

11-Nov-19
11:54:43

1
.5 ms
0.50 V

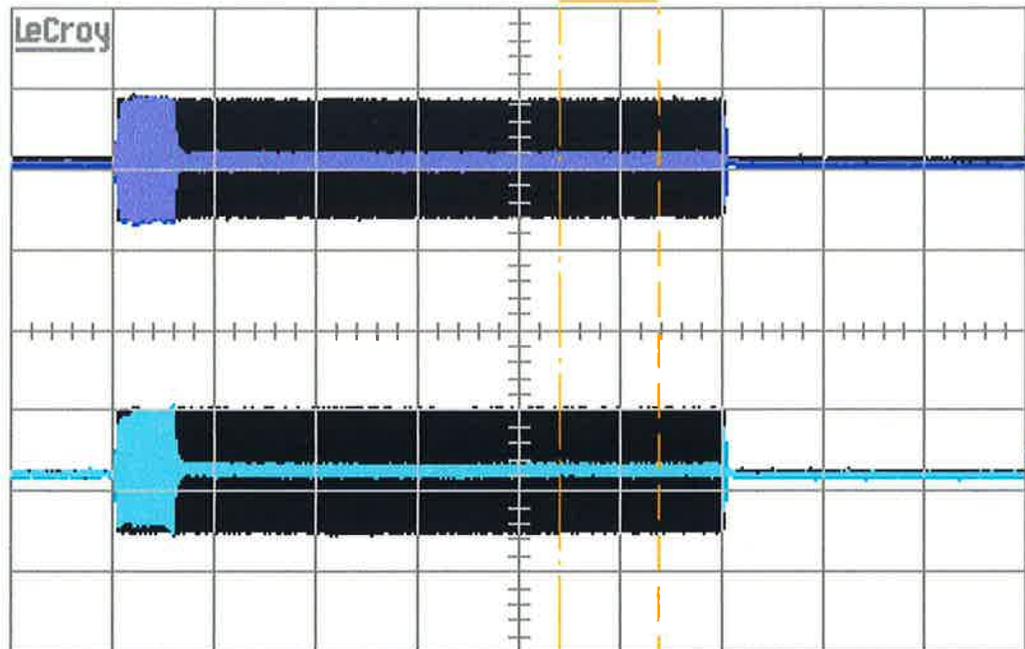
2
.5 ms
200mV

3
.5 ms
0.50 V

4
.5 ms
200mV

.5 ms

1 .5 V AC
2 .2 V AC
3 .5 V AC
4 .2 V AC



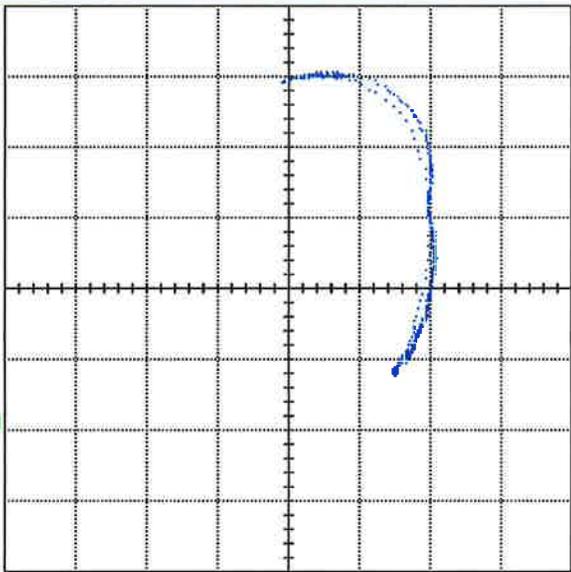
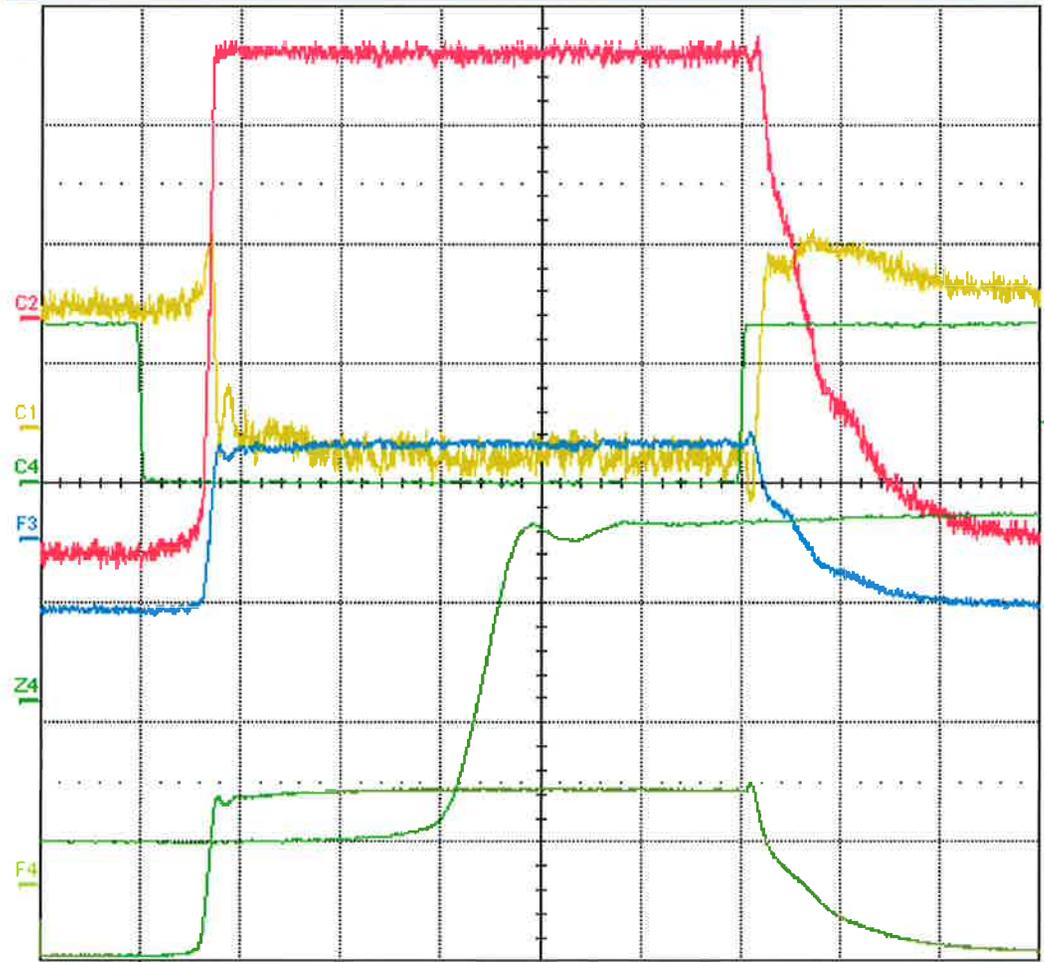
| | 5 sweeps: | average | low | high | sigma |
|------------|-----------|---------|-------|-------|-------|
| rms(1) | | 249.3mV | 248.1 | 250.1 | 0.9 |
| rms(2) | | 15.6mV | 15.2 | 16.0 | 0.4 |
| rms(3) | | 265.9mV | 264.6 | 266.8 | 0.8 |
| rms(4) | | 12.5mV | 11.8 | 13.3 | 0.6 |
| phase(1,3) | | 63.1 ° | 29.4 | 219.8 | 35.3 |



Ext10 DC 0.60 V 1MΩ

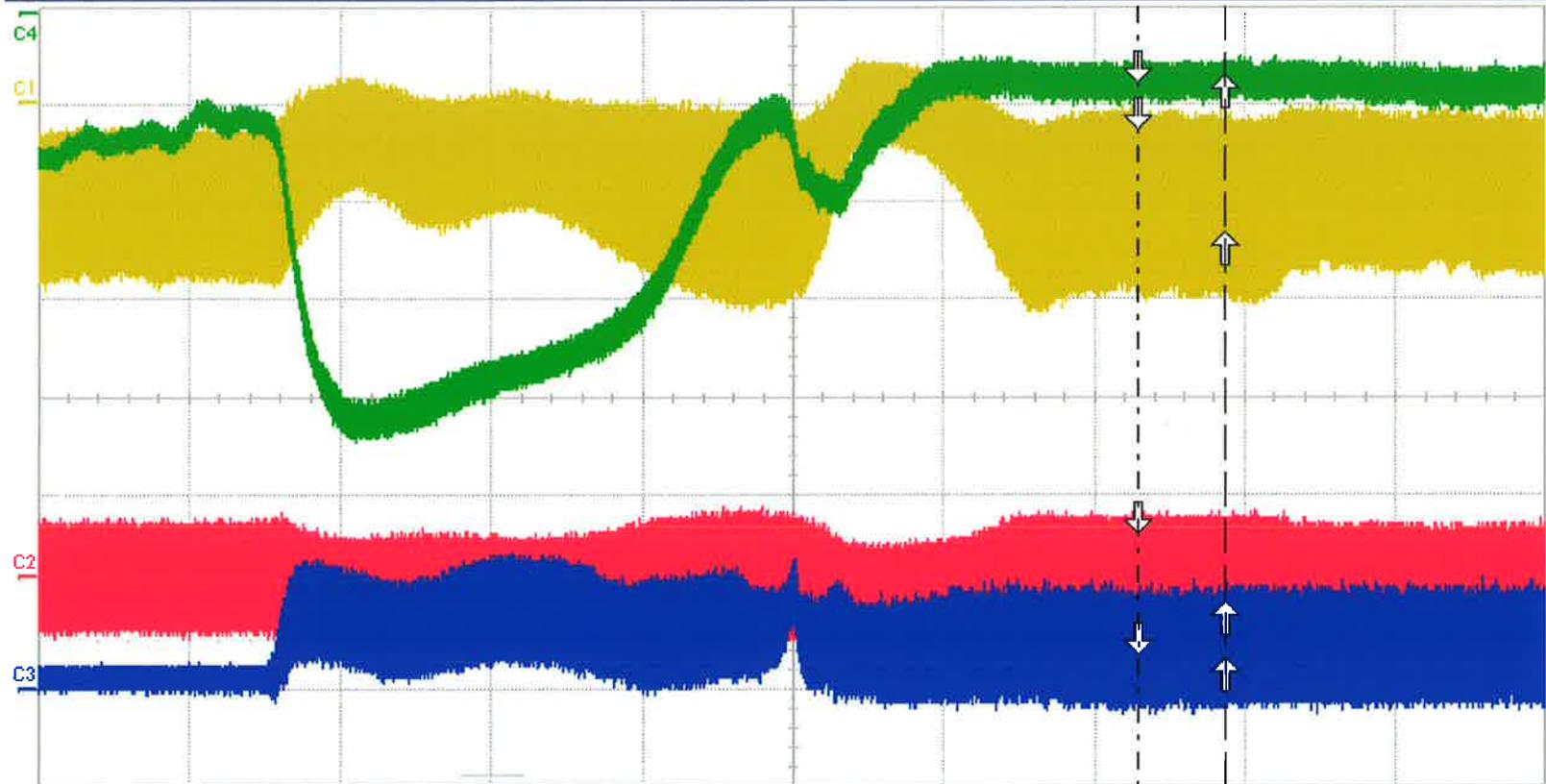
20 MS/s

NORMAL



| | | | | | | | | | | | | | |
|--------|--------|--------|-------------|-------------|-------------|--------|-------------|------|------|--------|--------|-------------|-------------|
| C1 | D1 | C2 | D1 | C4 | D1 | F3 | script(...) | F4 | <F3> | XY | XF1 | Z4 | zoom(...) |
| 200 mV | 200 mV | 200 mV | 2.00 V | 2.00 V | 2.00 V | 2.00 V | 2.00 | 2.00 | 2.00 | 200 mV | 200 mV | 1.00 | 1.00 |
| 92 mV | 274 mV | 0 mV | 500 μ s | 500 μ s | 500 μ s | 27 # | | | | 200 mV | 200 mV | 100 μ s | 100 μ s |

| | | | |
|---------|-----------------|---------|----------|
| Tbase | -2.00 ms | Trigger | C4 DC |
| | 500 μ s/div | Normal | 1.00 V |
| 2.50 kS | 500 kS/s | Edge | Negative |



| Measure | P1:mean(C1) | P2:pkpk(C2) | P3:pkpk(C3) | P4:mean(C3) | P5:mean(C4) | P6:--- |
|---------|-------------|-------------|-------------|-------------|-------------|--------|
| value | -468 mV | 1.19 V | 138 V | 42.0 V | -76.7 V | |
| status | ✓ | ✓ | ✓ | ✓ | ✓ | |

| C1 | C2 | C3 | C4 |
|----------------|---------------|---------------|----------------|
| DCIM | DCIM | DCIM | DCIM |
| 500 mV/div | 1.00 V/div | 100 V/div | 100 V/div |
| 1.510 V offset | -1.840 V ofst | -300.0 V ofst | 394.0 V offset |
| ↓ -135 mV | ↓ 465 mV | ↓ 39.1 V | ↓ -70.5 V |
| ↑ -682 mV | ↑ -287 mV | ↑ 31.3 V | ↑ -67.5 V |
| Δy -547 mV | Δy -752 mV | Δy -7.9 V | Δy 3.0 V |

| | | | |
|----------|-------------|---------|-----------|
| Timebase | -200 μs | Trigger | Ext/10 DC |
| | 50.0 μs/div | Normal | 200 mV |
| 500 kS | 1.0 GS/s | Edge | Positive |

X1= 314.260 μs ΔX= 29.060 μs
 X2= 343.320 μs 1/ΔX= 34.412 kHz

11-Nov-19
11:56:40

1
.5 ms
0.50 V

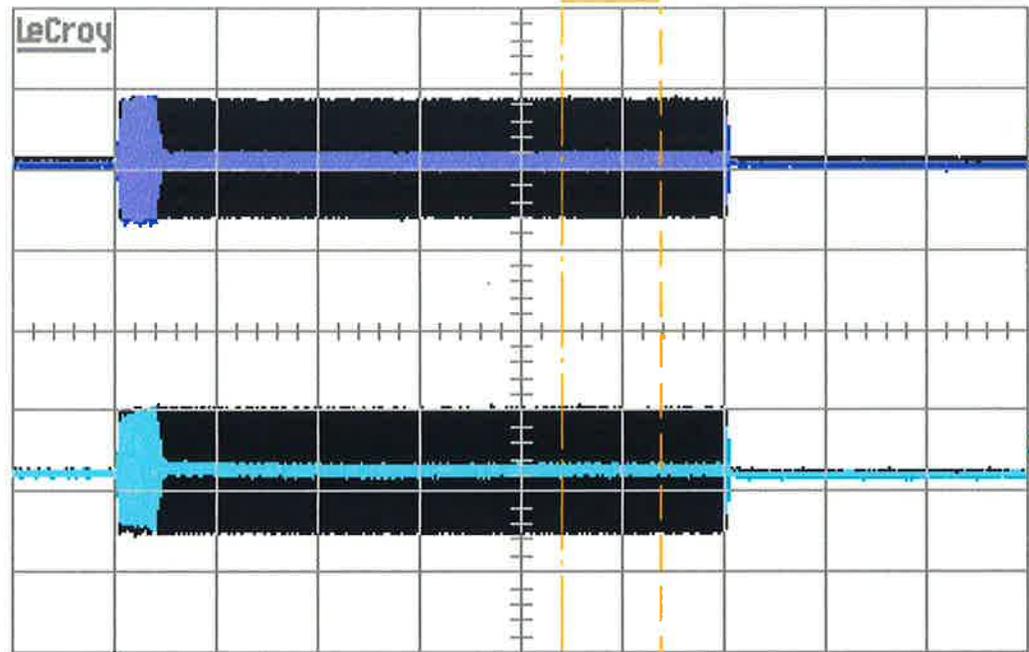
2
.5 ms
200mV

3
.5 ms
0.50 V

4
.5 ms
200mV

.5 ms

1 .5 V AC
2 .2 V AC
3 .5 V AC
4 .2 V AC



5 sweeps:

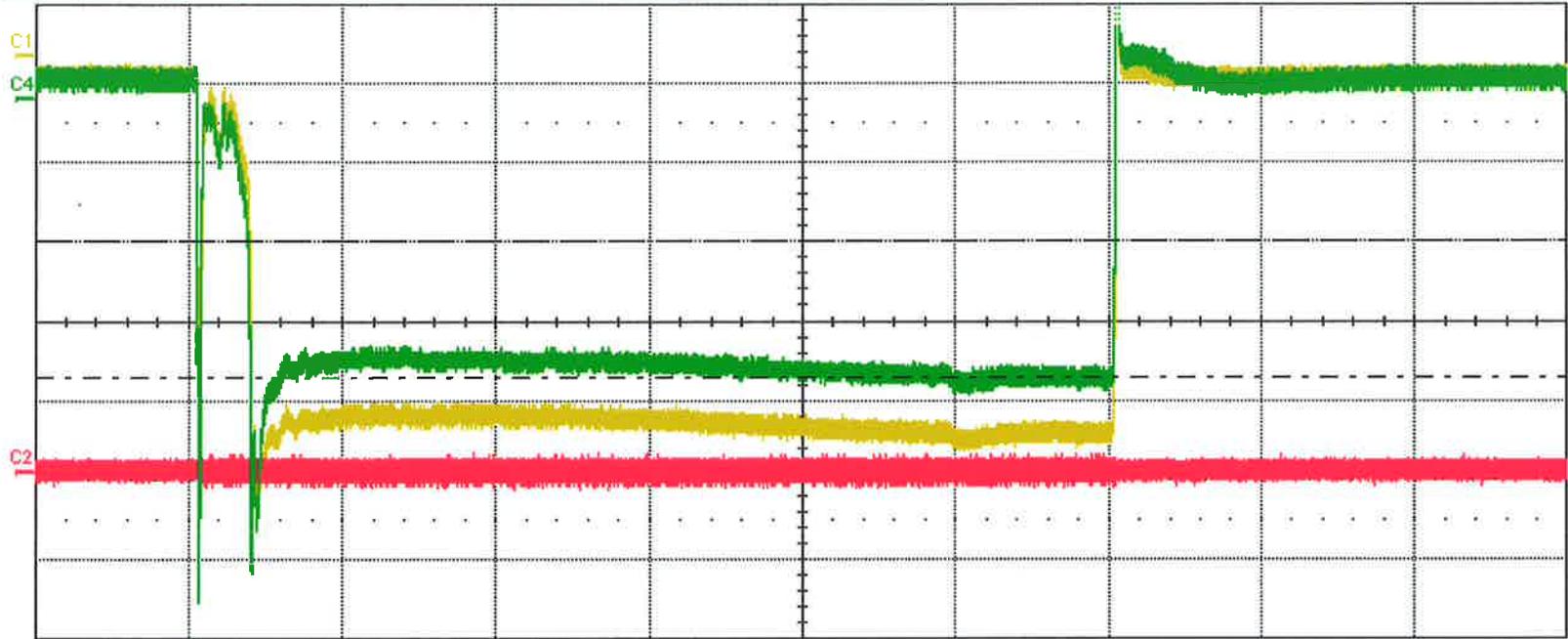
| | average | low | high | sigma |
|-------------|---------|-------|-------|-------|
| rms (1) | 251.4mV | 250.2 | 252.1 | 0.7 |
| rms (2) | 15.6mV | 14.9 | 16.7 | 0.8 |
| rms (3) | 268.1mV | 267.0 | 268.9 | 0.7 |
| rms (4) | 12.2mV | 10.4 | 14.3 | 1.6 |
| phase (1,3) | 65 ° | -132 | 221 | 40 |



Ext10 DC 0.60 V 1MΩ

20 MS/s

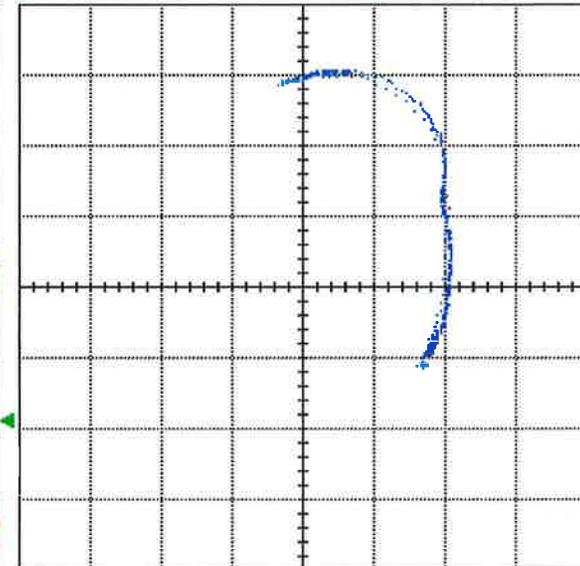
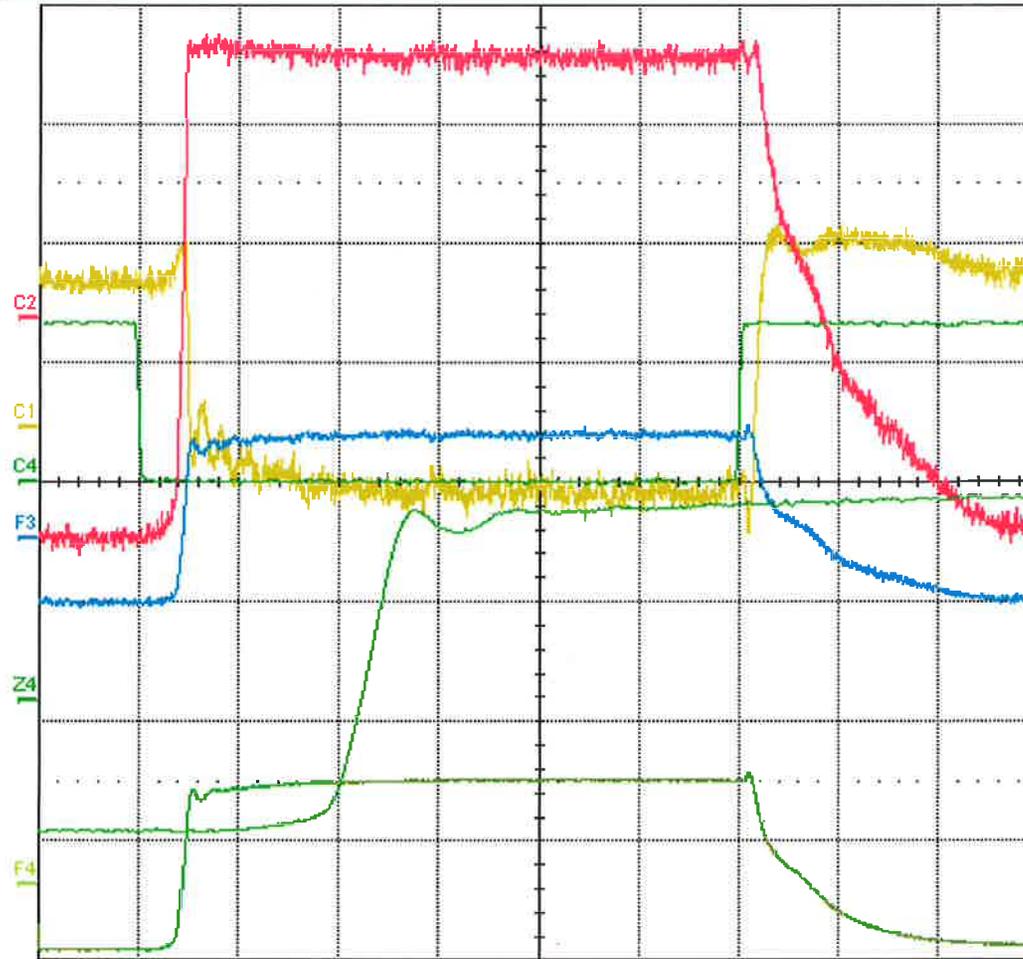
NORMAL



| Measure | P1:mean(Z1) | P2:mean(Z4) | P3:mean(C1) | P4:mean(C4) | P5:phase(C1,C4) | P6:--- |
|---------|---------------|---------------|---------------|---------------|-----------------|--------|
| value | -46.83 mV | -34.11 mV | -46.31 mV | -33.73 mV | --- | --- |
| mean | -46.6185 mV | -34.1980 mV | -46.7713 mV | -34.3073 mV | --- | --- |
| min | -47.64 mV | -35.28 mV | -47.77 mV | -34.99 mV | --- | --- |
| max | -45.98 mV | -33.54 mV | -46.06 mV | -33.60 mV | --- | --- |
| sdev | 579.2 μ V | 524.2 μ V | 561.9 μ V | 433.4 μ V | --- | --- |
| num | 10 | 10 | 10 | 10 | 0 | --- |
| status | ✓ | ✓ | ✓ | ✓ | --- | --- |

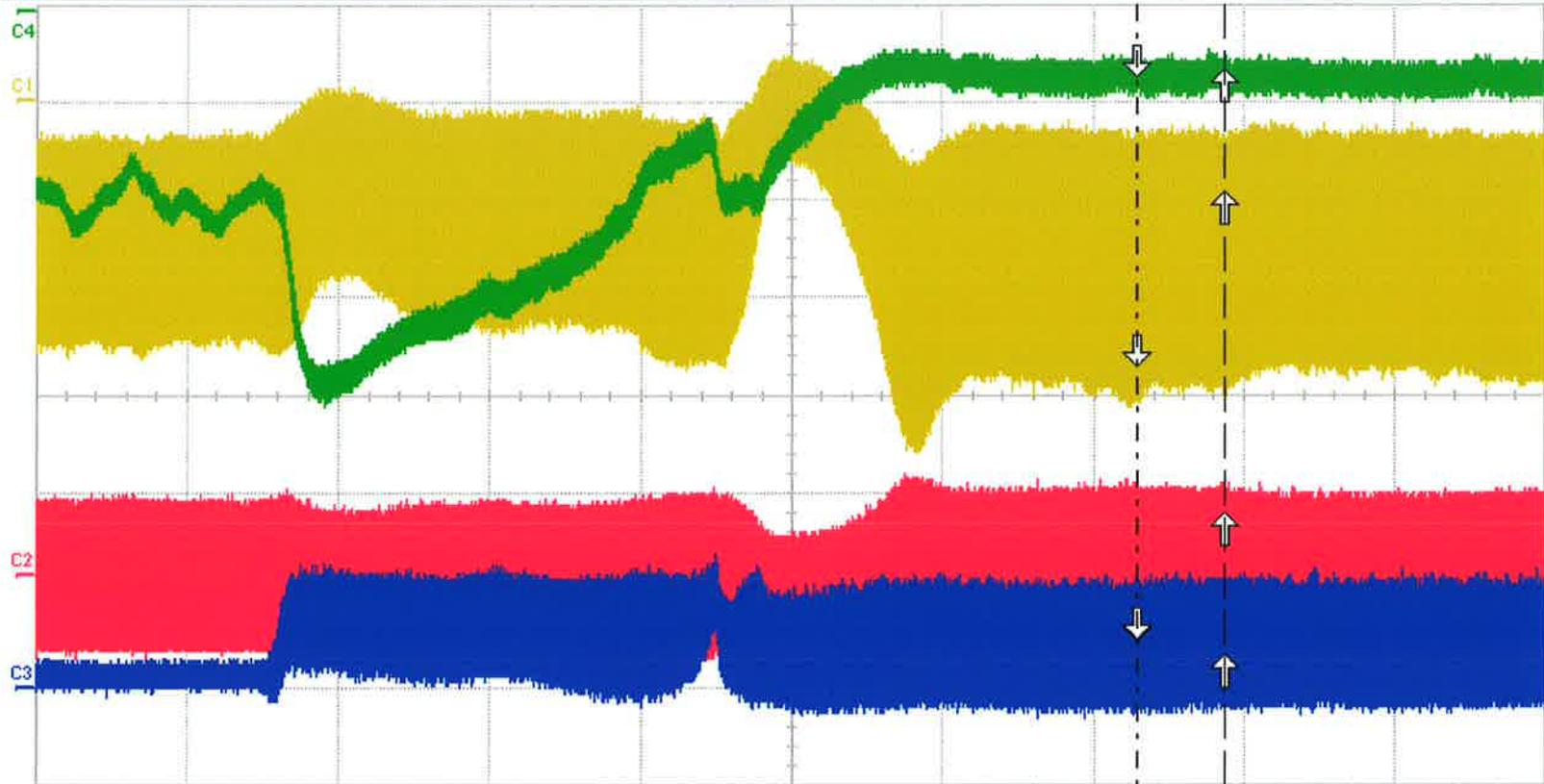
| C1 | C2 | C4 |
|--------------------|-------------------|--------------------|
| DCIM | DCIM | DCIM |
| 16.0 mV/div | 1.00 V/div | 10.0 mV/div |
| 33.50 mV ofst | -1.890 V ofst | 28.00 mV ofst |
| ----- -40.5 mV | ----- 1.19 V | ----- -35.0 mV |
| ----- -23.5 mV | ----- 2.89 V | ----- -18.0 mV |
| Δy 17.0 mV | Δy 1.70 V | Δy 17.0 mV |

| | | | |
|----------|-----------------|---------|----------|
| Timebase | -2.00 ms | Trigger | Edge |
| | 500 μ s/div | Normal | 200 mV |
| 1.00 MS | 200 MS/s | Edge | Negative |



| | | | | | | |
|--------|--------|--------|-------------|-------------|--------|-------------|
| C1 | C2 | C4 | F3 | F4 | KY | Z4 |
| 200 mV | 200 mV | 2.00 V | 2.00 | 2.00 | 200 mV | 1.00 |
| 92 mV | 274 mV | 0 mV | 500 μ s | 500 μ s | 200 mV | 100 μ s |
| | | | | 15 # | 15 # | 15 # |

| | | | |
|---------|-----------------|---------|----------|
| Tbase | -2.00 ms | Trigger | C4 |
| | 500 μ s/div | Normal | 1.00 V |
| 2.50 kS | 500 kS/s | Edge | Negative |

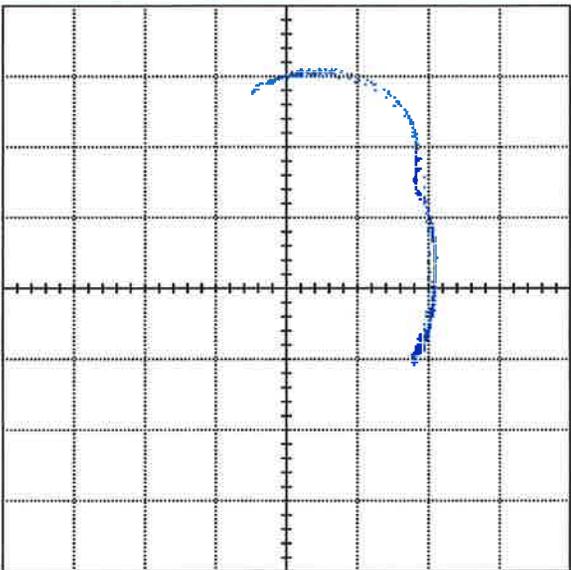
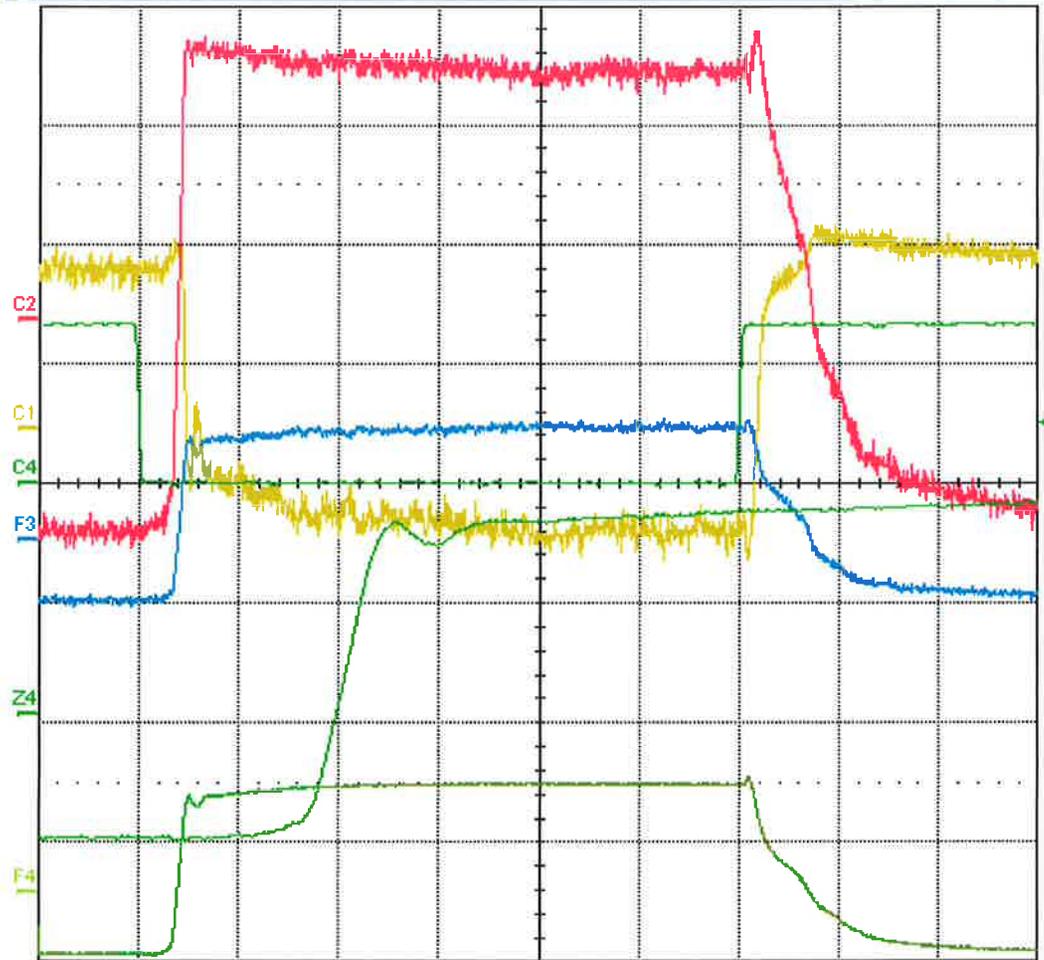


| Measure | P1:mean(C1) | P2:pkpk(C2) | P3:pkpk(C3) | P4:mean(C3) | P5:mean(C4) | P6:--- |
|---------|-------------|-------------|-------------|-------------|-------------|--------|
| value | -801 mV | 1.81 V | 147 V | 43.2 V | -70.3 V | |
| status | ✓ | ✓ | ✓ | ✓ | ✓ | |

| C1 | C2 | C3 | C4 |
|----------------|---------------|---------------|----------------|
| DCIM | DCIM | DCIM | DCIM |
| 500 mV/div | 1.00 V/div | 100 V/div | 100 V/div |
| 1.510 V offset | -1.840 V ofst | -300.0 V ofst | 394.0 V offset |
| ↓ -1.356 V | ↓ -661 mV | ↓ 53.1 V | ↓ -65.9 V |
| ↑ -477 mV | ↑ 625 mV | ↑ 31.4 V | ↑ -63.0 V |
| Δy 879 mV | Δy 1.286 V | Δy -21.7 V | Δy 2.9 V |

| | | | |
|----------|-------------|---------|-----------|
| Timebase | -200 μs | Trigger | Est/10 DC |
| | 50.0 μs/div | Normal | 200 mV |
| 500 kS | 1.0 GS/s | Edge | Positive |

X1= 314.260 μs ΔX= 29.060 μs
 X2= 343.320 μs 1/ΔX= 34.412 kHz



| | | | | | | | | | | | | | |
|--------|----|--------|----|--------|----|-------------|-------------|-------------|------|--------|-----|-------------|-----------|
| C1 | D1 | C2 | D1 | C4 | D1 | F3 | script(...) | F4 | <F3> | XY | XF1 | Z4 | zoom(...) |
| 200 mV | | 200 mV | | 2.00 V | | 2.00 | | 2.00 | | 200 mV | | 1.00 | |
| 92 mV | | 274 mV | | 0 mV | | 500 μ s | | 500 μ s | | 200 mV | | 100 μ s | |
| | | | | | | | | 16 # | | 16 # | | 16 # | |

| | | | |
|---------|-----------------|---------|----------|
| Tbase | -2.00 ms | Trigger | C4 DC |
| | 500 μ s/div | Normal | 1.00 V |
| 2.50 kS | 500 kS/s | Edge | Negative |

11-Nov-19
11:58:27

1
.5 ms
0.50 V

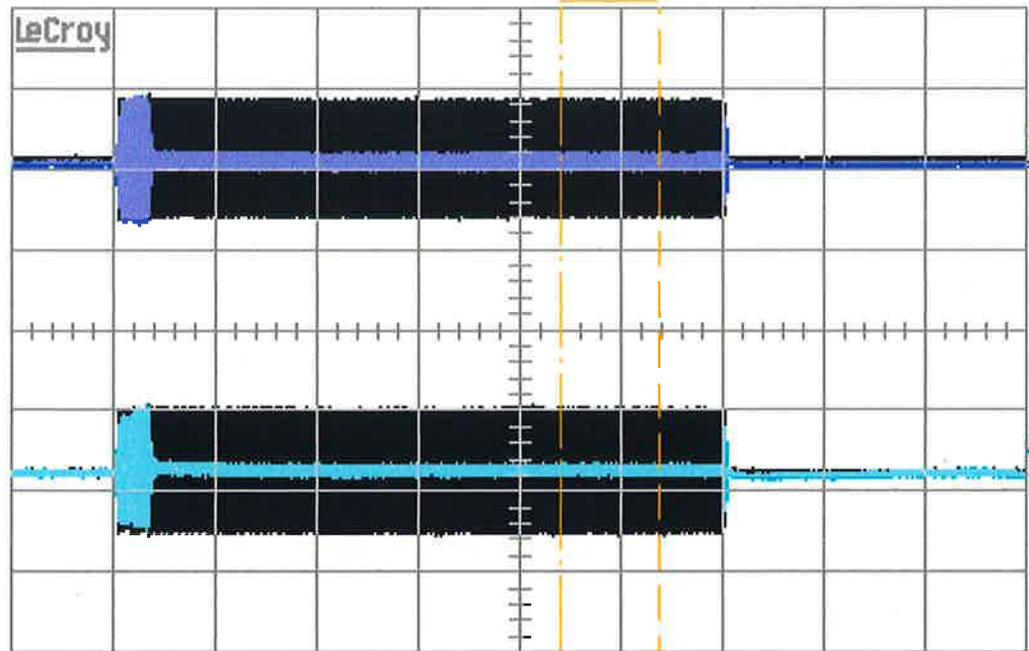
2
.5 ms
200 mV

3
.5 ms
0.50 V

4
.5 ms
200 mV

.5 ms

1 .5 V AC
2 .2 V AC
3 .5 V AC
4 .2 V AC



17 sweeps:

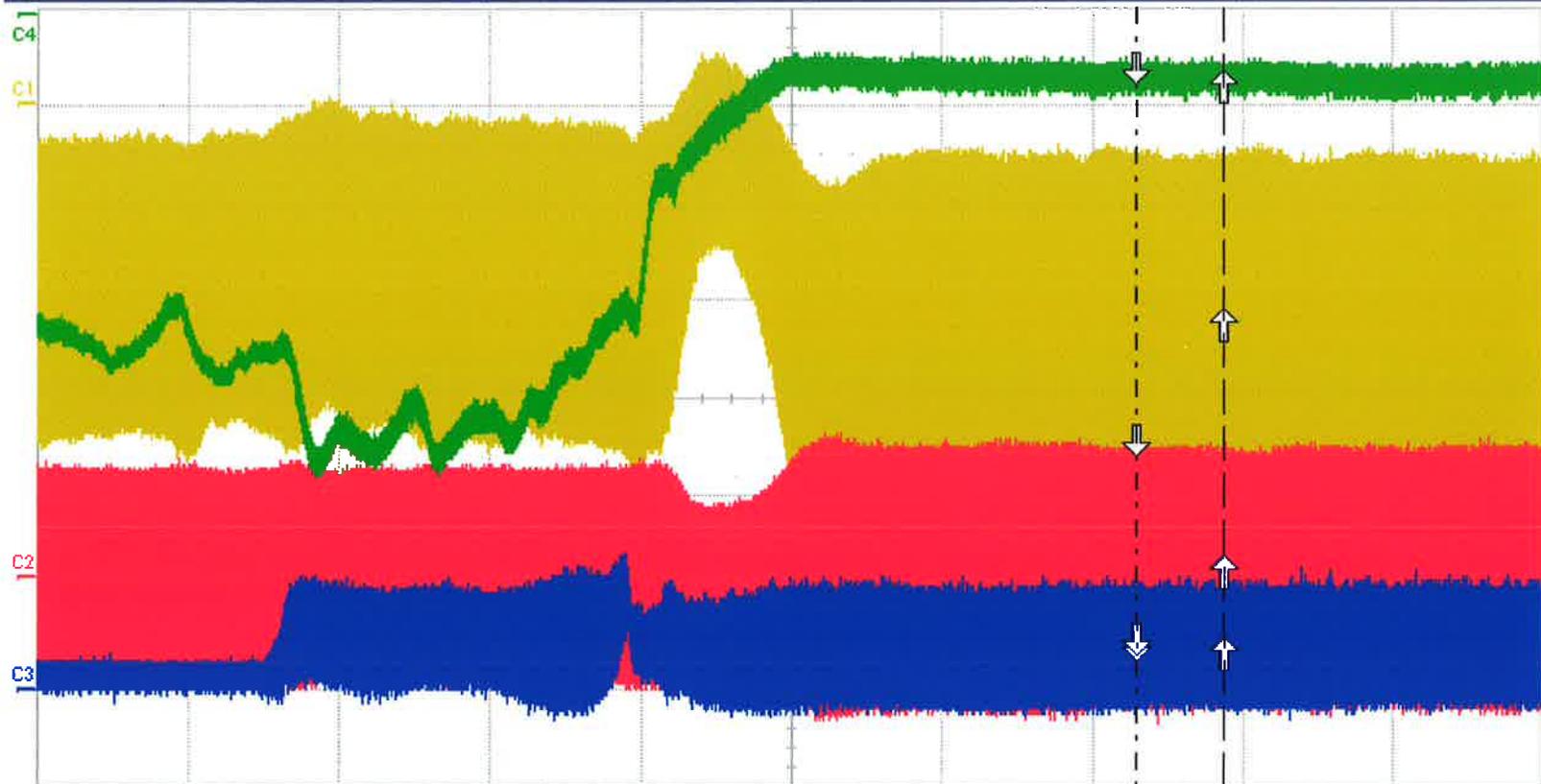
| | average | low | high | sigma |
|------------|---------|--------|-------|-------|
| rms(1) | 250.2mV | 247.8 | 252.1 | 1.3 |
| rms(2) | 15.7mV | 14.6 | 16.6 | 0.7 |
| rms(3) | 266.8mV | 264.1 | 268.8 | 1.3 |
| rms(4) | 12.6mV | 10.6 | 14.4 | 1.4 |
| phase(1,3) | 63.9 ° | -132.5 | 221.0 | 39.8 |



Ext10 DC 0.60 V 1MΩ

20 MS/s

NORMAL



| Measure | P1:mean(C1) | P2:pkpk(C2) | P3:pkpk(C3) | P4:mean(C3) | P5:mean(C4) | P6:--- |
|---------|-------------|-------------|-------------|-------------|-------------|--------|
| value | -1.291 V | 2.84 V | 147 V | 42.7 V | -69.0 V | |
| status | ✓ | ✓ | ✓ | ✓ | ✓ | |

| C1 | C2 | C3 | C4 |
|----------------|---------------|---------------|----------------|
| DCIM | DCIM | DCIM | DCIM |
| 500 mV/div | 1.00 V/div | 100 V/div | 100 V/div |
| 1.510 V offset | -1.840 V ofst | -300.0 V ofst | 394.0 V offset |
| ↓ -1.800 V | ↓ -839 mV | ↓ 38.8 V | ↓ -70.8 V |
| ↑ -1.072 V | ↑ 189 mV | ↑ 51.4 V | ↑ -60.1 V |
| Δy 728 mV | Δy 1.028 V | Δy 12.6 V | Δy 10.8 V |

| | | | |
|----------|-------------|---------|-----------|
| Timebase | -200 μs | Trigger | Ext/10 DC |
| | 50.0 μs/div | Normal | 200 mV |
| 500 kS | 1.0 GS/s | Edge | Positive |

X1= 314.260 μs ΔX= 29.060 μs
 X2= 343.320 μs 1/ΔX= 34.412 kHz

11-Nov-19
11:59:56

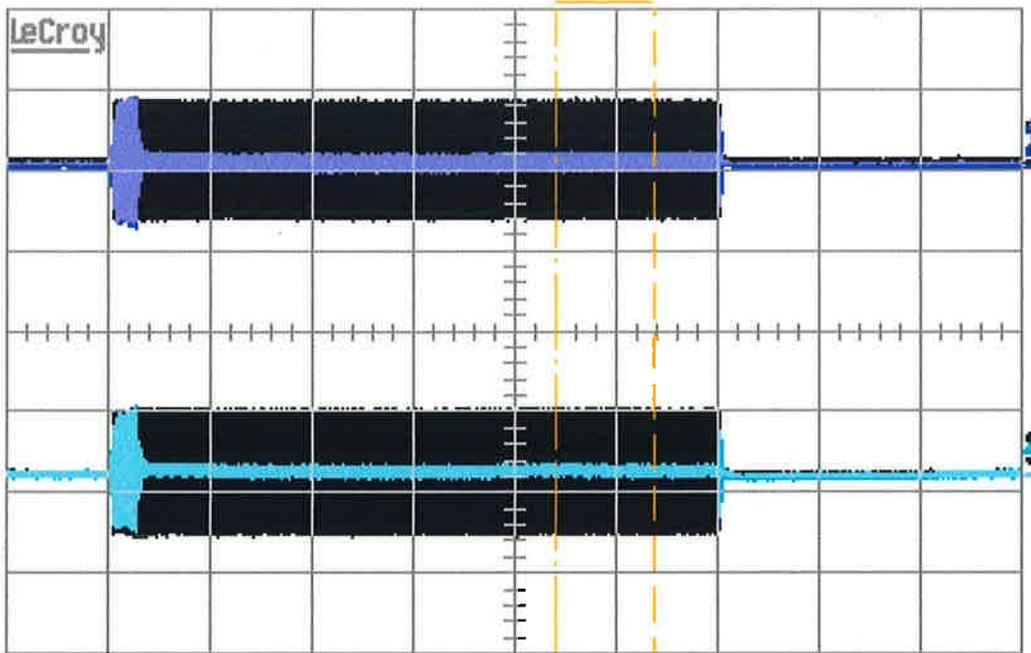
1
.5 ms
0.50 V

2
.5 ms
200mV

3
.5 ms
0.50 V

4
.5 ms
200mV

.5 ms
1 .5 V AC
2 .2 V AC
3 .5 V AC
4 .2 V AC



3 sweeps:

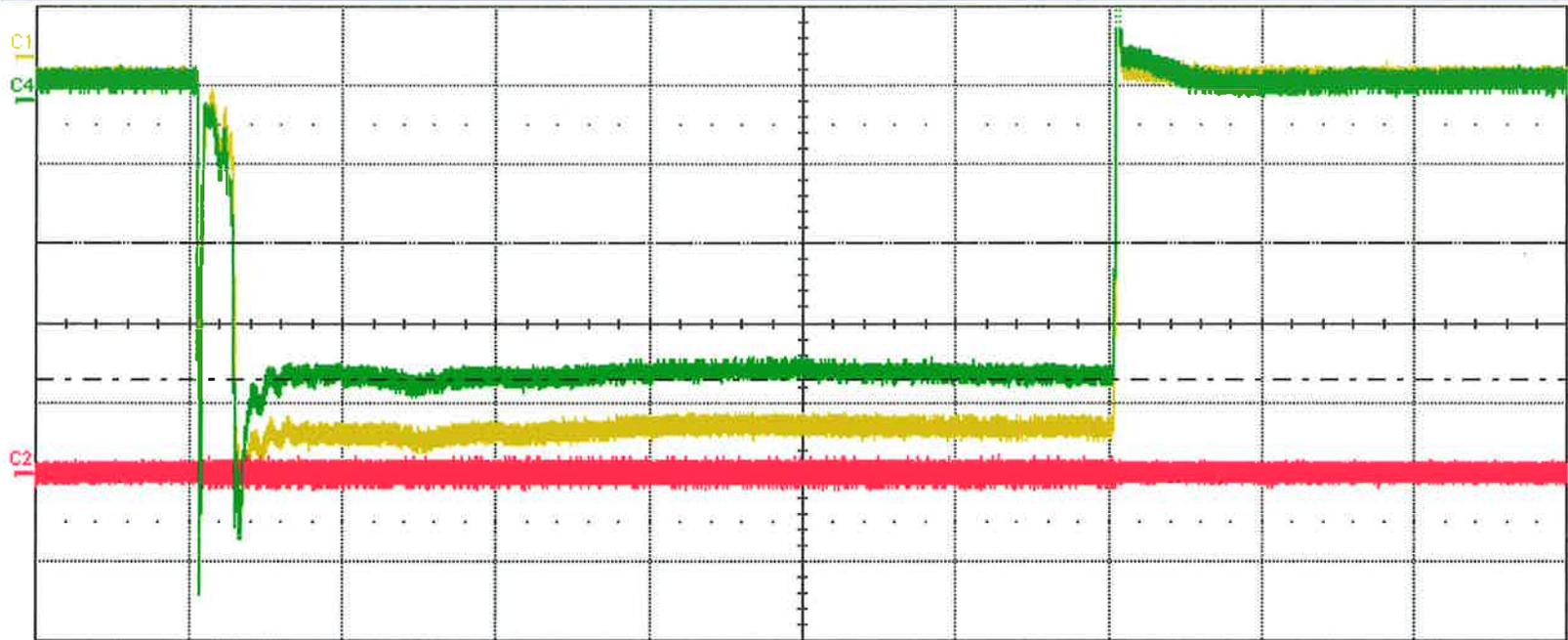
| | average | low | high | sigma |
|------------|---------|-------|-------|-------|
| rms(1) | 251.6mV | 250.7 | 252.3 | 0.8 |
| rms(2) | 16.0mV | 15.1 | 16.4 | 0.7 |
| rms(3) | 268.5mV | 267.6 | 269.2 | 0.8 |
| rms(4) | 12.9mV | 11.0 | 13.9 | 1.6 |
| phase(1,3) | 68.2 ° | 29.5 | 219.6 | 34.5 |



Ext10 DC 0.60 V 1MΩ

20 MS/s

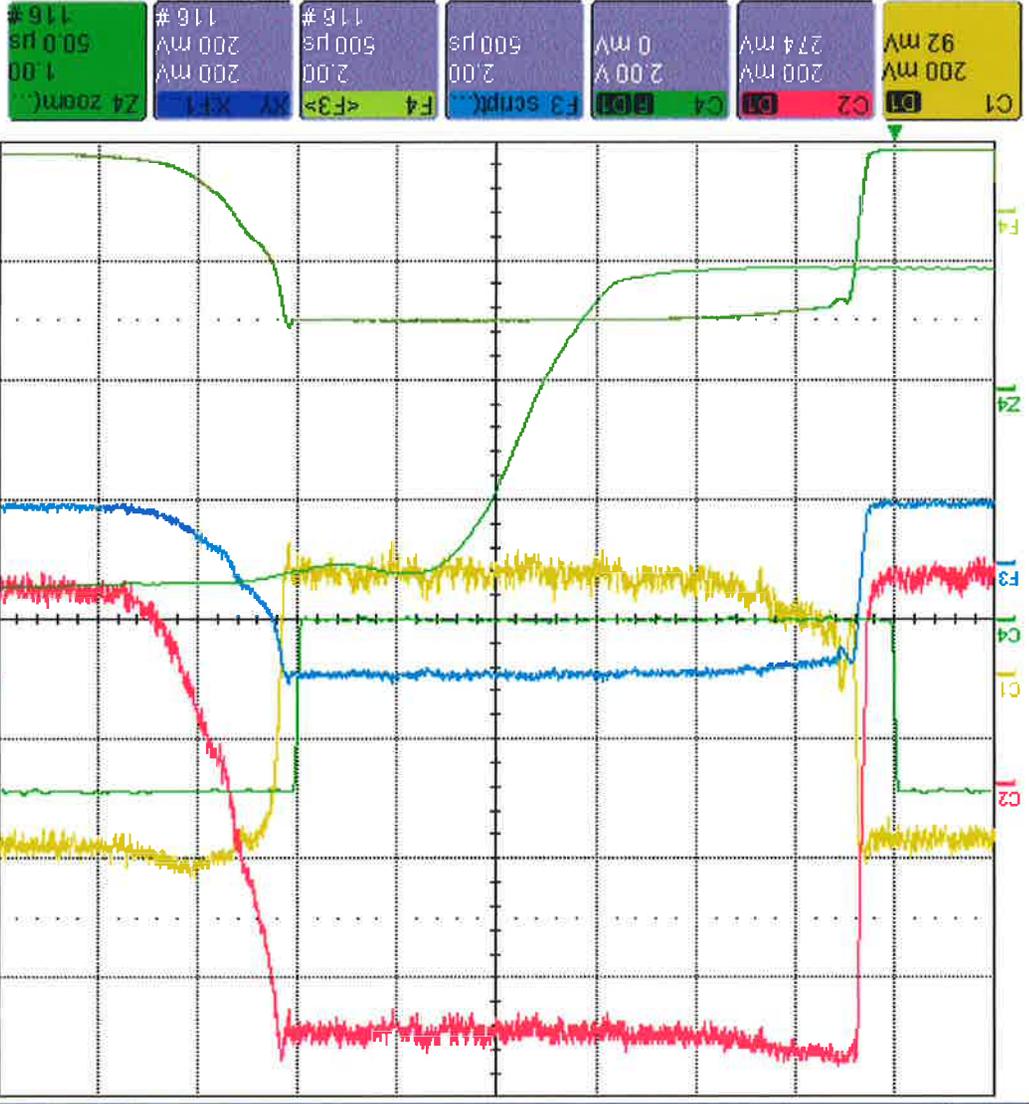
NORMAL



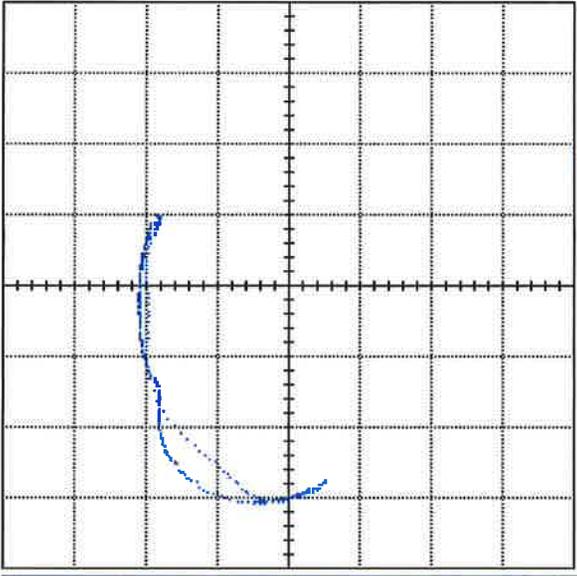
| Measure | P1:mean(Z1) | P2:mean(Z4) | P3:mean(C1) | P4:mean(C4) | P5:phase(C1,C4) | P6:--- |
|---------|---------------|---------------|---------------|---------------|-----------------|--------|
| value | -46.36 mV | -33.85 mV | -46.35 mV | -33.98 mV | --- | --- |
| mean | -46.3776 mV | -33.9665 mV | -46.5050 mV | -34.0727 mV | --- | --- |
| min | -47.66 mV | -35.17 mV | -47.94 mV | -35.51 mV | --- | --- |
| max | -45.42 mV | -33.09 mV | -45.53 mV | -33.12 mV | --- | --- |
| sdev | 777.1 μ V | 739.5 μ V | 809.6 μ V | 791.5 μ V | --- | --- |
| num | 7 | 7 | 7 | 7 | 0 | --- |
| status | ✓ | ✓ | ✓ | ✓ | --- | --- |

| C1 | C2 | C4 |
|--------------------|-------------------|--------------------|
| DCIM | DCIM | DCIM |
| 10.0 mV/div | 1.00 V/div | 10.0 mV/div |
| 33.50 mV ofst | -1.890 V ofst | 28.00 mV ofst |
| ---- -40.5 mV | ---- 1.19 V | ---- -35.0 mV |
| ---- -23.5 mV | ---- 2.89 V | ---- -18.0 mV |
| Δ y 17.0 mV | Δ y 1.70 V | Δ y 17.0 mV |

| | | | |
|----------|-----------------|---------|-------------|
| Timebase | -2.00 ms | Trigger | Ext/10 (DC) |
| | 500 μ s/div | Normal | 200 mV |
| 1.00 MS | 200 MS/s | Edge | Negative |



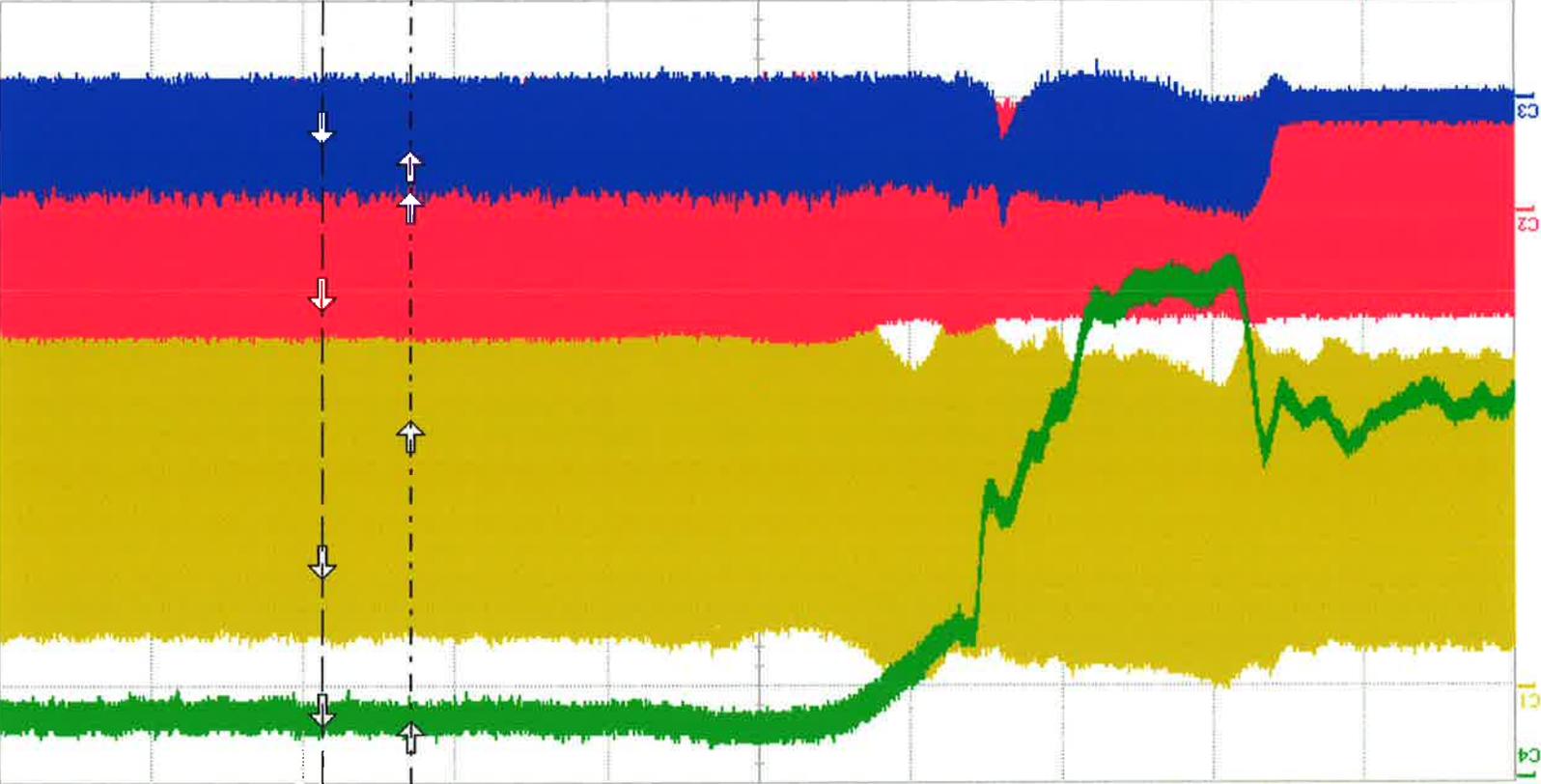
| | | | | | | | | | | | | | | | | | | |
|----|--------|--------|--------|--------|------|--------|------|-----------|--------|-------|----|-----|--------|--------|-------|---------|---------|-------|
| C1 | 92 mV | 200 mV | 200 mV | 274 mV | 0 mV | 2.00 V | 0 mV | F3 script | 500 ps | 116 # | XY | X11 | 200 mV | 200 mV | 116 # | 50.0 ps | Z4 zoom | 116 # |
| C2 | 274 mV | 200 mV | 200 mV | 274 mV | 0 mV | 2.00 V | 0 mV | F3 script | 500 ps | 116 # | XY | X11 | 200 mV | 200 mV | 116 # | 50.0 ps | Z4 zoom | 116 # |
| C3 | 200 mV | 200 mV | 200 mV | 274 mV | 0 mV | 2.00 V | 0 mV | F3 script | 500 ps | 116 # | XY | X11 | 200 mV | 200 mV | 116 # | 50.0 ps | Z4 zoom | 116 # |
| C4 | 200 mV | 200 mV | 200 mV | 274 mV | 0 mV | 2.00 V | 0 mV | F3 script | 500 ps | 116 # | XY | X11 | 200 mV | 200 mV | 116 # | 50.0 ps | Z4 zoom | 116 # |
| F3 | 200 mV | 200 mV | 200 mV | 274 mV | 0 mV | 2.00 V | 0 mV | F3 script | 500 ps | 116 # | XY | X11 | 200 mV | 200 mV | 116 # | 50.0 ps | Z4 zoom | 116 # |
| F4 | 200 mV | 200 mV | 200 mV | 274 mV | 0 mV | 2.00 V | 0 mV | F3 script | 500 ps | 116 # | XY | X11 | 200 mV | 200 mV | 116 # | 50.0 ps | Z4 zoom | 116 # |



| | | | | |
|------------|----------|---------|--------|----------|
| Timebase | -2.00 ms | Trigger | Edge | Negative |
| 2.50 kS | 500 kS/s | Normal | 1.00 V | |
| 500 ps/div | | | | |

11/11/2019 11:59:51 AM

LeCroy



| Measure | value | status |
|-------------|----------|--------|
| P1:mean(C1) | -1.223 V | |
| P2:pkpk(C2) | 2.69 V | |
| P3:pkpk(C3) | 1.38 V | |
| P4:mean(C3) | 34.7 V | |
| P5:mean(C4) | -62.3 V | |

| Channel | Scale | Offset | Color |
|---------|------------|-----------------|--------|
| C1 | 500 mV/div | 1.510 V offset | Yellow |
| C2 | 1.00 V/div | -1.840 V offset | Red |
| C3 | 100 V/div | -300.0 V offset | Blue |
| C4 | 100 V/div | 394.0 V offset | Green |

| Parameter | Value |
|-------------|----------|
| Timebase | -200 ns |
| 500 Ks | 1.0 GS/s |
| 50.0 ns/div | Normal |
| 200 mV | Edge |
| Trigger | ERTM DC |

X1 = 314.260 ns ΔX = 29.060 ns
 X2 = 343.320 ns 1/ΔX = 34.412 KHz

11-Nov-19
12:02:42

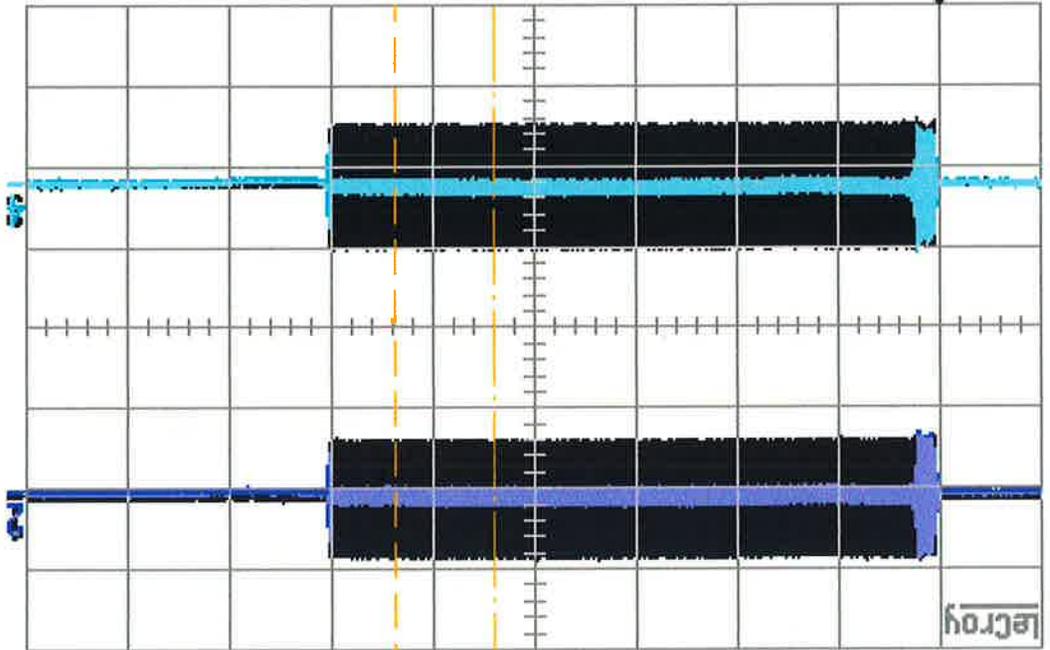
1
.5 ms
0.50 V

2
.5 ms
200mV

3
.5 ms
0.50 V

4
.5 ms
200mV

0 .5 V AC
2 .2 V AC
3 .5 V AC
4 .2 V AC



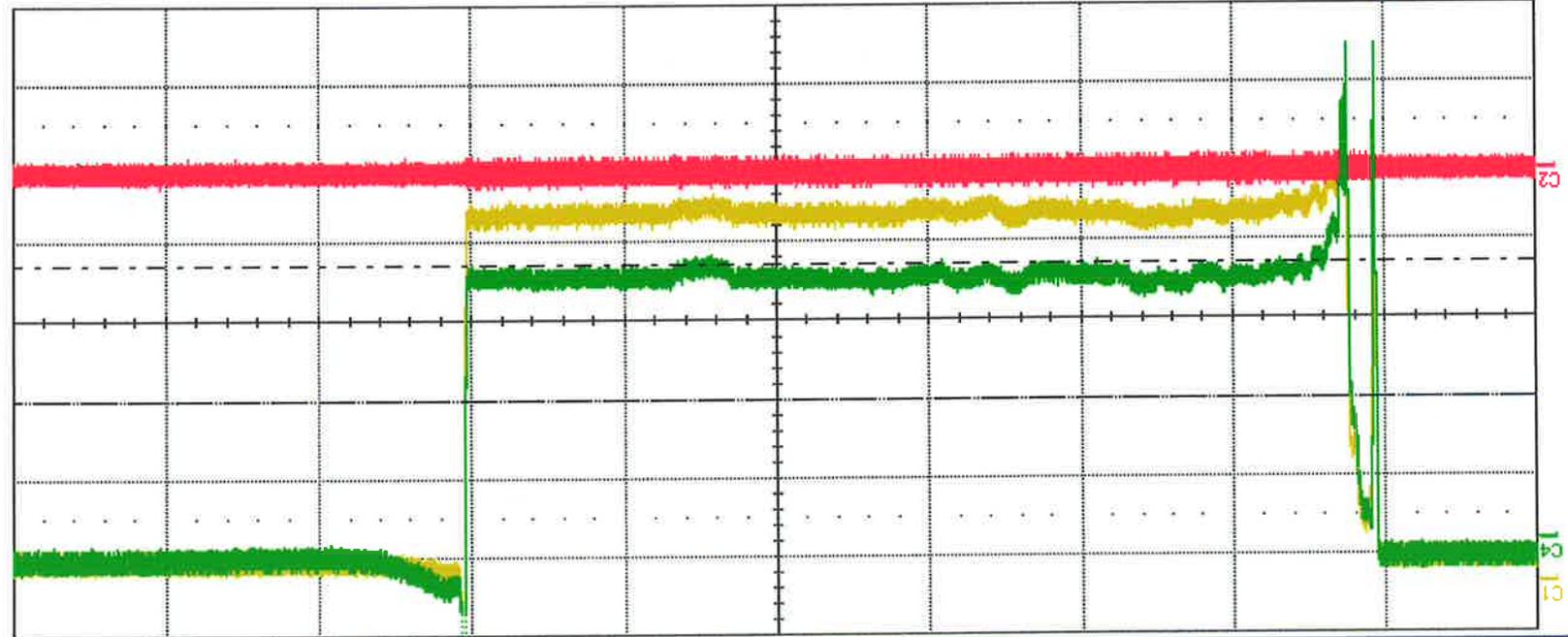
4 sweeps: average low high sigma

| | | | | |
|-------------|---------|-------|-------|------|
| rms (1) | 251.1mV | 250.6 | 252.4 | 0.9 |
| rms (2) | 16.4mV | 15.8 | 16.8 | 0.5 |
| rms (3) | 267.4mV | 266.9 | 268.7 | 0.9 |
| rms (4) | 14.5mV | 13.6 | 15.5 | 1.0 |
| phase (1,3) | 65.2° | 29.7 | 220.1 | 38.9 |

EXT10 DC 0.60 V 1MΩ



20 MS/s
NORMAL



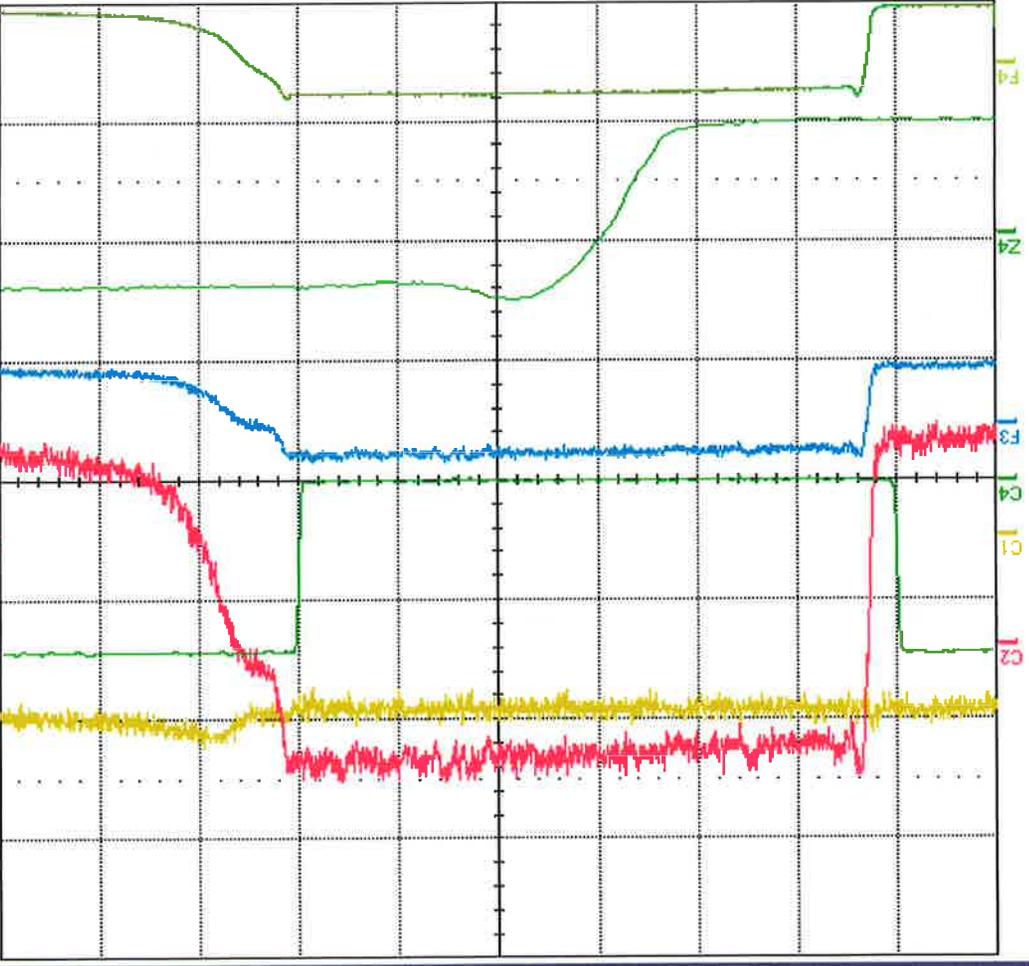
| Measure | Value | Mean | Min | Max | sdv | num | status |
|-----------------|-----------|-------------|-----------|-----------|---------------|-----|--------|
| P1:mean(Z1) | -46.87 mV | -46.0894 mV | -46.97 mV | -44.79 mV | 791.7 μ V | 8 | |
| P2:mean(Z4) | -33.30 mV | -32.6069 mV | -33.92 mV | -30.92 mV | 911.1 μ V | 8 | |
| P3:mean(C1) | -46.89 mV | -46.1821 mV | -46.89 mV | -45.22 mV | 556.2 μ V | 8 | |
| P4:mean(C4) | -33.21 mV | -32.6395 mV | -33.27 mV | -31.35 mV | 666.0 μ V | 8 | |
| P5:phase(C1,C4) | --- | --- | --- | --- | --- | 0 | |

| | | | |
|-----------|-----------------|-----------------|-----------------|
| C1 | 10.0 mV/div | 1.00 V/div | 10.0 mV/div |
| | 33.59 mV offset | -1.890 V offset | 28.00 mV offset |
| | 40.5 mV | 1.19 V | -35.0 mV |
| | 23.5 mV | 2.89 V | -18.0 mV |
| | 12.0 mV | 1.70 V | 17.0 mV |

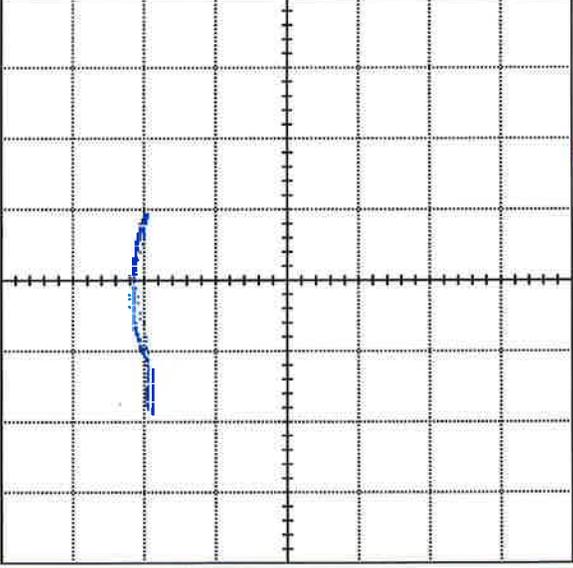
| | | | |
|-----------|-----------------|-----------------|-----------------|
| C2 | 10.0 mV/div | 1.00 V/div | 10.0 mV/div |
| | 33.59 mV offset | -1.890 V offset | 28.00 mV offset |
| | 40.5 mV | 1.19 V | -35.0 mV |
| | 23.5 mV | 2.89 V | -18.0 mV |
| | 12.0 mV | 1.70 V | 17.0 mV |

| | | | |
|-----------|-----------------|-----------------|-----------------|
| C3 | 10.0 mV/div | 1.00 V/div | 10.0 mV/div |
| | 33.59 mV offset | -1.890 V offset | 28.00 mV offset |
| | 40.5 mV | 1.19 V | -35.0 mV |
| | 23.5 mV | 2.89 V | -18.0 mV |
| | 12.0 mV | 1.70 V | 17.0 mV |

| | | | |
|-----------|-----------------|----------|------------|
| C4 | 500 μ s/div | Normal | 200 mV |
| | 1.00 MS | Edge | Negative |
| | 200 MS/s | Trigger | EBM10 (C4) |
| | -2.00 ms | Timebase | |



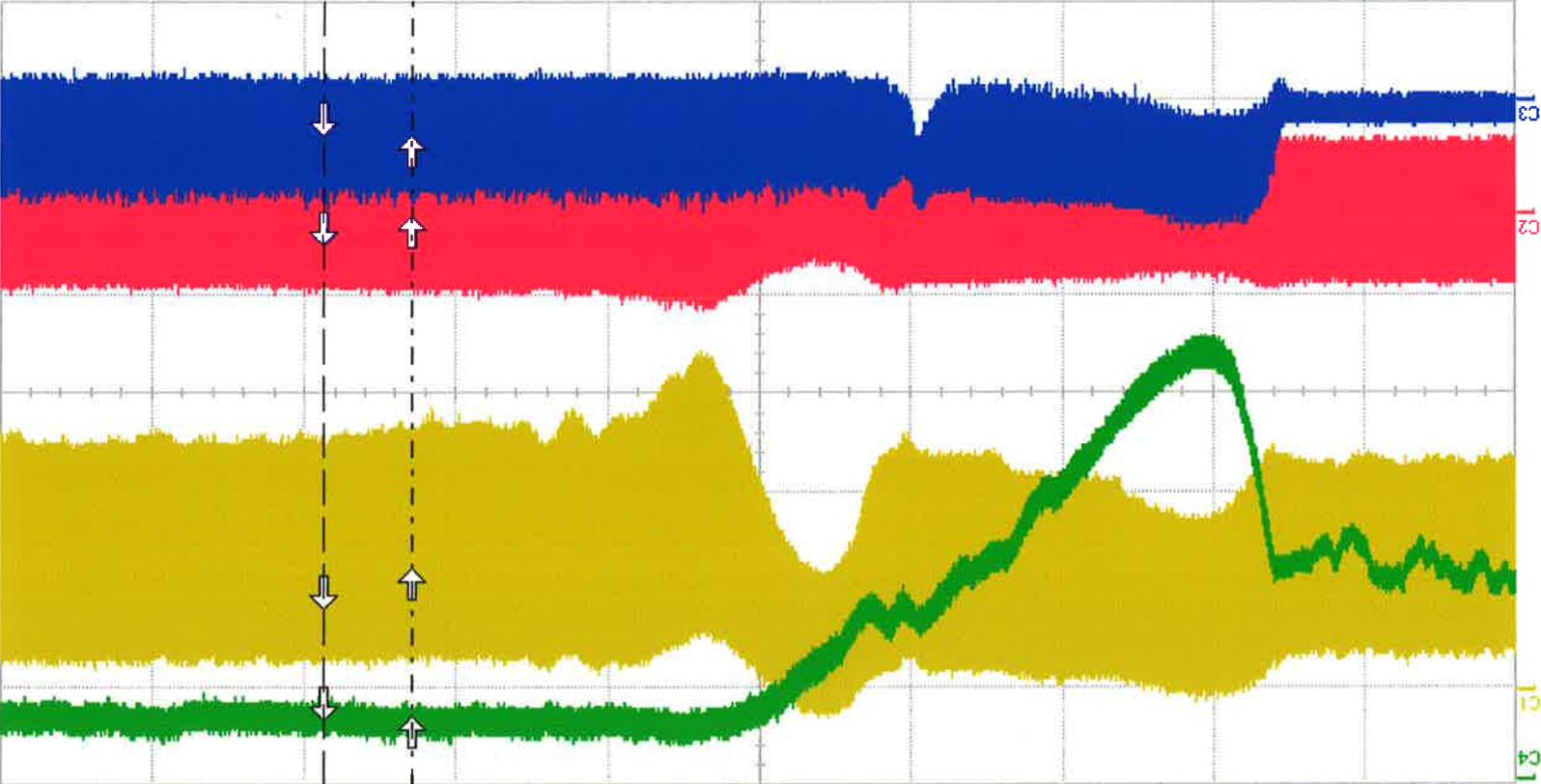
| | | | | | | |
|----|-----------|--------|--------|------|--------|------|
| C1 | 200 mV | 200 mV | 2.00 V | 0 mV | 500 ps | 28 # |
| C2 | 92 mV | 274 mV | 2.00 V | 0 mV | 500 ps | 28 # |
| C3 | 200 mV | 200 mV | 2.00 V | 0 mV | 500 ps | 28 # |
| C4 | 200 mV | 200 mV | 2.00 V | 0 mV | 500 ps | 28 # |
| F3 | <F3> | 200 mV | 2.00 V | 0 mV | 500 ps | 28 # |
| F4 | <F4> | 200 mV | 2.00 V | 0 mV | 500 ps | 28 # |
| Z4 | Z4 zoom() | 200 mV | 2.00 V | 0 mV | 500 ps | 28 # |



| | | | |
|------------|----------|---------|----------|
| Timebase | -2.00 ms | Trigger | C4 DC |
| 2.50 kS | 500 kS/s | Normal | 1.00 V |
| 500 ps/div | 500 kS/s | Edge | Negative |

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| Measure | value | status |
|-------------|---------|--------|
| P1:mean(C1) | -713 mV | ✓ |
| P2:pkpk(C2) | 1.69 V | ✓ |
| P3:pkpk(C3) | 141 V | ✓ |
| P4:mean(C3) | 34.7 V | ✓ |
| P5:mean(C4) | -61.7 V | ✓ |

| Channel | Scale | Offset | Position | Color |
|---------|------------|-----------------|----------|--------|
| C1 | 500 mV/div | 1.510 V offset | 191 mV | Yellow |
| C2 | 1.00 V/div | -1.840 V offset | 322 mV | Red |
| C3 | 100 V/div | -300.0 V offset | 41.3 V | Blue |
| C4 | 100 V/div | 394.0 V offset | -62.7 V | Green |

| Parameter | Value |
|-----------|----------|
| Timebase | -200 μs |
| 500 kS | 1.0 GS/s |
| Edge | Normal |
| Trigger | Edge |
| ERT/IO | Positive |

X1 = 314.260 μs ΔX = 29.060 μs
 X2 = 343.320 μs 1/ΔX = 34.412 kHz

11-Nov-19
12:04:38

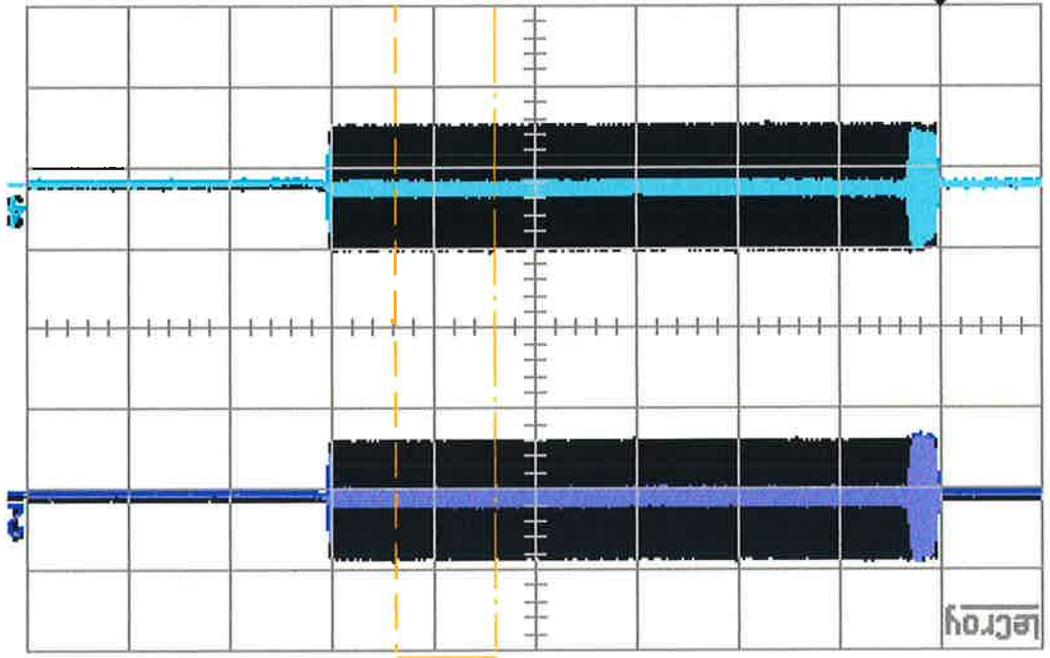
1 .5 ms
0.50 V

2 .5 ms
200mV

3 .5 ms
0.50 V

4 .5 ms
200mV

0 .5 V AC
2 .2 V AC
3 .5 V AC
4 .2 V AC

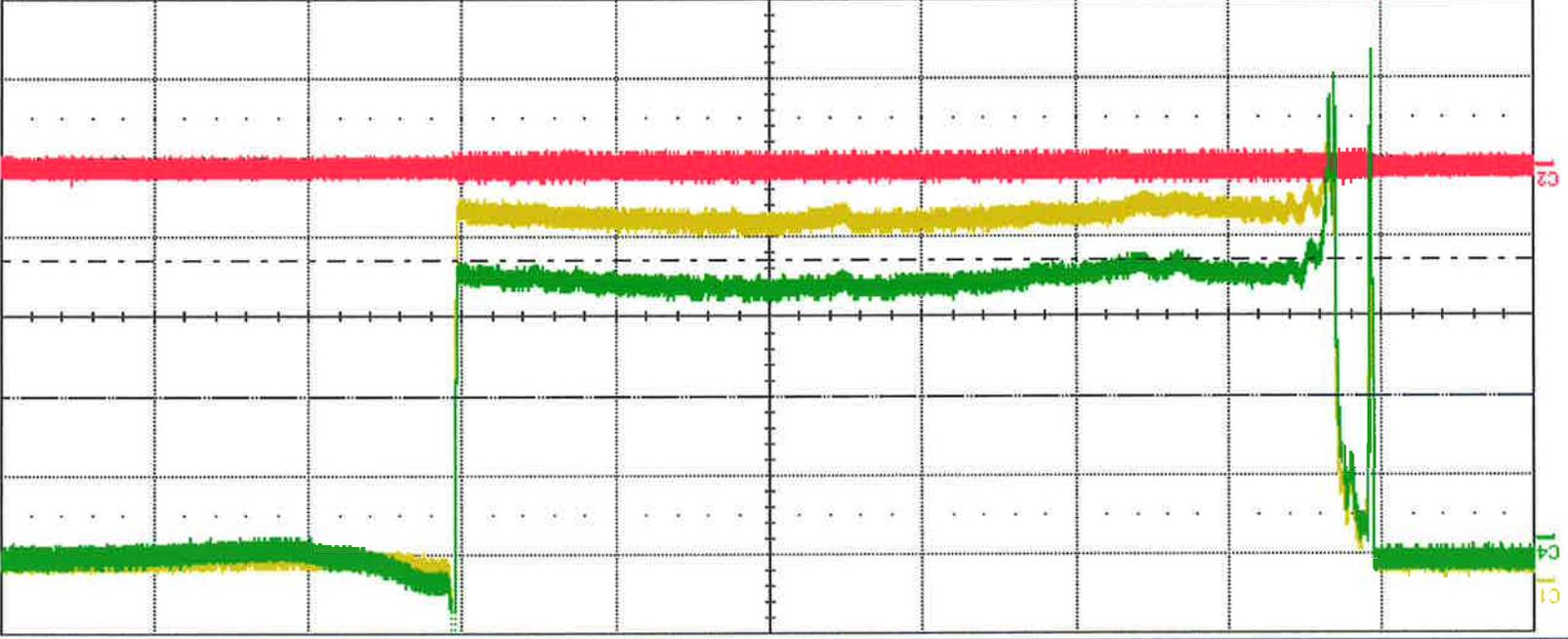


6 sweeps: average

| Channel | rms (1) | rms (2) | rms (3) | rms (4) | phase (1,3) |
|---------|---------|---------|---------|---------|-------------|
| low | 251.6mV | 16.5mV | 267.3 | 14.5mV | 65.0 ° |
| high | 252.1 | 17.1 | 268.5 | 15.6 | -133.2 |
| sigma | 0.5 | 0.7 | 0.5 | 1.2 | 36.0 |

EXT10 DC 0.60 V 1MΩ

20 MS/s
NORMAL



| Measure | Value | Mean | Min | Max | sdév | num | status |
|-----------------|-----------|-------------|-----------|-----------|---------------|-----|--------|
| P1:mean(Z1) | -45.15 mV | -45.7415 mV | -46.78 mV | -44.95 mV | 582.2 μ V | 10 | ✓ |
| P2:mean(Z4) | -31.47 mV | -32.0619 mV | -32.98 mV | -31.47 mV | 531.7 μ V | 10 | ✓ |
| P3:mean(C1) | -45.54 mV | -46.1668 mV | -46.72 mV | -45.53 mV | 455.2 μ V | 10 | ✓ |
| P4:mean(C4) | -31.81 mV | -32.5785 mV | -33.37 mV | -31.78 mV | 552.3 μ V | 10 | ✓ |
| P5:phase(C1,C4) | --- | --- | --- | --- | --- | 0 | --- |

Timebase -2.00 ms
 500 μ s/div
 Normal
 200 mV
 Edge
 Negative
 Trigger ERT10 DC

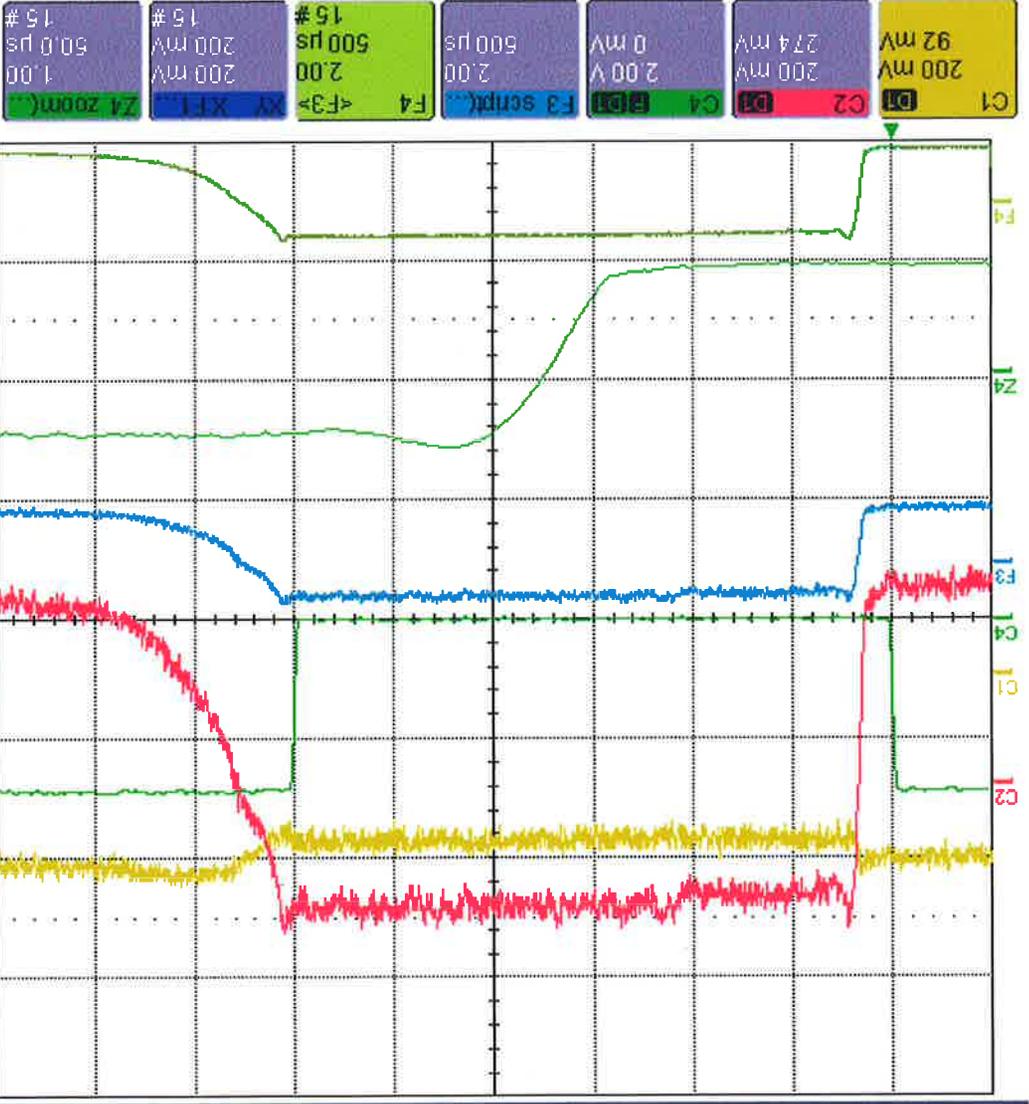
C1 10.0 mV/div 38.50 mV offset
 1.00 mV/div -1.890 V offset
 1.00 mV/div 28.00 mV offset
 1.00 mV/div 17.0 mV

C2 1.70 V 2.89 V
 1.70 V 18.0 mV
 1.70 V 35.0 mV

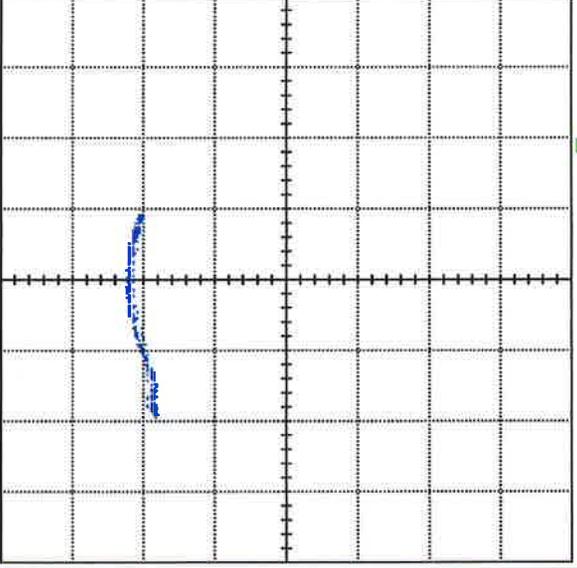
C4 1.70 V 18.0 mV
 1.70 V 35.0 mV
 1.70 V 17.0 mV

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| | | | | | |
|----|---------|--------|------|--------|------|
| C1 | 200 mV | 200 mV | 2.00 | 500 ps | 15 # |
| C2 | 92 mV | 274 mV | 2.00 | 500 ps | 15 # |
| C3 | 200 mV | 0 mV | 2.00 | 500 ps | 15 # |
| C4 | 200 mV | 2.00 V | 2.00 | 500 ps | 15 # |
| F4 | <F3> | 2.00 | 2.00 | 500 ps | 15 # |
| Z4 | XY X11 | 200 mV | 2.00 | 500 ps | 15 # |
| Z4 | Z4 zoom | 200 mV | 2.00 | 500 ps | 15 # |



| | | | | |
|---------|----------|------------|--------|--------|
| Thase | -2.00 ms | 500 ps/div | Normal | 1.00 V |
| Trigger | Edge | 500 kS/s | Normal | 1.00 V |
| | Negative | 2.50 kS/s | Normal | 1.00 V |

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12:06:07

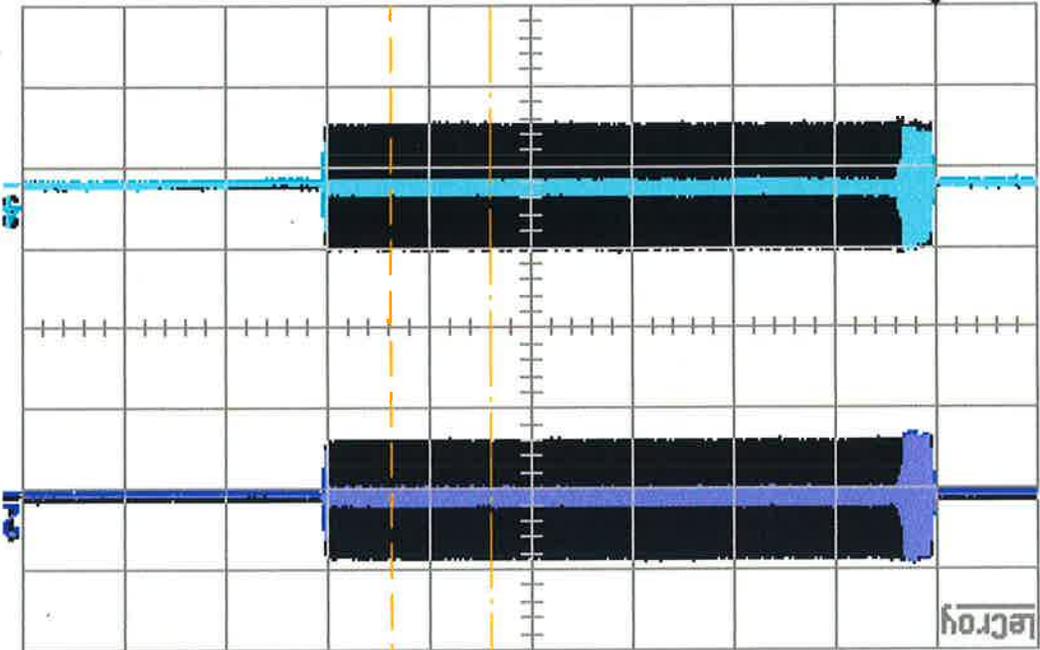
1 .5 ms
0.50 V

2 .5 ms
200mV

3 .5 ms
0.50 V

4 .5 ms
200mV

0 .5 V AC
2 .2 V AC
3 .5 V AC
4 .2 V AC



8 sweeps: average low high sigma

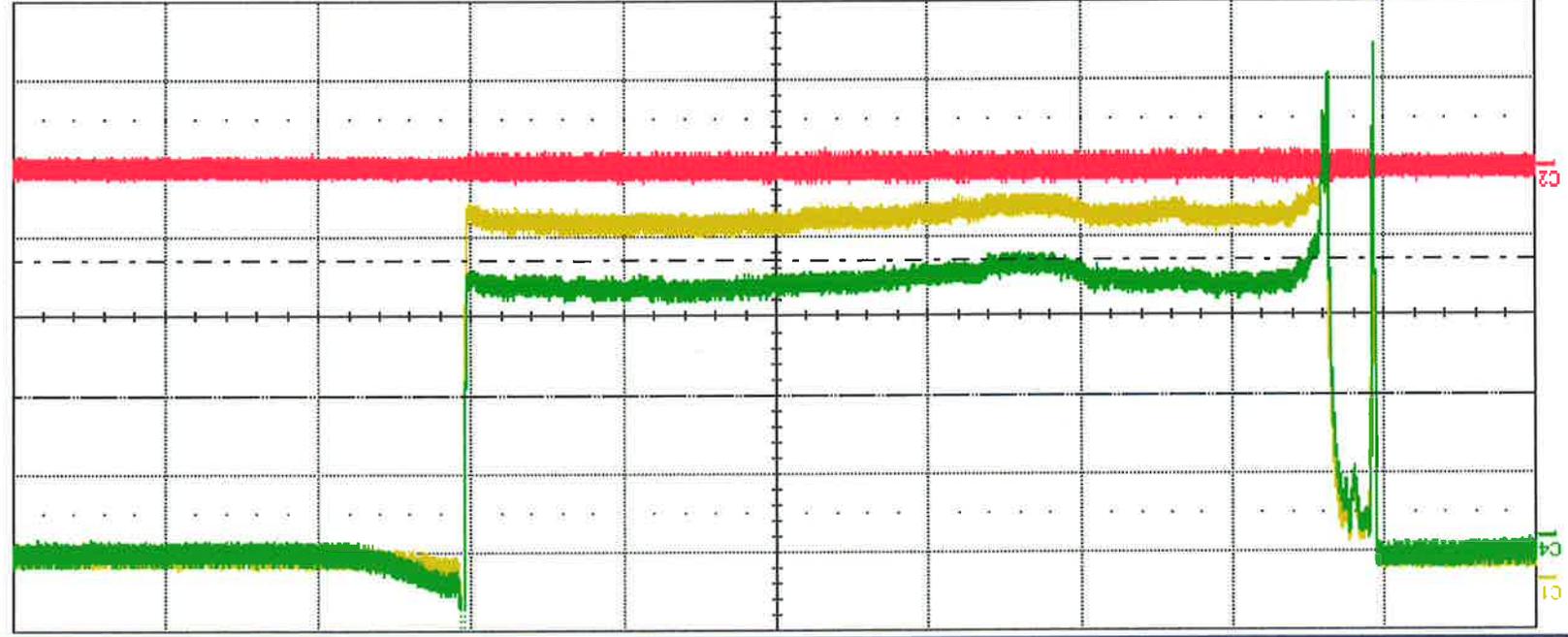
| | | | | |
|-------------|---------|--------|-------|------|
| rms (1) | 250.9mV | 247.9 | 252.7 | 1.5 |
| rms (2) | 16.3mV | 15.2 | 17.2 | 0.7 |
| rms (3) | 267.2mV | 264.2 | 268.8 | 1.5 |
| rms (4) | 14.5mV | 12.9 | 15.9 | 1.0 |
| phase (1,3) | 61.6 ° | -132.8 | 220.7 | 37.2 |

EX110 DC 0.60 V 1MΩ

20 MS/s
NORMAL



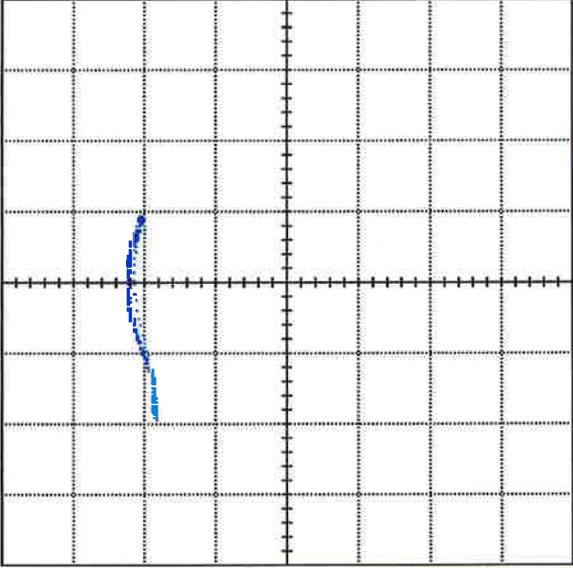
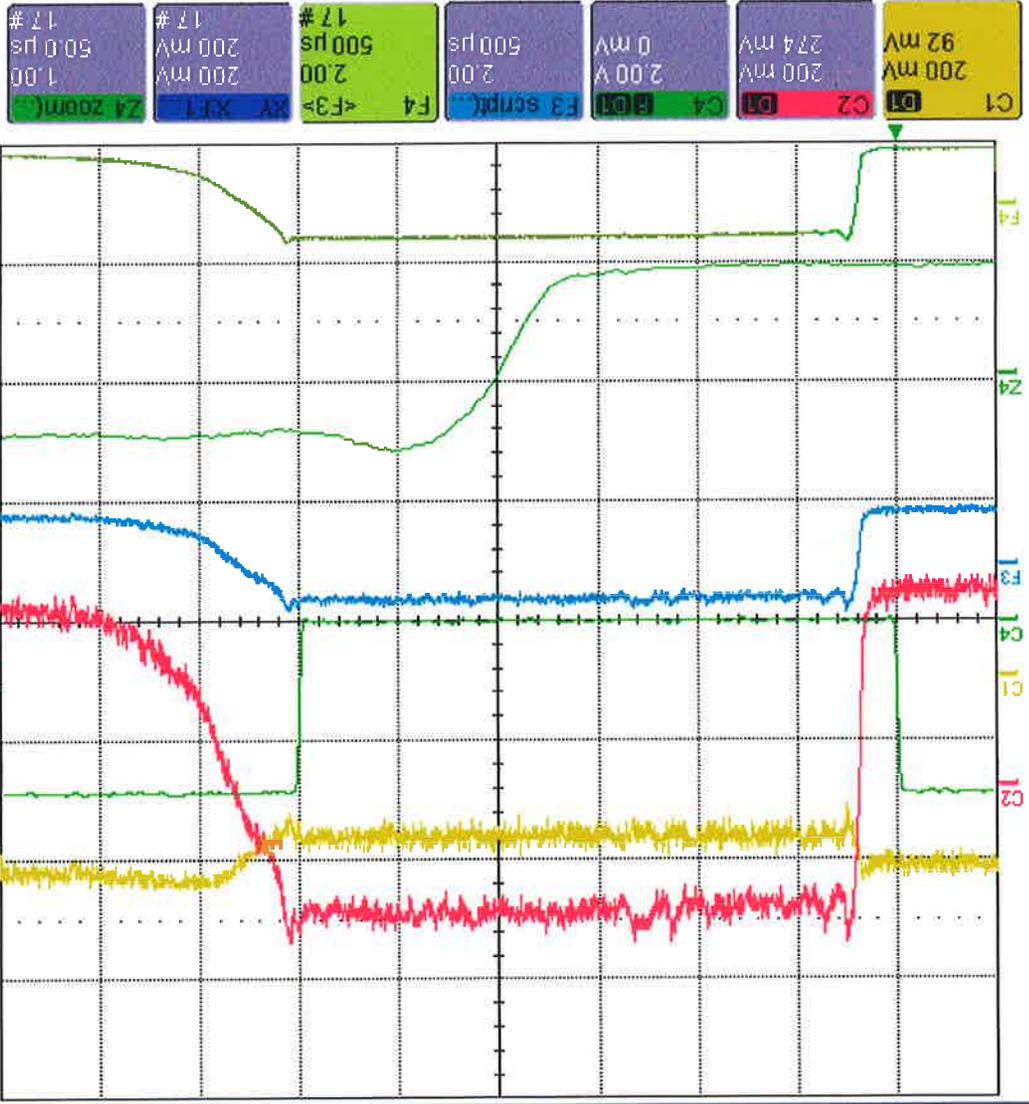
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| Measure | Value | Mean | Min | Max | sdev | num | status |
|-----------------|-----------|-------------|-----------|-----------|---------------|-----|--------|
| P1:mean(Z1) | -45.26 mV | -46.4163 mV | -47.90 mV | -44.86 mV | 905.9 μ V | 11 | ✓ |
| P2:mean(Z4) | -31.97 mV | -32.7681 mV | -34.55 mV | -31.78 mV | 769.2 μ V | 11 | ✓ |
| P3:mean(C1) | -45.92 mV | -46.4701 mV | -48.45 mV | -44.36 mV | 977.9 μ V | 11 | ✓ |
| P4:mean(C4) | -32.46 mV | -32.8361 mV | -34.98 mV | -31.25 mV | 888.4 μ V | 11 | ✓ |
| P5:phase(C1,C4) | --- | --- | --- | --- | --- | 0 | --- |

Timebase -2.00 ms
 500 μ s/div
 Normal
 200 mV
 Edge
 Trigger ESR10 DC
 1.00 MS
 200 MS/s
 Negative

C1 10.0 mV/div 33.50 mV offset
 1.00 mV/div -1.890 V offset
 10.0 mV/div 28.00 mV offset
 1.70 V 1.70 mV
 2.89 V 18.0 mV
 1.19 V 35.0 mV
 1.00 mV/div 28.00 mV offset
 1.70 V 17.0 mV

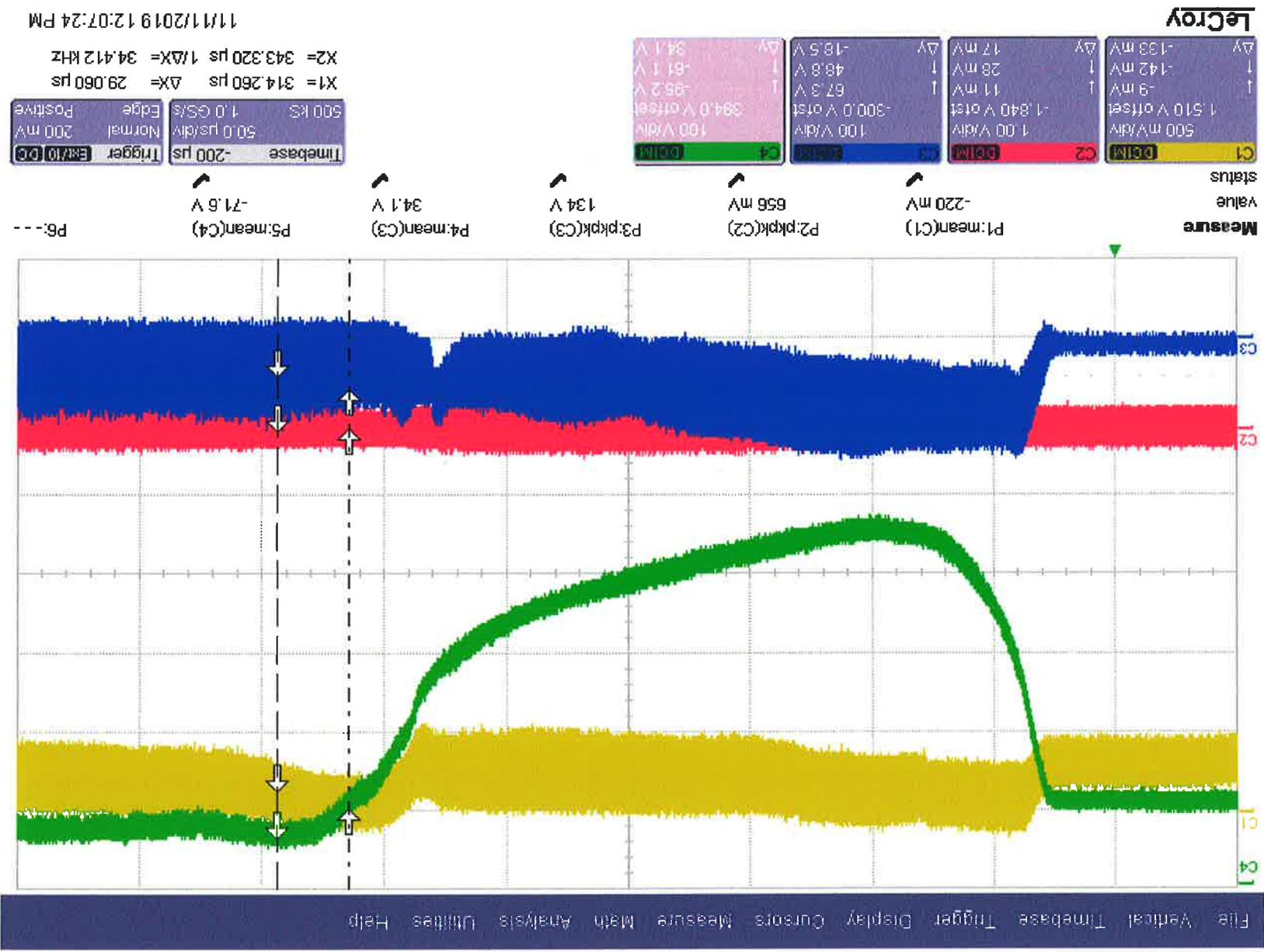


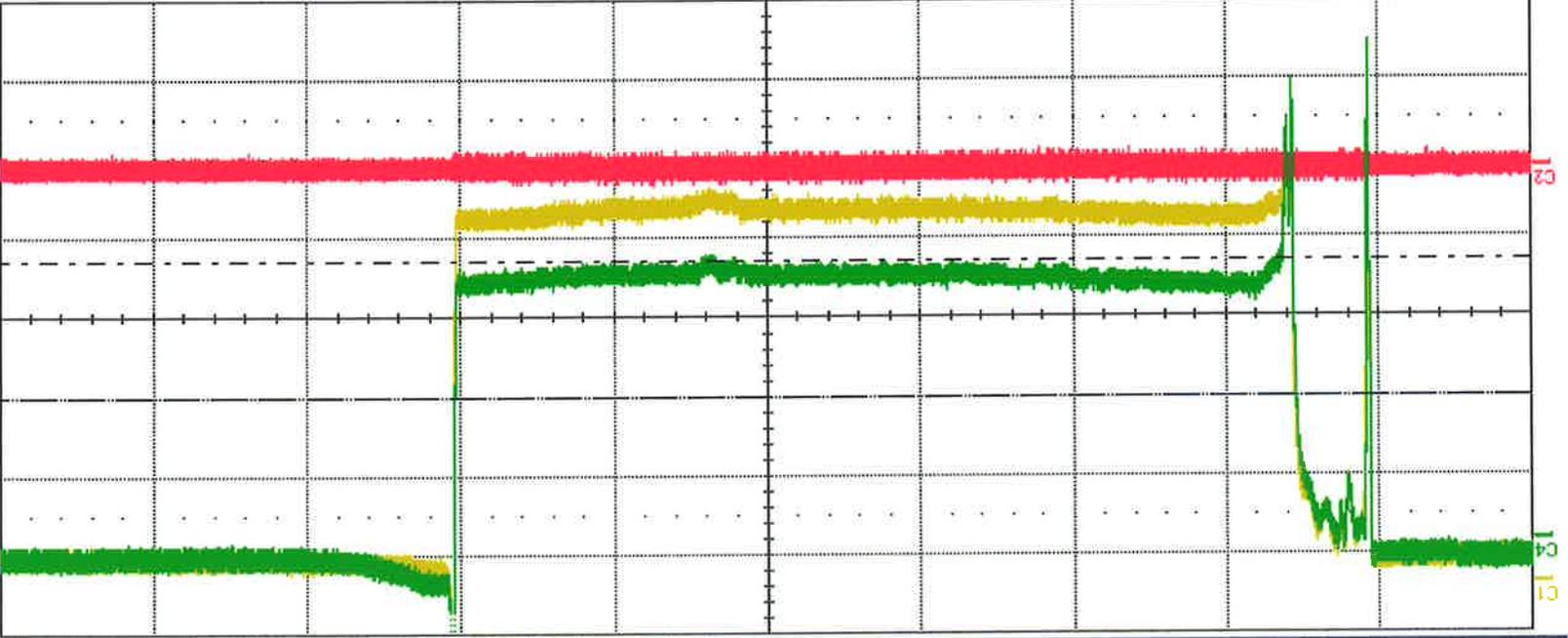
| | | | |
|------------|----------|----------|--------|
| Timebase | -2.00 ms | Trigger | C4 D3 |
| 2.50 kS | 500 kS/s | Normal | 1.00 V |
| 500 ps/div | Edge | Negative | |

| | | | |
|-----------|--------|---------|------|
| C1 | 200 mV | 2.00 V | 0 mV |
| 92 mV | 274 mV | 2.00 V | 0 mV |
| C2 | 200 mV | 2.00 V | 0 mV |
| 274 mV | 2.00 V | 0 mV | 0 mV |
| C4 | 200 mV | 2.00 V | 0 mV |
| 200 mV | 2.00 V | 0 mV | 0 mV |
| F3 script | 2.00 | 500 ps | |
| F4 | <F3> | 2.00 | |
| XZ | XZ | 200 mV | |
| 17 # | 200 mV | 50.0 ps | |
| Z4 zoom | 1.00 | 50.0 ps | |
| 17 # | 1.00 | 50.0 ps | |

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| Measure | Value | mean | min | max | sdev | num | status |
|-----------------|-----------|-------------|-----------|-----------|---------------|-----|--------|
| P1:mean(Z1) | -47.00 mV | -46.3152 mV | -48.77 mV | -44.66 mV | 946.6 μ V | 16 | ✓ |
| P2:mean(Z4) | -39.39 mV | -32.5845 mV | -34.76 mV | -30.94 mV | 938.8 μ V | 16 | ✓ |
| P3:mean(C1) | -47.00 mV | -46.3519 mV | -47.76 mV | -44.78 mV | 811.4 μ V | 16 | ✓ |
| P4:mean(C4) | -33.35 mV | -32.5920 mV | -33.88 mV | -30.95 mV | 807.7 μ V | 16 | ✓ |
| P5:phase(C1,C4) | --- | --- | --- | --- | --- | 0 | --- |

Timebase -2.00 ms
 1.00 MS 200 MS/s
 500 μ s/div Normal
 Trigger Edge Negative
 ERT10 D3 200 mV

C1 10.0 mV/div 33.50 mV offset
 1.00 V/div -1.890 V offset
 10.0 mV/div 28.00 mV offset
 1.00 V/div 1.19 V
 2.89 V -23.6 mV
 1.70 V 17.0 mV

C2 10.0 mV/div 28.00 mV offset
 1.00 V/div -1.890 V offset
 1.19 V -40.5 mV
 2.89 V -23.6 mV
 1.70 V 17.0 mV

C3 10.0 mV/div 28.00 mV offset
 1.00 V/div -1.890 V offset
 1.19 V -40.5 mV
 2.89 V -23.6 mV
 1.70 V 17.0 mV

11-Nov-19
12:08:28

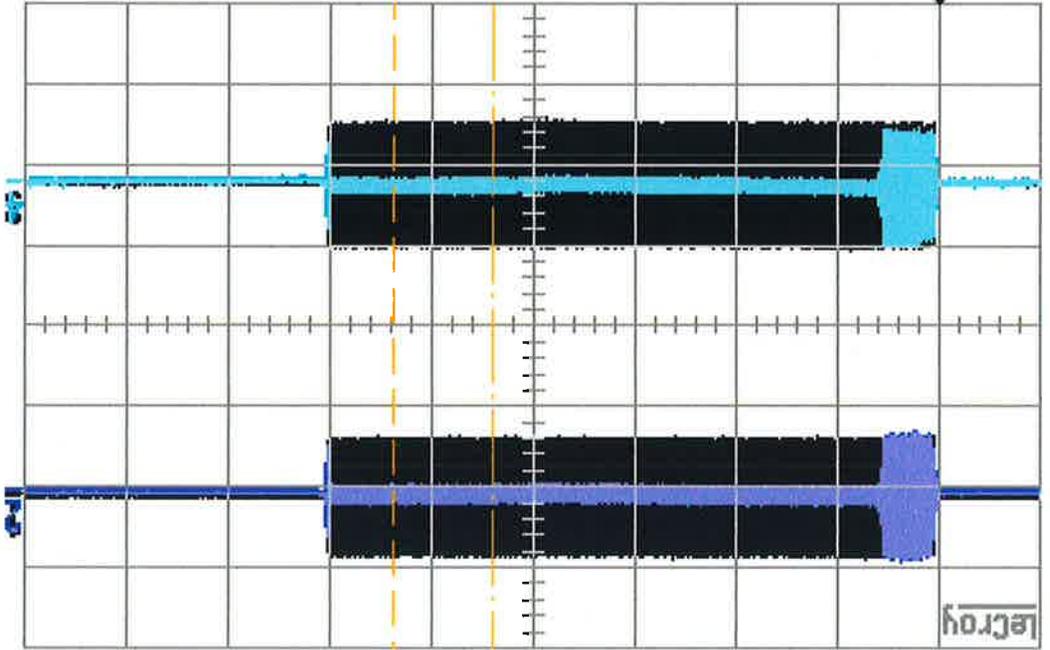
1 .5 ms
0.50 V

2 .5 ms
200mV

3 .5 ms
0.50 V

4 .5 ms
200mV

0 .5 V AC
2 .2 V AC
3 .5 V AC
4 .2 V AC

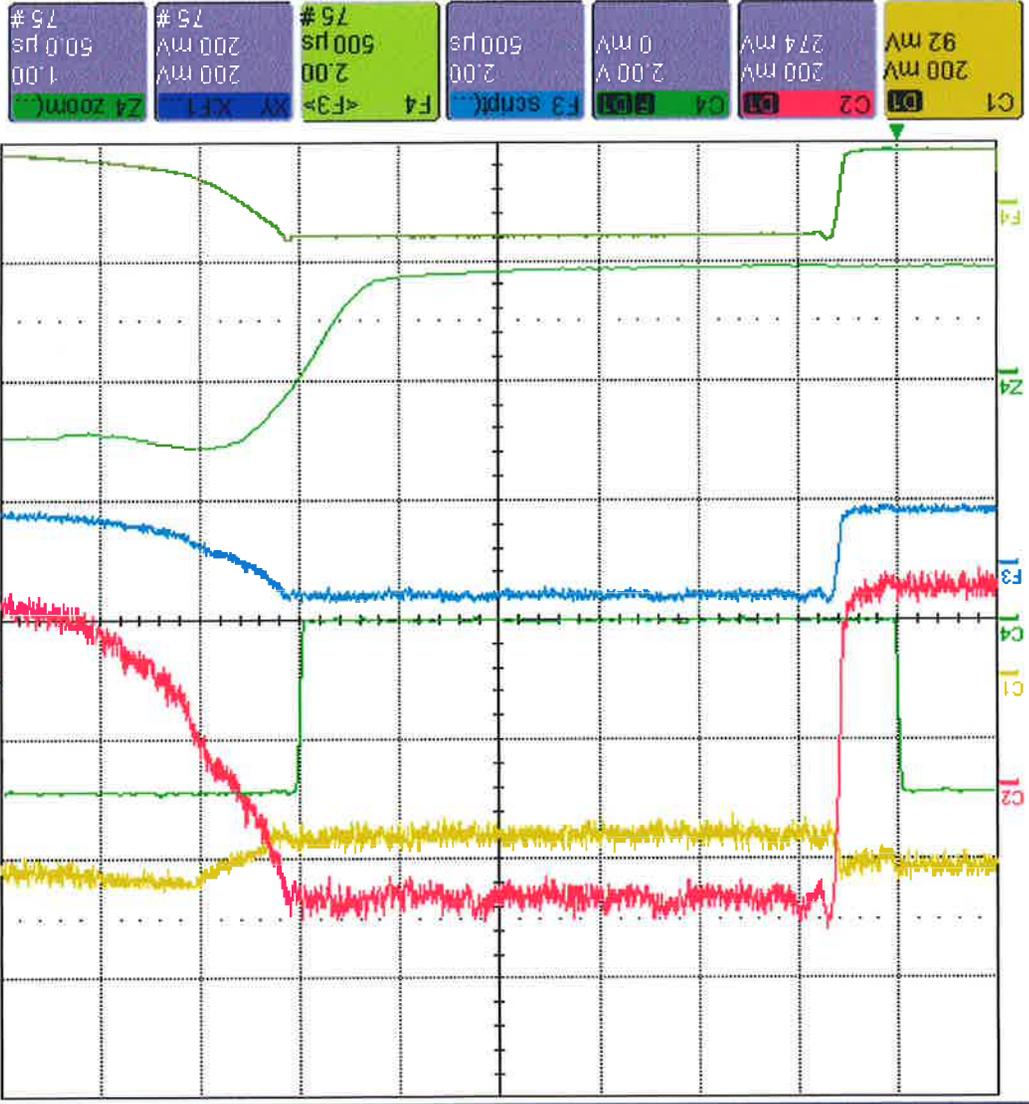


6 sweeps: average

| Channel | rms (1) | rms (2) | rms (3) | rms (4) | phase (1,3) |
|---------|---------|---------|---------|---------|-------------|
| low | 251.1mV | 16.1mV | 267.6mV | 14.1mV | 67.1° |
| high | 249.8 | 14.9 | 266.3 | 12.4 | 29.7 |
| sigma | 252.2 | 17.2 | 268.6 | 15.6 | 220.4 |
| | 0.8 | 0.8 | 0.8 | 1.1 | 41.5 |

EX10 DC 0.60 V 1M

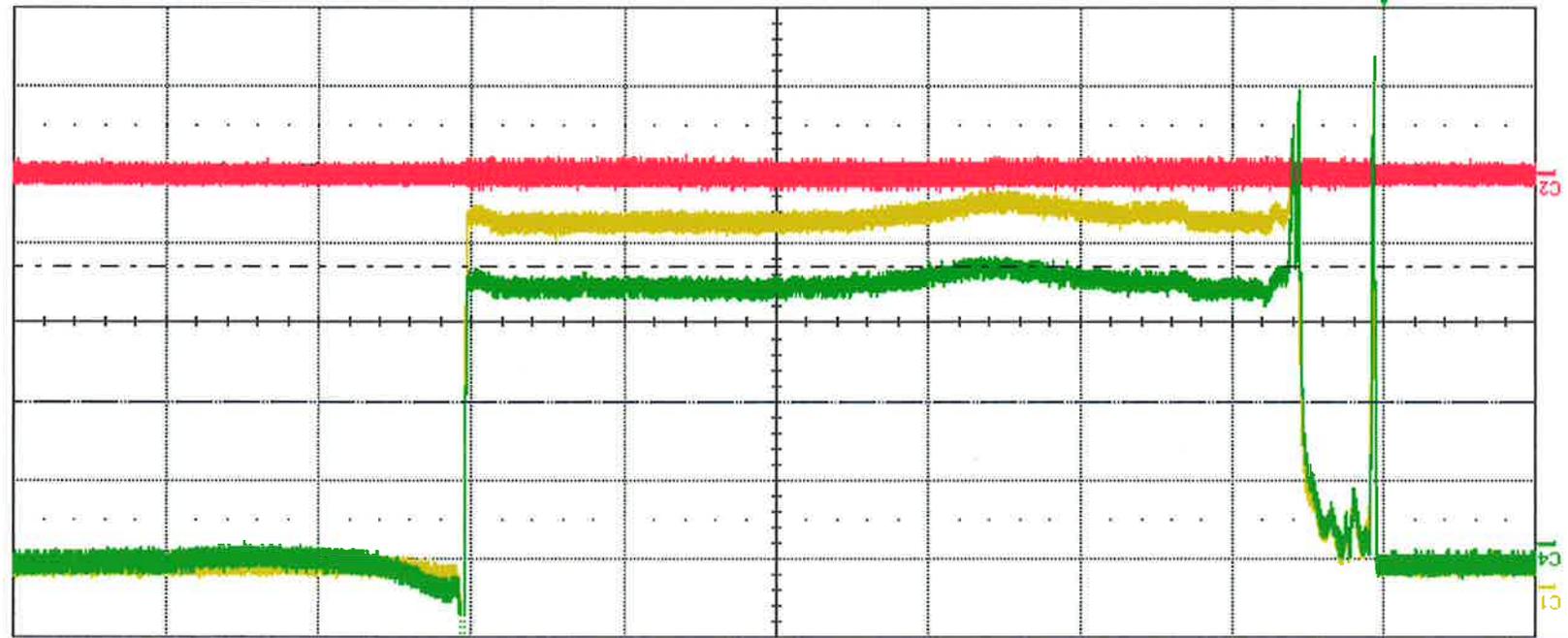
20 MS/s
NORMAL



| | | | | | | | |
|----------|----------|------------|---------|---------|------|------|---------|
| C1 | 200 mV | 200 mV | 1.00 | XY | X1 | 75 # | Z4 zoom |
| C2 | 274 mV | 200 mV | 1.00 | F4 | <F3> | 75 # | |
| C3 | 200 mV | 200 mV | 1.00 | F3 scpt | | 75 # | |
| C4 | 0 mV | 200 mV | 1.00 | F4 | | 75 # | |
| F3 | 500 ps | 200 mV | 1.00 | | | 75 # | |
| F4 | 500 ps | 200 mV | 1.00 | | | 75 # | |
| Z4 | 50.0 ps | 200 mV | 1.00 | | | 75 # | |
| Timebase | -2.00 ms | 500 ps/div | 2.50 ks | Trigger | | | |
| Edge | Negative | Normal | 1.00 V | | | | |

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| Measure | Value | mean | min | max | sdev | num | status |
|-----------------|-----------|-------------|-----------|-----------|---------------|-----|--------|
| P1:mean(Z1) | -46.17 mV | -46.3919 mV | -48.77 mV | -44.65 mV | 878.3 μ V | 74 | ✓ |
| P2:mean(Z4) | -32.32 mV | -32.5811 mV | -34.94 mV | -30.94 mV | 930.6 μ V | 74 | ✓ |
| P3:mean(C1) | -46.72 mV | -46.4169 mV | -48.41 mV | -44.52 mV | 873.1 μ V | 74 | ✓ |
| P4:mean(C4) | -32.91 mV | -32.5658 mV | -34.54 mV | -30.93 mV | 870.7 μ V | 74 | ✓ |
| P5:phase(C1,C4) | --- | --- | --- | --- | --- | 0 | --- |

Timebase -2.00 ms
 500 μ s/div
 Normal
 200 mV

Trigger **EN10** **OR**
 Edge
 Negative

1.00 MS
 200 MS/s

C1 10.0 mV/div
 33.50 mV offset
 17.0 mV Δ V

C2 1.00 V/div
 -1.890 V offset
 28.00 mV offset
 1.70 V Δ V

C3 10.0 mV/div
 28.00 mV offset
 1.19 V Δ V

C4 10.0 mV/div
 28.00 mV offset
 1.19 V Δ V

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12:09:29

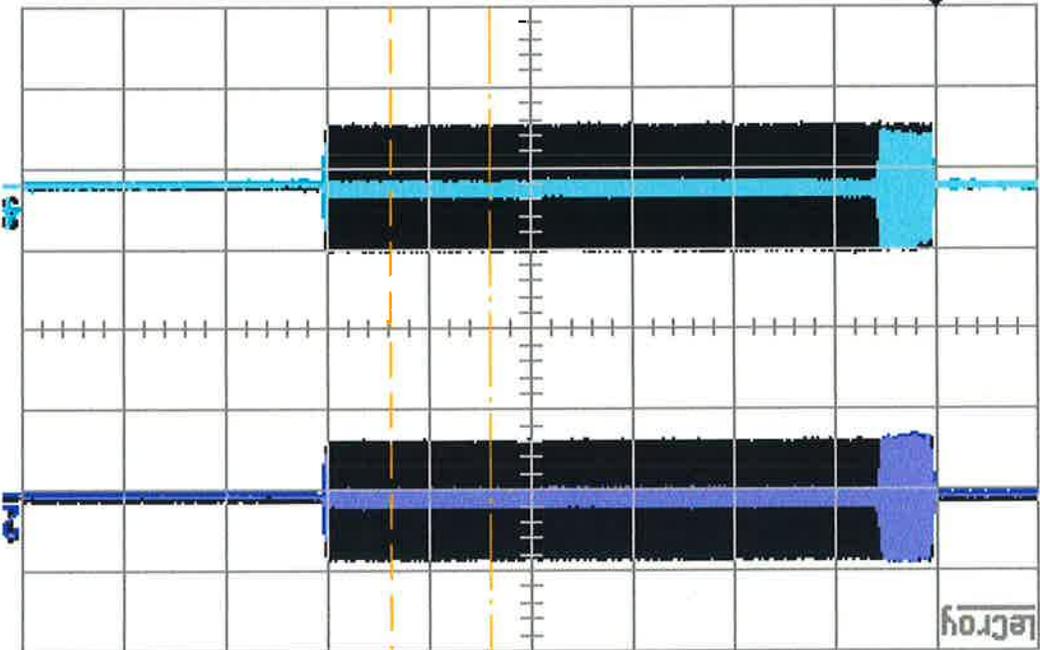
0.5 ms
0.50 V

0.5 ms
200mV

0.5 ms
0.50 V

0.5 ms
200mV

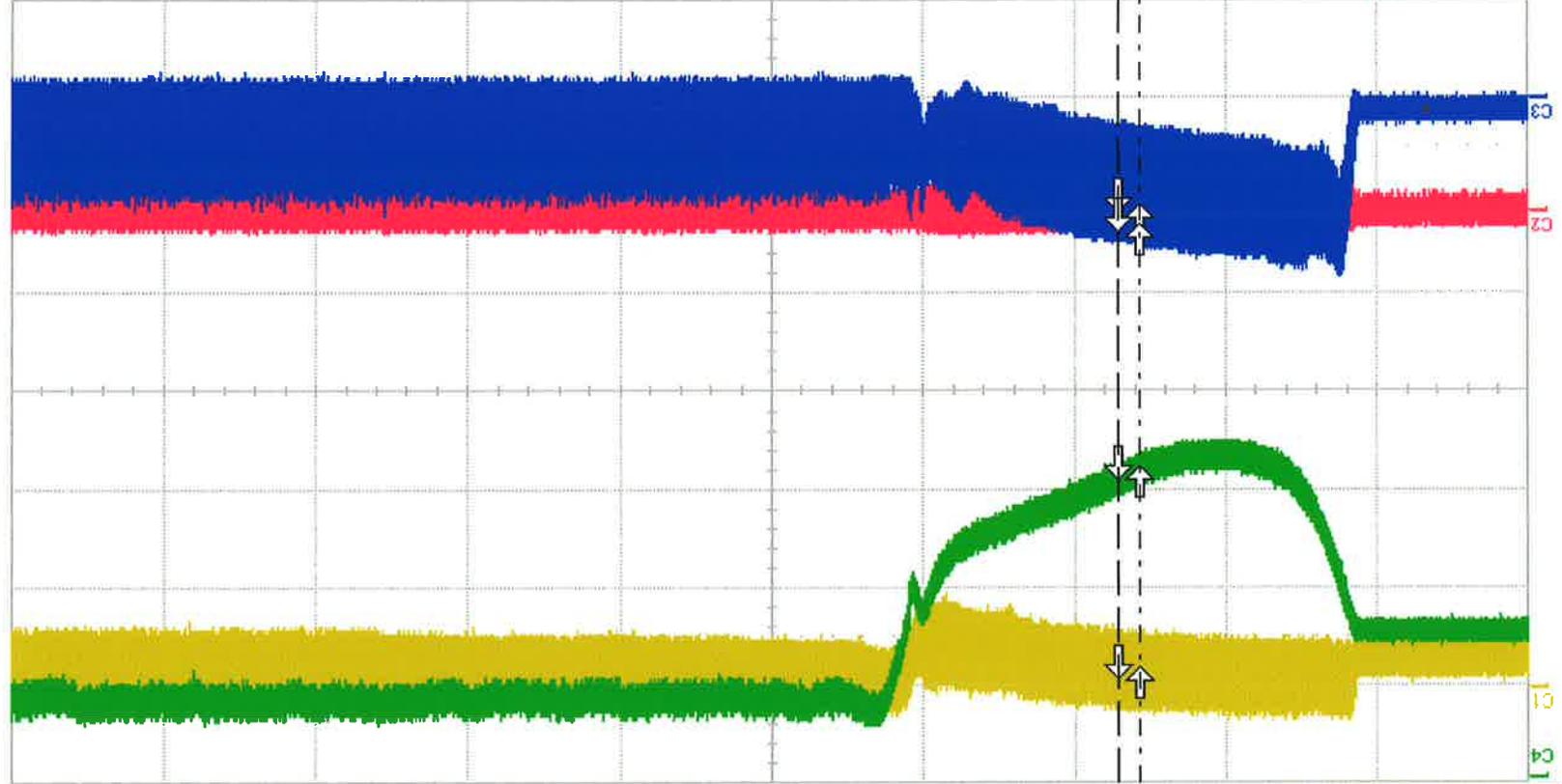
0.5 V AC
0.2 V AC
0.5 V AC
0.2 V AC



66 sweeps: average low high sigma
 rms (1) 251.1mV 249.5 252.8 0.8
 rms (2) 16.1mV 14.5 17.3 0.5
 rms (3) 267.6mV 266.0 269.3 0.8
 rms (4) 14.3mV 12.1 15.8 0.8
 phase (1,3) 65.6 ° -132.6 220.4 38.6

EX110 DC 0.60 V 1MΩ

20 MS/s
NORMAL



| Measure | Value | Status |
|-------------|---------|--------|
| P1:mean(C1) | -125 mV | |
| P2:pkpk(C2) | 531 mV | |
| P3:pkpk(C3) | 144 V | |
| P4:mean(C3) | 37.6 V | |
| P5:mean(C4) | -78.8 V | |

| Channel | Scale | Offset | Color |
|---------|------------|-----------------|--------|
| C1 | 500 mV/div | 1.510 V offset | Yellow |
| C2 | 1.00 V/div | -1.840 V offset | Red |
| C3 | 100 V/div | -300.0 V offset | Blue |
| C4 | 100 V/div | 394.0 V offset | Green |

| Setting | Value |
|----------|-----------------|
| Timebase | -800 μ s |
| Trigger | Edge |
| ES/IO | Positive |
| Normal | 200 μ s/div |
| 200 mV | |

X1 = 314.260 μ s Δ X = 29.060 μ s
 X2 = 343.320 μ s 1/ Δ X = 34.412 kHz

11/11/2019 12:10:41 PM

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11-NOV-19
12:11:33

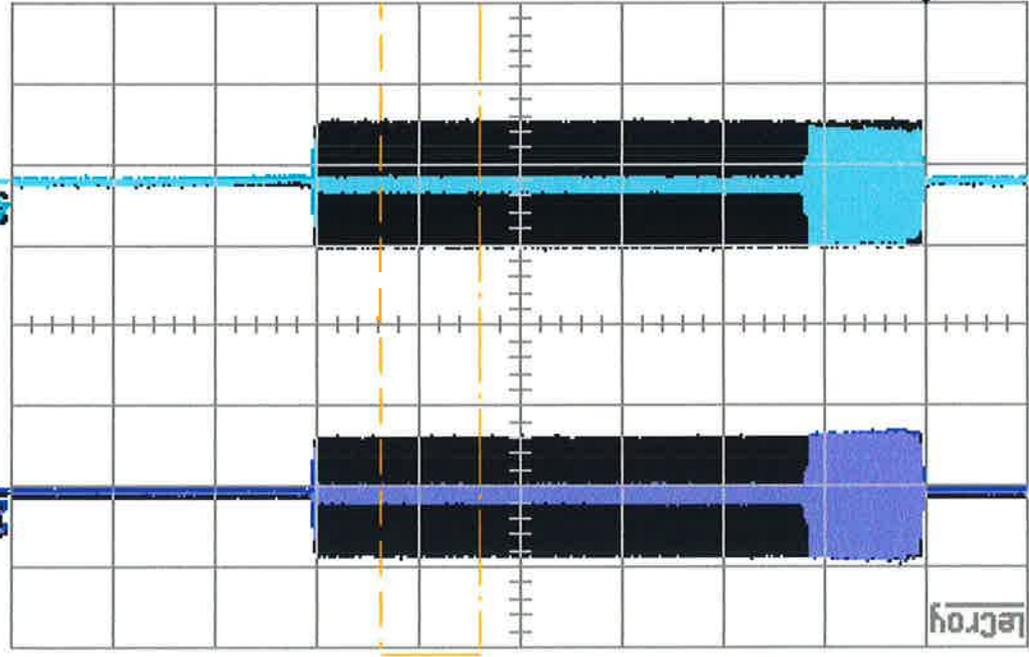
1 .5 ms
0.50 V

2 .5 ms
200mV

3 .5 ms
0.50 V

4 .5 ms
200mV

0 .5 V AC
2 .2 V AC
3 .5 V AC
4 .2 V AC



6 sweeps: average low high sigma

| | | | | |
|-------------|---------|-------|-------|------|
| rms (1) | 251.1mV | 250.2 | 252.1 | 0.6 |
| rms (2) | 16.3mV | 15.5 | 17.0 | 0.8 |
| rms (3) | 267.5mV | 266.8 | 268.4 | 0.6 |
| rms (4) | 14.2mV | 13.0 | 15.4 | 1.1 |
| phase (1,3) | 66.1° | 30.0 | 220.1 | 36.5 |

EXT10 DC 0.60 V 1MΩ



20 MS/s
NORMAL