



SAD iTPM

Signal Integrity Test Report

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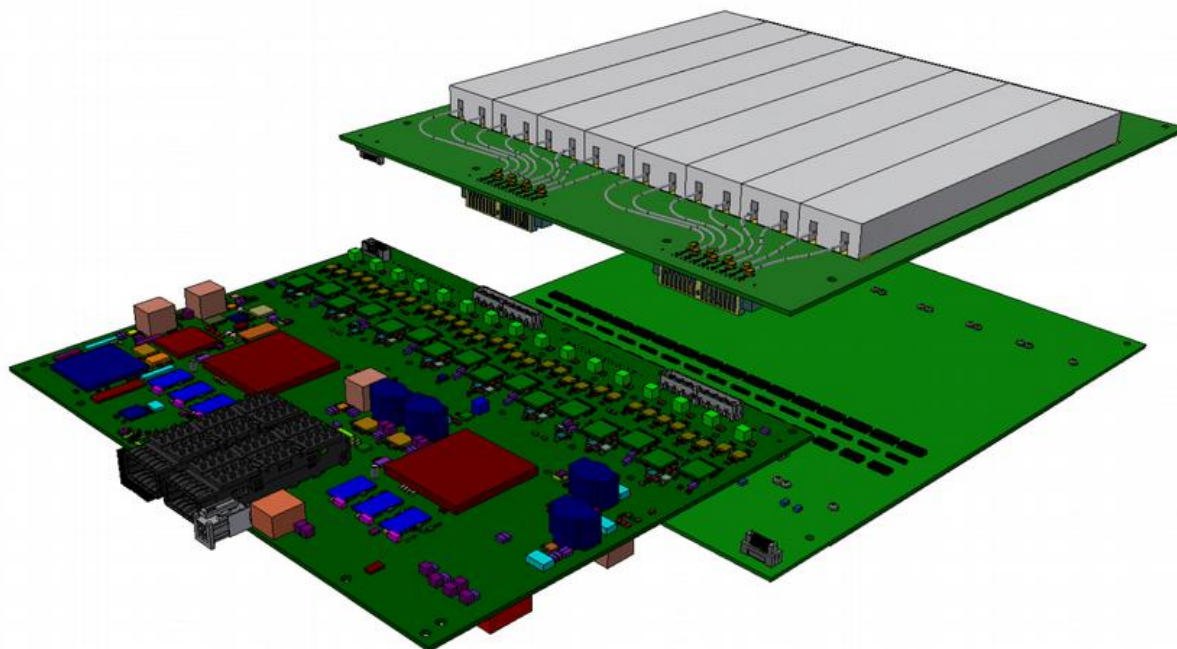
Acronyms

AAVS1	Aperture Array Verification System 1
ADU	Analog to Digital Unit
EMI	Electromagnetic Immunity
FFT	Fast Fourier Transform
FPGA	Field Programmable Gate Array
iTPM	italian Tile Processing Module
LNA	Low Noise Amplifier
NIC	Network Interface Card
ORX	Optical Receiver
OS	Operating System
preADU	pre Analog to Digital Unit
RF	Radio Frequency
RFI	Radio Frequency Interference
RX	Receiver
SAD	Sardinia Array Demonstrator
OTX	Optical Transmitter
WDM	Wavelength Division Multiplexing

Introduction

iTPM (italian Tile Processing Unit) is a data acquisition and process system for radio astronomy developed in the frame of SKA low frequency aperture antenna array.

It is an assembly of three boards: two **preADUs**, and one **ADU**. The iTPM is the assembly under test described in this report.



The preADU board is a set of 8 ORX where the signals coming from the antennas in the field are converted back into the RF domain, filtered and amplified.

Each ORX can handle two RF signals (typically the two polarizations of the same antenna) received through the same optical fibre thanks to the **WDM** technology. This means that each preADU board provides to the ADU board 16 RF signals. The ADU is designed to be connected with two preADUs, one to the top and one flipped back to the bottom.

The ADU samples 32 RF signals with 16 dual input ADCs. It computes the FFTs of each RF input and then create the beam of a tile (a subset of 16 antennas of one station). When TPMs are connected in a stack, thanks to the additive network beamforming, it also generates the station beam (or more beams with less bandwidth).

Hardware



This picture shows iTPMs mounted in the SAD rack. The cabinet hosts all the necessary equipment to allow the iTPMs to work and to send data to the workstation. In the top of the rack there are two 16 Volt 94 Amps power supplies that provides power to iTPMs subrack by eight breakers of the dual bus power distribution unit.

The power consumption of each iTPM is 180 W (at room temperature) when using the station beamforming firmware. It drops down to 150 W by using the signal integrity test firmware.

The boards management is served by a 1Gb RJ45 Ethernet Switch, while the high speed data link is provided by a 40Gb QSFP+ Ethernet Switch.

The iTPM requires reference clock signals for synchronisation therefore a distributor (National Instruments Octoclock which is a 1U device) takes one pulse per second (PPS) signal and one 10 MHz reference signal as input and divides them on 8 outputs.

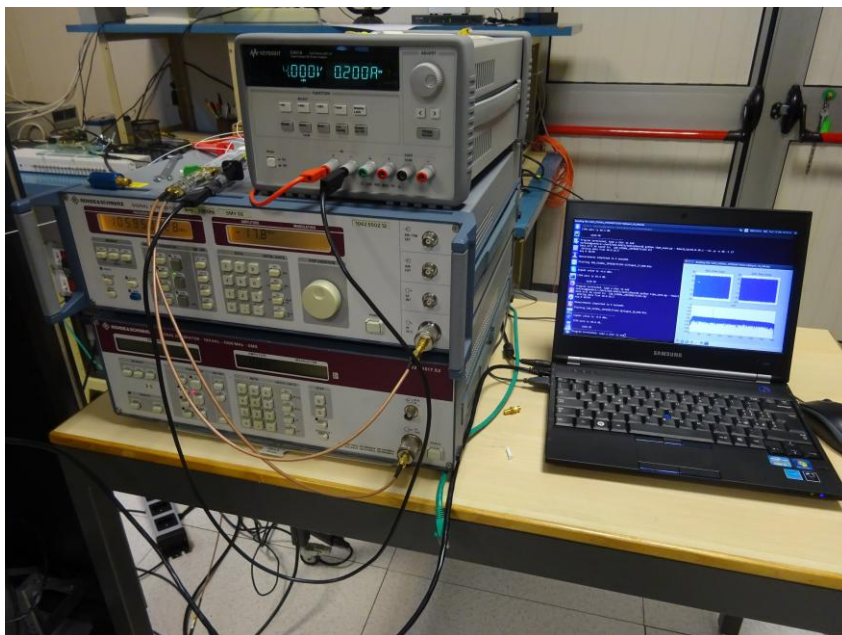
The iTPM Subrack Stack is designed as follow (from bottom to top):

- 1U 6 fans unit, 230VAC, with 845 m³/h airflow volume, blowing cold air to iTPM heatsinks
- 1U airflow collector
- 6U subrack hosting 4 iTPM (21hp width each)
- 1U airflow collector
- 1U 6 fans unit (same model as before) blowing hot air outside the subrack



There are two iTPM subracks stacks in the rack spaced by 3U. Currently there is a temporary air deflector cardboard model that directs the hot air to the rear of the rack to study thermal benefits in separate tests.

The input signals for the signal integrity test are provided by two signal generators locked to the same iTPMs 10 MHz reference clock. The OTX is powered by a different power supply set to 4 V. The data of the test is stored on a laptop connected to the iTPMs 1Gb output network.

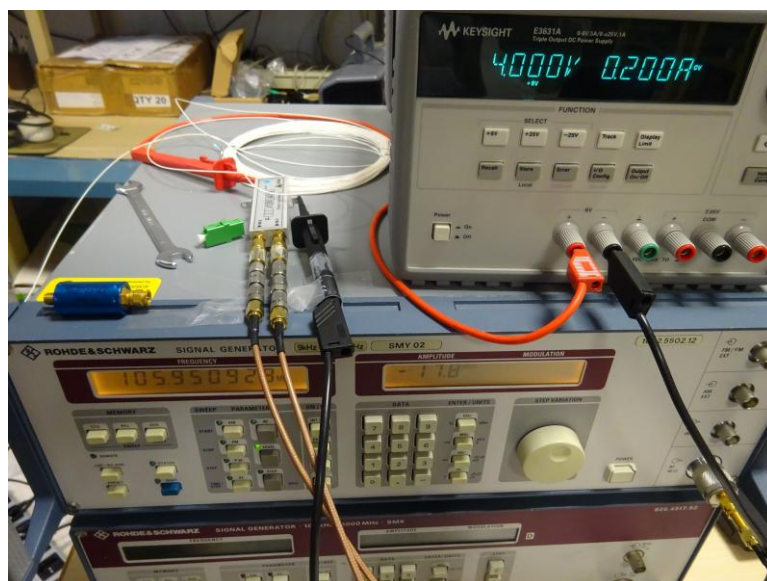


Test Description

Both the ADU and preADU boards have been tested independently measuring the main performance parameters in order to verify the compliance with the requirements. After the iTPM integration, it is necessary a check on the signal path in order to verify all the interconnections between the 3 boards and the iTPM front panel itself that can be wrongly assembled.



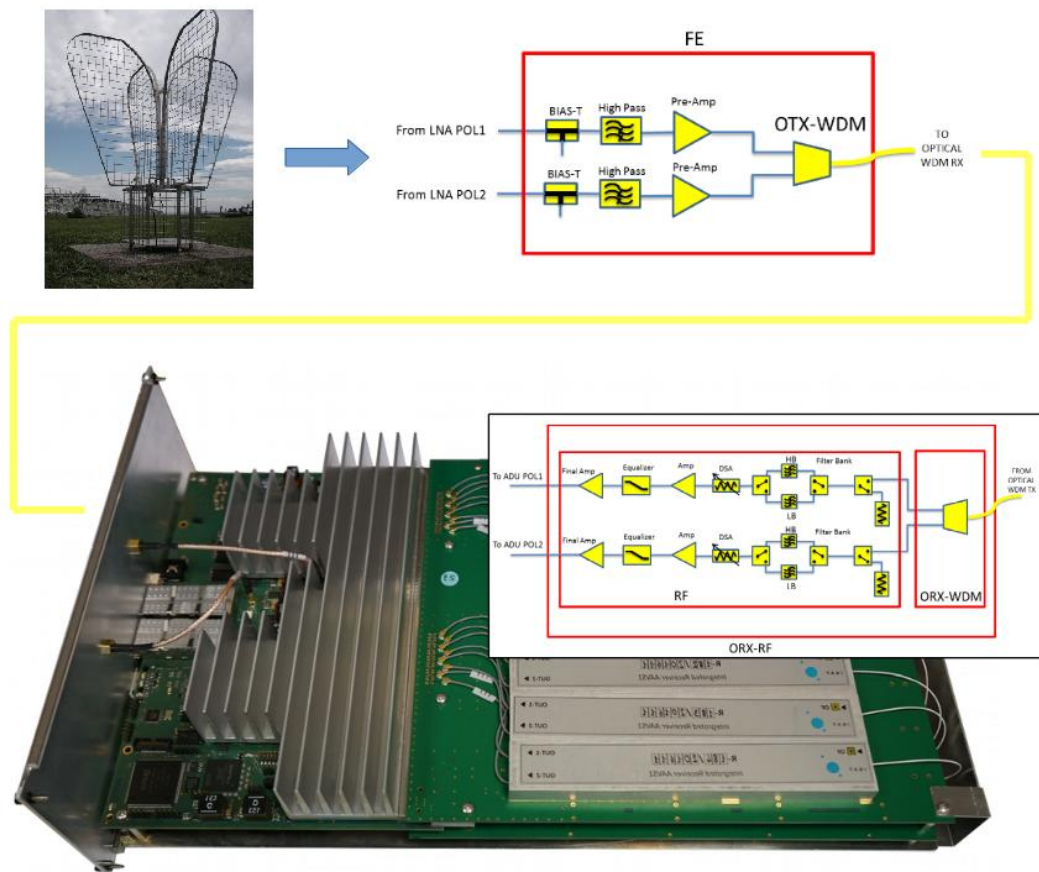
The optical fibres are very fragile, cabling mistakes may damage them or the mapping in the iTPM front panel may be wrong.



The test stimulus are single tone continuous wavelength signals coming from two signals generators, set around 100 MHz. Each signal generator is connected to one RF input of the OTX. Two different frequencies are generated in order to check also the cross talk between

the channels. The frequencies are, respectively, 105,950928 MHz for RF1 (Y pol of the antenna) and 111,627197 MHz for RF2 (X polarization).

AAVS1 and SAD use the same system to connect the antenna to the acquisition system.



The gain of the RF chain is about 60 dB¹ (OTX + preADU without any fibre optic in between except the OTX and ORX pigtails). This is a characteristic of the SKA AAVS1 system installed in Australia at the Murchison Radio Observatory where there are 5 Km of fibres between the antenna LNA and the TPM cabinet.

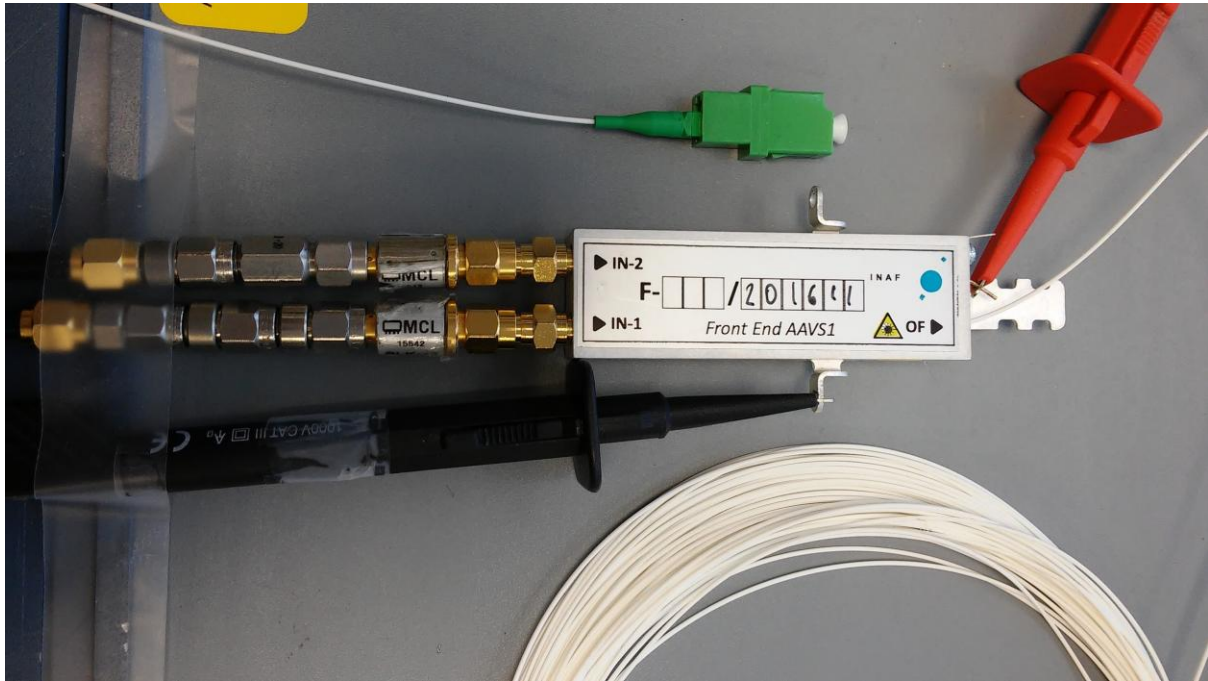
Considering the total gain, in order to be within the linearity we set the level of the signals at the inputs of the OTX to -60 dBm for both polarizations, to measure a signal level of 0 dBm at ADC level.

Measuring by the ADU board 0 dBm (± 6 dB) means that there is no unexpected attenuation. If also the shape of the spectra looks like expected without spurious signals higher than what measured before the integration, it means that everything is working well.

The digital step attenuator of the preADU was set to 0 dB to achieve the 0 dBm output level.

¹ Requirements are specified in the public tender: "Specifiche tecniche e linee guida relative alla realizzazione e di fornitura di un sistema ricevente per AAVS1" (http://www.ira.inaf.it/Bandi_Gara/Bando_IRA_06_20160309/Capitolato_Tecnico.pdf)

This is very important also to avoid to mask known spurious signals (such as low frequencies spikes generated by the RF digital step attenuators used in the preADU board) or spurious not already known (measured as worst other spurious).



The above picture is a zoomed view of the Optical Tx. From the left the output RF of the signal generators are attenuated of 40 dB using SMA attenuators, then DC Blocks stop the continuous voltage that would supply the antenna LNA. IN-1 and IN-2 are RF-1 and RF-2 respectively, on the right optical fibre carrying the two RF signals.

Software and Firmware

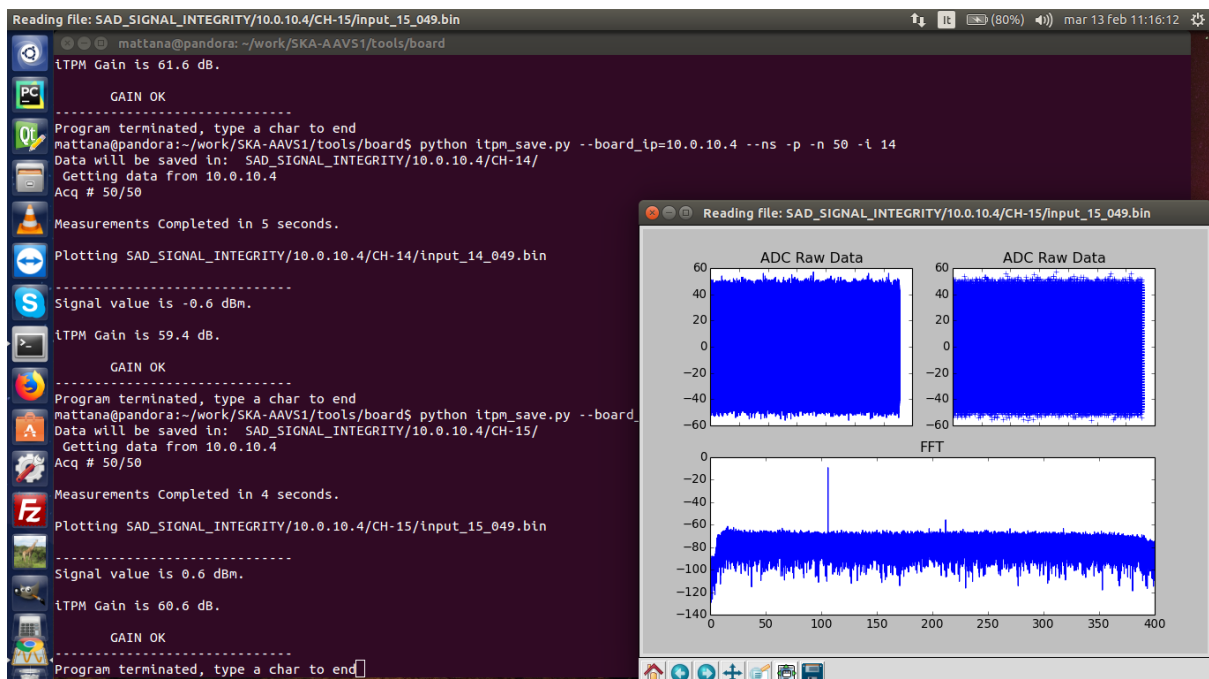
The iTPM FPGA Firmware running for this test is the same used to measure the ADC performance parameters. It provides time domain data of the 32 input is sampled by ADCs, collected in a 4 MB buffer and sent to the workstation without any onboard process in UDP packets of 1 KB. The acquisitions are paused until the buffer is completely empty and ready for new data.

This is typically a fast process but the speed may depend on the network traffic, the receiving buffer size on the OS kernel and the capability of the NIC to don't lose big burst of UDP packets. Using a Linux OS with receiving buffer size increased up to 16 MB allows us to get 50 measurements in less than 5 seconds. For Linux Ubuntu release 14.04 the commands to increase the kernel receiving buffer is (requires admin privileges):

```
sudo sysctl -w net.core.rmem_max=16777216
sudo sysctl -w net.core.rmem_default=16777216
```

Each measurement needs to be reconstructed from thousands consecutive 1KB packets of the 4 MB stream, checking the sequence counter packet to discard incomplete streams.

The software running on the laptop is a Python script that instantiates a UDP socket listener to get the iTPM packets and compute the averaged spectrum of 50 acquisitions and checking if the level of the signal is within the range of +6 dBm and -6 dBm. Since there is only one signal source it is possible to acquire 2 polarizations at time, then the user needs to connect the source to the next LC input plug on the iTPM front panel.



The Python software is platform independent, can run on Microsoft Windows machine and Linux machine (that is what we used as well), and must be used with this syntax:

```
$ python itpm_save.py --help
Usage: itpm_save.py [options]
```

Options:

```
-h, --help                show this help message and exit
-i CHANNEL, --channel=CHANNEL
                          ADC input channel where the signal generator is
                          connected [0 to 31]
-v                          Print lots of many information...
-p                          Plot the last acquisition
-n ACQ_NUM, --num=ACQ_NUM
                          Number of acquisition
-b BOARD_IP, --board_ip=BOARD_IP
                          Board ip, def: 10.0.10.2
--ns                        do not drive the signal generator (output folder does
                          not append the frequency)
--cp                        if the power is read from a coupler take into account
                          of its attenuation
```

and briefly:

```
$ python itpm_save.py --board_ip=<tpm_ip> --ns -p -n <number_of_measurements> -i
<itpm_adu_input_channel>
```

The following example syntax allows to acquire 50 measurements of the input channel #0 (that correspond to Input Fiber #1 Polarization Y) from the TPM Board #1:

```
$ python itpm_save.py --board_ip=10.0.10.1 --ns -p -n 50 -i 0
```

The software prompts to the video a feedback of the level of the signal and using the “-p” option, a simple preview plots the data of the last single measurement for a quick look to the shape of the spectra.

All the data is saved to a destination directory following this structure:

```
SAD_SIGNAL_INTEGRITY
├── 10.0.10.1
│   ├── CH-00
│   │   ├── input_00_000.bin
│   │   ├── input_00_001.bin
│   │   ├── input_00_002.bin
│   │   ├── input_00_003.bin
│   │   ├── input_00_004.bin
│   │   ├── input_00_005.bin
│   │   └── input_00_006.bin
│   └── .....continue.....
│       ├── input_00_047.bin
│       ├── input_00_048.bin
│       └── input_00_049.bin
│   ├── CH-01
│   │   ├── input_01_000.bin
│   │   └── input_01_001.bin
```

```

|   |   |— input_01_002.bin
|   |   |— input_01_003.bin
|   |   .....continue.....
|   |   |— input_31_046.bin
|   |   |— input_31_047.bin
|   |   |— input_31_048.bin
|   |   |— input_31_049.bin
|— 10.0.10.2
|   |— CH-00
|   |   |— input_00_000.bin
|   |   |— input_00_001.bin
|   |   |— input_00_002.bin
|   |   .....continue.....

```

When the measurements campaign is completed, another Python software (`sig_integrity.py`) provides a more accurate analysis on the same data reporting the level of fundamental tone harmonics, level and frequency of the worst spurious signal, and, the measure of the cross talk.

This software re-process the entire directory tree and save figures to the `images` folder.

```

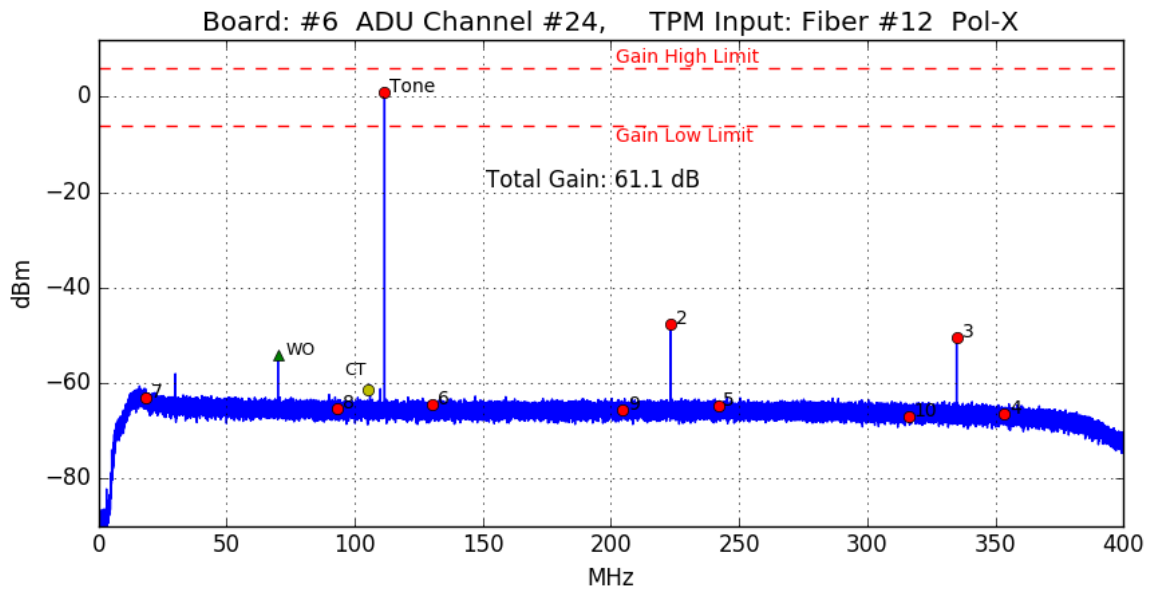
$ python ./sig_integrity.py

Directory processed: 10.0.10.1
Directory processed: 10.0.10.2
Directory processed: 10.0.10.3
Directory processed: 10.0.10.4
Directory processed: 10.0.10.5
Directory processed: 10.0.10.6
Directory processed: 10.0.10.7
Directory processed: 10.0.10.8

SAD_SIGNAL_INTEGRITY
|— images
|   |— SAD-1_CH-00.png
|   |— SAD-1_CH-01.png
|   |— SAD-1_CH-02.png
|   |— SAD-1_CH-03.png
|   |— SAD-1_CH-04.png
|   |— SAD-1_CH-05.png
|   |— SAD-1_CH-06.png
|   .....continue.....
|   |— SAD-8_CH-27.png
|   |— SAD-8_CH-28.png
|   |— SAD-8_CH-29.png
|   |— SAD-8_CH-30.png
|   |— SAD-8_CH-31.png

```


The output figure is as follow:



Fundamental Tone: 1.1 dBm
Second Harmonic: -47.7 dBm
Third Harmonic: -50.4 dBm

Tone Frequency: 111.627.197 Hz
Worst Other: -54.2 dBm @ 70.001 MHz
Cross Talk: 61.5 dBC @ 105.951 MHz

Results

The following tables show the fundamental tone signal level measured by the TPM that must be within the range ± 6 dBm and the respectively absolute gain (within 54 dB and 66 dB).

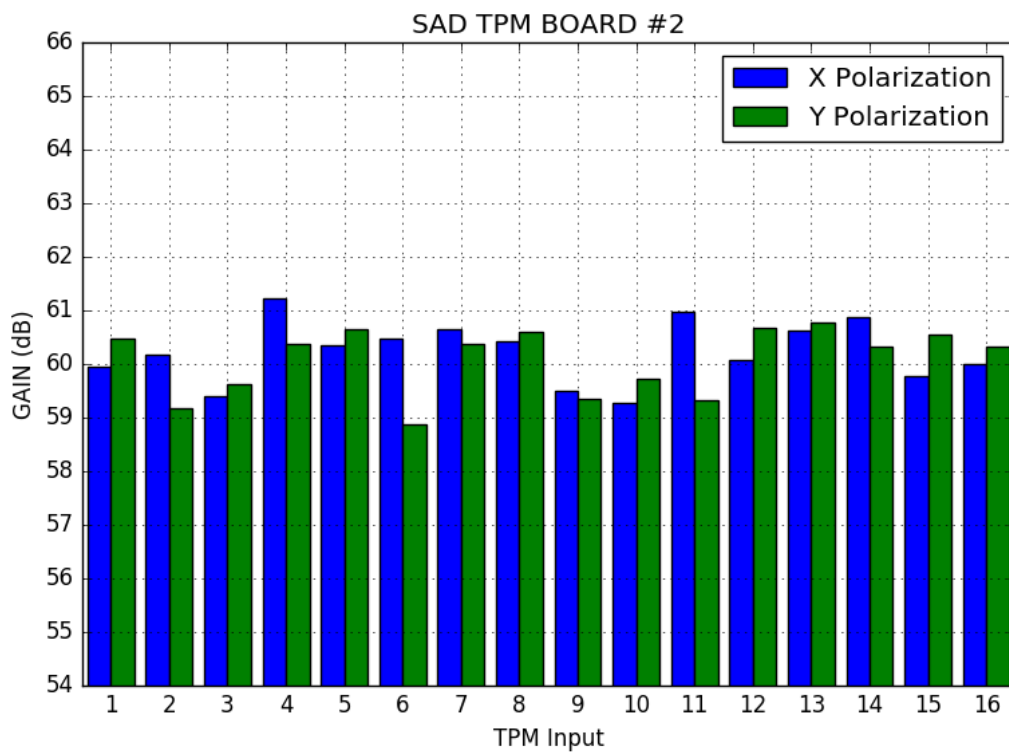
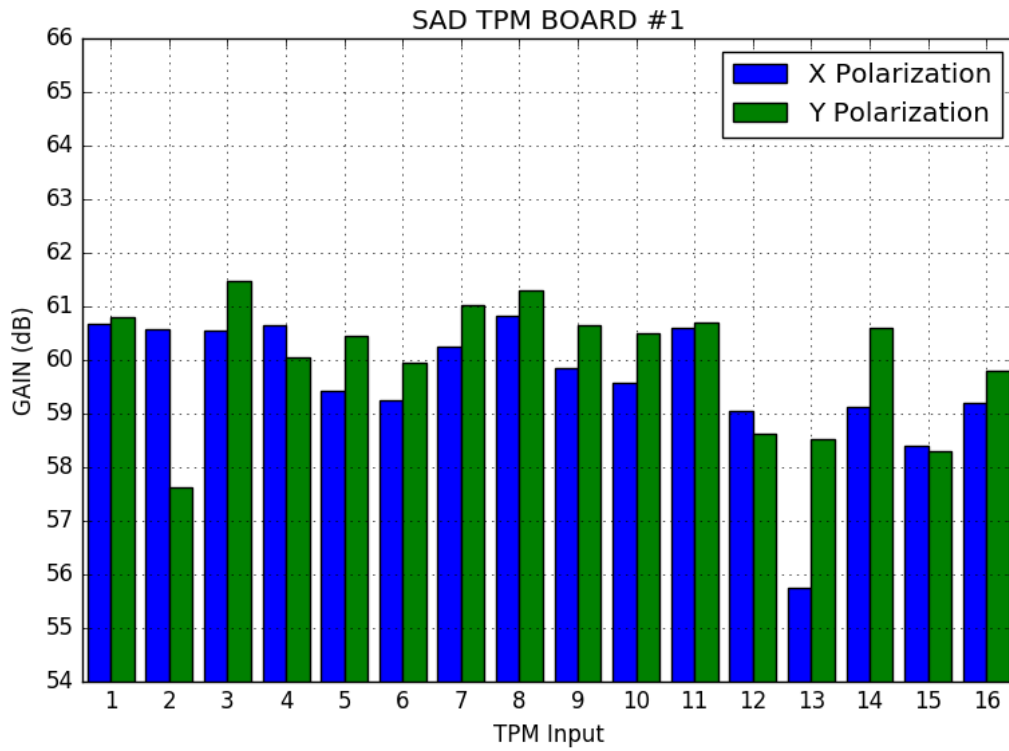
Fiber Number	ADU Input	Pol	Board	Level (dBm)	Gain (dB)	Board	Level (dBm)	Gain (dB)
1	0	Y	1	0.8	60.8	2	0.5	60.5
	1	X		0.7	60.7		0	60
2	2	Y		-2.4	57.6		-0.8	59.2
	3	X		0.6	60.6		0.2	60.2
3	4	Y		1.5	61.5		-0.4	59.6
	5	X		0.5	60.5		-0.6	59.4
4	6	Y		0.1	60.1		0.4	60.4
	7	X		0.7	60.7		1.2	61.2
5	16	Y		0.4	60.4		0.7	60.7
	17	X		-0.6	59.4		0.3	60.3
6	18	Y		0	60		-1.1	58.9
	19	X		-0.7	59.3		0.5	60.5
7	20	Y		1	61		0.4	60.4
	21	X		0.2	60.2		0.7	60.7
8	22	Y		1.3	61.3		0.6	60.6
	23	X		0.8	60.8		0.4	60.4
9	31	Y		0.6	60.6		-0.7	59.3
	30	X		-0.2	59.8		-0.5	59.5
10	29	Y		0.5	60.5		-0.3	59.7
	28	X		-0.4	59.6		-0.7	59.3
11	27	Y		0.7	60.7		-0.7	59.3
	26	X		0.6	60.6		1	61
12	25	Y		-1.4	58.6		0.7	60.7
	24	X		-1	59		0.1	60.1
13	15	Y		-1.5	58.5		0.8	60.8
	14	X		-4.2	55.8		0.6	60.6
14	13	Y		0.6	60.6		0.3	60.3
	12	X		-0.9	59.1		0.9	60.9
15	11	Y		-1.7	58.3		0.6	60.6
	10	X		-1.6	58.4		-0.2	59.8
16	9	Y		-0.2	59.8		0.3	60.3
	8	X		-0.8	59.2		0	60

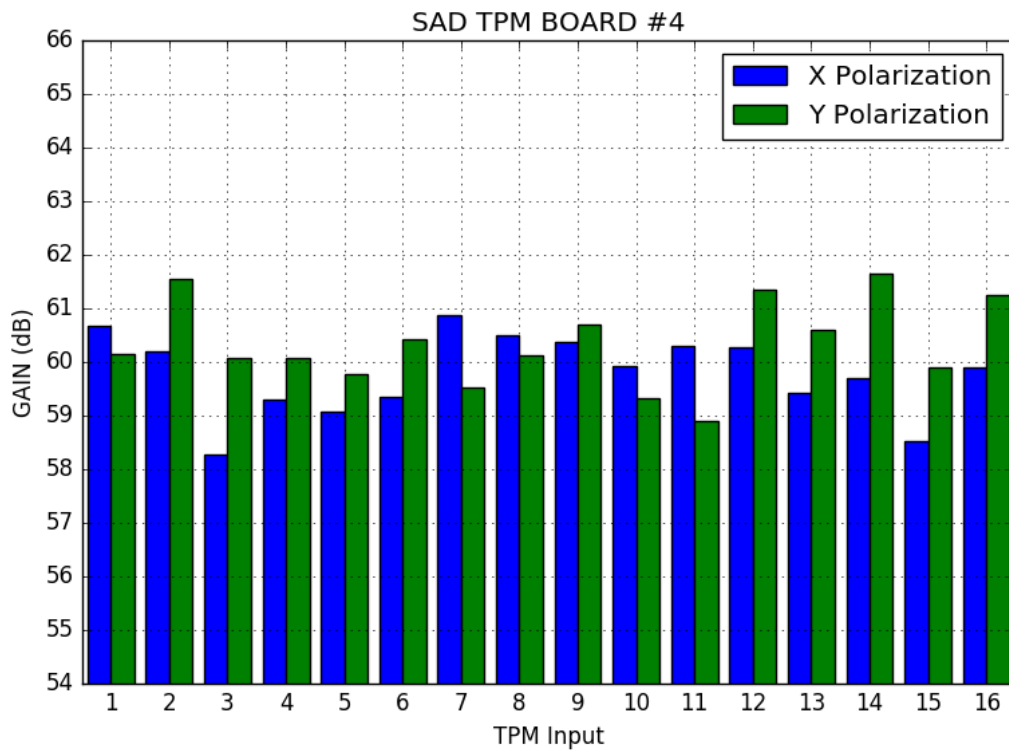
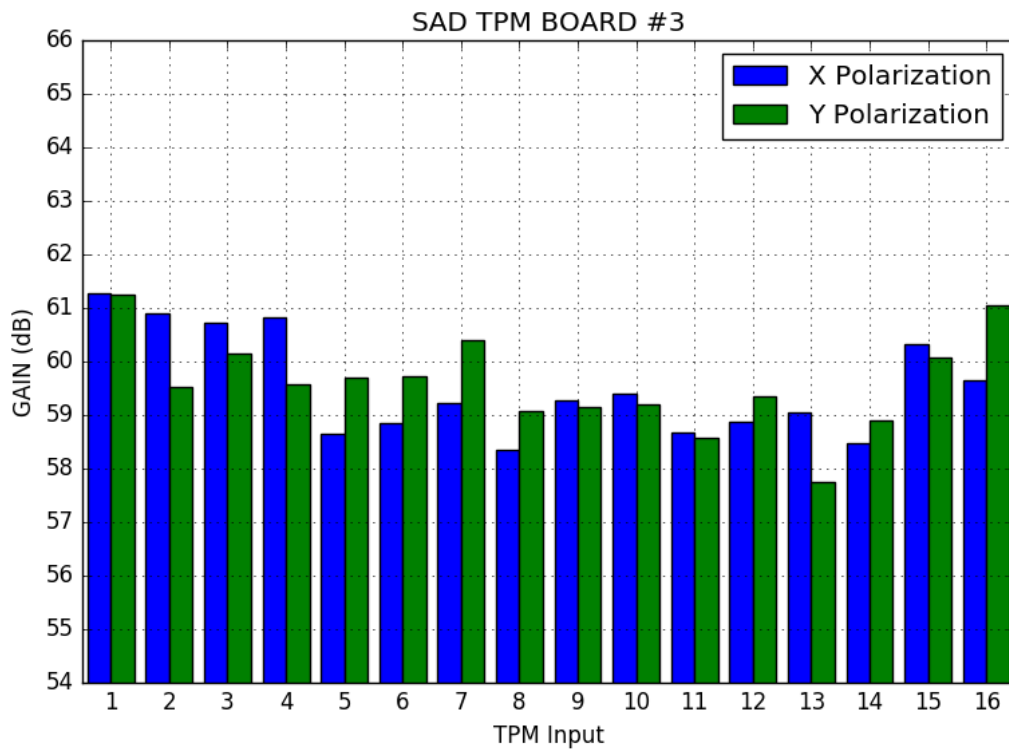
Fiber Number	ADU Input	Pol	Board	Level dBm	Gain dB	Board	Level dBm	Gain dB
1	0	Y	3	1.2	61.2	4	0.1	60.1
	1	X		1.3	61.3		0.7	60.7
2	2	Y		-0.5	59.5		1.5	61.5
	3	X		0.9	60.9		0.2	60.2
3	4	Y		0.1	60.1		0.1	60.1
	5	X		0.7	60.7		-1.7	58.3
4	6	Y		-0.4	59.6		0.1	60.1
	7	X		0.8	60.8		-0.7	59.3
5	16	Y		-0.3	59.7		-0.2	59.8
	17	X		-1.3	58.7		-0.9	59.1
6	18	Y		-0.3	59.7		0.4	60.4
	19	X		-1.2	58.8		-0.7	59.3
7	20	Y		0.4	60.4		-0.5	59.5
	21	X		-0.8	59.2		0.9	60.9
8	22	Y		-0.9	59.1		0.1	60.1
	23	X		-1.6	58.4		0.5	60.5
9	31	Y		-0.9	59.1		0.7	60.7
	30	X		-0.7	59.3		0.4	60.4
10	29	Y		-0.8	59.2		-0.7	59.3
	28	X		-0.6	59.4		-0.1	59.9
11	27	Y		-1.4	58.6		-1.1	58.9
	26	X		-1.3	58.7		0.3	60.3
12	25	Y		-0.6	59.4		1.4	61.4
	24	X		-1.1	58.9		0.3	60.3
13	15	Y		-2.2	57.8		0.6	60.6
	14	X		-1	59		-0.6	59.4
14	13	Y		-1.1	58.9		1.6	61.6
	12	X		-1.5	58.5		-0.3	59.7
15	11	Y		0.1	60.1		-0.1	59.9
	10	X		0.3	60.3		-1.5	58.5
16	9	Y		1.1	61.1		1.2	61.2
	8	X		-0.3	59.7		-0.1	59.9

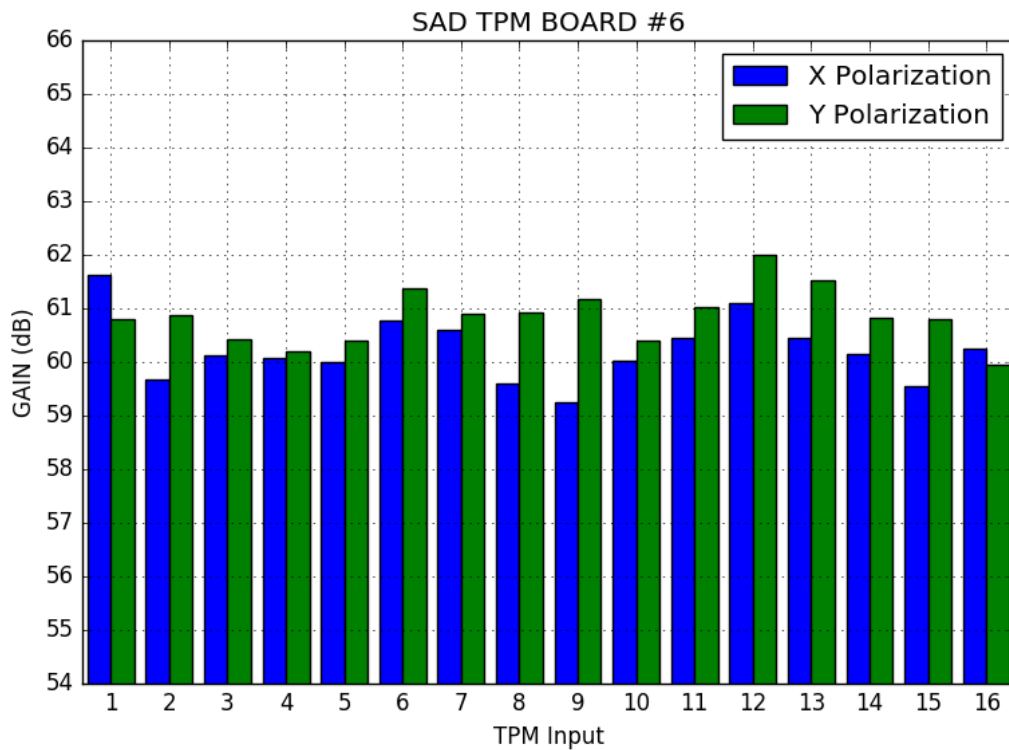
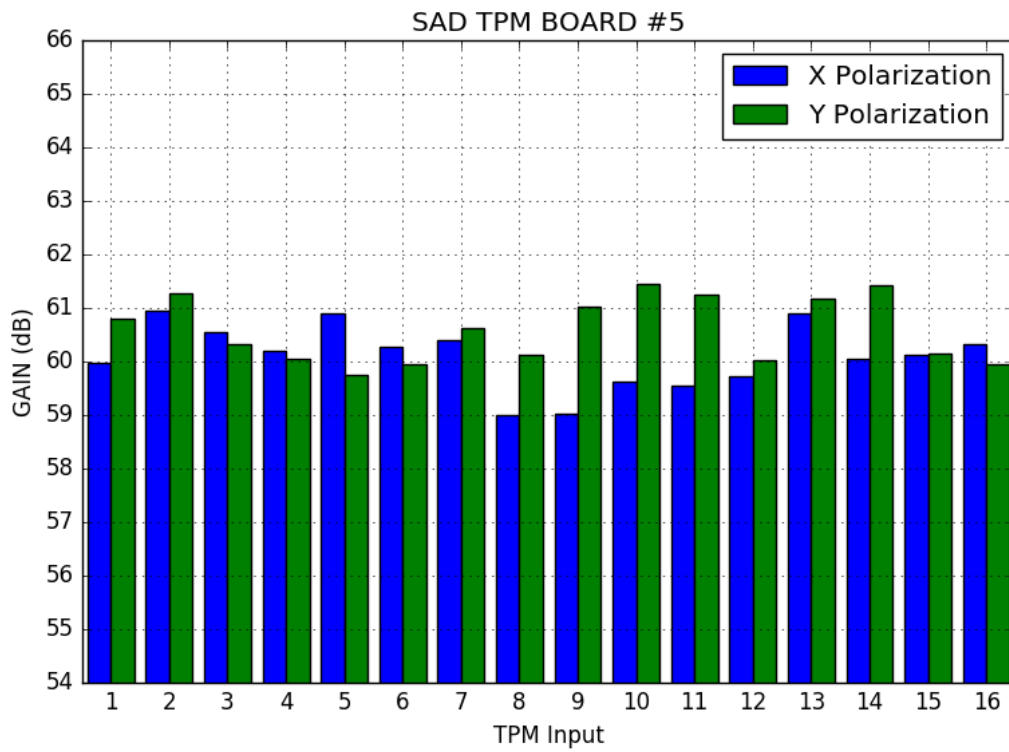
Fiber Number	ADU Input	Pol	Board	Level dBm	Gain dB	Board	Level dBm	Gain dB
1	0	Y	5	0.8	60.8	6	0.8	60.8
	1	X		1.6	61.6			
2	2	Y		1.3	61.3		0.9	60.9
	3	X		0.9	60.9		-0.3	59.7
3	4	Y		0.3	60.3		0.4	60.4
	5	X		0.6	60.6		0.1	60.1
4	6	Y		0	60		0.2	60.2
	7	X		0.2	60.2		0.1	60.1
5	16	Y		-0.2	59.8		0.4	60.4
	17	X		0.9	60.9		0	60
6	18	Y		0	60		1.4	61.4
	19	X		0.3	60.3		0.8	60.8
7	20	Y		0.6	60.6		0.9	60.9
	21	X		0.4	60.4		0.6	60.6
8	22	Y		0.1	60.1		0.9	60.9
	23	X		-1	59		-0.4	59.6
9	31	Y		1	61		1.2	61.2
	30	X		-1	59		-0.8	59.2
10	29	Y		1.4	61.4		0.4	60.4
	28	X		-0.4	59.6		0	60
11	27	Y		1.2	61.2		1	61
	26	X		-0.4	59.6		0.4	60.4
12	25	Y		0	60		2	62
	24	X		-0.3	59.7		1.1	61.1
13	15	Y		1.2	61.2		1.5	61.5
	14	X		0.9	60.9		0.5	60.5
14	13	Y		1.4	61.4		0.8	60.8
	12	X		0	60		0.2	60.2
15	11	Y		0.2	60.2		0.8	60.8
	10	X		0.1	60.1		-0.4	59.6
16	9	Y		0	60		0	60
	8	X		0.3	60.3		0.2	60.2

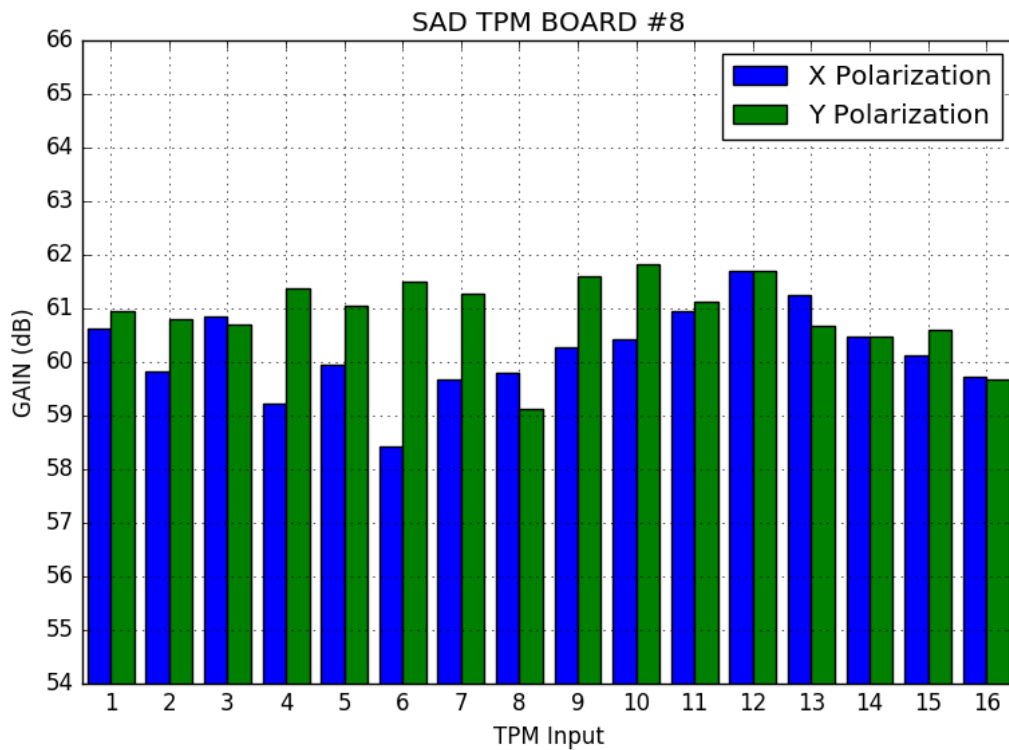
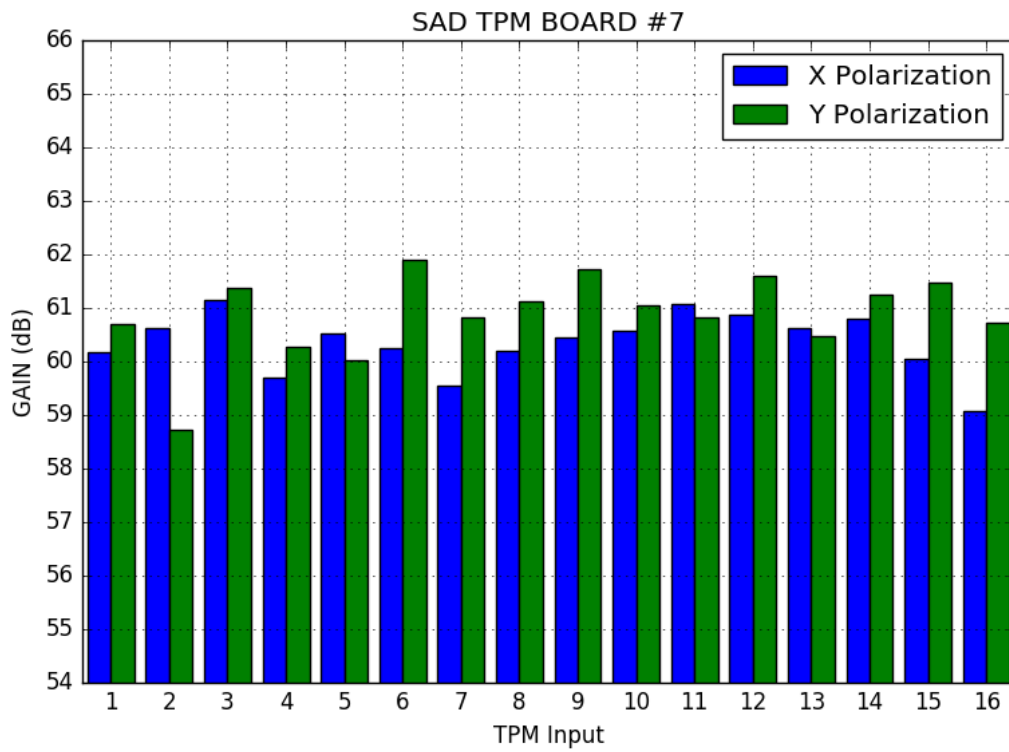
Fiber Number	ADU Input	Pol	Board	Level dBm	Gain dB	Board	Level dBm	Gain dB
1	0	Y	7	0.7	60.7	8	1	61
	1	X		0.2	60.2		0.6	60.6
2	2	Y		-1.3	58.7		0.8	60.8
	3	X		0.6	60.6		-0.2	59.8
3	4	Y		1.4	61.4		0.7	60.7
	5	X		1.2	61.2		0.8	60.8
4	6	Y		0.3	60.3		1.4	61.4
	7	X		-0.3	59.7		-0.8	59.2
5	16	Y		0	60		1	61
	17	X		0.5	60.5		-0.1	59.9
6	18	Y		1.9	61.9		1.5	61.5
	19	X		0.3	60.3		-1.6	58.4
7	20	Y		0.8	60.8		1.3	61.3
	21	X		-0.4	59.6		-0.3	59.7
8	22	Y		1.1	61.1		-0.9	59.1
	23	X		0.2	60.2		-0.2	59.8
9	31	Y		1.7	61.7		1.6	61.6
	30	X		0.4	60.4		0.3	60.3
10	29	Y		1.1	61.1		1.8	61.8
	28	X		0.6	60.6		0.4	60.4
11	27	Y		0.8	60.8		1.1	61.1
	26	X		1.1	61.1		0.9	60.9
12	25	Y		1.6	61.6		1.7	61.7
	24	X		0.9	60.9		1.7	61.7
13	15	Y		0.5	60.5		0.7	60.7
	14	X		0.6	60.6		1.2	61.2
14	13	Y		1.2	61.2		0.5	60.5
	12	X		0.8	60.8		0.5	60.5
15	11	Y		1.5	61.5		0.6	60.6
	10	X		0	60		0.1	60.1
16	9	Y		0.7	60.7		-0.3	59.7
	8	X		-0.9	59.1		-0.3	59.7

The following pictures are the bar plot view of the same results.









Conclusion

The main goal of the test has been successfully achieved. During the test one ORX in a preADU has been replaced because the level of the signal was out of specification (very low level, the ORX has been tested separately and the issue was confirmed).

At the end we provided 8 full working TPMs for the SAD project.

For future signal integrity tests some aspects may be improved. The software which receives UDP packets and the analysis software must be merged into a unique one in order to have a real time accurate analysis. This also will allow an immediate investigation of the origin of eventual spurious (i.e. if they are generated by the test setup itself or are really generated by the TPM).

We have noticed that spurious signals may be introduced in the receiver chains by moving the SMA-MCX adapters at the OTX inputs. These connections must be carefully checked before to start the full test.

We have found a fixed spurious signal at 70 MHz in all the inputs of TPM #6. This board was tested separately with a different setup because all the cabinet was already packed to be shipped in Sardinia the week before we received the ADU board to complete the TPM integration. Further investigation must be done to understand the source of this spurious, if internally generated in the ADU board or something in the setup of the latest test campaign.

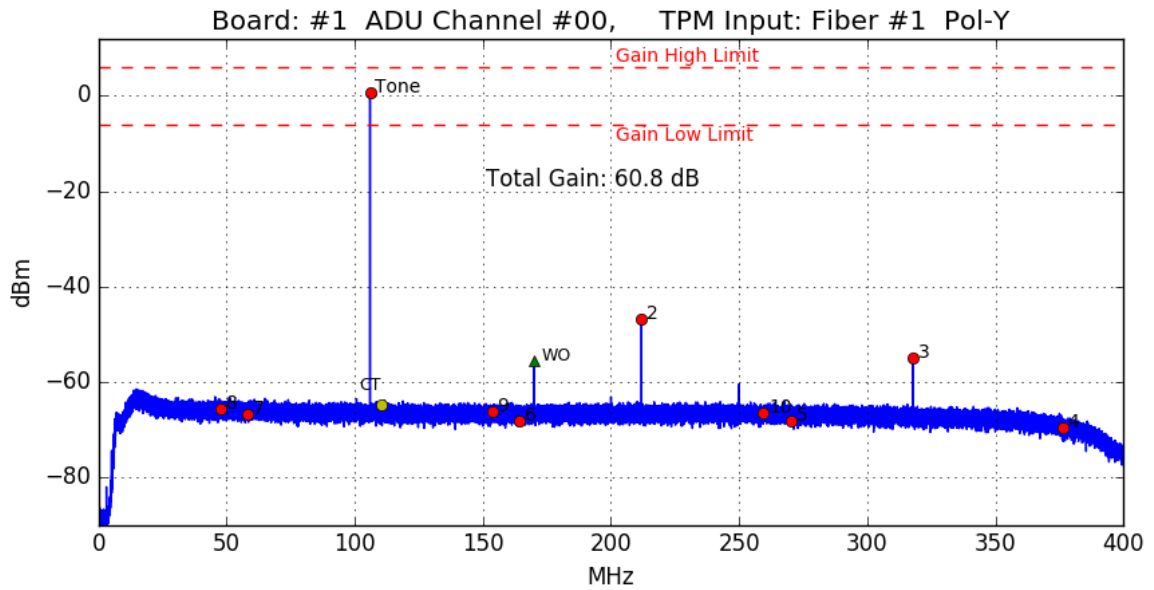
Annex 1: TPM Boards Serial Numbers

TPM	ADU	preADU TOP	RX preADU TOP	preADU BOTTOM	RX preADU BOTTOM
SAD 1	5041602009	61	R-481/201611	60	R-473/201611
			R-482/201611		R-474/201611
			R-483/201611		R-475/201611
			R-484/201611		R-476/201611
			R-485/201611		R-477/201611
			R-486/201611		R-478/201611
			R-487/201611		R-479/201611
			R-488/201611		R-480/201611
SAD 2	5041602013	63	R-497/201611	62	R-489/201611
			R-498/201611		R-490/201611
			R-499/201611		R-491/201611
			R-500/201611		R-492/201611
			R-501/201611		R-493/201611
			R-502/201611		R-494/201611
			R-503/201611		R-495/201611
			R-504/201611		R-496/201611

TPM	ADU	preADU TOP	RX preADU TOP	preADU BOTTOM	RX preADU BOTTOM
SAD 3	5041602014	65	R-513/201611	64	R-505/201611
			R-514/201611		R-506/201611
			R-515/201611		R-507/201611
			R-516/201611		R-508/201611
			R-517/201611		R-509/201611
			R-518/201611		R-510/201611
			R-519/201611		R-511/201611
			R-520/201611		R-512/201611
SAD 4	5041602017	67	R-529/201611	66	R-521/201611
			R-530/201611		R-522/201611
			R-531/201611		R-523/201611
			R-532/201611		R-524/201611
			R-533/201611		R-525/201611
			R-534/201611		R-526/201611
			R-535/201611		R-527/201611
			R-536/201611		R-528/201611
SAD 5	5041602023	69	R-545/201611	68	R-537/201611
			R-546/201611		R-538/201611
			R-547/201611		R-539/201611
			R-548/201611		R-540/201611
			R-549/201611		R-541/201611
			R-550/201611		R-542/201611
			R-551/201611		R-543/201611
			R-552/201611		R-544/201611

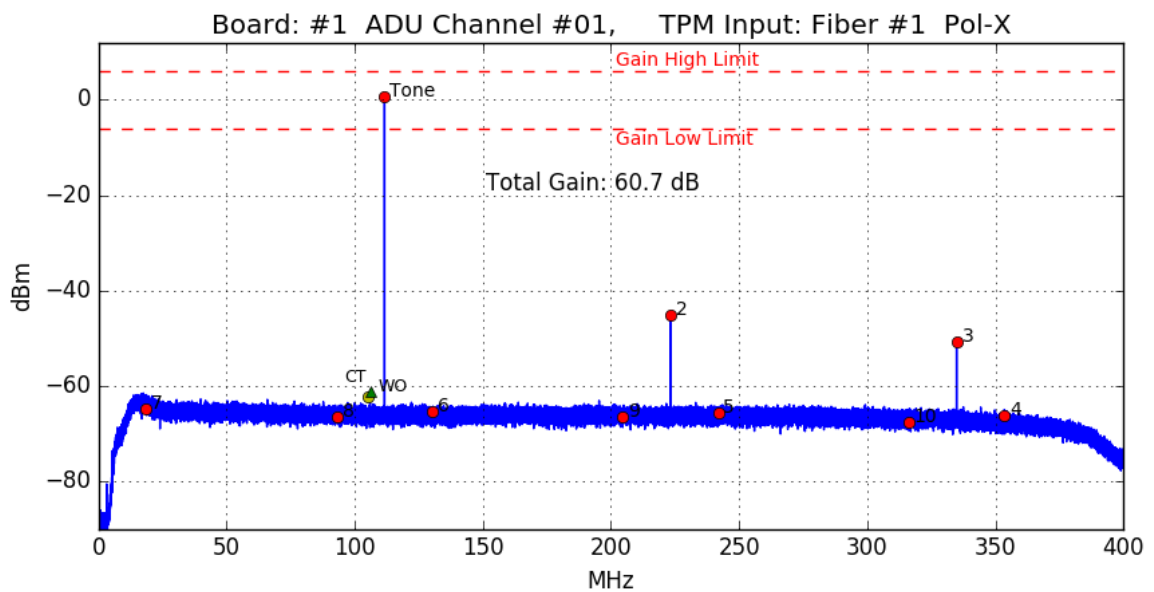
TPM	ADU	preADU TOP	RX preADU TOP	preADU BOTTOM	RX preADU BOTTOM
SAD 6	5041602020	71	R-561/201611	70	R-553/201611
			R-562/201611		R-554/201611
			R-563/201611		R-555/201611
			R-564/201611		R-556/201611
			R-565/201611		R-557/201611
			R-566/201611		R-558/201611
			R-567/201611		R-559/201611
			R-568/201611		R-560/201611
SAD 7	5041602033	73	R-577/201611	72	R-569/201611
			R-578/201611		R-570/201611
			R-579/201611		R-571/201611
			R-580/201611		R-572/201611
			R-581/201611		R-573/201611
			R-582/201611		R-574/201611
			R-583/201611		R-575/201611
			R-584/201611		R-576/201611
SAD 8	5041702004	75	R-593/201611	74	R-585/201611
			R-594/201611		R-586/201611
			R-595/201611		R-587/201611
			R-596/201611		R-588/201611
			R-597/201611		R-589/201611
			R-598/201611		R-590/201611
			R-599/201611		R-591/201611
			R-600/201611		R-592/201611

Annex 2: Measurements



Fundamental Tone: 0.8 dBm
 Second Harmonic: -46.9 dBm
 Third Harmonic: -55.1 dBm

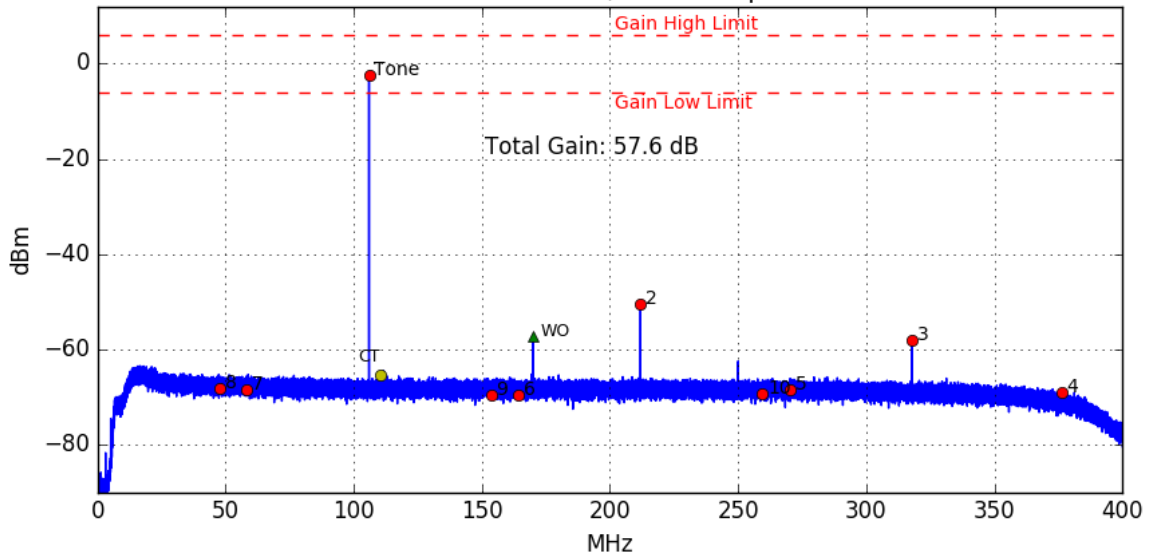
Tone Frequency: 105.950928 Hz
 Worst Other: -55.6 dBm @ 170.001 MHz
 Cross Talk: 64.6 dBC @ 111.627 MHz



Fundamental Tone: 0.7 dBm
 Second Harmonic: -45.2 dBm
 Third Harmonic: -50.8 dBm

Tone Frequency: 111.627197 Hz
 Worst Other: -61.2 dBm @ 105.951 MHz
 Cross Talk: 61.9 dBC @ 105.951 MHz

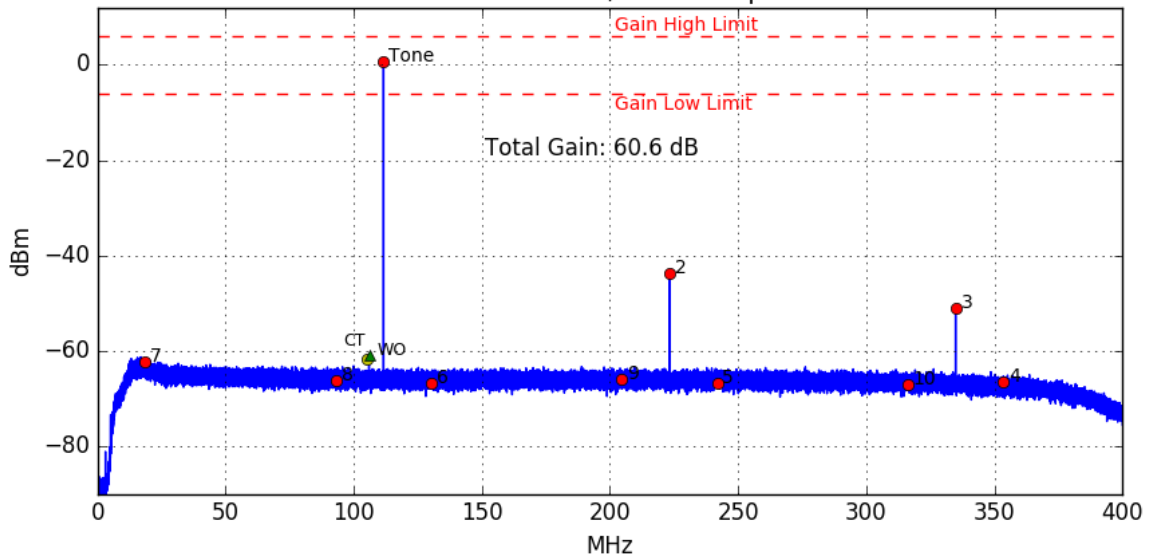
Board: #1 ADU Channel #02, TPM Input: Fiber #2 Pol-Y



Fundamental Tone: -2.4 dBm
 Second Harmonic: -50.6 dBm
 Third Harmonic: -58.1 dBm

Tone Frequency: 105.950928 Hz
 Worst Other: -57.1 dBm @ 170.001 MHz
 Cross Talk: 62.1 dBC @ 111.627 MHz

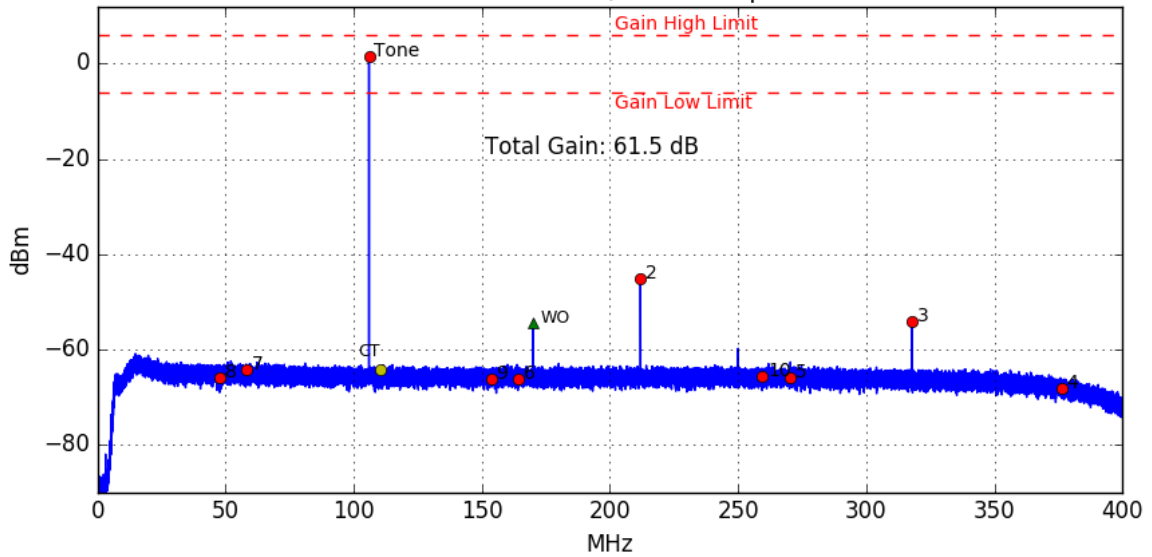
Board: #1 ADU Channel #03, TPM Input: Fiber #2 Pol-X



Fundamental Tone: 0.6 dBm
 Second Harmonic: -43.8 dBm
 Third Harmonic: -51.1 dBm

Tone Frequency: 111.627197 Hz
 Worst Other: -60.8 dBm @ 105.951 MHz
 Cross Talk: 61.4 dBC @ 105.951 MHz

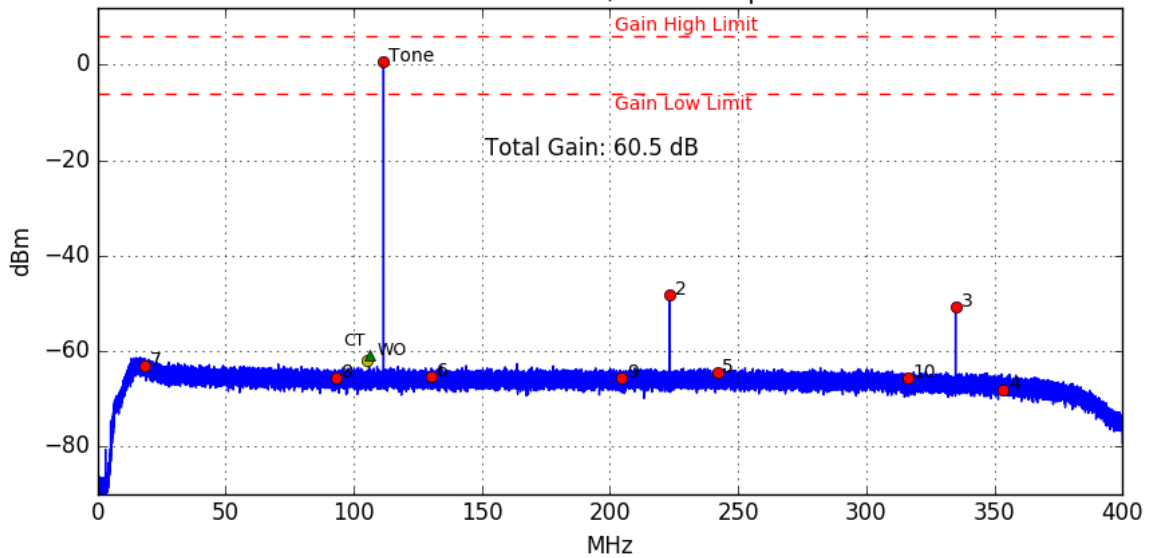
Board: #1 ADU Channel #04, TPM Input: Fiber #3 Pol-Y



Fundamental Tone: 1.5 dBm
 Second Harmonic: -45.0 dBm
 Third Harmonic: -54.2 dBm

Tone Frequency: 105.950928 Hz
 Worst Other: -54.3 dBm @ 170.001 MHz
 Cross Talk: 64.9 dBC @ 111.633 MHz

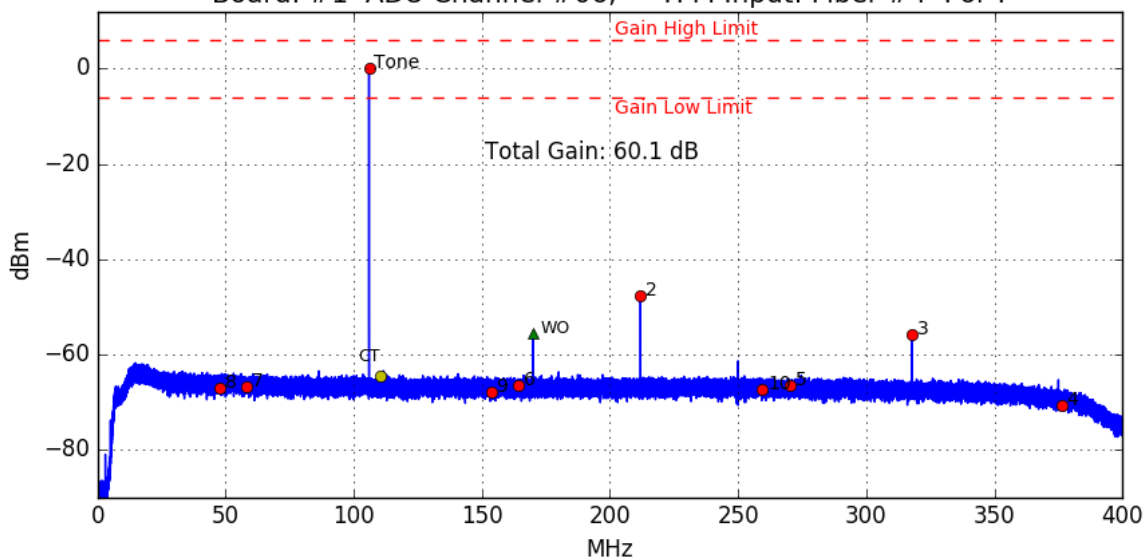
Board: #1 ADU Channel #05, TPM Input: Fiber #3 Pol-X



Fundamental Tone: 0.5 dBm
 Second Harmonic: -48.2 dBm
 Third Harmonic: -50.8 dBm

Tone Frequency: 111.627197 Hz
 Worst Other: -60.9 dBm @ 105.951 MHz
 Cross Talk: 61.5 dBC @ 105.951 MHz

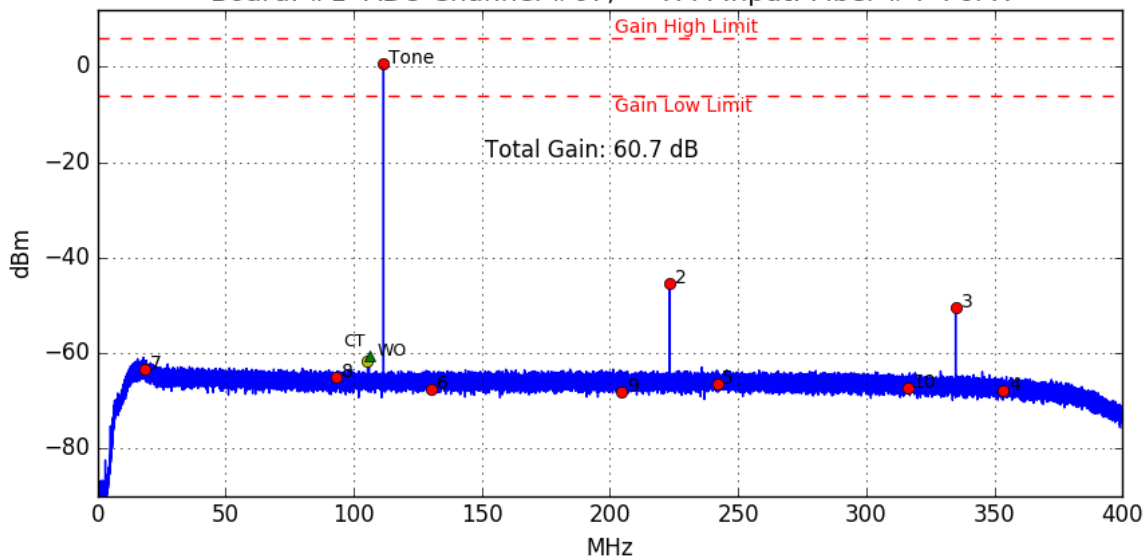
Board: #1 ADU Channel #06, TPM Input: Fiber #4 Pol-Y



Fundamental Tone: 0.1 dBm
 Second Harmonic: -47.6 dBm
 Third Harmonic: -55.8 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -55.7 dBm @ 170.001 MHz
 Cross Talk: 63.5 dBC @ 111.627 MHz

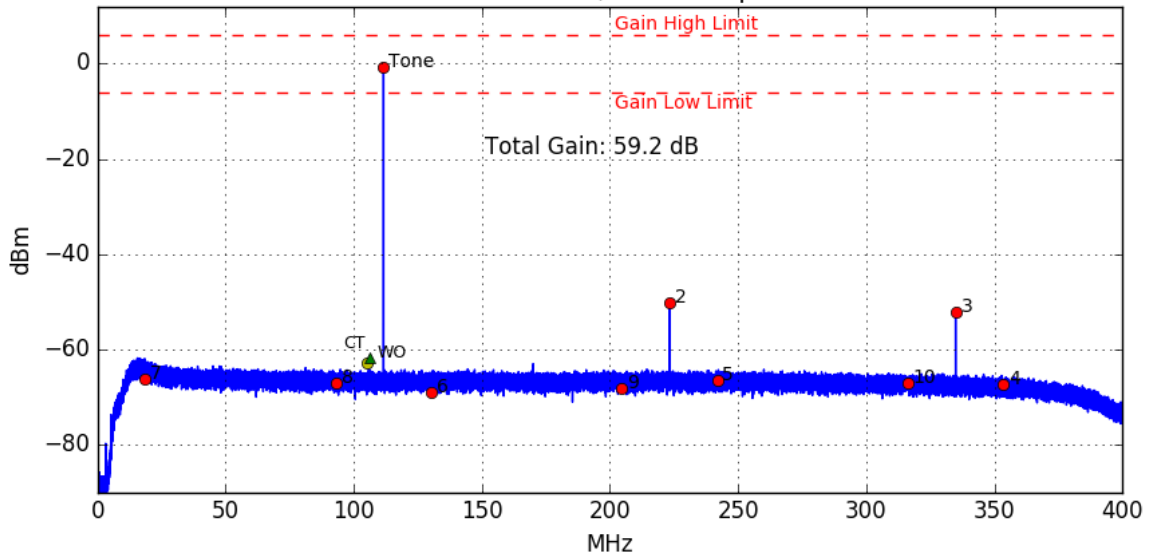
Board: #1 ADU Channel #07, TPM Input: Fiber #4 Pol-X



Fundamental Tone: 0.7 dBm
 Second Harmonic: -45.3 dBm
 Third Harmonic: -50.5 dBm

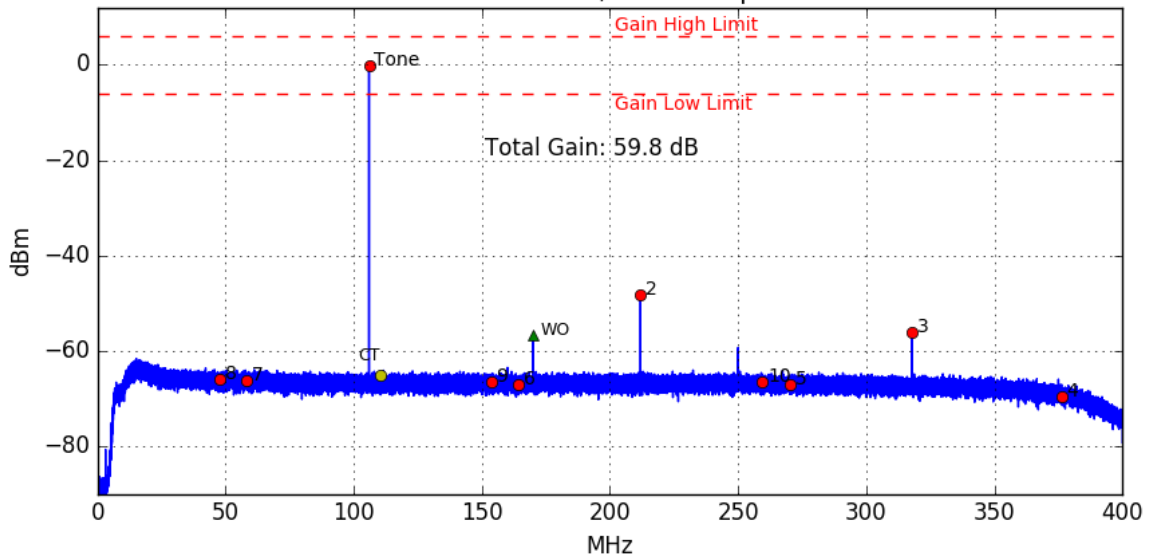
Tone Frequency: 111.627.197 Hz
 Worst Other: -60.6 dBm @ 105.951 MHz
 Cross Talk: 61.3 dBC @ 105.951 MHz

Board: #1 ADU Channel #08, TPM Input: Fiber #16 Pol-X



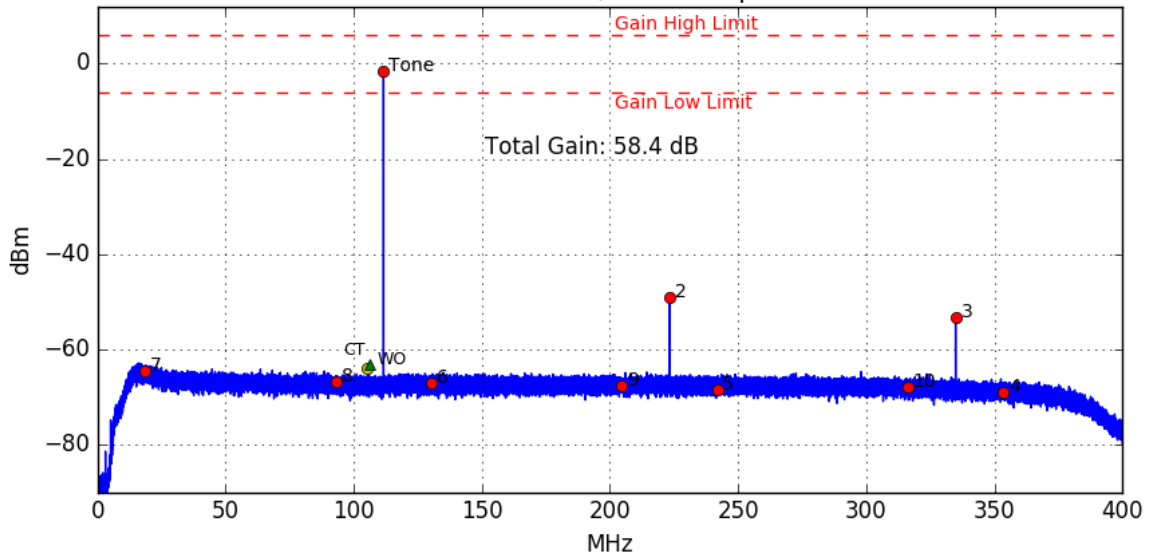
Fundamental Tone: -0.8 dBm Tone Frequency: 111.627.197 Hz
 Second Harmonic: -50.1 dBm Worst Other: -61.8 dBm @ 105.951 MHz
 Third Harmonic: -52.1 dBm Cross Talk: 61.0 dBC @ 105.951 MHz

Board: #1 ADU Channel #09, TPM Input: Fiber #16 Pol-Y



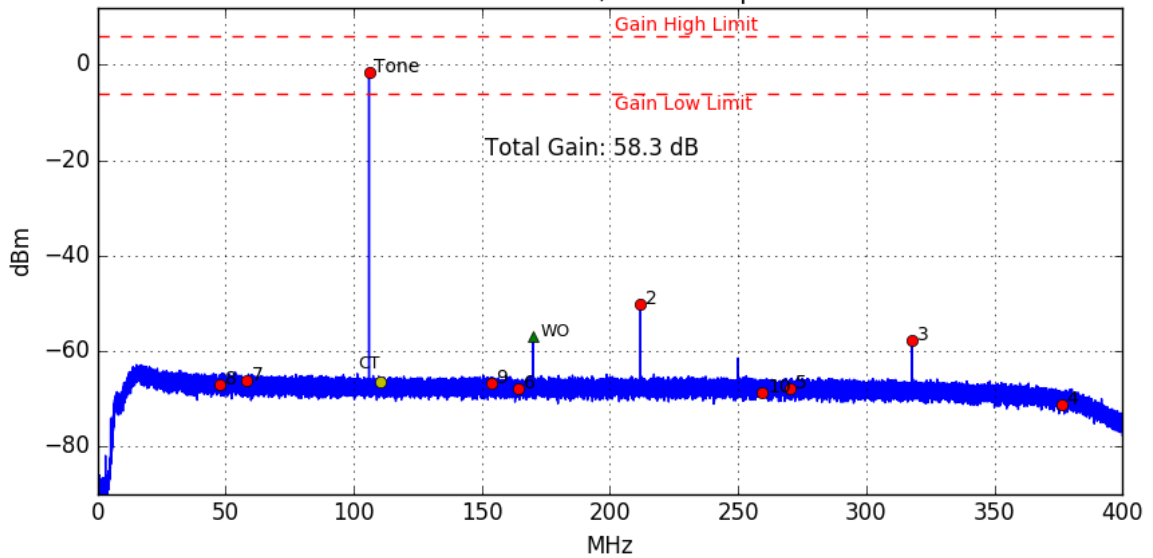
Fundamental Tone: -0.2 dBm Tone Frequency: 105.950.928 Hz
 Second Harmonic: -48.3 dBm Worst Other: -56.8 dBm @ 170.001 MHz
 Third Harmonic: -56.1 dBm Cross Talk: 63.9 dBC @ 111.627 MHz

Board: #1 ADU Channel #10, TPM Input: Fiber #15 Pol-X

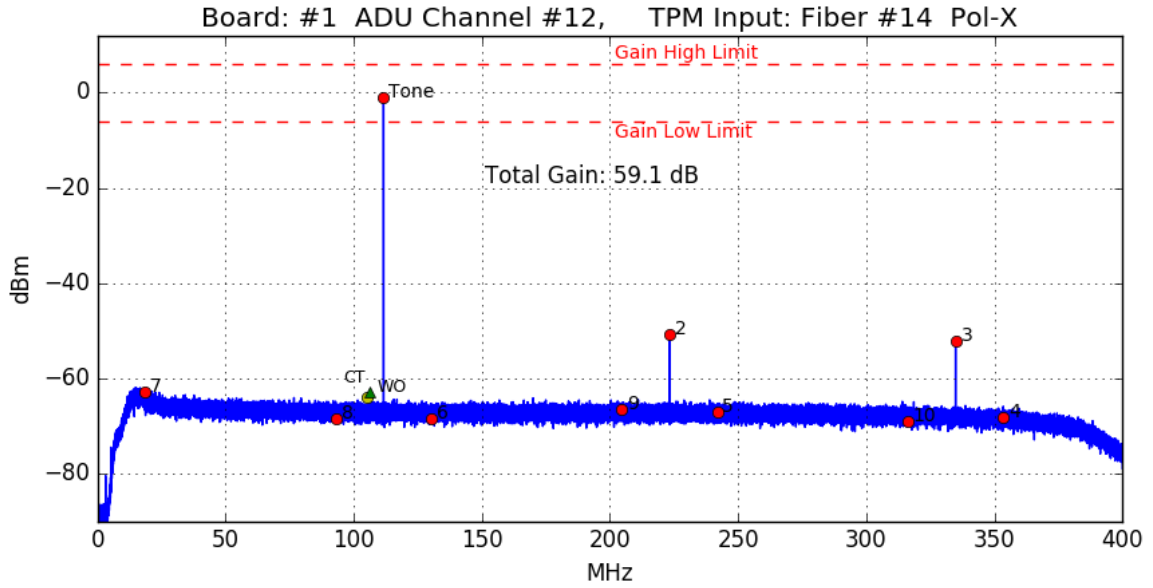


Fundamental Tone: -1.6 dBm Tone Frequency: 111.627.197 Hz
 Second Harmonic: -49.0 dBm Worst Other: -63.0 dBm @ 105.951 MHz
 Third Harmonic: -53.3 dBm Cross Talk: 61.4 dBC @ 105.951 MHz

Board: #1 ADU Channel #11, TPM Input: Fiber #15 Pol-Y

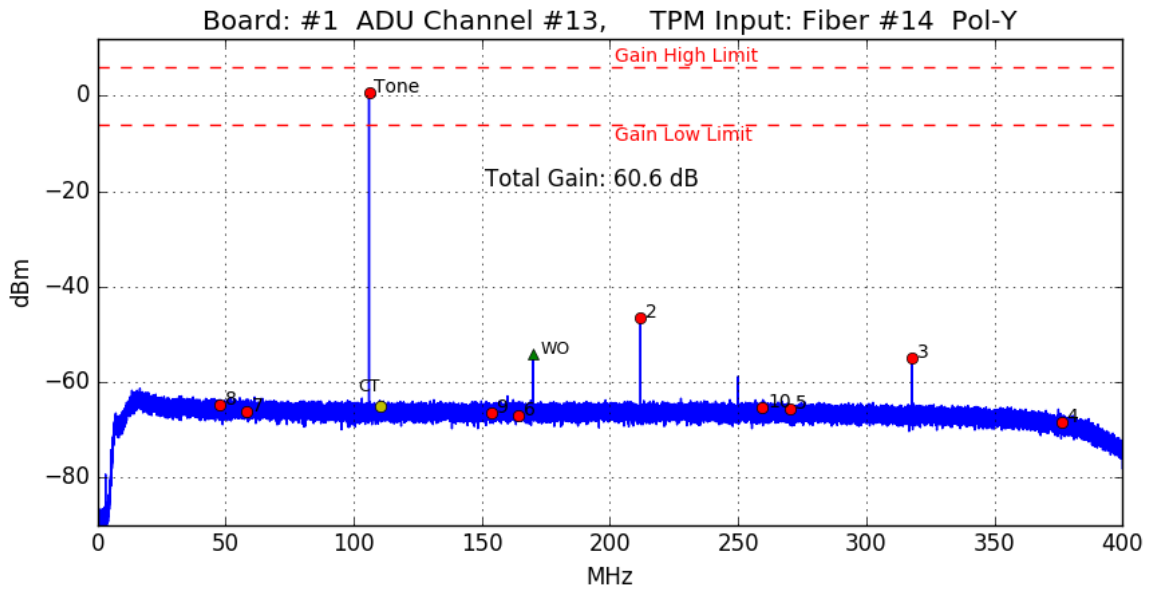


Fundamental Tone: -1.7 dBm Tone Frequency: 105.950.928 Hz
 Second Harmonic: -50.1 dBm Worst Other: -56.8 dBm @ 170.001 MHz
 Third Harmonic: -57.8 dBm Cross Talk: 63.9 dBC @ 111.597 MHz



Fundamental Tone: -0.9 dBm
 Second Harmonic: -50.9 dBm
 Third Harmonic: -52.1 dBm

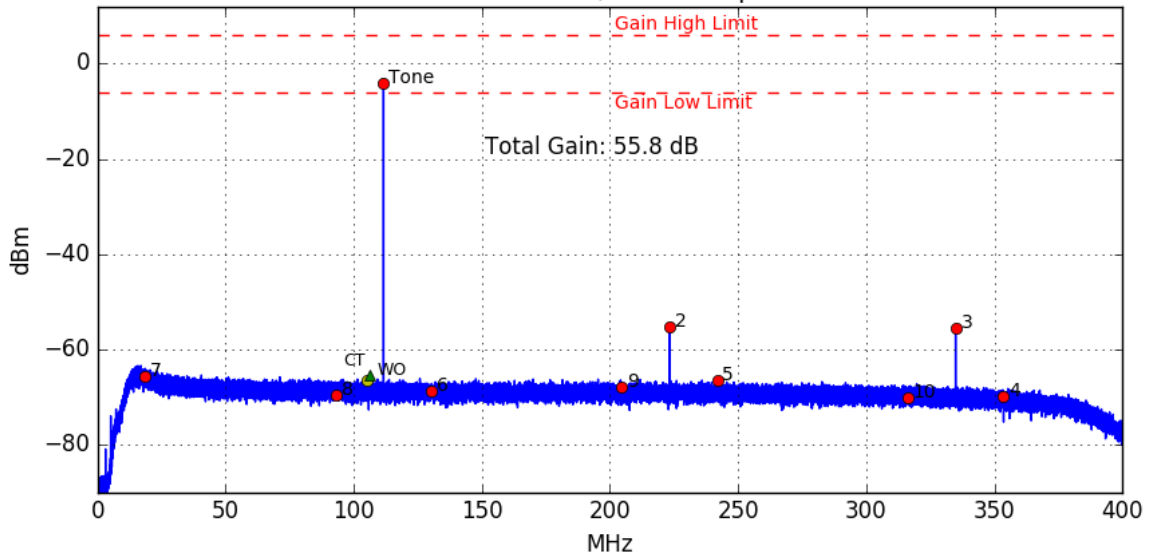
Tone Frequency: 111.627.197 Hz
 Worst Other: -62.9 dBm @ 105.951 MHz
 Cross Talk: 62.0 dBC @ 105.951 MHz



Fundamental Tone: 0.6 dBm
 Second Harmonic: -46.5 dBm
 Third Harmonic: -55.0 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -54.1 dBm @ 170.001 MHz
 Cross Talk: 64.6 dBC @ 111.609 MHz

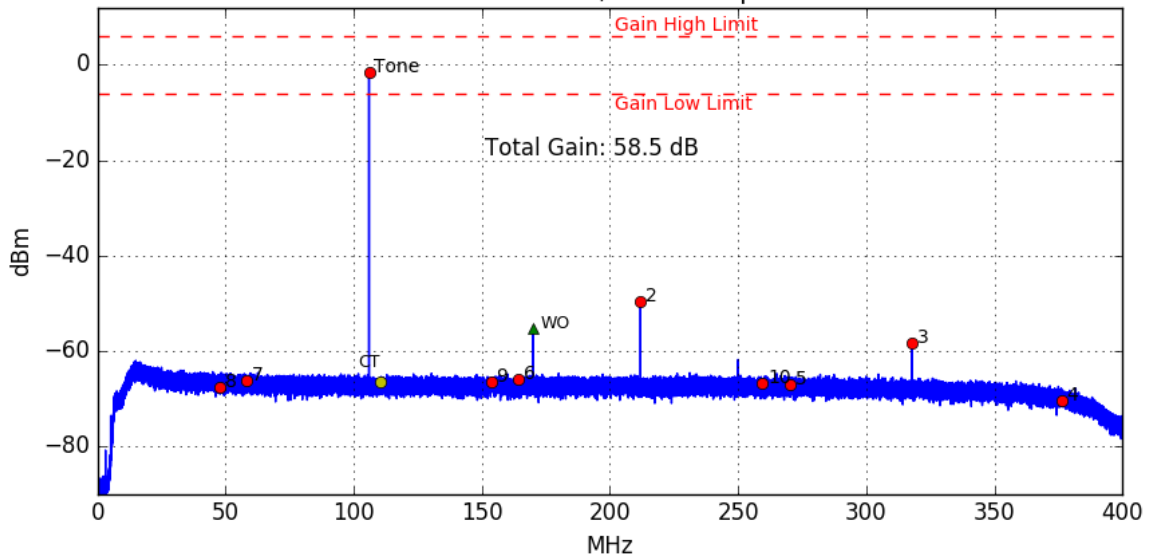
Board: #1 ADU Channel #14, TPM Input: Fiber #13 Pol-X



Fundamental Tone: -4.2 dBm
 Second Harmonic: -55.3 dBm
 Third Harmonic: -55.5 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -65.4 dBm @ 105.951 MHz
 Cross Talk: 61.2 dBC @ 105.951 MHz

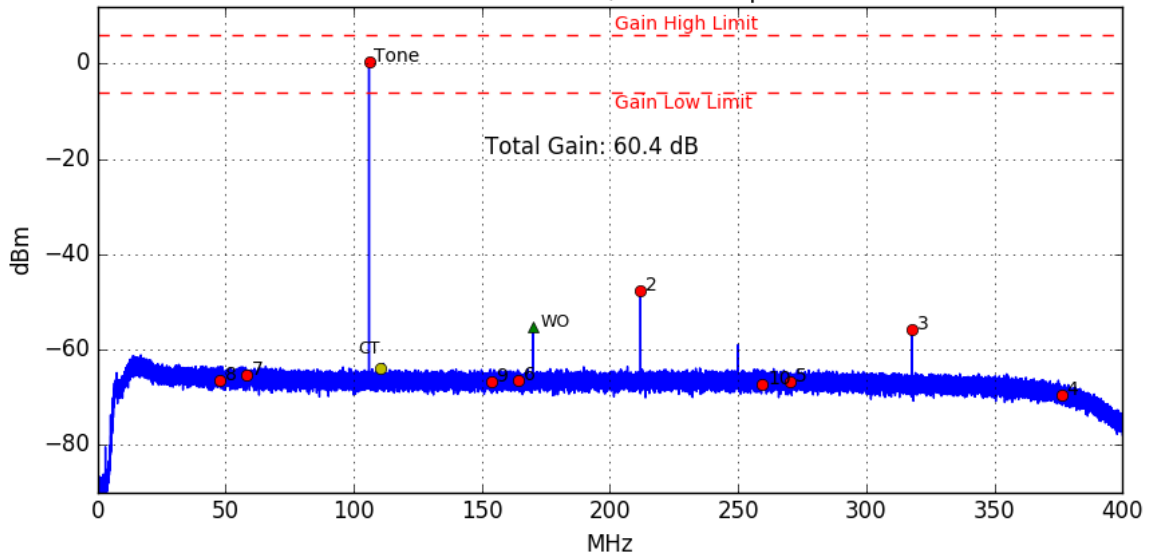
Board: #1 ADU Channel #15, TPM Input: Fiber #13 Pol-Y



Fundamental Tone: -1.5 dBm
 Second Harmonic: -49.5 dBm
 Third Harmonic: -58.4 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -55.2 dBm @ 170.001 MHz
 Cross Talk: 64.0 dBC @ 111.627 MHz

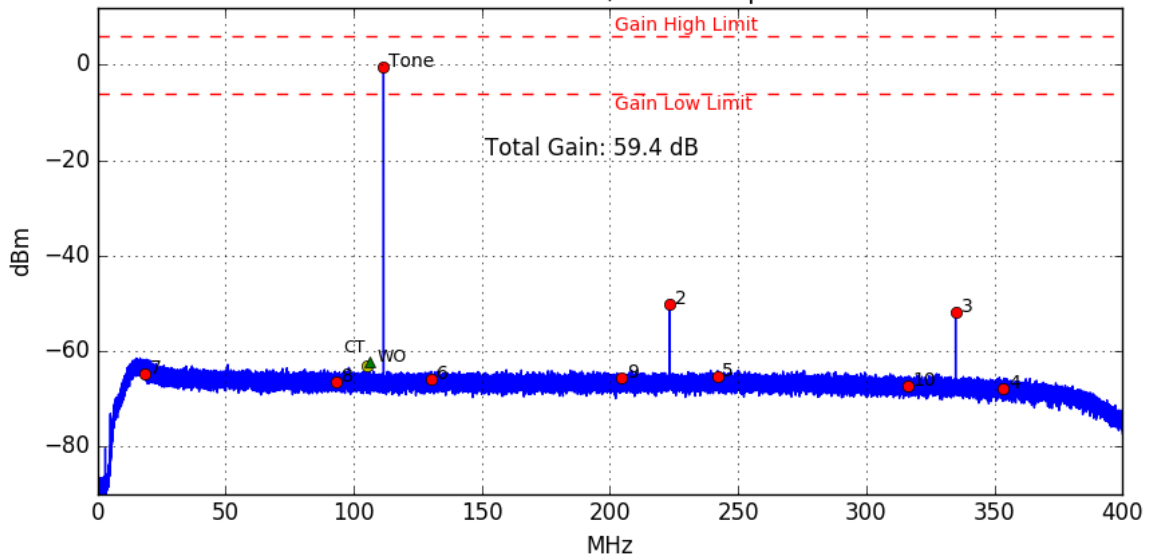
Board: #1 ADU Channel #16, TPM Input: Fiber #5 Pol-Y



Fundamental Tone: 0.4 dBm
 Second Harmonic: -47.7 dBm
 Third Harmonic: -55.7 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -55.3 dBm @ 170.001 MHz
 Cross Talk: 63.4 dBC @ 111.627 MHz

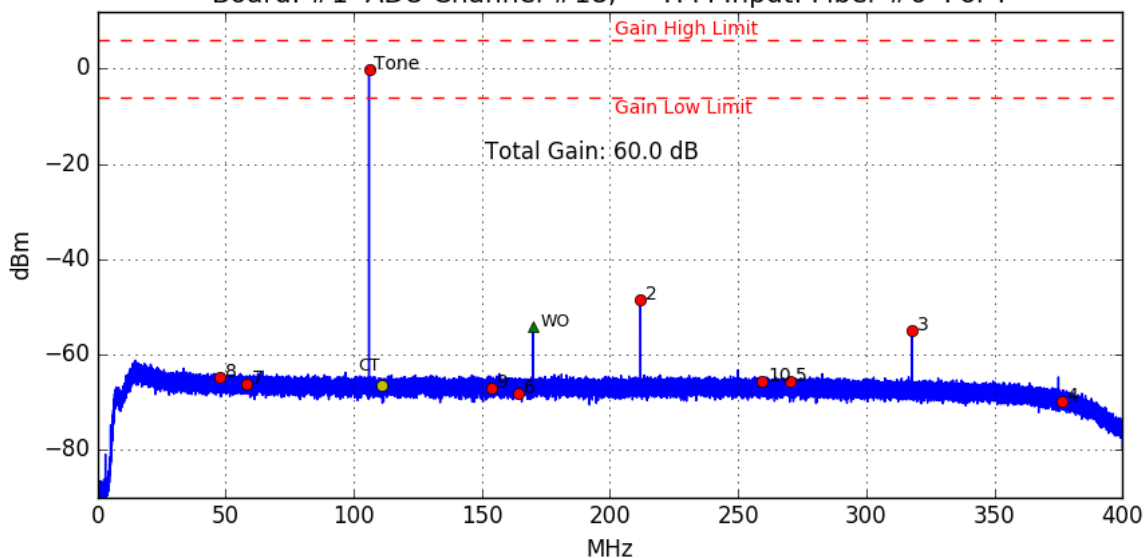
Board: #1 ADU Channel #17, TPM Input: Fiber #5 Pol-X



Fundamental Tone: -0.6 dBm
 Second Harmonic: -50.2 dBm
 Third Harmonic: -51.9 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -62.2 dBm @ 105.951 MHz
 Cross Talk: 61.6 dBC @ 105.951 MHz

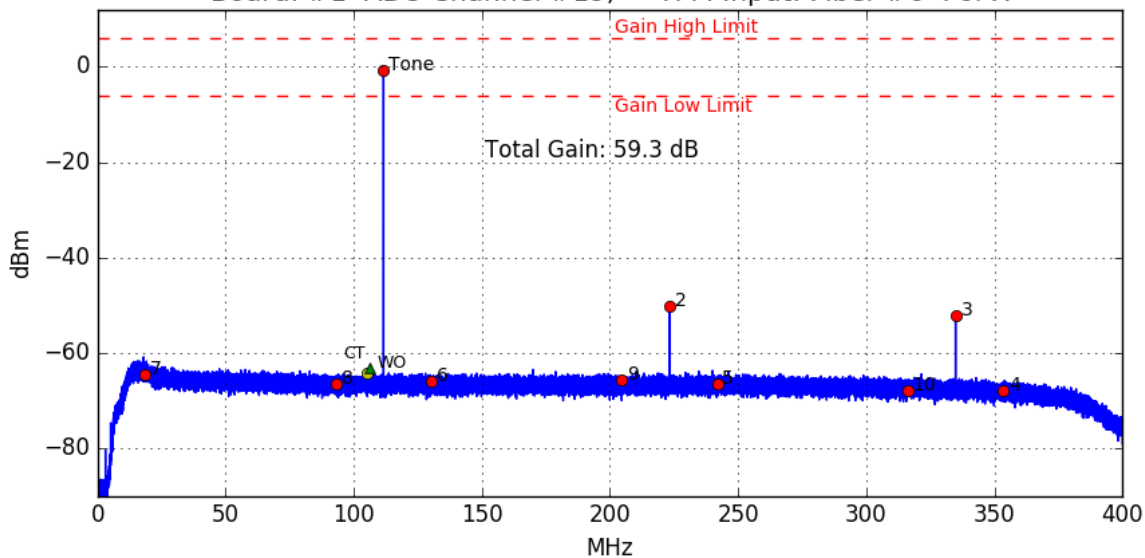
Board: #1 ADU Channel #18, TPM Input: Fiber #6 Pol-Y



Fundamental Tone: -0.0 dBm
 Second Harmonic: -48.6 dBm
 Third Harmonic: -55.1 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -54.0 dBm @ 170.001 MHz
 Cross Talk: 65.3 dBC @ 111.731 MHz

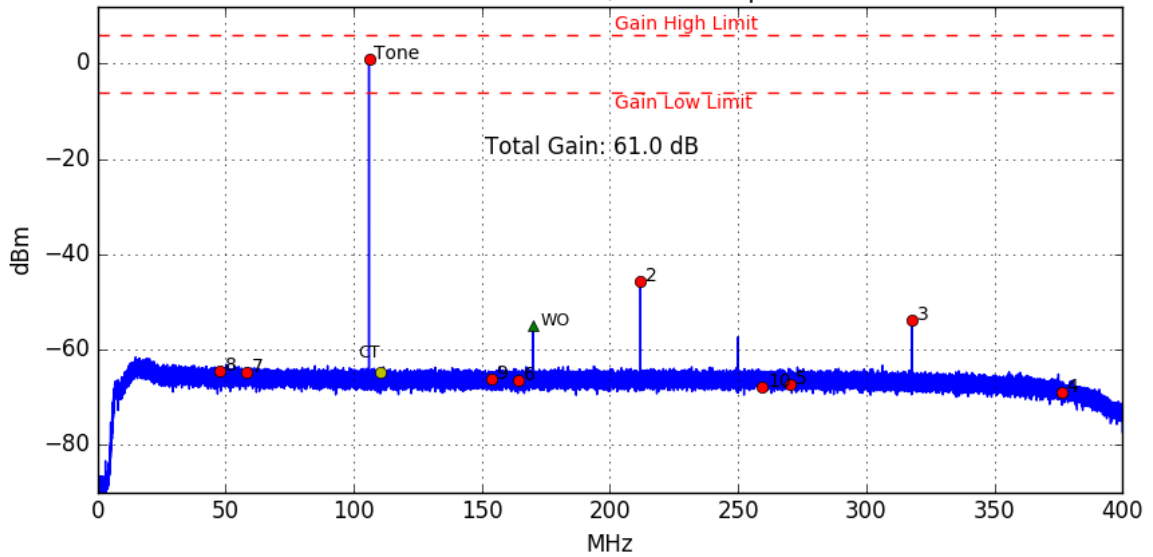
Board: #1 ADU Channel #19, TPM Input: Fiber #6 Pol-X



Fundamental Tone: -0.7 dBm
 Second Harmonic: -50.0 dBm
 Third Harmonic: -52.2 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -63.1 dBm @ 105.951 MHz
 Cross Talk: 62.4 dBC @ 105.951 MHz

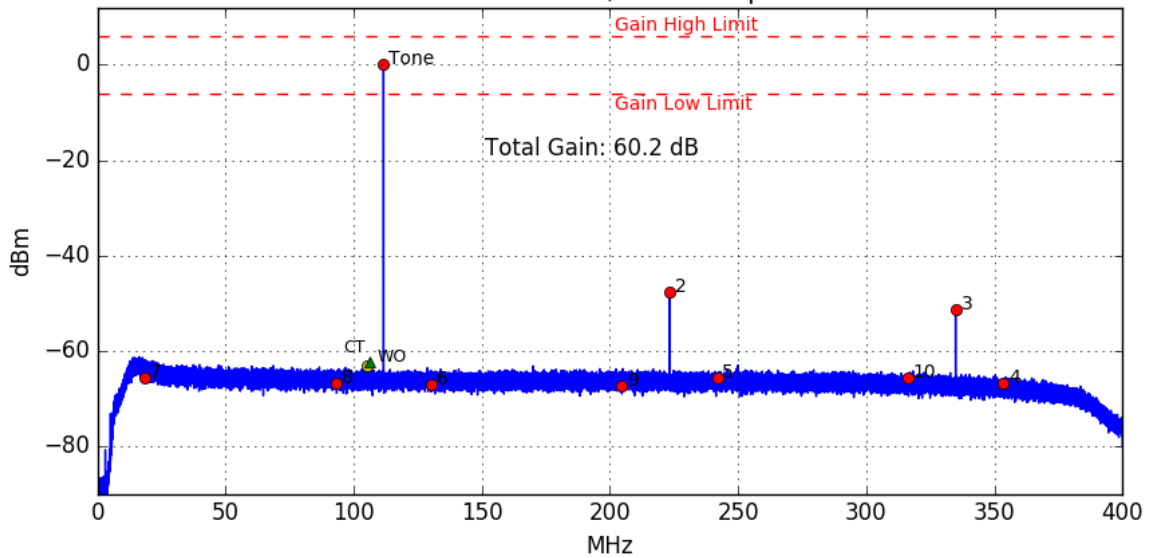
Board: #1 ADU Channel #20, TPM Input: Fiber #7 Pol-Y



Fundamental Tone: 1.0 dBm
 Second Harmonic: -45.6 dBm
 Third Harmonic: -53.8 dBm

Tone Frequency: 105.950928 Hz
 Worst Other: -55.0 dBm @ 170.001 MHz
 Cross Talk: 64.7 dBC @ 111.627 MHz

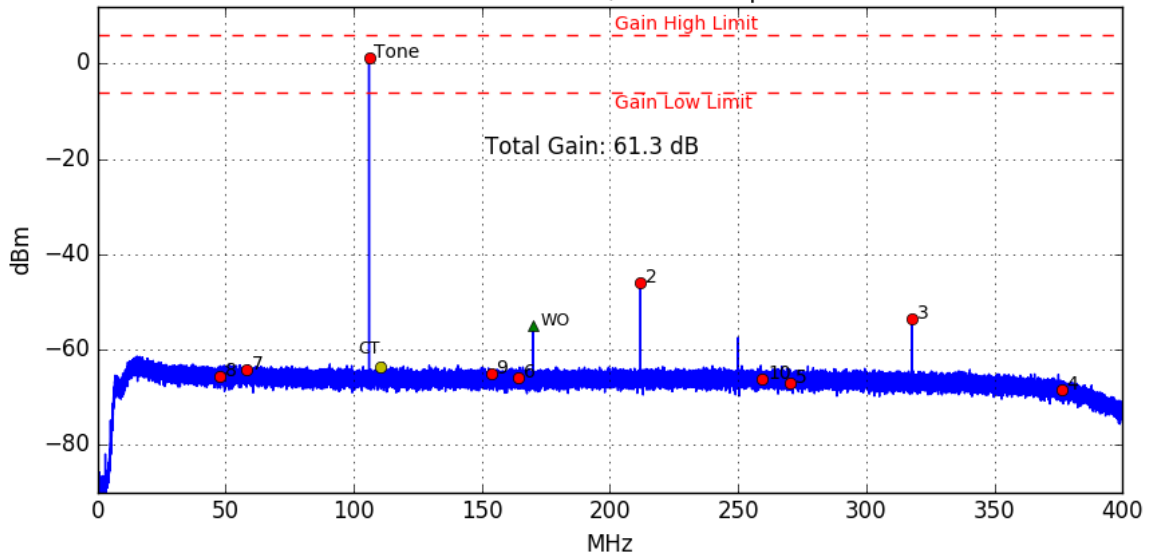
Board: #1 ADU Channel #21, TPM Input: Fiber #7 Pol-X



Fundamental Tone: 0.2 dBm
 Second Harmonic: -47.6 dBm
 Third Harmonic: -51.3 dBm

Tone Frequency: 111.627197 Hz
 Worst Other: -62.2 dBm @ 105.951 MHz
 Cross Talk: 62.5 dBC @ 105.951 MHz

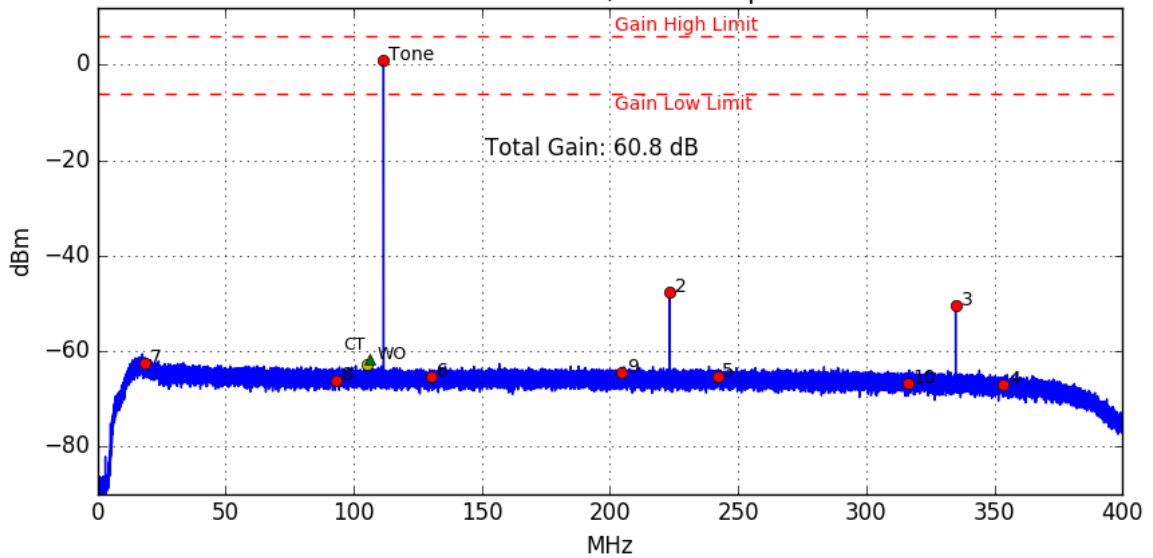
Board: #1 ADU Channel #22, TPM Input: Fiber #8 Pol-Y



Fundamental Tone: 1.3 dBm
 Second Harmonic: -46.0 dBm
 Third Harmonic: -53.7 dBm

Tone Frequency: 105.950928 Hz
 Worst Other: -55.0 dBm @ 170.001 MHz
 Cross Talk: 64.1 dBC @ 111.627 MHz

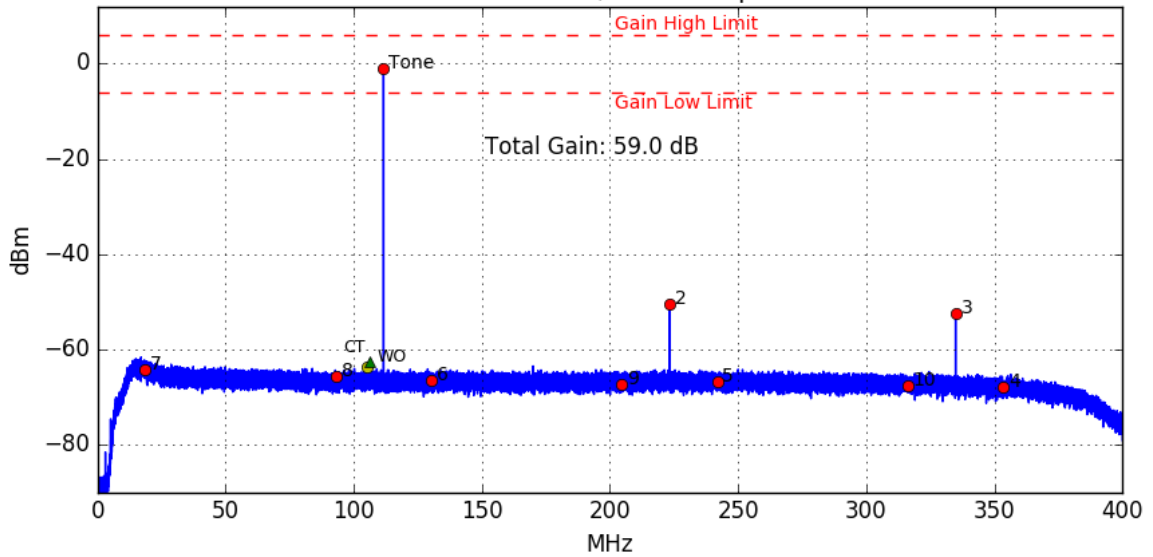
Board: #1 ADU Channel #23, TPM Input: Fiber #8 Pol-X



Fundamental Tone: 0.8 dBm
 Second Harmonic: -47.6 dBm
 Third Harmonic: -50.4 dBm

Tone Frequency: 111.627197 Hz
 Worst Other: -61.8 dBm @ 105.951 MHz
 Cross Talk: 62.6 dBC @ 105.951 MHz

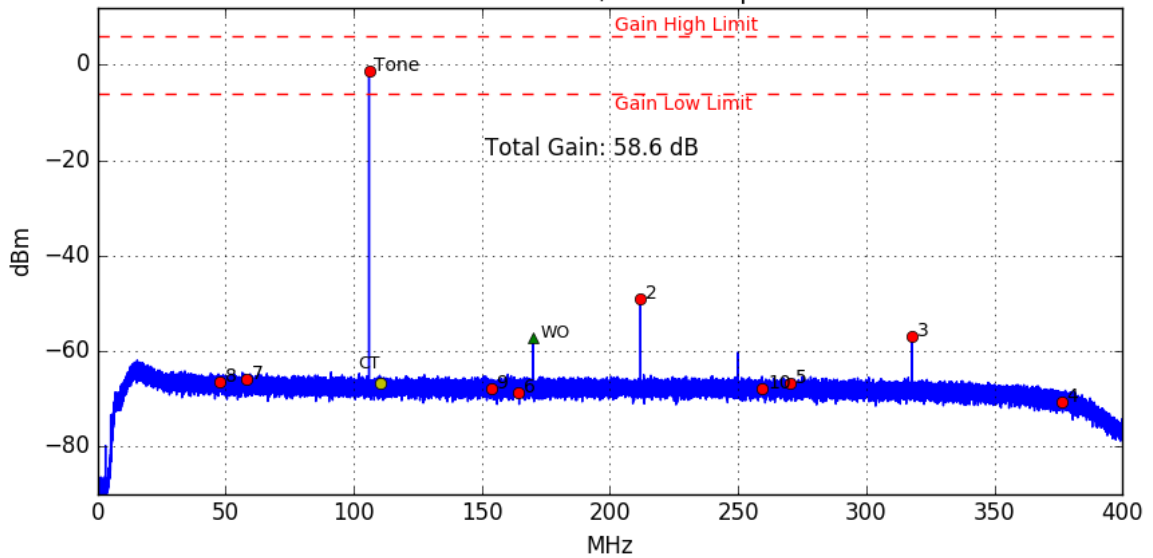
Board: #1 ADU Channel #24, TPM Input: Fiber #12 Pol-X



Fundamental Tone: -1.0 dBm
 Second Harmonic: -50.4 dBm
 Third Harmonic: -52.3 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -62.7 dBm @ 105.951 MHz
 Cross Talk: 61.7 dBC @ 105.951 MHz

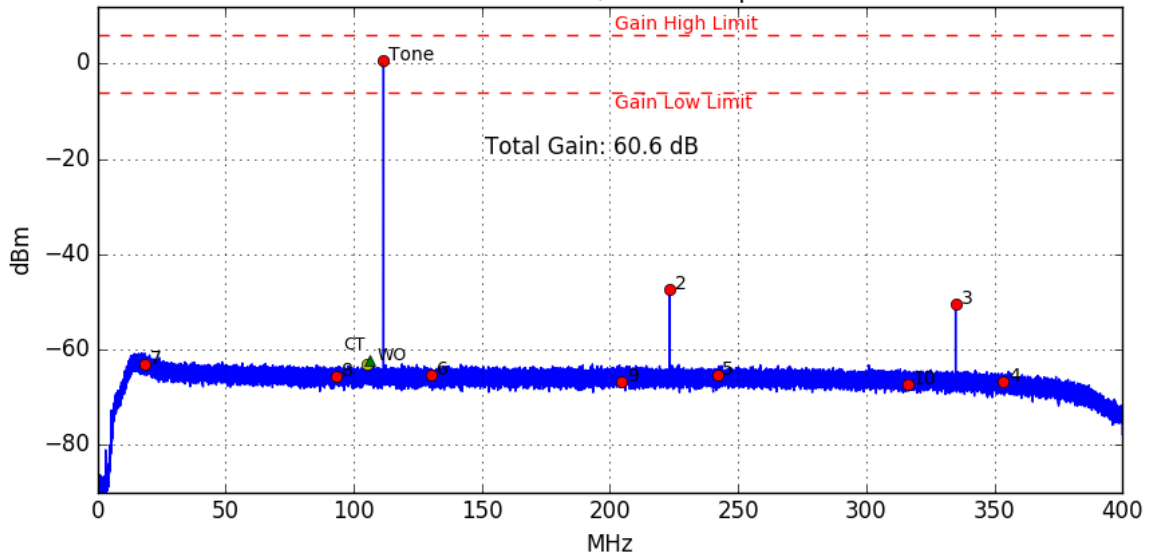
Board: #1 ADU Channel #25, TPM Input: Fiber #12 Pol-Y



Fundamental Tone: -1.4 dBm
 Second Harmonic: -49.0 dBm
 Third Harmonic: -56.9 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -57.2 dBm @ 170.001 MHz
 Cross Talk: 64.3 dBC @ 111.627 MHz

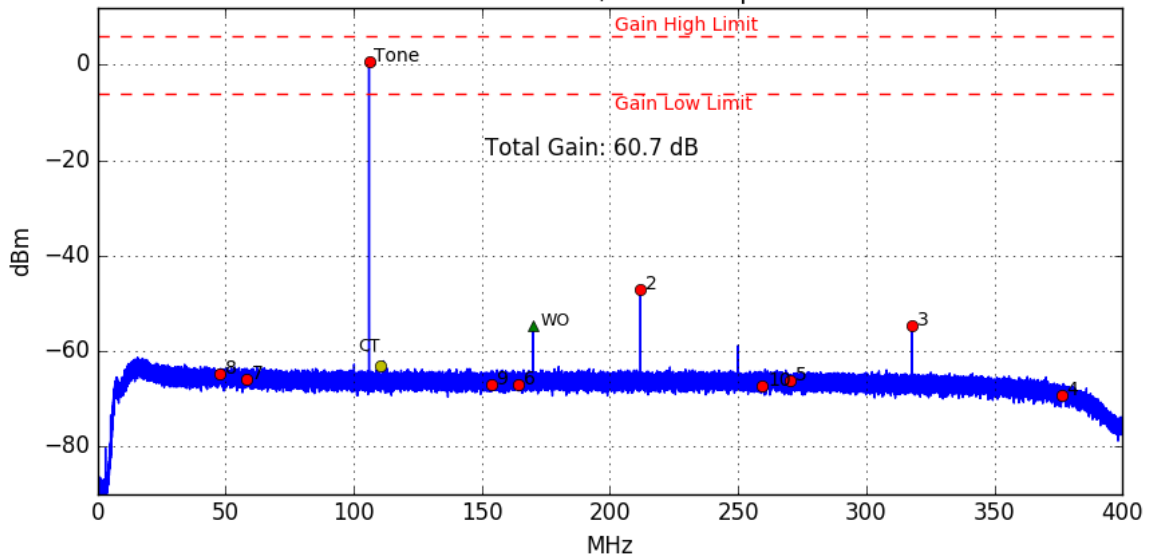
Board: #1 ADU Channel #26, TPM Input: Fiber #11 Pol-X



Fundamental Tone: 0.6 dBm
 Second Harmonic: -47.4 dBm
 Third Harmonic: -50.5 dBm

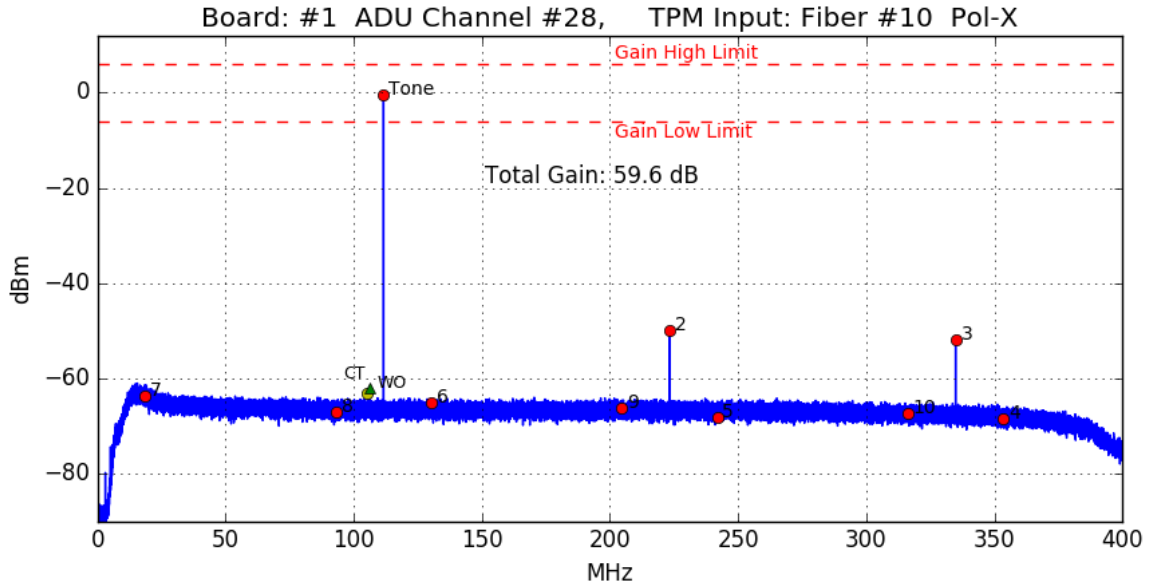
Tone Frequency: 111.627.197 Hz
 Worst Other: -62.1 dBm @ 105.951 MHz
 Cross Talk: 62.7 dBC @ 105.951 MHz

Board: #1 ADU Channel #27, TPM Input: Fiber #11 Pol-Y



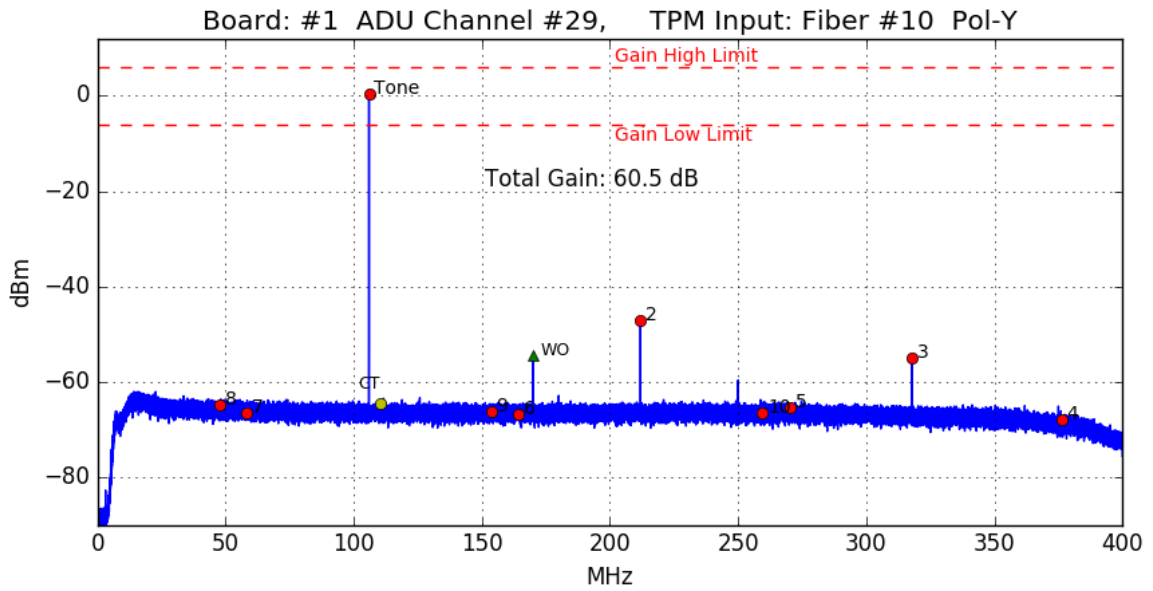
Fundamental Tone: 0.7 dBm
 Second Harmonic: -47.1 dBm
 Third Harmonic: -54.8 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -54.6 dBm @ 170.001 MHz
 Cross Talk: 62.8 dBC @ 111.627 MHz



Fundamental Tone: -0.4 dBm
 Second Harmonic: -49.9 dBm
 Third Harmonic: -51.7 dBm

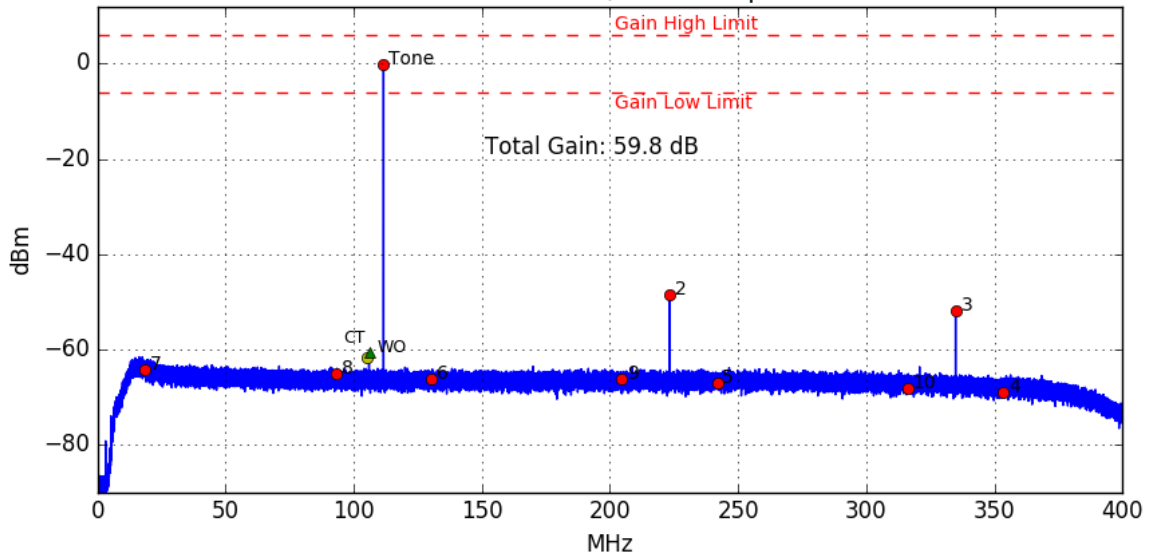
Tone Frequency: 111.627.197 Hz
 Worst Other: -62.0 dBm @ 105.951 MHz
 Cross Talk: 61.6 dBC @ 105.951 MHz



Fundamental Tone: 0.5 dBm
 Second Harmonic: -47.2 dBm
 Third Harmonic: -55.1 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -54.4 dBm @ 170.001 MHz
 Cross Talk: 63.9 dBC @ 111.627 MHz

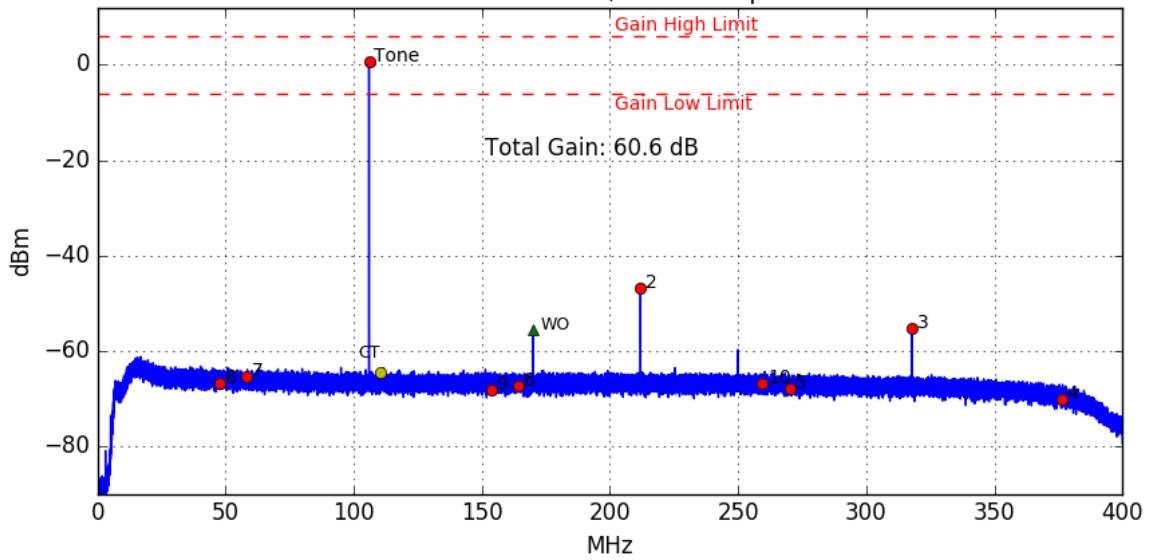
Board: #1 ADU Channel #30, TPM Input: Fiber #9 Pol-X



Fundamental Tone: -0.2 dBm
 Second Harmonic: -48.5 dBm
 Third Harmonic: -51.9 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -60.6 dBm @ 105.951 MHz
 Cross Talk: 60.4 dBC @ 105.951 MHz

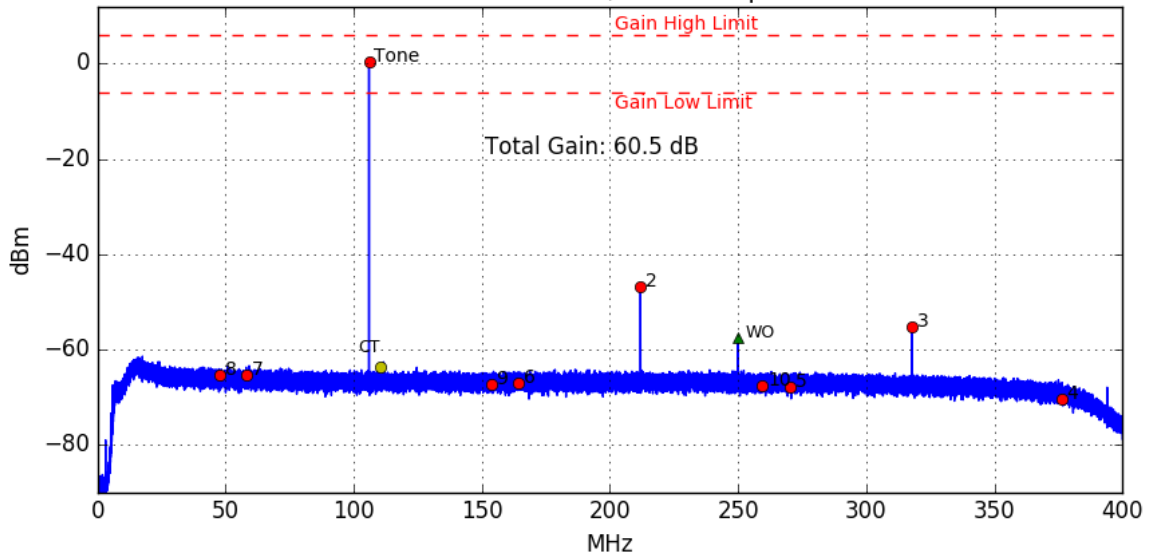
Board: #1 ADU Channel #31, TPM Input: Fiber #9 Pol-Y



Fundamental Tone: 0.6 dBm
 Second Harmonic: -46.8 dBm
 Third Harmonic: -55.4 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -55.4 dBm @ 170.001 MHz
 Cross Talk: 64.2 dBC @ 111.627 MHz

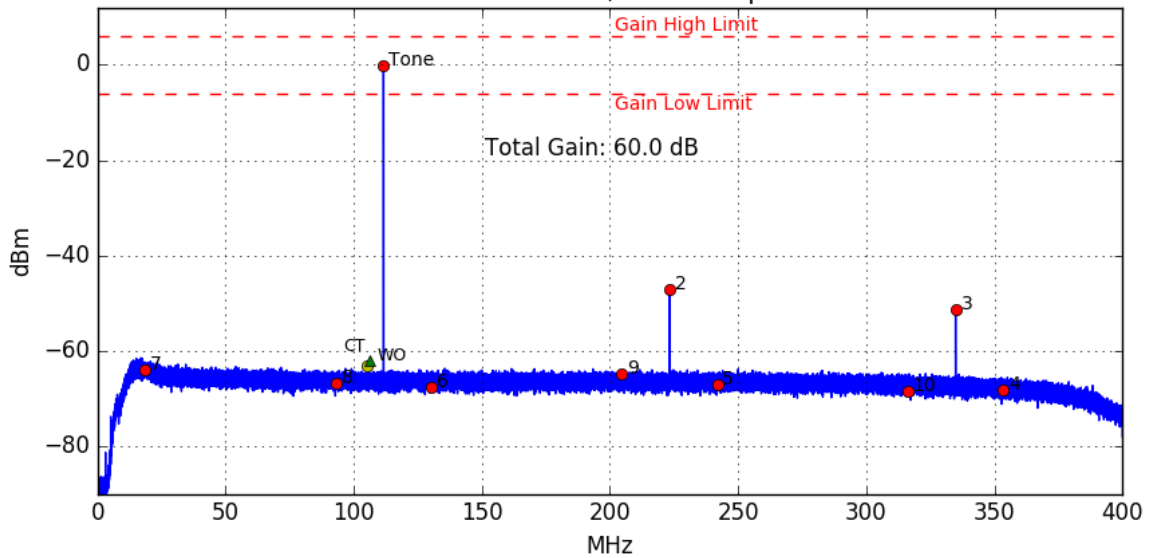
Board: #2 ADU Channel #00, TPM Input: Fiber #1 Pol-Y



Fundamental Tone: 0.5 dBm
 Second Harmonic: -46.8 dBm
 Third Harmonic: -55.2 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -57.4 dBm @ 249.988 MHz
 Cross Talk: 63.1 dBC @ 111.627 MHz

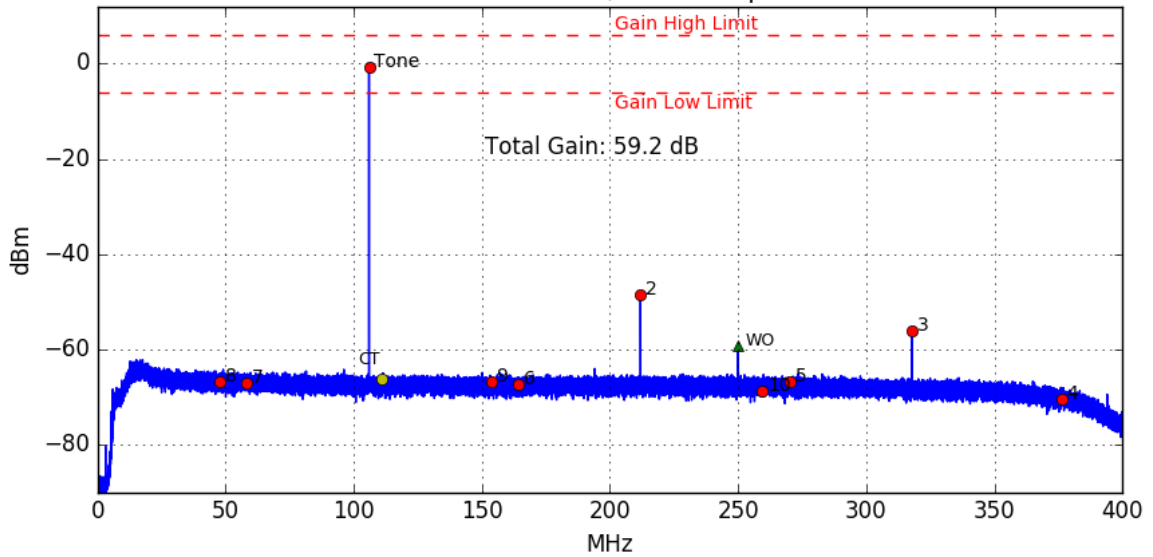
Board: #2 ADU Channel #01, TPM Input: Fiber #1 Pol-X



Fundamental Tone: -0.0 dBm
 Second Harmonic: -47.2 dBm
 Third Harmonic: -51.2 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -62.0 dBm @ 105.951 MHz
 Cross Talk: 62.0 dBC @ 105.951 MHz

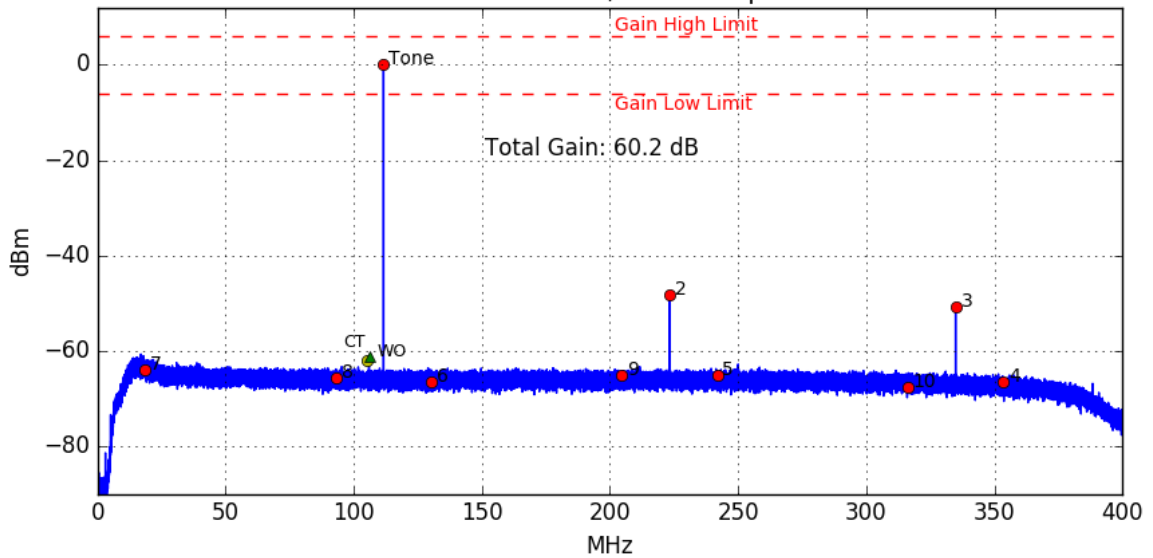
Board: #2 ADU Channel #02, TPM Input: Fiber #2 Pol-Y



Fundamental Tone: -0.8 dBm
 Second Harmonic: -48.5 dBm
 Third Harmonic: -56.1 dBm

Tone Frequency: 105.950928 Hz
 Worst Other: -59.3 dBm @ 249.988 MHz
 Cross Talk: 64.4 dBC @ 111.658 MHz

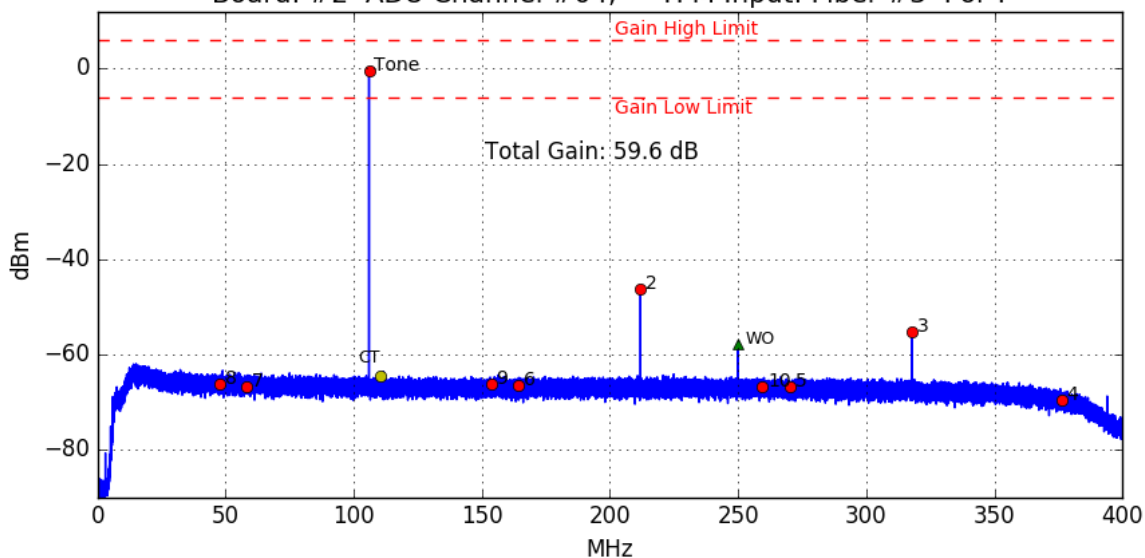
Board: #2 ADU Channel #03, TPM Input: Fiber #2 Pol-X



Fundamental Tone: 0.2 dBm
 Second Harmonic: -48.1 dBm
 Third Harmonic: -50.8 dBm

Tone Frequency: 111.627197 Hz
 Worst Other: -61.1 dBm @ 105.951 MHz
 Cross Talk: 61.3 dBC @ 105.951 MHz

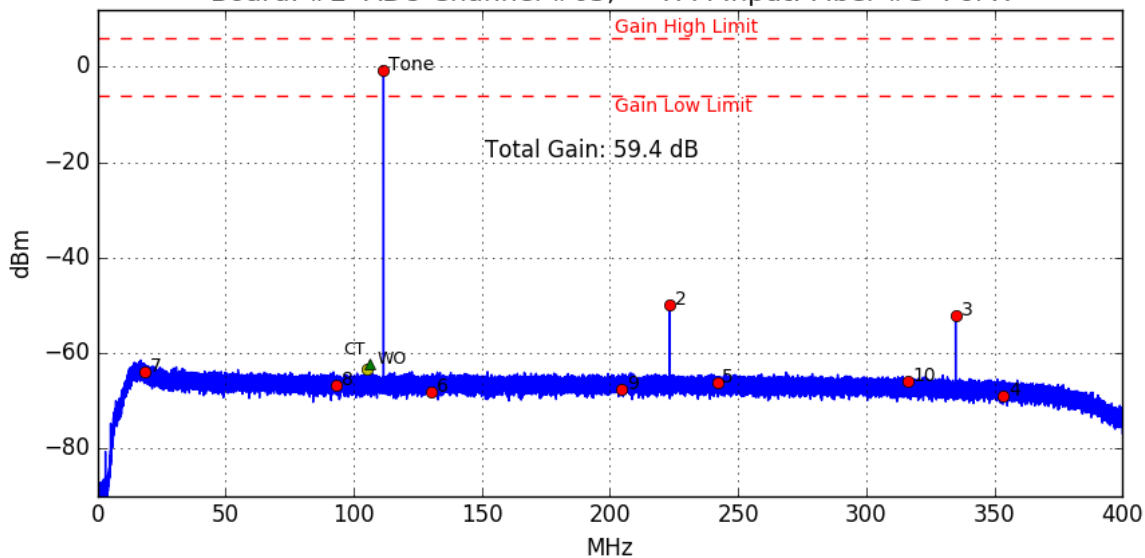
Board: #2 ADU Channel #04, TPM Input: Fiber #3 Pol-Y



Fundamental Tone: -0.4 dBm
 Second Harmonic: -46.4 dBm
 Third Harmonic: -55.3 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -57.7 dBm @ 249.988 MHz
 Cross Talk: 63.2 dBC @ 111.627 MHz

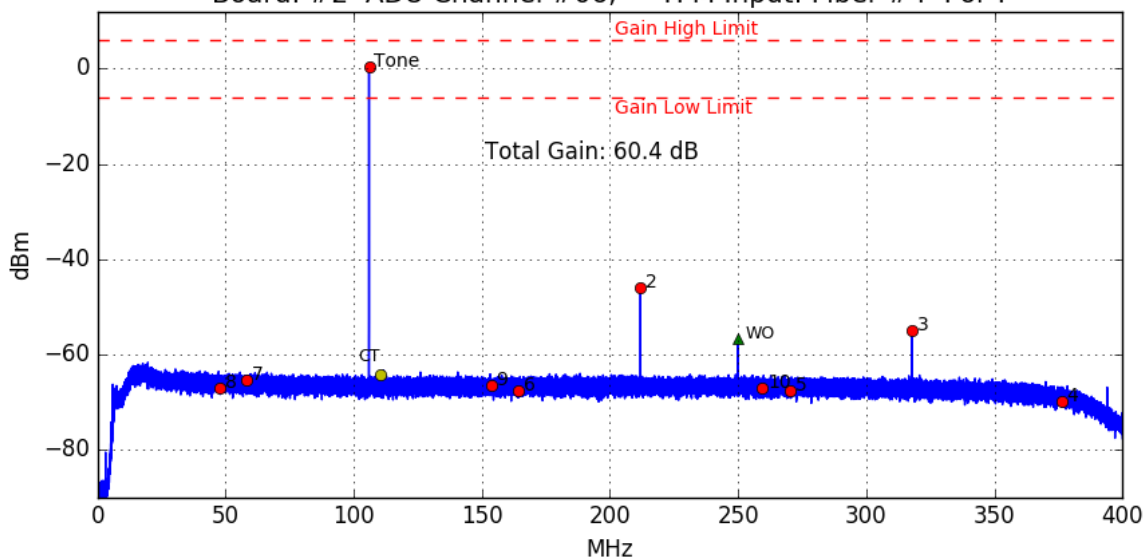
Board: #2 ADU Channel #05, TPM Input: Fiber #3 Pol-X



Fundamental Tone: -0.6 dBm
 Second Harmonic: -49.8 dBm
 Third Harmonic: -52.1 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -62.4 dBm @ 105.951 MHz
 Cross Talk: 61.8 dBC @ 105.951 MHz

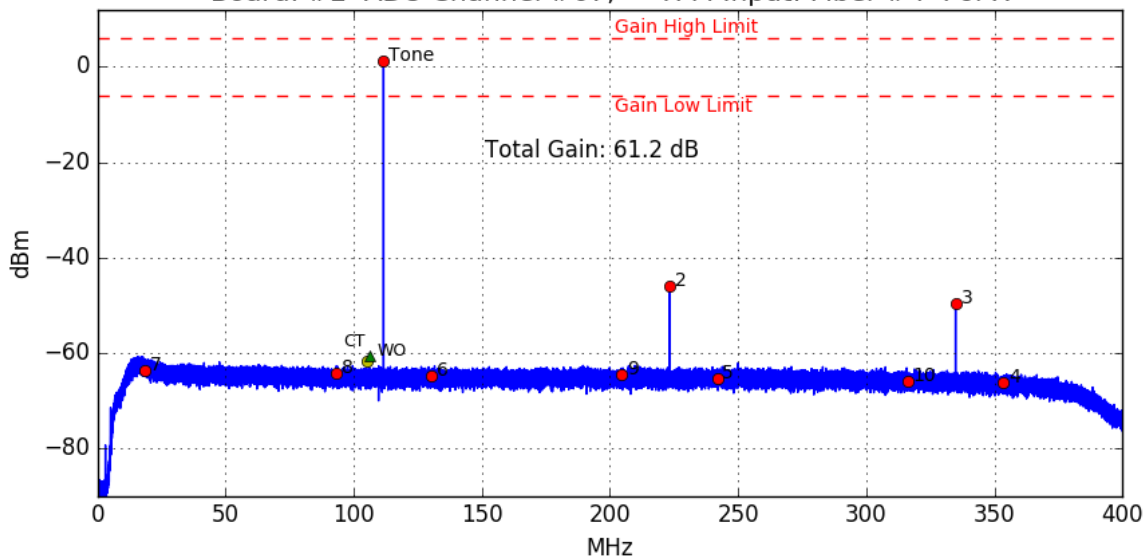
Board: #2 ADU Channel #06, TPM Input: Fiber #4 Pol-Y



Fundamental Tone: 0.4 dBm
 Second Harmonic: -46.0 dBm
 Third Harmonic: -55.0 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -56.6 dBm @ 249.988 MHz
 Cross Talk: 63.7 dBC @ 111.627 MHz

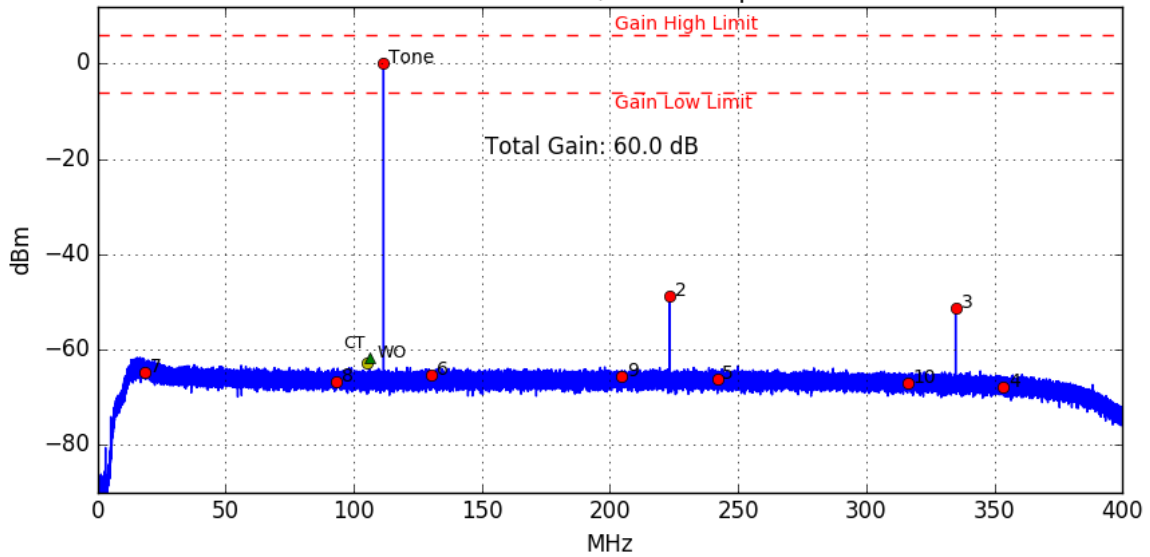
Board: #2 ADU Channel #07, TPM Input: Fiber #4 Pol-X



Fundamental Tone: 1.2 dBm
 Second Harmonic: -45.9 dBm
 Third Harmonic: -49.6 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -60.7 dBm @ 105.951 MHz
 Cross Talk: 61.9 dBC @ 105.951 MHz

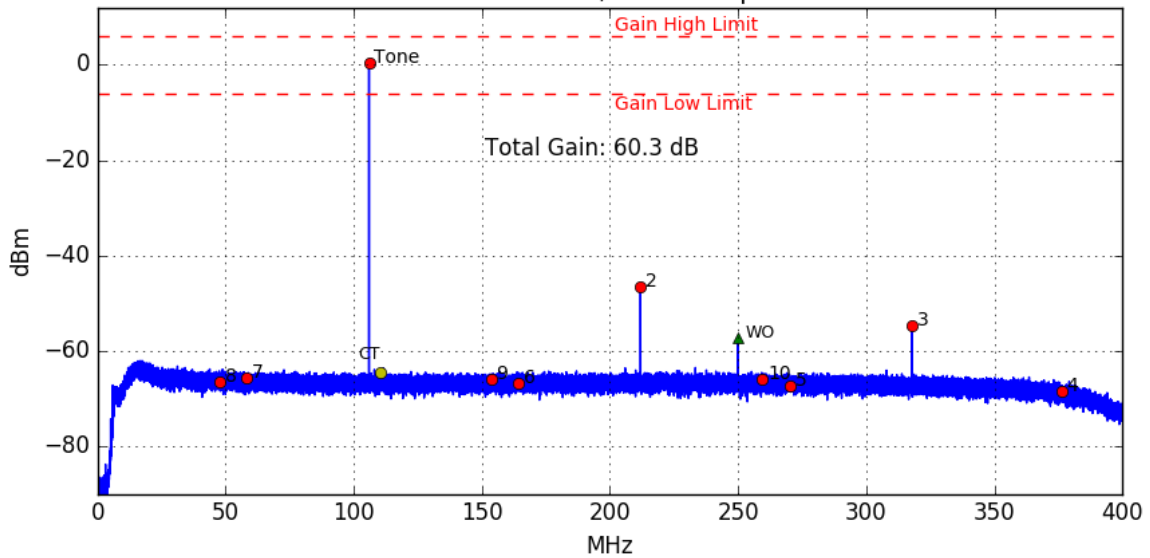
Board: #2 ADU Channel #08, TPM Input: Fiber #16 Pol-X



Fundamental Tone: -0.0 dBm
 Second Harmonic: -48.8 dBm
 Third Harmonic: -51.2 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -61.8 dBm @ 105.951 MHz
 Cross Talk: 61.8 dBC @ 105.951 MHz

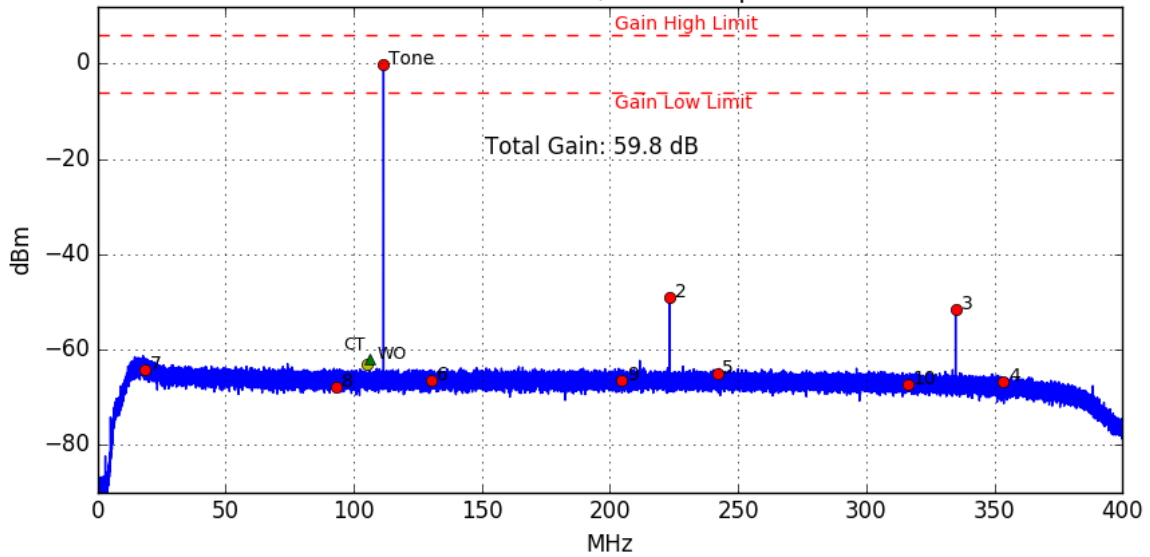
Board: #2 ADU Channel #09, TPM Input: Fiber #16 Pol-Y



Fundamental Tone: 0.3 dBm
 Second Harmonic: -46.5 dBm
 Third Harmonic: -54.8 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -57.1 dBm @ 249.988 MHz
 Cross Talk: 63.9 dBC @ 111.627 MHz

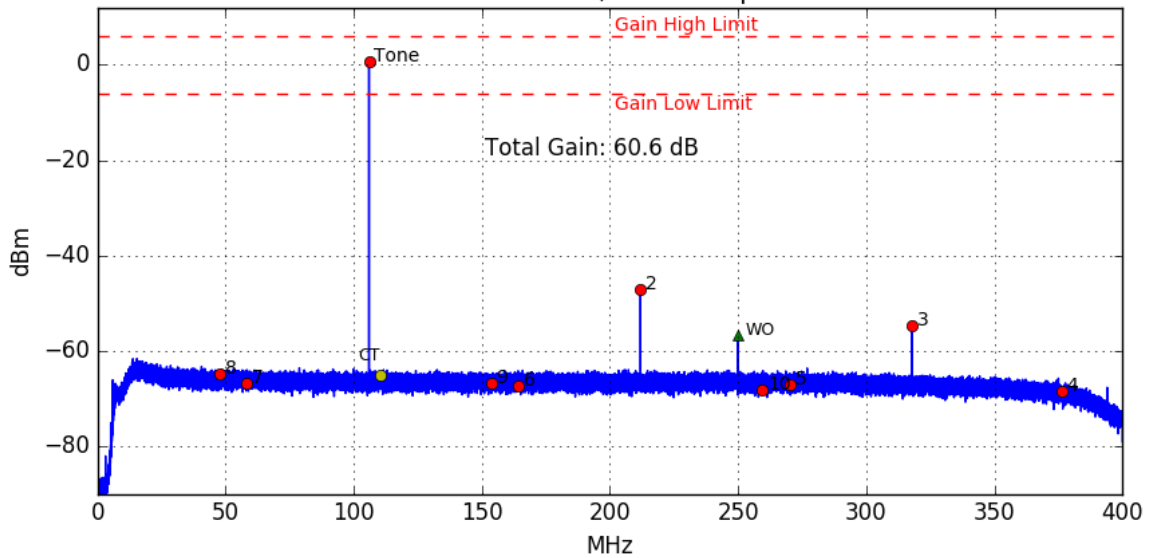
Board: #2 ADU Channel #10, TPM Input: Fiber #15 Pol-X



Fundamental Tone: -0.2 dBm
 Second Harmonic: -49.0 dBm
 Third Harmonic: -51.5 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -62.0 dBm @ 105.951 MHz
 Cross Talk: 61.8 dBC @ 105.951 MHz

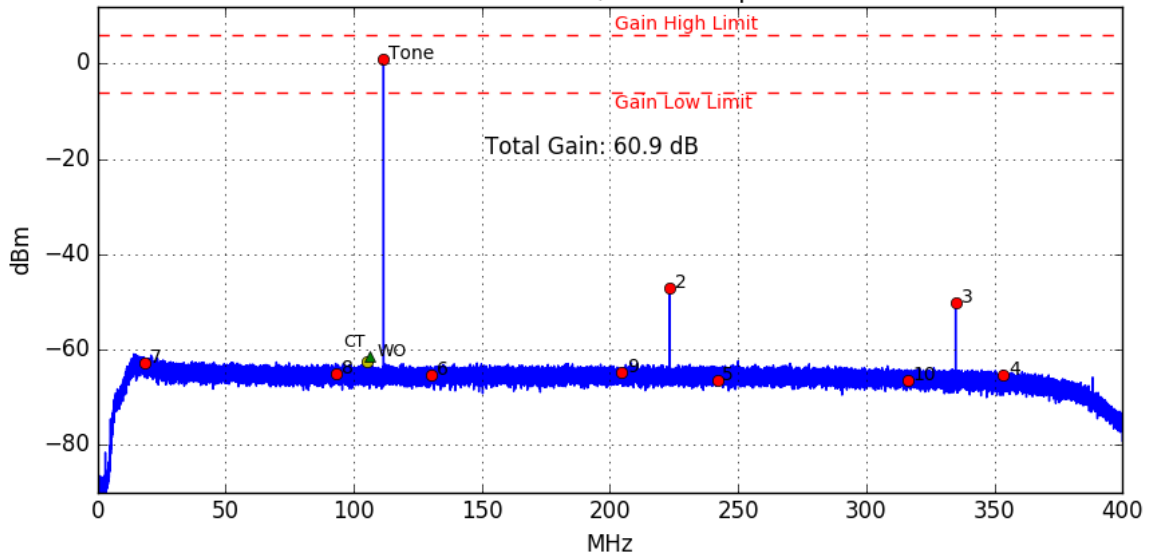
Board: #2 ADU Channel #11, TPM Input: Fiber #15 Pol-Y



Fundamental Tone: 0.6 dBm
 Second Harmonic: -47.1 dBm
 Third Harmonic: -54.7 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -56.7 dBm @ 249.988 MHz
 Cross Talk: 64.5 dBC @ 111.627 MHz

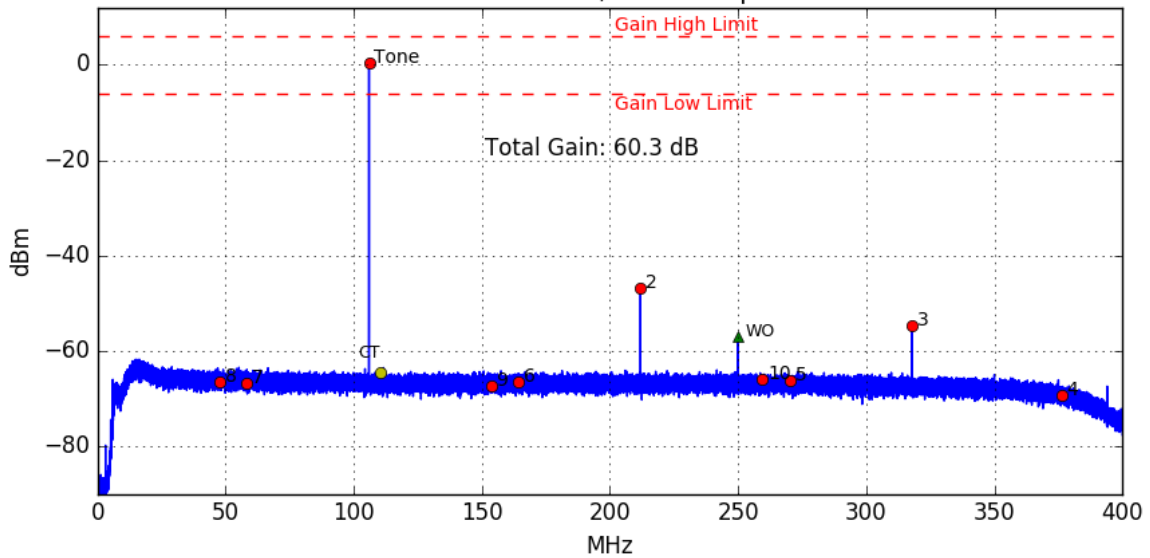
Board: #2 ADU Channel #12, TPM Input: Fiber #14 Pol-X



Fundamental Tone: 0.9 dBm
 Second Harmonic: -47.0 dBm
 Third Harmonic: -50.3 dBm

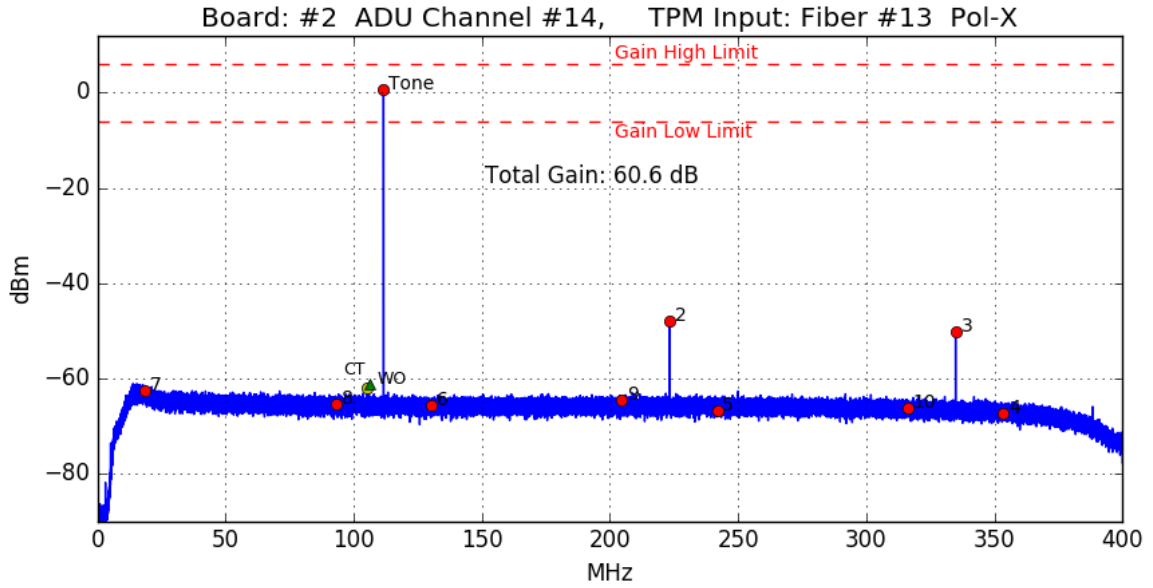
Tone Frequency: 111.627.197 Hz
 Worst Other: -61.6 dBm @ 105.951 MHz
 Cross Talk: 62.4 dBC @ 105.951 MHz

Board: #2 ADU Channel #13, TPM Input: Fiber #14 Pol-Y



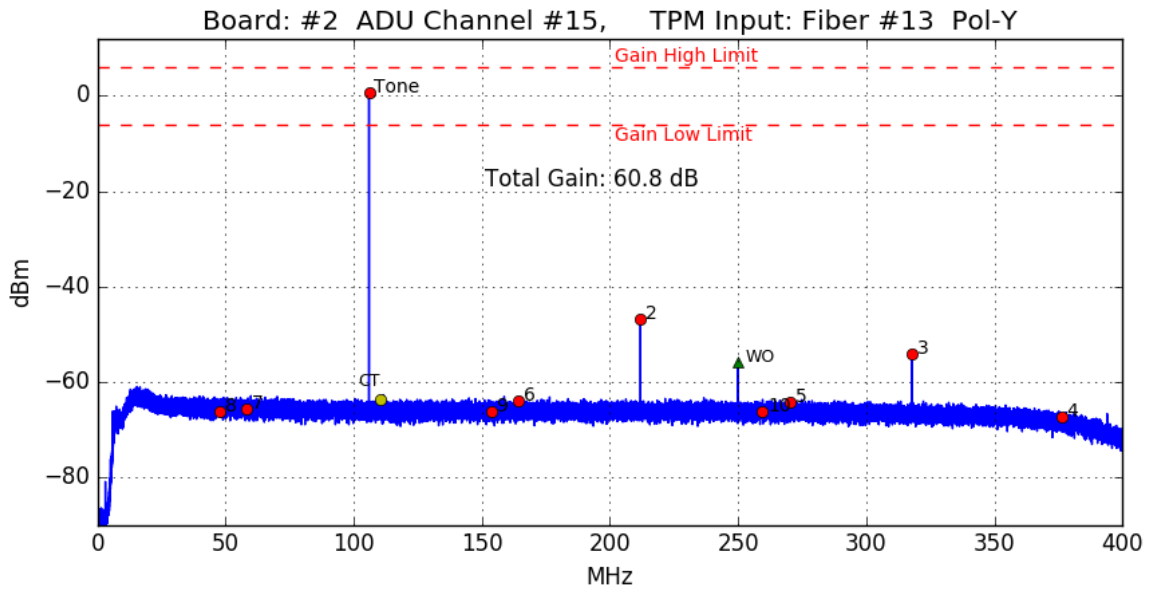
Fundamental Tone: 0.3 dBm
 Second Harmonic: -46.8 dBm
 Third Harmonic: -54.6 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -56.9 dBm @ 249.988 MHz
 Cross Talk: 63.8 dBC @ 111.627 MHz



Fundamental Tone: 0.6 dBm
 Second Harmonic: -47.9 dBm
 Third Harmonic: -50.2 dBm

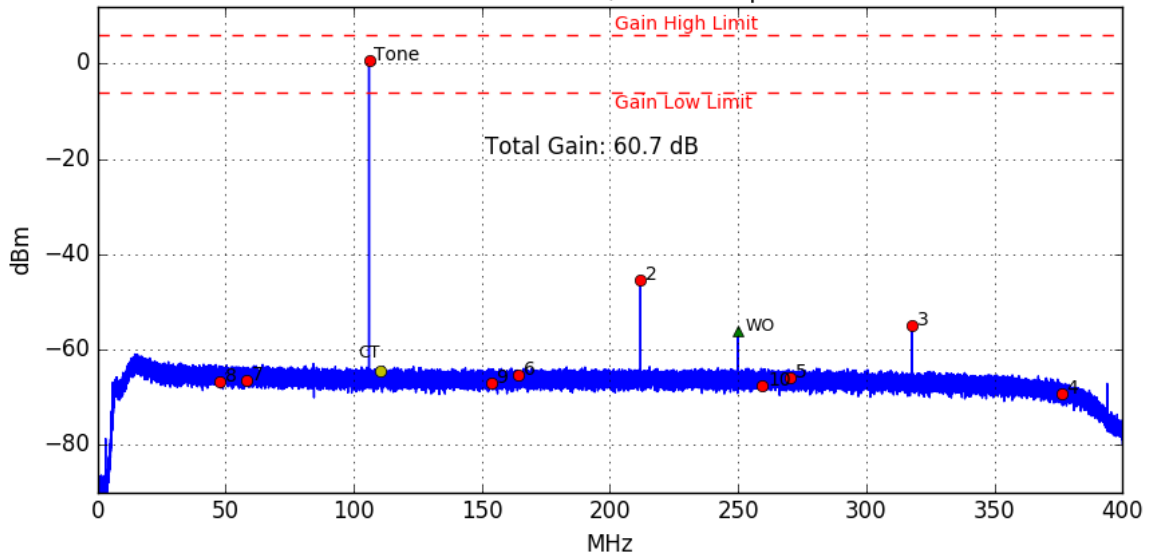
Tone Frequency: 111.627.197 Hz
 Worst Other: -61.1 dBm @ 105.951 MHz
 Cross Talk: 61.7 dBC @ 105.951 MHz



Fundamental Tone: 0.8 dBm
 Second Harmonic: -46.9 dBm
 Third Harmonic: -54.2 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -55.8 dBm @ 249.988 MHz
 Cross Talk: 63.5 dBC @ 111.627 MHz

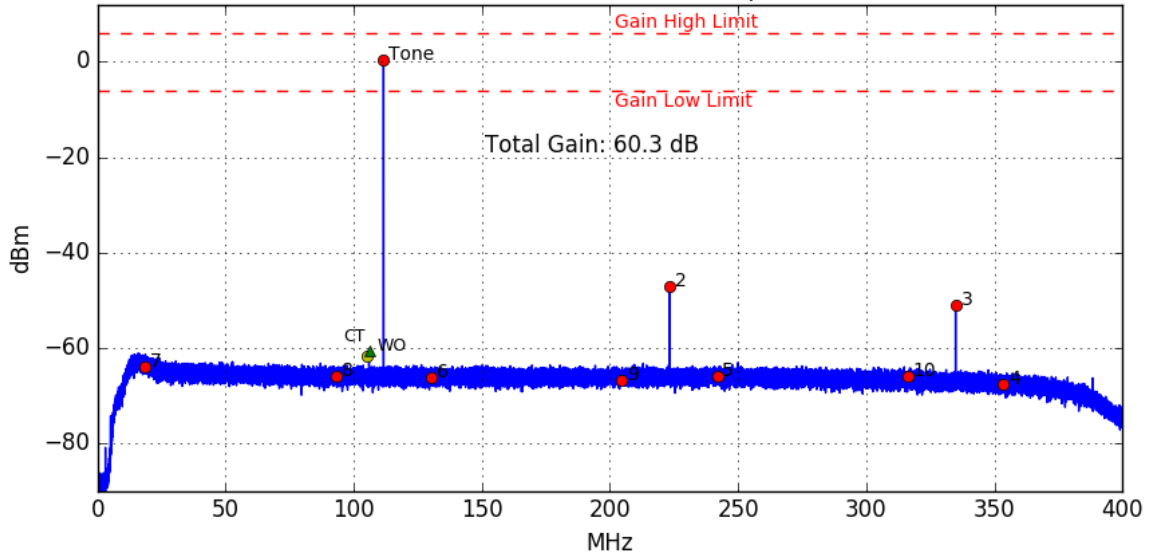
Board: #2 ADU Channel #16, TPM Input: Fiber #5 Pol-Y



Fundamental Tone: 0.7 dBm
 Second Harmonic: -45.5 dBm
 Third Harmonic: -54.9 dBm

Tone Frequency: 105.950928 Hz
 Worst Other: -56.1 dBm @ 249.988 MHz
 Cross Talk: 64.3 dBC @ 111.627 MHz

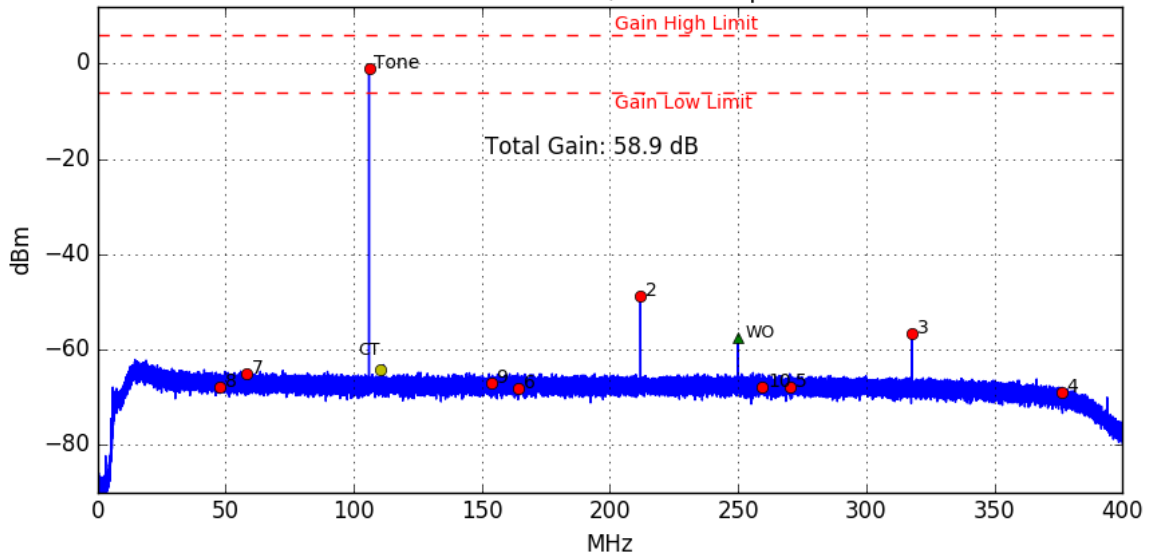
Board: #2 ADU Channel #17, TPM Input: Fiber #5 Pol-X



Fundamental Tone: 0.3 dBm
 Second Harmonic: -47.1 dBm
 Third Harmonic: -50.9 dBm

Tone Frequency: 111.627197 Hz
 Worst Other: -60.7 dBm @ 105.951 MHz
 Cross Talk: 61.1 dBC @ 105.951 MHz

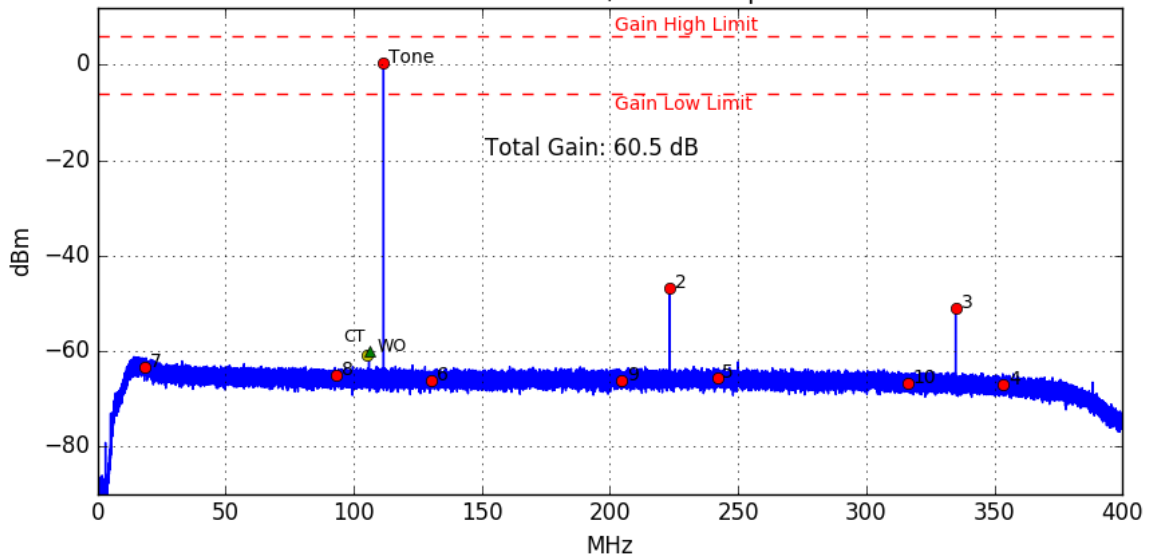
Board: #2 ADU Channel #18, TPM Input: Fiber #6 Pol-Y



Fundamental Tone: -1.1 dBm
 Second Harmonic: -48.7 dBm
 Third Harmonic: -56.5 dBm

Tone Frequency: 105.950928 Hz
 Worst Other: -57.4 dBm @ 249.988 MHz
 Cross Talk: 62.1 dBC @ 111.627 MHz

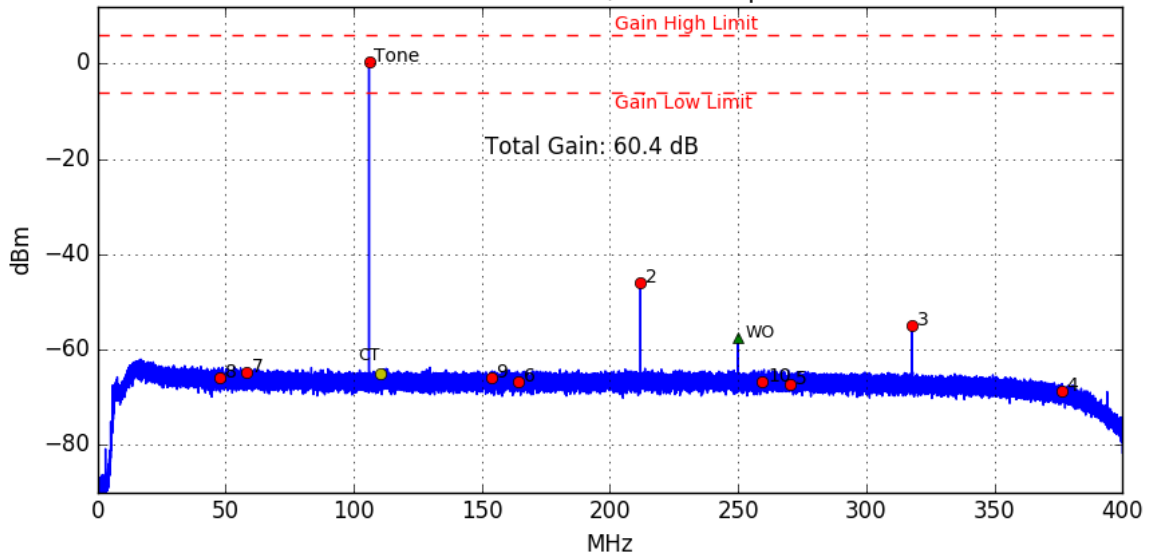
Board: #2 ADU Channel #19, TPM Input: Fiber #6 Pol-X



Fundamental Tone: 0.5 dBm
 Second Harmonic: -47.0 dBm
 Third Harmonic: -50.9 dBm

Tone Frequency: 111.627197 Hz
 Worst Other: -60.0 dBm @ 105.951 MHz
 Cross Talk: 60.4 dBC @ 105.951 MHz

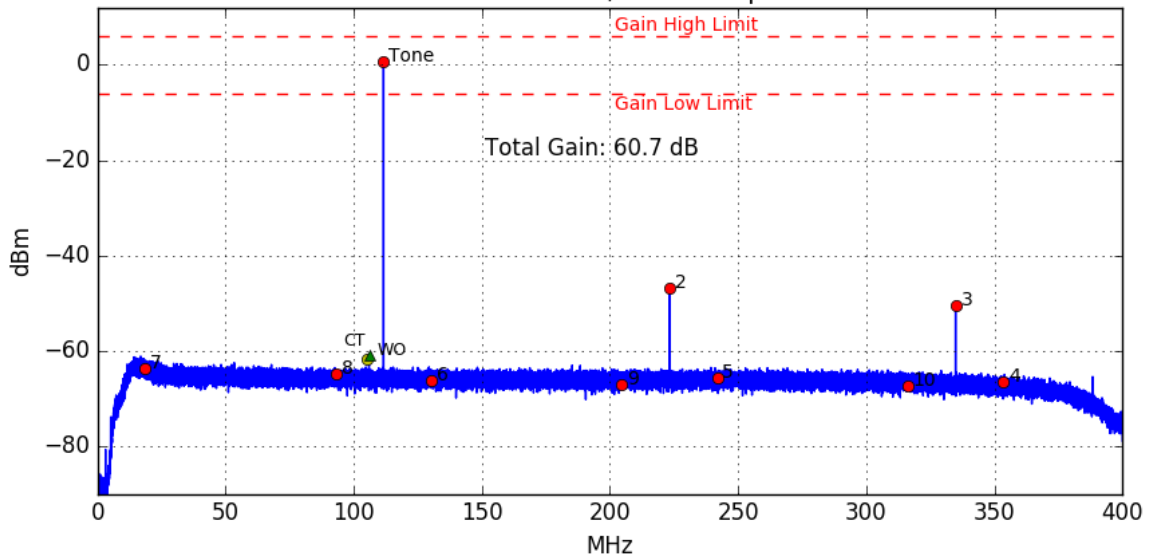
Board: #2 ADU Channel #20, TPM Input: Fiber #7 Pol-Y



Fundamental Tone: 0.4 dBm
 Second Harmonic: -46.1 dBm
 Third Harmonic: -54.9 dBm

Tone Frequency: 105.950928 Hz
 Worst Other: -57.6 dBm @ 249.988 MHz
 Cross Talk: 64.5 dBC @ 111.627 MHz

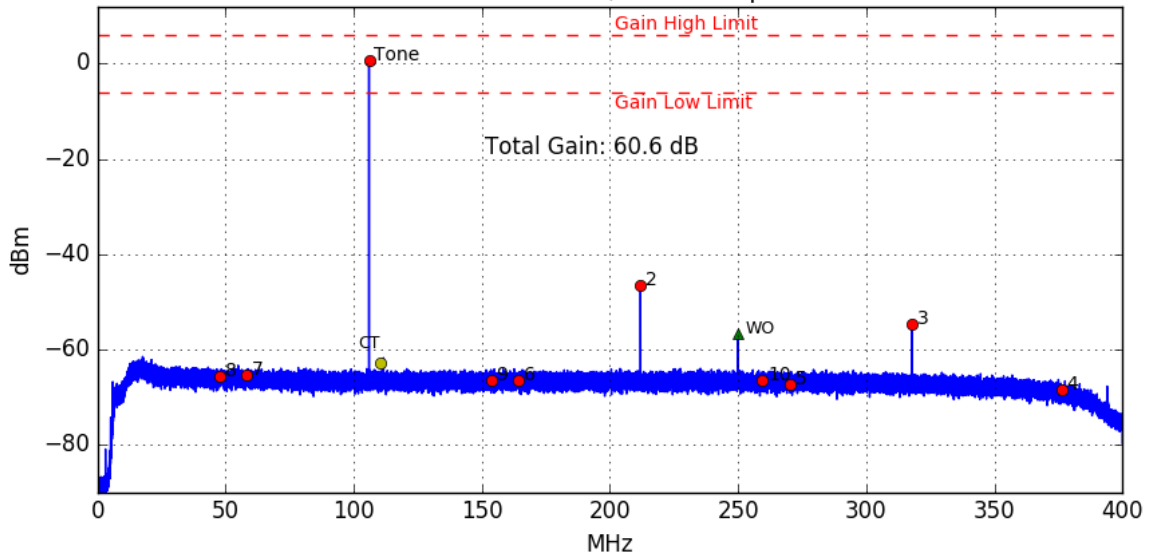
Board: #2 ADU Channel #21, TPM Input: Fiber #7 Pol-X



Fundamental Tone: 0.7 dBm
 Second Harmonic: -46.9 dBm
 Third Harmonic: -50.5 dBm

Tone Frequency: 111.627197 Hz
 Worst Other: -60.8 dBm @ 105.951 MHz
 Cross Talk: 61.5 dBC @ 105.951 MHz

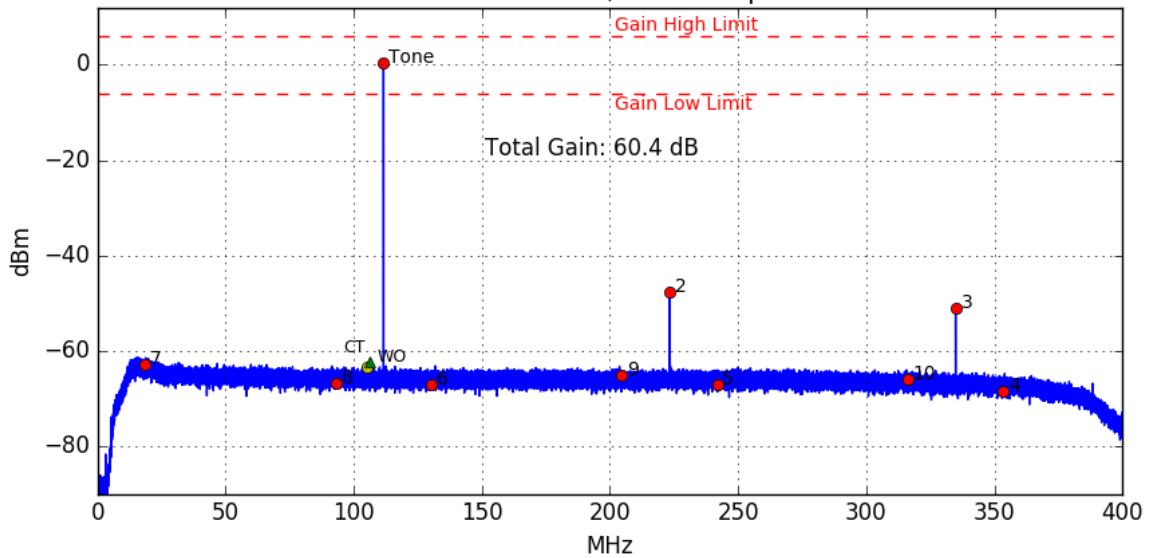
Board: #2 ADU Channel #22, TPM Input: Fiber #8 Pol-Y



Fundamental Tone: 0.6 dBm
 Second Harmonic: -46.5 dBm
 Third Harmonic: -54.6 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -56.5 dBm @ 249.988 MHz
 Cross Talk: 62.4 dBC @ 111.627 MHz

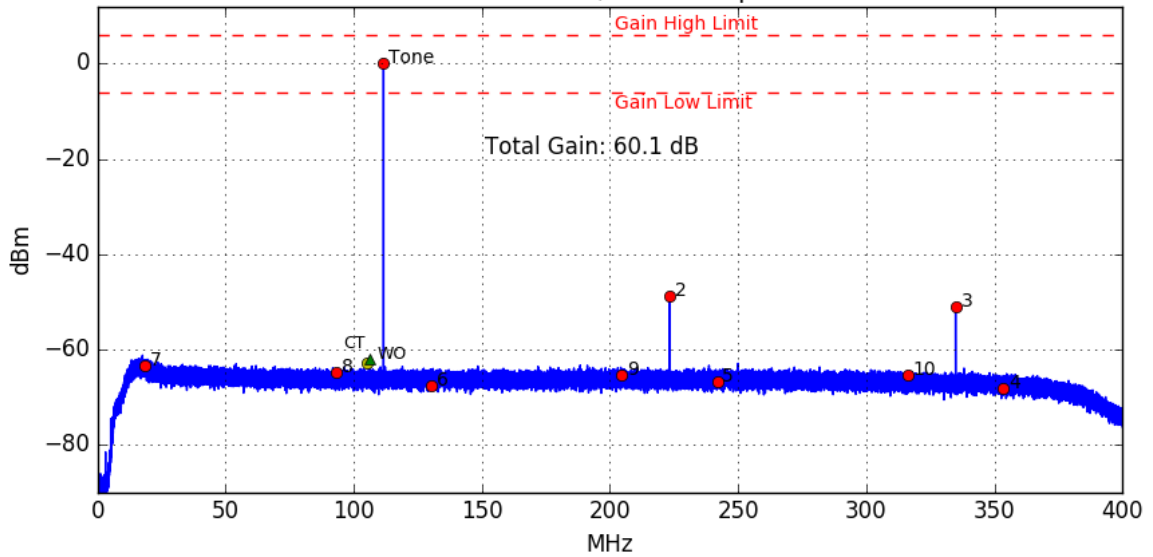
Board: #2 ADU Channel #23, TPM Input: Fiber #8 Pol-X



Fundamental Tone: 0.4 dBm
 Second Harmonic: -47.7 dBm
 Third Harmonic: -51.0 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -62.4 dBm @ 105.951 MHz
 Cross Talk: 62.8 dBC @ 105.951 MHz

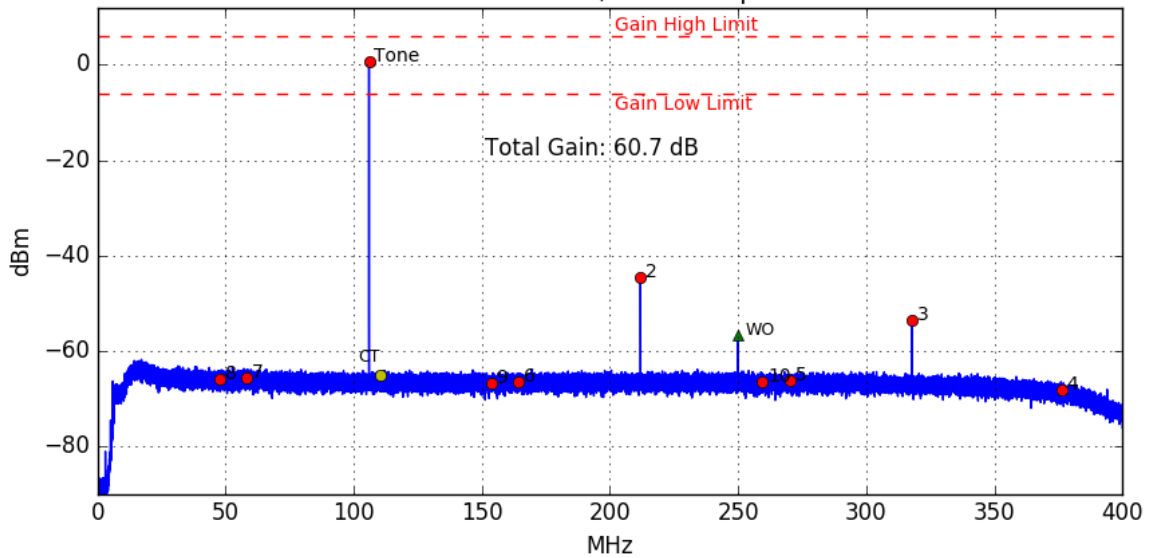
Board: #2 ADU Channel #24, TPM Input: Fiber #12 Pol-X



Fundamental Tone: 0.1 dBm
 Second Harmonic: -48.7 dBm
 Third Harmonic: -51.0 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -61.9 dBm @ 105.951 MHz
 Cross Talk: 61.9 dBC @ 105.951 MHz

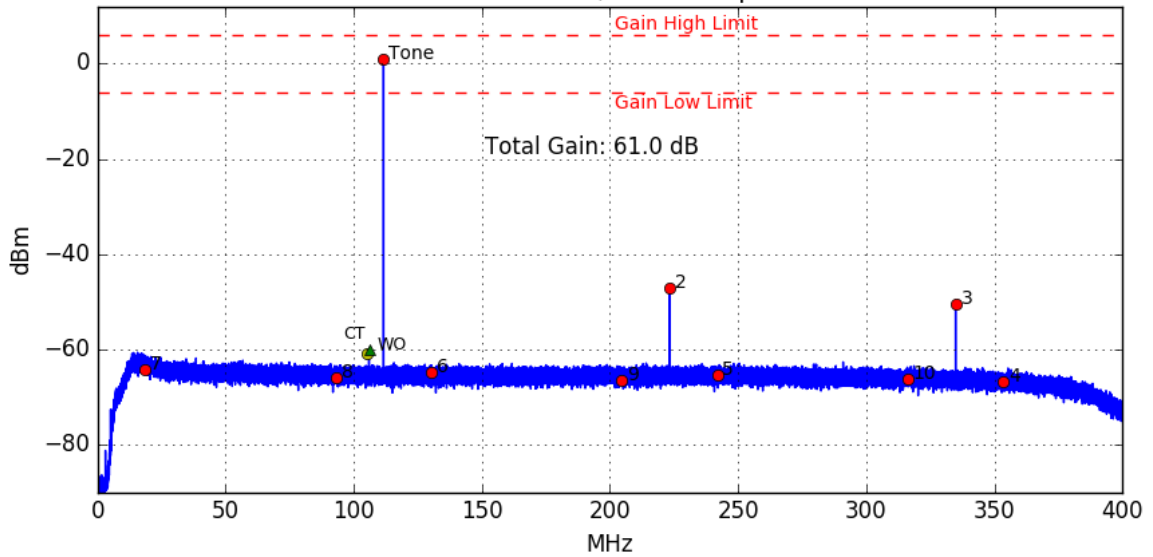
Board: #2 ADU Channel #25, TPM Input: Fiber #12 Pol-Y



Fundamental Tone: 0.7 dBm
 Second Harmonic: -44.7 dBm
 Third Harmonic: -53.6 dBm

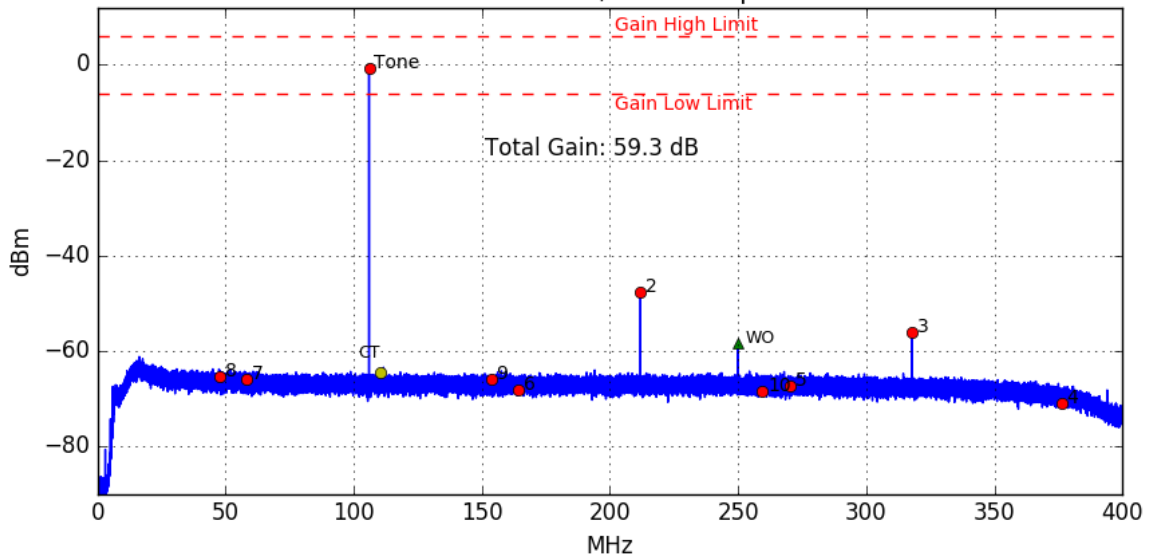
Tone Frequency: 105.950.928 Hz
 Worst Other: -56.6 dBm @ 249.988 MHz
 Cross Talk: 64.9 dBC @ 111.627 MHz

Board: #2 ADU Channel #26, TPM Input: Fiber #11 Pol-X

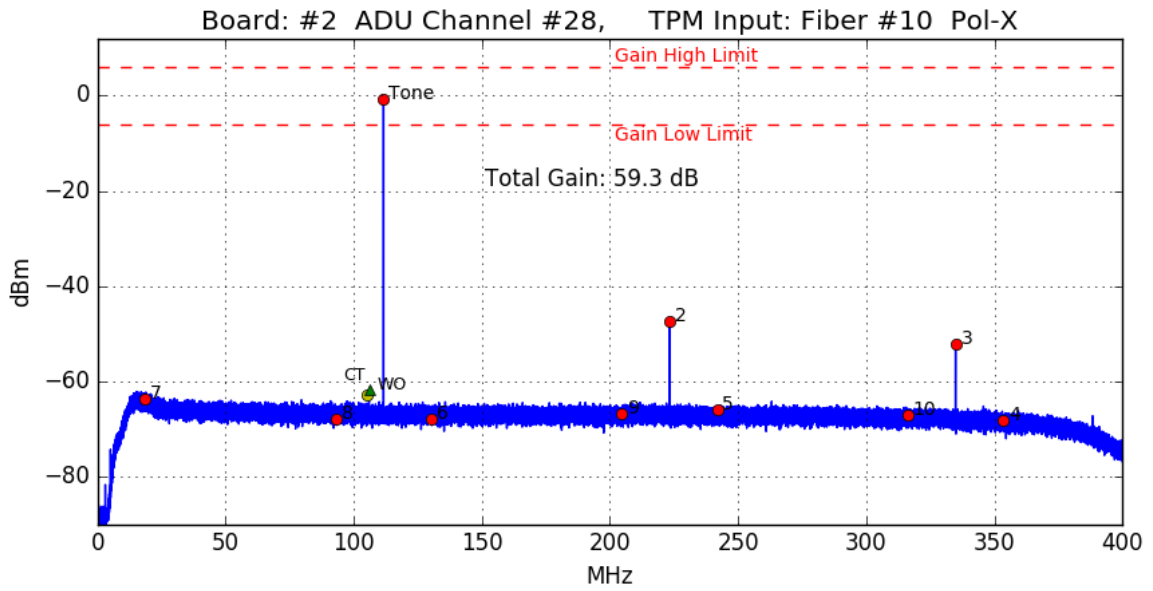


Fundamental Tone: 1.0 dBm Tone Frequency: 111.627.197 Hz
 Second Harmonic: -47.2 dBm Worst Other: -59.9 dBm @ 105.951 MHz
 Third Harmonic: -50.4 dBm Cross Talk: 60.9 dBC @ 105.951 MHz

Board: #2 ADU Channel #27, TPM Input: Fiber #11 Pol-Y

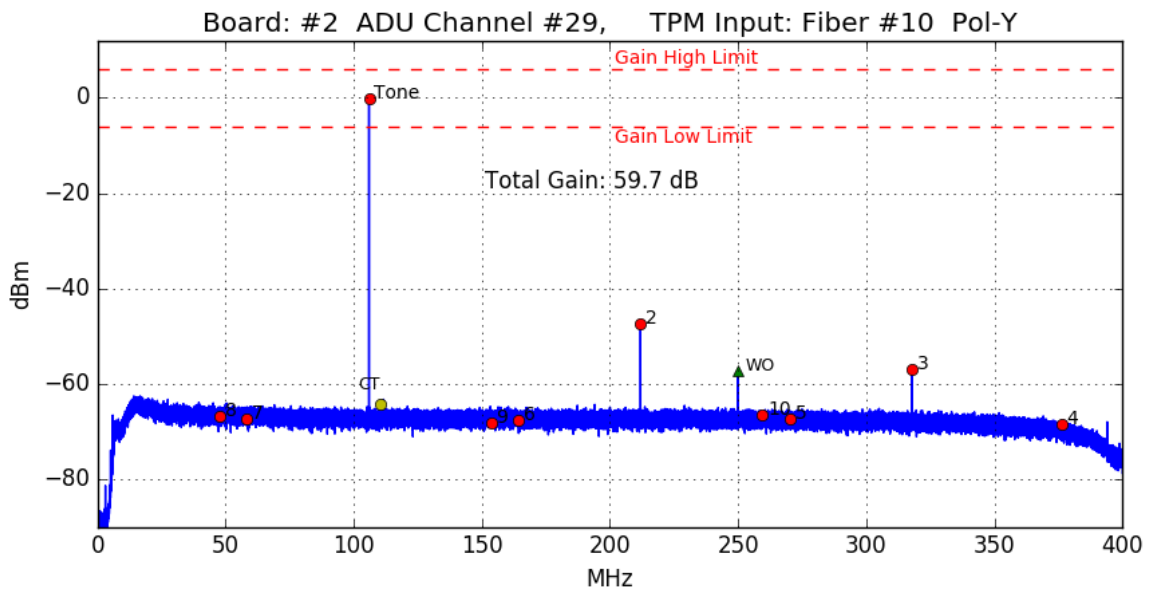


Fundamental Tone: -0.7 dBm Tone Frequency: 105.950.928 Hz
 Second Harmonic: -47.7 dBm Worst Other: -58.3 dBm @ 249.988 MHz
 Third Harmonic: -56.0 dBm Cross Talk: 62.8 dBC @ 111.627 MHz



Fundamental Tone: -0.7 dBm
 Second Harmonic: -47.3 dBm
 Third Harmonic: -52.3 dBm

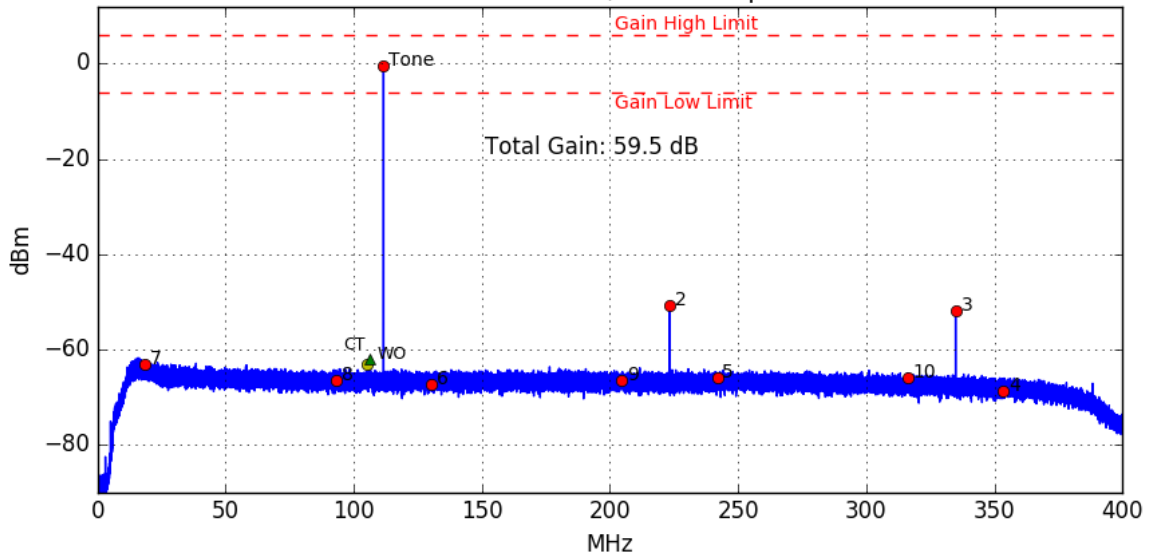
Tone Frequency: 111.627.197 Hz
 Worst Other: -61.7 dBm @ 105.951 MHz
 Cross Talk: 61.0 dBC @ 105.951 MHz



Fundamental Tone: -0.3 dBm
 Second Harmonic: -47.4 dBm
 Third Harmonic: -56.9 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -57.1 dBm @ 249.988 MHz
 Cross Talk: 63.0 dBC @ 111.627 MHz

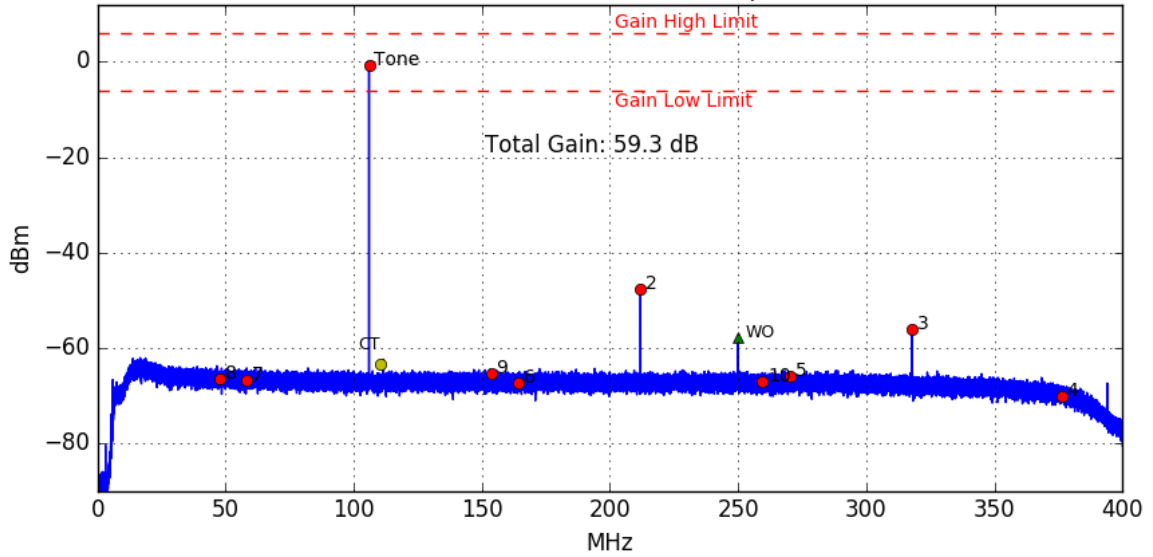
Board: #2 ADU Channel #30, TPM Input: Fiber #9 Pol-X



Fundamental Tone: -0.5 dBm
 Second Harmonic: -50.7 dBm
 Third Harmonic: -51.7 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -62.1 dBm @ 105.951 MHz
 Cross Talk: 61.6 dBC @ 105.951 MHz

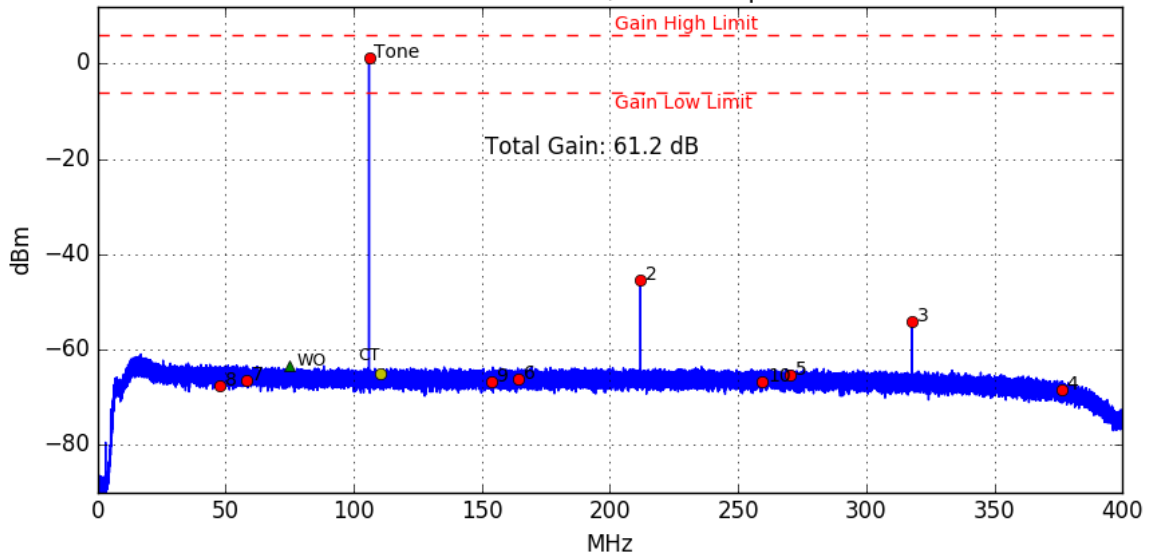
Board: #2 ADU Channel #31, TPM Input: Fiber #9 Pol-Y



Fundamental Tone: -0.7 dBm
 Second Harmonic: -47.7 dBm
 Third Harmonic: -56.2 dBm

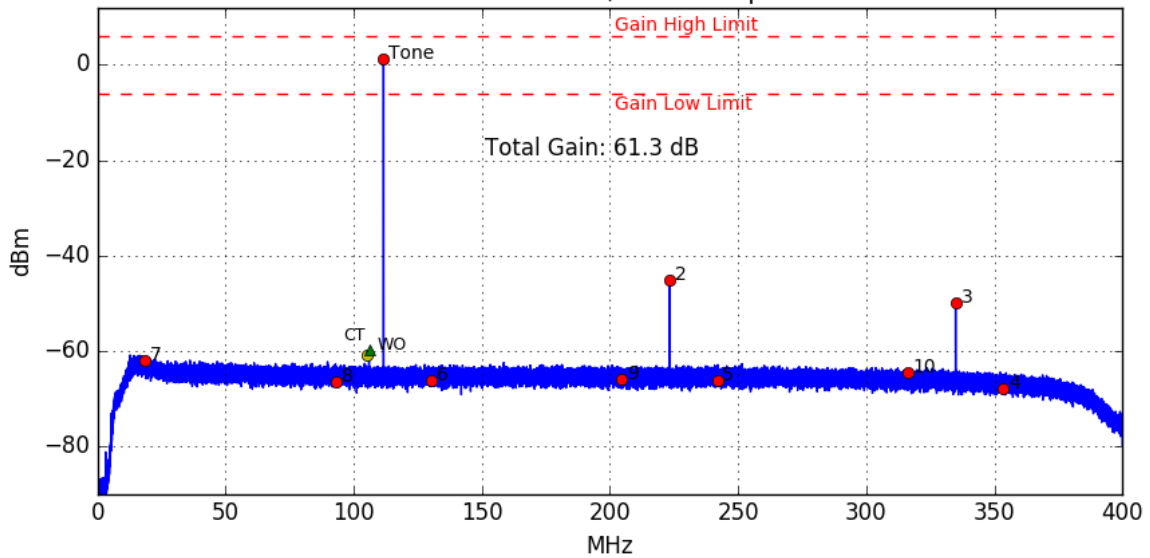
Tone Frequency: 105.950.928 Hz
 Worst Other: -57.7 dBm @ 249.988 MHz
 Cross Talk: 61.7 dBC @ 111.627 MHz

Board: #3 ADU Channel #00, TPM Input: Fiber #1 Pol-Y



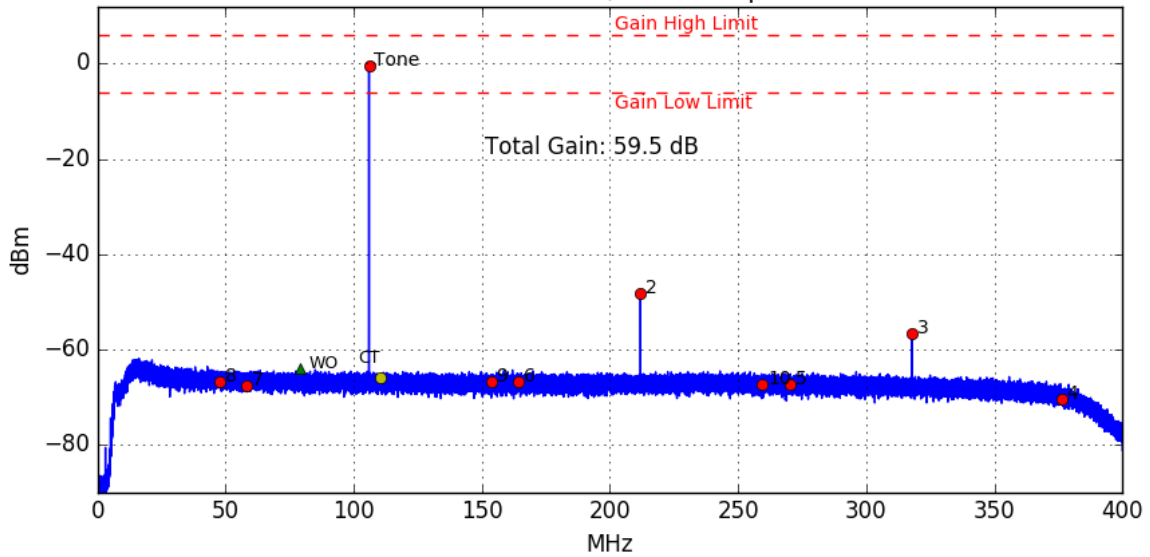
Fundamental Tone: 1.2 dBm Tone Frequency: 105.950.928 Hz
 Second Harmonic: -45.5 dBm Worst Other: -63.3 dBm @ 74.677 MHz
 Third Harmonic: -54.1 dBm Cross Talk: 65.4 dBC @ 111.627 MHz

Board: #3 ADU Channel #01, TPM Input: Fiber #1 Pol-X



Fundamental Tone: 1.3 dBm Tone Frequency: 111.627.197 Hz
 Second Harmonic: -45.1 dBm Worst Other: -59.8 dBm @ 105.951 MHz
 Third Harmonic: -49.9 dBm Cross Talk: 61.1 dBC @ 105.951 MHz

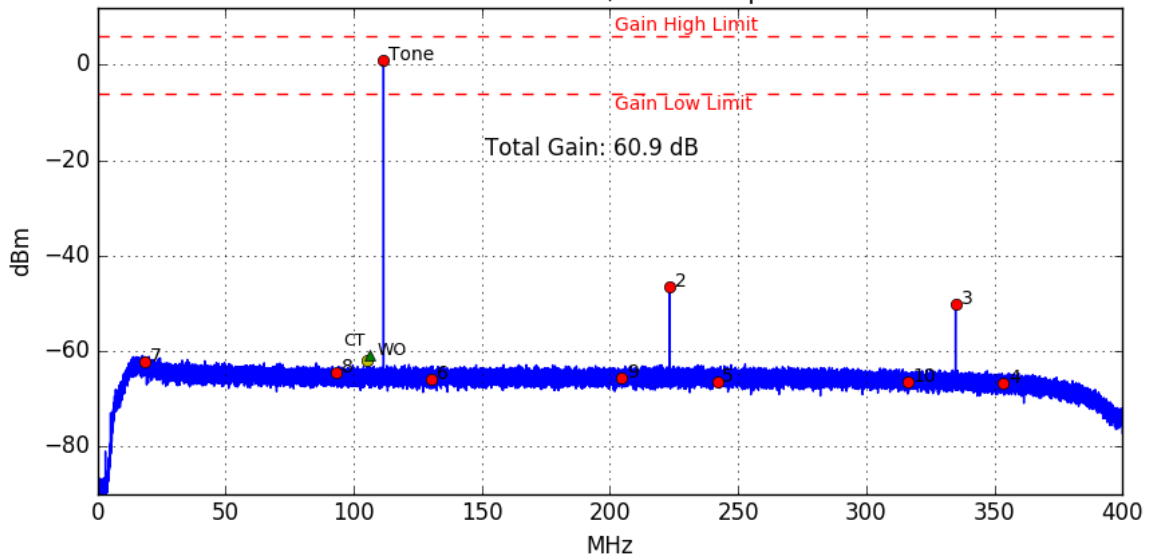
Board: #3 ADU Channel #02, TPM Input: Fiber #2 Pol-Y



Fundamental Tone: -0.5 dBm
 Second Harmonic: -48.2 dBm
 Third Harmonic: -56.7 dBm

Tone Frequency: 105.950928 Hz
 Worst Other: -64.0 dBm @ 79.224 MHz
 Cross Talk: 64.4 dBC @ 111.627 MHz

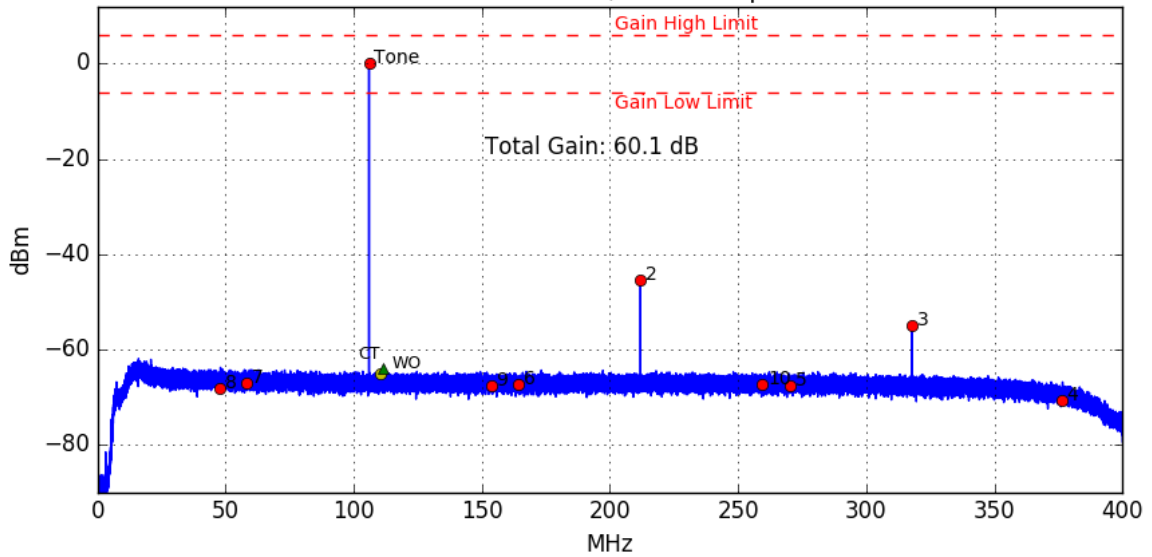
Board: #3 ADU Channel #03, TPM Input: Fiber #2 Pol-X



Fundamental Tone: 0.9 dBm
 Second Harmonic: -46.5 dBm
 Third Harmonic: -50.1 dBm

Tone Frequency: 111.627197 Hz
 Worst Other: -60.9 dBm @ 105.951 MHz
 Cross Talk: 61.8 dBC @ 105.951 MHz

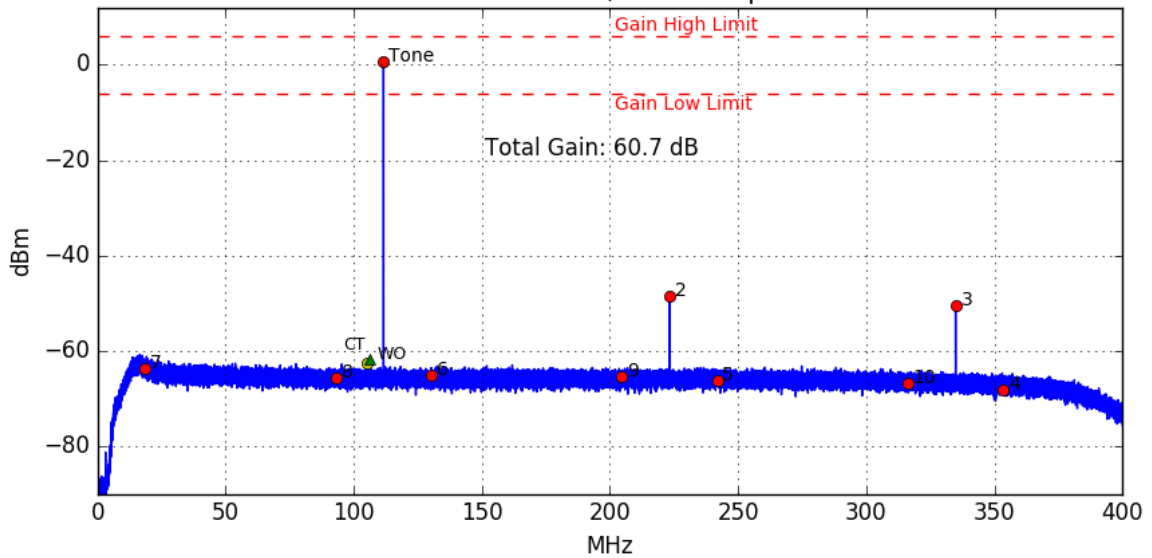
Board: #3 ADU Channel #04, TPM Input: Fiber #3 Pol-Y



Fundamental Tone: 0.1 dBm
 Second Harmonic: -45.4 dBm
 Third Harmonic: -55.0 dBm

Tone Frequency: 105.950928 Hz
 Worst Other: -64.1 dBm @ 111.627 MHz
 Cross Talk: 64.2 dBC @ 111.627 MHz

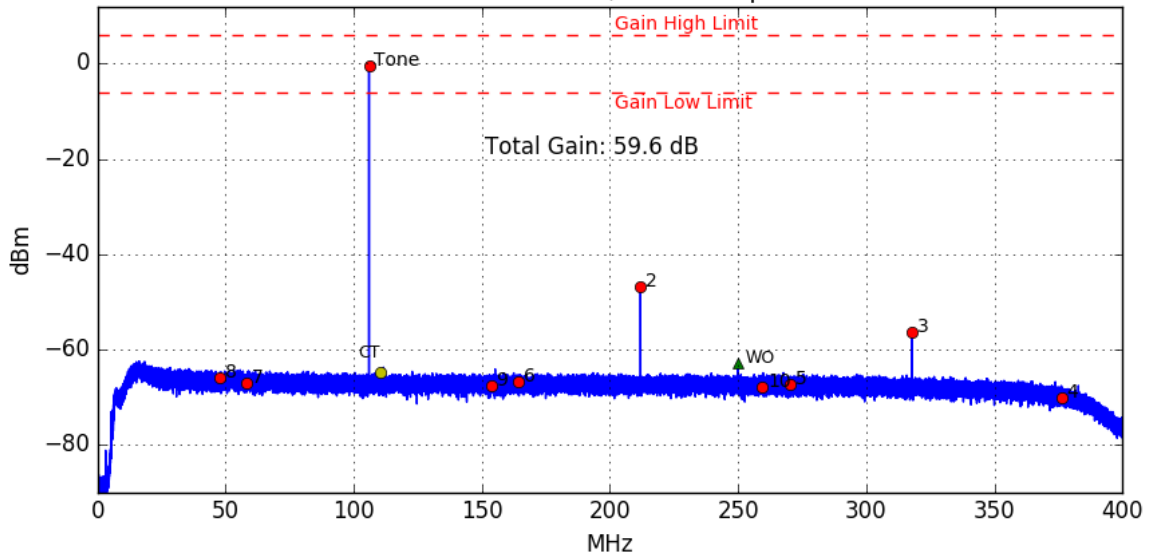
Board: #3 ADU Channel #05, TPM Input: Fiber #3 Pol-X



Fundamental Tone: 0.7 dBm
 Second Harmonic: -48.5 dBm
 Third Harmonic: -50.5 dBm

Tone Frequency: 111.627197 Hz
 Worst Other: -61.6 dBm @ 105.951 MHz
 Cross Talk: 62.3 dBC @ 105.951 MHz

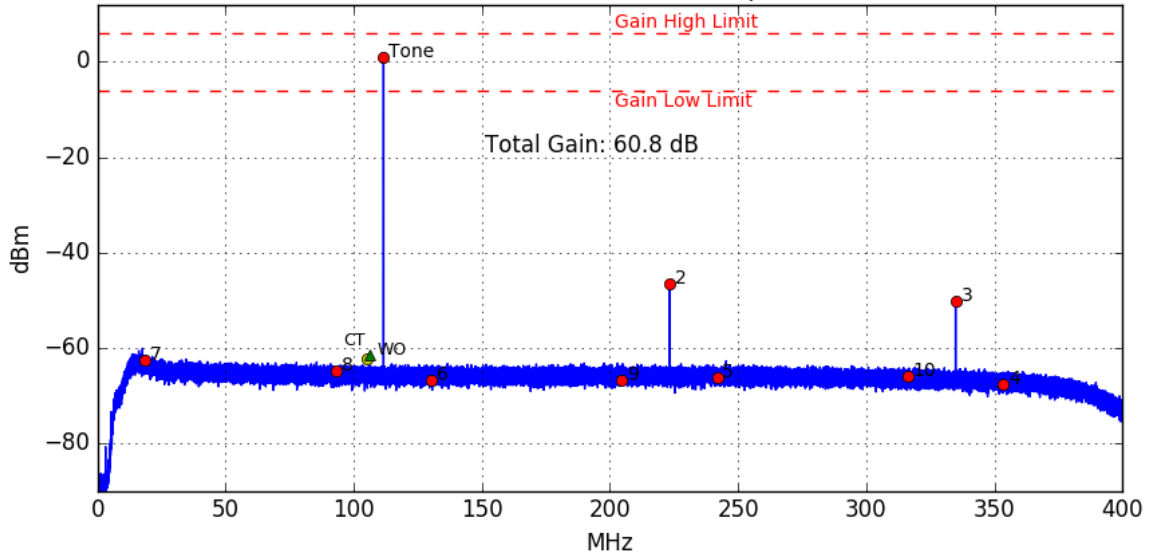
Board: #3 ADU Channel #06, TPM Input: Fiber #4 Pol-Y



Fundamental Tone: -0.4 dBm
 Second Harmonic: -46.9 dBm
 Third Harmonic: -56.4 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -62.8 dBm @ 249.988 MHz
 Cross Talk: 63.3 dBC @ 111.627 MHz

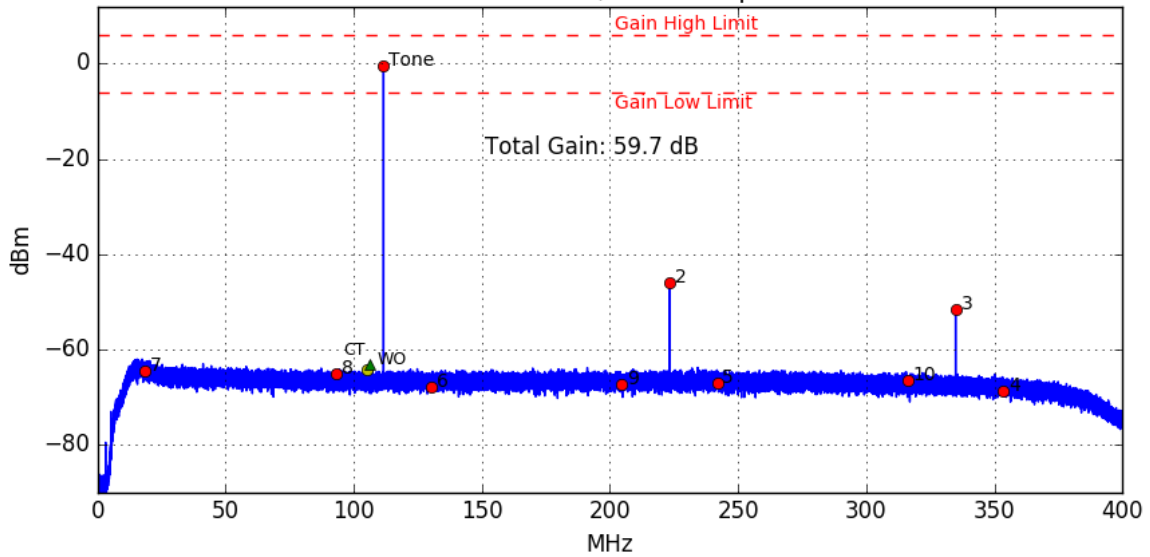
Board: #3 ADU Channel #07, TPM Input: Fiber #4 Pol-X



Fundamental Tone: 0.8 dBm
 Second Harmonic: -46.7 dBm
 Third Harmonic: -50.2 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -61.4 dBm @ 105.951 MHz
 Cross Talk: 62.2 dBC @ 105.951 MHz

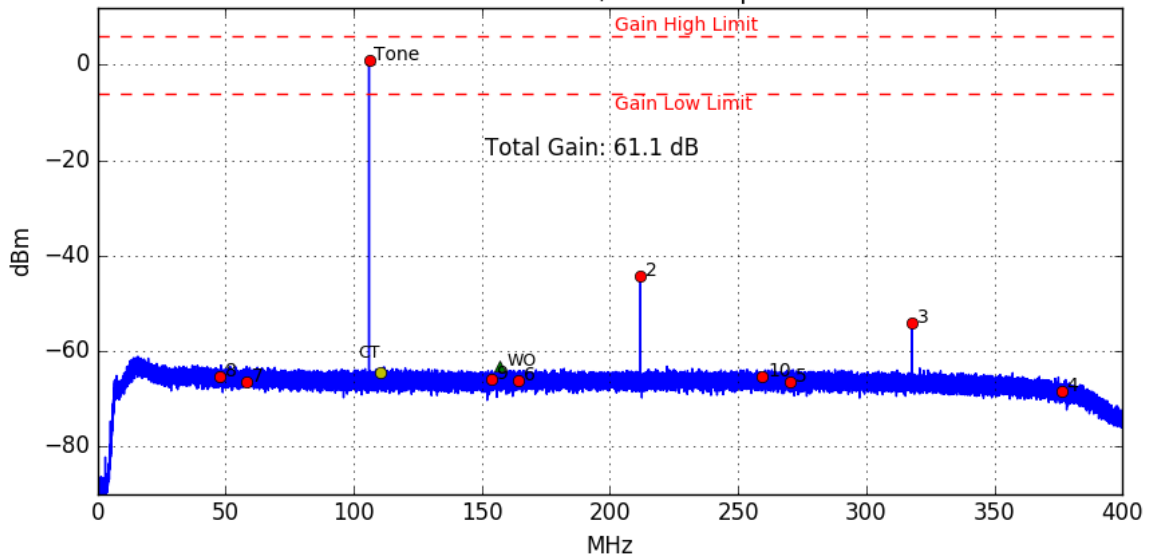
Board: #3 ADU Channel #08, TPM Input: Fiber #16 Pol-X



Fundamental Tone: -0.3 dBm
 Second Harmonic: -46.0 dBm
 Third Harmonic: -51.7 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -63.2 dBm @ 105.951 MHz
 Cross Talk: 62.8 dBC @ 105.951 MHz

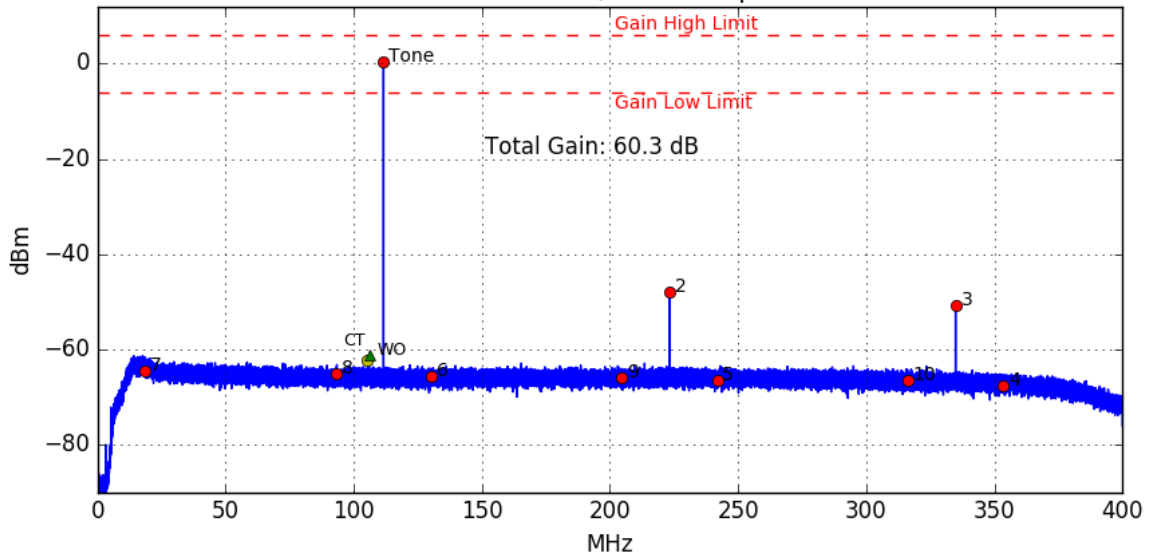
Board: #3 ADU Channel #09, TPM Input: Fiber #16 Pol-Y



Fundamental Tone: 1.1 dBm
 Second Harmonic: -44.4 dBm
 Third Harmonic: -54.0 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -63.1 dBm @ 157.013 MHz
 Cross Talk: 64.5 dBC @ 111.627 MHz

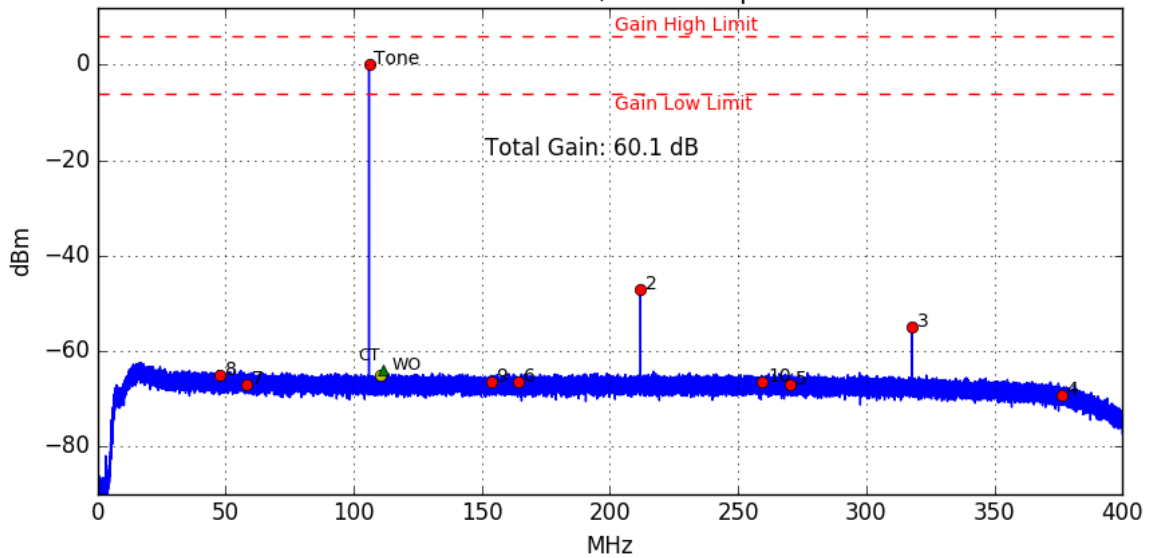
Board: #3 ADU Channel #10, TPM Input: Fiber #15 Pol-X



Fundamental Tone: 0.3 dBm
 Second Harmonic: -48.0 dBm
 Third Harmonic: -50.8 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -61.1 dBm @ 105.951 MHz
 Cross Talk: 61.5 dBC @ 105.951 MHz

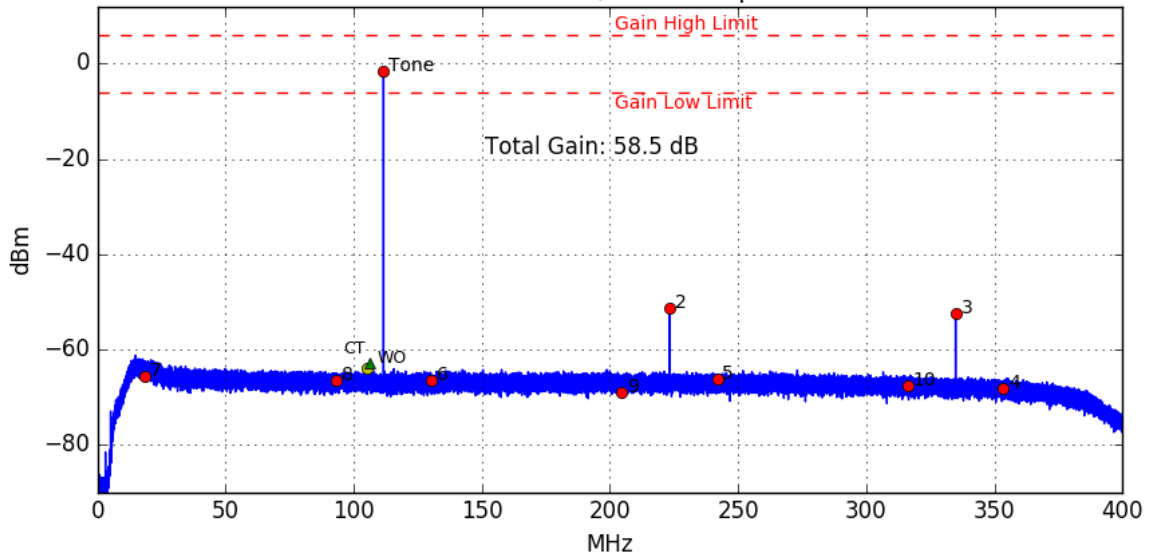
Board: #3 ADU Channel #11, TPM Input: Fiber #15 Pol-Y



Fundamental Tone: 0.1 dBm
 Second Harmonic: -47.1 dBm
 Third Harmonic: -55.0 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -64.0 dBm @ 111.627 MHz
 Cross Talk: 64.1 dBC @ 111.627 MHz

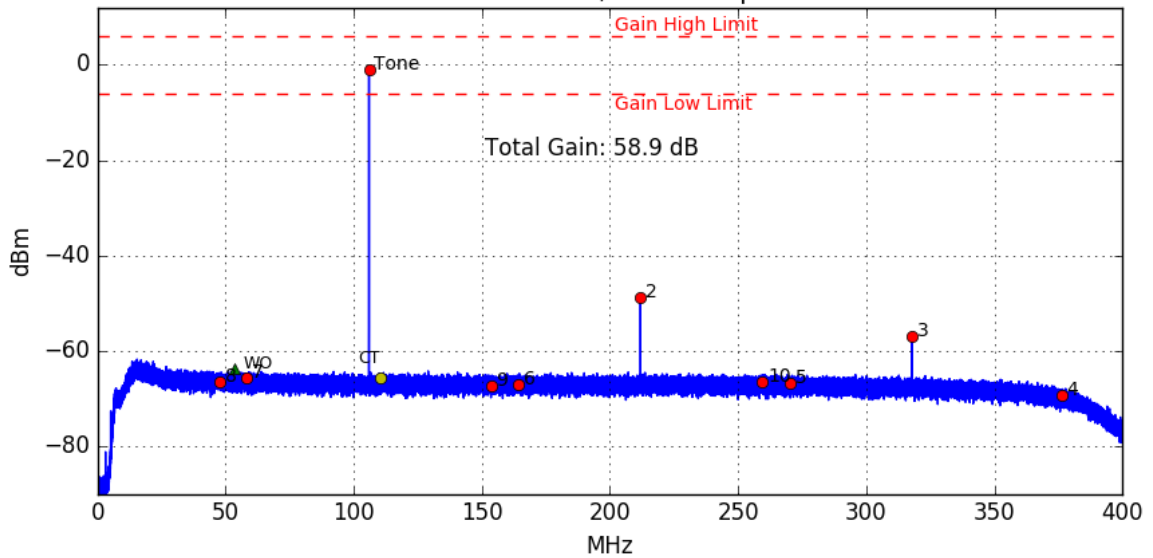
Board: #3 ADU Channel #12, TPM Input: Fiber #14 Pol-X



Fundamental Tone: -1.5 dBm
 Second Harmonic: -51.3 dBm
 Third Harmonic: -52.4 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -62.9 dBm @ 105.951 MHz
 Cross Talk: 61.4 dBC @ 105.951 MHz

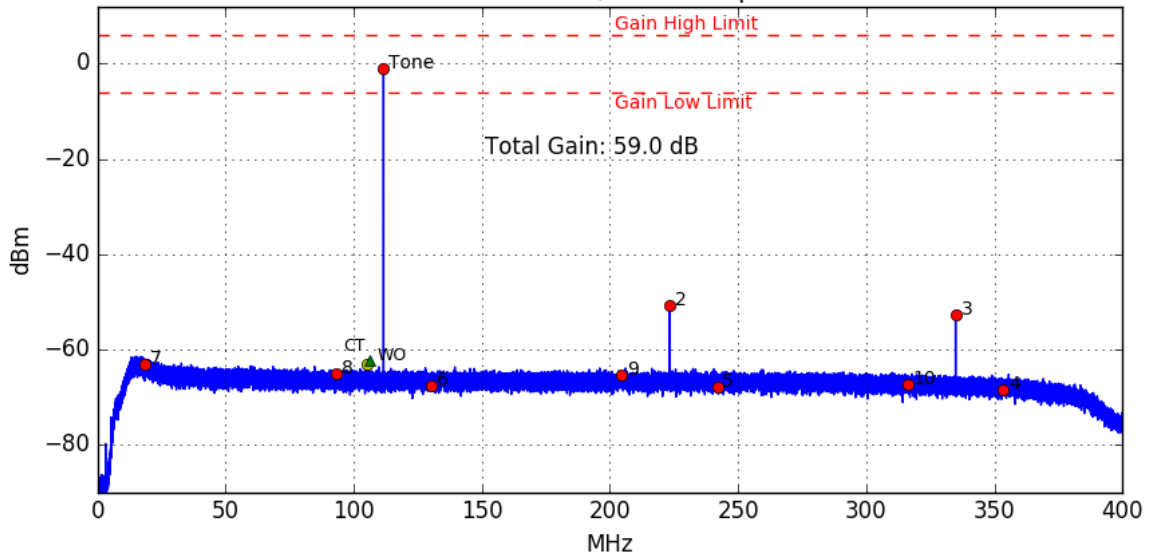
Board: #3 ADU Channel #13, TPM Input: Fiber #14 Pol-Y



Fundamental Tone: -1.1 dBm
 Second Harmonic: -48.8 dBm
 Third Harmonic: -57.0 dBm

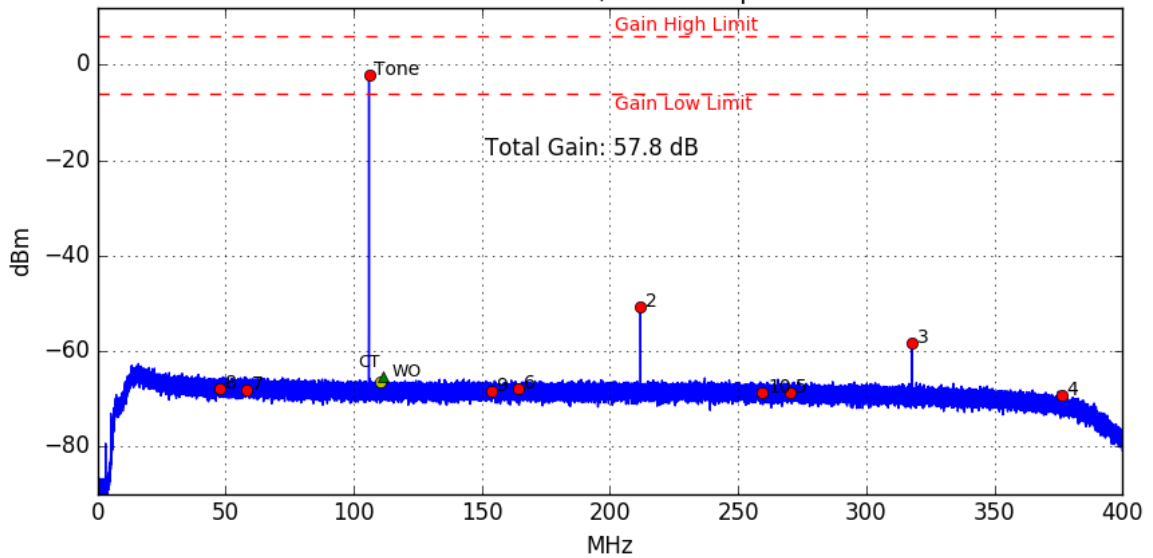
Tone Frequency: 105.950.928 Hz
 Worst Other: -63.6 dBm @ 53.650 MHz
 Cross Talk: 63.4 dBC @ 111.627 MHz

Board: #3 ADU Channel #14, TPM Input: Fiber #13 Pol-X



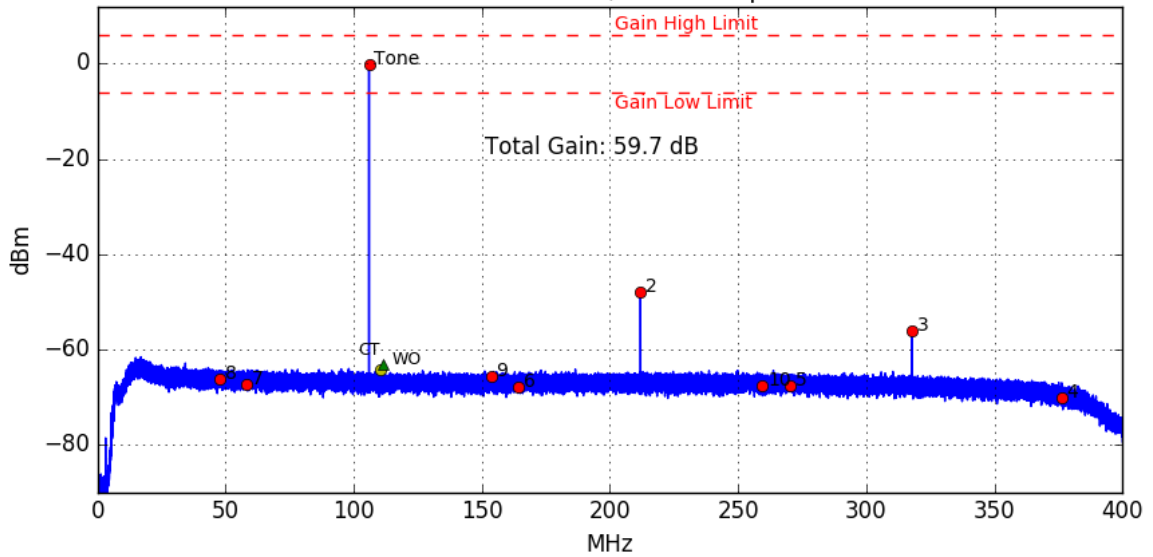
Fundamental Tone: -1.0 dBm Tone Frequency: 111.627.197 Hz
 Second Harmonic: -50.8 dBm Worst Other: -62.2 dBm @ 105.951 MHz
 Third Harmonic: -52.6 dBm Cross Talk: 61.2 dBC @ 105.951 MHz

Board: #3 ADU Channel #15, TPM Input: Fiber #13 Pol-Y



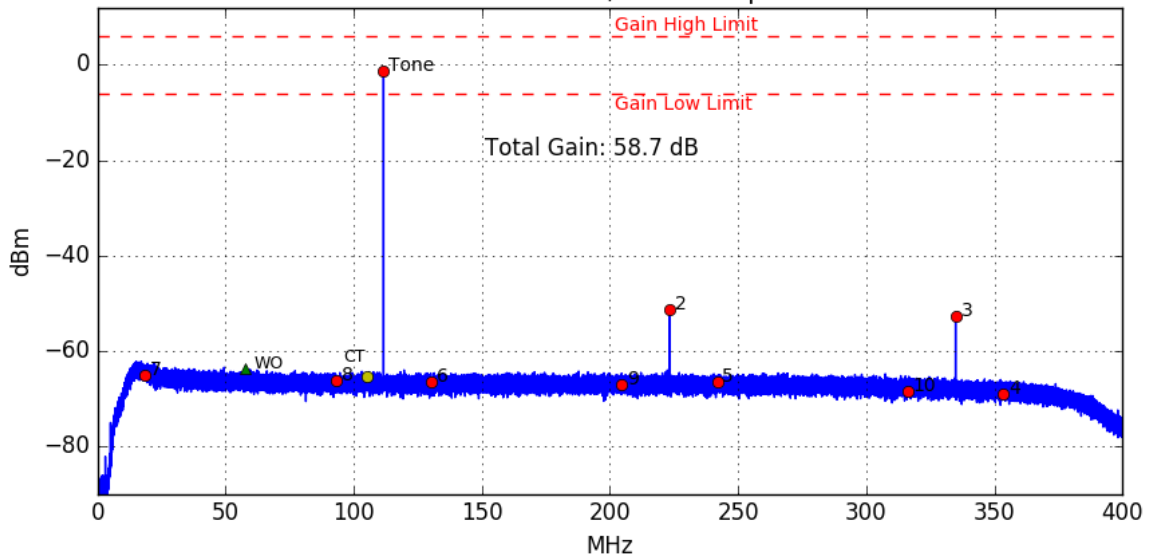
Fundamental Tone: -2.2 dBm Tone Frequency: 105.950.928 Hz
 Second Harmonic: -50.6 dBm Worst Other: -65.4 dBm @ 111.627 MHz
 Third Harmonic: -58.2 dBm Cross Talk: 63.2 dBC @ 111.627 MHz

Board: #3 ADU Channel #16, TPM Input: Fiber #5 Pol-Y



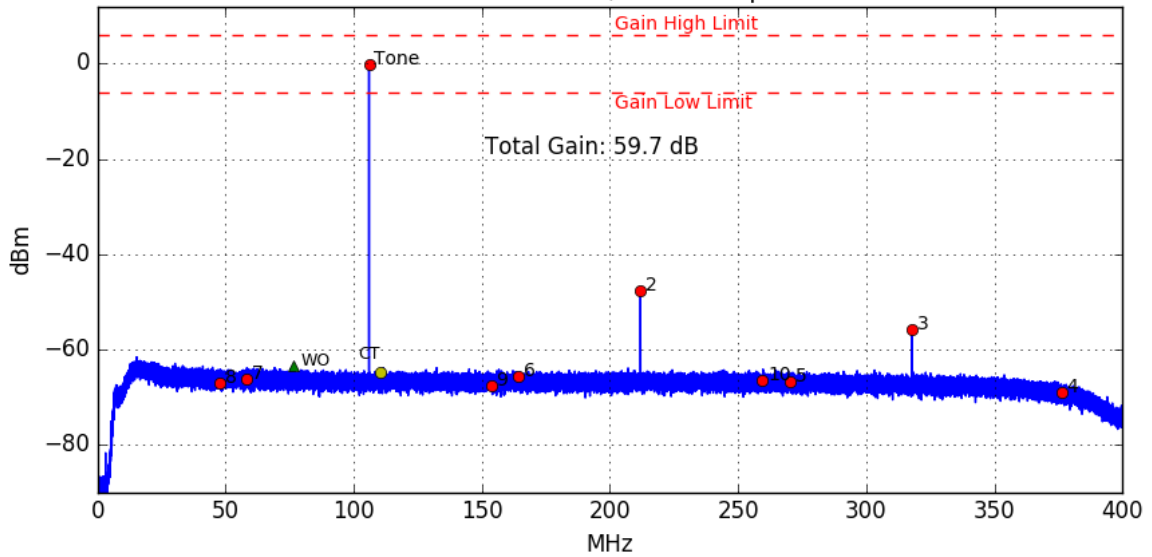
Fundamental Tone: -0.3 dBm Tone Frequency: 105.950.928 Hz
 Second Harmonic: -48.0 dBm Worst Other: -63.2 dBm @ 111.627 MHz
 Third Harmonic: -56.2 dBm Cross Talk: 62.9 dBC @ 111.627 MHz

Board: #3 ADU Channel #17, TPM Input: Fiber #5 Pol-X



Fundamental Tone: -1.3 dBm Tone Frequency: 111.627.197 Hz
 Second Harmonic: -51.4 dBm Worst Other: -63.7 dBm @ 57.849 MHz
 Third Harmonic: -52.9 dBm Cross Talk: 63.0 dBC @ 105.951 MHz

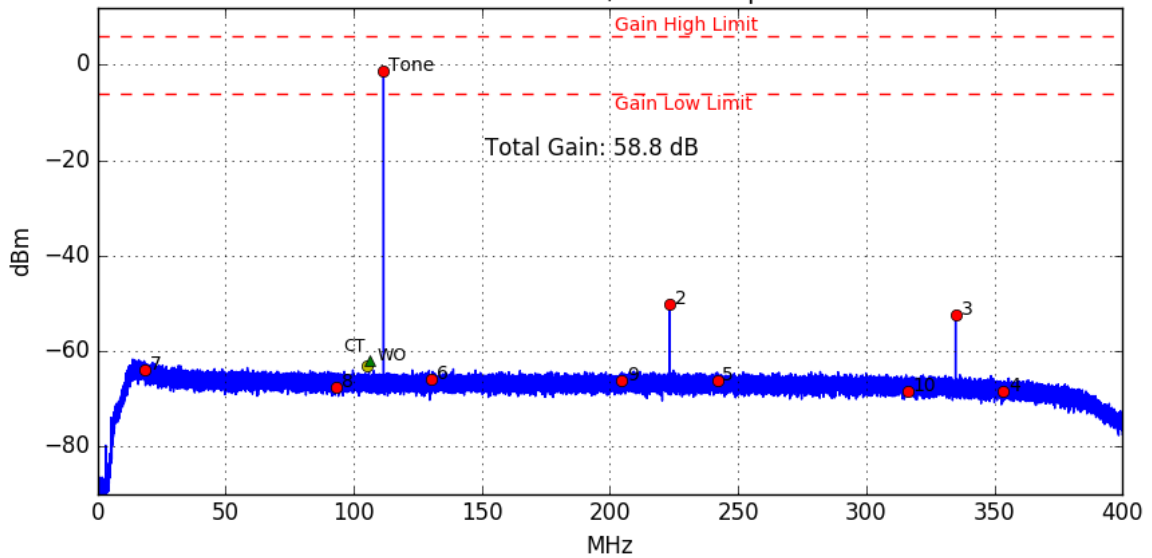
Board: #3 ADU Channel #18, TPM Input: Fiber #6 Pol-Y



Fundamental Tone: -0.3 dBm
 Second Harmonic: -47.7 dBm
 Third Harmonic: -55.7 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -63.5 dBm @ 76.202 MHz
 Cross Talk: 63.6 dBC @ 111.627 MHz

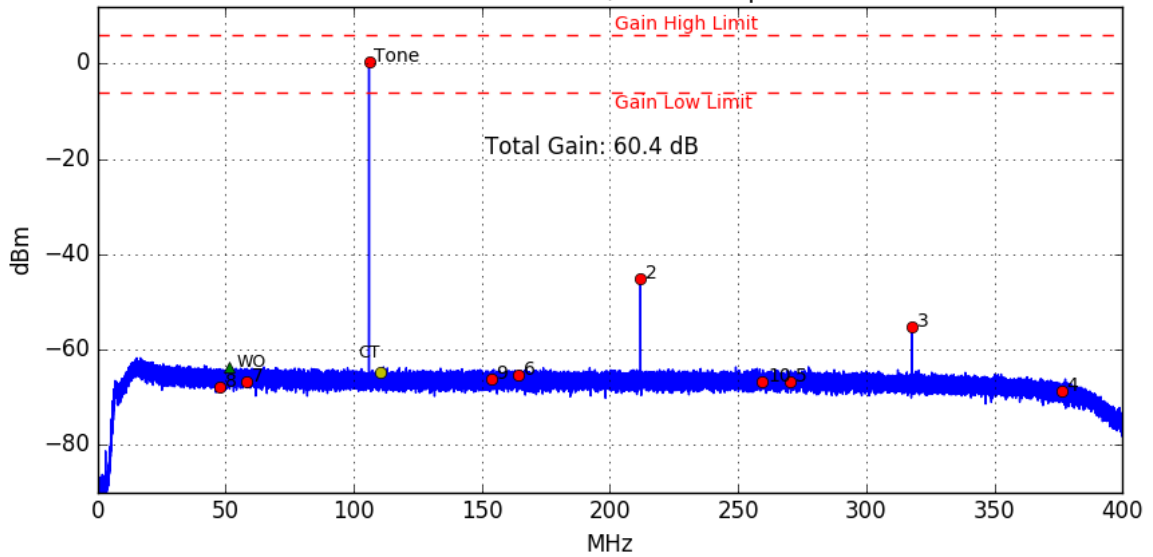
Board: #3 ADU Channel #19, TPM Input: Fiber #6 Pol-X



Fundamental Tone: -1.2 dBm
 Second Harmonic: -50.3 dBm
 Third Harmonic: -52.5 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -62.1 dBm @ 105.951 MHz
 Cross Talk: 61.0 dBC @ 105.951 MHz

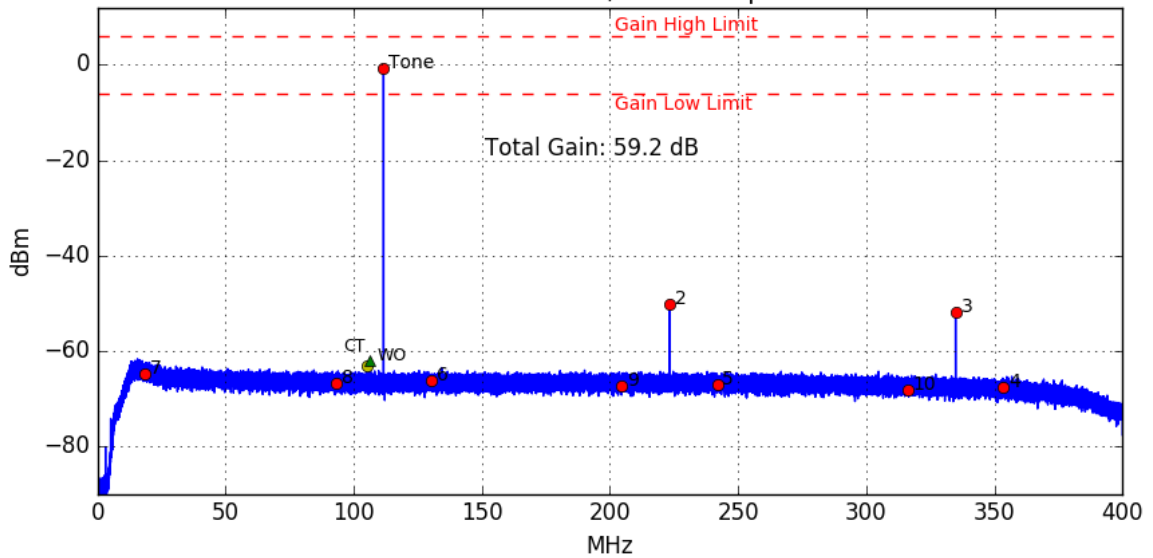
Board: #3 ADU Channel #20, TPM Input: Fiber #7 Pol-Y



Fundamental Tone: 0.4 dBm
 Second Harmonic: -45.1 dBm
 Third Harmonic: -55.3 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -63.6 dBm @ 51.331 MHz
 Cross Talk: 64.1 dBC @ 111.627 MHz

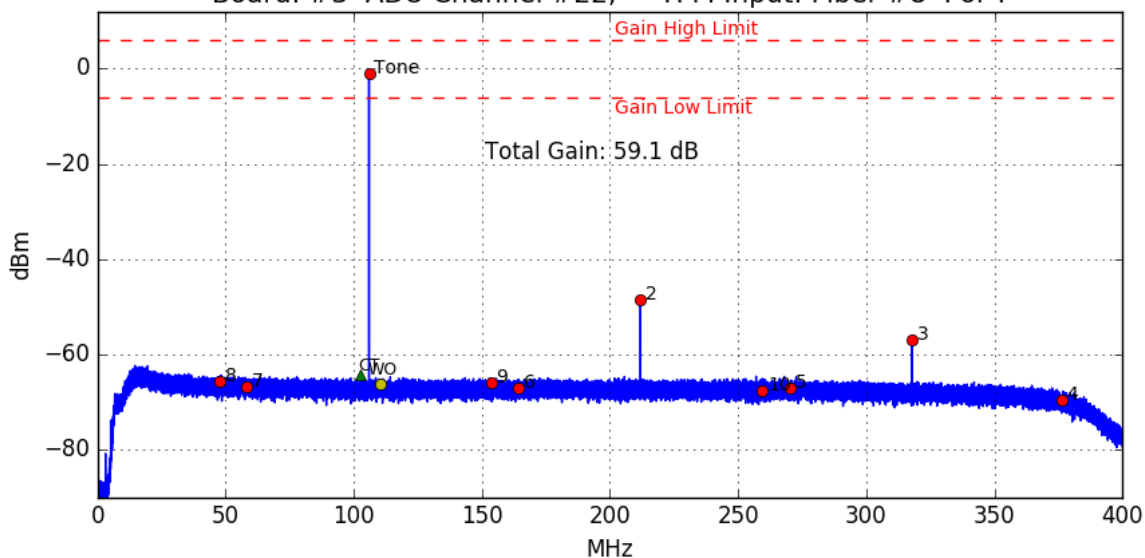
Board: #3 ADU Channel #21, TPM Input: Fiber #7 Pol-X



Fundamental Tone: -0.8 dBm
 Second Harmonic: -50.3 dBm
 Third Harmonic: -51.9 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -62.1 dBm @ 105.951 MHz
 Cross Talk: 61.4 dBC @ 105.951 MHz

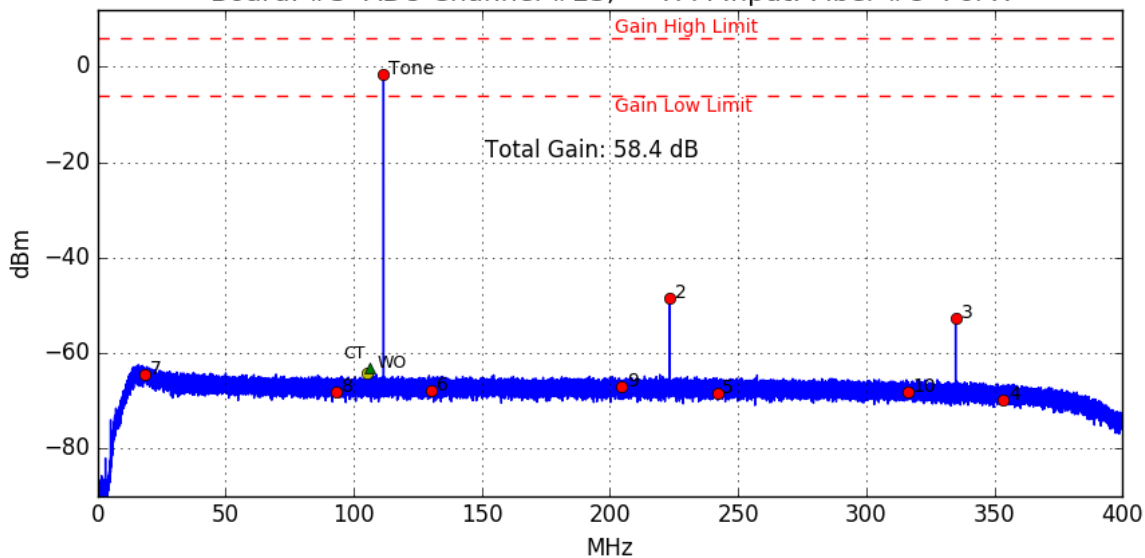
Board: #3 ADU Channel #22, TPM Input: Fiber #8 Pol-Y



Fundamental Tone: -0.9 dBm
 Second Harmonic: -48.4 dBm
 Third Harmonic: -56.9 dBm

Tone Frequency: 105.950928 Hz
 Worst Other: -64.3 dBm @ 102.332 MHz
 Cross Talk: 64.4 dBC @ 111.627 MHz

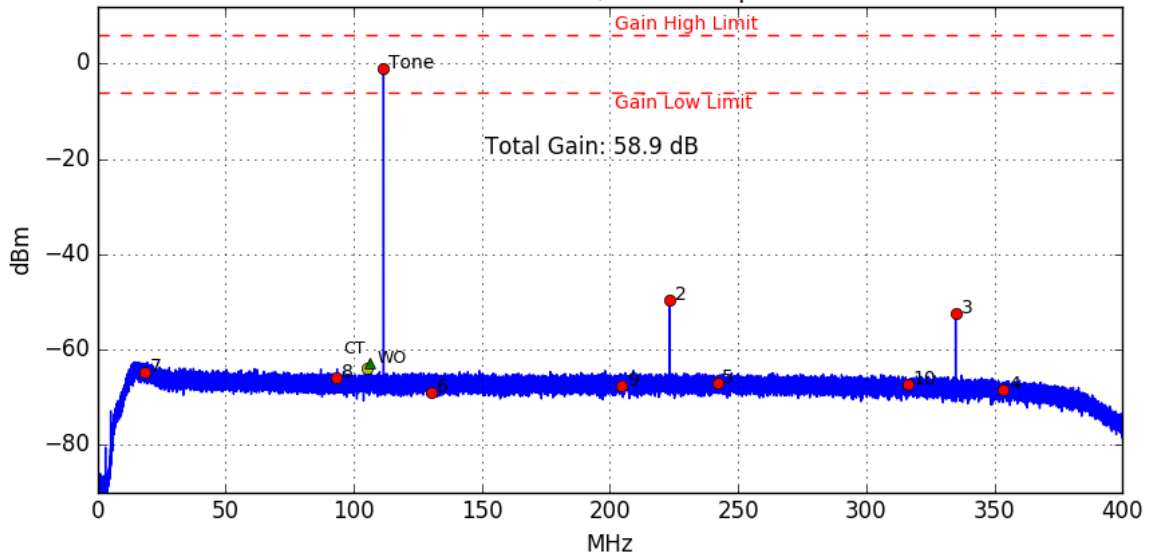
Board: #3 ADU Channel #23, TPM Input: Fiber #8 Pol-X



Fundamental Tone: -1.6 dBm
 Second Harmonic: -48.4 dBm
 Third Harmonic: -52.8 dBm

Tone Frequency: 111.627197 Hz
 Worst Other: -63.2 dBm @ 105.951 MHz
 Cross Talk: 61.6 dBC @ 105.951 MHz

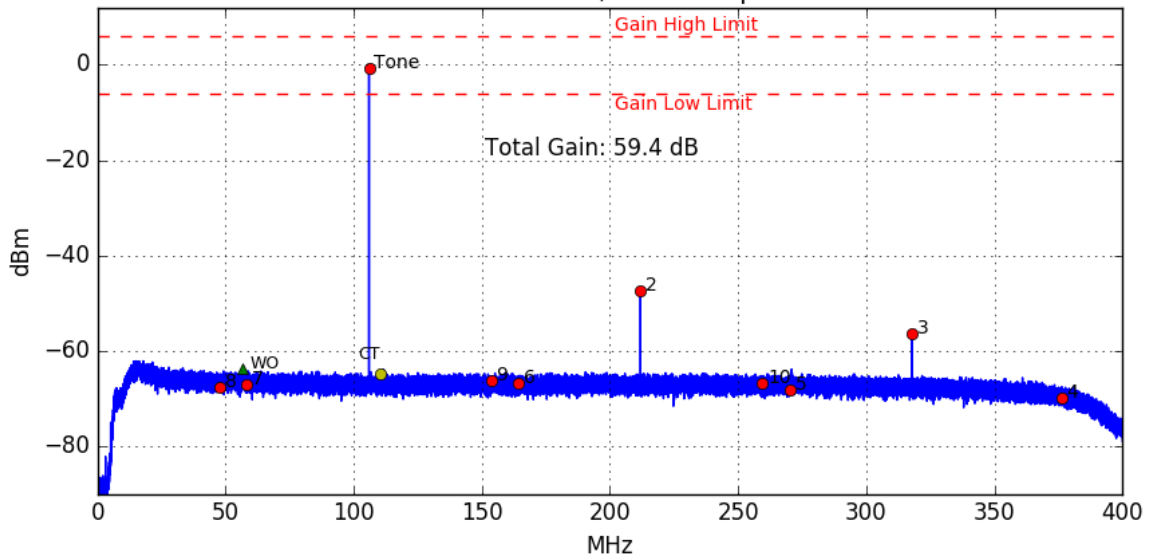
Board: #3 ADU Channel #24, TPM Input: Fiber #12 Pol-X



Fundamental Tone: -1.1 dBm
 Second Harmonic: -49.5 dBm
 Third Harmonic: -52.4 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -62.9 dBm @ 105.951 MHz
 Cross Talk: 61.8 dBC @ 105.951 MHz

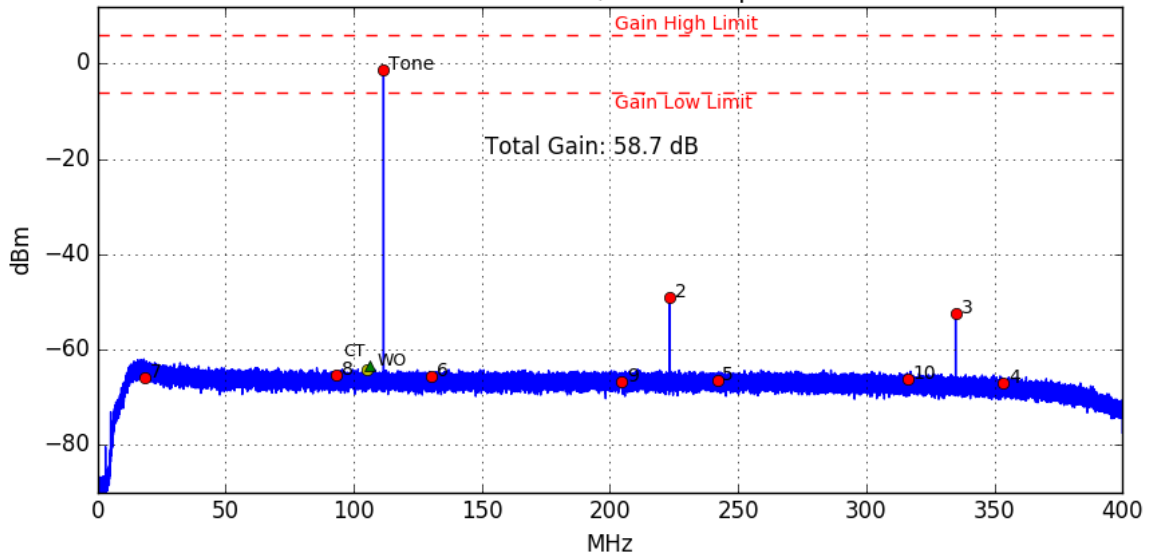
Board: #3 ADU Channel #25, TPM Input: Fiber #12 Pol-Y



Fundamental Tone: -0.6 dBm
 Second Harmonic: -47.4 dBm
 Third Harmonic: -56.3 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -63.7 dBm @ 56.738 MHz
 Cross Talk: 63.2 dBC @ 111.627 MHz

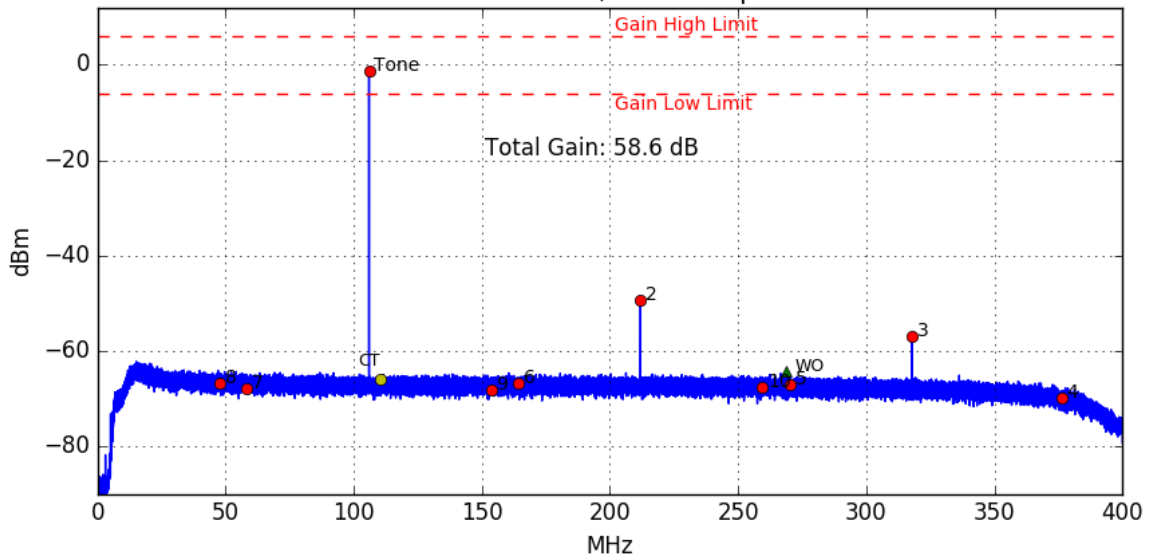
Board: #3 ADU Channel #26, TPM Input: Fiber #11 Pol-X



Fundamental Tone: -1.3 dBm
 Second Harmonic: -49.1 dBm
 Third Harmonic: -52.4 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -63.3 dBm @ 105.951 MHz
 Cross Talk: 62.0 dBC @ 105.951 MHz

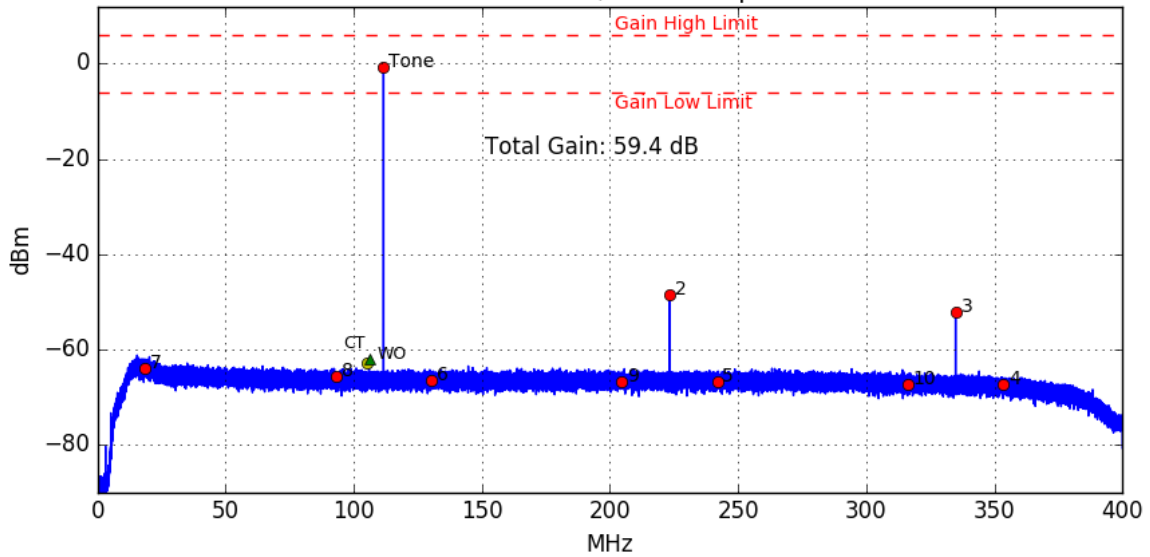
Board: #3 ADU Channel #27, TPM Input: Fiber #11 Pol-Y



Fundamental Tone: -1.4 dBm
 Second Harmonic: -49.4 dBm
 Third Harmonic: -56.9 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -64.3 dBm @ 268.945 MHz
 Cross Talk: 63.5 dBC @ 111.627 MHz

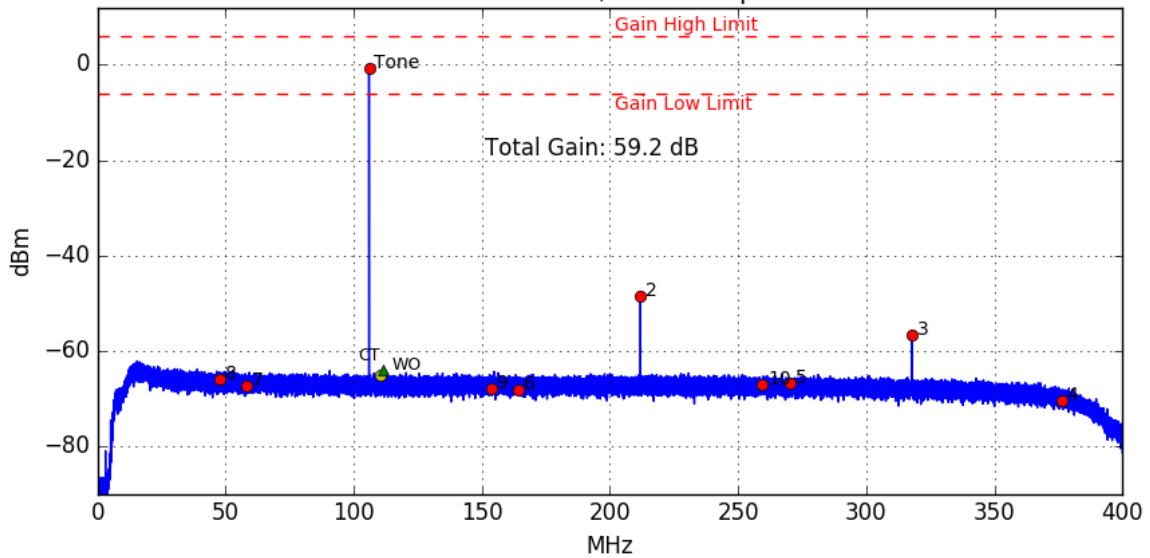
Board: #3 ADU Channel #28, TPM Input: Fiber #10 Pol-X



Fundamental Tone: -0.6 dBm
 Second Harmonic: -48.5 dBm
 Third Harmonic: -52.1 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -61.9 dBm @ 105.951 MHz
 Cross Talk: 61.3 dBC @ 105.951 MHz

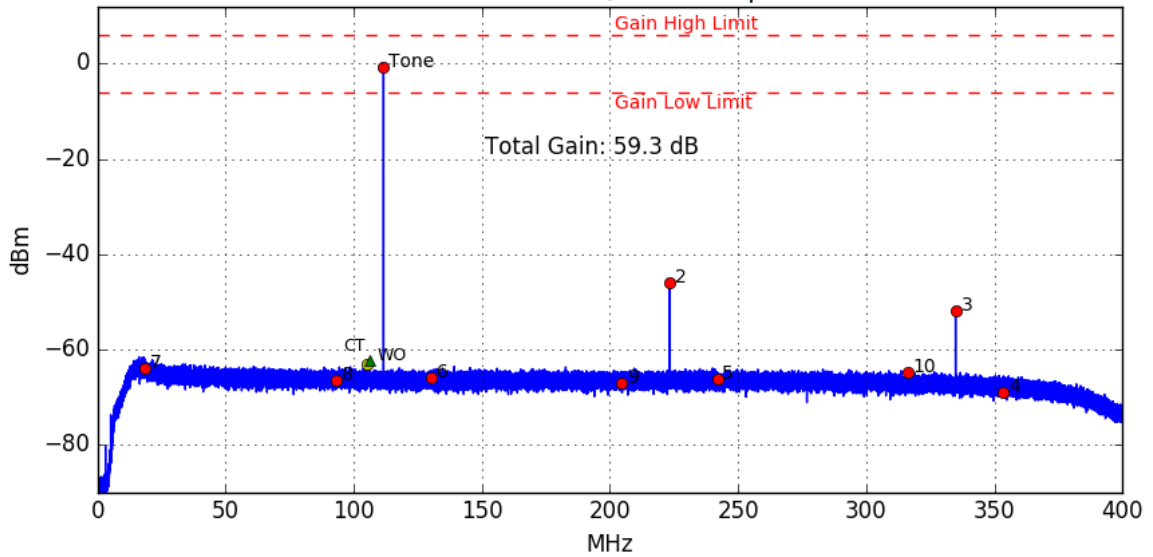
Board: #3 ADU Channel #29, TPM Input: Fiber #10 Pol-Y



Fundamental Tone: -0.8 dBm
 Second Harmonic: -48.5 dBm
 Third Harmonic: -56.8 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -64.1 dBm @ 111.627 MHz
 Cross Talk: 63.3 dBC @ 111.627 MHz

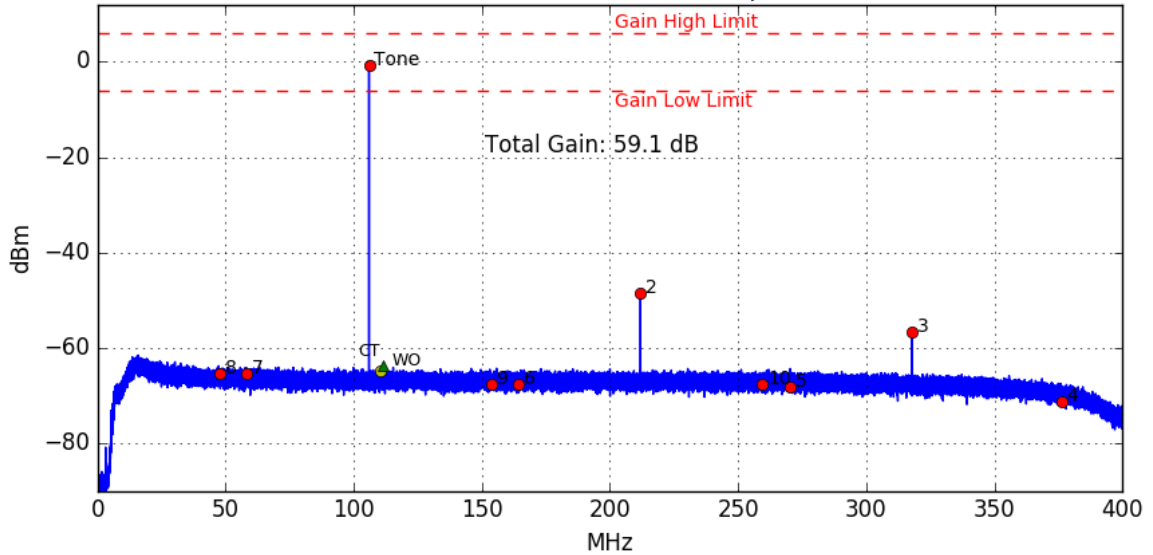
Board: #3 ADU Channel #30, TPM Input: Fiber #9 Pol-X



Fundamental Tone: -0.7 dBm
 Second Harmonic: -46.0 dBm
 Third Harmonic: -51.8 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -62.2 dBm @ 105.951 MHz
 Cross Talk: 61.5 dBC @ 105.951 MHz

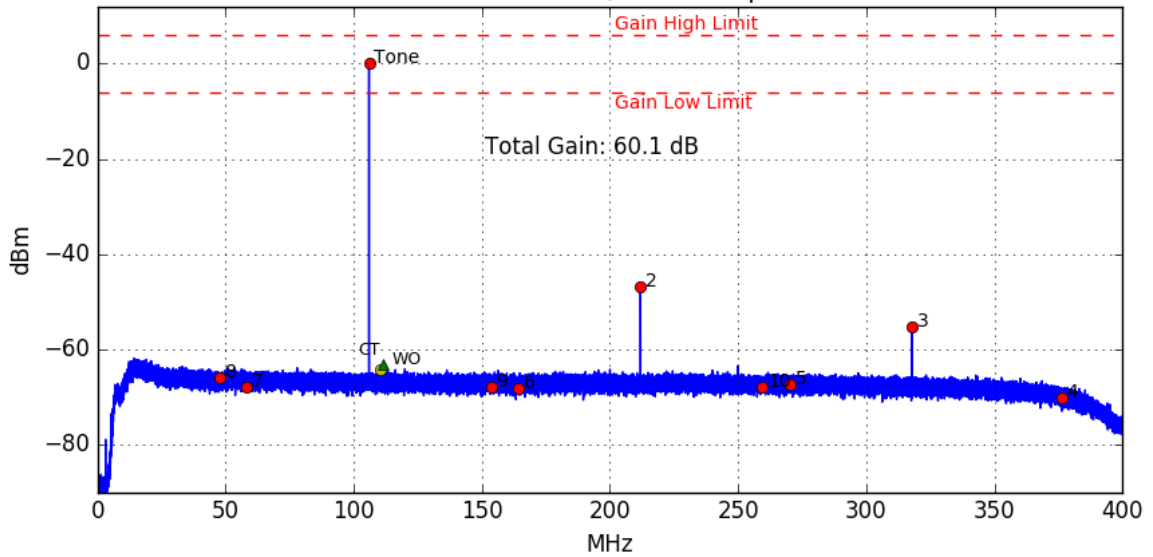
Board: #3 ADU Channel #31, TPM Input: Fiber #9 Pol-Y



Fundamental Tone: -0.9 dBm
 Second Harmonic: -48.4 dBm
 Third Harmonic: -56.6 dBm

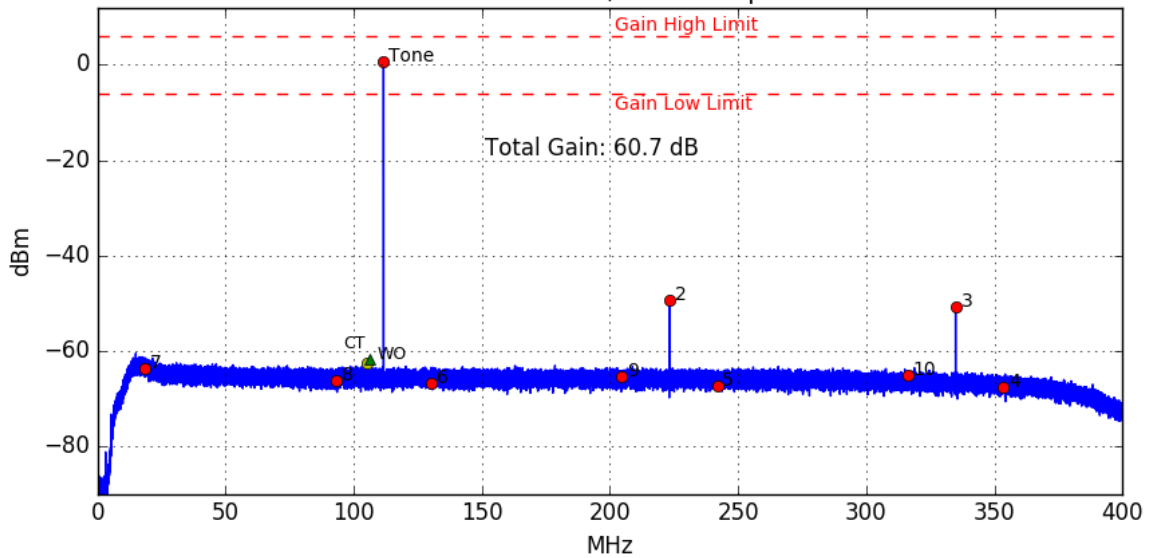
Tone Frequency: 105.950.928 Hz
 Worst Other: -63.7 dBm @ 111.627 MHz
 Cross Talk: 62.8 dBC @ 111.627 MHz

Board: #4 ADU Channel #00, TPM Input: Fiber #1 Pol-Y



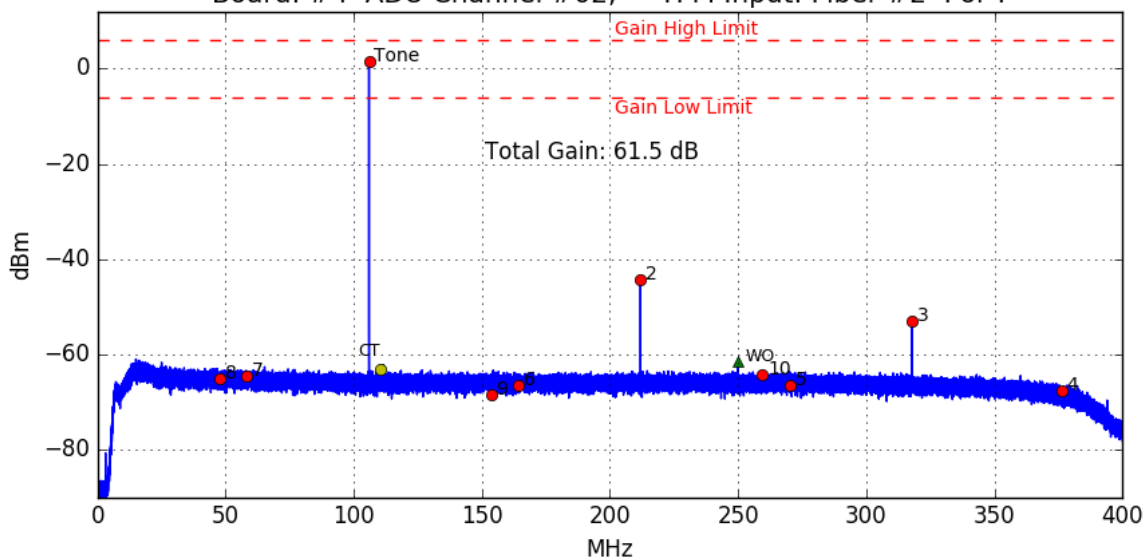
Fundamental Tone: 0.1 dBm Tone Frequency: 105.950928 Hz
 Second Harmonic: -46.8 dBm Worst Other: -63.2 dBm @ 111.627 MHz
 Third Harmonic: -55.2 dBm Cross Talk: 63.4 dBC @ 111.627 MHz

Board: #4 ADU Channel #01, TPM Input: Fiber #1 Pol-X



Fundamental Tone: 0.7 dBm Tone Frequency: 111.627197 Hz
 Second Harmonic: -49.4 dBm Worst Other: -61.6 dBm @ 105.951 MHz
 Third Harmonic: -50.8 dBm Cross Talk: 62.3 dBC @ 105.951 MHz

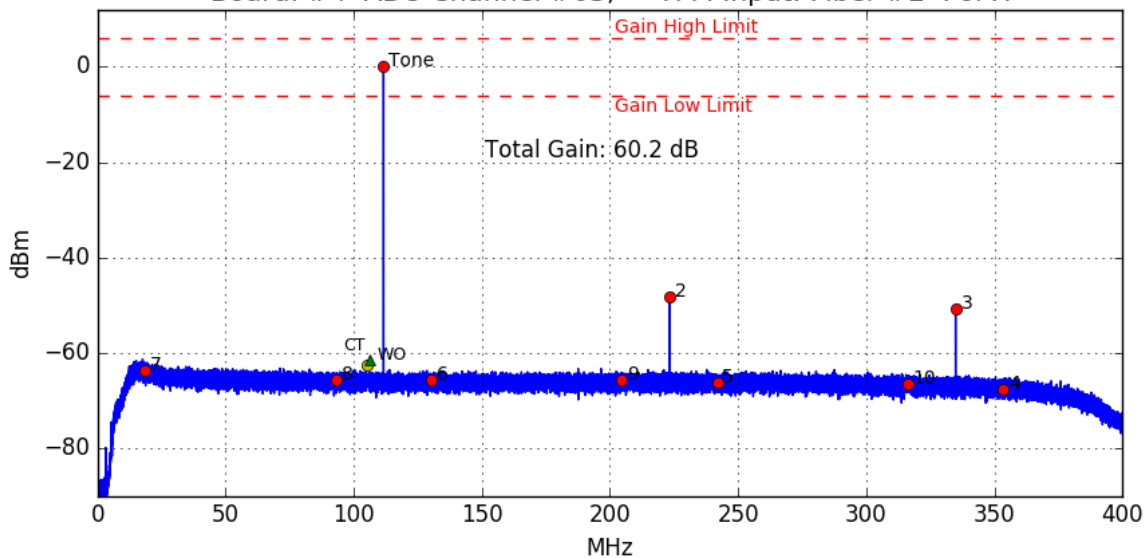
Board: #4 ADU Channel #02, TPM Input: Fiber #2 Pol-Y



Fundamental Tone: 1.5 dBm
Second Harmonic: -44.3 dBm
Third Harmonic: -52.9 dBm

Tone Frequency: 105.950928 Hz
Worst Other: -61.4 dBm @ 249.988 MHz
Cross Talk: 63.8 dBC @ 111.627 MHz

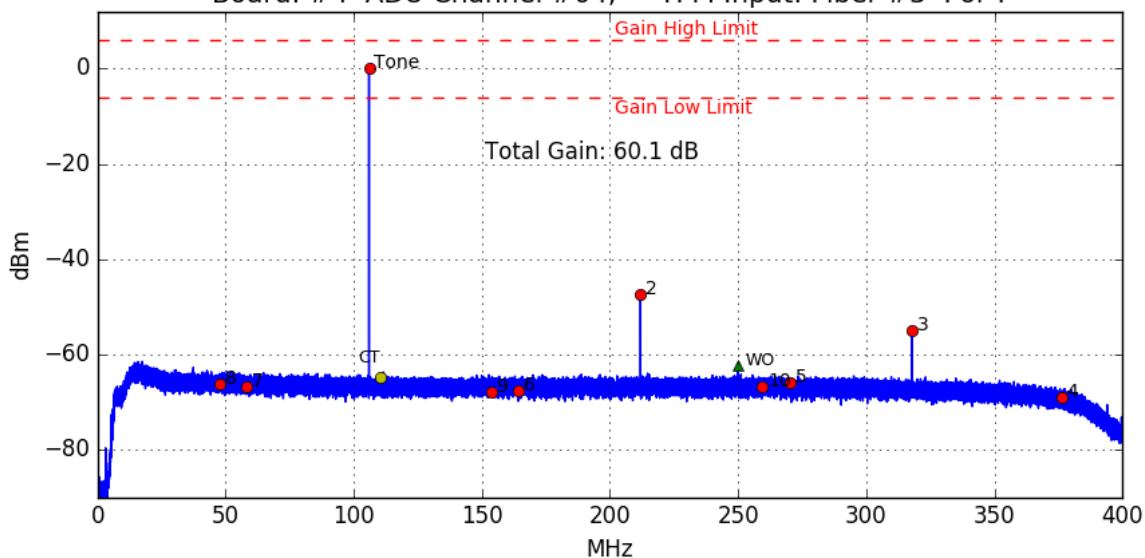
Board: #4 ADU Channel #03, TPM Input: Fiber #2 Pol-X



Fundamental Tone: 0.2 dBm
Second Harmonic: -48.2 dBm
Third Harmonic: -50.8 dBm

Tone Frequency: 111.627197 Hz
Worst Other: -61.4 dBm @ 105.951 MHz
Cross Talk: 61.6 dBC @ 105.951 MHz

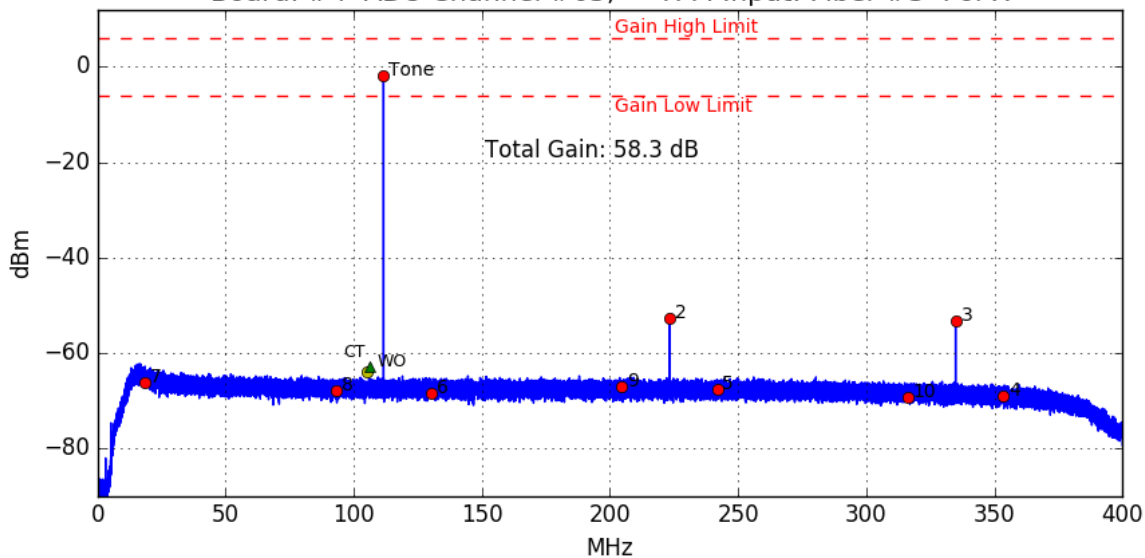
Board: #4 ADU Channel #04, TPM Input: Fiber #3 Pol-Y



Fundamental Tone: 0.1 dBm
 Second Harmonic: -47.3 dBm
 Third Harmonic: -55.1 dBm

Tone Frequency: 105.950928 Hz
 Worst Other: -62.2 dBm @ 249.988 MHz
 Cross Talk: 63.8 dBC @ 111.627 MHz

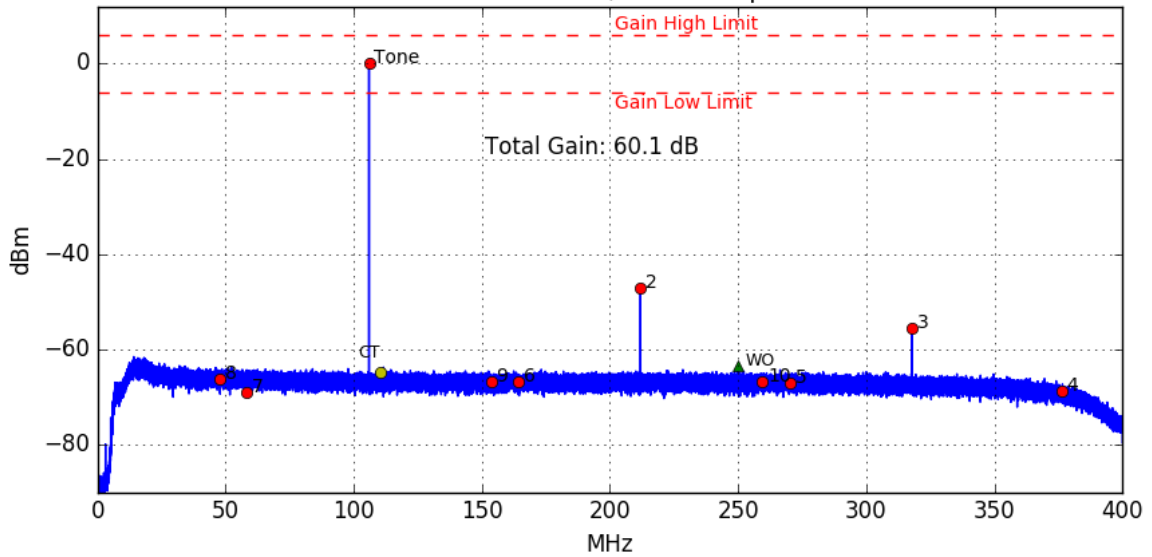
Board: #4 ADU Channel #05, TPM Input: Fiber #3 Pol-X



Fundamental Tone: -1.7 dBm
 Second Harmonic: -52.6 dBm
 Third Harmonic: -53.3 dBm

Tone Frequency: 111.627197 Hz
 Worst Other: -62.9 dBm @ 105.951 MHz
 Cross Talk: 61.2 dBC @ 105.951 MHz

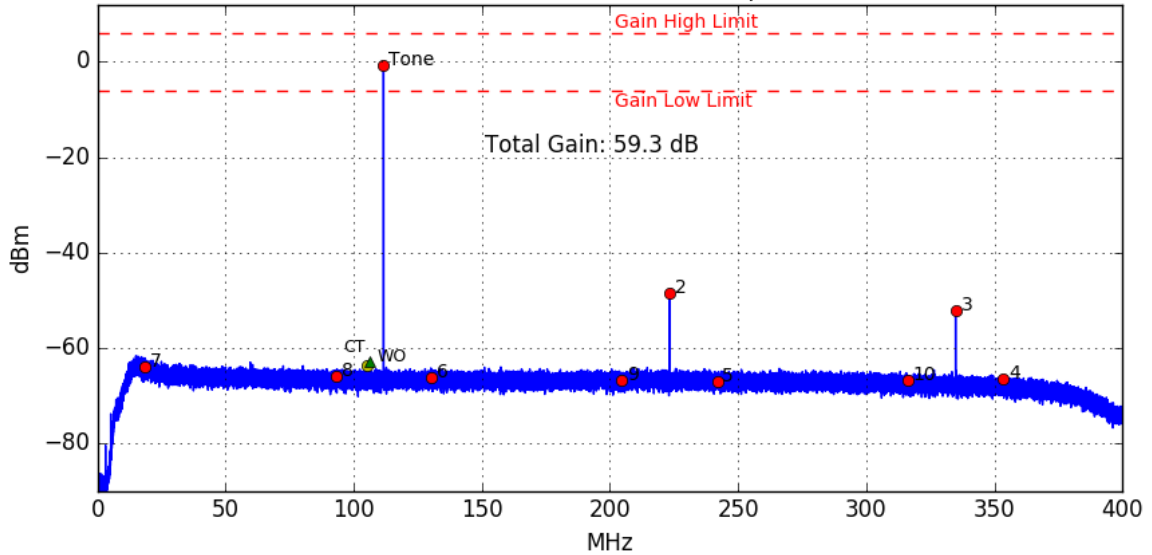
Board: #4 ADU Channel #06, TPM Input: Fiber #4 Pol-Y



Fundamental Tone: 0.1 dBm
 Second Harmonic: -47.0 dBm
 Third Harmonic: -55.5 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -63.4 dBm @ 249.988 MHz
 Cross Talk: 63.8 dBC @ 111.627 MHz

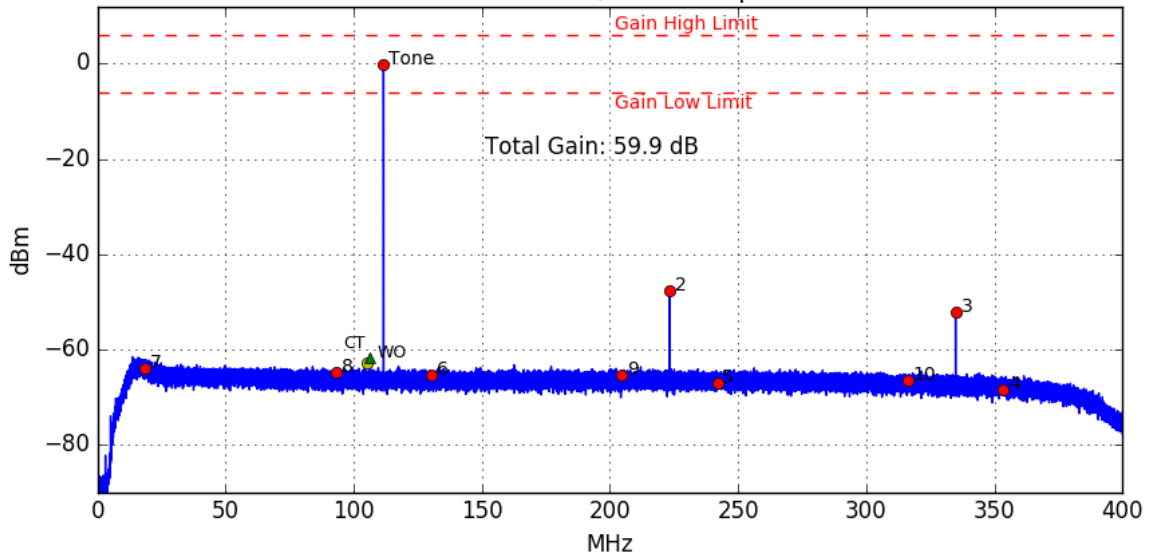
Board: #4 ADU Channel #07, TPM Input: Fiber #4 Pol-X



Fundamental Tone: -0.7 dBm
 Second Harmonic: -48.5 dBm
 Third Harmonic: -52.2 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -62.8 dBm @ 105.951 MHz
 Cross Talk: 62.1 dBC @ 105.951 MHz

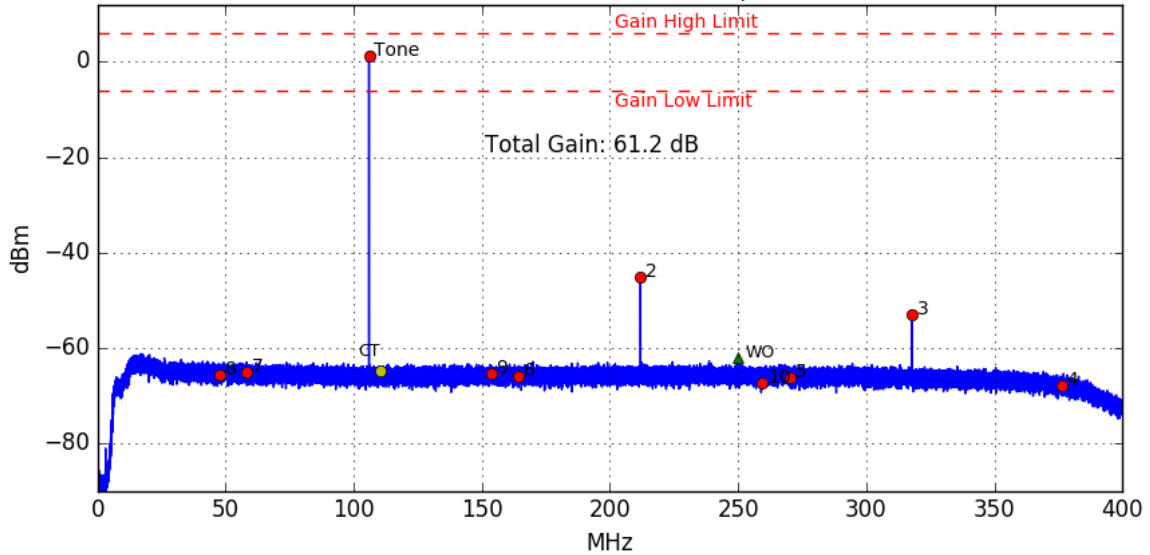
Board: #4 ADU Channel #08, TPM Input: Fiber #16 Pol-X



Fundamental Tone: -0.1 dBm
 Second Harmonic: -47.6 dBm
 Third Harmonic: -52.0 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -61.7 dBm @ 105.951 MHz
 Cross Talk: 61.6 dBC @ 105.951 MHz

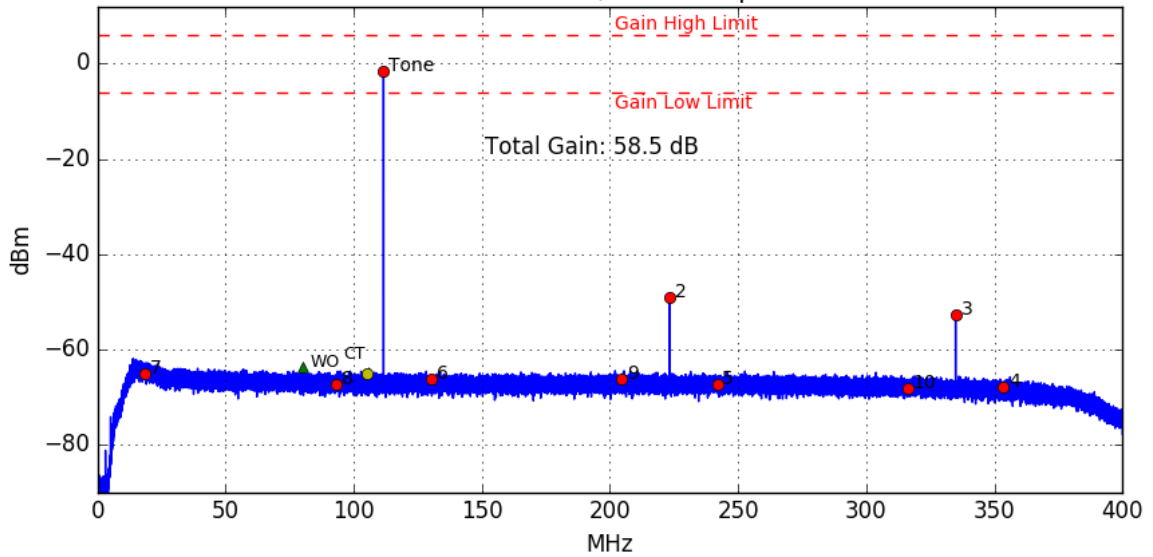
Board: #4 ADU Channel #09, TPM Input: Fiber #16 Pol-Y



Fundamental Tone: 1.2 dBm
 Second Harmonic: -45.0 dBm
 Third Harmonic: -53.1 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -62.1 dBm @ 249.994 MHz
 Cross Talk: 65.1 dBC @ 111.609 MHz

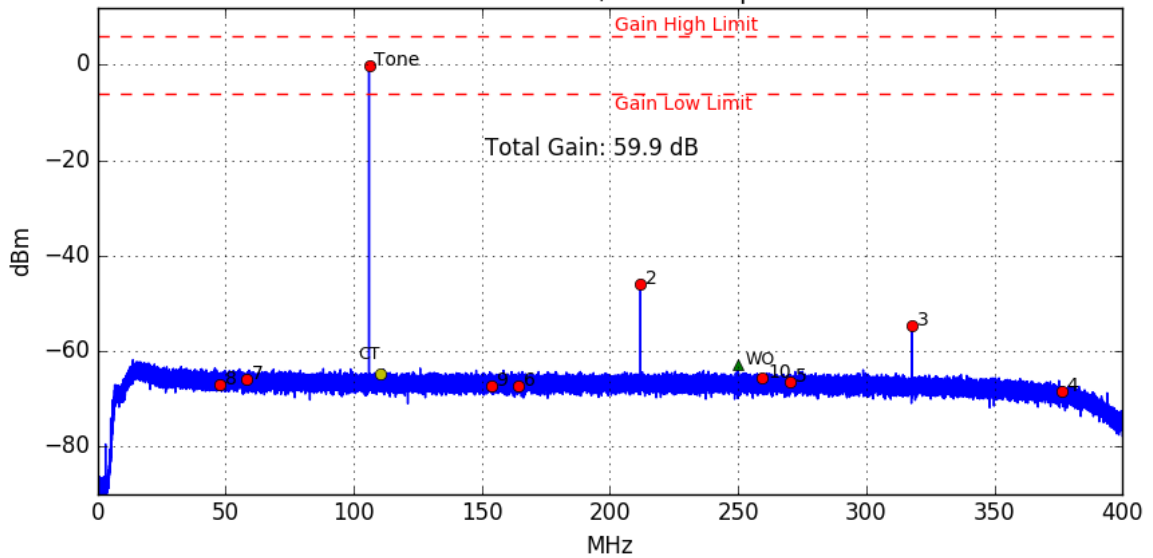
Board: #4 ADU Channel #10, TPM Input: Fiber #15 Pol-X



Fundamental Tone: -1.5 dBm
Second Harmonic: -49.1 dBm
Third Harmonic: -52.6 dBm

Tone Frequency: 111.627.197 Hz
Worst Other: -63.6 dBm @ 79.858 MHz
Cross Talk: 62.5 dBC @ 105.951 MHz

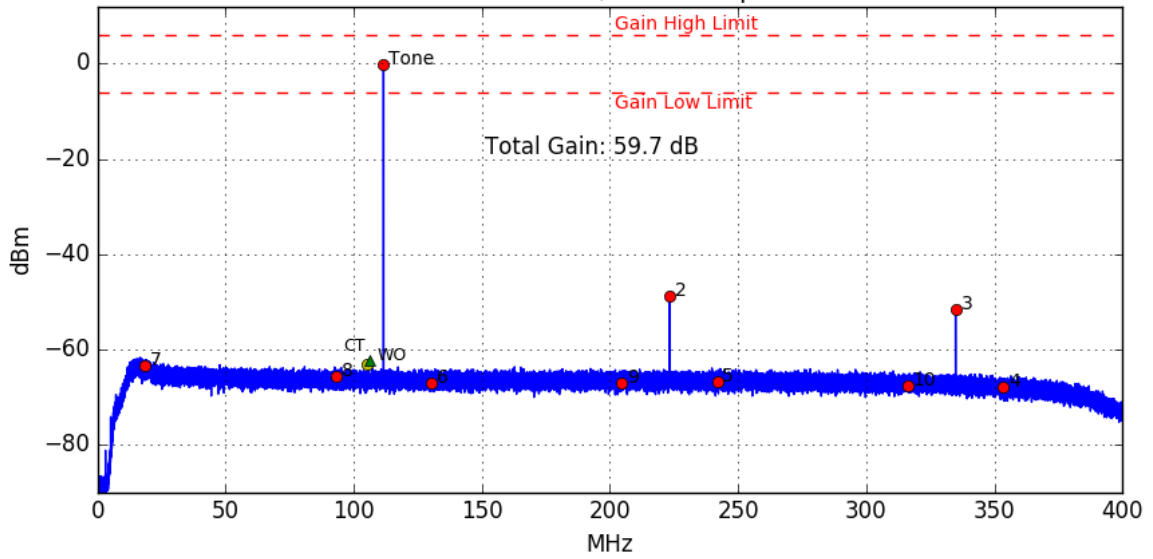
Board: #4 ADU Channel #11, TPM Input: Fiber #15 Pol-Y



Fundamental Tone: -0.1 dBm
Second Harmonic: -46.1 dBm
Third Harmonic: -54.8 dBm

Tone Frequency: 105.950.928 Hz
Worst Other: -62.8 dBm @ 249.988 MHz
Cross Talk: 63.7 dBC @ 111.627 MHz

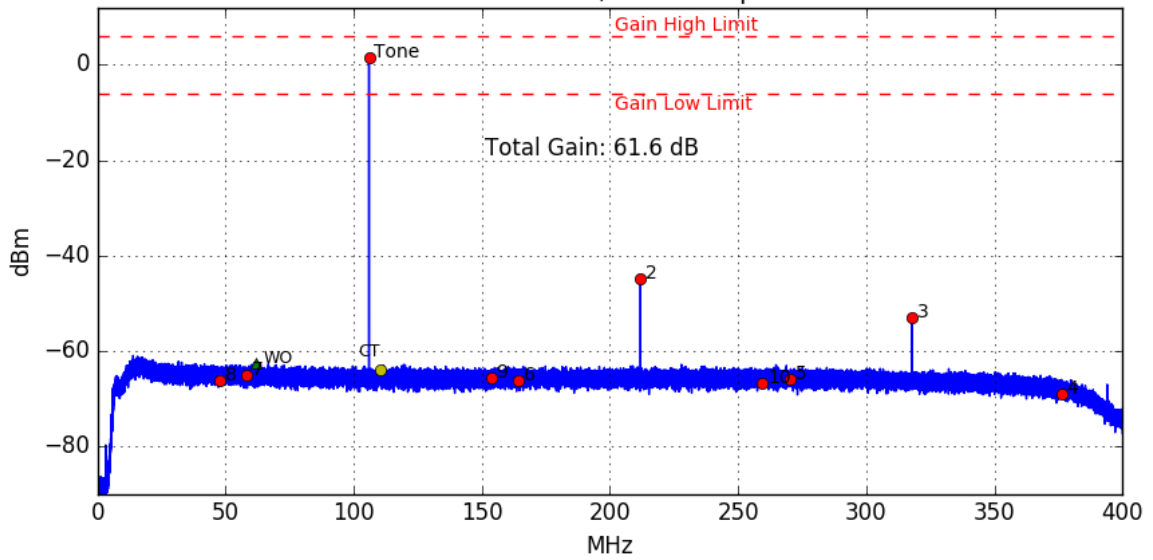
Board: #4 ADU Channel #12, TPM Input: Fiber #14 Pol-X



Fundamental Tone: -0.3 dBm
 Second Harmonic: -48.7 dBm
 Third Harmonic: -51.5 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -62.3 dBm @ 105.951 MHz
 Cross Talk: 62.0 dBC @ 105.951 MHz

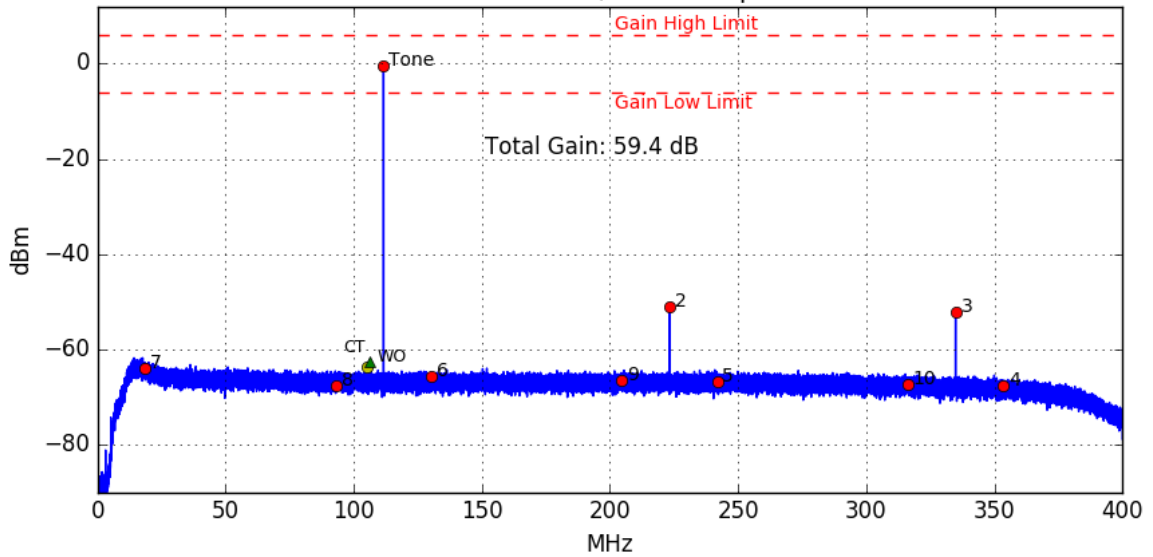
Board: #4 ADU Channel #13, TPM Input: Fiber #14 Pol-Y



Fundamental Tone: 1.6 dBm
 Second Harmonic: -44.8 dBm
 Third Harmonic: -53.0 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -62.6 dBm @ 61.786 MHz
 Cross Talk: 64.7 dBC @ 111.627 MHz

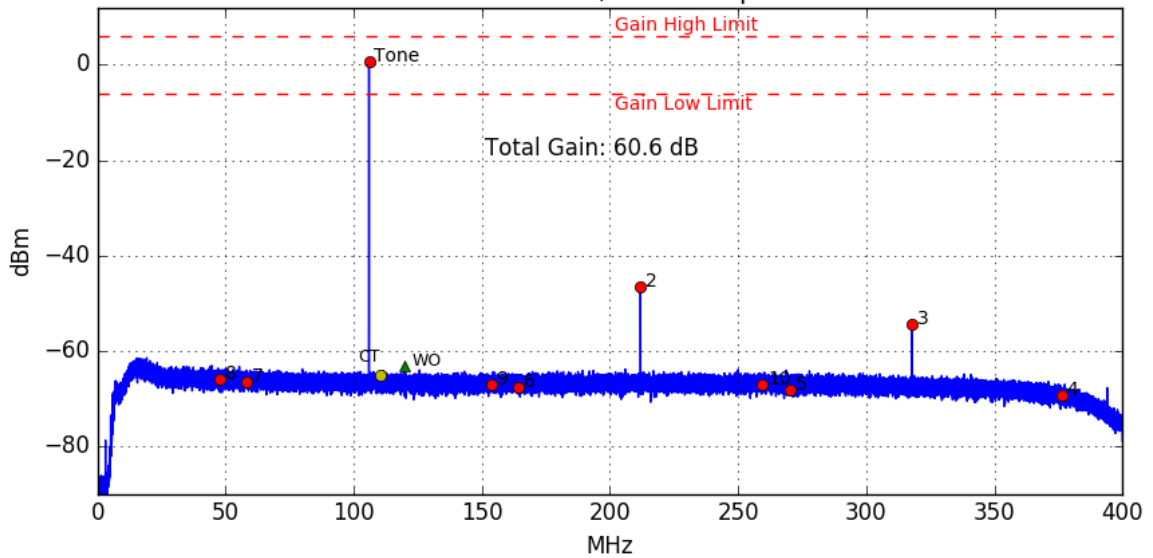
Board: #4 ADU Channel #14, TPM Input: Fiber #13 Pol-X



Fundamental Tone: -0.6 dBm
 Second Harmonic: -51.1 dBm
 Third Harmonic: -52.1 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -62.6 dBm @ 105.951 MHz
 Cross Talk: 62.0 dBC @ 105.951 MHz

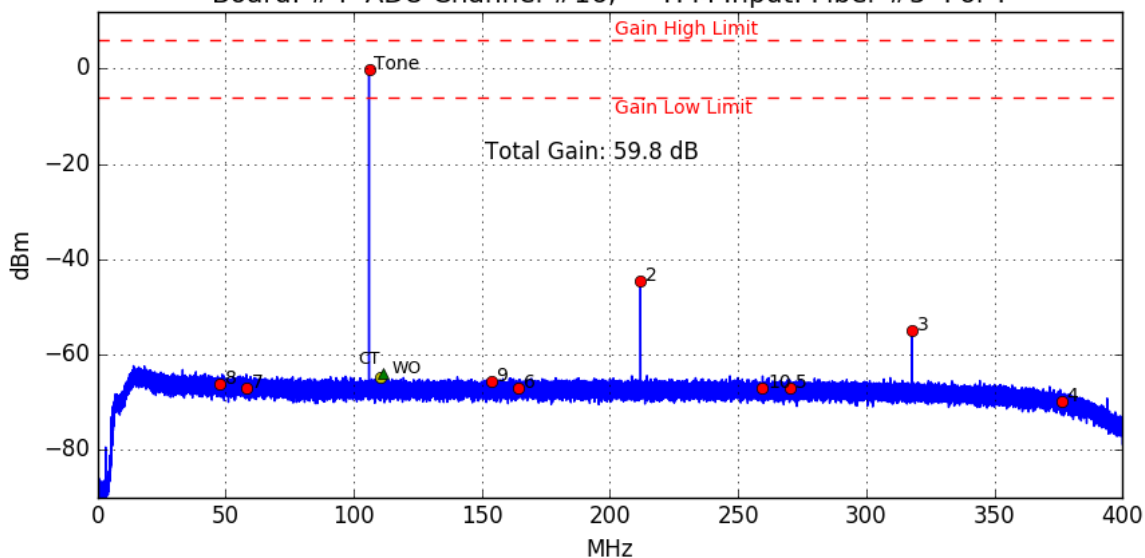
Board: #4 ADU Channel #15, TPM Input: Fiber #13 Pol-Y



Fundamental Tone: 0.6 dBm
 Second Harmonic: -46.5 dBm
 Third Harmonic: -54.5 dBm

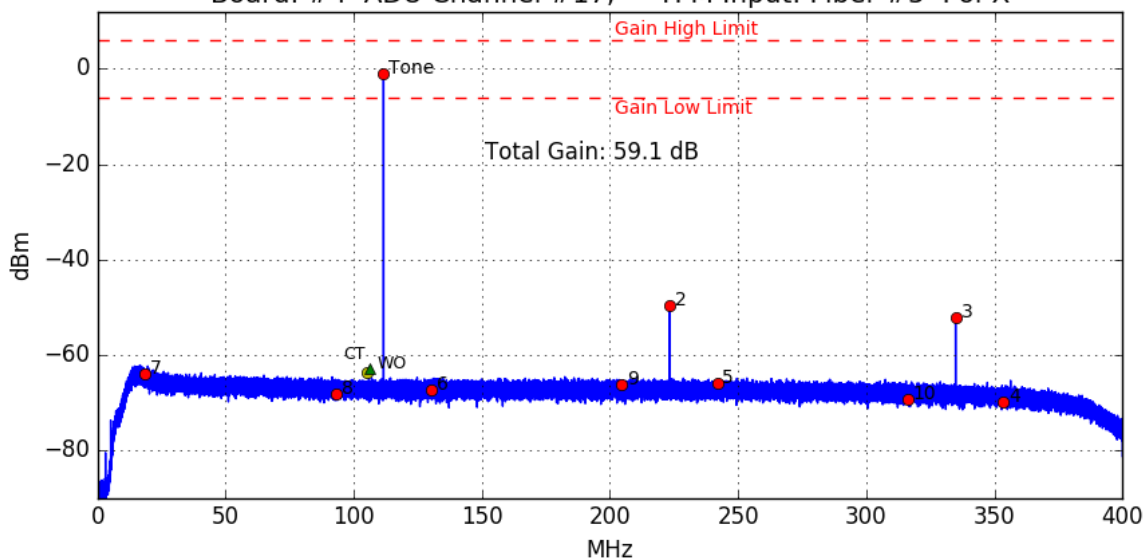
Tone Frequency: 105.950.928 Hz
 Worst Other: -63.2 dBm @ 119.806 MHz
 Cross Talk: 64.8 dBC @ 111.627 MHz

Board: #4 ADU Channel #16, TPM Input: Fiber #5 Pol-Y



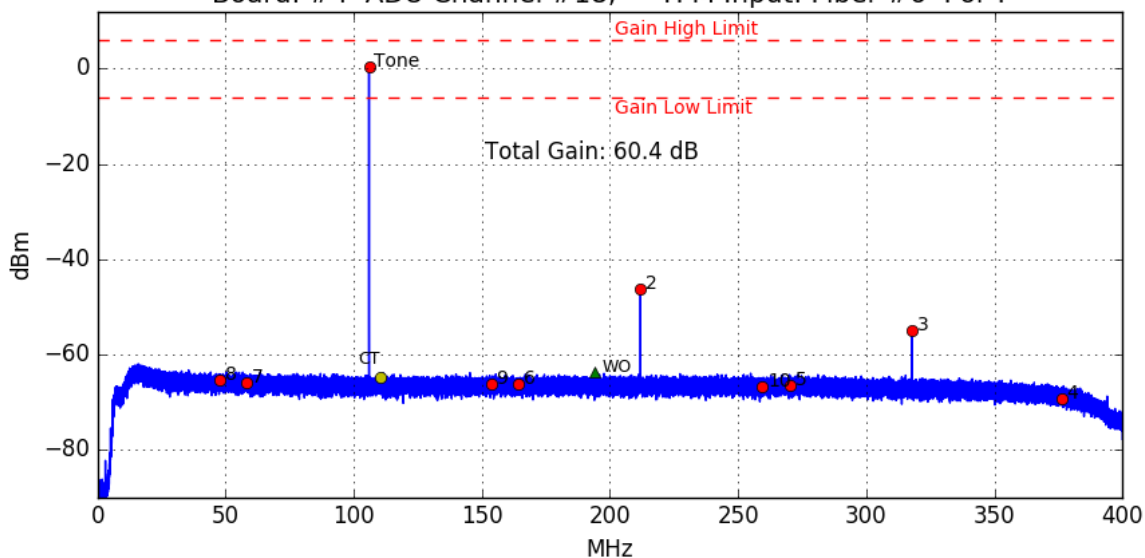
Fundamental Tone: -0.2 dBm	Tone Frequency: 105.950.928 Hz
Second Harmonic: -44.6 dBm	Worst Other: -63.9 dBm @ 111.627 MHz
Third Harmonic: -54.9 dBm	Cross Talk: 63.7 dBC @ 111.627 MHz

Board: #4 ADU Channel #17, TPM Input: Fiber #5 Pol-X



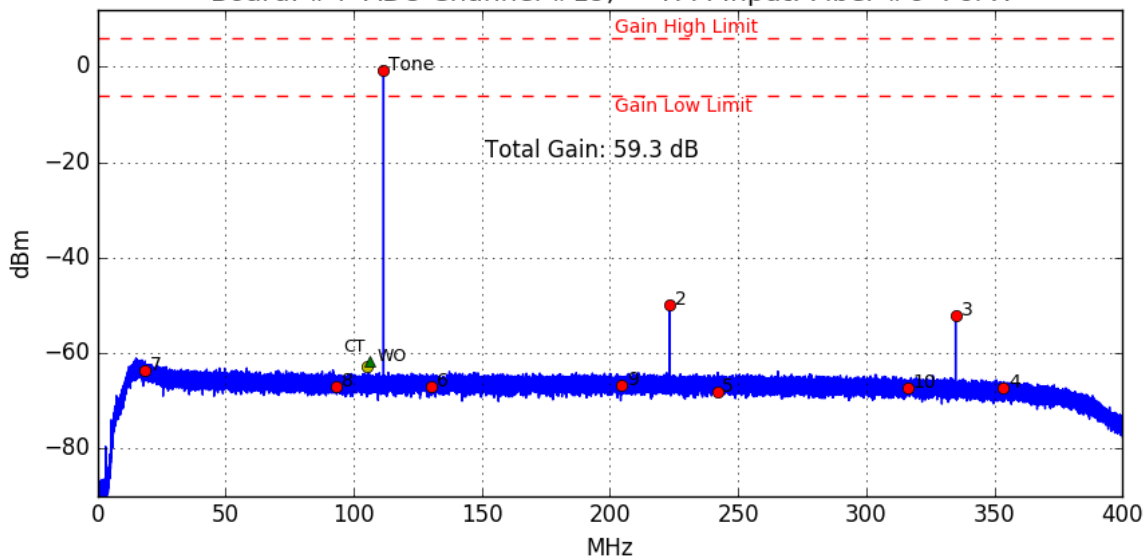
Fundamental Tone: -0.9 dBm	Tone Frequency: 111.627.197 Hz
Second Harmonic: -49.7 dBm	Worst Other: -62.8 dBm @ 105.951 MHz
Third Harmonic: -52.2 dBm	Cross Talk: 61.9 dBC @ 105.951 MHz

Board: #4 ADU Channel #18, TPM Input: Fiber #6 Pol-Y



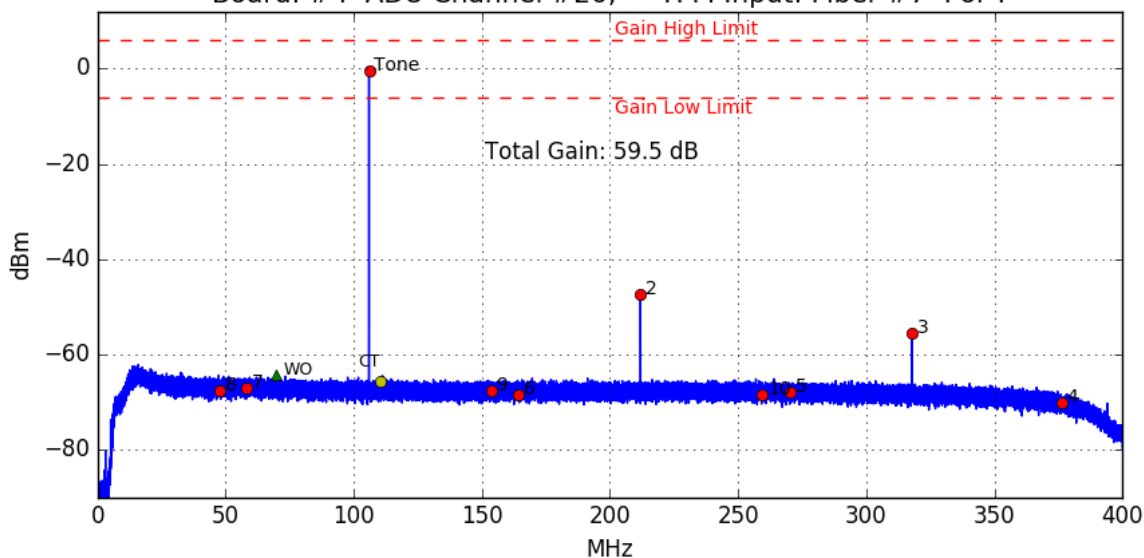
Fundamental Tone: 0.4 dBm Tone Frequency: 105.950.928 Hz
 Second Harmonic: -46.2 dBm Worst Other: -63.5 dBm @ 194.049 MHz
 Third Harmonic: -55.0 dBm Cross Talk: 64.4 dBC @ 111.627 MHz

Board: #4 ADU Channel #19, TPM Input: Fiber #6 Pol-X



Fundamental Tone: -0.7 dBm Tone Frequency: 111.627.197 Hz
 Second Harmonic: -49.9 dBm Worst Other: -61.7 dBm @ 105.951 MHz
 Third Harmonic: -52.1 dBm Cross Talk: 61.1 dBC @ 105.951 MHz

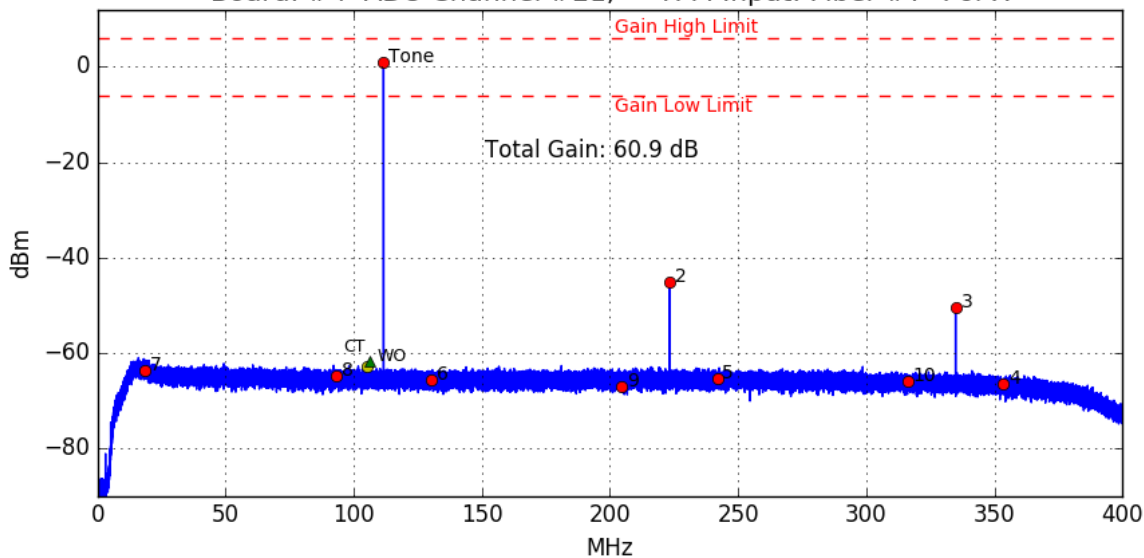
Board: #4 ADU Channel #20, TPM Input: Fiber #7 Pol-Y



Fundamental Tone: -0.5 dBm
 Second Harmonic: -47.2 dBm
 Third Harmonic: -55.4 dBm

Tone Frequency: 105.950928 Hz
 Worst Other: -64.2 dBm @ 69.586 MHz
 Cross Talk: 64.2 dBC @ 111.627 MHz

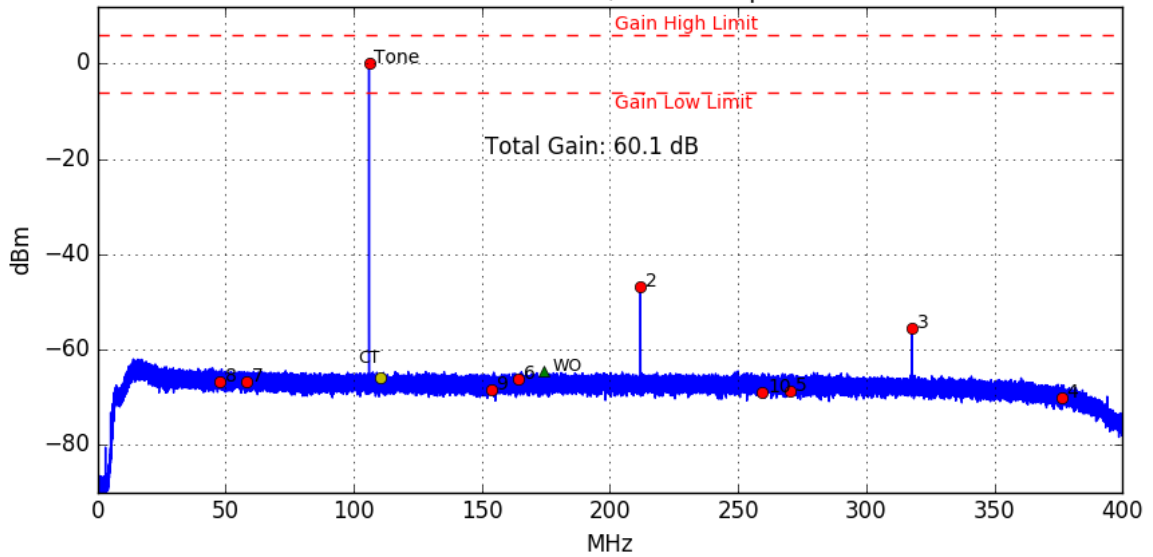
Board: #4 ADU Channel #21, TPM Input: Fiber #7 Pol-X



Fundamental Tone: 0.9 dBm
 Second Harmonic: -45.1 dBm
 Third Harmonic: -50.5 dBm

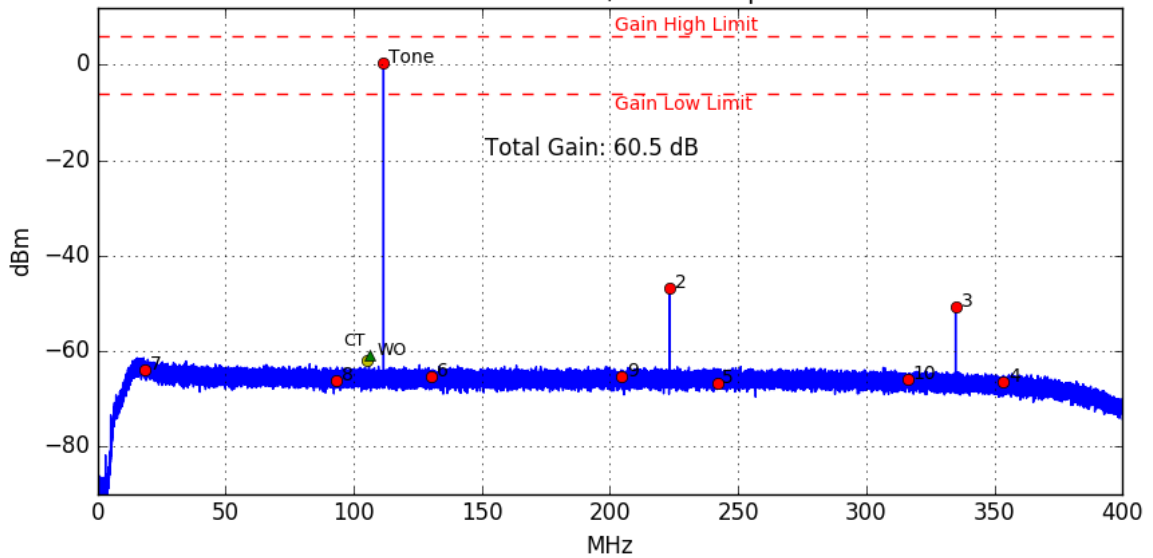
Tone Frequency: 111.627197 Hz
 Worst Other: -61.7 dBm @ 105.951 MHz
 Cross Talk: 62.6 dBC @ 105.951 MHz

Board: #4 ADU Channel #22, TPM Input: Fiber #8 Pol-Y

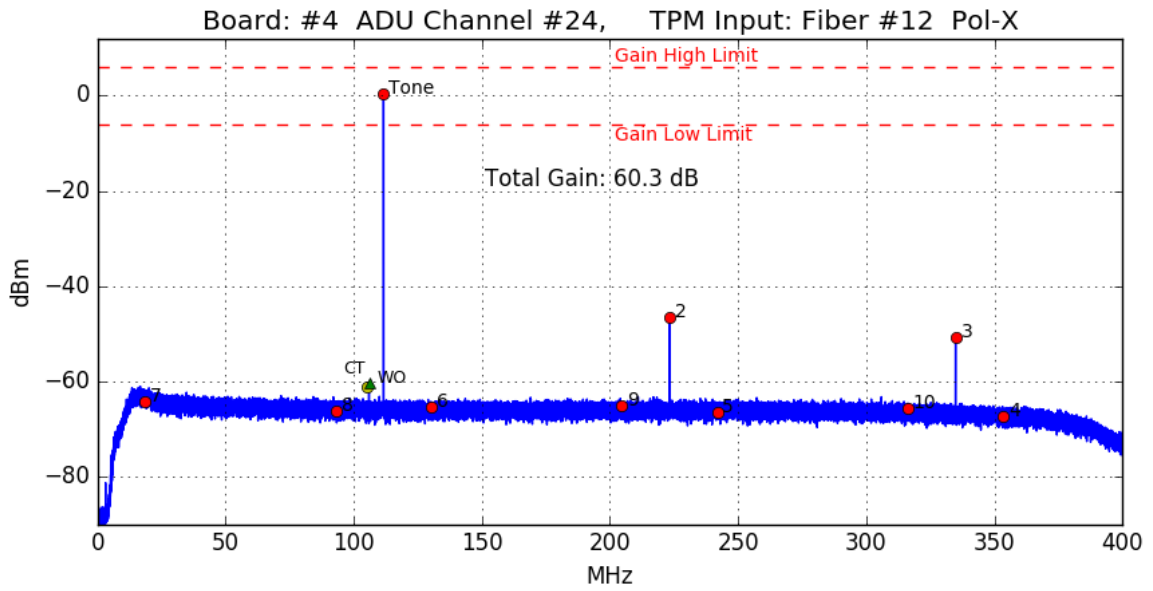


Fundamental Tone: 0.1 dBm Tone Frequency: 105.950928 Hz
 Second Harmonic: -46.9 dBm Worst Other: -64.4 dBm @ 174.335 MHz
 Third Harmonic: -55.6 dBm Cross Talk: 65.0 dBC @ 111.627 MHz

Board: #4 ADU Channel #23, TPM Input: Fiber #8 Pol-X

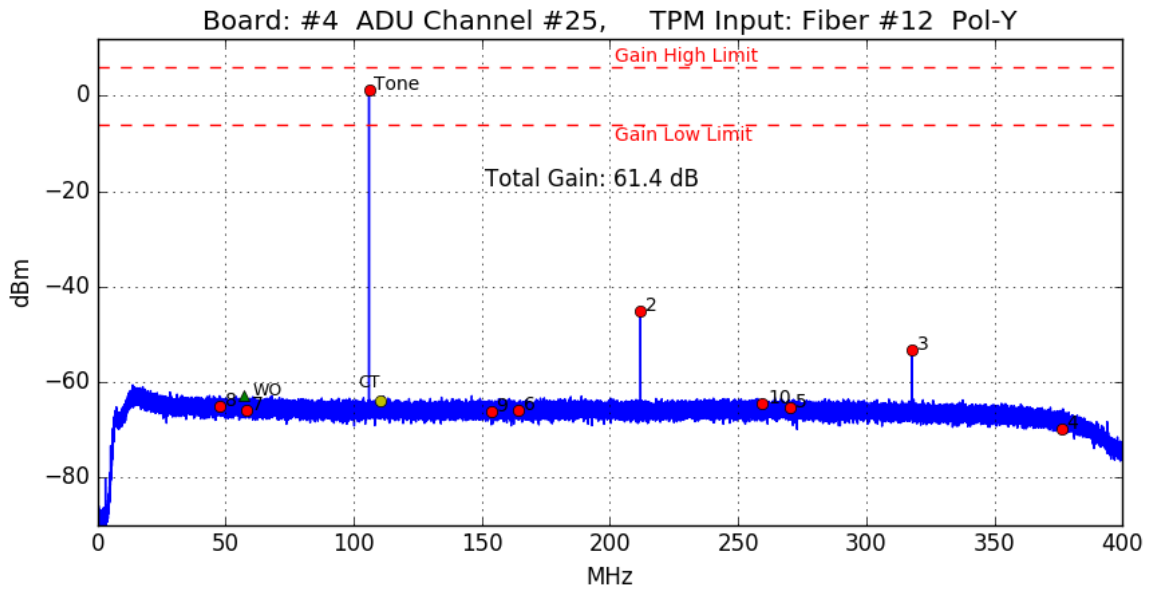


Fundamental Tone: 0.5 dBm Tone Frequency: 111.627197 Hz
 Second Harmonic: -46.7 dBm Worst Other: -60.9 dBm @ 105.951 MHz
 Third Harmonic: -50.8 dBm Cross Talk: 61.4 dBC @ 105.951 MHz



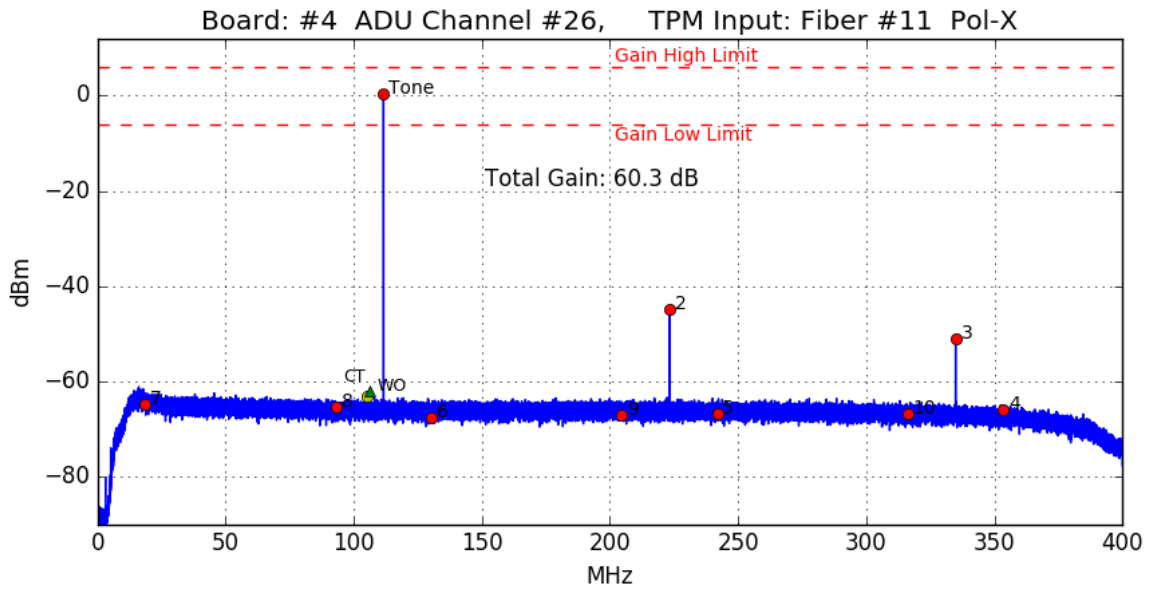
Fundamental Tone: 0.3 dBm
 Second Harmonic: -46.6 dBm
 Third Harmonic: -50.7 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -60.2 dBm @ 105.951 MHz
 Cross Talk: 60.5 dBC @ 105.951 MHz

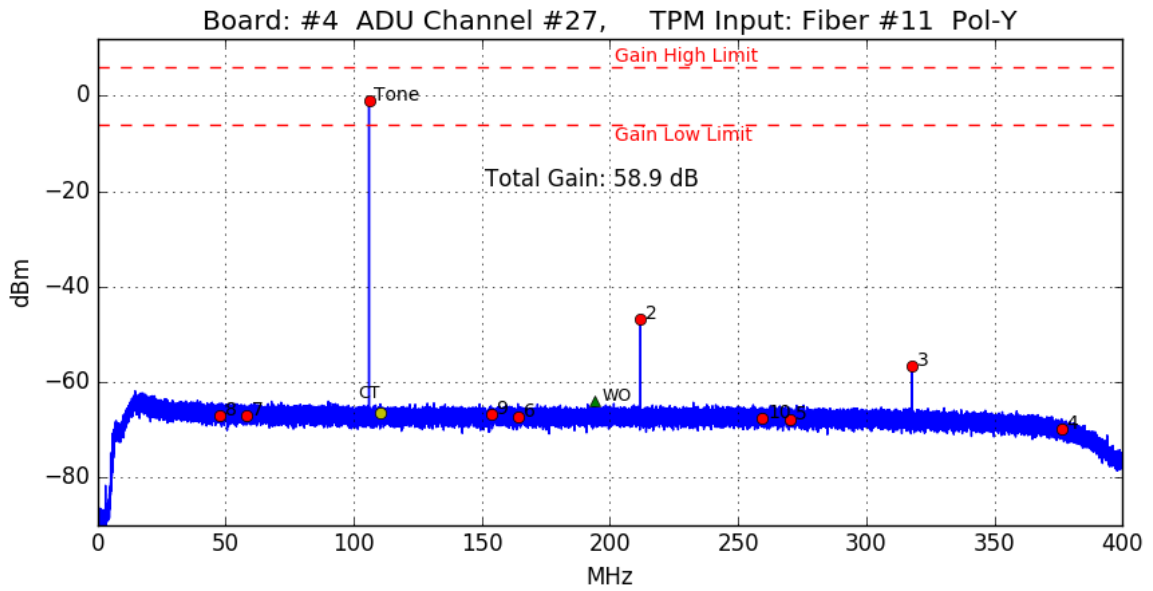


Fundamental Tone: 1.4 dBm
 Second Harmonic: -45.2 dBm
 Third Harmonic: -53.4 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -62.8 dBm @ 57.300 MHz
 Cross Talk: 64.4 dBC @ 111.627 MHz

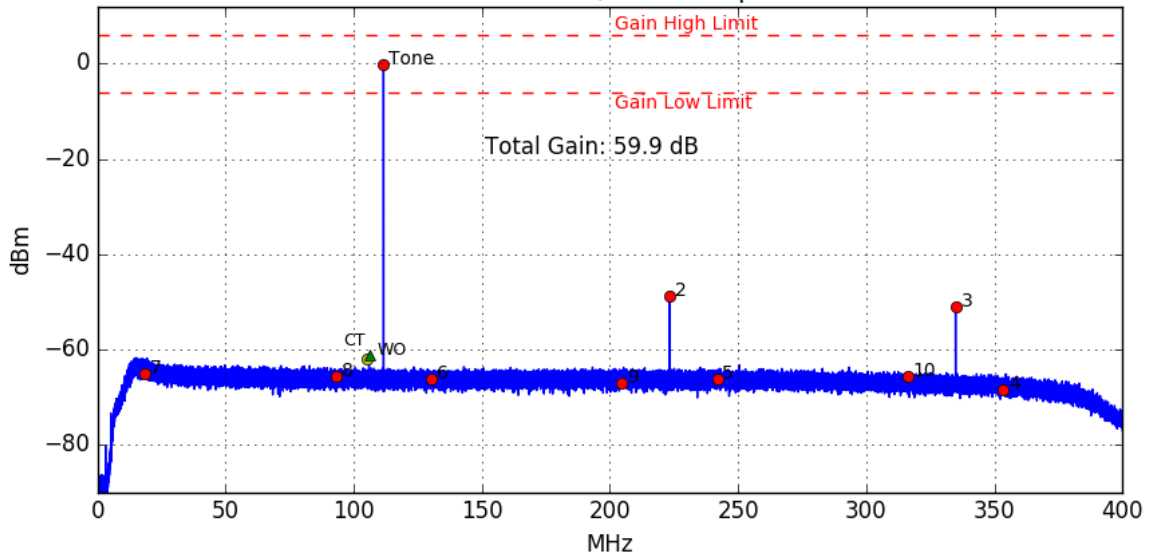


Fundamental Tone: 0.3 dBm Tone Frequency: 111.627.197 Hz
 Second Harmonic: -44.8 dBm Worst Other: -62.1 dBm @ 105.951 MHz
 Third Harmonic: -50.9 dBm Cross Talk: 62.4 dBC @ 105.951 MHz



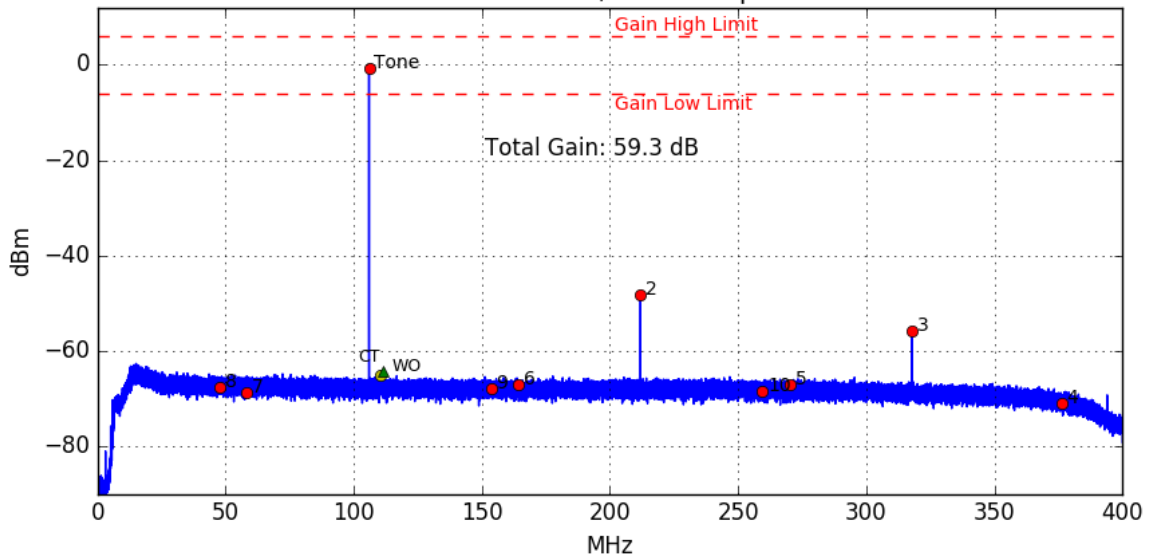
Fundamental Tone: -1.1 dBm Tone Frequency: 105.950.928 Hz
 Second Harmonic: -46.9 dBm Worst Other: -63.9 dBm @ 194.049 MHz
 Third Harmonic: -56.7 dBm Cross Talk: 64.3 dBC @ 111.627 MHz

Board: #4 ADU Channel #28, TPM Input: Fiber #10 Pol-X



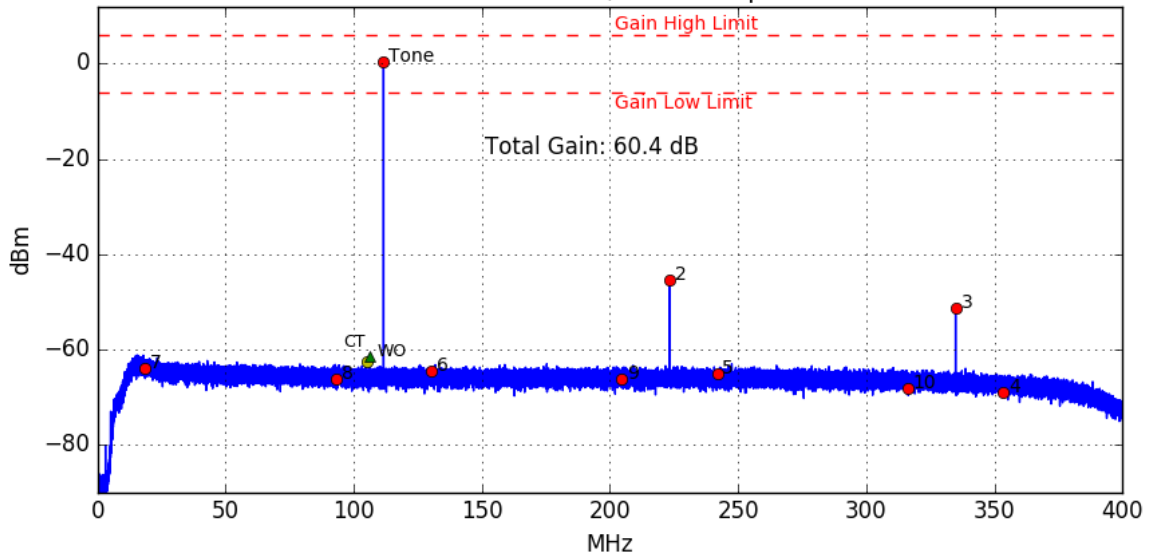
Fundamental Tone: -0.1 dBm Tone Frequency: 111.627.197 Hz
 Second Harmonic: -48.8 dBm Worst Other: -61.1 dBm @ 105.951 MHz
 Third Harmonic: -51.2 dBm Cross Talk: 61.0 dBC @ 105.951 MHz

Board: #4 ADU Channel #29, TPM Input: Fiber #10 Pol-Y



Fundamental Tone: -0.7 dBm Tone Frequency: 105.950.928 Hz
 Second Harmonic: -48.1 dBm Worst Other: -64.2 dBm @ 111.627 MHz
 Third Harmonic: -55.9 dBm Cross Talk: 63.5 dBC @ 111.627 MHz

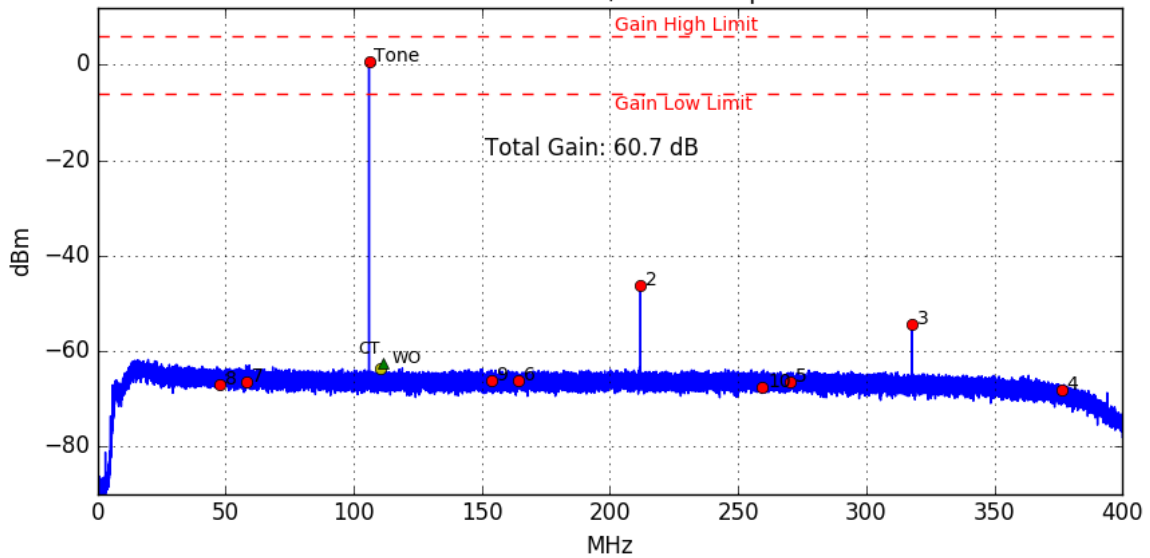
Board: #4 ADU Channel #30, TPM Input: Fiber #9 Pol-X



Fundamental Tone: 0.4 dBm
 Second Harmonic: -45.5 dBm
 Third Harmonic: -51.3 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -61.4 dBm @ 105.951 MHz
 Cross Talk: 61.8 dBC @ 105.951 MHz

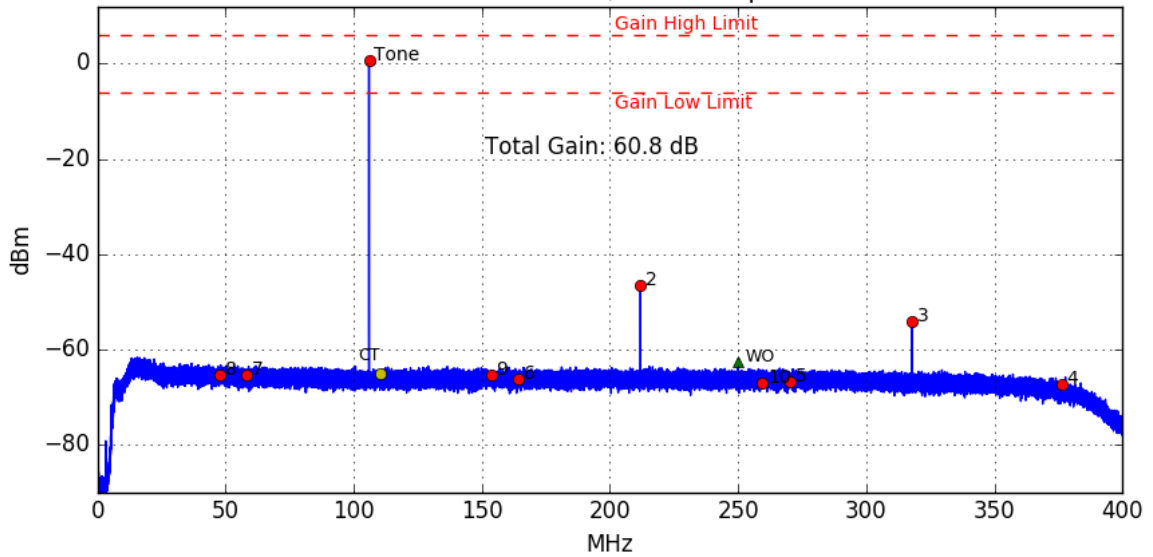
Board: #4 ADU Channel #31, TPM Input: Fiber #9 Pol-Y



Fundamental Tone: 0.7 dBm
 Second Harmonic: -46.3 dBm
 Third Harmonic: -54.3 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -62.6 dBm @ 111.627 MHz
 Cross Talk: 63.3 dBC @ 111.627 MHz

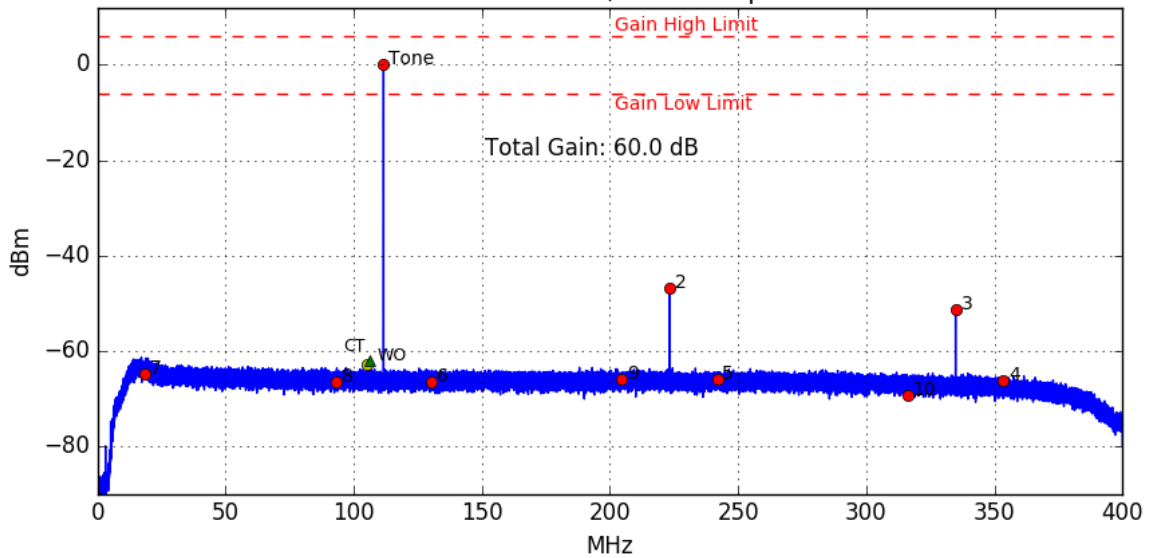
Board: #5 ADU Channel #00, TPM Input: Fiber #1 Pol-Y



Fundamental Tone: 0.8 dBm
 Second Harmonic: -46.4 dBm
 Third Harmonic: -54.2 dBm

Tone Frequency: 105.950928 Hz
 Worst Other: -62.6 dBm @ 249.988 MHz
 Cross Talk: 65.0 dBC @ 111.627 MHz

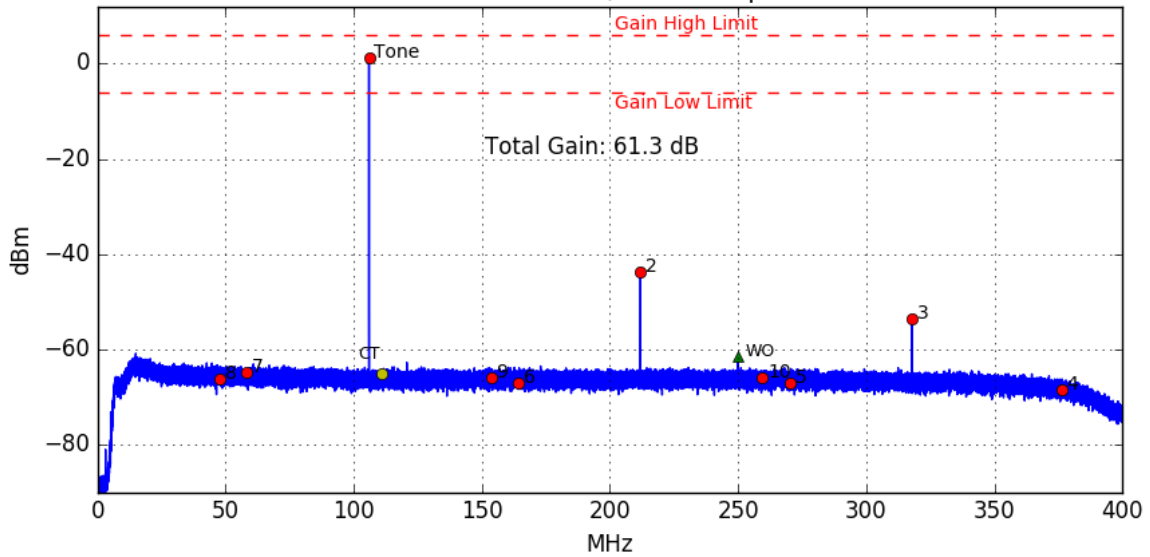
Board: #5 ADU Channel #01, TPM Input: Fiber #1 Pol-X



Fundamental Tone: -0.0 dBm
 Second Harmonic: -46.7 dBm
 Third Harmonic: -51.3 dBm

Tone Frequency: 111.627197 Hz
 Worst Other: -62.0 dBm @ 105.951 MHz
 Cross Talk: 62.0 dBC @ 105.951 MHz

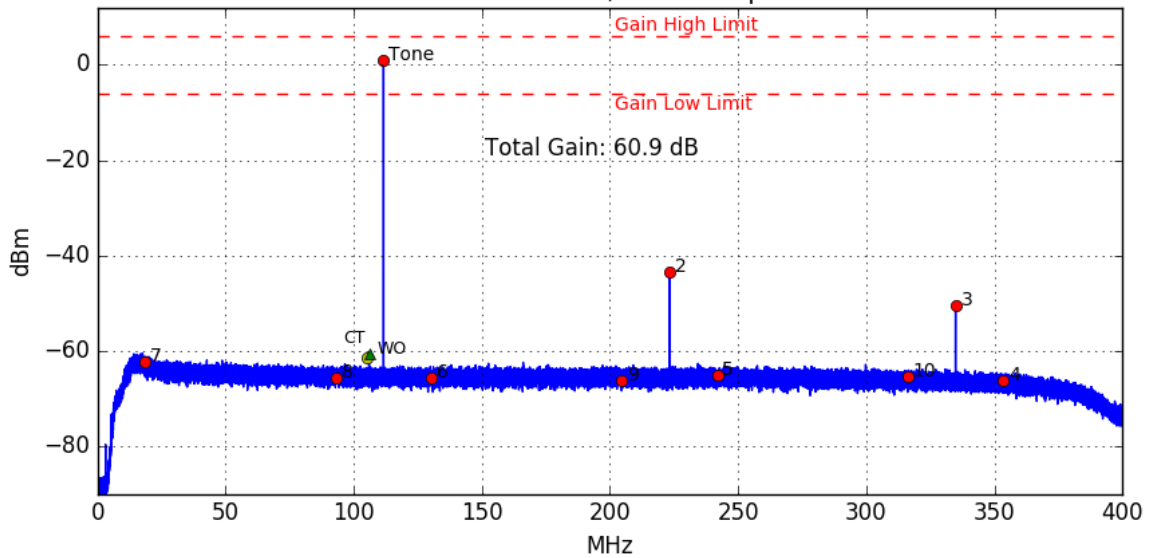
Board: #5 ADU Channel #02, TPM Input: Fiber #2 Pol-Y



Fundamental Tone: 1.3 dBm
 Second Harmonic: -43.8 dBm
 Third Harmonic: -53.7 dBm

Tone Frequency: 105.950928 Hz
 Worst Other: -61.3 dBm @ 249.988 MHz
 Cross Talk: 65.3 dBC @ 111.688 MHz

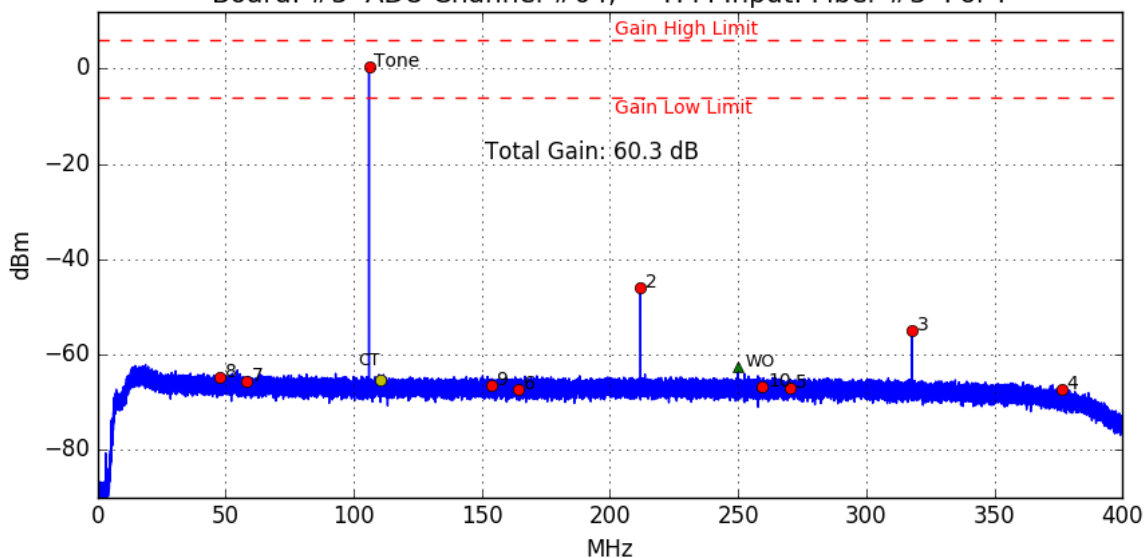
Board: #5 ADU Channel #03, TPM Input: Fiber #2 Pol-X



Fundamental Tone: 0.9 dBm
 Second Harmonic: -43.5 dBm
 Third Harmonic: -50.3 dBm

Tone Frequency: 111.627197 Hz
 Worst Other: -60.5 dBm @ 105.951 MHz
 Cross Talk: 61.4 dBC @ 105.951 MHz

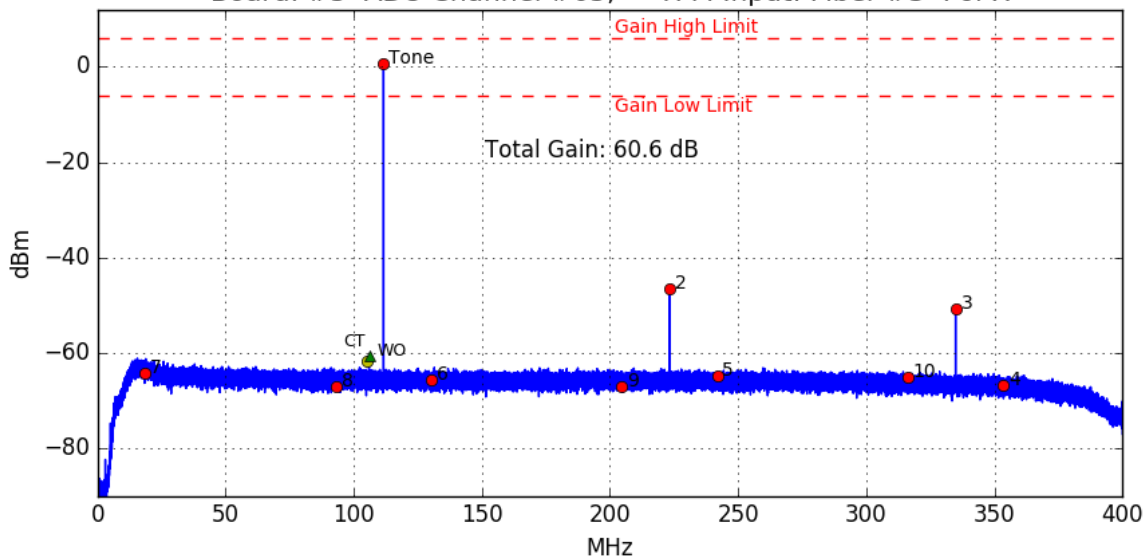
Board: #5 ADU Channel #04, TPM Input: Fiber #3 Pol-Y



Fundamental Tone: 0.3 dBm
 Second Harmonic: -46.0 dBm
 Third Harmonic: -54.9 dBm

Tone Frequency: 105.950928 Hz
 Worst Other: -62.5 dBm @ 249.988 MHz
 Cross Talk: 64.6 dBC @ 111.627 MHz

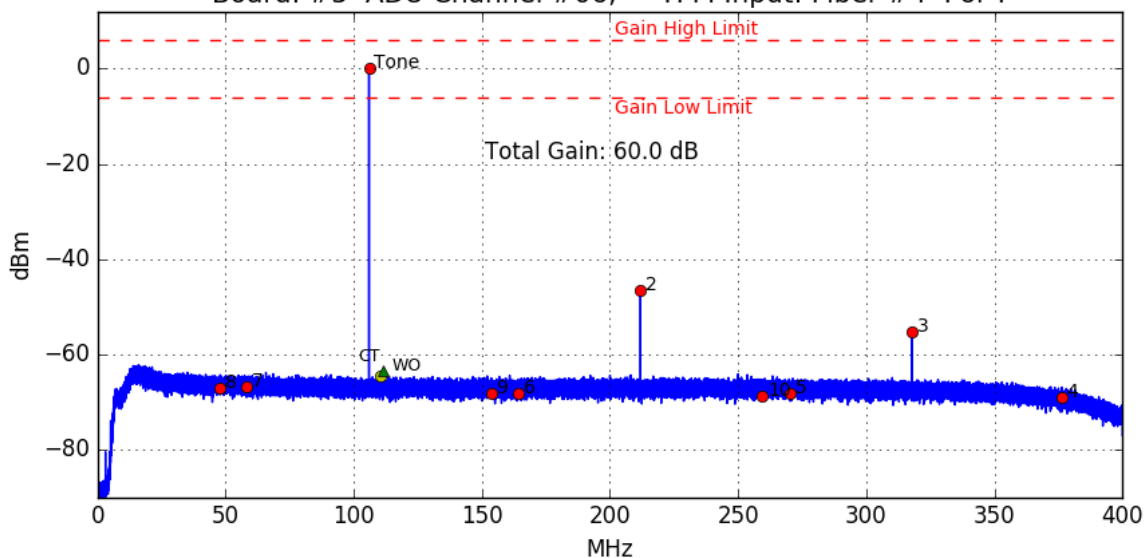
Board: #5 ADU Channel #05, TPM Input: Fiber #3 Pol-X



Fundamental Tone: 0.6 dBm
 Second Harmonic: -46.6 dBm
 Third Harmonic: -50.7 dBm

Tone Frequency: 111.627197 Hz
 Worst Other: -60.6 dBm @ 105.951 MHz
 Cross Talk: 61.2 dBC @ 105.951 MHz

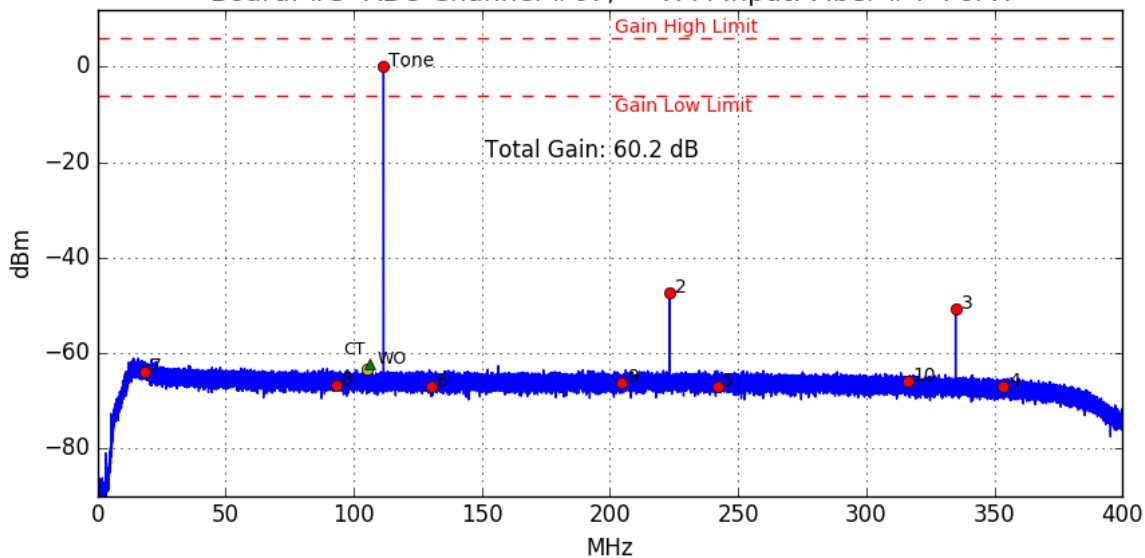
Board: #5 ADU Channel #06, TPM Input: Fiber #4 Pol-Y



Fundamental Tone: 0.0 dBm
 Second Harmonic: -46.5 dBm
 Third Harmonic: -55.2 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -63.4 dBm @ 111.627 MHz
 Cross Talk: 63.4 dBC @ 111.627 MHz

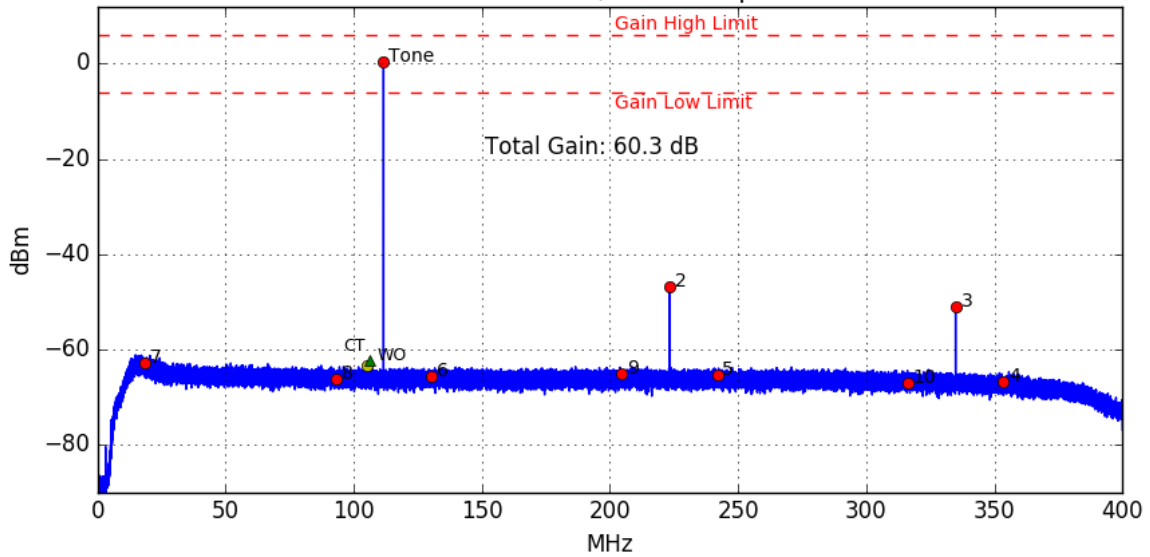
Board: #5 ADU Channel #07, TPM Input: Fiber #4 Pol-X



Fundamental Tone: 0.2 dBm
 Second Harmonic: -47.5 dBm
 Third Harmonic: -50.9 dBm

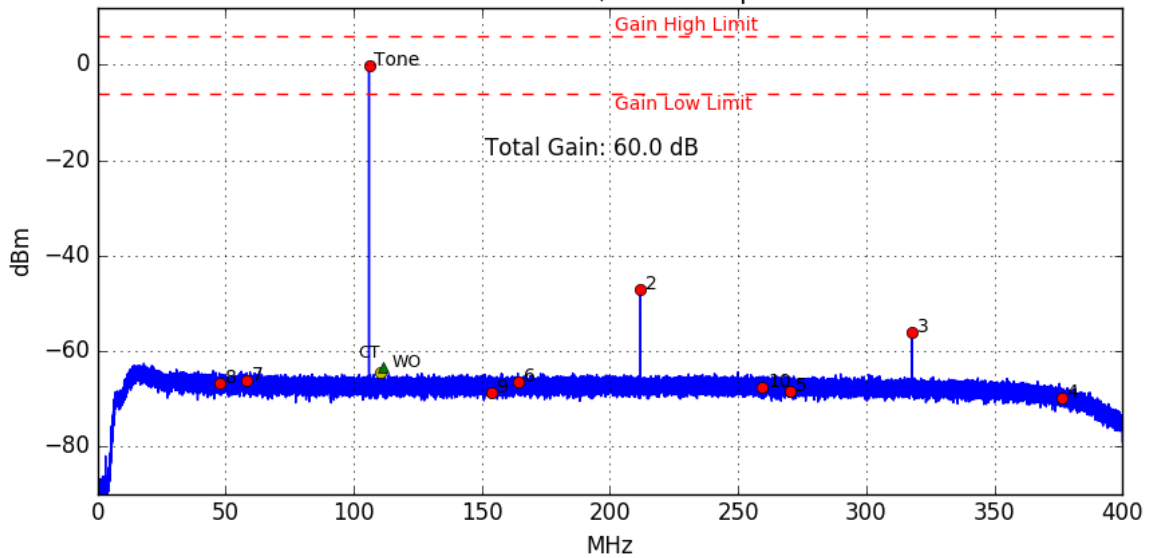
Tone Frequency: 111.627.197 Hz
 Worst Other: -62.3 dBm @ 105.951 MHz
 Cross Talk: 62.5 dBC @ 105.951 MHz

Board: #5 ADU Channel #08, TPM Input: Fiber #16 Pol-X



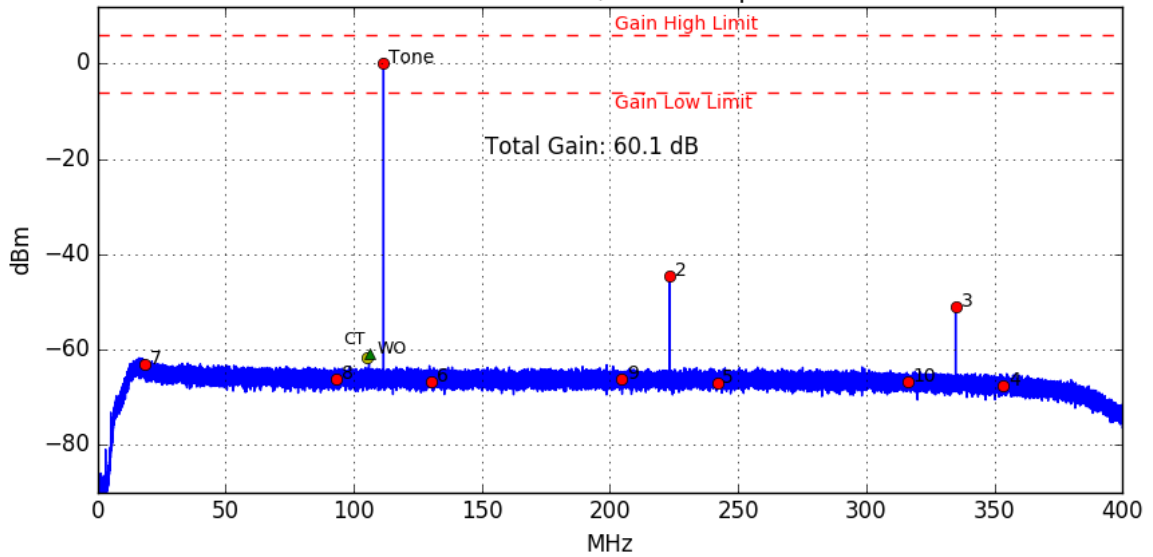
Fundamental Tone: 0.3 dBm	Tone Frequency: 111.627.197 Hz
Second Harmonic: -46.8 dBm	Worst Other: -62.3 dBm @ 105.951 MHz
Third Harmonic: -51.0 dBm	Cross Talk: 62.7 dBC @ 105.951 MHz

Board: #5 ADU Channel #09, TPM Input: Fiber #16 Pol-Y



Fundamental Tone: -0.0 dBm	Tone Frequency: 105.950.928 Hz
Second Harmonic: -47.2 dBm	Worst Other: -63.4 dBm @ 111.627 MHz
Third Harmonic: -56.0 dBm	Cross Talk: 63.4 dBC @ 111.627 MHz

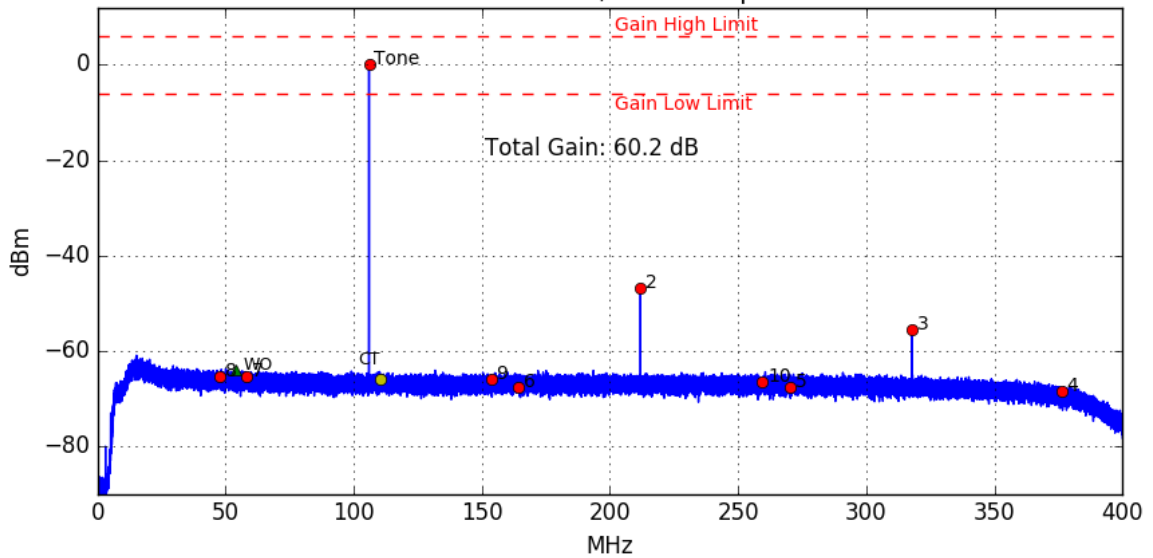
Board: #5 ADU Channel #10, TPM Input: Fiber #15 Pol-X



Fundamental Tone: 0.1 dBm
 Second Harmonic: -44.7 dBm
 Third Harmonic: -51.1 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -60.8 dBm @ 105.951 MHz
 Cross Talk: 60.9 dBC @ 105.951 MHz

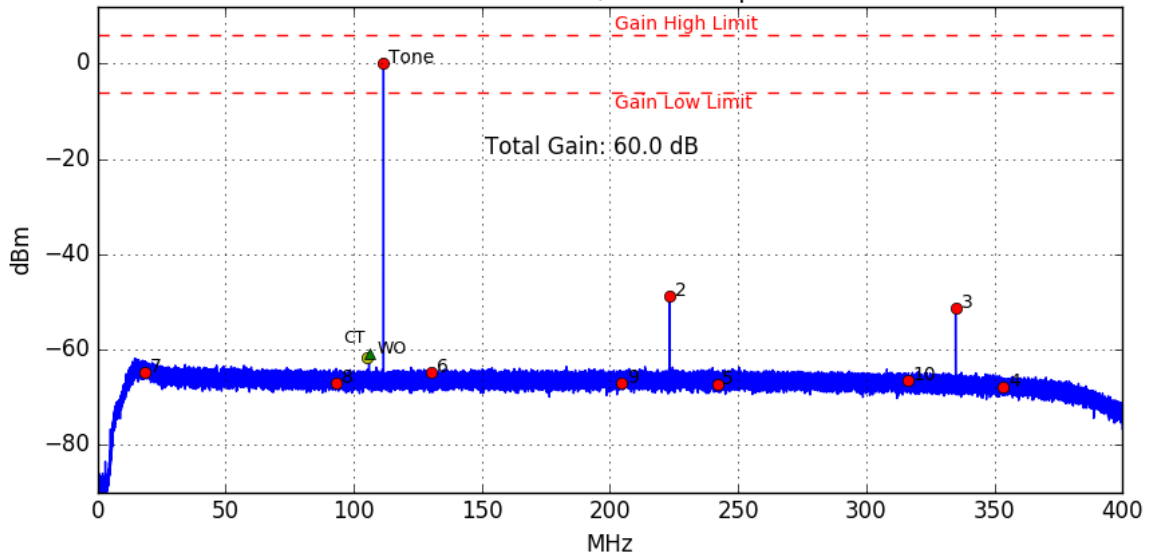
Board: #5 ADU Channel #11, TPM Input: Fiber #15 Pol-Y



Fundamental Tone: 0.2 dBm
 Second Harmonic: -46.8 dBm
 Third Harmonic: -55.4 dBm

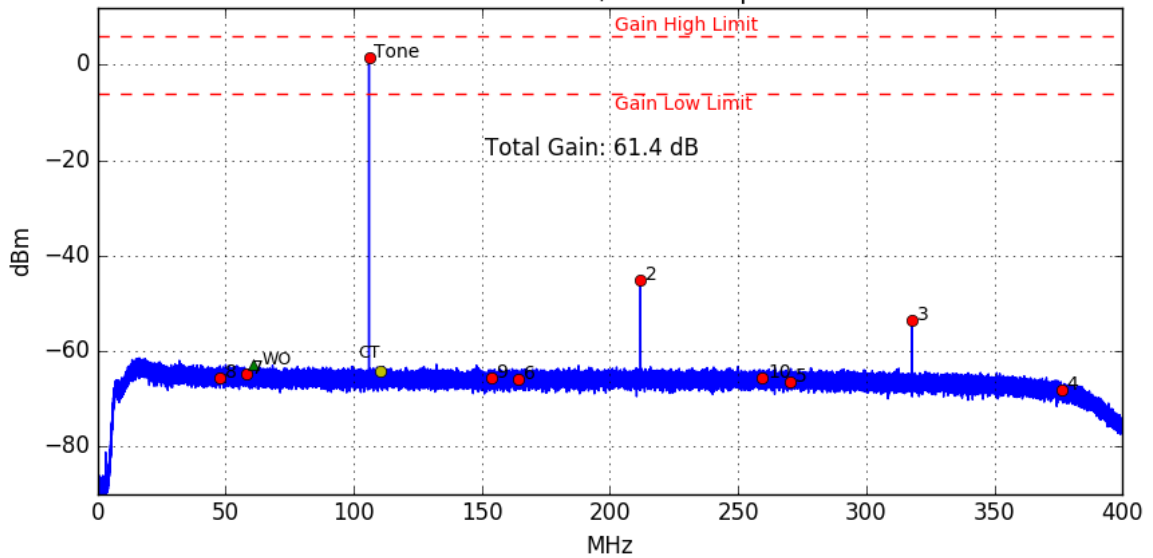
Tone Frequency: 105.950.928 Hz
 Worst Other: -63.9 dBm @ 53.741 MHz
 Cross Talk: 65.0 dBC @ 111.627 MHz

Board: #5 ADU Channel #12, TPM Input: Fiber #14 Pol-X



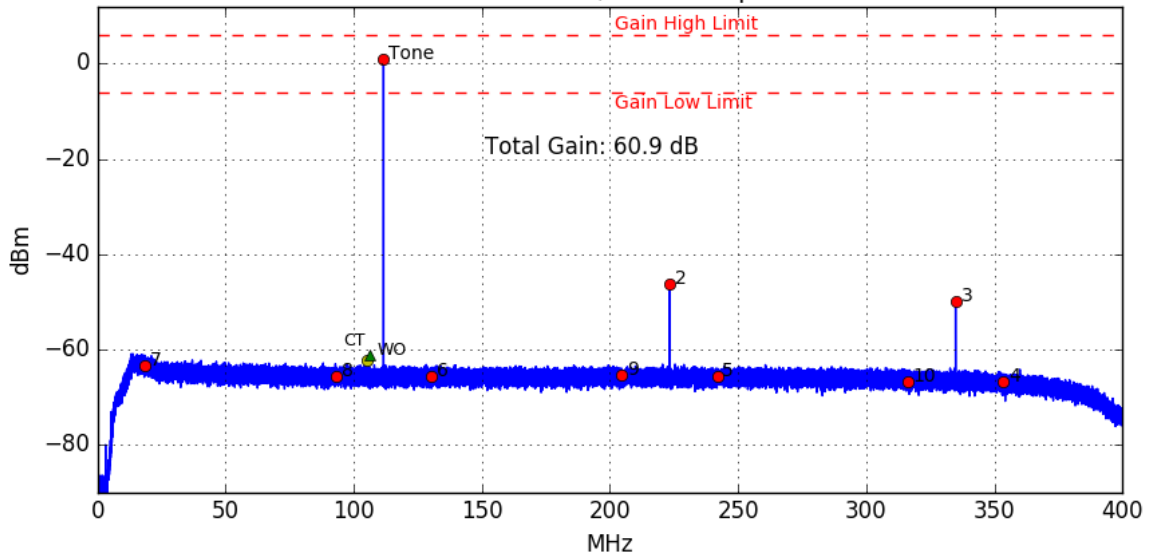
Fundamental Tone: 0.0 dBm Tone Frequency: 111.627.197 Hz
 Second Harmonic: -48.9 dBm Worst Other: -60.7 dBm @ 105.951 MHz
 Third Harmonic: -51.2 dBm Cross Talk: 60.8 dBC @ 105.951 MHz

Board: #5 ADU Channel #13, TPM Input: Fiber #14 Pol-Y



Fundamental Tone: 1.4 dBm Tone Frequency: 105.950.928 Hz
 Second Harmonic: -45.2 dBm Worst Other: -62.8 dBm @ 60.968 MHz
 Third Harmonic: -53.4 dBm Cross Talk: 64.7 dBC @ 111.627 MHz

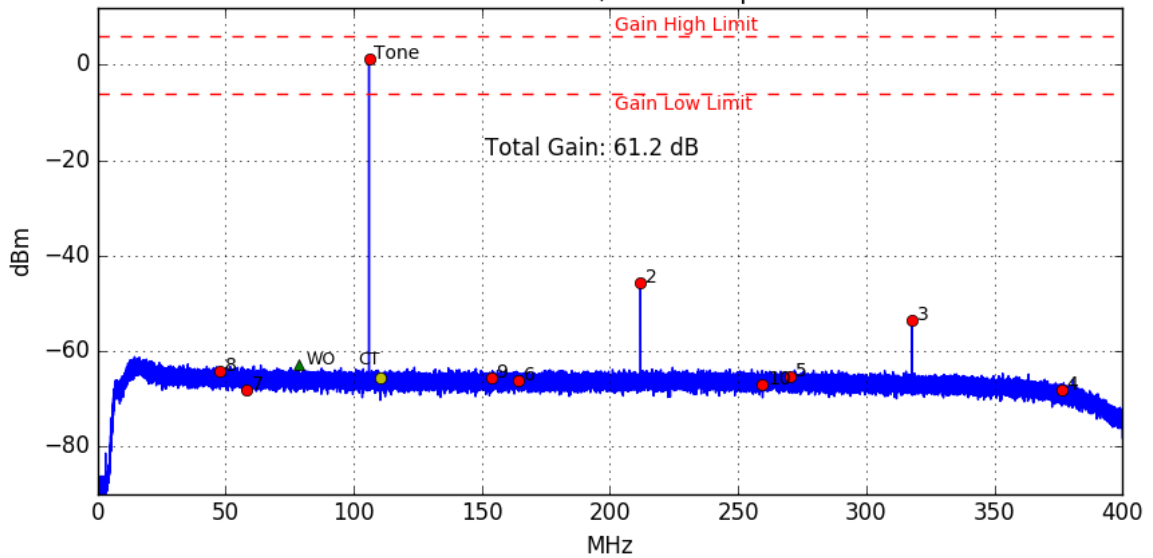
Board: #5 ADU Channel #14, TPM Input: Fiber #13 Pol-X



Fundamental Tone: 0.9 dBm
 Second Harmonic: -46.1 dBm
 Third Harmonic: -49.9 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -61.2 dBm @ 105.951 MHz
 Cross Talk: 62.1 dBC @ 105.951 MHz

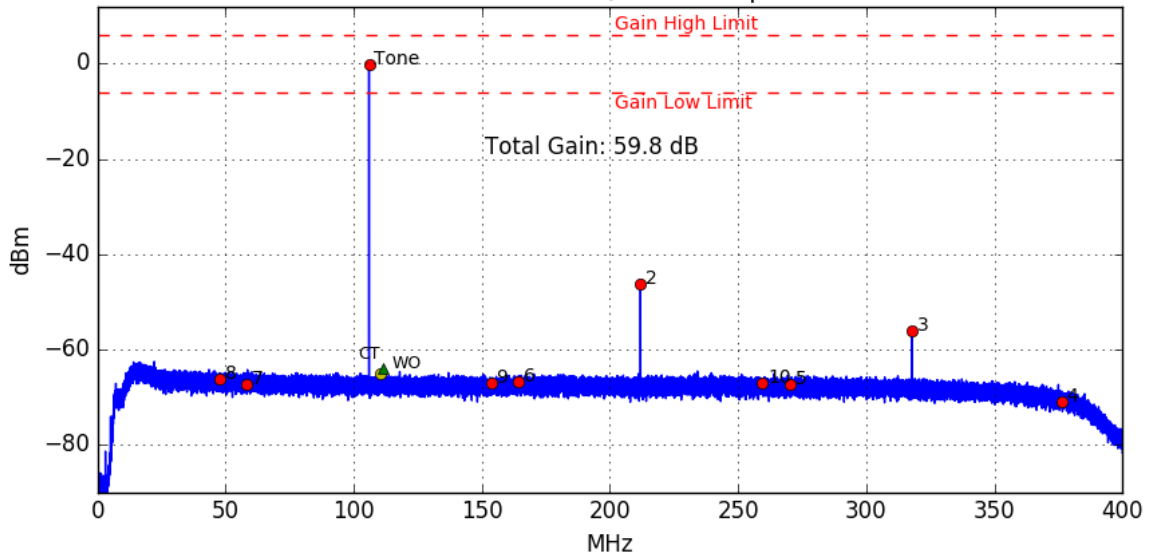
Board: #5 ADU Channel #15, TPM Input: Fiber #13 Pol-Y



Fundamental Tone: 1.2 dBm
 Second Harmonic: -45.8 dBm
 Third Harmonic: -53.5 dBm

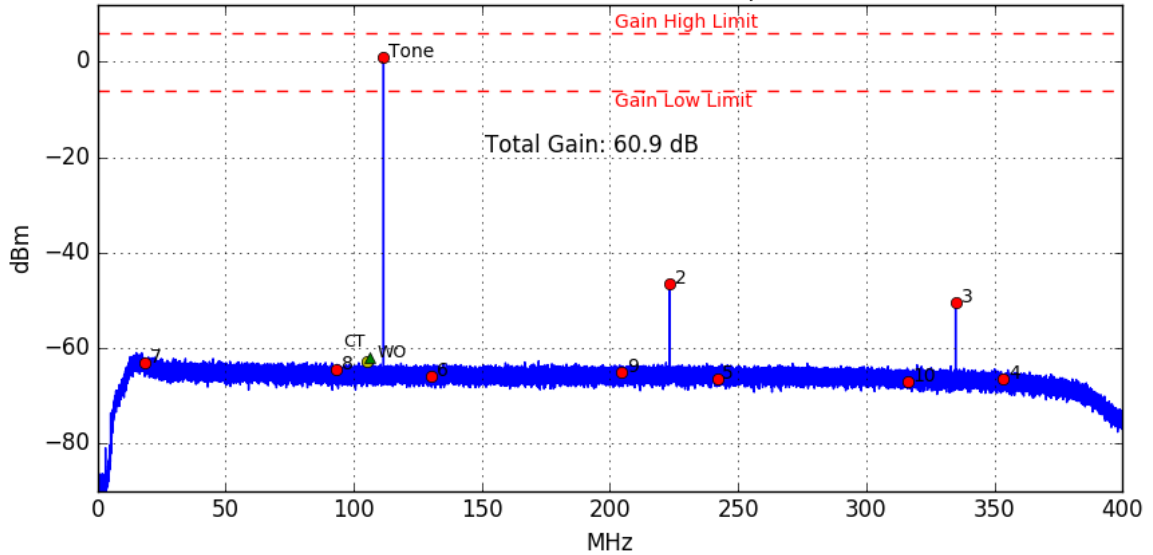
Tone Frequency: 105.950.928 Hz
 Worst Other: -62.7 dBm @ 78.638 MHz
 Cross Talk: 65.9 dBC @ 111.627 MHz

Board: #5 ADU Channel #16, TPM Input: Fiber #5 Pol-Y



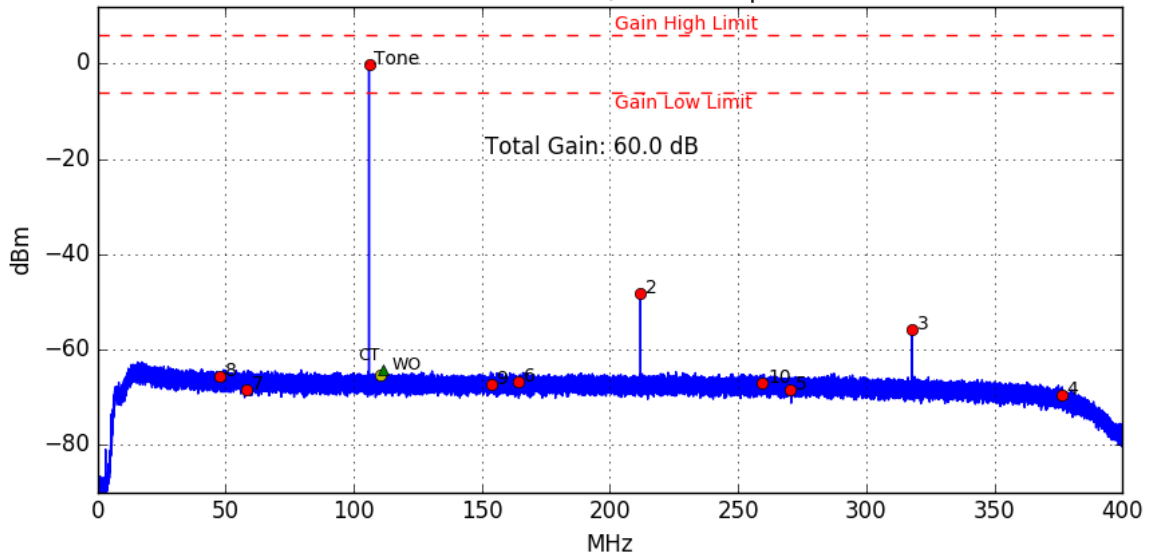
Fundamental Tone: -0.2 dBm Tone Frequency: 105.950.928 Hz
 Second Harmonic: -46.4 dBm Worst Other: -64.0 dBm @ 111.627 MHz
 Third Harmonic: -56.1 dBm Cross Talk: 63.8 dBC @ 111.627 MHz

Board: #5 ADU Channel #17, TPM Input: Fiber #5 Pol-X



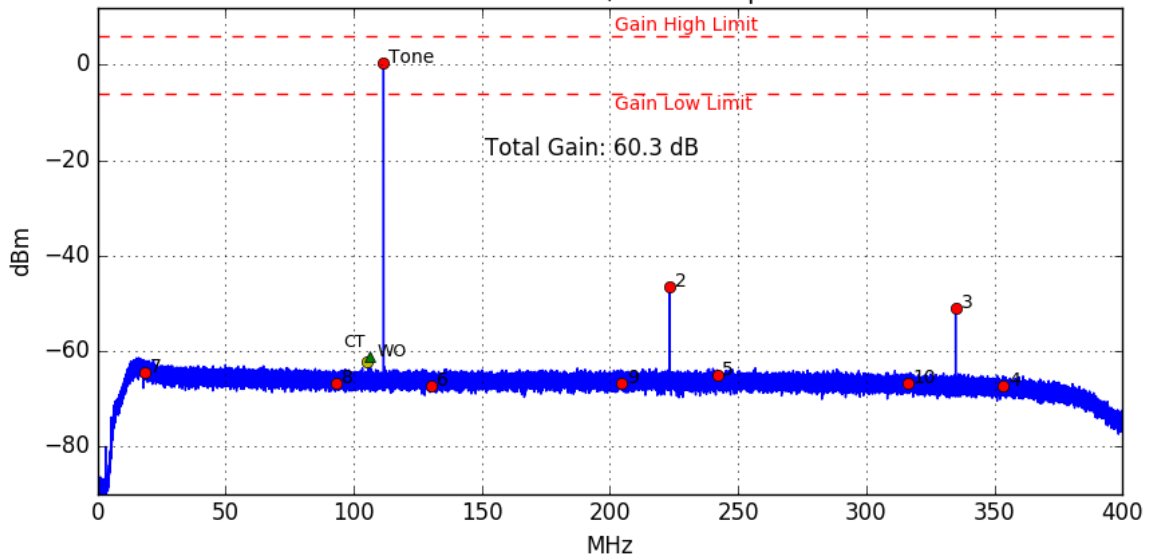
Fundamental Tone: 0.9 dBm Tone Frequency: 111.627.197 Hz
 Second Harmonic: -46.5 dBm Worst Other: -61.9 dBm @ 105.951 MHz
 Third Harmonic: -50.5 dBm Cross Talk: 62.8 dBC @ 105.951 MHz

Board: #5 ADU Channel #18, TPM Input: Fiber #6 Pol-Y



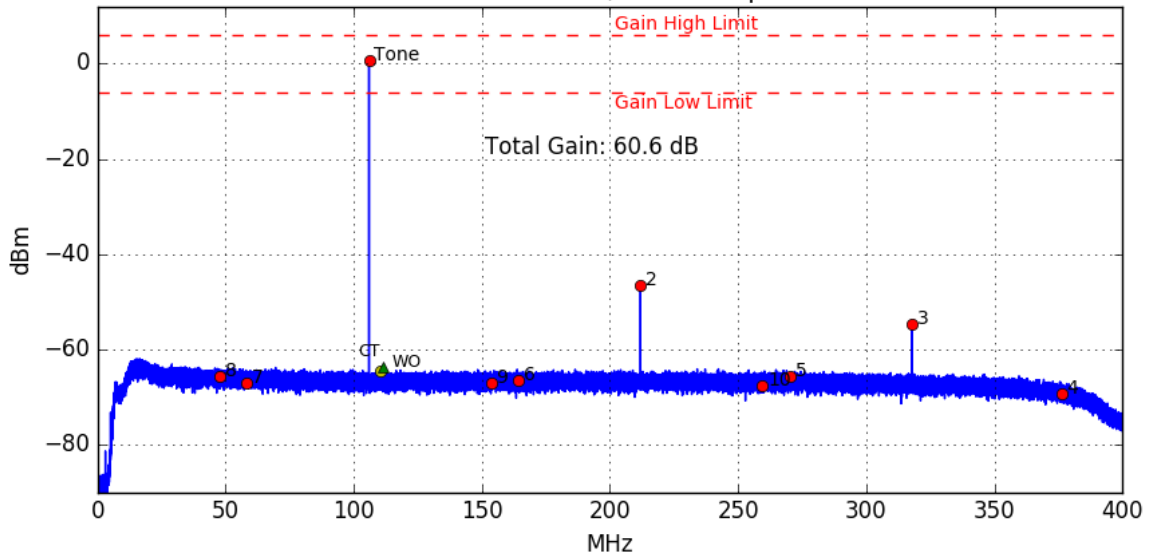
Fundamental Tone: -0.0 dBm Tone Frequency: 105.950.928 Hz
 Second Harmonic: -48.1 dBm Worst Other: -64.3 dBm @ 111.627 MHz
 Third Harmonic: -55.8 dBm Cross Talk: 64.2 dBC @ 111.627 MHz

Board: #5 ADU Channel #19, TPM Input: Fiber #6 Pol-X



Fundamental Tone: 0.3 dBm Tone Frequency: 111.627.197 Hz
 Second Harmonic: -46.5 dBm Worst Other: -61.2 dBm @ 105.951 MHz
 Third Harmonic: -51.1 dBm Cross Talk: 61.4 dBC @ 105.951 MHz

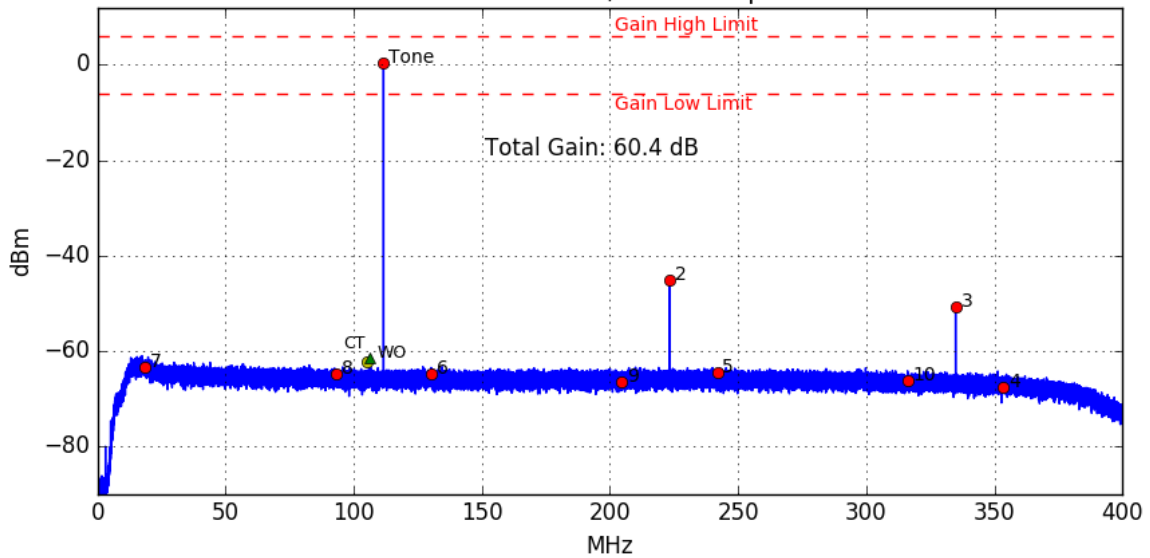
Board: #5 ADU Channel #20, TPM Input: Fiber #7 Pol-Y



Fundamental Tone: 0.6 dBm
 Second Harmonic: -46.4 dBm
 Third Harmonic: -54.6 dBm

Tone Frequency: 105.950928 Hz
 Worst Other: -63.5 dBm @ 111.627 MHz
 Cross Talk: 64.2 dBC @ 111.627 MHz

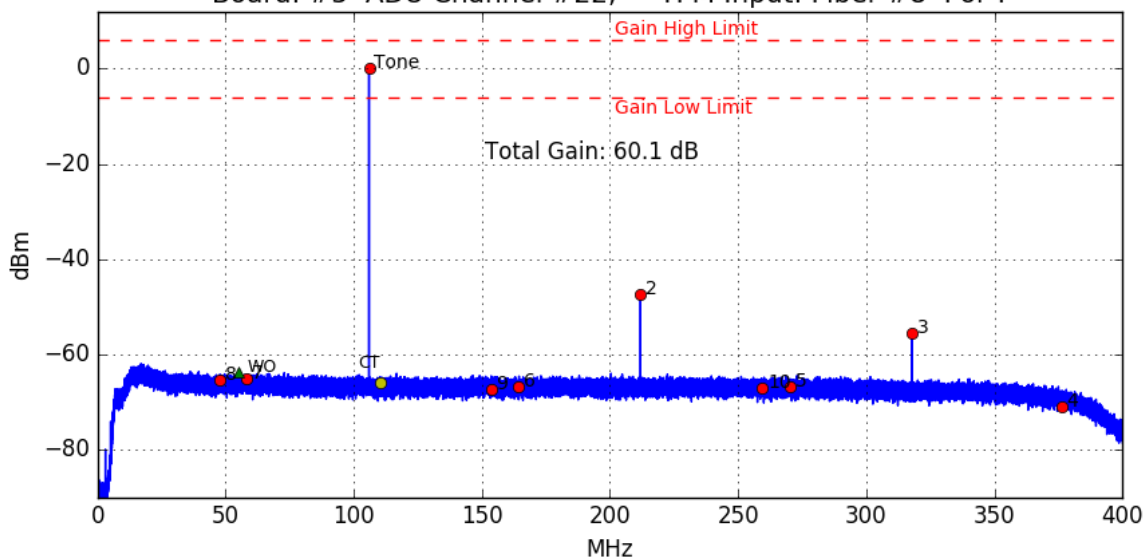
Board: #5 ADU Channel #21, TPM Input: Fiber #7 Pol-X



Fundamental Tone: 0.4 dBm
 Second Harmonic: -45.2 dBm
 Third Harmonic: -50.7 dBm

Tone Frequency: 111.627197 Hz
 Worst Other: -61.3 dBm @ 105.951 MHz
 Cross Talk: 61.7 dBC @ 105.951 MHz

Board: #5 ADU Channel #22, TPM Input: Fiber #8 Pol-Y



Fundamental Tone: 0.1 dBm

Tone Frequency: 105.950928 Hz

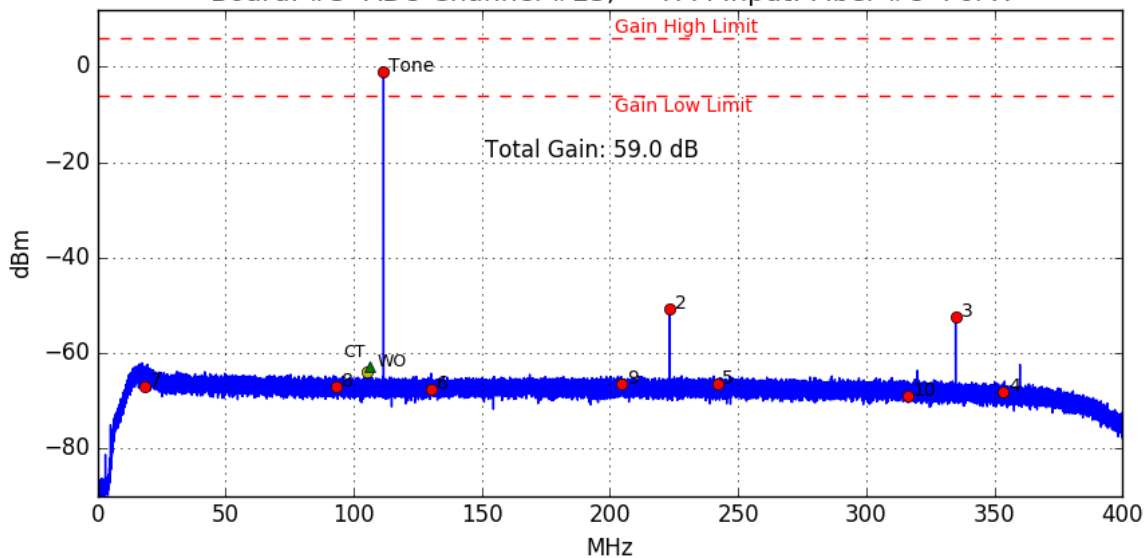
Second Harmonic: -47.4 dBm

Worst Other: -63.8 dBm @ 55.249 MHz

Third Harmonic: -55.7 dBm

Cross Talk: 65.1 dBC @ 111.627 MHz

Board: #5 ADU Channel #23, TPM Input: Fiber #8 Pol-X



Fundamental Tone: -1.0 dBm

Tone Frequency: 111.627197 Hz

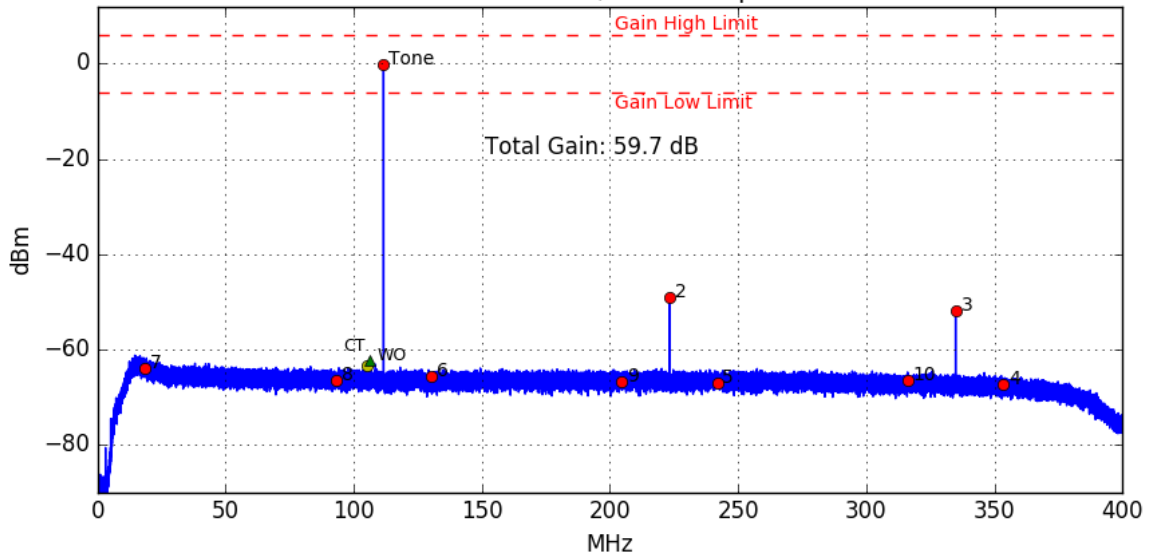
Second Harmonic: -50.8 dBm

Worst Other: -62.9 dBm @ 105.951 MHz

Third Harmonic: -52.5 dBm

Cross Talk: 61.9 dBC @ 105.951 MHz

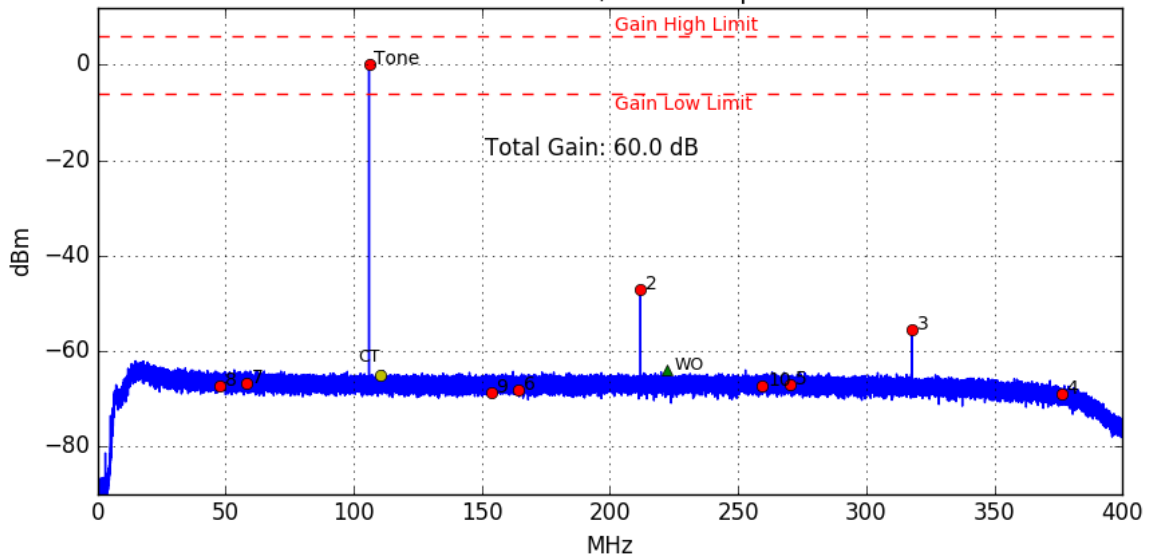
Board: #5 ADU Channel #24, TPM Input: Fiber #12 Pol-X



Fundamental Tone: -0.3 dBm
Second Harmonic: -49.0 dBm
Third Harmonic: -51.8 dBm

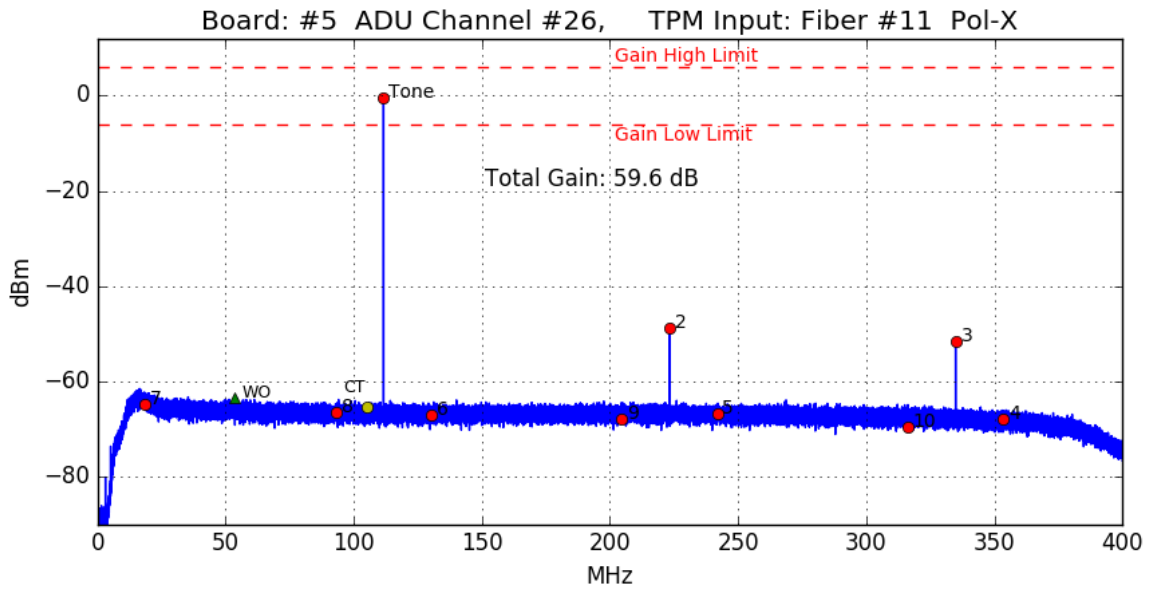
Tone Frequency: 111.627.197 Hz
Worst Other: -62.4 dBm @ 105.951 MHz
Cross Talk: 62.1 dBC @ 105.951 MHz

Board: #5 ADU Channel #25, TPM Input: Fiber #12 Pol-Y



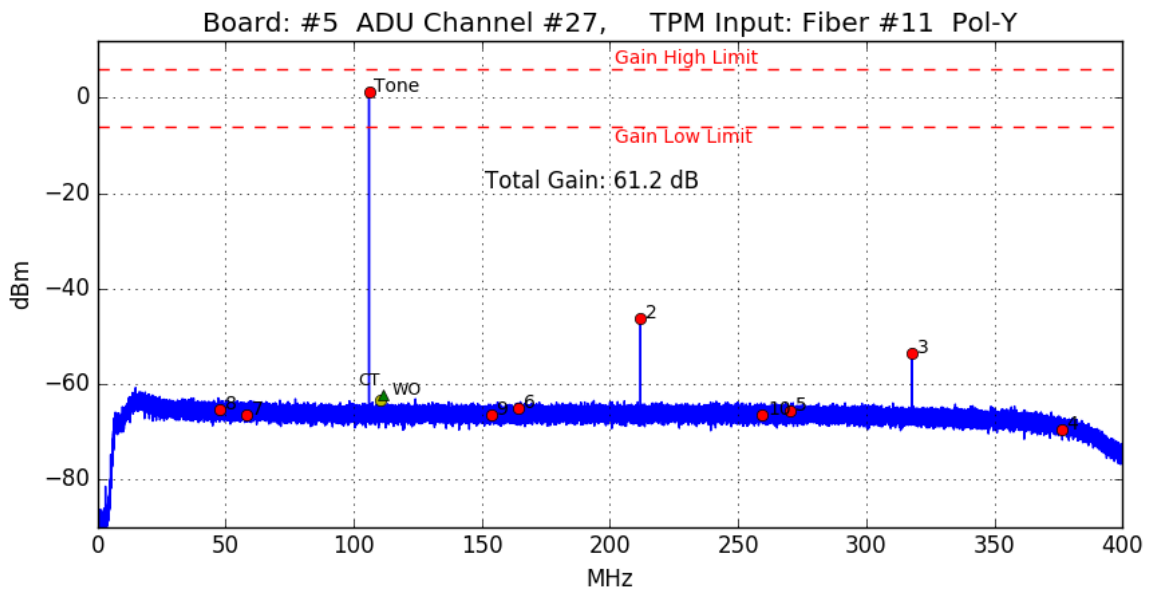
Fundamental Tone: 0.0 dBm
Second Harmonic: -47.0 dBm
Third Harmonic: -55.6 dBm

Tone Frequency: 105.950.928 Hz
Worst Other: -63.9 dBm @ 222.211 MHz
Cross Talk: 64.2 dBC @ 111.627 MHz



Fundamental Tone: -0.4 dBm
 Second Harmonic: -48.8 dBm
 Third Harmonic: -51.7 dBm

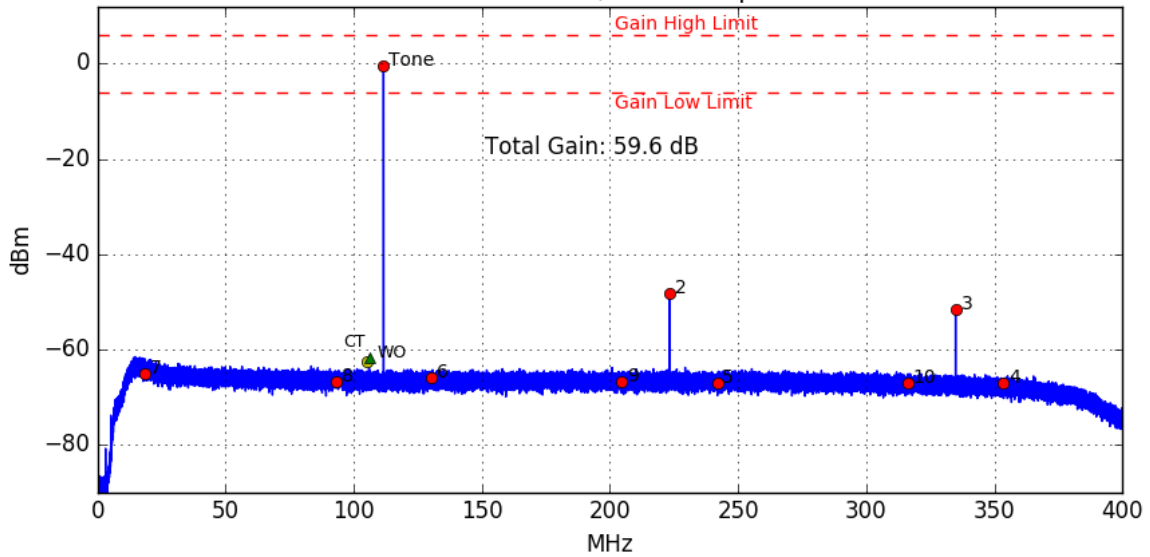
Tone Frequency: 111.627.197 Hz
 Worst Other: -63.4 dBm @ 53.455 MHz
 Cross Talk: 63.9 dBC @ 105.951 MHz



Fundamental Tone: 1.2 dBm
 Second Harmonic: -46.3 dBm
 Third Harmonic: -53.6 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -62.3 dBm @ 111.627 MHz
 Cross Talk: 63.6 dBC @ 111.627 MHz

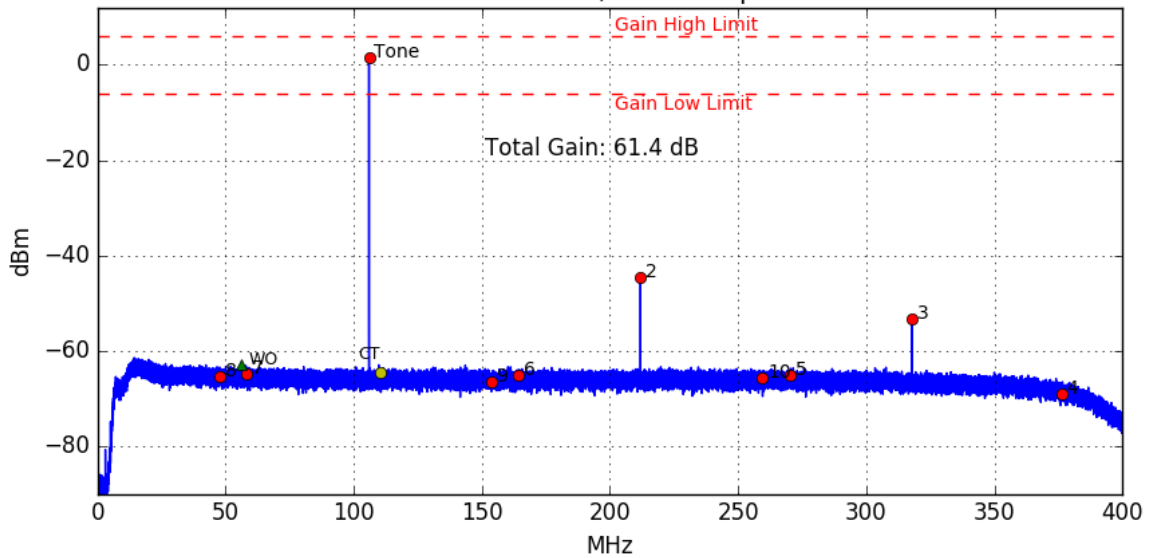
Board: #5 ADU Channel #28, TPM Input: Fiber #10 Pol-X



Fundamental Tone: -0.4 dBm
 Second Harmonic: -48.2 dBm
 Third Harmonic: -51.6 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -61.6 dBm @ 105.951 MHz
 Cross Talk: 61.2 dBC @ 105.951 MHz

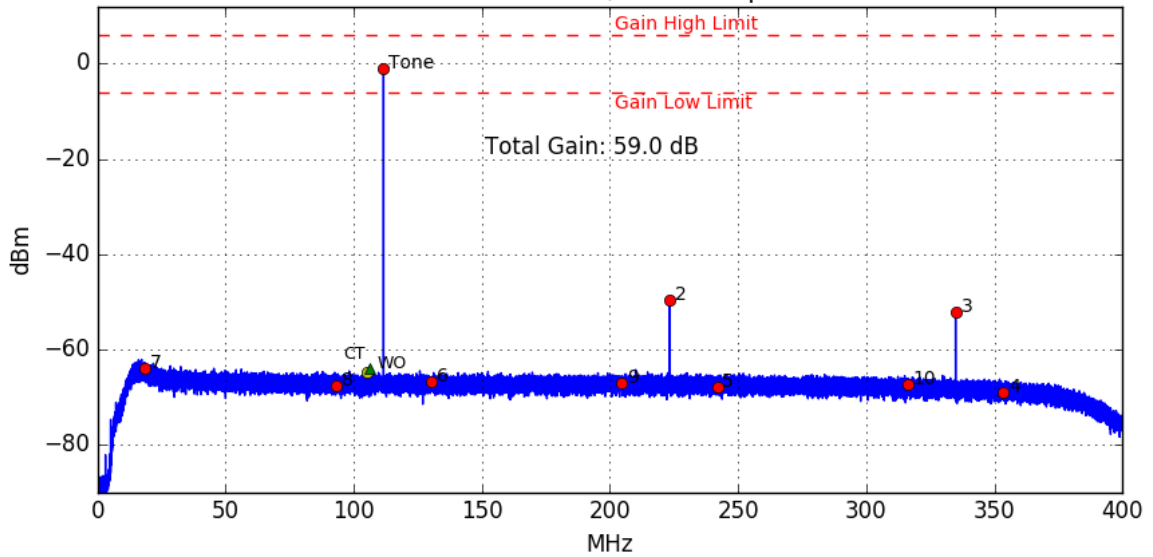
Board: #5 ADU Channel #29, TPM Input: Fiber #10 Pol-Y



Fundamental Tone: 1.4 dBm
 Second Harmonic: -44.6 dBm
 Third Harmonic: -53.4 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -62.8 dBm @ 56.201 MHz
 Cross Talk: 65.0 dBC @ 111.627 MHz

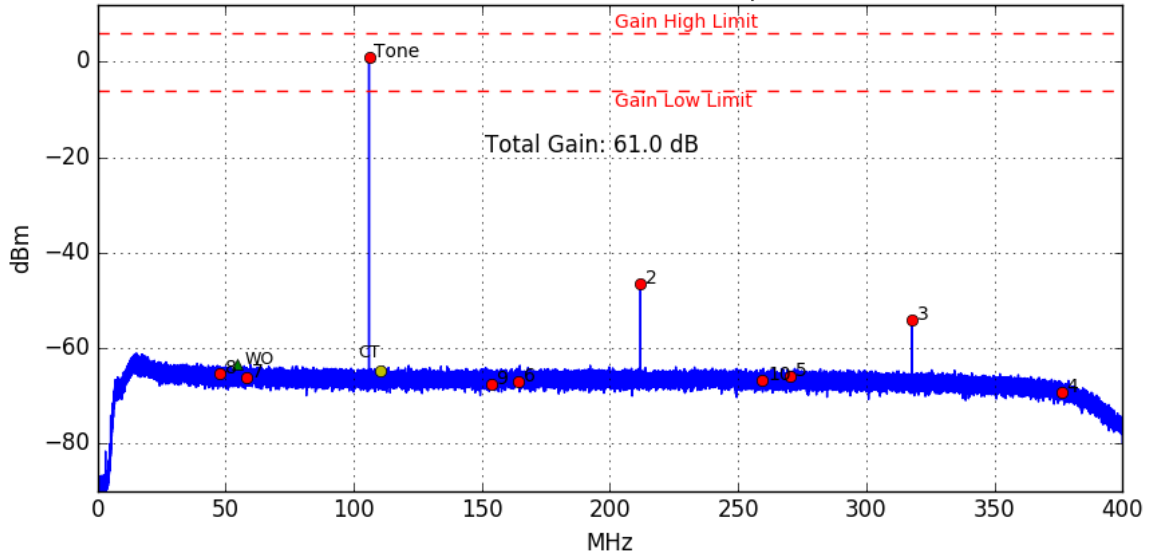
Board: #5 ADU Channel #30, TPM Input: Fiber #9 Pol-X



Fundamental Tone: -1.0 dBm
 Second Harmonic: -49.5 dBm
 Third Harmonic: -52.0 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -63.9 dBm @ 105.951 MHz
 Cross Talk: 62.9 dBC @ 105.951 MHz

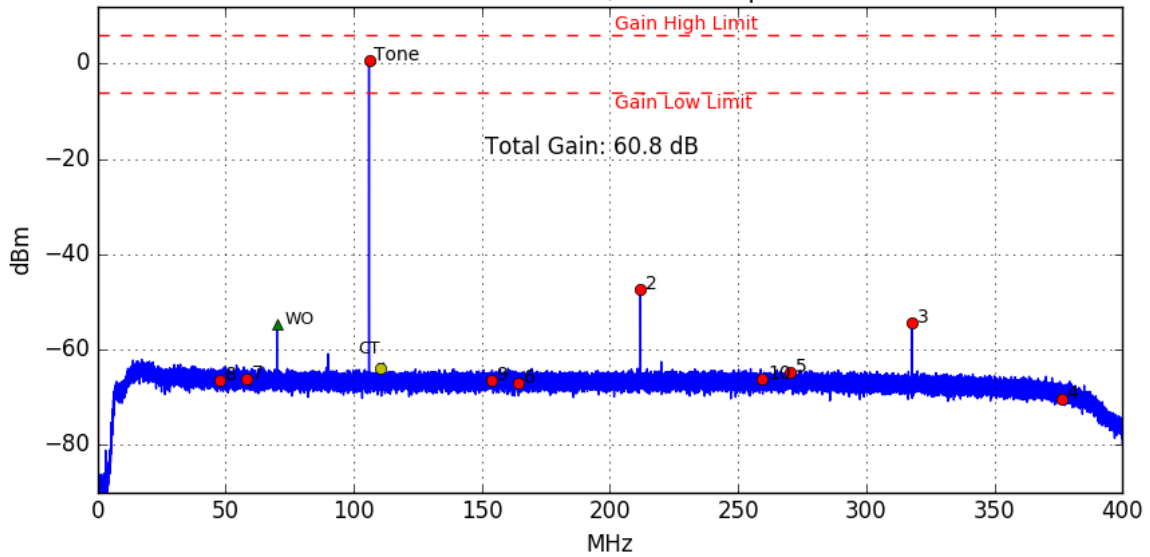
Board: #5 ADU Channel #31, TPM Input: Fiber #9 Pol-Y



Fundamental Tone: 1.0 dBm
 Second Harmonic: -46.4 dBm
 Third Harmonic: -54.2 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -63.4 dBm @ 54.572 MHz
 Cross Talk: 65.0 dBC @ 111.627 MHz

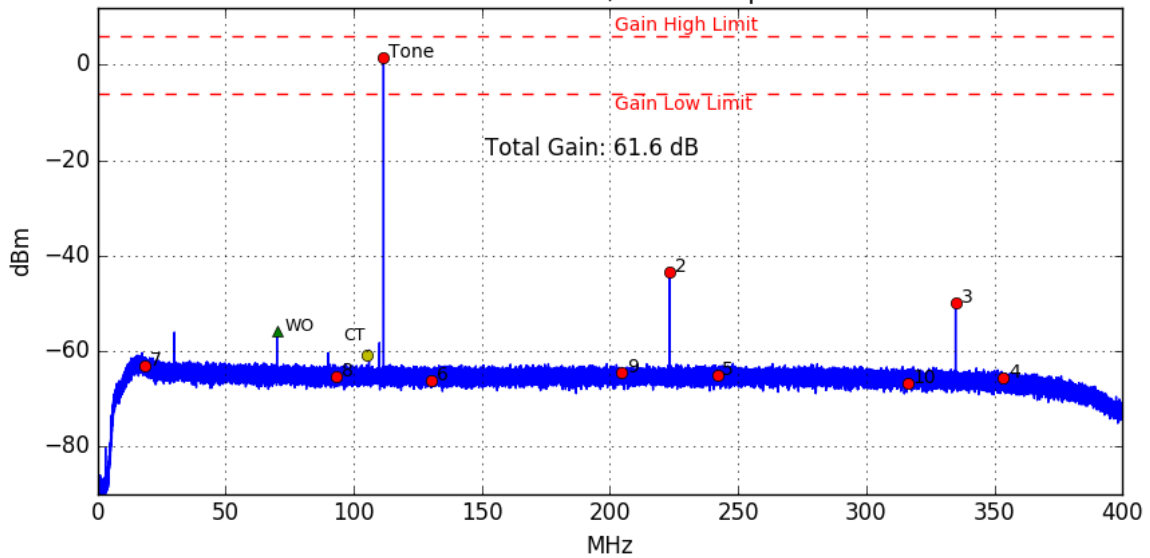
Board: #6 ADU Channel #00, TPM Input: Fiber #1 Pol-Y



Fundamental Tone: 0.8 dBm
 Second Harmonic: -47.4 dBm
 Third Harmonic: -54.3 dBm

Tone Frequency: 105.950928 Hz
 Worst Other: -54.6 dBm @ 70.001 MHz
 Cross Talk: 63.7 dBC @ 111.627 MHz

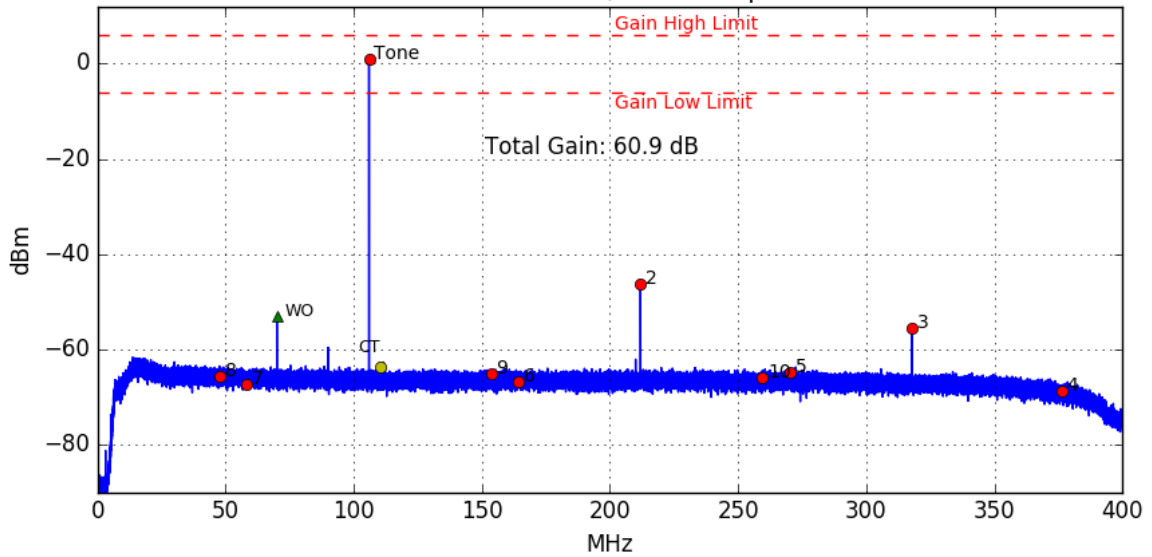
Board: #6 ADU Channel #01, TPM Input: Fiber #1 Pol-X



Fundamental Tone: 1.6 dBm
 Second Harmonic: -43.5 dBm
 Third Harmonic: -49.8 dBm

Tone Frequency: 111.627197 Hz
 Worst Other: -55.8 dBm @ 70.001 MHz
 Cross Talk: 61.5 dBC @ 105.951 MHz

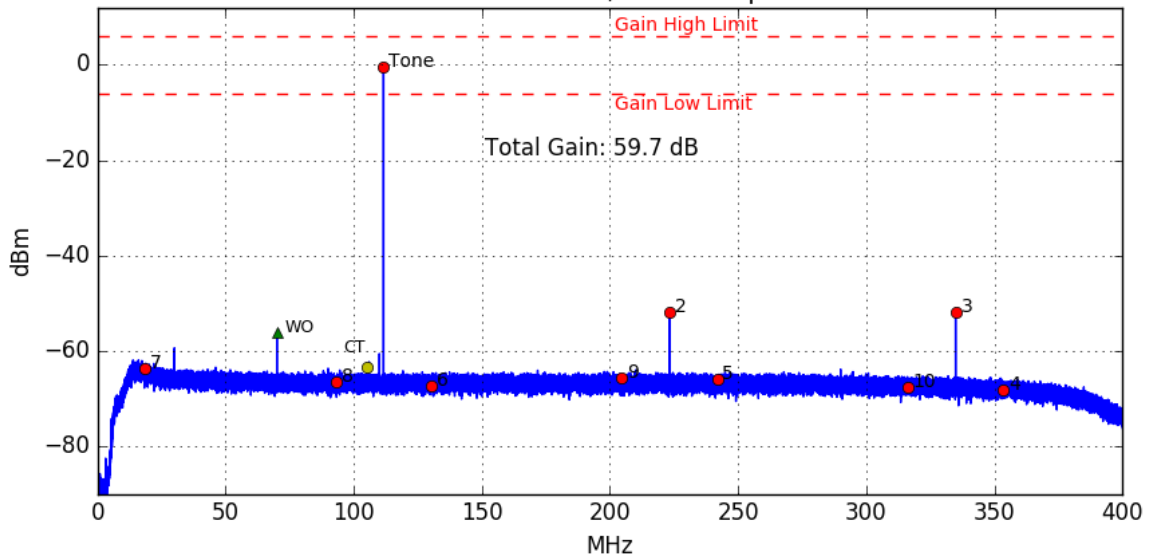
Board: #6 ADU Channel #02, TPM Input: Fiber #2 Pol-Y



Fundamental Tone: 0.9 dBm
 Second Harmonic: -46.4 dBm
 Third Harmonic: -55.4 dBm

Tone Frequency: 105.950928 Hz
 Worst Other: -52.9 dBm @ 70.001 MHz
 Cross Talk: 63.6 dBC @ 111.627 MHz

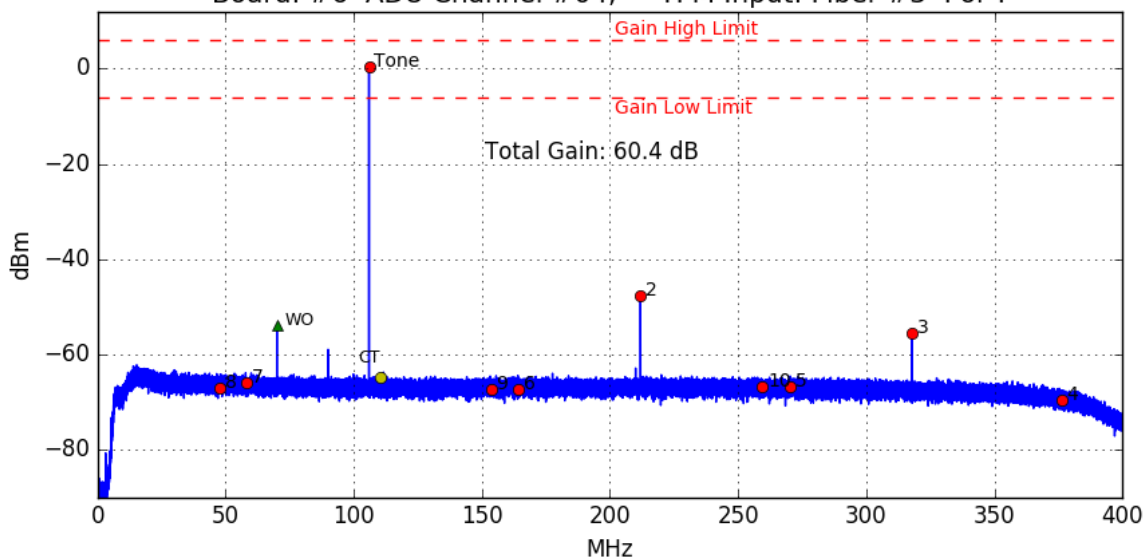
Board: #6 ADU Channel #03, TPM Input: Fiber #2 Pol-X



Fundamental Tone: -0.3 dBm
 Second Harmonic: -51.8 dBm
 Third Harmonic: -51.8 dBm

Tone Frequency: 111.627197 Hz
 Worst Other: -56.0 dBm @ 70.001 MHz
 Cross Talk: 62.0 dBC @ 105.951 MHz

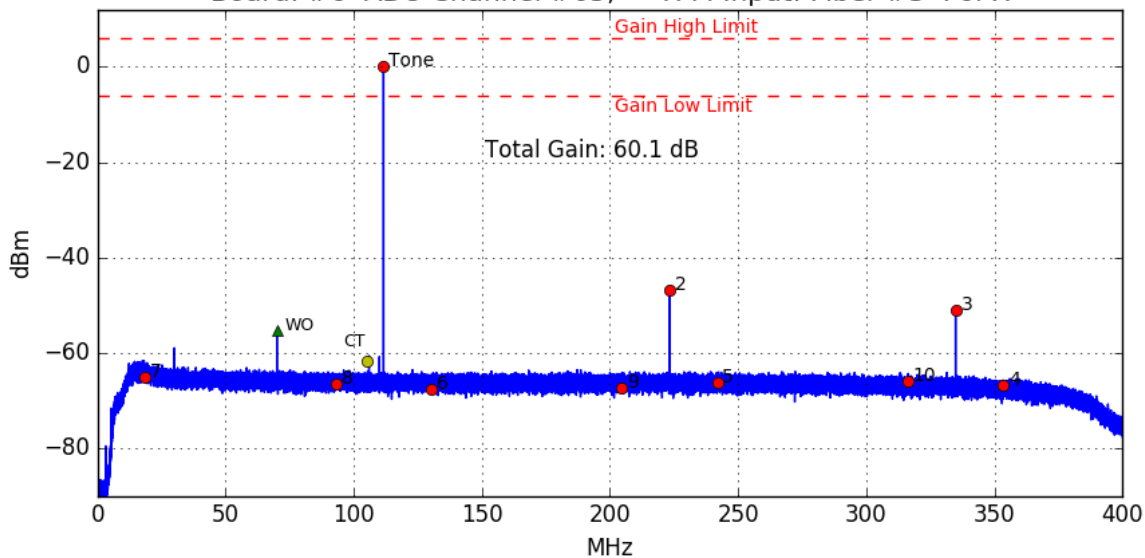
Board: #6 ADU Channel #04, TPM Input: Fiber #3 Pol-Y



Fundamental Tone: 0.4 dBm
 Second Harmonic: -47.7 dBm
 Third Harmonic: -55.5 dBm

Tone Frequency: 105.950928 Hz
 Worst Other: -53.8 dBm @ 70.001 MHz
 Cross Talk: 64.2 dBC @ 111.627 MHz

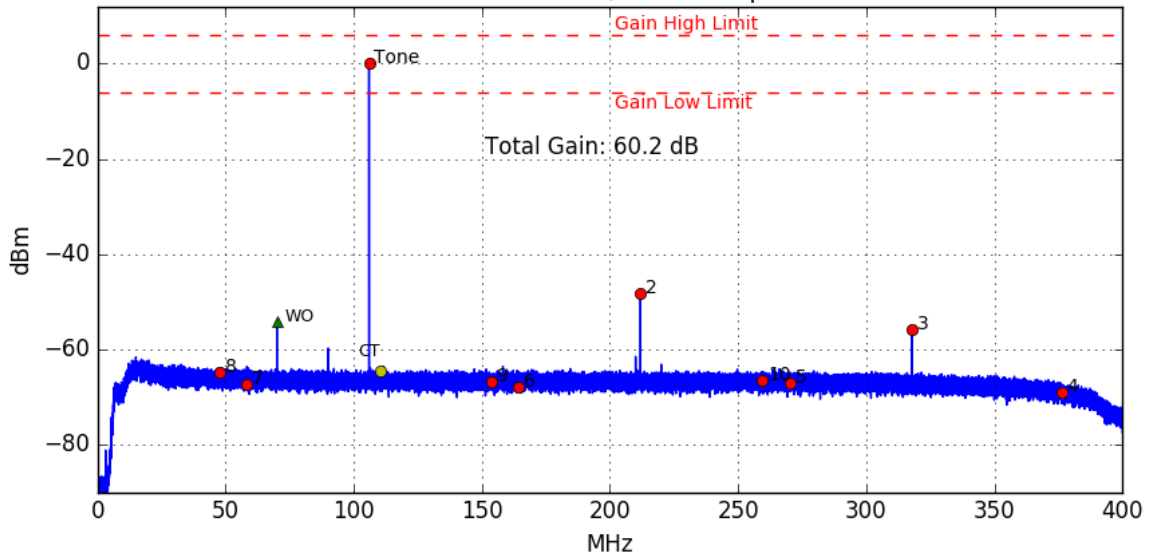
Board: #6 ADU Channel #05, TPM Input: Fiber #3 Pol-X



Fundamental Tone: 0.1 dBm
 Second Harmonic: -46.8 dBm
 Third Harmonic: -51.0 dBm

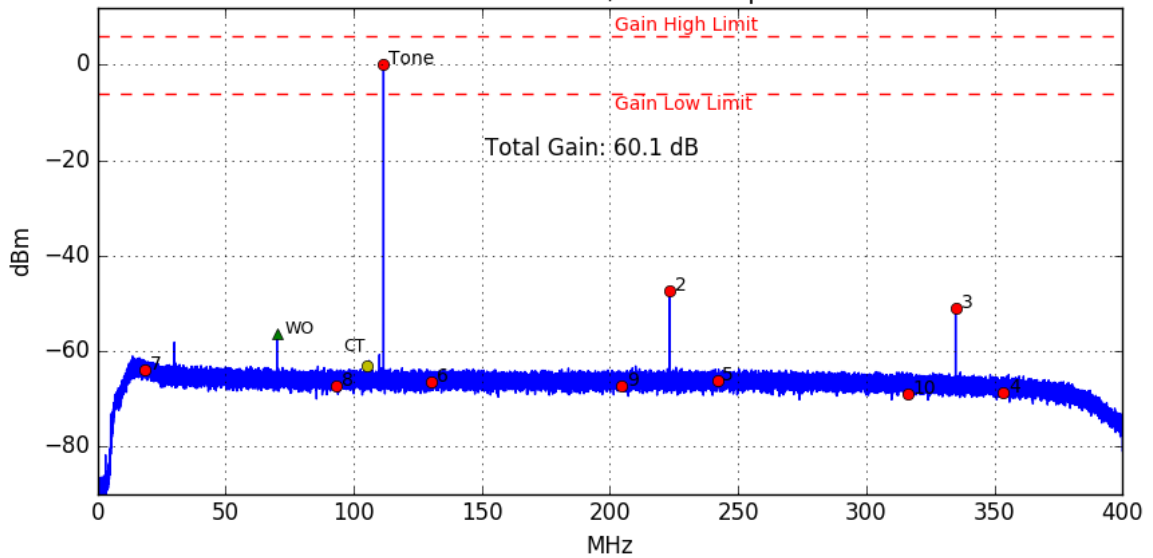
Tone Frequency: 111.627197 Hz
 Worst Other: -55.3 dBm @ 70.001 MHz
 Cross Talk: 60.7 dBC @ 105.951 MHz

Board: #6 ADU Channel #06, TPM Input: Fiber #4 Pol-Y

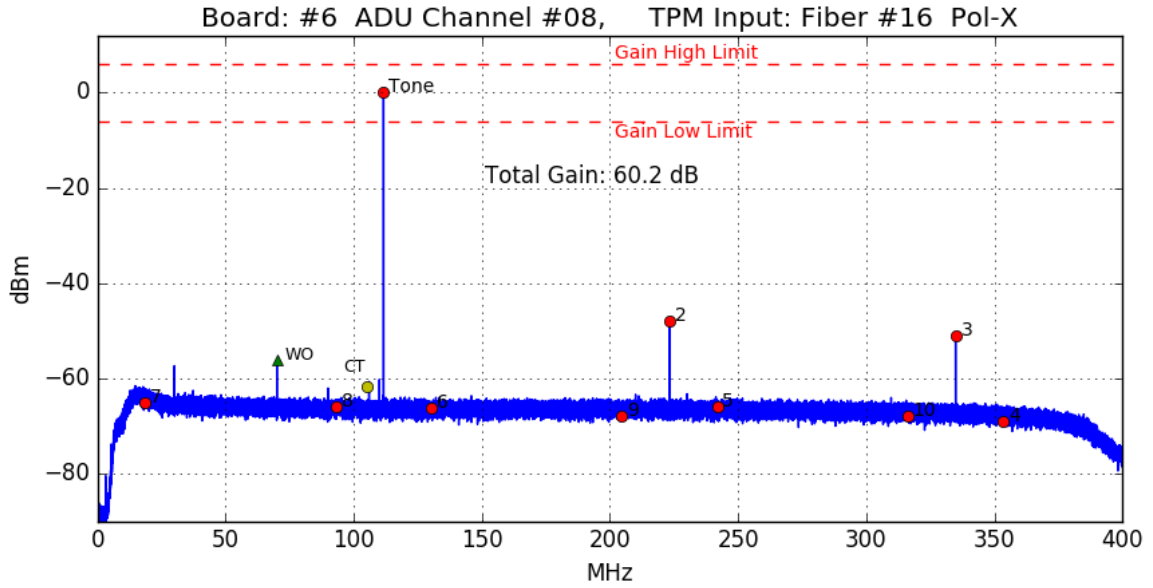


Fundamental Tone: 0.2 dBm	Tone Frequency: 105.950.928 Hz
Second Harmonic: -48.2 dBm	Worst Other: -54.1 dBm @ 70.001 MHz
Third Harmonic: -55.8 dBm	Cross Talk: 63.7 dBC @ 111.627 MHz

Board: #6 ADU Channel #07, TPM Input: Fiber #4 Pol-X

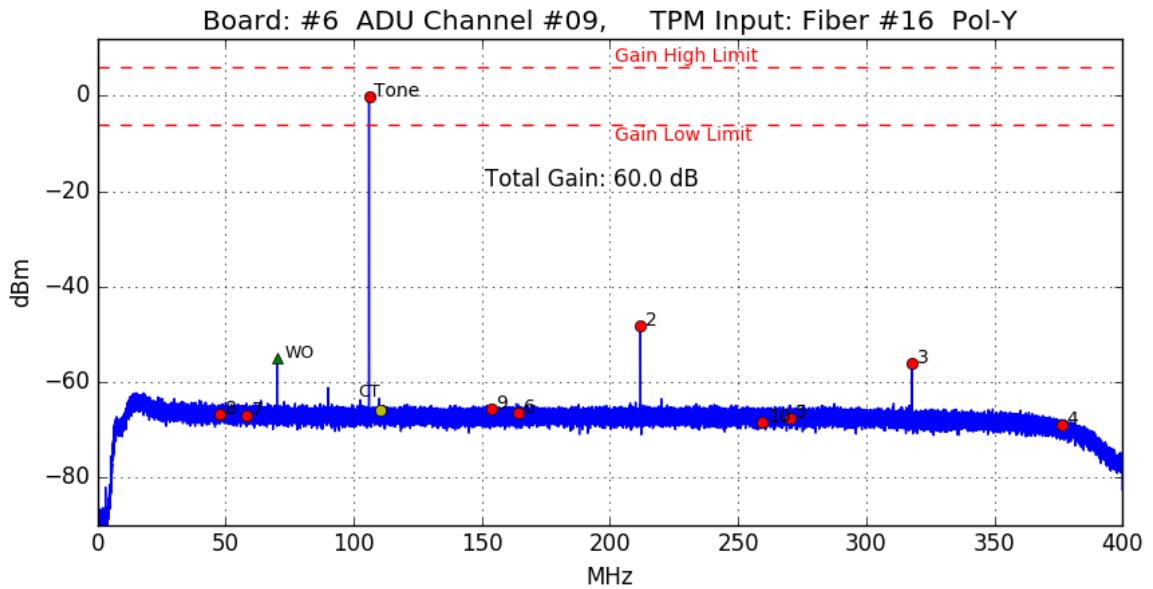


Fundamental Tone: 0.1 dBm	Tone Frequency: 111.627.197 Hz
Second Harmonic: -47.4 dBm	Worst Other: -56.4 dBm @ 70.001 MHz
Third Harmonic: -50.9 dBm	Cross Talk: 62.1 dBC @ 105.951 MHz



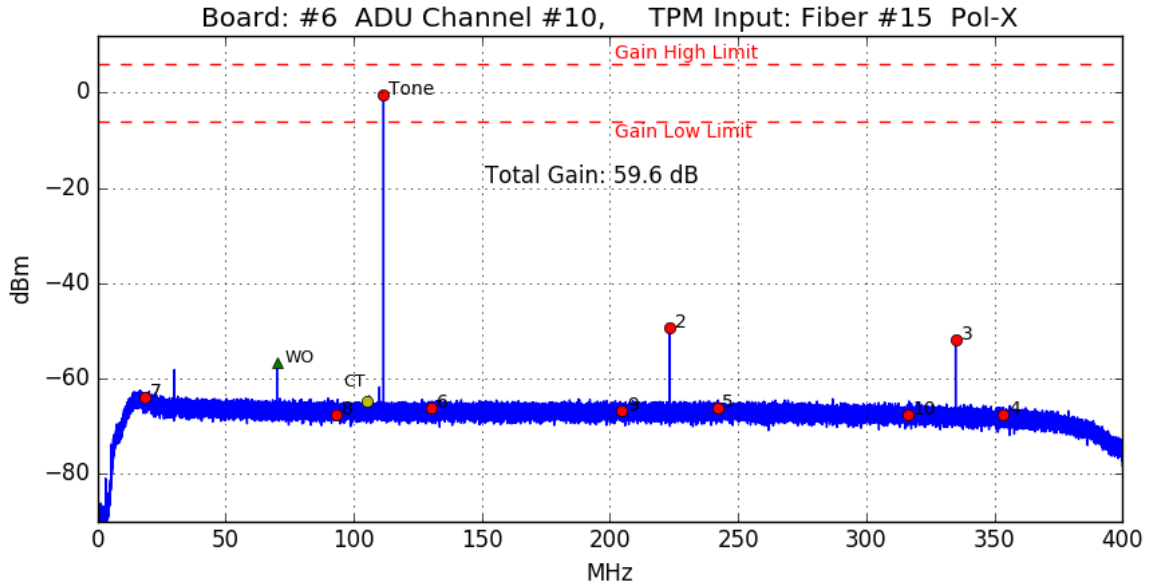
Fundamental Tone: 0.2 dBm
 Second Harmonic: -48.0 dBm
 Third Harmonic: -51.1 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -56.2 dBm @ 70.001 MHz
 Cross Talk: 60.9 dBC @ 105.951 MHz



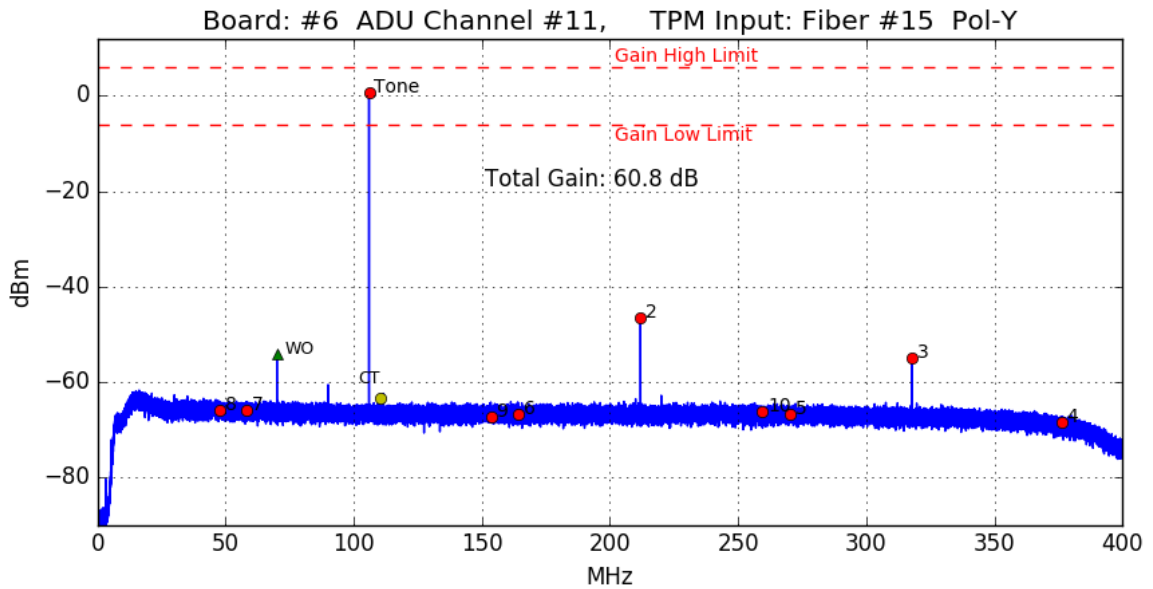
Fundamental Tone: -0.0 dBm
 Second Harmonic: -48.2 dBm
 Third Harmonic: -56.2 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -55.0 dBm @ 70.001 MHz
 Cross Talk: 65.0 dBC @ 111.627 MHz



Fundamental Tone: -0.4 dBm
 Second Harmonic: -49.4 dBm
 Third Harmonic: -52.0 dBm

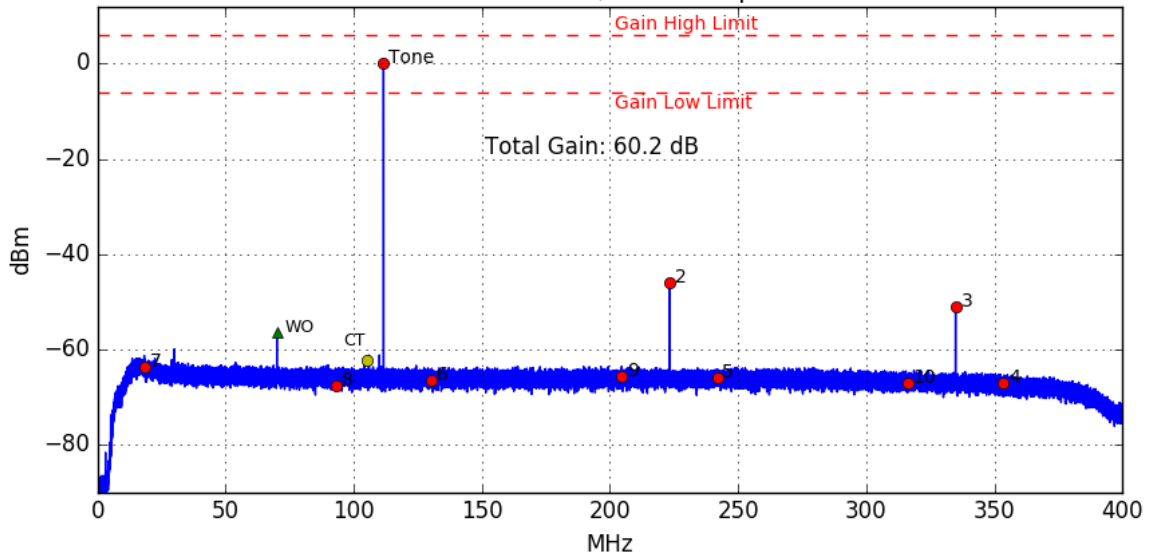
Tone Frequency: 111.627.197 Hz
 Worst Other: -56.7 dBm @ 70.001 MHz
 Cross Talk: 63.2 dBC @ 105.951 MHz



Fundamental Tone: 0.8 dBm
 Second Harmonic: -46.6 dBm
 Third Harmonic: -55.0 dBm

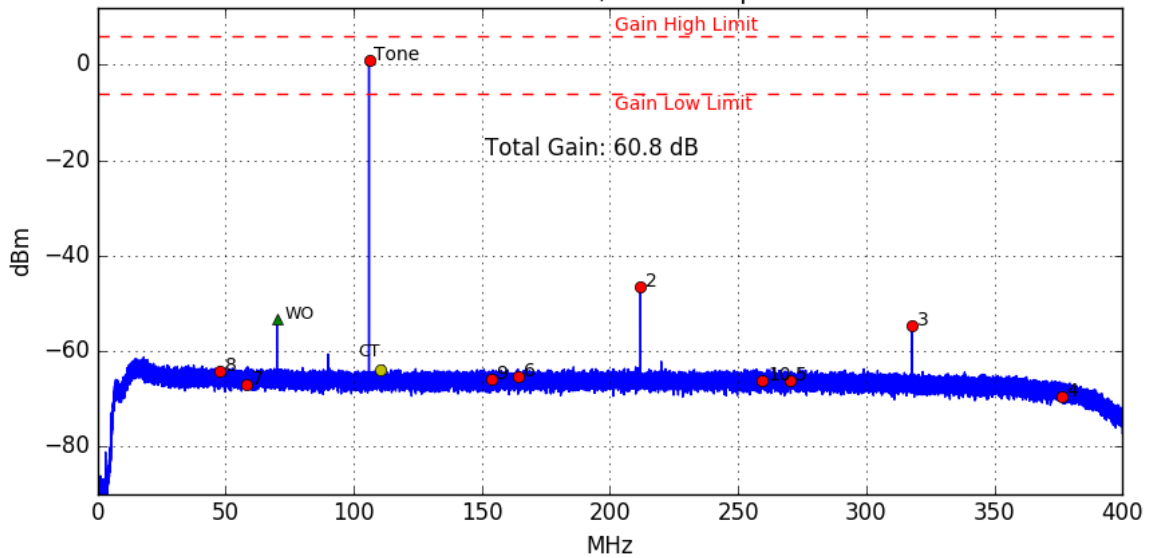
Tone Frequency: 105.950.928 Hz
 Worst Other: -54.0 dBm @ 70.001 MHz
 Cross Talk: 63.2 dBC @ 111.627 MHz

Board: #6 ADU Channel #12, TPM Input: Fiber #14 Pol-X



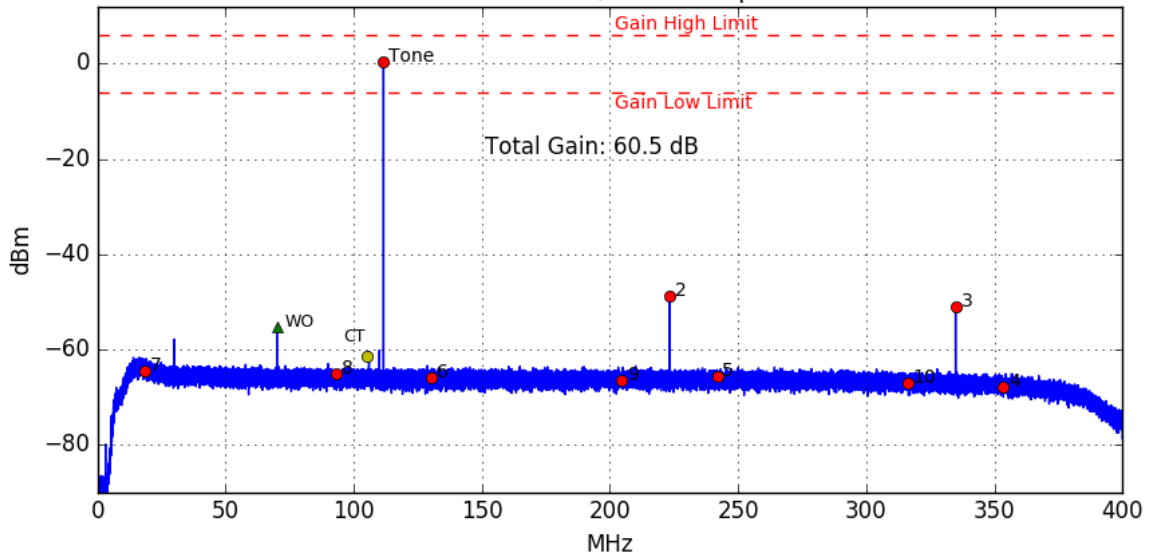
Fundamental Tone: 0.2 dBm Tone Frequency: 111.627.197 Hz
 Second Harmonic: -46.1 dBm Worst Other: -56.2 dBm @ 70.001 MHz
 Third Harmonic: -51.1 dBm Cross Talk: 61.4 dBC @ 105.951 MHz

Board: #6 ADU Channel #13, TPM Input: Fiber #14 Pol-Y



Fundamental Tone: 0.8 dBm Tone Frequency: 105.950.928 Hz
 Second Harmonic: -46.7 dBm Worst Other: -53.3 dBm @ 70.001 MHz
 Third Harmonic: -54.6 dBm Cross Talk: 63.9 dBC @ 111.627 MHz

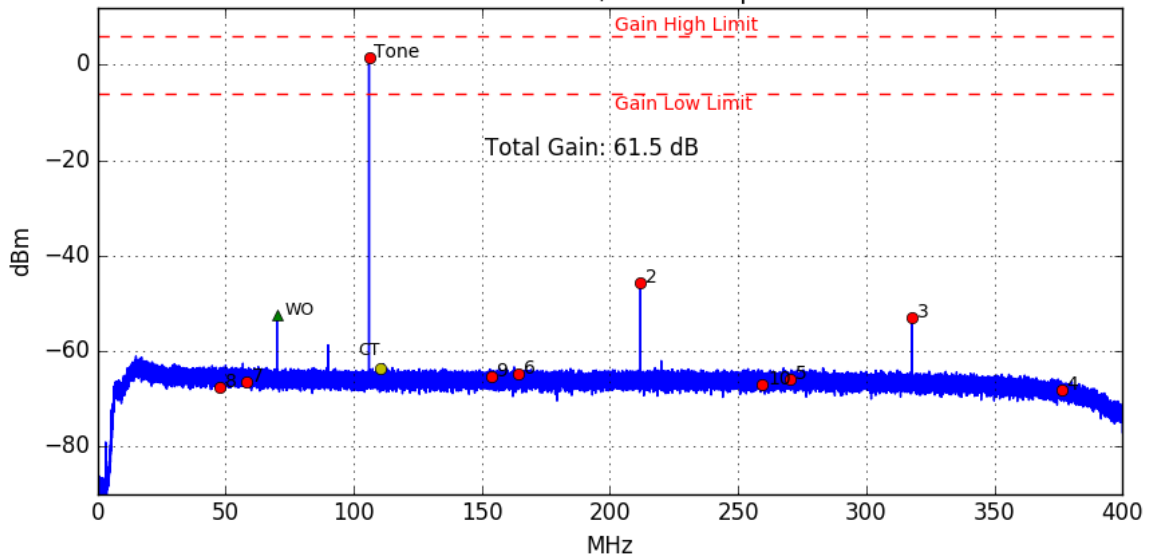
Board: #6 ADU Channel #14, TPM Input: Fiber #13 Pol-X



Fundamental Tone: 0.5 dBm
 Second Harmonic: -48.7 dBm
 Third Harmonic: -51.0 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -55.3 dBm @ 70.001 MHz
 Cross Talk: 60.9 dBC @ 105.951 MHz

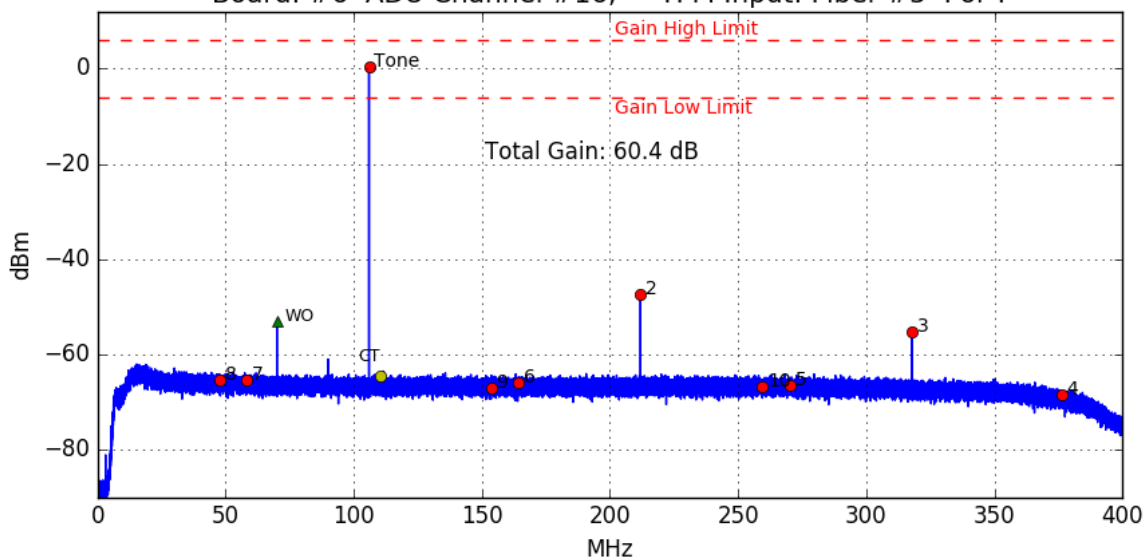
Board: #6 ADU Channel #15, TPM Input: Fiber #13 Pol-Y



Fundamental Tone: 1.5 dBm
 Second Harmonic: -45.7 dBm
 Third Harmonic: -53.1 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -52.5 dBm @ 70.001 MHz
 Cross Talk: 64.3 dBC @ 111.627 MHz

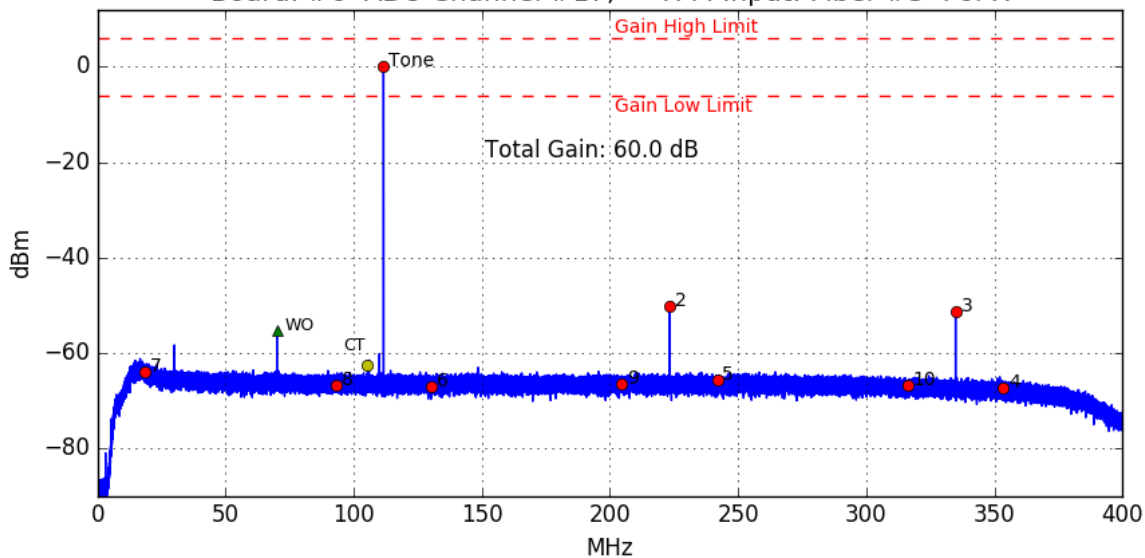
Board: #6 ADU Channel #16, TPM Input: Fiber #5 Pol-Y



Fundamental Tone: 0.4 dBm
 Second Harmonic: -47.3 dBm
 Third Harmonic: -55.3 dBm

Tone Frequency: 105.950928 Hz
 Worst Other: -53.0 dBm @ 70.001 MHz
 Cross Talk: 63.9 dBC @ 111.627 MHz

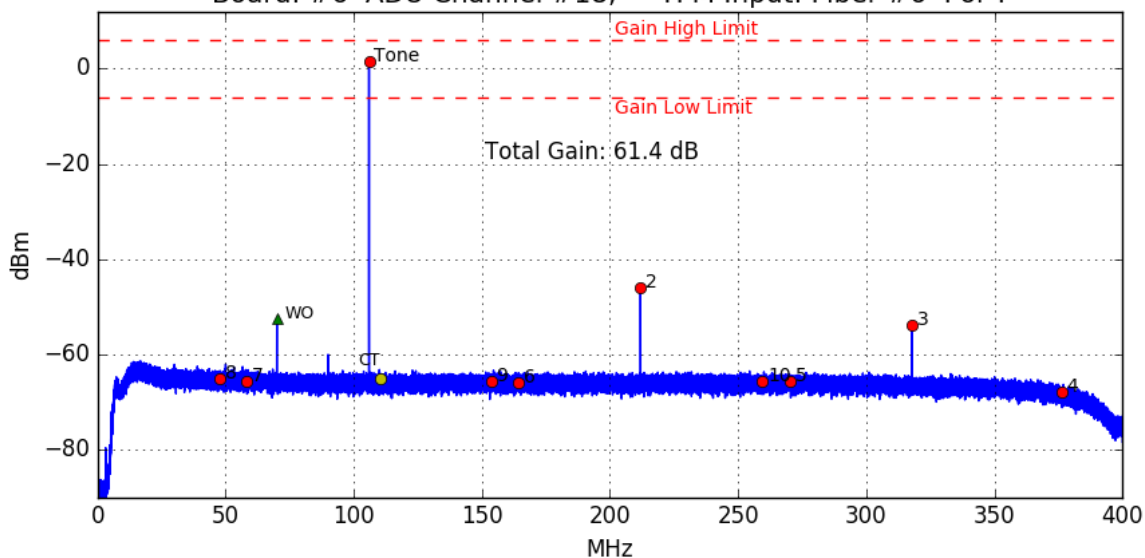
Board: #6 ADU Channel #17, TPM Input: Fiber #5 Pol-X



Fundamental Tone: -0.0 dBm
 Second Harmonic: -50.1 dBm
 Third Harmonic: -51.2 dBm

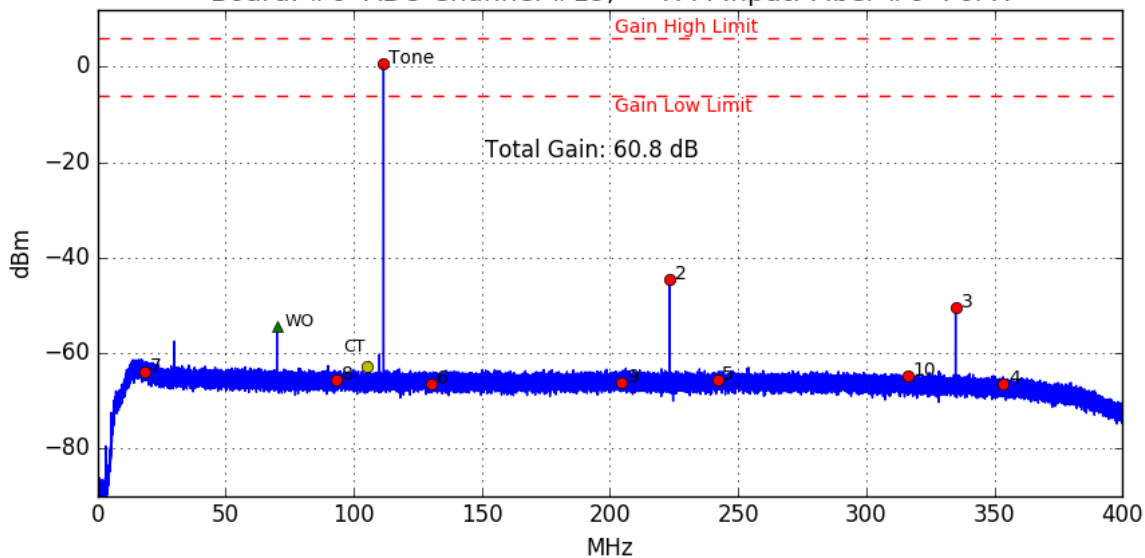
Tone Frequency: 111.627197 Hz
 Worst Other: -55.3 dBm @ 70.001 MHz
 Cross Talk: 61.5 dBC @ 105.951 MHz

Board: #6 ADU Channel #18, TPM Input: Fiber #6 Pol-Y



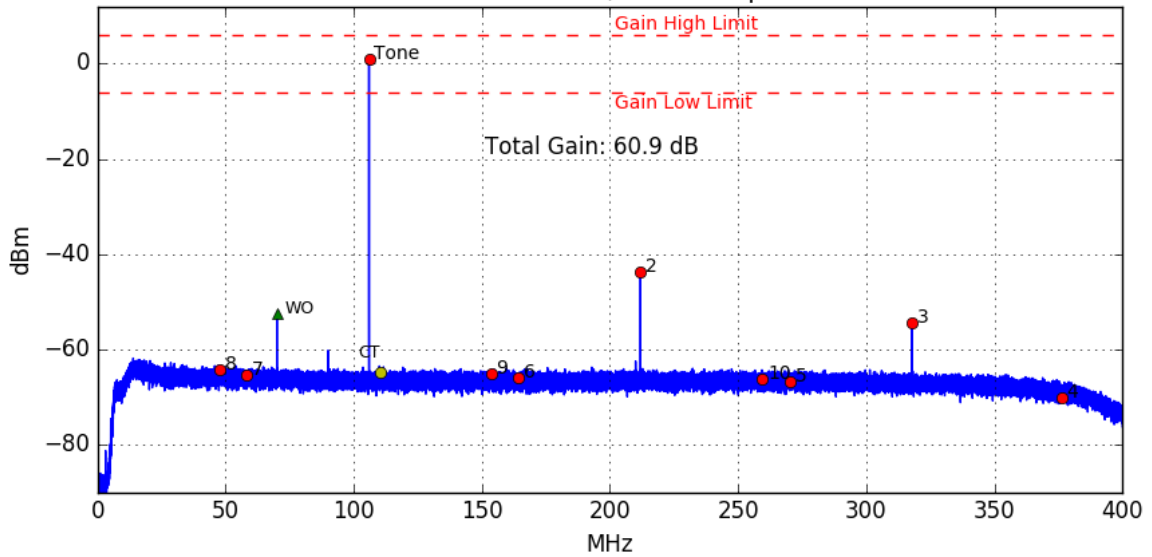
Fundamental Tone: 1.4 dBm Tone Frequency: 105.950.928 Hz
 Second Harmonic: -46.1 dBm Worst Other: -52.3 dBm @ 70.001 MHz
 Third Harmonic: -53.8 dBm Cross Talk: 65.5 dBC @ 111.554 MHz

Board: #6 ADU Channel #19, TPM Input: Fiber #6 Pol-X



Fundamental Tone: 0.8 dBm Tone Frequency: 111.627.197 Hz
 Second Harmonic: -44.5 dBm Worst Other: -54.4 dBm @ 70.001 MHz
 Third Harmonic: -50.5 dBm Cross Talk: 62.6 dBC @ 105.951 MHz

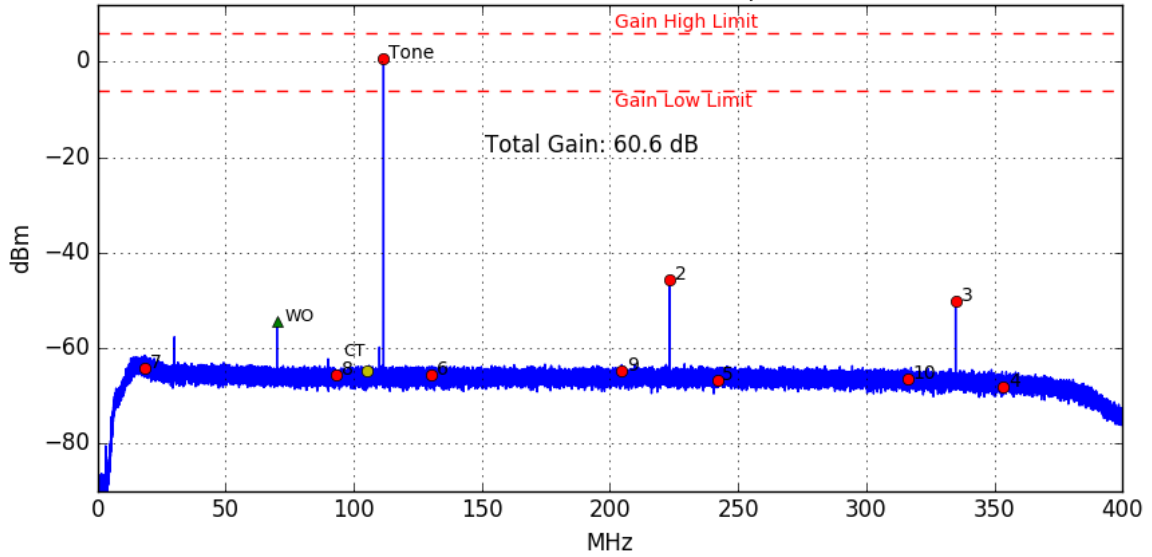
Board: #6 ADU Channel #20, TPM Input: Fiber #7 Pol-Y



Fundamental Tone: 0.9 dBm
 Second Harmonic: -43.7 dBm
 Third Harmonic: -54.3 dBm

Tone Frequency: 105.950928 Hz
 Worst Other: -52.4 dBm @ 70.001 MHz
 Cross Talk: 64.6 dBC @ 111.627 MHz

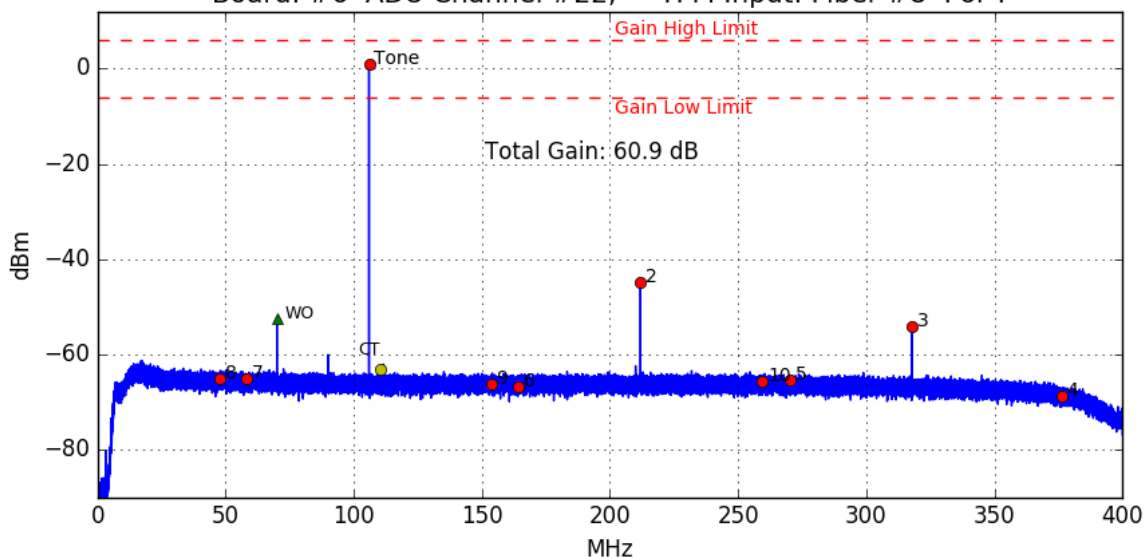
Board: #6 ADU Channel #21, TPM Input: Fiber #7 Pol-X



Fundamental Tone: 0.6 dBm
 Second Harmonic: -45.8 dBm
 Third Harmonic: -50.3 dBm

Tone Frequency: 111.627197 Hz
 Worst Other: -54.4 dBm @ 70.001 MHz
 Cross Talk: 64.3 dBC @ 105.951 MHz

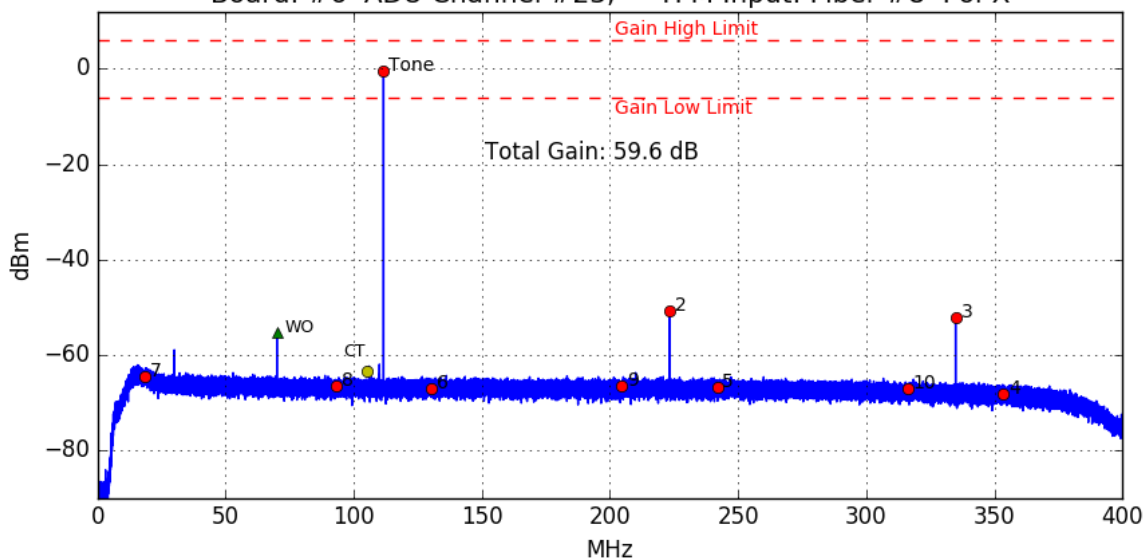
Board: #6 ADU Channel #22, TPM Input: Fiber #8 Pol-Y



Fundamental Tone: 0.9 dBm
 Second Harmonic: -44.7 dBm
 Third Harmonic: -54.2 dBm

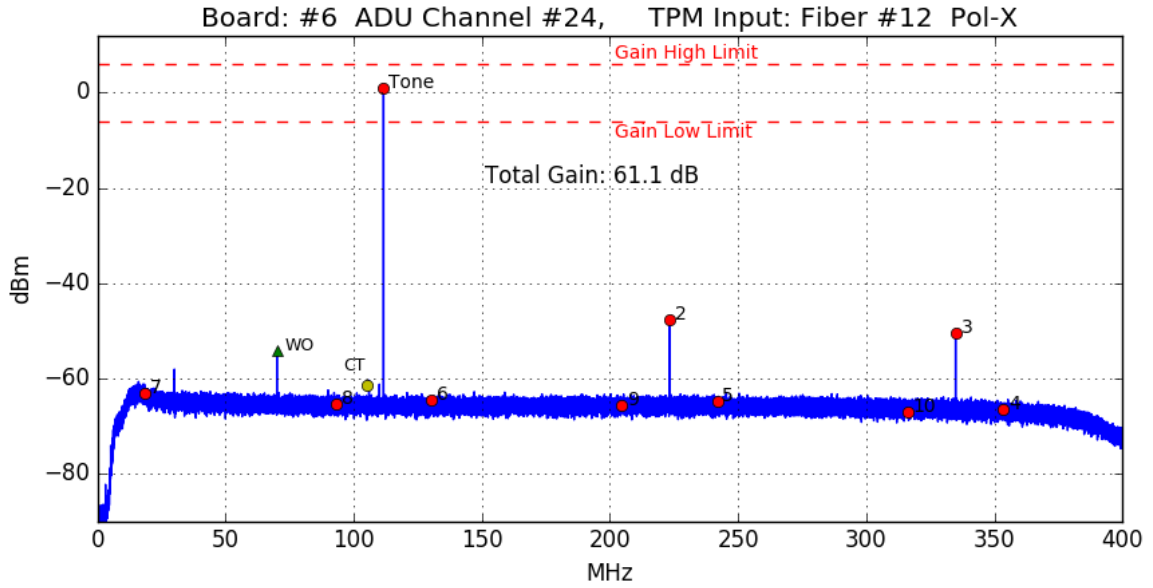
Tone Frequency: 105.950928 Hz
 Worst Other: -52.4 dBm @ 70.001 MHz
 Cross Talk: 63.0 dBC @ 111.627 MHz

Board: #6 ADU Channel #23, TPM Input: Fiber #8 Pol-X



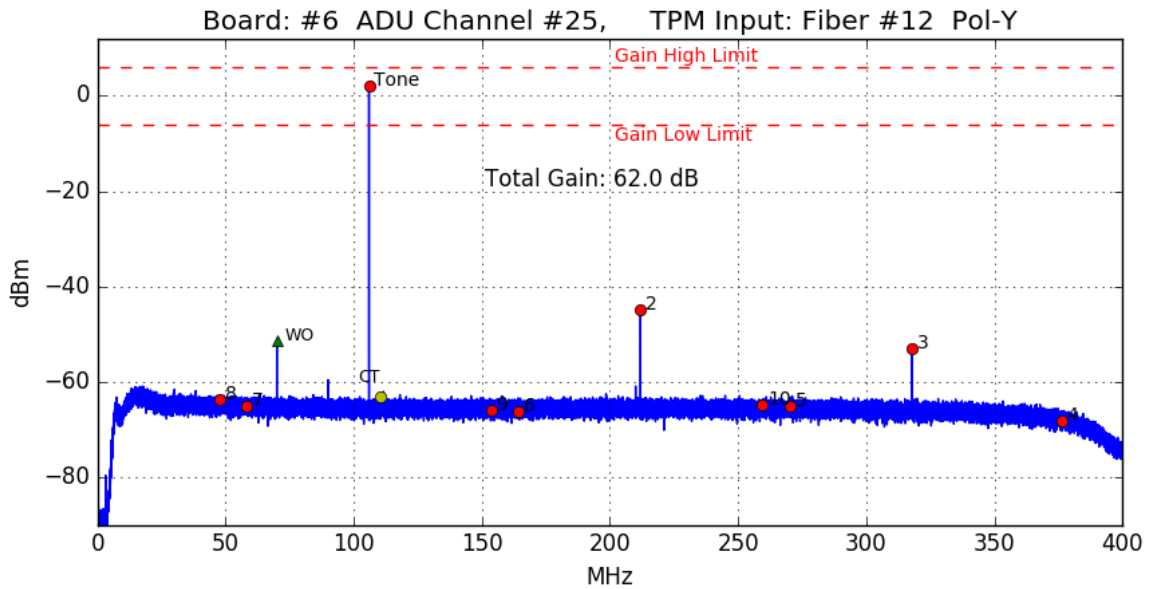
Fundamental Tone: -0.4 dBm
 Second Harmonic: -50.7 dBm
 Third Harmonic: -52.2 dBm

Tone Frequency: 111.627197 Hz
 Worst Other: -55.1 dBm @ 70.001 MHz
 Cross Talk: 62.0 dBC @ 105.951 MHz



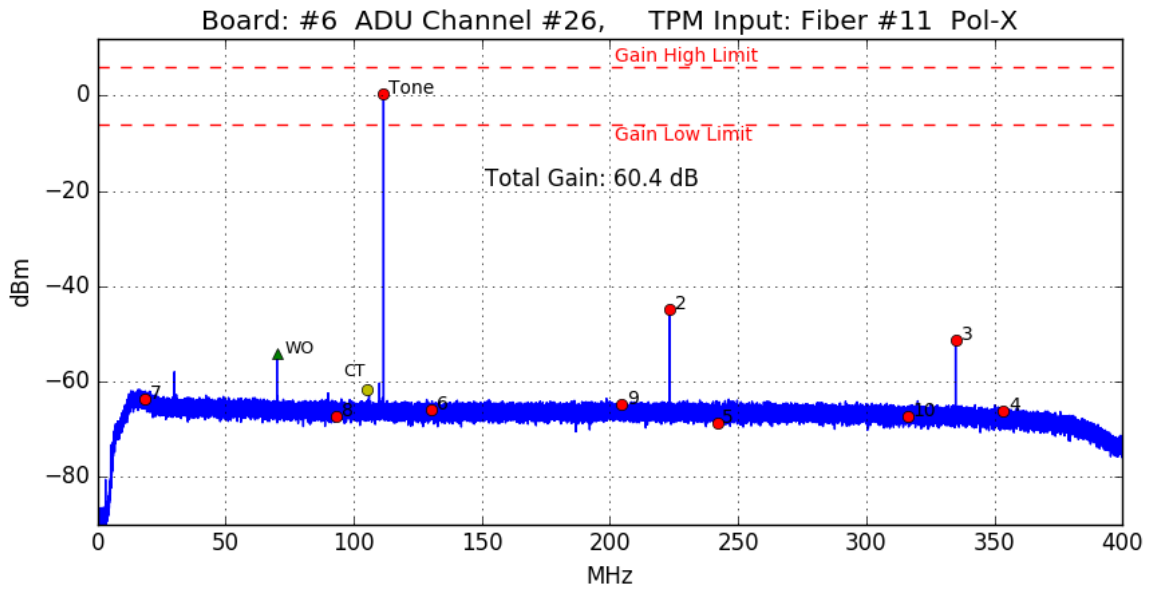
Fundamental Tone: 1.1 dBm
 Second Harmonic: -47.7 dBm
 Third Harmonic: -50.4 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -54.2 dBm @ 70.001 MHz
 Cross Talk: 61.5 dBC @ 105.951 MHz



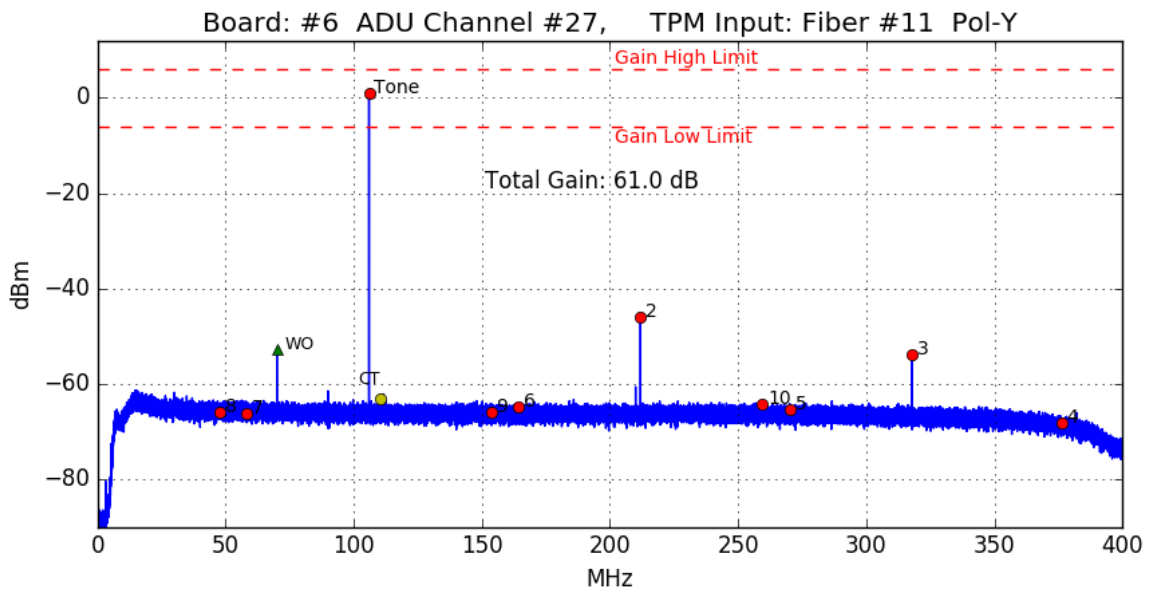
Fundamental Tone: 2.0 dBm
 Second Harmonic: -44.7 dBm
 Third Harmonic: -53.0 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -51.4 dBm @ 70.001 MHz
 Cross Talk: 64.0 dBC @ 111.627 MHz



Fundamental Tone: 0.4 dBm
 Second Harmonic: -44.8 dBm
 Third Harmonic: -51.3 dBm

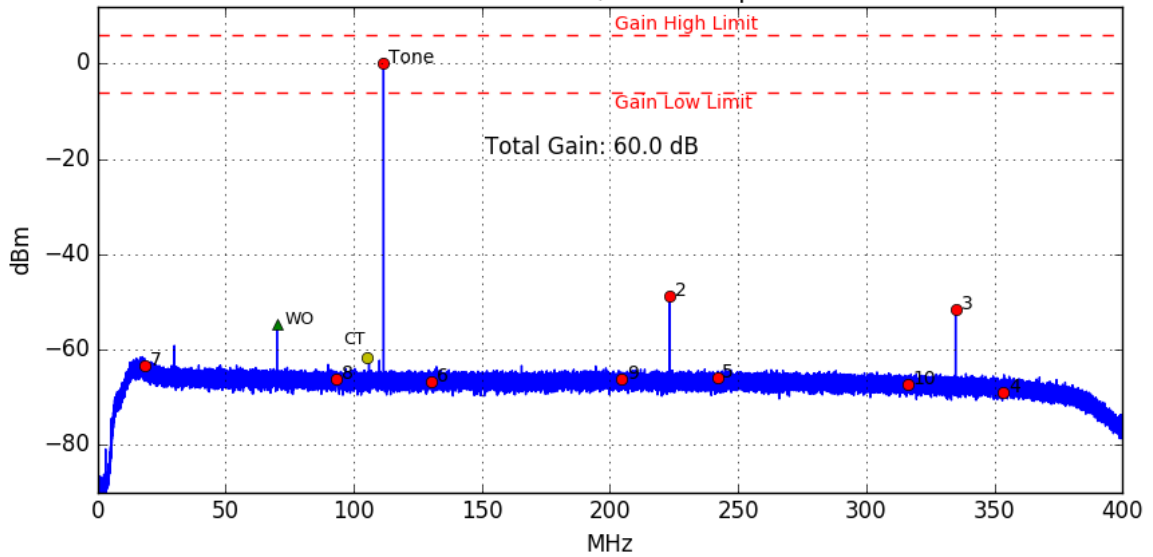
Tone Frequency: 111.627.197 Hz
 Worst Other: -54.2 dBm @ 70.001 MHz
 Cross Talk: 61.2 dBC @ 105.951 MHz



Fundamental Tone: 1.0 dBm
 Second Harmonic: -46.0 dBm
 Third Harmonic: -53.8 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -52.6 dBm @ 70.001 MHz
 Cross Talk: 63.2 dBC @ 111.627 MHz

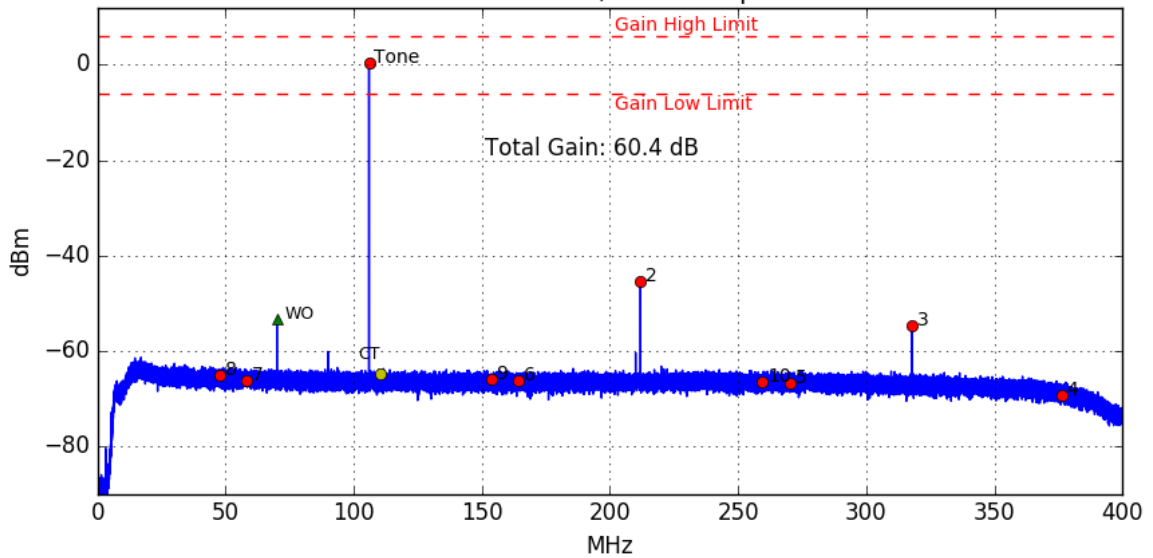
Board: #6 ADU Channel #28, TPM Input: Fiber #10 Pol-X



Fundamental Tone: 0.0 dBm
 Second Harmonic: -48.8 dBm
 Third Harmonic: -51.5 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -54.7 dBm @ 70.001 MHz
 Cross Talk: 60.8 dBC @ 105.951 MHz

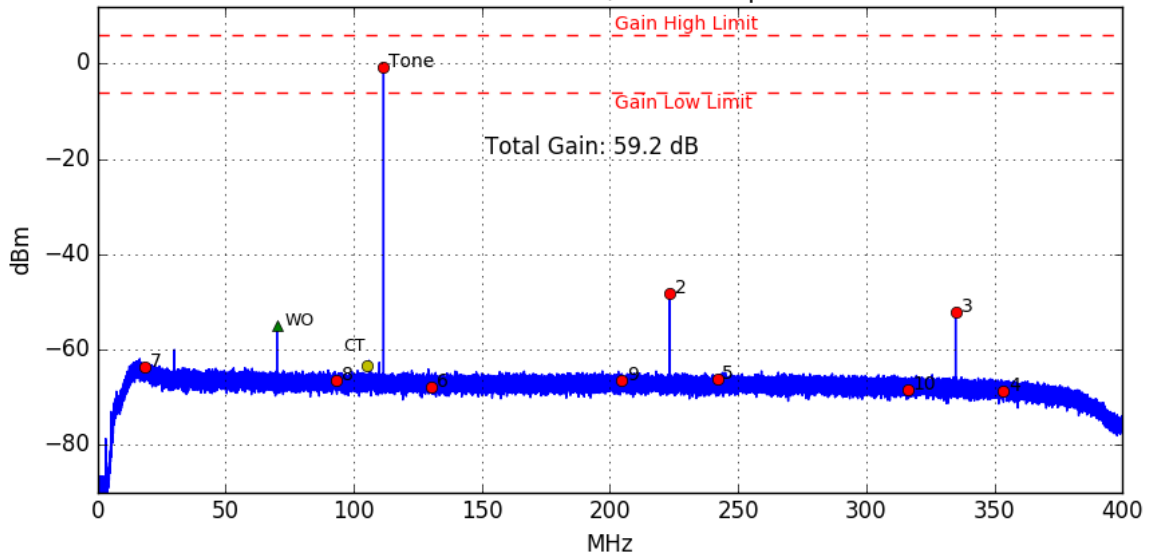
Board: #6 ADU Channel #29, TPM Input: Fiber #10 Pol-Y



Fundamental Tone: 0.4 dBm
 Second Harmonic: -45.5 dBm
 Third Harmonic: -54.8 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -53.2 dBm @ 70.001 MHz
 Cross Talk: 64.1 dBC @ 111.627 MHz

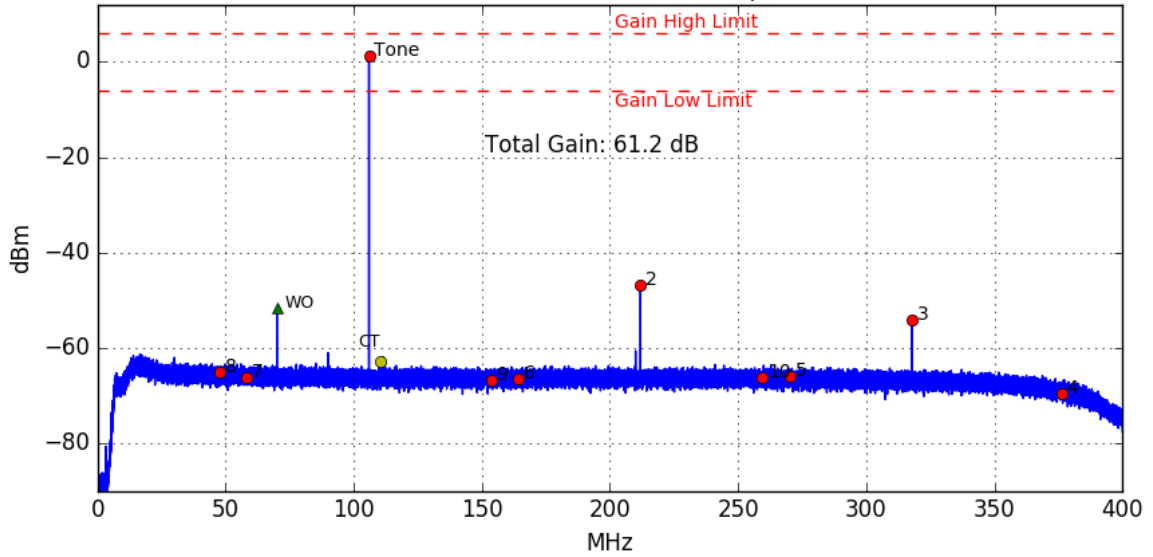
Board: #6 ADU Channel #30, TPM Input: Fiber #9 Pol-X



Fundamental Tone: -0.8 dBm
Second Harmonic: -48.3 dBm
Third Harmonic: -52.1 dBm

Tone Frequency: 111.627.197 Hz
Worst Other: -54.8 dBm @ 70.001 MHz
Cross Talk: 61.6 dBC @ 105.951 MHz

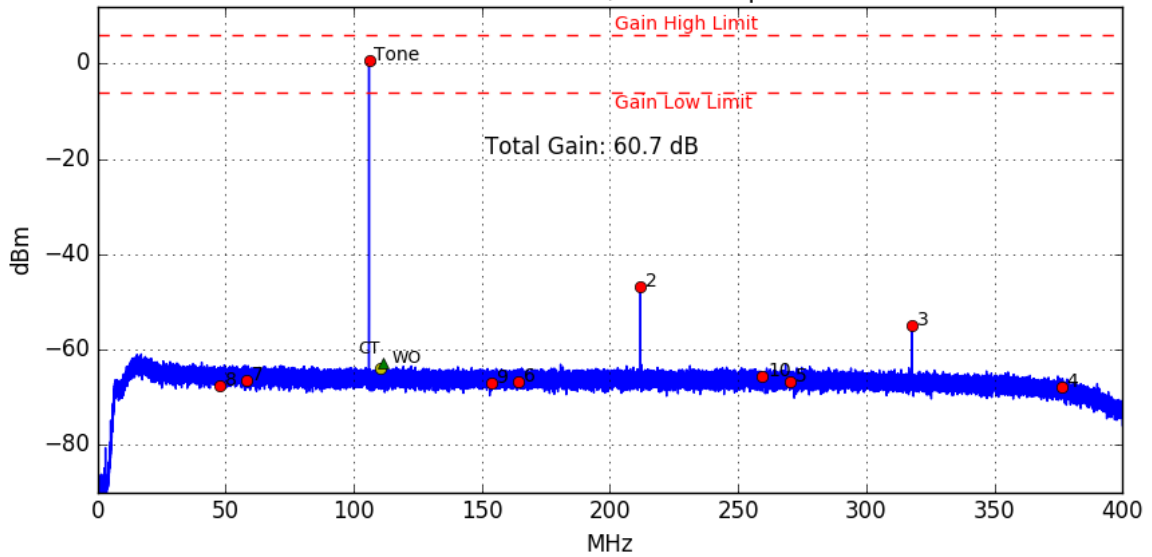
Board: #6 ADU Channel #31, TPM Input: Fiber #9 Pol-Y



Fundamental Tone: 1.2 dBm
Second Harmonic: -46.8 dBm
Third Harmonic: -54.2 dBm

Tone Frequency: 105.950.928 Hz
Worst Other: -51.6 dBm @ 70.001 MHz
Cross Talk: 63.1 dBC @ 111.627 MHz

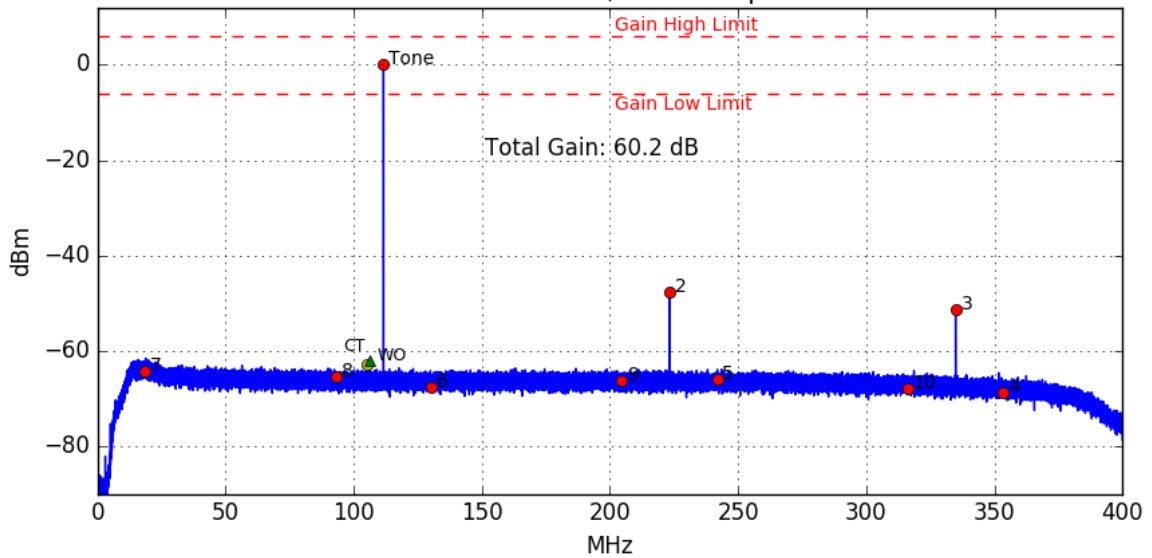
Board: #7 ADU Channel #00, TPM Input: Fiber #1 Pol-Y



Fundamental Tone: 0.7 dBm
 Second Harmonic: -46.8 dBm
 Third Harmonic: -54.9 dBm

Tone Frequency: 105.950928 Hz
 Worst Other: -62.9 dBm @ 111.627 MHz
 Cross Talk: 63.6 dBC @ 111.627 MHz

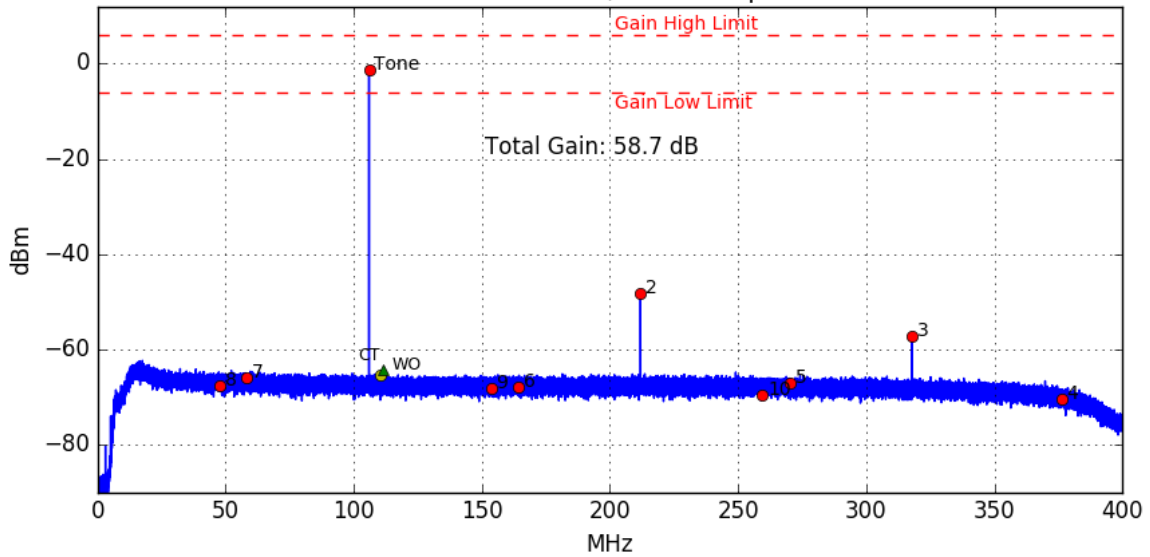
Board: #7 ADU Channel #01, TPM Input: Fiber #1 Pol-X



Fundamental Tone: 0.2 dBm
 Second Harmonic: -47.6 dBm
 Third Harmonic: -51.2 dBm

Tone Frequency: 111.627197 Hz
 Worst Other: -61.9 dBm @ 105.951 MHz
 Cross Talk: 62.1 dBC @ 105.951 MHz

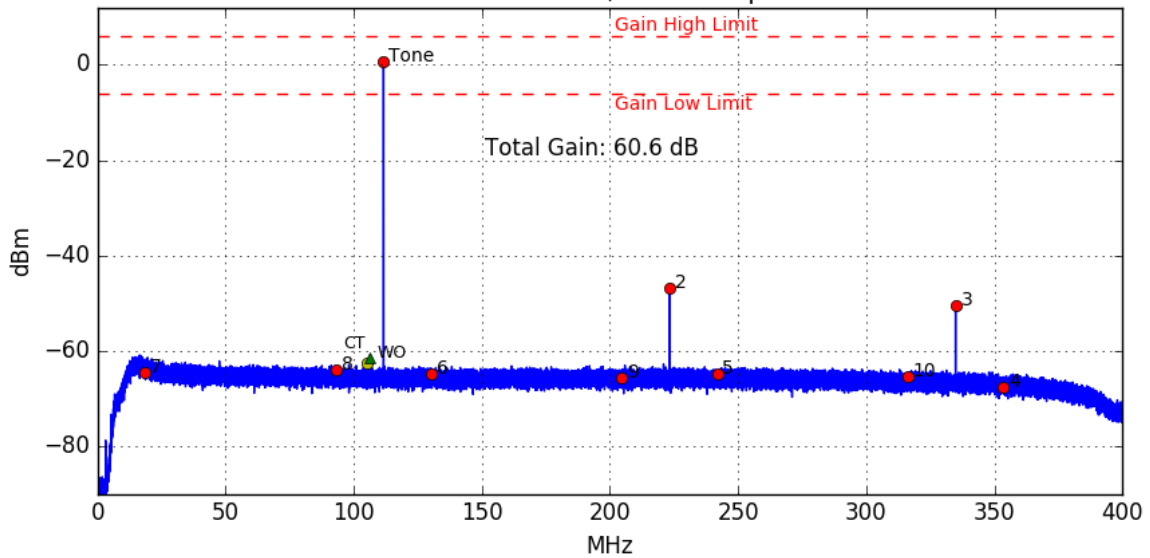
Board: #7 ADU Channel #02, TPM Input: Fiber #2 Pol-Y



Fundamental Tone: -1.3 dBm
 Second Harmonic: -48.2 dBm
 Third Harmonic: -57.2 dBm

Tone Frequency: 105.950928 Hz
 Worst Other: -64.3 dBm @ 111.627 MHz
 Cross Talk: 63.0 dBC @ 111.627 MHz

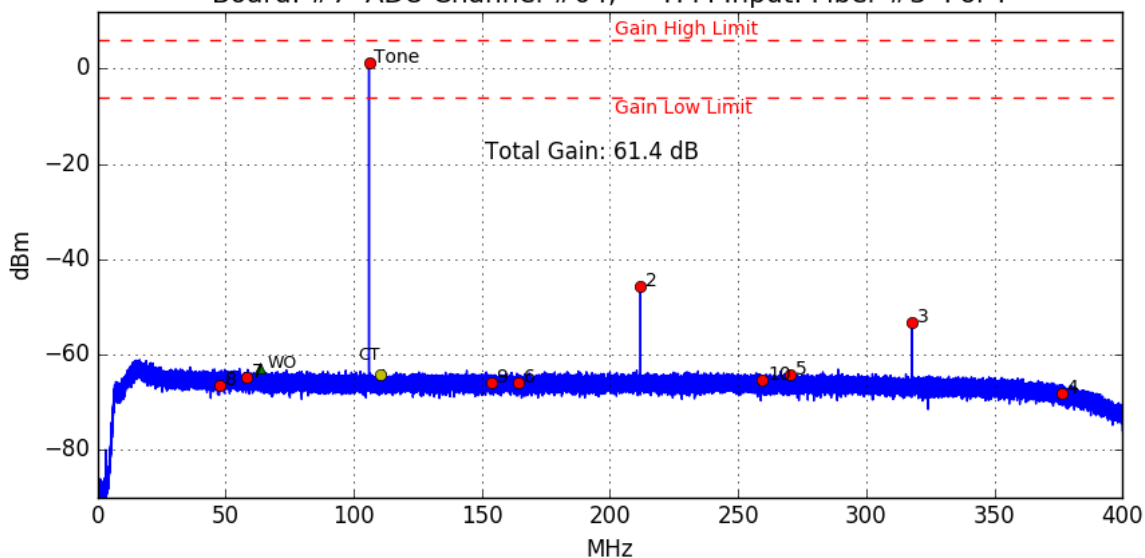
Board: #7 ADU Channel #03, TPM Input: Fiber #2 Pol-X



Fundamental Tone: 0.6 dBm
 Second Harmonic: -46.7 dBm
 Third Harmonic: -50.5 dBm

Tone Frequency: 111.627197 Hz
 Worst Other: -61.5 dBm @ 105.951 MHz
 Cross Talk: 62.1 dBC @ 105.951 MHz

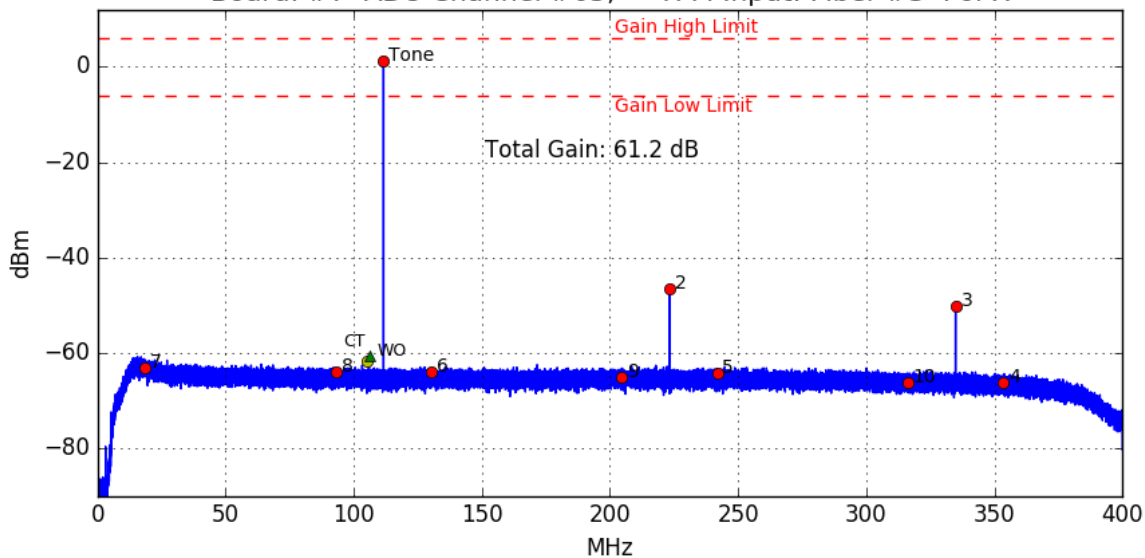
Board: #7 ADU Channel #04, TPM Input: Fiber #3 Pol-Y



Fundamental Tone: 1.4 dBm
 Second Harmonic: -45.6 dBm
 Third Harmonic: -53.3 dBm

Tone Frequency: 105.950928 Hz
 Worst Other: -63.0 dBm @ 63.495 MHz
 Cross Talk: 64.6 dBC @ 111.627 MHz

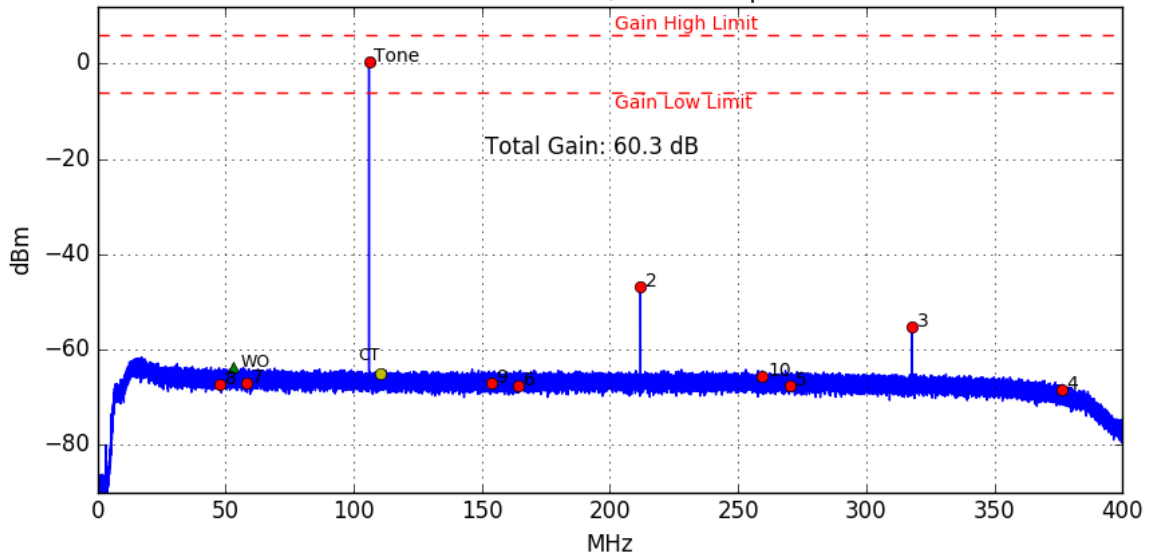
Board: #7 ADU Channel #05, TPM Input: Fiber #3 Pol-X



Fundamental Tone: 1.2 dBm
 Second Harmonic: -46.6 dBm
 Third Harmonic: -50.3 dBm

Tone Frequency: 111.627197 Hz
 Worst Other: -60.7 dBm @ 105.951 MHz
 Cross Talk: 61.8 dBC @ 105.951 MHz

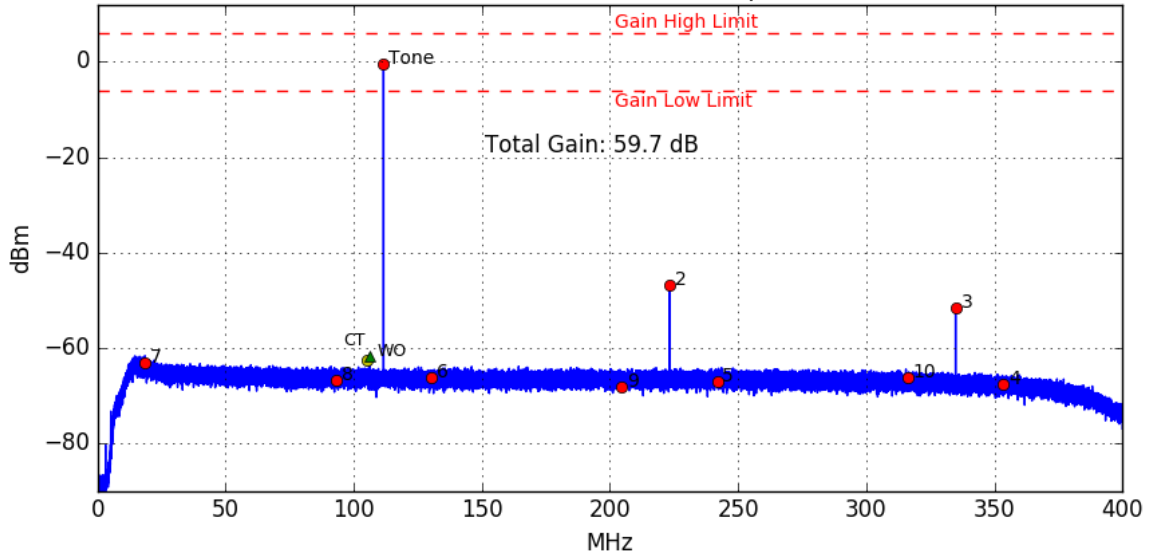
Board: #7 ADU Channel #06, TPM Input: Fiber #4 Pol-Y



Fundamental Tone: 0.3 dBm
 Second Harmonic: -46.8 dBm
 Third Harmonic: -55.3 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -63.7 dBm @ 52.802 MHz
 Cross Talk: 64.5 dBC @ 111.627 MHz

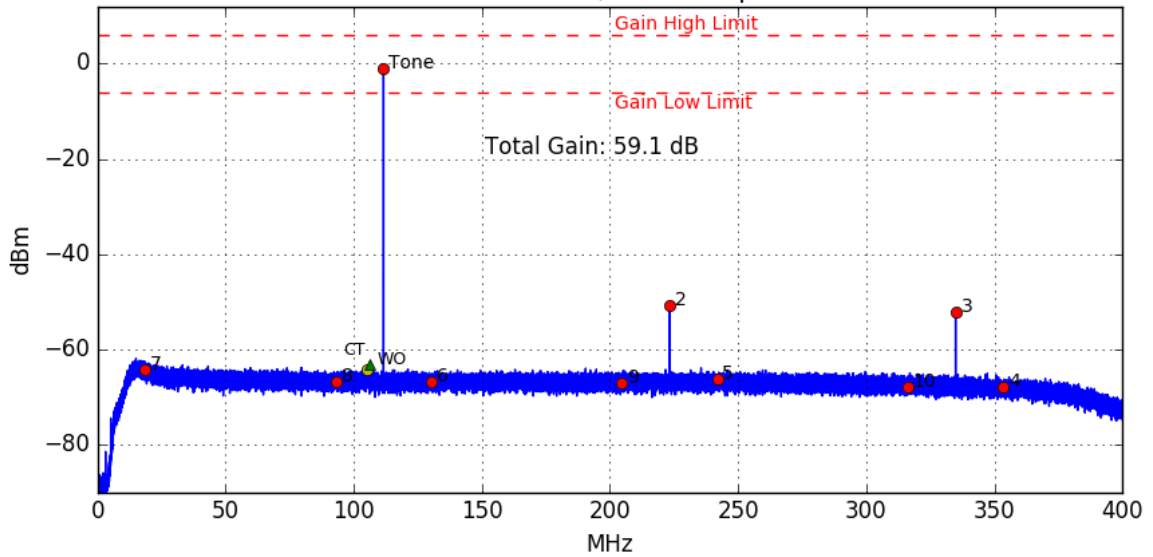
Board: #7 ADU Channel #07, TPM Input: Fiber #4 Pol-X



Fundamental Tone: -0.3 dBm
 Second Harmonic: -46.7 dBm
 Third Harmonic: -51.6 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -61.6 dBm @ 105.951 MHz
 Cross Talk: 61.3 dBC @ 105.951 MHz

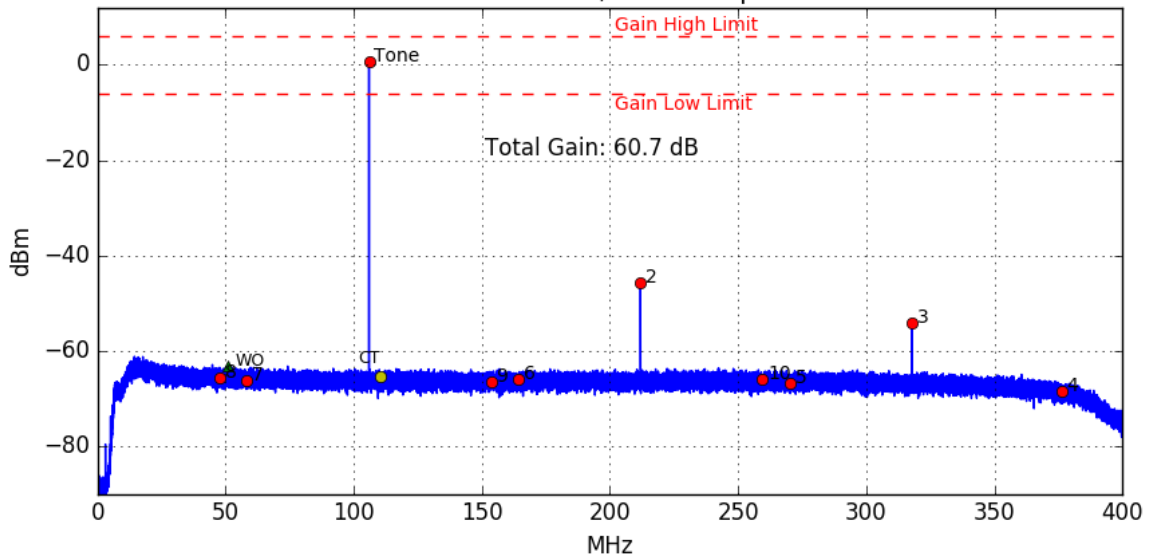
Board: #7 ADU Channel #08, TPM Input: Fiber #16 Pol-X



Fundamental Tone: -0.9 dBm
Second Harmonic: -50.7 dBm
Third Harmonic: -52.1 dBm

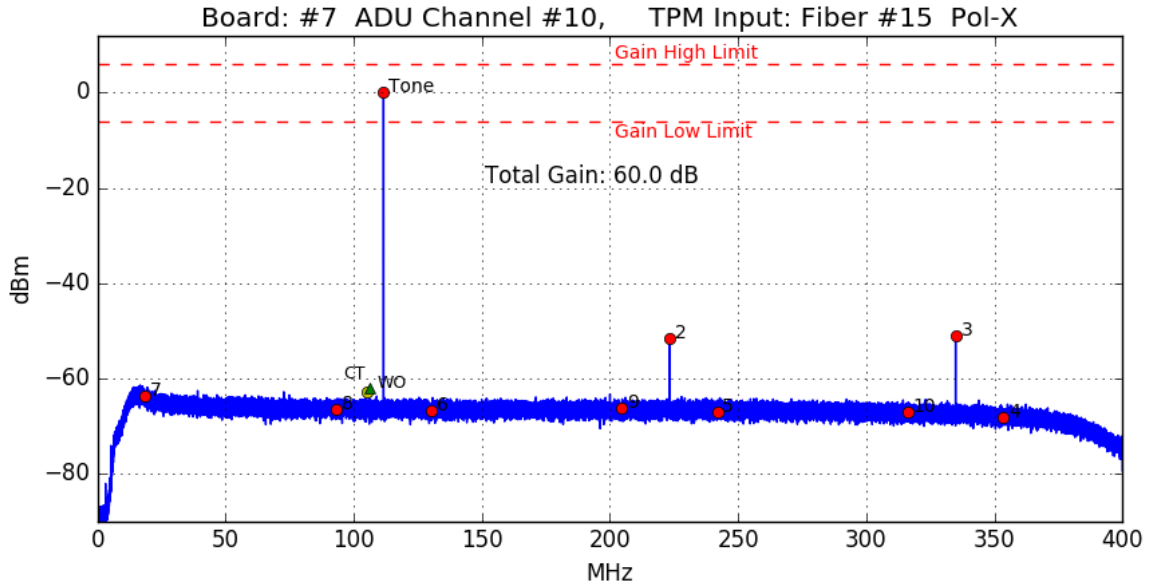
Tone Frequency: 111.627.197 Hz
Worst Other: -63.1 dBm @ 105.951 MHz
Cross Talk: 62.2 dBC @ 105.951 MHz

Board: #7 ADU Channel #09, TPM Input: Fiber #16 Pol-Y



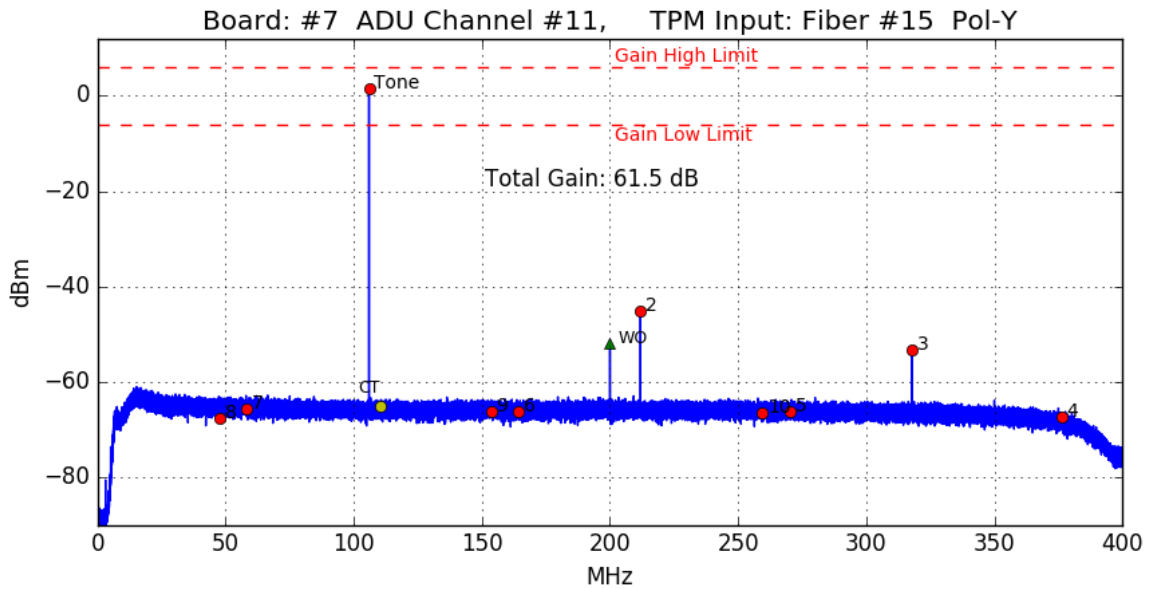
Fundamental Tone: 0.7 dBm
Second Harmonic: -45.7 dBm
Third Harmonic: -54.2 dBm

Tone Frequency: 105.950.928 Hz
Worst Other: -63.1 dBm @ 50.848 MHz
Cross Talk: 65.2 dBC @ 111.627 MHz



Fundamental Tone: 0.0 dBm
 Second Harmonic: -51.5 dBm
 Third Harmonic: -51.0 dBm

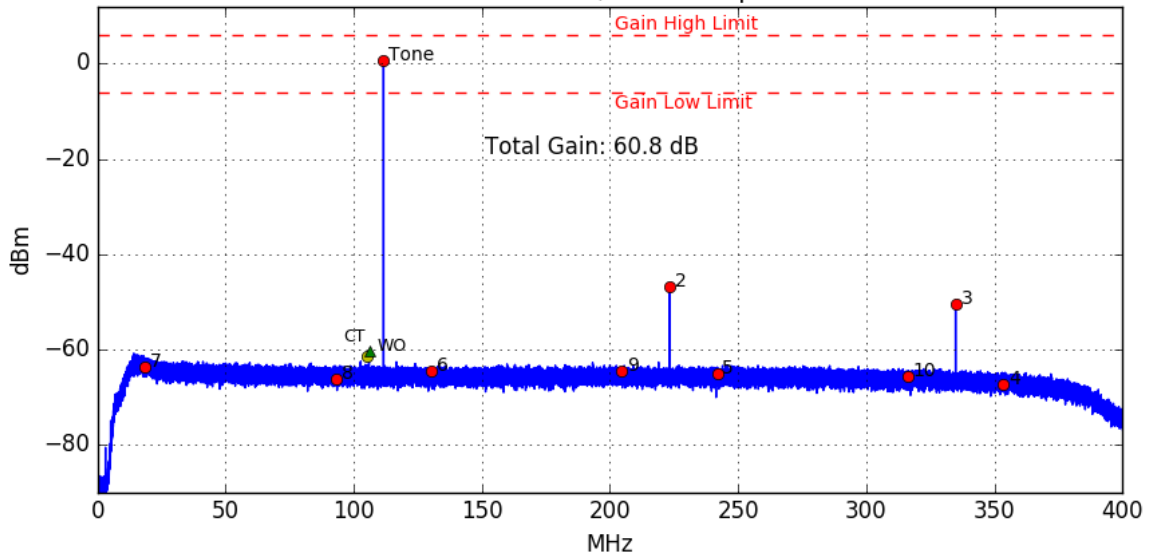
Tone Frequency: 111.627.197 Hz
 Worst Other: -61.9 dBm @ 105.951 MHz
 Cross Talk: 62.0 dBC @ 105.951 MHz



Fundamental Tone: 1.5 dBm
 Second Harmonic: -45.2 dBm
 Third Harmonic: -53.3 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -51.8 dBm @ 199.994 MHz
 Cross Talk: 65.6 dBC @ 111.627 MHz

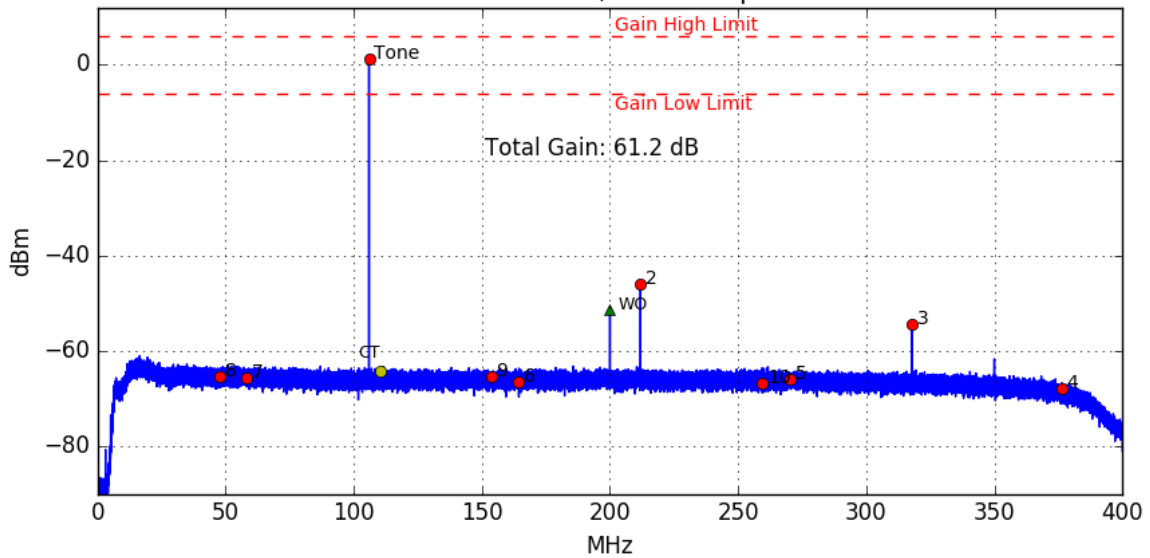
Board: #7 ADU Channel #12, TPM Input: Fiber #14 Pol-X



Fundamental Tone: 0.8 dBm
 Second Harmonic: -46.9 dBm
 Third Harmonic: -50.4 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -60.4 dBm @ 105.951 MHz
 Cross Talk: 61.1 dBC @ 105.951 MHz

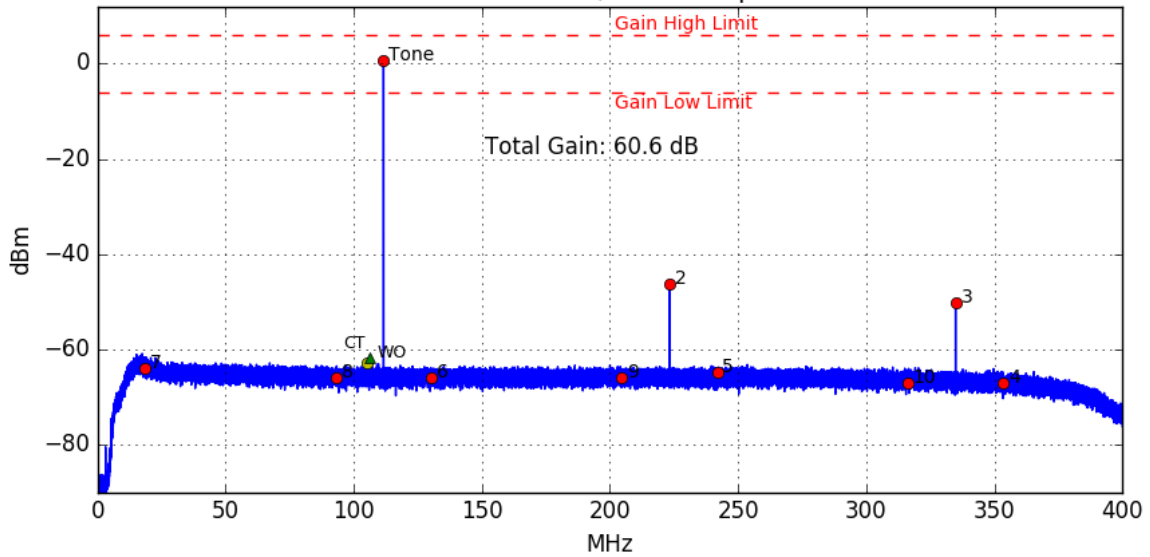
Board: #7 ADU Channel #13, TPM Input: Fiber #14 Pol-Y



Fundamental Tone: 1.2 dBm
 Second Harmonic: -46.0 dBm
 Third Harmonic: -54.4 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -51.3 dBm @ 199.994 MHz
 Cross Talk: 64.5 dBC @ 111.639 MHz

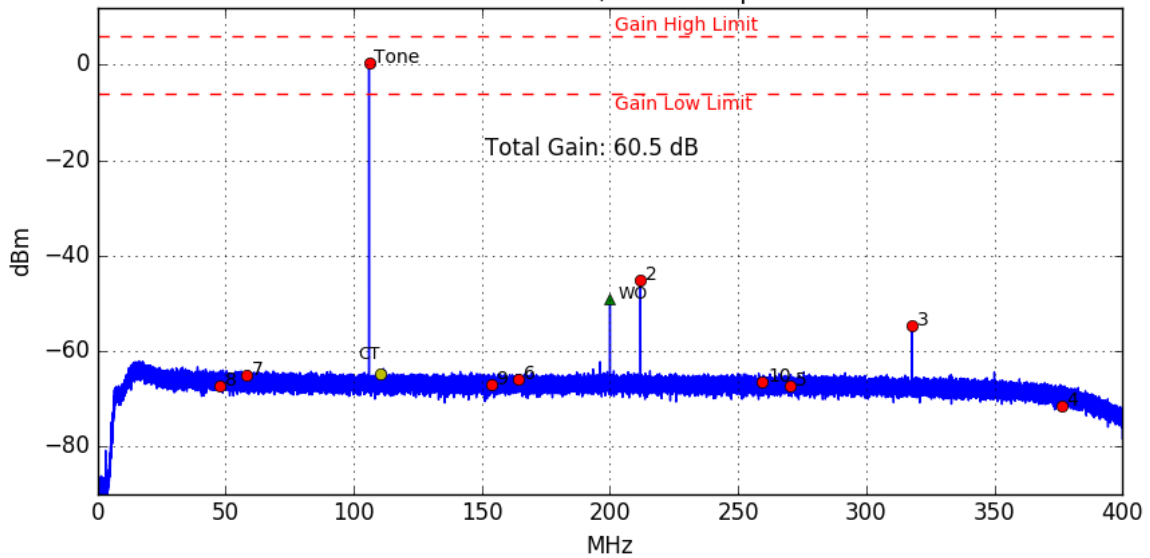
Board: #7 ADU Channel #14, TPM Input: Fiber #13 Pol-X



Fundamental Tone: 0.6 dBm
 Second Harmonic: -46.2 dBm
 Third Harmonic: -50.2 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -61.7 dBm @ 105.951 MHz
 Cross Talk: 62.4 dBC @ 105.951 MHz

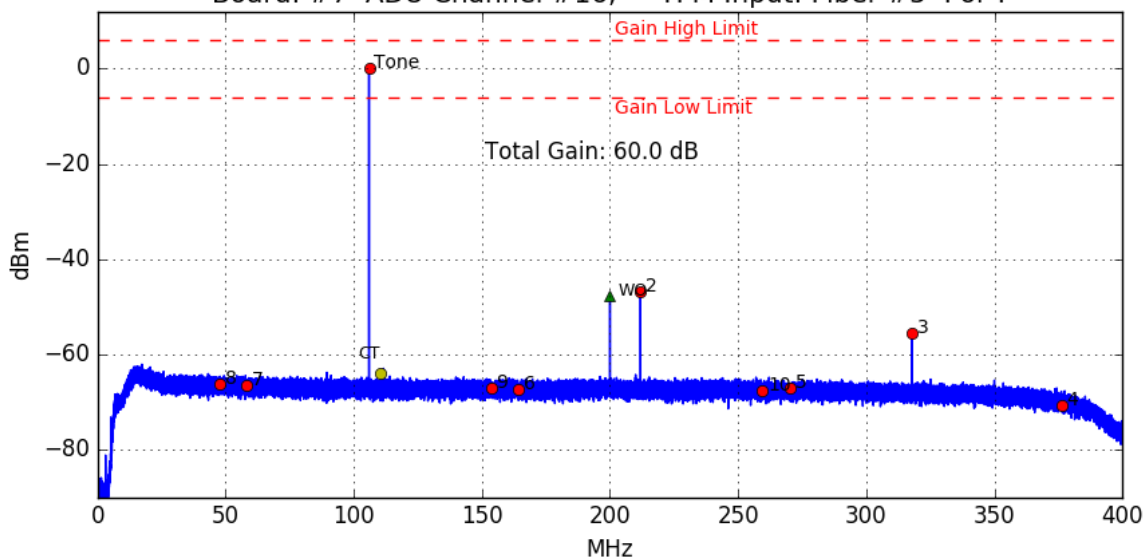
Board: #7 ADU Channel #15, TPM Input: Fiber #13 Pol-Y



Fundamental Tone: 0.5 dBm
 Second Harmonic: -45.1 dBm
 Third Harmonic: -54.6 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -49.1 dBm @ 199.994 MHz
 Cross Talk: 64.2 dBC @ 111.627 MHz

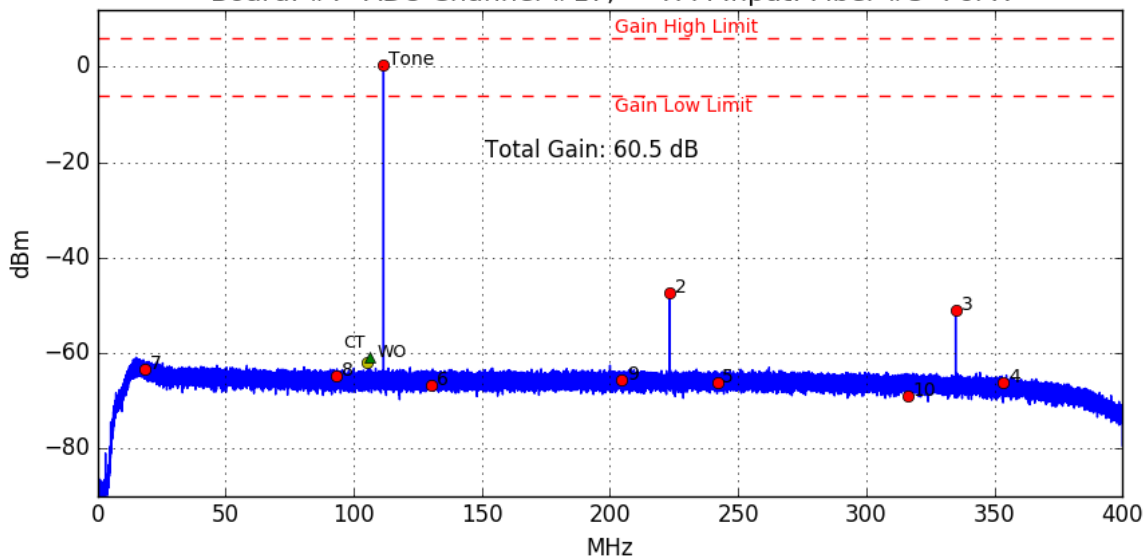
Board: #7 ADU Channel #16, TPM Input: Fiber #5 Pol-Y



Fundamental Tone: 0.0 dBm
 Second Harmonic: -46.9 dBm
 Third Harmonic: -55.6 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -47.8 dBm @ 199.994 MHz
 Cross Talk: 63.0 dBC @ 111.627 MHz

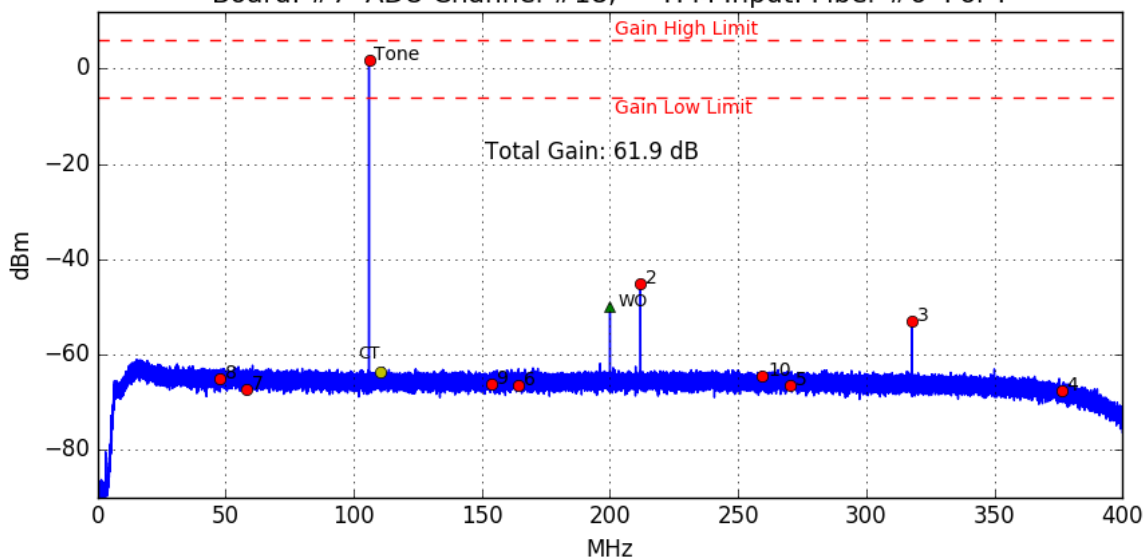
Board: #7 ADU Channel #17, TPM Input: Fiber #5 Pol-X



Fundamental Tone: 0.5 dBm
 Second Harmonic: -47.5 dBm
 Third Harmonic: -51.0 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -60.9 dBm @ 105.951 MHz
 Cross Talk: 61.4 dBC @ 105.951 MHz

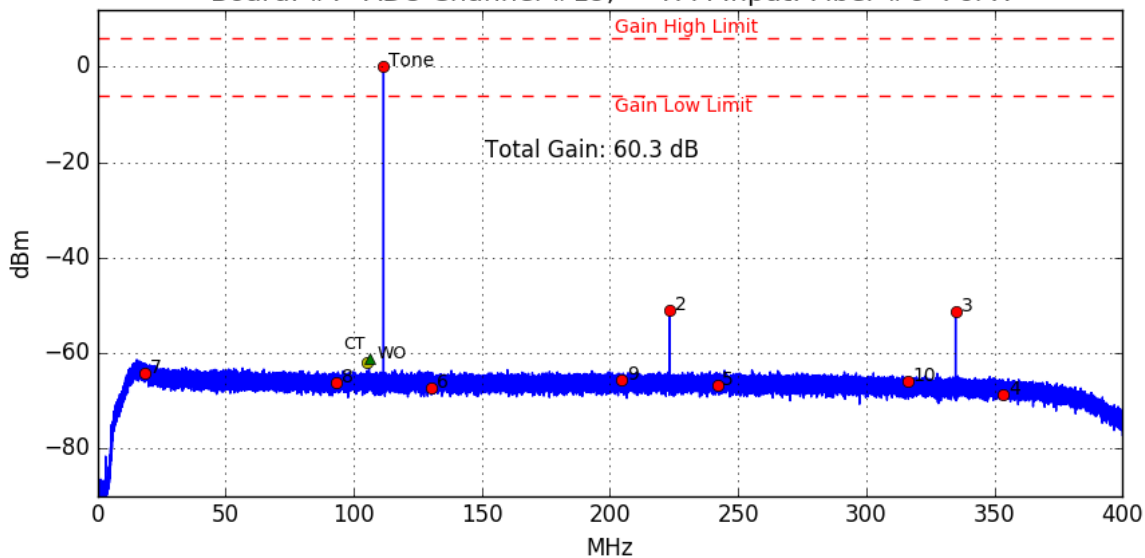
Board: #7 ADU Channel #18, TPM Input: Fiber #6 Pol-Y



Fundamental Tone: 1.9 dBm
 Second Harmonic: -45.1 dBm
 Third Harmonic: -53.1 dBm

Tone Frequency: 105.950928 Hz
 Worst Other: -50.0 dBm @ 199.994 MHz
 Cross Talk: 64.7 dBC @ 111.627 MHz

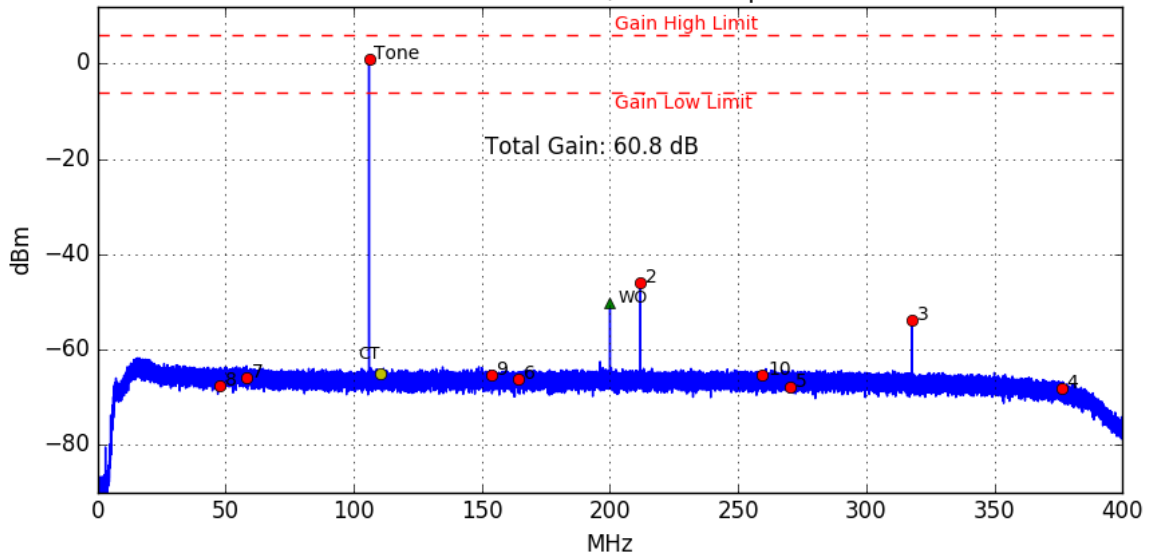
Board: #7 ADU Channel #19, TPM Input: Fiber #6 Pol-X



Fundamental Tone: 0.3 dBm
 Second Harmonic: -51.1 dBm
 Third Harmonic: -51.2 dBm

Tone Frequency: 111.627197 Hz
 Worst Other: -61.1 dBm @ 105.951 MHz
 Cross Talk: 61.3 dBC @ 105.951 MHz

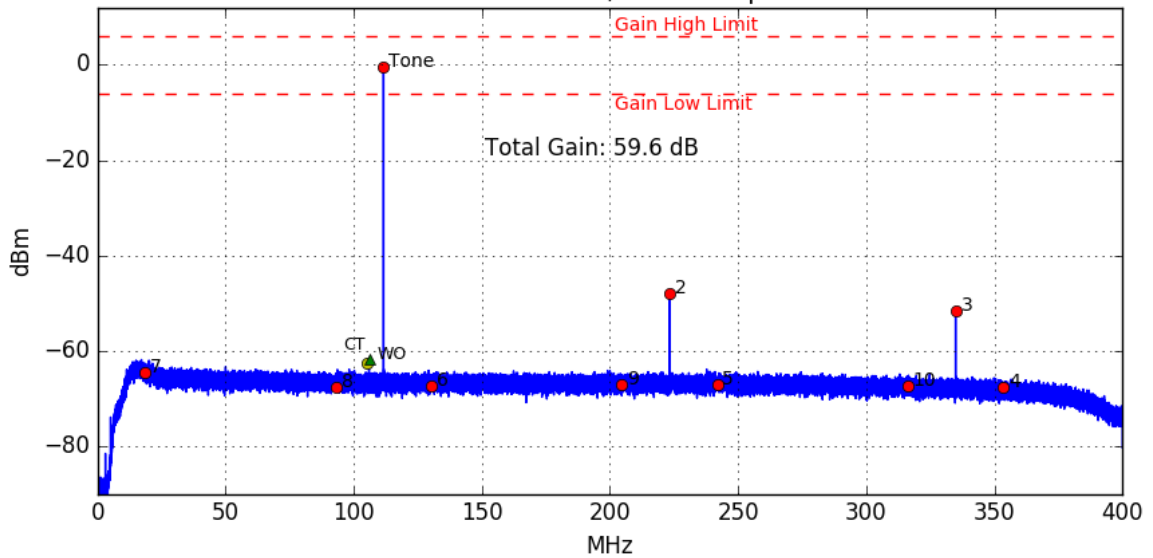
Board: #7 ADU Channel #20, TPM Input: Fiber #7 Pol-Y



Fundamental Tone: 0.8 dBm
 Second Harmonic: -45.8 dBm
 Third Harmonic: -53.7 dBm

Tone Frequency: 105.950928 Hz
 Worst Other: -50.1 dBm @ 199.994 MHz
 Cross Talk: 64.8 dBC @ 111.627 MHz

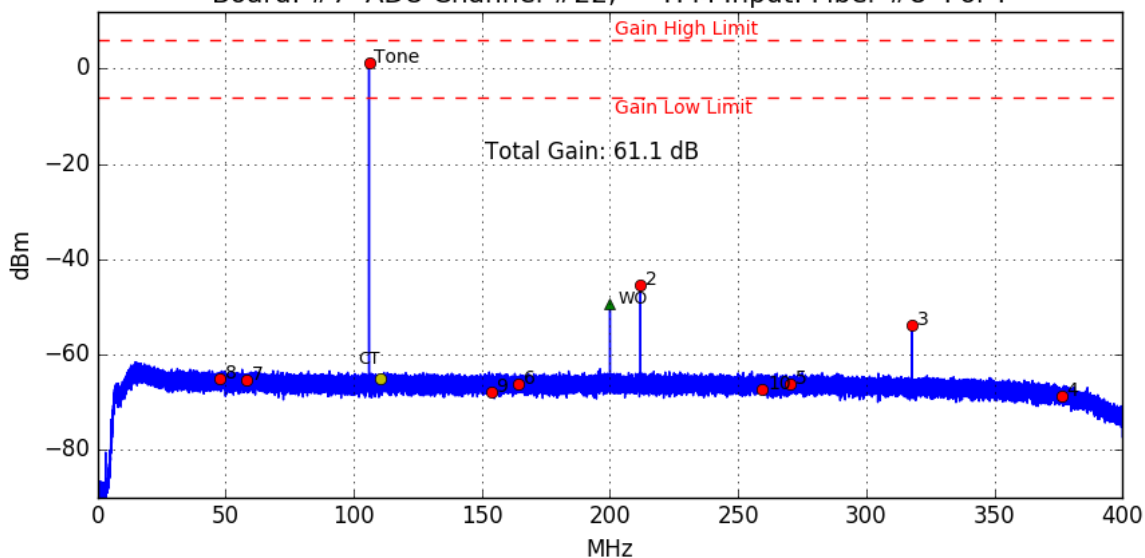
Board: #7 ADU Channel #21, TPM Input: Fiber #7 Pol-X



Fundamental Tone: -0.4 dBm
 Second Harmonic: -48.0 dBm
 Third Harmonic: -51.5 dBm

Tone Frequency: 111.627197 Hz
 Worst Other: -61.6 dBm @ 105.951 MHz
 Cross Talk: 61.2 dBC @ 105.951 MHz

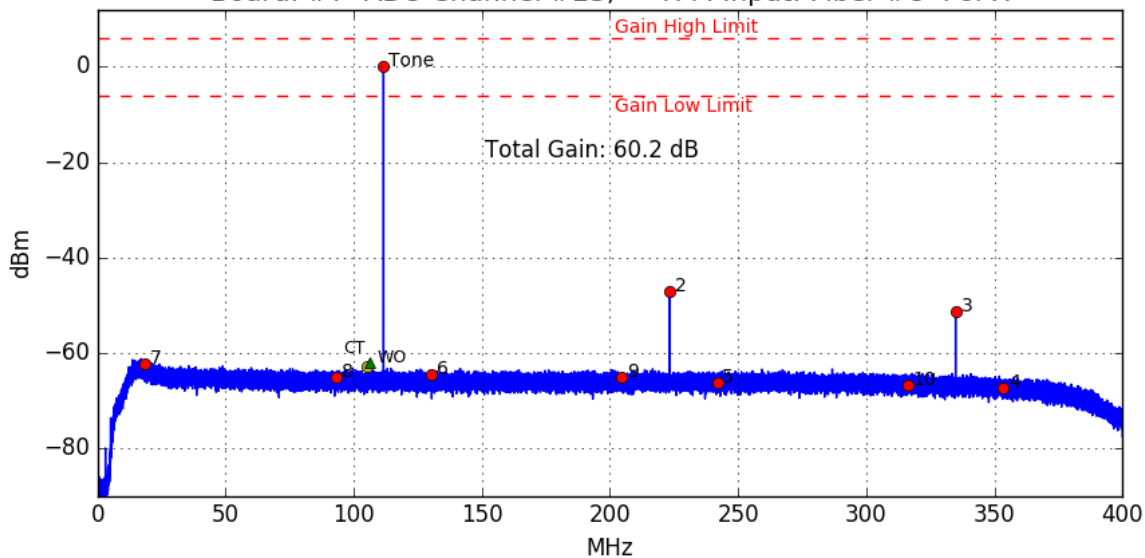
Board: #7 ADU Channel #22, TPM Input: Fiber #8 Pol-Y



Fundamental Tone: 1.1 dBm
Second Harmonic: -45.5 dBm
Third Harmonic: -53.8 dBm

Tone Frequency: 105.950928 Hz
Worst Other: -49.3 dBm @ 199.994 MHz
Cross Talk: 65.2 dBC @ 111.627 MHz

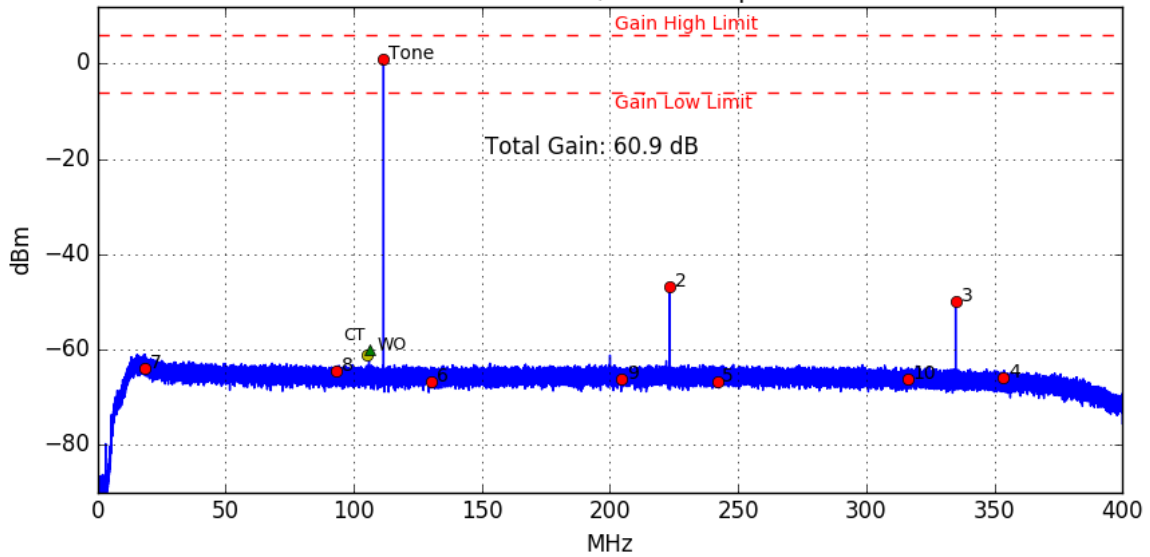
Board: #7 ADU Channel #23, TPM Input: Fiber #8 Pol-X



Fundamental Tone: 0.2 dBm
Second Harmonic: -47.0 dBm
Third Harmonic: -51.2 dBm

Tone Frequency: 111.627197 Hz
Worst Other: -61.9 dBm @ 105.951 MHz
Cross Talk: 62.1 dBC @ 105.951 MHz

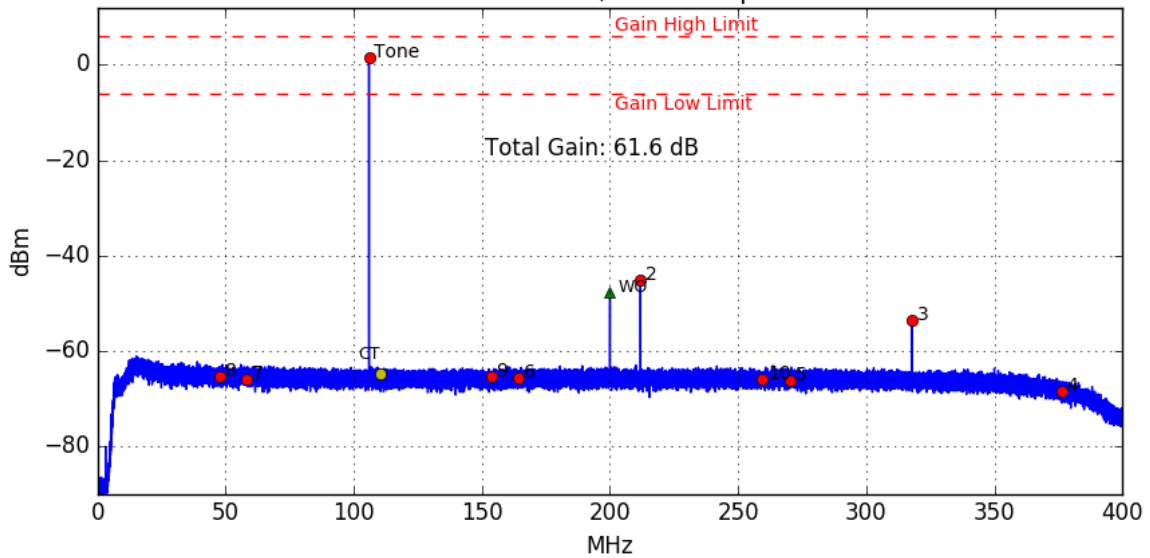
Board: #7 ADU Channel #24, TPM Input: Fiber #12 Pol-X



Fundamental Tone: 0.9 dBm
 Second Harmonic: -46.9 dBm
 Third Harmonic: -50.0 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -60.1 dBm @ 105.951 MHz
 Cross Talk: 61.0 dBC @ 105.951 MHz

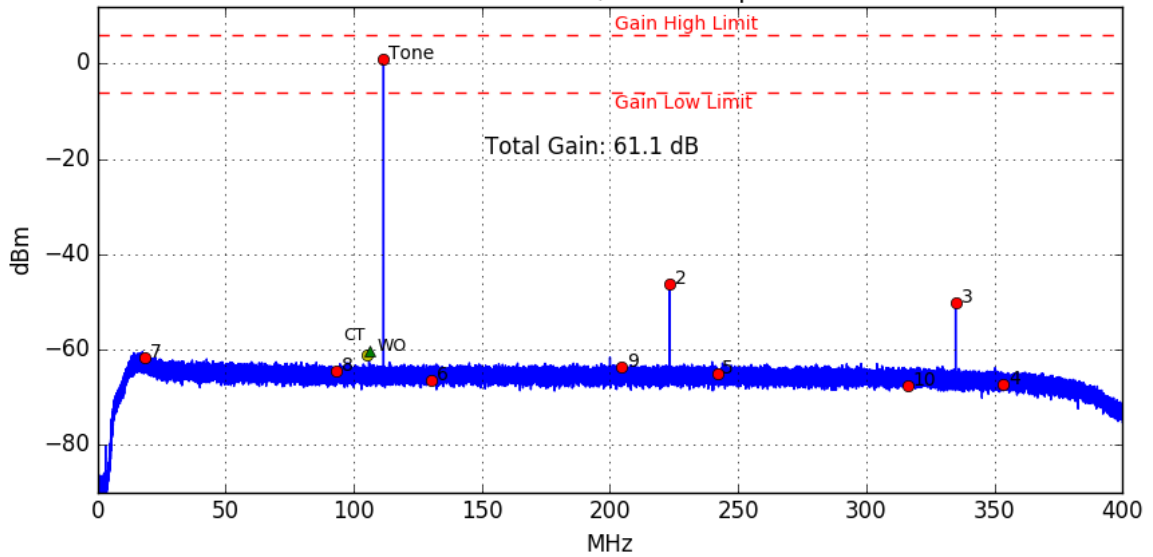
Board: #7 ADU Channel #25, TPM Input: Fiber #12 Pol-Y



Fundamental Tone: 1.6 dBm
 Second Harmonic: -45.3 dBm
 Third Harmonic: -53.5 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -47.7 dBm @ 199.994 MHz
 Cross Talk: 65.3 dBC @ 111.627 MHz

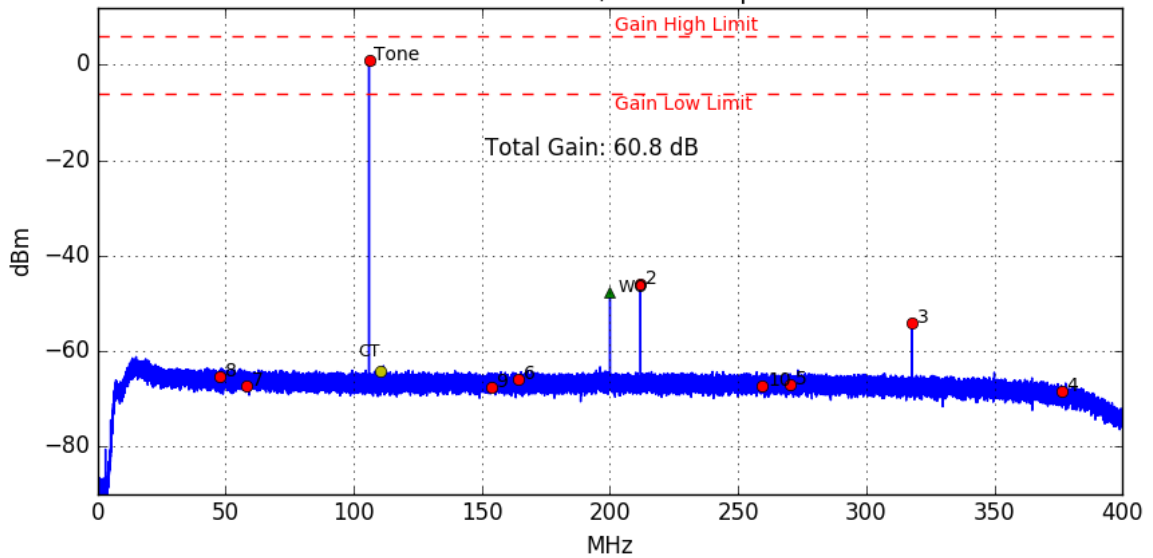
Board: #7 ADU Channel #26, TPM Input: Fiber #11 Pol-X



Fundamental Tone: 1.1 dBm
 Second Harmonic: -46.3 dBm
 Third Harmonic: -50.1 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -60.2 dBm @ 105.951 MHz
 Cross Talk: 61.3 dBC @ 105.951 MHz

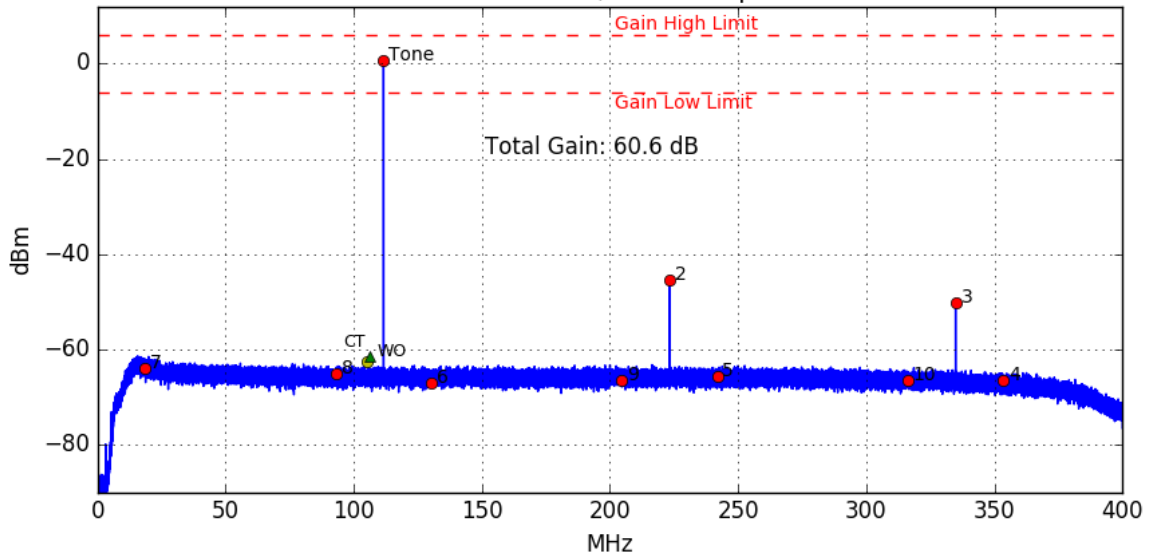
Board: #7 ADU Channel #27, TPM Input: Fiber #11 Pol-Y



Fundamental Tone: 0.8 dBm
 Second Harmonic: -46.0 dBm
 Third Harmonic: -54.2 dBm

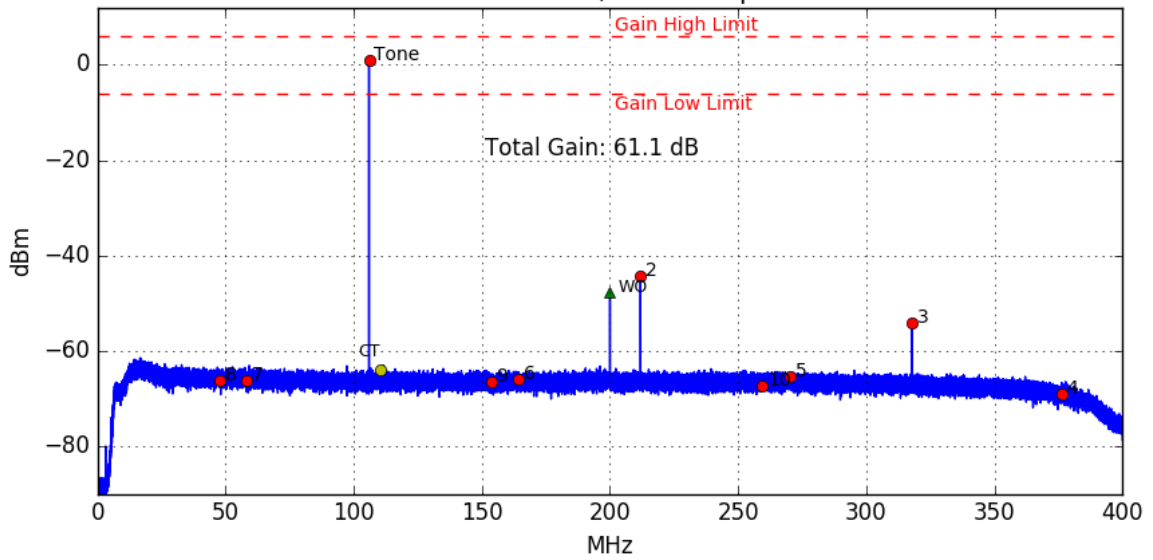
Tone Frequency: 105.950.928 Hz
 Worst Other: -47.6 dBm @ 199.994 MHz
 Cross Talk: 63.9 dBC @ 111.627 MHz

Board: #7 ADU Channel #28, TPM Input: Fiber #10 Pol-X



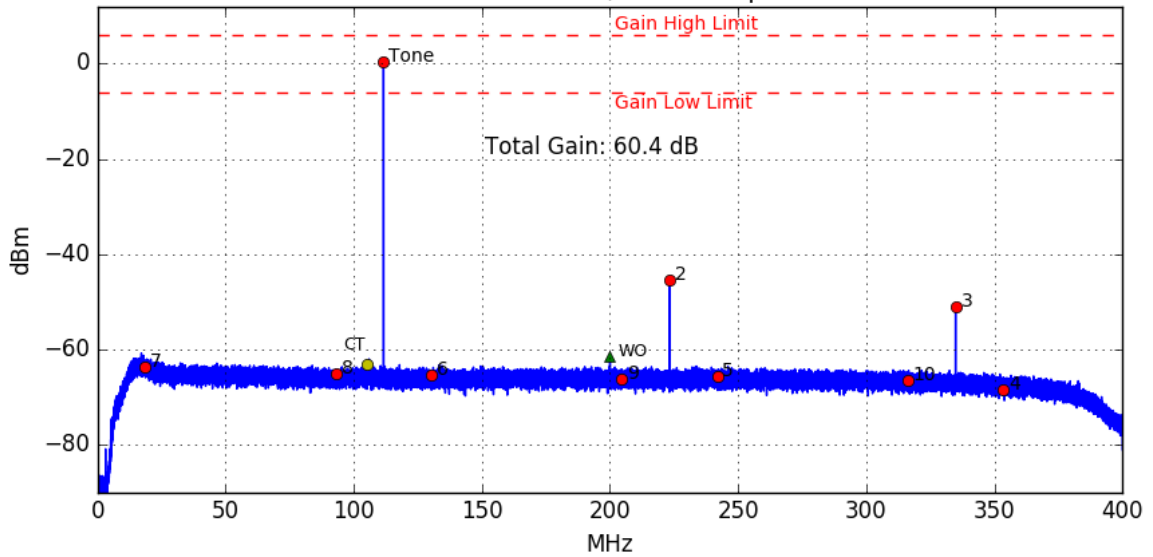
Fundamental Tone: 0.6 dBm Tone Frequency: 111.627.197 Hz
 Second Harmonic: -45.3 dBm Worst Other: -61.4 dBm @ 105.951 MHz
 Third Harmonic: -50.1 dBm Cross Talk: 62.0 dBC @ 105.951 MHz

Board: #7 ADU Channel #29, TPM Input: Fiber #10 Pol-Y



Fundamental Tone: 1.1 dBm Tone Frequency: 105.950.928 Hz
 Second Harmonic: -44.3 dBm Worst Other: -47.6 dBm @ 199.994 MHz
 Third Harmonic: -54.1 dBm Cross Talk: 64.1 dBC @ 111.627 MHz

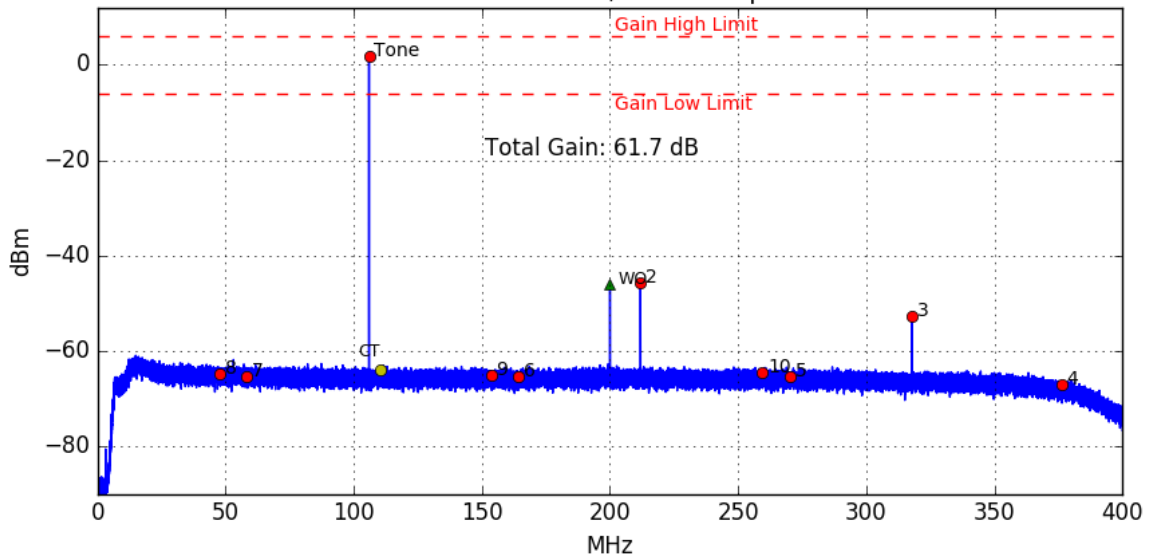
Board: #7 ADU Channel #30, TPM Input: Fiber #9 Pol-X



Fundamental Tone: 0.4 dBm
 Second Harmonic: -45.4 dBm
 Third Harmonic: -51.0 dBm

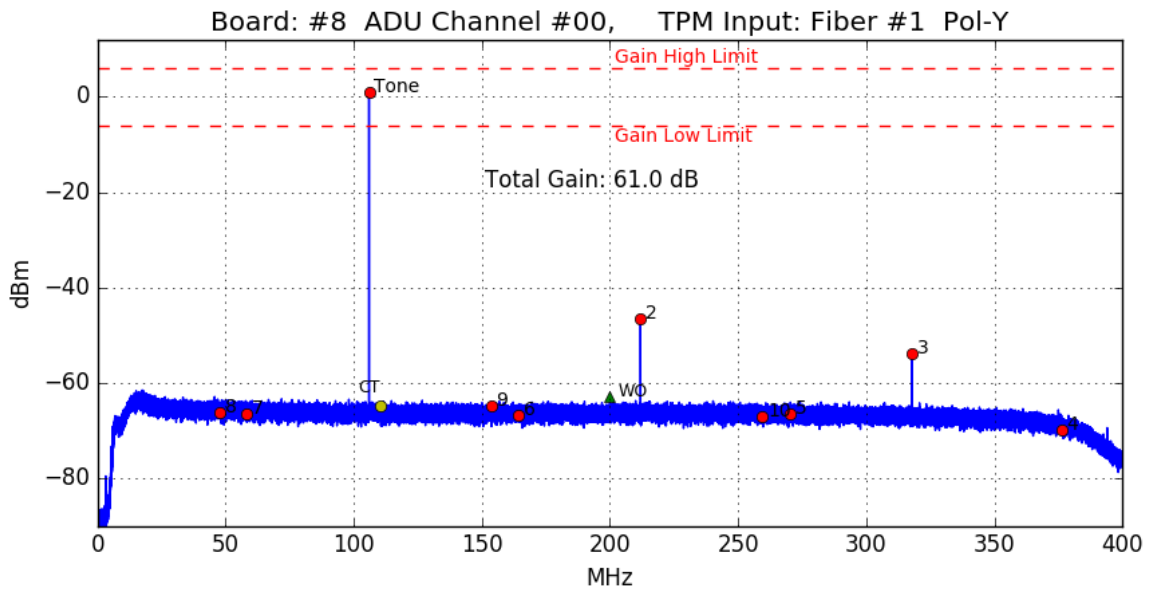
Tone Frequency: 111.627.197 Hz
 Worst Other: -61.3 dBm @ 199.994 MHz
 Cross Talk: 62.5 dBC @ 105.951 MHz

Board: #7 ADU Channel #31, TPM Input: Fiber #9 Pol-Y



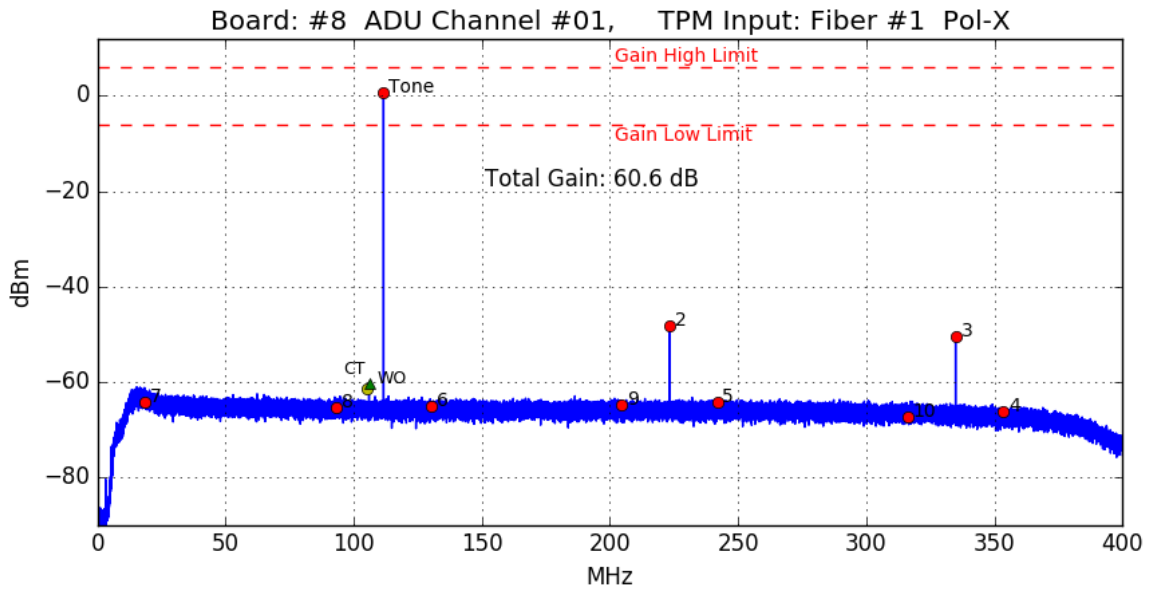
Fundamental Tone: 1.7 dBm
 Second Harmonic: -45.7 dBm
 Third Harmonic: -52.7 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -45.8 dBm @ 199.994 MHz
 Cross Talk: 64.8 dBC @ 111.627 MHz



Fundamental Tone: 1.0 dBm
 Second Harmonic: -46.6 dBm
 Third Harmonic: -53.9 dBm

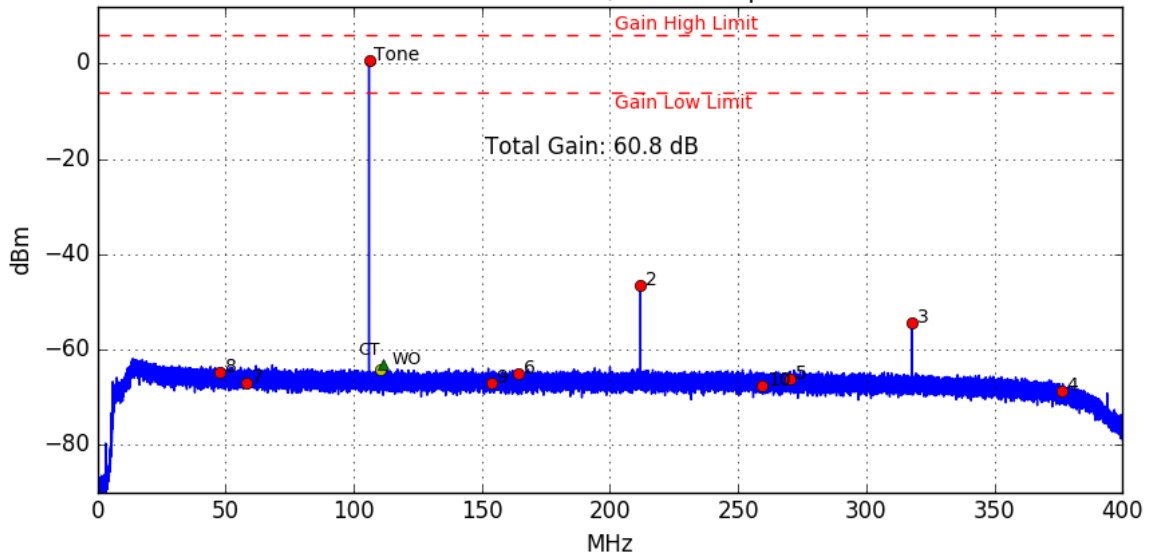
Tone Frequency: 105.950.928 Hz
 Worst Other: -62.7 dBm @ 199.994 MHz
 Cross Talk: 64.9 dBC @ 111.627 MHz



Fundamental Tone: 0.6 dBm
 Second Harmonic: -48.1 dBm
 Third Harmonic: -50.6 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -60.3 dBm @ 105.951 MHz
 Cross Talk: 61.0 dBC @ 105.951 MHz

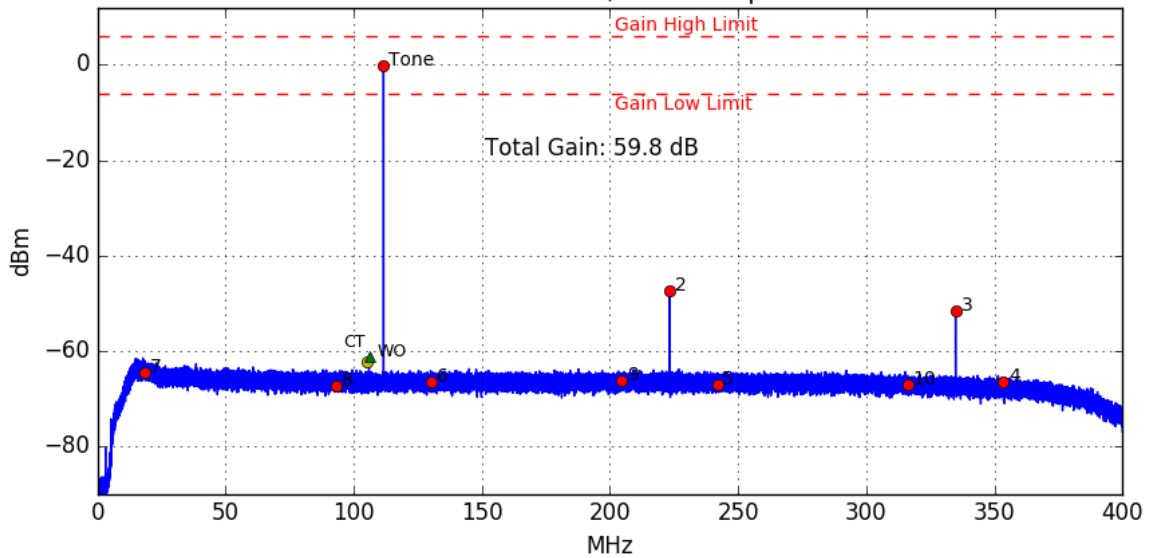
Board: #8 ADU Channel #02, TPM Input: Fiber #2 Pol-Y



Fundamental Tone: 0.8 dBm
 Second Harmonic: -46.5 dBm
 Third Harmonic: -54.4 dBm

Tone Frequency: 105.950928 Hz
 Worst Other: -63.2 dBm @ 111.627 MHz
 Cross Talk: 64.0 dBC @ 111.627 MHz

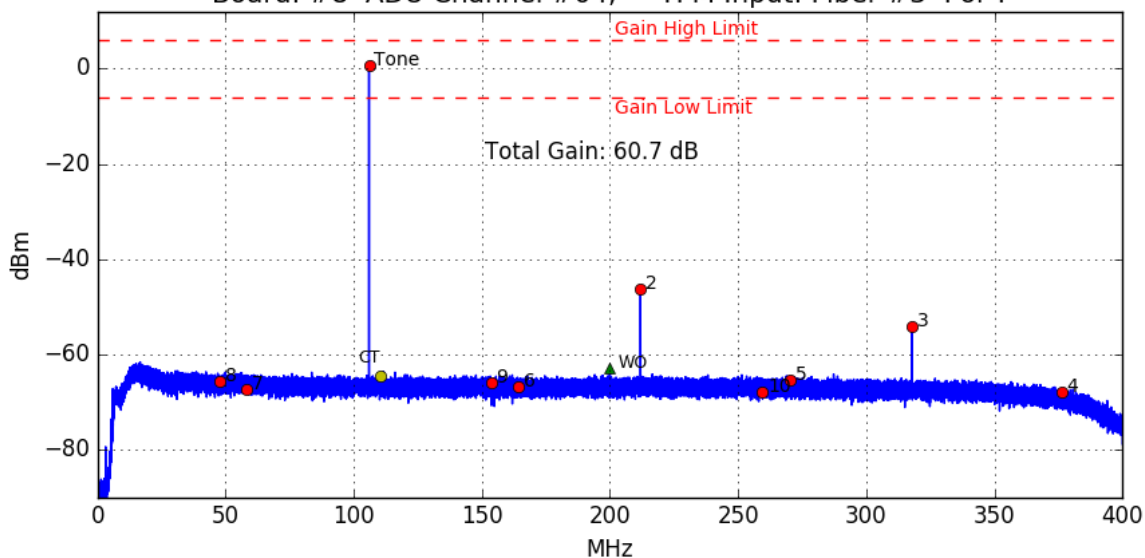
Board: #8 ADU Channel #03, TPM Input: Fiber #2 Pol-X



Fundamental Tone: -0.2 dBm
 Second Harmonic: -47.5 dBm
 Third Harmonic: -51.7 dBm

Tone Frequency: 111.627197 Hz
 Worst Other: -61.3 dBm @ 105.951 MHz
 Cross Talk: 61.1 dBC @ 105.951 MHz

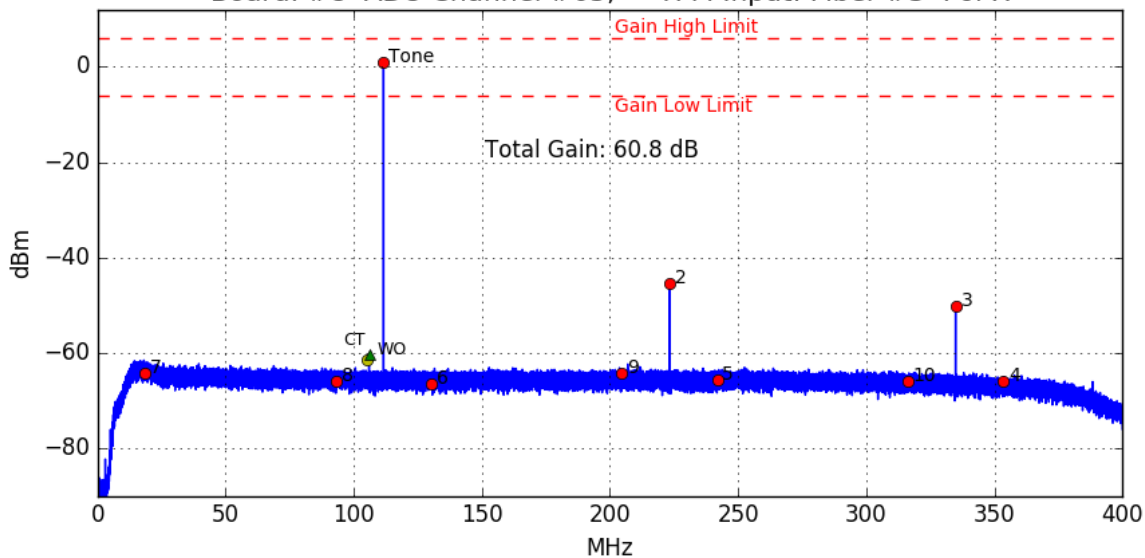
Board: #8 ADU Channel #04, TPM Input: Fiber #3 Pol-Y



Fundamental Tone: 0.7 dBm
 Second Harmonic: -46.2 dBm
 Third Harmonic: -54.3 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -62.9 dBm @ 199.994 MHz
 Cross Talk: 64.3 dBC @ 111.627 MHz

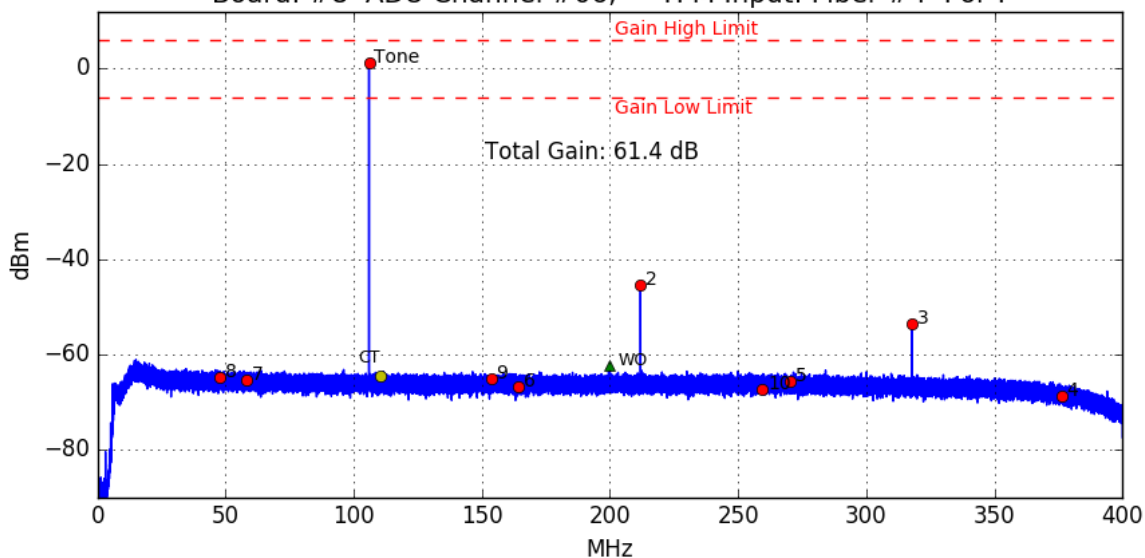
Board: #8 ADU Channel #05, TPM Input: Fiber #3 Pol-X



Fundamental Tone: 0.8 dBm
 Second Harmonic: -45.5 dBm
 Third Harmonic: -50.2 dBm

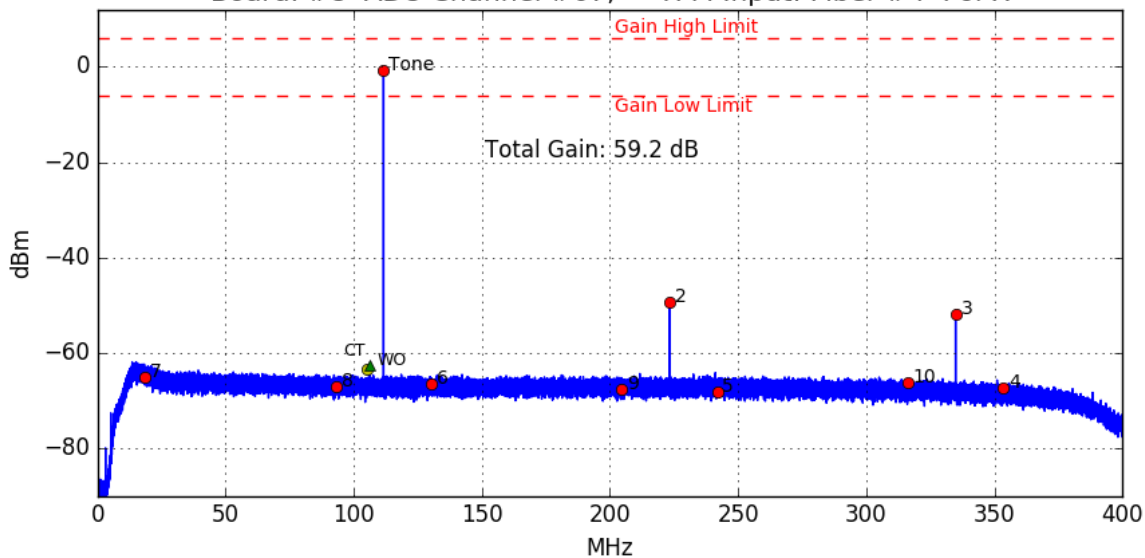
Tone Frequency: 111.627.197 Hz
 Worst Other: -60.4 dBm @ 105.951 MHz
 Cross Talk: 61.3 dBC @ 105.951 MHz

Board: #8 ADU Channel #06, TPM Input: Fiber #4 Pol-Y



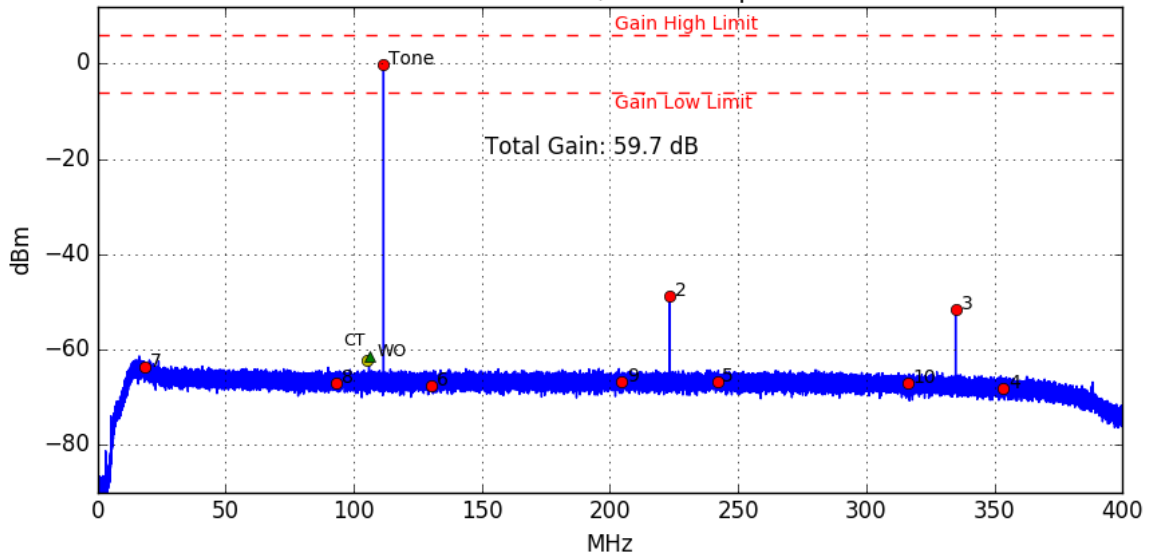
Fundamental Tone: 1.4 dBm Tone Frequency: 105.950.928 Hz
 Second Harmonic: -45.4 dBm Worst Other: -62.3 dBm @ 199.994 MHz
 Third Harmonic: -53.5 dBm Cross Talk: 65.0 dBC @ 111.627 MHz

Board: #8 ADU Channel #07, TPM Input: Fiber #4 Pol-X



Fundamental Tone: -0.8 dBm Tone Frequency: 111.627.197 Hz
 Second Harmonic: -49.4 dBm Worst Other: -62.5 dBm @ 105.951 MHz
 Third Harmonic: -51.9 dBm Cross Talk: 61.7 dBC @ 105.951 MHz

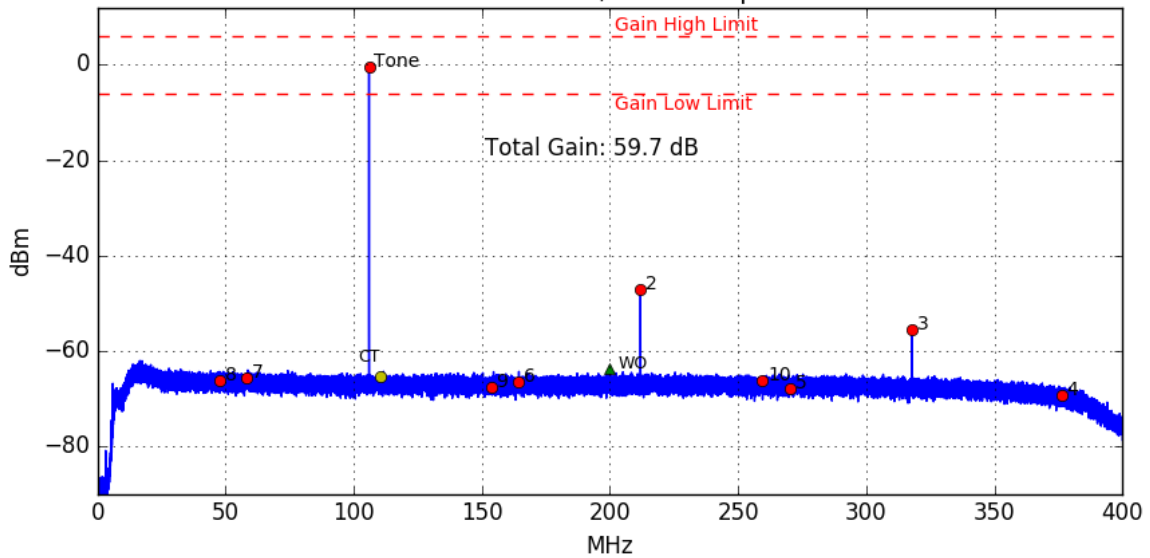
Board: #8 ADU Channel #08, TPM Input: Fiber #16 Pol-X



Fundamental Tone: -0.3 dBm
 Second Harmonic: -48.7 dBm
 Third Harmonic: -51.5 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -61.3 dBm @ 105.951 MHz
 Cross Talk: 61.0 dBC @ 105.951 MHz

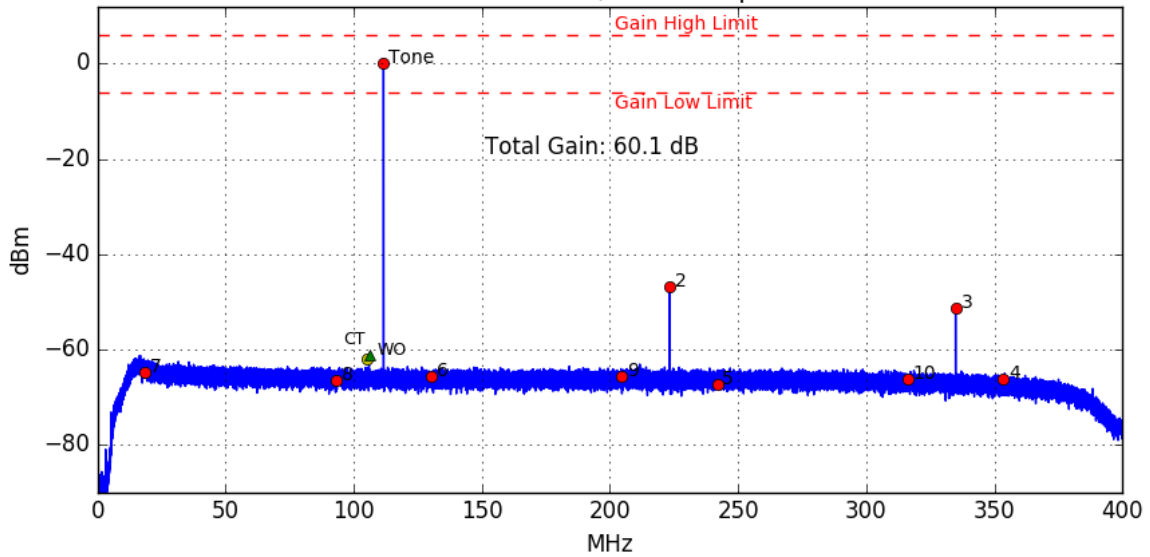
Board: #8 ADU Channel #09, TPM Input: Fiber #16 Pol-Y



Fundamental Tone: -0.3 dBm
 Second Harmonic: -47.2 dBm
 Third Harmonic: -55.5 dBm

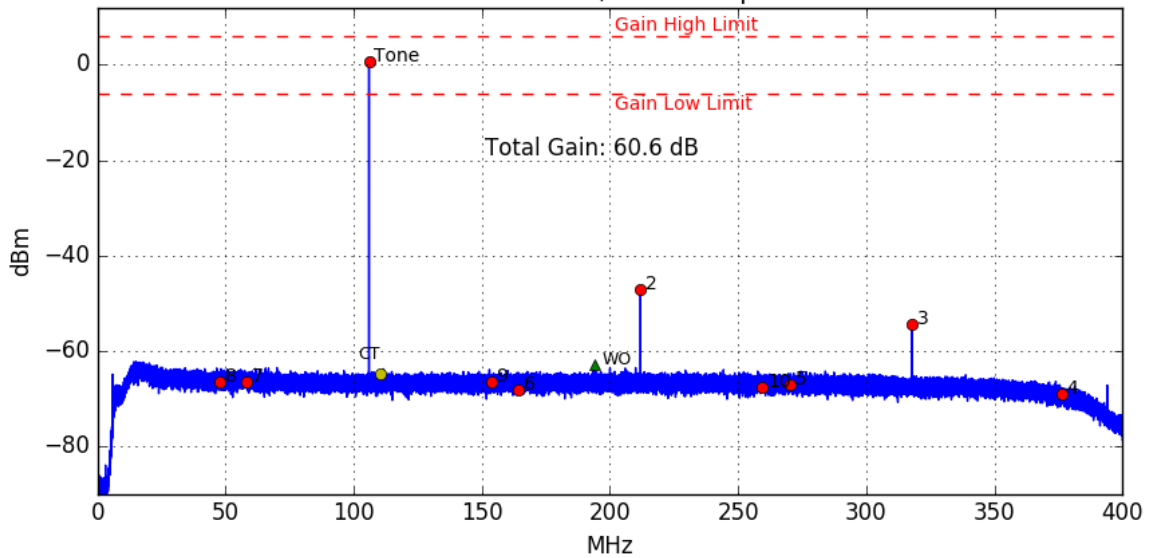
Tone Frequency: 105.950.928 Hz
 Worst Other: -63.6 dBm @ 199.994 MHz
 Cross Talk: 64.0 dBC @ 111.627 MHz

Board: #8 ADU Channel #10, TPM Input: Fiber #15 Pol-X



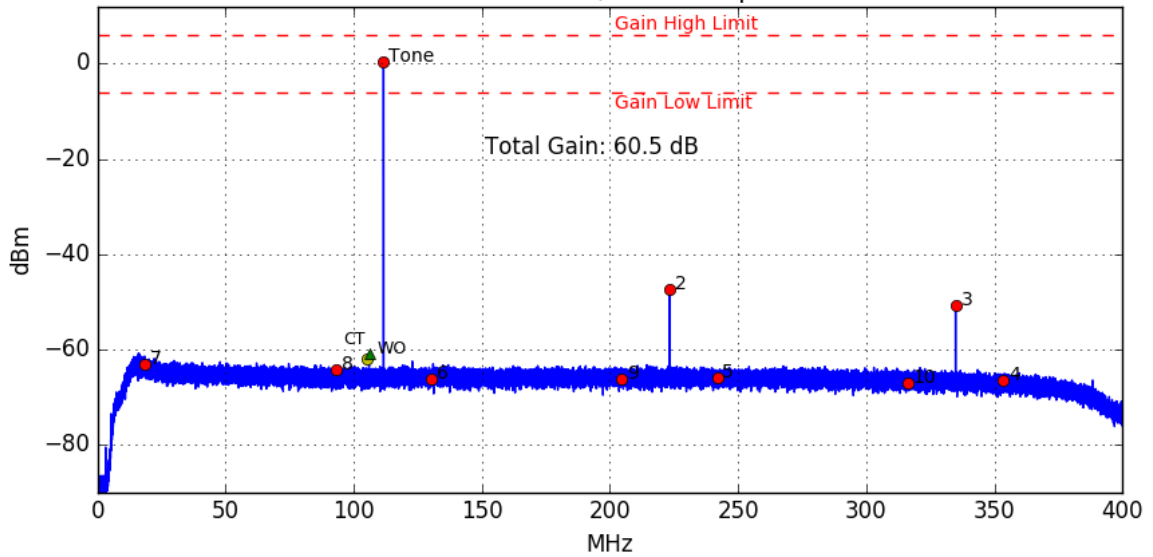
Fundamental Tone: 0.1 dBm Tone Frequency: 111.627.197 Hz
 Second Harmonic: -46.9 dBm Worst Other: -61.0 dBm @ 105.951 MHz
 Third Harmonic: -51.2 dBm Cross Talk: 61.2 dBC @ 105.951 MHz

Board: #8 ADU Channel #11, TPM Input: Fiber #15 Pol-Y



Fundamental Tone: 0.6 dBm Tone Frequency: 105.950.928 Hz
 Second Harmonic: -47.1 dBm Worst Other: -62.8 dBm @ 194.049 MHz
 Third Harmonic: -54.5 dBm Cross Talk: 64.4 dBC @ 111.627 MHz

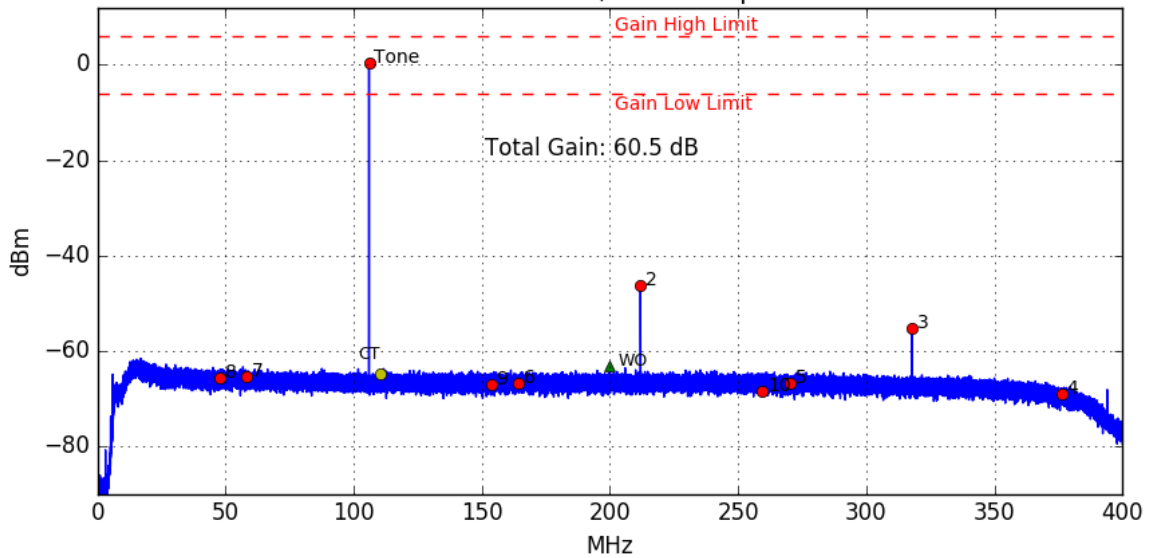
Board: #8 ADU Channel #12, TPM Input: Fiber #14 Pol-X



Fundamental Tone: 0.5 dBm
 Second Harmonic: -47.4 dBm
 Third Harmonic: -50.8 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -60.9 dBm @ 105.951 MHz
 Cross Talk: 61.3 dBC @ 105.951 MHz

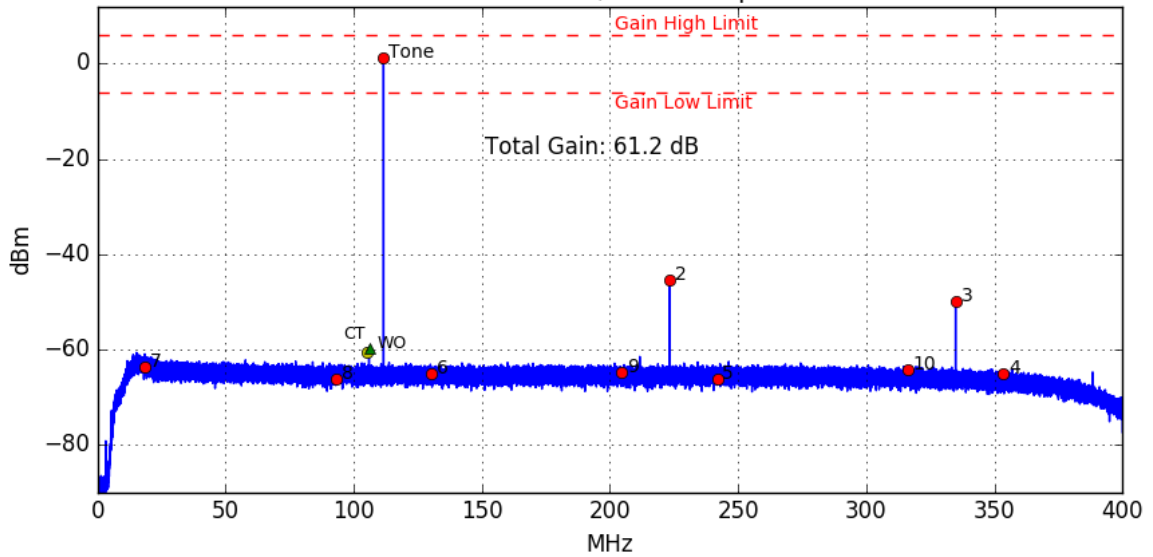
Board: #8 ADU Channel #13, TPM Input: Fiber #14 Pol-Y



Fundamental Tone: 0.5 dBm
 Second Harmonic: -46.3 dBm
 Third Harmonic: -55.3 dBm

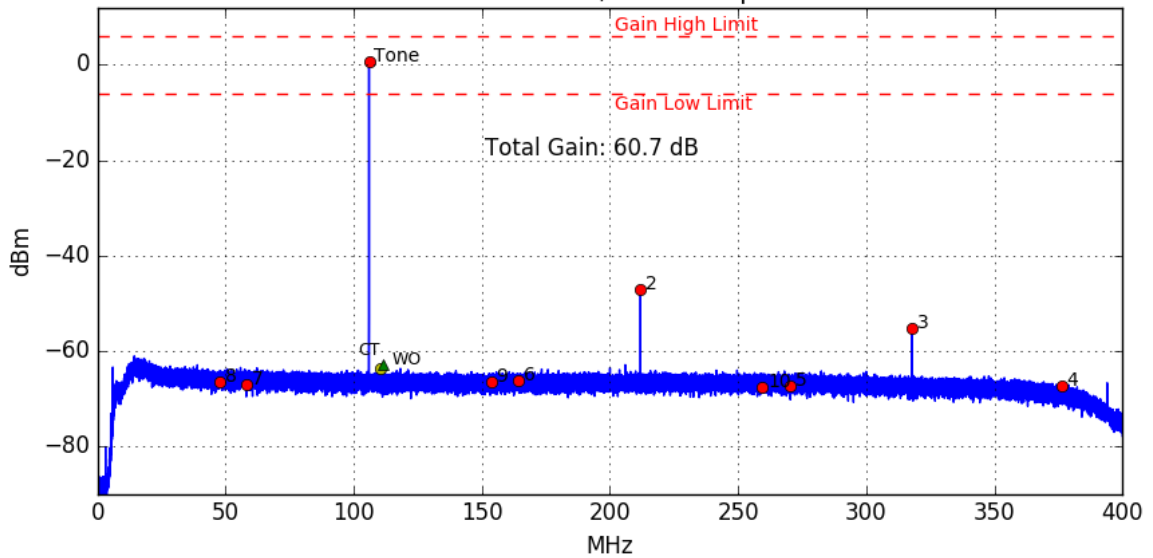
Tone Frequency: 105.950.928 Hz
 Worst Other: -63.0 dBm @ 199.994 MHz
 Cross Talk: 64.2 dBC @ 111.627 MHz

Board: #8 ADU Channel #14, TPM Input: Fiber #13 Pol-X



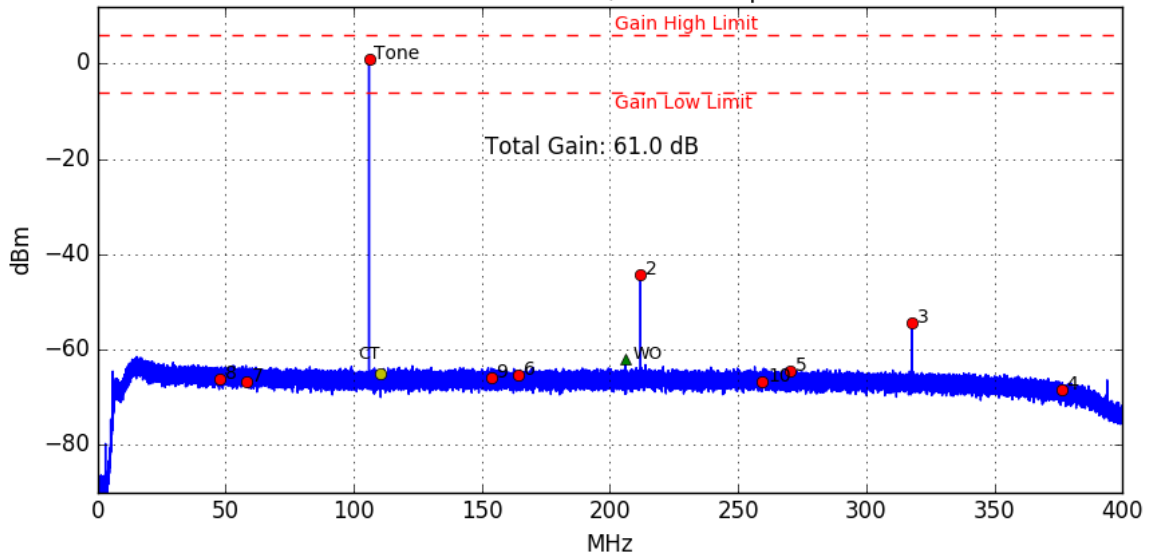
Fundamental Tone: 1.2 dBm Tone Frequency: 111.627.197 Hz
 Second Harmonic: -45.5 dBm Worst Other: -59.7 dBm @ 105.951 MHz
 Third Harmonic: -49.9 dBm Cross Talk: 60.9 dBC @ 105.951 MHz

Board: #8 ADU Channel #15, TPM Input: Fiber #13 Pol-Y



Fundamental Tone: 0.7 dBm Tone Frequency: 105.950.928 Hz
 Second Harmonic: -47.2 dBm Worst Other: -62.8 dBm @ 111.627 MHz
 Third Harmonic: -55.1 dBm Cross Talk: 63.5 dBC @ 111.627 MHz

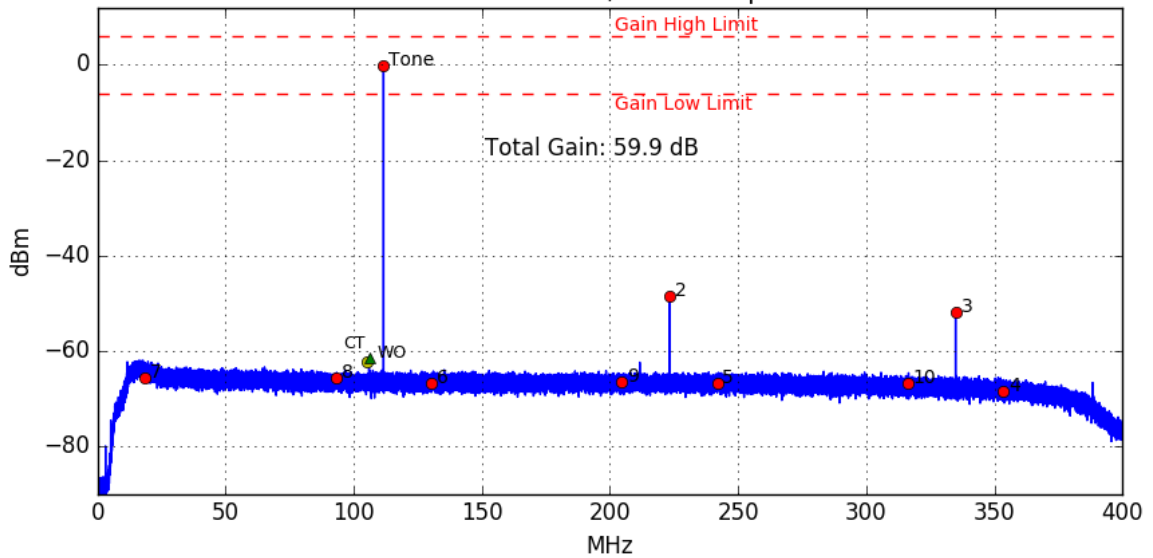
Board: #8 ADU Channel #16, TPM Input: Fiber #5 Pol-Y



Fundamental Tone: 1.0 dBm
 Second Harmonic: -44.3 dBm
 Third Harmonic: -54.3 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -62.1 dBm @ 205.951 MHz
 Cross Talk: 65.1 dBC @ 111.646 MHz

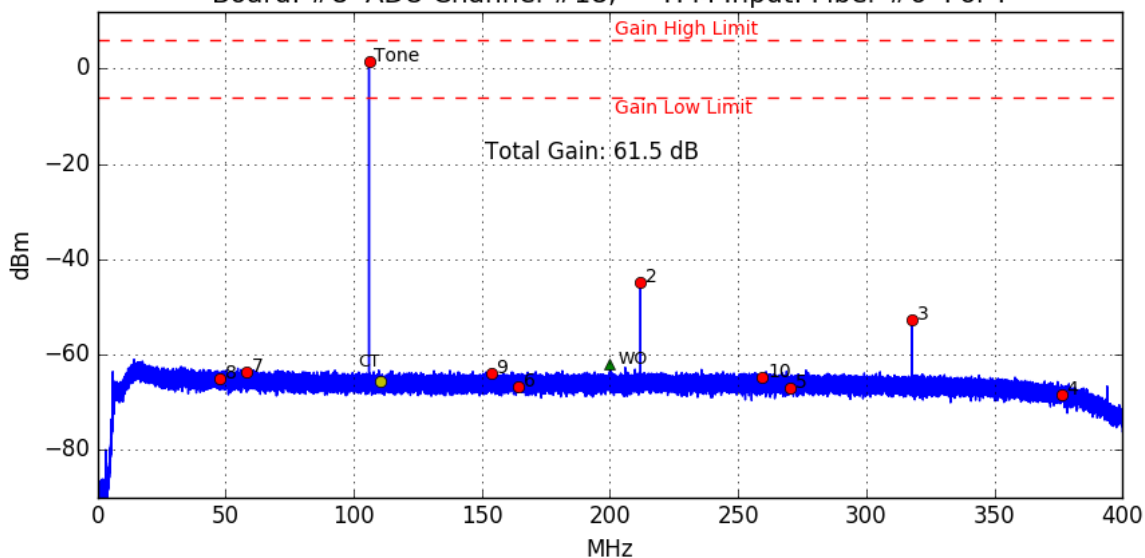
Board: #8 ADU Channel #17, TPM Input: Fiber #5 Pol-X



Fundamental Tone: -0.1 dBm
 Second Harmonic: -48.4 dBm
 Third Harmonic: -51.8 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -61.3 dBm @ 105.951 MHz
 Cross Talk: 61.3 dBC @ 105.951 MHz

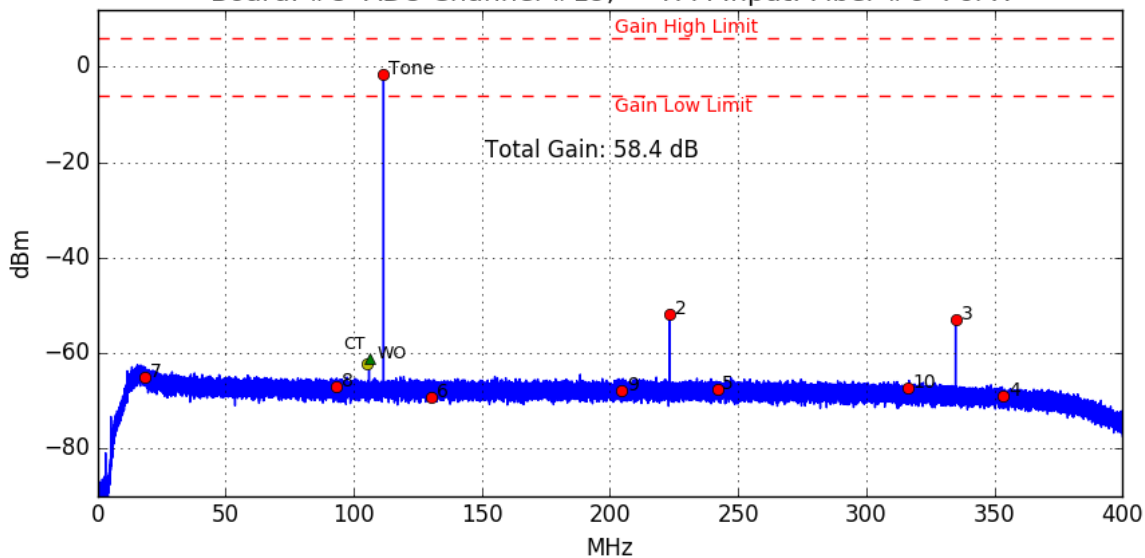
Board: #8 ADU Channel #18, TPM Input: Fiber #6 Pol-Y



Fundamental Tone: 1.5 dBm
 Second Harmonic: -44.9 dBm
 Third Harmonic: -52.8 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -61.9 dBm @ 199.994 MHz
 Cross Talk: 66.2 dBC @ 111.591 MHz

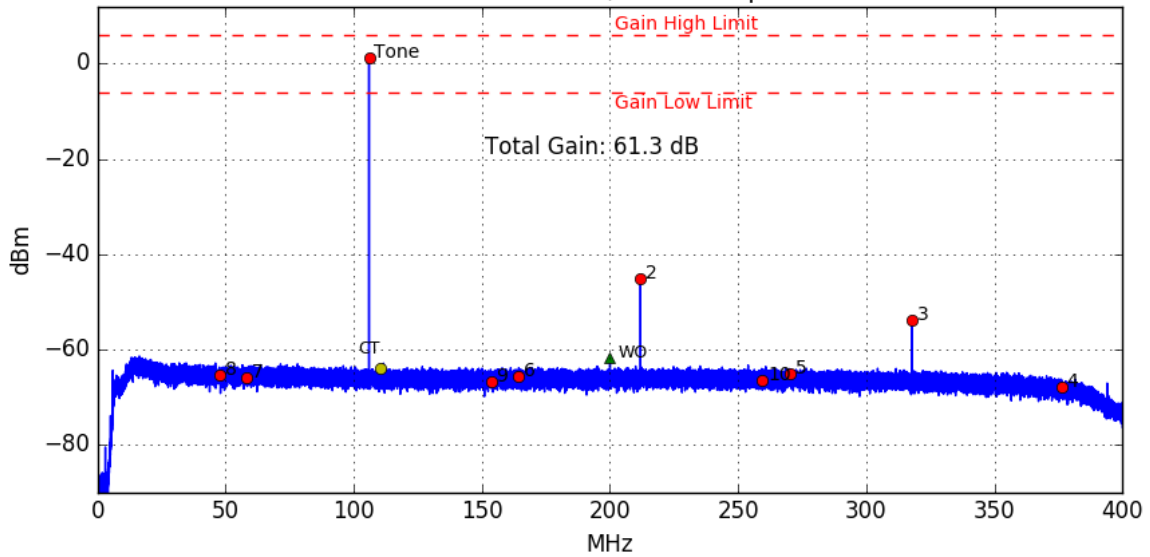
Board: #8 ADU Channel #19, TPM Input: Fiber #6 Pol-X



Fundamental Tone: -1.6 dBm
 Second Harmonic: -51.8 dBm
 Third Harmonic: -52.9 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -61.1 dBm @ 105.951 MHz
 Cross Talk: 59.6 dBC @ 105.951 MHz

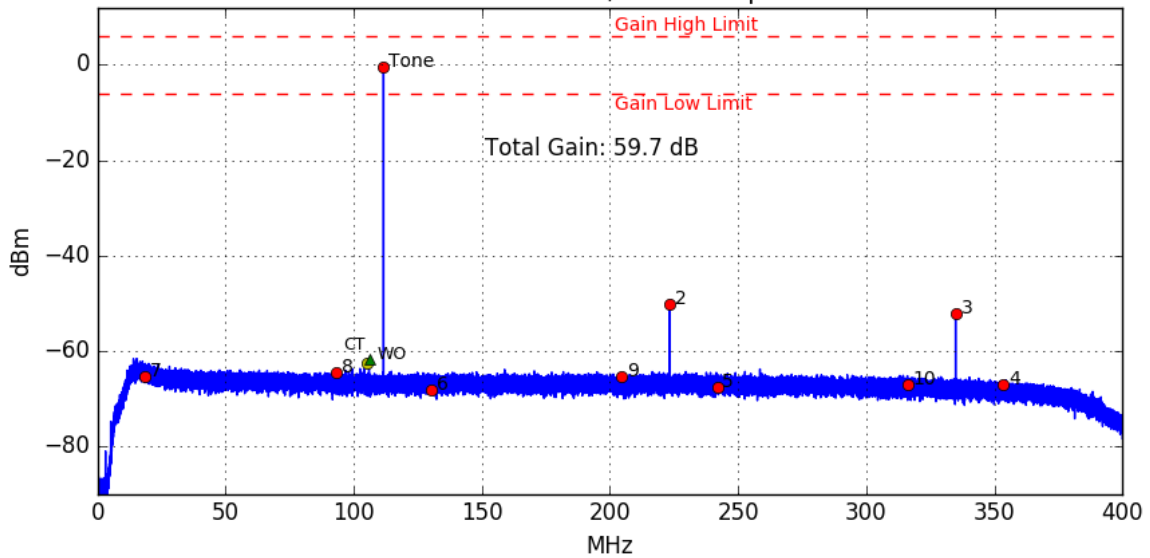
Board: #8 ADU Channel #20, TPM Input: Fiber #7 Pol-Y



Fundamental Tone: 1.3 dBm
 Second Harmonic: -45.1 dBm
 Third Harmonic: -53.7 dBm

Tone Frequency: 105.950928 Hz
 Worst Other: -61.8 dBm @ 199.994 MHz
 Cross Talk: 64.2 dBC @ 111.627 MHz

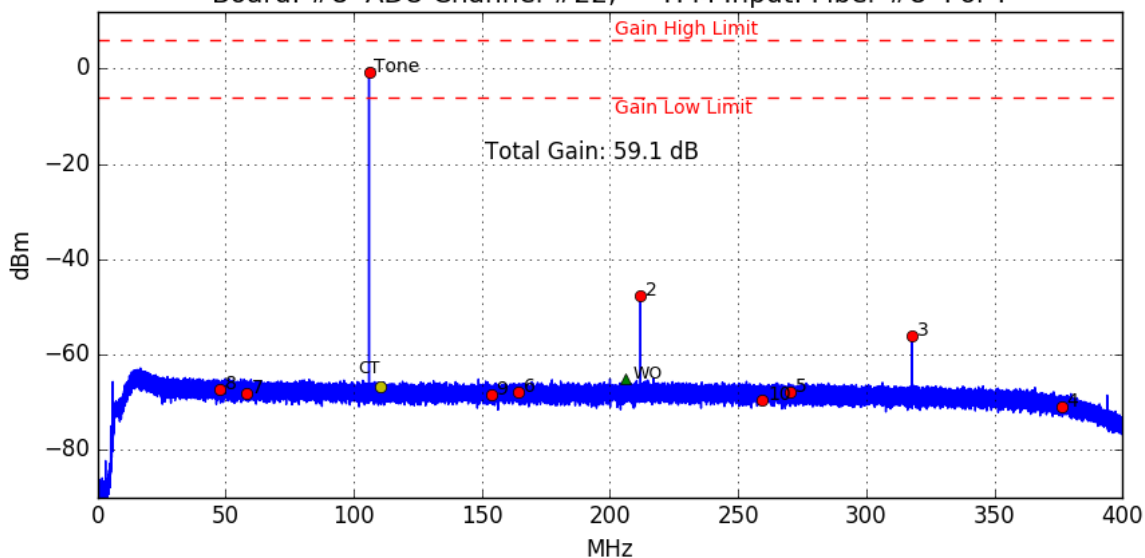
Board: #8 ADU Channel #21, TPM Input: Fiber #7 Pol-X



Fundamental Tone: -0.3 dBm
 Second Harmonic: -50.3 dBm
 Third Harmonic: -52.1 dBm

Tone Frequency: 111.627197 Hz
 Worst Other: -61.6 dBm @ 105.951 MHz
 Cross Talk: 61.3 dBC @ 105.951 MHz

Board: #8 ADU Channel #22, TPM Input: Fiber #8 Pol-Y



Fundamental Tone: -0.9 dBm

Tone Frequency: 105.950928 Hz

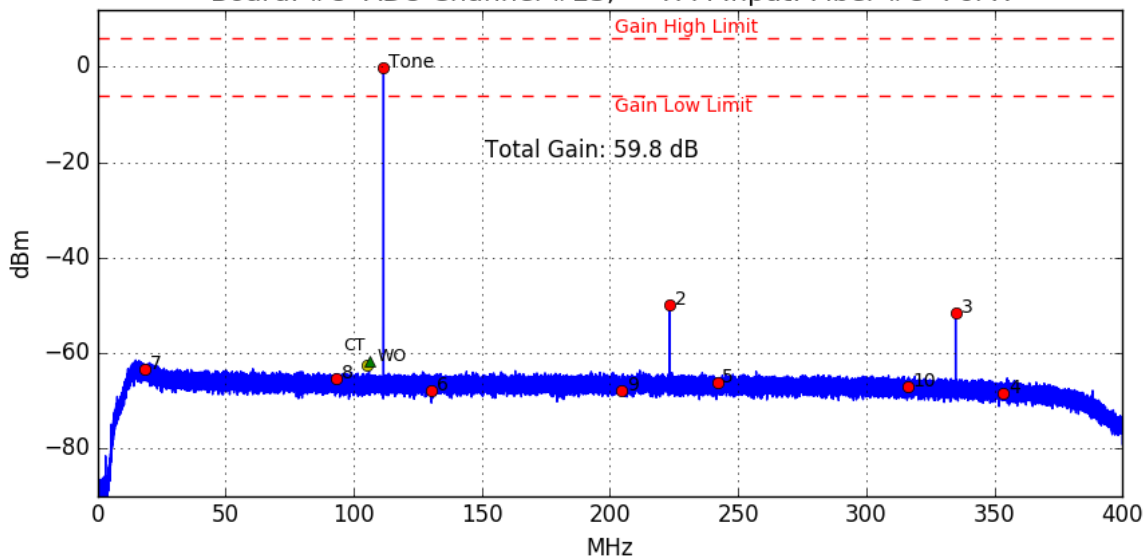
Second Harmonic: -47.6 dBm

Worst Other: -65.0 dBm @ 205.951 MHz

Third Harmonic: -56.1 dBm

Cross Talk: 65.0 dBC @ 111.621 MHz

Board: #8 ADU Channel #23, TPM Input: Fiber #8 Pol-X



Fundamental Tone: -0.2 dBm

Tone Frequency: 111.627197 Hz

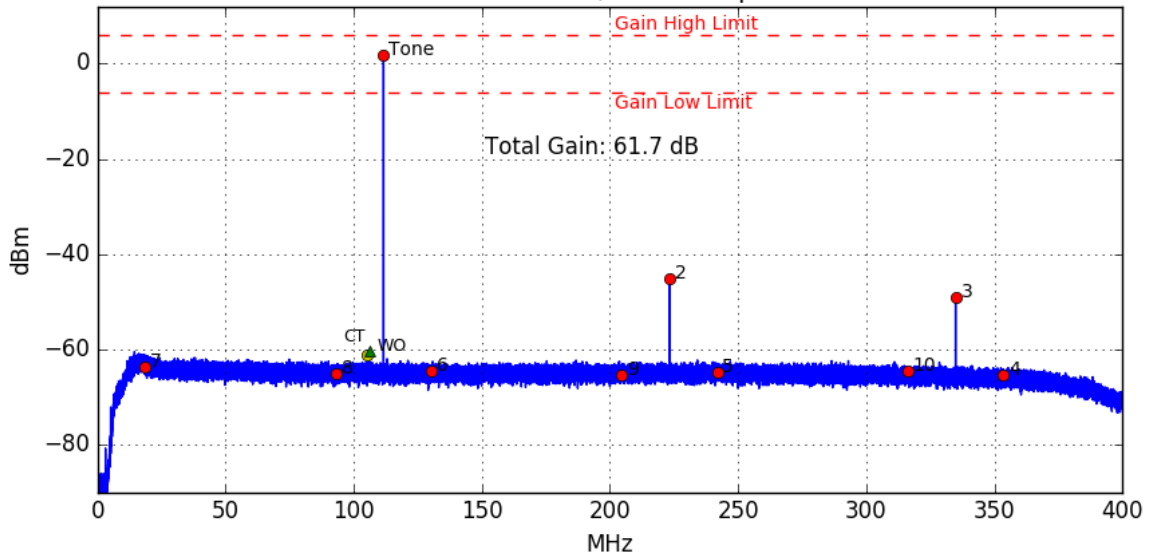
Second Harmonic: -49.8 dBm

Worst Other: -61.6 dBm @ 105.951 MHz

Third Harmonic: -51.5 dBm

Cross Talk: 61.4 dBC @ 105.951 MHz

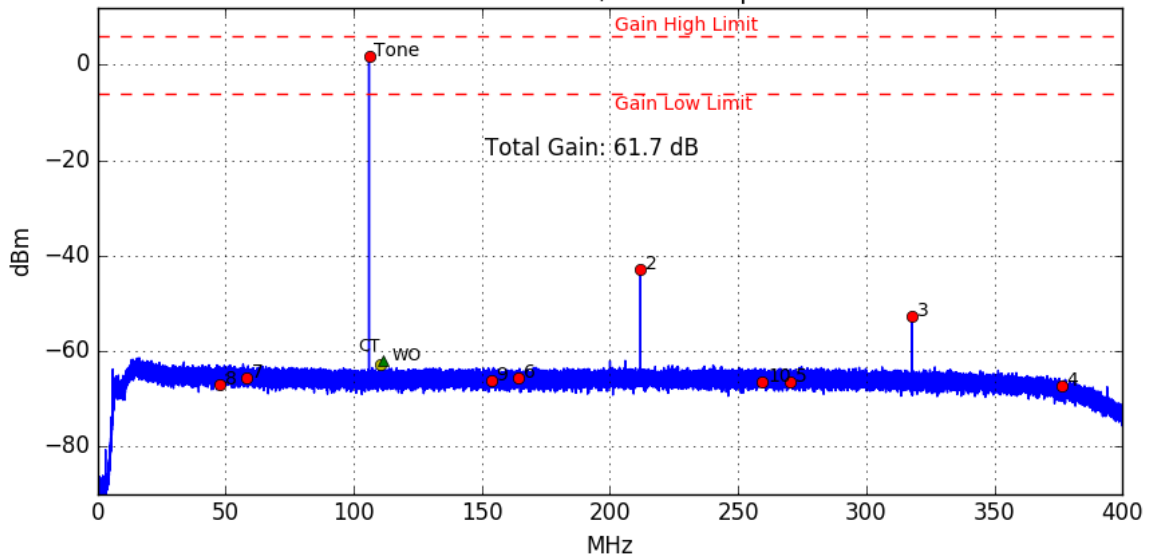
Board: #8 ADU Channel #24, TPM Input: Fiber #12 Pol-X



Fundamental Tone: 1.7 dBm
 Second Harmonic: -45.0 dBm
 Third Harmonic: -49.1 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -60.2 dBm @ 105.951 MHz
 Cross Talk: 61.9 dBC @ 105.951 MHz

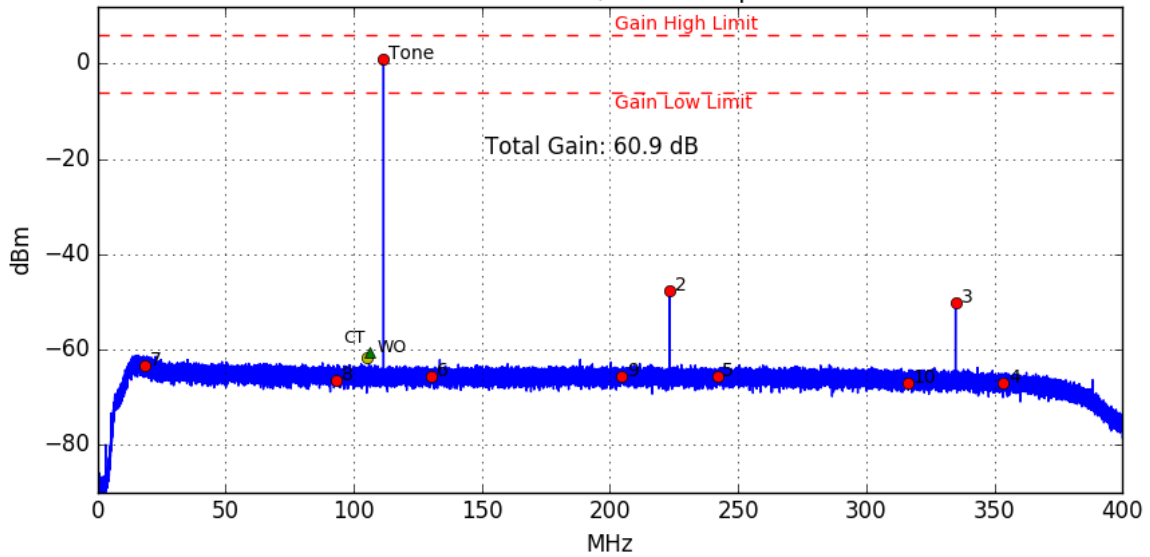
Board: #8 ADU Channel #25, TPM Input: Fiber #12 Pol-Y



Fundamental Tone: 1.7 dBm
 Second Harmonic: -42.8 dBm
 Third Harmonic: -52.8 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -61.9 dBm @ 111.627 MHz
 Cross Talk: 63.6 dBC @ 111.627 MHz

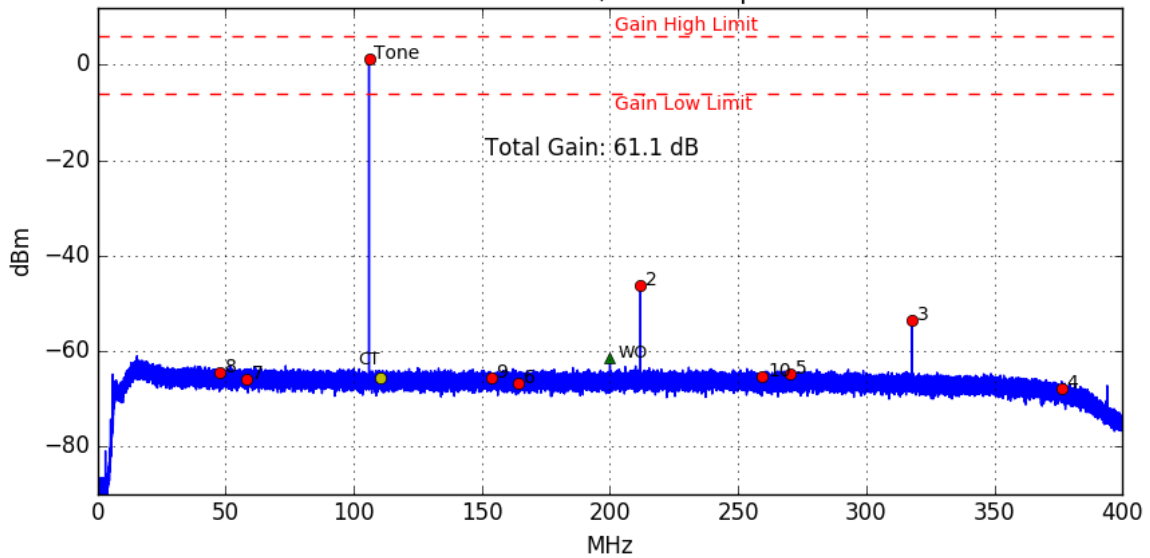
Board: #8 ADU Channel #26, TPM Input: Fiber #11 Pol-X



Fundamental Tone: 0.9 dBm
 Second Harmonic: -47.7 dBm
 Third Harmonic: -50.1 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -60.7 dBm @ 105.951 MHz
 Cross Talk: 61.7 dBC @ 105.951 MHz

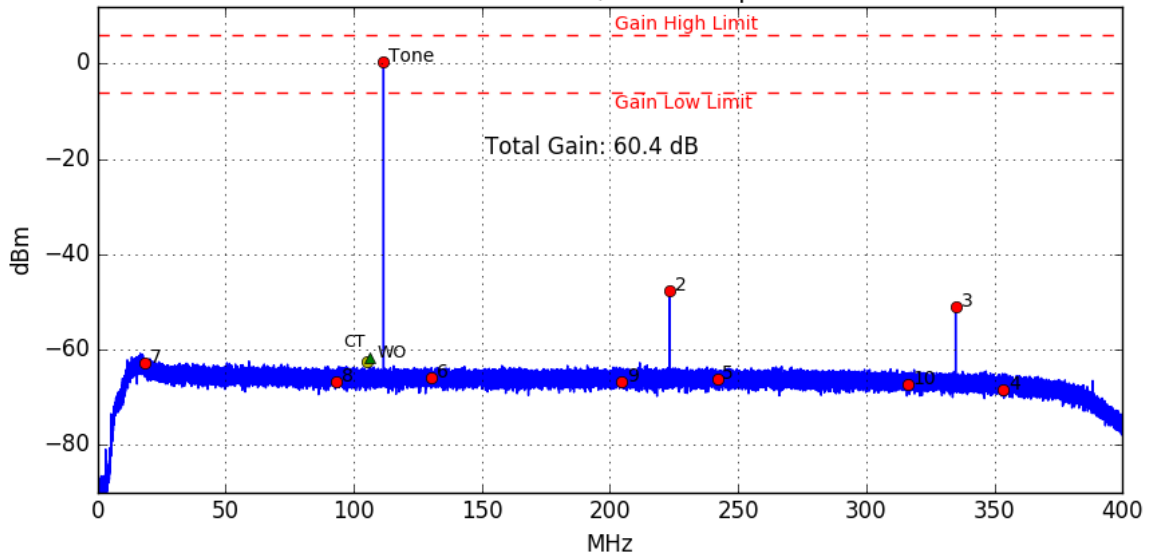
Board: #8 ADU Channel #27, TPM Input: Fiber #11 Pol-Y



Fundamental Tone: 1.1 dBm
 Second Harmonic: -46.4 dBm
 Third Harmonic: -53.6 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -61.3 dBm @ 199.994 MHz
 Cross Talk: 65.8 dBC @ 111.560 MHz

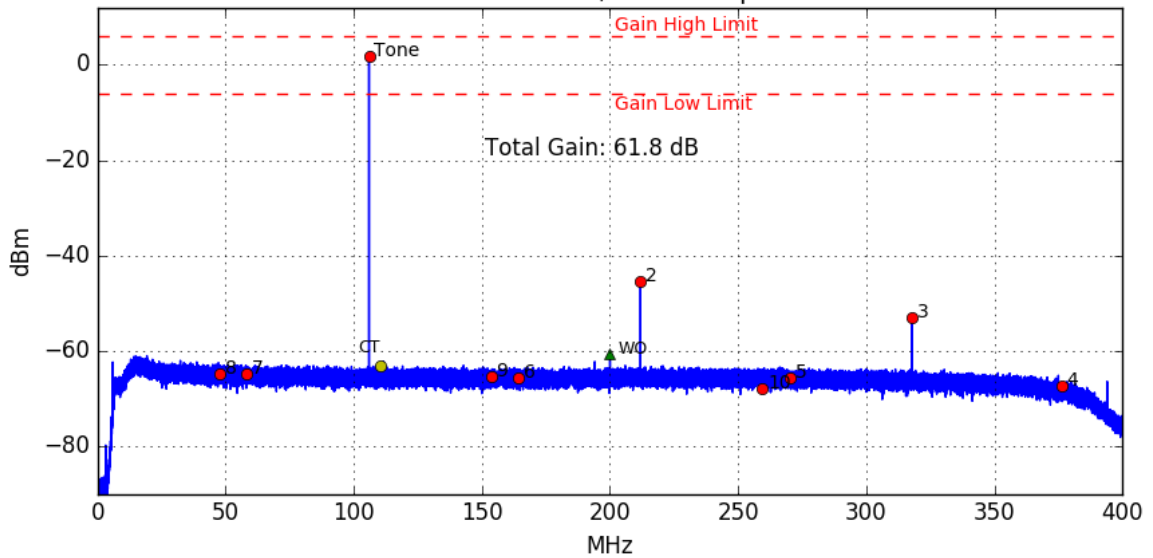
Board: #8 ADU Channel #28, TPM Input: Fiber #10 Pol-X



Fundamental Tone: 0.4 dBm
 Second Harmonic: -47.7 dBm
 Third Harmonic: -50.9 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -61.6 dBm @ 105.951 MHz
 Cross Talk: 62.0 dBC @ 105.951 MHz

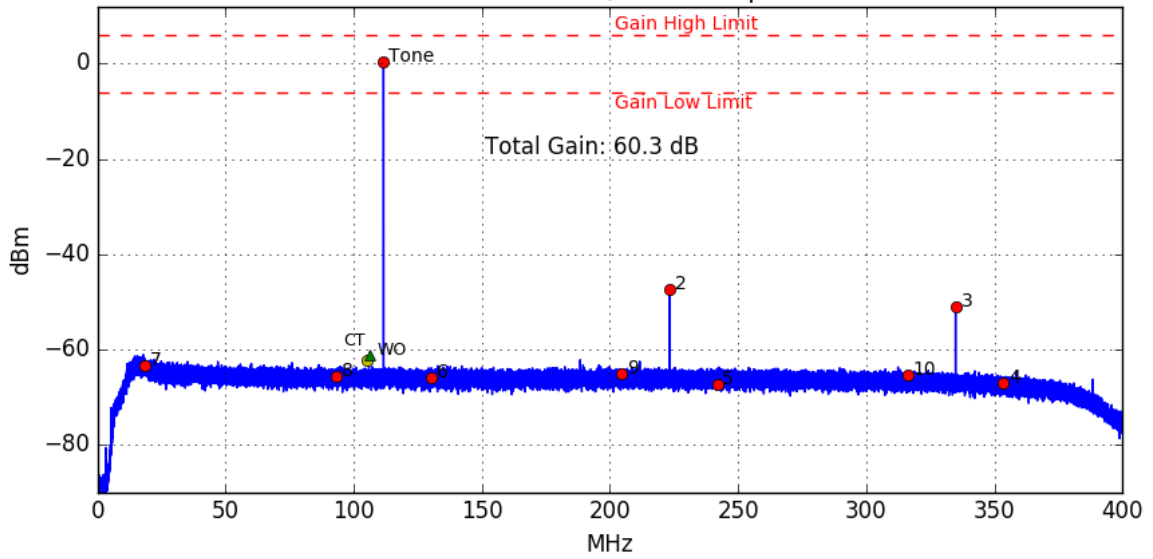
Board: #8 ADU Channel #29, TPM Input: Fiber #10 Pol-Y



Fundamental Tone: 1.8 dBm
 Second Harmonic: -45.3 dBm
 Third Harmonic: -53.1 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -60.6 dBm @ 199.994 MHz
 Cross Talk: 64.0 dBC @ 111.627 MHz

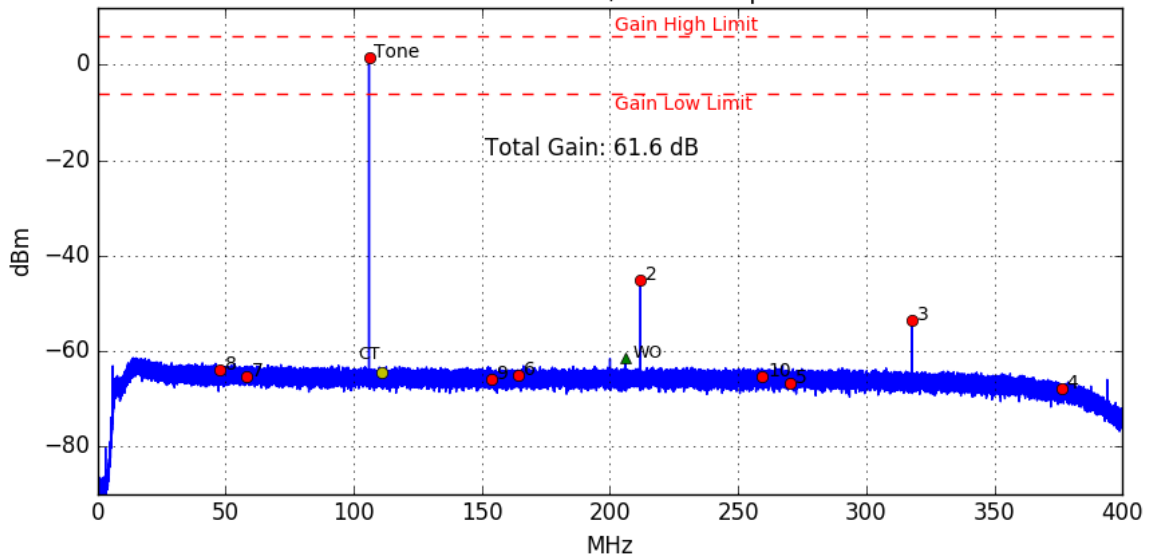
Board: #8 ADU Channel #30, TPM Input: Fiber #9 Pol-X



Fundamental Tone: 0.3 dBm
 Second Harmonic: -47.2 dBm
 Third Harmonic: -51.1 dBm

Tone Frequency: 111.627.197 Hz
 Worst Other: -61.2 dBm @ 105.951 MHz
 Cross Talk: 61.5 dBC @ 105.951 MHz

Board: #8 ADU Channel #31, TPM Input: Fiber #9 Pol-Y



Fundamental Tone: 1.6 dBm
 Second Harmonic: -45.1 dBm
 Third Harmonic: -53.7 dBm

Tone Frequency: 105.950.928 Hz
 Worst Other: -61.5 dBm @ 205.951 MHz
 Cross Talk: 65.2 dBC @ 111.743 MHz