TEST REPORT

No.I21N04177-EMC

for

TCL Communication Ltd.

Tablet PC

Model Name：9160G

With

Hardware Version: 05

Software Version: DT1A

FCC ID: 2ACCJB174

Issued Date: 2022-03-07

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
I21N04177-EMC	Rev.0	1st edition	2022-03-07

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	Tablet PC
Model Name	9160G
Applicant's name	TCL Communication Ltd.
Manufacturer's Name	TCL Communication Ltd.

1.2. Test Standards

FCC Part 15, Subpart B (10-1-2020 Edition); ANSI C63.4-2014.

1.3. Test Result

Total test 2 items, pass 2 items. Please refer to "6.2 Test Results".

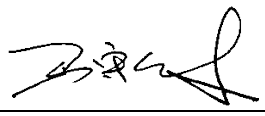
1.4. Testing Location

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

1.5. Project data

Testing Start Date: 2022-02-18 Testing End Date: 2022-03-03

1.6. Signature

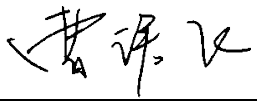


Ma Shoujian

(Prepared this test report)

Zhang Yunzhuan

(Reviewed this test report)



Cao Junfei

(Approved this test report)

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2. CLIENT INFORMATION

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	Peter Yang
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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	Peter Yang
Email	peter.yang@tcl.com
Tel.	+86 755 3664 5759
Fax	0086-755-36612000-81722

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3. EQUIPMENT UNDER TEST (EUT) AND ANCILLARY EQUIPMENT (AE)

3.1. About EUT

Description	Tablet PC
Model Name	9160G
FCC ID	2ACCJB174
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
UT01aa	358946220000485	05	DT1A	2022-01-28
UT02aa	358946220000477	05	DT1A	2022-01-28

*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	USB Cable
AE4	Headset

AE1-1

Model	TLp053C1
Manufacturer	BYD
Capacity	5500mAh
Nominal Voltage	3.85V

AE2-1

Model	UC13US
S/N	CBA0059AGTC1
Manufacturer	BYD

AE3-1

Model	CDA0000123C1
Manufacturer	JUWEI

AE3-2

Model	CDA0000123C2
Manufacturer	shenghua

AE4

Model	/
Manufacturer	/

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* AE ID: is used to identify the test sample in the lab internally.
AE: ancillary equipment
AE4：Just for testing.

3.4. EUT Set-ups

EUT set-up No.	Combination of EUT and AE	Remarks
Set.1	EUT+AE1-1+AE2-1+AE3-1	
Set.2	EUT+AE1-1+AE2-1+AE3-2	
Set.3	EUT+AE1-1+AE2-1+AE3-1+AE4	
Set.4	EUT+AE1-1+AE3-1+PC	
Set.5	EUT+AE1-1+AE3-2+PC	

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3.5. General Description

The Equipment Under Test (EUT) is a model of Tablet PC.
It supports GSM 850/900/1800/1900MHz,WCDMA Bands 1/2/4/5/8 and
LTE Bands 1/2/3/4/5/7/8/12/13/17/20/28/38/40/41/66.
It has Video Player, Camera, FM Receiver, USB memory, Bluetooth, Wi-Fi and GNSS functions.
It consists of normal options: Battery, Charger USB Cable and headset.
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.

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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	(10-1-2020 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

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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

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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	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.

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7. MEASUREMENT UNCERTAINTY

Test item	Frequency ranges	Measurement uncertainty
Radiated Emission	30MHz-1GHz	4.86dB(*k*=2)
	1GHz-18GHz	4.82dB(*k*=2)
	18GHz-40GHz	2.90dB(*k*=2)
Conducted Emission	150kHz-30MHz	2.62dB(*k*=2)

8. MEASURING APPARATUS UTILIZED

No.	**Name**	**Model**	**Serial Number**	**Manufacturer**	**Calibration Due date**	**Calibration Period**
1.	Test Receiver	ESR7	101676	R&S	2022.11.24	1 year
2.	Test Receiver	ESCI	100702	R&S	2023.01.12	1 year
3.	Spectrum Analyzer	FSV40	101192	R&S	2023.01.12	1 year
4.	BiLog Antenna	3142E	0224831	ETS-Lindgren	2024.05.27	3 years
5.	Horn Antenna	3117	00066577	ETS-Lindgren	2022.04.02	3 years
6.	LISN	ENV216	102067	R&S	2022.07.15	1 year
7.	Chamber	FACT3-2.0	1285	ETS-Lindgren	2023.05.29	2 years
8.	Software	EMC32	V10.50.40	R&S	/	/
9.	Universal Radio Communication Tester	CMU200	114545	R&S	2023.01.12	1 year
10.	Horn Antenna	QSH-SL-18-26-S-20	17013	Q-par	2023.01.06	3 years
11.	Horn Antenna	QSH-SL-8-26-40-K-20	17014	Q-par	2023.01.06	3 years

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9. TEST ACCESSORY UTILIZED

No.	Name	Model	Serial Number	Manufacturer	Calibration Due date	Calibration Period
1.	PC	ThinkPad T480	PF-13LW0C	Lenovo	/	/
2.	Printer	P1008	VNF6C12491	HP	/	/
3.	Mouse	MOEUUOA	44NY517	Lenovo	/	/

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ANNEX A: MEASUREMENT RESULTS

A.1 Radiated Emission (§15.109(a))

Reference

FCC: Part 15.109(a)

A.1.1 Method of measurement

The field strength of radiated emissions from the unintentional radiator at a distance of 3 meters or 1 meter 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. Below 18GHz the measurement antenna was placed at a distance of 3 meters from the EUT. Above 18GHz the measurement antenna was placed at a distance of 1 meters from the EUT. (According to Part 15.31(f)(1), 1m limit is calculated by extrapolation factor of 20 dB/decade) 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:

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.

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

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 EUT 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 System Simulator (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 System Simulator (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 System Simulator (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 Band5, LTE Band 5,LTE Band 12, LTE Band 13 and LTE Band 17

The EUT was tested while operating in licensed band receiver 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.

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A.1.3 Measurement Limit

Limit from 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

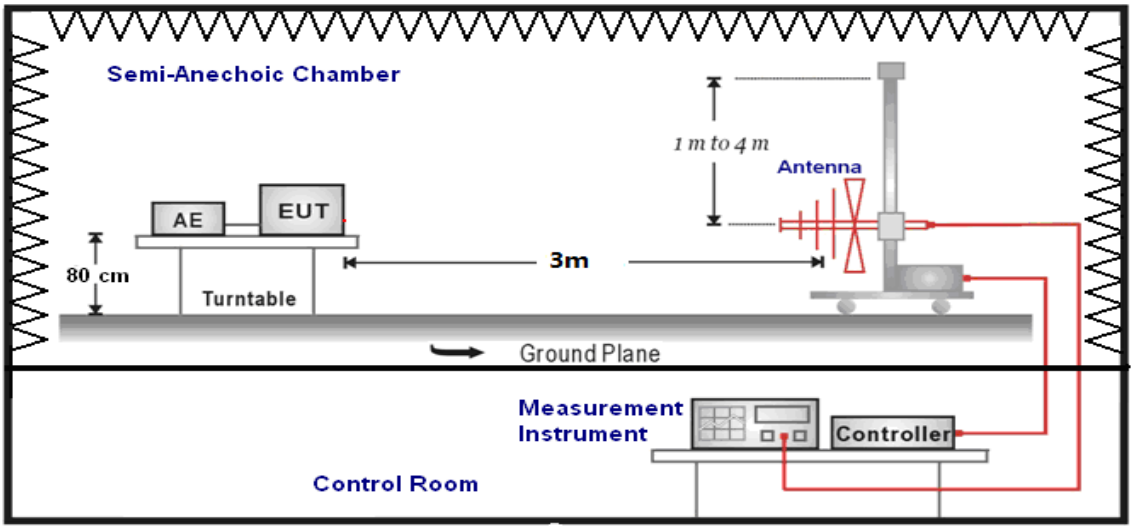
*Note: The original limit is defined at 10m test distance. This limit is calculated according to CISPR requirements.

A.1.4 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



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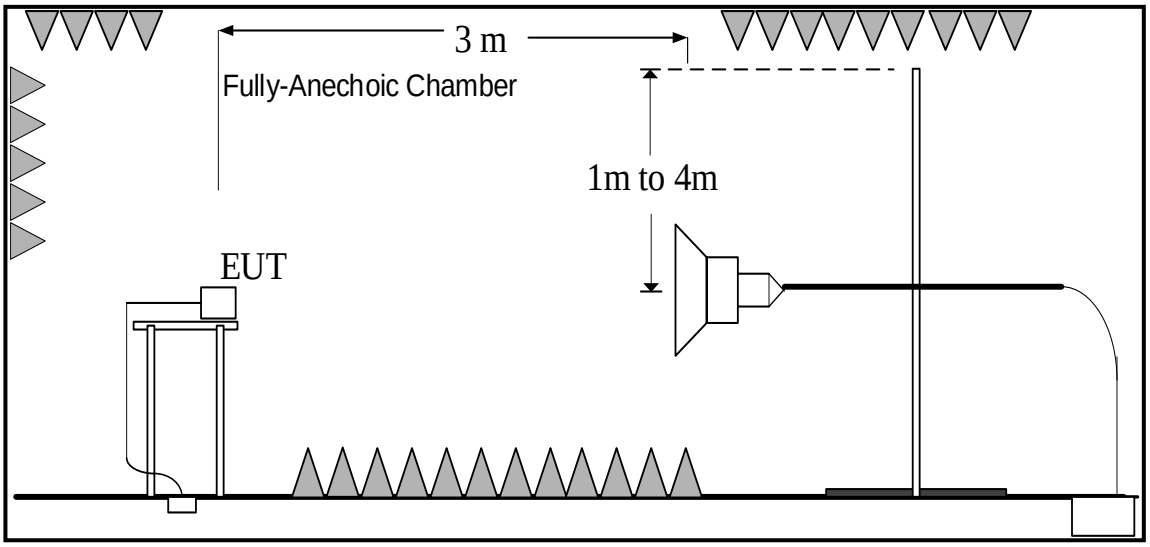
1GHz-40GHz



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:

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

Camera

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m) UT02aa/Set.1	Conclusion
30-88	40.00	See Figure A.1.1.	P
88-216	43.52		
216-960	46.02		
960-1000	54.00		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m) UT02aa/Set.1	Conclusion
1000 to 3000	54.00	74.00	See Figure A.1.2.	P
3000 to 18000	54.00	74.00	See Figure A.1.3.	
18000 to 26500	54.00	74.00	See Figure A.1.4.	
26500 to 40000	54.00	74.00	See Figure A.1.5.	

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Video Player

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m) UT02aa/Set.1	Conclusion
30-88	40.00	See Figure A.1.6.	P
88-216	43.52		
216-960	46.02		
960-1000	54.00		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m) UT02aa/Set.1	Conclusion
1000 to 3000	54.00	74.00	See Figure A.1.7.	P
3000 to 18000	54.00	74.00	See Figure A.1.8.	
18000 to 26500	54.00	74.00	See Figure A.1.9.	
26500 to 40000	54.00	74.00	See Figure A.1.10.	

FM receiver

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m) UT02aa/Set.3	Conclusion
30-88	40.00	See Figure A.1.11.	P
88-216	43.52		
216-960	46.02		
960-1000	54.00		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m) UT02aa/Set.3	Conclusion
1000 to 3000	54.00	74.00	See Figure A.1.12.	P
3000 to 18000	54.00	74.00	See Figure A.1.13.	
18000 to 26500	54.00	74.00	See Figure A.1.14.	
26500 to 40000	54.00	74.00	See Figure A.1.15.	

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GSM receiver 850MHz

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m) UT02aa/Set.1	Conclusion
30-88	40.00	See Figure A.1.16.	P
88-216	43.52		
216-960	46.02		
960-1000	54.00		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m) UT02aa/Set.1	Conclusion
1000 to 3000	54.00	74.00	See Figure A.1.17.	P
3000 to 18000	54.00	74.00	See Figure A.1.18.	
18000 to 26500	54.00	74.00	See Figure A.1.19.	
26500 to 40000	54.00	74.00	See Figure A.1.20.	

WCDMA receiver Band 5

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m) UT02aa/Set.1	Conclusion
30-88	40.00	See Figure A.1.21.	P
88-216	43.52		
216-960	46.02		
960-1000	54.00		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m) UT02aa/Set.1	Conclusion
1000 to 3000	54.00	74.00	See Figure A.1.22.	P
3000 to 18000	54.00	74.00	See Figure A.1.23.	
18000 to 26500	54.00	74.00	See Figure A.1.24.	
26500 to 40000	54.00	74.00	See Figure A.1.25.	

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LTE receiver Band 5

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m) UT02aa/Set.1	Conclusion
30-88	40.00	See Figure A.1.26.	P
88-216	43.52		
216-960	46.02		
960-1000	54.00		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m) UT02aa/Set.1	Conclusion
1000 to 3000	54.00	74.00	See Figure A.1.27.	P
3000 to 18000	54.00	74.00	See Figure A.1.28.	
18000 to 26500	54.00	74.00	See Figure A.1.29.	
26500 to 40000	54.00	74.00	See Figure A.1.30.	

LTE receiver Band 12

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m) UT02aa/Set.1	Conclusion
30-88	40.00	See Figure A.1.31.	P
88-216	43.52		
216-960	46.02		
960-1000	54.00		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m) UT02aa/Set.1	Conclusion
1000 to 3000	54.00	74.00	See Figure A.1.32.	P
3000 to 18000	54.00	74.00	See Figure A.1.33.	
18000 to 26500	54.00	74.00	See Figure A.1.34.	
26500 to 40000	54.00	74.00	See Figure A.1.35.	

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LTE receiver Band 13

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m) UT02aa/Set.1	Conclusion
30-88	40.00	See Figure A.1.36.	P
88-216	43.52		
216-960	46.02		
960-1000	54.00		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m) UT02aa/Set.1	Conclusion
1000 to 3000	54.00	74.00	See Figure A.1.37.	P
3000 to 18000	54.00	74.00	See Figure A.1.38.	
18000 to 26500	54.00	74.00	See Figure A.1.39.	
26500 to 40000	54.00	74.00	See Figure A.1.40.	

LTE receiver Band 17

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m) UT02aa/Set.1	Conclusion
30-88	40.00	See Figure A.1.41.	P
88-216	43.52		
216-960	46.02		
960-1000	54.00		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m) UT02aa/Set.1	Conclusion
1000 to 3000	54.00	74.00	See Figure A.1.42.	P
3000 to 18000	54.00	74.00	See Figure A.1.43.	
18000 to 26500	54.00	74.00	See Figure A.1.44.	
26500 to 40000	54.00	74.00	See Figure A.1.45.	

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Data Transfer

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m)	Conclusion
		UT02aa/Set.4	
30-88	40.00	See Figure A.1.46.	P
88-216	43.52		
216-960	46.02		
960-1000	54.00		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m)	Conclusion
			UT02aa/Set.4	
1000 to 3000	54.00	74.00	See Figure A.1.47.	P
3000 to 18000	54.00	74.00	See Figure A.1.48.	
18000 to 26500	54.00	74.00	See Figure A.1.49.	
26500 to 40000	54.00	74.00	See Figure A.1.50.	

Data Transfer

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m)	Conclusion
		UT02aa/Set.5	
30-88	40.00	See Figure A.1.51.	P
88-216	43.52		
216-960	46.02		
960-1000	54.00		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m)	Conclusion
			UT02aa/Set.5	
1000 to 3000	54.00	74.00	See Figure A.1.52.	P
3000 to 18000	54.00	74.00	See Figure A.1.53.	
18000 to 26500	54.00	74.00	See Figure A.1.54.	
26500 to 40000	54.00	74.00	See Figure A.1.55.	

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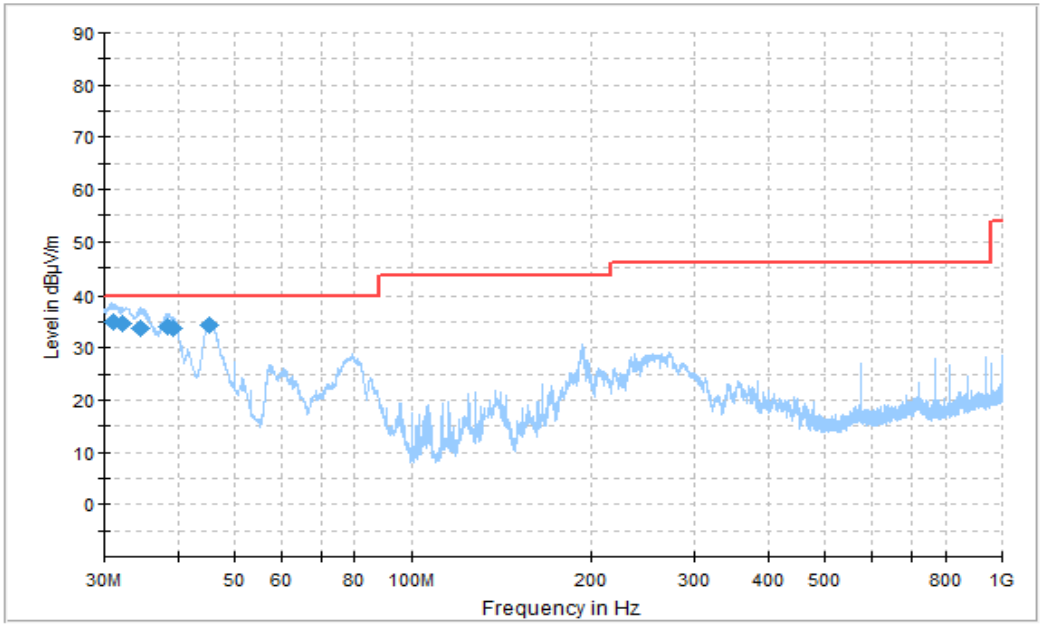

Figure A.1.1. Radiated Emission (Camera , 30MHz to 1GHz)

Final_Results

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	PMea (dBµV)
30.974444	34.98	40.00	5.02	V	-25.4	60.38
32.229444	34.71	40.00	5.29	V	-25.9	60.61
34.532778	33.71	40.00	6.29	V	-26.7	60.41
38.318889	34.12	40.00	5.88	V	-28.7	62.82
39.304444	33.67	40.00	6.33	V	-29.4	63.07
45.340000	34.36	40.00	5.64	V	-32.8	67.16

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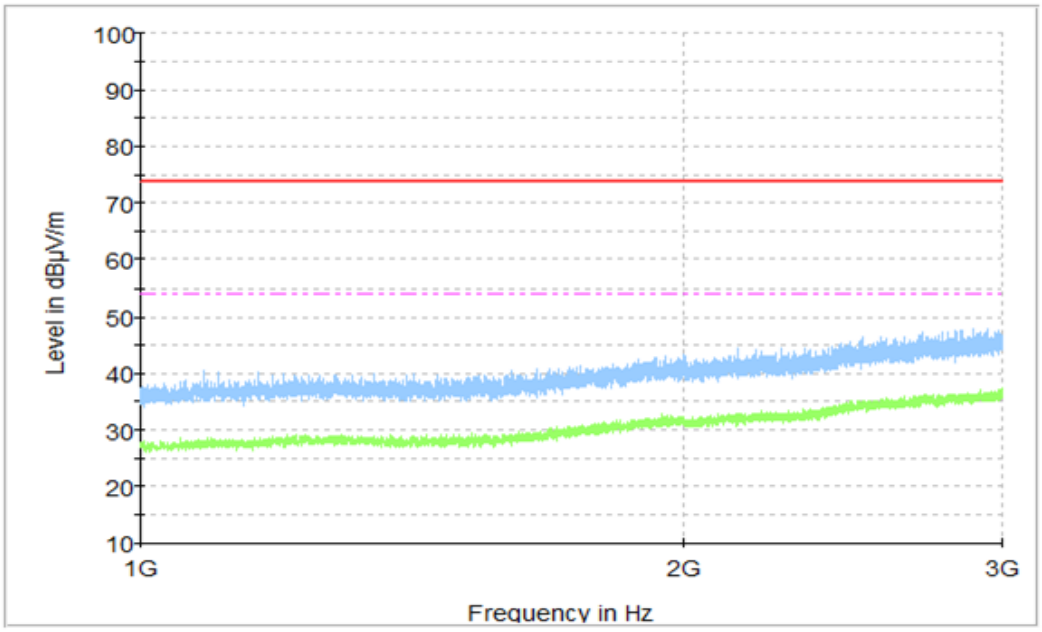

Figure A.1.2. Radiated Emission (Camera , 1GHz to 3GHz)

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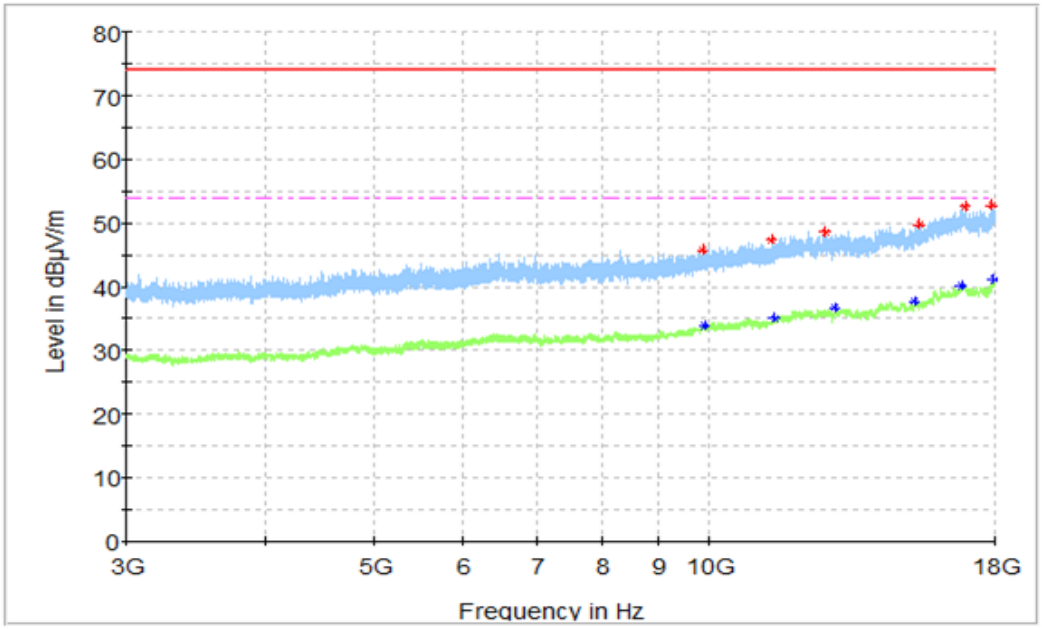

Figure A.1.3. Radiated Emission (Camera , 3GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	PMea (dBµV)
9868.500000	45.75	74.00	28.25	V	5.2	40.55
11355.500000	47.33	74.00	26.67	H	6.4	40.93
12674.000000	48.66	74.00	25.34	H	9.0	39.66
15426.500000	49.78	74.00	24.22	H	12.6	37.18
16961.000000	52.50	74.00	21.50	V	16.0	36.5
17910.500000	52.71	74.00	21.29	V	17.4	35.31

Final_Results_AVG

Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	PMea (dBµV)
9885.000000	33.95	54.00	20.05	V	5.3	28.65
11418.500000	35.11	54.00	18.89	V	6.6	28.51
12940.500000	36.76	54.00	17.24	V	9.4	27.36
15284.500000	37.73	54.00	16.27	V	12.3	25.43
16816.500000	40.20	54.00	13.80	H	16.0	24.2
17949.000000	41.12	54.00	12.88	V	17.2	23.92

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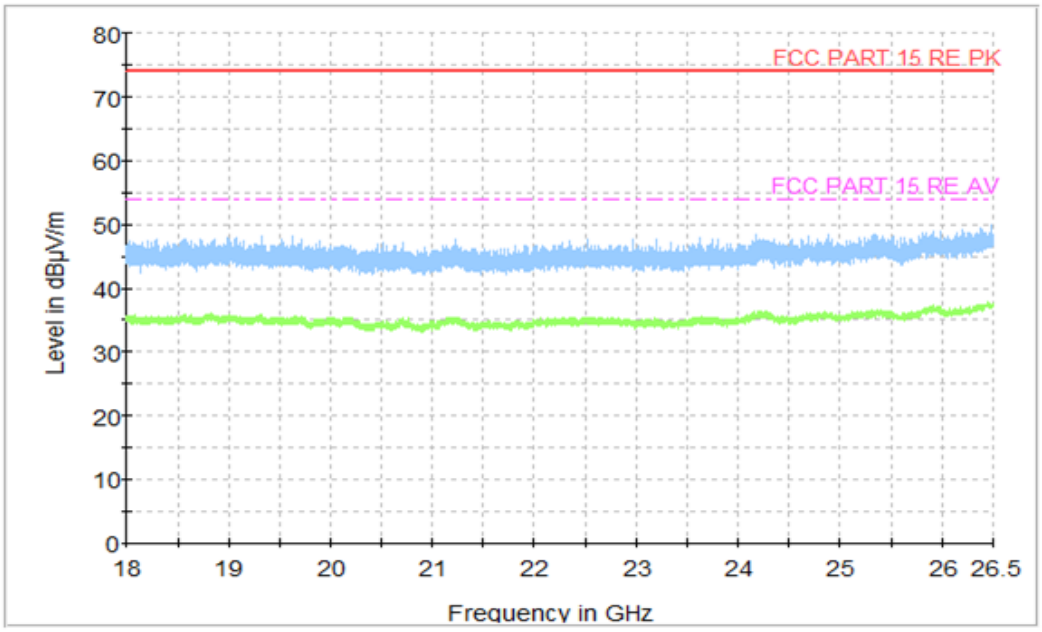

Figure A.1.4. Radiated Emission (Camera , 18GHz to 26.5GHz)

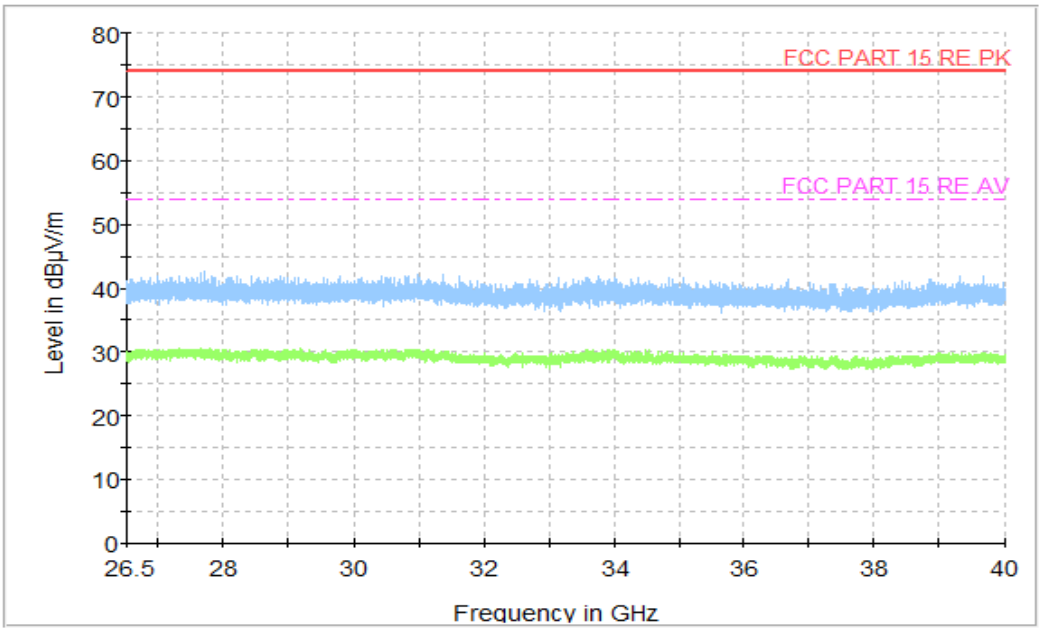

Figure A.1.5. Radiated Emission (Camera , 26.5GHz to 40GHz)

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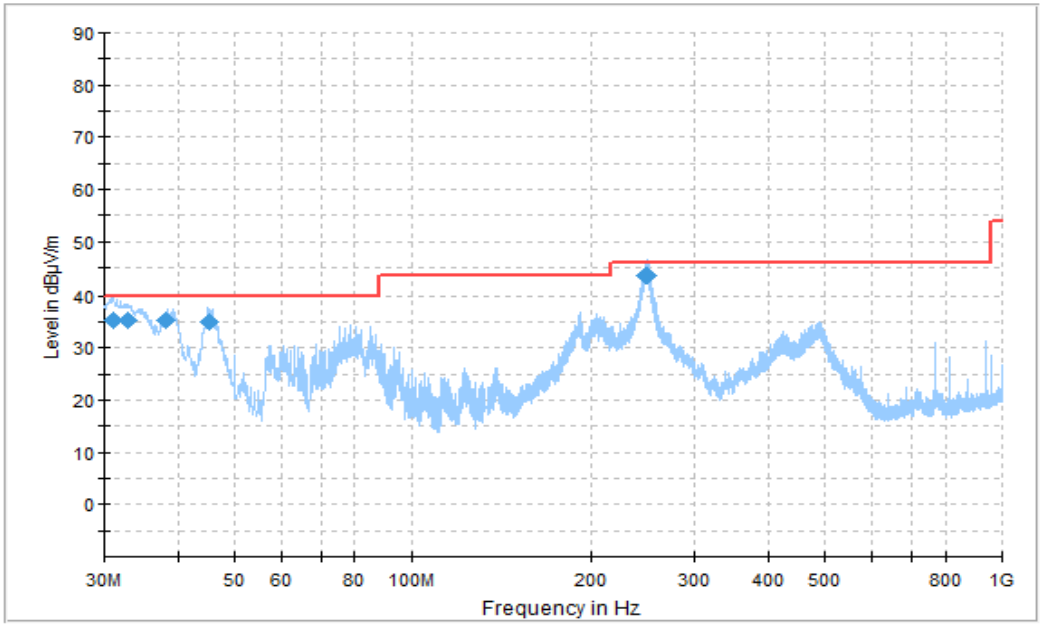

Figure A.1.6. Radiated Emission (Video Player , 30MHz to 1GHz)

Final_Results

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	PMea (dBµV)
31.151667	35.39	40.00	4.61	V	-25.6	60.99
32.796111	35.31	40.00	4.69	V	-25.9	61.21
38.240556	35.27	40.00	4.73	V	-28.7	63.97
45.135000	34.97	40.00	5.03	V	-32.7	67.67
248.511667	43.37	46.00	2.63	H	-31.3	74.67
249.160000	43.50	46.00	2.50	H	-31.3	74.80

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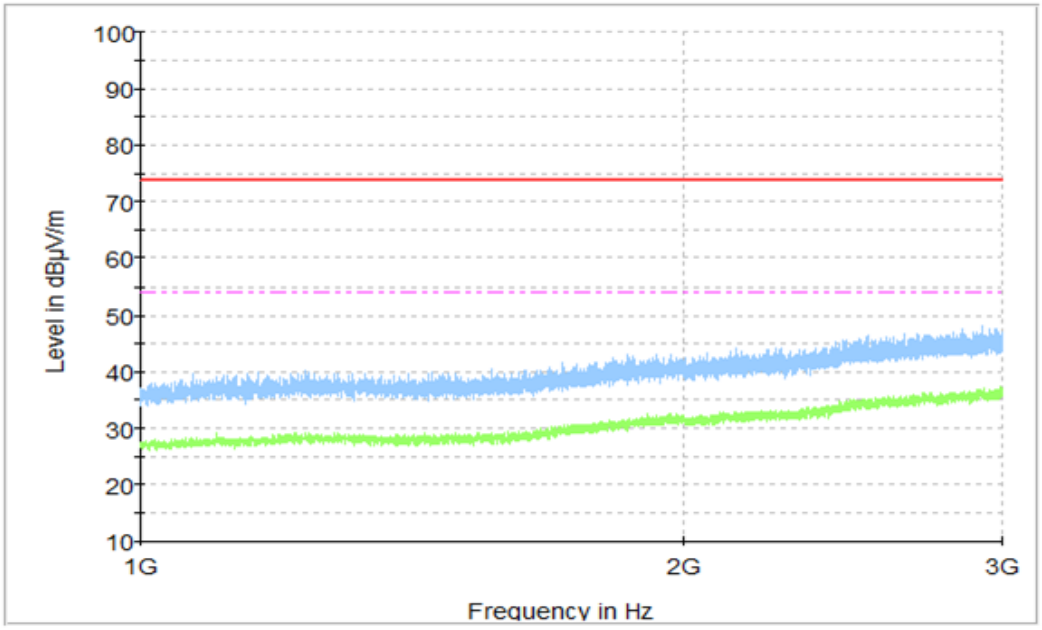

Figure A.1.7. Radiated Emission (Video Player , 1GHz to 3GHz)

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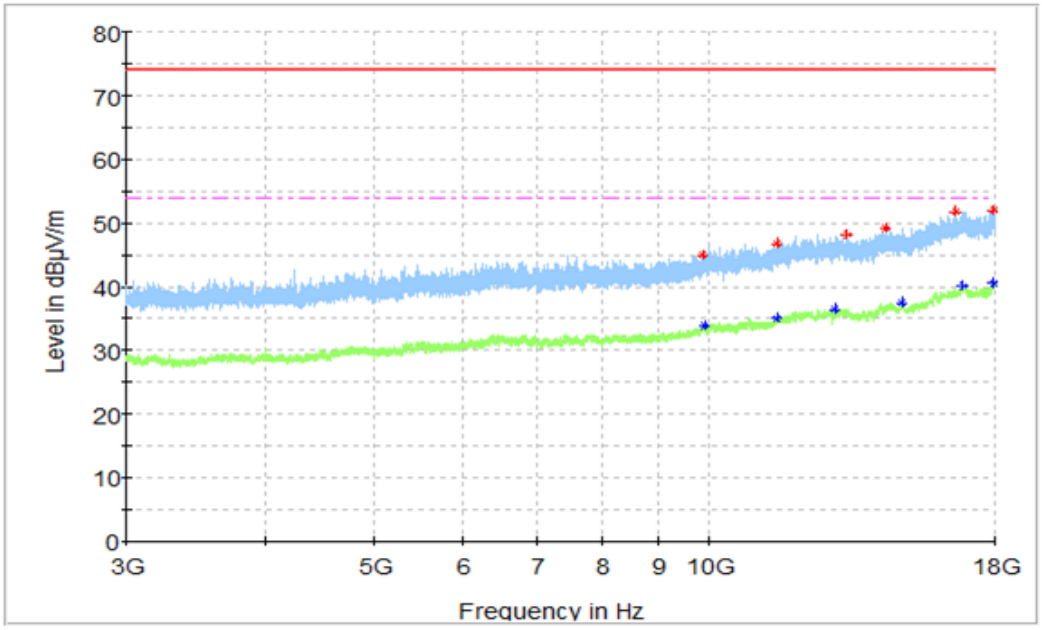

Figure A.1.8. Radiated Emission (Video Player , 3GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	PMea (dBµV)
9852.000000	45.03	74.00	28.97	H	5.4	39.63
11491.500000	46.78	74.00	27.22	V	7.0	39.78
13276.000000	48.19	74.00	25.81	V	9.7	38.49
14374.500000	49.15	74.00	24.85	H	11.4	37.75
16592.000000	51.69	74.00	22.31	H	15.3	36.39
17956.500000	51.96	74.00	22.04	V	17.0	34.96

Final_Results_AVG

Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	PMea (dBµV)
9881.500000	33.82	54.00	20.18	H	5.4	28.42
11490.500000	35.14	54.00	18.86	V	7.0	28.14
12953.500000	36.52	54.00	17.48	V	9.1	27.42
14860.000000	37.58	54.00	16.42	V	11.6	25.98
16871.500000	40.13	54.00	13.87	V	15.9	24.23
17944.000000	40.56	54.00	13.44	V	17.3	23.26

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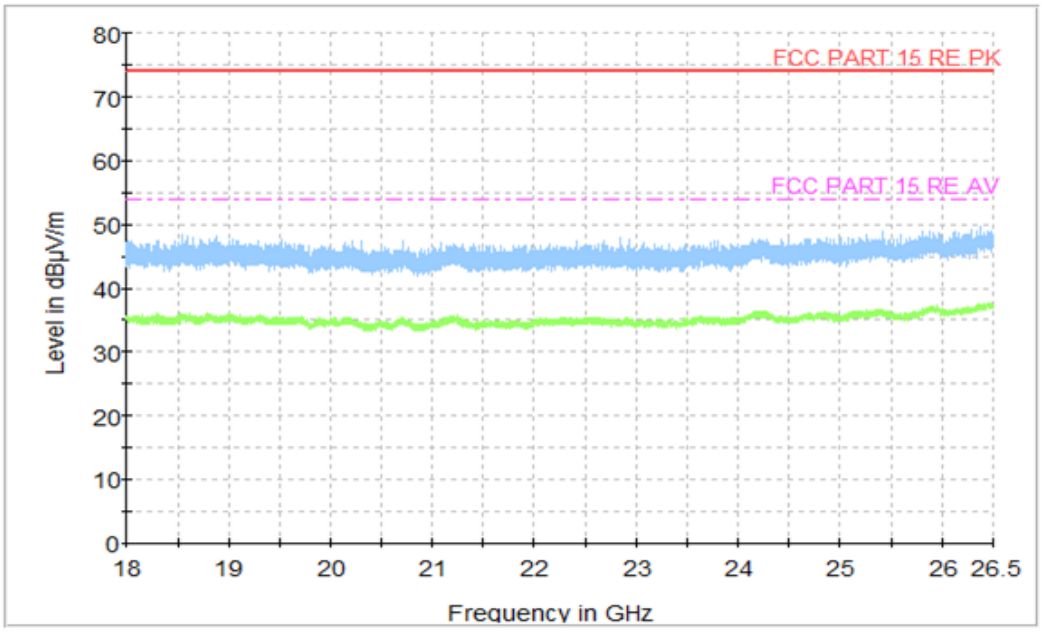

Figure A.1.9. Radiated Emission (Video Player , 18GHz to 26.5GHz)

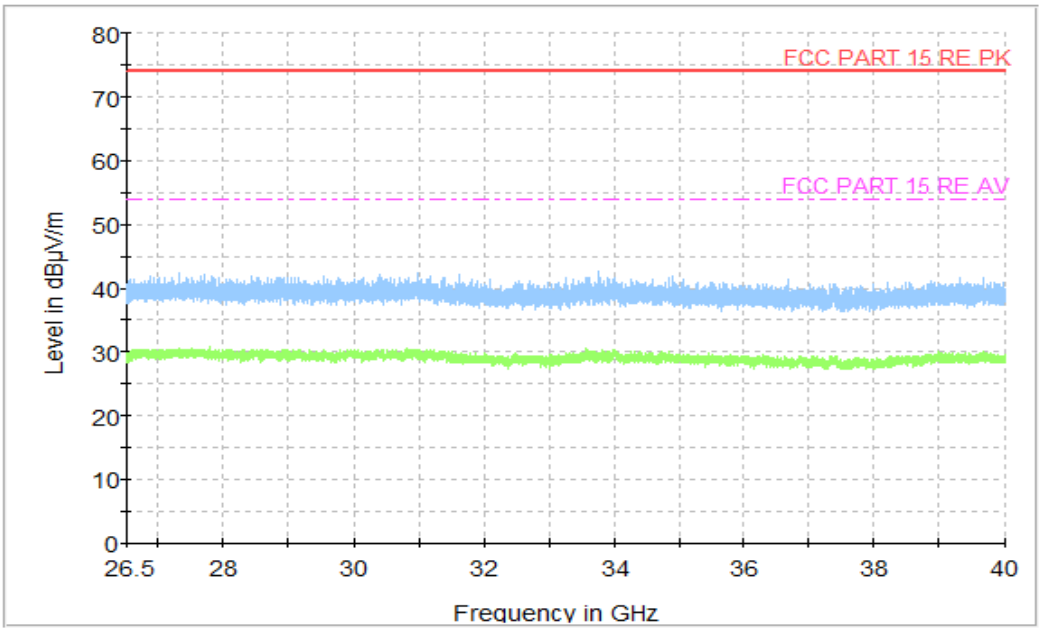

Figure A.1.10. Radiated Emission (Video Player , 26.5GHz to 40GHz)

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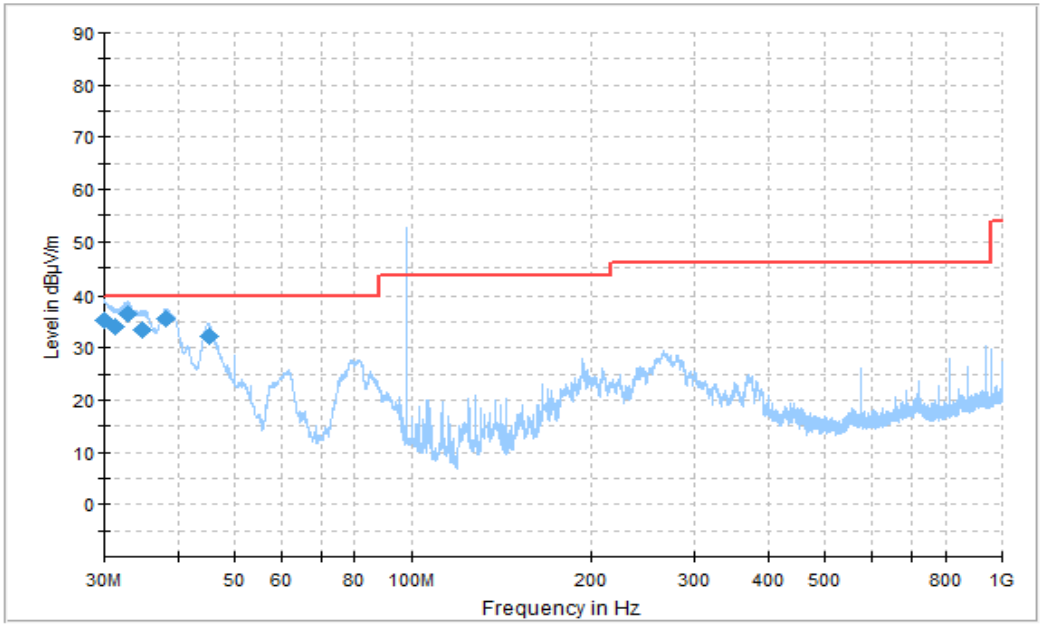

Figure A.1.11. Radiated Emission (FM receiver , 30MHz to 1GHz)

Final_Results

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	PMea (dBµV)
30.080000	35.19	40.00	4.81	V	-24.1	59.29
31.381111	34.04	40.00	5.96	V	-25.7	59.74
32.905556	36.47	40.00	3.53	V	-26.0	62.47
34.857778	33.50	40.00	6.50	V	-26.9	60.40
38.225000	35.64	40.00	4.36	V	-28.6	64.24
45.136667	32.27	40.00	7.73	V	-32.7	64.97

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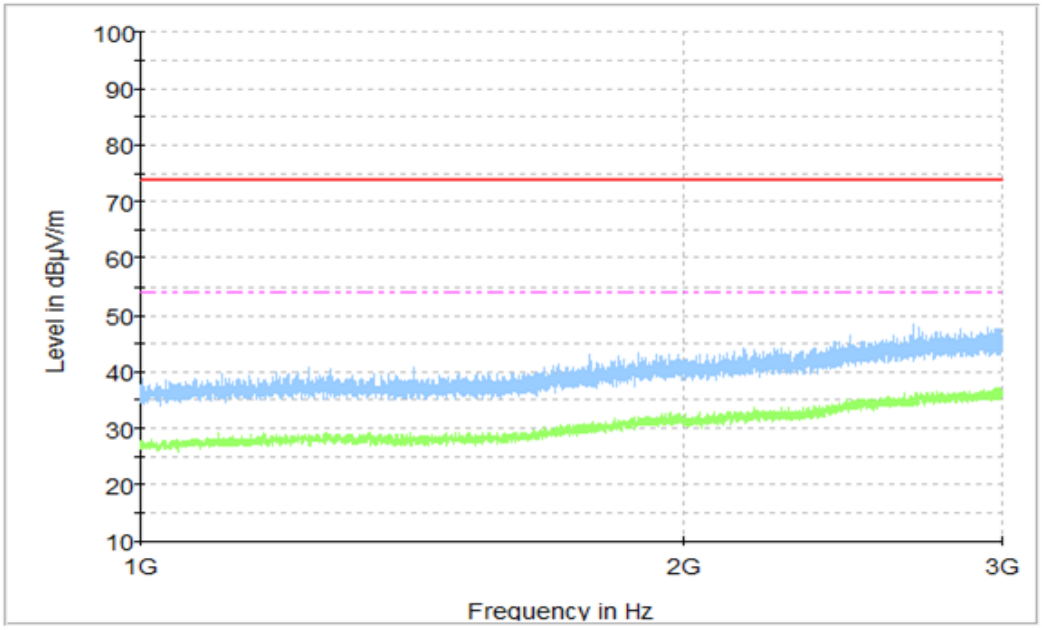

Figure A.1.12. Radiated Emission (FM receiver , 1GHz to 3GHz)

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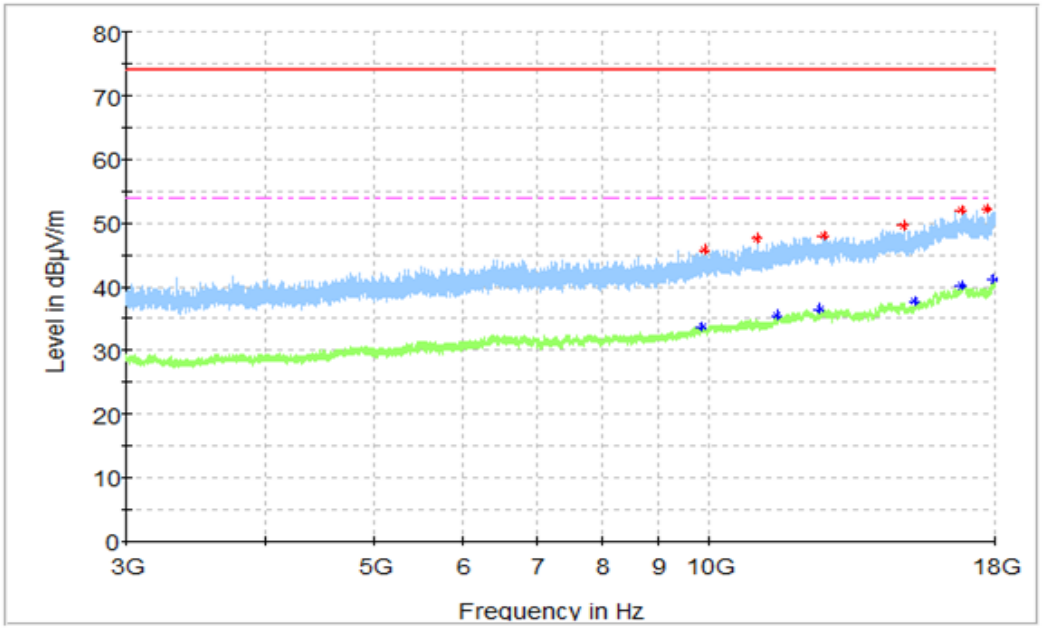

Figure A.1.13. Radiated Emission (FM receiver, 3GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	PMea (dBµV)
9888.000000	45.77	74.00	28.23	V	5.3	40.47
11023.500000	47.50	74.00	26.50	V	6.0	41.5
12649.500000	47.98	74.00	26.02	V	8.7	39.28
14913.500000	49.66	74.00	24.34	H	11.7	37.96
16810.000000	52.05	74.00	21.95	H	15.9	36.15
17745.500000	52.18	74.00	21.82	V	16.4	35.78

Final_Results_AVG

Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	PMea (dBµV)
9849.500000	33.72	54.00	20.28	V	5.3	28.42
11491.000000	35.38	54.00	18.62	V	7.0	28.38
12545.500000	36.52	54.00	17.48	H	8.8	27.72
15279.500000	37.66	54.00	16.34	V	12.2	25.46
16822.000000	40.12	54.00	13.88	H	15.9	24.22
17944.500000	41.02	54.00	12.98	H	17.3	23.72

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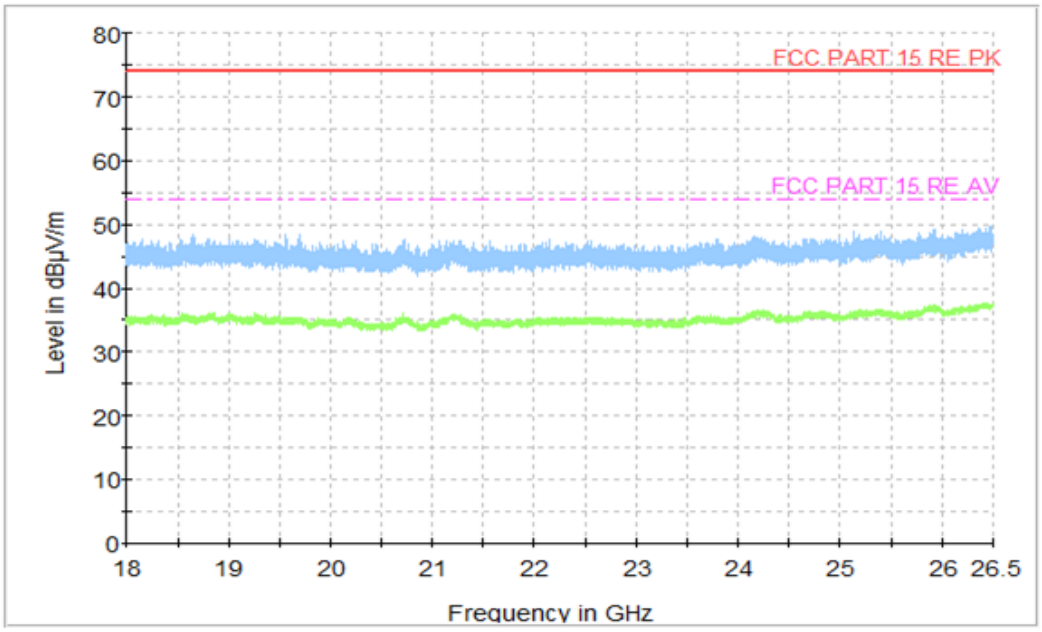

Figure A.1.14. Radiated Emission (FM receiver , 18GHz to 26.5GHz)

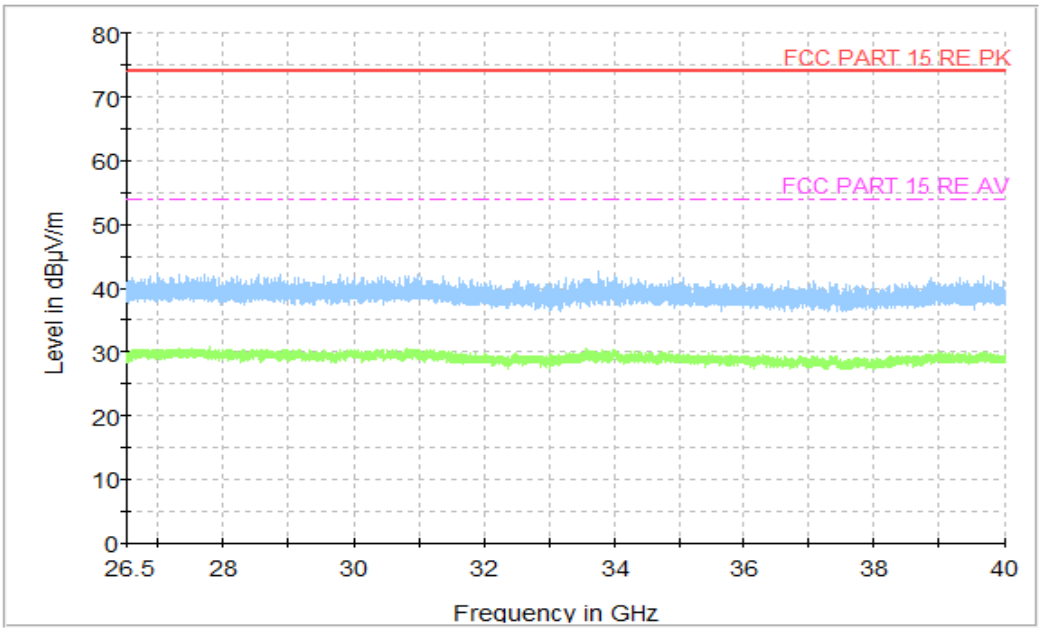

Figure A.1.15. Radiated Emission (FM receiver , 26.5GHz to 40GHz)

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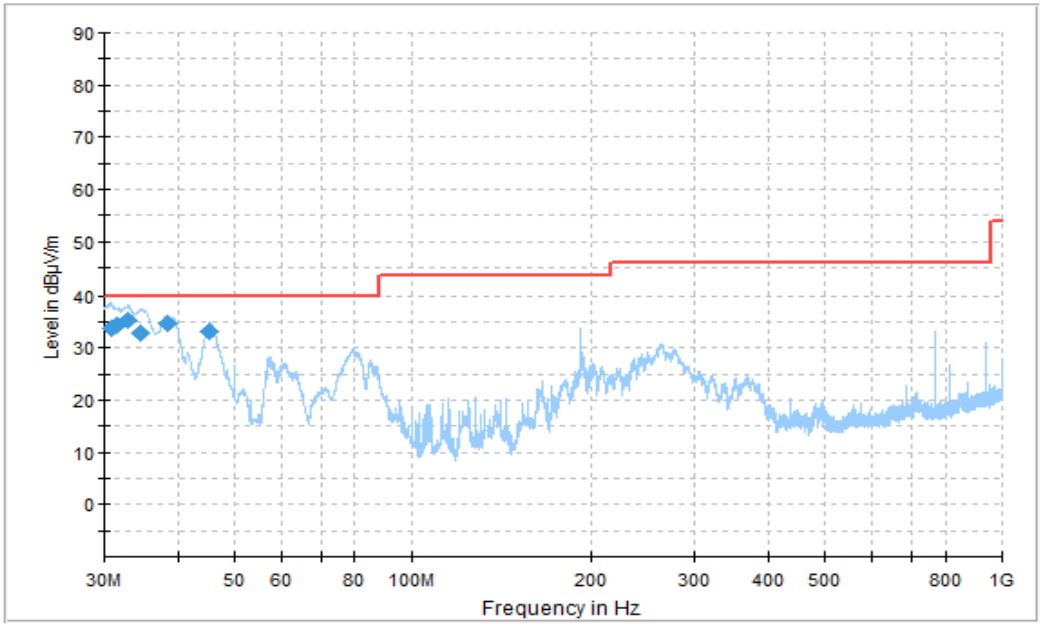

Figure A.1.16. Radiated Emission (GSM receiver 850MHz, 30MHz to 1GHz)

Final_Results

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
30.880556	33.78	40.00	6.22	V	-25.3	59.08
31.478333	34.21	40.00	5.79	V	-25.7	59.91
32.916111	35.15	40.00	4.85	V	-26.0	61.15
34.548333	32.95	40.00	7.05	V	-26.7	59.65
38.360556	34.67	40.00	5.33	V	-28.8	63.47
45.258333	32.97	40.00	7.03	V	-32.8	65.77

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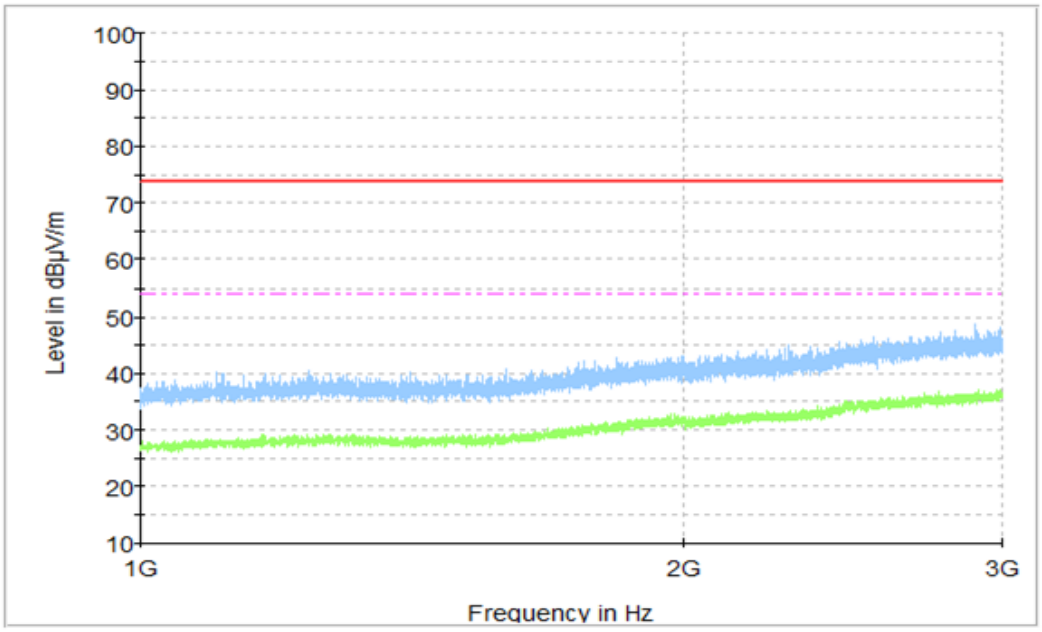

Figure A.1.17. Radiated Emission (GSM receiver 850MHz , 1GHz to 3GHz)

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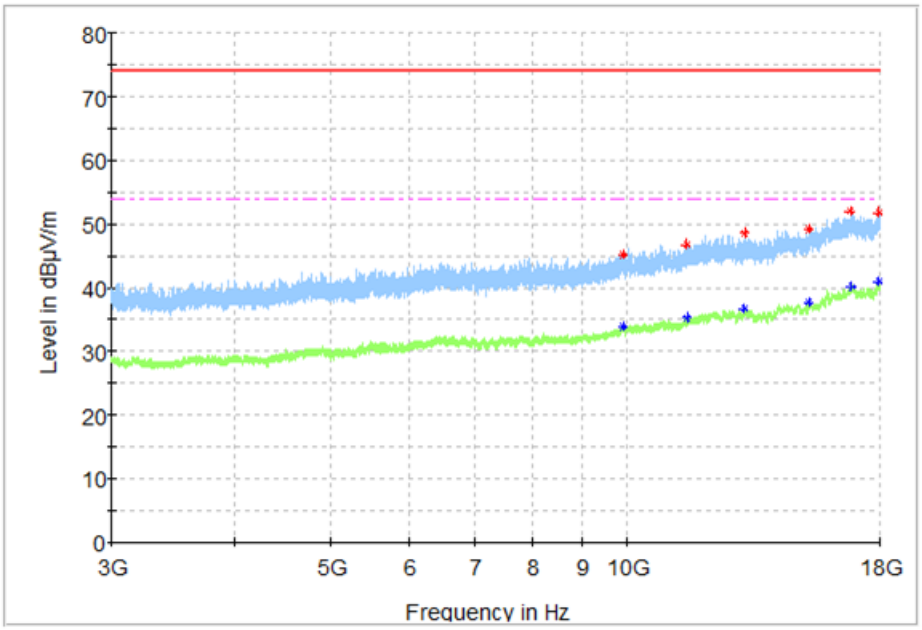

Figure A.1.18. Radiated Emission (GSM receiver 850MHz , 3GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
9891.500000	45.16	74.00	28.84	V	5.3	51.30
11473.000000	46.77	74.00	27.23	H	6.7	50.00
13143.000000	48.65	74.00	25.35	V	9.6	48.20
15271.000000	49.09	74.00	24.91	H	12.1	46.90
16810.000000	52.04	74.00	21.96	V	15.9	46.40
17929.500000	51.86	74.00	22.14	V	16.8	43.70

Final_Results_AVG

Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
9883.500000	33.82	54.00	20.18	H	5.4	38.30
11487.000000	35.25	54.00	18.75	H	6.9	37.60
13095.500000	36.74	54.00	17.26	H	9.7	34.90
15290.500000	37.73	54.00	16.27	H	12.4	33.10
16850.000000	40.16	54.00	13.84	V	16.0	32.60
17951.500000	40.84	54.00	13.16	H	17.1	30.90

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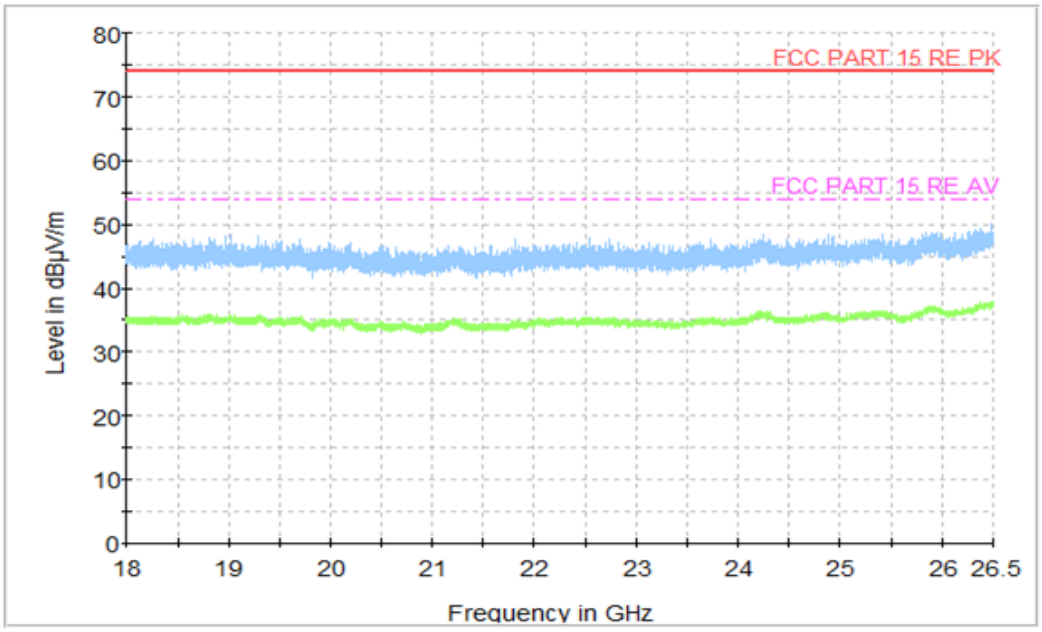

Figure A.1.19. Radiated Emission (GSM receiver 850MHz, 18GHz to 26.5GHz)

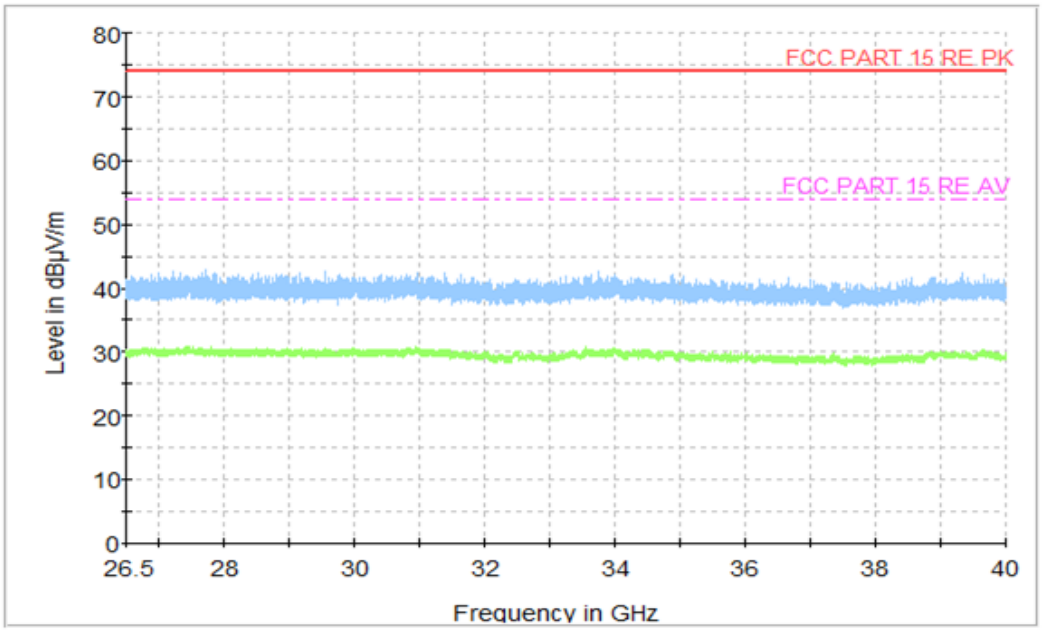

Figure A.1.20. Radiated Emission (GSM receiver 850MHz , 26.5GHz to 40GHz)

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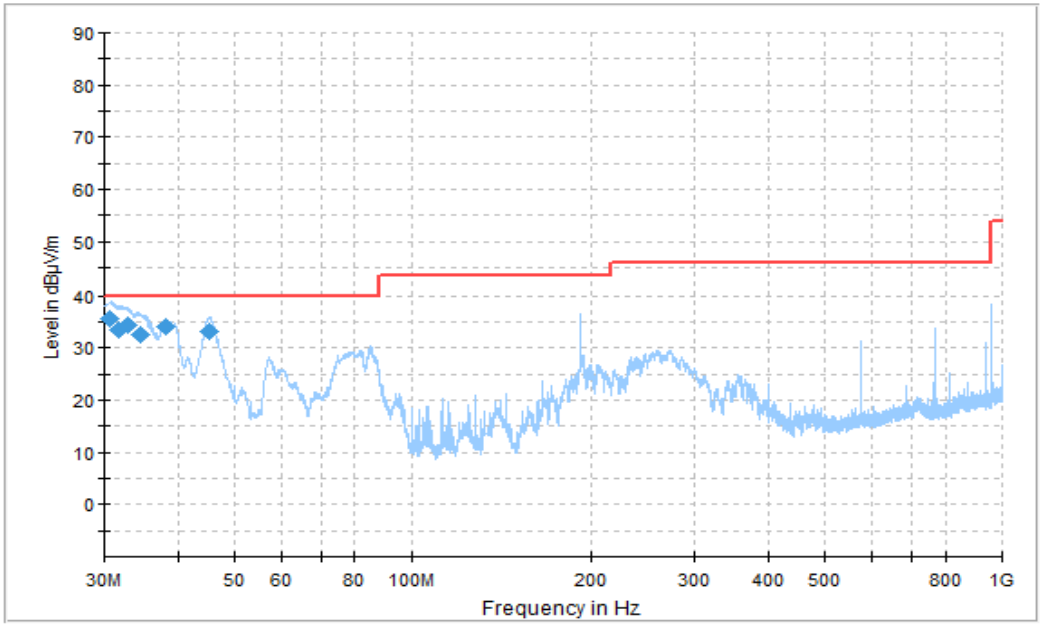

Figure A.1.21. Radiated Emission (WCDMA receiver Band 5, 30MHz to 1GHz)

Final_Results

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
30.734444	35.45	40.00	4.55	V	-25.1	60.55
31.787778	33.53	40.00	6.47	V	-25.8	59.33
32.959444	34.31	40.00	5.69	V	-26.0	60.31
34.628333	32.50	40.00	7.50	V	-26.7	59.20
38.195556	34.16	40.00	5.84	V	-28.6	62.76
45.258333	32.97	40.00	7.03	V	-32.8	65.77

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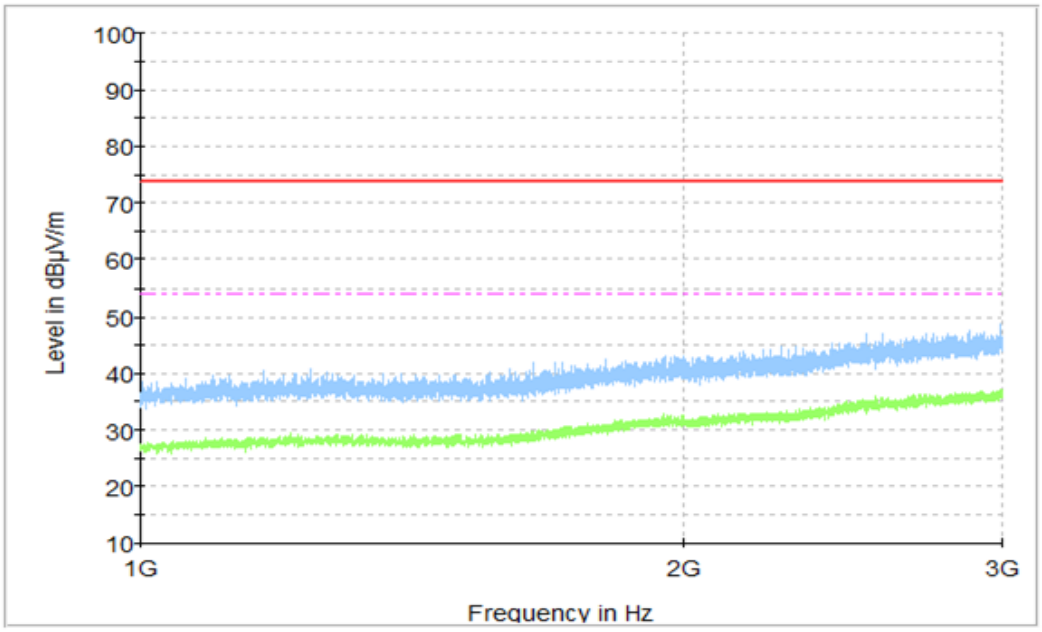

Figure A.1.22. Radiated Emission (WCDMA 850MHz , 1GHz to 3GHz)

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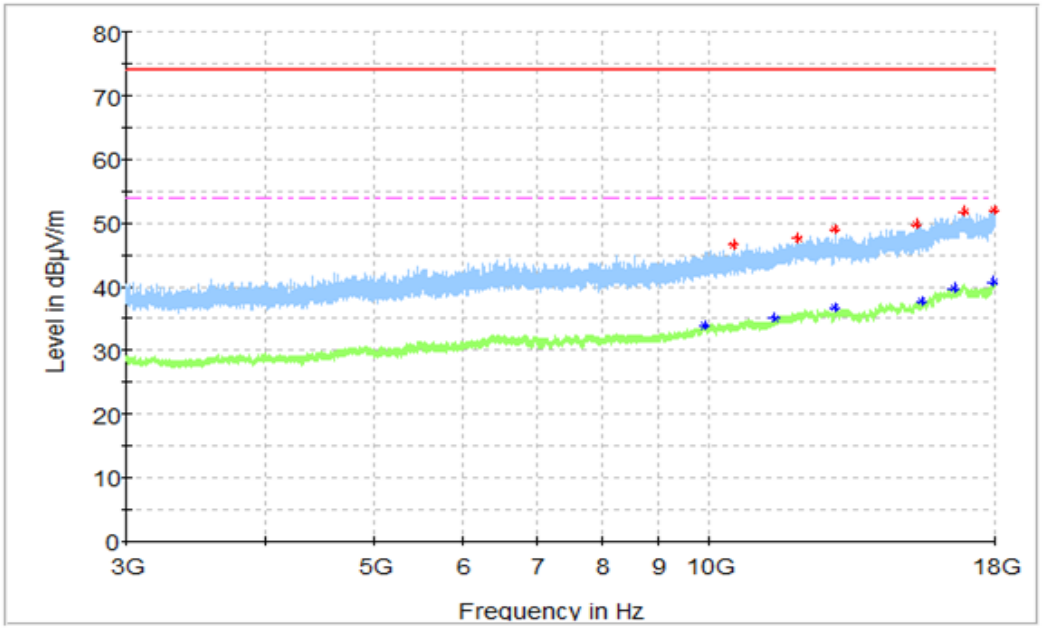

Figure A.1.23. Radiated Emission (WCDMA receiver Band 5, 3GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
10512.500000	46.58	74.00	27.42	H	5.4	41.18
11982.000000	47.55	74.00	26.45	H	8.2	39.35
12960.500000	48.94	74.00	25.06	V	9.2	39.74
15328.000000	49.72	74.00	24.28	V	12.3	37.42
16900.000000	51.73	74.00	22.27	V	15.9	35.83
17984.500000	52.02	74.00	21.98	V	16.9	35.12

Final_Results_AVG

Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
9883.000000	33.91	54.00	20.09	H	5.4	28.51
11415.000000	35.00	54.00	19.00	H	6.6	28.4
12940.500000	36.63	54.00	17.37	V	9.4	27.23
15476.500000	37.59	54.00	16.41	H	12.9	24.69
16564.500000	39.74	54.00	14.26	V	15.2	24.54
17952.000000	40.73	54.00	13.27	V	17.1	23.63

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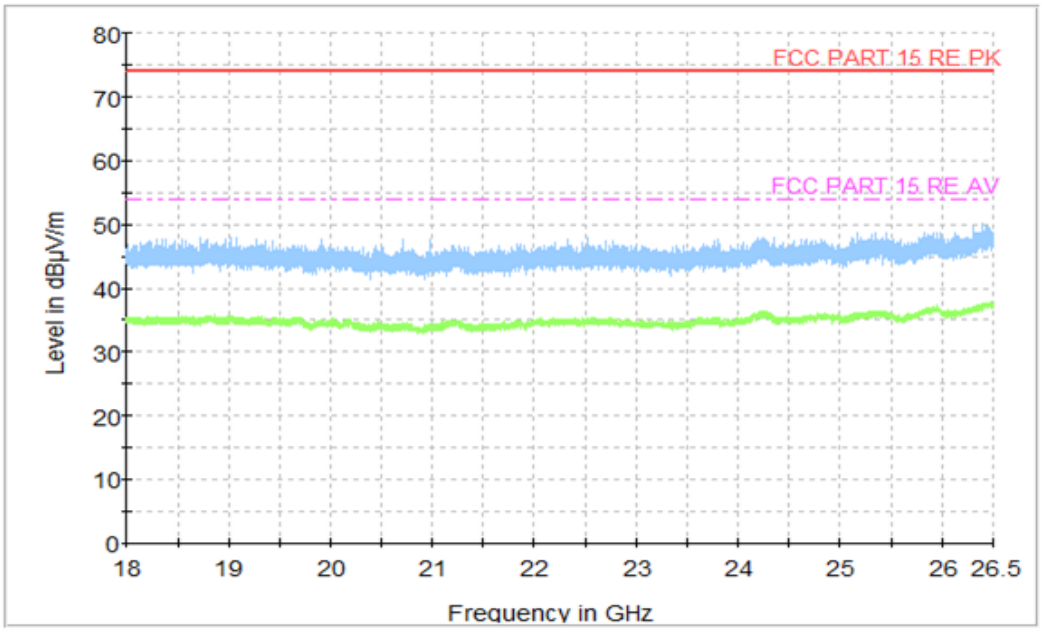

Figure A.1.24. Radiated Emission (WCDMA receiver Band 5 , 18GHz to 26.5GHz)

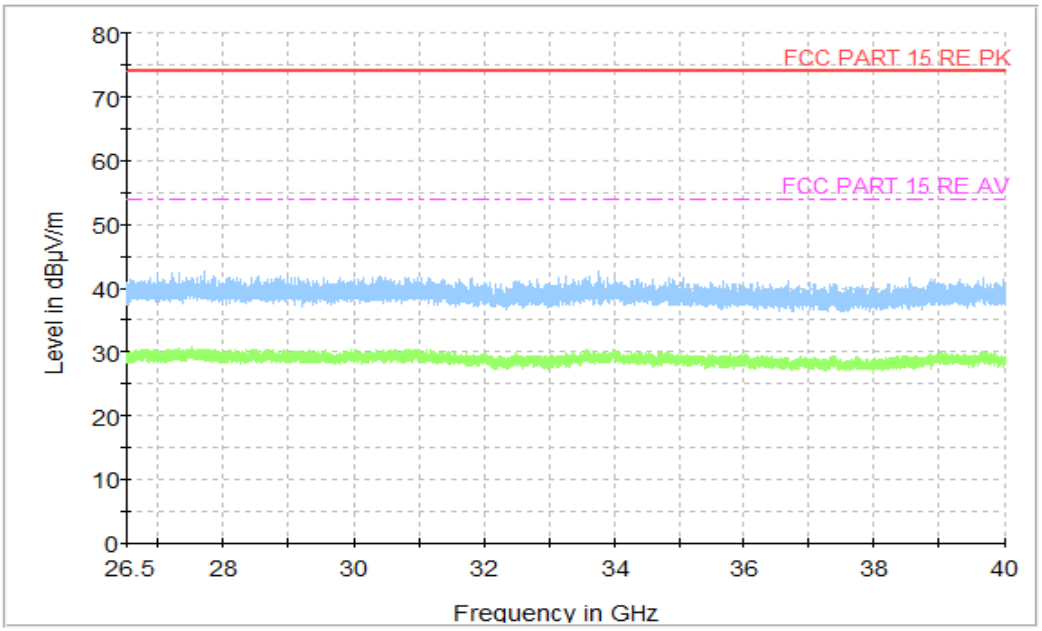

Figure A.1.25. Radiated Emission (WCDMA receiver Band 5 , 26.5GHz to 40GHz)

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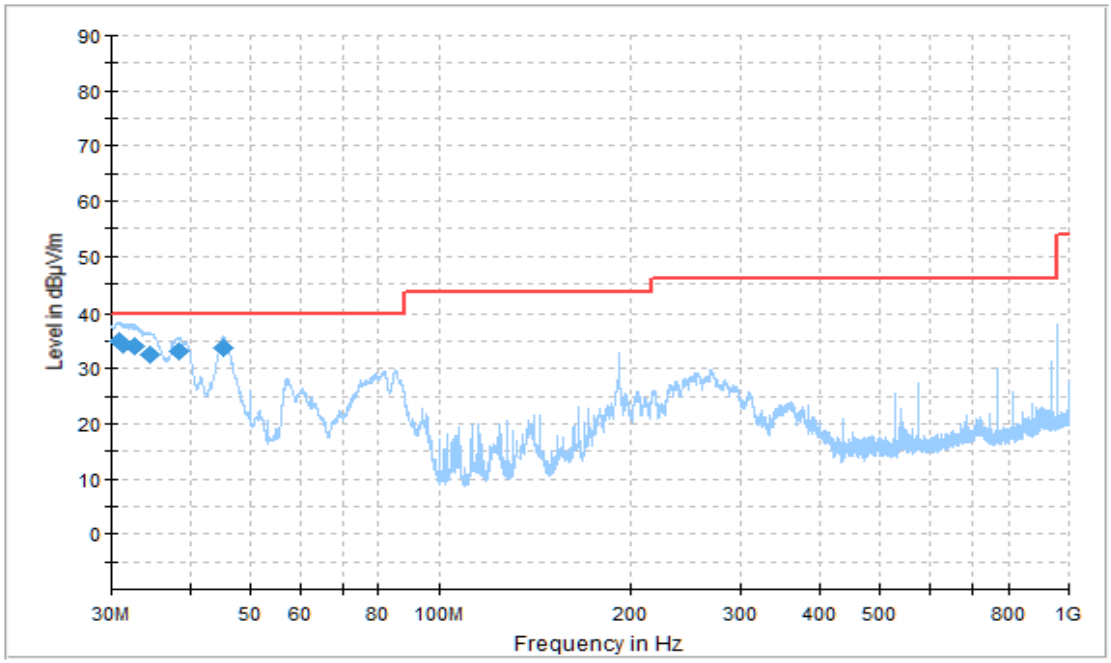

Figure A.1.26. Radiated Emission (LTE receiver Band 5, 30MHz to 1GHz)

Final_Results

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
30.772778	35.06	40.00	4.94	V	-25.2	60.26
31.301111	34.22	40.00	5.78	V	-25.7	59.92
32.610000	34.10	40.00	5.90	V	-25.9	60.00
34.665000	32.64	40.00	7.36	V	-26.8	59.44
38.400556	33.26	40.00	6.74	V	-28.8	62.06
45.218333	33.64	40.00	6.36	V	-32.7	66.34

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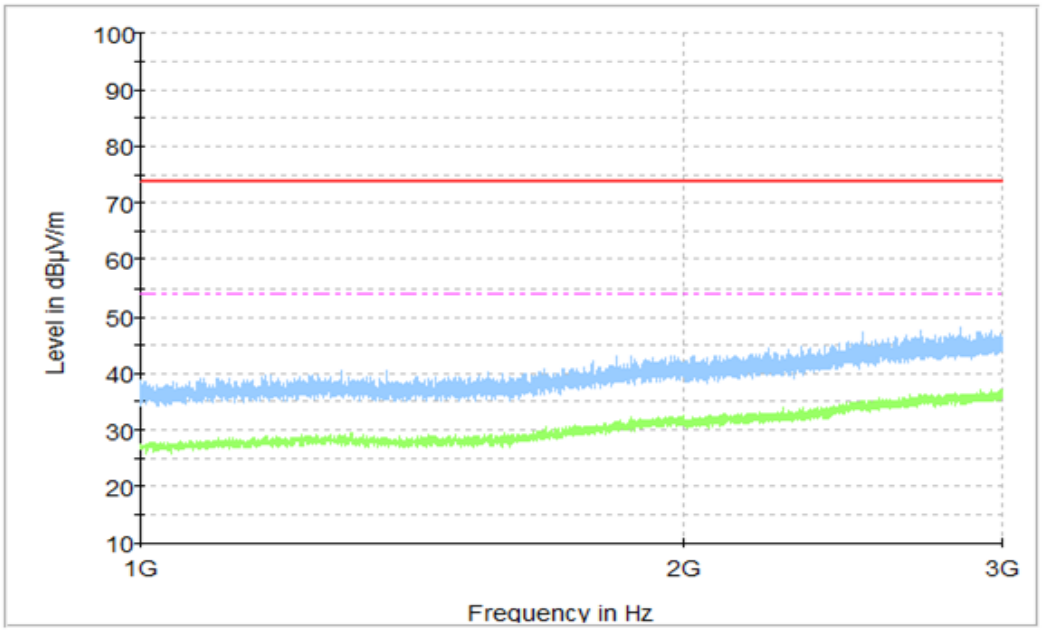

Figure A.1.27. Radiated Emission (LTE receiver Band 5 , 1GHz to 3GHz)

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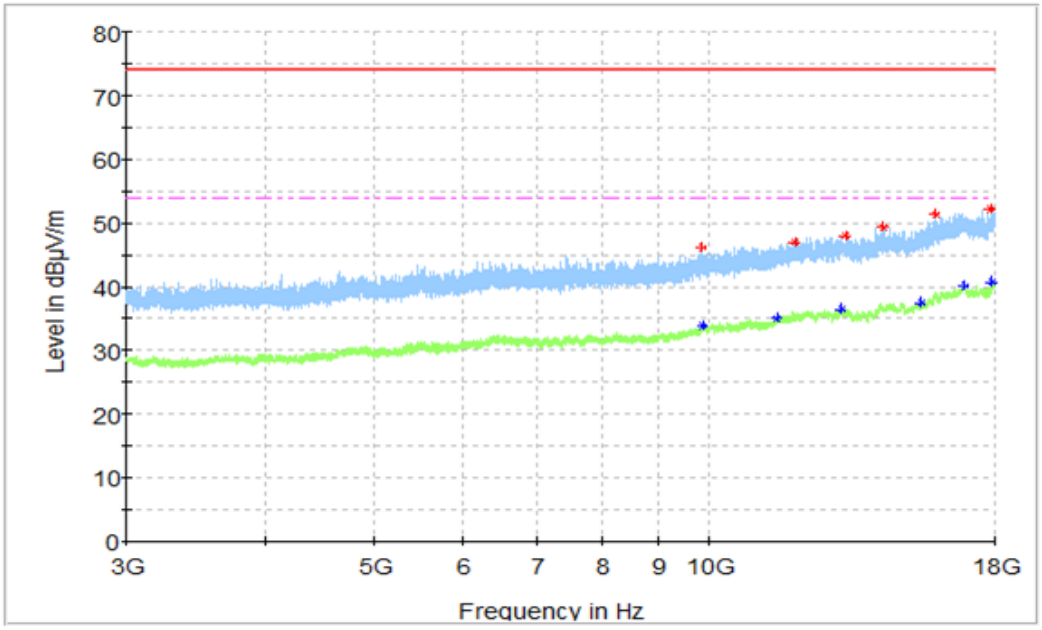

Figure A.1.28. Radiated Emission (LTE receiver Band 5, 3GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
9834.000000	46.08	74.00	27.92	H	5.0	41.08
11928.000000	46.94	74.00	27.06	H	7.8	39.14
13207.500000	47.92	74.00	26.08	H	9.5	38.42
14292.000000	49.27	74.00	24.73	V	11.7	37.57
15932.500000	51.35	74.00	22.65	V	14.8	36.55
17822.000000	52.10	74.00	21.90	V	16.6	35.50

Final_Results_AVG

Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
9876.500000	33.93	54.00	20.07	H	5.3	28.63
11490.500000	35.03	54.00	18.97	V	7.0	28.03
13126.500000	36.57	54.00	17.43	H	9.8	26.77
15464.000000	37.56	54.00	16.44	H	12.7	24.86
16887.000000	40.13	54.00	13.87	H	16.1	24.03
17907.000000	40.62	54.00	13.38	H	17.3	23.32

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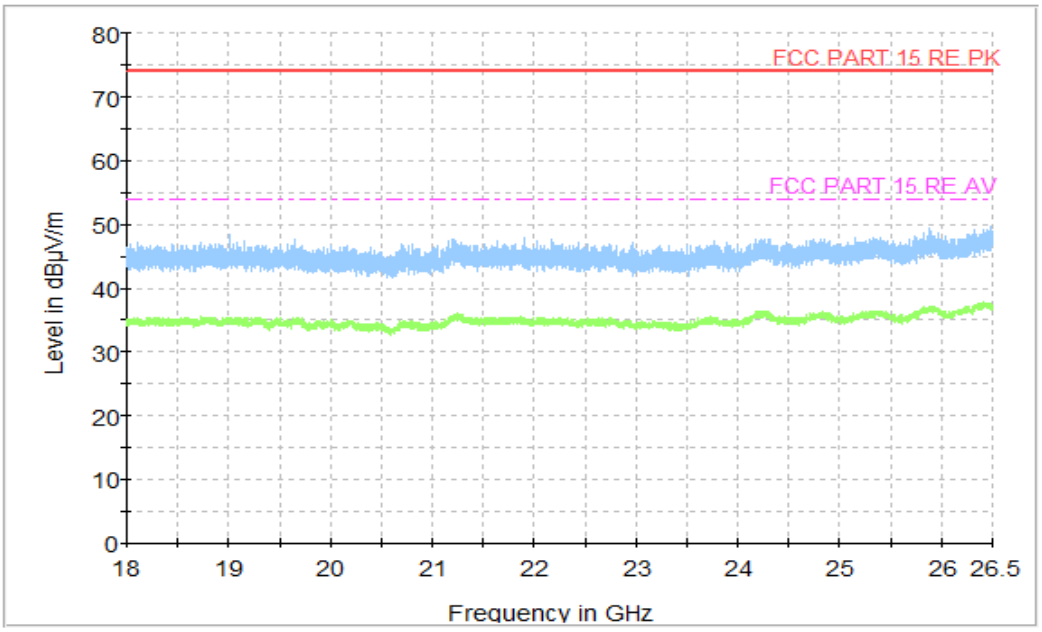

Figure A.1.29. Radiated Emission ((LTE receiver Band 5 , 18GHz to 26.5GHz)

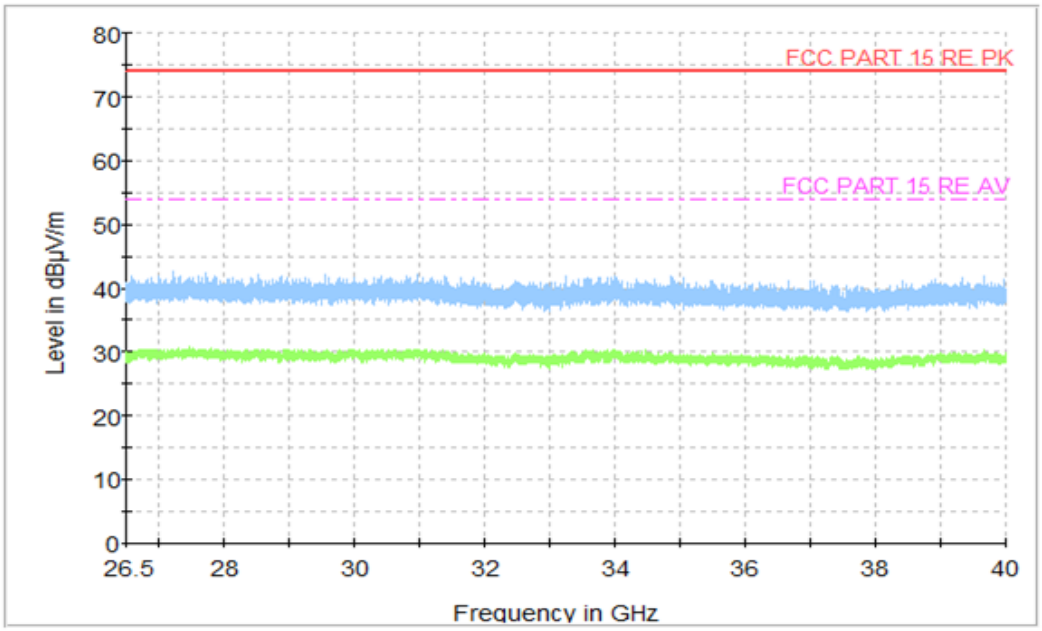

Figure A.1.30. Radiated Emission ((LTE receiver Band 5 , 26.5GHz to 40GHz)

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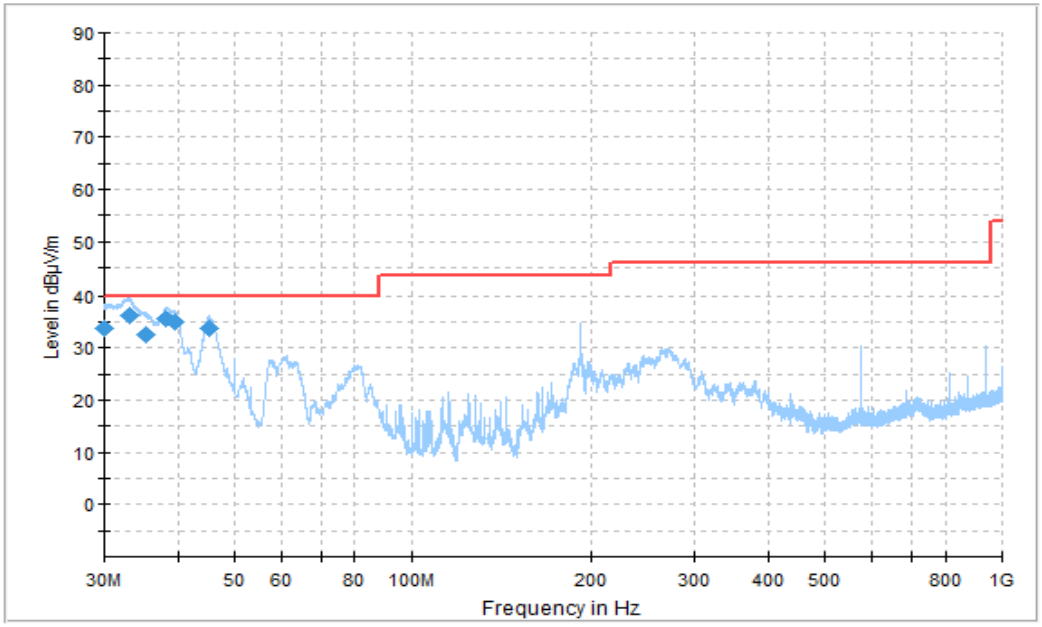

Figure A.1.31. Radiated Emission (LTE receiver Band 12, 30MHz to 1GHz)

Final_Results

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
30.040000	33.75	40.00	6.25	V	-24.0	57.75
33.037778	36.08	40.00	3.92	V	-26.0	62.08
35.208889	32.49	40.00	7.51	V	-27.1	59.59
38.186667	35.51	40.00	4.49	V	-28.6	64.11
39.533889	34.98	40.00	5.02	V	-29.4	64.38
45.270556	33.82	40.00	6.18	V	-32.8	66.62

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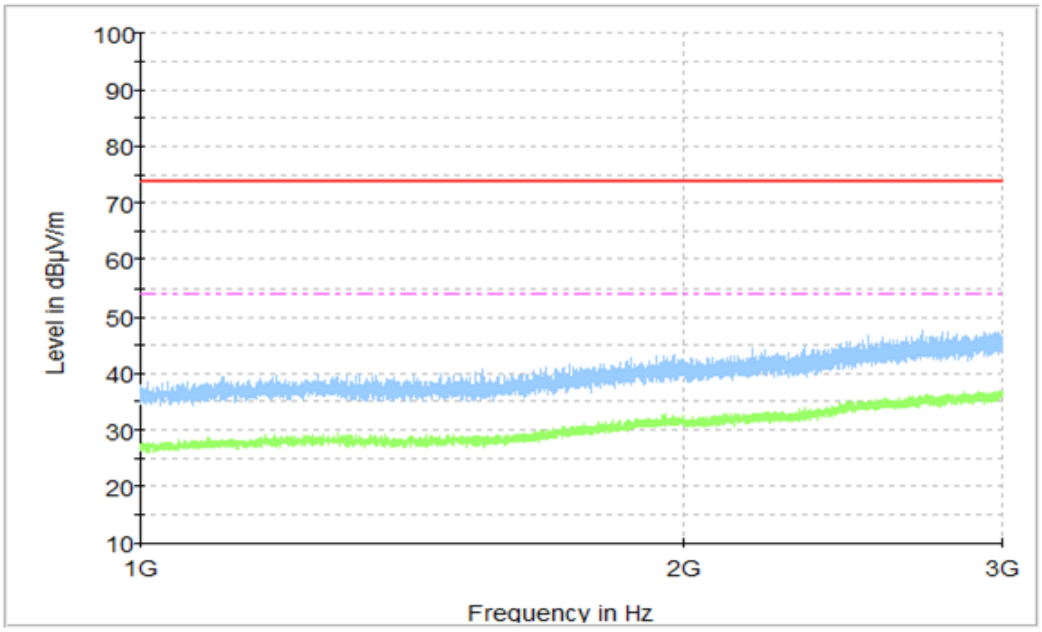

Figure A.1.32. Radiated Emission (LTE receiver Band 12 , 1GHz to 3GHz)

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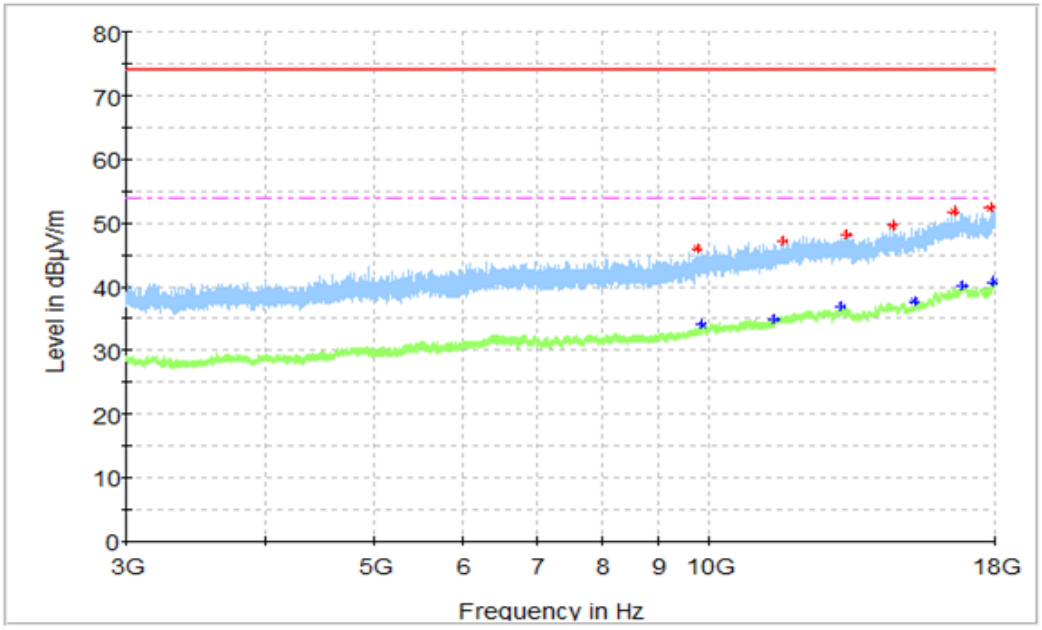

Figure A.1.33. Radiated Emission (LTE receiver Band 12, 3GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
9736.000000	45.92	74.00	28.08	H	4.8	41.12
11630.000000	47.12	74.00	26.88	H	7.1	40.02
13249.000000	48.19	74.00	25.81	H	9.6	38.59
14616.500000	49.54	74.00	24.46	H	11.6	37.94
16548.500000	51.70	74.00	22.30	H	15.3	36.4
17817.500000	52.30	74.00	21.70	V	16.5	35.80

Final_Results_AVG

Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
9850.000000	33.99	54.00	20.01	V	5.3	28.69
11424.500000	34.90	54.00	19.10	V	6.7	28.2
13099.500000	36.89	54.00	17.11	V	9.8	27.09
15283.500000	37.61	54.00	16.39	H	12.3	25.31
16848.500000	40.19	54.00	13.81	V	16.0	24.19
17949.500000	40.73	54.00	13.27	V	17.2	23.53

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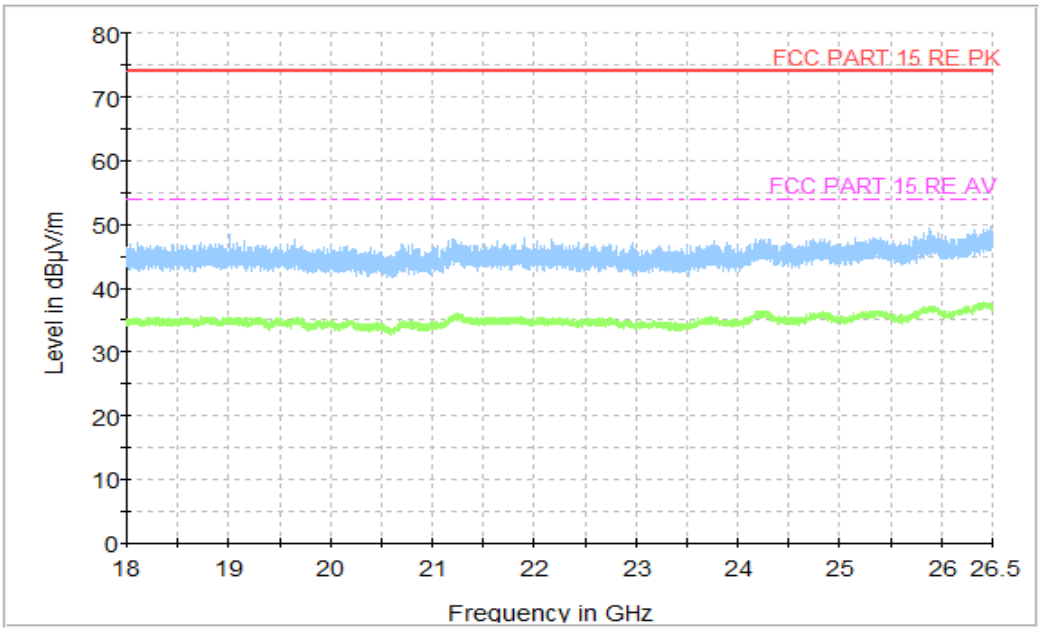

Figure A.1.34. Radiated Emission ((LTE receiver Band 12 , 18GHz to 26.5GHz)

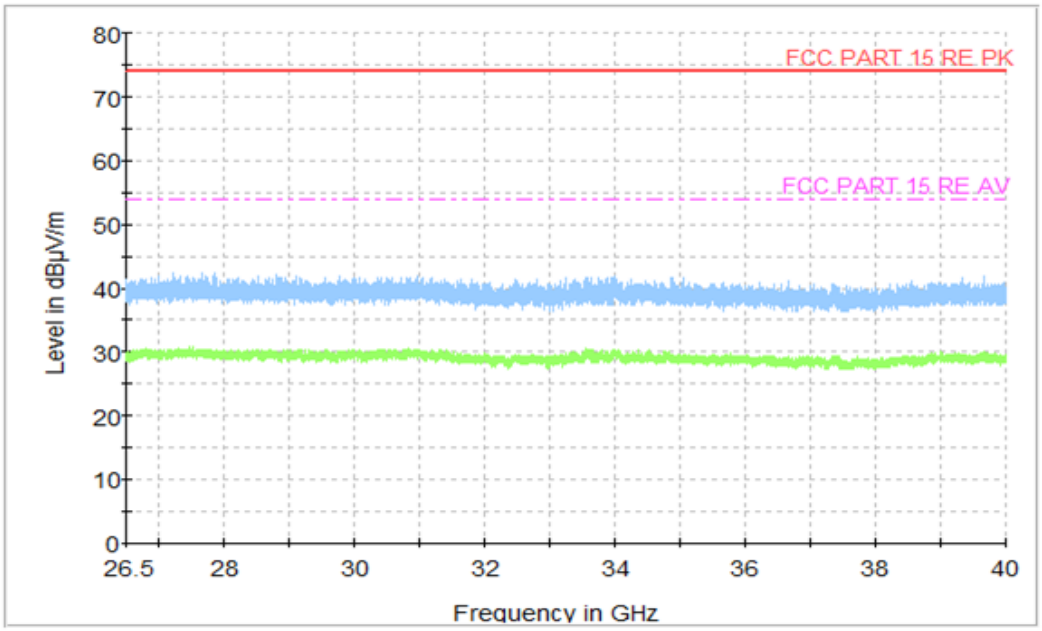

Figure A.1.35. Radiated Emission ((LTE receiver Band 12 , 26.5GHz to 40GHz)

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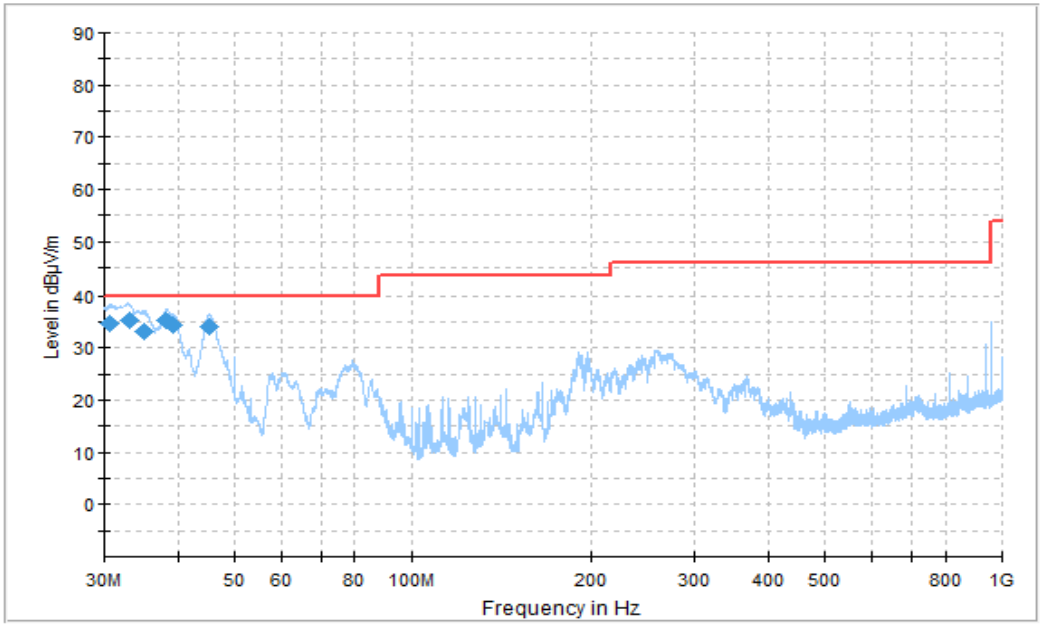

Figure A.1.36. Radiated Emission (LTE receiver Band 13, 30MHz to 1GHz)

Final_Results

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
30.637222	34.60	40.00	5.40	V	-25.0	59.60
33.023889	35.26	40.00	4.74	V	-26.0	61.26
35.087222	33.20	40.00	6.80	V	-27.0	60.20
38.212778	35.23	40.00	4.77	V	-28.6	63.83
39.384444	34.33	40.00	5.67	V	-29.4	63.73
45.258333	34.14	40.00	5.86	V	-32.8	66.94

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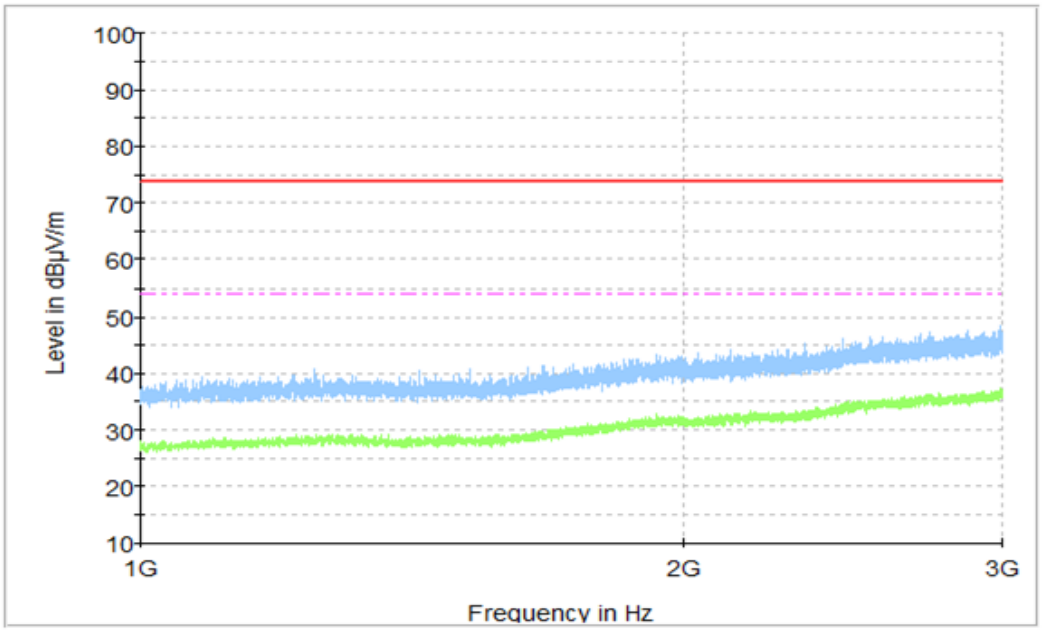

Figure A.1.37. Radiated Emission (LTE receiver Band 13 , 1GHz to 3GHz)

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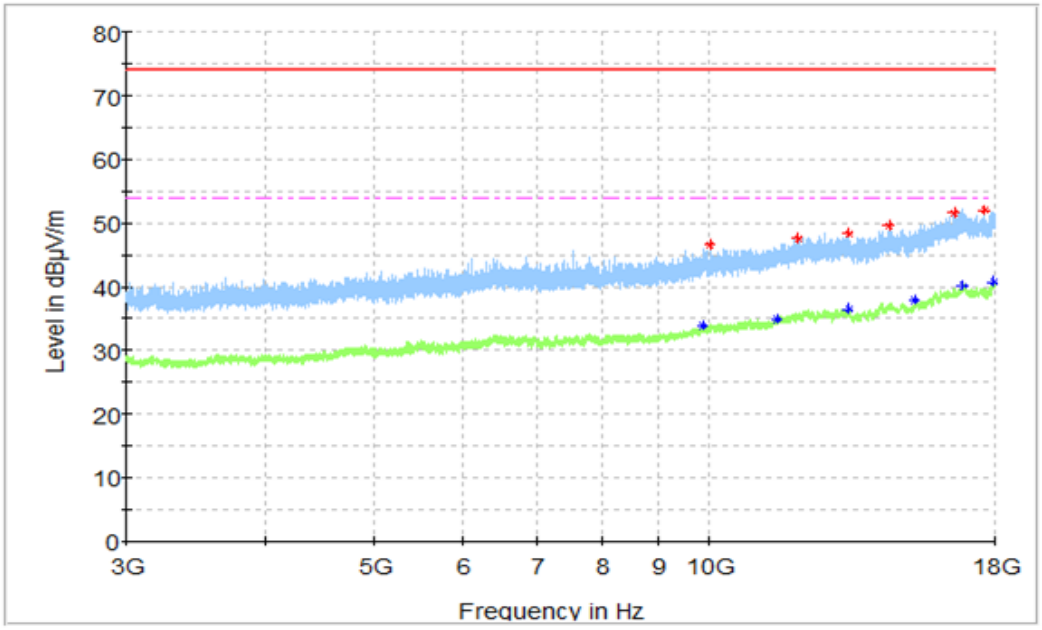

Figure A.1.38. Radiated Emission (LTE receiver Band 13, 3GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
10019.500000	46.54	74.00	27.46	V	5.2	41.34
11972.000000	47.55	74.00	26.45	V	8.1	39.45
13314.000000	48.45	74.00	25.55	V	9.6	38.85
14464.000000	49.50	74.00	24.50	H	11.7	37.80
16531.000000	51.63	74.00	22.37	H	15.2	36.43
17638.500000	52.06	74.00	21.94	H	15.7	36.36

Final_Results_AVG

Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
9856.500000	33.78	54.00	20.22	H	5.3	28.48
11492.000000	34.95	54.00	19.05	V	7.0	27.95
13314.500000	36.56	54.00	17.44	V	9.6	26.96
15289.500000	37.83	54.00	16.17	V	12.4	25.43
16859.000000	40.12	54.00	13.88	V	15.9	24.22
17948.000000	40.79	54.00	13.21	H	17.2	23.59

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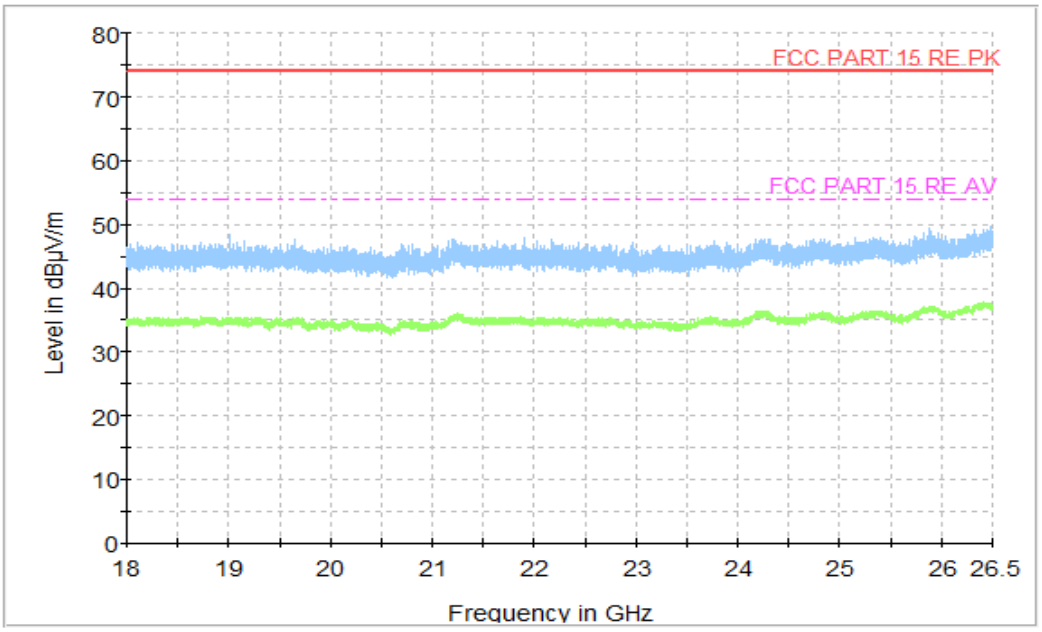

Figure A.1.39. Radiated Emission ((LTE receiver Band 13 , 18GHz to 26.5GHz)

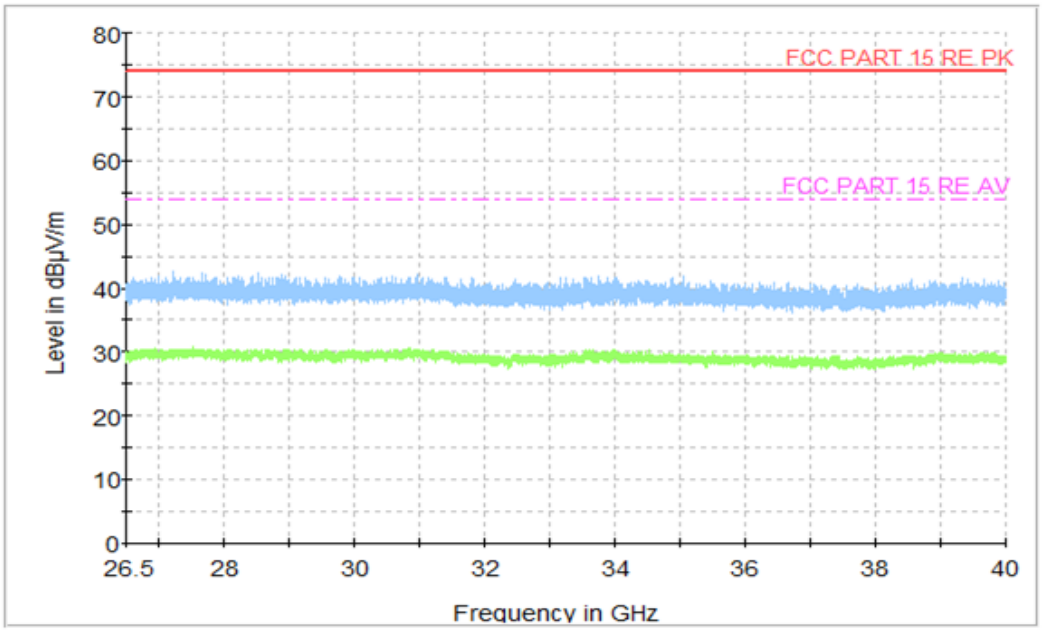

Figure A.1.40. Radiated Emission ((LTE receiver Band 13 , 26.5GHz to 40GHz)

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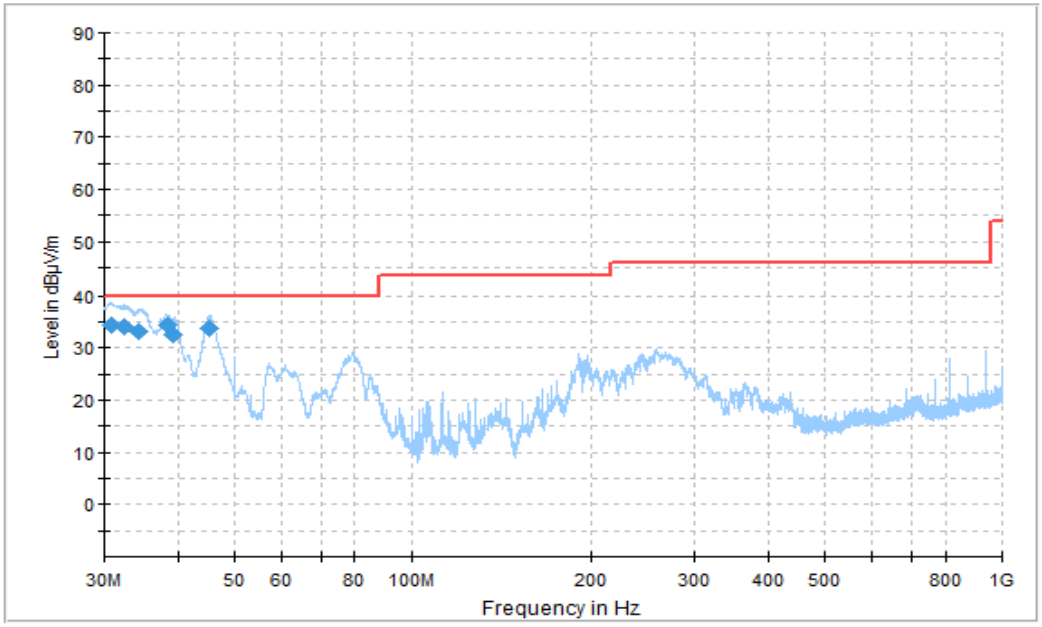

Figure A.1.41. Radiated Emission (LTE receiver Band 17, 30MHz to 1GHz)

Final_Results

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
30.786667	34.22	40.00	5.78	V	-25.2	59.42
32.338889	34.18	40.00	5.82	V	-25.9	60.08
34.358889	32.97	40.00	7.03	V	-26.6	59.57
38.318889	34.49	40.00	5.51	V	-28.7	63.19
39.304444	32.51	40.00	7.49	V	-29.4	61.91
45.232222	33.59	40.00	6.41	V	-32.7	66.29

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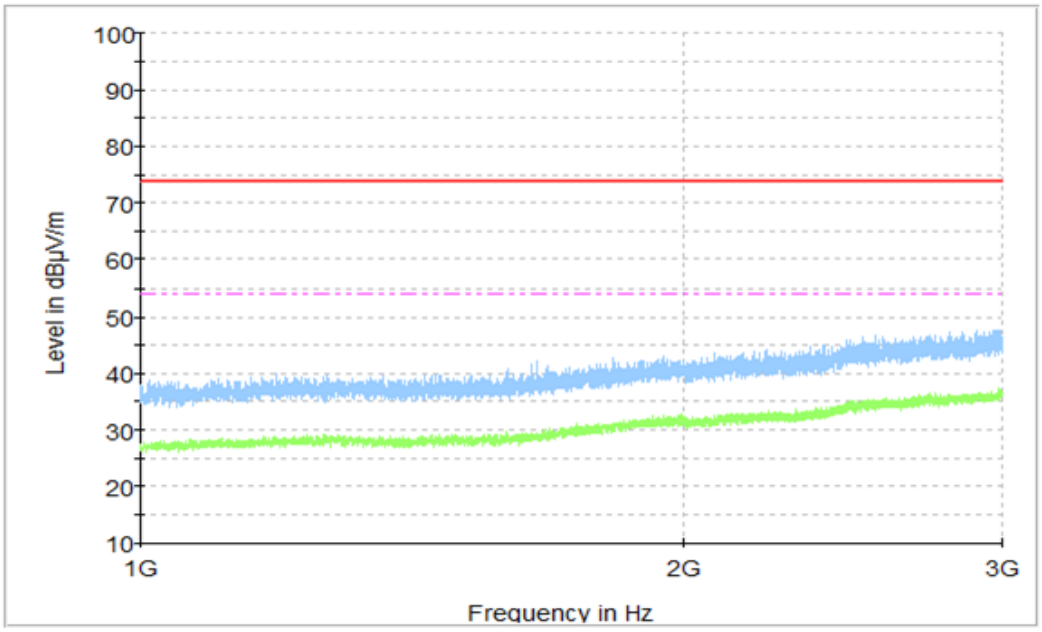

Figure A.1.42. Radiated Emission (LTE receiver Band 17 , 1GHz to 3GHz)

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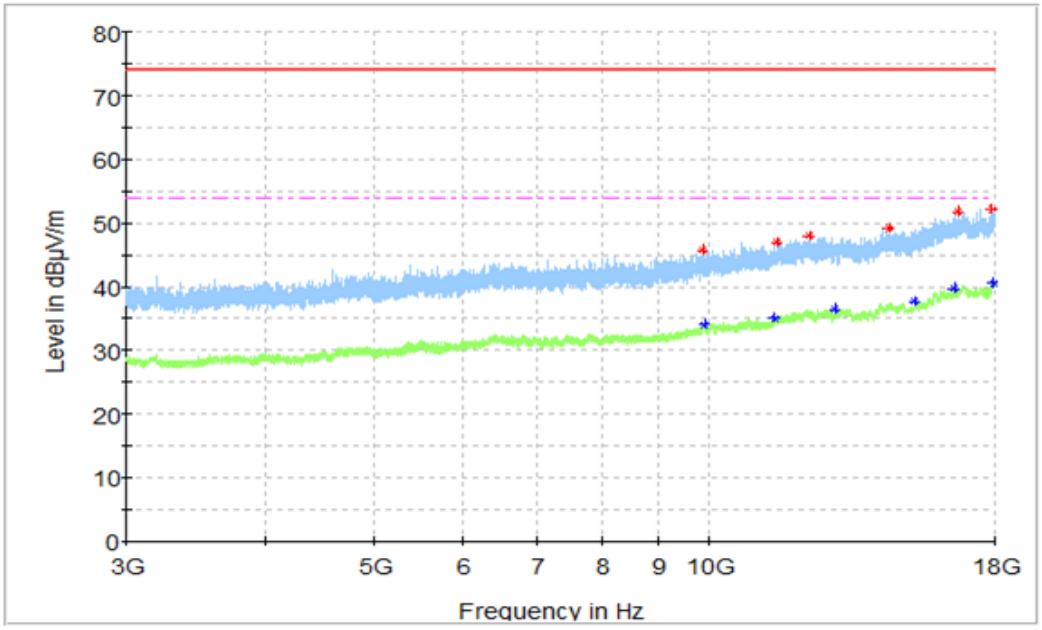

Figure A.1.43. Radiated Emission (LTE receiver Band 17, 3GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
9867.500000	45.69	74.00	28.31	H	5.2	40.49
11495.000000	46.94	74.00	27.06	H	6.9	40.04
12285.000000	47.98	74.00	26.02	V	8.5	39.48
14488.500000	49.18	74.00	24.82	V	11.7	37.48
16712.500000	51.71	74.00	22.29	H	15.4	36.31
17913.000000	52.17	74.00	21.83	H	17.3	34.87

Final_Results_AVG

Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
9883.000000	34.03	54.00	19.97	V	5.4	28.63
11423.000000	35.10	54.00	18.90	H	6.7	28.4
12943.500000	36.55	54.00	17.45	H	9.4	27.15
15289.000000	37.70	54.00	16.30	H	12.4	25.30
16562.000000	39.79	54.00	14.21	H	15.3	24.49
17948.500000	40.60	54.00	13.40	V	17.2	23.40

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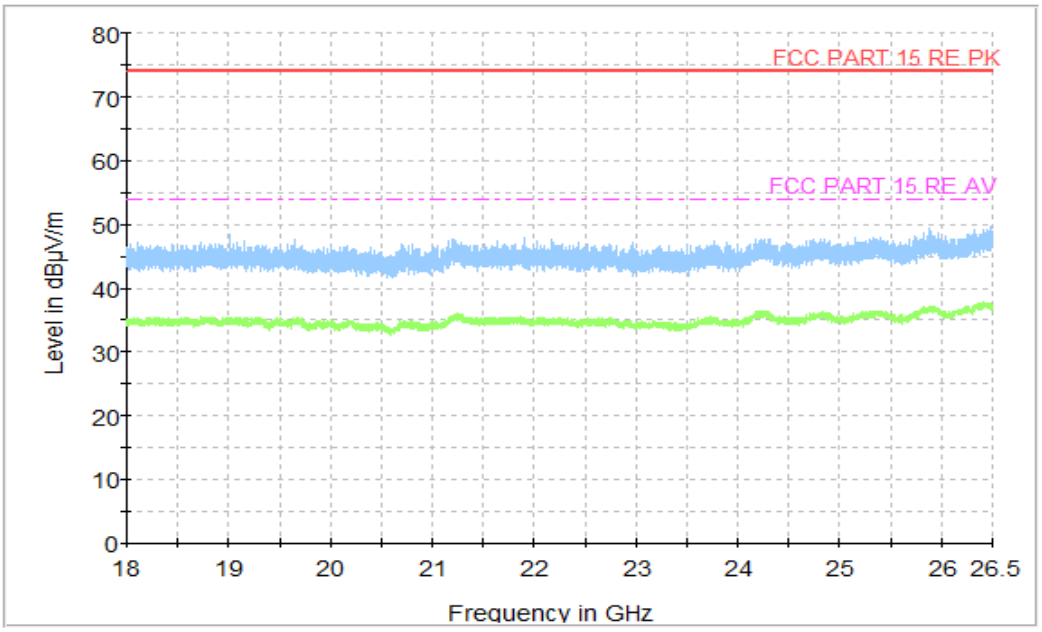

Figure A.1.44. Radiated Emission ((LTE receiver Band 17 , 18GHz to 26.5GHz)

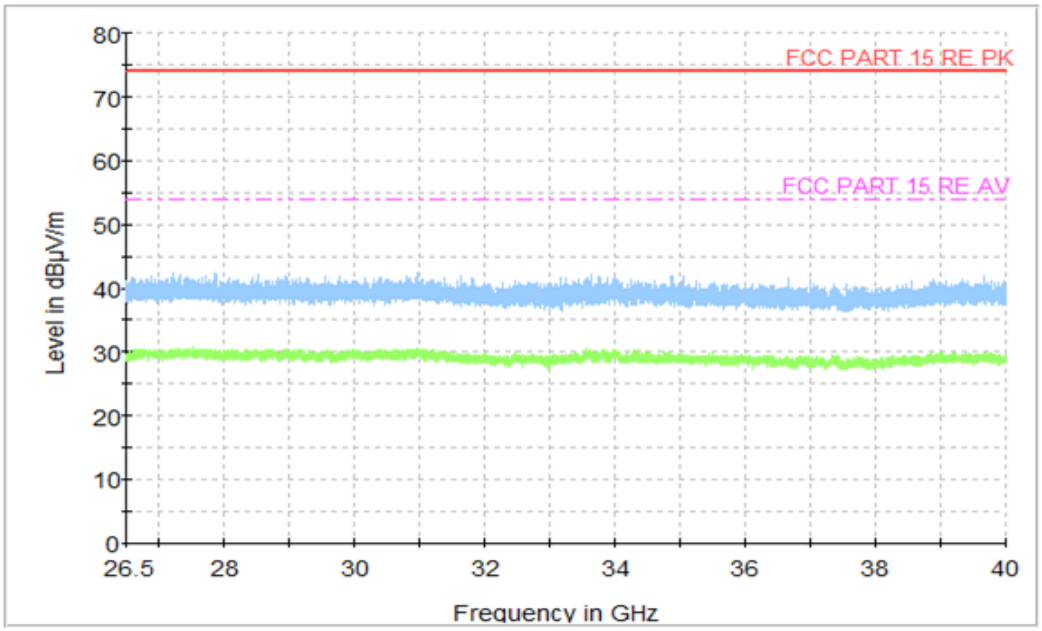

Figure A.1.45. Radiated Emission (LTE receiver Band 17 , 26.5GHz to 40GHz)

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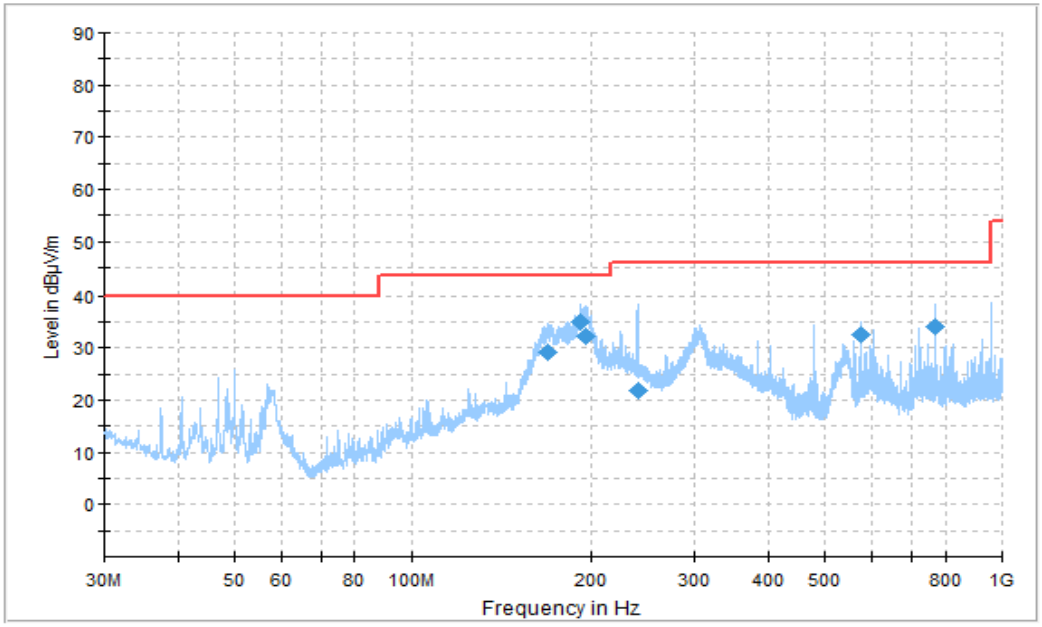

Figure A.1.46. Radiated Emission (Data Transfer: PC TO EUT, 30MHz to 1GHz)

Final_Results

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
168.836111	29.23	43.50	14.27	H	-31.6	60.83
191.970000	35.11	43.50	8.39	H	-33.4	68.51
196.486111	32.21	43.50	11.29	H	-33.3	65.51
240.038889	21.77	46.00	24.23	H	-31.5	53.27
576.022222	32.64	46.00	13.36	V	-21.9	54.54
767.988333	33.94	46.00	12.06	H	-19.3	53.24

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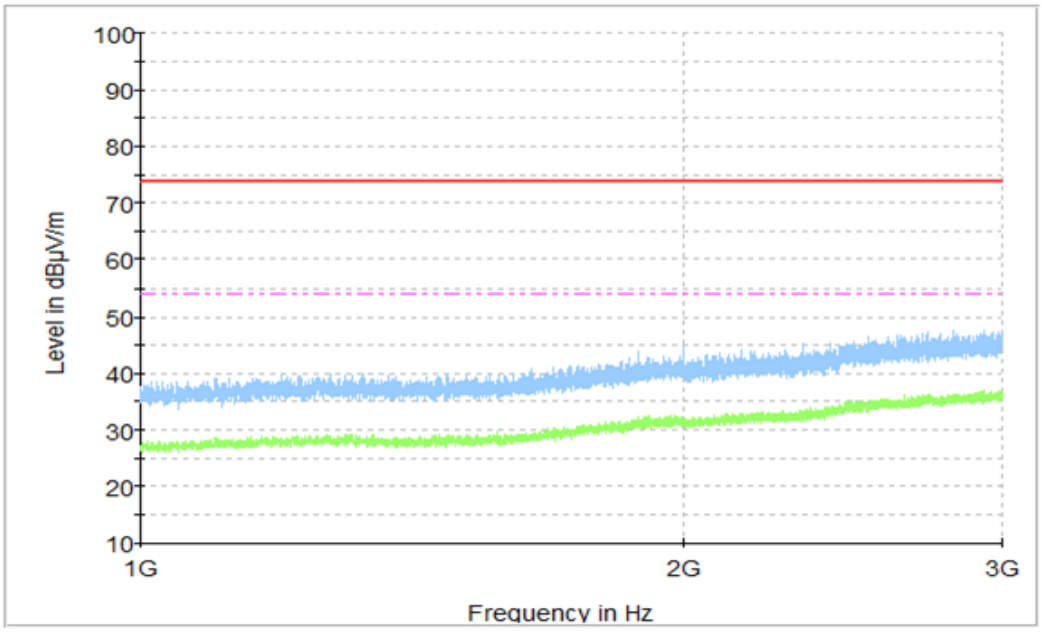

Figure A.1.47. Radiated Emission (Data Transfer: PC TO EUT , 1GHz to 3GHz)

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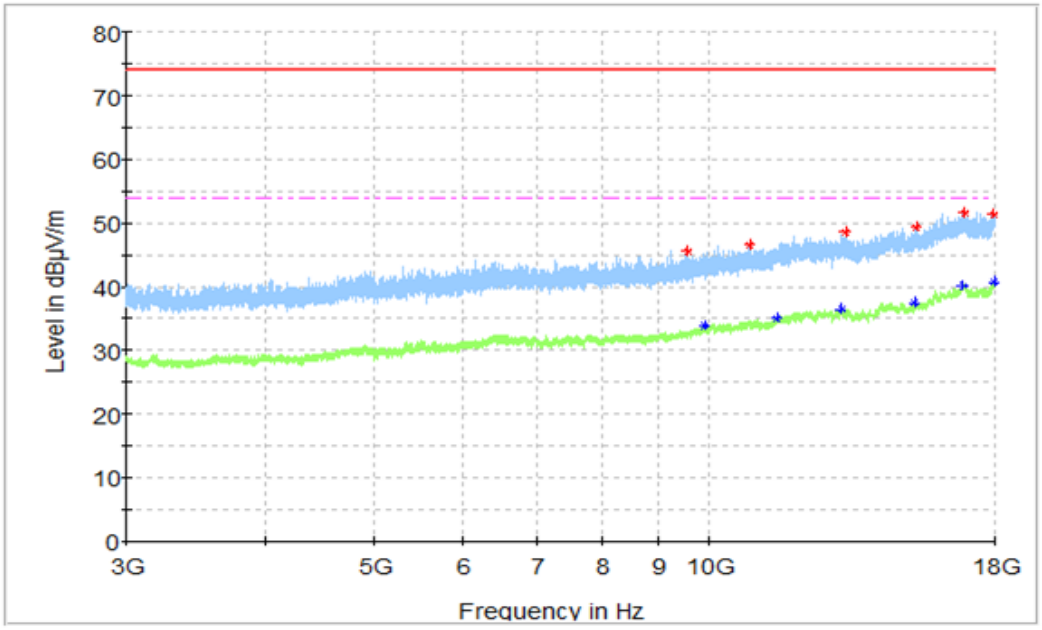

Figure A.1.48. Radiated Emission (Data Transfer: PC TO EUT, 3GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
9544.000000	45.45	74.00	28.55	H	4.1	41.35
10849.000000	46.45	74.00	27.55	V	6.3	40.15
13225.500000	48.64	74.00	25.36	H	9.5	39.14
15296.000000	49.46	74.00	24.54	V	12.4	37.06
16887.500000	51.65	74.00	22.35	V	16.1	35.55
17945.000000	51.43	74.00	22.57	H	17.3	34.13

Final_Results_AVG

Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
9898.500000	33.90	54.00	20.10	H	5.3	28.60
11491.000000	35.06	54.00	18.94	V	7.0	28.06
13093.500000	36.48	54.00	17.52	V	9.6	26.88
15286.000000	37.52	54.00	16.48	H	12.3	25.22
16850.000000	40.12	54.00	13.88	H	16.0	24.12
17979.000000	40.74	54.00	13.26	V	16.9	23.84

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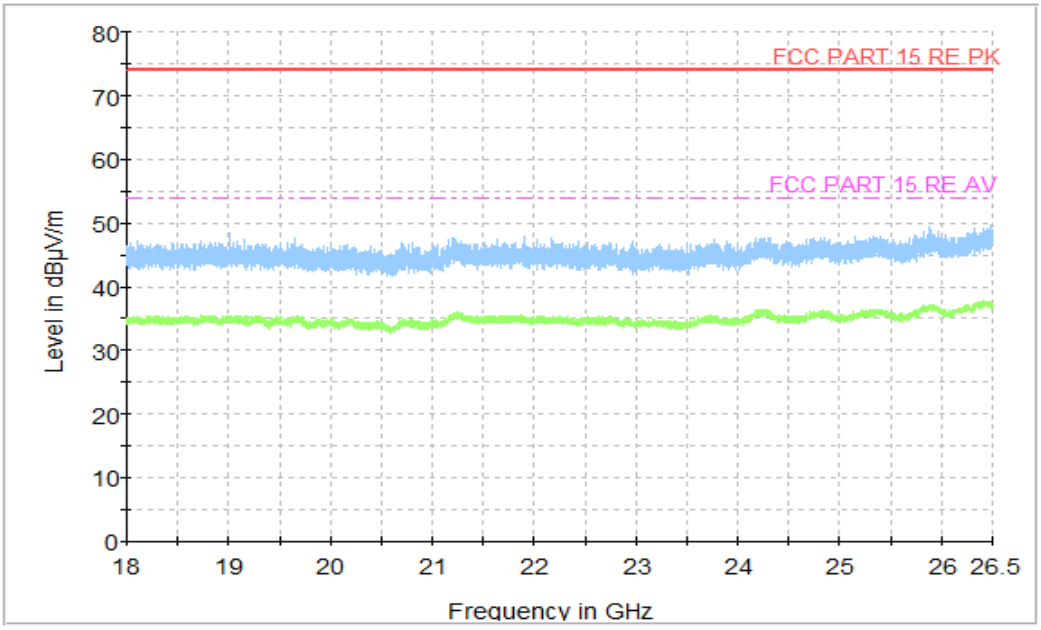

Figure A.1.49. Radiated Emission (Data Transfer: PC TO EUT, 18GHz to 26.5GHz)

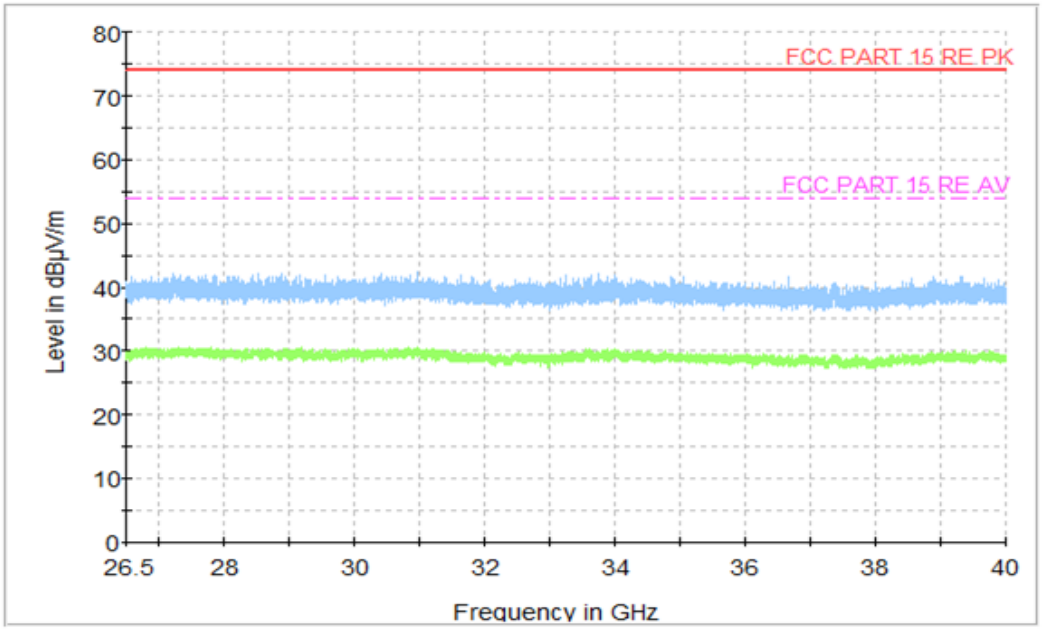

Figure A.1.50. Radiated Emission (Data Transfer: PC TO EUT , 26.5GHz to 40GHz)

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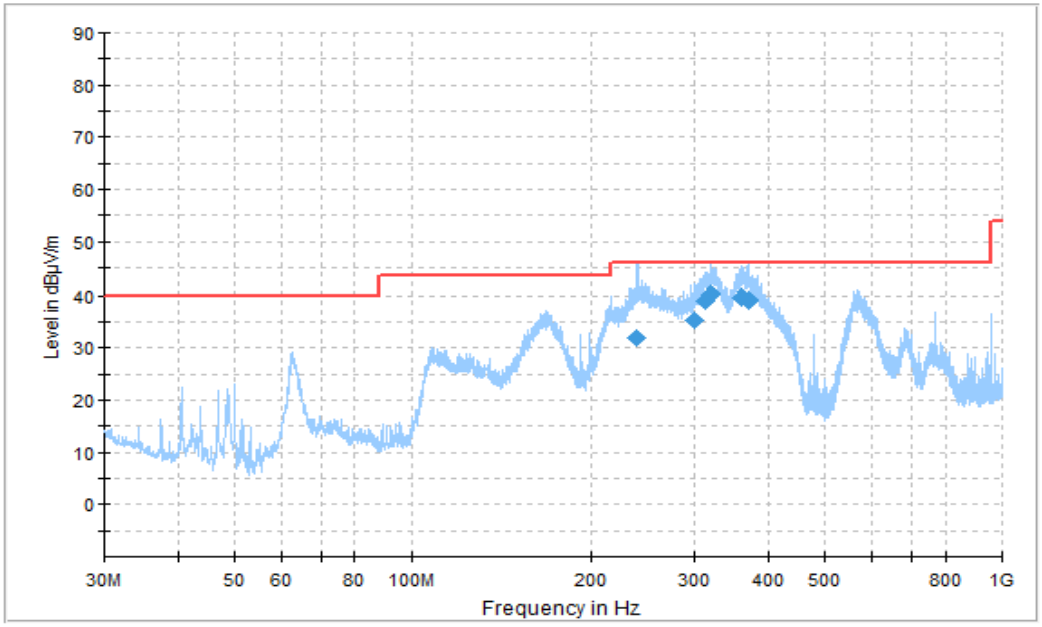

Figure A.1.51. Radiated Emission (Data Transfer: PC TO EUT, 30MHz to 1GHz)

Final_Results

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
239.833889	32.02	46.00	13.98	H	-31.5	63.52
300.836111	35.24	46.00	10.76	H	-29.4	64.64
313.609444	39.03	46.00	6.97	H	-28.9	67.93
320.321111	40.25	46.00	5.75	H	-28.6	68.85
361.275000	39.56	46.00	6.44	H	-27.6	67.16
371.136667	39.07	46.00	6.93	H	-27.0	66.07

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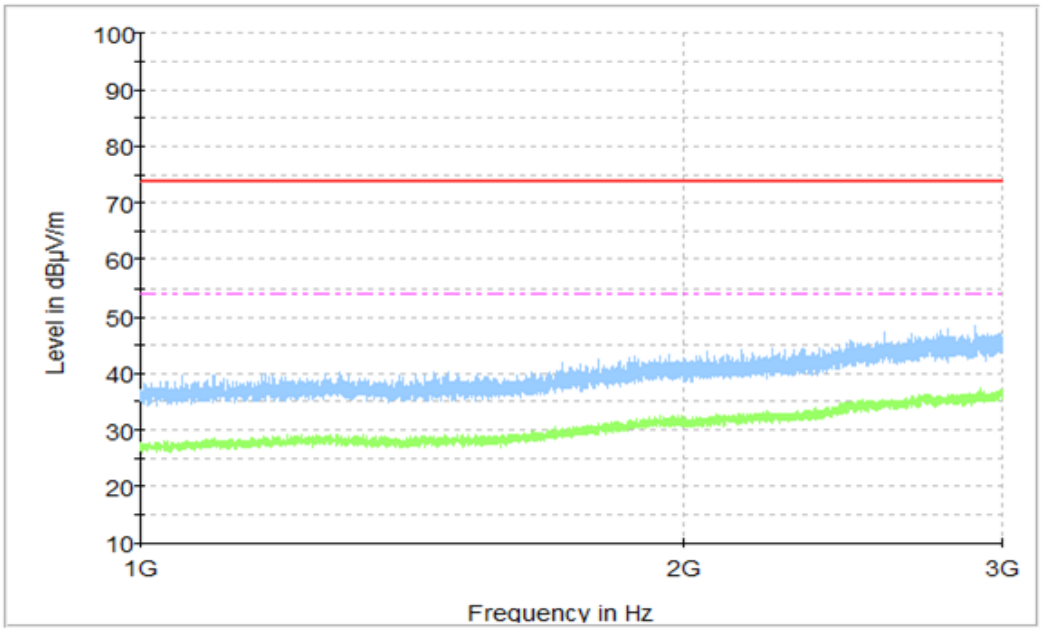

Figure A.1.52. Radiated Emission (Data Transfer: PC TO EUT , 1GHz to 3GHz)

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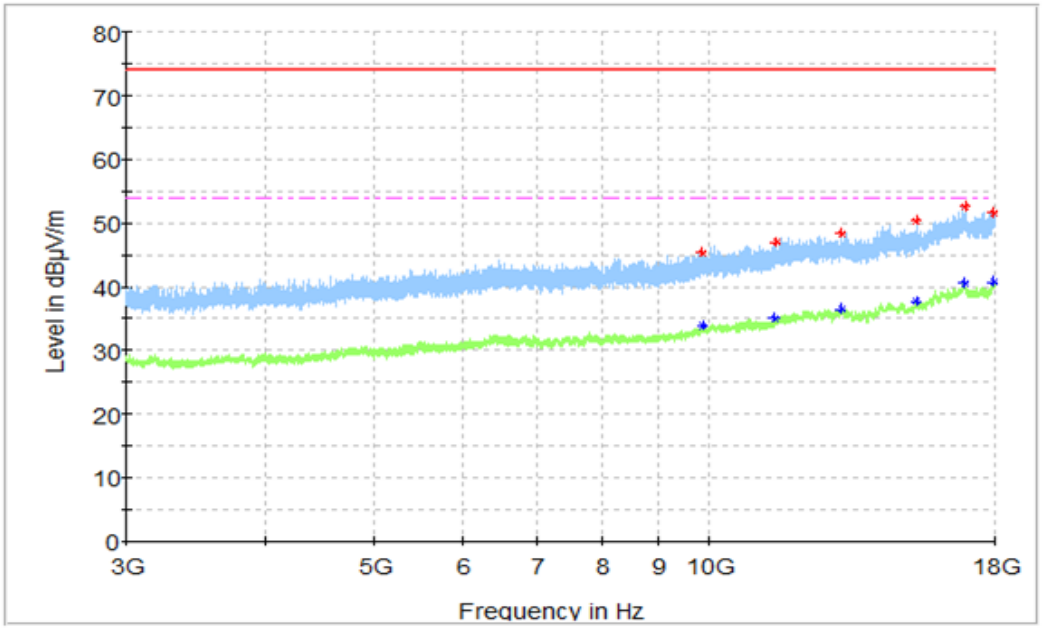

Figure A.1.53. Radiated Emission (Data Transfer: PC TO EUT, 3GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	PMea (dBµV)
9851.500000	45.28	74.00	28.72	H	5.4	39.88
11449.500000	46.99	74.00	27.01	V	6.7	40.29
13121.000000	48.42	74.00	25.58	V	9.7	38.72
15323.500000	50.48	74.00	23.52	V	12.3	38.18
16957.000000	52.56	74.00	21.44	H	15.9	36.66
17954.500000	51.65	74.00	22.35	H	17.1	34.55

Final_Results_AVG

Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
9878.000000	33.94	54.00	20.06	H	5.3	28.64
11434.500000	34.99	54.00	19.01	V	6.8	28.19
13125.500000	36.54	54.00	17.46	V	9.8	26.74
15303.000000	37.65	54.00	16.35	V	12.3	25.35
16879.500000	40.41	54.00	13.59	V	16.0	24.41
17943.500000	40.63	54.00	13.37	H	17.3	23.33

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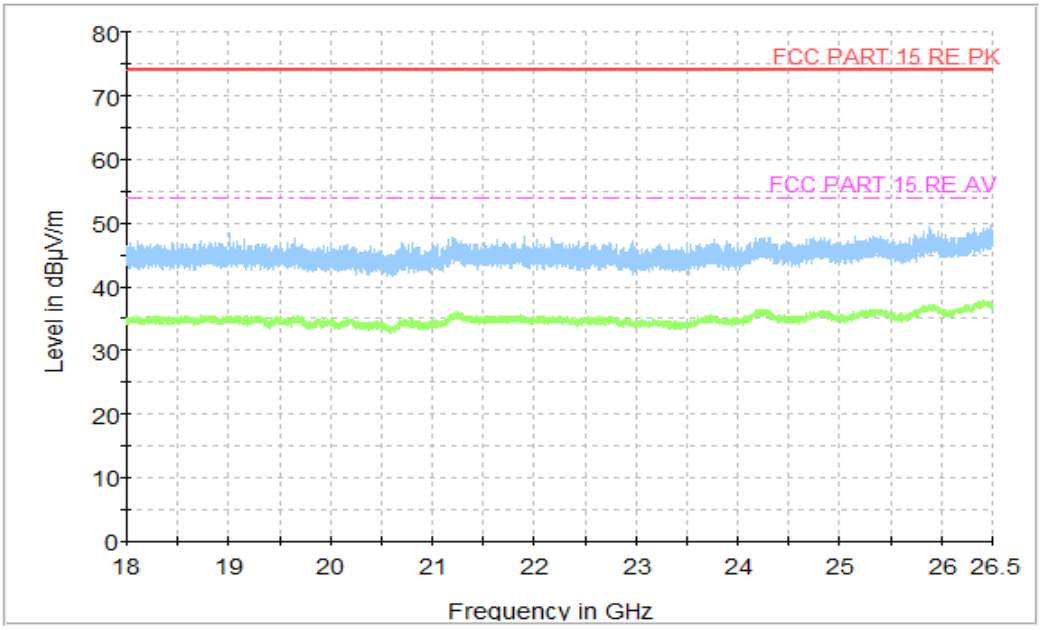

Figure A.1.54. Radiated Emission (Data Transfer: PC TO EUT, 18GHz to 26.5GHz)

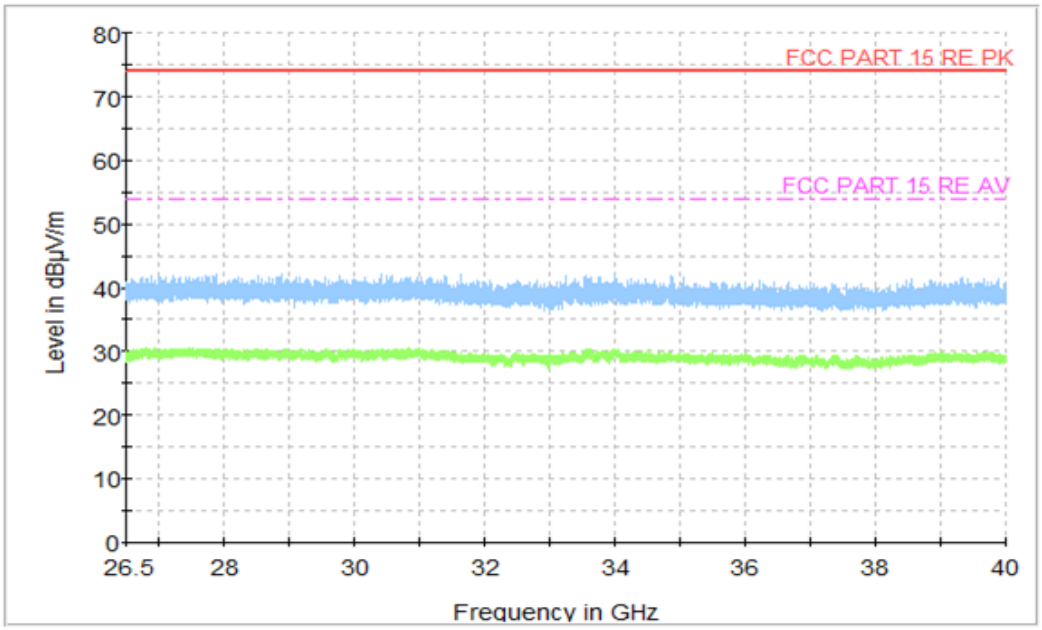

Figure A.1.55. Radiated Emission (Data Transfer: PC TO EUT , 26.5GHz to 40GHz)

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A.2 Conducted Emission (§15.107(a))

Reference

FCC: 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 Mode:

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.

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

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 EUT 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		

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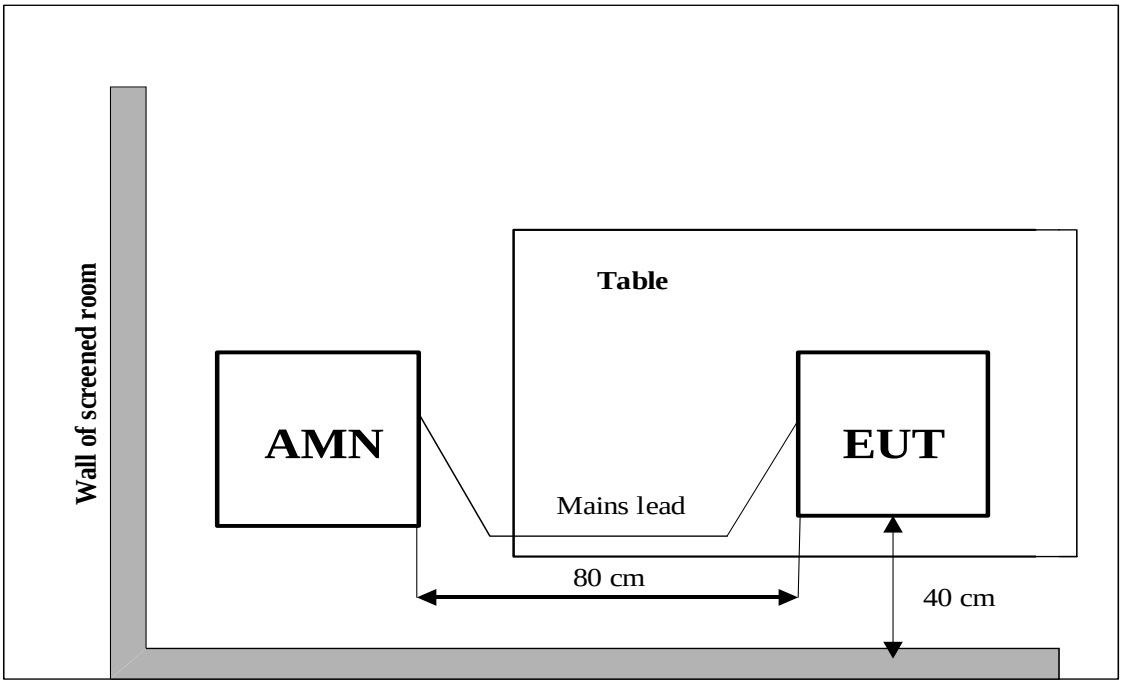
A.2.4Test set-up:



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
			UT01aa/Set.1	
0.15 to 0.5	66 to 56	56 to 46	See Figure A.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.				

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Video Player

AC Input Port/ Voltage: 120V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV) UT01aa/Set.1	Conclusion
0.15 to 0.5	66 to 56	56 to 46	See Figure A.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.				

Video Player

AC Input Port/ Voltage: 120V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV) UT01aa/Set.2	Conclusion
0.15 to 0.5	66 to 56	56 to 46	See Figure A.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.				

FM receiver

AC Input Port/ Voltage: 120V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV) UT01aa/Set.3	Conclusion
0.15 to 0.5	66 to 56	56 to 46	See Figure A.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

AC Input Port/ Voltage: 120V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV) UT01aa/Set.4	Conclusion
0.15 to 0.5	66 to 56	56 to 46	See Figure A.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.				

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Data Transfer

AC Input Port/ Voltage: 120V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV) UT01aa/Set.5	Conclusion
0.15 to 0.5	66 to 56	56 to 46	See Figure A.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

AC Input Port/ Voltage: 240V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV) UT01aa/Set.1	Conclusion
0.15 to 0.5	66 to 56	56 to 46	See Figure A.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.				

Camera

AC Input Port/ Voltage: 240V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV) UT01aa/Set.2	Conclusion
0.15 to 0.5	66 to 56	56 to 46	See Figure A.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.				

Video Player

AC Input Port/ Voltage: 240V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV) UT01aa/Set.1	Conclusion
0.15 to 0.5	66 to 56	56 to 46	See Figure A.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.				

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FM receiver

AC Input Port/ Voltage: 240V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			UT01aa/Set.3	
0.15 to 0.5	66 to 56	56 to 46	See Figure A.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

AC Input Port/ Voltage: 240V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			UT01aa/Set.4	
0.15 to 0.5	66 to 56	56 to 46	See Figure A.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

AC Input Port/ Voltage: 240V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			UT01aa/Set.5	
0.15 to 0.5	66 to 56	56 to 46	See Figure A.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.				

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AC Input Port/ Voltage: 120V/60Hz

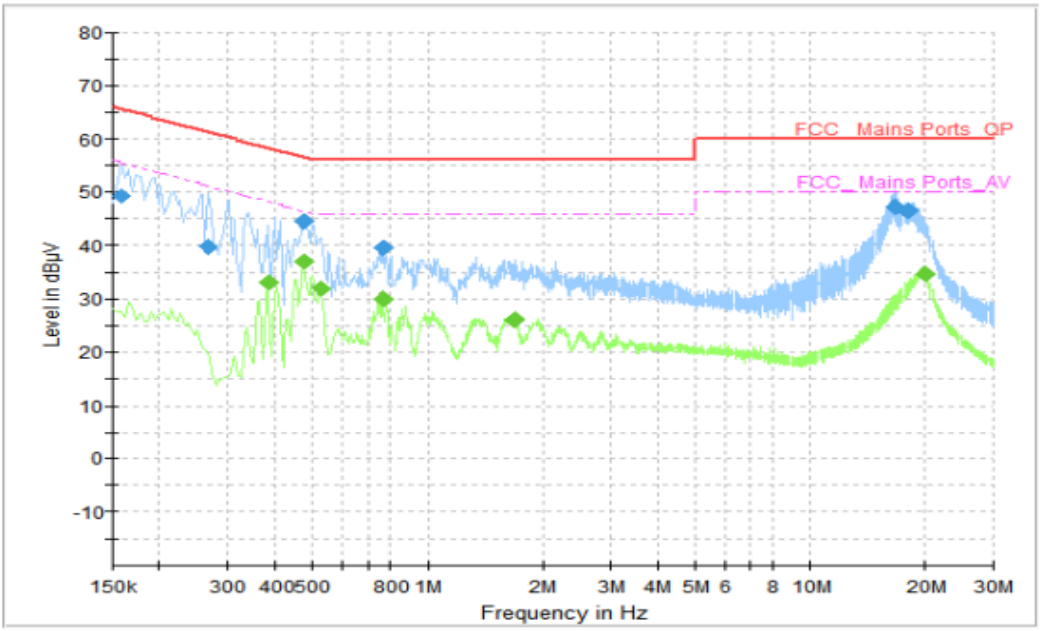

Figure A.2.1. Conducted Emission(Camera)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.158000	49.15	65.57	16.41	N	10	39.15
0.266000	39.64	61.24	21.60	N	10	29.64
0.478000	44.61	56.37	11.76	N	10	34.61
0.762000	39.40	56.00	16.60	N	10	29.40
16.602000	47.35	60.00	12.65	L1	10	37.35
17.962000	46.62	60.00	13.38	L1	10	36.62

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.382000	33.04	48.24	15.20	L1	10	23.04
0.474000	37.08	46.44	9.37	L1	10	27.08
0.526000	31.90	46.00	14.10	L1	10	21.90
0.766000	29.91	46.00	16.09	L1	10	19.91
1.686000	26.11	46.00	19.89	L1	10	16.11
20.014000	34.66	50.00	15.34	N	10	24.66

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AC Input Port/ Voltage: 120V/60Hz

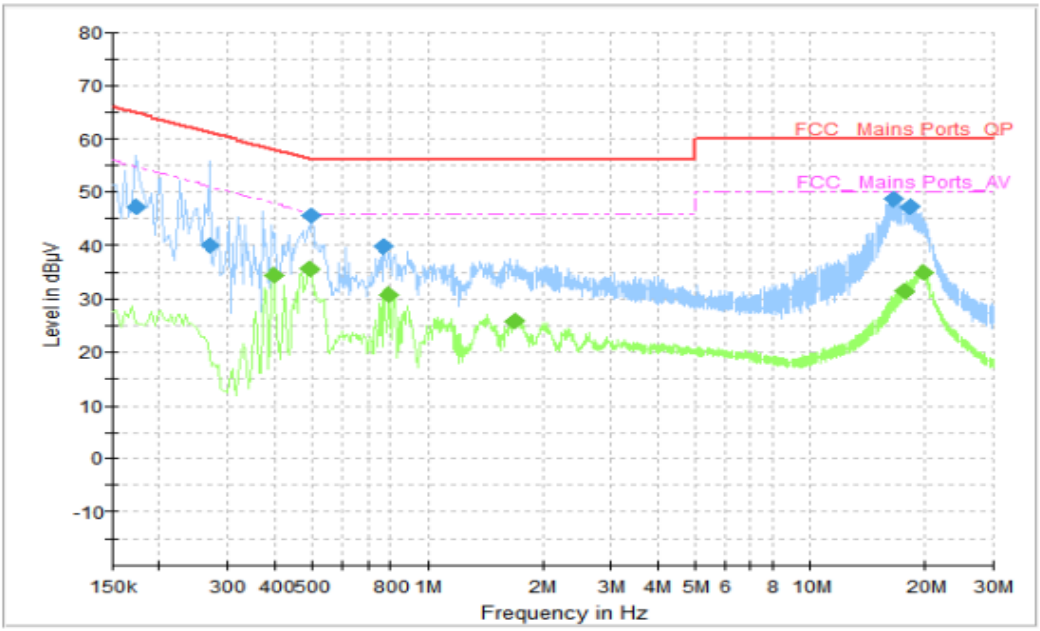

Figure A.2.2. Conducted Emission(Video Player)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.174000	47.19	64.77	17.58	N	10	37.19
0.270000	40.11	61.12	21.01	N	10	30.11
0.498000	45.60	56.03	10.44	N	10	35.60
0.770000	39.89	56.00	16.11	N	10	29.89
16.538000	48.63	60.00	11.37	L1	10	38.63
18.314000	47.29	60.00	12.71	L1	10	37.29

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.398000	34.46	47.90	13.44	L1	10	24.46
0.494000	35.57	46.10	10.53	L1	10	25.57
0.794000	30.95	46.00	15.05	L1	10	20.95
1.694000	25.70	46.00	20.30	L1	10	15.70
17.654000	31.27	50.00	18.73	N	10	21.27
19.738000	34.94	50.00	15.06	N	10	24.94

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AC Input Port/ Voltage: 120V/60Hz

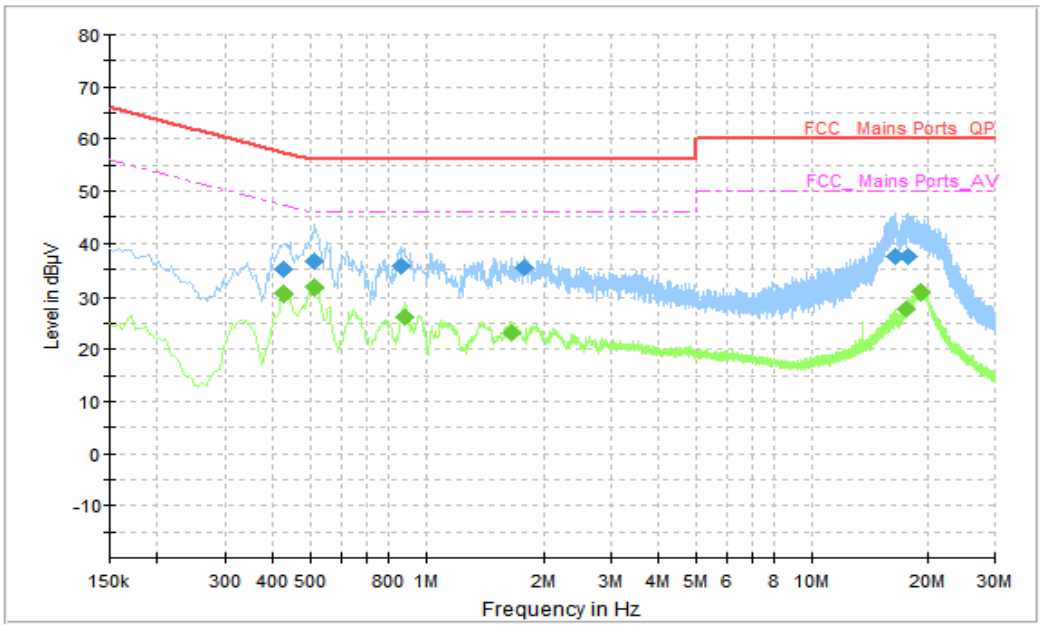

Figure A.2.3. Conducted Emission(Video Player)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.426000	35.02	57.33	22.31	N	10	37.19
0.510000	36.43	56.00	19.57	N	10	30.11
0.858000	35.58	56.00	20.42	N	10	35.60
1.774000	35.47	56.00	20.53	N	10	29.89
16.470000	37.52	60.00	22.48	L1	10	38.63
17.886000	37.63	60.00	22.37	N	10	37.29

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.426000	30.36	47.33	16.97	L1	10	24.46
0.514000	31.74	46.00	14.26	L1	10	25.57
0.882000	26.08	46.00	19.92	L1	10	20.95
1.646000	23.25	46.00	22.75	L1	10	15.70
17.646000	27.66	50.00	22.34	N	10	21.27
19.286000	30.78	50.00	19.22	N	10	24.94

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AC Input Port/ Voltage: 120V/60Hz

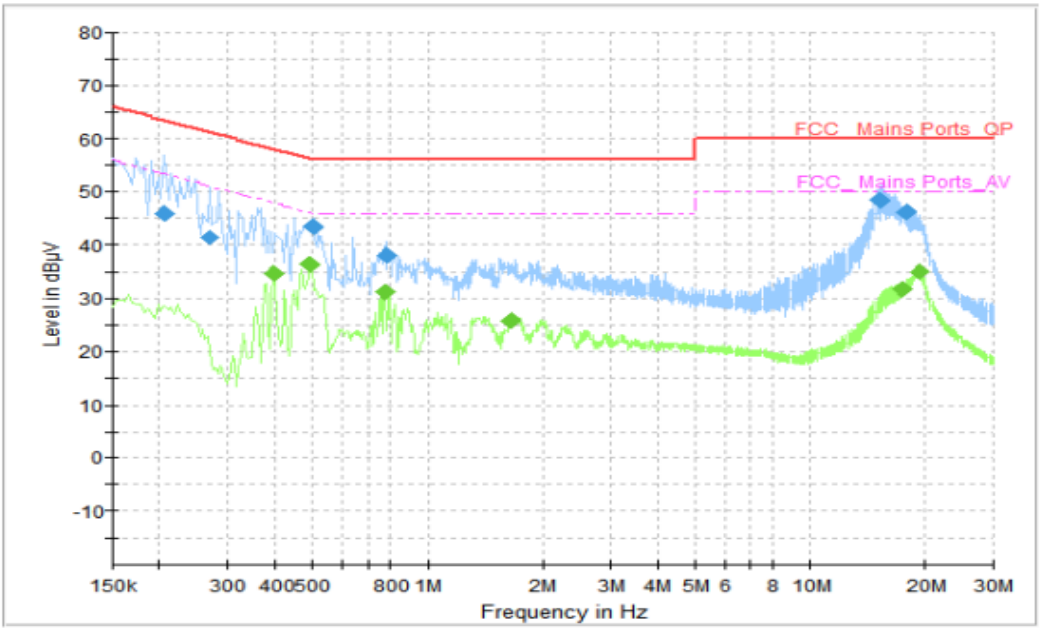

Figure A.2.4. Conducted Emission(FM receiver)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.206000	45.93	63.37	17.44	L1	10	35.93
0.270000	41.43	61.12	19.69	L1	10	31.43
0.502000	43.32	56.00	12.68	N	10	33.32
0.782000	38.18	56.00	17.82	N	10	28.18
15.226000	48.48	60.00	11.52	L1	10	38.48
17.822000	46.08	60.00	13.92	N	10	36.08

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.398000	34.65	47.90	13.25	L1	10	24.65
0.490000	36.47	46.17	9.70	L1	10	26.47
0.774000	31.20	46.00	14.80	L1	10	21.20
1.654000	25.77	46.00	20.23	L1	10	15.77
17.390000	31.66	50.00	18.34	N	10	21.66
19.186000	**34.94**	**50.00**	**15.06**	**N**	10	24.94

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AC Input Port/ Voltage: 120V/60Hz

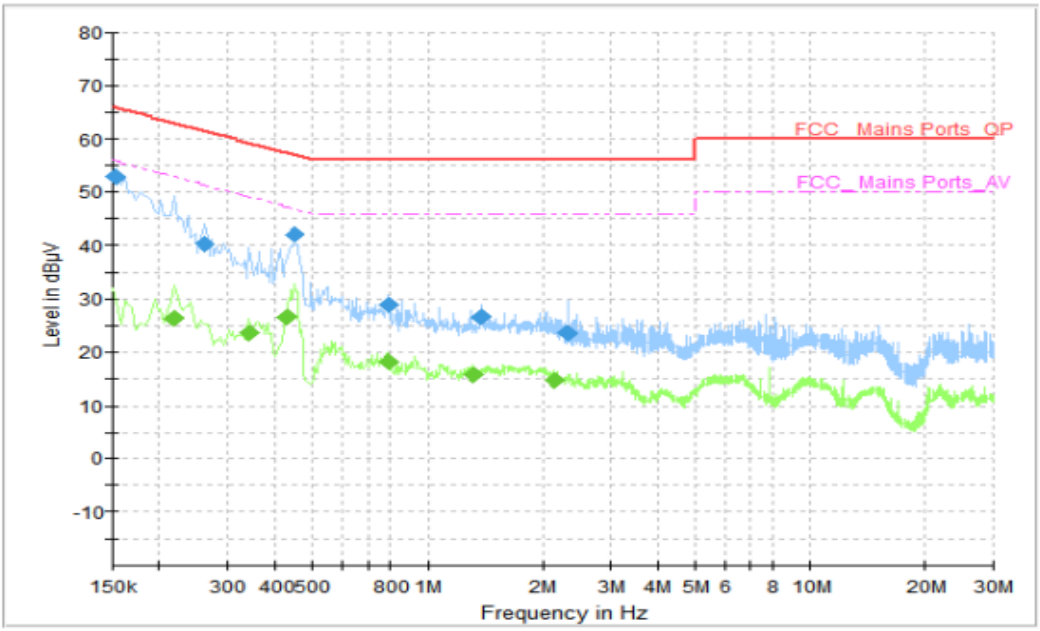

Figure A.2.5. Conducted Emission(Data Transfer)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.154000	52.93	65.78	12.86	N	10	42.93
0.262000	40.21	61.37	21.16	N	10	30.21
0.450000	42.09	56.88	14.79	L1	10	32.09
0.794000	28.82	56.00	27.18	N	10	18.82
1.374000	26.59	56.00	29.41	N	10	16.59
2.326000	23.64	56.00	32.36	N	10	13.64

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.218000	26.26	52.90	26.64	N	10	16.26
0.342000	23.66	49.16	25.50	N	10	13.66
0.430000	26.64	47.25	20.61	L1	10	16.64
0.794000	18.18	46.00	27.82	N	10	8.18
1.314000	15.87	46.00	30.13	N	10	5.87
2.142000	14.53	46.00	31.47	N	10	4.53

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AC Input Port/ Voltage: 120V/60Hz

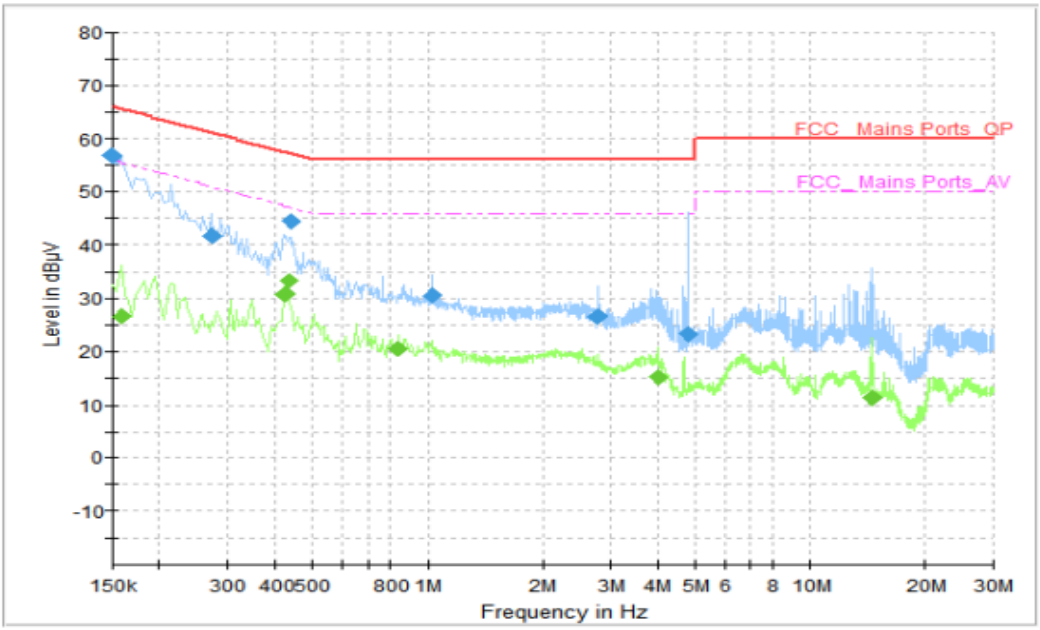

Figure A.2.6. Conducted Emission(Data Transfer)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.150000	56.95	66.00	9.05	N	10	46.95
0.274000	41.74	61.00	19.25	N	10	31.74
0.438000	44.63	57.10	12.47	N	10	34.63
1.026000	30.42	56.00	25.58	N	10	20.42
2.786000	26.74	56.00	29.26	N	10	16.74
4.786000	23.24	56.00	32.76	L1	10	13.24

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.158000	26.53	55.57	29.03	N	10	16.53
0.426000	30.90	47.33	16.43	N	10	20.9
0.434000	33.40	47.18	13.78	N	10	23.40
0.838000	20.45	46.00	25.55	N	10	10.45
3.986000	15.31	46.00	30.69	N	10	5.31
14.514000	11.25	50.00	38.75	N	10	1.25

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AC Input Port/ Voltage: 240V/60Hz

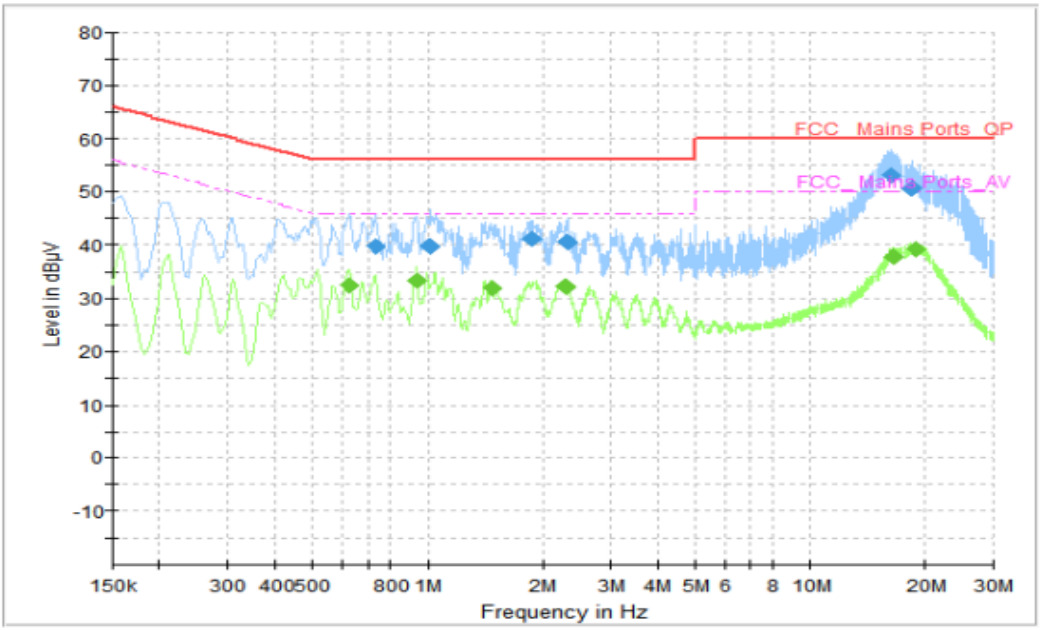

Figure A.2.7. Conducted Emission(Camera)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.730000	39.65	56.00	16.35	L1	10	29.65
1.018000	39.75	56.00	16.25	L1	10	29.75
1.878000	41.26	56.00	14.74	N	10	31.26
2.318000	40.55	56.00	15.45	N	10	30.55
16.194000	53.26	60.00	6.74	N	10	43.26
18.450000	50.73	60.00	9.27	N	10	40.73

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.622000	32.49	46.00	13.51	N	10	22.49
0.938000	33.26	46.00	12.74	N	10	23.26
1.470000	31.86	46.00	14.14	N	10	21.86
2.290000	32.19	46.00	13.81	N	10	22.19
16.382000	37.75	50.00	12.25	N	10	27.75
18.810000	39.10	50.00	10.90	N	10	29.10

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AC Input Port/ Voltage: 240V/60Hz

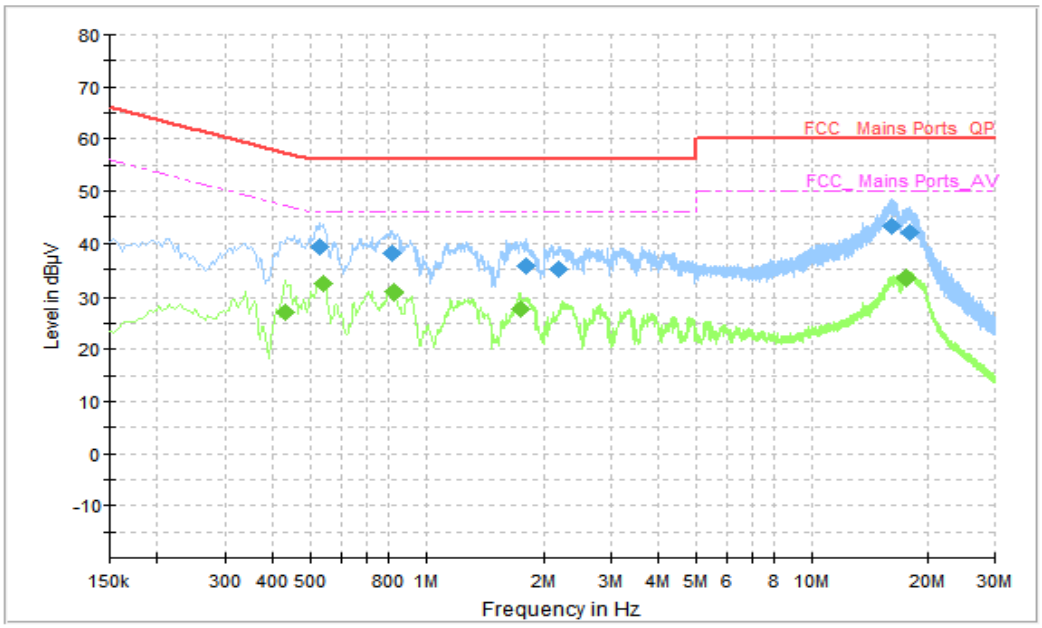

Figure A.2.8. Conducted Emission(Camera)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.526000	39.22	56.00	16.78	N	10	29.65
0.814000	38.21	56.00	17.79	N	10	29.75
1.810000	35.74	56.00	20.26	N	10	31.26
2.182000	35.04	56.00	20.96	N	10	30.55
16.210000	43.36	60.00	16.64	N	10	43.26
18.066000	42.19	60.00	17.81	N	10	40.73

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.430000	27.16	47.25	20.09	L1	10	22.49
0.538000	32.35	46.00	13.65	L1	10	23.26
0.822000	30.76	46.00	15.24	L1	10	21.86
1.738000	27.63	46.00	18.37	L1	10	22.19
17.602000	33.23	50.00	16.77	N	10	27.75
17.718000	33.42	50.00	16.58	N	10	29.10

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AC Input Port/ Voltage: 240V/60Hz

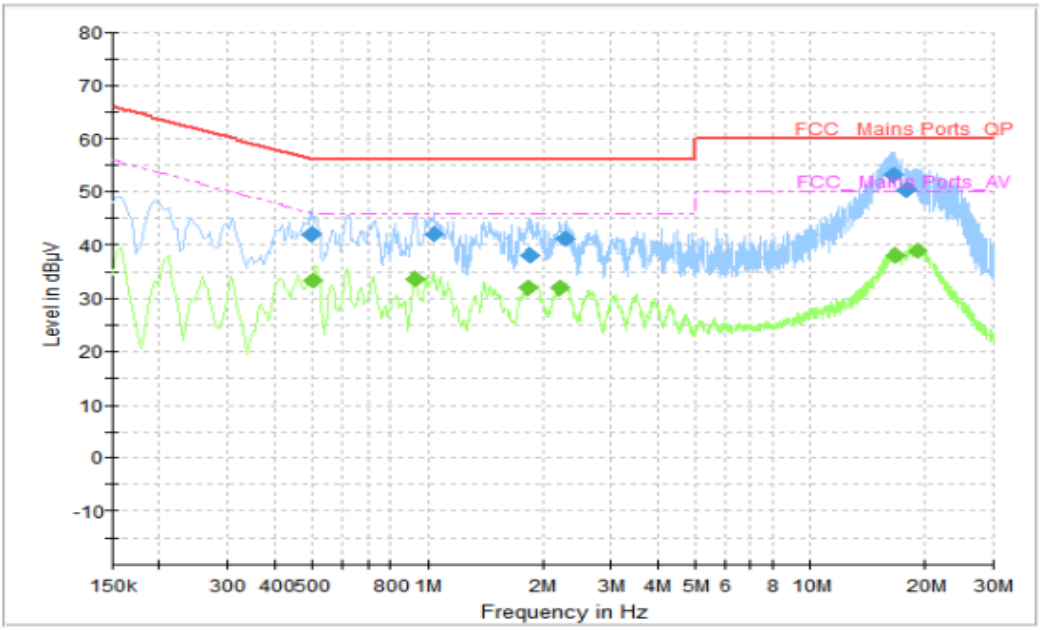

Figure A.2.9. Conducted Emission(Video Player)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.498000	41.91	56.03	14.12	L1	10	31.91
1.038000	41.97	56.00	14.03	N	10	31.97
1.862000	38.12	56.00	17.88	L1	10	28.12
2.306000	41.05	56.00	14.95	N	10	31.05
16.510000	53.16	60.00	6.84	N	10	43.16
17.870000	50.29	60.00	9.71	N	10	40.29

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.506000	33.44	46.00	12.56	N	10	23.44
0.930000	33.73	46.00	12.27	N	10	23.73
1.834000	32.08	46.00	13.92	N	10	22.08
2.226000	31.96	46.00	14.04	N	10	21.96
16.586000	38.07	50.00	11.93	N	10	28.07
18.970000	38.91	50.00	11.09	N	10	28.91

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AC Input Port/ Voltage:240 V/60Hz

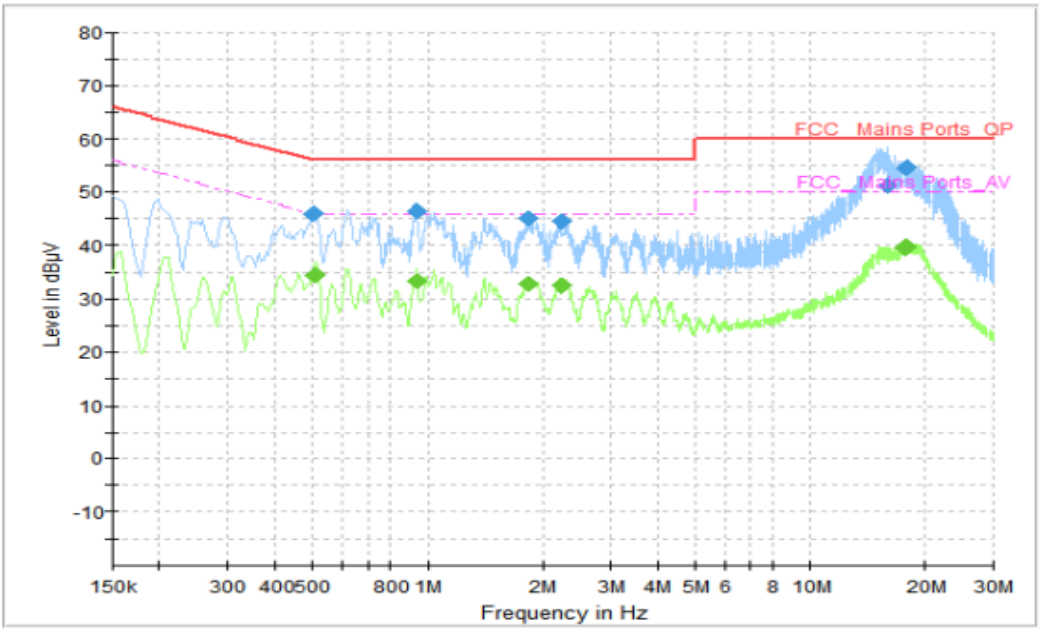

Figure A.2.10. Conducted Emission(FM receiver)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.506000	40.87	56.00	15.13	L1	10	30.87
0.938000	41.39	56.00	14.61	N	10	31.39
1.834000	40.01	56.00	15.99	N	10	30.01
2.238000	39.41	56.00	16.59	N	10	29.41
15.878000	51.27	60.00	8.73	N	10	41.27
17.826000	49.48	60.00	10.52	N	10	39.48

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.510000	34.40	46.00	11.60	N	10	24.40
0.938000	33.48	46.00	12.52	N	10	23.48
1.834000	32.77	46.00	13.23	N	10	22.77
2.234000	32.57	46.00	13.43	N	10	22.57
17.658000	39.56	50.00	10.44	N	10	29.56
17.802000	39.71	50.00	10.29	N	10	29.71

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AC Input Port/ Voltage: 240V/60Hz

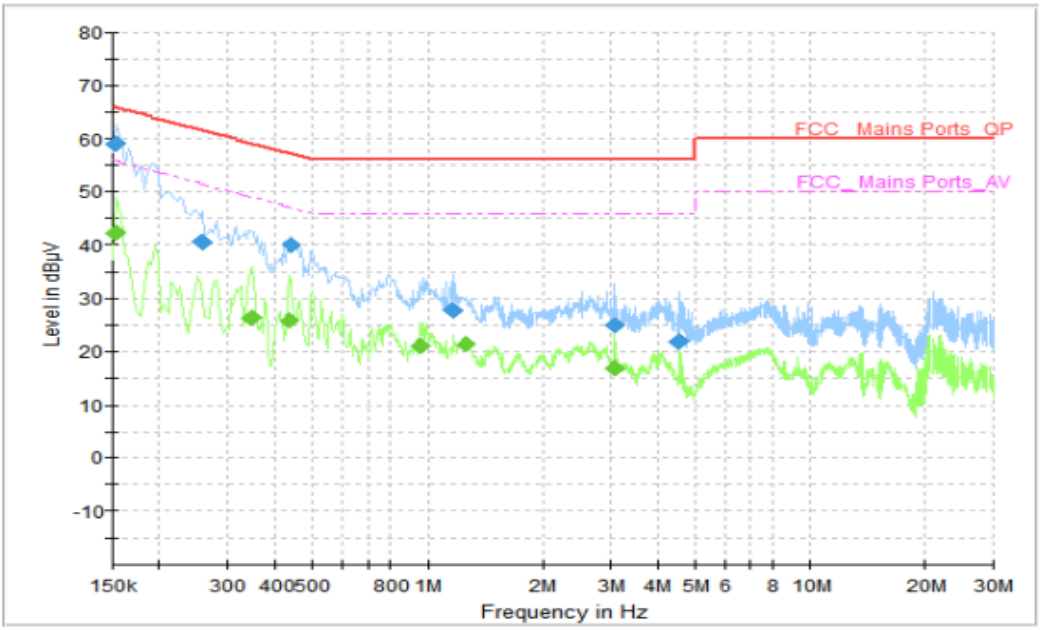

Figure A.2.11. Conducted Emission(Data Transfer)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.154000	59.10	65.78	6.68	N	10	49.10
0.258000	40.63	61.50	20.87	L1	10	30.63
0.442000	39.99	57.02	17.03	N	10	29.99
1.166000	27.68	56.00	28.32	N	10	17.68
3.082000	24.86	56.00	31.14	N	10	14.86
4.554000	21.81	56.00	34.19	N	10	11.81

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.154000	42.23	55.78	13.55	N	10	32.23
0.346000	26.45	49.06	22.61	N	10	16.45
0.434000	25.80	47.18	21.37	N	10	15.80
0.962000	21.17	46.00	24.83	N	10	11.17
1.254000	21.33	46.00	24.67	N	10	11.33
3.082000	16.75	46.00	29.25	N	10	6.75

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AC Input Port/ Voltage: 240V/60Hz

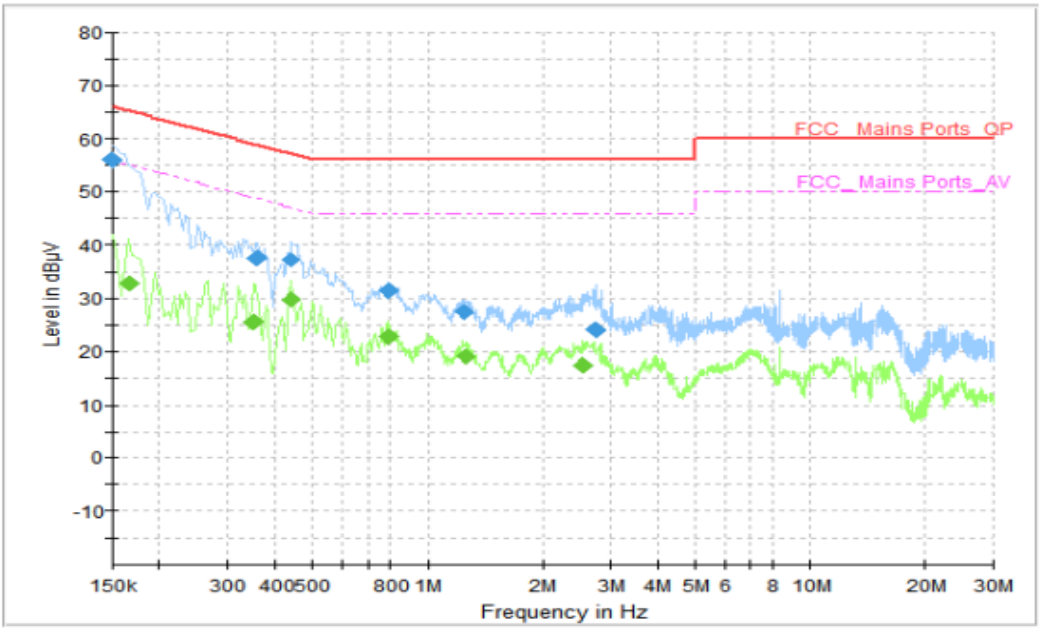

Figure A.2.12. Conducted Emission(Data Transfer)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.150000	55.92	66.00	10.08	N	10	45.92
0.358000	37.63	58.78	21.14	N	10	27.63
0.442000	37.37	57.02	19.65	N	10	27.37
0.794000	31.37	56.00	24.63	N	10	21.37
1.250000	27.45	56.00	28.55	N	10	17.45
2.762000	24.23	56.00	31.77	L1	10	14.23

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.166000	32.81	55.16	22.35	L1	10	22.81
0.350000	25.45	48.96	23.52	N	10	15.45
0.442000	29.68	47.02	17.34	N	10	19.68
0.790000	22.70	46.00	23.30	N	10	12.70
1.258000	19.22	46.00	26.78	N	10	9.22
2.546000	17.31	46.00	28.69	L1	10	7.31

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

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