

TEST REPORT

Applicant : Toast, Incorporated
Address of Applicant : 401 Park Drive, Suite 801, Boston, MA
02215, USA
Product Name : Data Processing Machine
Model No. : TT200/TT202/TT203/TK200

Standards : FCC CFR47 Part 15, Subpart E
RSS-Gen (Issue 5, March 2019)
RSS-407 (Issue 2, February 2017)

Date of Receipt : 2020-07-24
Date of Test : 2020-07-24~2020-08-05
Date of Issue : 2020-08-05

Compiled by:

Oliver Xiang

Reviewed by:

jesse

Approved by:

Guoyou Chi

TABLE OF CONTENTS

1.	GENERAL INFORMATION	3
1.1	TESTING LABORATORY	3
1.2	PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	3
1.3	DOCUMENT REVISION HISTORY	4
1.4	TEST METHODOLOGY	4
2	TEST CONDITION	5
2.1	ENVIRONMENTAL CONDITIONS	5
2.2	EQUIPMENT LIST	5
2.3	MEASUREMENT UNCERTAINTY	5
3	TEST SET-UP AND OPERATION MODES	6
3.1	DETAILS OF TEST MODE	6
3.2	SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT	6
3.3	SUPPORT SOFTWARE	7
3.4	TEST SETUP DIAGRAM.....	7
4	TEST RESULTS	8
4.1	TRANSMITTER REQUIREMENT & TEST SUITES.....	8
4.2	MAINS EMISSIONS.....	16

1. GENERAL INFORMATION

1.1 Testing Laboratory

Company Name	ICAS Testing Technology Services (Shanghai) Co., Ltd.
Address	1298 Pingan Rd, Minhang District, Shanghai, China
Telephone	0086 21-51682999
Fax	0086 21-54711112
Homepage	www.icasiso.com

1.2 Product Description for Equipment under Test (EUT)

Product Name	Data Processing machine
Brand Name	Toast
Model No.	TT200/TT202/TT203/TK200
Class type	Class B
Working Voltage	High 28V, Normal: 24 V, Low 20V
Wireless Description	WIFI 2.4GHz(802.11 B,G,N20) WIFI 5G Band 1/4 802.11a/802.11n (20MHz,40MHz) /802.11ac(20MHz,40MHz,80MHz) Bluetooth4.2 BR/EDR/HS3.0/BLE4.0
Hardware version	CT541MB80C_20191016
Software version	1.2.6/121
FCC ID	2AMNG-TT200
IC number	23177-TT200
Note :	RJ45 LINE is less than 3 meters
General remarks: The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory. Comments: The test results are true for the test sample(s) only.	

1.3 DOCUMENT REVISION HISTORY

Revision Number	Report Number	Standard	Description of Revision
1	SHE19110012-02KE	FCC CFR47 Part 15, Subpart E RSS-Gen (Issue 5, March 2019) RSS-247 (Issue 2, February 2017)	Original Report
2	SHE20070042-01KE	FCC CFR47 Part 15, Subpart E RSS-Gen (Issue 5, March 2019) RSS-247 (Issue 2, February 2017)	Amended Report

Note:

This is an amended report application based on below reports.(issue by ICAS Testing Technology Services (Shanghai) Co., Ltd.) :

SHE19110012-02KE FCC IC WLAN 5G Test Report

Product Description –

The product covered in this report is a Data Processing Machine, intended for used with information technology equipment. Class III equipment.

This equipment consists of following critical parts:

- Data Processing Machine (Main LCD panel Terminal);
- On-Counter Guest Facing Display (Sub LCD panel Terminal)
- Attached base support;
- Adapter (Model: SOY2400400).

Model Differences –

- TT200: Main LCD panel Terminal + Attached base support;
- TT202: Main LCD panel Terminal(Remove POE module & one speaker)+ Attached base support;
- TT203: Main LCD panel Terminal(Remove POE module & one speaker & Y cable) + Attached base support;
- TK200: Main LCD panel Terminal.

The new model name TT202, TT203 were added in this report.

Additional application considerations – (Considerations used to test a component or sub-assembly) –

Only the model name, trade name. The original test results are applicable except radiated spurious emission below 1GHz, conducted emission and continue to be representative of this device. All data please check the Original Report.

1.4 Test Methodology

47 CFR Part 15, Subpart E (11-1-19 Edition)	Unlicensed National Information Infrastructure Devices
KDB Publication 789033 D02	Guidelines for Compliance Testing of Unlicensed National

v02r01	Information Infrastructure (U-NII) Devices Part 15, Subpart E
KDB Publication 662911 D01 v02r01	Emissions Testing of Transmitters with Multiple Outputs in the Same Band (e.g., MIMO, Smart Antenna, etc)
RSS-Gen (Issue 5, March 2019)	General Requirements for Compliance of Radio Apparatus
RSS-247 (Issue 2, February 2017)	Digital Transmission Systems (DTSS), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices
ANSI C63.10-2013	American National Standard for Testing Unlicensed Wireless Devices

Note(s):

All test items were verified and recorded according to the standards and without any addition/deviation/exclusion during the test.

2 Test Condition**2.1 Environmental conditions**

Temperature (°C)	18-25
Humidity (%RH)	40-65
Barometric Pressure (mbar)	960-1060

2.2 Equipment List

Name of Equipment	Manufacturer	Model	Serial No.	Cal. Due Date
Spectrum Analyzer	Keysight	N9020B	MY59260184	2020-07-28
Spectrum Analyzer	Rohde & Schwarz	FSV40N	101450	2021-06-24
EMI Test Receiver	Rohde & Schwarz	ESPI3	100173	2021-06-19
EMI Test Receiver	Rohde & Schwarz	ESR 7	101911	2021-06-19
V-network	SCHWARZBECK	NSLK 8127	8127-902	202102-20
Wideband Radio Communication Tester	Rohde & Schwarz	CMW 500	100687	2020-08-22
Broadband Antenna	SCHWARZBECK	VULB9163	9163-1037	2021-06-06
Horn Antenna-18G	SCHWARZBECK	BBHA9120D	9120D-1775	2021-06-06
Loop Antenna	SCHWARZBECK	FMZB 1513	N/A	2021-03-19
Horn Antenna-40G	YINGLIAN	LB-180400-KF	N/A	2021-07-26
Test Software	BL	BL410_E	N/A	N/A

2.3 Measurement Uncertainty

Parameter	Frequency	Uncertainty
Antenna Port Conducted Emission	< 1GHz	± 1.5 dB
	> 1GHz	± 1.5 dB
Radiated Emission	30 MHz – 1 GHz	± 3 dB
	> 1GHz	± 3 dB

3 Test Set-up and Operation Modes

3.1 Details of Test Mode

Using test software was control EUT work in continuous transmitter and receiver mode. Select test channel For 802.11a/n(HT20), 802.11ac(VHT20)

Band I (5150 – 5250 MHz)		Band IV (5725 – 5850 MHz)	
Channel	Frequency	Channel	Frequency
The lowest channel(CH36)	5180MHz	The lowest channel(CH149)	5745MHz
The middle channel(CH44)	5220MHz	The middle channel(CH157)	5785MHz
The highest channel(CH48)	5240MHz	The highest channel(CH165)	5825MHz

For 802.11n(HT40), 802.11ac(VHT40)

Band I (5150 – 5250 MHz)		Band IV (5725 – 5850 MHz)	
Channel	Frequency	Channel	Frequency
The lowest channel(CH38)	5190MHz	The lowest channel(CH151)	5755MHz
The highest channel(CH46)	5230MHz	The highest channel(CH159)	5795MHz

For 802.11ac(VHT80)

Band I (5150 – 5250 MHz)		Band IV (5725 – 5850 MHz)	
Channel	Frequency	Channel	Frequency
The lowest channel(CH42)	5210MHz	The lowest channel(CH155)	5775MHz

Through Pre-scan under all rate at lowest channel, the data rate as below table described is the worst case, so we choose these data rate for test.

Type	Data rate
802.11a	6Mbps
802.11n(HT20), 802.11ac(VHT20)	MCS0
802.11n(HT40), 802.11ac(VHT40)	MCS0
802.11ac(VHT80)	MCS0

The basic operation modes are:

- A. On
 - 1. BR/EDR mode
 - a. Transmitting
 - i. Low Channel
 - ii. Middle Channel
 - iii. High Channel
 - iv. Hopping mode
 - b. Receiving
 - 2. Normal working with Bluetooth on
- B. Standby
- C. Off

3.2 Special Accessories and Auxiliary Equipment

Description	Manufacturer	Model No.	Serial No.
Laptop	Lenovo	TP00083A	N/A

3.3 Support Software

Description	Manufacturer	Software Name
Software	/	RF Test Tool

3.4 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test

Note: Measurements above 1GHz are done with a table height of 1.5m. In addition, there is RF absorbing material on the floor of the test site for above 1GHz measurement.

4 Test Results

4.1 Transmitter Requirement & Test Suites

4.1.1 Spurious Emission

RESULT:

PASS

Test standard : FCC Part 15.407(b)
RSS-247 6.2
Requirement : ANSI C63.10-2013
Kind of test site : 3m Semi-Anechoic Chamber

Test setup

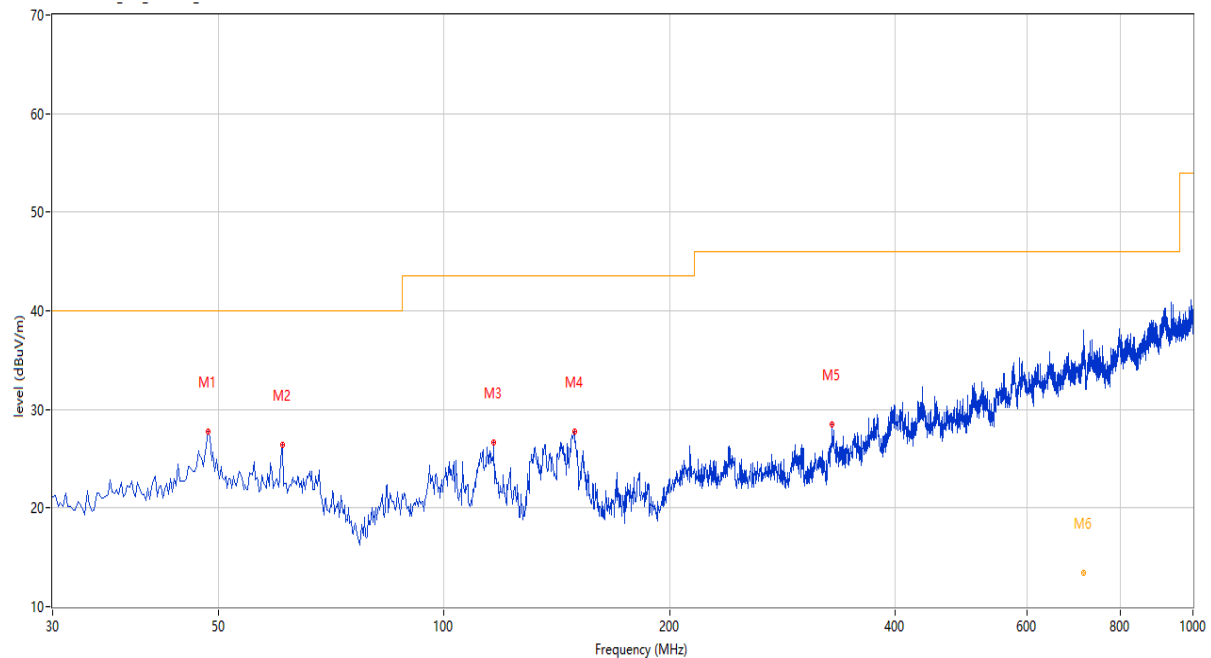
Test Channel : Low/Middle/High
Operation Mode : A
Ambient temperature : 26°C
Relative humidity : 52%

4.1.2 Test record

TT202

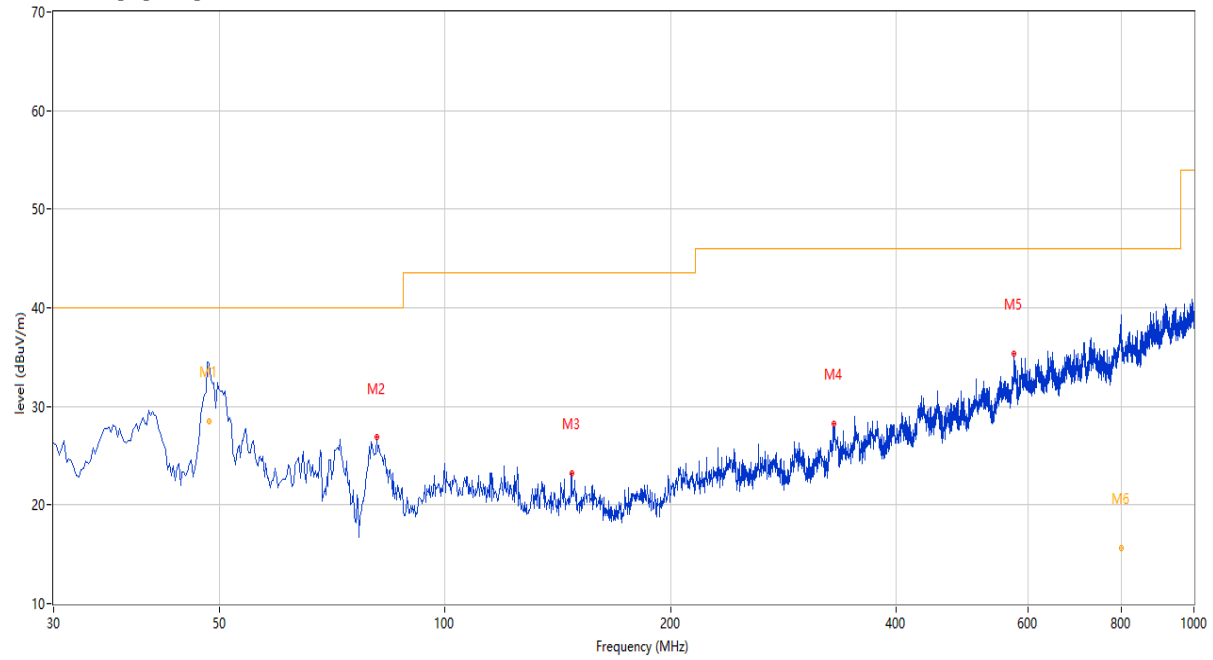
AC port 110V:

REmission Test case_FCC_Part 15B_FCC Part 15B Class B 30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	48.425	27.73	-23.76	40.0	-12.27	Peak	87.70	200	Horizontal	Pass
2	60.790	26.42	-25.64	40.0	-13.58	Peak	276.00	100	Horizontal	Pass
3	116.551	26.63	-27.18	43.5	-16.87	Peak	304.90	200	Horizontal	Pass
4	149.280	27.81	-28.74	43.5	-15.69	Peak	306.60	100	Horizontal	Pass
5	329.655	28.47	-21.64	46.0	-17.53	Peak	360.00	200	Horizontal	Pass
6	715.342	19.98	-14.50	46.0	-26.02	Peak	118.60	130	Horizontal	Pass
6*	715.342	13.48	-14.50	46.0	-32.52	QP	118.60	130	Horizontal	Pass

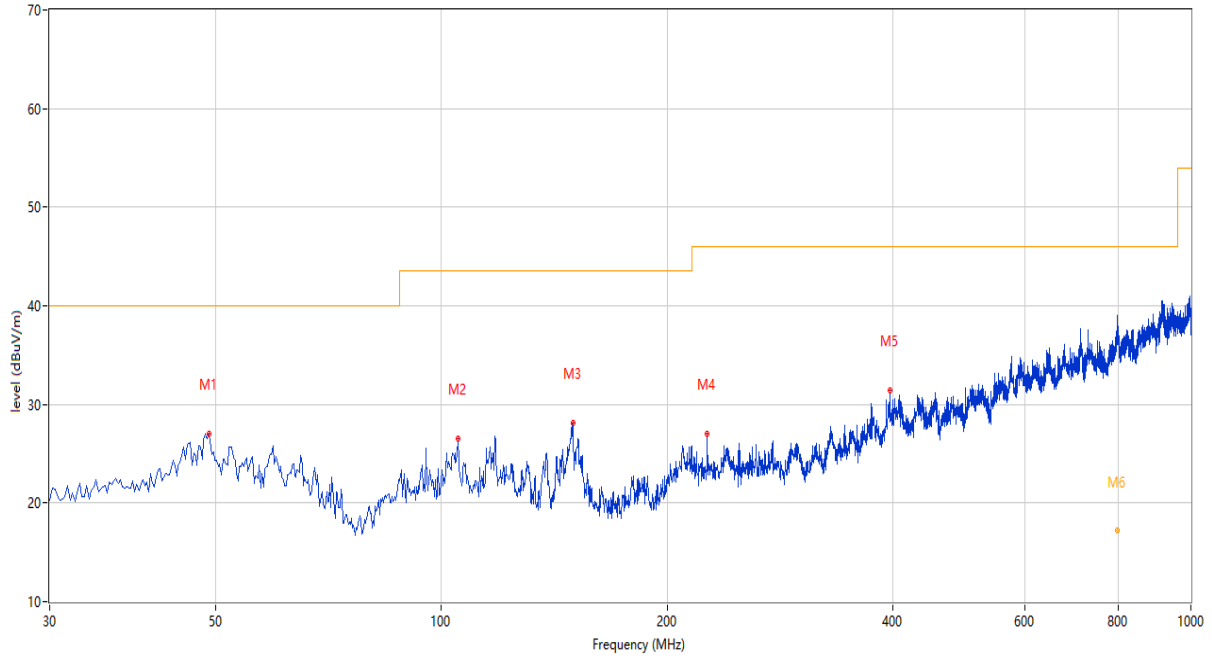
REmission Test case_FCC_Part 15B_FCC Part 15B Class B 30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	48.371	31.60	-23.69	40.0	-8.40	Peak	75.10	100	Vertical	Pass
1*	48.371	28.48	-23.69	40.0	-11.52	QP	75.10	100	Vertical	Pass
2	81.155	26.85	-29.55	40.0	-13.15	Peak	189.70	100	Vertical	Pass
3	147.583	23.26	-29.03	43.5	-20.24	Peak	360.00	200	Vertical	Pass
4	330.625	28.22	-21.64	46.0	-17.78	Peak	359.80	100	Vertical	Pass
5	575.489	35.41	-16.04	46.0	-10.59	Peak	285.60	200	Vertical	Pass
6	799.357	22.28	-11.99	46.0	-23.72	Peak	360.00	246	Vertical	Pass
6*	799.357	15.69	-11.99	46.0	-30.31	QP	360.00	246	Vertical	Pass

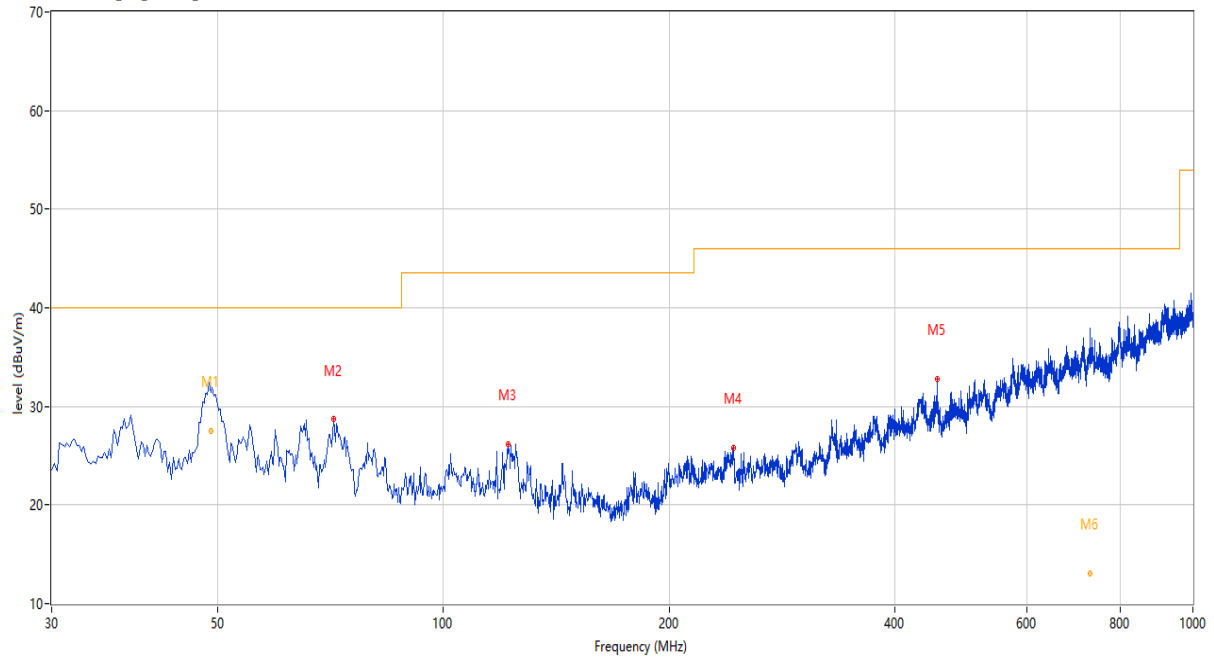
AC port 230V:

REmission Test case_FCC_Part 15B_FCC Part 15B Class B 30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	48.910	27.00	-23.90	40.0	-13.00	Peak	256.20	200	Horizontal	Pass
2	105.156	26.58	-27.01	43.5	-16.92	Peak	299.70	200	Horizontal	Pass
3	149.765	28.17	-28.66	43.5	-15.33	Peak	308.70	200	Horizontal	Pass
4	226.376	26.98	-25.79	46.0	-19.02	Peak	279.50	100	Horizontal	Pass
5	396.568	31.46	-21.18	46.0	-14.54	Peak	0.00	100	Horizontal	Pass
6	798.488	22.95	-11.56	46.0	-23.05	Peak	243.20	194	Horizontal	Pass
6*	798.488	17.17	-11.56	46.0	-28.83	QP	243.20	194	Horizontal	Pass

REmission Test case_FCC_Part 15B_FCC Part 15B Class B 30MHz-1GHz

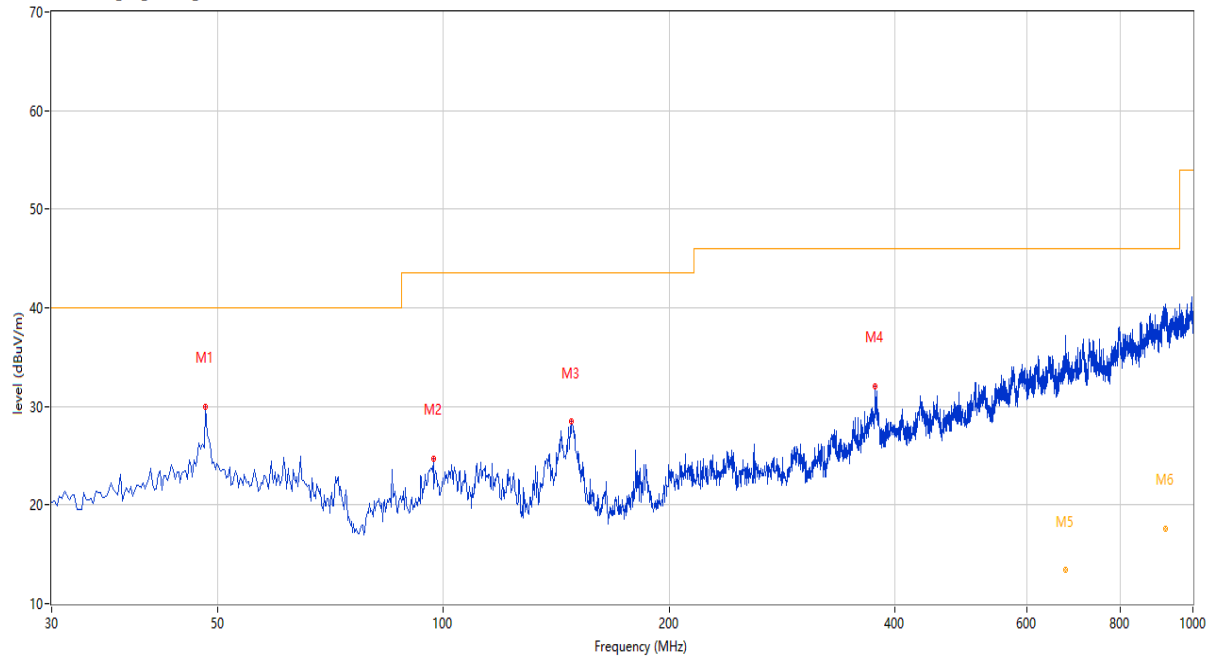


No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	48.901	30.89	-23.83	40.0	-9.11	Peak	51.10	100	Vertical	Pass
1*	48.901	27.45	-23.83	40.0	-12.55	QP	51.10	100	Vertical	Pass
2	71.457	28.69	-28.32	40.0	-11.31	Peak	147.90	100	Vertical	Pass
3	122.127	26.15	-27.84	43.5	-17.35	Peak	33.60	100	Vertical	Pass
4	243.832	25.78	-25.40	46.0	-20.22	Peak	0.00	200	Vertical	Pass
5	455.481	32.74	-19.13	46.0	-13.26	Peak	193.70	200	Vertical	Pass
6	728.571	20.62	-14.43	46.0	-25.38	Peak	0.00	199	Vertical	Pass
6*	728.571	13.09	-14.43	46.0	-32.91	QP	0.00	199	Vertical	Pass

TT203

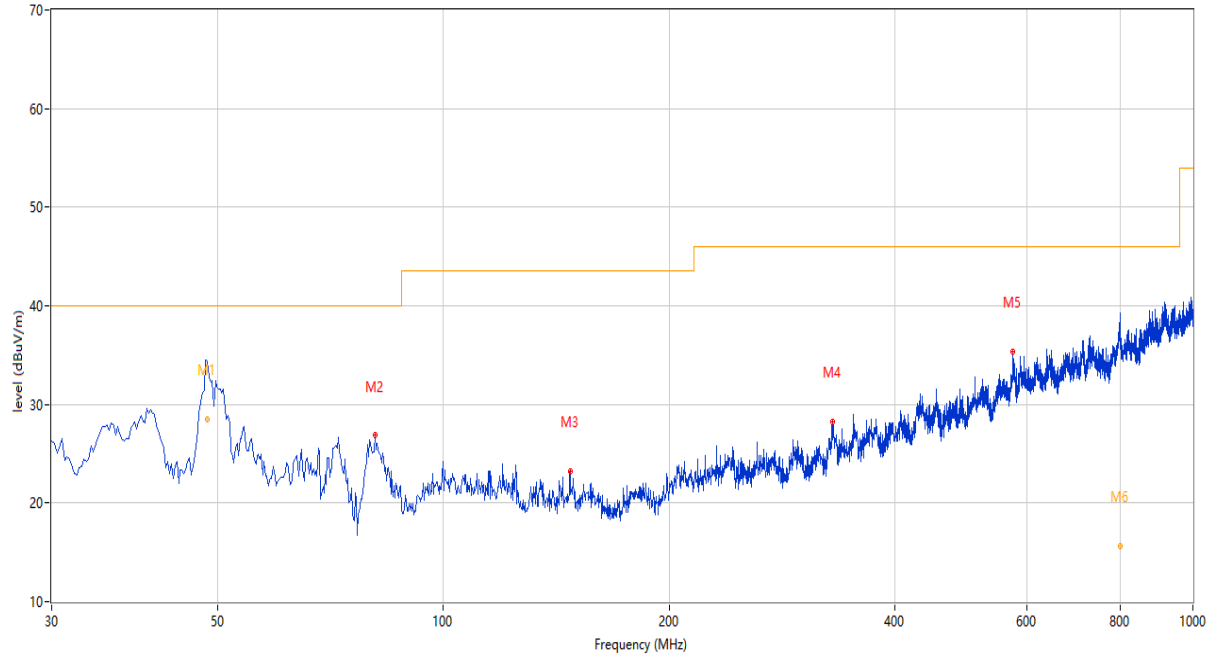
AC port 110V:

REmission Test case_FCC_Part 15B_FCC Part 15B Class B 30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	48.183	29.92	-23.69	40.0	-10.08	Peak	32.80	200	Horizontal	Pass
2	96.913	24.70	-26.76	43.5	-18.80	Peak	136.20	200	Horizontal	Pass
3	148.310	28.44	-28.91	43.5	-15.06	Peak	0.00	200	Horizontal	Pass
4	376.688	32.05	-21.49	46.0	-13.95	Peak	29.50	100	Horizontal	Pass
5	675.949	20.55	-15.00	46.0	-25.45	Peak	0.00	323	Horizontal	Pass
5*	675.949	13.44	-15.00	46.0	-32.56	QP	0.00	323	Horizontal	Pass
6	920.173	23.75	-10.40	46.0	-22.25	Peak	0.00	242	Horizontal	Pass
6*	920.173	17.60	-10.40	46.0	-28.40	QP	0.00	242	Horizontal	Pass

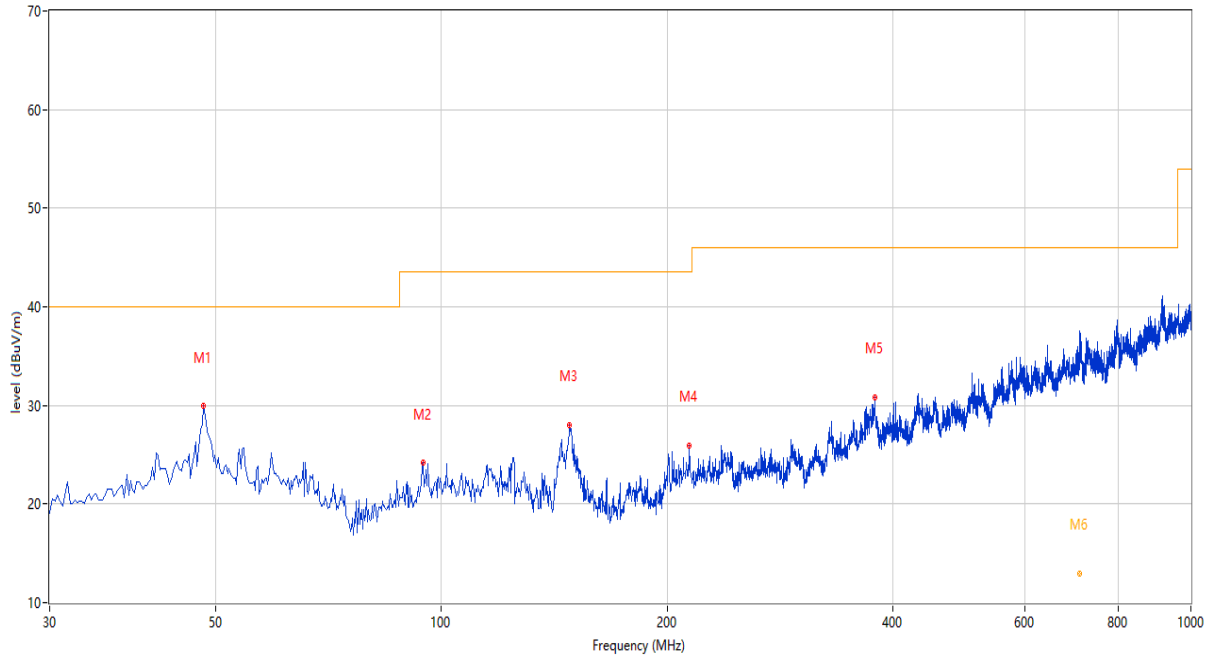
REmission Test case_FCC_Part 15B_FCC Part 15B Class B 30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	48.371	31.60	-23.69	40.0	-8.40	Peak	75.10	100	Vertical	Pass
1*	48.371	28.48	-23.69	40.0	-11.52	QP	75.10	100	Vertical	Pass
2	81.155	26.85	-29.55	40.0	-13.15	Peak	189.70	100	Vertical	Pass
3	147.583	23.26	-29.03	43.5	-20.24	Peak	360.00	200	Vertical	Pass
4	330.625	28.22	-21.64	46.0	-17.78	Peak	359.80	100	Vertical	Pass
5	575.489	35.41	-16.04	46.0	-10.59	Peak	285.60	200	Vertical	Pass
6	799.357	22.28	-11.99	46.0	-23.72	Peak	360.00	246	Vertical	Pass
6*	799.357	15.69	-11.99	46.0	-30.31	QP	360.00	246	Vertical	Pass

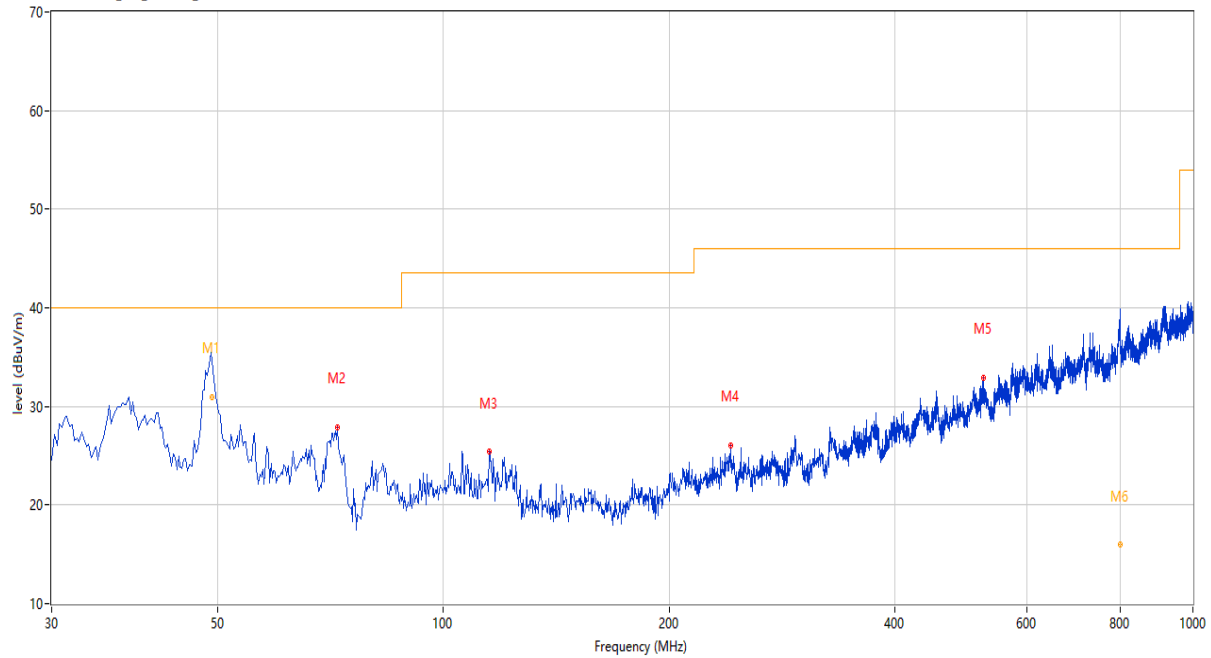
AC port 230V:

REmission Test case_FCC_Part 15B_FCC Part 15B Class B 30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	48.183	29.90	-23.69	40.0	-10.10	Peak	11.60	200	Horizontal	Pass
2	94.489	24.15	-27.09	43.5	-19.35	Peak	0.00	200	Horizontal	Pass
3	148.310	28.04	-28.91	43.5	-15.46	Peak	0.00	200	Horizontal	Pass
4	214.011	25.89	-26.16	43.5	-17.61	Peak	245.70	100	Horizontal	Pass
5	378.628	30.86	-21.61	46.0	-15.14	Peak	28.70	100	Horizontal	Pass
6	710.292	19.26	-15.12	46.0	-26.74	Peak	346.60	280	Horizontal	Pass
6*	710.292	13.00	-15.12	46.0	-33.00	QP	346.60	280	Horizontal	Pass

REmission Test case_FCC_Part 15B_FCC Part 15B Class B 30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	49.098	34.45	-23.90	40.0	-5.55	Peak	42.30	100	Vertical	Pass
1*	49.098	30.90	-23.90	40.0	-9.10	QP	42.30	100	Vertical	Pass
2	72.184	27.86	-28.62	40.0	-12.14	Peak	117.40	100	Vertical	Pass
3	115.096	25.38	-27.22	43.5	-18.12	Peak	55.70	100	Vertical	Pass
4	241.892	26.08	-24.89	46.0	-19.92	Peak	0.00	200	Vertical	Pass
5	525.061	32.92	-18.02	46.0	-13.08	Peak	20.30	100	Vertical	Pass
6	799.369	22.68	-11.99	46.0	-23.32	Peak	170.30	117	Vertical	Pass
6*	799.369	15.99	-11.99	46.0	-30.01	QP	170.30	117	Vertical	Pass

Notes:

1. All the frequency is tested, the report only show the main difference test data.
2. Above 1GHz test data please refer to the original test report :
"SHE19110012-02KE FCC IC WLAN 5G Test Report"
3. The spurious above 18GHz is noise only and 20dB below the limit. The value has no need to be reported.
4. The EUT is working in the Normal link mode below 1 GHz.

4.2 Mains Emissions

4.2.1 Conducted Emission on AC

RESULT:

PASS

Test standard : FCC Part 15.207(b)
 RSS-Gen 8.8
 Requirement : ANSI C63.10-2013
 Kind of test site : Shielded room

Test setup

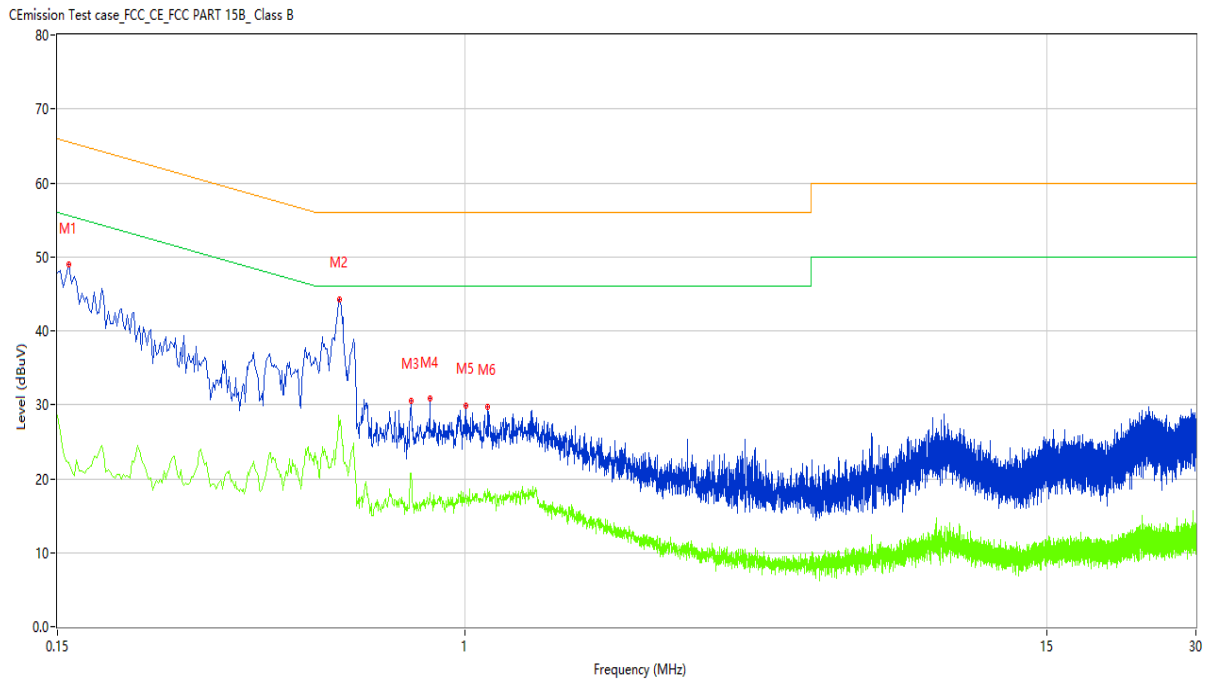
Input Voltage : AC 120V, 60Hz; AC 240V, 50Hz Operation
 Operation Mode : A
 Earthing : Not Connected
 Ambient temperature : 25°C
 Relative humidity : 50%

For details refer to following test plot.

Note: The all configurations were tested respectively, but only the worst configuration shown here.
 Figure 1: Conducted Emission on AC Mains, L Phase

TT202

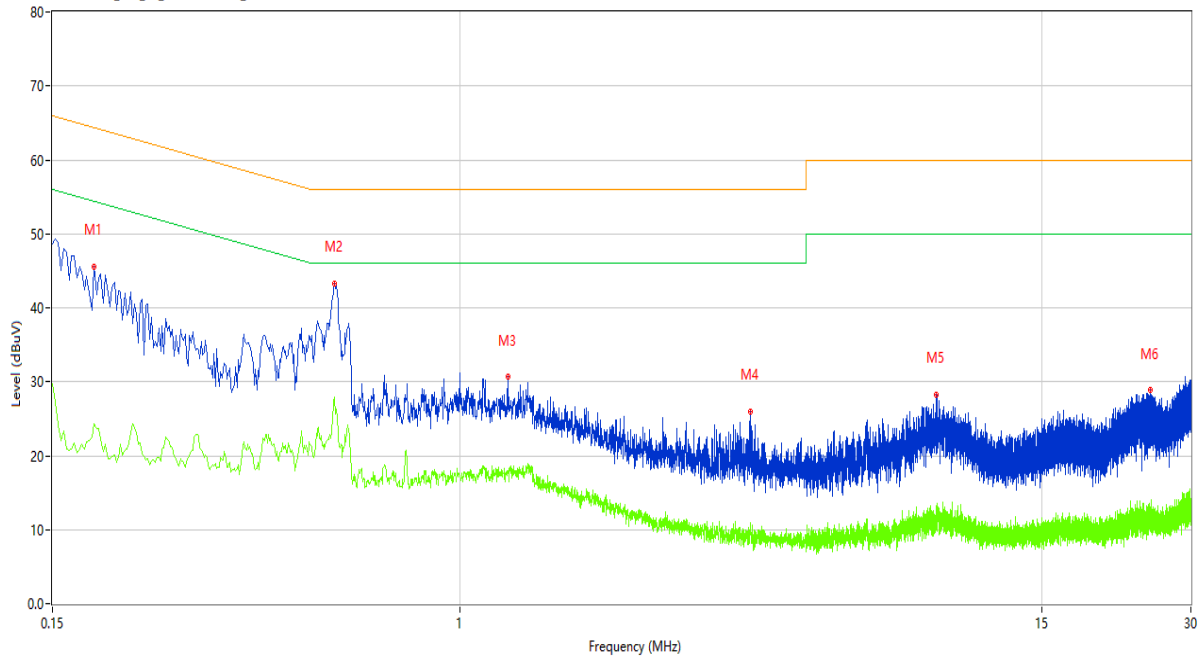
AC port 110V:



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.158	49.62	10.15	65.57	-15.95	Peak	L	Pass
1*	0.158	41.02	10.15	65.57	-24.55	QP	L	Pass
1**	0.158	22.14	10.15	55.57	-33.43	AV	L	Pass
2	0.558	45.36	10.15	56.00	-10.64	Peak	L	Pass
2*	0.558	41.86	10.15	56.00	-14.14	QP	L	Pass

2**	0.558	27.08	10.15	46.00	-18.92	AV	L	Pass
3	0.778	32.13	10.15	56.00	-23.87	Peak	L	Pass
3*	0.778	26.00	10.15	56.00	-30.00	QP	L	Pass
3**	0.778	20.81	10.15	46.00	-25.19	AV	L	Pass
4	0.848	31.30	10.15	56.00	-24.70	Peak	L	Pass
4*	0.848	23.52	10.15	56.00	-32.48	QP	L	Pass
4**	0.848	18.09	10.15	46.00	-27.91	AV	L	Pass
5	1.002	31.14	10.15	56.00	-24.86	Peak	L	Pass
5*	1.002	23.58	10.15	56.00	-32.42	QP	L	Pass
5**	1.002	17.82	10.15	46.00	-28.18	AV	L	Pass
6	1.110	30.88	10.16	56.00	-25.12	Peak	L	Pass
6*	1.110	24.01	10.16	56.00	-31.99	QP	L	Pass
6**	1.110	18.16	10.16	46.00	-27.84	AV	L	Pass

CEmission Test case_FCC_CE_FCC PART 15B_Class B

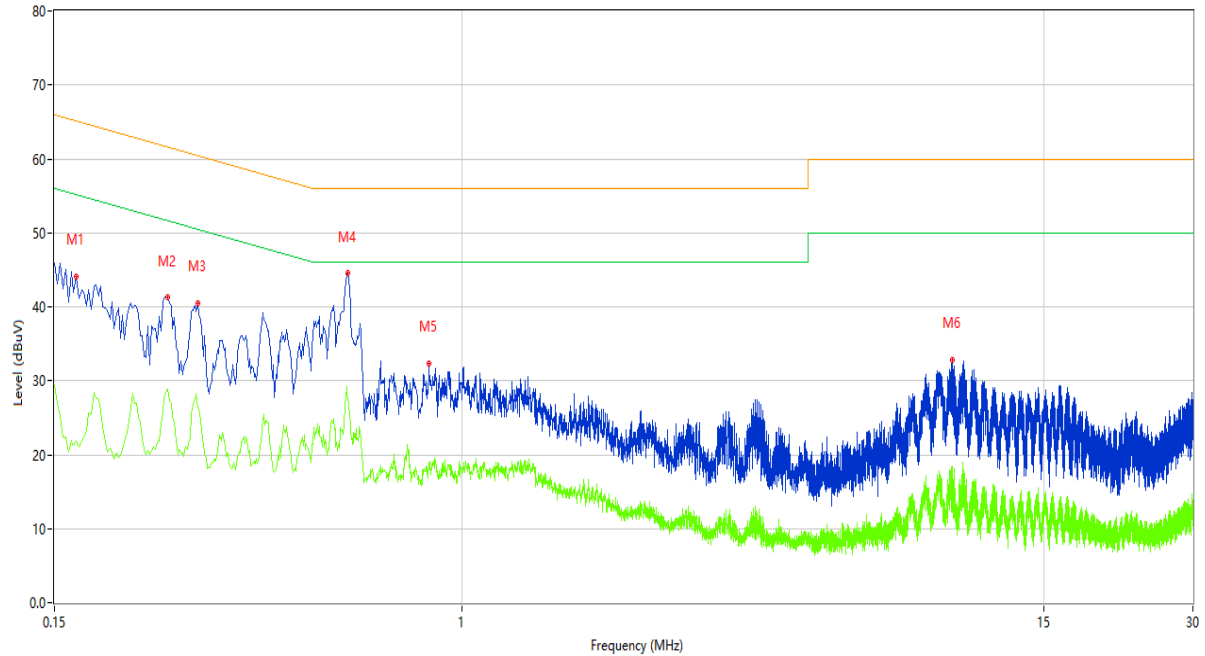


No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.182	46.78	10.15	64.39	-17.61	Peak	N	Pass
1*	0.182	38.09	10.15	64.39	-26.30	QP	N	Pass
1**	0.182	24.39	10.15	54.39	-30.00	AV	N	Pass
2	0.558	44.11	10.15	56.00	-11.89	Peak	N	Pass
2*	0.558	40.85	10.15	56.00	-15.15	QP	N	Pass
2**	0.558	27.93	10.15	46.00	-18.07	AV	N	Pass
3	1.248	30.58	10.16	56.00	-25.42	Peak	N	Pass
3*	1.248	22.96	10.16	56.00	-33.04	QP	N	Pass
3**	1.248	17.95	10.16	46.00	-28.05	AV	N	Pass
4	3.864	26.64	10.24	56.00	-29.36	Peak	N	Pass
4*	3.864	20.19	10.24	56.00	-35.81	QP	N	Pass
4**	3.864	10.97	10.24	46.00	-35.03	AV	N	Pass
5	9.186	29.13	10.36	60.00	-30.87	Peak	N	Pass
5*	9.186	22.85	10.36	60.00	-37.15	QP	N	Pass

5**	9.186	13.17	10.36	50.00	-36.83	AV	N	Pass
6	24.800	28.83	10.55	60.00	-31.17	Peak	N	Pass
6*	24.800	22.27	10.55	60.00	-37.73	QP	N	Pass
6**	24.800	11.50	10.55	50.00	-38.50	AV	N	Pass

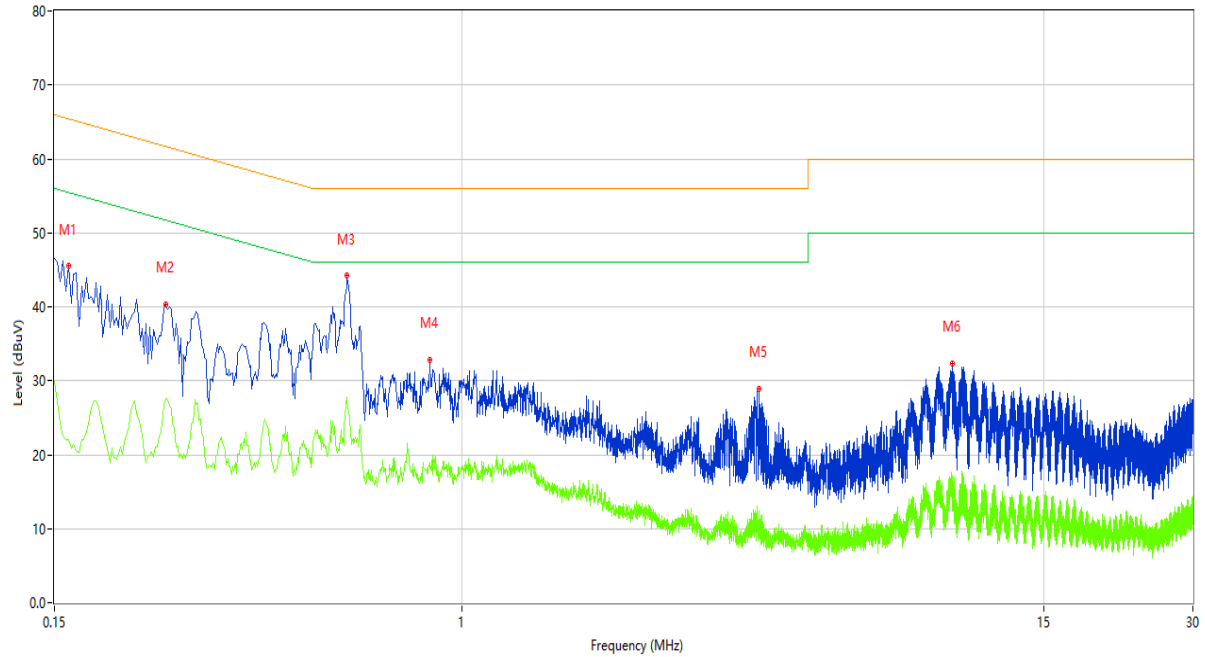
AC port 230V:

CEmission Test case_FCC_CE_FCC PART 15B_Class B



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.166	45.71	10.15	65.16	-19.45	Peak	L	Pass
1*	0.166	37.03	10.15	65.16	-28.13	QP	L	Pass
1**	0.166	21.80	10.15	55.16	-33.36	AV	L	Pass
2	0.254	44.57	10.14	61.63	-17.06	Peak	L	Pass
2*	0.254	39.54	10.14	61.63	-22.09	QP	L	Pass
2**	0.254	28.97	10.14	51.63	-22.66	AV	L	Pass
3	0.292	42.37	10.14	60.47	-18.10	Peak	L	Pass
3*	0.292	37.84	10.14	60.47	-22.63	QP	L	Pass
3**	0.292	26.50	10.14	50.47	-23.97	AV	L	Pass
4	0.588	45.79	10.15	56.00	-10.21	Peak	L	Pass
4*	0.588	41.97	10.15	56.00	-14.03	QP	L	Pass
4**	0.588	27.75	10.15	46.00	-18.25	AV	L	Pass
5	0.858	33.68	10.15	56.00	-22.32	Peak	L	Pass
5*	0.858	27.24	10.15	56.00	-28.76	QP	L	Pass
5**	0.858	18.99	10.15	46.00	-27.01	AV	L	Pass
6	9.790	33.86	10.39	60.00	-26.14	Peak	L	Pass
6*	9.790	29.93	10.39	60.00	-30.07	QP	L	Pass
6**	9.790	17.51	10.39	50.00	-32.49	AV	L	Pass

CEmission Test case_FCC_CE_FCC PART 15B_Class B

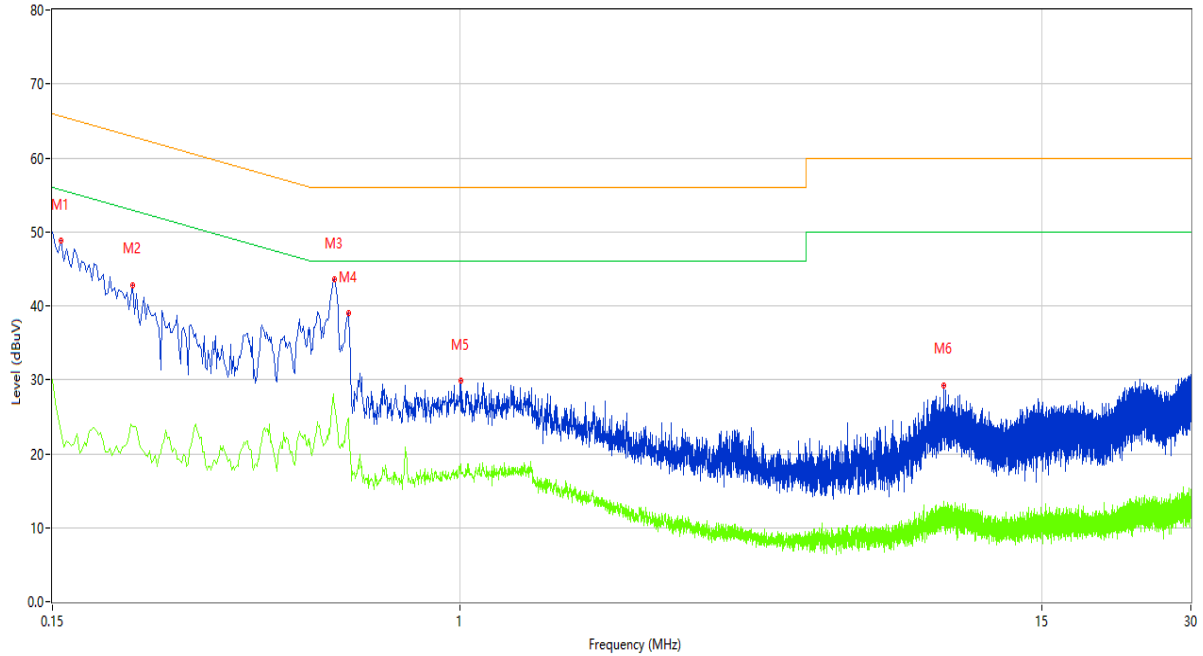


No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.160	46.75	10.15	65.46	-18.71	Peak	N	Pass
1*	0.160	38.03	10.15	65.46	-27.43	QP	N	Pass
1**	0.160	22.03	10.15	55.46	-33.43	AV	N	Pass
2	0.252	43.69	10.14	61.69	-18.00	Peak	N	Pass
2*	0.252	38.79	10.14	61.69	-22.90	QP	N	Pass
2**	0.252	27.58	10.14	51.69	-24.11	AV	N	Pass
3	0.586	44.54	10.15	56.00	-11.46	Peak	N	Pass
3*	0.586	41.33	10.15	56.00	-14.67	QP	N	Pass
3**	0.586	27.11	10.15	46.00	-18.89	AV	N	Pass
4	0.860	33.83	10.15	56.00	-22.17	Peak	N	Pass
4*	0.860	27.84	10.15	56.00	-28.16	QP	N	Pass
4**	0.860	18.08	10.15	46.00	-27.92	AV	N	Pass
5	3.990	30.17	10.25	56.00	-25.83	Peak	N	Pass
5*	3.990	24.07	10.25	56.00	-31.93	QP	N	Pass
5**	3.990	11.63	10.25	46.00	-34.37	AV	N	Pass
6	9.794	33.39	10.39	60.00	-26.61	Peak	N	Pass
6*	9.794	28.88	10.39	60.00	-31.12	QP	N	Pass
6**	9.794	16.71	10.39	50.00	-33.29	AV	N	Pass

TT203

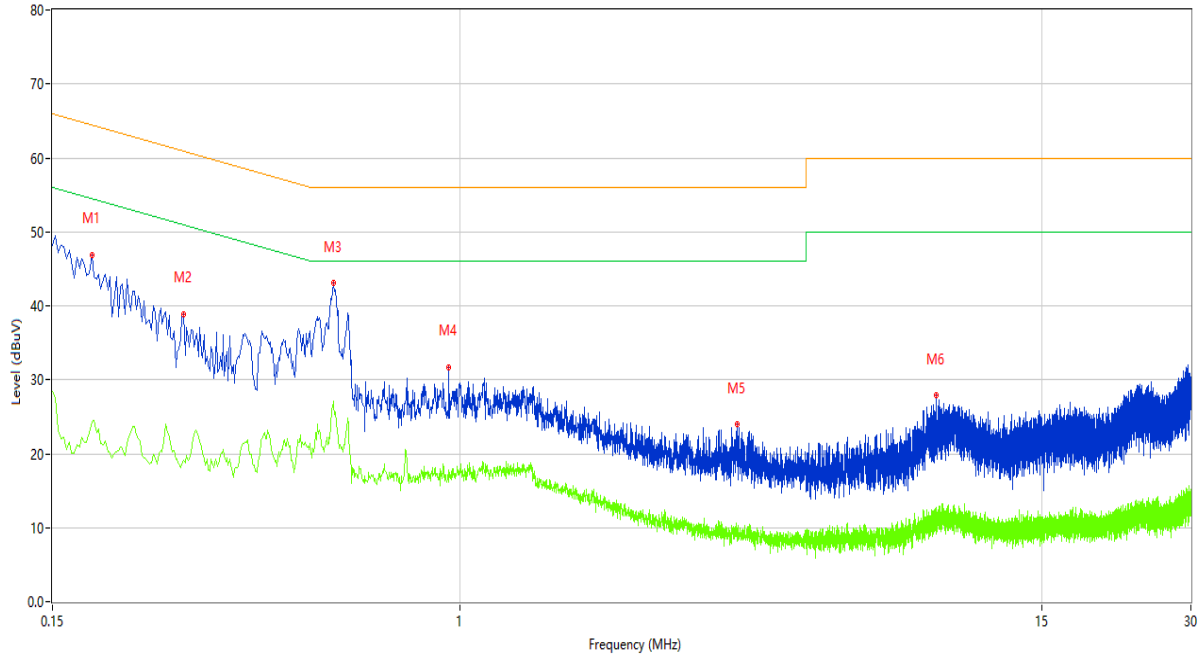
AC port 110V:

CEmission Test case_FCC_CE_FCC PART 15B_Class B



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.156	50.38	10.15	65.67	-15.29	Peak	L	Pass
1*	0.156	41.21	10.15	65.67	-24.46	QP	L	Pass
1**	0.156	23.01	10.15	55.67	-32.66	AV	L	Pass
2	0.218	43.79	10.14	62.89	-19.10	Peak	L	Pass
2*	0.218	34.93	10.14	62.89	-27.96	QP	L	Pass
2**	0.218	23.70	10.14	52.89	-29.19	AV	L	Pass
3	0.558	44.57	10.15	56.00	-11.43	Peak	L	Pass
3*	0.558	40.73	10.15	56.00	-15.27	QP	L	Pass
3**	0.558	26.39	10.15	46.00	-19.61	AV	L	Pass
4	0.594	40.19	10.15	56.00	-15.81	Peak	L	Pass
4*	0.594	36.54	10.15	56.00	-19.46	QP	L	Pass
4**	0.594	24.90	10.15	46.00	-21.10	AV	L	Pass
5	1.002	31.65	10.15	56.00	-24.35	Peak	L	Pass
5*	1.002	24.13	10.15	56.00	-31.87	QP	L	Pass
5**	1.002	18.57	10.15	46.00	-27.43	AV	L	Pass
6	9.508	29.08	10.37	60.00	-30.92	Peak	L	Pass
6*	9.508	23.49	10.37	60.00	-36.51	QP	L	Pass
6**	9.508	13.13	10.37	50.00	-36.87	AV	L	Pass

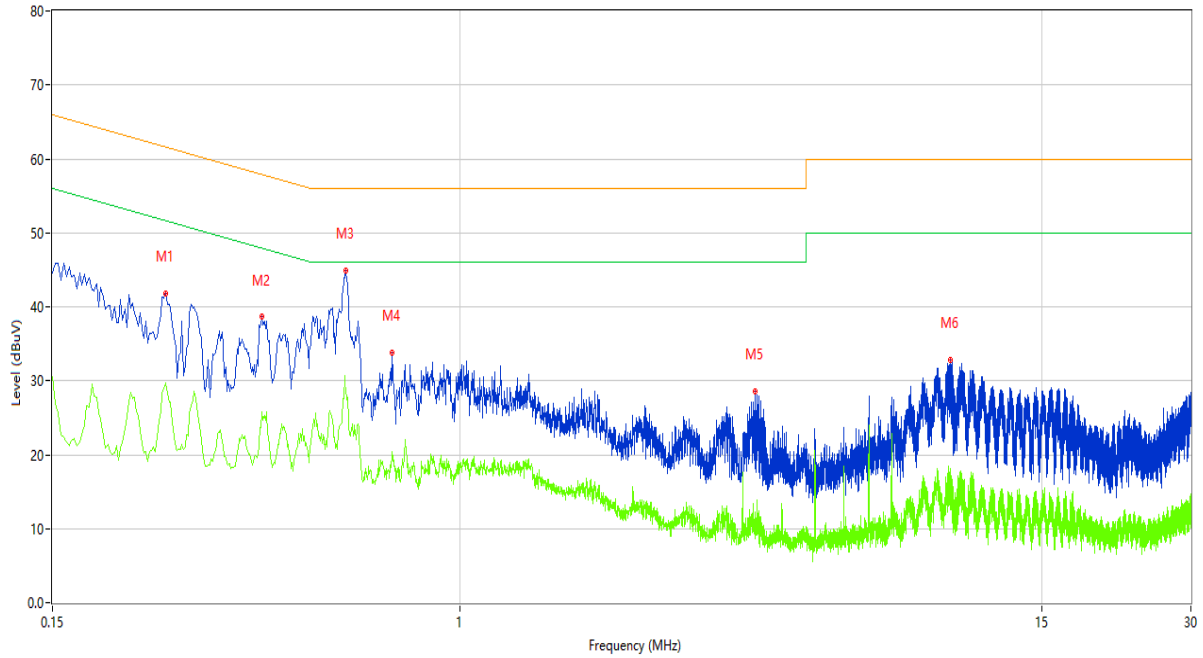
CEmission Test case_FCC_CE_FCC PART 15B_Class B



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.180	46.81	10.15	64.49	-17.68	Peak	N	Pass
1*	0.180	38.47	10.15	64.49	-26.02	QP	N	Pass
1**	0.180	24.29	10.15	54.49	-30.20	AV	N	Pass
2	0.276	39.27	10.14	60.94	-21.67	Peak	N	Pass
2*	0.276	29.36	10.14	60.94	-31.58	QP	N	Pass
2**	0.276	19.10	10.14	50.94	-31.84	AV	N	Pass
3	0.554	43.56	10.15	56.00	-12.44	Peak	N	Pass
3*	0.554	40.25	10.15	56.00	-15.75	QP	N	Pass
3**	0.554	27.10	10.15	46.00	-18.90	AV	N	Pass
4	0.950	31.19	10.15	56.00	-24.81	Peak	N	Pass
4*	0.950	22.98	10.15	56.00	-33.02	QP	N	Pass
4**	0.950	17.72	10.15	46.00	-28.28	AV	N	Pass
5	3.628	25.43	10.23	56.00	-30.57	Peak	N	Pass
5*	3.628	17.57	10.23	56.00	-38.43	QP	N	Pass
5**	3.628	9.03	10.23	46.00	-36.97	AV	N	Pass
6	9.174	29.11	10.36	60.00	-30.89	Peak	N	Pass
6*	9.174	23.06	10.36	60.00	-36.94	QP	N	Pass
6**	9.174	12.09	10.36	50.00	-37.91	AV	N	Pass

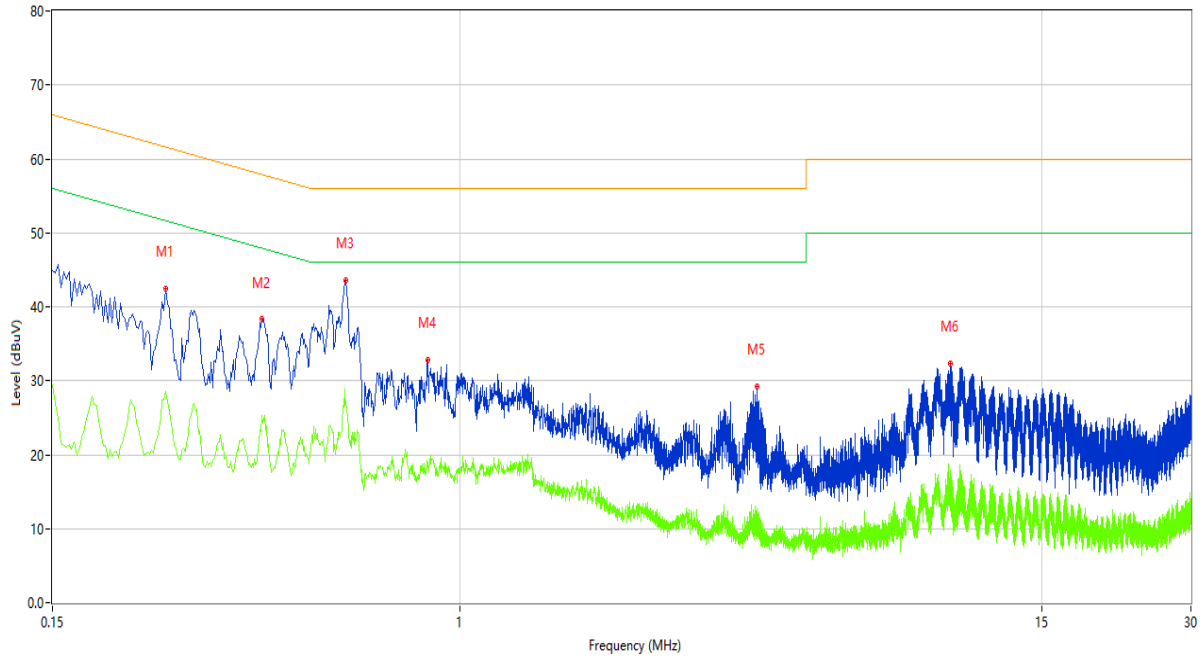
AC port 230V:

CEmission Test case_FCC_CE_FCC PART 15B_Class B



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.254	44.17	10.14	61.63	-17.46	Peak	L	Pass
1*	0.254	39.60	10.14	61.63	-22.03	QP	L	Pass
1**	0.254	29.76	10.14	51.63	-21.87	AV	L	Pass
2	0.398	39.89	10.14	57.90	-18.01	Peak	L	Pass
2*	0.398	35.55	10.14	57.90	-22.35	QP	L	Pass
2**	0.398	25.86	10.14	47.90	-22.04	AV	L	Pass
3	0.588	45.13	10.15	56.00	-10.87	Peak	L	Pass
3*	0.588	41.76	10.15	56.00	-14.24	QP	L	Pass
3**	0.588	29.05	10.15	46.00	-16.95	AV	L	Pass
4	0.730	32.85	10.15	56.00	-23.15	Peak	L	Pass
4*	0.730	27.05	10.15	56.00	-28.95	QP	L	Pass
4**	0.730	20.48	10.15	46.00	-25.52	AV	L	Pass
5	3.952	28.61	10.25	56.00	-27.39	Peak	L	Pass
5*	3.952	22.96	10.25	56.00	-33.04	QP	L	Pass
5**	3.952	12.18	10.25	46.00	-33.82	AV	L	Pass
6	9.778	33.63	10.39	60.00	-26.37	Peak	L	Pass
6*	9.778	27.56	10.39	60.00	-32.44	QP	L	Pass
6**	9.778	16.39	10.39	50.00	-33.61	AV	L	Pass

CEmission Test case_FCC_CE_FCC PART 15B_Class B



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.254	43.59	10.14	61.63	-18.04	Peak	N	Pass
1*	0.254	38.76	10.14	61.63	-22.87	QP	N	Pass
1**	0.254	28.55	10.14	51.63	-23.08	AV	N	Pass
2	0.398	40.02	10.14	57.90	-17.88	Peak	N	Pass
2*	0.398	35.24	10.14	57.90	-22.66	QP	N	Pass
2**	0.398	25.26	10.14	47.90	-22.64	AV	N	Pass
3	0.588	44.55	10.15	56.00	-11.45	Peak	N	Pass
3*	0.588	40.73	10.15	56.00	-15.27	QP	N	Pass
3**	0.588	27.22	10.15	46.00	-18.78	AV	N	Pass
4	0.862	33.76	10.15	56.00	-22.24	Peak	N	Pass
4*	0.862	27.32	10.15	56.00	-28.68	QP	N	Pass
4**	0.862	18.99	10.15	46.00	-27.01	AV	N	Pass
5	3.986	30.31	10.25	56.00	-25.69	Peak	N	Pass
5*	3.986	23.94	10.25	56.00	-32.06	QP	N	Pass
5**	3.986	12.69	10.25	46.00	-33.31	AV	N	Pass
6	9.788	33.60	10.39	60.00	-26.40	Peak	N	Pass
6*	9.788	29.62	10.39	60.00	-30.38	QP	N	Pass
6**	9.788	15.77	10.39	50.00	-34.23	AV	N	Pass

END OF REPORT