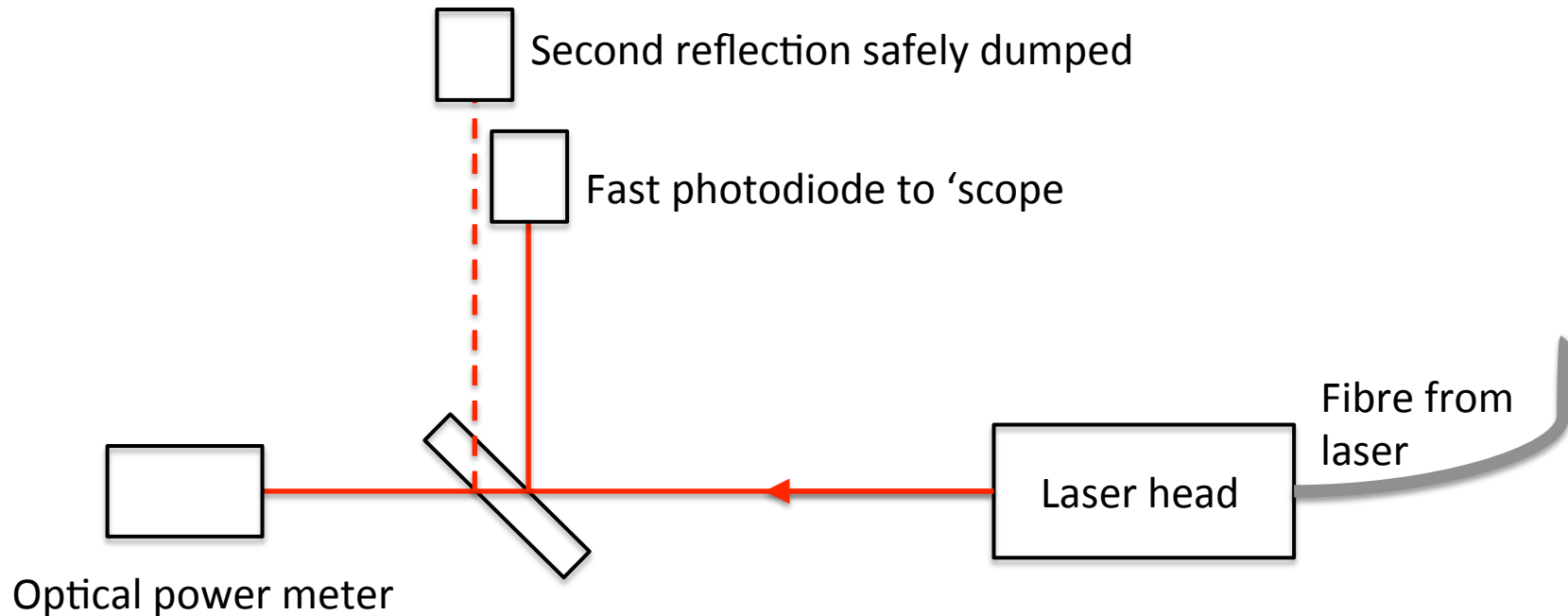
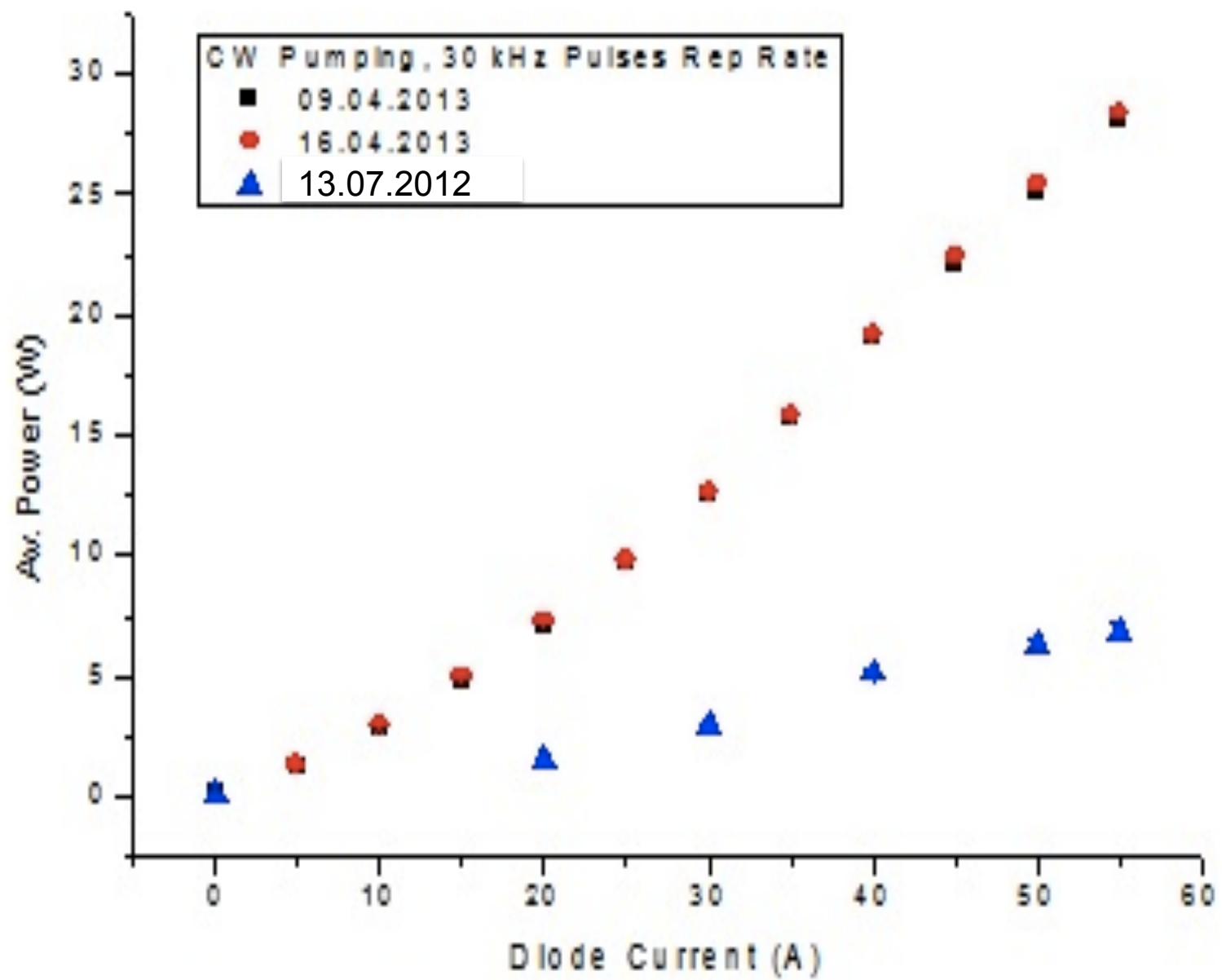


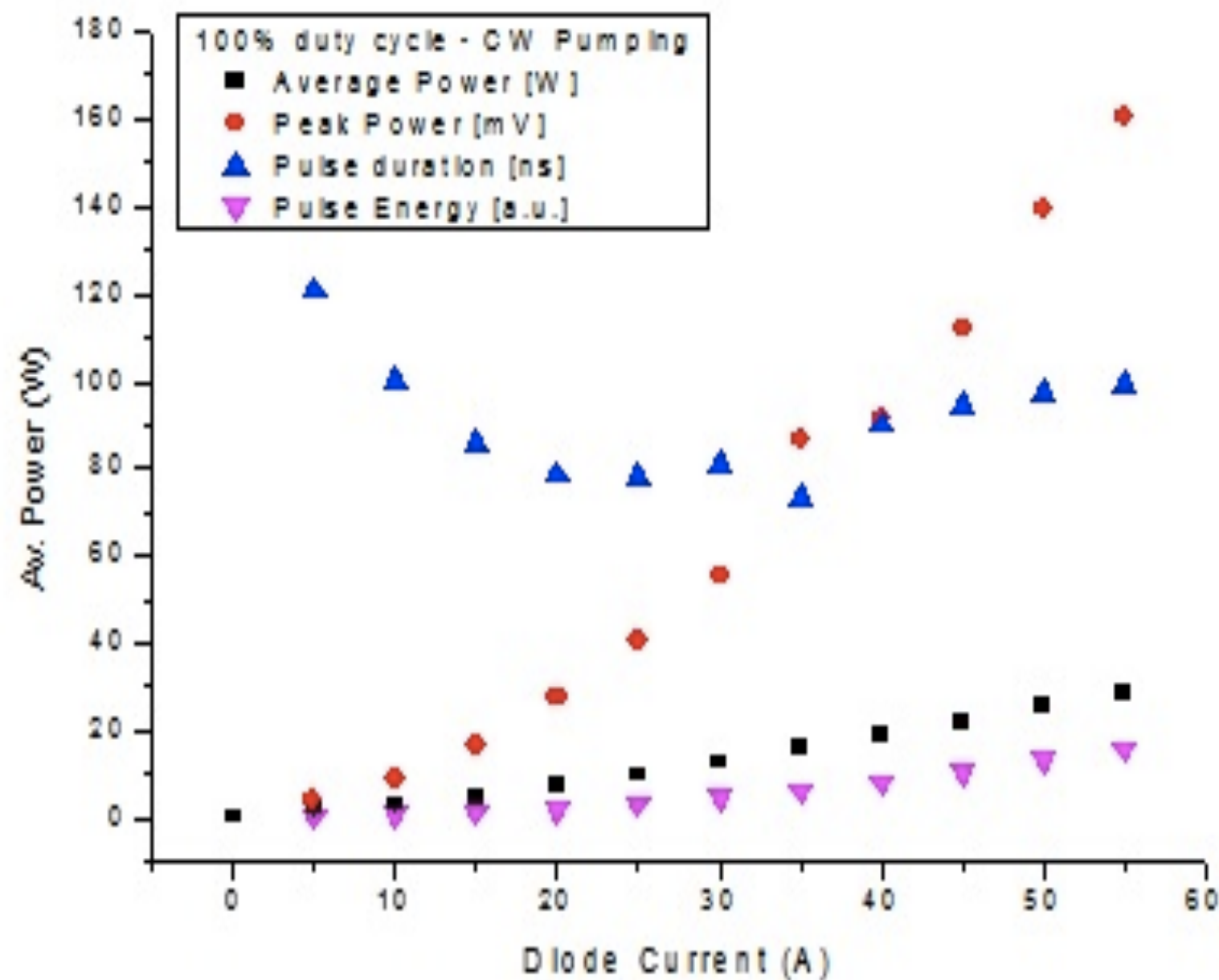
FETS Laser Status 17.04.2013

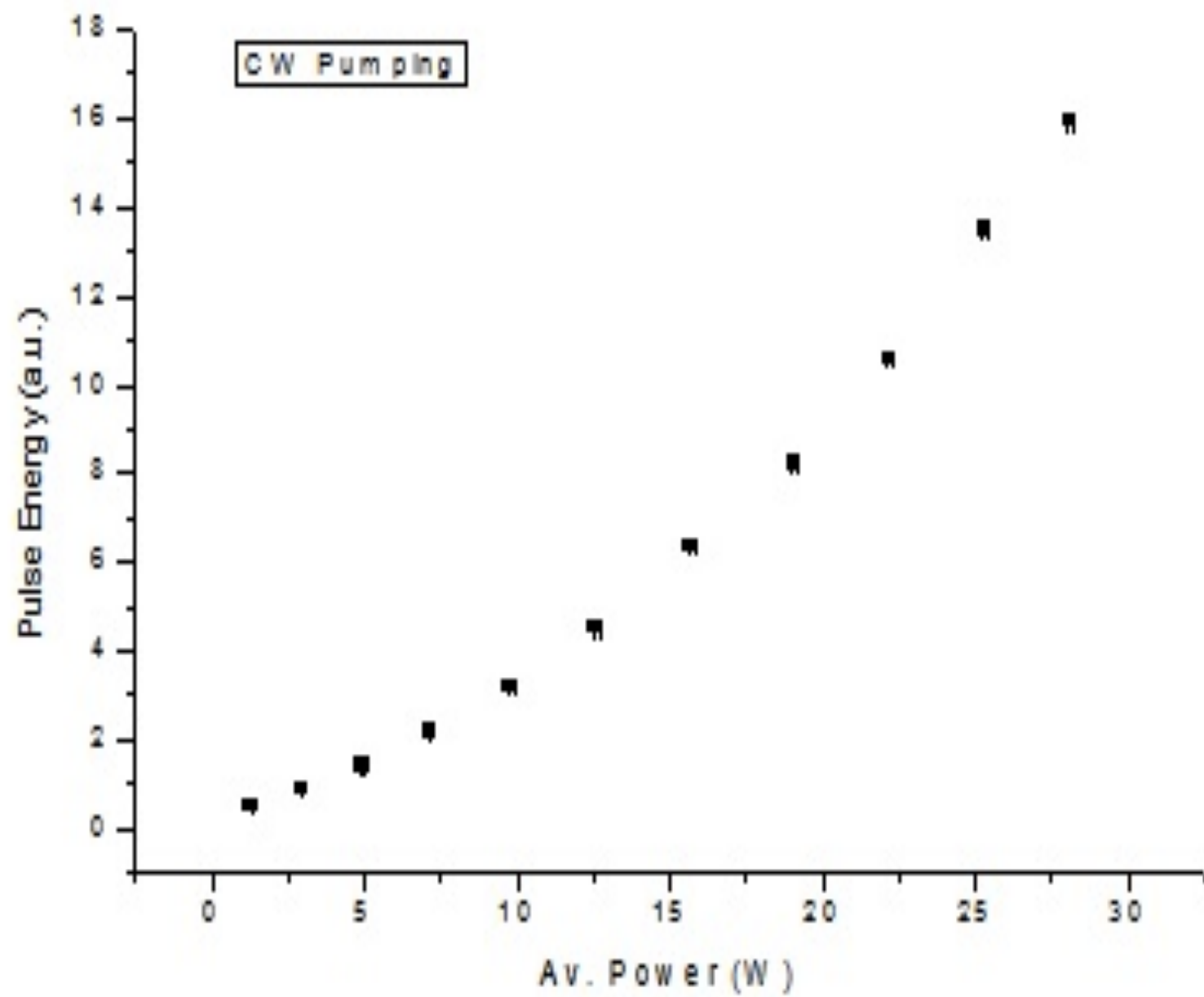
Christoph Gabor, Alessio Bosco, Stephen Gibson

- Fibre laser has returned from Manlight, France and initial tests conducted this week at Royal Holloway to assess performance after repair.
- Average power measured directly at output from laser and then after beam splitter while sampling pulses with a fast photodiode.



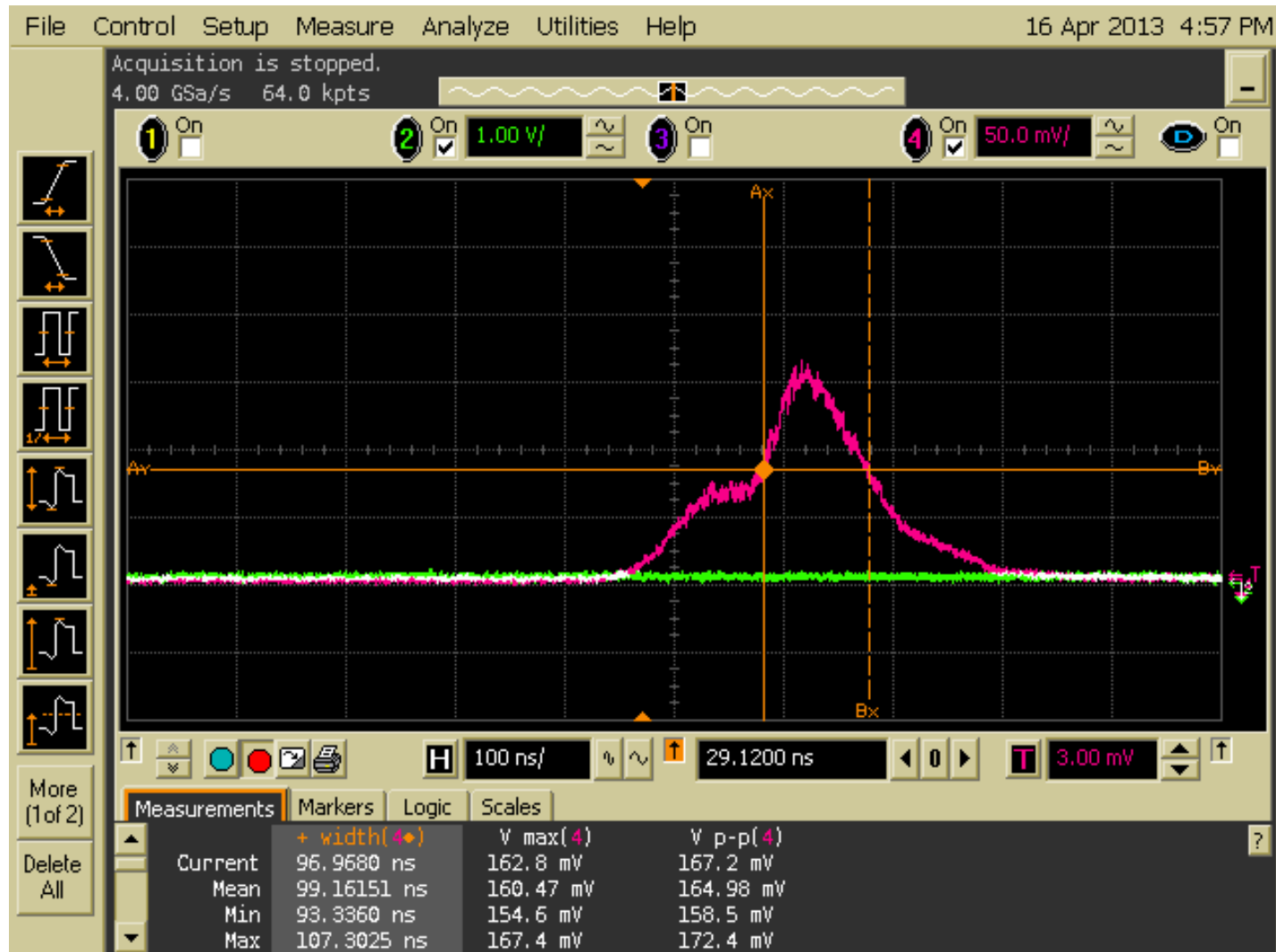


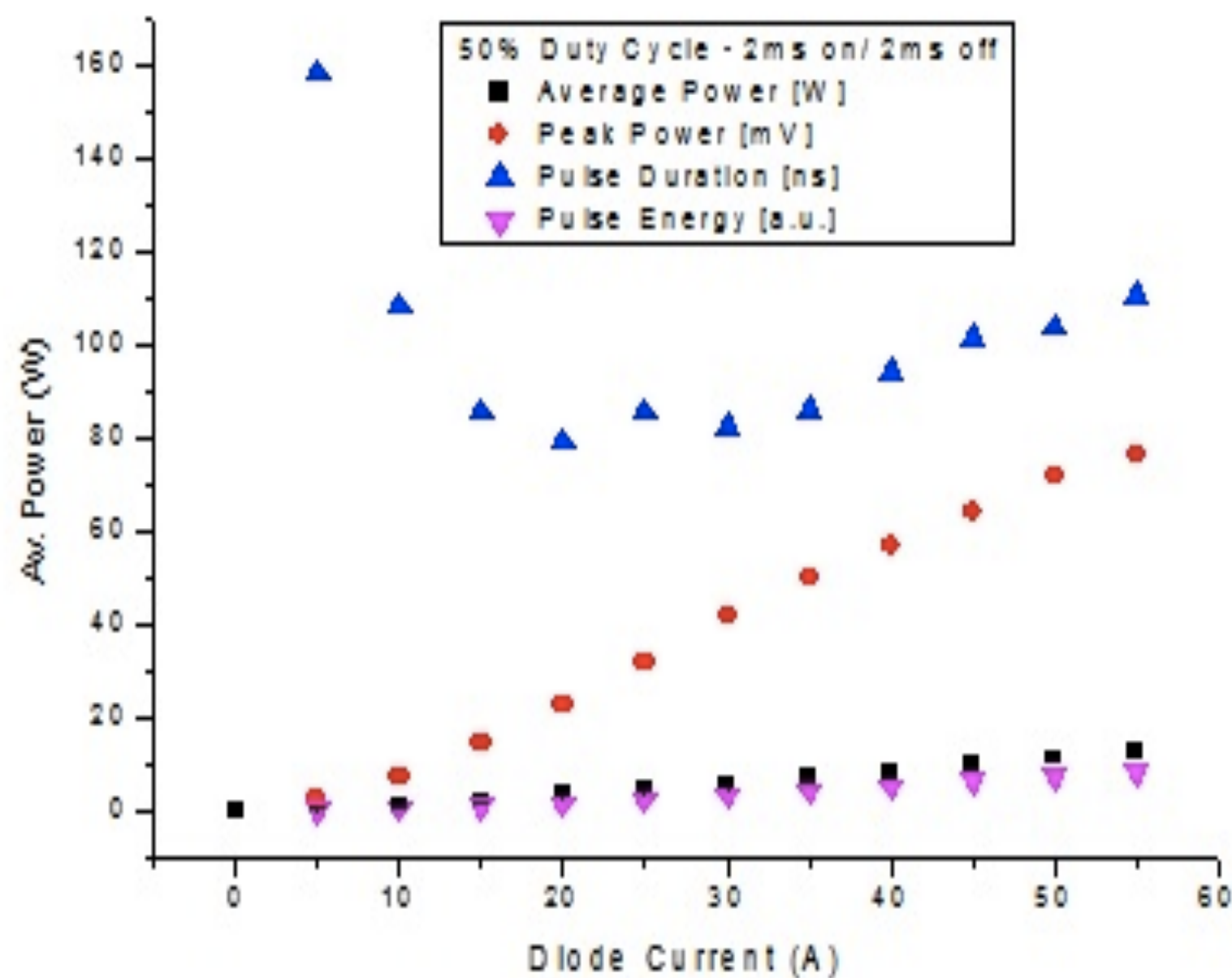




Pulse Profile @ 55 A Diode Pump Current

Diode pump in CW regime

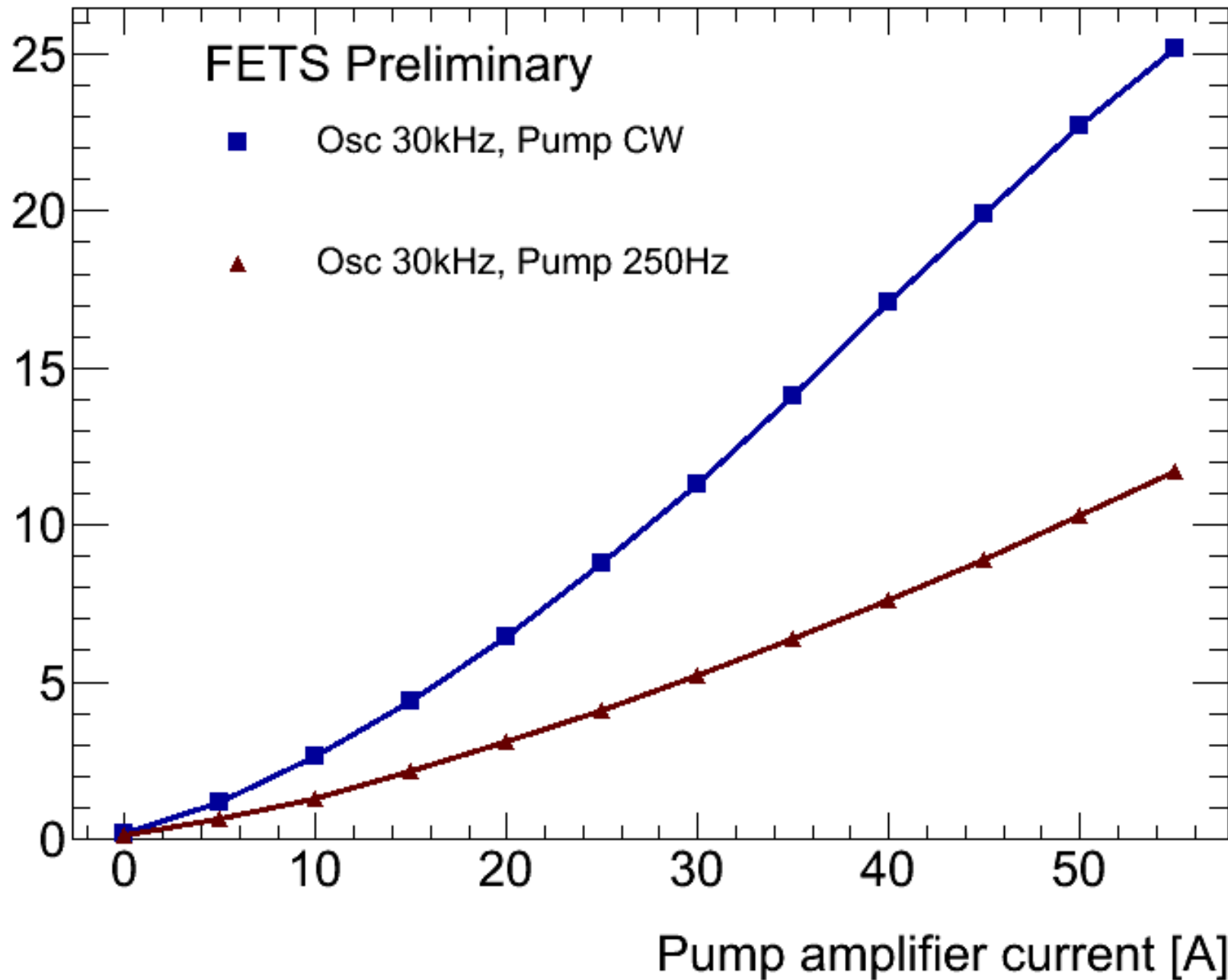


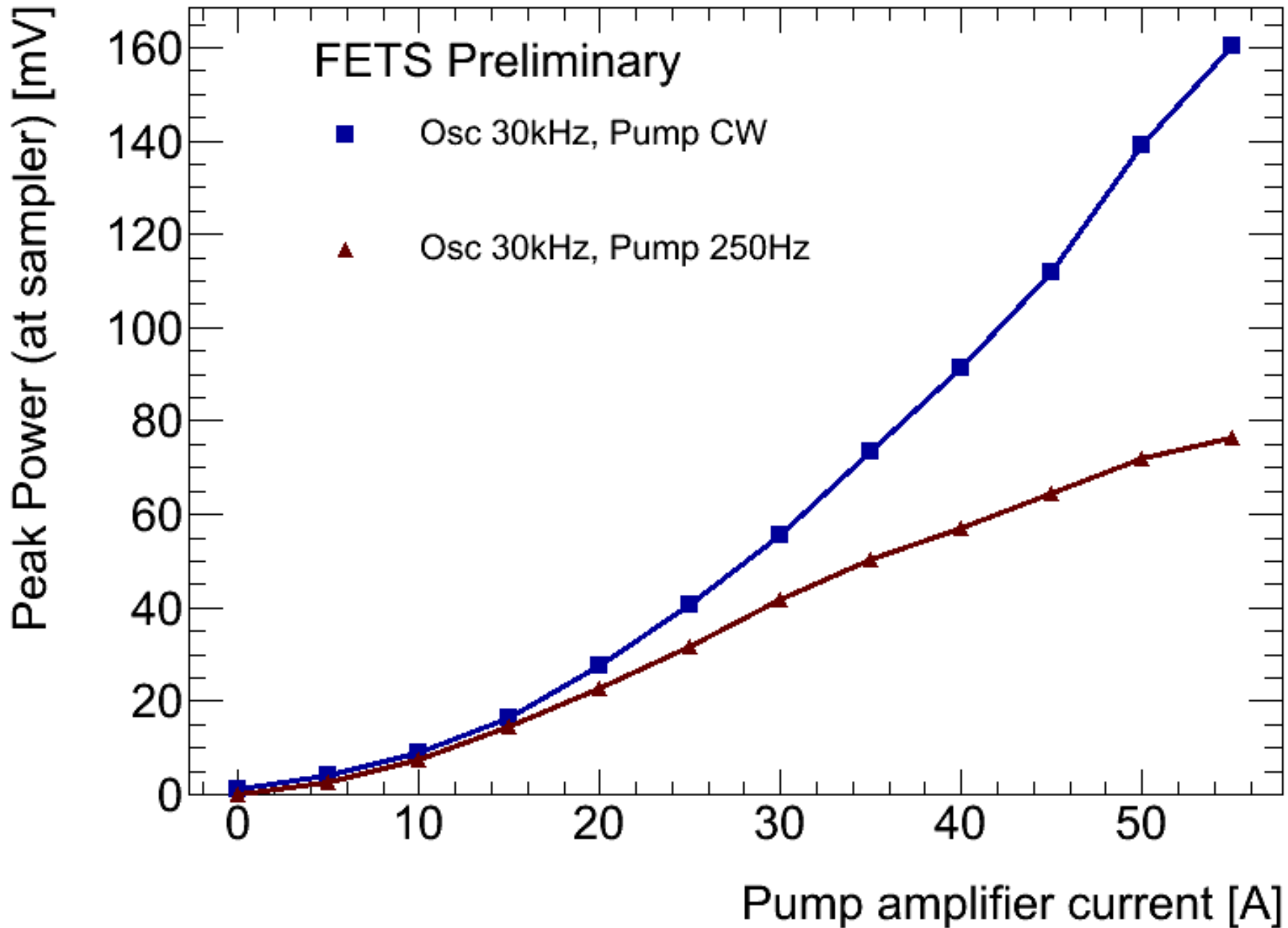


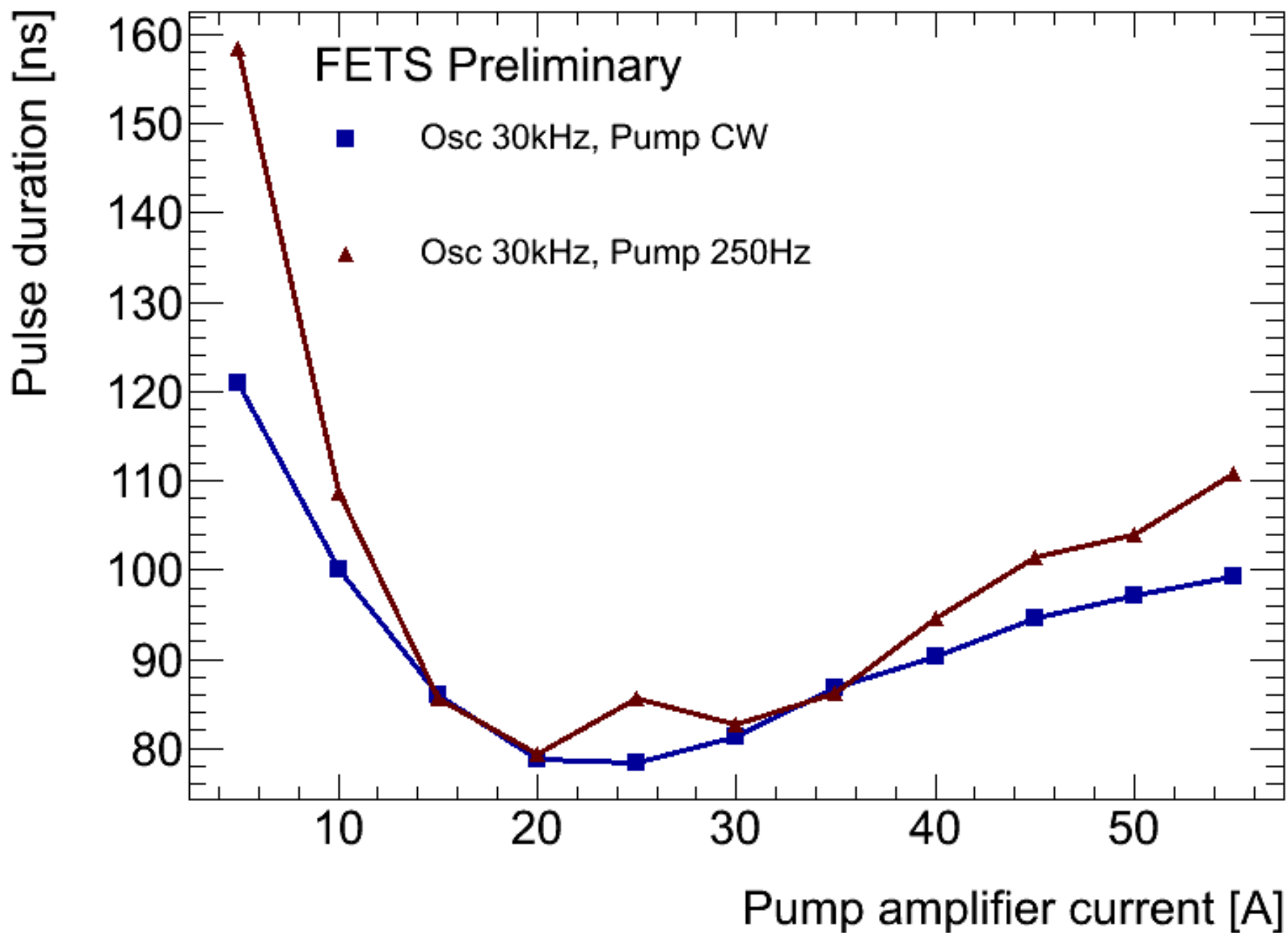
Average Power (after sampler) [W]

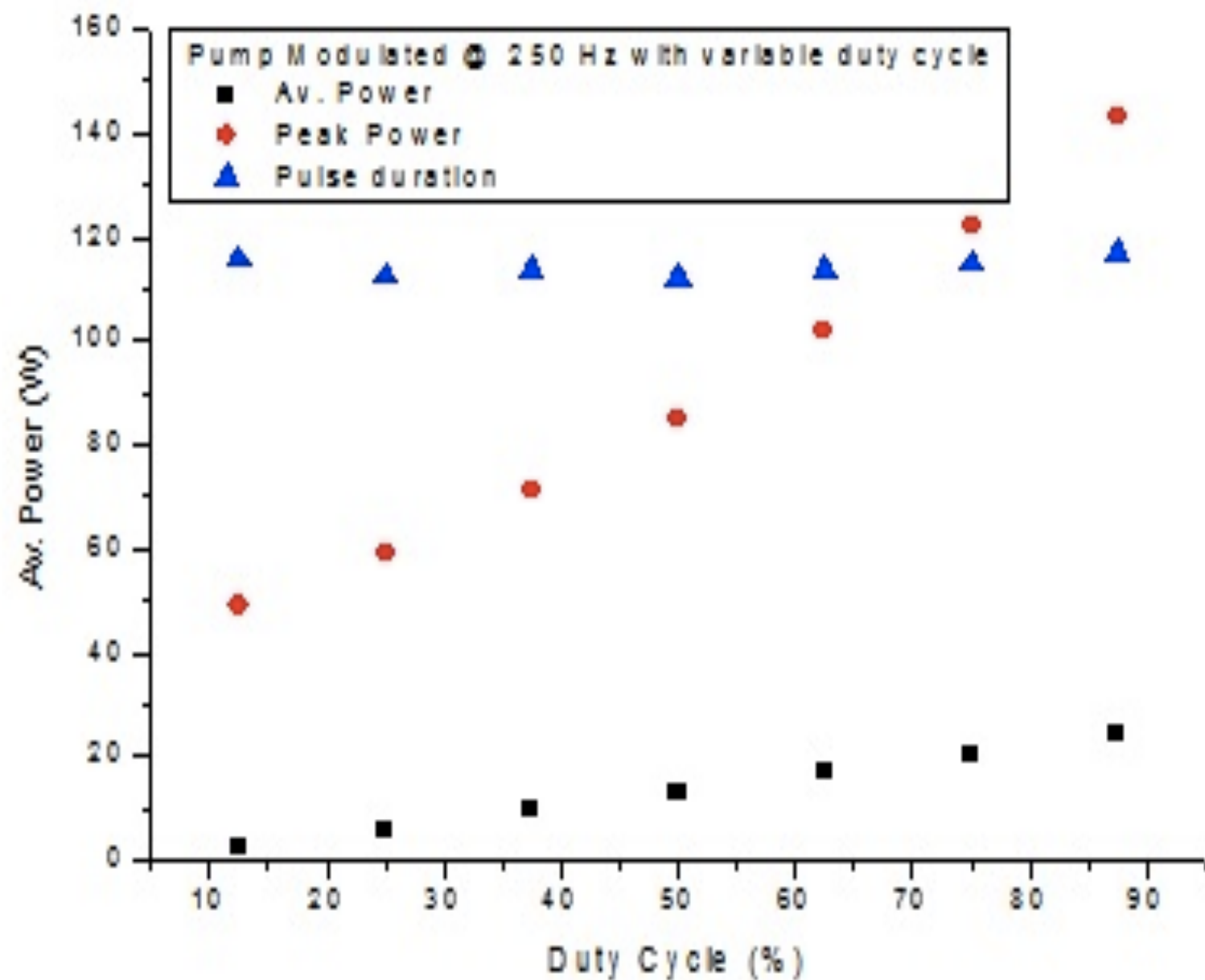
FETS Preliminary

- Osc 30kHz, Pump CW
- ▲ Osc 30kHz, Pump 250Hz









Acquisition is stopped.

1.00 GSa/s 5.00 Mpts

1 On

2 On

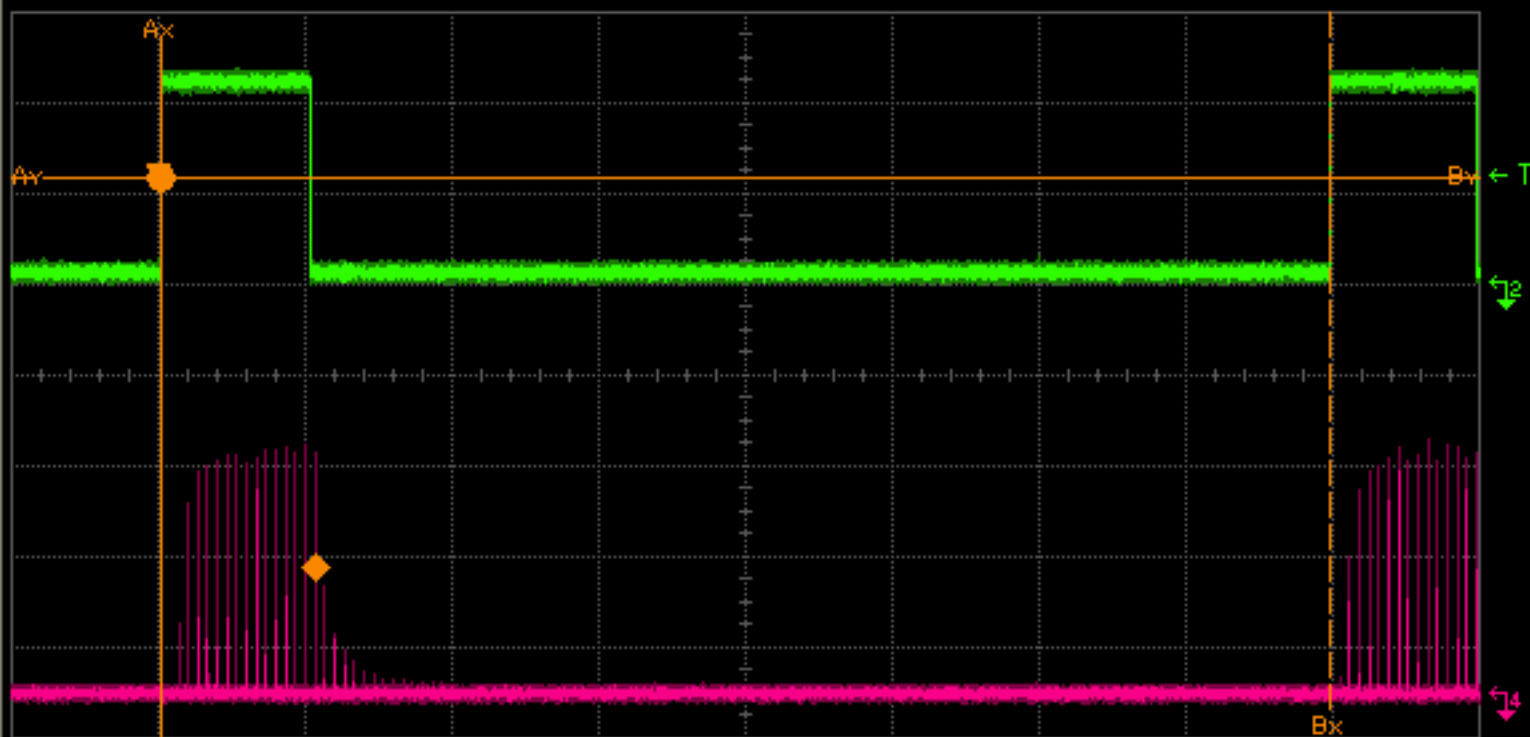
1.00 V/

3 On

4 On

20.0 mV/

On

500 μ s/

5.9636921000 ms



T

1.180 V

More
(1 of 2)Delete
All

Measurements

Markers

Logic

Scales

	Period(2 $\blacktriangledown$)	+ width(2 $\blacklozenge$)	V max(2)	+ width(4 $\blacklozenge$)	V max(4)	?
Current	3.97633627 ms	501.50616 μ s	2.339 V	105.33 ns	55.6 mV	
Mean	3.97632919 ms	501.49967 μ s	2.353 V	100.88 ns	55.5 mV	
Min	3.97621024 ms	501.45908 μ s	2.339 V	82.78 ns	54.8 mV	
Max	3.97641597 ms	501.54641 μ s	2.368 V	106.14 ns	56.8 mV	

Acquisition is stopped.

1.00 GSa/s 5.00 Mpts

1 On

2 On

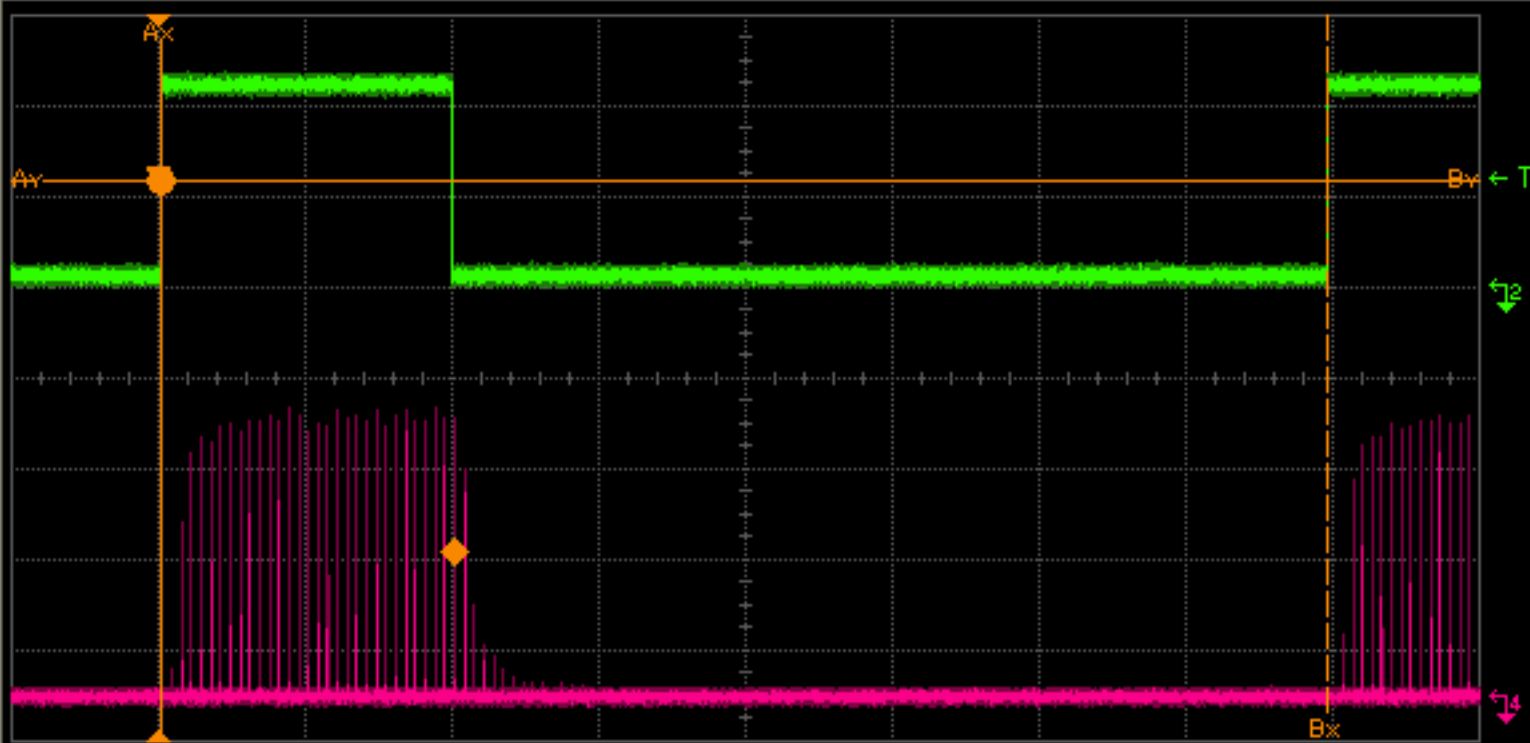
1.00 V/

3 On

4 On

20.0 mV/

On



H

500 μ s/

1.9935769000 ms



T

1.180 V

More
(1 of 2)Delete
All

Measurements

Markers

Logic

Scales

	Period(2 $\blacktriangledown$)	+ width(2 $\blacktriangledown$)	V max(2 $\blacktriangledown$)	+ width(4 $\blacktriangledown$)	V max(4 $\blacktriangledown$)	?
Current	3.97672318 ms	996.91394 μ s	2.341 V	108.02 ns	63.4 mV	
Mean	3.97672556 ms	997.16330 μ s	2.363 V	103.17 ns	64.4 mV	
Min	3.97663915 ms	996.91394 μ s	2.341 V	92.59 ns	62.8 mV	
Max	3.97678066 ms	997.36514 μ s	2.376 V	110.36 ns	66.0 mV	

Acquisition is stopped.

1.00 GSa/s 5.00 Mpts

1 On

2 On

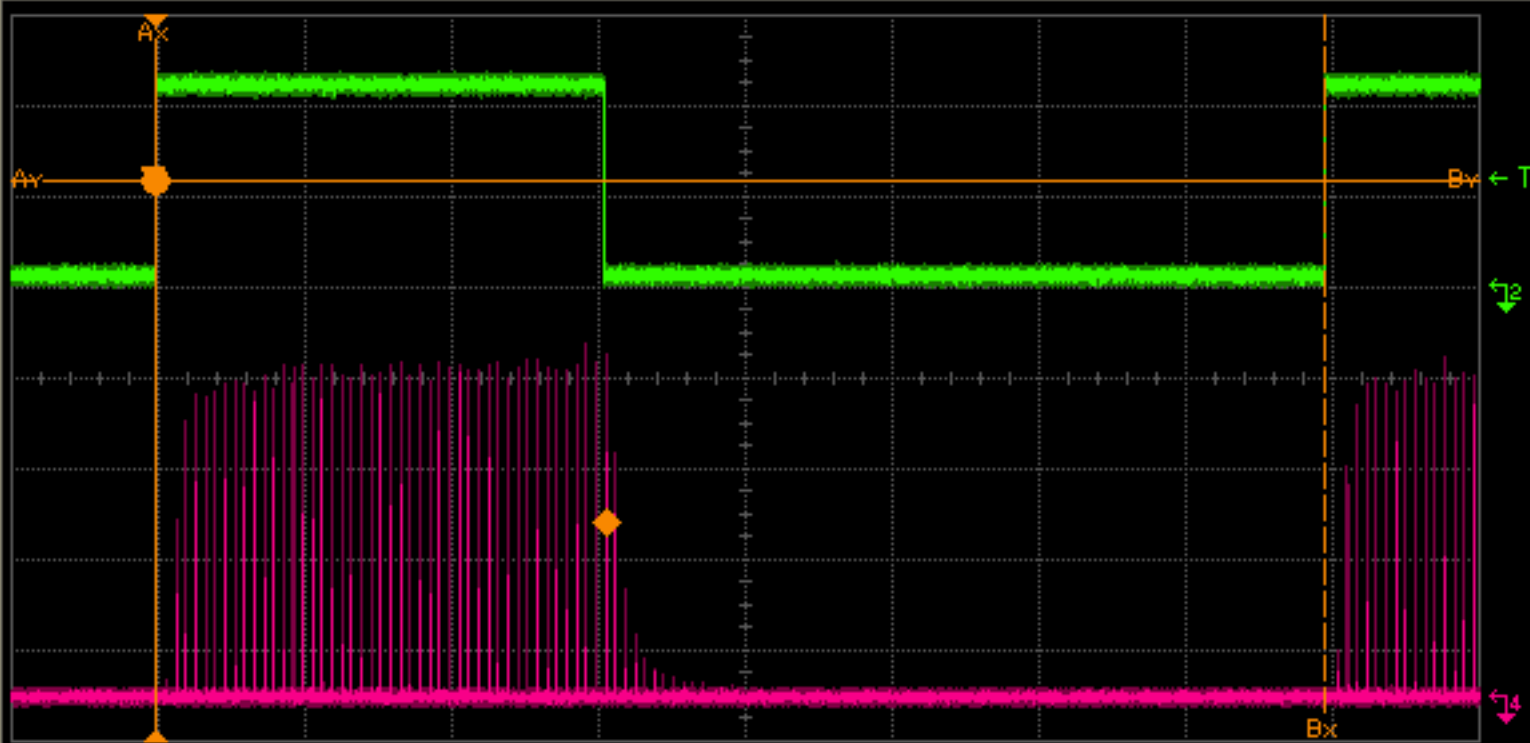
1.00 V/

3 On

4 On

20.0 mV/

On

500 μ s/

2.0051838000 ms



T

1.180 V

More
(1 of 2)Delete
All

Measurements

Markers

Logic

Scales

	Period(2 $\heartsuit$)	+ width(2 $\heartsuit$)	V max(2)	+ width(4 $\heartsuit$)	V max(4)
Current	3.97626617 ms	1.52038716 ms	2.356 V	106.95 ns	77.5 mV
Mean	3.97624659 ms	1.52051777 ms	2.351 V	102.49 ns	77.0 mV
Min	3.97600221 ms	1.52038716 ms	2.342 V	91.70 ns	75.9 mV
Max	3.97644786 ms	1.52059751 ms	2.372 V	110.12 ns	77.5 mV

Acquisition is stopped.

1.00 GSa/s 5.00 Mpts

1 On

2 On

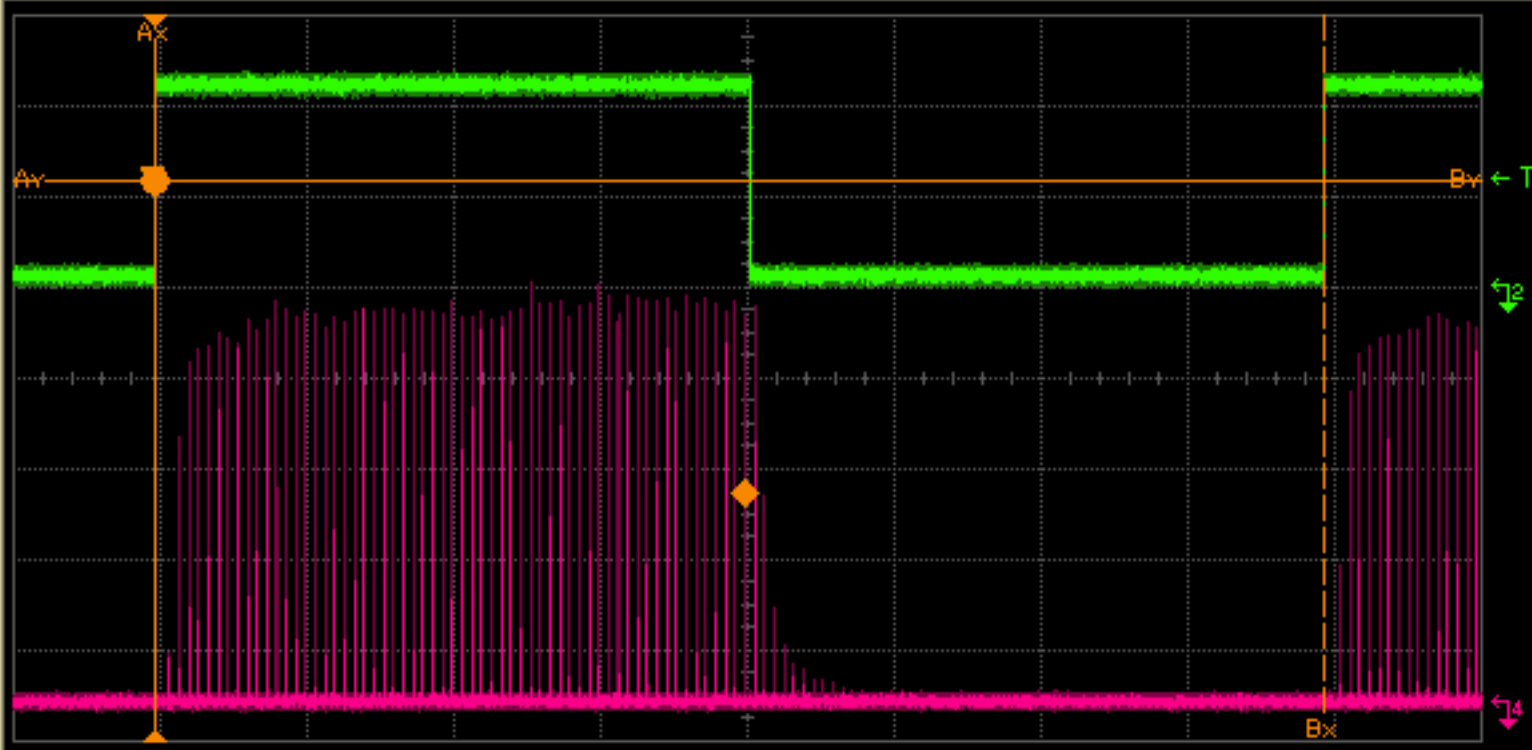
1.00 V/

3 On

4 On

20.0 mV/

On



H

500 μs/

2.0144594000 ms

T

1.180 V

More
(1 of 2)Delete
All

Measurements

Markers

Logic

Scales

	Period(2▼)	+ width(2◆)	V max(2)	+ width(4◆)	V max(4)
Current	3.97678095 ms	2.02332037 ms	2.362 V	107.49 ns	92.1 mV
Mean	3.97696913 ms	2.02328951 ms	2.356 V	106.61 ns	91.2 mV
Min	3.97678095 ms	2.02308818 ms	2.343 V	101.63 ns	89.9 mV
Max	3.97722506 ms	2.02338456 ms	2.377 V	109.94 ns	93.4 mV

Acquisition is stopped.

1.00 GSa/s 5.00 Mpts

1 On

2 On

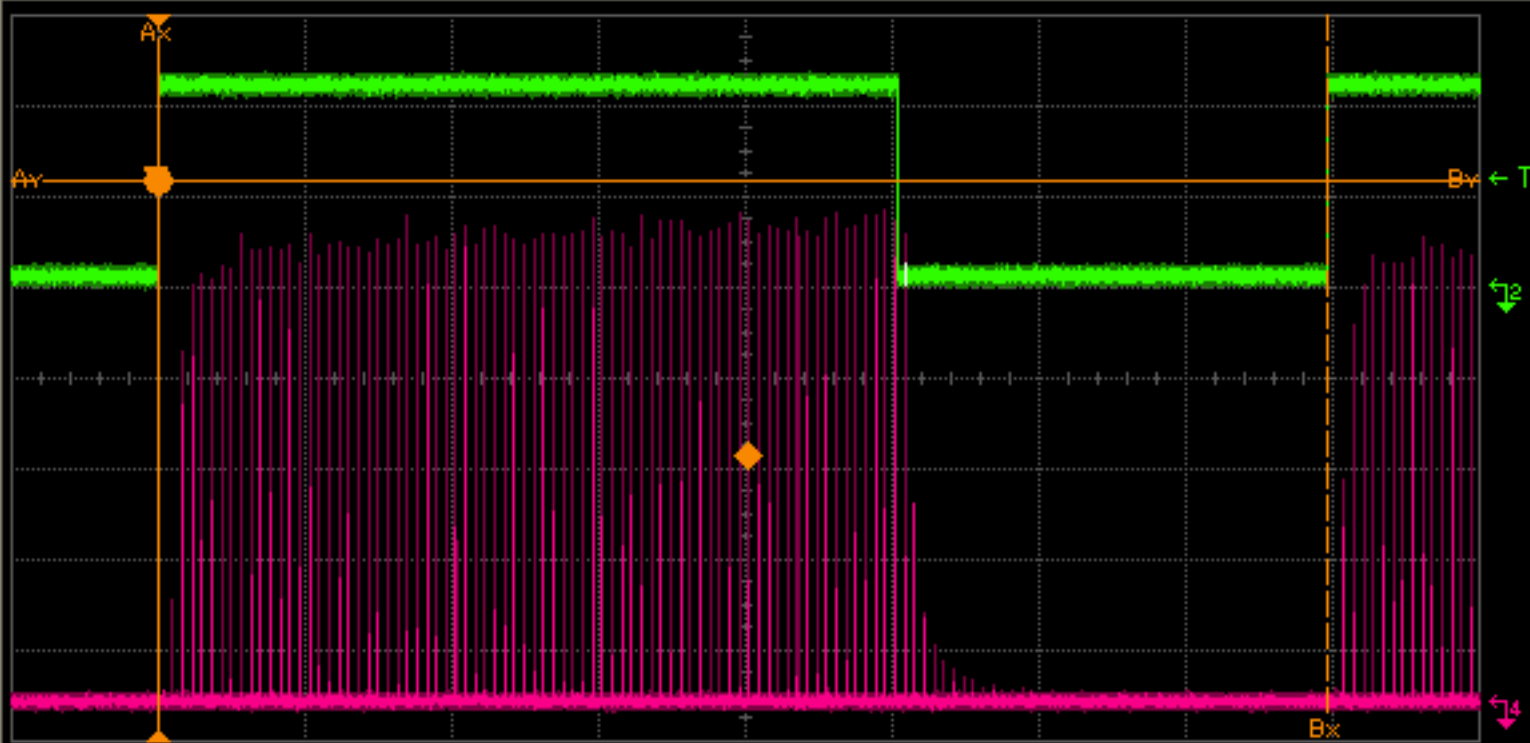
1.00 V/

3 On

4 On

20.0 mV/

On



H

500 μ s/

1.9987122000 ms



T 1.180 V

More
(1 of 2)Delete
All

Measurements

Markers

Logic

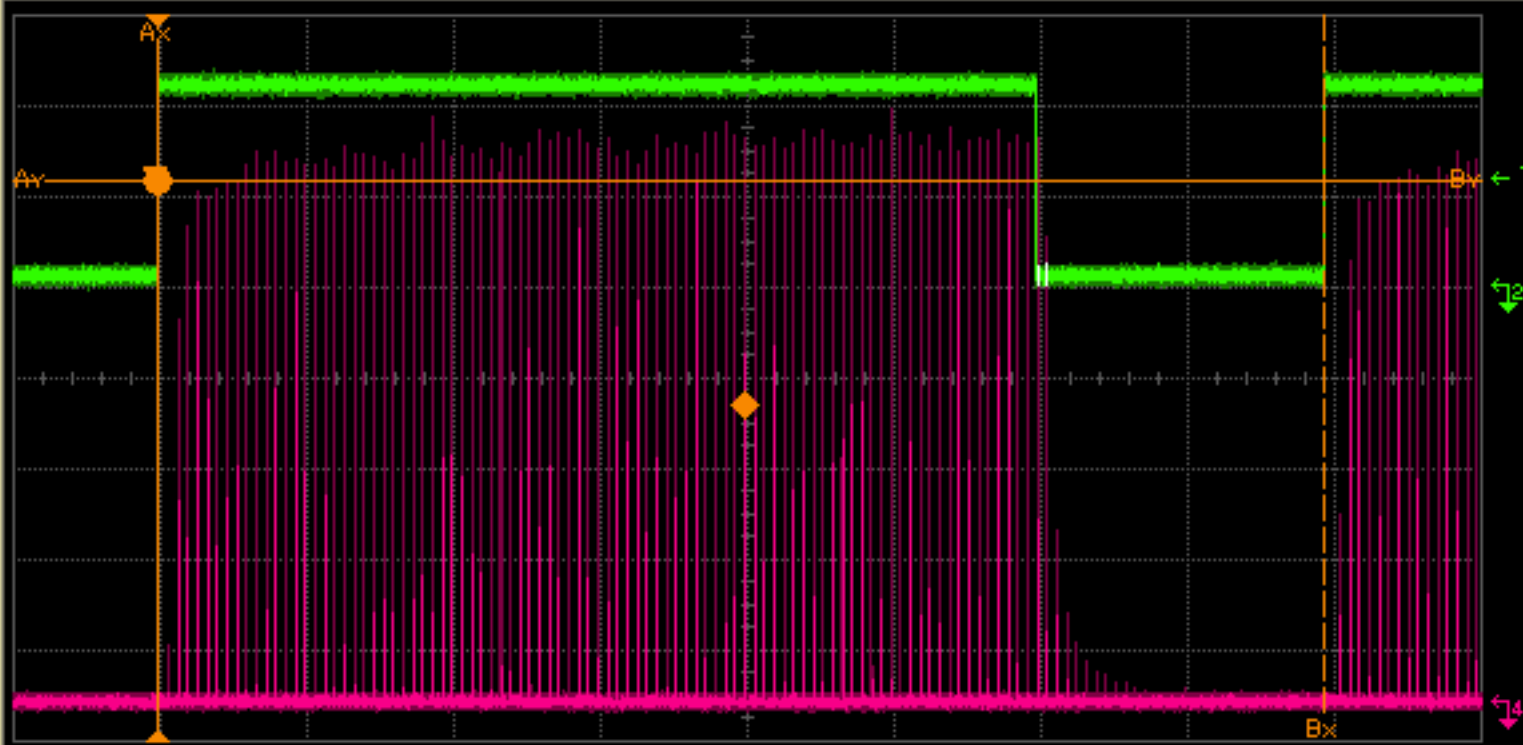
Scales

	Period(2 $\blacktriangledown$)	+ width(2 $\blacktriangledown$)	V max(2)	+ width(4 $\blacklozenge$)	V max(4)	?
Current	3.97667503 ms	2.51657732 ms	2.346 V	106.30 ns	107.8 mV	
Mean	3.97672029 ms	2.51706249 ms	2.3571 V	102.591 ns	109.00 mV	
Min	3.97652363 ms	2.51646678 ms	2.342 V	99.26 ns	107.8 mV	
Max	3.97683390 ms	2.51759731 ms	2.378 V	108.49 ns	110.3 mV	

Acquisition is stopped.

1.00 GSa/s 5.00 Mpts

1 On 2 On 1.00 V/ 3 On 4 On 20.0 mV/ On



500 μ s/ 2.0083322000 ms 1.180 V

Measurements Markers Logic Scales

	Period(2 $\blacktriangledown$)	+ width(2 $\blacktriangledown$)	V max(2)	+ width(4 $\blacklozenge$)	V max(4)
Current	3.97622045 ms	2.99248894 ms	2.376 V	101.63 ns	130.3 mV
Mean	3.97649963 ms	2.99245517 ms	2.355 V	100.62 ns	129.2 mV
Min	3.97622045 ms	2.99216733 ms	2.343 V	96.34 ns	125.9 mV
Max	3.97671222 ms	2.99269640 ms	2.401 V	103.64 ns	131.2 mV

More
(1 of 2)Delete
All

Acquisition is stopped.

1.00 GSa/s 5.00 Mpts



1 On

2 On

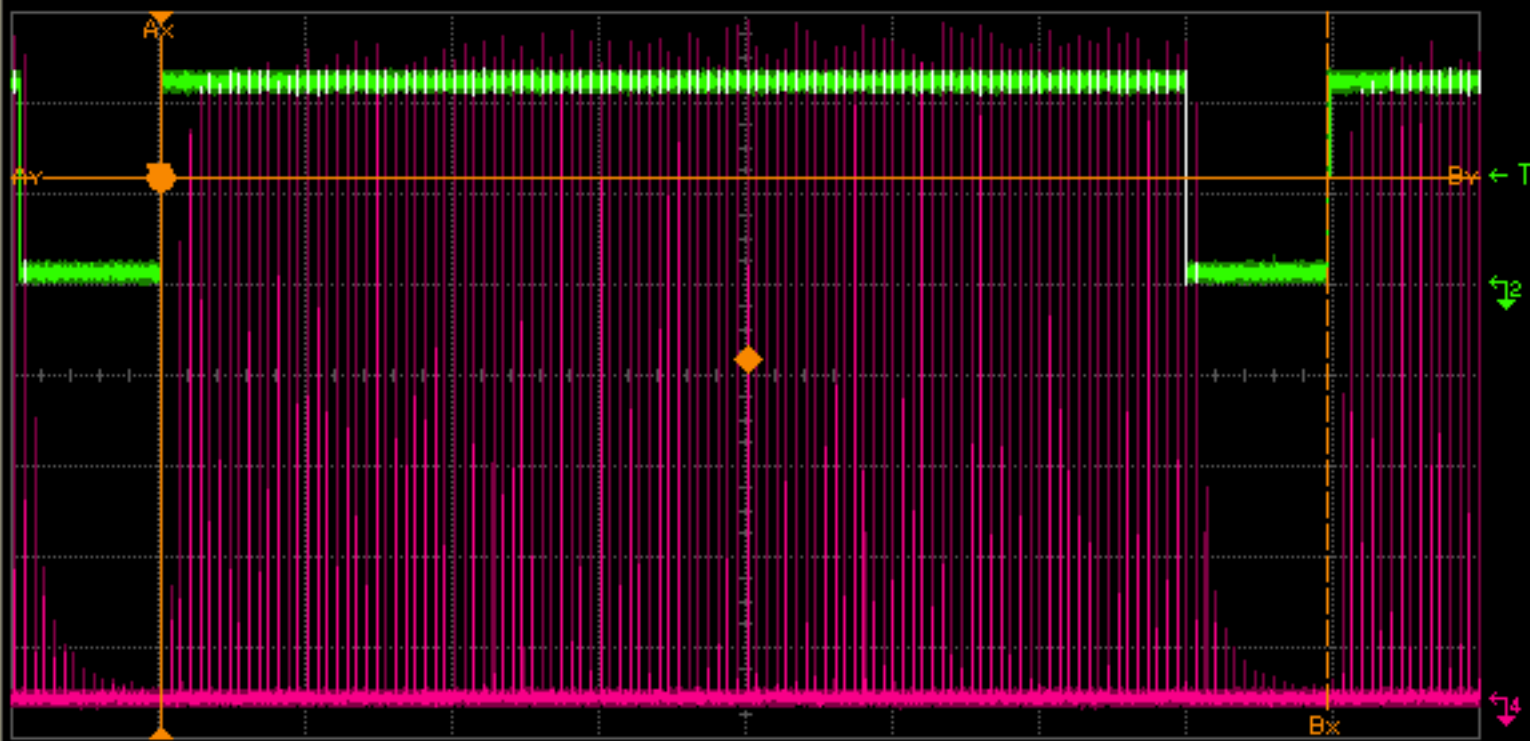
1.00 V/

3 On

4 On

20.0 mV/

On



H

500 μ s/

1.9901341000 ms

1.180 V

0

T

1.180 V

1

More
(1 of 2)Delete
All

Measurements

Markers

Logic

Scales

	Period(2)	+ width(2)	V max(2)	+ width(4)	V max(4)
Current	3.97637550 ms	3.49418283 ms	2.344 V	92.21 ns	149.5 mV
Mean	3.97610933 ms	3.49411151 ms	2.3539 V	97.730 ns	? 150.53 mV
Min	3.97530434 ms	3.49313727 ms	2.340 V	85.35 ns	? 147.5 mV
Max	3.97654978 ms	3.49498301 ms	2.403 V	184.95 ns	? 152.1 mV