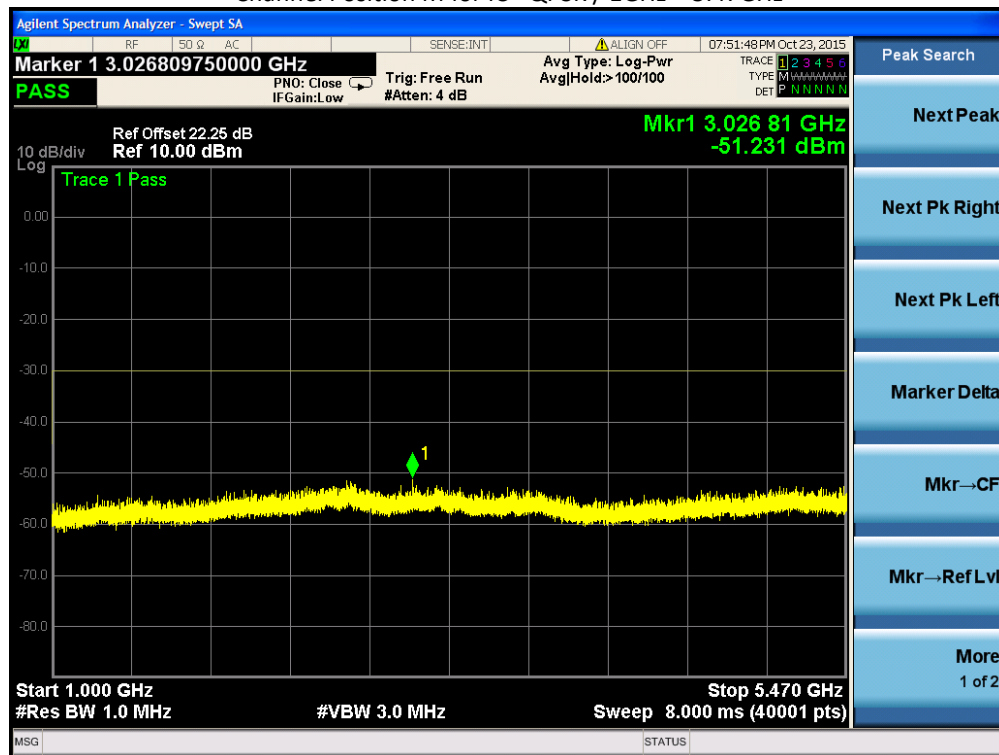
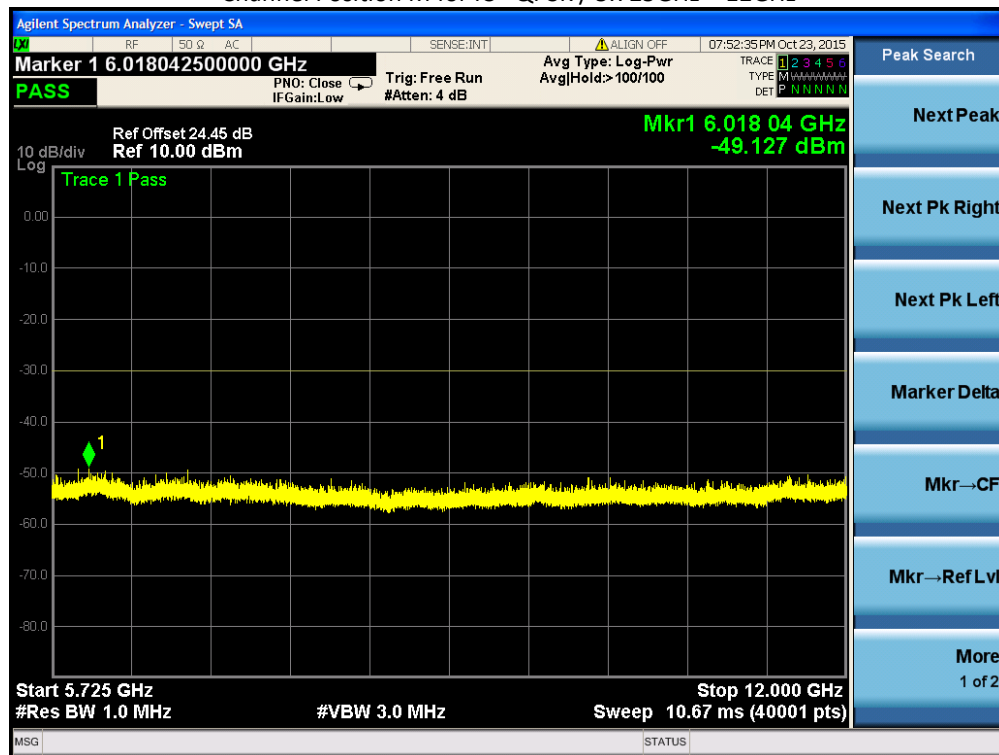


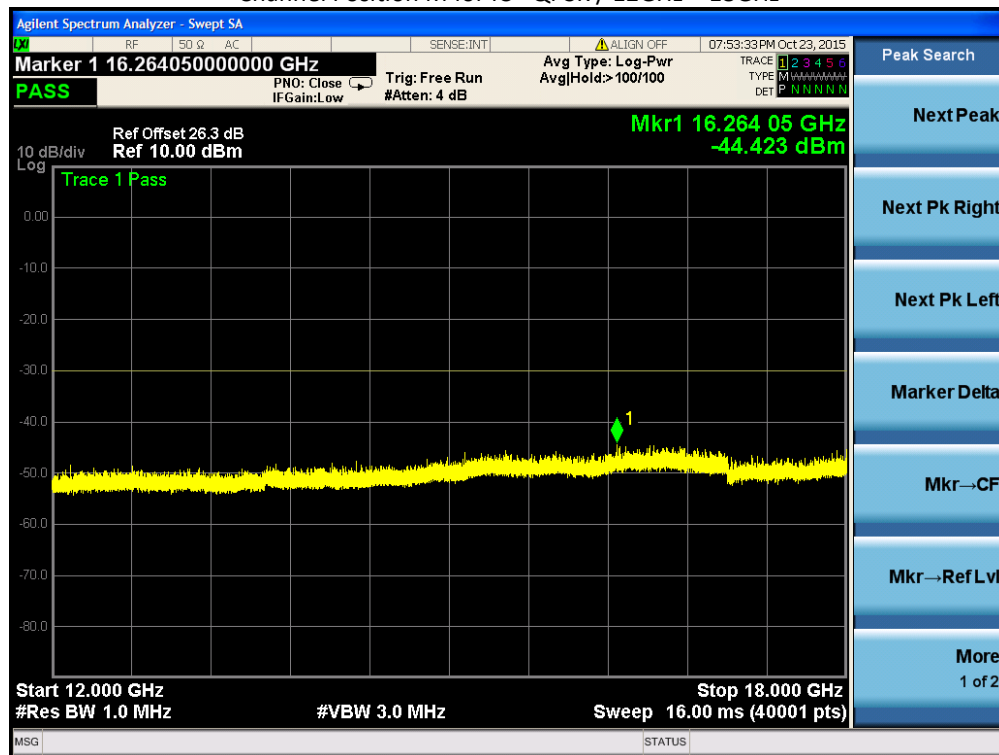
Channel Position M for IC - QPSK / 1GHz – 5.47GHz



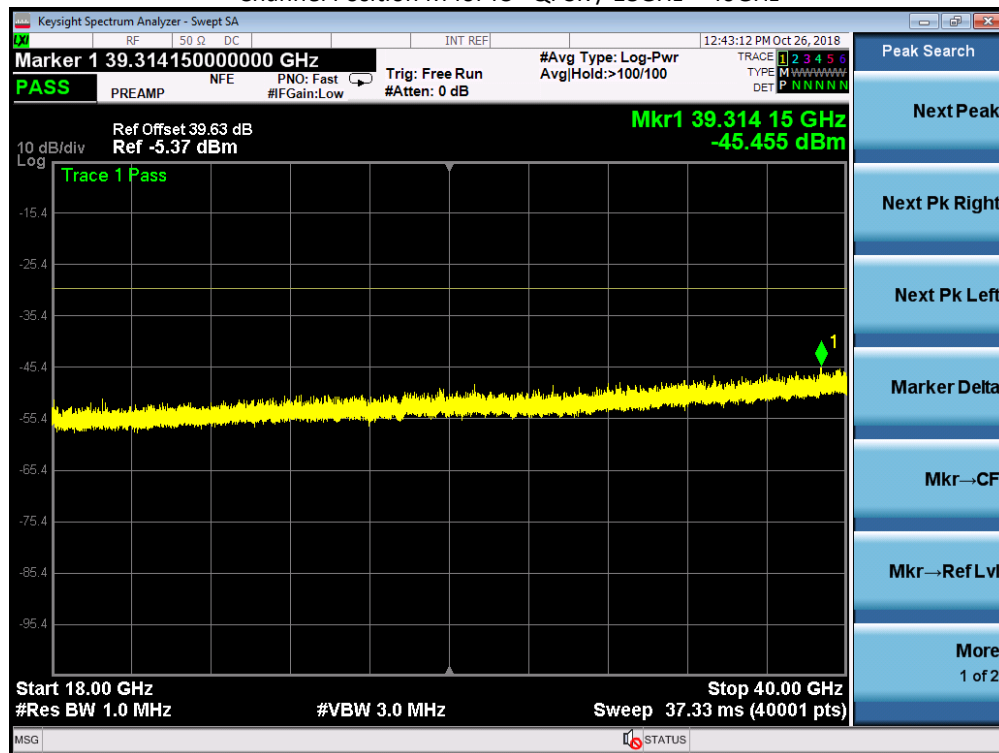
Channel Position M for IC - QPSK / 5.725GHz – 12GHz



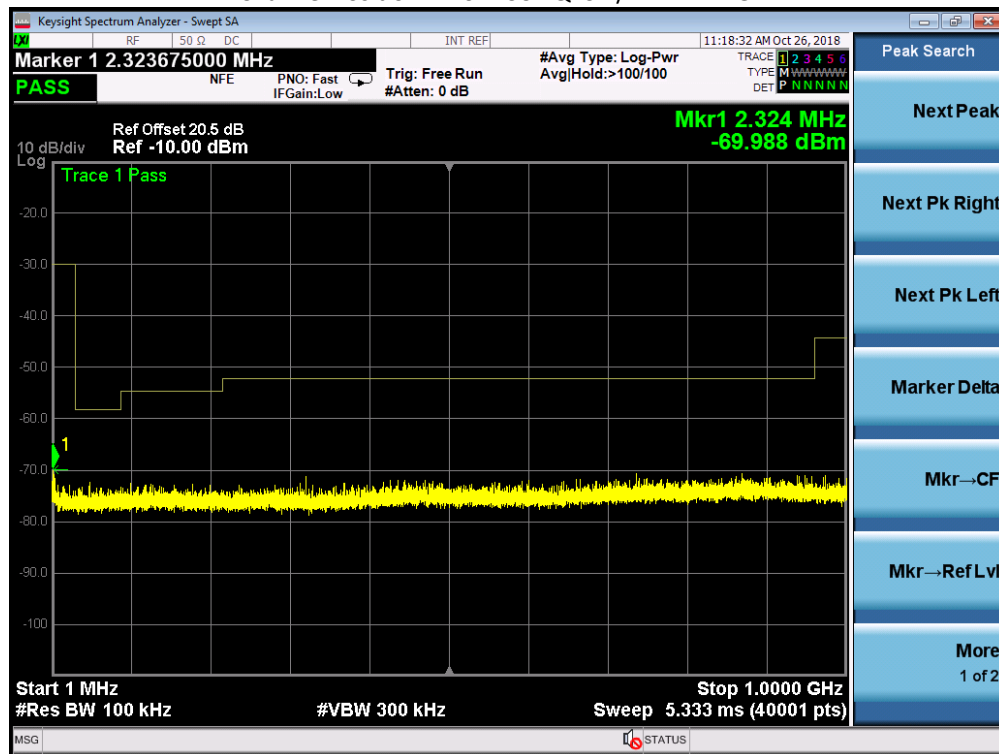
Channel Position M for IC - QPSK / 12GHz – 18GHz



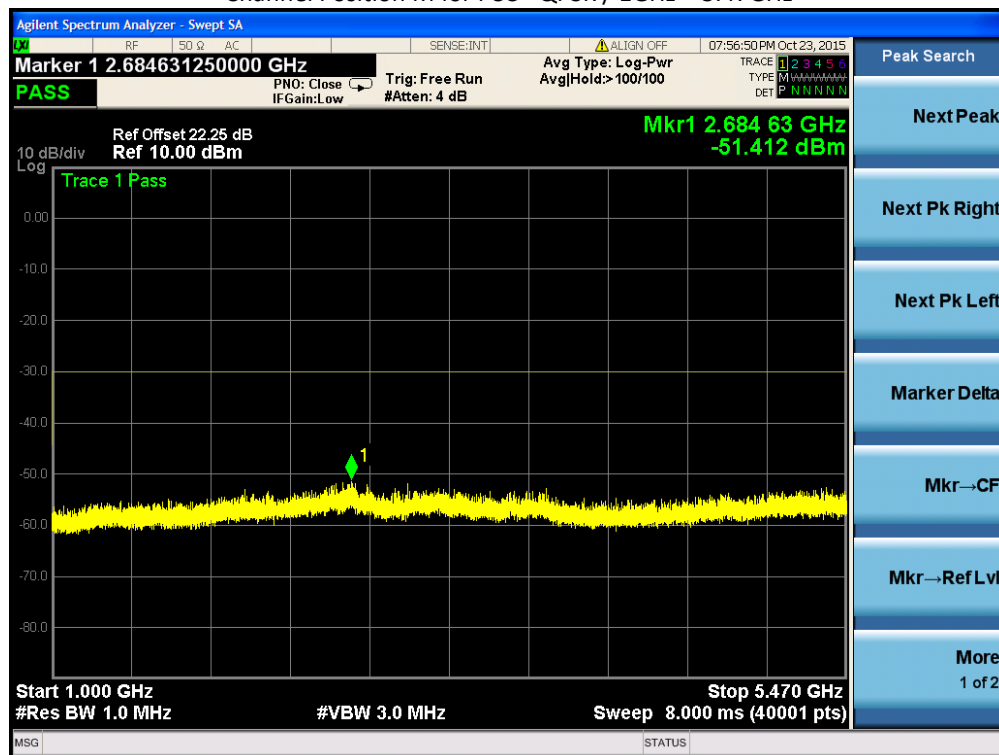
Channel Position M for IC - QPSK / 18GHz – 40GHz



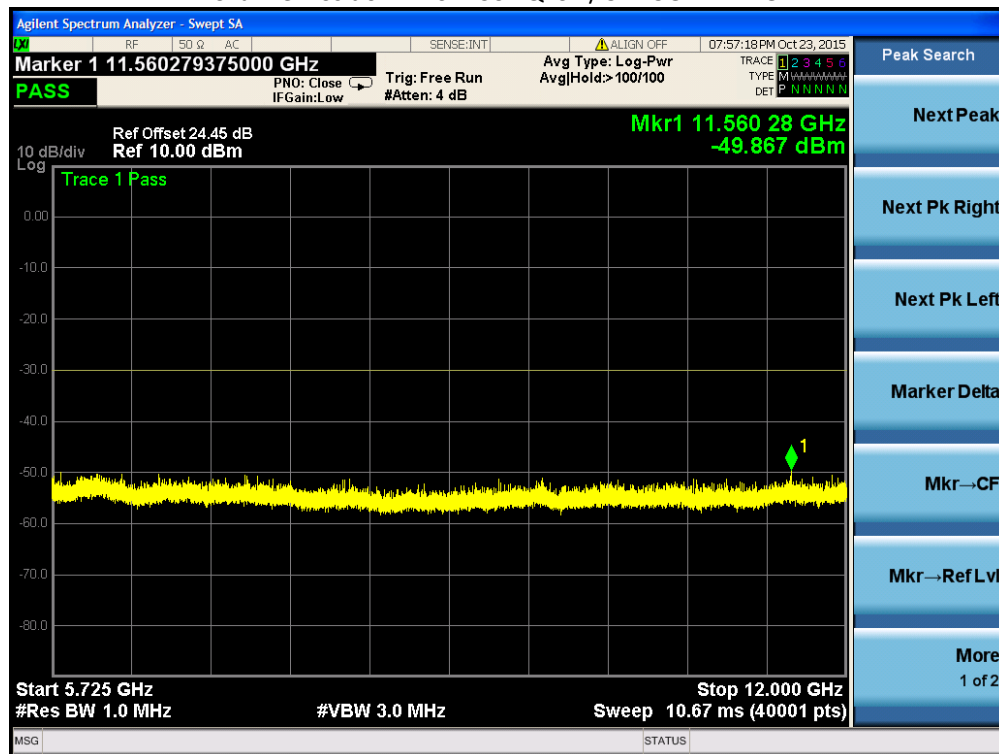
Channel Position M for FCC - QPSK / 1MHz – 1GHz



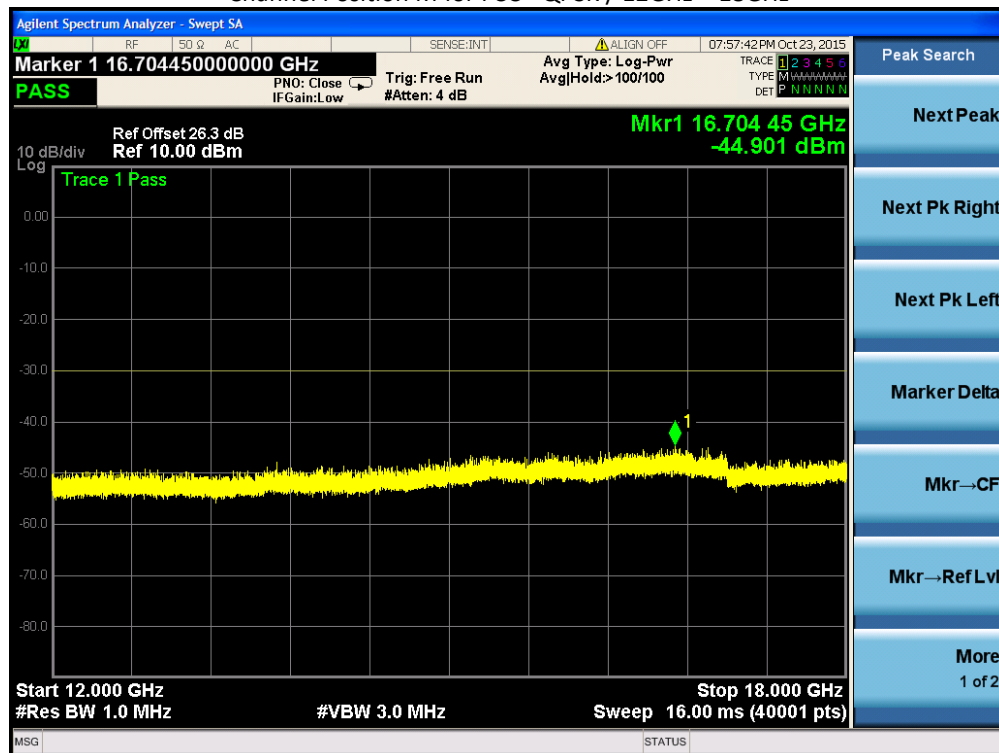
Channel Position M for FCC - QPSK / 1GHz – 5.47GHz



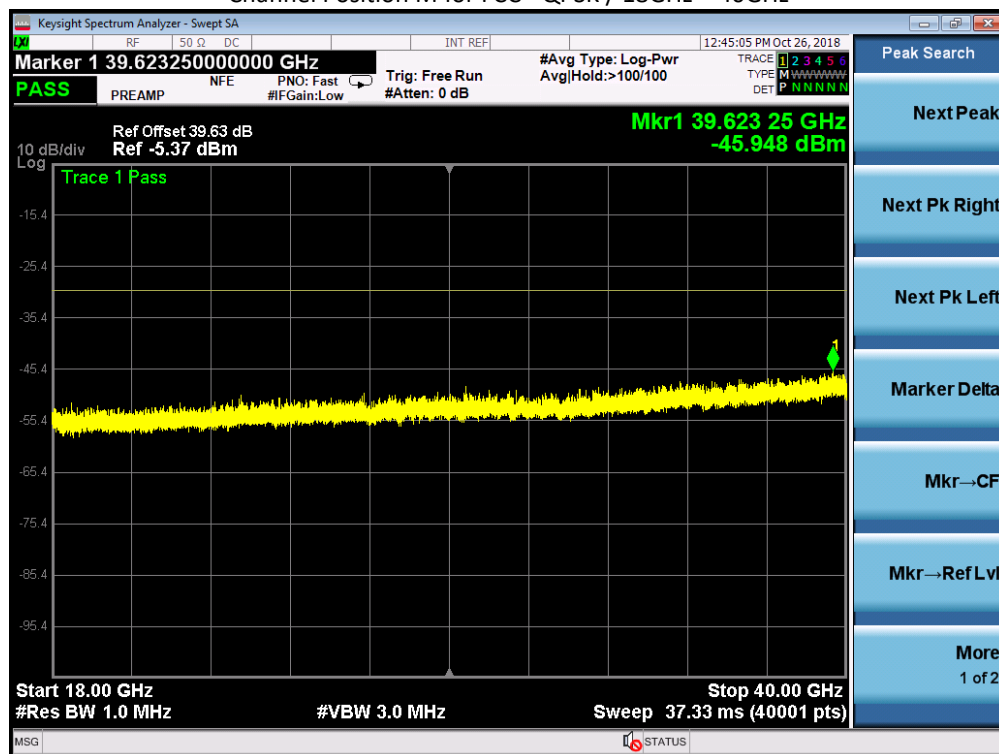
Channel Position M for FCC - QPSK / 5.725GHz – 12GHz



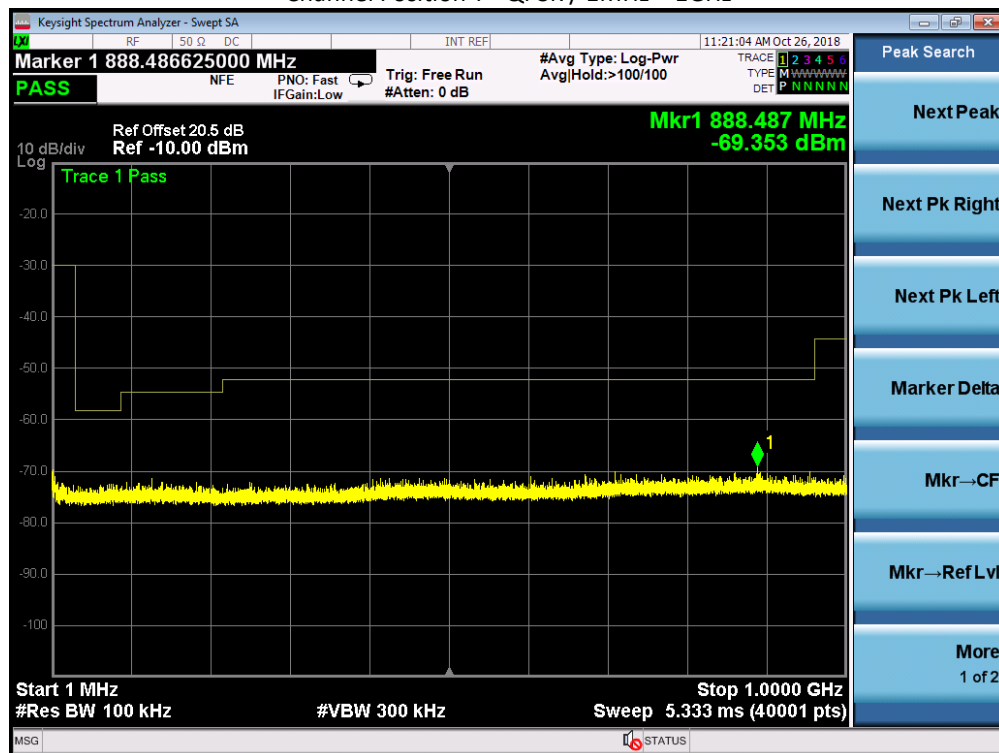
Channel Position M for FCC - QPSK / 12GHz – 18GHz



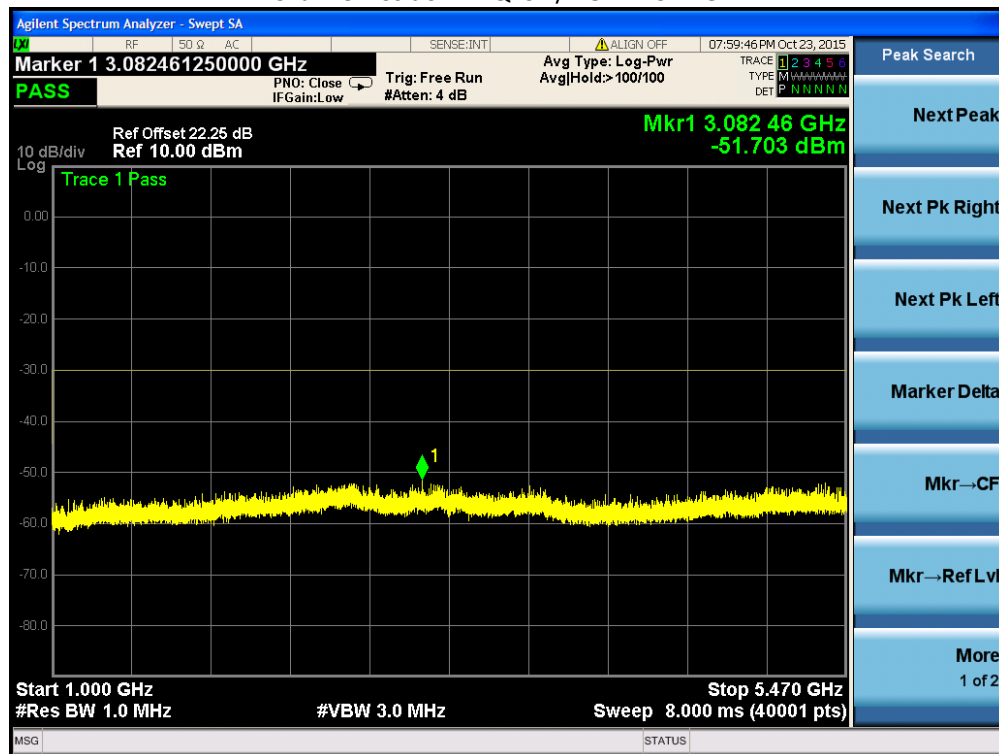
Channel Position M for FCC - QPSK / 18GHz – 40GHz



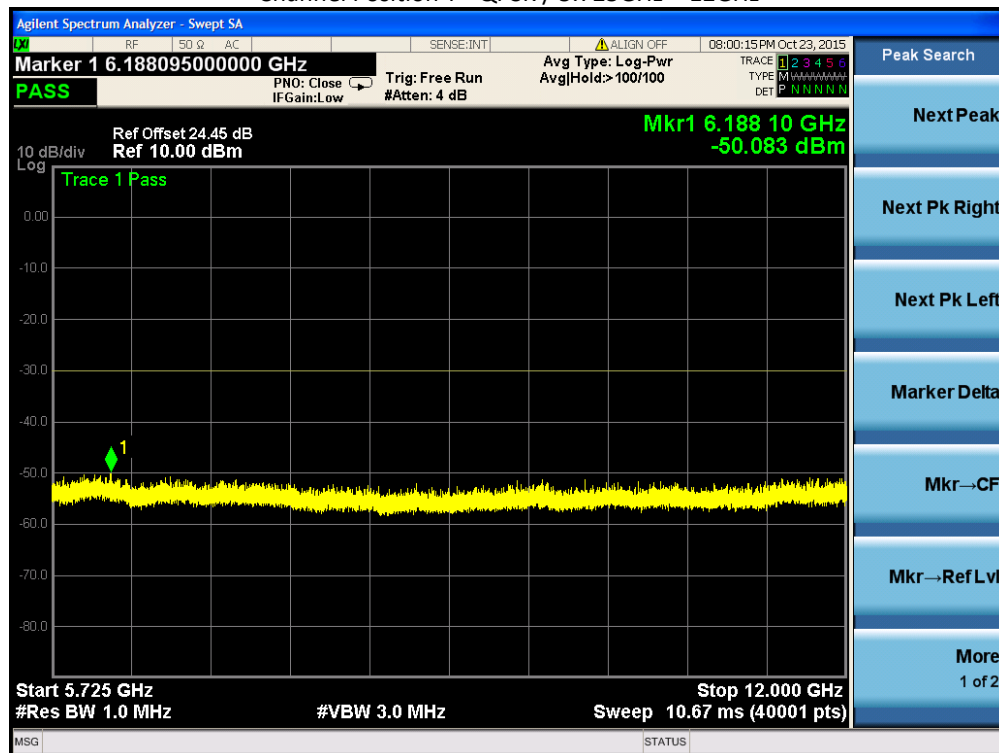
Channel Position T - QPSK / 1MHz – 1GHz



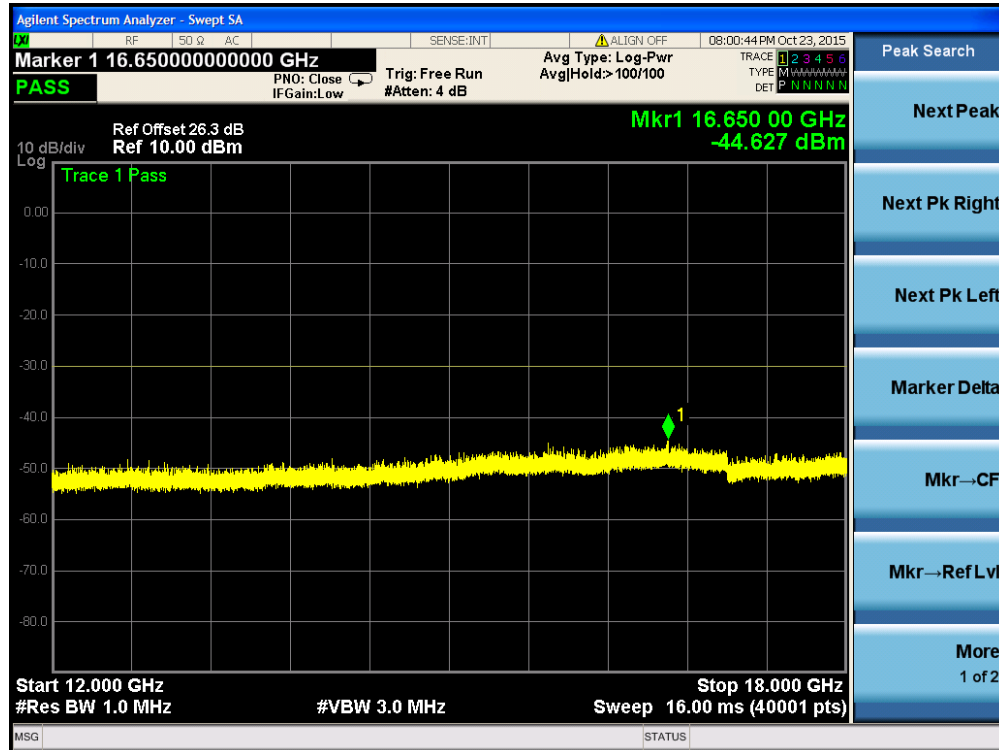
Channel Position T - QPSK / 1GHz – 5.47GHz



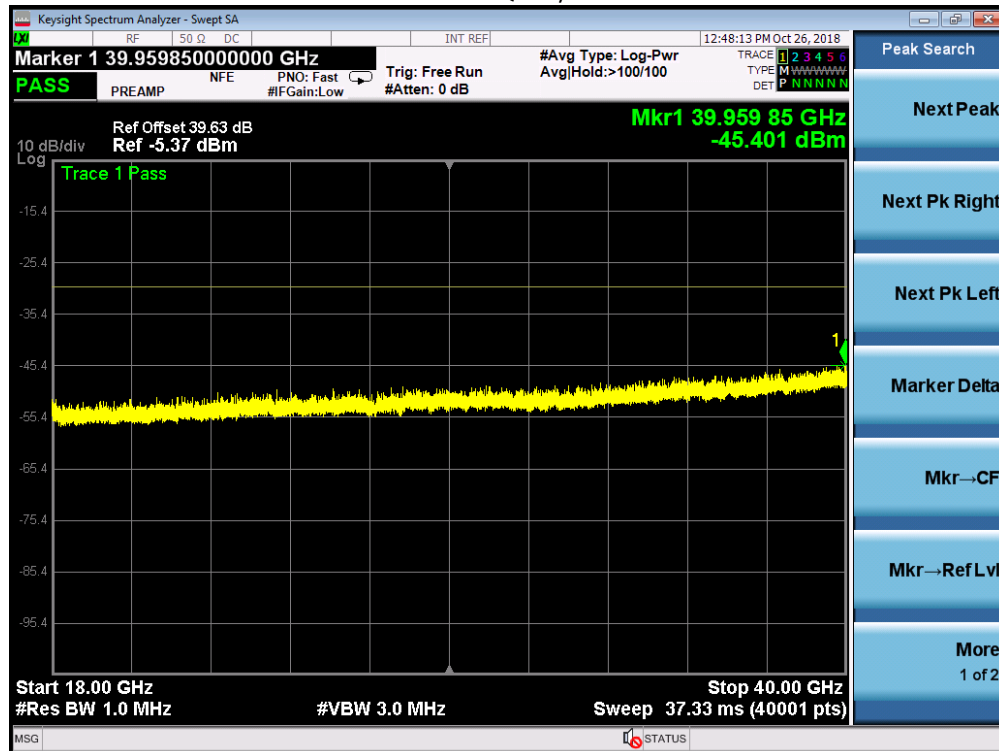
Channel Position T - QPSK / 5.725GHz – 12GHz



Channel Position T - QPSK / 12GHz – 18GHz



Channel Position T - QPSK / 18GHz – 40GHz



7 Undesirable Emission at Band Edge

Test result: Pass

7.1 Limit

For transmitters operating in the 5.25-5.35 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 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.

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 5.25-5.35 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 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (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 5350MHz and 5460MHz in the restricted band, use the following formula as per Section G (1) of 789033 D02 General UNII Test Procedures v01r04:

$E \text{ (dB}\mu\text{V/m)} = \text{E.I.R.P. (dBm)} + 95.2$, and the results should comply with peak limit 74 dB μ V/m and average limit 54 dB μ V/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 18dBm per port:

Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5260MHz	1	-30.01
T	20.0 MHz	5320MHz	1	-30.01

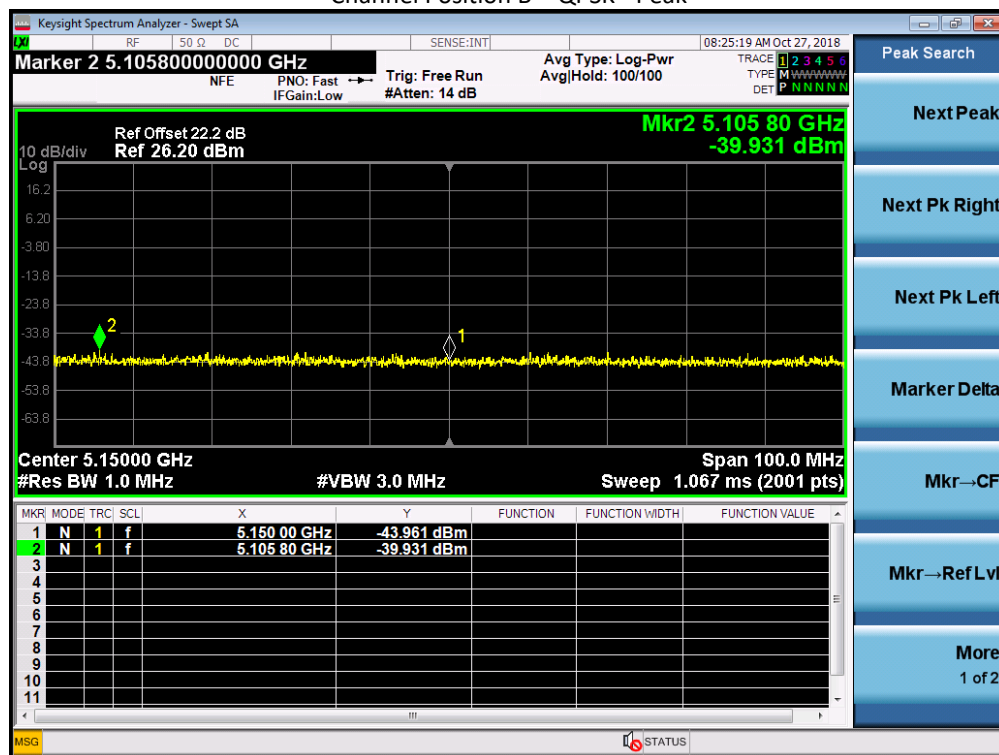
Note 1: The channels shown in the table above are the minimum and maximum channels that can be used in the authorized frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be available to the end user.

Note 2: 5350 MHz in the restricted band, use the following formula as per Section G (1) of 789033 D02 General UNII Test Procedures v01r04:

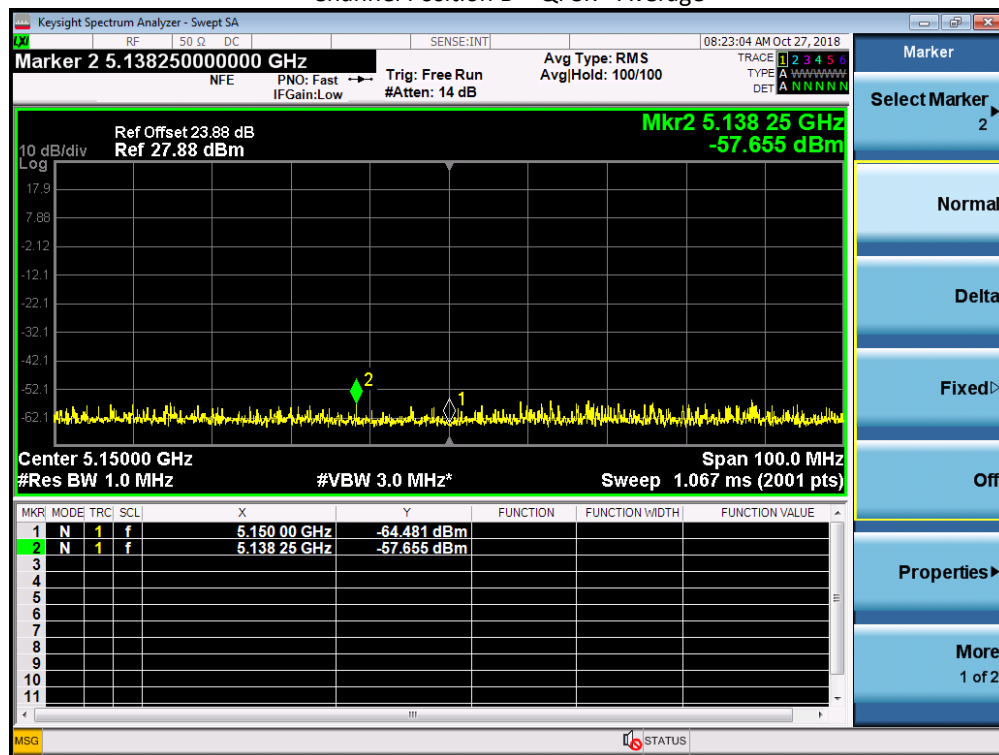
$$E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} + 95.2 = (\text{measured level dBm} + 6 \text{ dBi antenna gain}) + 95.2$$

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).

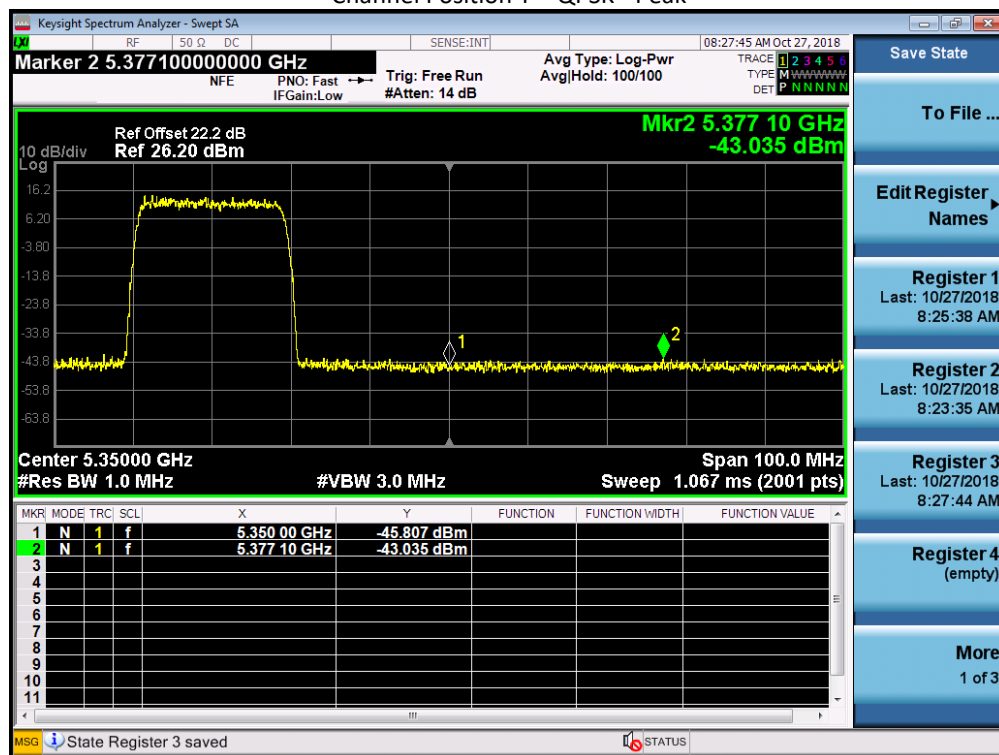
Channel Position B – QPSK - Peak



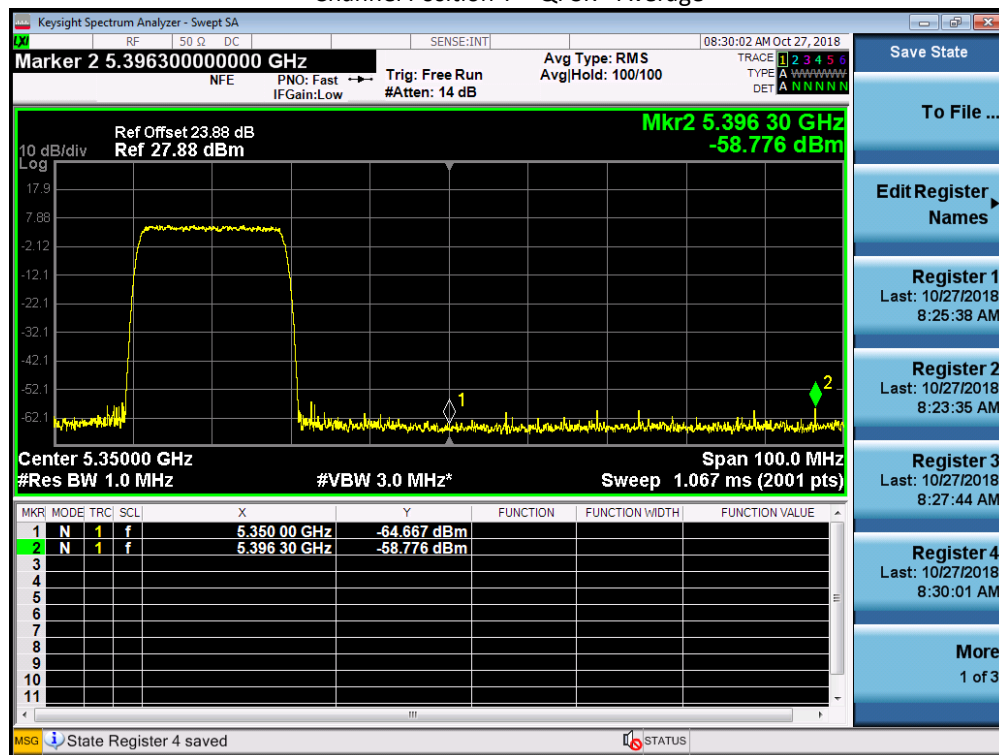
Channel Position B – QPSK - Average



Channel Position T – QPSK - Peak



Channel Position T – QPSK - Average



L-MIMO-MC 1 (2C)

Maximum Output Power 18dBm per port:

Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5260MHz + 5280MHz	1	-30.01
T	20.0 MHz	5300MHz + 5320MHz	1	-30.01

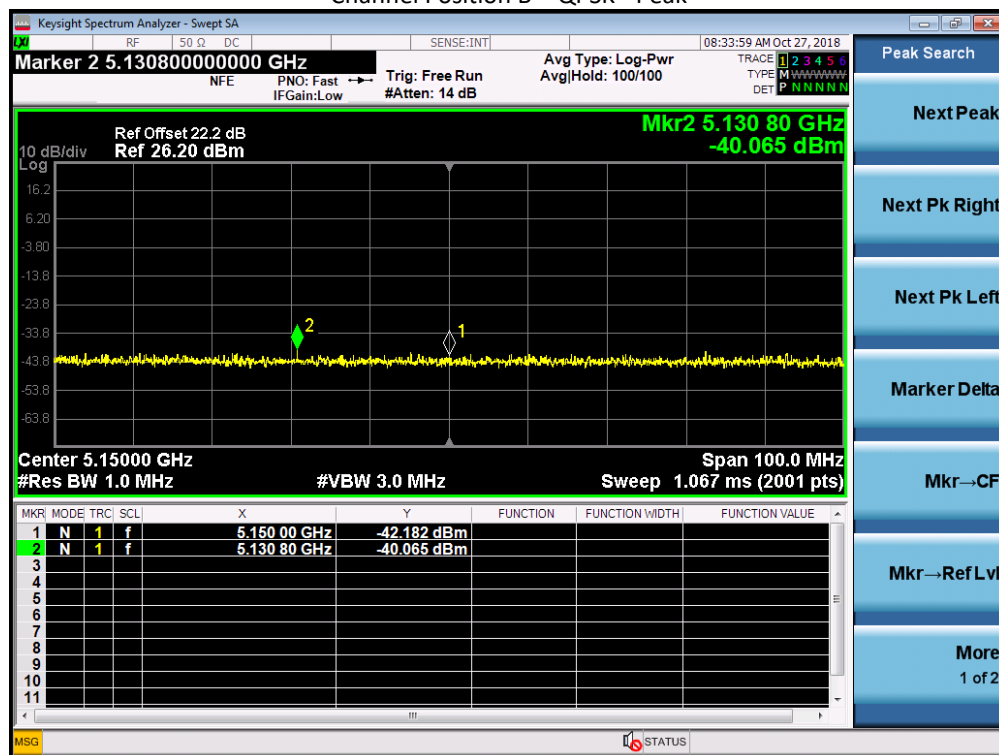
Note 1: The channels shown in the table above are the minimum and maximum channels that can be used in the authorised frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be available to the end user.

Note 2: 5350 MHz in the restricted band, use the following formula as per Section G (1) of 789033 D02 General UNII Test Procedures v01r04:

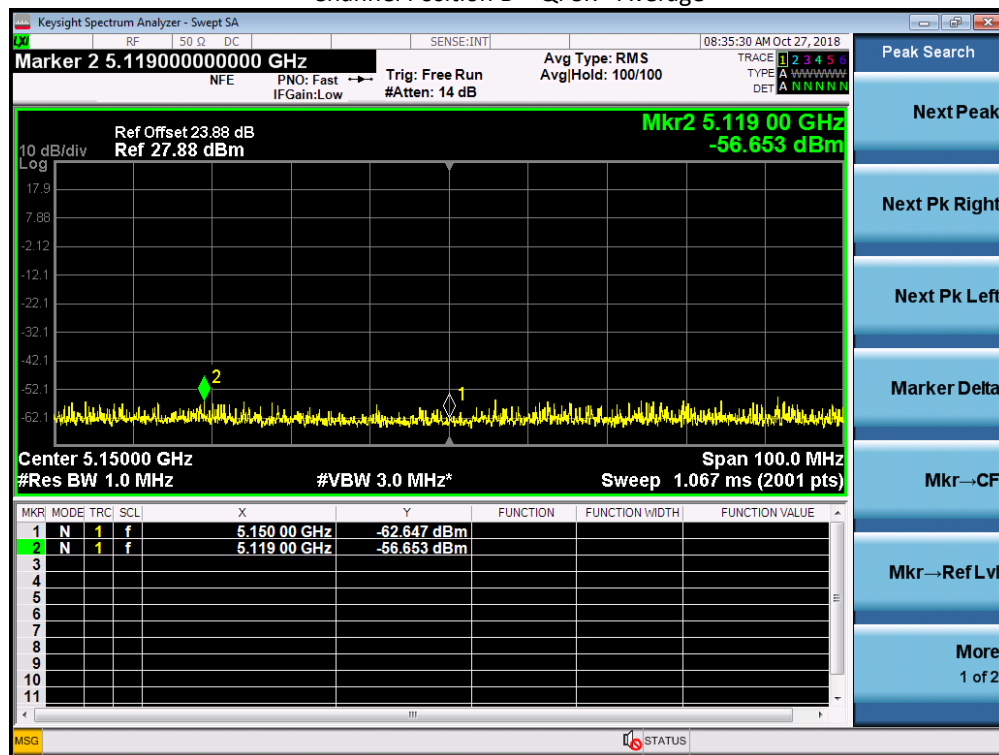
$$E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} + 95.2 = (\text{measured level dBm} + 6 \text{ dBi antenna gain}) + 95.2$$

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).

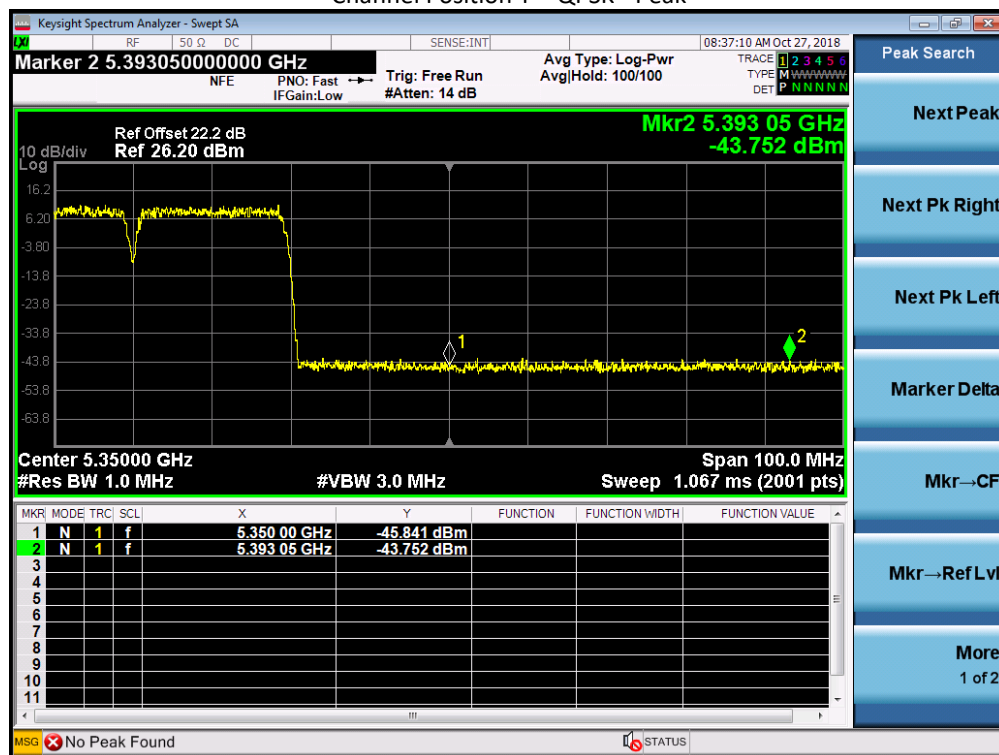
Channel Position B – QPSK - Peak



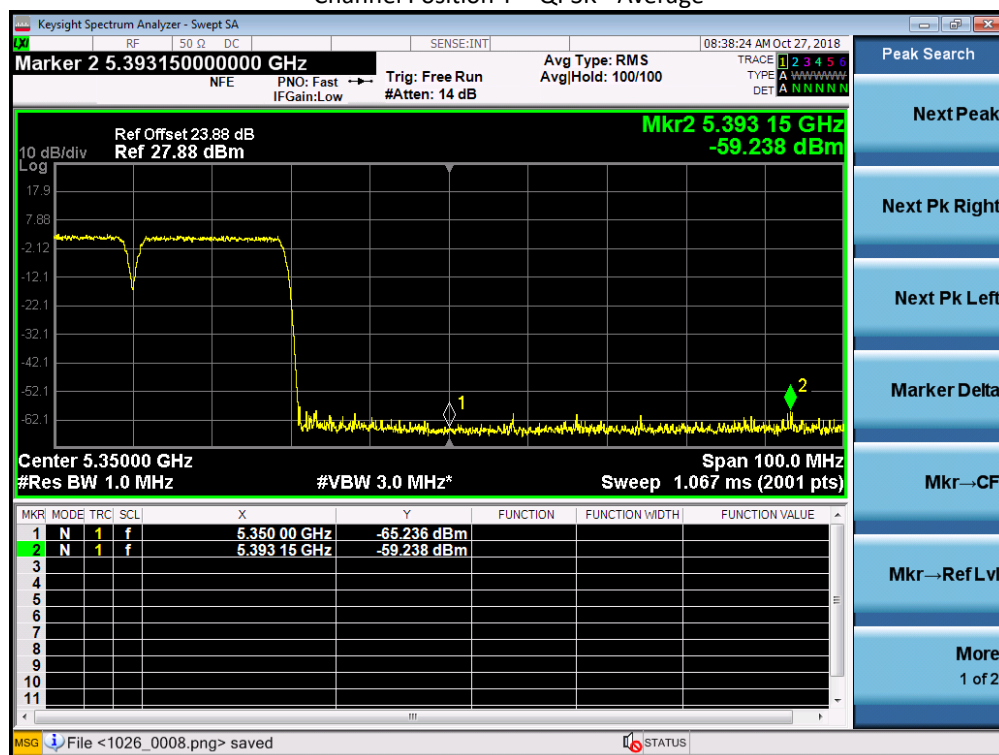
Channel Position B – QPSK - Average



Channel Position T – QPSK - Peak



Channel Position T – QPSK - Average



L-MIMO-MC 2 (3C)

Maximum Output Power 18dBm per port:

Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5260MHz + 5280MHz + 5300MHz	1	-30.01
T	20.0 MHz	5280MHz + 5300MHz + 5320MHz	1	-30.01

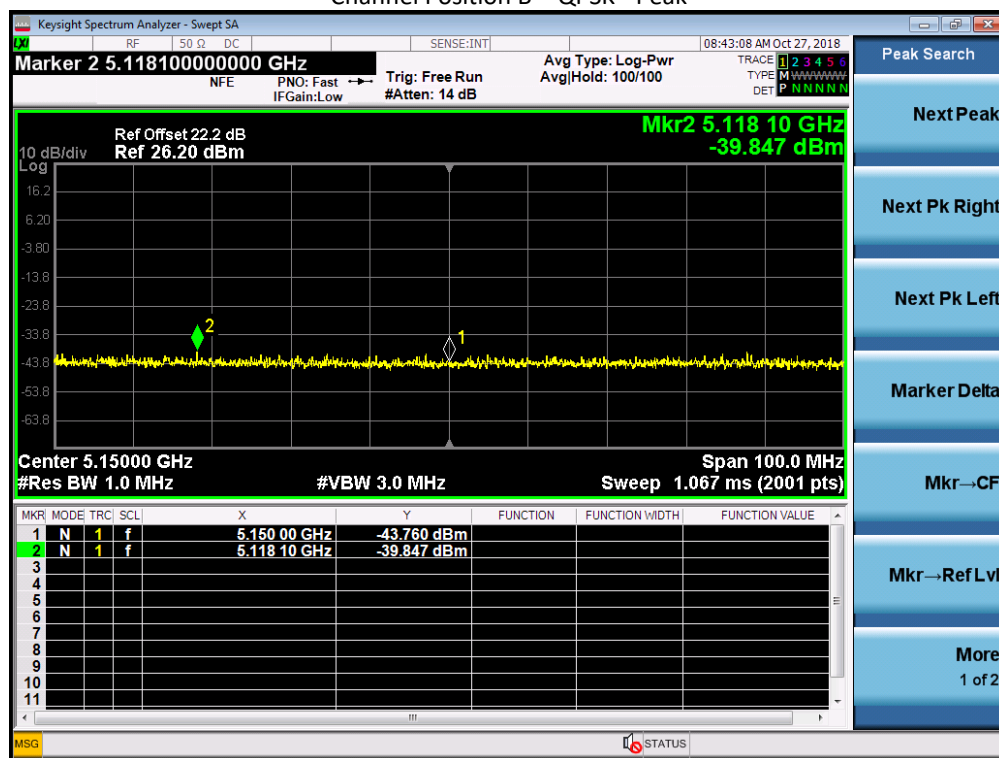
Note 1: The channels shown in the table above are the minimum and maximum channels that can be used in the authorized frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be available to the end user.

Note 2: 5350MHz in the restricted band, use the following formula as per Section G (1) of 789033 D02 General UNII Test Procedures v01r04:

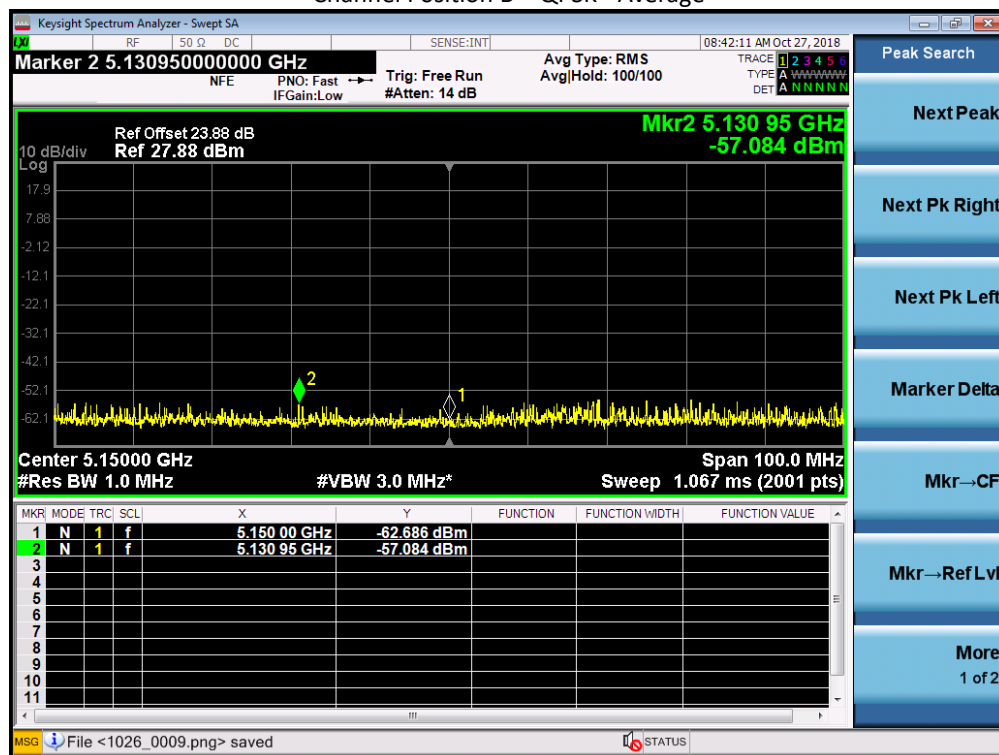
$$E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} + 95.2 = (\text{measured level dBm} + 6 \text{ dBi antenna gain}) + 95.2$$

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).

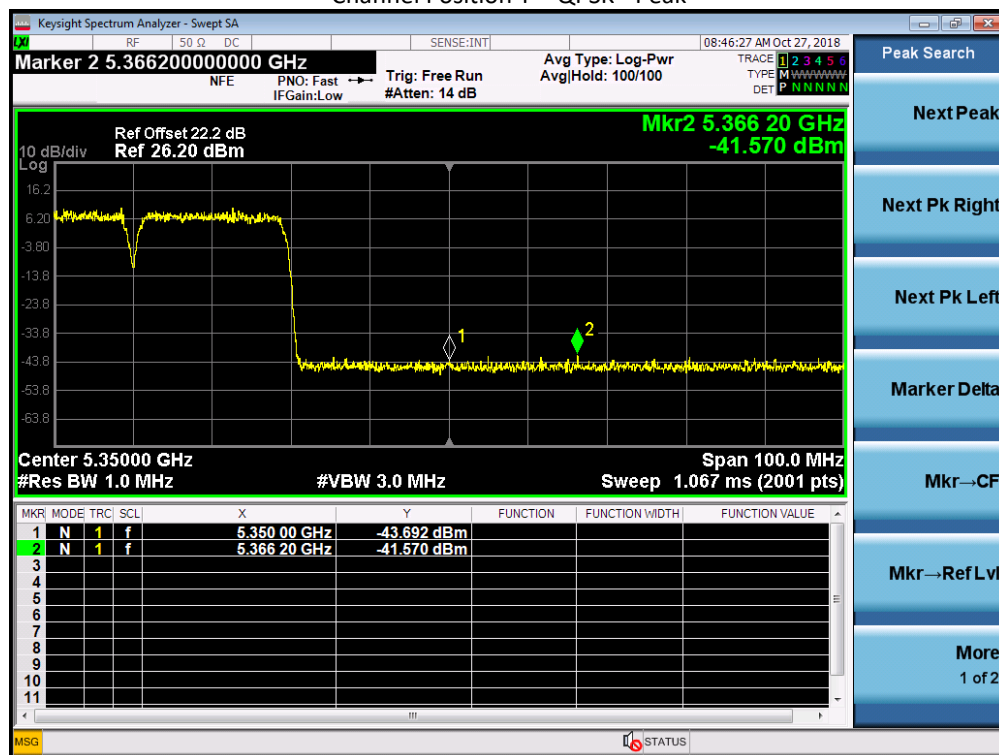
Channel Position B – QPSK - Peak



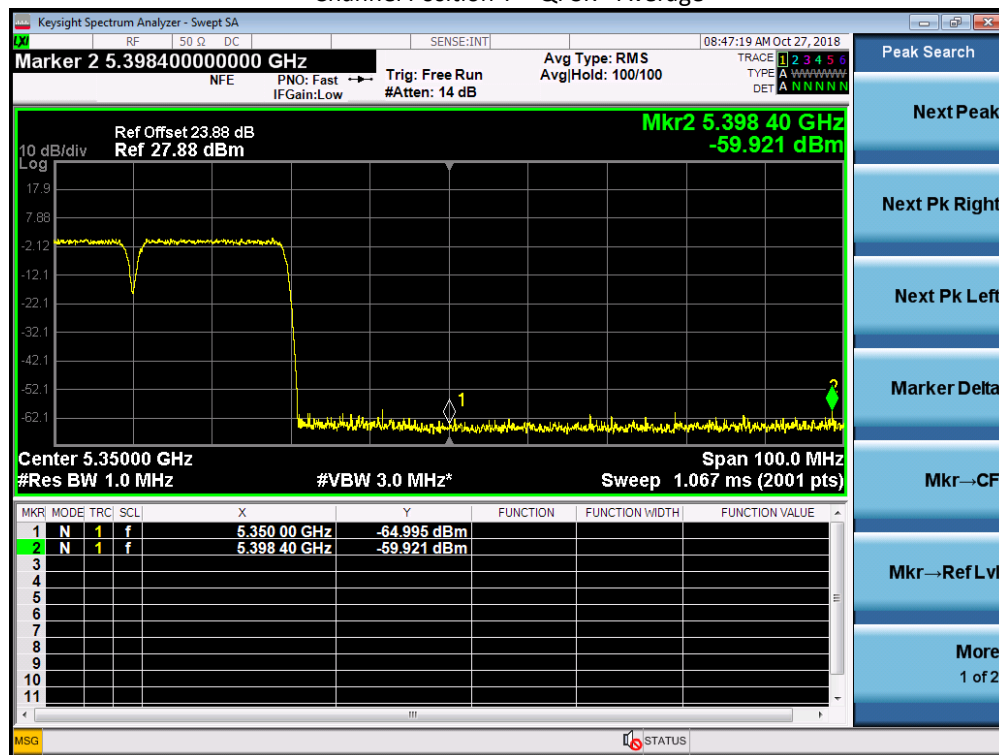
Channel Position B – QPSK - Average



Channel Position T – QPSK - Peak



Channel Position T – QPSK - Average



Configuration A2

L-MIMO-SC

Maximum Output Power 18dBm per port:

Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5500MHz	1	-30.01
T	20.0 MHz	5700MHz	1	-30.01

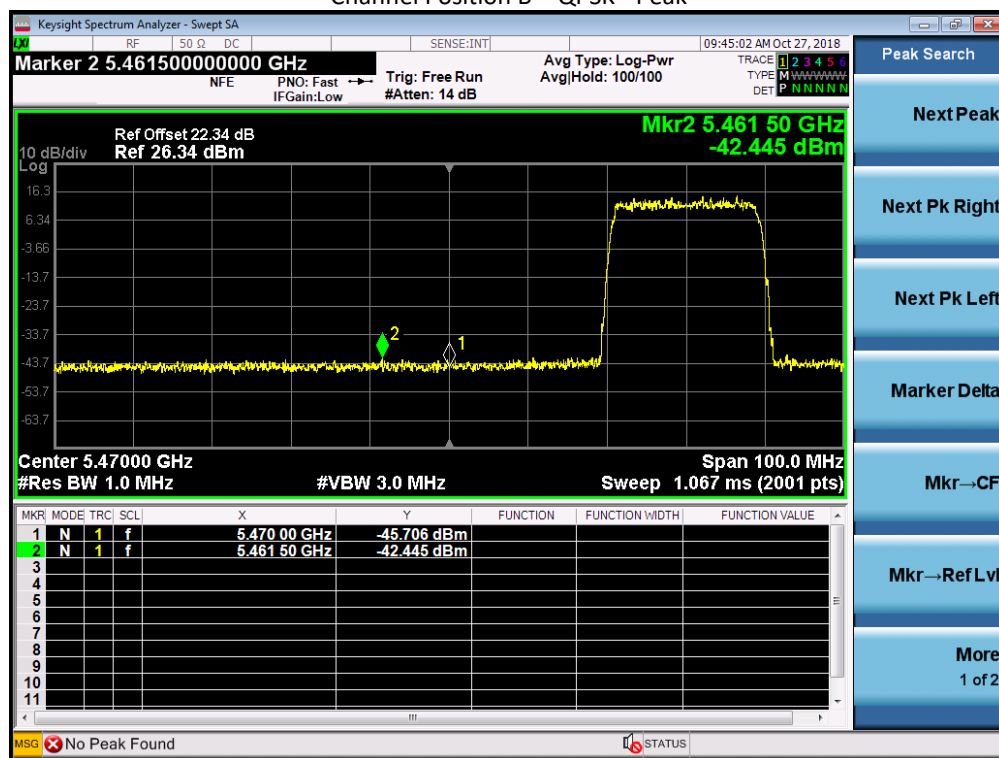
Note 1: The channels shown in the table above are the minimum and maximum channels that can be used in the authorized frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be available to the end user.

Note 2: 5460MHz in the restricted band, use the following formula as per Section G (1) of 789033 D02 General UNII Test Procedures v01r04:

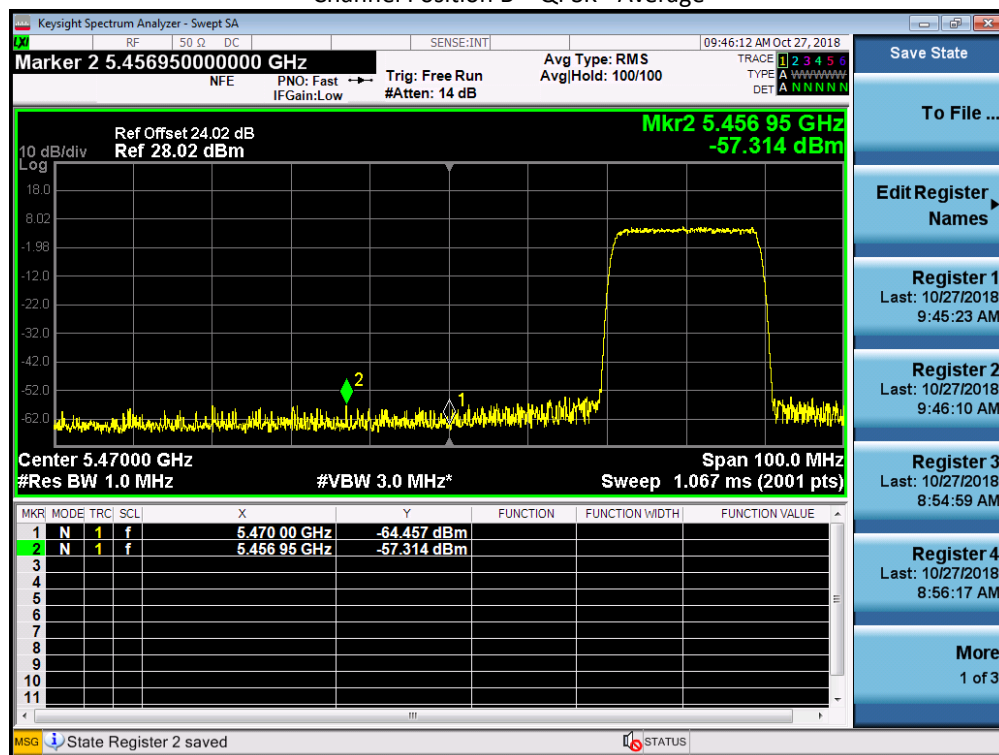
$$E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} + 95.2 = (\text{measured level dBm} + 6 \text{ dBi antenna gain}) + 95.2$$

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).

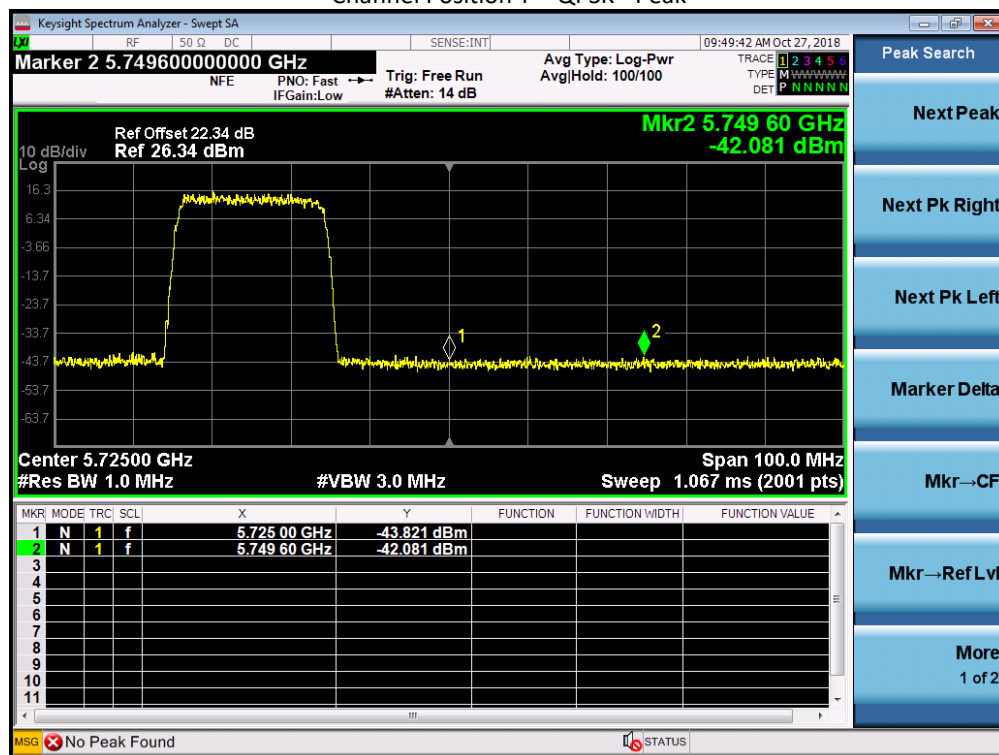
Channel Position B – QPSK - Peak



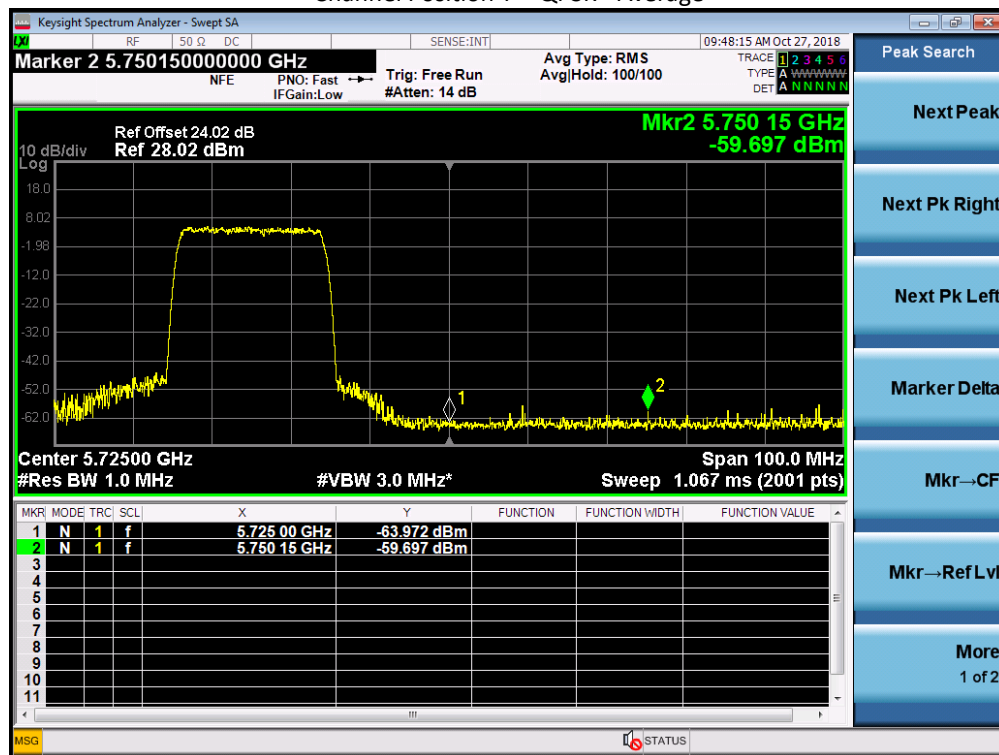
Channel Position B – QPSK - Average



Channel Position T – QPSK - Peak



Channel Position T – QPSK - Average



L-MIMO-MC 1 (2C)

Maximum Output Power 18dBm per port:

Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5500MHz + 5520MHz	1	-30.01
T	20.0 MHz	5680MHz + 5700MHz	1	-30.01

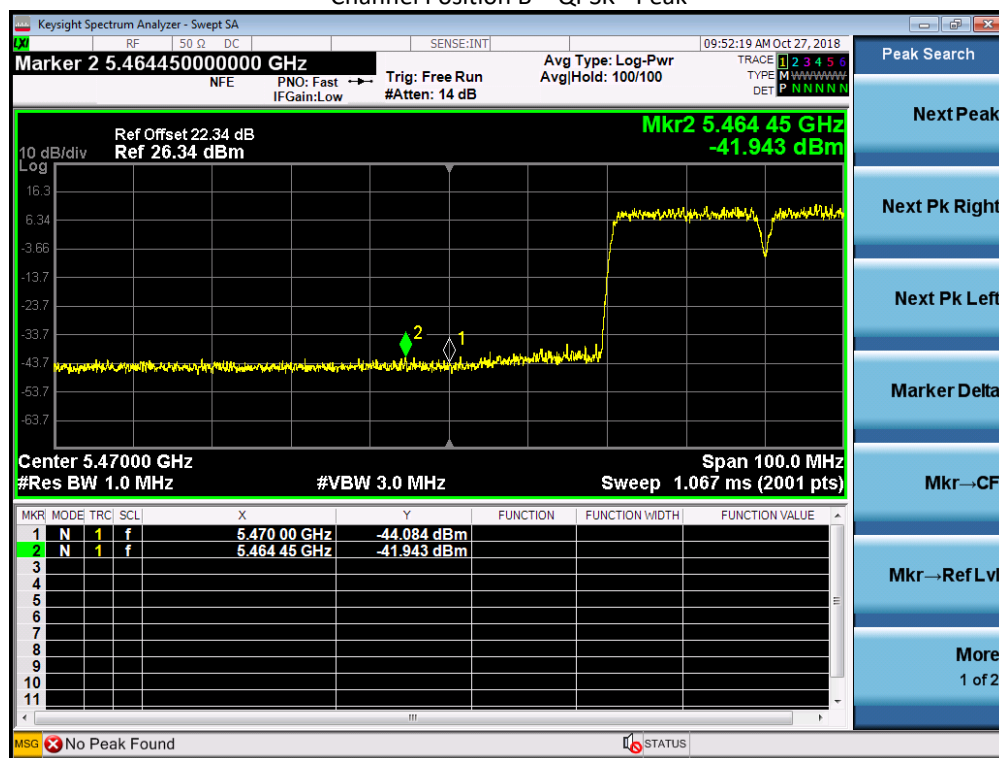
Note 1: The channels shown in the table above are the minimum and maximum channels that can be used in the authorized frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be available to the end user.

Note 2: 5460MHz in the restricted band, use the following formula as per Section G (1) of 789033 D02 General UNII Test Procedures v01r04:

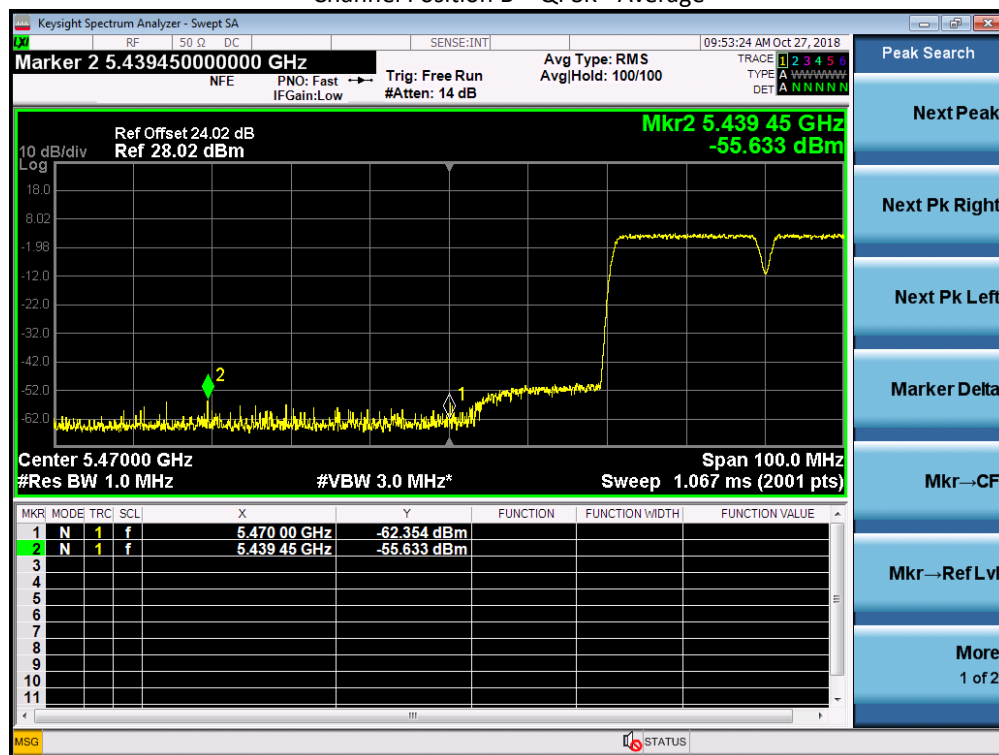
$$E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} + 95.2 = (\text{measured level dBm} + 6 \text{ dBi antenna gain}) + 95.2$$

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).

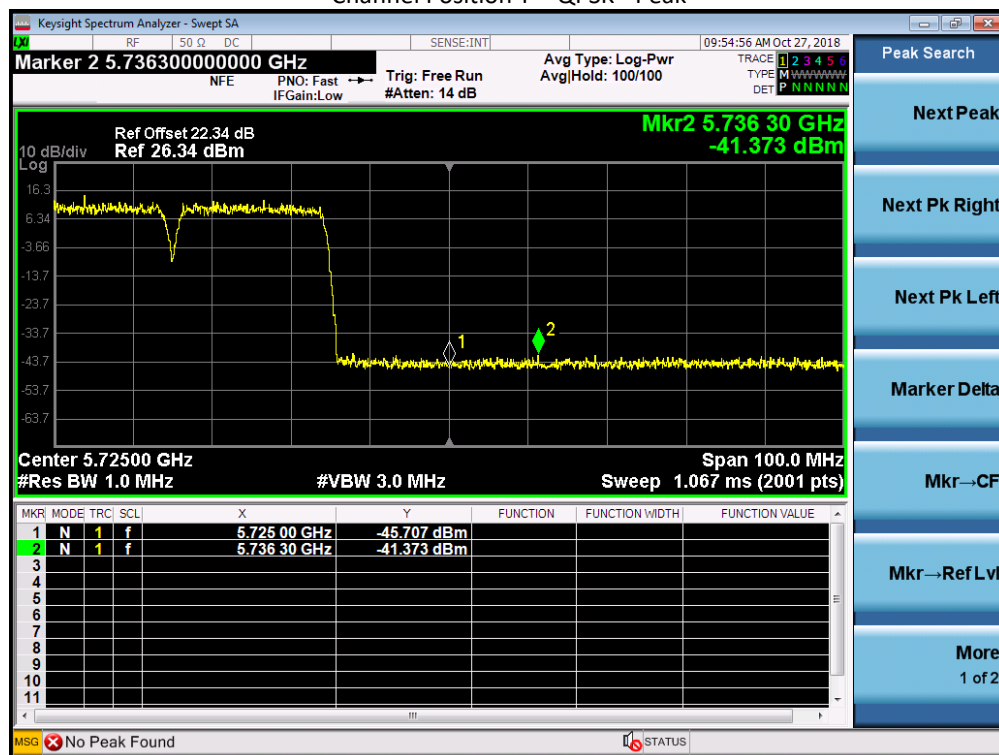
Channel Position B – QPSK - Peak



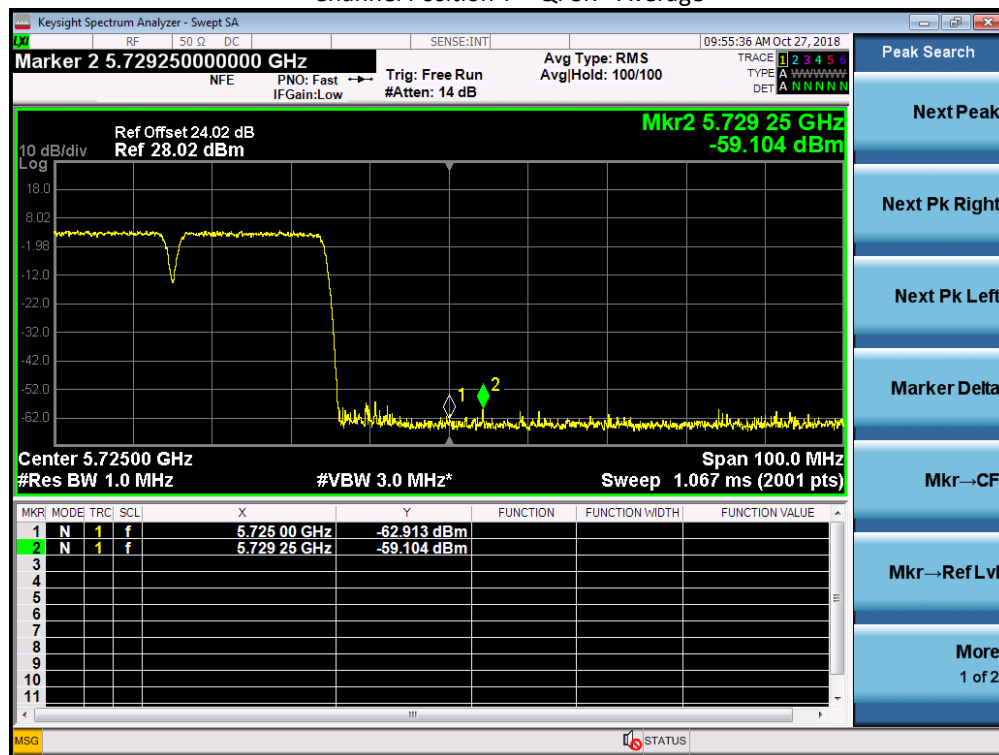
Channel Position B – QPSK - Average



Channel Position T – QPSK - Peak



Channel Position T – QPSK - Average



L-MIMO-MC 2 (3C)

Maximum Output Power 18dBm per port:

Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5500MHz + 5520MHz + 5540MHz	1	-30.01
T	20.0 MHz	5660MHz + 5680MHz + 5700MHz	1	-30.01

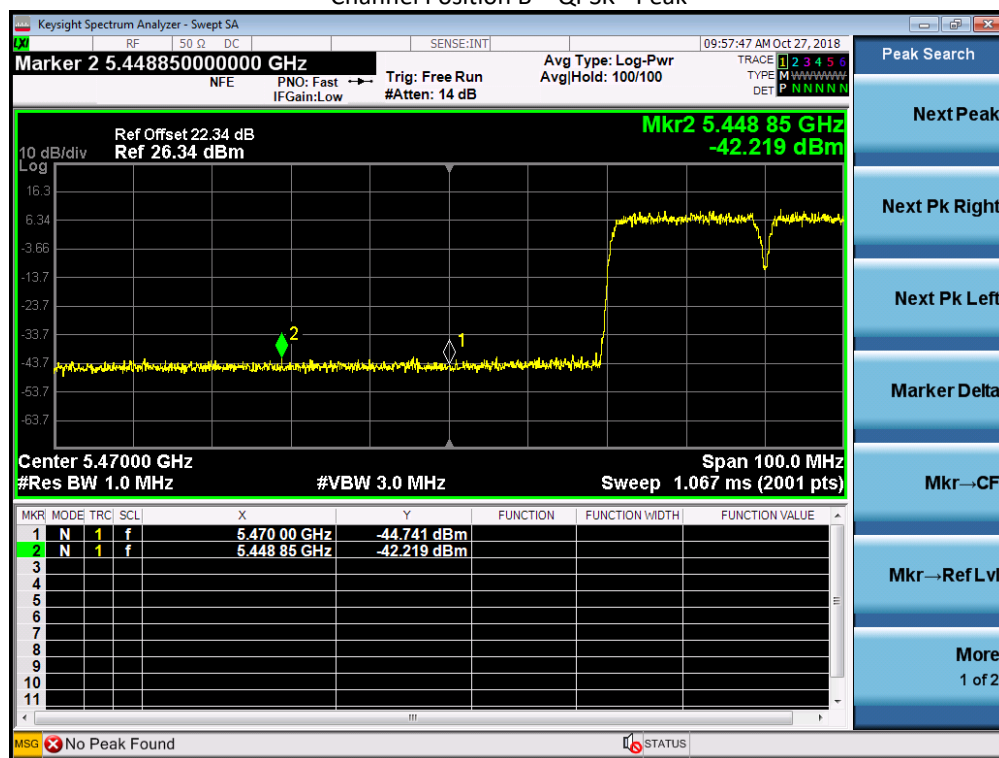
Note 1: The channels shown in the table above are the minimum and maximum channels that can be used in the authorized frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be available to the end user.

Note 2: 5460MHz in the restricted band, use the following formula as per Section G (1) of 789033 D02 General UNII Test Procedures v01r04:

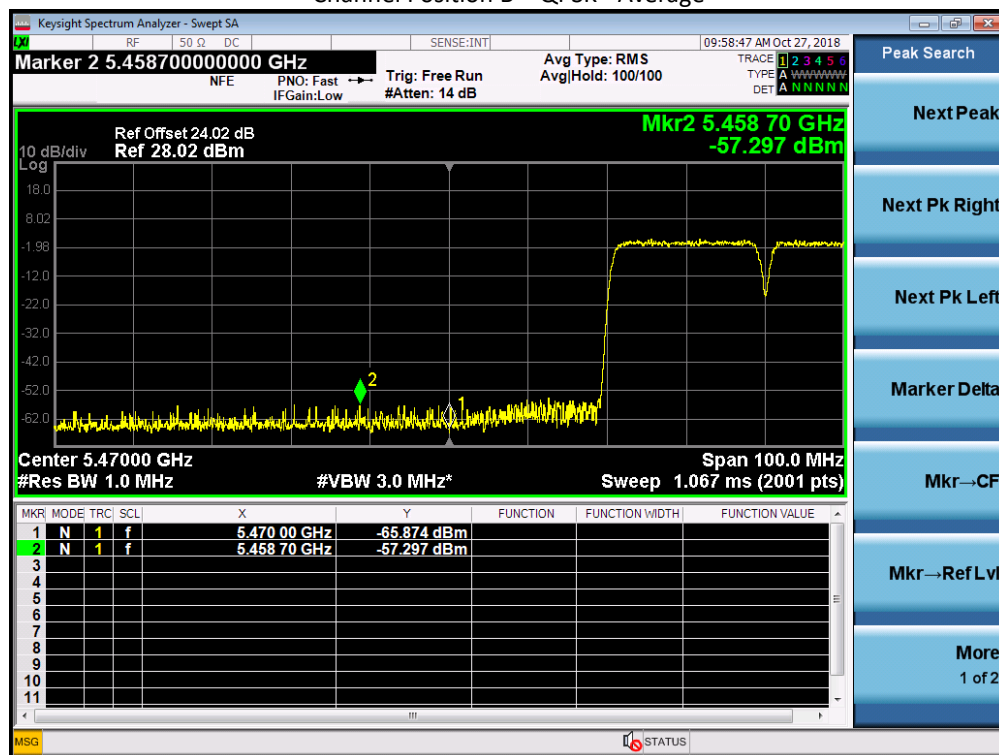
$$E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} + 95.2 = (\text{measured level dBm} + 6 \text{ dBi antenna gain}) + 95.2$$

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).

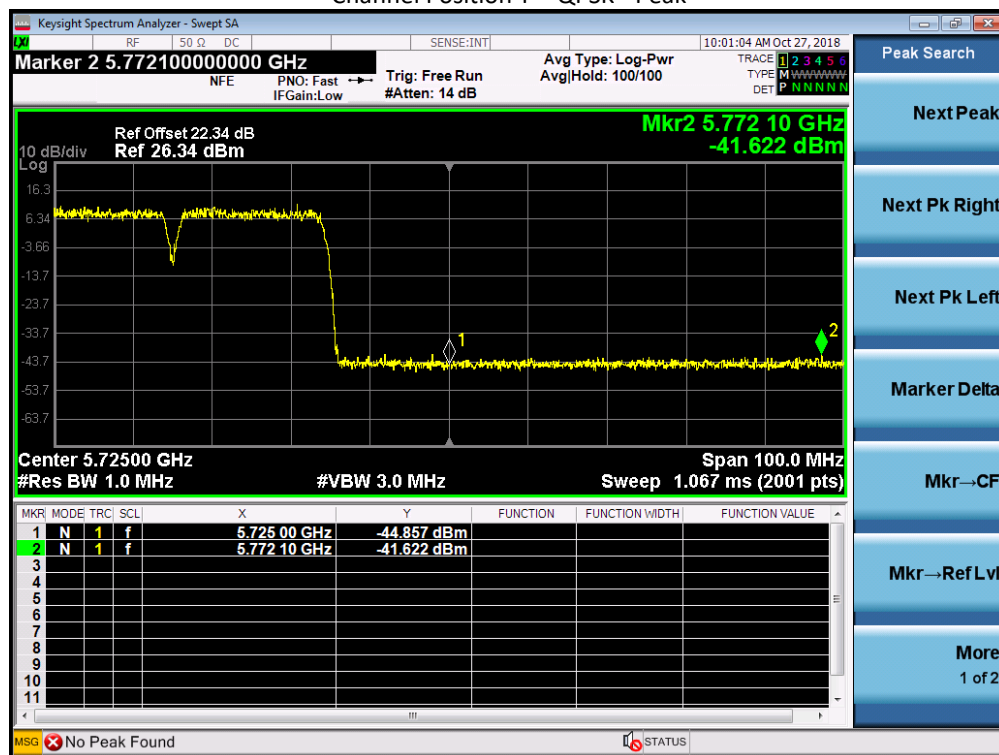
Channel Position B – QPSK - Peak



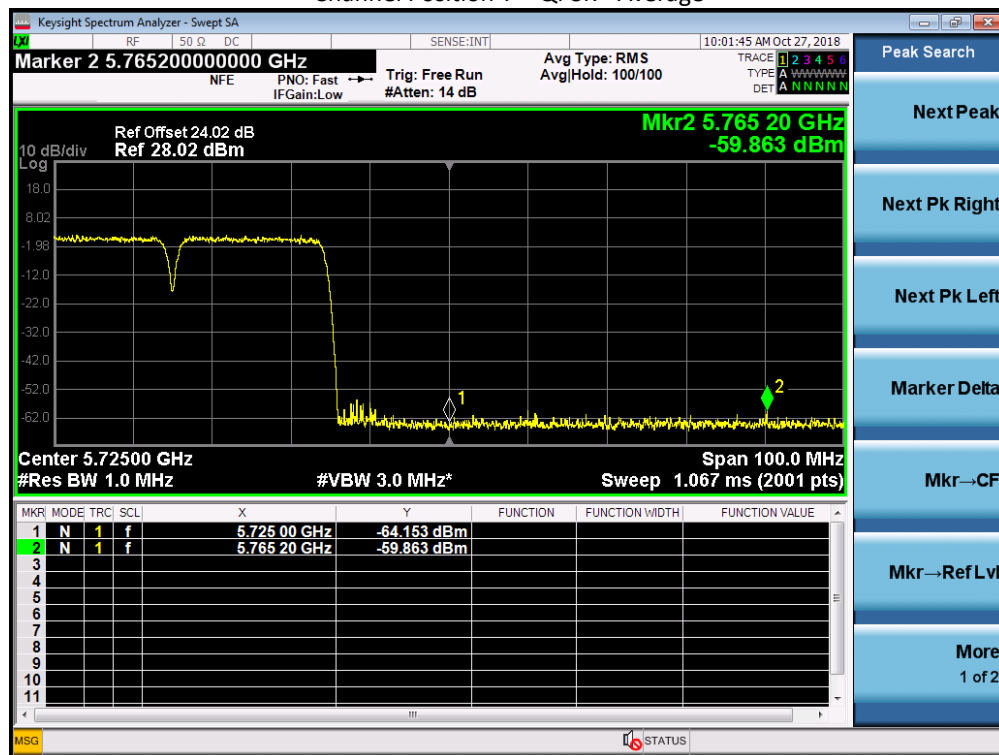
Channel Position B – QPSK - Average



Channel Position T – QPSK - Peak



Channel Position T – QPSK - Average



Configuration B1

L-MIMO-SC

Maximum Output Power 12dBm per port:

Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5260MHz	1	-30.01
T	20.0 MHz	5320MHz	1	-30.01

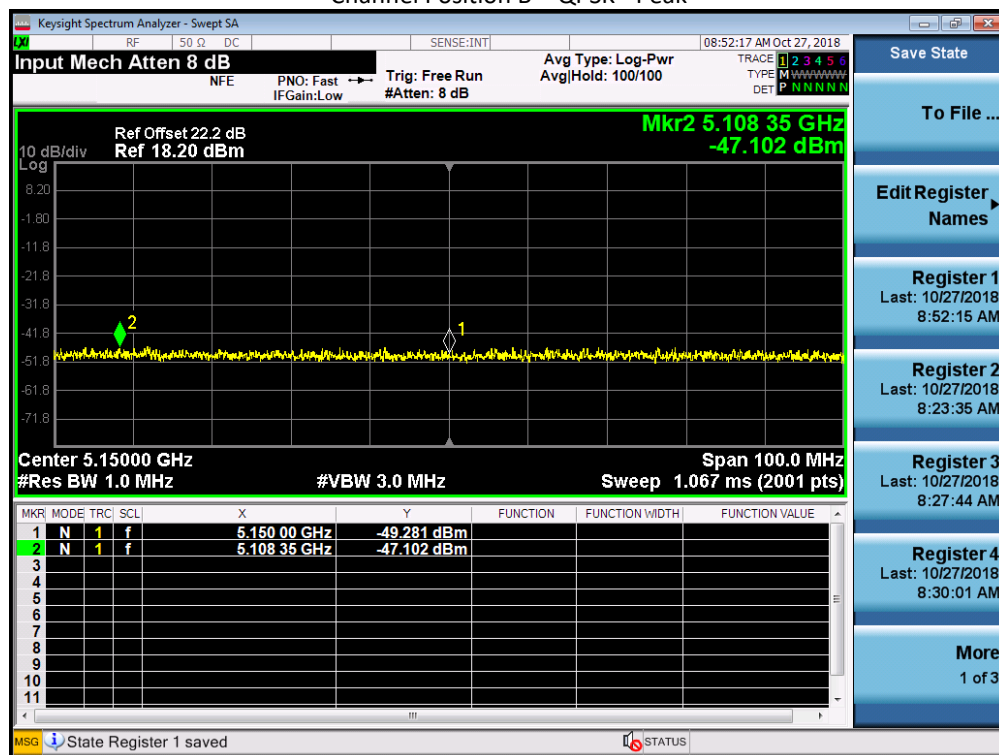
Note 1: The channels shown in the table above are the minimum and maximum channels that can be used in the authorized frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be available to the end user.

Note 2: 5350 MHz in the restricted band, use the following formula as per Section G (1) of 789033 D02 General UNII Test Procedures v01r04:

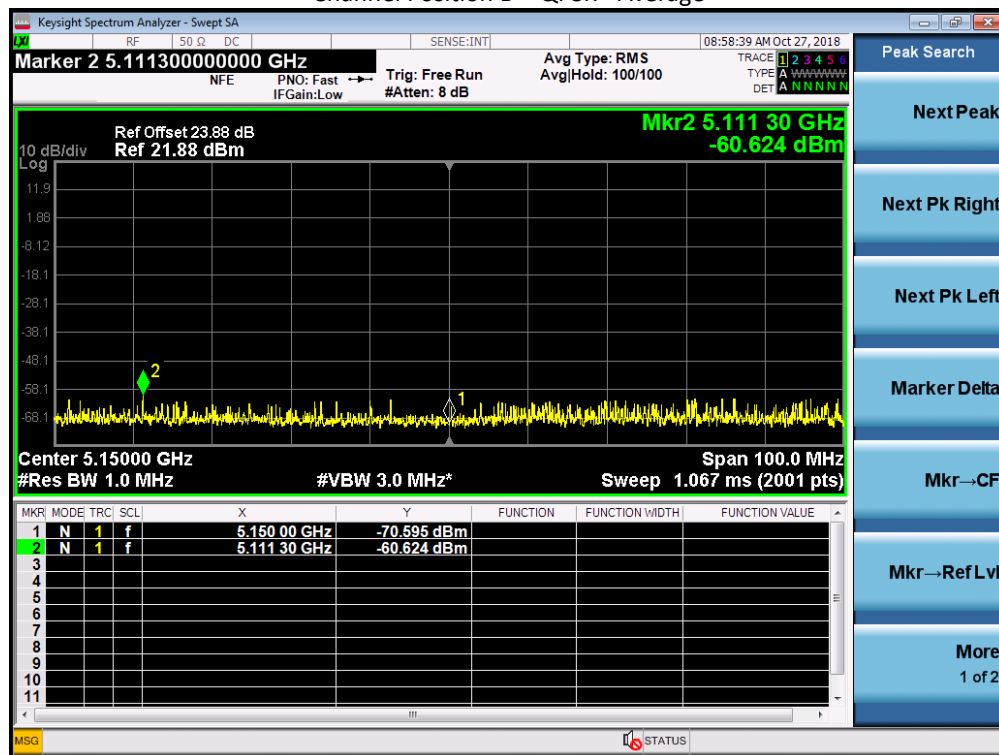
$$E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} + 95.2 = (\text{measured level dBm} + 12 \text{ dBi antenna gain}) + 95.2$$

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).

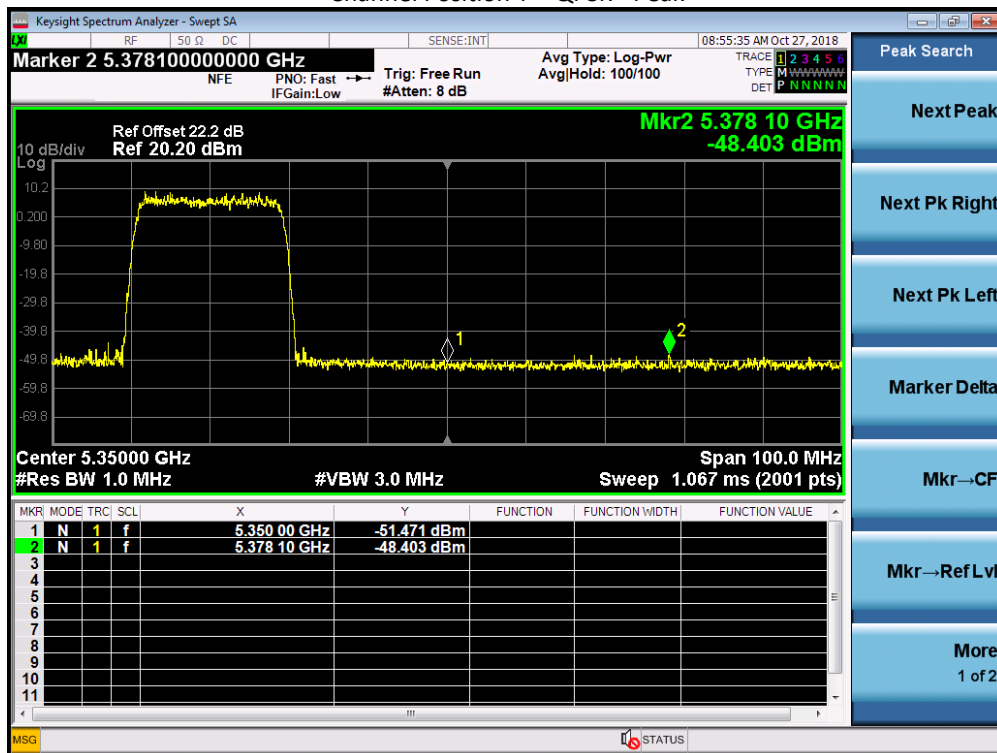
Channel Position B – QPSK - Peak



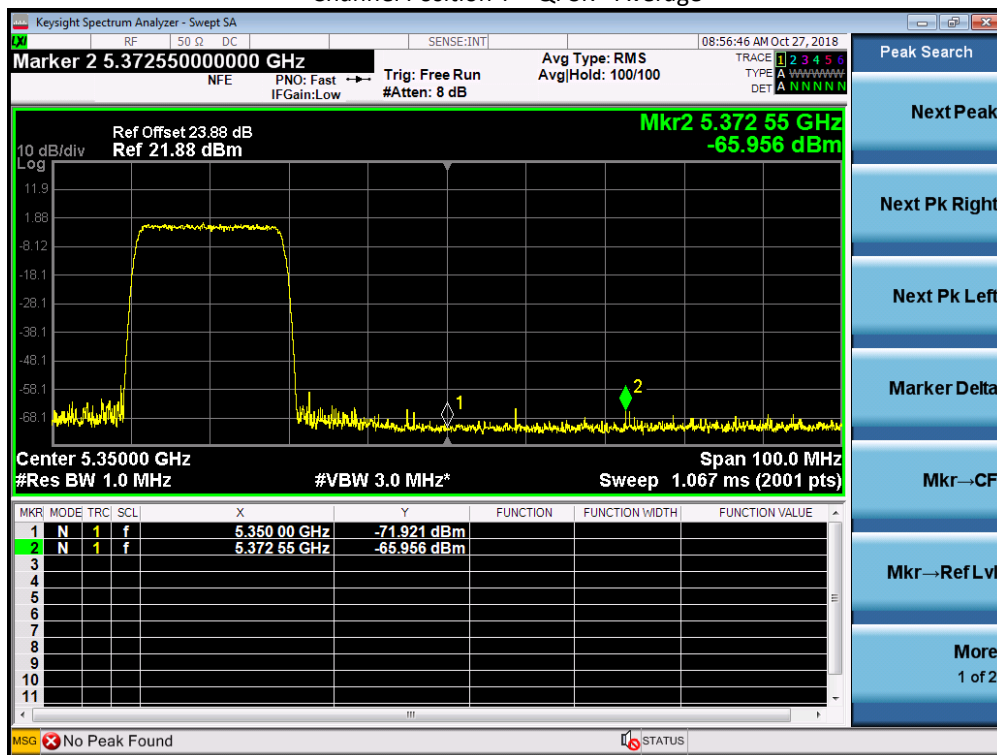
Channel Position B – QPSK - Average



Channel Position T – QPSK - Peak



Channel Position T – QPSK - Average



L-MIMO-MC 1 (2C)

Maximum Output Power 12dBm per port:

Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5260MHz + 5280MHz	1	-30.01
T	20.0 MHz	5300MHz + 5320MHz	1	-30.01

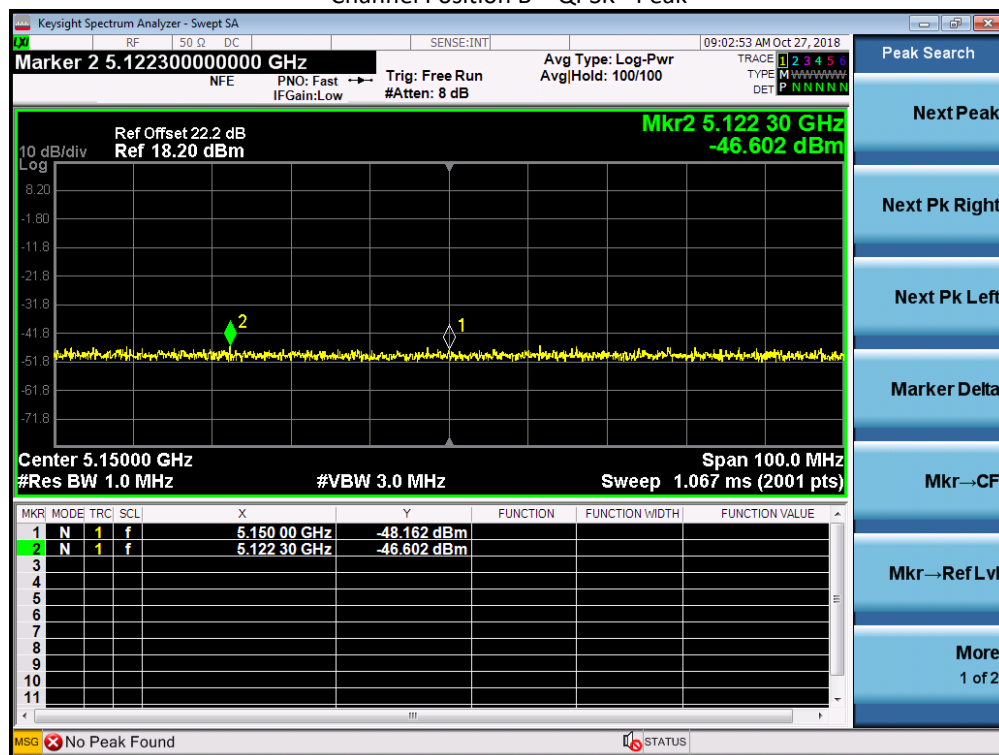
Note 1: The channels shown in the table above are the minimum and maximum channels that can be used in the authorized frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be available to the end user.

Note 2: 5350 MHz in the restricted band, use the following formula as per Section G (1) of 789033 D02 General UNII Test Procedures v01r04:

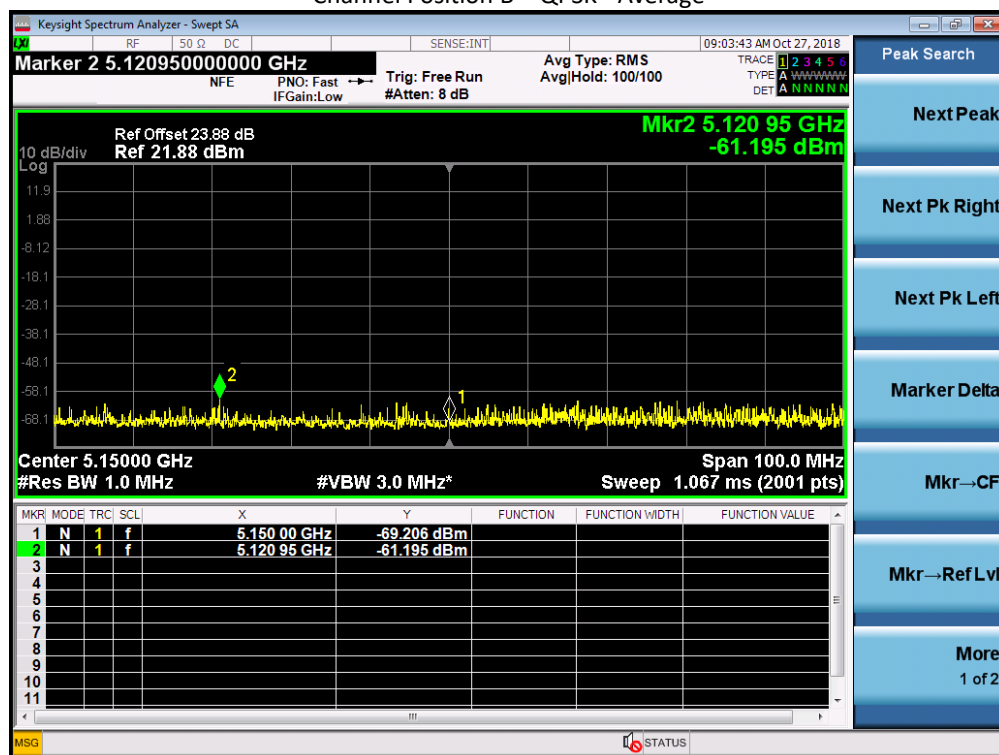
$$E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} + 95.2 = (\text{measured level dBm} + 12 \text{ dBi antenna gain}) + 95.2$$

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).

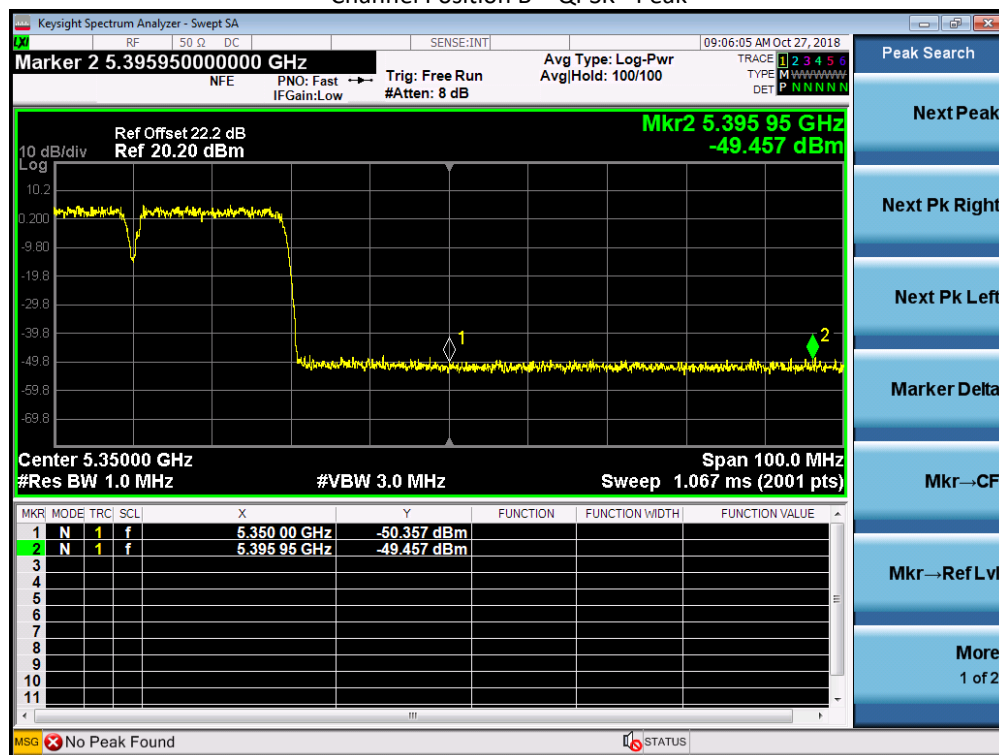
Channel Position B – QPSK - Peak



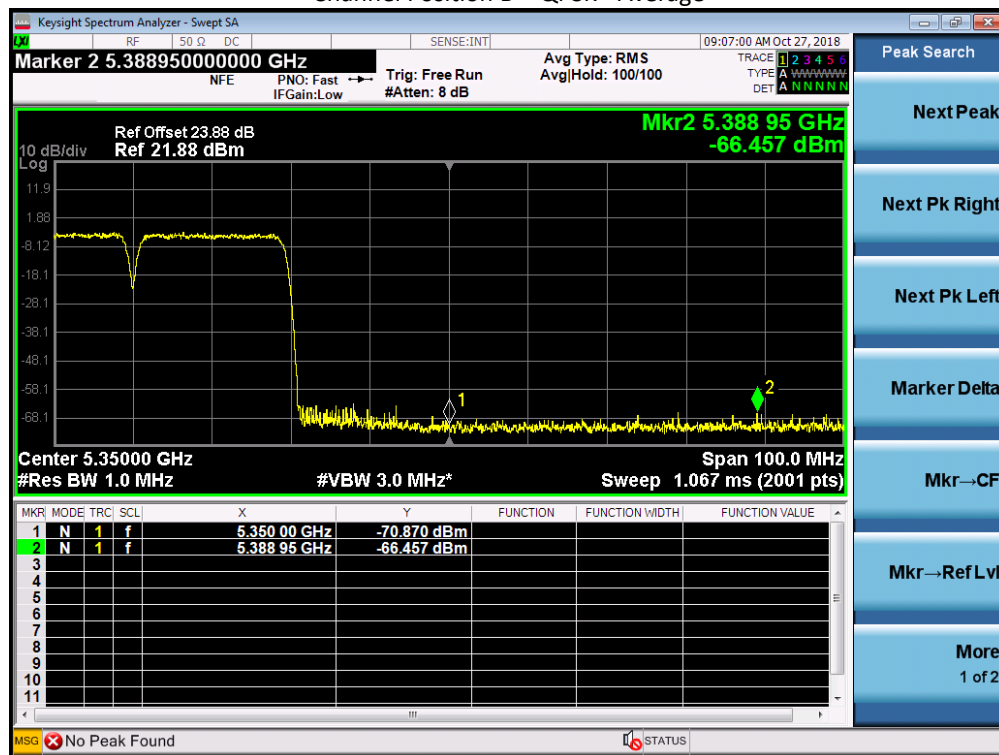
Channel Position B – QPSK - Average



Channel Position B – QPSK - Peak



Channel Position B – QPSK - Average



L-MIMO-MC 2 (3C)

Maximum Output Power 12dBm per port:

Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5260MHz + 5280MHz + 5300MHz	1	-30.01
T	20.0 MHz	5280MHz + 5300MHz + 5320MHz	1	-30.01

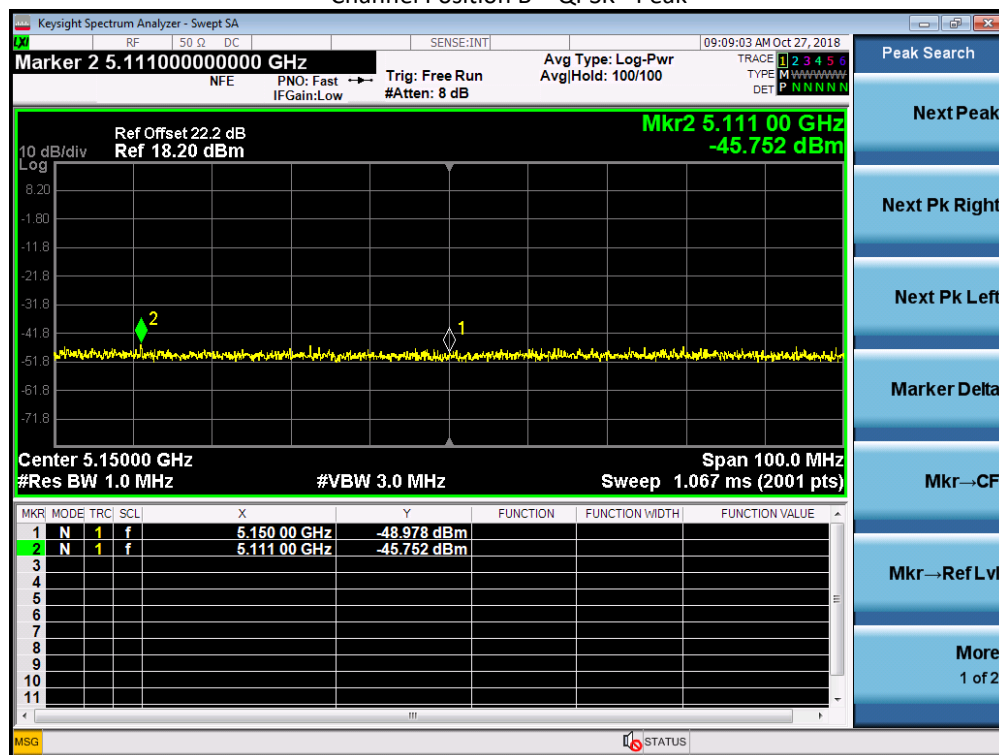
Note 1: The channels shown in the table above are the minimum and maximum channels that can be used in the authorized frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be available to the end user.

Note 2: 5350 MHz in the restricted band, use the following formula as per Section G (1) of 789033 D02 General UNII Test Procedures v01r04:

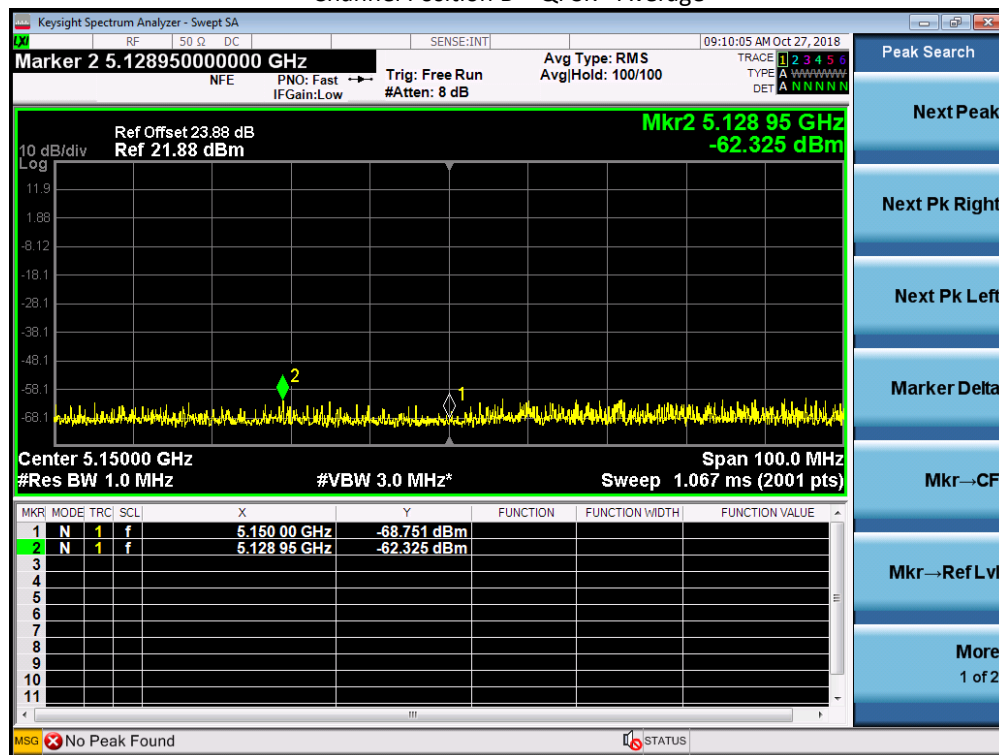
$$E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} + 95.2 = (\text{measured level dBm} + 12 \text{ dBi antenna gain}) + 95.2$$

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).

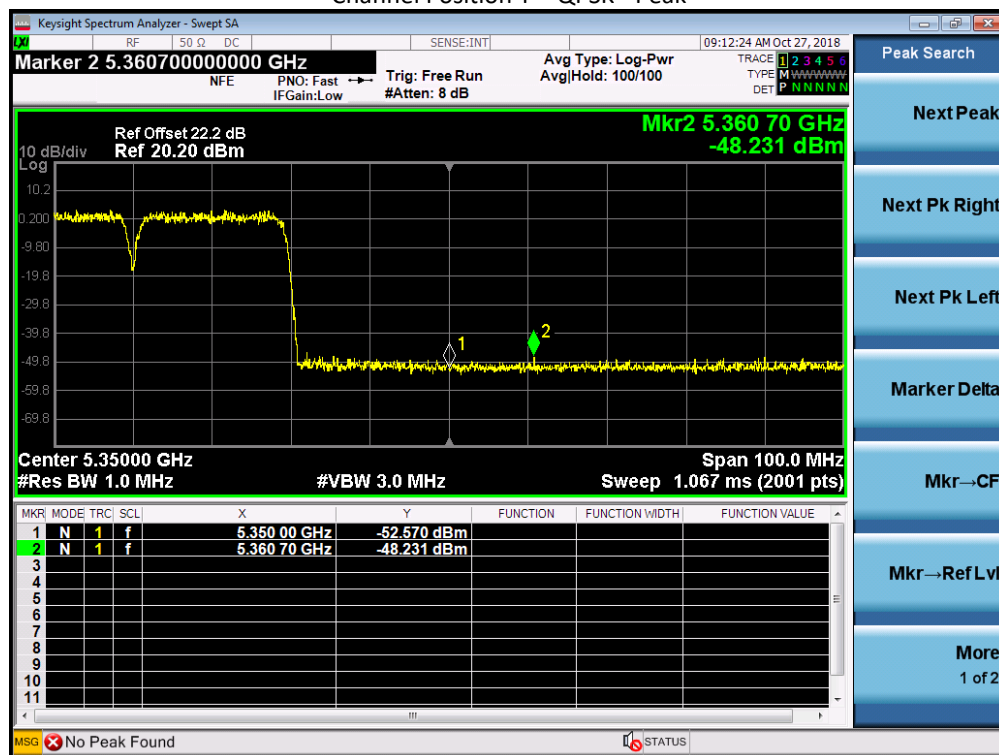
Channel Position B – QPSK - Peak



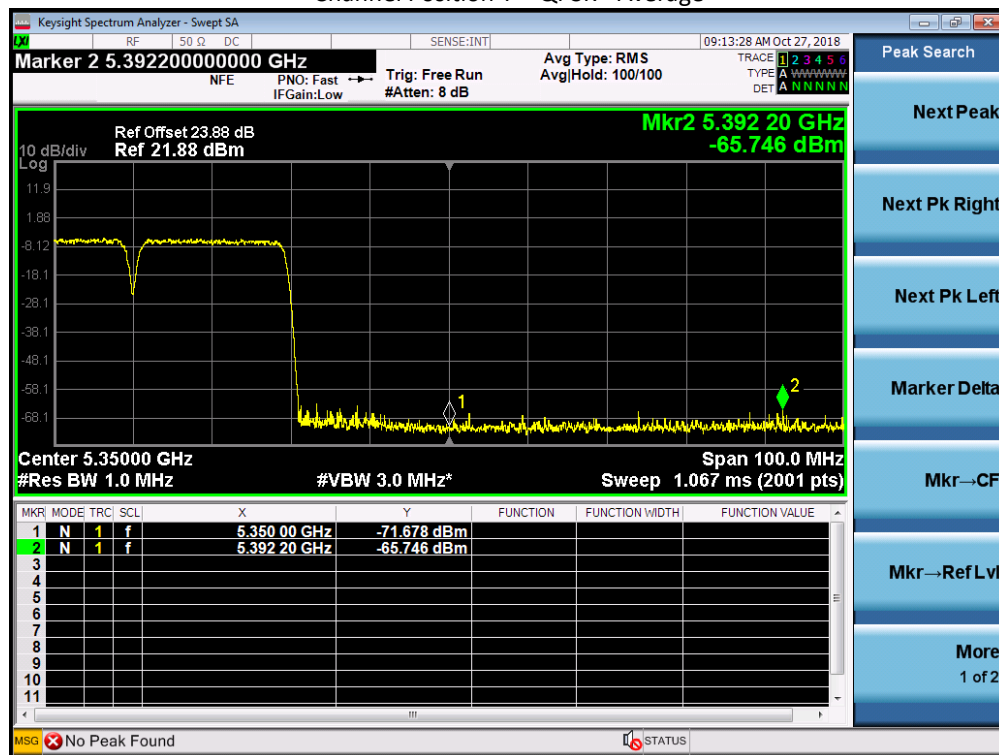
Channel Position B – QPSK - Average



Channel Position T – QPSK - Peak



Channel Position T – QPSK - Average



Configuration B2

L-MIMO-SC

Maximum Output Power 12dBm per port:

Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5500MHz	1	-30.01
T	20.0 MHz	5700MHz	1	-30.01

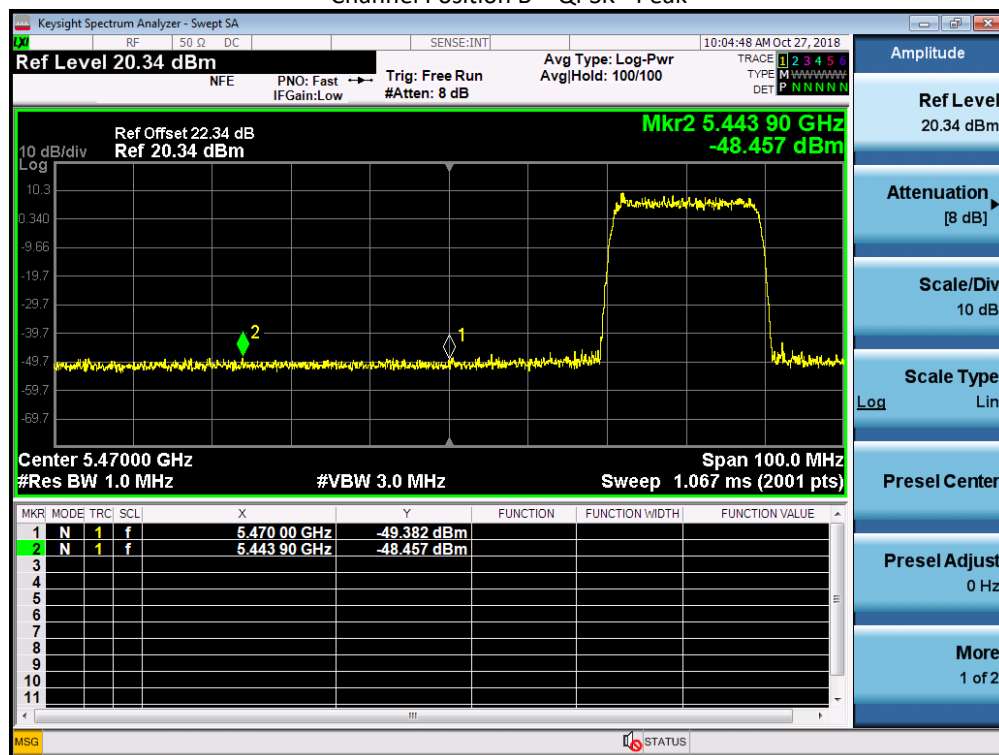
Note 1: The channels shown in the table above are the minimum and maximum channels that can be used in the authorized frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be available to the end user.

Note 2: 5460 MHz in the restricted band, use the following formula as per Section G (1) of 789033 D02 General UNII Test Procedures v01r04:

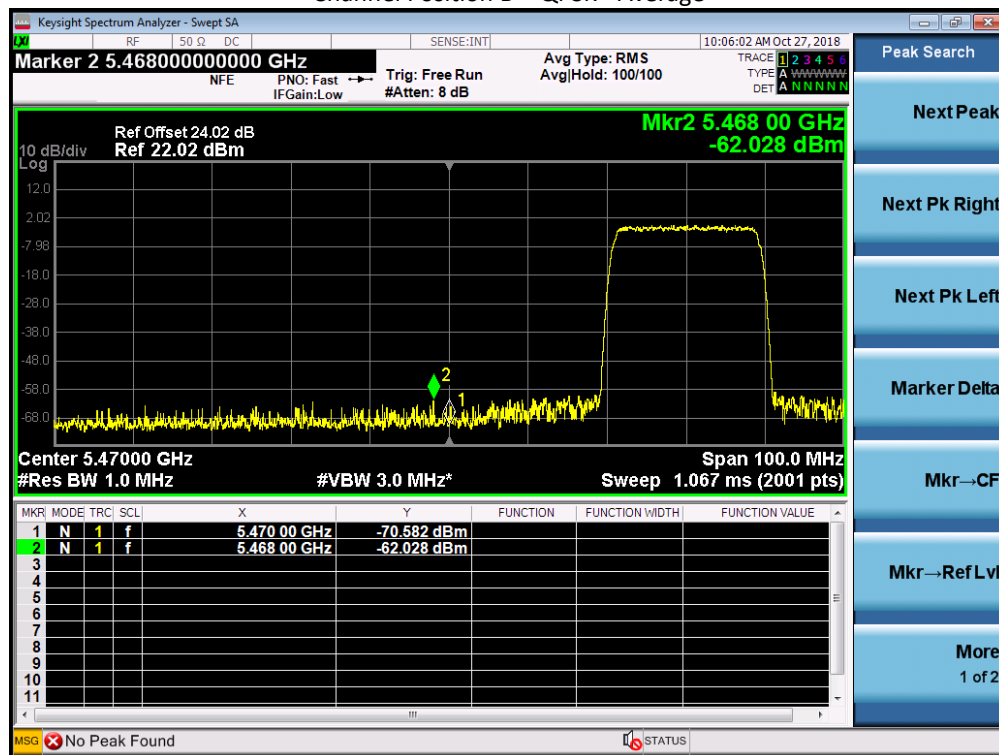
$$E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} + 95.2 = (\text{measured level dBm} + 12 \text{ dBi antenna gain}) + 95.2$$

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).

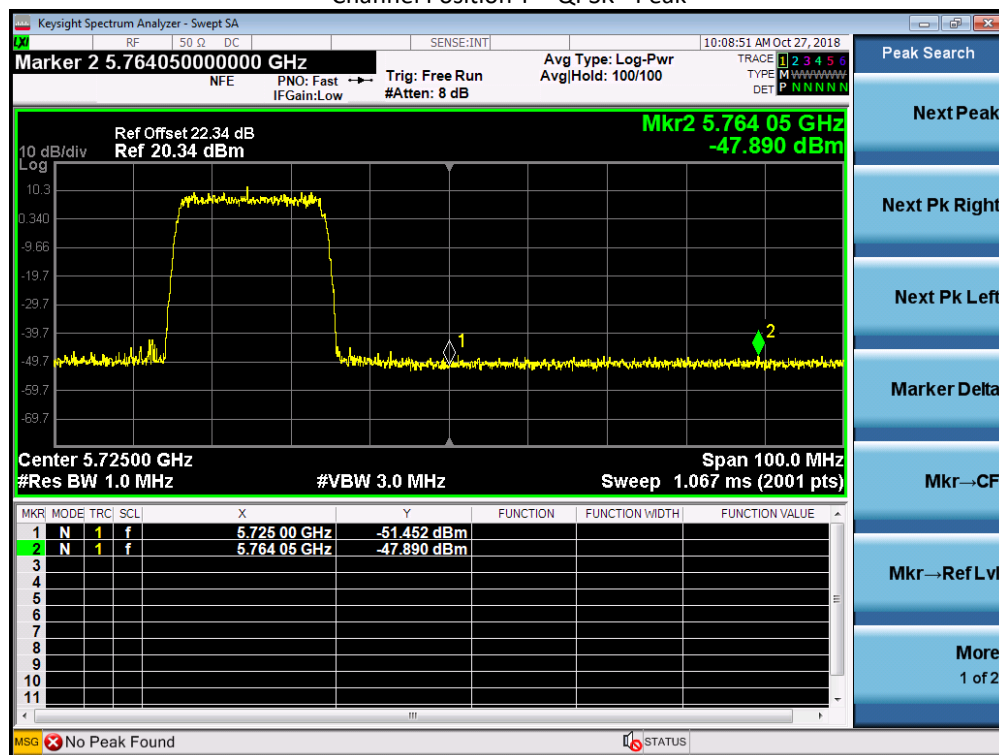
Channel Position B – QPSK - Peak



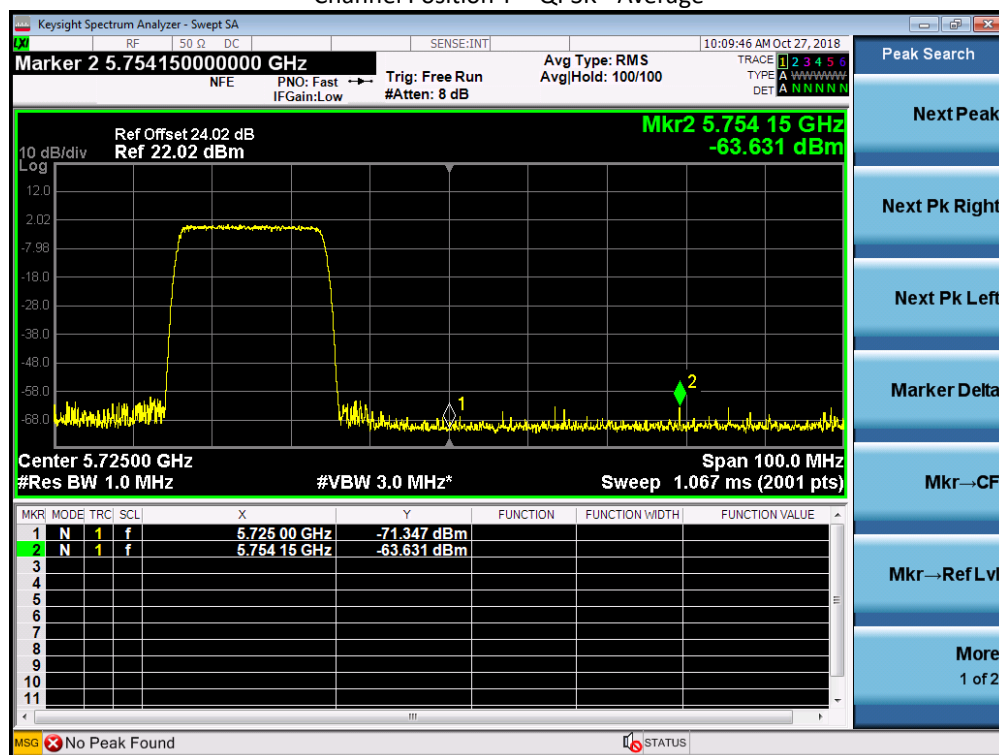
Channel Position B – QPSK - Average



Channel Position T – QPSK - Peak



Channel Position T – QPSK - Average



L-MIMO-MC 1 (2C)

Maximum Output Power 12dBm per port:

Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5500MHz + 5520MHz	1	-30.01
T	20.0 MHz	5680MHz + 5700MHz	1	-30.01

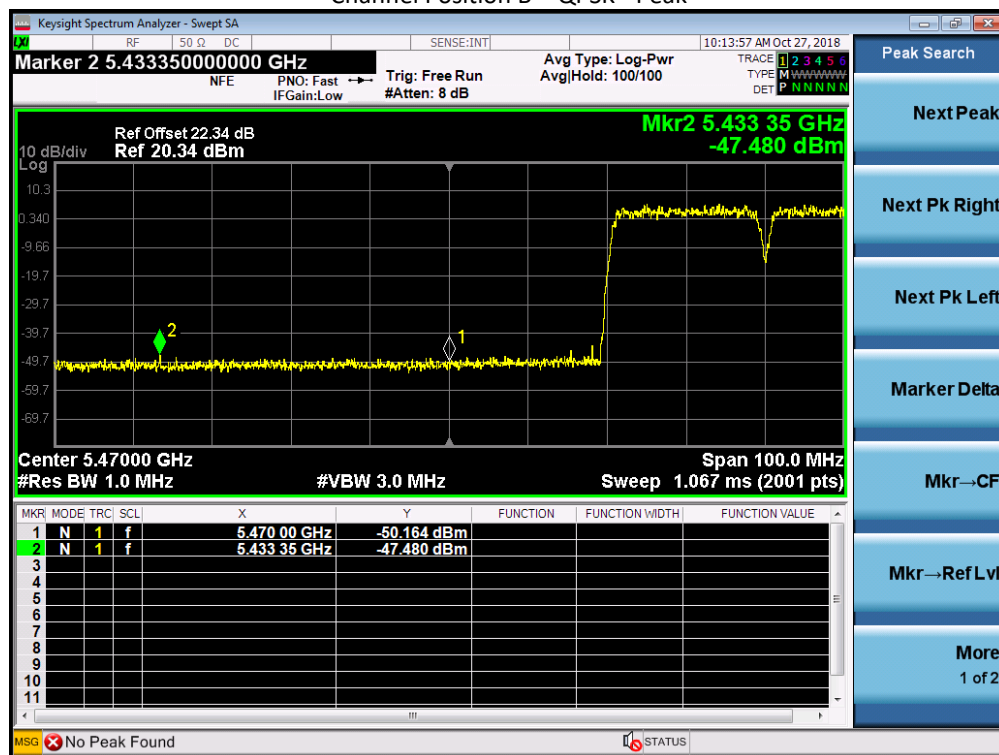
Note 1: The channels shown in the table above are the minimum and maximum channels that can be used in the authorized frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be available to the end user.

Note 2: 5460 MHz in the restricted band, use the following formula as per Section G (1) of 789033 D02 General UNII Test Procedures v01r04:

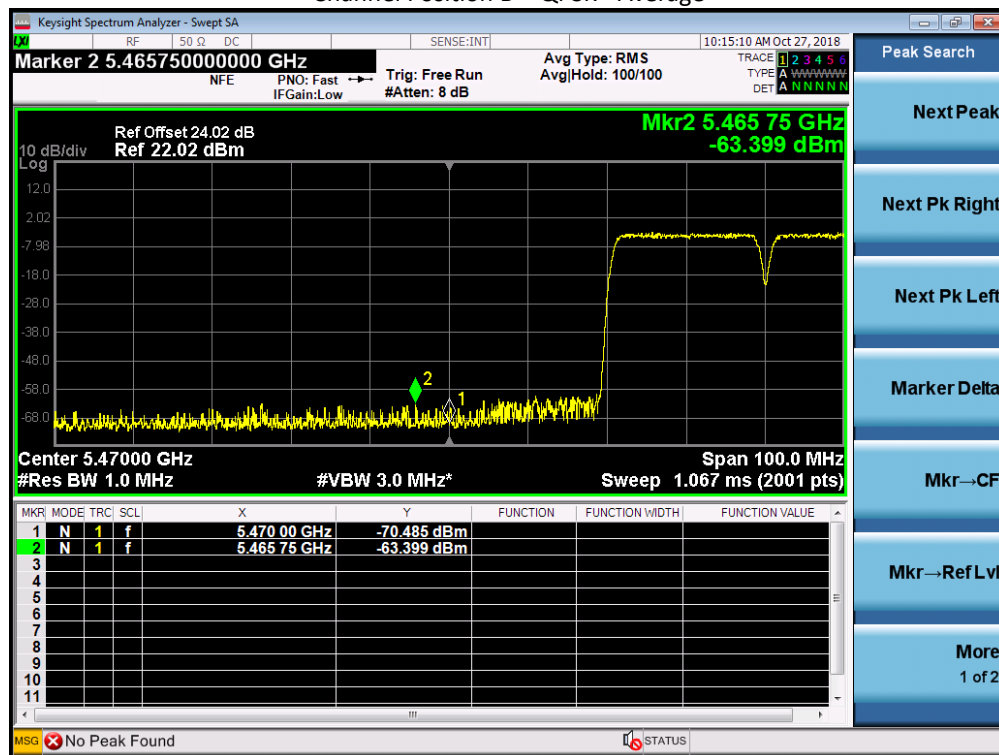
$$E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} + 95.2 = (\text{measured level dBm} + 12 \text{ dBi antenna gain}) + 95.2$$

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).

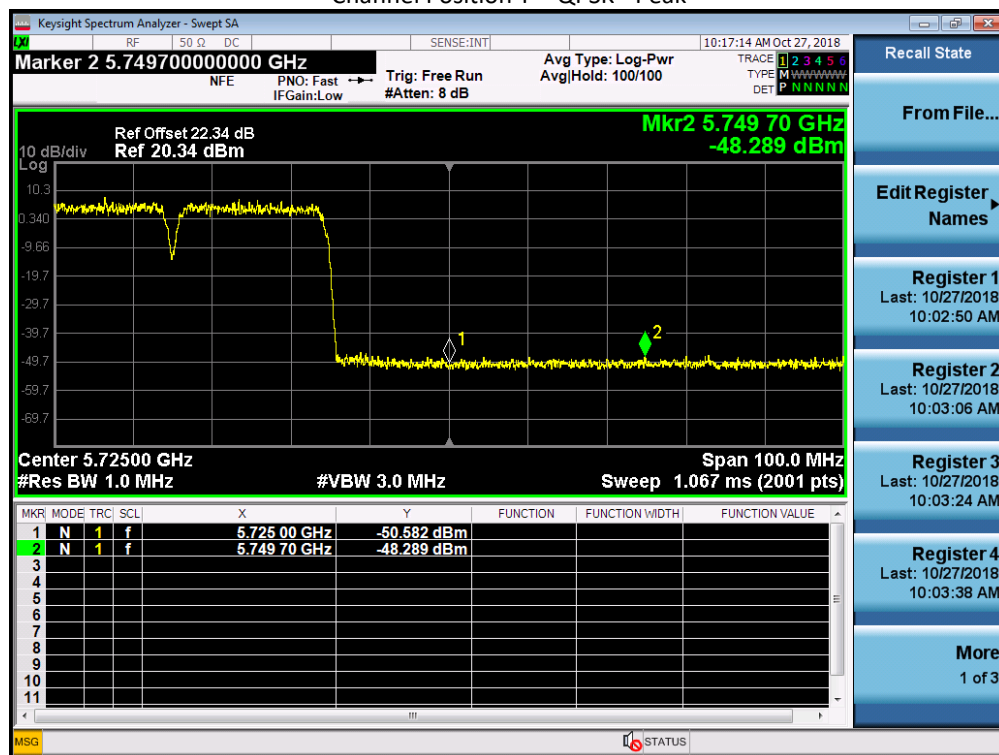
Channel Position B – QPSK - Peak



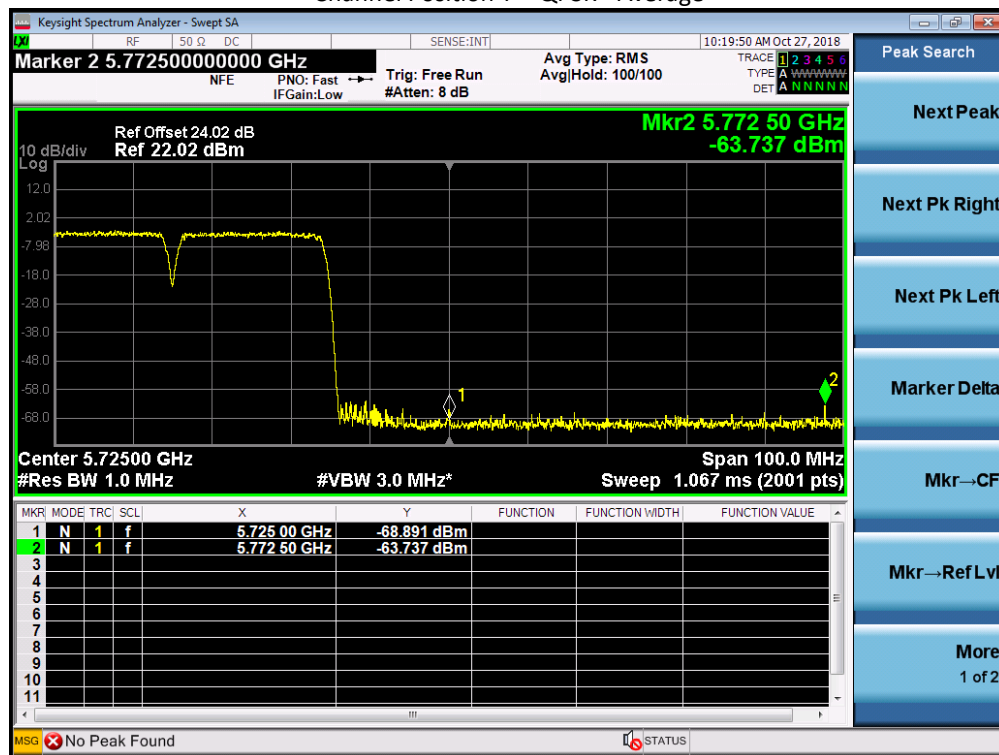
Channel Position B – QPSK - Average



Channel Position T – QPSK - Peak



Channel Position T – QPSK - Average



L-MIMO-MC 2 (3C)

Maximum Output Power 12dBm per port:

Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5500MHz + 5520MHz + 5540MHz	1	-30.01
T	20.0 MHz	5660MHz + 5680MHz + 5700MHz	1	-30.01

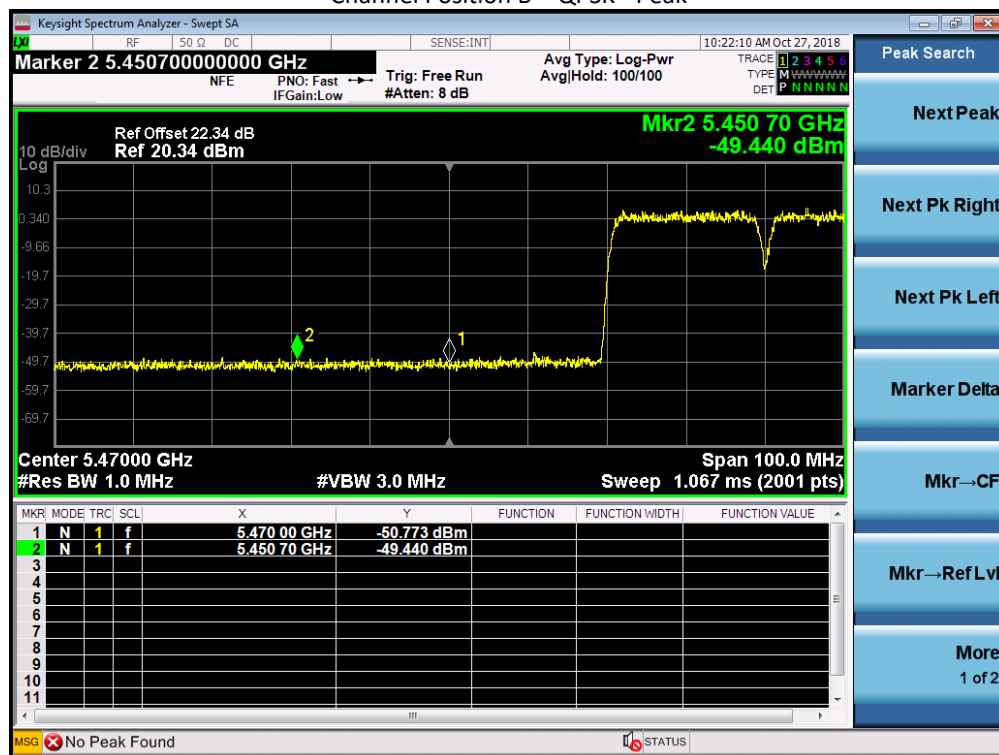
Note 1: The channels shown in the table above are the minimum and maximum channels that can be used in the authorized frequency ranges to maintain compliance. Channels outside of the ranges shown in the above tables shall not be available to the end user.

Note 2: 5460 MHz in the restricted band, use the following formula as per Section G (1) of 789033 D02 General UNII Test Procedures v01r04:

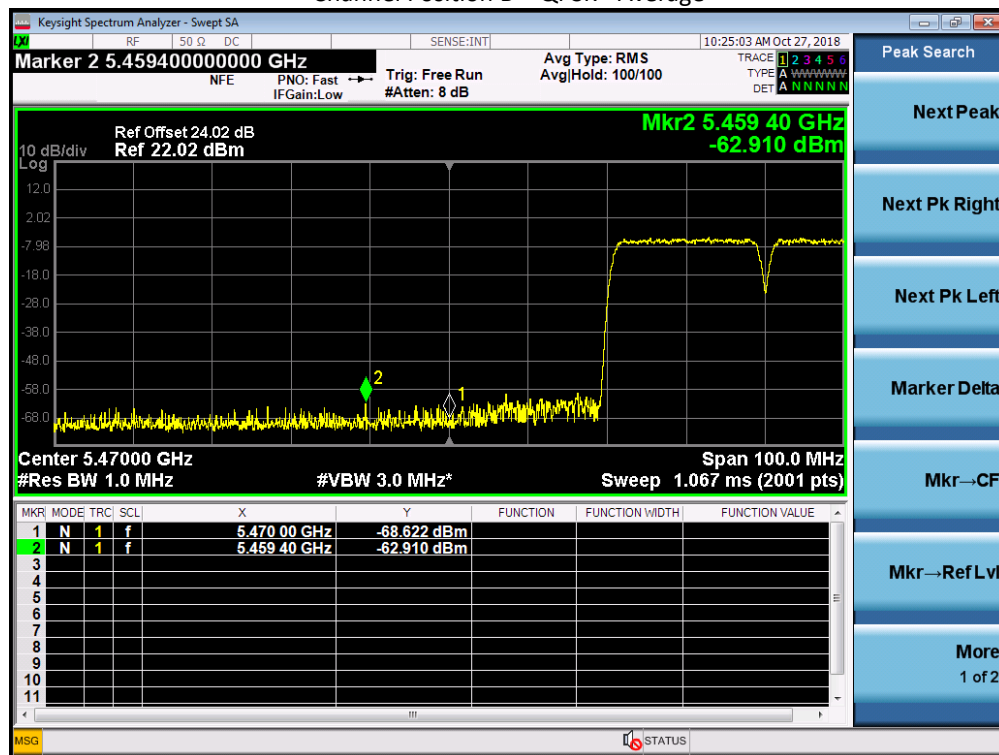
$$E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} + 95.2 = (\text{measured level dBm} + 12 \text{ dBi antenna gain}) + 95.2$$

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).

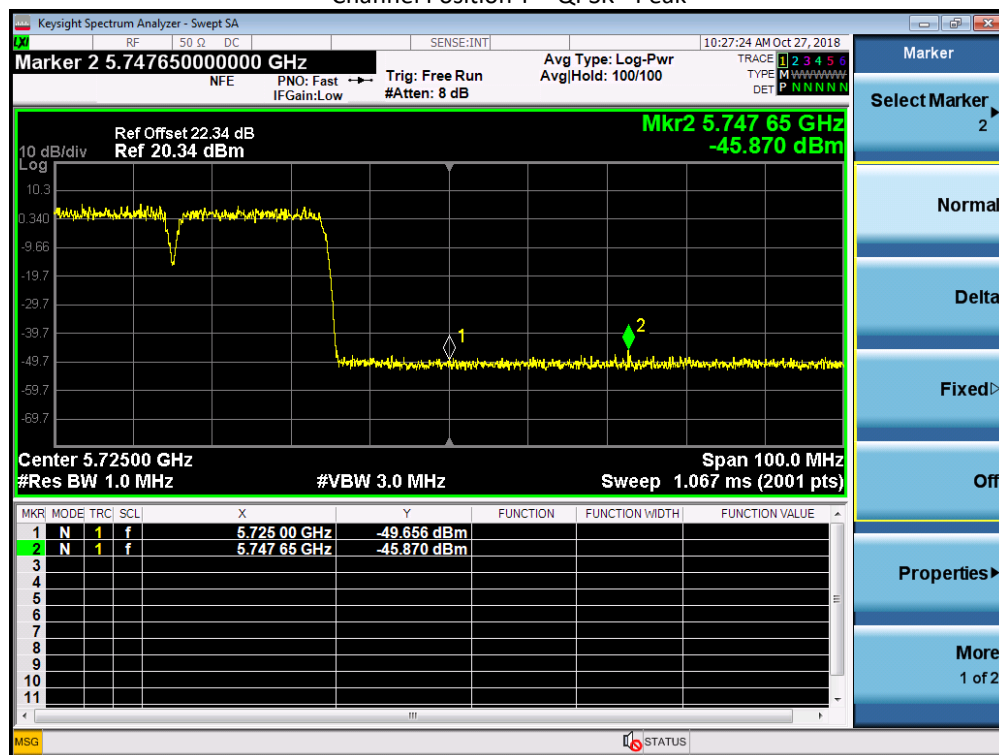
Channel Position B – QPSK - Peak



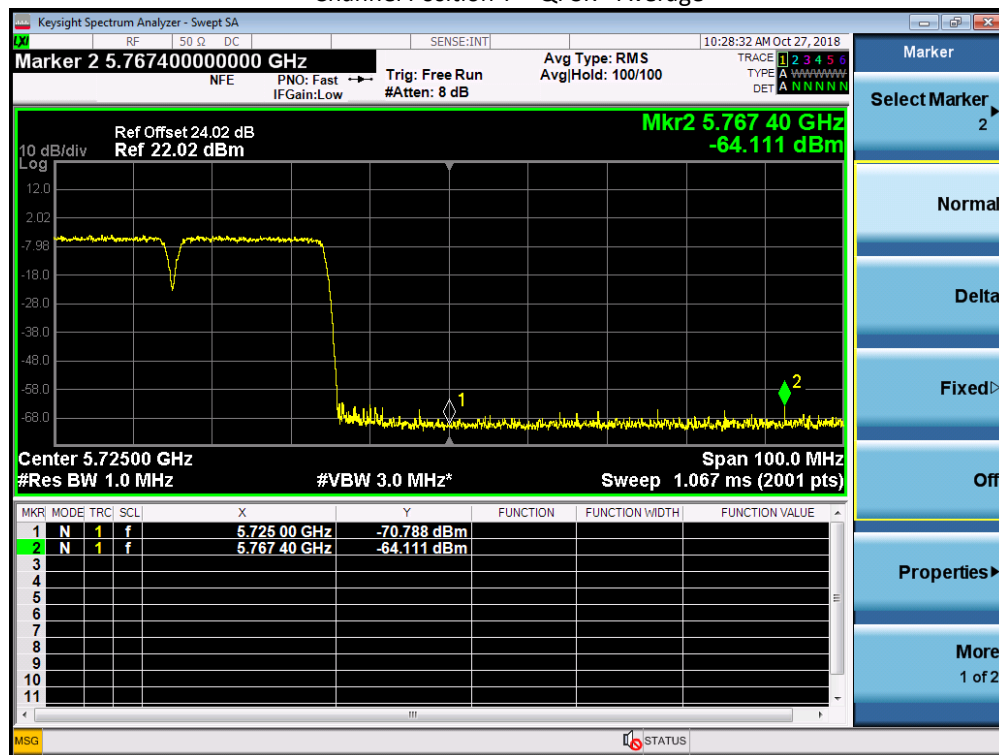
Channel Position B – QPSK - Average



Channel Position T – QPSK - Peak



Channel Position T – QPSK - Average



8 Undesirable Emission - Radiated

Test result: Pass

8.1 Limit

For transmitters operating in the 5.25-5.35 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 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

The radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) showed as below:

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

8.2 Test Method

The test was applied in accordance with the test method requirements of FCC CFR 47 Part 15, clause 15.407(b), clause 15.209 and ANSI 63.10, and RSS-247 clause 6 and RSS-Gen clause 8.

A preliminary profile of the Spurious Radiated Emissions was obtained by operating the EUT on a remotely controlled turntable within the chamber. Measurements of emissions from the EUT were obtained with the measurement antenna in both horizontal and vertical polarisations.

Emissions identified within the range 30MHz to 1GHz were then formally measured using quasi-peak detector, and 1GHz to 40GHz using both peak and average detector.

The limits for outside frequency band(s) of operation the power of the undesirable emissions above 1 GHz have been calculated, as shown below using the following formula:

$$E(\text{dB}\mu\text{V/m}) = \text{E.I.R.P} + 95.2 \text{ dB} = -27 + 95.2 = 68.2 \text{ dB}\mu\text{V/m}$$

The EUT was measured with the antenna height varied between 1 and 4 m with the turntable rotated between 0 and 360 degrees. The emission of any outside a licensee's frequencies within 20dB of the limit were measured with the substitution method used according to the standard.

The measurements were performed at a 3m distance unless otherwise stated.

These limits have been used to determine Pass or Fail for the harmonics measured and detailed in the following results.

The results are shown in the plots below.

8.3 Test Results

Note: EUT was set to transmitting mode with AC power supply and DC power supply and the results and plots is shown as below. Only the worst case results plots have been included as all of the emissions are greater than 20dB below the limit.

Configuration A1

L-MIMO-SC

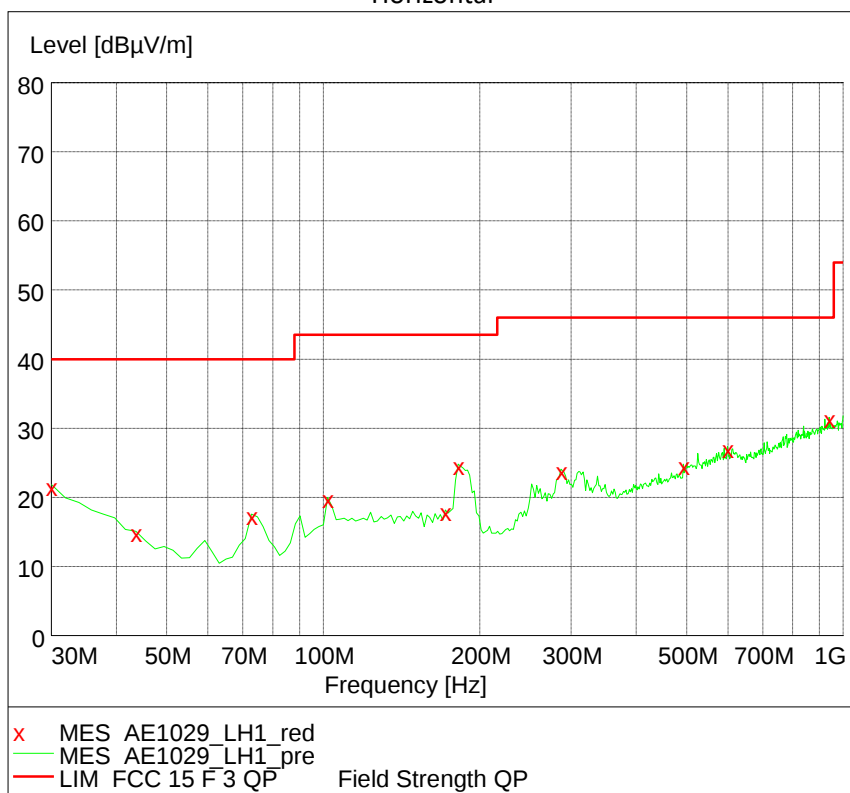
Maximum Output Power 18dBm per port:

Channel Position	Bandwidth (MHz)	Channel Frequency
B	20.0 MHz	5260MHz
M	20.0 MHz	5300MHz
T	20.0 MHz	5320MHz

Channel Position B – QPSK

30-1000MHz

Horizontal

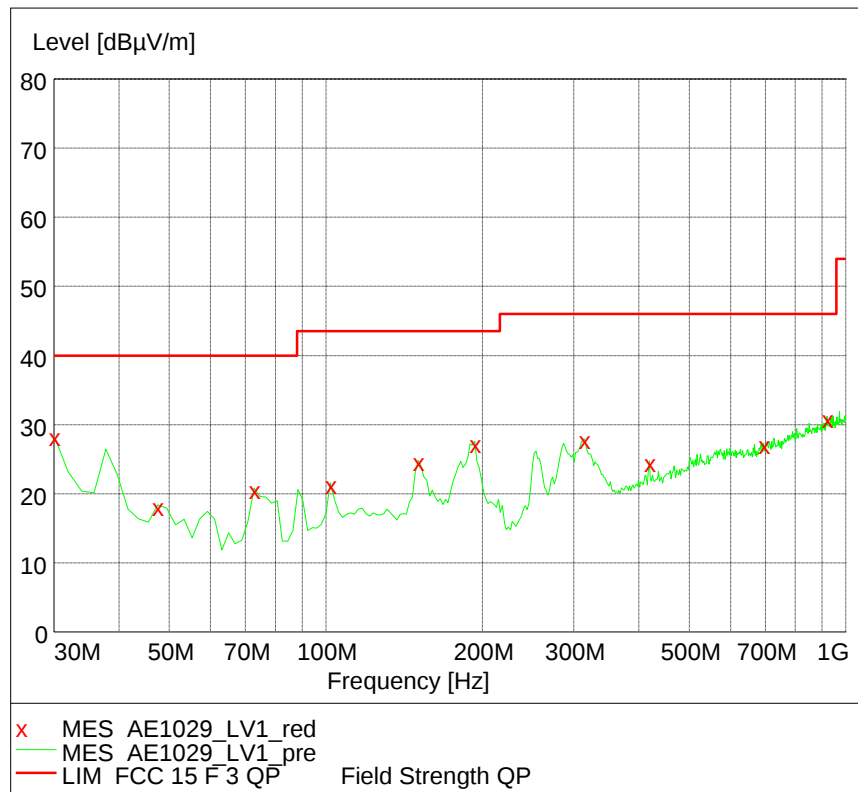


Frequency Level Transd Limit Margin

MHz dBμV/m dB dBμV/m dB

30.000000	21.80	18.6	40.0	18.2
43.607214	15.10	11.5	40.0	24.9
72.765531	17.60	7.4	40.0	22.4
101.923848	20.00	12.1	43.5	23.5
171.903808	18.20	10.7	43.5	25.3
181.623246	24.80	10.5	43.5	18.7
286.593186	24.10	14.5	46.0	21.9
492.645291	24.80	19.4	46.0	21.2
599.559118	27.30	20.8	46.0	18.7
939.739479	31.60	23.9	46.0	14.4

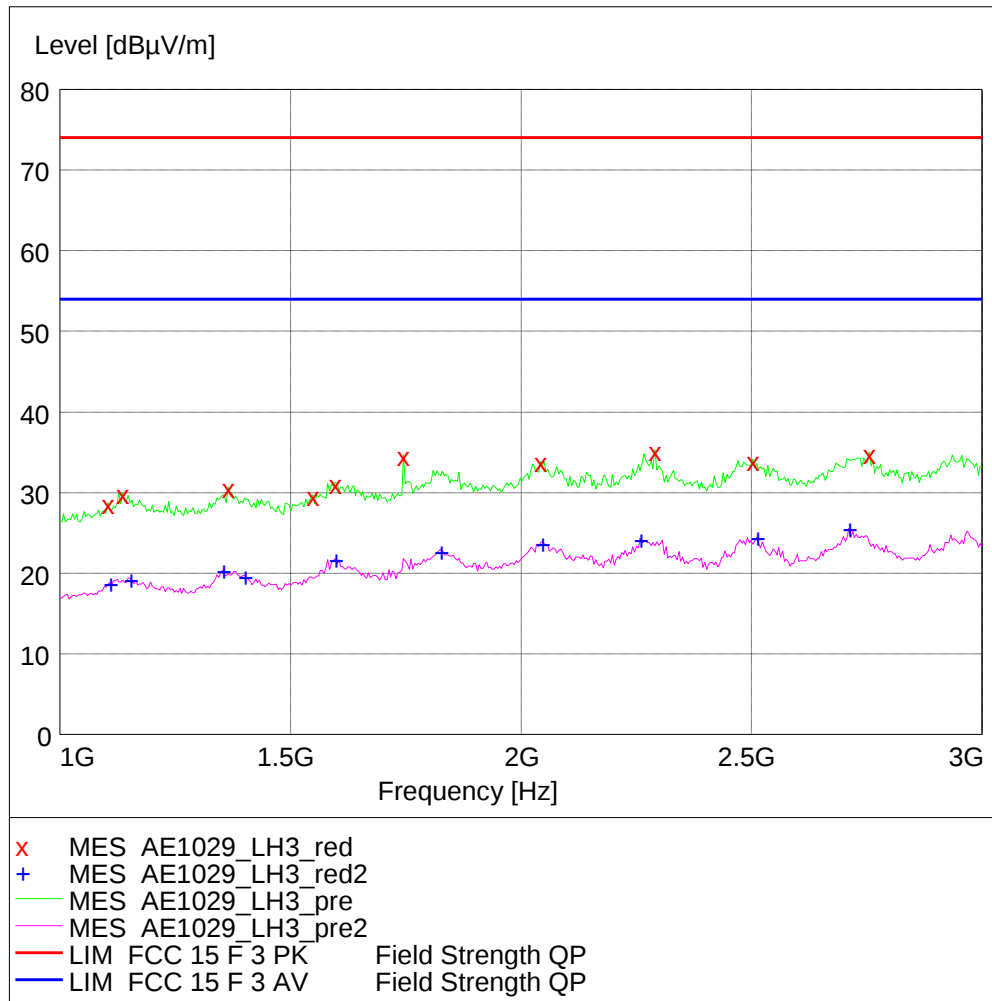
Vertical



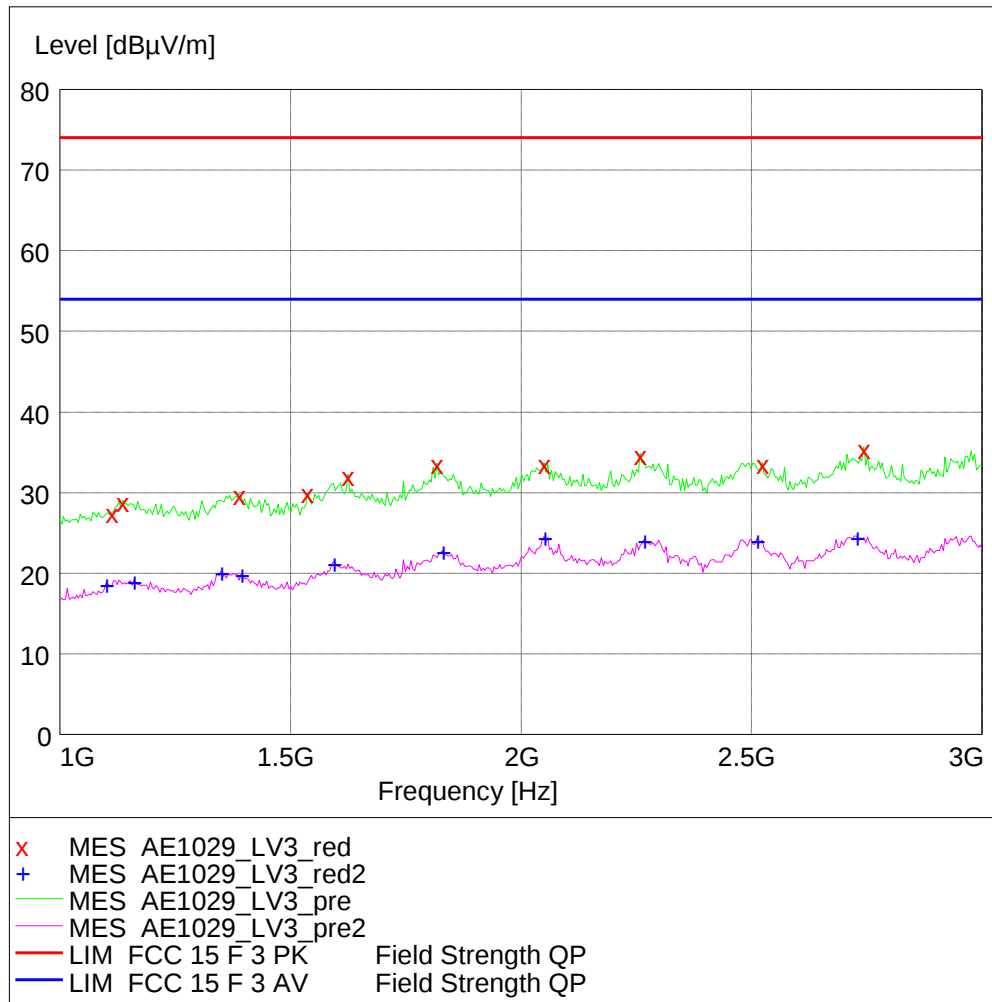
Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB
30.000000	28.40	18.6	40.0	11.6
47.494990	18.40	9.7	40.0	21.6
72.765531	20.80	7.4	40.0	19.2
101.923848	21.60	12.1	43.5	21.9
150.521042	24.80	11.7	43.5	18.7
193.286573	27.50	10.8	43.5	16.0
313.807615	28.00	15.2	46.0	18.0
418.777555	24.70	17.9	46.0	21.3
694.809619	27.30	21.3	46.0	18.7
920.300601	31.20	23.7	46.0	14.8

1-3GHz

Horizontal

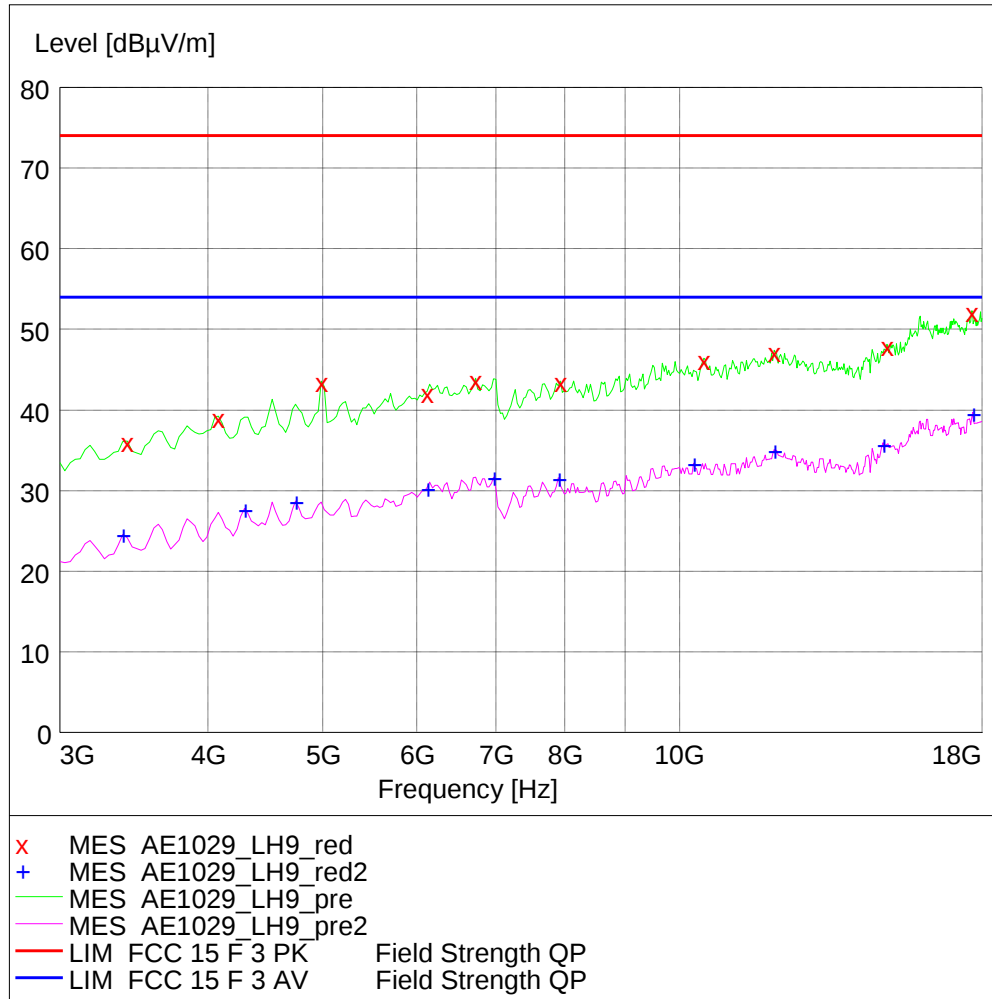


Vertical

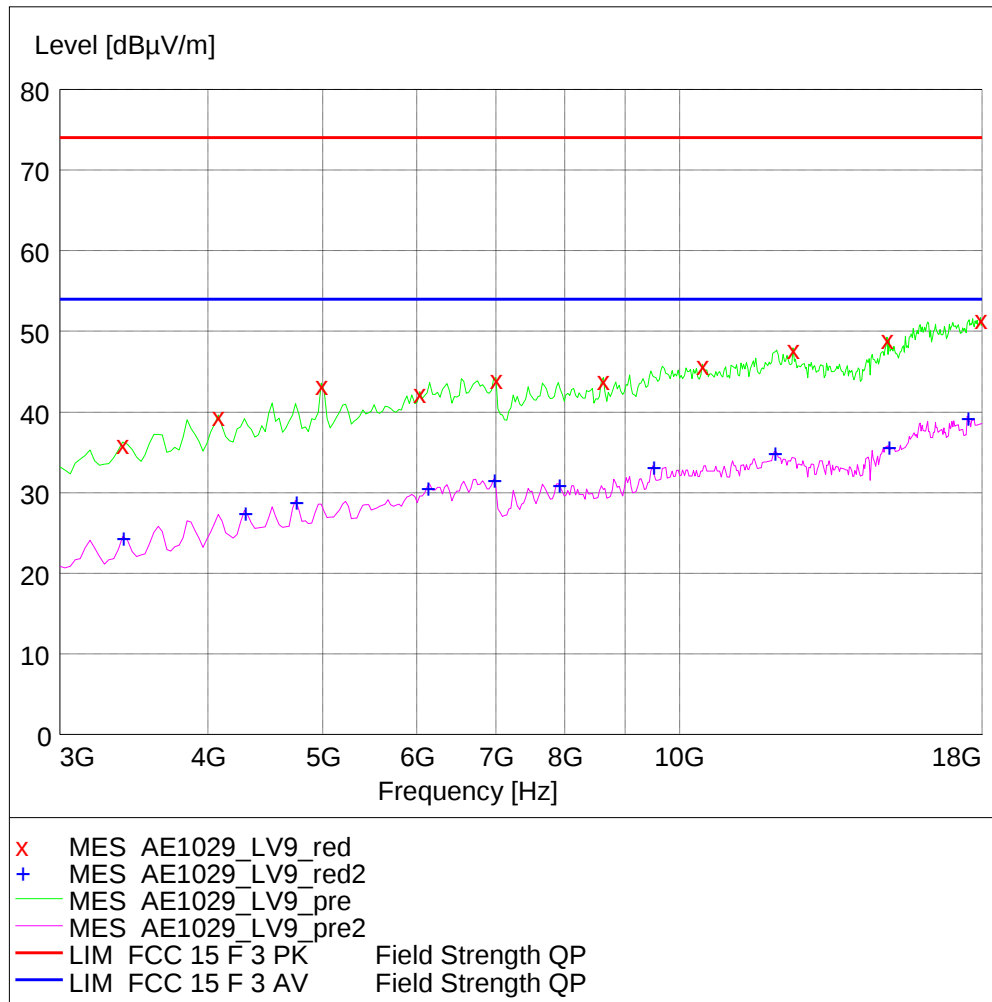


3-18GHz

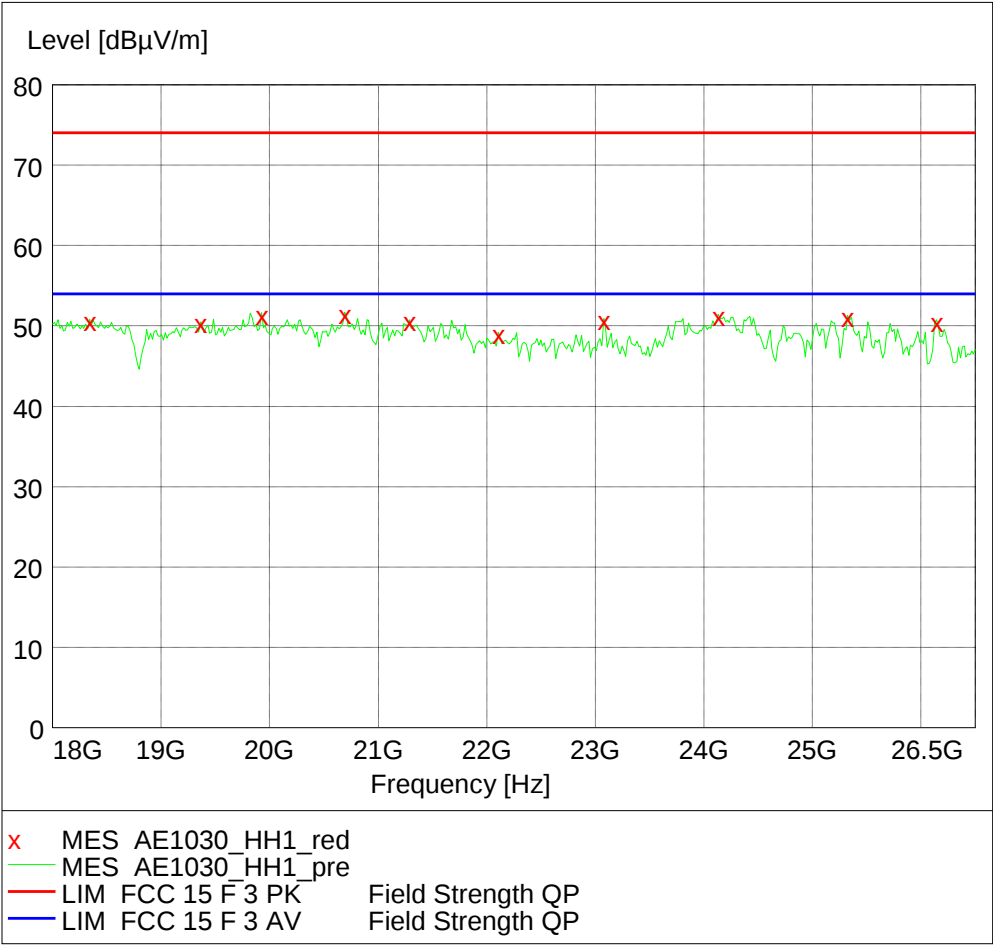
Horizontal



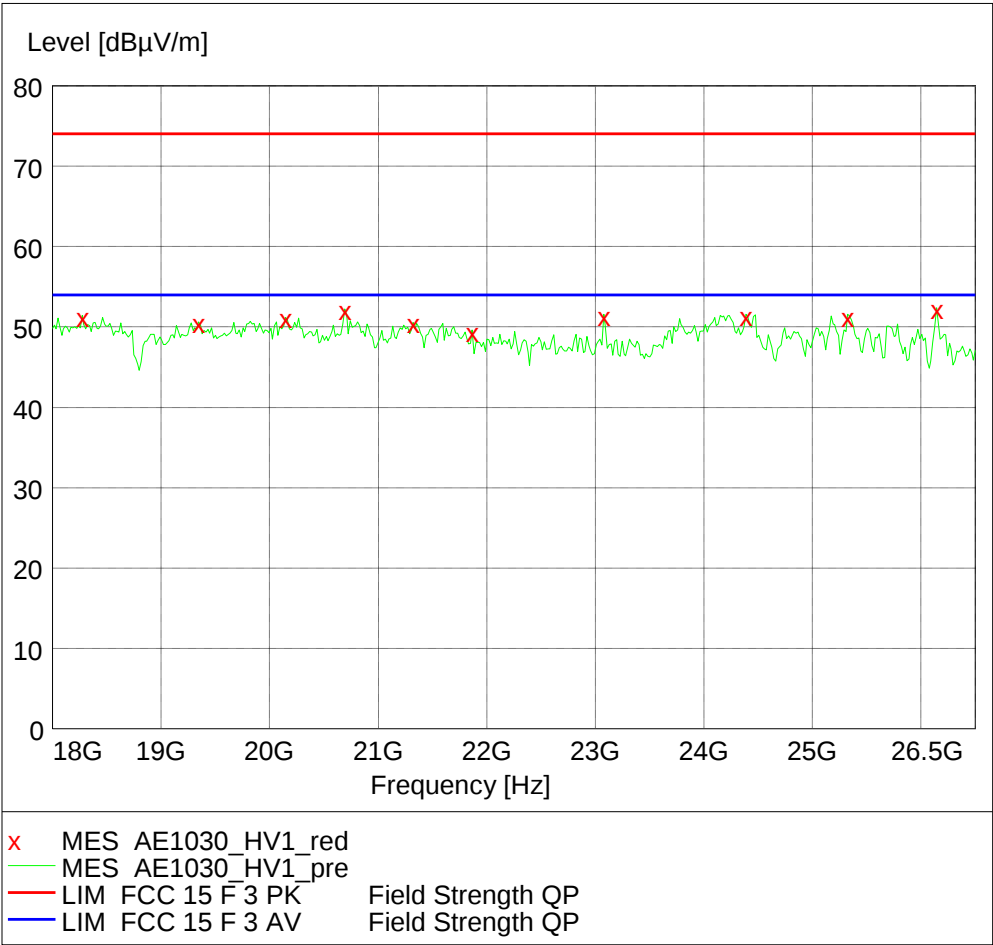
Vertical



18-26.5GHz
Horizontal

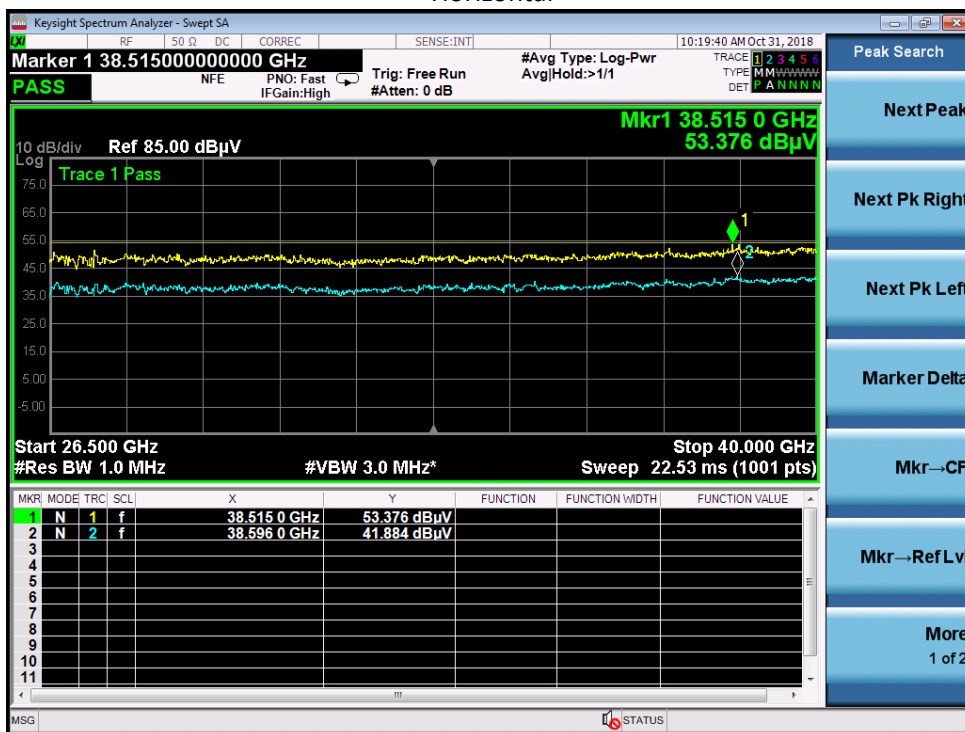


Vertical

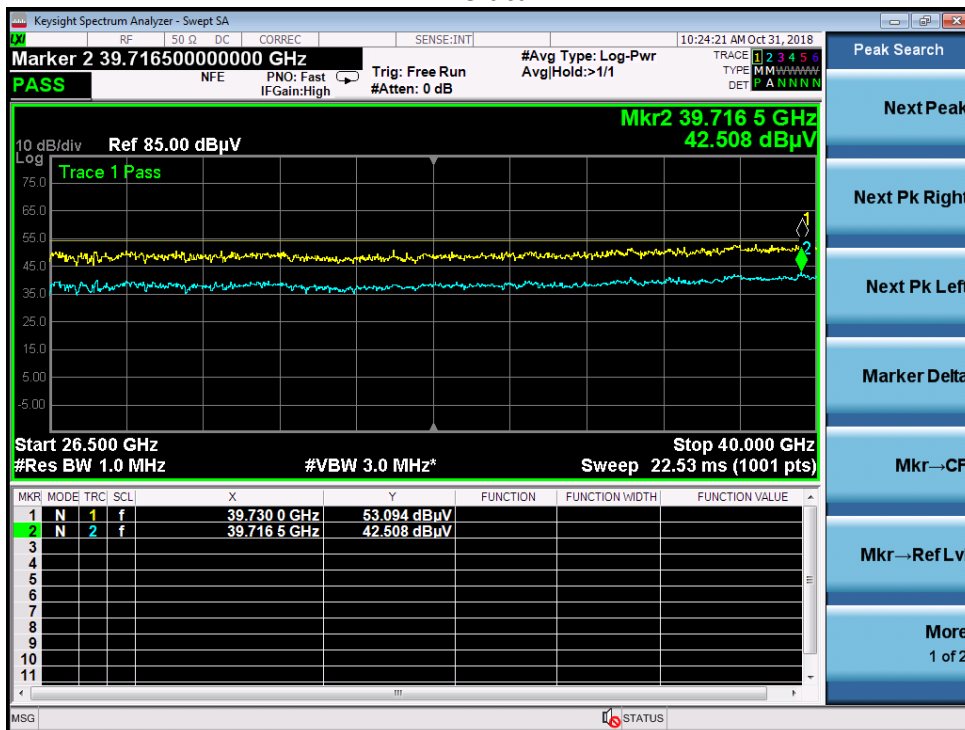


26.5-40GHz

Horizontal



Vertical



Channel Position M – QPSK

No emissions were detected within 20dB of the limit.

Channel Position T – QPSK

No emissions were detected within 20dB of the limit.

L-MIMO-MC 1 (2C)

Maximum Output Power 12dBm per port:

Channel Position	Channel Frequency
B _{RFBW}	5260MHz + 5280MHz

Channel Position B_{RFBW} – QPSK

No emissions were detected within 20dB of the limit.

L-MIMO-MC 2 (3C)

Maximum Output Power 12dBm per port:

Channel Position	Channel Frequency
B _{RFBW}	5260MHz + 5280MHz + 5300MHz

Channel Position B_{RFBW} – QPSK

No emissions were detected within 20dB of the limit.

Configuration A2

L-MIMO-SC

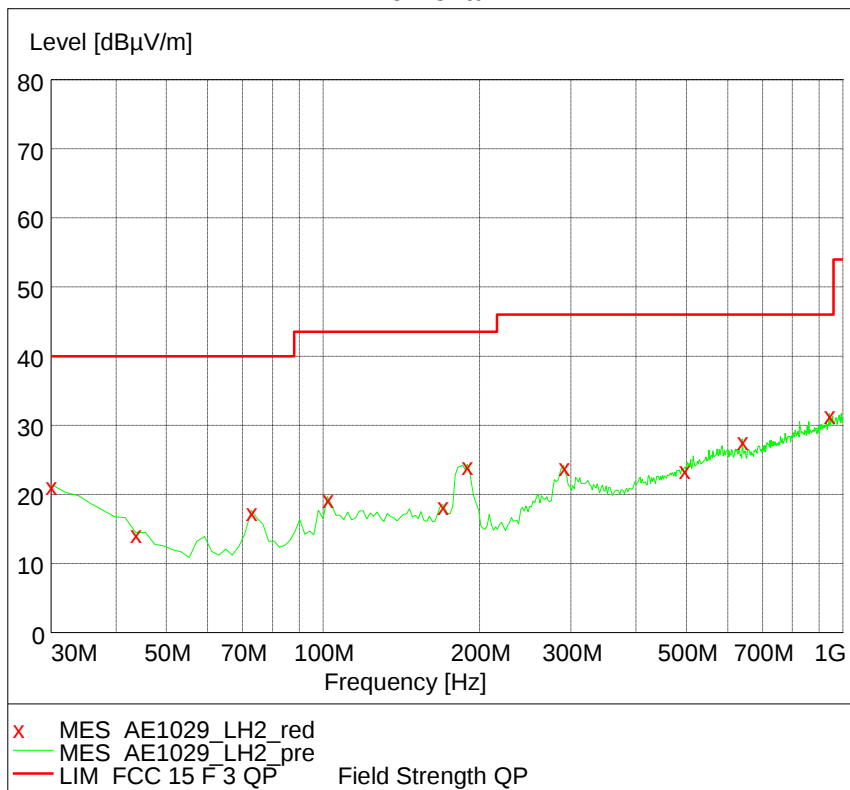
Maximum Output Power 18dBm per port:

Channel Position	Bandwidth (MHz)	Channel Frequency
B	20.0 MHz	5500MHz
M (for IC)	20.0 MHz	5580MHz
M (for FCC)	20.0 MHz	5600MHz
T	20.0 MHz	5700MHz

Channel Position B – QPSK

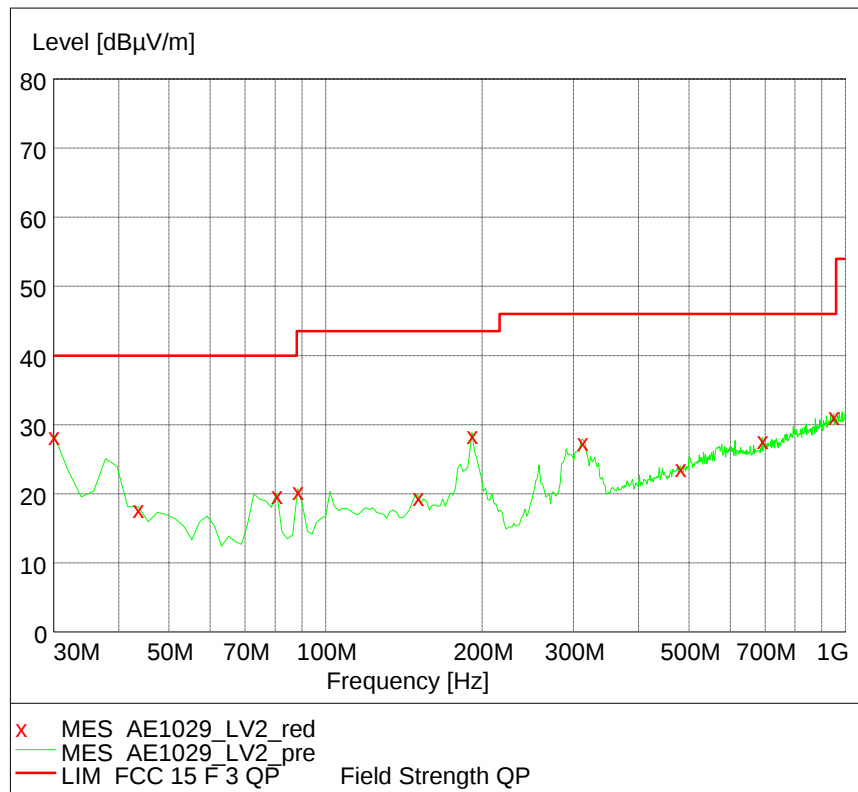
30-1000MHz

Horizontal



Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB
30.000000	21.50	18.6	40.0	18.5
43.607214	14.50	11.5	40.0	25.5
72.765531	17.70	7.4	40.0	22.3
101.923848	19.60	12.1	43.5	23.9
169.959920	18.60	10.8	43.5	24.9
189.398798	24.40	10.7	43.5	19.1
290.480962	24.20	14.6	46.0	21.8
494.589178	23.80	19.4	46.0	22.2
640.380762	28.00	21.0	46.0	18.0
941.683367	31.70	23.9	46.0	14.3

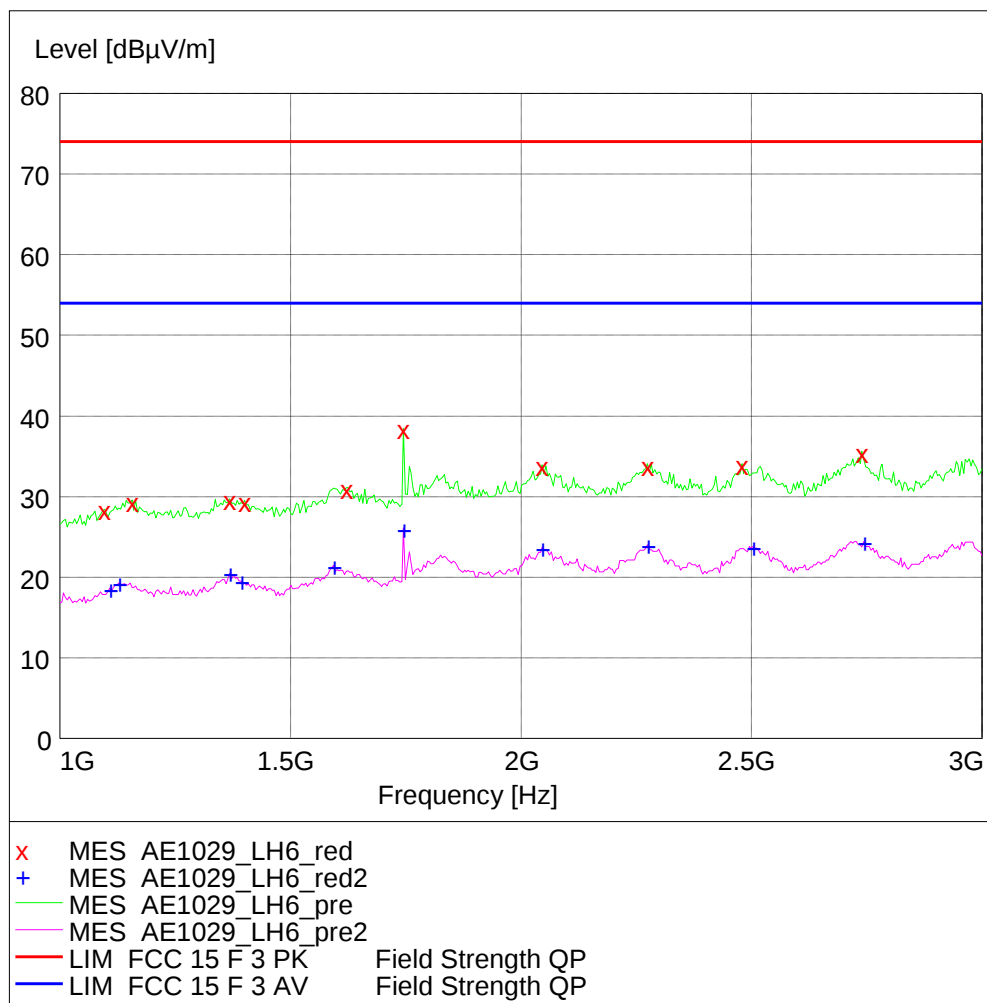
Vertical



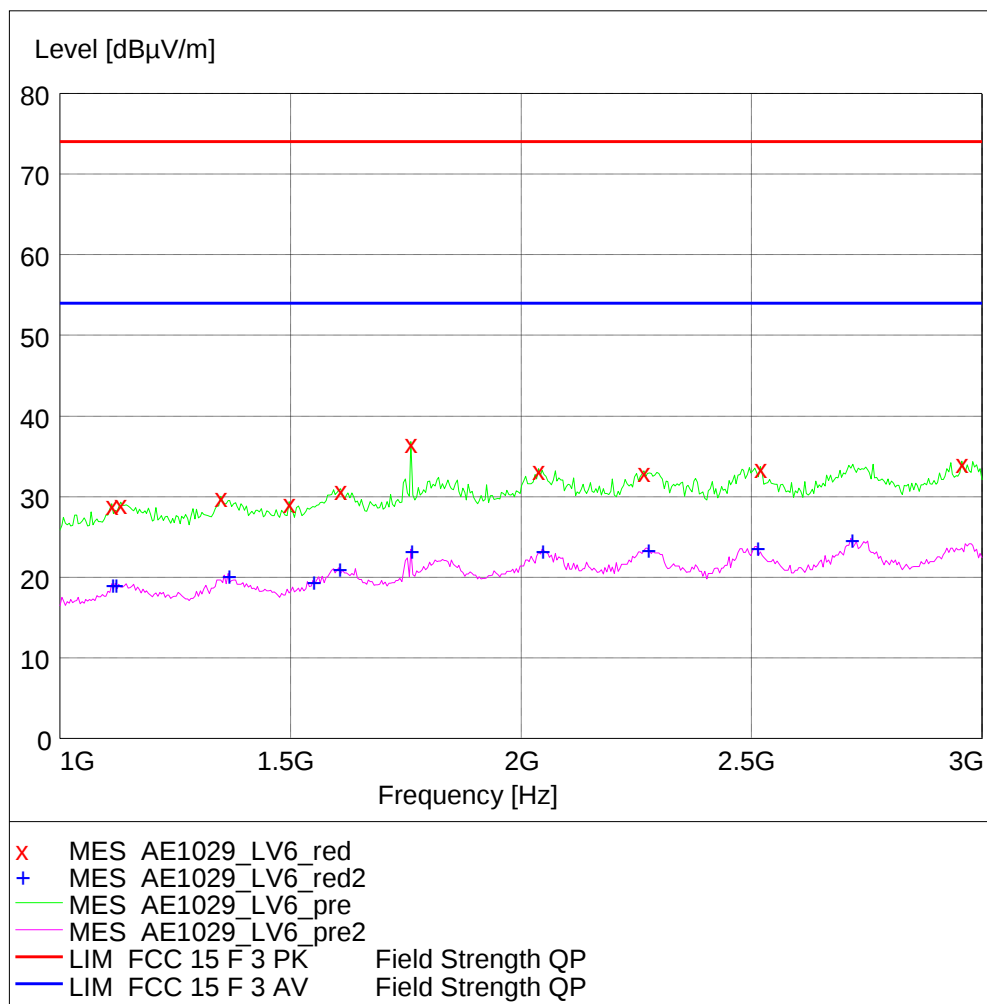
Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB
30.000000	28.60	18.6	40.0	11.4
43.607214	18.10	11.5	40.0	21.9
80.541082	20.10	7.8	40.0	19.9
88.316633	20.70	9.5	43.5	22.8
150.521042	19.80	11.7	43.5	23.7
191.342685	28.80	10.8	43.5	14.7
311.863727	27.80	15.1	46.0	18.2
480.981964	24.00	19.1	46.0	22.0
690.921844	28.10	21.3	46.0	17.9
949.458918	31.60	24.0	46.0	14.4

1-3GHz

Horizontal

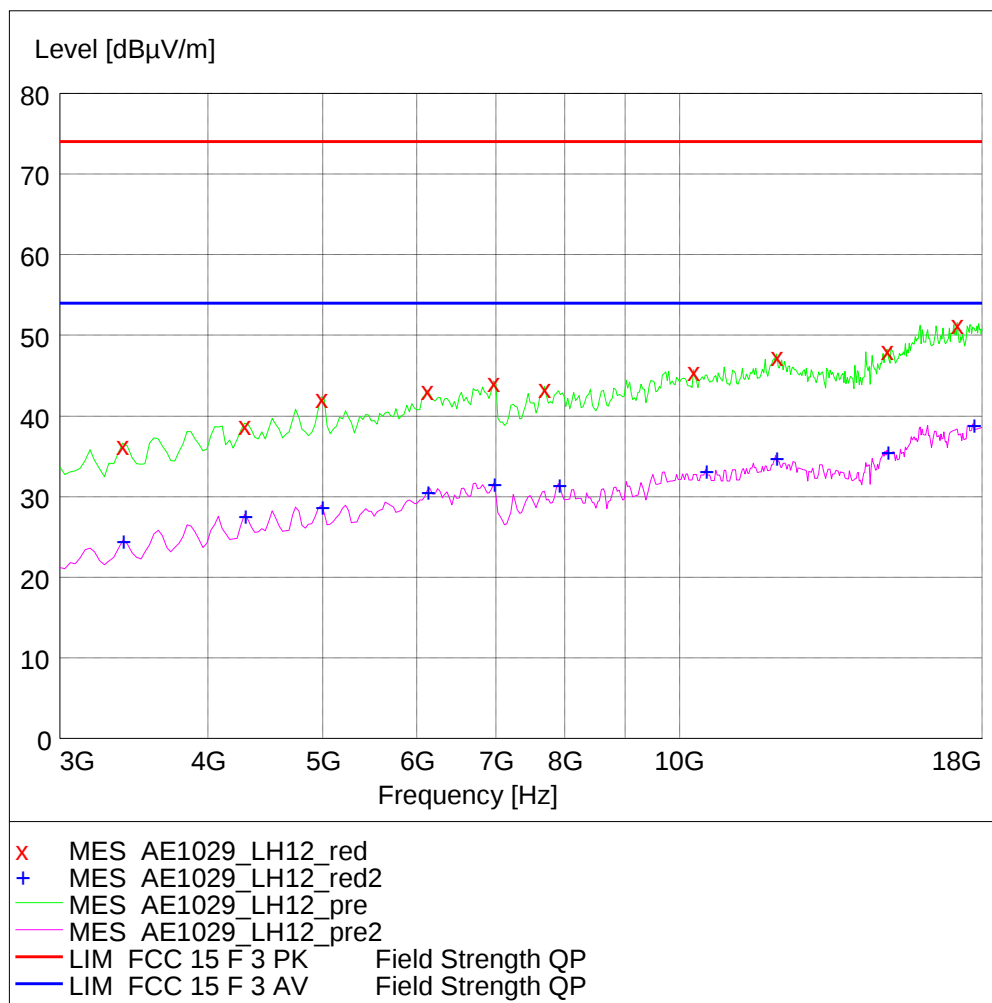


Vertical

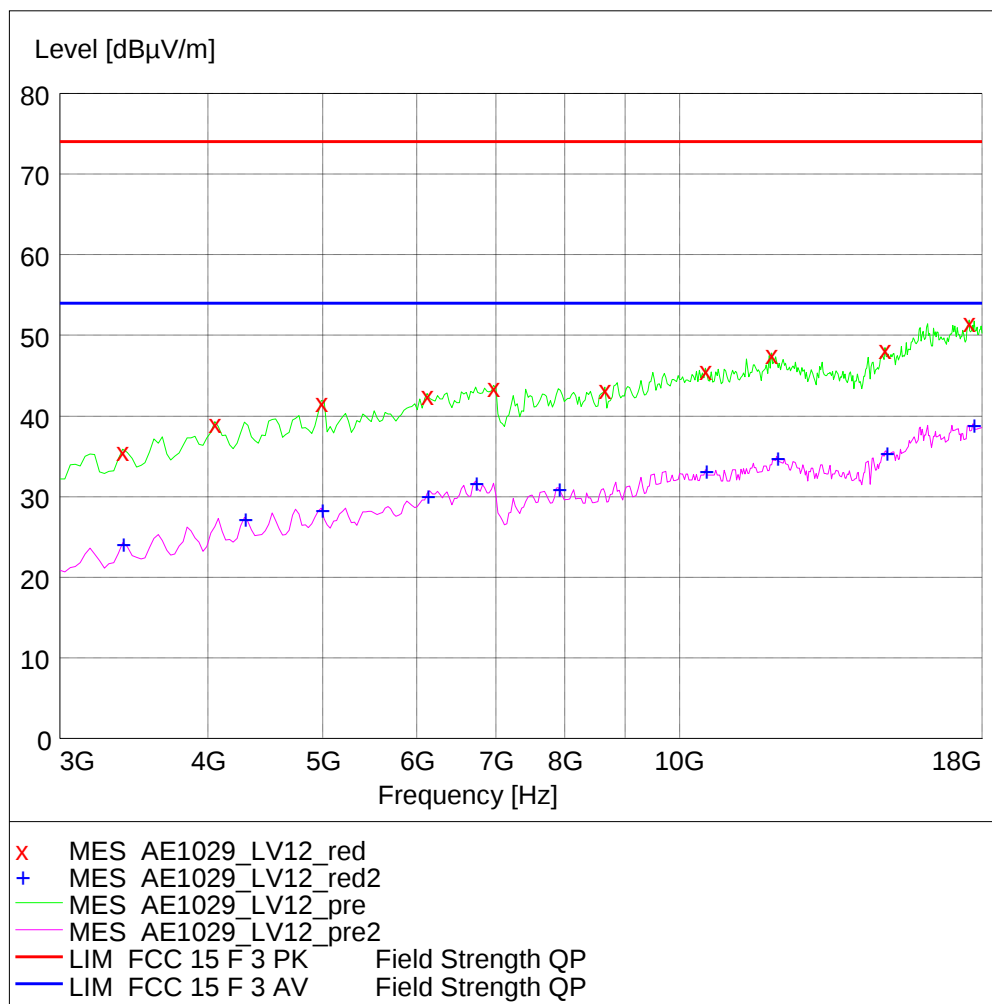


3-18GHz

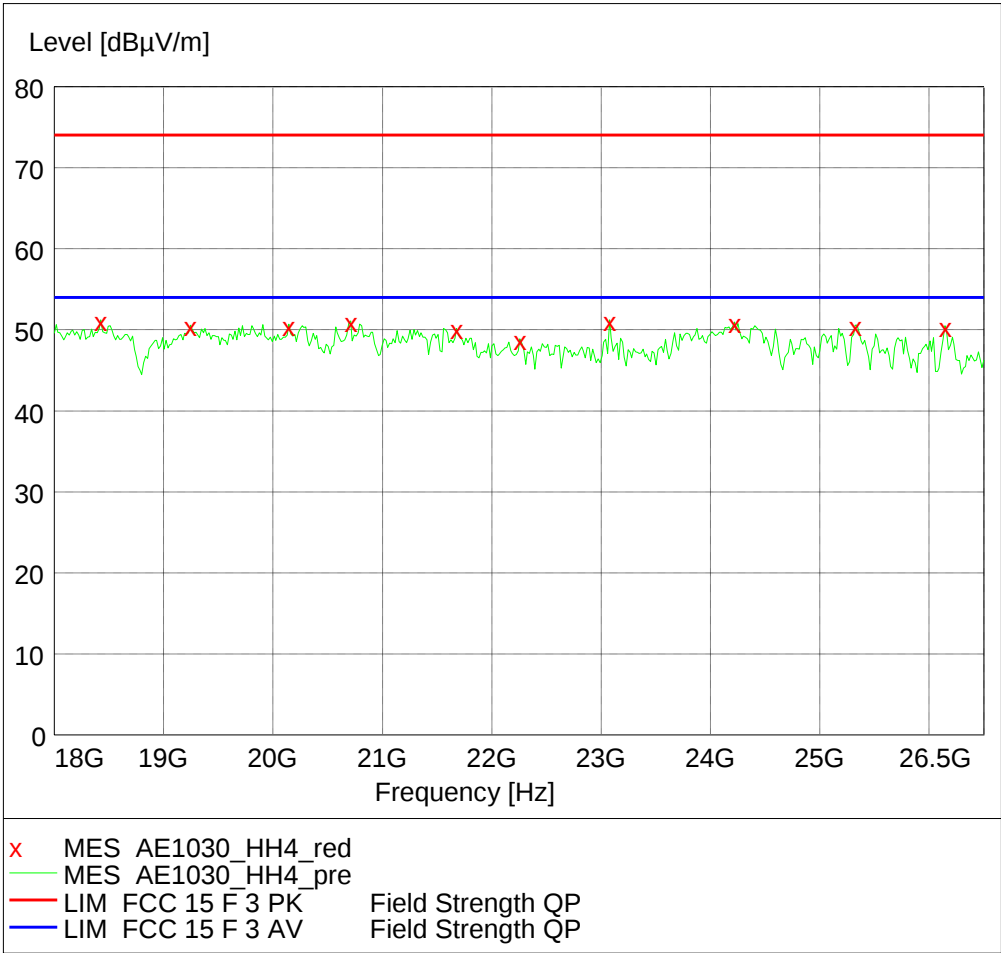
Horizontal



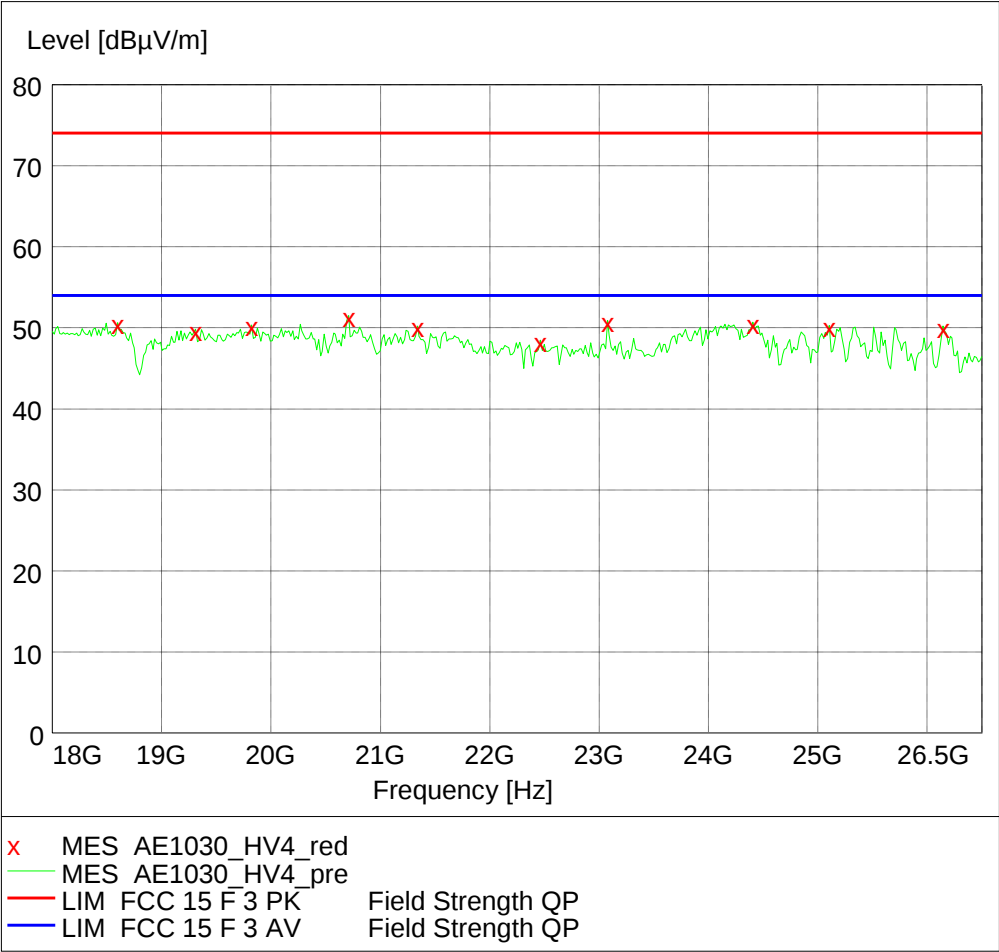
Vertical



18-26.5GHz
Horizontal

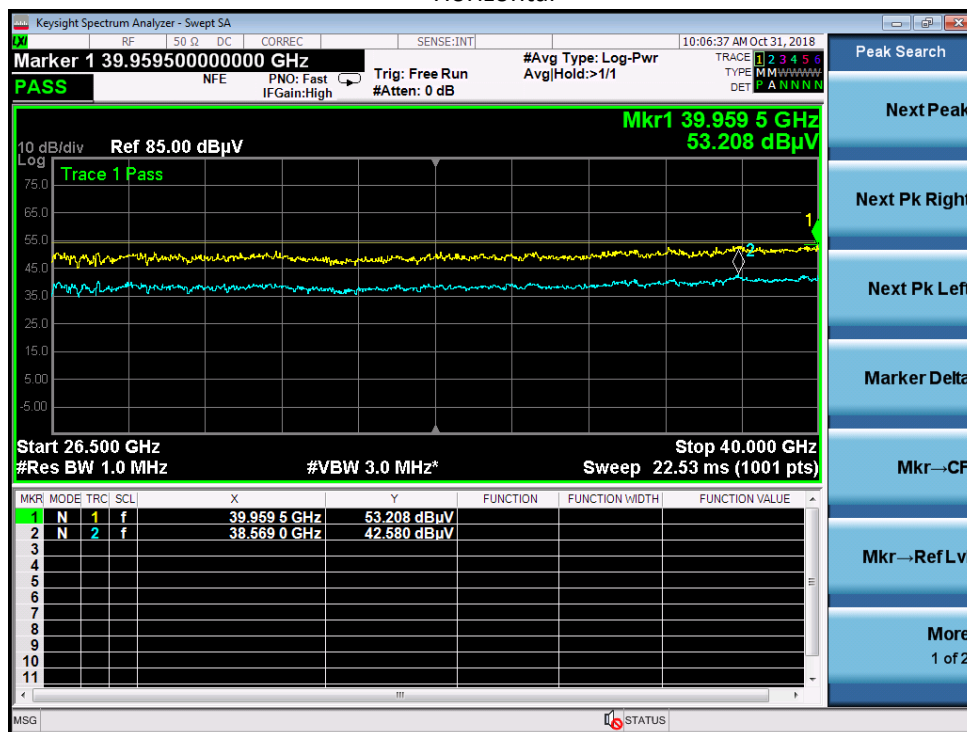


Vertical

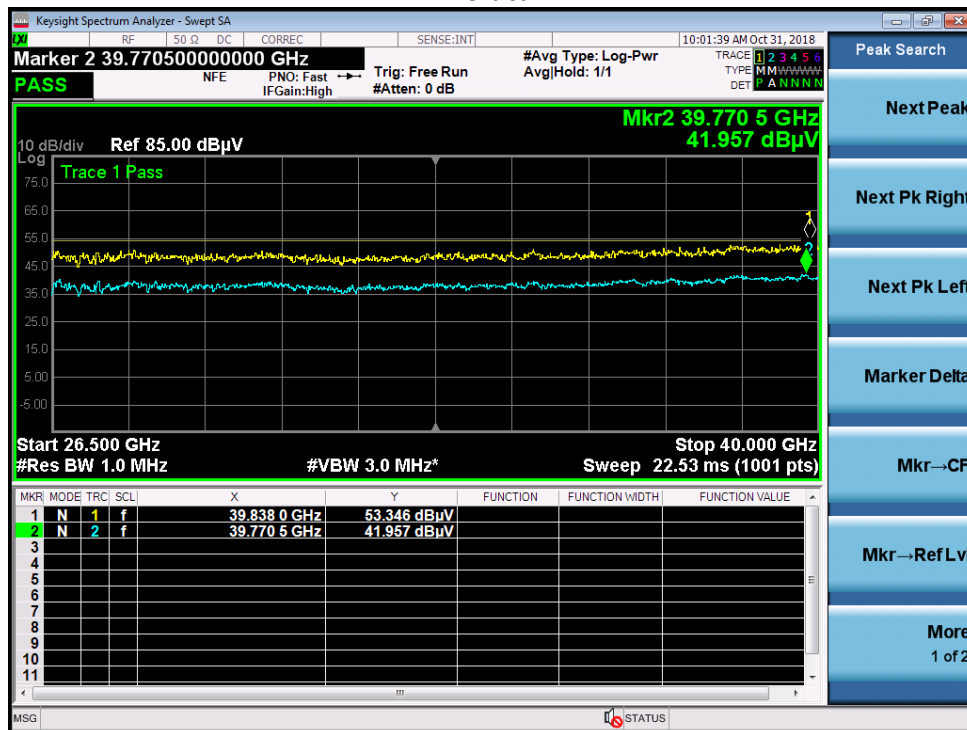


26.5-40GHz

Horizontal



Vertical



Channel Position M – QPSK

No emissions were detected within 20dB of the limit.

Channel Position T – QPSK

No emissions were detected within 20dB of the limit.

L-MIMO-MC 1 (2C)

Maximum Output Power 12dBm per port:

Channel Position	Channel Frequency
B _{RFBW}	5500MHz + 5520MHz

Channel Position B_{RFBW} – QPSK

No emissions were detected within 20dB of the limit.

L-MIMO-MC 2 (3C)

Maximum Output Power 12dBm per port:

Channel Position	Channel Frequency
B _{RFBW}	5500MHz + 5520MHz + 5540MHz

Channel Position B_{RFBW} – QPSK

No emissions were detected within 20dB of the limit.

Configuration B1

L-MIMO-SC

Maximum Output Power 12dBm per port:

Channel Position	Bandwidth (MHz)	Channel Frequency
B	20.0 MHz	5260MHz
M	20.0 MHz	5300MHz
T	20.0 MHz	5320MHz

Channel Position B – QPSK

No emissions were detected within 20dB of the limit.

Channel Position T – QPSK

No emissions were detected within 20dB of the limit.

Channel Position M – QPSK

Configuration B2

L-MIMO-SC

Maximum Output Power 12dBm per port:

Channel Position	Bandwidth (MHz)	Channel Frequency
B	20.0 MHz	5500MHz
M (for IC)	20.0 MHz	5580MHz
M (for FCC)	20.0 MHz	5600MHz
T	20.0 MHz	5700MHz

Channel Position B – QPSK

No emissions were detected within 20dB of the limit.

Channel Position M – QPSK

No emissions were detected within 20dB of the limit.

Channel Position T – QPSK

9 Conducted Emission

Test result: Pass

9.1 Limit

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	QP	AV
0.15-0.5	66 to 56*	56 to 46 *
0.5-5	56	46
5-30	60	50
* Decreases with the logarithm of the frequency.		

9.2 Test Method

Measured levels of ac power-line conducted emission shall be the emission voltages from the voltage probe, where permitted, or across the 50 Ω LISN port (to which the EUT is connected), where permitted, terminated into a 50 Ω measuring instrument. All emission voltage and current measurements shall be made on each current-carrying conductor at the plug end of the EUT power cord by the use of mating plugs and receptacles on the LISN, if used. Equipment shall be tested with power cords that are normally supplied or recommended by the manufacturer and that have electrical and shielding characteristics that are the same as those cords normally supplied or recommended by the manufacturer. For those measurements using a LISN, the 50 Ω measuring port is terminated by a measuring instrument having 50 Ω input impedance. All other ports are terminated in 50 Ω loads.

Tabletop devices shall be placed on a platform of nominal size 1 m by 1.5 m, raised 80 cm above the reference ground plane. The vertical conducting plane or wall of an RF-shielded (screened) room shall be located 40 cm to the rear of the EUT. Floor-standing devices shall be placed either directly on the reference ground-plane or on insulating material. All other surfaces of tabletop or floor-standing EUTs shall be at least 80 cm from any other grounded conducting surface, including the case or cases of one or more LISNs.

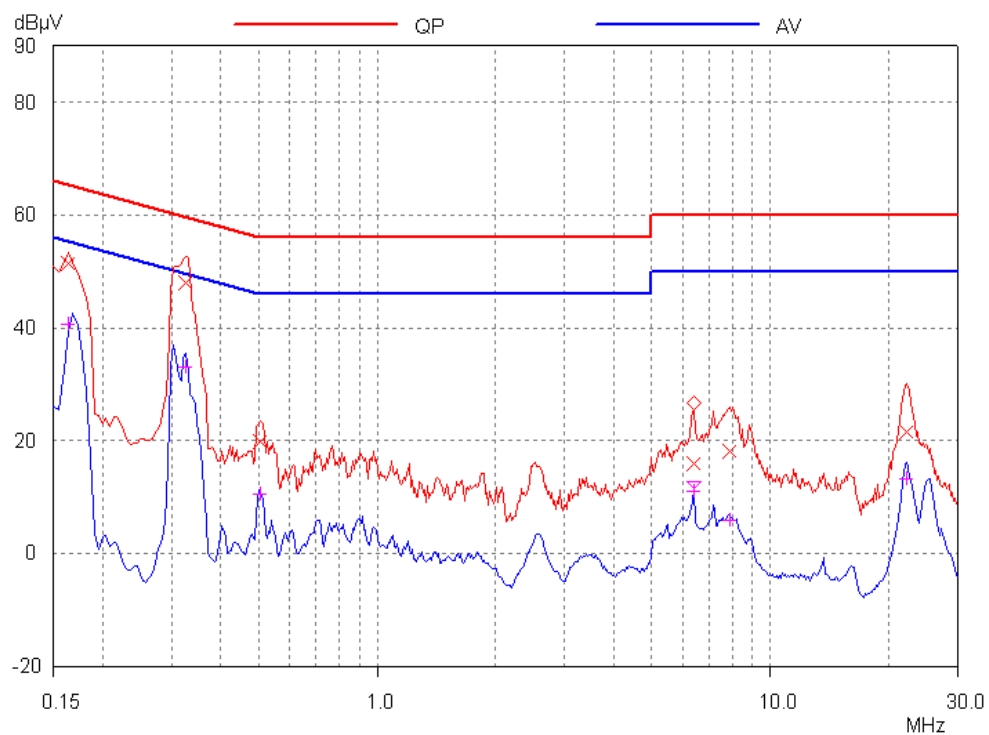
The bandwidth of the test receiver is set at 9 kHz.

9.3 Test Results

Note: The EUT was set to Transmitting Mode with AC power supply and the worse results and plots is shown as below

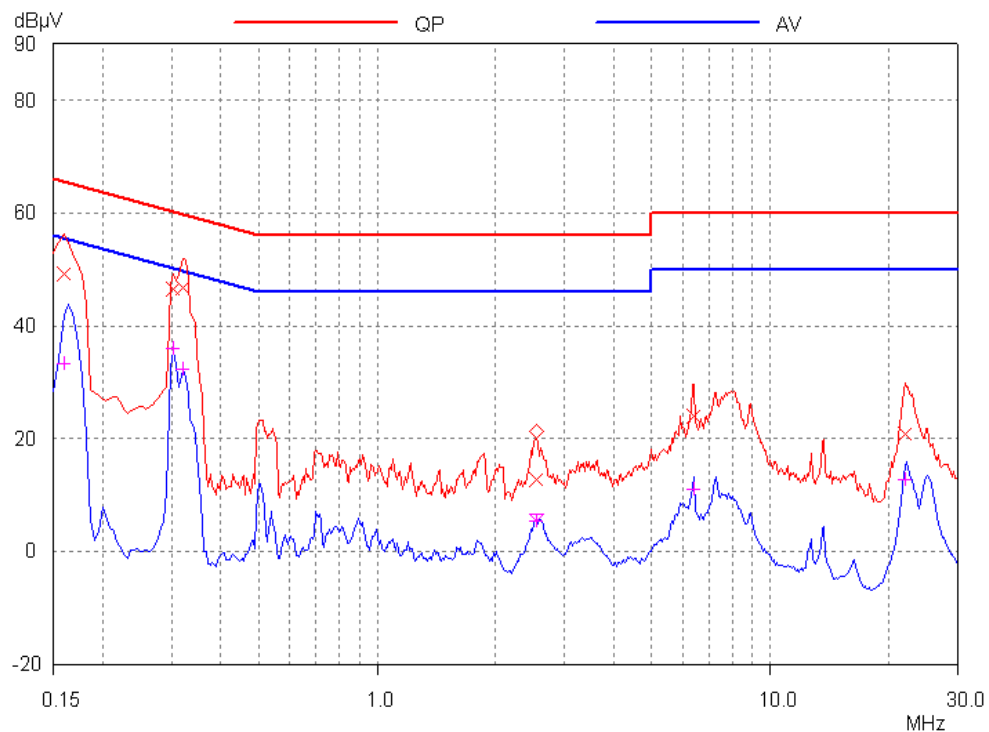
Test Curve:

L line:



Frequency (MHz)	Quasi-peak			Frequency (MHz)	Average		
	Level dB(μV)	Limit dB(μV)	Margin dB		Level dB(μV)	Limit dB(μV)	Margin dB
0.1635	51.33	65.28	13.95	0.1635	40.65	55.28	14.63
0.3255	48.03	59.57	11.54	0.3255	33.09	49.57	16.48
0.50549	19.73	56.00	36.27	0.50549	10.63	46.00	35.37
6.333	15.86	60.00	44.14	6.333	11.04	50.00	38.96
7.872	18.15	60.00	41.85	7.872	5.83	50.00	44.17
22.083	21.60	60.00	38.40	22.083	13.20	50.00	36.80

N line:



Frequency (MHz)	Quasi-peak			Frequency (MHz)	Average		
	Level dB(μV)	Limit dB(μV)	Margin dB		Level dB(μV)	Limit dB(μV)	Margin dB
0.159	49.14	65.52	16.38	0.159	33.28	55.52	22.24
0.303	46.55	60.16	13.61	0.303	35.90	50.16	14.26
0.321	46.84	59.68	12.84	0.321	32.40	49.68	17.28
2.535	12.75	56.00	43.25	2.535	5.34	46.00	40.66
6.333	23.88	60.00	36.12	6.333	11.06	50.00	38.94
21.9255	20.84	60.00	39.16	21.9255	12.76	50.00	37.24

10 Frequency Stability

Test result: Pass

10.1 Limit

The frequency stability shall be sufficient to ensure that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

10.2 Test Result:

Frequency Error - Temperature Variation

Configuration A1

L-MIMO-SC

Maximum Output Power 18dBm per port:

Supply Voltage DC (V)	Temperature (°C)	Frequency Stability (Hz)		
		Channel Position B (5260MHz)	Channel Position M (5300MHz)	Channel Position H (5320MHz)
-48.0	-30	-17.97	-13.94	-18.63
	-20	-12.27	-17.49	-14.90
	-10	-10.06	-10.74	-9.92
	0	-15.76	-15.57	-15.89
	10	-14.36	-10.89	-12.89
	20	-26.30	-26.85	-26.23
	30	-20.03	-24.72	-14.83
	40	-17.04	-19.77	-16.91
	50	-21.94	-21.99	-24.20

Configuration A2

L-MIMO-SC

Maximum Output Power 18dBm per port:

Supply Voltage DC (V)	Temperature (°C)	Frequency Stability (Hz)			
		Channel Position B (5500MHz)	Channel Position M for IC (5580MHz)	Channel Position M for FCC (5600MHz)	Channel Position H (5700MHz)
-48.0	-30	-14.67	-16.14	-14.97	-16.24
	-20	-14.24	-15.52	-13.89	-17.72
	-10	-12.04	-10.87	-9.39	-13.07
	0	-21.58	-14.88	-19.59	-15.14
	10	-14.01	-15.78	-13.76	-16.92
	20	-28.17	-25.37	-25.46	-27.20
	30	-14.23	-13.97	-16.82	-14.26
	40	-14.42	-14.04	-11.60	-14.31
	50	-17.97	-16.29	-17.48	-21.10

Frequency Error - Voltage Variation

Configuration A1

L-MIMO-SC

Maximum Output Power 18dBm per port:

Supply Voltage DC (V)	Temperature (°C)	Frequency Stability (Hz)		
		Channel Position B (5260MHz)	Channel Position M (5300MHz)	Channel Position H (5320MHz)
-48.0	20	-26.30	-26.85	-26.23
-40.8		-30.24	-30.48	-26.59
-55.2		-27.04	-28.83	-28.02

Configuration A2

L-MIMO-SC

Maximum Output Power 18dBm per port:

Supply Voltage DC (V)	Temperature (°C)	Frequency Stability (Hz)			
		Channel Position B (5500MHz)	Channel Position M for IC (5580MHz)	Channel Position M for FCC (5600MHz)	Channel Position H (5700MHz)
-48.0	20	-28.17	-25.37	-25.46	-27.20
-40.8		-25.86	-26.14	-26.71	-26.81
-55.2		-28.05	-24.32	-23.72	-24.83

Frequency Error - Temperature Variation

Configuration B1

L-MIMO-SC

Maximum Output Power 12dBm per port:

Supply Voltage DC (V)	Temperature (°C)	Frequency Stability (Hz)		
		Channel Position B (5260MHz)	Channel Position M (5300MHz)	Channel Position H (5320MHz)
-48.0	-30	-18.23	-15.83	-14.23
	-20	-14.66	-12.99	-16.74
	-10	-12.64	-10.23	-10.76
	0	-15.49	-13.74	-16.16
	10	-13.17	-12.29	-12.56
	20	-27.20	-27.53	-27.95
	30	-14.26	-14.32	-13.84
	40	-16.57	-16.22	-20.17
	50	-20.84	-21.44	-19.89

Configuration B2

L-MIMO-SC

Maximum Output Power 12dBm per port:

Supply Voltage DC (V)	Temperature (°C)	Frequency Stability (Hz)			
		Channel Position B (5500MHz)	Channel Position M for IC (5580MHz)	Channel Position M for FCC (5600MHz)	Channel Position H (5700MHz)
-48.0	-30	-19.76	-16.67	-15.74	-18.52
	-20	-15.39	-13.76	-15.15	-15.14
	-10	-12.38	-10.32	-10.59	-10.17
	0	-15.96	-14.44	-13.48	-13.79
	10	-14.14	-16.21	-18.07	-15.39
	20	-25.12	-27.69	-26.51	-27.33
	30	-14.84	-14.32	-14.09	-13.83
	40	-16.02	-15.89	-12.35	-15.26
	50	-15.91	-15.70	-18.34	-20.52

Frequency Error - Voltage Variation

Configuration B1

L-MIMO-SC

Maximum Output Power 12dBm per port:

Supply Voltage DC (V)	Temperature (°C)	Frequency Stability (Hz)		
		Channel Position B (5260MHz)	Channel Position M (5300MHz)	Channel Position H (5320MHz)
-40.8	20	-27.20	-27.53	-27.95
-48.0		-26.54	-31.50	-28.02
-55.2		-24.56	-30.90	-26.67

Configuration B2

L-MIMO-SC

Maximum Output Power 12dBm per port:

Supply Voltage DC (V)	Temperature (°C)	Frequency Stability (Hz)			
		Channel Position B (5500MHz)	Channel Position M for IC (5580MHz)	Channel Position M for FCC (5600MHz)	Channel Position H (5700MHz)
-40.8	20	-25.12	-27.69	-26.51	-27.33
-48.0		-27.62	-26.80	-28.01	-24.43
-55.2		-26.62	-28.69	-26.50	-26.48

***** END *****