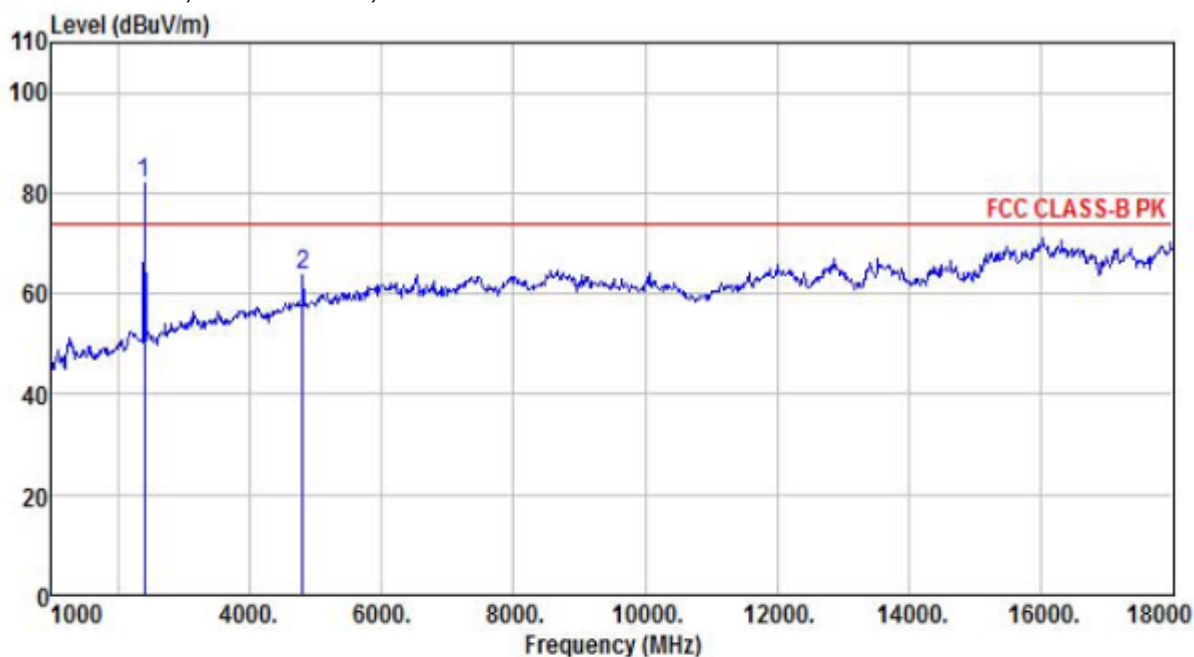


## Bluetooth 8-DPSK, traffic mode; Channel 0

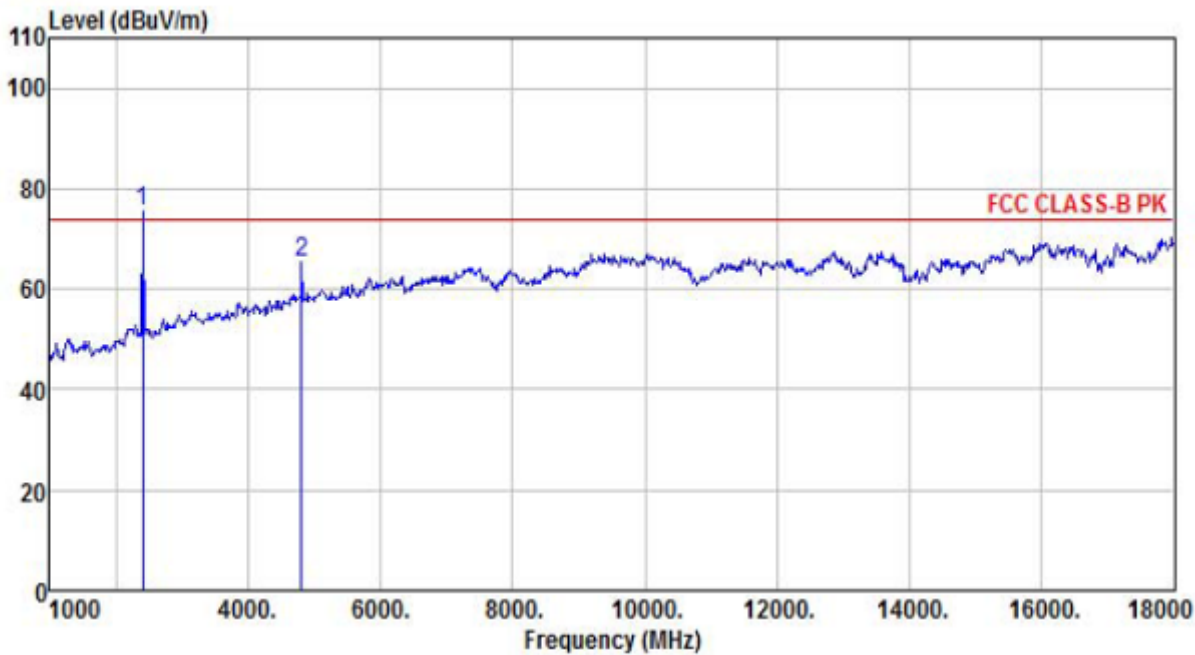


Site : chamber  
 Condition : FCC CLASS-B PK 3m BBHA9120D(RSE-H) HORIZONTAL  
 EUT : carbonado smart PTT case for iphone  
 Model Name : PTK14C0  
 Temp/Humi : 25°C / 57%  
 Power Rating: DC 3.7V  
 Mode : 8DPSK ch 0  
 Memo :

		ReadAntenna	Cable	Preamp		Limit	Over	
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 pp	2394.00	75.10	37.92	7.13	38.34	81.81	74.00	7.81 Peak
2	4808.00	48.31	42.27	10.40	37.17	63.81	74.00	-10.19 Peak

Frequency (MHz)	Level (dBUV/m)	Limit (dBUV/m)	Over Limit (dB)	Remark
4804	63.81	74	-10.19	Peak
4804	39.08	54	-14.92	Average

**Notes:** there is not any harmonic but for background noise above 6GHz.



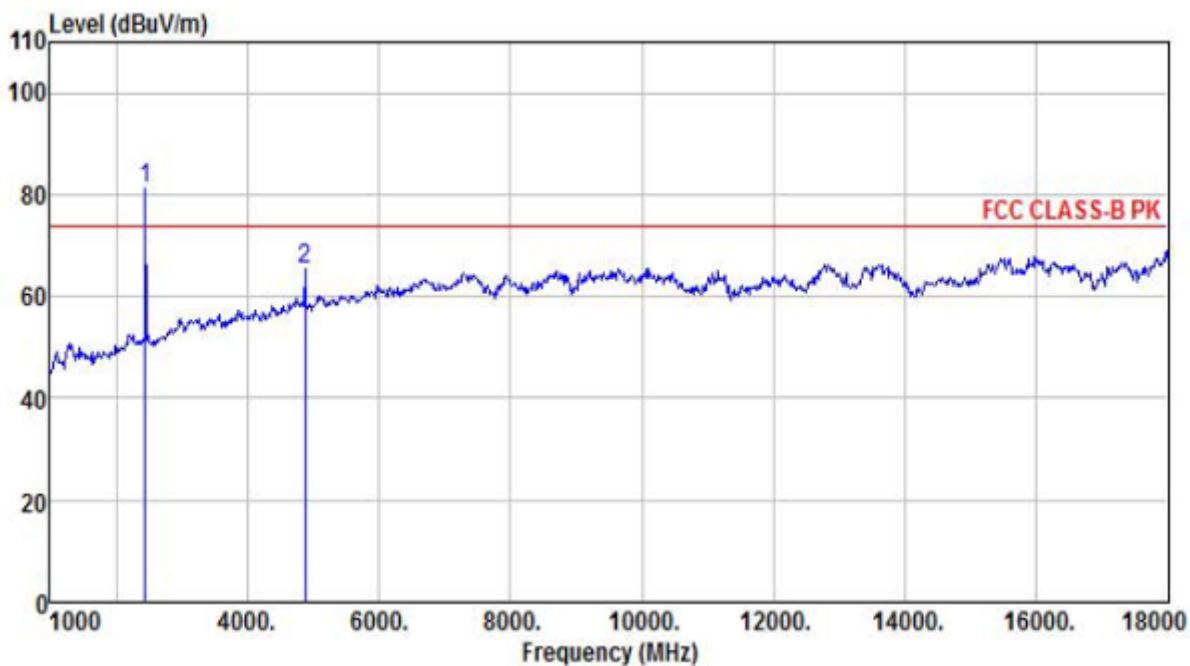
Site : chamber  
Condition : FCC CLASS-B PK 3m BBHA9120D(RSE-V) VERTICAL  
EUT : carbonado smart PTT case for iphone  
Model Name : PTK14CO  
Temp/Humi : 25℃ / 57%  
Power Rating: DC 3.7V  
Mode : 8DPSK ch 0  
Memo :

	Freq	ReadAntenna	Cable	Preamp		Limit	Over	
		Level	Factor	Loss	Factor	Level	Line	Limit
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 pp	2394.00	68.93	37.92	7.13	38.34	75.64	74.00	1.64 Peak
2	4808.00	49.96	42.27	10.40	37.17	65.46	74.00	-8.54 Peak

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Remark
4804	65.46	74	-8.54	Peak
4804	40.73	54	-13.27	Average

Notes: there is not any harmonic but for background noise above 6GHz.

## Bluetooth 8-DPSK, traffic mode; Channel 39

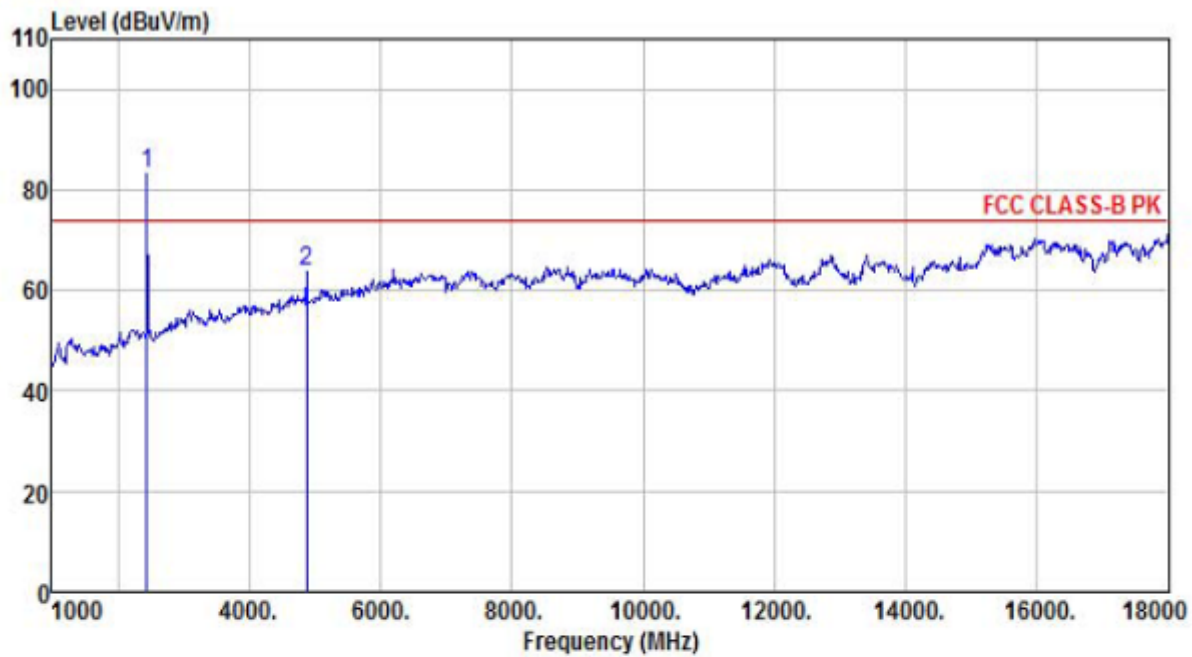


Site : chamber  
 Condition : FCC CLASS-B PK 3m BBHA9120D(RSE-H) HORIZONTAL  
 EUT : carbonado smart PTT case for iphone  
 Model Name : PTK14CO  
 Temp/Humi : 25°C / 57%  
 Power Rating: DC 3.7V  
 Mode : 8DPSK ch 39  
 Memo :

	Freq	ReadAntenna	Cable	Preamp		Limit	Over	
		Level	Factor	Loss	Factor	Level	Line	Limit Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 pp	2445.00	73.91	38.25	7.37	38.32	81.21	74.00	7.21 Peak
2	4876.00	50.57	41.63	10.36	37.15	65.41	74.00	-8.59 Peak

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Remark
4882	65.41	74	-8.59	Peak
4882	40.68	54	-13.32	Average

**Notes:** there is not any harmonic but for background noise above 6GHz.



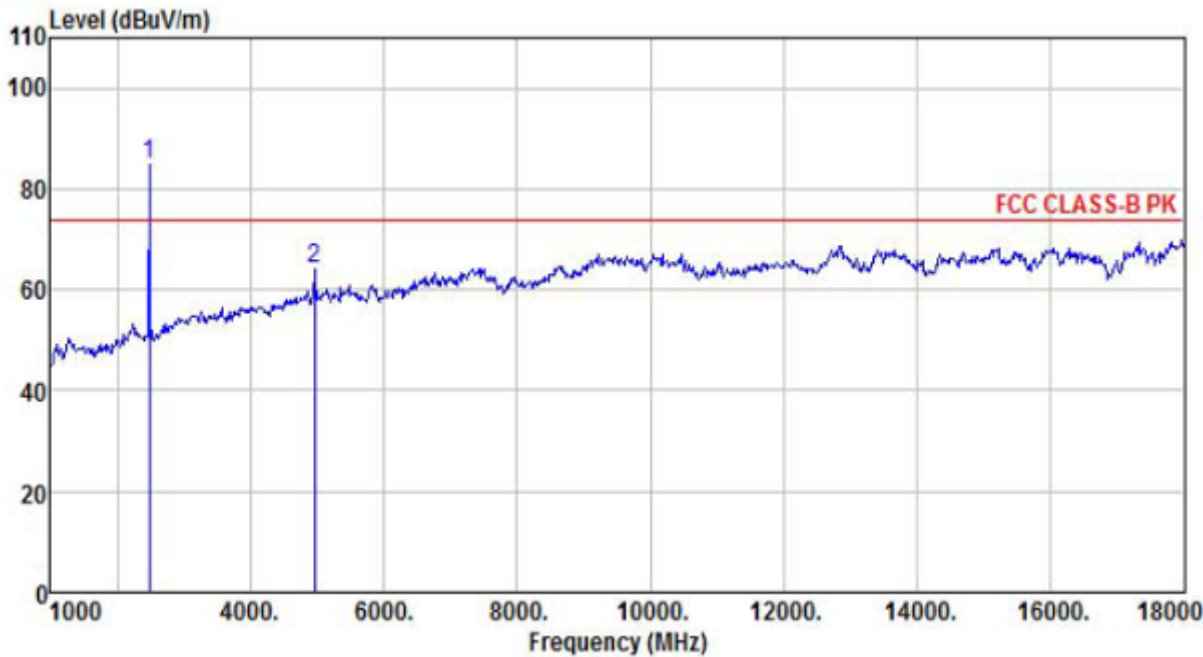
Site : chamber  
Condition : FCC CLASS-B PK 3m BBHA9120D(RSE-V) VERTICAL  
EUT : carbonado smart PTT case for iphone  
Model Name : PTK14C0  
Temp/Humi : 25℃ / 57%  
Power Rating: DC 3.7V  
Mode : 8DPSK ch 39  
Memo :

Freq	ReadAntenna		Cable Preamp		Limit		Over	
	Level	Factor	Loss	Factor	Level	Line	Limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1 pp 2445.00	75.99	38.25	7.37	38.32	83.29	74.00	9.29	Peak
2 4876.00	48.96	41.63	10.36	37.15	63.80	74.00	-10.20	Peak

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Remark
4882	63.80	74	-10.20	Peak
4882	39.07	54	-14.93	Average

Notes: there is not any harmonic but for background noise above 6GHz.

Bluetooth 8-DPSK, traffic mode; Channel 78



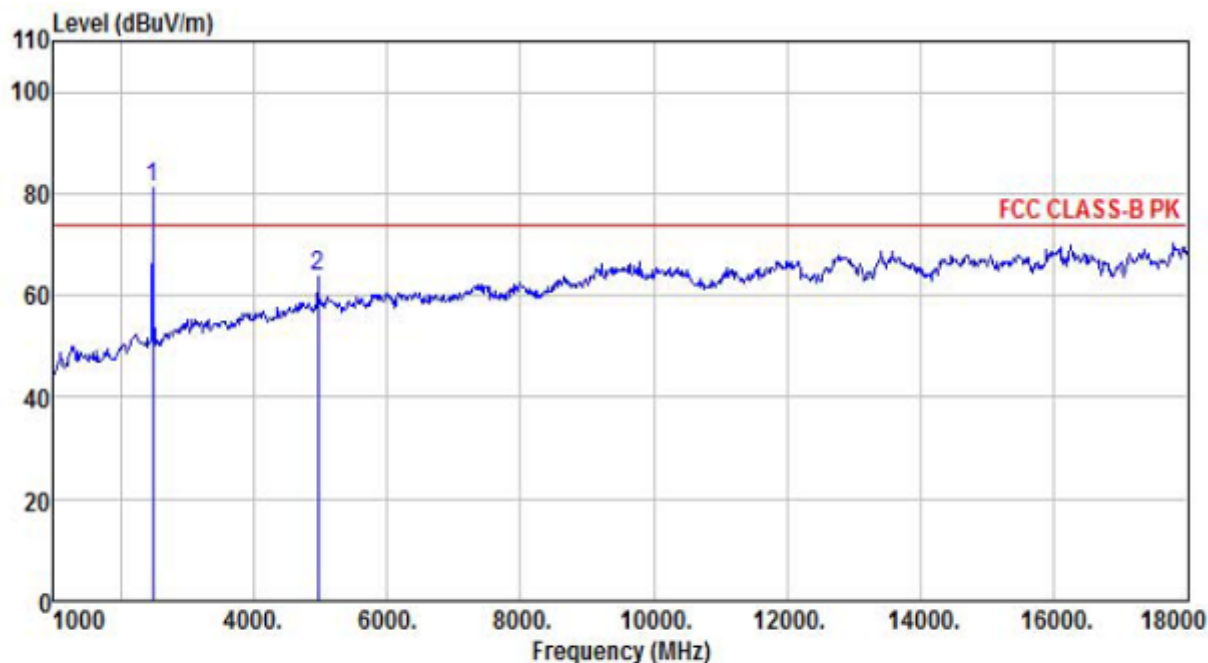
Site : chamber  
Condition : FCC CLASS-B PK 3m BBHA9120D(RSE-H) HORIZONTAL  
EUT : carbonado smart PTT case for iphone  
Model Name : PTK14CO  
Temp/Humi : 25℃ / 57%  
Power Rating: DC 3.7V  
Mode : 8DPSK ch 78  
Memo :

	Freq	ReadAntenna		Cable Preamp		Limit		Over	Remark
		Level	Factor	Loss	Factor	Level	Line		
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1 pp	2479.00	77.19	38.38	7.41	38.31	84.67	74.00	10.67	Peak
2	4961.00	48.68	42.07	10.52	37.11	64.16	74.00	-9.84	Peak

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Remark
4960	64.16	74	-9.84	Peak
4960	39.43	54	-14.57	Average

**Notes:** there is not any harmonic but for background noise above 6GHz.





Site : chamber  
Condition : FCC CLASS-B PK 3m BBHA9120D(RSE-V) VERTICAL  
EUT : carbonado smart PTT case for iphone  
Model Name : PTK14C0  
Temp/Humi : 25℃ / 57%  
Power Rating: DC 3.7V  
Mode : 8DPSK ch 78  
Memo :

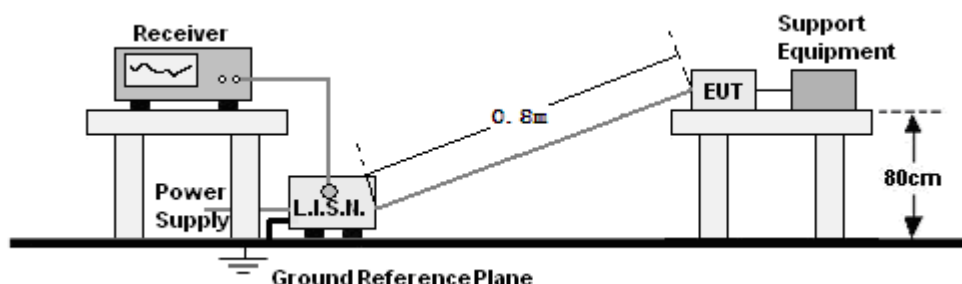
	Freq	ReadAntenna	Cable	Preamp		Limit	Over	
		Level	Factor	Loss	Factor	Level	Line	Limit
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB
1 pp	2479.00	73.50	38.38	7.41	38.31	80.98	74.00	6.98 Peak
2	4961.00	48.31	42.07	10.52	37.11	63.79	74.00	-10.21 Peak

Frequency (MHz)	Level (dBUV/m)	Limit (dBUV/m)	Over Limit (dB)	Remark
4960	63.79	74	-10.21	Peak
4960	39.06	54	-14.94	Average

Notes: there is not any harmonic but for background noise above 6GHz.

## 12. AC POWER LINE CONDUCTED EMISSIONS

### 12.1 TEST SETUP



### 12.2 LIMITS

Frequency range (MHz)	Limits dB(μV)	
	Quasi-peak	Average
0,15 to 0,50	66 to 56	56 to 46
0,50 to 5	56	46
5 to 30	60	50

**NOTE:** 1. The lower limit shall apply at the transition frequencies.  
2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 to 0.50 MHz.

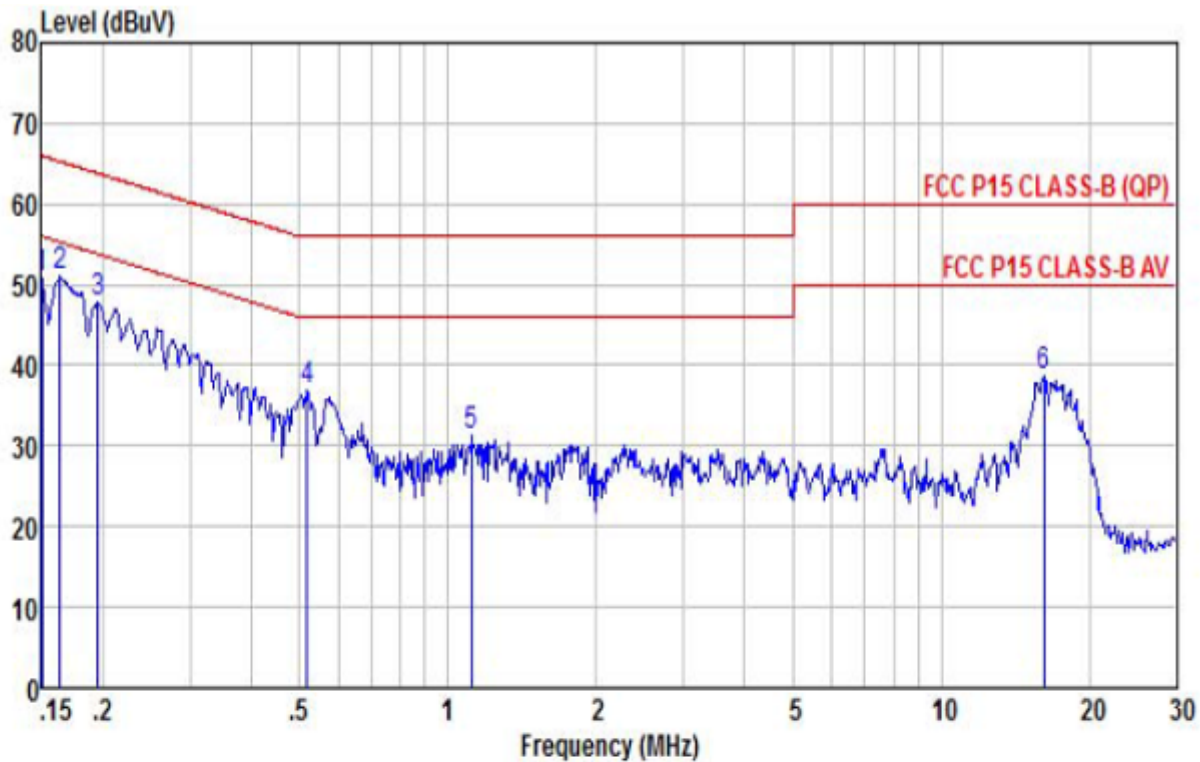
### 12.3 TEST PROCEDURE

According to description of ANSI C63.4: 2009 sec.13.3, the AC power line preliminary conducted emissions measurements were carried out. The preliminary conducted measurements were performed using the spectrum analyzer to observe the emission characteristics of the EUT. The EUT configuration, cable configuration and mode of operation were determined for producing the maximum level of emissions. These configurations were used for final AC power line conducted emissions measurements. The EUT is placed on a non-metallic table 0.8m above the horizontal metal reference ground plane. The EUT is connected to LISN and LISN is connected to the reference ground. All other supplemental devices are connected with EUT through other LISN. The distance between EUT and LISN is 80cm. A radio link is established between EUT and the tester. The output power of the EUT is controlled by the tester and driven to maximum value. An initial pre-scan was performed on the live L line and neutral line with peak detector (9kHz RBW ). Both average detector and quasi-peak detector are performed at the frequencies with maximized peak emission.

Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

12.4 RESULTS & PERFORMANCE

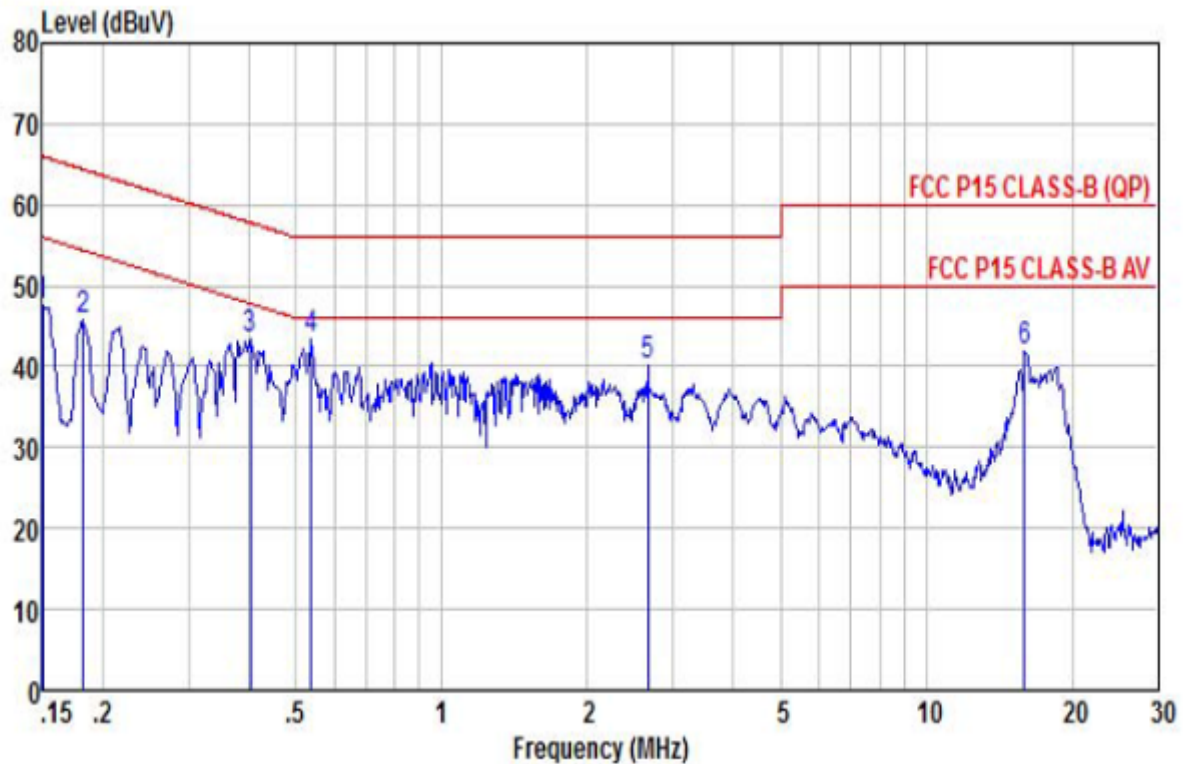
GFSK BT



Site : shielded room 3  
Condition : FCC P15 CLASS-B (QP) ENV216(L)-20120730 LINE  
EUT : carbonado smart PTT case for iphone  
Model Name : PTK14C0  
Temp/Humi : 24℃/52%  
Power Rating: AC 120V/60Hz  
Mode : GFSK  
Memo :

		Read	LISN	Cable	Preamp		Limit	Over	
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1	0.15	40.37	10.36	0.09	0.00	50.82	66.00	-15.18	Peak
2 pp	0.16	40.41	10.44	0.09	0.00	50.94	65.30	-14.36	Peak
3	0.20	37.07	10.44	0.23	0.00	47.74	63.80	-16.06	Peak
4	0.52	26.20	10.55	0.10	0.00	36.85	56.00	-19.15	Peak
5	1.12	20.66	10.52	0.14	0.00	31.32	56.00	-24.68	Peak
6	16.14	28.11	10.52	0.11	0.00	38.74	60.00	-21.26	Peak

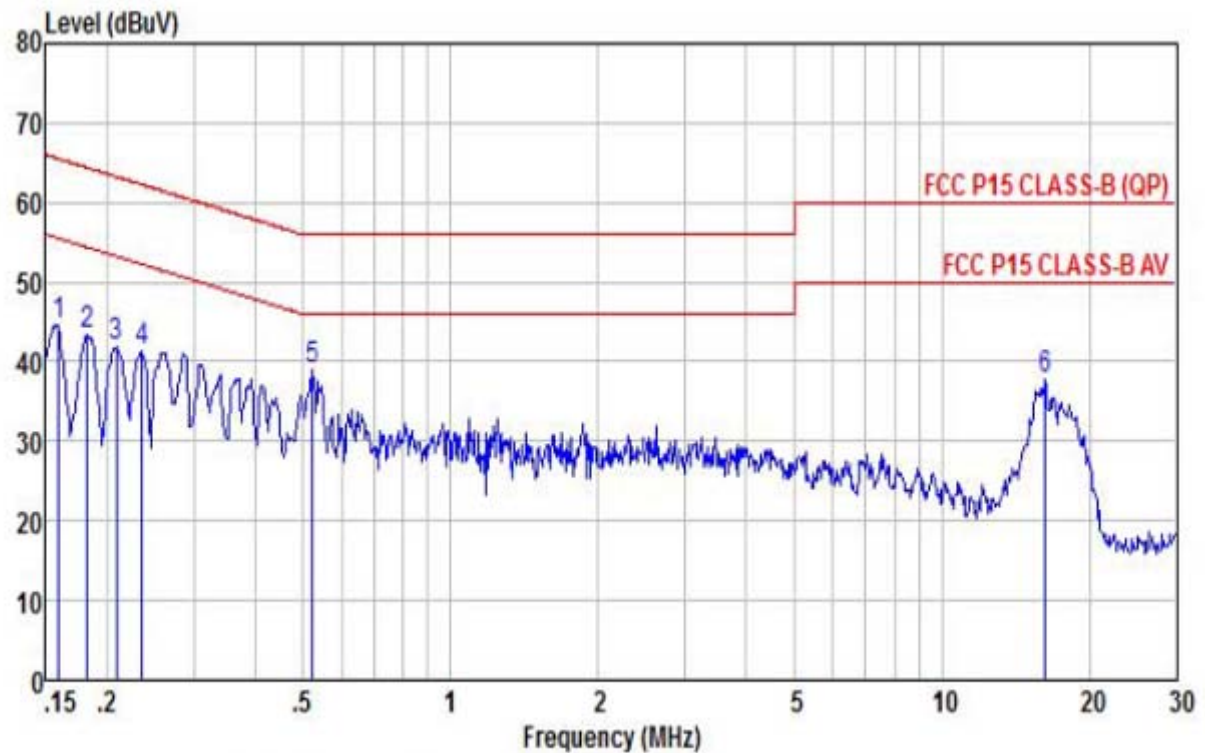




Site : shielded room 3  
 Condition : FCC P15 CLASS-B (QP) ENV216(N)-20120730 NEUTRAL  
 EUT : carbonado smart PTT case for iphone  
 Model Name : PTK14C0  
 Temp/Humi : 24°C/52%  
 Power Rating: AC 120V/60Hz  
 Mode : GFSK  
 Memo :

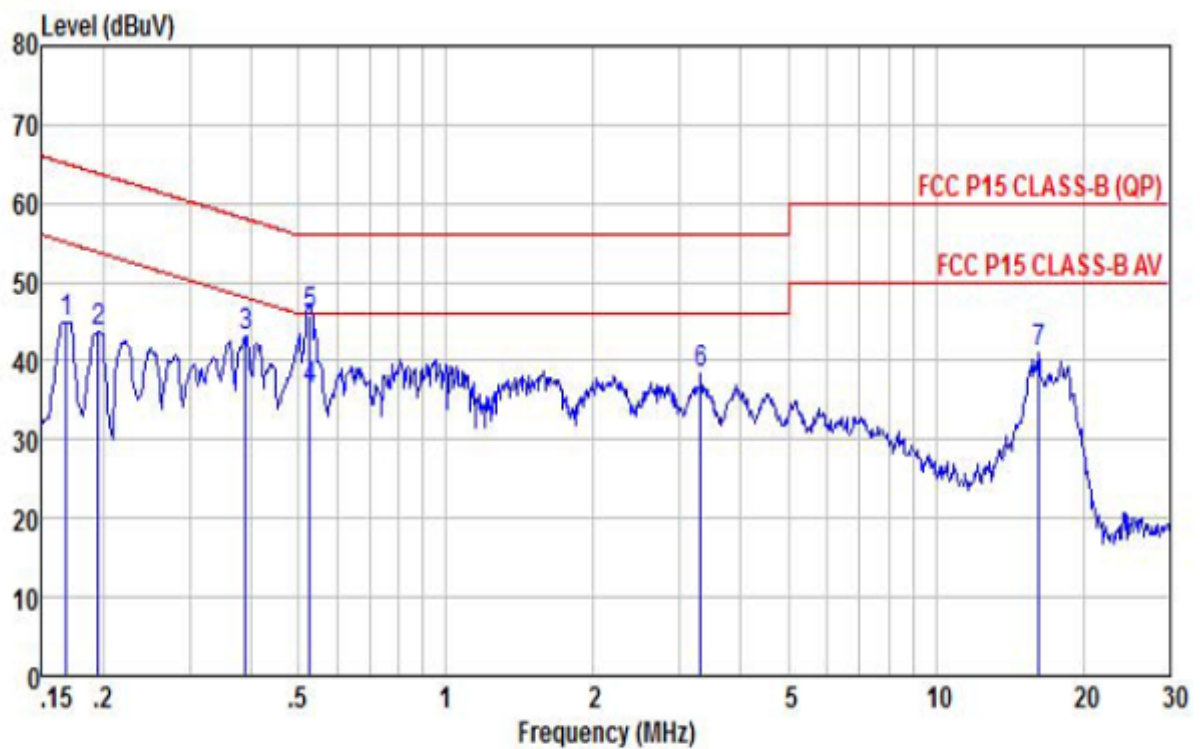
	Read Freq	LISN Level	Cable Factor	Preamp Loss	Preamp Factor	Limit Level	Over Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1	0.15	37.00	10.29	0.09	0.00	47.38	66.00	-18.62	Peak
2	0.18	35.22	10.24	0.23	0.00	45.69	64.42	-18.73	Peak
3	0.40	32.93	10.42	0.14	0.00	43.49	57.81	-14.32	Peak
4 pp	0.54	32.85	10.39	0.11	0.00	43.35	56.00	-12.65	Peak
5	2.66	29.82	10.32	0.15	0.00	40.29	56.00	-15.71	Peak
6	15.97	31.18	10.53	0.11	0.00	41.82	60.00	-18.18	Peak

## 8-DPSK BT



Site : shielded room 3  
 Condition : FCC P15 CLASS-B (QP) ENV216(L)-20120730 LINE  
 EUT : carbonado smart PTT case for iphone  
 Model Name : PTK14C0  
 Temp/Humi : 24°C/52%  
 Power Rating: AC 120V/60Hz  
 Mode : 8DPSK  
 Memo :

	Freq	Read Level	LISN Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1	0.16	34.19	10.40	0.09	0.00	44.68	65.52	-20.84	Peak
2	0.18	32.55	10.52	0.23	0.00	43.30	64.42	-21.12	Peak
3	0.21	31.33	10.43	0.22	0.00	41.98	63.27	-21.29	Peak
4	0.24	30.80	10.45	0.20	0.00	41.45	62.26	-20.81	Peak
5 pp	0.52	28.35	10.54	0.10	0.00	38.99	56.00	-17.01	Peak
6	16.23	27.04	10.52	0.11	0.00	37.67	60.00	-22.33	Peak



Site : shielded room 3  
 Condition : FCC P15 CLASS-B (QP) ENV216(N)-20120730 NEUTRAL  
 EUT : carbonado smart PTT case for iphone  
 Model Name : PTK14C0  
 Temp/Humi : 24°C/52%  
 Power Rating: AC 120V/60Hz  
 Mode : 8DPSK  
 Memo :

	Read	LISN	Cable	Preamp		Limit	Over	
Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Remark
MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1	0.17	34.63	10.27	0.09	0.00	44.99	65.08	-20.09 Peak
2	0.20	32.97	10.38	0.23	0.00	43.58	63.80	-20.22 Peak
3 pk	0.39	32.40	10.42	0.14	0.00	42.96	58.08	-15.12 Peak
4 pp	0.53	25.74	10.40	0.10	0.00	36.24	46.00	-9.76 Average
5 qp	0.53	35.30	10.40	0.10	0.00	45.80	56.00	-10.20 QP
6	3.31	27.93	10.32	0.15	0.00	38.40	56.00	-17.60 Peak
7	16.23	30.33	10.52	0.11	0.00	40.96	60.00	-19.04 Peak

## **APPENDIX 1    PHOTOGRAPHS OF EUT**

Please refer to the file named "Photograph of EUT".

## **APPENDIX 2    PHOTOGRAPHS OF TEST SETUP**

Please refer to the file named "Photograph of test Setup".

----End of the report----