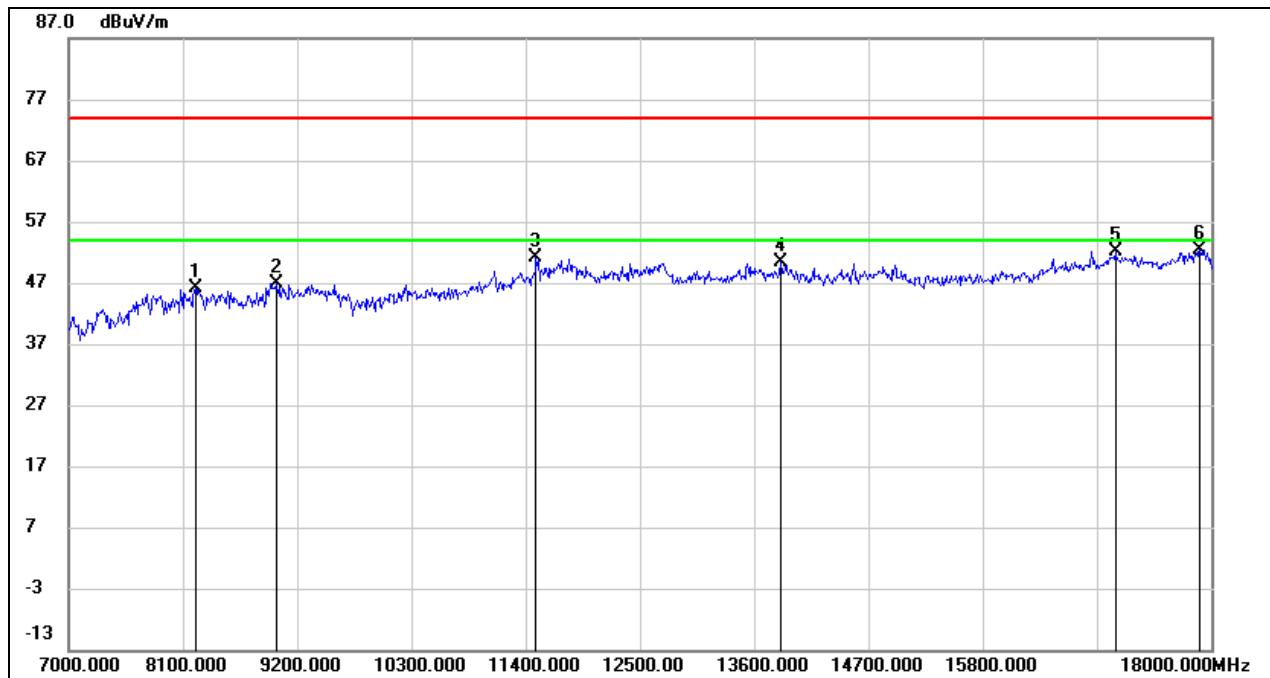
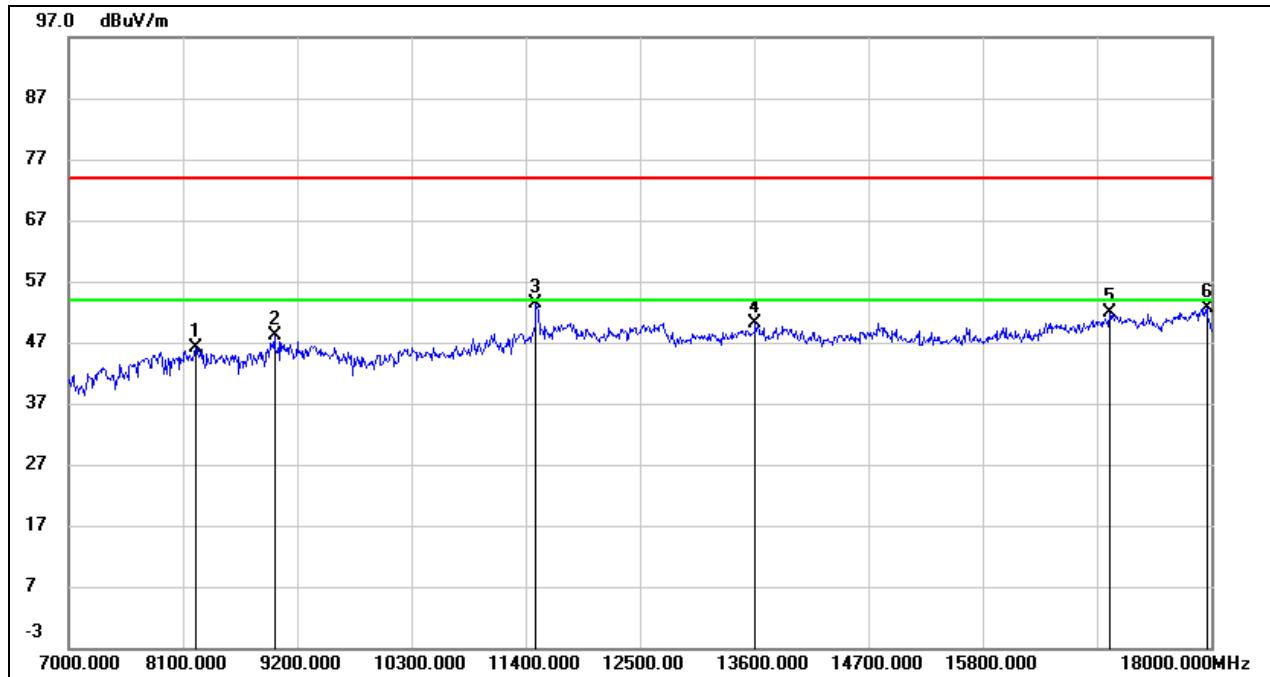


**UNII-3 BAND****HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)**

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8228.333	36.78	9.25	46.03	74.00	-27.97	peak
2	9003.467	36.31	10.60	46.91	74.00	-27.09	peak
3	11504.133	36.86	14.35	51.21	74.00	-22.79	peak
4	13857.400	33.38	16.92	50.30	74.00	-23.70	peak
5	17085.533	31.52	20.58	52.10	74.00	-21.90	peak
6	17899.900	29.75	22.70	52.45	74.00	-21.55	peak

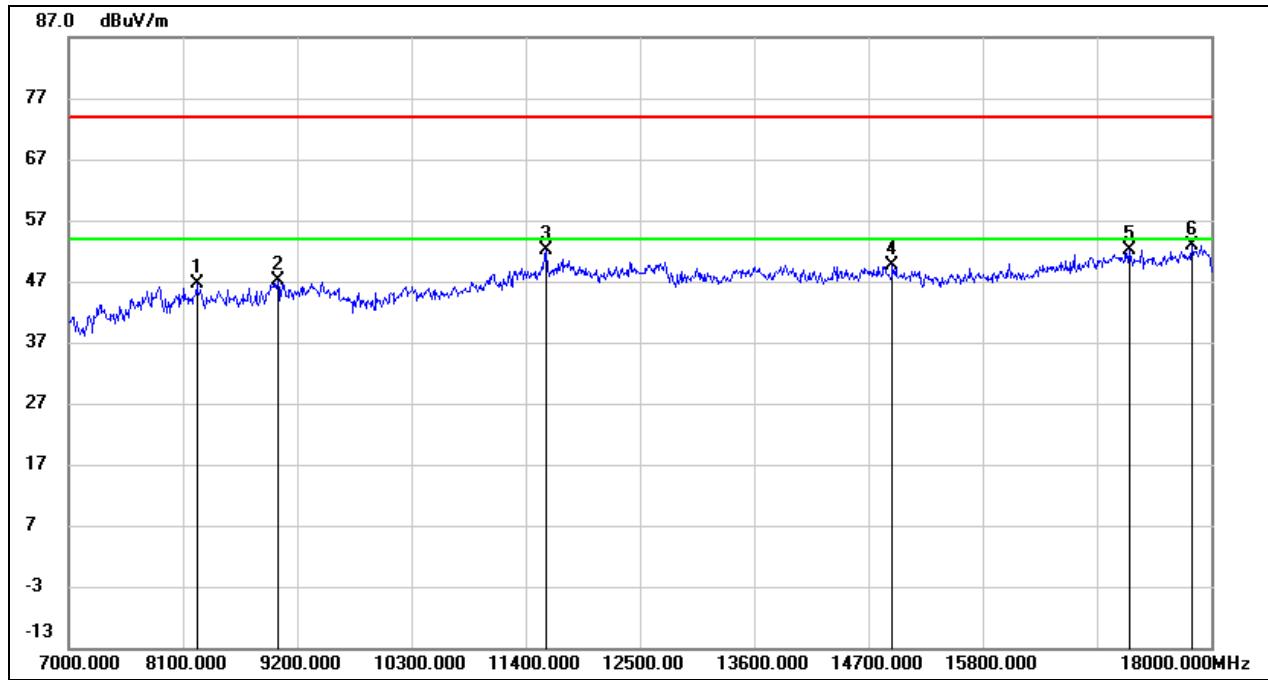
Note: 1. Measurement = Reading Level + Correct Factor.  
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
3. Peak: Peak detector.  
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.  
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.  
6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8228.700	37.00	9.25	46.25	74.00	-27.75	peak
2	8986.233	37.56	10.49	48.05	74.00	-25.95	peak
3	11509.267	39.04	14.37	53.41	74.00	-20.59	peak
4	13613.200	33.60	16.46	50.06	74.00	-23.94	peak
5	17024.667	31.51	20.33	51.84	74.00	-22.16	peak
6	17959.300	29.97	22.68	52.65	74.00	-21.35	peak

Note:

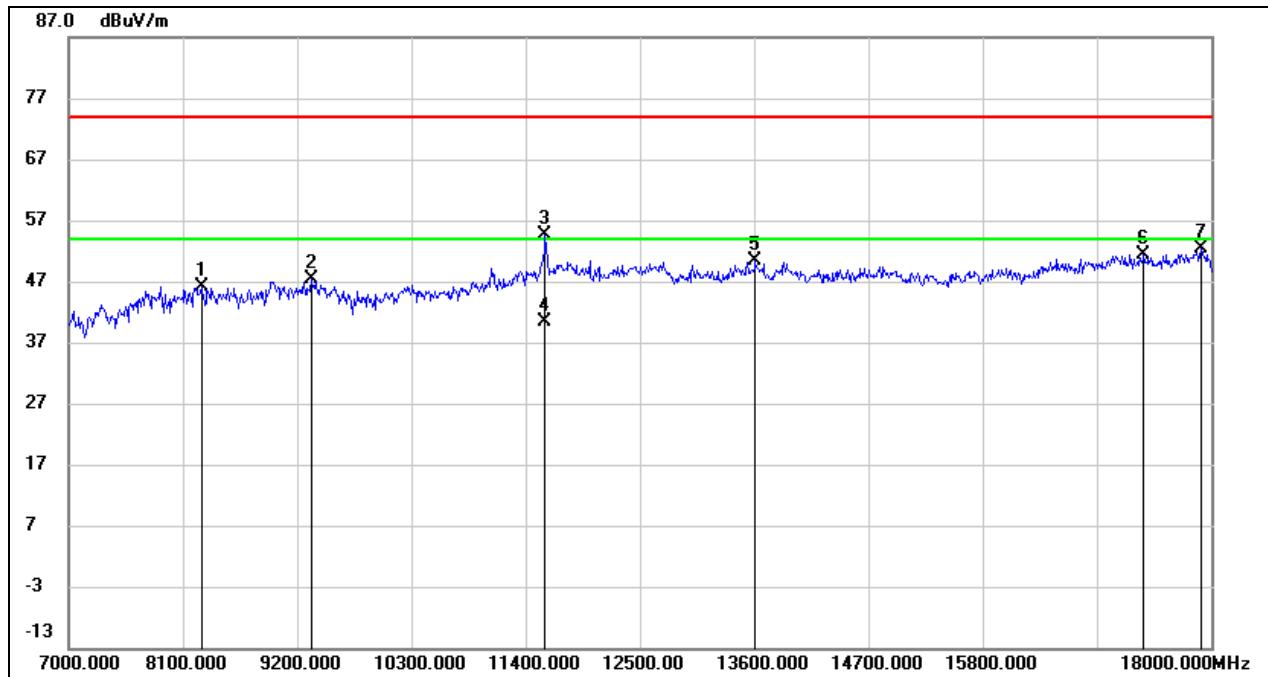
1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8241.533	37.36	9.20	46.56	74.00	-27.44	peak
2	9018.867	36.60	10.50	47.10	74.00	-26.90	peak
3	11606.067	37.63	14.55	52.18	74.00	-21.82	peak
4	14936.867	32.73	16.87	49.60	74.00	-24.40	peak
5	17217.900	31.14	21.01	52.15	74.00	-21.85	peak
6	17822.900	30.16	22.71	52.87	74.00	-21.13	peak

Note:

1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8282.967	37.06	9.04	46.10	74.00	-27.90	peak
2	9336.033	37.33	9.98	47.31	74.00	-26.69	peak
3	11595.067	40.15	14.51	54.66	74.00	-19.34	peak
4	11595.067	25.92	14.51	40.43	54.00	-13.57	AVG
5	13621.633	33.84	16.48	50.32	74.00	-23.68	peak
6	17354.300	30.49	20.80	51.29	74.00	-22.71	peak
7	17910.167	29.68	22.69	52.37	74.00	-21.63	peak

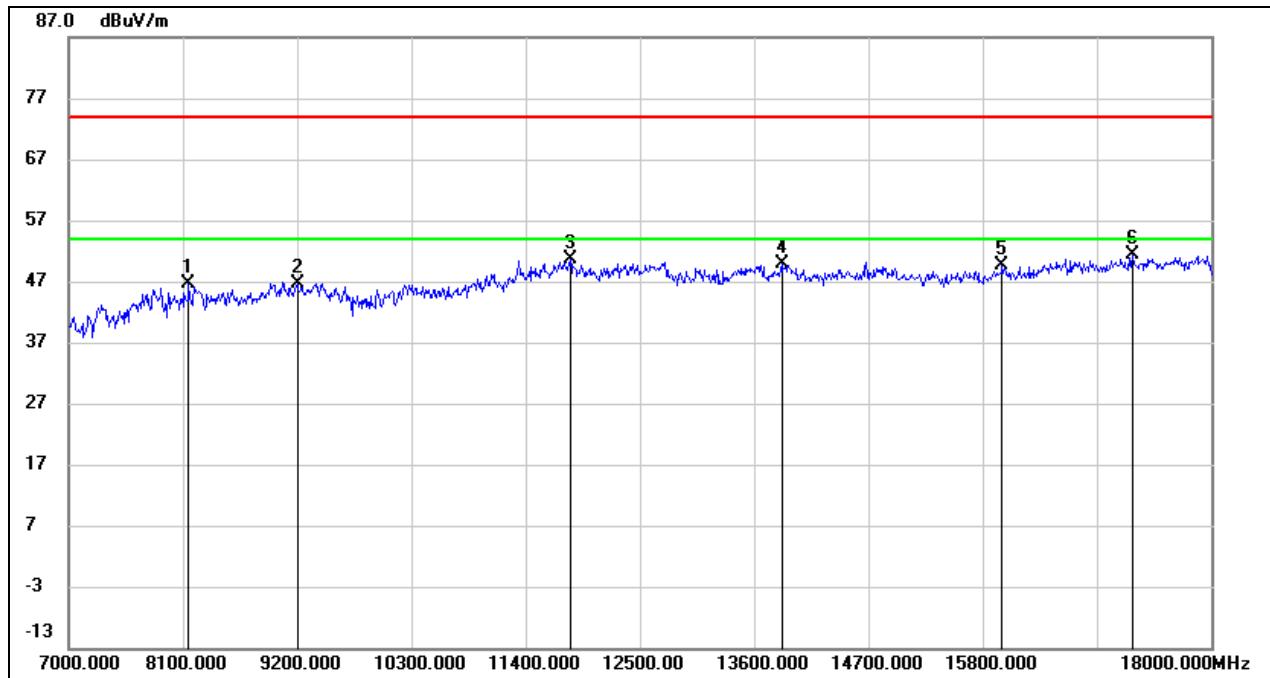
Note:

1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. AVG:  $VBW=1/Ton$ , where: Ton is the transmitting duration.
5. For the transmitting duration, please refer to clause 7.1.
6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

### 8.3.4. 802.11ac VHT80 MIMO MODE

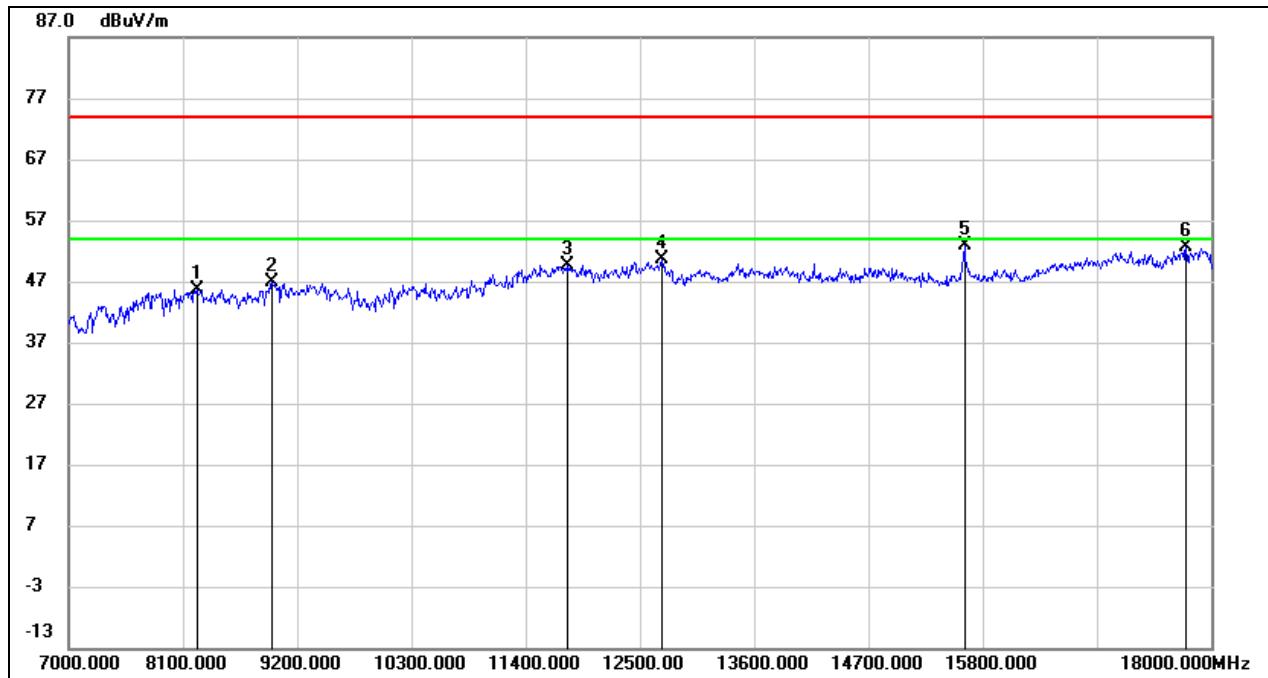
#### UNII-1 BAND

#### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8163.433	37.53	9.05	46.58	74.00	-27.42	peak
2	9206.600	37.43	9.32	46.75	74.00	-27.25	peak
3	11839.633	35.14	15.56	50.70	74.00	-23.30	peak
4	13865.467	32.91	16.92	49.83	74.00	-24.17	peak
5	15996.533	32.51	17.23	49.74	74.00	-24.26	peak
6	17242.833	30.44	20.97	51.41	74.00	-22.59	peak

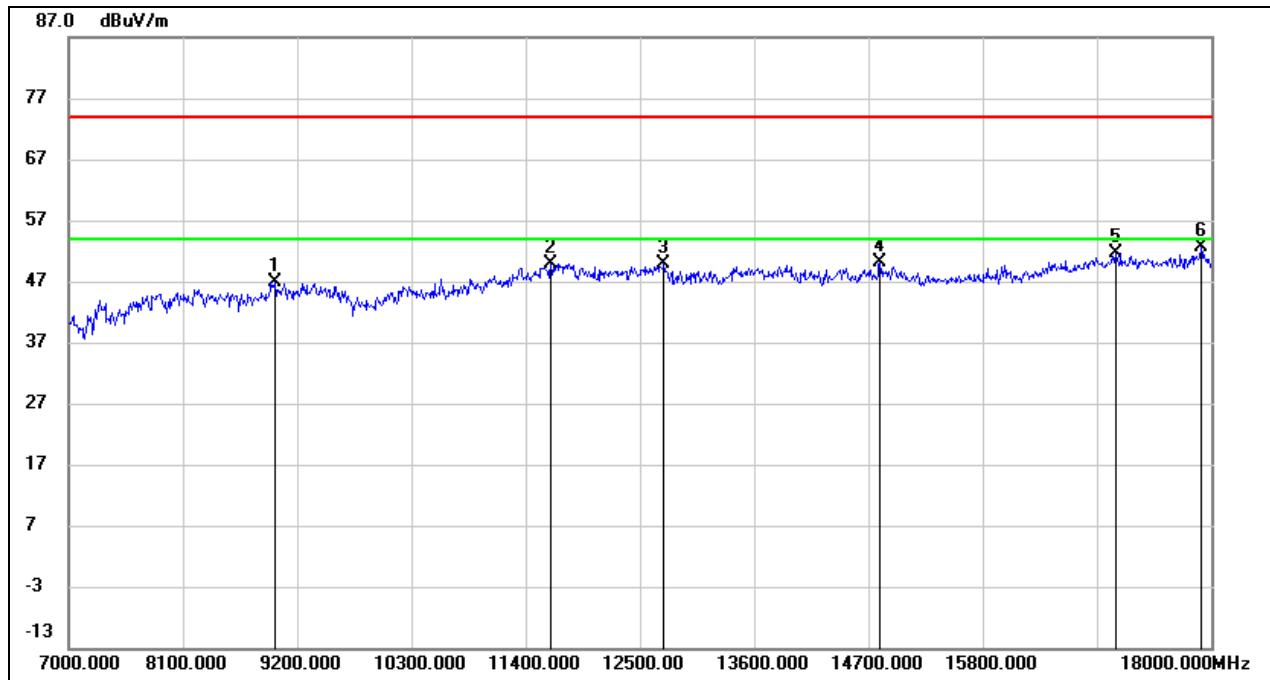
Note: 1. Measurement = Reading Level + Correct Factor.  
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
3. Peak: Peak detector.  
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.  
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.  
6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8236.767	36.45	9.22	45.67	74.00	-28.33	peak
2	8963.133	36.71	10.24	46.95	74.00	-27.05	peak
3	11811.400	34.06	15.59	49.65	74.00	-24.35	peak
4	12712.300	35.10	15.50	50.60	74.00	-23.40	peak
5	15633.533	36.12	16.72	52.84	74.00	-21.16	peak
6	17759.833	30.26	22.41	52.67	74.00	-21.33	peak

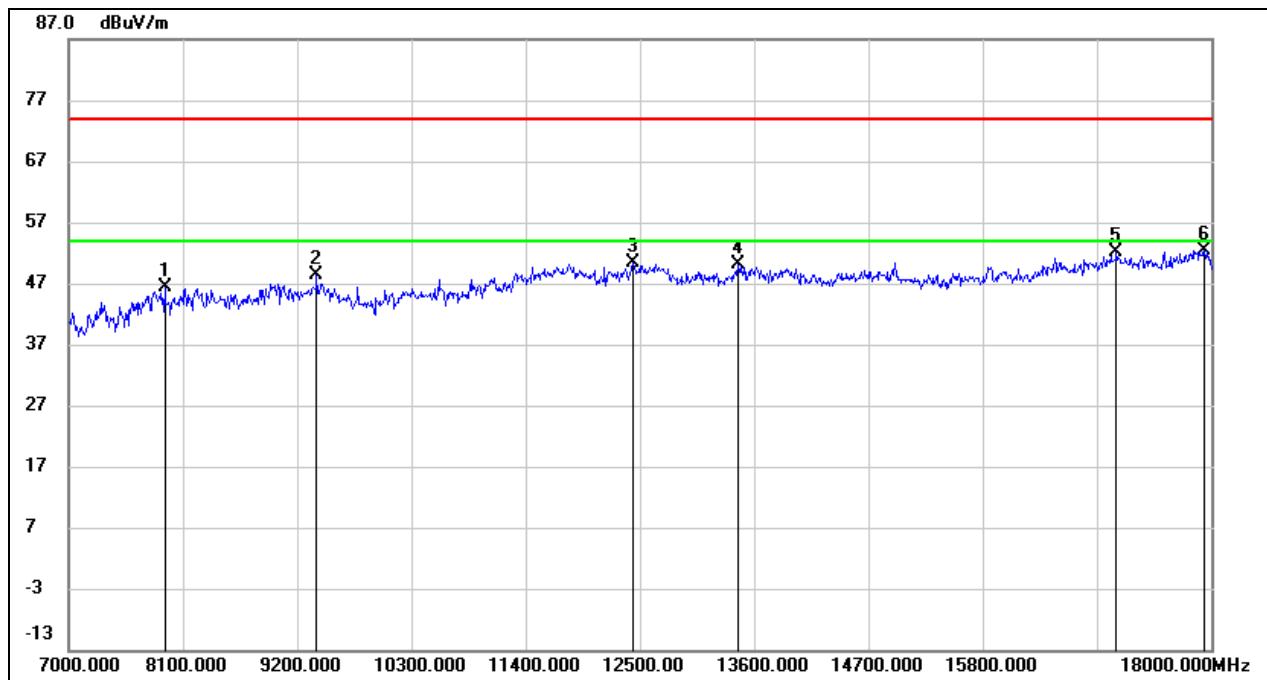
Note:

1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

UNII-2A BANDHARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8992.100	36.44	10.54	46.98	74.00	-27.02	peak
2	11651.900	35.18	14.80	49.98	74.00	-24.02	peak
3	12738.333	34.22	15.54	49.76	74.00	-24.24	peak
4	14810.367	33.38	16.81	50.19	74.00	-23.81	peak
5	17081.133	31.20	20.55	51.75	74.00	-22.25	peak
6	17911.267	29.82	22.70	52.52	74.00	-21.48	peak

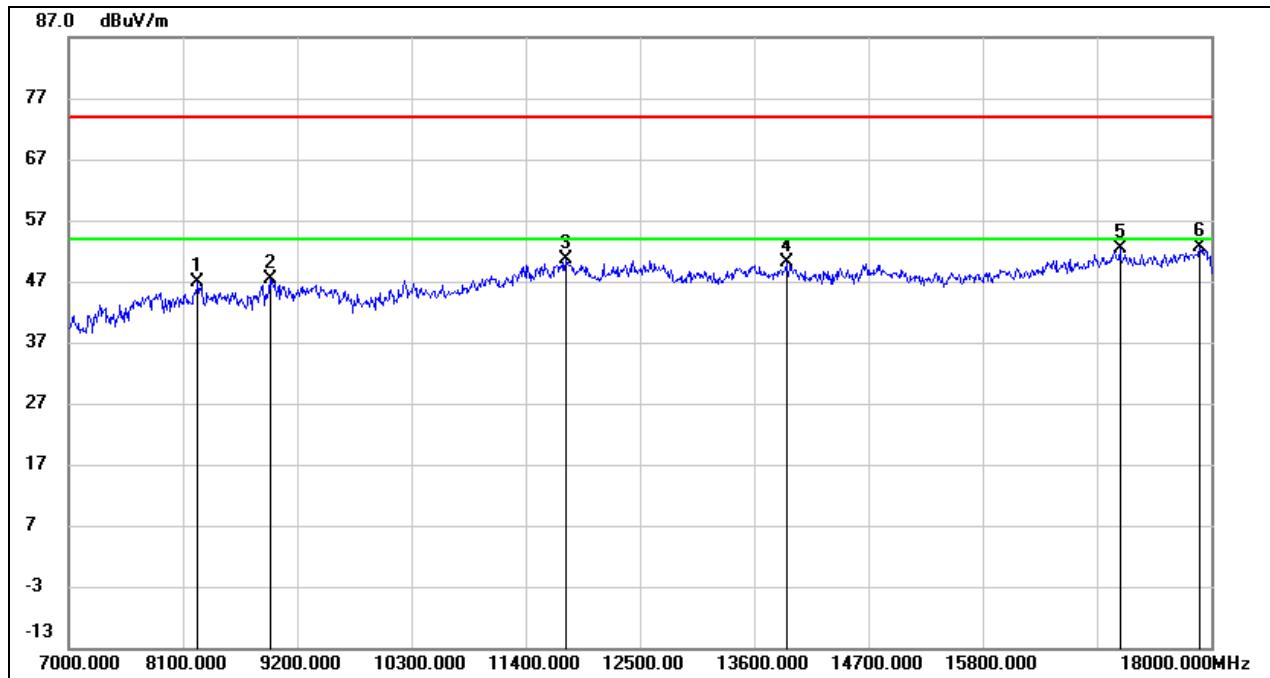
Note: 1. Measurement = Reading Level + Correct Factor.  
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
3. Peak: Peak detector.  
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.  
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.  
6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7933.167	38.46	7.86	46.32	74.00	-27.68	peak
2	9388.467	38.16	10.25	48.41	74.00	-25.59	peak
3	12435.467	34.88	15.47	50.35	74.00	-23.65	peak
4	13454.067	33.73	16.36	50.09	74.00	-23.91	peak
5	17090.300	31.42	20.59	52.01	74.00	-21.99	peak
6	17936.933	29.77	22.69	52.46	74.00	-21.54	peak

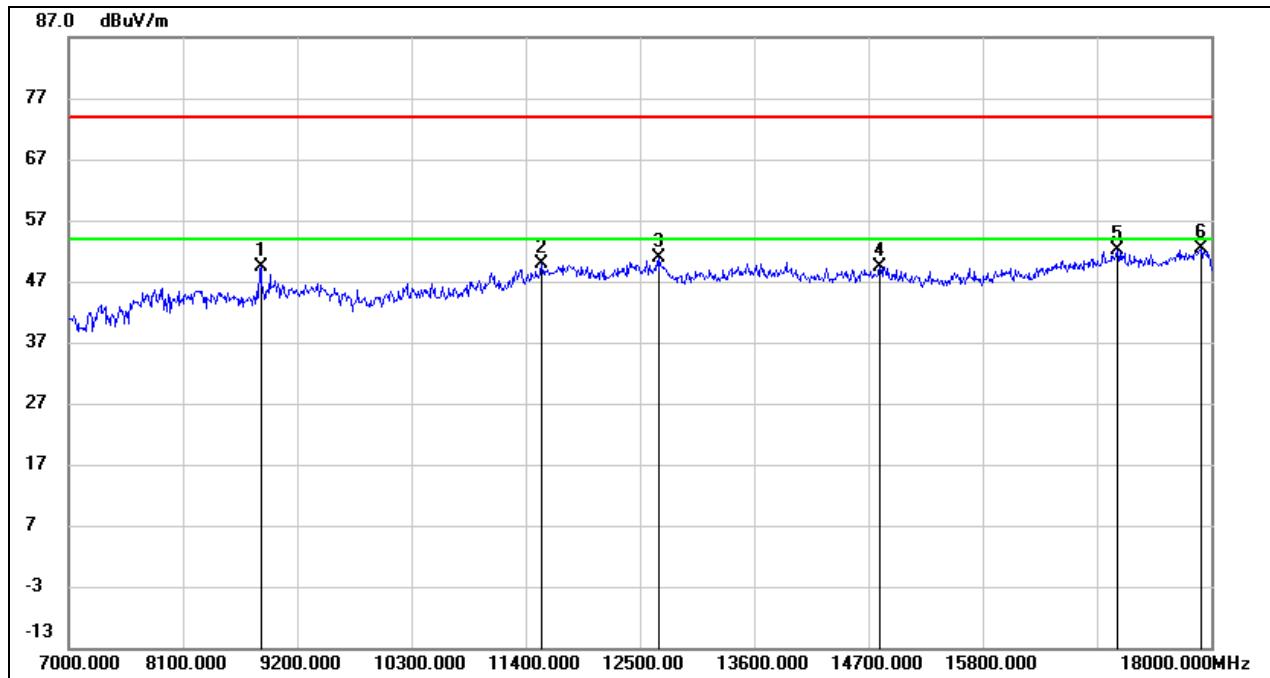
Note:

1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

UNII-2C BANDHARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8251.433	37.72	9.16	46.88	74.00	-27.12	peak
2	8943.333	37.37	10.03	47.40	74.00	-26.60	peak
3	11792.333	35.05	15.57	50.62	74.00	-23.38	peak
4	13908.000	33.33	16.90	50.23	74.00	-23.77	peak
5	17123.667	31.69	20.73	52.42	74.00	-21.58	peak
6	17898.800	29.95	22.70	52.65	74.00	-21.35	peak

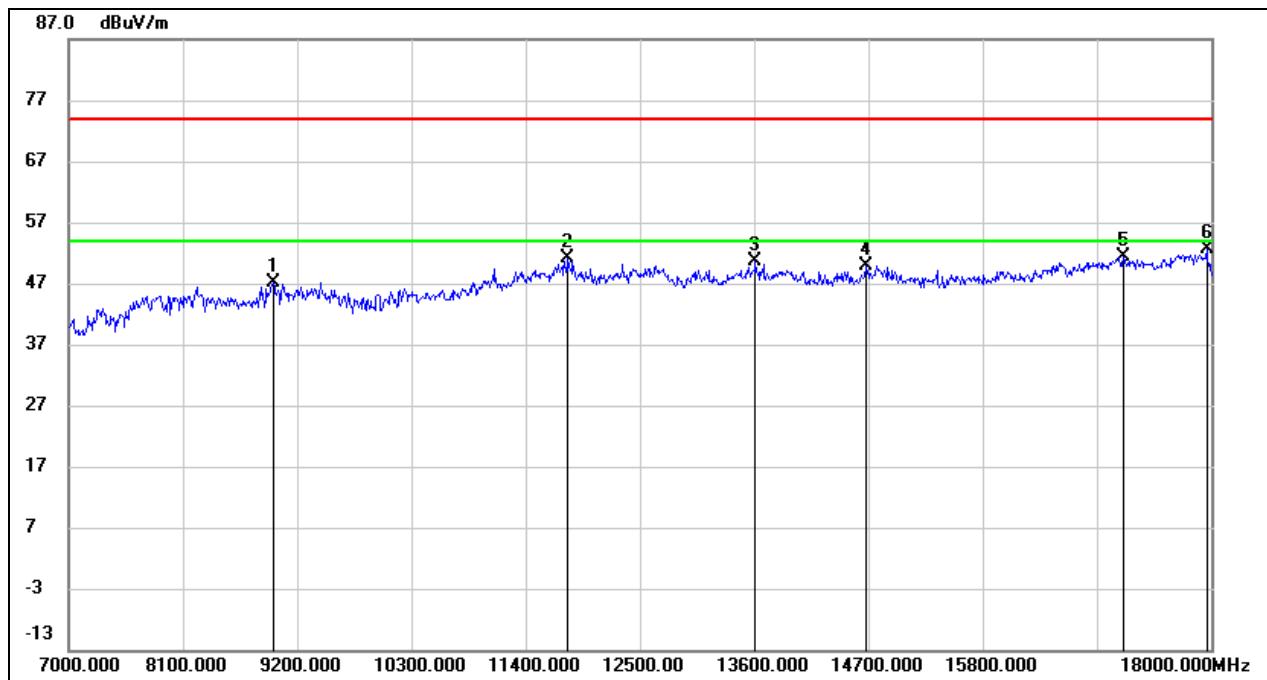
Note: 1. Measurement = Reading Level + Correct Factor.  
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
3. Peak: Peak detector.  
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.  
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.  
6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8848.000	40.35	9.03	49.38	74.00	-24.62	peak
2	11563.533	35.45	14.45	49.90	74.00	-24.10	peak
3	12691.767	35.31	15.45	50.76	74.00	-23.24	peak
4	14816.600	32.69	16.80	49.49	74.00	-24.51	peak
5	17106.433	31.53	20.67	52.20	74.00	-21.80	peak
6	17908.700	29.72	22.69	52.41	74.00	-21.59	peak

Note:

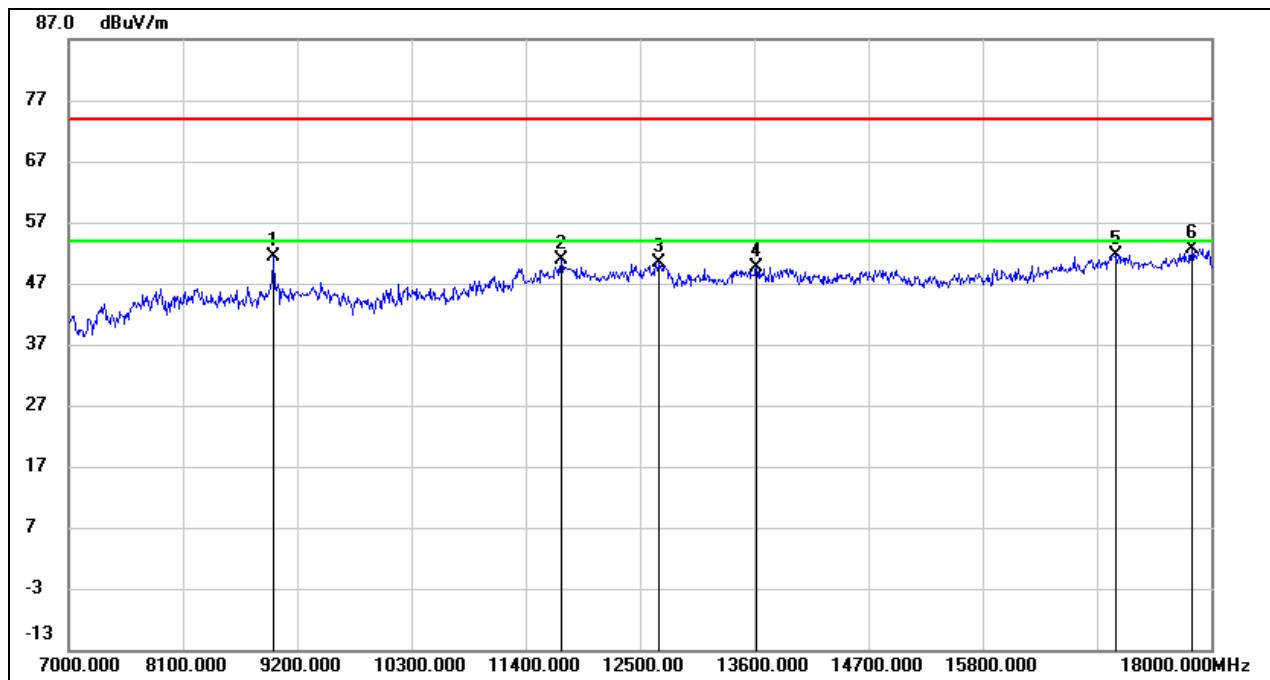
1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8976.333	36.67	10.38	47.05	74.00	-26.95	peak
2	11815.800	35.43	15.59	51.02	74.00	-22.98	peak
3	13621.633	34.18	16.48	50.66	74.00	-23.34	peak
4	14682.033	33.22	16.60	49.82	74.00	-24.18	peak
5	17159.233	30.43	20.88	51.31	74.00	-22.69	peak
6	17958.200	29.87	22.68	52.55	74.00	-21.45	peak

Note:

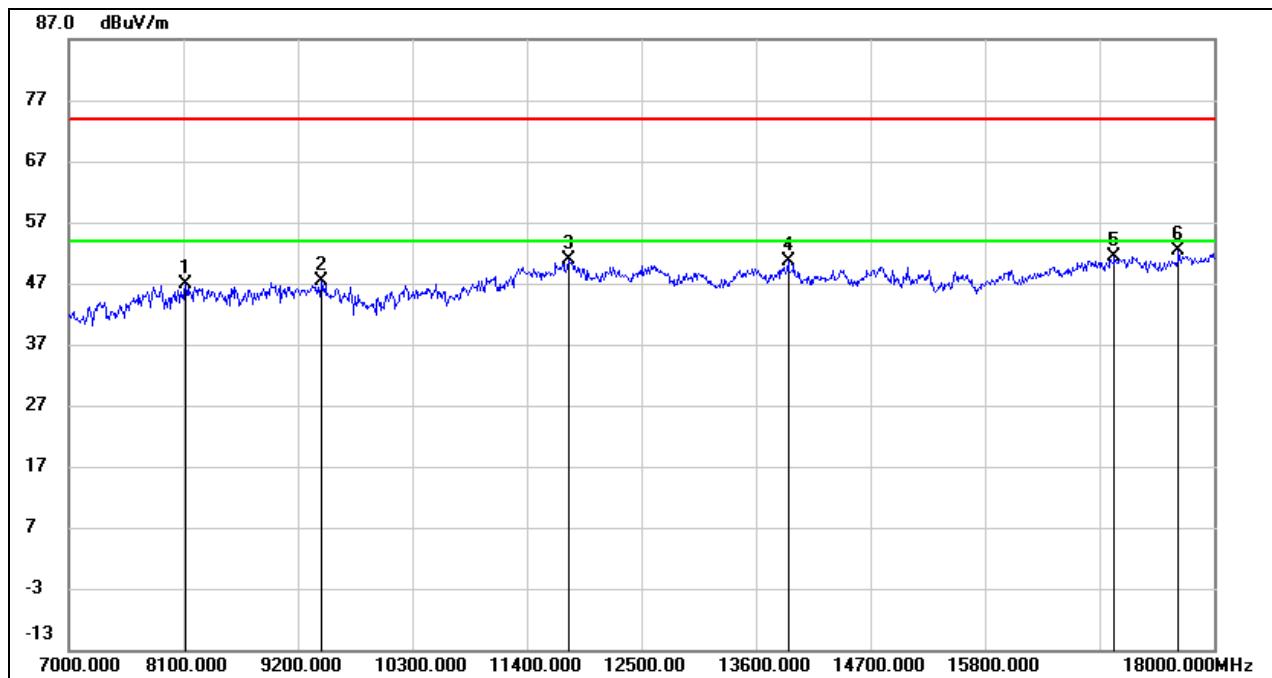
1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8976.700	40.90	10.38	51.28	74.00	-22.72	peak
2	11749.067	35.46	15.33	50.79	74.00	-23.21	peak
3	12691.033	34.95	15.46	50.41	74.00	-23.59	peak
4	13626.033	33.16	16.50	49.66	74.00	-24.34	peak
5	17085.167	31.12	20.58	51.70	74.00	-22.30	peak
6	17819.233	30.04	22.71	52.75	74.00	-21.25	peak

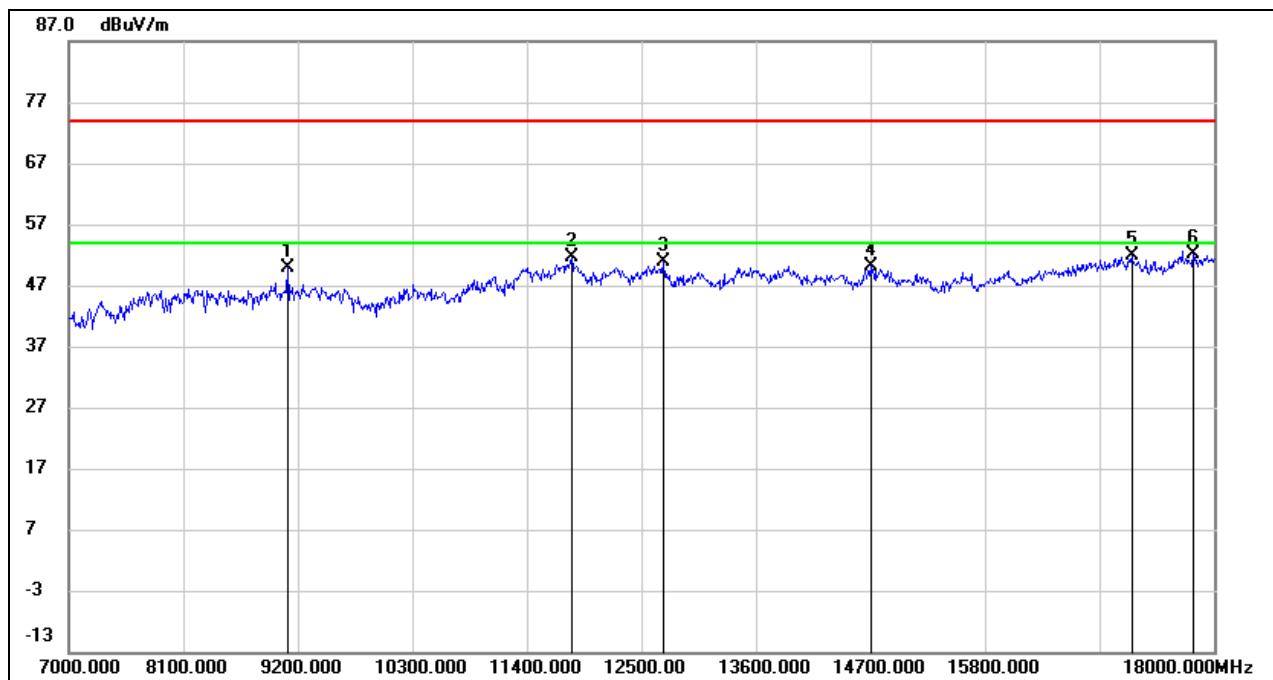
Note:

1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

**STRADDLE CHANNEL 138****HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)**

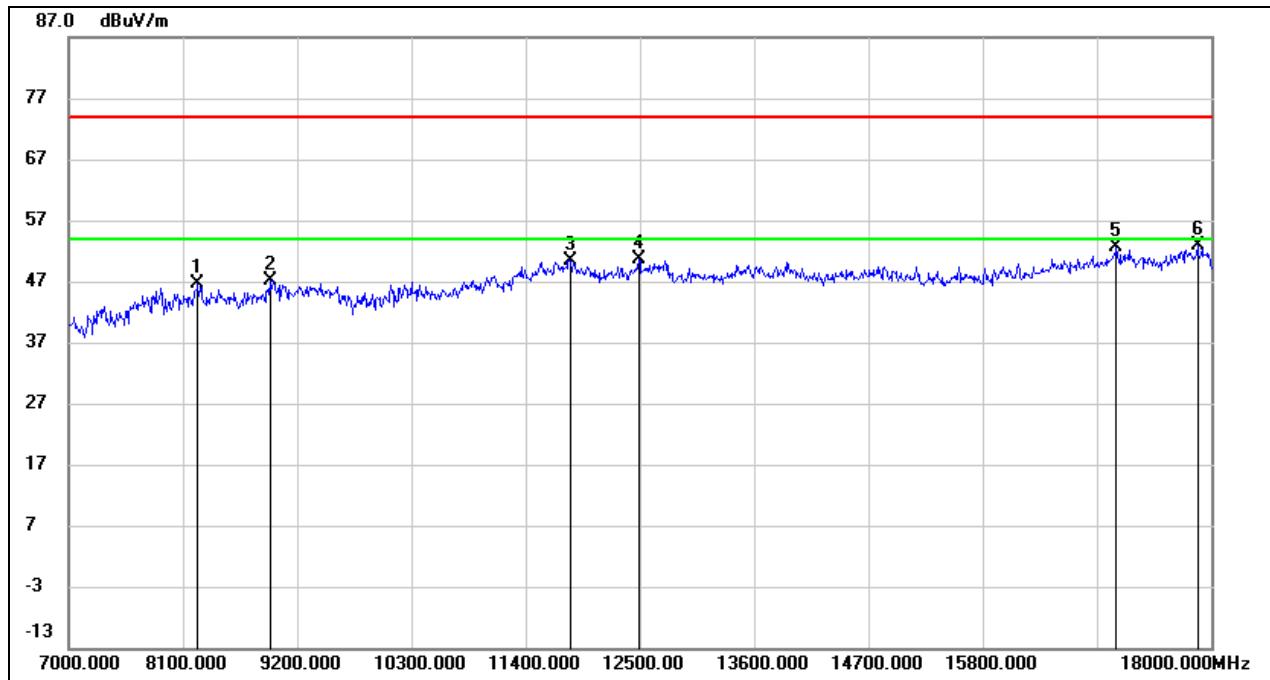
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8122.000	38.13	8.70	46.83	74.00	-27.17	peak
2	9431.000	36.98	10.35	47.33	74.00	-26.67	peak
3	11796.000	35.32	15.59	50.91	74.00	-23.09	peak
4	13908.000	33.65	16.90	50.55	74.00	-23.45	peak
5	17043.000	30.99	20.40	51.39	74.00	-22.61	peak
6	17659.000	30.69	21.63	52.32	74.00	-21.68	peak

Note: 1. Measurement = Reading Level + Correct Factor.  
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
3. Peak: Peak detector.  
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.  
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.  
6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)

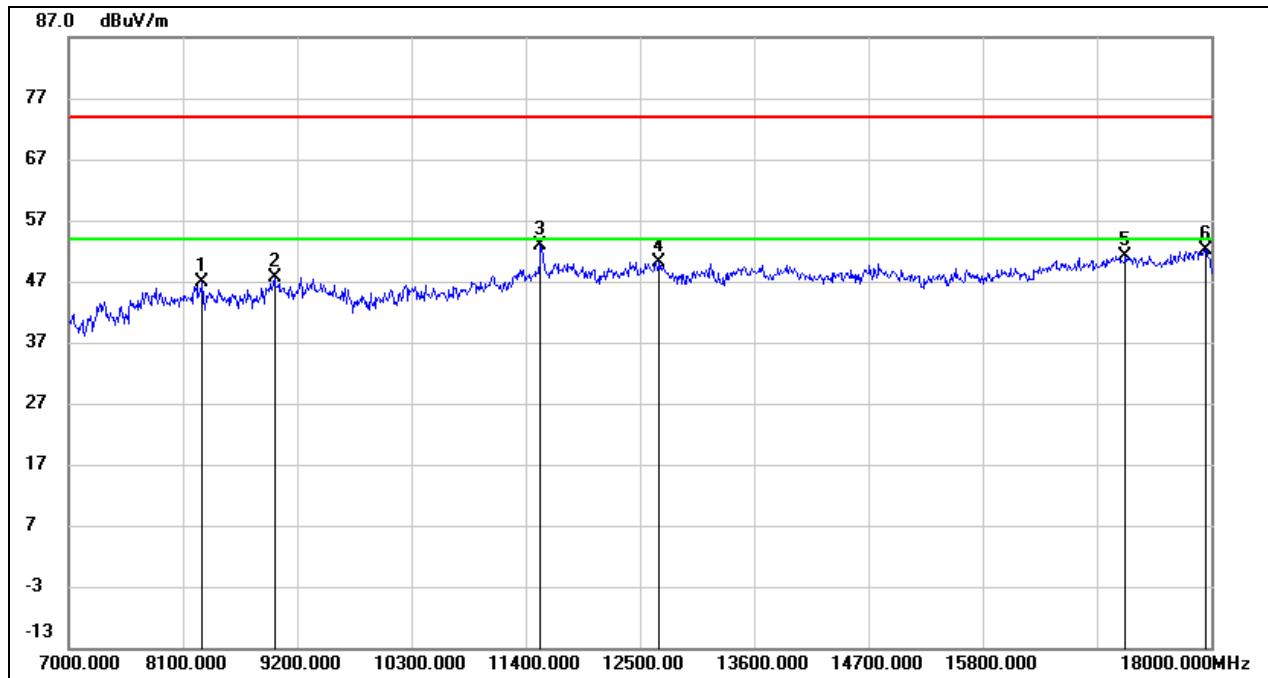
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9101.000	39.85	9.95	49.80	74.00	-24.20	peak
2	11829.000	35.94	15.57	51.51	74.00	-22.49	peak
3	12709.000	35.41	15.49	50.90	74.00	-23.10	peak
4	14700.000	33.56	16.63	50.19	74.00	-23.81	peak
5	17208.000	30.93	21.03	51.96	74.00	-22.04	peak
6	17802.000	29.33	22.72	52.05	74.00	-21.95	peak

Note: 1. Measurement = Reading Level + Correct Factor.  
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
3. Peak: Peak detector.  
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.  
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.  
6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

**UNII-3 BAND****HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)**

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8252.533	37.51	9.16	46.67	74.00	-27.33	peak
2	8942.967	37.21	10.02	47.23	74.00	-26.77	peak
3	11831.200	34.91	15.56	50.47	74.00	-23.53	peak
4	12499.633	35.29	15.38	50.67	74.00	-23.33	peak
5	17092.133	32.11	20.60	52.71	74.00	-21.29	peak
6	17870.200	30.15	22.70	52.85	74.00	-21.15	peak

Note: 1. Measurement = Reading Level + Correct Factor.  
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
3. Peak: Peak detector.  
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.  
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.  
6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8292.500	37.98	9.00	46.98	74.00	-27.02	peak
2	8985.867	37.17	10.48	47.65	74.00	-26.35	peak
3	11544.833	38.36	14.42	52.78	74.00	-21.22	peak
4	12695.067	34.72	15.46	50.18	74.00	-23.82	peak
5	17183.800	30.06	20.98	51.04	74.00	-22.96	peak
6	17946.100	29.50	22.69	52.19	74.00	-21.81	peak

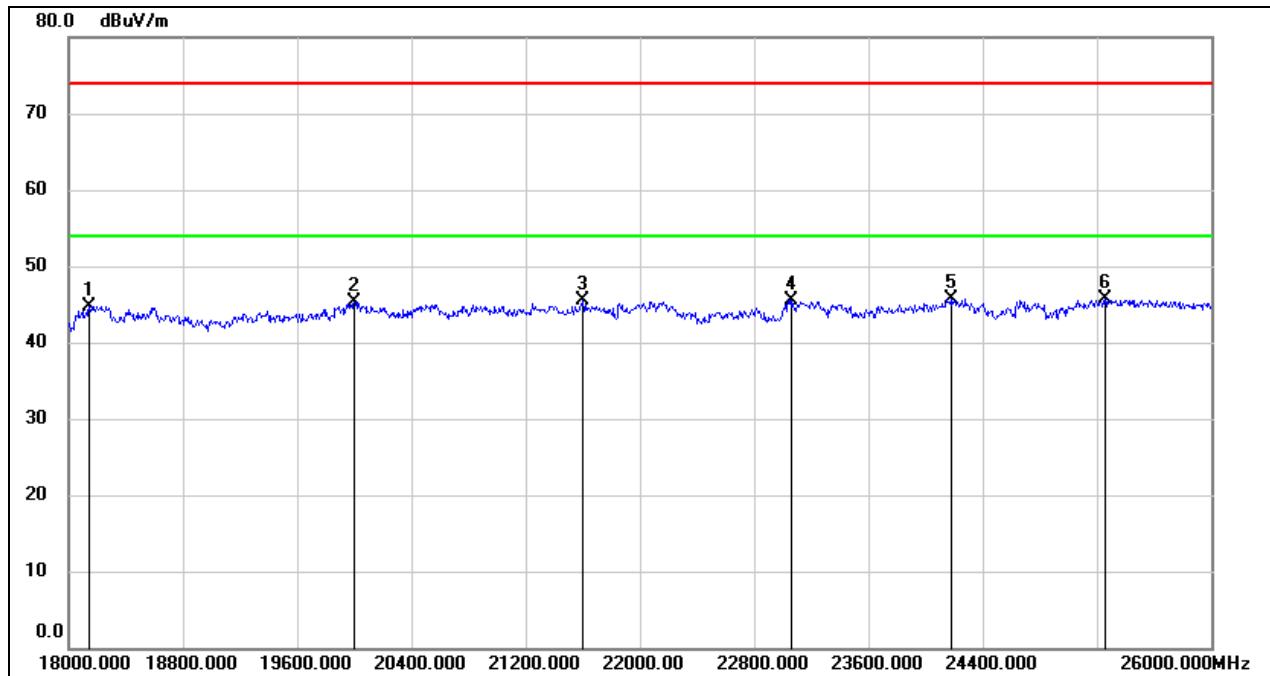
Note:

1. Measurement = Reading Level + Correct Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.

## 8.4. SPURIOUS EMISSIONS (18 GHz ~ 26 GHz)

### 8.4.1. 802.11ac VHT80 MODE

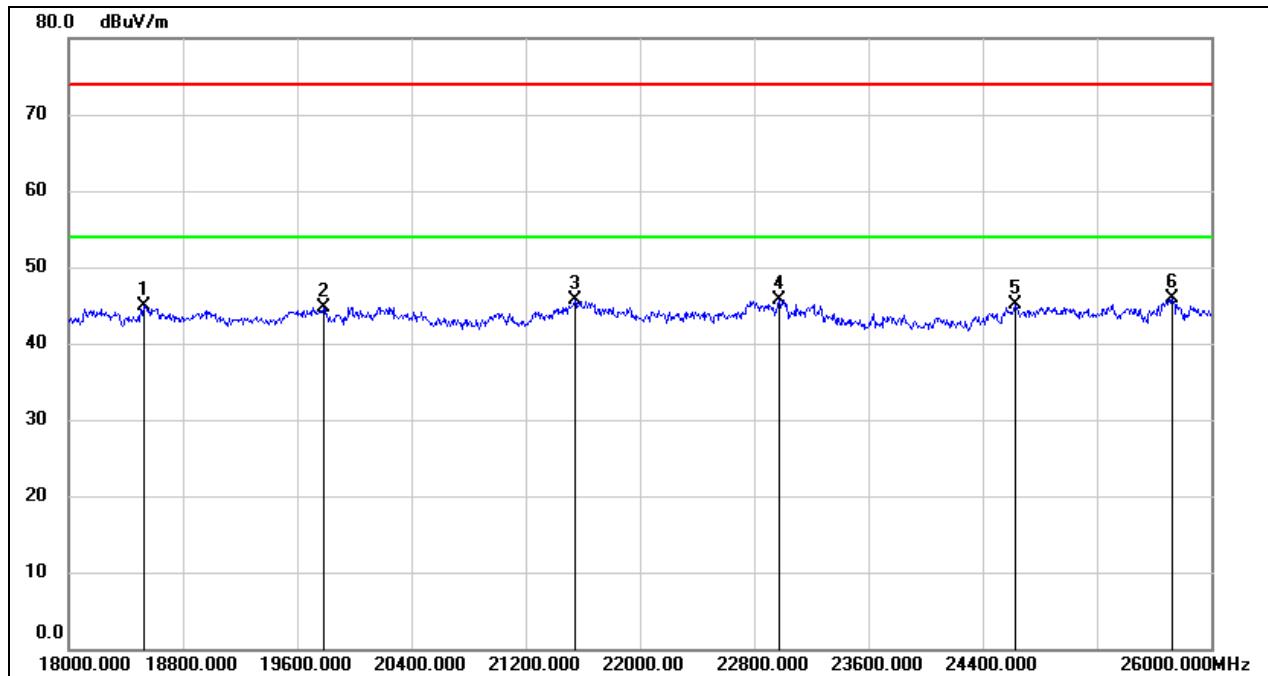
#### SPURIOUS EMISSIONS (UNII-1 BAND LOW CHANNEL, HORIZONTAL, WORST-CASE CONFIGURATION)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18144.000	50.27	-5.48	44.79	74.00	-29.21	peak
2	20000.000	50.81	-5.45	45.36	74.00	-28.64	peak
3	21600.000	50.02	-4.54	45.48	74.00	-28.52	peak
4	23064.000	48.99	-3.42	45.57	74.00	-28.43	peak
5	24184.000	48.43	-2.80	45.63	74.00	-28.37	peak
6	25256.000	47.29	-1.67	45.62	74.00	-28.38	peak

Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.

**SPURIOUS EMISSIONS (UNII-1 BAND LOW CHANNEL, VERTICAL, WORST-CASE CONFIGURATION)**



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18528.000	50.11	-5.26	44.85	74.00	-29.15	peak
2	19784.000	50.07	-5.28	44.79	74.00	-29.21	peak
3	21544.000	50.26	-4.63	45.63	74.00	-28.37	peak
4	22976.000	49.26	-3.46	45.80	74.00	-28.20	peak
5	24624.000	47.49	-2.33	45.16	74.00	-28.84	peak
6	25728.000	46.61	-0.72	45.89	74.00	-28.11	peak

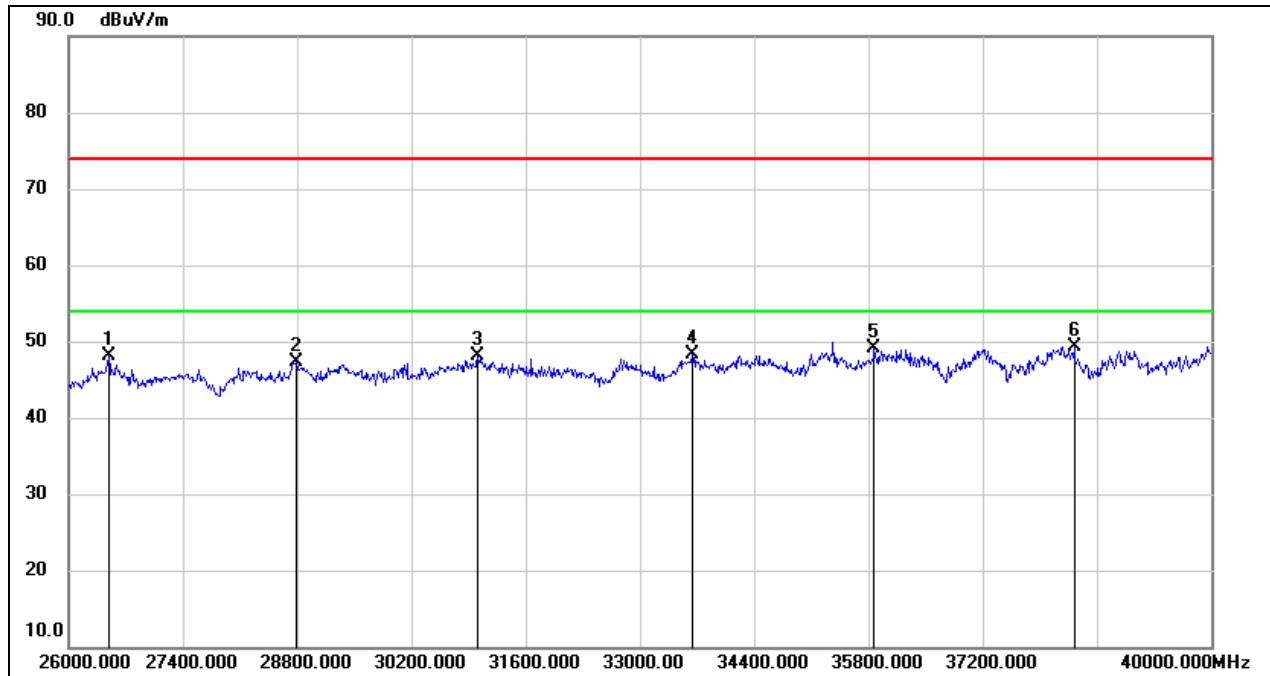
Note: 1. Measurement = Reading Level + Correct Factor.  
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
3. Peak: Peak detector.

Note: All the modes and antennas had been tested, but only the worst data was recorded in the report.

## 8.5. SPURIOUS EMISSIONS (26 GHz ~ 40 GHz)

### 8.5.1. 802.11n HT20 MODE

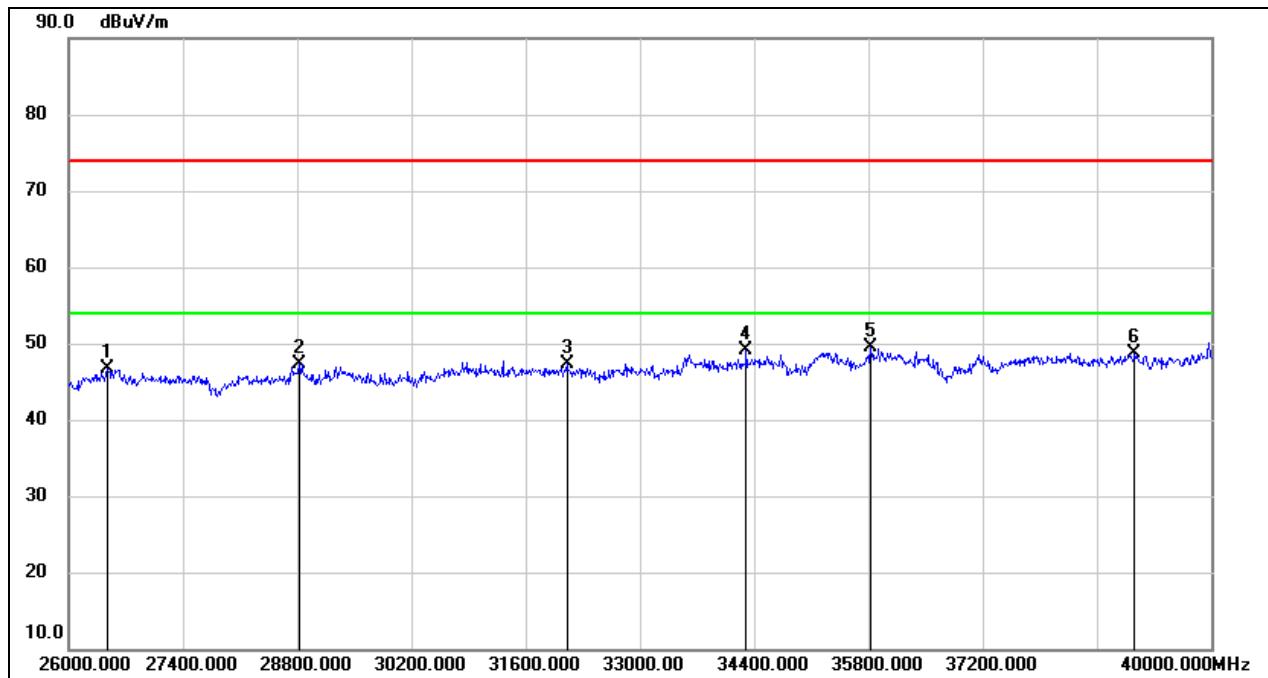
#### SPURIOUS EMISSIONS (UNII-1 BAND LOW CHANNEL, HORIZONTAL, WORST-CASE CONFIGURATION)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	26490.000	52.79	-4.74	48.05	74.00	-25.95	peak
2	28786.000	47.99	-0.64	47.35	74.00	-26.65	peak
3	31012.000	48.83	-0.71	48.12	74.00	-25.88	peak
4	33644.000	47.81	0.42	48.23	74.00	-25.77	peak
5	35870.000	45.33	3.75	49.08	74.00	-24.92	peak
6	38320.000	45.56	3.77	49.33	74.00	-24.67	peak

Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.

**SPURIOUS EMISSIONS (UNII-1 BAND LOW CHANNEL, VERTICAL, WORST-CASE CONFIGURATION)**



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	26476.000	51.53	-4.78	46.75	74.00	-27.25	peak
2	28828.000	48.13	-0.79	47.34	74.00	-26.66	peak
3	32104.000	48.99	-1.75	47.24	74.00	-26.76	peak
4	34302.000	47.95	1.10	49.05	74.00	-24.95	peak
5	35828.000	45.75	3.67	49.42	74.00	-24.58	peak
6	39062.000	44.48	4.30	48.78	74.00	-25.22	peak

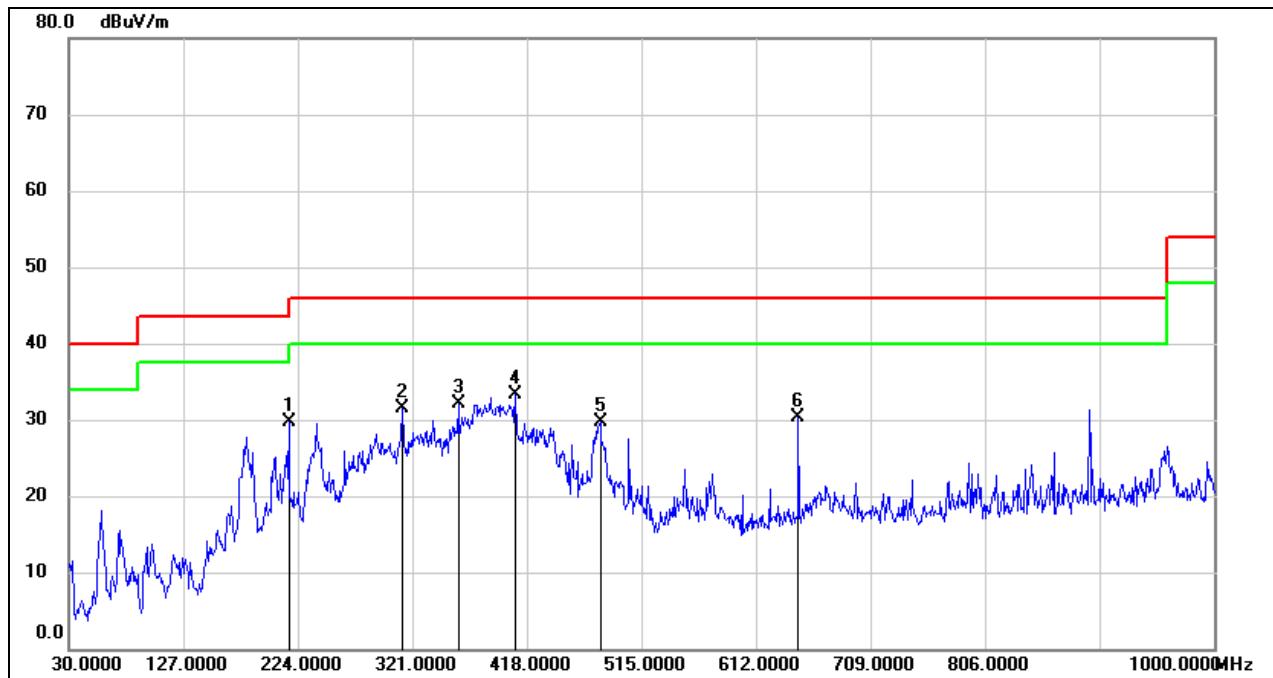
Note: 1. Measurement = Reading Level + Correct Factor.  
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.  
 3. Peak: Peak detector.

Note: All the modes and antennas had been tested, but only the worst data was recorded in the report.

## 8.6. SPURIOUS EMISSIONS (30 MHz ~ 1 GHz)

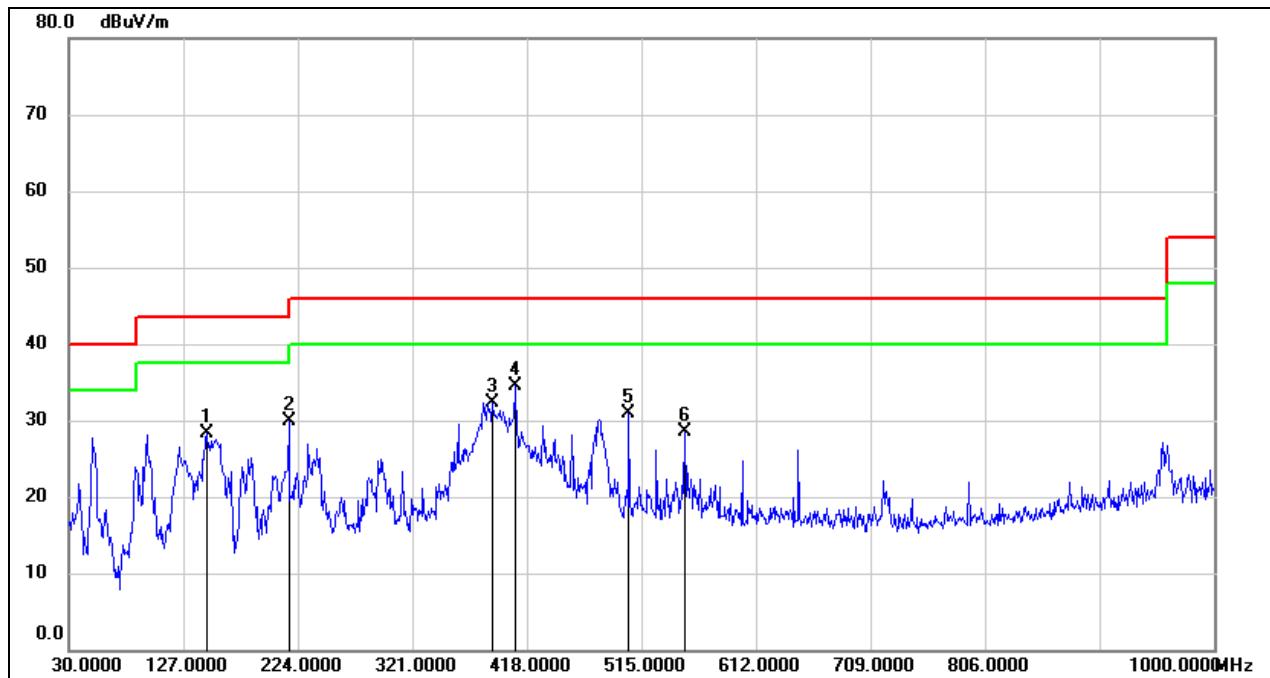
### 8.6.1. 802.11ac VHT80 MODE

#### SPURIOUS EMISSIONS (UNII-1 BAND LOW CHANNEL, HORIZONTAL, WORST-CASE CONFIGURATION)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	216.2400	47.56	-17.84	29.72	46.00	-16.28	QP
2	312.2700	46.60	-15.01	31.59	46.00	-14.41	QP
3	359.8000	46.17	-14.10	32.07	46.00	-13.93	QP
4	408.3000	46.50	-13.17	33.33	46.00	-12.67	QP
5	480.0800	41.52	-11.79	29.73	46.00	-16.27	QP
6	647.8900	39.45	-9.05	30.40	46.00	-15.60	QP

Note: 1. Result Level = Read Level + Correct Factor.  
2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.  
3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

SPURIOUS EMISSIONS (UNII-1 BAND LOW CHANNEL, VERTICAL, WORST-CASE CONFIGURATION)

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	146.4000	46.81	-18.49	28.32	43.50	-15.18	QP
2	216.2400	47.84	-17.84	30.00	46.00	-16.00	QP
3	388.9000	45.90	-13.51	32.39	46.00	-13.61	QP
4	408.3000	47.69	-13.17	34.52	46.00	-11.48	QP
5	504.3300	42.18	-11.37	30.81	46.00	-15.19	QP
6	551.8600	38.97	-10.46	28.51	46.00	-17.49	QP

Note: 1. Result Level = Read Level + Correct Factor.  
2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.  
3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto

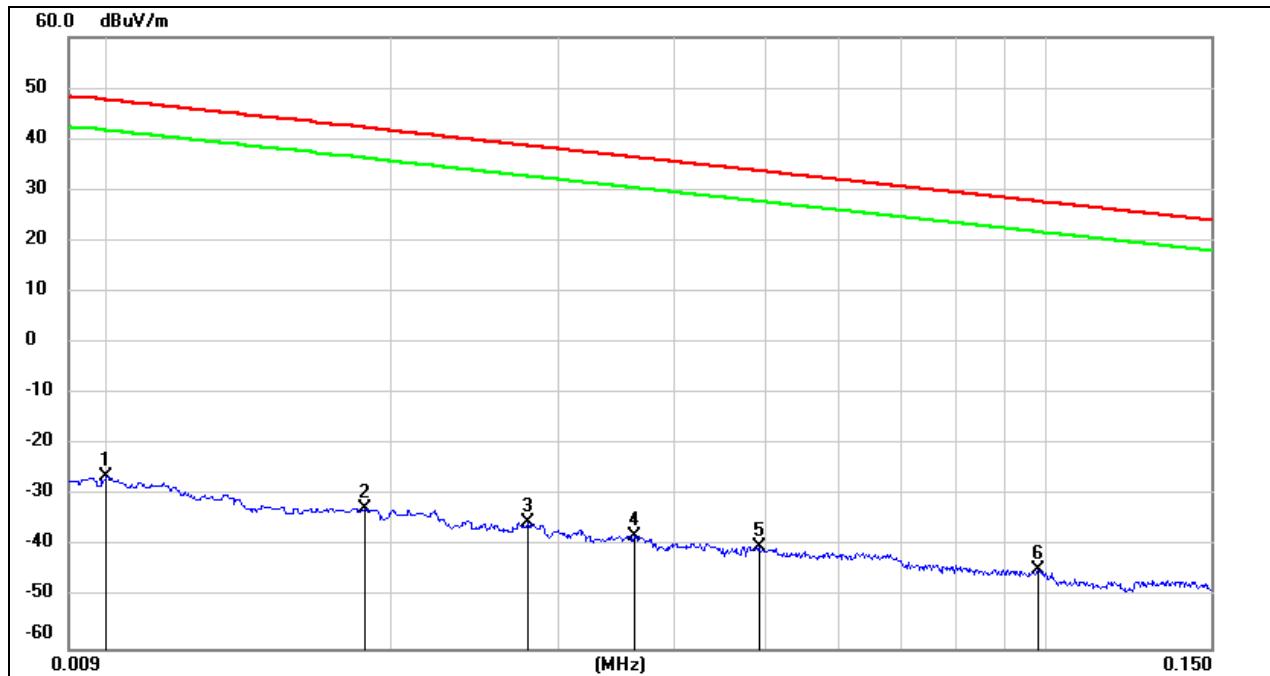
Note: All the modes and antennas had been tested, but only the worst data was recorded in the report.

## 8.7. SPURIOUS EMISSIONS BELOW 30 MHz

### 8.7.1. 802.11ac VHT80 MODE

#### SPURIOUS EMISSIONS (UNII-1 BAND LOW CHANNEL, LOOP ANTENNA FACE ON TO THE EUT, WORST-CASE CONFIGURATION)

9 kHz~ 150 kHz

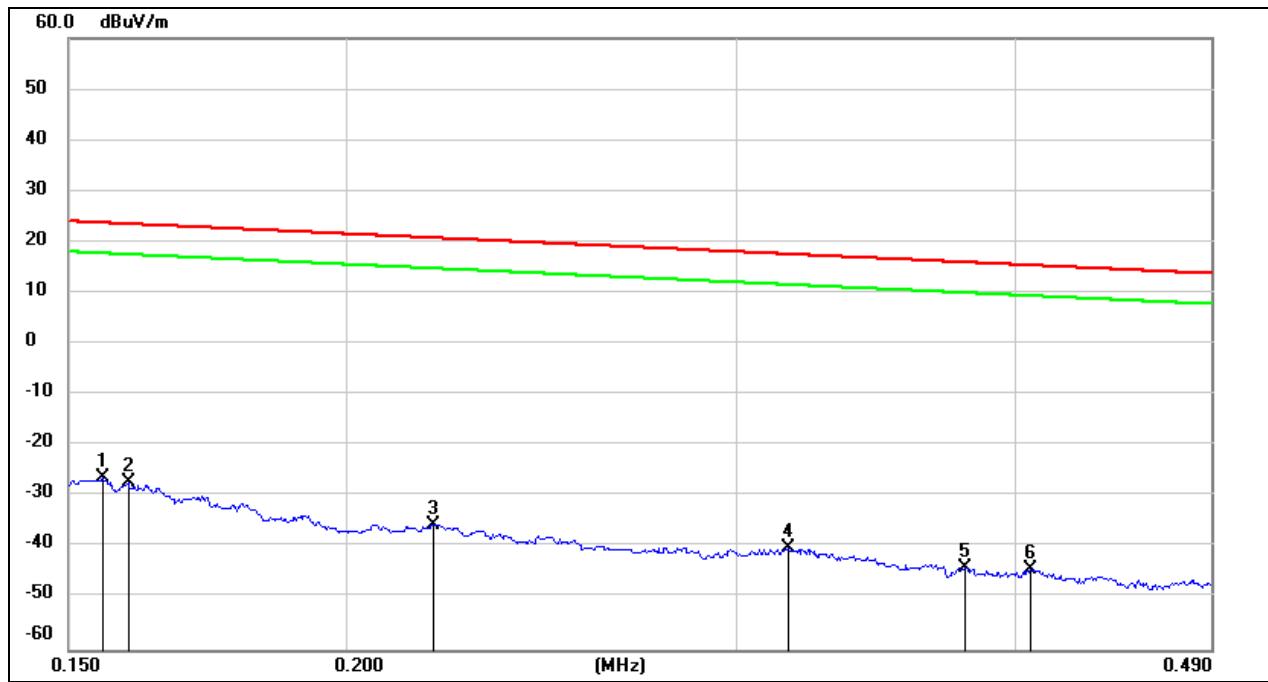


Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.

3. All 3 polarizations (Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.

4.  $\text{dBuA/m} = \text{dBuV/m} - 20\log_{10}(120\pi) = \text{dBuV/m} - 51.5$ .

150 kHz ~ 490 kHz


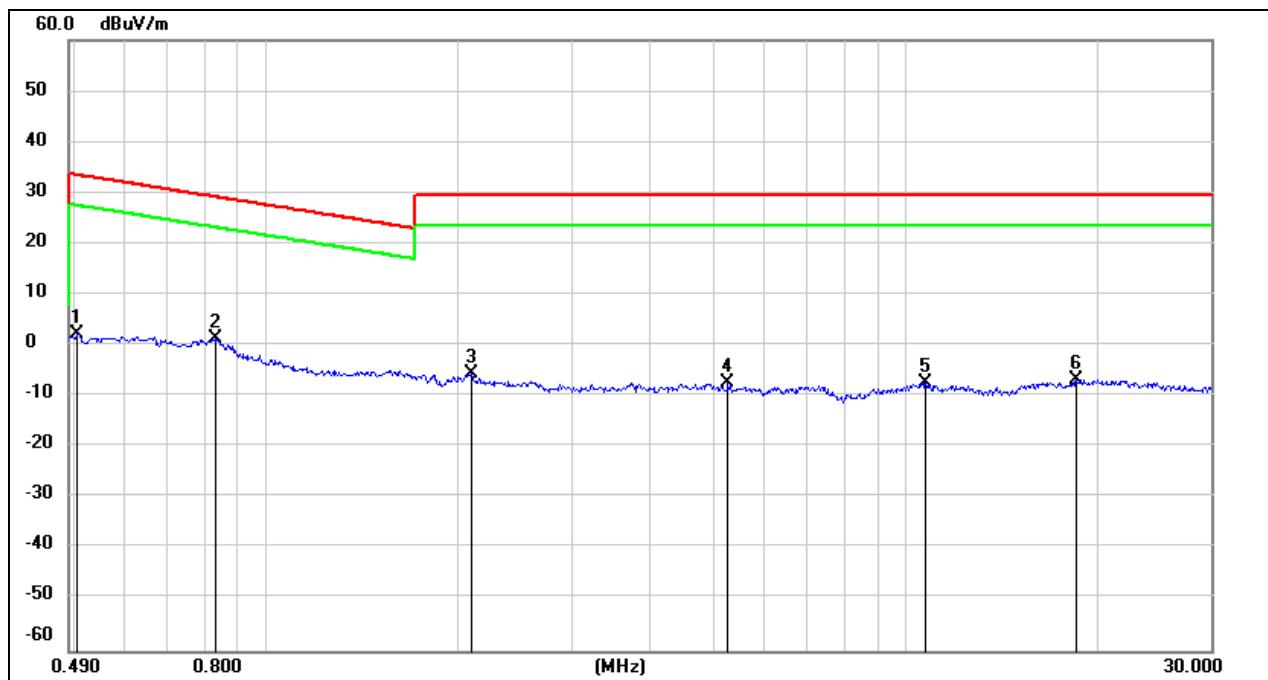
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	FCC Result (dBuV/m)	FCC Limit (dBuV/m)	ISED Result (dBuA/m)	ISED Limit (dBuA/m)	Margin (dB)	Remark
1	0.1554	75.27	-101.65	-26.38	23.77	-77.88	-27.73	-50.15	peak
2	0.1595	74.36	-101.65	-27.29	23.55	-78.79	-27.95	-50.84	peak
3	0.2190	66.27	-101.75	-35.48	20.79	-86.98	-30.71	-56.27	peak
4	0.3163	61.70	-101.87	-40.17	17.6	-91.67	-33.90	-57.77	peak
5	0.3800	58.02	-101.94	-43.92	16.01	-95.42	-35.49	-59.93	peak
6	0.4062	57.64	-101.96	-44.32	15.43	-95.82	-36.07	-59.75	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.

3. All 3 polarizations (Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.

4.  $\text{dBuA/m} = \text{dBuV/m} - 20\log_{10}(120\pi) = \text{dBuV/m} - 51.5$ .

490 kHz ~ 30 MHz


No.	Frequency	Reading	Correct	FCC Result	FCC Limit	ISED Result	ISED Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dBuA/m)	(dBuA/m)	(dB)	
1	0.5039	64.44	-62.07	2.37	33.56	-49.13	-17.94	-31.19	peak
2	0.8296	63.44	-62.17	1.27	29.23	-50.23	-22.27	-27.96	peak
3	2.0939	56.39	-61.79	-5.4	29.54	-56.90	-21.96	-34.94	peak
4	5.2705	54.04	-61.45	-7.41	29.54	-58.91	-21.96	-36.95	peak
5	10.7299	53.48	-60.83	-7.35	29.54	-58.85	-21.96	-36.89	peak
6	18.4908	54.06	-60.89	-6.83	29.54	-58.33	-21.96	-36.37	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.

3. All 3 polarizations (Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.

4. dBuA/m = dBuV/m - 20log10(120π) = dBuV/m -51.5.

Note: All the modes and antennas had been tested, but only the worst data was recorded in the report.

## 9. AC POWER LINE CONDUCTED EMISSIONS

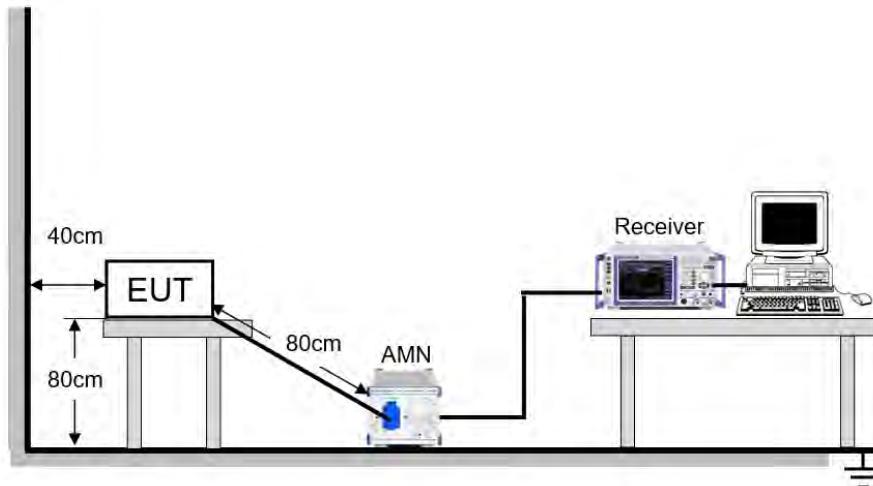
### LIMITS

Please refer to CFR 47 FCC §15.207 (a) and ISED RSS-Gen Clause 8.8

FREQUENCY (MHz)	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

### TEST SETUP AND PROCEDURE

Refer to ANSI C63.10-2013 clause 6.2.

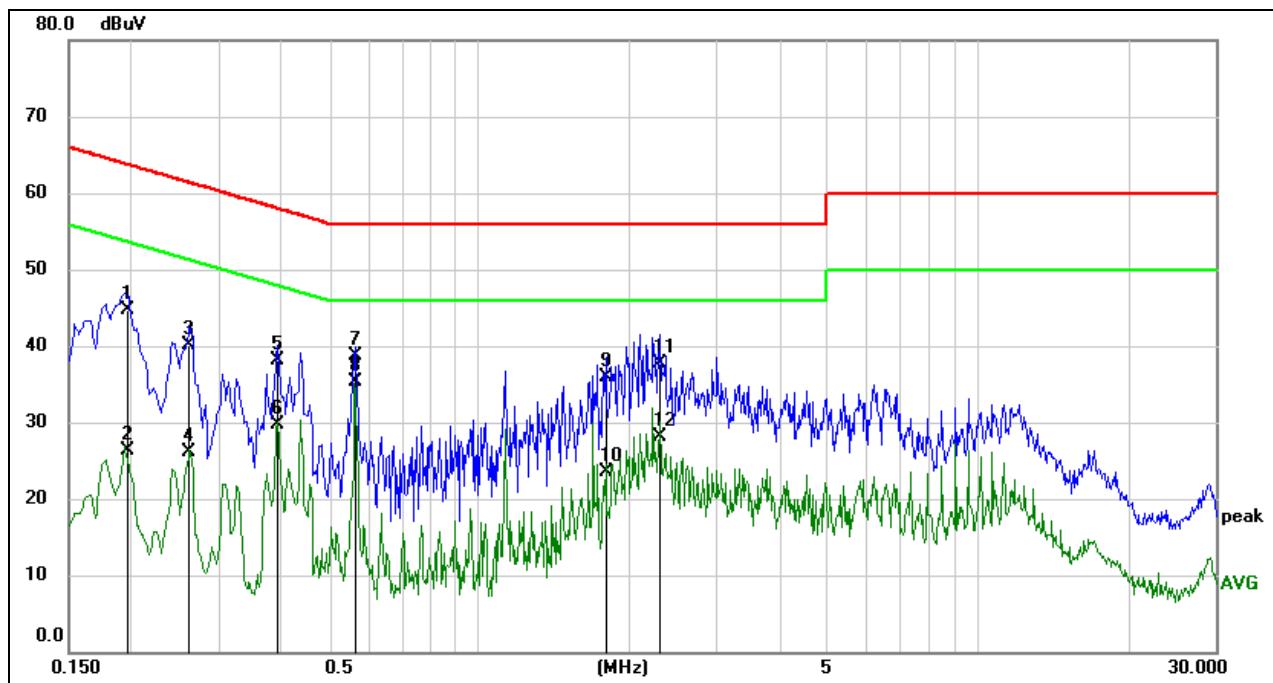


The EUT is put on a table of non-conducting material that is 80 cm high. The vertical conducting wall of shielding is located 40 cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 6.2 of ANSI C63.10-2013. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9 kHz.

The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.

### TEST ENVIRONMENT

Temperature	26.1°C	Relative Humidity	63 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 3.3 V

RESULTS**9.1.1. 802.11ac VHT80 MODE****LINE N RESULTS (UNII-1 BAND LOW CHANNEL, WORST-CASE CONFIGURATION)**

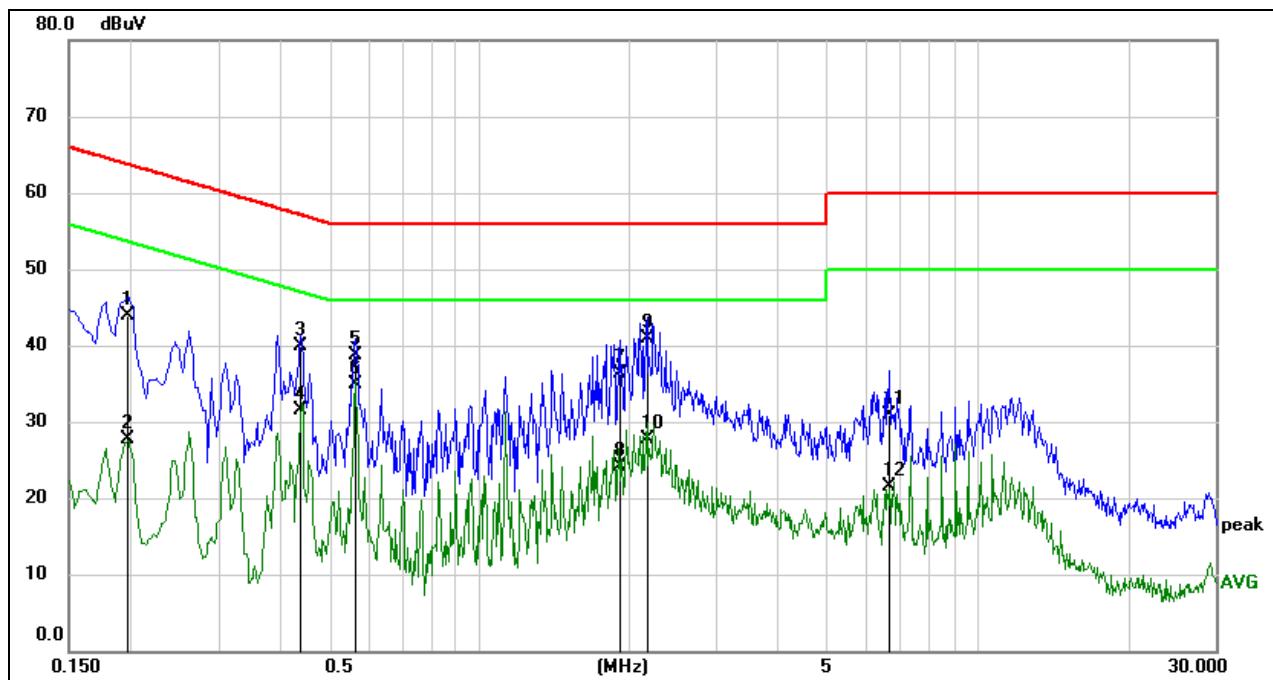
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1966	35.08	9.59	44.67	63.75	-19.08	QP
2	0.1966	16.75	9.59	26.34	53.75	-27.41	AVG
3	0.2618	30.47	9.59	40.06	61.37	-21.31	QP
4	0.2618	16.56	9.59	26.15	51.37	-25.22	AVG
5	0.3940	28.46	9.59	38.05	57.98	-19.93	QP
6	0.3940	20.13	9.59	29.72	47.98	-18.26	AVG
7	0.5649	29.06	9.60	38.66	56.00	-17.34	QP
8	0.5649	25.63	9.60	35.23	46.00	-10.77	AVG
9	1.7952	26.20	9.62	35.82	56.00	-20.18	QP
10	1.7952	13.84	9.62	23.46	46.00	-22.54	AVG
11	2.3000	28.09	9.63	37.72	56.00	-18.28	QP
12	2.3000	18.46	9.63	28.09	46.00	-17.91	AVG

Note: 1. Result = Reading + Correct Factor.

2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 200 Hz (9 kHz ~ 150 kHz), 9 kHz (150 kHz ~ 30 MHz).

4. Step size: 80 Hz (0.009 MHz ~ 0.15 MHz), 4 kHz (0.15 MHz ~ 30 MHz), Scan time: auto.

LINE L RESULTS (UNII-1 BAND LOW CHANNEL, WORST-CASE CONFIGURATION)

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1958	34.33	9.59	43.92	63.79	-19.87	QP
2	0.1958	18.17	9.59	27.76	53.79	-26.03	AVG
3	0.4389	30.35	9.60	39.95	57.08	-17.13	QP
4	0.4389	21.84	9.60	31.44	47.08	-15.64	AVG
5	0.5642	29.15	9.60	38.75	56.00	-17.25	QP
6	0.5642	25.33	9.60	34.93	46.00	-11.07	AVG
7	1.9075	26.72	9.63	36.35	56.00	-19.65	QP
8	1.9075	14.39	9.63	24.02	46.00	-21.98	AVG
9	2.1692	31.28	9.63	40.91	56.00	-15.09	QP
10	2.1692	18.01	9.63	27.64	46.00	-18.36	AVG
11	6.6374	21.21	9.63	30.84	60.00	-29.16	QP
12	6.6374	11.80	9.63	21.43	50.00	-28.57	AVG

Note: 1. Result = Reading + Correct Factor.

2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 200 Hz (9 kHz ~ 150 kHz), 9 kHz (150 kHz ~ 30 MHz).

4. Step size: 80 Hz (0.009 MHz ~ 0.15 MHz), 4 kHz (0.15 MHz ~ 30 MHz), Scan time: auto.

Note: All the modes had been tested, but only the worst data was recorded in the report.

## 10. FREQUENCY STABILITY

### LIMITS

The frequency of the carrier signal shall be maintained within band of operation.

### TEST PROCEDURE

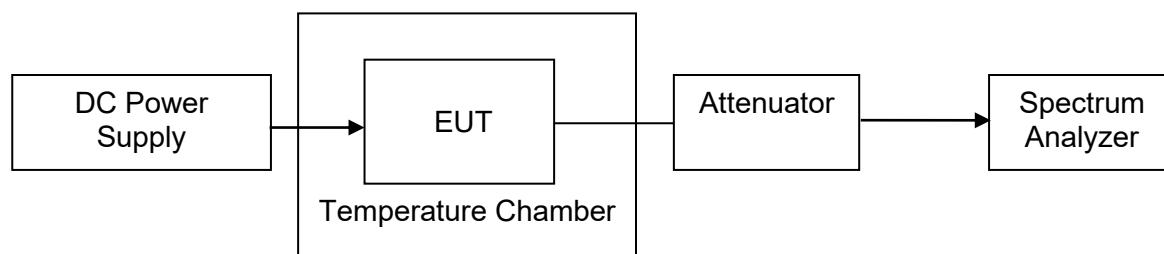
1. The EUT was placed inside an environmental chamber as the temperature in the chamber was varied between 0 °C ~ 40 °C (declared by customer).
2. The temperature was incremented by 10 °C intervals and the unit allowed to stabilize at each temperature before each measurement. The center frequency of the transmitting channel was evaluated at each temperature and the frequency deviation from the channel's center frequency was recorded.
3. The primary supply voltage is varied from 85 % to 115 % of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

Connect the EUT to the spectrum analyser and use the following settings:

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	10 kHz
VBW	$\geq 3 \times$ RBW
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

4. While maintaining a constant temperature inside the environmental chamber, turn the EUT on and record the operating frequency at startup, and at 2 minutes, 5minutes, and 10 minutes after the EUT is energized.
5. Allow the trace to stabilize, find the peak value of the power envelope and record the frequency, then calculated the frequency drift.

### TEST SETUP



**TEST ENVIRONMENT**

	Normal Test Conditions	Extreme Test Conditions
Relative Humidity	20 % - 75 %	/
Atmospheric Pressure	100 kPa ~102 kPa	/
Temperature	$T_N$ (Normal Temperature): 25.1 °C	$T_L$ (Low Temperature): 0 °C
		$T_H$ (High Temperature): 40 °C
Supply Voltage	$V_N$ (Normal Voltage): DC 3.3 V	$V_L$ (Low Voltage): DC 2.97 V
		$V_H$ (High Voltage): DC 3.63 V

**RESULTS**

Please refer to Appendix E.

## 11. DYNAMIC FREQUENCY SELECTION

### APPLICABILITY OF DFS REQUIREMENTS

A U-NII network will employ a DFS function to detect signals from radar systems and to avoid co-channel operation with these systems. This applies to the 5250-5350 MHz and/or 5470-5725 MHz bands.

Within the context of the operation of the DFS function, a U-NII device will operate in either Master Mode or Client Mode. U-NII devices operating in Client Mode can only operate in a network controlled by a U-NII device operating in Master Mode.

Table 1: Applicability of DFS Requirements Prior to Use of a Channel

Requirement	Operational Mode		
	<input type="checkbox"/> Master	<input checked="" type="checkbox"/> Client Without Radar Detection	<input type="checkbox"/> Client With Radar Detection
Non-Occupancy Period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	Yes	Not required	Not required
U-NII Detection Bandwidth	Yes	Not required	Yes

Table 2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode	
	<input type="checkbox"/> Master Device or Client with Radar Detection	<input checked="" type="checkbox"/> Client Without Radar Detection
DFS Detection Threshold	Yes	Not required
Channel Closing Transmission Time	Yes	Yes
Channel Move Time	Yes	Yes
U-NII Detection Bandwidth	Yes	Not required

Additional requirements for devices with multiple bandwidth modes	<input type="checkbox"/> Master Device or Client with Radar Detection	<input checked="" type="checkbox"/> Client Without Radar Detection
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required
Channel Move Time and Channel Closing Transmission Time	Test using widest BW mode available	Test using the widest BW mode available for the link
All other tests	Any single BW mode	Not required

Note: Frequencies selected for statistical performance check should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.

## LIMITS

### (1) DFS Detection Thresholds

Table 3: DFS Detection Thresholds for Master Devices and Client Devices With Radar Detection

Maximum Transmit Power	Value (See Notes 1, 2, and 3)
EIRP $\geq$ 200 milliwatt	-64 dBm
EIRP $<$ 200 milliwatt and power spectral density $<$ 10 dBm/MHz	-62 dBm
EIRP $<$ 200 milliwatt that do not meet the power spectral density requirement	-64 dBm

Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna.  
Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.  
Note 3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.

### (2) DFS Response Requirements

Table 4: DFS Response Requirement Values

Parameter	Value
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds See Note 1.
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.  
Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required facilitating a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.  
Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

## PARAMETERS OF RADAR TEST WAVEFORMS

This section provides the parameters for required test waveforms, minimum percentage of successful detections, and the minimum number of trials that must be used for determining DFS conformance. Step intervals of 0.1 microsecond for Pulse Width, 1 microsecond for PRI, 1 MHz for chirp width and 1 for the number of pulses will be utilized for the random determination of specific test waveforms.

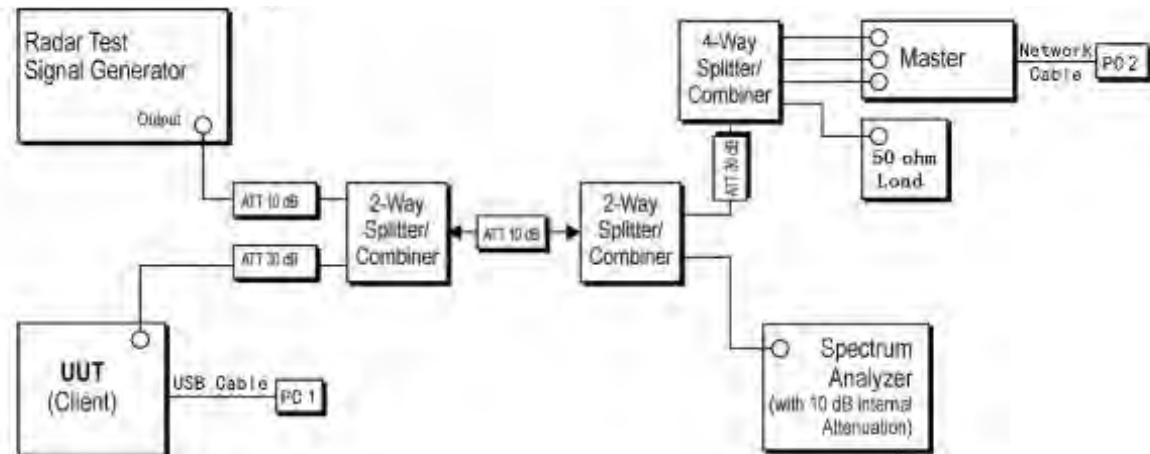
Table 5 Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
0	1	1428	18	See Note 1	See Note 1
1	1	Test A	Roundup $\left\lceil \left( \frac{1}{360} \right) \cdot \left( \frac{19 \cdot 10^6}{\text{PRI}_{\text{max}}} \right) \right\rceil$	60%	30
		Test B			
2	1.5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120
Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.					
Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a.					
Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A					

A minimum of 30 unique waveforms are required for each of the Short Pulse Radar Types 2 through 4. If more than 30 waveforms are used for Short Pulse Radar Types 2 through 4, then each additional waveform must also be unique and not repeated from the previous waveforms. If more than 30 waveforms are used for Short Pulse Radar Type 1, then each additional waveform is generated with Test B and must also be unique and not repeated from the previous waveforms in Tests A or B. Test aggregate is average of the percentage of successful detections of short pulse radar types 1-4.

## TEST SETUP

Setup for Client with injection at the Master



## TEST ENVIRONMENT

Temperature	24.1 °C	Relative Humidity	60.5 %
Atmosphere Pressure	101 kPa	Test Voltage	DC 3.3 V

## RESULTS

Please refer to Appendix F.

## 12. ANTENNA REQUIREMENTS

### APPLICABLE REQUIREMENTS

Please refer to FCC §15.203

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Please refer to FCC §15.247(b)(4)

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

### RESULTS

Complies

## 12.1. Appendix A1: Emission Bandwidth

### 12.1.1. Test Result

Test Mode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Verdict
11A20	Ant1	5180	20.040	5169.920	5189.960	PASS
	Ant2	5180	19.840	5170.080	5189.920	PASS
	Ant1	5200	19.440	5190.320	5209.760	PASS
	Ant2	5200	19.640	5190.040	5209.680	PASS
	Ant1	5240	19.520	5230.280	5249.800	PASS
	Ant2	5240	19.640	5230.040	5249.680	PASS
	Ant1	5260	19.720	5250.120	5269.840	PASS
	Ant2	5260	19.960	5249.920	5269.880	PASS
	Ant1	5280	19.640	5270.280	5289.920	PASS
	Ant2	5280	20.080	5270.080	5290.160	PASS
	Ant1	5320	19.600	5310.200	5329.800	PASS
	Ant2	5320	19.560	5310.280	5329.840	PASS
	Ant1	5500	19.560	5490.280	5509.840	PASS
	Ant2	5500	19.920	5490.120	5510.040	PASS
	Ant1	5580	19.520	5570.280	5589.800	PASS
	Ant2	5580	19.640	5570.280	5589.920	PASS
	Ant1	5700	19.800	5690.280	5710.080	PASS
	Ant2	5700	19.800	5690.040	5709.840	PASS
	Ant1	5720	19.440	5710.240	5729.680	PASS
	Ant2	5720	19.640	5710.120	5729.760	PASS
	Ant1	5720 UNII-2C	14.76	5710.240	5725	PASS
	Ant2	5720 UNII-2C	14.88	5710.120	5725	PASS
	Ant1	5720 UNII-3	4.68	5725	5729.680	PASS
	Ant2	5720 UNII-3	4.76	5725	5729.760	PASS
	Ant1	5745	19.960	5734.920	5754.880	PASS
	Ant2	5745	19.960	5734.880	5754.840	PASS
	Ant1	5785	19.920	5775.080	5795.000	PASS
	Ant2	5785	19.840	5774.920	5794.760	PASS
	Ant1	5825	19.720	5815.200	5834.920	PASS
	Ant2	5825	20.120	5814.920	5835.040	PASS
11N20MIMO	Ant1	5180	19.800	5170.160	5189.960	PASS
	Ant2	5180	20.200	5169.800	5190.000	PASS
	Ant1	5200	19.840	5190.040	5209.880	PASS
	Ant2	5200	19.920	5189.960	5209.880	PASS
	Ant1	5240	20.400	5229.840	5250.240	PASS
	Ant2	5240	20.080	5229.800	5249.880	PASS
	Ant1	5260	19.520	5250.200	5269.720	PASS
	Ant2	5260	19.760	5250.120	5269.880	PASS
	Ant1	5280	20.080	5269.920	5290.000	PASS
	Ant2	5280	19.920	5270.160	5290.080	PASS
	Ant1	5320	20.240	5309.920	5330.160	PASS
	Ant2	5320	20.000	5309.920	5329.920	PASS
	Ant1	5500	19.920	5490.080	5510.000	PASS
	Ant2	5500	19.400	5490.200	5509.600	PASS
	Ant1	5580	19.880	5570.160	5590.040	PASS
	Ant2	5580	19.680	5570.160	5589.840	PASS
	Ant1	5700	19.760	5690.040	5709.800	PASS
	Ant2	5700	20.040	5689.800	5709.840	PASS
	Ant1	5720	20.240	5709.800	5730.040	PASS
	Ant2	5720	19.960	5709.920	5729.880	PASS
	Ant1	5720 UNII-2C	15.2	5709.800	5725	PASS
	Ant2	5720 UNII-2C	15.08	5709.920	5725	PASS
	Ant1	5720 UNII-3	5.04	5725	5730.040	PASS
	Ant2	5720 UNII-3	4.88	5725	5729.880	PASS
	Ant1	5745	20.200	5734.960	5755.160	PASS

	Ant2	5745	19.760	5735.120	5754.880	PASS
	Ant1	5785	20.000	5775.000	5795.000	PASS
	Ant2	5785	19.920	5775.000	5794.920	PASS
	Ant1	5825	19.960	5814.920	5834.880	PASS
	Ant2	5825	20.080	5814.920	5835.000	PASS
11N40MIMO	Ant1	5190	40.400	5169.520	5209.920	PASS
	Ant2	5190	40.000	5169.680	5209.680	PASS
	Ant1	5230	39.920	5209.760	5249.680	PASS
	Ant2	5230	39.920	5210.400	5250.320	PASS
	Ant1	5270	40.160	5249.920	5290.080	PASS
	Ant2	5270	40.240	5250.080	5290.320	PASS
	Ant1	5310	40.160	5290.000	5330.160	PASS
	Ant2	5310	39.920	5290.320	5330.240	PASS
	Ant1	5510	40.080	5490.080	5530.160	PASS
	Ant2	5510	39.280	5490.400	5529.680	PASS
	Ant1	5550	40.160	5530.160	5570.320	PASS
	Ant2	5550	38.960	5530.640	5569.600	PASS
	Ant1	5670	40.240	5649.760	5690.000	PASS
	Ant2	5670	39.840	5649.920	5689.760	PASS
	Ant1	5710	39.280	5690.320	5729.600	PASS
	Ant2	5710	39.120	5690.400	5729.520	PASS
	Ant1	5710 UNII-2C	34.68	5690.320	5725	PASS
	Ant2	5710 UNII-2C	34.6	5690.400	5725	PASS
	Ant1	5710 UNII-3	4.6	5725	5729.600	PASS
	Ant2	5710 UNII-3	4.52	5725	5729.520	PASS
	Ant1	5755	40.160	5735.160	5775.320	PASS
	Ant2	5755	40.000	5735.000	5775.000	PASS
	Ant1	5795	40.240	5774.440	5814.680	PASS
	Ant2	5795	39.360	5775.080	5814.440	PASS
11AC20MIMO	Ant1	5180	20.040	5170.000	5190.040	PASS
	Ant2	5180	19.600	5170.000	5189.600	PASS
	Ant1	5200	20.440	5189.640	5210.080	PASS
	Ant2	5200	20.360	5189.720	5210.080	PASS
	Ant1	5240	20.200	5230.000	5250.200	PASS
	Ant2	5240	19.760	5230.120	5249.880	PASS
	Ant1	5260	19.920	5250.040	5269.960	PASS
	Ant2	5260	19.880	5249.920	5269.800	PASS
	Ant1	5280	19.840	5270.040	5289.880	PASS
	Ant2	5280	19.640	5270.200	5289.840	PASS
	Ant1	5320	19.800	5310.080	5329.880	PASS
	Ant2	5320	19.960	5310.120	5330.080	PASS
	Ant1	5500	19.560	5490.240	5509.800	PASS
	Ant2	5500	20.040	5490.080	5510.120	PASS
	Ant1	5580	19.880	5569.960	5589.840	PASS
	Ant2	5580	19.760	5570.320	5590.080	PASS
	Ant1	5700	19.760	5690.200	5709.960	PASS
	Ant2	5700	19.680	5690.320	5710.000	PASS
	Ant1	5720	20.200	5709.920	5730.120	PASS
	Ant2	5720	19.720	5710.040	5729.760	PASS
	Ant1	5720 UNII-2C	15.08	5709.920	5725	PASS
	Ant2	5720 UNII-2C	14.96	5710.040	5725	PASS
	Ant1	5720 UNII-3	5.12	5725	5730.120	PASS
	Ant2	5720 UNII-3	4.76	5725	5729.760	PASS
	Ant1	5745	20.000	5734.960	5754.960	PASS
	Ant2	5745	19.720	5735.120	5754.840	PASS
	Ant1	5785	20.080	5774.840	5794.920	PASS
	Ant2	5785	19.960	5774.800	5794.760	PASS
	Ant1	5825	19.480	5815.200	5834.680	PASS
	Ant2	5825	20.000	5814.880	5834.880	PASS
11AC40MIMO	Ant1	5190	38.960	5170.560	5209.520	PASS
	Ant2	5190	39.600	5170.640	5210.240	PASS
	Ant1	5230	40.480	5210.000	5250.480	PASS



	Ant2	5230	40.160	5210.160	5250.320	PASS
	Ant1	5270	40.000	5250.160	5290.160	PASS
	Ant2	5270	39.440	5250.320	5289.760	PASS
	Ant1	5310	40.480	5289.360	5329.840	PASS
	Ant2	5310	39.760	5290.320	5330.080	PASS
	Ant1	5510	39.840	5490.080	5529.920	PASS
	Ant2	5510	39.280	5490.640	5529.920	PASS
	Ant1	5550	40.160	5530.000	5570.160	PASS
	Ant2	5550	39.760	5530.160	5569.920	PASS
	Ant1	5670	39.760	5650.320	5690.080	PASS
	Ant2	5670	39.280	5650.560	5689.840	PASS
	Ant1	5710	40.800	5689.760	5730.560	PASS
	Ant2	5710	39.280	5690.320	5729.600	PASS
	Ant1	5710 UNII-2C	35.24	5689.760	5725	PASS
	Ant2	5710 UNII-2C	34.68	5690.320	5725	PASS
	Ant1	5710 UNII-3	5.56	5725	5730.560	PASS
	Ant2	5710 UNII-3	4.6	5725	5729.600	PASS
	Ant1	5755	40.240	5735.000	5775.240	PASS
	Ant2	5755	39.600	5735.400	5775.000	PASS
	Ant1	5795	39.680	5775.080	5814.760	PASS
	Ant2	5795	40.080	5775.240	5815.320	PASS
11AC80MIMO	Ant1	5210	80.480	5169.680	5250.160	PASS
	Ant2	5210	79.040	5170.960	5250.000	PASS
	Ant1	5290	80.800	5250.160	5330.960	PASS
	Ant2	5290	79.840	5250.160	5330.000	PASS
	Ant1	5530	80.000	5490.000	5570.000	PASS
	Ant2	5530	79.680	5490.640	5570.320	PASS
	Ant1	5610	79.200	5570.480	5649.680	PASS
	Ant2	5610	80.000	5569.840	5649.840	PASS
	Ant1	5690	79.840	5650.160	5730.000	PASS
	Ant2	5690	79.840	5650.320	5730.160	PASS
	Ant1	5690 UNII-2C	74.84	5650.160	5725	PASS
	Ant2	5690 UNII-2C	74.68	5650.320	5725	PASS
	Ant1	5690 UNII-3	5	5725	5730.000	PASS
	Ant2	5690 UNII-3	5.16	5725	5730.160	PASS
	Ant1	5775	80.480	5734.680	5815.160	PASS
	Ant2	5775	79.840	5735.160	5815.000	PASS

## 12.1.2. Test Graphs







11A\_Ant1 5260



11A\_Ant2 5260

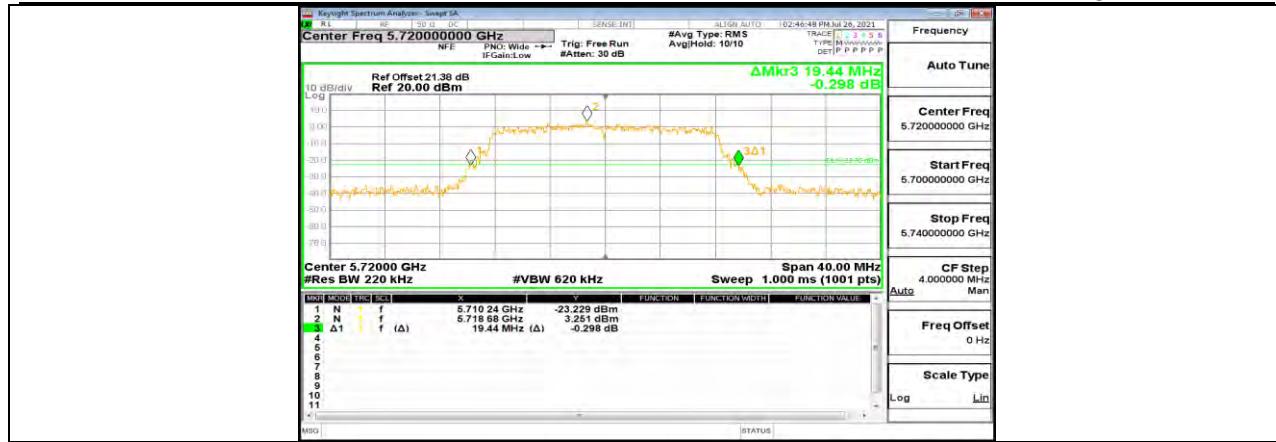


11A\_Ant1 5280









11A\_Ant1 5720



11A\_Ant2 5720



11A\_Ant1 5745



11A\_Ant2 5745



11A\_Ant1 5785



11A Ant2 5785









11N20MIMO\_Ant2 5260



11N20MIMO\_Ant1 5280



11N20MIMO\_Ant2\_5280











11N20MIMO\_Ant1 5785



11N20MIMO\_Ant2 5785



11N20MIMO\_Ant1\_5825



11N20MIMO\_Ant2\_5825



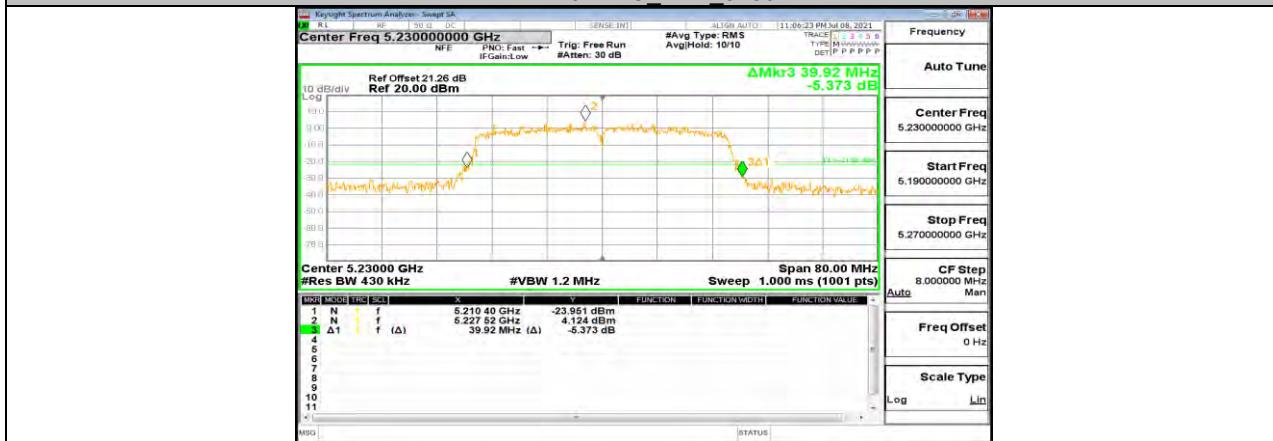
11N40MIMO\_Ant1\_5190



11N40MIMO Ant2 5190



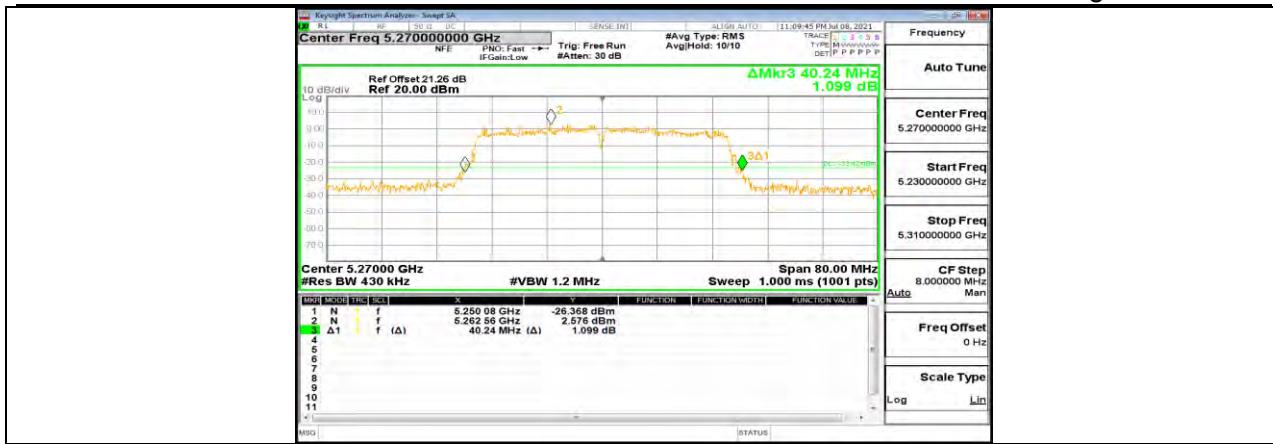
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11N40MIMO\_Ant2\_5230



11N40MIMO\_Ant1 5270



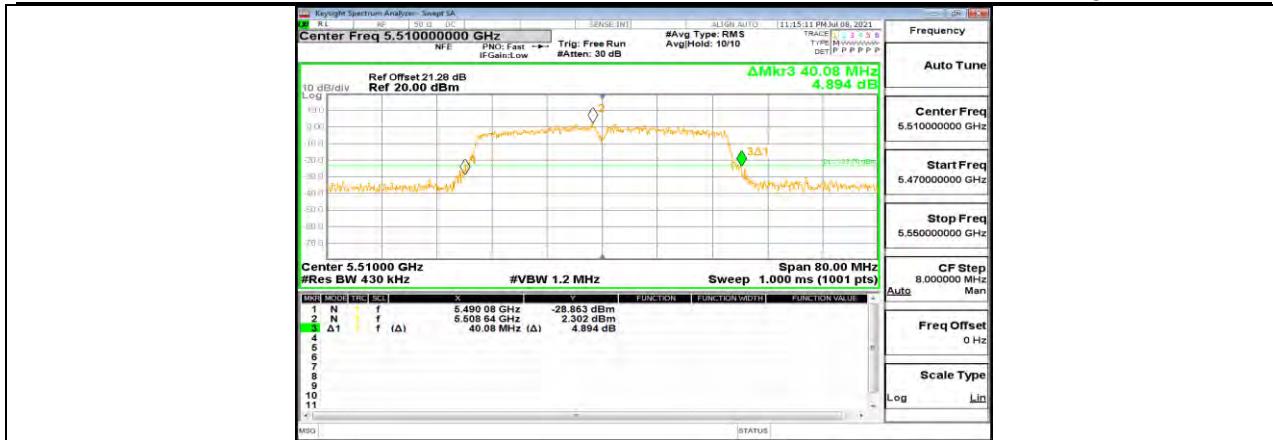
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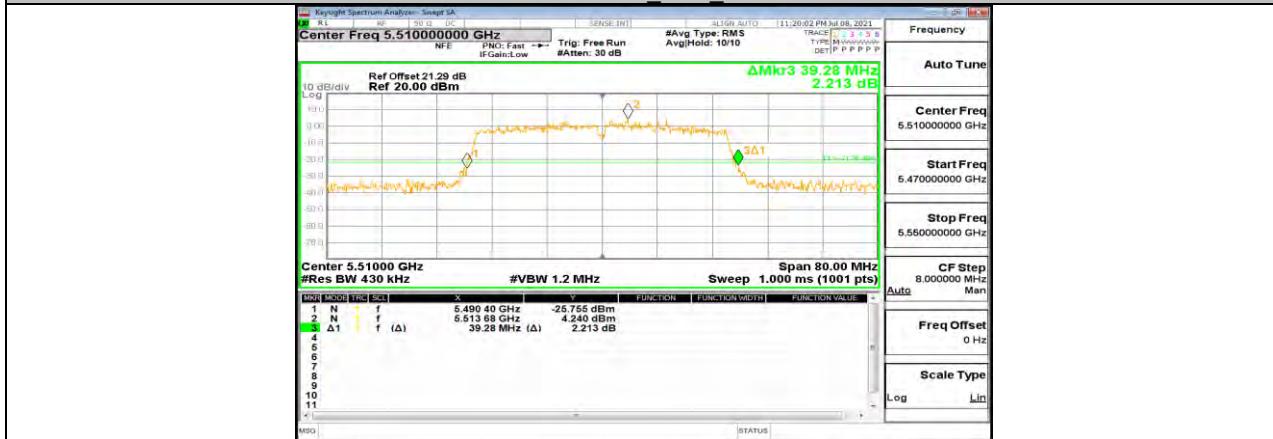
11N40MIMO\_Ant1\_5310



11N40MIMO\_Ant2\_5310



11N40MIMO\_Ant1\_5510



11N40MIMO\_Ant2\_5510



11N40MIMO\_Ant1\_5550







