24e-3	24e-3
325 mV	-251 mV	46.56e-3	46.56e-3
Δ y	Δ y	1.044	738.00e-3
		1.020	691.45e-3



C1	DCIM3	C4	DCIM4	Math	<C1>
5.00 mV/div	5.00 mV/div	5.00 mV/div	5.00 mV/div	4.00 mV/div	4.00 mV/div
9.00 mV ofst	9.00 mV ofst	4.50 mV ofst	4.50 mV ofst	1.00 mV/div	1.00 mV/div
↓ -13.25 mV	↓ -13.25 mV	↓ -1.41 mV	↓ -1.41 mV	↓ -12.7334 mV	↓ -12.7334 mV
↑ -2.69 mV	↑ -2.69 mV	↑ 2.88 mV	↑ 2.88 mV	↑ -2.3078 mV	↑ -2.3078 mV
Δy 10.56 mV	Δy 10.56 mV	Δy 4.28 mV	Δy 4.28 mV	Δy 10.4256 mV	Δy 10.4256 mV

Timebase	-4.00 ms	Trigger	Edge	700 mV	Negative
1.00 ms/div		Normal			
2.00 MS		Edge			
X1= 3.293210 ms		ΔX= -3.396850 ms			
X2= -103.640 μs		1/ΔX= -294.3904 Hz			



Tbase -4.00 ms
1.00 ms/div
500 kS
Trigger Normal
Edge
Positive

F3 perhs...
5.00 k#
1.0 ms
74.8 k#

F2 perhs...
20.0 #
1.0 ms
2.58 k#

C4
10.0 V
25.30 V

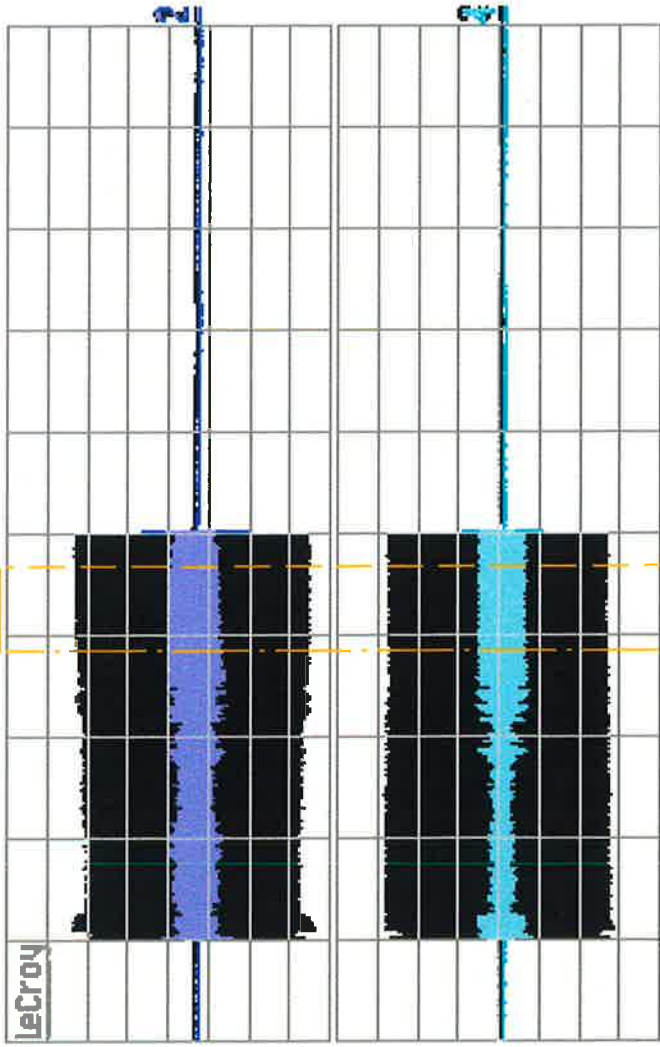
C3
5.00 V
-11.0 V

C2
5.00 V
5.95 V

C1
5.00 V
12.70 V

TELEDYNE LECROY
10/8/2020 12:51:12 PM

8-Oct-20
12:53:05



1
1 ms
200 mV

2
1 ms
200 mV

3
1 ms
200 mV

4
1 ms
200 mV

29 sweeps:

rms(1)	average	low	high	sigma
rms(2)	407.4 mV	405.1	410.7	1.6
rms(3)	78.9 mV	68.8	83.8	3.7
rms(4)	375.7 mV	372.6	386.2	3.4
phase(1,3)	82.1 mV	79.5	83.2	1.0
	0.07 k°	0.03	0.13	0.04

1 ms

- 1 .2 V AC
- 2 .2 V AC
- 3 .2 V AC
- 4 .2 V AC

10 MS/s

Ext10 DC 0.15 V 50Ω

☐ NORMAL