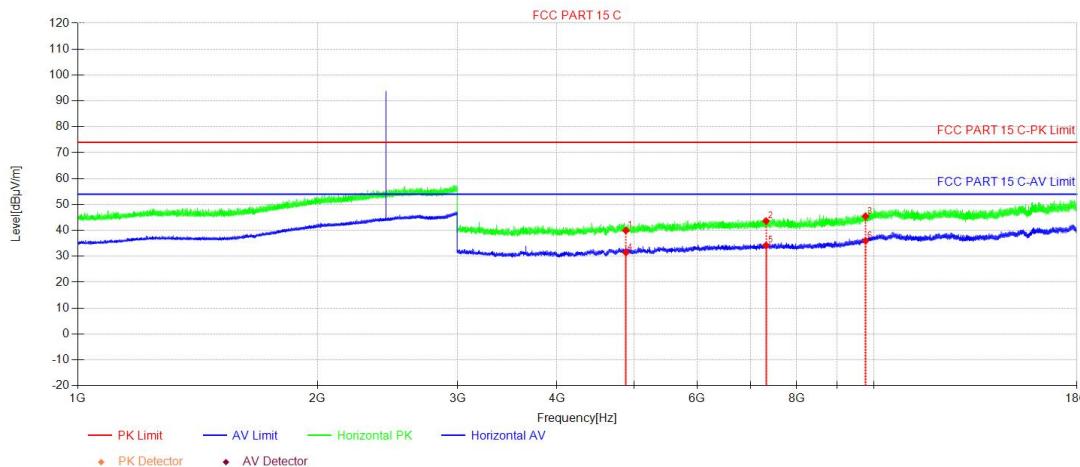
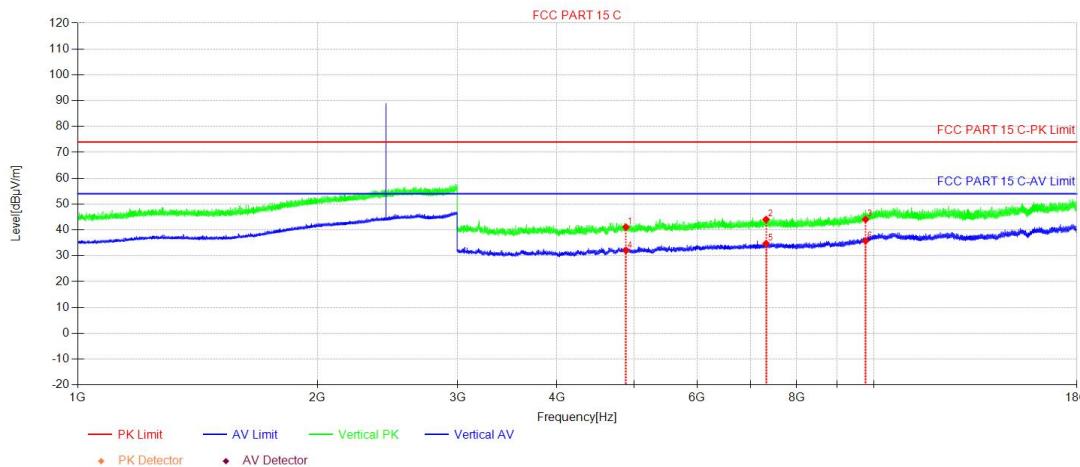




DH5 2441MHz



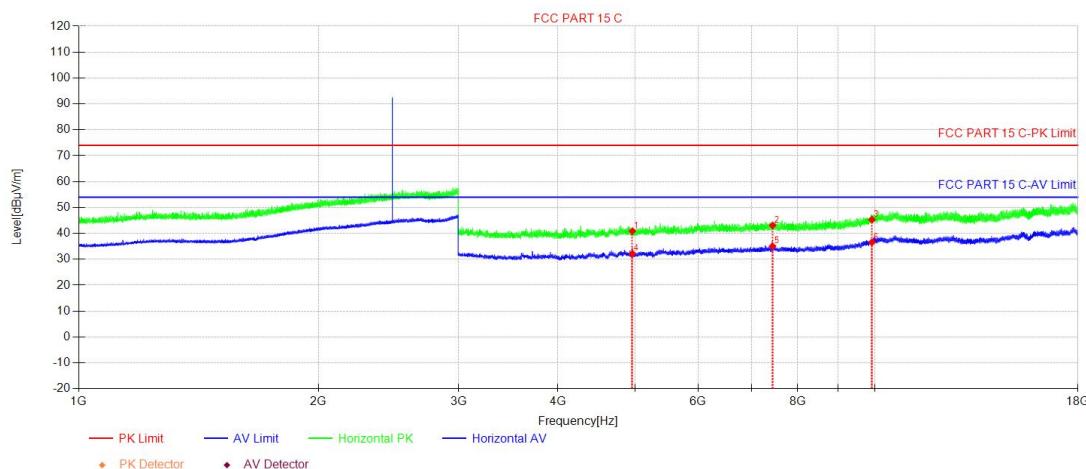
NO.	Freq. [MHz]	Reading Level [dB μ V]	Correct Factor [dB/m]	Result Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Height [cm]	Angle [°]	Remark	Polarity
1	4882.59	44.67	-4.72	39.95	74.00	34.05	150	104	PK	H
2	7323.22	45.10	-1.49	43.61	74.00	30.39	150	161	PK	H
3	9764.59	43.81	1.64	45.45	74.00	28.55	150	0	PK	H
4	4882.59	36.17	-4.72	31.45	54.00	22.55	150	356	AV	H
5	7323.22	35.66	-1.49	34.17	54.00	19.83	150	0	AV	H
6	9764.59	34.37	1.64	36.01	54.00	17.99	150	86	AV	H



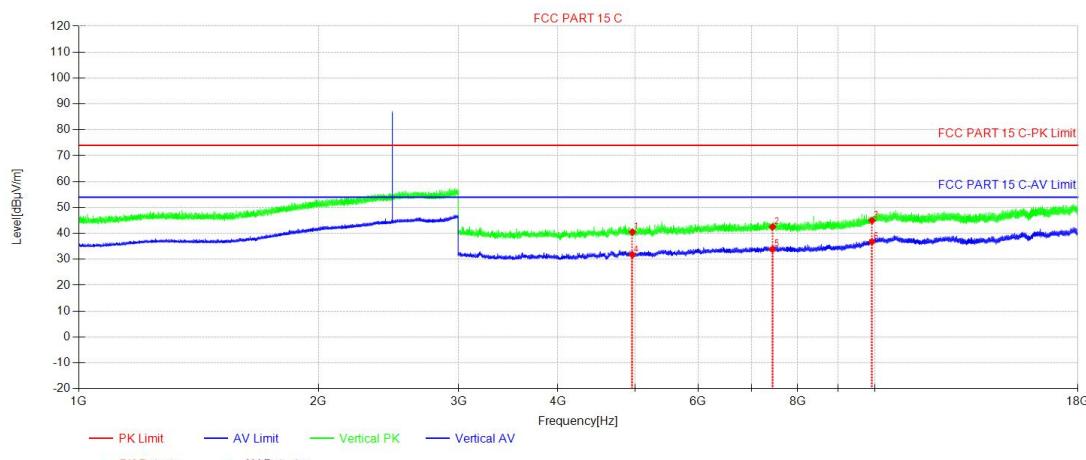
NO.	Freq. [MHz]	Reading Level [dB μ V]	Correct Factor [dB/m]	Result Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Height [cm]	Angle [°]	Remark	Polarity
1	4882.59	45.80	-4.72	41.08	74.00	32.92	150	73	PK	V
2	7323.22	45.54	-1.49	44.05	74.00	29.95	150	305	PK	V
3	9764.59	42.40	1.64	44.04	74.00	29.96	150	19	PK	V
4	4882.59	36.80	-4.72	32.08	54.00	21.92	150	55	AV	V
5	7323.22	36.18	-1.49	34.69	54.00	19.31	150	269	AV	V
6	9764.59	34.13	1.64	35.77	54.00	18.23	150	91	AV	V



DH5 2480MHz



NO.	Freq. [MHz]	Reading Level [dB μ V]	Correct Factor [dB/m]	Result Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Height [cm]	Angle [°]	Remark	Polarity
1	4960.60	45.74	-4.86	40.88	74.00	33.12	150	173	PK	H
2	7440.22	44.45	-1.34	43.11	74.00	30.89	150	266	PK	H
3	9920.60	43.06	2.27	45.33	74.00	28.67	150	339	PK	H
4	4960.60	37.04	-4.86	32.18	54.00	21.82	150	48	AV	H
5	7440.22	36.40	-1.34	35.06	54.00	18.94	150	266	AV	H
6	9920.60	34.29	2.27	36.56	54.00	17.44	150	210	AV	H



NO.	Freq. [MHz]	Reading Level [dB μ V]	Correct Factor [dB/m]	Result Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Height [cm]	Angle [°]	Remark	Polarity
1	4960.60	45.38	-4.86	40.52	74.00	33.48	150	90	PK	V
2	7440.22	43.87	-1.34	42.53	74.00	31.47	150	339	PK	V
3	9920.60	42.69	2.27	44.96	74.00	29.04	150	214	PK	V
4	4960.60	36.59	-4.86	31.73	54.00	22.27	150	232	AV	V
5	7440.22	35.23	-1.34	33.89	54.00	20.11	150	35	AV	V
6	9920.60	34.51	2.27	36.78	54.00	17.22	150	126	AV	V



Note:

1. The Measurement (Result Level) is calculated by Reading Level adding the Correct Factor(maybe including Ant.Factor and the Cable Factor etc.), The basic equation is as follows:
Result Level= Reading Level + Correct Factor(including Ant.Factor, Cable Factor etc.)
2. The amplitude of 9KHz to 30MHz spurious emission that is attenuated by more than 20dB below the permissible limit has no need to be reported.
3. The amplitude of 18GHz to 25GHz spurious emission that is attenuated by more than 20dB below the permissible limit has no need to be report.
4. All channels had been pre-test,DH5 is the worst case, only the worst case was reported.
5. Both left and right earphone have tested for the amplitude of 30MHz to 1GHz spurious emission ,
The Right earphone is the worst and only the worse case was reported.

3.10 Restricted bands around fundamental frequency

Test Requirement:	47 CFR Part 15C Section 15.209 and 15.205		
Test Method:	ANSI C63.10: 2013 Section 11.12		
Test Site:	Measurement Distance: 3m or 10m (Semi-Anechoic Chamber)		
Limit:	Frequency	Limit (dBuV/m)	Remark
	30MHz-88MHz	40.0	Quasi-peak
	88MHz-216MHz	43.5	Quasi-peak
	216MHz-960MHz	46.0	Quasi-peak
	960MHz-1GHz	54.0	Quasi-peak
	Above 1GHz	54.0	Average Value
		74.0	Peak Value
Test Setup:			

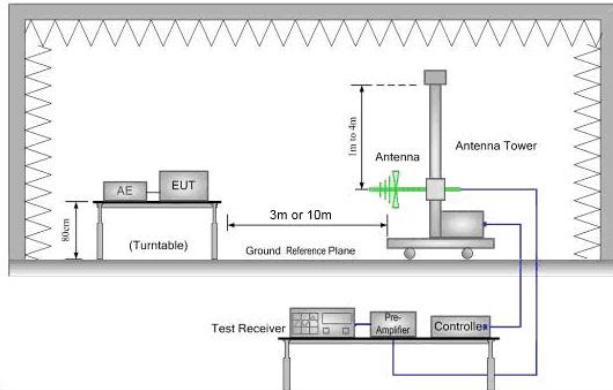


Figure 1. 30MHz to 1GHz

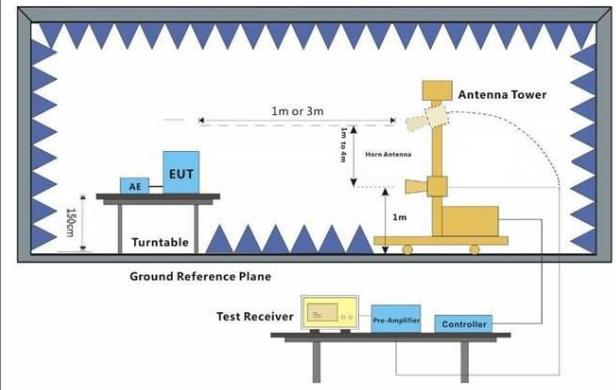


Figure 2. Above 1 GHz

Test Procedure:	<ol style="list-style-type: none"> For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel Test the EUT in the lowest channel , the Highest channel The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case. Repeat above procedures until all frequencies measured was complete.
Test Configuration:	Measurements Below 1000MHz

Dongguan DN Testing Co., Ltd.

Add: No. 1, West Fourth Street, Xingfa South Road, Wusha Community, Chang'an Town, Dongguan City, Guangdong P.R.China

Web: www.dn-testing.com

Tel: +86-769-88087383

E-mail: service@dn-testing.com

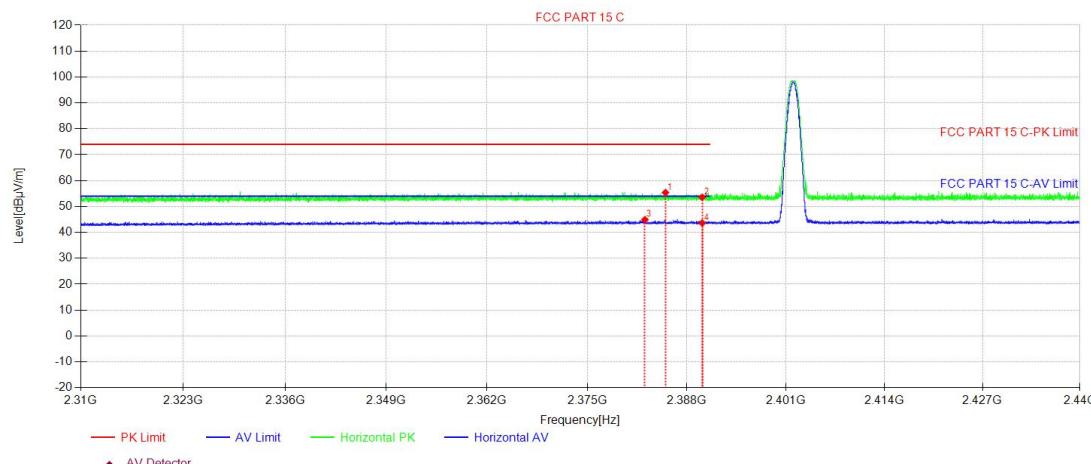


	<ul style="list-style-type: none">• RBW = 120 kHz• VBW = 300 kHz• Detector = Peak• Trace mode = max hold <p>Peak Measurements Above 1000 MHz</p> <ul style="list-style-type: none">• RBW = 1 MHz• VBW ≥ 3 MHz• Detector = Peak• Sweep time = auto• Trace mode = max hold <p>Average Measurements Above 1000MHz</p> <ul style="list-style-type: none">• RBW = 1 MHz• VBW = 10 Hz, when duty cycle is no less than 98 percent.• VBW $\geq 1/T$, when duty cycle is less than 98 percent where T is the minimum <p>transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.</p>
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates. Transmitting mode.
Final Test Mode:	Pretest the EUT Transmitting mode. Through Pre-scan, find the DH5 of data type is the worst case of all modulation type. Only the worst case is recorded in the report.
Instruments Used:	Refer to section 2.9 for details
Test Results:	Pass

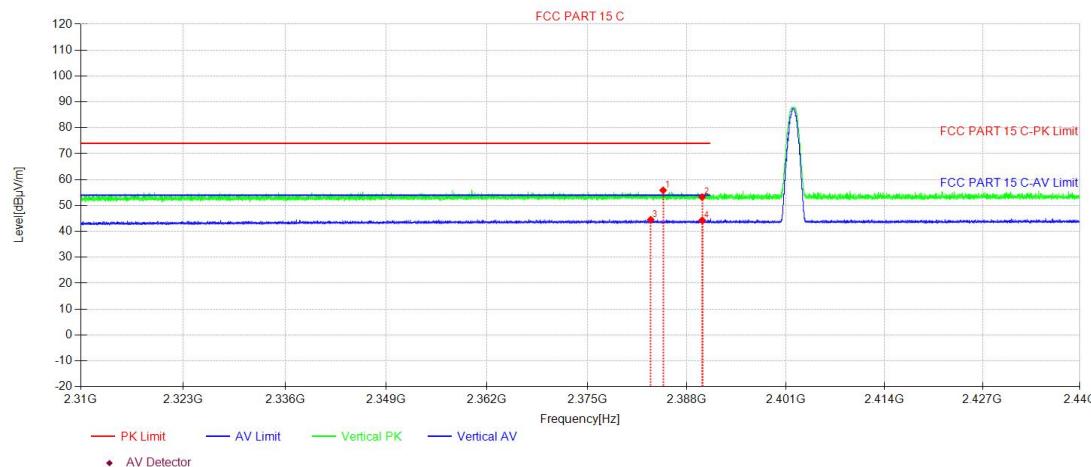


Test Date

DH5 2402MHz



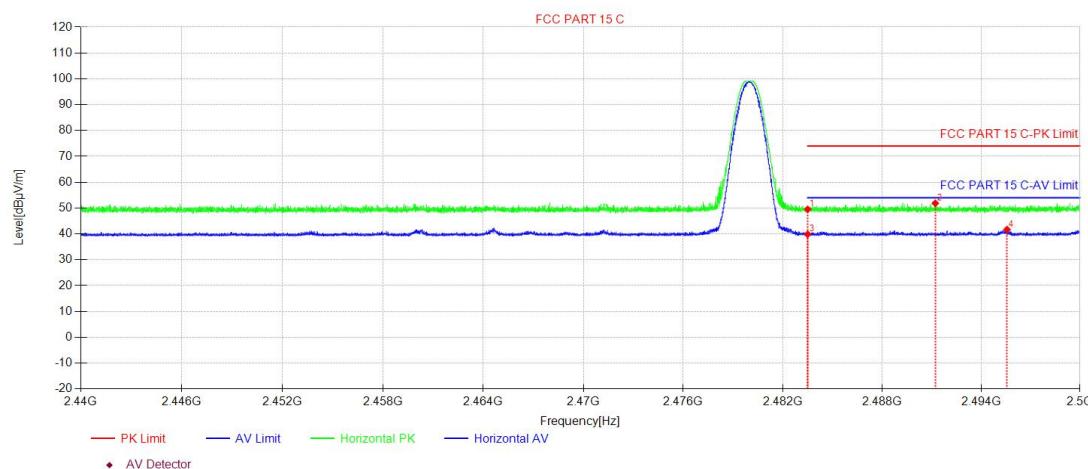
NO.	Freq. [MHz]	Reading Level [dB μ V]	Correct Factor [dB/m]	Result Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Height [cm]	Angle [°]	Remark	Polarity
1	2385.21	56.17	-0.81	55.36	74.00	18.64	150	357	PK	H
2	2390.01	54.37	-0.80	53.57	74.00	20.43	150	215	PK	H
3	2382.52	45.74	-0.83	44.91	54.00	9.09	150	23	AV	H
4	2390.01	44.42	-0.80	43.62	54.00	10.38	150	290	AV	H



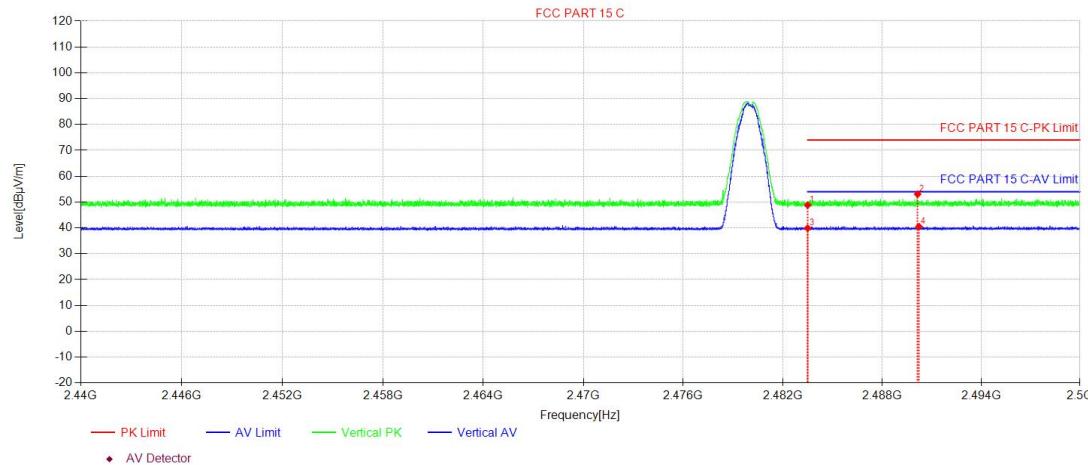
NO.	Freq. [MHz]	Reading Level [dB μ V]	Correct Factor [dB/m]	Result Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Height [cm]	Angle [°]	Remark	Polarity
1	2384.90	56.69	-0.82	55.87	74.00	18.13	150	334	PK	V
2	2390.01	54.06	-0.80	53.26	74.00	20.74	150	173	PK	V
3	2383.28	45.34	-0.83	44.51	54.00	9.49	150	248	AV	V
4	2390.01	45.08	-0.80	44.28	54.00	9.72	150	238	AV	V



DH5 2480MHz



NO.	Freq. [MHz]	Reading Level [dB μ V]	Correct Factor [dB/m]	Result Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Height [cm]	Angle [°]	Remark	Polarity
1	2483.50	49.83	-0.29	49.54	74.00	24.46	150	0	PK	H
2	2491.22	52.08	-0.24	51.84	74.00	22.16	150	228	PK	H
3	2483.50	40.15	-0.29	39.86	54.00	14.14	150	261	AV	H
4	2495.57	41.90	-0.21	41.69	54.00	12.31	150	261	AV	H

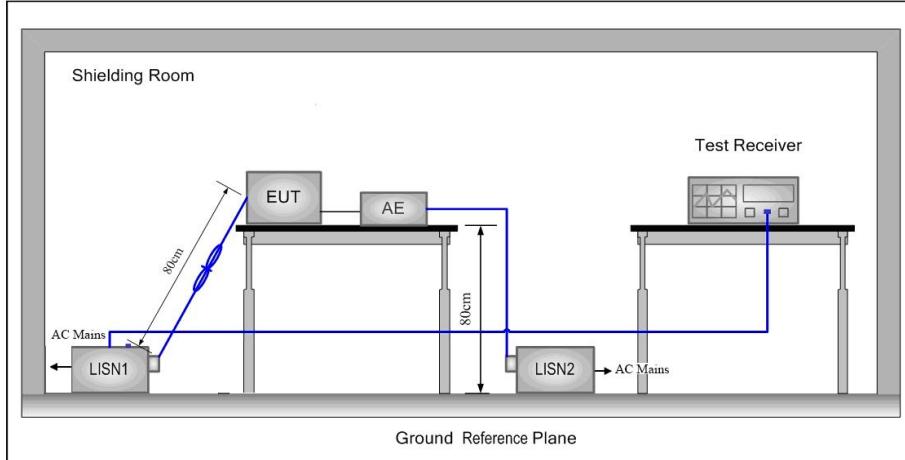


NO.	Freq. [MHz]	Reading Level [dB μ V]	Correct Factor [dB/m]	Result Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Height [cm]	Angle [°]	Remark	Polarity
1	2483.50	49.11	-0.29	48.82	74.00	25.18	150	99	PK	V
2	2490.15	53.29	-0.24	53.05	74.00	20.95	150	328	PK	V
3	2483.50	40.20	-0.29	39.91	54.00	14.09	150	262	AV	V
4	2490.23	40.77	-0.24	40.53	54.00	13.47	150	328	AV	V

Note:

1. The Measurement (Result Level) is calculated by Reading Level adding the Correct Factor(maybe including Ant.Factor and the Cable Factor etc.), The basic equation is as follows:
Result Level= Reading Level + Correct Factor(including Ant.Factor ,Cable Factor etc.)
2. All channels had been pre-test, DH5 is the worst case, only the worst case was reported.
3. Both left and right earphone have tested, The Right earphone is the worst and only the worse case was reported.

3.11 AC Power Line Conducted Emissions

Test Requirement:	47 CFR Part 15C Section 15.207		
Test Method:	ANSI C63.10: 2013		
Test Frequency Range:	150kHz to 30MHz		
Limit:	Frequency range (MHz)		Limit (dBuV)
			Quasi-peak
	0.15-0.5	66 to 56*	56 to 46*
	0.5-5	56	46
	5-30	60	50
* Decreases with the logarithm of the frequency.			
Test Procedure:	<p>1) The mains terminal disturbance voltage test was conducted in a shielded room.</p> <p>2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a $50\Omega/50\mu\text{H} + 5\Omega$ linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.</p> <p>3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,</p> <p>4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 2013 on conducted measurement.</p>		
Test Setup:			
Exploratory Test Mode:	<p>Transmitting with all kind of modulations, data rates at lowest, middle and highest channel.</p> <p>Charge + Transmitting mode.</p>		
Final Test Mode:	Through Pre-scan, find the the worst case.		



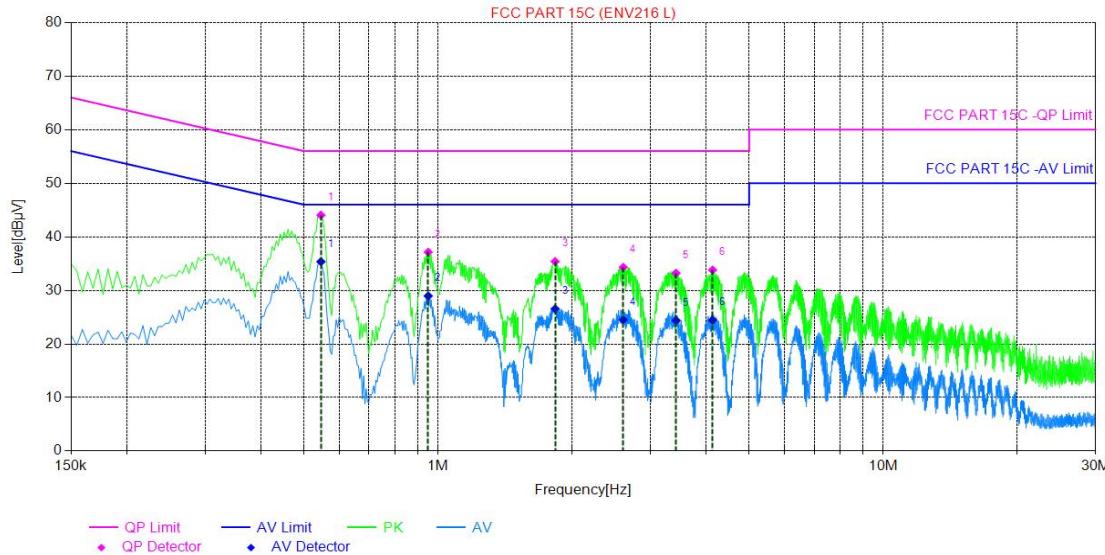
Instruments Used:	Refer to section 2.9 for details
Test Results:	PASS

Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.

Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

Live Line:

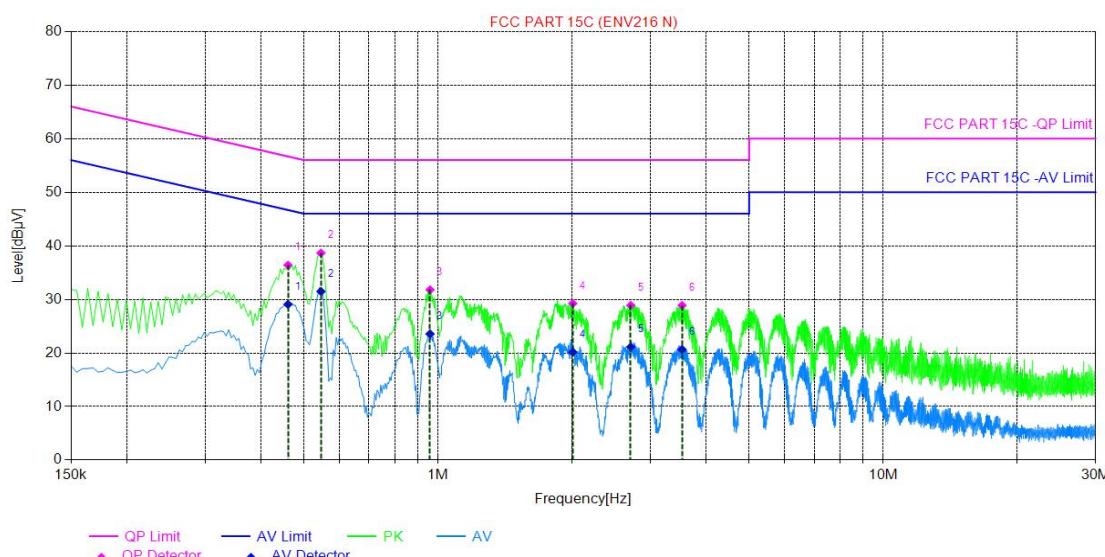


Final Data List

NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV]	QP Limit [dBμV]	QP Margin [dB]	AV Value [dBμV]	AV Limit [dBμV]	AV Margin [dB]	Verdict
1	0.546	9.85	44.04	56.00	11.96	35.36	46.00	10.64	PASS
2	0.951	9.73	37.14	56.00	18.86	28.96	46.00	17.04	PASS
3	1.833	9.73	35.39	56.00	20.61	26.56	46.00	19.44	PASS
4	2.607	9.74	34.31	56.00	21.69	24.51	46.00	21.49	PASS
5	3.426	9.75	33.20	56.00	22.80	24.38	46.00	21.62	PASS
6	4.137	9.76	33.80	56.00	22.20	24.44	46.00	21.56	PASS



Neutral Line:



Final Data List

NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV]	QP Limit [dBμV]	QP Margin [dB]	AV Value [dBμV]	AV Limit [dBμV]	AV Margin [dB]	Verdict
1	0.4605	9.77	36.39	56.68	20.29	29.07	46.68	17.61	PASS
2	0.546	9.74	38.65	56.00	17.35	31.48	46.00	14.52	PASS
3	0.96	9.71	31.79	56.00	24.21	23.56	46.00	22.44	PASS
4	2.0085	9.78	29.23	56.00	26.77	20.16	46.00	25.84	PASS
5	2.7105	9.84	28.89	56.00	27.11	21.12	46.00	24.88	PASS
6	3.534	9.92	28.87	56.00	27.13	20.65	46.00	25.35	PASS

Remark:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. The Measurement (Result Level) is calculated by Reading Level adding the Correct Factor(maybe including LISN Factor and the Cable Factor etc.), The basic equation is as follows:
Result Level= Reading Level + Correct Factor(including LISN Factor, Cable Factor etc.



4 Appendix

Appendix A: 20dB Emission Bandwidth

Test Result

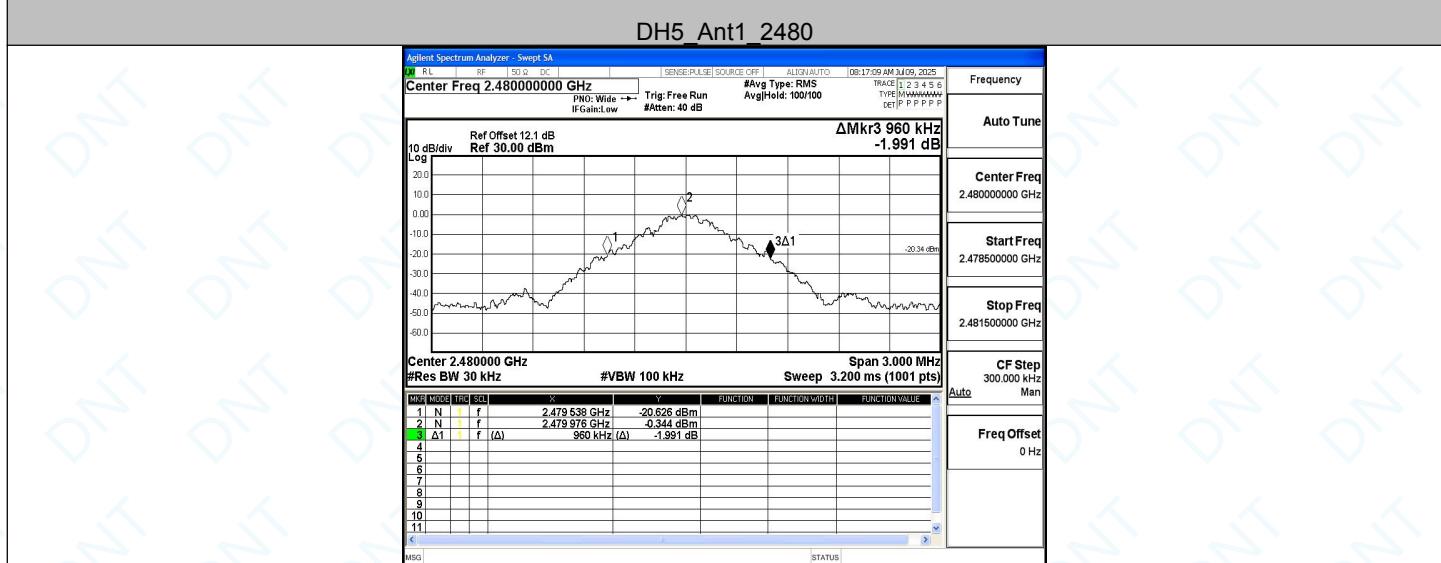
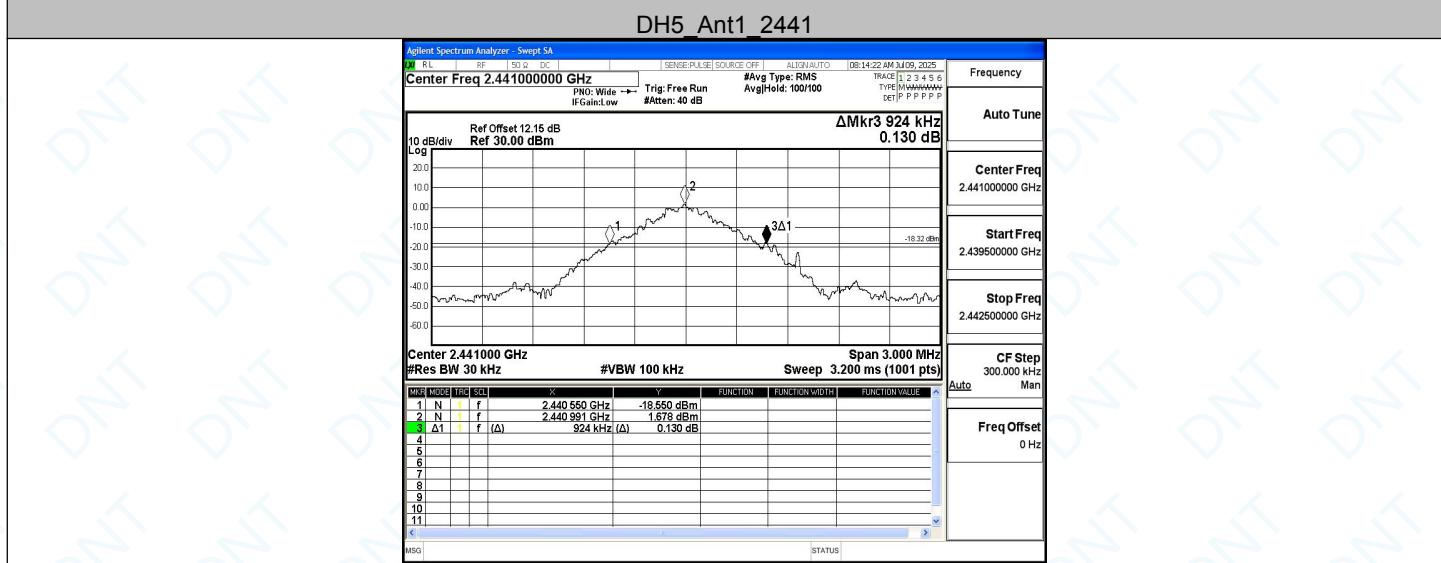
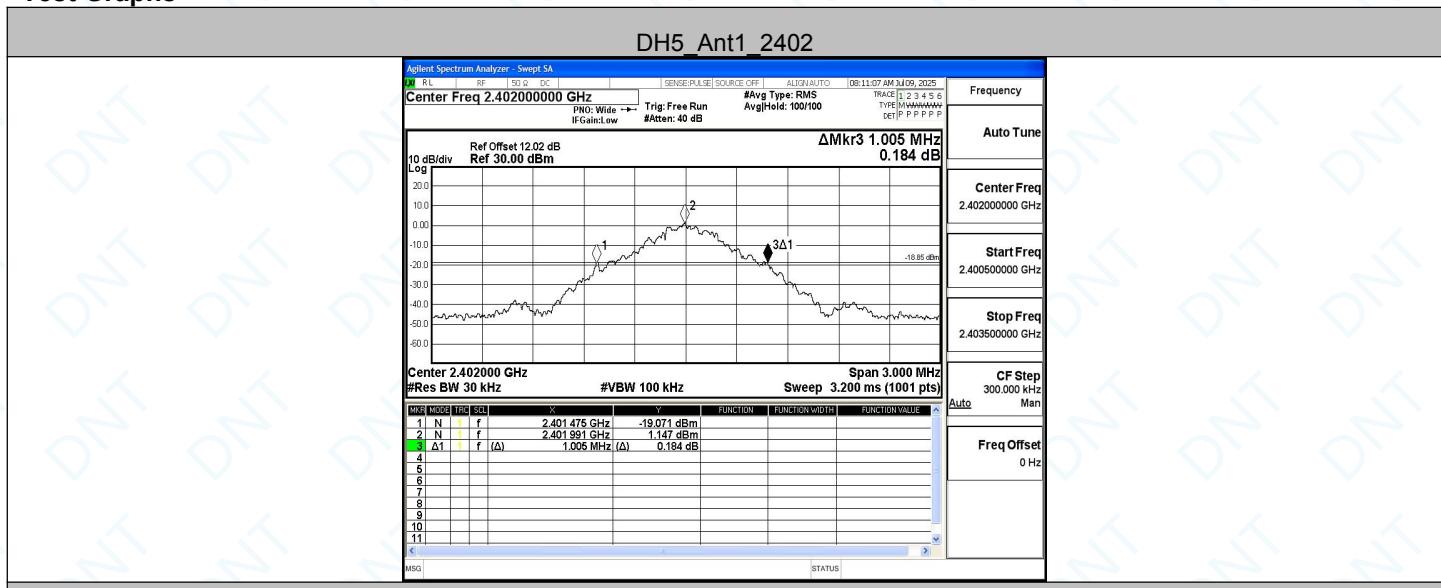
TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	1.005	2401.475	2402.480	---	---
		2441	0.924	2440.550	2441.474	---	---
		2480	0.960	2479.538	2480.498	---	---
2DH5	Ant1	2402	1.281	2401.364	2402.645	---	---
		2441	1.311	2440.346	2441.657	---	---
		2480	1.365	2479.322	2480.687	---	---
3DH5	Ant1	2402	1.284	2401.355	2402.639	---	---
		2441	1.353	2440.322	2441.675	---	---
		2480	1.335	2479.328	2480.663	---	---

Note:

Both left and right earphone have tested, The Right earphone is the worst and only the worse case was reported.

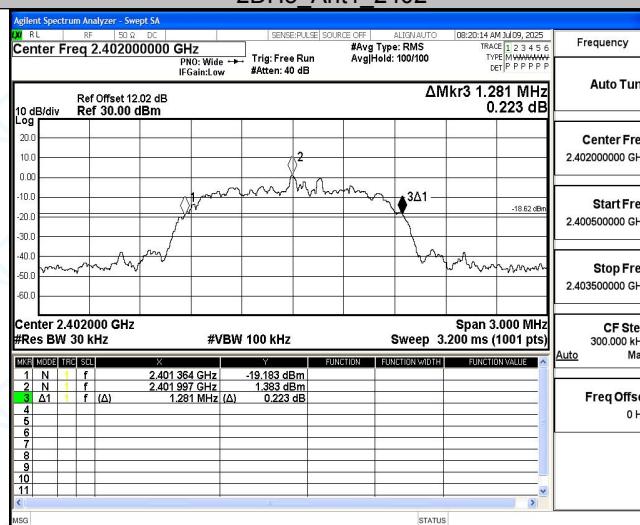


Test Graphs

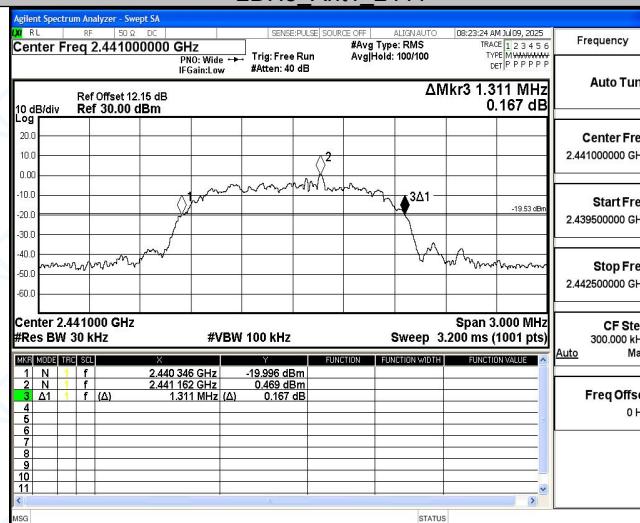




2DH5 Ant1 2402



2DH5 Ant1 2441



2DH5 Ant1 2480

