5.7 SPURIOUS EMISSIONS AT ANTENNA TERMINALS

Test Requirement: **LTE Band 2 & LTE Band 25:** FCC 47 CFR Part 24.238(a)
LTE Band 4 & LTE Band 66: FCC 47 CFR Part 27.53(h)
LTE Band 5 & LTE Band 26: FCC 47 CFR Part 22.917(a)
LTE Band 7 & Band 38 & Band 41: FCC 47 CFR Part 27.53(m)(4)
LTE Band 12 & Band 71: FCC 47 CFR Part 27.53(g)
LTE Band 13: FCC 47 CFR Part 27.53
LTE Band 26: FCC 47 CFR Part 90.691

Test Method: ANSI C63.26-2015 & KDB 971168 D01v03r01

Limit:

FCC 47 CFR Part 24.238(a), 27.53(h)(1), 22.917(a), 27.53(g), 27.53(c)(2), 90.691:
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. The emission limit equal to -13 dBm.

FCC 47 CFR Part 27.53(m)(4):
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 55 + 10 log(P) dB. The emission limit equal to -25 dBm.

Test Procedure:

The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range. b. Measuring frequency range is from 30 MHz to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower. Set RBW & VBW to 100 kHz for the measurement below 1 GHz, and 1 MHz for the measurement above 1 GHz.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

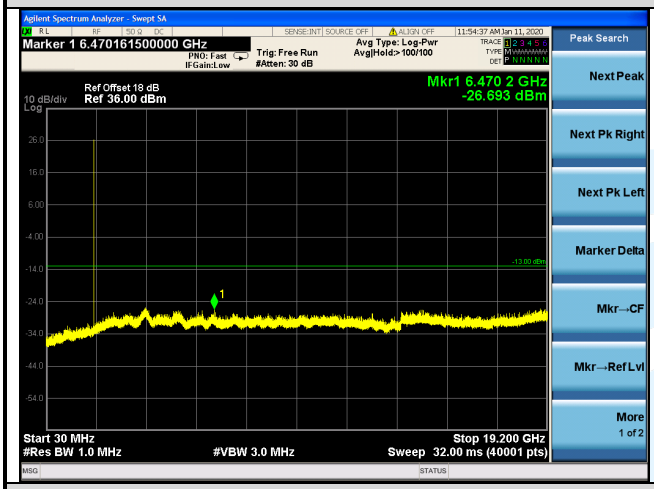
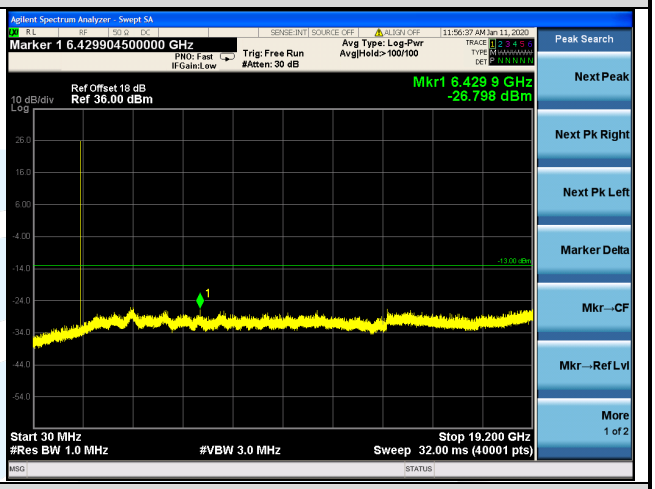
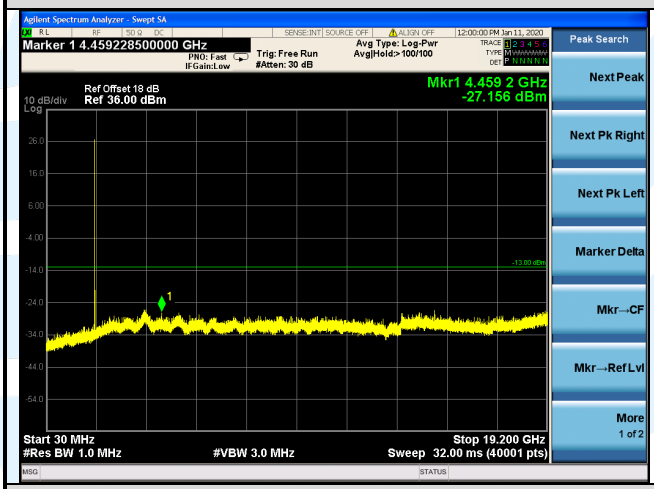
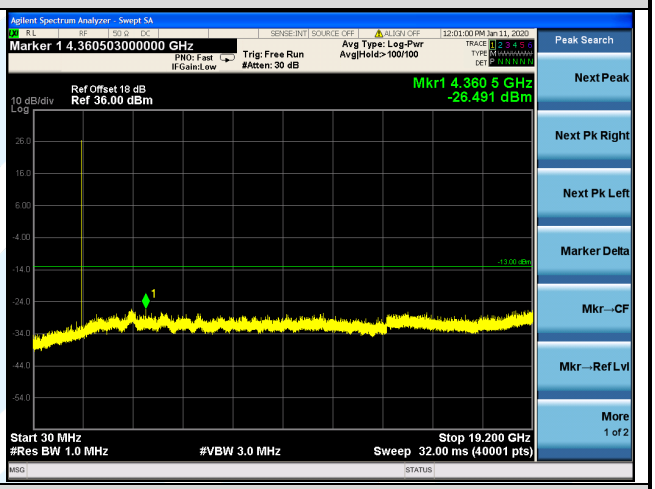
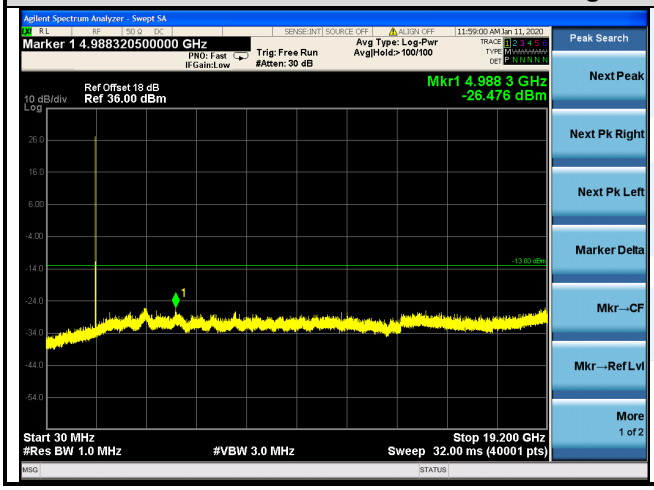
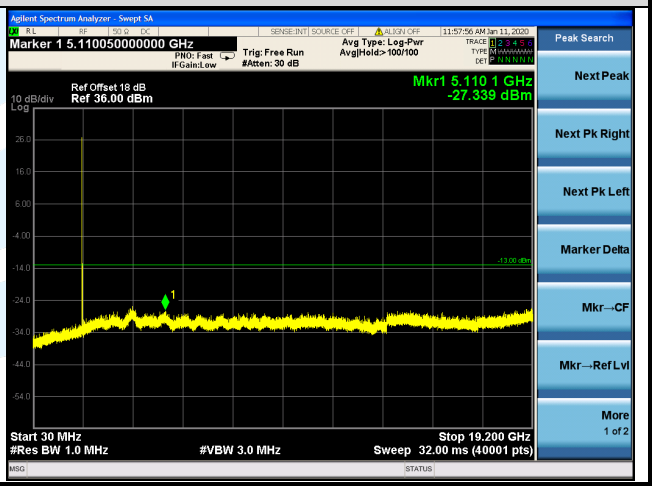
Test Setup: Refer to section 4.2.2 for details.

Instruments Used: Refer to section 3 for details

Test Mode: Link mode

Test Results: Pass

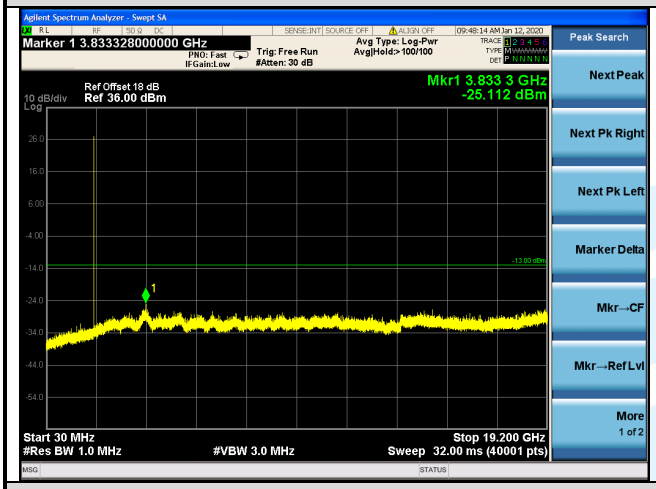
5.7.1 LTE Band 2

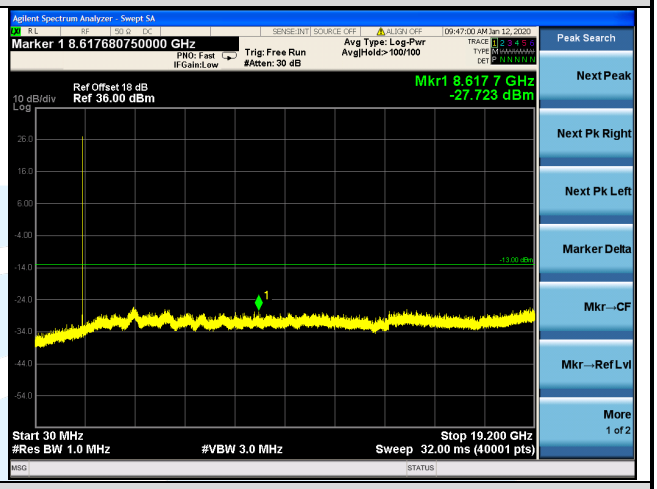
LTE Band 2_ Channel Bandwidth: 1.4 MHz	
QPSK	16QAM
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

LTE Band 2_ Channel Bandwidth: 3 MHz

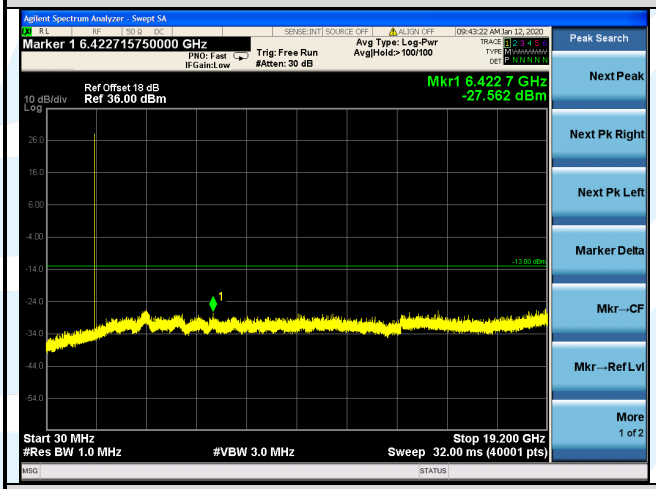
QPSK	16QAM

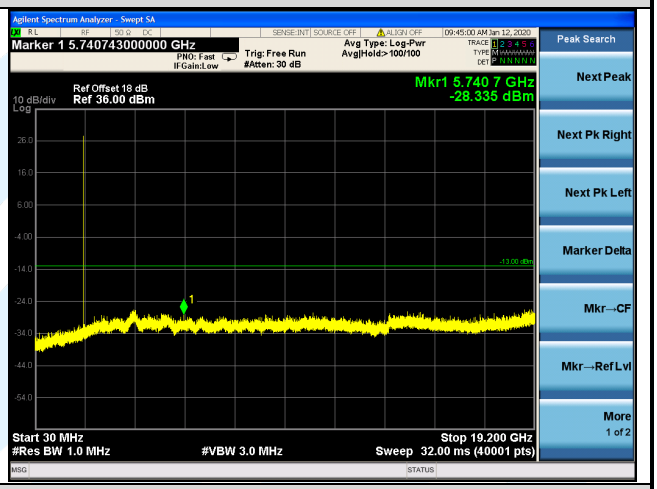
Lowest Channel



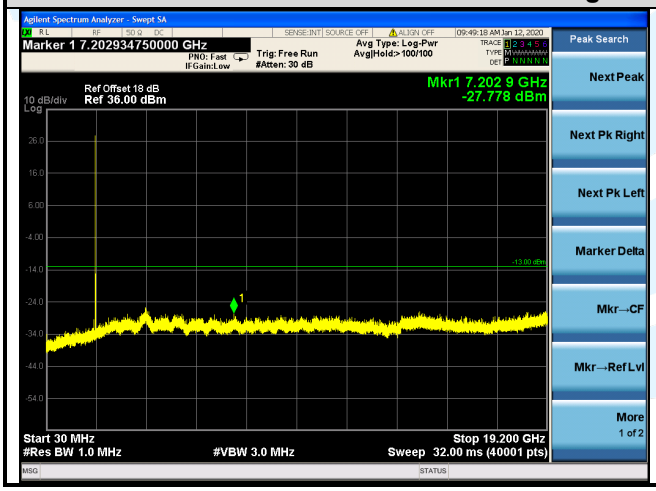


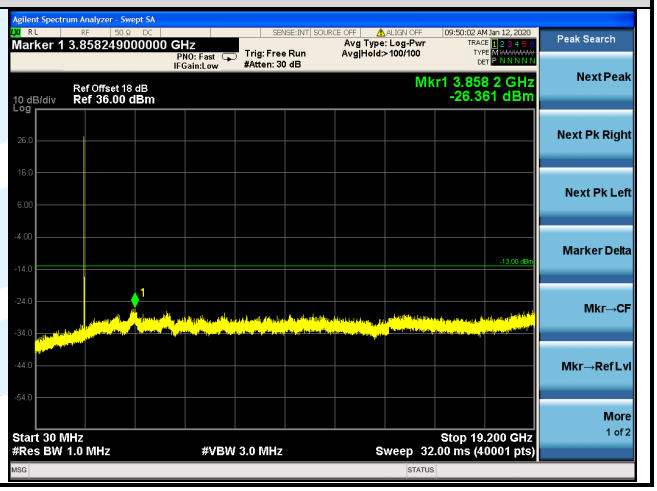
Middle Channel





Highest Channel

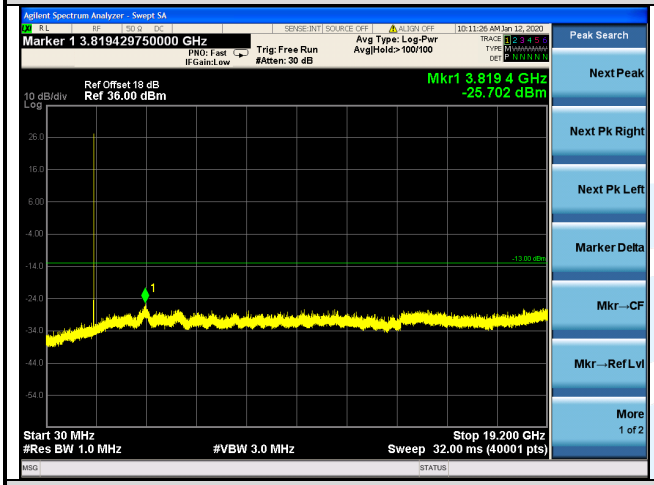


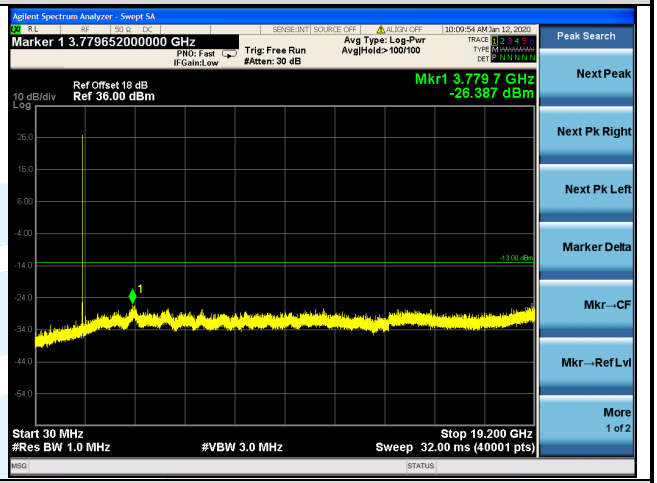


LTE Band 2_ Channel Bandwidth: 5 MHz

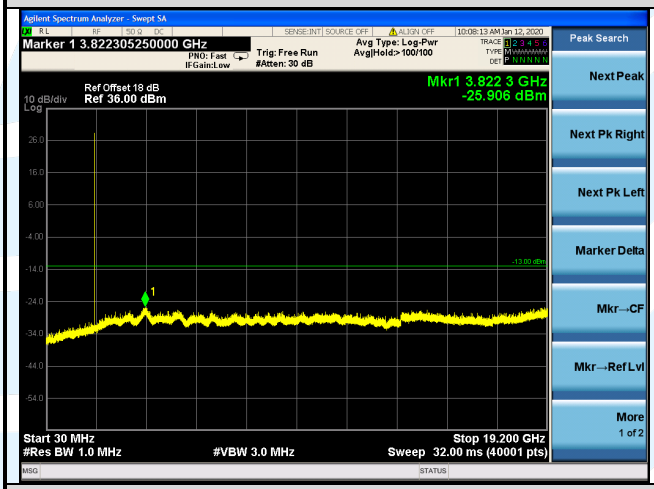
QPSK	16QAM

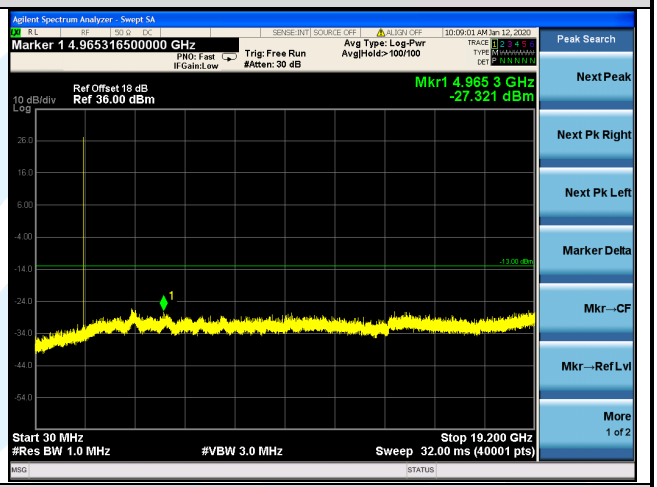
Lowest Channel



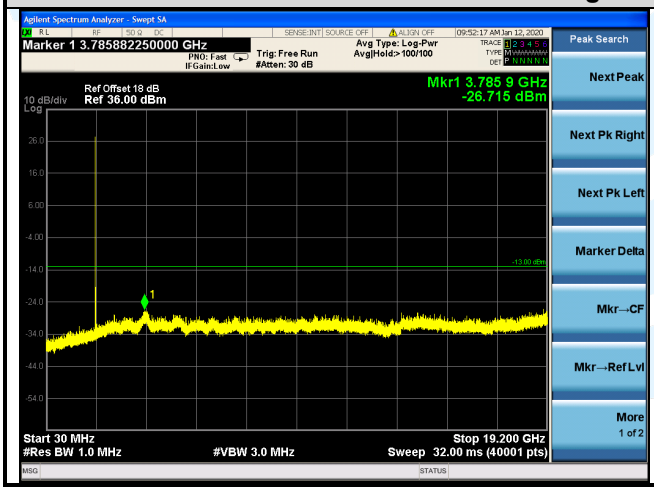


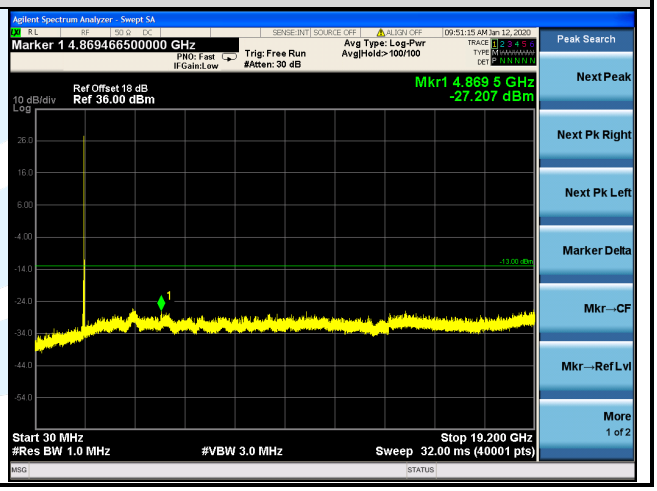
Middle Channel





Highest Channel

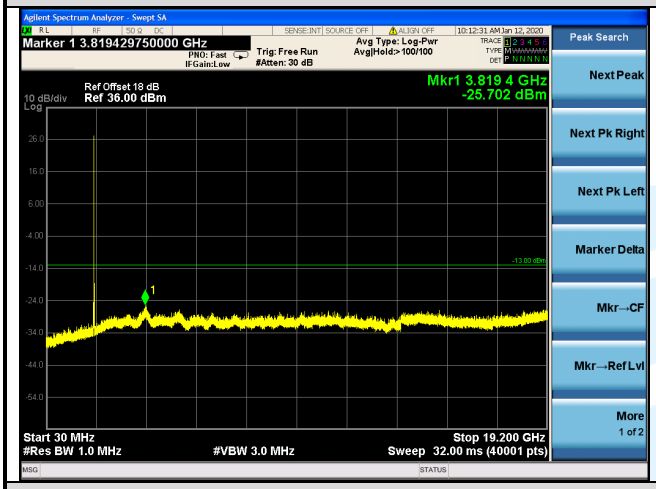


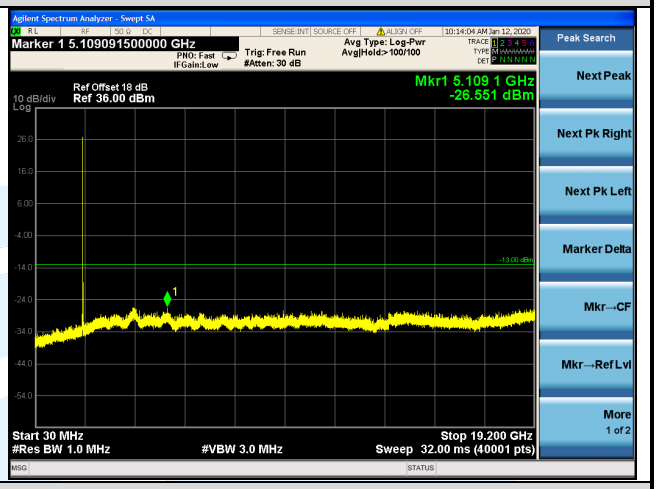


LTE Band 2_ Channel Bandwidth: 10 MHz

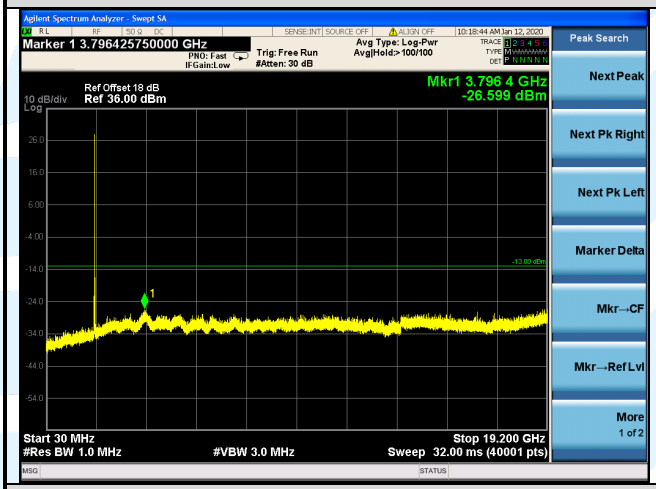
QPSK	16QAM

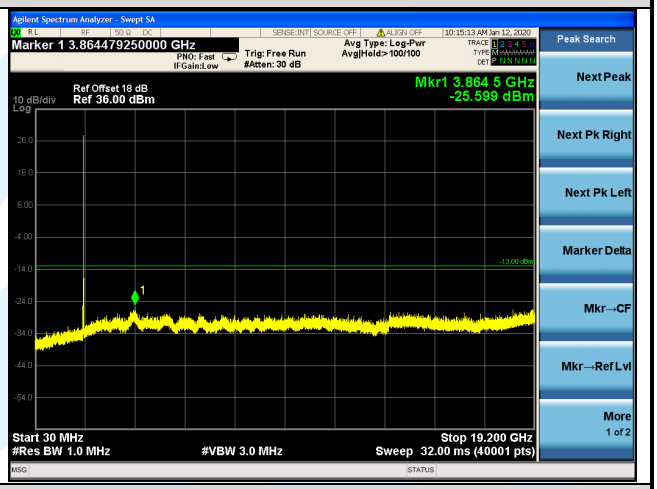
Lowest Channel



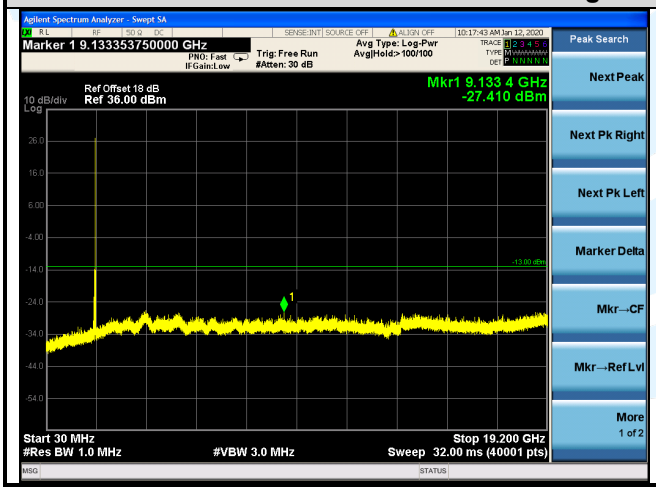


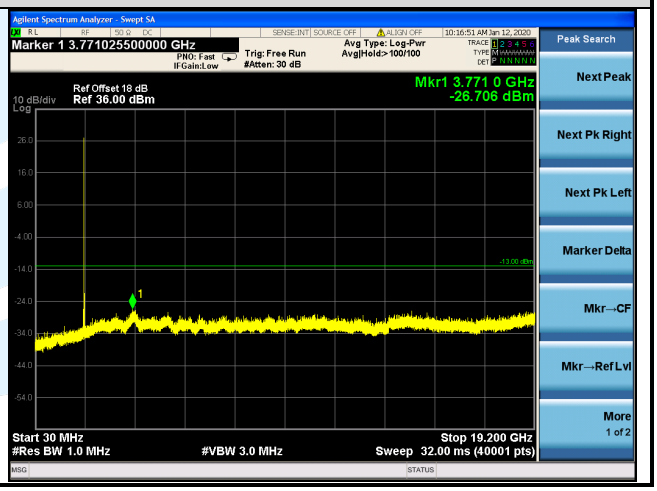
Middle Channel



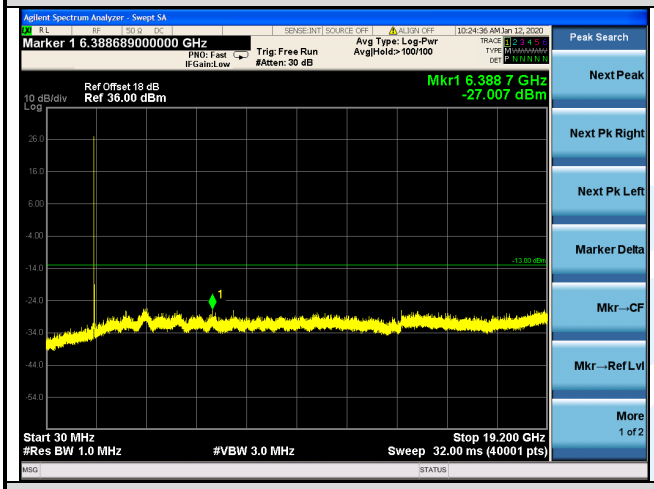
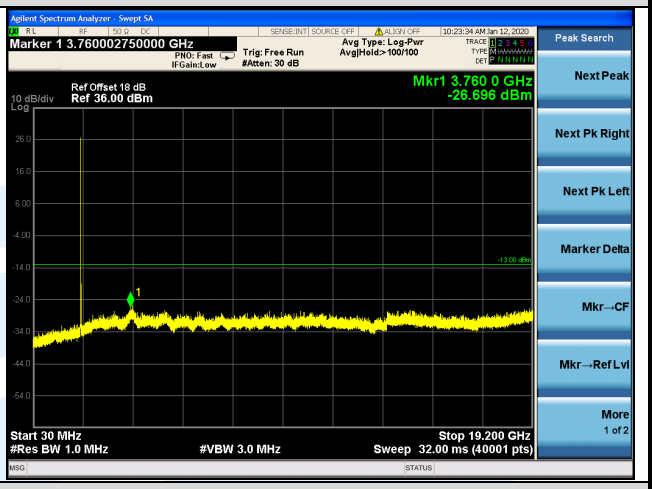
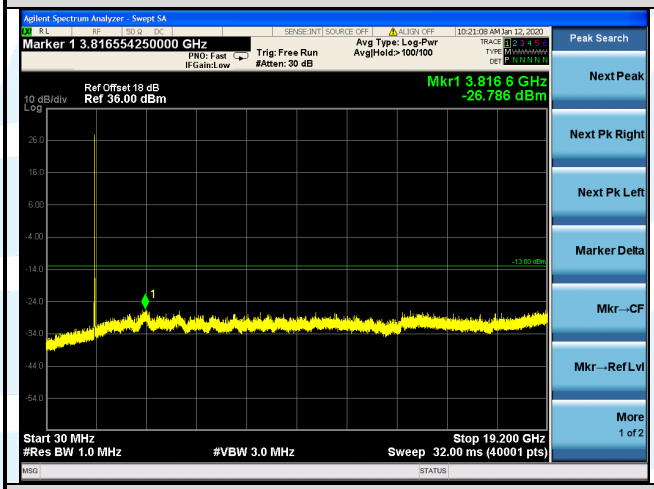
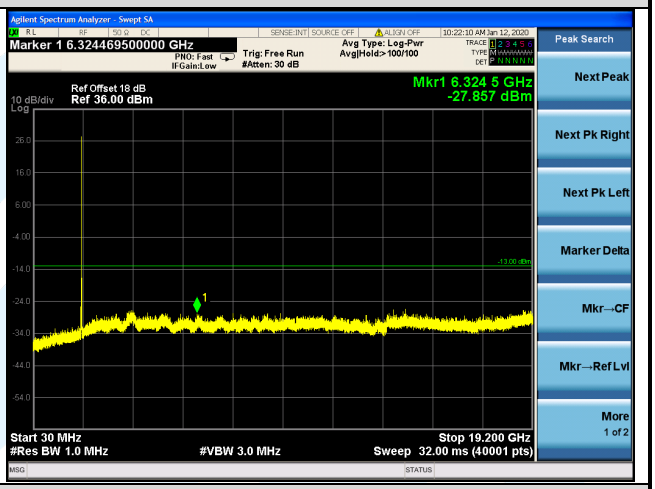
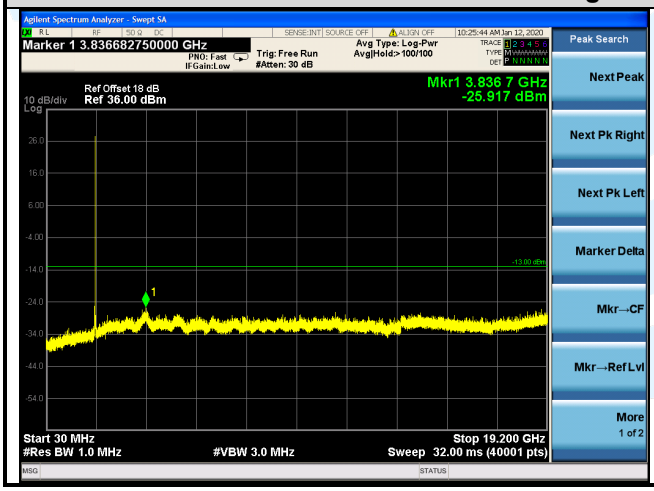
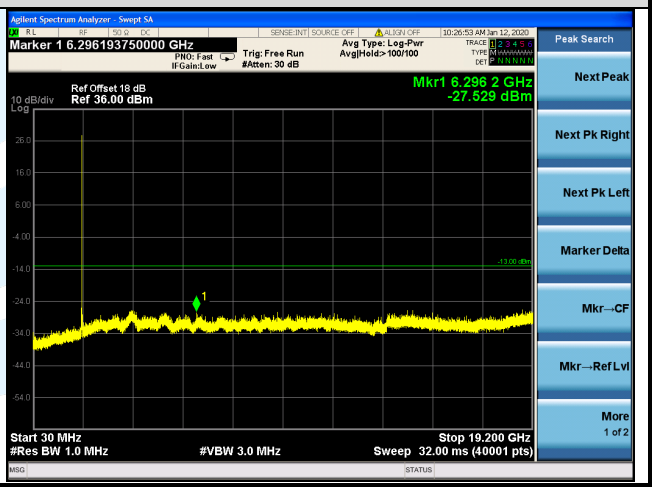


Highest Channel

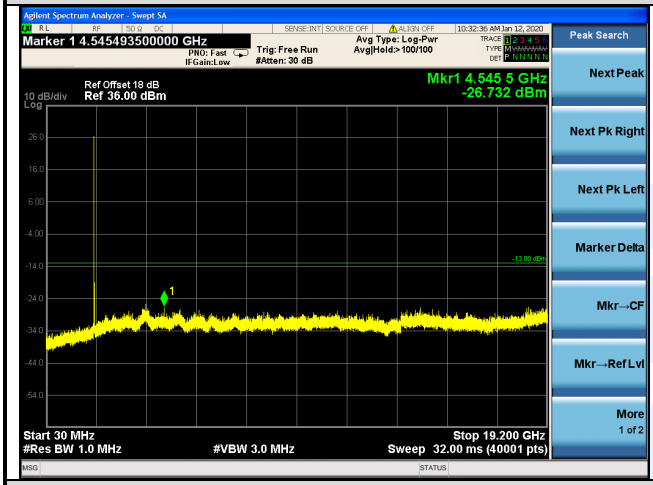
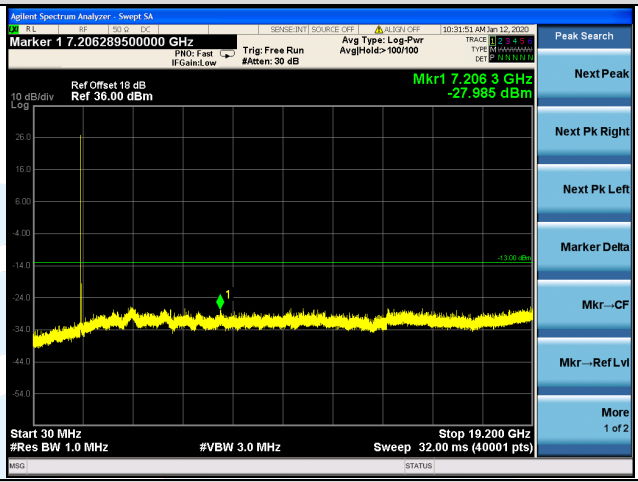
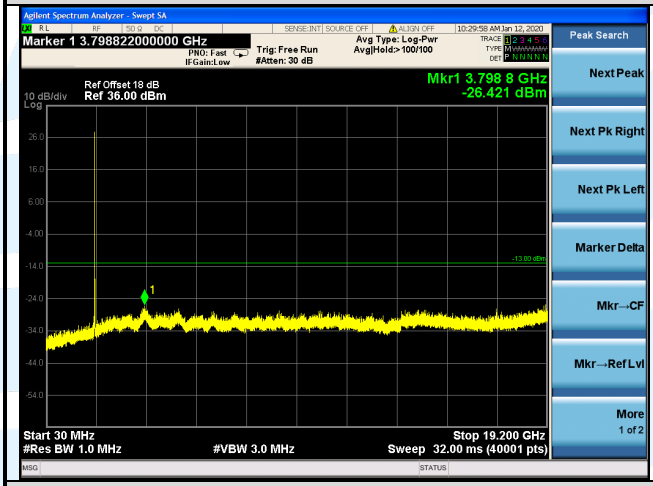
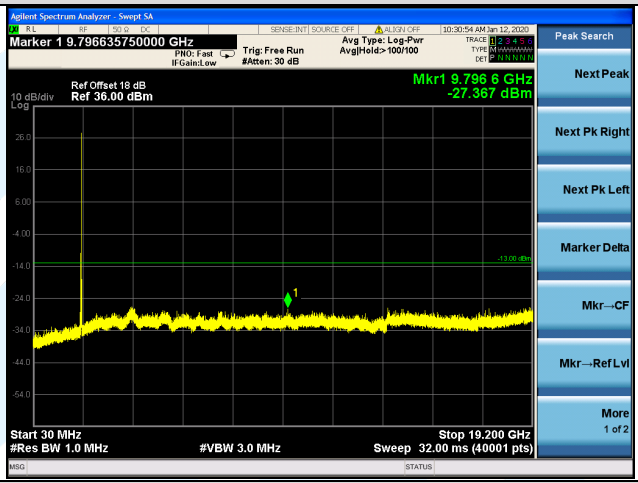
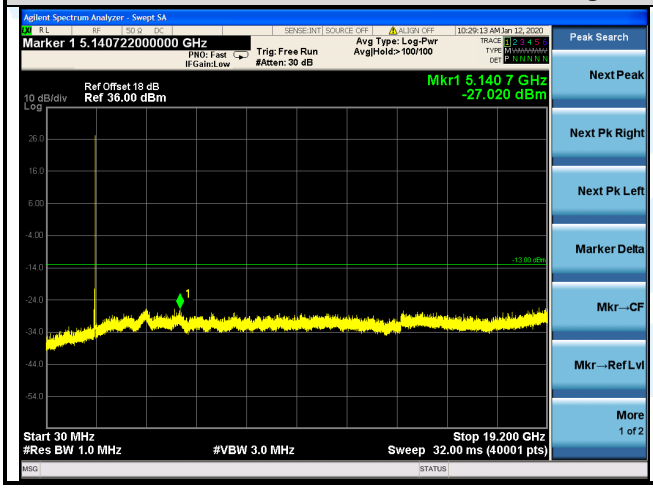
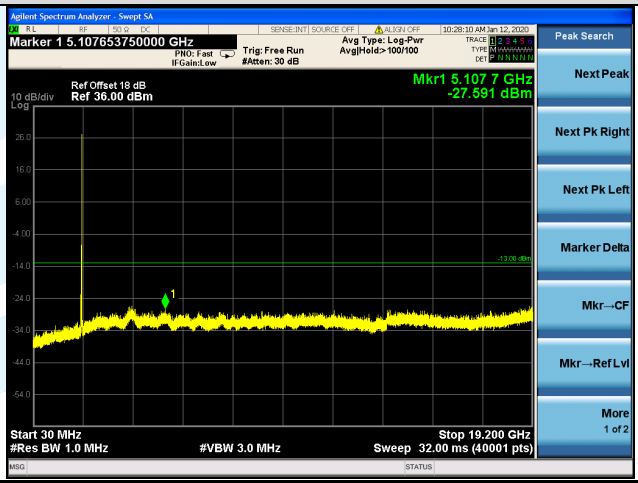




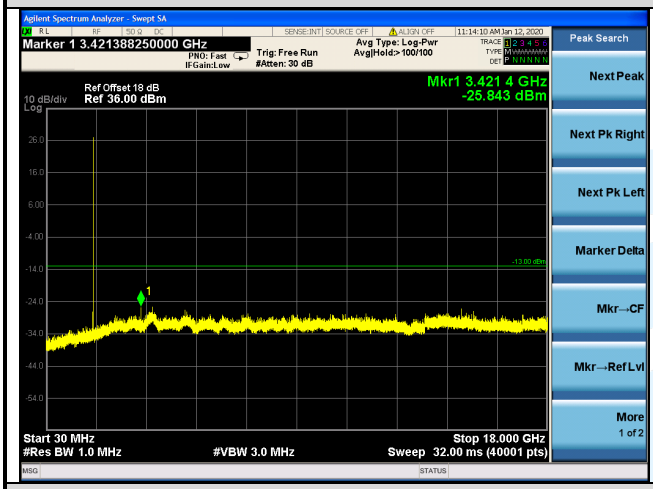
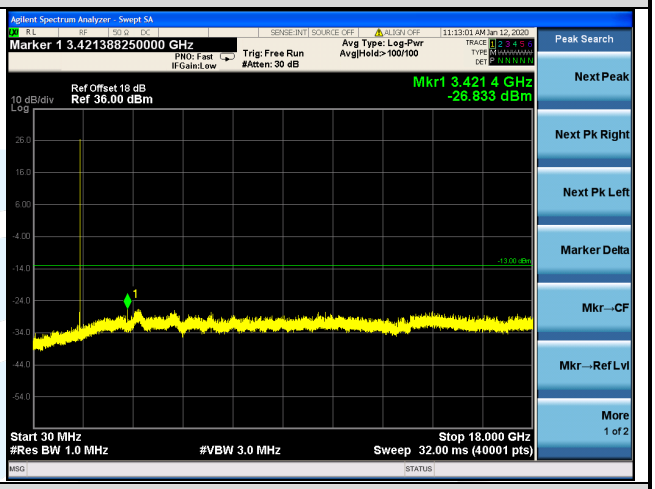
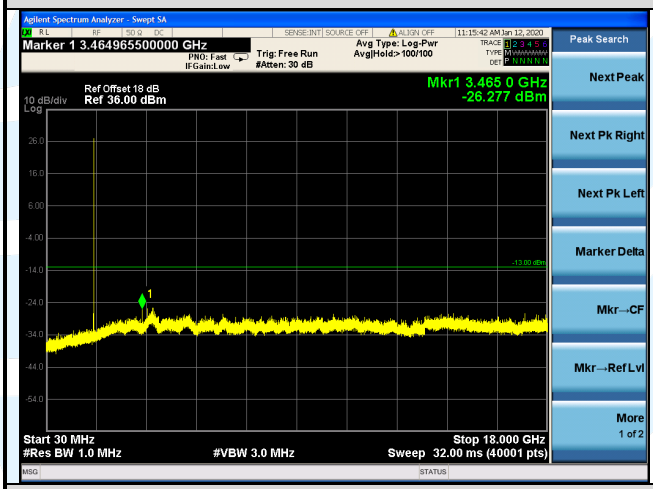
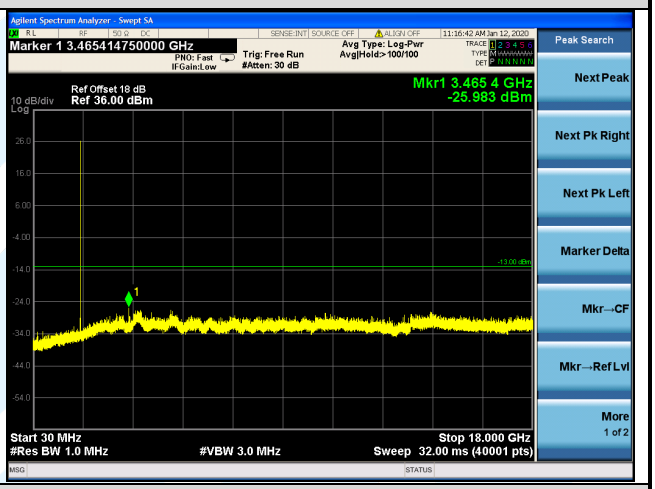
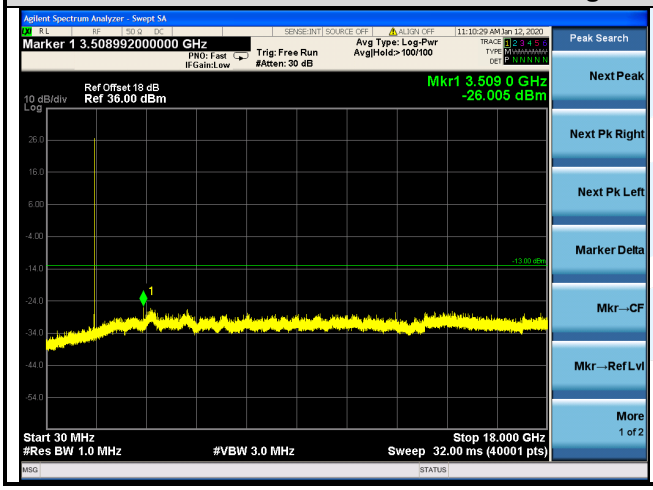
LTE Band 2_ Channel Bandwidth: 15 MHz

QPSK	16QAM
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

LTE Band 2_ Channel Bandwidth: 20 MHz

QPSK	16QAM
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

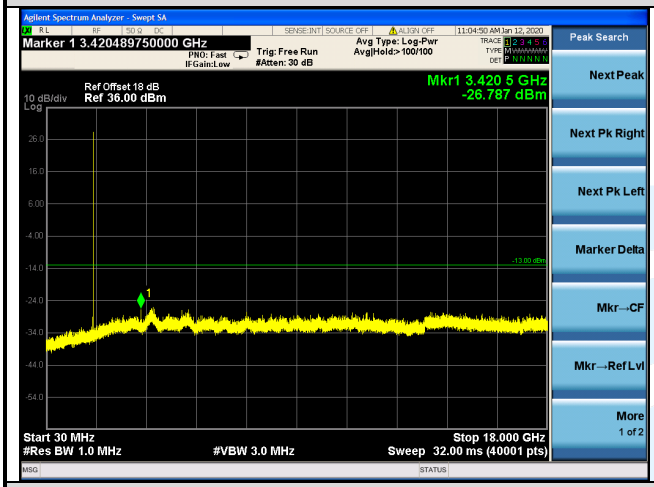
5.7.2 LTE Band 4

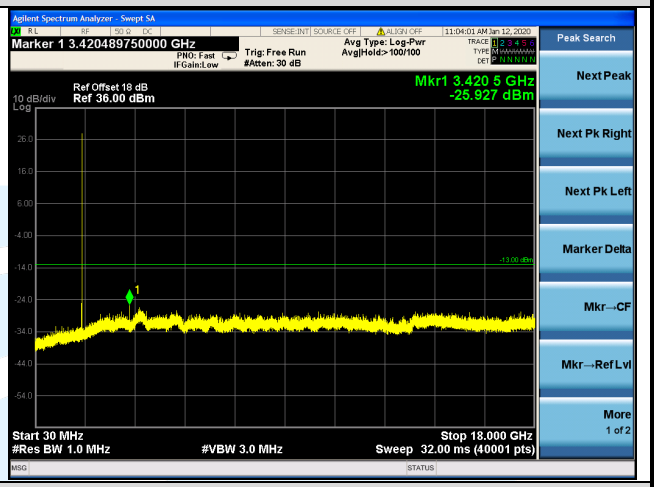
LTE Band 4_ Channel Bandwidth: 1.4 MHz	
QPSK	16QAM
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

LTE Band 4_ Channel Bandwidth: 3 MHz

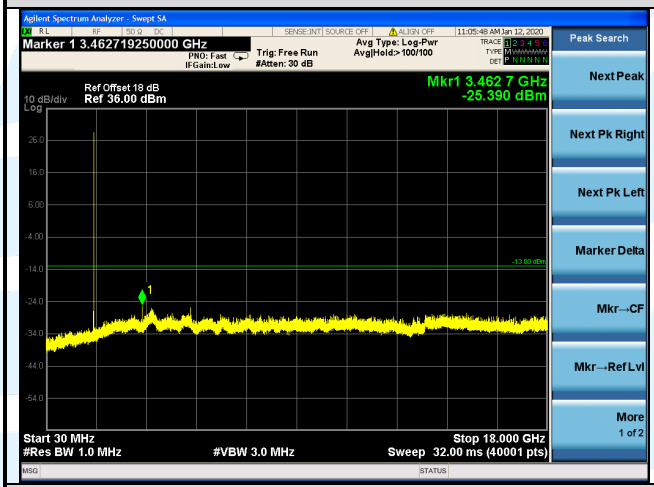
QPSK	16QAM

Lowest Channel

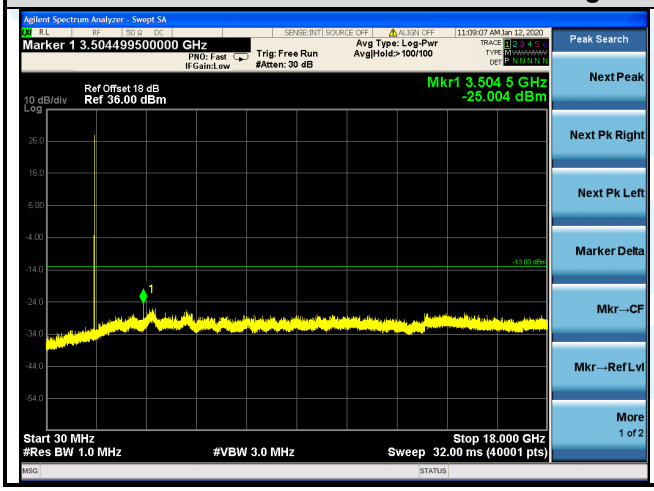


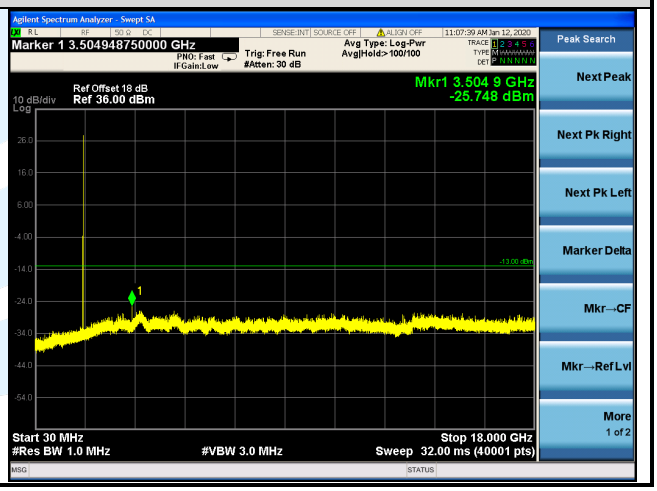


Middle Channel



Highest Channel

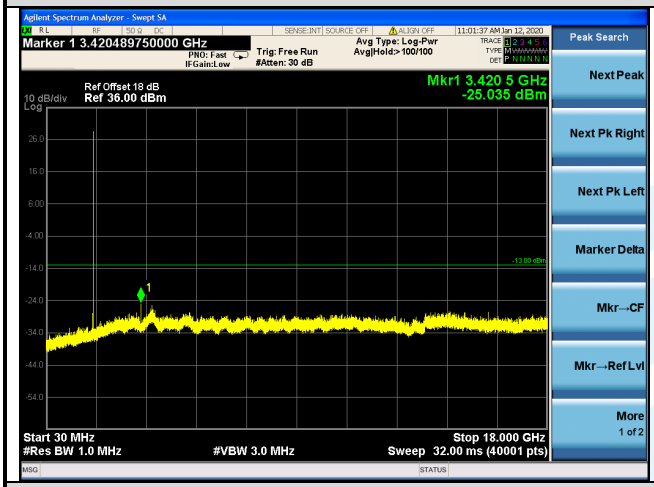


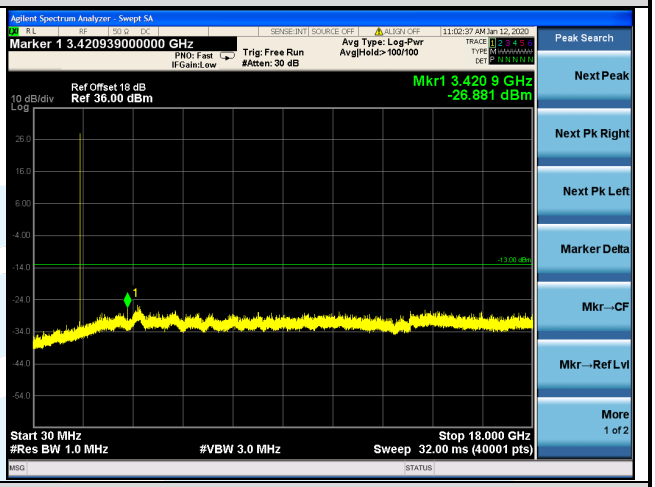


LTE Band 4_ Channel Bandwidth: 5 MHz

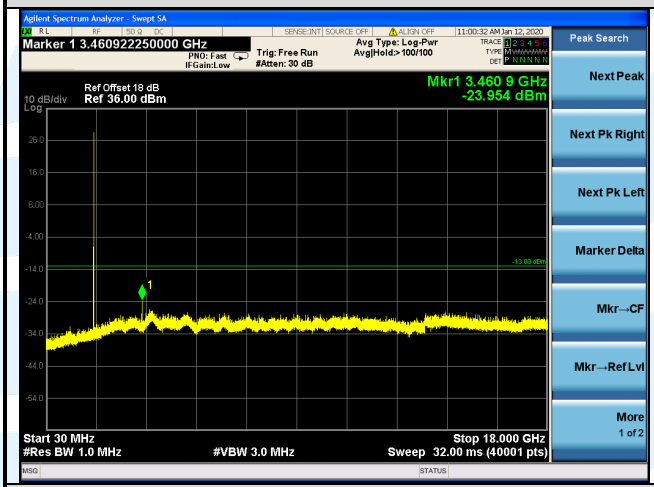
QPSK	16QAM

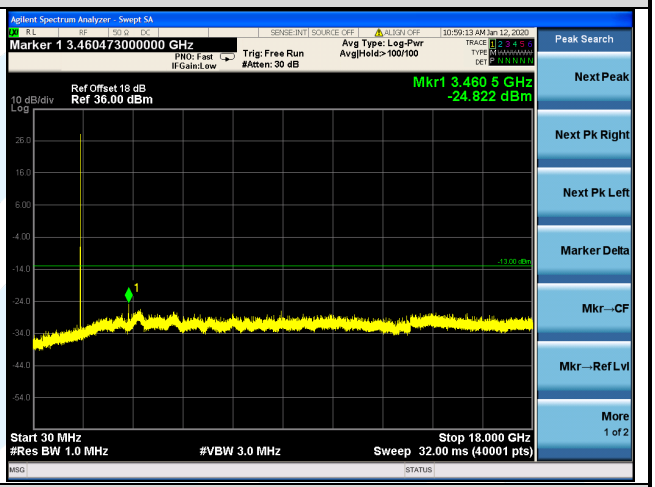
Lowest Channel



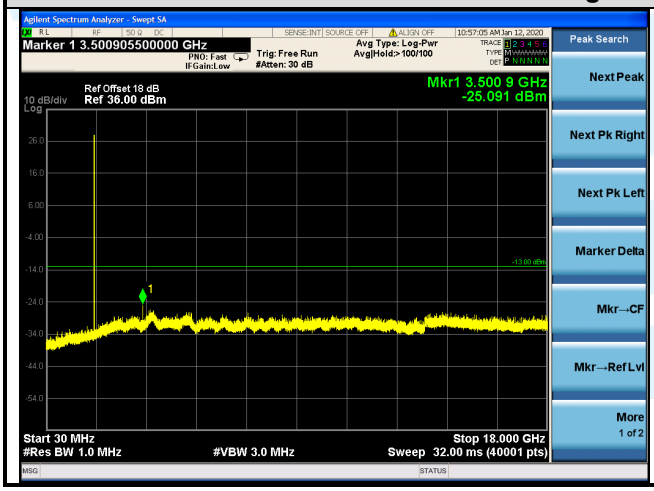


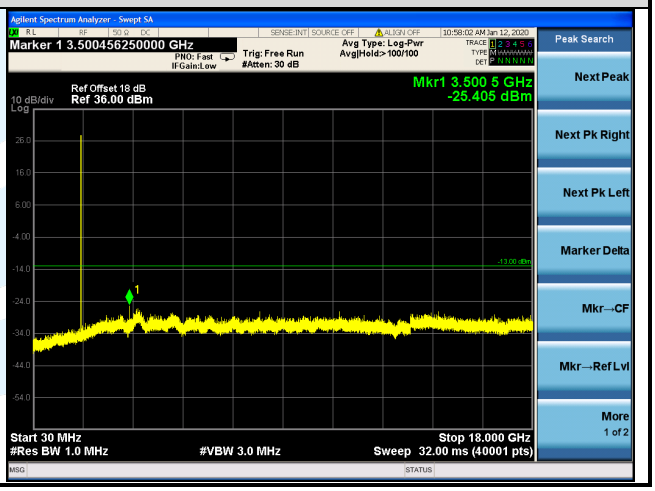
Middle Channel





Highest Channel

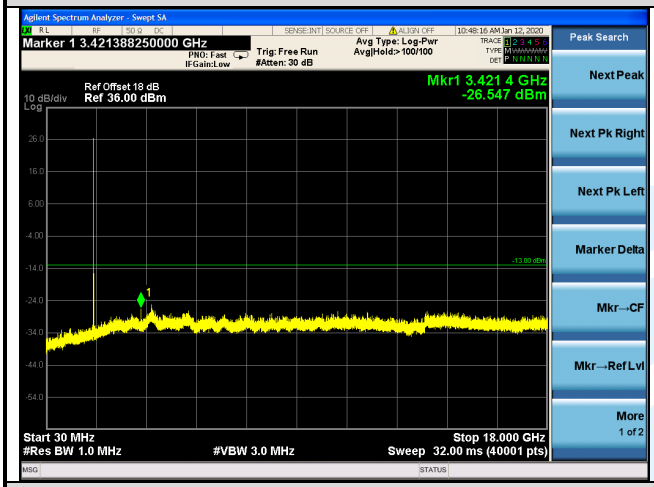


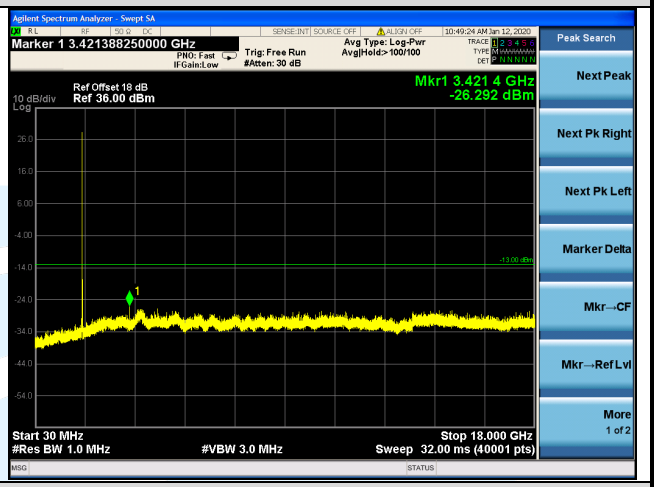


LTE Band 4_ Channel Bandwidth: 10 MHz

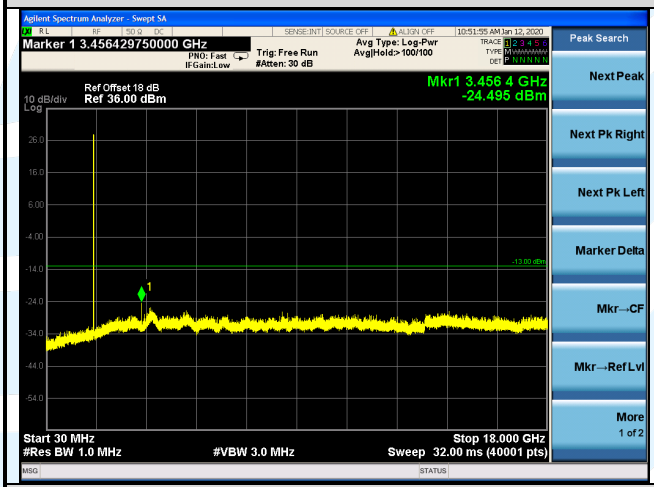
QPSK	16QAM

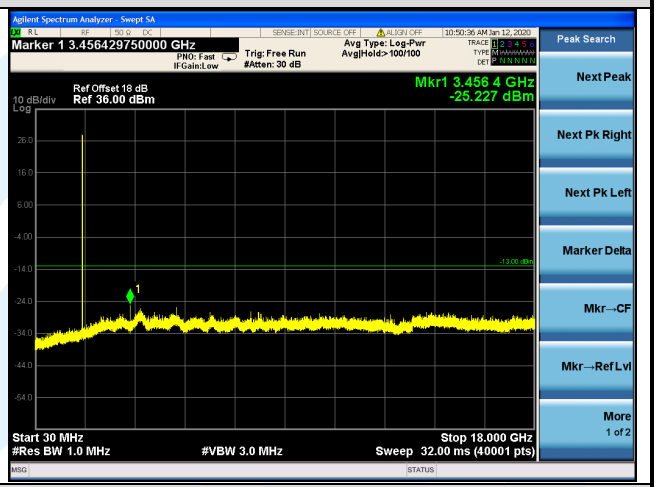
Lowest Channel



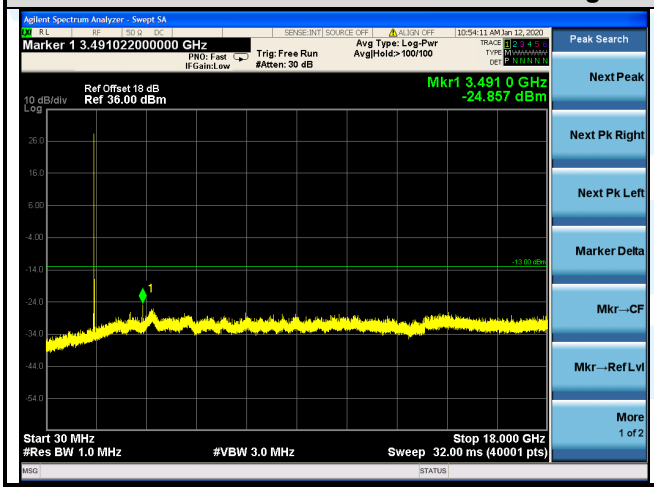


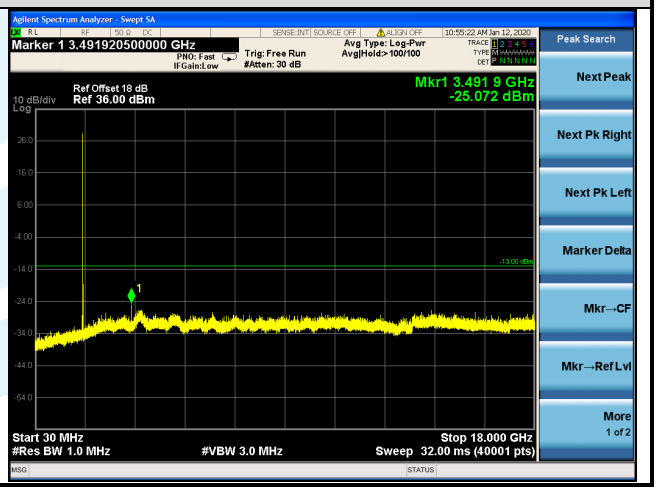
Middle Channel





Highest Channel

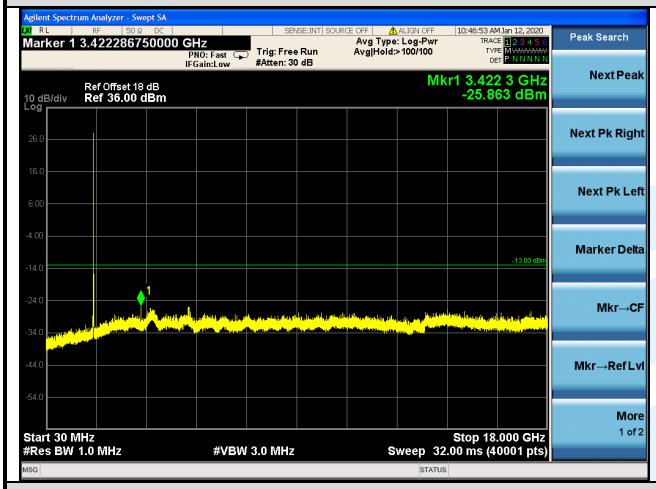




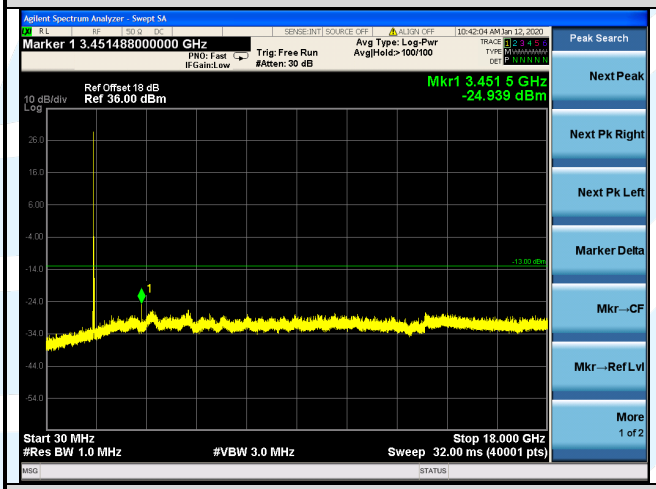
LTE Band 4_ Channel Bandwidth: 15 MHz

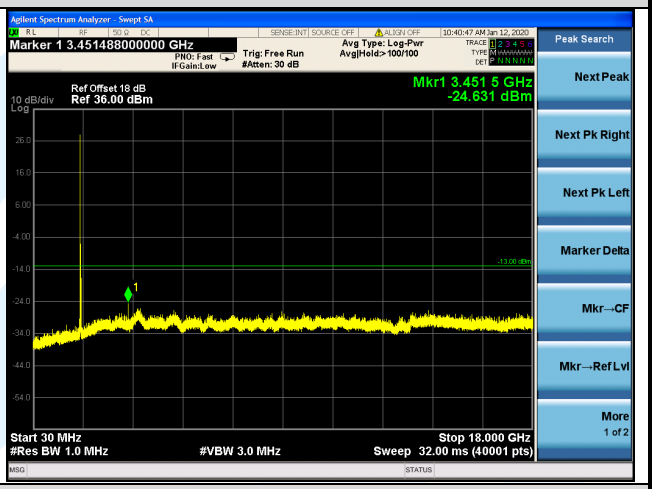
QPSK	16QAM

Lowest Channel

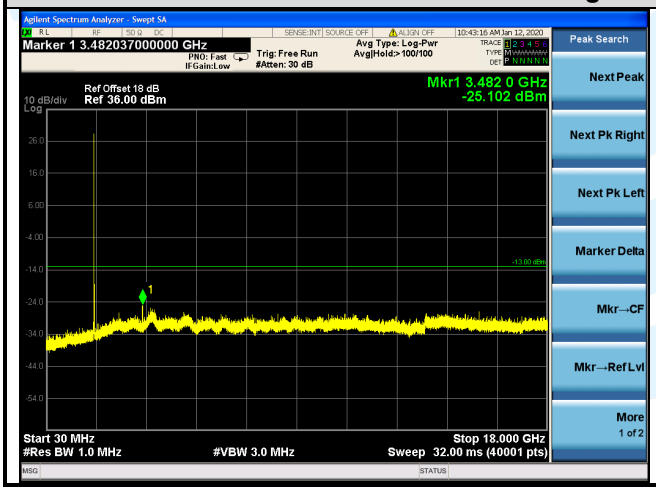


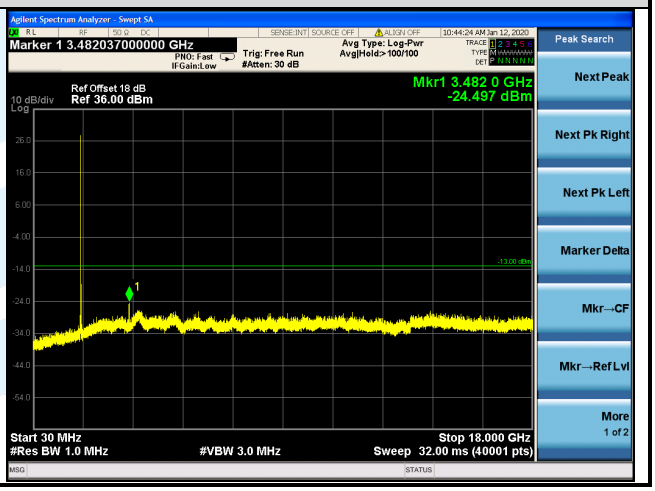
Middle Channel



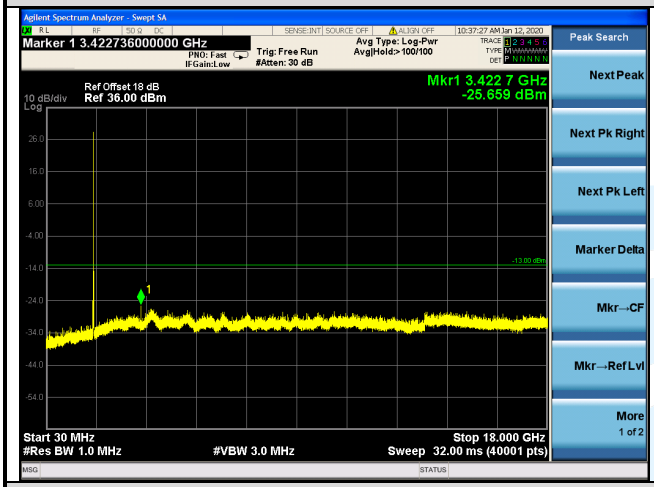
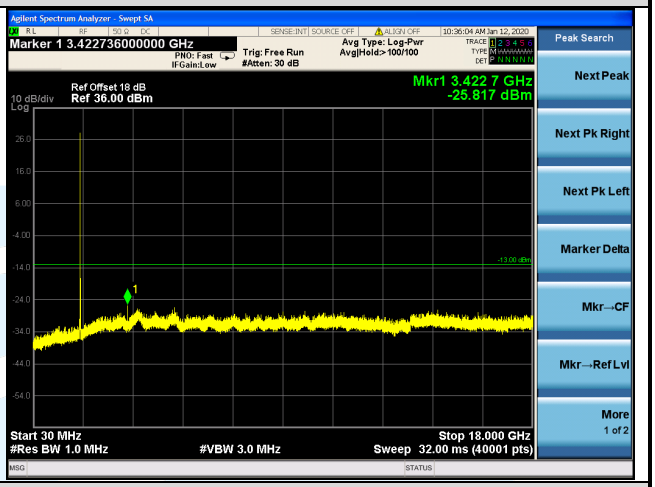
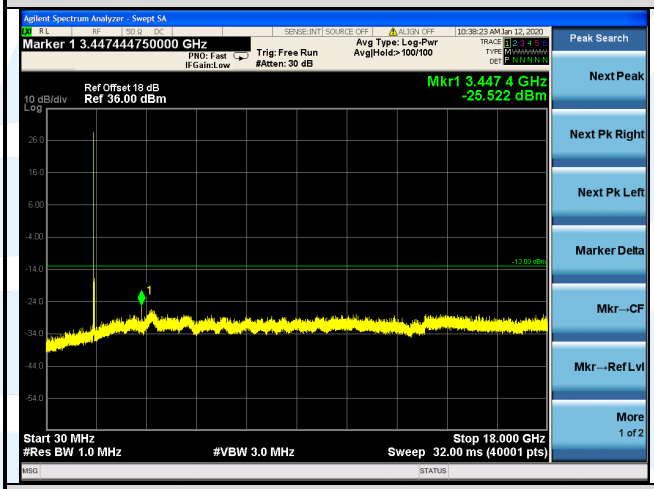
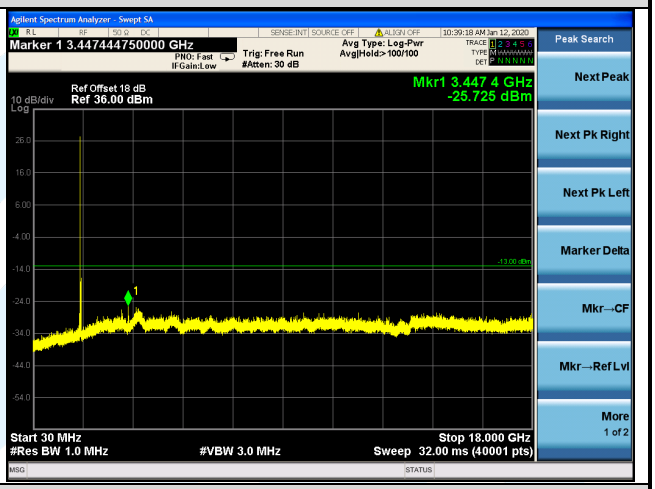
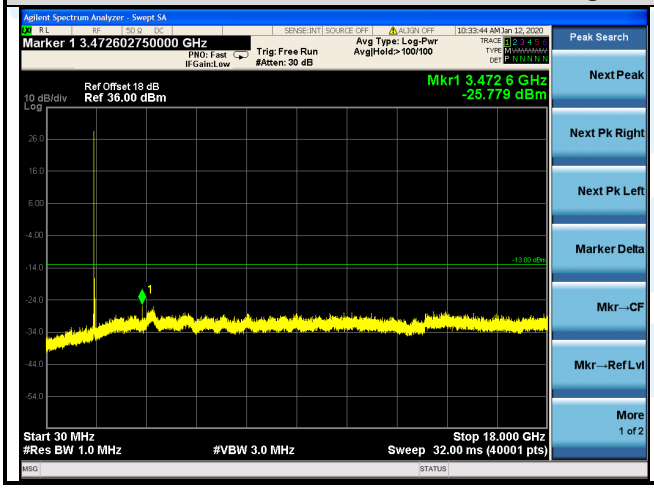
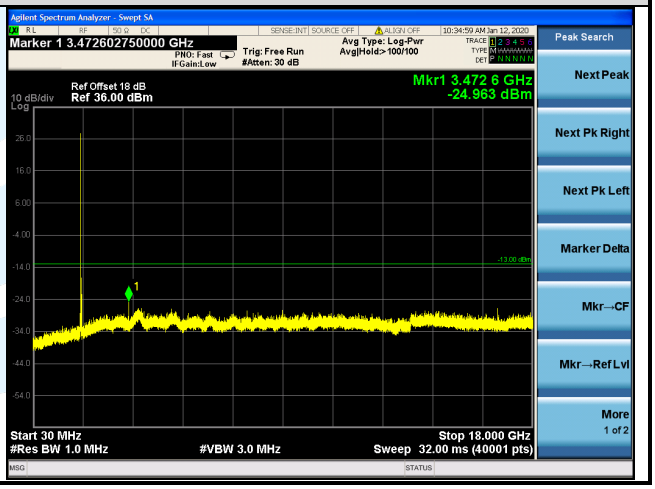


Highest Channel

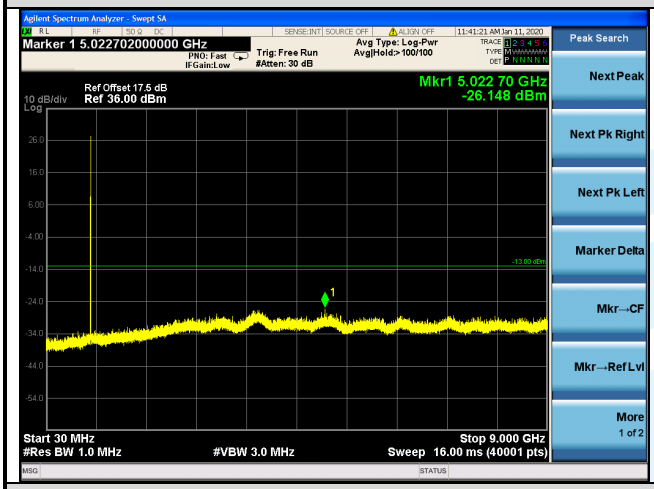
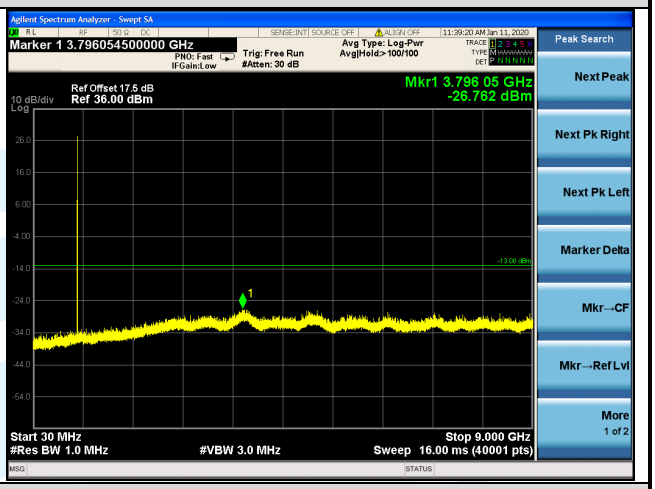
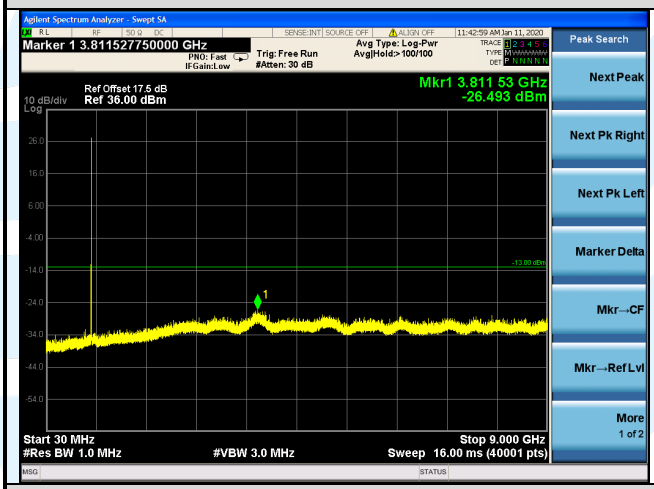
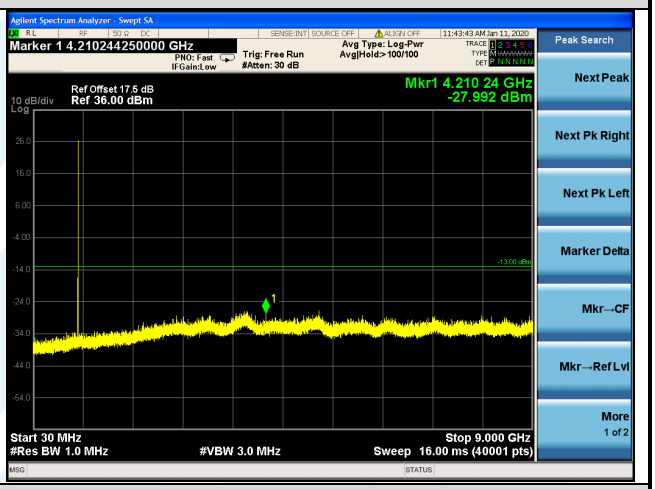
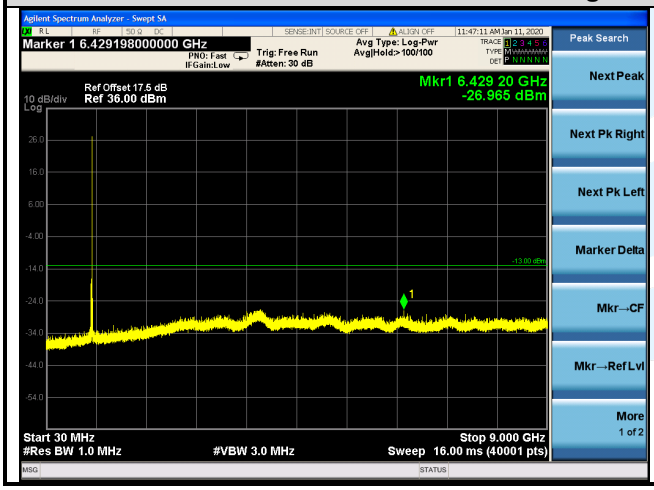
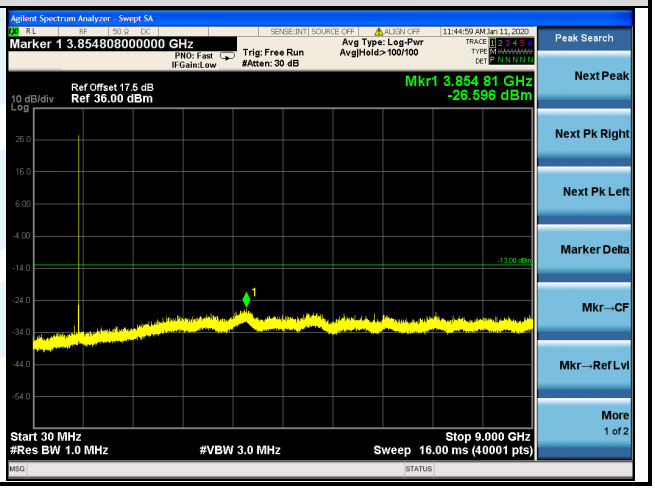




LTE Band 4_ Channel Bandwidth: 20 MHz

QPSK	16QAM
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

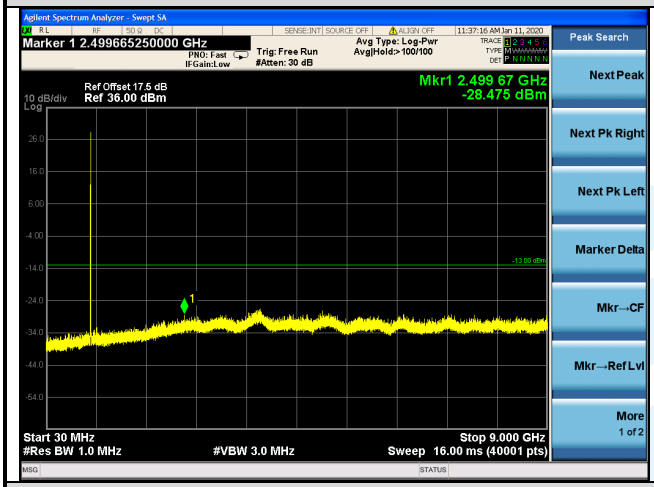
5.7.3 LTE Band 5

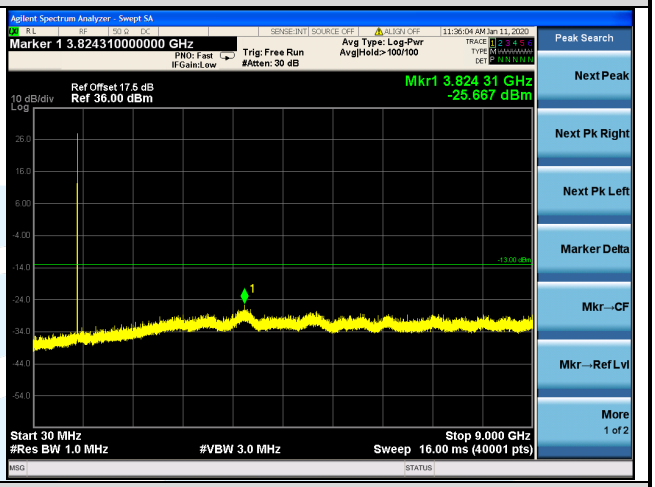
LTE Band 5_ Channel Bandwidth: 1.4 MHz	
QPSK	16QAM
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

LTE Band 5_ Channel Bandwidth: 3 MHz

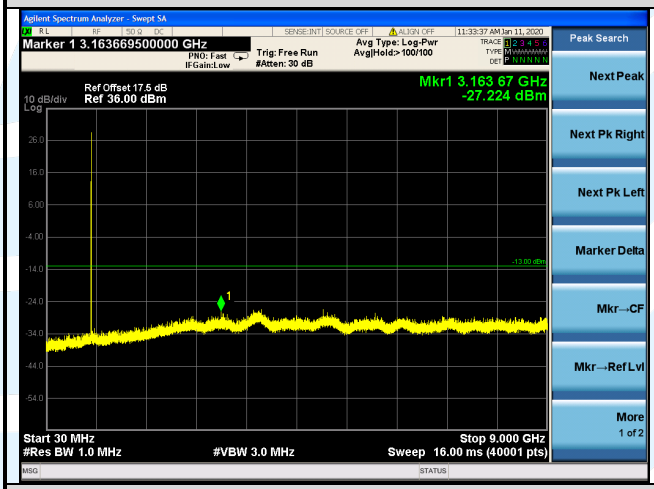
QPSK	16QAM

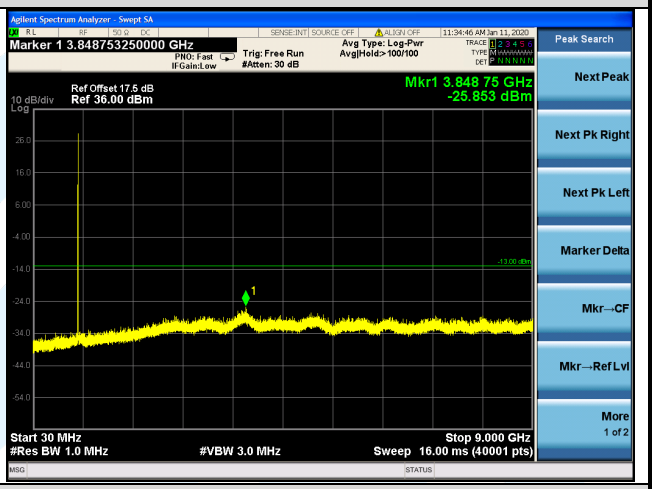
Lowest Channel



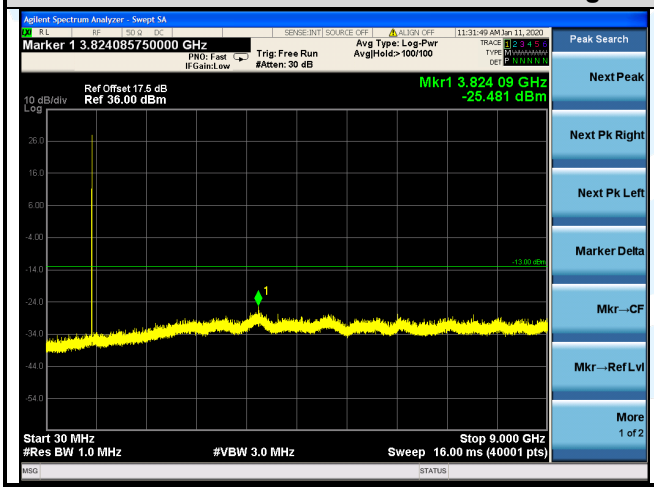


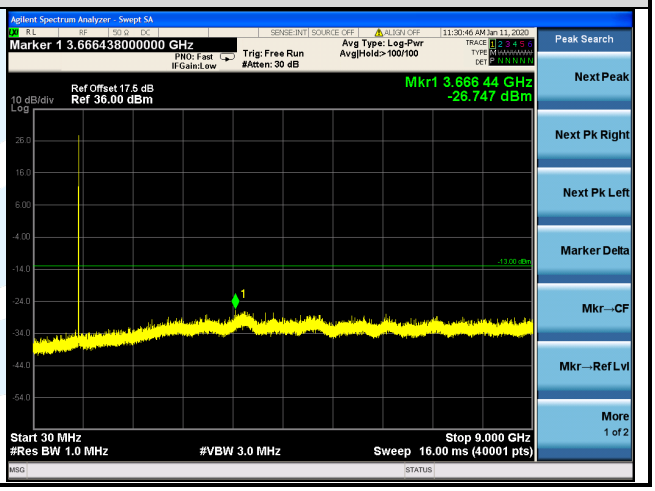
Middle Channel





Highest Channel

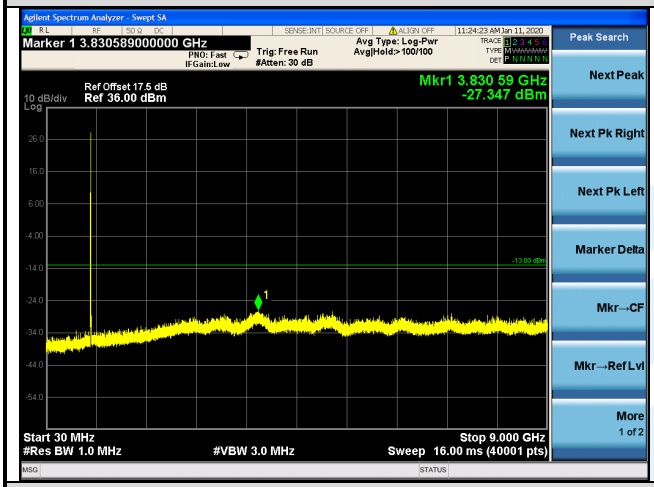


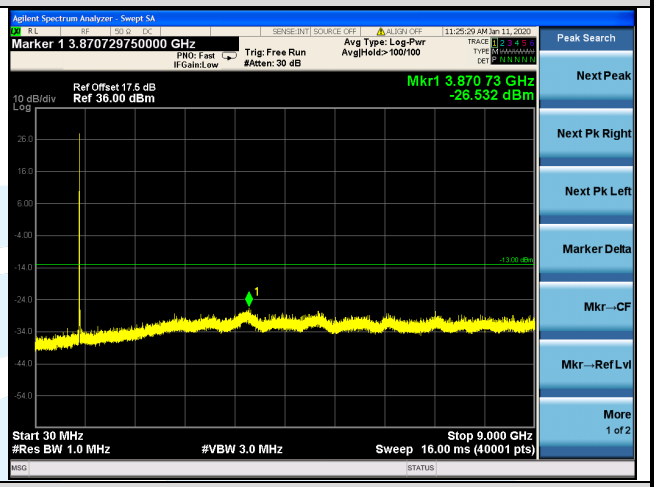


LTE Band 5_ Channel Bandwidth: 5 MHz

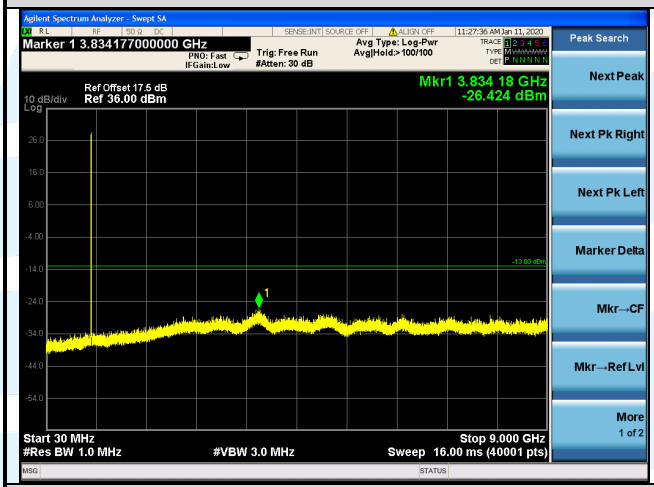
QPSK	16QAM

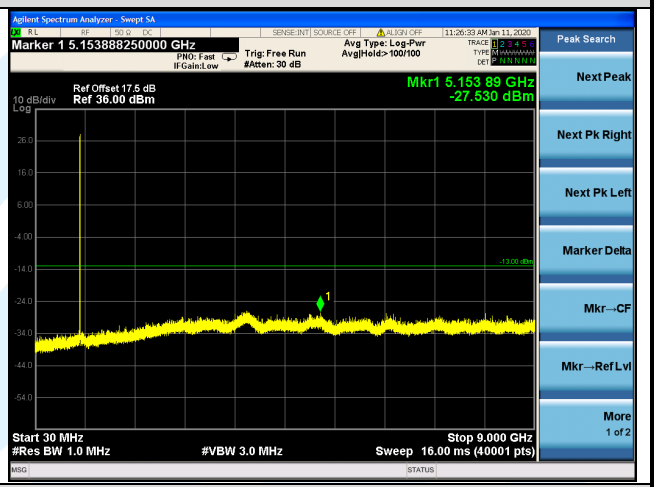
Lowest Channel



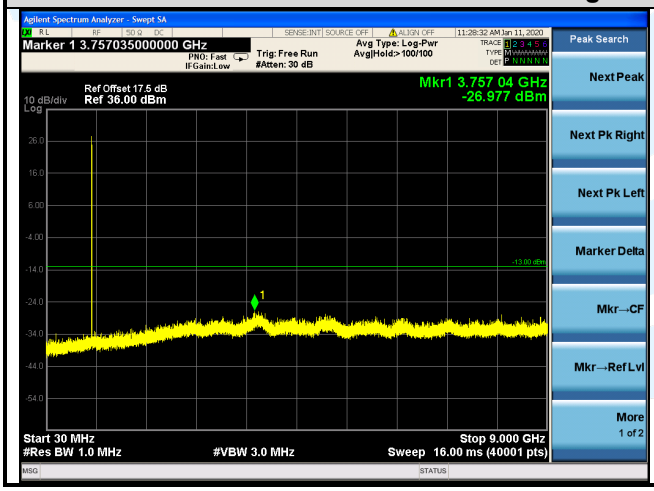


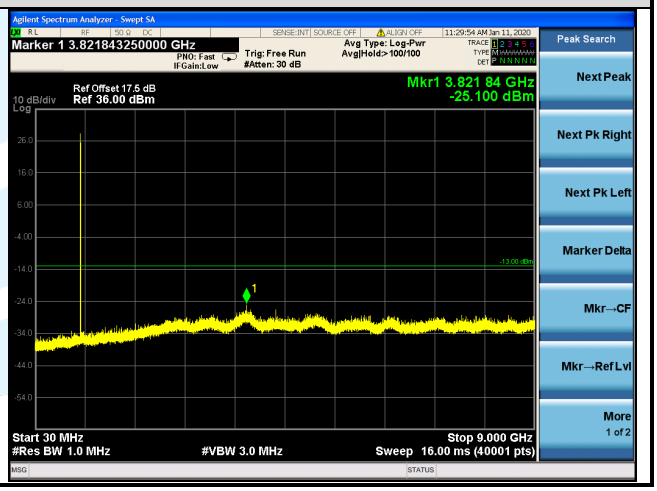
Middle Channel





Highest Channel

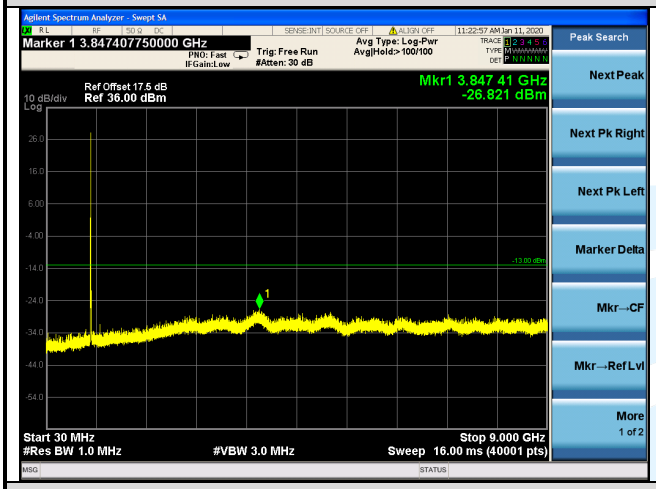


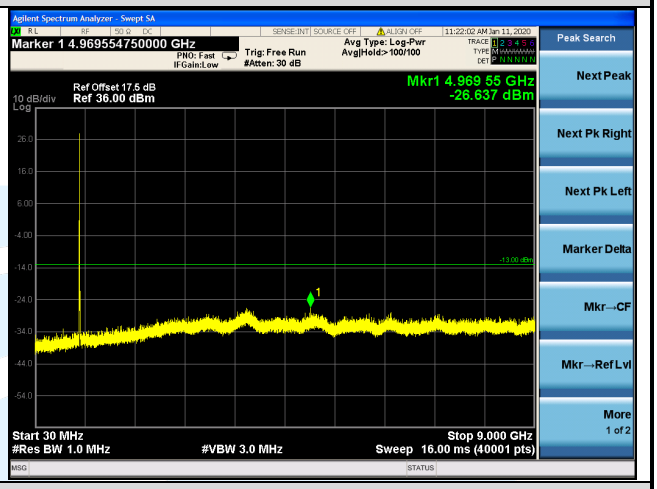


LTE Band 5_ Channel Bandwidth: 10 MHz

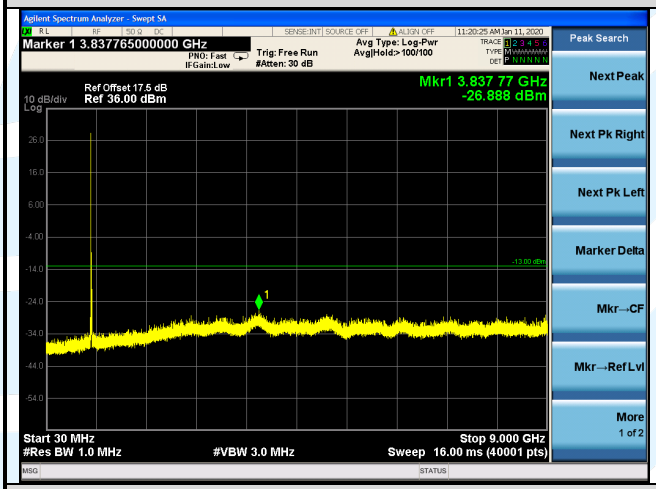
QPSK	16QAM

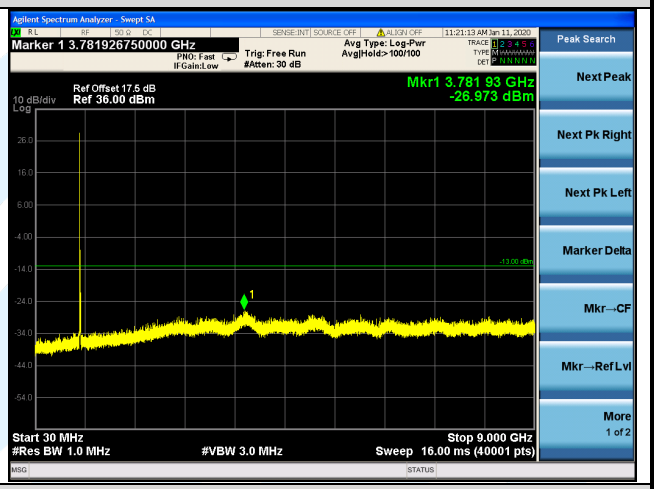
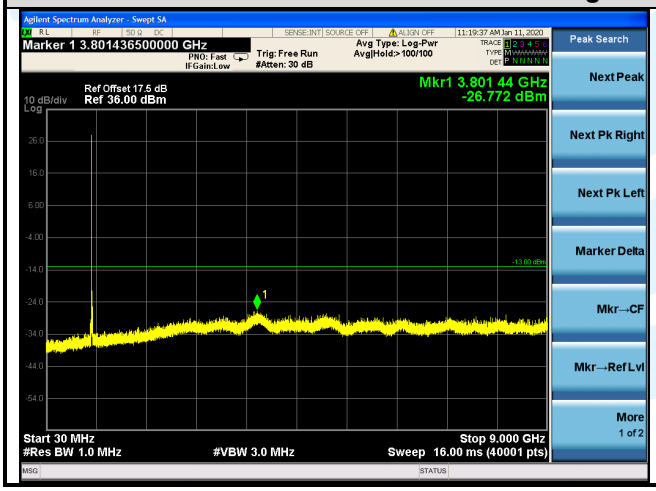
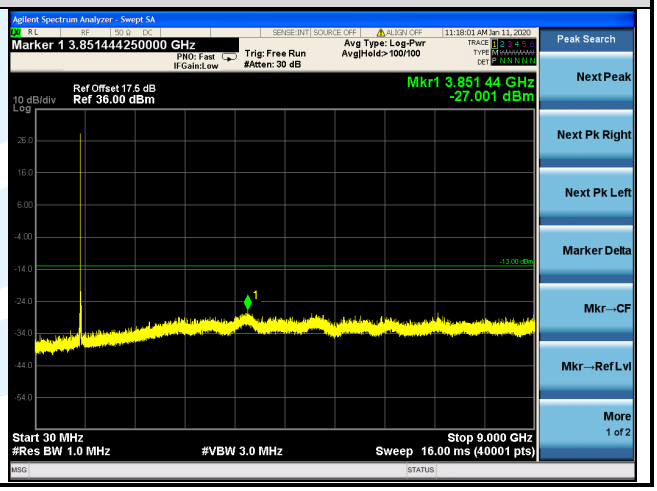
Lowest Channel





Middle Channel





Highest Channel