



FCC Test Report

APPLICANT : KonnectONE
EQUIPMENT : LTE MiFi
BRAND NAME : moxee
MODEL NAME : K779HSDL
FCC ID : 2APQU-K779HSDL
STANDARD : 47 CFR Part 15 Subpart B
CLASSIFICATION : Certification

The product was received on Nov. 06, 2019 and testing was completed on Nov. 25, 2019.

We, Sporton International (Kunshan) Inc., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI C63.4-2014 and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International (Kunshan) Inc., the test report shall not be reproduced except in full.

Reviewed by: Jason Jia / Supervisor

Approved by: James Huang / Manager



Sportun International (Kunshan) Inc.
No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300
People's Republic of China



TABLE OF CONTENTS

REVISION HISTORY.....	3
SUMMARY OF TEST RESULT	4
1. GENERAL DESCRIPTION	5
1.1. Applicant.....	5
1.2. Manufacturer	5
1.3. Product Feature of Equipment Under Test	5
1.4. Product Specification of Equipment Under Test	6
1.5. Modification of EUT	6
1.6. Test Location.....	7
1.7. Test Software	7
1.8. Applicable Standards	7
2. TEST CONFIGURATION OF EQUIPMENT UNDER TEST.....	8
2.1. Test Mode	8
2.2. Connection Diagram of Test System	9
2.3. Support Unit used in test configuration and system.....	10
2.4. EUT Operation Test Setup	10
3. TEST RESULT.....	11
3.1. Test of AC Conducted Emission Measurement	11
3.2. Test of Radiated Emission Measurement	15
4. LIST OF MEASURING EQUIPMENT	20
6. UNCERTAINTY OF EVALUATION.....	21

APPENDIX A. SETUP PHOTOGRAPHS



REVISION HISTORY



SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	15.107	AC Conducted Emission	< 15.107 limits	PASS	Under limit 3.45 dB at 0.194 MHz
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	Under limit 3.43 dB at 45.520 MHz

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.



1. General Description

1.1. Applicant

KonnectONE

40 Lake Bellevue Drive, Suite 350, Bellevue, WA 98005

1.2. Manufacturer

MeiG Smart Technology Co., Ltd

No. 1 building, 9th floor, No.20, the 4th road of Zhangba Road, high-tech district, Xi'an, China.

1.3. Product Feature of Equipment Under Test

Product Feature	
Equipment	LTE MIFI
Brand Name	moxee
Model Name	K779HSDL
FCC ID	2APQU-K779HSDL
EUT supports Radios application	LTE WLAN 2.4GHz 802.11b/g/n HT20/HT40 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80
IMEI Code	Conduction: 351995110011554 Radiation: 351995110012842
HW Version	K779HSDL_V1.02_PCB
SW Version	K779HSDL_2.00.10_EQ100
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.



1.4. Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	LTE Band 2 : 1850.7 MHz ~ 1909.3 MHz LTE Band 4 : 1710.7 MHz ~ 1754.3 MHz LTE Band 5 : 824.7 MHz ~ 848.3 MHz LTE Band 12 : 699.7 MHz ~ 715.3 MHz LTE Band 13 : 779.5 MHz ~ 784.5 MHz LTE Band 25 : 1850.7 MHz ~ 1914.3 MHz LTE Band 26 : 814.7 MHz ~ 848.3 MHz LTE Band 41 : 2498.5 MHz ~ 2687.5 MHz LTE Band 66 : 1710.7 MHz ~ 1779.3 MHz LTE Band 71: 665.5 MHz ~ 695.5MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz 802.11a/n/ac: 5180 MHz ~ 5240 MHz; 5745 MHz ~ 5825 MHz
Rx Frequency	LTE Band 2 : 1930.7 MHz ~ 1989.3 MHz LTE Band 4 : 2110.7 MHz ~ 2154.3 MHz LTE Band 5 : 869.7 MHz ~ 893.3 MHz LTE Band 12 : 729.7 MHz ~ 745.3 MHz LTE Band 13 : 748.5 MHz ~ 753.5 MHz LTE Band 25 : 1930.7 MHz ~ 1994.3 MHz LTE Band 26 : 859.7 MHz ~ 893.3 MHz LTE Band 41 : 2498.5 MHz ~ 2687.5 MHz LTE Band 66 : 2110.7 MHz~ 2179.3 MHz LTE Band 71: 619.5 MHz ~ 649.5MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz 802.11a/n/ac: 5180 MHz ~ 5240 MHz; 5745 MHz ~ 5825 MHz
Antenna Type	WWAN/WLAN : IFA Antenna
Type of Modulation	LTE: QPSK / 16QAM / 64QAM (downlink only) 802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11a/g/n/ac : OFDM (BPSK / QPSK / 16QAM / 64QAM /256QAM)

1.5. Modification of EUT

No modifications are made to the EUT during all test items.



1.6. Test Location

Sportun International (Kunshan) Inc. is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Test Firm	Sportun International (Kunshan) Inc.		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158 FAX : +86-512-57900958		
Test Site No.	Sportun Site No.	FCC Designation No.	FCC Test Firm Registration No.
	CO01-KS 03CH02-KS	CN1257	314309

1.7. Test Software

Item	Site	Manufacture	Name	Version
1.	03CH02-KS	AUDIX	E3	6.2009-8-24a
2.	CO01-KS	AUDIX	E3	6.2009-8-24

1.8. Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR Part 15 Subpart B
- ANSI C63.4-2014

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.



2. Test Configuration of Equipment Under Test

2.1. Test Mode

The EUT has been associated with peripherals pursuant to ANSI C63.4-2014 and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

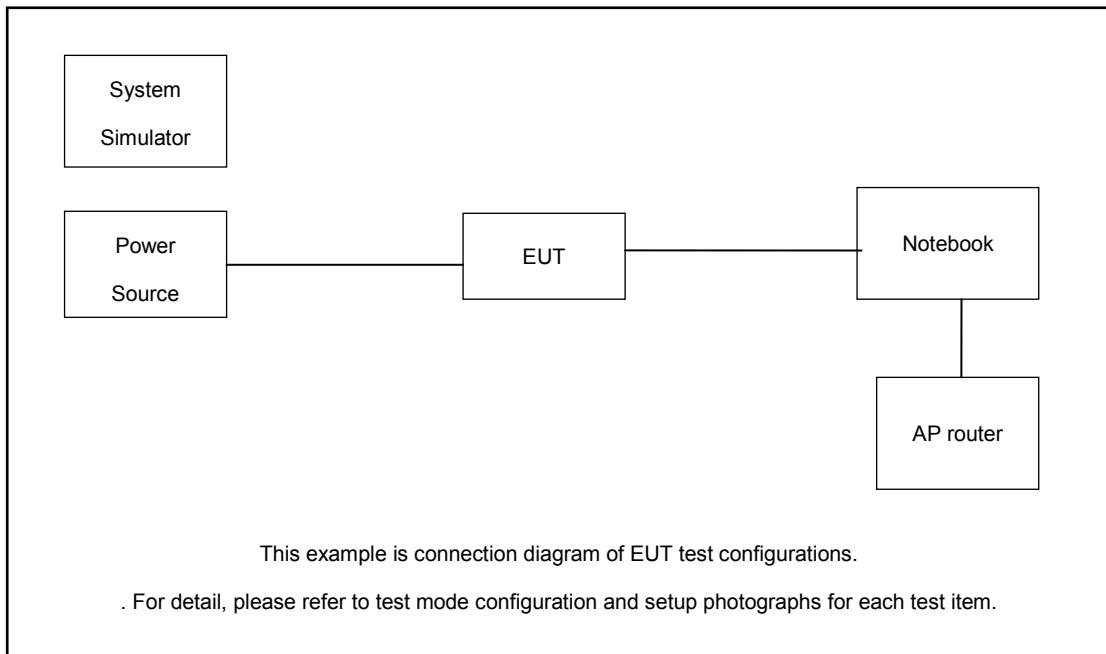
Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (30MHz to the 5th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

Test Items	Function Type
AC Conducted Emission	Mode 1: LTE Band 5 Rx(Middle) + WLAN (2.4G) Idle + USB Cable(Charging from Adapter) Mode 2: LTE Band 2 Rx + WLAN (5G) Idle + USB Cable(Charging from Adapter) Mode 3: LTE Band 12 Rx(Low) + WLAN (2.4G) Idle + USB Cable(Charging from Adapter) Mode 4: LTE Band 13 Rx(High) + WLAN (5G) Idle + USB Cable(Charging from Adapter) Mode 5: LTE Band 26 Rx(High) + WLAN (2.4G) Idle + USB Cable(Charging from Adapter) Mode 6: LTE Band 71 Rx(Middle) + WLAN (5G) Idle + USB Cable(Charging from Adapter) Mode 7: LTE Band 5 Rx(Middle) + WLAN (2.4G) Idle + USB Cable(Data Link with Notebook)
Radiated Emissions	Mode 1: LTE Band 5 Rx(Middle) + WLAN (2.4G) Idle + USB Cable(Charging from Adapter) Mode 2: LTE Band 2 Rx + WLAN (5G) Idle + USB Cable(Charging from Adapter) Mode 3: LTE Band 12 Rx(Low) + WLAN (2.4G) Idle + USB Cable(Charging from Adapter) Mode 4: LTE Band 13 Rx(High) + WLAN (5G) Idle + USB Cable(Charging from Adapter) Mode 5: LTE Band 26 Rx(High) + WLAN (2.4G) Idle + USB Cable(Charging from Adapter) Mode 6: LTE Band 71 Rx(Middle) + WLAN (5G) Idle + USB Cable(Charging from Adapter) Mode 7: LTE Band 5 Rx(Middle) + WLAN (2.4G) Idle + USB Cable(Data Link with Notebook)

Remark:

1. The worst case of AC is mode 1; only the test data of this mode is reported.
2. The worst case of RE is mode 1; only the test data of this mode is reported.
3. Data Link with Notebook / PC means data application transferred mode between EUT and Notebook / PC.
4. Pre-scanned Low/Middle/High channel for LTE Band 2/5/12/13/26/71, the worst channel was recorded in this report.

2.2. Connection Diagram of Test System



The EUT has been associated with peripherals pursuant to ANSI C63.4-2014 and configuration operated in a manner tended to maximize its emission characteristics in a typical application



2.3. Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	WLAN AP	TP-Link	TL-WDR5600	N/A	N/A	Unshielded,1.8m
2.	Notebook	DELL	Latitude3440	N/A	N/A	shielded cable DC O/P 1.8m , Unshielded AC I/P cable 1.8m
3.	Hard disk	KINGSHARE	S64G8A18X003	N/A	N/A	N/A
4.	LTE Base Station	Anritus	MT8820C	N/A	N/A	Unshielded,1.8m
5.	LTE Base Station	Anritus	MT8821C	N/A	N/A	Unshielded,1.8m
6.	LTE Base Station	Anritus	MT8820C	N/A	N/A	Unshielded,1.8m
7.	Notebook	Lenovo	G480	QDS-BRCM1050I	N/A	shielded cable DC O/P 1.8m , Unshielded AC I/P cable 1.8m
8.	Router	D-link	DIR-655	KA21R655B1	N/A	Unshielded,1.8m
9.	iPod	Apple	A1199	Fcc DoC	Shielded, 1.2m	N/A

2.4. EUT Operation Test Setup

The EUT was LTE idle mode during the testing. The EUT was synchronized to the BCCH, and is in continuous receiving mode by setting system simulator's paging reorganization.

At the same time, the EUT was attached to the WLAN AP, and the following programs installed in the EUT were programmed during the test.

1. Data application is transferred between notebook and EUT via USB cable.



3. Test Result

3.1. Test of AC Conducted Emission Measurement

3.1.1 Limits of AC Conducted Emission

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 150 kHz to 30 MHz shall not exceed the limits in the following table.

<Class B Limit>

Frequency of emission (MHz)	Conducted limit (dBuV)	
	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.

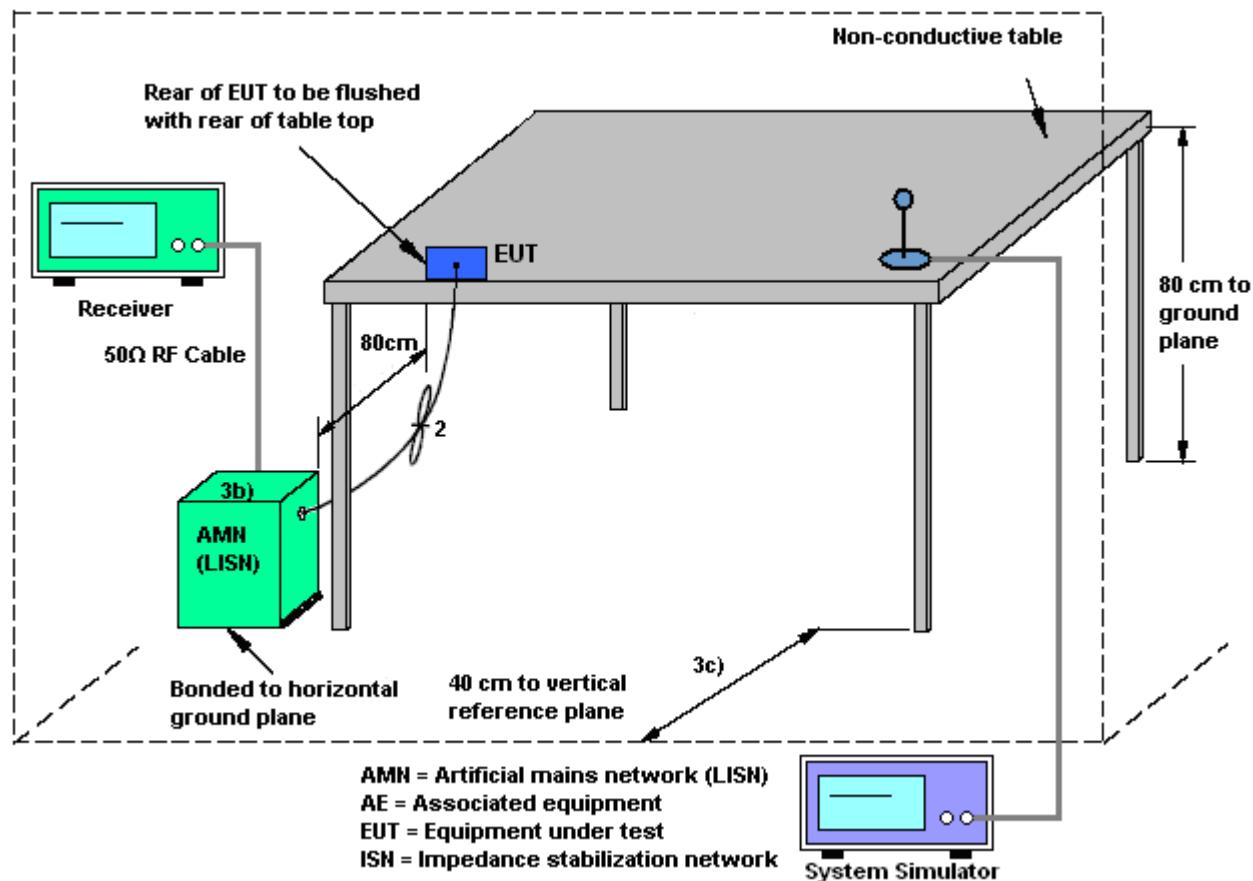
3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.1.3 Test Procedure

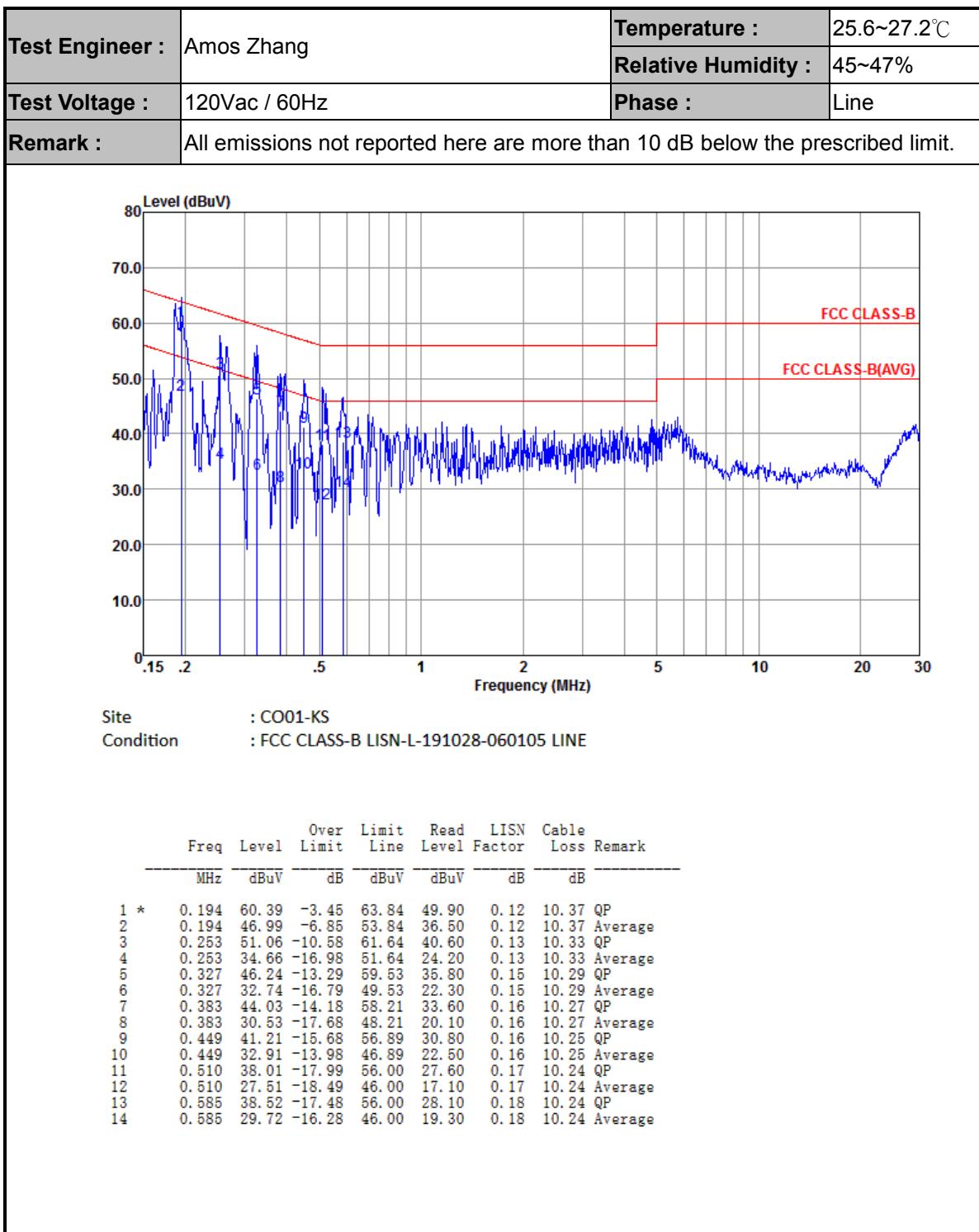
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
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.

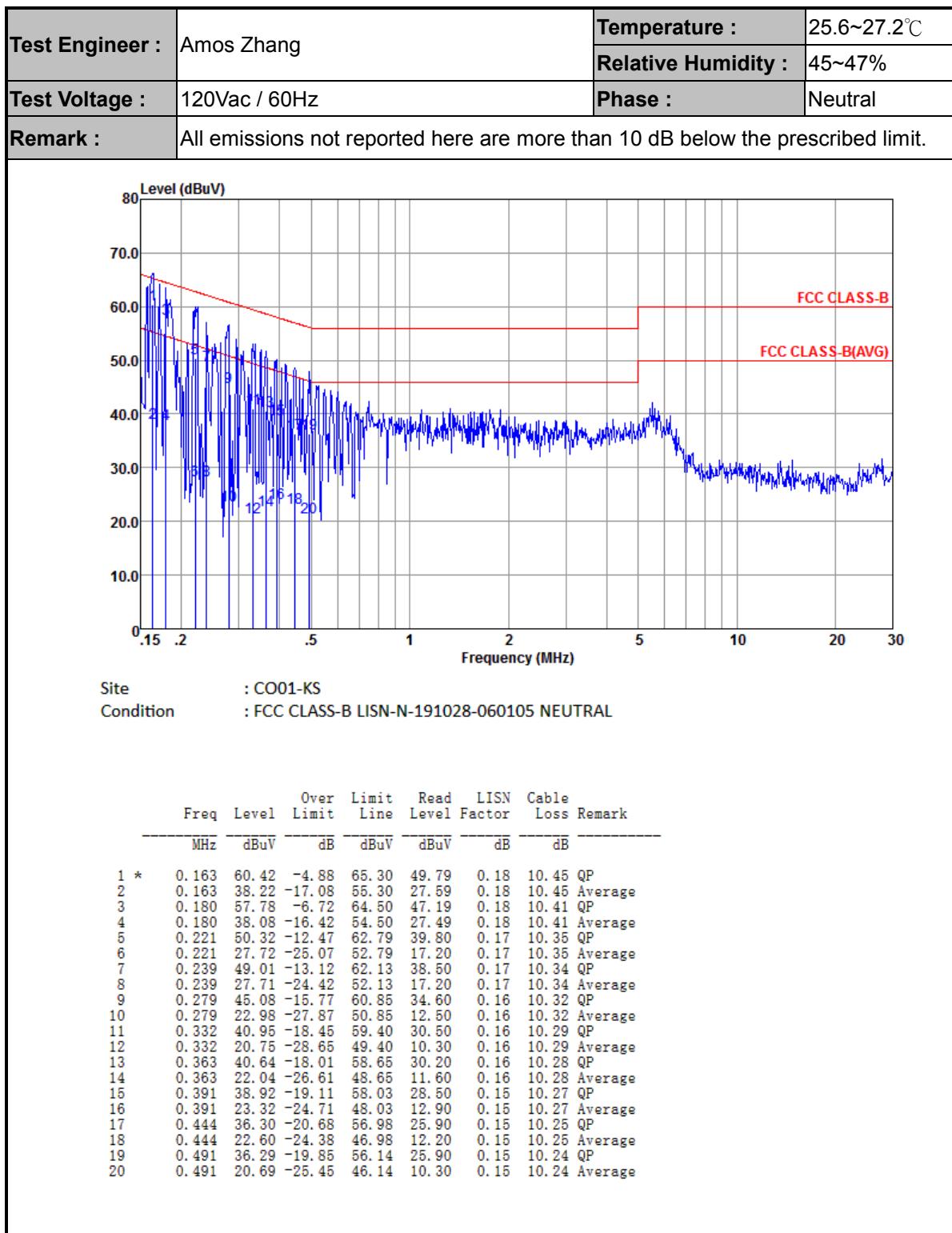
3.1.4 Test Setup





3.1.5 Test Result of AC Conducted Emission





Note:

1. Level(dB μ V) = Read Level(dB μ V) + LISN Factor(dB) + Cable Loss(dB)
2. Over Limit(dB) = Level(dB μ V) – Limit Line(dB μ V)



3.2. Test of Radiated Emission Measurement

3.2.1. Limit of Radiated Emission

The emissions from an unintentional radiator shall not exceed the field strength levels specified in the following table:

<Class B Limit>

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

3.2.2. Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

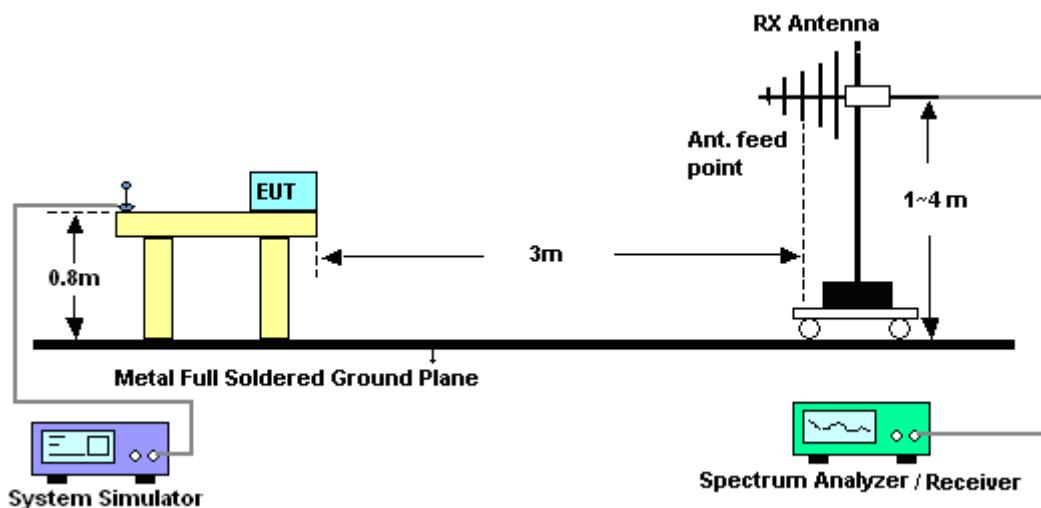


3.2.3. Test Procedures

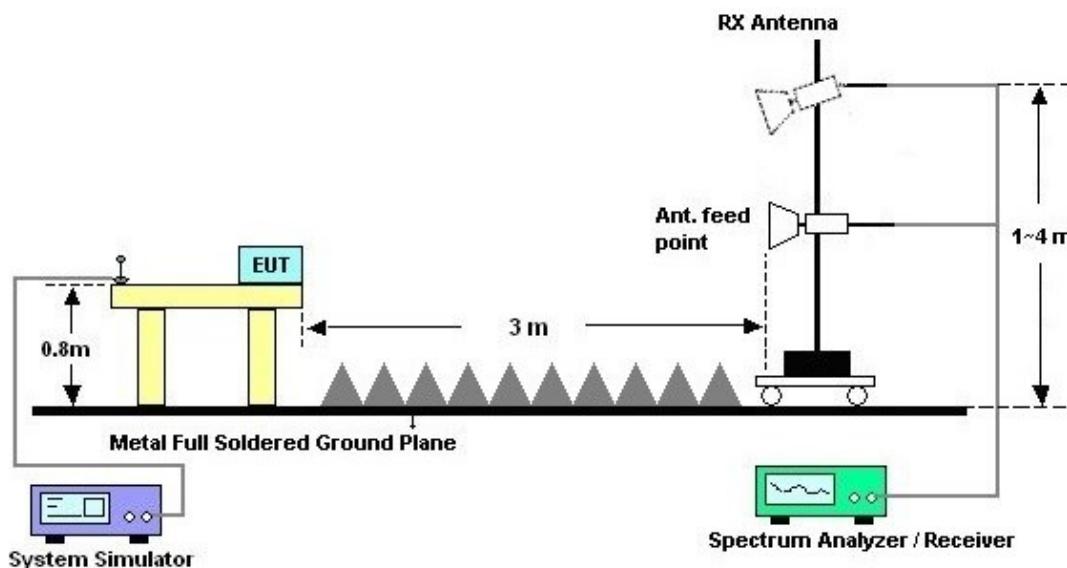
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna is a Bi-Log antenna and its height is adjusted between one to four 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 and specified bandwidth with Maximum Hold Mode (RBW=120kHz/VBW=300kHz for frequency below 1GHz; RBW=1MHz VBW=3MHz (Peak), RBW=1MHz/VBW=10Hz (Average) for frequency above 1GHz).
7. If the emission level of the EUT in peak mode was 3 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.
8. Emission level (dB μ V/m) = 20 log Emission level (μ V/m)
9. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

3.2.4. Test Setup of Radiated Emission

For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz





3.2.5. Test Result of Radiated Emission

Test Engineer :	Jack Guo	Temperature :	21~22°C																																																																																																																																																																														
		Relative Humidity :	41~42%																																																																																																																																																																														
Test Distance :	3m	Polarization :	Horizontal																																																																																																																																																																														
Remark :	#6 is system simulator signal which can be ignored.																																																																																																																																																																																
Site : 03CH02-KS Condition : FCC CLASS-B 3m LF 49922-3M HORIZONTAL																																																																																																																																																																																	
<table border="1"> <thead> <tr> <th rowspan="2">Freq</th> <th rowspan="2">Level</th> <th>Over</th> <th>Limit</th> <th>Read</th> <th>Antenna</th> <th>Cable</th> <th>Preamp</th> <th>A/Pos</th> <th>T/Pos</th> <th>Remark</th> </tr> <tr> <th>Limit</th> <th>Line</th> <th>Level</th> <th>Factor</th> <th>Loss</th> <th>Factor</th> <th></th> <th></th> <th></th> </tr> <tr> <th>MHz</th> <th>dBuV/m</th> <th>dB</th> <th>dBuV/m</th> <th>dBuV</th> <th>dB/m</th> <th>dB</th> <th>dB</th> <th>cm</th> <th>deg</th> <th></th> </tr> </thead> <tbody> <tr> <td>1</td> <td>37.760</td> <td>18.90</td> <td>-21.10</td> <td>40.00</td> <td>29.49</td> <td>20.66</td> <td>0.71</td> <td>31.96</td> <td>---</td> <td>--- Peak</td> </tr> <tr> <td>2</td> <td>134.760</td> <td>26.59</td> <td>-16.91</td> <td>43.50</td> <td>40.36</td> <td>16.89</td> <td>1.28</td> <td>31.94</td> <td>---</td> <td>--- Peak</td> </tr> <tr> <td>3</td> <td>164.830</td> <td>23.79</td> <td>-19.71</td> <td>43.50</td> <td>37.63</td> <td>16.58</td> <td>1.51</td> <td>31.93</td> <td>---</td> <td>--- Peak</td> </tr> <tr> <td>4</td> <td>246.310</td> <td>19.50</td> <td>-26.50</td> <td>46.00</td> <td>31.19</td> <td>18.42</td> <td>1.85</td> <td>31.96</td> <td>---</td> <td>--- Peak</td> </tr> <tr> <td>5</td> <td>839.950</td> <td>28.76</td> <td>-17.24</td> <td>46.00</td> <td>28.20</td> <td>29.08</td> <td>3.33</td> <td>31.85</td> <td>---</td> <td>--- Peak</td> </tr> <tr> <td>6</td> <td>881.660</td> <td>38.90</td> <td></td> <td></td> <td>37.83</td> <td>29.24</td> <td>3.41</td> <td>31.58</td> <td>---</td> <td>--- Peak</td> </tr> <tr> <td>7</td> <td>948.590</td> <td>30.06</td> <td>-15.94</td> <td>46.00</td> <td>26.64</td> <td>30.87</td> <td>3.55</td> <td>31.00</td> <td>100</td> <td>0 Peak</td> </tr> <tr> <td>8</td> <td>3648.000</td> <td>42.28</td> <td>-31.72</td> <td>74.00</td> <td>32.69</td> <td>34.33</td> <td>7.11</td> <td>31.85</td> <td>---</td> <td>--- Peak</td> </tr> <tr> <td>9</td> <td>5424.000</td> <td>42.83</td> <td>-31.17</td> <td>74.00</td> <td>30.13</td> <td>35.06</td> <td>8.71</td> <td>31.07</td> <td>---</td> <td>--- Peak</td> </tr> <tr> <td>10</td> <td>7072.000</td> <td>44.48</td> <td>-29.52</td> <td>74.00</td> <td>29.57</td> <td>36.23</td> <td>10.01</td> <td>31.33</td> <td>---</td> <td>--- Peak</td> </tr> <tr> <td>11</td> <td>11808.000</td> <td>46.40</td> <td>-27.60</td> <td>74.00</td> <td>25.58</td> <td>39.16</td> <td>13.72</td> <td>32.06</td> <td>---</td> <td>--- Peak</td> </tr> <tr> <td>12</td> <td>14400.000</td> <td>47.02</td> <td>-26.98</td> <td>74.00</td> <td>23.60</td> <td>39.38</td> <td>15.59</td> <td>31.55</td> <td>---</td> <td>--- Peak</td> </tr> <tr> <td>13</td> <td>17154.000</td> <td>47.38</td> <td>-26.62</td> <td>74.00</td> <td>21.86</td> <td>40.68</td> <td>16.51</td> <td>31.67</td> <td>---</td> <td>--- Peak</td> </tr> </tbody> </table>				Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	A/Pos	T/Pos	Remark	Limit	Line	Level	Factor	Loss	Factor				MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg		1	37.760	18.90	-21.10	40.00	29.49	20.66	0.71	31.96	---	--- Peak	2	134.760	26.59	-16.91	43.50	40.36	16.89	1.28	31.94	---	--- Peak	3	164.830	23.79	-19.71	43.50	37.63	16.58	1.51	31.93	---	--- Peak	4	246.310	19.50	-26.50	46.00	31.19	18.42	1.85	31.96	---	--- Peak	5	839.950	28.76	-17.24	46.00	28.20	29.08	3.33	31.85	---	--- Peak	6	881.660	38.90			37.83	29.24	3.41	31.58	---	--- Peak	7	948.590	30.06	-15.94	46.00	26.64	30.87	3.55	31.00	100	0 Peak	8	3648.000	42.28	-31.72	74.00	32.69	34.33	7.11	31.85	---	--- Peak	9	5424.000	42.83	-31.17	74.00	30.13	35.06	8.71	31.07	---	--- Peak	10	7072.000	44.48	-29.52	74.00	29.57	36.23	10.01	31.33	---	--- Peak	11	11808.000	46.40	-27.60	74.00	25.58	39.16	13.72	32.06	---	--- Peak	12	14400.000	47.02	-26.98	74.00	23.60	39.38	15.59	31.55	---	--- Peak	13	17154.000	47.38	-26.62	74.00	21.86	40.68	16.51	31.67	---	--- Peak
Freq	Level	Over	Limit			Read	Antenna	Cable	Preamp	A/Pos	T/Pos	Remark																																																																																																																																																																					
		Limit	Line	Level	Factor	Loss	Factor																																																																																																																																																																										
MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg																																																																																																																																																																								
1	37.760	18.90	-21.10	40.00	29.49	20.66	0.71	31.96	---	--- Peak																																																																																																																																																																							
2	134.760	26.59	-16.91	43.50	40.36	16.89	1.28	31.94	---	--- Peak																																																																																																																																																																							
3	164.830	23.79	-19.71	43.50	37.63	16.58	1.51	31.93	---	--- Peak																																																																																																																																																																							
4	246.310	19.50	-26.50	46.00	31.19	18.42	1.85	31.96	---	--- Peak																																																																																																																																																																							
5	839.950	28.76	-17.24	46.00	28.20	29.08	3.33	31.85	---	--- Peak																																																																																																																																																																							
6	881.660	38.90			37.83	29.24	3.41	31.58	---	--- Peak																																																																																																																																																																							
7	948.590	30.06	-15.94	46.00	26.64	30.87	3.55	31.00	100	0 Peak																																																																																																																																																																							
8	3648.000	42.28	-31.72	74.00	32.69	34.33	7.11	31.85	---	--- Peak																																																																																																																																																																							
9	5424.000	42.83	-31.17	74.00	30.13	35.06	8.71	31.07	---	--- Peak																																																																																																																																																																							
10	7072.000	44.48	-29.52	74.00	29.57	36.23	10.01	31.33	---	--- Peak																																																																																																																																																																							
11	11808.000	46.40	-27.60	74.00	25.58	39.16	13.72	32.06	---	--- Peak																																																																																																																																																																							
12	14400.000	47.02	-26.98	74.00	23.60	39.38	15.59	31.55	---	--- Peak																																																																																																																																																																							
13	17154.000	47.38	-26.62	74.00	21.86	40.68	16.51	31.67	---	--- Peak																																																																																																																																																																							



Test Engineer :	Jack Guo	Temperature :	21~22°C																																																																																																																																																																			
		Relative Humidity :	41~42%																																																																																																																																																																			
Test Distance :	3m	Polarization :	Vertical																																																																																																																																																																			
Remark :	#7 is system simulator signal which can be ignored.																																																																																																																																																																					
Site : 03CH02-KS Condition : FCC CLASS-B 3m LF 49922-3M VERTICAL																																																																																																																																																																						
<table border="1"> <thead> <tr> <th rowspan="2">Freq</th> <th rowspan="2">Level</th> <th>Over</th> <th>Limit</th> <th>Read</th> <th>Antenna</th> <th>Cable</th> <th>Preamp</th> <th>A/Pos</th> <th>T/Pos</th> <th rowspan="2">Remark</th> </tr> <tr> <th>Limit</th> <th>Line</th> <th>Antenna</th> <th>Level</th> <th>Factor</th> <th>Loss</th> <th>Factor</th> <th>cm</th> <th>deg</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>45.520</td> <td>36.57</td> <td>-3.43</td> <td>40.00</td> <td>51.10</td> <td>16.63</td> <td>0.78</td> <td>31.94</td> <td>100</td> <td>0 Peak</td> </tr> <tr> <td>2</td> <td>70.740</td> <td>21.41</td> <td>-18.59</td> <td>40.00</td> <td>39.64</td> <td>12.72</td> <td>0.97</td> <td>31.92</td> <td>---</td> <td>--- Peak</td> </tr> <tr> <td>3</td> <td>135.730</td> <td>25.79</td> <td>-17.71</td> <td>43.50</td> <td>39.53</td> <td>16.91</td> <td>1.29</td> <td>31.94</td> <td>---</td> <td>--- Peak</td> </tr> <tr> <td>4</td> <td>161.920</td> <td>23.73</td> <td>-19.77</td> <td>43.50</td> <td>37.45</td> <td>16.71</td> <td>1.50</td> <td>31.93</td> <td>---</td> <td>--- Peak</td> </tr> <tr> <td>5</td> <td>261.830</td> <td>23.89</td> <td>-22.11</td> <td>46.00</td> <td>35.15</td> <td>18.84</td> <td>1.89</td> <td>31.99</td> <td>---</td> <td>--- Peak</td> </tr> <tr> <td>6</td> <td>719.670</td> <td>28.79</td> <td>-17.21</td> <td>46.00</td> <td>30.62</td> <td>27.41</td> <td>3.07</td> <td>32.31</td> <td>---</td> <td>--- Peak</td> </tr> <tr> <td>7</td> <td>881.660</td> <td>39.41</td> <td></td> <td></td> <td>38.34</td> <td>29.24</td> <td>3.41</td> <td>31.58</td> <td>---</td> <td>--- Peak</td> </tr> <tr> <td>8</td> <td>1936.000</td> <td>38.34</td> <td>-35.66</td> <td>74.00</td> <td>37.67</td> <td>29.01</td> <td>5.00</td> <td>33.34</td> <td>---</td> <td>--- Peak</td> </tr> <tr> <td>9</td> <td>3640.000</td> <td>41.98</td> <td>-32.02</td> <td>74.00</td> <td>32.41</td> <td>34.29</td> <td>7.10</td> <td>31.82</td> <td>---</td> <td>--- Peak</td> </tr> <tr> <td>10</td> <td>5056.000</td> <td>42.69</td> <td>-31.31</td> <td>74.00</td> <td>30.63</td> <td>34.83</td> <td>8.44</td> <td>31.21</td> <td>---</td> <td>--- Peak</td> </tr> <tr> <td>11</td> <td>7088.000</td> <td>43.42</td> <td>-30.58</td> <td>74.00</td> <td>28.53</td> <td>36.23</td> <td>10.02</td> <td>31.36</td> <td>---</td> <td>--- Peak</td> </tr> <tr> <td>12</td> <td>8232.000</td> <td>44.42</td> <td>-29.58</td> <td>74.00</td> <td>29.17</td> <td>36.20</td> <td>11.06</td> <td>32.01</td> <td>---</td> <td>--- Peak</td> </tr> <tr> <td>13</td> <td>17442.000</td> <td>47.00</td> <td>-27.00</td> <td>74.00</td> <td>21.53</td> <td>40.82</td> <td>16.54</td> <td>31.89</td> <td>---</td> <td>--- Peak</td> </tr> </tbody> </table>				Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	A/Pos	T/Pos	Remark	Limit	Line	Antenna	Level	Factor	Loss	Factor	cm	deg	1	45.520	36.57	-3.43	40.00	51.10	16.63	0.78	31.94	100	0 Peak	2	70.740	21.41	-18.59	40.00	39.64	12.72	0.97	31.92	---	--- Peak	3	135.730	25.79	-17.71	43.50	39.53	16.91	1.29	31.94	---	--- Peak	4	161.920	23.73	-19.77	43.50	37.45	16.71	1.50	31.93	---	--- Peak	5	261.830	23.89	-22.11	46.00	35.15	18.84	1.89	31.99	---	--- Peak	6	719.670	28.79	-17.21	46.00	30.62	27.41	3.07	32.31	---	--- Peak	7	881.660	39.41			38.34	29.24	3.41	31.58	---	--- Peak	8	1936.000	38.34	-35.66	74.00	37.67	29.01	5.00	33.34	---	--- Peak	9	3640.000	41.98	-32.02	74.00	32.41	34.29	7.10	31.82	---	--- Peak	10	5056.000	42.69	-31.31	74.00	30.63	34.83	8.44	31.21	---	--- Peak	11	7088.000	43.42	-30.58	74.00	28.53	36.23	10.02	31.36	---	--- Peak	12	8232.000	44.42	-29.58	74.00	29.17	36.20	11.06	32.01	---	--- Peak	13	17442.000	47.00	-27.00	74.00	21.53	40.82	16.54	31.89	---	--- Peak
Freq	Level	Over	Limit			Read	Antenna	Cable	Preamp	A/Pos	T/Pos	Remark																																																																																																																																																										
		Limit	Line	Antenna	Level	Factor	Loss	Factor	cm	deg																																																																																																																																																												
1	45.520	36.57	-3.43	40.00	51.10	16.63	0.78	31.94	100	0 Peak																																																																																																																																																												
2	70.740	21.41	-18.59	40.00	39.64	12.72	0.97	31.92	---	--- Peak																																																																																																																																																												
3	135.730	25.79	-17.71	43.50	39.53	16.91	1.29	31.94	---	--- Peak																																																																																																																																																												
4	161.920	23.73	-19.77	43.50	37.45	16.71	1.50	31.93	---	--- Peak																																																																																																																																																												
5	261.830	23.89	-22.11	46.00	35.15	18.84	1.89	31.99	---	--- Peak																																																																																																																																																												
6	719.670	28.79	-17.21	46.00	30.62	27.41	3.07	32.31	---	--- Peak																																																																																																																																																												
7	881.660	39.41			38.34	29.24	3.41	31.58	---	--- Peak																																																																																																																																																												
8	1936.000	38.34	-35.66	74.00	37.67	29.01	5.00	33.34	---	--- Peak																																																																																																																																																												
9	3640.000	41.98	-32.02	74.00	32.41	34.29	7.10	31.82	---	--- Peak																																																																																																																																																												
10	5056.000	42.69	-31.31	74.00	30.63	34.83	8.44	31.21	---	--- Peak																																																																																																																																																												
11	7088.000	43.42	-30.58	74.00	28.53	36.23	10.02	31.36	---	--- Peak																																																																																																																																																												
12	8232.000	44.42	-29.58	74.00	29.17	36.20	11.06	32.01	---	--- Peak																																																																																																																																																												
13	17442.000	47.00	-27.00	74.00	21.53	40.82	16.54	31.89	---	--- Peak																																																																																																																																																												

Note:

1. Level(dB μ V/m) = Read Level(dB μ V) + Antenna Factor(dB/m) + Cable Loss(dB) - Preamp Factor(dB)
2. Over Limit(dB) = Level(dB μ V/m) - Limit Line(dB μ V/m)



4. List of Measuring Equipment

5. Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz;	Apr. 16, 2019	Nov. 25, 2019	Apr. 15, 2020	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060103	9kHz~30MHz	Oct. 18, 2019	Nov. 25, 2019	Oct. 17, 2020	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060105	9kHz~30MHz	Oct. 28, 2019	Nov. 25, 2019	Oct. 27, 2020	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	AC 0V~300V, 45Hz~1000Hz	Oct. 18, 2019	Nov. 25, 2019	Oct. 17, 2020	Conduction (CO01-KS)
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz; Max 30dBm	Oct. 18, 2019	Nov. 24, 2019	Oct. 17, 2020	Radiation (03CH02-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150208	10Hz-44G, MAX 30dB	Apr. 15, 2019	Nov. 24, 2019	Apr. 16, 2020	Radiation (03CH02-KS)
Bilog Antenna	TeseQ	CBL6111D	49922	30MHz-1GHz	May. 30, 2019	Nov. 24, 2019	May. 29, 2020	Radiation (03CH02-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75959	1GHz~18GHz	Jan. 27, 2019	Nov. 24, 2019	Jan. 26, 2020	Radiation (03CH02-KS)
SHF-EHF Horn	Com-power	AH-840	101070	18GHz~40GHz	Jan. 05, 2019	Nov. 24, 2019	Jan. 04, 2020	Radiation (03CH02-KS)
Amplifier	MITEQ	TTA1840-35-HG	1887435	18~40GHz	Feb. 08, 2019	Nov. 24, 2019	Feb. 07, 2020	Radiation (03CH02-KS)
Amplifier	SONOMA	310N	187289	9KHz-1GHz	Aug. 06, 2019	Nov. 24, 2019	Aug. 05, 2020	Radiation (03CH02-KS)
Amplifier	Keysight	83017A	MY57280106	500MHz~26.5GHz	Apr. 15, 2019	Nov. 24, 2019	Apr. 14, 2020	Radiation (03CH02-KS)
AC Power Source	Chroma	61601	616010002473	N/A	NCR	Nov. 24, 2019	NCR	Radiation (03CH02-KS)
Turn Table	MF	MF7802	N/A	0~360 degree	NCR	Nov. 24, 2019	NCR	Radiation (03CH02-KS)
Antenna Mast	MF	MF7802	N/A	1 m~4 m	NCR	Nov. 24, 2019	NCR	Radiation (03CH02-KS)

NCR: No Calibration Required



6. Uncertainty of Evaluation

Uncertainty of Conducted Emission Measurement (150 kHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2U _c (y))	2.9 dB
-------------------------------------------------------------------------------------	--------

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2U _c (y))	4.9 dB
-------------------------------------------------------------------------------------	--------

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2U _c (y))	5.0 dB
-------------------------------------------------------------------------------------	--------