

Antenna Port Conducted Bandedge

90.691 Limits (dBm)						
Frequency F	Range (MHz)	Limit (dBm)	RBW			
<851	.9625	-19.02	100kHz			
851.9625	851.9875	-26	27kHz			
869.0125	869.0375	-26	27kHz			
>869	.0375	-19.02	100kHz			

Tests performed at Port 1 on lowest and highest channels for all modulations and channel bandwidth modes. Limits are reduced by 10 Log (4) per FCC KDB 66291D01 v02r01 due to 4x4 MIMO operation. LTE 1.4 MHz and 3 MHz modes required power reduction at the lowest and highest channels to meet bandedge limits as described in output power section of this report.

Results summary:

851.9625-851.9875MHz & 869.0125-869.0375MHz

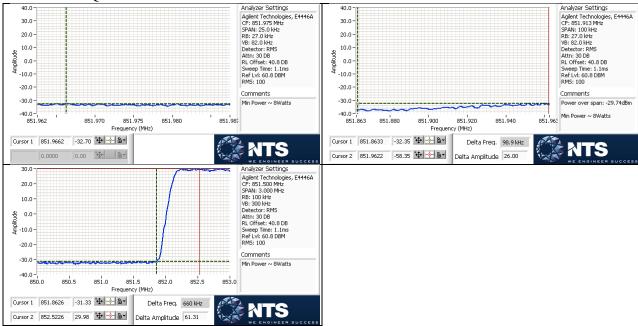
	LTE - QPSK		LTE - 16QAM		LTE - 64QAM		
	Low	High	Low	High	Low	High	Limit
1.4M	-32.70dBm*	-33.12dBm*	-32.41dBm*	-34.66dBm*	-32.43dBm*	-34.55dBm*	-26dBm
1.4M±1	-36.23dBm*	-43.07dBm*	-36.22dBm*	-41.95dBm*	-36.13dBm*	-42.86dBm*	-26dBm
1.4M±2	-36.25dBm*	-45.41dBm*	-37.00dBm*	-44.22dBm*	-37.20dBm*	-45.92dBm*	-26dBm
1.4M±3	-37.09dBm*	-45.93dBm*	-36.44dBm*	-44.32dBm*	-37.10dBm*	-44.93dBm*	-26dBm
1.4M±4	-26.48dBm	-45.95dBm*	-26.82dBm	-45.97dBm	-26.55dBm	-45.21dBm*	-26dBm
1.4M±5	N/A	-27.00dBm	N/A	-26.44dBm	N/A	-26.33dBm	-26dBm
3M	-34.05dBm*	-34.38dBm*	-35.02dBm*	-34.08dBm*	-35.06dBm	-33.71dBm*	-26dBm
3M+1	-28.58dBm	-30.79dBm	-29.12dBm	-30.70dBm	-28.74dBm	-30.26dBm	-26dBm
5M	-28.97dBm	-28.73dBm	-29.36dBm	-29.47dBm	-29.55dBm	-28.07dBm	-26dBm
10M	-29.89dBm	-30.23dBm	-30.78dBm	-31.11dBm	-30.05dBm	-30.47dBm	-26dBm
15M	-29.69dBm	-29.73dBm	-30.07dBm	-30.66dBm	-30.38dBm	-30.08dBm	-26dBm
1.4M Dual	-26.30dBm*	-26.61dBm*	-27.09dBm*	-27.29dBm	-26.72dBm*	-26.89dBm	-26dBm
1.4M Dual ±1	-26.95dBm	-28.31dBm	-28.07dBm	-28.42dBm	-27.43dBm	-28.98dBm	-26dBm

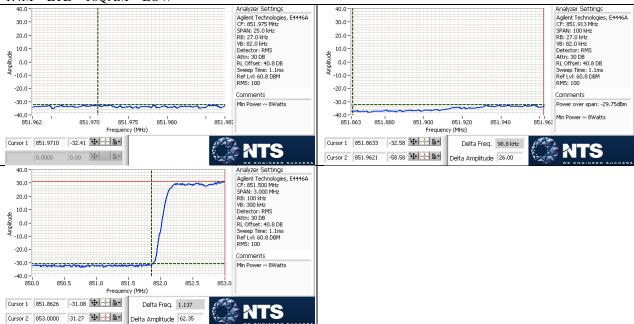
< 851.9625MHz & >869.0375MHz

	LTE - QPSK		LTE - 16QAM		LTE - 64QAM		
	Low	High	Low	High	Low	High	Limit
1.4M	-29.74dBm*	-30.1dBm*	-29.75dBm*	-30.25dBm*	-29.76dBm*	-30.28dBm*	-19.00dBm
1.4M±1	-32.18dBm*	-32.48dBm*	-32.14dBm*	-32.32dBm*	-32.3dBm*	-32.56dBm*	-19.00dBm
1.4M±2	-32.45dBm*	-32.58dBm*	-32.46dBm*	-32.51dBm*	-32.33dBm*	-32.54dBm*	-19.00dBm
1.4M±3	-32.44dBm*	-32.62dBm*	-32.52dBm*	-32.31dBm*	-32.57dBm*	-32.59dBm*	-19.00dBm
1.4M±4	-20.07dBm	-32.62dBm*	-20.74dBm	-32.62dBm*	-20.46dBm	-32.58dBm	-19.00dBm
1.4M±5	N/A	-22.65dBm	N/A	-22.2dBm	N/A	-21.44dBm	-19.00dBm
3M	-32.04dBm*	-32.09dBm*	-32.19dBm*	-32.10dBm*	-32.04dBm*	-32.15dBm*	-19.00dBm
3M+1	-24.79dBm	-25.38dBm	-25.45dBm	-25.23dBm	-25.21dBm	-25.66dBm	-19.00dBm
5M	-25.74dBm	-26.61dBm	-25.71dBm	-26.92dBm	-25.92dBm	-27.02dBm	-19.00dBm
10M	-29.49dBm	-30dBm	-29.59dBm	-29.96dBm	-29.61dBm	-29.83dBm	-19.00dBm
15M	-27.53dBm	-27.63dBm	-27.74dBm	-27.84dBm	-28.24dBm	-27.74dBm	-19.00dBm
1.4M Dual	-23.44dBm*	-23.45dBm*	-24.30dBm*	-23.79dBm*	-23.97dBm	-23.63dBm*	-19.00dBm
1.4M Dual ±1	-24.49dBm	-24.56dBm	-24.40dBm	-24.77dBm	-24.57dBm	-24.95dBm	-19.00dBm
* = Min Power	~ 8Watts Per Channel						

All corresponding plots are included on the following pages. Measurements were performed at Port 1 in RMS average mode over 100 traces. Total path loss of 40.8dB accounted in via reference level offset to the spectrum analyzer.

1.4M - LTE - QPSK - LOW





-30.0

-40.0

850.0

850.5

Cursor 1 851.7779 -30.64 💠 🕸 🖫

851.0

Cursor 2 852.2714 30.13 💠 🛨 🔭 Delta Amplitude 60.77

851.5

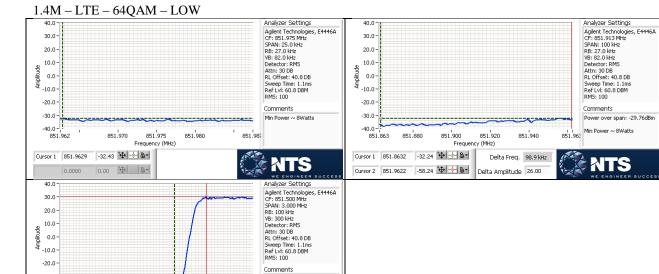
Frequency (MHz)

852.0

Delta Freq. 493 kHz

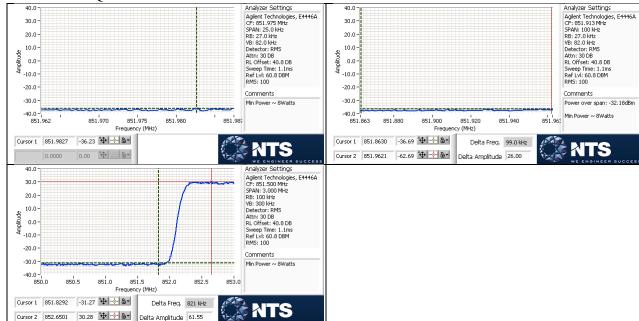
852.5

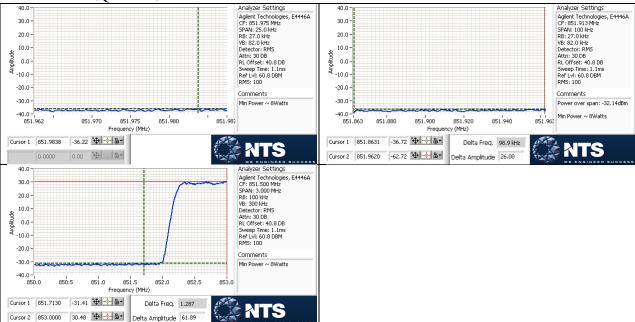
853.0



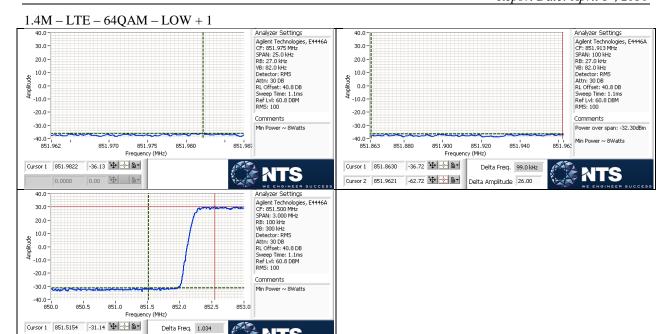
Min Power ~ 8Watts

1.4M - LTE - QPSK - LOW + 1

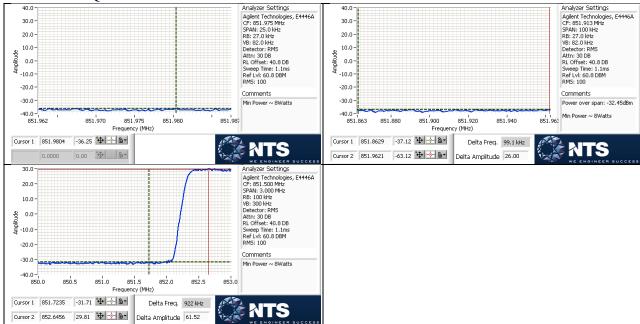


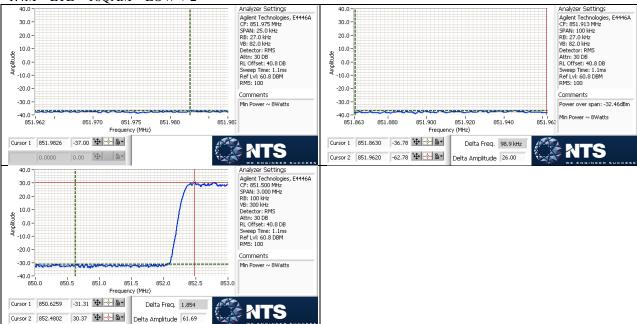


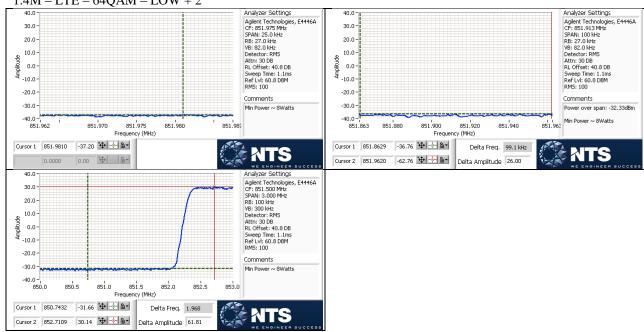
Cursor 2 852.5489 30.18 💠 🕸 Delta Amplitude 61.32



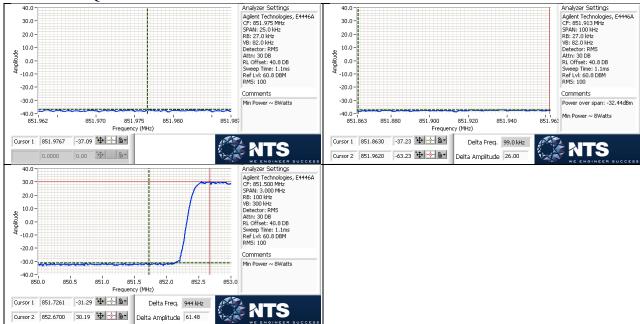


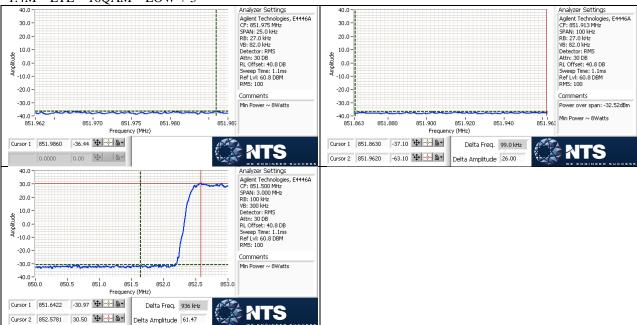






1.4M - LTE - QPSK - LOW + 3

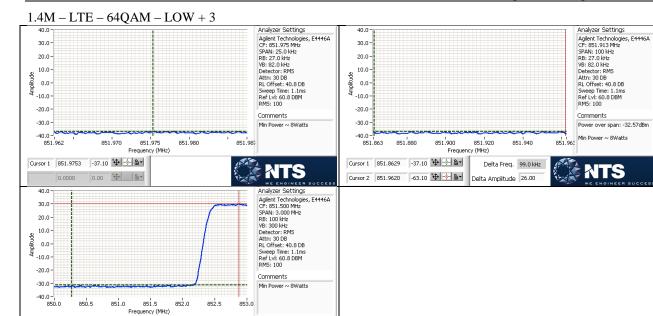




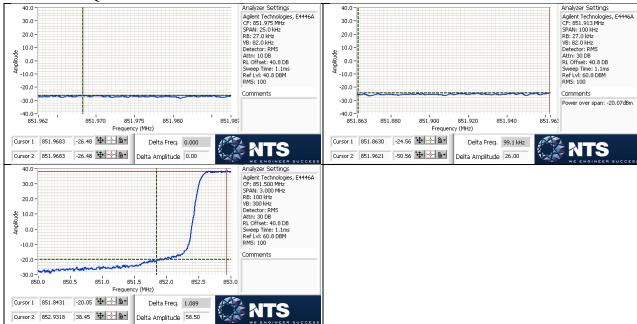
Cursor 1 850.2764 -31.47 ♣ 🛧 🖫

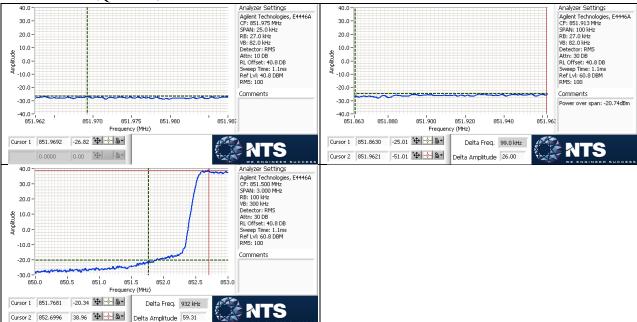
Cursor 2 852.8788 30.01 💠 🛧 🔭 Delta Amplitude 61.48

Delta Freq. 2.602

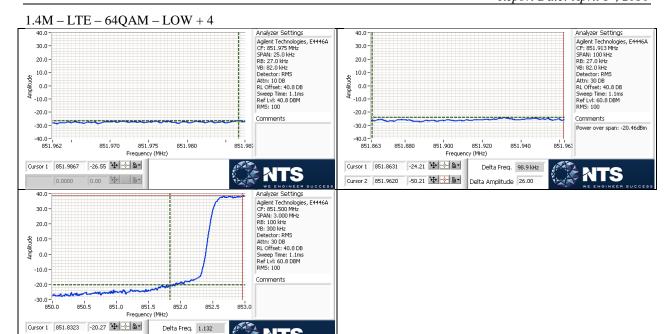


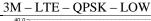
1.4M - LTE - QPSK - LOW + 4

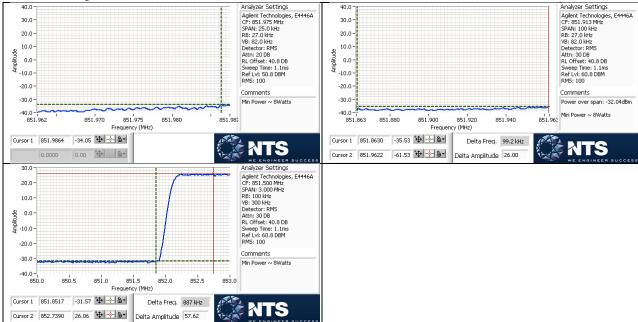




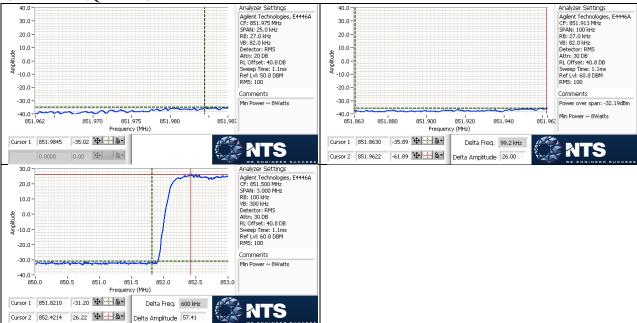
Cursor 2 852.9647 38.76 🕁 🛨 🔭 Delta Amplitude 59.03







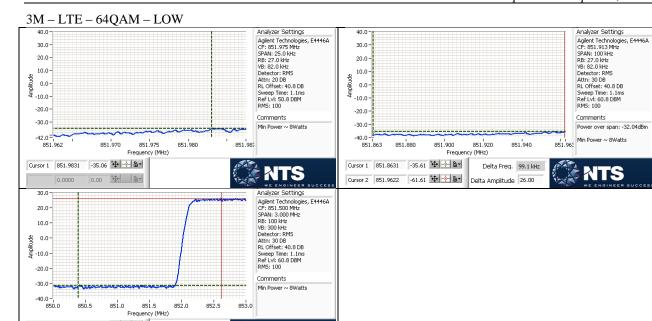




Cursor 1 850.3945 -31.27 ♣ ♣ 🎳 •

Cursor 2 852.6179 26.11 💠 🛧 🖭 Delta Amplitude 57.38

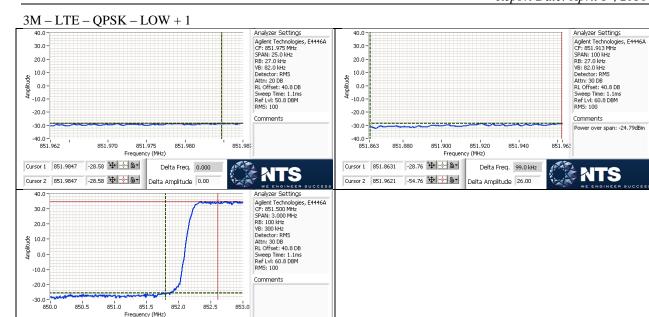
Delta Freq. 2.223

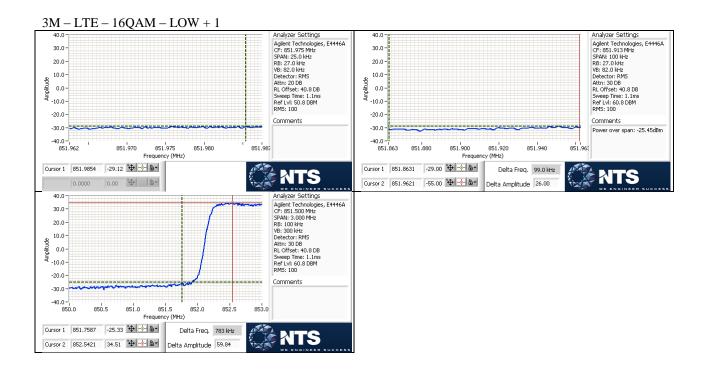


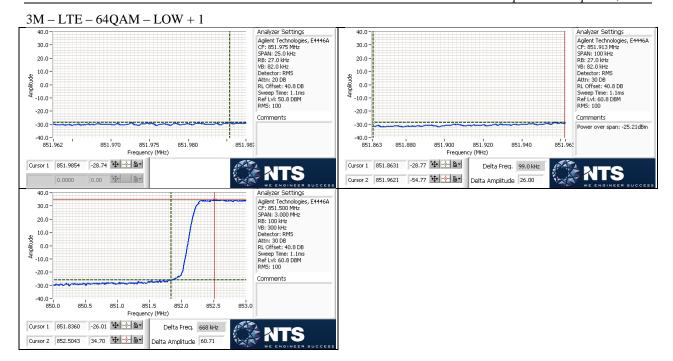
Cursor 1 851.7970 -25.57 💠 🕸 🖫

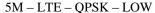
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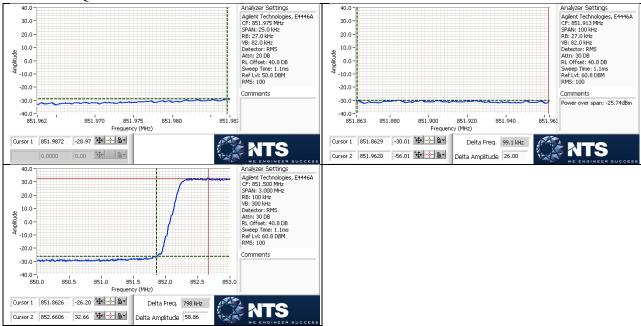
Delta Freq. 815 kHz

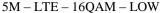


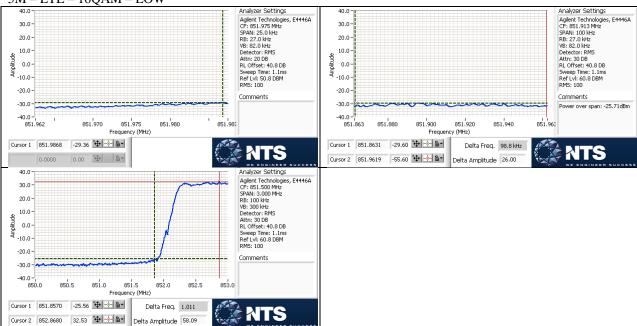








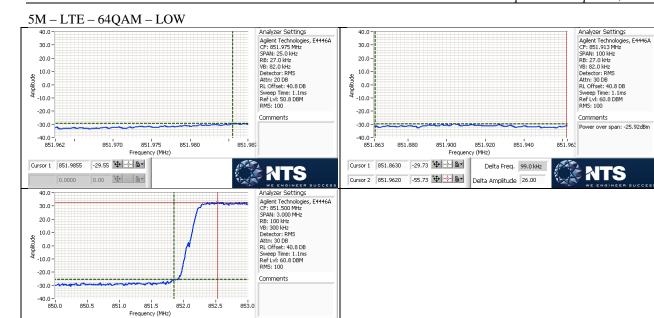




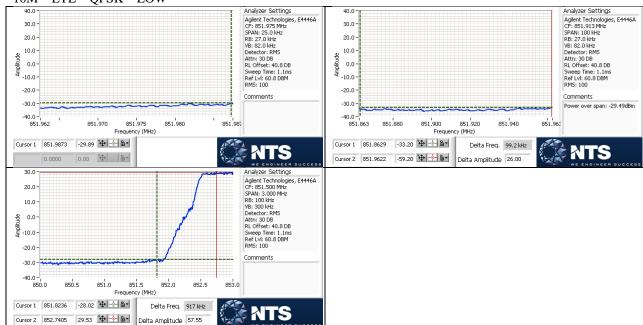
Cursor 1 851.8495 -25.67 ♣ ♣ 🎳 •

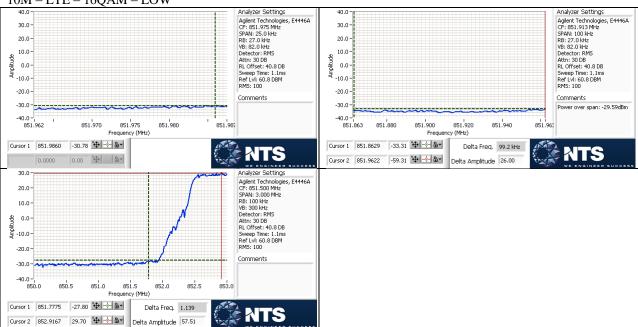
Cursor 2 852.5256 32.62 🛨 🛣 Delta Amplitude 58.29

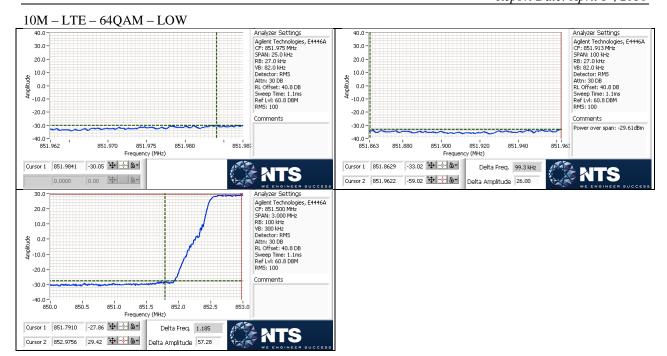
Delta Freq. 676 kHz



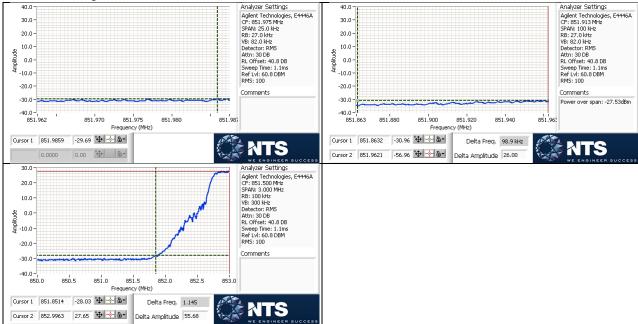
10M - LTE - QPSK - LOW

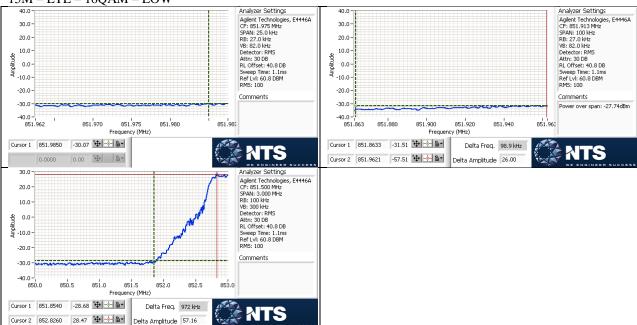


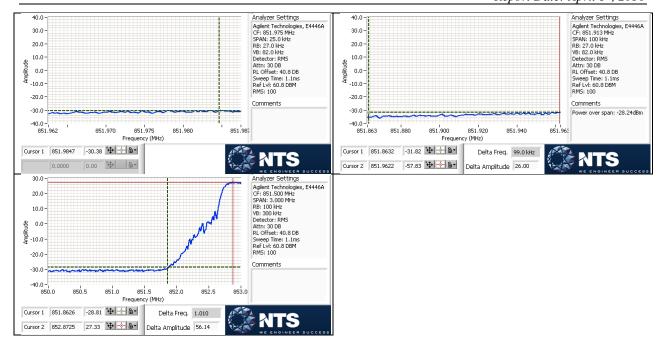




15M - LTE - QPSK - LOW







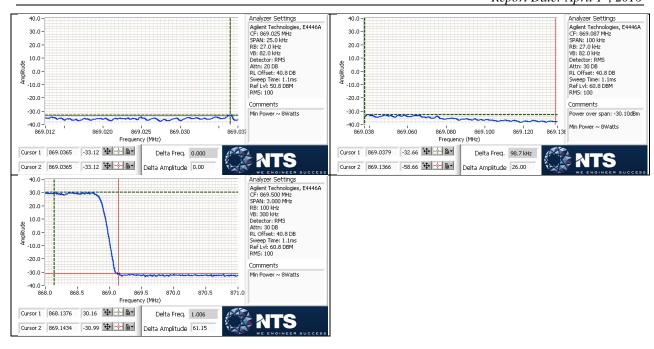
1.4M - LTE - 16QAM - HIGH

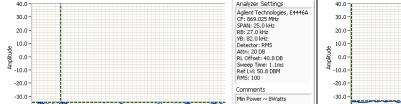
-40.0 -869.012

Cursor 1 869.0162 -34.68 ♣ ♣ 🗞 •

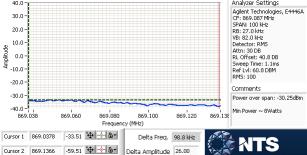
0.0000

0.00 ♣ & &

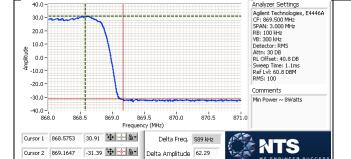




Analyzer Settings

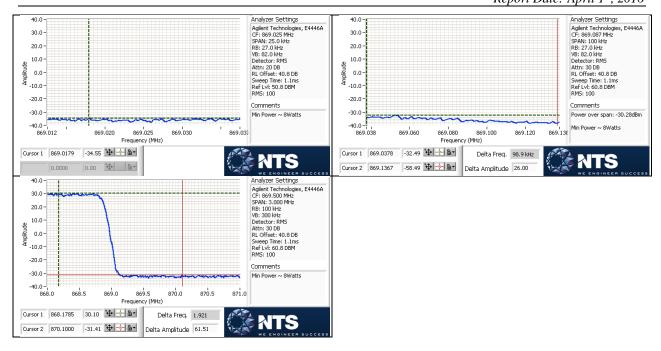


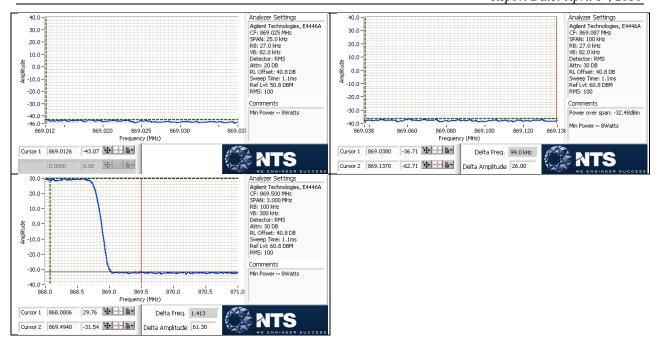
Analyzer Settings

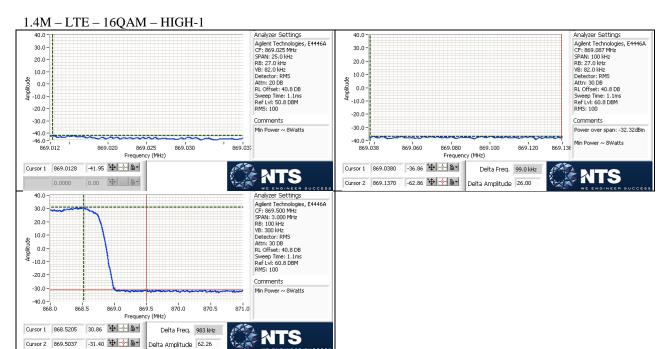


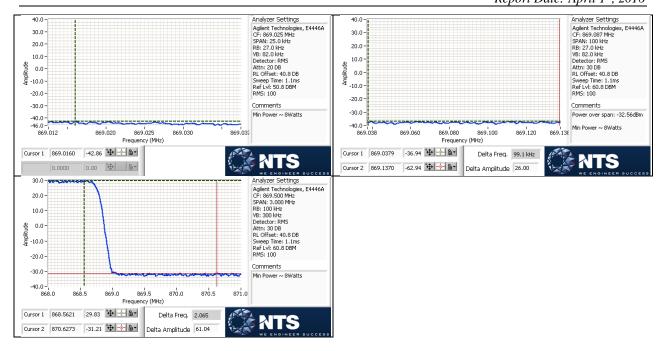
869,030

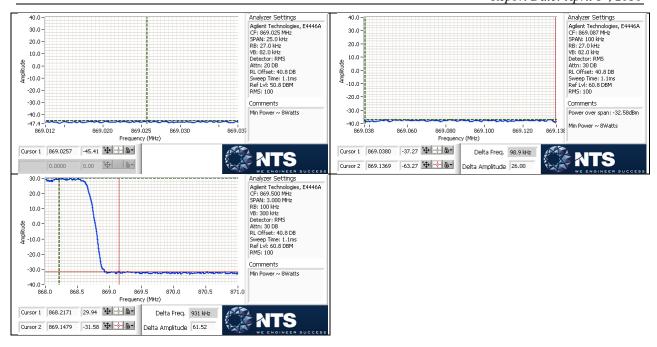
869.025 Frequency (MHz)

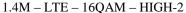


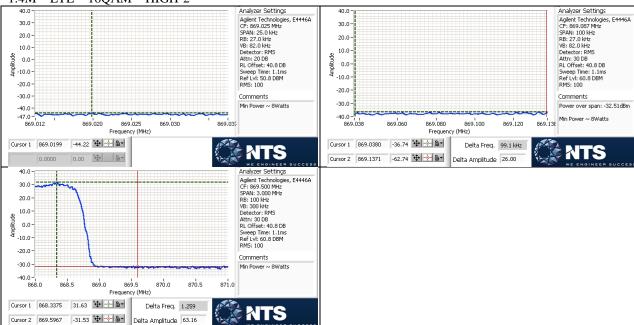


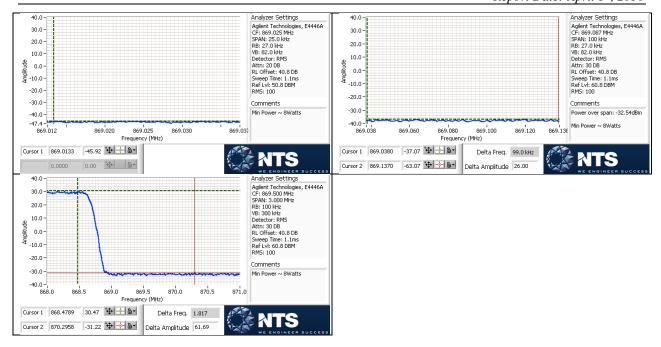


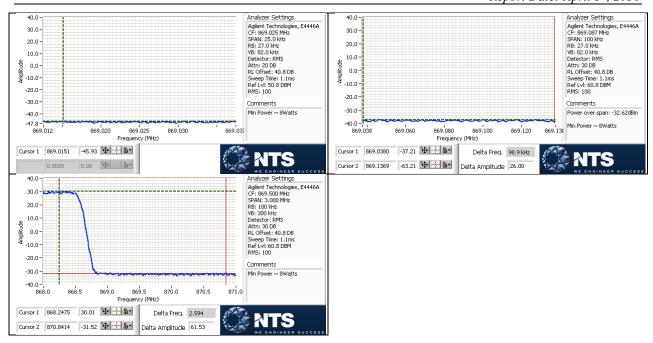


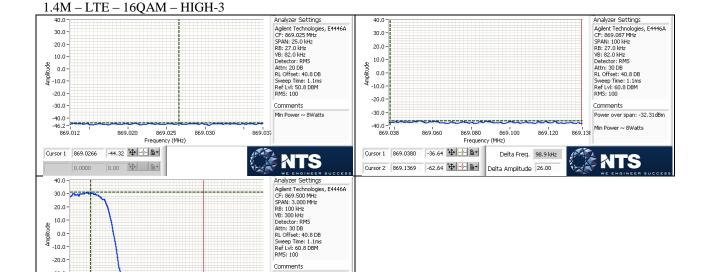












Min Power ~ 8Watts

870.5

871.0

870.0

Delta Freq. 1.758

869.0 869.5 Frequency (MHz)

Cursor 2 870.0779 -31.12 🕁 🕸 🖫 Delta Amplitude 62.07

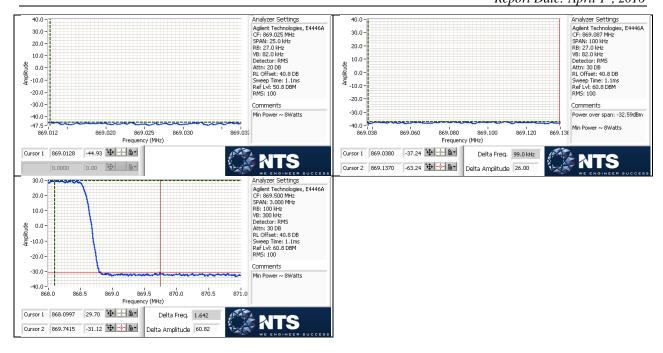
-30.0

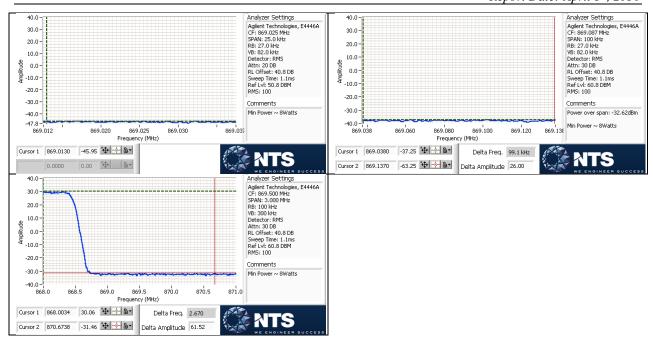
-40.0

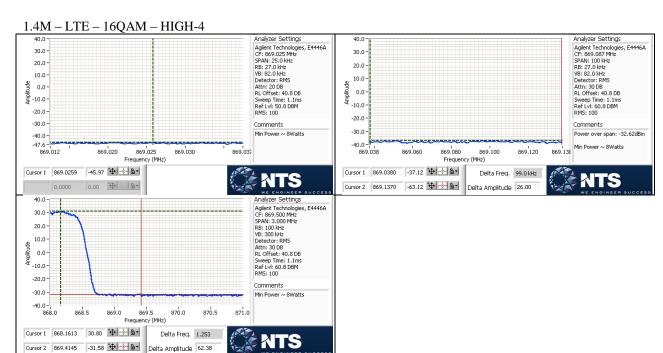
868.0

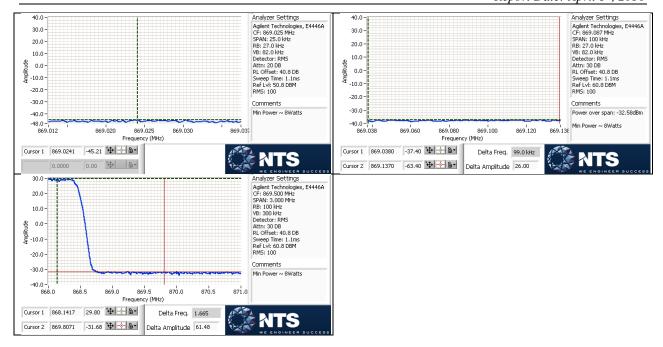
868.5

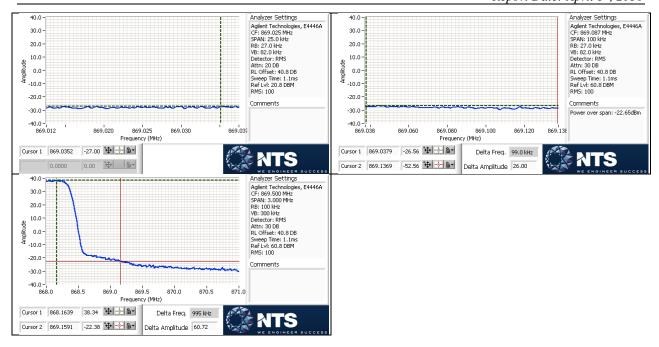
Cursor 1 868.3203 30.95 💠 🕸



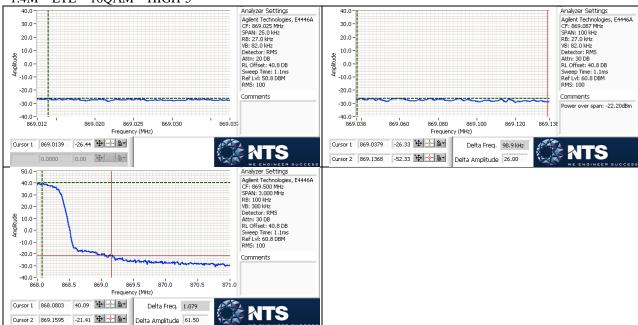


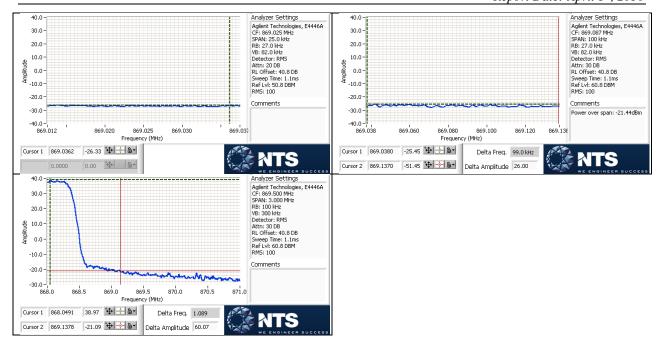


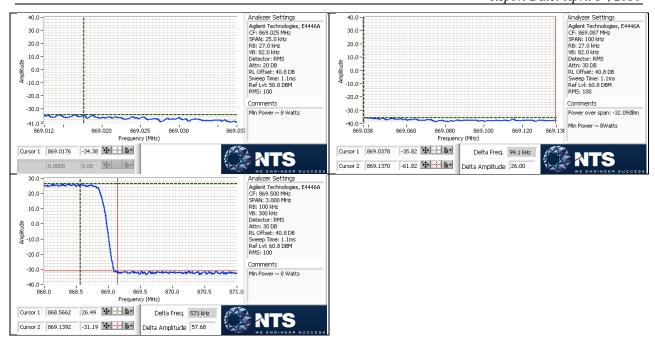


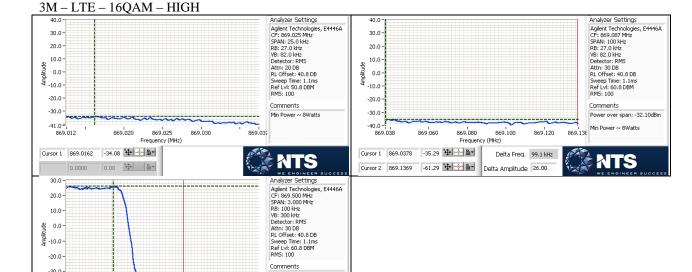












Min Power ~ 8Watts

-30.0

-40.0 868.0

868.5

Cursor 1 868.7339 25.93 💠 🔆 🖫

869.0

Cursor 2 869.8262 -31.43 🕁 🕸 🕞 Delta Amplitude 57.36

869.5

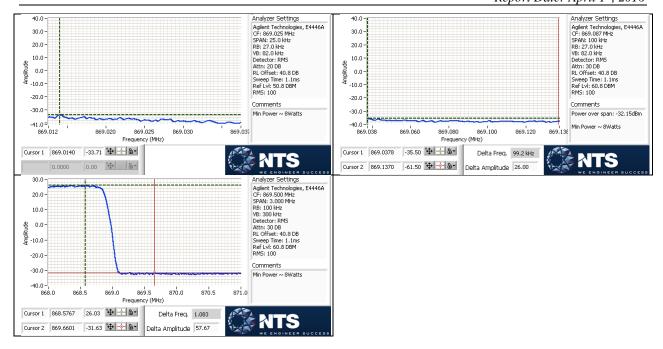
Frequency (MHz)

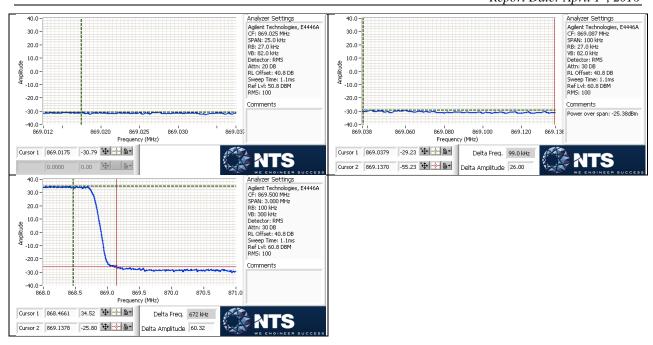
870.0

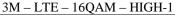
Delta Freq. 1.092

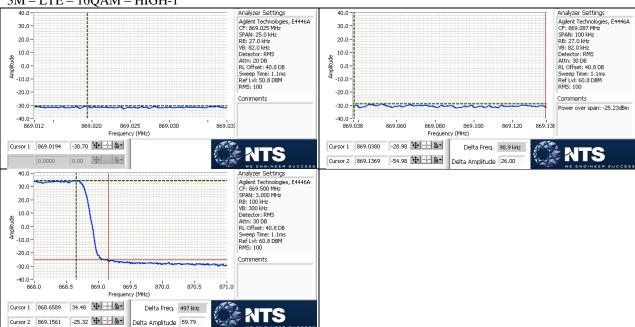
870.5

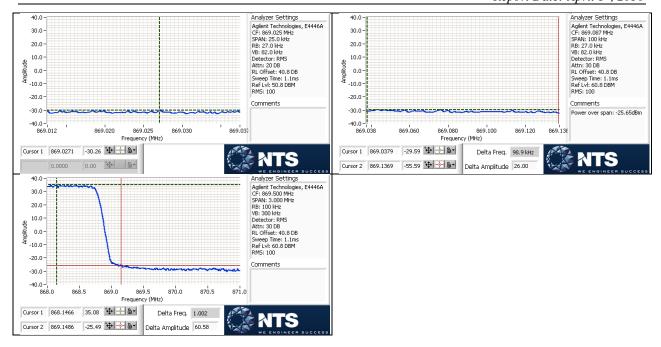
871.0

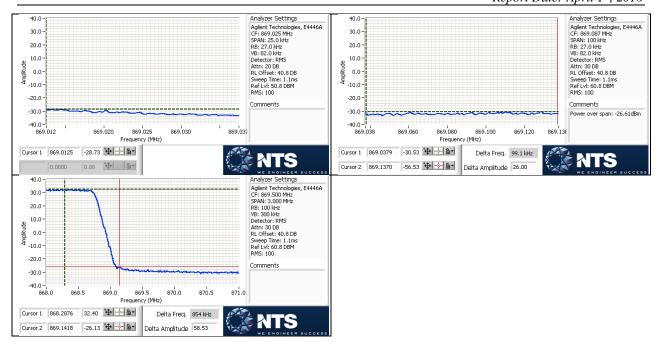


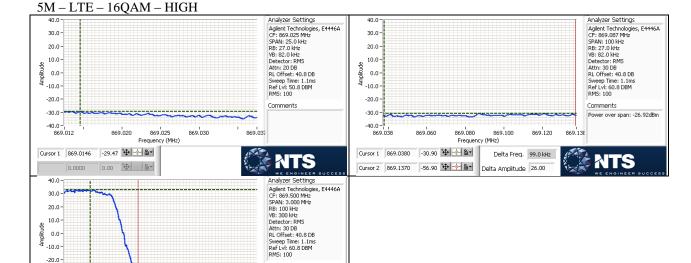












-30.0 --40.0 -868.0

868.5

Cursor 1 868.4065 32.78 💠 🔆 🖫

869.0

Cursor 2 869.1520 -26.51 🕁 🖈 🖫 Delta Amplitude 59.30

869.5

Frequency (MHz)

870.0

Delta Freq. 745 kHz

870.5

871.0

