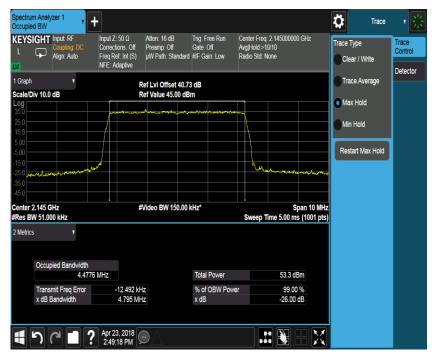
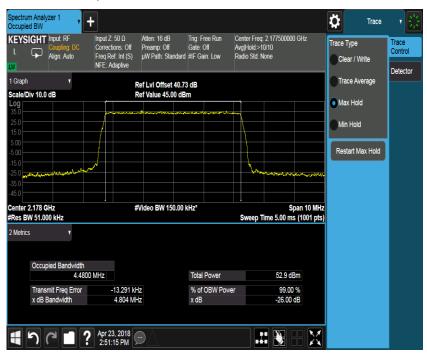


Port D, QPSK 5.0M Channel position M

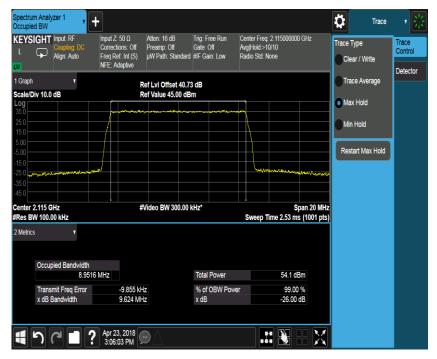


Port D, QPSK 5.0M Channel position T

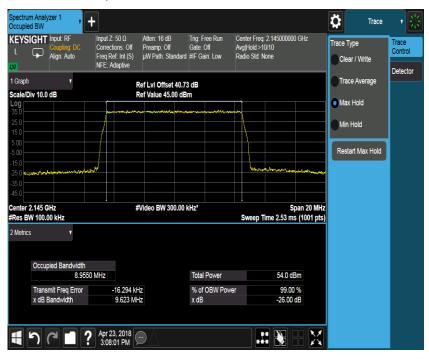




Port D, QPSK 10.0M Channel position B

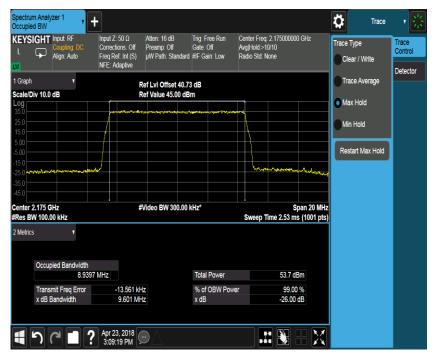


Port D, QPSK 10.0M Channel position M

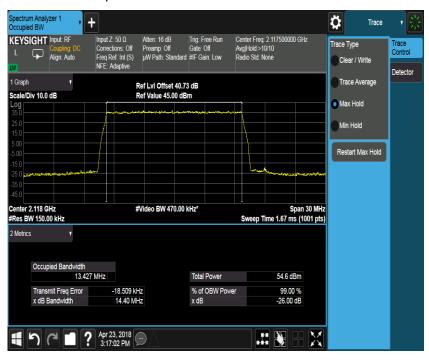




Port D, QPSK 10.0M Channel position T

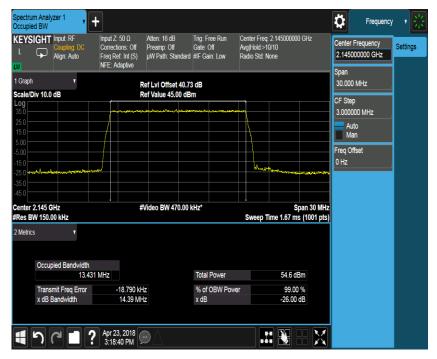


Port D, QPSK 15.0M Channel position B

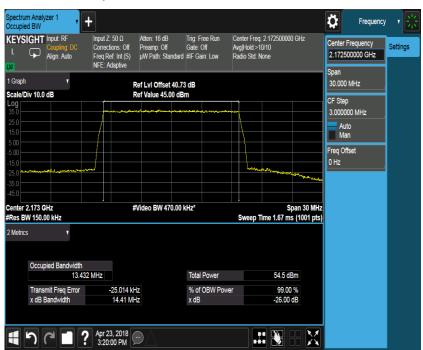




Port D, QPSK 15.0M Channel position M

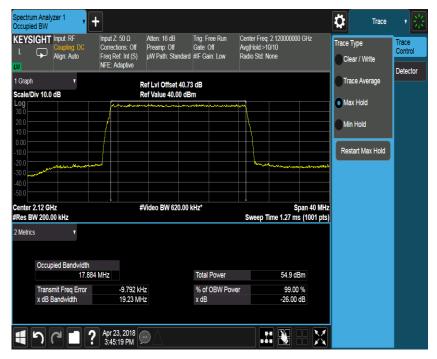


Port D, QPSK 15.0M Channel position T

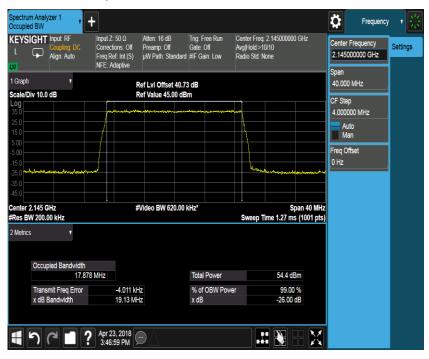




Port D, QPSK 20.0M Channel position B

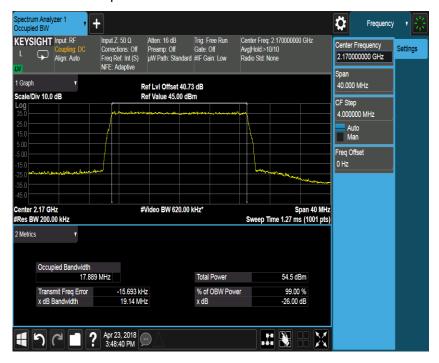


Port D, QPSK 20.0M Channel position M

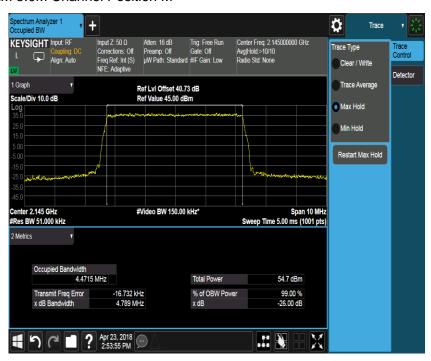




Port D, QPSK 20.0M Channel position T

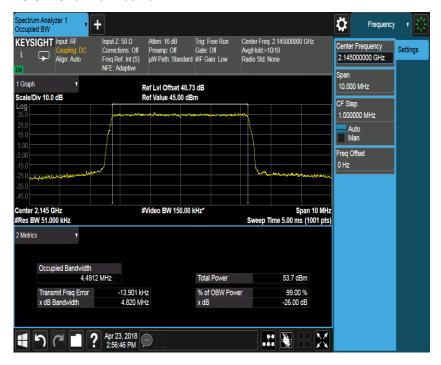


Port D, 16QAM 5.0M Channel Position M





Port D, 64QAM 5.0M Channel Position M

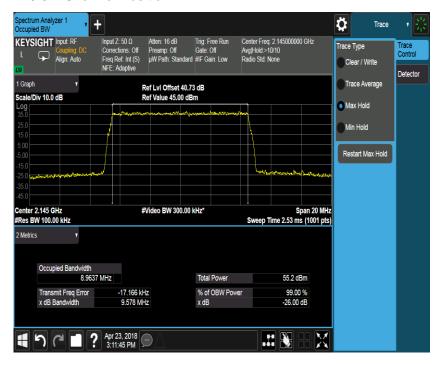


Port D, 256QAM 5.0M Channel Position M





Port D, 16QAM 10.0M Channel Position M



Port D, 64QAM 10.0M Channel Position M

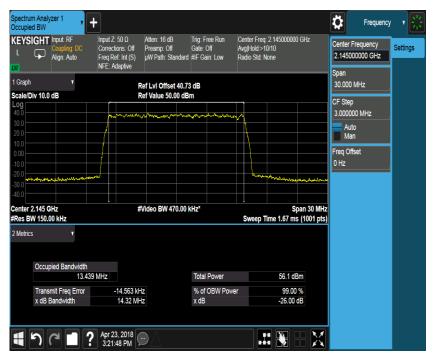




Port D, 256QAM 10.0M Channel Position M



Port D, 16QAM 15.0M Channel Position M

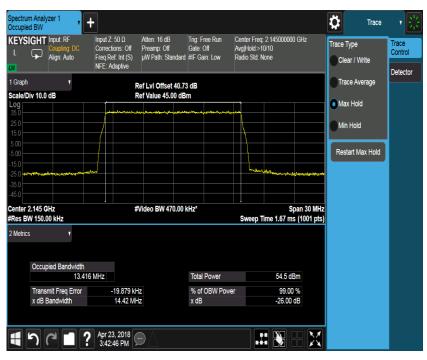




Port D, 64QAM 15.0M Channel Position M

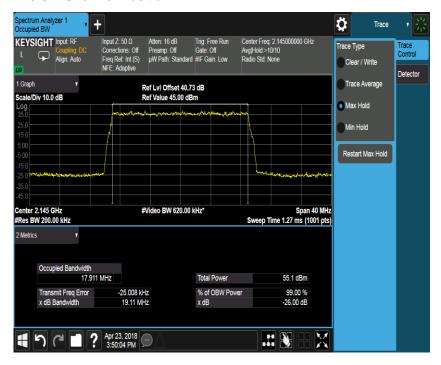


Port D, 256QAM 15.0M Channel Position M

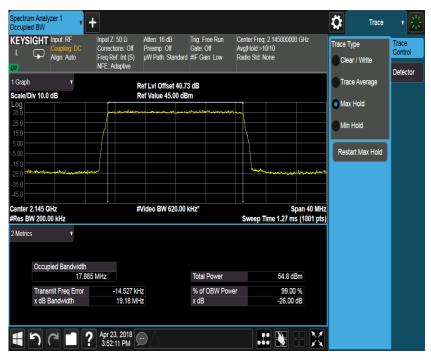




Port D, 16QAM 20.0M Channel Position M

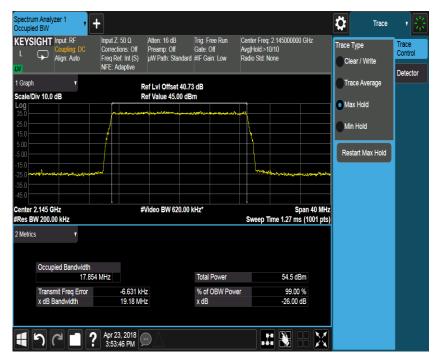


Port D, 64QAM 20.0M Channel Position M





Port D, 256QAM 20.0M Channel Position M



Configuration NBIoT-InBand-1C

-26dBc Occupied Bandwidth

	Modulation /	Occupied Bandwidth (MHz)			
	Bandwidth	Channel Position B	Channel Position M	Channel Position T	
	QPSK/				
Antenna	5.0 MHz	4.720	4.720	4.714	
D	QPSK/				
	10.0 MHz	9.495	9.507	9.505	
	QPSK/				
	15.0 MHz	14.320	14.330	14.260	
	QPSK/				
	20.0 MHz	19.010	19.020	19.060	



99% Occupied Bandwidth

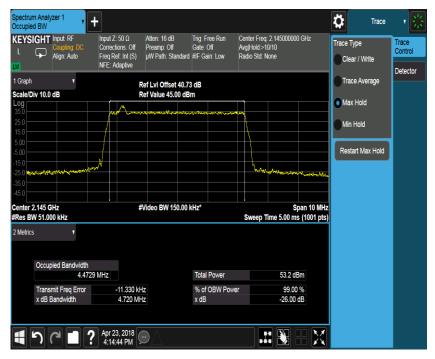
	Modulation / Bandwidth	Occupied Bandwidth (MHz)			
		Channel Position B	Channel Position M	Channel Position T	
	QPSK/				
Antenna	5.0 MHz	4.469	4.472	4.465	
D	QPSK/				
	10.0 MHz	8.940	8.941	8.941	
	QPSK/				
	15.0 MHz	13.426	13.438	13.456	
	QPSK/				
	20.0 MHz	17.869	17.868	17.884	

Port D , QPSK 5.0M Channel position B

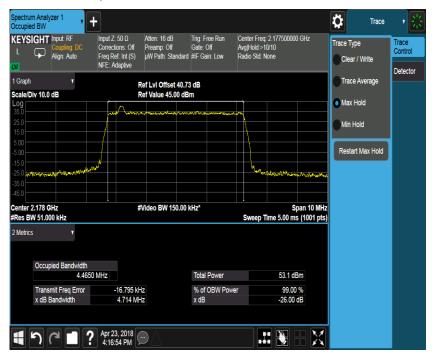




Port D, QPSK 5.0M Channel position M



Port D, QPSK 5.0M Channel position T





Port D, QPSK 10.0M Channel position B

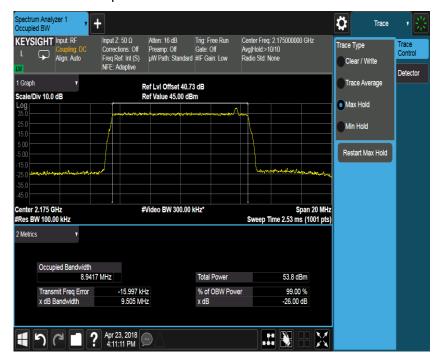


Port D, QPSK 10.0M Channel position M

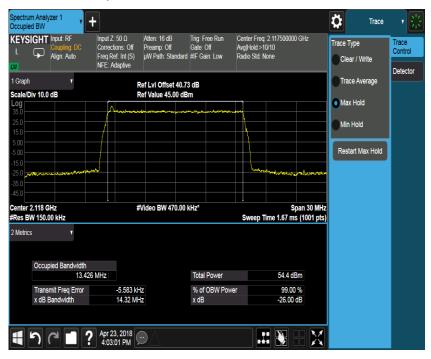




Port D, QPSK 10.0M Channel position T

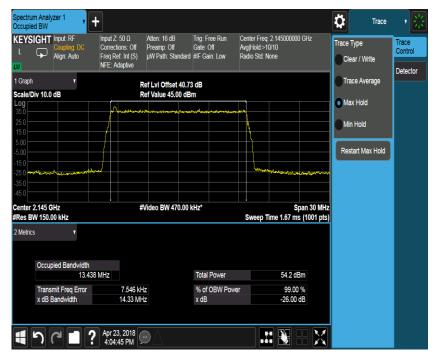


Port D, QPSK 15.0M Channel position B

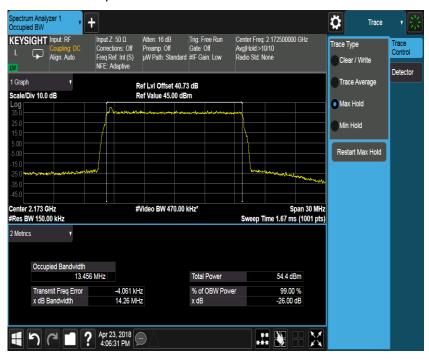




Port D, QPSK 15.0M Channel position M



Port D, QPSK 15.0M Channel position T

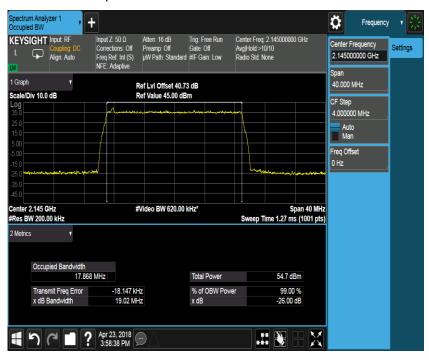




Port D, QPSK 20.0M Channel position B



Port D, QPSK 20.0M Channel position M





Port D, QPSK 20.0M Channel position T



Configuration NBIoT-StandAlone-1C

-26dBc Occupied Bandwidth

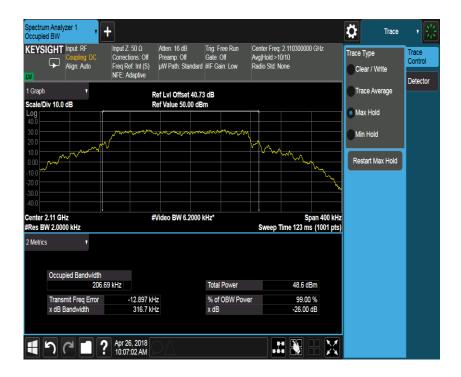
	Modulation	Occupied Bandwidth (KHz)		
Antenna		Channel Position B	Channel Position M	Channel Position T
D	QPSK	316.7	293.8	306.8

99% Occupied Bandwidth

	Modulation	Occupied Bandwidth (KHz)		
Antenna		Channel Position B	Channel Position M	Channel Position T
D	QPSK	206.69	205.77	206.00

Port D, QPSK Channel Position B





Port D, QPSK Channel Position M



Port D, QPSK Channel Position T







A.3 Spurious Emissions at Band Edge

A.3.1 Reference

FCC CFR 47 Part 27, Clause 27.53(h) RSS-139, Clause 6.6

A.3.2 Method of measurement

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 + 10log(P) dB.

For MIMO mode configurations, the limit was adjusted with a correction of -6.02dB [10Log4] by using the Measure and Add 10Log(N) dB technique according to FCC KDB 662911 D01 accounting for simultaneous transmission from all antenna ports.

According to FCC rules, in the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed and a RBW of 1MHz for measurements of emissions > 1MHz away from the band edges. The limit was adjusted with -13.01dB [10Log(50/1000)] to compensate for the reduce measurement bandwidth 50KHz for emission more than 1MHz away from the band edges. For MIMO mode, the limit of -32.03dBm was used for emission more than 1MHz away from the band edges. For Non-MIMO mode, the limit of -26.01dBm was used for emission more than 1MHz away from the band edges. Spectrum analyzer detector was set as RMS.

A.3.3 Measurement limit

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 + 10log(P) dB.

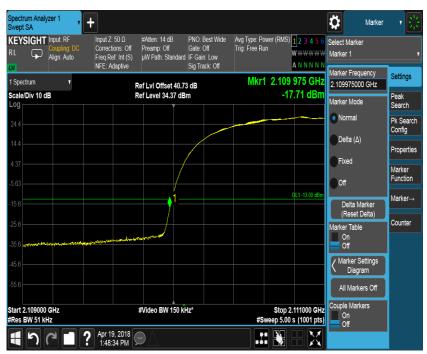


A.3.4 Measurement result

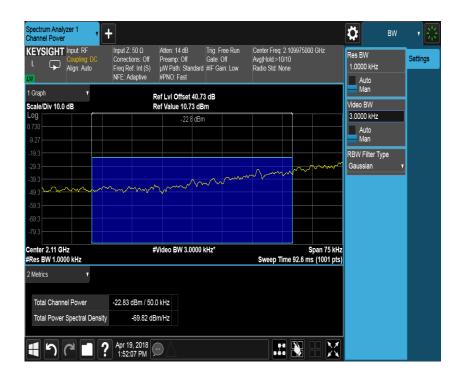
Configuration WCDMA-1C-BE

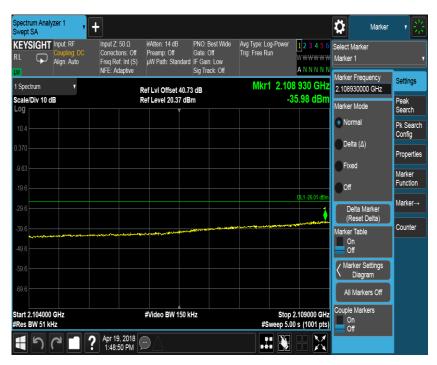
Modulation	Band Edge	Channel	RBW	Limit
iviodulation	Frequency	Bandwidth	(KHz)	(dBm)
	Channel Position B	5.0MHz	51	-13.00
QPSK	2110.0MHz	5.0WHZ		
QFSK	Channel Position T	5.0MHz	51	-13.00
	2155.0MHz	3.0WII 12		
	Channel Position B	5.0MHz	51	-19.02
16QAM	2110.0MHz	3.0WII 12		
TOQAW	Channel Position T	5.0MHz	51	-19.02
	2155.0MHz	3.0WII 12		
	Channel Position B	5.0MHz	51	-19.02
64QAM	2110.0MHz	3.0WII 12		
04QAW	Channel Position T	5.0MHz	51	-19.02
	2155.0MHz	J.UIVITZ		

Port D, Channel Position B, QPSK



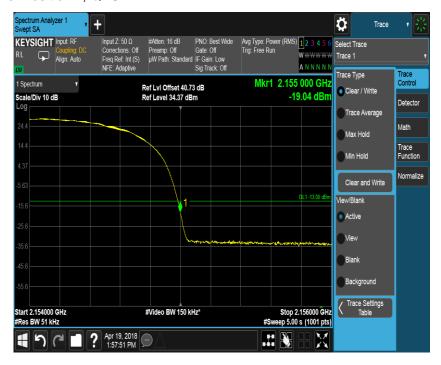


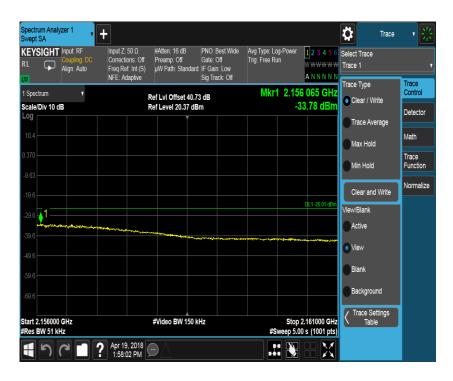






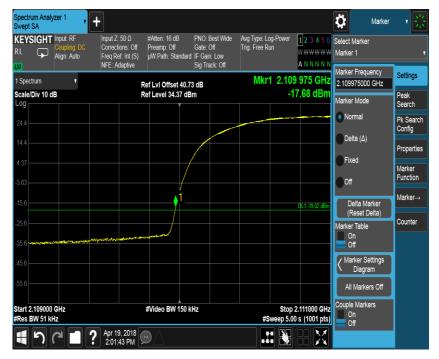
Port D, Channel Position T, QPSK

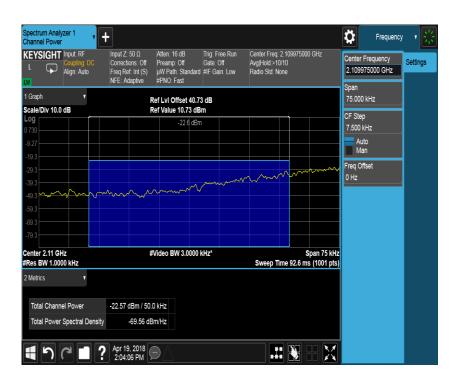




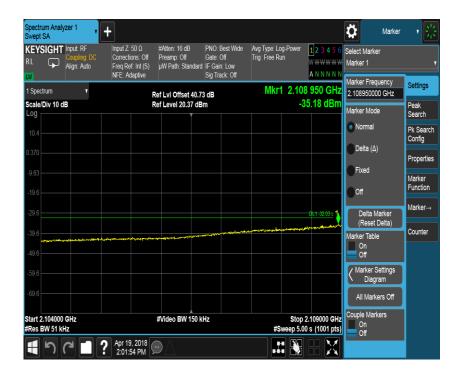


Port D, Channel Position B, 16QAM









Port D, Channel Position T, 16QAM

