FCC TEST REPORT

For

LTE Digital Mobile Phone

Model Number: NX629J

FCC ID: 2AHJO-NX629J

Report Number : WT198004684

Test Laboratory	:	Shenzhen Academy of Metrology and Quality Inspection
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TEST REPORT DECLARATION

Applicant	:	Nubia Technology Co., Ltd.
Address	:	10/F, Tower A, Hans Innovation Mansion, North Ring Rd., No.9018, High-Tech Park, Nanshan District,Shenzhen,China
Manufacturer	:	Nubia Technology Co., Ltd.
Address	:	10/F, Tower A, Hans Innovation Mansion, North Ring Rd., No.9018, High-Tech Park, Nanshan District,Shenzhen,China
EUT Description	:	LTE Digital Mobile Phone
Model No.	:	NX629J
Trade mark	:	nubia
Serial Number	:	/
FCC ID	:	2AHJO-NX629J

Test Standards:

FCC Part 15 Subpart B 15.107, 15.109 （2018）

The EUT described above is tested by Shenzhen Academy of Metrology and Quality Inspection EMC Laboratory to determine the maximum emissions from the EUT. Shenzhen Academy of Metrology and Quality Inspection EMC Laboratory is assumed full responsibility for the accuracy of the test results.

The test report is valid for above tested sample only and shall not be reproduced in part without written approval of the laboratory.

Project Engineer:	(Zhou Fangai 周芳媛)	Date:	Sep.05, 2019
Checked by:	(Lin Yixiang 林奕翔)	Date:	Sep.05, 2019
Approved by:	(Lin Bin 林斌)	Date:	Sep.05, 2019

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1. TEST RESULTS SUMMARY

Table 1 Test Results Summary

Test Items	FCC Rules	Test Results
Radiation Emission	15.109	Pass

Remark: “N/A” means “Not applicable.”

2. GENERAL INFORMATION

2.1. Report information

This report is not a certificate of quality; it only applies to the sample of the specific product/equipment given at the time of its testing. The results are not used to indicate or imply that they are application to the similar items. In addition, such results must not be used to indicate or imply that SMQ approves recommends or endorses the manufacture, supplier or use of such product/equipment, or that SMQ in any way guarantees the later performance of the product/equipment.

The sample/s mentioned in this report is/are supplied by Applicant, SMQ therefore assumes no responsibility for the accuracy of information on the brand name, model number, origin of manufacture or any information supplied.

Additional copies of the report are available to the Applicant at an additional fee. No third part can obtain a copy of this report through SMQ, unless the applicant has authorized SMQ in writing to do so.

2.2. Laboratory Accreditation and Relationship to Customer

The testing report were performed by the Shenzhen Academy of Metrology and quality Inspection EMC Laboratory (Guangdong EMC compliance testing center), in their facilities located at NETC Building, No.4 Tongfa Rd., Xili, Nanshan, Shenzhen, China. At the time of testing, Laboratory is accredited by the following organizations:

China National Accreditation Service for Conformity Assessment (CNAS) accredits the Laboratory for conformance to FCC standards, EMC international standards and EN standards. The Registration Number is CNAS L0579.

The Laboratory is Accredited Testing Laboratory of FCC with Designation number CN1165 and Site registration number 582918.

The Laboratory is registered to perform emission tests with Innovation, Science and Economic Development (ISED), and the registration number is 11177A.

2.3. Measurement Uncertainty

Radiated Emission
30MHz~1000MHz 5.1dB
1GHz~6GHz 5.04dB
6GHz~18GHz 5.54dB

3. PRODUCT DESCRIPTION

3.1. EUT Description

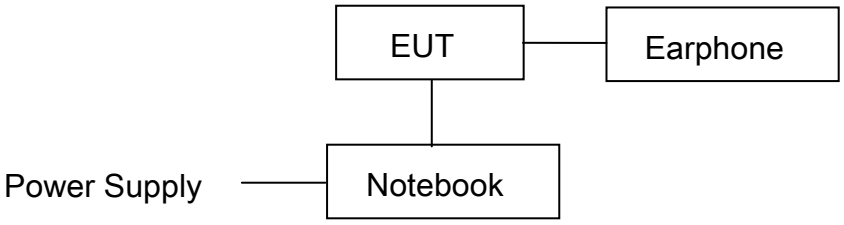
Table 2 Specification of the Equipment under Test

Product Type:	LTE Digital Mobile Phone
Hardware Version:	NX629J_V1AMB
Software Version :	NX629J_V1S_ENCommon_V1.01
FCC-ID:	2AHJO-NX629J
Frequency:	GSM850:TX 824MHz~849MHz RX 869MHz~894MHz PCS1900: TX 1850MHZ~1910MHz RX 1930MHz~1990MHz WCDMA 850: TX 824MHz~849MHz RX 869MHz~894MHz WCDMA 1700:TX: 1710MHz~1755MHz RX 2110MHz~2155MHz WCDMA 1900:TX 1850MHZ~1910MHz RX 1930MHz~1990MHz LTE Band 2: TX 1850MHZ~1910MHz RX 1930MHz~1990MHz LTE Band 4: TX 1710MHZ~1755MHz RX 2110MHz~2155MHz LTE Band 5:TX 824MHz~849MHz RX 869MHz~894MHz LTE Band 7:TX 2500MHz~2570MHz RX 2620MHz~2690MHz LTE Band 12:TX 699MHz~716MHz RX 728MHz~746MHz LTE Band 17:TX 704MHz~716MHz RX 734MHz~746MHz LTE Band 25:TX 1850MHz~1915MHz RX 1930MHz~1995MHz LTE Band 26:TX 814MHz~849MHz RX 859MHz~894MHz LTE Band 30:TX 2305MHz~2315MHz 2350MHz~2360MHz LTE Band 41:TX 2496MHz~2690MHz RX 2496MHz~2690MHz LTE Band 66:TX 1710MHz~1780MHz RX 1710MHz~1780MHz 2.4GHz WLAN:2412MHz~2462MHz 5GHzWLAN:5150MHz~5350MHz,5500MHz~5700MHz,5725MHz~5850MHz Bluetooth:2402MHz~2480MHz
Type(s) of Modulation:	GSM850/PCS1900:GMSK 8PSK WCDMA:QPSK LTE:QPSK, 16QAM DSSS (DBPSK, DQPSK, CCK) for 802.11b OFDM (256QAM, 64QAM,16QAM, QPSK, BPSK) for 802.11a/g/n OFDM (256QAM) for 802.11ac Bluetooth: GFSK, pi/4-DQPSK, 8DPSK
Antenna Type:	GSM/WCDMA/LTE: Internal antenna 2.4GHz WLAN: Internal antenna 5.0GHz WLAN: Internal antenna Bluetooth: Internal antenna
Operating voltage:	Internal battery, 120V AC Adapter 3.5V (Low)/3.85V (Nominal)/ 4.4V (Max)

Remark: This is a derivative report based on original report SET2019-03466. This report changes the shape of vents on the back of the phone, changes the app processor chip qualcomm 855 to qualcomm 855 pro. All other parts of the product, including the circuit theory,

electrical design and the Critical Components are the same. Test data in this report are based on those of Test Report: SET2019-03466, except for the Radiated Emission test data.

3.2. Block Diagram of EUT Configuration



Test mode 1

3.3. Operating Condition of EUT

Test mode 1: connected to a pc and data transmission.

The test mode mentioned above is identified as worst case for this EUT and the test results for this mode are recorded in this report.

The Radiated emission measurements were carried out in semi-anechoic chamber with 3-meter test range, and EUT is rotated on three test planes to find out the worst emission (X plane).

3.4. Support Equipment List

Table 3 Support Equipment List

Name	Model No	S/N	Manufacturer
Battery for EUT	Li3949T44P6h996644	--	Zhuhai Coslight Battery Co.,Ltd.
USB for EUT	--	--	--

Table 4 Support Equipment List

Name	Model No	S/N	Manufacturer	FCC
Notebook	P35G	--	DELL	DOC
Earphone	--	--	--	--

3.5. Test Conditions

Date of test：Aug.23, 2019- Aug.28, 2019
Date of EUT Receive：Aug.14, 2019
Temperature: 24℃-25℃
Relative Humidity: 50%

3.6. Modifications

No modification was made.

4. TEST EQUIPMENT USED

4.1. Test Equipment Used to Measure Radiated Emission

Table 5 Radiated Emission Test Equipment

No.	Equipment	Manufacturer	Model No.	LAST CALIB	Period
SB3436	Test Receiver	R&S	ESI26	Nov.19,2018	1 Year
SB3955	Broadband Antenna	Schwarzbeck	VULB9163	May.31,2019	1 Year
SB9054/09	Horn Antenna	R&S	HF907	Sep.04,2019	1 Year
SB8501/16	Pre-Amplifier	R&S	SCU 26	Feb.18,2019	1 Year
SB8501/17	Pre-Amplifier	R&S	SCU-18	Feb.20,2019	1 Year
SB9059	Pre-Amplifier	R&S	SCU-40	Aug.27,2019	1 Year
SB8501/11	Horn Antenna	R&S	3160-09	Mar.21,2017	3 Years
SB8501/12	Horn Antenna	R&S	3160-10	Mar.21,2017	3 Years

5. RADIATION EMISSION TEST

5.1. Test Standard and Limit

5.1.1. Test Standard

FCC Part 15: Section 15.109

5.1.2. Test Limit

Table 6 Radiation Emission Test Limit for FCC (Class B) (9 kHz-1GHz)

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
960~1000	500	3

Table 7 Radiation Emission Test Limit for FCC (Class B) (Above 1G)

Frequency (MHz)	(dBuV/m) (at 3 meters)	
	PEAK	AVERAGE
Above 1000	74	54

* The lower limit shall apply at the transition frequency.
* The test distance is 3m.

5.2. Test Procedure

The EUT is placed on a turntable, which is 0.8 meter above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set **3 meters** away from the receiving antenna, which is mounted on an antenna tower. The antenna can move up and down between 1 to 4 meters to find out the maximum emission level. Broadband antenna is used as a receiving antenna. Both horizontal and vertical polarization of the antenna is set on test.
RBW = 100 kHz (less than or equal to 1 GHz); 1 MHz (above 1 GHz)
VBW ≥ 3 x RBW
Detector = Peak & Quasi-Peak (frequency range 30 MHz to 1 GHz);
Peak & Average (frequency range above 1 GHz);
Changing VBW to 10 Hz for average measurement
The use of a higher-than-specified video bandwidth produces a conservative measurement result.

5.3. Test Arrangement

The arrangement of the equipment is installed to meet the standards and operating in

a manner, which tends to maximize its emission characteristics in a normal application. The detailed information refers to test picture.

5.4.Test Data

The emissions don't show in following result tables are more than 20dB below the limits, the test curves are shown in the next page.
The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the res ult
which was 20dB lower than the limit line per 15.31(o) was not reported.

Table 8 Radiated Emission Test Data

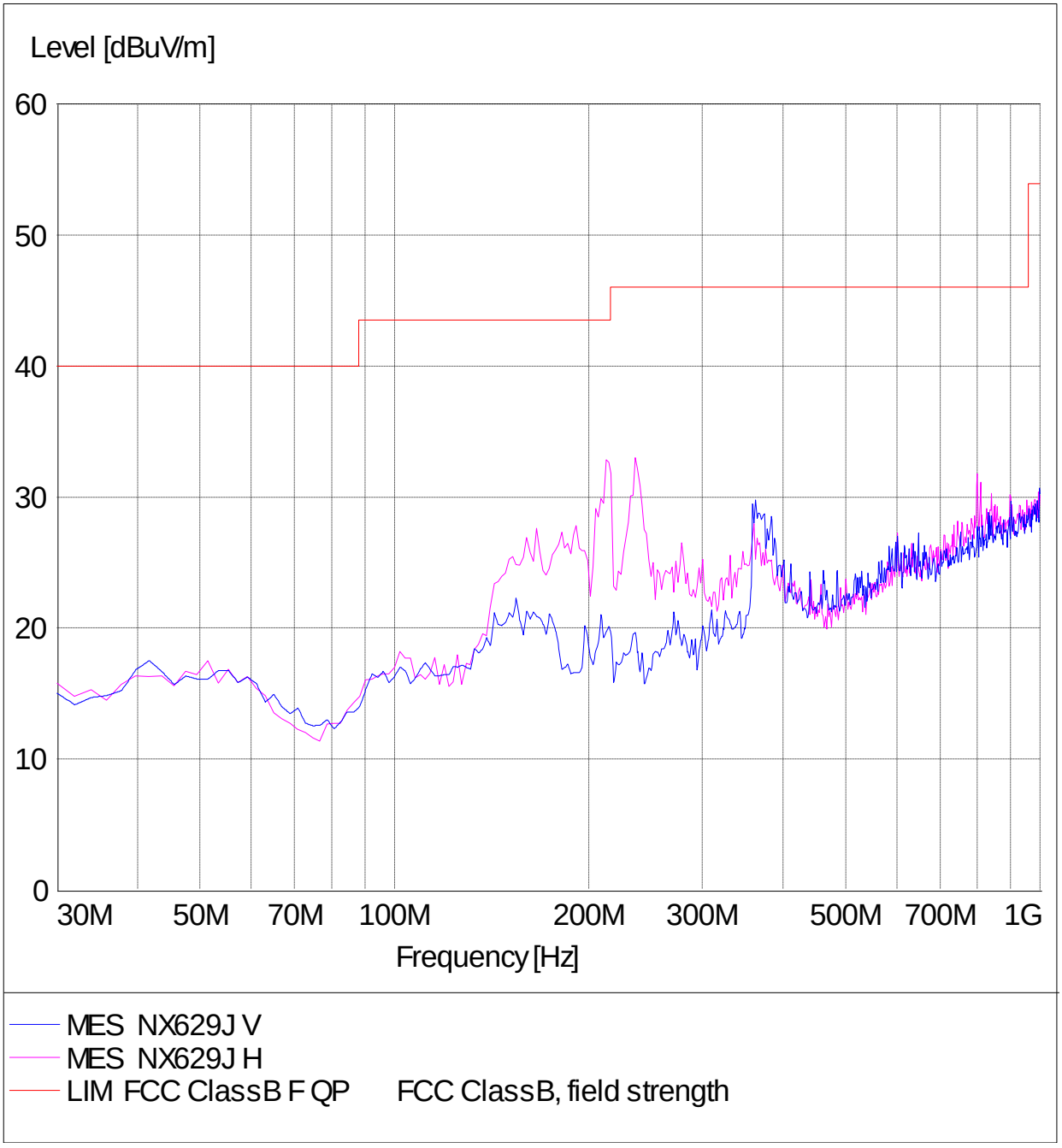
Model No.: NX629J Test mode: 1								
Frequency (MHz)	Cable Loss +preamp (dB)	Antenna Factor (dB)	Reading (dBμV/m)	Level (dBμV/m)	Polarity (H/V)	Limit (dBμV/m)	Margin (dB)	Note
41.663	0.7	13.6	1.2	15.5	V	40	24.5	QP
55.270	0.8	13.0	0.9	14.7	V	40	25.3	QP
101.923	1.1	13.2	0.9	15.2	V	43.5	28.3	QP
154.408	1.4	8.3	9.5	19.2	V	43.5	24.3	QP
271.042	1.9	12.1	4.2	18.2	V	46	27.8	QP
362.404	2.3	14.3	10.2	26.8	V	46	19.2	QP
51.382	0.8	13.3	1.3	15.4	H	40	24.6	QP
166.072	1.5	8.7	14.4	24.6	H	43.5	18.9	QP
191.342	1.6	10.6	13.9	26.1	H	43.5	17.4	QP
212.725	1.6	10.6	18.2	30.4	H	43.5	13.1	QP
236.052	1.8	11.2	17.1	30.1	H	46	15.9	QP
360.460	2.3	14.3	9.3	25.9	H	46	20.1	QP
1170.530	-41.0	24.4	54.2	37.6	H	74	36.4	PK
1374.530	-40.8	24.3	51.0	34.5	H	74	39.5	PK
1579.370	-40.6	25.1	60.1	44.6	H	74	29.4	PK
1784.330	-40.5	26.7	49.4	35.6	H	74	38.4	PK
2601.590	-40.0	29.6	47.1	36.7	H	74	37.3	PK
1800.000	-40.5	26.9	67.8	54.2	H	74	19.8	PK
1170.340	-41.0	24.4	50.2	33.6	V	74	40.4	PK
1374.150	-40.8	24.3	55.1	38.6	V	74	35.4	PK
1578.332	-40.6	25.1	58.1	42.6	V	74	31.4	PK
2193.350	-40.3	28.6	47.4	35.7	V	74	38.3	PK
6000.370	-38.3	34.7	61.2	57.6	V	74	16.4	PK
1800.000	-40.5	26.9	67.2	53.6	V	74	20.4	PK
1170.530	-41.0	24.4	32.0	15.4	H	54	38.6	AV
1374.530	-40.8	24.3	29.7	13.2	H	54	40.8	AV
1579.370	-40.6	25.1	39.1	23.6	H	54	30.4	AV
1784.330	-40.5	26.7	27.6	13.8	H	54	40.2	AV

2601.590	-40.0	29.6	25.0	14.6	H	54	39.4	AV
1800.000	-40.5	26.9	46.6	33.0	H	54	21.0	AV
1170.340	-41.0	24.4	29.4	12.8	V	54	41.2	AV
1374.150	-40.8	24.3	32.5	16.0	V	54	38.0	AV
1578.332	-40.6	25.1	37.1	21.6	V	54	32.4	AV
2193.350	-40.3	28.6	25.2	13.5	V	54	40.5	AV
6000.370	-38.3	34.7	38.2	34.6	V	54	19.4	AV
1800.000	-40.5	26.9	45.7	32.1	V	54	21.9	AV

Emission level (dBuV)=Read Value(dBuV/m) + Antenna Factor(dB)+ Cable Loss +preamp(dB)

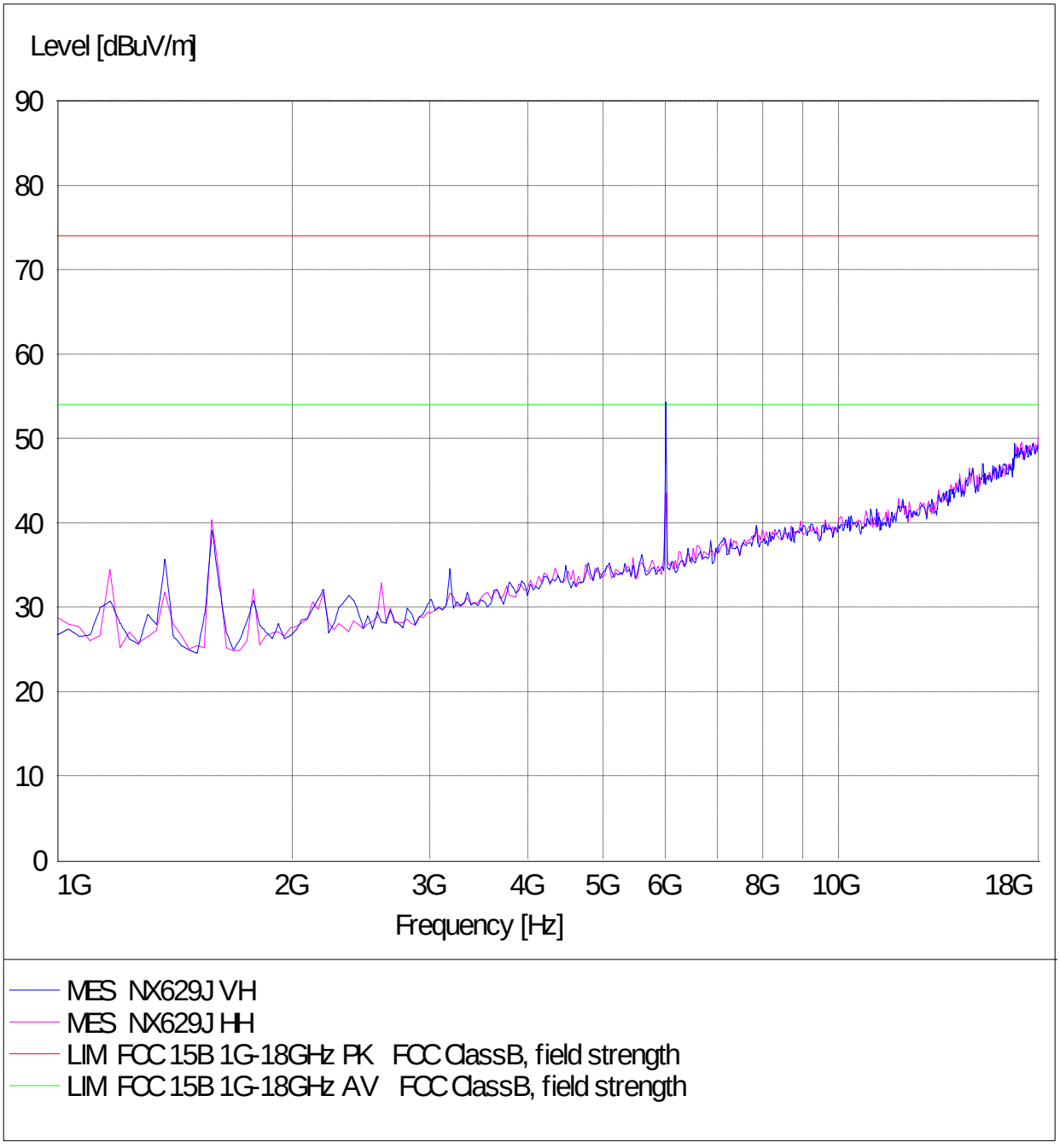
Radiated Emission

EUT Name: NX629J
Operating Condition: Test Mode 1
Test site: SMQ NETC EMC Lab.3m Chamber
Antenna Position: Horizontal & Vertical
Comment: AC 120V60Hz



Radiated Emission

EUT Name: NX629J
Operating Condition: Test Mode 1
Test site: SMQ NETC EMC Lab.3m Chamber
Antenna Position: Vertical & Horizontal
Comment: AC 120V/60Hz



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