TEST REPORT

Application No.:	ZR/2020/40013
Applicant:	Xiaomi Communications Co., Ltd.
Address of Applicant:	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085
Manufacturer:	Xiaomi Communications Co., Ltd.
Address of Manufacturer:	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085
EUT Description:	Mobile Phone
Model No.:	M2004J19AG
Trade Mark:	Redmi
FCC ID:	2AFZZJ19AG
Standard(s) :	47 CFR Part 15, Subpart B
Date of Receipt:	2020-04-09
Date of Test:	2020-04-09 to 2020-04-21
Date of Issue:	2020-04-30
Test Result:	**Pass***

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

Derek Yang
Wireless Laboratory Manager

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Revision Record				
Version	***Chapter***	***Date***	***Modifier***	***Remark***
01		*2020-04-30*		*Original*

Authorized for issue by:				
		Louis He **(Louis He) /Project Engineer**		
		David Chen **(David Chen) /Reviewer**		

2 Test Summary

Emission Part				
Item	**Standard**	**Method**	**Requirement**	**Result**
Conducted Emissions at Mains Terminals (150kHz-30MHz)	47 CFR Part 15, Subpart B	ANSI C63.4:2014	Class B	Pass
Radiated Emissions (30MHz-1GHz)	47 CFR Part 15, Subpart B	ANSI C63.4:2014	Class B	Pass
Radiated Emissions (above 1GHz)	47 CFR Part 15, Subpart B	ANSI C63.4:2014	Class B	Pass

Internal Source	Upper Frequency
Below 1.705MHz	30MHz
1.705MHz to 108MHz	1GHz
108MHz to 500MHz	2GHz
500MHz to 1GHz	5GHz
Above 1GHz	5th harmonic of the highest frequency or 40GHz, whichever is lower

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4 General Information

Device Type :	portable device		
Exposure Category:	uncontrolled environment / general population		
Product Name:	Mobile Phone		
Model No.(EUT):	M2004J19AG		
Trade Mark:	Redmi		
Product Phase:	Identical Prototype		
FCC ID:	2AFZZJ19AG		
Hardware Version:	P2		
Software Version:	MIUI 11		
Antenna Type:	PIFA Antenna		
Device Operating Configurations :			
Modulation Mode:	**GSM:** GMSK, 8PSK; **WCDMA:** QPSK, 16QAM; **LTE:** QPSK,16QAM,64QAM **WIFI:** DSSS, OFDM **BT:** GFSK, π/4DQPSK,8DPSK		
Device Class:	B		
GPRS Multi-slots Class:	12	EGPRS Multi-slots Class:	12
HSDPA UE Category:	24	HSUPA UE Category	6
Power Class	4,tested with power level 5(GSM850)		
	1,tested with power level 0(GSM1900)		
	3, tested with power control "all 1"(WCDMA Band II/IV/V)		
	3, tested with power control Max Power(LTE Band 2/4/5/7/38)		
Frequency Bands:	Band	Tx (MHz)	Rx (MHz)
	GSM850	824~849	869~894
	GSM1900	1850~1910	1930~1990
	WCDMA Band II	1850~1910	1930~1990
	WCDMA Band IV	1710~1755	2110~2155
	WCDMA Band V	824~849	869~894
	LTE Band 2	1850~1910	1930~1990
	LTE Band 4	1710~1755	2110~2155
	LTE Band 5	824~849	869~894
	LTE Band 7	2500~2570	2620~2690
	LTE Band 38	2570~2620	2570~2620
	WIFI 2.4G	2412~2462	2412~2462
	WIFI 5G	5150~5825	5150~5825
	BT	2402~2480	2402~2480
	GNSS(GPS/BDS/GLONASS/Galileo)	/	1559~1610
	FM	87.5~108	
	NFC	13.56	
Adaptor Information1 #:	Model:	MDY-09-EQ	
	Brand Name:	MI	
	SEC:	I/P: 100 - 240 Vac, 0.35 A, O/P:5.0V,2A;	
	Manufacturer:	Jiangsu Chenyang Electron Co.,Ltd.	
Adaptor Information2 #:	Model:	MDY-09-EQ	
	Brand Name:	MI	
	SEC:	I/P: 100 - 240 Vac, 0.35 A, O/P:5.0V,2A;	
	Manufacturer:	Jiangxi jian Aohai Technology Co.,Ltd.	

Battery Information #:	Model:	BN54
	Brand Name:	+3.87V
	Normal Voltage:	4920mAh
	Rated capacity:	Ningde Amperex Technology Limited
	Manufacturer:	BN54
Headset Information:	Model:	EM023
	Manufacturer:	Tiinlab Acoustic Technology (Shenzhen) Co., Ltd.
USB Cable1 Information :	Model:	H73312
	Signal Line	1.0 meter, shielded cable
	Manufacturer:	Dehong
USB Cable2 Information :	Model:	B73312
	Signal Line	1.0 meter, shielded cable,
	Manufacturer:	Broad

Note: There are 2 types of EUT sample, differences between them is Memory, EUT 1(4+64); EUT 2(3+32); Except listings above, the others are all the same

4.1 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Laptop	Lenovo	T430u	REF. No.SEA1800
Mouse	Lenovo	M-U0025-O	REF. No.:SEA2400
Router	NETGEAR	DGN2200	REF. No.SEA2200

4.2 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Conduction Emission	± 3.4dB (150kHz to 30MHz)
2	Radiated Emission	± 4.8dB (30MHz-1GHz)
		± 5.2dB (1GHz-6GHz)
		± 5.5dB (6GHz-18GHz)
		± 5.02dB (18GHz-40GHz)
3	Temperature test	± 1°C
4	Humidity test	± 3%

4.3 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Xi'an Branch

Single floor D, building 1, Kanghong orange square science and technology park, No.137 keyuan 3rd road, fengdong new town, Xi 'an city, shanxi China. 518057.

Tel: +86 (0) 29 6282 7885 Fax: +86 (0) 29 6282 7885

No tests were sub-contracted.

4.4 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **A2LA (Certificate No. 4854.01)**

SGS-CSTC STANDARDS TECHNICAL SERVICES CO., LTD. XIAN BRANCH

is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 4854.01.

Test Site No.:	**SGS Xian Site No.**		**FCC Designation No.**
	CO01-XA	03CH01-XA	CN1271

4.5 Deviation from Standards

None

4.6 Abnormalities from Standard Conditions

None

5 Equipment List

Radiated Emissions (30MHz~ 40GHz)					
Test Equipment	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal. date (yyyy-mm-dd)**	**Cal.Due date (yyyy-mm-dd)**
966 Test chamber	Brilliant-emc	NA	XAW040101	2019/6/11	2022/6/9
BiConiLog Antenna (30MHz-3GHz)	rosenberge	VULB 9163	XAW010901	2018/8/8	2021/8/7
Horn Antenna (800MHz-18GHz)	rosenberger	BBHA 9120D	XAW010902	2018/7/18	2021/7/17
Horn Antenna (18-40GHz)	rosenberge	BBHA 9170	XAW010903	2018/8/1	2021/7/31
Amplifier(9kHz-3GHz)	Tonscend	TAP00903040	XAW030601	2019/11/18	2020/11/18
Amplifier(100MHz-18GHz)	Tonscend	TAP01018048	XAW030602	2019/11/18	2020/11/18
Amplifier(18-40GHz)	Tonscend	TAP18040048	XAW030603	2019/11/18	2020/11/18
Radio Communication Analyzers	Anritsu	Mt8820c	XAW020223	2019/6/27	2020/6/26
Test receiver	Rohde & Schwarz	ESR	XAW010801	2019/9/7	2020/9/6
MXA signal analyzer	Rohde & Schwarz	FSV	XAW040103	2020/4/2	2021/4/3
Measurement Software	Tonscend	TS+	N/A	N/A	N/A
Filter bank	Tonscend	JS0806-F	N/A	N/A	N/A
Filter bank	Tonscend	JS0806s	N/A	N/A	N/A
Artificial network	Rohde & Schwarz	ENV216	N/A	2019/7/16	2020/7/16

Conducted Emissions at Mains Terminals (150kHz-30MHz)					
Test Equipment	**Manufacturer**	**Model No.**	**Inventory No.**	**Cal. date (yyyy-mm-dd)**	**Cal.Due date (yyyy-mm-dd)**
Shield Room	Brilliant-emc	NA	XAW08043	NA	NA
Test receiver	Rohde & Schwarz	ESR	XAW010801	9/7/2019	9/6/2020
Artificial network	Rohde & Schwar	ENV216	XAW010401	7/16/2019	7/15/2020
Artificial network	Rohde & Schwar	ENV216	XAW013001	7/16/2019	7/15/2020
Cabel	SGS	NA	NA	NA	NA

6 Emission Test Results

6.1 Conducted Emissions at Mains Terminals (150kHz-30MHz)

Test Requirement:	47 CFR Part 15, Subpart B
Test Method:	ANSI C63.4:2014
Frequency Range:	150kHz to 30MHz
Limit:	
0.15M-0.5MHz	66dB(μV)-56dB(μV) quasi-peak, 56dB(μV)-46dB(μV) average
0.5M-5MHz	56dB(μV) quasi-peak, 46dB(μV) average
5M-30MHz	60dB(μV) quasi-peak, 50dB(μV) average
Detector:	Peak for pre-scan (9kHz resolution bandwidth) 0.15M to 30MHz

6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 18.9 °C Humidity: 55.1 % RH Atmospheric Pressure: 1000 mbar

Pretest these modes to find the worst case:

a:Transfer data between the EUT1 and the PC+USB cable1

b:Transfer data between the EUT1 and the PC+USB cable2

c:GSM850 Link down ant+BT+NFC+WLAN2.4G+GPS Rx+playing MP4 (SD card)+earphone+EUT1+USB cable1+adapter1

d:GSM1900 Link down ant+BT+NFC+WLAN5G+GPS Rx+camera (Back)+earphone+EUT1+USB cable1+adapter1

e:WCDMA II Link down ant+BT+NFC+WLAN2.4G+GPS Rx+camera (Front)+earphone+EUT1+USB cable1+adapter1

f:WCDMA V Link down ant+BT+NFC+WLAN2.4G+GPS Rx+camera (Front)+earphone+EUT1+USB cable1+adapter1

g:WCDMA VI Link down ant+BT+NFC+WLAN5G+GPS Rx+camera (Back)+earphone+EUT1+USB cable1+adapter1

h:LTE band 2 Link down ant+BT+NFC+ WLAN5G+GPS Rx +earphone+EUT1+USB cable1+adapter1

o:LTE band 4 Idle down ant+BT+FM+NFC+WLAN2.4G+GPS Rx+earphone+EUT1+USB cable1+adapter1

p:LTE band 5 Idle down ant +BT+FM+NFC+WLAN5G+GPS Rx+earphone+EUT1+USB cable1+adapter1

q:LTE band 7 Idle down ant+BT+FM+NFC+WLAN2.4G+GPS Rx+earphone+EUT1+USB cable1+adapter1

r:LTE band 38 Link down ant+BT+NFC+WLAN5G+GPS Rx +earphone+EUT1+USB cable1+adapter1

s:GSM850 Link top ant+BT+NFC+WLAN5G+GPS Rx+camera (Back)+earphone+EUT1+USB cable1+adapter2

t:GSM850 Link down ant+BT+NFC+WLAN5G+GPS Rx+camera (Back)+earphone+EUT1+USB cable1+adapter2

u:GSM850 Link down ant+BT+NFC+WLAN5G+GPS Rx+camera (Back)+earphone+EUT1+USB cable2+adapter2

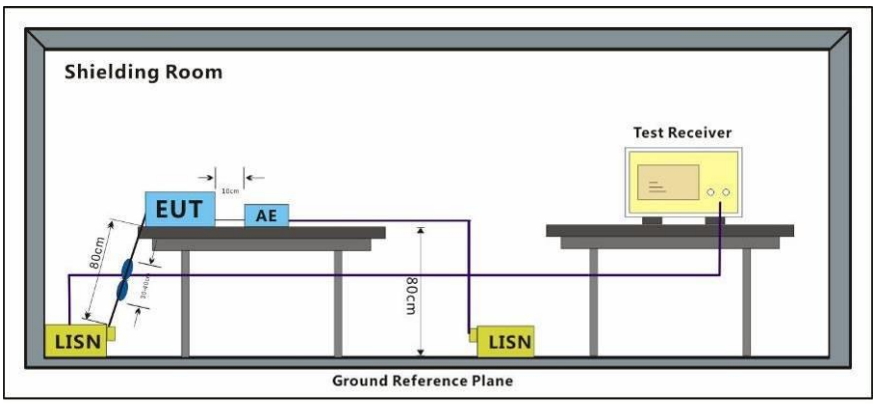
v:GSM850 Link down ant+BT+NFC+WLAN5G+GPS Rx+camera (Back)+earphone+EUT2+USB cable2+adapter2

The worst case for final test:

a:Transfer data between the EUT1 and the PC+USB cable1

t:GSM850 Link down ant+BT+WLAN5G+GPS Rx+camera (Back)+earphone+EUT1+USB cable1+adapter2

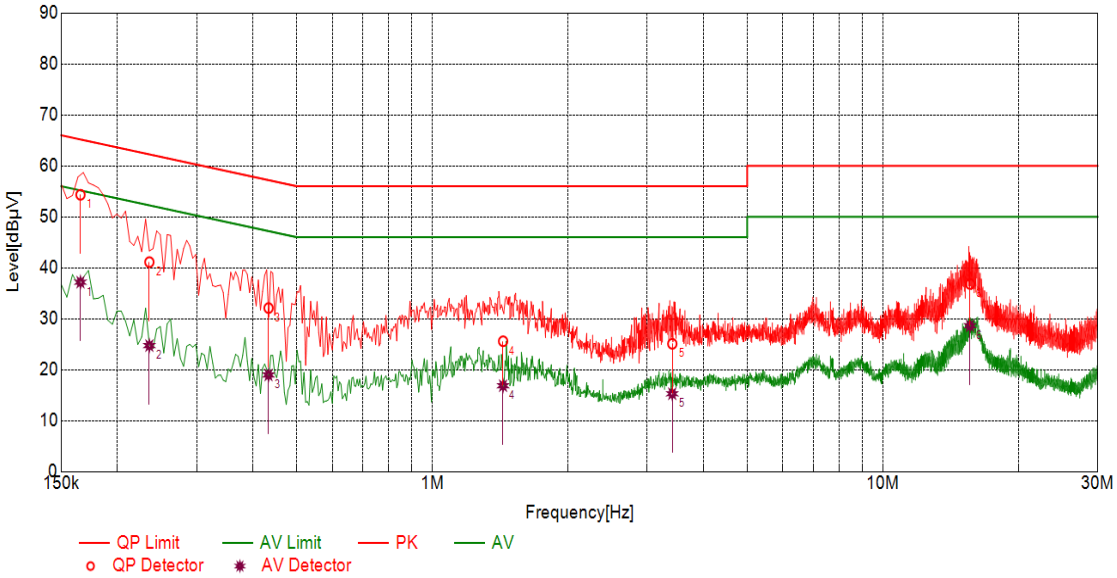
6.1.2 Test Setup Diagram



6.1.3 Measurement Data

An initial pre-scan was performed with peak detector.Quasi-Peak or Average measurement were performed at the frequencies with maximized peak emission were detected.

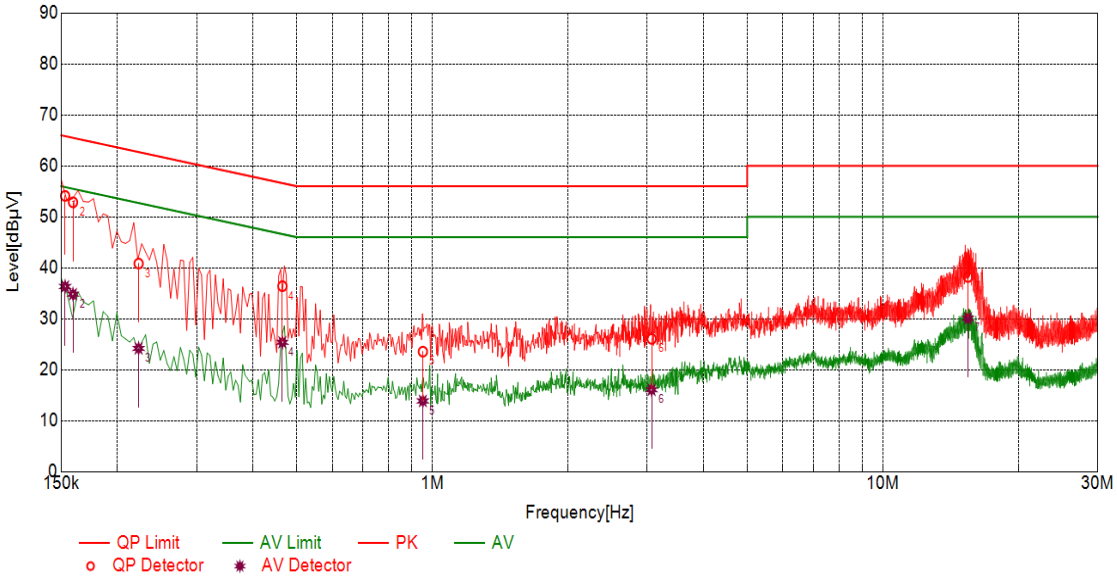
Mode:a; Line:Live Line



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]	Type
1	0.1656	10.10	54.32	65.18	10.86	37.17	55.18	18.01	L
2	0.2355	10.10	41.12	62.25	21.13	24.73	52.25	27.52	L
3	0.4330	10.10	32.10	57.19	25.09	18.96	47.19	28.23	L
4	1.4357	10.10	25.59	56.00	30.41	16.86	46.00	29.14	L
5	3.4085	10.10	25.09	56.00	30.91	15.28	46.00	30.72	L
6	15.6142	10.11	36.83	60.00	23.17	28.62	50.00	21.38	L

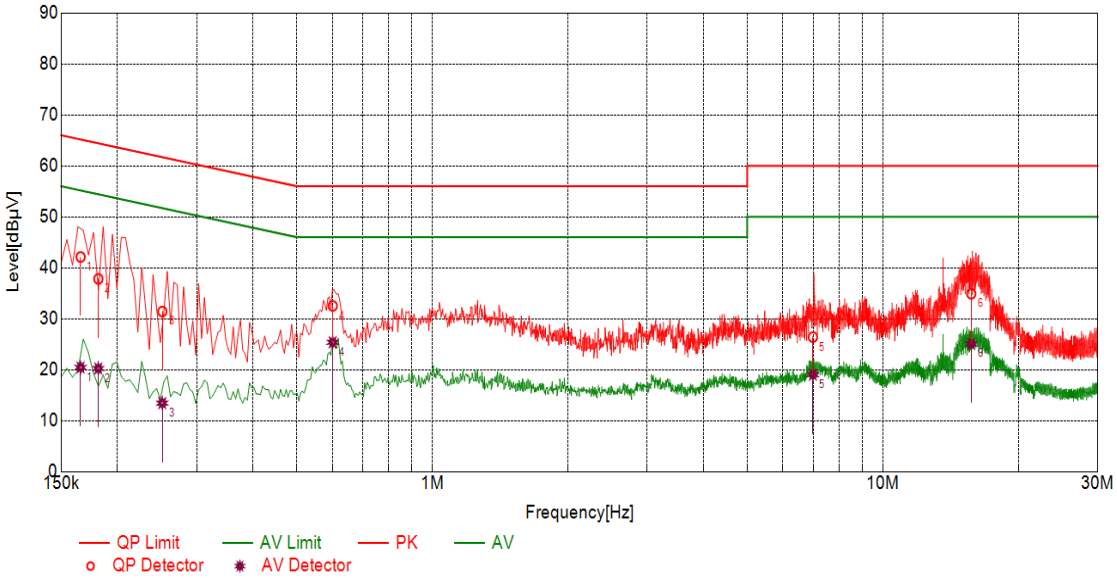
Mode:a; Line:Neutral Line



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]	Type
1	0.1531	10.10	54.11	65.83	11.72	36.32	55.83	19.51	N
2	0.1594	10.10	52.85	65.49	12.64	34.81	55.49	20.68	N
3	0.2229	10.10	40.83	62.71	21.88	24.18	52.71	28.53	N
4	0.4647	10.10	36.39	56.61	20.22	25.38	46.61	21.23	N
5	0.9528	10.10	23.55	56.00	32.45	13.87	46.00	32.13	N
6	3.0680	10.10	26.06	56.00	29.94	16.06	46.00	29.94	N
7	15.4530	10.11	38.20	60.00	21.80	30.08	50.00	19.92	N

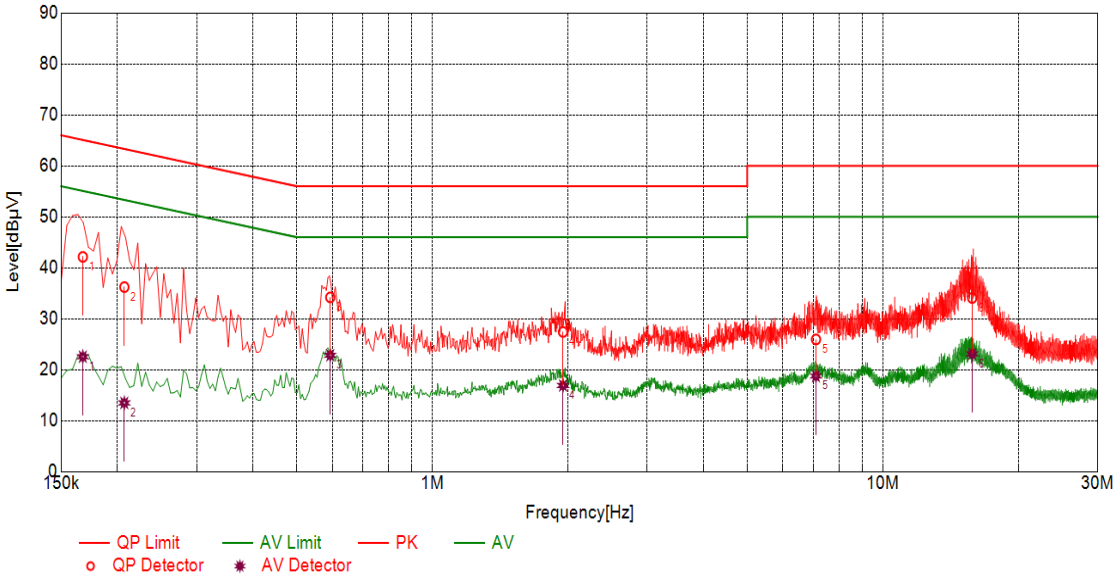
Mode:t; Line:Live Line



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]	Type
1	0.1657	10.10	42.13	65.17	23.04	20.44	55.17	34.73	L
2	0.1814	10.10	37.82	64.42	26.60	20.24	54.42	34.18	L
3	0.2516	10.10	31.42	61.71	30.29	13.44	51.71	38.27	L
4	0.6010	10.10	32.52	56.00	23.48	25.38	46.00	20.62	L
5	6.9938	10.10	26.40	60.00	33.60	19.03	50.00	30.97	L
6	15.7110	10.11	34.90	60.00	25.10	25.07	50.00	24.93	L

Mode:t; Line: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]	Type
1	0.1676	10.10	42.14	65.08	22.94	22.54	55.08	32.54	N
2	0.2072	10.10	36.21	63.32	27.11	13.48	53.32	39.84	N
3	0.5936	10.10	34.19	56.00	21.81	22.83	46.00	23.17	N
4	1.9504	10.10	27.41	56.00	28.59	16.90	46.00	29.10	N
5	7.1051	10.10	25.95	60.00	34.05	18.75	50.00	31.25	N
6	15.7838	10.11	34.07	60.00	25.93	23.11	50.00	26.89	N

6.2 Radiated Emissions (30MHz-1GHz)

Test Requirement:	47 CFR Part 15, Subpart B
Test Method:	ANSI C63.4:2014
Frequency Range:	30MHz to 1GHz
Measurement Distance:	3m
Limit:	
30MHz -88MHz	40.0(dBμV/m) quasi-peak
88MHz-216MHz	43.5(dBμV/m) quasi-peak
216MHz-960MHz	46.0(dBμV/m) quasi-peak
960MHz-1000MHz	54.0(dBμV/m) quasi-peak
Detector:	Peak for pre-scan (120kHz resolution bandwidth) 30M to1000MHz

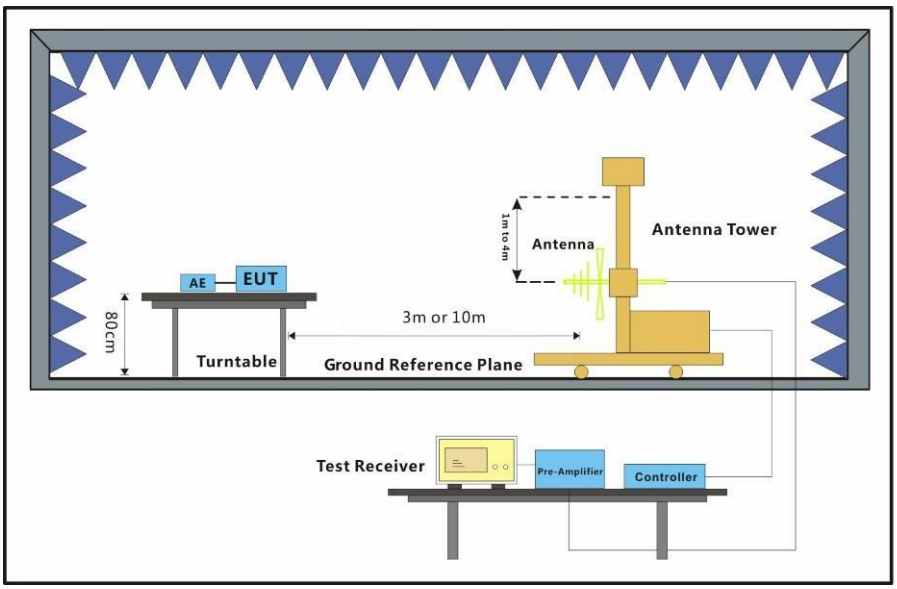
6.2.1 E.U.T. Operation

Operating Environment:

Temperature:	25 °C	Humidity:	66.5 % RH	Atmospheric Pressure:	1010	mbar

Pretest these modes to find the worst case:	a:Transfer data between the EUT1 and the PC+USB cable1 b:Transfer data between the EUT1 and the PC+USB cable2 c:GSM850 Idle down ant+BT+FM+NFC+WLAN2.4G+GPS Rx+playing MP4 (SD card)+earphone+EUT1+USB cable1+adapter1 d:GSM1900 Idle down ant+BT+FM+NFC+WLAN5G+GPS Rx+camera (Back)+earphone+EUT1+USB cable1+adapter1 e:WCDMA II Idle down ant+BT+FM+NFC+WLAN2.4G+GPS Rx+camera (Front)+earphone+EUT1+USB cable1+adapter1 f:WCDMA V Idle down ant+BT+FM+NFC+WLAN2.4G+GPS Rx+camera (Front)+earphone+EUT1+USB cable1+adapter1 g:WCDMA VI Idle down ant+BT+FM+NFC+WLAN5G+GPS Rx+camera (Back)+earphone+EUT1+USB cable1+adapter1 h:LTE band 2 Idle down ant+BT+FM+NFC+ WLAN5G+GPS Rx +earphone+EUT1+USB cable1+adapter1 o:LTE band 4 Idle down ant+BT+FM+NFC+WLAN2.4G+GPS Rx+earphone+EUT1+USB cable1+adapter1 p:LTE band 5 Idle down ant +BT+FM+NFC+WLAN5G+GPS Rx+earphone+EUT1+USB cable1+adapter1 q:LTE band 7 Idle down ant+BT+FM+NFC+WLAN2.4G+GPS Rx+earphone+EUT1+USB cable1+adapter1 r:LTE band 38 Idle down ant+BT+FM+NFC+WLAN5G+GPS Rx +earphone+EUT1+USB cable1+adapter1 s:p:LTE band 5 Idle top ant +BT+FM+NFC+WLAN5G+GPS Rx+earphone+EUT1+USB cable1+adapter1 t:LTE band 4 Idle down ant+BT+FM+NFC+WLAN2.4G+GPS Rx+earphone+EUT1+USB cable1+adapter2 u:LTE band 4 Idle down ant+BT+FM+NFC+WLAN2.4G+GPS Rx+earphone+EUT1+USB cable2+adapter2 v:LTE band 4 Idle down ant+BT+FM+NFC+WLAN2.4G+GPS Rx+earphone+EUT2+USB cable1+adapter2
The worst case for final test:	a:Transfer data between the EUT1 and the PC+USB cable1 t:LTE band 4 Idle down ant+BT+FM+NFC+WLAN2.4G+GPS Rx+earphone+EUT1+USB cable1+adapter2

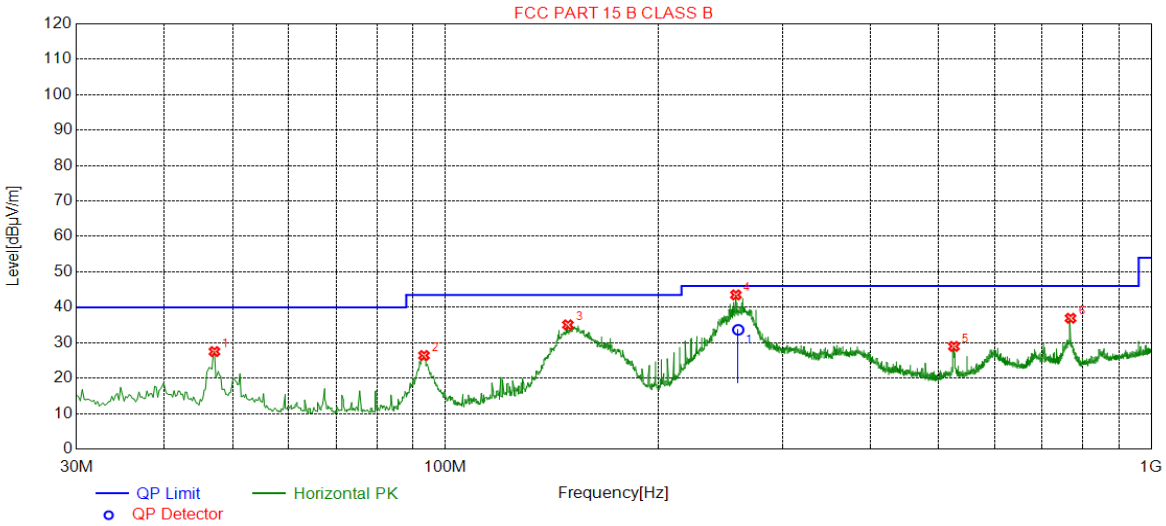
6.2.2 Test Setup Diagram



6.2.3 Measurement Data

An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by BiConiLog antenna with 2 orthogonal polarities.

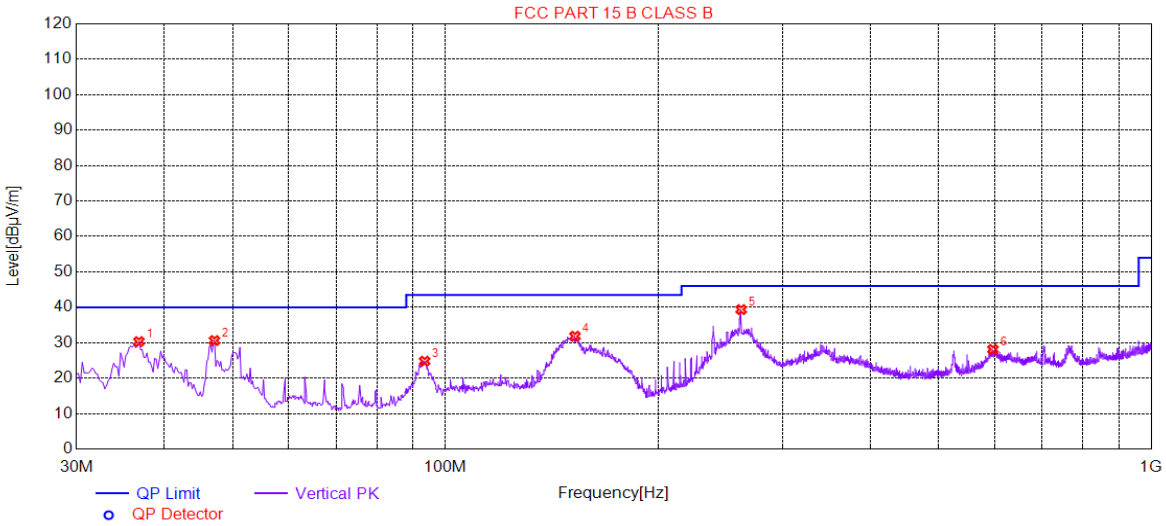
Mode:a; Polarization:Horizontal



Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	47.0754	27.51	-30.40	40.00	12.49	200	113	Horizontal
2	93.2567	26.40	-33.18	43.50	17.10	200	43	Horizontal
3	149.139	35.05	-35.12	43.50	8.45	200	40	Horizontal
4	257.995	43.51	-29.43	46.00	2.49	100	13	Horizontal
5	525.381	28.96	-22.67	46.00	17.04	200	95	Horizontal
6	768.705	36.91	-18.13	46.00	9.09	100	297	Horizontal

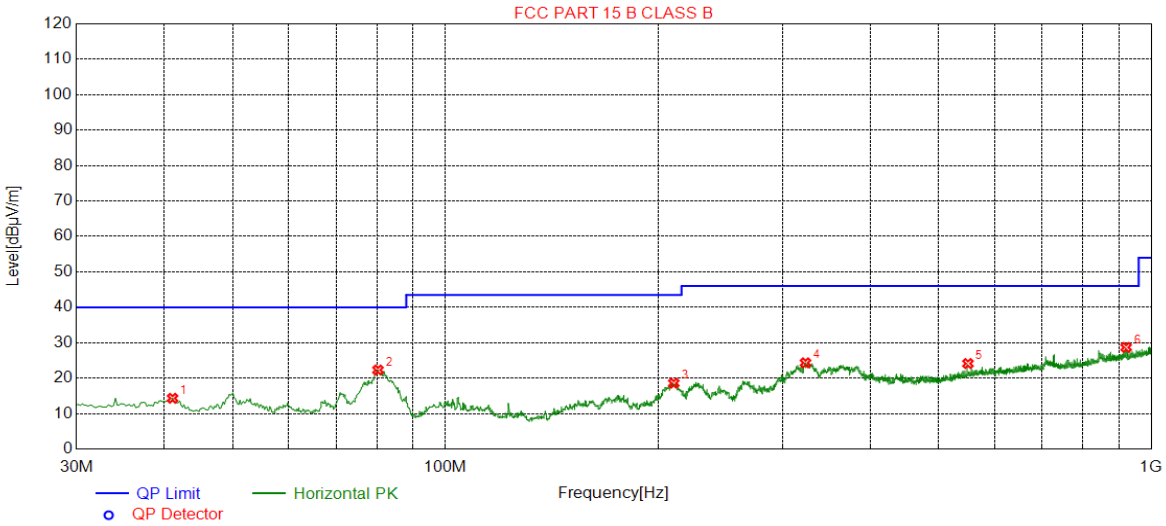
Final Data List								
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	259.905	-29.37	33.65	46.00	12.35	123	148.6	Horizontal

Mode:a; Polarization:Vertical



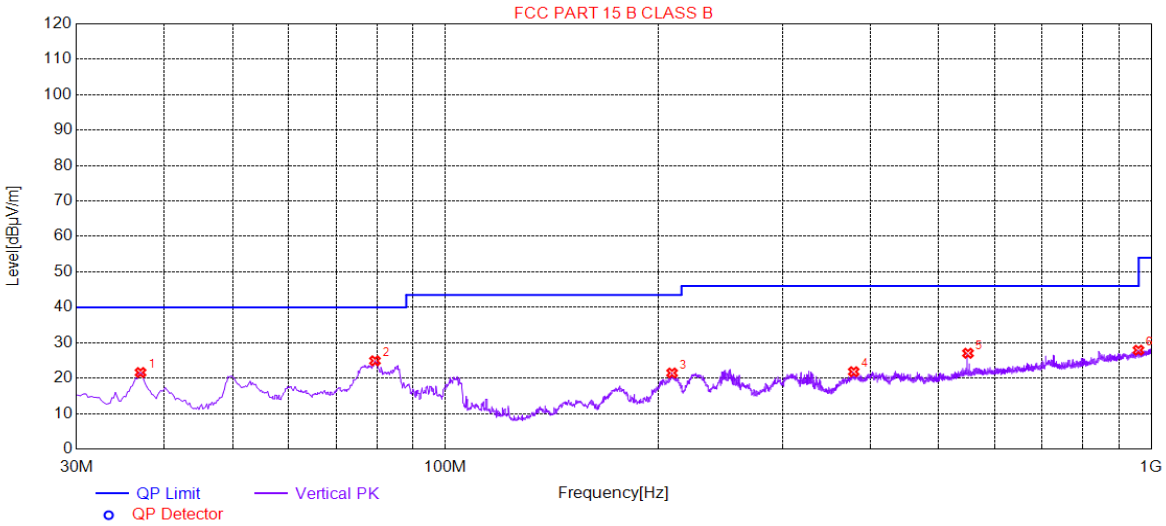
Suspected List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	36.7914	30.33	-29.38	40.00	9.67	100	7	Vertical
2	47.0754	30.61	-30.40	40.00	9.39	100	63	Vertical
3	93.4507	24.79	-33.14	43.50	18.71	100	218	Vertical
4	152.632	31.84	-34.96	43.50	11.66	100	110	Vertical
5	262.458	39.37	-29.32	46.00	6.63	200	316	Vertical
6	596.787	28.12	-20.72	46.00	17.88	100	323	Vertical

Mode t; Polarization:Horizontal



Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	41.0602	14.33	-28.78	40.00	25.67	100	289	Horizontal
2	80.2561	22.30	-36.09	40.00	17.70	200	91	Horizontal
3	210.650	18.57	-30.96	43.50	24.93	100	220	Horizontal
4	323.774	24.33	-27.59	46.00	21.67	100	77	Horizontal
5	550.024	24.13	-22.04	46.00	21.87	200	274	Horizontal
6	921.414	28.68	-15.79	46.00	17.32	200	22	Horizontal

Mode:t; Polarization:Vertical



Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	36.9854	21.59	-29.32	40.00	18.41	200	227	Vertical
2	79.4799	24.90	-36.06	40.00	15.10	100	241	Vertical
3	209.485	21.46	-30.99	43.50	22.04	100	307	Vertical
4	378.881	21.83	-26.10	46.00	24.17	100	322	Vertical
5	550.024	27.03	-22.04	46.00	18.97	100	112	Vertical
6	959.251	27.90	-15.35	46.00	18.10	200	152	Vertical

6.3 Radiated Emissions (above 1GHz)

Test Requirement:	47 CFR Part 15, Subpart B
Test Method:	ANSI C63.4:2014
Frequency Range:	Above 1GHz
Measurement Distance:	3m
Limit:	
Above 1GHz	74(dBμV/m) peak, 54(dBμV/m) average
Detector:	Peak for pre-scan (1000kHz resolution bandwidth) 1000M to18000MHz

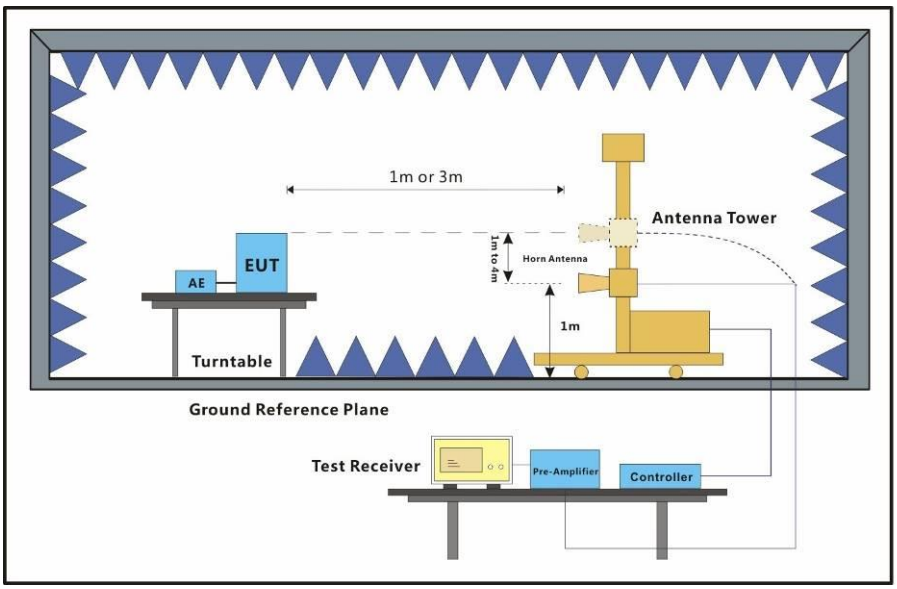
6.3.1 E.U.T. Operation

Operating Environment:

Temperature: 21.7 °C Humidity: 56.4 % RH Atmospheric Pressure: 1010 mbar

Pretest these modes to find the worst case:	a:Transfer data between the EUT1 and the PC+USB cable1
	b:Transfer data between the EUT1 and the PC+USB cable2
	c:GSM850 Idle down ant+BT+FM+NFC+WLAN2.4G+GPS Rx+playing MP4 (SD card)+earphone+EUT1+USB cable1+adapter1
	d:GSM1900 Idle down ant+BT+FM+NFC+WLAN5G+GPS Rx+camera (Back)+earphone+EUT1+USB cable1+adapter1
	e:WCDMA II Idle down ant+BT+FM+NFC+WLAN2.4G+GPS Rx+camera (Front)+earphone+EUT1+USB cable1+adapter1
	f:WCDMA V Idle down ant+BT+FM+NFC+WLAN2.4G+GPS Rx+camera (Front)+earphone+EUT1+USB cable1+adapter1
	g:WCDMA VI Idle down ant+BT+FM+NFC+WLAN5G+GPS Rx+camera (Back)+earphone+EUT1+USB cable1+adapter1
	h:LTE band 2 Idle down ant+BT+FM+NFC+ WLAN5G+GPS Rx +earphone+EUT1+USB cable1+adapter1
	o:LTE band 4 Idle down ant+BT+FM+NFC+WLAN2.4G+GPS Rx+earphone+EUT1+USB cable1+adapter1
	p:LTE band 5 Idle down ant +BT+FM+NFC+WLAN5G+GPS Rx+earphone+EUT1+USB cable1+adapter1
	q:LTE band 7 Idle down ant+BT+FM+NFC+WLAN2.4G+GPS Rx+earphone+EUT1+USB cable1+adapter1
	r:LTE band 38 Idle down ant+BT+FM+NFC+WLAN5G+GPS Rx +earphone+EUT1+USB cable1+adapter1
	s:p:LTE band 5 Idle top ant +BT+FM+NFC+WLAN5G+GPS Rx+earphone+EUT1+USB cable1+adapter1
	t:LTE band 4 Idle down ant+BT+FM+NFC+WLAN2.4G+GPS Rx+earphone+EUT1+USB cable1+adapter2
	u:LTE band 4 Idle down ant+BT+FM+NFC+WLAN2.4G+GPS Rx+earphone+EUT1+USB cable2+adapter2
	v:LTE band 4 Idle down ant+BT+FM+NFC+WLAN2.4G+GPS Rx+earphone+EUT2+USB cable1+adapter2
The worst case for final test:	a:Transfer data between the EUT1 and the PC+USB cable1
	t:LTE band 4 Idle down ant+BT+FM+NFC+WLAN2.4G+GPS Rx+earphone+EUT1+USB cable1+adapter2

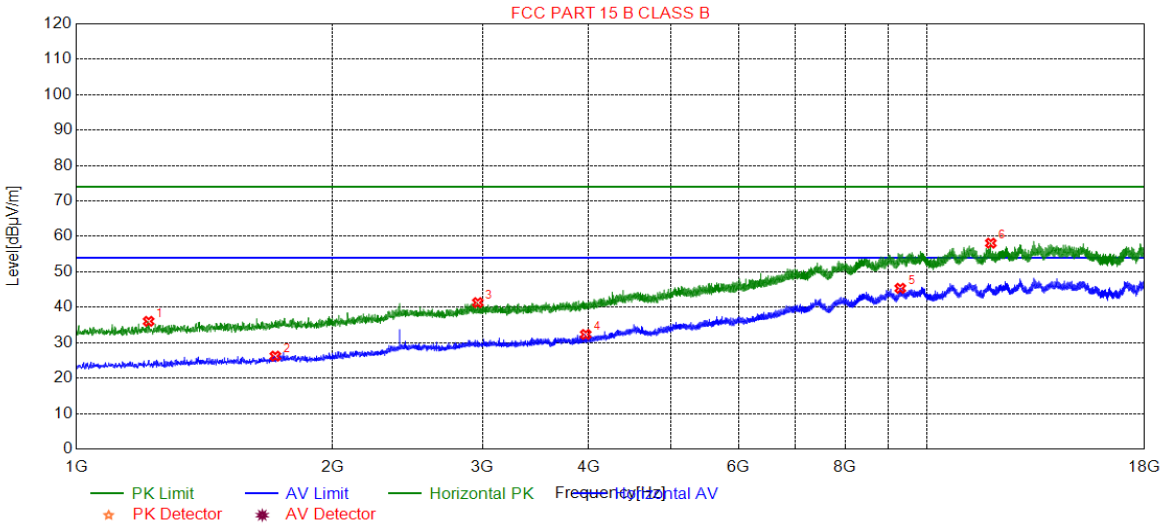
6.3.2 Test Setup Diagram



6.3.3 Measurement Data

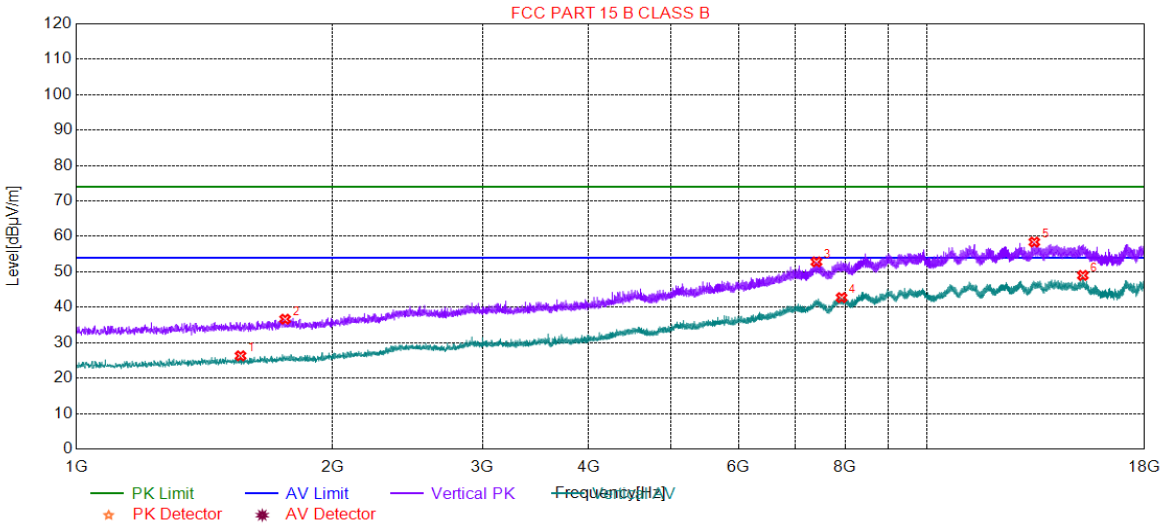
An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Average measurements were conducted based on the peak sweep graph. The EUT was measured by Horn antenna with 2 orthogonal polarities.

Mode:a; Polarization:Horizontal



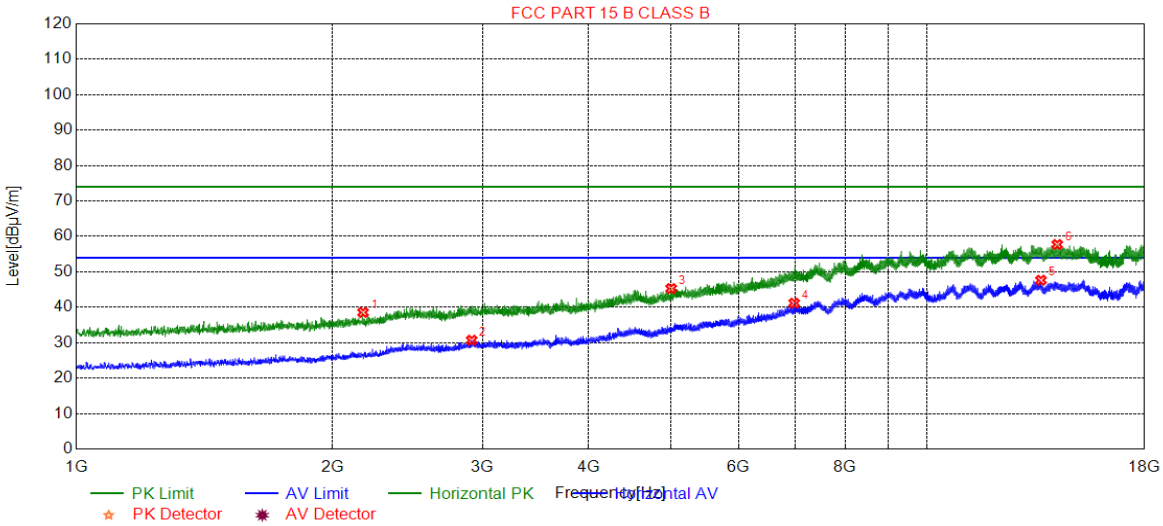
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1215.91	36.04	-30.18	74.00	37.96	100	143	Horizontal
2	1713.18	26.22	-28.27	54.00	27.78	200	268	Horizontal
3	2962.74	41.32	-22.86	74.00	32.68	200	218	Horizontal
4	3967.49	32.34	-19.41	54.00	21.66	100	1	Horizontal
5	9293.01	45.36	-1.53	54.00	8.64	200	118	Horizontal
6	11873.7	58.10	-0.19	74.00	15.90	200	118	Horizontal

Mode:a; Polarization:Vertical



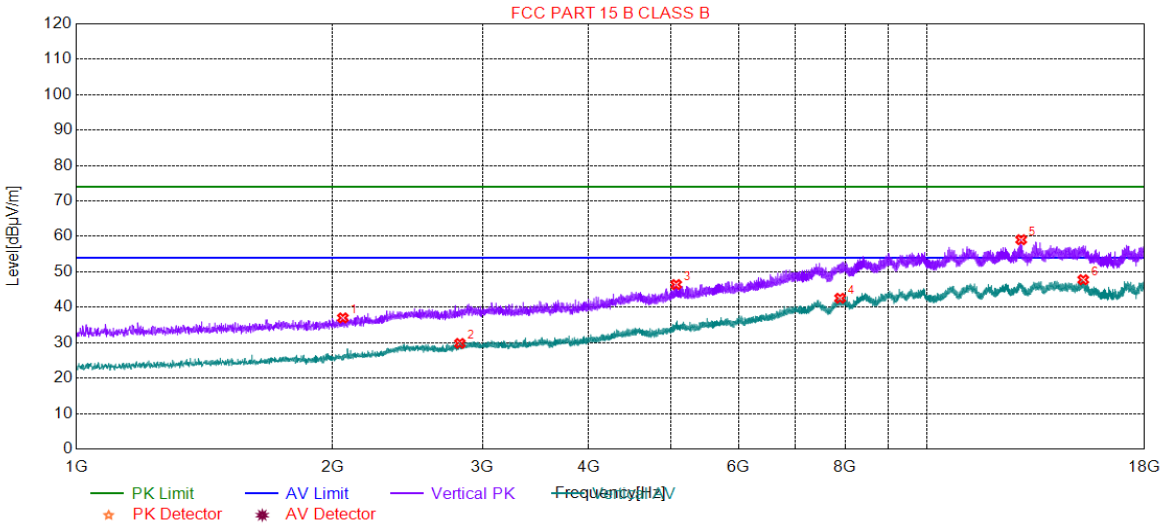
Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1559.32	26.30	-28.97	54.00	27.70	100	292	Vertical
2	1759.08	36.65	-28.06	74.00	37.35	100	292	Vertical
3	7406.77	52.82	-6.76	74.00	21.18	200	269	Vertical
4	7928.69	42.72	-5.64	54.00	11.28	200	70	Vertical
5	13354.5	58.41	1.81	74.00	15.59	200	360	Vertical
6	15230.5	48.99	2.83	54.00	5.01	100	39	Vertical

Mode:t; Polarization:Horizontal



Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2172.20	38.54	-26.31	74.00	35.46	100	142	Horizontal
2	2914.29	30.71	-22.83	54.00	23.29	100	342	Horizontal
3	4999.45	45.29	-14.44	74.00	28.71	100	242	Horizontal
4	6973.24	41.17	-8.49	54.00	12.83	100	192	Horizontal
5	13595.9	47.64	2.41	54.00	6.36	100	192	Horizontal
6	14209.6	57.72	2.41	74.00	16.28	100	142	Horizontal

Mode:t; Polarization:Vertical



Suspected List								
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2056.60	37.00	-26.82	74.00	37.00	100	217	Vertical
2	2822.49	29.81	-23.37	54.00	24.19	100	266	Vertical
3	5067.45	46.42	-14.34	74.00	27.58	100	266	Vertical
4	7896.39	42.56	-5.84	54.00	11.44	100	359	Vertical
5	12888.6	59.07	2.11	74.00	14.93	100	167	Vertical
6	15245.8	47.78	2.79	54.00	6.22	100	18	Vertical

Remark:

1) Scan from 1GHz to 30GHz,The disturbance above 18GHz was very low and all noise floor. The above radiated emissions were the highest point could be found when testing, so only the above radiated emissions had been displayed.

7 Photographs

7.1 Conducted Emissions at Mains Terminals (150kHz-30MHz) Test Setup

7.2 Radiated Emissions (30MHz-1GHz) Test Setup

7.3 Radiated Emissions (above 1GHz) Test Setup

7.4 EUT Constructional Details (EUT Photos)

Refer to Photographs of EUT Constructional Details

- End of the Report -