TEST REPORT

No.I20N00775-EMC

for

TCL Communication Ltd.

LTE/UMTS/GSM Mobile Phone

Model Name：3080A

With

Hardware Version: PIO

Software Version: V 1.0

FCC ID: 2ACCJB125

Issued Date: 2020-04-26

Designation Number: CN1210

Note:

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

Test Laboratory:

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
I20N00775-EMC	Rev.0	1st edition	2020-04-26

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

CONTENTS

1. Summary of Test Report

1.1. Test Items

Description	LTE/UMTS/GSM Mobile Phone
Model Name	3080A
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

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: 2020-03-30 Testing End Date: 2020-04-25

1.6. Signature

Liang Yong
(Prepared this test report)

Zhang Yunzhuan
(Reviewed this test report)

Cao Junfei
(Approved this test report)

2. ClientInformation

2.1. Applicant Information

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

2.2. Manufacturer Information

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

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

3.1. About EUT

Description	LTE/UMTS/GSM Mobile Phone
Model Name	3080A
FCC ID	2ACCJB125
Antenna Type	Internal Antenna
Bands	GSM850/1900,WCDMA Band 2/4/5, LTE Band 2/4/5/7
Functions	FM, Bluetooth
Condition of EUT as received	No obvious damage in appearance

This device contains the receivers which tune and operate between 30MHz-960MHz in the following bands:
GSM850MHz, WCDMA Band5, LTE Band 5.

Note: Photographs of EUT are shown in ANNEX A of this test report. 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
UT05ca	354831110200037	PIO	V 1.0	2020-03-30

*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	Data Cable
AE4	Headset

AE1-1

Model	CAB1500081C7
Manufacturer	VEKEN
Capacity	1500mAh
Nominal Voltage	3.8v

AE1-2

Model	CAB1500082CA
Manufacturer	TIANMAO
Capacity	1500mAh
Nominal Voltage	3.8v

AE2-1

Model	CBA0066AGAC5
Manufacturer	PUAN

AE2-2

Model	CBA0066AGAC7
Manufacturer	CHENYANG

AE3

Model	/
Manufacturer	/

AE4-1

Model	CCB0046A10C1
Manufacturer	JUWEI

AE4-2

Model	CCB0046A10C4
Manufacturer	meihao

*AE ID and AE Label: is used to identify the test sample in the lab internally.
Note: AE3 just for testing

3.4. EUT set-ups

EUT set-up No.	Combination of EUT and AE	Remarks
Set.1	UT05aa +AE1-1+AE2-1+AE3+AE4-1	/
Set.2	UT05aa +AE1-2+AE2-2+AE3+AE4-2	/
Set.3	UT05aa +AE1-1+AE3+AE4-1	Data Transfer Mode
Set.4	UT02aa +AE1-2+AE3+AE4-2	Data Transfer Mode

3.5. General Description

The Equipment Under Test (EUT) is a model of LTE/UMTS/GSM Mobile Phone with internal antenna.
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 ℃, 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. = 30 ℃
Relative humidity	Min. =20 %, Max. = 75 %
Shielding effectiveness	0.014MHz-1MHz,>60dB; 1MHz-10000MHz,>90dB
Electrical insulation	>2MΩ
Ground system resistance	<4Ω

Fully-anechoic chamber did not exceed following limits along the EMC testing:
9.10m×6.10m×5.60m (L×W×H)

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

6. SUMMARY OF TEST RESULTS

6.1. Testing Environment

Normal Temperature: 15~35℃
Relative Humidity: 20~75%
Atmospheric pressure 86~106kPa

6.2. Summary of Measurement Results

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

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

6.3. Statement

6.3.1 Statements of conformity

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

7. Measurement uncertainty

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

8. Test Facilities Utilized

NO.	NAME	TYPE	SERIES NUMBER	PRODUCER	CALDUE DATE	CAL PERIOD
1.	Test Receiver	ESR7	101676	R&S	2020.11.27	1 year
2.	Test Receiver	ESCI	100701	R&S	2020.08.10	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	2020.07.17	1 year
6.	Horn Antenna	3117	00066577	ETS-Lindgren	2022.04.02	3 years
7.	Chamber	FACT3-2.0	1285	ETS-Lindgren	2021.07.19	2 years
8.	Software	EMC32	V10.01.00	R&S	/	/
9.	PC	ThinkPad T480	PF-13LW0C	Lenovo	/	/
10.	Printer	P1008	VNF6C12491	HP	/	/
11.	Mouse	MOEUUOA	44NY517	Lenovo	/	/

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:

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

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

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

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

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

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

A.1.3 Measurement Limit

Limit from CFR Part 15.109(a)

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

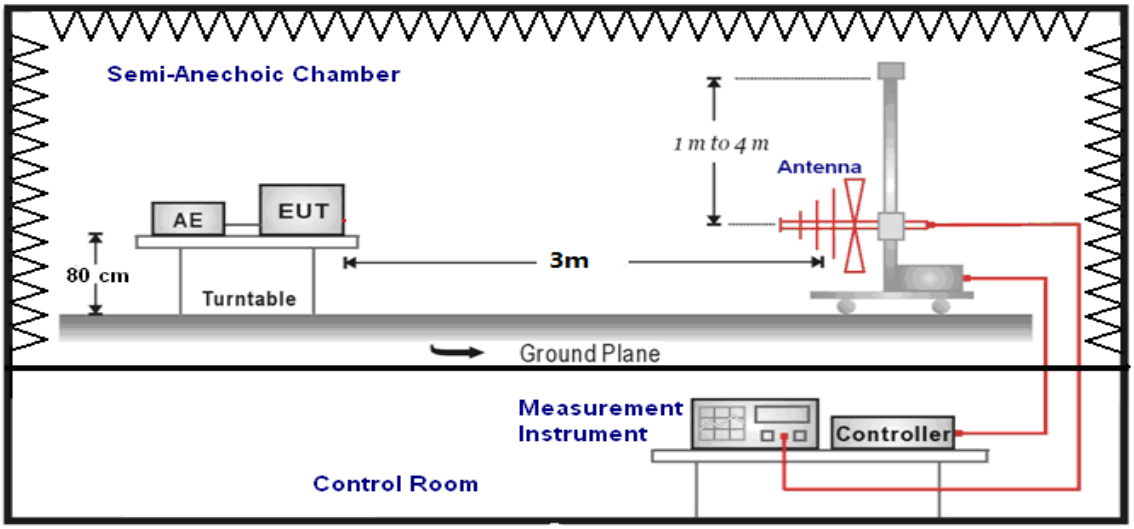
*Note: The original limit is defined at 10m test distance. This limit is calculated according to CISPR requirements.

A.1.4 Test Condition

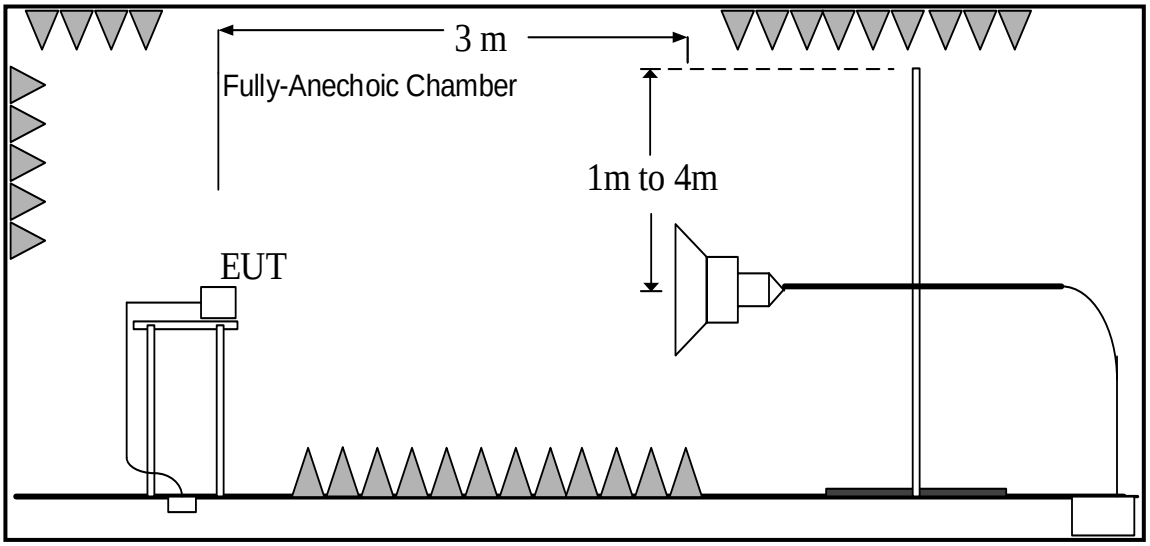
Frequency of emission (MHz)	RBW/VBW	Sweep Time(s)
30-1000	120kHz (IF bandwidth)	5
Above 1000	1MHz/3MHz	15

A.1.5 Test set-up:

30MHz-1GHz



1GHz-30GHz



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

Charging and GSM850MHz idle

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/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 (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m) Set.1	Conclusion
1000 to 3000	54	74	See Figure A.2	P
3000 to 18000			See Figure A.3	P

Charging and WCDMA Band 5 idle

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m) Set.1	Conclusion
30-88	40	See Figure A.4	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m) Set.1	Conclusion
1000 to 3000	54	74	See Figure A.5	P
3000 to 18000			See Figure A.6	P

Charging and LTE Band 5 idle

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/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 (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m) Set.1	Conclusion
1000 to 3000	54	74	See Figure A.8	P
3000 to 18000			See Figure A.9	P

Camera Mode

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m) Set.1	Conclusion
30-88	40	See Figure A.10	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m) Set.1	Conclusion
1000 to 3000	54	74	See Figure A.11	P
3000 to 18000			See Figure A.12	P

Video Player Mode

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m) Set.1	Conclusion
30-88	40	See Figure A.13	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m) Set.1	Conclusion
1000 to 3000	54	74	See Figure A.14	P
3000 to 18000			See Figure A.15	P

FM Mode

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m) Set.1	Conclusion
30-88	40	See Figure A.16	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m) Set.1	Conclusion
1000 to 3000	54	74	See Figure A.17	P
3000 to 18000			See Figure A.18	P

Video Player Mode

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/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 (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m) Set.2	Conclusion
1000 to 3000	54	74	See Figure A.20	P
3000 to 18000			See Figure A.21	P

Data Transfer Mode (PC to TF Card)

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m) Set.3	Conclusion
30-88	40	See Figure A.22	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m) Set.3	Conclusion
1000 to 3000	54	74	See Figure A.23	P
3000 to 18000			See Figure A.24	P

Data Transfer Mode (TF Card to PC)

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m)	Conclusion
		Set.3	
30-88	40	See Figure A.25	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m)	Conclusion
			Set.3	
1000 to 3000	54	74	See Figure A.26	P
3000 to 18000			See Figure A.27	P

Data Transfer Mode (TF Card to PC)

Frequency range (MHz)	Quasi-Peak Limit (dBμV/m)	Result (dBμV/m) Set.4	Conclusion
30-88	40	See Figure A.28	P
88-216	44		
216-960	46		
960-1000	54		

Frequency range (MHz)	Average Limit (dBμV/m)	Peak Limit (dBμV/m)	Result (dBμV/m)	Conclusion
			Set.4	
1000 to 3000	54	74	See Figure A.29	P
3000 to 18000			See Figure A.30	P

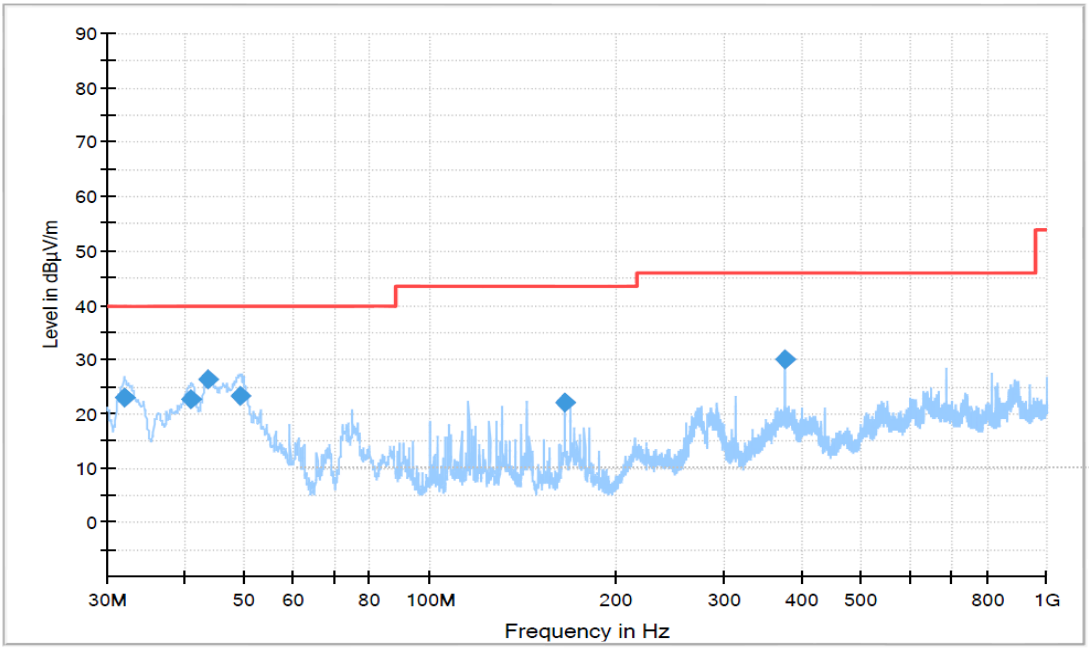


Figure A.1 Radiated Emission (Set.1, Charging and GSM850MHz idle, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
31.920000	23.07	40.00	16.93	V	-25.8	48.87
41.067222	22.62	40.00	17.38	V	-29.8	52.42
43.706111	26.24	40.00	13.76	V	-31.9	58.14
49.220000	23.25	40.00	16.75	V	-35.9	59.15
165.644444	22.02	43.50	21.48	V	-32.5	54.52
375.016667	29.97	46.00	16.03	V	-26.8	56.77

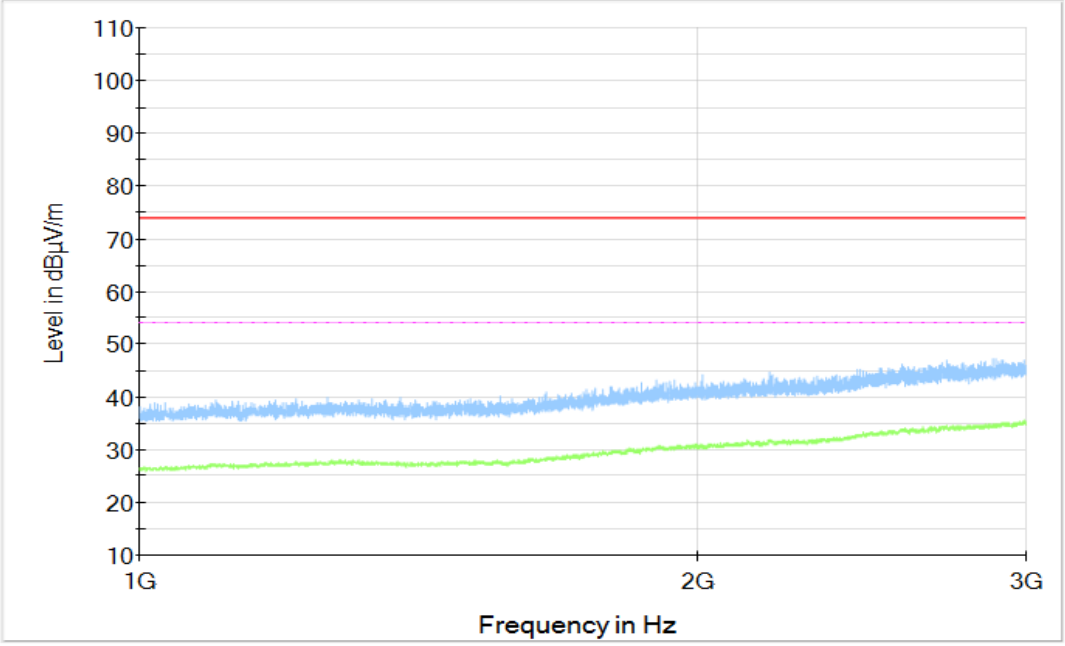


Figure A.2 Radiated Emission (Set.1, Charging and GSM850MHz idle, 1GHz to 3GHz)

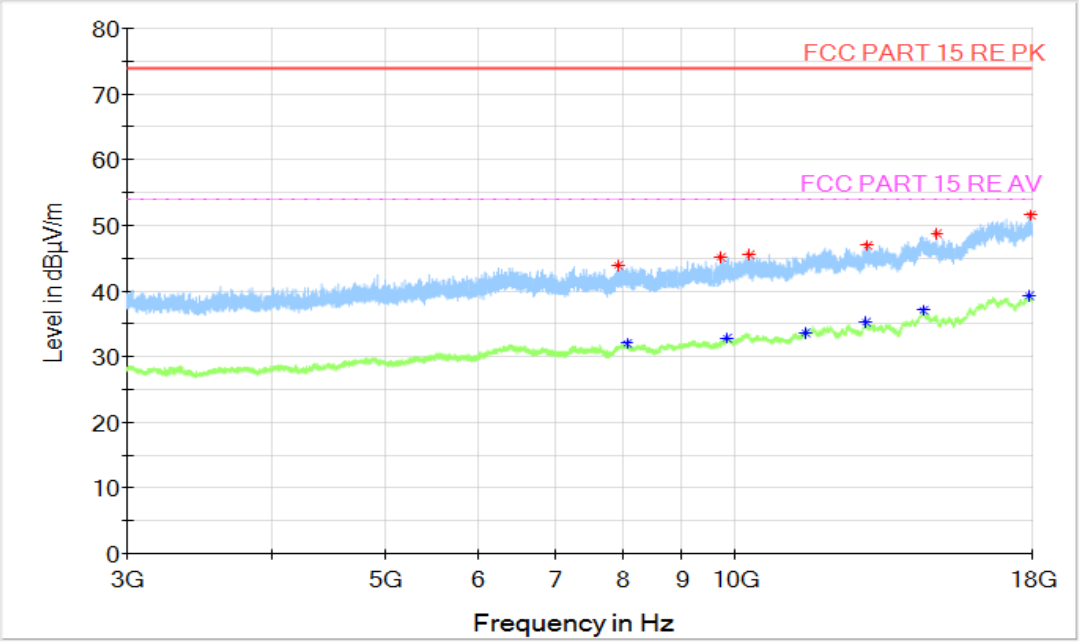


Figure A.3 Radiated Emission (Set.1, Charging and GSM850MHz idle , 3GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
7940.000000	43.99	74.00	30.01	V	2.8	41.19
9729.500000	45.18	74.00	28.82	V	4.0	41.18
10297.000000	45.52	74.00	28.48	H	5.1	40.42
12974.500000	46.97	74.00	27.03	H	8.4	38.57
14928.500000	48.75	74.00	25.25	V	11.2	37.55
17945.000000	51.52	74.00	22.48	H	16.0	35.52

Final_Results_AVG

Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
8083.000000	32.03	54.00	21.97	V	2.7	29.33
9844.500000	32.81	54.00	21.19	V	4.5	28.31
11489.500000	33.66	54.00	20.34	H	6.0	27.66
12945.000000	35.34	54.00	18.66	H	8.6	26.74
14505.000000	37.10	54.00	16.90	H	11.5	25.6
17915.000000	39.35	54.00	14.65	H	16.3	23.05

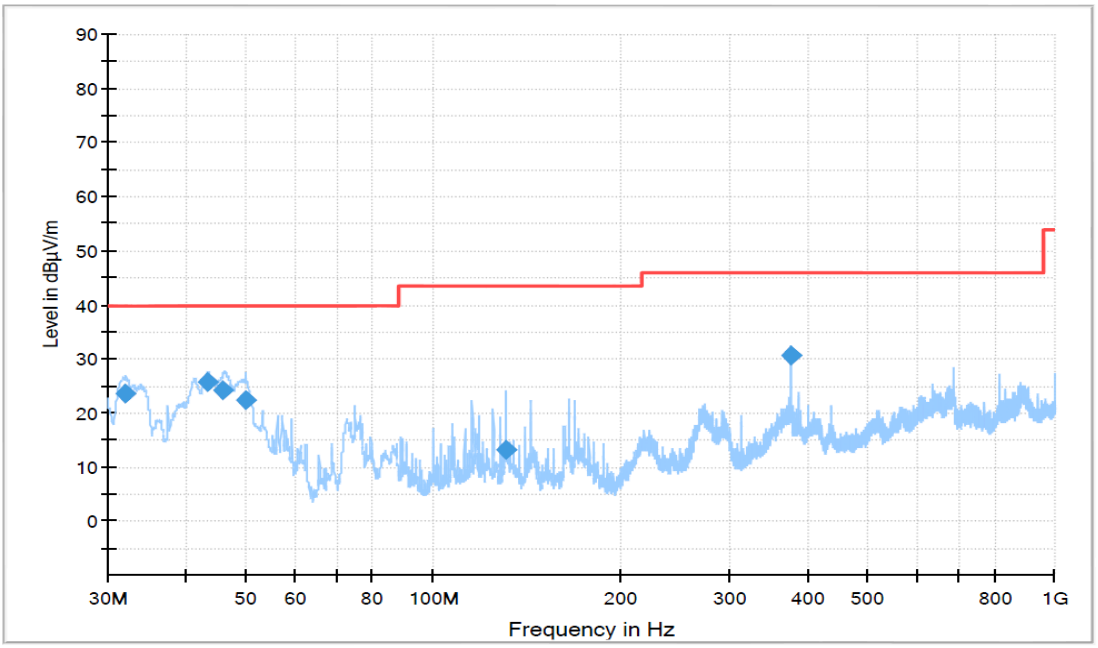


Figure A.4 Radiated Emission (Set.1, Charging and WCDMA Band 5 idle, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
32.013889	23.61	40.00	16.39	V	-25.9	49.51
43.226111	25.89	40.00	14.11	V	-31.6	57.49
46.040556	24.23	40.00	15.77	V	-33.4	57.63
49.998889	22.55	40.00	17.45	V	-36.6	59.15
131.237222	13.15	43.50	30.35	V	-32.3	45.45
375.016667	30.76	46.00	15.24	V	-26.8	57.56

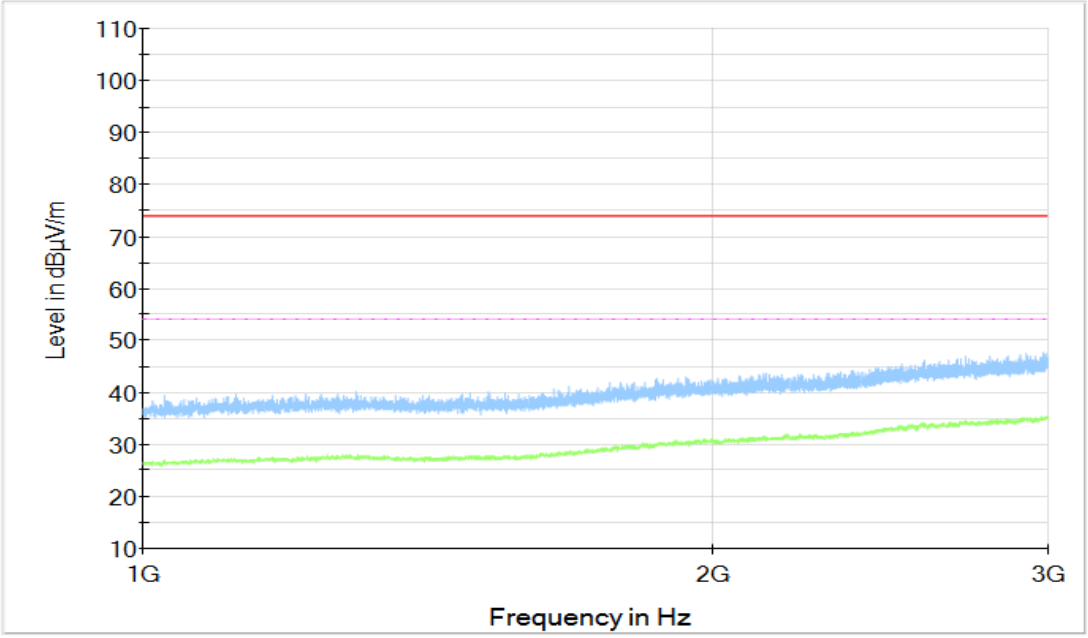


Figure A.5 Radiated Emission (Set.1, Charging and WCDMA Band 5 idle, 1GHz to 3GHz)

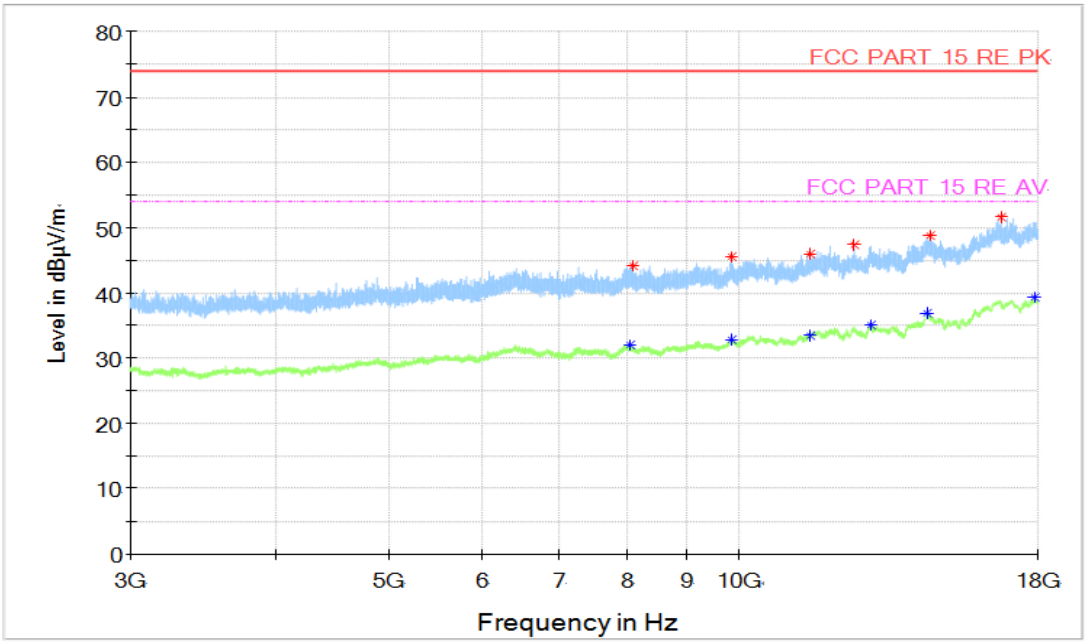


Figure A.6 Radiated Emission (Set.1, Charging and WCDMA Band 5 idle , 3GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
8099.500000	44.18	74.00	29.82	H	2.7	41.48
9827.000000	45.50	74.00	28.50	V	4.4	41.1
11496.500000	46.01	74.00	27.99	H	6.0	40.01
12523.000000	47.28	74.00	26.72	H	8.0	39.28
14577.500000	48.73	74.00	25.27	H	11.4	37.33
16745.000000	51.63	74.00	22.37	V	14.9	36.73

Final_Results_AVG

Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
8047.000000	31.97	54.00	22.03	H	2.8	29.17
9829.000000	32.88	54.00	21.12	H	4.4	28.48
11499.500000	33.53	54.00	20.47	H	6.1	27.43
12945.000000	35.12	54.00	18.88	V	8.6	26.52
14480.000000	36.90	54.00	17.10	H	11.3	25.6
17900.500000	39.21	54.00	14.79	V	16.3	22.91

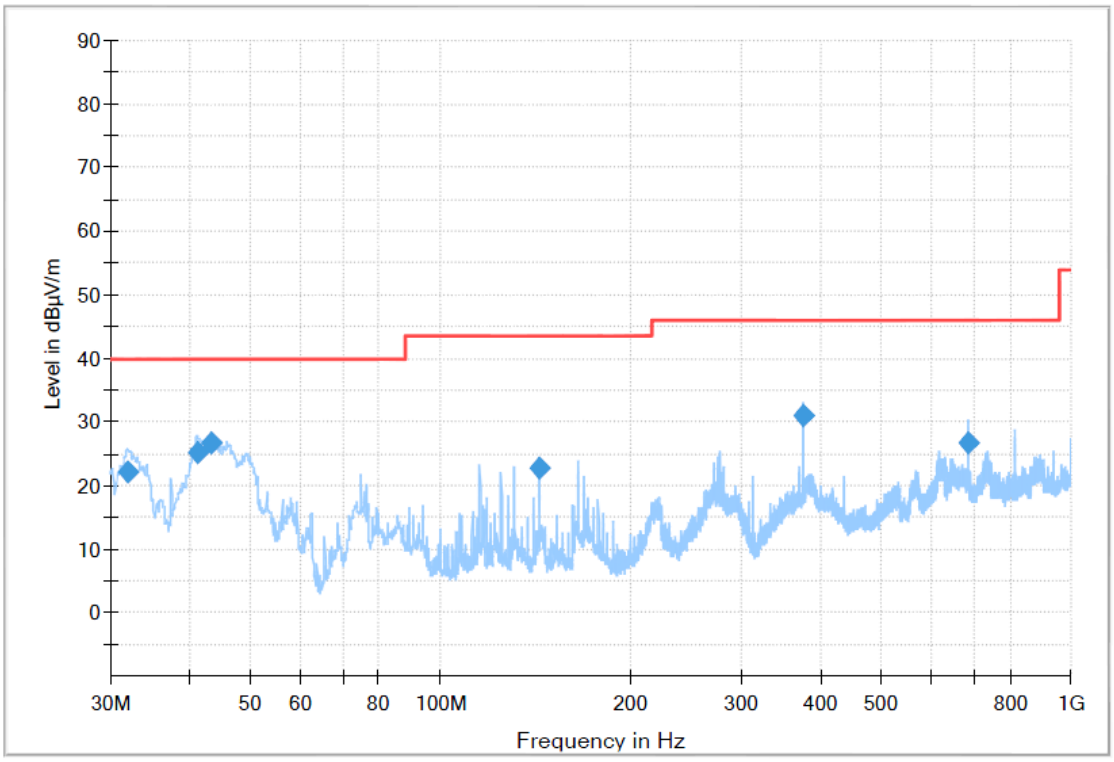


Figure A.7 Radiated Emission (Set.1, Charging and LTE Band 5 idle, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
31.949444	22.09	40.00	17.91	V	-25.8	47.89
41.148889	25.03	40.00	14.97	V	-29.9	54.93
43.464444	26.68	40.00	13.32	V	-31.8	58.48
143.765556	22.79	43.50	20.71	V	-33.5	56.29
375.016667	31.11	46.00	14.89	V	-26.8	57.91
687.518333	26.81	46.00	19.19	V	-19.9	46.71

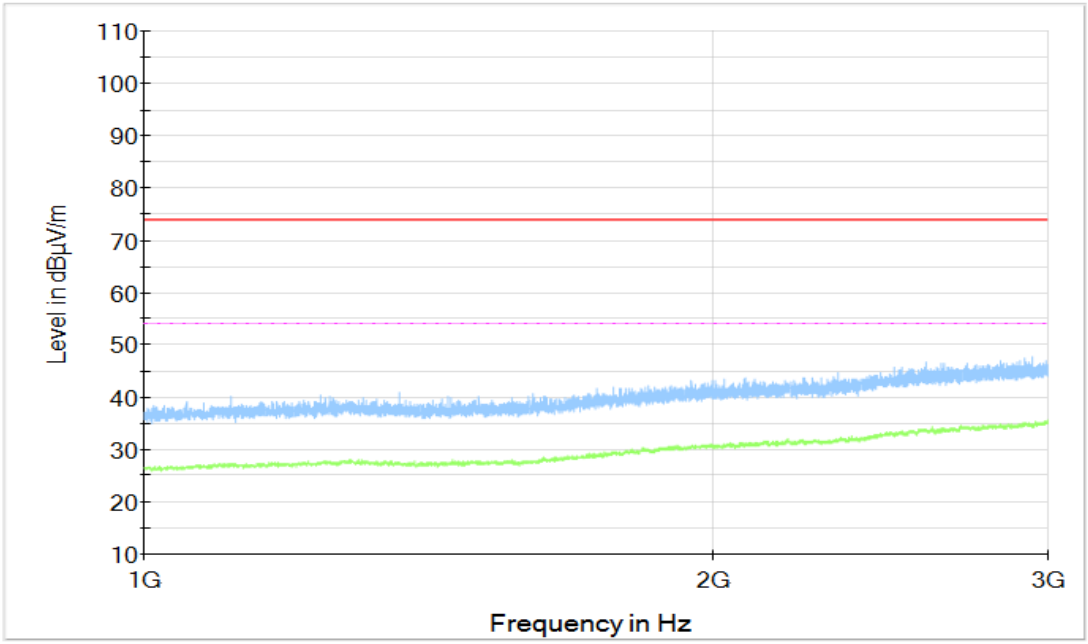


Figure A.8 Radiated Emission (Set.1, Charging and LTE Band 5 idle, 1GHz to 3GHz)

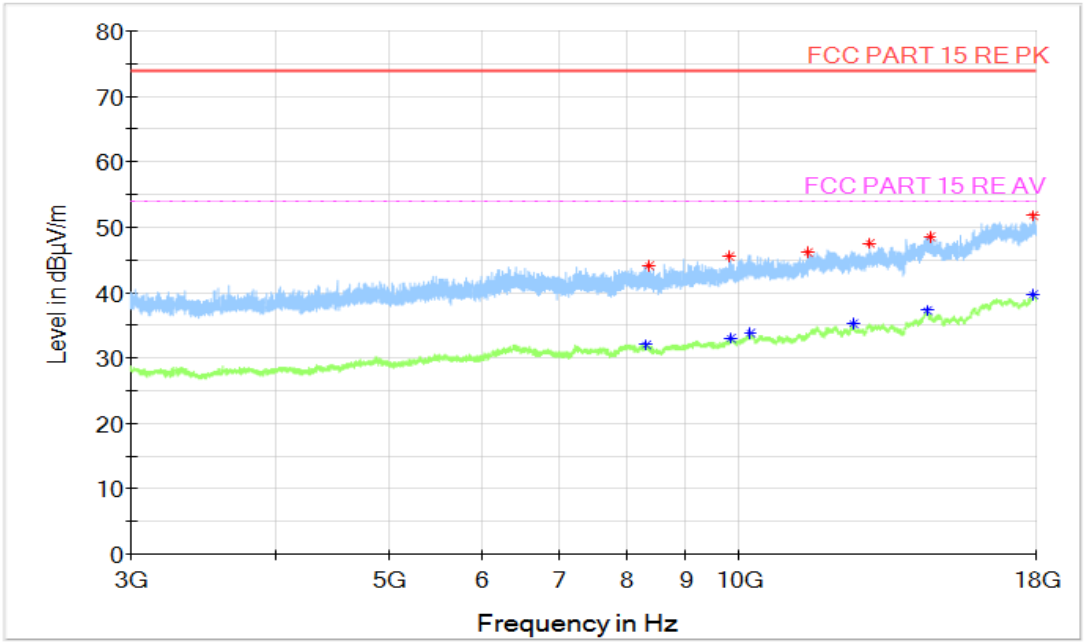


Figure A.9 Radiated Emission (Set.1, Charging and LTE Band 5 idle , 3GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
8367.500000	44.19	74.00	29.81	V	3.0	41.19
9797.000000	45.49	74.00	28.51	H	4.2	41.29
11466.500000	46.13	74.00	27.87	V	5.8	40.33
12941.000000	47.47	74.00	26.53	H	8.6	38.87
14618.000000	48.66	74.00	25.34	V	11.2	37.46
17892.000000	51.75	74.00	22.25	V	16.2	35.55

Final_Results_AVG

Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
8309.500000	32.04	54.00	21.96	V	3.2	28.84
9845.500000	33.07	54.00	20.93	H	4.5	28.57
10232.500000	33.81	54.00	20.19	V	5.1	28.71
12527.500000	35.26	54.00	18.74	V	8.0	27.26
14499.000000	37.26	54.00	16.74	H	11.4	25.86
17909.500000	39.78	54.00	14.22	H	16.3	23.48

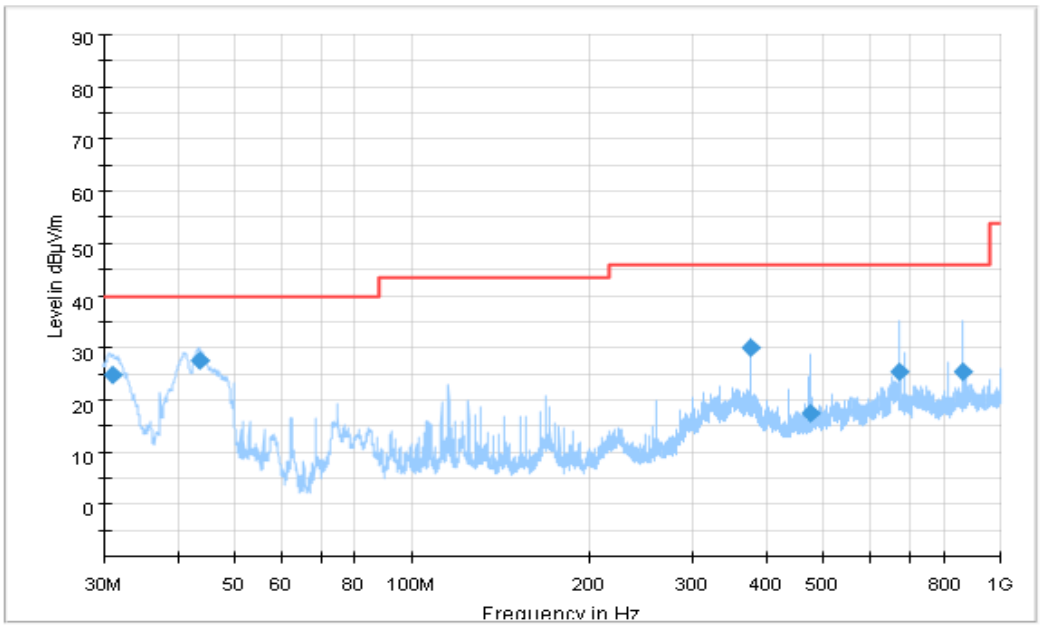


Figure A.10 Radiated Emission (Set.1,Camera Mode, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
31.101111	24.95	40.00	15.05	V	-25.3	50.25
43.613889	27.60	40.00	12.40	V	-31.8	59.4
375.016667	30.14	46.00	15.86	H	-26.8	56.94
475.465556	17.42	46.00	28.58	H	-23.9	41.32
672.012222	25.55	46.00	20.45	V	-20.2	45.75
864.004444	25.63	46.00	20.37	H	-18.5	44.13

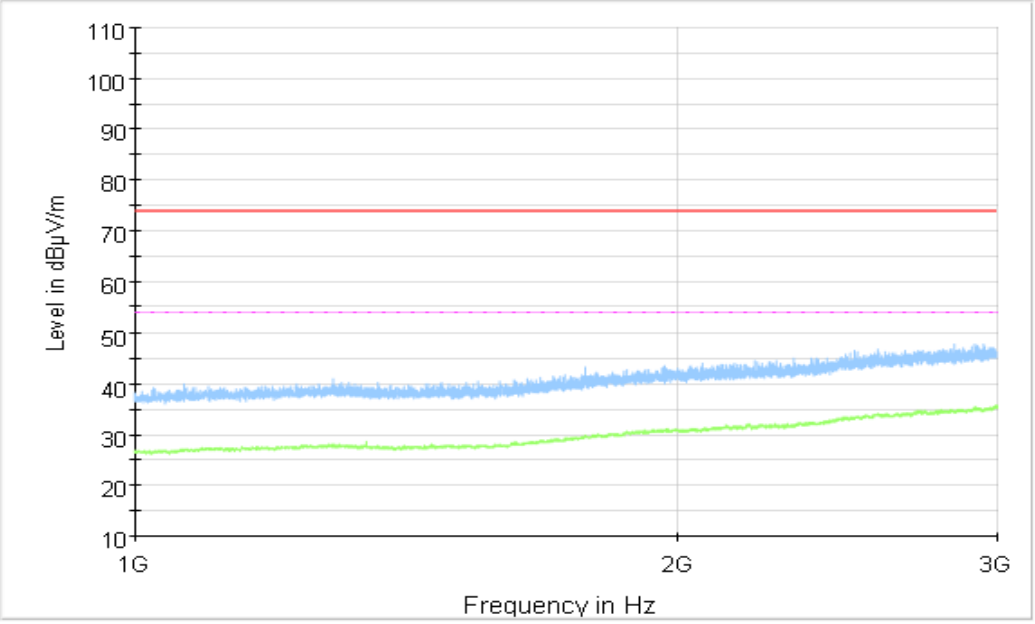


Figure A.11 Radiated Emission (Set.1, Camera Mode , 1GHz to 3GHz)

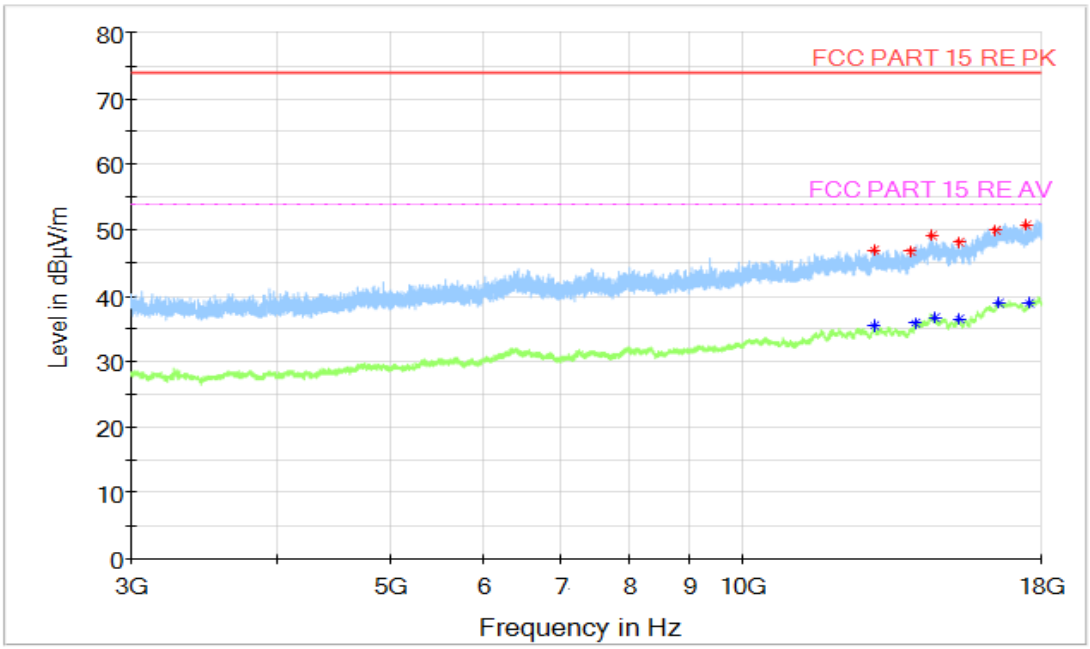


Figure A.12 Radiated Emission (Set.1, Camera Mode , 3GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
12935.500000	46.99	74.00	27.01	V	8.6	38.39
13910.000000	46.71	74.00	27.29	H	9.4	37.31
14512.500000	49.15	74.00	24.85	V	11.5	37.65
15295.500000	48.15	74.00	25.85	H	11.4	36.75
16478.500000	50.05	74.00	23.95	H	14.6	35.45
17444.000000	50.70	74.00	23.30	V	14.7	36

Final_Results_AVG

Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
12947.500000	35.44	54.00	18.56	V	8.6	26.84
14059.500000	35.79	54.00	18.21	V	9.8	25.99
14598.000000	36.74	54.00	17.26	H	11.2	25.54
15307.000000	36.55	54.00	17.45	H	11.6	24.95
16547.500000	38.84	54.00	15.16	H	14.7	24.14
17585.000000	38.95	54.00	15.05	H	15.5	23.45
12947.500000	35.44	54.00	18.56	V	8.6	26.84

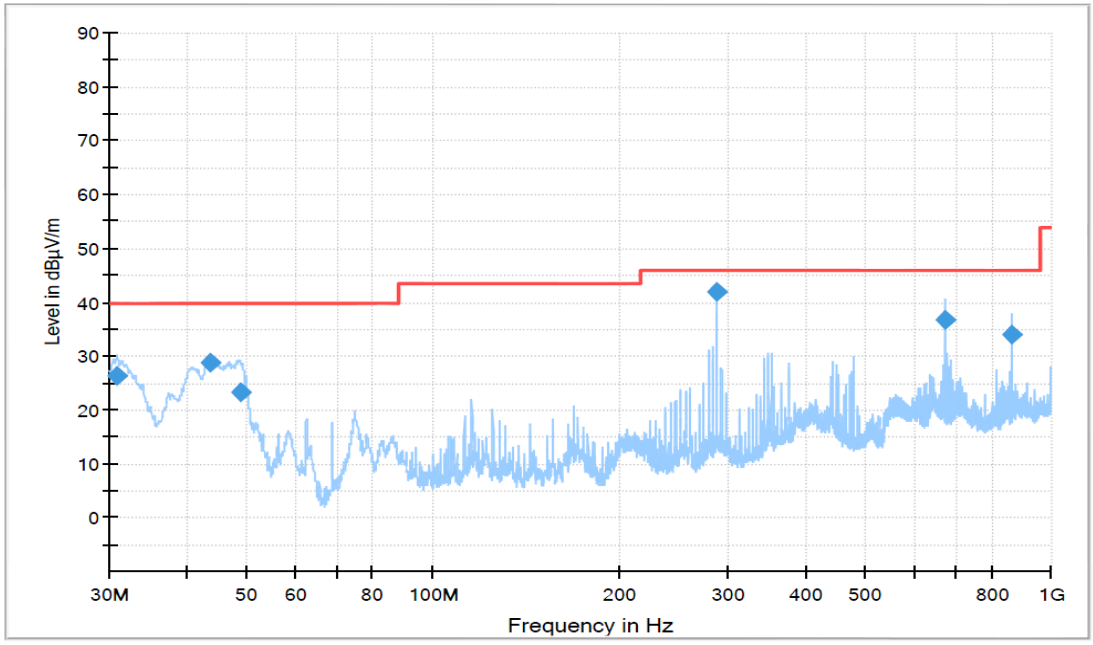


Figure A.13 Radiated Emission (Set.1,Video Player Mode, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
30.882222	26.26	40.00	13.74	V	-25.1	51.36
43.711111	28.91	40.00	11.09	V	-31.9	60.81
48.745556	23.37	40.00	16.63	V	-35.5	58.87
287.986111	41.88	46.00	4.12	H	-29.7	71.58
672.012222	36.74	46.00	9.26	H	-20.2	56.94
863.978333	33.88	46.00	12.12	V	-18.5	52.38

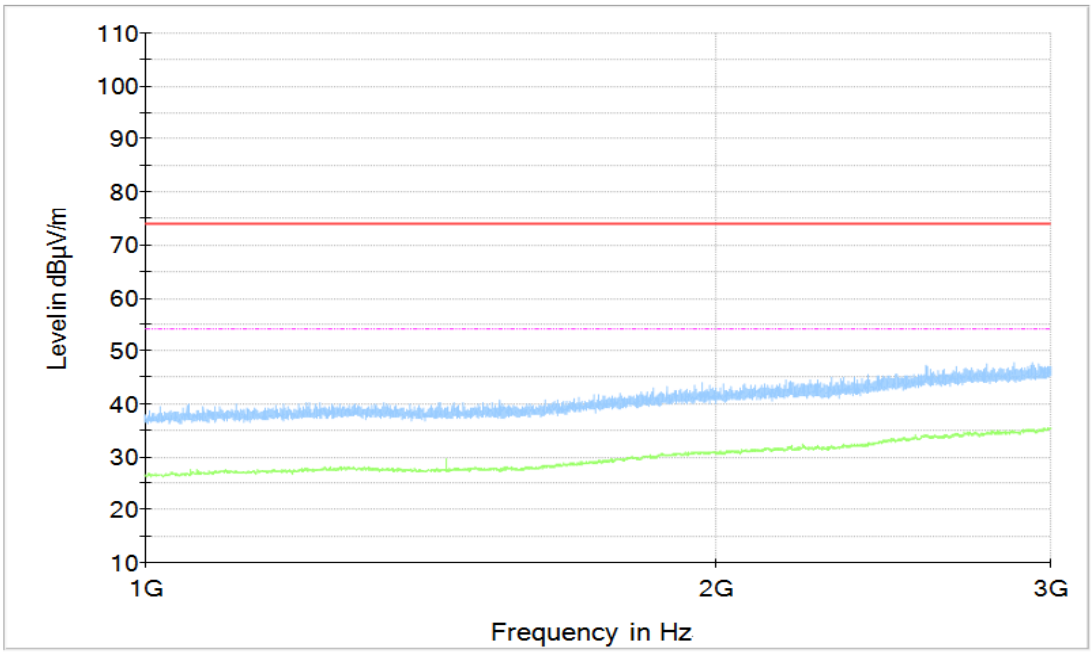


Figure A.14 Radiated Emission (Set.1, Video Player Mode, 1GHz to 3GHz)

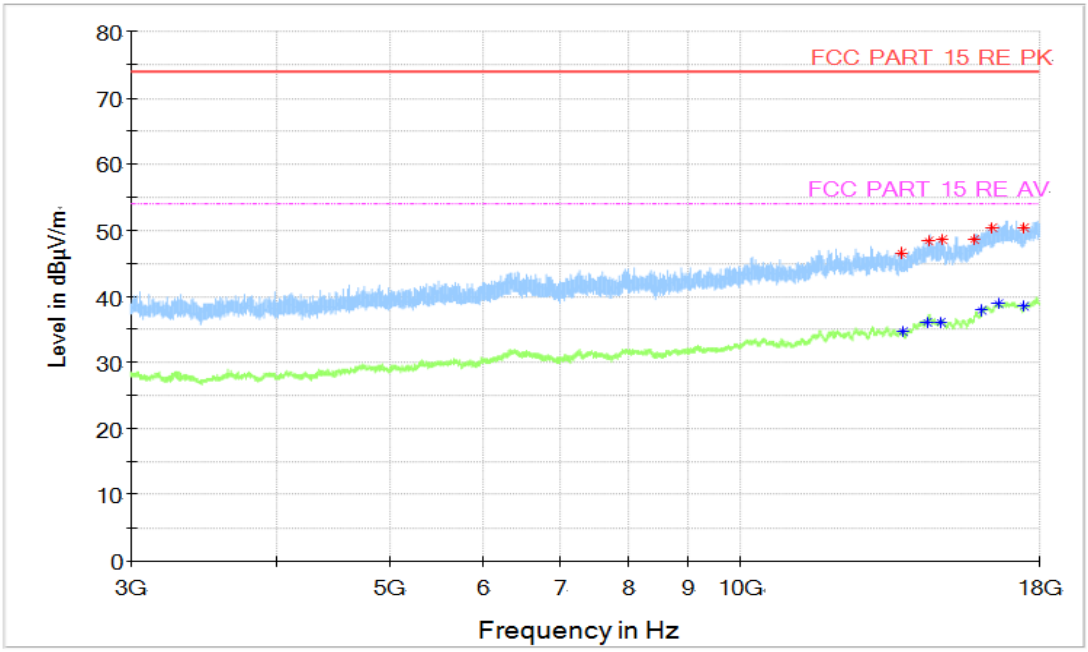


Figure A.15 Radiated Emission (Set.1, Video Player Mode, 3GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
13707.000000	46.56	74.00	27.44	H	8.6	37.96
14461.500000	48.37	74.00	25.63	H	11.2	37.17
14875.500000	48.52	74.00	25.48	H	11.0	37.52
15819.000000	48.63	74.00	25.37	H	12.7	35.93
16422.000000	50.43	74.00	23.57	H	14.1	36.33
17482.500000	50.44	74.00	23.56	V	14.8	35.64

Final_Results_AVG

Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	PMea (dBµV)
13738.500000	34.72	54.00	19.28	V	8.7	26.02
14443.000000	36.12	54.00	17.88	H	11.0	25.12
14838.500000	36.12	54.00	17.88	H	10.8	25.32
16088.000000	37.97	54.00	16.03	V	13.9	24.07
16592.000000	38.97	54.00	15.03	H	14.8	24.17
17484.000000	38.41	54.00	15.59	H	14.8	23.61

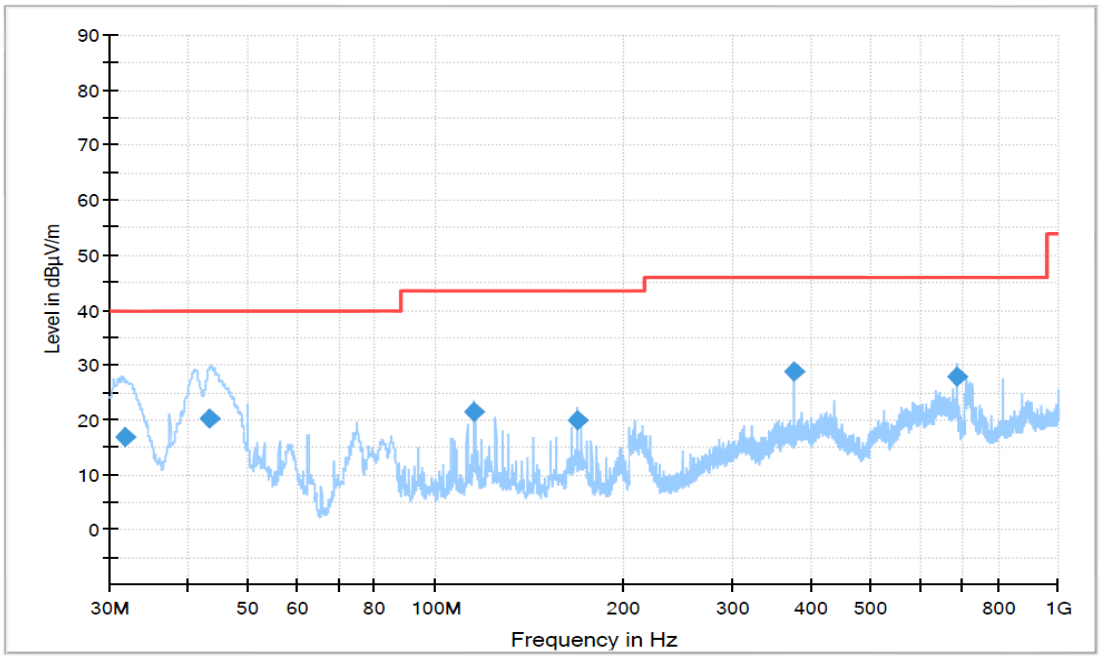


Figure A.16 Radiated Emission (Set.1,FM Mode, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
31.701111	17.02	40.00	22.98	V	-25.7	42.72
43.441667	20.17	40.00	19.83	V	-31.7	51.87
115.609444	21.53	43.50	21.97	V	-31.6	53.13
168.743889	19.88	43.50	23.62	V	-31.6	51.48
375.016667	28.98	46.00	17.02	H	-26.8	55.78
687.518333	27.92	46.00	18.08	V	-19.9	47.82

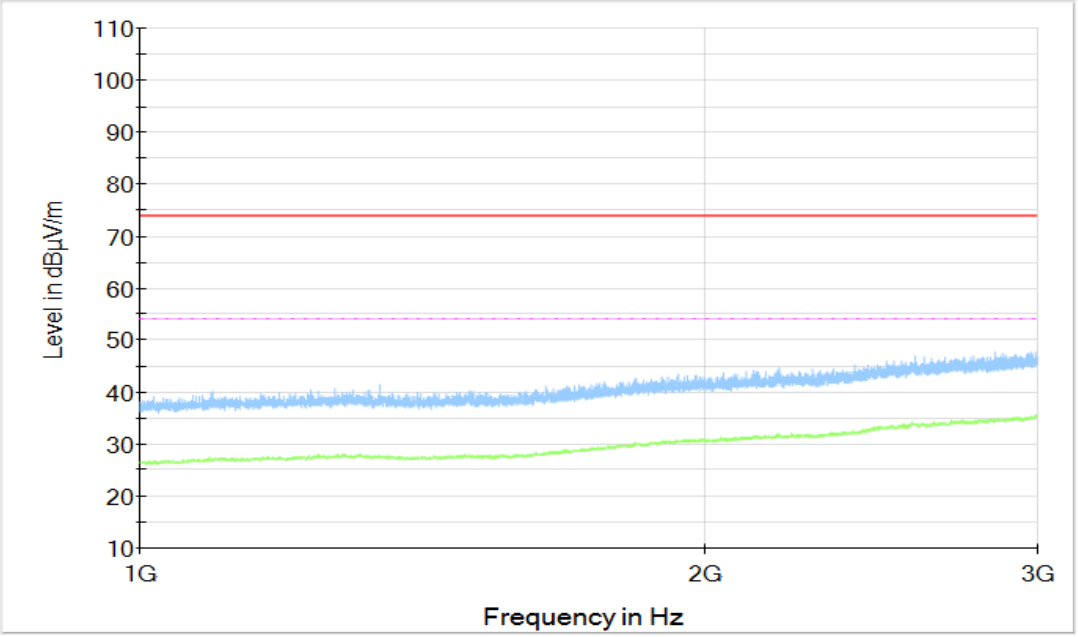


Figure A.17 Radiated Emission (Set.1, FM Mode, 1GHz to 3GHz)

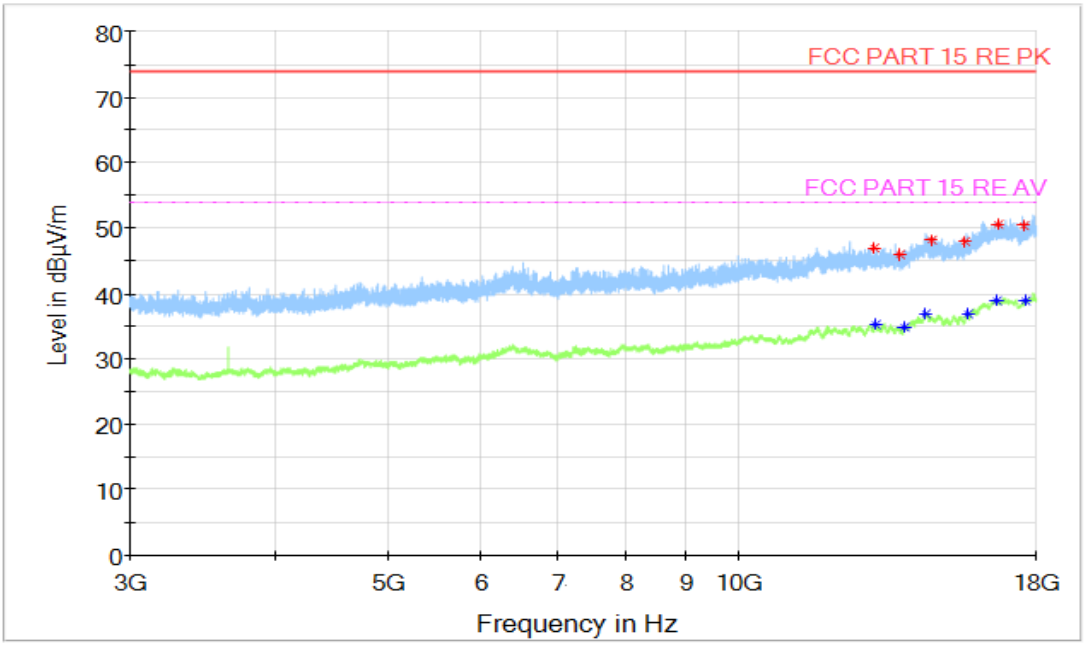


Figure A.18 Radiated Emission (Set.1, FM Mode, 3GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
13707.000000	46.56	74.00	27.44	H	8.6	38.56
14461.500000	48.37	74.00	25.63	H	11.2	37.32
14875.500000	48.52	74.00	25.48	H	11.0	36.85
15819.000000	48.63	74.00	25.37	H	12.7	36.16
16422.000000	50.43	74.00	23.57	H	14.1	35.6
17482.500000	50.44	74.00	23.56	V	14.8	34.98

Final_Results_AVG

Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
13738.500000	34.72	54.00	19.28	V	8.7	26.72
14443.000000	36.12	54.00	17.88	H	11.0	25.76
14838.500000	36.12	54.00	17.88	H	10.8	25.57
16088.000000	37.97	54.00	16.03	V	13.9	24.46
16592.000000	38.97	54.00	15.03	H	14.8	24.05
17484.000000	38.41	54.00	15.59	H	14.8	23.21

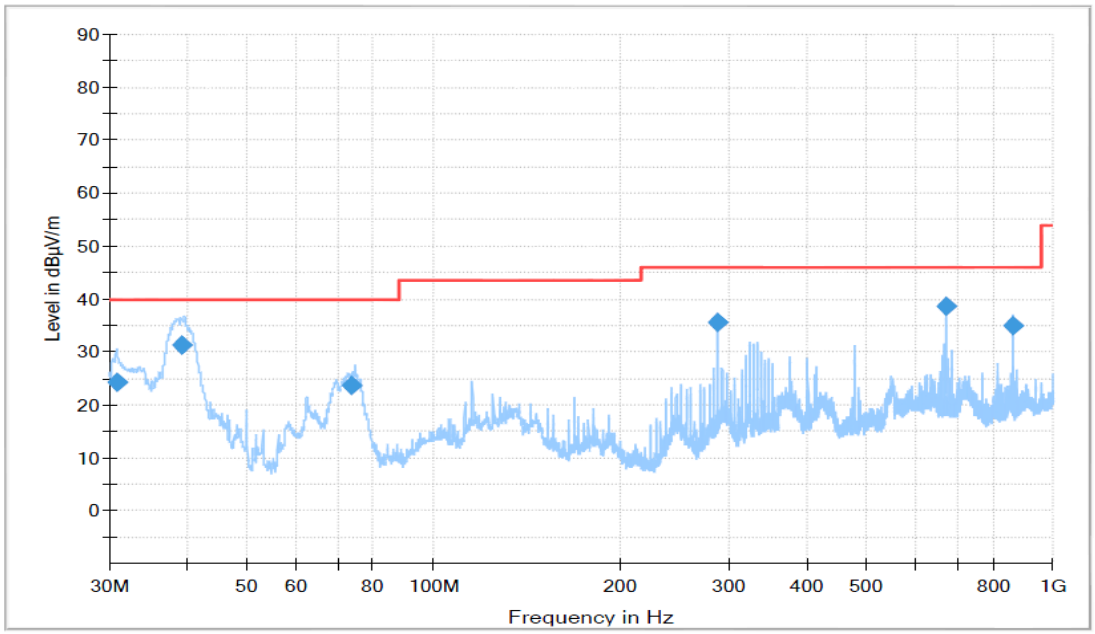


Figure A.19 Radiated Emission (Set.2,Video Player Mode, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
30.816111	24.18	40.00	15.82	V	-25.1	49.28
39.292222	31.33	40.00	8.67	V	-29.3	60.63
73.727222	23.52	40.00	16.48	V	-33.8	57.32
287.986111	35.70	46.00	10.30	H	-29.7	65.4
672.012222	38.48	46.00	7.52	V	-20.2	58.68
864.004444	35.01	46.00	10.99	V	-18.5	53.51

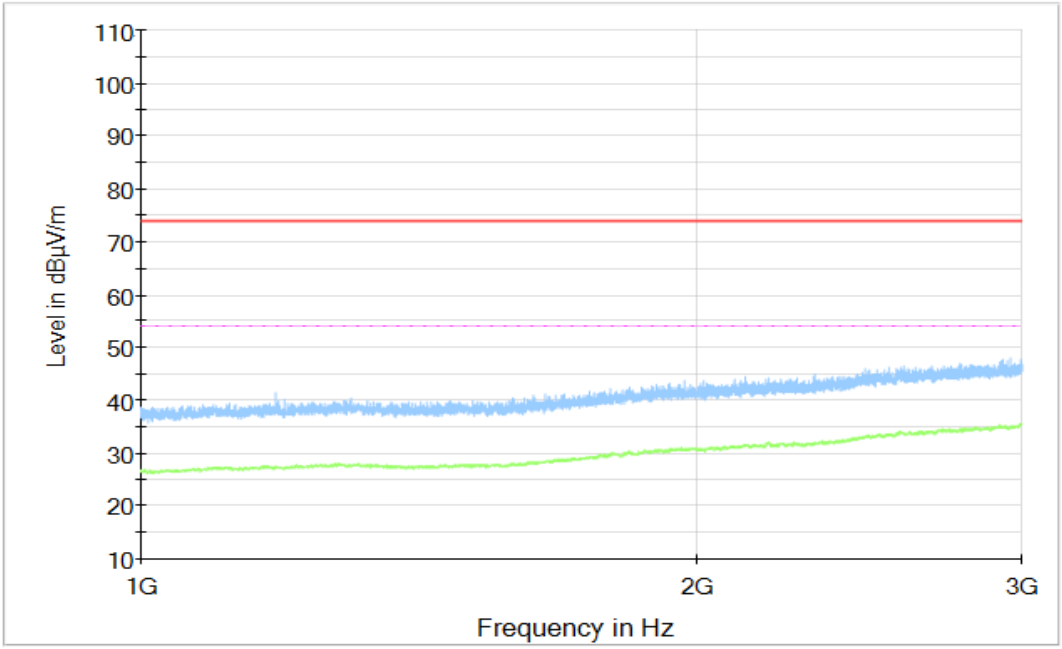


Figure A.20 Radiated Emission (Set.2, Video Player Mode, 1GHz to 3GHz)

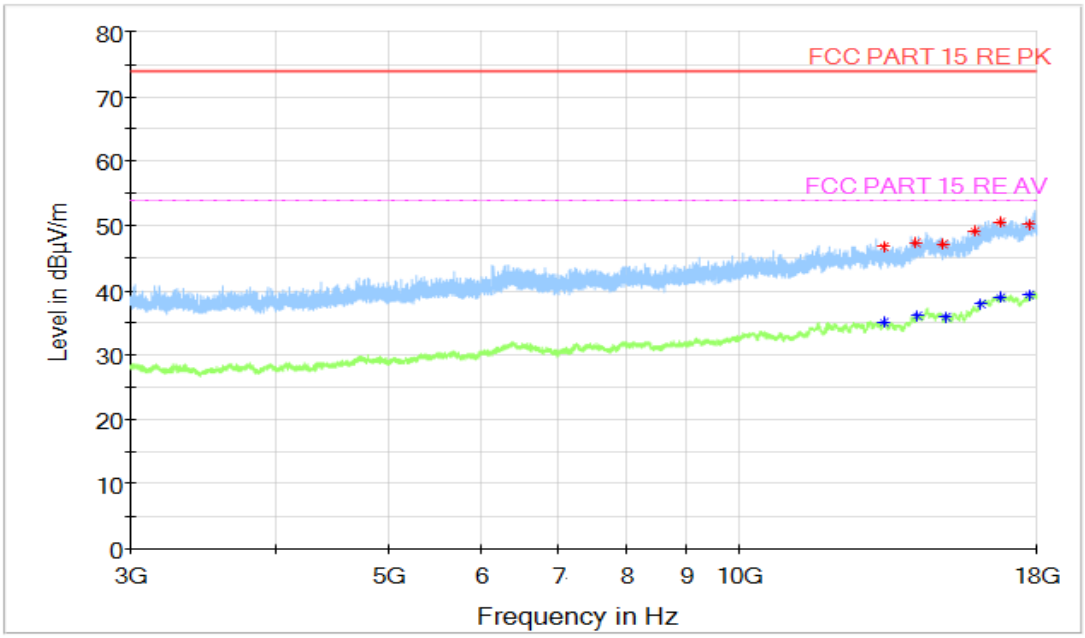


Figure A.21 Radiated Emission (Set.2, Video Player Mode, 3GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
13313.000000	46.84	74.00	27.16	V	8.9	37.94
14172.000000	47.45	74.00	26.55	V	10.7	36.75
14965.500000	47.19	74.00	26.81	V	11.0	36.19
15927.000000	49.09	74.00	24.91	H	13.3	35.79
16741.500000	50.55	74.00	23.45	H	14.9	35.65
17738.500000	50.27	74.00	23.73	H	16.1	34.17

Final_Results_AVG

Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
13306.500000	35.10	54.00	18.90	H	9.0	26.1
14218.500000	36.11	54.00	17.89	H	10.9	25.21
15040.500000	35.88	54.00	18.12	V	10.9	24.98
16090.500000	37.95	54.00	16.05	V	13.9	24.05
16758.500000	38.87	54.00	15.13	H	14.8	24.07
17759.000000	39.38	54.00	14.62	H	16.2	23.18

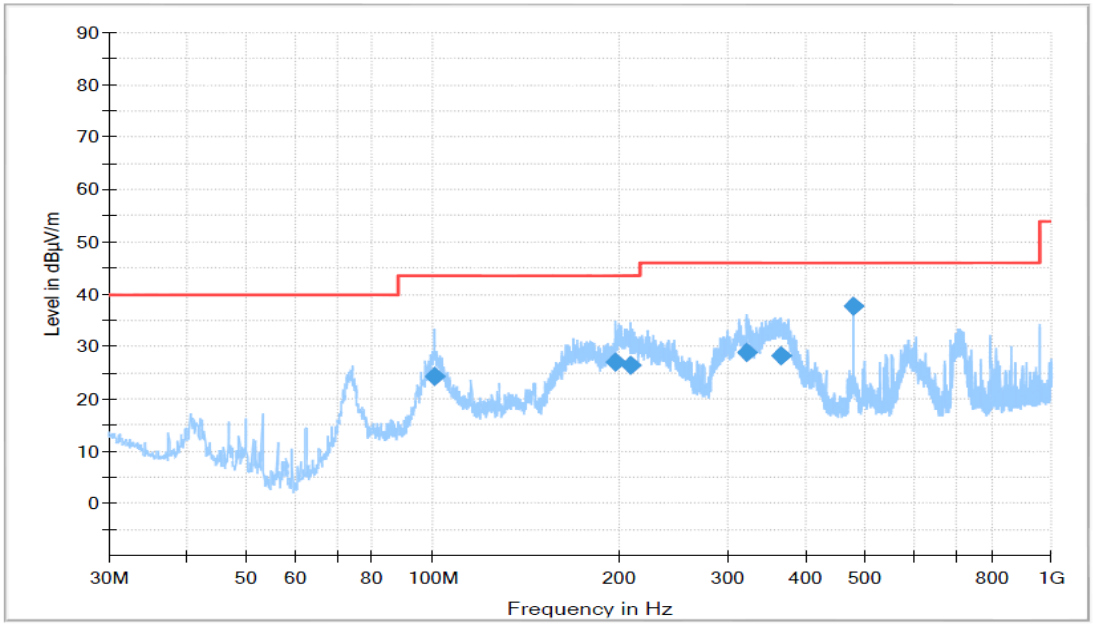


Figure A.22 Radiated Emission (Set.3, Data Transfer Mode/PC to TF Card, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
100.776111	24.16	43.50	19.34	H	-32.3	56.46
197.897778	27.03	43.50	16.47	H	-33.3	60.33
209.483889	26.44	43.50	17.06	H	-32.9	59.34
322.584444	28.81	46.00	17.19	H	-28.6	57.41
365.678333	28.18	46.00	17.82	H	-27.3	55.48
479.992222	37.67	46.00	8.33	V	-23.9	61.57

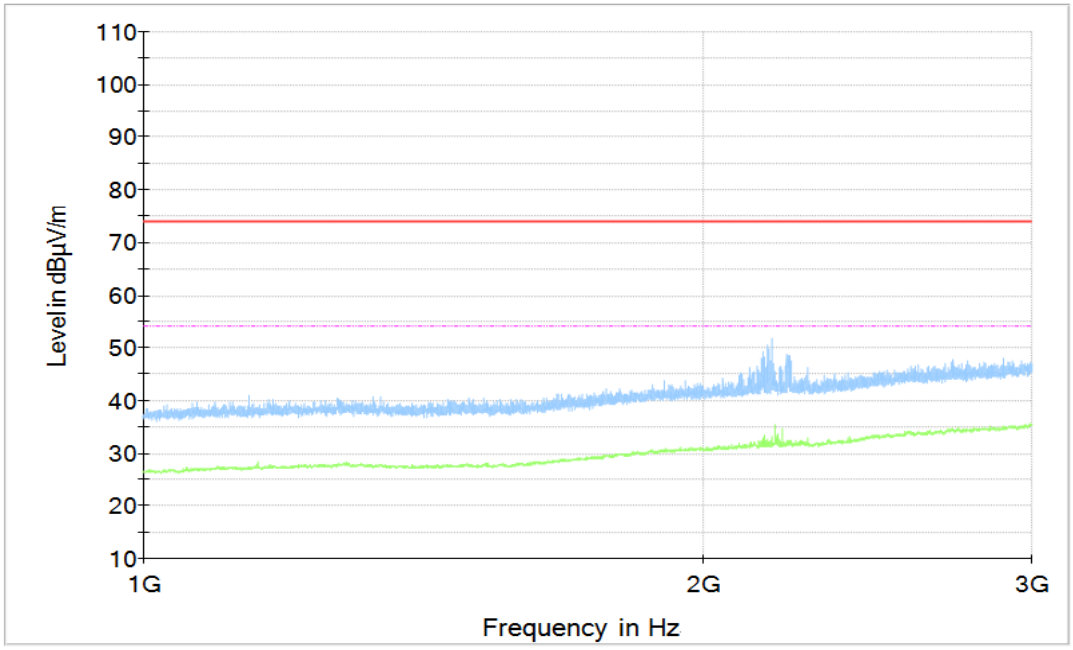


Figure A.23 Radiated Emission (Set.3, Data Transfer Mode/PC to TF Card, 1GHz to 3GHz)

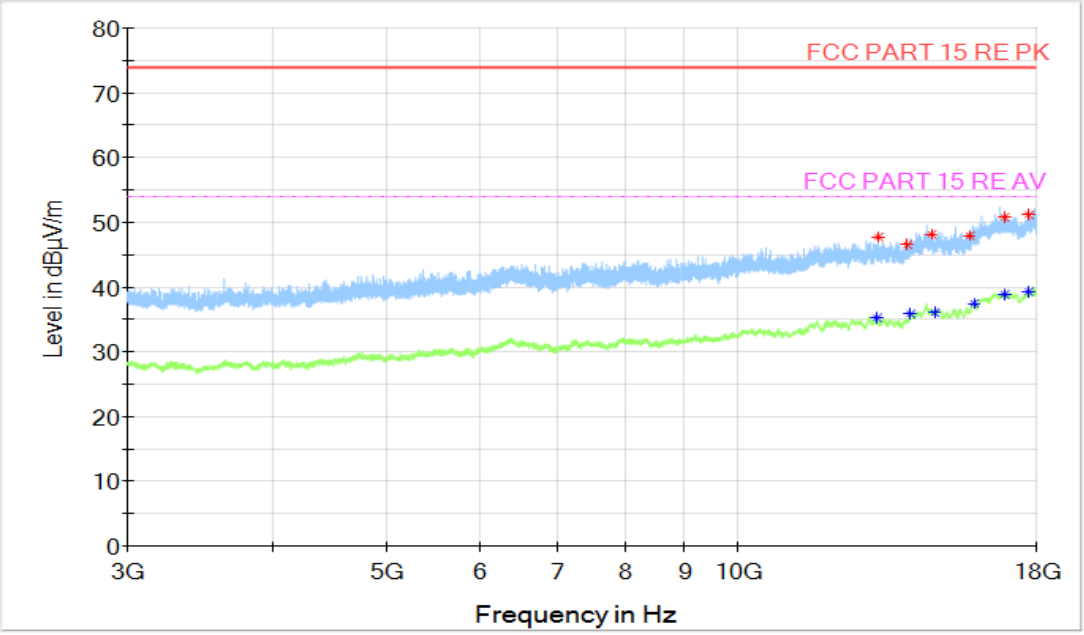


Figure A.24 Radiated Emission (Set.3, Data Transfer Mode/PC to TF Card, 3GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
13191.500000	47.75	74.00	26.25	H	8.5	39.25
13966.000000	46.48	74.00	27.52	H	9.5	36.98
14627.500000	48.23	74.00	25.77	H	11.3	36.93
15757.500000	48.04	74.00	25.96	H	12.6	35.44
16923.000000	50.83	74.00	23.17	V	15.0	35.83
17755.500000	51.10	74.00	22.90	V	16.3	34.8

Final_Results_AVG

Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
13152.000000	35.34	54.00	18.66	H	8.6	26.74
14063.500000	35.81	54.00	18.19	H	9.9	25.91
14721.000000	36.03	54.00	17.97	H	10.8	25.23
15902.500000	37.53	54.00	16.47	H	13.2	24.33
16892.500000	38.95	54.00	15.05	H	15.1	23.85
17745.000000	39.35	54.00	14.65	H	16.2	23.15

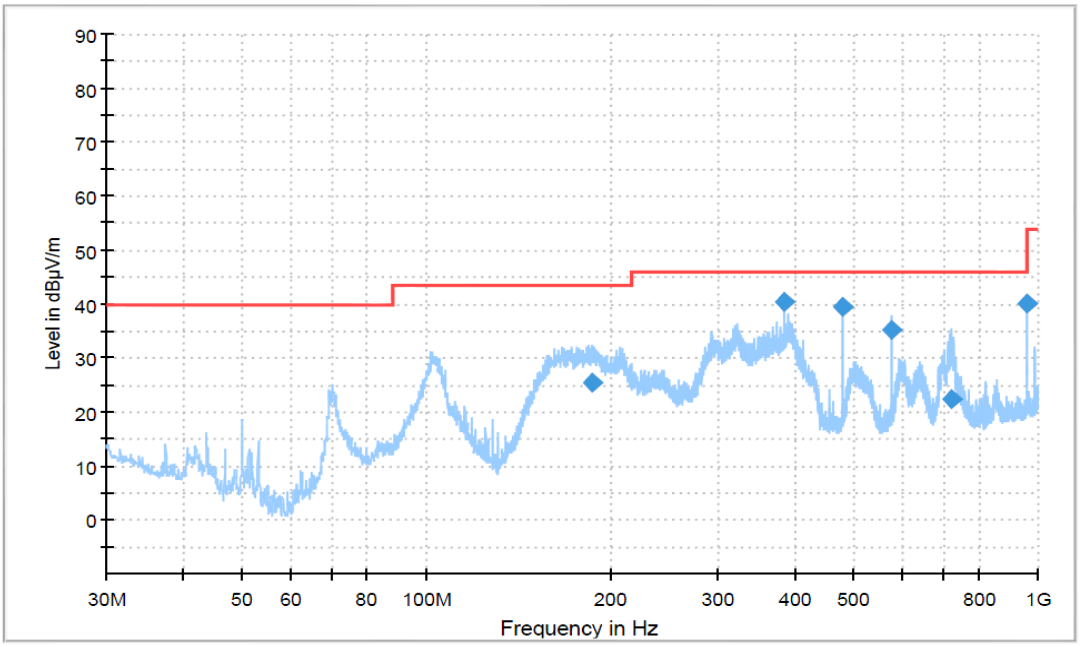


Figure A.25 Radiated Emission (Set.3, Data Transfer Mode/ TF Card to PC, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
186.003889	25.62	43.50	17.88	H	-33.9	59.52
384.016111	40.56	46.00	5.44	H	-26.6	67.16
480.006111	39.55	46.00	6.45	V	-23.9	63.45
576.008333	35.37	46.00	10.63	H	-22.0	57.37
722.495556	22.46	46.00	23.54	H	-19.0	41.46
959.994444	40.01	46.00	5.99	V	-16.3	56.31

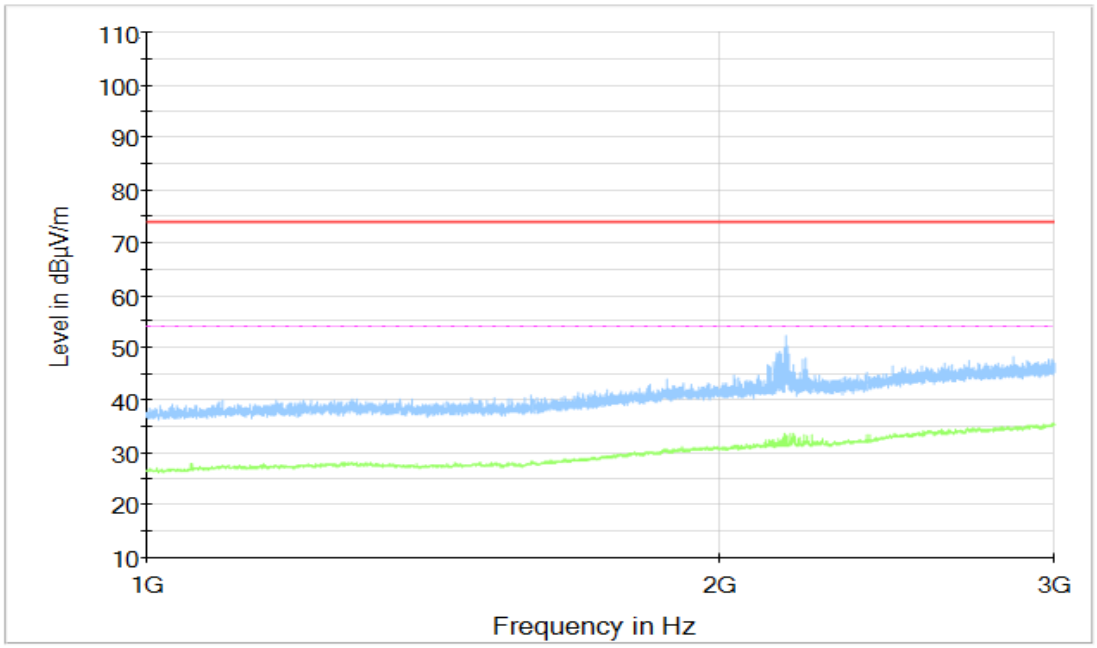


Figure A.26 Radiated Emission (Set.3, Data Transfer Mode/ TF Card to PC, 1GHz to 3GHz)

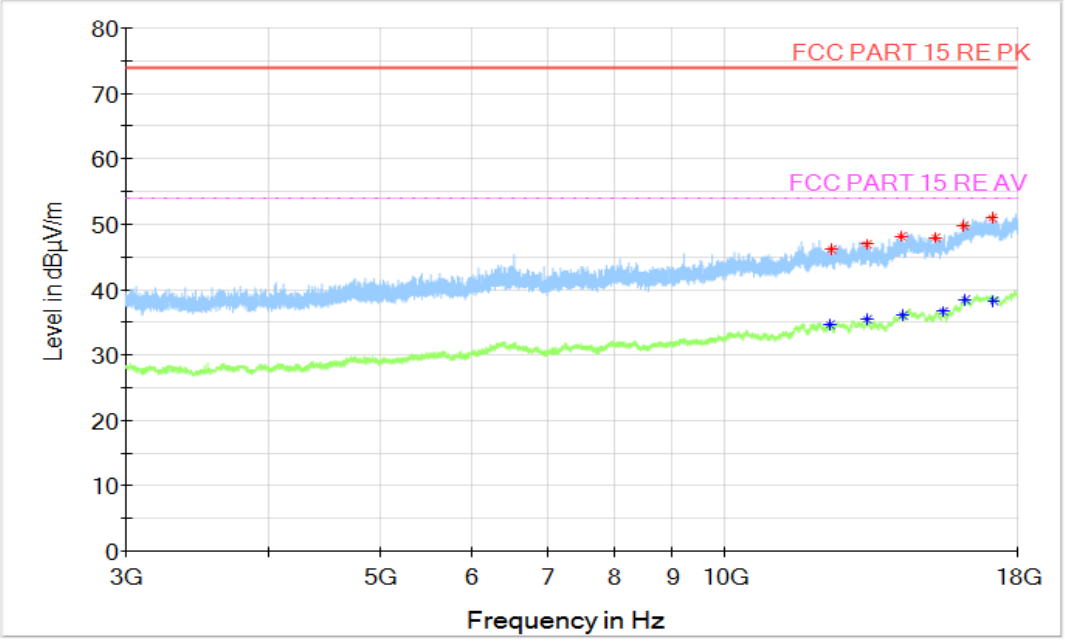


Figure A.27 Radiated Emission (Set.3, Data Transfer Mode/ TF Card to PC, 3GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
12369.000000	46.21	74.00	27.79	V	7.4	38.81
13312.000000	46.90	74.00	27.10	H	8.9	38
14268.000000	48.09	74.00	25.91	H	10.9	37.19
15267.500000	48.05	74.00	25.95	H	11.2	36.85
16168.500000	49.80	74.00	24.20	V	14.3	35.5
17115.000000	51.04	74.00	22.96	H	15.0	36.04

Final_Results_AVG

Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
12329.500000	34.64	54.00	19.36	V	7.3	27.34
13313.500000	35.38	54.00	18.62	V	8.9	26.48
14317.000000	36.15	54.00	17.85	H	10.9	25.25
15514.000000	36.69	54.00	17.31	H	12.0	24.69
16205.000000	38.50	54.00	15.50	H	14.4	24.1
17165.500000	38.23	54.00	15.77	V	14.9	23.33

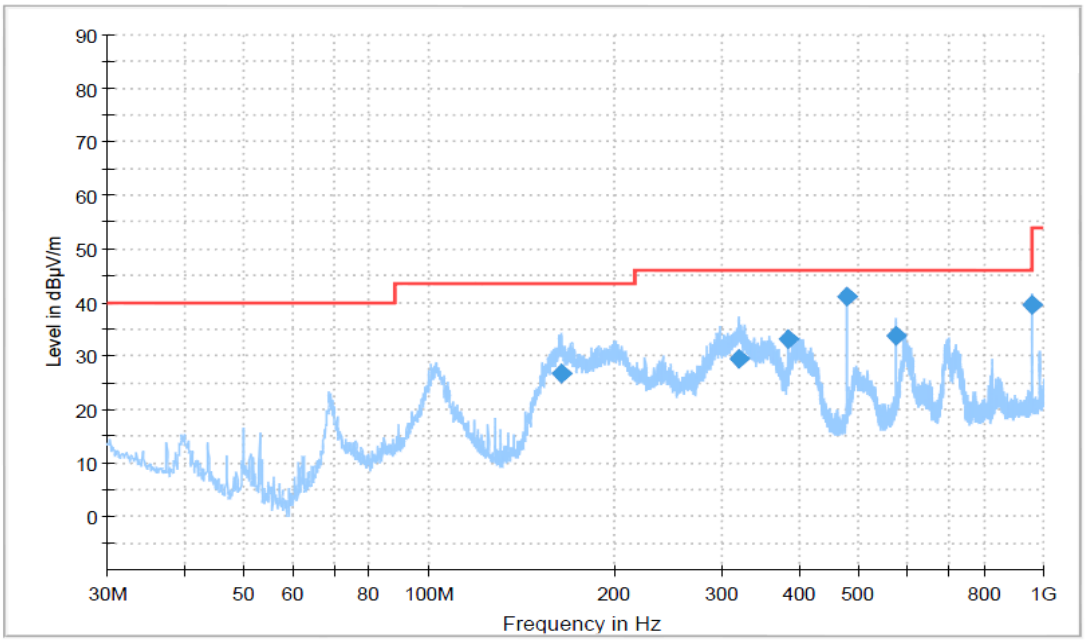


Figure A.28 Radiated Emission (Set.4, Data Transfer Mode/ TF Card to PC, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	ARpl (dB/m)	P_{Mea} (dBµV)
164.418889	26.65	43.50	16.85	H	-32.8	59.45
319.026111	29.54	46.00	16.46	H	-28.7	58.24
383.976111	33.05	46.00	12.95	H	-26.6	59.65
480.006111	40.95	46.00	5.05	H	-23.9	64.85
576.008333	33.77	46.00	12.23	H	-22.0	55.77
959.980556	39.53	46.00	6.47	H	-16.3	55.83

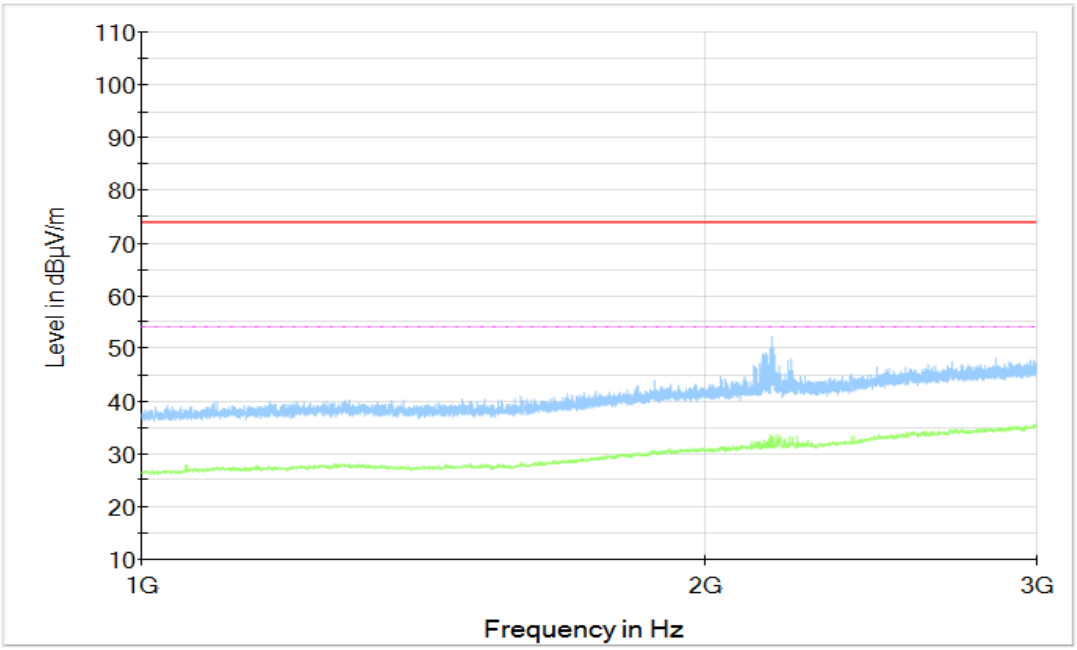


Figure A.29 Radiated Emission (Set.4, Data Transfer Mode/ TF Card to PC, 1GHz to 3GHz)

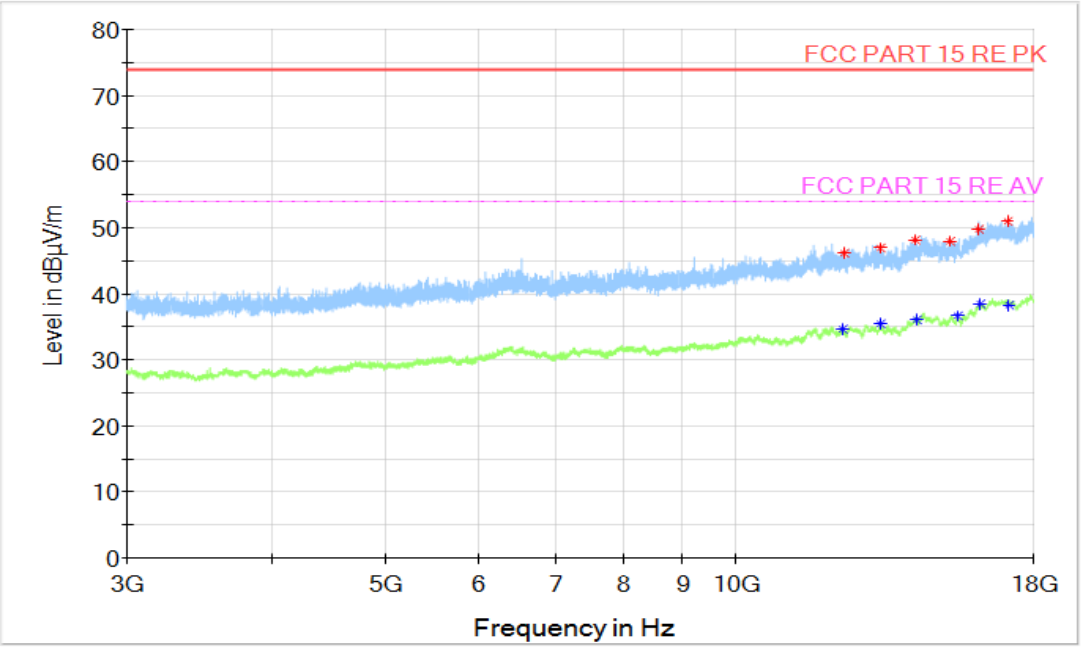


Figure A.30 Radiated Emission (Set.4, Data Transfer Mode/ TF Card to PC, 3GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
12369.000000	46.21	74.00	27.79	V	7.4	38.81
13312.000000	46.90	74.00	27.10	H	8.9	38
14268.000000	48.09	74.00	25.91	H	10.9	37.19
15267.500000	48.05	74.00	25.95	H	11.2	36.85
16168.500000	49.80	74.00	24.20	V	14.3	35.5
17115.000000	51.04	74.00	22.96	H	15.0	36.04

Final_Results_AVG

Frequency(MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P_{Mea} (dBµV)
12329.500000	34.64	54.00	19.36	V	7.3	27.34
13313.500000	35.38	54.00	18.62	V	8.9	26.48
14317.000000	36.15	54.00	17.85	H	10.9	25.25
15514.000000	36.69	54.00	17.31	H	12.0	24.69
16205.000000	38.50	54.00	15.50	H	14.4	24.1
17165.500000	38.23	54.00	15.77	V	14.9	23.33

B.2 Conducted Emission (§15.107(a))

Reference

FCC: CFR Part 15.107(a)

B.2.1 Method of measurement

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

B.2.2 EUT Operating Mode:

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

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

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

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

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

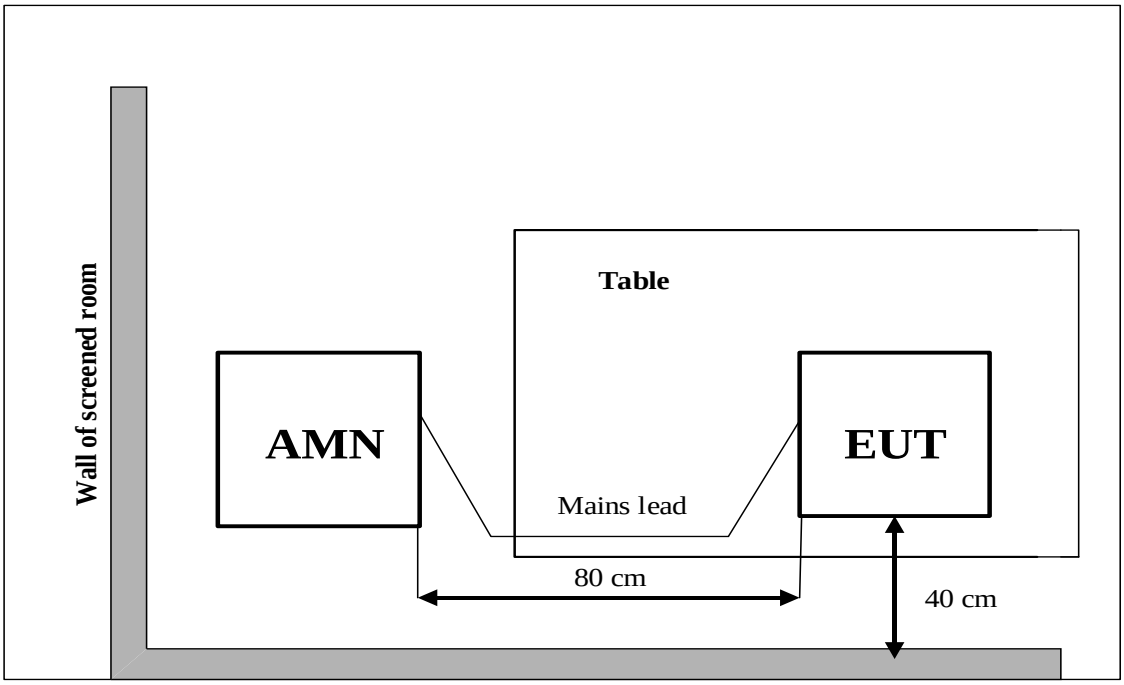
Data Transfer Mode: The model of the PC is Lenovo ThinkPad T480, and the serial number of the PC is PF-13LW0C. The EUT is connected to a PC for transmitting data. The software is used to let the PC keep on copying data to MS or TF Card, reading and erasing the data after copy action was finished.

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

B.2.3 Measurement Limit

Frequency of emission (MHz)	Conducted limit (dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50
*Decreases with the logarithm of the frequency		

B.2.4Test set-up:



B.2.5 Test Condition in charging mode

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

RBW	Sweep Time(s)
9kHz	1

B.2.6 Measurement Results

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

Where

Corr: PathLoss + Voltage Division Factor

PMea: Measurement result on receiver.

Camera Mode

AC Input Port/ Voltage: 120V/60Hz

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

AC Input Port/ Voltage: 120V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV) Set.1	Conclusion
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 Mode

AC Input Port/ Voltage: 120V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV) Set.1	Conclusion
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.				

Camera Mode

AC Input Port/ Voltage: 120V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV) Set.2	Conclusion
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 Mode: PC to TF Card

AC Input Port/ Voltage: 120V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV) Set.3	Conclusion
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 Mode: TF Card to PC

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.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.				

Data Transfer Mode: PC to TF Card

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.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 Mode

AC Input Port/ Voltage: 240V/60Hz

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

Video Player Mode

AC Input Port/ Voltage: 240V/60Hz

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

AC Input Port/ Voltage: 240V/60Hz

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

Camera Mode

AC Input Port/ Voltage: 240V/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.11	P
0.5 to 5	56	46		
5 to 30	60	50		
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

Data Transfer Mode: PC to TF Card

AC Input Port/ Voltage: 240V/60Hz

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

Data Transfer Mode: TF Card to PC

AC Input Port/ Voltage: 240V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			Set.3	
0.15 to 0.5	66 to 56	56 to 46	See Figure B.13	P
0.5 to 5	56	46		
5 to 30	60	50		
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

Data Transfer Mode: PC to TF Card

AC Input Port/ Voltage: 240V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			Set.4	
0.15 to 0.5	66 to 56	56 to 46	See Figure B.14	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

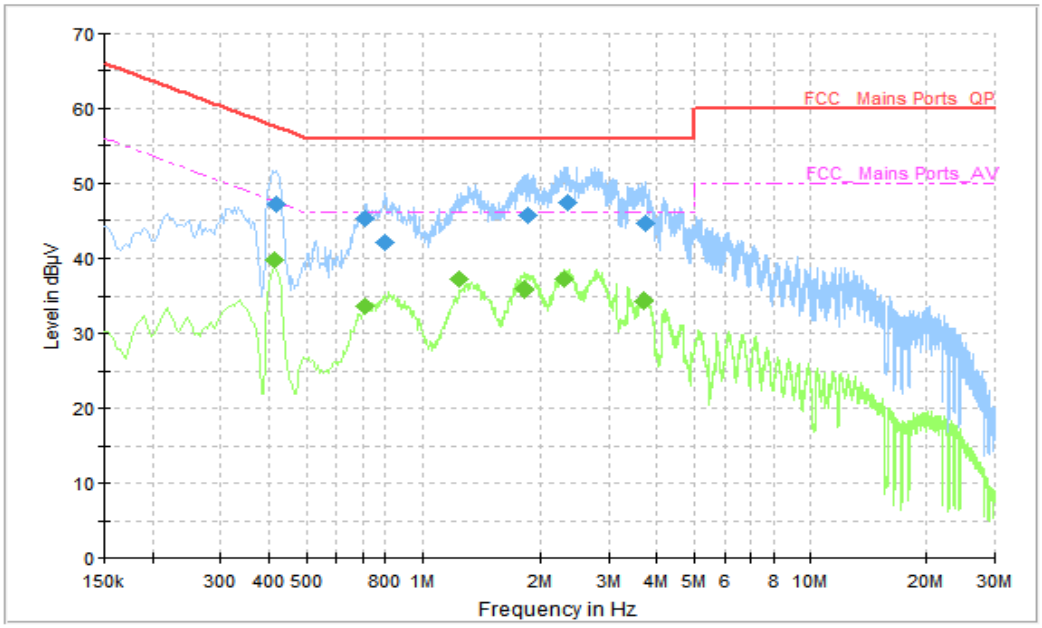


Figure B.1 Conducted Emission(Set.1, Camera Mode)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.418000	47.17	57.49	10.32	N	9.7	37.47
0.710000	45.32	56.00	10.68	N	9.7	35.62
0.798000	42.05	56.00	13.95	N	9.7	32.35
1.858000	45.59	56.00	10.41	N	9.7	35.89
2.362000	47.47	56.00	8.53	N	9.7	37.77
3.718000	44.61	56.00	11.39	N	9.7	34.91
0.418000	47.17	57.49	10.32	N	9.7	37.47

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.414000	39.74	47.57	7.82	N	9.7	30.04
0.710000	33.63	46.00	12.37	N	9.7	23.93
1.242000	37.18	46.00	8.82	N	9.7	27.48
1.810000	35.92	46.00	10.08	N	9.7	26.22
2.310000	37.04	46.00	8.96	N	9.7	27.34
3.714000	34.41	46.00	11.59	N	9.7	24.71

AC Input Port/ Voltage: 120V/60Hz

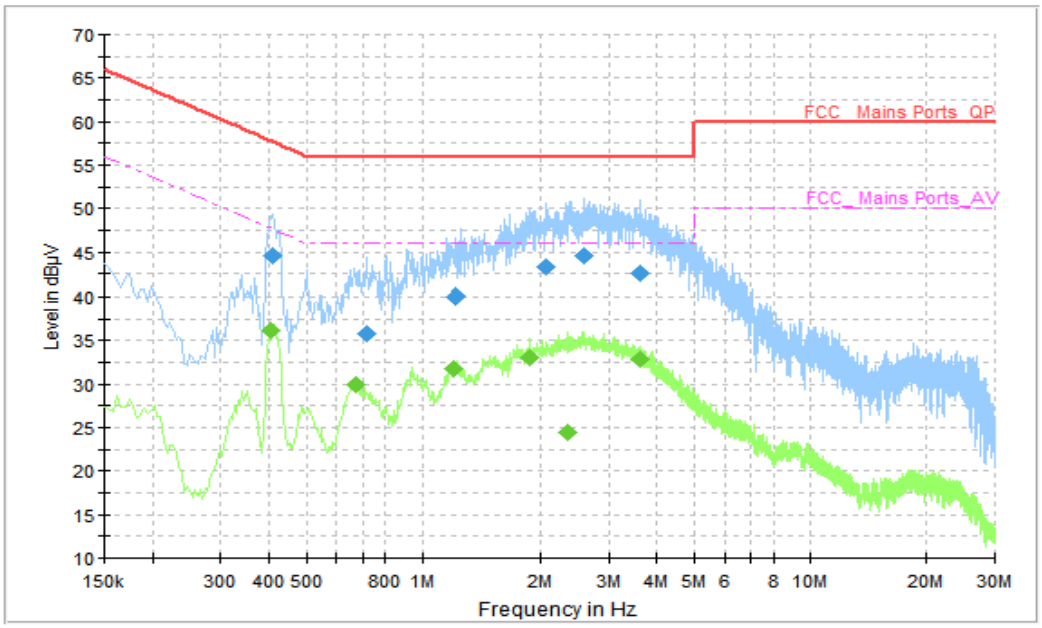


Figure B.2 Conducted Emission(Set.1, Video Player Mode)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.410000	44.49	57.65	13.16	L1	9.7	34.79
0.714000	35.86	56.00	20.14	N	9.7	26.16
1.214000	39.99	56.00	16.01	L1	9.7	30.29
2.074000	43.21	56.00	12.79	L1	9.7	33.51
2.594000	44.51	56.00	11.49	L1	9.7	34.81
3.614000	42.54	56.00	13.46	L1	9.7	32.84

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.406000	36.21	47.73	11.52	L1	9.7	26.51
0.670000	29.94	46.00	16.06	L1	9.7	20.24
1.198000	31.79	46.00	14.21	L1	9.7	22.09
1.878000	33.08	46.00	12.92	L1	9.7	23.38
2.354000	24.43	46.00	21.57	L1	9.7	14.73
3.622000	32.95	46.00	13.05	L1	9.7	23.25

AC Input Port/ Voltage: 120V/60Hz

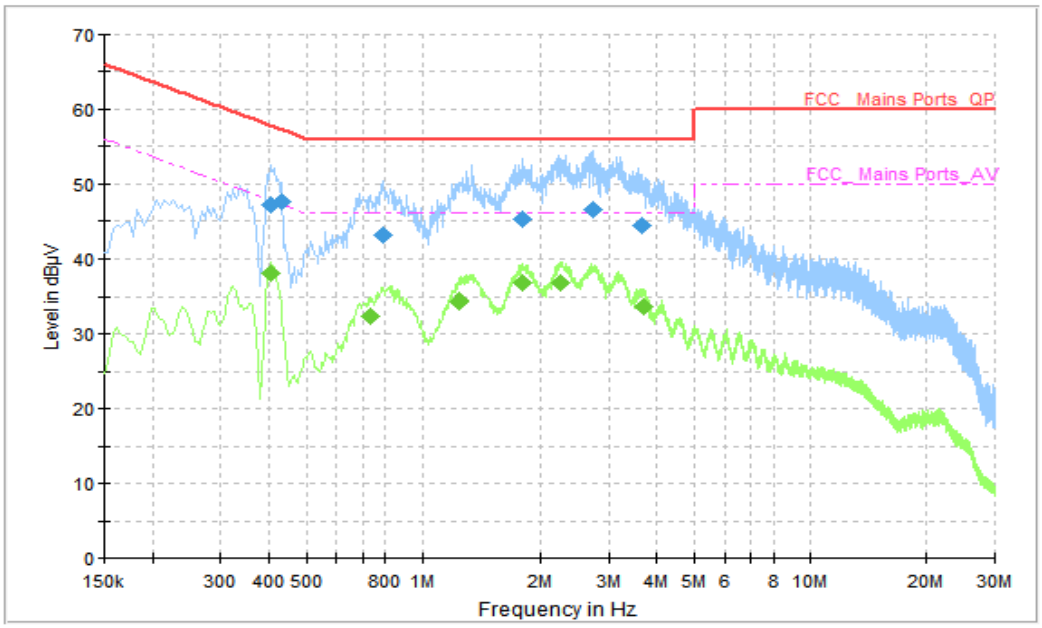


Figure B.3 Conducted Emission(Set.1, FM Mode)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.406000	47.19	57.73	10.54	N	9.7	37.49
0.434000	47.55	57.18	9.62	N	9.7	37.85
0.794000	43.12	56.00	12.88	N	9.7	33.42
1.802000	45.22	56.00	10.78	N	9.7	35.52
2.726000	46.42	56.00	9.58	N	9.7	36.72
3.658000	44.41	56.00	11.59	N	9.7	34.71

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.406000	38.01	47.73	9.72	N	9.7	28.31
0.730000	32.38	46.00	13.62	N	9.7	22.68
1.238000	34.43	46.00	11.57	N	9.7	24.73
1.790000	36.63	46.00	9.37	N	9.7	26.93
2.242000	36.79	46.00	9.21	N	9.7	27.09
3.686000	33.76	46.00	12.24	N	9.7	24.06

AC Input Port/ Voltage: 120V/60Hz

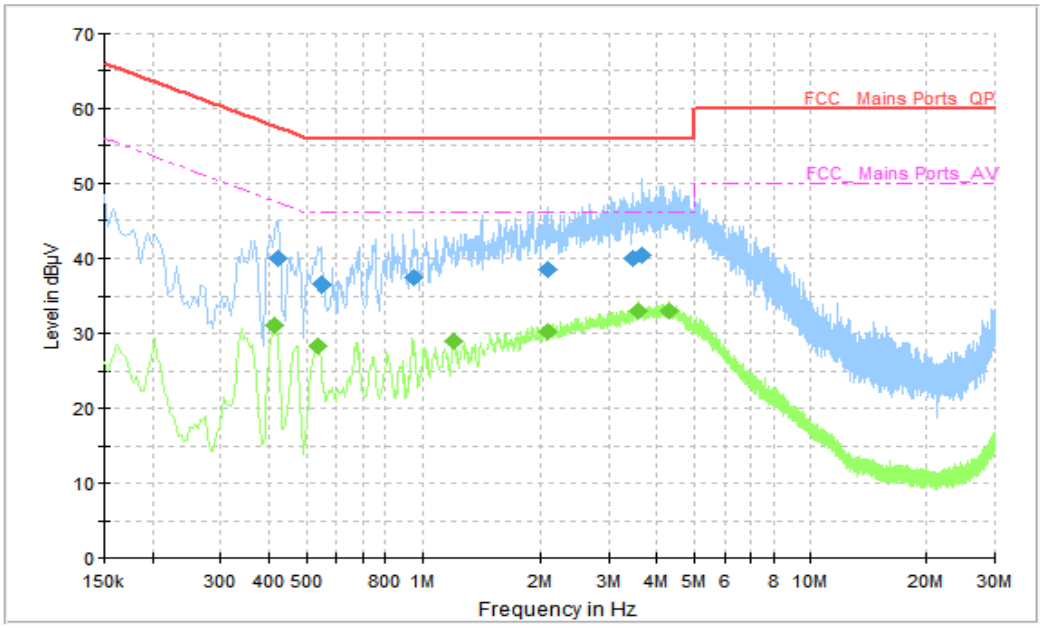


Figure B.4 Conducted Emission(Set.2, Camera Mode)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.422000	39.90	57.41	17.51	L1	9.7	30.2
0.546000	36.42	56.00	19.58	L1	9.7	26.72
0.950000	37.40	56.00	18.60	L1	9.7	27.7
2.098000	38.40	56.00	17.60	L1	9.7	28.7
3.474000	39.99	56.00	16.01	L1	9.7	30.29
3.654000	40.42	56.00	15.58	L1	9.7	30.72

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.414000	31.13	47.57	16.43	L1	9.7	21.43
0.538000	28.39	46.00	17.61	L1	9.7	18.69
1.206000	28.94	46.00	17.06	L1	9.7	19.24
2.098000	30.29	46.00	15.71	L1	9.7	20.59
3.570000	32.99	46.00	13.01	L1	9.7	23.29
4.318000	33.10	46.00	12.90	L1	9.8	23.3

AC Input Port/ Voltage: 120V/60Hz

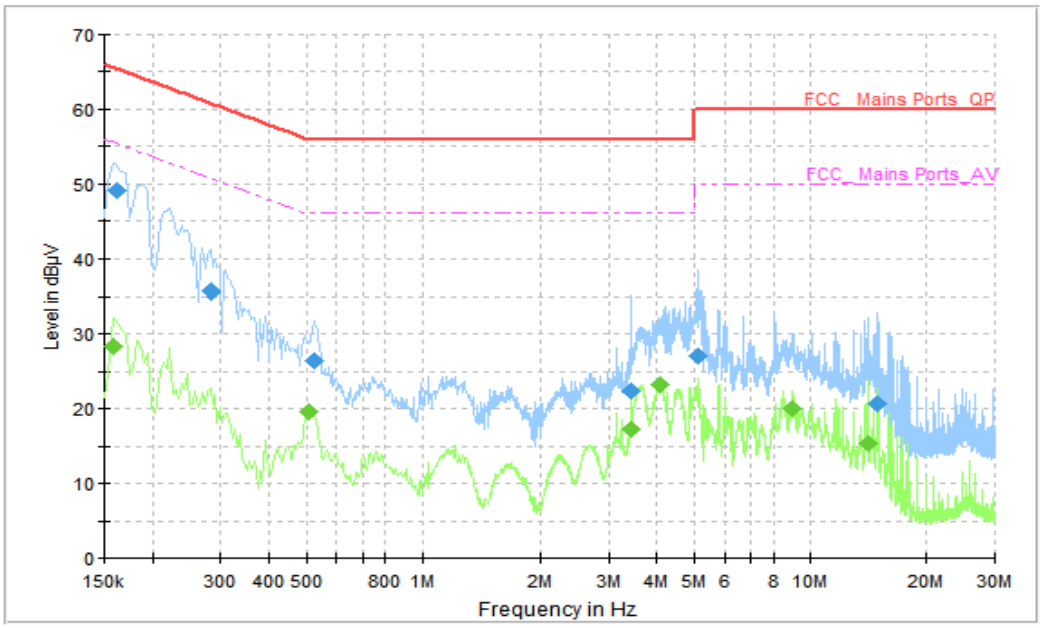


Figure B.5 Conducted Emission(Set.3, Data Transfer Mode: PC to TF Card)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.162000	49.07	65.36	16.29	N	9.6	39.47
0.282000	35.59	60.76	25.17	N	9.6	25.99
0.526000	26.52	56.00	29.48	N	9.7	16.82
3.430000	22.34	56.00	33.66	L1	9.7	12.64
5.134000	27.13	60.00	32.87	N	9.7	17.43
14.862000	20.79	60.00	39.21	L1	10.1	10.69

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.158000	28.44	55.57	27.12	L1	9.7	18.74
0.506000	19.62	46.00	26.38	N	9.7	9.92
3.430000	17.25	46.00	28.75	L1	9.7	7.55
4.054000	23.33	46.00	22.67	L1	9.7	13.63
8.966000	20.12	50.00	29.88	L1	9.8	10.32
14.038000	15.33	50.00	34.67	N	9.9	5.43

AC Input Port/ Voltage: 120V/60Hz

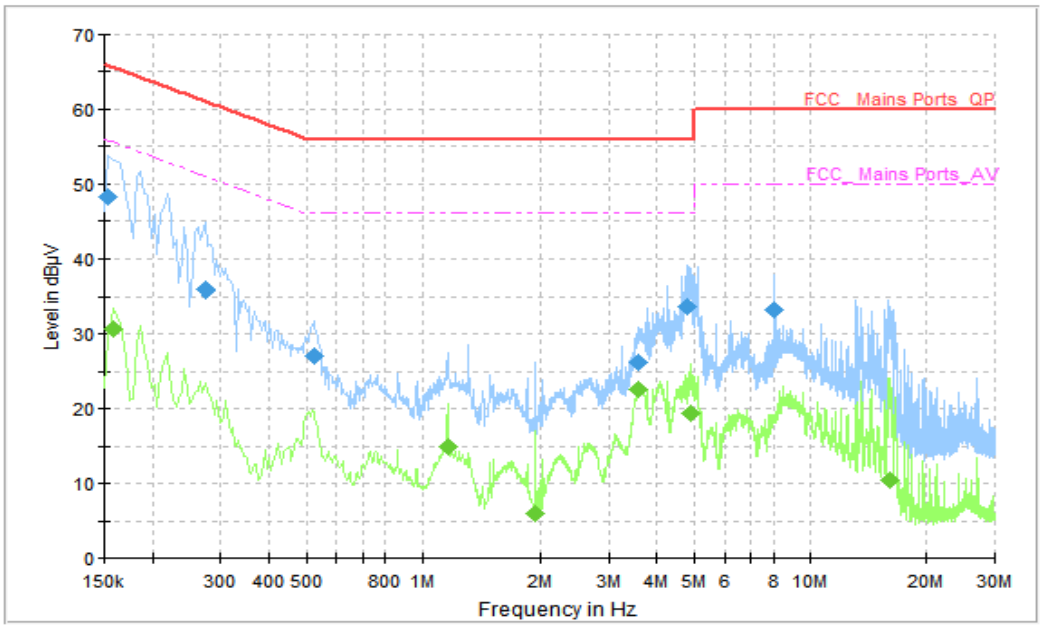


Figure B.6 Conducted Emission(Set.3, Data Transfer Mode: TF Card to PC)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.154000	48.20	65.78	17.58	L1	9.7	38.5
0.274000	35.86	61.00	25.14	L1	9.7	26.16
0.522000	27.15	56.00	28.85	N	9.7	17.45
3.574000	26.25	56.00	29.75	L1	9.7	16.55
4.790000	33.68	56.00	22.32	N	9.7	23.98
8.018000	33.28	60.00	26.72	L1	9.8	23.48

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.158000	30.80	55.57	24.77	N	9.6	21.2
1.162000	14.92	46.00	31.08	N	9.7	5.22
1.934000	5.87	46.00	40.13	N	9.7	-3.83
3.598000	22.71	46.00	23.29	L1	9.7	13.01
4.886000	19.34	46.00	26.66	L1	9.8	9.54
16.006000	10.39	50.00	39.61	L1	10.1	0.29

AC Input Port/ Voltage: 120V/60Hz

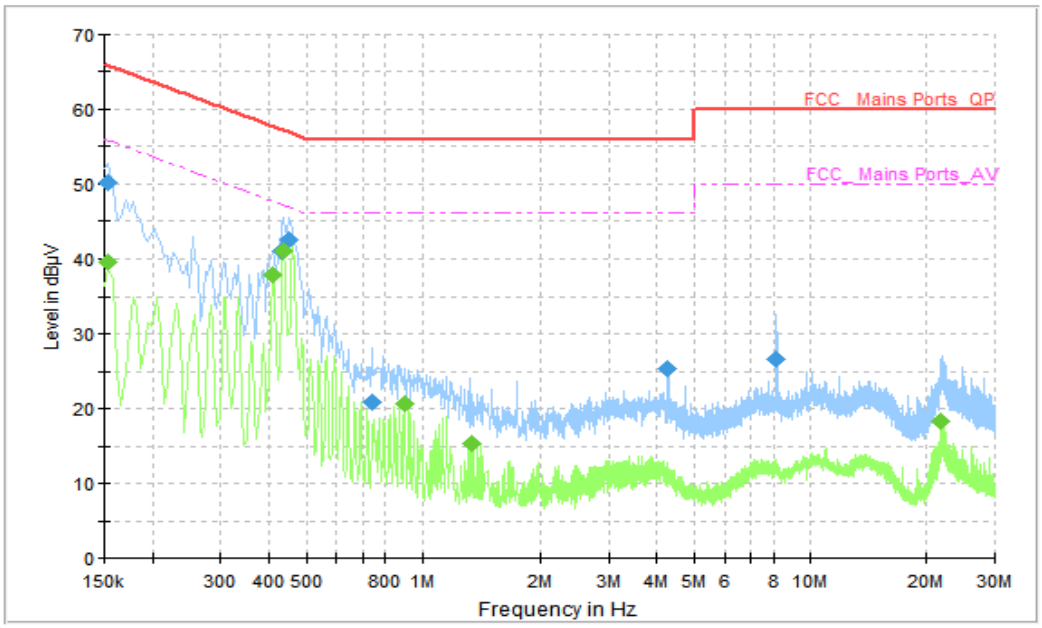


Figure B.7 Conducted Emission(Set.4, Data Transfer Mode: PC to TF Card)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.154000	50.24	65.78	15.54	N	9.6	40.64
0.430000	41.08	57.25	16.17	N	9.7	31.38
0.450000	42.57	56.88	14.31	N	9.6	32.97
0.738000	20.90	56.00	35.10	N	9.7	11.2
4.254000	25.35	56.00	30.65	N	9.7	15.65
8.166000	26.69	60.00	33.31	N	9.8	16.89

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.154000	39.39	55.78	16.39	L1	9.7	29.69
0.410000	37.81	47.65	9.84	L1	9.7	28.11
0.438000	40.92	47.10	6.18	L1	9.7	31.22
0.898000	20.72	46.00	25.28	L1	9.7	11.02
1.334000	15.41	46.00	30.59	N	9.7	5.71
21.726000	18.40	50.00	31.60	L1	10.1	8.3

AC Input Port/ Voltage: 240V/60Hz

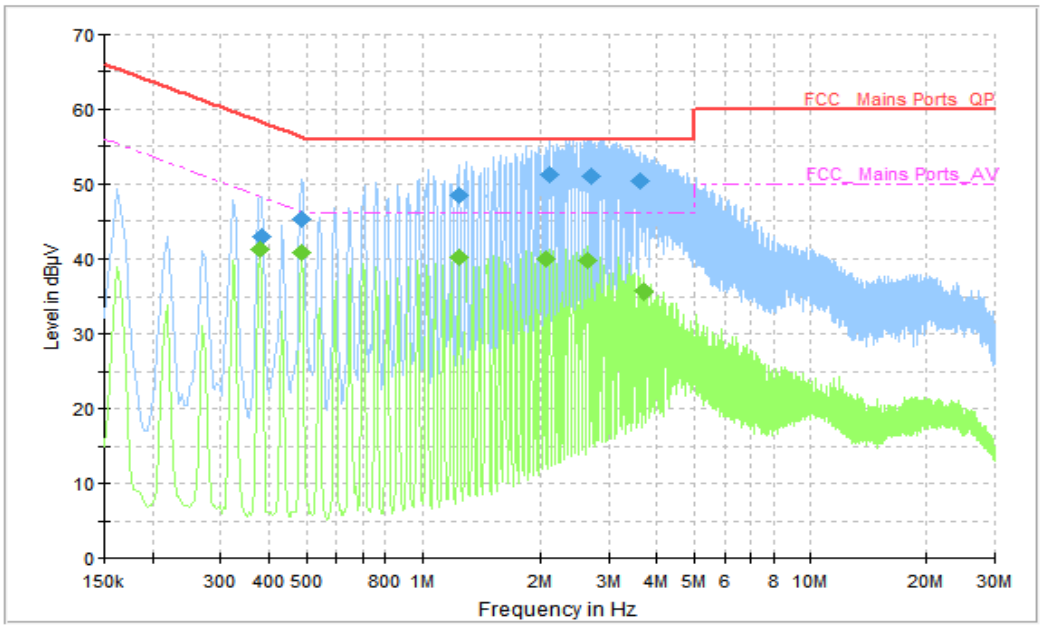


Figure B.8 Conducted Emission(Set.1, Camera Mode)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.382000	42.82	58.24	15.42	N	9.6	33.22
0.486000	45.33	56.24	10.91	N	9.7	35.63
1.246000	48.48	56.00	7.52	N	9.7	38.78
2.114000	51.22	56.00	4.78	N	9.7	41.52
2.710000	50.91	56.00	5.09	N	9.7	41.21
3.630000	50.37	56.00	5.63	L1	9.7	40.67
0.382000	42.82	58.24	15.42	N	9.6	33.22

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.378000	41.23	48.32	7.09	L1	9.7	31.53
0.486000	40.85	46.24	5.39	L1	9.7	31.15
1.242000	40.15	46.00	5.85	L1	9.7	30.45
2.058000	39.99	46.00	6.01	L1	9.7	30.29
2.654000	39.66	46.00	6.34	L1	9.7	29.96
3.682000	35.68	46.00	10.32	N	9.7	25.98

AC Input Port/ Voltage: 240V/60Hz

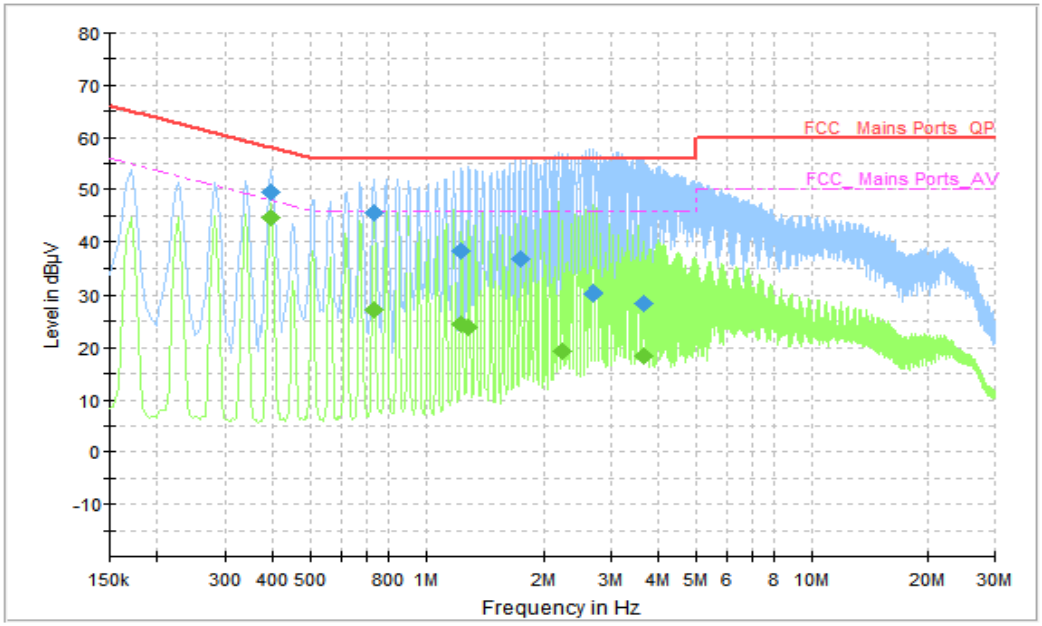


Figure B.9 Conducted Emission(Set.1, Video Player Mode)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.394000	49.66	57.98	8.32	N	9.6	40.06
0.730000	45.45	56.00	10.55	N	9.7	35.75
1.238000	38.31	56.00	17.69	N	9.7	28.61
1.742000	36.65	56.00	19.35	N	9.7	26.95
2.698000	30.29	56.00	25.71	N	9.7	20.59
3.650000	28.54	56.00	27.46	N	9.7	18.84

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.394000	44.57	47.98	3.41	N	9.6	34.97
0.734000	27.16	46.00	18.84	N	9.7	17.46
1.238000	24.39	46.00	21.61	N	9.7	14.69
1.294000	23.82	46.00	22.18	N	9.7	14.12
2.250000	19.47	46.00	26.53	N	9.7	9.77
3.650000	18.55	46.00	27.45	N	9.7	8.85

AC Input Port/ Voltage: 240V/60Hz

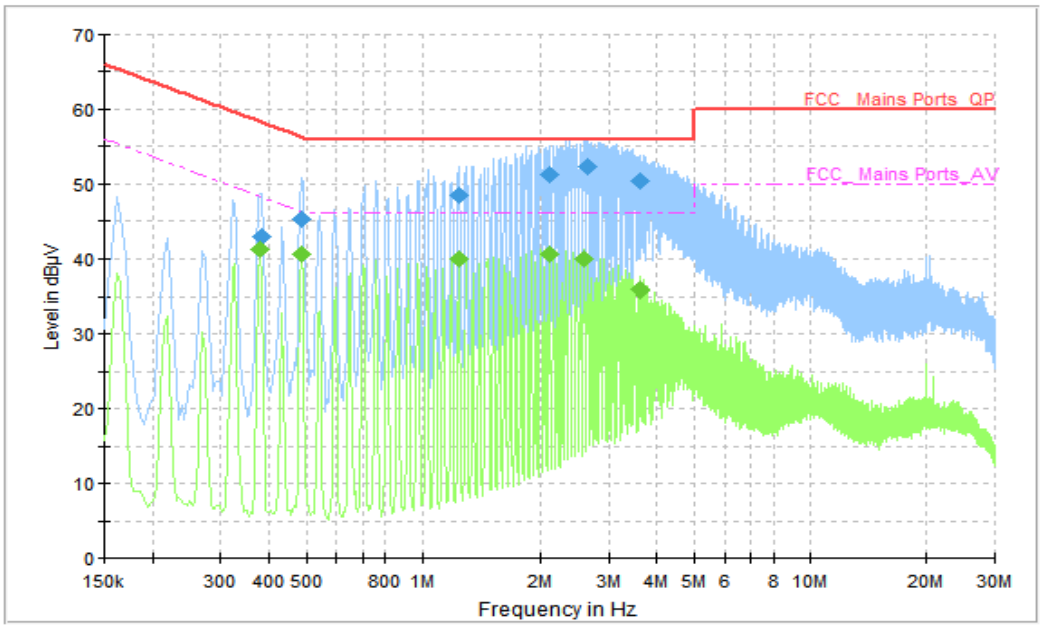


Figure B.10 Conducted Emission(Set.1, FM Mode)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.382000	42.94	58.24	15.29	N	9.6	33.34
0.486000	45.14	56.24	11.09	N	9.7	35.44
1.246000	48.37	56.00	7.63	N	9.7	38.67
2.114000	51.12	56.00	4.88	N	9.7	41.42
2.654000	52.23	56.00	3.77	N	9.7	42.53
3.630000	50.38	56.00	5.62	L1	9.7	40.68
0.382000	42.94	58.24	15.29	N	9.6	33.34

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.378000	41.26	48.32	7.06	L1	9.7	31.56
0.486000	40.65	46.24	5.58	L1	9.7	30.95
1.242000	39.95	46.00	6.05	L1	9.7	30.25
2.110000	40.52	46.00	5.48	L1	9.7	30.82
2.598000	39.86	46.00	6.14	N	9.7	30.16
3.626000	35.88	46.00	10.12	L1	9.7	26.18

AC Input Port/ Voltage: 240V/60Hz

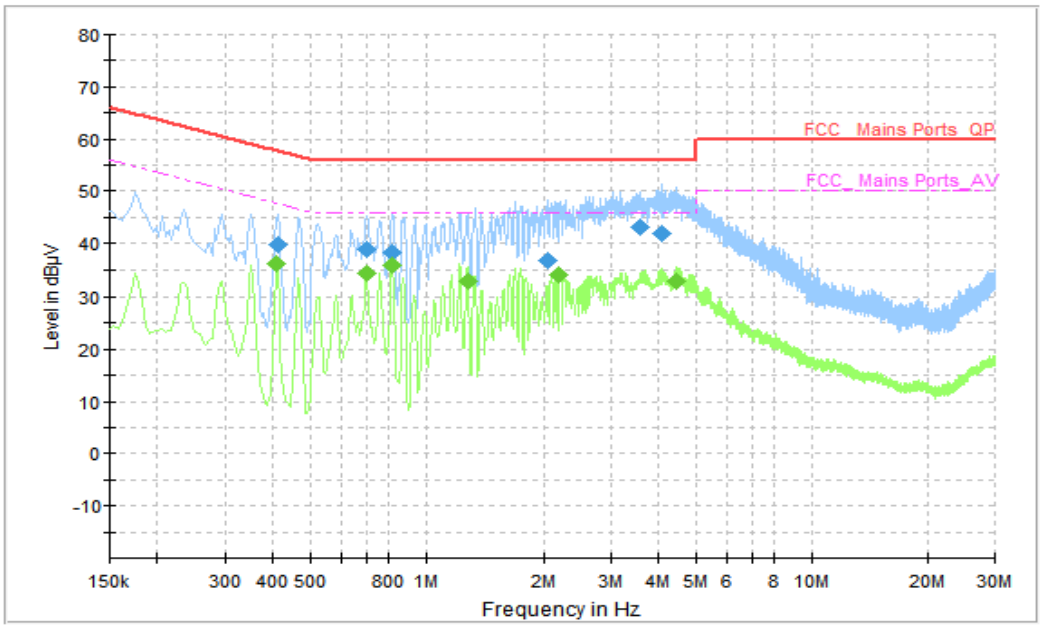


Figure B.11 Conducted Emission(Set.2, Camera Mode)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.410000	39.87	57.65	17.78	L1	9.7	30.17
0.702000	38.91	56.00	17.09	N	9.7	29.21
0.818000	38.23	56.00	17.77	N	9.7	28.53
2.046000	36.63	56.00	19.37	L1	9.7	26.93
3.574000	42.96	56.00	13.04	N	9.7	33.26
4.090000	41.80	56.00	14.20	L1	9.7	32.1

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.406000	36.04	47.73	11.69	L1	9.7	26.34
0.698000	34.19	46.00	11.81	L1	9.7	24.49
0.814000	35.67	46.00	10.33	L1	9.7	25.97
1.282000	32.80	46.00	13.20	L1	9.7	23.1
2.198000	33.99	46.00	12.01	L1	9.7	24.29
4.454000	32.78	46.00	13.22	N	9.7	23.08

AC Input Port/ Voltage: 240V/60Hz

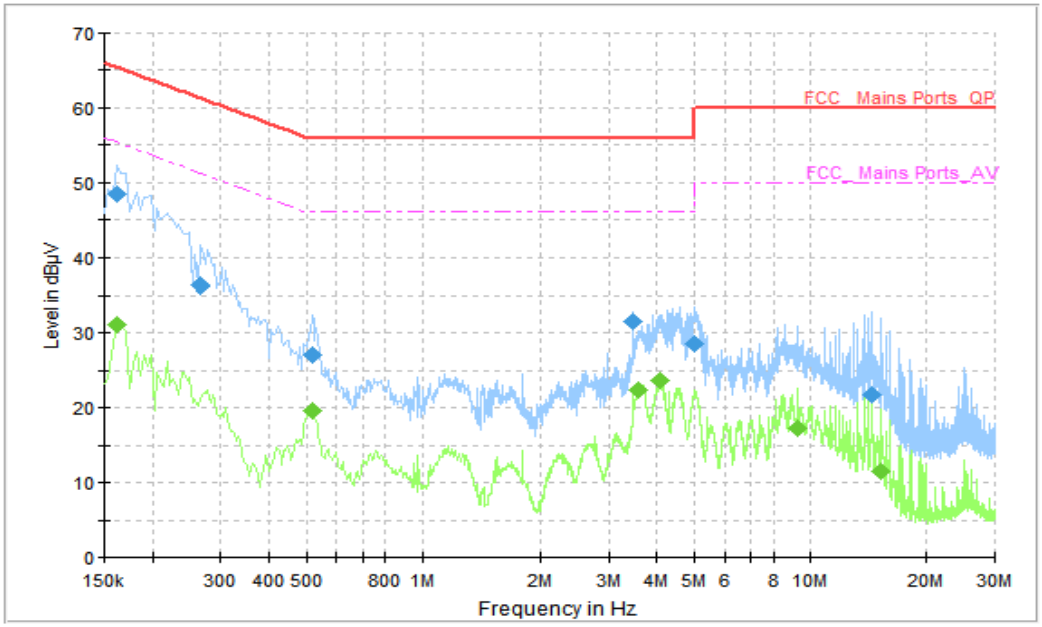


Figure B.12 Conducted Emission(Set.3, Data Transfer Mode: PC to TF Card)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.162000	48.44	65.36	16.92	N	9.6	38.84
0.266000	36.30	61.24	24.94	L1	9.7	26.6
0.518000	27.21	56.00	28.79	N	9.7	17.51
3.466000	31.52	56.00	24.48	N	9.7	21.82
4.994000	28.54	56.00	27.46	L1	9.8	18.74
14.422000	21.84	60.00	38.16	N	10.0	11.84

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.162000	31.19	55.36	24.17	N	9.6	21.59
0.518000	19.74	46.00	26.26	N	9.7	10.04
3.574000	22.48	46.00	23.52	L1	9.7	12.78
4.086000	23.59	46.00	22.41	L1	9.7	13.89
9.290000	17.21	50.00	32.79	N	9.8	7.41
15.190000	11.50	50.00	38.50	N	10.0	1.5

AC Input Port/ Voltage: 240V/60Hz

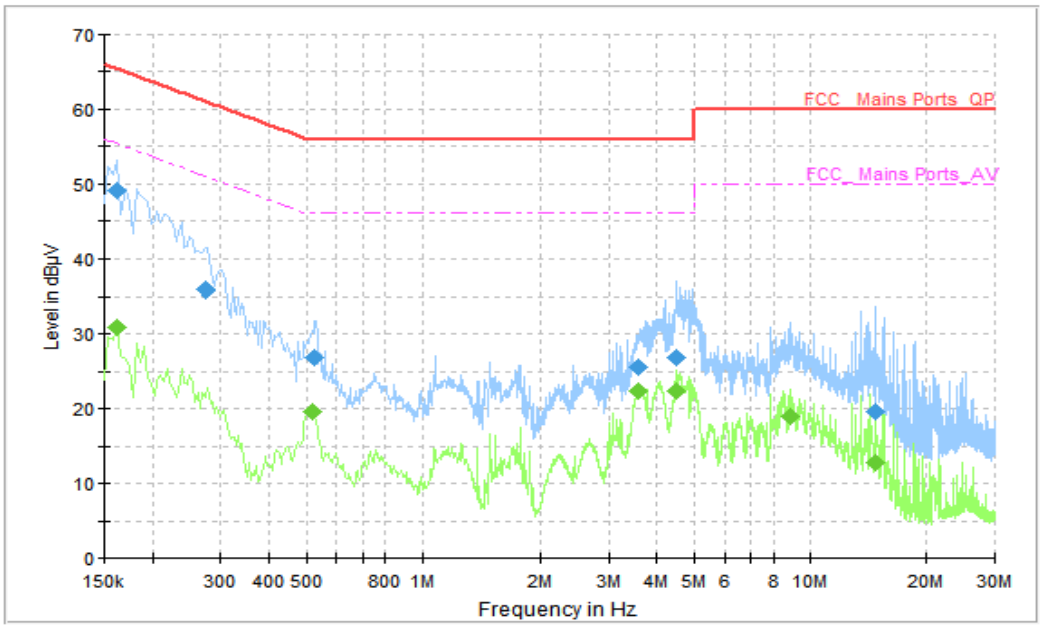


Figure B.13 Conducted Emission(Set.3, Data Transfer Mode: TF Card to PC)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.162000	49.08	65.36	16.29	L1	9.7	39.38
0.274000	35.88	61.00	25.12	N	9.6	26.28
0.526000	26.80	56.00	29.20	N	9.7	17.1
3.570000	25.67	56.00	30.33	L1	9.7	15.97
4.494000	26.86	56.00	29.14	L1	9.8	17.06
14.714000	19.73	60.00	40.27	N	10.0	9.73

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.162000	30.87	55.36	24.49	N	9.6	21.27
0.518000	19.73	46.00	26.27	N	9.7	10.03
3.574000	22.50	46.00	23.50	L1	9.7	12.8
4.486000	22.42	46.00	23.58	L1	9.8	12.62
8.818000	19.05	50.00	30.95	N	9.8	9.25
14.714000	12.80	50.00	37.20	N	10.0	2.8

AC Input Port/ Voltage: 240V/60Hz

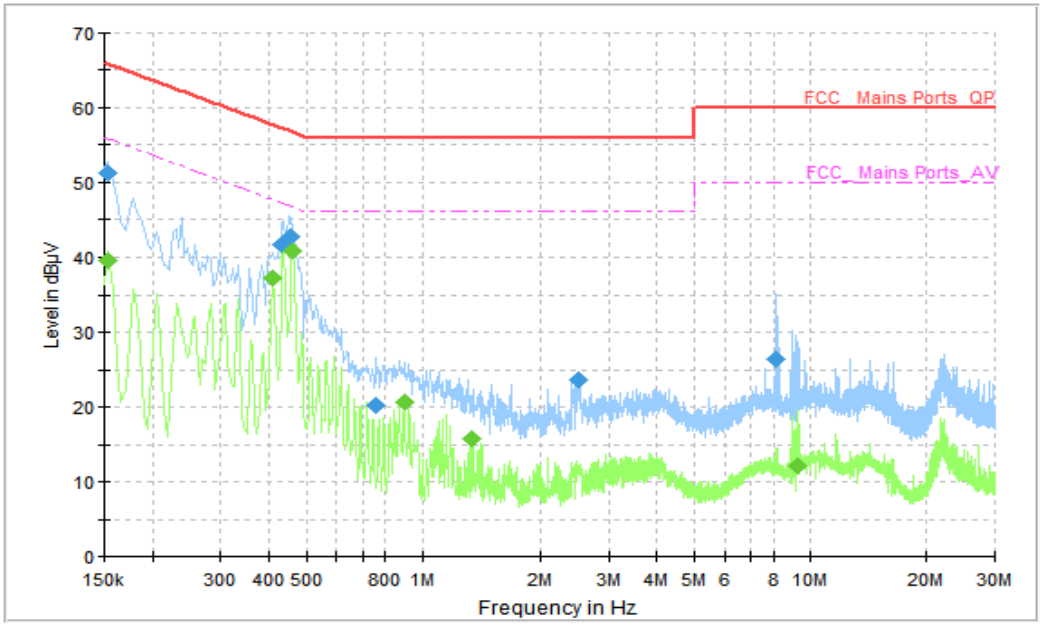


Figure B.14 Conducted Emission(Set.4, Data Transfer Mode: PC to TF Card)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.154000	51.14	65.78	14.65	L1	9.7	41.44
0.430000	41.53	57.25	15.72	N	9.7	31.83
0.454000	42.72	56.80	14.08	L1	9.7	33.02
0.758000	20.38	56.00	35.62	L1	9.7	10.68
2.498000	23.77	56.00	32.23	N	9.7	14.07
8.170000	26.49	60.00	33.51	L1	9.8	16.69

Final_Result_AVG

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)	P_{Mea} (dBµV)
0.154000	39.43	55.78	16.35	N	9.6	29.83
0.410000	37.07	47.65	10.58	N	9.7	27.37
0.462000	40.76	46.66	5.89	N	9.7	31.06
0.898000	20.63	46.00	25.37	L1	9.7	10.93
1.334000	15.86	46.00	30.14	L1	9.7	6.16
9.234000	12.26	50.00	37.74	L1	9.8	2.46

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