



TEST REPORT

No.I22N00378-EMC

for

TCL Communication Ltd.

Tablet PC

Model Name: 9132X

With

Hardware Version: PIO

Software Version: CS61

FCC ID: 2ACCJB176

Issued Date: 2022-03-16

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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No.I22N00378-EMC

REPORT HISTORY

Report Number	Revision	Description	Issue Date
I22N00378-EMC	Rev.0	1st edition	2022-03-16

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	9132X
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

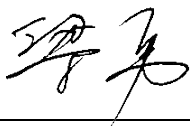
Address: Building G, Shenzhen International Innovation Center, No.1006
Shennan Road, Futian District, Shenzhen, Guangdong, China

1.5. Project data

Testing Start Date: 2022-03-05

Testing End Date: 2022-03-11

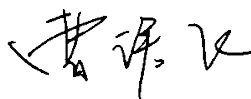
1.6. Signature



Liang Yong
(Prepared this test report)



Zhang Yunzhuan
(Reviewed this test report)



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(Approved this test report)



2. CLIENT INFORMATION

2.1. Applicant Information

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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	+86 755 3661 2000-81722

3. EQUIPMENT UNDER TEST (EUT) AND ANCILLARY EQUIPMENT

(AE)

3.1. About EUT

Description	Tablet PC
Model Name	9132X
FCC ID	2ACCJB176
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
UT02aa	SGZ97L5PMJWW6L9T	PIO	CS61	2022-02-23
UT09aa	PRFIEA4PCQJB8GM	PIO	CS61	2022-02-23
UT03aa	LBNZBIPE5XKNOZUC	PIO	CS61	2022-02-23

*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

Model	CAC4000018C7
Manufacturer	VEKEN
Capacity	4000mAh
Nominal Voltage	3.85 V

AE2

Model	CBA0058AGTC5
Manufacturer	PUAN

AE3-1

Model	CDA0000162C2
Manufacturer	SHENGHUA

AE3-2

Model	CDA0000162C1
Manufacturer	JUWEI

AE4

Model	Ha01
Manufacturer	/



* 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+AE2+AE3-1	
Set.2	EUT+AE1+AE2+AE3-1+AE4	
Set.3	EUT+AE1+AE2+AE3-2+AE4	
Set.4	EUT+AE1+AE3-1+PC	
Set.5	EUT+AE1+AE3-2+PC	

3.5. General Description

The Equipment Under Test (EUT) is a model of Tablet PC.

It has MP3, Camera, FM receiver, USB memory, Bluetooth, Wi-Fi and GNSS functions.

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

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	(10-1-2020 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

5. LABORATORY ENVIRONMENT

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

9.10m×6.10m×5.60m (L×W×H)

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

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

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

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

9.10m×6.10m×5.60m (L×W×H)

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

6. SUMMARY OF TEST RESULTS

6.1. Testing Environment

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

6.2. Summary of Measurement Results

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

Items	Test Name	Clause in FCC/IC rules	Section in this report	Verdict
1	Radiated Emission	15.109(a)/ Section 6.2	A.1	P
2	Conducted Emission	15.107(a)/ Section 6.1	A.2	P

6.3. Statement

6.3.1 Statements of conformity

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

7. MEASUREMENT UNCERTAINTY

Test item	Frequency ranges	Measurement uncertainty
Radiated Emission	30MHz-1GHz	4.86dB(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.	Bluetooth Tester	CBT32	100584	R&S	2022.12.29	1 year
10.	Horn Antenna	QSH-SL-18-2 6-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
12.	Signal Generator	SMB100A	179725	R&S	2022.11.24	1 year



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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	/	/

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.

This device does not contain the receivers which tune and operate between 30MHz-960MHz of licensed bands.

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 Part 15.109(a)

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

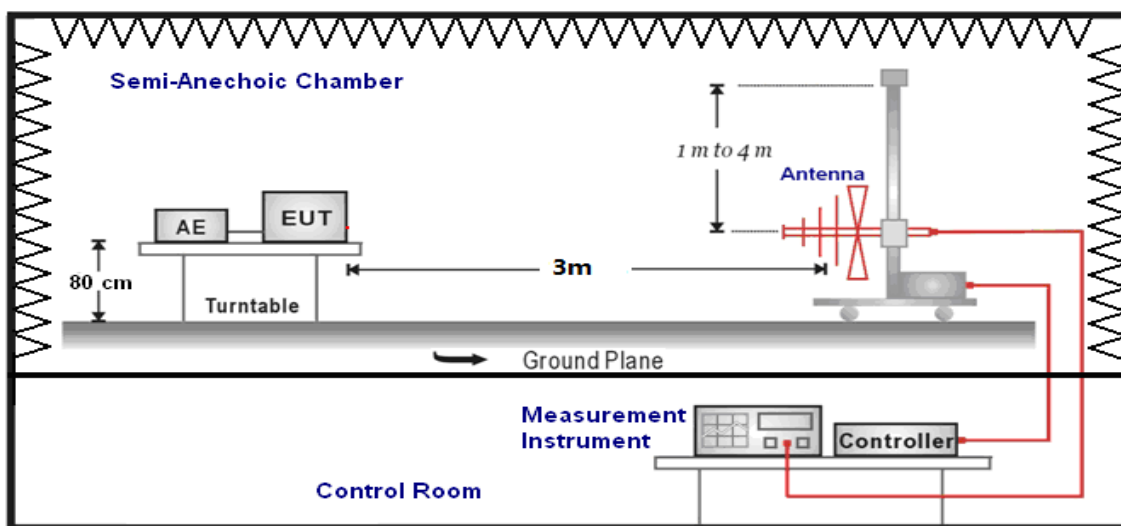
*Note: The original limit is defined at 10m test distance. This limit is calculated according to CISPR requirements.

A.1.4 Test Condition

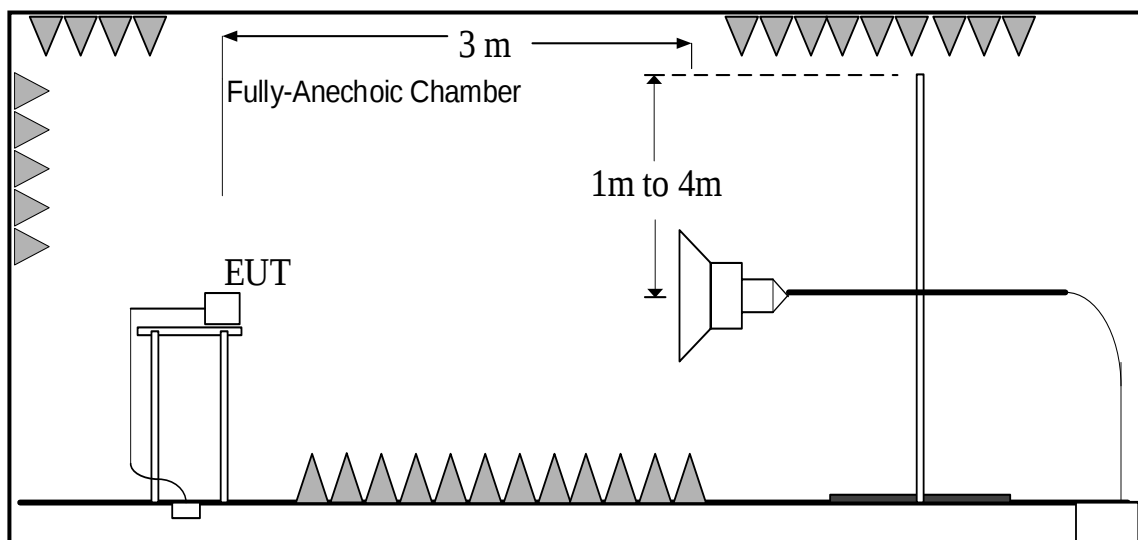
Frequency of emission (MHz)	RBW/VBW	Sweep Time(s)
30-1000	120kHz (IF bandwidth)	5
Above 1000	1MHz/3MHz	15

A.1.5 Test set-up:

30MHz-1GHz



1GHz-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:

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

Where

G_A : Antenna factor of receive antenna

G_{PL} : Path Loss

P_{Mea} : Measurement result on receiver.

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

Note: the result contains vertical part and Horizontal part

Camera

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
		UT02aa/Set.1	
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 (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
			UT02aa/Set.1	
1000 to 18000	54.00	74.00	See Figure A.1.2.	P
18000 to 26500	63.54	83.54	See Figure A.1.3.	
26500 to 40000	63.54	83.54	See Figure A.1.4.	

Video Player

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
		UT02aa/Set.1	
30-88	40.00	See Figure A.1.5.	P
88-216	43.52		
216-960	46.02		
960-1000	54.00		

Frequency range (MHz)	Average Limit (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
			UT02aa/Set.1	
1000 to 18000	54.00	74.00	See Figure A.1.6.	P
18000 to 26500	63.54	83.54	See Figure A.1.7.	
26500 to 40000	63.54	83.54	See Figure A.1.8.	

FM receiver

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
		UT02aa/Set.2	
30-88	40.00	See Figure A.1.9.	P
88-216	43.52		
216-960	46.02		
960-1000	54.00		

Frequency range (MHz)	Average Limit (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
			UT02aa/Set.2	
1000 to 18000	54.00	74.00	See Figure A.1.10.	P
18000 to 26500	63.54	83.54	See Figure A.1.11.	
26500 to 40000	63.54	83.54	See Figure A.1.12.	

FM receiver

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
		UT02aa/Set.3	
30-88	40.00	See Figure A.1.13.	P
88-216	43.52		
216-960	46.02		
960-1000	54.00		

Frequency range (MHz)	Average Limit (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
			UT02aa/Set.3	
1000 to 18000	54.00	74.00	See Figure A.1.14.	P
18000 to 26500	63.54	83.54	See Figure A.1.15.	
26500 to 40000	63.54	83.54	See Figure A.1.16.	

Data Transfer: PC TO EUT

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
		UT02aa/Set.4	
30-88	40.00	See Figure A.1.17.	P
88-216	43.52		
216-960	46.02		
960-1000	54.00		

Frequency range (MHz)	Average Limit (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
			UT02aa/Set.4	
1000 to 18000	54.00	74.00	See Figure A.1.18.	P
18000 to 26500	63.54	83.54	See Figure A.1.19.	
26500 to 40000	63.54	83.54	See Figure A.1.20.	

Data Transfer: EUT TO PC

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
		UT02aa/Set.4	
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 (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
			UT02aa/Set.4	
1000 to 18000	54.00	74.00	See Figure A.1.22.	P
18000 to 26500	63.54	83.54	See Figure A.1.23.	
26500 to 40000	63.54	83.54	See Figure A.1.24.	

Data Transfer: PC TO TF Card

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
		UT09aa/Set.4	
30-88	40.00	See Figure A.1.25.	P
88-216	43.52		
216-960	46.02		
960-1000	54.00		

Frequency range (MHz)	Average Limit (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
			UT09aa/Set.4	
1000 to 18000	54.00	74.00	See Figure A.1.26.	P
18000 to 26500	63.54	83.54	See Figure A.1.27.	
26500 to 40000	63.54	83.54	See Figure A.1.28.	

Data Transfer: TF Card TO PC

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
		UT09aa/Set.4	
30-88	40.00	See Figure A.1.29.	P
88-216	43.52		
216-960	46.02		
960-1000	54.00		

Frequency range (MHz)	Average Limit (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
			UT09aa/Set.4	
1000 to 18000	54.00	74.00	See Figure A.1.30.	P
18000 to 26500	63.54	83.54	See Figure A.1.31.	
26500 to 40000	63.54	83.54	See Figure A.1.32.	

Data Transfer: EUT TO PC

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
		UT02aa/Set.5	
30-88	40.00	See Figure A.1.33.	P
88-216	43.52		
216-960	46.02		
960-1000	54.00		

Frequency range (MHz)	Average Limit (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
			UT02aa/Set.5	
1000 to 18000	54.00	74.00	See Figure A.1.34.	P
18000 to 26500	63.54	83.54	See Figure A.1.35.	
26500 to 40000	63.54	83.54	See Figure A.1.36.	

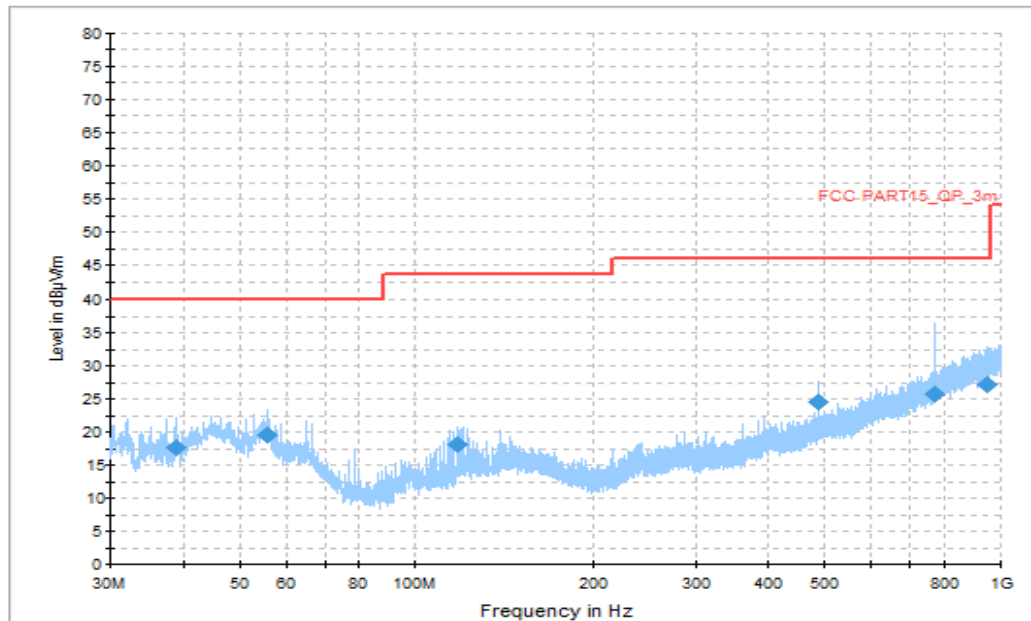


Figure A.1.1. Radiated Emission (Camera , 30MHz to 1GHz)

Final_Results

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
38.778500	17.59	40.00	22.41	V	-22.13	39.72
55.899000	19.41	40.00	20.59	V	-22.68	42.09
117.930500	18.10	43.50	25.40	V	-24.35	42.45
486.045500	24.45	46.00	21.55	V	-17.22	41.67
768.024500	25.80	46.00	20.20	V	-11.83	37.63
947.571500	27.15	46.00	18.85	V	-8.84	35.99

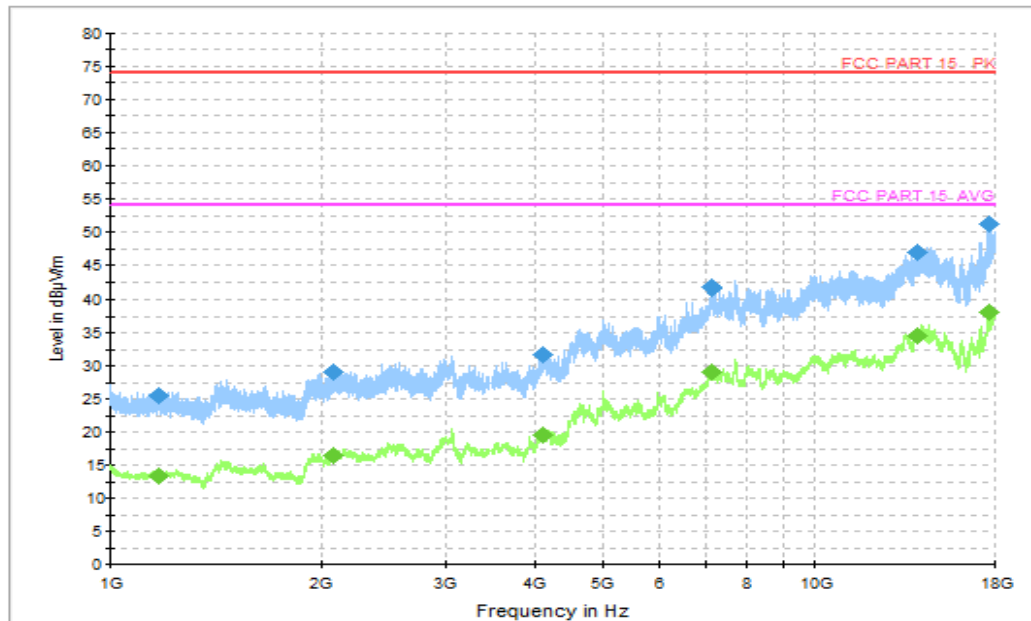


Figure A.1.2. Radiated Emission (Camera , 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
1171.400000	25.49	74.00	48.51	V	-20.85	46.34
2072.000000	29.11	74.00	44.89	V	-17.26	46.37
4099.200000	31.70	74.00	42.30	H	-10.64	42.34
7129.600000	41.59	74.00	32.41	H	-0.85	42.44
14001.000000	46.91	74.00	27.09	V	5.72	41.19
17702.000000	51.30	74.00	22.70	H	11.38	39.92

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
1171.400000	13.38	54.00	40.62	V	-20.85	34.23
2072.000000	16.46	54.00	37.54	V	-17.26	33.72
4099.200000	19.54	54.00	34.46	H	-10.64	30.18
7129.600000	28.93	54.00	25.07	H	-0.85	29.78
14001.000000	34.41	54.00	19.59	V	5.72	28.69
17702.000000	38.19	54.00	15.81	H	11.38	26.81

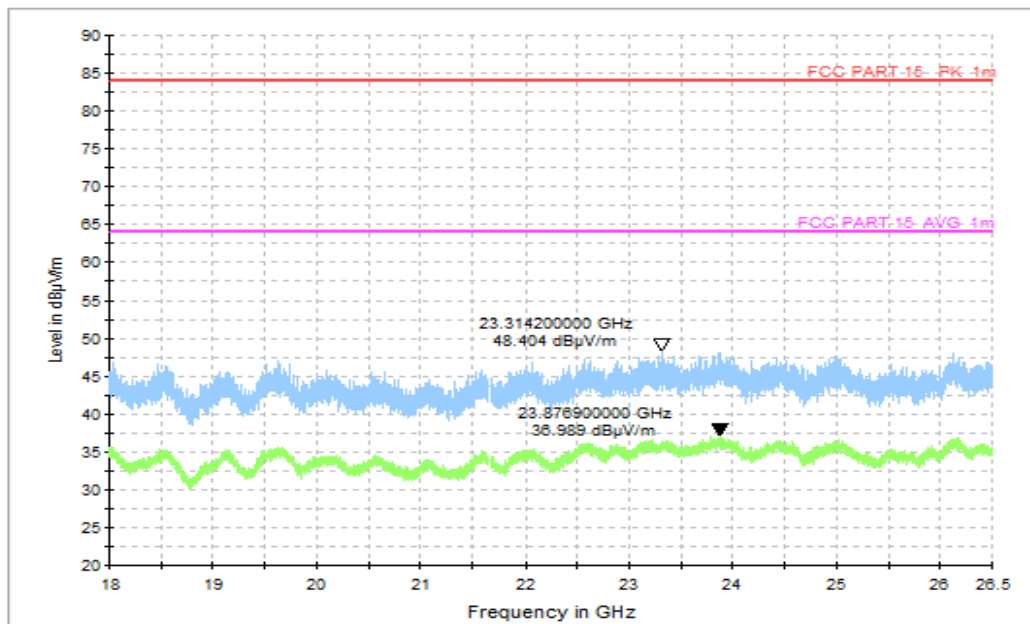


Figure A.1.3. Radiated Emission (Camera , 18GHz to 26.5GHz)

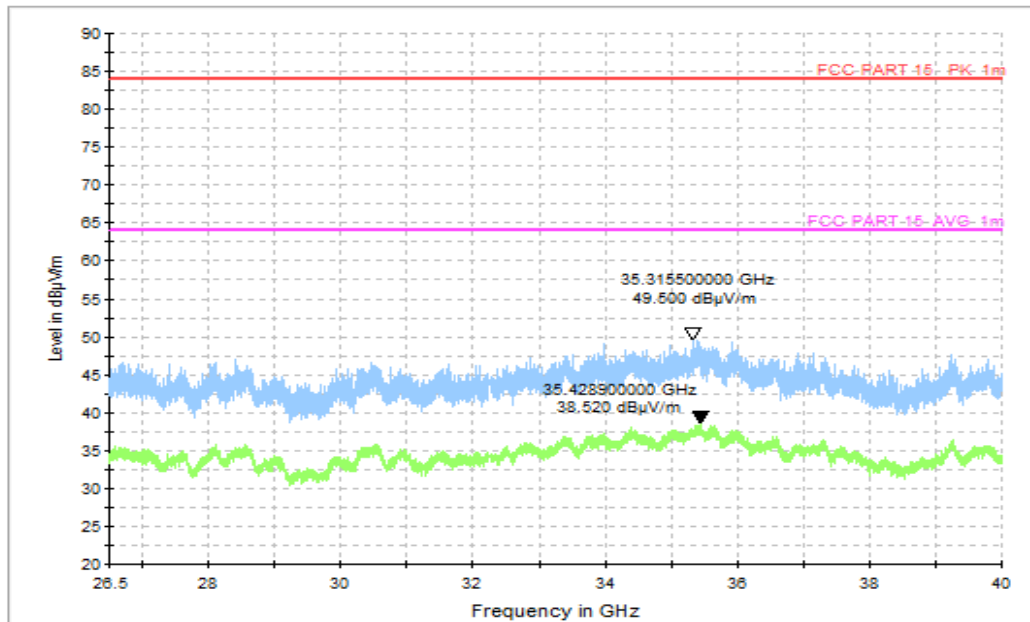


Figure A.1.4. Radiated Emission (Camera , 26.5GHz to 40GHz)

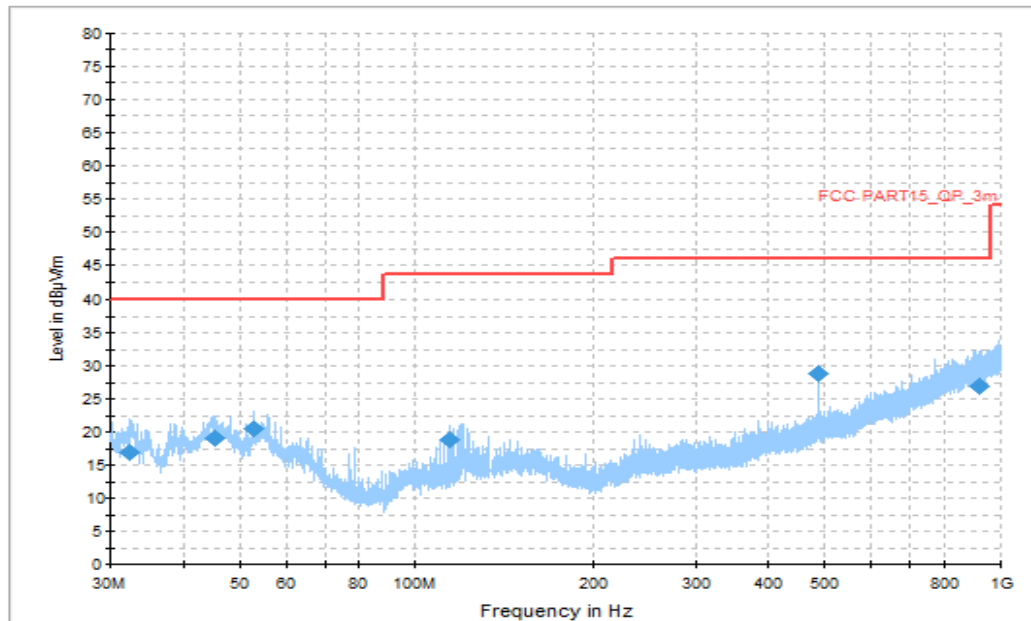


Figure A.1.5. Radiated Emission (Video Player , 30MHz to 1GHz)

Final_Results

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
32.328000	16.93	40.00	23.07	V	-23.45	40.38
45.423000	19.06	40.00	20.94	V	-22.03	41.09
52.892000	20.36	40.00	19.64	V	-22.44	42.80
114.972000	18.81	43.50	24.69	V	-24.64	43.45
485.997000	28.89	46.00	17.11	V	-17.22	46.11
921.721000	26.84	46.00	19.16	H	-9.18	36.02

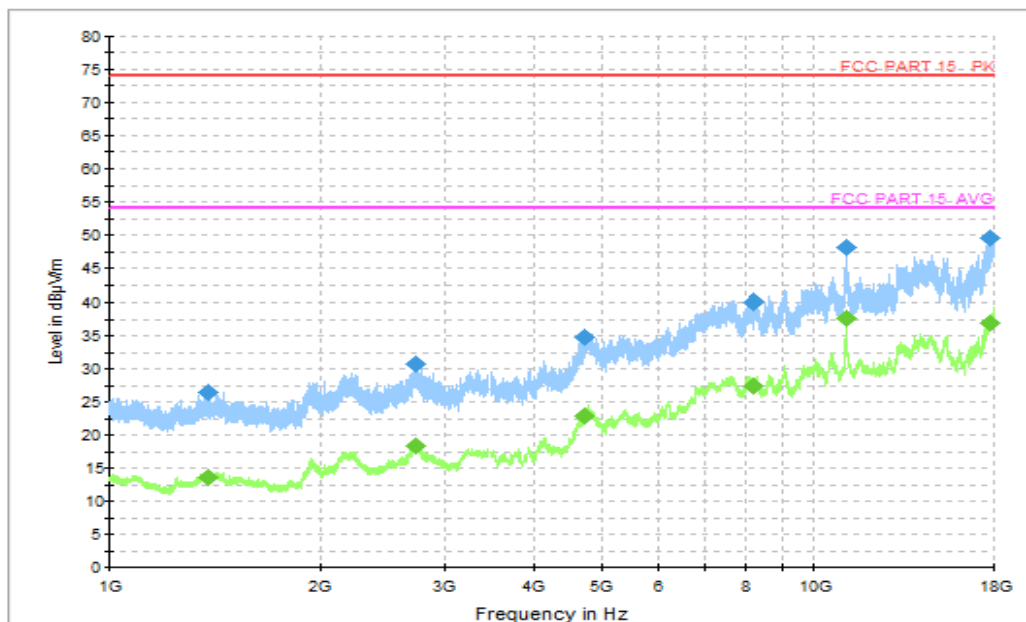


Figure A.1.6. Radiated Emission (Video Player , 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
1381.400000	26.48	74.00	47.52	V	-19.84	46.32
2726.400000	30.68	74.00	43.32	H	-15.29	45.97
4712.000000	34.68	74.00	39.32	V	-7.27	41.95
8207.200000	39.91	74.00	34.09	H	-1.05	40.96
11104.000000	48.18	74.00	25.82	V	2.54	45.64
17745.200000	49.57	74.00	24.43	V	11.60	37.97

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
1381.400000	13.52	54.00	40.48	V	-19.84	33.36
2726.400000	18.24	54.00	35.76	H	-15.29	33.53
4712.000000	22.79	54.00	31.21	V	-7.27	30.06
8207.200000	27.46	54.00	26.54	H	-1.05	28.51
11104.000000	37.60	54.00	16.40	V	2.54	35.06
17745.200000	36.96	54.00	17.04	V	11.60	25.36

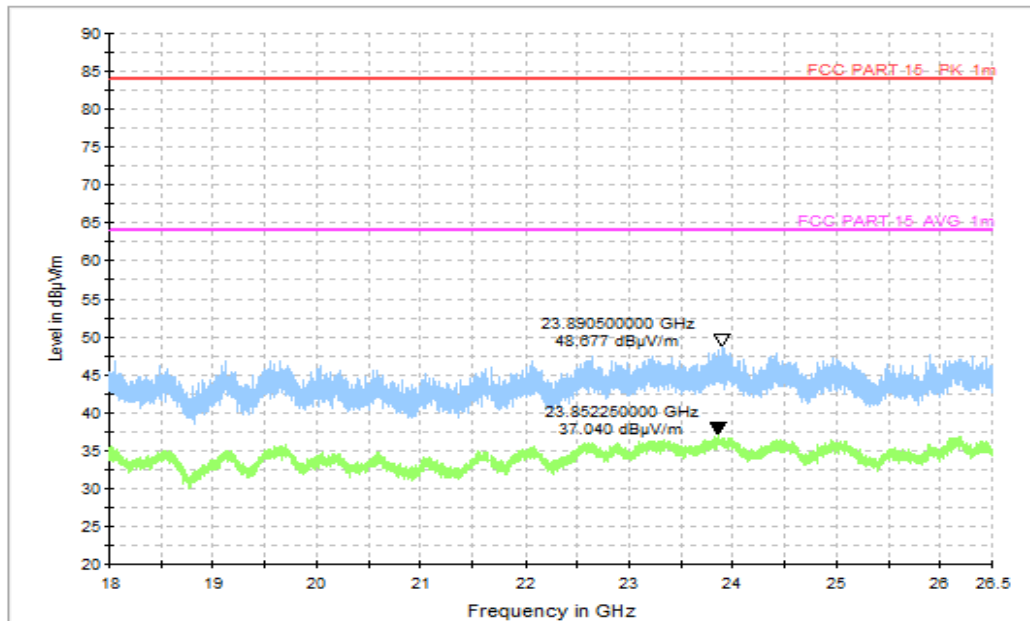


Figure A.1.7. Radiated Emission (Video Player , 18GHz to 26.5GHz)

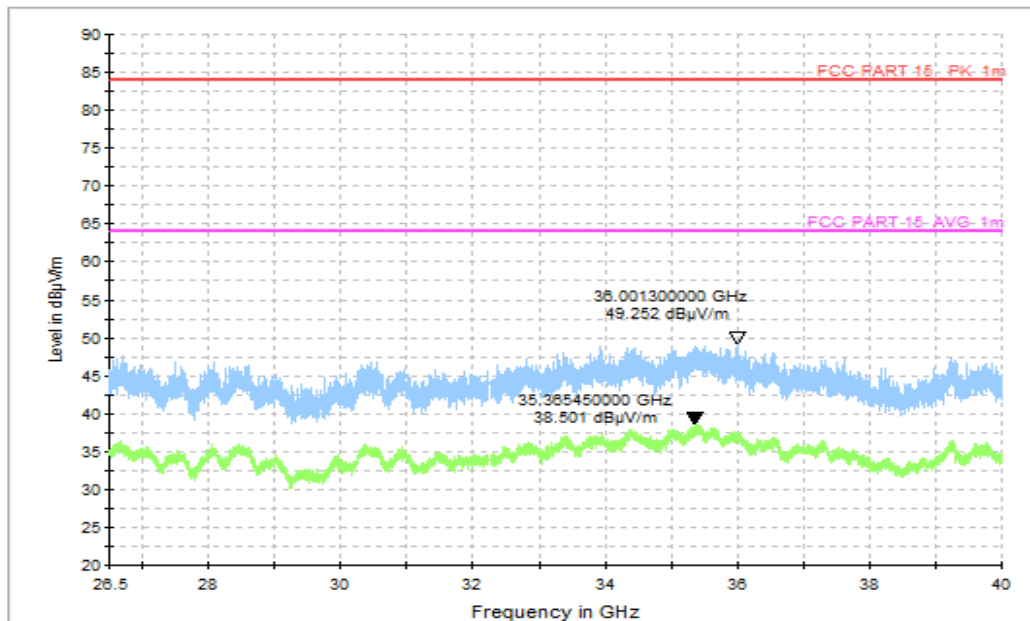
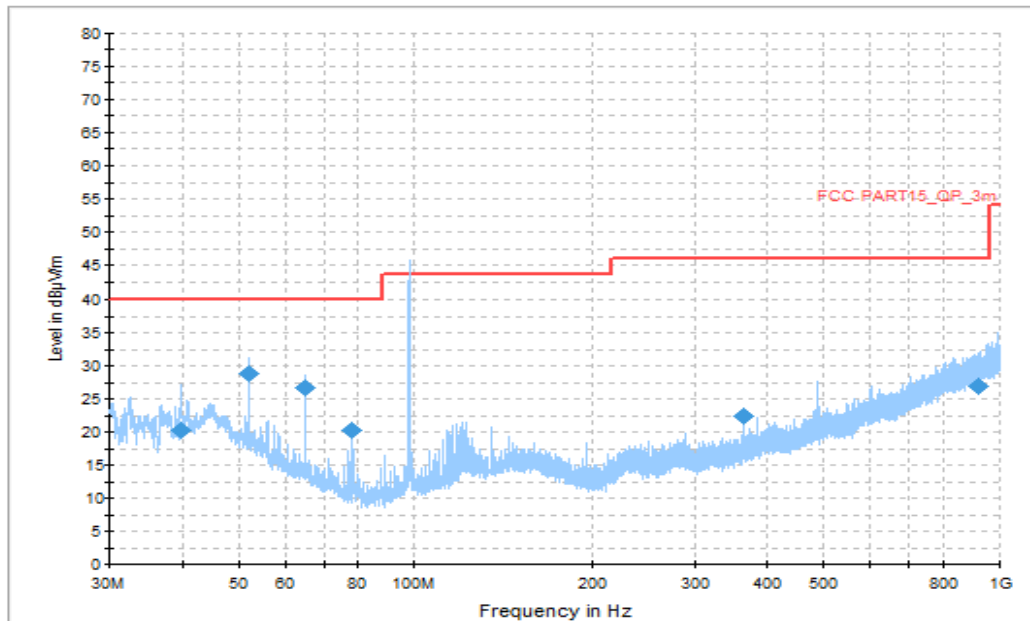


Figure A.1.8. Radiated Emission (Video Player , 26.5GHz to 40GHz)



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

Figure A.1.9. Radiated Emission (FM receiver , 30MHz to 1GHz)

Final_Results

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
39.894000	20.29	40.00	19.71	V	-21.85	42.14
51.970500	28.82	40.00	11.18	V	-22.37	51.19
64.968500	26.75	40.00	13.25	V	-23.85	50.60
77.966500	20.22	40.00	19.78	H	-26.34	46.56
364.504500	22.48	46.00	23.52	H	-20.33	42.81
918.714000	26.83	46.00	19.17	H	-9.21	36.04

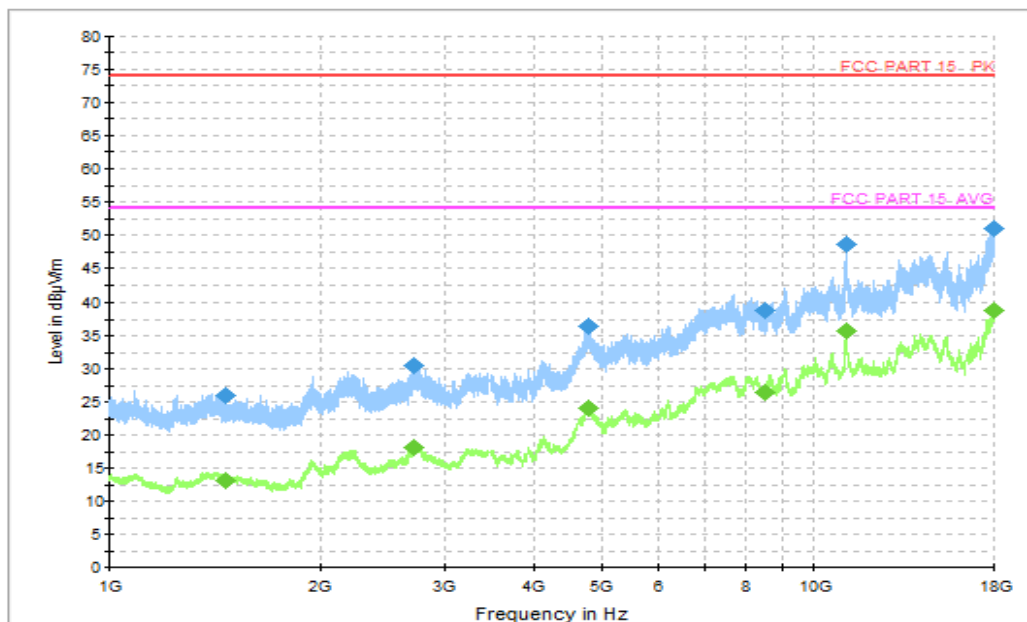


Figure A.1.10. Radiated Emission (FM receiver , 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
1462.800000	25.96	74.00	48.04	V	-19.92	45.88
2707.800000	30.55	74.00	43.45	V	-15.36	45.91
4769.600000	36.54	74.00	37.46	H	-6.88	43.42
8524.800000	38.82	74.00	35.18	H	-1.49	40.31
11098.500000	48.60	74.00	25.40	H	2.53	46.07
17996.800000	50.88	74.00	23.12	H	12.89	37.99

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
1462.800000	13.00	54.00	41.00	V	-19.92	32.92
2707.800000	18.12	54.00	35.88	V	-15.36	33.48
4769.600000	24.10	54.00	29.90	H	-6.88	30.98
8524.800000	26.38	54.00	27.62	H	-1.49	27.87
11098.500000	35.73	54.00	18.27	H	2.53	33.2
17996.800000	38.75	54.00	15.25	H	12.89	25.86

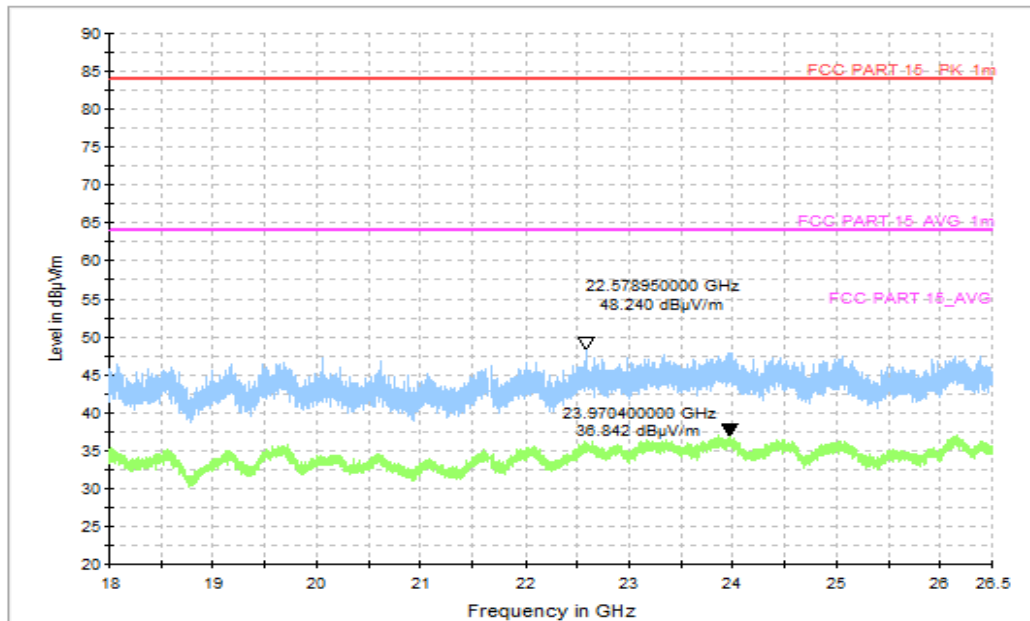


Figure A.1.11. Radiated Emission (FM receiver , 18GHz to 26.5GHz)

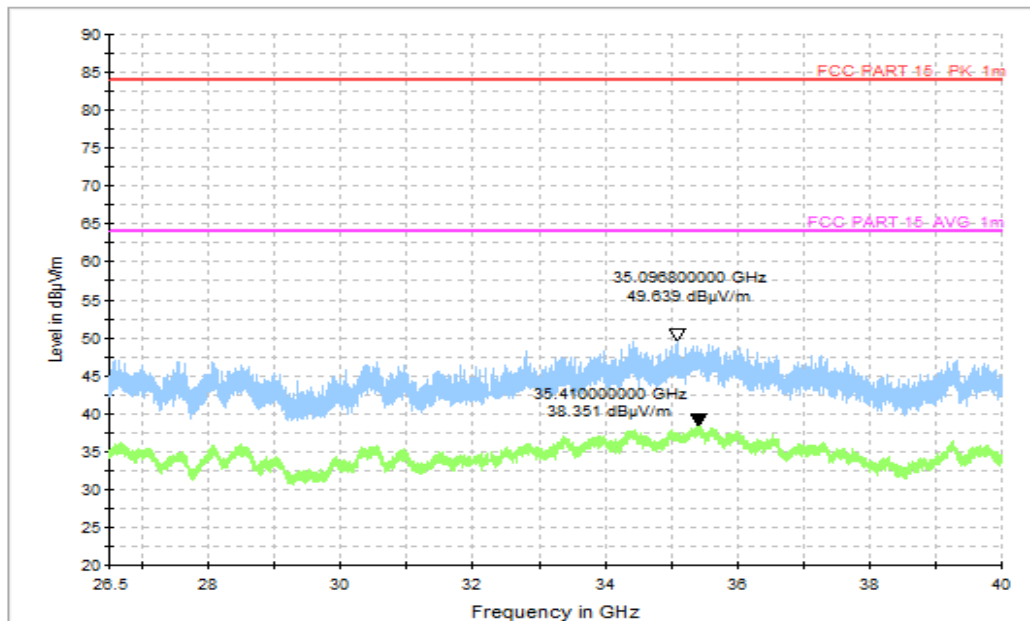
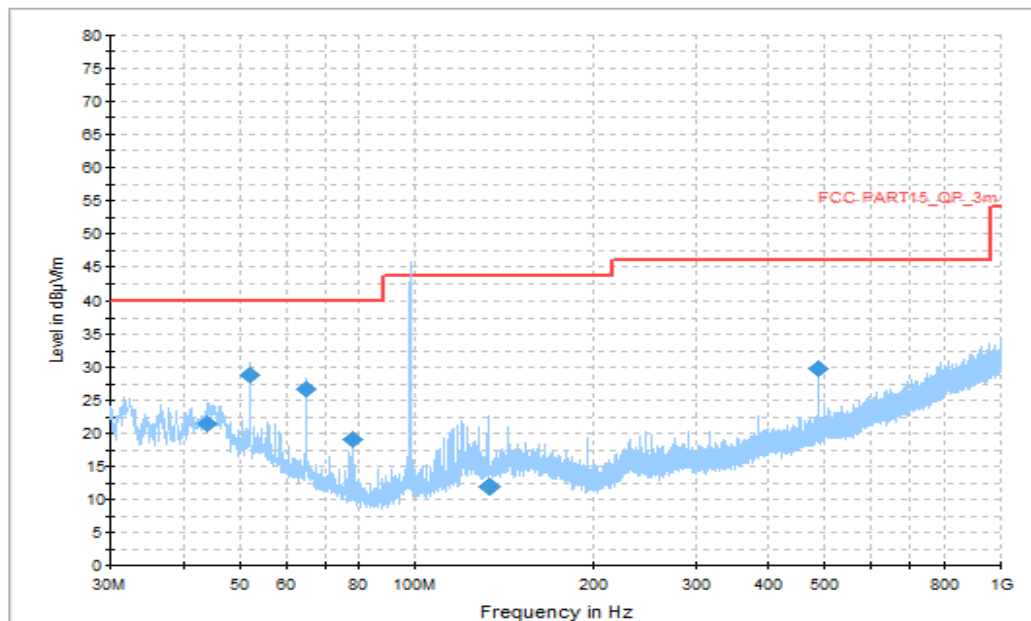


Figure A.1.12. Radiated Emission (FM receiver , 26.5GHz to 40GHz)



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

Figure A.1.13. Radiated Emission (FM receiver , 30MHz to 1GHz)

Final Results

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
44.016500	21.48	40.00	18.52	H	-21.98	43.46
51.970500	28.89	40.00	11.11	V	-22.37	51.26
64.968500	26.76	40.00	13.24	V	-23.85	50.61
77.966500	19.11	40.00	20.89	H	-26.34	45.45
133.935500	11.94	43.50	31.56	V	-23.25	35.19
485.997000	29.79	46.00	16.21	V	-17.22	47.01

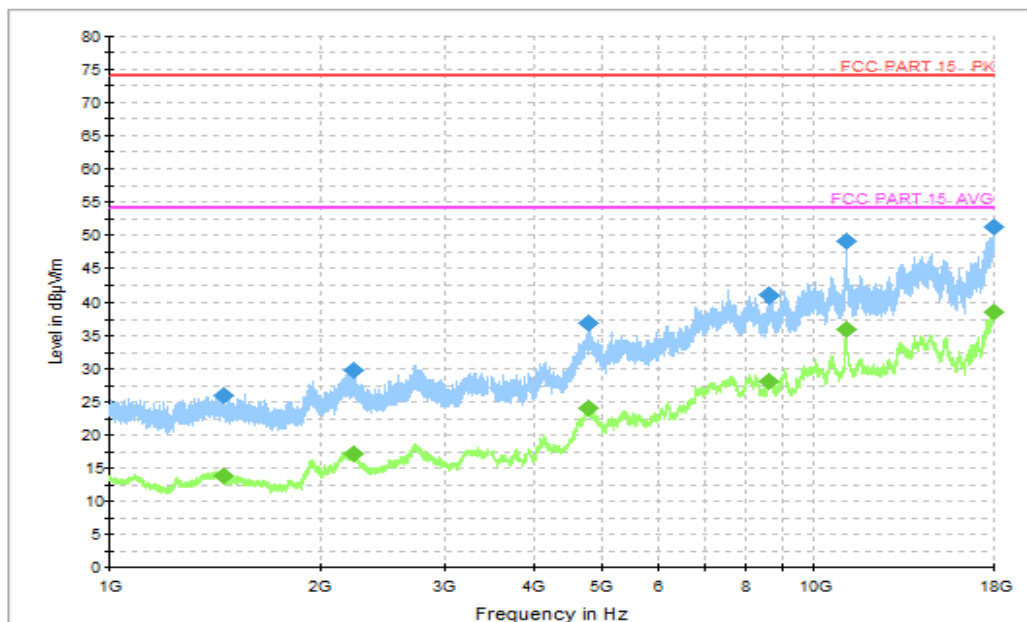


Figure A.1.14. Radiated Emission (FM receiver , 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
1452.000000	26.07	74.00	47.93	V	-19.89	45.96
2231.800000	29.80	74.00	44.20	H	-16.04	45.84
4768.800000	36.79	74.00	37.21	V	-6.88	43.67
8613.600000	41.04	74.00	32.96	H	-1.14	42.18
11098.500000	49.05	74.00	24.95	H	2.53	46.52
17993.600000	51.17	74.00	22.83	H	12.88	38.29

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
1452.000000	13.81	54.00	40.19	V	-19.89	33.70
2231.800000	17.09	54.00	36.91	H	-16.04	33.13
4768.800000	24.10	54.00	29.90	V	-6.88	30.98
8613.600000	28.12	54.00	25.88	H	-1.14	29.26
11098.500000	36.07	54.00	17.93	H	2.53	33.54
17993.600000	38.66	54.00	15.34	H	12.88	25.78

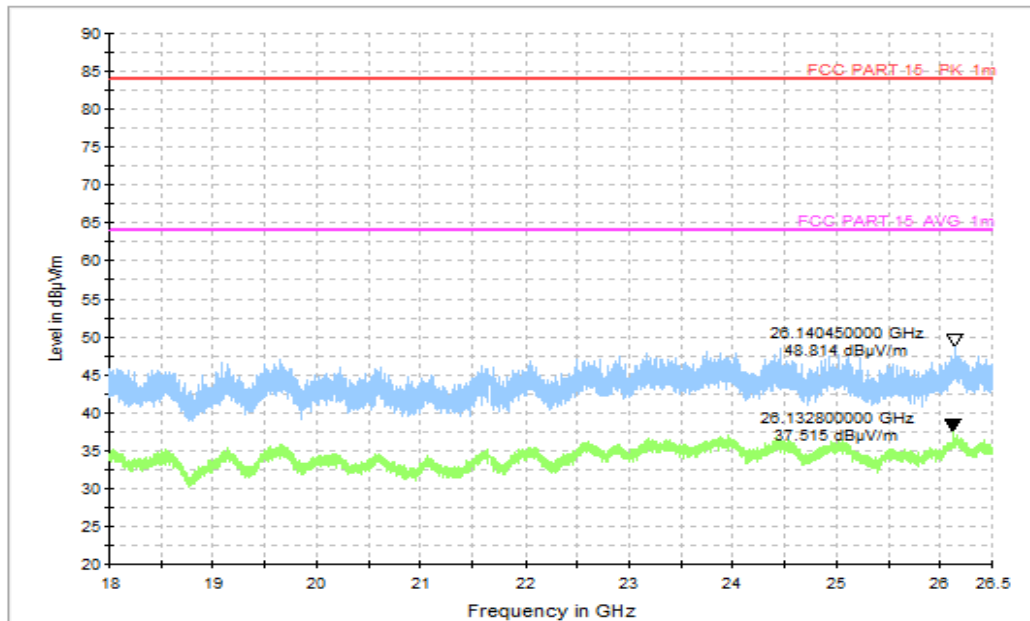


Figure A.1.15. Radiated Emission (FM receiver , 18GHz to 26.5GHz)

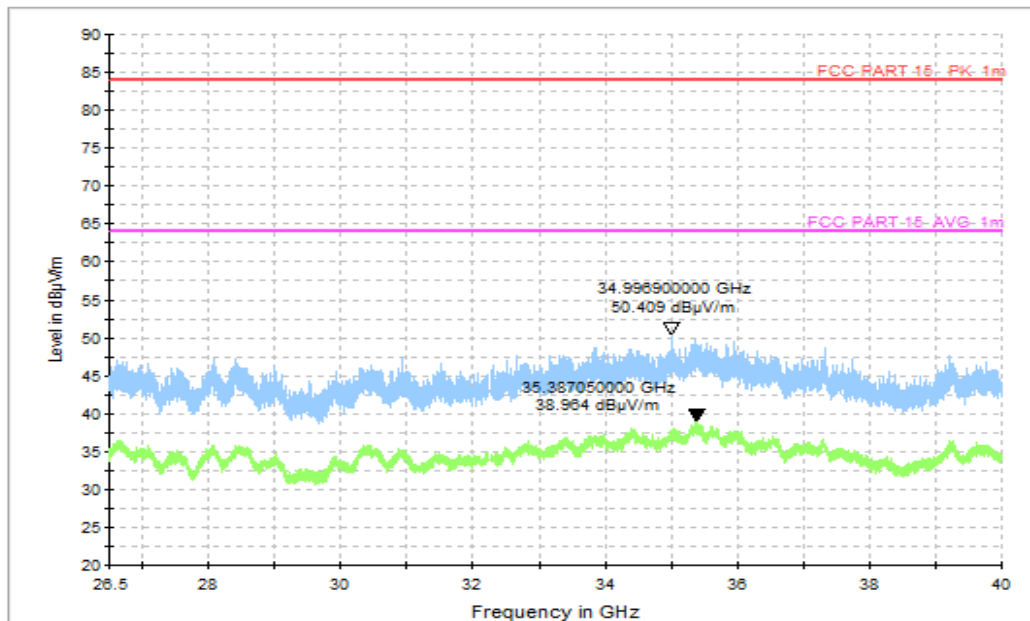


Figure A.1.16. Radiated Emission (FM receiver , 26.5GHz to 40GHz)

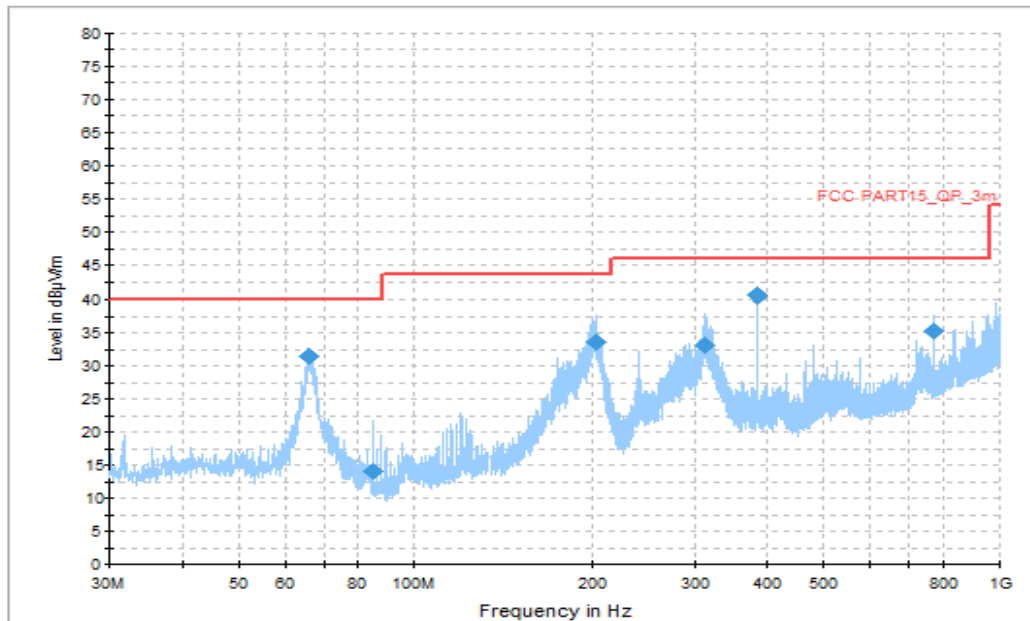


Figure A.1.17. Radiated Emission (Data Transfer: PC TO EUT, 30MHz to 1GHz)

Final_Results

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
66.229500	31.37	40.00	8.63	V	-24.06	55.43
84.756500	13.93	40.00	26.07	V	-26.79	40.72
203.290500	33.66	43.50	9.84	H	-25.55	59.21
311.251500	33.17	46.00	12.83	H	-22.20	55.37
384.001500	40.52	46.00	5.48	H	-19.71	60.23
768.024500	35.35	46.00	10.65	V	-11.83	47.18

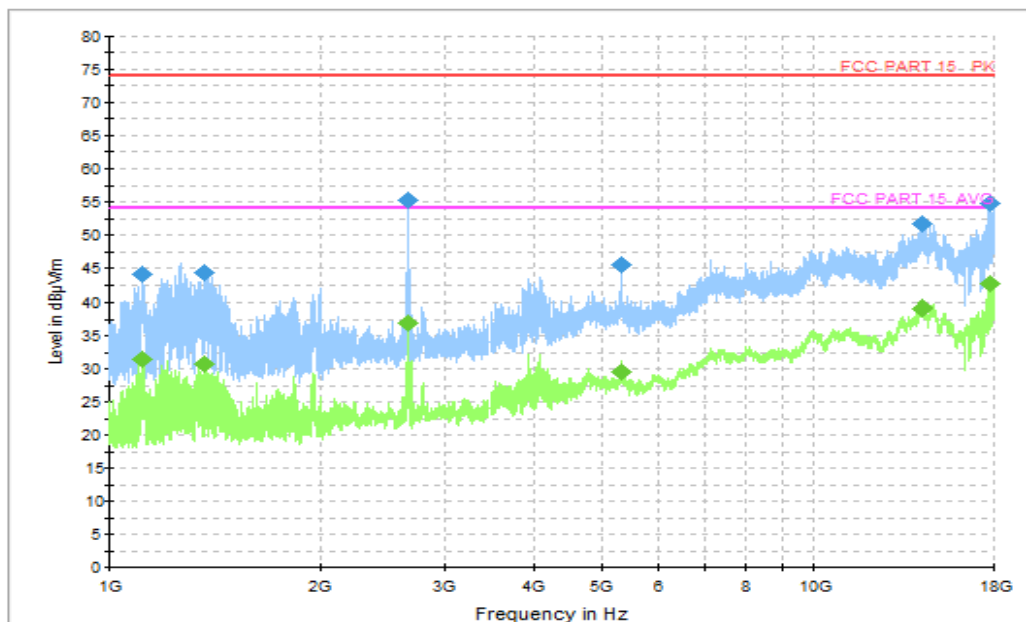


Figure A.1.18. Radiated Emission (Data Transfer: PC TO EUT, 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
1116.400000	44.00	74.00	30.00	V	-20.89	64.89
1365.400000	44.31	74.00	29.69	H	-19.88	64.19
2660.200000	55.31	74.00	18.69	V	-15.42	70.73
5324.800000	45.57	74.00	28.43	V	-6.71	52.28
14238.000000	51.66	74.00	22.34	V	7.07	44.59
17785.200000	54.85	74.00	19.15	V	11.81	43.04

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
1116.400000	31.54	54.00	22.46	V	-20.89	52.43
1365.400000	30.71	54.00	23.29	H	-19.88	50.59
2660.200000	36.95	54.00	17.05	V	-15.42	52.37
5324.800000	29.55	54.00	24.45	V	-6.71	36.26
14238.000000	39.07	54.00	14.93	V	7.07	32
17785.200000	42.61	54.00	11.39	V	11.81	30.80

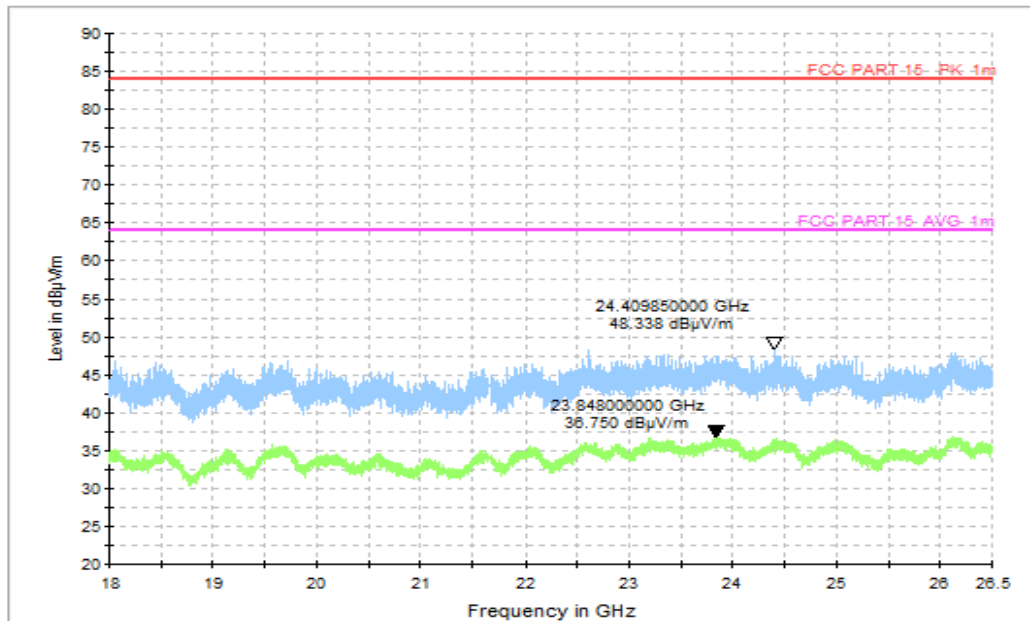


Figure A.1.19. Radiated Emission (Data Transfer: PC TO EUT, 18GHz to 26.5GHz)

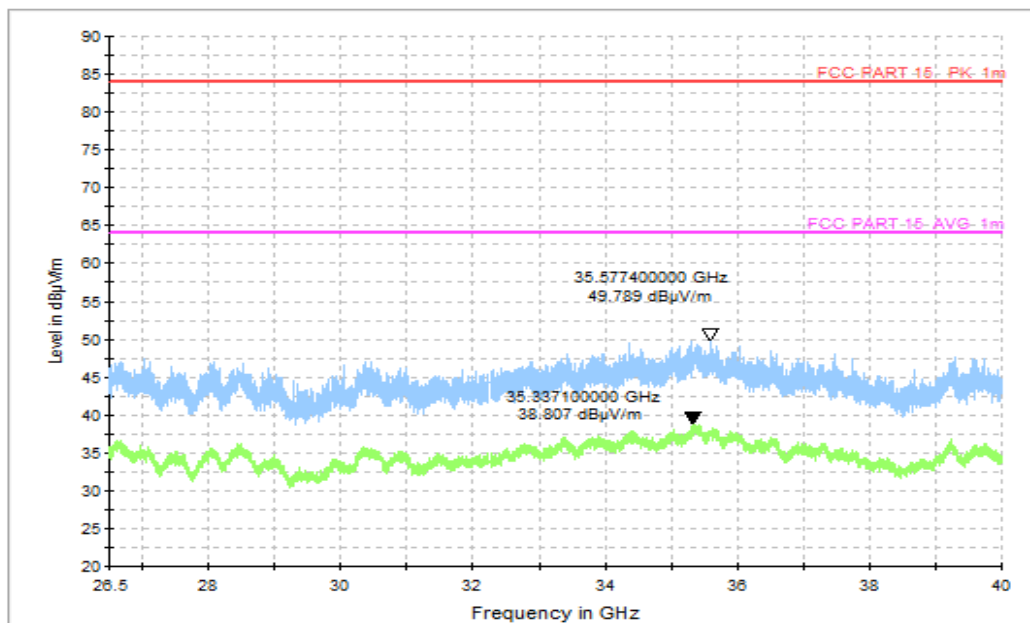


Figure A.1.20. Radiated Emission (Data Transfer: PC TO EUT, 26.5GHz to 40GHz)

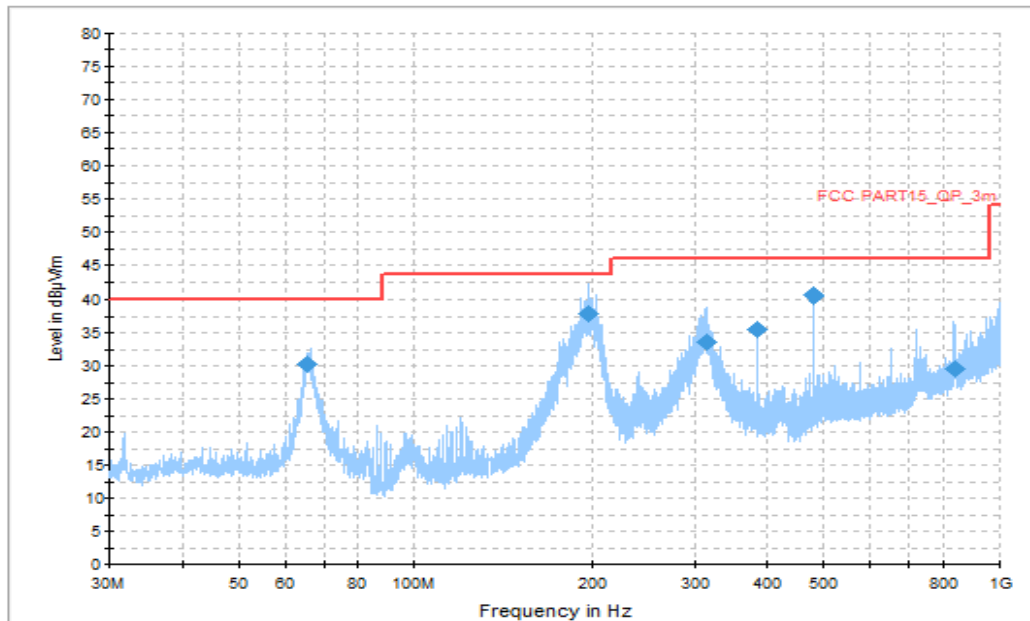


Figure A.1.21. Radiated Emission (Data Transfer: EUT TO PC, 30MHz to 1GHz)

Final_Results

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
65.502000	30.15	40.00	9.85	H	-23.94	54.09
197.567500	37.83	43.50	5.67	H	-25.57	63.4
315.325500	33.52	46.00	12.48	H	-22.05	55.57
384.001500	35.53	46.00	10.47	H	-19.71	55.24
479.983000	40.58	46.00	5.42	H	-17.39	57.97
841.599000	29.63	46.00	16.37	H	-10.45	40.08

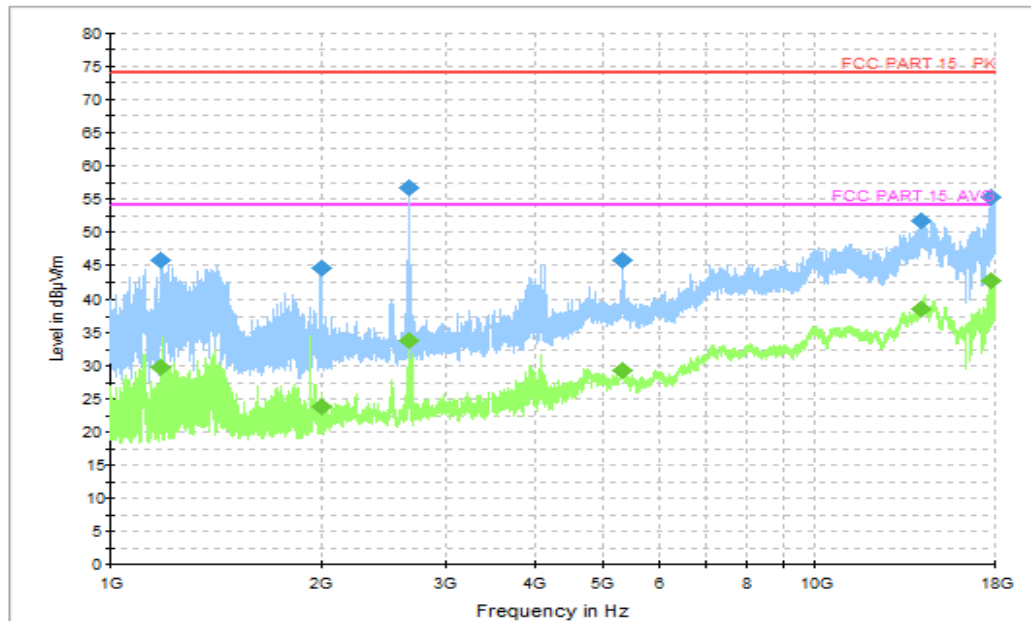


Figure A.1.22. Radiated Emission (Data Transfer: EUT TO PC, 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
1182.200000	45.70	74.00	28.30	H	-20.78	66.48
1992.400000	44.60	74.00	29.40	V	-18.29	62.89
2657.000000	56.59	74.00	17.41	V	-15.42	72.01
5328.000000	45.70	74.00	28.30	V	-6.70	52.40
14177.500000	51.63	74.00	22.37	H	7.06	44.57
17780.400000	55.17	74.00	18.83	H	11.78	43.39

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
1182.200000	29.76	54.00	24.24	H	-20.78	50.54
1992.400000	23.87	54.00	30.13	V	-18.29	42.16
2657.000000	33.74	54.00	20.26	V	-15.42	49.16
5328.000000	29.27	54.00	24.73	V	-6.70	35.97
14177.500000	38.54	54.00	15.46	H	7.06	31.48
17780.400000	42.70	54.00	11.30	H	11.78	30.92

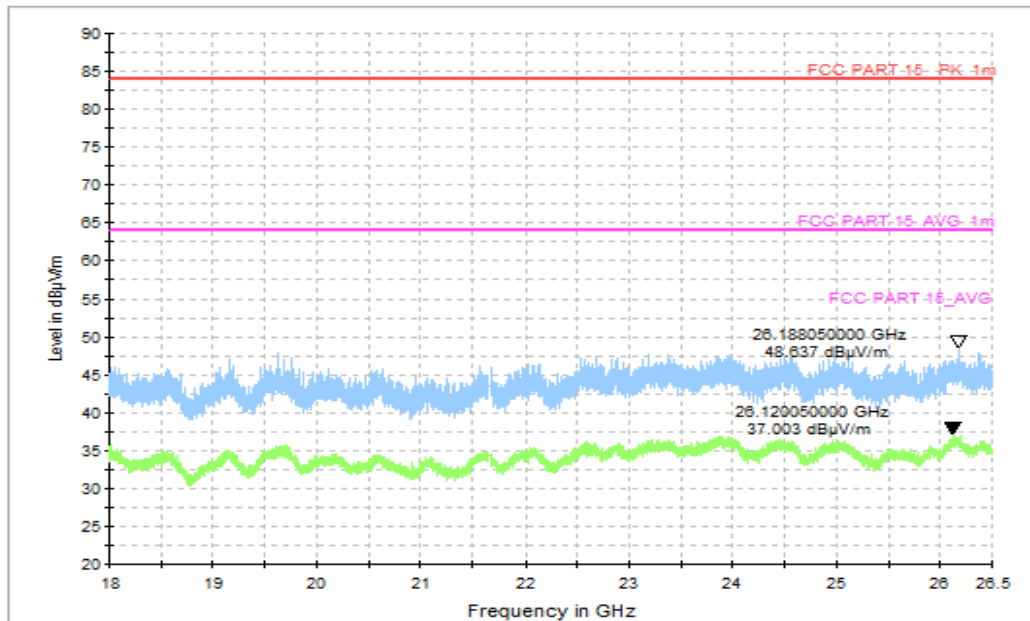


Figure A.1.23. Radiated Emission (Data Transfer: EUT TO PC, 18GHz to 26.5GHz)

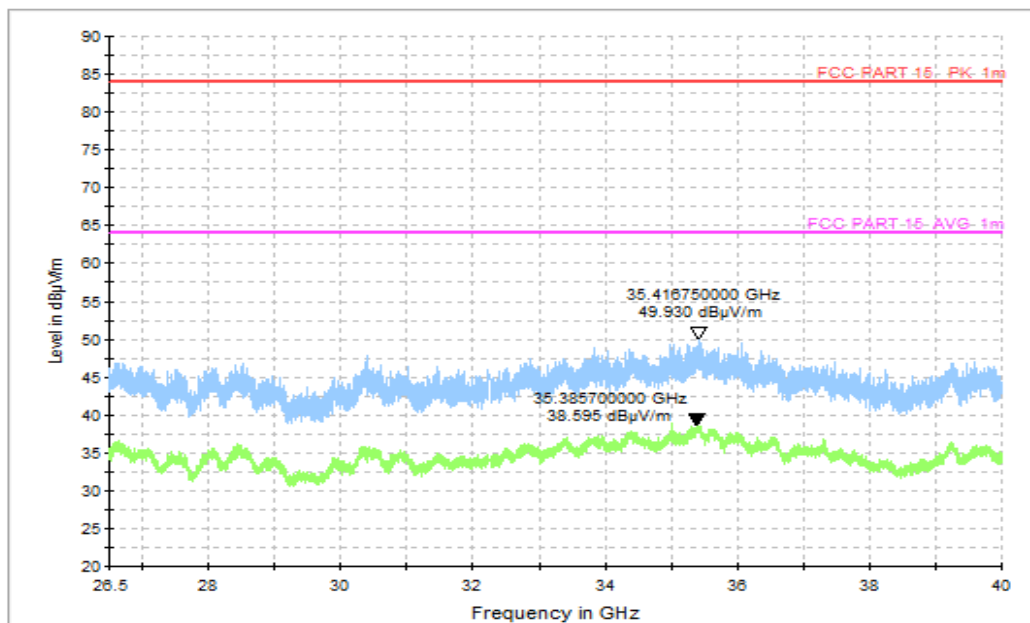


Figure A.1.24. Radiated Emission (Data Transfer: EUT TO PC, 26.5GHz to 40GHz)

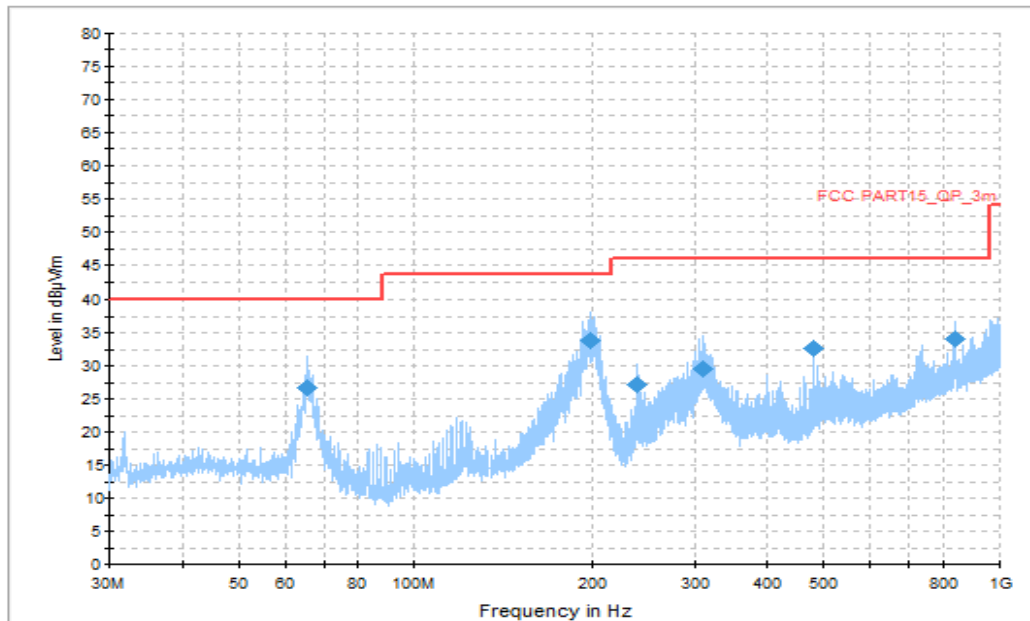


Figure A.1.25. Radiated Emission (Data Transfer: PC TO TF Card, 30MHz to 1GHz)
Final_Results

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
65.502000	26.63	40.00	13.37	V	-23.94	50.57
198.731500	33.75	43.50	9.75	H	-25.61	59.36
239.471500	27.16	46.00	18.84	H	-23.62	50.78
310.233000	29.52	46.00	16.48	H	-22.24	51.76
479.983000	32.55	46.00	13.45	H	-17.39	49.94
836.167000	33.98	46.00	12.02	H	-10.53	44.51

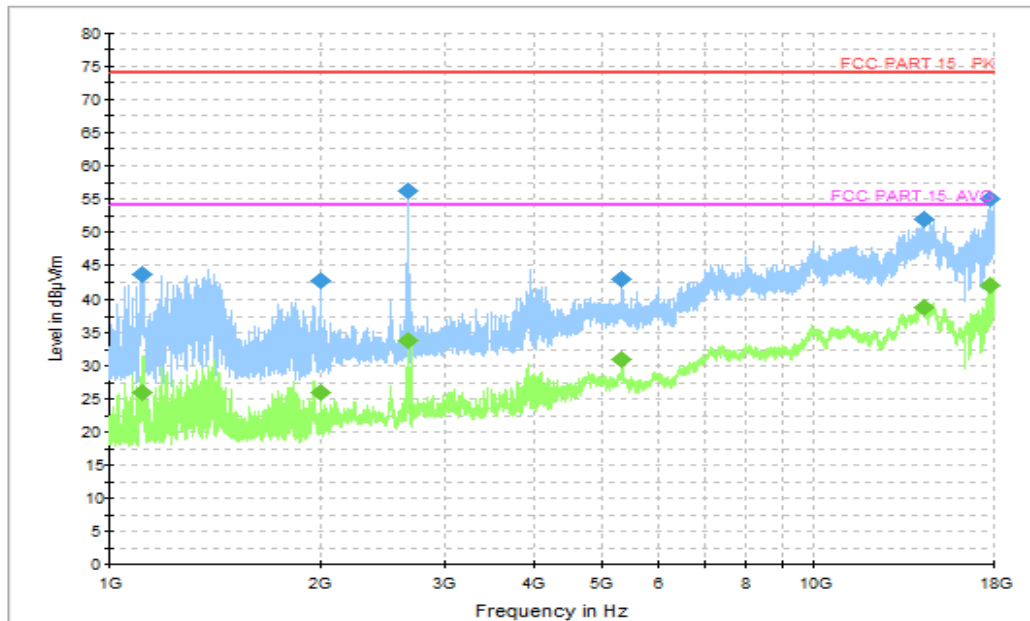


Figure A.1.26. Radiated Emission (Data Transfer: PC TO TF Card, 1GHz to 18GHz)
Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
1112.200000	43.54	74.00	30.46	H	-20.85	64.39
1995.400000	42.60	74.00	31.40	V	-18.29	60.89
2659.200000	56.18	74.00	17.82	V	-15.42	71.60
5328.800000	42.96	74.00	31.04	V	-6.70	49.66
14295.000000	51.79	74.00	22.21	V	6.75	45.04
17773.200000	55.06	74.00	18.94	H	11.74	43.32

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
1112.200000	25.98	54.00	28.02	H	-20.85	46.83
1995.400000	25.84	54.00	28.16	V	-18.29	44.13
2659.200000	33.72	54.00	20.28	V	-15.42	49.14
5328.800000	30.96	54.00	23.04	V	-6.70	37.66
14295.000000	38.77	54.00	15.23	V	6.75	32.02
17773.200000	41.93	54.00	12.07	H	11.74	30.19

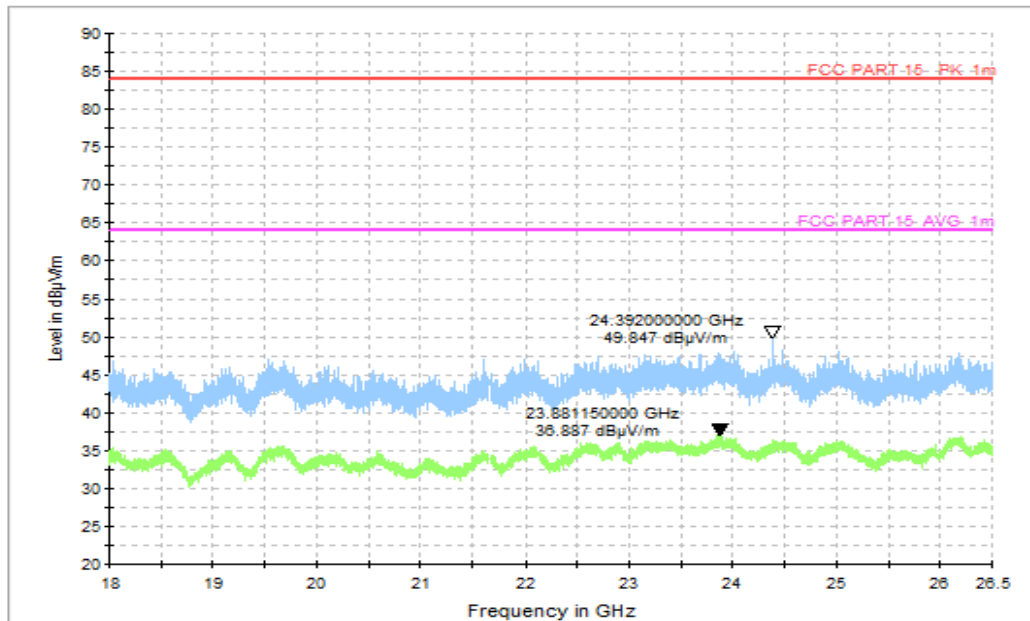


Figure A.1.27. Radiated Emission (Data Transfer: PC TO TF Card, 18GHz to 26.5GHz)

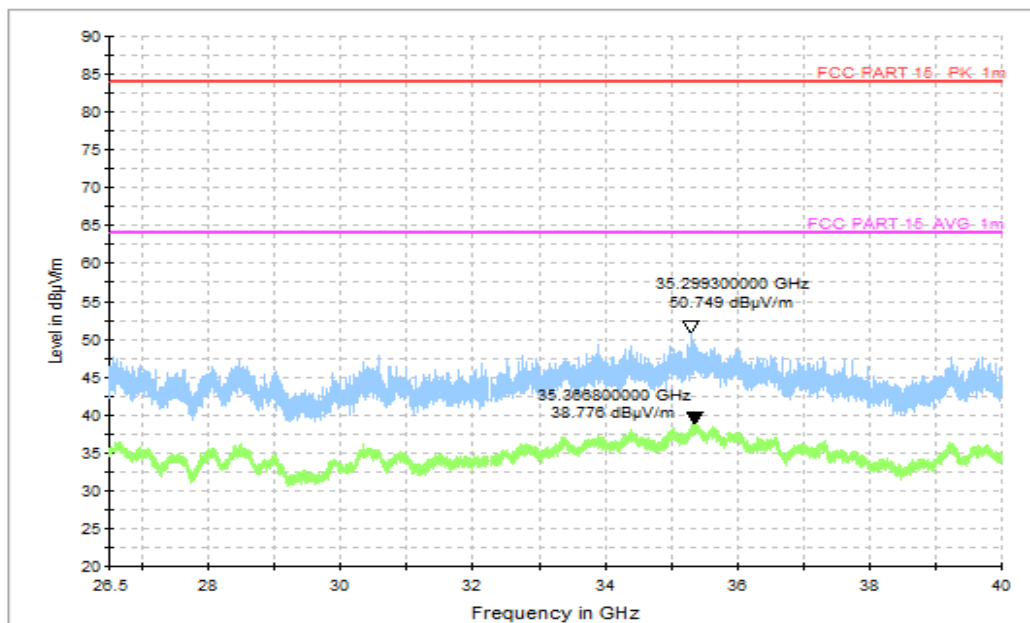


Figure A.1.28. Radiated Emission (Data Transfer: PC TO TF Card, 26.5GHz to 40GHz)

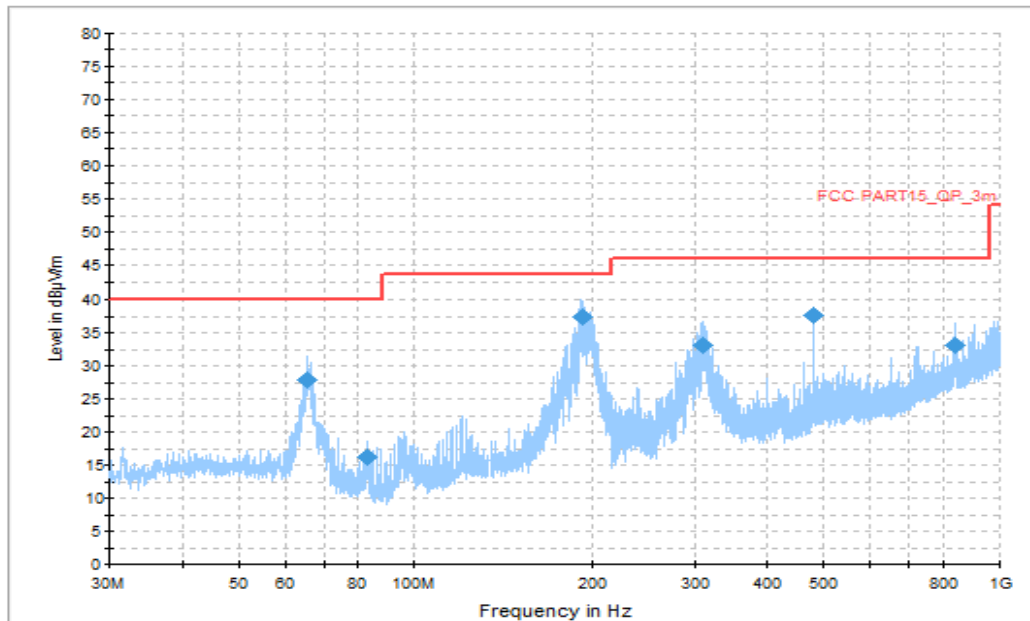


Figure A.1.29. Radiated Emission (Data Transfer: TF Card TO PC, 30MHz to 1GHz)
Final_Results

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
65.647500	27.93	40.00	12.07	V	-23.96	51.89
83.059000	16.08	40.00	23.92	H	-26.78	42.86
192.863000	37.39	43.50	6.11	H	-25.41	62.80
310.427000	33.06	46.00	12.94	H	-22.24	55.30
479.983000	37.67	46.00	8.33	H	-17.39	55.06
836.894500	33.02	46.00	12.98	H	-10.52	43.54

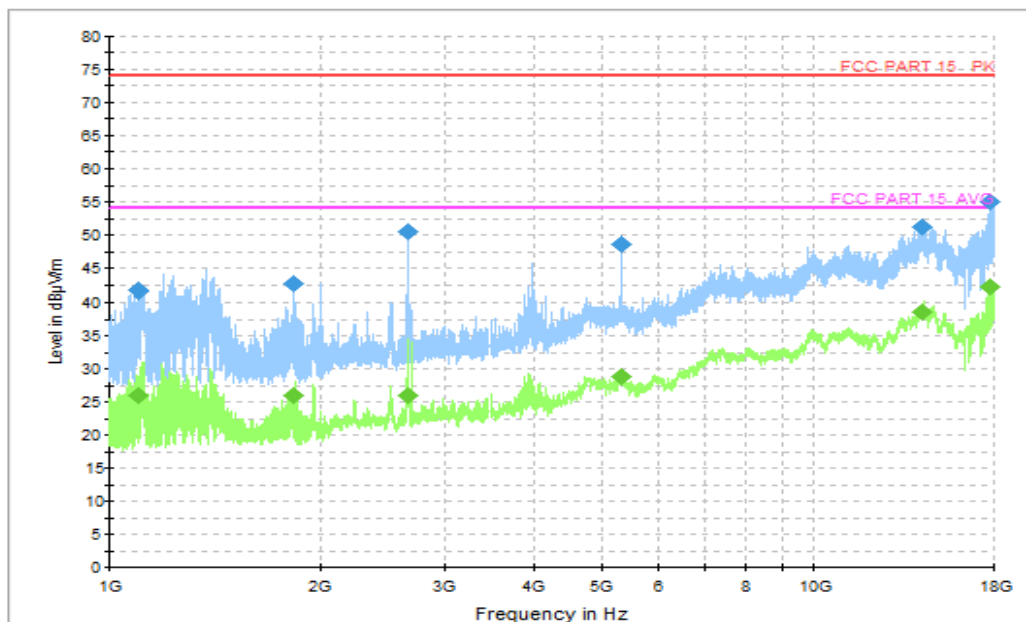


Figure A.1.30. Radiated Emission (Data Transfer: TF Card TO PC, 1GHz to 18GHz)
Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
1103.200000	41.77	74.00	32.23	H	-20.79	62.56
1834.000000	42.64	74.00	31.36	V	-19.25	61.89
2660.800000	50.53	74.00	23.47	V	-15.42	65.95
5311.200000	48.66	74.00	25.34	V	-6.75	55.41
14194.000000	51.15	74.00	22.85	V	7.19	43.96
17787.600000	54.97	74.00	19.03	V	11.82	43.15

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
1103.200000	25.97	54.00	28.03	H	-20.79	46.76
1834.000000	26.01	54.00	27.99	V	-19.25	45.26
2660.800000	26.05	54.00	27.95	V	-15.42	41.47
5311.200000	28.74	54.00	25.26	V	-6.75	35.49
14194.000000	38.59	54.00	15.41	V	7.19	31.4
17787.600000	42.14	54.00	11.86	V	11.82	30.32

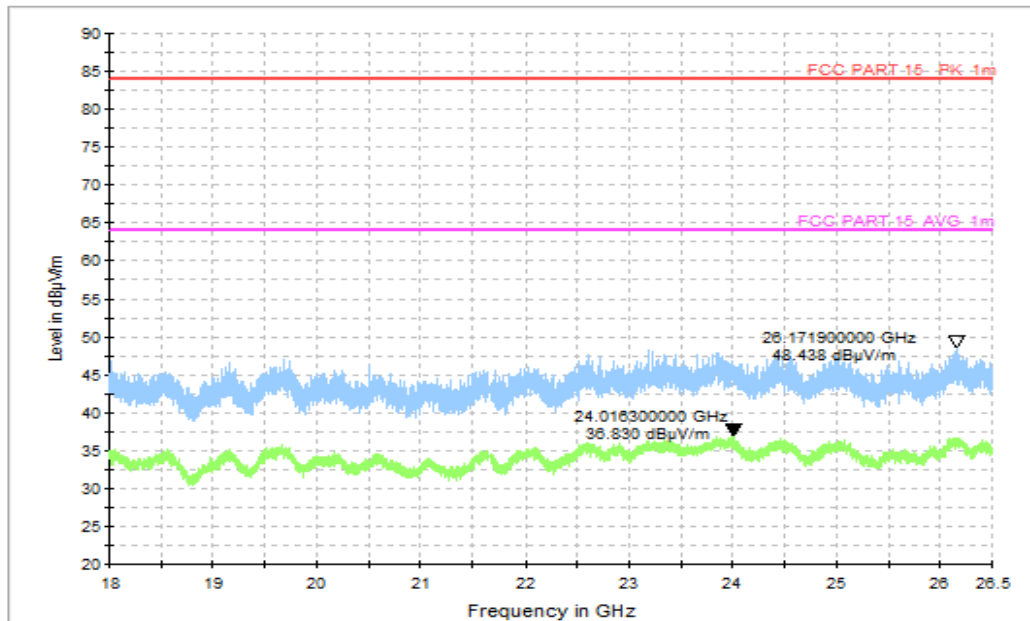


Figure A.1.31. Radiated Emission (Data Transfer: TF Card TO PC, 18GHz to 26.5GHz)

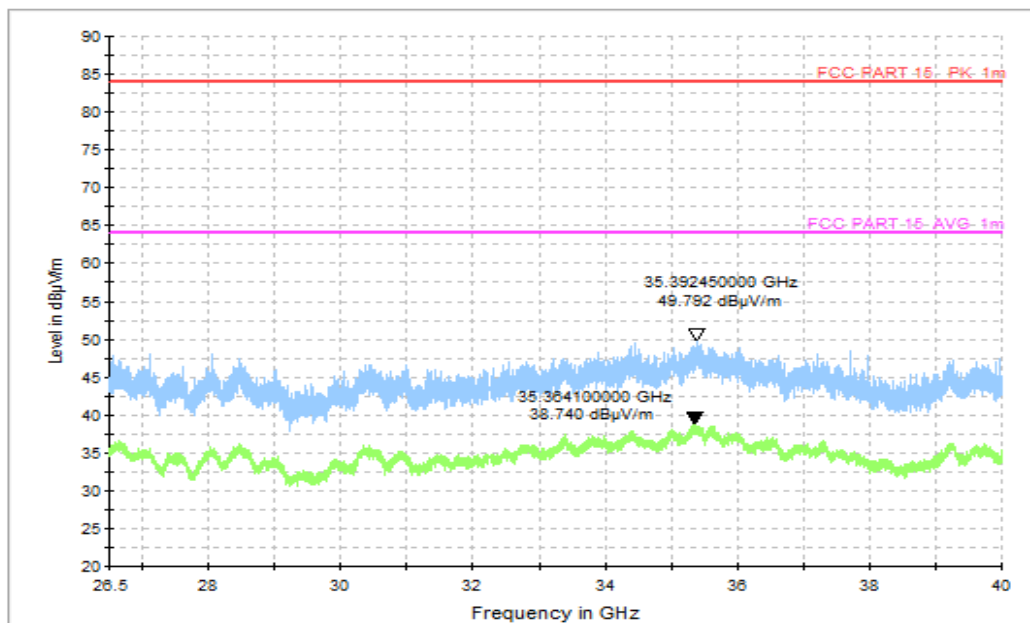


Figure A.1.32. Radiated Emission (Data Transfer: TF Card TO PC, 26.5GHz to 40GHz)

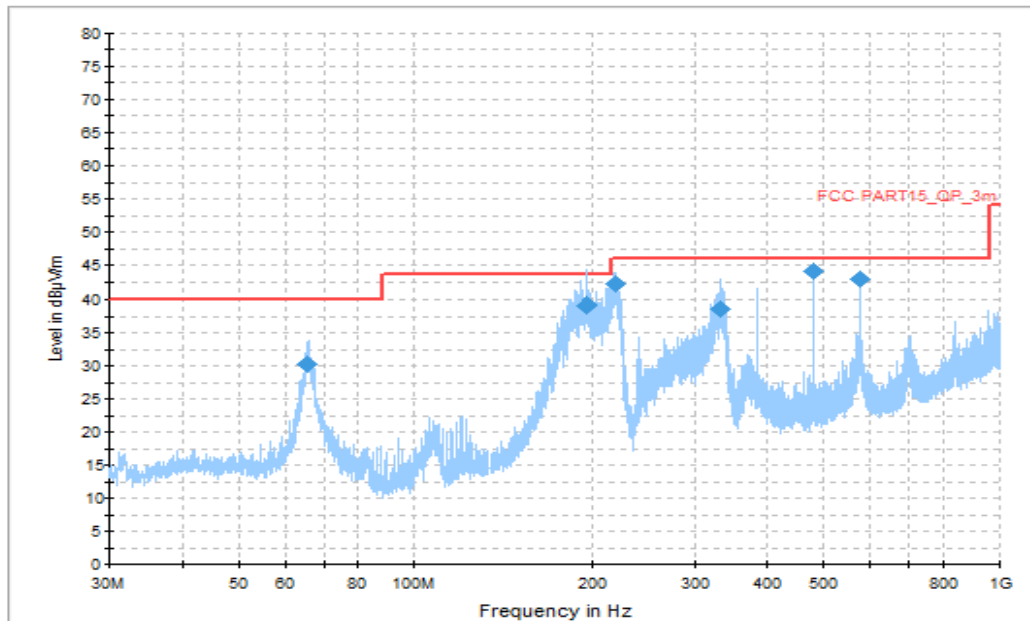


Figure A.1.33. Radiated Emission (Data Transfer: EUT TO PC, 30MHz to 1GHz)

Final_Results

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
65.502000	30.19	40.00	9.81	H	-23.94	54.13
195.821500	39.05	43.50	4.45	H	-25.51	64.56
219.877500	42.08	46.00	3.92	H	-24.98	67.06
332.252000	38.52	46.00	7.48	H	-21.46	59.98
479.983000	43.98	46.00	2.02	H	-17.39	61.37
576.013000	42.97	46.00	3.03	H	-15.39	58.36

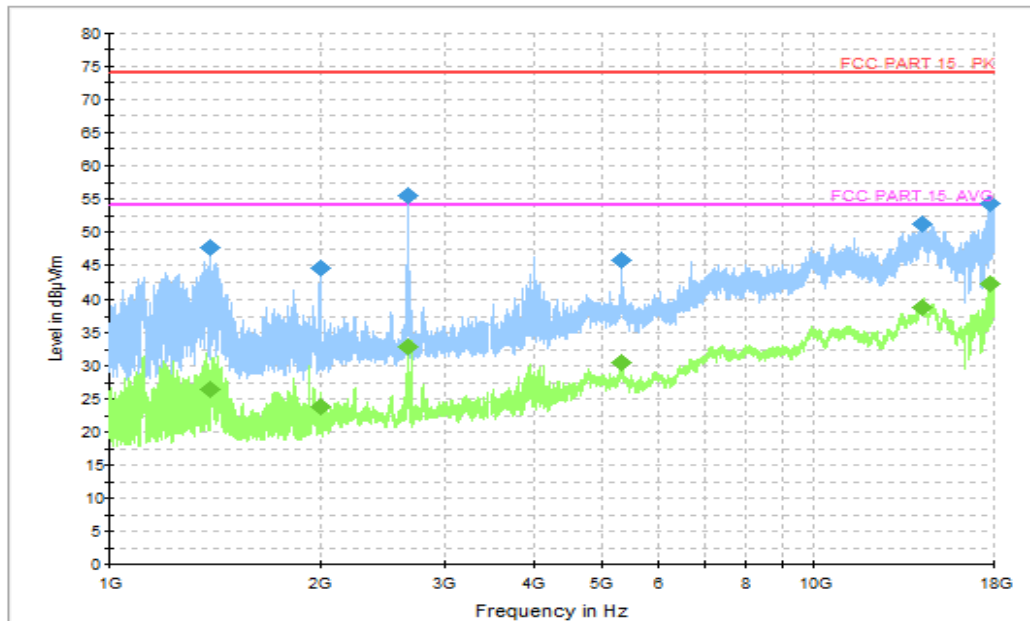


Figure A.1.34. Radiated Emission (Data Transfer: EUT TO PC, 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
1387.800000	47.52	74.00	26.48	H	-19.83	67.35
1997.400000	44.56	74.00	29.44	V	-18.30	62.86
2663.000000	55.49	74.00	18.51	V	-15.42	70.91
5331.200000	45.81	74.00	28.19	V	-6.69	52.50
14215.000000	51.11	74.00	22.89	V	7.20	43.91
17756.000000	54.29	74.00	19.71	V	11.66	42.63

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
1387.800000	26.39	54.00	27.61	H	-19.83	46.22
1997.400000	23.84	54.00	30.16	V	-18.30	42.14
2663.000000	32.77	54.00	21.23	V	-15.42	48.19
5331.200000	30.55	54.00	23.45	V	-6.69	37.24
14215.000000	38.78	54.00	15.22	V	7.20	31.58
17756.000000	42.10	54.00	11.90	V	11.66	30.44

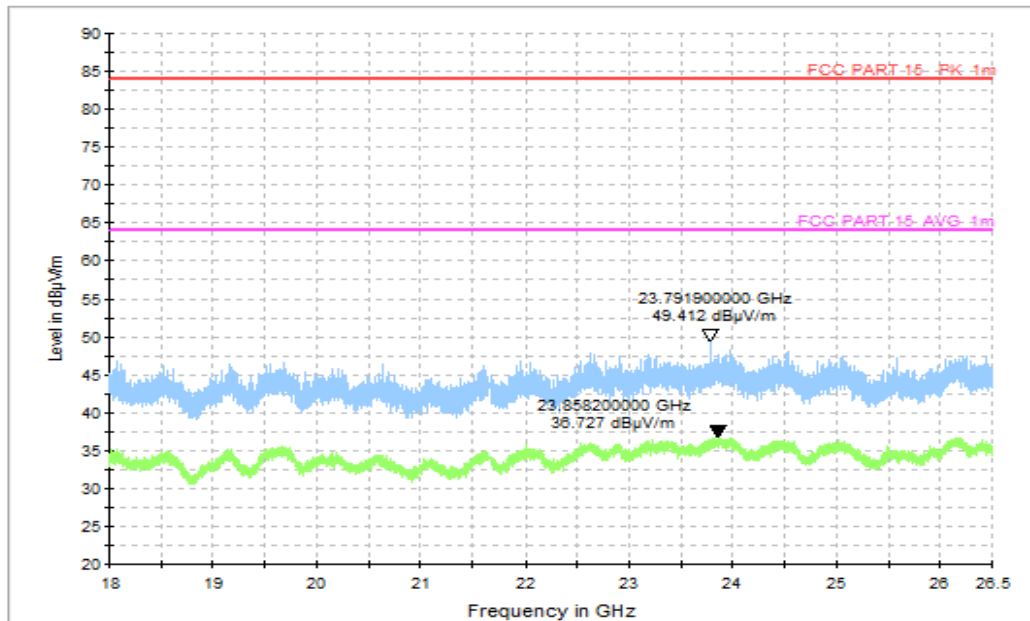


Figure A.1.35. Radiated Emission (Data Transfer: EUT TO PC, 18GHz to 26.5GHz)

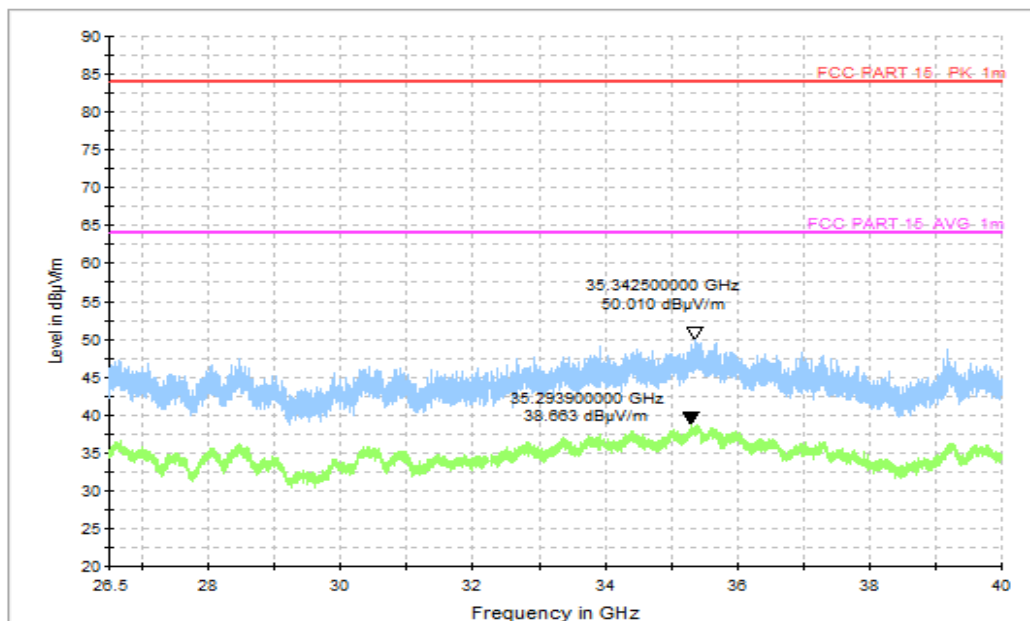


Figure A.1.36. Radiated Emission (Data Transfer: EUT TO PC, 26.5GHz to 40GHz)

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.

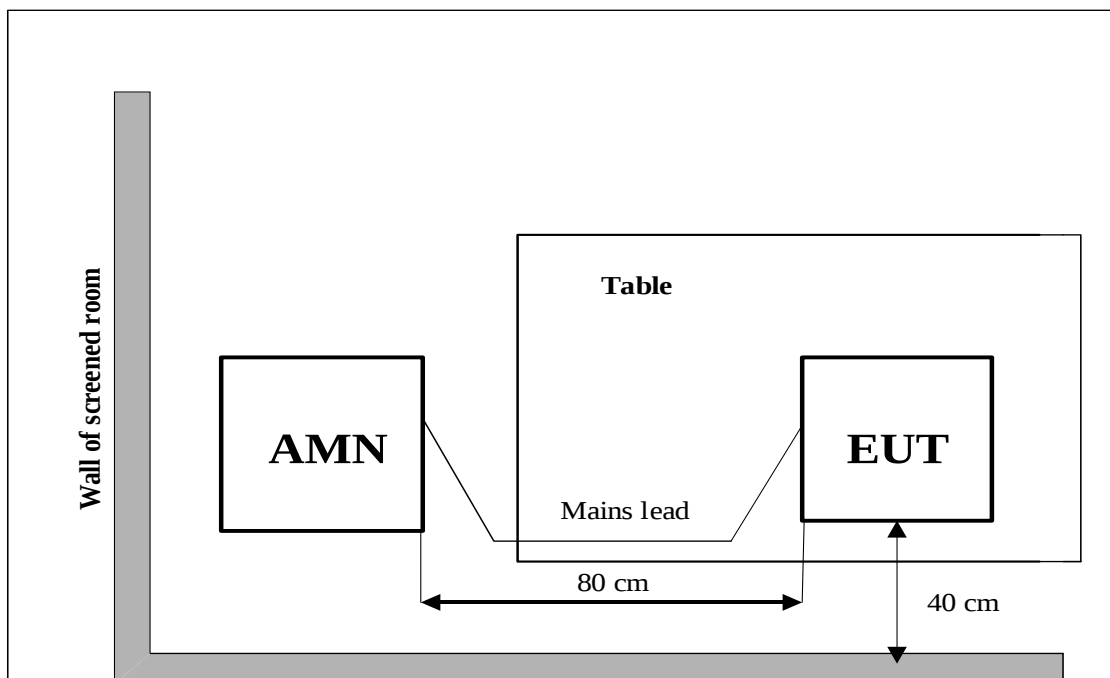
FM receiver: The EUT is connected to a charger for charging. The EUT is synchronized to a FM signal generator. The EUT is keeping on demodulating the FM signal and outputting the audio signal through the headset.

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		

A.2.4 Test set-up:



A.2.5 Test Condition in charging mode

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

RBW	Sweep Time(s)
9kHz	1

A.2.6 Measurement Results

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

Where

Corr: PathLoss + Voltage Division Factor

PMea: Measurement result on receiver.

Camera

AC Input Port/ Voltage: 120V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			UT03aa/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.				

Video Player

AC Input Port/ Voltage: 120V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			UT03aa/Set.1	
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.				

FM receiver

AC Input Port/ Voltage: 120V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			UT03aa/Set.2	
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)	Conclusion
			UT03aa/Set.3	
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)	Conclusion
			UT03aa/Set.4	
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.				

Data Transfer

AC Input Port/ Voltage: 120V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			UT03aa/Set.5	
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)	Conclusion
			UT03aa/Set.1	
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.				

Video Player

AC Input Port/ Voltage: 240V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			UT03aa/Set.1	
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.				

FM receiver

AC Input Port/ Voltage: 240V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			UT03aa/Set.2	
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.				

FM receiver

AC Input Port/ Voltage: 240V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			UT03aa/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
			UT03aa/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
			UT03aa/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.				

AC Input Port/ Voltage: 120V/60Hz

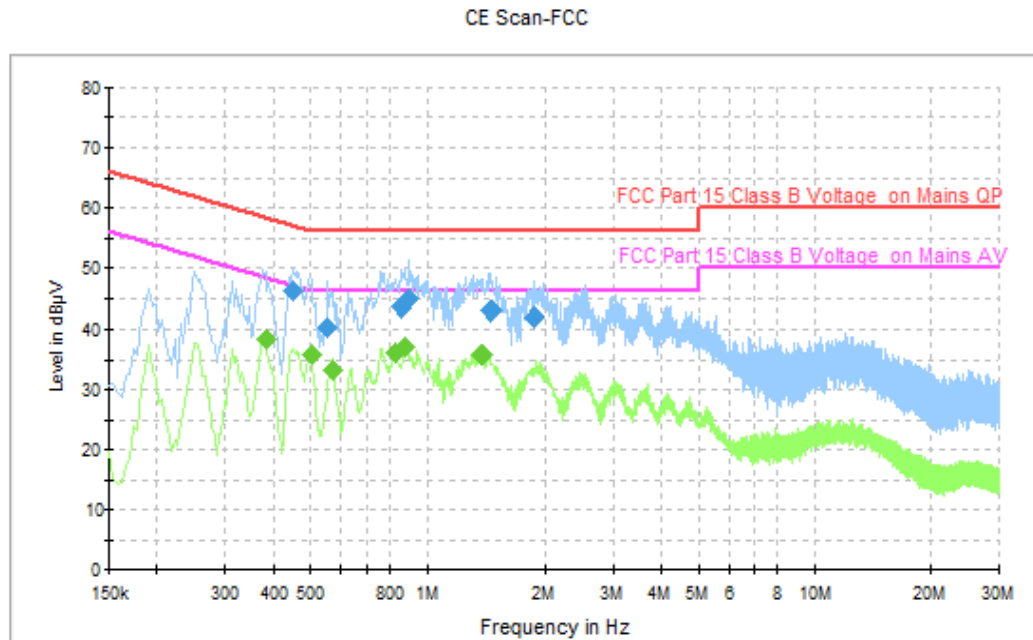


Figure A.2.1. Conducted Emission(Camera)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.450000	46.2	56.9	10.7	L1	9.8	36.40
0.554000	40.3	56.0	15.7	L1	9.8	30.5
0.862000	43.4	56.0	12.6	L1	9.8	33.60
0.902000	45.0	56.0	11.0	L1	9.8	35.20
1.454000	43.0	56.0	13.0	L1	9.8	33.2
1.874000	42.1	56.0	13.9	L1	9.8	32.30

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.382000	38.4	48.2	9.8	L1	9.8	28.60
0.502000	35.9	46.0	10.1	L1	9.8	26.1
0.570000	33.4	46.0	12.6	L1	9.8	23.60
0.826000	36.3	46.0	9.7	L1	9.8	26.50
0.882000	37.0	46.0	9.0	L1	9.8	27.2
1.386000	35.7	46.0	10.3	L1	9.8	25.90

AC Input Port/ Voltage: 120V/60Hz

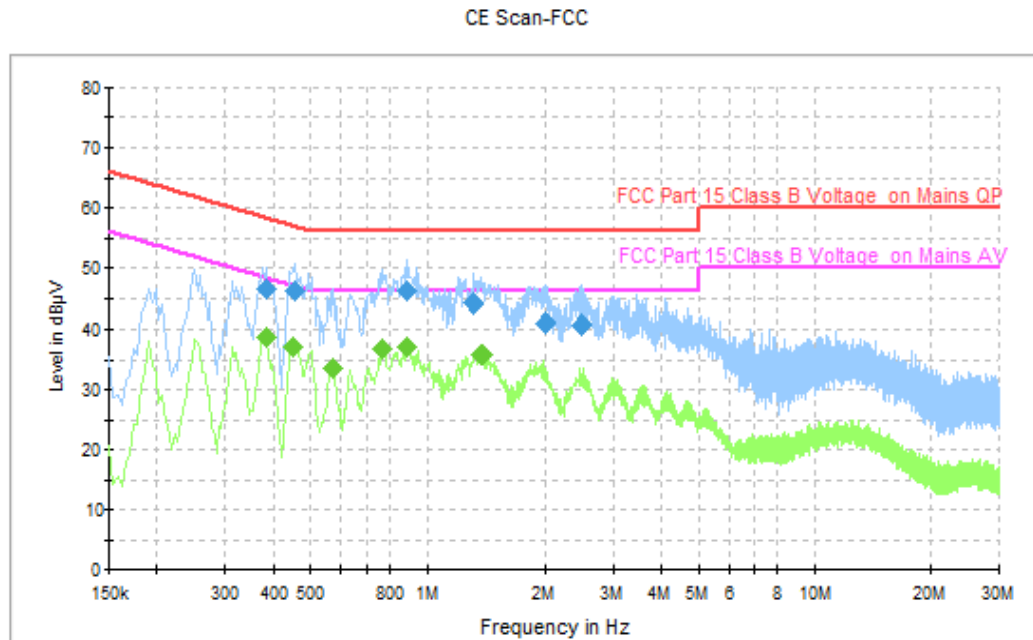


Figure A.2.2. Conducted Emission(Video Player)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.382000	46.6	58.2	11.7	L1	9.8	36.80
0.454000	46.3	56.8	10.5	L1	9.8	36.5
0.890000	46.2	56.0	9.8	L1	9.8	36.40
1.326000	44.3	56.0	11.7	L1	9.8	34.50
1.998000	40.8	56.0	15.2	L1	9.8	31
2.498000	40.8	56.0	15.2	L1	9.8	31.00

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.382000	38.8	48.2	9.5	L1	9.8	29.00
0.450000	37.2	46.9	9.6	L1	9.8	27.4
0.570000	33.5	46.0	12.5	L1	9.8	23.70
0.766000	36.7	46.0	9.3	L1	9.8	26.90
0.890000	37.1	46.0	8.9	L1	9.8	27.3
1.382000	35.9	46.0	10.1	L1	9.8	26.10

AC Input Port/ Voltage: 120V/60Hz

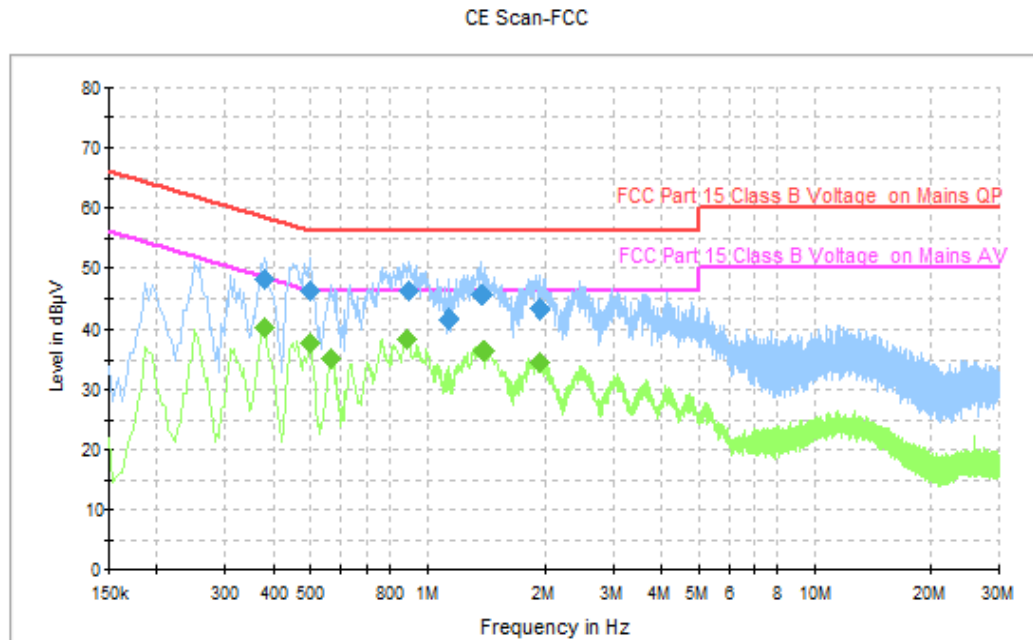


Figure A.2.3. Conducted Emission(FM receiver)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.378000	48.0	58.3	10.3	L1	9.8	38.20
0.498000	46.3	56.0	9.8	L1	9.8	36.5
0.902000	46.2	56.0	9.8	L1	9.8	36.40
1.134000	41.7	56.0	14.3	L1	9.8	31.90
1.378000	45.6	56.0	10.4	L1	9.8	35.8
1.946000	43.4	56.0	12.6	L1	9.8	33.60

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.378000	40.2	48.3	8.1	L1	9.8	30.40
0.498000	37.7	46.0	8.3	L1	9.8	27.9
0.566000	35.0	46.0	11.0	L1	9.8	25.20
0.886000	38.4	46.0	7.6	L1	9.8	28.60
1.390000	36.5	46.0	9.5	L1	9.8	26.7
1.930000	34.4	46.0	11.6	L1	9.8	24.60

AC Input Port/ Voltage: 120V/60Hz

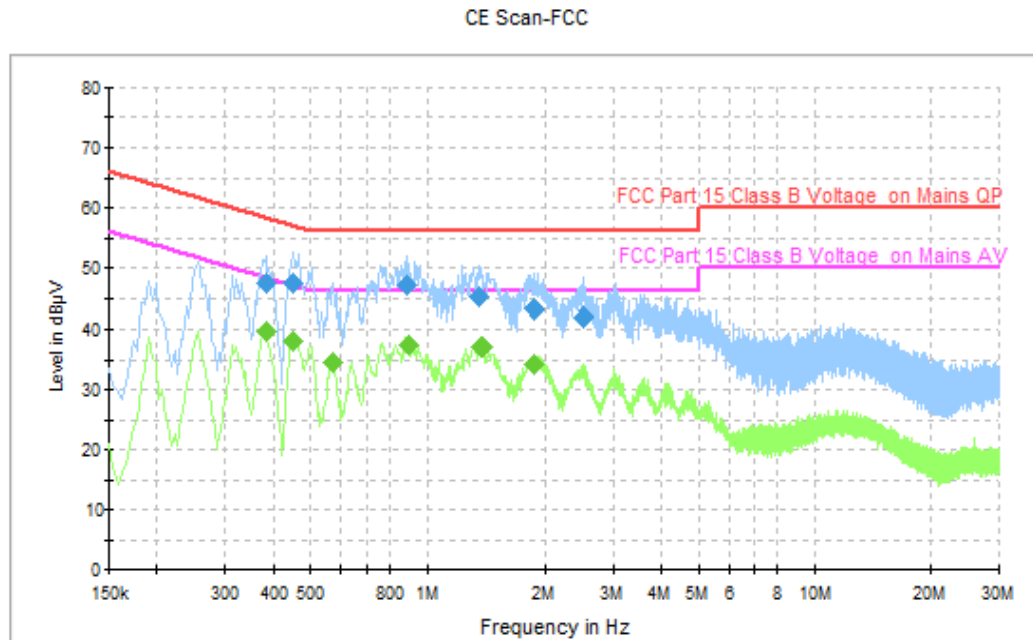


Figure A.2.4. Conducted Emission(FM receiver)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.382000	47.5	58.2	10.7	L1	9.8	37.70
0.450000	47.6	56.9	9.3	L1	9.8	37.8
0.890000	47.2	56.0	8.8	L1	9.8	37.40
1.366000	45.1	56.0	10.9	L1	9.8	35.30
1.882000	43.2	56.0	12.8	L1	9.8	33.4
2.506000	42.0	56.0	14.0	L1	9.8	32.20

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.382000	39.7	48.2	8.6	L1	9.8	29.90
0.450000	38.1	46.9	8.7	L1	9.8	28.3
0.570000	34.6	46.0	11.4	L1	9.8	24.80
0.898000	37.4	46.0	8.6	L1	9.8	27.60
1.382000	37.0	46.0	9.0	L1	9.8	27.2
1.882000	34.3	46.0	11.7	L1	9.8	24.50

AC Input Port/ Voltage: 120V/60Hz

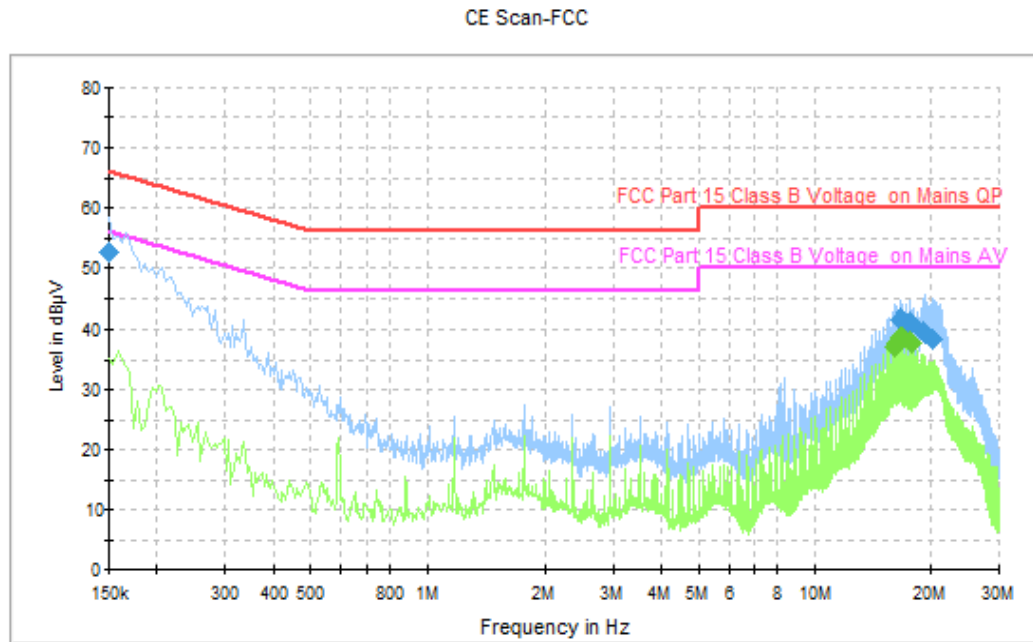


Figure A.2.5. Conducted Emission(Data Transfer)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.150000	52.7	66.0	13.3	L1	9.7	43.00
16.590000	41.7	60.0	18.3	N	9.8	31.9
17.538000	41.1	60.0	18.9	N	9.9	31.20
19.054000	39.7	60.0	20.3	N	9.9	29.80
19.342000	39.2	60.0	20.8	L1	9.8	29.4
20.098000	38.3	60.0	21.7	N	9.9	28.40

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
16.022000	37.2	50.0	12.8	N	9.9	27.30
16.306000	37.9	50.0	12.1	N	9.9	28
16.590000	38.6	50.0	11.4	N	9.8	28.80
16.874000	38.6	50.0	11.4	N	9.9	28.70
17.538000	38.0	50.0	12.0	N	9.9	28.1
17.822000	37.7	50.0	12.3	N	9.9	27.80

AC Input Port/ Voltage: 120V/60Hz

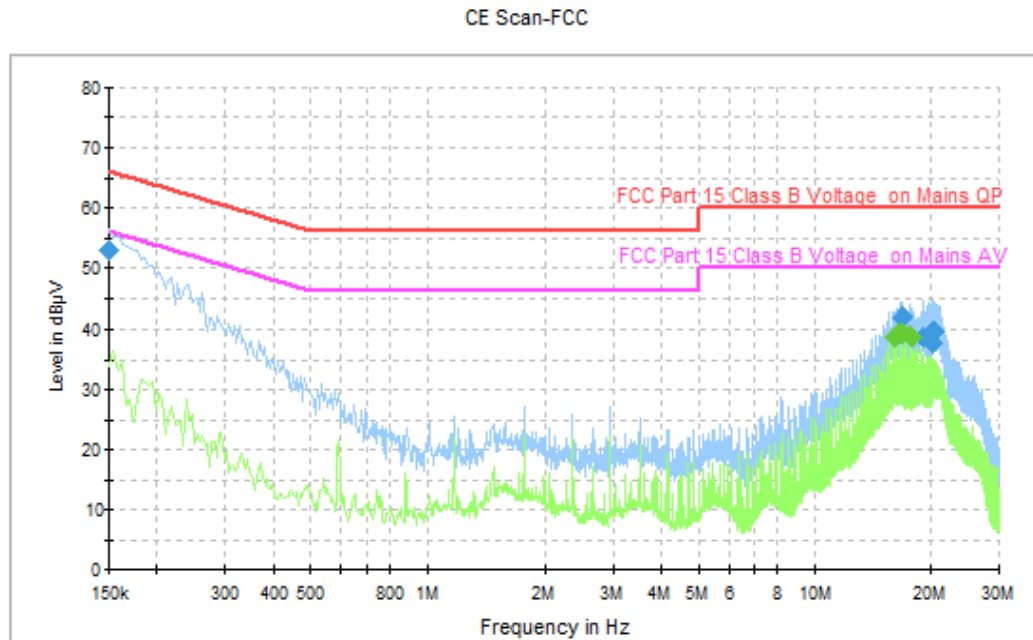


Figure A.2.6. Conducted Emission(Data Transfer)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.150000	52.9	66.0	13.1	N	9.6	43.30
16.874000	41.9	60.0	18.1	L1	9.8	32.1
19.150000	38.6	60.0	21.4	N	9.9	28.70
20.138000	37.7	60.0	22.3	N	9.9	27.80
20.286000	39.7	60.0	20.3	L1	9.8	29.9
20.382000	39.7	60.0	20.3	L1	9.8	29.90

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
16.022000	38.6	50.0	11.4	N	9.9	28.70
16.306000	39.0	50.0	11.0	N	9.9	29.1
16.590000	39.3	50.0	10.7	N	9.8	29.50
16.874000	39.2	50.0	10.8	N	9.9	29.30
17.538000	39.1	50.0	10.9	N	9.9	29.2
17.822000	38.8	50.0	11.2	N	9.9	28.90

AC Input Port/ Voltage: 240V/60Hz

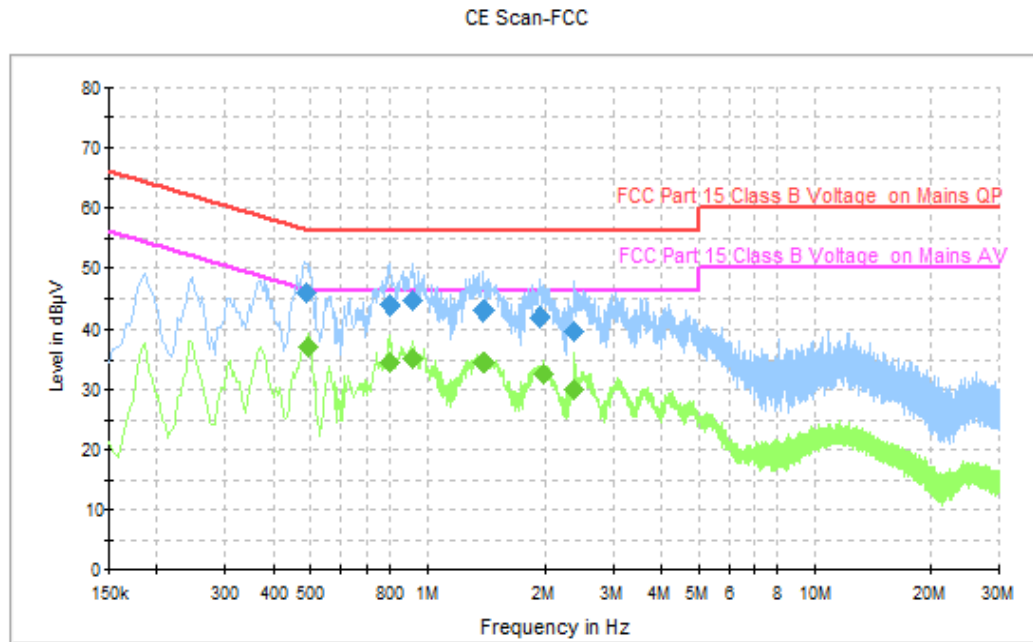


Figure A.2.7. Conducted Emission(Camera)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.486000	45.9	56.2	10.3	L1	9.8	36.10
0.798000	43.9	56.0	12.1	L1	9.8	34.1
0.922000	44.4	56.0	11.6	L1	9.8	34.60
1.402000	43.1	56.0	12.9	L1	9.8	33.30
1.942000	41.9	56.0	14.1	L1	9.8	32.1
2.386000	39.7	56.0	16.3	L1	9.8	29.90

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.490000	37.1	46.2	9.1	L1	9.8	27.30
0.798000	34.4	46.0	11.6	L1	9.8	24.6
0.922000	35.2	46.0	10.8	L1	9.8	25.40
1.398000	34.4	46.0	11.6	L1	9.8	24.60
1.986000	32.7	46.0	13.3	L1	9.8	22.9
2.386000	30.1	46.0	15.9	L1	9.8	20.30

AC Input Port/ Voltage: 240V/60Hz

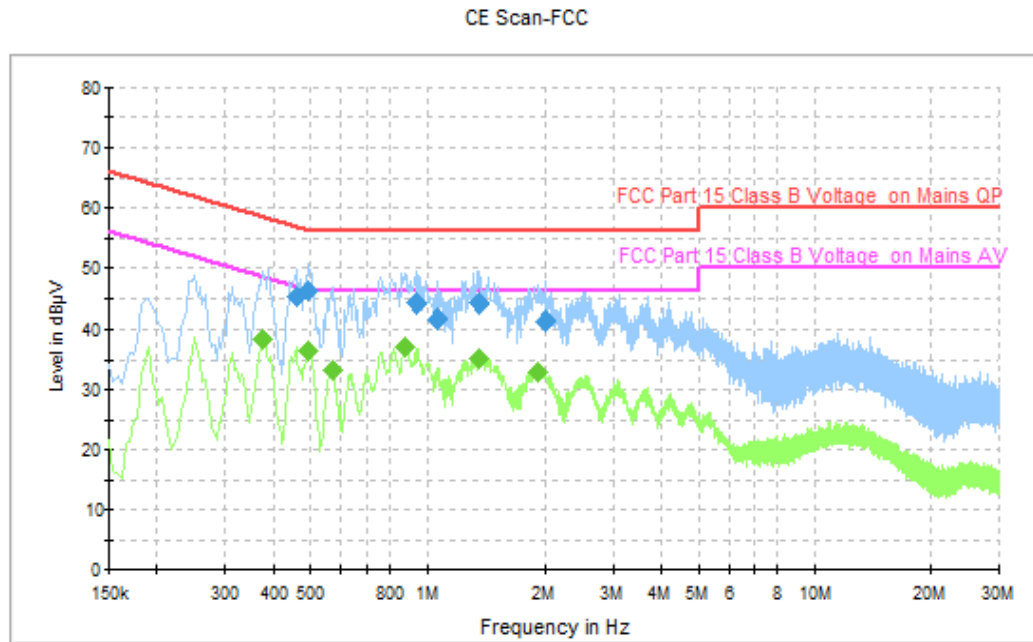


Figure A.2.8. Conducted Emission(Video Player)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.458000	45.2	56.7	11.5	L1	9.8	35.40
0.494000	46.0	56.1	10.1	L1	9.8	36.2
0.938000	44.3	56.0	11.7	L1	9.8	34.50
1.062000	41.7	56.0	14.3	L1	9.8	31.90
1.362000	44.1	56.0	11.9	L1	9.8	34.3
1.998000	41.2	56.0	14.8	L1	9.8	31.40

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.374000	38.2	48.4	10.2	L1	9.8	28.40
0.494000	36.5	46.1	9.6	L1	9.8	26.7
0.570000	33.2	46.0	12.8	L1	9.8	23.40
0.882000	37.0	46.0	9.0	L1	9.8	27.20
1.366000	35.2	46.0	10.8	L1	9.8	25.4
1.914000	32.8	46.0	13.2	L1	9.8	23.00

AC Input Port/ Voltage: 240V/60Hz

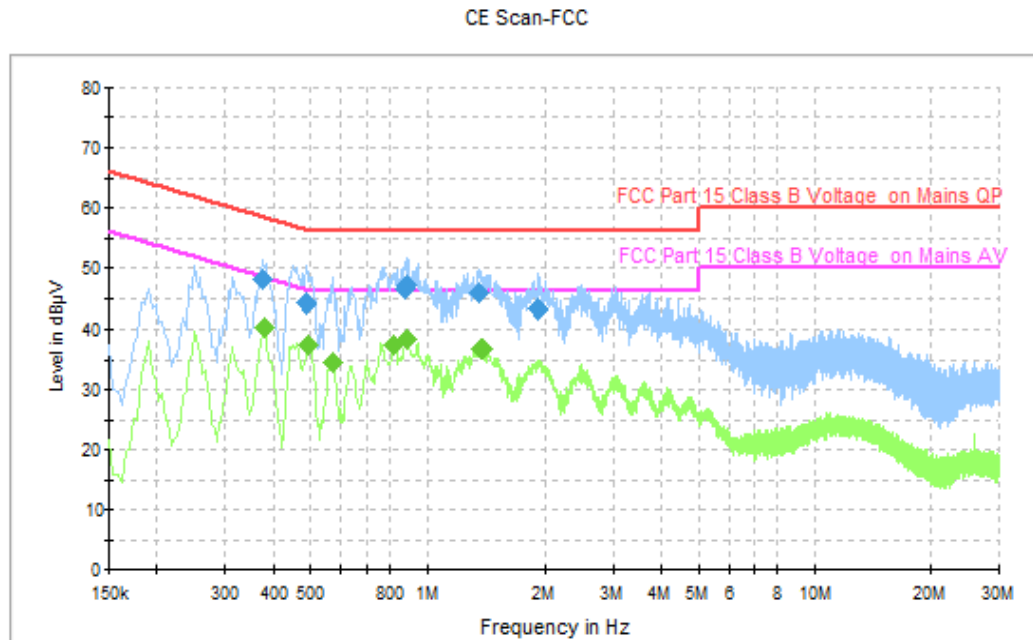


Figure A.2.9. Conducted Emission(FM receiver)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.374000	48.2	58.4	10.2	L1	9.8	38.40
0.486000	44.1	56.2	12.2	L1	9.8	34.3
0.874000	46.4	56.0	9.6	L1	9.8	36.60
0.886000	47.2	56.0	8.8	L1	9.8	37.40
1.370000	45.9	56.0	10.1	L1	9.8	36.1
1.918000	43.2	56.0	12.8	L1	9.8	33.40

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.378000	40.2	48.3	8.2	L1	9.8	30.40
0.494000	37.5	46.1	8.6	L1	9.8	27.7
0.570000	34.4	46.0	11.6	L1	9.8	24.60
0.822000	37.4	46.0	8.6	L1	9.8	27.60
0.886000	38.5	46.0	7.5	L1	9.8	28.7
1.378000	36.9	46.0	9.1	L1	9.8	27.10

AC Input Port/ Voltage: 240V/60Hz

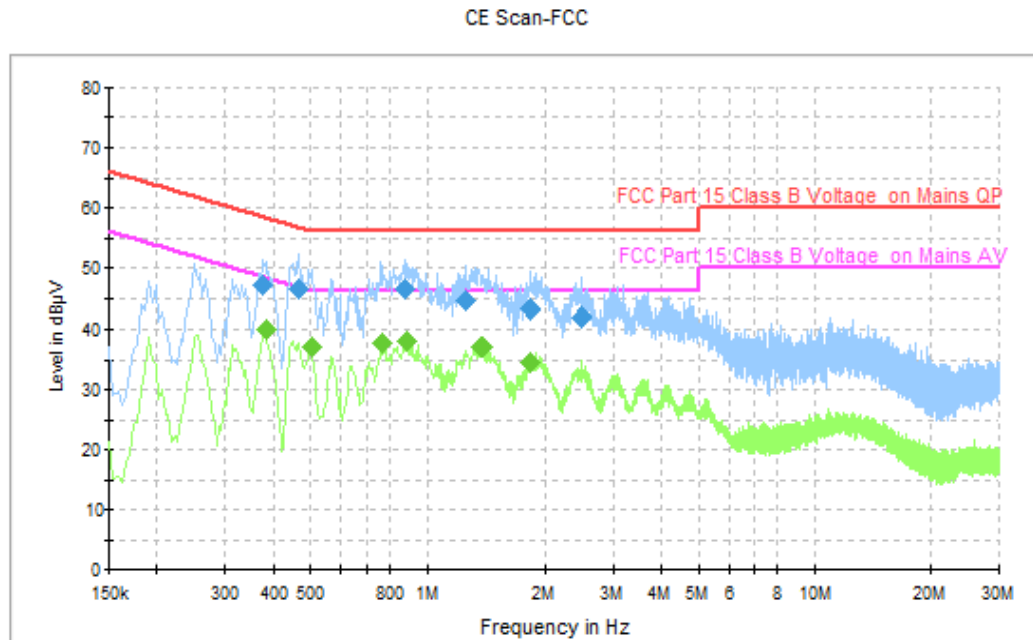


Figure A.2.10. Conducted Emission(FM receiver)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.374000	47.2	58.4	11.2	L1	9.8	37.40
0.466000	46.6	56.6	10.0	L1	9.8	36.8
0.882000	46.4	56.0	9.6	L1	9.8	36.60
1.262000	44.7	56.0	11.3	L1	9.8	34.90
1.834000	43.3	56.0	12.7	L1	9.8	33.5
2.498000	41.9	56.0	14.1	L1	9.8	32.10

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.382000	39.9	48.2	8.4	L1	9.8	30.10
0.502000	37.0	46.0	9.0	L1	9.8	27.2
0.766000	37.7	46.0	8.3	L1	9.8	27.90
0.890000	38.0	46.0	8.0	L1	9.8	28.20
1.378000	37.0	46.0	9.0	L1	9.8	27.2
1.834000	34.5	46.0	11.5	L1	9.8	24.70

AC Input Port/ Voltage: 240V/60Hz

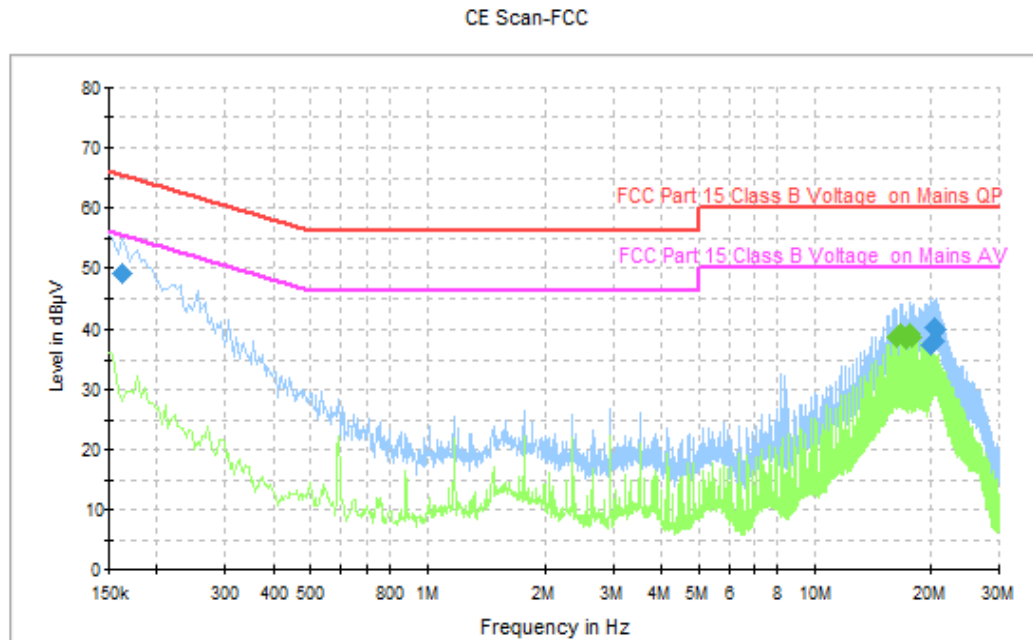


Figure A.2.11. Conducted Emission(Data Transfer)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.162000	49.1	65.4	16.2	L1	9.7	39.40
20.010000	37.5	60.0	22.5	N	9.9	27.6
20.330000	38.1	60.0	21.9	N	9.9	28.20
20.362000	38.2	60.0	21.8	L1	9.8	28.40
20.430000	40.2	60.0	19.8	N	9.9	30.3
20.574000	40.0	60.0	20.0	N	9.9	30.10

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
16.306000	38.8	11.2	11.2	N	9.9	28.90
16.590000	39.3	10.7	10.7	N	9.8	29.5
16.874000	39.2	10.8	10.8	N	9.9	29.30
17.254000	38.4	11.6	11.6	N	9.9	28.50
17.538000	39.2	10.8	10.8	N	9.9	29.3
17.822000	38.8	11.2	11.2	L1	9.8	29.00

AC Input Port/ Voltage: 240V/60Hz

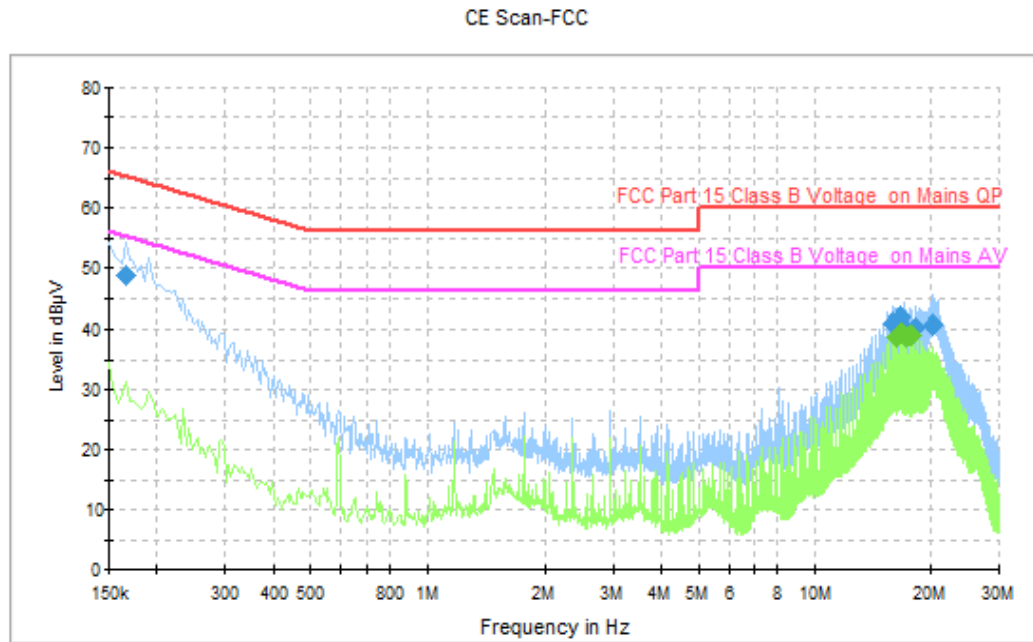


Figure A.2.12. Conducted Emission(Data Transfer)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.166000	48.7	65.2	16.5	L1	9.7	39.00
15.926000	41.0	60.0	19.0	N	9.9	31.1
16.590000	41.8	60.0	18.2	L1	9.8	32.00
16.970000	40.5	60.0	19.5	L1	9.8	30.70
18.202000	40.2	60.0	19.8	N	9.9	30.3
20.290000	40.8	60.0	19.2	N	9.9	30.90

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
16.306000	38.8	50.0	11.2	N	9.9	28.90
16.590000	39.3	50.0	10.8	L1	9.8	29.5
16.874000	39.2	50.0	10.8	N	9.9	29.30
17.254000	38.5	50.0	11.5	N	9.9	28.60
17.538000	39.0	50.0	11.0	L1	9.8	29.2
17.822000	39.0	50.0	11.0	N	9.9	29.10

END OF REPORT