TEST REPORT

No.I20N02496-EMC

for

TCL Communication Ltd.

Tablet PC

Model Name：8094X

With

Hardware Version: PIO

Software Version: 2C51

FCC ID: 2ACCJB140

Issued Date: 2020-10-15

Designation Number: CN1210

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of SAICT.

Test Laboratory:

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
I20N02496-EMC	Rev.0	1st edition	2020-10-15

Note: the latest revision of the test report supersedes all previous version.

CONTENTS

1. Summary of Test Report

1.1. Test Items

Description	Tablet PC
Model Name	8094X
Applicant's name	TCL Communication Ltd.
Manufacturer's Name	TCL Communication Ltd.

1.2. Test Standards

FCC Part 15, Subpart B 10-1-2019 Edition; ANSI C63.4 2014.

1.3. Test Result

PASS

1.4. Testing Location

Address: Building G, Shenzhen International Innovation Center, No.1006 Shennan Road, Futian District, Shenzhen, Guangdong, P. R. China

1.5. Project data

Testing Start Date: 2020-06-22 Testing End Date: 2020-08-10

1.6. Signature

Liang Yong
(Prepared this test report)

Zhang Yunzhuan
(Reviewed this test report)

Cao Junfei
(Approved this test report)

2. ClientInformation

2.1. Applicant Information

Company Name:	TCL Communication Ltd.
Address:	5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, Shatin, NT, Hong Kong
Contact:	Gong Zhizhou
E-mail	zhizhou.gong@tcl.com
Tel:	0086-755-36611722
Fax：	0086-755-36612000-81722

2.2. Manufacturer Information

Company Name:	TCL Communication Ltd.
Address:	5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, Shatin, NT, Hong Kong
Contact:	Gong Zhizhou
E-mail	zhizhou.gong@tcl.com
Tel:	0086-755-36611722
Fax：	0086-755-36612000-81722

3. Equipment UnderTest (EUT) and Ancillary Equipment (AE)

3.1. About EUT

Description	Tablet PC
Model Name	8094X
FCC ID	2ACCJB140
Antenna Type	Internal Antenna
Condition of EUT as received	No obvious damage in appearance

This device contains the receivers which tune and operate between 30MHz-960MHz in the following bands:
GSM850MHz, WCDMA Band 5, LTE Band 5.

Note: Components list, please refer to documents of the manufacturer; it is also included in the original test record of Shenzhen Academy of Information and Communications Technology.

3.2. Internal Identification of EUT

EUT ID*	SN or IMEI	HW Version	SW Version	Receive Date
UT17aa	358496890001116	PIO	2C51	2020-07-22

*EUT ID: is used to identify the test sample in the lab internally.

3.3. Internal Identification of AE

AE ID*	Description
AE1	Battery
AE2	Charger
AE3	Cable
AE4	Headset

AE1

Model	TLp053C1
Manufacturer	BYD
Capacitance	5500mAh
Nominal Voltage	3.85V
S/N	CAC5360006C1

AE2-1

Model	UC13US(CBA0059AGAC5)
Manufacturer	PUAN

AE3-1

Model	CDA0000123C2
Manufacturer	SHENGHUA

AE3-2

Model CDA0000123C8
Manufacturer PUAN
AE4
Model /
Manufacturer /
*AE ID is used to identify the test sample in the lab internally.
AE: ancillary equipment
Note: AE4 is just for testing

3.4. EUT set-ups

EUT set-up No.	Combination of EUT and AE	Remarks
Set.1	UT07aa +AE1+AE2-1+AE3-1	
Set.2	UT07aa +AE1+AE2-1+AE3-2	
Set.3	UT07aa +AE1+AE2-1+AE3-1+AE4	
Set.4	UT07aa +AE1+AE2-1+AE3-2+AE4	
Set.5	UT07aa +AE1+AE3-1+PC	Data Transfer Mode;
Set.6	UT07aa +AE1+AE3-2+PC	Data Transfer Mode

3.5. General Description

The Equipment Under Test (EUT) is a model of Tablet PC with internal antenna.
It supports GSM 900/850/1800/1900MHz, WCDMA Bands 1/2/5/8, and LTE Bands 1/3/5/7/8/20/28/38/41.
It has Camera, Video Player, FM Receiver, USB Data Transfer, Bluetooth,Wi-Fi and GNSS functions.
Manual and specifications of the EUT were provided to fulfill the test.
Samples (EUT+AE) undergoing test were selected by the Client. Relevant information is provided by the Client.
Tablet PC 8094X manufactured by TCL Communication Ltd. is a variant model based on 8094M manufactured by TCL Communication Ltd. for conformance test. According to client's description, the table below shows the difference between model 8094X and 8094M:

Changes	8094X	8094M
Band	UMTS: Bands 1/2/5/8 LTE: Bands 1/3/5/7/8/20/28/38/41	UMTS: Bands 1/2/4/5/8 LTE: Bands 2/3/4/5/7/8/12/13/17/28/66
LCD/ Speaker/ Camera/ Vibrator	Single Speaker/ single mic/G-Sensor	Dual speaker/ Dual mic/ G-Sensor /P-Sensor /L-Sensor
Main RF components	have been changed in LTE Bands 20/38/41	

The EUT model 8094X (FCC ID: 2ACCJB140) is a variant product of 8094M (FCC ID: 2ACCJB131), according to the declaration of changes provided by applicant and FCC KDB publication 484596 D01, spot check measurement were performed on this device, all the test results are derived from test report I20N01660-EMC. Please refer ANNEX A for reference data, and ANNEX B for detail spot check verification data, the spot check test results are consistent with basic model.

4. Reference Documents

4.1. Reference Documents for testing

The following documents listed in this section are referred for testing.

Reference	Title	Version
FCC Part 15, Subpart B	Radio frequency devices	10-1-2019 Edition
ANSI C63.4	Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz	2014

5. LABORATORY ENVIRONMENT

Semi-anechoic chamber did not exceed following limits along the EMC testing:

9.10m×6.10m×5.60m (L×W×H)

Temperature	Min. = 15 ℃, Max. = 35℃
Relative humidity	Min. = 20 %, Max. = 75 %
Shielding effectiveness	0.014MHz-1MHz,>60dB; 1MHz-18000MHz,>90dB
Electrical insulation	>2MΩ
Ground system resistance	<4Ω
Normalised site attenuation (NSA)	<±4 dB, 3 m distance, from 30 to 1000 MHz

Shield room did not exceed following limits along the EMC testing:

Temperature	Min. = 15 ℃, Max. = 35 ℃
Relative humidity	Min. =20 %, Max. = 75 %
Shielding effectiveness	0.014MHz-1MHz,>60dB; 1MHz-10000MHz,>90dB
Electrical insulation	>2MΩ
Ground system resistance	<4Ω

Fully-anechoic chamber did not exceed following limits along the EMC testing:

9.10m×6.10m×5.60m (L×W×H)

Temperature	Min. = 15 ℃, Max. = 35℃
Relative humidity	Min. = 20 %, Max. = 75 %
Shielding effectiveness	0.014MHz-1MHz,>60dB; 1MHz-18000MHz,>90dB
Electrical insulation	>2MΩ
Ground system resistance	<4Ω
Voltage Standing Wave Ratio （VSWR）	≤ 6 dB, from 1 to 18GHz，3 m distance
Uniformity of field strength	Between 0 and 6 dB, from 80 to 6000 MHz

6. SUMMARY OF TEST RESULTS

6.1. Testing Environment

Normal Temperature: 15~35℃

Relative Humidity: 20~75%

Atmospheric pressure 86~106kPa

6.2. Summary of Measurement Results

Abbreviations used in this clause:	
P	Pass
NA	Not applicable
F	Fail

Items	Test Name	Clause in FCC rules	Section in this report	Verdict
1	Radiated Emission	15.109(a)	A.1	P
2	Conducted Emission	15.107(a)	A.2	P

6.3. Statement

6.3.1 Statements of conformity

This report takes measured values as criterion of test conclusion. The test conclusion meets the limit requirements.

7. Measurement uncertainty

Test item	Frequency ranges	Measurement uncertaint
Radiated Emission	30MHz-1GHz	4.90dB(k=2)
	1GHz-18GHz	4.60dB(k=2)
	18GHz-40GHz	4.10dB(k=2)
Conducted Emission	150kHz-30MHz	3.00dB(k=2)

8. Test Facilities Utilized

NO.	NAME	TYPE	SERIES NUMBER	PRODUCER	CALDUE DATE	CAL PERIOD
1.	Test Receiver	ESR7	101676	R&S	2020.11.27	1 year
2.	Test Receiver	ESCI	100701	R&S	2021.08.09	1 year
3.	Spectrum Analyzer	FSV40	101192	R&S	2021.01.14	1 year
4.	BiLog Antenna	3142E	00224831	ETS-Lindgren	2021.05.17	3 years
5.	LISN	ENV216	102067	R&S	2021.07.16	1 year
6.	Horn Antenna	3117	00066577	ETS-Lindgren	2022.04.02	3 years
7.	Horn Antenna	QSH-SL-18-26-S-20	17013	Q-par	2023.01.06	3 years
8.	Horn Antenna	QSH-SL-8-26-40-K-20	17014	Q-par	2023.01.06	3 years
9.	Universal Radio Communication Tester	CMU200	114545	R&S	2021.01.14	1 year
10.	Universal Radio Communication Tester	CMW500	152499	R&S	2021.07.16	1 year
11.	Signal Generator	SMB100A	179725	R&S	2020.11.27	1 year
12.	Chamber	FACT3-2.0	1285	ETS-Lindgren	2021.07.19	2 years
13.	Software	EMC32	V10.01.00	R&S	/	/
14.	PC	ThinkPad T480	PF-13LW0C	Lenovo	/	/
15.	Printer	P1008	VNF6C12491	HP	/	/
16.	Mouse	MOEUUOA	44NY517	Lenovo	/	/
17.	Filter	HPF_3G18G-SMA	/	SKET	/	/
18.	Filter	HPF_6.3G21G-SMA	/	SKET	/	/

ANNEX A: The Date from the initial model

A.1. MEASUREMENT RESULTS

A.1.1 Radiated Emission (§15.109(a))

Reference

FCC: CFR Part 15.109(a)

A.1.1.1 Method of measurement

The field strength of radiated emissions from the unintentional radiator (Data transfer mode of EUT and charging mode of EUT) at a distance of 3 meters is tested. Tested in accordance with the procedures of ANSI C63.4 -2014, section 8.3.

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

A.1.2 EUT Operating Mode:

FM receiver: The EUT is connected to a charger for charging and open FM function. The EUT is synchronized to a FM signal generator. The EUT is keeping on demodulating the FM signal and outputting the audio signal through the headset.

Camera Mode: At the beginning of measurement, the battery is completely discharged. The battery and charger are installed so that the EUT works well and keeping on taking photos.

Video Player Mode: The EUT is connected to a charger for charging and keeping on playing mp3.

Data Transfer Mode: The model of the PC is Lenovo ThinkPad T480, and the serial number of the PC is PF-13LW0C. The EUT is connected to a PC for transmitting data. The software is used to let the PC keep on copying data to MS or TF Card, reading and erasing the data after copy action was finished.

GSM receiver: The EUT is connected to a charger for charging.The EUT is synchronized to SS, and able to respond to paging messages and incoming call. An established call has been released.

WCDMA receiver: The EUT is connected to a charger for charging.The EUT is synchronized to SS, and able to respond to paging messages and incoming call. An established call has been released.

LTE receiver: The EUT is connected to a charger for charging.The EUT is synchronized to SS, and able to respond to paging messages and incoming call. An established call has been released.

The EUT was tested while operating in licensed band Rx mode. All licensed band receivers that tune in the range of 30MHz-960MHz, as listed in Section 3.1, are investigated. Only the worst case emissions are reported.

All equipment is placed on the test table top and arranged in a typical configuration in accordance with ANSI C63.4-2014 and manipulated to obtain worst case emissions.

A.1.1.3 Measurement Limit

Limit from CFR Part 15.109(a)

Frequency range (MHz)	Field strength limit (μV/m)		
	Quasi-peak	Average	Peak
30-88	100		
88-216	150		
216-960	200		
960-1000	500		
>1000		500	5000

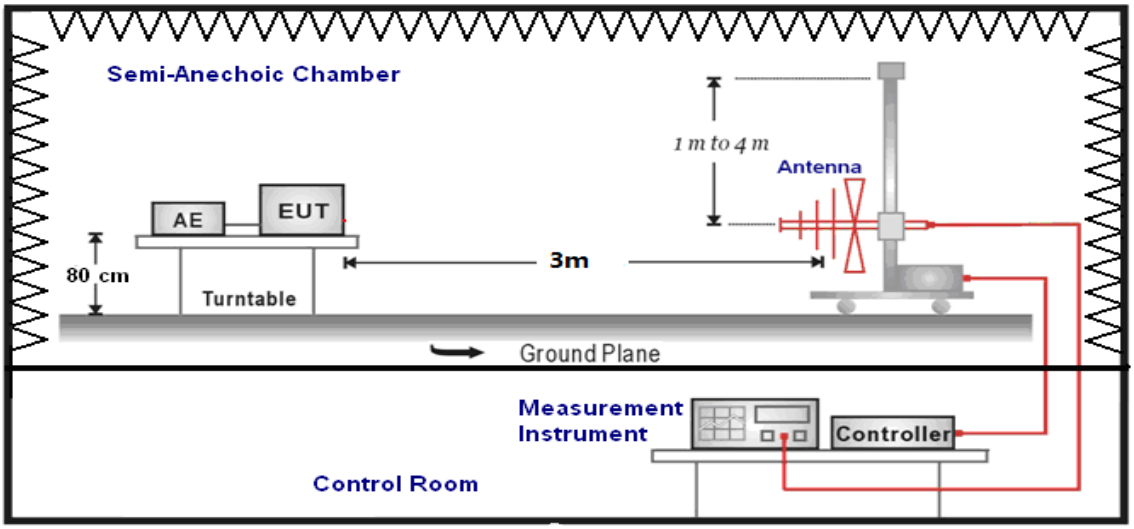
*Note: The original limit is defined at 10m test distance. This limit is calculated according to CISPR requirements.

A.1.1.4 Test Condition

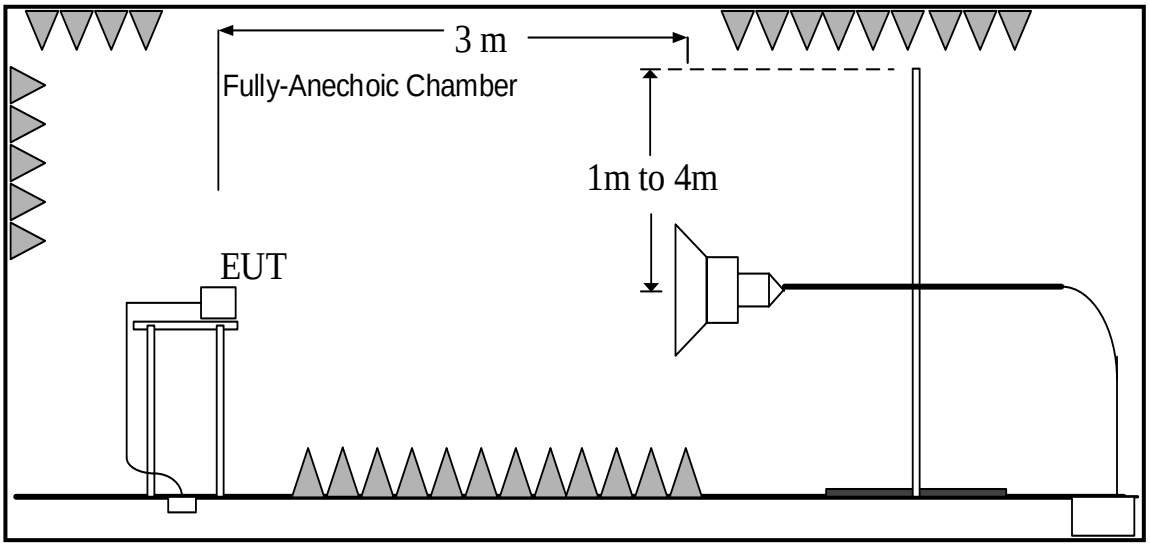
Frequency of emission (MHz)	RBW/VBW	Sweep Time(s)
30-1000	120kHz (IF bandwidth)	5
Above 1000	1MHz/3MHz	15

A.1.1.5 Test set-up:

30MHz-1GHz



1GHz-40GHz



A.1.1.6 Measurement Results

A "reference path loss" is established and the A_{Rpl} is the attenuation of “reference path loss”. It includes the antenna factor of receive antenna and the path loss.

The measurement results are obtained as described below:

$Result=P_{Mea}+A_{Rpl} = P_{Mea} +G_A+G_{PL}$

Where

G_A: Antenna factor of receive antenna

G_{PL}:PathLoss

P_{Mea}: Measurement result on receiver.

Result:Quasi-Peak(dBμV/m) /Average(dBμV/m)/Peak(dBμV/m)

Note: the result contains vertical part and Horizontal part

GSM850MHz Receiver

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m) Set.1	Conclusion
30-88	40	See Fiture A.1.	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m) Set.1	Conclusion
1000 to 18000	54	74	See Fiture A.2.	P
18000 to 26500			See Fiture A.3.	
26500 to 40000			See Fiture A.4.	

WCDMA Band 5 Receiver

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m) Set.1	Conclusion
30-88	40	See Fiture A.5.	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m) Set.1	Conclusion
1000 to 18000	54	74	See Fiture A.6.	P
18000 to 26500			See Fiture A.7.	
26500 to 40000			See Fiture A.8.	

LTE Band 5 Receiver

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m) Set.1	Conclusion
30-88	40	See Fiture A.9.	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m) Set.1	Conclusion
1000 to 18000	54	74	See Fiture A.10.	P
18000 to 26500			See Fiture A.11.	
26500 to 40000			See Fiture A.12.	

GSM850MHz Receiver

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m) Set.2	Conclusion
30-88	40	See Fiture A.13.	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m) Set.2	Conclusion
1000 to 18000	54	74	See Fiture A.14.	P
18000 to 26500			See Fiture A.15.	
26500 to 40000			See Fiture A.16.	

WCDMA Band 5 Receiver

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m) Set.2	Conclusion
30-88	40	See Fiture A.17.	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m) Set.2	Conclusion
1000 to 18000	54	74	See Fiture A.18.	P
18000 to 26500			See Fiture A.19.	
26500 to 40000			See Fiture A.20.	

LTE Band 5 Receiver

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m) Set.2	Conclusion
30-88	40	See Fiture A.21.	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m) Set.2	Conclusion
1000 to 18000	54	74	See Fiture A.22.	P
18000 to 26500			See Fiture A.23.	
26500 to 40000			See Fiture A.24.	

Camera Mode

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m) Set.1	Conclusion
30-88	40	See Fiture A.25.	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m) Set.1	Conclusion
1000 to 18000	54	74	See Fiture A.26.	P
18000 to 26500			See Fiture A.27.	
26500 to 40000			See Fiture A.28.	

FM receiver

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m) Set.3	Conclusion
30-88	40	See Fiture A.29.	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m) Set.3	Conclusion
1000 to 18000	54	74	See Fiture A.30.	P
18000 to 26500			See Fiture A.31.	
26500 to 40000			See Fiture A.32.	

Video Player Mode

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m) Set.1	Conclusion
30-88	40	See Fiture A.33.	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m) Set.1	Conclusion
1000 to 18000	54	74	See Fiture A.34.	P
18000 to 26500			See Fiture A.35.	
26500 to 40000			See Fiture A.36.	

Video Player Mode

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m) Set.2	Conclusion
30-88	40	See Fiture A.37.	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m) Set.2	Conclusion
1000 to 18000	54	74	See Fiture A.38.	P
18000 to 26500			See Fiture A.39.	
26500 to 40000			See Fiture A.40.	

Data Transfer Mode: EUT to PC

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m) Set.5	Conclusion
30-88	40	See Fiture A.41.	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m) Set.5	Conclusion
1000 to 18000	54	74	See Fiture A.42.	P
18000 to 26500			See Fiture A.43.	
26500 to 40000			See Fiture A.44.	

Data Transfer Mode: PC to EUT

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m)	Conclusion
		Set.5	
30-88	40	See Fiture A.45.	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m)	Conclusion
			Set.5	
1000 to 18000	54	74	See Fiture A.46.	P
18000 to 26500			See Fiture A.47.	
26500 to 40000			See Fiture A.48.	

Data Transfer Mode: PC to TF Card

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m)	Conclusion
		Set.5	
30-88	40	See Fiture A.49.	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m)	Conclusion
			Set.5	
1000 to 18000	54	74	See Fiture A.50.	P
18000 to 26500			See Fiture A.51.	
26500 to 40000			See Fiture A.52.	

Data Transfer Mode: TF Card to PC

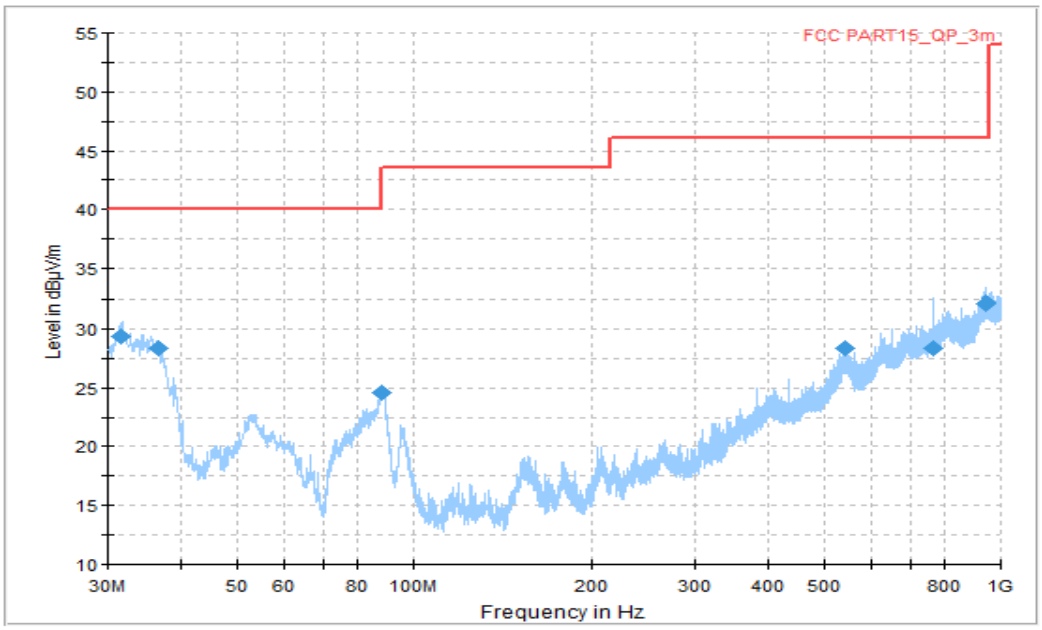
Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m)	Conclusion
		Set.5	
30-88	40	See Fiture A.53.	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m)	Conclusion
			Set.5	
1000 to 18000	54	74	See Fiture A.54.	P
18000 to 26500			See Fiture A.55.	
26500 to 40000			See Fiture A.56.	

Data Transfer Mode: TF Card to PC

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m)	Conclusion
		Set.6	
30-88	40	See Fiture A.57.	P
88-216	44		
216-960	46		
960-1000	54		

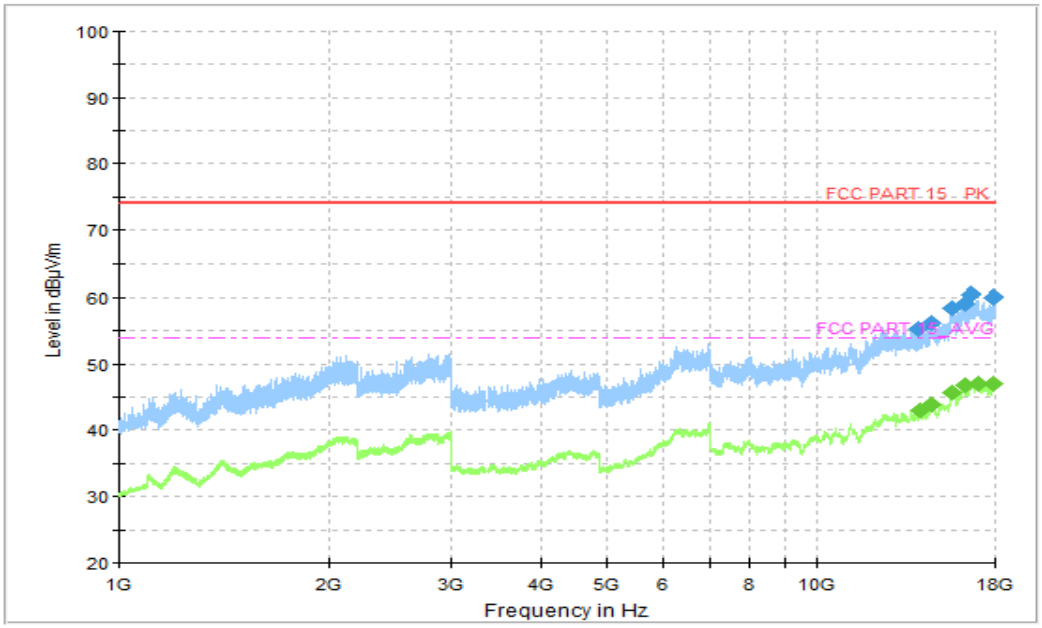
Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m)	Conclusion
			Set.6	
1000 to 18000	54	74	See Fiture A.58.	P
18000 to 26500			See Fiture A.59.	
26500 to 30000			See Fiture A.60.	



Fiture A.1. Radiated Emission (Set.1, GSM850MHz Receiver, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
31.697500	29.34	40.00	10.66	V	-14	43.34
36.486875	28.32	40.00	11.68	V	-17	45.32
88.381875	24.59	43.52	18.93	V	-21	45.59
541.917500	28.37	46.02	17.65	H	-4	32.37
767.988125	28.34	46.02	17.68	V	-2	30.34
939.920625	32.10	46.02	13.92	V	1	31.1



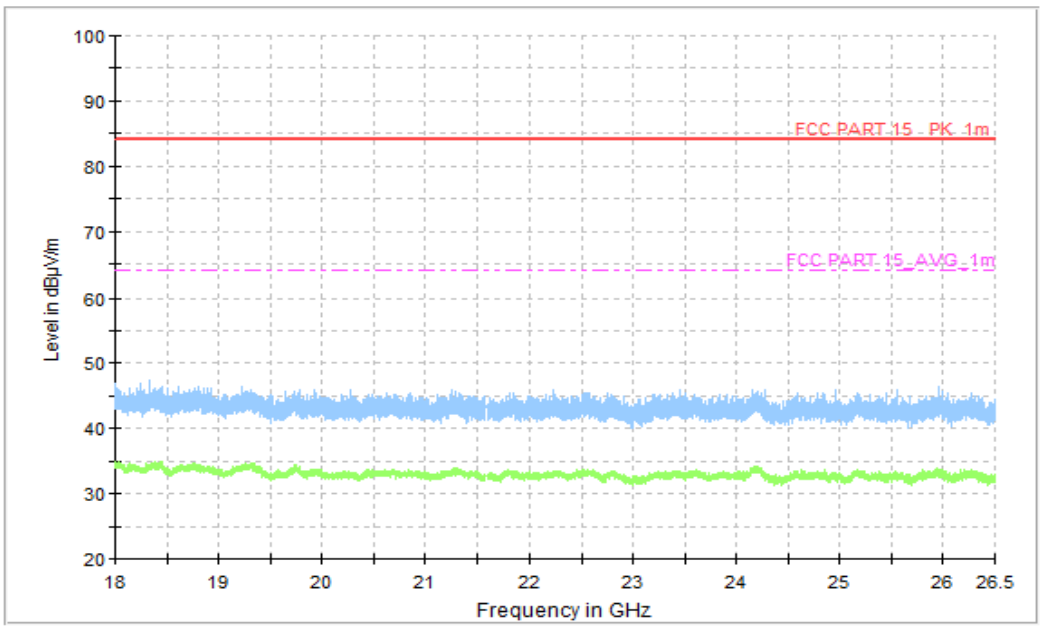
Fiture A.2. Radiated Emission (Set.1, GSM850MHz Receiver, 1GHz to 18GHz)

Final_Results_PK

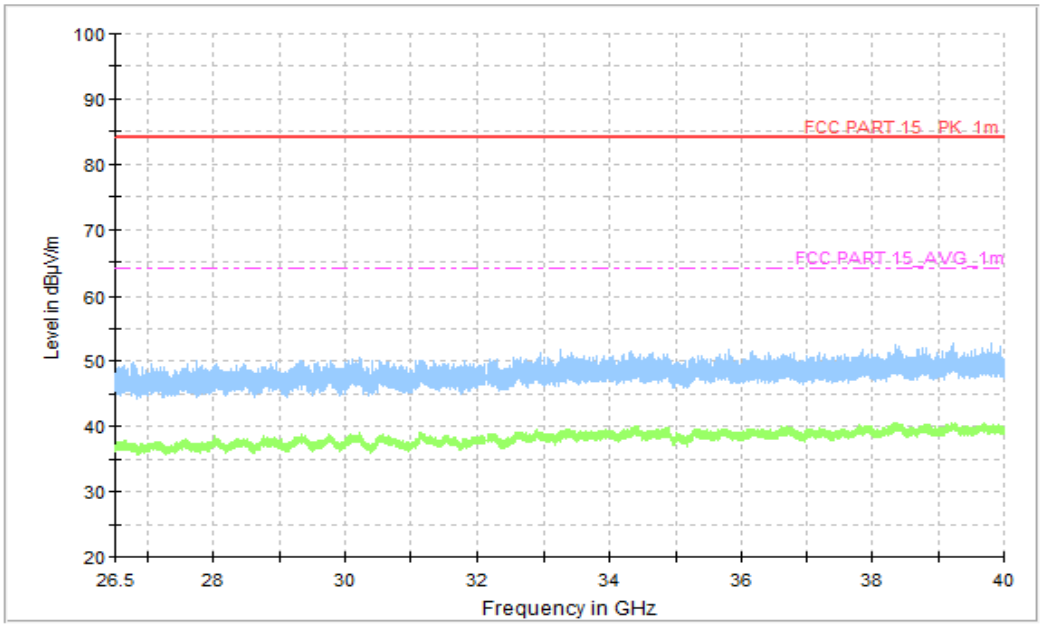
Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
13979.750000	55.23	74.00	18.77	H	17	38.23
14561.500000	56.13	74.00	17.87	V	18	38.13
15576.000000	58.35	74.00	15.65	H	20	38.35
16278.750000	59.19	74.00	14.81	H	21	38.19
16636.000000	60.35	74.00	13.65	H	22	38.35
17893.250000	60.05	74.00	13.95	V	24	36.05

Final_Results_AVG

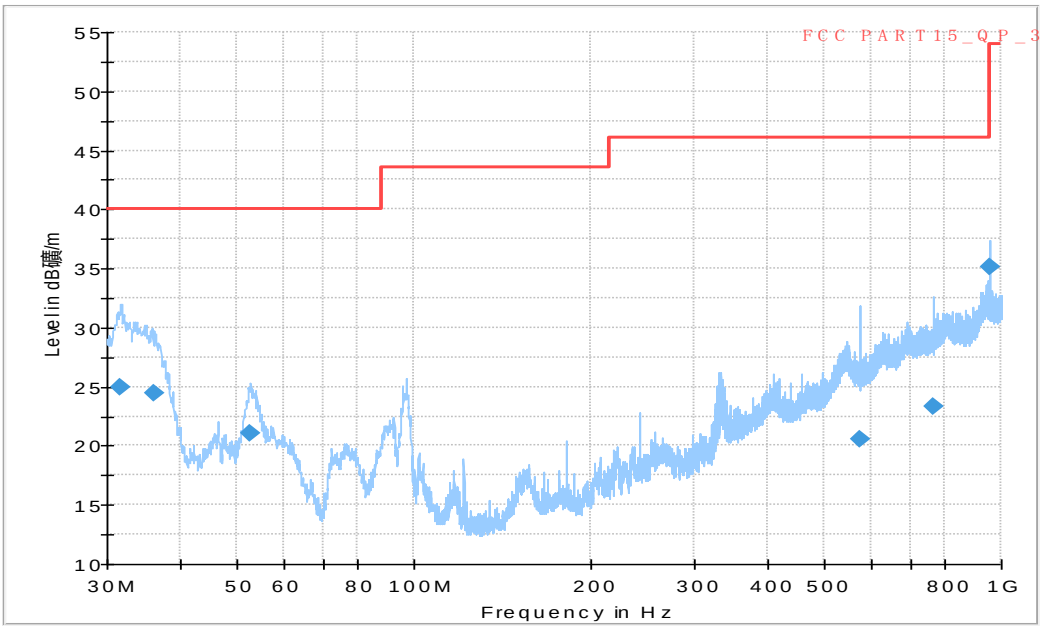
Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
14016.500000	43.02	54.00	10.98	H	17	26.02
14577.750000	43.96	54.00	10.04	H	18	25.96
15570.750000	45.74	54.00	8.26	H	20	25.74
16279.250000	46.78	54.00	7.22	V	21	25.78
16998.500000	47.10	54.00	6.90	V	23	24.1
17895.750000	47.15	54.00	6.85	V	24	23.15



Fiture A.3. Radiated Emission (Set.1, GSM850MHz Receiver , 18GHz to 26.5GHz)



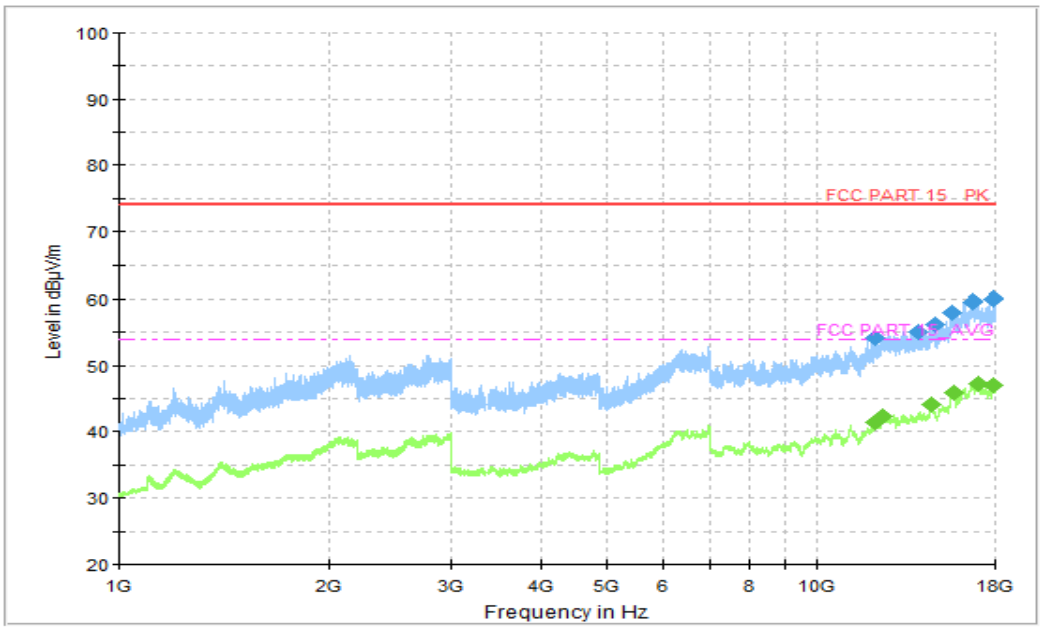
Fiture A.4. Radiated Emission (Set.1, GSM850MHz Receiver , 26.5GHz to 40GHz)



Fiture A.5. Radiated Emission (Set.1, WCDMA Band 5 Receiver, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
31.697500	24.99	40.00	15.01	V	-14	38.99
36.123125	24.43	40.00	15.57	V	-16	40.43
52.734375	21.10	40.00	18.9	V	-22	43.1
575.988750	20.59	46.02	25.43	V	-5	25.59
767.988125	23.36	46.02	22.66	V	-2	25.36
960.048125	35.11	53.98	18.87	H	1	34.11



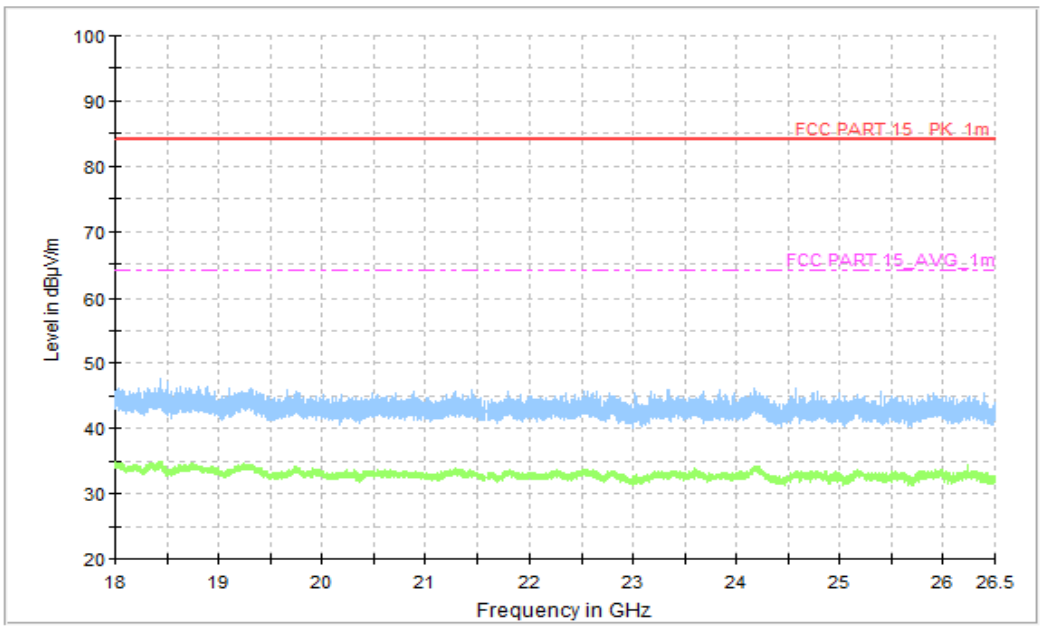
Fiture A.6. Radiated Emission (Set.1, WCDMA Band 5 Receiver, 1GHz to 18GHz)

Final_Results_PK

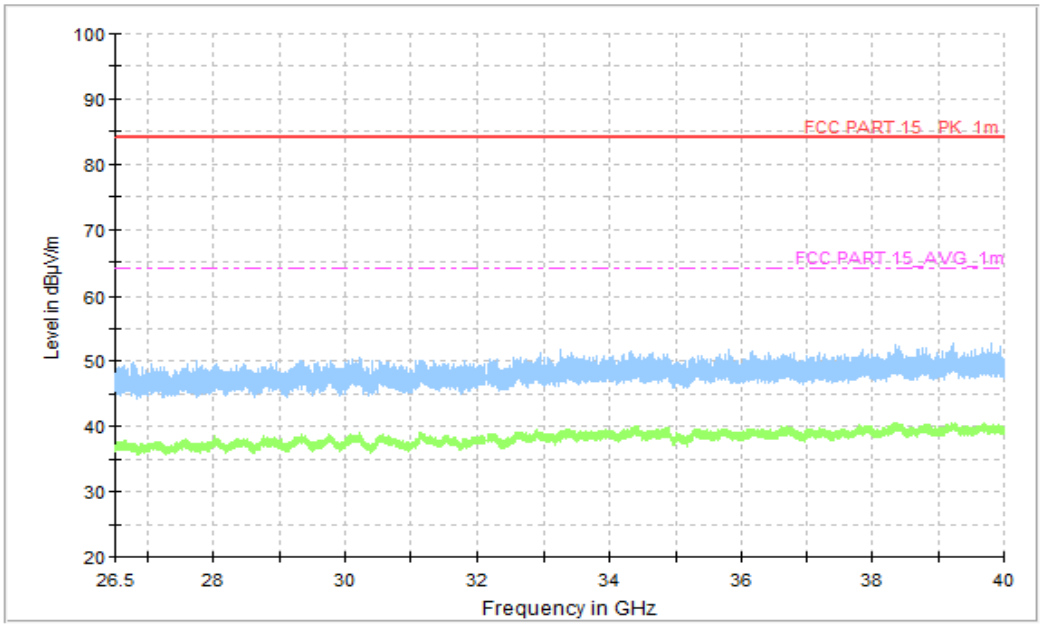
Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
12081.750000	54.27	74.00	19.73	V	16	38.27
13927.000000	55.17	74.00	18.83	V	17	38.17
14749.000000	56.17	74.00	17.83	V	18	38.17
15560.250000	58.01	74.00	15.99	V	19	39.01
16712.250000	59.46	74.00	14.54	V	21	38.46
17895.000000	60.00	74.00	14.00	V	24	36.00

Final_Results_AVG

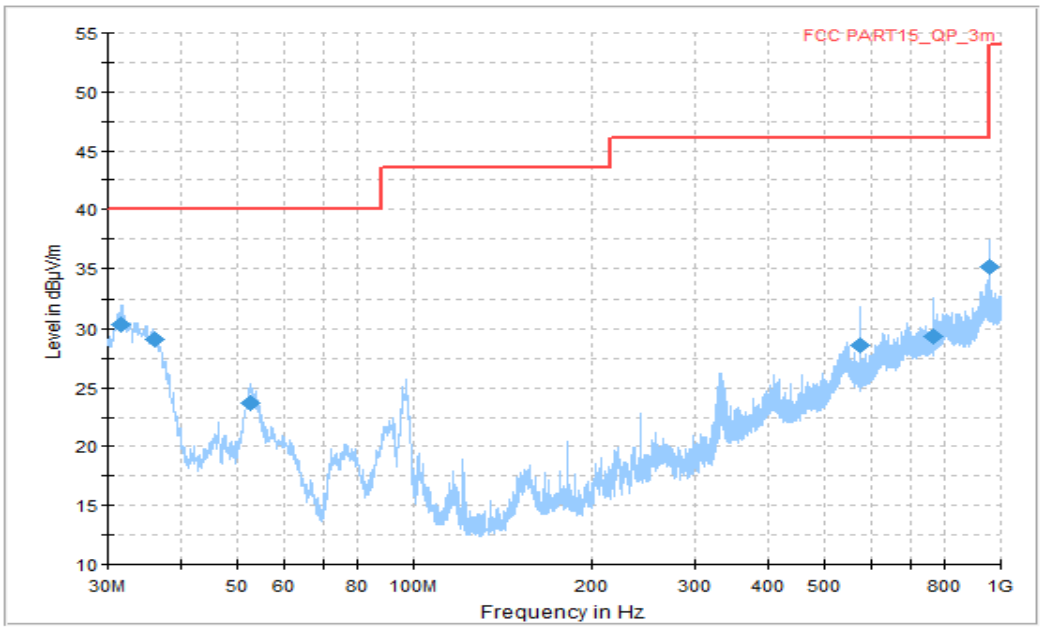
Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
12426.750000	42.45	54.00	11.55	V	17	25.45
12426.750000	42.45	54.00	11.55	V	17	25.45
14562.000000	44.08	54.00	9.92	V	18	26.08
15689.750000	46.01	54.00	7.99	V	20	26.01
16998.750000	47.21	54.00	6.79	V	23	24.21
17896.000000	47.08	54.00	6.92	V	24	23.08



Fiture A.7. Radiated Emission (Set.1, WCDMA Band 5 Receiver, 18GHz to 26.5GHz)



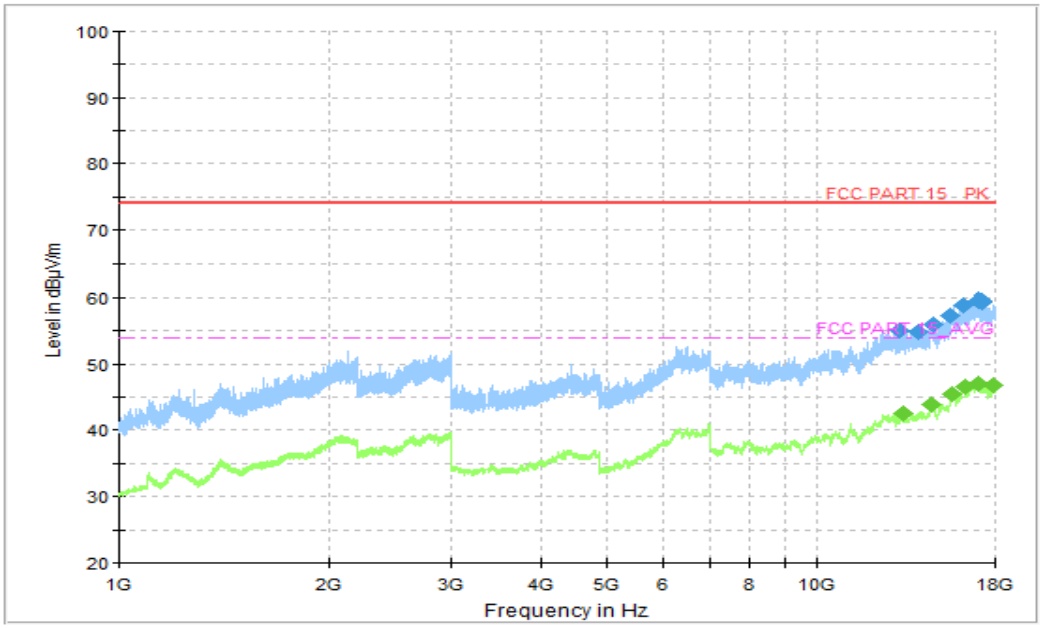
Fiture A.8. Radiated Emission (Set.1, WCDMA Band 5 Receiver, 26.5GHz to 40GHz)



Fiture A.8. Radiated Emission (Set.1, LTE Band 5 Receiver, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
31.697500	30.34	40.00	9.66	V	-14	44.34
36.123125	29.06	40.00	10.94	V	-16	45.06
52.734375	23.70	40.00	16.3	V	-22	45.7
575.988750	28.65	46.02	17.37	V	-5	33.65
767.988125	29.31	46.02	16.71	V	-2	31.31
959.987500	35.08	46.02	10.94	H	1	34.08



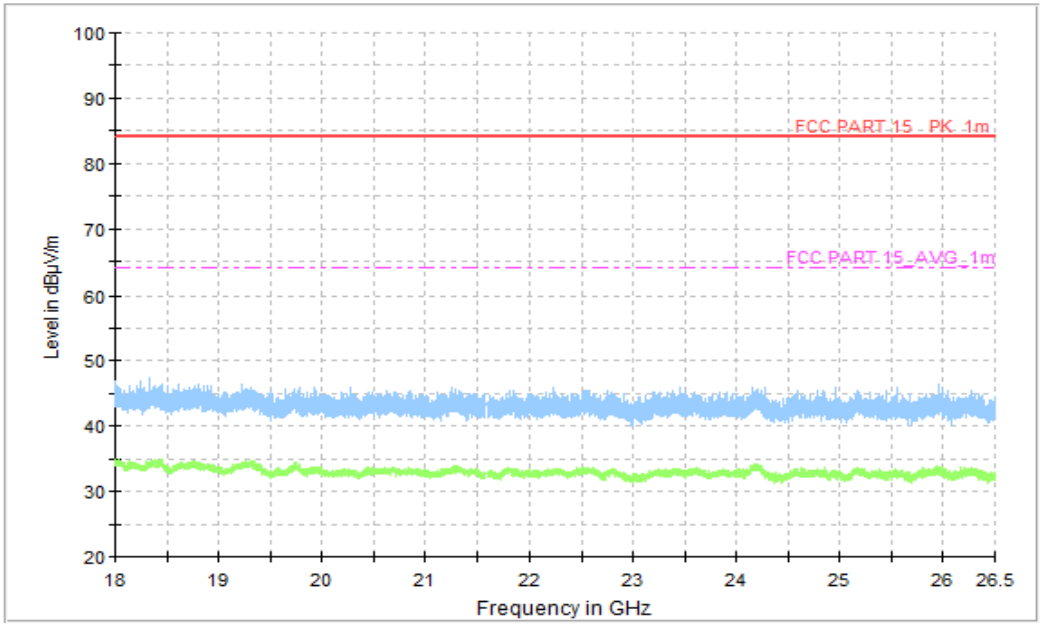
Fiture A.9. Radiated Emission (Set.1, LTE Band 5 Receiver , 1GHz to 18GHz)

Final_Results_PK

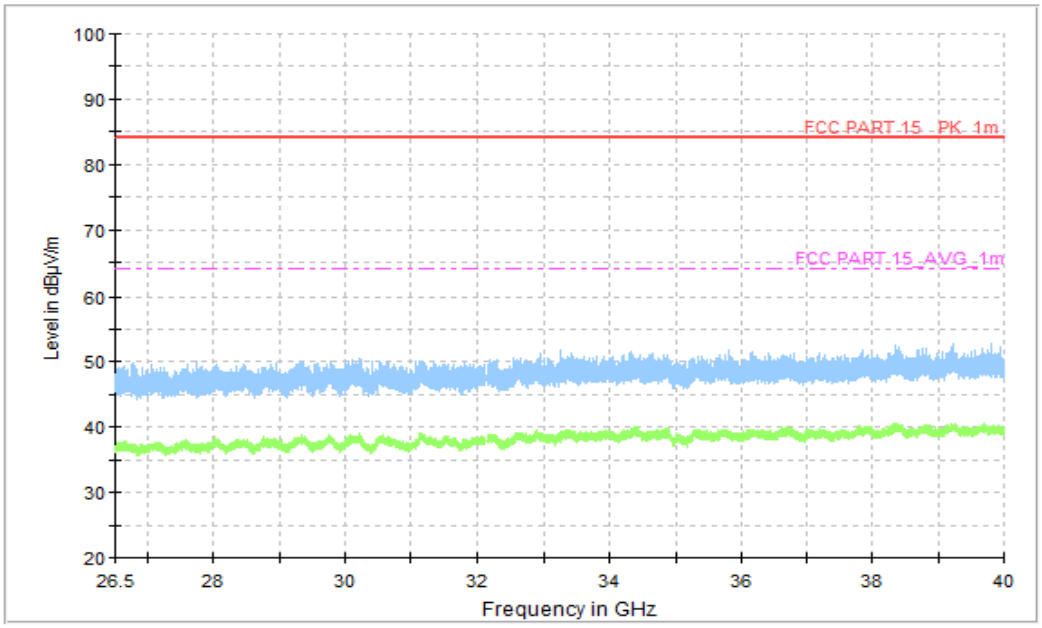
Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
13104.750000	55.12	74.00	18.88	V	17	38.12
13967.250000	54.94	74.00	19.06	H	17	37.94
14645.250000	55.91	74.00	18.09	V	18	37.91
15523.250000	57.26	74.00	16.74	H	19	38.26
16156.500000	58.90	74.00	15.10	V	21	37.9
17030.000000	59.60	74.00	14.40	H	22	37.60
17196.250000	59.25	74.00	14.75	H	21	38.12

Final_Results_AVG

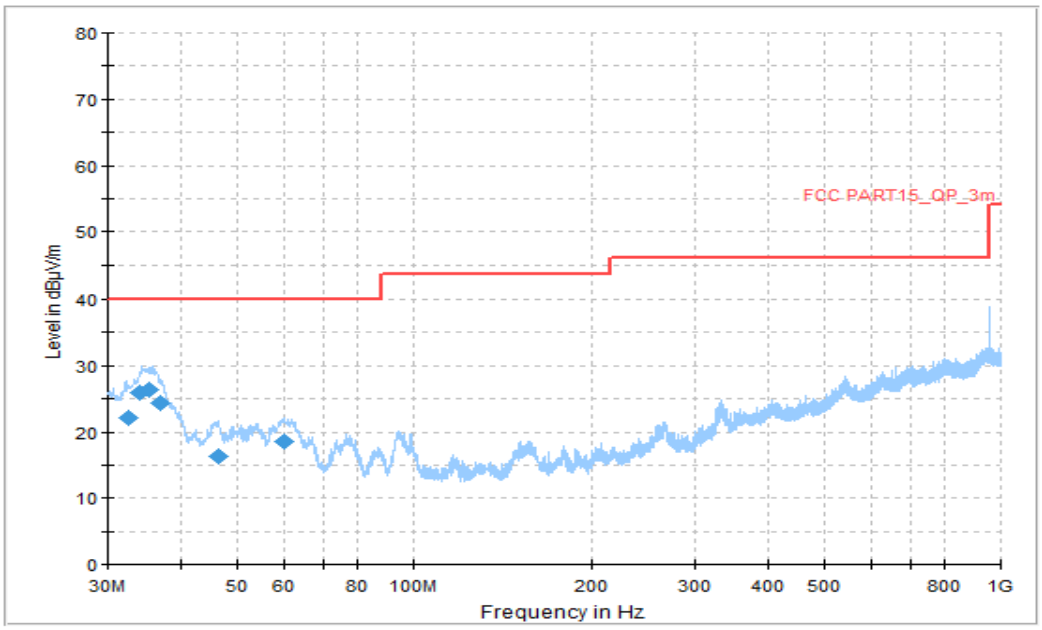
Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
13254.500000	42.52	54.00	11.48	V	17	25.52
14569.000000	44.01	54.00	9.99	H	18	26.01
15570.500000	45.58	54.00	8.42	V	20	25.58
16279.750000	46.58	54.00	7.42	V	21	25.58
17002.250000	47.02	54.00	6.98	V	23	24.02
17895.000000	46.90	54.00	7.10	H	24	22.90



Fiture A.10. Radiated Emission (Set.1, LTE Band 5 Receiver, 18GHz to 26.5GHz)



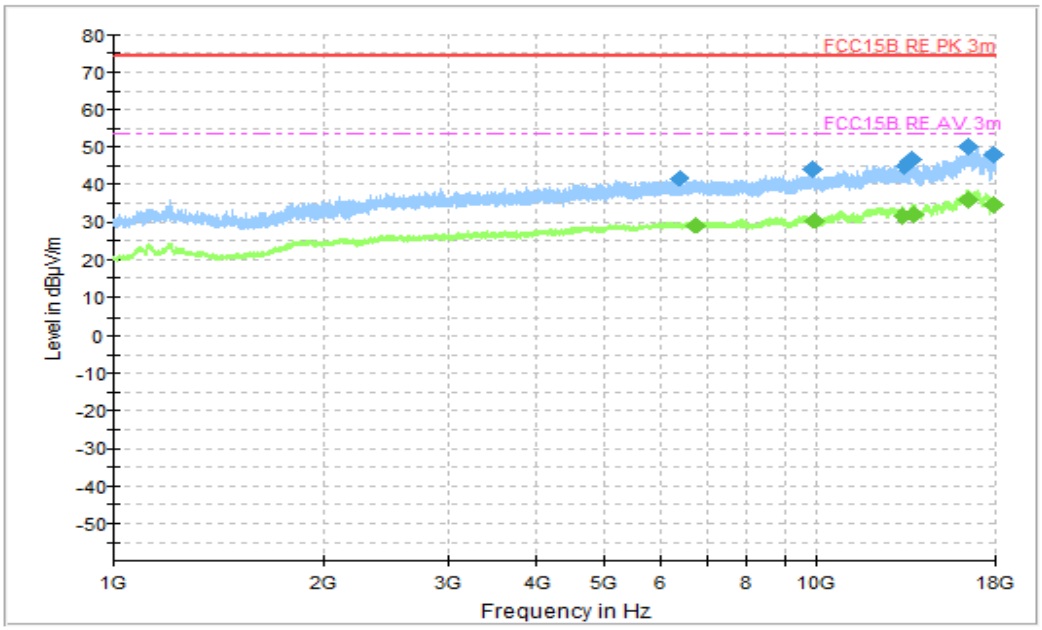
Fiture A.11. Radiated Emission (Set.1, LTE Band 5 Receiver, 26.5GHz to 40GHz)



Fiture A.12. Radiated Emission (Set.2, GSM850MHz Receiver, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
32.425000	22.20	40.00	17.80	V	-14	36.20
34.061875	26.00	40.00	14.00	V	-15	41.00
35.395625	26.38	40.00	13.62	V	-16	42.38
36.850625	24.31	40.00	15.69	V	-17	41.31
46.247500	16.31	40.00	23.69	V	-21	37.31
59.888125	18.46	40.00	21.54	V	-22	40.46



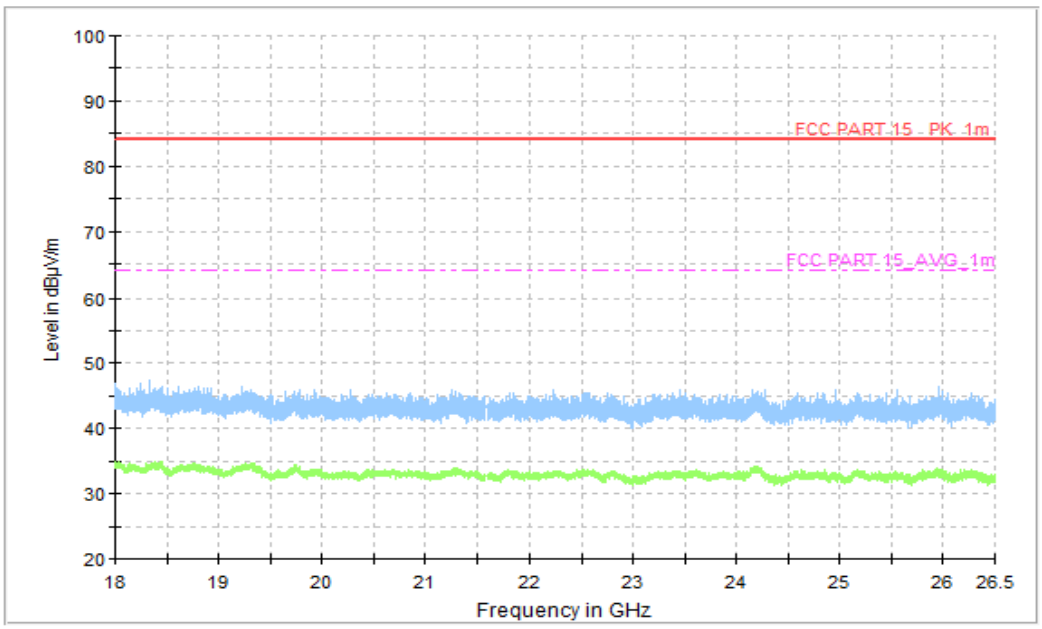
Fiture A.13. Radiated Emission (Set.2, GSM850MHz Receiver , 1GHz to 18GHz)

Final_Results_PK

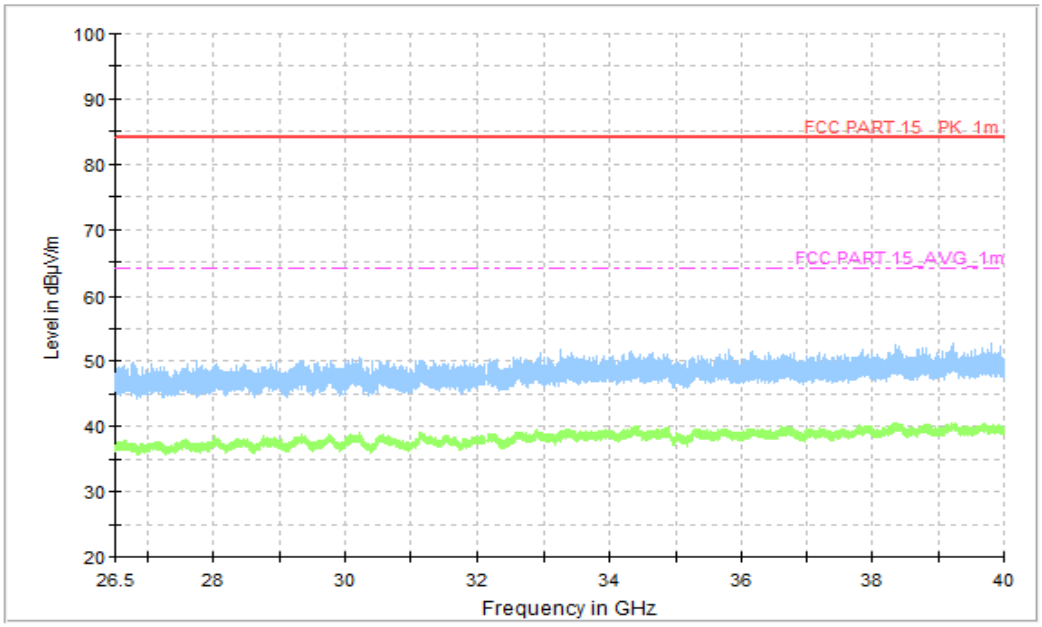
Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
6393.000000	41.80	74	32.20	H	3.0	38.80
9877.000000	44.48	74	29.52	V	6.4	38.08
13383.000000	45.06	74	28.94	H	8.5	36.56
13754.500000	46.71	74	27.29	H	8.9	37.81
16549.000000	49.94	74	24.06	H	14.8	35.14
17938.000000	47.90	74	26.10	H	13.1	34.80

Final_Results_AVG

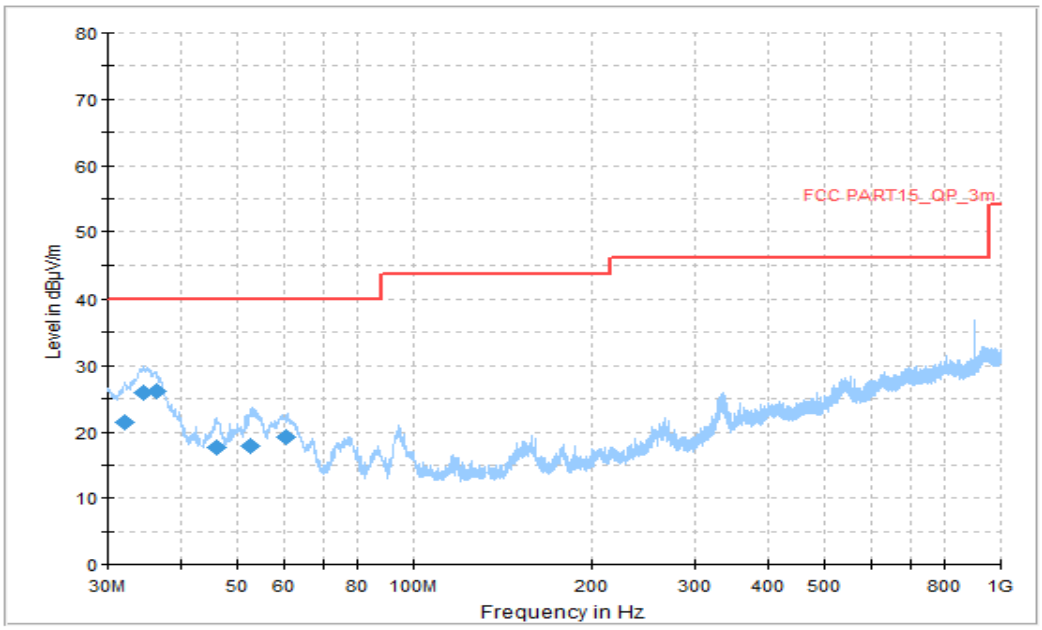
Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	PMea (dBµV)
6755.500000	29.42	54	24.58	H	3.5	25.92
9966.000000	30.71	54	23.29	V	6.3	24.41
13284.000000	31.87	54	22.13	V	8.3	23.57
13769.000000	32.42	54	21.58	V	9.0	23.42
16485.000000	36.17	54	17.83	V	14.7	21.47
17910.500000	34.72	54	19.28	V	13.2	21.52



Fiture A.14. Radiated Emission (Set.2, GSM850MHz Receiver , 18GHz to 26.5GHz)



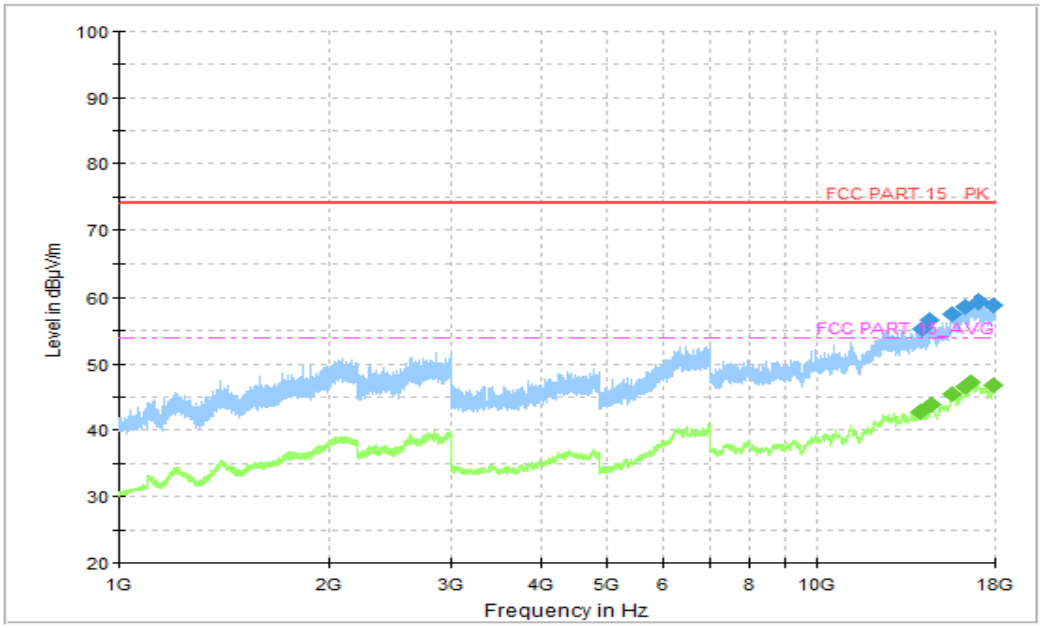
Fiture A.15. Radiated Emission (Set.2, GSM850MHz Receiver , 26.5GHz to 40GHz)



Fiture A.16. Radiated Emission (Set.2, WCDMA Band 5 Receiver, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
32.000625	21.43	40.00	18.57	V	-14	35.43
34.486250	25.82	40.00	14.18	V	-15	40.82
36.305000	26.11	40.00	13.89	V	-16	42.11
46.126250	17.74	40.00	22.26	V	-21	38.74
52.491875	17.85	40.00	22.15	V	-22	39.85
60.676250	19.14	40.00	20.86	V	-22	41.14



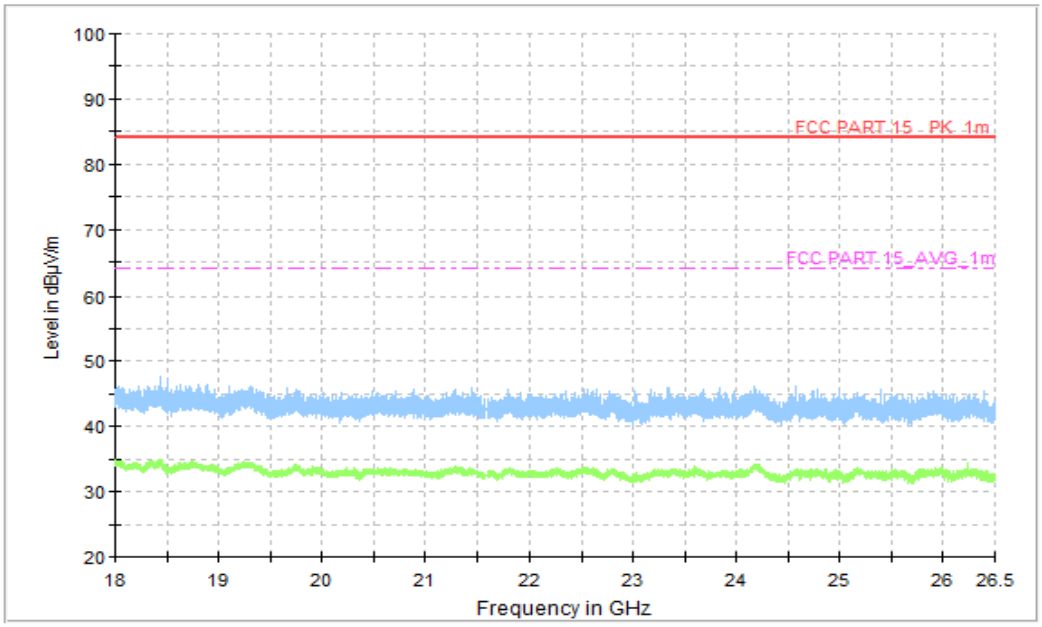
Fiture A.17. Radiated Emission (Set.2, WCDMA Band 5 Receiver , 1GHz to 18GHz)

Final_Results_PK

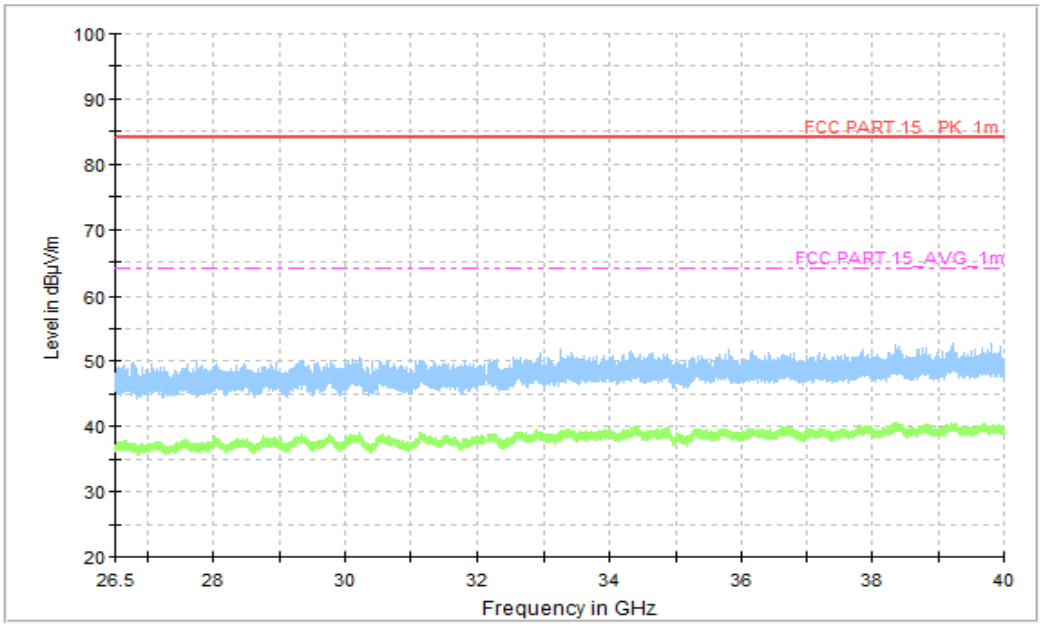
Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
14141.750000	55.38	74.00	18.62	V	17	38.38
14520.750000	56.63	74.00	17.37	H	18	38.63
15567.000000	57.61	74.00	16.39	V	20	37.61
16259.750000	58.69	74.00	15.31	H	21	37.69
16989.750000	59.38	74.00	14.62	V	23	36.38
17876.750000	58.97	74.00	15.03	V	24	34.97

Final_Results_AVG

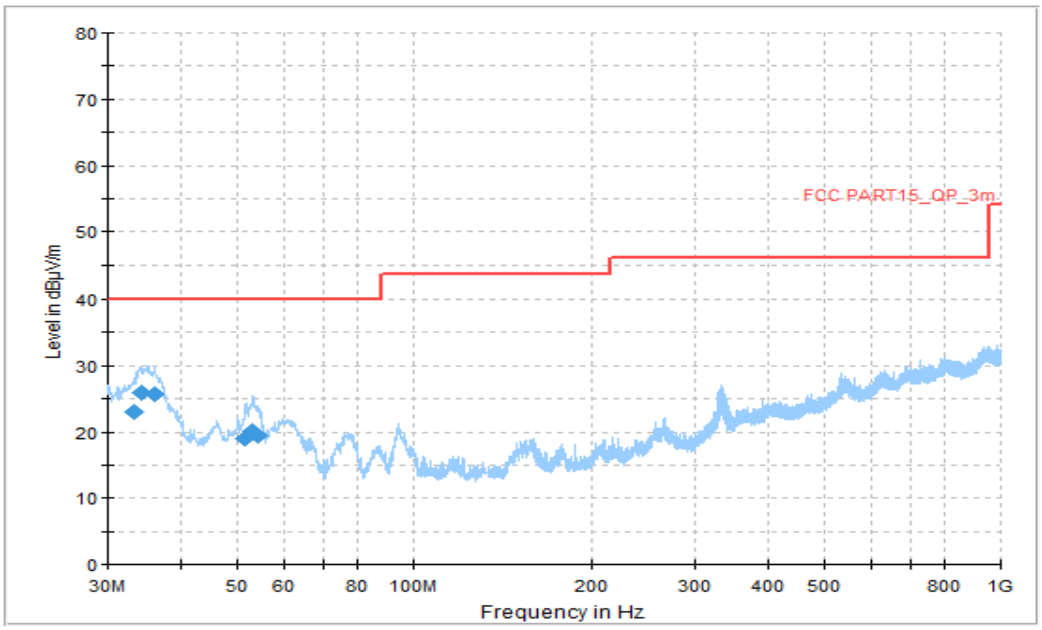
Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
14017.000000	42.87	54.00	11.13	H	17	25.87
14570.500000	43.89	54.00	10.11	H	18	25.89
15565.750000	45.49	54.00	8.51	H	20	25.49
16287.000000	46.55	54.00	7.45	H	21	25.55
16645.000000	47.17	54.00	6.83	H	22	25.17
17895.250000	46.92	54.00	7.08	V	24	22.92



Fiture A.18. Radiated Emission (Set.2, WCDMA Band 5 Receiver, 18GHz to 26.5GHz)



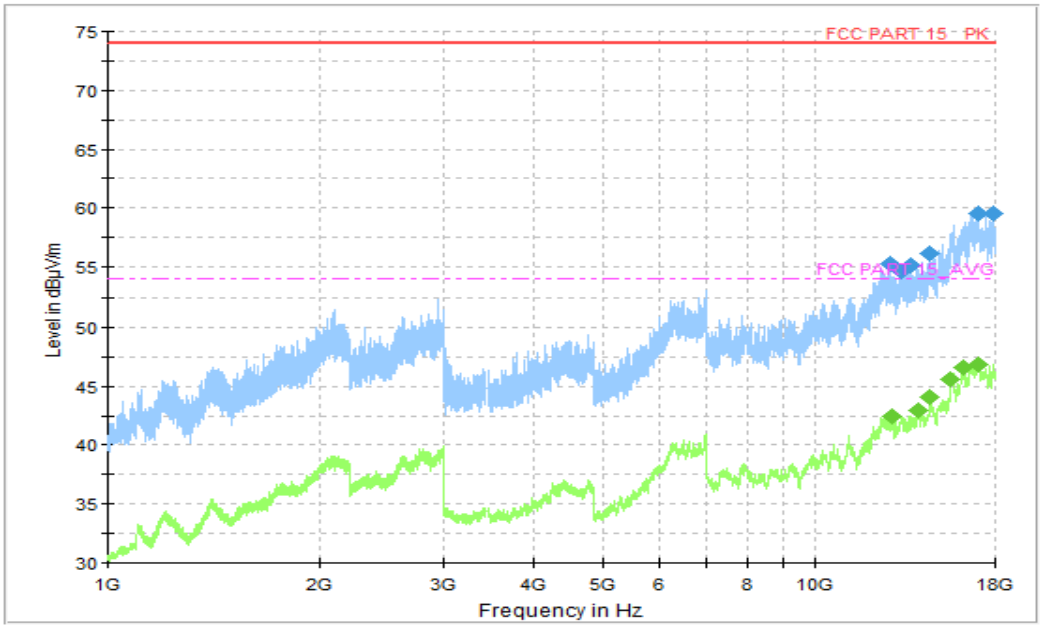
Fiture A.19. Radiated Emission (Set.2, WCDMA Band 5 Receiver, 26.5GHz to 40GHz)



Fiture A.20. Radiated Emission (Set.2, LTE Band 5 Receiver, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
33.273750	22.94	40.00	17.06	V	-15	37.94
34.243750	25.98	40.00	14.02	V	-15	40.98
36.062500	25.63	40.00	14.37	V	-16	41.63
51.582500	19.07	40.00	20.93	V	-22	41.07
53.158750	20.16	40.00	19.84	V	-22	42.16
54.189375	19.46	40.00	20.54	V	-22	41.46



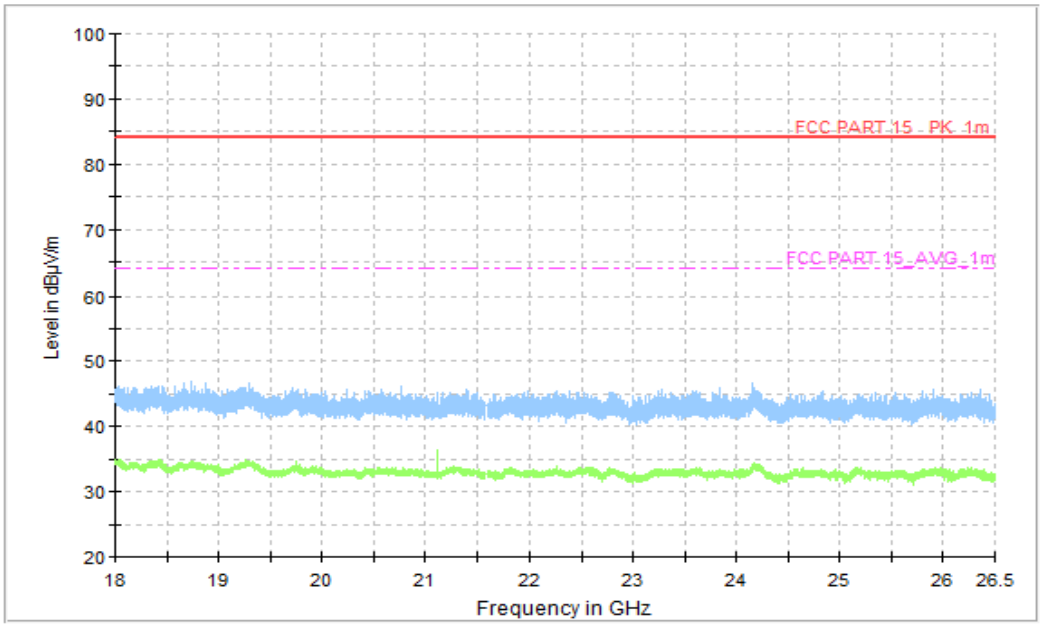
Fiture A.21. Radiated Emission (Set.2, LTE Band 5 Receiver , 1GHz to 18GHz)

Final_Results_PK

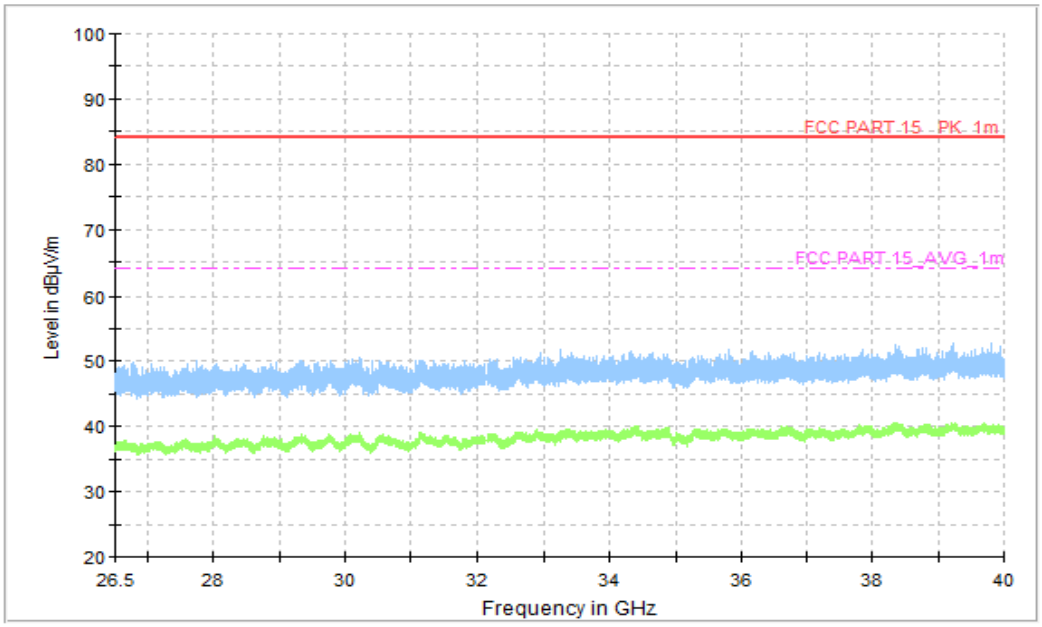
Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
12774.000000	55.23	74.00	18.77	V	17	38.23
13239.500000	54.60	74.00	19.40	H	17	37.6
13656.750000	55.20	74.00	18.80	V	17	38.20
14540.250000	56.10	74.00	17.90	V	18	38.10
17051.750000	59.58	74.00	14.42	V	22	37.58
17894.750000	59.57	74.00	14.43	V	24	35.57

Final_Results_AVG

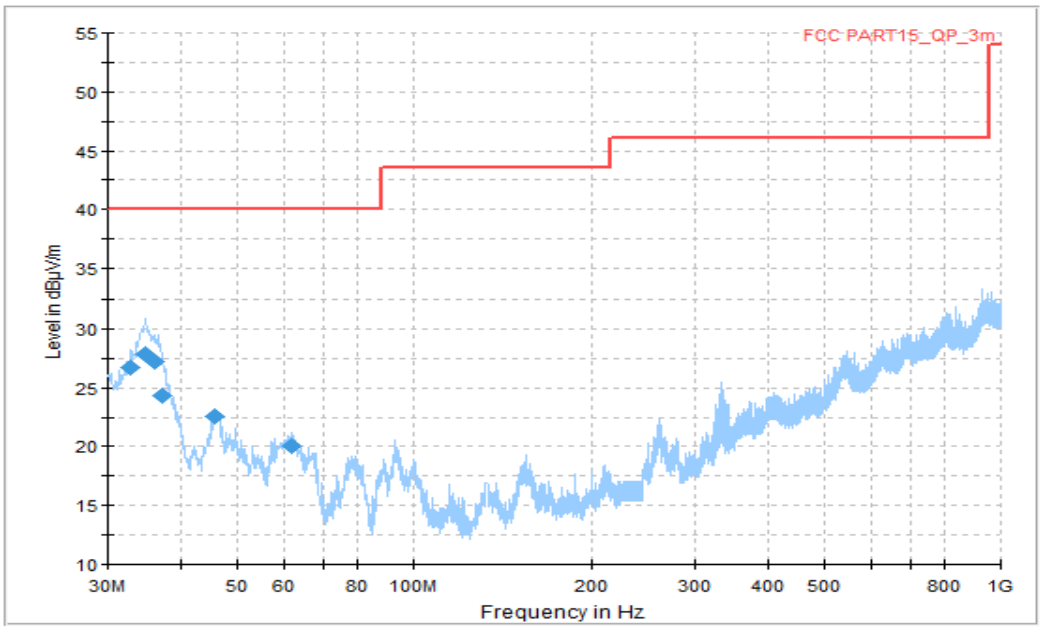
Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
12891.500000	42.46	54.00	11.54	H	17	25.46
14017.250000	42.96	54.00	11.04	V	17	25.96
14562.000000	44.08	54.00	9.92	H	18	26.08
15566.000000	45.63	54.00	8.37	V	20	25.63
16256.000000	46.54	54.00	7.46	V	21	25.54
17047.000000	46.89	54.00	7.11	V	22	24.89



Fiture A.22. Radiated Emission (Set.2, LTE Band 5 Receiver, 18GHz to 26.5GHz)



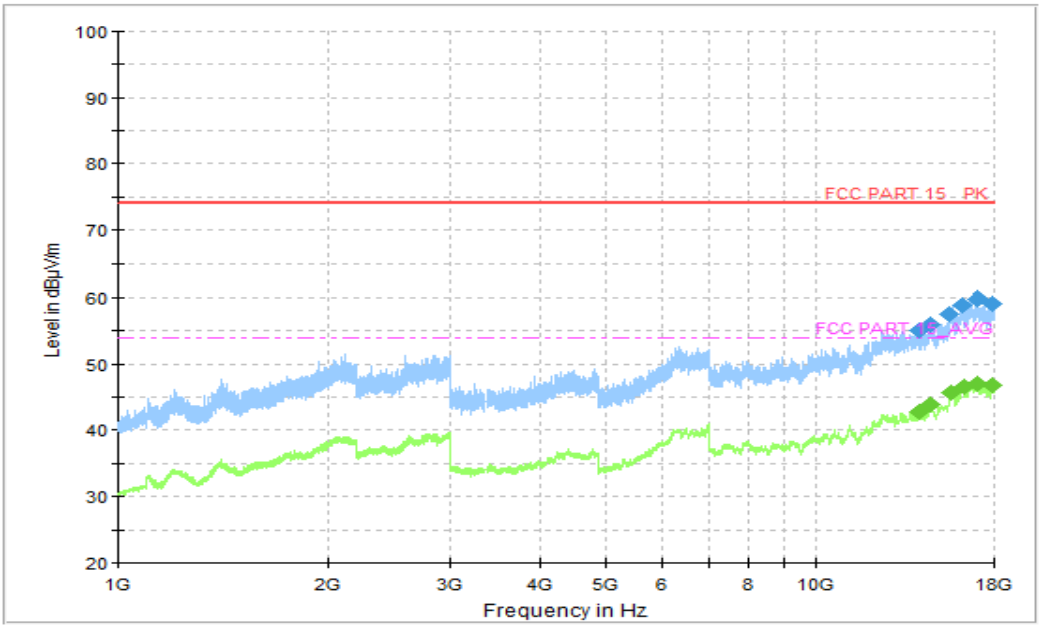
Fiture A.23. Radiated Emission (Set.2, LTE Band 5 Receiver, 26.5GHz to 40GHz)



Fiture A.24. Radiated Emission (Set.1,Camera Mode, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
32.728125	26.68	40.00	13.32	V	-15	41.68
34.668125	27.88	40.00	12.12	V	-15	42.88
36.001875	27.22	40.00	12.78	V	-16	43.22
37.214375	24.35	40.00	15.65	V	-17	41.35
45.762500	22.58	40.00	17.42	V	-21	43.58
61.888750	20.00	40.00	20.00	V	-22	42.00



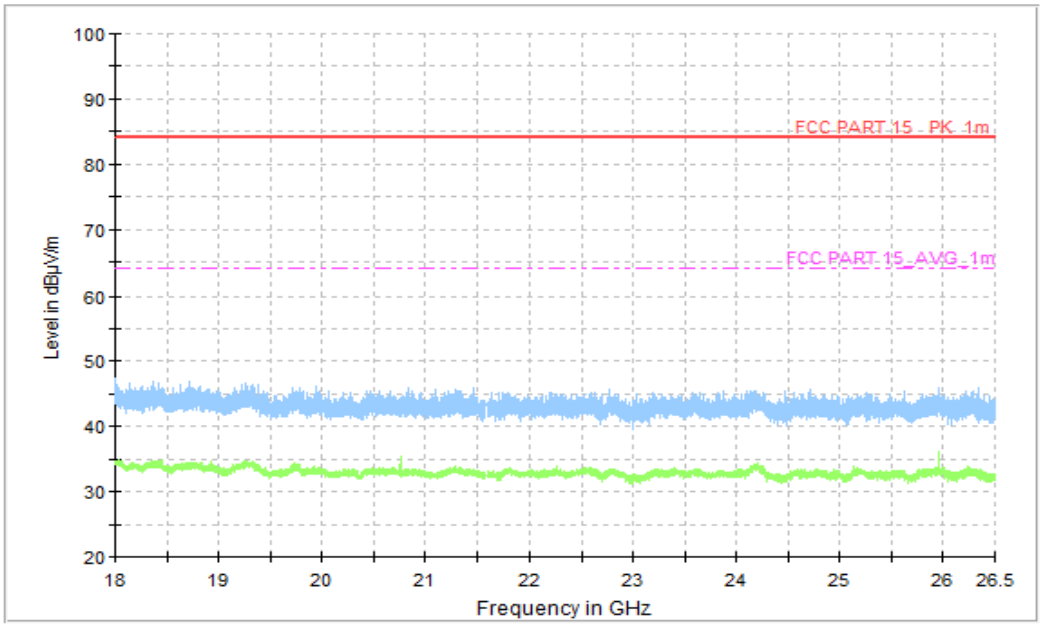
Fiture A.26. Radiated Emission (Set.1, Camera Mode , 1GHz to 18GHz)

Final_Results_PK

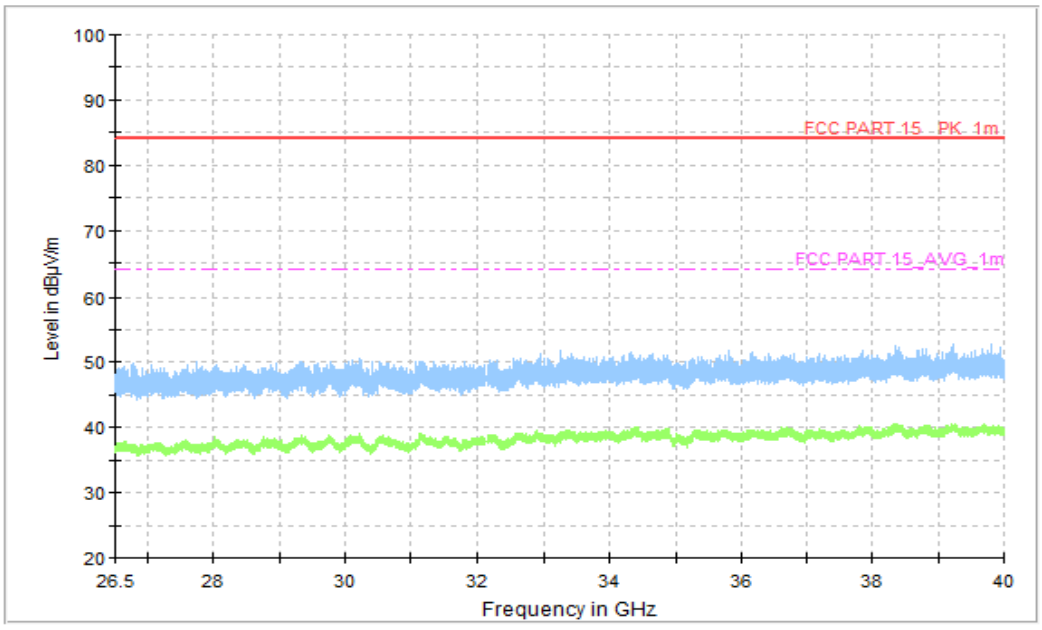
Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
14002.250000	55.11	74.00	18.89	H	17	38.11
14538.500000	56.05	74.00	17.95	H	18	38.05
15539.500000	57.46	74.00	16.54	H	19	38.46
16163.750000	58.88	74.00	15.12	H	21	37.88
17001.750000	59.82	74.00	14.19	H	23	36.82
17852.500000	59.18	74.00	14.82	H	23	36.18

Final_Results_AVG

Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
14017.000000	42.86	54.00	11.14	H	17	25.86
14565.500000	43.90	54.00	10.10	V	18	25.9
15576.000000	45.75	54.00	8.25	H	20	25.75
16259.500000	46.51	54.00	7.49	H	21	25.51
17002.250000	47.06	54.00	6.94	H	23	24.06
17892.000000	46.88	54.00	7.12	H	24	22.88

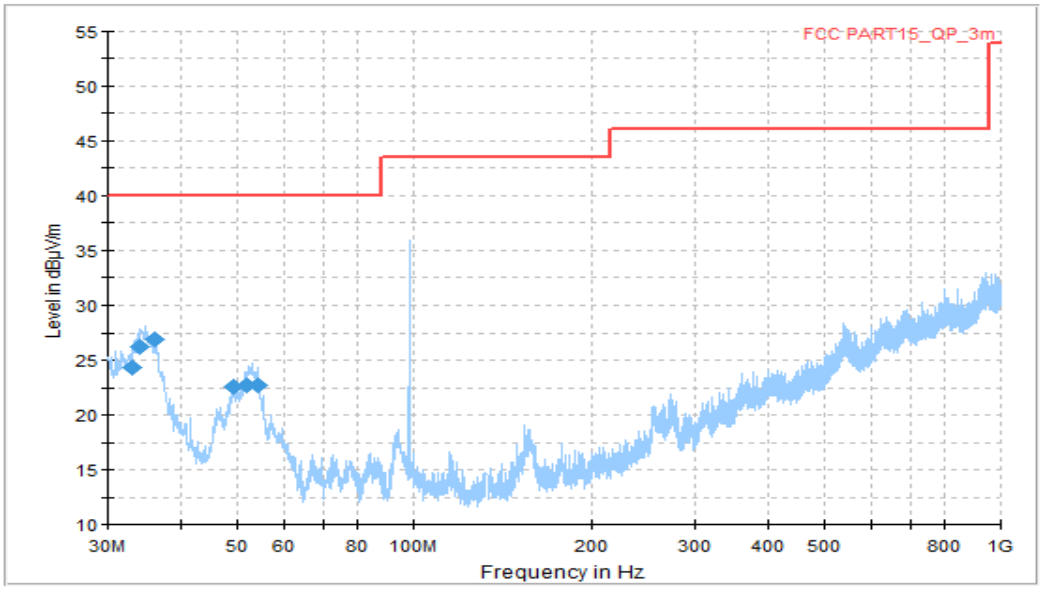


Fiture A.27. Radiated Emission (Set.1, Camera Mode , 18GHz to 26.5GHz)



*

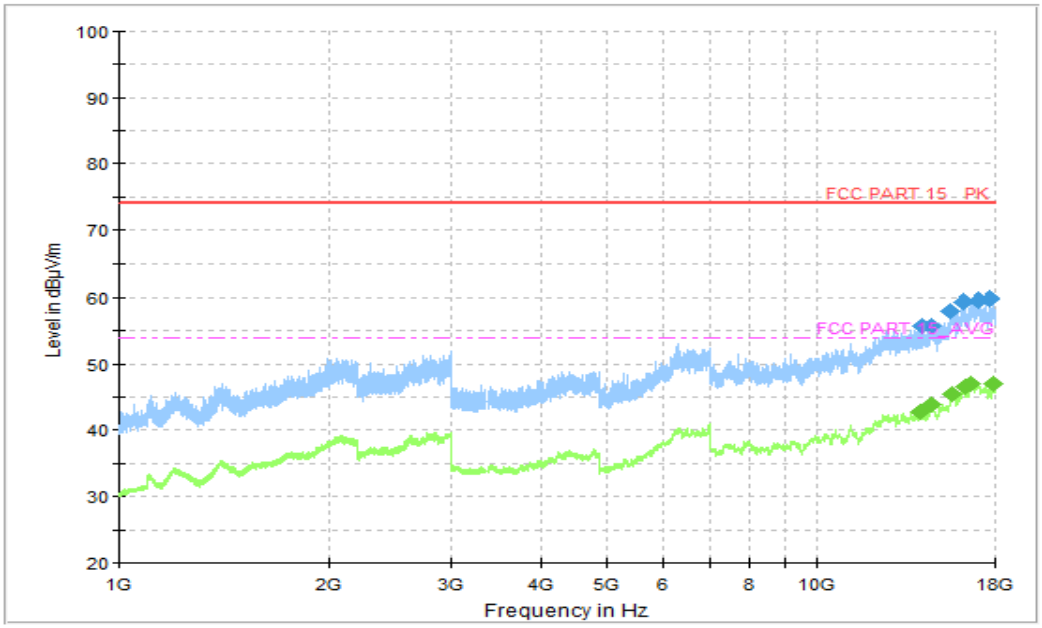
Fiture A.28. Radiated Emission (Set.1, Camera Mode , 26.5GHz to 40GHz)



Fiture A.29. Radiated Emission (Set.3,FM receiver, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
32.910000	24.30	40.00	15.70	V	-15	39.30
34.122500	26.32	40.00	13.68	V	-15	41.32
36.062500	26.93	40.00	13.07	V	-16	42.93
49.278750	22.58	40.00	17.42	V	-22	44.58
51.885625	22.79	40.00	17.21	V	-22	44.79
54.007500	22.78	40.00	17.22	V	-22	44.78



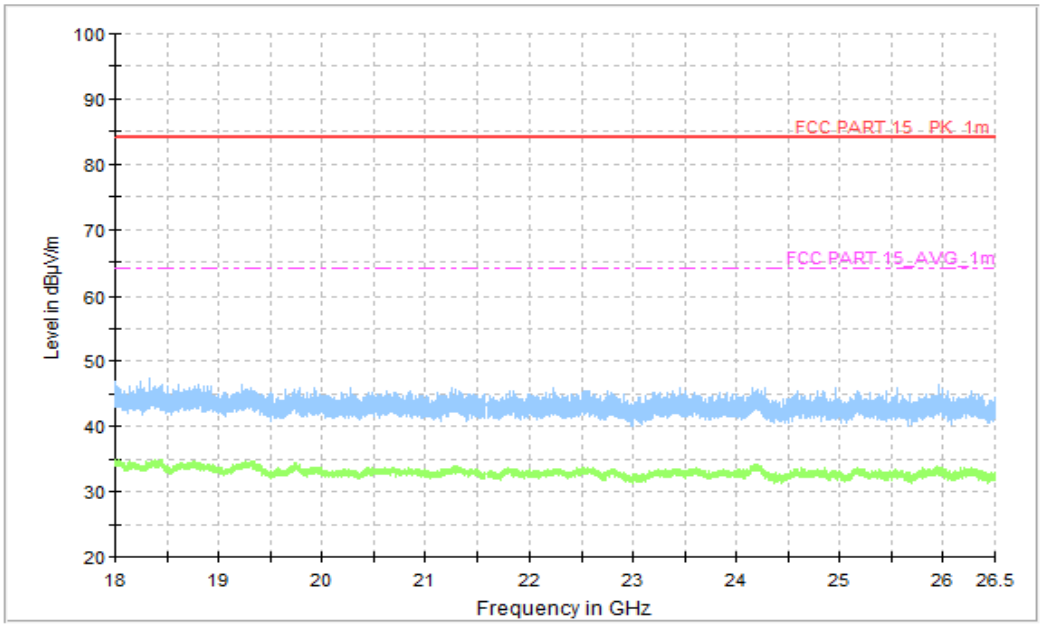
Fiture A.30. Radiated Emission (Set.3, FM receiver , 1GHz to 18GHz)

Final_Results_PK

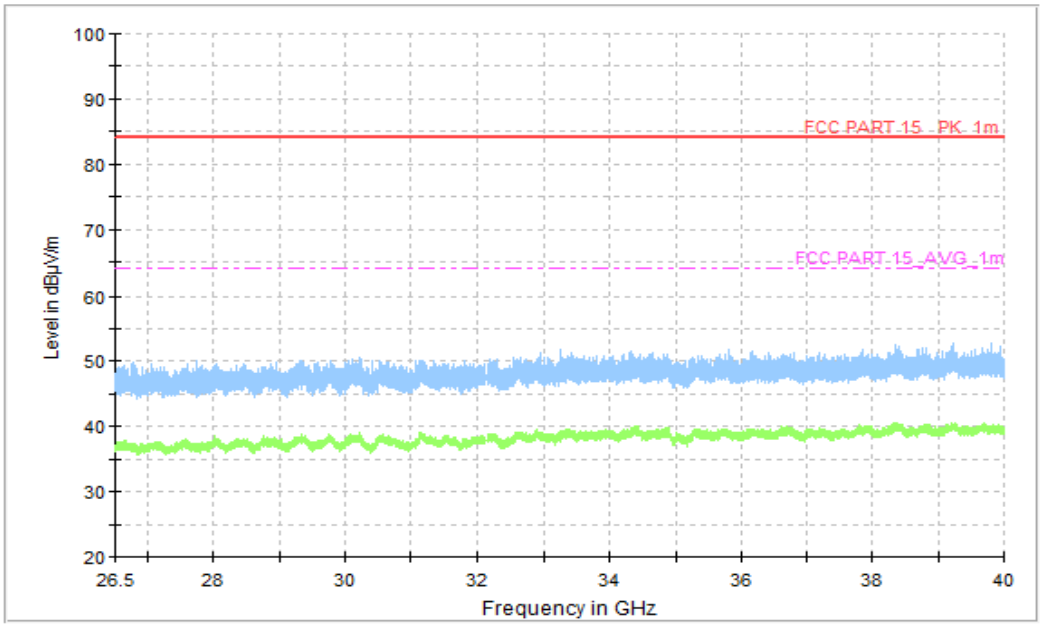
Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
14134.750000	55.84	74.00	18.16	H	17	38.84
14578.500000	55.79	74.00	18.21	V	18	37.79
15553.250000	58.02	74.00	15.98	H	19	39.02
16240.250000	59.30	74.00	14.70	H	21	38.30
17067.500000	59.58	74.00	14.42	H	22	37.58
17691.000000	59.73	74.00	14.27	V	23	36.73

Final_Results_AVG

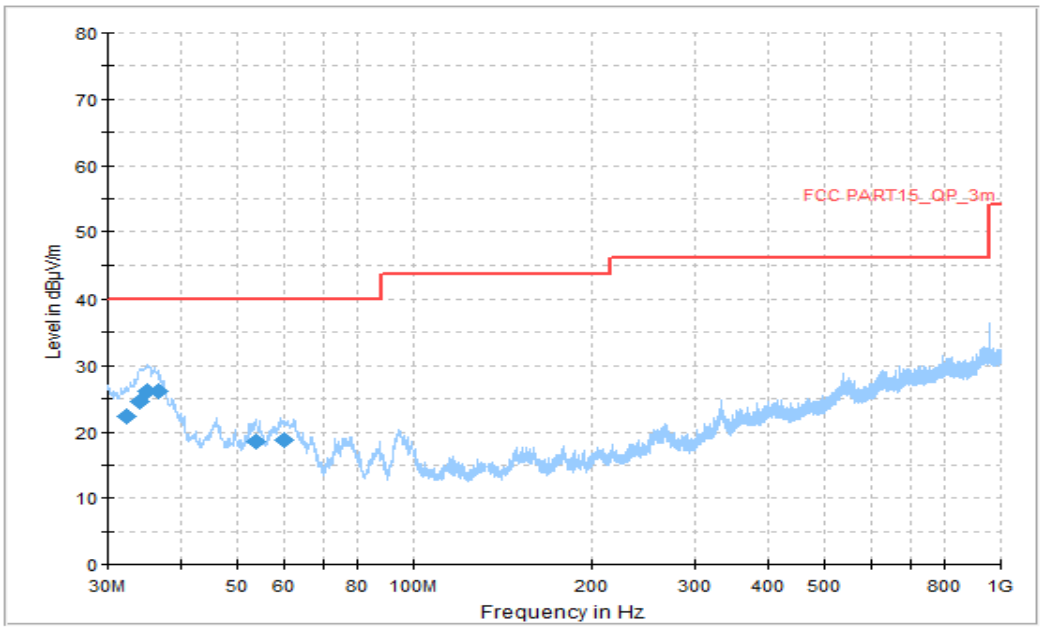
Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
14015.750000	42.89	54.00	11.11	H	17	25.89
14561.250000	43.88	54.00	10.12	H	18	25.88
15566.750000	45.56	54.00	8.44	H	20	25.56
16253.000000	46.52	54.00	7.48	V	21	25.52
16650.000000	47.13	54.00	6.87	H	22	25.13
17897.250000	46.96	54.00	7.04	V	24	22.96



Fiture A.31. Radiated Emission (Set.3, FM receiver , 18GHz to 26.5GHz)



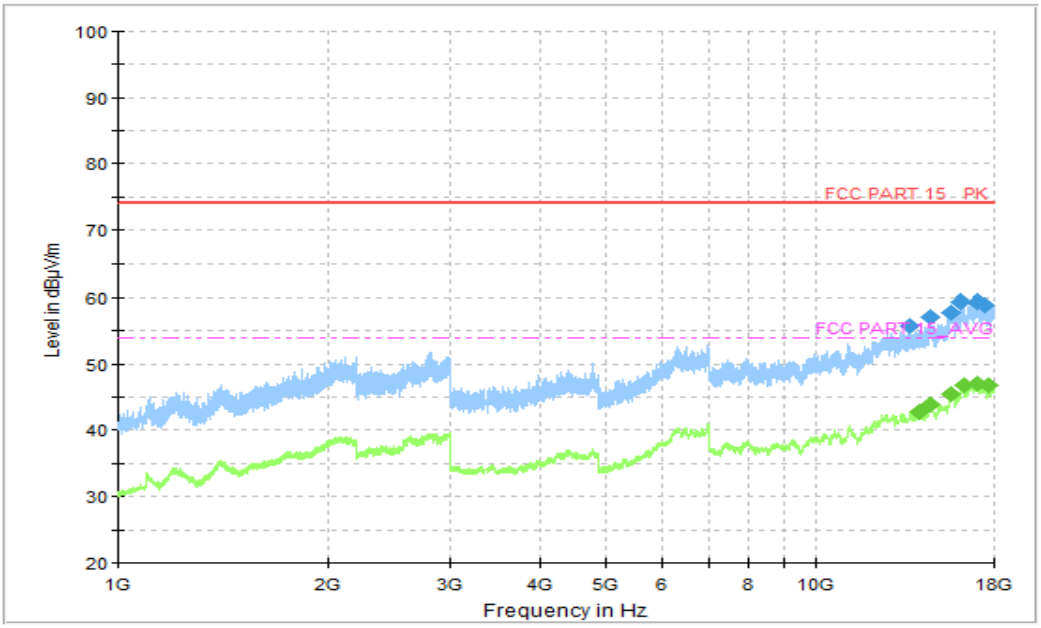
Fiture A.32. Radiated Emission (Set.3, FM receiver , 26.5GHz to 40GHz)



Fiture A.33. Radiated Emission (Set.1,Video Player Mode, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
32.182500	22.32	40.00	17.68	V	-14	36.32
33.940625	24.52	40.00	15.48	V	-15	39.52
35.153125	26.16	40.00	13.84	V	-16	42.16
36.608125	26.11	40.00	13.89	V	-17	43.11
53.583125	18.51	40.00	21.49	V	-22	40.51
60.070000	18.81	40.00	21.19	V	-22	40.81



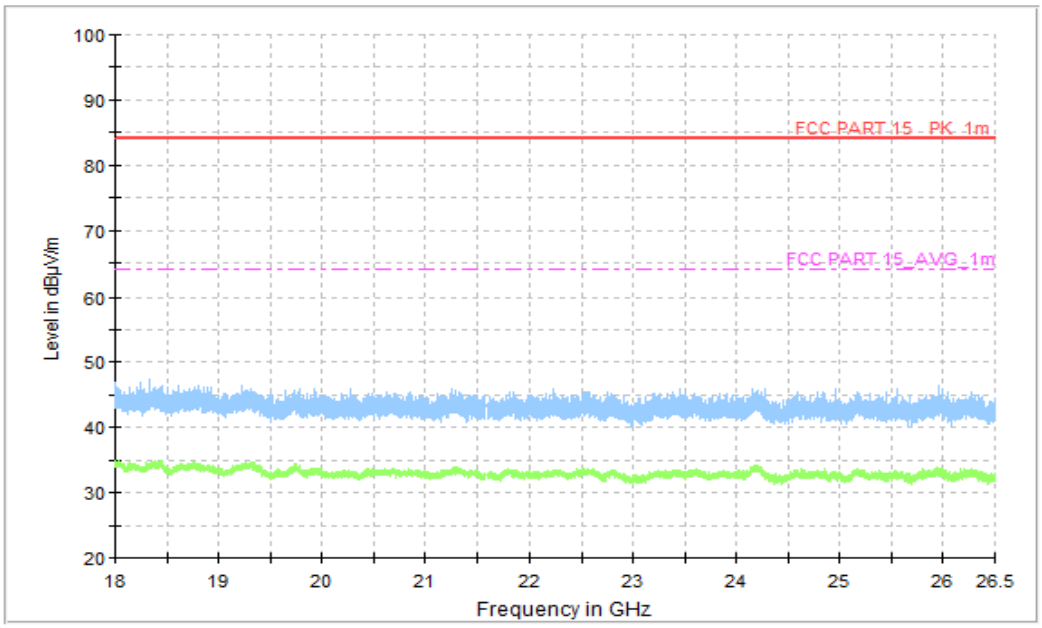
Fiture A.34. Radiated Emission (Set.1, Video Player Mode, 1GHz to 18GHz)

Final_Results_PK

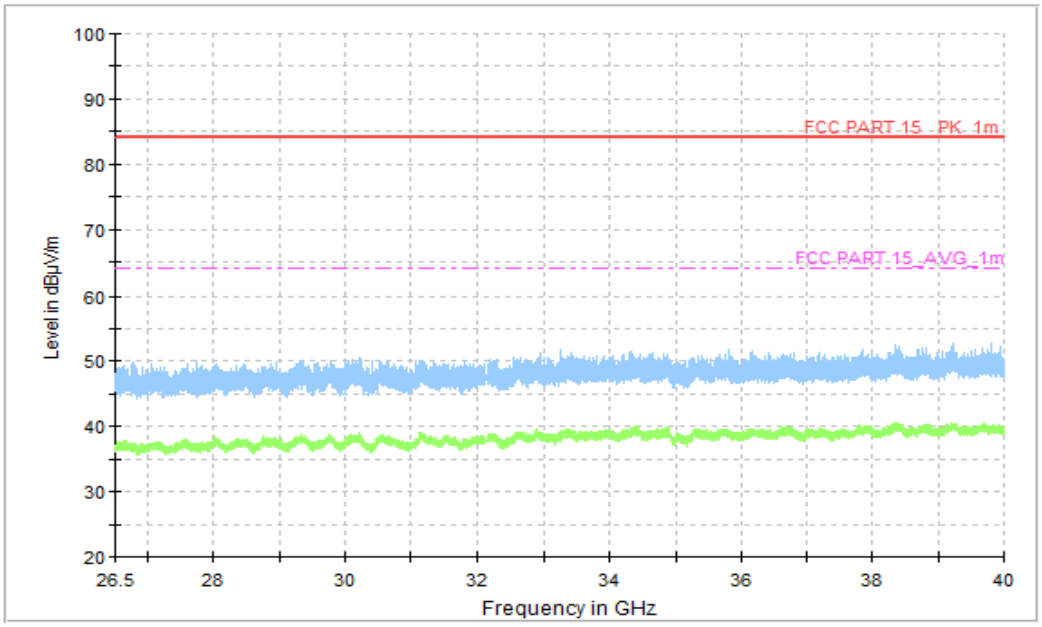
Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
13648.750000	55.78	74.00	18.22	H	17	38.78
14567.500000	57.19	74.00	16.81	V	18	39.19
15569.500000	57.84	74.00	16.16	H	20	37.84
16136.750000	59.37	74.00	14.63	H	21	38.37
17056.750000	59.37	74.00	14.63	H	22	37.37
17483.750000	58.87	74.00	15.13	V	22	36.87

Final_Results_AVG

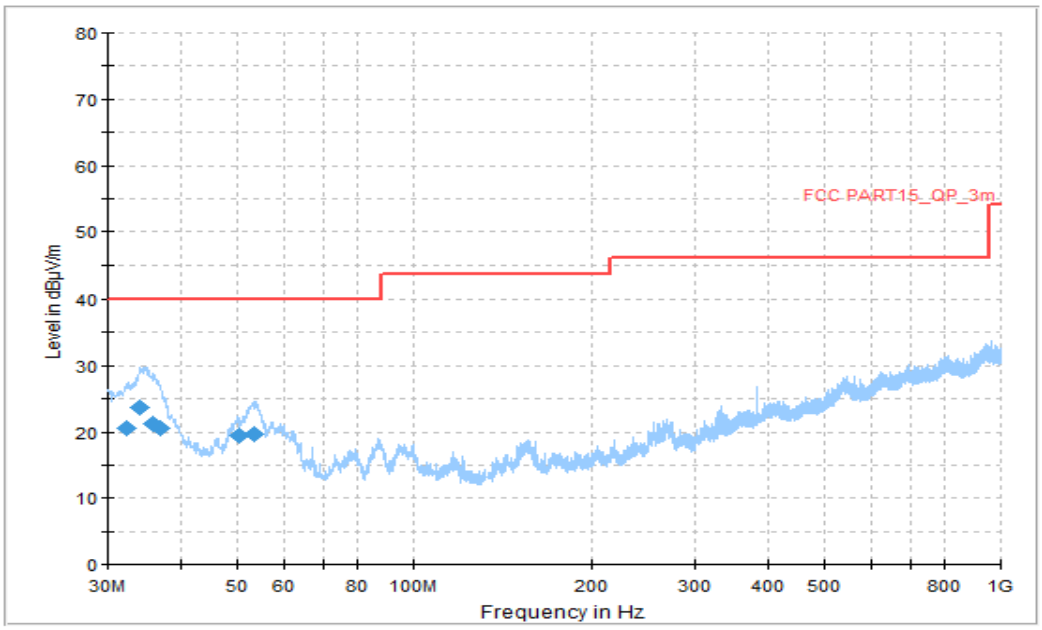
Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
14018.000000	42.89	54.00	11.11	V	17	25.89
14595.750000	43.99	54.00	10.01	H	18	25.99
15566.500000	45.50	54.00	8.50	V	20	25.50
16262.500000	46.75	54.00	7.25	V	21	25.75
16998.750000	46.98	54.00	7.02	H	23	23.98
17707.250000	46.85	54.00	7.15	V	23	23.85



Fiture A.35. Radiated Emission (Set.1, Video Player Mode, 18GHz to 26.5GHz)



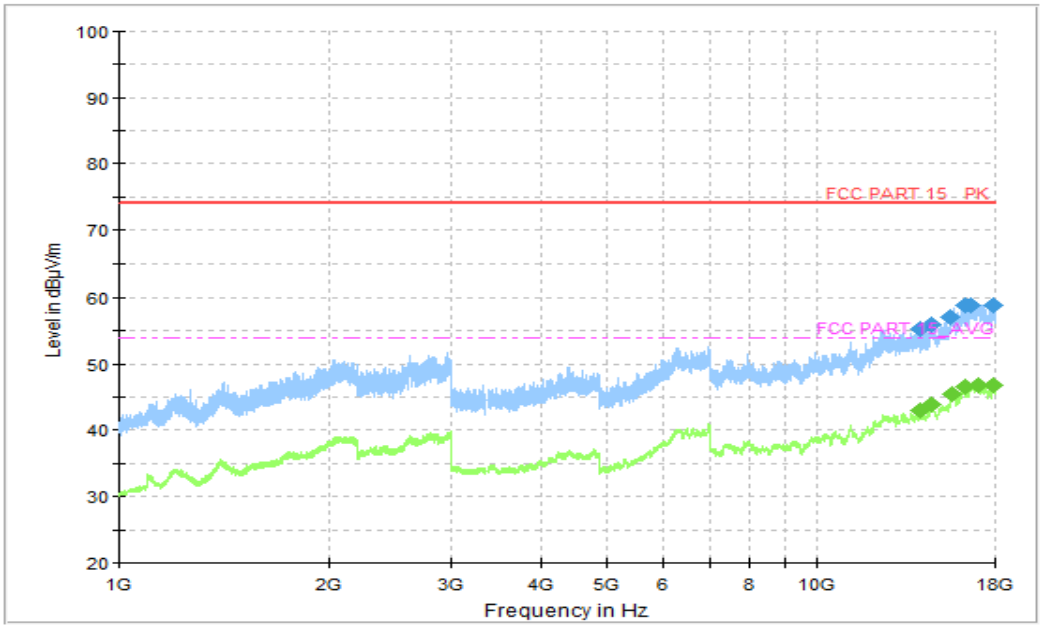
Fiture A.36. Radiated Emission (Set.1, Video Player Mode, 26.5GHz to 40GHz)



Fiture A.37. Radiated Emission (Set.2 Video Player Mode, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
32.182500	20.58	40.00	19.42	V	-14	34.58
34.122500	23.58	40.00	16.42	V	-15	38.58
35.759375	21.16	40.00	18.84	V	-16	37.16
36.971875	20.51	40.00	19.49	V	-17	37.51
50.127500	19.41	40.00	20.59	V	-22	41.41
53.219375	19.56	40.00	20.44	V	-22	41.56



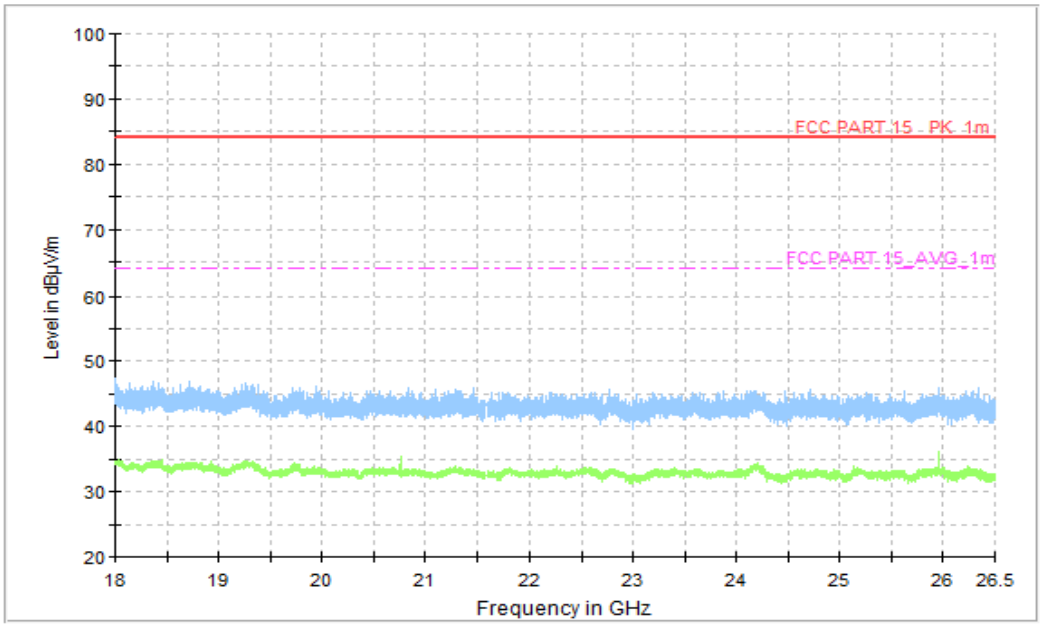
Fiture A.38. Radiated Emission (Set.2 Video Player Mode, 1GHz to 18GHz)

Final_Results_PK

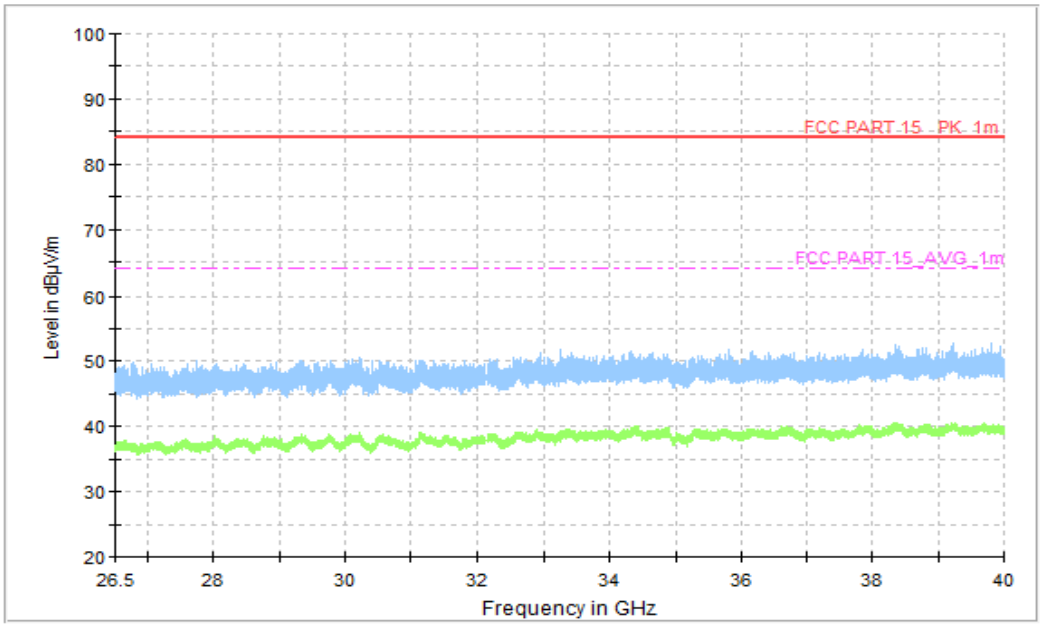
Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
14031.500000	55.31	74.00	18.69	H	17	38.31
14563.500000	56.02	74.00	17.98	H	18	38.02
15557.750000	57.15	74.00	16.85	H	19	38.15
16282.250000	58.98	74.00	15.02	V	21	37.98
16608.500000	58.97	74.00	15.03	H	22	36.97
17899.250000	58.96	74.00	15.04	V	24	34.96

Final_Results_AVG

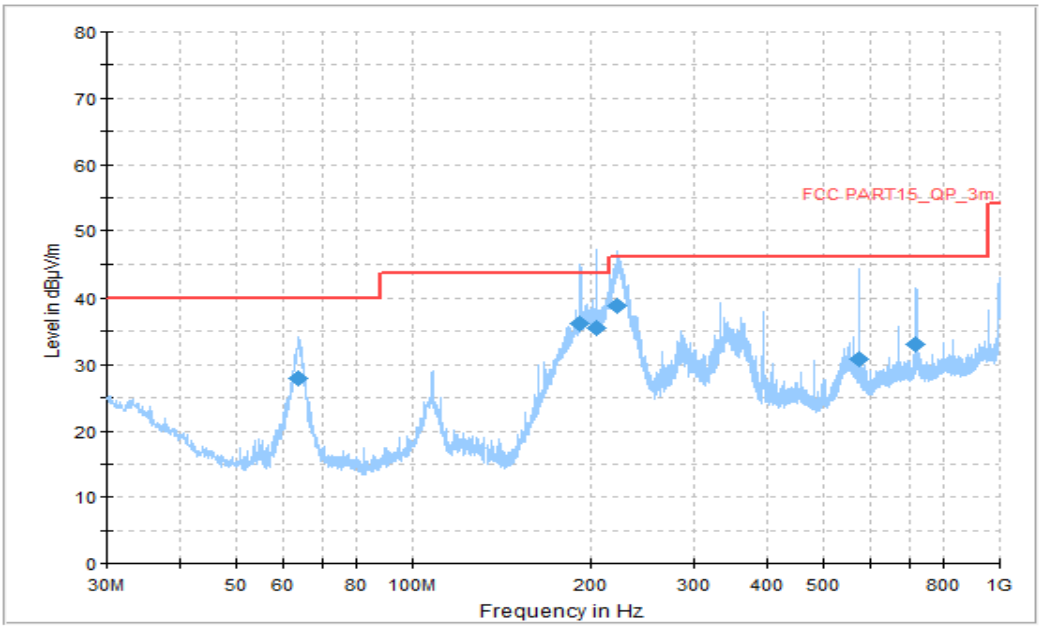
Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
14017.250000	43.06	54.00	10.94	V	17	26.06
14572.500000	43.94	54.00	10.06	H	18	25.94
15569.750000	45.52	54.00	8.48	H	20	25.52
16262.250000	46.63	54.00	7.37	V	21	25.63
16996.500000	46.92	54.00	7.08	H	23	23.92
17895.000000	46.80	54.00	7.20	H	24	22.80



Fiture A.39. Radiated Emission (Set.2 Video Player Mode, 18GHz to 26.5GHz)



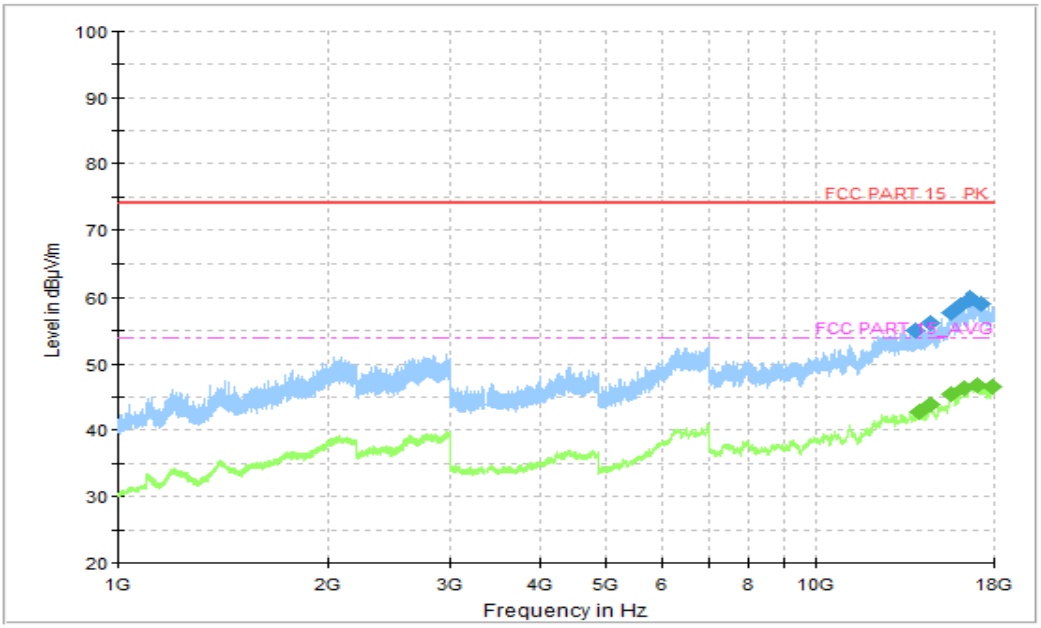
Fiture A.40. Radiated Emission (Set.2, Video Player Mode, 26.5GHz to 40GHz)



Fiture A.41. Radiated Emission (Set.5, Data Transfer Mode: EUT to PC, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
63.707500	28.04	40.00	11.96	V	-22	50.04
191.929375	36.13	43.52	7.39	H	-18	54.13
203.993750	35.55	43.52	7.97	H	-17	52.55
222.363125	38.92	46.02	7.10	H	-17	55.92
575.988750	30.76	46.02	15.26	V	-5	35.76
719.548750	33.09	46.02	12.93	V	-2	35.09



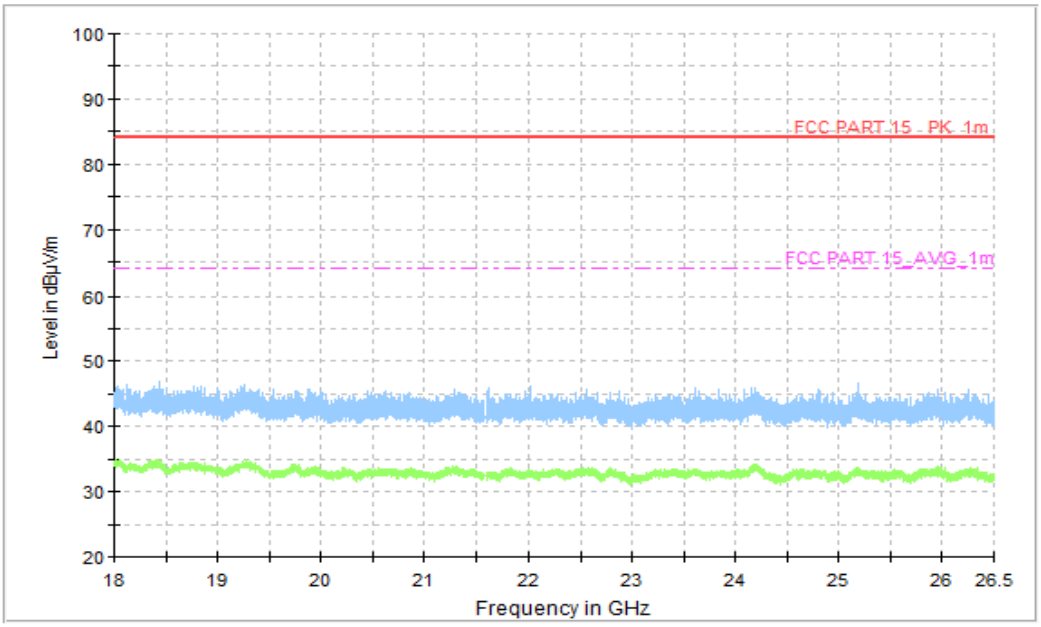
Fiture A.42. Radiated Emission (Set.5, Data Transfer Mode: EUT to PC, 1GHz to 18GHz)

Final_Results_PK

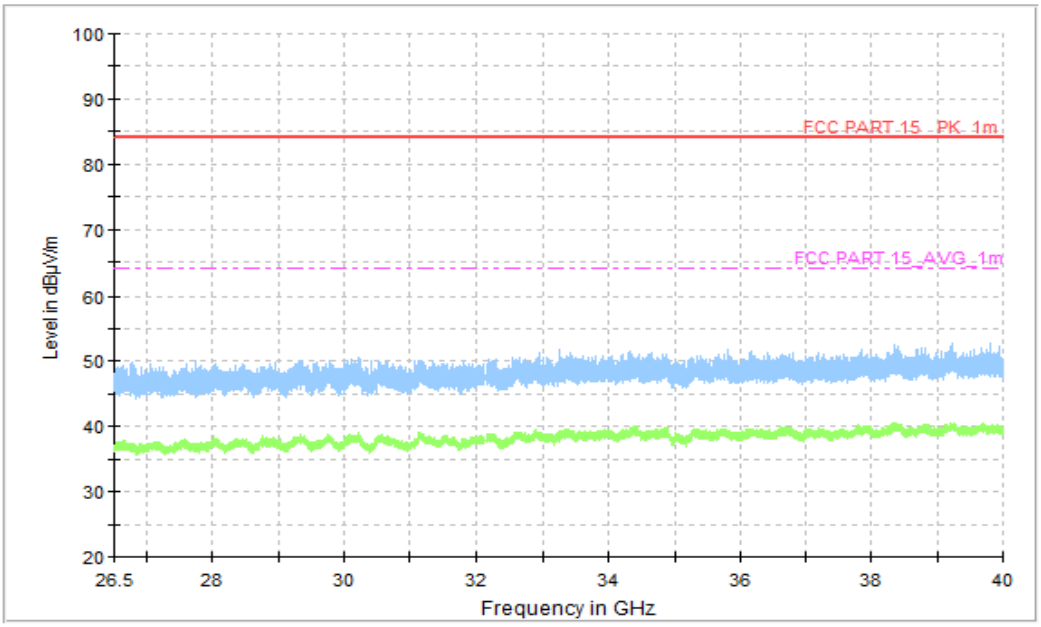
Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
13859.750000	55.07	74.00	18.93	V	17	38.07
14597.500000	56.14	74.00	17.86	V	18	38.14
15568.250000	57.82	74.00	16.18	H	20	37.82
16077.500000	58.88	74.00	15.12	H	21	37.88
16647.750000	59.69	74.00	14.31	H	22	37.69
17239.500000	59.17	74.00	14.83	V	22	37.17

Final_Results_AVG

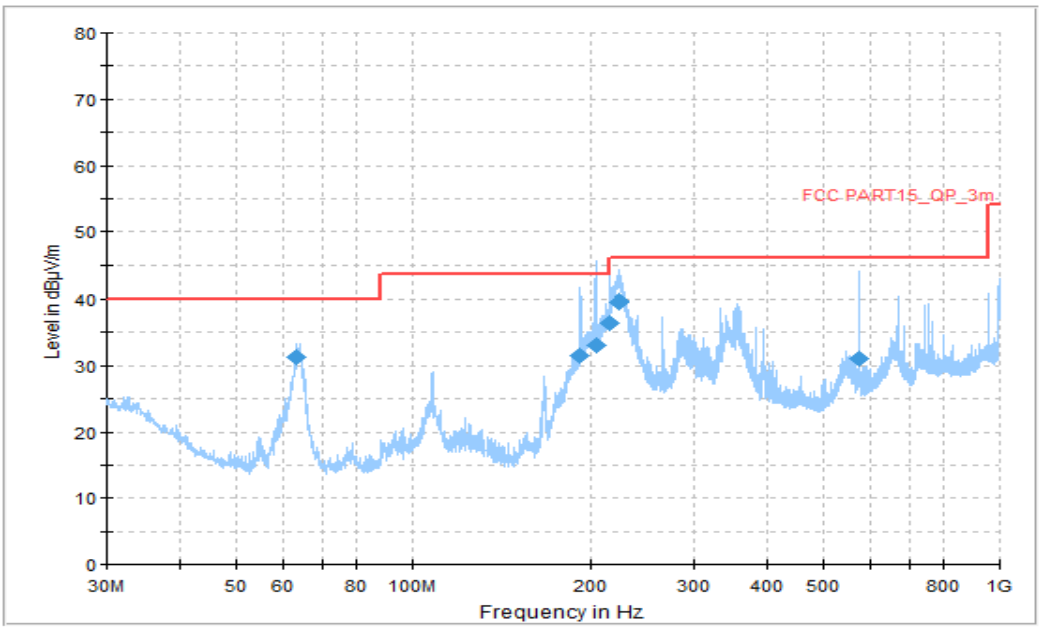
Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
14015.000000	42.75	54.00	11.25	H	17	25.75
14558.750000	43.95	54.00	10.05	H	18	25.95
15575.750000	45.45	54.00	8.55	V	20	25.45
16293.000000	46.37	54.00	7.63	V	21	25.37
16998.750000	46.92	54.00	7.08	V	23	23.92
17892.750000	46.64	54.00	7.36	H	24	22.64



Fiture A.43. Radiated Emission (Set.5, Data Transfer Mode: EUT to PC, 18GHz to 26.5GHz)



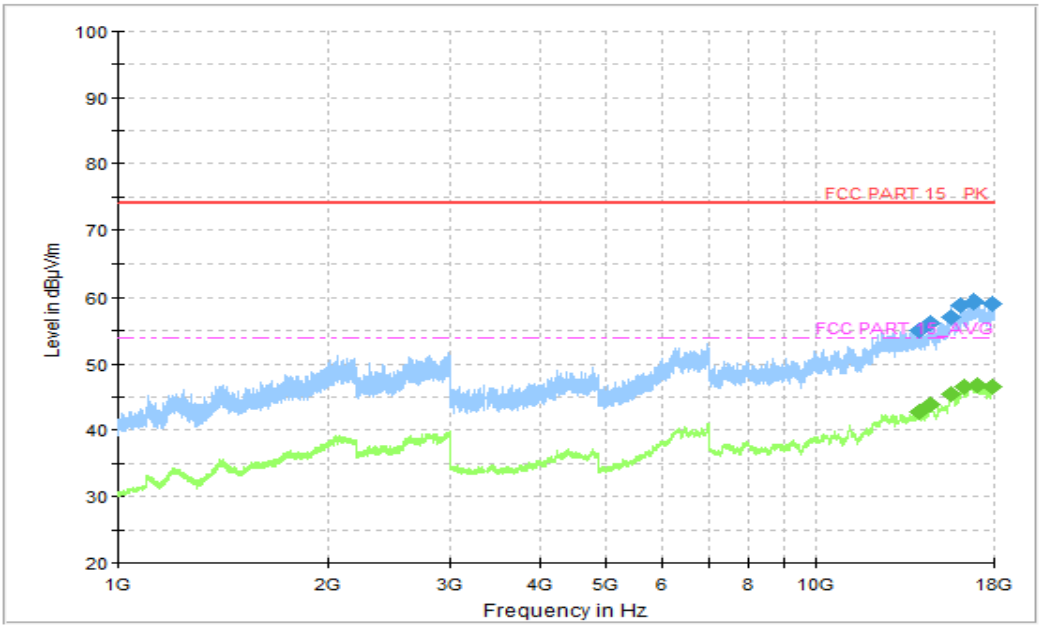
Fiture A.44. Radiated Emission (Set.5, Data Transfer Mode: EUT to PC, 26.5GHz to 40GHz)



Fiture A.45. Radiated Emission (Set.5, Data Transfer Mode: PC to EUT, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
63.404375	31.33	40.00	8.67	H	-22	53.33
191.990000	31.57	43.52	11.95	H	-18	49.57
203.993750	33.18	43.52	10.34	H	-17	50.18
215.997500	36.50	43.52	7.02	H	-17	53.50
223.575625	39.48	46.02	6.54	H	-17	56.48
575.988750	31.12	46.02	6.54	V	-5	56.48



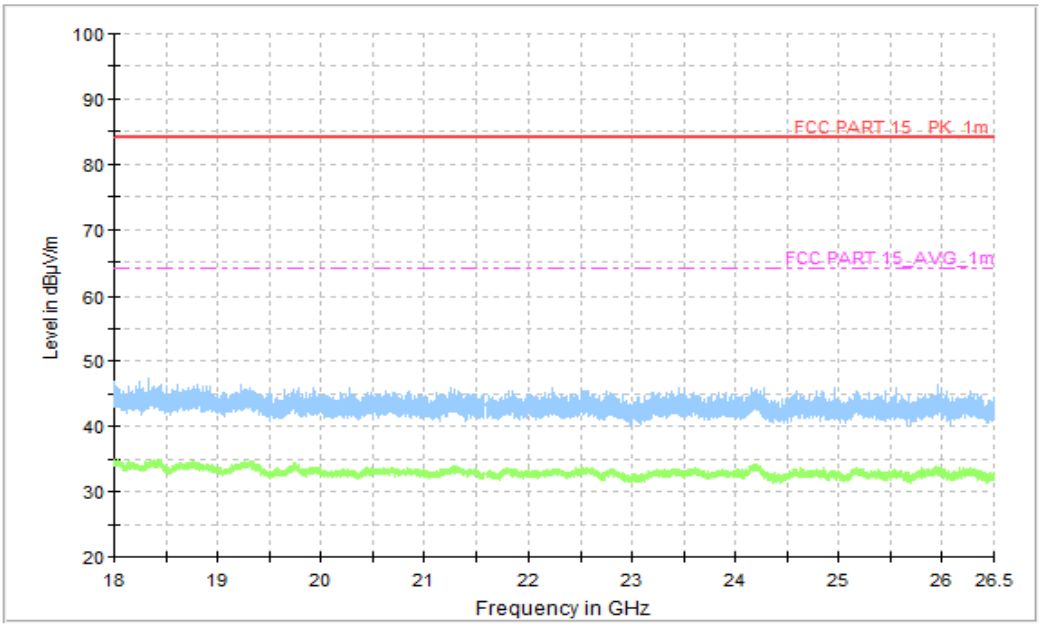
Fiture A.46. Radiated Emission (Set.5, Data Transfer Mode: PC to EUT, 1GHz to 18GHz)

Final_Results_PK

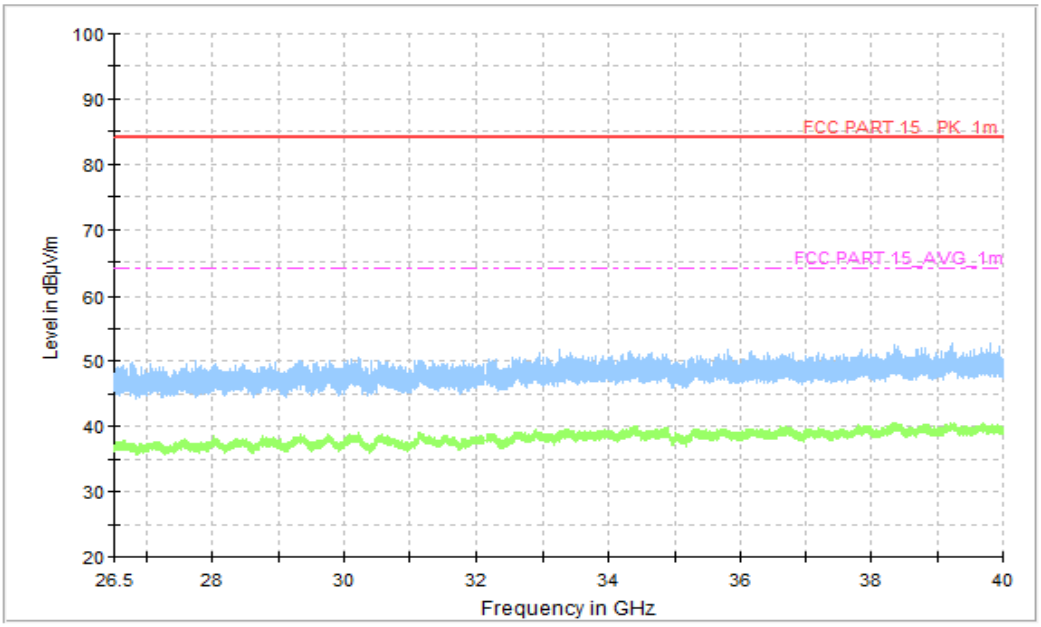
Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
14040.750000	55.16	74.00	18.84	V	17	38.16
14587.000000	56.23	74.00	17.77	V	18	38.23
15574.750000	57.16	74.00	16.84	H	20	37.16
16147.500000	58.89	74.00	15.11	V	21	37.89
16817.250000	59.22	74.00	14.78	V	22	37.22
17855.000000	59.14	74.00	14.86	H	24	35.14

Final_Results_AVG

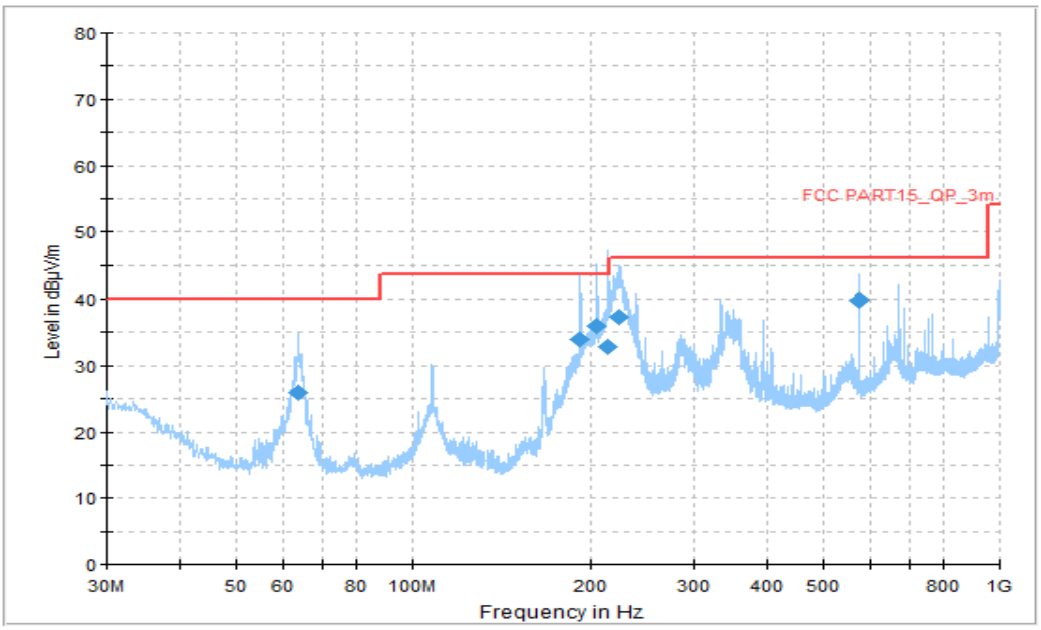
Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	PMea (dBµV)
14017.250000	42.79	54.00	11.21	V	17	25.79
14563.000000	43.94	54.00	10.06	V	18	25.94
15566.250000	45.42	54.00	8.58	V	20	25.42
16282.250000	46.59	54.00	7.41	H	21	25.59
17010.000000	46.91	54.00	7.09	H	23	23.91
17892.250000	46.67	54.00	7.33	V	24	22.67



Fiture A.47. Radiated Emission (Set.5, Data Transfer Mode: PC to EUT, 18GHz to 26.5GHz)



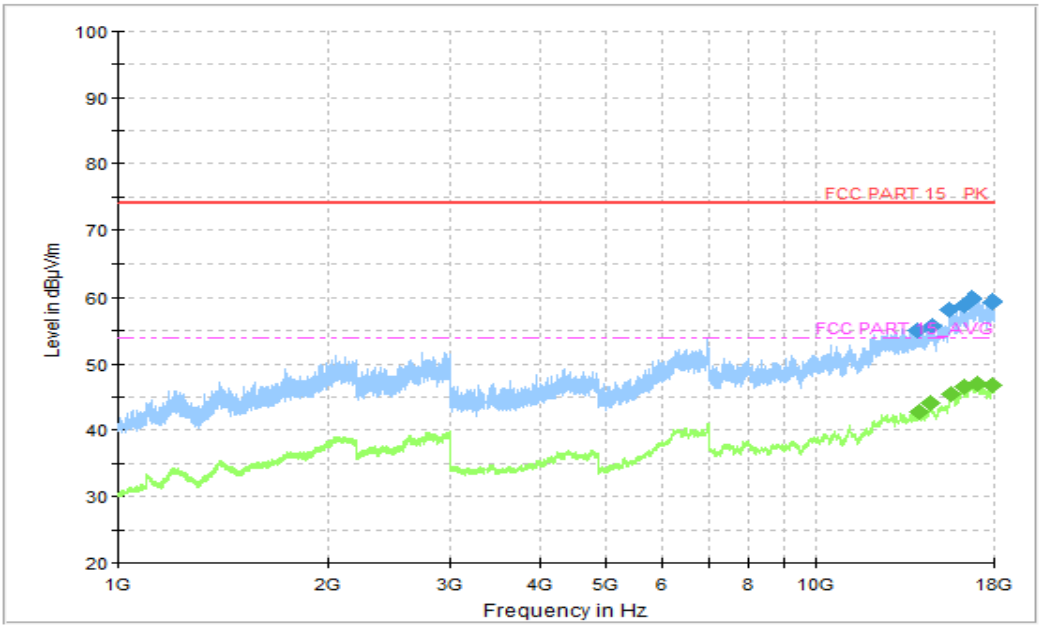
Fiture A.48. Radiated Emission (Set.5, Data Transfer Mode: PC to EUT, 26.5GHz to 40GHz)



Fiture A.49. Radiated Emission (Set.5, Data Transfer Mode: PC to TF Card, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
63.707500	25.99	40.00	14.01	H	-22	47.99
191.990000	33.87	43.52	9.65	H	-18	51.87
203.993750	35.98	43.52	7.54	H	-17	52.98
214.239375	32.96	43.52	10.56	H	-17	49.96
222.787500	37.34	46.02	8.68	H	-17	54.34
575.988750	39.82	46.02	6.20	V	-5	44.82



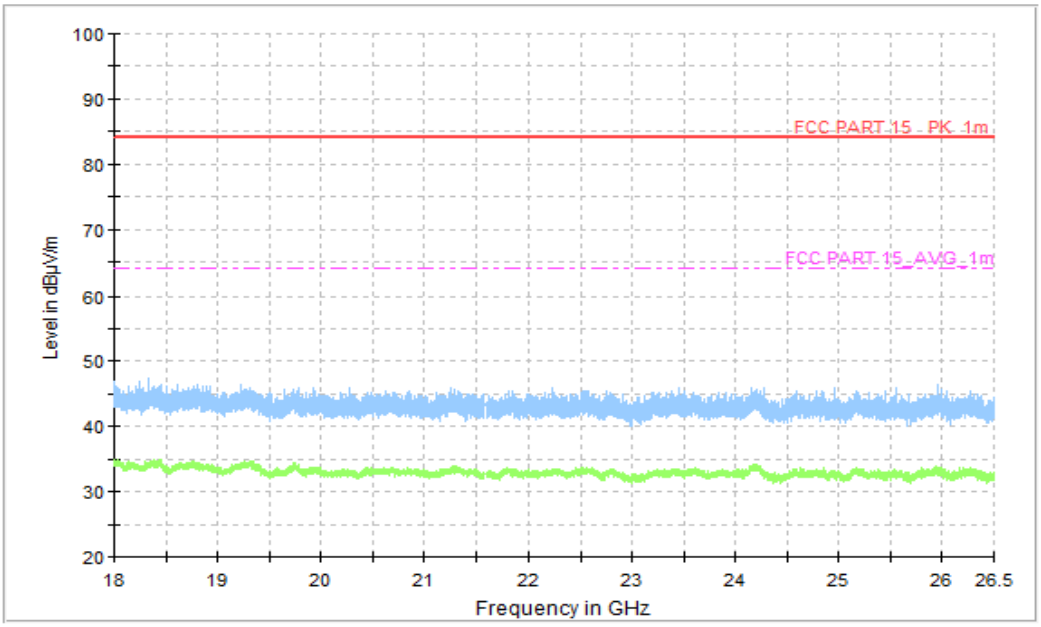
Fiture A.50. Radiated Emission (Set.5, Data Transfer Mode: PC to TF Card, 1GHz to 18GHz)

Final_Results_PK

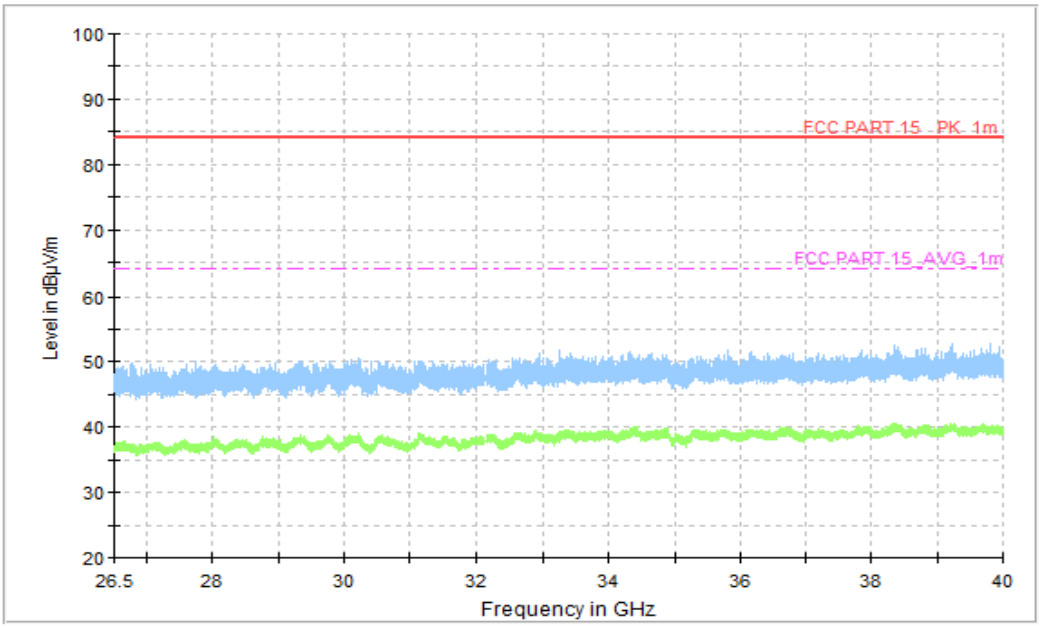
Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
13950.250000	55.00	74.00	19.00	V	17	38.00
14685.500000	55.69	74.00	18.31	H	18	37.69
15557.500000	58.30	74.00	15.70	H	19	39.30
16280.000000	58.97	74.00	15.03	V	21	37.97
16755.500000	59.69	74.00	14.31	H	21	38.69
17876.250000	59.27	74.00	14.73	H	24	35.27

Final_Results_AVG

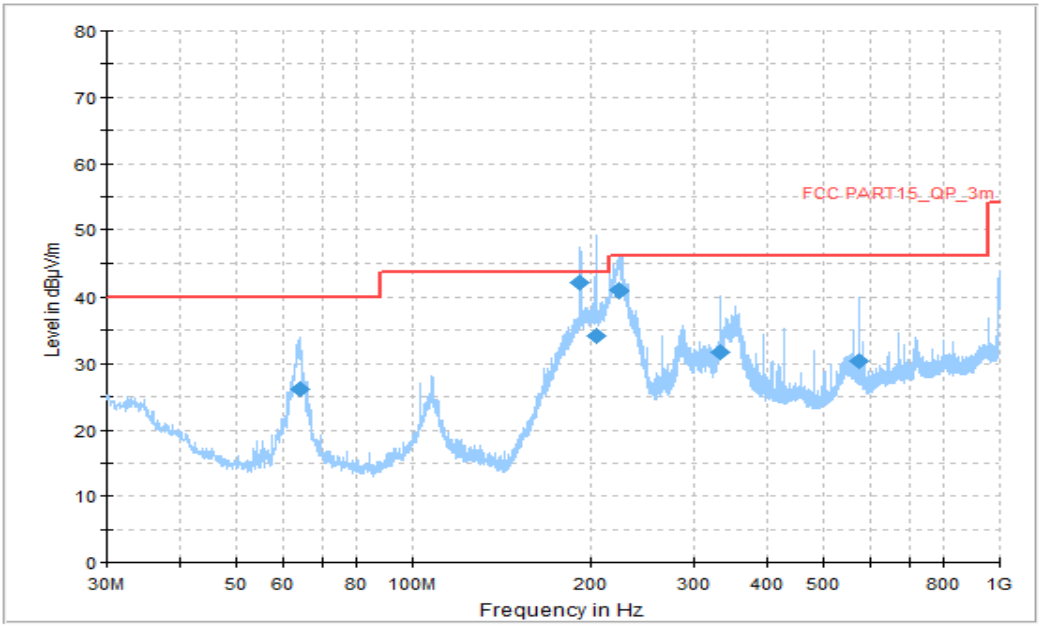
Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
14015.250000	42.83	54.00	11.17	V	17	25.83
14575.500000	44.03	54.00	9.97	H	18	26.03
15577.250000	45.43	54.00	8.57	H	20	25.43
16259.250000	46.50	54.00	7.50	H	21	25.50
17019.000000	46.93	54.00	7.07	V	23	23.93
17895.250000	46.91	54.00	7.09	V	24	22.91



Fiture A.51. Radiated Emission (Set.5, Data Transfer Mode: PC to TF Card, 18GHz to 26.5GHz)



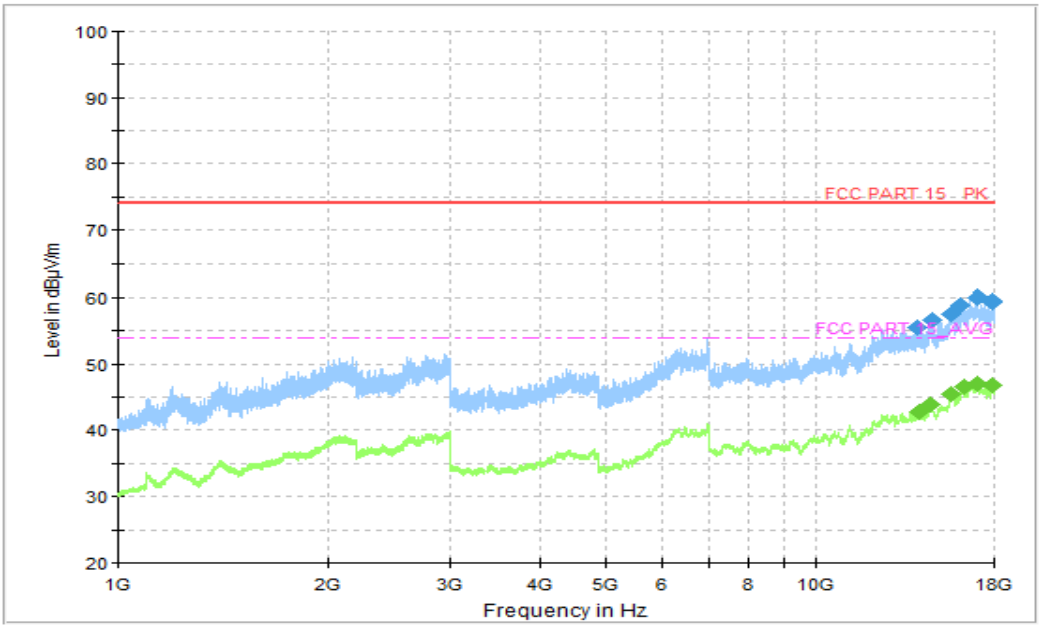
Fiture A.52. Radiated Emission (Set.5, Data Transfer Mode: PC to TF Card, 26.5GHz to 40GHz)



Fiture A.53. Radiated Emission (Set.5, Data Transfer Mode: TF Card to PC, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
64.192500	26.21	40.00	13.79	H	-22	48.21
191.990000	42.09	43.52	1.43	H	-18	60.09
203.933125	34.28	43.52	9.24	H	-17	51.28
223.272500	40.94	46.02	5.08	H	-17	57.94
331.851875	31.65	46.02	14.37	H	-12	43.65
575.988750	30.33	46.02	15.69	V	-5	35.33



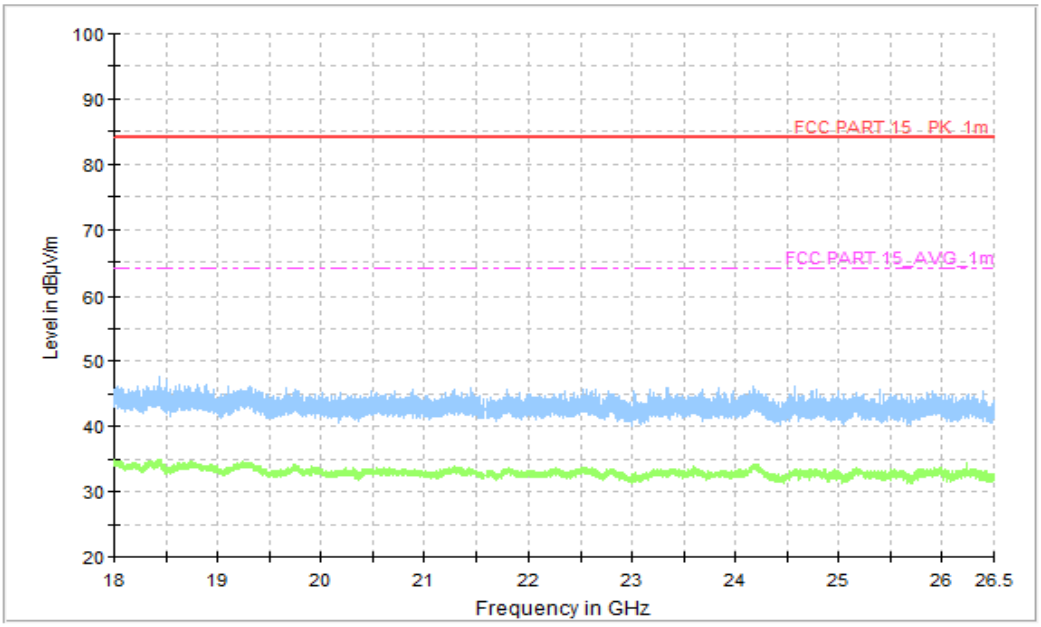
Fiture A.54. Radiated Emission (Set.5, Data Transfer Mode: TF Card to PC, 1GHz to 18GHz)

Final_Results_PK

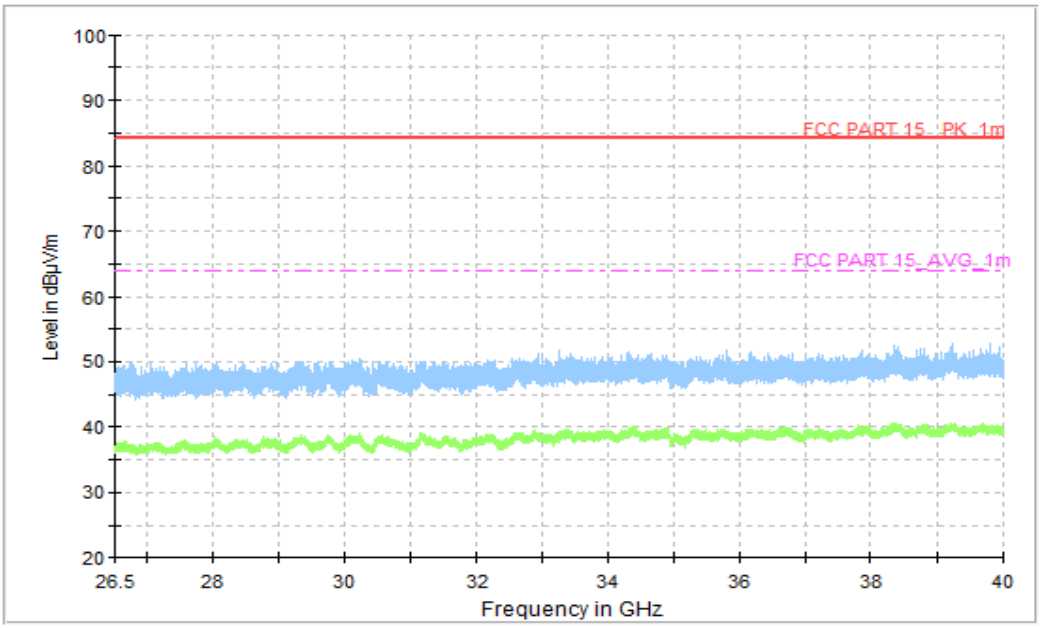
Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
13994.250000	55.61	74.00	18.39	V	17	38.61
14629.750000	56.69	74.00	17.31	H	18	38.69
15564.750000	57.47	74.00	16.53	V	20	37.47
16147.000000	58.79	74.00	15.21	V	21	37.79
17015.000000	59.97	74.00	14.03	V	23	36.97
17884.000000	59.23	74.00	14.77	H	24	35.23

Final_Results_AVG

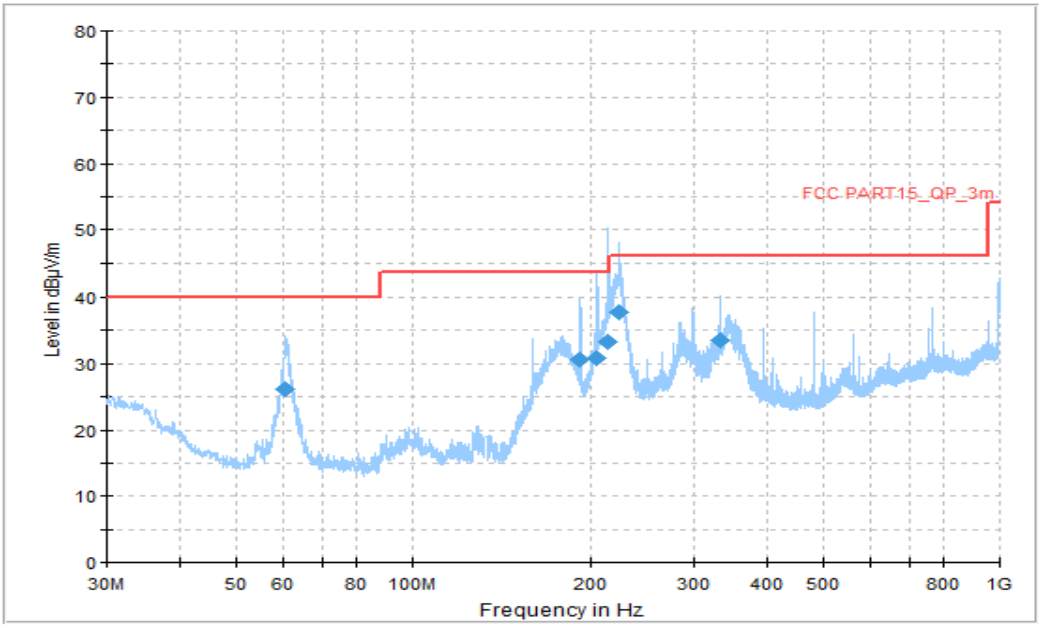
Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
14014.250000	42.81	54.00	11.19	V	17	25.81
14564.500000	43.99	54.00	10.01	V	18	25.99
15562.500000	45.44	54.00	8.56	H	19	26.44
16265.750000	46.54	54.00	7.46	V	21	25.54
16998.250000	46.94	54.00	7.06	H	23	23.94
17895.000000	46.72	54.00	7.28	H	24	22.72



Fiture A.55. Radiated Emission (Set.5, Data Transfer Mode: TF Card to PC, 18GHz to 26.5GHz)



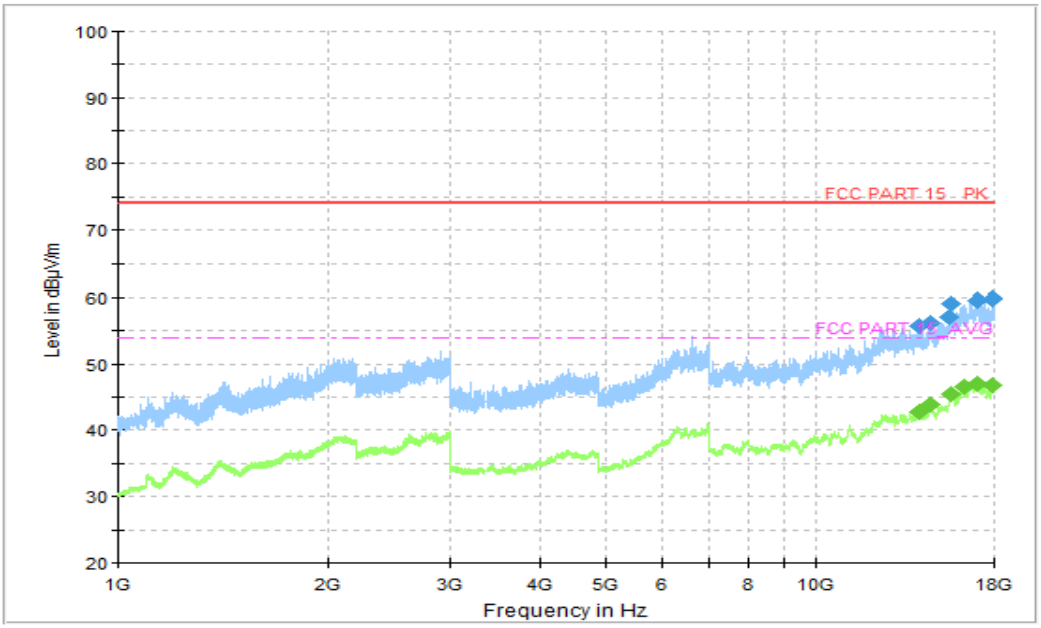
Fiture A.56. Radiated Emission (Set.5, Data Transfer Mode: TF Card to PC, 26.5GHz to 40GHz)



Fiture A.57. Radiated Emission (Set.6, Data Transfer Mode: TF Card to PC, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
60.494375	26.25	40.00	13.75	V	-22	48.25
191.929375	30.54	43.52	12.98	H	-18	48.54
203.933125	30.86	43.52	12.66	H	-17	47.86
214.239375	33.23	43.52	10.29	H	-17	50.23
222.848125	37.83	46.02	8.19	H	-17	54.83
333.185625	33.47	46.02	12.55	H	-12	45.47



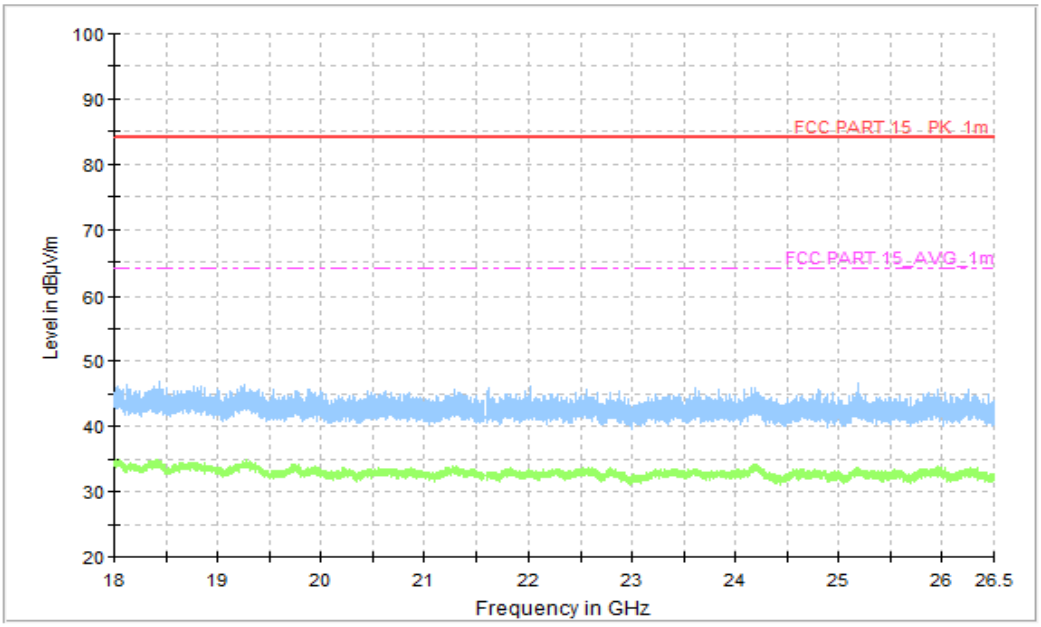
Fiture A.58. Radiated Emission (Set.6, Data Transfer Mode: TF Card to PC, 1GHz to 18GHz)

Final_Results_PK

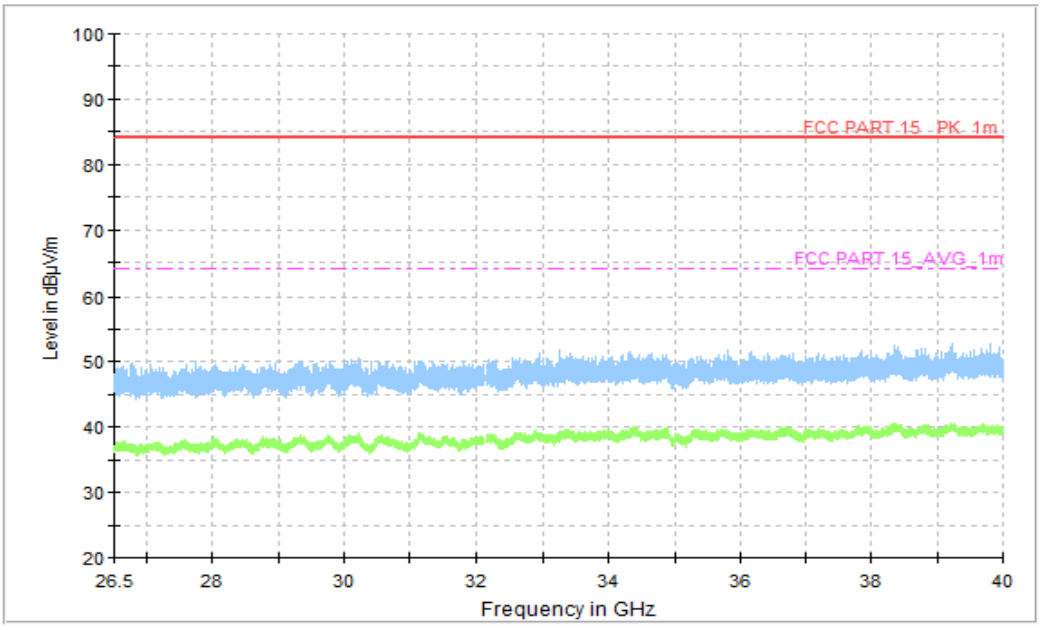
Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
14021.250000	55.75	74.00	18.25	H	17	38.75
14564.500000	56.10	74.00	17.90	V	18	38.10
15549.750000	57.04	74.00	16.96	V	19	38.04
15646.000000	59.02	74.00	14.98	V	20	39.02
17062.000000	59.63	74.00	14.37	V	22	37.63
17934.500000	59.86	74.00	14.14	V	24	35.86

Final_Results_AVG

Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
14021.250000	55.75	74.00	18.25	H	17	38.75
14564.500000	56.10	74.00	17.90	V	18	38.10
15549.750000	57.04	74.00	16.96	V	19	38.04
15646.000000	59.02	74.00	14.98	V	20	39.02
17062.000000	59.63	74.00	14.37	V	22	37.63
17934.500000	59.86	74.00	14.14	V	24	35.86



Fiture A.59. Radiated Emission (Set.6, Data Transfer Mode: TF Card to PC, 18GHz to 26.5GHz)



Fiture A.60. Radiated Emission (Set.6, Data Transfer Mode: TF Card to PC, 26.5GHz to 40GHz)

A.1.2 Conducted Emission (§15.107(a))

Reference

FCC: CFR Part 15.107(a)

A.1.2.1 Method of measurement

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150kHz to 30MHz shall not exceed the limits. Tested in accordance with the procedures of ANSI C63.4 -2014, section 7.3.

A.1.2.2 EUT Operating Mode:

FM receiver: The EUT is connected to a charger for charging and open FM function.

Camera Mode: At the beginning of measurement, the battery is completely discharged. The battery and charger are installed so that the EUT works well and keeping on taking photos.

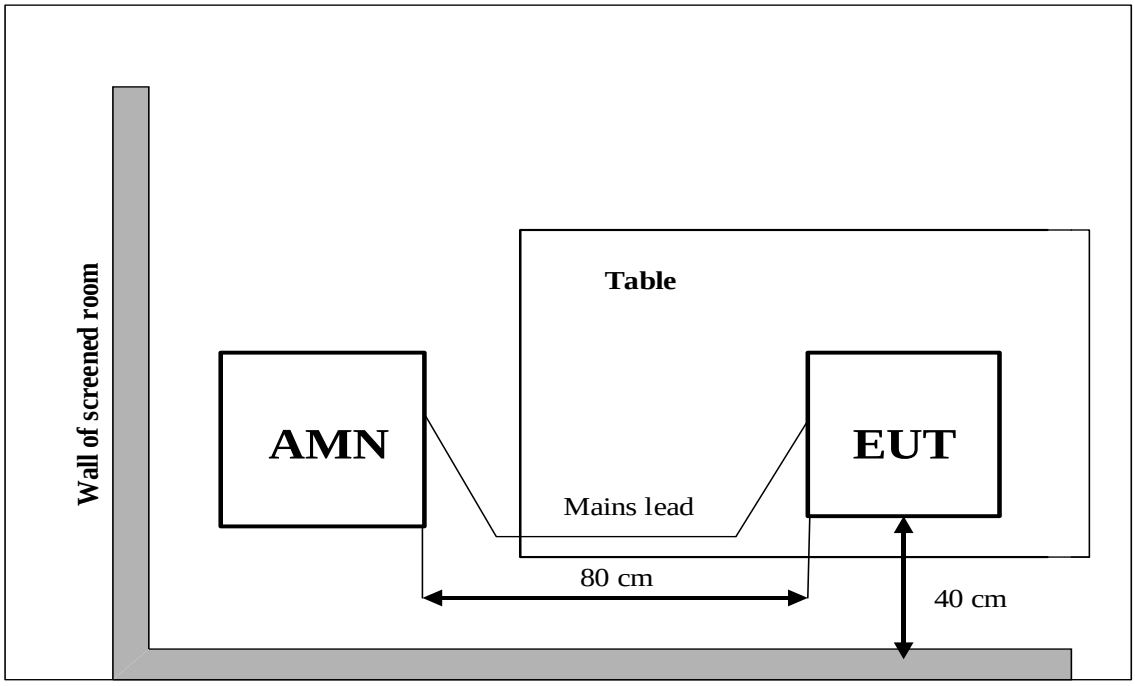
Video Player Mode: The EUT is connected to a charger for charging and keeping on playing mp3.

Data Transfer Mode: The model of the PC is Lenovo ThinkPad T480, and the serial number of the PC is PF-13LW0C. The EUT is connected to a PC for transmitting data. The software is used to let the PC keep on copying data to MS or TF Card, reading and erasing the data after copy action was finished.

B.9.2.3 Measurement Limit

Frequency of emission (MHz)	Conducted limit (dBμV)	
	Quasi-peak	Average
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		

A.1.2.4Test set-up:



A.1.2.5 Test Condition in charging mode

Voltage（V）	Frequency（Hz）
120	60
240	60

RBW	Sweep Time(s)
9kHz	1

A.1.2.6 Measurement Results

QuasiPeak(dBμV) /Average(dBμV) =PMea+Corr

Where

Corr: PathLoss + Voltage Division Factor

PMea: Measurement result on receiver.

Camera Mode

AC Input Port/ Voltage: 120V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			Set.1	
0.15 to 0.5	66 to 56	56 to 46	See Fiture A.1.2.1.	P
0.5 to 5	56	46		
5 to 30	60	50		
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

Video Player Mode

AC Input Port/ Voltage: 120V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			Set.1	
0.15 to 0.5	66 to 56	56 to 46	See Fiture A.1.2.2.	P
0.5 to 5	56	46		
5 to 30	60	50		
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

FM receiver

AC Input Port/ Voltage: 120V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			Set.3	
0.15 to 0.5	66 to 56	56 to 46	See Fiture A.1.2.3.	P
0.5 to 5	56	46		
5 to 30	60	50		
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

Video Player Mode

AC Input Port/ Voltage: 120V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			Set.2	
0.15 to 0.5	66 to 56	56 to 46	See Fiture A.1.2.4.	P
0.5 to 5	56	46		
5 to 30	60	50		
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

Data Transfer Mode

AC Input Port/ Voltage: 120V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			Set.5	
0.15 to 0.5	66 to 56	56 to 46	See Fiture A.1.2.5.	P
0.5 to 5	56	46		
5 to 30	60	50		
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

Data Transfer Mode

AC Input Port/ Voltage: 120V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			Set.6	
0.15 to 0.5	66 to 56	56 to 46	See Fiture A.1.2.6.	P
0.5 to 5	56	46		
5 to 30	60	50		
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

Camera Mode

AC Input Port/ Voltage: 240V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			Set.1	
0.15 to 0.5	66 to 56	56 to 46	See Fiture A.1.2.7.	P
0.5 to 5	56	46		
5 to 30	60	50		
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

Video Player Mode

AC Input Port/ Voltage: 240V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			Set.1	
0.15 to 0.5	66 to 56	56 to 46	See Fiture A.1.2.8.	P
0.5 to 5	56	46		
5 to 30	60	50		
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

FM receiver

AC Input Port/ Voltage: 240V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			Set.3	
0.15 to 0.5	66 to 56	56 to 46	See Fiture A.1.2.9.	P
0.5 to 5	56	46		
5 to 30	60	50		
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

FM receiver

AC Input Port/ Voltage: 240V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			Set.4	
0.15 to 0.5	66 to 56	56 to 46	See Fiture A.1.2.10.	P
0.5 to 5	56	46		
5 to 30	60	50		
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

Data Transfer Mode

AC Input Port/ Voltage: 240V/60Hz

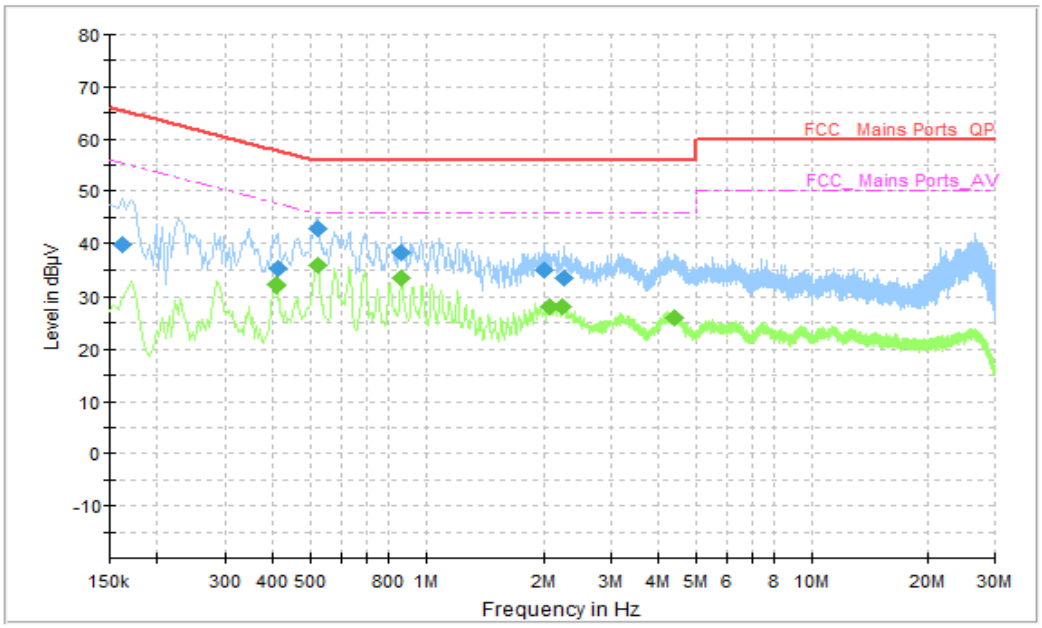
Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			Set.5	
0.15 to 0.5	66 to 56	56 to 46	See Fiture A.1.2.11.	P
0.5 to 5	56	46		
5 to 30	60	50		
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

Data Transfer Mode

AC Input Port/ Voltage: 240V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			Set.6	
0.15 to 0.5	66 to 56	56 to 46	See Fiture A.1.2.12.	P
0.5 to 5	56	46		
5 to 30	60	50		
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

AC Input Port/ Voltage: 120V/60Hz



Fiture A.1.2.1. Conducted Emission(Set.1, Camera Mode)

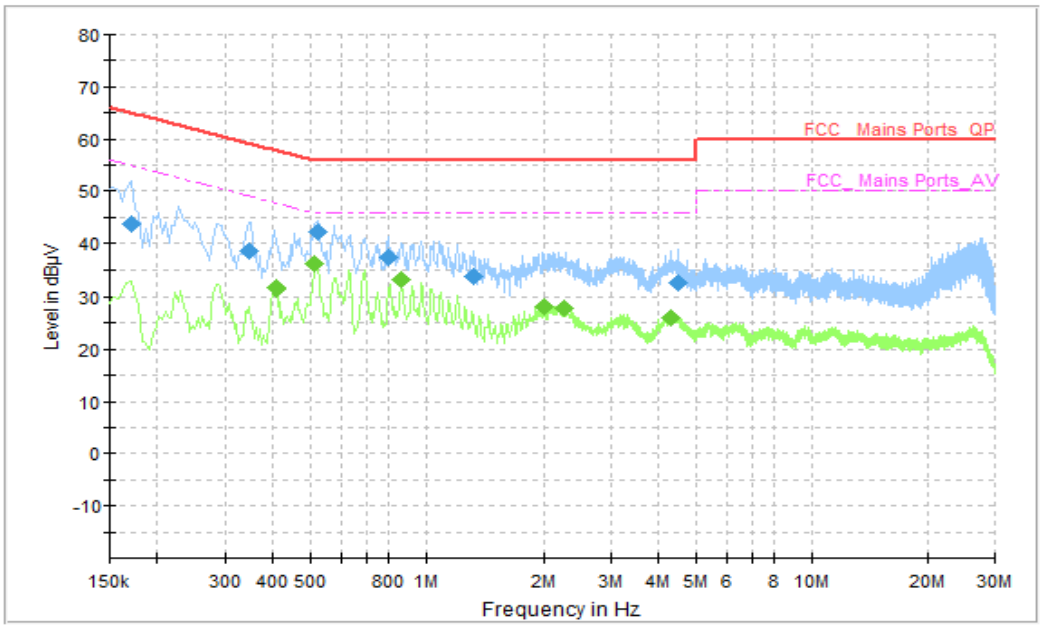
Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.162000	39.89	65.36	25.47	L1	10	29.89
0.410000	35.06	57.65	22.58	N	10	25.06
0.522000	42.94	56.00	13.06	L1	10	32.94
0.862000	38.35	56.00	17.65	L1	10	28.35
2.018000	34.75	56.00	21.25	L1	10	24.75
2.274000	33.50	56.00	22.50	L1	10	23.50

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.406000	32.10	47.73	15.63	L1	10	22.10
0.522000	35.75	46.00	10.25	L1	10	25.75
0.866000	33.30	46.00	12.70	L1	10	23.30
2.074000	28.28	46.00	17.72	L1	10	18.28
2.250000	28.16	46.00	17.84	L1	10	18.16
4.402000	26.17	46.00	19.83	L1	10	16.17

AC Input Port/ Voltage: 120V/60Hz



Fiture A.1.2.2. Conducted Emission(Set.1, Video Player Mode)

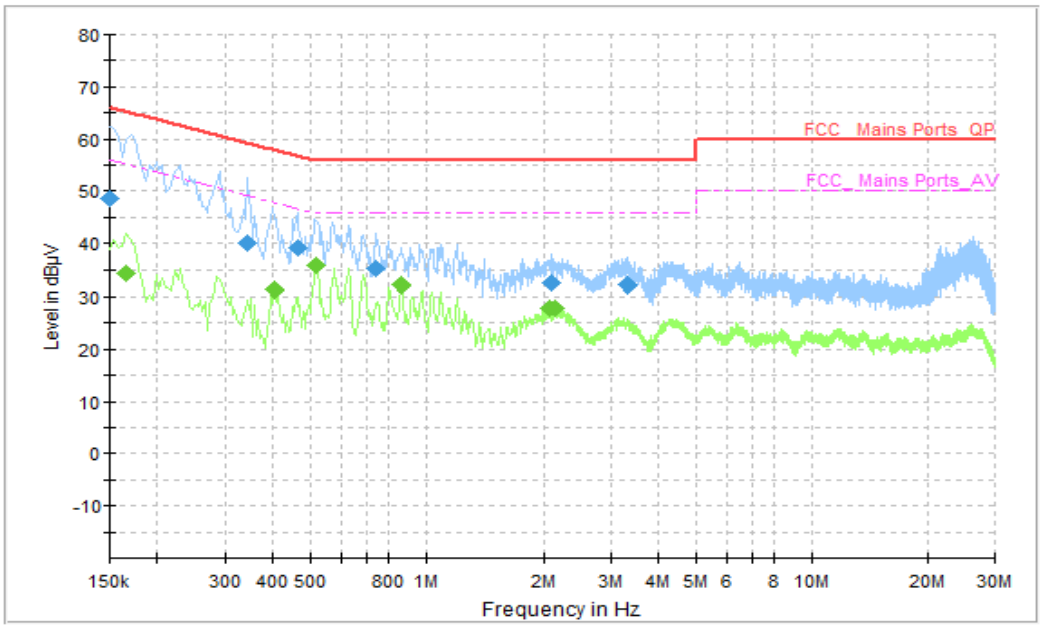
Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.170000	43.62	64.96	21.34	N	10	33.62
0.346000	38.44	59.06	20.62	L1	10	28.44
0.522000	42.26	56.00	13.74	L1	10	32.26
0.798000	37.22	56.00	18.78	L1	10	27.22
1.334000	33.67	56.00	22.33	L1	10	23.67
4.506000	32.29	56.00	23.71	L1	10	22.29

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.406000	31.62	47.73	16.11	L1	10	21.62
0.514000	35.98	46.00	10.02	L1	10	25.98
0.862000	33.11	46.00	12.89	L1	10	23.11
2.014000	28.15	46.00	17.85	L1	10	18.15
2.254000	27.92	46.00	18.08	L1	10	17.92
4.282000	26.11	46.00	19.89	L1	10	16.11

AC Input Port/ Voltage: 120V/60Hz



Fiture A.1.2.3. Conducted Emission(Set.3, FM receiver)

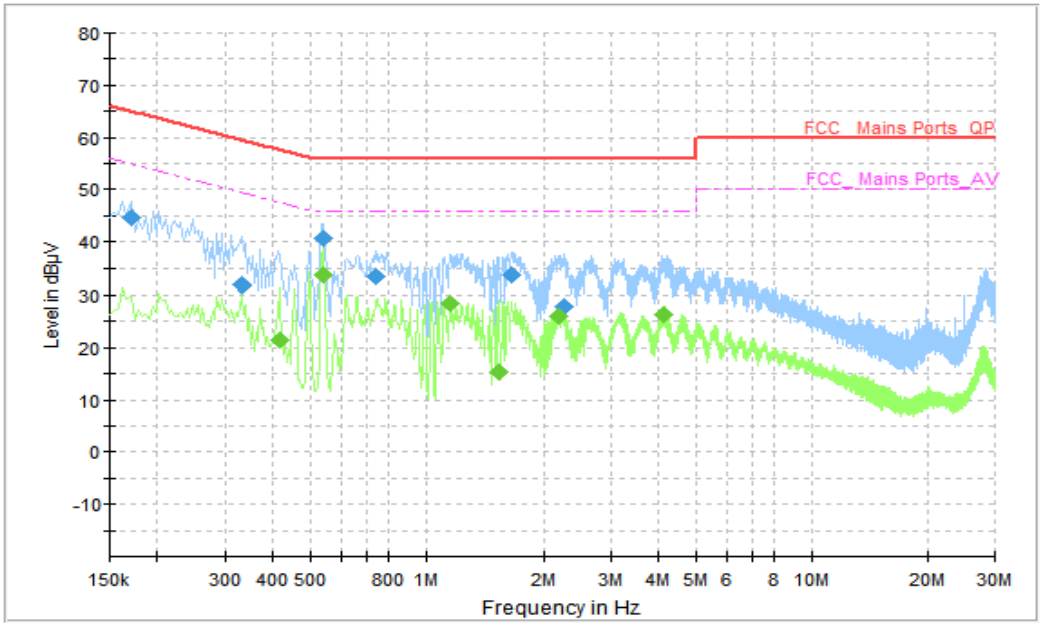
Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.150000	48.55	66.00	17.45	N	10	38.55
0.342000	40.17	59.16	18.99	N	10	30.17
0.462000	39.14	56.66	17.52	L1	10	29.14
0.742000	35.31	56.00	20.69	N	10	25.31
2.094000	32.51	56.00	23.49	L1	10	22.51
3.322000	32.01	56.00	23.99	L1	10	22.01

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.166000	34.15	55.16	21.01	N	10	24.15
0.402000	31.37	47.81	16.44	L1	10	21.37
0.518000	35.84	46.00	10.16	L1	10	25.84
0.862000	32.08	46.00	13.92	L1	10	22.08
2.074000	27.77	46.00	18.23	L1	10	17.77
2.134000	27.76	46.00	18.24	L1	10	17.76

AC Input Port/ Voltage: 120V/60Hz



Fiture A.1.2.4. Conducted Emission(Set.2, Video Player Mode)

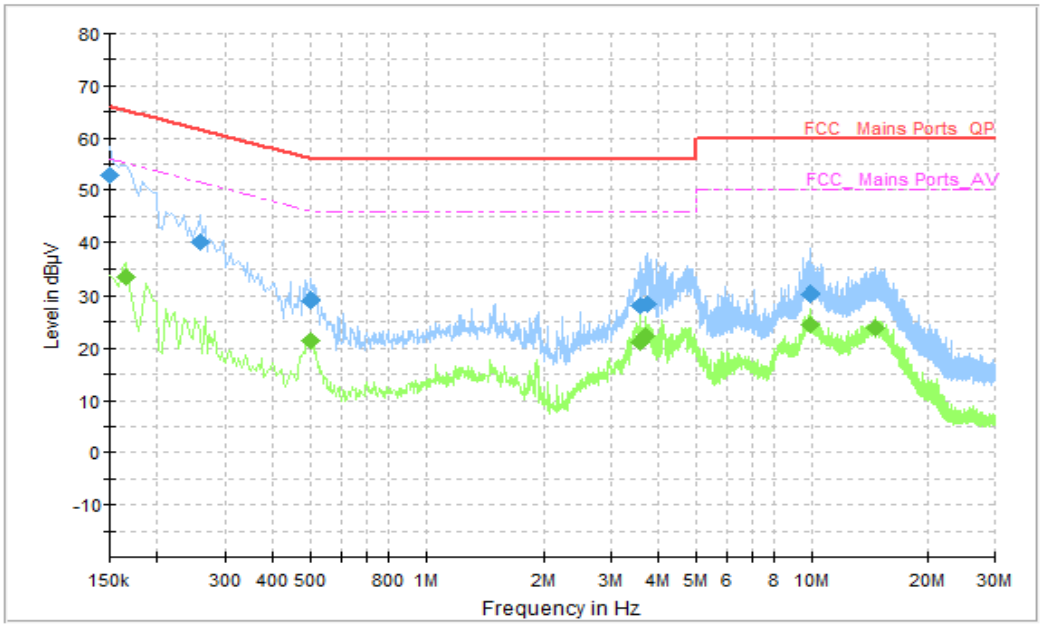
Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.170000	30.73	64.96	34.23	N	9.6	21.13
0.330000	31.77	59.45	27.68	N	9.6	22.17
0.538000	40.58	56.00	15.42	N	9.7	30.88
0.742000	33.33	56.00	22.67	N	9.7	23.63
1.658000	33.69	56.00	22.31	N	9.7	23.99
2.274000	27.95	56.00	28.05	L1	9.7	18.25

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.414000	21.47	47.57	26.10	N	9.7	11.77
0.538000	33.67	46.00	12.33	N	9.7	23.97
1.158000	28.56	46.00	17.44	N	9.7	18.86
1.530000	15.40	46.00	30.60	N	9.7	5.70
2.190000	26.10	46.00	19.90	N	9.7	16.4
4.102000	26.44	46.00	19.56	N	9.7	16.74

AC Input Port/ Voltage: 120V/60Hz



Fiture A.1.2.5. Conducted Emission(Set.5, Data Transfer Mode)

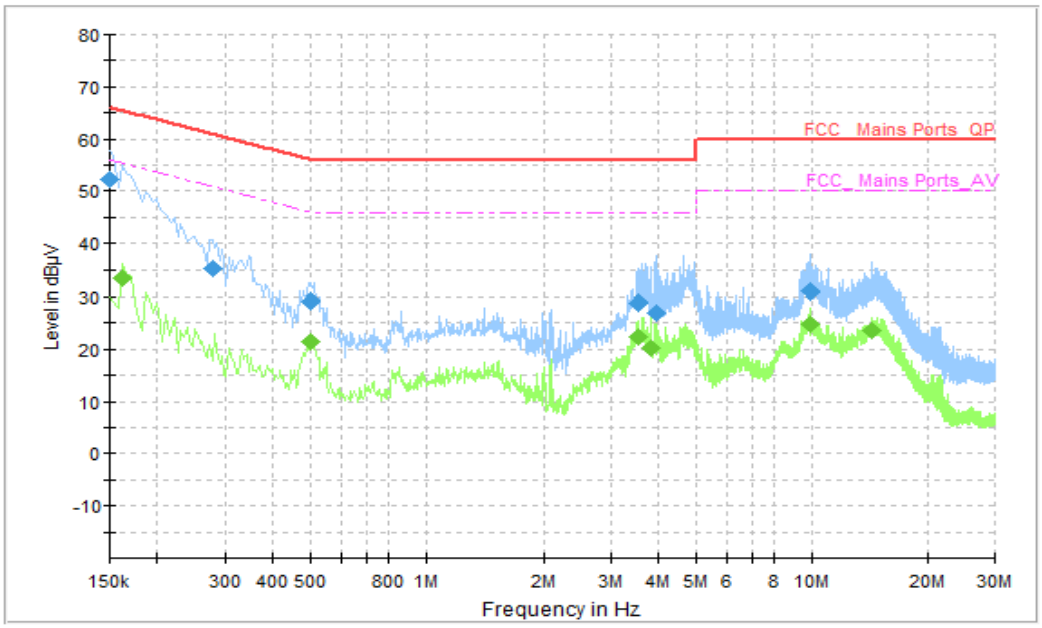
Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.150000	52.75	66.00	13.25	L1	10	42.75
0.258000	39.94	61.50	21.55	N	10	29.94
0.502000	28.94	56.00	27.06	N	10	18.94
3.554000	28.26	56.00	27.74	N	10	18.26
3.714000	28.54	56.00	27.46	L1	10	18.54
9.902000	30.35	60.00	29.65	L1	10	20.35

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.166000	33.30	55.16	21.85	L1	10	23.30
0.502000	21.40	46.00	24.60	N	10	11.40
3.590000	21.18	46.00	24.82	N	10	11.18
3.710000	22.44	46.00	23.56	L1	10	12.44
9.898000	24.64	50.00	25.36	L1	10	14.64
14.698000	23.98	50.00	26.02	N	10	13.98

AC Input Port/ Voltage: 120V/60Hz



Fiture A.1.2.6. Conducted Emission(Set.6, Data Transfer Mode)

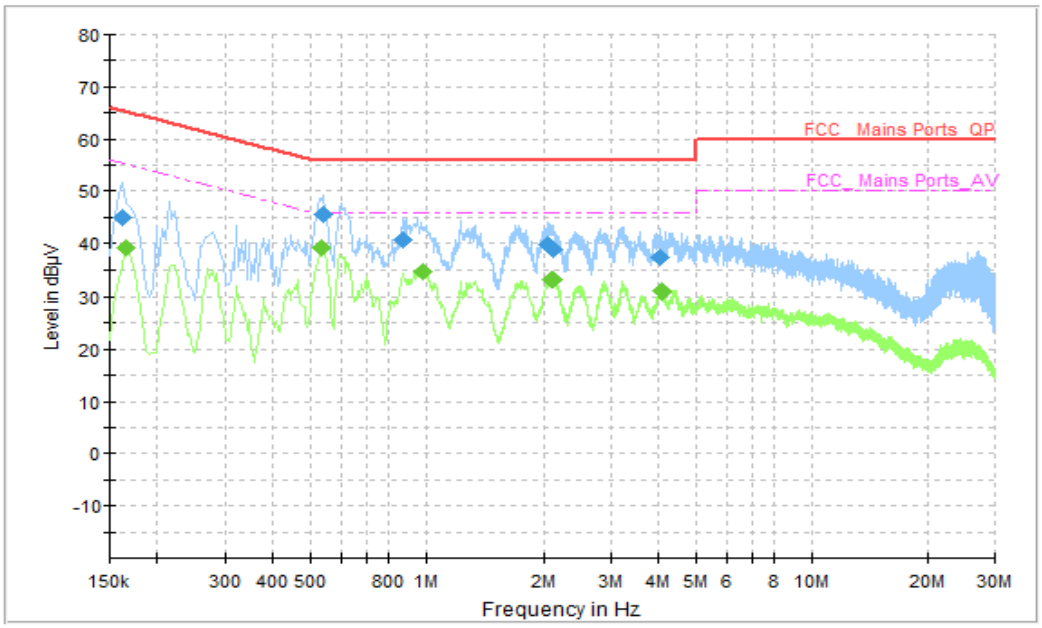
Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.150000	52.40	66.00	13.60	L1	10	42.40
0.278000	35.28	60.88	25.59	L1	10	25.28
0.502000	29.04	56.00	26.96	N	10	19.04
3.550000	28.90	56.00	27.10	L1	10	18.90
3.926000	26.95	56.00	29.05	L1	10	16.95
9.874000	30.79	60.00	29.21	L1	10	20.79

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.162000	33.47	55.36	21.89	L1	10	23.47
0.502000	21.35	46.00	24.65	N	10	11.35
3.538000	22.46	46.00	23.54	L1	10	12.46
3.802000	20.37	46.00	25.63	N	10	10.37
9.874000	24.76	50.00	25.24	L1	10	14.76
14.310000	23.72	50.00	26.28	N	10	13.72

AC Input Port/ Voltage: 240V/60Hz



Fiture A.1.2.7. Conducted Emission(Set.1, Camera Mode)

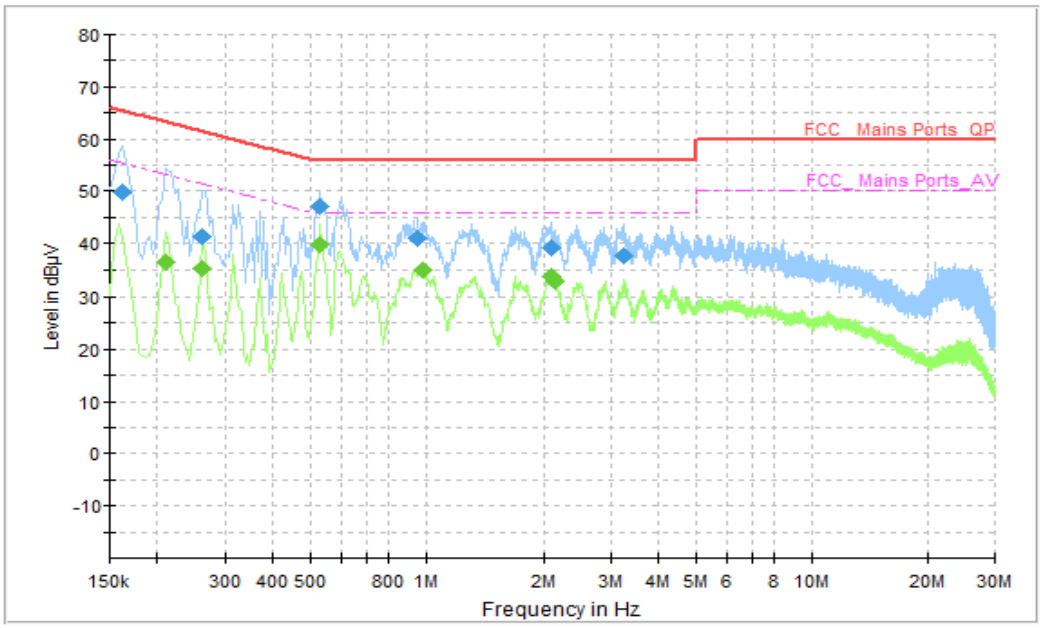
Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.162000	44.88	65.36	20.48	N	10	34.88
0.538000	45.41	56.00	10.59	L1	10	35.41
0.874000	40.62	56.00	15.38	L1	10	30.62
2.058000	39.84	56.00	16.16	L1	10	29.84
2.126000	38.92	56.00	17.08	L1	10	28.92
4.026000	37.38	56.00	18.62	L1	10	27.38

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.166000	39.05	55.16	16.11	L1	10	29.05
0.534000	39.14	46.00	6.86	L1	10	29.14
0.982000	34.60	46.00	11.40	L1	10	24.60
2.098000	33.11	46.00	12.89	L1	10	23.11
2.130000	32.99	46.00	13.01	L1	10	22.99
4.074000	30.81	46.00	15.19	L1	10	20.81

AC Input Port/ Voltage: 240V/60Hz



Fiture A.1.2.8. Conducted Emission(Set.1, Video Player Mode)

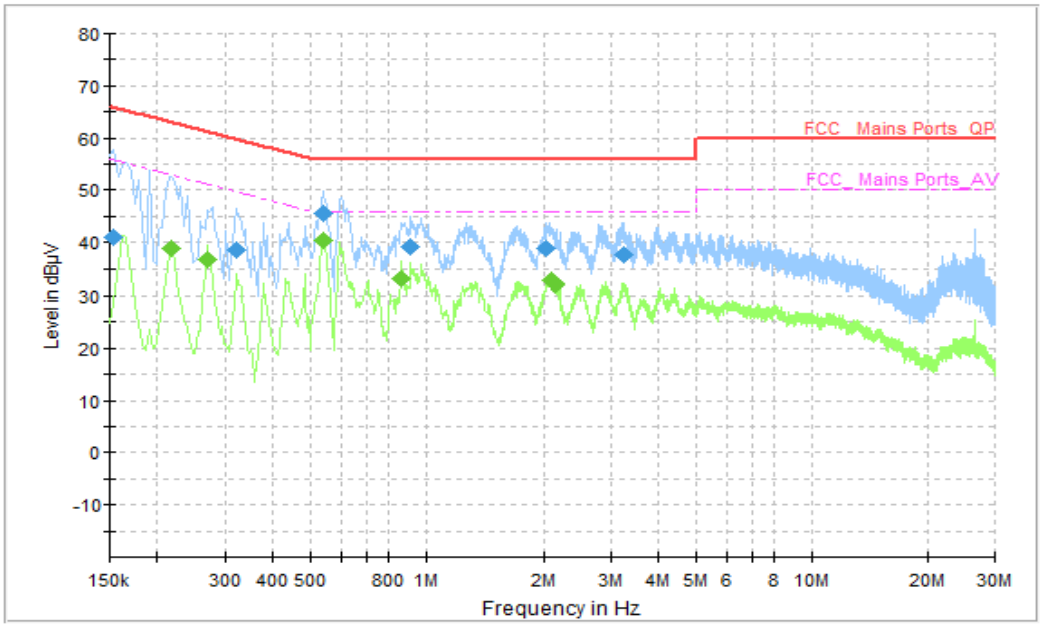
Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.162000	49.80	65.36	15.56	N	10	39.80
0.262000	41.23	61.37	20.14	L1	10	31.23
0.530000	47.05	56.00	8.95	L1	10	37.05
0.954000	40.86	56.00	15.14	L1	10	30.86
2.094000	39.26	56.00	16.74	L1	10	29.26
3.254000	37.54	56.00	18.46	L1	10	27.54

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.210000	36.32	53.21	16.88	L1	10	26.32
0.262000	35.08	51.37	16.29	L1	10	25.08
0.530000	39.78	46.00	6.22	L1	10	29.78
0.978000	35.02	46.00	10.98	L1	10	25.02
2.098000	33.74	46.00	12.26	L1	10	23.74
2.154000	32.88	46.00	13.12	L1	10	22.88

AC Input Port/ Voltage: 240V/60Hz



Fiture A.1.2.9. Conducted Emission(Set.3, FM receiver)

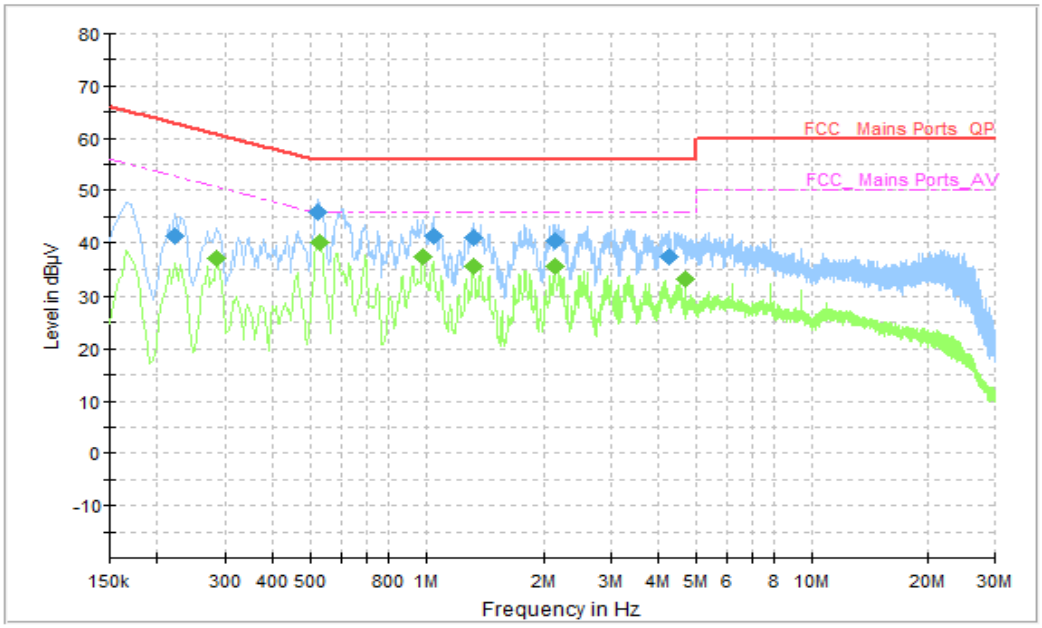
Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.154000	40.92	65.78	24.86	N	10	30.92
0.322000	38.47	59.66	21.19	L1	10	28.47
0.538000	45.45	56.00	10.55	L1	10	35.45
0.914000	39.04	56.00	16.96	L1	10	29.04
2.034000	38.82	56.00	17.18	L1	10	28.82
3.250000	37.72	56.00	18.28	L1	10	27.72

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.218000	38.91	52.90	13.99	L1	10	28.91
0.270000	36.78	51.12	14.34	L1	10	26.78
0.542000	40.41	46.00	5.59	L1	10	30.41
0.862000	33.01	46.00	12.99	L1	10	23.01
2.090000	32.83	46.00	13.17	L1	10	22.83
2.142000	32.28	46.00	13.72	L1	10	22.28

AC Input Port/ Voltage: 240V/60Hz



Fiture A.1.2.10. Conducted Emission(Set.4, FM receiver)

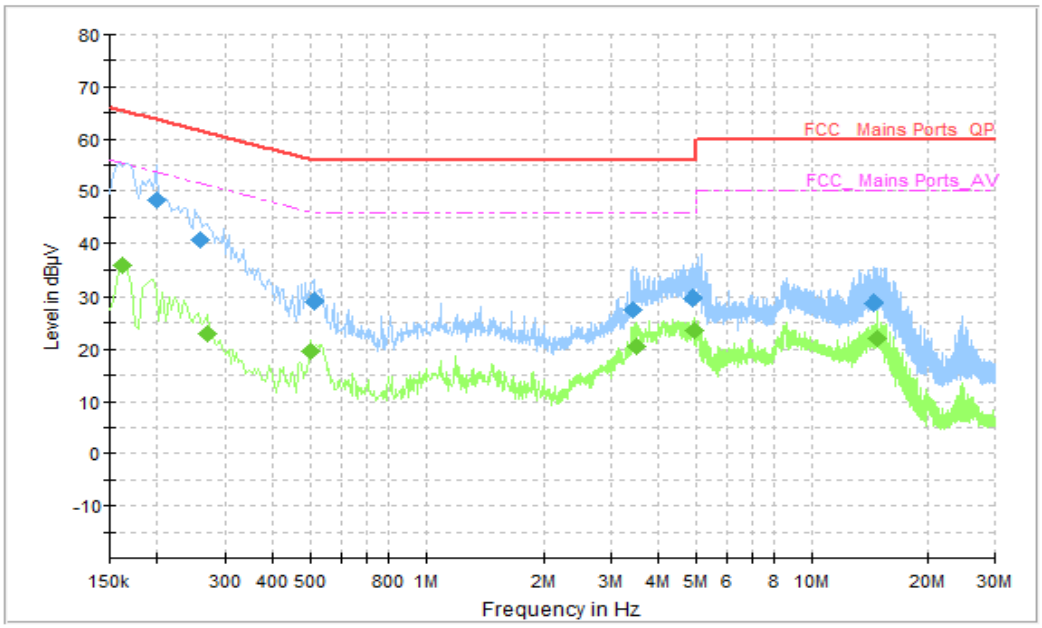
Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.222000	41.33	62.74	21.41	L1	10	31.33
0.522000	45.84	56.00	10.16	N	10	35.84
1.042000	41.37	56.00	14.63	N	10	31.37
1.330000	40.87	56.00	15.13	N	10	30.87
2.146000	40.45	56.00	15.55	N	10	30.45
4.230000	37.32	56.00	18.68	N	10	27.32

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.286000	36.92	50.64	13.72	N	10	26.92
0.526000	39.92	46.00	6.08	N	10	29.92
0.982000	37.32	46.00	8.68	N	10	27.32
1.330000	35.54	46.00	10.46	N	10	25.54
2.138000	35.52	46.00	10.48	N	10	25.52
4.682000	33.12	46.00	12.88	N	10	23.12

AC Input Port/ Voltage: 240V/60Hz



Fiture A.1.2.11. Conducted Emission(Set.5, Data Transfer Mode)

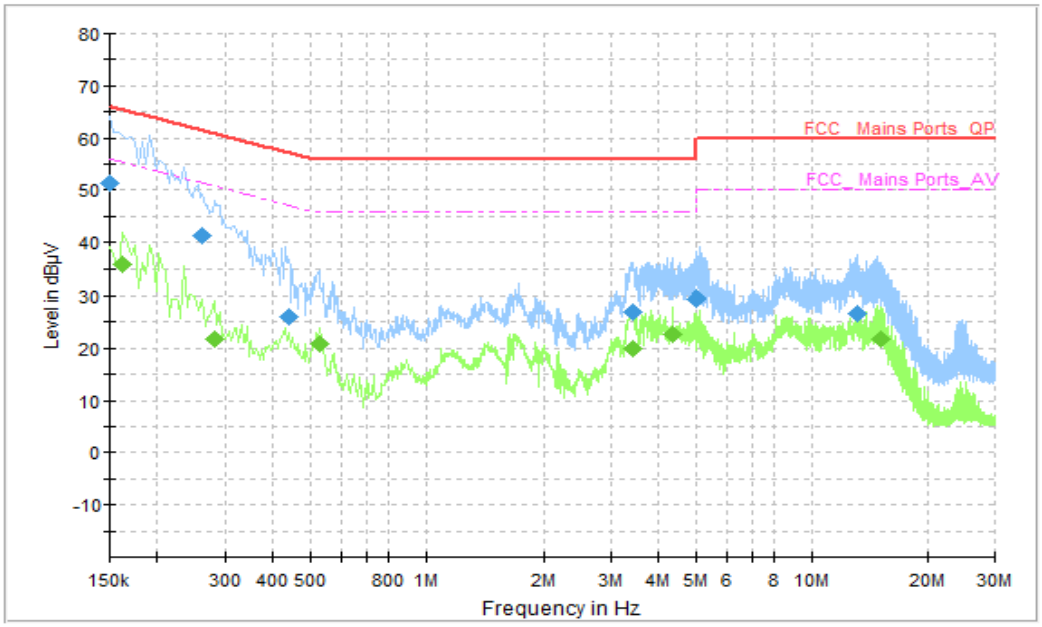
Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.198000	48.41	63.69	15.28	N	10	38.41
0.258000	40.80	61.50	20.70	N	10	30.80
0.510000	29.12	56.00	26.88	N	10	19.12
3.418000	27.70	56.00	28.30	N	10	17.70
4.894000	29.78	56.00	26.22	N	10	19.78
14.566000	28.64	60.00	31.36	L1	10	18.64

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.162000	35.91	55.36	19.45	N	10	25.91
0.270000	23.11	51.12	28.01	N	10	13.11
0.502000	19.54	46.00	26.46	N	10	9.54
3.478000	20.52	46.00	25.48	N	10	10.52
4.926000	23.47	46.00	22.53	L1	10	13.47
14.758000	22.20	50.00	27.80	L1	10	12.20

AC Input Port/ Voltage: 240V/60Hz



Fiture A.1.2.12. Conducted Emission(Set.6, Data Transfer Mode)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.150000	51.28	66.00	14.72	N	10	41.28
0.262000	41.19	61.37	20.18	N	10	31.19
0.438000	26.16	57.10	30.94	N	10	16.16
3.418000	27.01	56.00	28.99	N	10	17.01
4.982000	29.47	56.00	26.53	N	10	19.47
13.146000	26.69	60.00	33.31	N	10	16.69

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.162000	35.78	55.36	19.58	N	10	25.78
0.282000	21.91	50.76	28.85	N	10	11.91
0.526000	20.99	46.00	25.01	N	10	10.99
3.418000	19.92	46.00	26.08	N	10	9.92
4.354000	22.61	46.00	23.39	N	10	12.61
15.202000	21.70	50.00	28.30	N	10	11.70

ANNEX B: Spot check verification data

B.1 Radiated Emission (§15.109(a))

Reference

FCC: CFR Part 15.109(a)

B.1.1 Method of measurement

The field strength of radiated emissions from the unintentional radiator (Data transfer mode of EUT and charging mode of EUT) at a distance of 3 meters is tested. Tested in accordance with the procedures of ANSI C63.4 -2014, section 8.3.

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

B.1.2 EUT Operating Mode:

Data Transfer Mode: The model of the PC is Lenovo ThinkPad T480, and the serial number of the PC is PF-13LW0C. The EUT is connected to a PC for transmitting data. The software is used to let the PC keep on copying data to MS or TF Card, reading and erasing the data after copy action was finished.

All equipment is placed on the test table top and arranged in a typical configuration in accordance with ANSI C63.4-2014 and manipulated to obtain worst case emissions.

B.1.3 Measurement Limit

Limit from CFR Part 15.109(a)

Frequency range (MHz)	Field strength limit (μV/m)		
	Quasi-peak	Average	Peak
30-88	100		
88-216	150		
216-960	200		
960-1000	500		
>1000		500	5000

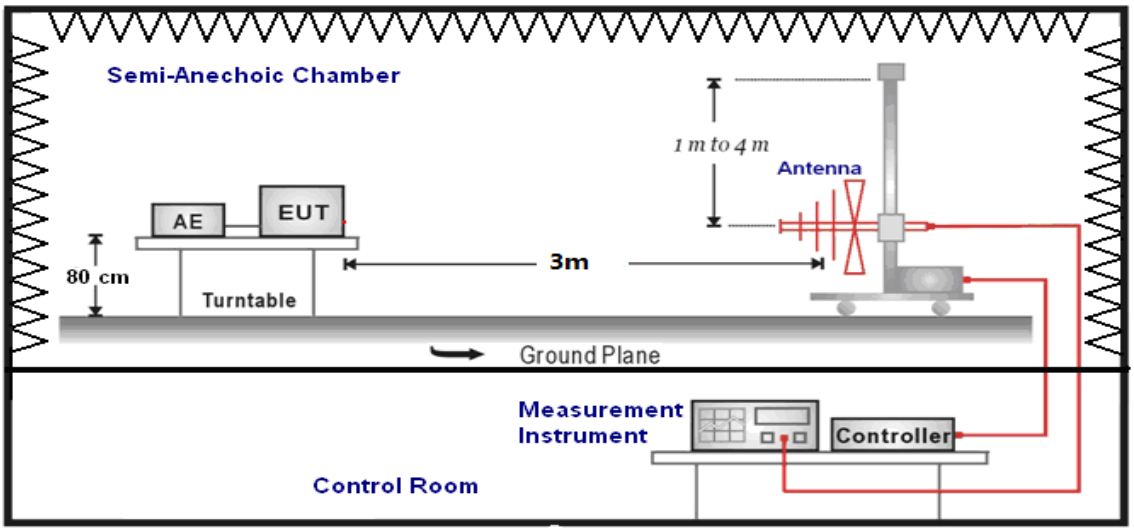
*Note: The original limit is defined at 10m test distance. This limit is calculated according to CISPR requirements.

B.1.4 Test Condition

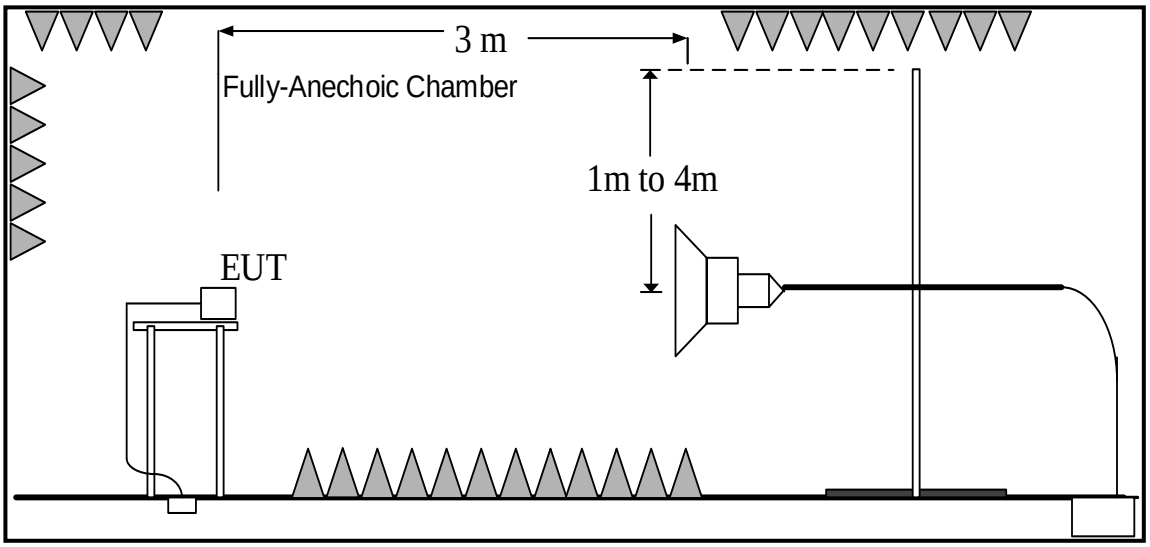
Frequency of emission (MHz)	RBW/VBW	Sweep Time(s)
30-1000	120kHz (IF bandwidth)	5
Above 1000	1MHz/3MHz	15

B.1.5 Test set-up:

30MHz-1GHz



1GHz-40GHz



B.1.6 Measurement Results

A "reference path loss" is established and the A_{Rpl} is the attenuation of “reference path loss”. It includes the antenna factor of receive antenna and the path loss.

The measurement results are obtained as described below:

$Result=P_{Mea}+A_{Rpl} = P_{Mea} +G_A+G_{PL}$

Where

G_A: Antenna factor of receive antenna

G_{PL}:PathLoss

P_{Mea}: Measurement result on receiver.

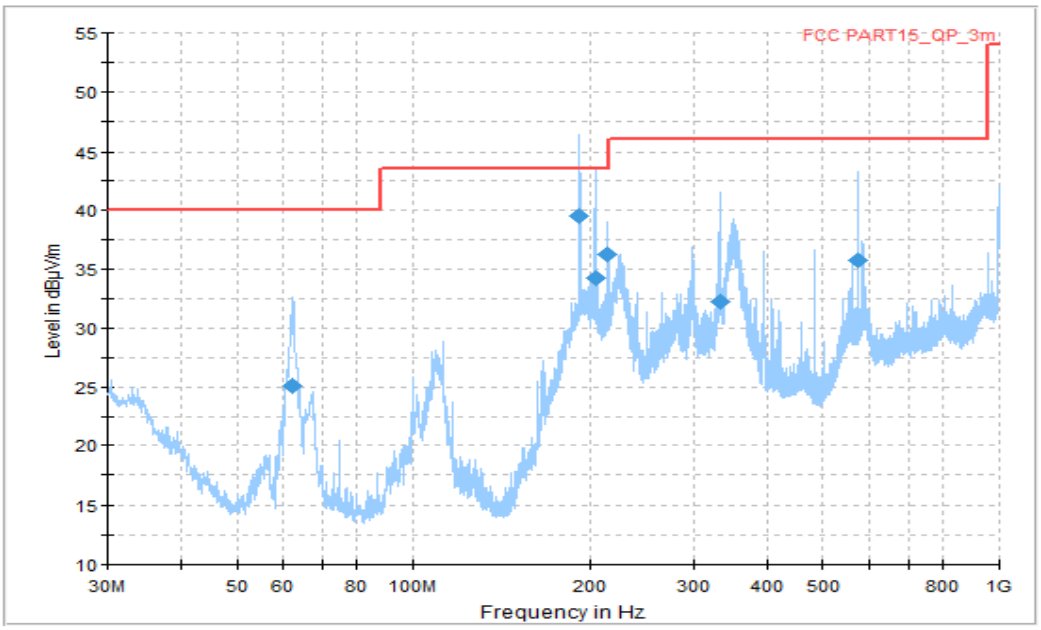
Result:Quasi-Peak(dBμV/m) /Average(dBμV/m)/Peak(dBμV/m)

Note: the result contains vertical part and Horizontal part

Data Transfer Mode: TF Card to PC

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m)	Conclusion
		Set.5	
30-88	40	See Fiture B.1.	P
88-216	44		
216-960	46		
960-1000	54		

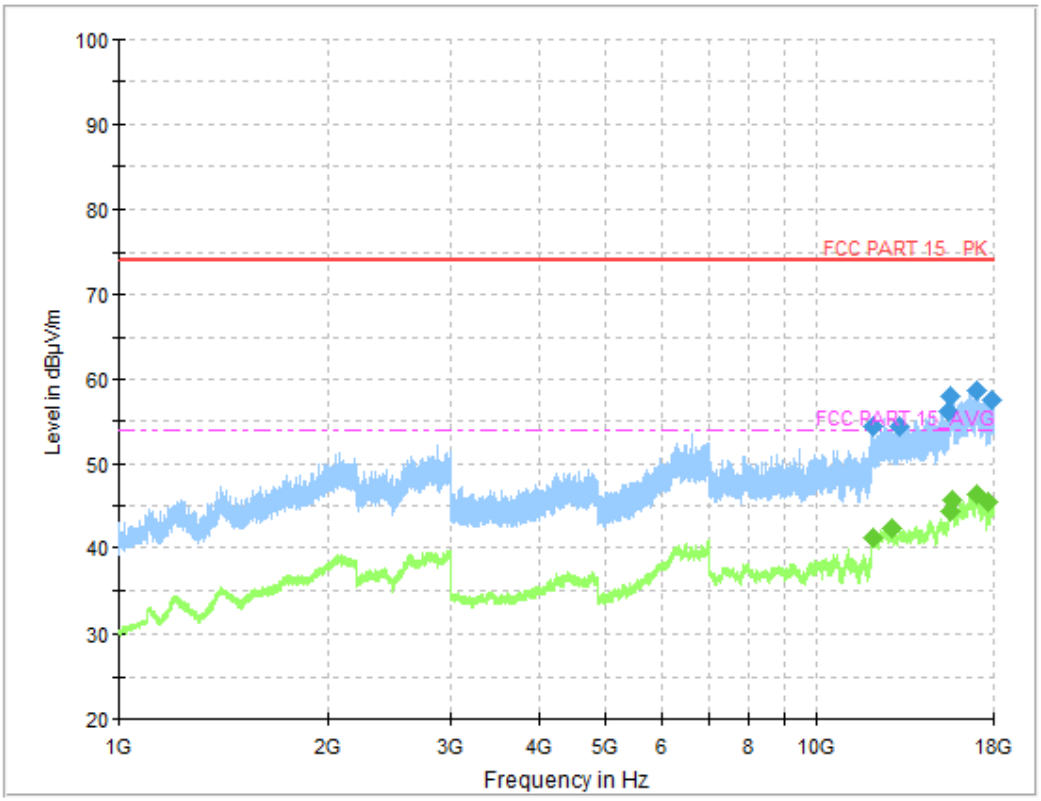
Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m)	Conclusion
			Set.3	
1000 to 18000	54	74	See Fiture B.2.	P
18000 to 26500			See Fiture B.3.	
26500 to 40000			See Fiture B.4.	



Fiture B.1. Radiated Emission (Set.5, Data Transfer Mode: TF Card to PC, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
62.434375	25.08	40.00	14.92	H	-22	47.08
191.990000	39.54	43.52	3.98	H	-18	57.54
203.933125	34.22	43.52	9.30	H	-17	51.22
214.239375	36.32	43.52	7.20	V	-17	53.32
333.125000	32.26	46.02	13.76	H	-12	44.26
575.988750	35.73	46.02	10.29	V	-5	40.73



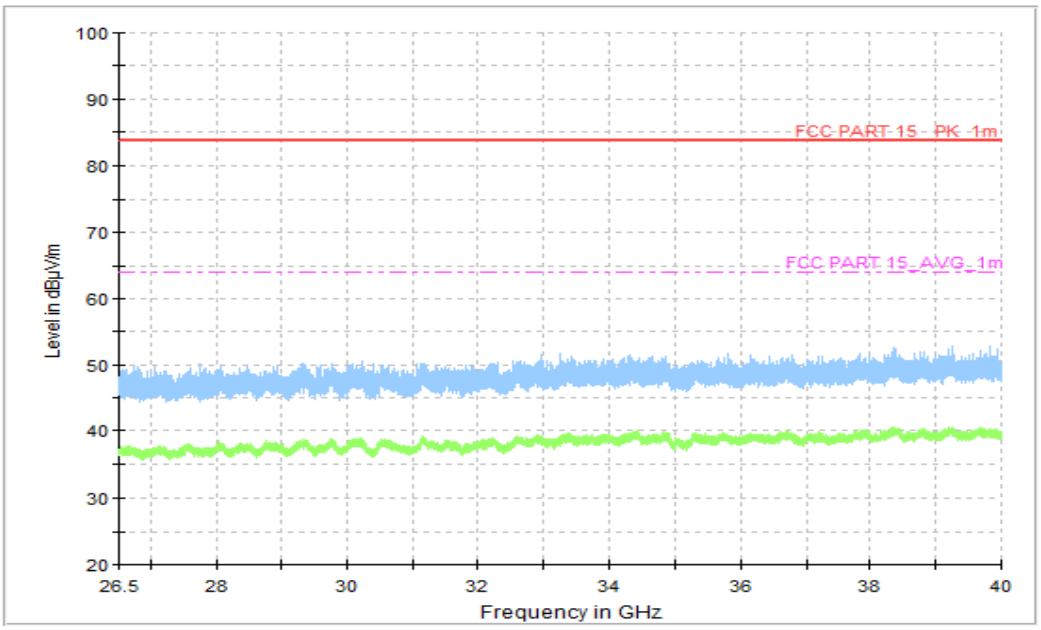
Fiture B.2. Radiated Emission (Set.5, Data Transfer Mode: TF Card to PC, 1GHz to 18GHz)

Final_Results_PK

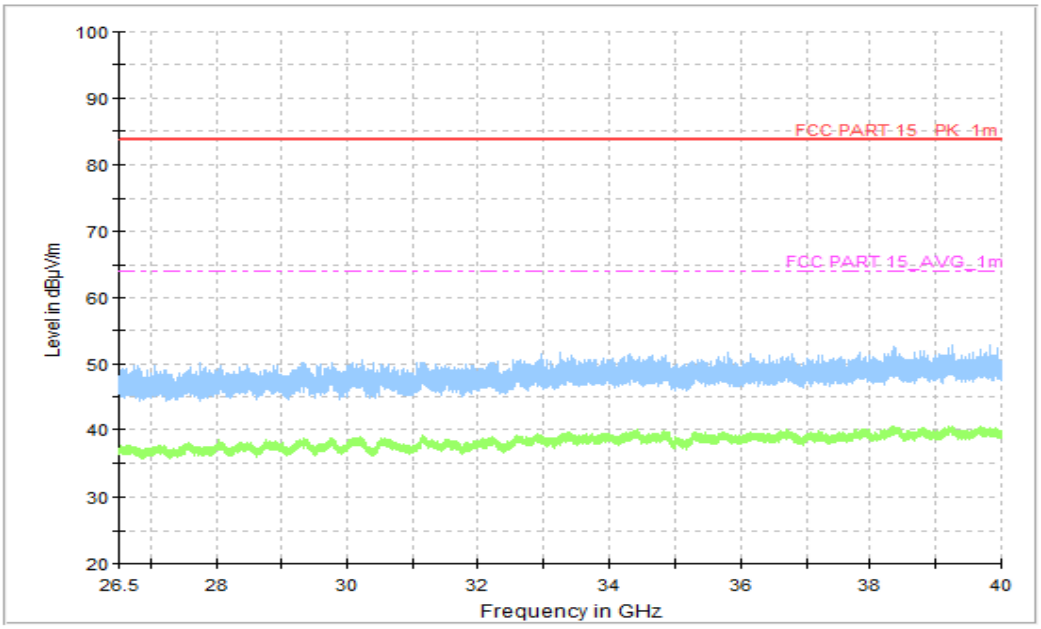
Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
12072.500000	54.45	74.00	19.55	V	16	38.45
13190.000000	54.39	74.00	19.61	V	18	36.39
15548.250000	56.29	74.00	17.71	V	19	37.29
15639.250000	58.02	74.00	15.98	H	20	38.02
17034.250000	58.56	74.00	15.44	V	22	36.56
17905.500000	57.53	74.00	16.47	V	24	33.53

Final_Results_AVG

Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
12077.750000	41.20	54.00	12.80	V	16	25.20
12905.250000	42.35	54.00	11.65	V	17	25.35
15569.750000	44.32	54.00	9.68	V	20	24.32
15680.250000	45.62	54.00	8.38	H	20	25.62
16997.500000	46.29	54.00	7.71	H	23	23.29
17693.000000	45.49	54.00	8.51	H	23	22.49



Fiture B.3. Radiated Emission (Set.5, Data Transfer Mode: TF Card to PC, 18GHz to 26.5GHz)



Fiture B.4. Radiated Emission (Set.5 Data Transfer Mode: TF Card to PC, 26.5GHz to 40GHz)

B.2 Conducted Emission (§15.107(a))

Reference

FCC: CFR Part 15.107(a)

B.2.1 Method of measurement

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150kHz to 30MHz shall not exceed the limits. Tested in accordance with the procedures of ANSI C63.4 -2014, section 7.3.

B.2.2 EUT Operating Mode:

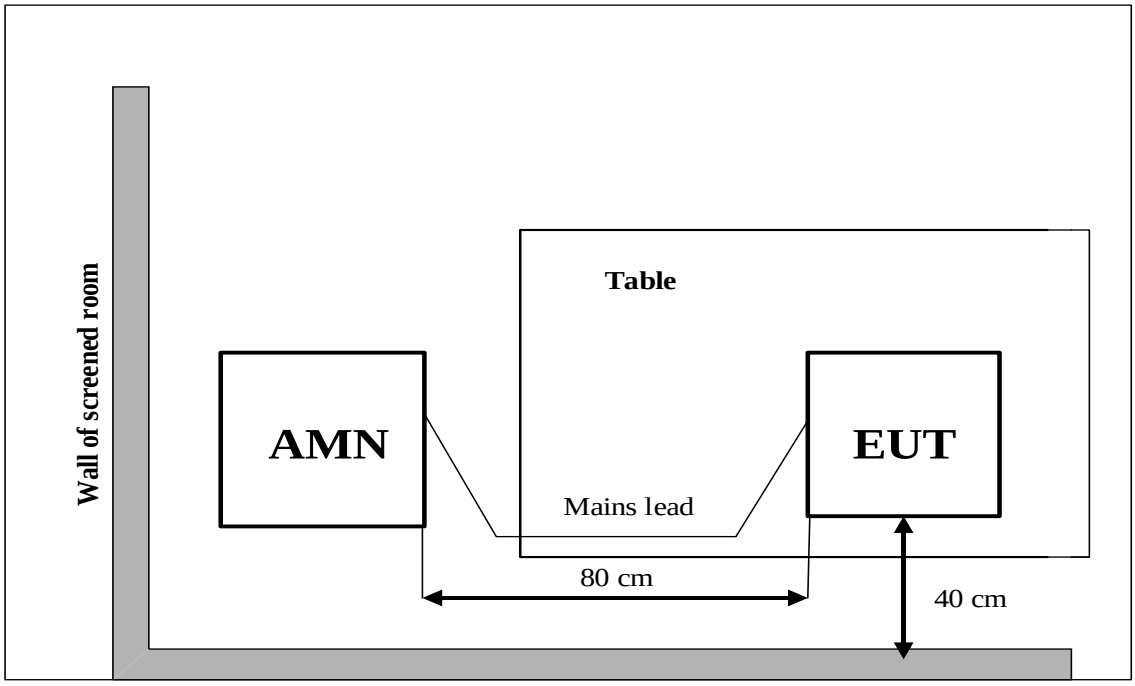
FM receiver: The EUT is connected to a charger for charging and open FM function.

Video Player Mode: The EUT is connected to a charger for charging and keeping on playing mp3.

B.2.3 Measurement Limit

Frequency of emission (MHz)	Conducted limit (dBμV)	
	Quasi-peak	Average
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		

B.2.4Test set-up:



B.2.5 Test Condition in charging mode

Voltage（V）	Frequency（Hz）
120	60
240	60

RBW	Sweep Time(s)
9kHz	1

B.2.6 Measurement Results

QuasiPeak(dBμV) /Average(dBμV) =PMea+Corr

Where

Corr: PathLoss + Voltage Division Factor

PMea: Measurement result on receiver.

Video Player

AC Input Port/ Voltage: 120V/60Hz

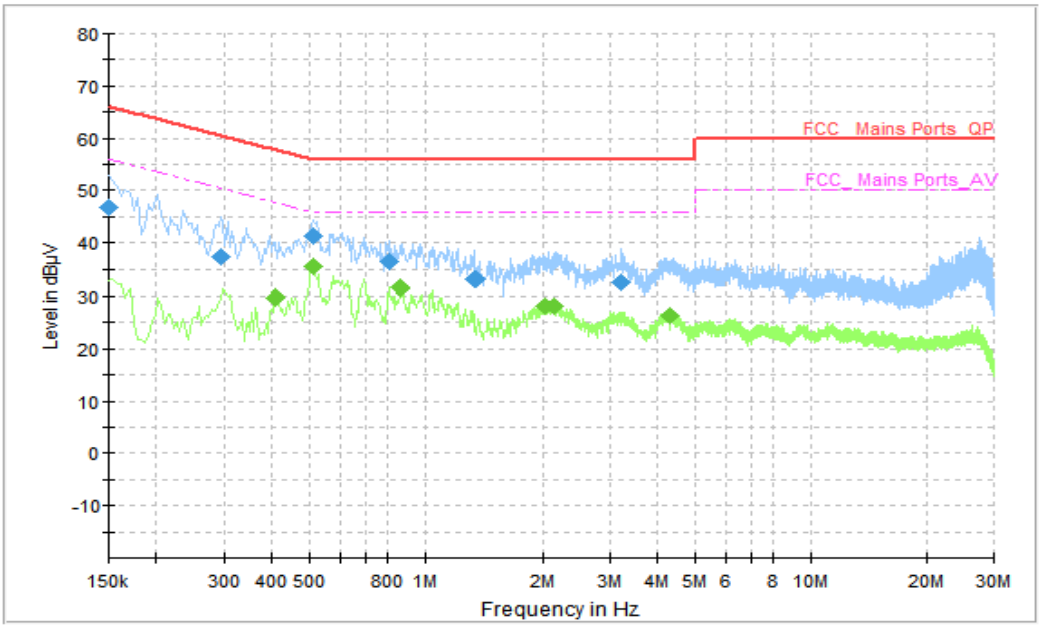
Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			Set.1	
0.15 to 0.5	66 to 56	56 to 46	See Fiture B.2.1.	P
0.5 to 5	56	46		
5 to 30	60	50		
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

FM receiver

AC Input Port/ Voltage: 240V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			Set.3	
0.15 to 0.5	66 to 56	56 to 46	See Fiture B.2.2.	P
0.5 to 5	56	46		
5 to 30	60	50		
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

AC Input Port/ Voltage: 120V/60Hz



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Fiture B.2.1. Conducted Emission(Set.1, Video Player)

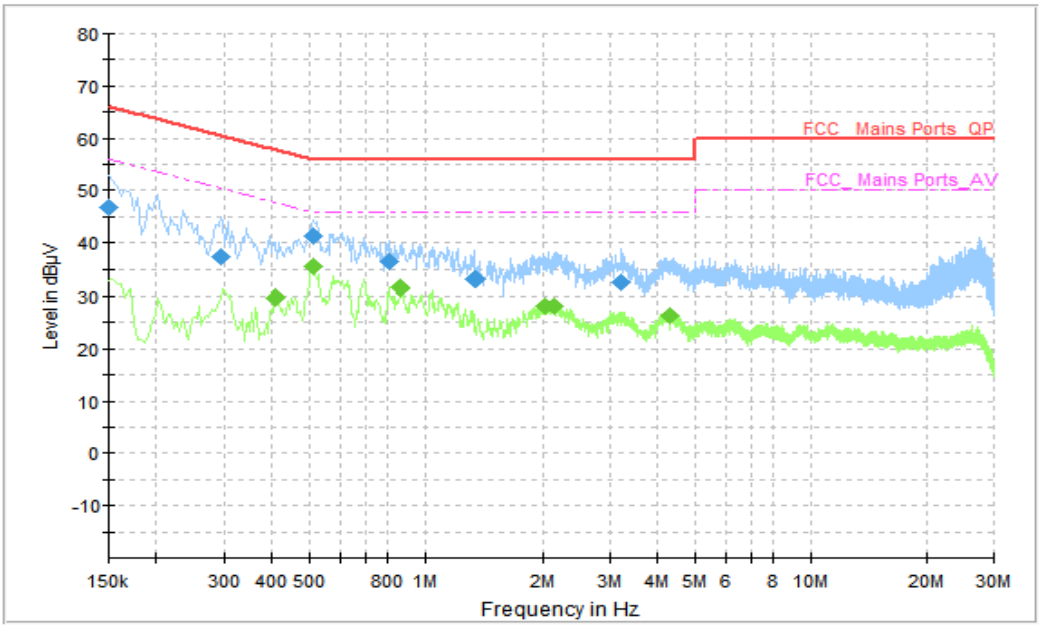
Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.150000	46.90	66.00	19.10	N	10	36.90
0.294000	37.29	60.41	23.12	N	10	27.29
0.510000	41.30	56.00	14.70	L1	10	31.30
0.806000	36.49	56.00	19.51	L1	10	26.49
1.338000	33.06	56.00	22.94	L1	10	23.06
3.222000	32.57	56.00	23.43	L1	10	22.57

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.406000	29.67	47.73	18.06	L1	10	19.67
0.514000	35.60	46.00	10.40	L1	10	25.60
0.862000	31.57	46.00	14.43	L1	10	21.57
2.022000	28.18	46.00	17.82	L1	10	18.18
2.134000	28.12	46.00	17.88	L1	10	18.12
4.310000	26.27	46.00	19.74	L1	10	16.27

AC Input Port/ Voltage: 240V/60Hz



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Fiture B.2.2. Conducted Emission(Set.3, FM receiver)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.150000	46.90	66.00	19.10	N	10	36.90
0.294000	37.29	60.41	23.12	N	10	27.29
0.510000	41.30	56.00	14.70	L1	10	31.30
0.806000	36.49	56.00	19.51	L1	10	26.49
1.338000	33.06	56.00	22.94	L1	10	23.06
3.222000	32.57	56.00	23.43	L1	10	22.57

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.406000	29.67	47.73	18.06	L1	10	19.67
0.514000	35.60	46.00	10.40	L1	10	25.60
0.862000	31.57	46.00	14.43	L1	10	21.57
2.022000	28.18	46.00	17.82	L1	10	18.18
2.134000	28.12	46.00	17.88	L1	10	18.12
4.310000	26.27	46.00	19.74	L1	10	16.27

*****END OF REPORT****