



# FCC SDoC Test Report

Issued date: May 18, 2020

Project No.: 20Q042702

**Product :** mSATA SSD

**Model :** SU210-300, SX210-300 (X=A~Z)

**Applicant :** Apacer Technology Inc.

**Address :** 1F., No.32, Zhongcheng Rd., Tucheng Dist., New Taipei City 236,  
Taiwan (R.O.C)

**Report No: WD-EF-R-200141-A0**

**According to**

**47 CFR FCC Part 15, Subpart B, Class B**  
**ICES-003: 2016 Issue 6, Class B**

**ANSI C63.4: 2014**

**Authorized Signatory :** Ken Huang / Ken Huang



**Wendell Industrial Co., Ltd**  
**Wendell EMC & RF Laboratory**

Add: 6F/6F-1, No.188, Baoqiao Rd., Xindian Dist., New Taipei City 23145, Taiwan R.O.C.



## Table of Contents

<b>1</b>	<b>Certification .....</b>	<b>5</b>
1.1	Summary of Test Result.....	6
<b>2</b>	<b>Test Configuration of Equipment Under Test .....</b>	<b>7</b>
2.1	Test Facility.....	7
2.2	Measurement Uncertainty .....	8
2.2.1	Conducted Emission test.....	8
2.2.2	Radiated Emission test.....	8
<b>3</b>	<b>General Information.....</b>	<b>9</b>
3.1	Description of EUT.....	9
3.2	Description of Test Modes.....	10
3.3	EUT Operating Condition .....	10
3.4	Description of Support Unit .....	11
3.5	Configuration of System Under Test.....	11
<b>4</b>	<b>Emission Test.....</b>	<b>12</b>
4.1	Conducted Emission Measurement (Frequency Range 150 KHz-30MHz).....	12
4.1.1	Limit of Conducted Emission Measurement .....	12
4.1.2	Test Instrument .....	13
4.1.3	Test Procedure.....	14
4.1.4	Deviation from Test Standard .....	14
4.1.5	Test Setup.....	15
4.1.6	Test Result .....	16
4.1.7	Photographs of Test Configuration .....	18
4.2	Radiated Emission Measurement .....	19
4.2.1	Limits of Radiated Emission Measurement .....	19
4.2.2	Test Instrument .....	21
4.2.3	Test Procedure.....	22
4.2.4	Deviation from Test Standard .....	22
4.2.5	Test Setup.....	23
4.2.6	Test Result .....	24
4.2.7	Photographs of Test Configuration .....	28



### History of this test report

Report No.	Issue date	Description
WD-EF-R-200141-A0	May 18, 2020	Initial Issue

#### Declaration

This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us.



### History of supplementary report

Report No.	Issue date	Description
WD-EF-R-200141-A0	May 18, 2020	Original report

**Declaration**

This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us.



## 1 Certification

**Product:** mSATA SSD

**Brand Name:** Apacer

**Model:** SU210-300, SX210-300 (X=A~Z)

**Applicant:** Apacer Technology Inc.

**Tested:** Apr. 30 ~ May 05, 2020

**Standard:** 47 CFR FCC Part 15, Subpart B, Class B

ICES-003: 2016 Issue 6, Class B

ANSI C63.4: 2014

The above equipment (Model: SU210-300) has been tested by **Wendell EMC & RF Laboratory**, and found compliance with the requirement of the above standards. The test record, data evaluation and Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Please note that the measurement uncertainty are provided for informational purpose only and are not used in determining the Pass/Fail results.



## 1.1 Summary of Test Result

The EUT has been tested according to the following specifications:

Emission				
Standard	Test Item	Limit	Result	Remark
47 CFR FCC Part 15, Subpart B	Conducted disturbance at mains terminals	Class B	Pass	Meets the requirements
ICES-003	Radiated disturbance	Class B	Pass	Meets the requirements

**Note:** Test record contained in the referenced test report relate only to the EUT sample and test item.



## **2 Test Configuration of Equipment Under Test**

### **2.1 Test Facility**

#### **Conducted disturbance at mains terminals Test**

W01: 5F-1, No.188, Baoqiao Rd., Xindian Dist., New Taipei City 23145, Taiwan (R.O.C)

#### **Radiated emission (9\*6\*6 Chamber) Tests**

W08: No.119, Wugong 3rd Rd., Wugu Dist., New Taipei City 248, Taiwan (R.O.C)

#### **ACCREDITATIONS**

The laboratories are accredited and approved by the TAF according to ISO/IEC 17025.

## 2.2 Measurement Uncertainty

The measurement instrumentation uncertainty consideration contained in CISPR 16-4-2.

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of  $k=2$ .

Please note that the measurement uncertainty are provided for informational purpose only and are not used in determining the Pass/Fail results.

### 2.2.1 Conducted Emission test

Test Site	Measurement Freq. Range	dB ( $U_{\text{cispr}}$ )	Note
W01	150 kHz ~ 30 MHz	2.72	N/A

### 2.2.2 Radiated Emission test

Test Site	Measurement Freq. Range	Ant	dB ( $U_{\text{cispr}}$ )	Note
W08	30 MHz ~ 200 MHz	V	3.68	N/A
	30 MHz ~ 200 MHz	H	2.70	N/A
	200 MHz ~ 1000 MHz	V	5.19	N/A
	200 MHz ~ 1000 MHz	H	3.26	N/A
	1 GHz ~ 6 GHz	V	4.98	N/A
	1 GHz ~ 6 GHz	H	5.07	N/A
	6 GHz ~ 18 GHz	V	5.09	N/A
	6 GHz ~ 18 GHz	H	4.99	N/A
	18 GHz ~ 40 GHz	V	4.72	N/A
	18 GHz ~ 40 GHz	H	4.72	N/A



### 3 General Information

#### 3.1 Description of EUT

<b>Product</b>	mSATA SSD
<b>Brand</b>	Apacer
<b>Model</b>	SU210-300, SX210-300 (X=A~Z)
<b>Applicant</b>	Apacer Technology Inc.
<b>Received Date</b>	Apr. 27, 2020
<b>EUT Power Rating</b>	5Vdc (from host equipment)
<b>Model Differences</b>	The models are electrically identical, different models no. are for marketing purpose.
<b>Operating System</b>	N/A
<b>Data Cable Supplied</b>	N/A
<b>Accessory Device</b>	N/A
<b>I/O Port</b>	Please refer to the User's Manual

**Note:**

1. The EUT's highest operating frequency is more than 108MHz. Therefore the radiated emission is tested up to 6GHz.

### 3.2 Description of Test Modes

Test results are presented in the report as below.

Test Mode	Test Condition
<b>Conducted emission test</b>	
-	Normal mode
<b>Radiated emission 30MHz ~ 1GHz test</b>	
-	Normal mode
<b>Radiated emission above 1GHz test</b>	
-	Normal mode

### 3.3 EUT Operating Condition

- a. The EUT inserted to PC and placed on the test table.
- b. The EUT read /write data.
- c. The PC run test program "BurnIn.exe" to enable all functions.
- d. The PC sent "H" message to monitor and displayed on screen.
- e. The microphone sent voice signal to PC.
- f. The PC sent voice signal to earphone.
- g. The PC sent signal to printer.

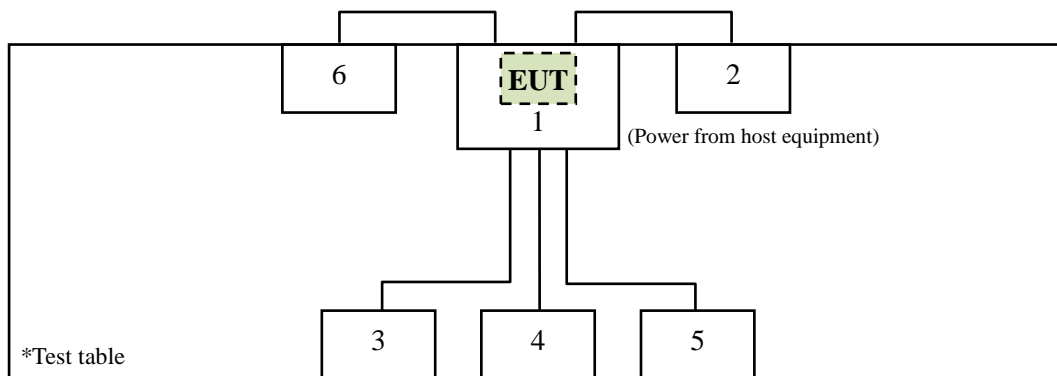
### 3.4 Description of Support Unit

The EUT has been conducted testing with other necessary accessories or support units.

Item	Equipment	Brand	Model No.	Serial No.	FCC ID	Data Cable	Power Cord	Remark
1	PC	DELL	D24M	N/A	PD93165N G	N/A	1.8m non-shielded cable	-
2	Monitor	DELL	P2317H	N/A	FCC DoC Approved	1.5m shielded HDMI cable	1.8m non-shielded cable	-
3	Keyboard	DELL	KB4021	N/A	FCC DoC Approved	1.5m non-shielded cable	N/A	-
4	Mouse	DELL	MS111-L	N/A	FCC DoC Approved	1.5m non-shielded cable	N/A	-
5	Earphone & Microphone	E-books	E-EPA057	N/A	N/A	1.4m non-shielded cable	N/A	-
6	Printer	HP	SNPRH-1504	CN738282V9	FCC DoC Approved	1.4m shielded cable	AC: 1.7m non-shielded cable	-

**Note:** 1. The core(s) is(are) originally attached to the cable(s).

### 3.5 Configuration of System Under Test





## 4 Emission Test

### 4.1 Conducted Emission Measurement (Frequency Range 150 KHz-30MHz)

#### 4.1.1 Limit of Conducted Emission Measurement

Frequency (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 to 0.5	79	66	66 to 56	56 to 46
0.50 to 5.0	73	60	56	46
5.0 to 30.0	73	60	60	50

- Note:**
1. The lower limit shall apply at the transition frequencies.
  2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.
  3. Detector function in the form: PK = Peak, QP = Quasi Peak, AV = Average
  4. The test result calculated as following:  
Measurement Value = Reading Level + Correct Factor  
Correction Factor = Insertion loss of LISN + Cable loss + Transient Limiter (If use)  
Margin Level = Measurement Value –Limit Value



#### 4.1.2 Test Instrument

Test Site: W01-CE					
Item	Equipment	Manufacturer	Model	Meter No.	Calibration Date
1	TWO-LINE V-NETWORK	R&S	ENV216	CT-1-025-1	Apr. 29, 2020
2	Pulse limiter	R&S®	ESH3-Z2	CT-2-015	Apr. 27, 2020
3	EMI Test Receiver	R&S	ESCI	CT-1-024	Apr. 29, 2020
4	V-LISN	Schwarzbeck	NSLK8127	CT-1-104-1	Apr. 29, 2020
5	Test Cable	Marvelous Microwave Inc	200200.400LL .500A	CT-10-048-1	Apr. 27, 2020
6	50ohm Termination	N/A	N/A	CT-1-065-1	Apr. 28, 2020
7	Measurement Software	EZ-EMC	Ver: EMC-CON 3A1	CT-3-012	No calibration request

**Note:** 1. The calibration interval of the above test instruments is 12 months.

### 4.1.3 Test Procedure

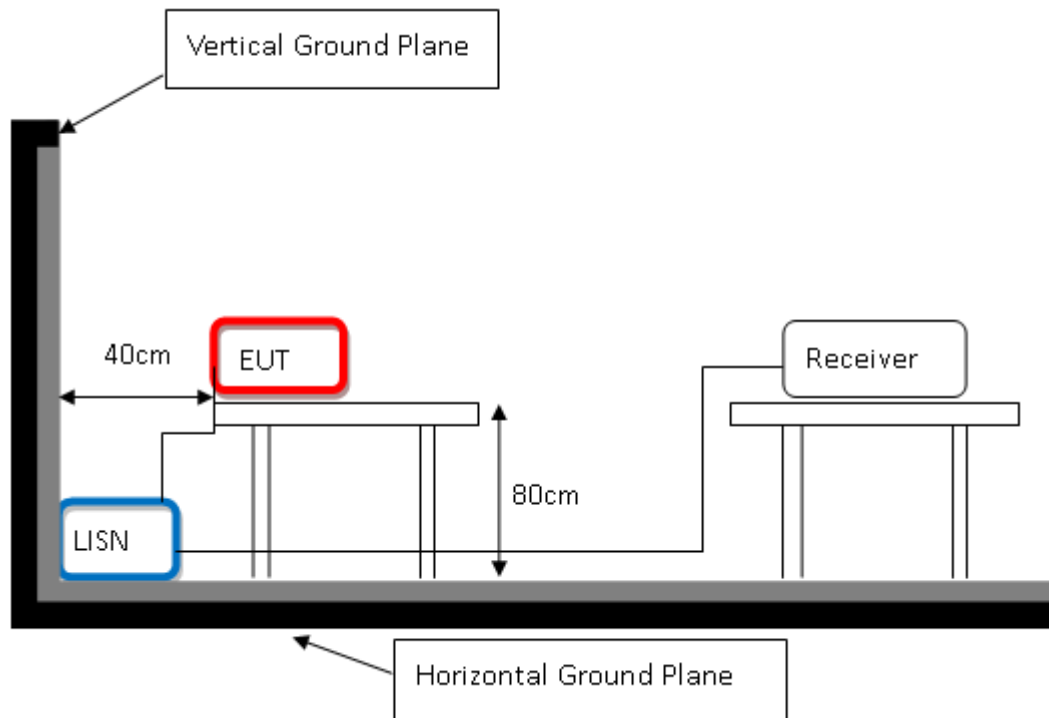
- a. The table-top EUT was placed 0.8 meter height wooden table from the horizontal ground plane with EUT being connected to power source through a line impedance stabilization network (LISN). The LISN at least be 80 cm from nearest chassis of EUT. The floor-standing EUT and all cables shall be insulated from the ground plane by up to 12 mm of insulating material if required.
- b. The line impedance stabilization network (LISN) provides 50 ohm/50uH of coupling impedance for the measuring instrument. All other support equipments powered from additional LISN(s).
- c. Interrelating cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle. All I/O cables were positioned to simulate typical usage.
- d. All I/O cables that are not connected to a peripheral shall be bundle in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- e. The EMI test receiver connected to LISN powering the EUT. The actual test configuration, please refer to EUT test photos.
- f. The receiver scanned from 150kHz to 30MHz for emissions in each of test modes. A scan was taken on both power lines, Line and Neutral, recording at least six highest emissions.
- g. The EUT and cable configuration of the above highest emission levels were recorded. The test data of the worst case was recorded.

### 4.1.4 Deviation from Test Standard

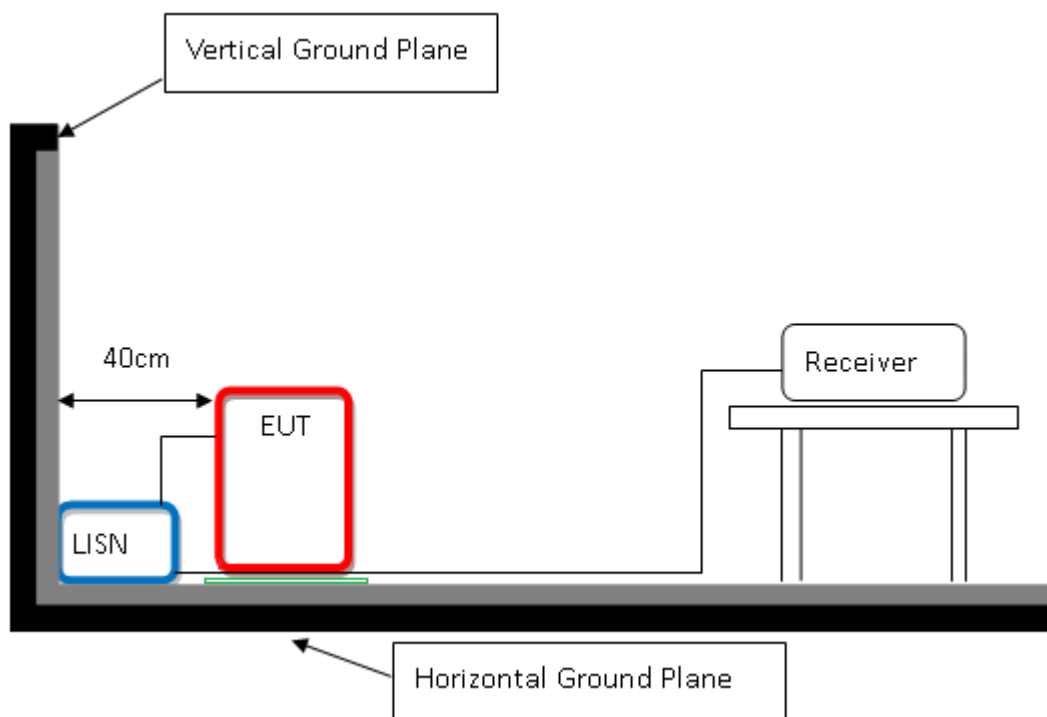
No deviation

### 4.1.5 Test Setup

#### < Table-Top equipment >



#### < Floor-Standing equipment >

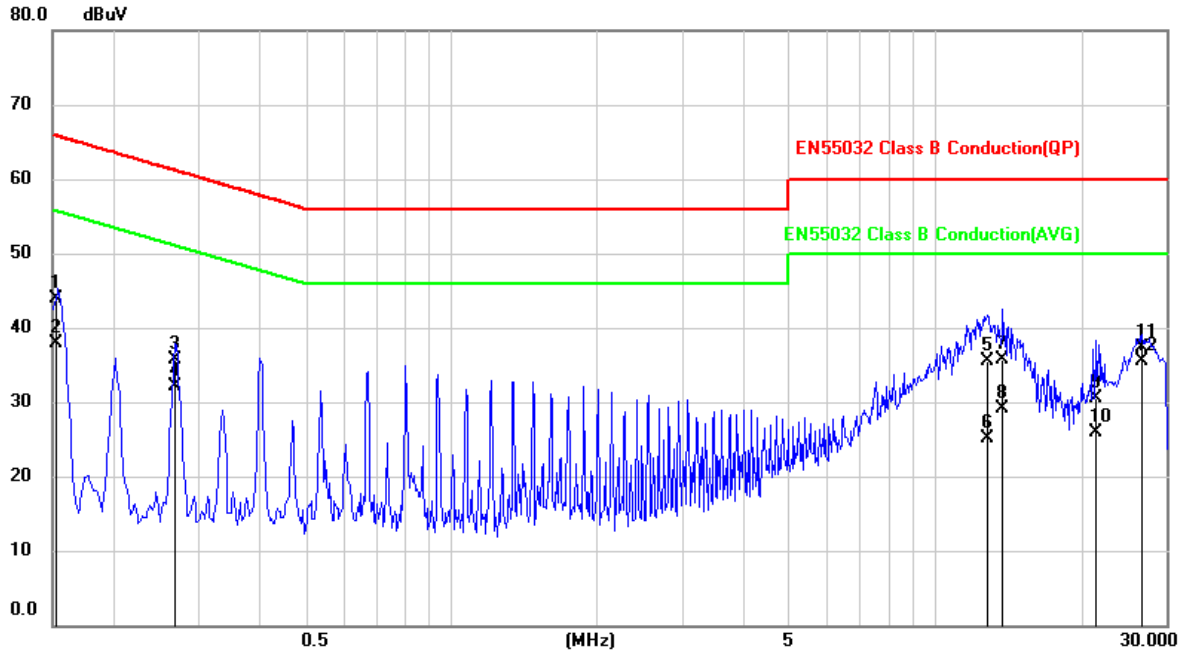


**Note:** Please refer to 4.1.7 for the actual test configuration.



### 4.1.6 Test Result

Test Voltage	120Vac, 60Hz	Frequency Range	0.15-30 MHz
Environmental Conditions	23°C, 51% RH	6dB Bandwidth	9 kHz
Test Date	2020/04/30	Phase	L
Tested by	Guanwei Liao	Test Site	W01

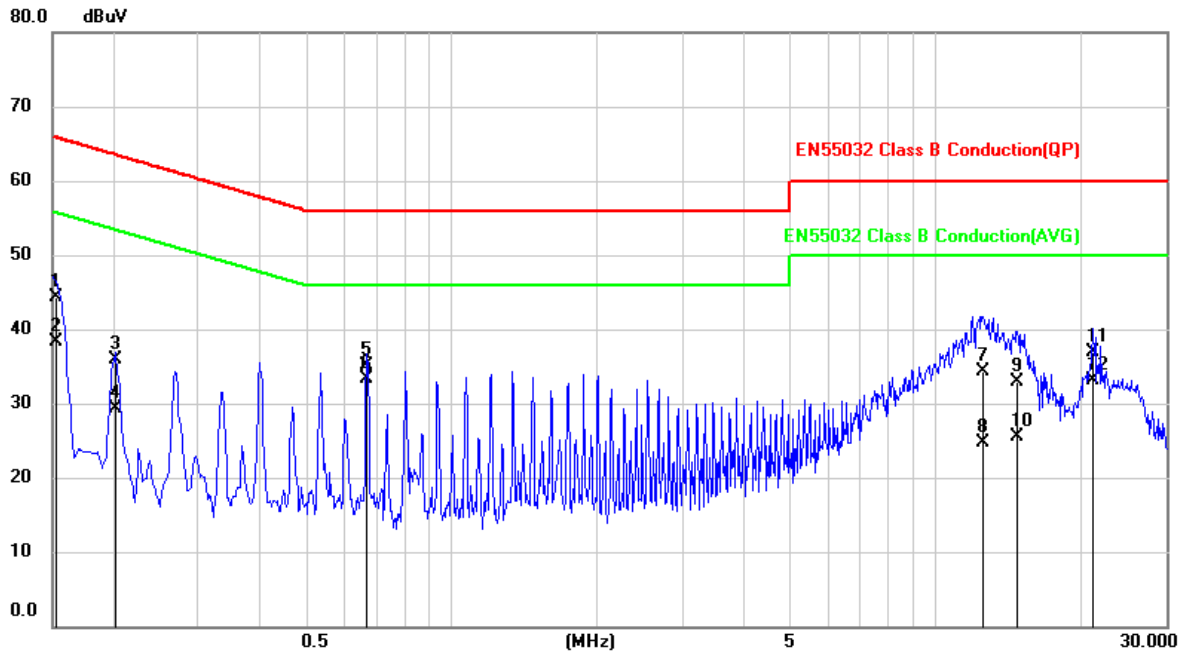


No.	Frequency (MHz)	Reading Level (dBuV)	Correct Factor (dB)	Measurement (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1522	33.88	9.94	43.82	65.88	-22.06	QP
2	0.1522	27.95	9.94	37.89	55.88	-17.99	AVG
3	0.2688	25.78	9.94	35.72	61.15	-25.43	QP
4	0.2688	22.22	9.94	32.16	51.15	-18.99	AVG
5	12.7868	25.42	10.08	35.50	60.00	-24.50	QP
6	12.7868	15.00	10.08	25.08	50.00	-24.92	AVG
7	13.8319	25.61	10.10	35.71	60.00	-24.29	QP
8	13.8319	18.94	10.10	29.04	50.00	-20.96	AVG
9	21.4820	20.26	10.16	30.42	60.00	-29.58	QP
10	21.4820	15.70	10.16	25.86	50.00	-24.14	AVG
11	26.7202	27.19	10.21	37.40	60.00	-22.60	QP
12	26.7202	25.34	10.21	35.55	50.00	-14.45	AVG

**Remark:** 1. QP = Quasi Peak, AVG = Average  
 2. Correction Factor = Insertion loss of LISN + Cable loss + Transient Limiter (If use)  
 3. Measurement Value = Reading Level + Correct Factor  
 4. Margin Level = Measurement Value - Limit Value



<b>Test Voltage</b>	120Vac, 60Hz	<b>Frequency Range</b>	0.15-30 MHz
<b>Environmental Conditions</b>	23°C, 51% RH	<b>6dB Bandwidth</b>	9 kHz
<b>Test Date</b>	2020/04/30	<b>Phase</b>	N
<b>Tested by</b>	Guanwei Liao	<b>Test Site</b>	W01



No.	Frequency (MHz)	Reading Level (dBuV)	Correct Factor (dB)	Measurement (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1529	34.30	9.94	44.24	65.84	-21.60	QP
2	0.1529	28.45	9.94	38.39	55.84	-17.45	AVG
3	0.2016	25.90	9.94	35.84	63.54	-27.70	QP
4	0.2016	19.45	9.94	29.39	53.54	-24.15	AVG
5	0.6710	25.14	9.94	35.08	56.00	-20.92	QP
6	0.6710	23.43	9.94	33.37	46.00	-12.63	AVG
7	12.5405	24.27	10.08	34.35	60.00	-25.65	QP
8	12.5405	14.64	10.08	24.72	50.00	-25.28	AVG
9	14.7533	22.76	10.11	32.87	60.00	-27.13	QP
10	14.7533	15.37	10.11	25.48	50.00	-24.52	AVG
11	21.1969	26.74	10.16	36.90	60.00	-23.10	QP
12	21.1969	23.03	10.16	33.19	50.00	-16.81	AVG

**Remark:**

1. QP = Quasi Peak, AVG = Average
2. Correction Factor = Insertion loss of LISN + Cable loss + Transient Limiter (If use)
3. Measurement Value = Reading Level + Correct Factor
4. Margin Level = Measurement Value - Limit Value

### 4.1.7 Photographs of Test Configuration





## 4.2 Radiated Emission Measurement

### 4.2.1 Limits of Radiated Emission Measurement

Radiated Frequency range 30 MHz to 1000 MHz

Radiated Emissions Limits at 10 meters		
Frequencies (MHz)	FCC 15B/ ICES-003	
	Class A (dB $\mu$ V/m)	Class B (dB $\mu$ V/m)
30-88	39.1	29.5
88-216	43.5	33.1
216-230	46.4	35.6
230-960		
960-1000	49.5	43.5

Radiated Emissions Limits at 3 meters		
Frequencies (MHz)	FCC 15B/ ICES-003	
	Class A (dB $\mu$ V/m)	Class B (dB $\mu$ V/m)
30-88	49.5	40
88-216	54	43.5
216-230	56.9	46
230-960		
960-1000	60	54

**Note:** 1. The lower limit shall apply at the transition frequency.

2. Detector function in the form: PK = Peak, QP = Quasi Peak, AV = Average

3. The test result calculated as following:

Measurement Value = Reading Level + Correct Factor

Correction Factor = Antenna factor + Cable loss (Antenna to preamplifier) - preamplifier Gain  
+ Cable loss (preamplifier to receiver)

Margin Level = Measurement Value - Limit Value

**Radiated Frequency range above 1 GHz**

Radiated Emissions Limits at 3meters				
Frequencies (GHz)	FCC 15B/ ICES-003			
	Class A (dB $\mu$ V/m)		Class B (dB $\mu$ V/m)	
	Peak	Average	Peak	Average
1 to 40	80	60	74	54

- Note:**
1. The lower limit shall apply at the transition frequency.
  2. Detector function in the form: PK = Peak, QP = Quasi Peak, AV = Average
  3. The test result calculated as following:  
 Measurement Value = Reading Level + Correct Factor  
 Correction Factor = Antenna factor + Cable loss (Antenna to preamplifier ) - preamplifier Gain  
 + Cable loss (preamplifier to receiver )  
 Margin Level = Measurement Value - Limit Value

**Frequency Range (For unintentional radiators)**

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705-108	1000
108-500	2000
500-1000	5000
Above 1000	5th harmonic of the highest frequency or 40GHz, whichever is lower



## 4.2.2 Test Instrument

Test Site: W08-966					
Item	Equipment	Manufacturer	Model	Meter No.	Calibration Date
1	Horn Antenna	Schwarzbeck	BBHA 9120D	CT-9-031	Sep. 26, 2019
2	Horn Antenna	Schwarzbeck	BBHA 9170	CT-9-032	Oct. 02, 2019
3	TRILOG Broadband Antenna with 5 dB Attenuator	Schwarzbeck	VULB 9168 & FAT-NM5NF5T3 G2W5	CT-1-002-1	Aug. 12, 2019
4	EXA Signal Analyzer	Keysight	N9010A	CT-1-093	Apr. 21, 2020
5	EMI Test Receiver	Keysight	N9038A	CT-9-007	Jul. 23, 2019
6	Preamplifier	EMEC	EMC003835B	CT-1-099	Jul. 24, 2019
7	Preamplifier	EMCI	EM01G18G	CT-9-025	Sep. 24, 2019
8	Preamplifier	EMCI	EMC051845SE	CT-9-012	Sep. 25, 2019
9	Preamplifier	EMCI	EMC184045SE	CT-9-013	Sep. 25, 2019
10	Test Cable	EMCI	EMCCFD400-N M-NM-1000	CT-1-132	Jul. 24, 2019
11	Test Cable	PEWC	CFD400NL-LW-NM-NM-3000	CT-1-141	Nov. 06, 2019
12	Test Cable	EMCI	EMCCFD400-N M-NM-15000	CT-1-133	Jul. 24, 2019
13	Test Cable	EMCI	EMC104-SM-35 M-600	CT-1-134	Jul. 23, 2019
14	Test Cable	EMCI	EMC104-SM-35 M-15000	CT-1-135	Jul. 23, 2019
15	Test Cable	EMCI	EMC102-KM-K M-600	CT-1-136	Jul. 23, 2019
16	Test Cable	HUBER+SUHNER	SF102	CT-9-002-1	Sep. 25, 2019
17	Measurement Software	EZ-EMC	Ver : FA-03A2 RE	CT-3-012	No calibration request

**Note:** 1. The calibration interval of the above test instruments is 12 months.



### 4.2.3 Test Procedure

- a. The table-top EUT was placed on the top of a turntable 0.8 meters above the ground at 3 m 966 chamber. The floor-standing EUT and all cables shall be insulated from the ground plane by up to 12 mm of insulating material if required. The table was rotated 360 degrees to determine the position of the high radiation emissions.
- b. The height of the test antenna shall vary between 1 m to 4 m. Both vertical and horizontal polarizations of the antenna were set to make the measurement.
- c. The EUT was set up as per the test configuration to simulate typical usage per the user's manual. All I/O cables were positioned to simulate typical usage. The actual test configuration, please refer to EUT test photos.
- d. The initial step in collecting radiated emission data is a Spectrum Mode scanning the measurement frequency range.

**Below 1GHz:**

Reading in which marked as QP or Peak means measurements by using Spectrum Mode with detector RBW=120kHz.

If the Spectrum Mode measured peak value compliance with and lower than Quasi Peak Limit, the EUT shall be deemed to meet QP Limits.

**Above 1GHz:**

Reading in which marked as Peak & AVG means measurements by using Spectrum Mode with setting in RBW=1MHz.

If the Spectrum Mode measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak and AVG Limits.

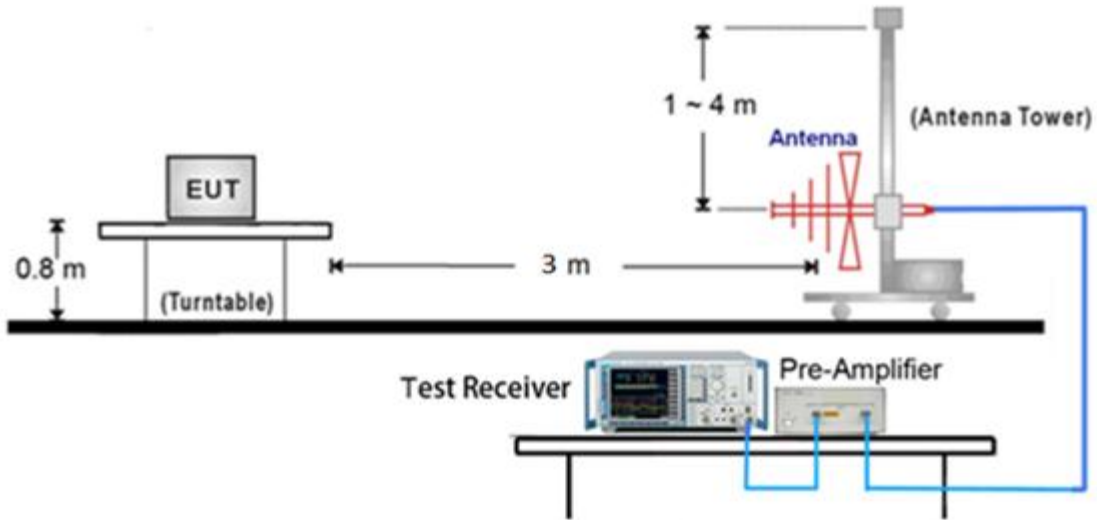
- e. Emission frequency and amplitude were recorded, recording at least six highest emissions. The EUT and cable configuration of the above highest emission levels were recorded. The test data of the worst case was recorded.

### 4.2.4 Deviation from Test Standard

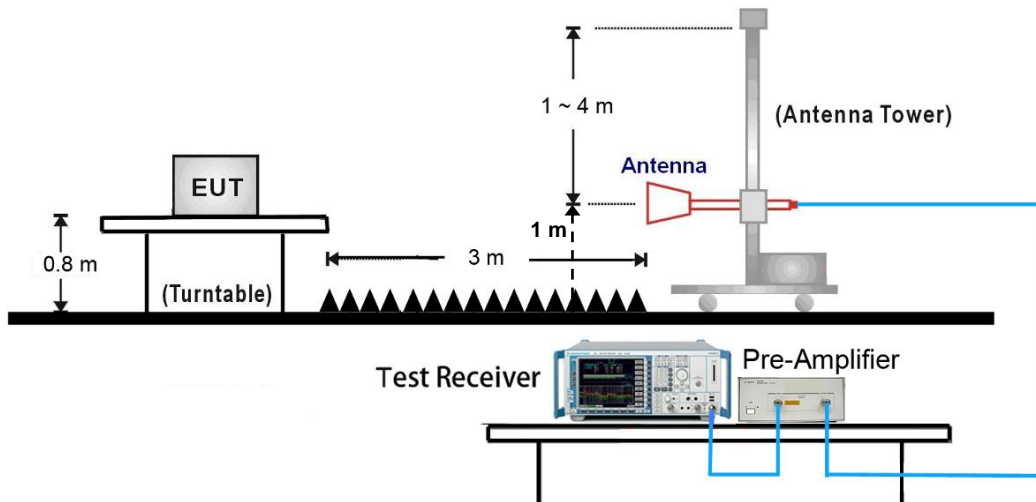
No deviation

### 4.2.5 Test Setup

< Radiated Emissions Frequency: 30 MHz to 1000 MHz >



< Radiated Emissions Frequency: above 1GHz >



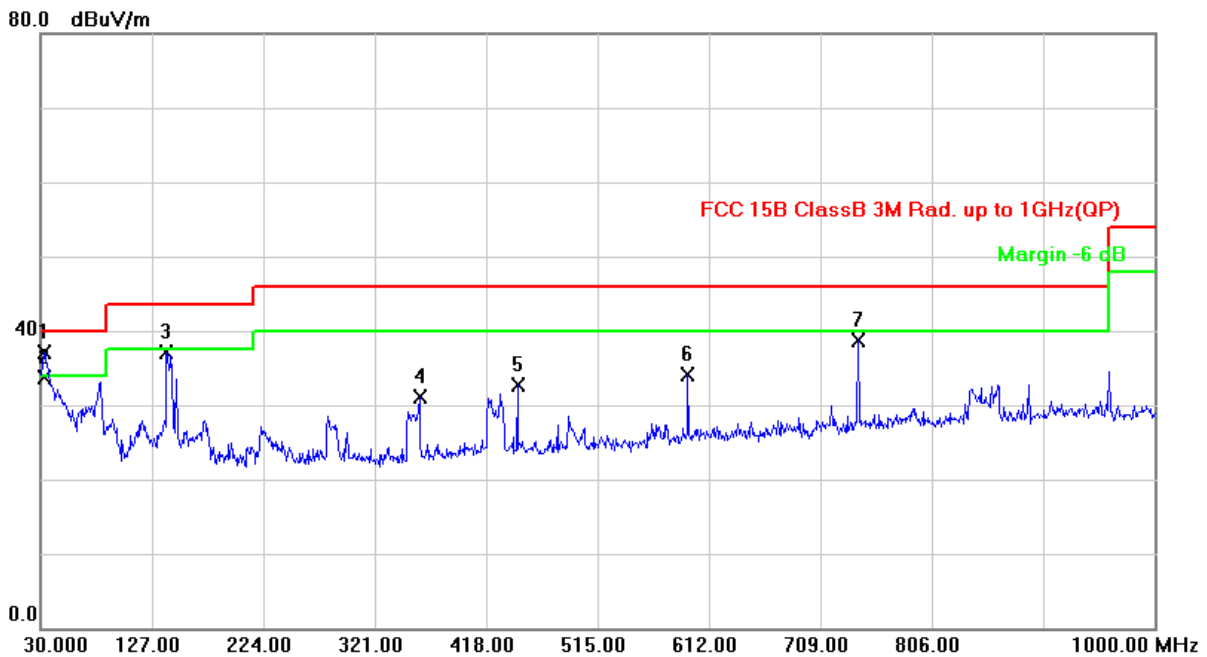
**Note:**

- (1) Please refer to the 4.2.7 for the actual test configuration.
- (2) The formula of measured value as:  $\text{Test Result} = \text{Reading} + \text{Correction Factor}$
- (3) Detector function in the form: PK = Peak, QP = Quasi Peak, AV = Average
- (4) The test result calculated as following:  
 $\text{Measurement Value} = \text{Reading Level} + \text{Correct Factor}$   
 $\text{Correct Factor} = \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain (if use)}$   
 $\text{Margin Level} = \text{Measurement Value} - \text{Limit Value}$



### 4.2.6 Test Result

<b>Test Voltage</b>	120Vac, 60Hz	<b>Frequency Range</b>	30 – 1000 MHz
<b>Environmental Conditions</b>	25°C, 59% RH	<b>6dB Bandwidth</b>	120 kHz
<b>Test Date</b>	2020/05/05	<b>Test Distance</b>	3m
<b>Tested by</b>	Karwin Kao	<b>Polarization</b>	Vertical
<b>Test Site</b>	W08		



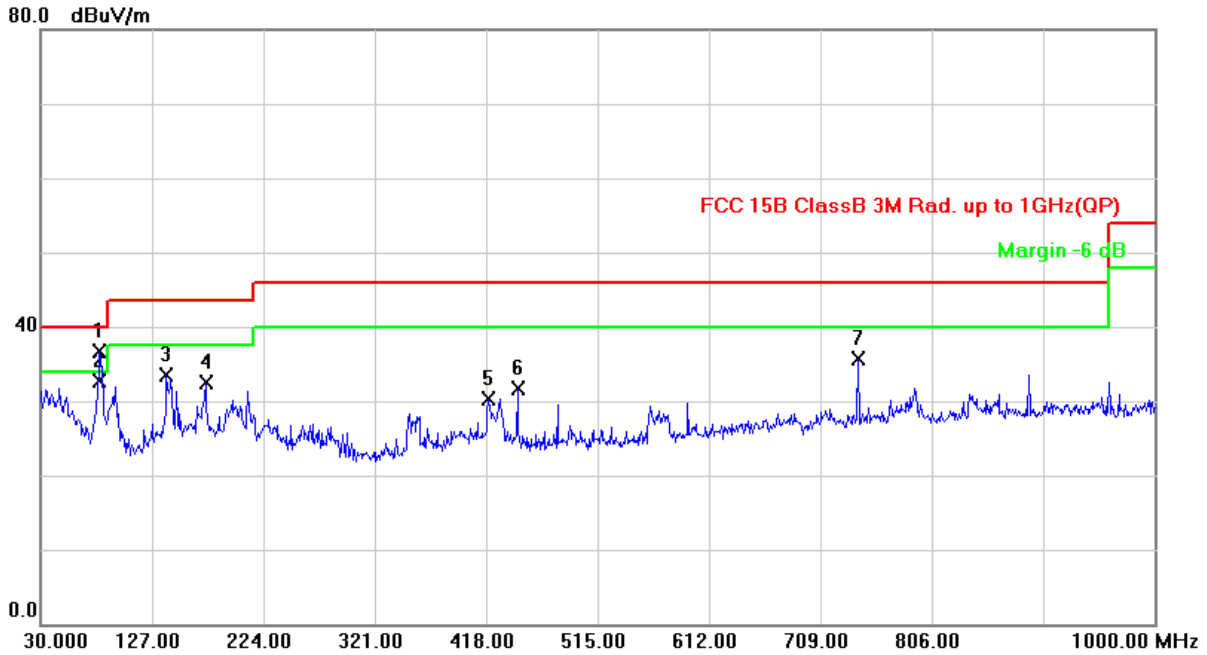
No.	Frequency (MHz)	Reading Level (dBuV)	Correct Factor (dB/m)	Measurement (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Antenna Height (cm)	Table Degree (degree)
1	32.9099	53.11	-16.09	37.02	40.00	-2.98	peak	100	48
2	32.9099	49.73	-16.09	33.64	40.00	-6.36	QP	100	48
3	139.6100	52.88	-15.76	37.12	43.50	-6.38	peak	100	0
4	359.8000	45.09	-13.92	31.17	46.00	-14.83	peak	100	194
5	445.1600	44.85	-12.21	32.64	46.00	-13.36	peak	100	187
6	593.5700	43.66	-9.47	34.19	46.00	-11.81	peak	100	123
7	741.9800	46.28	-7.63	38.65	46.00	-7.35	peak	100	359

**Remark:**

1. QP = Quasi Peak
2. Correction Factor = Antenna factor + Cable loss (Antenna to preamplifier) - preamplifier Gain + Cable loss (preamplifier to receiver)
3. Measurement Value = Reading Level + Correct Factor
4. Margin Level = Measurement Value - Limit Value



<b>Test Voltage</b>	120Vac, 60Hz	<b>Frequency Range</b>	30 – 1000 MHz
<b>Environmental Conditions</b>	25°C, 59% RH	<b>6dB Bandwidth</b>	120 kHz
<b>Test Date</b>	2020/05/05	<b>Test Distance</b>	3m
<b>Tested by</b>	Karwin Kao	<b>Polarization</b>	Horizontal
<b>Test Site</b>	W08		



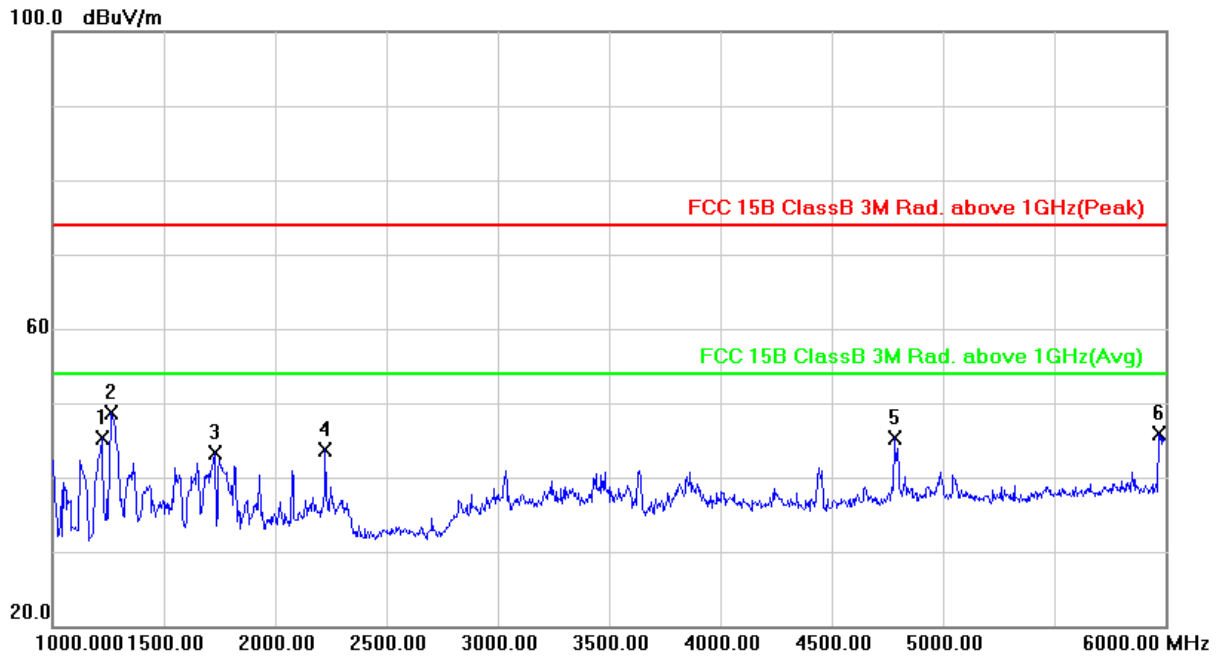
No.	Frequency (MHz)	Reading Level (dBuV)	Correct Factor (dB/m)	Measurement (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Antenna Height (cm)	Table Degree (degree)
1	81.4100	57.14	-20.42	36.72	40.00	-3.28	peak	200	351
2	81.4100	53.13	-20.42	32.71	40.00	-7.29	QP	200	351
3	139.6100	49.33	-15.76	33.57	43.50	-9.93	peak	200	94
4	173.5600	47.01	-14.56	32.45	43.50	-11.05	peak	148	0
5	419.9400	43.01	-12.62	30.39	46.00	-15.61	peak	200	158
6	445.1600	43.85	-12.21	31.64	46.00	-14.36	peak	200	155
7	741.9800	43.41	-7.63	35.78	46.00	-10.22	peak	100	126

**Remark:**

1. QP = Quasi Peak
2. Correction Factor = Antenna factor + Cable loss (Antenna to preamplifier ) - preamplifier Gain + Cable loss (preamplifier to receiver )
3. Measurement Value = Reading Level + Correct Factor
4. Margin Level = Measurement Value - Limit Value



<b>Test Voltage</b>	120Vac, 60Hz	<b>Frequency Range</b>	1 – 6GHz
<b>Environmental Conditions</b>	26°C, 58% RH	<b>6dB Bandwidth</b>	1MHz
<b>Test Date</b>	2020/05/05	<b>Test Distance</b>	3m
<b>Tested by</b>	Karwin Kao	<b>Polarization</b>	Vertical
<b>Test Site</b>	W08		

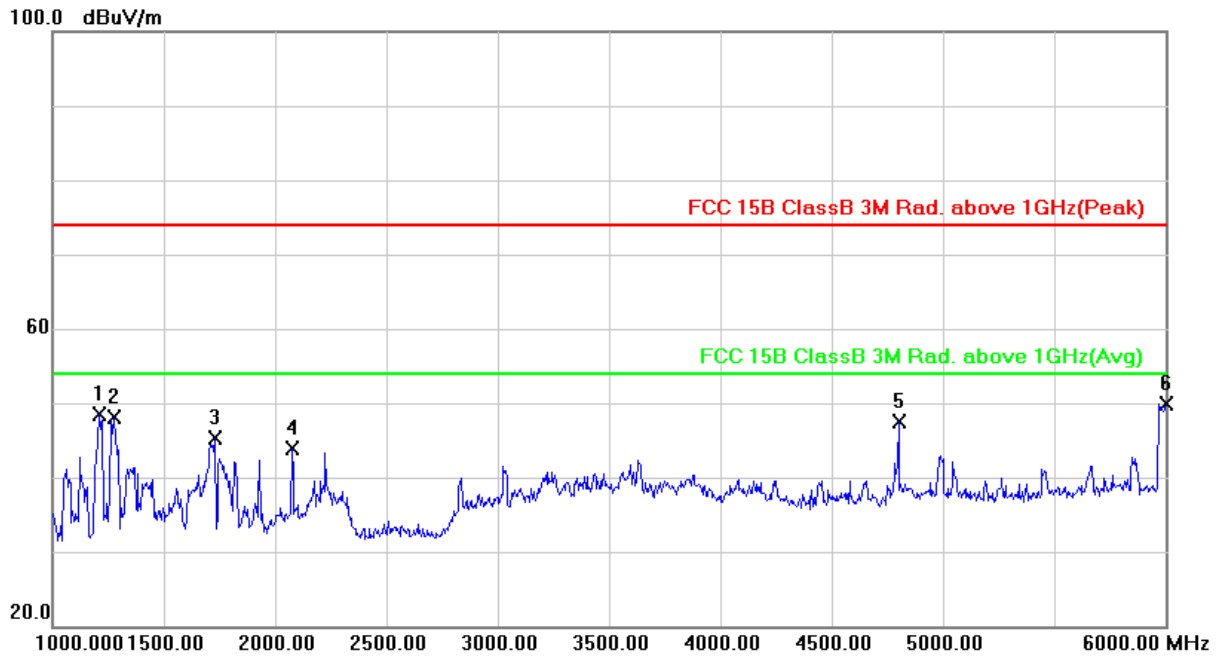


No.	Frequency (MHz)	Reading Level (dBuV)	Correct Factor (dB/m)	Measurement (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Antenna Height (cm)	Table Degree (degree)
1	1220.000	66.52	-21.31	45.21	74.00	-28.79	peak	200	186
2	1265.000	69.90	-21.13	48.77	74.00	-25.23	peak	200	186
3	1730.000	64.40	-21.19	43.21	74.00	-30.79	peak	200	143
4	2225.000	61.31	-17.68	43.63	74.00	-30.37	peak	100	113
5	4780.000	58.19	-12.79	45.40	74.00	-28.60	peak	100	360
6	5970.000	57.04	-11.17	45.87	74.00	-28.13	peak	200	236

**Remark:** 1. peak = Peak, AVG = Average  
 2. Correction Factor = Antenna factor + Cable loss (Antenna to preamplifier ) - preamplifier Gain + Cable loss (preamplifier to receiver )  
 3. Measurement Value = Reading Level + Correct Factor  
 4. Margin Level = Measurement Value - Limit Value



<b>Test Voltage</b>	120Vac, 60Hz	<b>Frequency Range</b>	1 – 6GHz
<b>Environmental Conditions</b>	26°C, 58% RH	<b>6dB Bandwidth</b>	1MHz
<b>Test Date</b>	2020/05/05	<b>Test Distance</b>	3m
<b>Tested by</b>	Karwin Kao	<b>Polarization</b>	Horizontal
<b>Test Site</b>	W08		



No.	Frequency (MHz)	Reading Level (dBuV)	Correct Factor (dB/m)	Measurement (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Antenna Height (cm)	Table Degree (degree)
1	1210.000	69.82	-21.36	48.46	74.00	-25.54	peak	100	110
2	1275.000	69.22	-21.12	48.10	74.00	-25.90	peak	100	114
3	1730.000	66.41	-21.19	45.22	74.00	-28.78	peak	100	107
4	2075.000	63.17	-19.29	43.88	74.00	-30.12	peak	100	153
5	4800.000	60.42	-12.87	47.55	74.00	-26.45	peak	200	256
6	6000.000	61.12	-11.17	49.95	74.00	-24.05	peak	100	297

**Remark:** 1. peak = Peak, AVG = Average  
 2. Correction Factor = Antenna factor + Cable loss (Antenna to preamplifier ) - preamplifier Gain + Cable loss (preamplifier to receiver )  
 3. Measurement Value = Reading Level + Correct Factor  
 4. Margin Level = Measurement Value - Limit Value

## 4.2.7 Photographs of Test Configuration

### Radiated Emission Test (30MHz~1GHz)



**Radiated Emission Test (Above 1GHz)**



< End Page >