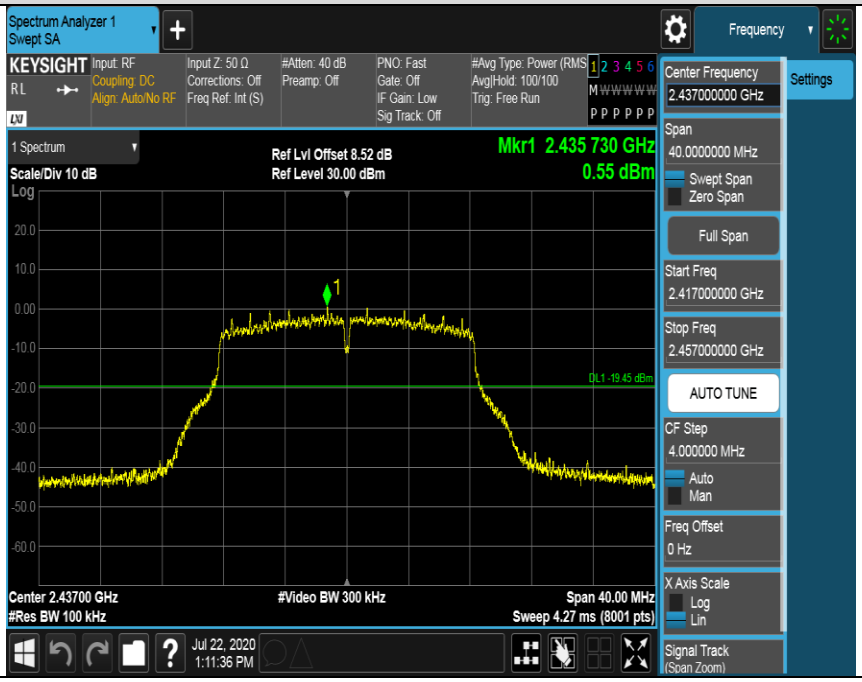
Test Mode	Channel	Verdict
11G	MCH	PASS

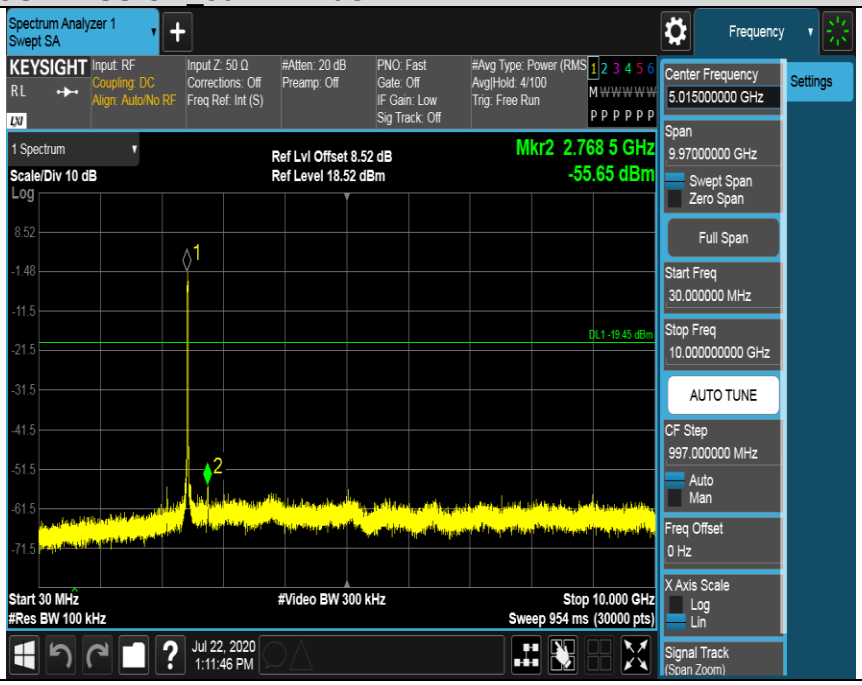
Pref test Plot

MCH SPURIOUS EMISSION

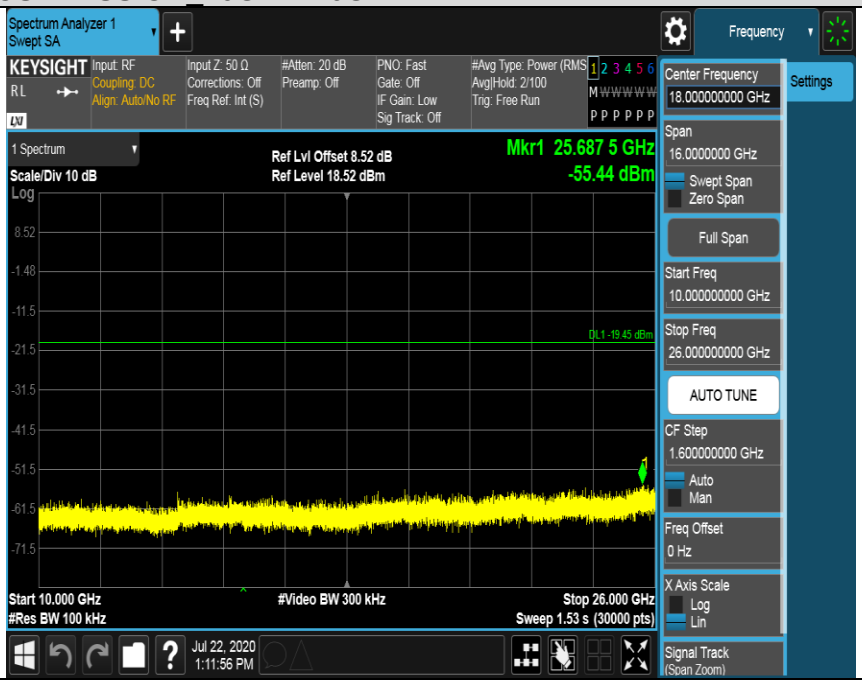


Puw test Plot

MCH SPURIOUS EMISSION_30MHz~10GHz



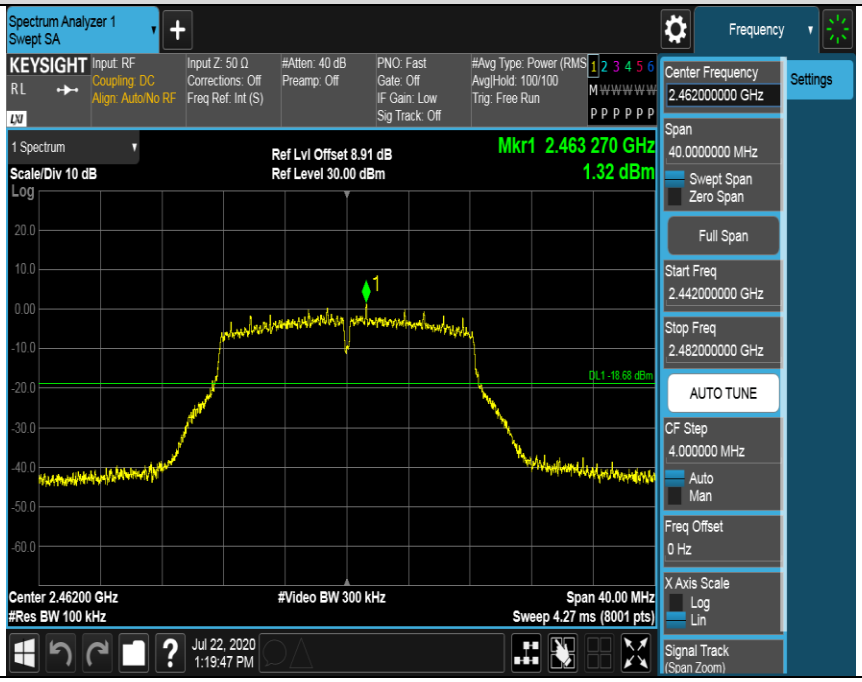
MCH SPURIOUS EMISSION_10GHz~26GHz



Test Mode	Channel	Verdict
11G	HCH	PASS

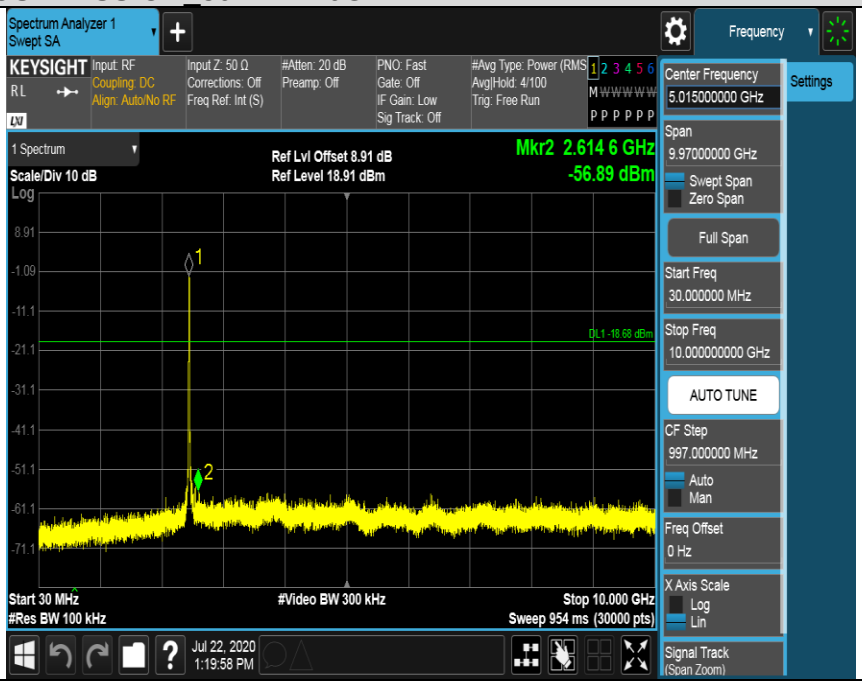
Pref test Plot

HCH SPURIOUS EMISSION

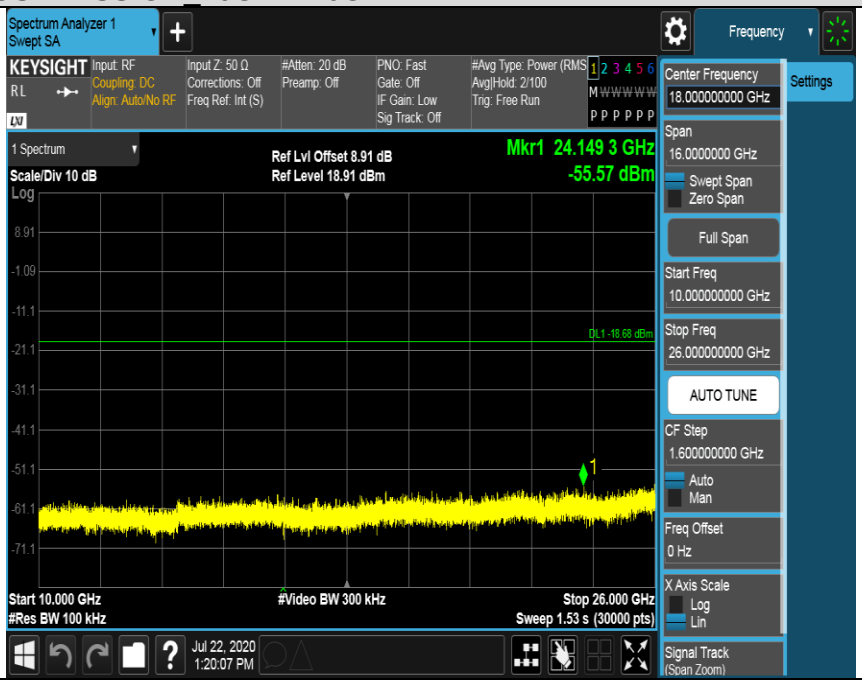


Puw test Plot

HCH SPURIOUS EMISSION_30MHz~10GHz

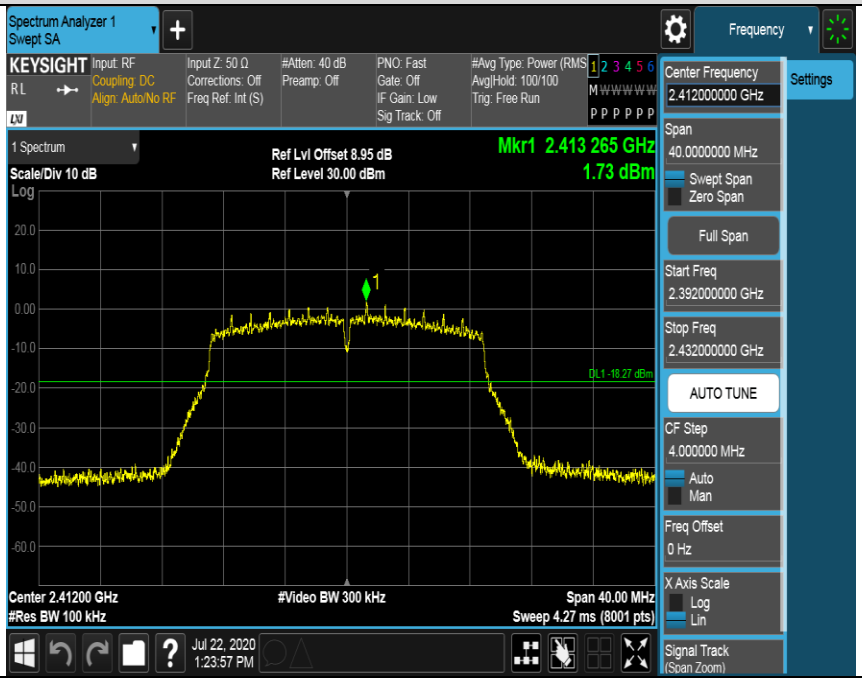


HCH SPURIOUS EMISSION_10GHz~26GHz



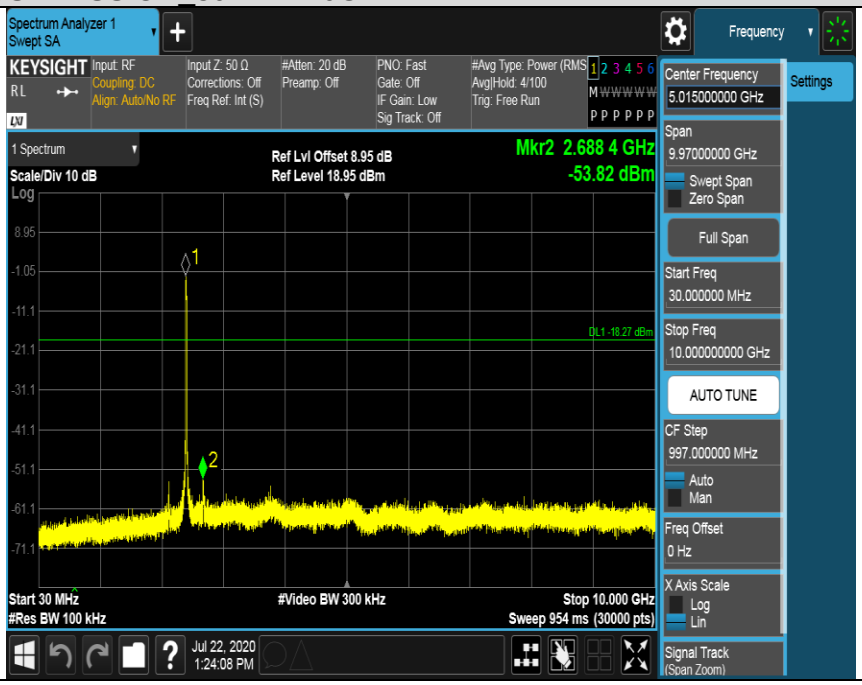
Test Mode	Channel	Verdict
11n HT20	LCH	PASS

Pref test Plot

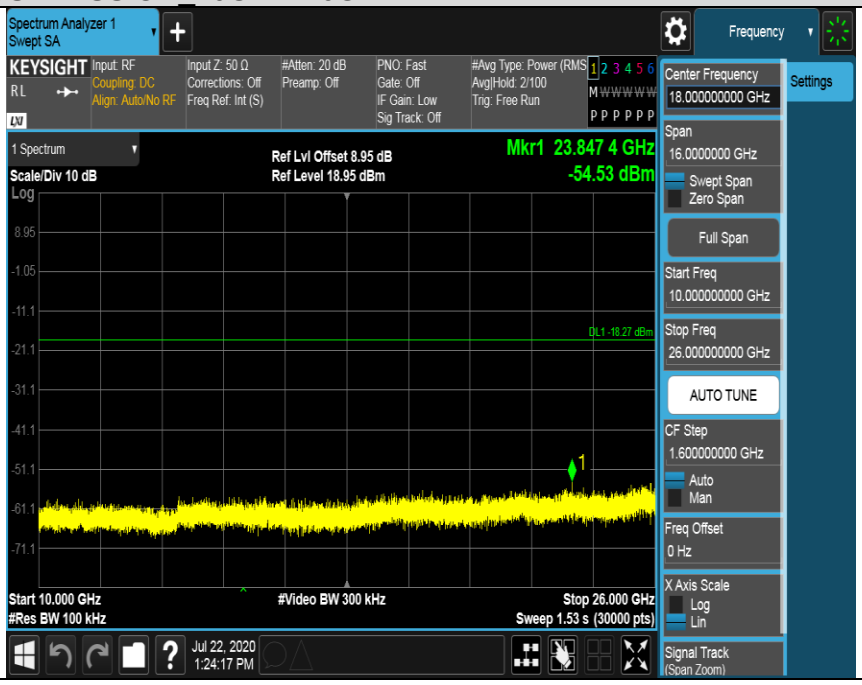
LCH SPURIOUS EMISSION


Puw test Plot

LCH SPURIOUS EMISSION_30MHz~10GHz



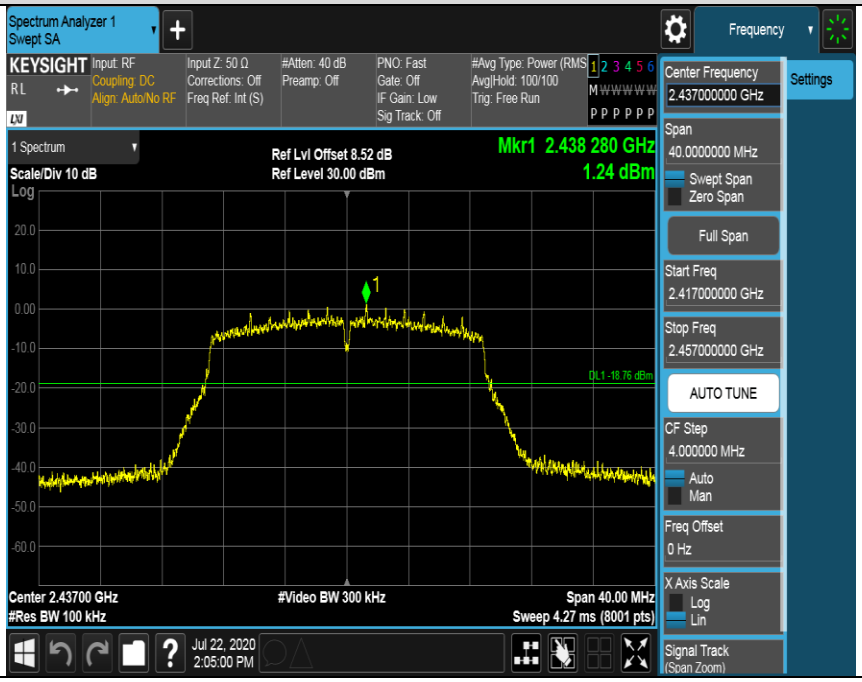
LCH SPURIOUS EMISSION_10GHz~26GHz



Test Mode	Channel	Verdict
11n HT20	MCH	PASS

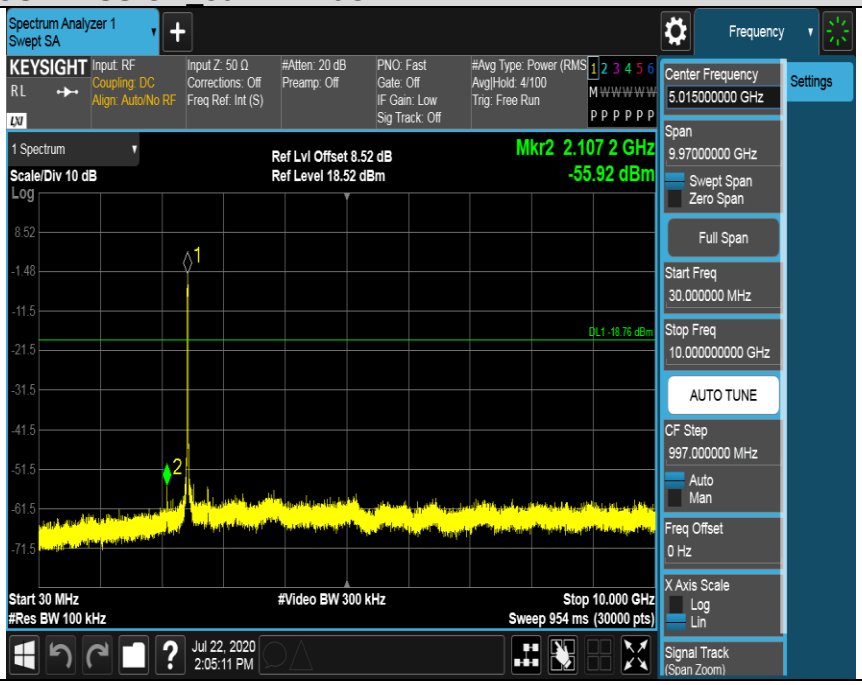
Pref test Plot

MCH SPURIOUS EMISSION

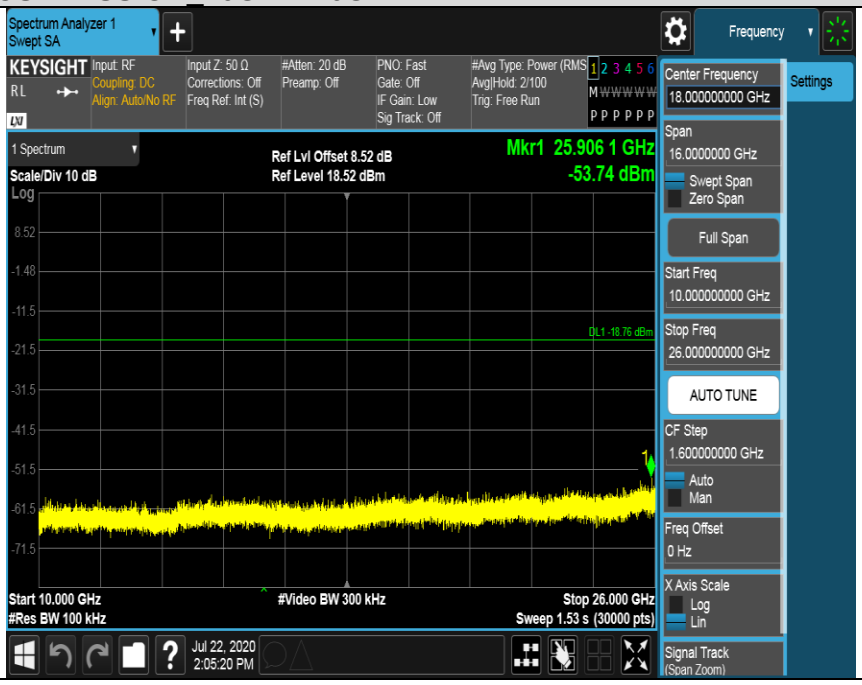


Puw test Plot

MCH SPURIOUS EMISSION_30MHz~10GHz



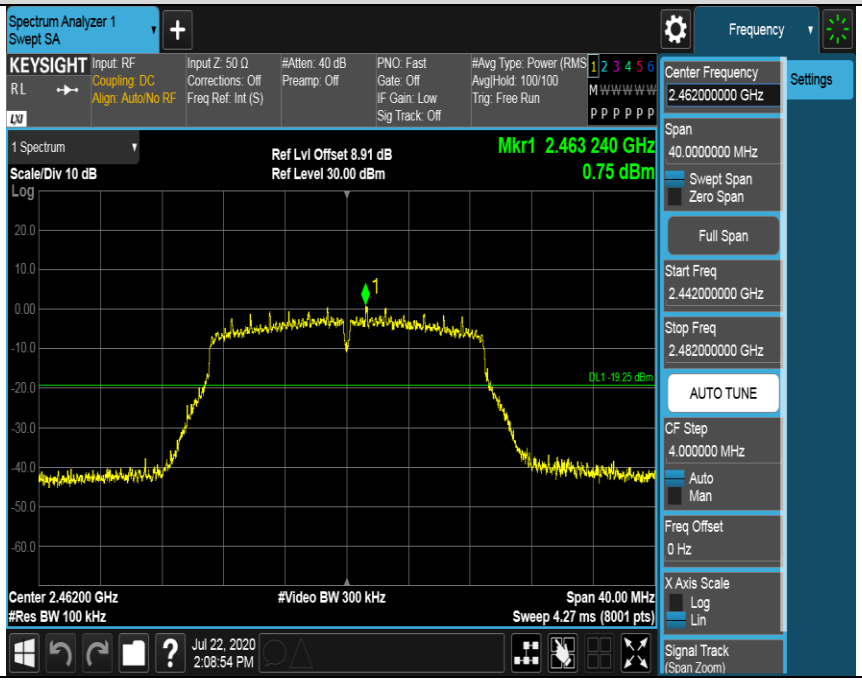
MCH SPURIOUS EMISSION_10GHz~26GHz



Test Mode	Channel	Verdict
11n HT20	HCH	PASS

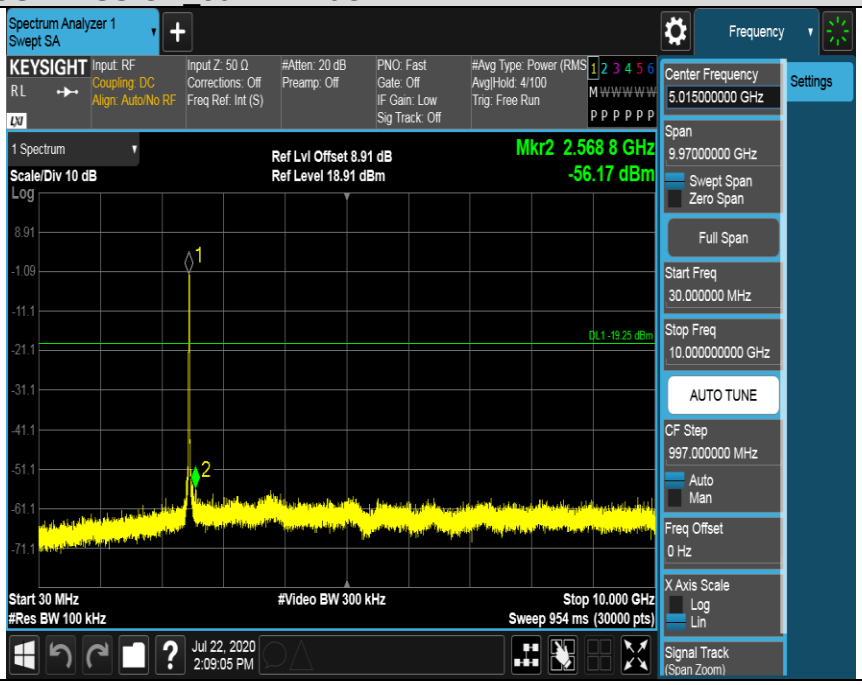
Pref test Plot

HCH SPURIOUS EMISSION

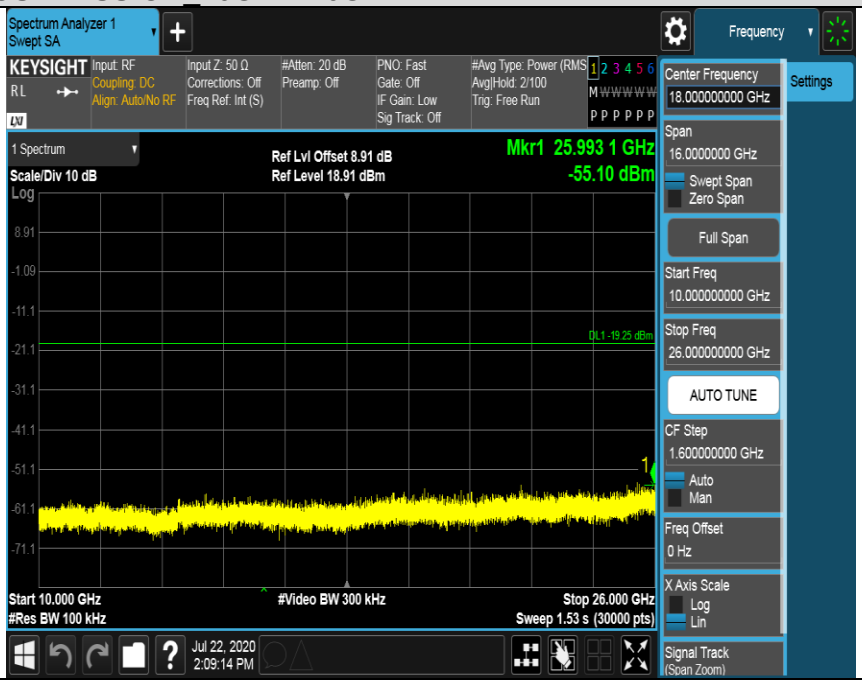


Puw test Plot

HCH SPURIOUS EMISSION_30MHz~10GHz



HCH SPURIOUS EMISSION_10GHz~26GHz



7.6. RADIATED TEST RESULTS

7.6.1. LIMITS AND PROCEDURE

LIMITS

Please refer to FCC §15.205 and §15.209

Please refer to FCC KDB 558074

Radiation Disturbance Test Limit for FCC (Class B)(9KHz-1GHz)

Frequency (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
960~1000	500	3

Note: 1) At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

(2) At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). This paragraph (f) shall not apply to Access BPL devices operating below 30 MHz.

Radiation Disturbance Test Limit for FCC (Above 1G)

Frequency (MHz)	dB(uV/m) (at 3 meters)	
	Peak	Average
Above 1000	74	54

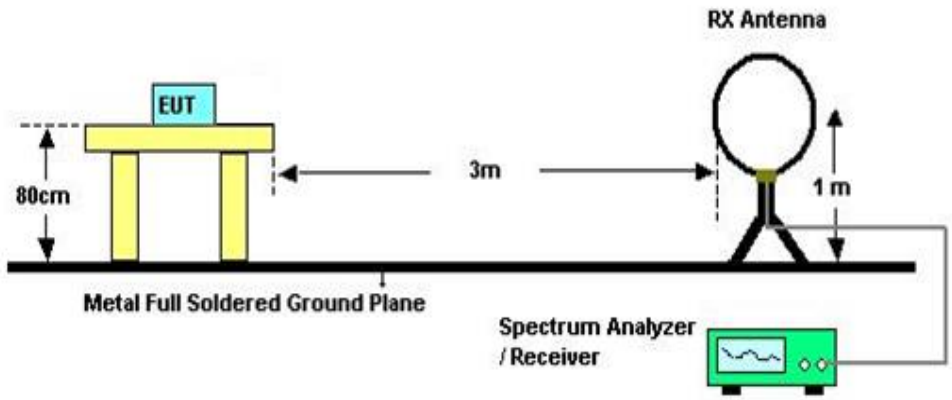
Restricted bands of operation

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
[1]0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	([2])
13.36-13.41			

Note: [1]Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.
[2]Above 38.6c

TEST SETUP AND PROCEDURE

Below 30MHz



The setting of the spectrum analyser

RBW	200Hz (From 9kHz to 0.15MHz)/ 9KHz (From 0.15MHz to 30MHz)
VBW	200Hz (From 9kHz to 0.15MHz)/ 9KHz (From 0.15MHz to 30MHz)
Sweep	Auto
Detector	Peak/QP/ Average
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013

2. The EUT was arranged to its worst case and then turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both Horizontal, Face-on and Face-off polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 0.8 meter above ground.

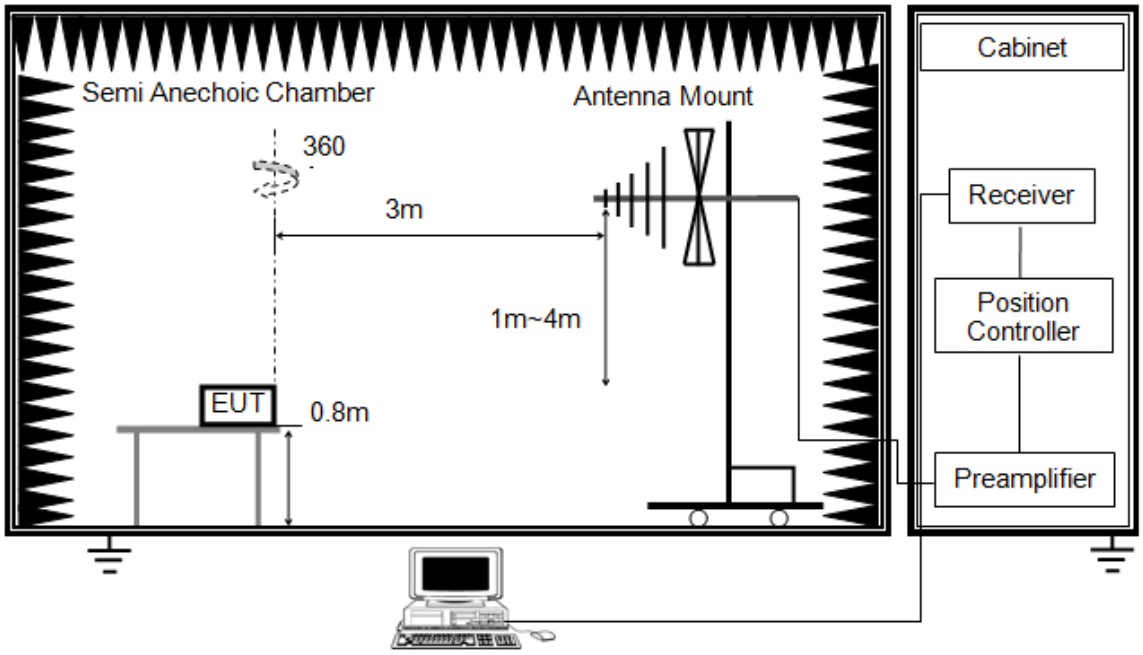
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a 1m height antenna tower.

5. The radiated emission limits are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector

6. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

7. For the actual test configuration, please refer to the related item in this test report (Photographs of the Test Configuration)

Below 1G



The setting of the spectrum analyser

RBW	120K
VBW	300K
Sweep	Auto
Detector	Peak/QP
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013.

2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

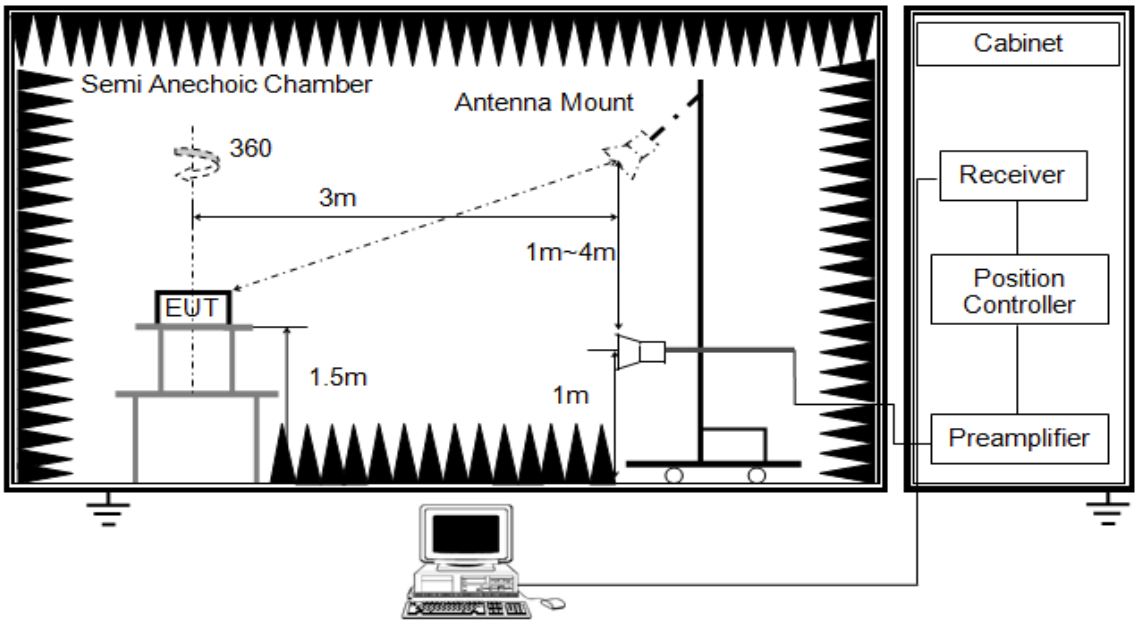
3. The EUT was placed on a turntable with 0.8 meter above ground.

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

5. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

6. For the actual test configuration, please refer to the related Item in this test report (Photographs of the Test Configuration)

ABOVE 1G



The setting of the spectrum analyser

RBW	1M
VBW	PEAK:3M AVG: See note6
Sweep	Auto
Detector	Peak/Average
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013.

2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 1.5m above ground.

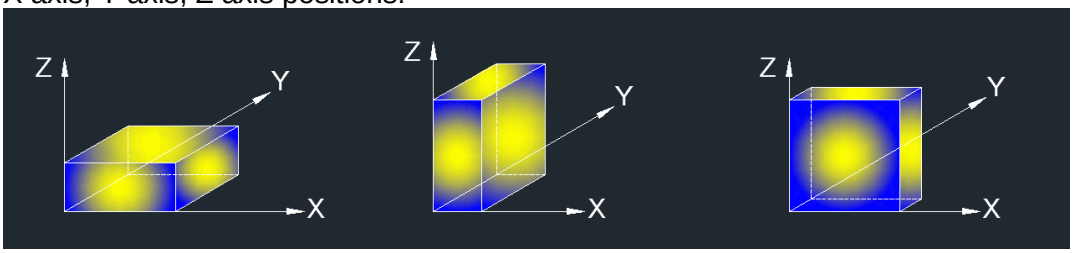
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

5. For measurement above 1GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.

6. For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with set VBW ≤RBW/100, but not less than list in section7.1 with average detector for final VBW setting , max hold to be run for at least 50 traces for average measurements.

8. For the actual test configuration, please refer to the related item in this test report (Photographs of the Test Configuration)

X axis, Y axis, Z axis positions:



Note : For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worst case (Z axis) data recorded in the report.

7.6.2. TEST ENVIRONMENT

Temperature	22°C	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	AC 120V

7.6.3. RESTRICTED BANDEDGE

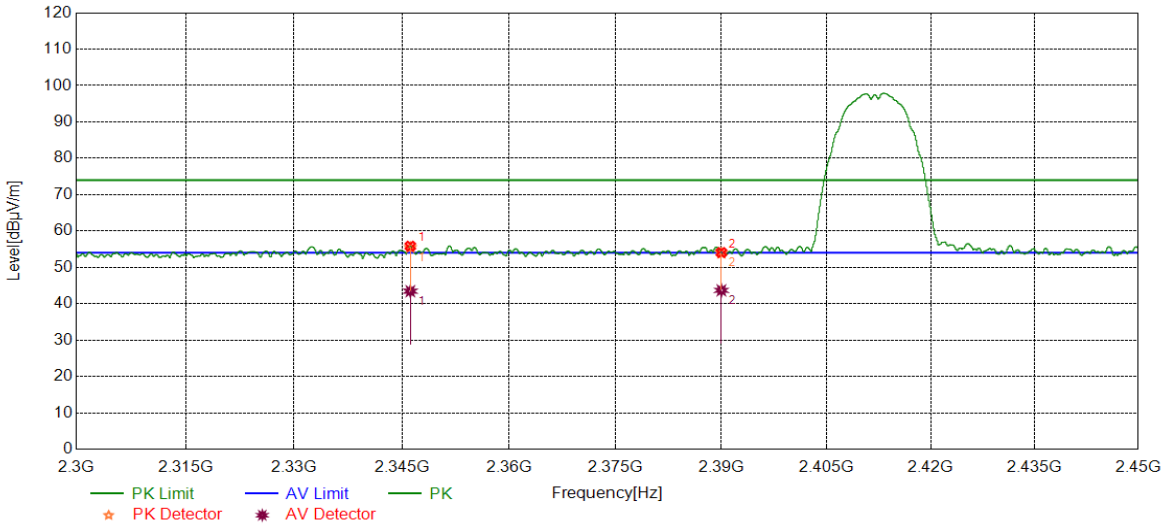
Test Result Table

Test Mode	Channel	Puw(dBm)	Verdict
11B	LCH	<Limit	PASS
	MCH	<Limit	PASS
	HCH	<Limit	PASS
11G	LCH	<Limit	PASS
	MCH	<Limit	PASS
	HCH	<Limit	PASS
11n HT20	LCH	<Limit	PASS
	MCH	<Limit	PASS
	HCH	<Limit	PASS

Remark:
1) Pre-testing both antenna1 and antenna2, and find the data of antenna 1 which is worse case, so only the data of antenna 1 is included in this test report.
2) For this product, it has two antennas, antenna1 and antenna2, but the ant1 and ant2 can't transmitter at the same time under all test modes. That's this product not support MIMO function, just support diversity function.

Test Graphs:

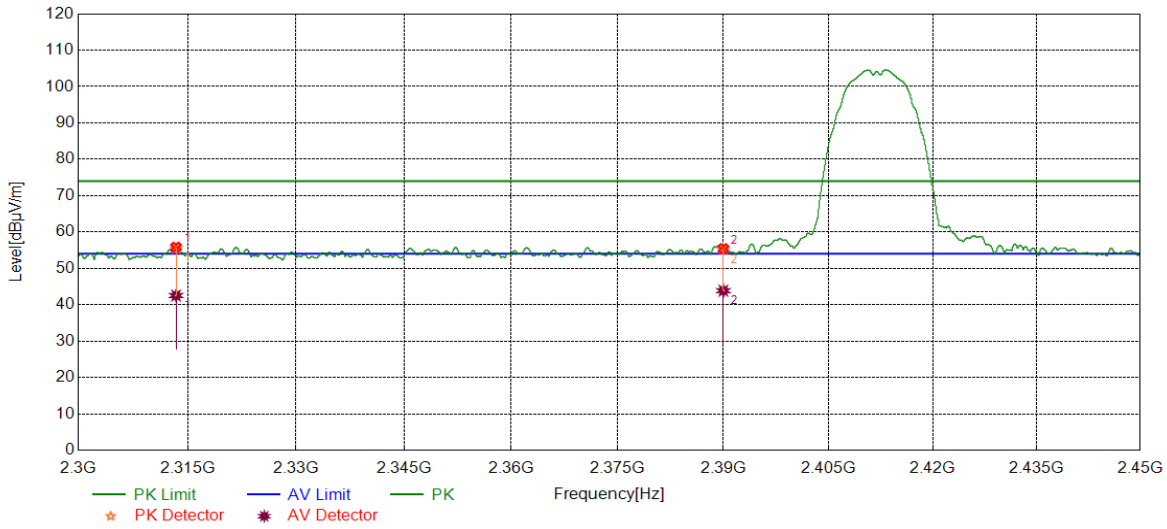
Test Mode	Channel	Polarization	Verdict
11B	LCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	2346.1683	42.49	13.35	55.84	74.00	-18.16	peak
		30.10	13.35	43.45	54.00	-10.55	average
2	2390.0000	40.34	13.75	54.09	74.00	-19.91	peak
		29.93	13.75	43.68	54.00	-10.32	average

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
3. Measurement = Reading Level + Correct Factor.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

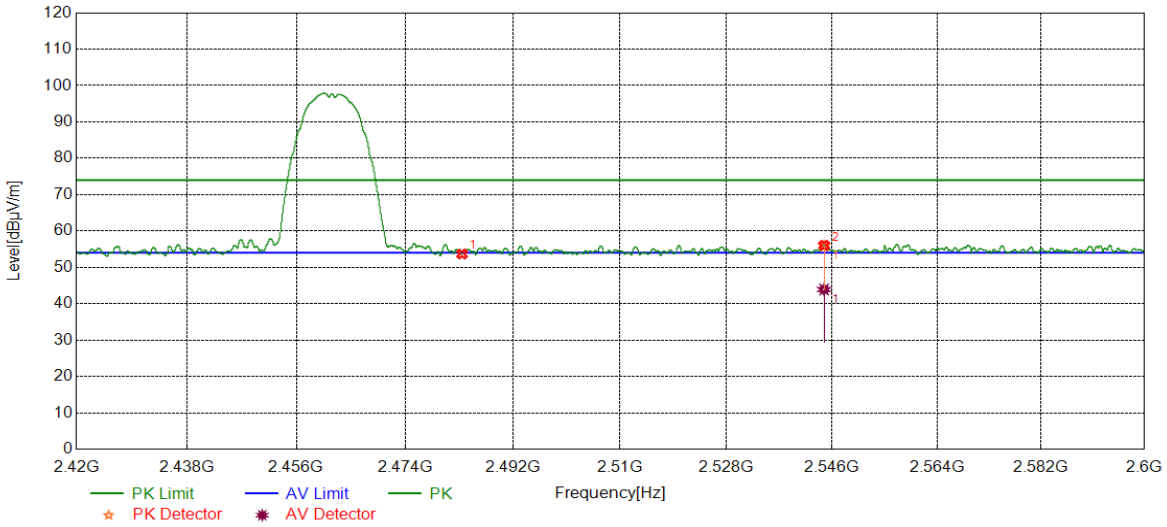
Test Mode	Channel	Polarization	Verdict
11B	LCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	2313.4079	42.87	12.96	55.83	74.00	-18.17	peak
		29.56	12.96	42.52	54.00	-11.48	average
2	2390.0000	41.68	13.75	55.43	74.00	-18.57	peak
		30.11	13.75	43.86	54.00	-10.14	average

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
3. Measurement = Reading Level + Correct Factor.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

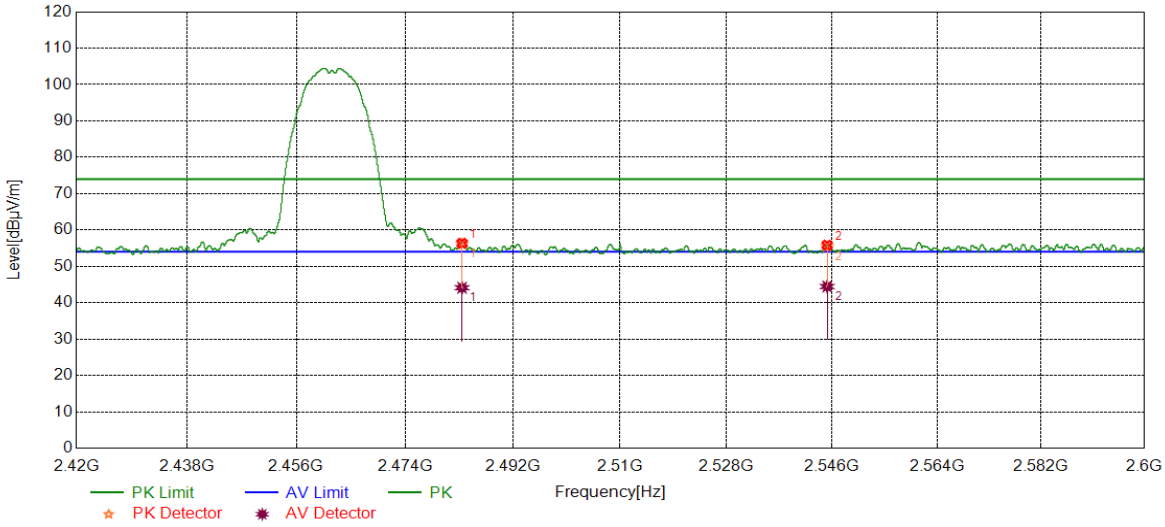
Test Mode	Channel	Polarization	Verdict
11B	HCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.5000	40.17	13.51	53.68	74.00	-20.32	peak
2	2544.6265	42.13	13.91	56.04	74.00	-17.96	peak
		30.00	13.91	43.91	54.00	-10.09	average

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
3. Measurement = Reading Level + Correct Factor.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

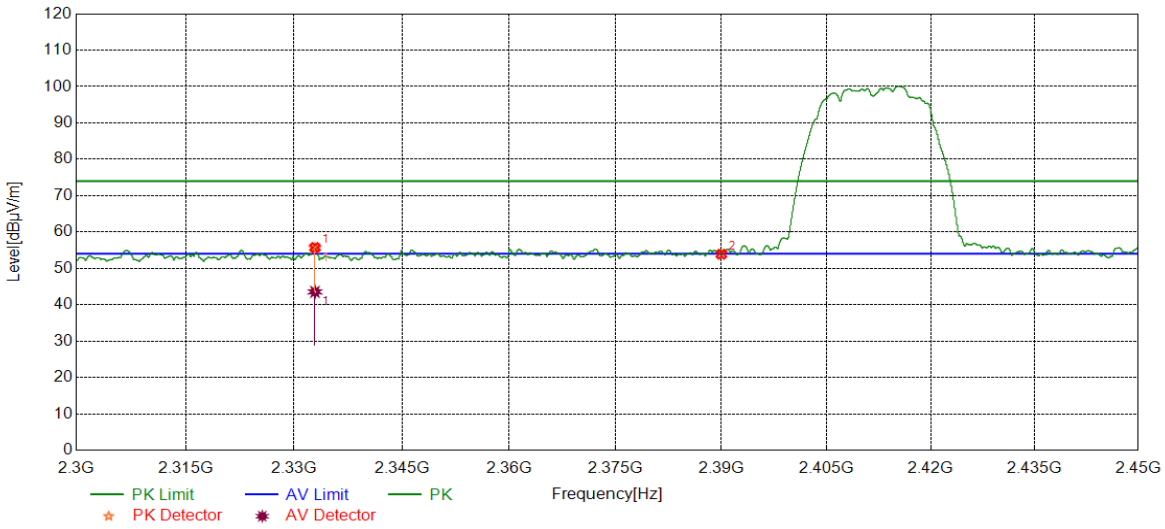
Test Mode	Channel	Polarization	Verdict
11B	HCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.5000	42.86	13.51	56.37	74.00	-17.63	peak
		30.61	13.51	44.12	54.00	-9.88	average
2	2545.1485	41.93	13.91	55.84	74.00	-18.16	peak
		30.55	13.91	44.46	54.00	-9.54	average

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
3. Measurement = Reading Level + Correct Factor.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

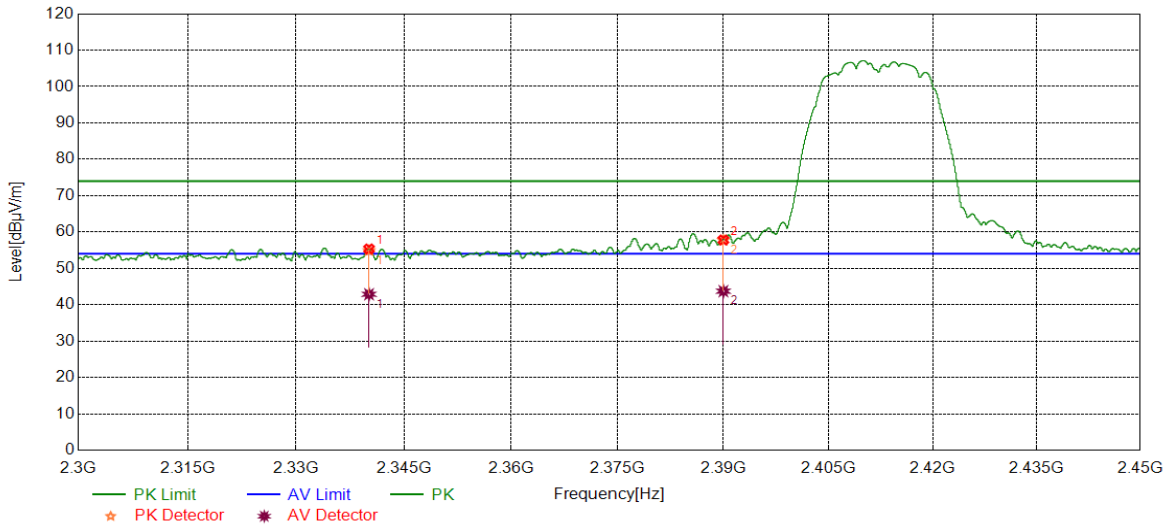
Test Mode	Channel	Polarization	Verdict
11G	LCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	2332.8916	42.52	13.20	55.72	74.00	-18.28	peak
		30.34	13.20	43.54	54.00	-10.46	average
2	2390.0000	40.15	13.75	53.90	74.00	-20.10	peak

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
3. Measurement = Reading Level + Correct Factor.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

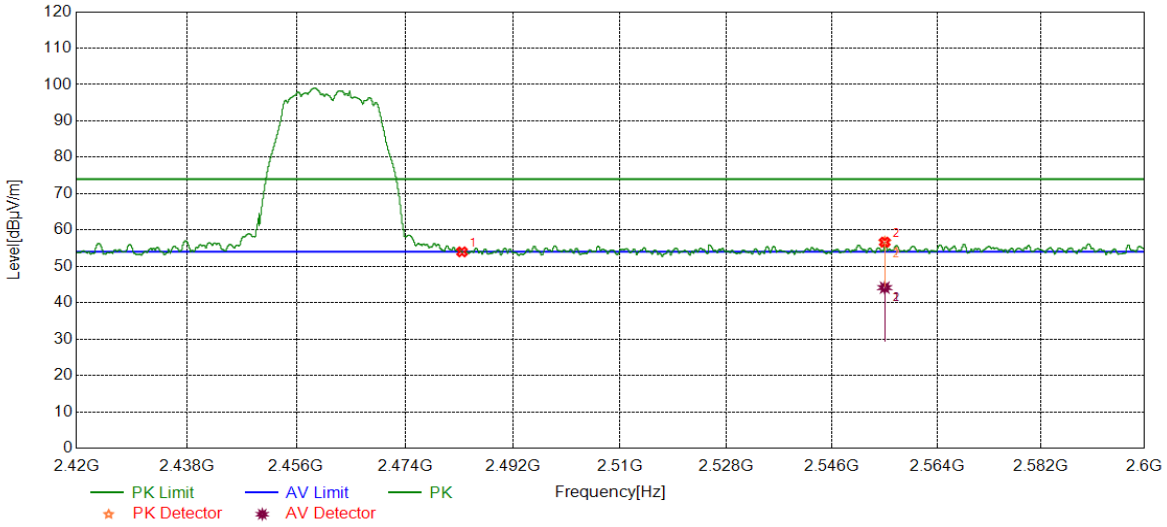
Test Mode	Channel	Polarization	Verdict
11G	LCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	2340.1300	42.06	13.28	55.34	74.00	-18.66	peak
		29.60	13.28	42.88	54.00	-11.12	average
2	2390.0000	44.06	13.75	57.81	74.00	-16.19	peak
		29.98	13.75	43.73	54.00	-10.27	average

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
3. Measurement = Reading Level + Correct Factor.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

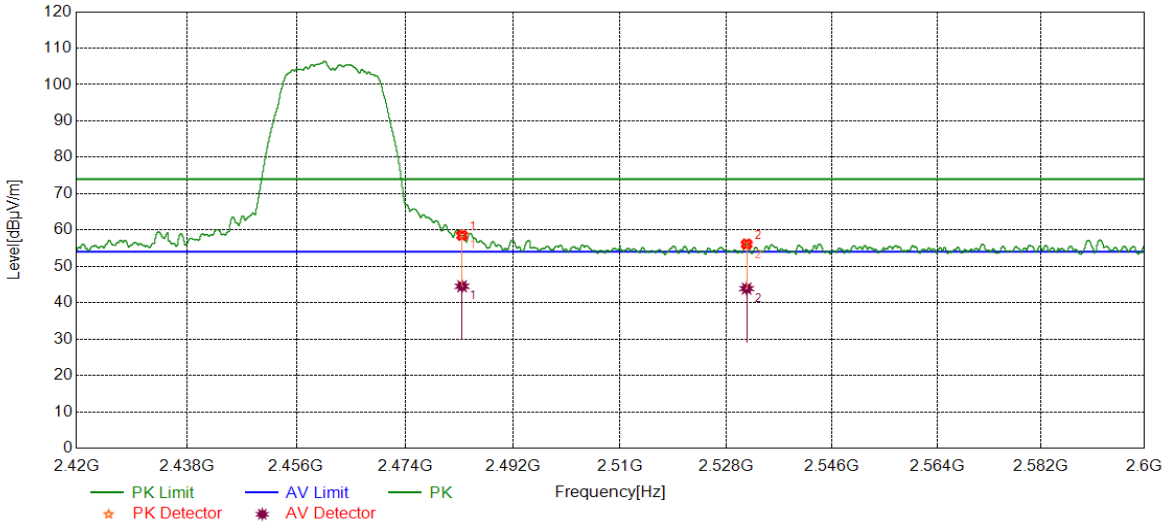
Test Mode	Channel	Polarization	Verdict
11G	HCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.5000	40.48	13.51	53.99	74.00	-20.01	peak
2	2555.0135	42.69	13.97	56.66	74.00	-17.34	peak
		30.22	13.97	44.19	54.00	-9.81	average

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
3. Measurement = Reading Level + Correct Factor.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

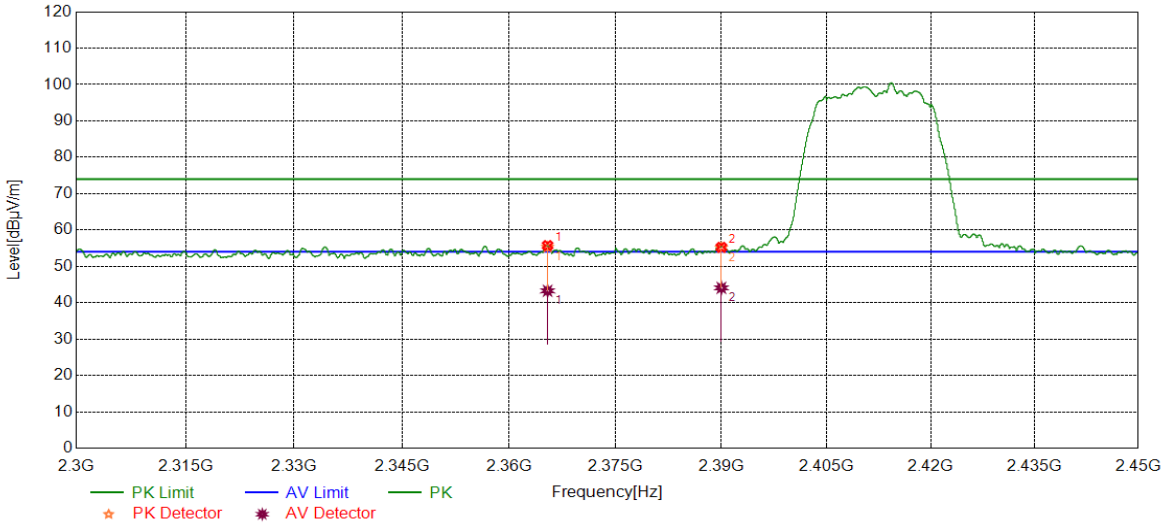
Test Mode	Channel	Polarization	Verdict
11G	HCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.5000	45.02	13.51	58.53	74.00	-15.47	peak
		31.02	13.51	44.53	54.00	-9.47	average
2	2531.4311	42.31	13.84	56.15	74.00	-17.85	peak
		30.04	13.84	43.88	54.00	-10.12	average

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
3. Measurement = Reading Level + Correct Factor.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

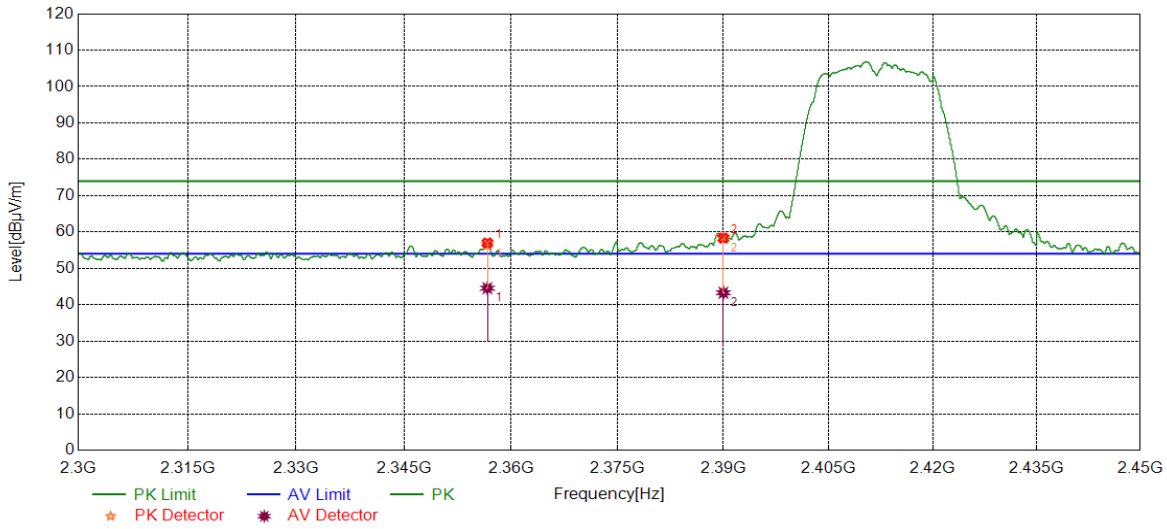
Test Mode	Channel	Polarization	Verdict
11n HT20	LCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	2365.4082	42.24	13.50	55.74	74.00	-18.26	peak
		29.78	13.50	43.28	54.00	-10.72	average
2	2390.0000	41.51	13.75	55.26	74.00	-18.74	peak
		30.34	13.75	44.09	54.00	-9.91	average

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
3. Measurement = Reading Level + Correct Factor.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

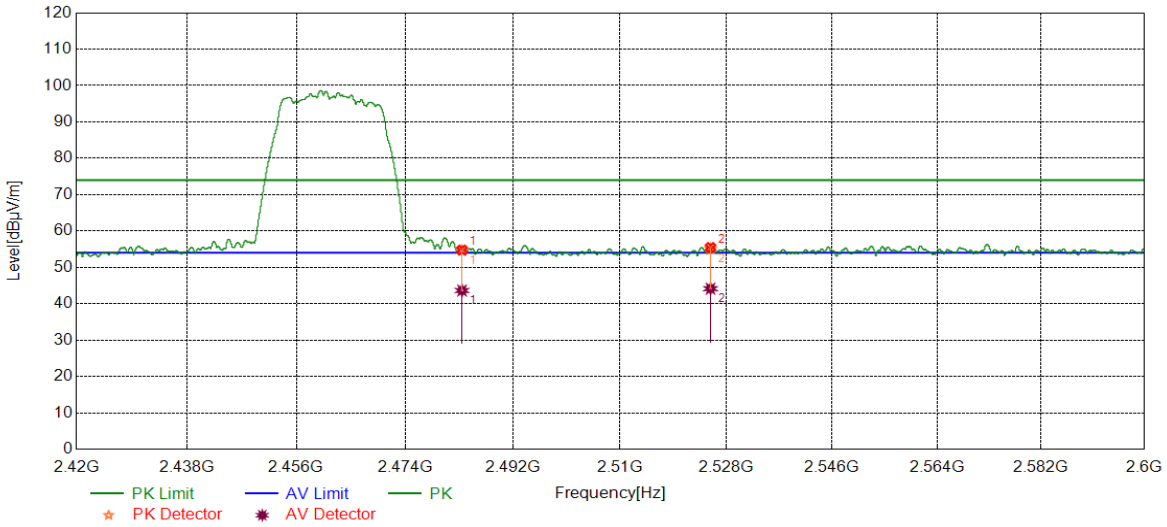
Test Mode	Channel	Polarization	Verdict
11n HT20	LCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	2356.6696	43.53	13.45	56.98	74.00	-17.02	peak
		31.10	13.45	44.55	54.00	-9.45	average
2	2390.0000	44.59	13.75	58.34	74.00	-15.66	peak
		29.54	13.75	43.29	54.00	-10.71	average

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
3. Measurement = Reading Level + Correct Factor.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

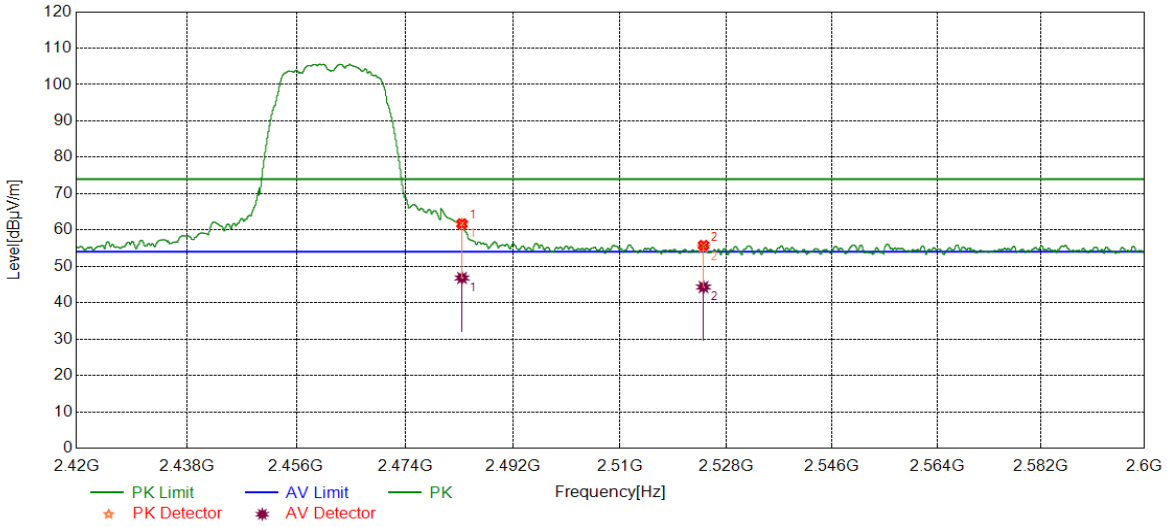
Test Mode	Channel	Polarization	Verdict
11n HT20	HCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.5000	41.25	13.51	54.76	74.00	-19.24	peak
		30.13	13.51	43.64	54.00	-10.36	average
2	2525.2925	41.65	13.81	55.46	74.00	-18.54	peak
		30.33	13.81	44.14	54.00	-9.86	average

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
3. Measurement = Reading Level + Correct Factor.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Test Mode	Channel	Polarization	Verdict
11n HT20	HCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.5000	48.21	13.51	61.72	74.00	-12.28	peak
		33.32	13.50	46.82	54.00	-7.18	average
2	2524.1044	41.98	13.80	55.78	74.00	-18.22	peak
		30.51	13.80	44.31	54.00	-9.69	average

Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
3. Measurement = Reading Level + Correct Factor.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

7.6.4. SPURIOUS EMISSIONS

Test Result Table:
1) For 1GHz~18GHz

Test Mode	Channel	Puw(dBm)	Verdict
11B	LCH	<Limit	PASS
	MCH	<Limit	PASS
	HCH	<Limit	PASS
11G	LCH	<Limit	PASS
	MCH	<Limit	PASS
	HCH	<Limit	PASS
11n HT20	LCH	<Limit	PASS
	MCH	<Limit	PASS
	HCH	<Limit	PASS

Remark: Pre-testing both antenna1 and antenna2, and find the data of antenna 1 which is worse case, so only the data of antenna 1 is included in this test report.

2) For 9KHz~30MHz

Test Mode	Channel	Puw(dBm)	Verdict
11n HT20	HCH	<Limit	PASS

Remark:
1) Through pre-testing all the test modes and test channels, but only the data of the worst case is included in this test report.
2) Pre-testing both antenna1 and antenna2, and find the data of antenna 1 which is worse case, so only the data of antenna 1 is included in this test report.

3) For 30MHz~1GHz

Test Mode	Channel	Puw(dBm)	Verdict
11n HT20	HCH	<Limit	PASS

Remark:
1) Through pre-testing all the test modes and test channels, but only the data of the worst case is included in this test report.
2) Pre-testing both antenna1 and antenna2, and find the data of antenna 1 which is worse case, so only the data of antenna 1 is included in this test report.

4) For 18GHz~26.5GHz

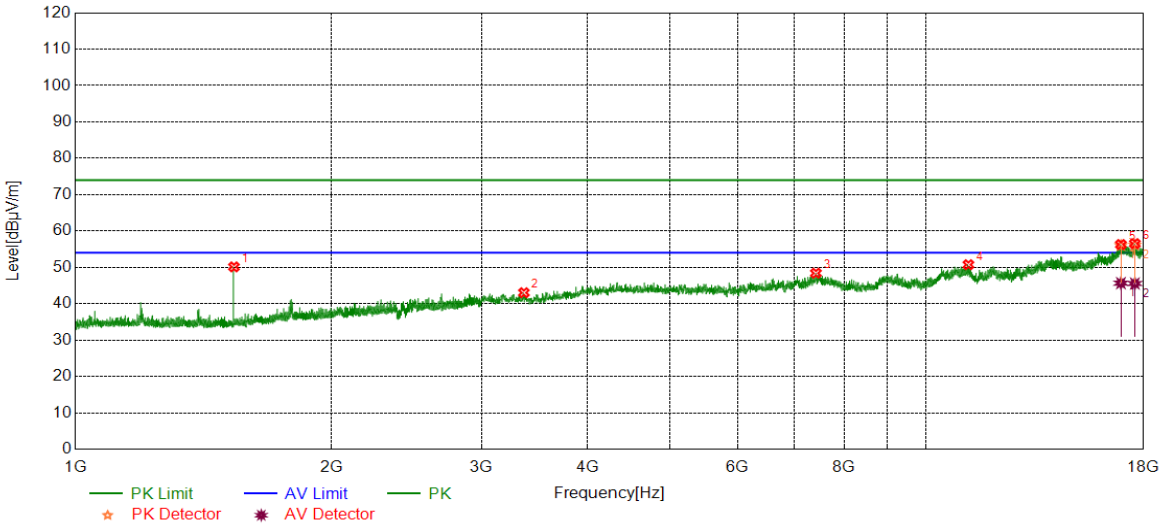
Test Mode	Channel	Puw(dBm)	Verdict
11n HT20	HCH	<Limit	PASS

Remark:
1) Through pre-testing all the test modes and test channels, but only the data of the worst case is included in this test report.
2) Pre-testing both antenna1 and antenna2, and find the data of antenna 1 which is worse case, so only the data of antenna 1 is included in this test report.

Part I: 1GHz~18GHz

HARMONICS AND SPURIOUS EMISSIONS

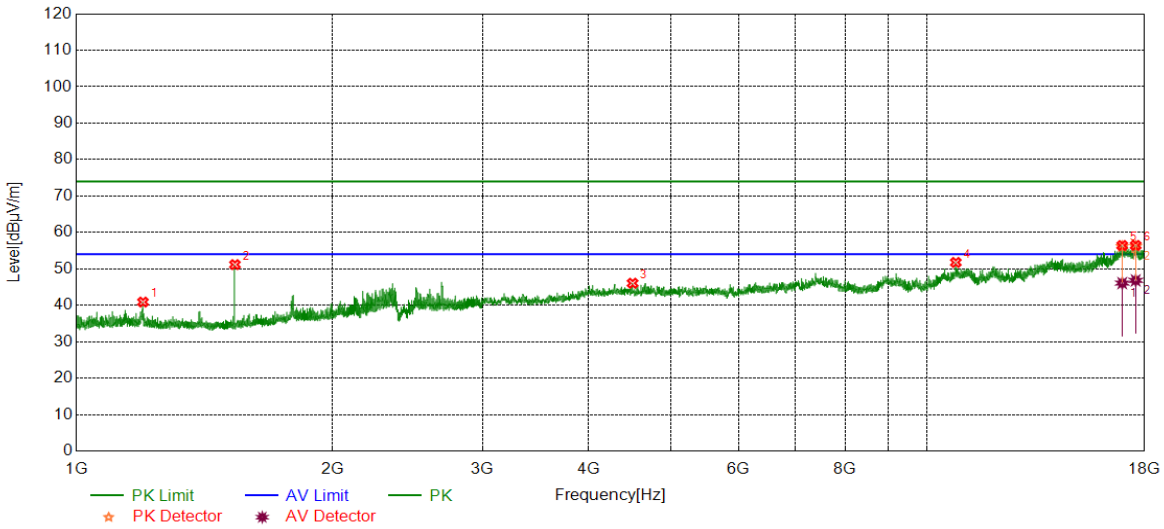
Test Mode	Channel	Polarization	Verdict
11B	LCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.8170	55.81	-5.68	50.13	74.00	-23.87	peak
2	3365.6707	41.06	1.97	43.03	74.00	-30.97	peak
3	7416.1770	39.29	9.11	48.40	74.00	-25.60	peak
4	11204.1505	38.42	12.31	50.73	74.00	-23.27	peak
5	16927.3659	37.41	18.87	56.28	74.00	-17.72	peak
		26.79	18.87	45.66	54.00	-8.34	average
6	17578.0723	37.55	18.98	56.53	74.00	-17.47	peak
		26.59	18.98	45.57	54.00	-8.43	average

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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. AVG: VBW refer to section 7.1.
6. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses. The proper operation of the transmitter prior to adding the filter to the measurement chain.
7. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

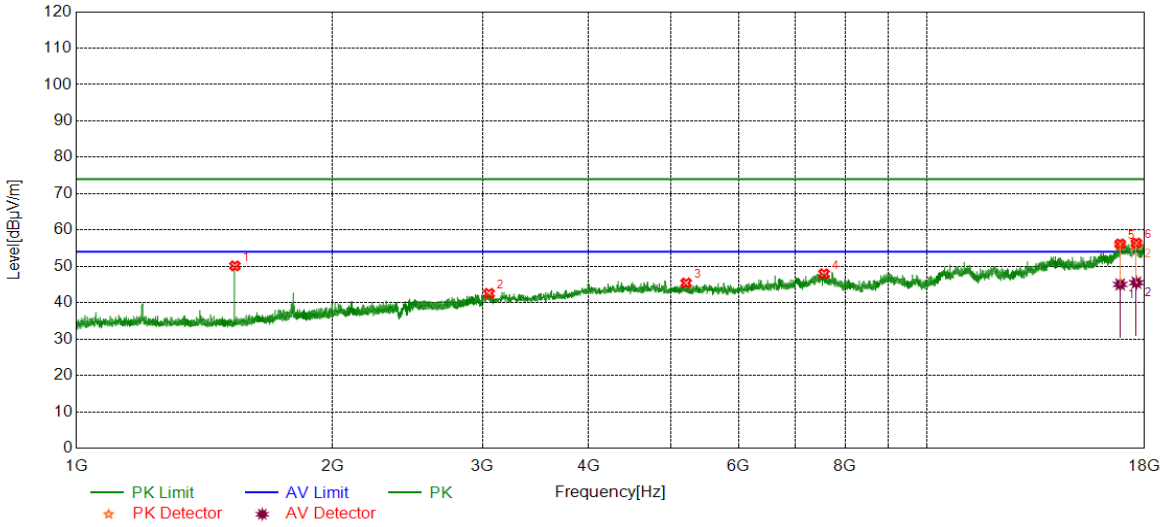
Test Mode	Channel	Polarization	Verdict
11B	LCH	Vertical	PASS



No.	Frequency (MHz)	Reading Level (dBuV/m)	Correct Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1197.5247	46.43	-5.54	40.89	74.00	-33.11	peak
2	1535.8170	56.85	-5.68	51.17	74.00	-22.83	peak
3	4503.9380	41.15	4.91	46.06	74.00	-27.94	peak
4	10799.0999	39.71	12.06	51.77	74.00	-22.23	peak
5	16940.4926	37.02	19.40	56.42	74.00	-17.58	peak
		26.69	19.40	46.09	54.00	-7.91	average
6	17570.5713	37.29	19.15	56.44	74.00	-17.56	peak
		27.69	19.15	46.84	54.00	-7.16	average

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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. AVG: VBW refer to section 7.1.
6. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses. The proper operation of the transmitter prior to adding the filter to the measurement chain.
7. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

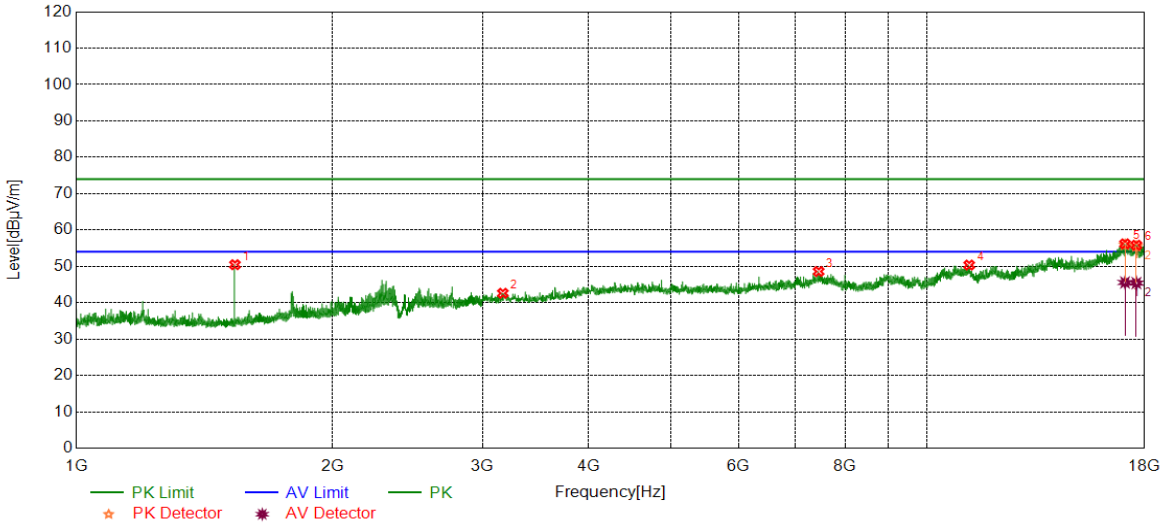
Test Mode	Channel	Polarization	Verdict
11B	MCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.8170	55.81	-5.68	50.13	74.00	-23.87	peak
2	3054.3818	40.42	2.15	42.57	74.00	-31.43	peak
3	5205.2757	40.18	5.24	45.42	74.00	-28.58	peak
4	7560.5701	38.61	9.35	47.96	74.00	-26.04	peak
5	16846.7308	38.17	17.99	56.16	74.00	-17.84	peak
		27.05	17.99	45.04	54.00	-8.96	average
6	17604.3255	37.68	18.72	56.40	74.00	-17.60	peak
		26.79	18.72	45.51	54.00	-8.49	average

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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. AVG: VBW refer to section 7.1.
6. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses. The proper operation of the transmitter prior to adding the filter to the measurement chain.
7. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

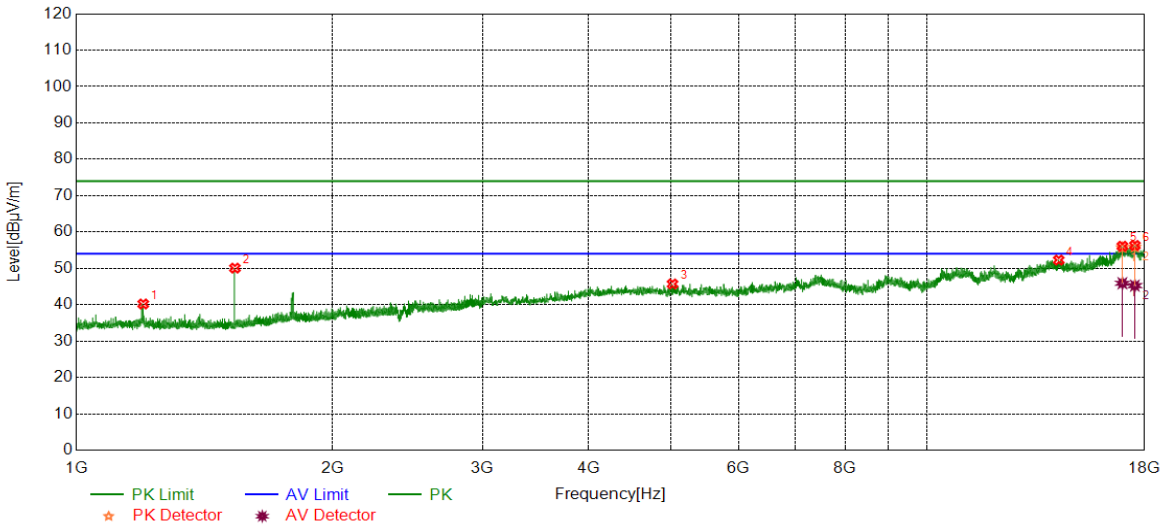
Test Mode	Channel	Polarization	Verdict
11B	MCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.8170	56.14	-5.68	50.46	74.00	-23.54	peak
2	3170.6463	40.60	2.00	42.60	74.00	-31.40	peak
3	7451.8065	39.47	9.12	48.59	74.00	-25.41	peak
4	11198.5248	38.06	12.30	50.36	74.00	-23.64	peak
5	17069.8837	36.71	19.49	56.20	74.00	-17.80	peak
		26.08	19.49	45.57	54.00	-8.43	average
6	17604.3255	37.10	18.72	55.82	74.00	-18.18	peak
		26.68	18.72	45.40	54.00	-8.60	average

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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. AVG: VBW refer to section 7.1.
6. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses. The proper operation of the transmitter prior to adding the filter to the measurement chain.
7. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

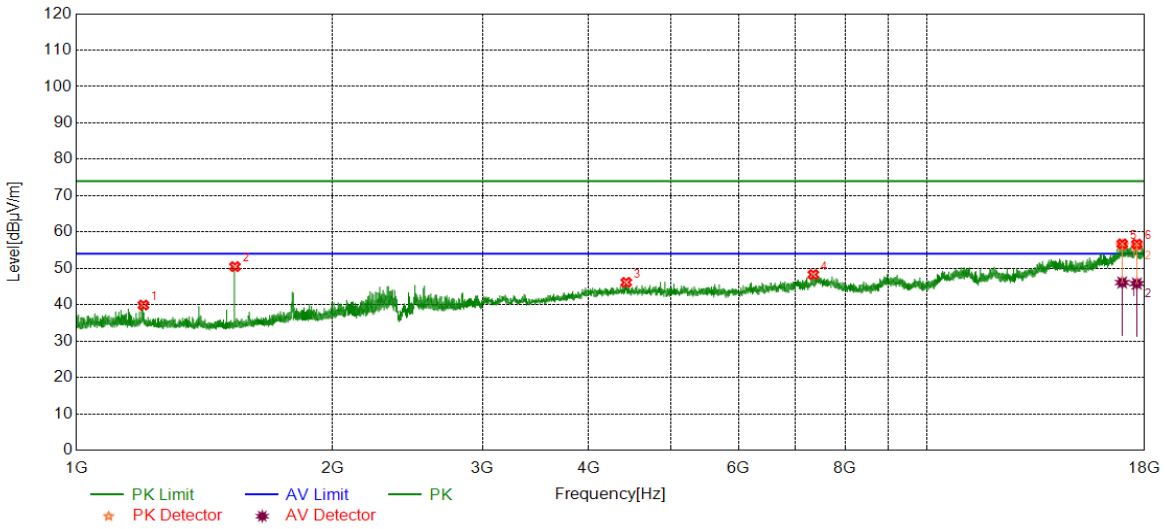
Test Mode	Channel	Polarization	Verdict
11B	HCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1198.2748	45.75	-5.54	40.21	74.00	-33.79	peak
2	1535.8170	55.75	-5.68	50.07	74.00	-23.93	peak
3	5017.7522	40.82	4.88	45.70	74.00	-28.30	peak
4	14268.2835	37.01	15.27	52.28	74.00	-21.72	peak
5	16947.9935	36.83	19.26	56.09	74.00	-17.91	peak
		26.65	19.26	45.91	54.00	-8.09	average
6	17531.1914	38.07	18.24	56.31	74.00	-17.69	peak
		27.01	18.24	45.25	54.00	-8.75	average

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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. AVG: VBW refer to section 7.1.
6. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses. The proper operation of the transmitter prior to adding the filter to the measurement chain.
7. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

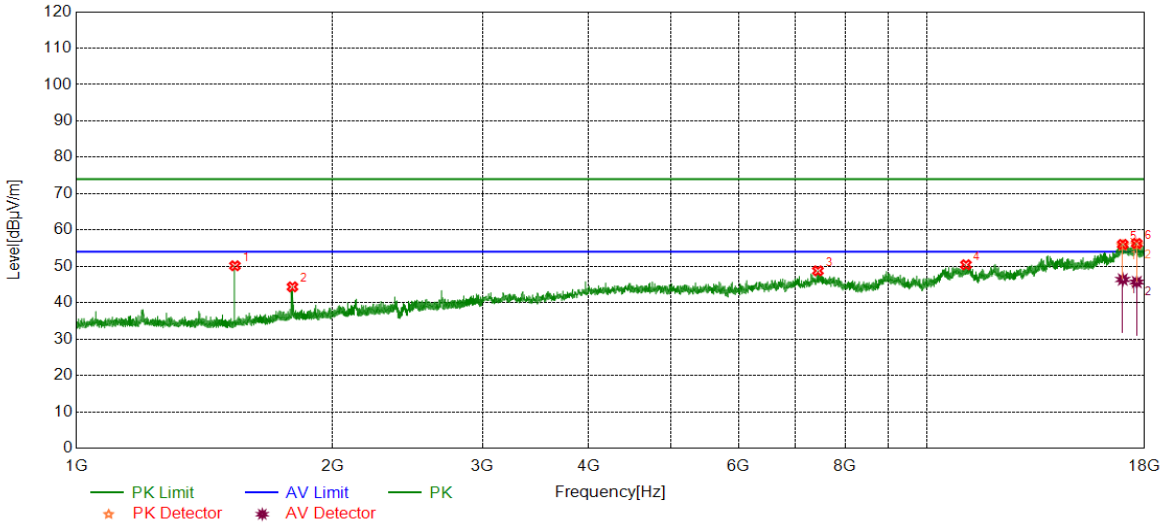
Test Mode	Channel	Polarization	Verdict
11B	HCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1198.7748	45.44	-5.54	39.90	74.00	-34.10	peak
2	1535.8170	56.16	-5.68	50.48	74.00	-23.52	peak
3	4427.0534	41.15	4.99	46.14	74.00	-27.86	peak
4	7344.9181	39.64	8.65	48.29	74.00	-25.71	peak
5	16940.4926	37.34	19.40	56.74	74.00	-17.26	peak
		26.71	19.40	46.11	54.00	-7.89	average
6	17626.8284	37.85	18.82	56.67	74.00	-17.33	peak
		27.00	18.82	45.82	54.00	-8.18	average

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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. AVG: VBW refer to section 7.1.
6. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses. The proper operation of the transmitter prior to adding the filter to the measurement chain.
7. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

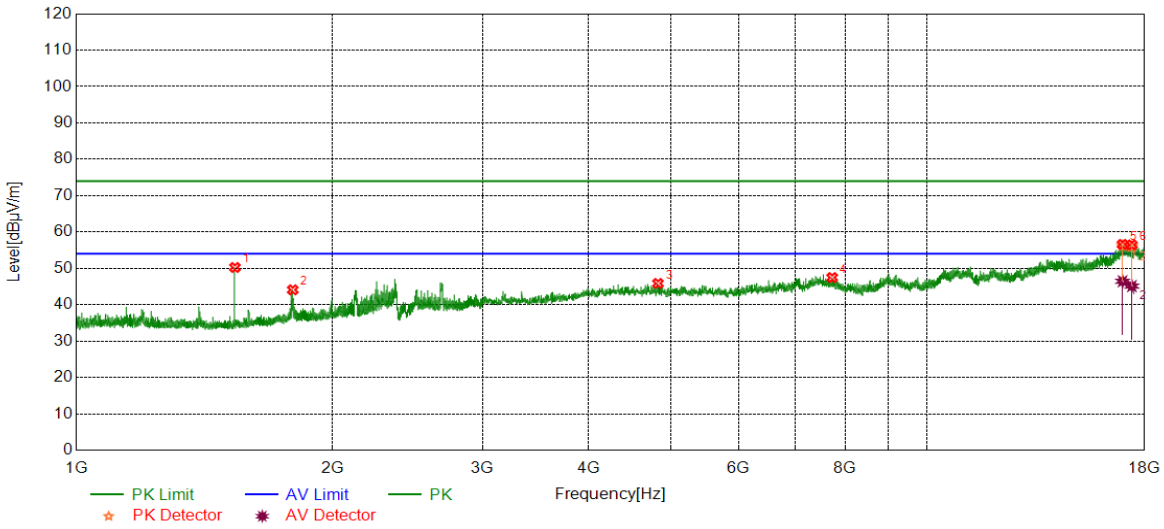
Test Mode	Channel	Polarization	Verdict
11G	LCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.8170	55.84	-5.68	50.16	74.00	-23.84	peak
2	1794.3493	48.30	-3.94	44.36	74.00	-29.64	peak
3	7436.8046	39.62	9.15	48.77	74.00	-25.23	peak
4	11101.0126	37.72	12.72	50.44	74.00	-23.56	peak
5	16964.8706	36.22	19.83	56.05	74.00	-17.95	peak
		26.55	19.83	46.38	54.00	-7.62	average
6	17623.0779	37.54	18.76	56.30	74.00	-17.70	peak
		26.93	18.76	45.69	54.00	-8.31	average

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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. AVG: VBW refer to section 7.1.
6. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses. The proper operation of the transmitter prior to adding the filter to the measurement chain.
7. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

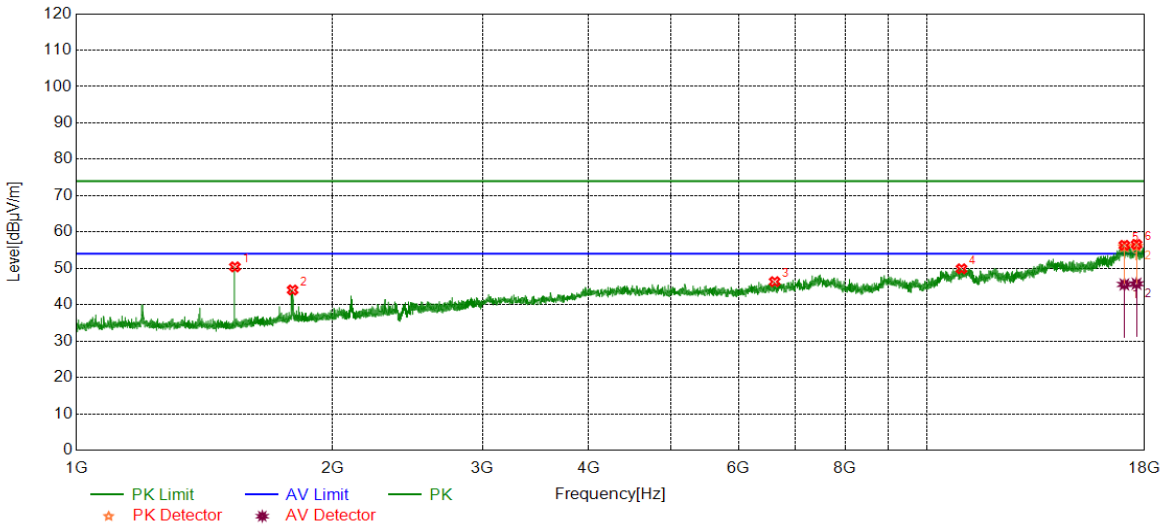
Test Mode	Channel	Polarization	Verdict
11G	LCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.8170	55.93	-5.68	50.25	74.00	-23.75	peak
2	1795.8495	48.02	-3.92	44.10	74.00	-29.90	peak
3	4824.6031	40.92	4.94	45.86	74.00	-28.14	peak
4	7729.3412	38.88	8.59	47.47	74.00	-26.53	peak
5	16955.4944	37.08	19.52	56.60	74.00	-17.40	peak
		26.93	19.52	46.45	54.00	-7.55	average
6	17390.5488	37.67	18.79	56.46	74.00	-17.54	peak
		26.34	18.79	45.13	54.00	-8.87	average

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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. AVG: VBW refer to section 7.1.
6. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses. The proper operation of the transmitter prior to adding the filter to the measurement chain.
7. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

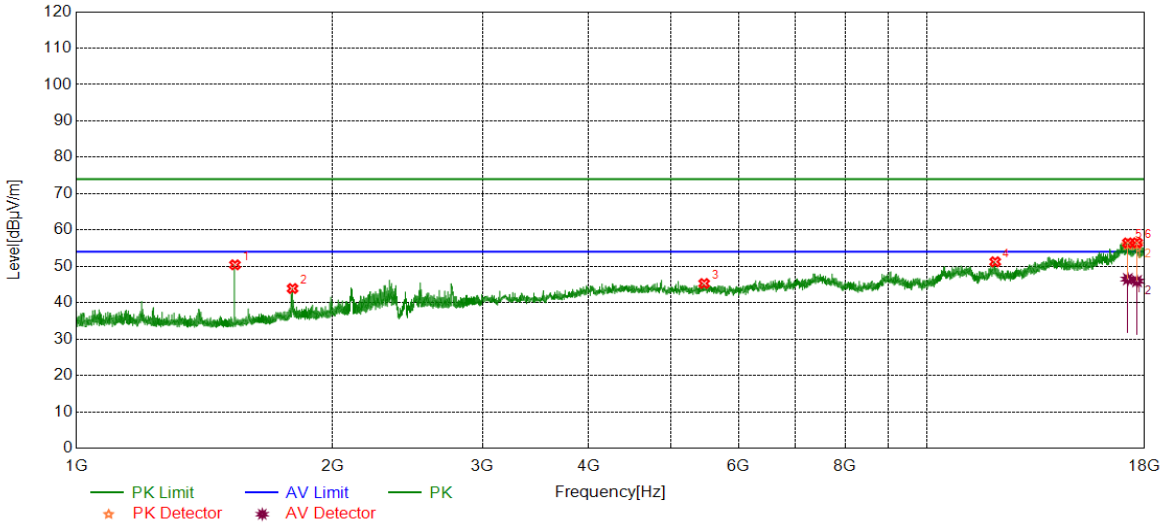
Test Mode	Channel	Polarization	Verdict
11G	MCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.8170	56.09	-5.68	50.41	74.00	-23.59	peak
2	1795.0994	47.98	-3.93	44.05	74.00	-29.95	peak
3	6615.4519	38.29	8.05	46.34	74.00	-27.66	peak
4	10967.8710	37.26	12.62	49.88	74.00	-24.12	peak
5	17039.8800	36.84	19.50	56.34	74.00	-17.66	peak
		26.08	19.50	45.58	54.00	-8.42	average
6	17609.9512	37.85	18.72	56.57	74.00	-17.43	peak
		27.05	18.72	45.77	54.00	-8.23	average

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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. AVG: VBW refer to section 7.1.
6. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses. The proper operation of the transmitter prior to adding the filter to the measurement chain.
7. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

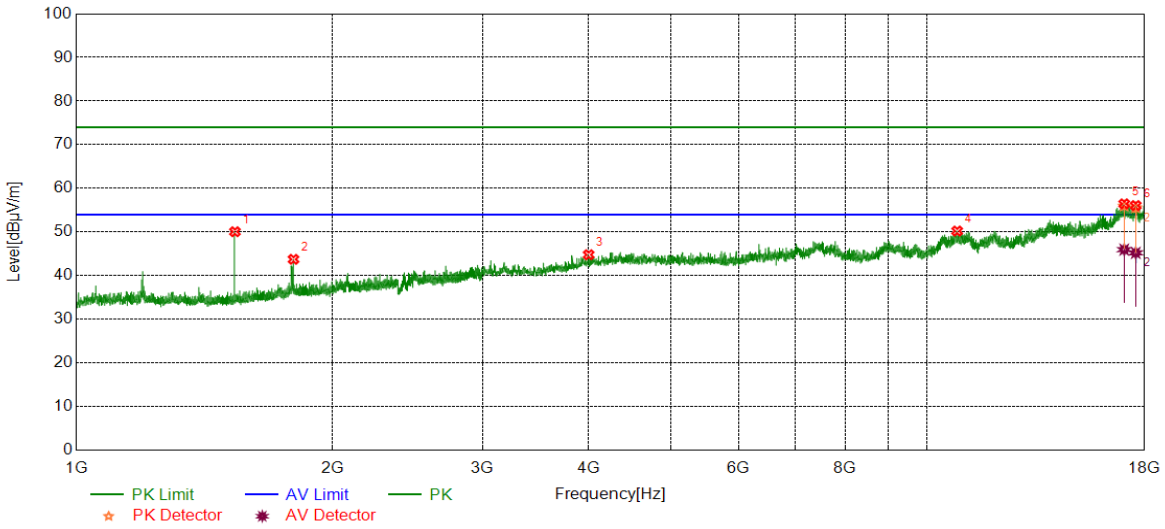
Test Mode	Channel	Polarization	Verdict
11G	MCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1536.0670	56.10	-5.68	50.42	74.00	-23.58	peak
2	1794.8494	47.84	-3.93	43.91	74.00	-30.09	peak
3	5465.9332	39.95	5.34	45.29	74.00	-28.71	peak
4	12014.2518	38.33	12.93	51.26	74.00	-22.74	peak
5	17199.2749	37.71	18.74	56.45	74.00	-17.55	peak
		27.75	18.74	46.49	54.00	-7.51	average
6	17634.3293	37.72	18.76	56.48	74.00	-17.52	peak
		27.18	18.76	45.94	54.00	-8.06	average

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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. AVG: VBW refer to section 7.1.
6. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses. The proper operation of the transmitter prior to adding the filter to the measurement chain.
7. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

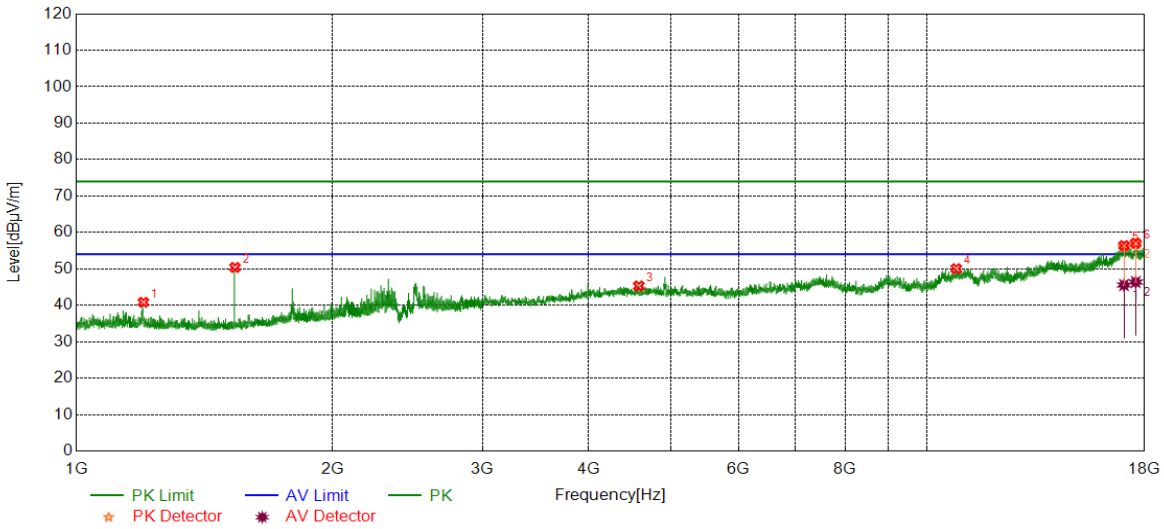
Test Mode	Channel	Polarization	Verdict
11G	HCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.8170	55.74	-5.68	50.06	74.00	-23.94	peak
2	1799.6000	47.62	-3.88	43.74	74.00	-30.26	peak
3	3999.4999	40.54	4.25	44.79	74.00	-29.21	peak
4	10838.4798	38.08	12.14	50.22	74.00	-23.78	peak
5	17032.3790	36.95	19.50	56.45	74.00	-17.55	peak
		26.46	19.50	45.96	54.00	-8.04	average
6	17572.4466	36.95	19.11	56.06	74.00	-17.94	peak
		26.11	19.11	45.22	54.00	-8.78	average

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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. AVG: VBW refer to section 7.1.
6. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses. The proper operation of the transmitter prior to adding the filter to the measurement chain.
7. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

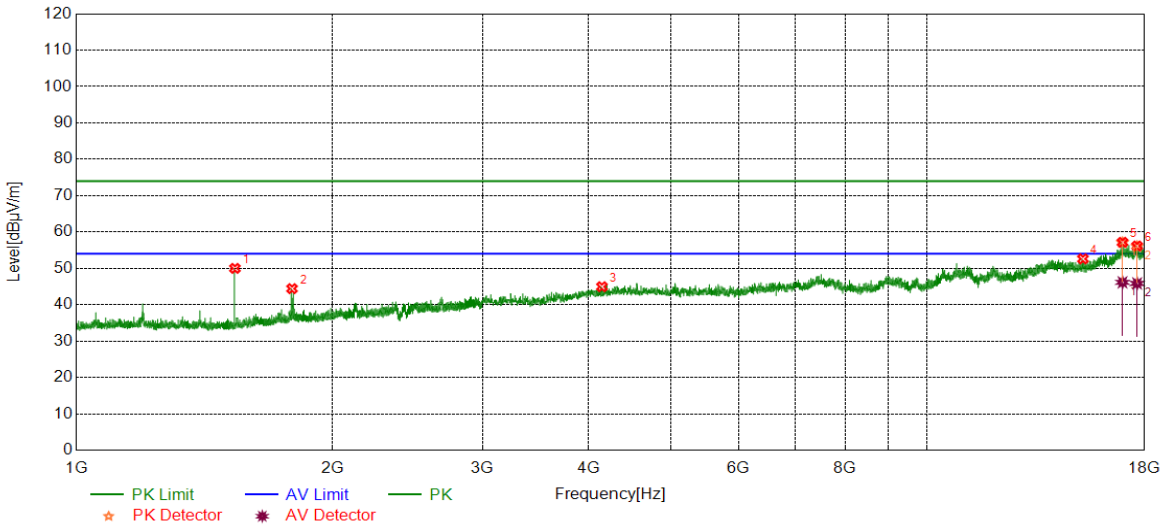
Test Mode	Channel	Polarization	Verdict
11G	HCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1198.7748	46.38	-5.54	40.84	74.00	-33.16	peak
2	1535.8170	56.07	-5.68	50.39	74.00	-23.61	peak
3	4580.8226	40.36	4.94	45.30	74.00	-28.70	peak
4	10812.2265	37.98	12.08	50.06	74.00	-23.94	peak
5	17023.0029	37.05	19.33	56.38	74.00	-17.62	peak
		26.23	19.33	45.56	54.00	-8.44	average
6	17572.4466	37.94	19.11	57.05	74.00	-16.95	peak
		27.27	19.11	46.38	54.00	-7.62	average

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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. AVG: VBW refer to section 7.1.
6. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses. The proper operation of the transmitter prior to adding the filter to the measurement chain.
7. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

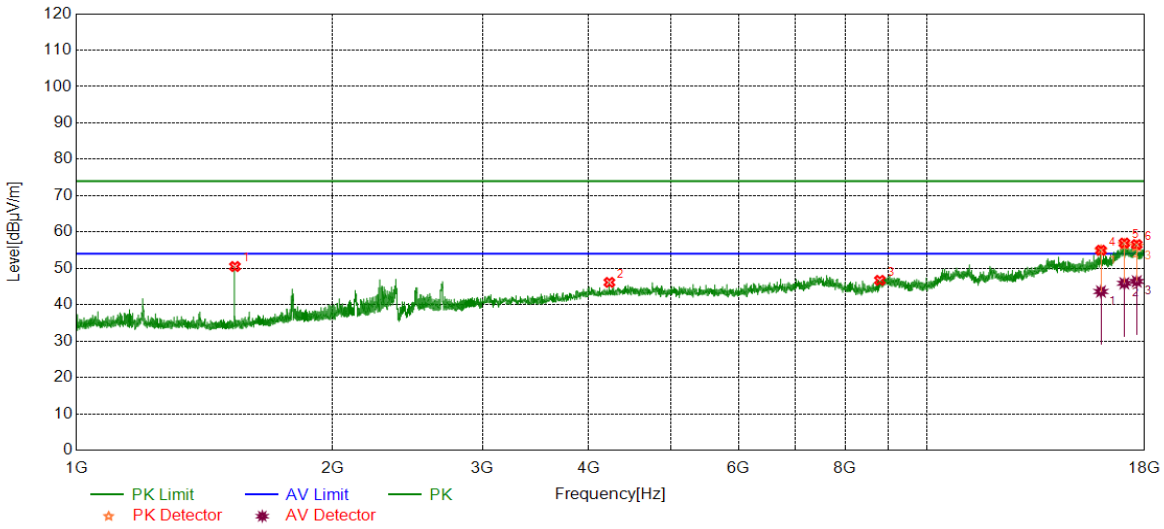
Test Mode	Channel	Polarization	Verdict
11n HT20	LCH	Horizontal	PASS



No.	Frequency (MHz)	Reading Level (dBuV/m)	Correct Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1535.8170	55.68	-5.68	50.00	74.00	-24.00	peak
2	1792.3490	48.38	-3.96	44.42	74.00	-29.58	peak
3	4145.7682	40.43	4.53	44.96	74.00	-29.04	peak
4	15234.0293	37.77	14.84	52.61	74.00	-21.39	peak
5	16953.6192	37.74	19.42	57.16	74.00	-16.84	peak
		26.74	19.42	46.16	54.00	-7.84	average
6	17638.0798	37.50	18.66	56.16	74.00	-17.84	peak
		27.20	18.66	45.86	54.00	-8.14	average

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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. AVG: VBW refer to section 7.1.
6. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses. The proper operation of the transmitter prior to adding the filter to the measurement chain.
7. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

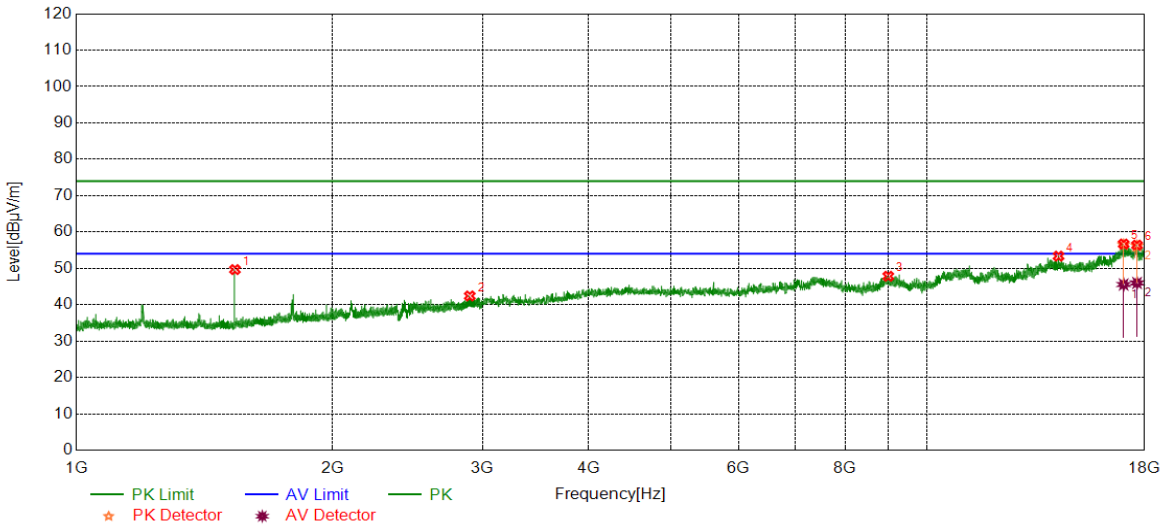
Test Mode	Channel	Polarization	Verdict
11n HT20	LCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.8170	56.19	-5.68	50.51	74.00	-23.49	peak
2	4230.1538	41.59	4.55	46.14	74.00	-27.86	peak
3	8792.5991	38.73	7.98	46.71	74.00	-27.29	peak
4	15993.4992	38.45	16.53	54.98	74.00	-19.02	peak
		27.11	16.53	43.64	54.00	-10.36	average
5	17038.0048	37.46	19.50	56.96	74.00	-17.04	peak
		26.39	19.50	45.89	54.00	-8.11	average
6	17619.3274	37.83	18.71	56.54	74.00	-17.46	peak
		27.71	18.71	46.42	54.00	-7.58	average

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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. AVG: VBW refer to section 7.1.
6. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses. The proper operation of the transmitter prior to adding the filter to the measurement chain.
7. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

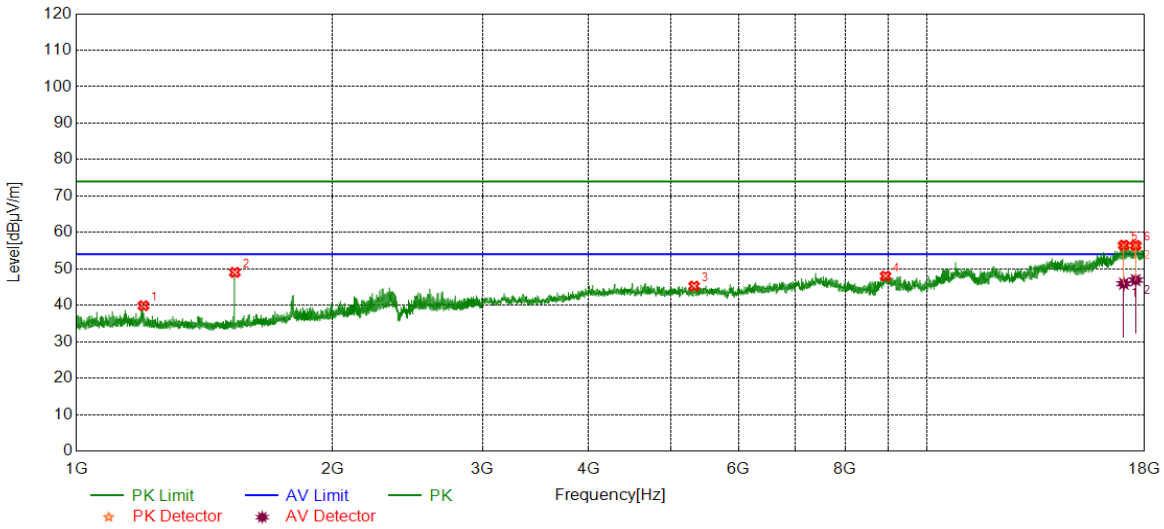
Test Mode	Channel	Polarization	Verdict
11n HT20	MCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.8170	55.34	-5.68	49.66	74.00	-24.34	peak
2	2899.2374	42.07	0.34	42.41	74.00	-31.59	peak
3	8996.9996	38.36	9.47	47.83	74.00	-26.17	peak
4	14260.7826	38.06	15.30	53.36	74.00	-20.64	peak
5	17006.1258	37.85	18.85	56.70	74.00	-17.30	peak
		26.71	18.85	45.56	54.00	-8.44	average
6	17634.3293	37.62	18.76	56.38	74.00	-17.62	peak
		27.23	18.76	45.99	54.00	-8.01	average

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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. AVG: VBW refer to section 7.1.
6. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses. The proper operation of the transmitter prior to adding the filter to the measurement chain.
7. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

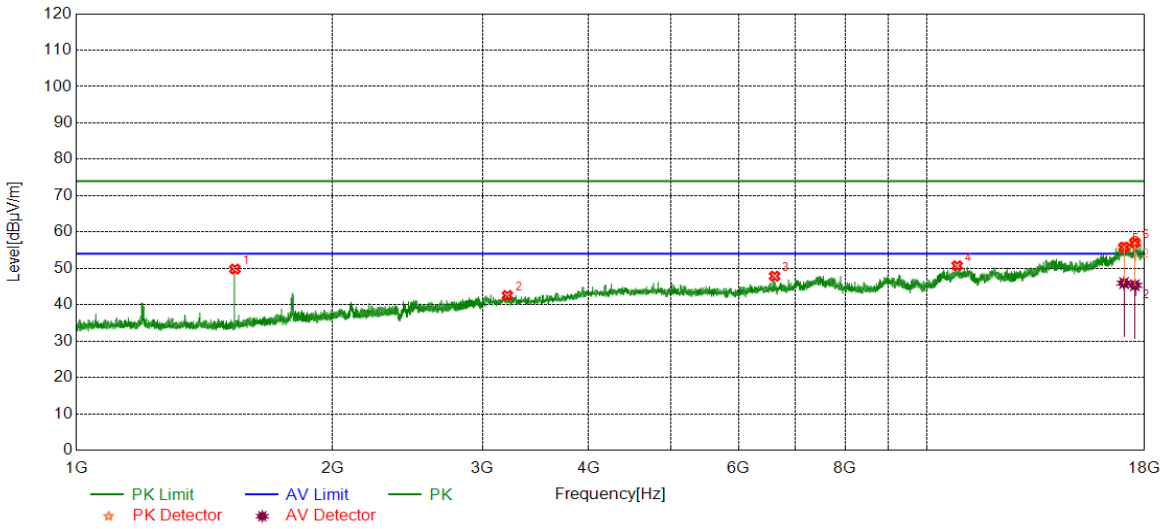
Test Mode	Channel	Polarization	Verdict
11n HT20	MCH	Vertical	PASS



No.	Frequency (MHz)	Reading Level (dBuV/m)	Correct Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1199.0249	45.43	-5.54	39.89	74.00	-34.11	peak
2	1535.3169	54.71	-5.69	49.02	74.00	-24.98	peak
3	5319.6650	39.87	5.41	45.28	74.00	-28.72	peak
4	8929.4912	38.91	9.10	48.01	74.00	-25.99	peak
5	17013.6267	37.51	18.98	56.49	74.00	-17.51	peak
		26.94	18.98	45.92	54.00	-8.08	average
6	17570.5713	37.29	19.15	56.44	74.00	-17.56	peak
		27.77	19.15	46.92	54.00	-7.08	average

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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. AVG: VBW refer to section 7.1.
6. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses. The proper operation of the transmitter prior to adding the filter to the measurement chain.
7. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

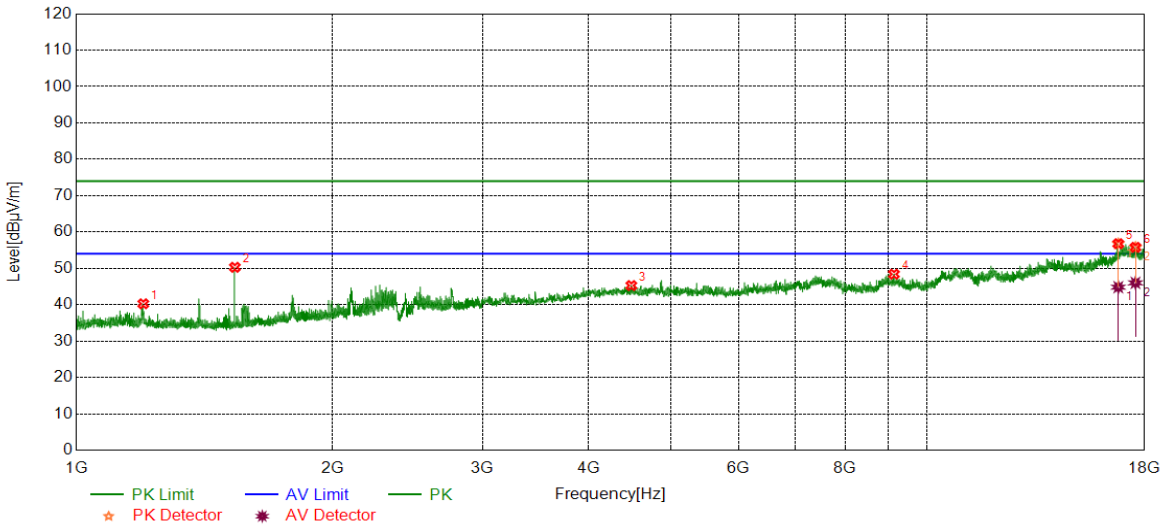
Test Mode	Channel	Polarization	Verdict
11n HT20	HCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.8170	55.50	-5.68	49.82	74.00	-24.18	peak
2	3210.0263	40.91	1.64	42.55	74.00	-31.45	peak
3	6613.5767	39.79	8.07	47.86	74.00	-26.14	peak
4	10838.4798	38.57	12.14	50.71	74.00	-23.29	peak
5	17021.1276	36.56	19.29	55.85	74.00	-18.15	peak
		26.66	19.29	45.95	54.00	-8.05	average
6	17533.0666	38.87	18.24	57.11	74.00	-16.89	peak
		27.11	18.24	45.35	54.00	-8.65	average

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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. AVG: VBW refer to section 7.1.
6. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses. The proper operation of the transmitter prior to adding the filter to the measurement chain.
7. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Test Mode	Channel	Polarization	Verdict
11n HT20	HCH	Vertical	PASS



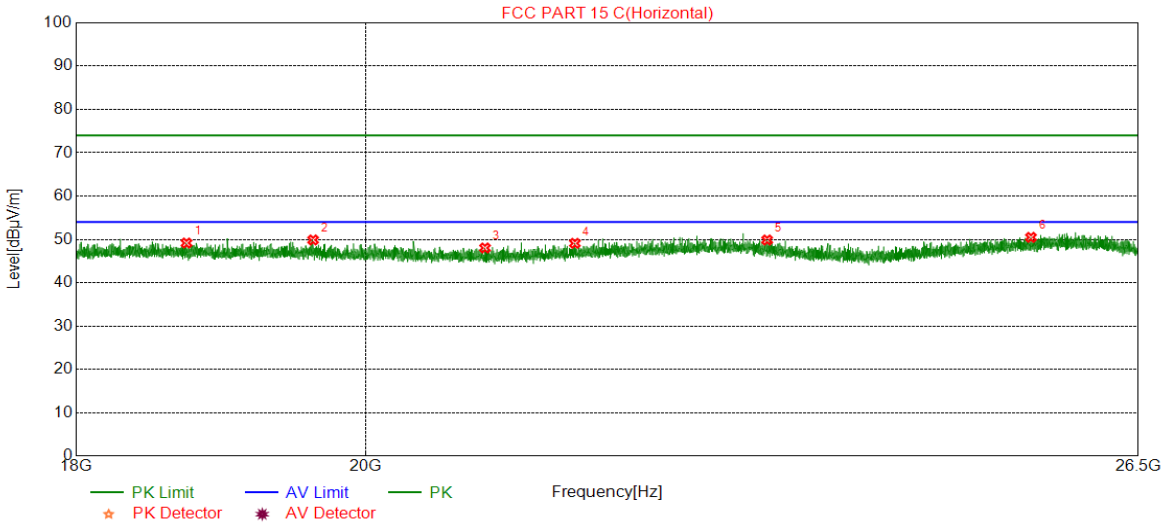
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1198.5248	45.80	-5.54	40.26	74.00	-33.74	peak
2	1535.5669	55.98	-5.69	50.29	74.00	-23.71	peak
3	4488.9361	40.43	4.84	45.27	74.00	-28.73	peak
4	9135.7670	39.19	9.22	48.41	74.00	-25.59	peak
5	16762.3453	39.23	17.55	56.78	74.00	-17.22	peak
		27.28	17.55	44.83	54.00	-9.17	average
6	17559.3199	36.96	18.82	55.78	74.00	-18.22	peak
		27.20	18.82	46.02	54.00	-7.98	average

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. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. AVG: VBW refer to section 7.1.
6. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses. The proper operation of the transmitter prior to adding the filter to the measurement chain.
7. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Part II: 18GHz~26.5GHz

SPURIOUS EMISSIONS 18GHz TO 26.5GHz (WORST-CASE CONFIGURATION)

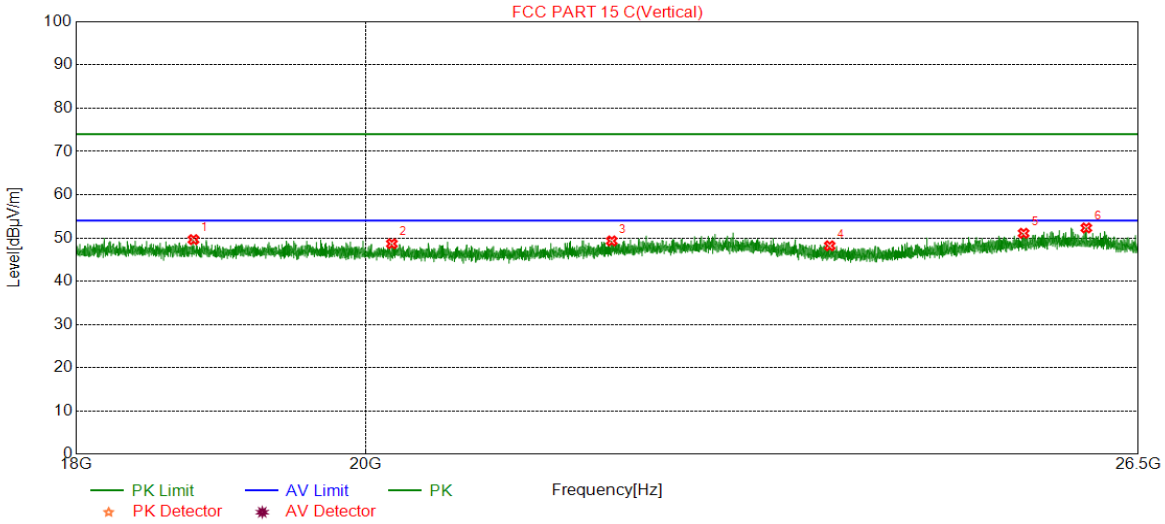
Test Mode	Channel	Polarization	Verdict
11n HT20	HCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	18737.0237	50.17	-1.01	49.16	74.00	-24.84	peak
2	19621.1121	50.56	-0.69	49.87	74.00	-24.13	peak
3	20889.4389	48.95	-0.93	48.02	74.00	-25.98	peak
4	21584.8085	49.49	-0.40	49.09	74.00	-24.91	peak
5	23150.6651	49.03	0.83	49.86	74.00	-24.14	peak
6	25485.8486	49.65	0.82	50.47	74.00	-23.53	peak

Note: 1.If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
3. Measurement = Reading Level + Correct Factor.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Test Mode	Channel	Polarization	Verdict
11n HT20	HCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	18784.6285	50.65	-1.04	49.61	74.00	-24.39	peak
2	20192.3692	49.26	-0.60	48.66	74.00	-25.34	peak
3	21876.3876	49.31	0.00	49.31	74.00	-24.69	peak
4	23684.5185	48.73	-0.55	48.18	74.00	-25.82	peak
5	25417.8418	50.37	0.71	51.08	74.00	-22.92	peak
6	26005.2505	50.66	1.65	52.31	74.00	-21.69	peak

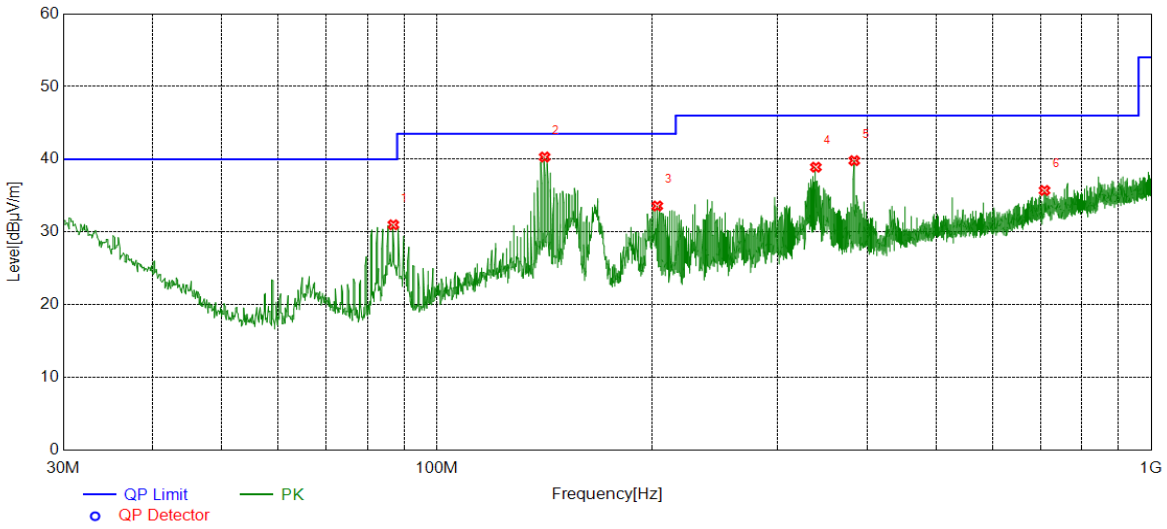
Note: 1.If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
3. Measurement = Reading Level + Correct Factor.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Note: All constructions and test modes and channels have been tested, only the worst data record in the report.

Part III: 30MHz~1GHz

SPURIOUS EMISSIONS 30M TO 1GHHz (WORST-CASE CONFIGURATION)

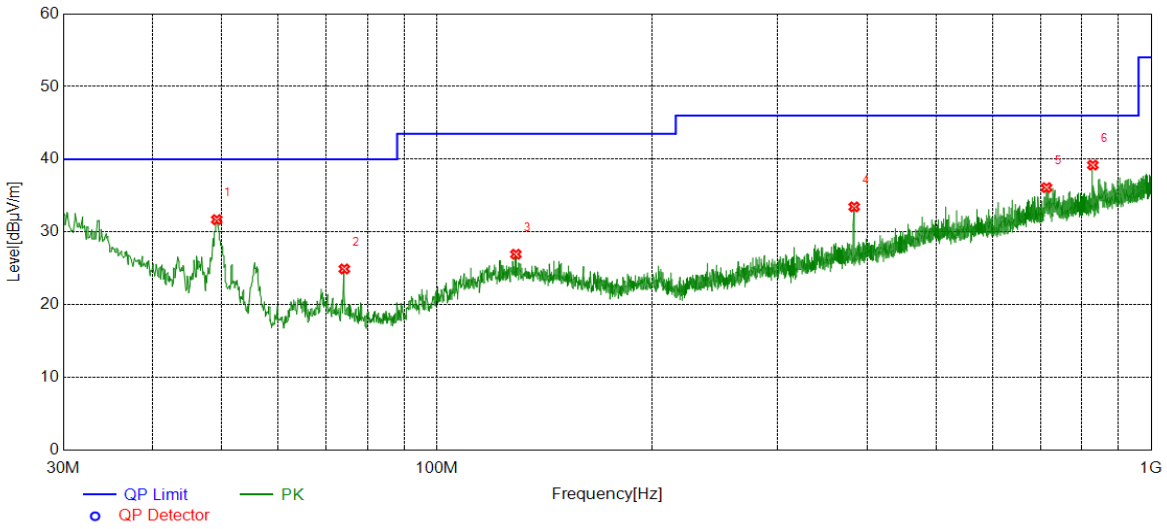
Test Mode	Channel	Polarization	Verdict
11n HT20	HCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	86.9447	16.42	14.57	30.99	40.00	-9.01	peak
2	141.5612	20.20	20.11	40.31	43.50	-3.19	peak
3	203.5504	14.40	19.18	33.58	43.50	-9.92	peak
4	339.3639	17.16	21.75	38.91	46.00	-7.09	peak
5	383.9884	17.01	22.80	39.81	46.00	-6.19	peak
6	709.0679	7.13	28.58	35.71	46.00	-10.29	peak

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

Test Mode	Channel	Polarization	Verdict
11n HT20	HCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	49.2079	16.52	15.18	31.70	40.00	-8.30	peak
2	74.2364	10.15	14.77	24.92	40.00	-15.08	peak
3	129.0469	6.51	20.43	26.94	43.50	-16.56	peak
4	383.9884	10.66	22.80	33.46	46.00	-12.54	peak
5	713.7244	7.45	28.65	36.10	46.00	-9.90	peak
6	828.4868	9.21	29.99	39.20	46.00	-6.80	peak

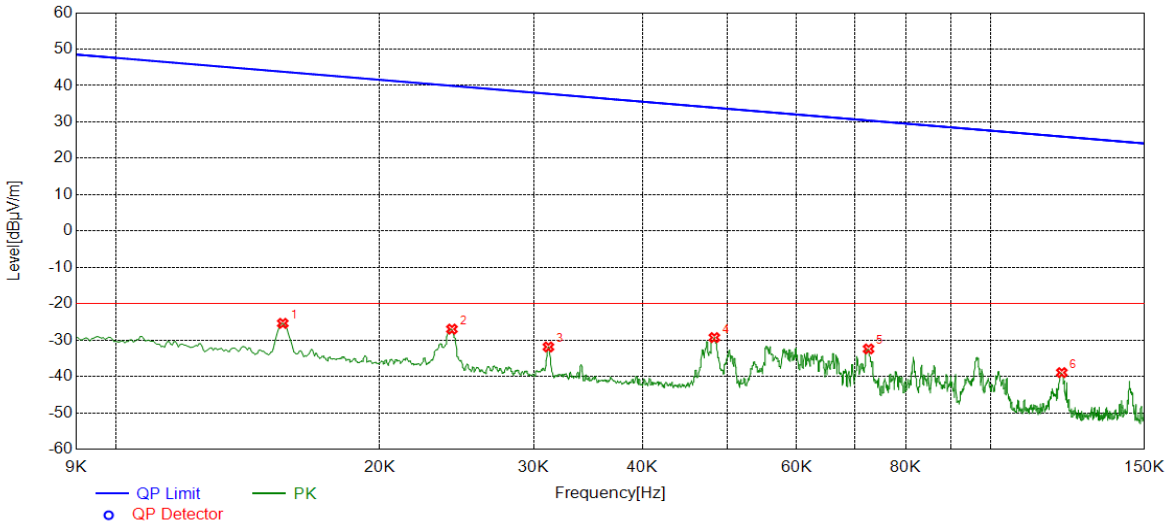
Note: 1. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
2. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.
3. Measurement = Reading Level + Correct Factor.

Note: All constructions and test modes and channels have been tested, only the worst data record in the report.

Part IV: 9KHz~30MHz

SPURIOUS EMISSIONS Below 30MHz (WORST CASE CONFIGURATION-FACE ON)

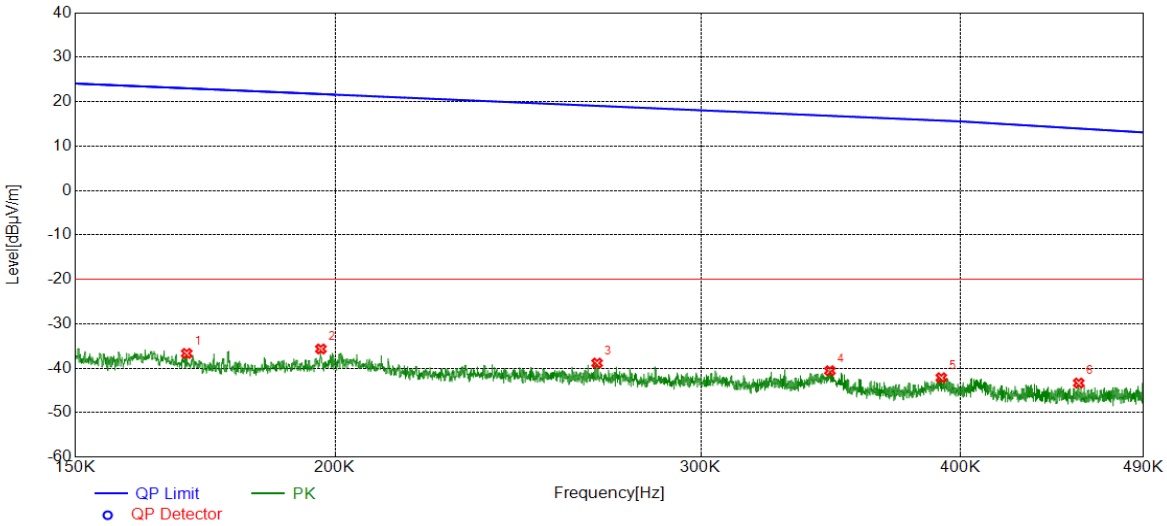
Test Mode	Channel	Frequency Range	Verdict
11n HT20	HCH	9KHz~150KHz	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	0.0155	35.49	-60.88	-25.39	43.80	-69.19	peak
2	0.0242	33.79	-60.77	-26.98	39.93	-66.91	peak
3	0.0312	28.93	-60.81	-31.88	37.71	-69.59	peak
4	0.0483	31.62	-60.93	-29.31	33.92	-63.23	peak
5	0.0725	28.87	-61.30	-32.43	30.39	-62.82	peak
6	0.1206	21.94	-60.88	-38.94	25.98	-64.92	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

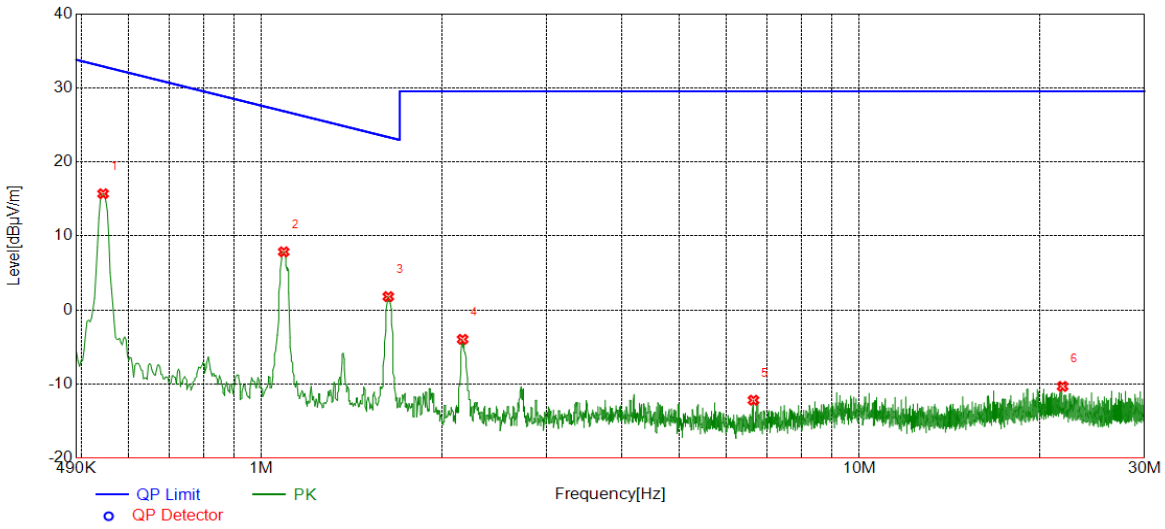
Test Mode	Channel	Frequency Range	Verdict
11n HT20	HCH	150KHz~490KHz	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	0.1697	24.47	-61.13	-36.66	23.01	-59.67	peak
2	0.1969	25.34	-61.00	-35.66	21.72	-57.38	peak
3	0.2674	21.88	-60.72	-38.84	19.06	-57.90	peak
4	0.3461	20.08	-60.65	-40.57	16.82	-57.39	peak
5	0.3916	18.47	-60.61	-42.14	15.74	-57.88	peak
6	0.4560	17.23	-60.56	-43.33	13.96	-57.29	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

Test Mode	Channel	Frequency Range	Verdict
11n HT20	HCH	490KHz~30MHz	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	0.5431	36.24	-20.54	15.70	32.91	-17.21	peak
2	1.0891	28.15	-20.29	7.86	26.87	-19.01	peak
3	1.6292	22.02	-20.21	1.81	23.36	-21.55	peak
4	2.1693	16.24	-20.20	-3.96	29.54	-33.50	peak
5	6.6494	7.54	-19.72	-12.18	29.54	-41.72	peak
6	21.8721	7.17	-17.49	-10.32	29.54	-39.86	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

Note: All constructions and test modes and channels have been tested, only the worst data record in the report.

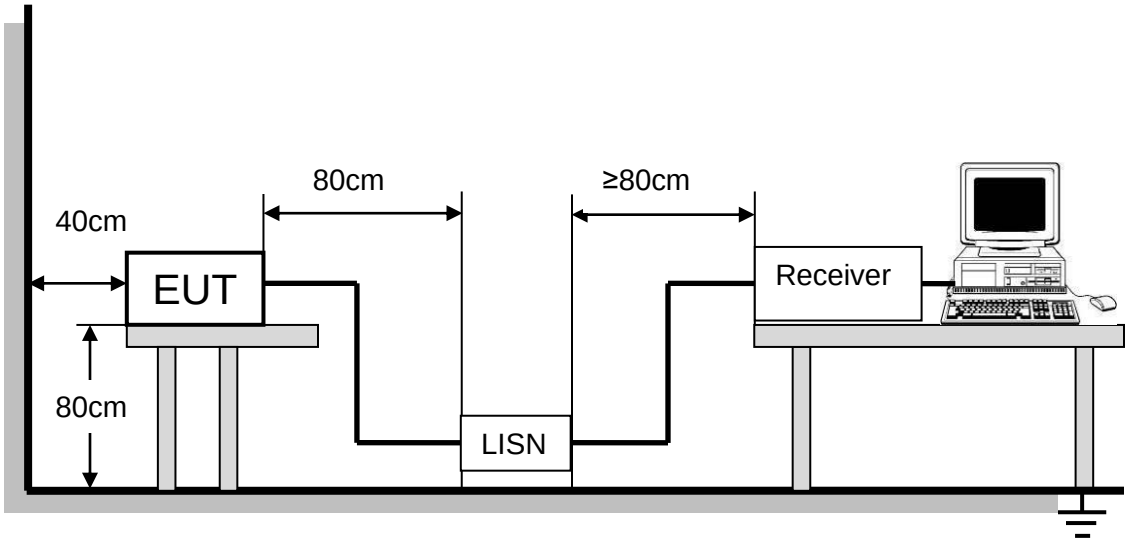
8. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

Please refer to FCC §15.207 (a)

FREQUENCY (MHz)	Limit (dBuV)	
	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

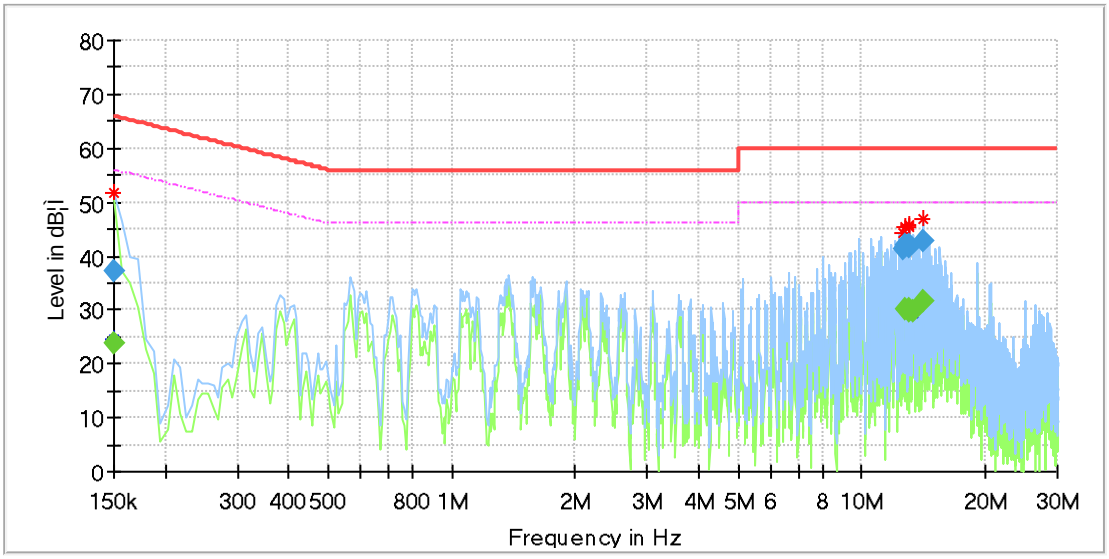


The EUT is put on a table of non-conducting material that is 80cm high. The vertical conducting wall of shielding is located 40cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) 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 30MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9kHz.

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 RESULTS (WORST CASE CONFIGURATION)

For L Line:

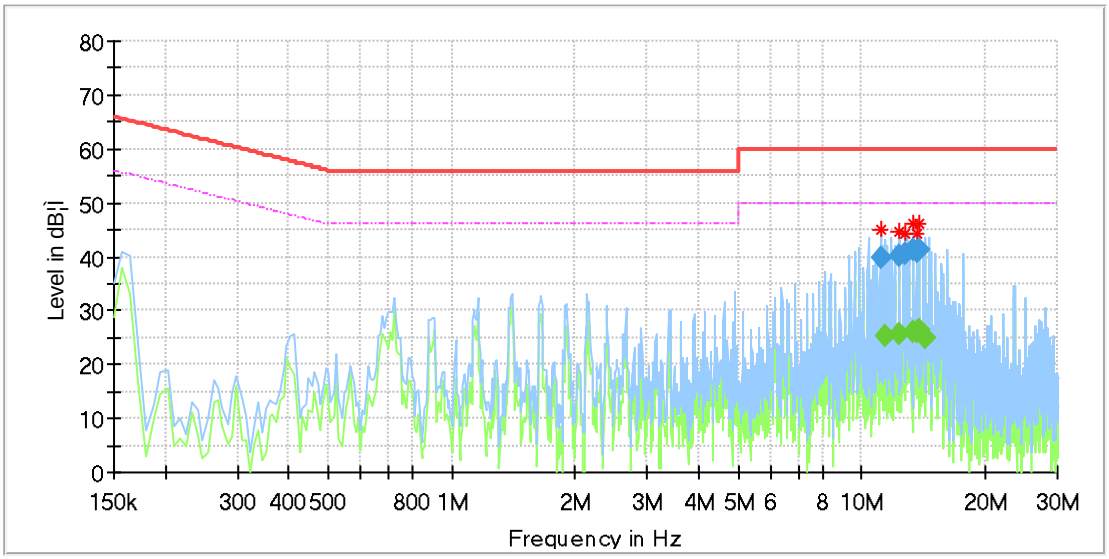


Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	Average (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.150000	---	23.65	56.00	32.35	1000.0	9.000	L1	OFF	9.5
0.150000	37.11	---	66.00	28.89	1000.0	9.000	L1	OFF	9.5
12.589988	41.14	---	60.00	18.86	1000.0	9.000	L1	OFF	9.6
12.828788	---	30.32	50.00	19.68	1000.0	9.000	L1	OFF	9.6
12.828788	41.99	---	60.00	18.01	1000.0	9.000	L1	OFF	9.6
13.075050	---	30.16	50.00	19.84	1000.0	9.000	L1	OFF	9.6
13.075050	41.86	---	60.00	18.14	1000.0	9.000	L1	OFF	9.6
13.097438	---	29.92	50.00	20.08	1000.0	9.000	L1	OFF	9.6
13.097438	42.06	---	60.00	17.94	1000.0	9.000	L1	OFF	9.6
13.343700	---	29.59	50.00	20.41	1000.0	9.000	L1	OFF	9.6
14.082488	---	31.69	50.00	18.31	1000.0	9.000	L1	OFF	9.6
14.082488	42.89	---	60.00	17.11	1000.0	9.000	L1	OFF	9.6

Note: 1. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).
3. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.
4. The extension cord/outlet strip was calibrated with the LISN as required by ANSI C63.10:2013 Clause 6.2.2.
5. Pre-testing all test modes and channels, and find the HCH of 11n HT20 which is the worst case, so only the worst case is included in this test report.

For N Line:



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	Average (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
11.119875	39.78	---	60.00	20.22	1000.0	9.000	N	OFF	9.7
11.358675	---	25.20	50.00	24.80	1000.0	9.000	N	OFF	9.7
12.343725	---	25.59	50.00	24.41	1000.0	9.000	N	OFF	9.7
12.343725	40.20	---	60.00	19.80	1000.0	9.000	N	OFF	9.7
12.828788	40.67	---	60.00	19.33	1000.0	9.000	N	OFF	9.7
13.328775	---	26.06	50.00	23.94	1000.0	9.000	N	OFF	9.7
13.328775	41.29	---	60.00	18.71	1000.0	9.000	N	OFF	9.7
13.589963	---	25.97	50.00	24.03	1000.0	9.000	N	OFF	9.7
13.589963	40.94	---	60.00	19.06	1000.0	9.000	N	OFF	9.7
13.843688	---	26.29	50.00	23.71	1000.0	9.000	N	OFF	9.7
13.843688	41.40	---	60.00	18.60	1000.0	9.000	N	OFF	9.7
14.336213	---	25.10	50.00	24.90	1000.0	9.000	N	OFF	9.6

Note: 1. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).
3. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.
4. The extension cord/outlet strip was calibrated with the LISN as required by ANSI C63.10:2013 Clause 6.2.2.
5. Pre-testing all test modes and channels, and find the HCH of 11n HT40 which is the worst case, so only the worst case is included in this test report.

9. 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.

ANTENNA CONNECTOR

EUT has a EUT with two PCB Antenna.

ANTENNA GAIN

The antenna gain of EUT is less than 6 dBi.

END OF REPORT