



TEST REPORT

Application No: AR/2021/50004
Applicant: Xiaomi Communications Co., Ltd.
Address of Applicant: #019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085
Manufacturer: Xiaomi Communications Co., Ltd.
Address of Manufacturer: #019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085
EUT Description: Mobile Phone
Model No.: 21081111RG
Trade Mark: XIAOMI
FCC ID: 2AFZZ11RG
Standard(s) : 47 CFR Part 15, Subpart B
Date of Receipt: 2021/6/11
Date of Test: 2021/6/13 to 2021/7/16
Date of Issue: 2021/7/27

Test Result:	Pass*
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* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

Simon Ling

Wireless Laboratory Manager



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SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd.
Wireless Laboratory

1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

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Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2021/7/27		Original

Authorized for issue by:	
Prepared By	 (Leah Chen) / Engineer
Checked By	 (Daniel Wang) /Reviewer



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Test Summary

Emission Part				
Item	Standard	Method	Requirement	Result
Conducted Emissions at Mains Terminals (150kHz-30MHz)	47 CFR Part 15, Subpart B	ANSI C63.4:2014	Class B	Pass
Radiated Emissions (30MHz-1GHz)	47 CFR Part 15, Subpart B	ANSI C63.4:2014	Class B	Pass
Radiated Emissions (above 1GHz)	47 CFR Part 15, Subpart B	ANSI C63.4:2014	Class B	Pass

Internal Source	Upper Frequency
Below 1.705MHz	30MHz
1.705MHz to 108MHz	1GHz
108MHz to 500MHz	2GHz
500MHz to 1GHz	5GHz
Above 1GHz	5th harmonic of the highest frequency or 40GHz, whichever is lower



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1 General Information

Product Name:	Mobile Phone		
Model No.(EUT):	21081111RG		
Trade Mark:	XIAOMI		
Hardware Version:	P2		
Software Version:	MIUI 12.5		
Frequency Bands:	Band	Tx (MHz)	Rx (MHz)
	GSM850	824~849	869~894
	GSM1900	1850~1910	1930~1990
	WCDMA Band II	1850~1910	1930~1990
	WCDMA Band IV	1710~1755	2110~2155
	WCDMA Band V	824~849	869~894
	LTE Band 2	1850~1910	1930~1990
	LTE Band 4	1710~1755	2110~2155
	LTE Band 5	824~849	869~894
	LTE Band 7	2500~2570	2620~2690
	LTE Band 12	699~716	729~746
	LTE Band 13	777~787	746~756
	LTE Band 17	704~716	734~746
	LTE Band 26	814~849	859~894
	LTE Band 38	2570~2620	2570~2620
	LTE Band 41	2496~2690	2496~2690
	LTE Band 42	3400~3600	3400~3600
	LTE Band 66	1710~1780	2110~2200
	NR Band N5	824~849	869~894
	NR Band N7	2500~2570	2620~2690
	NR Band N38	2570~2620	2570~2620
	NR Band N41	2496~2690	2496~2690
	NR Band N66	1710~1780	2110~2200
	NR Band N77	3450~3550 3700~3980	3450~3550 3700~3980
	NR Band N78	3450~3550	3450~3550
	Wi-Fi 2.4G	2412~2462	2412~2462
	Bluetooth	2402~2480	2402~2480
	Wi-Fi 5G	5150~5850	5150~5850
	NFC	13.56	
	GNSS(GPS+Glonass + Beidou+Galileo+QZSS)	1599~1610	

EUT 1=8+128G EUT2=8+256G



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1.1 Description of Support Units

Description	Manufacturer	Model No.	Inventory No.
Router	NETGEAR	R6020	No.XA1401
Computer	Lenovo	L480	No.XA1402
Mouse	A4TECH	OP-520NU USB	No.XA1403

1.2 Test Location

All tests were performed at:

Company:	SGS-CSTC STANDARDS TECHNICAL SERVICES (XI 'AN) CO., LTD.
Address:	1/F, Unit D, Building 1, Kanghong Orange Technology Park, No.137, Keyuan 3rd Road, Fengdong New City, Xi'an, Shaanxi China
Post code:	710086
Test engineer:	Leah Chen, Ken Liu, Andy Yao

1.3 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

A2LA (Certificate No. 4854.01)

SGS-CSTC STANDARDS TECHNICAL SERVICES (XI 'AN) CO., LTD. is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 4854.01.

FCC-Designation Number: CN1271.

1.4 Deviation from Standards

None

1.5 Abnormalities from Standard Conditions

None



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2 Emission Test Results

2.1 Conducted Emissions at Mains Terminals (150kHz-30MHz)

Test Requirement:	47 CFR Part 15, Subpart B
Test Method:	ANSI C63.4:2014
Frequency Range:	150kHz to 30MHz
Limit:	
0.15M-0.5MHz	66dB(μV)-56dB(μV) quasi-peak, 56dB(μV)-46dB(μV) average
0.5M-5MHz	56dB(μV) quasi-peak, 46dB(μV) average
5M-30MHz	60dB(μV) quasi-peak, 50dB(μV) average
Detector:	Peak for pre-scan (9kHz resolution bandwidth) 0.15M to 30MHz

2.1.1 E.U.T. Operation

Operating Environment:

Temperature: 18.9 °C Humidity: 55.1 % RH Atmospheric Pressure: 1000 mbar

- Pretest these modes to find the worst case:
- a: Transfer data between the EUT and the PC+USB cable1
 - b: Transfer data between the EUT and the PC+USB cable2
 - c: GSM 850 Idle+BT+2.4G WLAN +GNSS RX +NFC +playing MP4 +battery1+EUT1+Cable+ adapter
 - d: WCDMA Band V Idle+BT+2.4G WLAN + GNSS RX +NFC +playing MP4 +EUT1+battery2+ Cable+ adapter
 - e: LTE Band 5 Idle+BT+5G WLAN +GNSS RX +NFC+ camera (Front) +EUT1 +battery+ Cable +adapter
 - f: LTE Band 12 Idle+BT+5G WLAN +GNSS RX + NFC+ camera (Front) +EUT1 +battery+ Cable + adapter
 - g: LTE Band 13 Idle+BT+5G WLAN +GNSS RX +NFC +camera (Back) +EUT2 +battery+ Cable+ adapter
 - h: LTE Band 17 Idle+BT+5G WLAN +GNSS RX +NFC + camera (Back) +EUT2+battery+ Cable +adapter
 - i: LTE Band 26 Idle+BT+2.4G WLAN +GNSS RX +NFC + playing MP4+EUT2 +battery+ + Cable +adapter
 - j: NR Band n5 Idle+BT+2.4G WLAN +GNSS RX +NFC + playing MP4+EUT2 +battery+ Cable +adapter

The worst case for final test:

- a: Transfer data between the EUT and the PC+USB cable1
- e: LTE Band 5 Idle+BT+5G WLAN +GNSS RX +NFC+ camera (Front) +EUT1 +battery+ Cable +adapter



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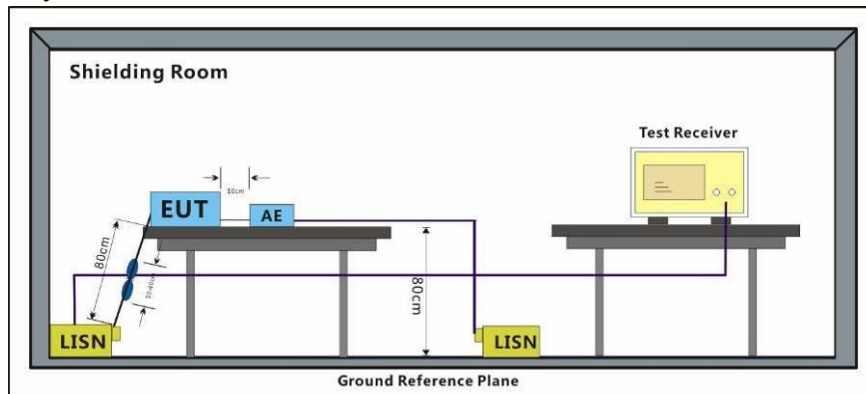
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2.1.2 Test Setup Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.



2.1.3 Measurement Data

An initial pre-scan was performed with peak detector. Quasi-Peak or Average measurement were performed at the frequencies with maximized peak emission were detected.

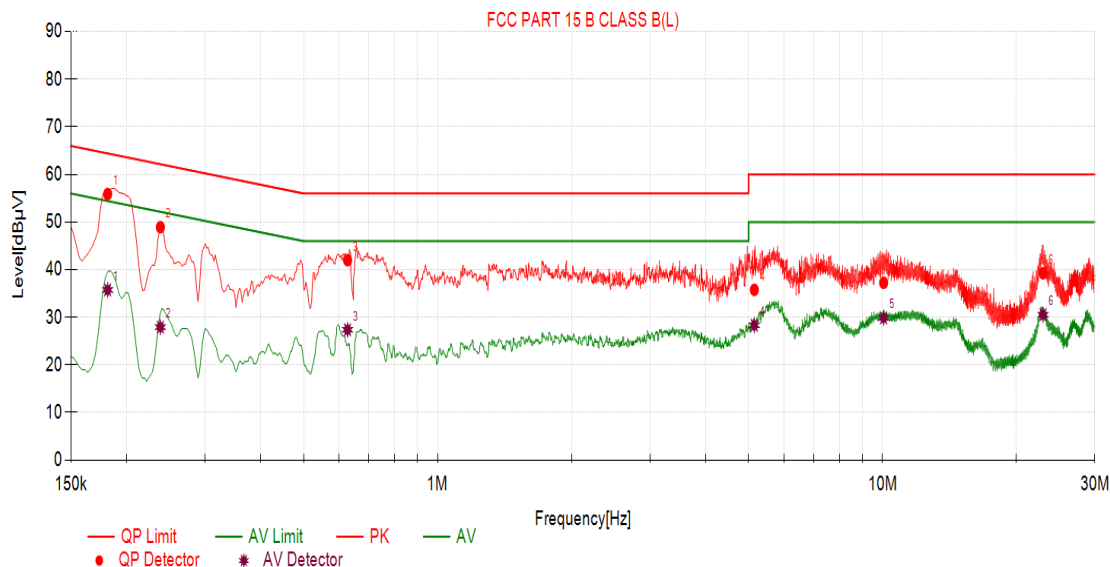


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Mode:a; Line:Live Line



Test Graph

Final Data List

NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV]	QP Limit [dBμV]	QP Margin [dB]	AV Value [dBμV]	AV Limit [dBμV]	AV Margin [dB]	Verdict
1	0.1814	10.10	55.89	64.42	8.53	35.75	54.42	18.67	PASS
2	0.2383	10.10	48.94	62.15	13.21	27.93	52.15	24.22	PASS
3	0.6277	10.10	42.01	56.00	13.99	27.38	46.00	18.62	PASS
4	5.1519	10.10	35.76	60.00	24.24	28.32	50.00	21.68	PASS
5	10.0573	10.10	37.26	60.00	22.74	29.88	50.00	20.12	PASS
6	22.9570	10.11	39.24	60.00	20.76	30.53	50.00	19.47	PASS

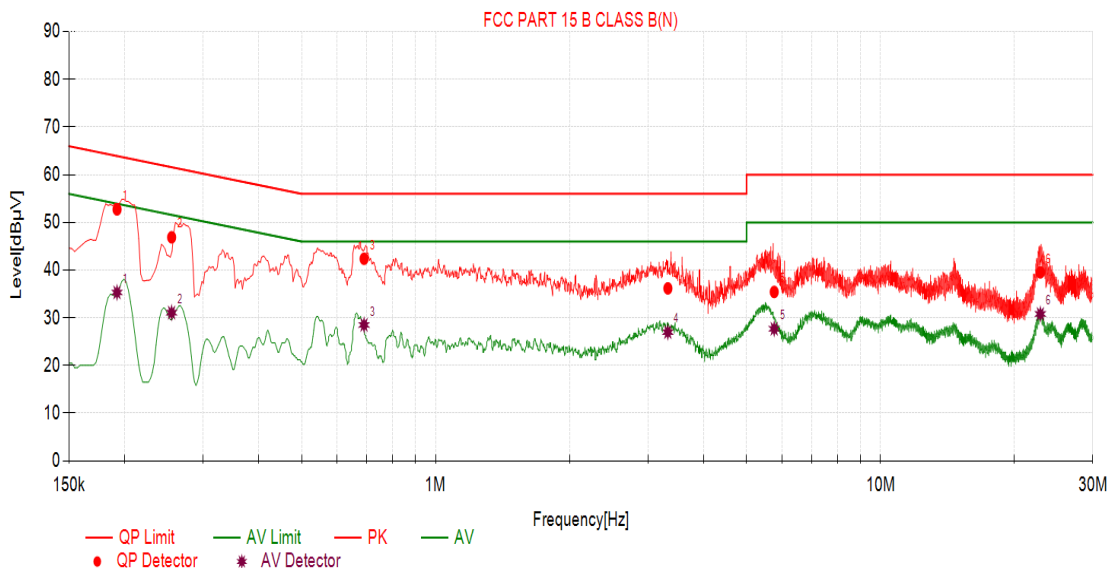


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Mode:a; Line:Neutral Line



Test Graph

Final Data List

NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV]	QP Limit [dBμV]	QP Margin [dB]	AV Value [dBμV]	AV Limit [dBμV]	AV Margin [dB]	Verdict
1	0.1924	10.10	52.74	63.93	11.19	35.32	53.93	18.61	PASS
2	0.2552	10.10	46.89	61.59	14.70	31.09	51.59	20.50	PASS
3	0.6908	10.10	42.40	56.00	13.60	28.51	46.00	17.49	PASS
4	3.3275	10.10	36.18	56.00	19.82	27.00	46.00	19.00	PASS
5	5.7689	10.10	35.43	60.00	24.57	27.70	50.00	22.30	PASS
6	22.8740	10.11	39.54	60.00	20.46	30.81	50.00	19.19	PASS



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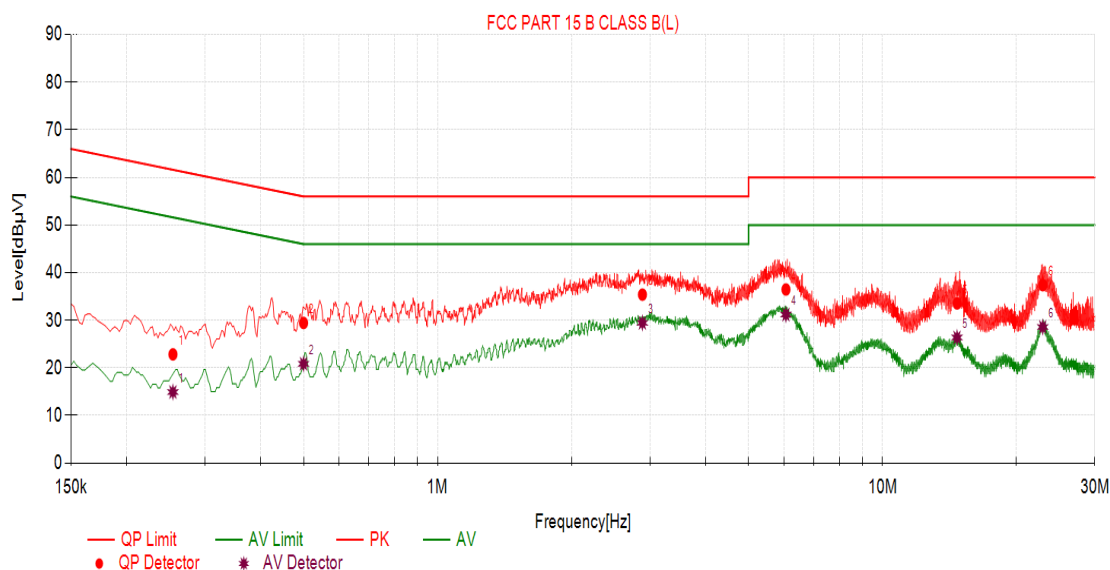
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t (86-29) 6282 7885 sgs.china@sgs.com

Mode:e; Line:Live Line



Test Graph

Final Data List

NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV]	QP Limit [dBμV]	QP Margin [dB]	AV Value [dBμV]	AV Limit [dBμV]	AV Margin [dB]	Verdict
1	0.2543	10.10	22.84	61.61	38.77	14.92	51.61	36.69	PASS
2	0.4999	10.10	29.44	56.00	26.56	20.86	46.00	25.14	PASS
3	2.8867	10.10	35.39	56.00	20.61	29.45	46.00	16.55	PASS
4	6.0667	10.10	36.47	60.00	23.53	31.19	50.00	18.81	PASS
5	14.7062	10.11	33.54	60.00	26.46	26.38	50.00	23.62	PASS
6	22.9178	10.11	37.39	60.00	22.61	28.58	50.00	21.42	PASS



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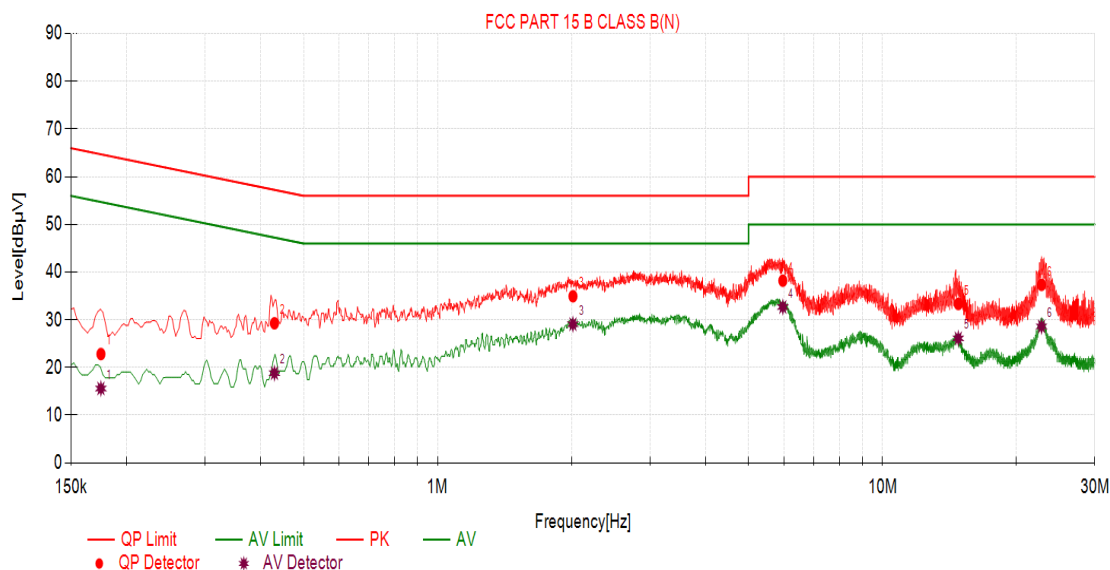
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Mode:e; Line:Neutral Line



Test Graph

Final Data List

NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV]	QP Limit [dBμV]	QP Margin [dB]	AV Value [dBμV]	AV Limit [dBμV]	AV Margin [dB]	Verdict
1	0.1752	10.10	22.83	64.71	41.88	15.60	54.71	39.11	PASS
2	0.4300	10.10	29.28	57.25	27.97	18.81	47.25	28.44	PASS
3	2.0151	10.10	34.95	56.00	21.05	29.08	46.00	16.92	PASS
4	5.9700	10.10	38.21	60.00	21.79	32.69	50.00	17.31	PASS
5	14.8008	10.11	33.33	60.00	26.67	26.12	50.00	23.88	PASS
6	22.7713	10.11	37.34	60.00	22.66	28.62	50.00	21.38	PASS



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2.2 Radiated Emissions (30MHz-1GHz)

Test Requirement:	47 CFR Part 15, Subpart B
Test Method:	ANSI C63.4:2014
Frequency Range:	30MHz to 1GHz
Measurement Distance:	3m
Limit:	
30MHz -88MHz	40.0(dBμV/m) quasi-peak
88MHz-216MHz	43.5(dBμV/m) quasi-peak
216MHz-960MHz	46.0(dBμV/m) quasi-peak
960MHz-1000MHz	54.0(dBμV/m) quasi-peak
Detector:	Peak for pre-scan (120kHz resolution bandwidth) 30M to1000MHz

2.2.1 E.U.T. Operation

Operating Environment:

Temperature: 25 °C Humidity: 66.5 % RH Atmospheric Pressure: 1010 mbar

Pretest these modes to find the worst case:

- a: Transfer data between the EUT and the PC+USB cable1
- b: Transfer data between the EUT and the PC+USB cable2
- c: GSM 850 Idle+BT+2.4G WLAN +GNSS RX +NFC +playing MP4 +battery1+earphone1+EUT1+Cable+ adapter
- d: WCDMA Band V Idle+BT+2.4G WLAN + GNSS RX +NFC +playing MP4 +EUT1+battery2+ Cable+ adapter
- e: LTE Band 5 Idle+BT+5G WLAN +GNSS RX +NFC+ camera (Front) +EUT1 +battery+ Cable +adapter
- f: LTE Band 12 Idle+BT+5G WLAN +GNSS RX + NFC+ camera (Front) +EUT1 +battery+ Cable + adapter
- g: LTE Band 13 Idle+BT+5G WLAN +GNSS RX +NFC +camera (Back) +EUT2 +battery+ Cable+ adapter
- h: LTE Band 17 Idle+BT+5G WLAN +GNSS RX +NFC + camera (Back) +EUT2+battery+ Cable +adapter
- i: LTE Band 26 Idle+BT+2.4G WLAN +GNSS RX +NFC + playing MP4+EUT2 +battery+ + Cable +adapter
- j: NR Band n5 Idle+BT+2.4G WLAN +GNSS RX +NFC + playing MP4+EUT2 +battery+ Cable +adapter

The worst case for final test:

- b: Transfer data between the EUT and the PC+USB cable2
- f: LTE Band 12 Idle+BT+5G WLAN +GNSS RX + NFC+ camera (Front) +EUT1 +battery+ Cable + adapter



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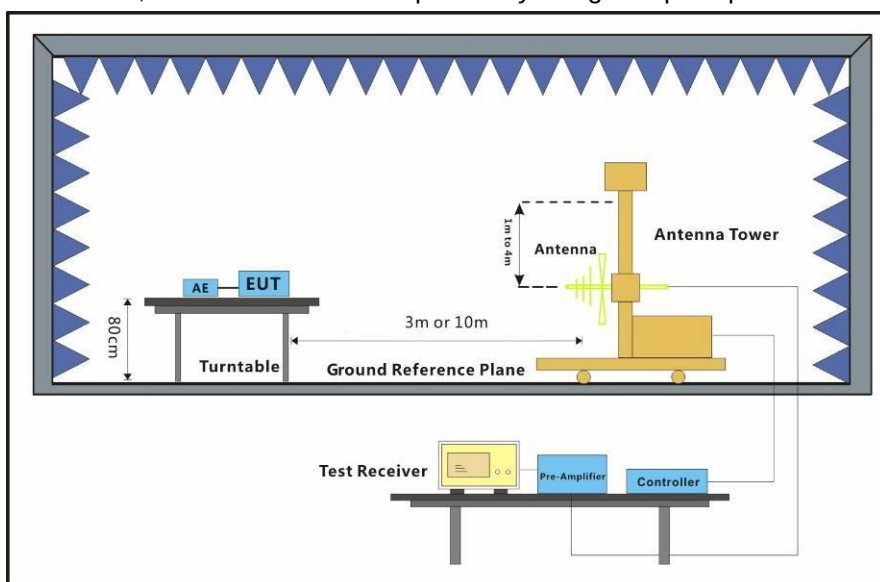
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2.2.2 Test Setup Procedures

1. The EUT was placed in a semi Anechoic Chamber as show below
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna height is adjusted between 1 to 4 meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. Set the test-receiver system to Peak Detect Function with specified bandwidth with Maximum Hold Mode, and the trace was allowed to stabilize.
7. If the emission level of the EUT in peak mode was 6 dB lower than the limit specified, peak values of EUT will be reported. Otherwise, the emission will be repeated by using the quasi-peak method and reported.

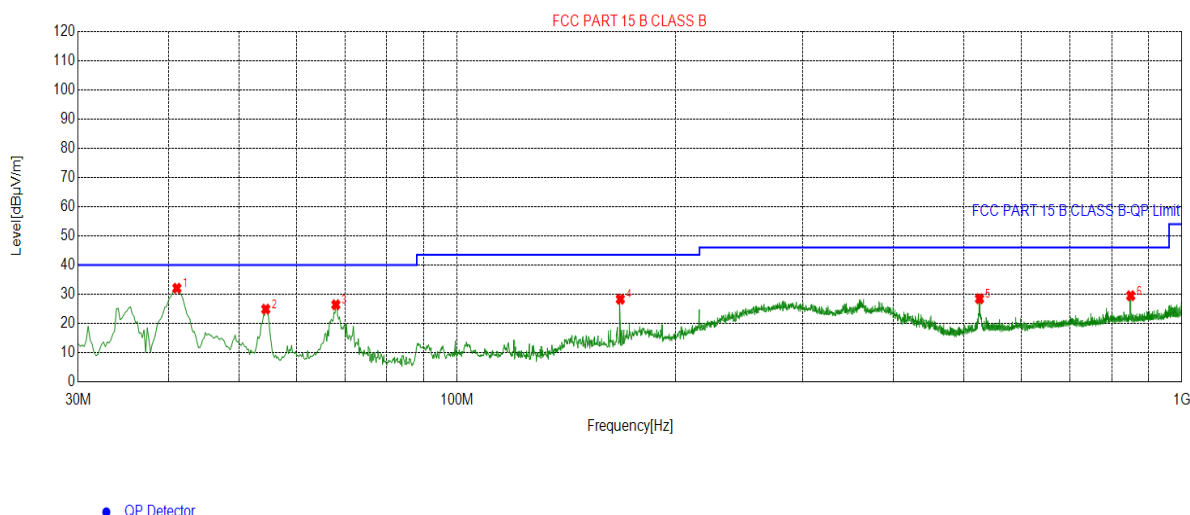


2.2.3 Measurement Data

An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by BiConiLog antenna with 2 orthogonal polarities.

The three polarities of X,Y,Z were measured by EUT, but only the worst data had been displayed.

Mode:b; Polarization:Horizontal



Suspected List

Suspected List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	41.0602	32.06	-22.15	40.00	7.94	174	162	Horizontal
2	54.4489	24.88	-22.02	40.00	15.12	241	259	Horizontal
3	68.0316	26.39	-24.57	40.00	13.61	321	22	Horizontal
4	167.961	28.31	-25.25	43.50	15.19	187	41	Horizontal
5	525.769	28.45	-13.63	46.00	17.55	162	216	Horizontal
6	850.008	29.48	-8.55	46.00	16.52	147	43	Horizontal



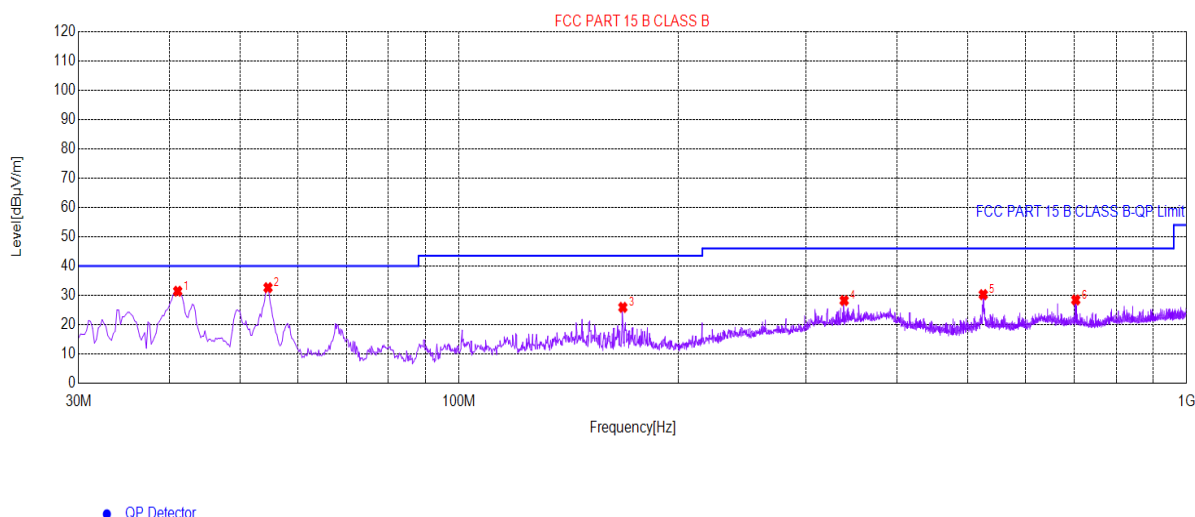
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Mode:b; Polarization:Vertical



Suspected List

Suspected List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	41.0602	31.41	-22.15	40.00	8.59	245	126	Vertical
2	54.6429	32.62	-22.05	40.00	7.38	214	0	Vertical
3	167.961	25.89	-25.25	43.50	17.61	225	62	Vertical
4	338.327	28.22	-17.93	46.00	17.78	244	16	Vertical
5	525.381	30.25	-13.64	46.00	15.75	158	150	Vertical
6	704.090	28.43	-10.61	46.00	17.57	321	117	Vertical

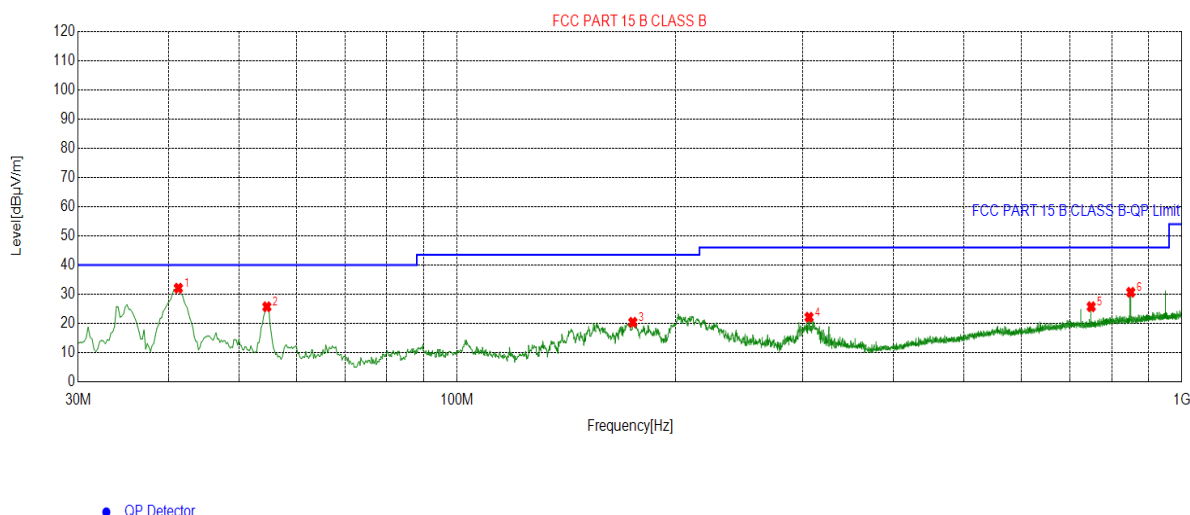


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Mode:f; Polarization:Horizontal



Suspected List

Suspected List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	41.2543	32.07	-22.11	40.00	7.93	196	88	Horizontal
2	54.6429	25.68	-22.05	40.00	14.32	128	234	Horizontal
3	174.753	20.39	-24.84	43.50	23.11	213	301	Horizontal
4	305.923	22.12	-18.97	46.00	23.88	216	74	Horizontal
5	749.689	25.72	-9.65	46.00	20.28	147	95	Horizontal
6	850.008	30.66	-8.55	46.00	15.34	158	94	Horizontal



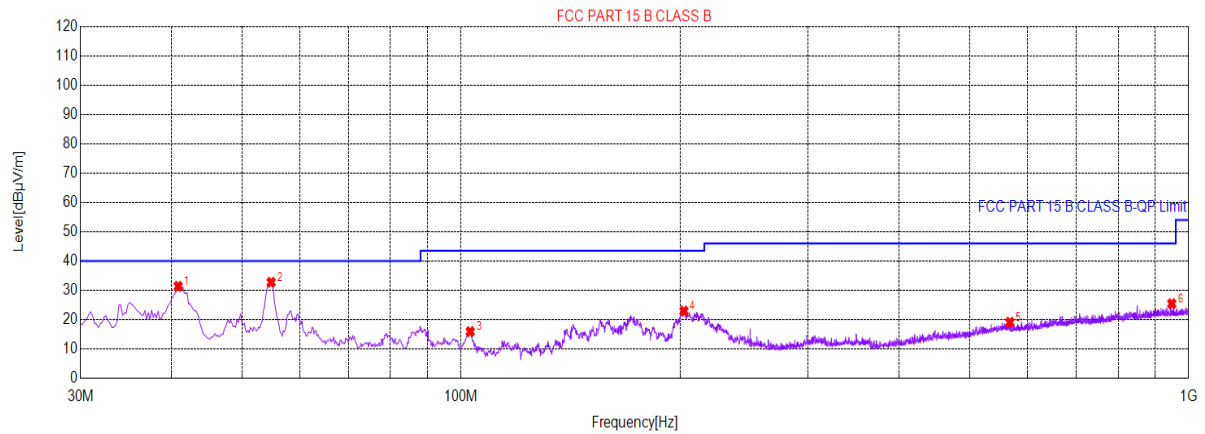
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Mode:f; Polarization:Vertical



• QP Detector

Suspected List

Suspected List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	40.8662	31.37	-22.19	40.00	8.63	258	154	Vertical
2	54.8370	32.75	-22.08	40.00	7.25	269	183	Vertical
3	102.958	15.93	-22.91	43.50	27.57	247	20	Vertical
4	202.500	22.93	-22.32	43.50	20.57	159	235	Vertical
5	567.875	19.10	-12.81	46.00	26.90	185	2	Vertical
6	947.997	25.44	-7.25	46.00	20.56	147	323	Vertical



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2.3 Radiated Emissions (above 1GHz)

Test Requirement: 47 CFR Part 15, Subpart B
 Test Method: ANSI C63.4:2014
 Frequency Range: Above 1GHz
 Measurement Distance: 3m
 Limit:
 Above 1GHz 74(dBμV/m) peak, 54(dBμV/m) average
 Detector: Peak for pre-scan (1000kHz resolution bandwidth) 1000M to 40000MHz

2.3.1 E.U.T. Operation

Operating Environment:

Temperature: 21.7 °C Humidity: 56.4 % RH Atmospheric Pressure: 1010 mbar

Pretest these modes to find the worst case:

- a: Transfer data between the EUT and the PC+USB cable1
- b: Transfer data between the EUT and the PC+USB cable2
- c: GSM 850 Idle+BT+2.4G WLAN +GNSS RX +NFC +playing MP4 +battery1+earphone1+EUT1+Cable+ adapter
- d: WCDMA Band V Idle+BT+2.4G WLAN + GNSS RX +NFC +playing MP4 +EUT1+battery2+ Cable+ adapter
- e: LTE Band 5 Idle+BT+5G WLAN +GNSS RX +NFC+ camera (Front) +EUT1 +battery+ Cable +adapter
- f: LTE Band 12 Idle+BT+5G WLAN +GNSS RX + NFC+ camera (Front) +EUT1 +battery+ Cable + adapter
- g: LTE Band 13 Idle+BT+5G WLAN +GNSS RX +NFC +camera (Back) +EUT2 +battery+ Cable+ adapter
- h: LTE Band 17 Idle+BT+5G WLAN +GNSS RX +NFC + camera (Back) +EUT2+battery+ Cable +adapter
- i: LTE Band 26 Idle+BT+2.4G WLAN +GNSS RX +NFC + playing MP4+EUT2 +battery+ + Cable +adapter
- j: NR Band n5 Idle+BT+2.4G WLAN +GNSS RX +NFC + playing MP4+EUT2 +battery+ Cable +adapter

The worst case for final test:

- a: Transfer data between the EUT and the PC+USB cable1
- e: LTE Band 5 Idle+BT+5G WLAN +GNSS RX +NFC+ camera (Front) +EUT1 +battery+ Cable +adapter



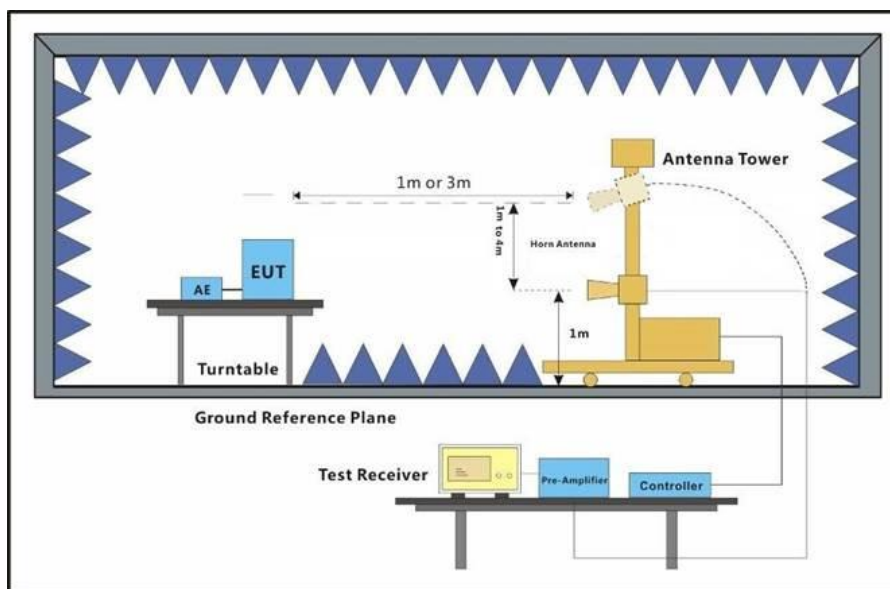
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2.3.2 Test Setup Procedures

1. The EUT was placed in a full Anechoic Chamber as show below
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna height is adjusted between 1 to 4 meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. Set the test-receiver system to Peak and AV Detect Function with specified bandwidth with Maximum Hold Mode, and the trace was allowed to stabilize.



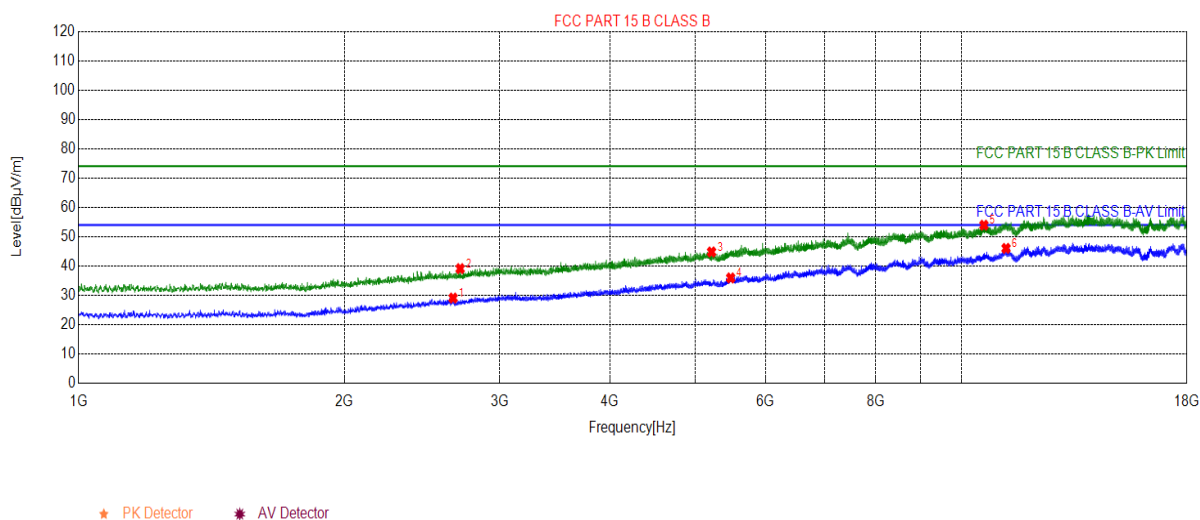
2.3.3 Measurement Data

An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Average measurements were conducted based on the peak sweep graph. The EUT was measured by Horn antenna with 2 orthogonal polarities.

The three polarities of X,Y,Z were measured by EUT, but only the worst data had been displayed.

Scan from 1GHz to 30GHz, the disturbance above 18GHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed.

Mode:a; Polarization:Horizontal



Suspected List

Suspected List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2656.73	29.07	-23.95	54.00	24.93	196	318	Horizontal
2	2706.03	39.10	-23.94	74.00	34.90	185	18	Horizontal
3	5212.81	44.79	-14.30	74.00	29.21	174	311	Horizontal
4	5479.72	35.92	-13.24	54.00	18.08	213	299	Horizontal
5	10608.0	53.92	-2.18	74.00	20.08	159	221	Horizontal
6	11237.9	46.01	-1.44	54.00	7.99	184	206	Horizontal

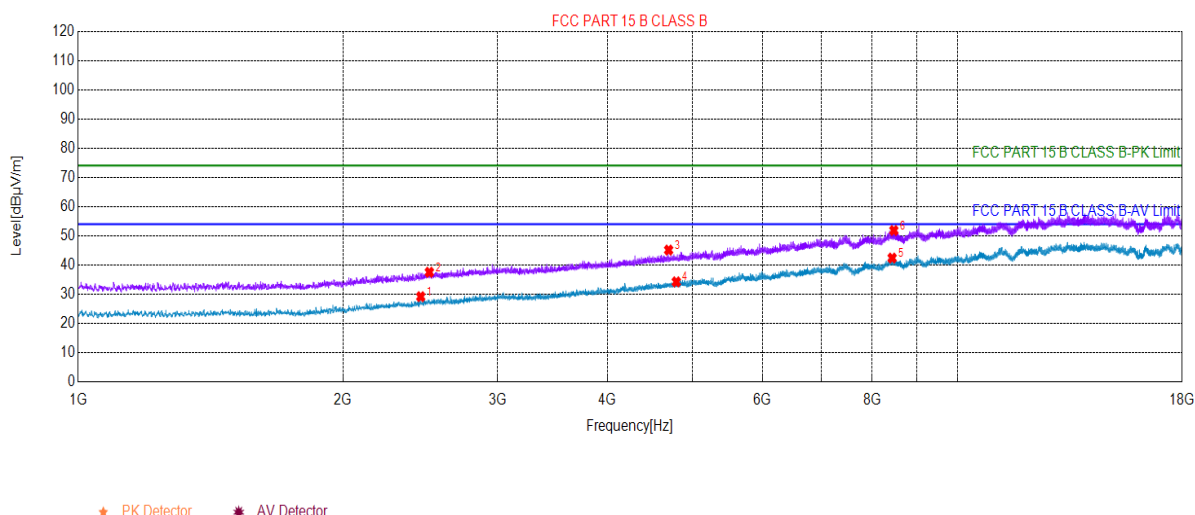


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Mode:a; Polarization:Vertical



Suspected List

Suspected List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2452.72	29.16	-25.02	54.00	24.84	147	229	Vertical
2	2508.82	37.52	-24.93	74.00	36.48	158	358	Vertical
3	4694.28	45.12	-16.16	74.00	28.88	191	275	Vertical
4	4789.48	34.23	-15.88	54.00	19.77	215	40	Vertical
5	8429.37	42.38	-6.25	54.00	11.62	246	229	Vertical
6	8466.77	51.82	-6.10	74.00	22.18	271	336	Vertical



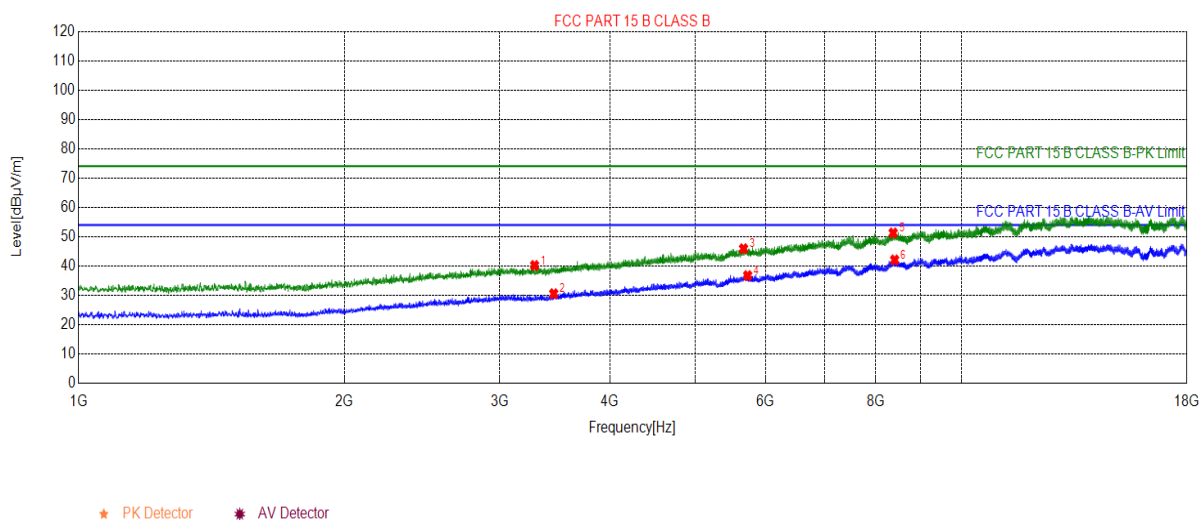
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Mode:e; Polarization:Horizontal



Suspected List

Suspected List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	3285.76	40.17	-21.65	74.00	33.83	174	175	Horizontal
2	3454.07	30.55	-21.17	54.00	23.45	185	193	Horizontal
3	5665.88	45.88	-12.77	74.00	28.12	213	216	Horizontal
4	5727.93	36.72	-12.70	54.00	17.28	216	219	Horizontal
5	8371.56	51.25	-6.44	74.00	22.75	128	336	Horizontal
6	8404.72	42.06	-6.26	54.00	11.94	219	69	Horizontal



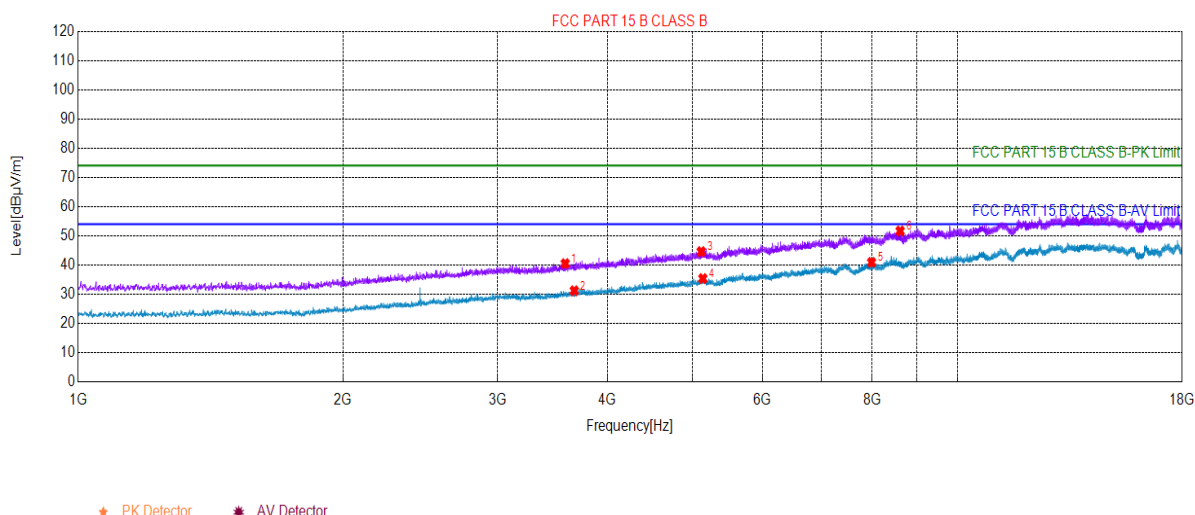
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中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086

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Mode:e; Polarization:Vertical



Suspected List

Suspected List								
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	3580.72	40.47	-20.76	74.00	33.53	123	245	Vertical
2	3666.58	31.18	-20.50	54.00	22.82	159	94	Vertical
3	5112.50	44.57	-14.72	74.00	29.43	196	26	Vertical
4	5134.60	35.35	-14.49	54.00	18.65	184	360	Vertical
5	7987.34	40.88	-7.36	54.00	13.12	213	130	Vertical
6	8607.03	51.64	-5.61	74.00	22.36	261	62	Vertical



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3 Equipment List

CE Test System					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Shielding Room	Brilliant-emc	N/A	XAW03-35-01	2019-09-11	2022-09-10
Test receiver	ROHDE&SCHWARZ	ESR	XAW01-08-01	2020-09-11	2021-09-10
Artificial network	ROHDE&SCHWARZ	ENV216	XAW01-04-01	2020-08-04	2021-08-03
5G UXM	Keysight	E7515B	XAW01-19-02	2020-09-11	2021-09-10
Temperature and humidity meter	MingGao	TH101B	XAW01-01-01	2020-11-06	2021-11-05
Measurement Software	Tonscend	TS+ CE V2.5	XAW02-05-02	NCR	NCR
CMW500 Wideband Radio Comm Tester	ROHDE&SCHWARZ	CMW 500	XAW01-03-02	2021/4/1	2022/3/31
Artificial network	ROHDE&SCHWARZ	ENV216	XAW01-04-01	2020/8/4	2021/8/3



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RE Test System					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Semi-Anechoic Chamber	Brilliant-emc	N/A	XAW03-35-01	2019-09-11	2022-09-10
MXA signal analyzer	Keysight	N9020A	XAW01-06-01	2021-04-01	2022-03-31
Spectrum Analyzer	Keysight	N9020B	XAW01-11-03	2021-04-01	2022-03-31
Spectrum Analyzer	ROHDE&SCHWARZ	FSV3044	101146	2021-06-08	2022-06-08
Radio communication analyzer	ROHDE&SCHWARZ	CMW 500	XAW01-03-02	2021-04-01	2022-03-31
Test receiver	ROHDE&SCHWARZ	ESR	XAW01-08-01	2020-09-11	2021-09-10
Receiving antenna (30MHz-3GHz)	Schwarzbeck	VULB 9163	XAW01-09-01	2019-10-13	2021-10-12
Receiving antenna (1GHz~18GHz)	Schwarzbeck	BBHA 9120D	XAW01-09-02	2019-10-13	2021-10-12
Receiving antenna (15GHz~40GHz)	Schwarzbeck	BBHA 9170	XAW01-09-03	2019-10-13	2021-10-12
Directional antenna rack controller	Max-Full	MF-7802BS	XAW03-03-01	NCR	NCR
High-speed antenna rack controller	Max-Full	MF-7802	XAW03-04-01	NCR	NCR
Amplifier	Tonscend	TAP00903040	XAW01-41-01	2020-10-26	2021-10-25
Amplifier	Tonscend	TAP01018048	XAW01-41-02	2020-10-26	2021-10-25
Amplifier	Tonscend	TAP18040048	XAW01-41-03	2020-10-27	2021-10-26
Amplifier	Shanghai Steed	YX28980930	XAW01-41-06	2020-10-26	2021-10-25
5G UXM	Keysight	E7515B	XAW01-04-01	2020-09-11	2021-09-10
Temperature and humidity meter	MingGao	TH101B	XAW01-01-01	2020-11-06	2021-11-05
Measurement Software	Tonscend	TS+ RE V3.0.0.2	XAW02-05-01	NCR	NCR
Loop Antenna	Schwarzbeck	FMZB 1519B	XAW01-48-02	2021/6/10	2022/6/9



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4 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Conduction Emission	$\pm 3.0\text{dB}$ (150kHz to 30MHz)
2	Radiated Emission	$\pm 4.8\text{dB}$ (Below 1GHz)
		$\pm 4.8\text{dB}$ (1GHz to 6GHz)
		$\pm 4.5\text{dB}$ (6GHz to 18GHz)
		$\pm 5.02\text{dB}$ (Above 18GHz)



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t (86-29) 6282 7885 www.sgsgroup.com.cn
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5 Photographs

5.1 Test Setup

Refer to Appendix A Setup Photos.

5.2 EUT Constructional Details (EUT Photos)

Refer to Photographs of EUT Constructional Details

- End of the Report -



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