Channel Position T_{RFBW} - QPSK / 5.35GHz – 12GHz

Channel Position T_{RFBW} - QPSK / 12GHz – 18GHz

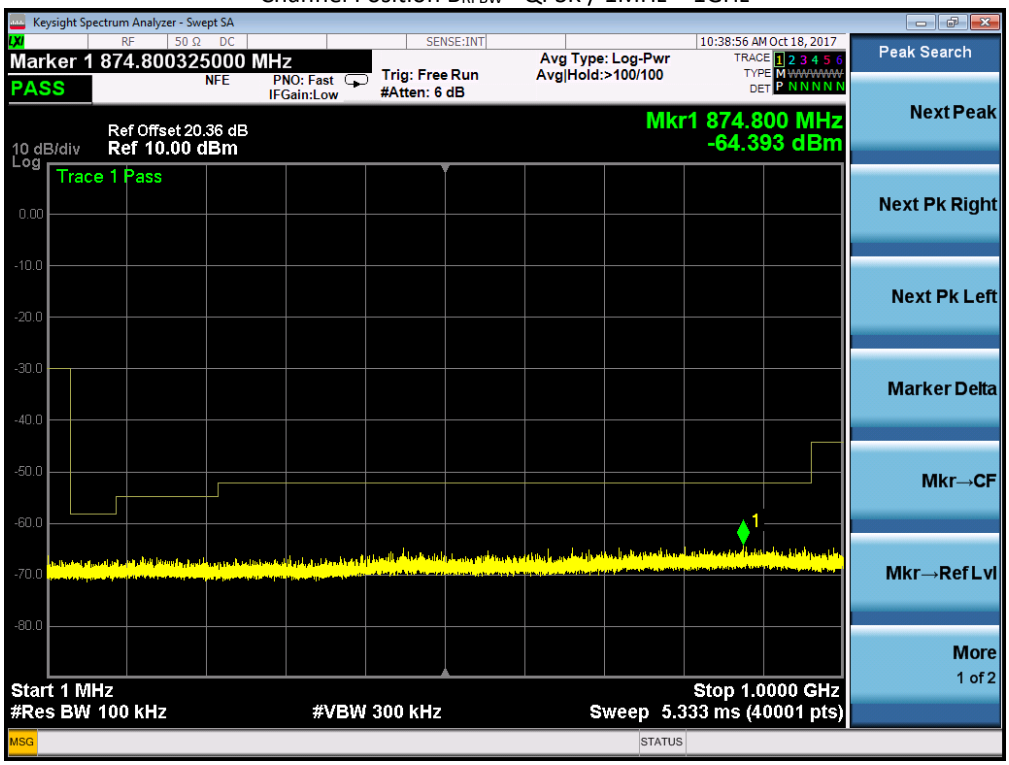
Channel Position T_{RFBW} - QPSK / 18GHz – 40GHz

L-MIMO-MC 2 (3C)

Maximum Output Power 25dBm per port:

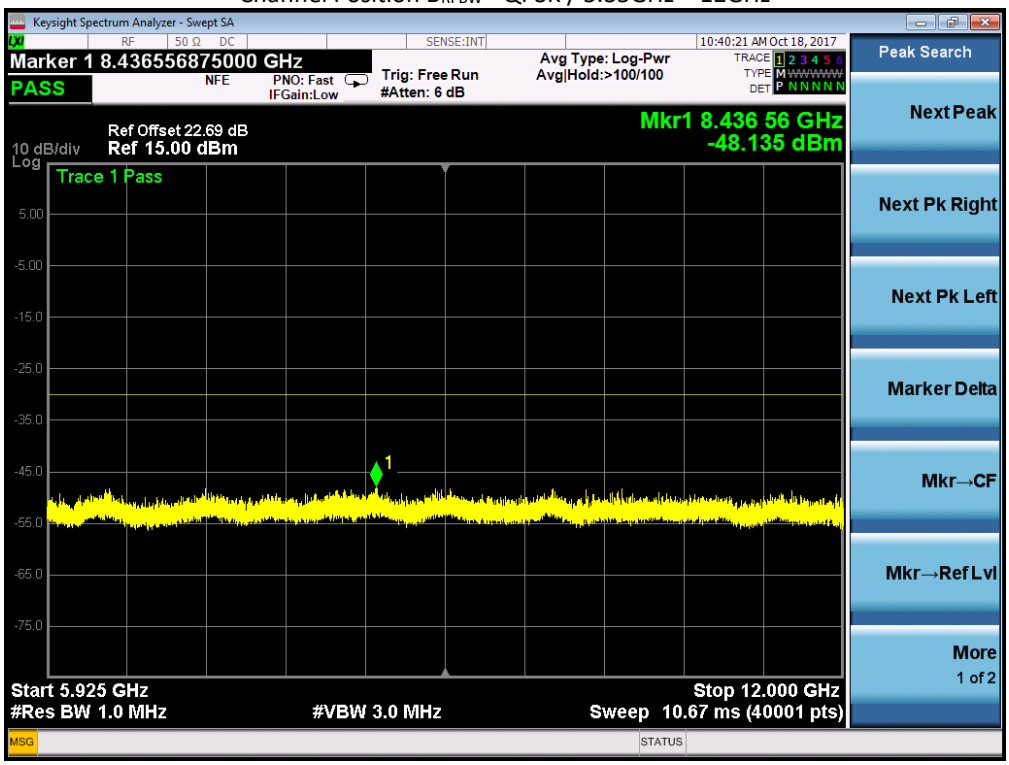
Channel Position	Bandwidth (MHz)	Channel Frequency
B_{RFBW}	20.0 MHz	5745MHz + 5765MHz + 5785MHz
M_{RFBW}	20.0 MHz	5765MHz + 5785MHz + 5805MHz
T_{RFBW}	20.0 MHz	5785MHz + 5805MHz + 5825MHz

Channel Position B_{RFBW} - QPSK / 1MHz – 1GHz



Channel Position B_{RFBW} - QPSK / 1GHz – 5.15GHz

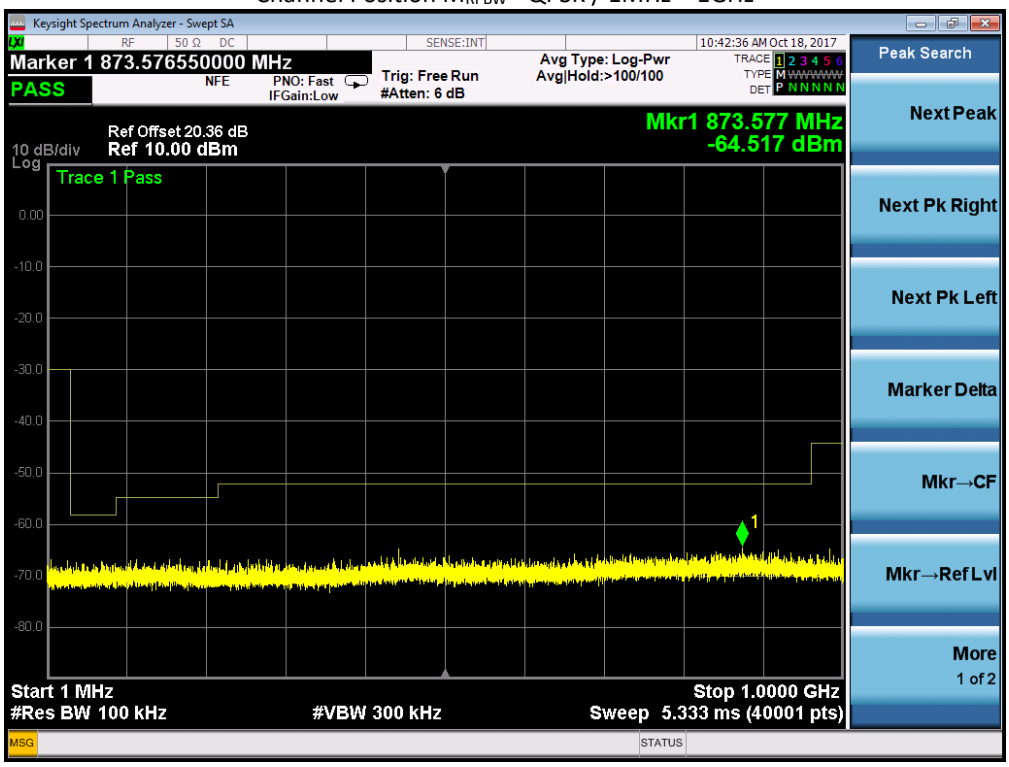
Channel Position B_{RFBW} - QPSK / 5.35GHz – 12GHz



Channel Position B_{RFBW} - QPSK / 12GHz – 18GHz

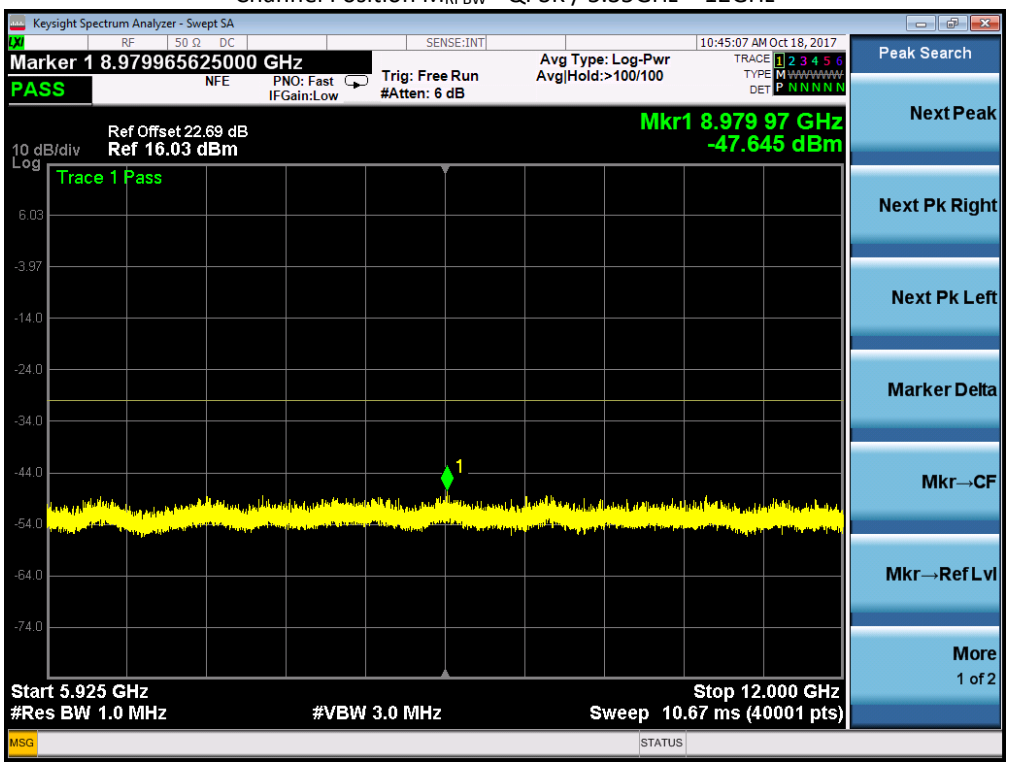
Channel Position B_{RFBW} - QPSK / 18GHz – 40GHz

Channel Position M_{RFBW} - QPSK / 1MHz – 1GHz



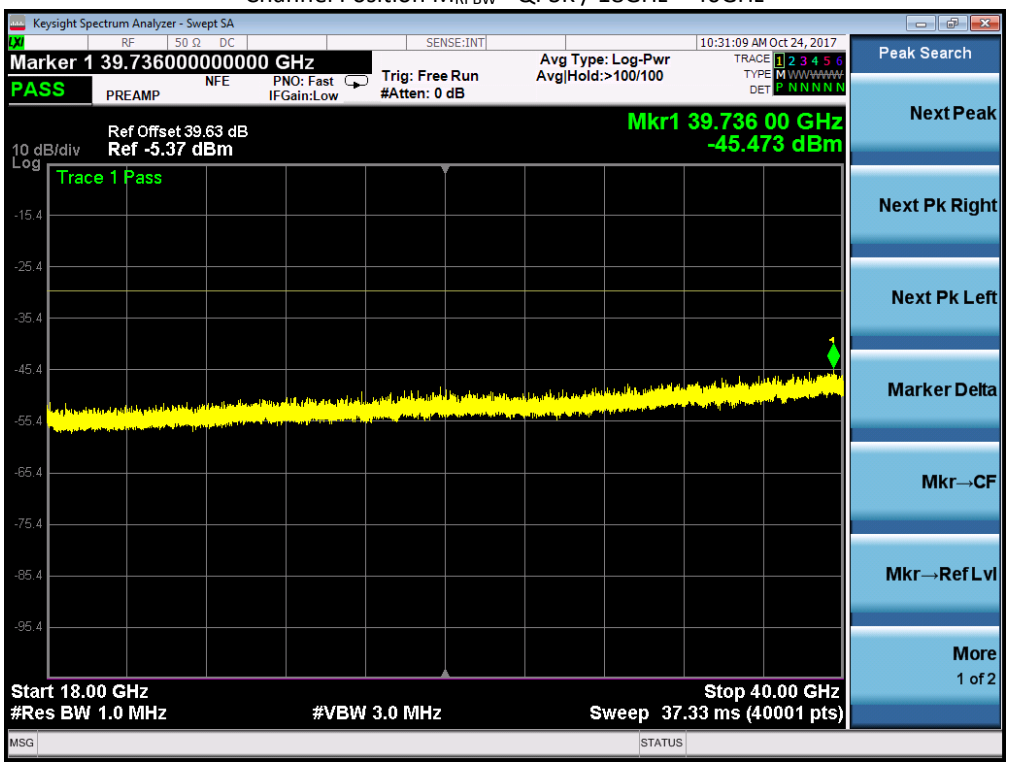
Channel Position M_{RFBW} - QPSK / 1GHz – 5.15GHz

Channel Position M_{RFBW} - QPSK / 5.35GHz – 12GHz

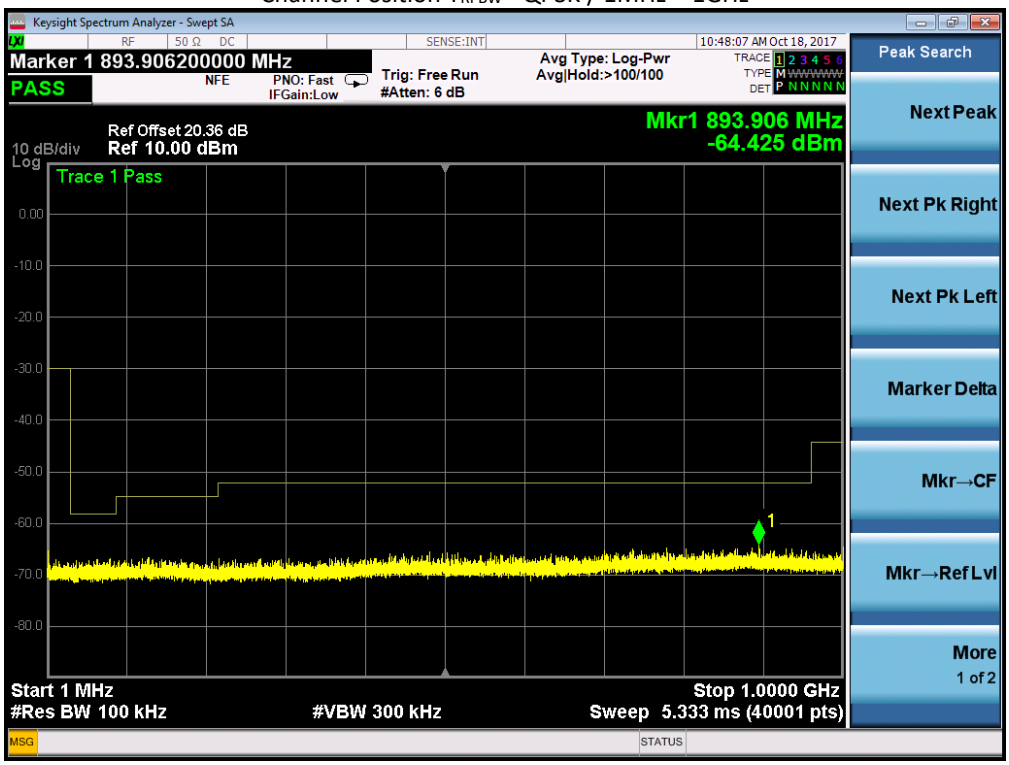


Channel Position M_{RFBW} - QPSK / 12GHz – 18GHz

Channel Position M_{RFBW} - QPSK / 18GHz – 40GHz



Channel Position T_{RFBW} - QPSK / 1MHz – 1GHz



Channel Position T_{RFBW} - QPSK / 1GHz – 5.15GHz

Channel Position T_{RFBW} - QPSK / 5.35GHz – 12GHz

Channel Position T_{RFBW} - QPSK / 12GHz – 18GHz

Channel Position T_{RFBW} - QPSK / 18GHz – 40GHz

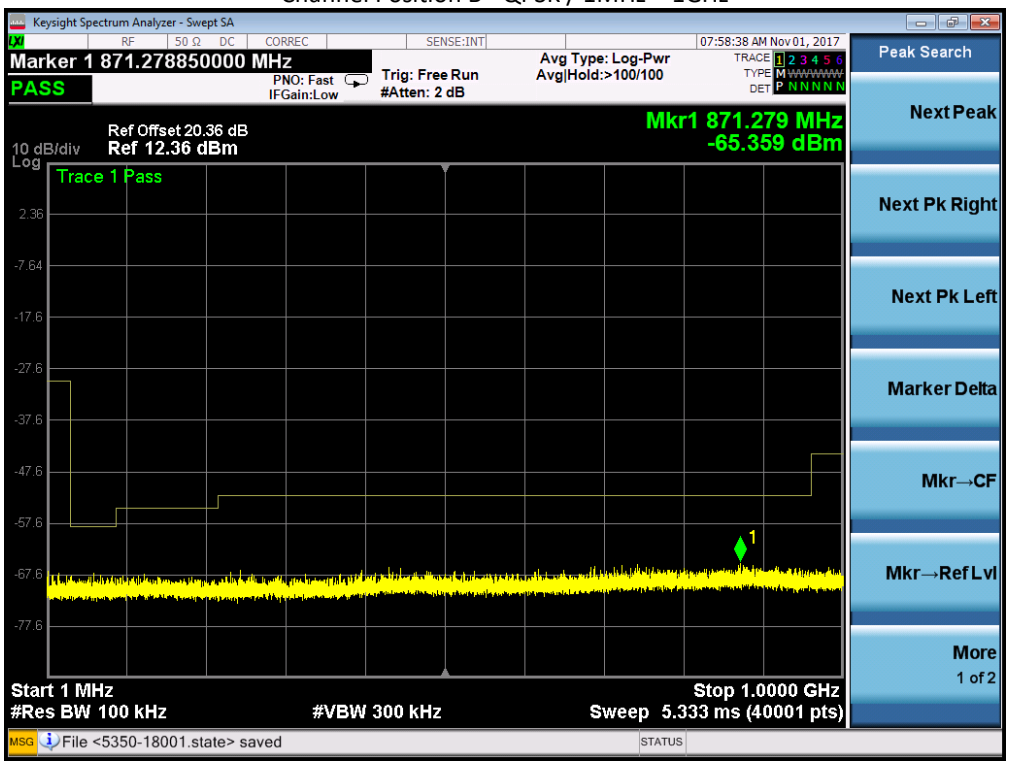
Configuration B3

L-MIMO-SC

Maximum Output Power 12dBm per port:

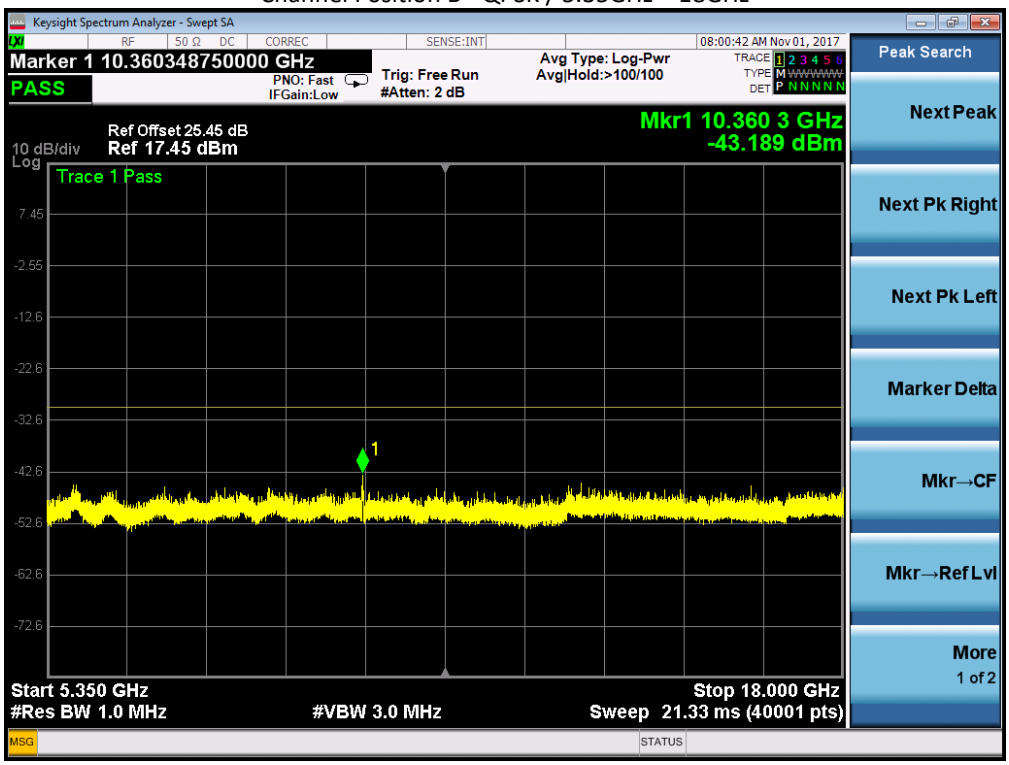
Channel Position	Bandwidth (MHz)	Channel Frequency
B	20.0 MHz	5180MHz
M	20.0 MHz	5220MHz
T	20.0 MHz	5240MHz

Channel Position B - QPSK / 1MHz – 1GHz

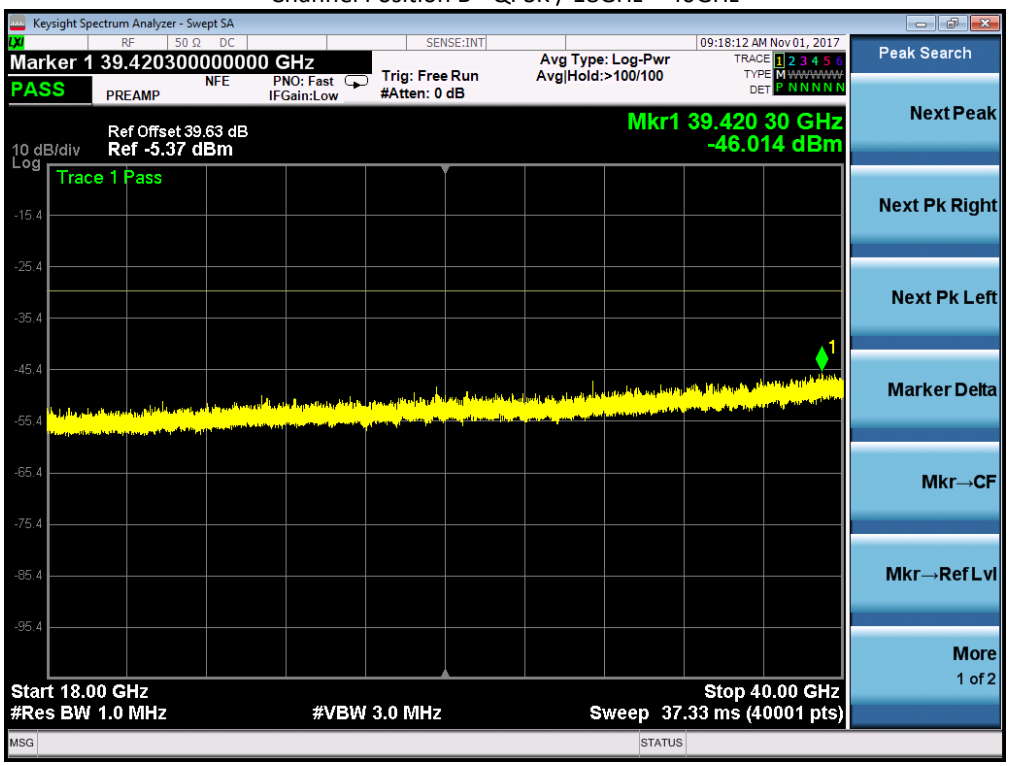


Channel Position B - QPSK / 1GHz – 5.15GHz

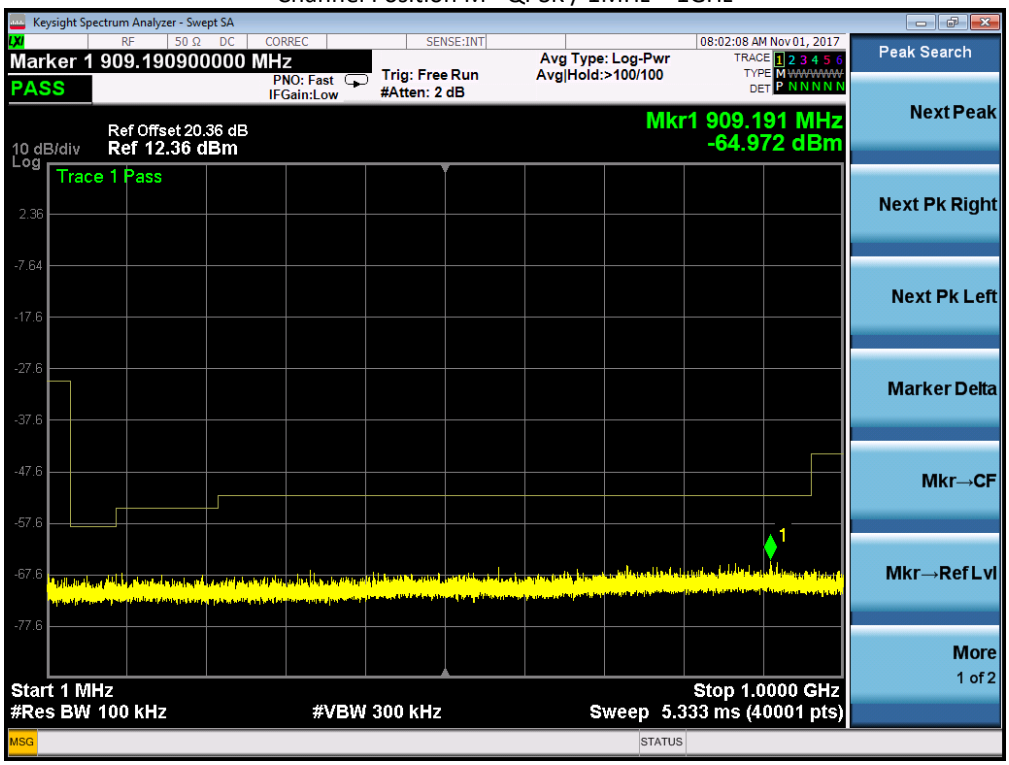
Channel Position B - QPSK / 5.35GHz – 18GHz



Channel Position B - QPSK / 18GHz – 40GHz



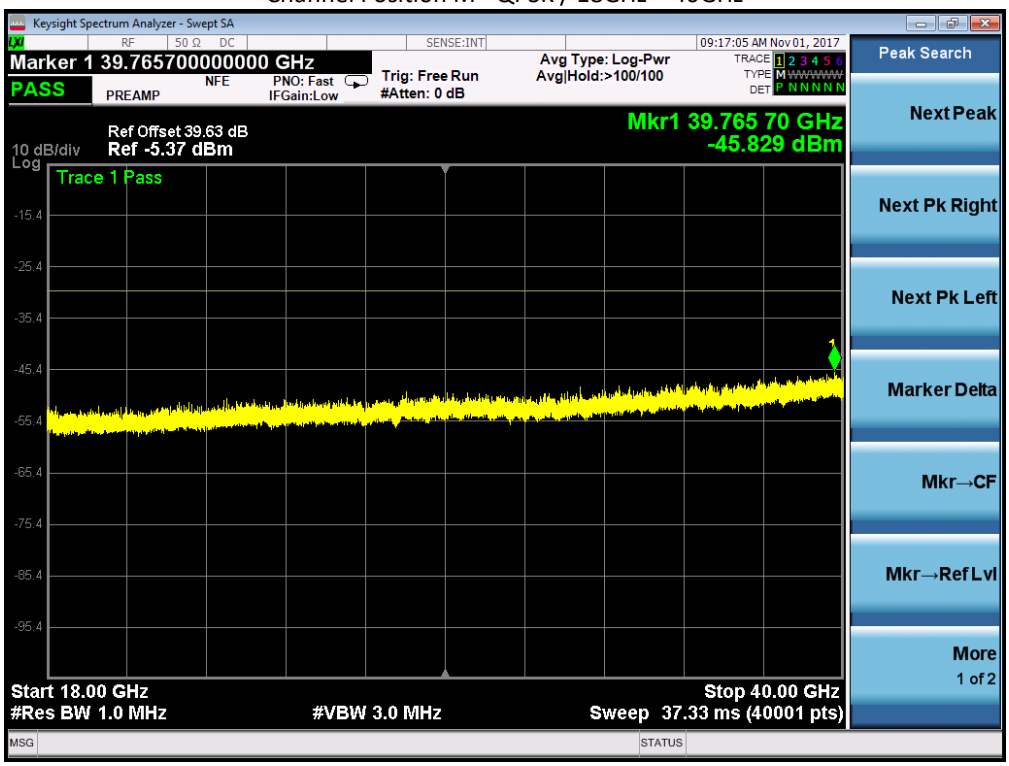
Channel Position M - QPSK / 1MHz – 1GHz



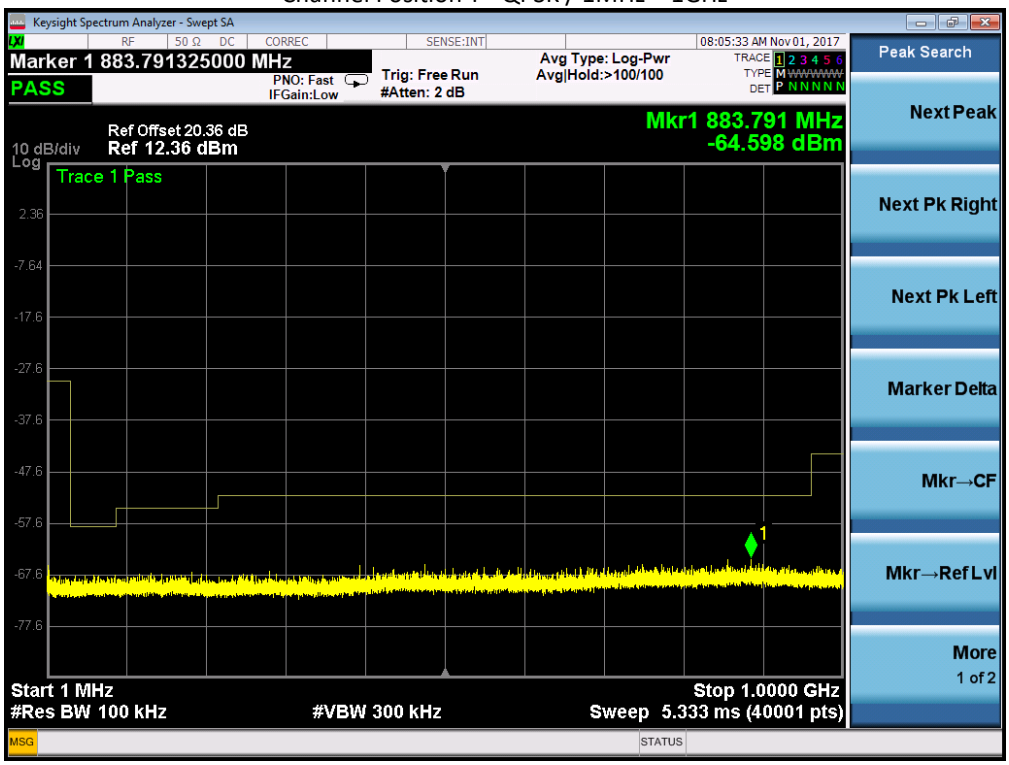
Channel Position M - QPSK / 1GHz – 5.15GHz

Channel Position M - QPSK / 5.35GHz – 18GHz

Channel Position M - QPSK / 18GHz – 40GHz



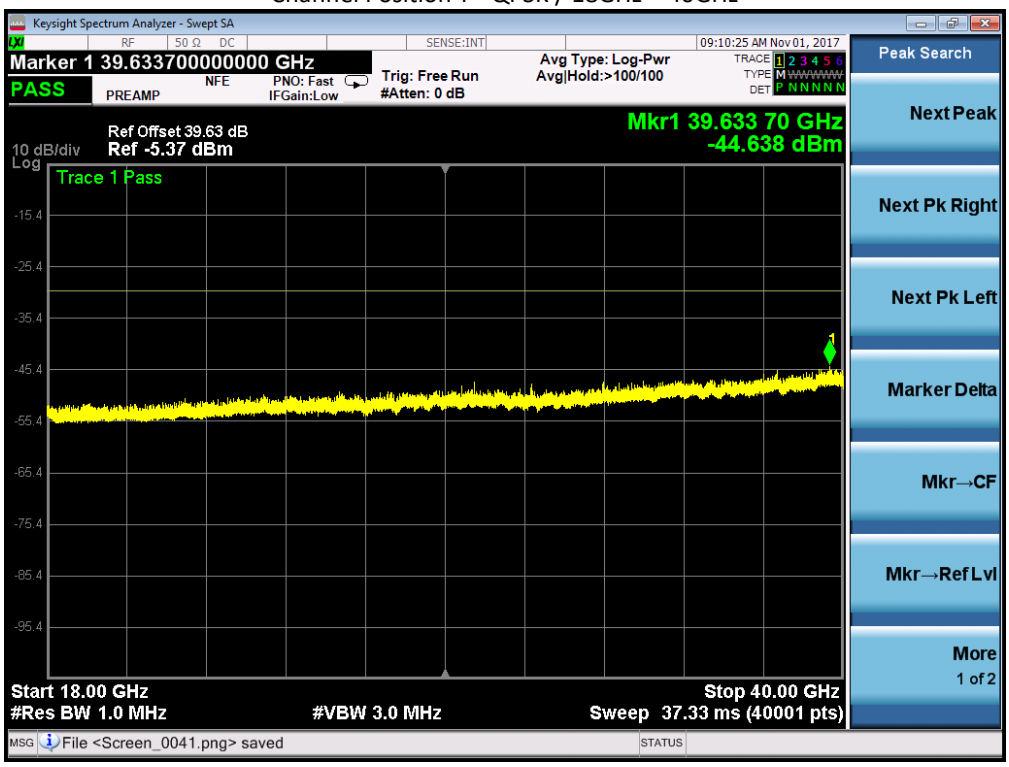
Channel Position T - QPSK / 1MHz – 1GHz



Channel Position T - QPSK / 1GHz – 5.15GHz

Channel Position T - QPSK / 5.35GHz – 18GHz

Channel Position T - QPSK / 18GHz – 40GHz

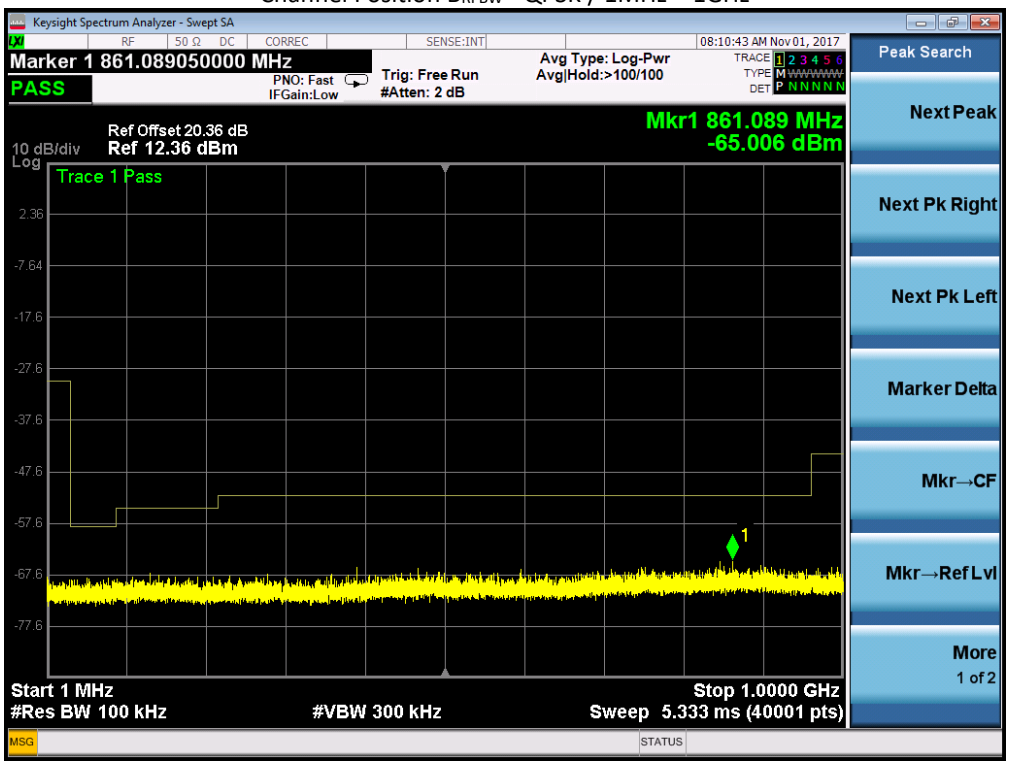


L-MIMO-MC 1 (2C)

Maximum Output Power 12dBm per port:

Channel Position	Bandwidth (MHz)	Channel Frequency
B_{RFBW}	20.0 MHz	5180MHz + 5220MHz
M_{RFBW}	20.0 MHz	-
T_{RFBW}	20.0 MHz	5200MHz + 5240MHz

Channel Position B_{RFBW} - QPSK / 1MHz – 1GHz

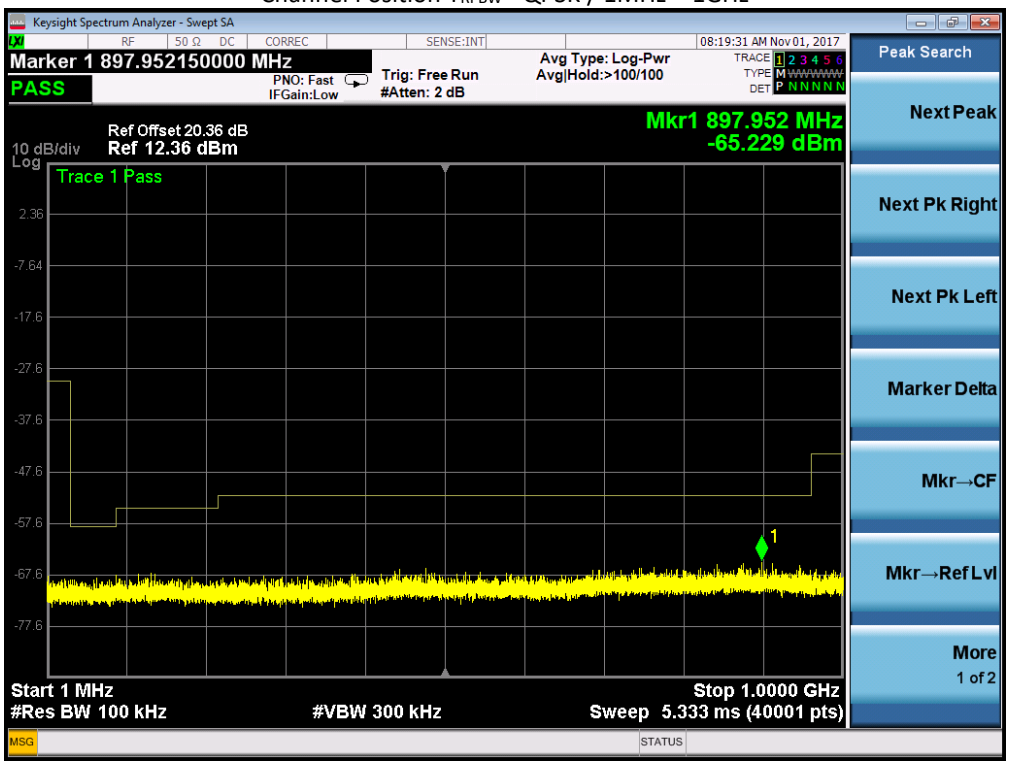


Channel Position B_{RFBW} - QPSK / 1GHz – 5.15GHz

Channel Position B_{RFBW} - QPSK / 5.35GHz – 18GHz

Channel Position B_{RFBW} - QPSK / 18GHz – 40GHz

Channel Position T_{RFBW} - QPSK / 1MHz – 1GHz



Channel Position T_{RFBW} - QPSK / 1GHz – 5.15GHz

Channel Position T_{RFBW} - QPSK / 5.35GHz – 18GHz

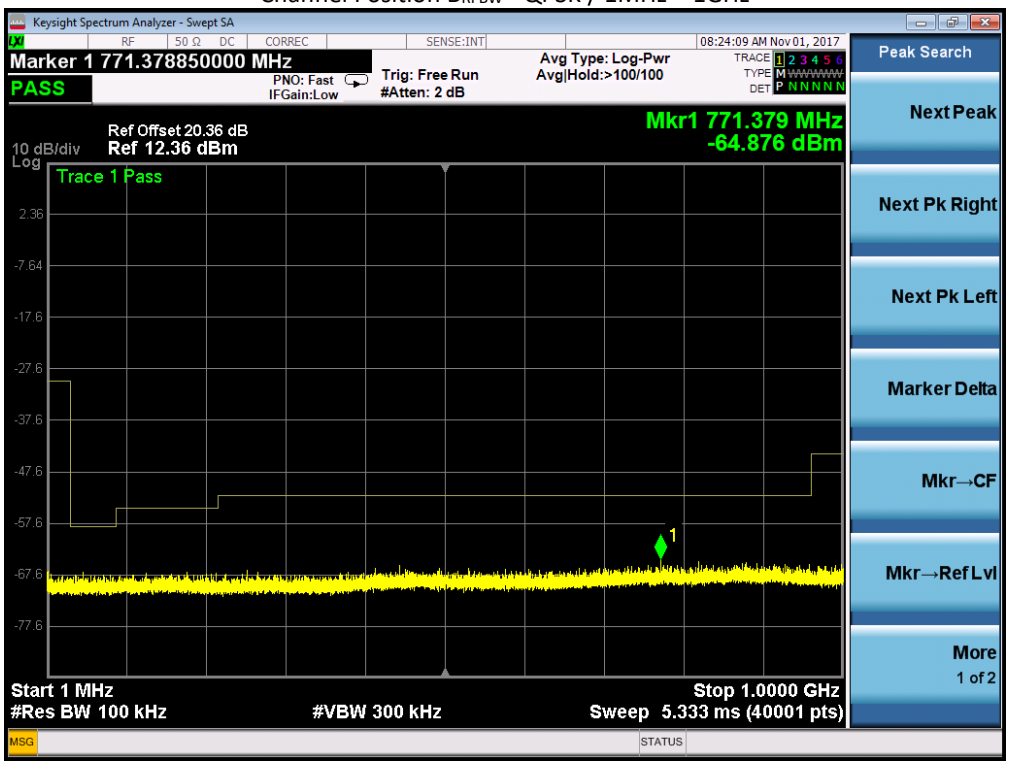
Channel Position T_{RFBW} - QPSK / 18GHz – 40GHz

L-MIMO-MC 2 (3C)

Maximum Output Power 12dBm per port:

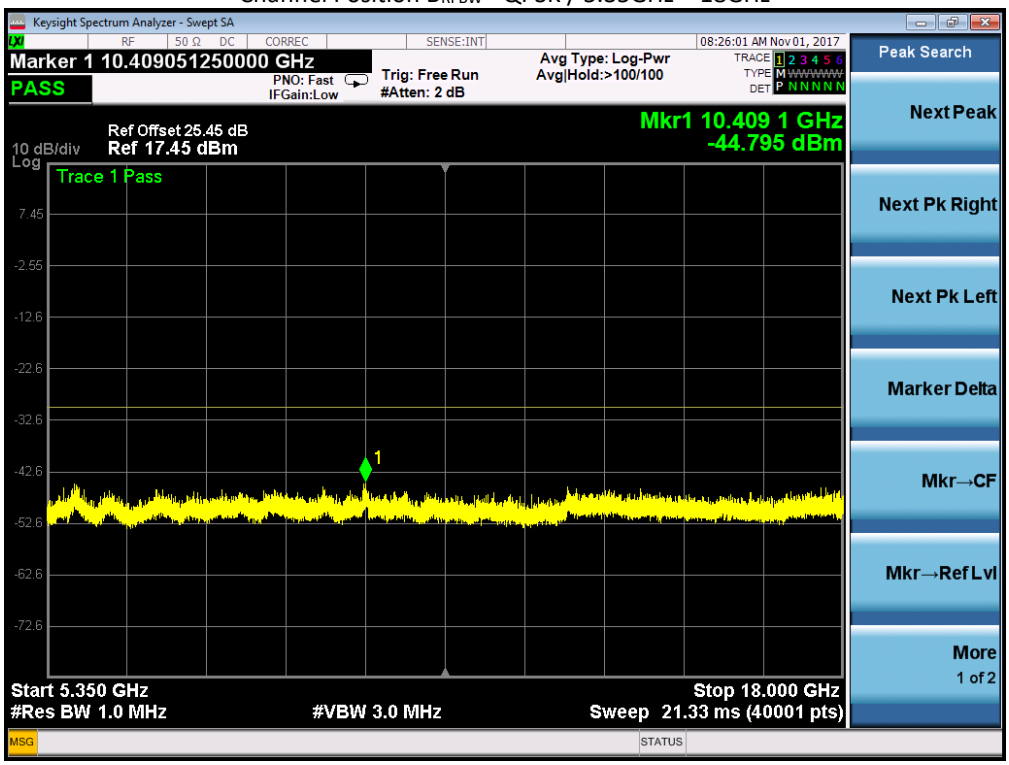
Channel Position	Bandwidth (MHz)	Channel Frequency
B_{RFBW}	20.0 MHz	5180MHz + 5200MHz + 5220MHz
M_{RFBW}	20.0 MHz	-
T_{RFBW}	20.0 MHz	5200MHz + 5220MHz + 5240MHz

Channel Position B_{RFBW} - QPSK / 1MHz – 1GHz

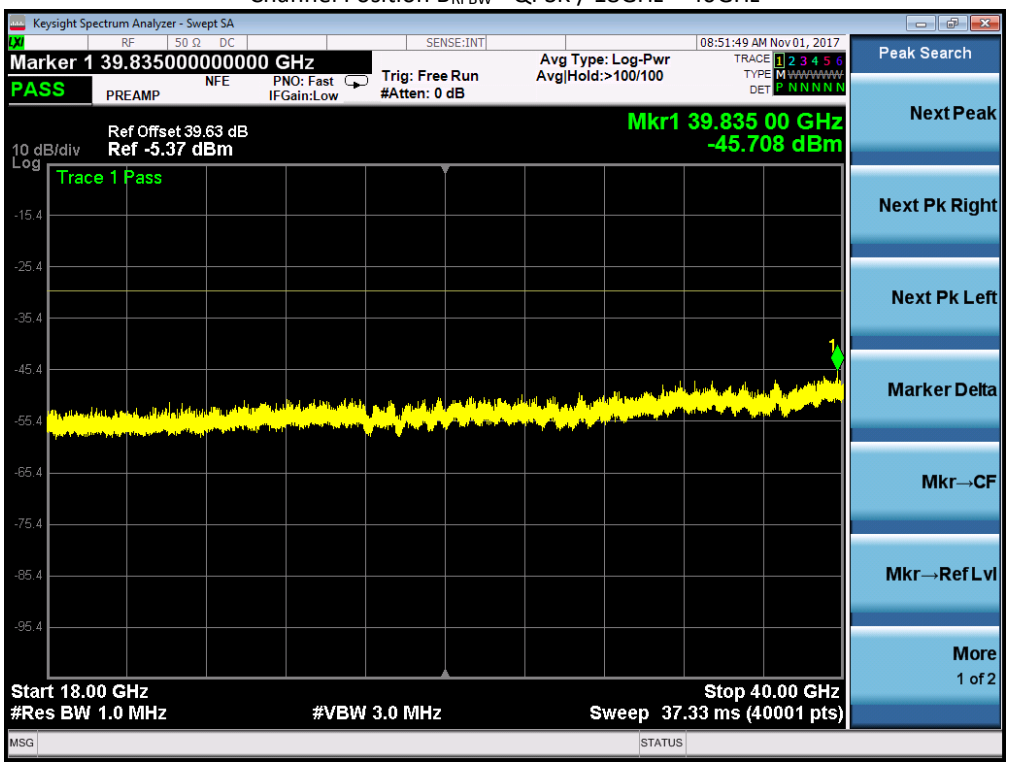


Channel Position B_{RFBW} - QPSK / 1GHz – 5.15GHz

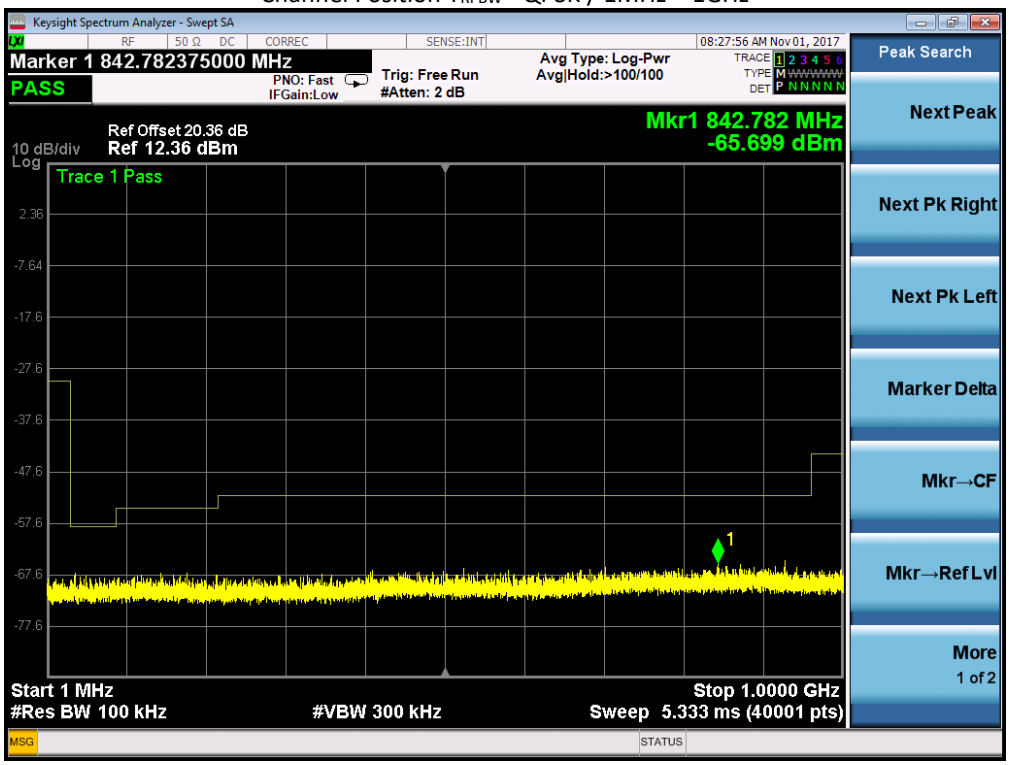
Channel Position B_{RFBW} - QPSK / 5.35GHz – 18GHz



Channel Position B_{RFBW} - QPSK / 18GHz – 40GHz



Channel Position T_{RFBW} - QPSK / 1MHz – 1GHz



Channel Position T_{RFBW} - QPSK / 1GHz – 5.15GHz

Channel Position T_{RFBW} - QPSK / 5.35GHz – 18GHz

Channel Position T_{RFBW} - QPSK / 18GHz – 40GHz

7 Undesirable Emission at Band Edge

Test result: **Pass**

7.1 Limit

For transmitters operating in the 5.15 - 5.25 GHz band: All emissions outside of the 5.15 - 5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.725 - 5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

7.2 Test Method

The test was applied in accordance with the test method requirements of FCC CFR 47 Part 15, Clause 15.407(b) and Clause 15.209, and RSS-247 Clause 6.

In accordance with FCC CFR 47 Part 15, Clause 15.407 (b), and RSS-247 Clause 6, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(1) For transmitters operating in the 5.15 - 5.25 GHz band: All emissions outside of the 5.15 - 5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(2) For transmitters operating in the 5.725 - 5.85 GHz band:
All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

(3) The provisions of § 15.205 apply to intentional radiators operating under this section.

(4) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipment permits.

For 5150 MHz in the restricted band, use the following formula as per Section G (1) of 789033 D02 General UNII Test Procedures v01r04:

E (dBµV/m) = E.I.R.P. (dBm) + 95.2, and the results should comply with peak limit 74 dBµV/m and average limit 54 dBµV/m at 3 meters in accordance with FCC CFR 47 Part 15, Clause 15.209.

For MIMO mode configurations, the limit was adjusted with a correction of -3.01dB [10Log2] by using the Measure and Add 10Log(N) dB technique according to FCC KDB 662911 D01 Multiple Transmitter Output v02r01 accounting for simultaneous transmission from antenna ports RF A and RF B.

The measurements were performed on the output connector RF A. Limited complementary measurement were done at output connector RF B to verify identical performance for both transmitter chains in MIMO mode.

The maximum path loss across the measurement band was used as the reference level offset to ensure worst case.

The worst results are shown in the plots below.

The maximum path loss and duty cycle factor were entered as a reference level offset. The EUT was set to transmit at its maximum rated output power in the configurations described in the tables below. The measurements were made at the bottom and top of the band with all channel bandwidth.

7.3 Test Results

Configuration A1

L-MIMO-SC

Maximum Output Power 20.5dBm per port:

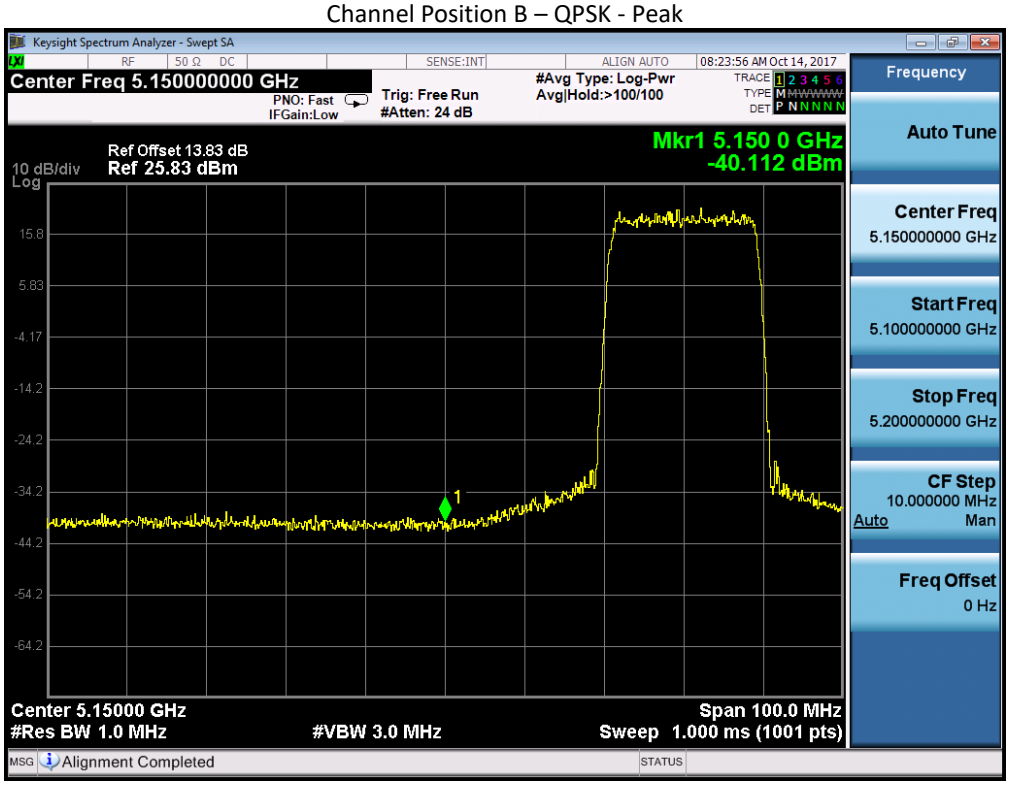
Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5180MHz	1	-30.01
T	20.0 MHz	5240MHz	1	-30.01

Note 1: The channels shown in the table above are the minimum and maximum channels that can be used in the authorized frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be available to the end user.

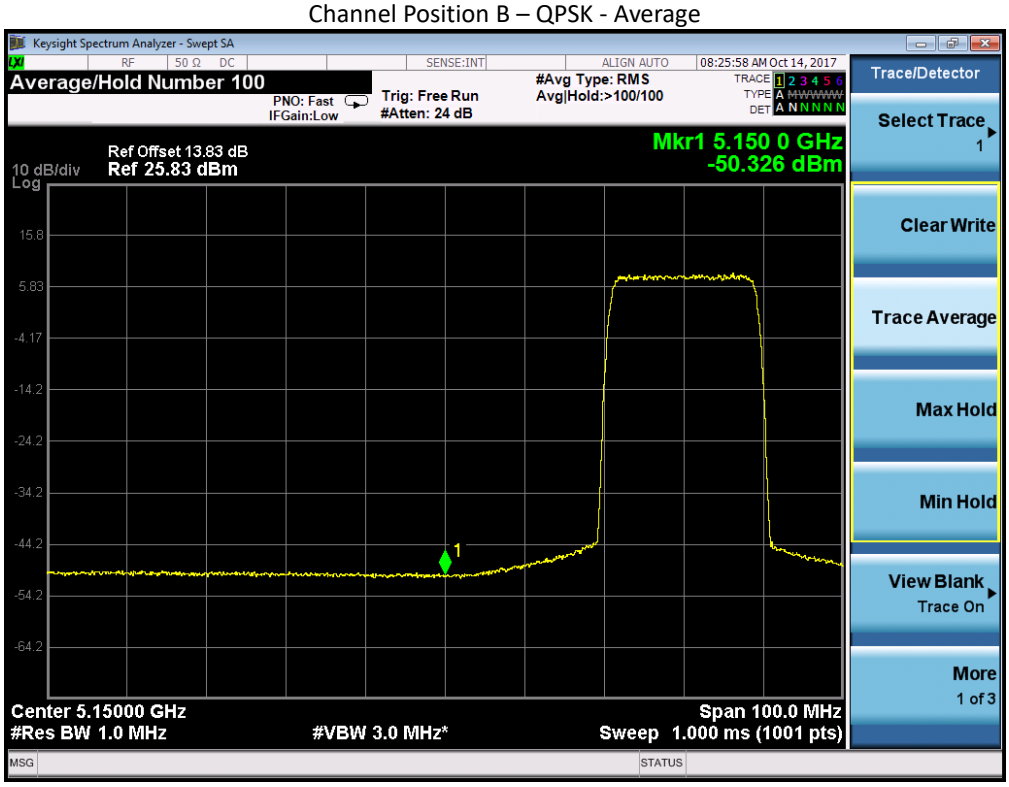
Note 2: 5150 MHz in the restricted band, use the following formula as per Section G (1) of 789033 D02 General UNII Test Procedures v01r04:
E (dBµV/m) = EIRP (dBm) + 95.2 = (measured level dBm + 9.5 dBi antenna gain) + 95.2

Note 3: For MIMO mode configurations, the limit was adjusted with a correction of -3.01dB [10Log(2)] to limits -27 dBm/MHz (Clause 15.407), and peak limits 74 dBµV/m and average limit 54 dBµV/m (Clause 15.209).

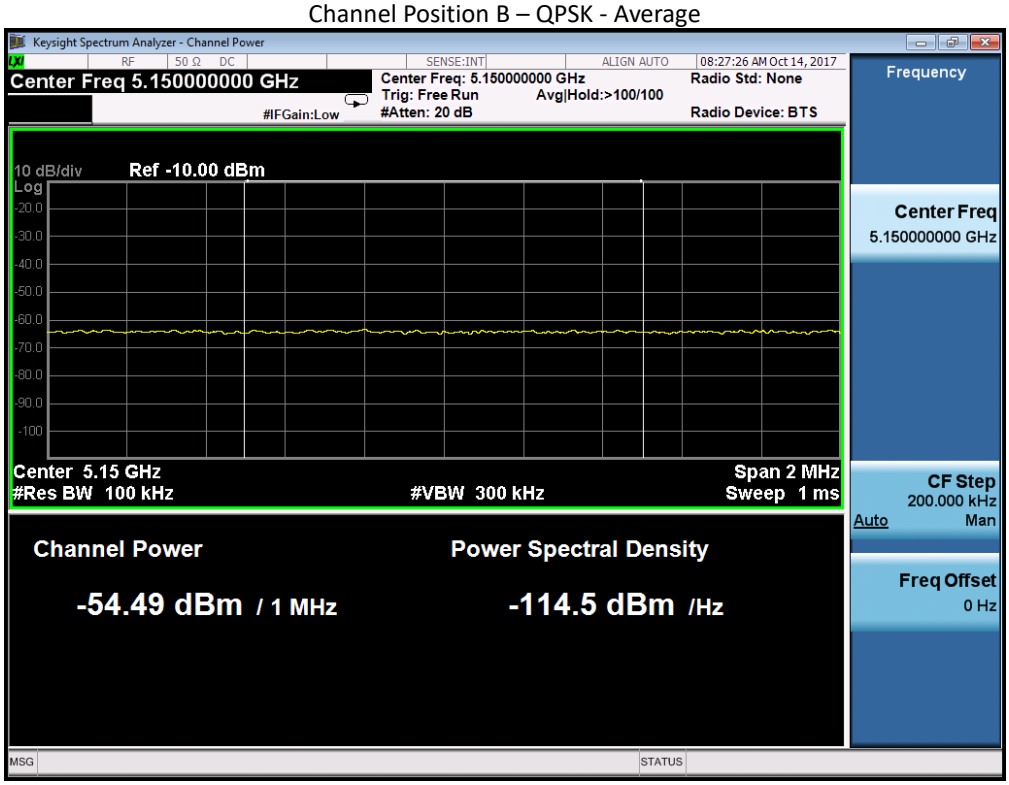
Channel Position B – QPSK - Peak



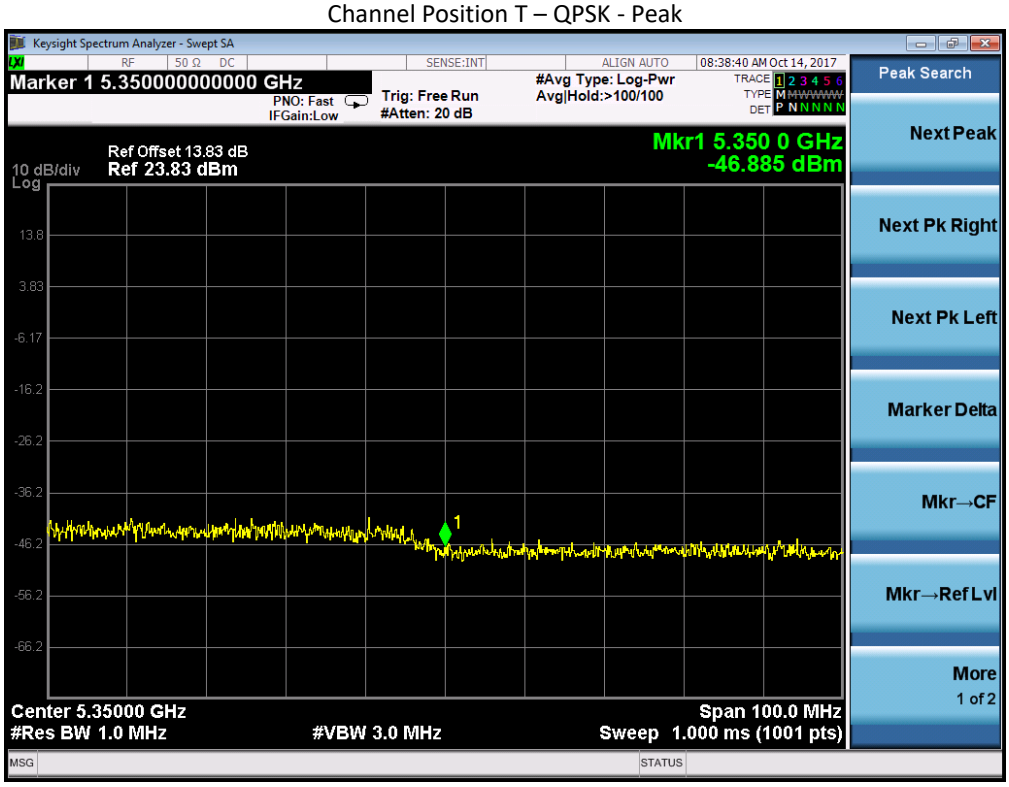
Channel Position B – QPSK - Average



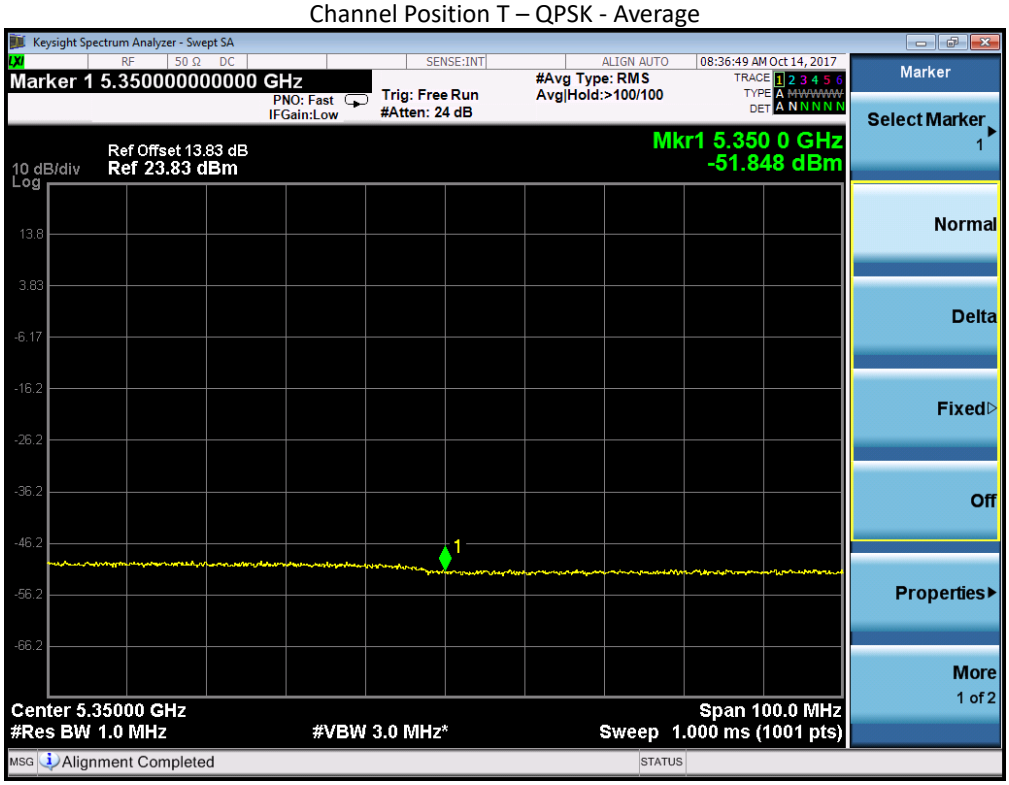
Channel Position B – QPSK - Average



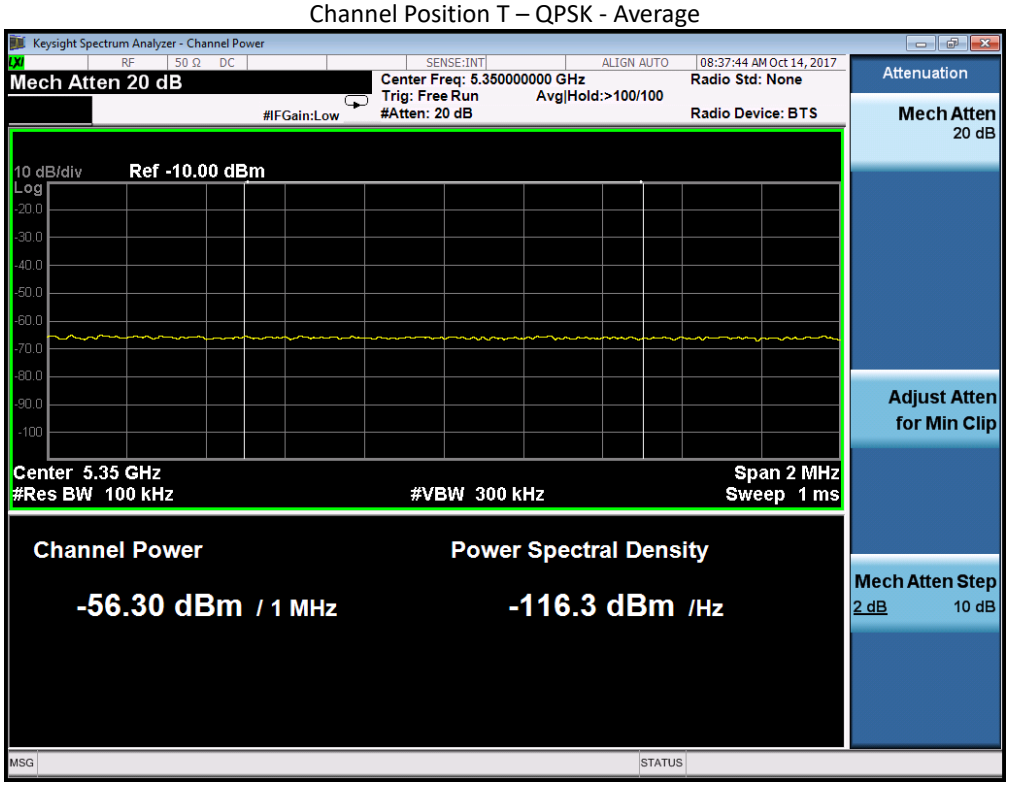
Channel Position T – QPSK - Peak



Channel Position T – QPSK - Average



Channel Position T – QPSK - Average



L-MIMO-MC 1 (2C)

Maximum Output Power 20.5dBm per port:

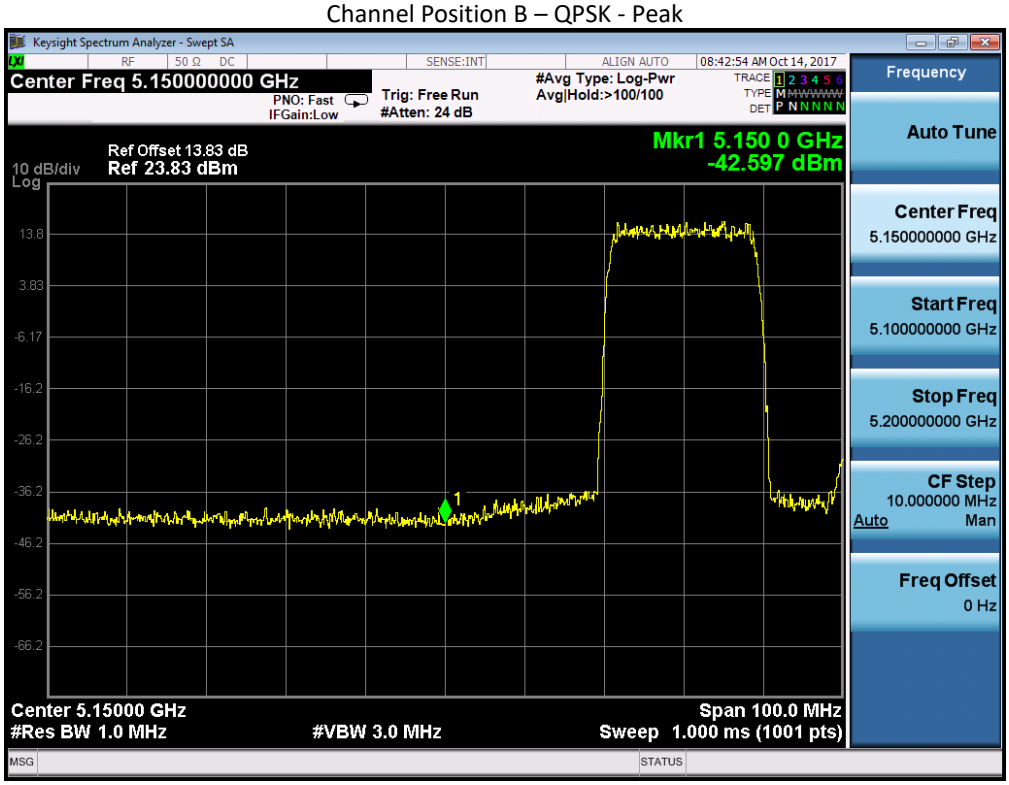
Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5180MHz + 5220MHz	1	-30.01
T	20.0 MHz	5200MHz + 5240MHz	1	-30.01

Note 1: The channels shown in the table above are the minimum and maximum channels that can be used in the authorised frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be available to the end user.

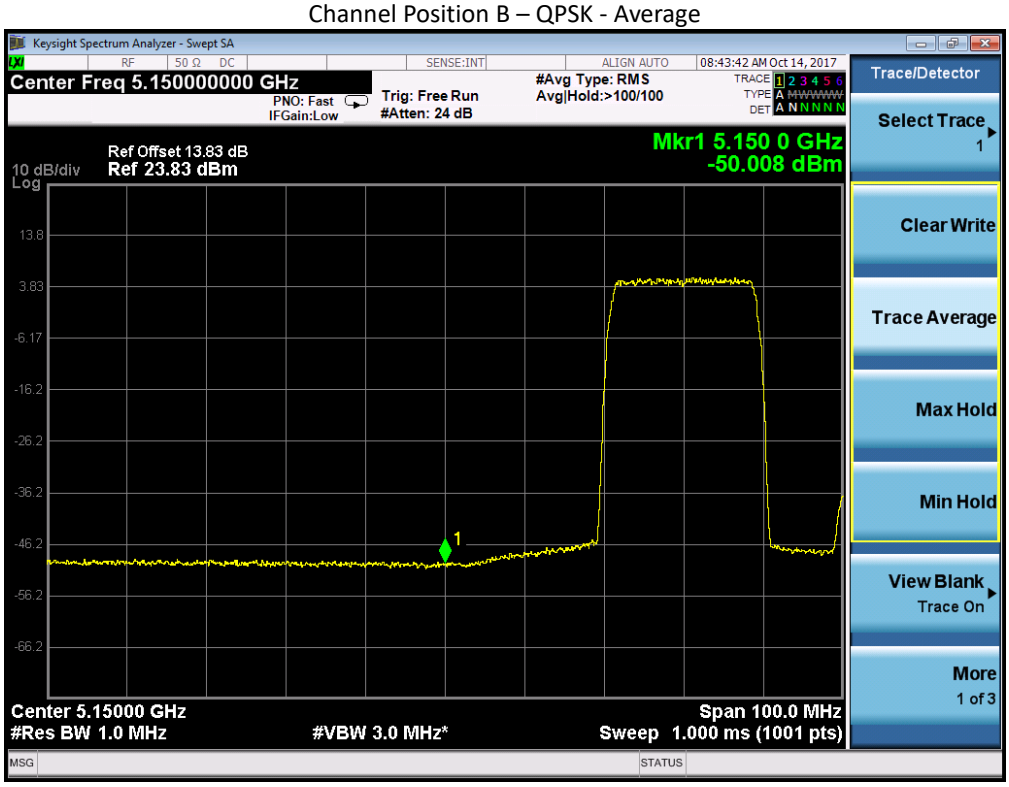
Note 2: 5150 MHz in the restricted band, use the following formula as per Section G (1) of 789033 D02 General UNII Test Procedures v01r04:
E (dBµV/m) = EIRP (dBm) + 95.2 = (measured level dBm + 9.5 dBi antenna gain) + 95.2

Note 3: For MIMO mode configurations, the limit was adjusted with a correction of -3.01dB [10Log(2)] to limits -27 dBm/MHz (Clause 15.407), and peak limits 74 dBµV/m and average limit 54 dBµV/m (Clause 15.209).

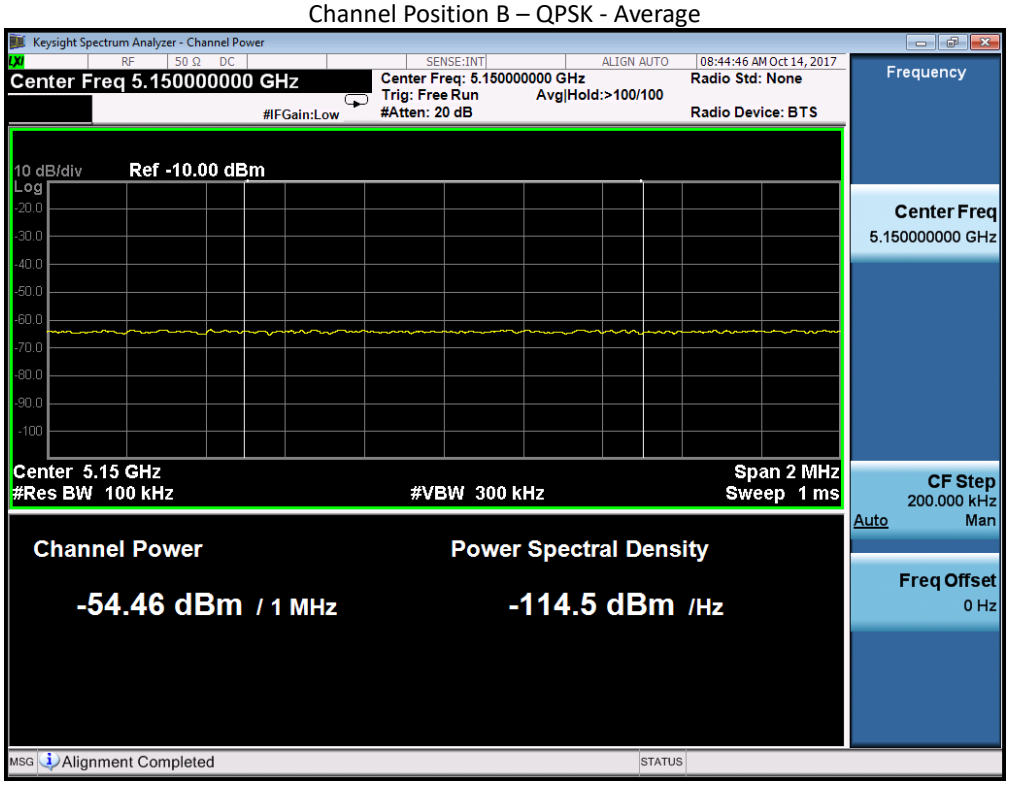
Channel Position B – QPSK - Peak



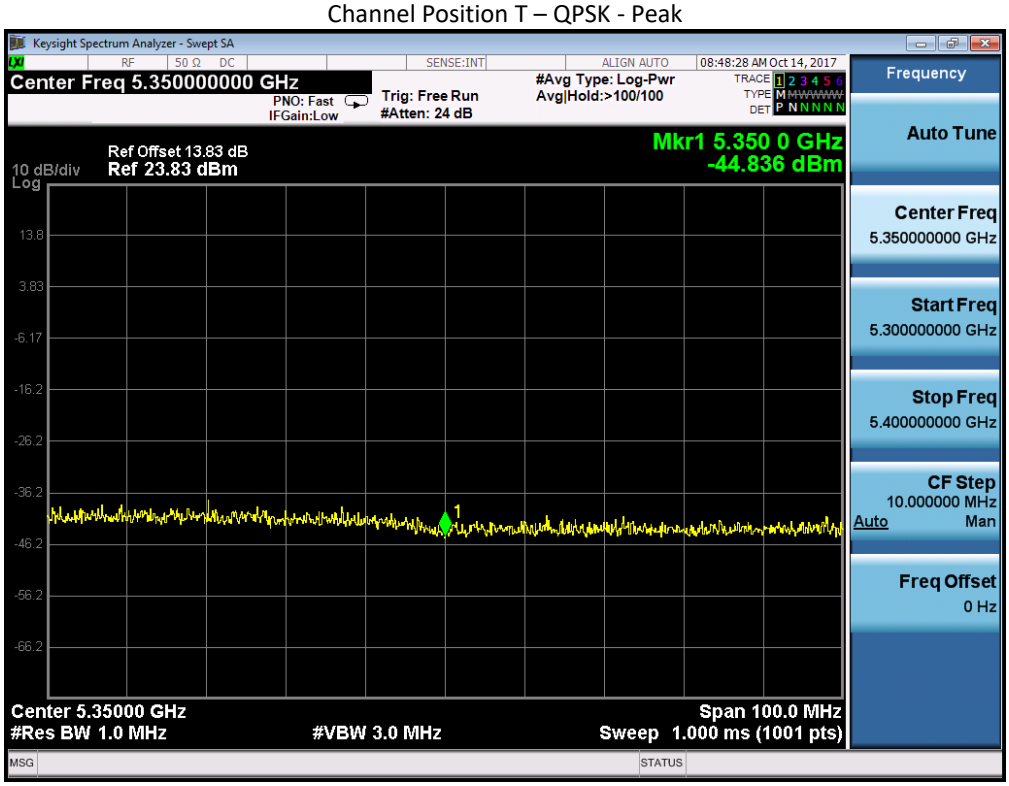
Channel Position B – QPSK - Average



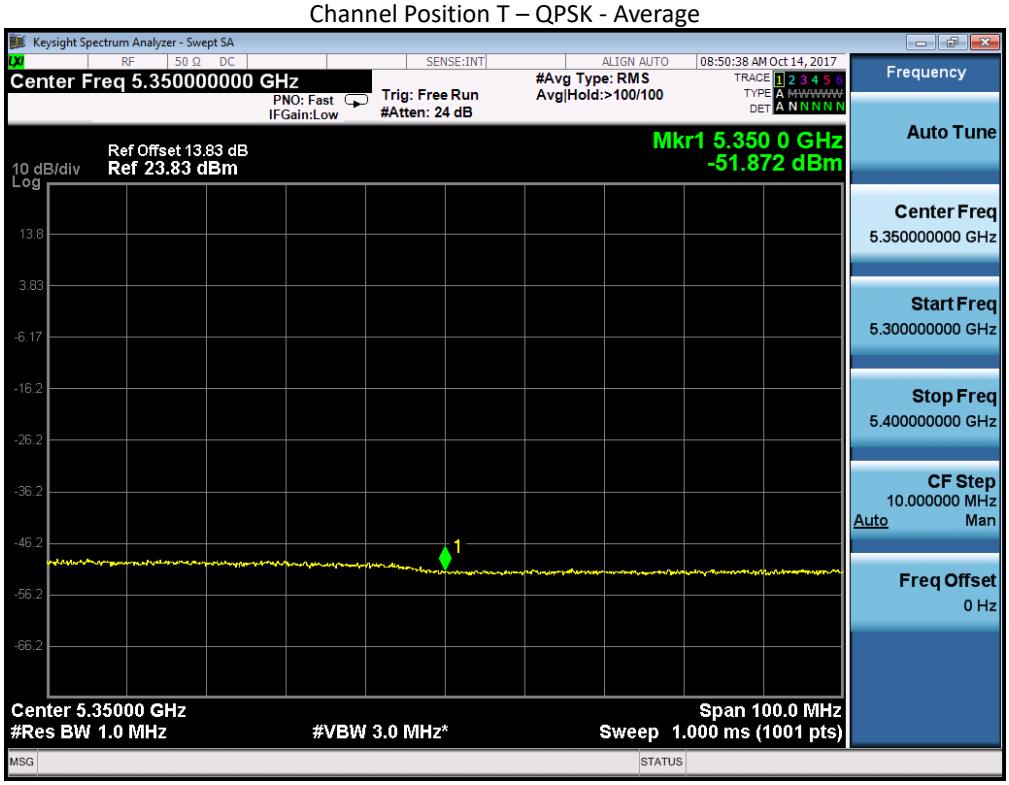
Channel Position B – QPSK - Average



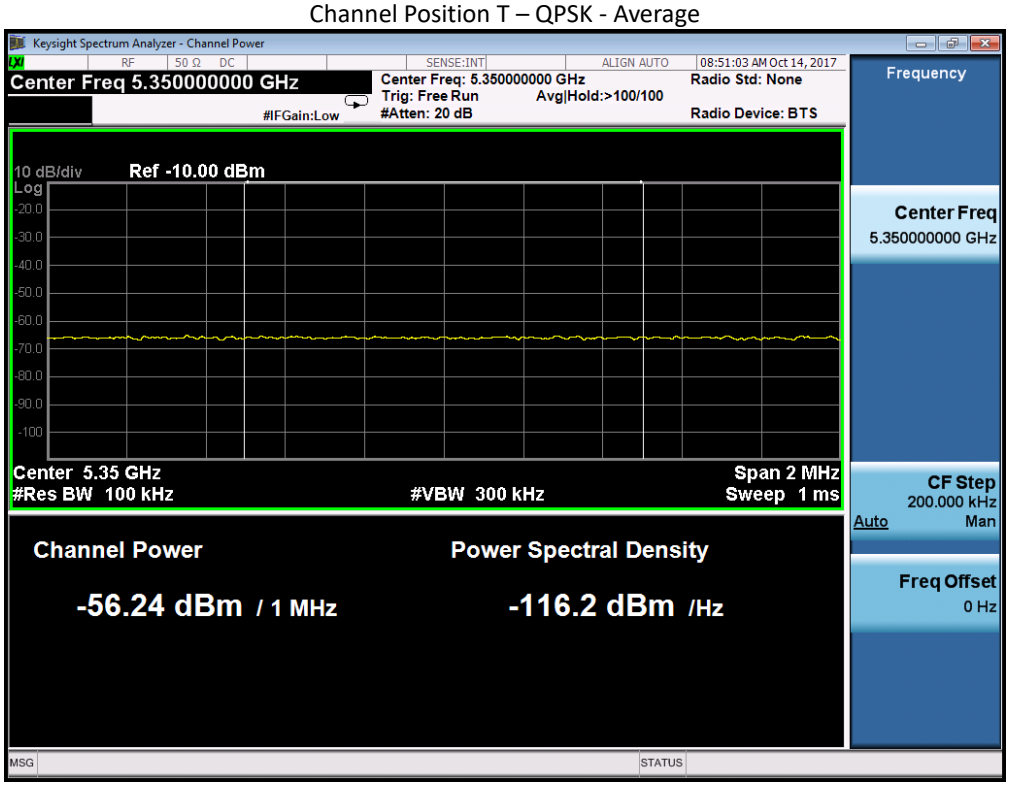
Channel Position T – QPSK - Peak



Channel Position T – QPSK - Average



Channel Position T – QPSK - Average



L-MIMO-MC 2 (3C)

Maximum Output Power 20.5dBm per port:

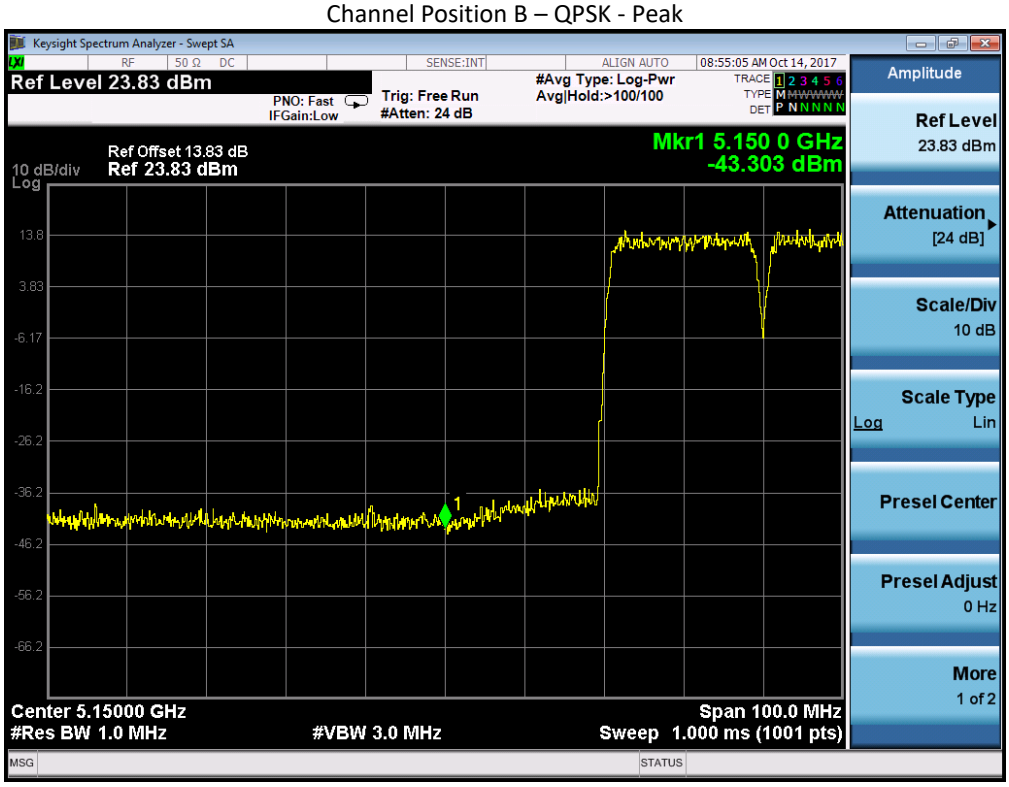
Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5180MHz + 5200MHz + 5220MHz	1	-30.01
T	20.0 MHz	5200MHz + 5220MHz + 5240MHz	1	-30.01

Note 1: The channels shown in the table above are the minimum and maximum channels that can be used in the authorized frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be available to the end user.

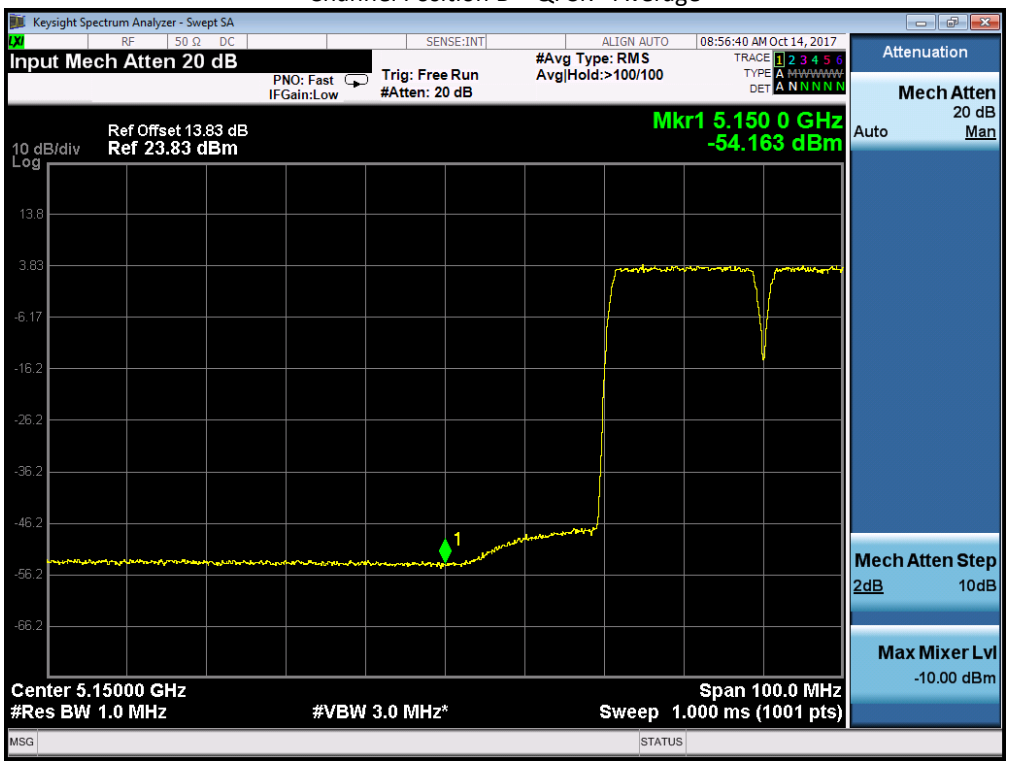
Note 2: 5150 MHz in the restricted band, use the following formula as per Section G (1) of 789033 D02 General UNII Test Procedures v01r04:
E (dBµV/m) = EIRP (dBm) + 95.2 = (measured level dBm + 9.5 dBi antenna gain) + 95.2

Note 3: For MIMO mode configurations, the limit was adjusted with a correction of -3.01dB [10Log(2)] to limits -27 dBm/MHz (Clause 15.407), and peak limits 74 dBµV/m and average limit 54 dBµV/m (Clause 15.209).

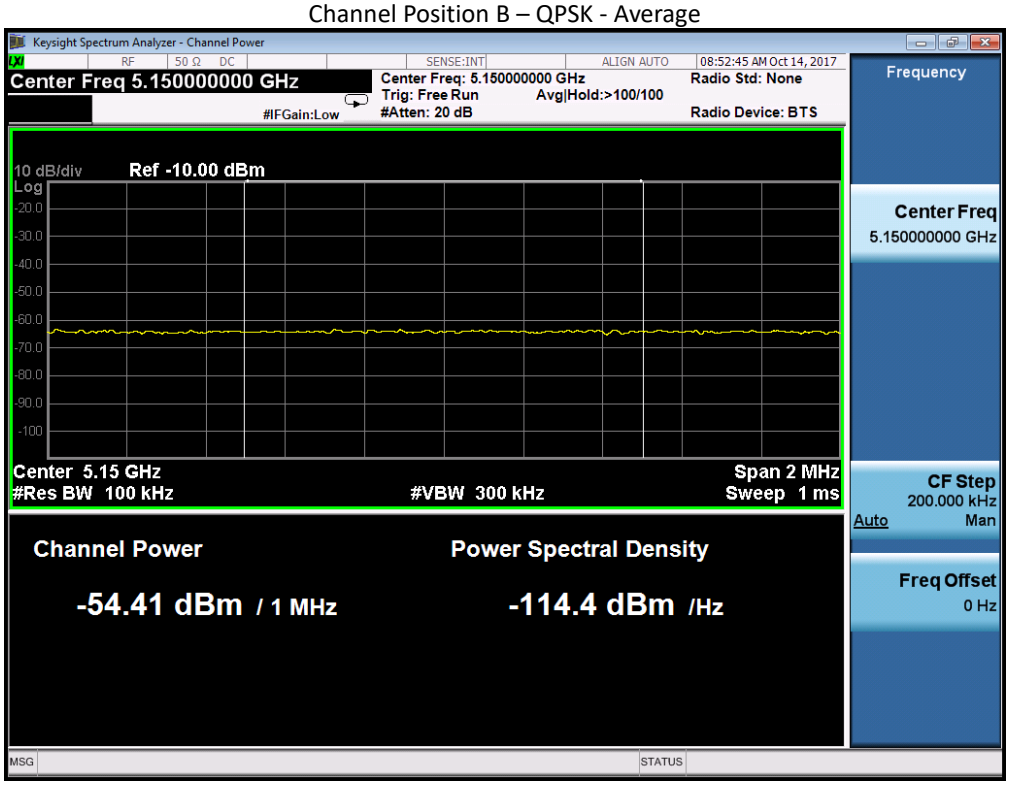
Channel Position B – QPSK - Peak



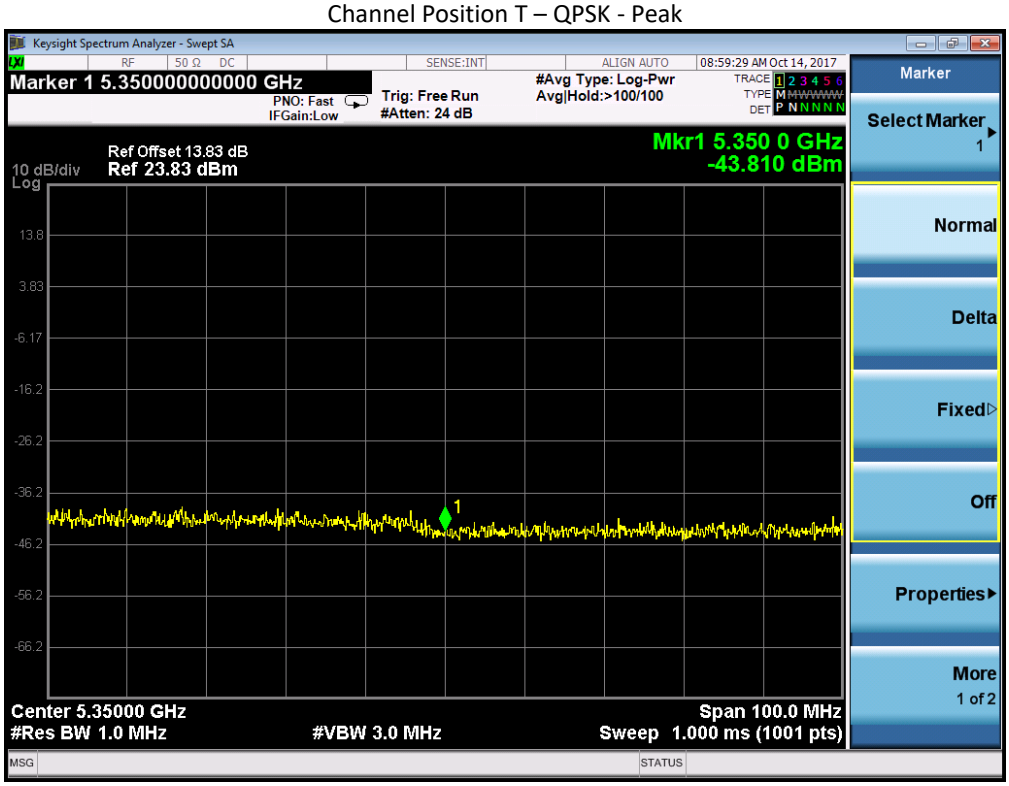
Channel Position B – QPSK - Average



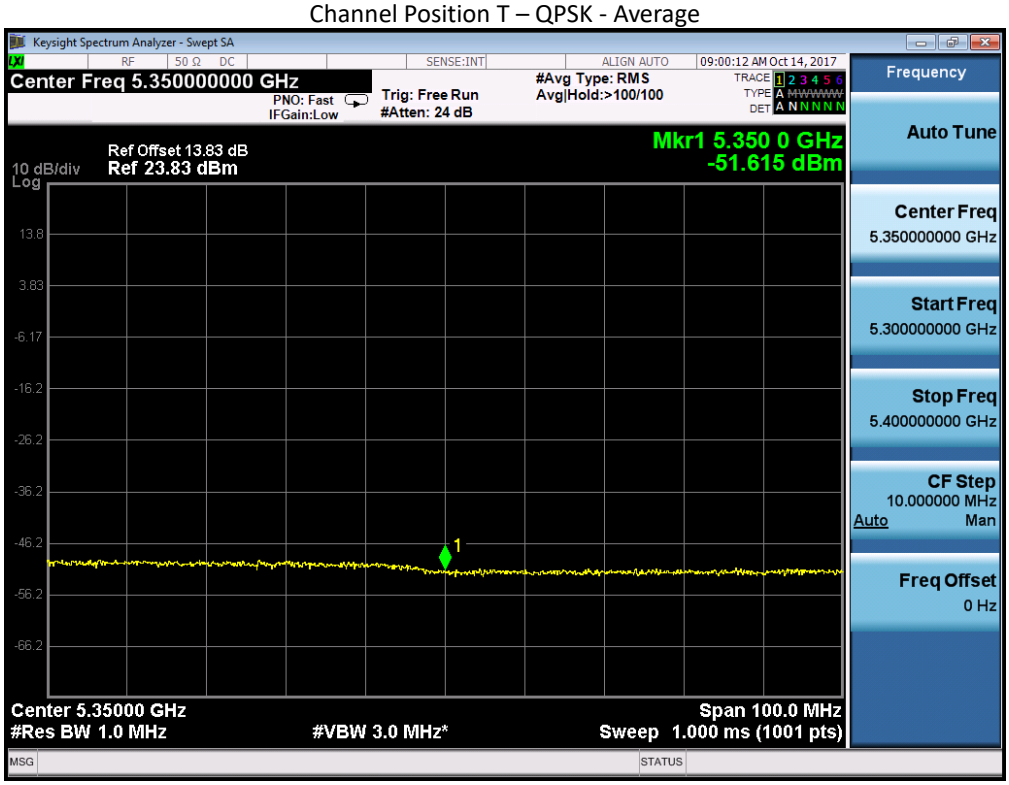
Channel Position B – QPSK - Average



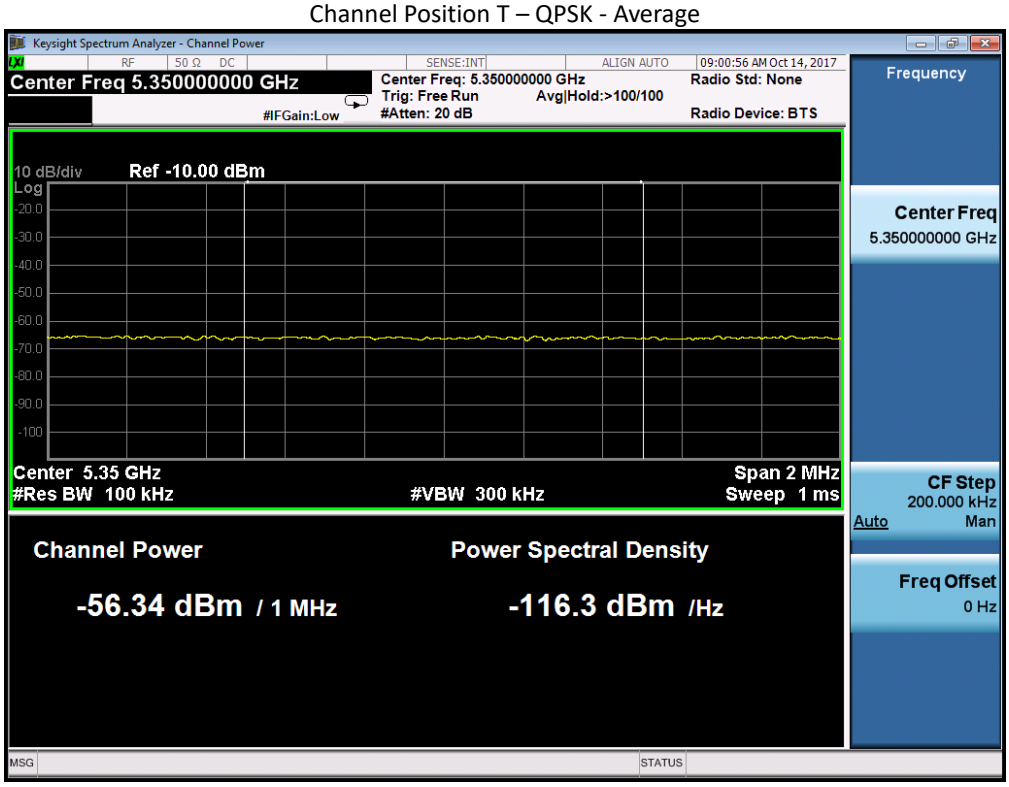
Channel Position T – QPSK - Peak



Channel Position T – QPSK - Average



Channel Position T – QPSK - Average



Configuration A2

L-MIMO-SC

Maximum Output Power 20.5dBm per port:

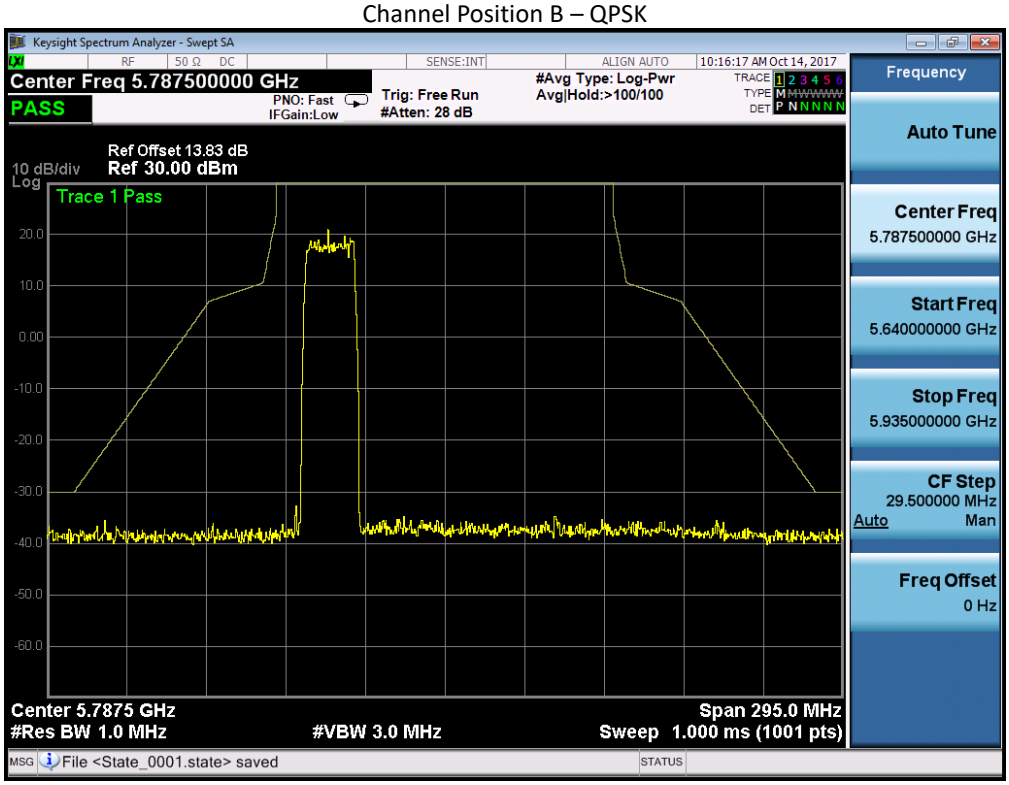
Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5745MHz	1	-30.01
T	20.0 MHz	5825MHz	1	-30.01

Note 1: The channels shown in the table above are the minimum and maximum channels that can be used in the authorized frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be available to the end user.

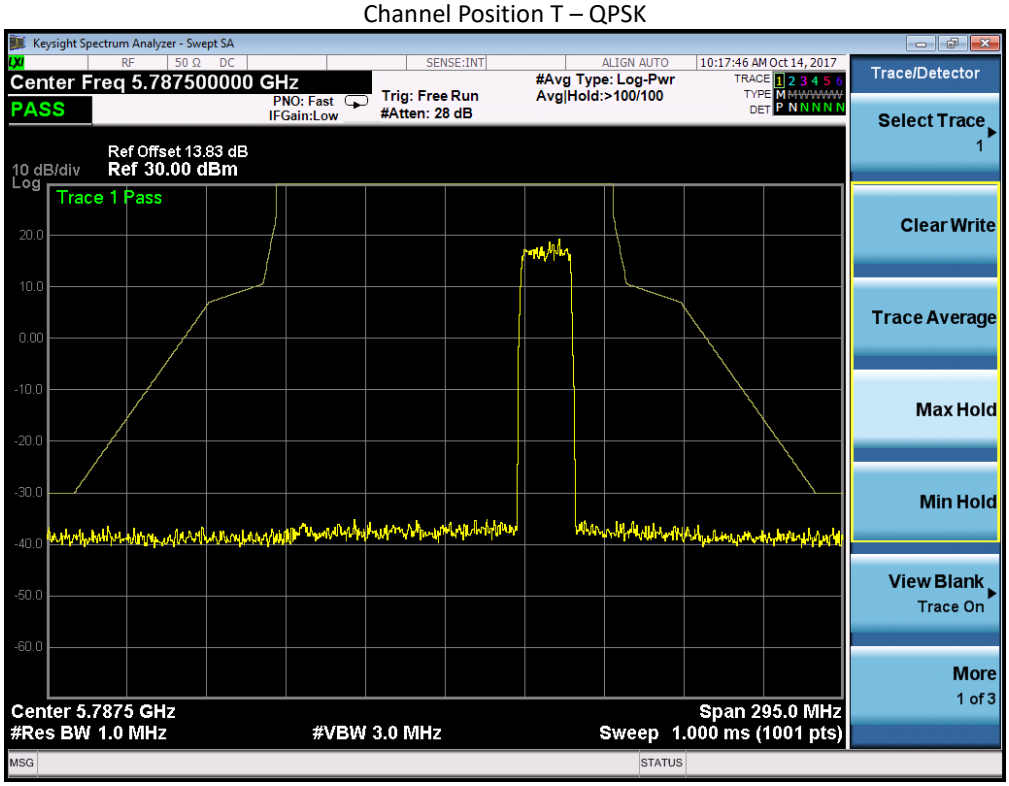
Note 2: For MIMO mode configurations, the limit was adjusted with a correction of -3.01dB [10Log(2)] to the following limit:

All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Channel Position B – QPSK



Channel Position T – QPSK



L-MIMO-MC 1 (2C)

Maximum Output Power 20.5dBm per port:

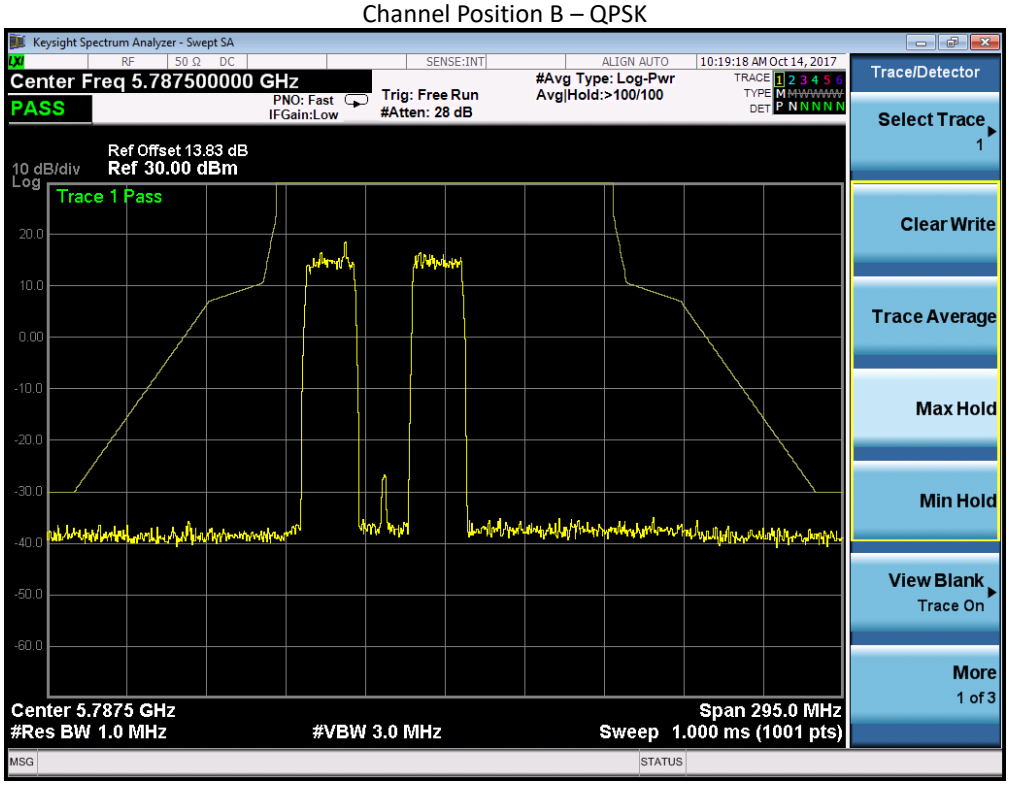
Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5785MHz + 5825MHz	1	-30.01
T	20.0 MHz	5785MHz + 5825MHz	1	-30.01

Note 1: The channels shown in the table above are the minimum and maximum channels that can be used in the authorized frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be available to the end user.

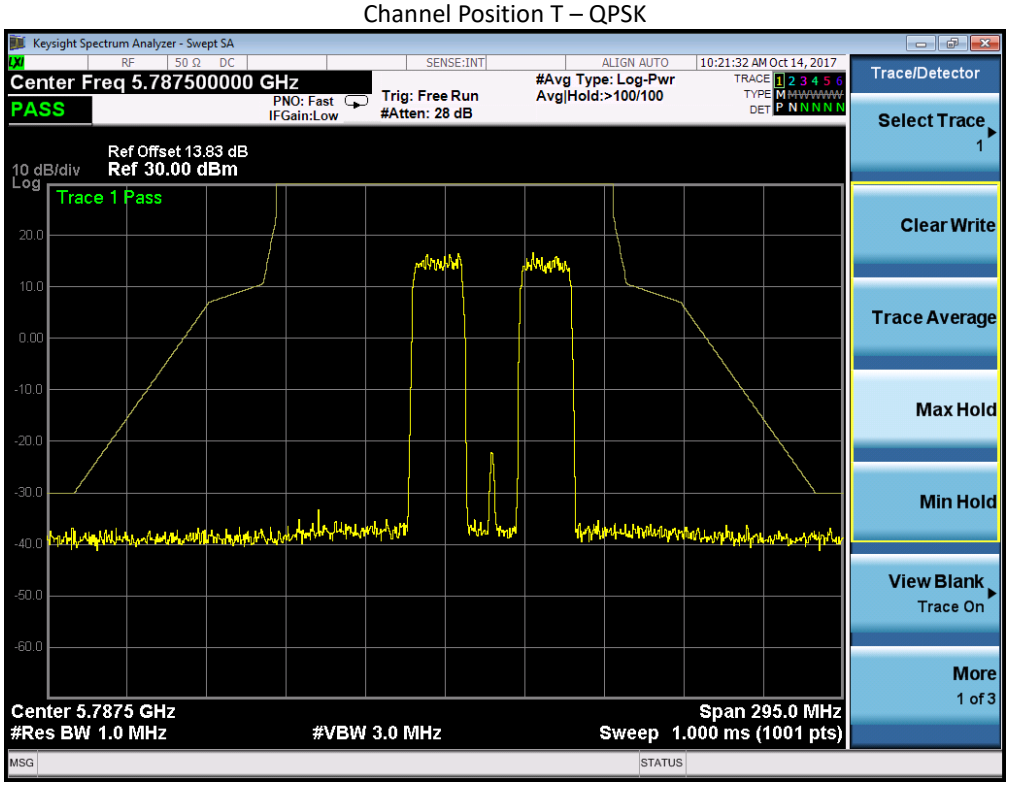
Note 2: For MIMO mode configurations, the limit was adjusted with a correction of -3.01dB [10Log(2)] to the following limit:

All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Channel Position B – QPSK



Channel Position T – QPSK



L-MIMO-MC 2 (3C)

Maximum Output Power 20.5dBm per port:

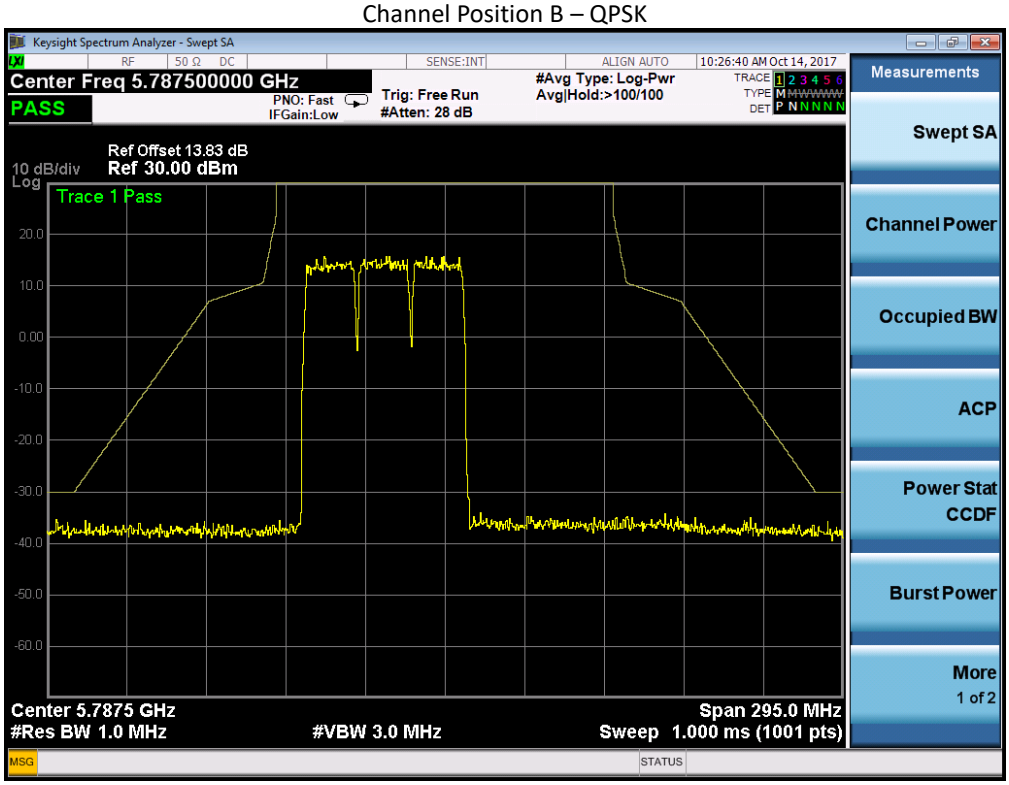
Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5745MHz + 5765MHz + 57850MHz	1	-30.01
T	20.0 MHz	5785MHz + 5805MHz + 5825MHz	1	-30.01

Note 1: The channels shown in the table above are the minimum and maximum channels that can be used in the authorized frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be available to the end user.

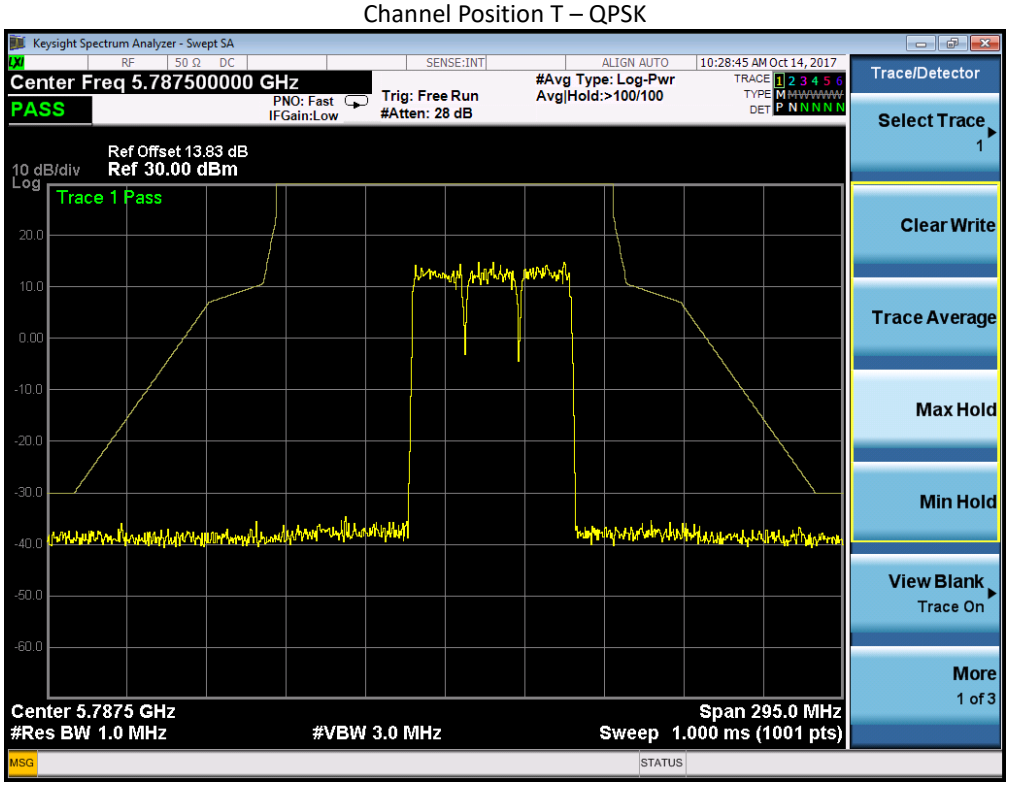
Note 2: For MIMO mode configurations, the limit was adjusted with a correction of -3.01dB [10Log(2)] to the following limit:

All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Channel Position B – QPSK



Channel Position T – QPSK



Configuration A3

L-MIMO-SC

Maximum Output Power 8.5dBm per port:

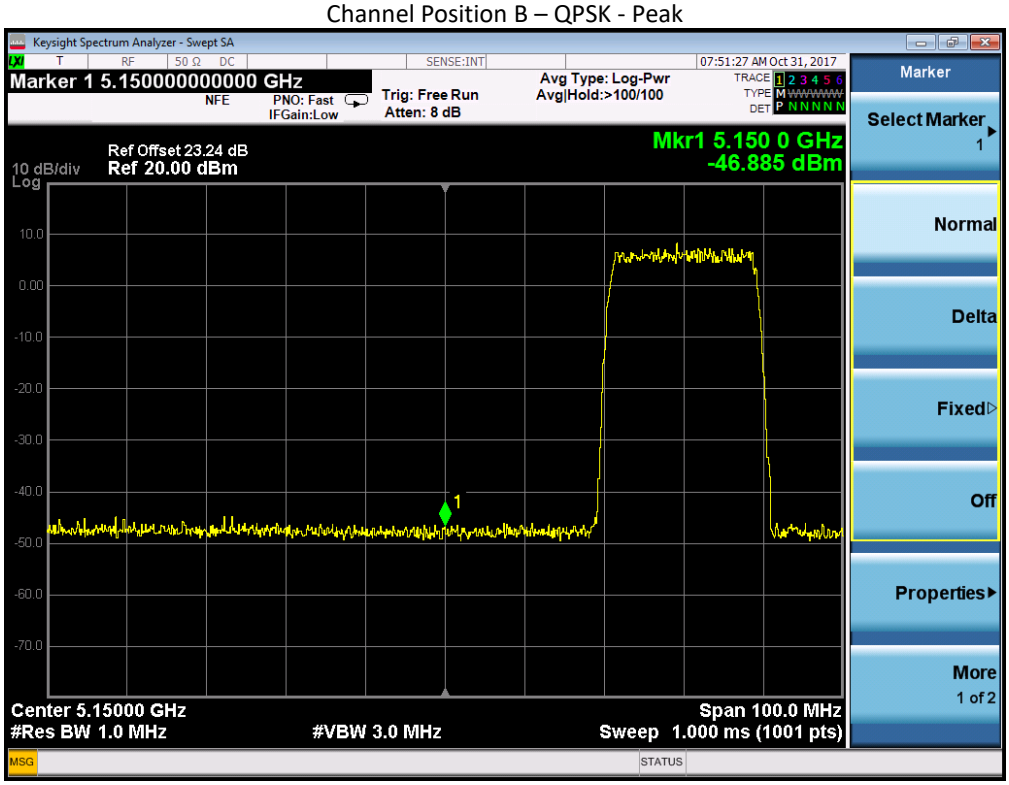
Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5180MHz	1	-30.01
T	20.0 MHz	5240MHz	1	-30.01

Note 1: The channels shown in the table above are the minimum and maximum channels that can be used in the authorized frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be available to the end user.

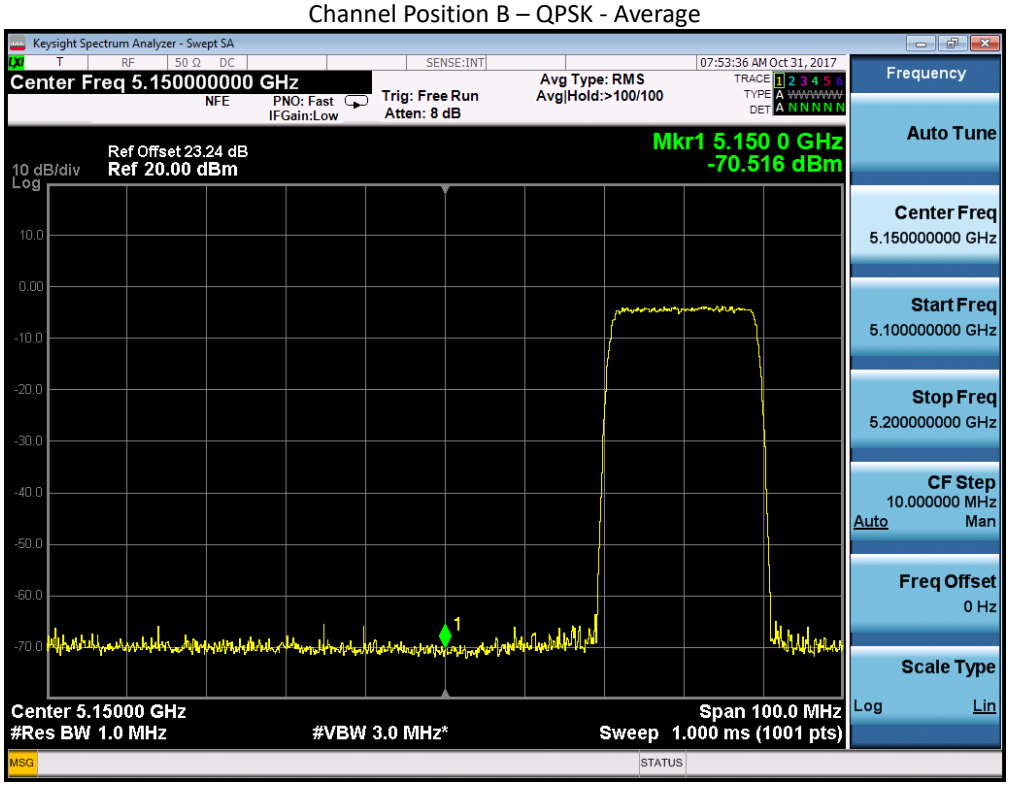
Note 2: 5150 MHz in the restricted band, use the following formula as per Section G (1) of 789033 D02 General UNII Test Procedures v01r04:
E (dBµV/m) = EIRP (dBm) + 95.2 = (measured level dBm + 9.5 dBi antenna gain) + 95.2

Note 3: For MIMO mode configurations, the limit was adjusted with a correction of -3.01dB [10Log(2)] to limits -27 dBm/MHz (Clause 15.407), and peak limits 74 dBµV/m and average limit 54 dBµV/m (Clause 15.209).

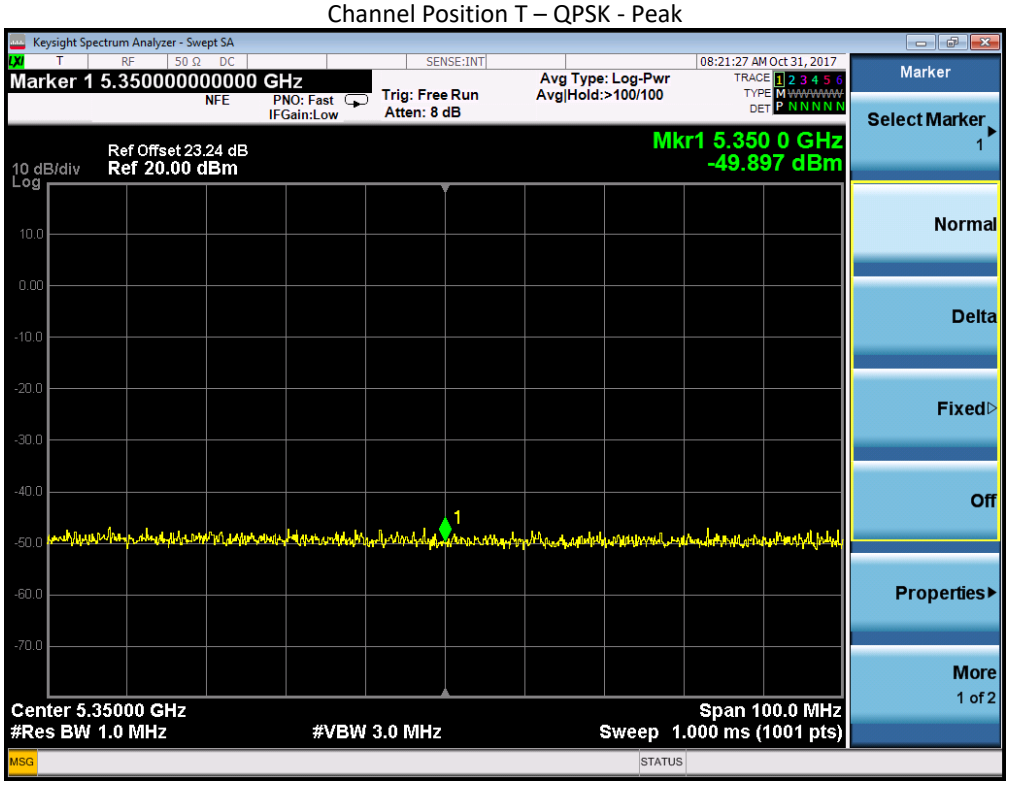
Channel Position B – QPSK - Peak



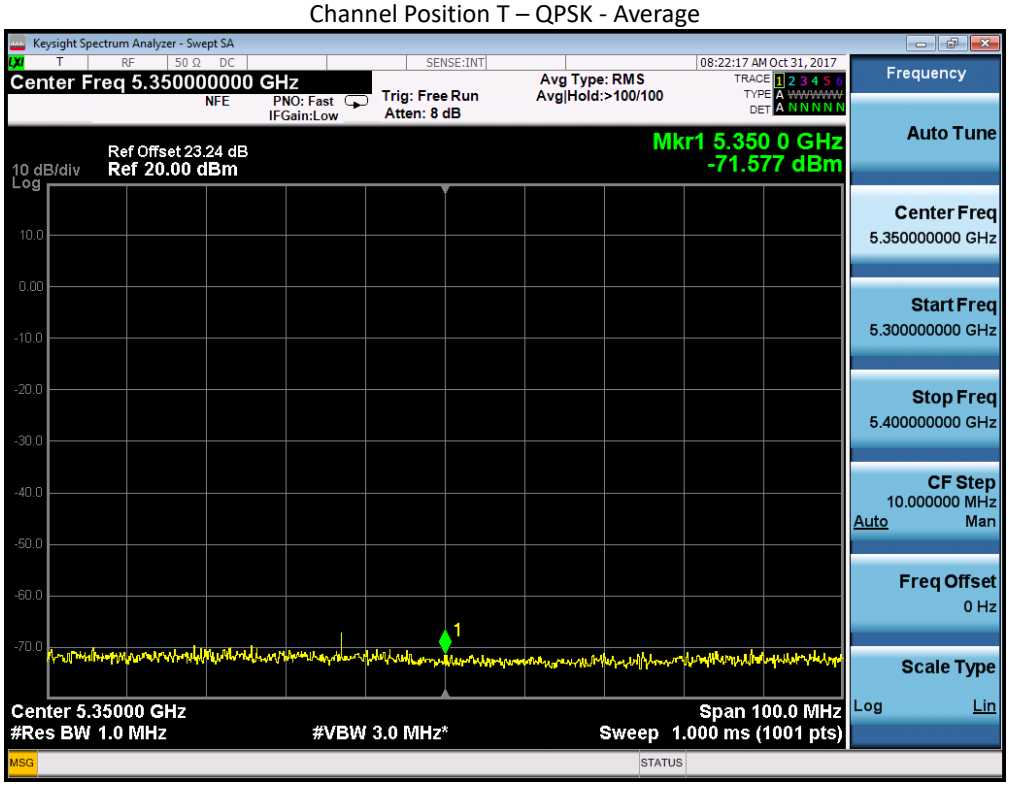
Channel Position B – QPSK - Average



Channel Position T – QPSK - Peak



Channel Position T – QPSK - Average



L-MIMO-MC 1 (2C)

Maximum Output Power 8.5dBm per port:

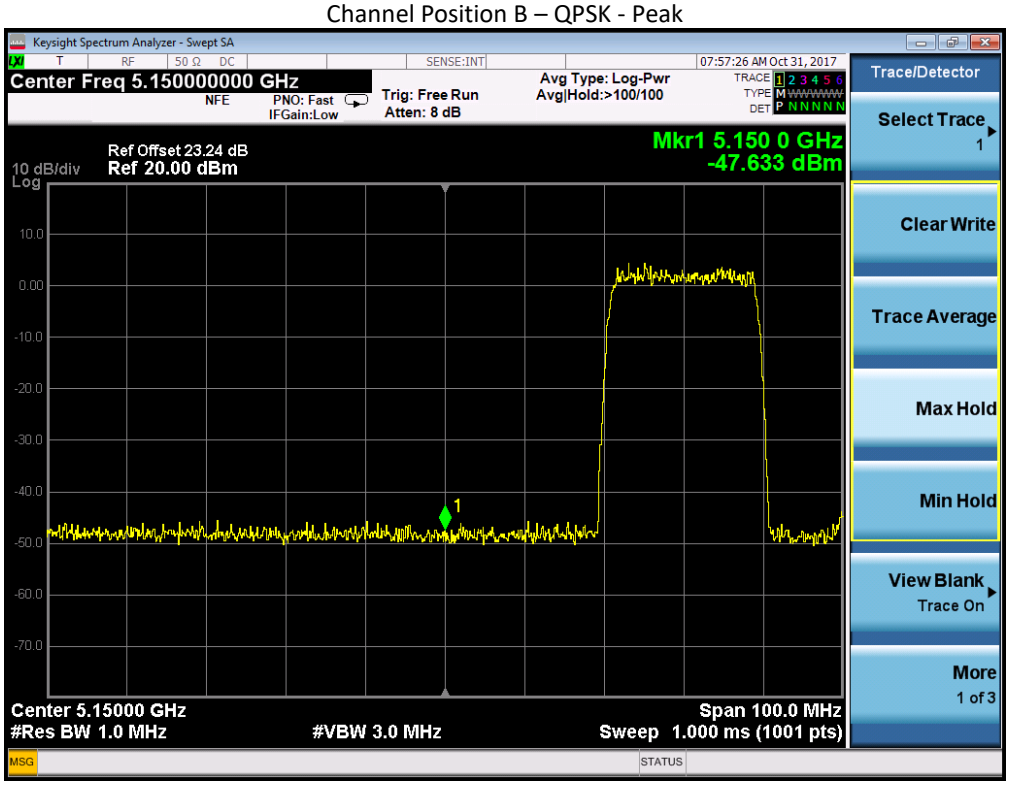
Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5180MHz + 5220MHz	1	-30.01
T	20.0 MHz	5200MHz + 5240MHz	1	-30.01

Note 1: The channels shown in the table above are the minimum and maximum channels that can be used in the authorized frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be available to the end user.

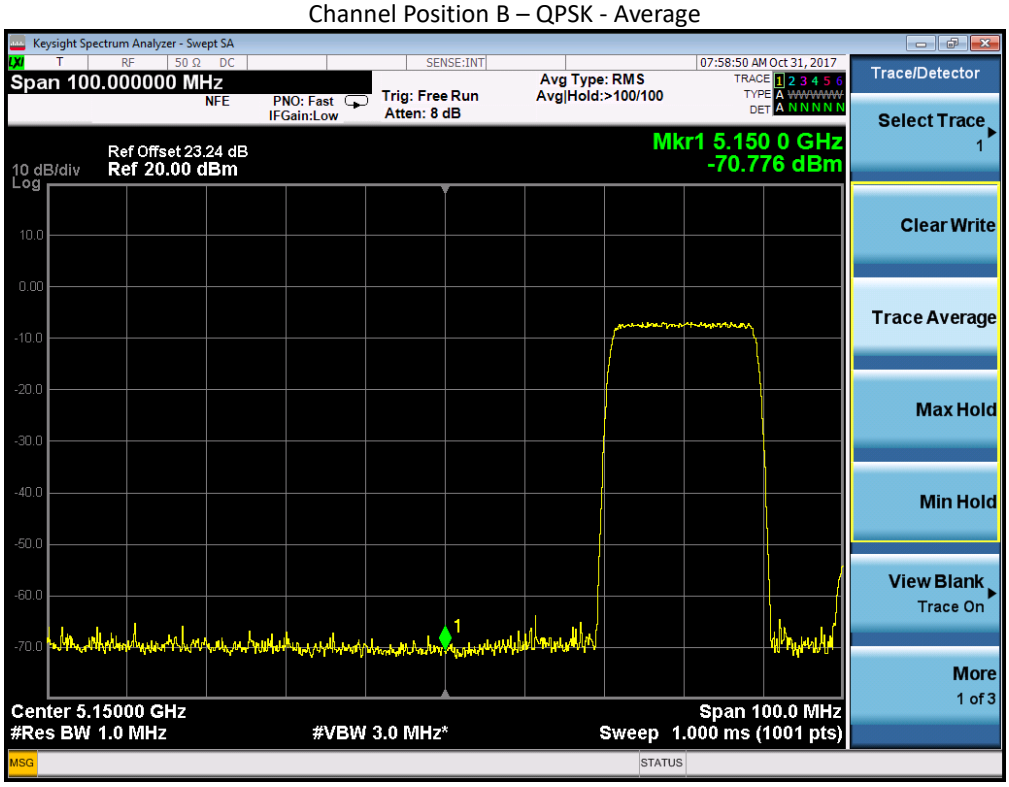
Note 2: 5150 MHz in the restricted band, use the following formula as per Section G (1) of 789033 D02 General UNII Test Procedures v01r04:
E (dBµV/m) = EIRP (dBm) + 95.2 = (measured level dBm + 9.5 dBi antenna gain) + 95.2

Note 3: For MIMO mode configurations, the limit was adjusted with a correction of -3.01dB [10Log(2)] to limits -27 dBm/MHz (Clause 15.407), and peak limits 74 dBµV/m and average limit 54 dBµV/m (Clause 15.209).

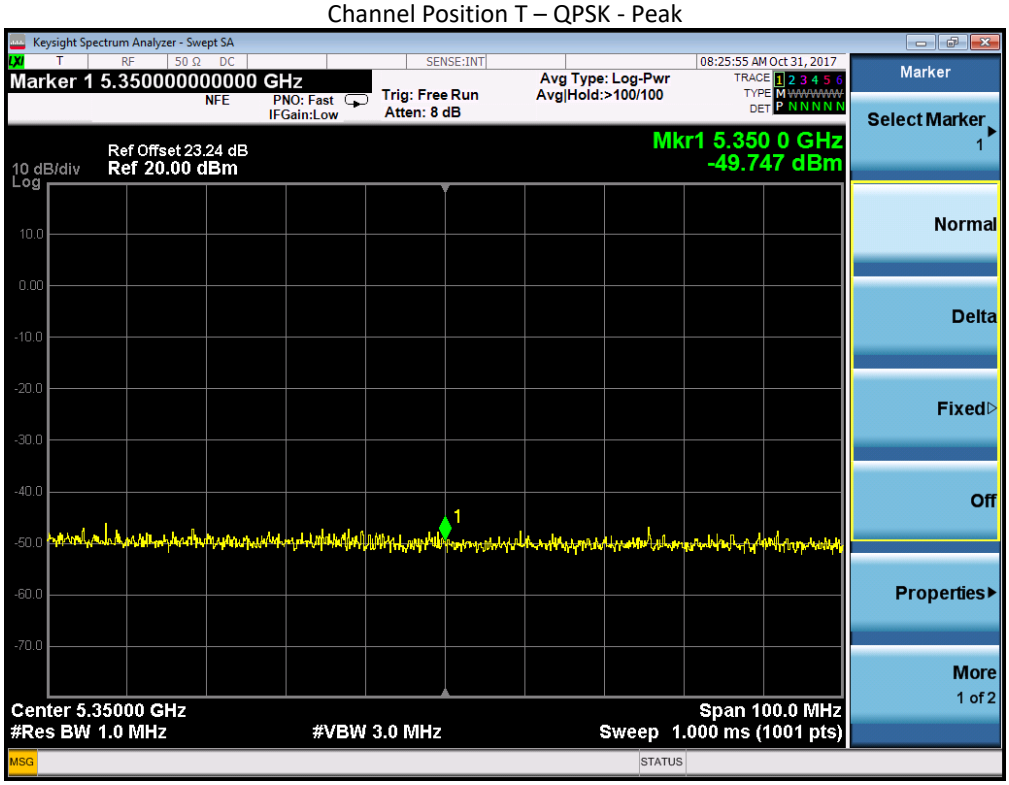
Channel Position B – QPSK - Peak



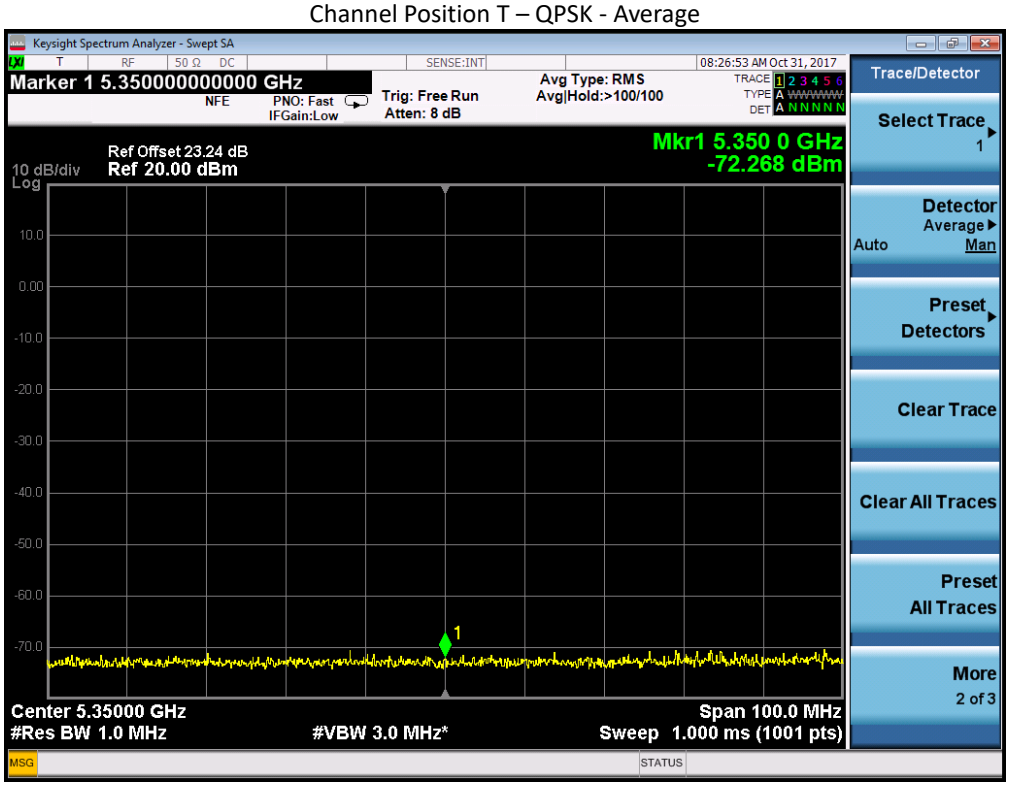
Channel Position B – QPSK - Average



Channel Position T – QPSK - Peak



Channel Position T – QPSK - Average



L-MIMO-MC 2 (3C)

Maximum Output Power 8.5dBm per port:

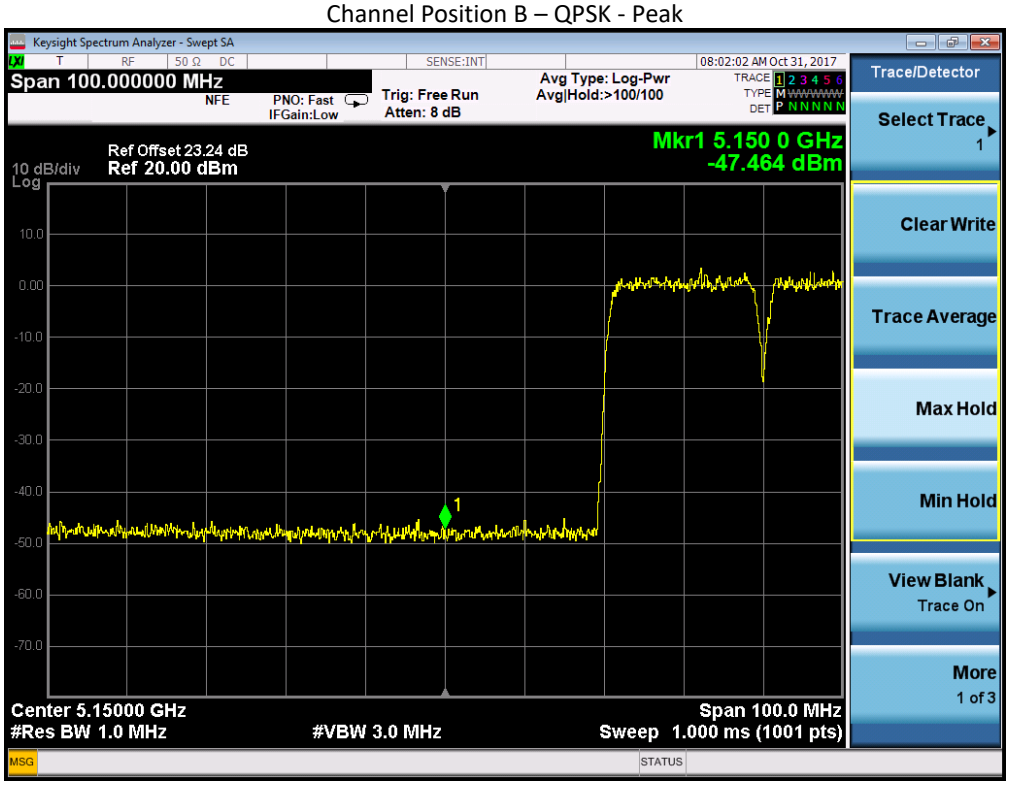
Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5180MHz + 5200MHz + 5220MHz	1	-30.01
T	20.0 MHz	5200MHz + 5220MHz + 5240MHz	1	-30.01

Note 1: The channels shown in the table above are the minimum and maximum channels that can be used in the authorized frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be available to the end user.

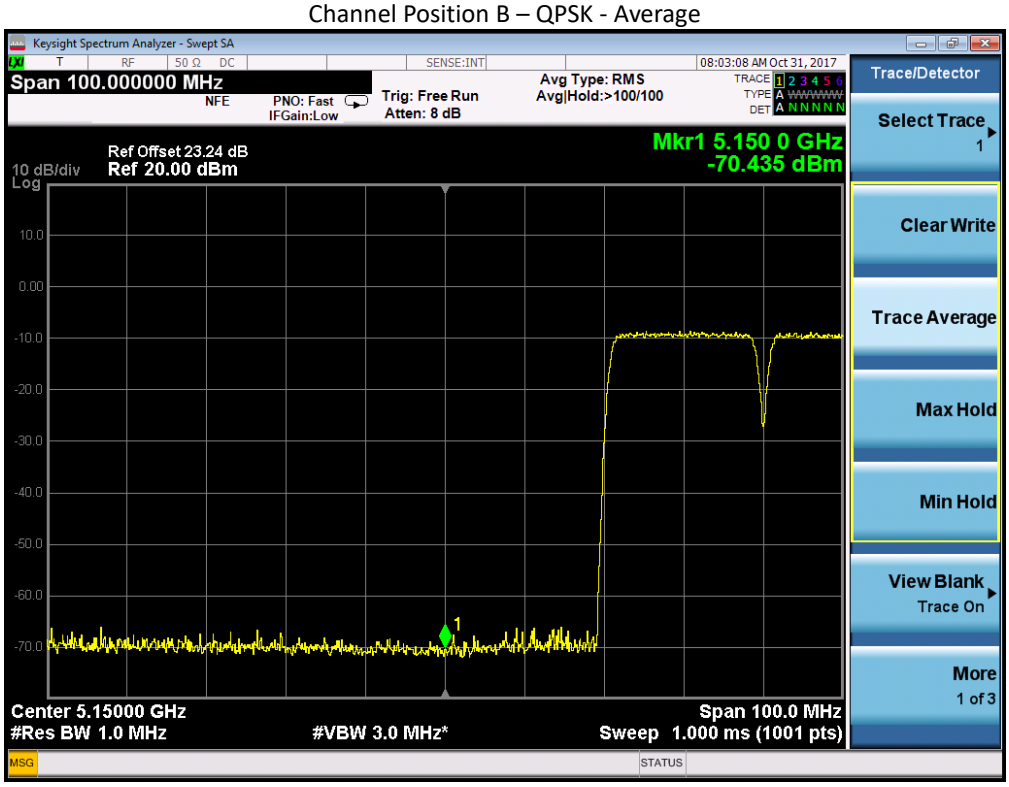
Note 2: 5150 MHz in the restricted band, use the following formula as per Section G (1) of 789033 D02 General UNII Test Procedures v01r04:
E (dBµV/m) = EIRP (dBm) + 95.2 = (measured level dBm + 9.5 dBi antenna gain) + 95.2

Note 3: For MIMO mode configurations, the limit was adjusted with a correction of -3.01dB [10Log(2)] to limits -27 dBm/MHz (Clause 15.407), and peak limits 74 dBµV/m and average limit 54 dBµV/m (Clause 15.209).

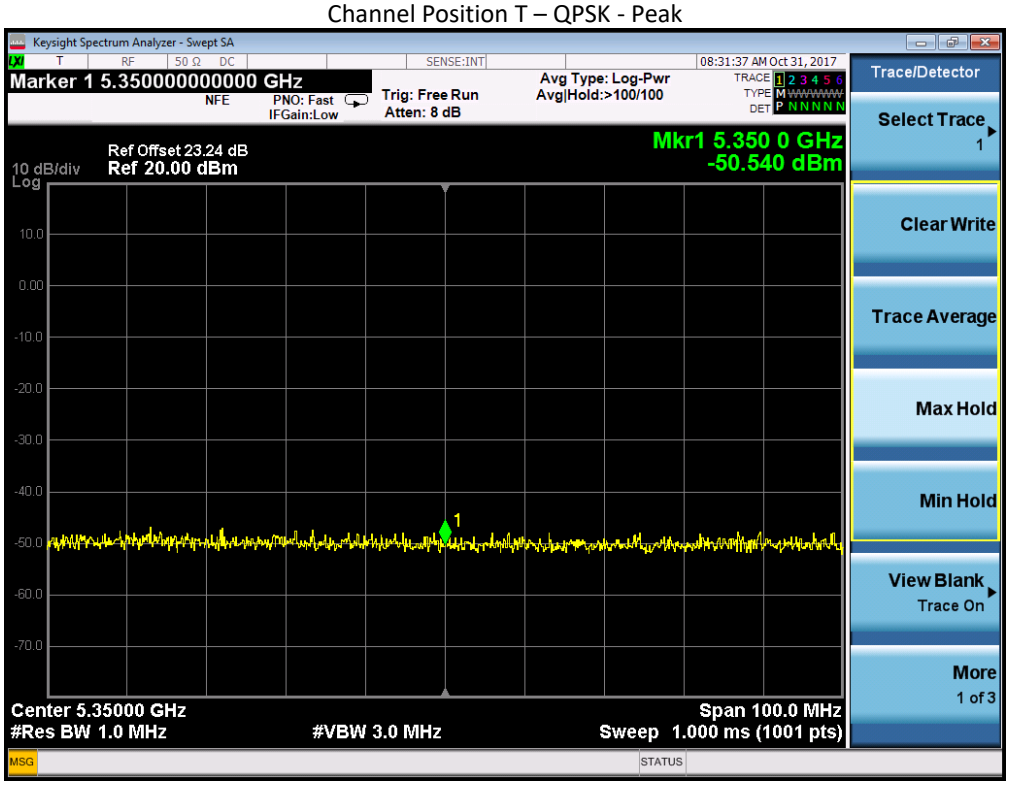
Channel Position B – QPSK - Peak



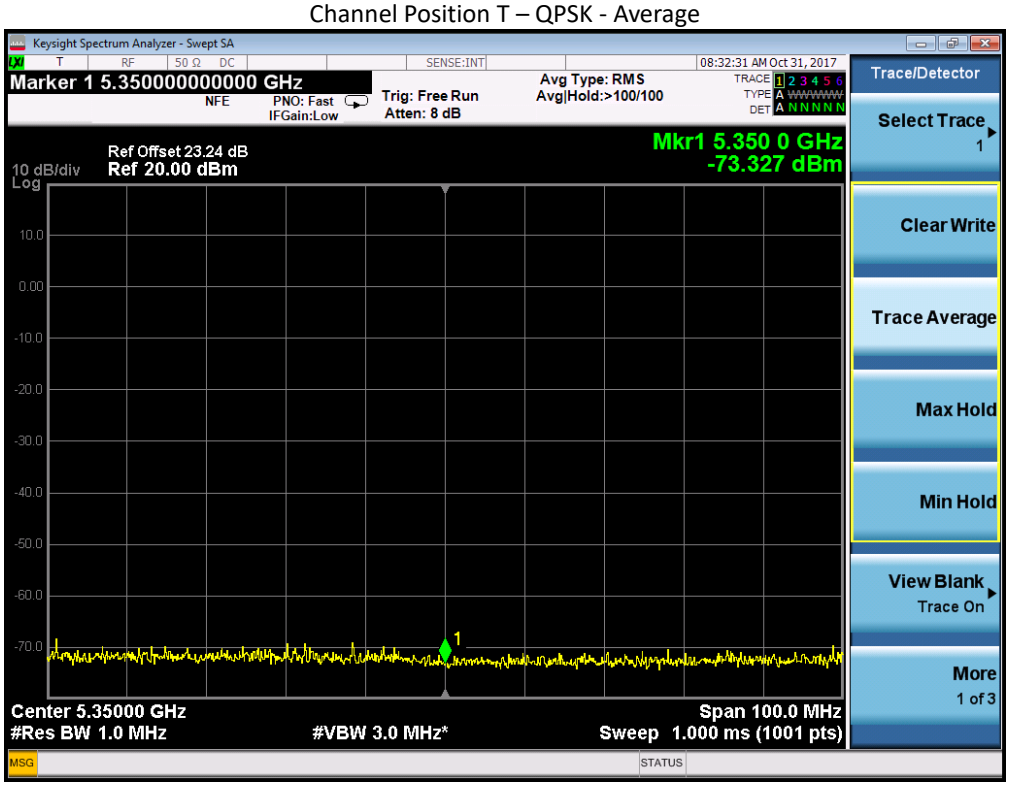
Channel Position B – QPSK - Average



Channel Position T – QPSK - Peak



Channel Position T – QPSK - Average



Configuration B1

L-MIMO-SC

Maximum Output Power 25dBm per port:

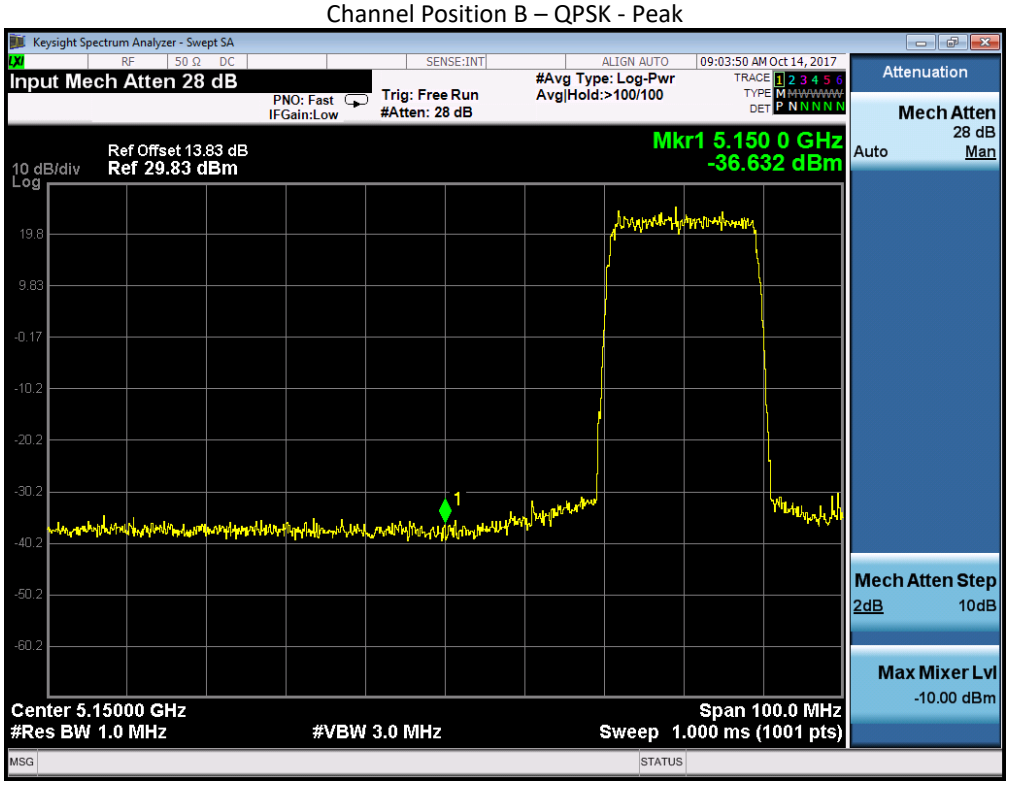
Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5180MHz	1	-30.01
T	20.0 MHz	5240MHz	1	-30.01

Note 1: The channels shown in the table above are the minimum and maximum channels that can be used in the authorized frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be available to the end user.

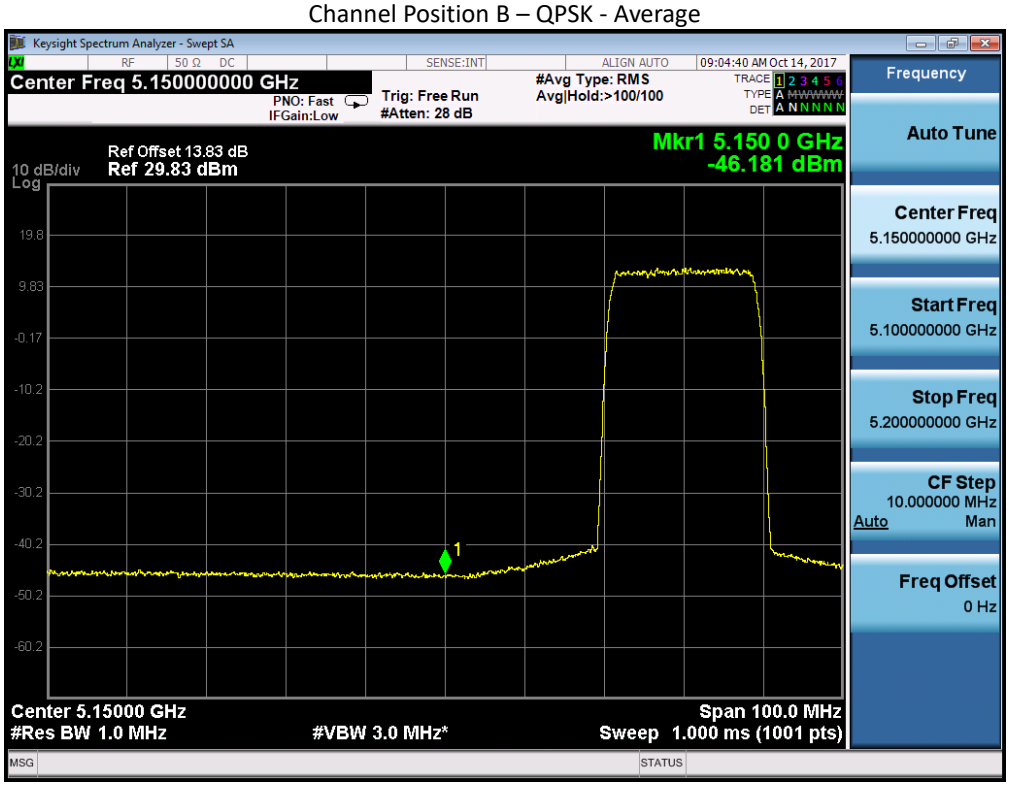
Note 2: 5150 MHz in the restricted band, use the following formula as per Section G (1) of 789033 D02 General UNII Test Procedures v01r04:
E (dBµV/m) = EIRP (dBm) + 95.2 = (measured level dBm + 6 dBi antenna gain) + 95.2

Note 3: For MIMO mode configurations, the limit was adjusted with a correction of -3.01dB [10Log(2)] to limits -27 dBm/MHz (Clause 15.407), and peak limits 74 dBµV/m and average limit 54 dBµV/m (Clause 15.209).

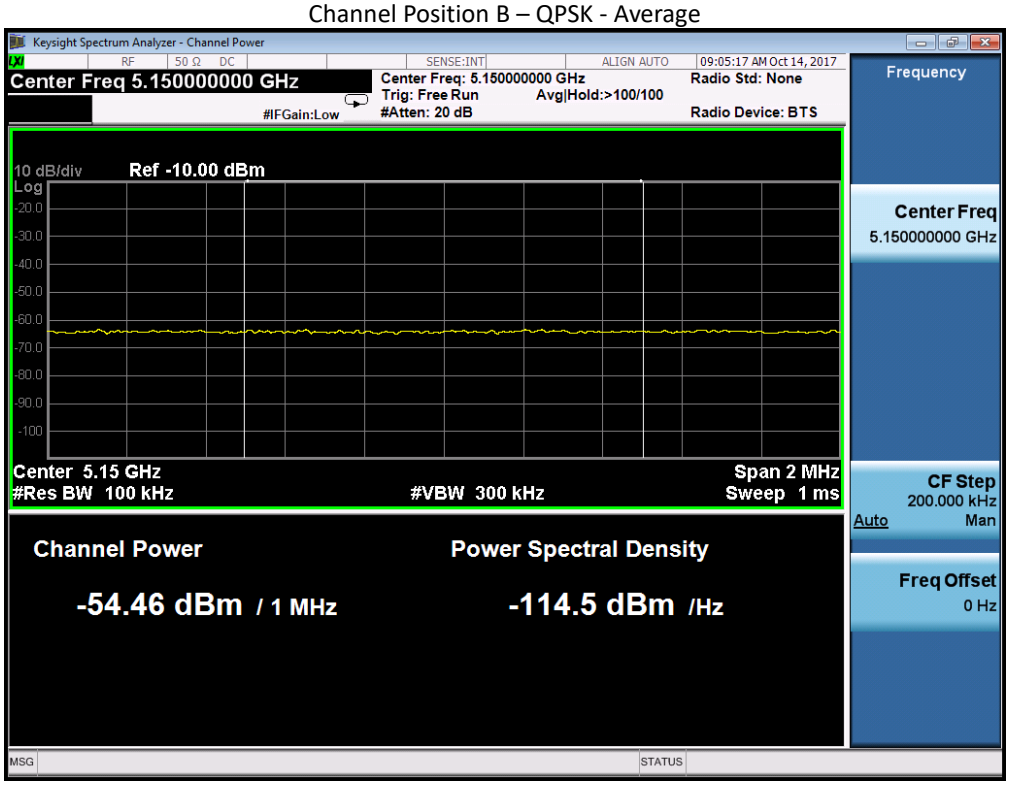
Channel Position B – QPSK - Peak



Channel Position B – QPSK - Average



Channel Position B – QPSK - Average



Channel Position T – QPSK - Peak