



TEST REPORT

No.24T04N001372-003-EMC

for

HMD Global Oy

Mobile Phone

Model Name: TA-1667

With

Hardware Version: FF646-MB-V0.2

Software Version: 0.2422.11.01

FCC ID: 2AJOTTA-1667

Issued Date:2024-07-31

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.24T04N001372-003-EMC

REPORT HISTORY

Report Number	Revision	Description	Issue Date
24T04N001372-003-EMC	Rev.0	1st edition	2024-07-31

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	Mobile Phone
Model Name	TA-1667
Applicant's name	HMD Global Oy
Manufacturer's Name	HMD Global Oy

1.2. Test Standards

FCC Part 15, Subpart B (10-1-2023 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

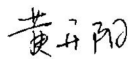
Address: EMC Laboratory, Building G, Shenzhen International Innovation Center, No.1006 Shennan Road, Futian District, Shenzhen, Guangdong, China

1.5. Project data

Testing Start Date: 2024-06-27

Testing End Date: 2024-07-26

1.6. Signature



Huang Kaiyang
(Prepared this test report)



Huang Yuqing
(Reviewed this test report)



Cao Junfei
(Approved this test report)



2. CLIENT INFORMATION

2.1. Applicant Information

Company Name: HMD Global Oy
Address: Bertel Jungin aukio 9,02600 Espoo,Finland
Contact: reza.serafat
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2.2. Manufacturer Information

Company Name: HMD Global Oy
Address: Bertel Jungin aukio 9,02600 Espoo,Finland
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Tel: +491735287964



3. EQUIPMENT UNDER TEST (EUT) AND ANCILLARY EQUIPMENT

(AE)

3.1. About EUT

Description	Mobile Phone
Model Name	TA-1667
FCC ID	2AJOTTA-1667
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	PA	Receive Date
UT01aa	351368850001914	FF638-MB-V0.2	0.2422.11.01	Mains supply	2024-06-27
UT02aa	351368850001872	FF638-MB-V0.2	0.2422.11.01	Mains supply	2024-06-27
UT06aa	351368850002995	FF638-MB-V0.2	0.2422.11.01	Second supply	2024-06-27

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

3.3. Internal Identification of AE

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

AE1-1

Model	BL-L5H
Manufacturer	Guangdong Fenghua New Energy Co.,Ltd/ FENG HUA NEW ENERGY PRIVATE LIMITED
Capacity	1450mAh
Nominal Voltage	3.7V

AE1-2

Model	BL-L5H
Manufacturer	SHENZHEN UTILITY ENERGYCO.,LTD./ ADIT INFRATEL PVT.LTD
Capacity	1450mAh
Nominal Voltage	3.7V

AE2-1

Model	AC-18E
Manufacturer	Shenzhen Baijunda Electronic Co.,Ltd./



Specification	Baijunda Electronics Private Limited Europe Standard Charger
AE2-2	
Model	AC-18X
Manufacturer	Shenzhen Baijunda Electronic Co.,Ltd./ Baijunda Electronics Private Limited
Specification	British Standard Charger
AE2-3	
Model	AC-18U
Manufacturer	Shenzhen Baijunda Electronic Co.,Ltd./ Baijunda Electronics Private Limited
Specification	American Standard Charger
AE2-4	
Model	AC-18A
Manufacturer	Shenzhen Baijunda Electronic Co.,Ltd./ Baijunda Electronics Private Limited
Specification	Australian Standard Charger
AE2-5	
Model	AC-18N3
Manufacturer	Baijunda Electronics Private Limited
Specification	Indian Standard Charger
AE2-6	
Model	AC-18T
Manufacturer	Shenzhen Baijunda Electronic Co.,Ltd./ Baijunda Electronics Private Limited
Specification	Thai Standard Charger
AE2-7	
Model	AC-18E
Manufacturer	Dayu Hongfa Electronics Co., Ltd
Specification	Europe Standard Charger
AE2-8	
Model	AC-18X
Manufacturer	Dayu Hongfa Electronics Co., Ltd
Specification	British Standard Charger
AE2-9	
Model	AC-18N3
Manufacturer	Hong Guang De Technology India Pvt Ltd.
Specification	Indian Standard Charger
AE3-1	
Model	SAT-A006A
Manufacturer	Saibao(Jiangxi) Communication Industrial Co.,Ltd
AE3-2	
Model	JWUB1710-W27H



Manufacturer HUIZHOU JUWEI ELECTRONICS CO.,LTD
AE4

Model JWEP1273-W27H

Manufacturer HUIZHOU JUWEI ELECTRONICS CO.,LTD

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

AE: ancillary equipment.

AE2: Charger Equality Declaration

Material Name	AE ID	Remarks	Manufacturer
AC-18E	AE2-1	Except pins and appearance, the other parts are the same.	Shenzhen Baijunda Electronic Co.,Ltd./ Baijunda Electronics Private Limited
AC-18X	AE2-2		
AC-18U	AE2-3		
AC-18A	AE2-4		
AC-18N3	AE2-5		
AC-18T	AE2-6		
AC-18E	AE2-7	Except pins and appearance, the other parts are the same.	Dayu Hongfa Electronics Co., Ltd/ Hong Guang De Technology India Pvt Ltd.
AC-18X	AE2-8		
AC-18N3	AE2-9		

3.4. EUT Set-ups

EUT set-up No.	Combination of EUT and AE	Remarks
Set.1	EUT+AE1-1+AE2-2+AE4	
Set.2	EUT+AE1-1+AE2-6+AE4	
Set.3	EUT+AE1-1+AE3-1+AE4+PC	

3.5. General Description

The Equipment Under Test (EUT) is a model of Mobile Phone with internal antenna.

Frequency Bands GSM850/900/1800/1900MHz, WCDMA Bands 1/2/4/5/8, LTE Bands 1/2/3/4/5/7/8/28/40/66.

It has MP3, Camera, FM receiver, USB memory and Bluetooth functions.

It consists of normal options: Battery, Charger, Headset and USB 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.

This report also serves as a record of TA-1667(second supply), the tables below show all the differences between TA-1667(Mains supply) and TA-1667(second supply).

Key material	TA-1667(second supply)		TA-1667(Mains supply)	
	Specification	Supplier	Specification	Supplier
metal	(F)Resistors,0.068ohm, $\pm$	ROYALOH	(F)metal alloy Resistor,0.068	YAGEO

alloy Resistor	1%,1/2W,TCR $\leq \pm 75$ PPM/ $^{\circ}$ C,0805,TL05W2F680MT5E,ROYALOHM	M	ohm, $\pm 1\%$,1/2W,TCR $\leq \pm 75$ PPM/ $^{\circ}$ C,0805,T=0.55 ± 0.15 mm,PE0805FRM470R068L,YAGEO	
Metal Foil Chip Fixed Resistor	(P)(T)Metal Foil Chip Resistor,0.01 ohm, $\pm 1\%$,1/2W,TCR $\leq \pm 50$ PPM/ $^{\circ}$ C,0805,MS05W2F100MT5E,ROYALOHM	ROYALOHM	(T)Metal Foil Chip Fixed Resistor,0.01 ohm, $\pm 1\%$,1/2W,TCR $\leq \pm 50$ PPM/ $^{\circ}$ C,0805,MFG05HR010FT,Fenghua	Fenghua
Varistor	(N)Varistor(10pF18V0402),SDV1005H180C100NPTF,SUNLORD	SUNLORD	(N)Varistor,5.5V,0402,SDV1005E5R5C400NPTF,Sunlord	Sunlord
TVS	(F)TVS(Transient Voltage Suppressor),Bi-directional,5V,0.6pF,DFN1006-2L,1.0x0.6x(0.50 ± 0.05)mm,WE05DUCF-BF,WAYON	WAYON	(F)TVS(Transient Voltage Suppressor),Bi-directional,5V,0.7pF,DFN1006-2,1.0x0.6*0.5mm,PESDR0541P1A,PN-SILICON	PN-SILICON
TVS	(T)TVS,Bi-directional,,Bi-directional,5V,15pF,DFN1006-2L,1.0x0.6x0.5(± 0.05)mm,SSCE5V022N1,SSC	SSC	(P)(T)TVS,Bi-directional,5V,16pF,DFN1006-2L,1.0x0.6x0.5(± 0.05)mm,MESD5V0SF11B,Millersemi	Millersemi
Power TVS	(P)(T)Power Transient Voltage Suppressor,Uni-direction,12V,5600W,SOD-123FL,JEU12D1FT,JIEJIE MICRO	JIEJIE MICRO	(T)TVS,Power Transient Voltage Suppressor,Uni-direction,12V,5600W,SOD-123FL,PESDU1271D1F,PN-Silicon	PN-Silicon
Power TVS	(F)TVS(Transient Voltage Suppressor),Uni-direction,4.5V,3900W,DFN2020-3L,2.0x2.0mm,WS4.5P4N3,WAYON	WAYON	(P)(T)Power TVS,Uni-direction,4.5V,DFN2020-3L,2x2x(0.6 ± 0.05)mm,PESDU4501P4-3M,PN-Silicon	PN-Silicon
MOS FET	(P)(T) MOS FET,N-Channel Enhancement Mode MOSFET with PNP Transistor,DFN3020-8L,3.0x2.0x0.75mm,ML5812,Millersemi	Millersemi	(T)MOS FET,N-Channel Enhancement Mode MOSFET with PNP Transistor,DFN3x2,3.0x2.0x0.8mm,SSC8P22AN3,SSC	SSC
MIC(SMT)	(P)(T)MIC(SMT),Omnidirectional Electret Condenser MIC(Top-ported), Black air	Ningbo Xinfengtai	(T)MIC(SMT),ECM(Top-ported),Apply dust film,-42 ± 3 dB, $\Phi 4.0$ xT1.3 (± 0.1)	Fenjinwei Electron

	filter, $-42 \pm 1.5\text{dB(V/Pa)}$, Φ 4.0xT1.3($\pm$ 0.2)mm,SMD4013S-2A422- C10NR390,Ningbo Xinfengtai		mm,FJM4013BSCRT2,Fenjin wei Electronic	ic
Antenn a Tuning Switch	(F)IC,0.4-3.8GHz SP4T Antenna Tuning Switch,VRF=45V,QFN-10,1 .5x1.0x0.4mm,MXD8545A, Maxscend	Maxscend	(P)(T)IC,0.4-3.8GHz SP4T Antenna Tuning Switch,QFN(10pin),1.5x1.1x0. 37mm,CR2114GLA,Cenre	Cenre
FM LNA	(P)(T)IC,FM Low-Noise-Amplifier in Alliance with Internal Antenna,DFN-6L,1.5x1.0x(0 .55 $\pm$ 0.05)mm,SW6115,Siliconw ave	Siliconwave	(T)IC,FM Low-Noise-Amplifier in Alliance with Internal Antenna,DFN-6L,1.5x1.0x(0.5 5 $\pm$ 0.05)mm,AW5037DNR,AWI NIC	AWINIC
SIM card holder	(T)NANO SIM Card Connector,Common bridge, with stopper, tin Angle welding, full SMT,7PIN, with detection. PIN,12.35x9.8x1.35mmH,S 126-0B07F13A,HONGRIDA	HONGRIDA	(T)NANO SIM Card Connector,Common bridge, with stopper, tin Angle welding, full SMT,7PIN, with detection. PIN,12.35x9.8x1.35mmH,A-W KSM07-B25412-22,Weikang	Weikan g
RF Switcha ble Recept acle	(P)(T)RF Switchable Receptacle, III Generation,Four welded feet, silver plated shell, inner diameter 0.5, outer diameter 1.35,2.1x2.0x0.9mmH,RF3 S-1B090FR0,HONGRIDA	HONGRIDA	(T)RF Switchable Receptacle,III Generation,four welded feet, silver plated shell, inner diameter 0.5, outer diameter 1.35,2.1x2.0x0.9mmH,818011 998,ECT	ECT
Battery Connec tor	(T)Battery Connector,Shrapnel on board,4SMT, solder inside tin pin, with two positioning posts, 3PIN,3.0PITCH,9.0x3.5x6.0 mmH,HW-BAT03P-060A,XI NHANWEI	XINHANWEI	(N)Battery Connector,shrapnel on board,4SMT, solder inside tin pin, with two positioning posts, 3PIN,3.0PITCH,9.0x3.5x6.0m mH,A-WKBT03-B30001-09,W eikang	Weikan g
Audio Jack	(P)(T)Audio Jack(Φ 3.5mm),on board, small bevel,5pin(4DIP+1SMT),12.	Weikang	(P)(T)Audio Jack(Φ 3.5mm),on board, small bevel, 5pin(4DIP+1SMT),	XINHA NWEI

	5x6.4x4.05mmH,A-WKPJ05 -B38011-37,Weikang		12.45x6.3x4.1mmH , HW-000538201002, XINHANWEI	
T-card Connec tor	(T)T-card Connector(T-FLASH booth), Open-top type,8PIN,1.1PITCH,Add LOGO,14.5x13.6x1.6mmH, ALP-TFH815-02,Alips	Alips	(P)(T)T-card Connector(T-FLASH booth), Open-top type, 8PIN, 1.1PITCH, 13.4x13.6x1.6mmH,A-WKTF0 8-B11001-01,Weikang	Weikan g
Crystal	(T)Crystal, 26MHz, $\pm$ 10ppm, 9pF, $\pm$ 10ppm@(-20~+70℃), 3225, 3.2x2.5x0.7mmH, 3S26000266, FAILONG	FAILONG	(T)Crystal,26MHz, $\pm$ 10ppm,9p F,3225,3.2x2.5x0.6mm,2.3.3.2 60000908,MDH	MDH
PCB	PCB,FF646-MB-V0.2, 6 layers 1 level HDI	BenChuang	PCB,FF646-MB-V0.2, 6 layers 1 level HDI	HongGa o
Shieldi ng case(B B)	(P)(T)Shielding case(BB),Irregular, white copper, material thickness 0.2mm, 29.75x23.4x1.6mm H,FF646,chuangyagao	ChuangYaG ao	(P)(T)Shielding case(BB),Irregular, white copper, material thickness 0.2mm, 29.75x23.4x1.6mmH,FF646,S henYouWei	ShenYo uWei
Shieldi ng case(R F)	(P)(T)Shielding case(RF),Rectangular, white copper, material thickness 0.2mm, 25.3x19.3x1.6mmH,FF646, ChuangYaGao	ChuangYaG ao	(P)(T)Shielding case(RF),rectangular, white copper, material thickness 0.2mm , 25.3x19.3x1.6mmH,FF646,Sh enYouWei	ShenYo uWei
Antenn a spring (SMT)	(P)(T)Antenna spring (SMT), stainless steel brush gold, pad 2.3x1.2, contact width 0.55, working range0.65/0.9,Optimum0.75 2.9x1.0x1.25mmH,P18-BB0 1F06A,Hongrida	Hongrida	(T) Antenna spring (SMT), stainless steel brush gold, pad 2.3x1.2, contact width 0.55, working range 0.65/1.25, 2.9x1.0x1.25mmH,KSN-A130 00101R-0100,Huile	Huile
Battery	Battery (HMD Universal Tag Label), Aluminum Shell Battery, External, Capacity: 1450 mAh, Cell: 503862AR, Voltage: 4.2 V, Internal Resistance: 0.15 Ω , Maximum Discharge	SHENZHEN UTILITY ENERGY CO., LTD.	Nokia Battery, Aluminum Shell Battery, External, Capacity: 1450 mAh, Cell: 503862AR, Voltage: 4.2 V, Internal Resistance: 0.15 Ω , Maximum Discharge Current: 1000 mA, ROHS + Reach +	Guangd ong Fenghu a New Energy Co.,Ltd

	Current: 1000 mA, ROHS + Reach + Halogen-free, 38 mm * 5.3 mm * 66 mm, Minimum Capacity: 1400 mAh, Transparent PE Sealing, Model: BL-L5H		Halogen-free, 38 mm * 5.3 mm * 66 mm, Minimum Capacity: 1400 mAh, Transparent PE Sealing, Model: BL-L5H	
LCD	LCD Display, 2.4 inches, QVGA, TN, Brightness: 380 cd/m², Model: ST7789P3-G6, BOE: 0, Thickness: 0.5 mm, Welded Type, 16 pins, ROHS + Reach + Halogen-free, Dimensions: 60.26 mm * 42.72 mm * 2.4 mm, Tolerance: 0.1/0.1, Shared Backlight, With Light Source, 4 LEDs	CHONGQIN G ZHONGXIA N TECHNOLO GY CO.,LT	LCD Display, 2.4 inches, QVGA, TN, Brightness: 380 cd/m², Model: ST7789P3-G6, BOE: 0, Thickness: 0.5 mm, Welded Type, 16 pins, ROHS + Reach + Halogen-free, Dimensions: 60.26 mm * 42.72 mm * 2.4 mm, Tolerance: 0.1/0.1, Shared Backlight, With Light Source, 4 LEDs	Hubei EO Electron ics Technol ogy Co. ltd.

This report is based on the TA-1667(Mains supply) as the main test.

TA-1667(Second supply) the following tests need to be performed:

NO.	Test item	EUT ID	Operating mode
1	Conducted Emission	UT06aa	Video Player, FM receier
2	Radiated Emission	UT06aa	Camera, FM receiver

Other results are cited from the initial model TA-1667(Mains supply).

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	(10-1-2023 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

Anechoic chamber (FACT3-2.0) 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> 60 dB; 1MHz-18000MHz>90 dB
Electrical insulation	> 2MΩ
Ground system resistance	< 4Ω
Normalised site attenuation (NSA)	< ± 4 dB, 3 m distance, from 30 to 1000 MHz
Voltage Standing Wave Ratio (VSWR)	≤ 6 dB, from 1 to 18 GHz, 3 m distance
Uniformity of field strength	Between 0 and 6 dB, from 80 to 6000 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-18000MHz,>90dB
Electrical insulation	>2MΩ
Ground system resistance	<4Ω

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	4.80dB(k=2)
	1GHz-18GHz	4.62dB(k=2)
	18GHz-40GHz	2.36dB(k=2)
Conducted Emission	150kHz-30MHz	2.68dB(k=2)

8. MEASURING APPARATUS UTILIZED

No.	Name	Model	Serial Number	Manufacturer	Calibration Due date	Calibration Period
1.	Test Receiver	ESR7	101676	R&S	2024.11.22	1 year
2.	Test Receiver	ESCI	100702	R&S	2025.01.10	1 year
3.	Spectrum Analyzer	FSV40	101192	R&S	2025.01.10	1 year
4.	Hybrid antenna	VULB 9163	9163-330	Schwarzbeck	2027.04.21	3 years
5.	LISN	ENV216	102067	R&S	2024.10.07	1 year
6.	Horn Antenna	3117	00066577	ETS-Lindgren	2025.04.17	3 years
7.	Anechoic Chamber	FACT3-2.0	1285	ETS-Lindgren	2025.05.28	2 years
8.	Universal Radio Communication Tester	CMU200	114545	R&S	2025.01.10	1 year
9.	Universal Radio Communication Tester	CMW500	168719	R&S	2025.03.22	1 year
10.	Horn Antenna	QSH-SL-18-2 6-S-20	17013	Q-par	2026.02.01	3 years

9. MEASURING ACCESSORY UTILIZED

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



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10. MEASURING SOFTWARE

No.	Name	Manufacturer	Version
1	EMC32	Rohde & Schwarz	V10.50.40

ANNEX A: MEASUREMENT RESULTS

A.1 Radiated Emission (§15.109(a))

Reference

FCC: Part 15.109(a)

IC: ICES-003 section 6.2

A.1.1 Method of measurement

The field strength of radiated emissions from the unintentional radiator at a distance of 3 meters or 1 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. 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.

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.

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.

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

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

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

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

GSM850MHz, WCDMA Band5, LTE Band 5.

The EUT was tested while operating in licensed band receiver mode. All licensed band receivers

that tune in the range of 30MHz-960MHz, as listed in Section 3.1, are investigated. Only the worst case emissions are reported.

All equipment is placed on the test table top and arranged in a typical configuration in accordance with ANSI C63.4-2014 and manipulated to obtain worst case emissions. For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Y plane) were recorded in this report.

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

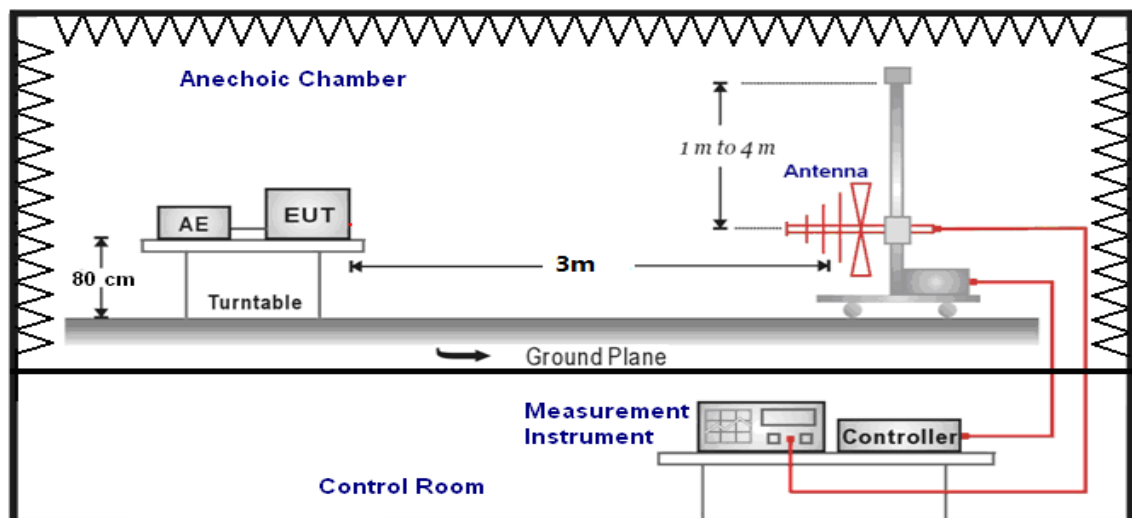
*Note: The original limit is defined at 10m test distance. This limit is calculated according to CISPR requirements.

A.1.4 Test Condition

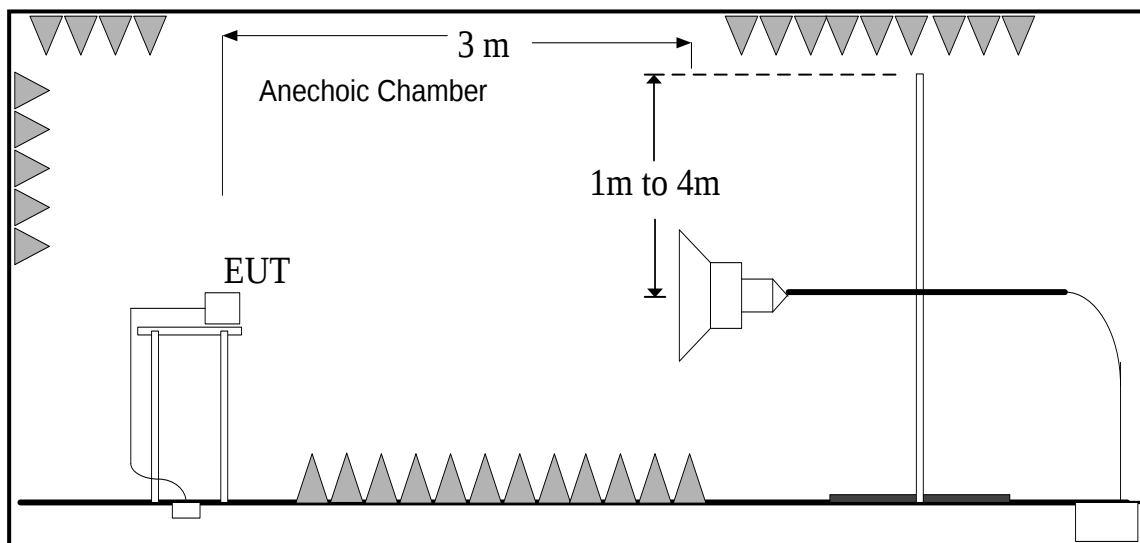
Frequency of emission (MHz)	RBW/VBW	Sweep Time(s)
30-1000	120kHz (IF bandwidth)	5
Above 1000	1MHz/3MHz	15

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:

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

Where

G_A : Antenna factor of receive antenna

G_{PL} : Path Loss

P_{Mea} : Measurement result on receiver.

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

Note: the result contains vertical part and Horizontal part

GSM receiver 850MHz

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
		UT01aa/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
			UT01aa/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.	

Camera

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
		UT01aa/Set.1	
30-88	40.00	See Figure A.1.4.	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
			UT01aa/Set.1	
1000 to 18000	54.00	74.00	See Figure A.1.5.	P
18000 to 26500	63.54	83.54	See Figure A.1.6.	

FM Receiver

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
		UT01aa/Set.1	
30-88	40.00	See Figure A.1.7.	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
			UT01aa/Set.1	
1000 to 18000	54.00	74.00	See Figure A.1.8.	P
18000 to 26500	63.54	83.54	See Figure A.1.9.	

Video Player

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
		UT01aa/Set.1	
30-88	40.00	See Figure A.1.10.	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
			UT01aa/Set.1	
1000 to 18000	54.00	74.00	See Figure A.1.11.	P
18000 to 26500	63.54	83.54	See Figure A.1.12.	

WCDMA receiver Band 5

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
		UT01aa/Set.1	
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
			UT01aa/Set.1	
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.	

LTE receiver Band 5

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
		UT01aa/Set.1	
30-88	40.00	See Figure A.1.16.	P
88-216	43.52		
216-960	46.02		
960-1000	54.00		

Frequency range (MHz)	Average Limit (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
			UT01aa/Set.1	
1000 to 18000	54.00	74.00	See Figure A.1.17.	P
18000 to 26500	63.54	83.54	See Figure A.1.18.	

Data Transfer: PC TO TF

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
		UT01aa/Set.3	
30-88	40.00	See Figure A.1.19.	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
			UT01aa/Set.3	
1000 to 18000	54.00	74.00	See Figure A.1.20.	P
18000 to 26500	63.54	83.54	See Figure A.1.21.	

Data Transfer: TF TO PC

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
		UT01aa/Set.3	
30-88	40.00	See Figure A.1.22.	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
			UT01aa/Set.3	
1000 to 18000	54.00	74.00	See Figure A.1.23.	P
18000 to 26500	63.54	83.54	See Figure A.1.24.	

Camera

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
		UT01aa/Set.2	
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
			UT01aa/Set.2	
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.	

Camera

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
		UT06aa /Set.1	
30-88	40.00	See Figure A.1.28.	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
			UT06aa /Set.1	
1000 to 18000	54.00	74.00	See Figure A.1.29.	P
18000 to 26500	63.54	83.54	See Figure A.1.30.	

FM Receiver

Frequency range (MHz)	Quasi-Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
		UT06aa/Set.1	
30-88	40.00	See Figure A.1.31.	P
88-216	43.52		
216-960	46.02		
960-1000	54.00		

Frequency range (MHz)	Average Limit (dB μ V/m)	Peak Limit (dB μ V/m)	Result (dB μ V/m)	Conclusion
			UT06aa /Set.1	
1000 to 18000	54.00	74.00	See Figure A.1.32.	P
18000 to 26500	63.54	83.54	See Figure A.1.33.	

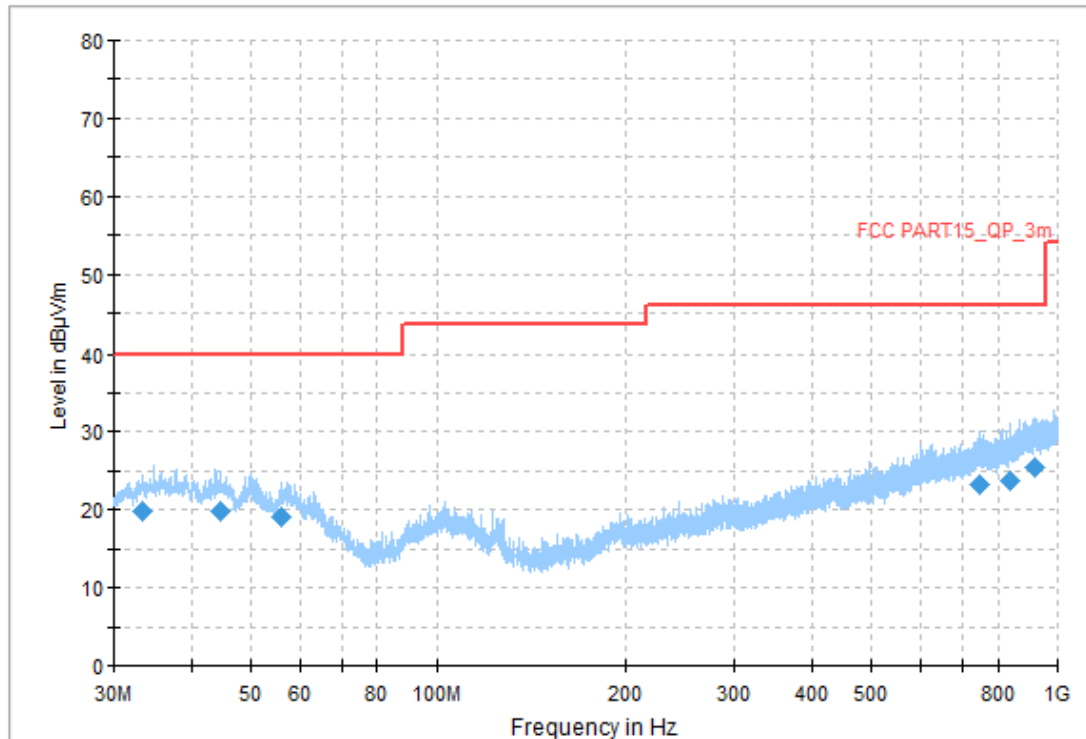


Figure A.1.1. Radiated Emission (GSM receiver 850MHz, 30MHz to 1GHz)
Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
33.395000	19.81	40.00	20.19	V	-14.9	34.71
44.550000	19.81	40.00	20.19	H	-13.2	33.01
56.028333	19.09	40.00	20.91	H	-13.0	32.09
749.308889	23.35	46.02	22.67	V	-2.1	25.45
837.093889	23.76	46.02	22.26	V	-1.4	25.16
917.442222	25.51	46.02	20.51	V	0.3	25.21

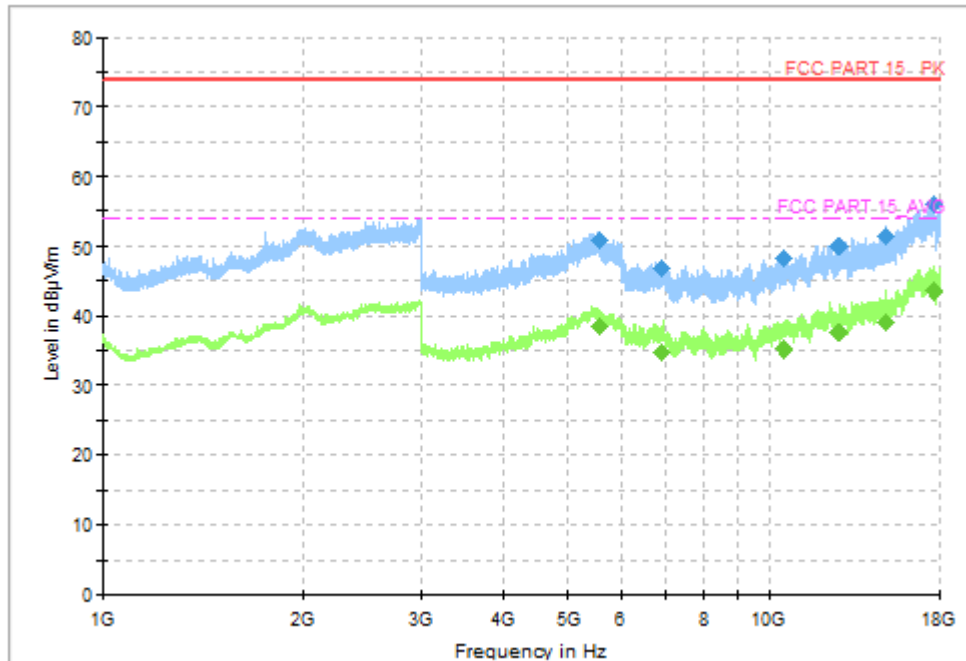


Figure A.1.2. Radiated Emission (GSM receiver 850MHz, 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
5555.100000	51.00	74.00	23.00	H	7.1	43.90
6909.000000	46.79	74.00	27.21	H	8.3	38.49
10529.142857	48.16	74.00	25.84	H	9.5	38.66
12742.714286	50.03	74.00	23.97	H	13.0	37.03
14965.285714	51.48	74.00	22.52	V	14.8	36.68
17688.857143	56.13	74.00	17.87	V	20.6	35.53

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
5555.100000	38.46	54.00	15.55	H	7.1	31.36
6909.000000	34.72	54.00	19.28	H	8.3	26.42
10529.142857	35.15	54.00	18.85	H	9.5	25.65
12742.714286	37.75	54.00	16.25	H	13.0	24.75
14965.285714	39.18	54.00	14.82	V	14.8	24.38
17688.857143	43.58	54.00	10.42	V	20.6	22.98

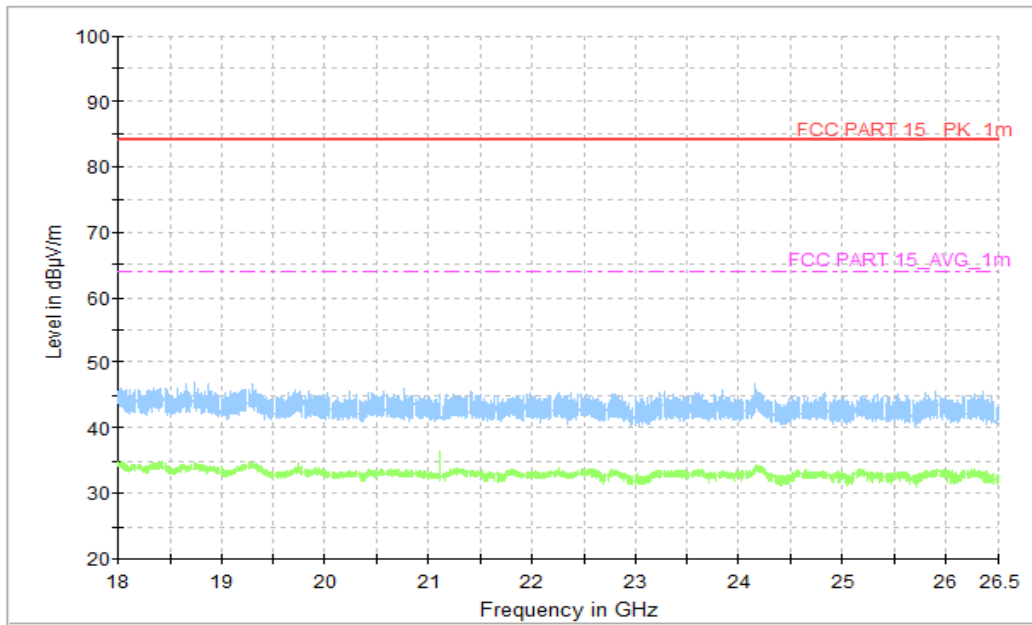


Figure A.1.3. Radiated Emission (GSM receiver 850MHz, 18GHz to 26.5GHz)

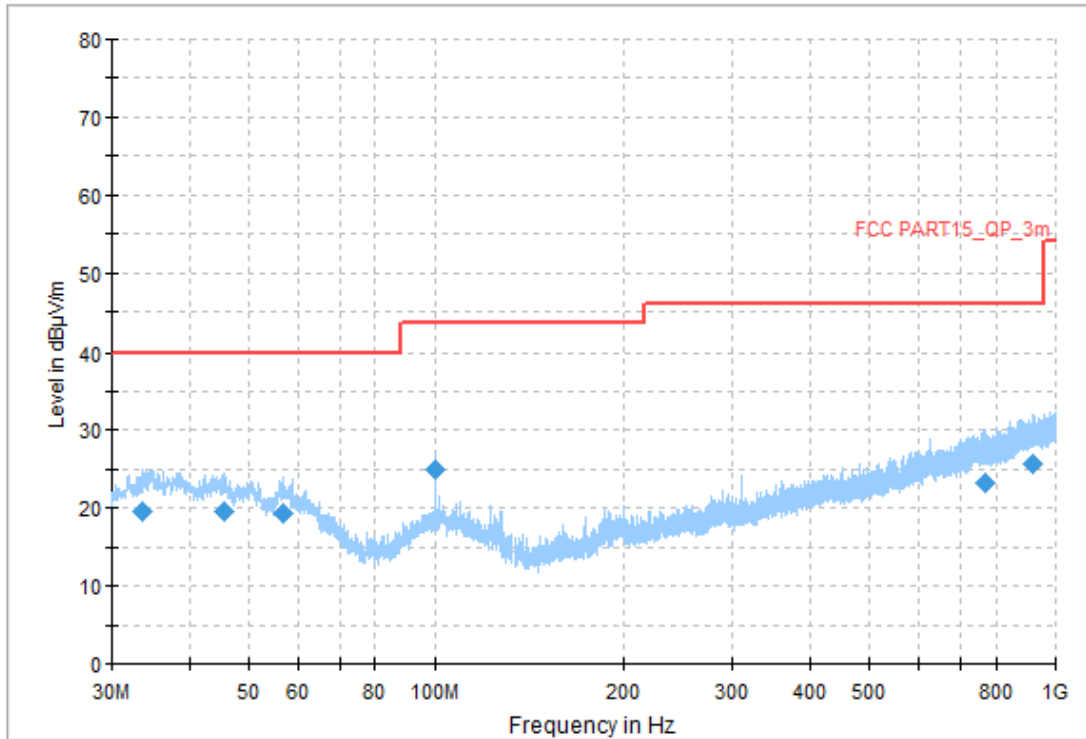


Figure A.1.4. Radiated Emission (Camera, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
33.502778	19.66	40.00	20.34	V	-14.9	34.56
45.573889	19.65	40.00	20.35	H	-13.1	32.75
56.675000	19.31	40.00	20.69	V	-12.7	32.01
99.947778	24.93	43.52	18.59	V	-14.6	39.53
768.493333	23.27	46.02	22.75	V	-2.2	25.47
920.891111	25.76	46.02	20.26	H	0.4	25.36

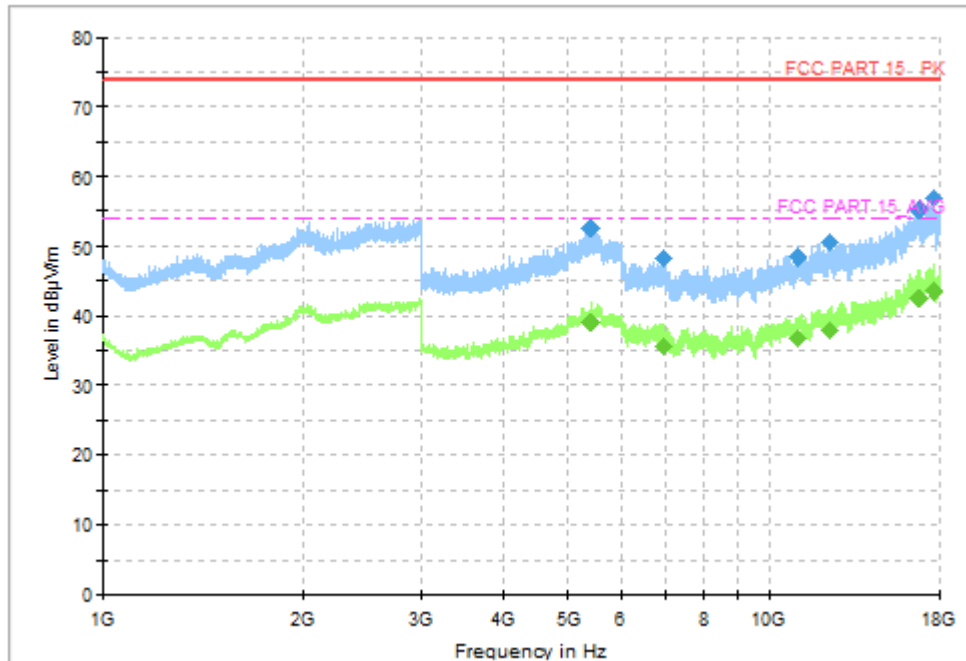


Figure A.1.5. Radiated Emission (Camera, 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
5413.500000	52.51	74.00	21.49	H	7.4	45.11
6943.714286	48.22	74.00	25.78	H	8.9	39.32
11084.142857	48.47	74.00	25.53	V	11.1	37.37
12364.285714	50.65	74.00	23.35	V	12.8	37.85
16754.142857	55.40	74.00	18.60	V	18.7	36.7
17700.428571	57.06	74.00	16.94	V	20.6	36.46

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
5413.500000	39.08	54.00	14.92	H	7.4	31.68
6943.714286	35.66	54.00	18.34	H	8.9	26.76
11084.142857	36.75	54.00	17.25	V	11.1	25.65
12364.285714	37.95	54.00	16.05	V	12.8	25.15
16754.142857	42.59	54.00	11.41	V	18.7	23.89
17700.428571	43.65	54.00	10.35	V	20.6	23.05

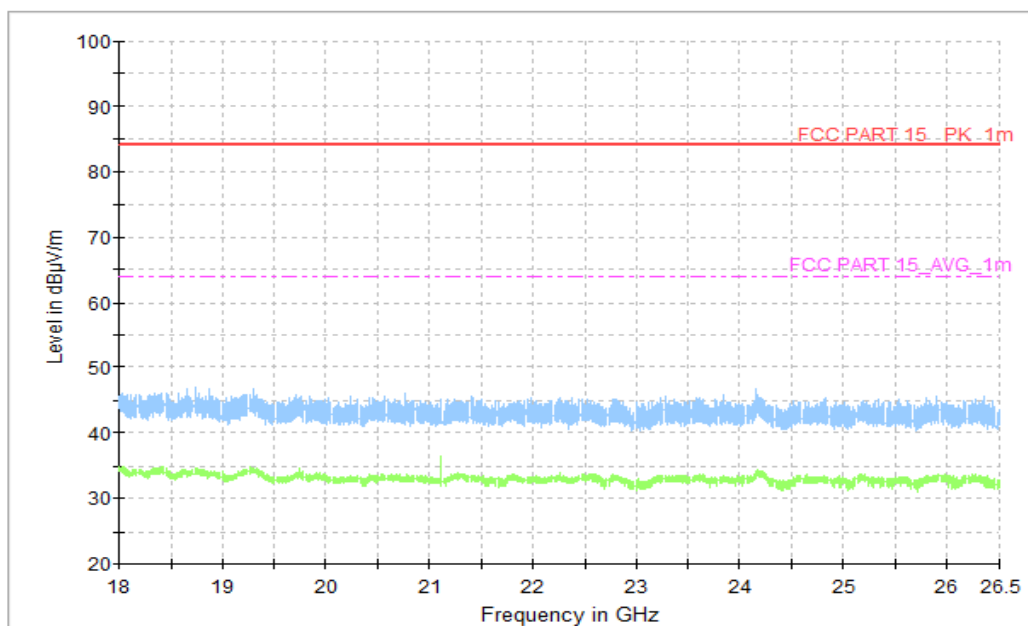


Figure A.1.6. Radiated Emission (Camera, 1GHz to 18GHz)

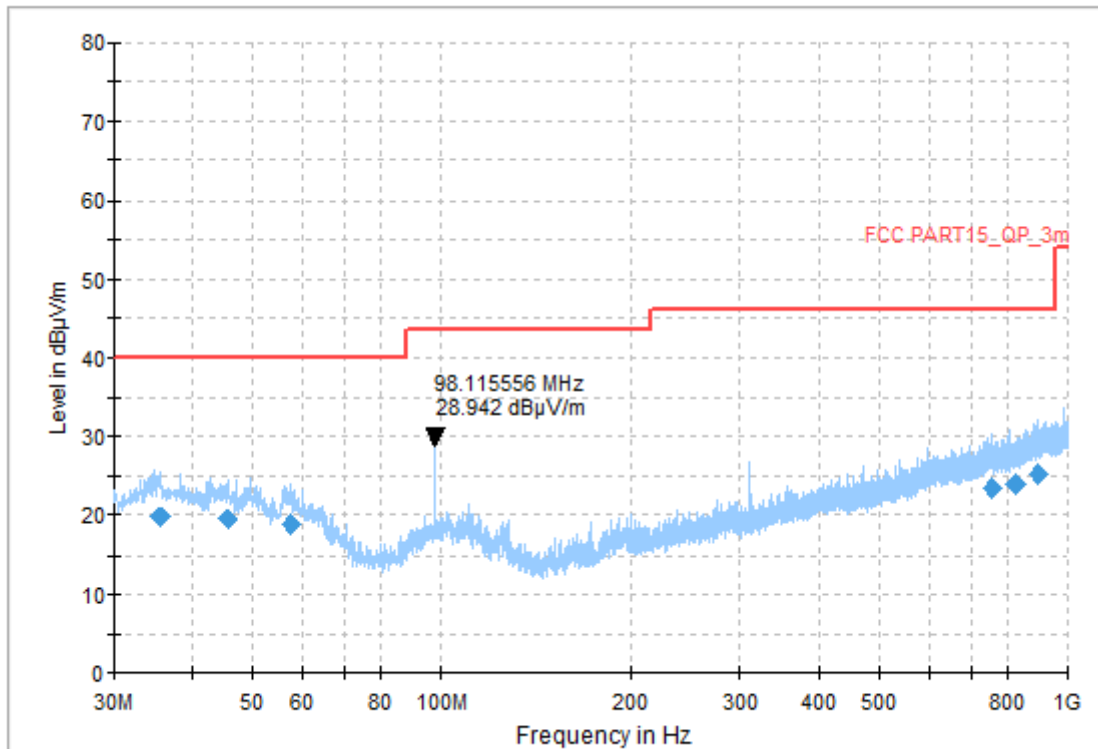


Figure A.1.7. Radiated Emission (FM Receiver, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
35.496667	19.89	40.00	20.11	V	-14.3	34.19
45.573889	19.62	40.00	20.38	V	-13.1	32.72
57.698889	18.81	40.00	21.19	V	-12.8	31.61
756.260556	23.51	46.02	22.51	H	-2.0	25.51
828.256111	23.97	46.02	22.05	V	-1.7	25.67
899.551111	25.14	46.02	20.88	H	0.0	25.14

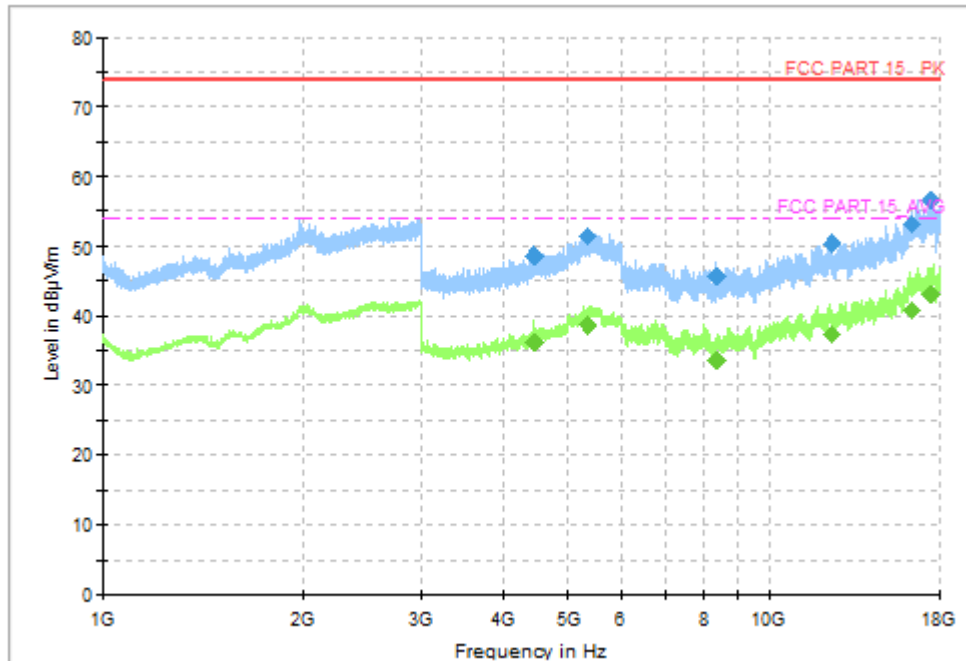


Figure A.1.8. Radiated Emission (FM Receiver, 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
4440.600000	48.65	74.00	25.35	H	5.2	43.45
5350.500000	51.33	74.00	22.67	V	7.1	44.23
8355.428572	45.71	74.00	28.29	V	7.3	38.41
12423.428572	50.32	74.00	23.68	H	12.4	37.92
16374.857143	53.05	74.00	20.95	H	17.0	36.05
17520.857143	56.62	74.00	17.38	V	20.3	36.32

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
4440.600000	36.19	54.00	17.81	H	5.2	30.99
5350.500000	38.61	54.00	15.39	V	7.1	31.51
8355.428572	33.53	54.00	20.47	V	7.3	26.23
12423.428572	37.46	54.00	16.54	H	12.4	25.06
16374.857143	40.74	54.00	13.26	H	17.0	23.74
17520.857143	43.16	54.00	10.84	V	20.3	22.86

Figure A.1.9. Radiated Emission (FM Receiver, 1GHz to 18GHz)

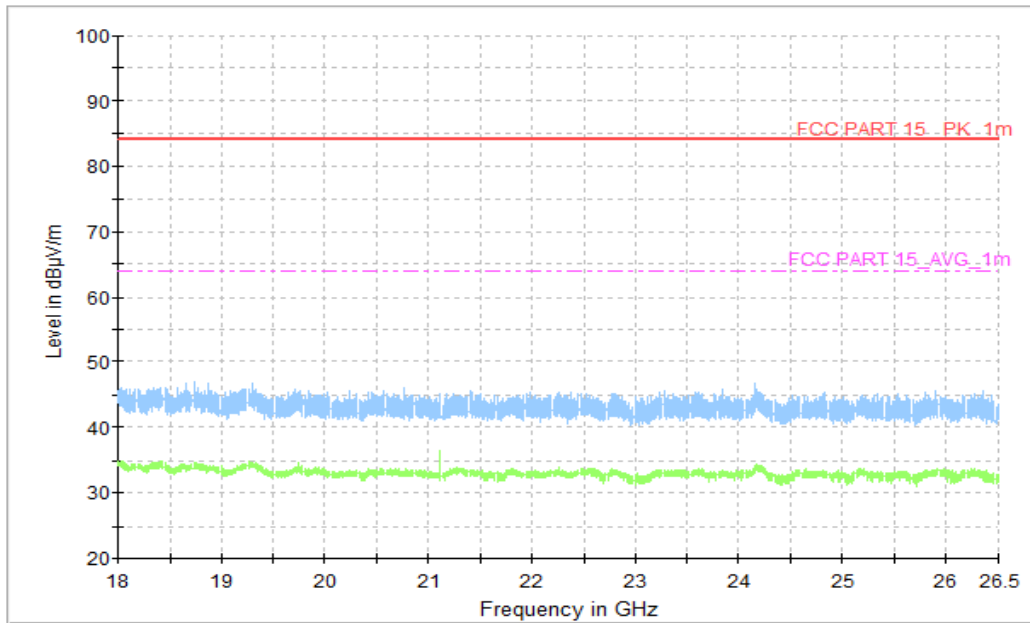


Figure A.1.10. Radiated Emission (FM Receiver, 18GHz to 26.5GHz)

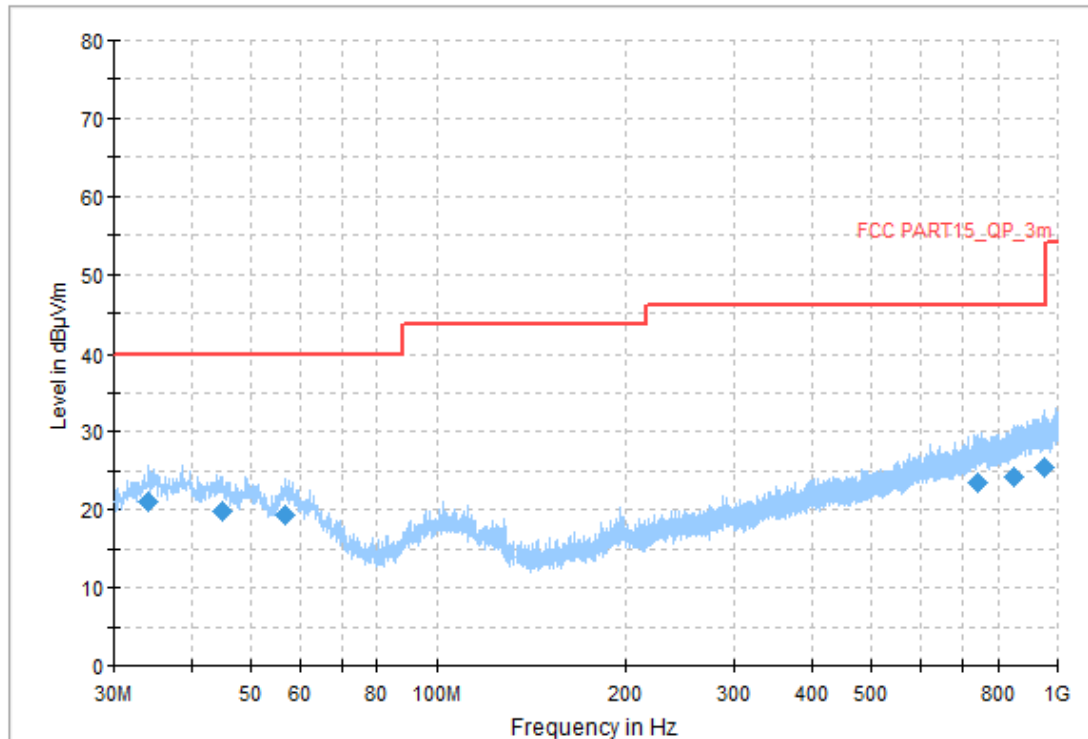


Figure A.1.11. Radiated Emission (Video Player, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
34.041667	20.92	40.00	19.08	V	-14.8	35.72
45.035000	19.82	40.00	20.18	H	-13.1	32.92
56.567222	19.25	40.00	20.75	H	-12.8	32.05
743.973889	23.45	46.02	22.57	V	-2.2	25.65
847.763889	24.11	46.02	21.91	V	-1.2	25.31
949.182778	25.54	46.02	20.48	H	0.1	25.44

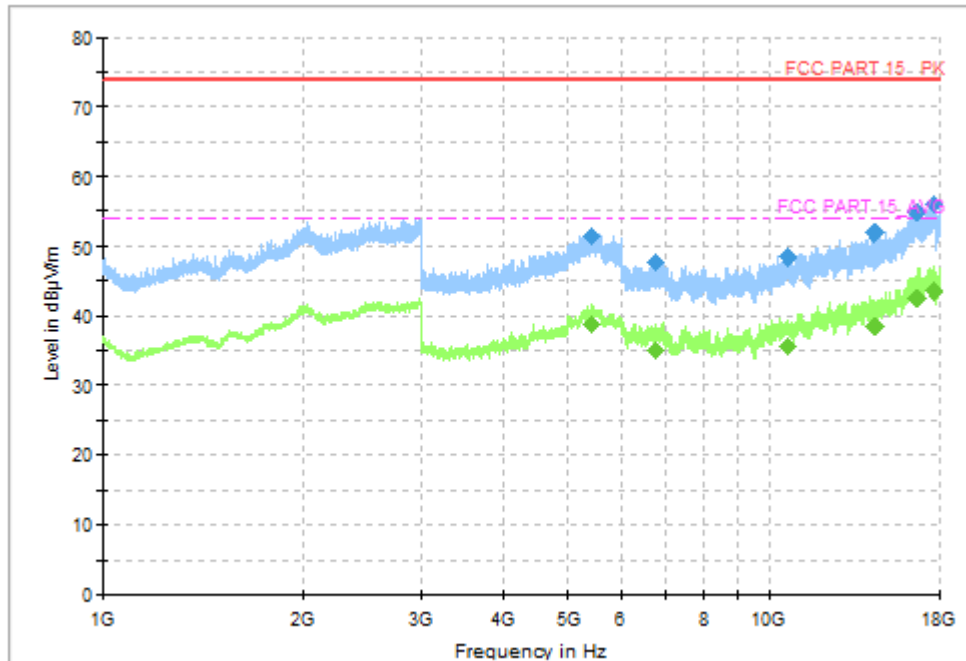


Figure A.1.12. Radiated Emission (Video Player, 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
5414.100000	51.32	74.00	22.68	V	7.4	43.92
6755.142857	47.81	74.00	26.19	V	8.3	39.51
10701.857143	48.50	74.00	25.50	H	9.8	38.70
14364.857143	51.83	74.00	22.17	V	13.6	38.23
16687.285714	54.79	74.00	19.21	V	19.0	35.79
17707.285714	56.11	74.00	17.89	V	20.6	35.51

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
5414.100000	38.96	54.00	15.04	V	7.4	31.56
6755.142857	35.03	54.00	18.97	V	8.3	26.73
10701.857143	35.84	54.00	18.16	H	9.8	26.04
14364.857143	38.49	54.00	15.51	V	13.6	24.89
16687.285714	42.47	54.00	11.53	V	19.0	23.47
17707.285714	43.59	54.00	10.41	V	20.6	22.99

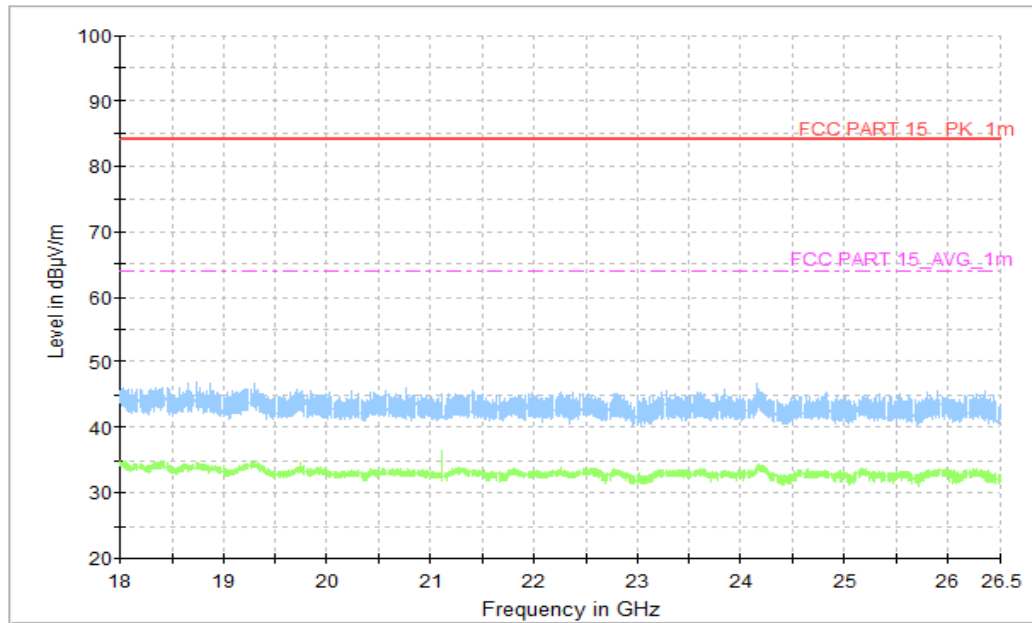


Figure A.1.13. Radiated Emission (Video Player, 18GHz to 26.5GHz)

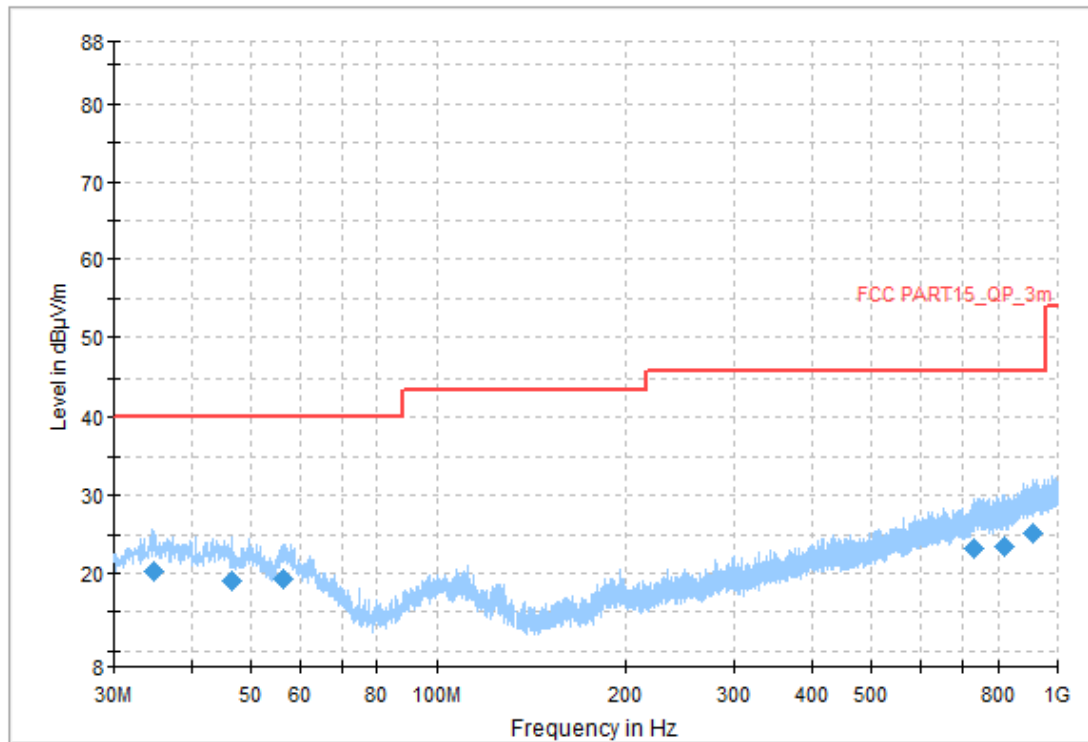


Figure A.1.14. Radiated Emission (WCDMA receiver Band 5, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
34.903889	20.23	40.00	19.77	V	-14.5	34.73
46.436111	18.89	40.00	21.11	V	-13.2	32.09
56.513333	19.20	40.00	20.80	V	-12.8	32.00
733.735000	23.29	46.02	22.73	H	-2.6	25.89
819.041111	23.45	46.02	22.57	H	-1.9	25.35
910.005556	25.24	46.02	20.78	H	0.1	25.14

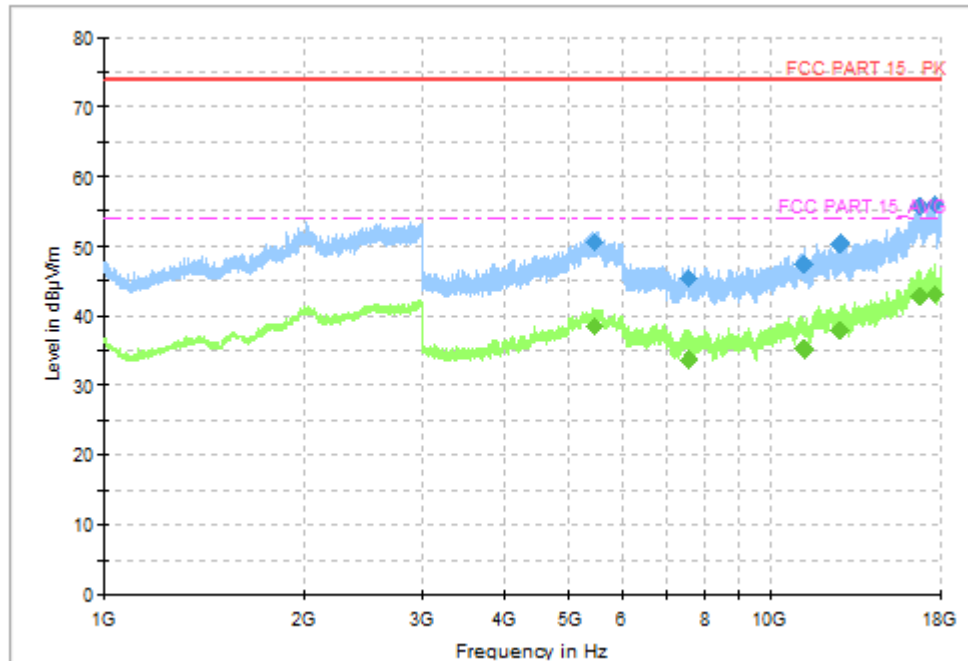


Figure A.1.15. Radiated Emission (WCDMA receiver Band 5, 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
5455.200000	50.59	74.00	23.41	H	7.4	43.19
7533.428572	45.61	74.00	28.39	V	6.8	38.81
11249.571429	47.56	74.00	26.44	V	10.2	37.36
12740.142857	50.45	74.00	23.55	H	13.0	37.45
16738.285714	55.78	74.00	18.22	V	18.8	36.98
17662.285714	56.02	74.00	17.98	V	20.5	35.52

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
5455.200000	38.48	54.00	15.52	H	7.4	31.08
7533.428572	33.72	54.00	20.28	V	6.8	26.92
11249.571429	35.31	54.00	18.69	V	10.2	25.11
12740.142857	37.83	54.00	16.17	H	13.0	24.83
16738.285714	42.86	54.00	11.14	V	18.8	24.06
17662.285714	43.18	54.00	10.82	V	20.5	22.68

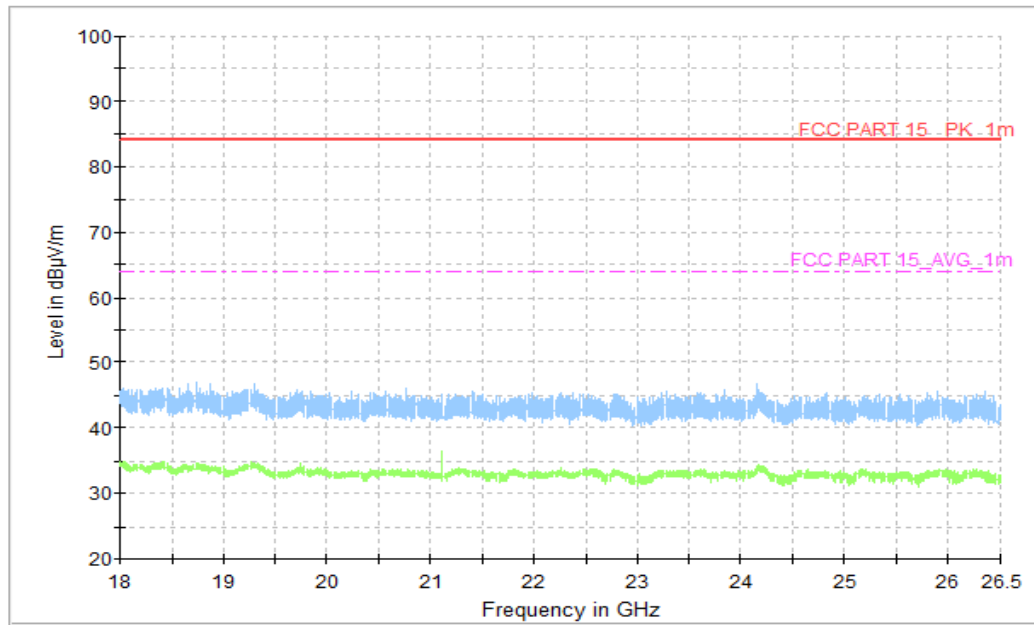


Figure A.1.16. Radiated Emission (WCDMA receiver Band 5, 18GHz to 26.5GHz)

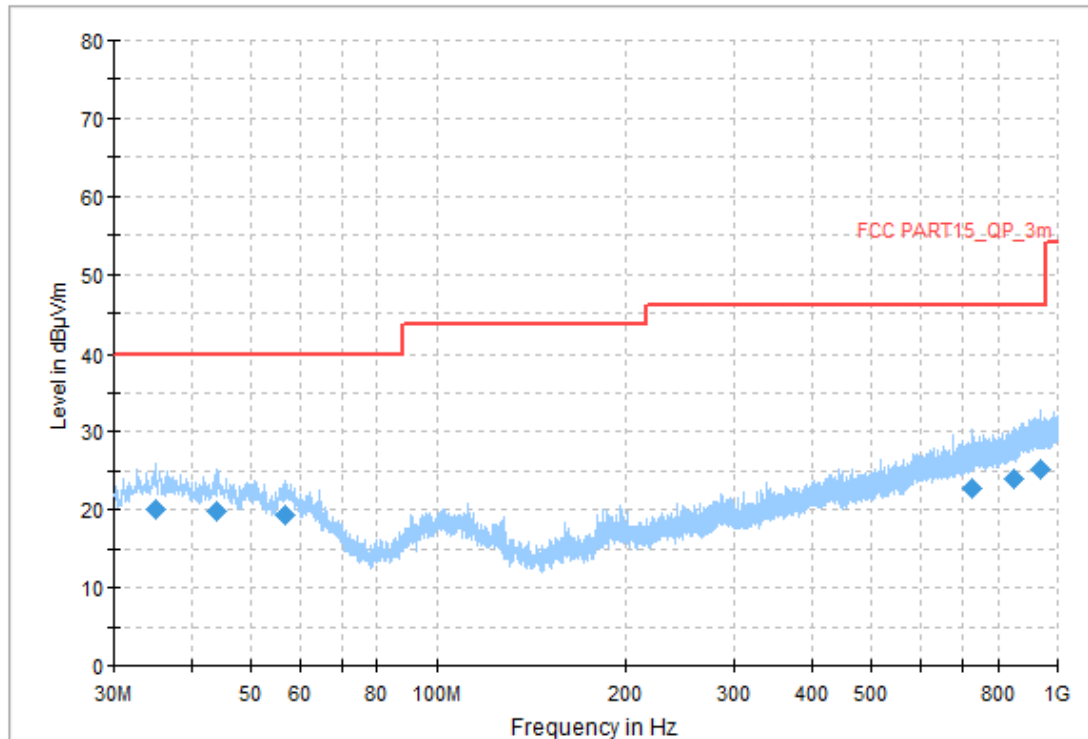


Figure A.1.17. Radiated Emission (LTE receiver Band 5, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
34.957778	20.11	40.00	19.89	V	-14.5	34.61
44.118889	19.86	40.00	20.14	H	-13.2	33.06
56.675000	19.24	40.00	20.76	H	-12.7	31.94
726.352222	22.81	46.02	23.21	H	-3.0	25.81
852.290556	24.06	46.02	21.96	H	-1.2	25.26
940.291111	25.27	46.02	20.75	V	0.1	25.17

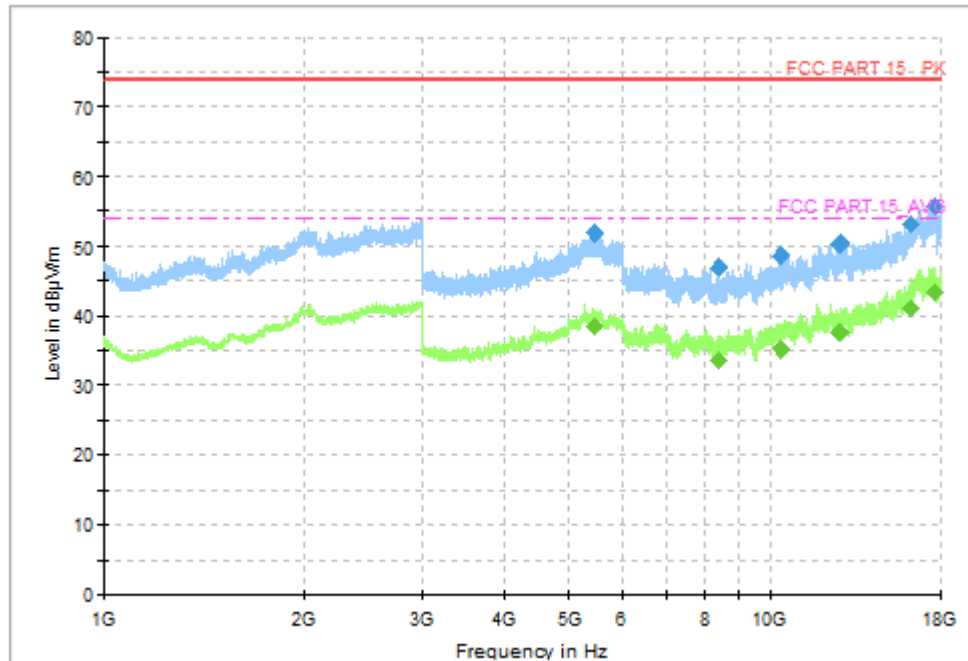


Figure A.1.18. Radiated Emission (LTE receiver Band 5, 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
5459.100000	51.77	74.00	22.23	V	7.3	44.47
8401.285714	46.92	74.00	27.08	H	7.8	39.12
10342.714286	48.63	74.00	25.37	H	10.3	38.33
12749.142857	50.45	74.00	23.55	H	12.9	37.55
16258.714286	53.10	74.00	20.90	H	16.8	36.3
17707.285714	55.67	74.00	18.33	V	20.6	35.07

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
5459.100000	38.47	54.00	15.53	V	7.3	31.17
8401.285714	33.60	54.00	20.40	H	7.8	25.8
10342.714286	35.23	54.00	18.77	H	10.3	24.93
12749.142857	37.62	54.00	16.38	H	12.9	24.72
16258.714286	41.12	54.00	12.88	H	16.8	24.32
17707.285714	43.40	54.00	10.60	V	20.6	22.80

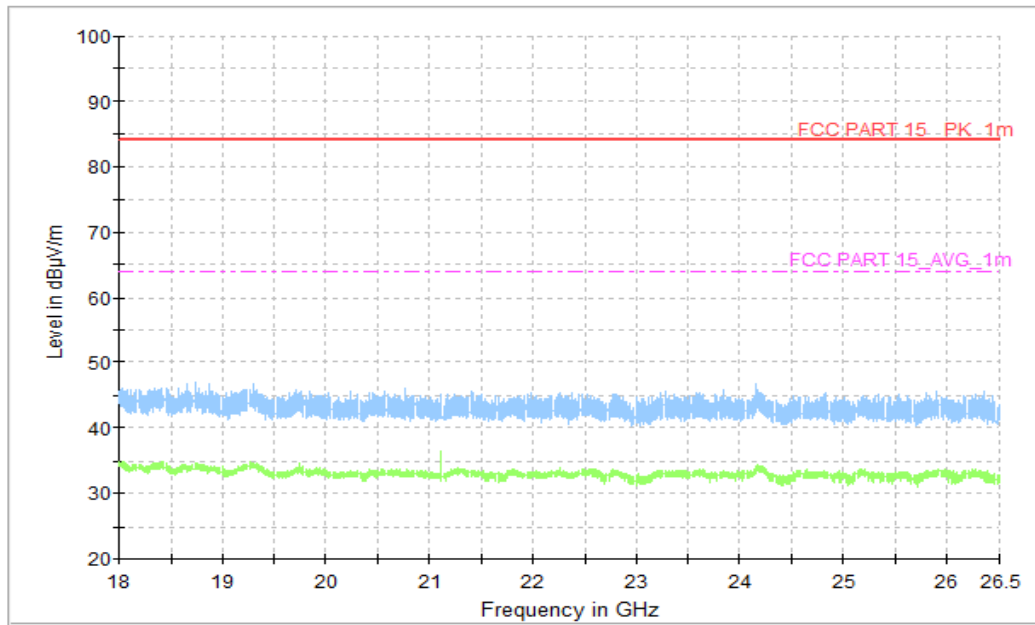


Figure A.1.19. Radiated Emission (LTE receiver Band 5, 18GHz to 26.5GHz)

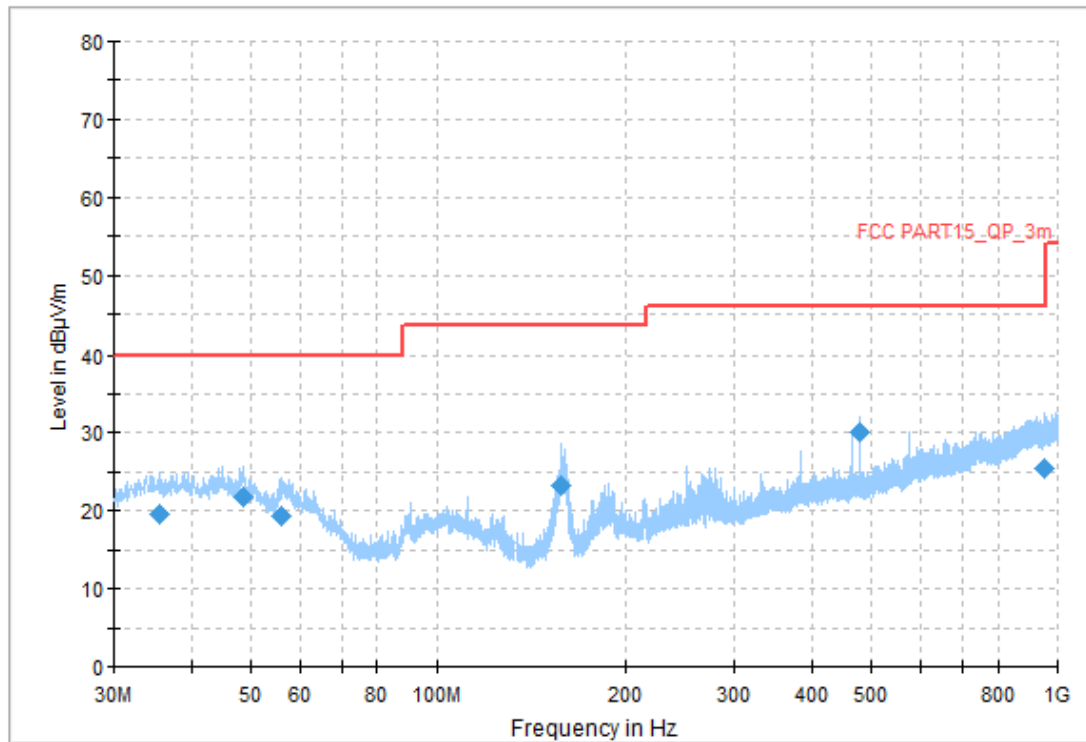


Figure A.1.20. Radiated Emission (Data Transfer: PC TO TF, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
35.658333	19.64	40.00	20.36	H	-14.3	33.94
48.483889	21.85	40.00	18.15	V	-13.3	35.15
56.082222	19.33	40.00	20.67	H	-13.0	32.33
157.016111	23.29	43.52	20.23	V	-17.7	40.99
480.026111	30.11	46.02	15.91	H	-7.2	37.31
953.008889	25.46	46.02	20.56	H	0.1	25.36

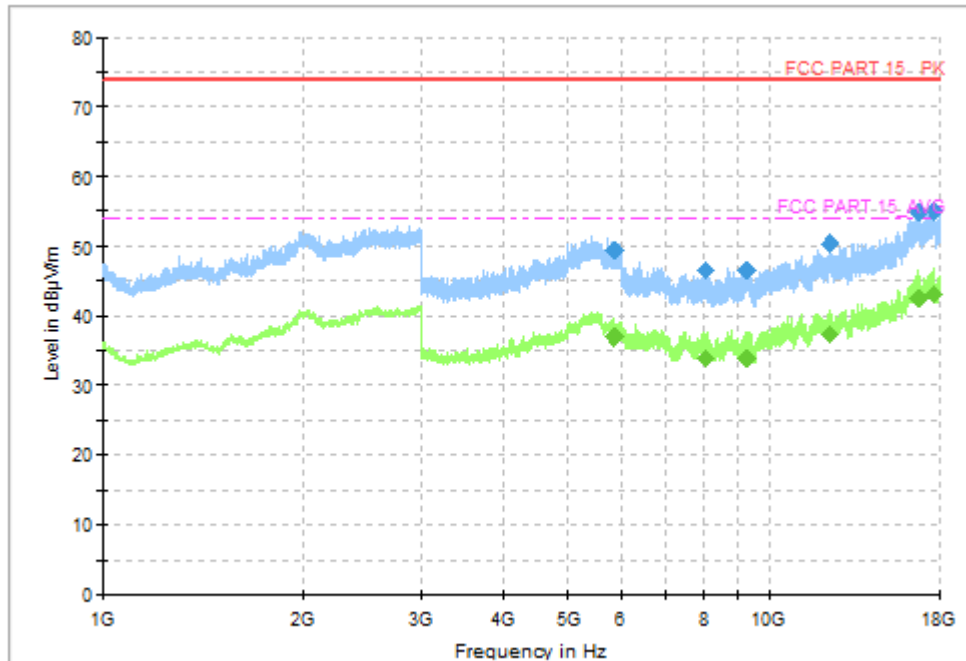


Figure A.1.21. Radiated Emission (Data Transfer: PC TO TF, 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
5867.400000	49.46	74.00	24.54	V	6.1	43.36
8042.142857	46.43	74.00	27.57	V	7.5	38.93
9279.428572	46.38	74.00	27.62	H	8.1	38.28
12346.285714	50.32	74.00	23.68	V	12.8	37.52
16727.142857	54.79	74.00	19.21	H	18.9	35.89
17669.142857	55.06	74.00	18.94	V	20.6	34.46

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
5867.400000	36.85	54.00	17.15	V	6.1	30.75
8042.142857	34.05	54.00	19.95	V	7.5	26.55
9279.428572	34.06	54.00	19.94	H	8.1	25.96
12346.285714	37.48	54.00	16.52	V	12.8	24.68
16727.142857	42.56	54.00	11.44	H	18.9	23.66
17669.142857	43.13	54.00	10.87	V	20.6	22.53

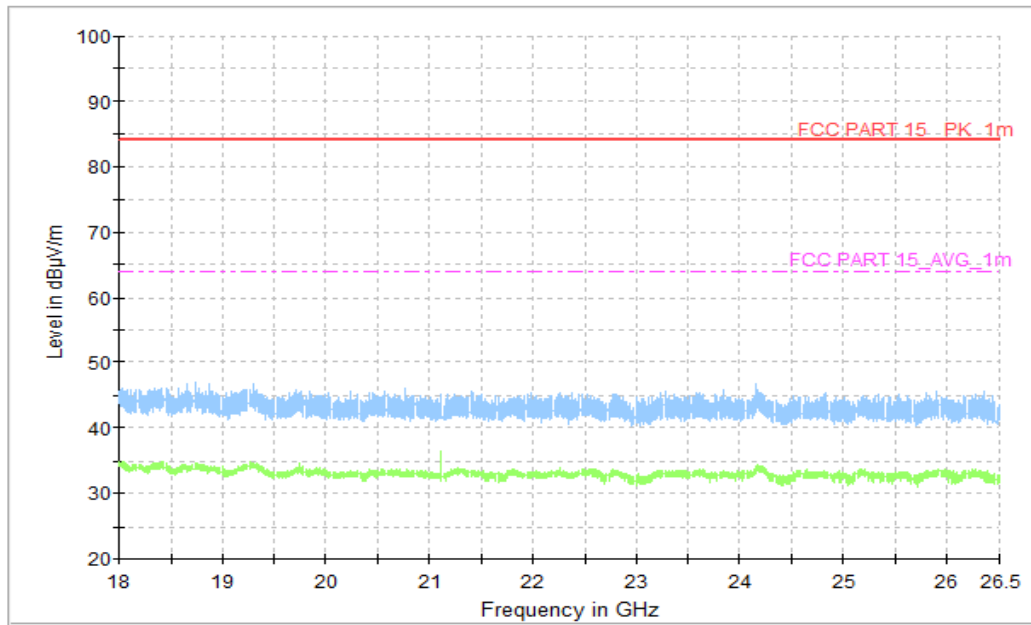


Figure A.1.22. Radiated Emission (Data Transfer: PC TO TF, 18GHz to 26.5GHz)

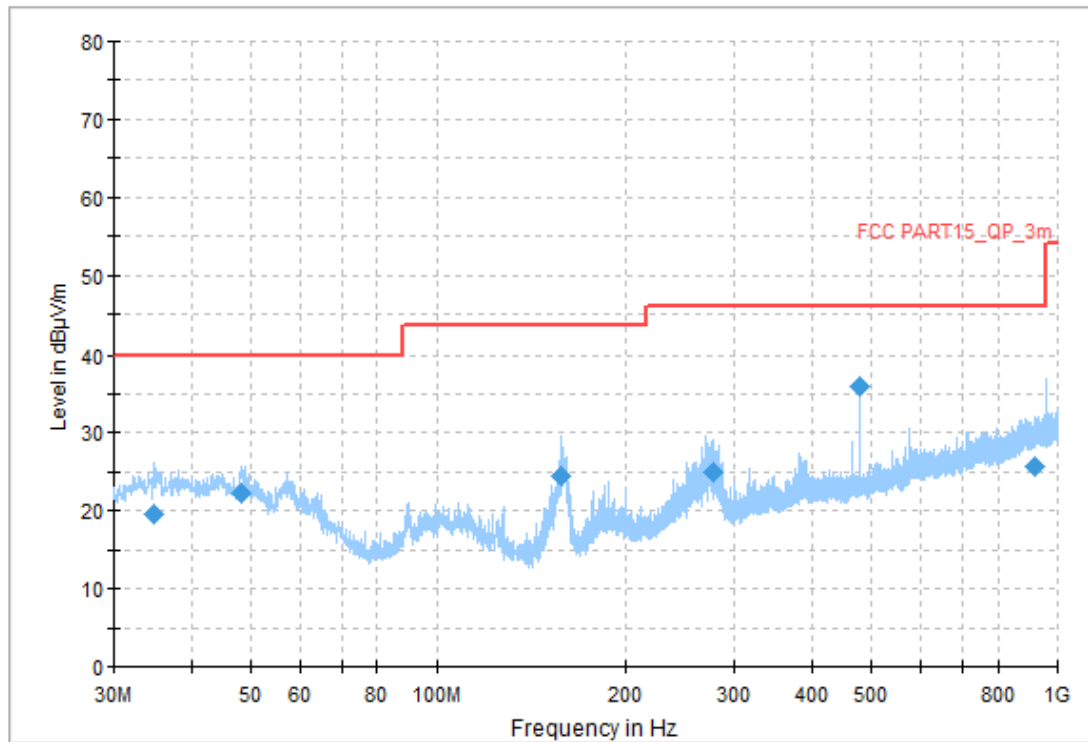


Figure A.1.23. Radiated Emission (Data Transfer: TF TO PC, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
34.850000	19.69	40.00	20.31	H	-14.5	34.19
48.214444	22.23	40.00	17.77	V	-13.3	35.53
157.824444	24.37	43.52	19.15	V	-17.6	41.97
277.565556	25.04	46.02	20.98	H	-12.7	37.74
479.972222	36.01	46.02	10.01	H	-7.2	43.21
917.226667	25.63	46.02	20.39	V	0.3	25.33

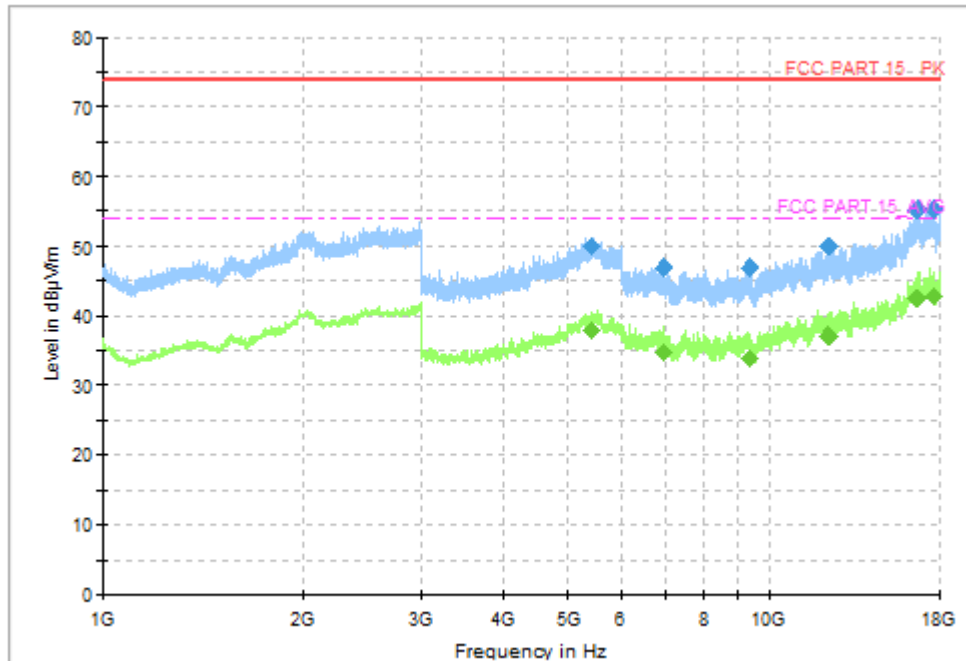


Figure A.1.24. Radiated Emission (Data Transfer: TF TO PC, 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
5424.600000	49.84	74.00	24.16	H	7.4	42.44
6946.714286	47.08	74.00	26.92	V	8.8	38.28
9369.428572	46.91	74.00	27.09	H	8.3	38.61
12310.285714	49.81	74.00	24.19	V	12.7	37.11
16699.285714	55.33	74.00	18.67	H	19.0	36.33
17657.142857	55.30	74.00	18.70	V	20.5	34.80

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
5424.600000	38.03	54.00	15.97	H	7.4	30.63
6946.714286	34.71	54.00	19.29	V	8.8	25.91
9369.428572	34.01	54.00	19.99	H	8.3	25.71
12310.285714	37.18	54.00	16.82	V	12.7	24.48
16699.285714	42.68	54.00	11.32	H	19.0	23.68
17657.142857	42.85	54.00	11.15	V	20.5	22.35

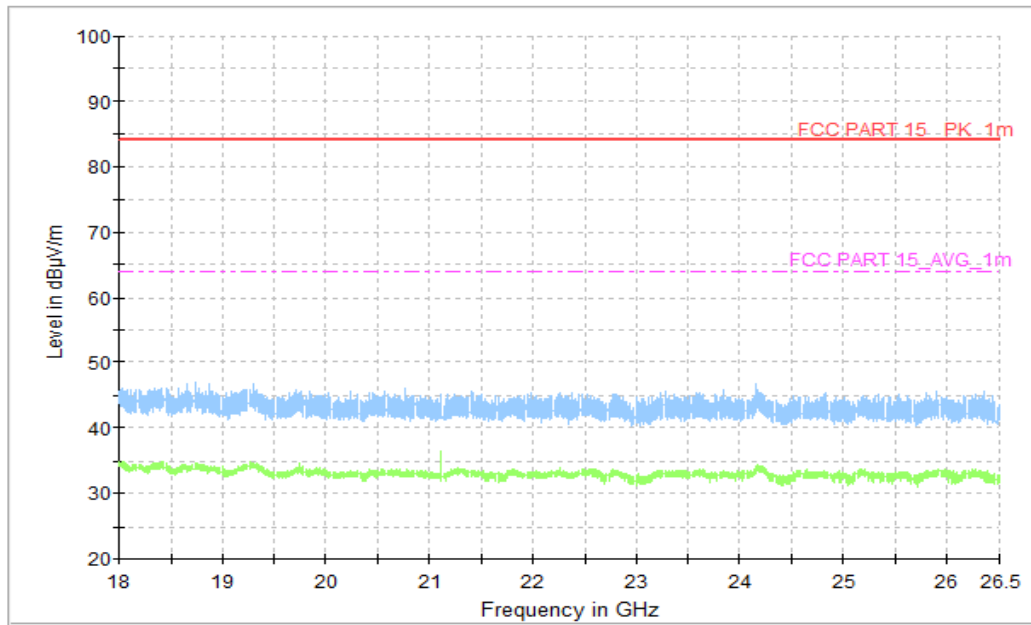


Figure A.1.25. Radiated Emission (Data Transfer: TF TO PC, 18GHz to 26.5GHz)

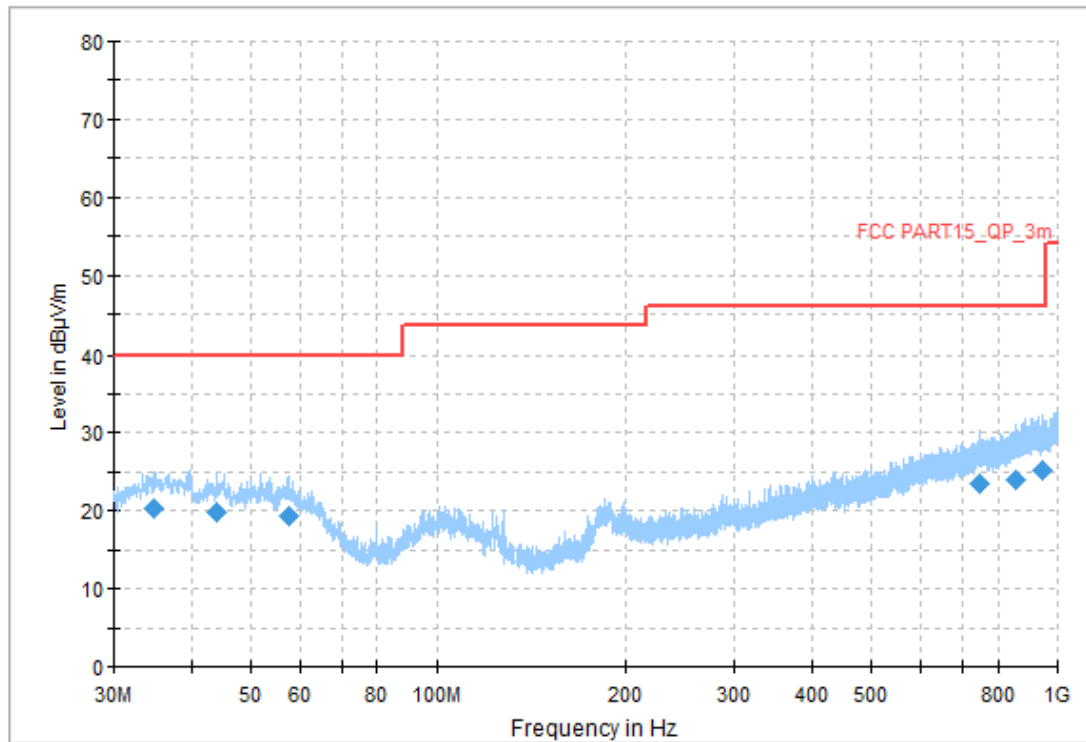


Figure A.1.26. Radiated Emission (Camera, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
34.796111	20.19	40.00	19.81	V	-14.6	34.79
43.957222	19.87	40.00	20.13	H	-13.2	33.07
57.429444	19.44	40.00	20.56	V	-12.7	32.14
750.009444	23.45	46.02	22.57	V	-2.0	25.45
852.937222	24.00	46.02	22.02	H	-1.2	25.2
942.069444	25.19	46.02	20.83	H	0.1	25.09

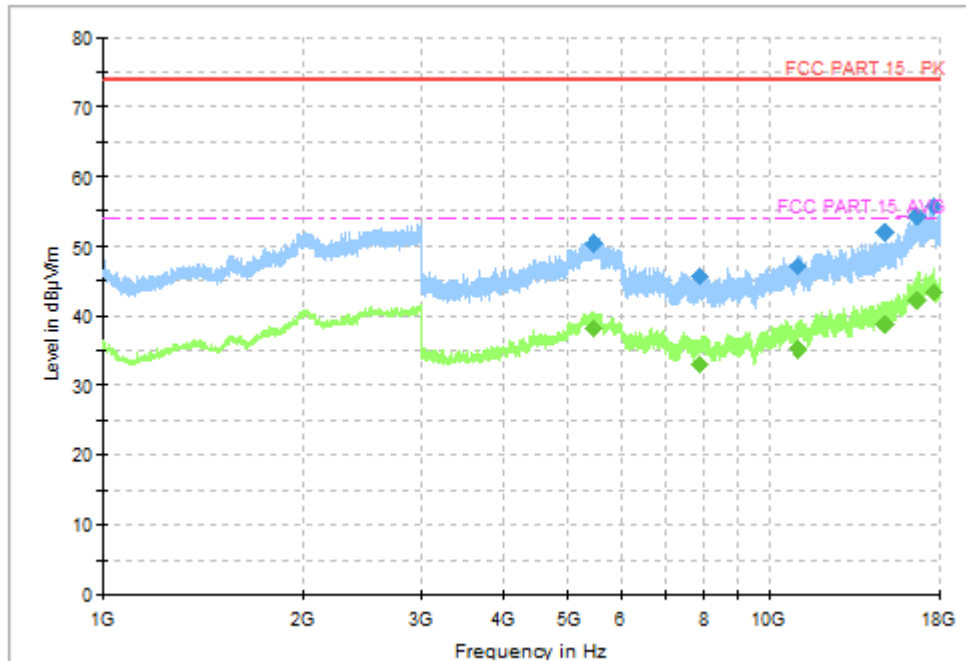


Figure A.1.27. Radiated Emission (Camera, 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
5449.500000	50.44	74.00	23.56	H	7.4	43.04
7866.000000	45.68	74.00	28.32	V	7.3	38.38
11026.285714	47.27	74.00	26.73	H	10.8	36.47
14944.714286	52.14	74.00	21.86	V	15.0	37.14
16692.428571	54.32	74.00	19.68	V	19.0	35.32
17705.571429	55.72	74.00	18.28	H	20.6	35.12

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
5449.500000	38.21	54.00	15.79	H	7.4	30.81
7866.000000	33.04	54.00	20.96	V	7.3	25.74
11026.285714	35.21	54.00	18.79	H	10.8	24.41
14944.714286	38.79	54.00	15.21	V	15.0	23.79
16692.428571	42.28	54.00	11.72	V	19.0	23.28
17705.571429	43.26	54.00	10.74	H	20.6	22.66

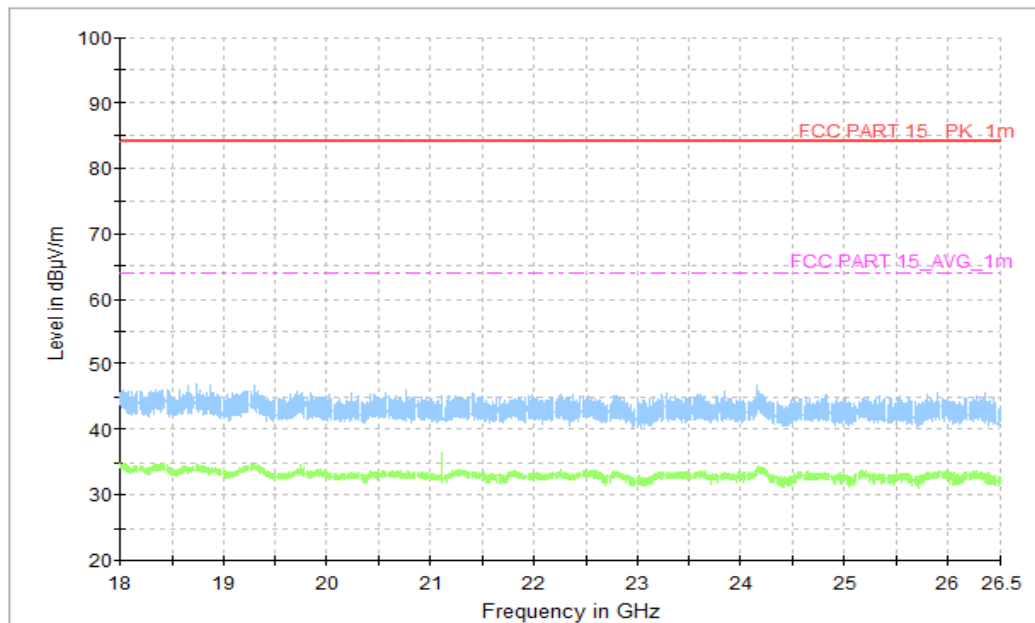


Figure A.1.28. Radiated Emission (Camera, 18GHz to 26.5GHz)

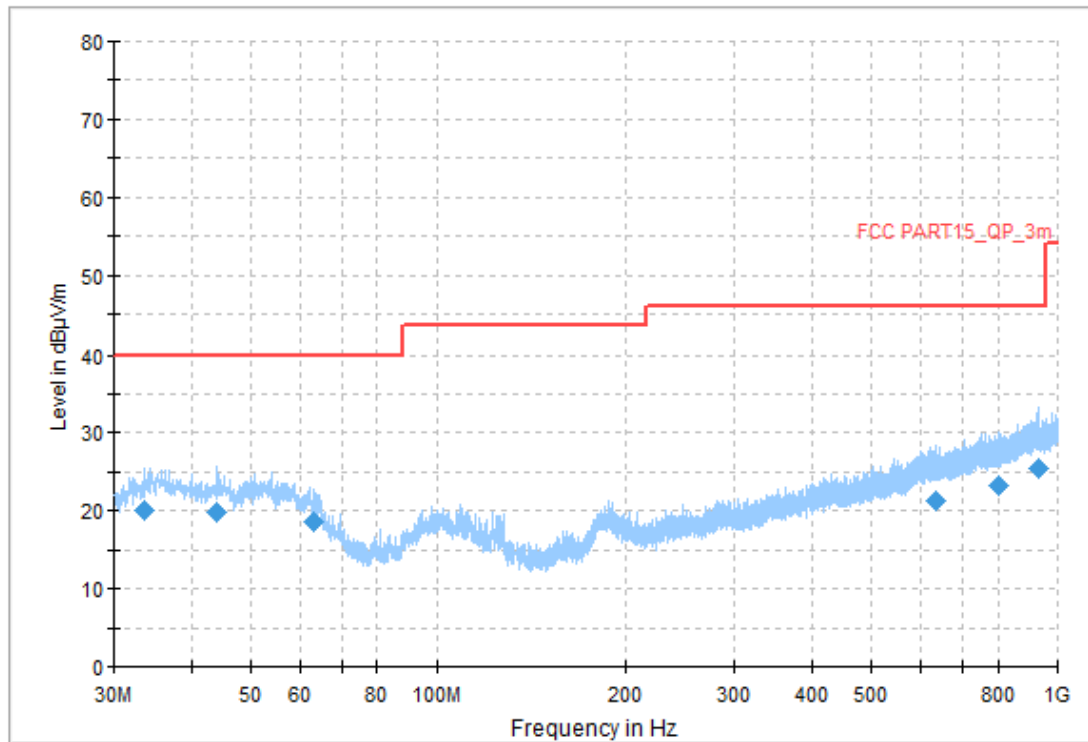


Figure A.1.29. Radiated Emission (Camera, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
33.718333	19.99	40.00	20.01	V	-14.9	34.89
44.118889	19.93	40.00	20.07	V	-13.2	33.13
63.033889	18.58	40.00	21.42	V	-14.6	33.18
635.495556	21.28	46.02	24.74	V	-4.3	25.58
800.018333	23.24	46.02	22.78	H	-2.1	25.34
933.123889	25.38	46.02	20.64	H	0.3	25.08

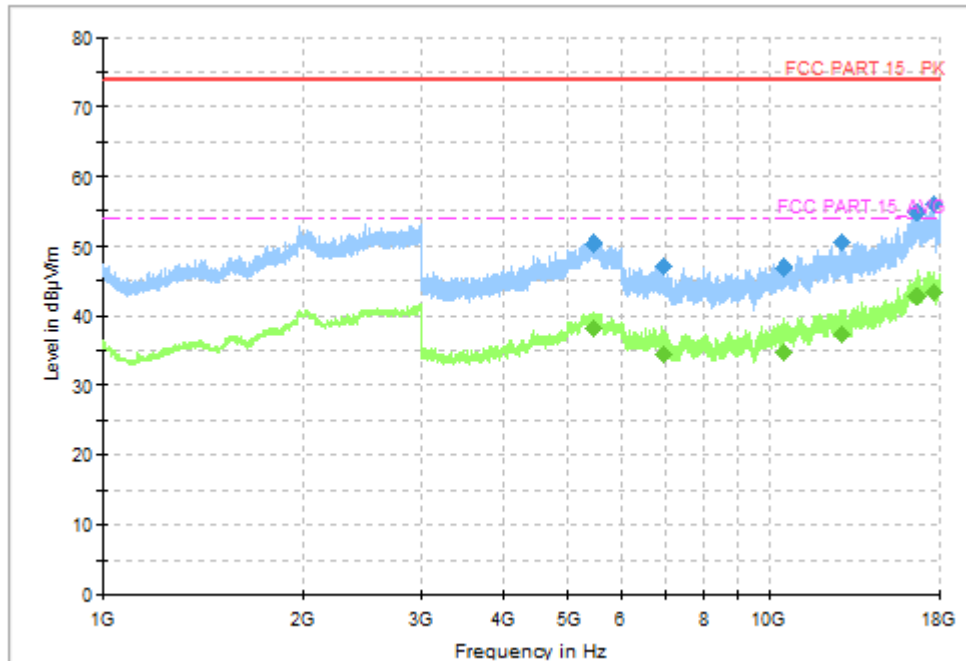


Figure A.1.30. Radiated Emission (Camera, 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
5473.200000	50.47	74.00	23.53	H	7.2	43.27
6937.714286	47.16	74.00	26.84	V	8.8	38.36
10524.000000	46.93	74.00	27.07	V	9.5	37.43
12900.857143	50.69	74.00	23.31	H	12.7	37.99
16706.142857	54.70	74.00	19.30	V	19.0	35.7
17707.285714	55.91	74.00	18.09	H	20.6	35.31

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
5473.200000	38.21	54.00	15.79	H	7.2	31.01
6937.714286	34.51	54.00	19.49	V	8.8	25.71
10524.000000	34.81	54.00	19.19	V	9.5	25.31
12900.857143	37.51	54.00	16.49	H	12.7	24.81
16706.142857	42.72	54.00	11.28	V	19.0	23.72
17707.285714	43.20	54.00	10.80	H	20.6	22.60

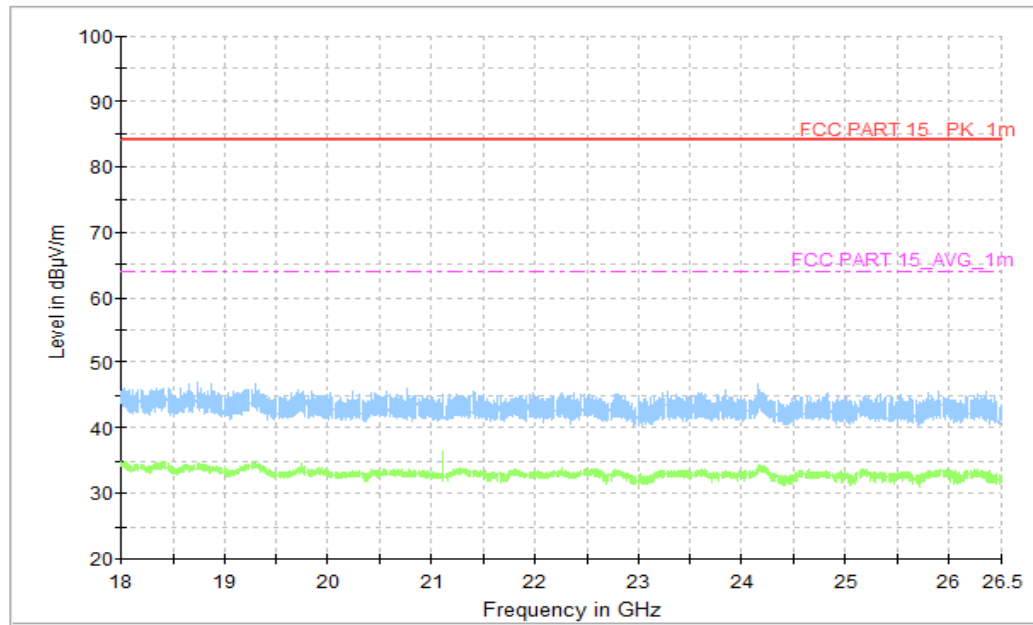


Figure A.1.31. Radiated Emission (Camera, 18GHz to 26.5GHz)

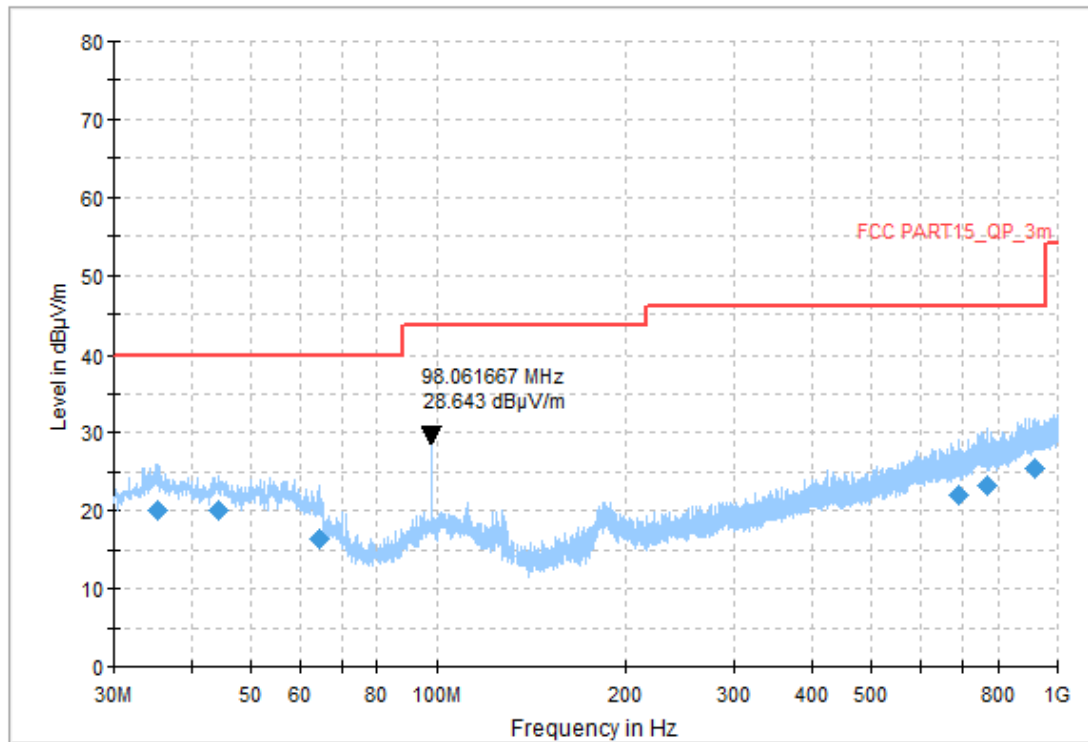


Figure A.1.32. Radiated Emission (FM Receiver, 30MHz to 1GHz)

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	ARpl (dB/m)	P _{Mea} (dBμV)
35.227222	20.10	40.00	19.90	V	-14.4	34.50
44.442222	20.01	40.00	19.99	V	-13.2	33.21
64.273333	16.31	40.00	23.69	V	-15.0	31.31
691.378333	22.07	46.02	23.95	V	-3.5	25.57
767.685000	23.22	46.02	22.80	H	-2.2	25.42
916.472222	25.54	46.02	20.48	H	0.3	25.24

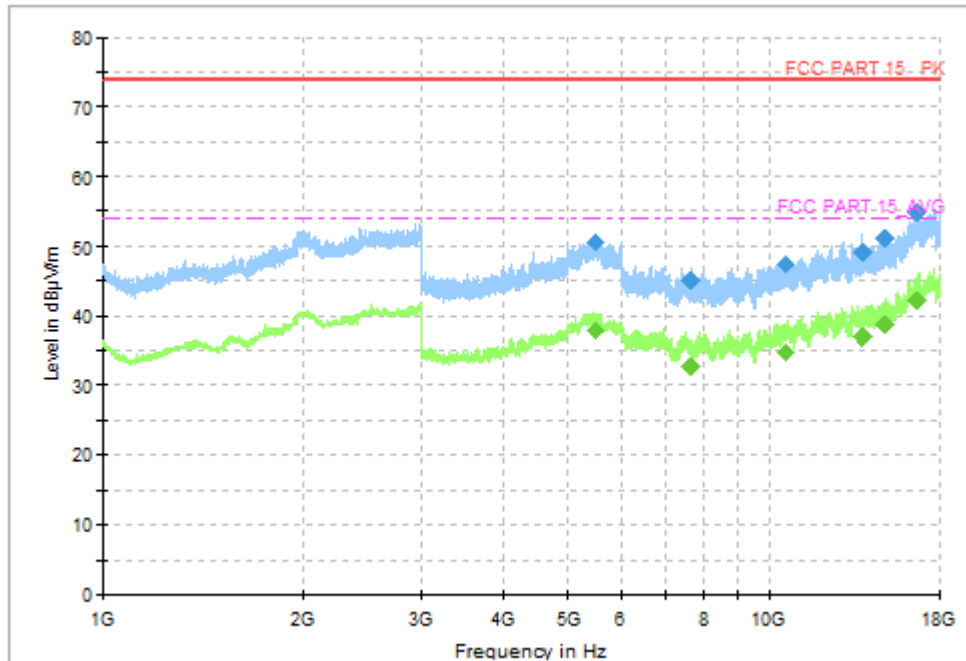


Figure A.1.33. Radiated Emission (FM Receiver, 1GHz to 18GHz)

Final_Results_PK

Frequency(MHz)	Peak (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
5498.100000	50.62	74.00	23.38	H	7.1	43.52
7653.428572	45.09	74.00	28.91	V	6.0	39.09
10591.714286	47.40	74.00	26.60	V	9.6	37.80
13801.285714	49.21	74.00	24.79	H	13.2	36.01
14951.142857	51.20	74.00	22.80	H	14.9	36.3
16682.142857	54.79	74.00	19.21	V	19.0	35.79

Final_Results_AVG

Frequency(MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin(dB)	Polarity	ARpl (dB/m)	P _{Mea} (dBμV)
5498.100000	37.89	54.00	16.11	H	7.1	30.79
7653.428572	32.67	54.00	21.33	V	6.0	26.67
10591.714286	34.75	54.00	19.25	V	9.6	25.15
13801.285714	37.02	54.00	16.98	H	13.2	23.82
14951.142857	38.97	54.00	15.03	H	14.9	24.07
16682.142857	42.40	54.00	11.60	V	19.0	23.40

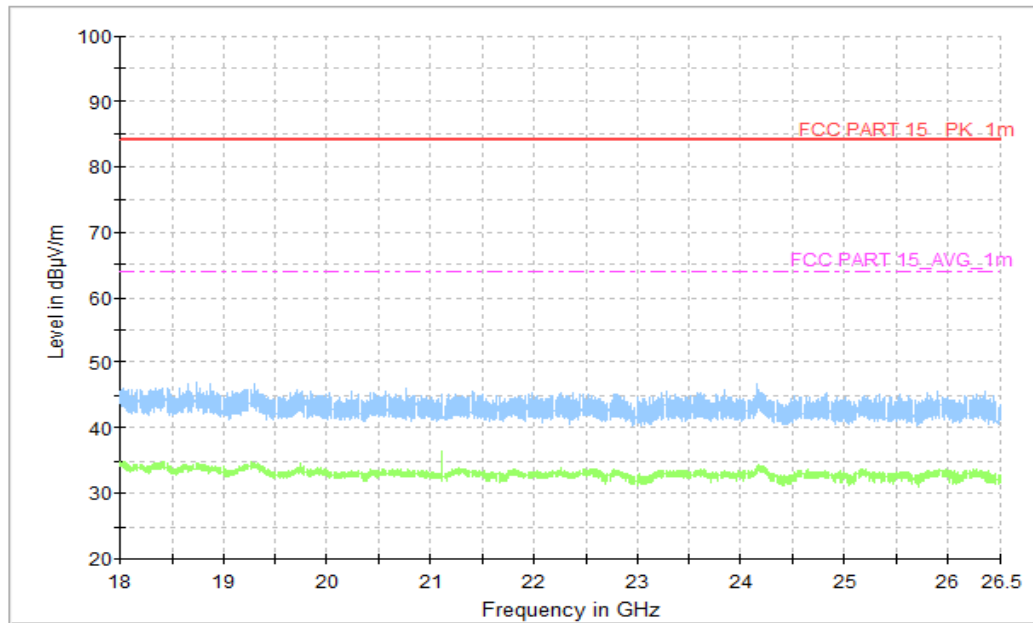


Figure A.1.34. Radiated Emission (FM Receiver, 18GHz to 26.5GHz)

A.2 Conducted Emission (§15.107(a))

Reference

FCC: Part 15.107(a)

IC: ICES-003 section 6.1.

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.

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.

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.

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

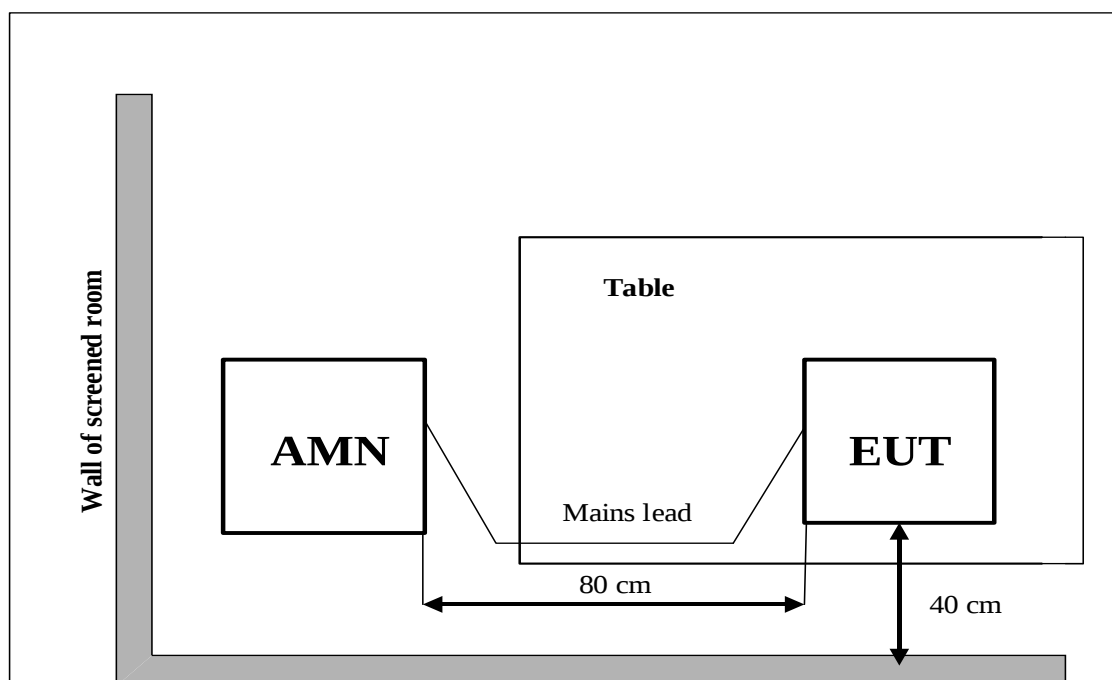
WCDMA receiver: The EUT is connected to a charger for charging. The EUT is synchronized to System Simulator (SS), and able to respond to paging messages and incoming call. An established call has been released.

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

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
			UT02aa/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.

Camera

AC Input Port/ Voltage: 240V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			UT02aa/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
			UT02aa/Set.1	
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: 240V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			UT02aa/Set.1	
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.				

Video Player

AC Input Port/ Voltage: 120V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			UT02aa/Set.1	
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.				

Video Player

AC Input Port/ Voltage: 240V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			UT02aa/Set.1	
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.				

Data Transfer

AC Input Port/ Voltage: 120V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			UT02aa/Set.3	
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.				

Data Transfer

AC Input Port/ Voltage: 240V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			UT02aa /Set.3	
0.15 to 0.5	66 to 56	56 to 46	See Figure A.2.8.	P
0.5 to 5	56	46		
5 to 30	60	50		
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

Video Player

AC Input Port/ Voltage: 120V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dB μ V)	Average Limit (dB μ V)	Result (dB μ V)	Conclusion
			UT02aa/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.

Video Player

AC Input Port/ Voltage: 240V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dB μ V)	Average Limit (dB μ V)	Result (dB μ V)	Conclusion
			UT02aa /Set.2	
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.

Video Player

AC Input Port/ Voltage: 120V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dB μ V)	Average Limit (dB μ V)	Result (dB μ V)	Conclusion
			UT06aa/Set.1	
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.

Video Player

AC Input Port/ Voltage: 240V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dB μ V)	Average Limit (dB μ V)	Result (dB μ V)	Conclusion
			UT06aa /Set.1	
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.

FM Receiver

AC Input Port/ Voltage: 120V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			UT06aa/Set.1	
0.15 to 0.5	66 to 56	56 to 46	See Figure A.2.13.	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.				

FM Receiver

AC Input Port/ Voltage: 240V/60Hz

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average Limit (dBμV)	Result (dBμV)	Conclusion
			UT06aa/Set.1	
0.15 to 0.5	66 to 56	56 to 46	See Figure A.2.14.	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

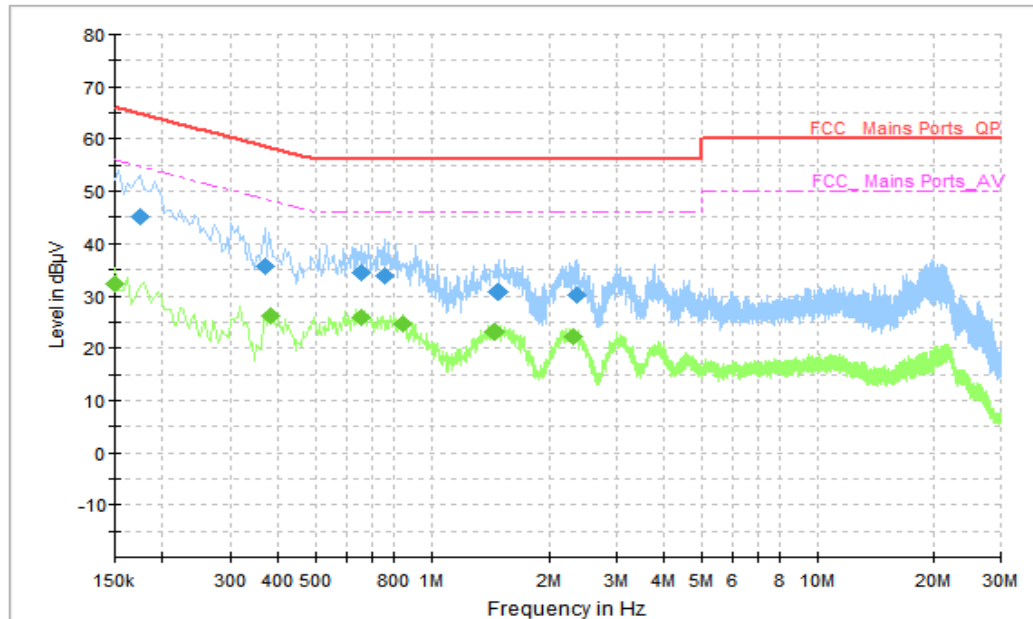


Figure A.2.1. Conducted Emission (Camera)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.182000	47.11	64.39	17.28	N	9	38.11
0.310000	39.03	59.97	20.94	N	10	29.03
0.550000	32.34	56.00	23.66	L1	10	22.34
0.826000	33.14	56.00	22.86	N	10	23.14
1.466000	31.97	56.00	24.03	N	10	21.97
2.326000	31.63	56.00	24.37	N	10	21.63

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.174000	33.72	54.77	21.05	L1	10	23.72
0.382000	27.28	48.24	20.95	N	10	17.28
0.638000	26.25	46.00	19.75	N	10	16.25
0.766000	25.08	46.00	20.92	N	10	15.08
1.562000	23.35	46.00	22.65	N	10	13.35
2.218000	22.85	46.00	23.15	N	10	12.85

AC Input Port/ Voltage: 240V/60Hz

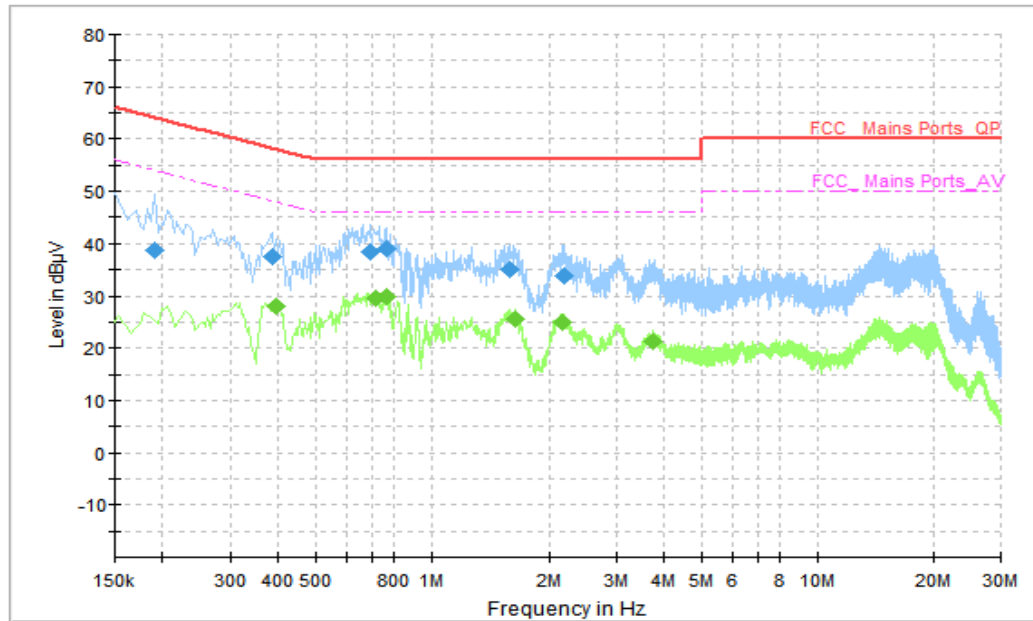


Figure A.2.2. Conducted Emission (Camera)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.190000	38.87	64.04	25.17	L1	10	28.87
0.386000	37.42	58.15	20.73	N	10	27.42
0.694000	38.34	56.00	17.66	N	10	28.34
0.762000	38.89	56.00	17.11	N	10	28.89
1.574000	35.16	56.00	20.84	N	10	25.16
2.186000	33.88	56.00	22.12	N	10	23.88

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.394000	27.88	47.98	20.10	N	10	17.88
0.718000	29.58	46.00	16.42	N	10	19.58
0.762000	29.85	46.00	16.15	N	10	19.85
1.626000	25.61	46.00	20.39	N	10	15.61
2.162000	25.04	46.00	20.96	N	10	15.04
3.738000	21.27	46.00	24.73	N	10	11.27

AC Input Port/ Voltage: 120V/60Hz

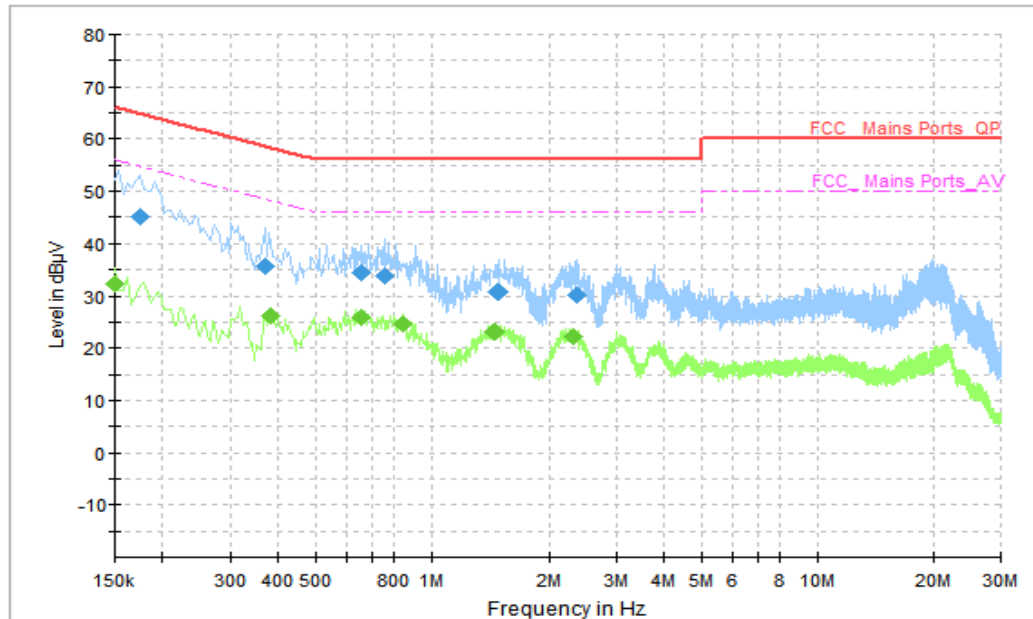


Figure A.2.3. Conducted Emission (FM Receiver)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.174000	45.13	64.77	19.64	N	8	37.13
0.370000	35.73	58.50	22.77	N	10	25.73
0.654000	34.49	56.00	21.51	N	10	24.49
0.758000	33.69	56.00	22.31	N	10	23.69
1.482000	30.65	56.00	25.35	N	10	20.65
2.370000	30.29	56.00	25.71	N	10	20.29

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.150000	32.18	56.00	23.82	L1	10	22.18
0.382000	26.06	48.24	22.18	N	10	16.06
0.654000	25.83	46.00	20.17	N	10	15.83
0.846000	24.72	46.00	21.28	N	10	14.72
1.454000	23.07	46.00	22.93	N	10	13.07
2.326000	22.26	46.00	23.74	N	10	12.26

AC Input Port/ Voltage: 240V/60Hz

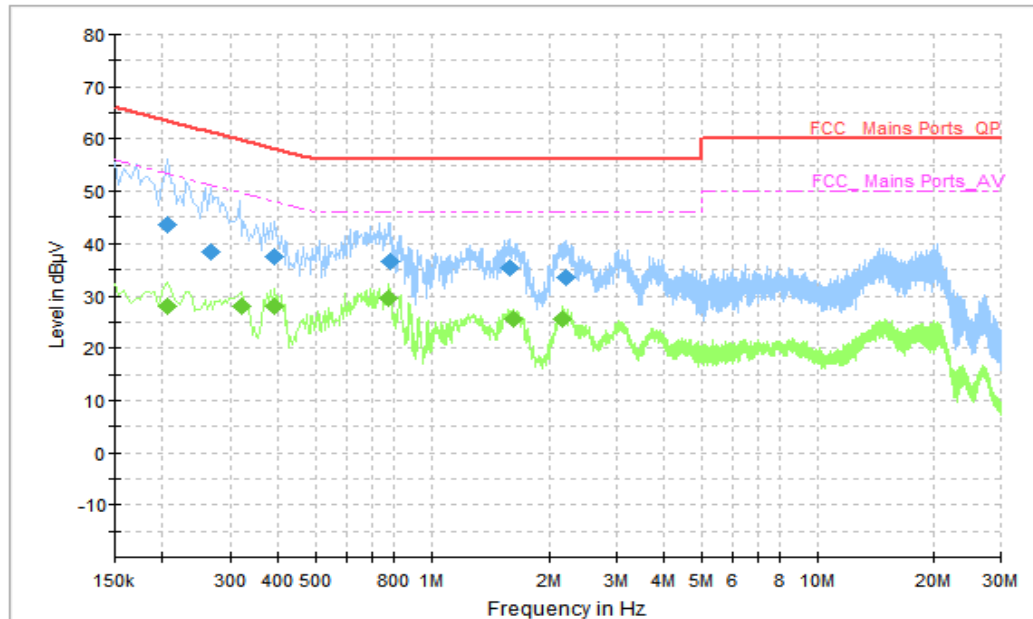


Figure A.2.4. Conducted Emission (FM Receiver)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.206000	43.54	63.37	19.82	N	10	33.54
0.266000	38.36	61.24	22.89	N	10	28.36
0.390000	37.59	58.06	20.48	N	10	27.59
0.782000	36.60	56.00	19.40	N	10	26.60
1.586000	35.26	56.00	20.74	N	10	25.26
2.226000	33.56	56.00	22.44	N	10	23.56

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.206000	27.99	53.37	25.38	N	10	17.99
0.322000	28.01	49.66	21.64	N	10	18.01
0.390000	28.16	48.06	19.90	N	10	18.16
0.774000	29.63	46.00	16.37	N	10	19.63
1.622000	25.60	46.00	20.40	N	10	15.6
2.178000	25.53	46.00	20.47	N	10	15.53

AC Input Port/ Voltage: 120V/60Hz

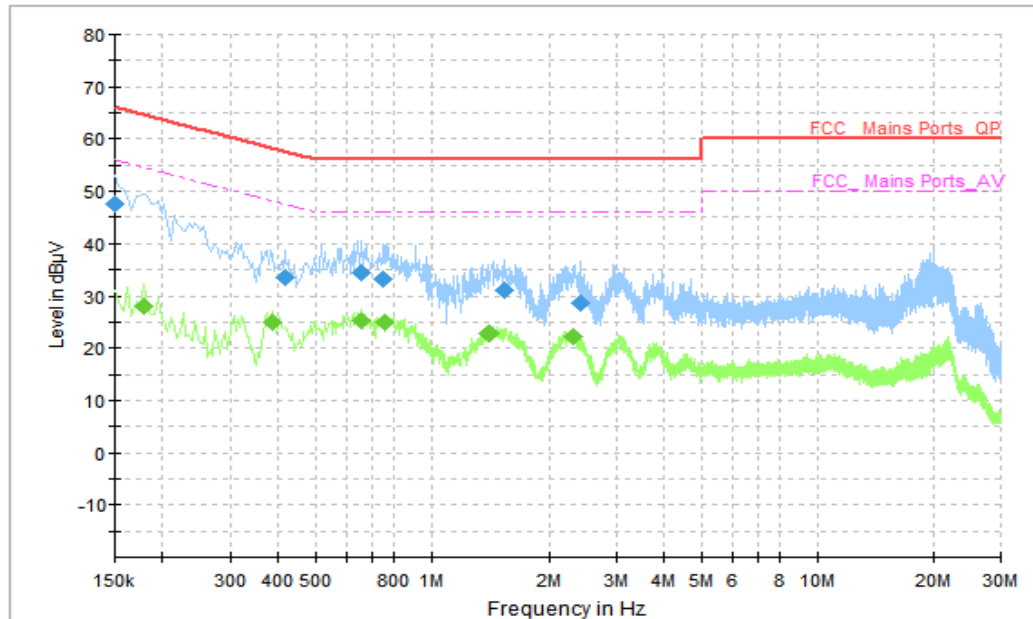


Figure A.2.5. Conducted Emission (Video Player)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.150000	47.64	66.00	18.36	L1	10	37.64
0.414000	33.47	57.57	24.10	N	10	23.47
0.654000	34.32	56.00	21.68	N	10	24.32
0.750000	33.26	56.00	22.74	N	10	23.26
1.534000	31.05	56.00	24.95	N	10	21.05
2.418000	28.77	56.00	27.23	N	10	18.77

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.178000	28.05	54.58	26.53	L1	10	18.05
0.386000	25.09	48.15	23.06	N	10	15.09
0.658000	25.27	46.00	20.73	N	10	15.27
0.754000	24.84	46.00	21.16	N	10	14.84
1.410000	22.67	46.00	23.33	N	10	12.67
2.318000	22.15	46.00	23.85	N	10	12.15

AC Input Port/ Voltage: 240V/60Hz

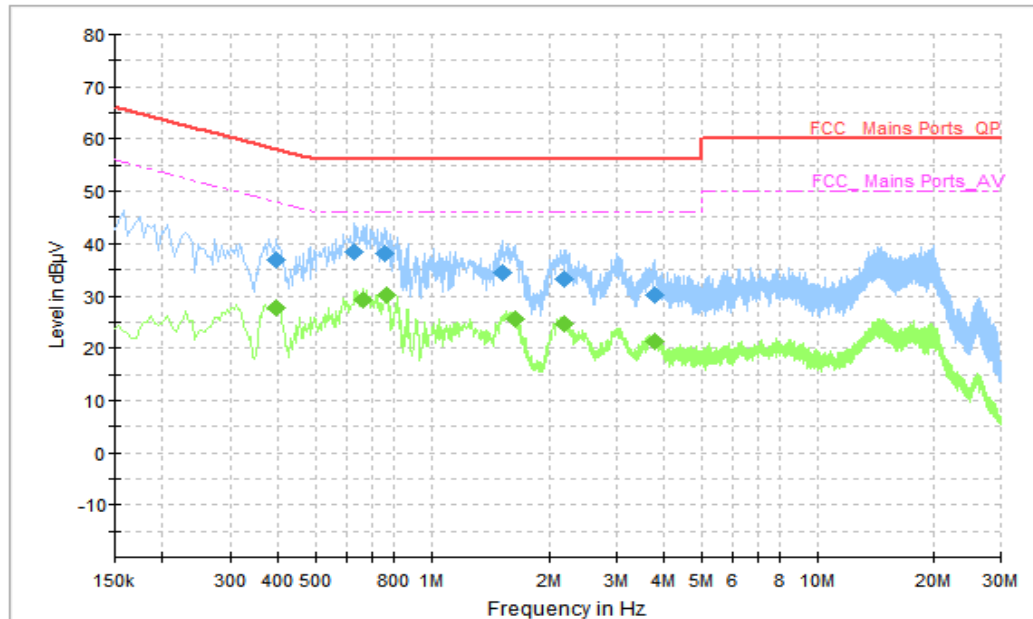


Figure A.2.6. Conducted Emission (Video Player)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.394000	36.82	57.98	21.16	N	10	26.82
0.630000	38.55	56.00	17.45	N	10	28.55
0.754000	38.06	56.00	17.94	N	10	28.06
1.510000	34.49	56.00	21.51	N	10	24.49
2.198000	33.14	56.00	22.86	N	10	23.14
3.774000	30.24	56.00	25.76	N	10	20.24

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.394000	27.84	47.98	20.14	N	10	17.84
0.662000	29.28	46.00	16.72	N	10	19.28
0.762000	30.03	46.00	15.97	N	10	20.03
1.626000	25.56	46.00	20.44	N	10	15.56
2.186000	24.76	46.00	21.24	N	10	14.76
3.774000	21.18	46.00	24.82	N	10	11.18

AC Input Port/ Voltage: 120V/60Hz

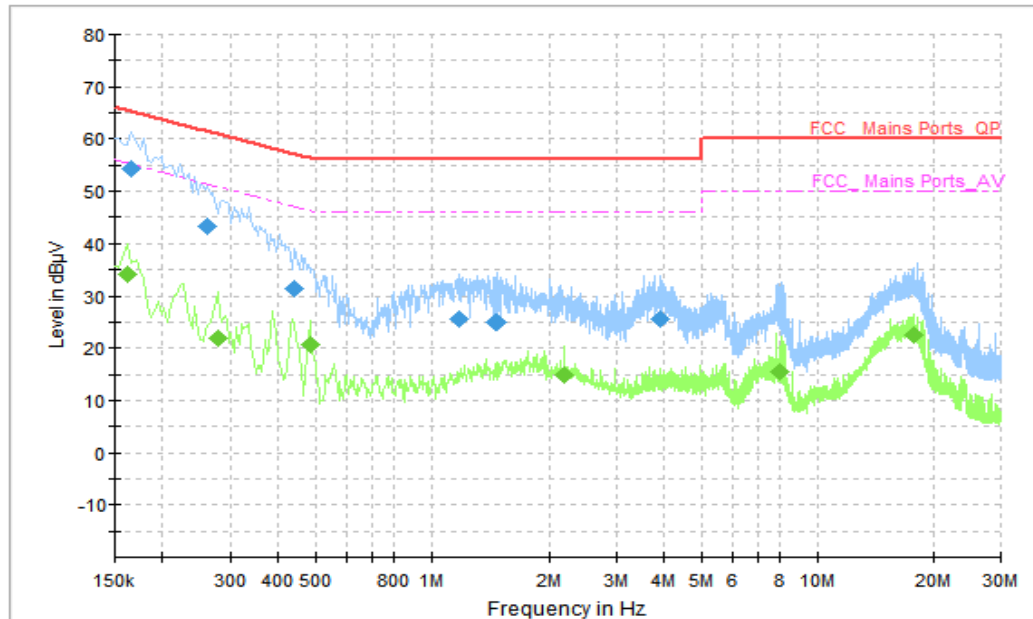


Figure A.2.7. Conducted Emission (Data Transfer)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.166000	54.38	65.16	10.78	L1	10	44.38
0.262000	43.20	61.37	18.16	N	10	33.2
0.438000	31.28	57.10	25.82	N	10	21.28
1.186000	25.45	56.00	30.55	L1	10	15.45
1.466000	24.99	56.00	31.01	L1	10	14.99
3.898000	25.50	56.00	30.50	L1	10	15.50

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.162000	34.28	55.36	21.08	L1	10	24.28
0.278000	21.97	50.88	28.90	N	10	11.97
0.482000	20.80	46.31	25.50	L1	10	10.80
2.190000	14.79	46.00	31.21	N	10	4.79
8.018000	15.47	50.00	34.53	L1	10	5.47
17.722000	22.42	50.00	27.58	N	10	12.42

AC Input Port/ Voltage: 240V/60Hz

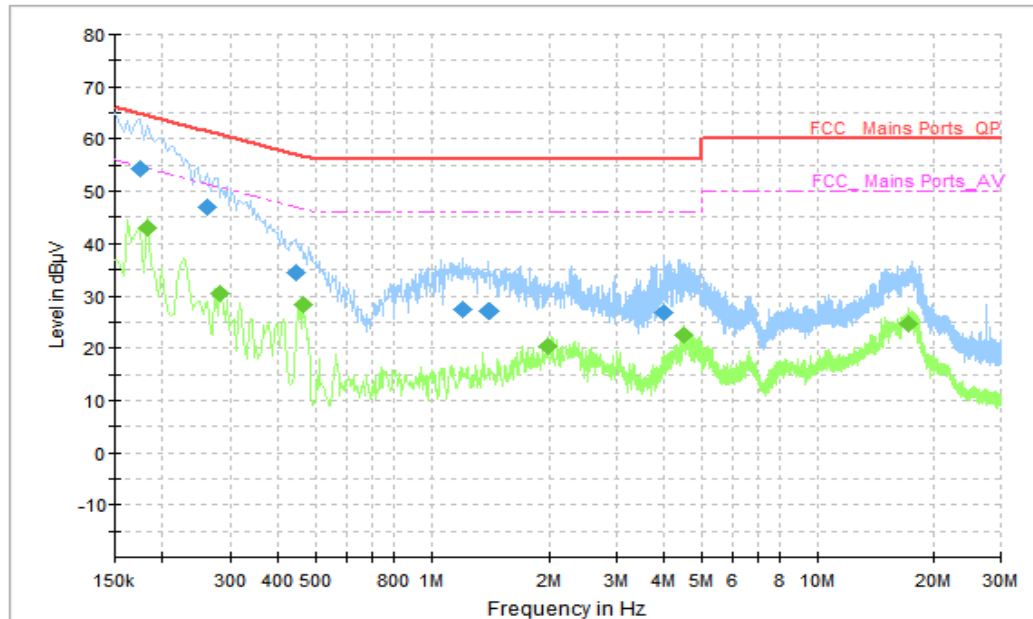


Figure A.2.8. Conducted Emission (Data Transfer)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.174000	54.28	64.77	10.48	N	8	46.28
0.262000	47.00	61.37	14.37	L1	10	37
0.442000	34.54	57.02	22.49	N	10	24.54
1.206000	27.41	56.00	28.59	L1	10	17.41
1.410000	27.01	56.00	28.99	L1	10	17.01
4.002000	26.85	56.00	29.15	L1	10	16.85

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.182000	43.13	54.39	11.26	L1	10	33.13
0.282000	30.53	50.76	20.23	N	10	20.53
0.462000	28.20	46.66	18.46	L1	10	18.20
1.986000	20.22	46.00	25.78	N	10	10.22
4.498000	22.39	46.00	23.61	N	10	12.39
17.334000	24.55	50.00	25.45	N	10	14.55

AC Input Port/ Voltage: 120V/60Hz

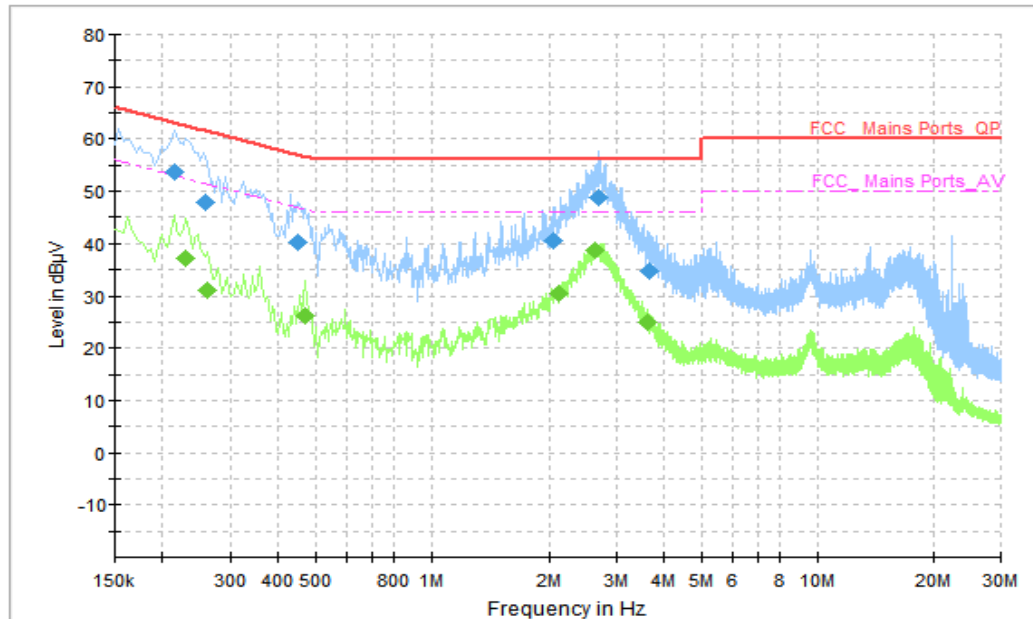


Figure A.2.9. Conducted Emission (Video Player)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.214000	53.56	63.05	9.49	N	10	43.56
0.258000	47.88	61.50	13.62	N	10	37.88
0.450000	40.24	56.88	16.64	N	10	30.24
2.062000	40.41	56.00	15.59	N	10	30.41
2.694000	48.69	56.00	7.31	N	10	38.69
3.634000	34.63	56.00	21.37	N	10	24.63

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.230000	37.04	52.45	15.41	N	10	27.04
0.262000	30.94	51.37	20.43	N	10	20.94
0.470000	26.21	46.51	20.31	N	10	16.21
2.110000	30.39	46.00	15.61	N	10	20.39
2.634000	38.65	46.00	7.35	N	10	28.65
3.610000	25.02	46.00	20.98	N	10	15.02

AC Input Port/ Voltage: 240V/60Hz

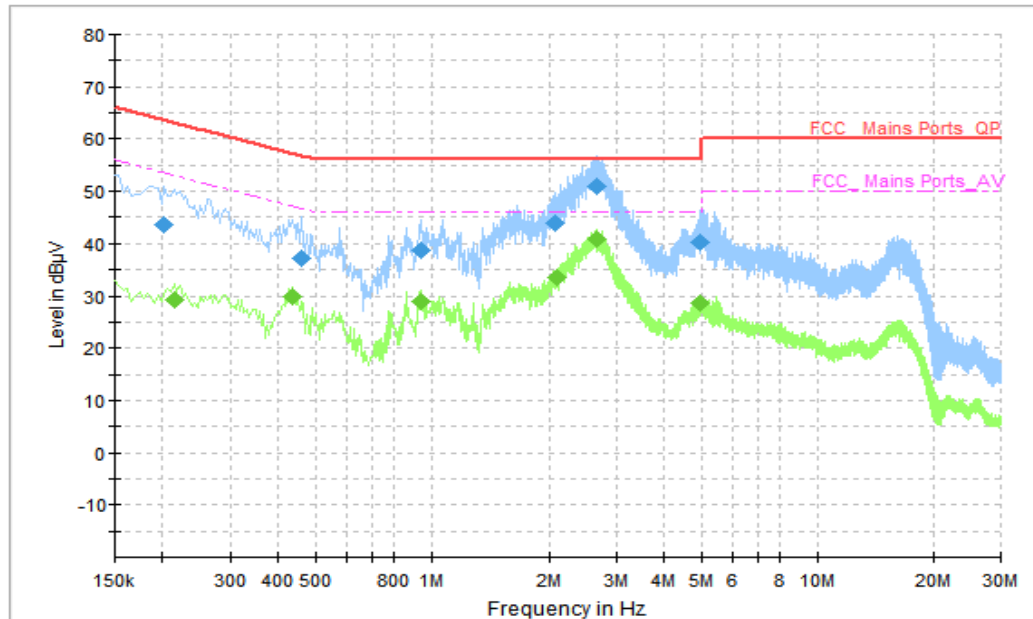


Figure A.2.10. Conducted Emission (Video Player)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.202000	43.57	63.53	19.96	N	10	33.57
0.458000	37.19	56.73	19.53	N	10	27.19
0.942000	38.84	56.00	17.16	N	10	28.84
2.086000	44.03	56.00	11.97	N	10	34.03
2.678000	50.82	56.00	5.18	N	10	40.82
4.974000	40.37	56.00	15.63	N	10	30.37

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.214000	29.39	53.05	23.66	N	10	19.39
0.434000	29.97	47.18	17.21	N	10	19.97
0.942000	28.87	46.00	17.13	N	10	18.87
2.094000	33.43	46.00	12.57	N	10	23.43
2.666000	40.72	46.00	5.28	N	10	30.72
4.974000	28.51	46.00	17.49	N	10	18.51

AC Input Port/ Voltage: 120V/60Hz

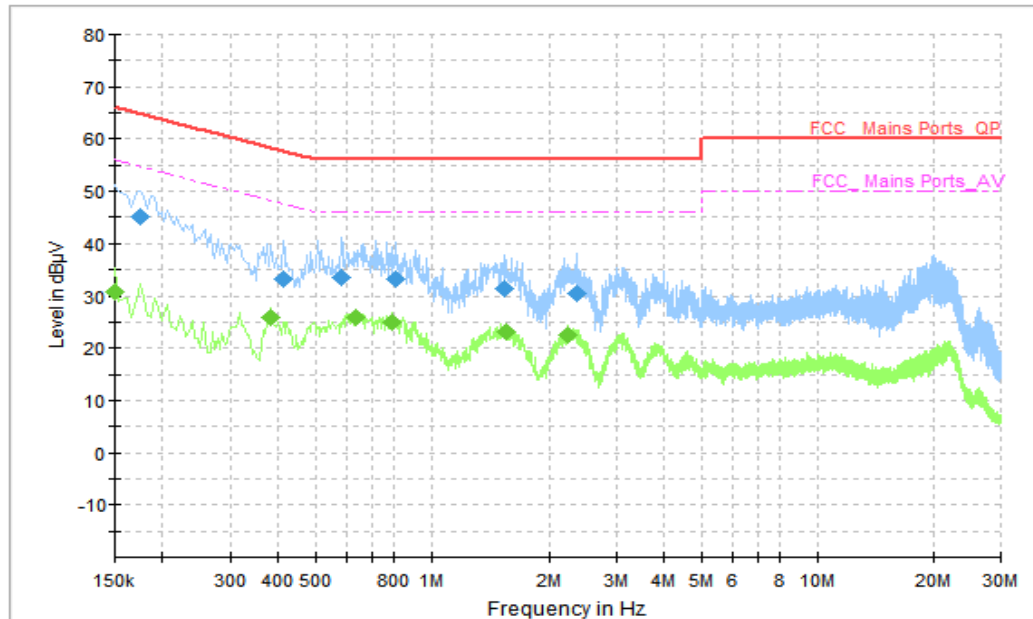


Figure A.2.11. Conducted Emission (Video Player)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.174000	45.05	64.77	19.72	L1	10	35.05
0.410000	33.30	57.65	24.34	N	10	23.3
0.582000	33.48	56.00	22.52	N	10	23.48
0.806000	33.11	56.00	22.89	N	10	23.11
1.526000	31.34	56.00	24.66	N	10	21.34
2.354000	30.46	56.00	25.54	N	10	20.46

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.150000	30.86	56.00	25.14	L1	10	20.86
0.382000	25.90	48.24	22.34	N	10	15.9
0.634000	25.86	46.00	20.14	N	10	15.86
0.794000	25.03	46.00	20.97	N	10	15.03
1.542000	23.17	46.00	22.83	N	10	13.17
2.250000	22.38	46.00	23.62	N	10	12.38

AC Input Port/ Voltage: 240V/60Hz

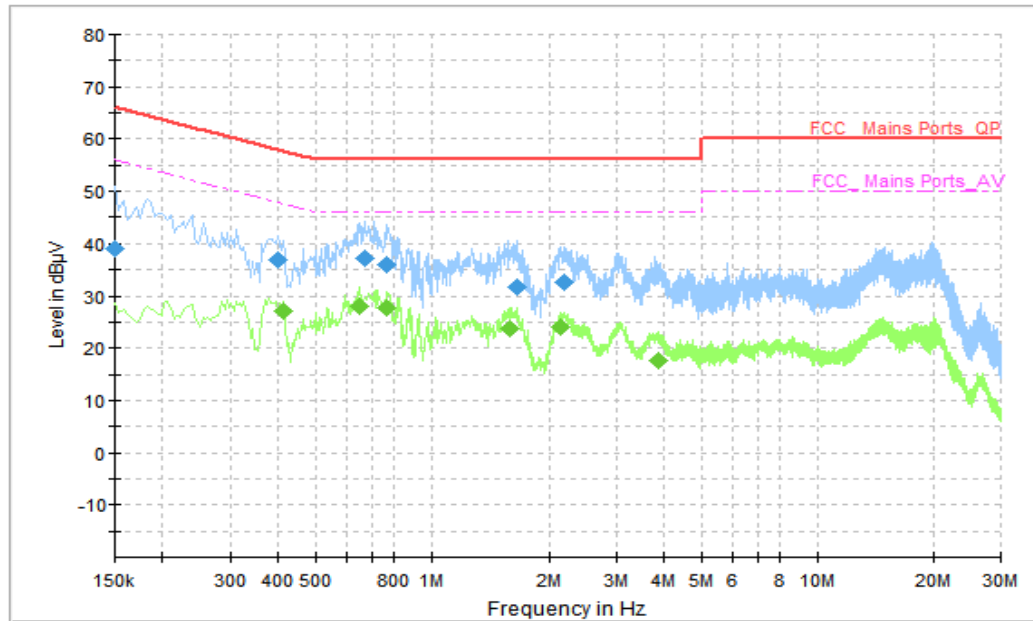


Figure A.2.12. Conducted Emission (Video Player)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.150000	38.95	66.00	27.05	L1	10	28.95
0.398000	36.73	57.90	21.16	N	10	26.73
0.670000	37.25	56.00	18.75	N	10	27.25
0.766000	36.06	56.00	19.94	N	10	26.06
1.650000	31.82	56.00	24.18	N	10	21.82
2.190000	32.71	56.00	23.29	N	10	22.71

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.410000	27.09	47.65	20.55	N	10	17.09
0.650000	28.16	46.00	17.84	N	10	18.16
0.766000	27.64	46.00	18.36	N	10	17.64
1.590000	23.66	46.00	22.34	N	10	13.66
2.134000	23.97	46.00	22.03	N	10	13.97
3.838000	17.54	46.00	28.46	N	10	7.54

AC Input Port/ Voltage: 120V/60Hz

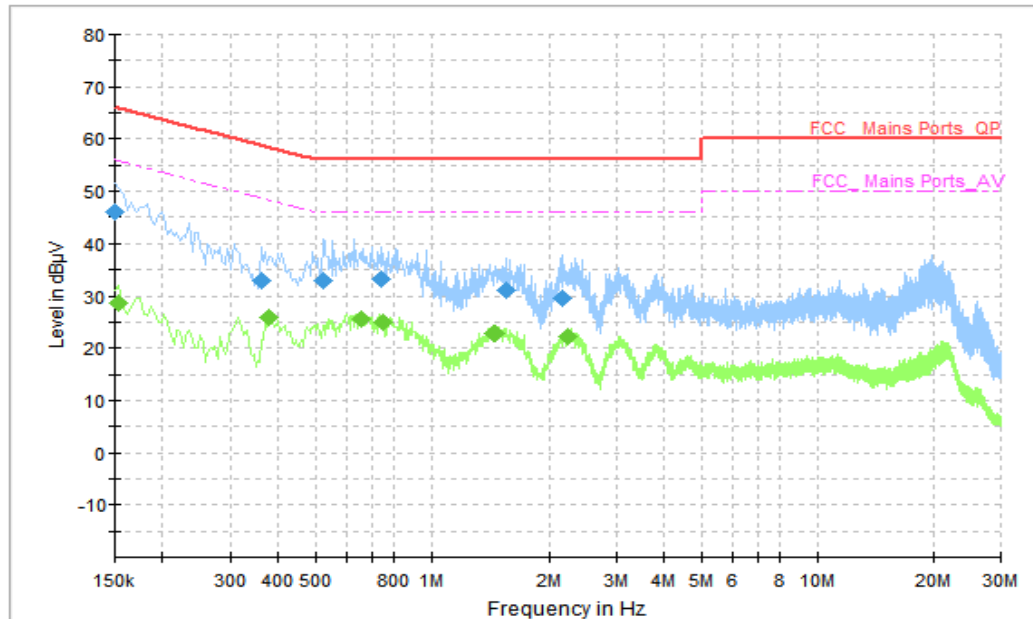


Figure A.2.13. Conducted Emission (FM Receiver)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.150000	46.04	66.00	19.96	L1	10	36.04
0.362000	32.79	58.68	25.89	N	10	22.79
0.522000	33.04	56.00	22.96	N	10	23.04
0.738000	33.14	56.00	22.86	N	10	23.14
1.542000	30.93	56.00	25.07	N	10	20.93
2.166000	29.48	56.00	26.52	N	10	19.48

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.154000	28.51	55.78	27.27	L1	10	18.51
0.378000	25.82	48.32	22.50	N	10	15.82
0.654000	25.63	46.00	20.37	N	10	15.63
0.746000	24.93	46.00	21.07	N	10	14.93
1.450000	22.76	46.00	23.24	N	10	12.76
2.250000	22.12	46.00	23.88	N	10	12.12

AC Input Port/ Voltage: 240V/60Hz

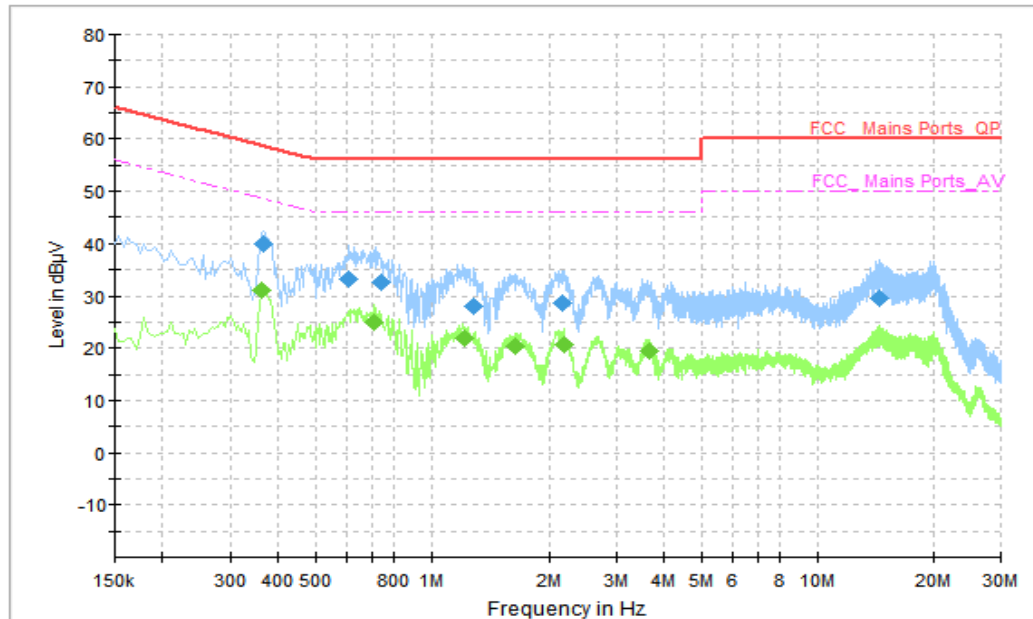


Figure A.2.14. Conducted Emission (FM Receiver)

Final_Result_QPK

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.366000	39.86	58.59	18.73	N	10	29.86
0.610000	33.31	56.00	22.69	N	10	23.31
0.742000	32.66	56.00	23.34	N	10	22.66
1.294000	27.98	56.00	28.02	N	10	17.98
2.178000	28.61	56.00	27.39	N	10	18.61
14.494000	29.57	60.00	30.43	N	10	19.57

Final_Result_AVG

Frequency (MHz)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)	P _{Mea} (dBμV)
0.362000	31.14	48.68	17.54	N	10	21.14
0.710000	25.07	46.00	20.93	N	10	15.07
1.214000	21.75	46.00	24.25	N	10	11.75
1.634000	20.49	46.00	25.51	N	10	10.49
2.194000	20.69	46.00	25.31	N	10	10.69
3.634000	19.47	46.00	26.53	N	10	9.47

END OF REPORT