



TEST REPORT

No.I20N02443-EMC

for

TCL Communication Ltd.

LTE/UMTS/GSM Smartphone

Model Name: 5030A

With

Hardware Version: FS180-MB-V2.1

Software Version: 5030A_TGMX_1SIM_V1.6_20200908

FCC ID: 2ACCJB135

Issued Date: 2020-09-28

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.

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
I20N02443-EMC	Rev.0	1st edition	2020-09-28

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

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1. Summary of Test Report

1.1. Test Items

Description	LTE/UMTS/GSM Smartphone
Model Name	5030A
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

Total test 2 items, pass 2 items. Please refer to "6.2 Summary of Measurement Results"

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: 2020-09-13

Testing End Date: 2020-09-25

1.6. Signature

Ma Shoujian

(Prepared this test report)

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(Reviewed this test report)

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(Approved this test report)



2. Client Information

2.1. Applicant Information

Company Name: TCL Communication Ltd.
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Park, Shatin, NT, Hong Kong
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2.2. Manufacturer Information

Company Name: TCL Communication Ltd.
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Park, Shatin, NT, Hong Kong
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Tel: 0086-755-36611722
Fax: 0086-755-36612000-81722

3. Equipment Under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

Description	LTE/UMTS/GSM Smartphone
Model Name	5030A
FCC ID	2ACCJB135
Antenna Type	Internal Antenna
Condition of EUT as received	No obvious damage in appearance

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
UT07aa	350770410000560	FS180-MB-V2.1	5030A_TGMX_1SIM_ V1.6_20200908	2020-09-13
UT09aa	350770410000578	FS180-MB-V2.1	5030A_TGMX_1SIM_ V1.6_20200908	2020-09-13

*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	Stereo Earphone
AE1-1	
Model	TLp038DA
SN	CAC3860032CA
Manufacturer	TIANMAO
Capacity	4000mAh
Nominal Voltage	3.85V
AE1-2	
Model	TLp038D7
SN	CAC3860025C7
Manufacturer	VENKE
Capacity	4000mAh
Nominal Voltage	3.85V
AE2-1	
Model	UC13US/CBA0059AGAC7



Manufacturer	CHENYANG
AE2-2	
Model	UC13US/CBA0059AGAC5
Manufacturer	PUAN
AE3-1	
Model	CDA0000024C8
Manufacturer	PUAN
AE3-2	
Model	CDA0000024C2
Manufacturer	JUWEI
AE4-1	
Model	WH15/CCB0046A10C1
Manufacturer	JUWEI
AE4-2	
Model	WH15/CCB0046A10C4
Manufacturer	MEIHAO

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

AE: ancillary equipment

3.4. **EUT set-ups**

EUT set-up No.	Combination of EUT and AE
Set.1	UT09aa +AE1-1+AE2-1+AE3-1+AE4-1
Set.2	UT07aa +AE1-2+AE2-2+AE3-2+AE4-2
Set.3	UT09aa +AE1-1+AE3-1+AE4-1+PC
Set.4	UT07aa +AE1-2+AE3-2+AE4-2+PC



3.5. General Description

The Equipment Under Test (EUT) is a model of LTE/UMTS/GSM Smartphone with internal antenna.

It supports GSM 900/850/1800/1900MHz, WCDMA Bands 1/2/4/5/8, and LTE Bands 2/3/4/5/7/12/13/17/26/28/66.

It has Camera, Video Player, FM Receiver, USB Data Transfer, Bluetooth, Wi-Fi and GNSS functions.

It consists of normal options: Battery, Charger, Data Cable and Stereo Earphone.

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.

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 °C, Max. = 35°C
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 °C, Max. = 35 °C
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 °C, Max. = 35°C
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 uncertainty
Radiated Emission	30MHz-1GHz	4.90dB(k=2)
	1GHz-18GHz	4.60dB(k=2)
Conducted Emission	150kHz-30MHz	3.00dB(k=2)

8. Test Facilities Utilized

NO.	NAME	TYPE	SERIES NUMBER	PRODUCER	CAL DUE 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.	Universal Radio Communication Tester	CMU200	114545	R&S	2021.01.14	1 year
8.	Universal Radio Communication Tester	CMW500	152499	R&S	2021.07.16	1 year
9.	Signal Generator	SMB100A	179725	R&S	2020.11.27	1 year
10.	Chamber	FACT3-2.0	1285	ETS-Lindgren	2021.07.19	2 years
11.	Software	EMC32	V10.01.00	R&S	/	/
12.	PC	ThinkPad T480	PF-13LW0C	Lenovo	/	/
13.	Printer	P1008	VNF6C12491	HP	/	/
14.	Mouse	MOEUUOA	44NY517	Lenovo	/	/
15.	Filter	HPF_3G18G-SMA	/	SKET	/	/
16.	Filter	HPF_6.3G21G-SMA	/	SKET	/	/

ANNEX A: MEASUREMENT RESULTS

A.1 Radiated Emission (§15.109(a))

Reference

FCC: CFR Part 15.109(a)

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

Data Transfer : 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.

This device contains the receivers which tune and operate between 30MHz-960MHz in the following bands:

GSM850MHz, WCDMA Band 5, LTE Band 12, LTE Band 13, LTE Band 26.

The EUT was tested while operating in licensed band Rx mode. All licensed band receivers that tune in the range of 30MHz-960MHz, 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.1.3 Measurement Limit

Limit from CFR Part 15.109(a)

Frequency range (MHz)	Field strength limit ($\mu\text{V/m}$)		
	Quasi-peak	Average	Peak
30-88	100		
88-216	150		
216-960	200		
960-1000	500		
>1000		500	5000

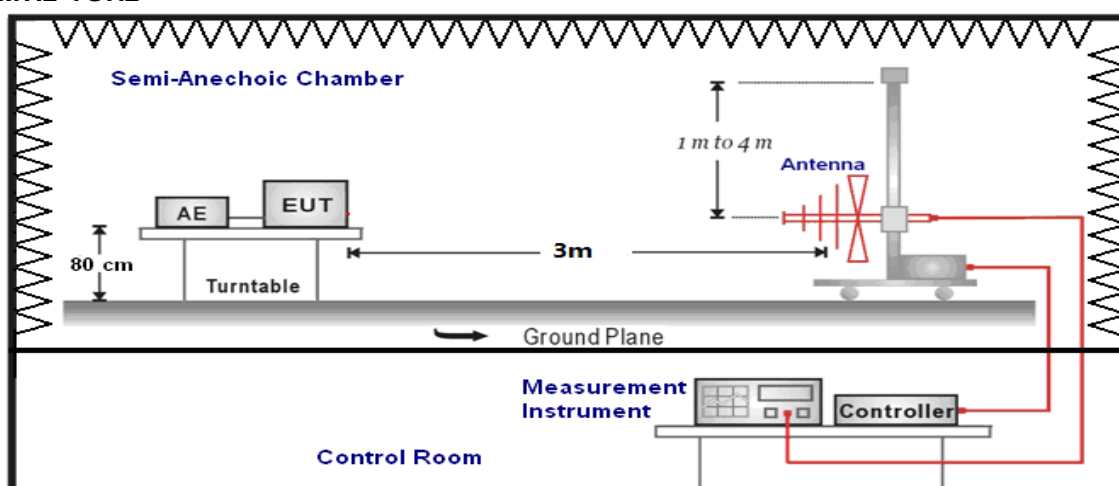
*Note: The original limit is defined at 10m test distance. This limit is calculated according to CISPR requirements.

A.1.4 Test Condition

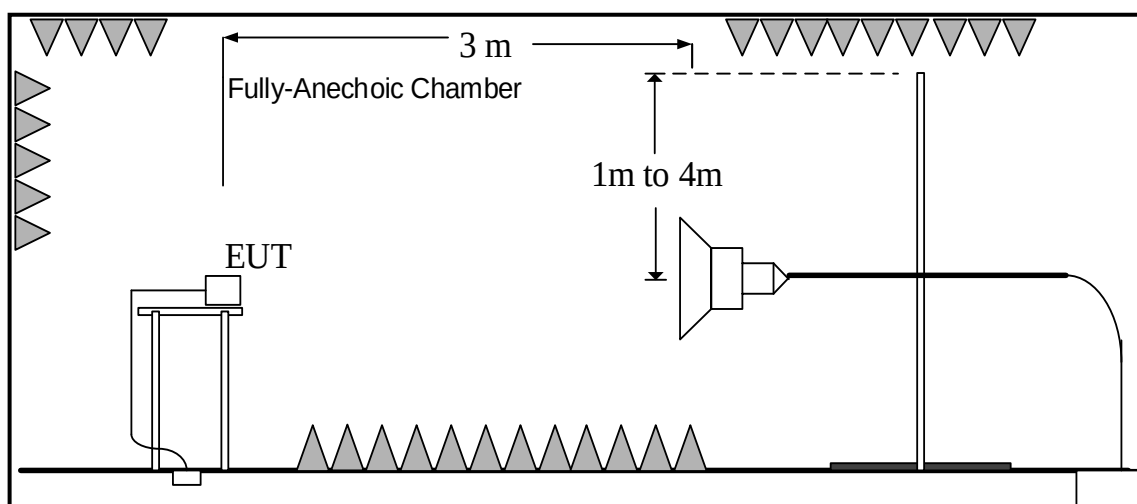
Frequency of emission (MHz)	RBW/VBW	Sweep Time(s)
30-1000	120kHz (IF bandwidth)	5
Above 1000	1MHz/3MHz	15

A.1.5 Test set-up:

30MHz-1GHz



1GHz-18GHz



A.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:

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

Where

G_A : Antenna factor of receive antenna

G_{PL} : Path Loss

P_{Mea} : Measurement result on receiver.

Result: Quasi-Peak(dB μ V/m) / Average(dB μ V/m)/Peak(dB μ V/m)

Note: the result contains vertical part and Horizontal part

GSM Receiver 850MHz

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

Frequency range (MHz)	Average Limit (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m) Set.1	Conclusion
1000 to 18000	54	74	See Figure A.2	P

WCDMA Receiver Band 5

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m) Set.1	Conclusion
30-88	40	See Figure A.3	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m) Set.1	Conclusion
1000 to 18000	54	74	See Figure A.4	P

LTE Receiver Band 12

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

Frequency range (MHz)	Average Limit (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m) Set.1	Conclusion
1000 to 18000	54	74	See Figure A.6	P

LTE Receiver Band 13

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m) Set.1	Conclusion
30-88	40	See Figure A.7	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m) Set.1	Conclusion
1000 to 18000	54	74	See Figure A.8	P

LTE Receiver Band 26

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

Frequency range (MHz)	Average Limit (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m) Set.1	Conclusion
1000 to 18000	54	74	See Figure A.10	P

GSM Receiver 850MHz

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m) Set.2	Conclusion
30-88	40	See Figure A.11	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m) Set.2	Conclusion
1000 to 18000	54	74	See Figure A.12	P

WCDMA Receiver Band5

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

Frequency range (MHz)	Average Limit (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m) Set.2	Conclusion
1000 to 18000	54	74	See Figure A.14	P

LTE Receiver Band 12

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m) Set.2	Conclusion
30-88	40	See Figure A.15	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m) Set.2	Conclusion
1000 to 18000	54	74	See Figure A.16	P

LTE Receiver Band 13

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

Frequency range (MHz)	Average Limit (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m) Set.1	Conclusion
1000 to 18000	54	74	See Figure A.18	P

LTE Receiver Band 26

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m) Set.2	Conclusion
30-88	40	See Figure A.19	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m) Set.2	Conclusion
1000 to 18000	54	74	See Figure A.20	P

Camera Mode

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m) Set.1	Conclusion
30-88	40	See Figure A.21	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m) Set.1	Conclusion
1000 to 18000	54	74	See Figure A.22	P

FM receiver

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
		Set.1	
30-88	40	See Figure A.23	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
			Set.1	
1000 to 18000	54	74	See Figure A.24	P

Video Player

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

Frequency range (MHz)	Average Limit (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
			Set.1	
1000 to 18000	54	74	See Figure A.26	P

Camera

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
		Set.2	
30-88	40	See Figure A.27	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
			Set.2	
1000 to 18000	54	74	See Figure A.28	P

FM receiver

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
		Set.2	
30-88	40	See Figure A.29	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
			Set.2	
1000 to 18000	54	74	See Figure A.30	P

Data Transfer : EUT to PC

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
		Set.3	
30-88	40	See Figure A.31	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
			Set.3	
1000 to 18000	54	74	See Figure A.32	P

Data Transfer : PC to EUT

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
		Set.3	
30-88	40	See Figure A.33	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
			Set.3	
1000 to 18000	54	74	See Figure A.34	P

Data Transfer : PC to TF Card

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
		Set.3	
30-88	40	See Figure A.35	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
			Set.3	
1000 to 18000	54	74	See Figure A.36	P

Data Transfer : TF Card to PC

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
		Set.3	
30-88	40	See Figure A.37	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
			Set.2	
1000 to 18000	54	74	See Figure A.38	P

Data Transfer : PC to EUT

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
		Set.4	
30-88	40	See Figure A.39	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
			Set.4	
1000 to 18000	54	74	See Figure A.40	P

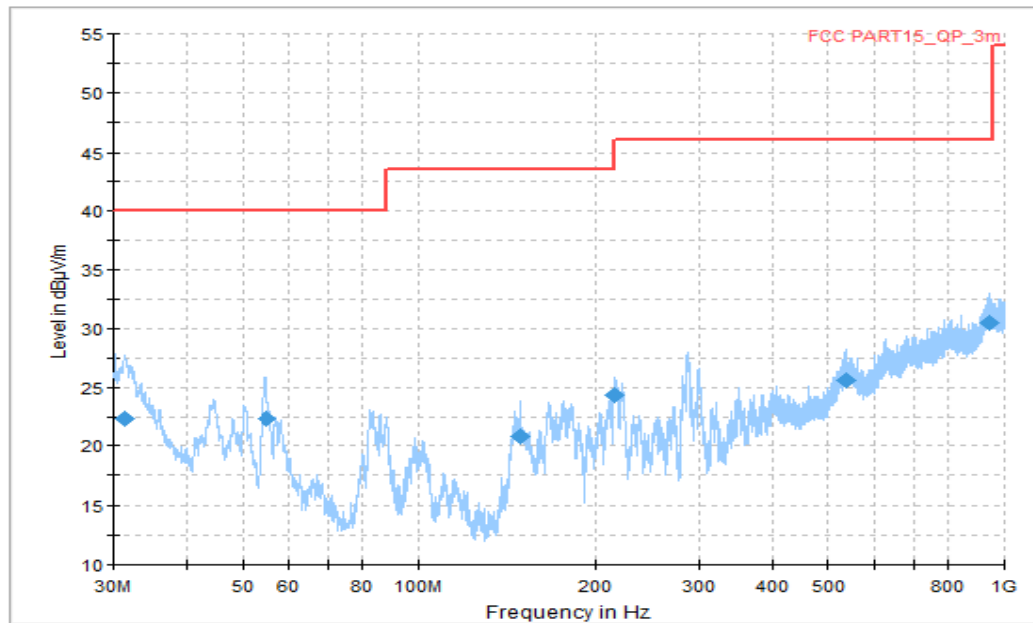


Figure A.1 Radiated Emission (Set.1, GSM Receiver 850MHz, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
31.333750	22.38	40.00	17.62	V	-14	36.38
54.795625	22.31	40.00	17.69	V	-22	44.31
149.128125	20.83	43.52	22.69	V	-19	39.83
215.755000	24.39	43.52	19.13	H	-17	41.39
539.189375	25.64	46.02	20.38	V	-4	29.64
945.680000	30.55	46.02	15.47	H	1	29.55

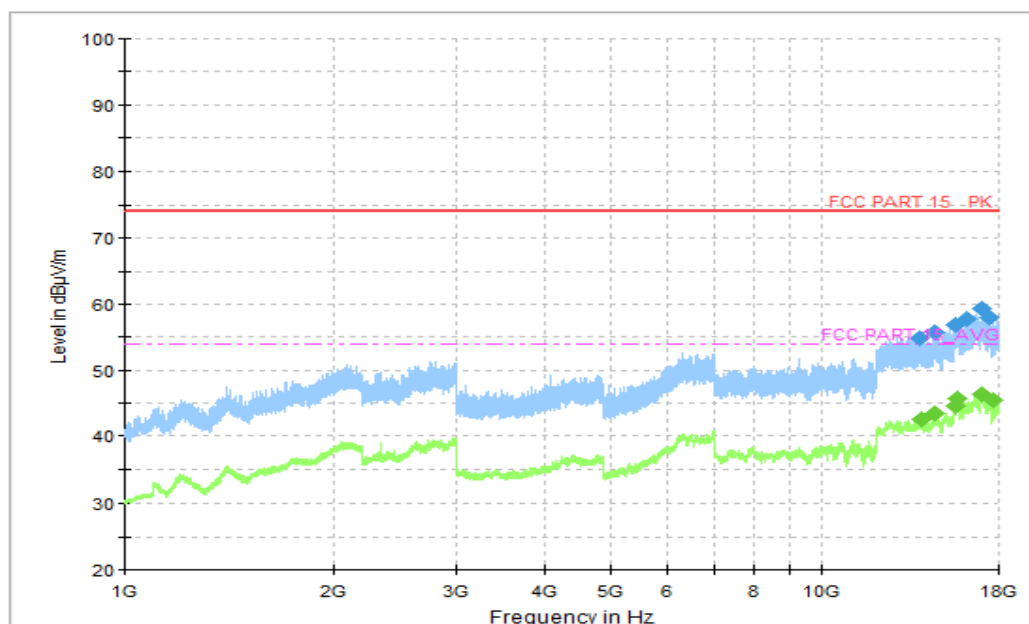


Figure A.2 Radiated Emission (Set.1, GSM Receiver 850MHz, 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
13859.500000	54.91	74.00	19.09	H	17	37.91
14585.750000	55.86	74.00	18.14	V	18	37.86
15571.000000	56.88	74.00	17.12	H	20	36.88
16237.000000	57.77	74.00	16.23	V	21	36.77
17052.250000	59.29	74.00	14.71	V	22	37.29
17478.000000	58.00	74.00	16.00	H	22	36

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
13954.500000	42.57	54.00	11.43	V	17	25.57
14563.000000	43.39	54.00	10.61	V	18	25.39
15565.750000	44.47	54.00	9.53	H	20	24.47
15656.500000	45.66	54.00	8.34	H	20	25.66
17017.750000	46.42	54.00	7.58	V	23	23.42
17706.500000	45.37	54.00	8.63	H	23	22.37

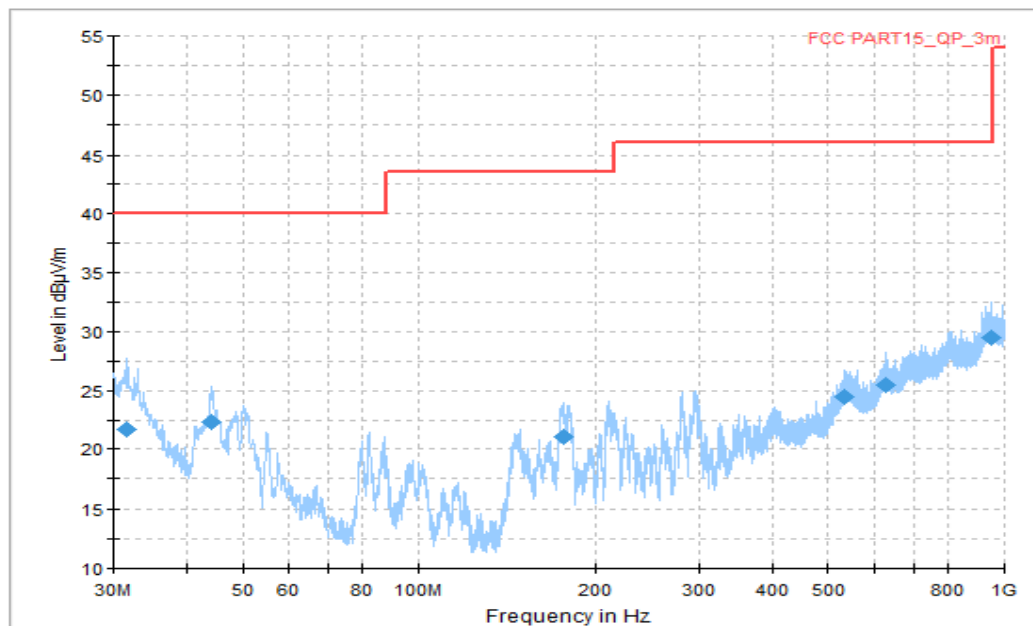


Figure A.3 Radiated Emission (Set.1, WCDMAReceiver Band 5, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
31.697500	21.66	40.00	18.34	V	-14	35.66
44.065000	22.26	40.00	17.74	V	-20	42.26
175.863750	21.00	43.52	22.52	H	-18	39
535.491250	24.44	46.02	21.58	V	-4	28.44
629.641875	25.48	46.02	20.54	V	-3	28.48
947.801875	29.53	46.02	16.49	V	1	28.53

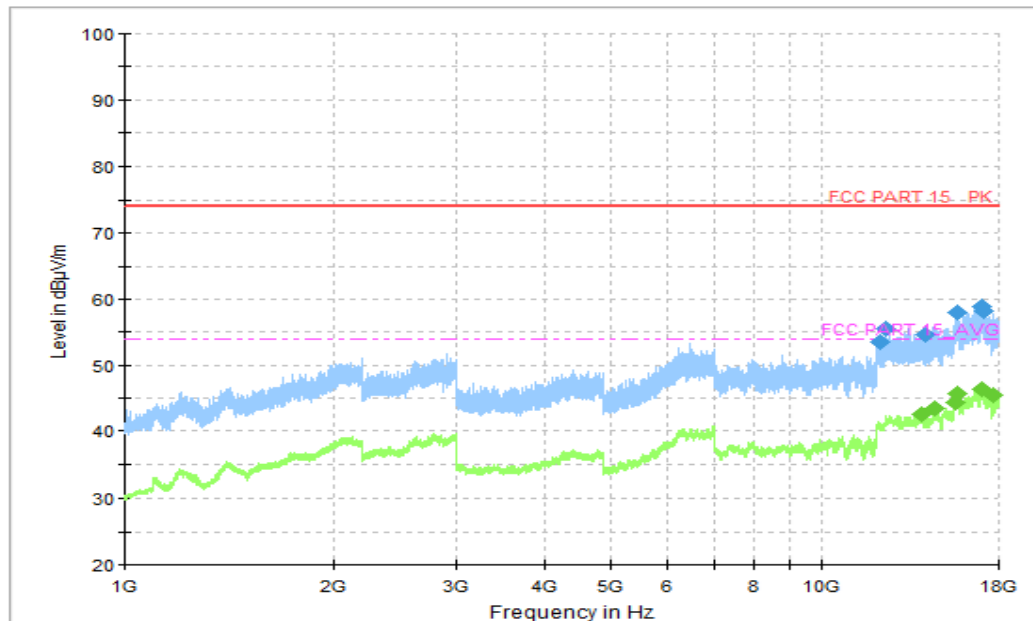


Figure A.5 Radiated Emission (Set.1, WCDMA Receiver Band 5, 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
12144.000000	53.51	74.00	20.49	V	16	37.51
12424.750000	55.50	74.00	18.50	V	17	38.5
14133.000000	54.71	74.00	19.29	V	17	37.71
15664.000000	57.95	74.00	16.05	V	20	37.95
17024.000000	58.96	74.00	15.04	V	23	35.96
17181.250000	58.30	74.00	15.70	H	21	37.30

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
13956.000000	42.55	54.00	11.45	V	17	25.55
14558.750000	43.46	54.00	10.54	V	18	25.46
15577.000000	44.42	54.00	9.58	V	20	24.42
15657.000000	45.72	54.00	8.28	V	20	25.72
17020.500000	46.43	54.00	7.57	V	23	23.43
17697.000000	45.45	54.00	8.55	V	23	22.45

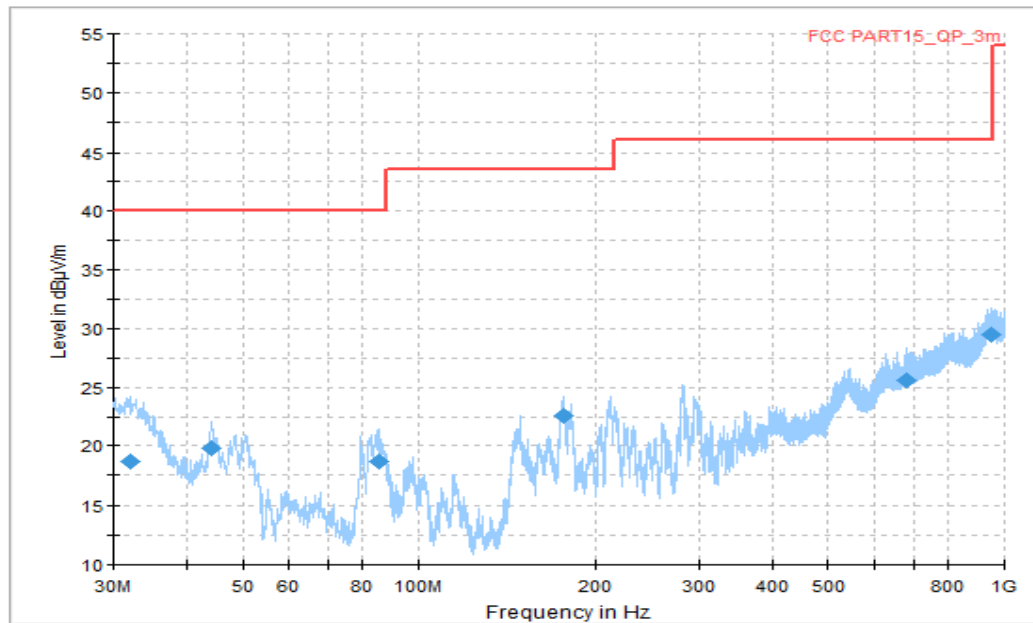


Figure A.6 Radiated Emission (Set.1, LTE Receiver Band 12, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
32.000625	18.67	40.00	21.33	V	-14	32.67
44.125625	19.86	40.00	20.14	V	-20	39.86
85.290000	18.72	40.00	21.28	V	-22	40.72
176.348750	22.53	43.52	20.99	H	-18	40.53
679.475625	25.60	46.02	20.42	H	-2	27.6
946.286250	29.51	46.02	16.51	V	1	28.51

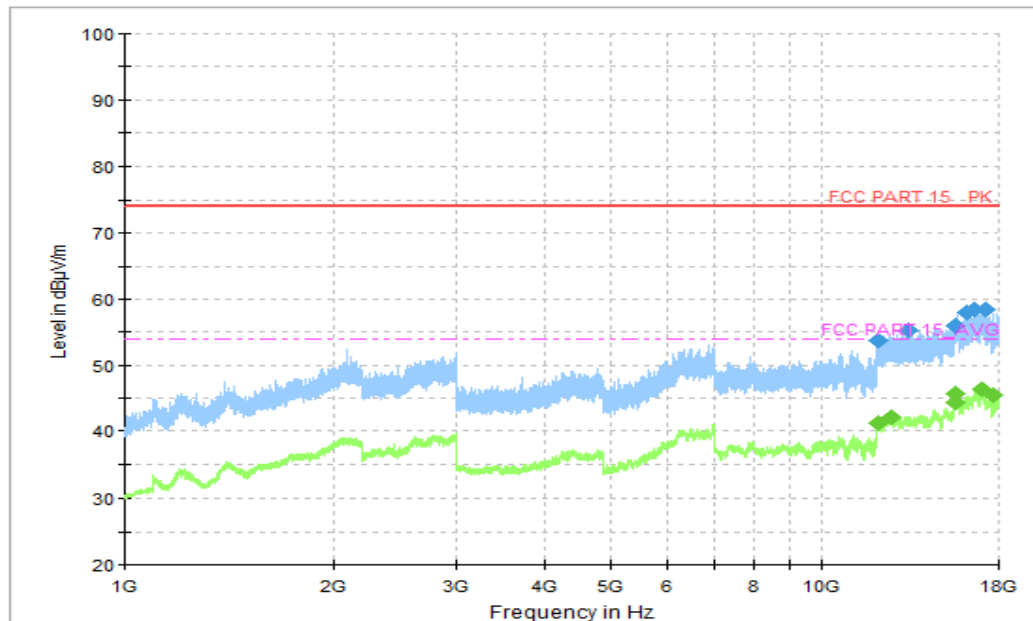


Figure A.7 Radiated Emission (Set.1, LTE Receiver Band 12 , 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
12073.750000	53.80	74.00	20.20	V	16	37.80
13383.000000	55.39	74.00	18.61	V	17	38.39
15561.250000	56.00	74.00	18.00	H	19	37
16149.500000	57.89	74.00	16.11	V	21	36.89
16597.750000	58.48	74.00	15.52	V	22	36.48
17208.250000	58.36	74.00	15.64	V	22	36.36

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
12078.750000	41.32	54.00	12.68	V	16	25.32
12656.250000	42.20	54.00	11.80	V	17	25.20
15572.750000	44.38	54.00	9.62	V	20	24.38
15644.250000	45.65	54.00	8.35	H	20	25.65
17023.750000	46.33	54.00	7.67	V	23	23.33
17693.000000	45.47	54.00	8.53	H	23	22.47

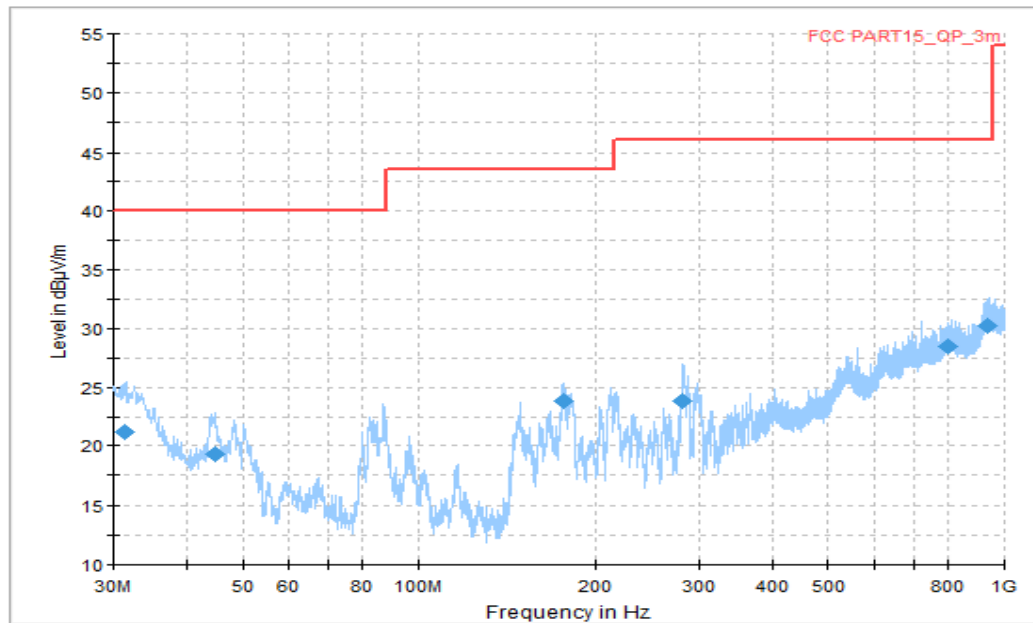


Figure A.8 Radiated Emission (Set.1, LTE Receiver Band 13, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
31.455000	21.21	40.00	18.79	V	-14	35.21
44.731875	19.36	40.00	20.64	V	-21	40.36
176.470000	23.77	43.52	19.75	H	-18	41.77
280.987500	23.87	46.02	22.15	H	-14	37.87
799.513125	28.42	46.02	17.60	H	-1	29.42
938.526250	30.24	46.02	15.78	V	1	29.24

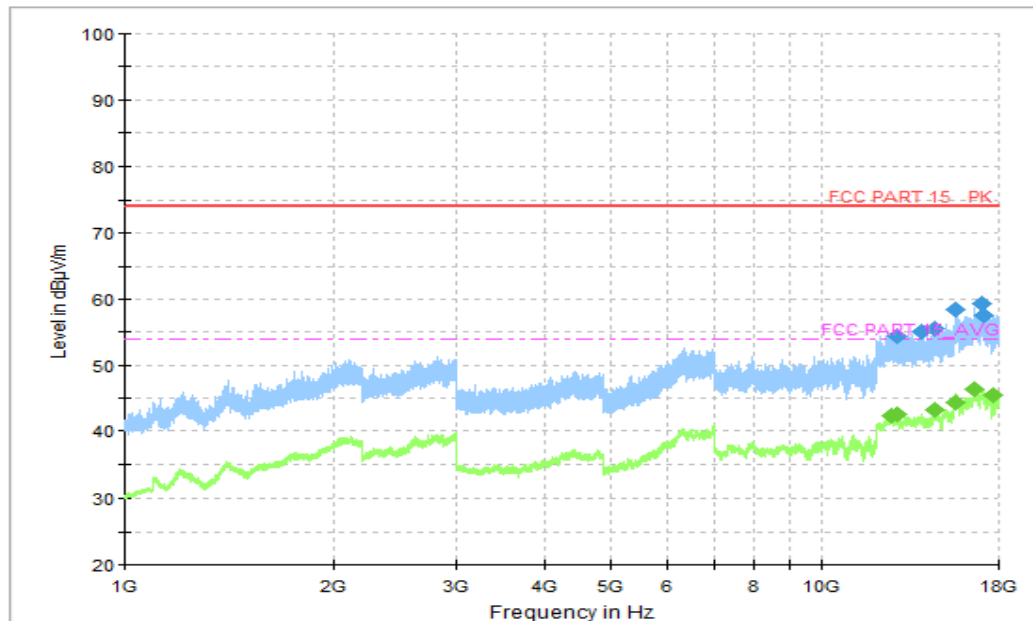


Figure A.9 Radiated Emission (Set.1, LTE Receiver Band 13 , 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
12870.000000	54.40	74.00	19.60	V	17	37.40
13955.250000	55.00	74.00	19.00	V	17	38.00
14603.000000	55.52	74.00	18.48	V	18	37.52
15644.750000	58.45	74.00	15.55	V	20	38.45
17026.750000	59.32	74.00	14.68	V	23	36.32
17177.250000	57.59	74.00	16.41	H	21	36.59

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
12658.500000	42.25	54.00	11.75	V	17	25.25
12895.000000	42.57	54.00	11.43	V	17	25.57
14541.750000	43.29	54.00	10.71	V	18	25.29
15569.250000	44.34	54.00	9.66	V	20	24.34
16621.250000	46.32	54.00	7.68	H	22	24.32
17704.250000	45.37	54.00	8.63	V	23	22.37

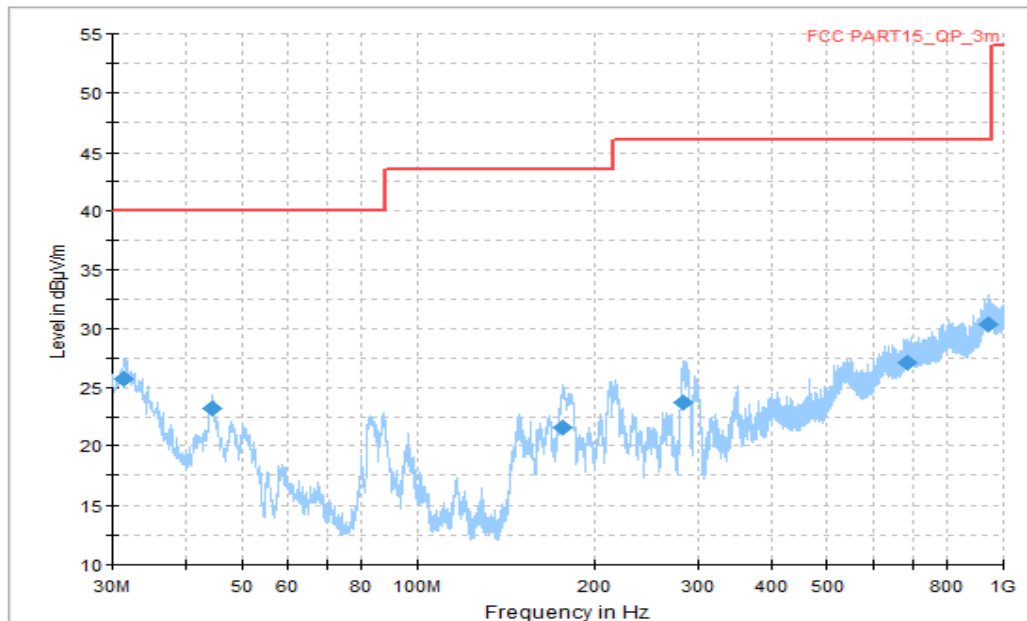


Figure A.10 Radiated Emission (Set.1, LTE Receiver Band 26, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
31.455000	25.74	40.00	14.26	V	-14	39.74
44.489375	23.17	40.00	16.83	V	-20	43.17
176.773125	21.55	43.52	21.97	H	-18	39.55
282.503125	23.66	46.02	22.36	H	-14	37.66
688.387500	27.10	46.02	18.92	V	-2	29.1
943.861250	30.40	46.02	15.62	V	1	29.40

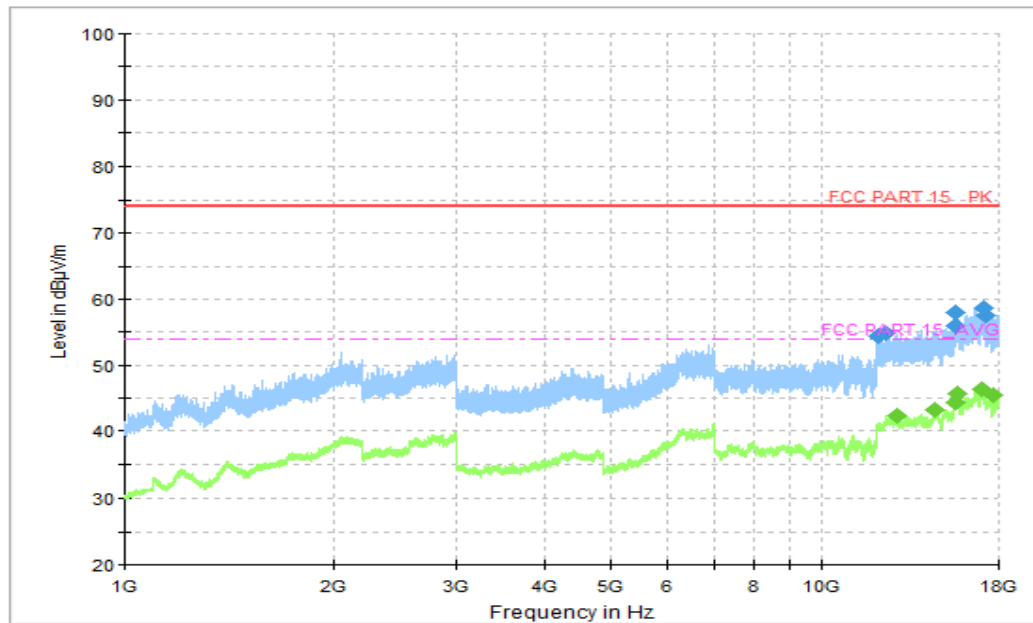


Figure A.11 Radiated Emission (Set.1, LTE Receiver Band 26 , 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
12098.000000	54.33	74.00	19.67	V	16	38.33
12427.500000	54.77	74.00	19.23	V	17	37.77
15567.250000	55.91	74.00	18.09	V	20	35.91
15617.250000	57.92	74.00	16.08	H	20	37.92
17076.750000	58.65	74.00	15.35	V	22	36.65
17191.500000	57.65	74.00	16.35	V	21	36.65

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
12901.000000	42.37	54.00	11.63	V	17	25.37
14575.750000	43.16	54.00	10.84	V	18	25.16
15576.000000	44.44	54.00	9.56	V	20	24.44
15664.250000	45.67	54.00	8.33	V	20	25.67
17050.250000	46.30	54.00	7.70	V	22	24.3
17690.750000	45.42	54.00	8.58	V	23	22.42

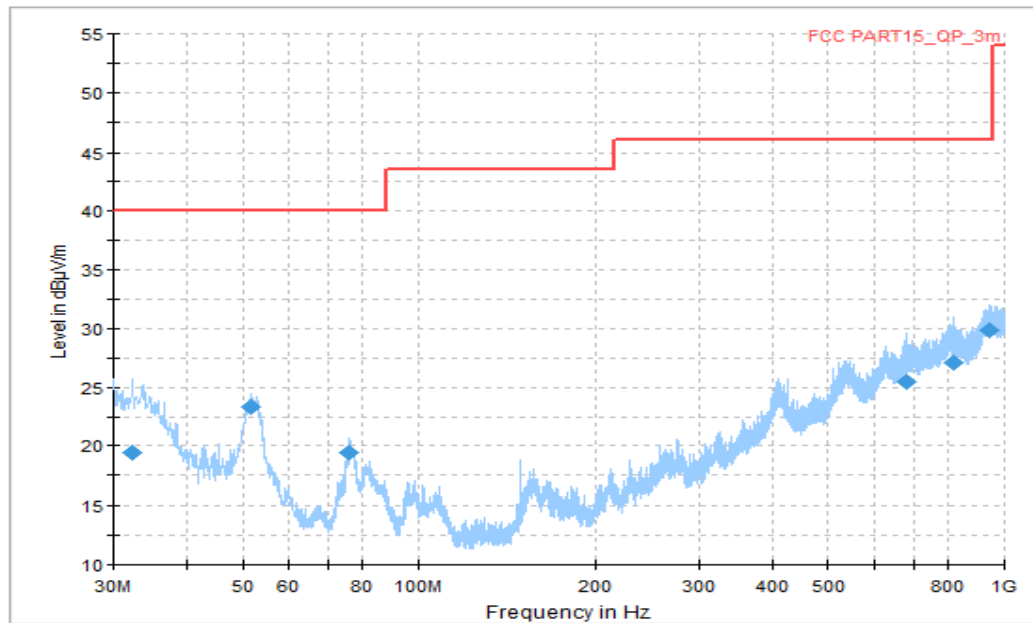


Figure A.12 Radiated Emission (Set.2, GSM Receiver 850MHz, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
32.303750	19.49	40.00	20.51	V	-14	33.49
51.582500	23.35	40.00	16.65	V	-22	45.35
76.196250	19.37	40.00	20.63	V	-22	41.37
680.930625	25.48	46.02	20.54	H	-2	27.48
818.731250	27.05	46.02	18.97	H	-1	28.05
941.739375	29.89	46.02	16.13	H	1	28.89

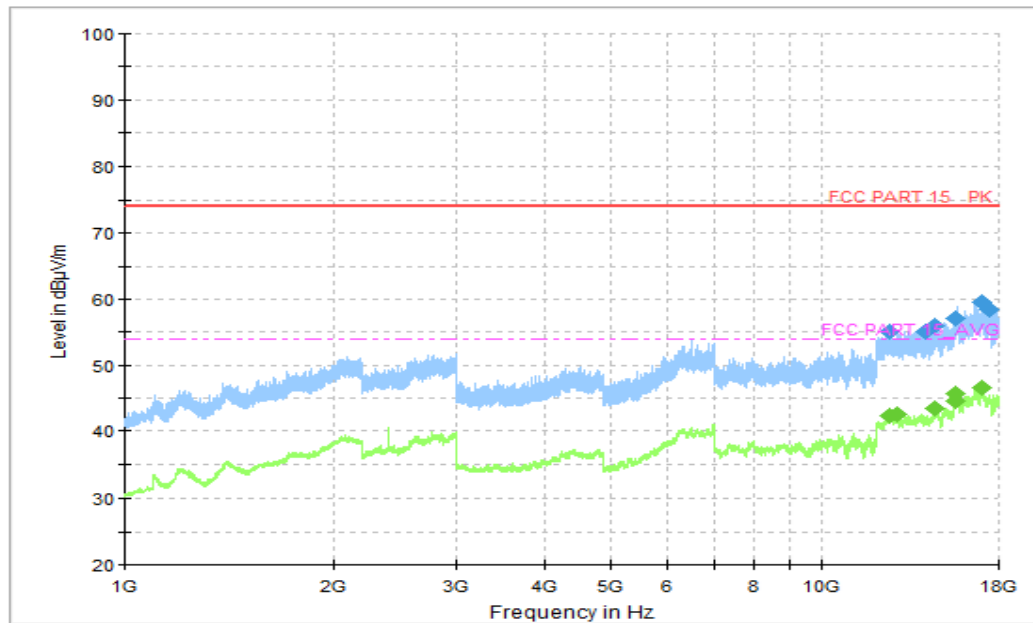


Figure A.13 Radiated Emission (Set.2, GSM Receiver 850MHz , 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
12554.250000	55.03	74.00	18.97	V	17	38.03
14137.500000	55.02	74.00	18.98	H	17	38.02
14554.750000	56.07	74.00	17.93	H	18	38.07
15558.750000	57.07	74.00	16.93	V	19	38.07
16997.500000	59.64	74.00	14.36	H	23	36.64
17488.250000	58.51	74.00	15.49	V	22	36.51

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
12543.250000	42.43	54.00	11.57	V	17	25.43
12900.500000	42.54	54.00	11.46	V	17	25.54
14562.000000	43.47	54.00	10.53	V	18	25.47
15576.250000	44.52	54.00	9.48	V	20	24.52
15647.250000	45.67	54.00	8.33	V	20	25.67
17023.500000	46.52	54.00	7.48	V	23	23.52

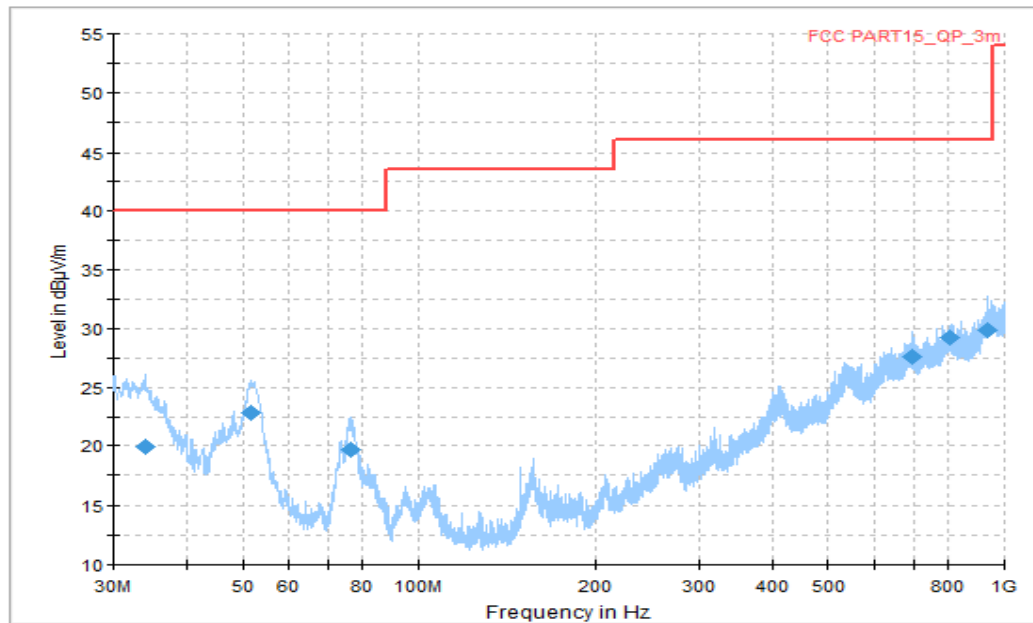


Figure A.14 Radiated Emission (Set.2, WCDMAReceiver Band 5, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
34.001250	19.98	40.00	20.02	V	-15	34.98
51.461250	22.83	40.00	17.17	V	-22	44.83
76.438750	19.70	40.00	20.30	V	-22	41.70
697.056875	27.60	46.02	18.42	H	-2	29.60
805.030000	29.25	46.02	16.77	V	-1	30.25
936.343750	29.86	46.02	16.16	H	1	28.86

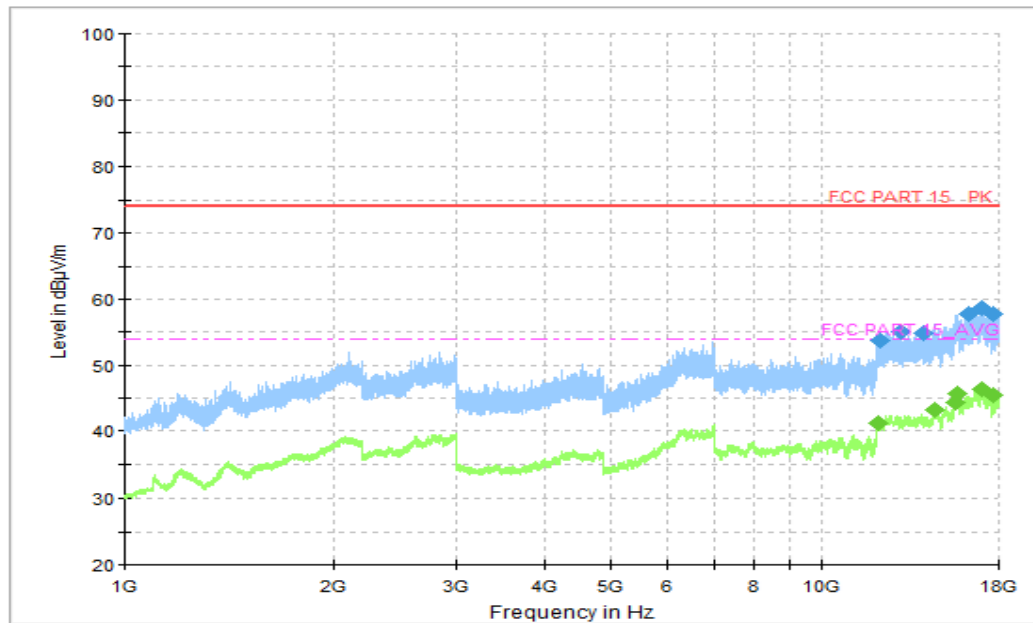


Figure A.15 Radiated Emission (Set.2, WCDMA Receiver Band 5 , 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
12196.250000	53.73	74.00	20.27	V	16	37.73
13003.500000	55.09	74.00	18.91	V	17	38.09
14021.000000	54.93	74.00	19.07	V	17	37.93
16286.000000	57.84	74.00	16.16	H	21	36.84
17036.500000	58.72	74.00	15.28	H	22	36.72
17676.250000	57.82	74.00	16.18	H	23	34.82

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
12078.000000	41.31	54.00	12.69	V	16	25.31
14575.500000	43.30	54.00	10.70	H	18	25.3
15573.750000	44.37	54.00	9.63	V	20	24.37
15676.750000	45.71	54.00	8.29	V	20	25.71
17040.500000	46.44	54.00	7.56	V	22	24.44
17689.750000	45.48	54.00	8.52	V	23	22.48

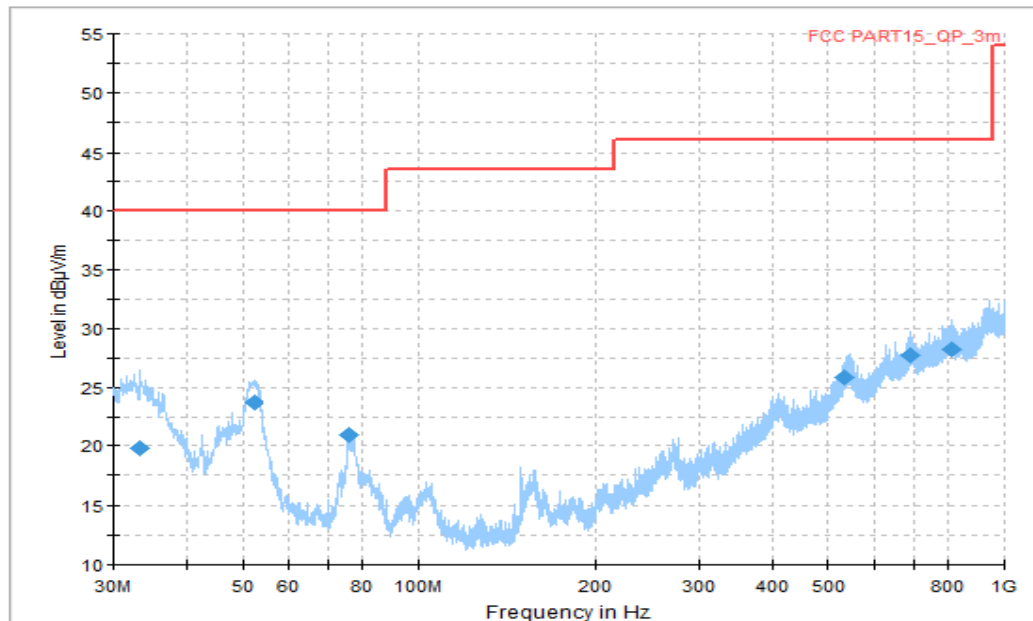


Figure A.16 Radiated Emission (Set.2, LTE Receiver Band 12, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
33.273750	19.79	40.00	20.21	V	-15	34.79
52.128125	23.74	40.00	16.26	V	-22	45.74
75.832500	20.98	40.00	19.03	V	-22	42.98
533.187500	25.90	46.02	20.12	V	-4	29.90
693.661875	27.77	46.02	18.25	V	-2	29.77
812.365625	28.26	46.02	17.76	H	-1	29.26

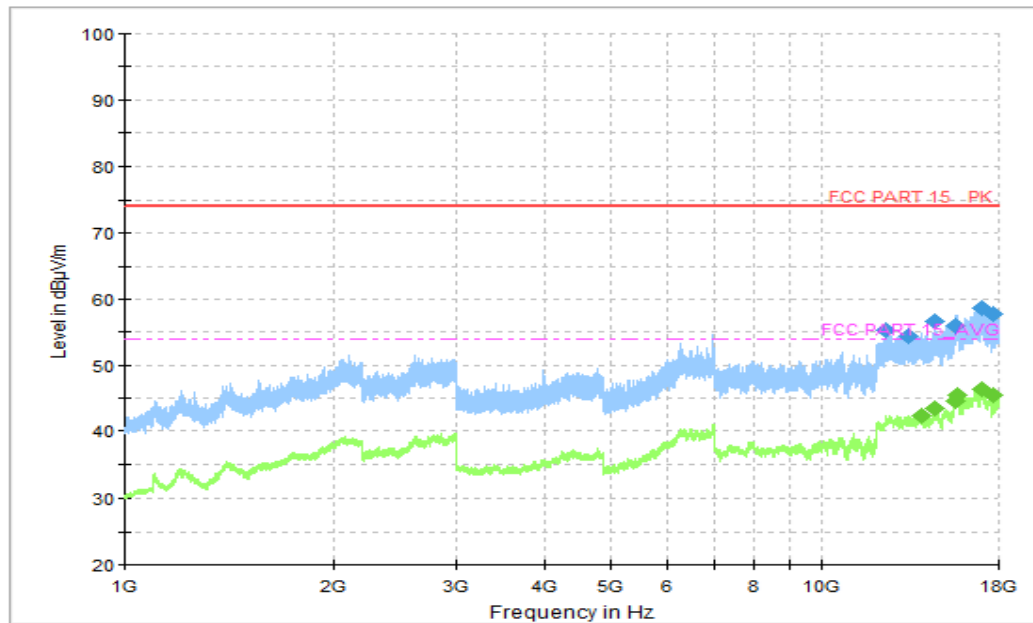


Figure A.17 Radiated Emission (Set.2, LTE Receiver Band 12 , 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
12411.250000	55.29	74.00	18.71	V	17	38.29
13367.000000	54.51	74.00	19.49	V	17	37.51
14582.750000	56.58	74.00	17.42	V	18	38.58
15559.250000	56.06	74.00	17.94	V	19	37.06
17054.250000	58.73	74.00	15.27	H	22	36.73
17680.750000	57.71	74.00	16.29	V	23	34.71

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
13959.250000	42.45	54.00	11.55	V	17	25.45
14569.000000	43.37	54.00	10.63	H	18	25.37
15576.000000	44.52	54.00	9.48	V	20	24.52
15660.250000	45.56	54.00	8.44	H	20	25.56
17023.500000	46.32	54.00	7.68	H	23	23.32
17700.250000	45.46	54.00	8.54	V	23	22.46

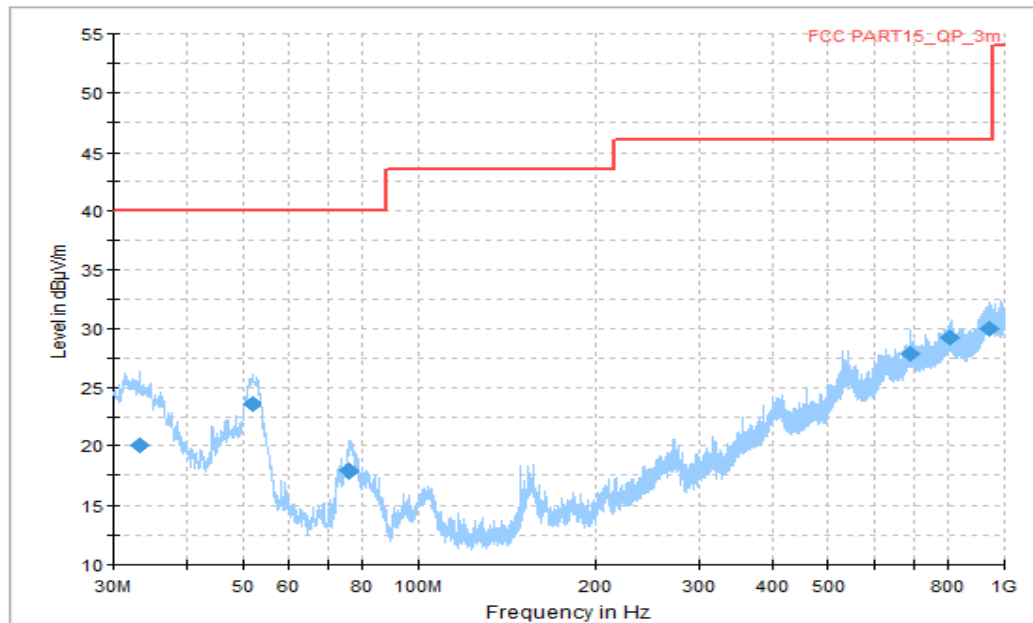


Figure A.18 Radiated Emission (Set.2, LTE Receiver Band 13, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
33.213125	20.06	40.00	19.94	V	-15	35.06
51.764375	23.60	40.00	16.40	V	-22	45.6
76.256875	17.91	40.00	22.09	V	-22	39.91
690.206250	27.84	46.02	18.18	H	-2	29.84
805.515000	29.28	46.02	16.74	H	-1	30.28
940.708750	29.98	46.02	16.04	V	1	28.98

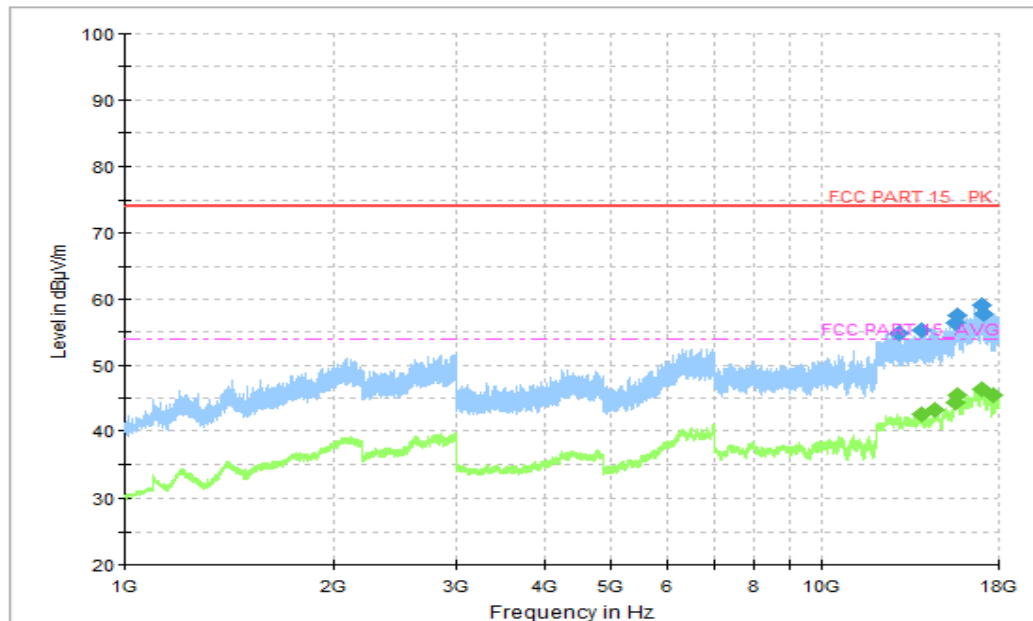


Figure A.19 Radiated Emission (Set.2, LTE Receiver Band 13 , 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
12919.750000	54.88	74.00	19.12	V	17	37.88
13918.250000	55.26	74.00	18.74	V	17	38.26
15573.000000	56.42	74.00	17.58	H	20	36.42
15670.250000	57.46	74.00	16.54	V	20	37.46
17054.000000	59.03	74.00	14.97	V	22	37.03
17156.750000	57.79	74.00	16.21	V	21	36.79

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
13949.000000	42.56	54.00	11.44	H	17	25.56
14558.250000	43.30	54.00	10.70	H	18	25.3
15576.000000	44.35	54.00	9.65	V	20	24.35
15668.250000	45.54	54.00	8.46	V	20	25.54
17043.750000	46.38	54.00	7.62	V	22	24.38
17697.250000	45.39	54.00	8.61	H	23	22.39

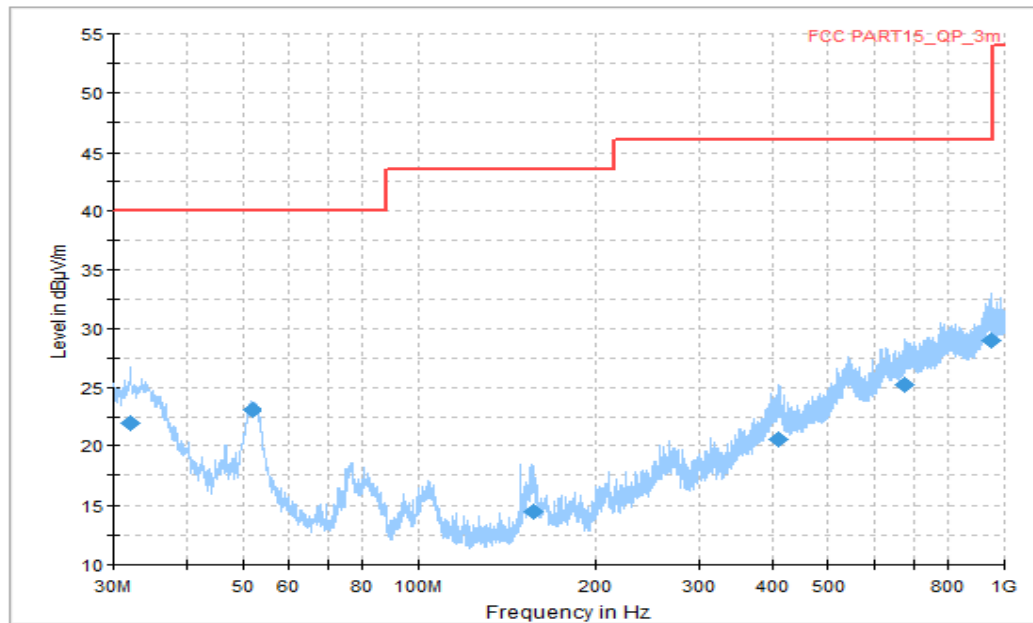


Figure A.20 Radiated Emission (Set.2, LTE Receiver Band 26, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
32.000625	21.91	40.00	18.09	V	-14	35.91
51.825000	23.05	40.00	16.95	V	-22	45.05
157.070000	14.57	43.52	28.95	V	-17	31.57
409.148750	20.59	46.02	25.43	V	-8	28.59
675.413750	25.25	46.02	20.77	H	-3	28.25
951.257500	29.03	46.02	16.99	V	1	28.03

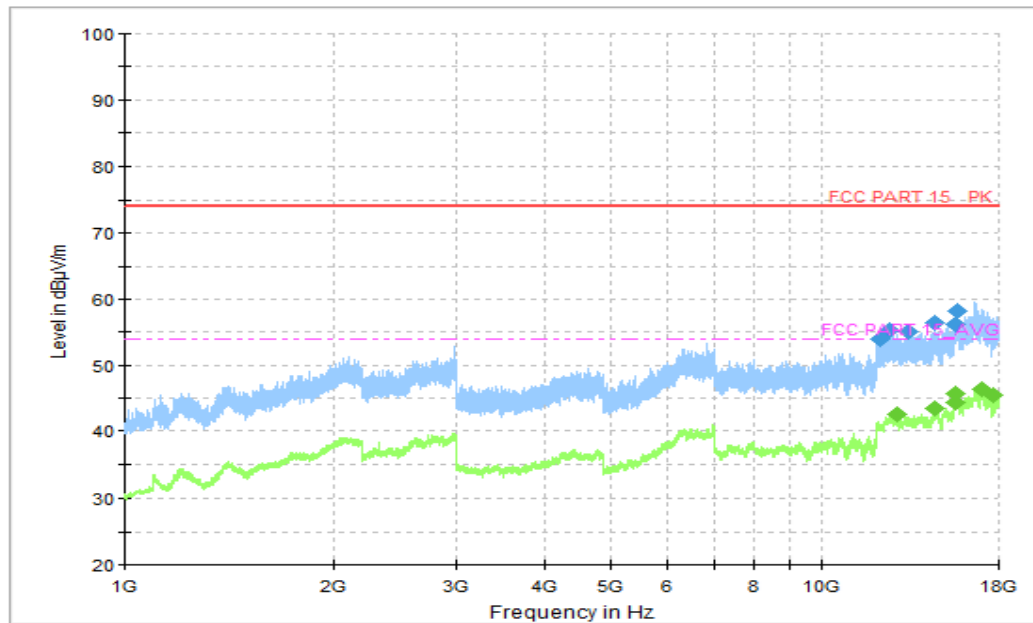


Figure A.21 Radiated Emission (Set.2, LTE Receiver Band 26 , 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
12142.000000	53.87	74.00	20.13	V	16	37.87
12569.250000	55.27	74.00	18.73	V	17	38.27
13393.250000	55.01	74.00	18.99	V	17	38.01
14569.000000	56.32	74.00	17.68	V	18	38.32
15576.250000	56.14	74.00	17.86	V	20	36.14
15665.000000	58.25	74.00	15.75	V	20	38.25

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
12889.750000	42.51	54.00	11.49	V	17	25.51
14561.750000	43.36	54.00	10.64	V	18	25.36
15562.500000	44.38	54.00	9.62	V	19	25.38
15650.500000	45.67	54.00	8.33	H	20	25.67
17023.500000	46.43	54.00	7.57	V	23	23.43
17693.500000	45.40	54.00	8.60	H	23	22.40

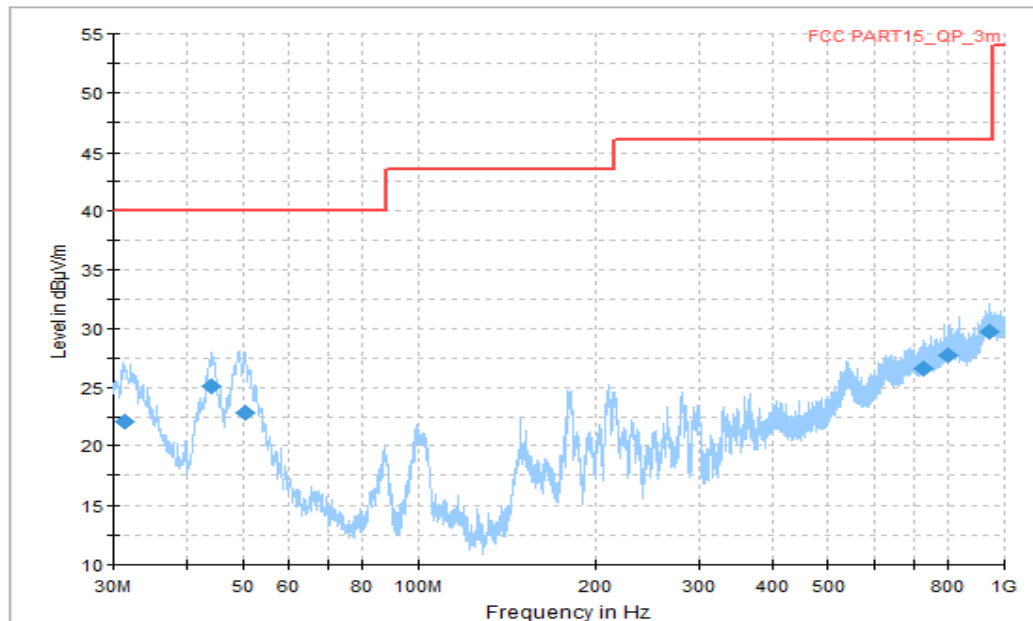


Figure A.22 Radiated Emission (Set.1,Camera , 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
31.333750	22.10	40.00	17.90	V	-14	36.10
44.125625	25.09	40.00	14.91	V	-20	45.09
50.127500	22.83	40.00	17.17	V	-22	44.83
727.733125	26.56	46.02	19.46	V	-2	28.56
801.271250	27.74	46.02	18.28	V	-1	28.74
942.345625	29.78	46.02	16.24	H	1	28.78

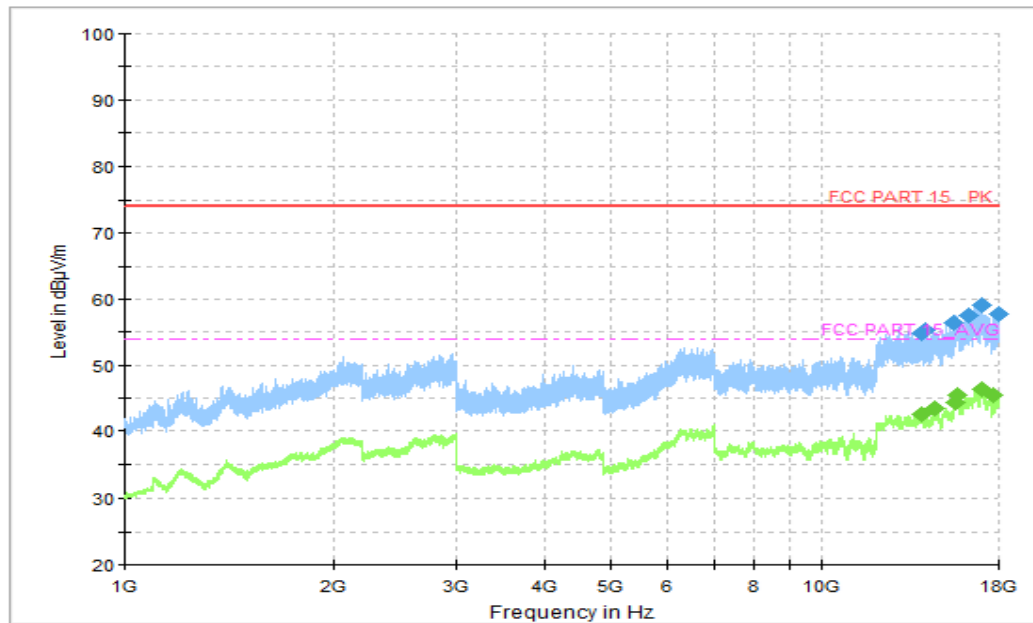


Figure A.23 Radiated Emission (Set.1, Camera ,1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
13933.750000	54.87	74.00	19.13	V	17	37.87
14150.000000	55.21	74.00	18.79	H	17	38.21
15538.750000	56.48	74.00	17.52	H	19	37.48
16282.750000	57.62	74.00	16.38	H	21	36.62
16987.500000	59.16	74.00	14.84	H	23	36.16
17995.500000	57.66	74.00	16.34	H	23	34.66

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
13951.500000	42.48	54.00	11.52	H	17	25.48
14561.500000	43.51	54.00	10.49	H	18	25.51
15562.750000	44.31	54.00	9.69	H	19	25.31
15660.500000	45.55	54.00	8.45	V	20	25.55
17050.250000	46.32	54.00	7.68	H	22	24.32
17704.250000	45.37	54.00	8.63	H	23	22.37

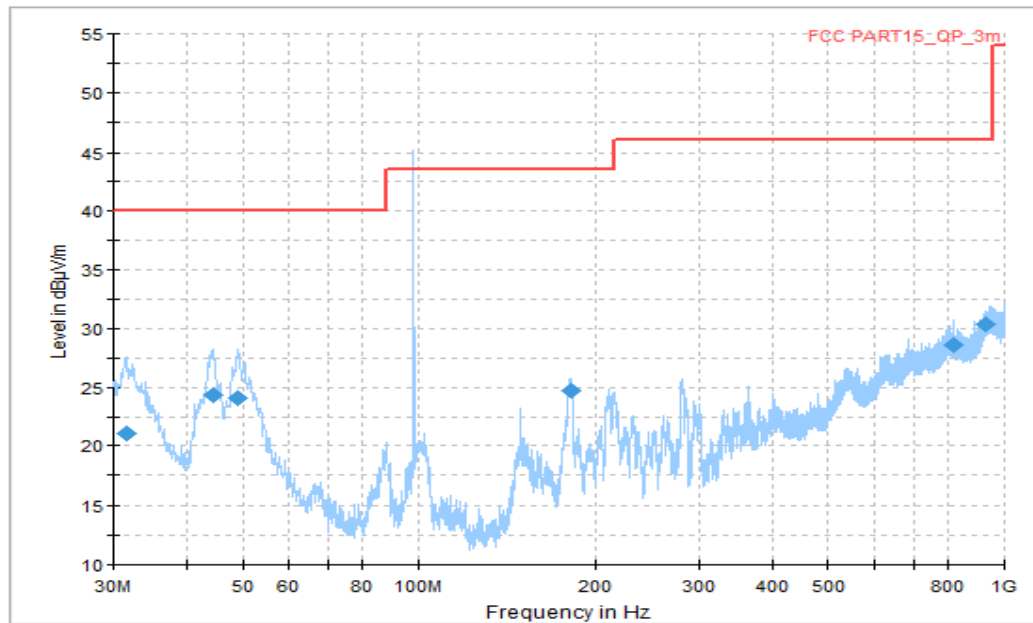


Figure A.24 Radiated Emission (Set.1, FM receiver, 30MHz to 1GHz)

Note: the spike over the limit is coming from the traffic carrier.

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
31.515625	21.03	40.00	18.97	V	-14	35.03
44.246875	24.38	40.00	15.62	V	-20	44.38
48.915000	24.05	40.00	15.95	V	-22	46.05
181.926250	24.71	43.52	18.81	H	-18	42.71
821.338125	28.66	46.02	17.36	V	-1	29.66
926.886250	30.33	46.02	15.69	V	1	29.33

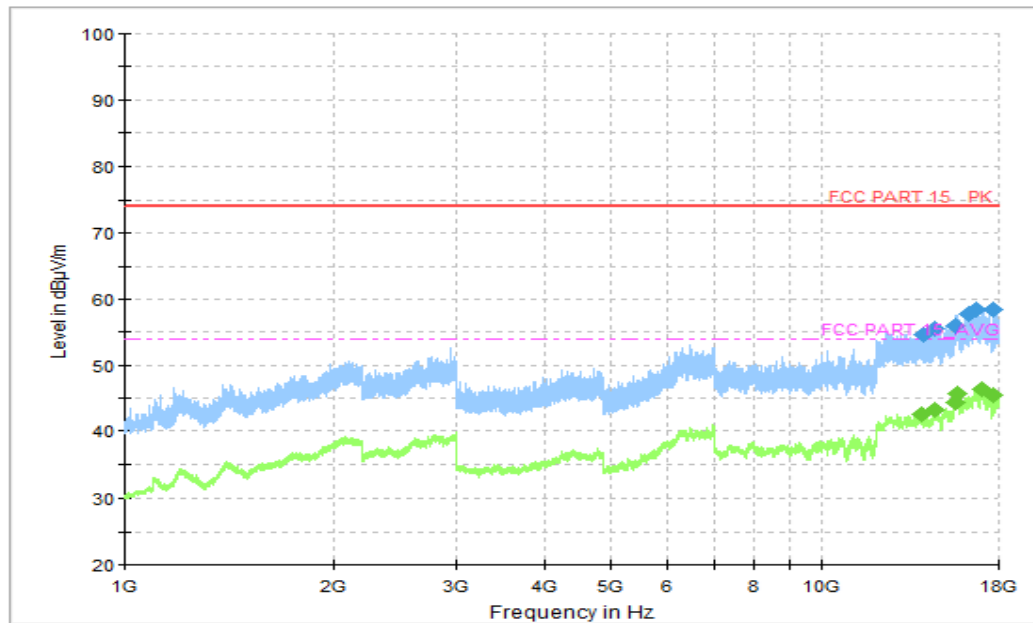


Figure A.25 Radiated Emission (Set.1, FM receiver , 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
14041.000000	54.71	74.00	19.29	V	17	37.71
14545.250000	55.55	74.00	18.45	V	18	37.55
15577.500000	56.03	74.00	17.97	H	20	36.03
16282.250000	57.82	74.00	16.18	H	21	36.82
16662.250000	58.37	74.00	15.63	V	22	36.37
17700.250000	58.52	74.00	15.48	H	23	35.52

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
13942.000000	42.57	54.00	11.43	H	17	25.57
14575.000000	43.27	54.00	10.73	V	18	25.27
15576.250000	44.38	54.00	9.62	V	20	24.38
15657.250000	45.66	54.00	8.34	V	20	25.66
17023.750000	46.26	54.00	7.74	H	23	23.26
17700.250000	45.46	54.00	8.54	H	23	22.46

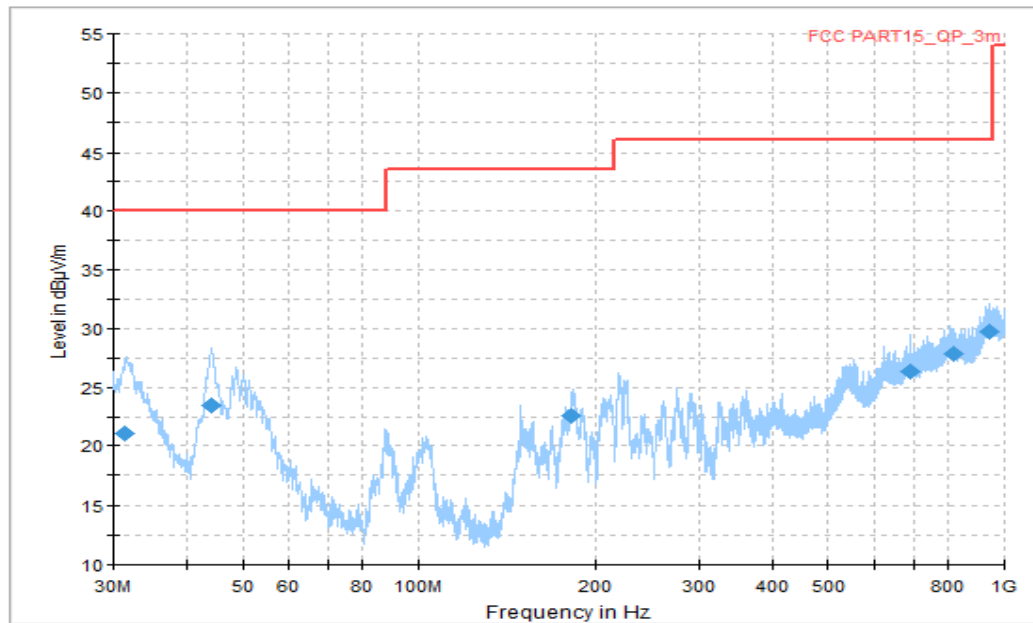


Figure A.26 Radiated Emission (Set.1,Video Player , 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
31.455000	21.03	40.00	18.97	V	-14	35.03
44.186250	23.48	40.00	16.52	V	-20	43.48
182.047500	22.59	43.52	20.93	V	-18	40.59
690.751875	26.30	46.02	19.72	V	-2	28.30
819.701250	27.79	46.02	18.23	V	-1	28.79
942.770000	29.78	46.02	16.24	V	1	28.78

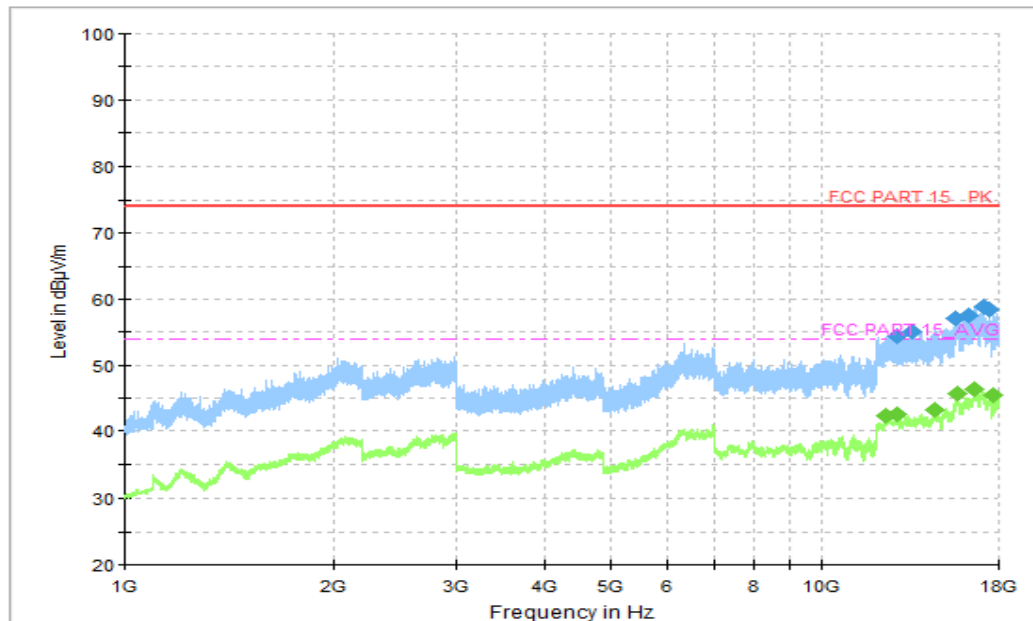


Figure A.27 Radiated Emission (Set.1, Video Player , 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
12897.250000	54.45	74.00	19.55	V	17	37.45
13490.250000	54.98	74.00	19.02	V	17	37.98
15570.500000	57.07	74.00	16.93	V	20	37.07
16279.750000	57.65	74.00	16.35	V	21	36.65
17123.500000	58.95	74.00	15.05	H	21	37.95
17464.750000	58.33	74.00	15.67	V	22	36.33

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
12427.250000	42.24	54.00	11.76	V	17	25.24
12888.500000	42.47	54.00	11.53	V	17	25.47
14565.750000	43.32	54.00	10.68	V	18	25.32
15657.000000	45.68	54.00	8.32	H	20	25.68
16613.750000	46.31	54.00	7.69	V	22	24.31
17693.500000	45.44	54.00	8.56	H	23	22.44

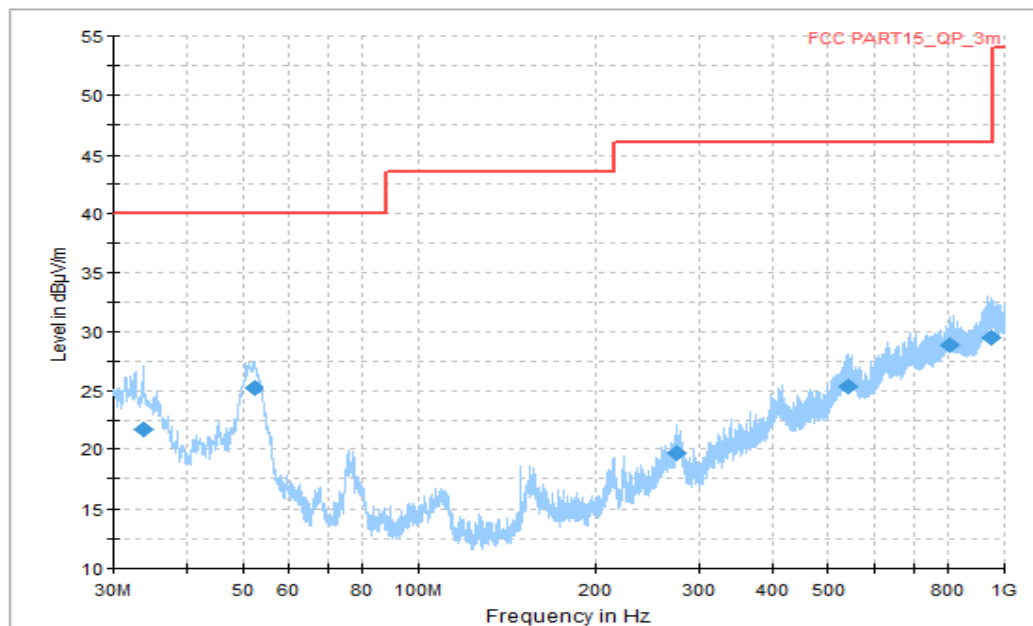


Figure A.28 Radiated Emission (Set.2 Camera , 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
33.637500	21.64	40.00	18.36	V	-15	36.64
52.310000	25.23	40.00	14.77	V	-22	47.23
274.925000	19.73	46.02	26.29	H	-14	33.73
540.462500	25.29	46.02	20.73	V	-4	29.29
807.394375	28.80	46.02	17.22	H	-1	29.8
951.075625	29.45	46.02	16.57	V	1	28.45

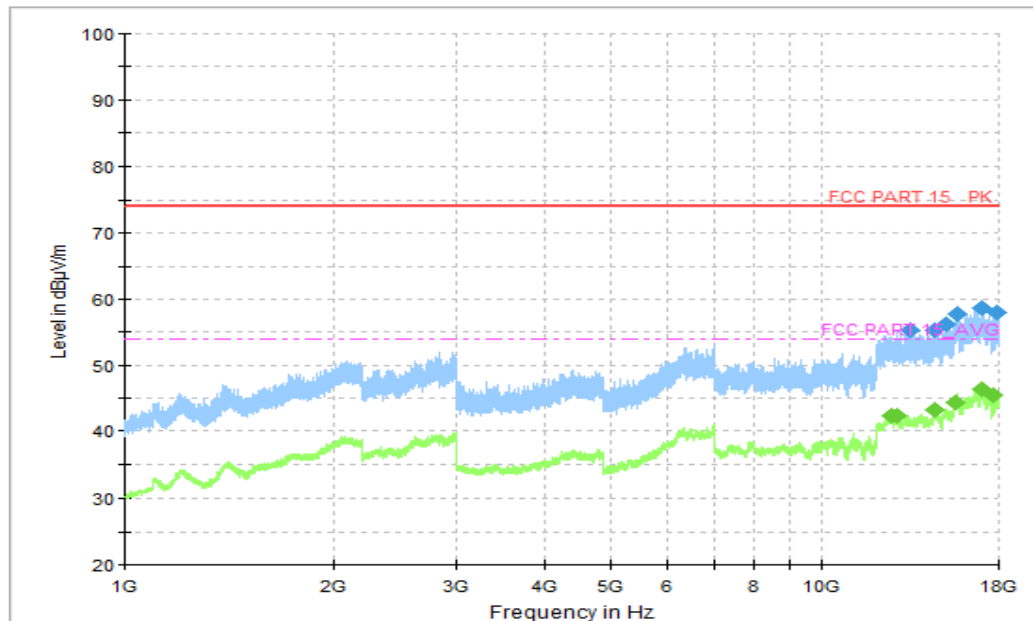


Figure A.29 Radiated Emission (Set.2 Camera , 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
13470.750000	55.33	74.00	18.67	V	17	38.33
14547.750000	55.39	74.00	18.61	V	18	37.39
15140.500000	56.10	74.00	17.90	V	18	38.10
15677.500000	57.74	74.00	16.26	H	20	37.74
17045.750000	58.62	74.00	15.38	H	22	36.62
17903.000000	57.94	74.00	16.06	V	24	33.94

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
12662.000000	42.26	54.00	11.74	V	17	25.26
12900.750000	42.37	54.00	11.63	V	17	25.37
14562.500000	43.32	54.00	10.68	V	18	25.32
15573.000000	44.31	54.00	9.69	V	20	24.31
17046.750000	46.28	54.00	7.72	V	22	24.28
17690.250000	45.38	54.00	8.62	V	23	22.38

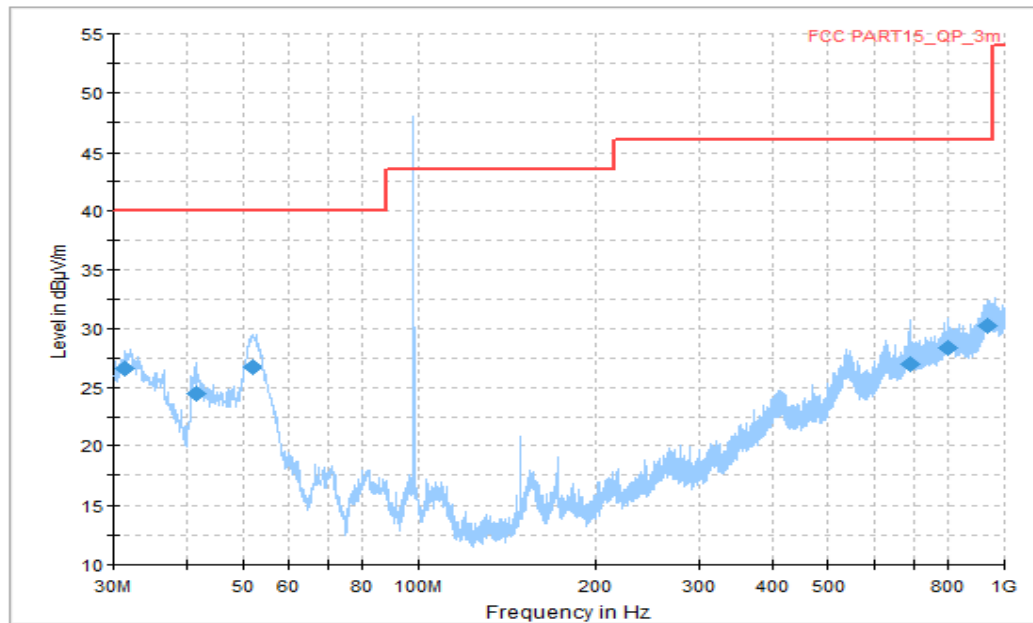


Figure A.30 Radiated Emission (Set.2,FM receiver, 30MHz to 1GHz)

Note: the spike over the limit is coming from the traffic carrier.

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
31.455000	26.53	40.00	13.47	V	-14	40.53
41.458125	24.49	40.00	15.51	V	-19	43.49
51.703750	26.78	40.00	13.22	V	-22	48.78
693.176875	27.00	46.02	19.02	V	-2	29.00
802.483750	28.36	46.02	17.66	H	-1	29.36
932.827500	30.18	46.02	15.84	V	1	29.18

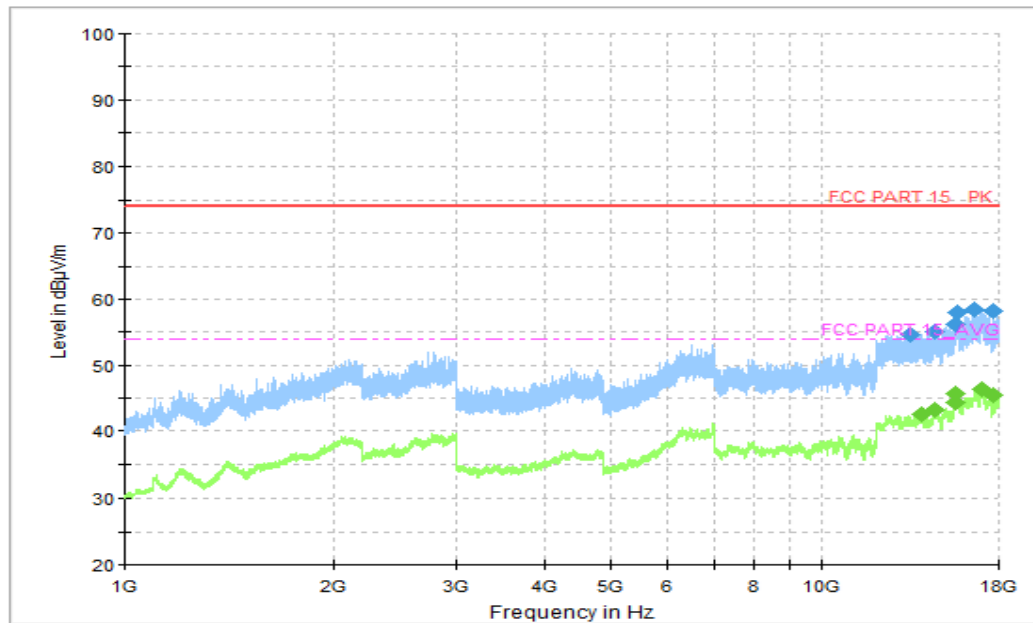


Figure A.30 Radiated Emission (Set.2, FM receiver , 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
13447.000000	54.74	74.00	19.26	H	17	37.74
14606.750000	55.13	74.00	18.87	V	18	37.13
15576.500000	56.12	74.00	17.88	H	20	36.12
15684.500000	57.94	74.00	16.06	H	20	37.94
16621.750000	58.34	74.00	15.66	H	22	36.34
17704.750000	58.24	74.00	15.76	H	23	35.24

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
13944.500000	42.59	54.00	11.41	H	17	25.59
14562.000000	43.35	54.00	10.65	V	18	25.35
15576.500000	44.36	54.00	9.64	H	20	24.36
15644.000000	45.63	54.00	8.37	V	20	25.63
17040.250000	46.38	54.00	7.62	H	22	24.38
17693.000000	45.39	54.00	8.61	V	23	22.39

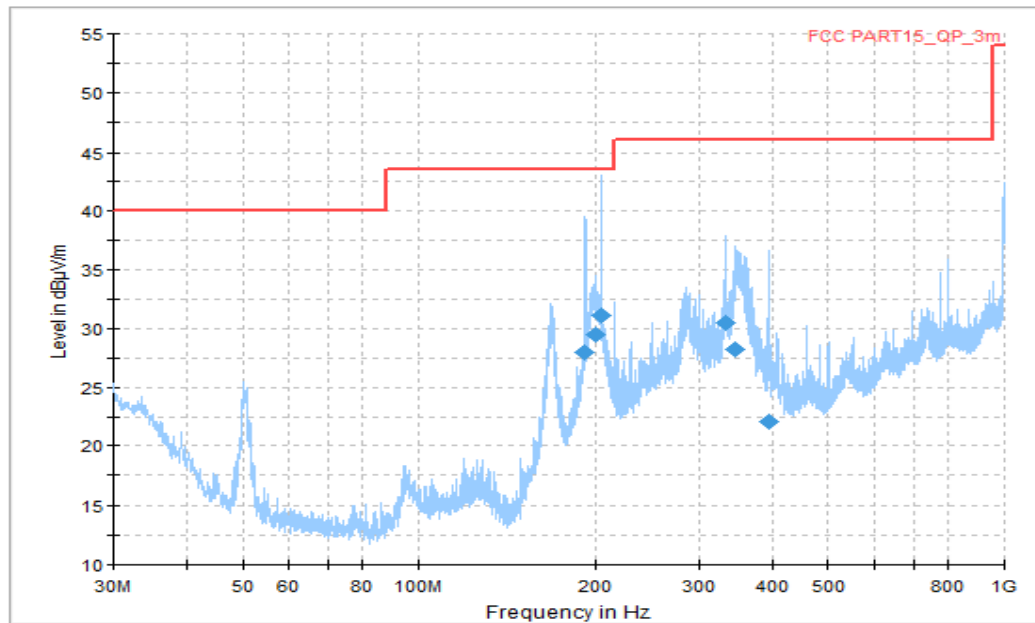


Figure A.31 Radiated Emission (Set.3, Data Transfer : EUT to PC, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
191.990000	27.92	43.52	15.60	H	-18	45.92
199.750000	29.49	43.52	14.03	H	-18	47.49
204.054375	31.13	43.52	12.39	H	-17	48.13
332.518750	30.47	46.02	15.55	H	-12	42.47
346.341250	28.19	46.02	17.83	H	-11	39.19
395.083750	22.10	46.02	23.92	V	-9	31.10

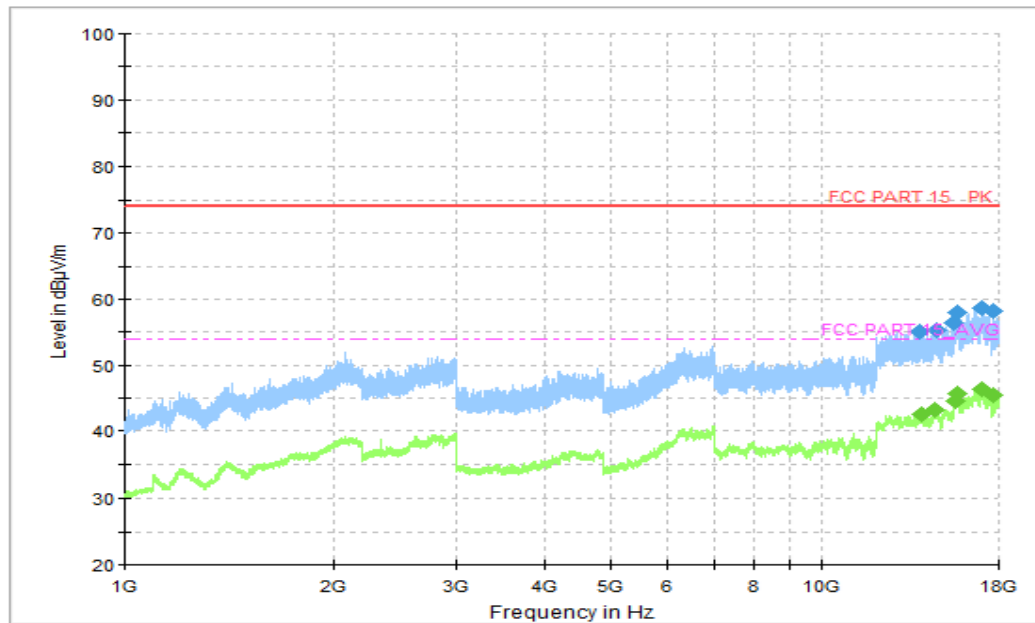


Figure A.32 Radiated Emission (Set.3, Data Transfer : EUT to PC, 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
13832.750000	55.01	74.00	18.99	V	17	38.01
14624.000000	55.36	74.00	18.64	H	18	37.36
15555.250000	56.36	74.00	17.64	V	19	37.36
15661.250000	58.03	74.00	15.97	H	20	38.03
16974.750000	58.60	74.00	15.40	V	23	35.6
17691.250000	58.30	74.00	15.70	V	23	35.30

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
13954.750000	42.51	54.00	11.49	H	17	25.51
14544.750000	43.33	54.00	10.67	H	18	25.33
15576.750000	44.48	54.00	9.52	V	20	24.48
15660.000000	45.76	54.00	8.24	H	20	25.76
17024.500000	46.35	54.00	7.65	V	23	23.35
17703.500000	45.46	54.00	8.54	V	23	22.46

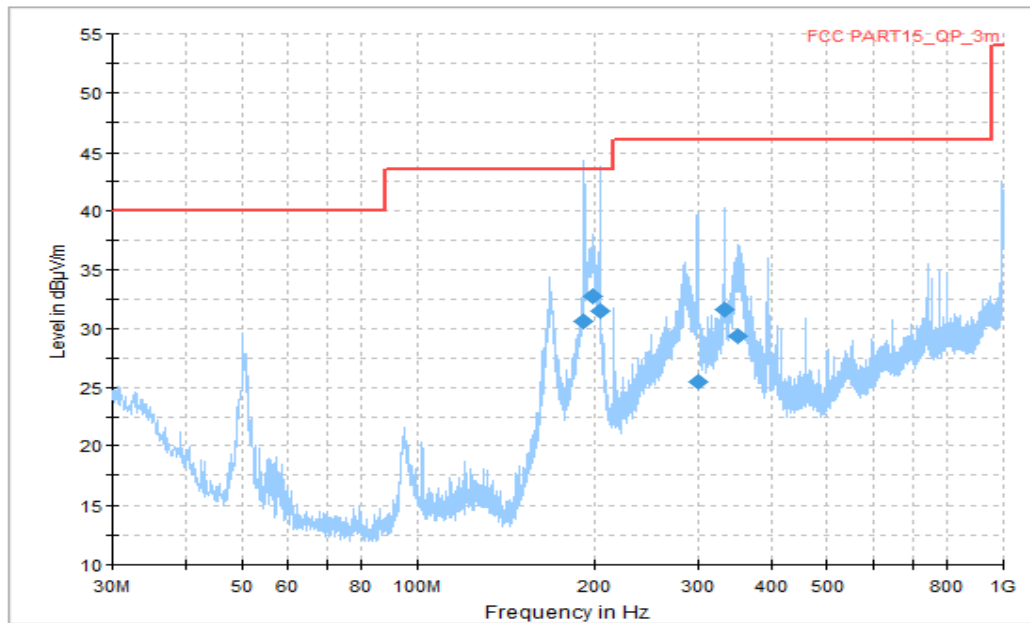


Figure A.33 Radiated Emission (Set.3, Data Transfer : PC to EUT, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
191.990000	30.63	43.52	12.89	H	-18	48.63
197.991875	32.69	43.52	10.83	H	-18	50.69
203.993750	31.49	43.52	12.03	H	-17	48.49
299.114375	25.44	46.02	20.58	H	-14	39.44
331.912500	31.60	46.02	14.42	H	-12	43.6
351.251875	29.34	46.02	16.68	H	-11	43.6

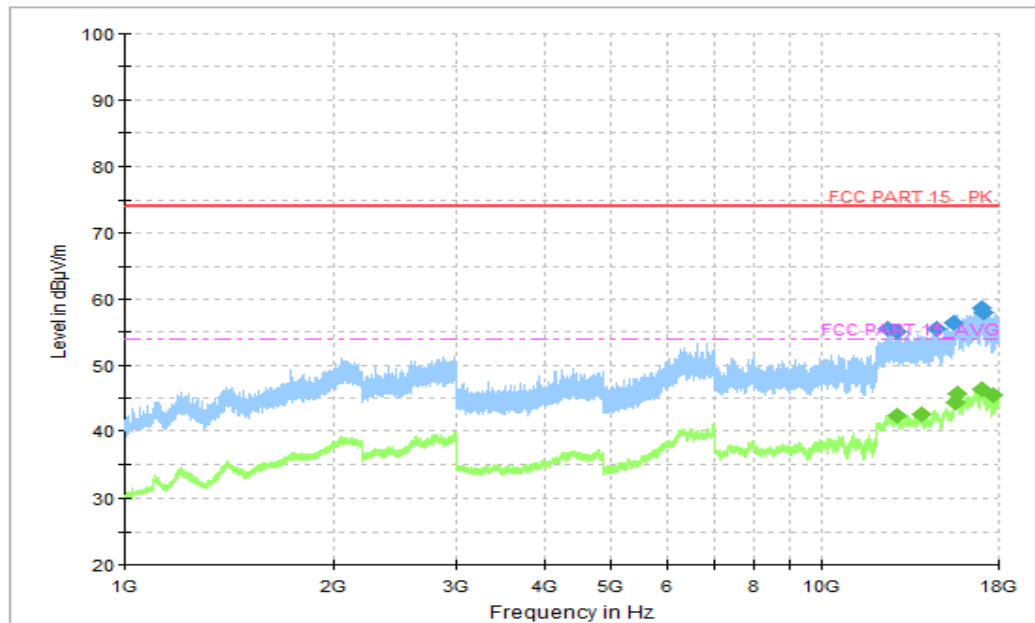


Figure A.34 Radiated Emission (Set.3, Data Transfer : PC to EUT, 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
12519.500000	55.50	74.00	18.50	V	17	38.50
12909.750000	54.98	74.00	19.02	V	17	37.98
14682.000000	55.51	74.00	18.49	V	18	37.51
15556.500000	56.43	74.00	17.57	V	19	37.43
17018.250000	58.67	74.00	15.33	V	23	35.67
17178.750000	58.03	74.00	15.97	H	21	37.03

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
12900.750000	42.44	54.00	11.56	V	17	25.44
13951.250000	42.58	54.00	11.42	V	17	25.58
15576.500000	44.38	54.00	9.62	H	20	24.38
15661.000000	45.64	54.00	8.36	V	20	25.64
17020.500000	46.34	54.00	7.66	H	23	23.34
17693.250000	45.58	54.00	8.42	V	23	22.58

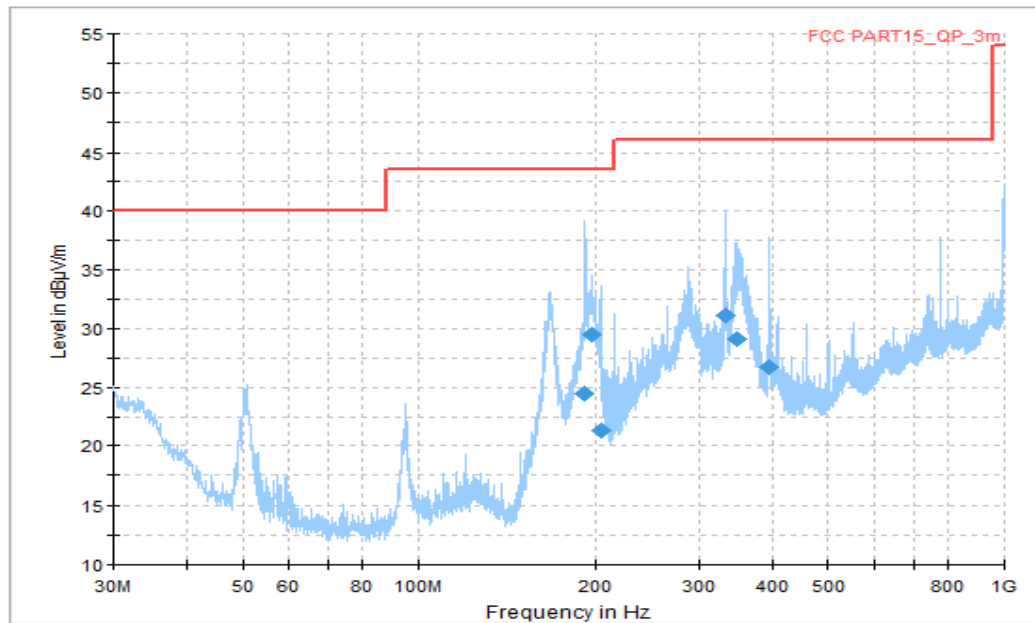


Figure A.35 Radiated Emission (Set.3, Data Transfer : PC to TF Card, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
191.929375	24.46	43.52	19.06	V	-18	42.46
197.203750	29.50	43.52	14.02	H	-18	47.5
204.115000	21.32	43.52	22.20	H	-17	38.32
333.185625	31.18	46.02	14.84	H	-12	43.18
348.341875	29.12	46.02	16.90	H	-11	40.12
394.416875	26.72	46.02	19.30	V	-9	35.72

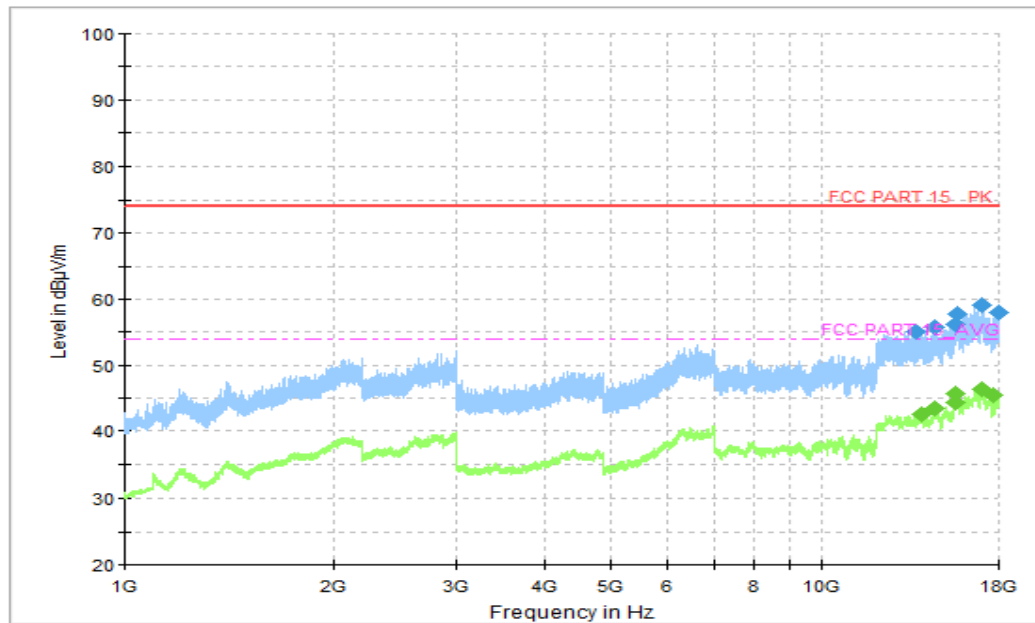


Figure A.36 Radiated Emission (Set.3, Data Transfer : PC to TF Card, 1GHz to 18GHz)
Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
13710.000000	55.00	74.00	19.00	V	17	38.00
14561.750000	55.67	74.00	18.33	H	18	37.67
15567.250000	56.14	74.00	17.86	H	20	36.14
15691.250000	57.75	74.00	16.25	H	20	37.75
17049.750000	59.19	74.00	14.81	V	22	37.19
18000.000000	57.95	74.00	16.05	H	23	34.95

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
13954.500000	42.56	54.00	11.44	V	17	25.56
14561.500000	43.46	54.00	10.54	V	18	25.46
15577.000000	44.38	54.00	9.62	V	20	24.38
15648.250000	45.63	54.00	8.37	V	20	25.63
17020.750000	46.32	54.00	7.68	V	23	23.32
17704.000000	45.49	54.00	8.51	V	23	22.49

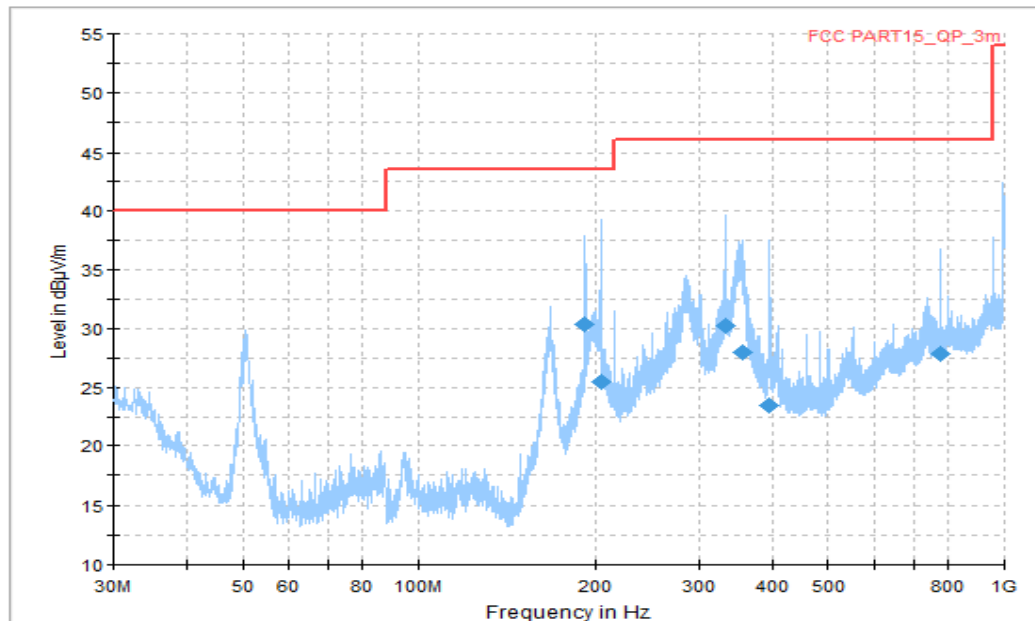


Figure A.37 Radiated Emission (Set.3, Data Transfer : TF Card to PC, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
191.990000	30.41	43.52	13.11	H	-18	48.41
203.993750	25.41	43.52	18.11	H	-17	42.41
331.851875	30.19	46.02	15.83	H	-12	42.19
354.828750	28.01	46.02	18.01	H	-10	38.01
394.053125	23.40	46.02	22.62	V	-9	32.4
779.991875	27.80	46.02	18.22	V	-2	29.80

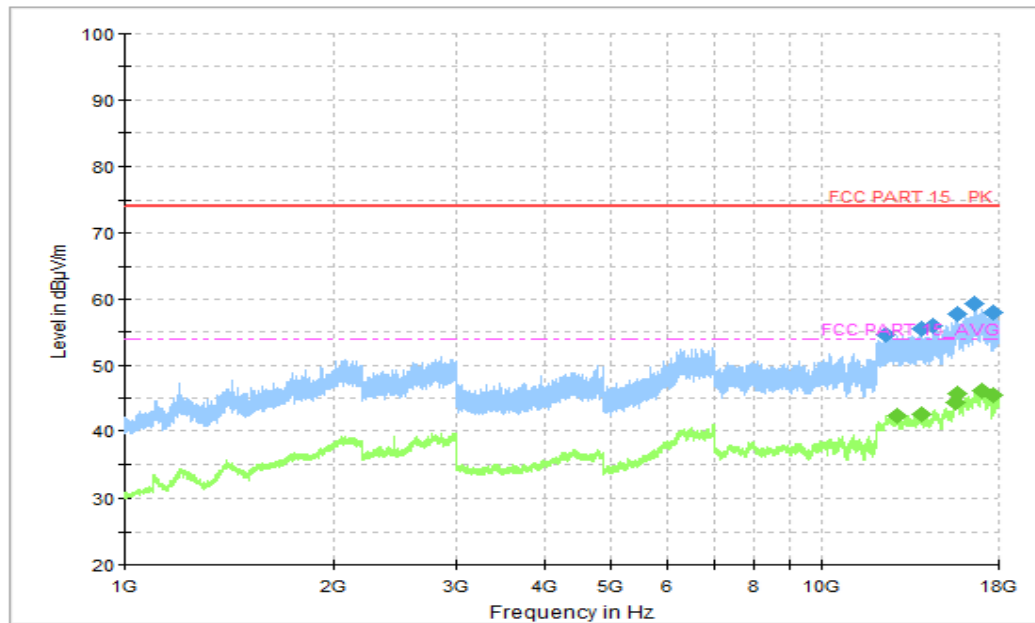


Figure A.38 Radiated Emission (Set.3, Data Transfer : TF Card to PC, 1GHz to 18GHz)
Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
12400.000000	54.74	74.00	19.26	V	17	37.74
13938.250000	55.46	74.00	18.54	V	17	38.46
14526.750000	55.91	74.00	18.09	V	18	37.91
15685.750000	57.80	74.00	16.20	H	20	37.80
16600.750000	59.23	74.00	14.77	V	22	37.23
17700.250000	57.94	74.00	16.06	H	23	34.94

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
12902.500000	42.38	54.00	11.62	V	17	25.38
13945.000000	42.52	54.00	11.48	V	17	25.52
15573.250000	44.45	54.00	9.55	H	20	24.45
15663.750000	45.75	54.00	8.25	H	20	25.75
17070.250000	46.21	54.00	7.79	V	22	24.21
17697.250000	45.43	54.00	8.57	H	23	22.43

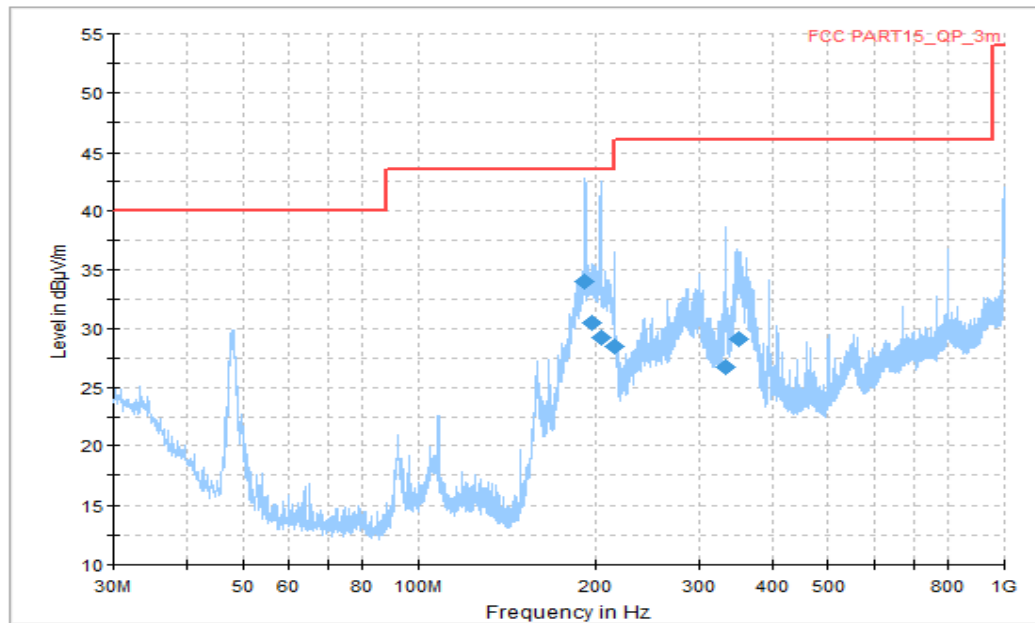


Figure A.39 Radiated Emission (Set.4, Data Transfer : PC to EUT, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
192.050625	33.96	43.52	9.56	H	-18	51.96
196.900625	30.54	43.52	12.98	H	-18	48.54
203.993750	29.22	43.52	14.30	H	-17	46.22
215.936875	28.44	43.52	15.08	H	-17	45.44
331.912500	26.67	46.02	19.35	H	-12	38.67
350.221250	29.14	46.02	16.88	H	-11	40.14

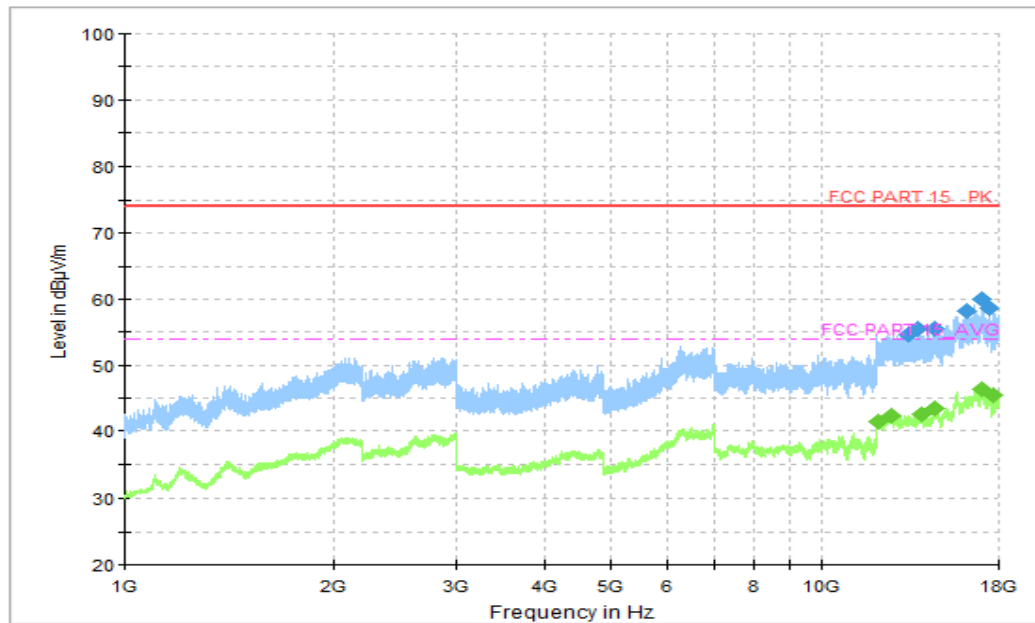


Figure A.40 Radiated Emission (Set.4, Data Transfer : PC to EUT, 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
13373.500000	54.73	74.00	19.27	V	17	37.73
13825.750000	55.56	74.00	18.44	V	17	38.56
14569.000000	55.46	74.00	18.54	V	18	37.46
16159.000000	58.23	74.00	15.77	V	21	37.23
17001.750000	59.99	74.00	14.01	V	23	36.99
17472.250000	58.59	74.00	15.41	V	22	36.59

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
12080.250000	41.35	54.00	12.65	V	16	25.35
12659.750000	42.28	54.00	11.72	V	17	25.28
13954.750000	42.56	54.00	11.44	V	17	25.56
14561.750000	43.41	54.00	10.59	V	18	25.41
17072.500000	46.35	54.00	7.65	V	22	24.35
17693.250000	45.47	54.00	8.53	H	23	22.47

A.2 Conducted Emission (§15.107(a))**Reference**

FCC: CFR Part 15.107(a)

A.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.2.2 EUT Operating :

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

Camera : 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.

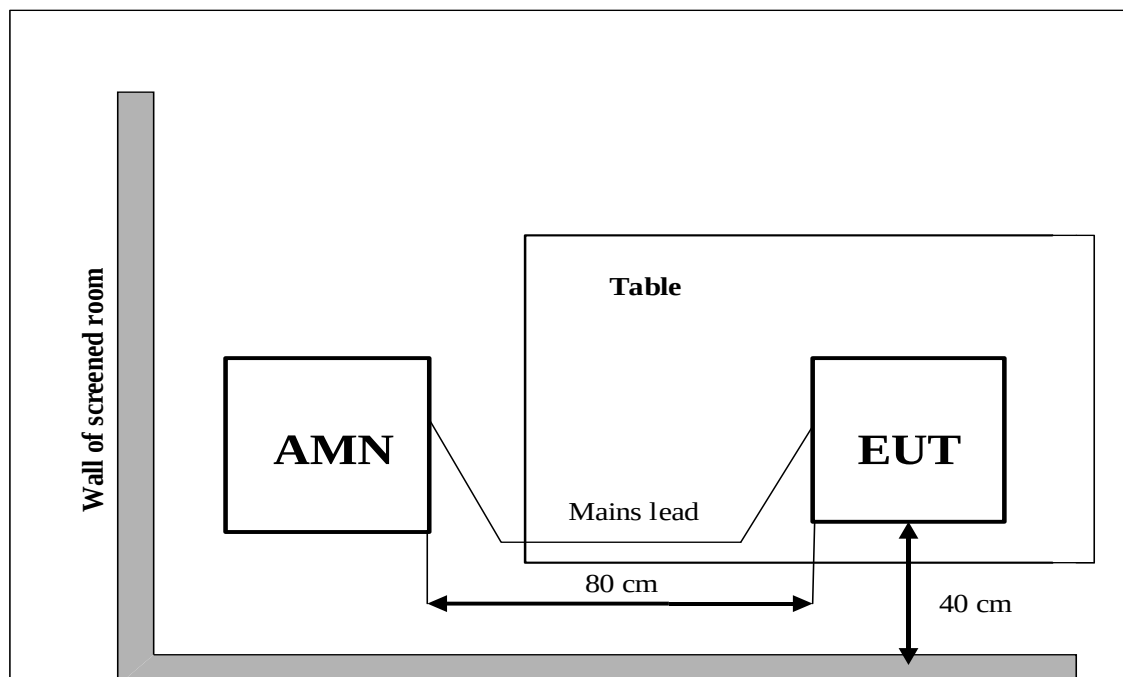
Video Player : The EUT is connected to a charger for charging and keeping on playing mp3.

Data Transfer : 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.

A.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.2.4 Test set-up:



A.2.5 Test Condition in charging mode

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

RBW	Sweep Time(s)
9kHz	1

A.2.6 Measurement Results

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

Where

Corr: PathLoss + Voltage Division Factor

PMea: Measurement result on receiver.

Camera

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 Figure B.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

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 Figure B.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.1	
0.15 to 0.5	66 to 56	56 to 46	See Figure B.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.				

FM receiver

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 Figure B.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

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 Figure B.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

AC Input Port/ Voltage: 120V/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 Figure B.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

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 Figure B.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

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 Figure B.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.1	
0.15 to 0.5	66 to 56	56 to 46	See Figure B.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 (dB μ V)	Average Limit (dB μ V)	Result (dB μ V)	Conclusion
			Set.2	
0.15 to 0.5	66 to 56	56 to 46	See Figure B.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

AC Input Port/ Voltage: 240V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dB μ V)	Average Limit (dB μ V)	Result (dB μ V)	Conclusion
			Set.3	
0.15 to 0.5	66 to 56	56 to 46	See Figure B.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

AC Input Port/ Voltage: 240V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dB μ V)	Average Limit (dB μ V)	Result (dB μ V)	Conclusion
			Set.4	
0.15 to 0.5	66 to 56	56 to 46	See Figure B.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

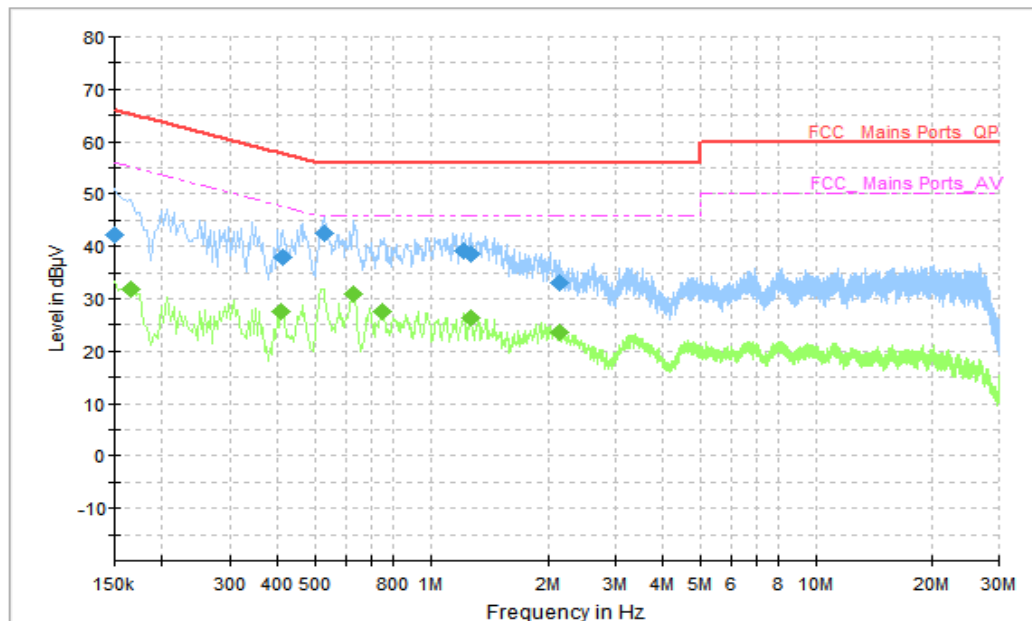


Figure B.1 Conducted Emission(Set.1, Camera)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.150000	42.24	66.00	23.76	N	10	32.24
0.410000	37.85	57.65	19.80	N	10	27.85
0.526000	42.40	56.00	13.60	N	10	32.40
1.218000	39.24	56.00	16.76	L1	10	29.24
1.274000	38.46	56.00	17.54	L1	10	28.46
2.154000	32.98	56.00	23.02	N	10	22.98

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.166000	31.68	55.16	23.48	N	10	21.68
0.406000	27.41	47.73	20.32	N	10	17.41
0.626000	30.81	46.00	15.19	N	10	20.81
0.750000	27.56	46.00	18.44	N	10	17.56
1.274000	26.20	46.00	19.80	L1	10	16.2
2.146000	23.62	46.00	22.38	N	10	13.62

AC Input Port/ Voltage : 120V/60Hz

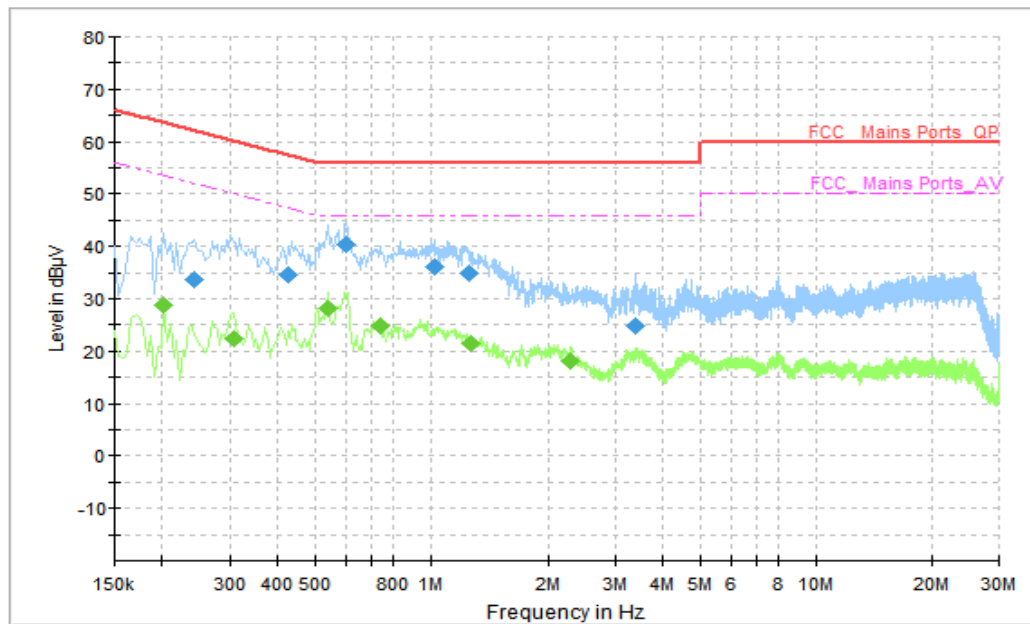


Figure B.2 Conducted Emission(Set.1, Video Player)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.242000	33.53	62.03	28.50	N	10	23.53
0.426000	34.46	57.33	22.87	N	10	24.46
0.602000	40.31	56.00	15.69	N	10	30.31
1.022000	36.03	56.00	19.97	L1	10	26.03
1.254000	34.93	56.00	21.07	L1	10	24.93
3.382000	24.75	56.00	31.25	N	10	14.75

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.202000	28.68	53.53	24.85	N	10	18.68
0.306000	22.51	50.08	27.57	N	10	12.51
0.538000	28.22	46.00	17.78	N	10	18.22
0.738000	24.89	46.00	21.11	N	10	14.89
1.270000	21.53	46.00	24.47	L1	10	11.53
2.294000	18.24	46.00	27.76	N	10	8.24

AC Input Port/ Voltage : 120V/60Hz

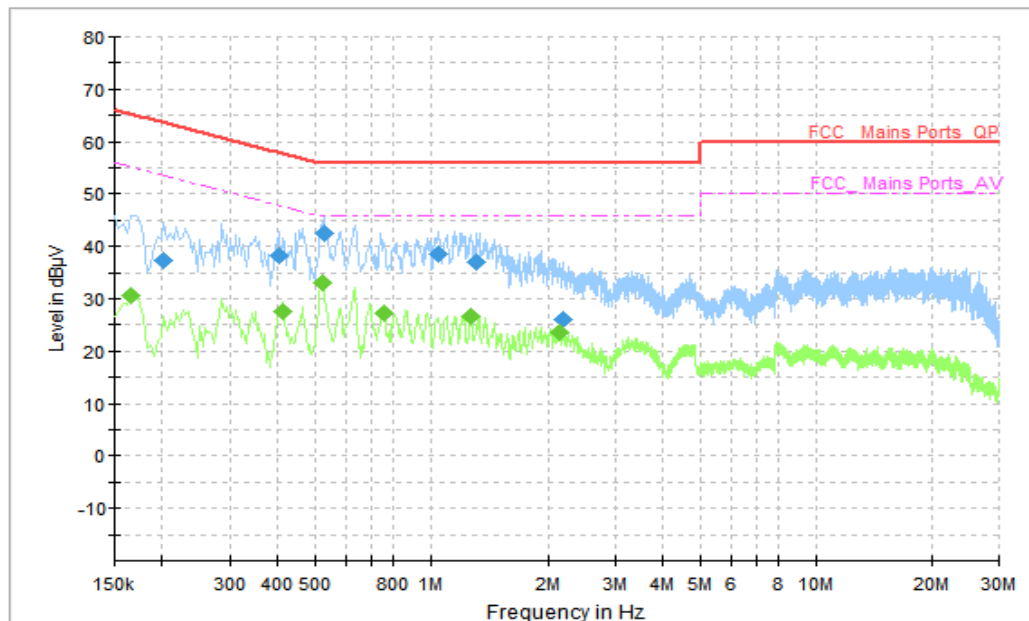


Figure B.3 Conducted Emission(Set.1, FM receiver)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.202000	37.34	63.53	26.19	N	10	27.34
0.402000	38.28	57.81	19.53	N	10	28.28
0.526000	42.57	56.00	13.43	N	10	32.57
1.042000	38.45	56.00	17.55	L1	10	28.45
1.318000	36.98	56.00	19.02	L1	10	26.98
2.182000	26.09	56.00	29.91	N	10	16.09

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.166000	30.65	55.16	24.51	N	10	20.65
0.410000	27.60	47.65	20.05	N	10	17.60
0.522000	33.06	46.00	12.94	N	10	23.06
0.754000	27.30	46.00	18.70	N	10	17.30
1.274000	26.74	46.00	19.26	L1	10	16.74
2.150000	23.60	46.00	22.40	N	10	13.60

AC Input Port/ Voltage : 120V/60Hz

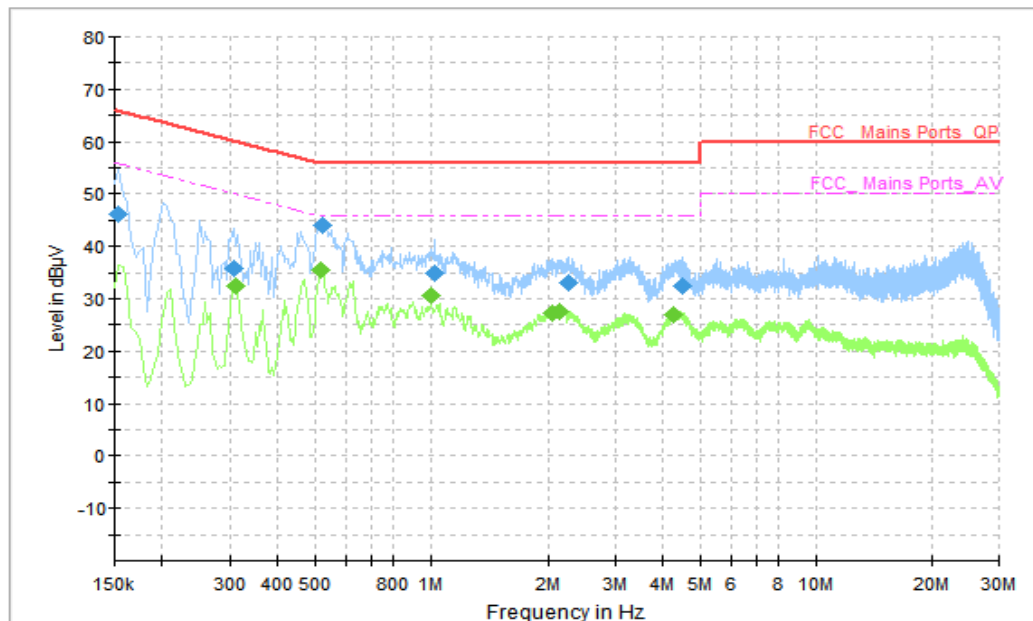


Figure B.4 Conducted Emission(Set.2, FM receiver)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.154000	46.18	65.78	19.60	N	10	36.18
0.306000	35.69	60.08	24.39	N	10	25.69
0.522000	44.01	56.00	11.99	L1	10	34.01
1.026000	34.88	56.00	21.12	L1	10	24.88
2.258000	33.15	56.00	22.85	L1	10	23.15
4.494000	32.51	56.00	23.49	L1	10	22.51

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.310000	32.38	49.97	17.59	L1	10	22.38
0.518000	35.55	46.00	10.45	L1	10	25.55
1.002000	30.69	46.00	15.31	L1	10	20.69
2.046000	27.37	46.00	18.63	L1	10	17.37
2.142000	27.64	46.00	18.36	L1	10	17.64
4.234000	26.87	46.00	19.13	L1	10	16.87

AC Input Port/ Voltage : 120V/60Hz

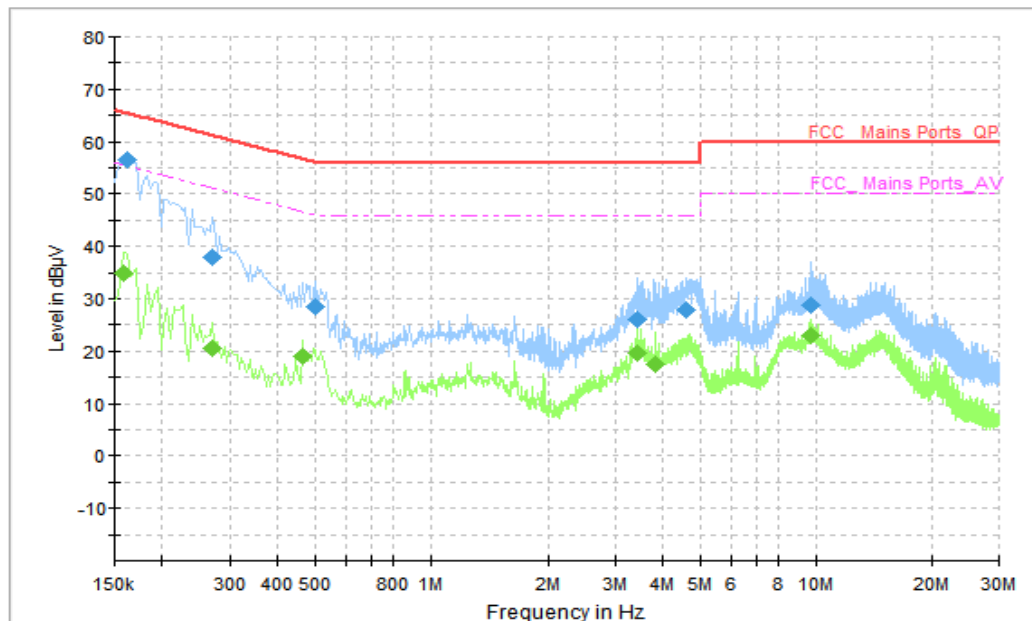


Figure B.5 Conducted Emission(Set.5, Data Transfer)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.162000	56.57	65.36	8.79	L1	10	46.57
0.270000	38.03	61.12	23.09	L1	10	28.03
0.502000	28.60	56.00	27.40	L1	10	18.60
3.438000	25.92	56.00	30.08	N	10	15.92
4.594000	27.95	56.00	28.05	L1	10	17.95
9.706000	28.69	60.00	31.31	N	10	18.69

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.158000	34.77	55.57	20.79	N	10	24.77
0.270000	20.67	51.12	30.45	L1	10	10.67
0.466000	19.16	46.59	27.42	L1	10	9.16
3.434000	19.77	46.00	26.23	N	10	9.77
3.814000	17.42	46.00	28.58	N	10	7.42
9.730000	23.13	50.00	26.87	N	10	13.13

AC Input Port/ Voltage : 120V/60Hz

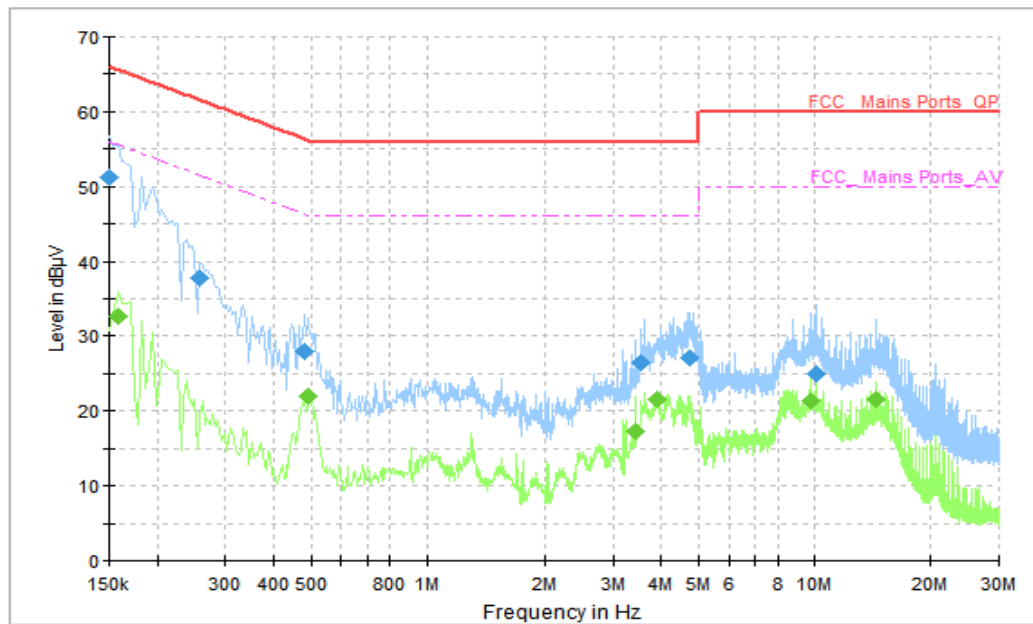


Figure B.6 Conducted Emission(Set.6, Data Transfer)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.150000	51.17	66.00	14.83	L1	10	41.17
0.258000	37.76	61.50	23.74	L1	10	27.76
0.482000	27.96	56.31	28.34	L1	10	17.96
3.558000	26.46	56.00	29.54	L1	10	16.46
4.754000	27.08	56.00	28.92	L1	10	17.08
10.058000	24.90	60.00	35.10	L1	10	14.90

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.158000	32.55	55.57	23.02	L1	10	22.55
0.494000	21.89	46.10	24.21	L1	10	11.89
3.438000	17.18	46.00	28.82	L1	10	7.18
3.886000	21.47	46.00	24.53	N	10	11.47
9.734000	21.32	50.00	28.68	N	10	11.32
14.358000	21.50	50.00	28.50	L1	10	11.50

AC Input Port/ Voltage : 240V/60Hz

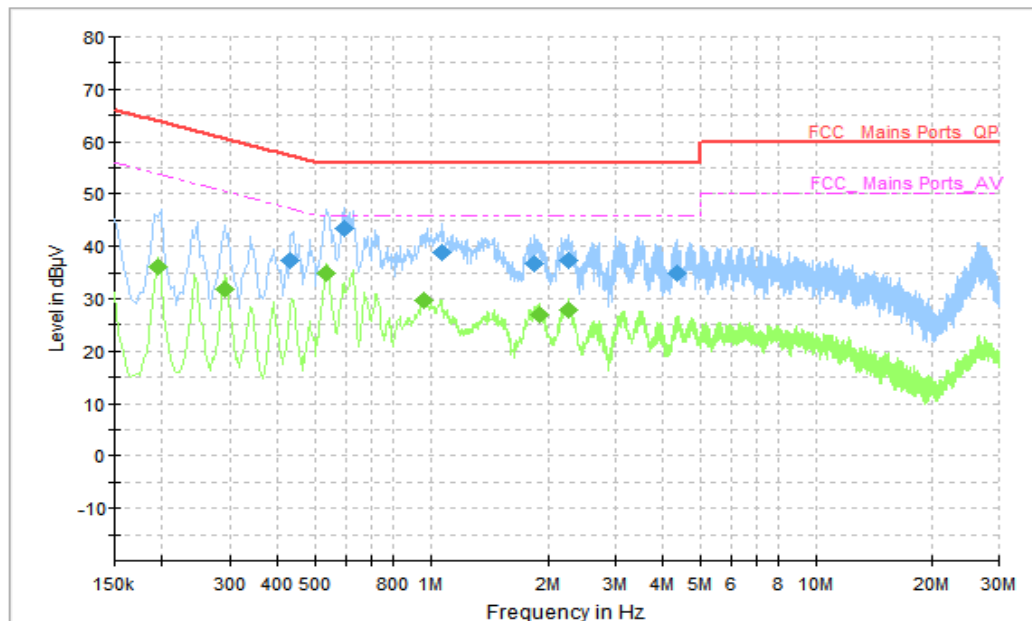


Figure B.7 Conducted Emission(Set.1, Camera)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.430000	37.20	57.25	20.05	N	10	27.20
0.594000	43.54	56.00	12.46	N	10	33.54
1.070000	38.91	56.00	17.09	N	10	28.91
1.842000	36.74	56.00	19.26	N	10	26.74
2.254000	37.28	56.00	18.72	N	10	27.28
4.350000	34.73	56.00	21.27	N	10	24.73

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.194000	36.17	53.86	17.70	N	10	26.17
0.290000	31.83	50.52	18.69	N	10	21.83
0.534000	34.94	46.00	11.06	N	10	24.94
0.962000	29.59	46.00	16.41	N	10	19.59
1.910000	26.95	46.00	19.05	N	10	16.95
2.254000	27.79	46.00	18.21	N	10	17.79

AC Input Port/ Voltage : 240V/60Hz

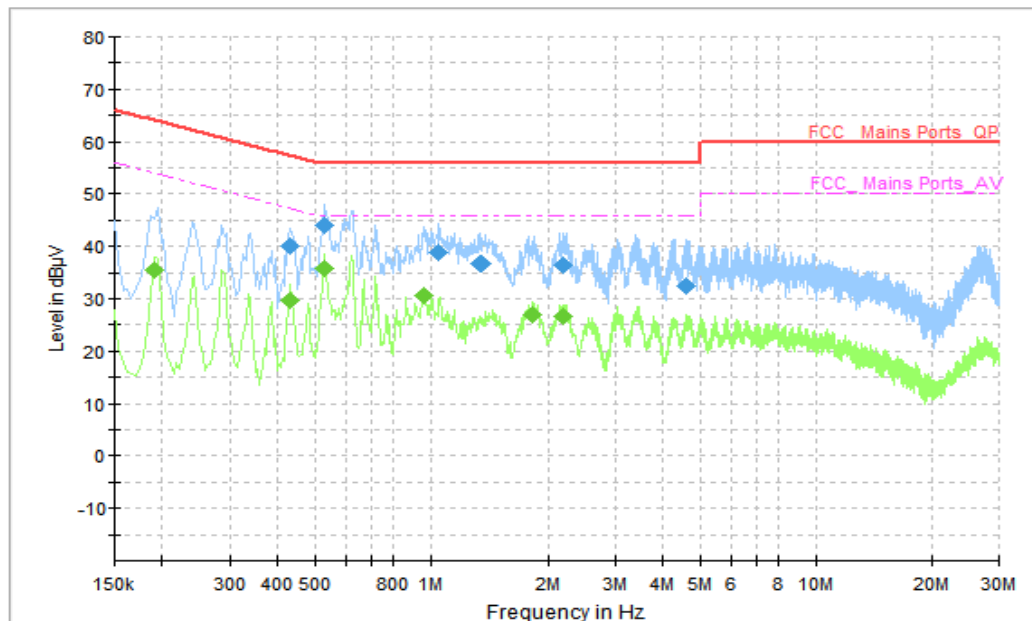


Figure B.8 Conducted Emission(Set.1, Video Player)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.430000	40.19	57.25	17.07	N	10	30.19
0.526000	43.94	56.00	12.06	N	10	33.94
1.050000	38.87	56.00	17.13	N	10	28.87
1.350000	36.77	56.00	19.23	N	10	26.77
2.198000	36.43	56.00	19.57	N	10	26.43
4.586000	32.37	56.00	23.63	N	10	22.37

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.190000	35.52	54.04	18.52	N	10	25.52
0.430000	29.71	47.25	17.55	N	10	19.71
0.526000	35.90	46.00	10.10	N	10	25.90
0.958000	30.46	46.00	15.54	N	10	20.46
1.814000	26.99	46.00	19.01	N	10	16.99
2.182000	26.60	46.00	19.40	N	10	16.60

AC Input Port/ Voltage : 240V/60Hz

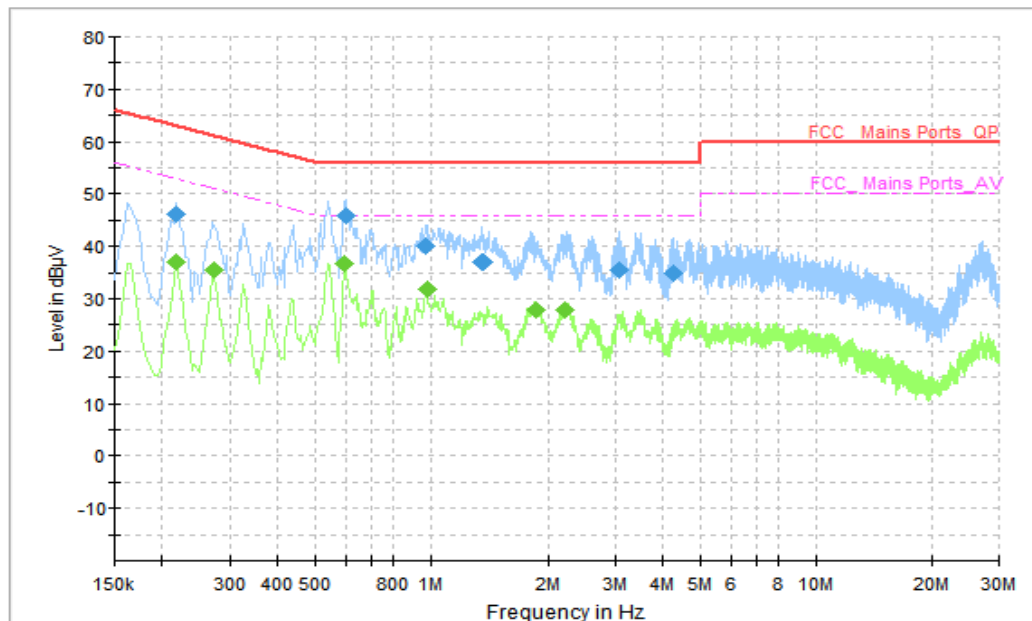


Figure B.9 Conducted Emission(Set.1, FM receiver)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.218000	46.25	62.90	16.64	N	10	36.25
0.602000	45.77	56.00	10.23	N	10	35.77
0.974000	39.97	56.00	16.03	N	10	29.97
1.362000	37.13	56.00	18.87	L1	10	27.13
3.082000	35.46	56.00	20.54	N	10	25.46
4.254000	34.88	56.00	21.12	N	10	24.88

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.218000	37.14	52.90	15.75	N	10	27.14
0.274000	35.41	51.00	15.58	N	10	25.41
0.598000	36.67	46.00	9.33	N	10	26.67
0.978000	31.75	46.00	14.25	N	10	21.75
1.866000	27.93	46.00	18.07	N	10	17.93
2.210000	27.90	46.00	18.10	N	10	17.90

AC Input Port/ Voltage : 240V/60Hz

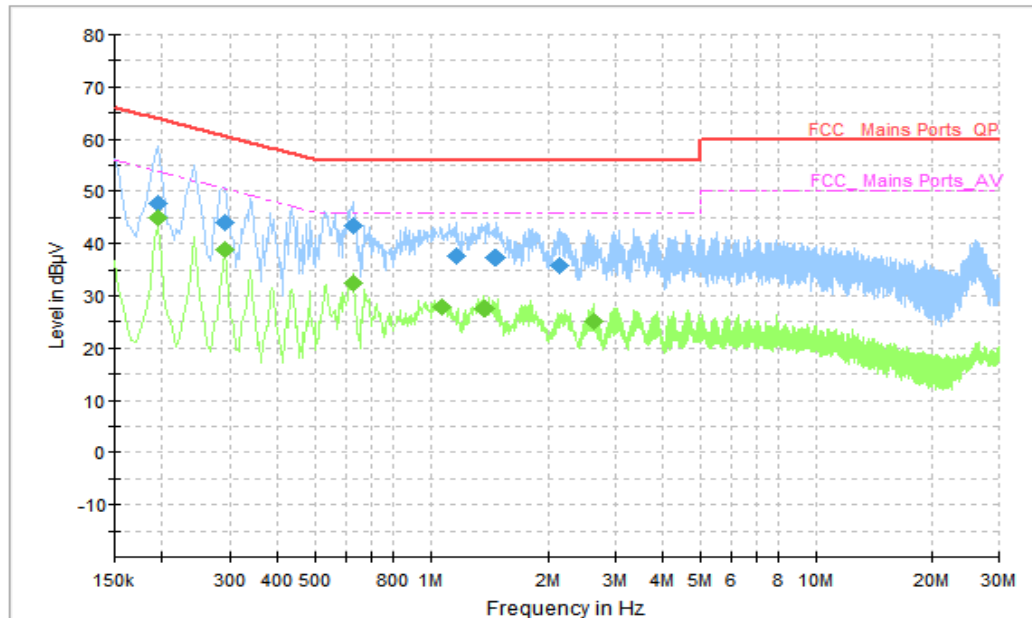


Figure B.10 Conducted Emission(Set.2, FM receiver)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.194000	47.71	63.86	16.15	N	10	37.71
0.290000	43.89	60.52	16.64	L1	10	33.89
0.626000	43.51	56.00	12.49	L1	10	33.51
1.166000	37.62	56.00	18.38	N	10	27.62
1.466000	37.38	56.00	18.62	N	10	27.38
2.154000	35.86	56.00	20.14	N	10	25.86

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.194000	44.87	53.86	9.00	N	10	34.87
0.290000	38.73	50.52	11.80	N	10	28.73
0.626000	32.39	46.00	13.61	L1	10	22.39
1.074000	27.74	46.00	18.26	N	10	17.74
1.374000	27.43	46.00	18.57	N	10	17.43
2.622000	24.97	46.00	21.03	N	10	14.97

AC Input Port/ Voltage : 240V/60Hz

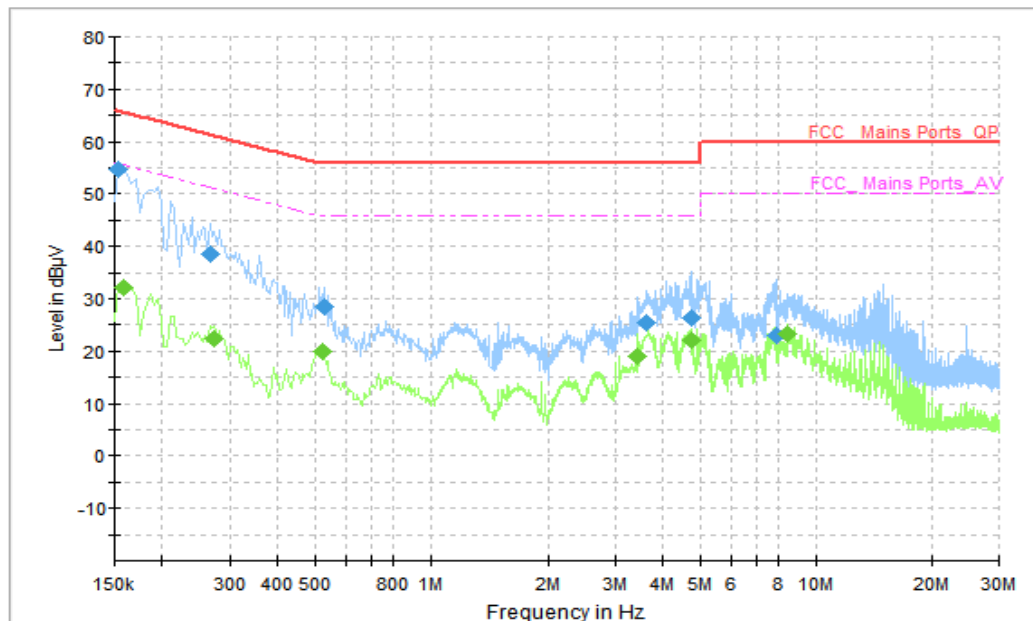


Figure B.11 Conducted Emission(Set.3, Data Transfer)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.154000	54.77	65.78	11.01	N	10	44.77
0.266000	38.50	61.24	22.75	L1	10	28.50
0.530000	28.52	56.00	27.48	L1	10	18.52
3.602000	25.55	56.00	30.45	L1	10	15.55
4.722000	26.29	56.00	29.71	N	10	16.29
7.894000	23.09	60.00	36.91	N	10	13.09

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.158000	32.10	55.57	23.47	L1	10	22.10
0.274000	22.49	51.00	28.50	L1	10	12.49
0.522000	20.00	46.00	26.00	L1	10	10.00
3.438000	19.08	46.00	26.92	N	10	9.08
4.714000	22.01	46.00	23.99	N	10	12.01
8.390000	23.30	50.00	26.70	N	10	13.30

AC Input Port/ Voltage : 240V/60Hz

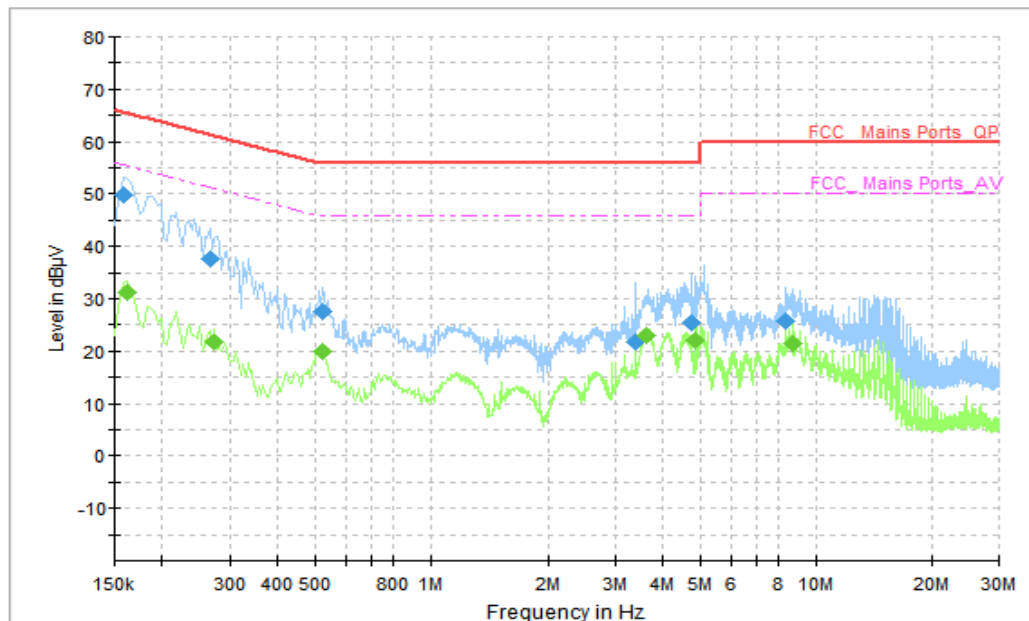


Figure B.12 Conducted Emission(Set.4, Data Transfer)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.158000	49.90	65.57	15.67	L1	10	39.90
0.266000	37.55	61.24	23.69	L1	10	27.55
0.522000	27.47	56.00	28.53	L1	10	17.47
3.378000	21.74	56.00	34.26	N	10	11.74
4.734000	25.47	56.00	30.53	L1	10	15.47
8.326000	25.69	60.00	34.31	N	10	15.69

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.162000	31.34	55.36	24.03	L1	10	21.34
0.274000	21.91	51.00	29.09	L1	10	11.91
0.522000	19.98	46.00	26.02	L1	10	9.98
3.598000	23.06	46.00	22.94	N	10	13.06
4.846000	22.10	46.00	23.90	L1	10	12.1
8.710000	21.43	50.00	28.57	N	10	11.43

END OF REPORT