

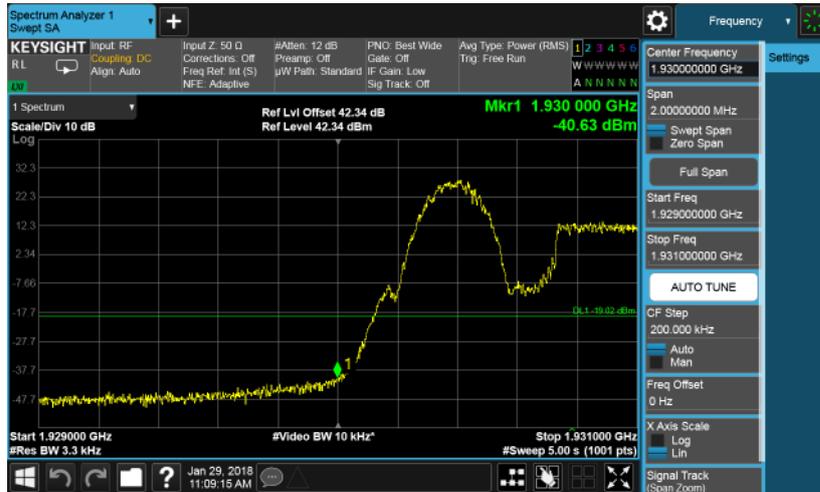
Port B, Channel Position T, 20.0MHz



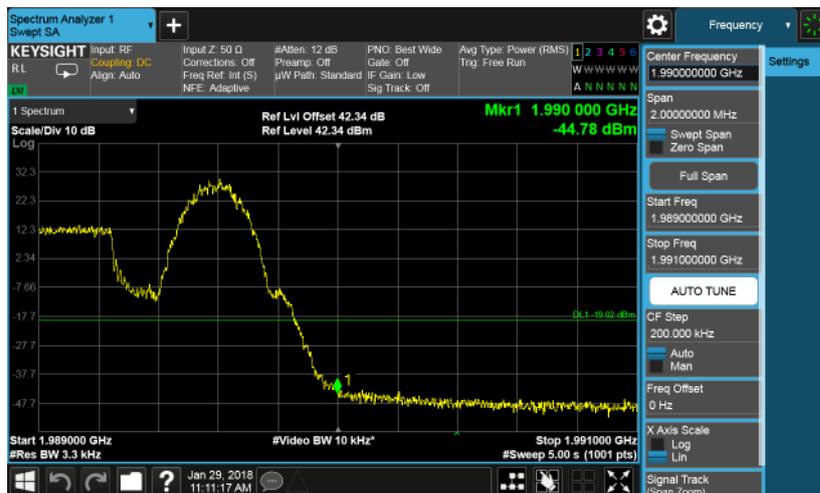
Configuration GSM+LTE-MIMO-MC-3-BE (1GSM, GMSK + 1LTE, QPSK)

Band Edge Frequency	Channel Bandwidth	RBW (KHz)	Limit (dBm)
Channel Position B 1930.0MHz	(L) 5.0MHz, (G) 250KHz	3.3	-19.02
Channel Position T 1990.0MHz	(L) 5.0MHz, (G) 250KHz	3.3	-19.02

Port B, Channel Position B



Port B, Channel Position T

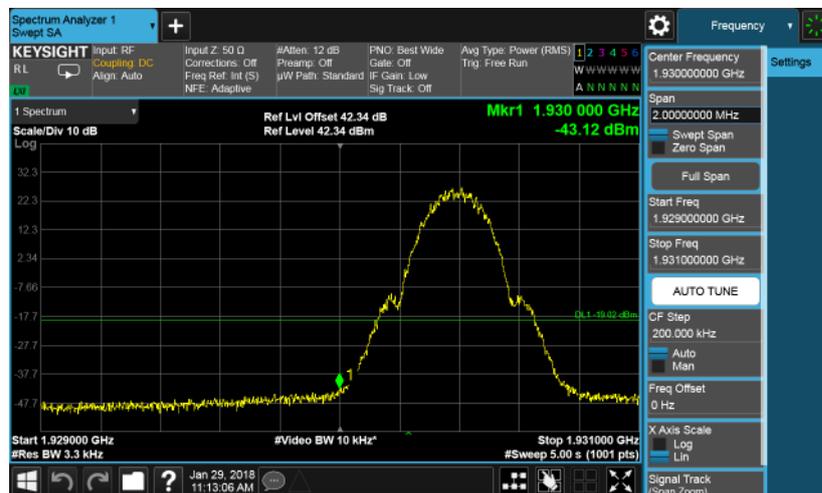




Configuration GSM+LTE-MIMO-MC-4-BE (2GSM, GMSK + 1LTE, QPSK)

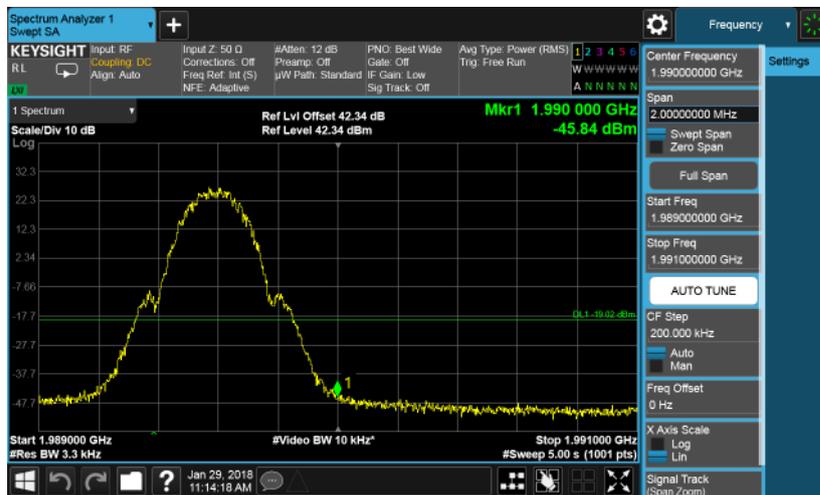
Band Edge Frequency	Channel Bandwidth	RBW (KHz)	Limit (dBm)
Channel Position B 1930.0MHz	(L) 5.0MHz, (G) 250KHz	3.3	-19.02
Channel Position T 1990.0MHz	(L) 5.0MHz, (G) 250KHz	3.3	-19.02

Port B, Channel Position B





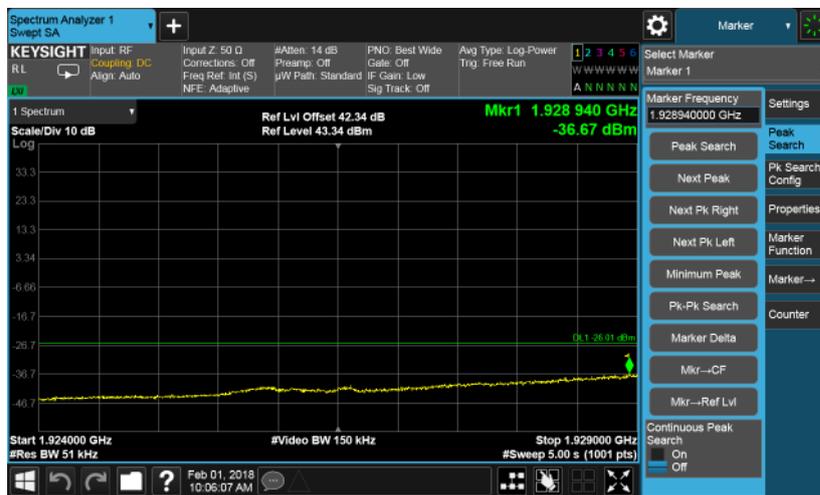
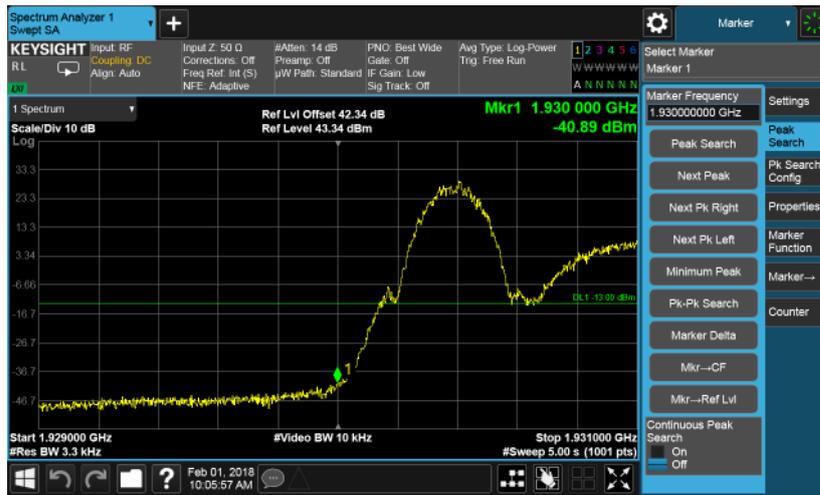
Port B, Channel Position T



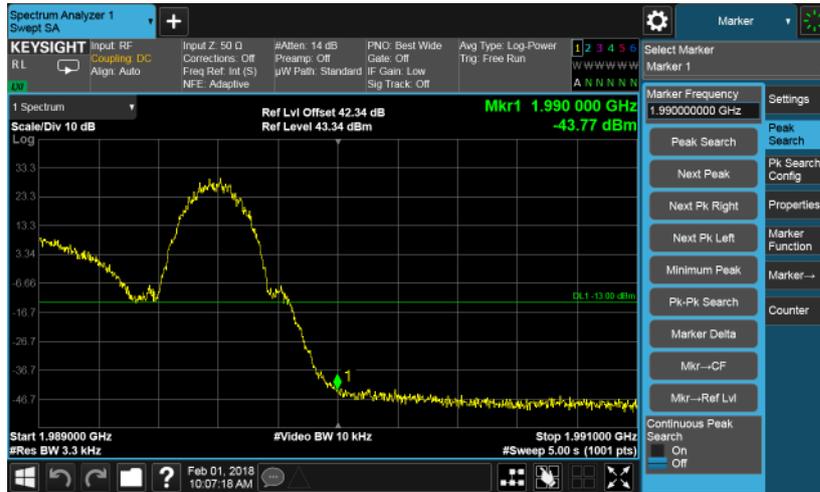
Configuration GSM+WCDMA-MC-3-BE (1GSM, GMSK + 1WCDMA, 16QAM)

Band Edge Frequency	Channel Bandwidth	RBW (KHz)	Limit (dBm)
Channel Position B 1930.0MHz	(W) 5.0MHz, (G) 250KHz	3.3	-13.00
Channel Position T 1990.0MHz	(W) 5.0MHz, (G) 250KHz	3.3	-13.00

Port B, Channel Position B



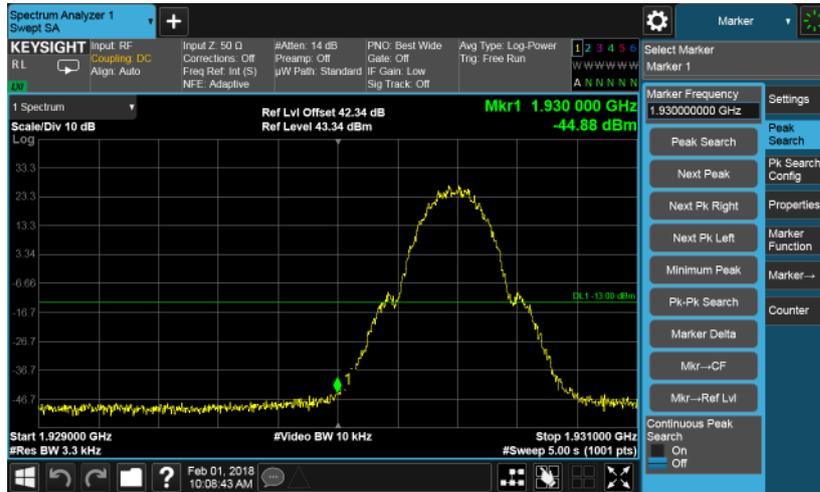
Port B, Channel Position T



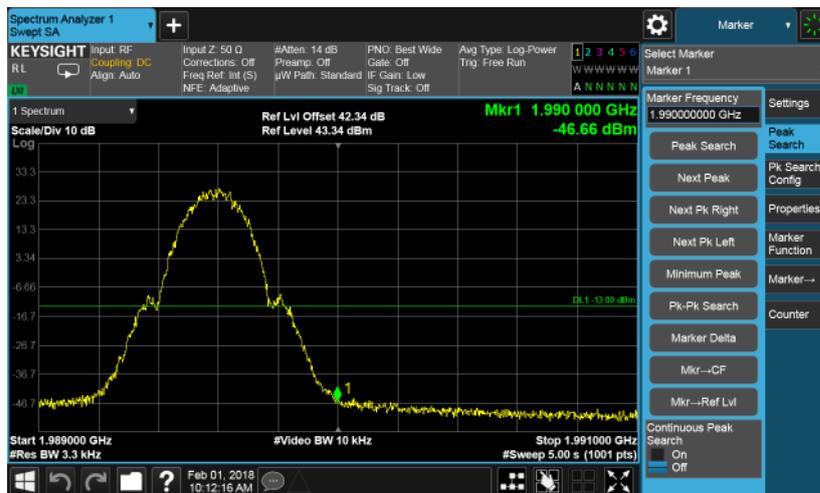
Configuration GSM+WCDMA-MC-4-BE (2GSM, GMSK +1WCDMA, 16QAM)

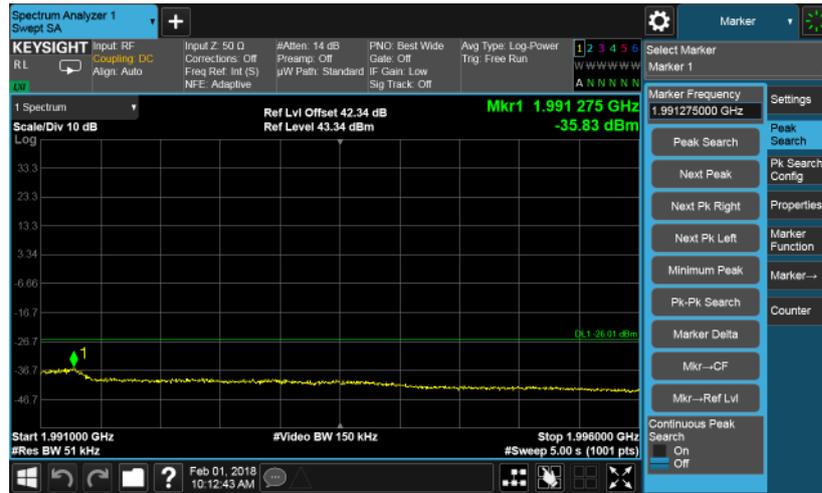
Band Edge Frequency	Channel Bandwidth	RBW (KHz)	Limit (dBm)
Channel Position B 1930.0MHz	(W) 5.0MHz, (G) 250KHz	3.3	-13.00
Channel Position T 1990.0MHz	(W) 5.0MHz, (G) 250KHz	3.3	-13.00

Port B, Channel Position B



Port B, Channel Position T

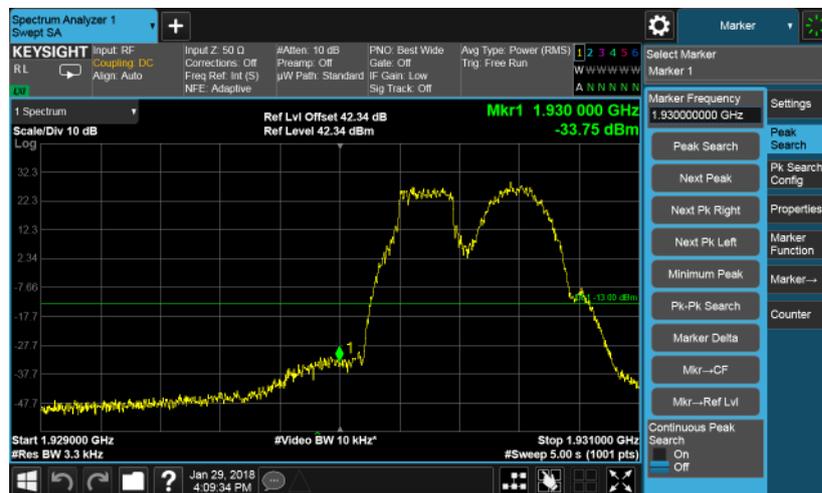




Configuration NB-IOT+GSM-MC-3-BE, (1NB, QPSK +1GSM, GMSK)

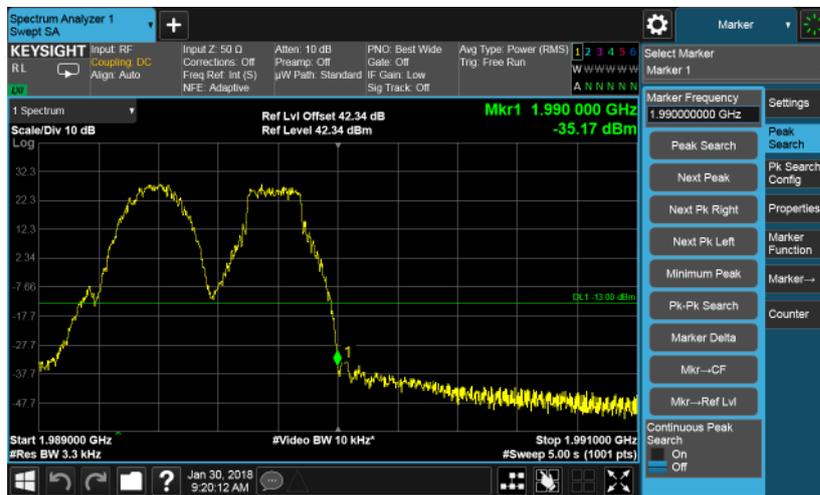
Band Edge Frequency	Channel Bandwidth	RBW (KHz)	Limit (dBm)
Channel Position B 1930.0MHz	(NB) 250KHz, (G) 250KHz	3.3	-13.00
Channel Position T 1990.0MHz	(NB) 250KHz, (G) 250KHz	3.3	-13.00

Port B, Channel Position B





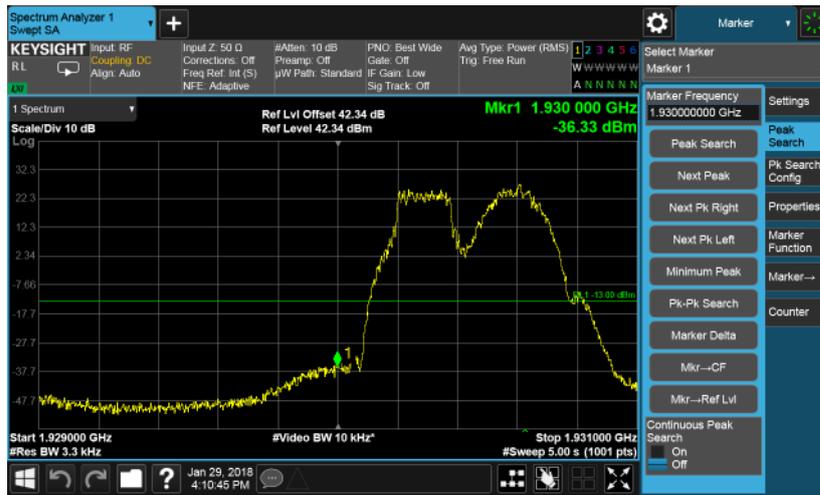
Port B, Channel Position T



Configuration NB-IOT+GSM-MC-4-BE, (1NB, QPSK +2GSM, GMSK)

Band Edge Frequency	Channel Bandwidth	RBW (KHz)	Limit (dBm)
Channel Position B 1930.0MHz	(NB) 250KHz, (G) 250KHz	3.3	-13.00
Channel Position T 1990.0MHz	(NB) 250KHz, (G) 250KHz	3.3	-13.00

Port B, Channel Position B



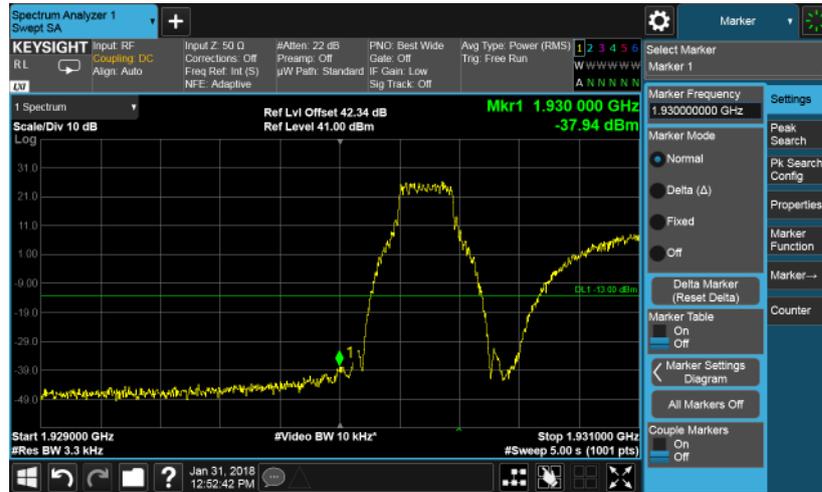
Port B, Channel Position T



Configuration NB-IOT+WCDMA-MC-3-BE, (1NB, QPSK +1WCDMA, 16QAM)

Band Edge Frequency	Channel Bandwidth	RBW (KHz)	Limit (dBm)
Channel Position B 1930.0MHz	(NB) 250KHz, (W) 5.0MHz	3.3	-13.00
Channel Position T 1995.0MHz	(NB) 250KHz, (W) 5.0MHz	3.3	-13.00

Port B, Channel Position B



Port B, Channel Position T





Configuration NB-IOT+WCDMA-MC-4-BE, (1NB, QPSK +2WCDMA, 16QAM)

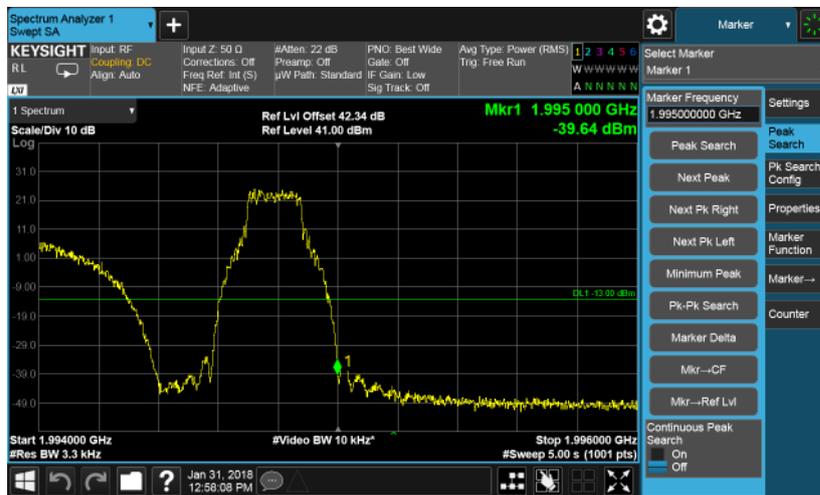
Band Edge Frequency	Channel Bandwidth	RBW (KHz)	Limit (dBm)
Channel Position B 1930.0MHz	(NB) 250KHz, (W) 5.0MHz	3.3	-13.00
Channel Position T 1995.0MHz	(NB) 250KHz, (W) 5.0MHz	3.3	-13.00

Port B, Channel Position B





Port B, Channel Position T



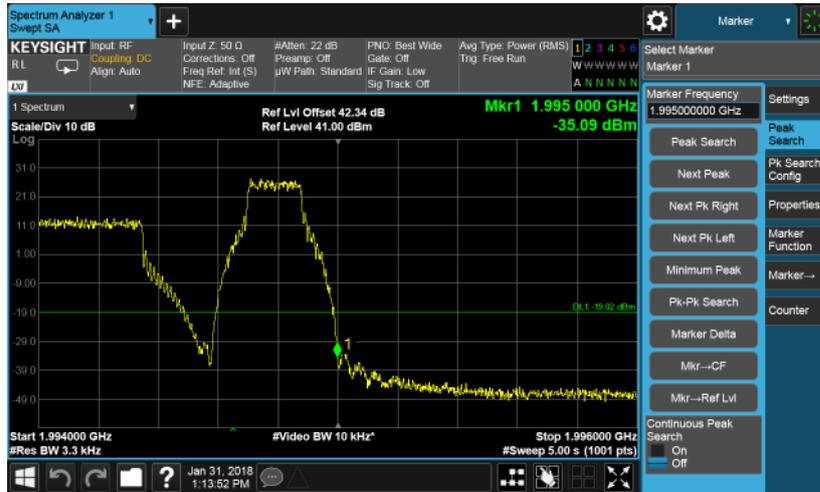
Configuration NB-IOT+LTE-MIMO-MC-3-BE, (1NB, QPSK +1LTE, QPSK)

Band Edge Frequency	Channel Bandwidth	RBW (KHz)	Limit (dBm)
Channel Position B 1930.0MHz	(NB) 250KHz, (L) 5.0MHz	3.3	-19.02
Channel Position T 1995.0MHz	(NB) 250KHz, (L) 5.0MHz	3.3	-19.02

Port B, Channel Position B



Port B, Channel Position T



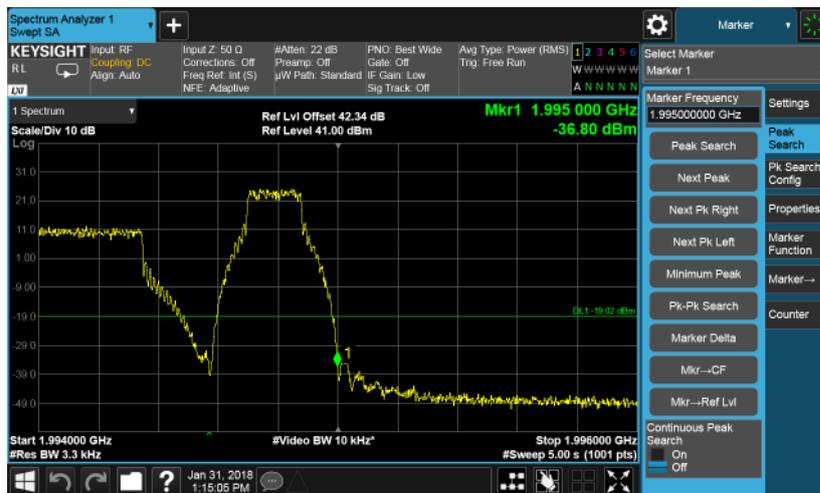
Configuration NB-IOT+LTE-MIMO-MC-4-BE, (1NB, QPSK +2LTE, QPSK)

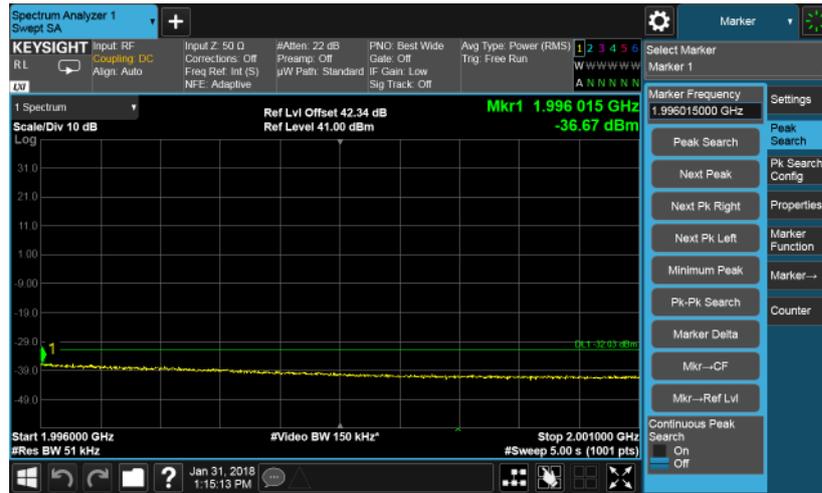
Band Edge Frequency	Channel Bandwidth	RBW (KHz)	Limit (dBm)
Channel Position B 1930.0MHz	(NB) 250KHz, (L) 5.0MHz	3.3	-19.02
Channel Position T 1995.0MHz	(NB) 250KHz, (L) 5.0MHz	3.3	-19.02

Port B, Channel Position B



Port B, Channel Position T



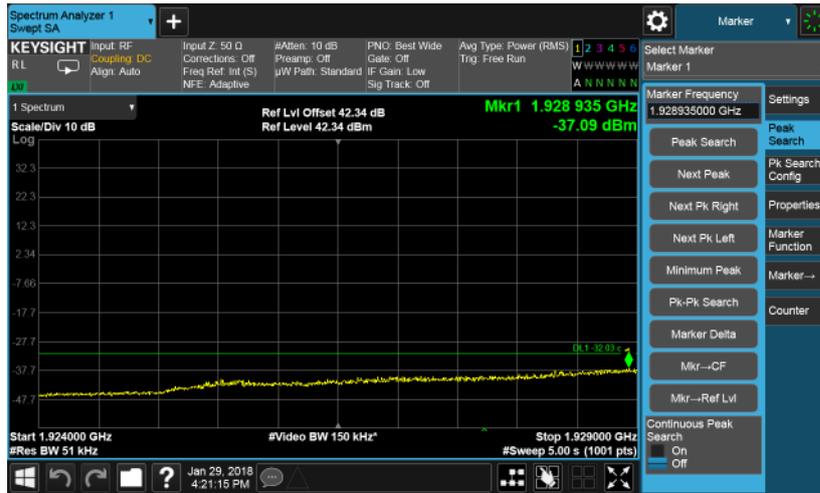


Configuration NB-IOT+GSM+LTE-MIMO-MC-3-BE, (1NB, QPSK +1GSM GMSK +1LTE, QPSK)

Band Edge Frequency	Channel Bandwidth	RBW (KHz)	Limit (dBm)
Channel Position B 1930.0MHz	(NB) 250KHz, (G) 250KHz (L) 5.0MHz	3.3	-19.02
Channel Position T 1990.0MHz	(NB) 250KHz, (G) 250KHz (L) 5.0MHz	3.3	-19.02

Port B, Channel Position B





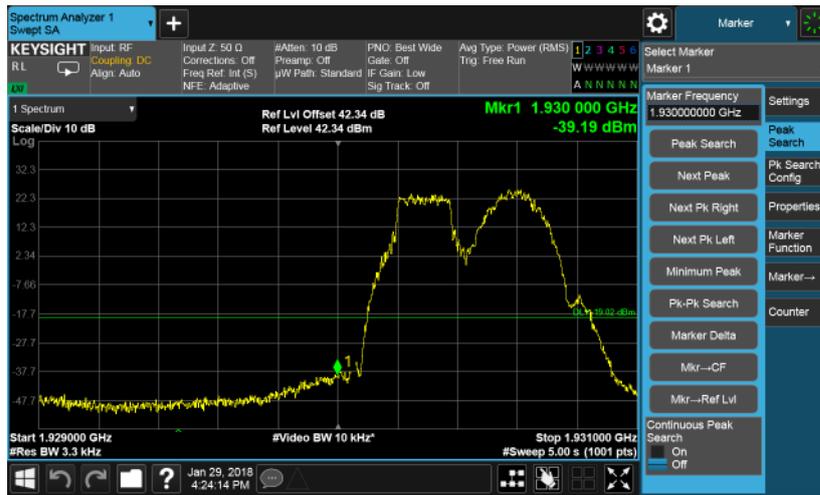
Port B, Channel Position T



Configuration NB-IOT+GSM+LTE-MIMO-MC-4-BE, (1NB, QPSK +2GSM GMSK +1LTE, QPSK)

Band Edge Frequency	Channel Bandwidth	RBW (KHz)	Limit (dBm)
Channel Position B 1930.0MHz	(NB) 250KHz, (G) 250KHz (L) 5.0MHz	3.3	-19.02
Channel Position T 1990.0MHz	(NB) 250KHz, (G) 250KHz (L) 5.0MHz	3.3	-19.02

Port B, Channel Position B

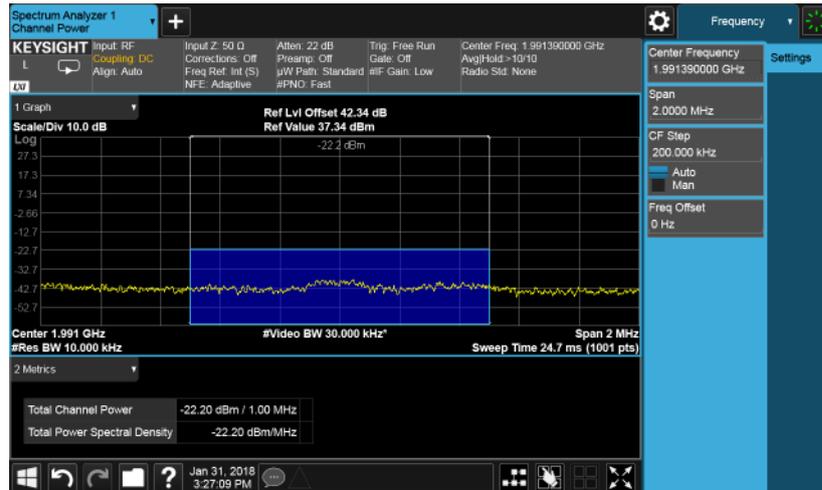




Port B, Channel Position T



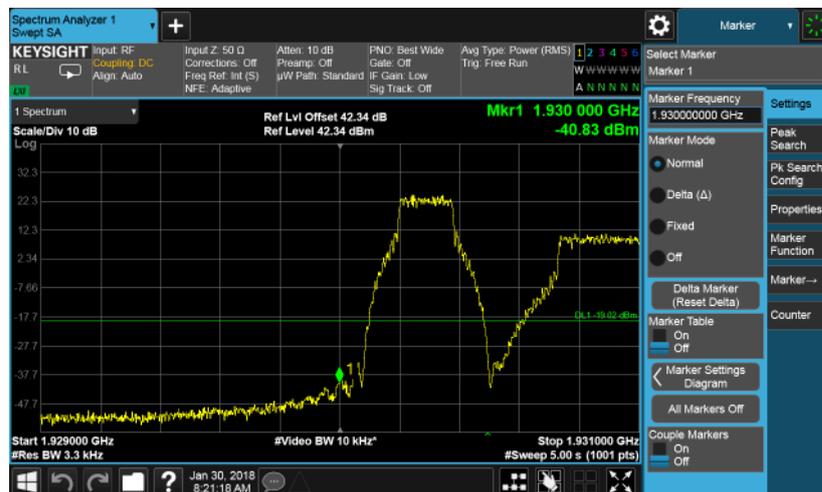
The channel power of 1.0MHz for 1991.39MHz is -22.20dBm, which is within the limit of -19.02dBm.

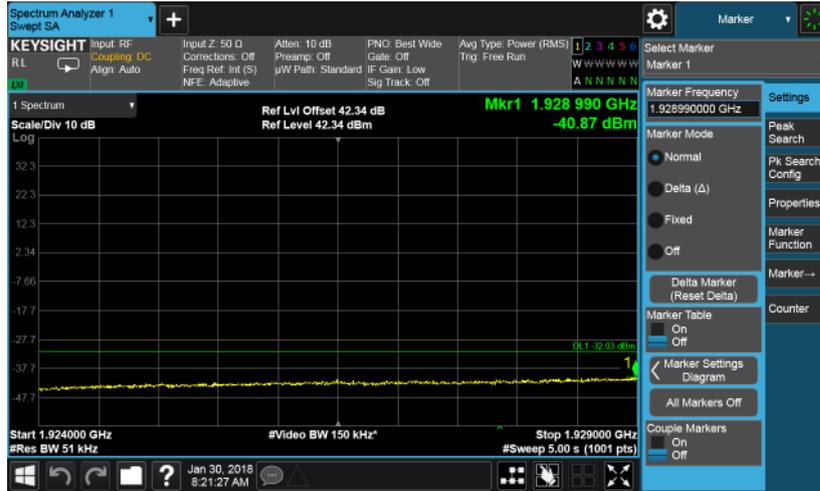


Configuration NB-IOT+WCDMA+LTE-MIMO-MC-3-BE, (1NB, QPSK +1WCDMA 16QAM +1LTE, QPSK)

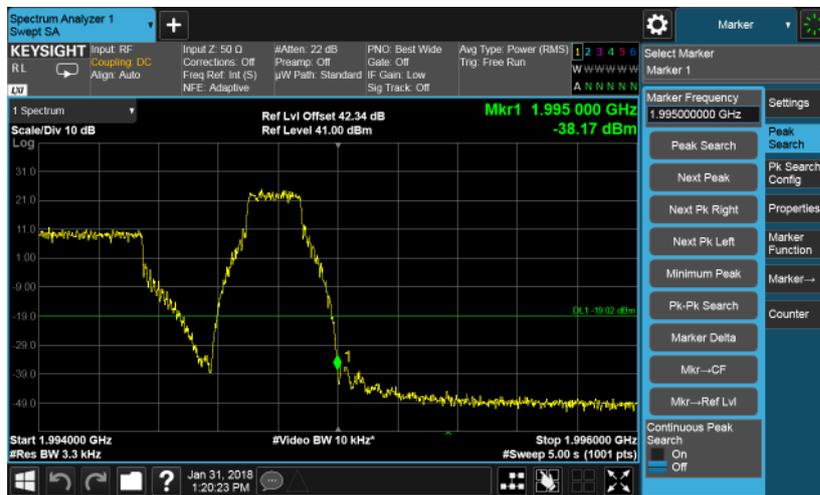
Band Edge Frequency	Channel Bandwidth	RBW (KHz)	Limit (dBm)
Channel Position B 1930.0MHz	(NB) 250KHz, (W) 5.0MHz (L) 5.0MHz	3.3	-19.02
Channel Position T 1995.0MHz	(NB) 250KHz, (W) 5.0MHz (L) 5.0MHz	3.3	-19.02

Port B, Channel Position B





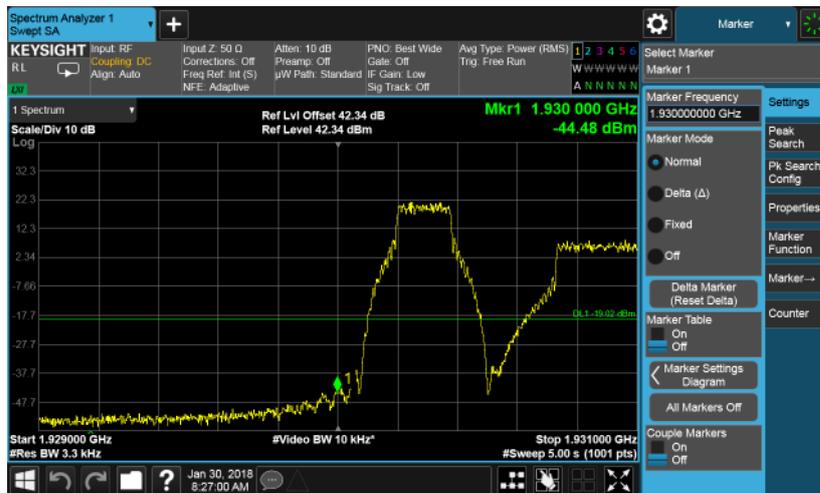
Port B, Channel Position T



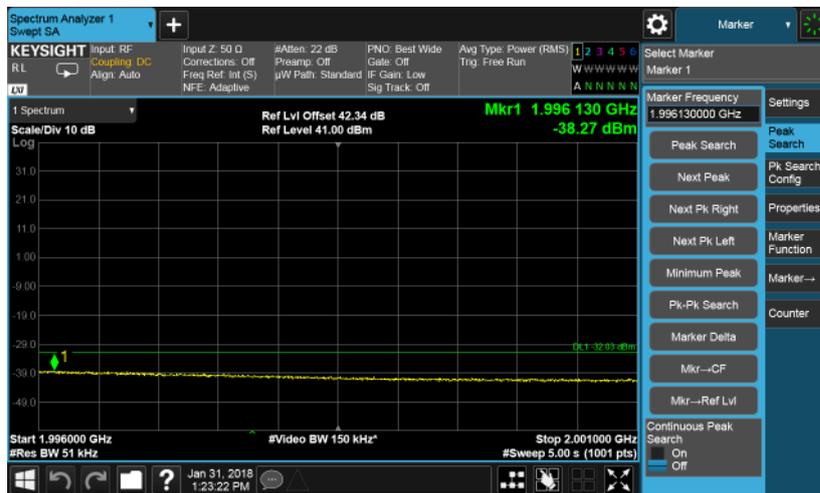
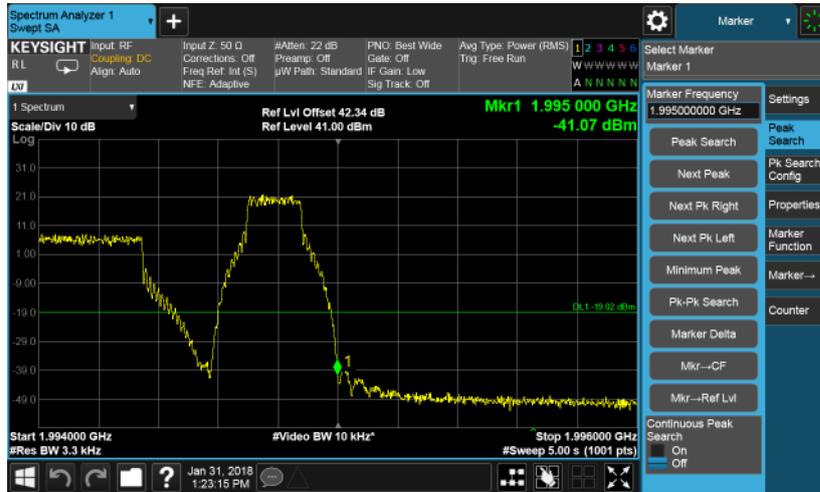
Configuration NB-IOT+WCDMA+LTE-MIMO-MC-4-BE, (1NB, QPSK +2WCDMA 16QAM +3LTE, QPSK)

Band Edge Frequency	Channel Bandwidth	RBW (KHz)	Limit (dBm)
Channel Position B 1930.0MHz	(NB) 250KHz, (W) 5.0MHz (L) 5.0MHz	3.3	-19.02
Channel Position T 1995.0MHz	(NB) 250KHz, (W) 5.0MHz (L) 5.0MHz	3.3	-19.02

Port B, Channel Position B



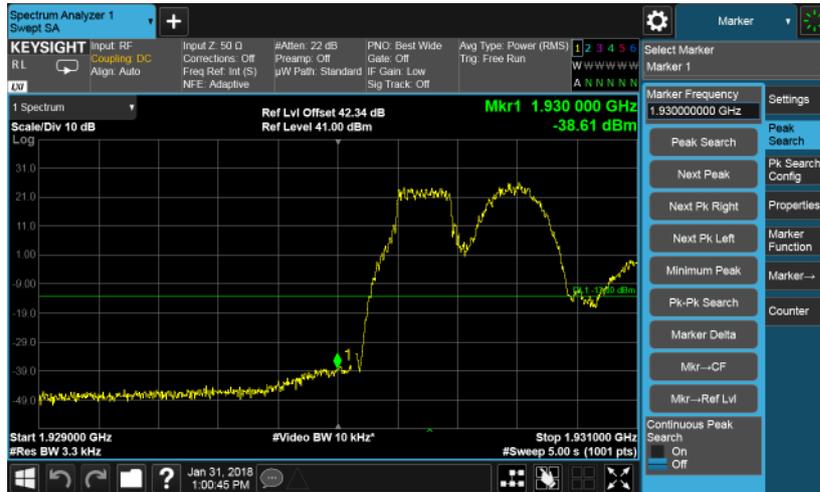
Port B, Channel Position T



Configuration NB-IOT+GSM+WCDMA-MC-3-BE, (1NB, QPSK +1GSM GMSK +1WCDMA, 16QAM)

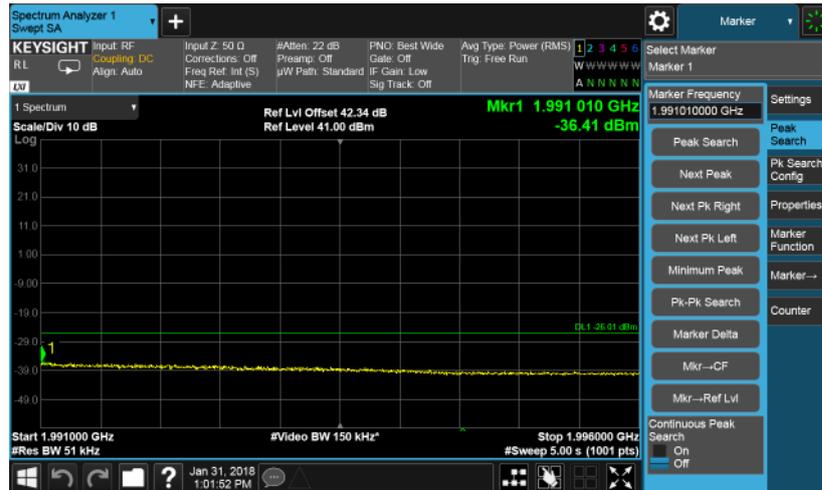
Band Edge Frequency	Channel Bandwidth	RBW (KHz)	Limit (dBm)
Channel Position B 1930.0MHz	(NB) 250KHz, (G) 250KHz, (W) 5.0MHz	3.3	-13.00
Channel Position T 1990.0MHz	(NB) 250KHz, (G) 250KHz (W) 5.0MHz	3.3	-13.00

Port B, Channel Position B



Port B, Channel Position T





Configuration NB-IOT+GSM+WCDMA-MIMO-MC-4-BE, (1NB, QPSK +2GSM GMSK +1WCDMA, 16QAM)

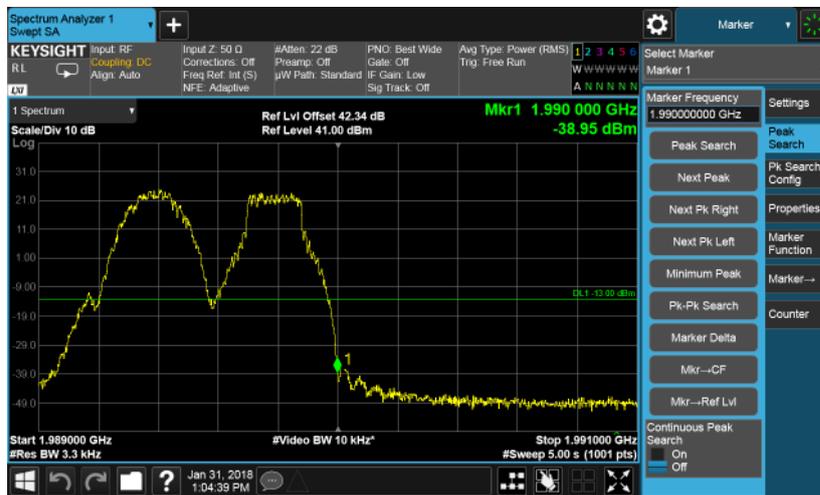
Band Edge Frequency	Channel Bandwidth	RBW (KHz)	Limit (dBm)
Channel Position B 1930.0MHz	(NB) 250KHz, (G) 250KHz, (W) 5.0MHz	3.3	-13.00
Channel Position T 1990.0MHz	(NB) 250KHz, (G) 250KHz (W) 5.0MHz	3.3	-13.00

Port B, Channel Position B





Port B, Channel Position T



A.4 Conducted Spurious Emission

A.4.1 Reference

FCC CFR 47 Part 2, Clause 2.1051
FCC CFR 47 Part 24, Clause 24.238 (a)
RSS-133, Clause 6.5

A.4.2 Method of measurement

In accordance with FCC CFR 47 Part 24, Clause 24.238, 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 spurious emissions from the antenna terminal were measured. The transmitter output power was attenuated using an attenuator and the frequency spectrum investigated from 3KHz to 20GHz. The resolution bandwidth of 1MHz was employed for frequency band 3KHz to 20GHz. The spectrum analyzer detector was set to RMS.

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 Multiple Transmitter Output accounting for simultaneous transmission from antenna ports RF A,B,C and D. Then the limit was adjust to -19.02dBm.

A.4.3 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 $43 + 10 \log(P)$ dB.

A.4.4 Measurement results

Configuration GSM-1C GMSK

Channel Bandwidth	RBW (MHz)	Limit (dBm)
250 KHz	1.0	-13.0

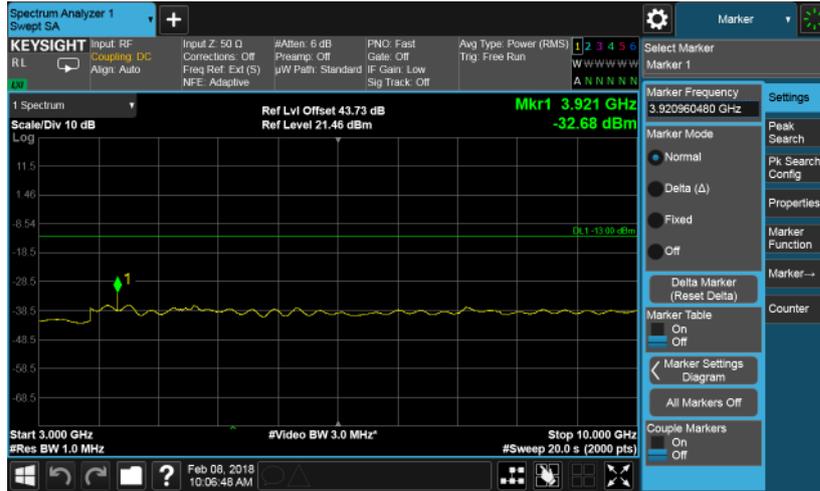
Port B, Channel Position B





Port B, Channel Position M





Port B, Channel Position T

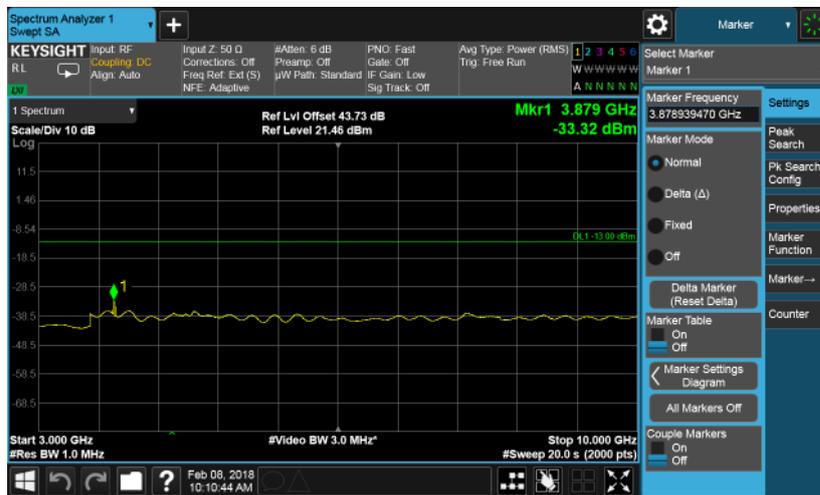




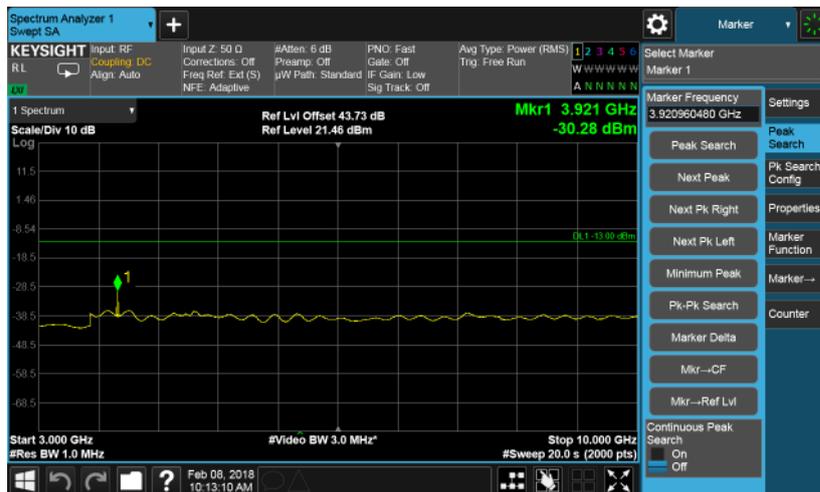
Configuration GSM-2C GMSK

Channel Bandwidth	RBW (MHz)	Limit (dBm)
250 KHz	1.0	-13.0

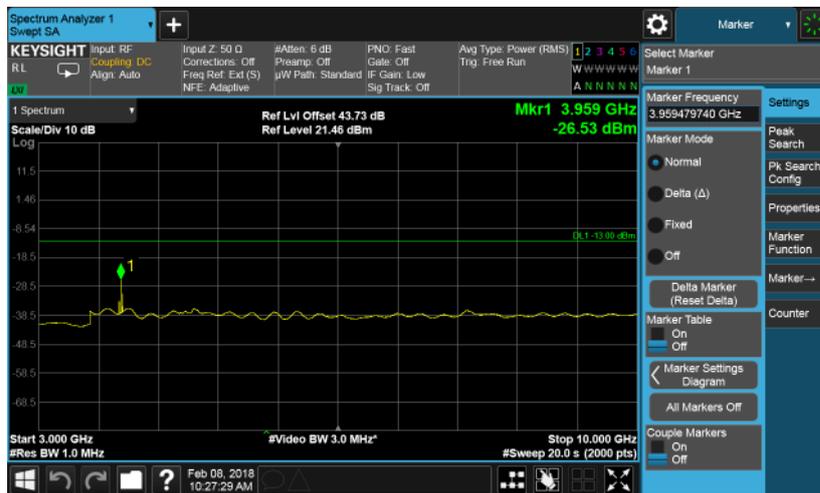
Port B, Channel Position B



Port B, Channel Position M



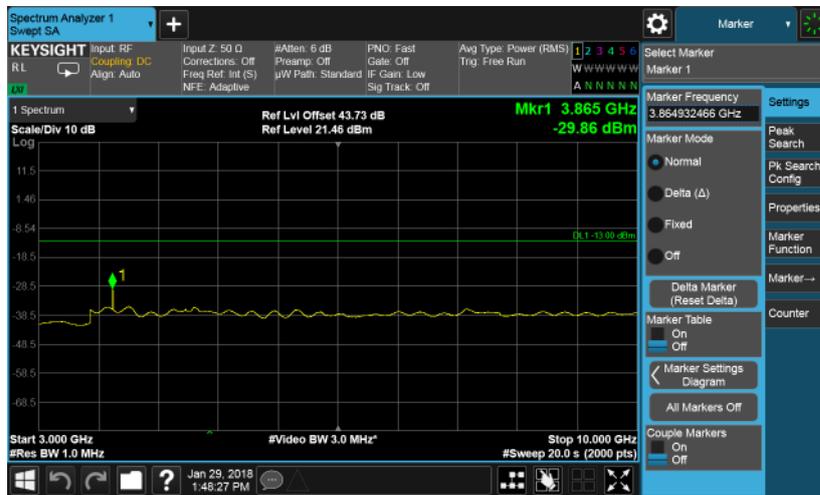
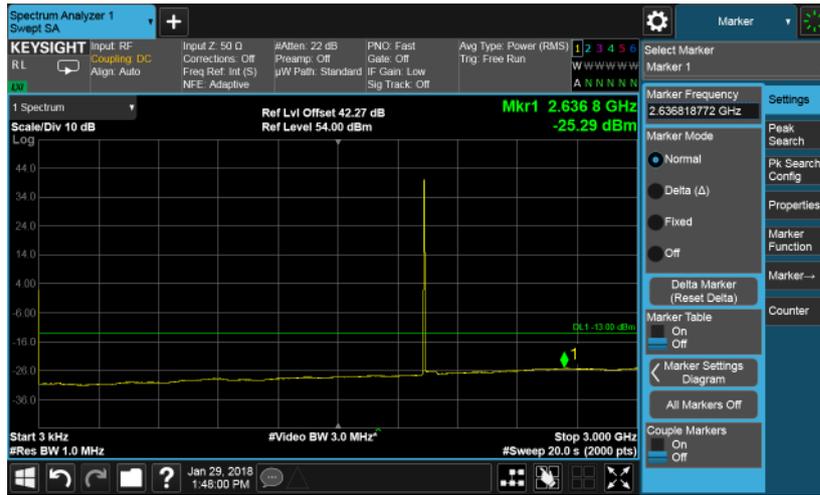
Port B, Channel Position T



Configuration WCDMA-1C QPSK

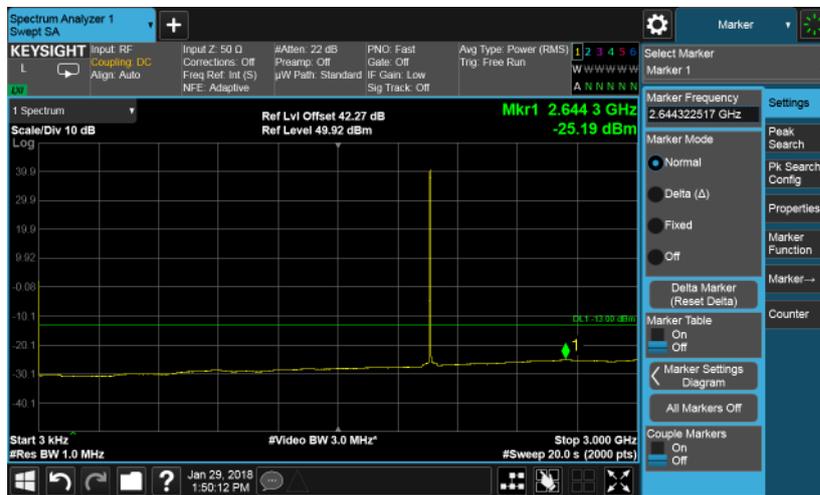
Channel Bandwidth	RBW (MHz)	Limit (dBm)
5.0 MHz	1.0	-13.0

Port B, Channel Position B



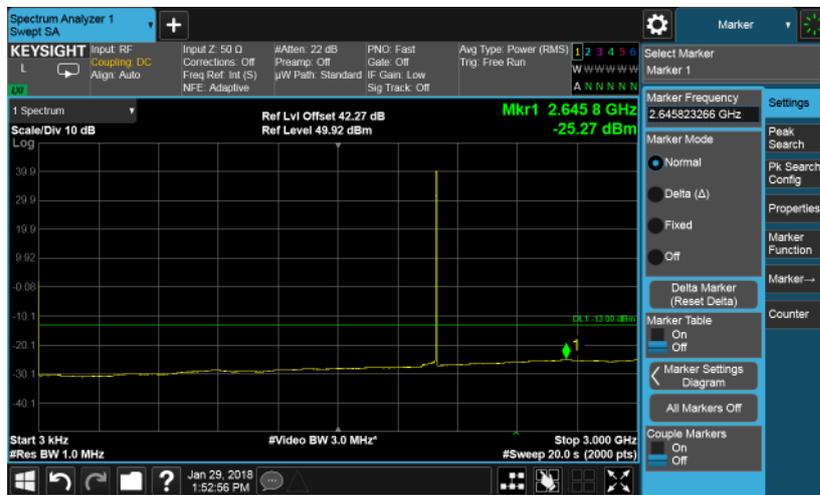


Port B, Channel Position M





Port B, Channel Position T





Configuration WCDMA-1C 16QAM

Channel Bandwidth	RBW (MHz)	Limit (dBm)
5.0 MHz	1.0	-13.0

Port B, Channel Position M

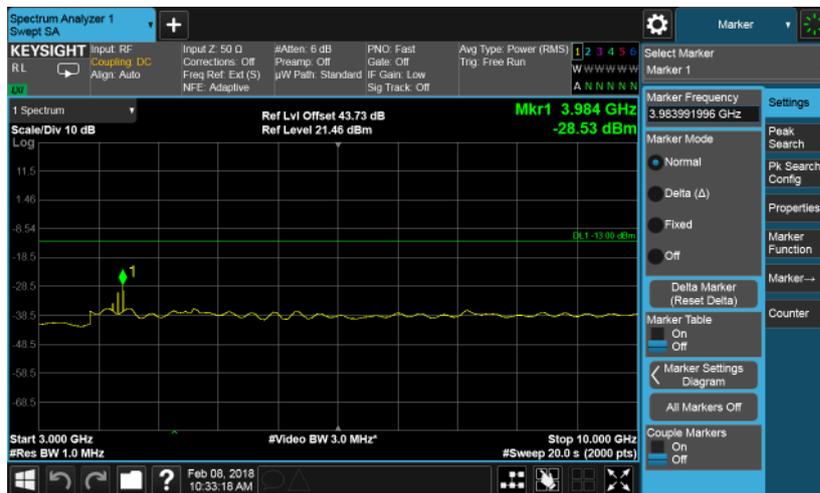
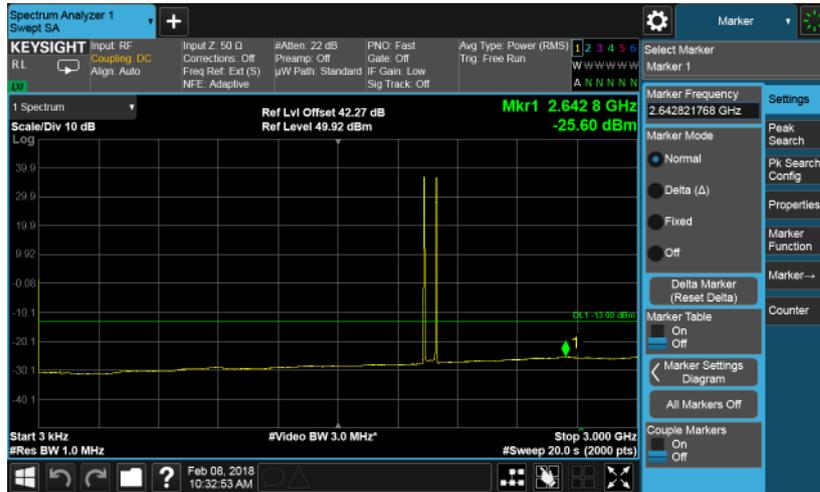




Configuration WCDMA-2C 16QAM

Channel Bandwidth	RBW (MHz)	Limit (dBm)
5.0 MHz	1.0	-13.0

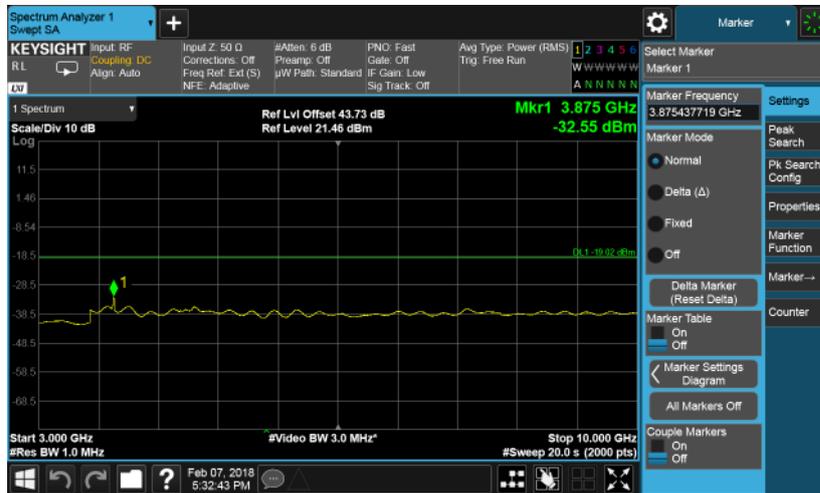
Port B, Channel Position M



Configuration LTE-MIMO-1C QPSK

Channel Bandwidth	RBW (MHz)	Limit (dBm)
15.0 MHz	1.0	-19.02
20.0 MHz	1.0	-19.02

Port B, Channel Position B 15.0 MHz



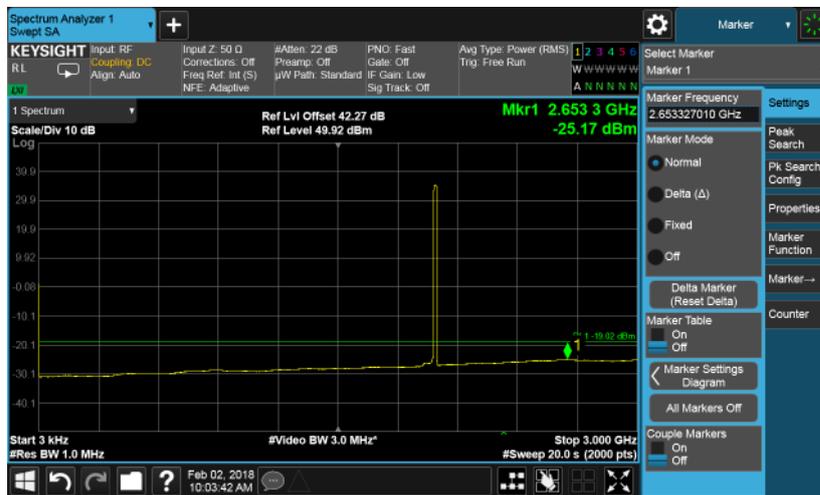


Port B, Channel Position M 15.0 MHz



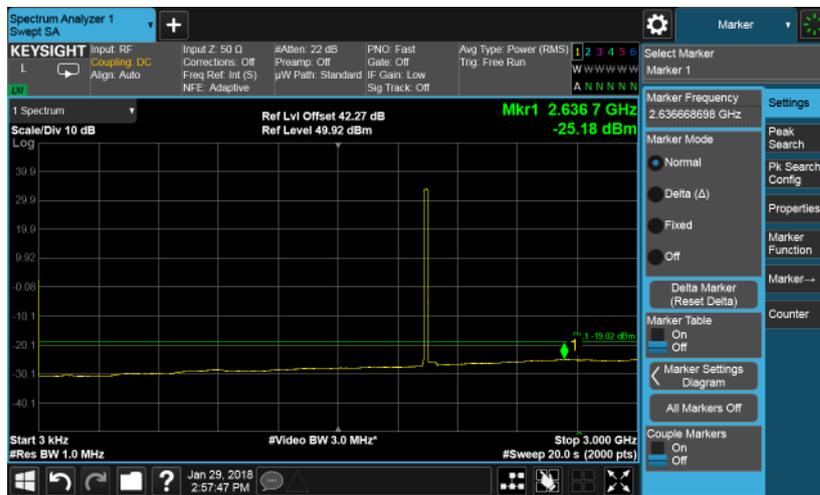


Port B, Channel Position T 15.0 MHz



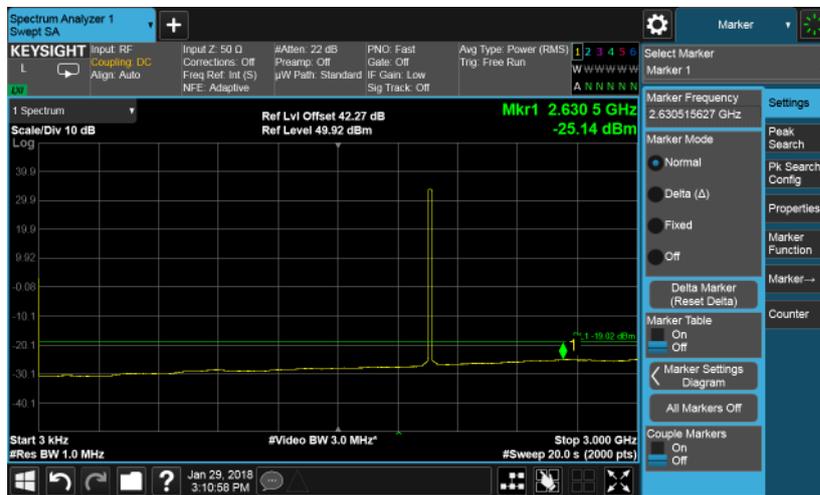


Port B, Channel Position B 20.0 MHz





Port B, Channel Position M 20.0 MHz





Port B, Channel Position T 20.0 MHz





Configuration LTE-MIMO-2C QPSK

Channel Bandwidth	RBW (MHz)	Limit (dBm)
3.0 MHz	1.0	-19.02
20.0 MHz	1.0	-19.02

Port B, Channel Position B 3.0 MHz

