

Test Report

Applicant: NoTraffic Ltd.

Address of Applicant: 126, Yigal Alon St. Tel Aviv Israel

Manufacturer: NoTraffic Ltd.

Address of Manufacturer: 126, Yigal Alon St. Tel Aviv Israel

Equipment Under Test (EUT)

Product Name: Sensor unit

Model No.: Sensor unit rev 1.1

Trade Mark: NoTraffic

FCC ID: 2AS3G-SENS

Contains FCC ID: VOB-P3310
2AEGPMK5OBU

Applicable standards: FCC CFR Title 47 Part 15 Subpart B

Date of sample receipt: August 12, 2019

Date of Test: August 13- September 12, 2019

Date of report issued: September 16, 2019

Test Result : PASS *

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



Robinson Lo

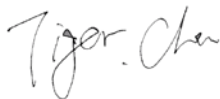
Laboratory Manager

This results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

2 Version

Version No.	Date	Description
00	September 16, 2019	Original

Prepared By:

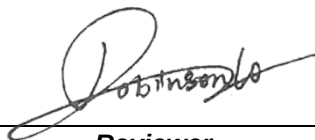


Date:

September 16, 2019

Project Engineer

Check By:



Date:

September 16, 2019

Reviewer

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4 Test Summary

Test Item	Test Requirement	Test Method	Class / Severity	Result
Conducted Emission	FCC Part15.107	ANSI C63.4	Class A	PASS
Radiated Emissions #	FCC Part15.109 &15.31	ANSI C63.4	Class A	PASS

Remarks:

1. Pass: The EUT complies with the essential requirements in the standard.
2. # Refer to FCC Part 15.33 (b)(1) conditional testing procedure :

The highest frequency generated or used in the EUT	Test frequency range of Radiated emission
<108MHz	30MHz ~ 1GHz
108MHz ~ 500MHz	30MHz ~ 2GHz
500MHz ~ 1GHz	30MHz ~ 5GHz
>1GHz	30MHz ~ 10th harmonic of the highest frequency or 40 GHz, whichever is lower.

Note: the EUT Internal clock frequency above 108MHz.

Measurement Uncertainty

Test Item	Frequency Range	Measurement Uncertainty	Notes
Radiated Emission	30MHz ~ 200MHz	$\pm 3.8039\text{dB}$	(1)
Radiated Emission	200MHz~1000 MHz	$\pm 3.9679\text{dB}$	(1)
Radiated Emission	1GHz ~ 6GHz	$\pm 4.29\text{dB}$	(1)
AC Power Line Conducted Emission	0.15MHz ~ 30MHz	$\pm 3.44\text{dB}$	(1)

Note (1): The measurement uncertainty is for coverage factor of k=2 and a level of confidence of 95%.

5 General Information

5.1 General Description of EUT

Product Name:	Sensor unit
Model No.:	Sensor unit rev 1.1
Serial No.:	N/A
Hardware Version:	1.1
Software Version:	N/A
Power Supply:	AC 120V

5.2 Test mode and Test voltage

Test mode:	
Co-Location mode	Keep the EUT in WIFI working simultaneously
Test voltage	
AC 120V	

5.3 Description of Support Units

Manufacturer	Description	Model	Serial Number
Lenovo	Notebook PC	E40-80	N/A
Canon	Printer	IP1600	N/A
DELL	KEYBOARD	SK-8115	GTS237-2
DELL	MOUSE	MOC5UO	GTS237-3

5.4 Deviation from Standards

None.

5.5 Abnormalities from Standard Conditions

None.

5.6 Test Facility

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

- **FCC —Registration No.: 381383**

Global United Technology Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in files. Registration 381383.

- **NVLAP (LAB CODE:600179-0)**

Global United Technology Services Co., Ltd., is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP). LAB CODE:600179-0

- **IC —Registration No.: 9079A**

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. Has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 9079A

5.7 Test Location

The test was performed at:

Global United Technology Services Co., Ltd.

Address: No. 123-128, Tower A, Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102

Tel: 0755-27798480

Fax: 0755-27798960

6 Test Instruments list

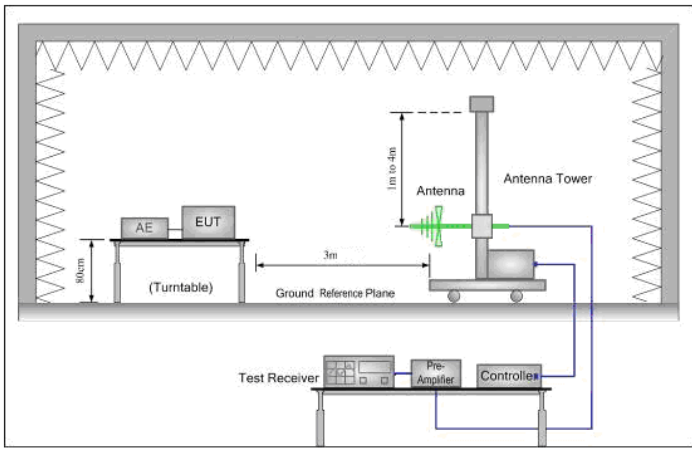
Radiated Emission:						
Item	Test Equipment	Manufacturer	Model No.	Inventor y No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	July. 03 2015	July. 02 2020
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	June. 26 2019	June. 25 2020
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	June. 26 2019	June. 25 2020
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120 D	GTS208	June. 26 2019	June. 25 2020
6	Horn Antenna	ETS-LINDGREN	3160	GTS217	June. 26 2019	June. 25 2020
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
8	Coaxial Cable	GTS	N/A	GTS213	June. 26 2019	June. 25 2020
9	Coaxial Cable	GTS	N/A	GTS211	June. 26 2019	June. 25 2020
10	Coaxial cable	GTS	N/A	GTS210	June. 26 2019	June. 25 2020
11	Coaxial Cable	GTS	N/A	GTS212	June. 26 2019	June. 25 2020
12	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	June. 26 2019	June. 25 2020
13	Amplifier(2GHz-20GHz)	HP	84722A	GTS206	June. 26 2019	June. 25 2020
14	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June. 26 2019	June. 25 2020
15	Band filter	Amindeon	82346	GTS219	June. 26 2019	June. 25 2020
16	Power Meter	Anritsu	ML2495A	GTS540	June. 26 2019	June. 25 2020
17	Power Sensor	Anritsu	MA2411B	GTS541	June. 26 2019	June. 25 2020
18	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	GTS575	June. 26 2019	June. 25 2020
19	Splitter	Agilent	11636B	GTS237	June. 26 2019	June. 25 2020
20	Loop Antenna	ZHINAN	ZN30900A	GTS534	June. 26 2019	June. 25 2020
21	Breitband hornantenne	SCHWARZBECK	BBHA 9170	GTS579	Oct. 20 2018	Oct. 19 2019
22	Amplifier	TDK	PA-02-02	GTS574	Oct. 20 2018	Oct. 19 2019
23	Amplifier	TDK	PA-02-03	GTS576	Oct. 20 2018	Oct. 19 2019
24	PSA Series Spectrum Analyzer	Rohde & Schwarz	FSP	GTS578	June. 26 2019	June. 25 2020

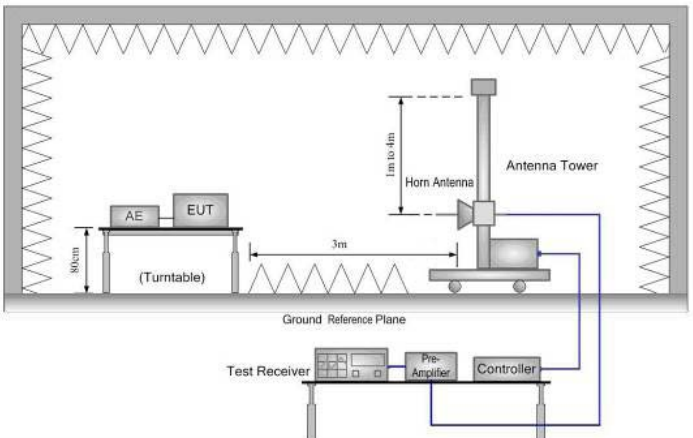
Conducted Emission						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	Shielding Room	ZhongYu Electron	7.3(L)x3.1(W)x2.9(H)	GTS252	May.15 2019	May.14 2022
2	EMI Test Receiver	R&S	ESCI 7	GTS552	June. 26 2019	June. 25 2020
3	Coaxial Switch	ANRITSU CORP	MP59B	GTS225	June. 26 2019	June. 25 2020
4	Artificial Mains Network	SCHWARZBECK MESS	NSLK8127	GTS226	June. 26 2019	June. 25 2020
5	Coaxial Cable	GTS	N/A	GTS227	N/A	N/A
6	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
7	Thermo meter	KTJ	TA328	GTS233	June. 26 2019	June. 25 2020
8	Absorbing clamp	Elektronik-Feinmechanik	MDS21	GTS229	June. 26 2019	June. 25 2020
9	ISN	SCHWARZBECK	NTFM 8158	GTD565	June. 26 2019	June. 25 2020

General used equipment:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	Humidity/ Temperature Indicator	KTJ	TA328	GTS243	June. 26 2019	June. 25 2020
2	Barometer	ChangChun	DYM3	GTS255	June. 26 2019	June. 25 2020

7 Test Results and Measurement Data

7.1 Radiated Emission

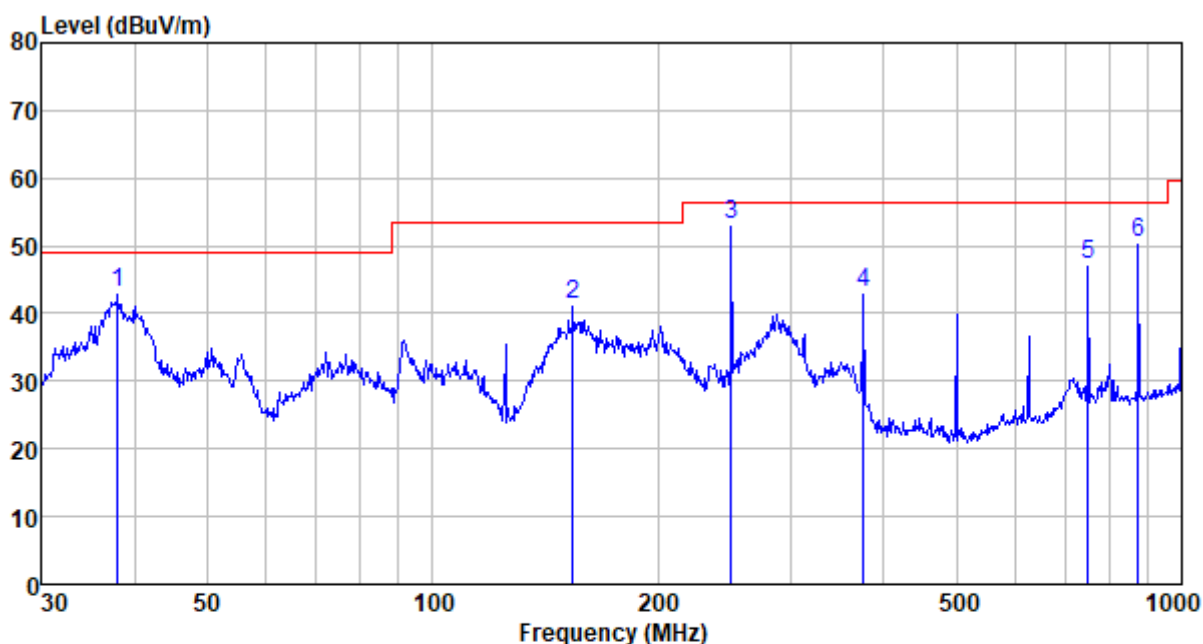
Test Requirement:	FCC Part15 B Section 15.109				
Test Method:	ANSI C63.4:2014				
Test Frequency Range:	30MHz to 40GHz				
Test site:	Measurement Distance: 3m (Semi-Anechoic Chamber)				
Receiver setup:	Frequency	Detector	RBW	VBW	Remark
	30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak Value
	Above 1GHz	Peak	1MHz	3MHz	Peak Value
		Peak	1MHz	10Hz	Average Value
Limit:	Frequency		Limit (dBuV/m @3m)		Remark
	30MHz-88MHz		49.00		Quasi-peak Value
	88MHz-216MHz		53.50		Quasi-peak Value
	216MHz-960MHz		56.40		Quasi-peak Value
	960MHz-1GHz		59.50		Quasi-peak Value
	Above 1GHz		54.00		Average Value
			74.00		Peak Value
Test setup:	For radiated emissions from 30MHz to1GHz				
					
	For radiated emissions above 1GHz				

		
Test environment:	Temp.: 25 °C Humid.: 52% Press.: 1 012mbar	
Test Instruments:	Refer to section 6 for details	
Test mode:	Refer to section 5.2 for details, only show the worst case.	
Test results:	Pass	

Measurement Data

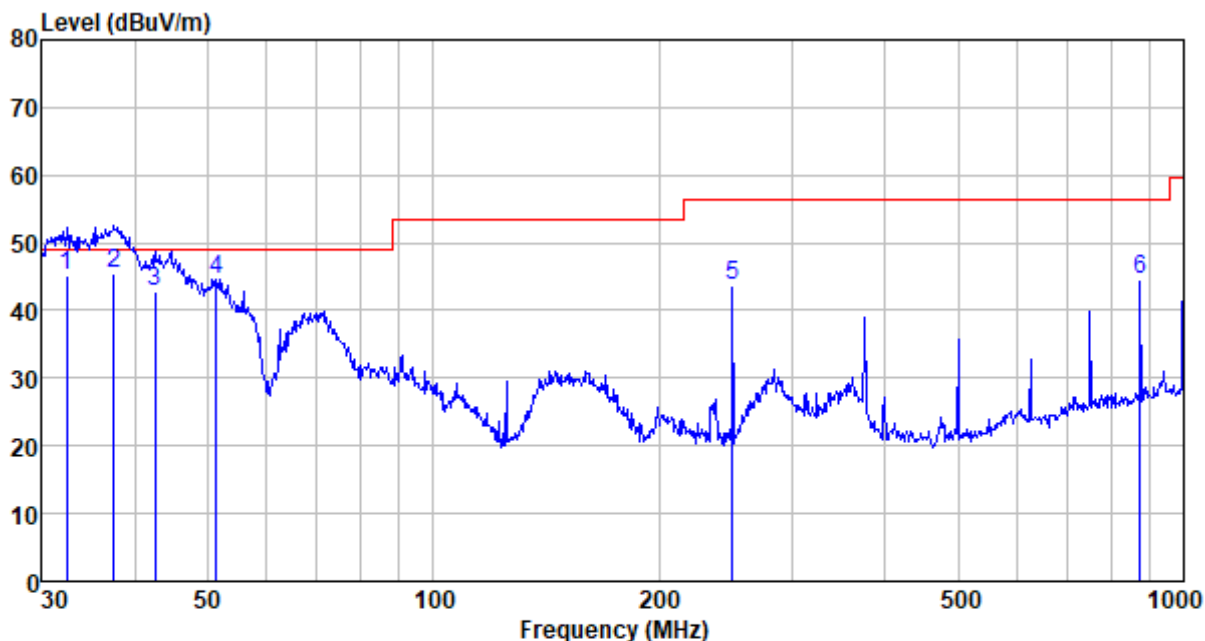
Below 1GHz

Test mode:	Co-Location mode	Antenna Polarity:	Horizontal
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Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV	Limit level dBuV/m	Over limit dB	Remark
37.945	66.24	11.86	0.64	35.54	43.20	49.00	-5.80	QP
153.739	69.01	7.90	1.59	37.10	41.40	53.50	-12.10	QP
250.301	76.14	12.18	2.12	37.38	53.06	56.40	-3.34	QP
375.939	62.86	14.94	2.75	37.50	43.05	56.40	-13.35	QP
750.108	60.14	20.53	4.28	37.62	47.33	56.40	-9.07	QP
875.247	61.17	22.09	4.76	37.60	50.42	56.40	-5.98	QP

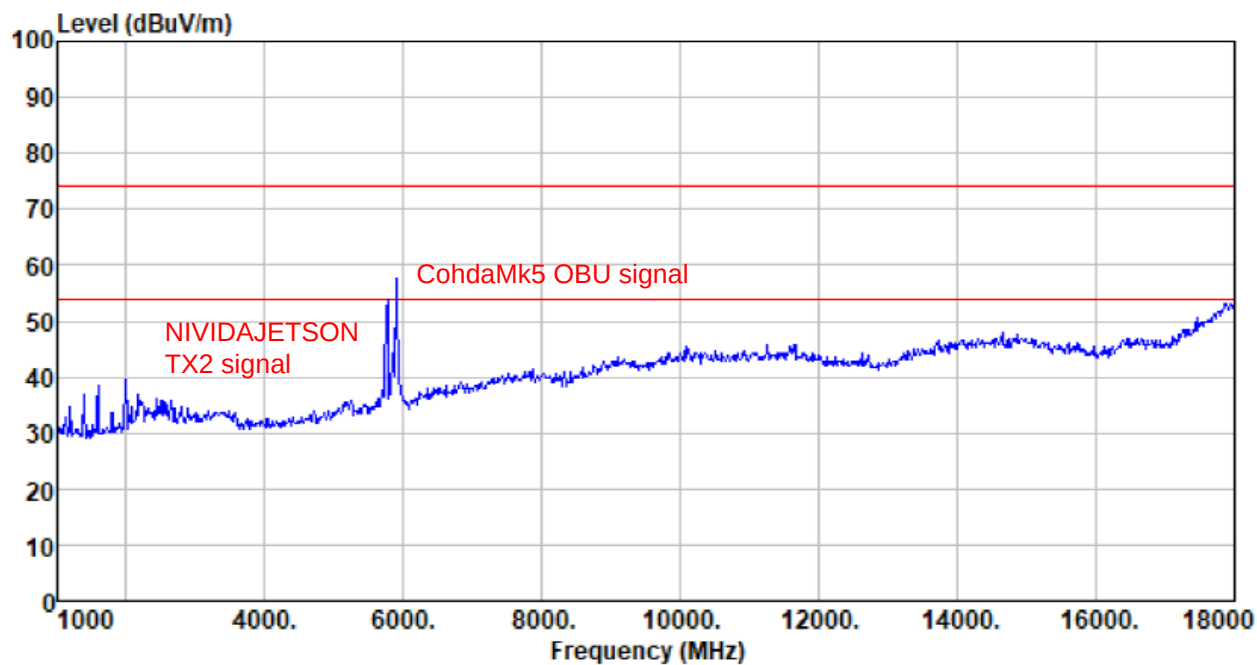
Test mode:	Co-Location mode	Antenna Polarity:	Vertical
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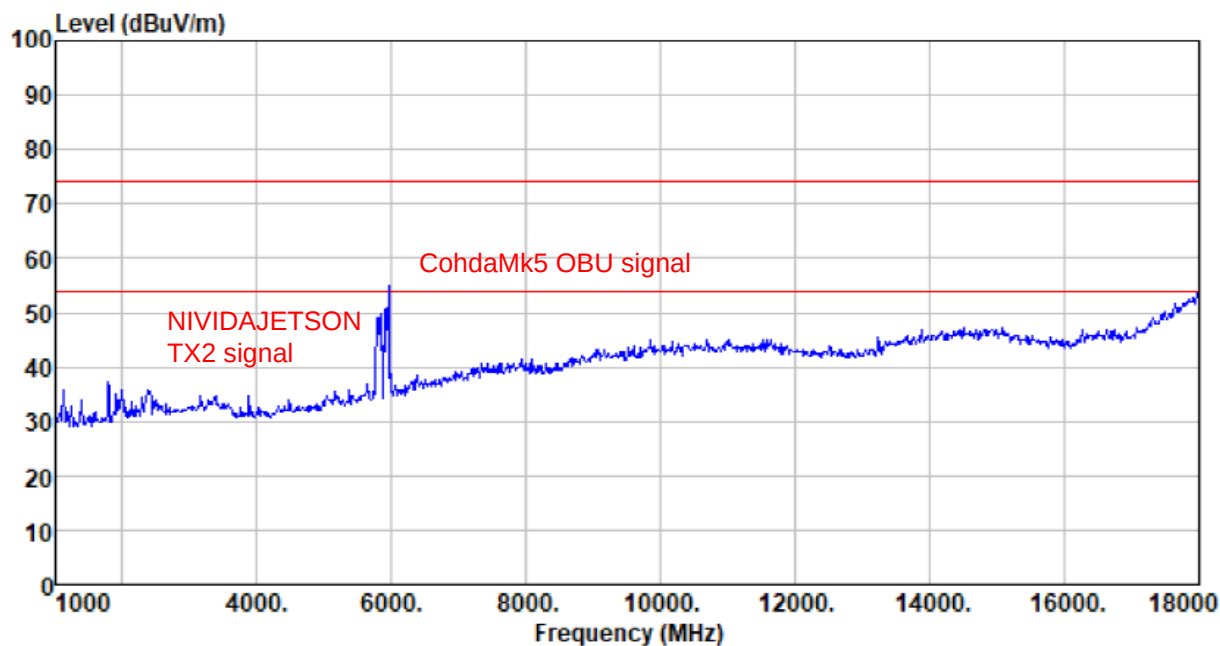
Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV	Limit level dBuV/m	Over limit dB	Remark
32.406	68.63	11.25	0.58	35.18	45.28	49.00	-3.72	QP
37.548	68.67	11.80	0.64	35.52	45.59	49.00	-3.41	QP
42.600	65.59	12.23	0.69	35.81	42.70	49.00	-6.30	QP
51.301	67.96	12.15	0.78	36.20	44.69	49.00	-4.31	QP
250.301	66.88	12.18	2.12	37.38	43.80	56.40	-12.60	QP
875.247	55.31	22.09	4.76	37.60	44.56	56.40	-11.84	QP

Above 1GHz

Test mode:	Co-Location mode	Antenna Polarity:	Horizontal
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Test mode:	Co-Location mode	Antenna Polarity:	Vertical
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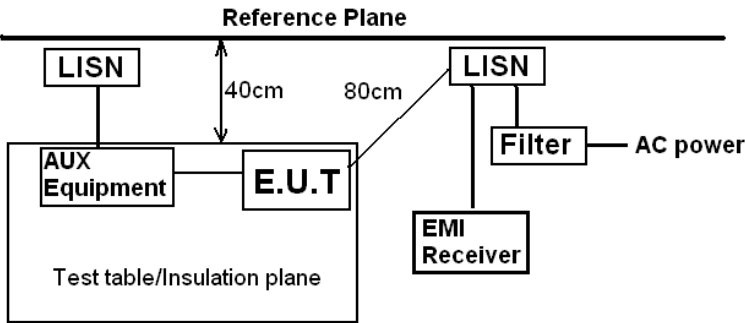
Note:

The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level = Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor

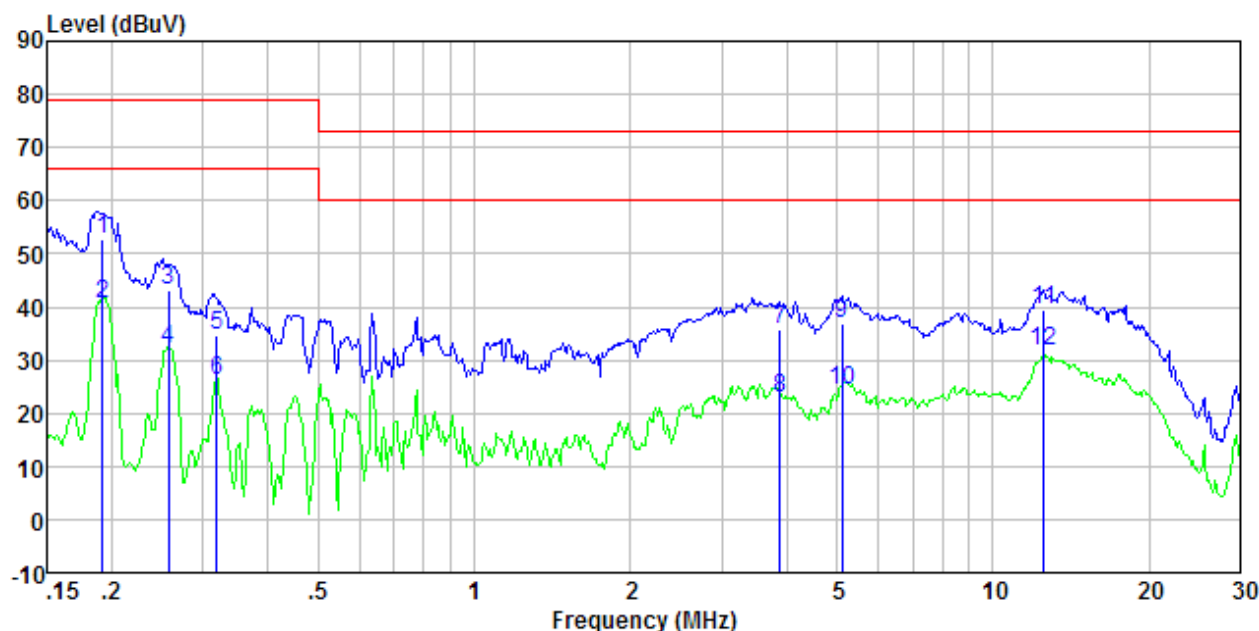
The test trace is same as the ambient noise (the test frequency range: 18GHz~40GHz), therefore no emission appear in the report.

7.2 Conducted Emissions

Test Requirement:	FCC Part15 B Section 15.107					
Test Method:	ANSI C63.4:2014					
Test Frequency Range:	150kHz to 30MHz					
Class / Severity:	Class A					
Receiver setup:	RBW=9kHz, VBW=30kHz					
Limit:	Frequency range (MHz)		Limit (dBμV)			
			Quasi-peak		Average	
	0.15-0.5		79		66	
	0.5-30		73		60	
* Decreases with the logarithm of the frequency.						
Test setup:						
	<i>Remark: E.U.T.: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m</i>					
Test environment:	Temp.:	25 °C	Humid.:	52%	Press.:	1 012mbar
Test Instruments:	Refer to section 6 for details					
Test mode:	Refer to section 5.2 for details, only show the worst case.					
Test results:	Pass					

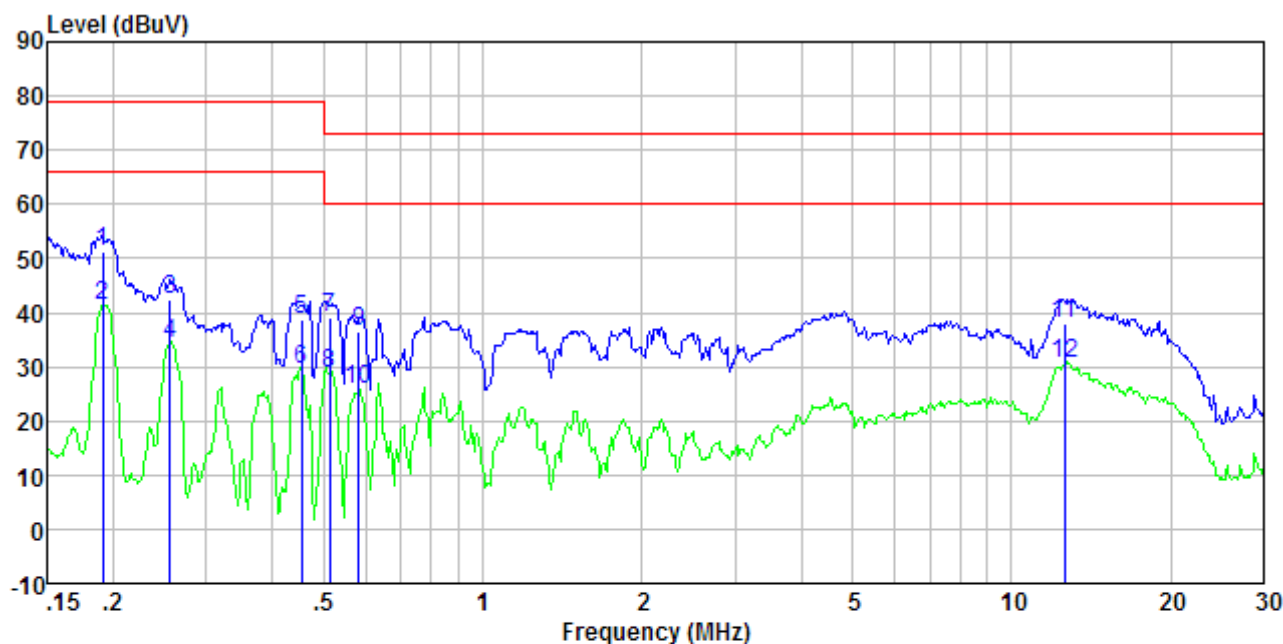
Measurement Data

Test mode:	Co-Location mode	Phase Polarity:	Line
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Freq MHz	Reading level dBuV	LISN/ISN factor dB/m	Cable loss dB	Level dBuV	Limit level dBuV	Over limit dB	Remark
0.19	52.36	0.40	0.11	52.87	79.00	-26.13	QP
0.19	40.16	0.40	0.11	40.67	66.00	-25.33	Average
0.26	42.61	0.40	0.10	43.11	79.00	-35.89	QP
0.26	31.62	0.40	0.10	32.12	66.00	-33.88	Average
0.32	34.04	0.39	0.10	34.53	79.00	-44.47	QP
0.32	25.75	0.39	0.10	26.24	66.00	-39.76	Average
3.88	35.50	0.20	0.18	35.88	73.00	-37.12	QP
3.88	22.61	0.20	0.18	22.99	60.00	-37.01	Average
5.11	36.54	0.20	0.17	36.91	73.00	-36.09	QP
5.11	23.89	0.20	0.17	24.26	60.00	-35.74	Average
12.52	39.06	0.20	0.21	39.47	73.00	-33.53	QP
12.52	31.18	0.20	0.21	31.59	60.00	-28.41	Average

Test mode:	Co-Location mode	Phase Polarity:	Neutral
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Freq MHz	Reading level dBuV	LISN/ISN factor dB/m	Cable loss dB	Level dBuV	Limit level dBuV	Over limit dB	Remark
0.19	50.82	0.40	0.10	51.32	79.00	-27.68	QP
0.19	40.69	0.40	0.10	41.19	66.00	-24.81	Average
0.26	41.81	0.40	0.10	42.31	79.00	-36.69	QP
0.26	33.80	0.40	0.10	34.30	66.00	-31.70	Average
0.45	38.37	0.33	0.11	38.81	79.00	-40.19	QP
0.45	29.14	0.33	0.11	29.58	66.00	-36.42	Average
0.51	38.70	0.31	0.11	39.12	73.00	-33.88	QP
0.51	28.47	0.31	0.11	28.89	60.00	-31.11	Average
0.58	36.02	0.29	0.12	36.43	73.00	-36.57	QP
0.58	25.31	0.29	0.12	25.72	60.00	-34.28	Average
12.58	37.69	0.20	0.21	38.10	73.00	-34.90	QP
12.58	30.05	0.20	0.21	30.46	60.00	-29.54	Average

Notes:

- The following Quasi-Peak and Average measurements were performed on the EUT:
- Final Test Level = Receiver Reading + LISN Factor + Cable Loss.

8 Test Setup Photo

Reference to the **appendix I** for details.

9 EUT Constructional Details

Reference to the **appendix II** for details.

-----End-----