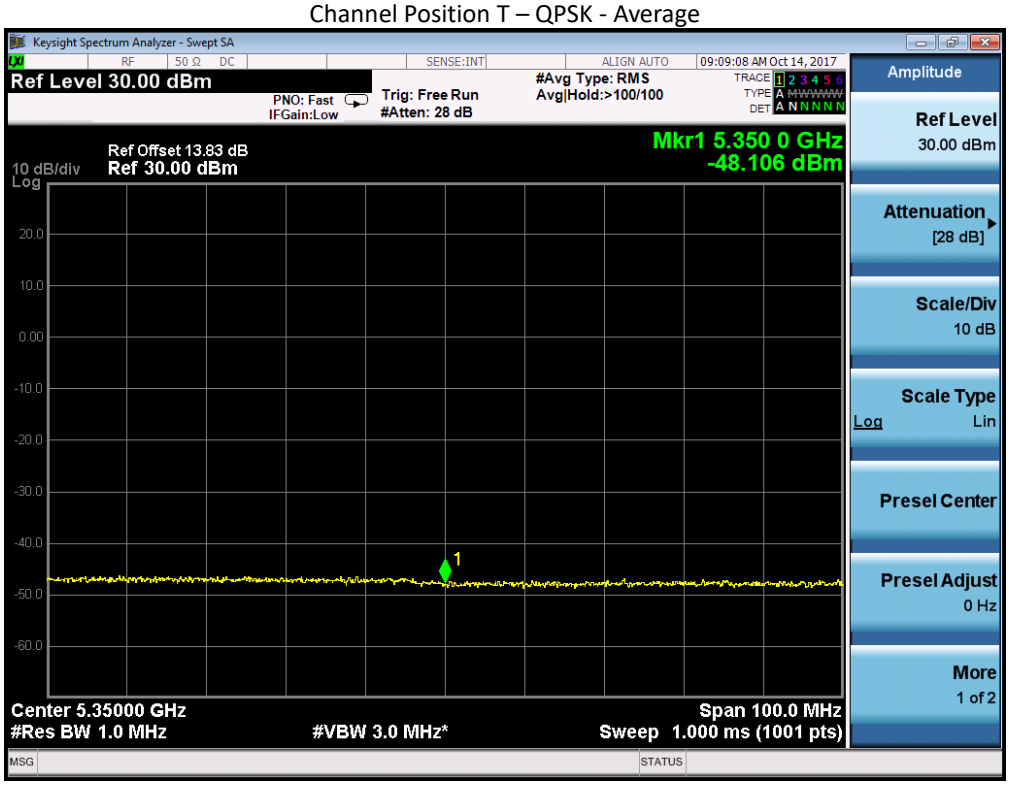
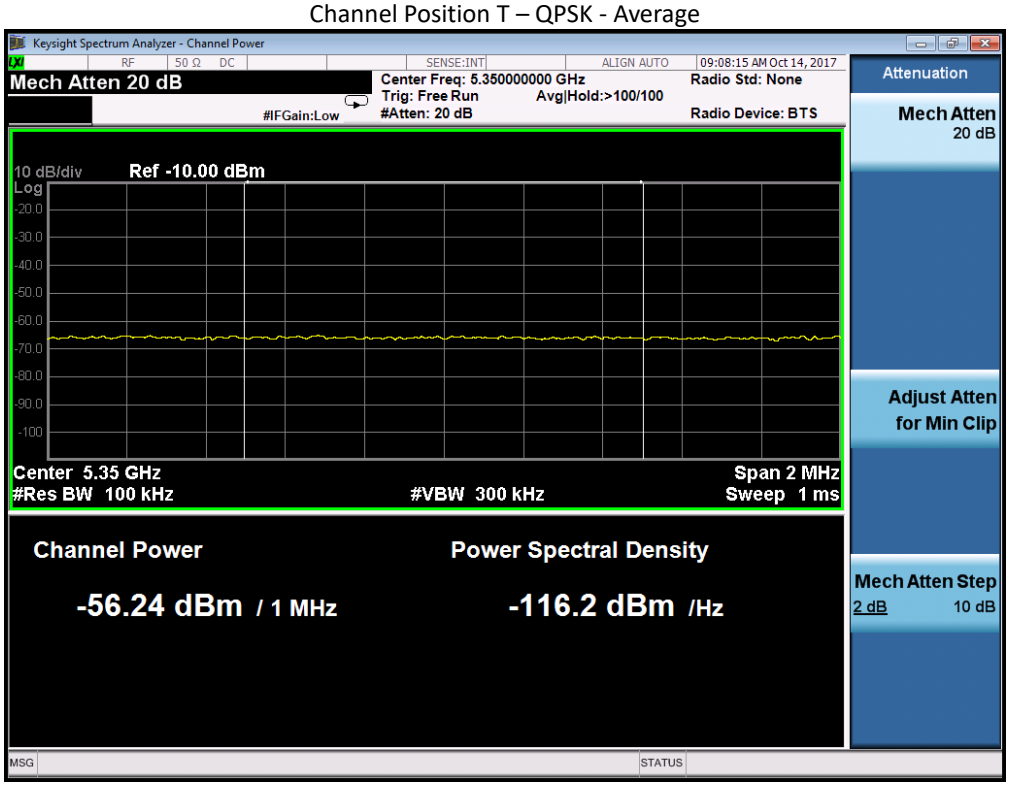
Channel Position T – QPSK - Average



Channel Position T – QPSK - Average



L-MIMO-MC 1 (2C)

Maximum Output Power 25dBm per port:

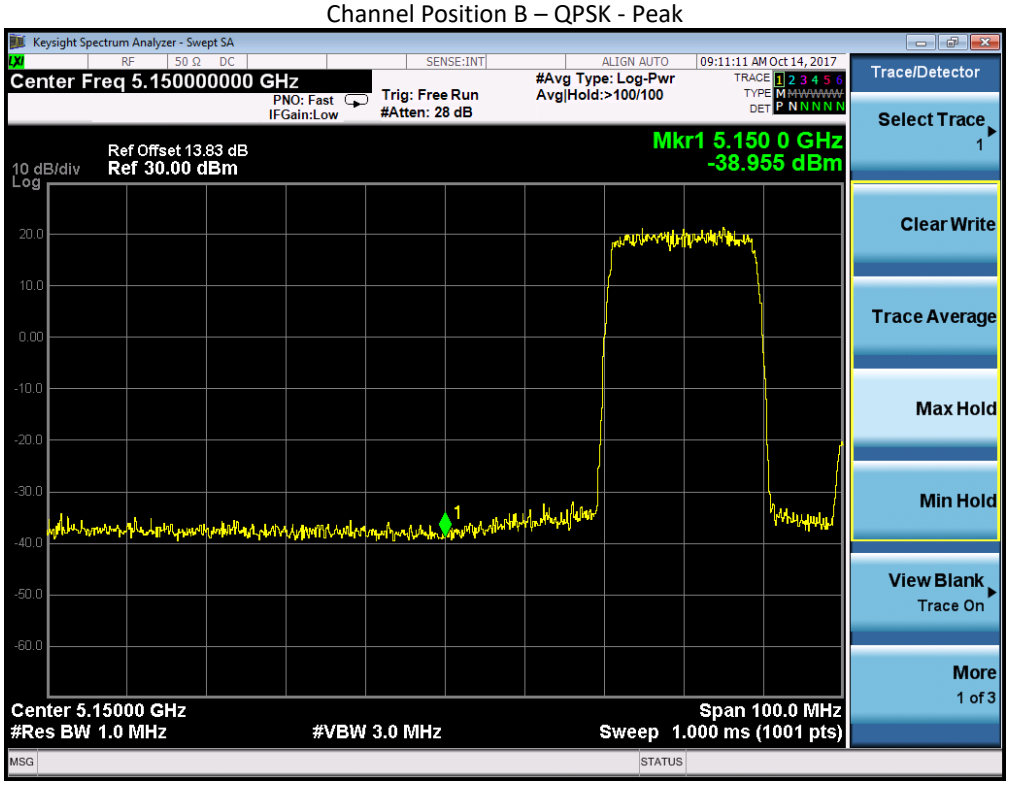
Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5180MHz + 5220MHz	1	-30.01
T	20.0 MHz	5200MHz + 5240MHz	1	-30.01

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.

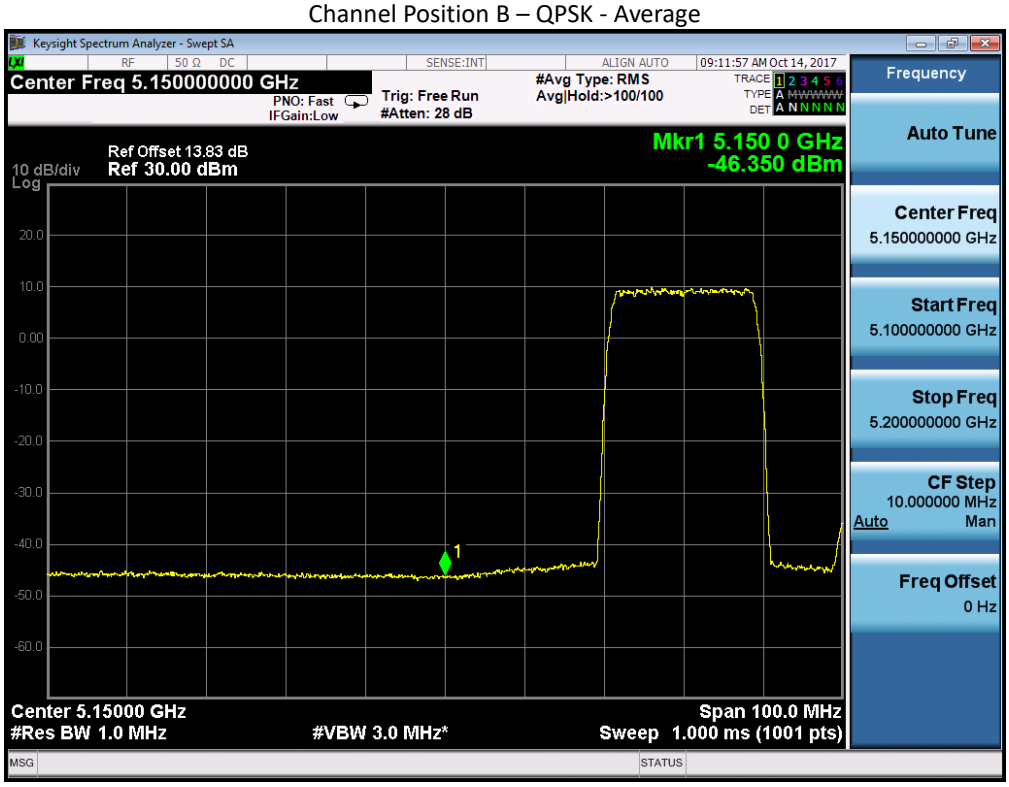
Note 2: 5150 MHz in the restricted band, use the following formula as per Section G (1) of 789033 D02 General UNII Test Procedures v01r04:
E (dBµV/m) = EIRP (dBm) + 95.2 = (measured level dBm + 6 dBi antenna gain) + 95.2

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).

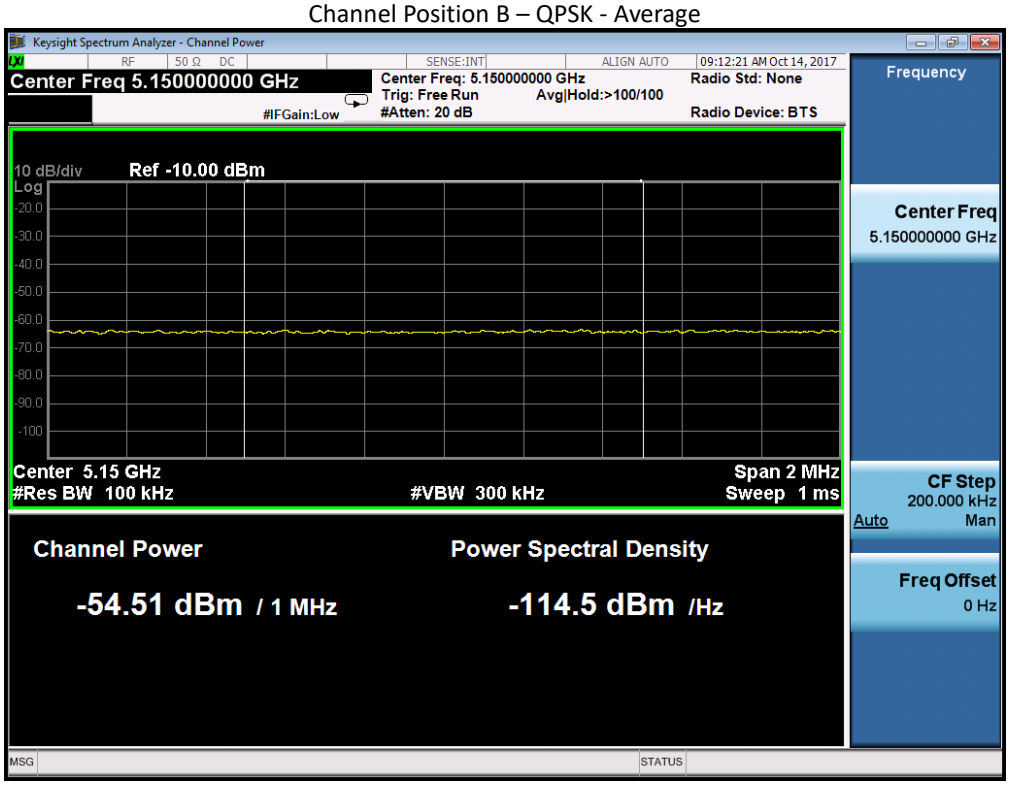
Channel Position B – QPSK - Peak



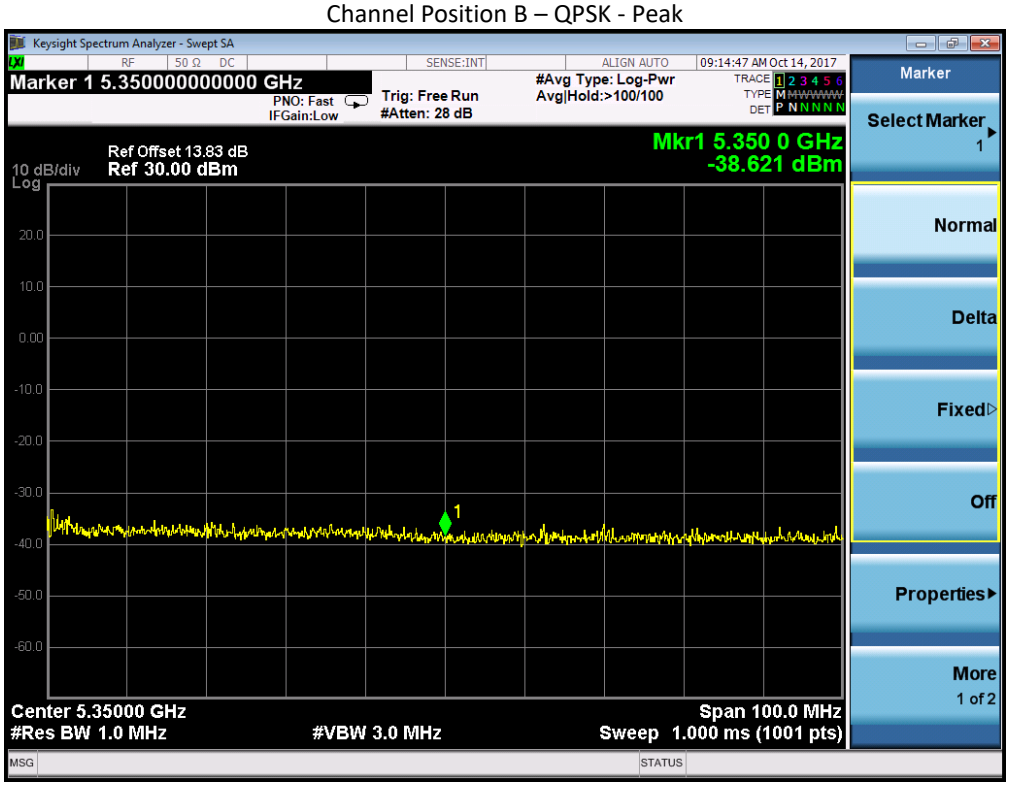
Channel Position B – QPSK - Average



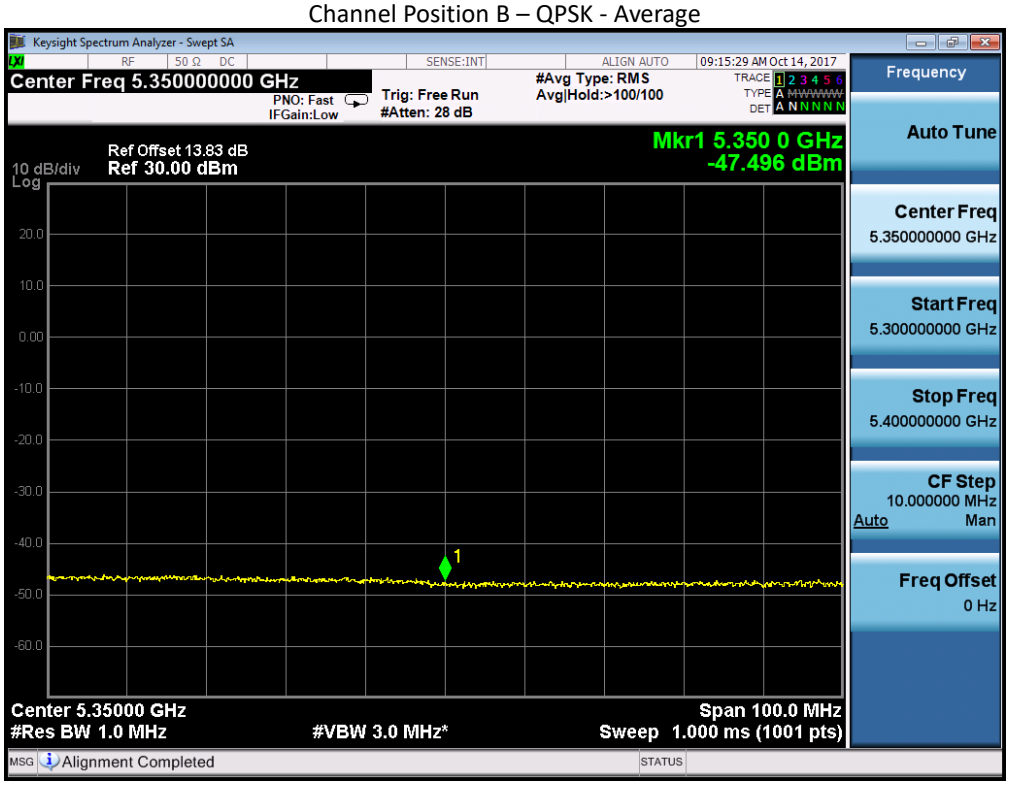
Channel Position B – QPSK - Average



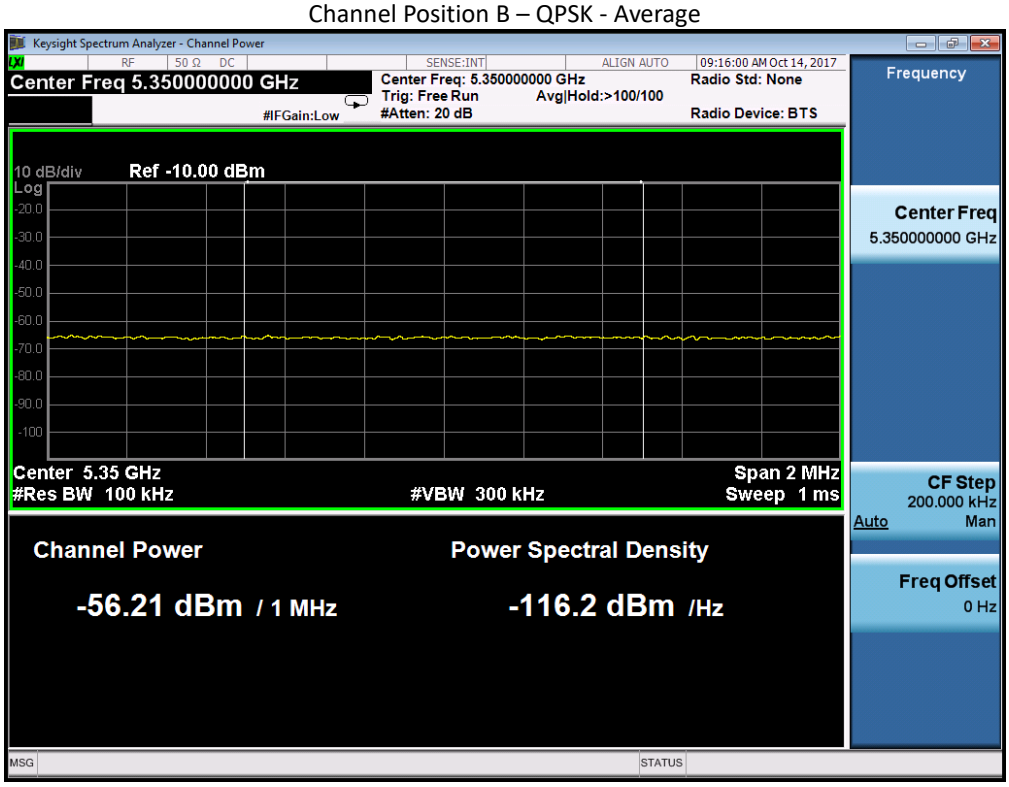
Channel Position B – QPSK - Peak



Channel Position B – QPSK - Average



Channel Position B – QPSK - Average



L-MIMO-MC 2 (3C)

Maximum Output Power 25dBm per port:

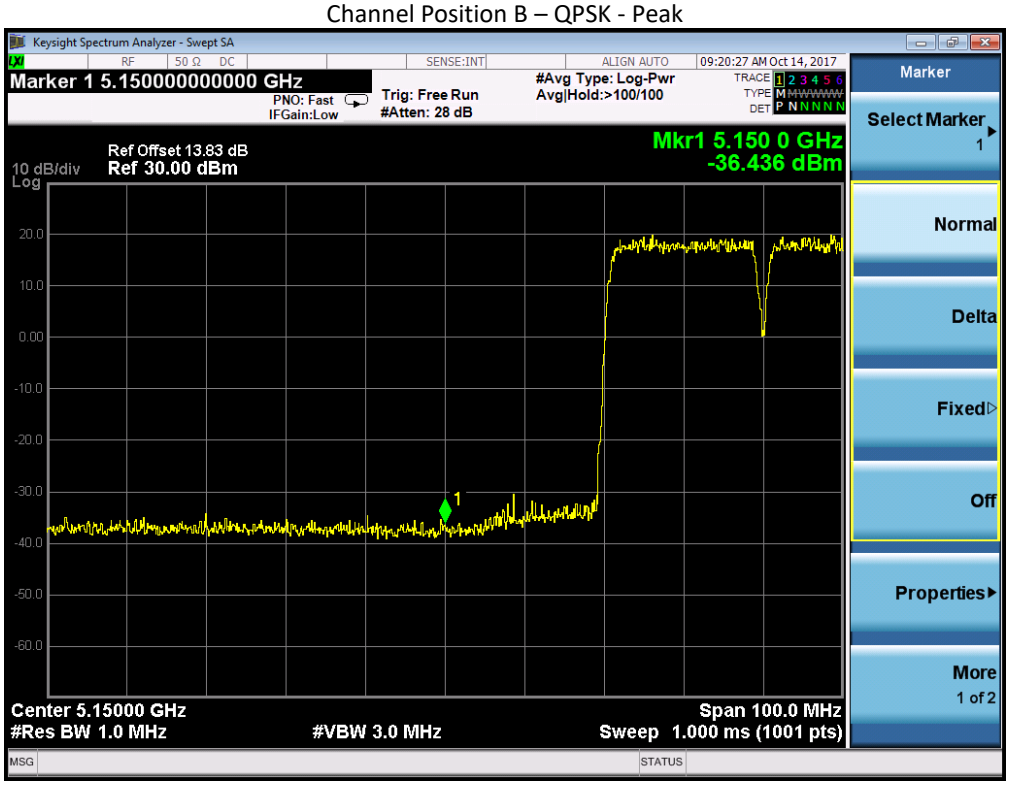
Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5180MHz + 5200MHz + 5220MHz	1	-30.01
T	20.0 MHz	5200MHz + 5220MHz + 5240MHz	1	-30.01

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.

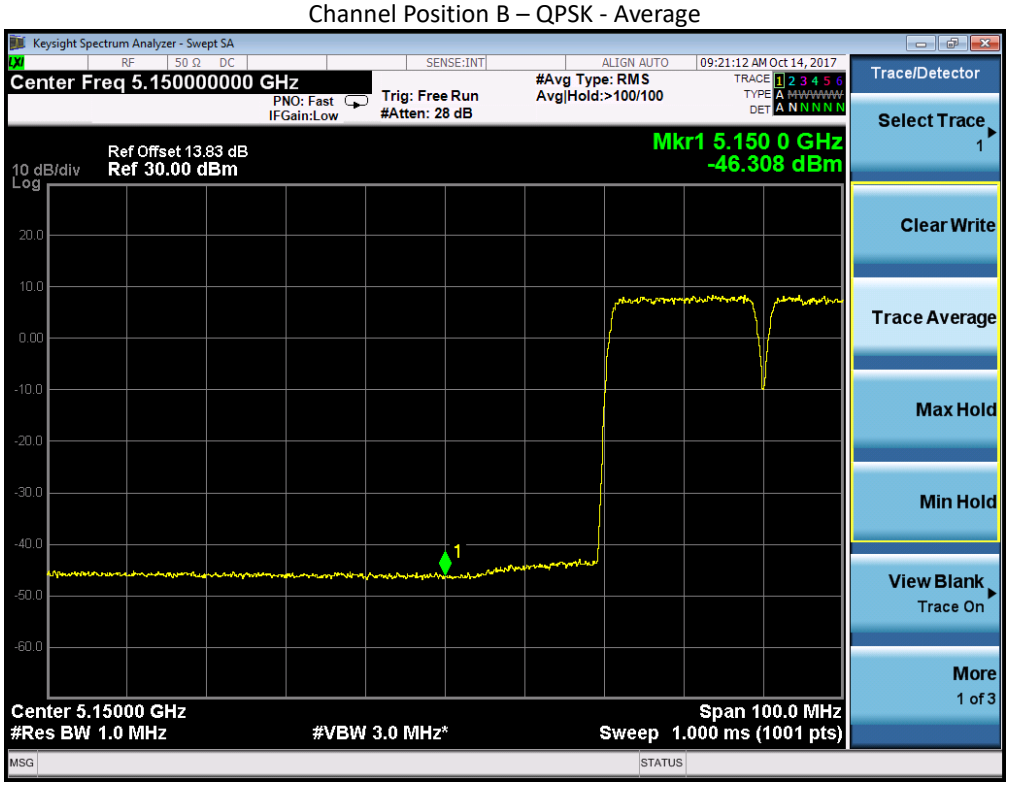
Note 2: 5150 MHz in the restricted band, use the following formula as per Section G (1) of 789033 D02 General UNII Test Procedures v01r04:
E (dBµV/m) = EIRP (dBm) + 95.2 = (measured level dBm + 6 dBi antenna gain) + 95.2

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).

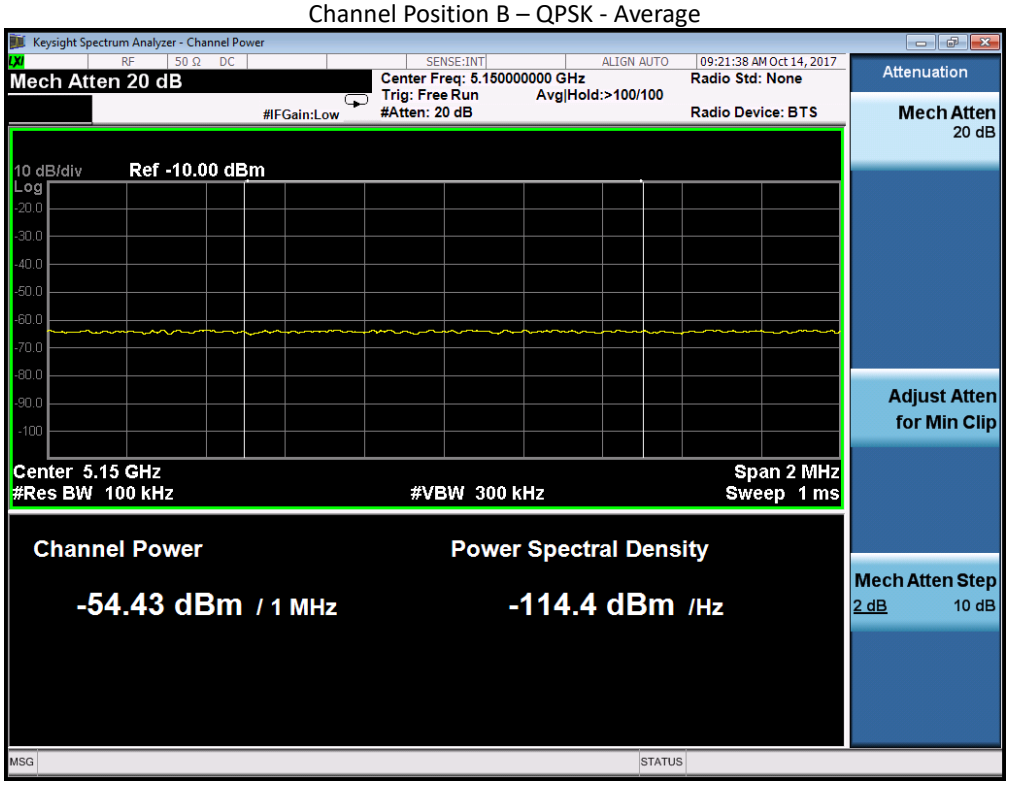
Channel Position B – QPSK - Peak



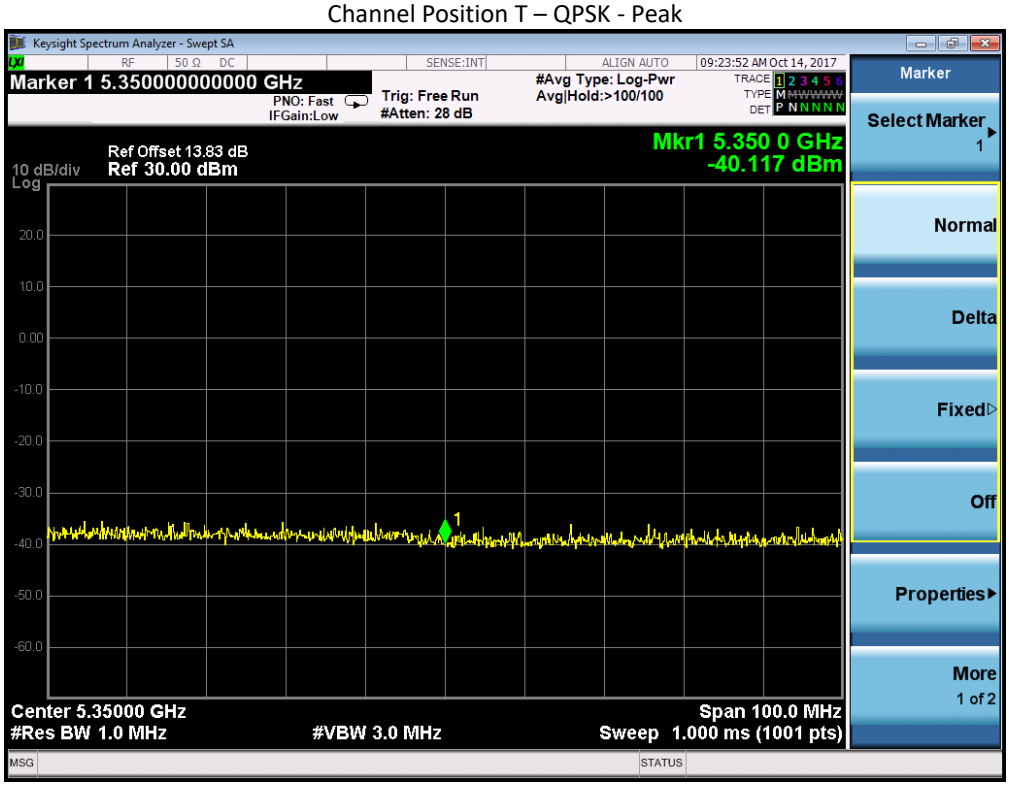
Channel Position B – QPSK - Average



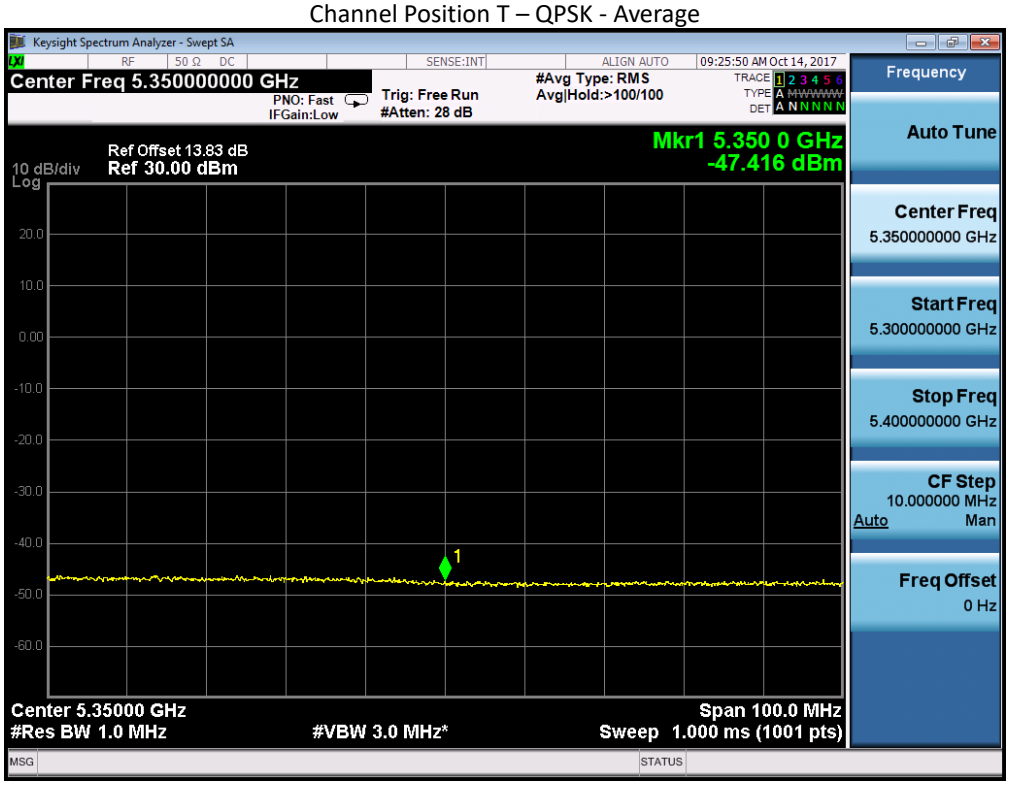
Channel Position B – QPSK - Average



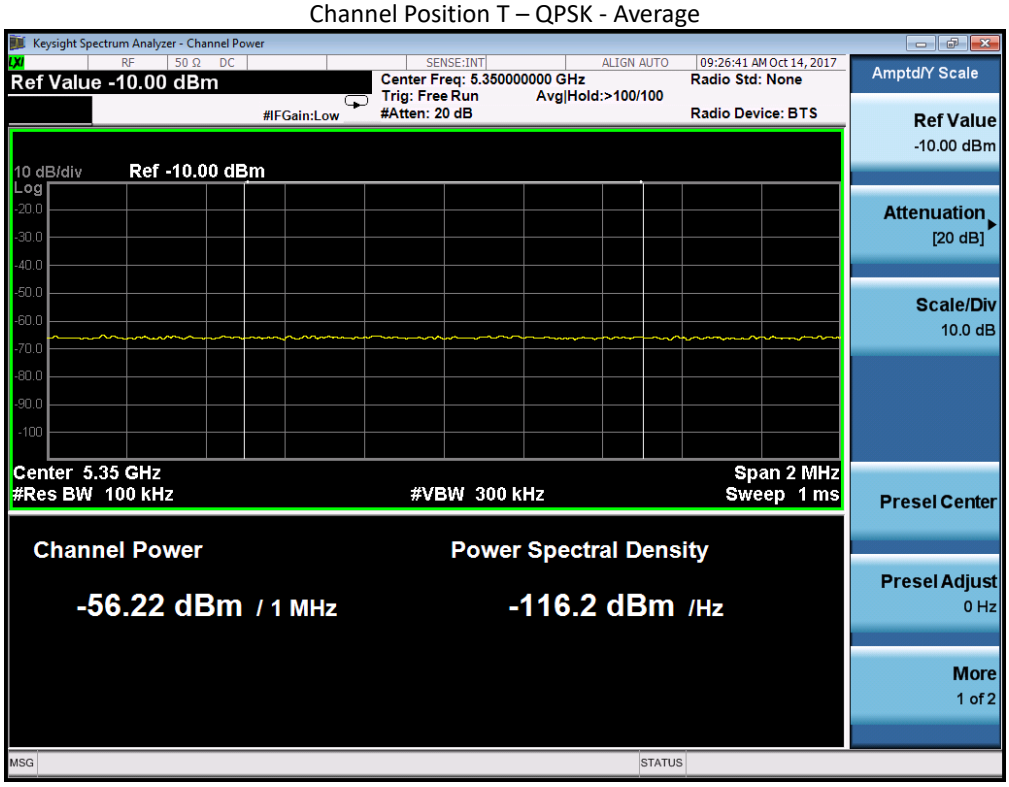
Channel Position T – QPSK - Peak



Channel Position T – QPSK - Average



Channel Position T – QPSK - Average



Configuration B2

L-MIMO-SC

Maximum Output Power 25dBm per port:

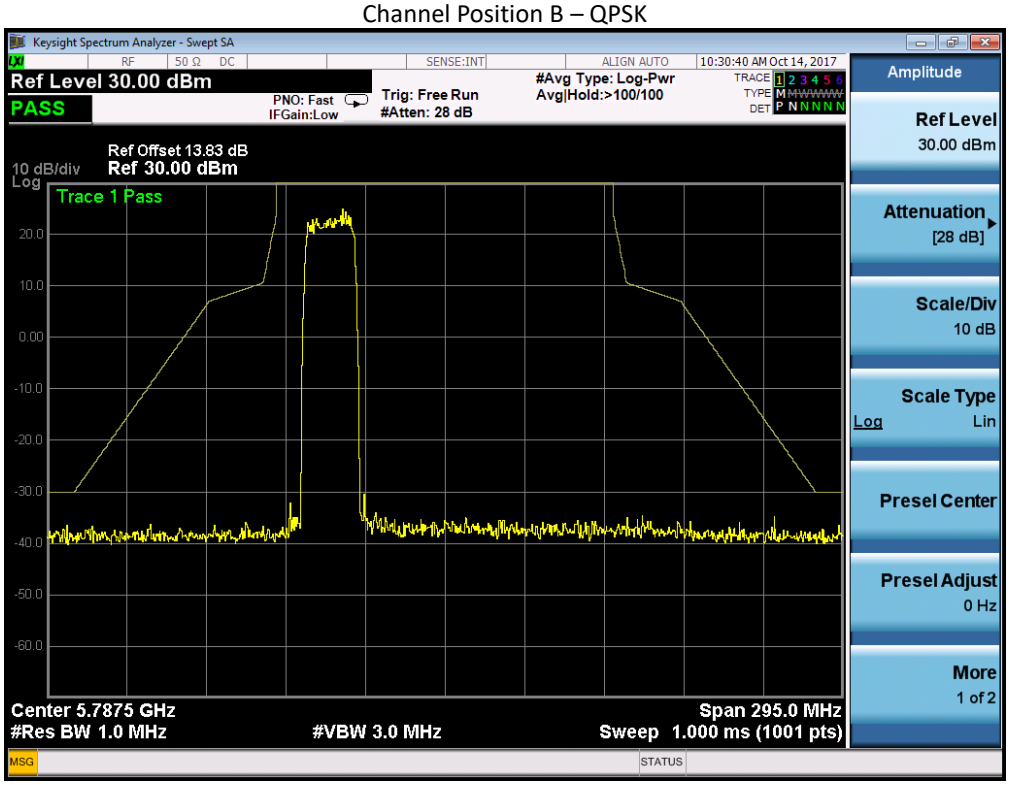
Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5745MHz	1	-30.01
T	20.0 MHz	5825MHz	1	-30.01

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.

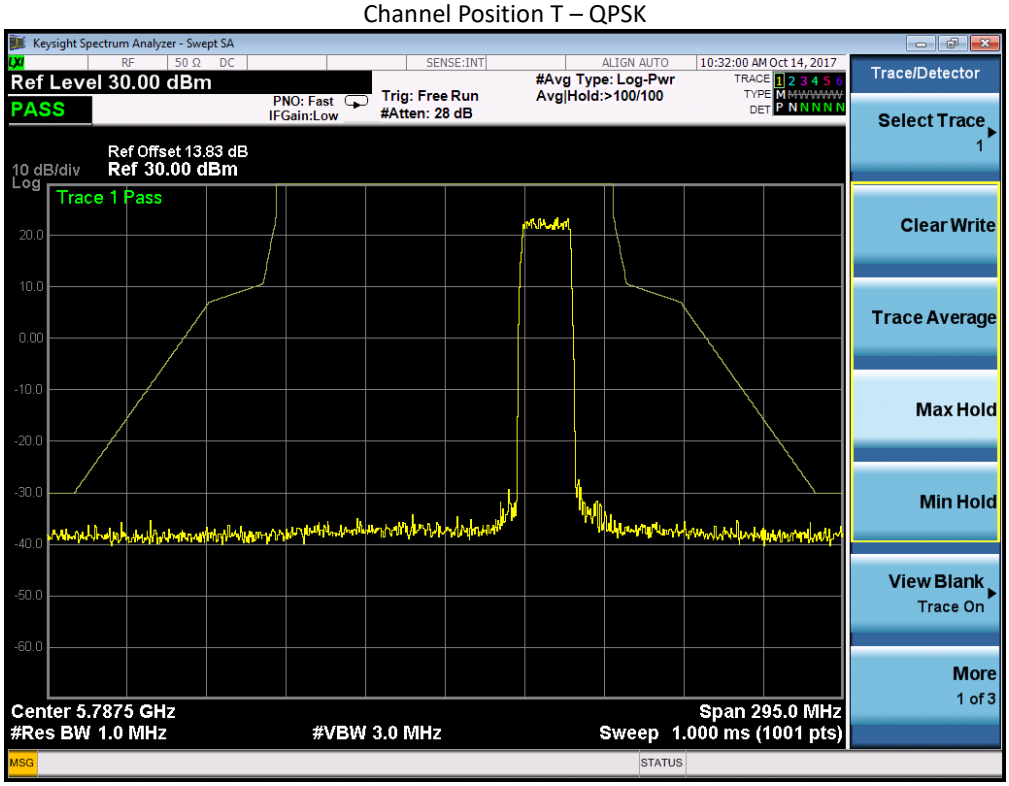
Note 2: For MIMO mode configurations, the limit was adjusted with a correction of -3.01dB [10Log(2)] to the following limit:

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 25dBm per port:

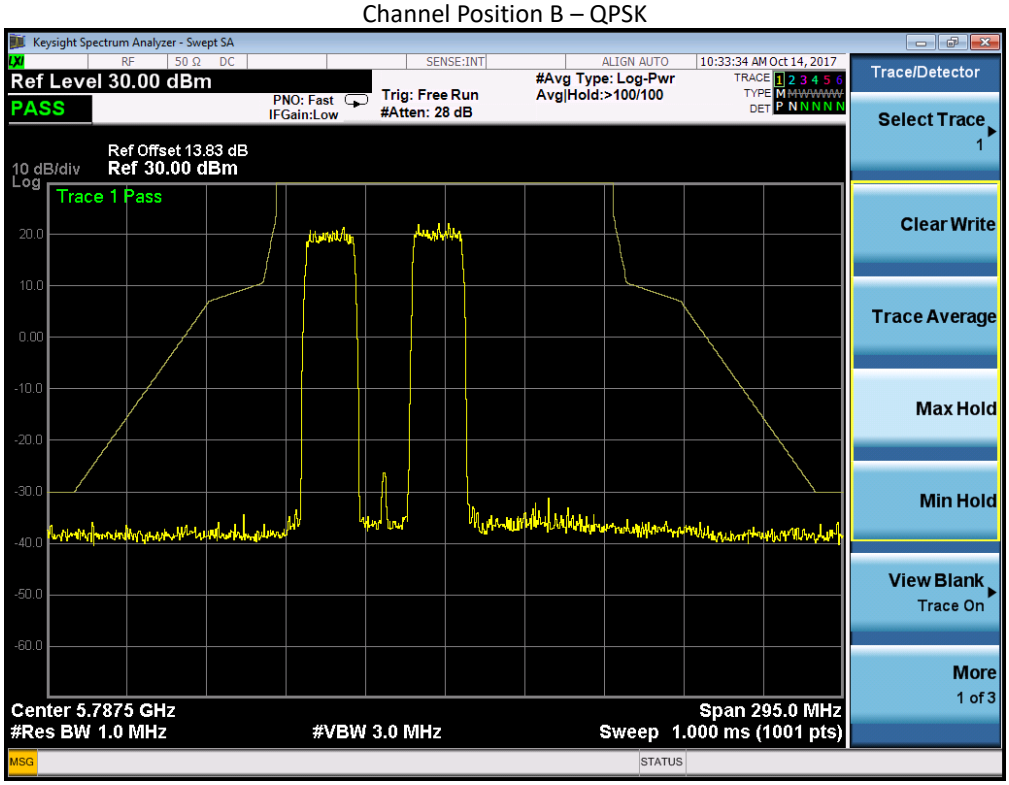
Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5785MHz + 5825MHz	1	-30.01
T	20.0 MHz	5785MHz + 5825MHz	1	-30.01

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.

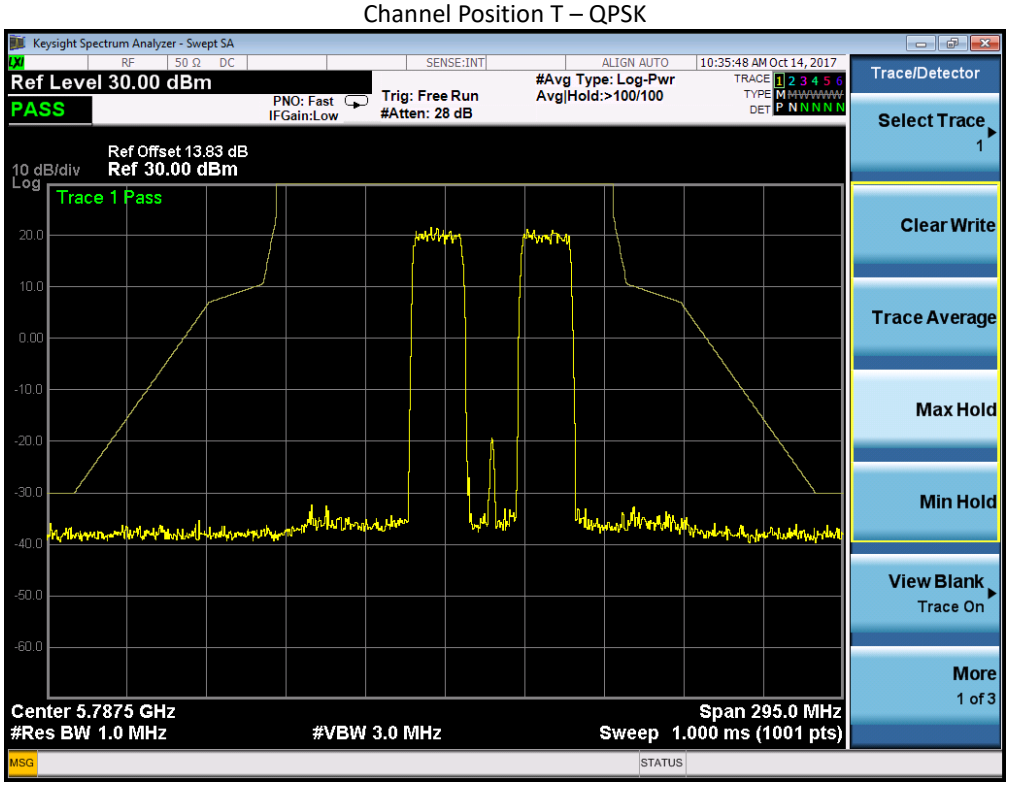
Note 2: For MIMO mode configurations, the limit was adjusted with a correction of -3.01dB [10Log(2)] to the following limit:

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 25dBm per port:

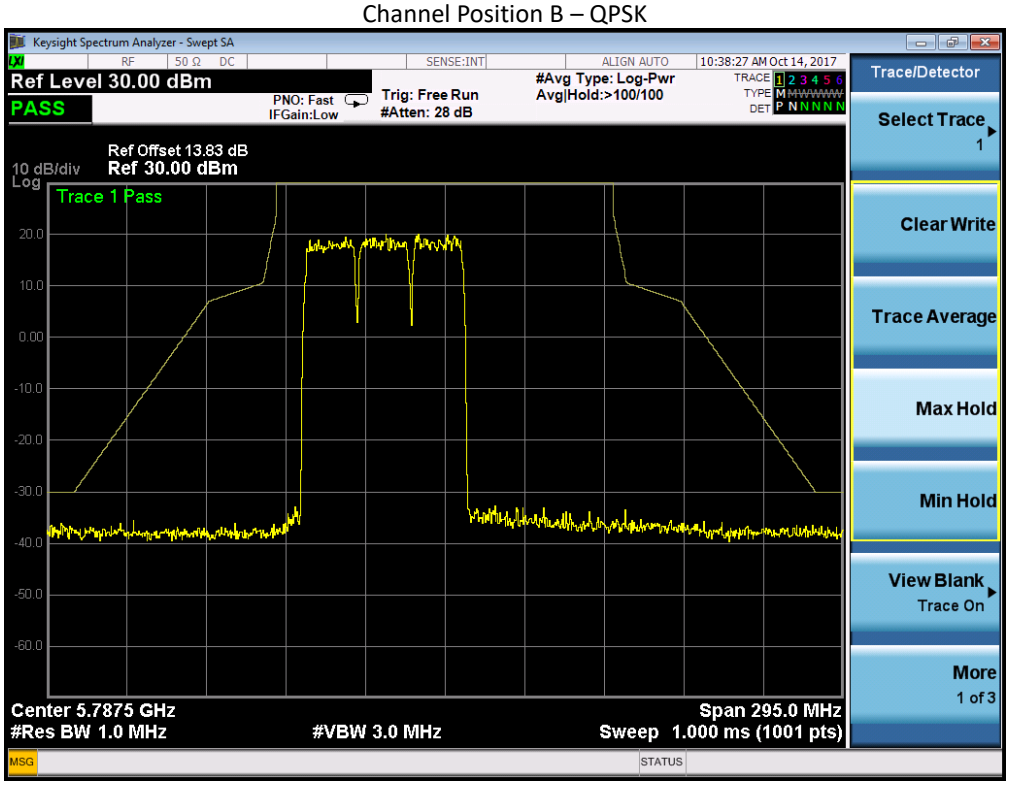
Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5745MHz + 5765MHz + 57850MHz	1	-30.01
T	20.0 MHz	5785MHz + 5805MHz + 5825MHz	1	-30.01

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.

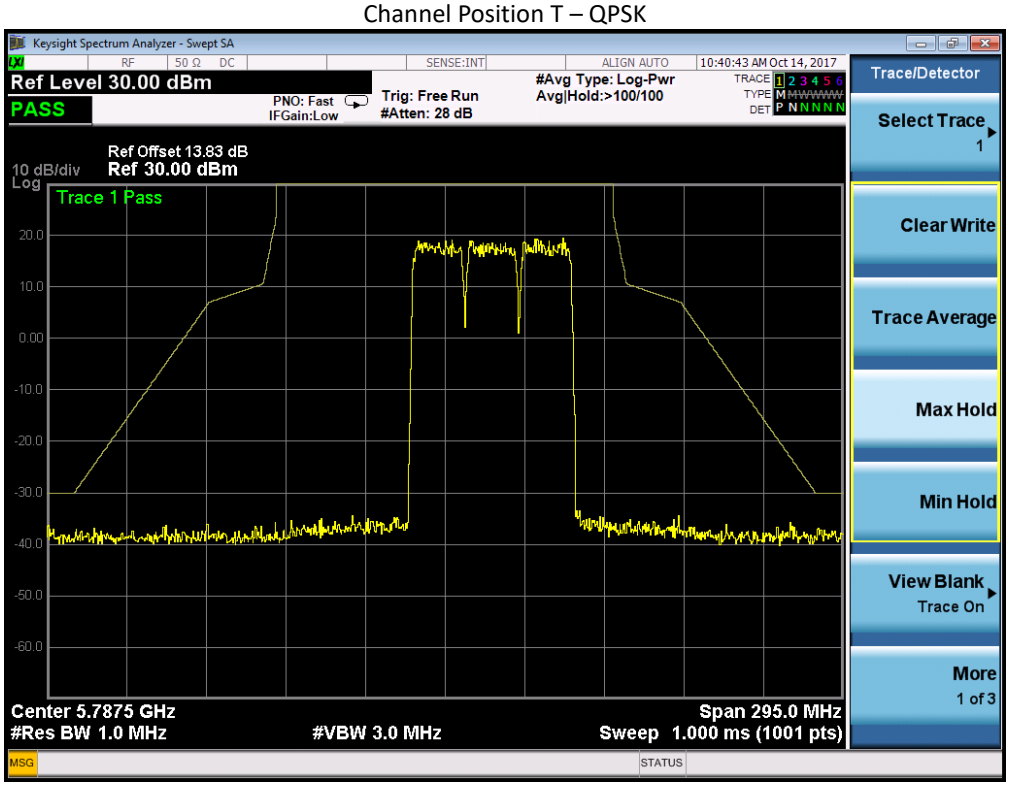
Note 2: For MIMO mode configurations, the limit was adjusted with a correction of -3.01dB [10Log(2)] to the following limit:

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 B3

L-MIMO-SC

Maximum Output Power 12dBm per port:

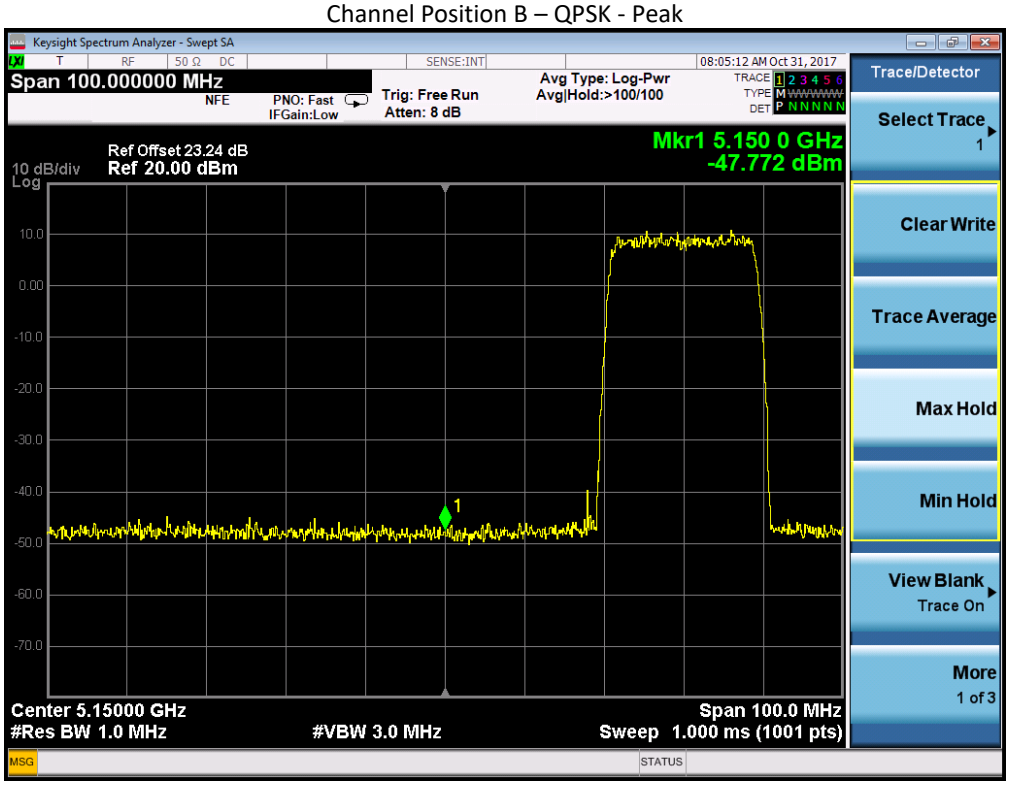
Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5180MHz	1	-30.01
T	20.0 MHz	5240MHz	1	-30.01

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.

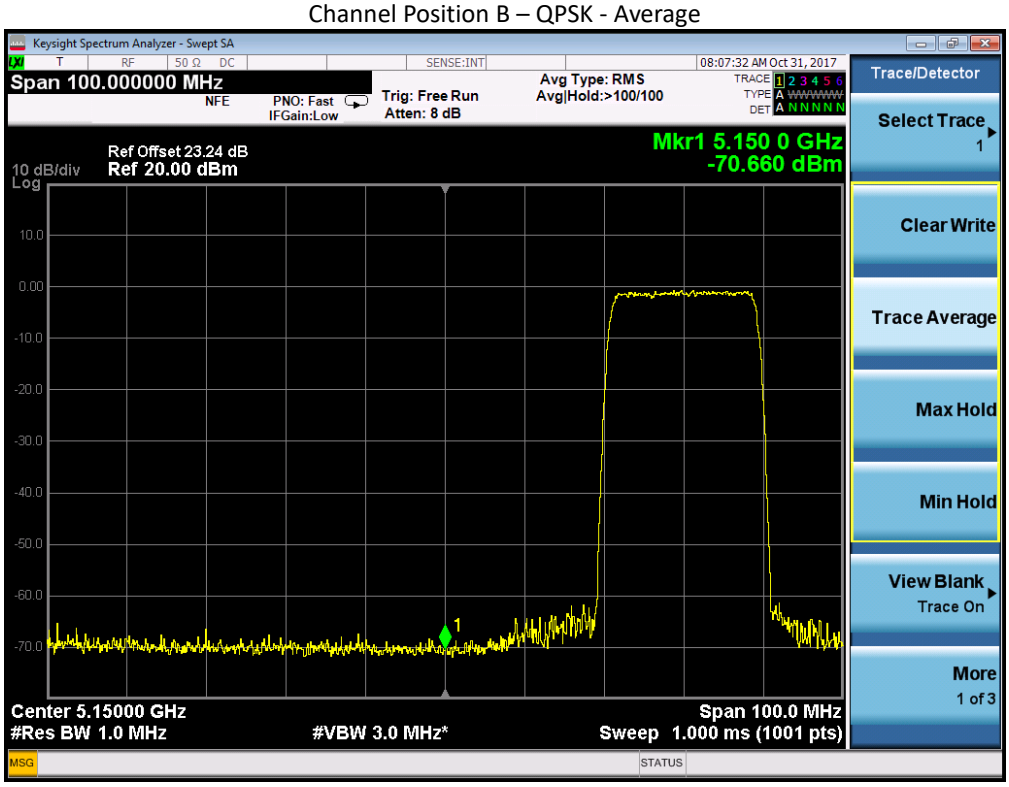
Note 2: 5150 MHz in the restricted band, use the following formula as per Section G (1) of 789033 D02 General UNII Test Procedures v01r04:
E (dBµV/m) = EIRP (dBm) + 95.2 = (measured level dBm + 9.5 dBi antenna gain) + 95.2

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).

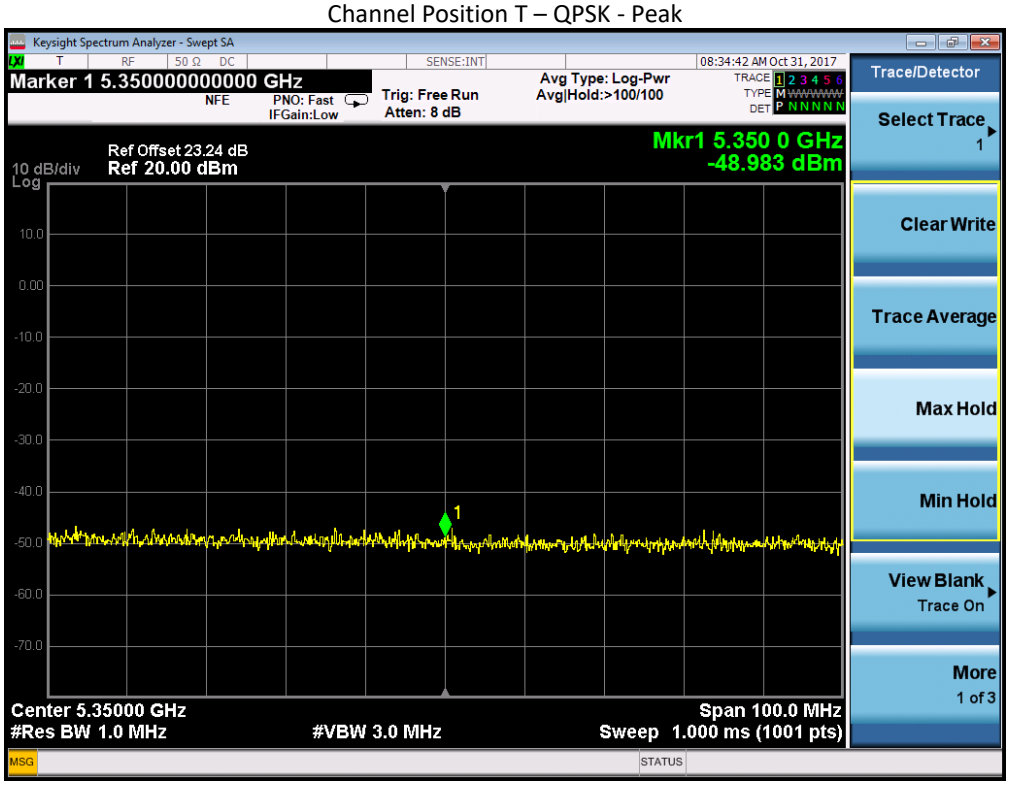
Channel Position B – QPSK - Peak



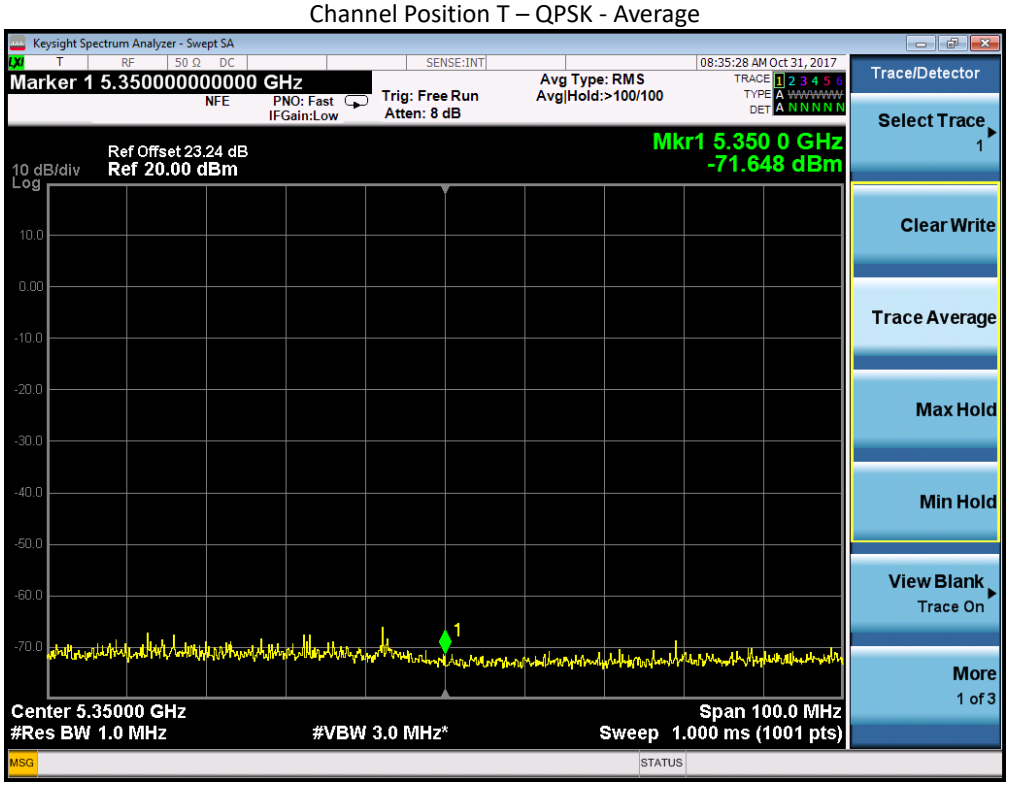
Channel Position B – QPSK - Average



Channel Position T – QPSK - Peak



Channel Position T – QPSK - Average



L-MIMO-MC 1 (2C)

Maximum Output Power 12dBm per port:

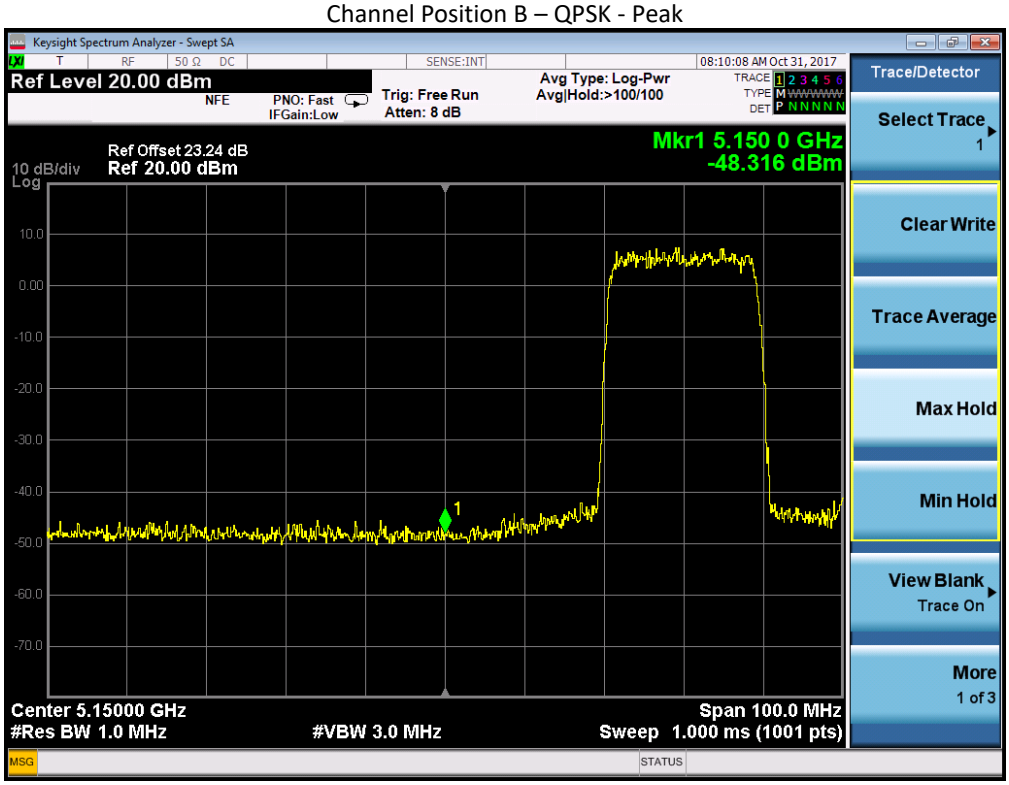
Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5180MHz + 5220MHz	1	-30.01
T	20.0 MHz	5200MHz + 5240MHz	1	-30.01

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.

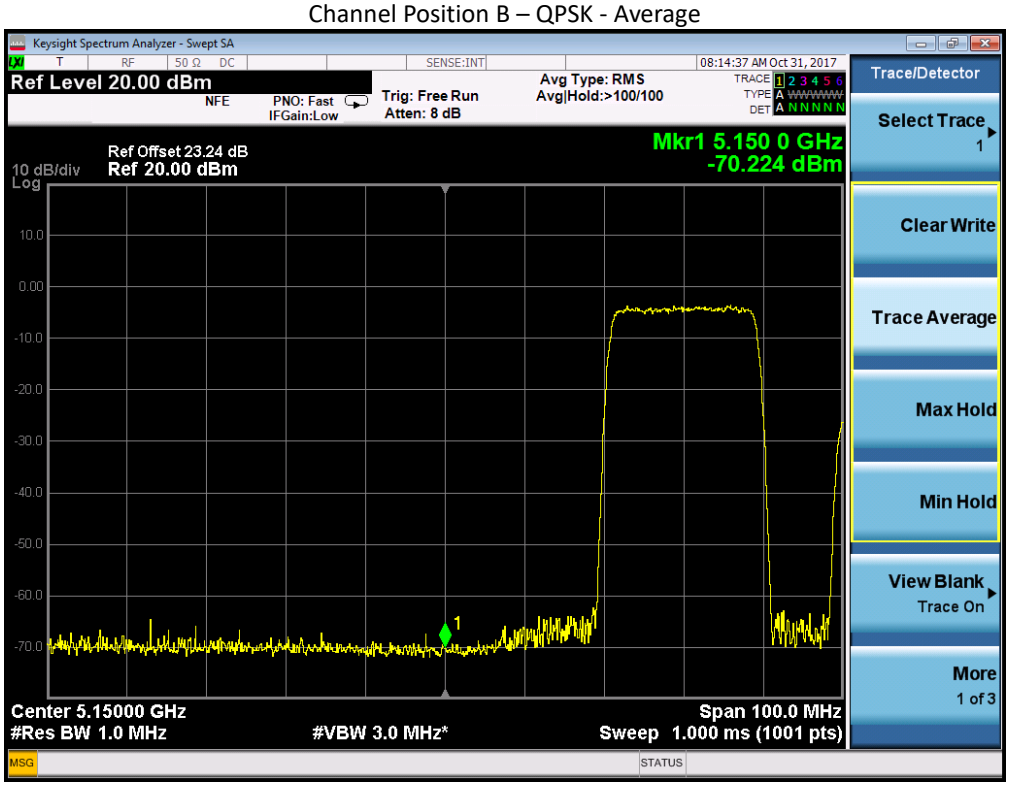
Note 2: 5150 MHz in the restricted band, use the following formula as per Section G (1) of 789033 D02 General UNII Test Procedures v01r04:
E (dBµV/m) = EIRP (dBm) + 95.2 = (measured level dBm + 9.5 dBi antenna gain) + 95.2

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).

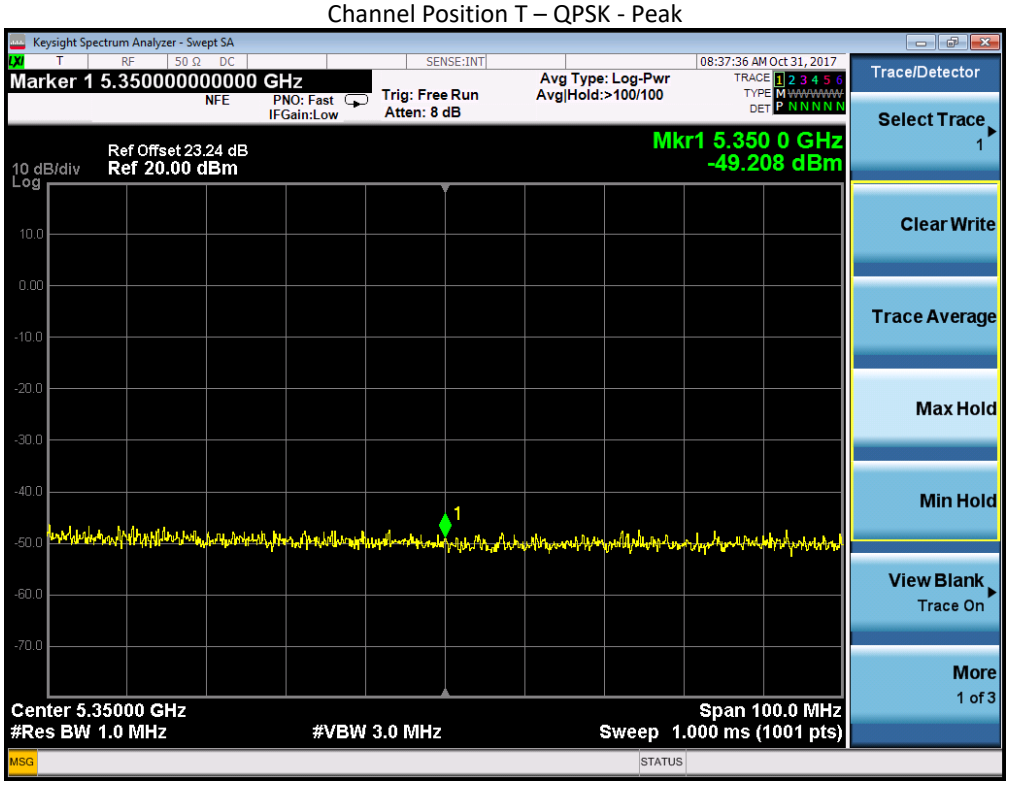
Channel Position B – QPSK - Peak



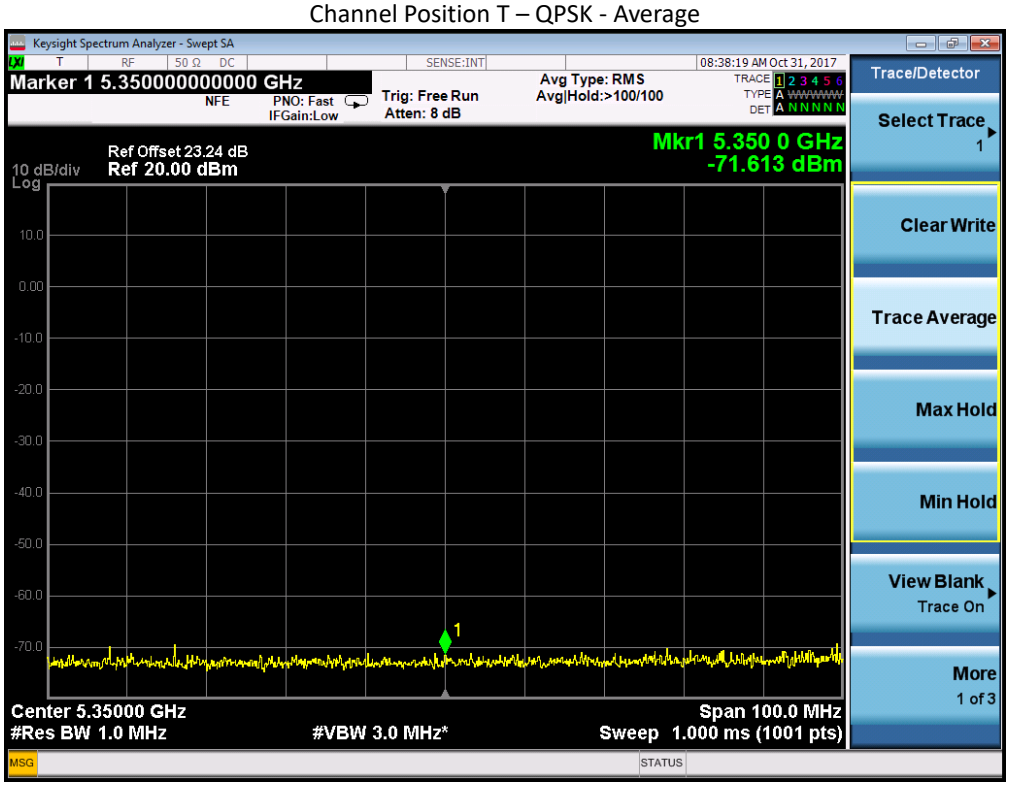
Channel Position B – QPSK - Average



Channel Position T – QPSK - Peak



Channel Position T – QPSK - Average



L-MIMO-MC 2 (3C)

Maximum Output Power 12dBm per port:

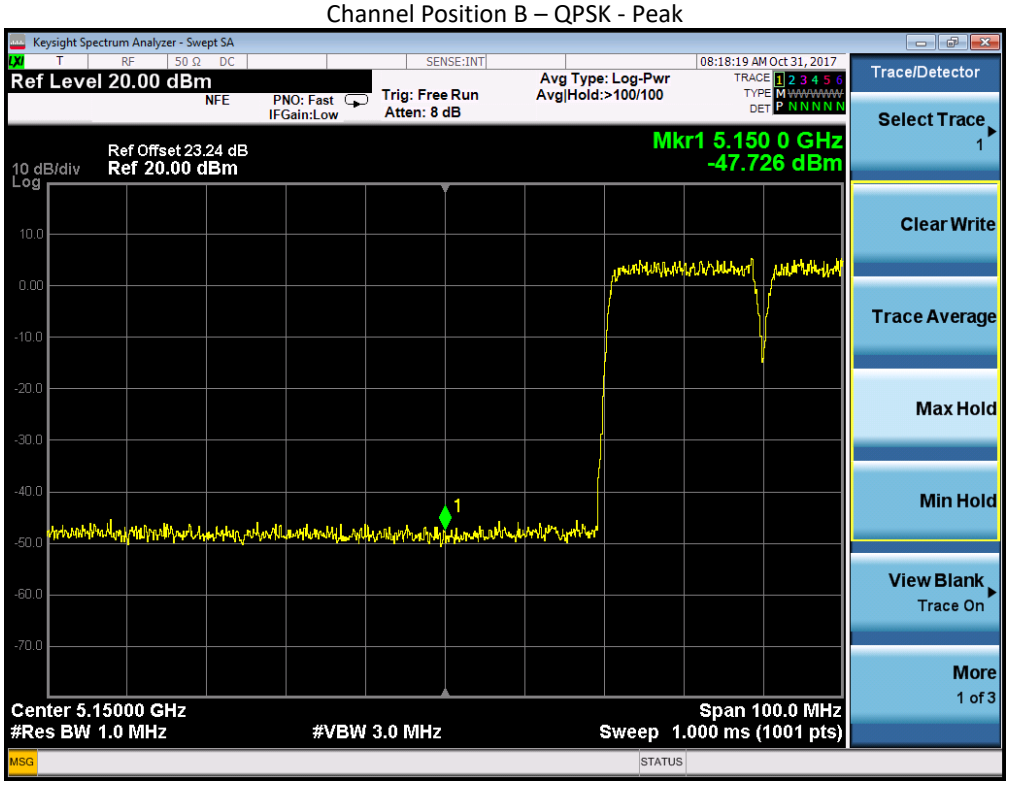
Channel Position	Bandwidth (MHz)	Channel Frequency	RBW (MHz)	EIRP Limit (dBm/MHz)
B	20.0 MHz	5180MHz + 5200MHz + 5220MHz	1	-30.01
T	20.0 MHz	5200MHz + 5220MHz + 5240MHz	1	-30.01

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.

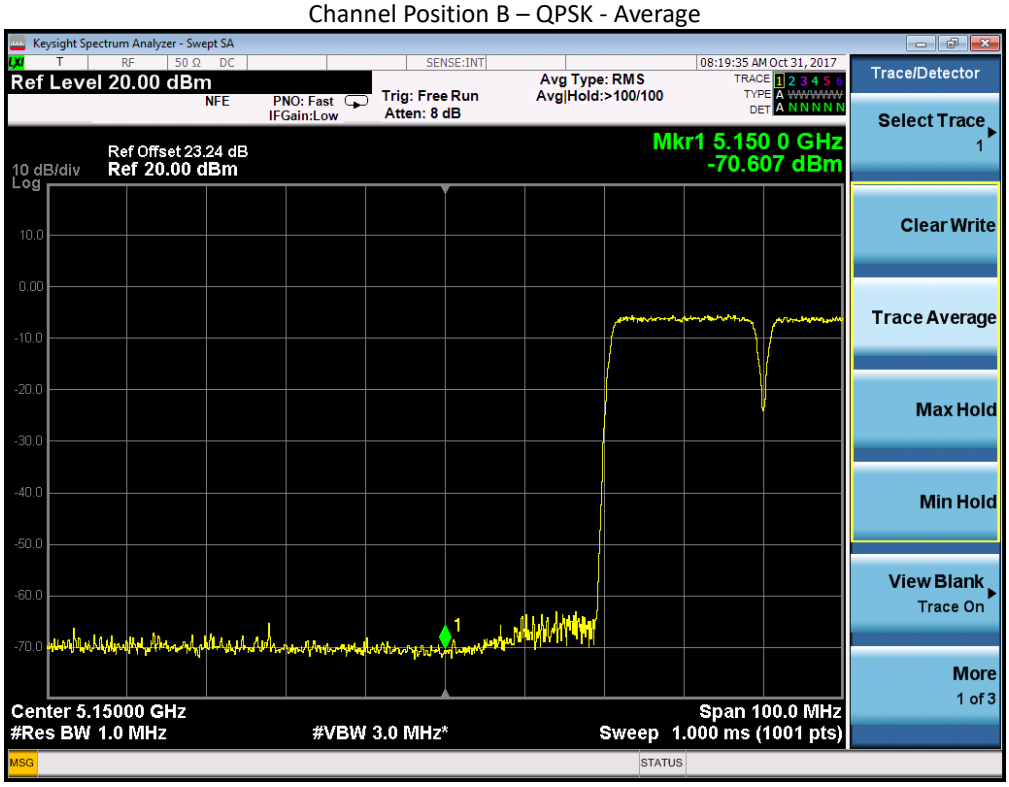
Note 2: 5150 MHz in the restricted band, use the following formula as per Section G (1) of 789033 D02 General UNII Test Procedures v01r04:
E (dBµV/m) = EIRP (dBm) + 95.2 = (measured level dBm + 9.5 dBi antenna gain) + 95.2

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).

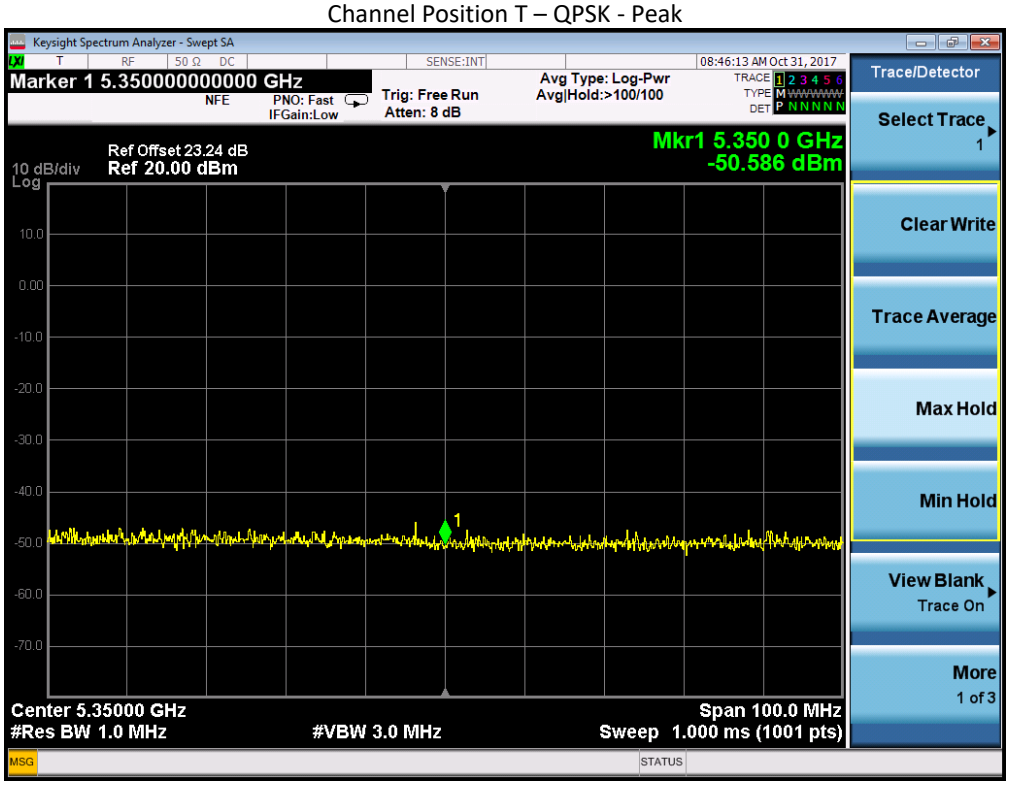
Channel Position B – QPSK - Peak



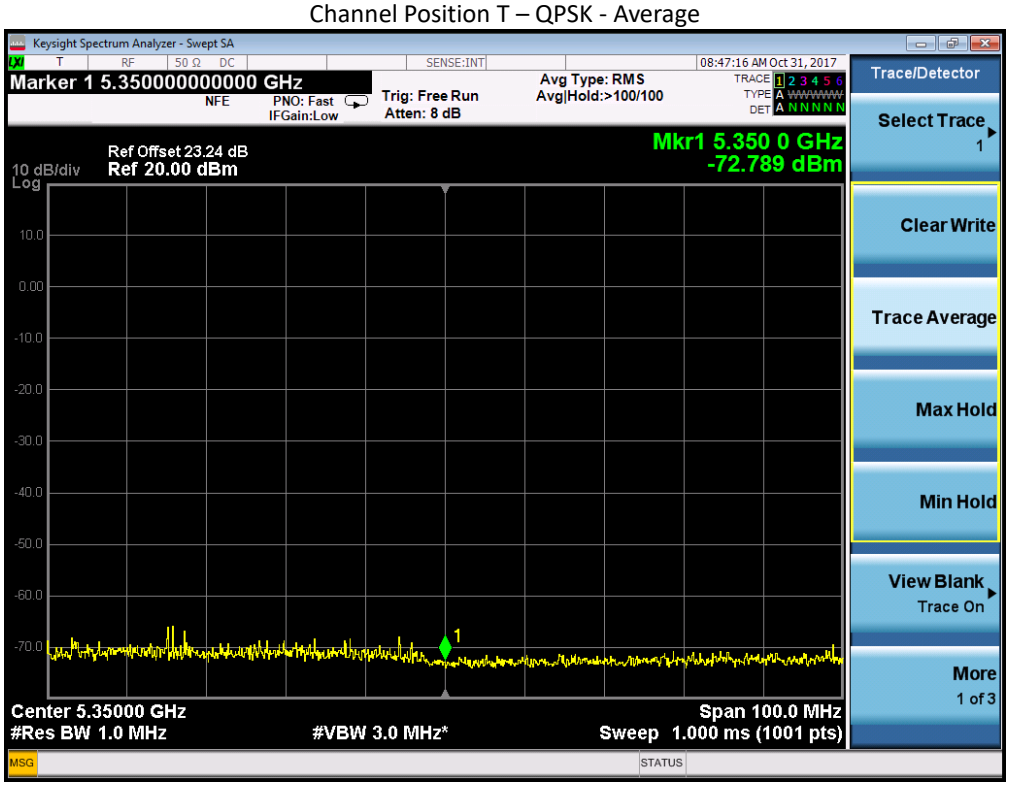
Channel Position B – QPSK - Average



Channel Position T – QPSK - Peak



Channel Position T – QPSK - Average



8 Undesirable Emission - Radiated

Test result: **Pass**

8.1 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.

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/TIA-603-D:2010, and RSS-247 clause 6 and RSS-Gen clause 8.10.

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(dBµV/m) = E.I.R.P + 95.2 dB = -27 + 95.2 = 68.2 dBµV/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. A set of plots have been included to show the measurement system noise floor.

Configuration A3 is the same with Configuration A1 except the output power, so only the configuration A1 with greater power was chosen to do the test.

Configuration B3 is the same with Configuration A1 except the output power, so only the configuration B1 with greater power was chosen to do the test.

Configuration A1

L-MIMO-SC

Maximum Output Power 20.5dBm 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

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

No emissions were detected within 20dB of the limit.

Configuration A2

L-MIMO-SC

Maximum Output Power 20.5dBm per port:

Channel Position	Bandwidth (MHz)	Channel Frequency
B	20.0 MHz	5745MHz
M	20.0 MHz	5785MHz
T	20.0 MHz	5825MHz

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

No emissions were detected within 20dB of the limit.

Configuration B1

L-MIMO-SC

Maximum Output Power 25dBm 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

No emissions were detected within 20dB of the limit.

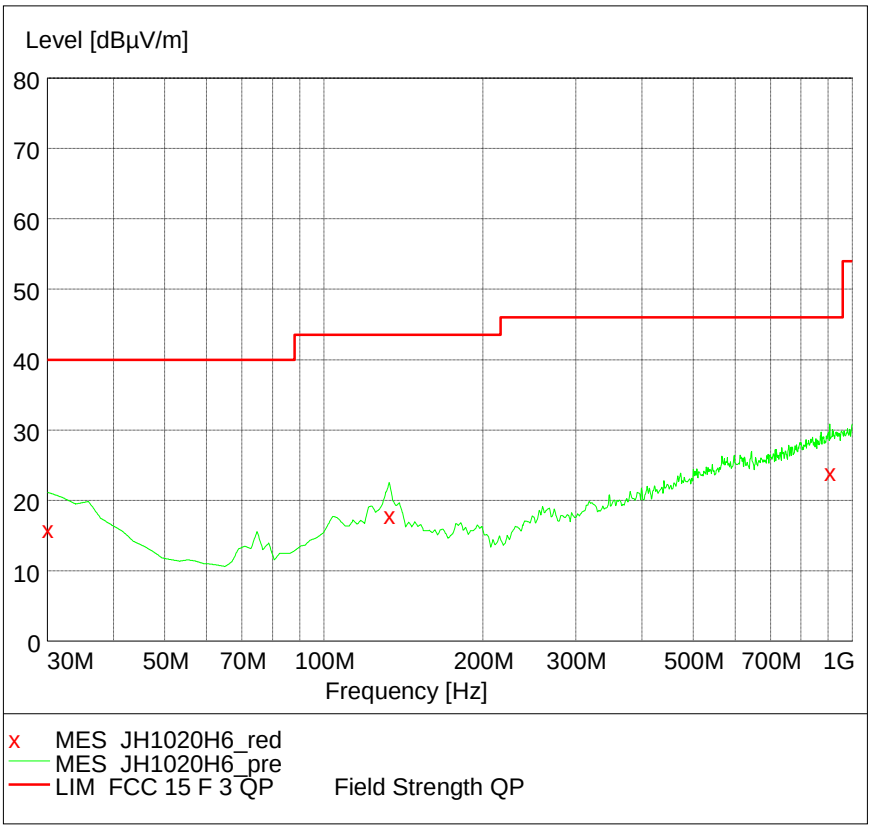
Channel Position T – QPSK

No emissions were detected within 20dB of the limit.

Channel Position M – QPSK

30MHz - 1GHz

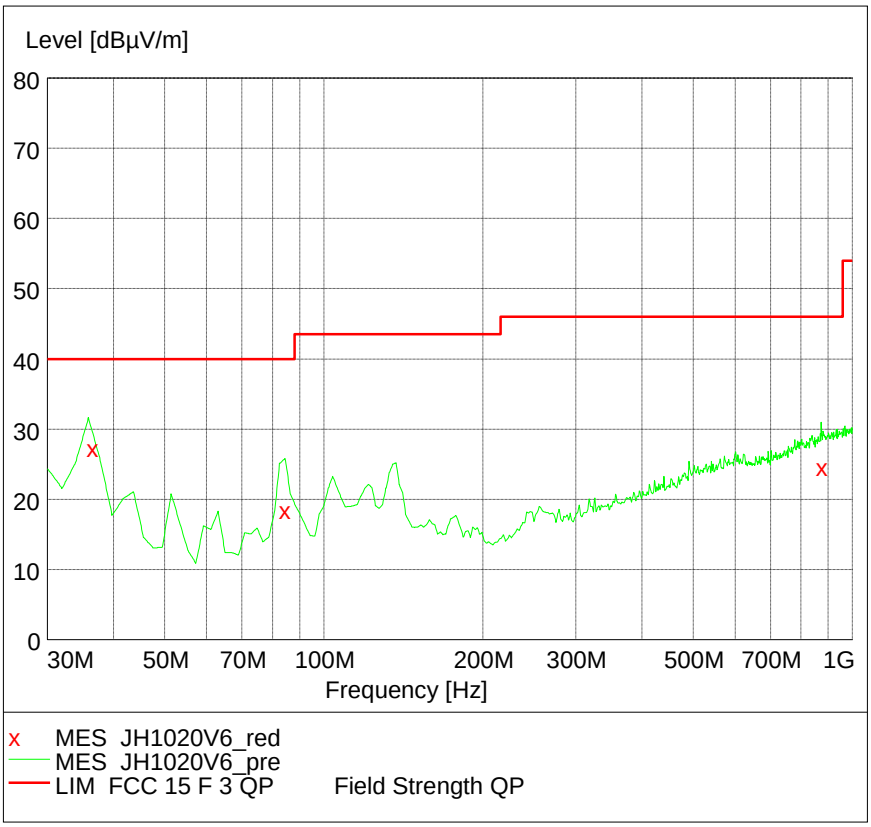
Horizontal



MEASUREMENT RESULT: "JH1020H6_red"

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Polarization
30.000000	16.19	19.2	40.0	23.81	Horizontal
132.709419	18.14	12.7	43.5	25.36	Horizontal
905.150301	24.27	23.0	46.0	21.73	Horizontal

Vertical

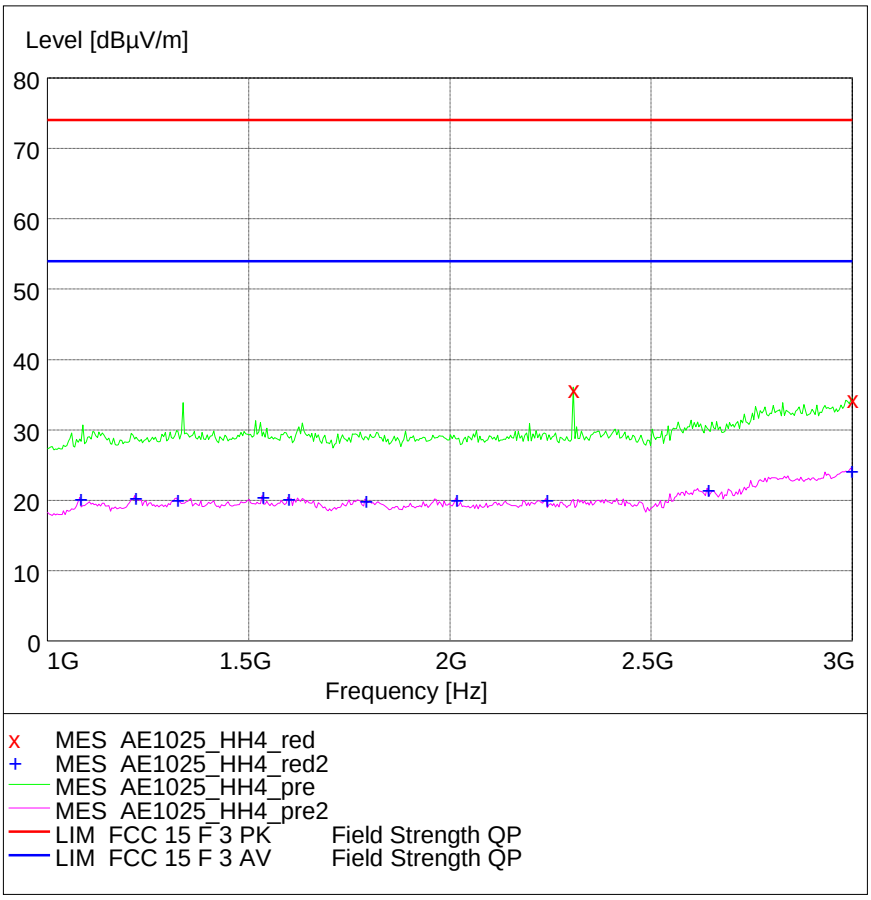


MEASUREMENT RESULT: "JH1020V6_red"

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Polarization
36.492986	27.48	15.6	40.0	12.52	Vertical
84.188377	18.65	8.7	40.0	21.35	Vertical
873.527054	24.88	22.8	46.0	21.12	Vertical

1GHz - 3GHz

Horizontal



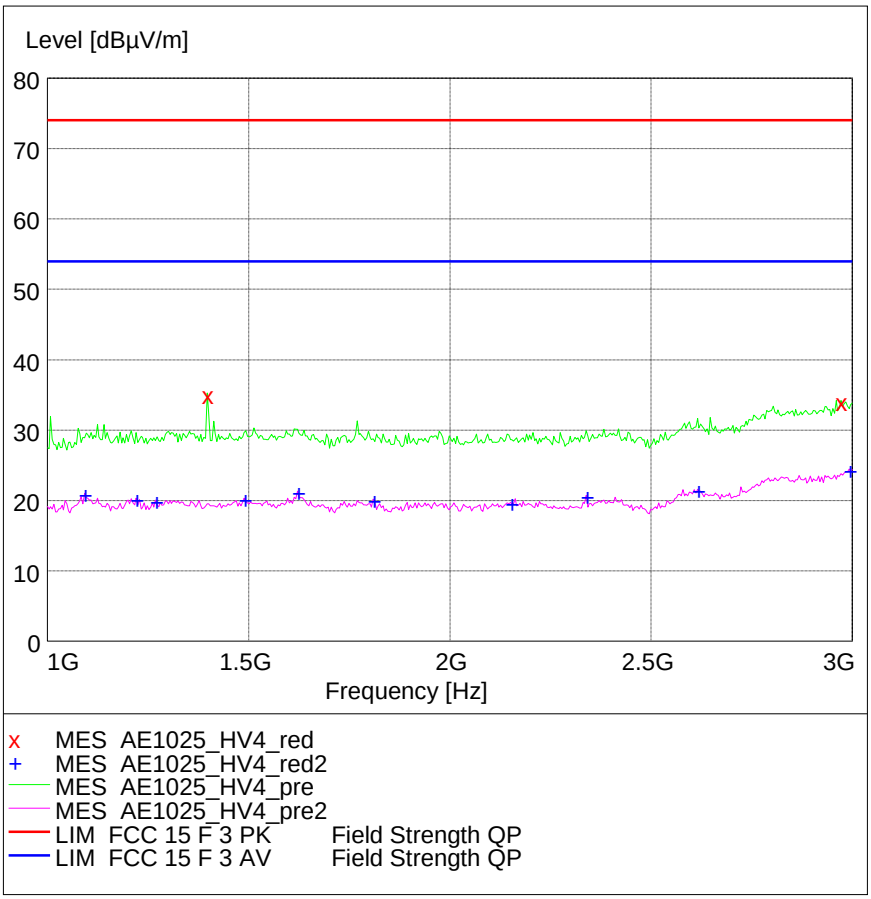
MEASUREMENT RESULT: "AE1025_HH4_red"

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Polarization
2306.613226	36.10	-10.5	74.0	37.9	VERTICAL
3000.000000	34.60	-5.1	74.0	39.4	VERTICAL

MEASUREMENT RESULT: "AE1025_HH4_red2"

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Polarization
2639.278557	21.70	-8.6	54.0	32.3	VERTICAL
2995.991984	24.50	-5.1	54.0	29.5	VERTICAL

Vertical



MEASUREMENT RESULT: "AE1025_HV4_red"

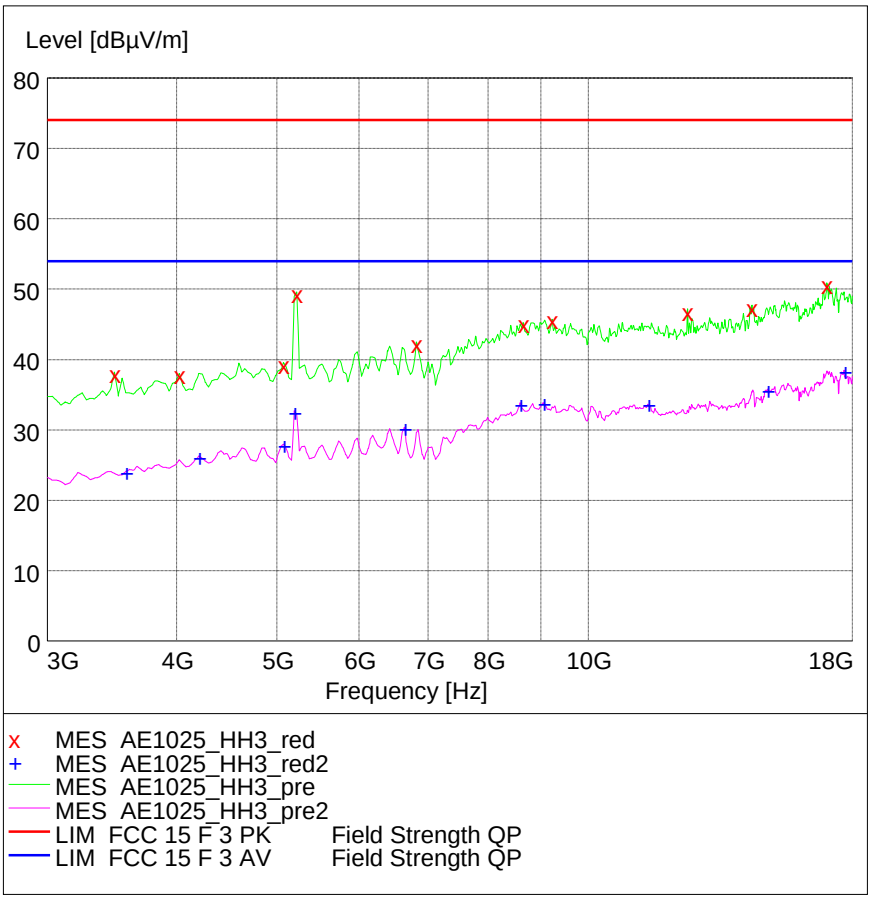
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Polarization
1396.793587	35.30	-11.9	74.0	38.7	VERTICAL
2971.943888	34.20	-5.3	74.0	39.8	VERTICAL

MEASUREMENT RESULT: "AE1025_HV4_red2"

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Polarization
1621.242485	21.30	-11.5	54.0	32.7	VERTICAL
2615.230461	21.60	-8.9	54.0	32.4	VERTICAL
2991.983968	24.50	-5.2	54.0	29.5	VERTICAL

3GHz - 18GHz

Horizontal



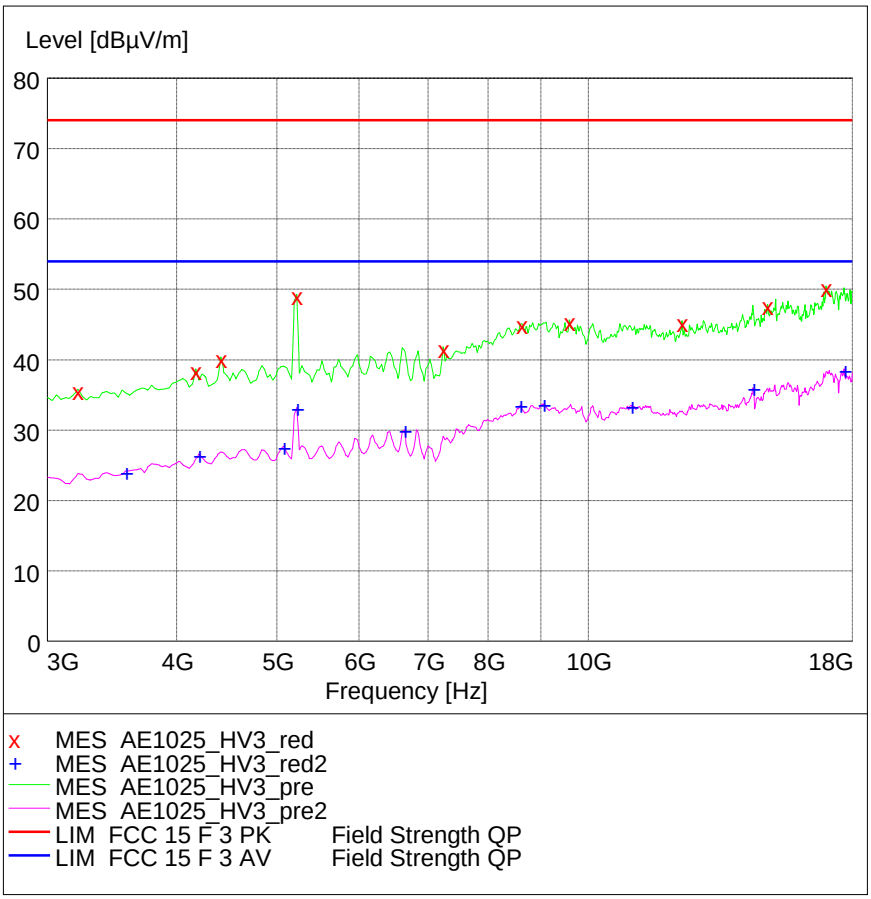
MEASUREMENT RESULT: "AE1025_HH3_red"

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Polarization
5224.448898	49.60	1.1	74.0	24.4	VERTICAL
14392.785571	47.60	14.2	74.0	26.4	VERTICAL
17008.016032	50.90	21.3	74.0	23.1	VERTICAL

MEASUREMENT RESULT: "AE1025_HH3_red2"

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Polarization
5194.388778	32.70	1.1	54.0	21.3	VERTICAL
14903.807615	35.80	15.2	54.0	18.2	VERTICAL
17669.338677	38.50	22.6	54.0	15.5	VERTICAL

Vertical



MEASUREMENT RESULT: "AE1025_HV3_red"

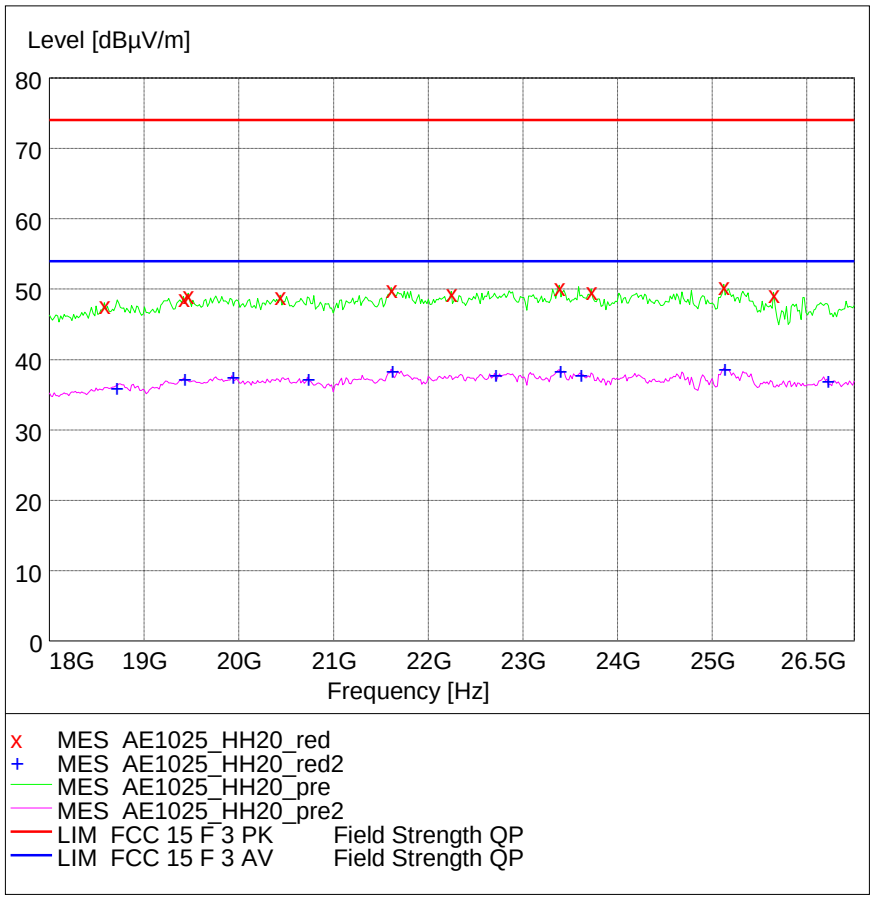
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Polarization
5224.448898	49.30	1.1	74.0	24.7	VERTICAL
14903.807615	47.90	15.2	74.0	26.1	VERTICAL
16977.955912	50.50	21.1	74.0	23.5	VERTICAL

MEASUREMENT RESULT: "AE1025_HV3_red2"

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Polarization
9042.084168	33.70	13.2	54.0	20.3	VERTICAL
14422.845691	36.00	14.3	54.0	18.0	VERTICAL
17669.338677	38.70	22.6	54.0	15.3	VERTICAL

18 - 26.5GHz

Horizontal



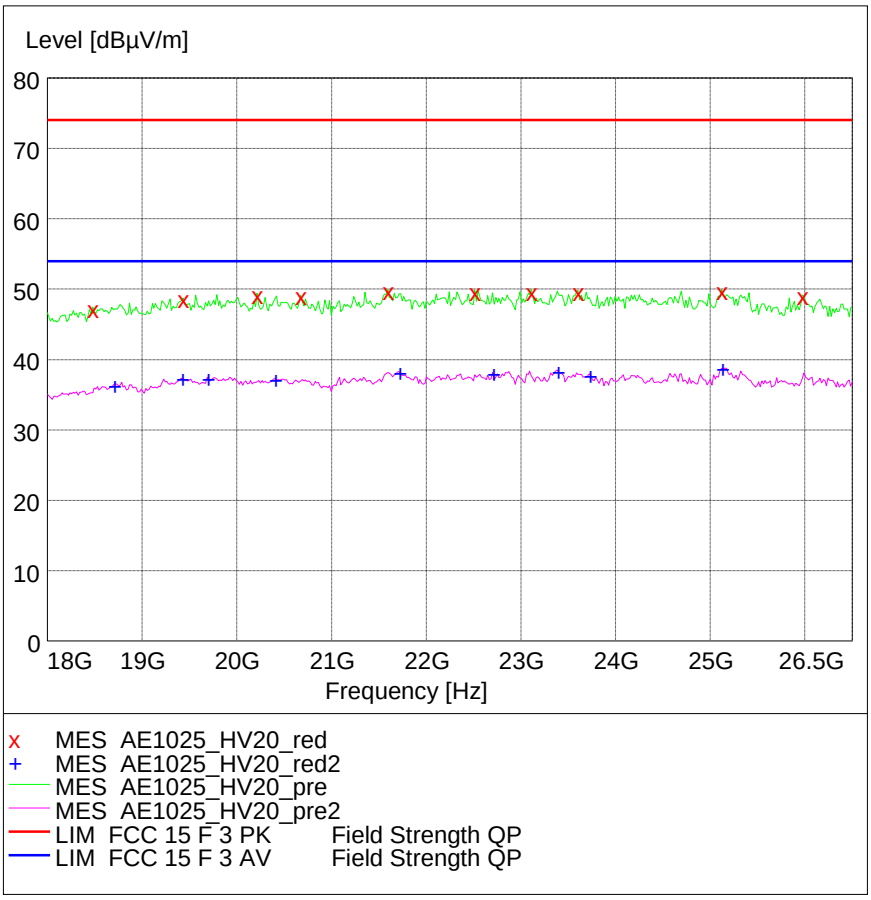
MEASUREMENT RESULT: "AE1025_HH20_red"

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Polarization
19464.929860	49.40	5.7	74.0	24.6	HORIZONTAL
25120.240481	50.70	7.1	74.0	23.3	HORIZONTAL

MEASUREMENT RESULT: "AE1025_HH20_red2"

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Polarization
23382.765531	38.60	7.3	54.0	15.4	HORIZONTAL
25120.240481	38.80	7.1	54.0	15.2	HORIZONTAL

Vertical



MEASUREMENT RESULT: "AE1025_HV20_red"

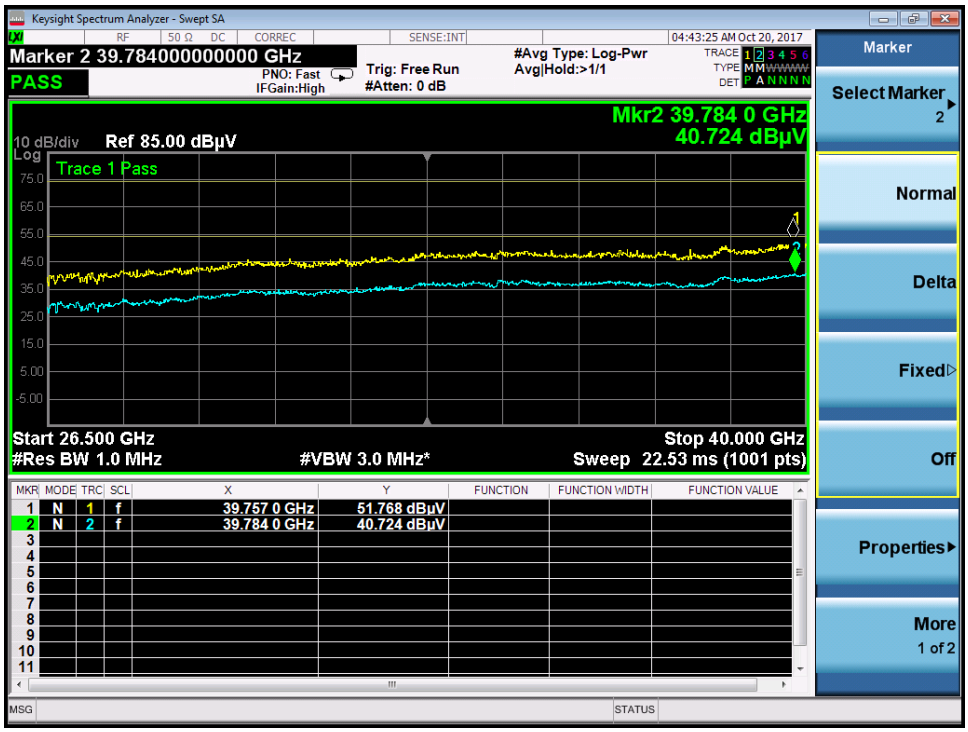
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Polarization
21594.188377	50.00	6.8	74.0	24.0	HORIZONTAL
25120.240481	50.00	7.1	74.0	24.0	HORIZONTAL

MEASUREMENT RESULT: "AE1025_HV20_red2"

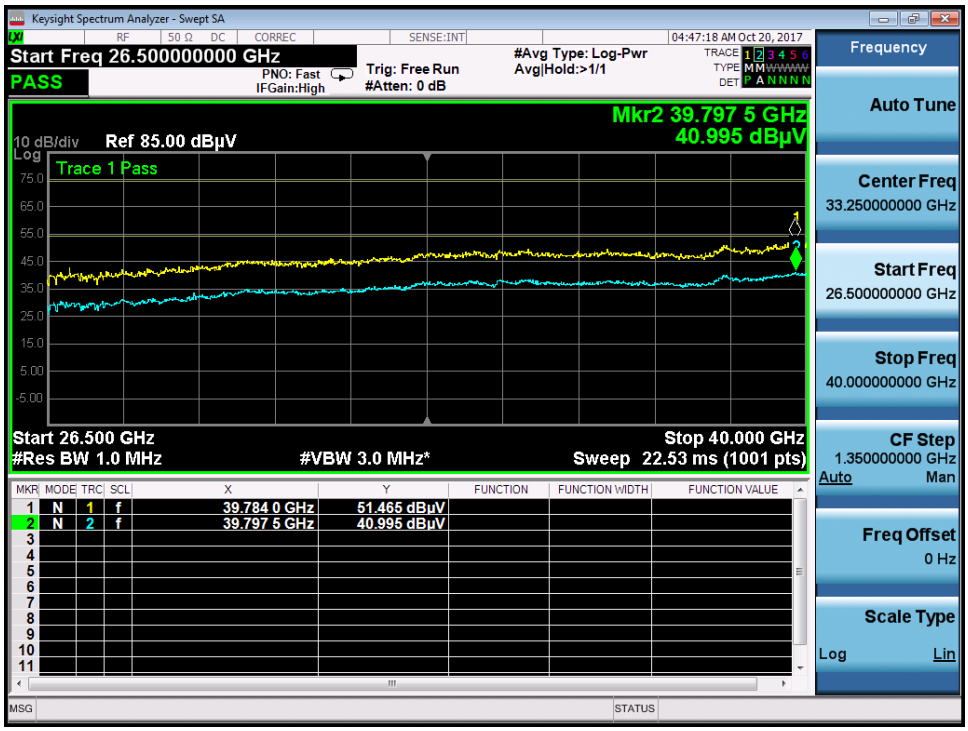
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Polarization
21713.426854	38.30	6.8	54.0	15.7	HORIZONTAL
25120.240481	38.80	7.1	54.0	15.2	HORIZONTAL

26.5GHz - 40GHz

Horizontal



Vertical



L-MIMO-MC 1 (2C)

Maximum Output Power 25dBm per port:

Channel Position	Channel Frequency
B_{RFBW}	5180MHz + 5220MHz
T_{RFBW}	5200MHz + 5240MHz

Channel Position B_{RFBW} – QPSK

No emissions were detected within 20dB of the limit.

Channel Position T_{RFBW} – QPSK

No emissions were detected within 20dB of the limit.

L-MIMO-MC 2 (3C)

Maximum Output Power 25dBm per port:

Channel Position	Channel Frequency
B_{RFBW}	5180MHz + 5200MHz + 5220MHz
T_{RFBW}	5200MHz + 5220MHz + 5240MHz

Channel Position B_{RFBW} – QPSK

No emissions were detected within 20dB of the limit.

Channel Position T_{RFBW} – QPSK

No emissions were detected within 20dB of the limit.

Configuration B2

L-MIMO-SC

Maximum Output Power 25dBm per port:

Channel Position	Bandwidth (MHz)	Channel Frequency
B	20.0 MHz	5745MHz
M	20.0 MHz	5785MHz
T	20.0 MHz	5825MHz

Channel Position B – QPSK

No emissions were detected within 20dB of the limit.

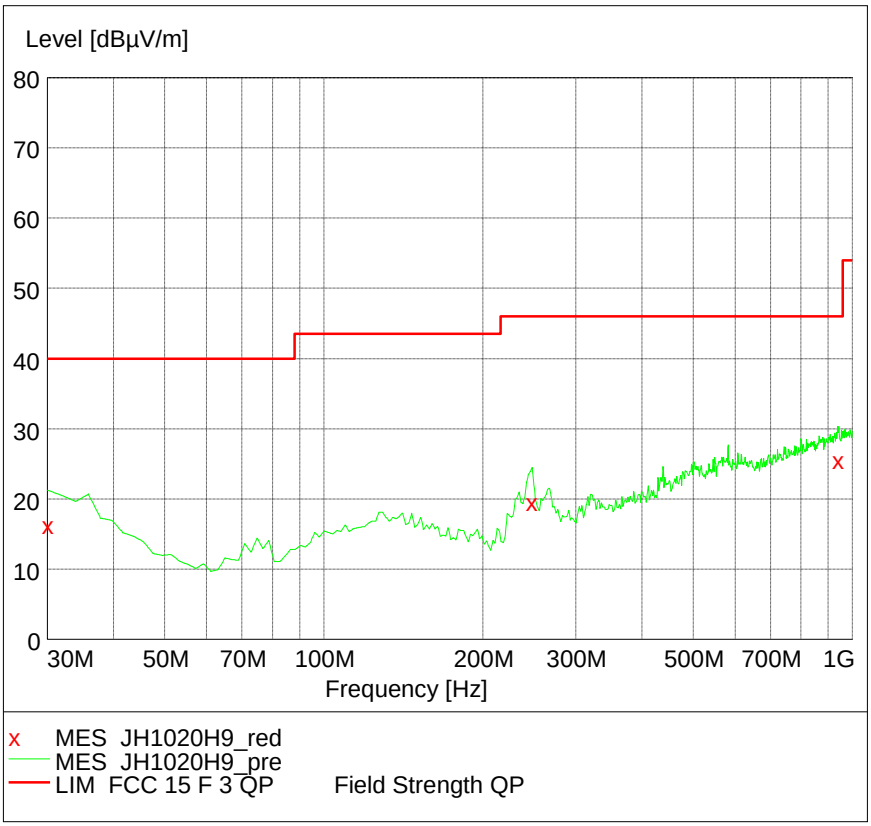
Channel Position M – QPSK

No emissions were detected within 20dB of the limit.

Channel Position T – QPSK

30MHz - 1GHz

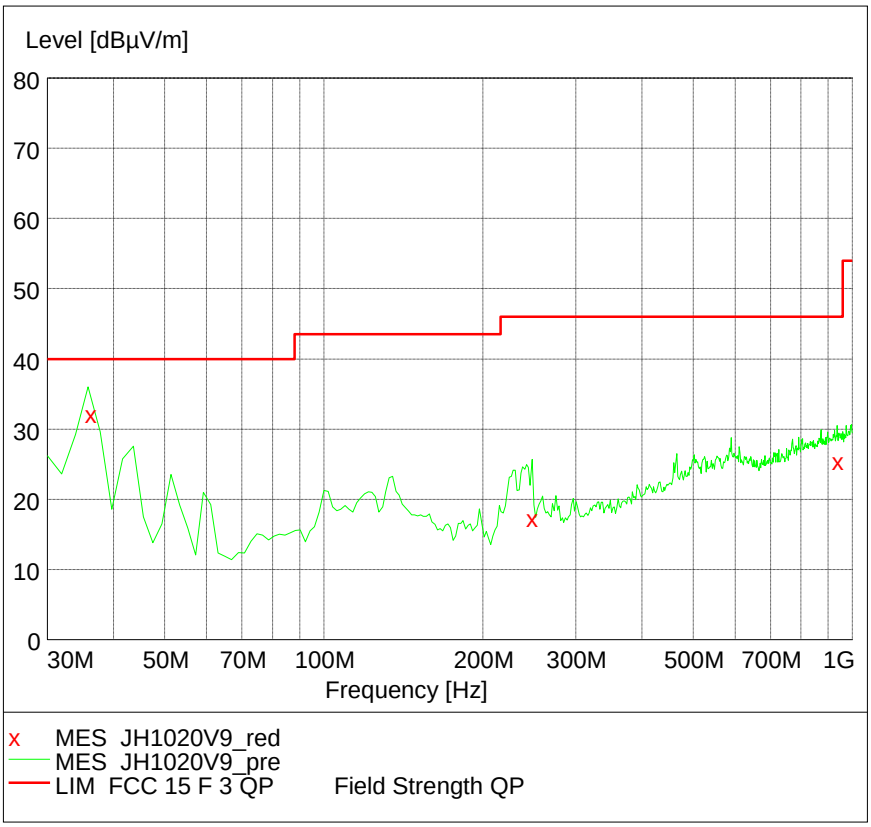
Horizontal



MEASUREMENT RESULT: "JH1020H9_red"

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Polarization
30.000000	16.55	19.2	40.0	23.45	Horizontal
246.849699	19.87	13.7	46.0	26.13	Horizontal
937.651303	25.77	23.4	46.0	20.23	Horizontal

Vertical

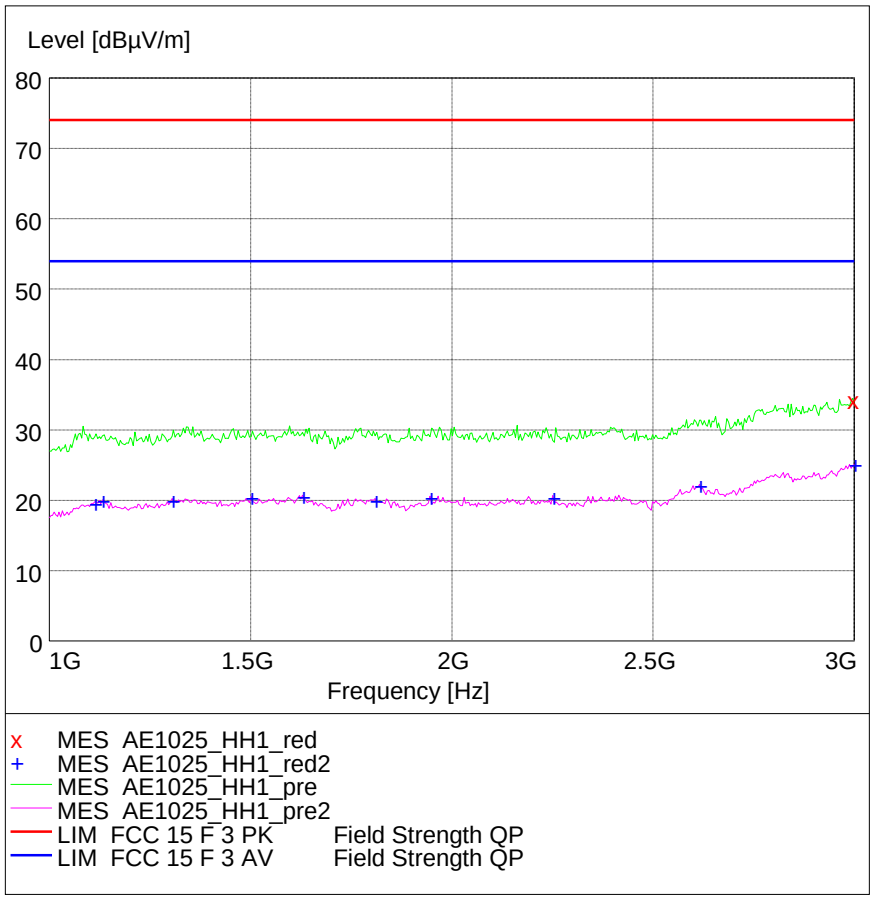


MEASUREMENT RESULT: "JH1020V9_red"

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Polarization
36.112224	32.38	15.6	40.0	7.62	Vertical
247.511022	17.56	13.7	46.0	28.44	Vertical
935.430862	25.65	23.3	46.0	20.35	Vertical

1GHz - 3GHz

Horizontal



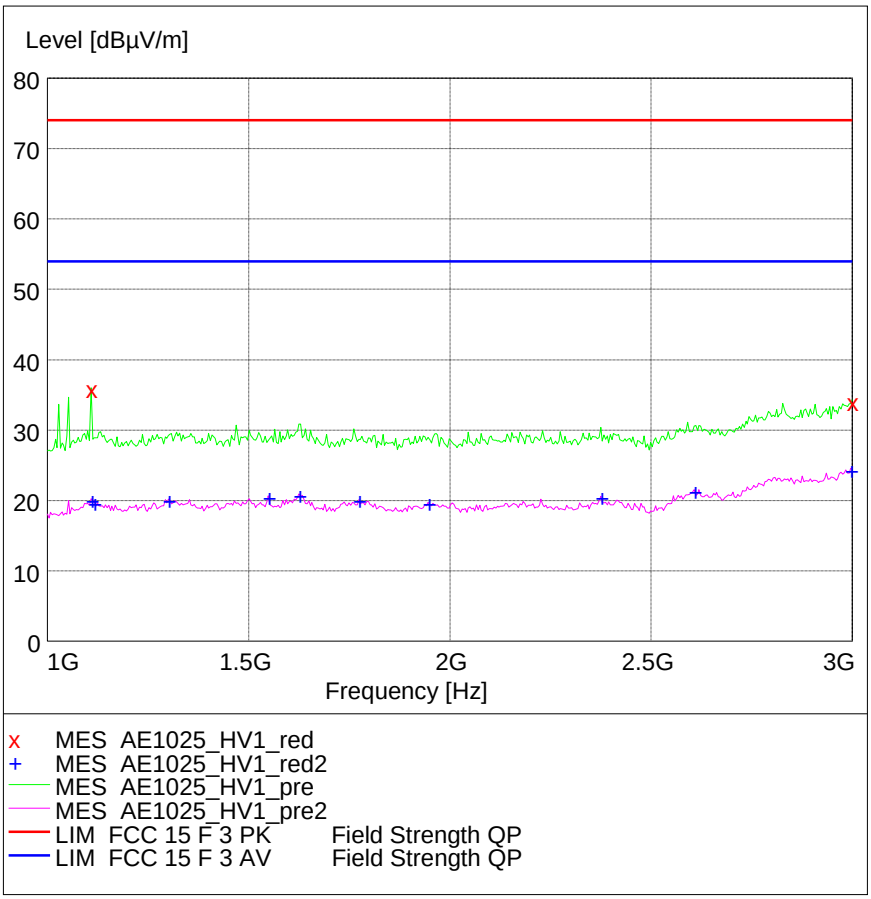
MEASUREMENT RESULT: "AE1025_HH1_red"

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Polarization
2995.991984	34.50	-5.1	74.0	39.5	VERTICAL

MEASUREMENT RESULT: "AE1025_HH1_red2"

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Polarization
2615.230461	22.30	-8.9	54.0	31.7	VERTICAL
3000.000000	25.20	-5.1	54.0	28.8	VERTICAL

Vertical



MEASUREMENT RESULT: "AE1025_HV1_red"

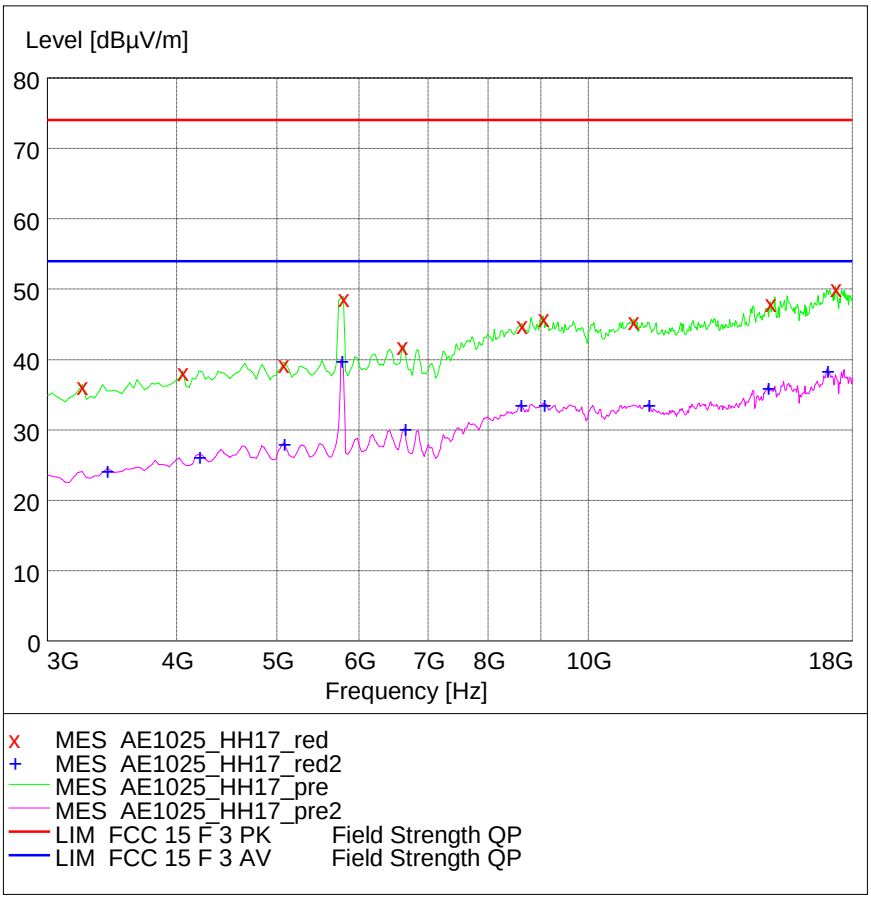
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Polarization
1108.216433	36.00	-12.9	74.0	38.0	VERTICAL
3000.000000	34.30	-5.1	74.0	39.7	VERTICAL

MEASUREMENT RESULT: "AE1025_HV1_red2"

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Polarization
2607.214429	21.50	-8.9	54.0	32.5	VERTICAL
2995.991984	24.50	-5.1	54.0	29.5	VERTICAL

3GHz - 18GHz

Horizontal



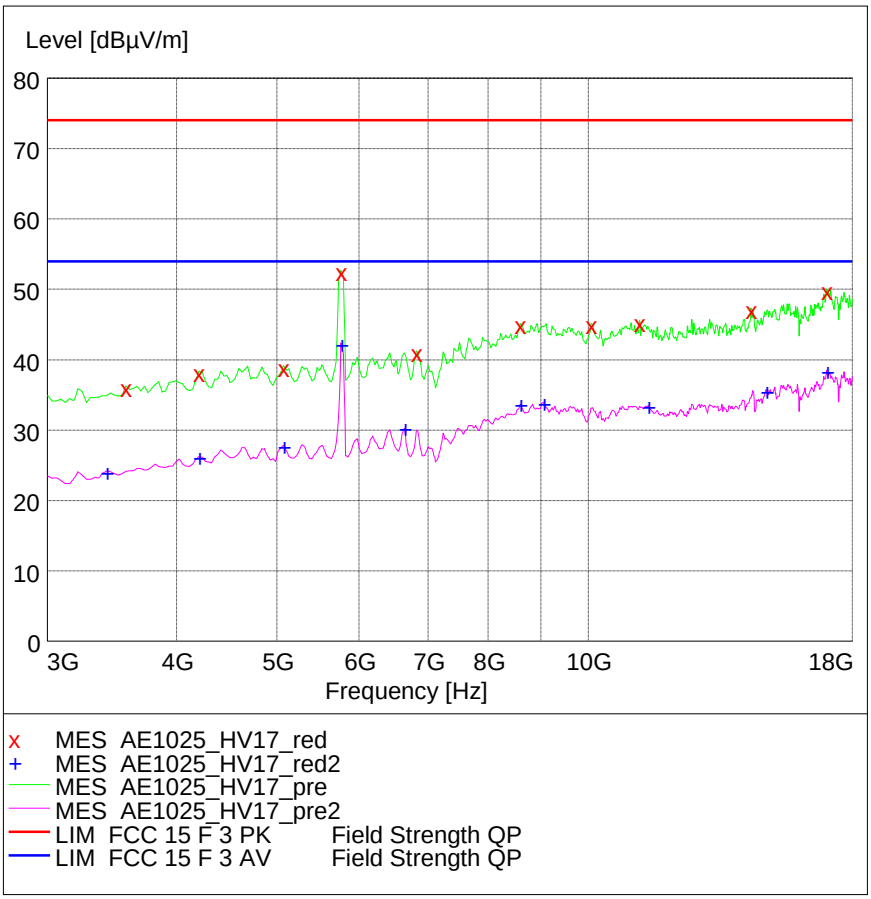
MEASUREMENT RESULT: "AE1025_HH17_red"

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Polarization
5825.591182	49.00	2.5	74.0	25.0	VERTICAL
17338.677355	50.40	21.9	74.0	23.6	VERTICAL

MEASUREMENT RESULT: "AE1025_HH17_red2"

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Polarization
5825.531062	40.00	2.4	54.0	14.0	VERTICAL
17008.016032	38.60	21.3	54.0	15.4	VERTICAL

Vertical



MEASUREMENT RESULT: "AE1025_HV17_red"

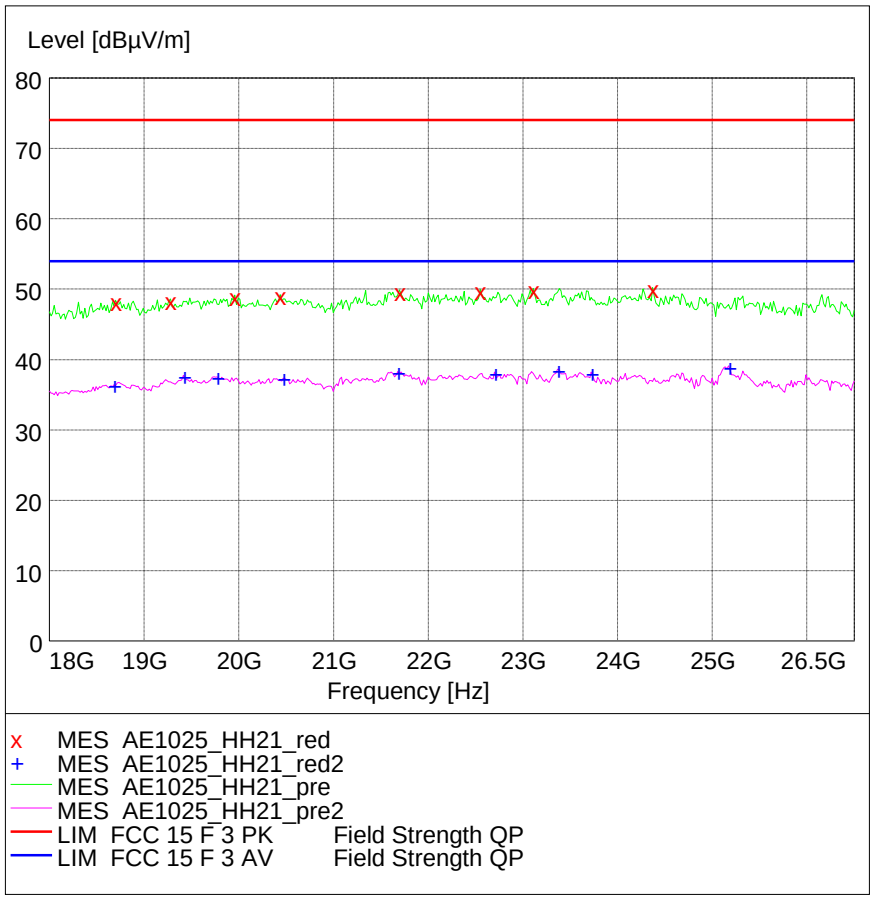
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Polarization
5825.531062	52.70	2.4	74.0	21.3	VERTICAL
17008.016032	50.00	21.3	74.0	24.0	VERTICAL

MEASUREMENT RESULT: "AE1025_HV17_red2"

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Polarization
5825.531062	42.40	2.4	54.0	11.6	VERTICAL
17008.016032	38.50	21.3	54.0	15.5	VERTICAL

18 - 26.5GHz

Horizontal



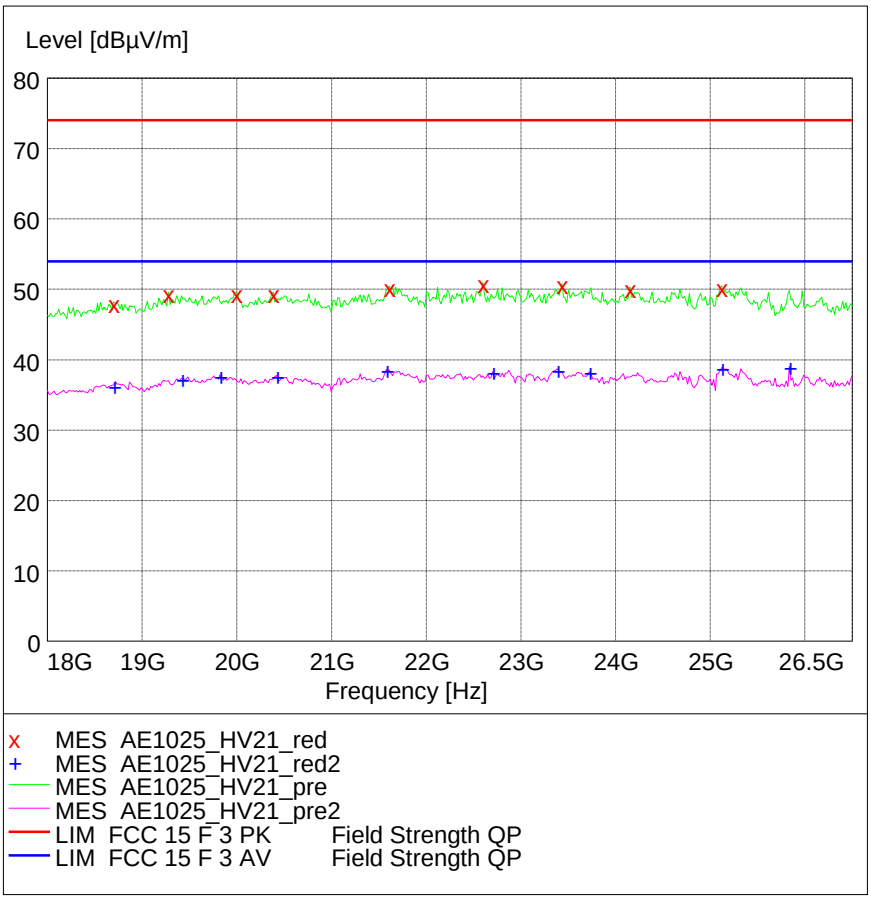
MEASUREMENT RESULT: "AE1025_HH21_red"

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Polarization
23110.220441	50.10	7.5	74.0	23.9	HORIZONTAL
24370.741483	50.30	6.5	74.0	23.7	HORIZONTAL

MEASUREMENT RESULT: "AE1025_HH21_red2"

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Polarization
23365.731463	38.60	7.3	54.0	15.4	HORIZONTAL
25171.342685	39.10	7.0	54.0	14.9	HORIZONTAL

Vertical



MEASUREMENT RESULT: "AE1025_HV21_red"

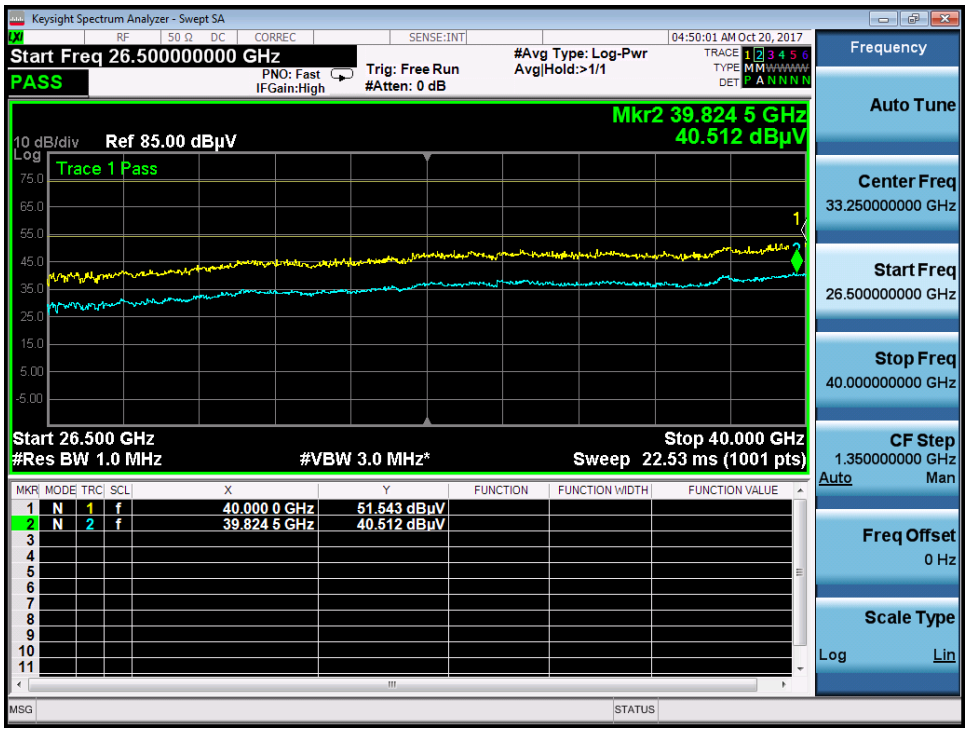
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Polarization
22599.198397	51.00	7.4	74.0	23.0	HORIZONTAL
23433.867735	50.80	7.3	74.0	23.2	HORIZONTAL

MEASUREMENT RESULT: "AE1025_HV21_red2"

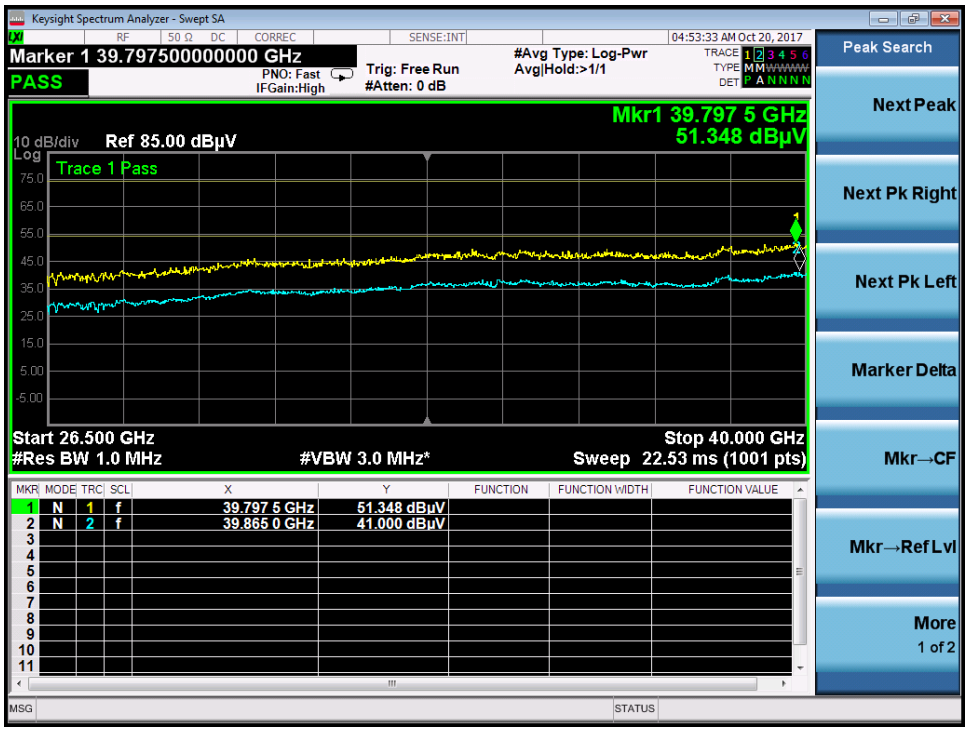
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Polarization
25120.240481	38.90	7.1	54.0	15.1	HORIZONTAL
25835.671343	39.00	7.4	54.0	15.0	HORIZONTAL

26.5GHz - 40GHz

Horizontal



Vertical



L-MIMO-MC 1 (2C)

Maximum Output Power 25dBm per port:

Channel Position	Channel Frequency
M_{RFBW}	5745MHz + 5805MHz

Channel Position M_{RFBW} – QPSK

No emissions were detected within 20dB of the limit.

L-MIMO-MC 2 (3C)

Maximum Output Power 25dBm per port:

Channel Position	Channel Frequency
M_{RFBW}	5765MHz + 5785MHz + 5805MHz

Channel Position M_{RFBW} – QPSK

No emissions were detected within 20dB of the limit.

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.

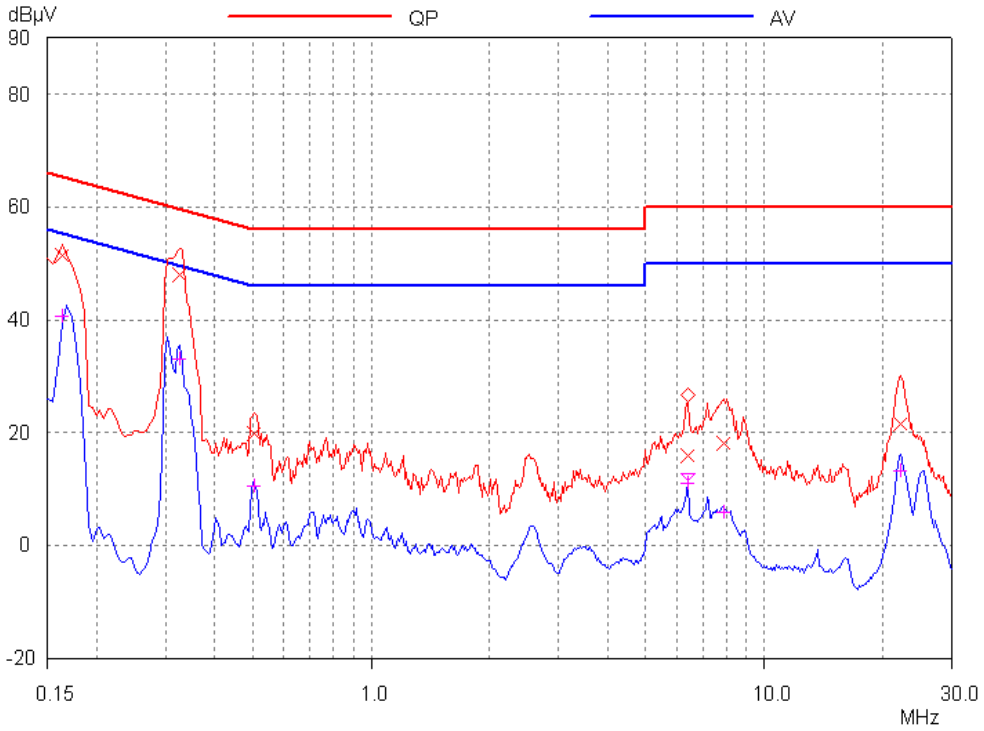
The bandwidth of the test receiver is set at 9 kHz.

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

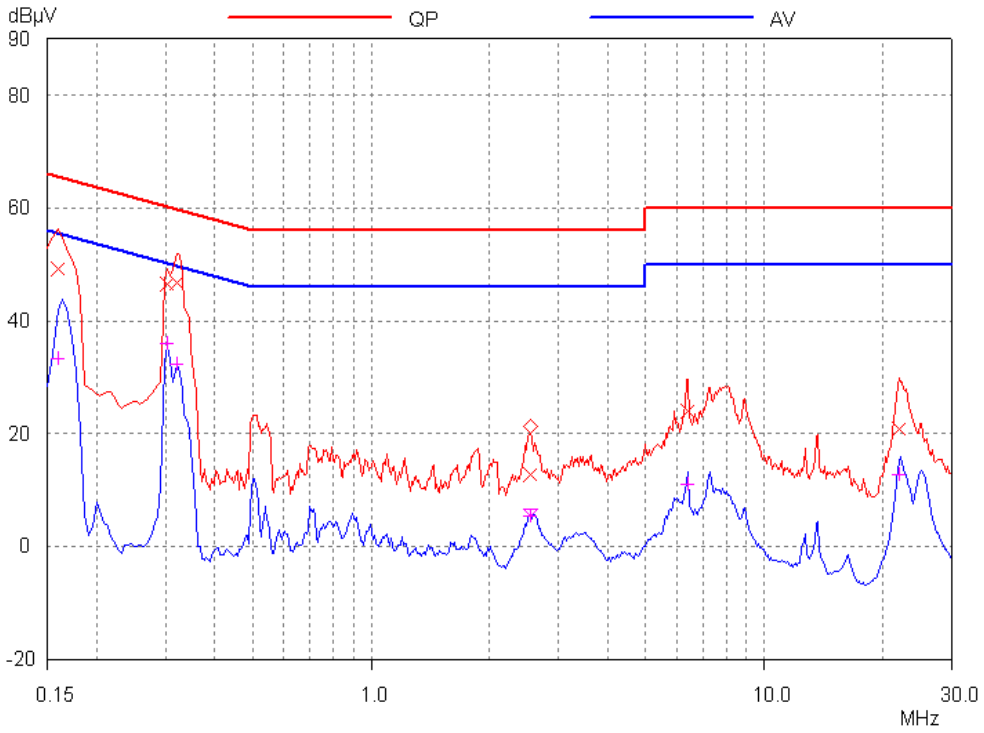
Test Curve:

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 20.5dBm per port:

Supply Voltage DC (V)	Temperature (°C)	Frequency Stability (Hz)		
		Channel Position B (5180MHz)	Channel Position M (5220MHz)	Channel Position H (5240MHz)
-48.0	-30	-30.12	-26.31	-29.28
	-20	-27.97	-24.73	-30.07
	-10	-25.68	-17.72	-19.52
	0	-20.41	5.27	4.86
	10	5.60	-18.79	-19.35
	20	-17.57	-28.16	-27.64
	30	-28.65	-31.16	-31.55
	40	-29.78	-26.31	-29.28
	50	-30.12	-24.73	-30.07

Configuration A2

L-MIMO-SC

Maximum Output Power 20.5dBm per port:

Supply Voltage DC (V)	Temperature (°C)	Frequency Stability (Hz)		
		Channel Position B (5745MHz)	Channel Position M (5785MHz)	Channel Position H (5825MHz)
-48.0	-30	-32.95	-30.62	-31.21
	-20	-30.48	-34.12	-33.98
	-10	-25.88	-28.99	-27.36
	0	-21.80	-22.84	-20.18
	10	7.20	3.80	9.15
	20	-17.75	-20.84	-14.82
	30	-33.01	-30.35	-30.64
	40	-30.02	-30.62	-31.21
	50	-32.95	-34.12	-33.98

Frequency Error - Voltage Variation

Configuration A1

L-MIMO-SC

Maximum Output Power 20.5dBm per port:

Supply Voltage DC (V)	Temperature (°C)	Frequency Stability (Hz)		
		Channel Position B (5180MHz)	Channel Position M (5220MHz)	Channel Position H (5240MHz)
-40.8	20	5.90	3.88	4.59
-48.0		5.60	5.27	4.86
-55.2		4.82	4.26	6.22

Configuration A2

L-MIMO-SC

Maximum Output Power 20.5dBm per port:

Supply Voltage DC (V)	Temperature (°C)	Frequency Stability (Hz)		
		Channel Position B (5745MHz)	Channel Position M (5785MHz)	Channel Position H (5825MHz)
-40.8	20	4.39	7.22	5.19
-48.0		7.08	5.05	4.51
-55.2		7.88	4.13	5.29

Frequency Error - Temperature Variation

Configuration B1

L-MIMO-SC

Maximum Output Power 25dBm per port:

Supply Voltage DC (V)	Temperature (°C)	Frequency Stability (Hz)		
		Channel Position B (5180MHz)	Channel Position M (5220MHz)	Channel Position H (5240MHz)
-48.0	-30	-27.30	-28.72	-32.10
	-20	-28.91	-26.79	-28.23
	-10	-17.04	-18.30	-17.84
	0	7.08	5.05	4.51
	10	-18.55	-18.21	-16.73
	20	-29.54	-29.04	-28.56
	30	-29.97	-30.48	-30.54
	40	-27.30	-28.72	-32.10
	50	-28.91	-26.79	-28.23

Configuration B2

L-MIMO-SC

Maximum Output Power 25dBm per port:

Supply Voltage DC (V)	Temperature (°C)	Frequency Stability (Hz)		
		Channel Position B (5745MHz)	Channel Position M (5785MHz)	Channel Position H (5825MHz)
-48.0	-30	-31.21	-28.53	-31.07
	-20	-33.98	-32.68	-33.21
	-10	-27.36	-29.44	-30.10
	0	-20.18	-20.57	-18.36
	10	9.15	8.77	8.26
	20	-14.82	-16.52	-17.09
	30	-30.64	-32.33	-32.60
	40	-31.21	-28.53	-31.07
	50	-33.98	-32.68	-33.21

Frequency Error - Voltage Variation

Configuration B1

L-MIMO-SC

Maximum Output Power 25dBm per port:

Supply Voltage DC (V)	Temperature (°C)	Frequency Stability (Hz)		
		Channel Position B (5180MHz)	Channel Position M (5220MHz)	Channel Position H (5240MHz)
-40.8	20	5.04	5.22	4.38
-48.0		7.20	3.79	3.80
-55.2		3.89	5.29	4.55

Configuration B2

L-MIMO-SC

Maximum Output Power 25dBm per port:

Supply Voltage DC (V)	Temperature (°C)	Frequency Stability (Hz)		
		Channel Position B (5745MHz)	Channel Position M (5785MHz)	Channel Position H (5825MHz)
-40.8	20	5.41	8.65	7.81
-48.0		9.15	8.77	8.26
-55.2		5.76	4.93	6.20

********** END **********