FCC RADIO TEST REPORT

FCC ID	:	**2AP6E-PROXYPRO-01**
Equipment	:	**Proxy Reader Pro**
Brand Name	:	**Proxy**
Model Name	:	**Proxy Reader Pro**
Applicant	:	**Proxy Technologies, Inc.** **500 3rd St, San Francisco, CA 94107**
Manufacturer	:	**Wistron NeWeb Corp.** **20 Park Avenue II, Hsinchu Science Park,** **Hsinchu 308, Taiwan,R.O.C**
Standard	:	**FCC Part 15 Subpart C §15.225**

The product was received on Jan. 26, 2019 and testing was started from Mar. 27, 2019 and completed on Apr. 03, 2019. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this variant report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Jones Tsai

Approved by: Jones Tsai

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

Table of Contents

History of this test report

Report No.	Version	Description	Issued Date
FR912611A	01	Initial issue of report	Apr. 08, 2019

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
-	15.207	AC Power Line Conducted Emissions	Not Required	-
3.1	15.215(c)	20dB Spectrum Bandwidth	Pass	-
	2.1049	99% OBW Spectrum Bandwidth	Reporting only	-
3.2	15.225(e)	Frequency Stability	Pass	-
3.3	15.225(a)(b)(c)	Field Strength of Fundamental Emissions	Pass	Max level 70.73 dBμV/m at 13.560 MHz
3.4	15.225(d) 15.209	Radiated Spurious Emissions	Pass	Under limit 0.23 dB at 40.800MHz
3.5	15.203	Antenna Requirements	Pass	-

Remark:

1. Not required means after assessing, test items are not necessary to carry out.

2. This is a variant report. All the test cases were performed on original report which can be referred to Sporton Report Number FR841912A. Based on the original report, only worst case was verified.

3. Detail changes list as below :

V1.0 > V1.2:

V1.1 change note.

For indicator leds, used a step up voltage converter to convert from 3.3V to 5V, then supply leds.

1. Modifying HF matching cap will change the HF reading range.
2. Modifying LF antenna will change LF reading range.

V1.2 change note.

For indicator leds, used 5V to supply leds directionally.

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.

Reviewed by: Wii Chang

Report Producer: Yimin Ho

1. General Description

1.1 Product Feature of Equipment Under Test

RFID

Product Specification subjective to this standard	
Antenna Type	RFID: Loop Antenna

1.2 Modification of EUT

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

1.3 Testing Location

Test Site	SPORTON INTERNATIONAL INC.	
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978	
Test Site No.	**Sporton Site No.**	
	TH03-HY	03CH07-HY
Test Engineer	George Chen	Jesse Wang and Stan Hsieh
Temperature	22~24℃	21~23℃
Relative Humidity	53~55%	51~53%

Note: The test site complies with ANSI C63.4 2014 requirement.

FCC Designation No. TW1190

1.4 Applicable Standards

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

- FCC Part 15 Subpart C §15.225
- FCC KDB 414788 D01 Radiated Test Site v01r01
- ANSI C63.10-2013

2. Test Configuration of Equipment Under Test

2.1 Descriptions of Test Mode

Investigation has been done on all the possible configurations.

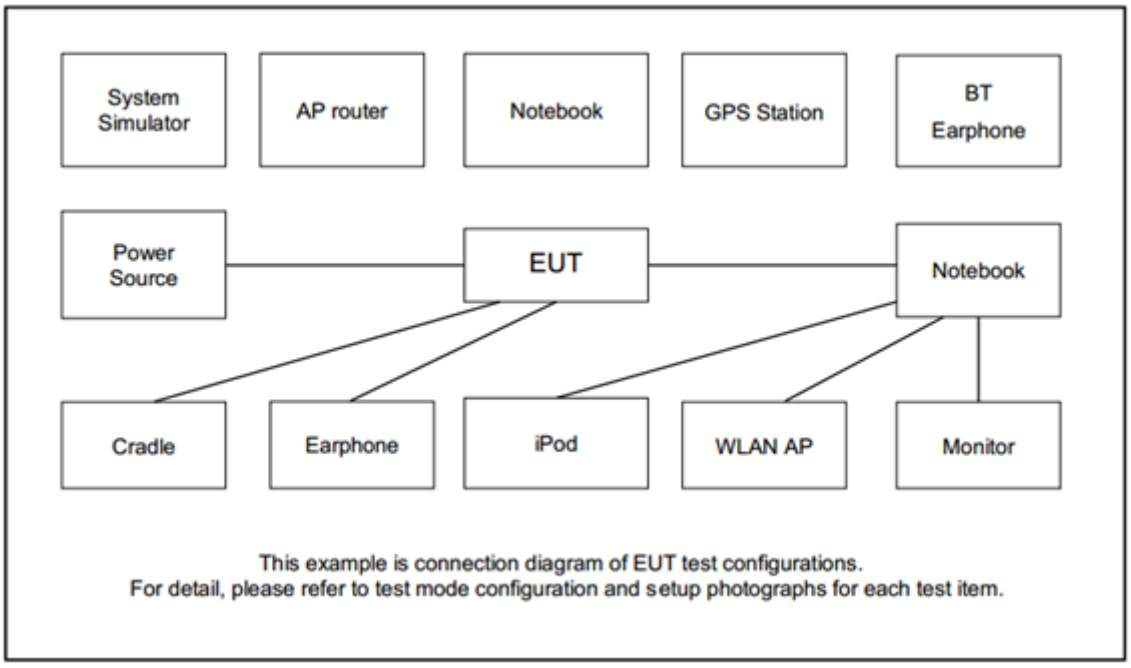
The following table is a list of the test modes shown in this test report.

Test Items	
20dB Spectrum Bandwidth	Field Strength of Fundamental Emissions
Radiated Emissions 9kHz~30MHz	Frequency Stability
Radiated Emissions 30MHz~1GHz	

The type A was recorded in this report.

Pre-scanned tests, X, Y, Z in three orthogonal panels to determine the final configuration (Y plane as worst plane) from all possible combinations.

2.2 Connection Diagram of Test System



2.3 Table for Supporting Units

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	NFC Card	N/A	N/A	N/A	N/A	N/A

2.4 EUT Operation Test Setup

The EUT was programmed to be in continuously transmitting mode.

The ancillary equipment, NFC card, is used to make the EUT (NFC) continuously transmit at 13.56MHz and is placed around 3 cm gap to the EUT.

3. Test Results

3.1 20dB and 99% OBW Spectrum Bandwidth Measurement

3.1.1 Limit

Intentional radiators must be designed to ensure that the 20dB and 99% emission bandwidth in the specific band 13.553~13.567MHz.

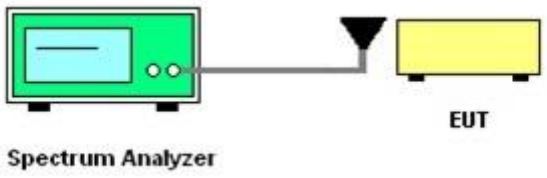
3.1.2 Measuring Instruments

See list of measuring instruments of this test report.

3.1.3 Test Procedures

1. The spectrum analyzer connected via a receive antenna placed near the EUT in peak Max hold mode.
2. The resolution bandwidth of 1 kHz and the video bandwidth of 3 kHz were used.
3. Measured the spectrum width with power higher than 20dB below carrier.
4. Measured the 99% OBW.

3.1.4 Test Setup



3.1.5 Test Result of Conducted Test Items

Please refer to Appendix A.

3.2 Frequency Stability Measurement

3.2.1 Limit

The frequency tolerance of the carrier signal shall be maintained within +/- 0.01% (100ppm) of the operating frequency over a temperature variation of -20 degrees to +50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.

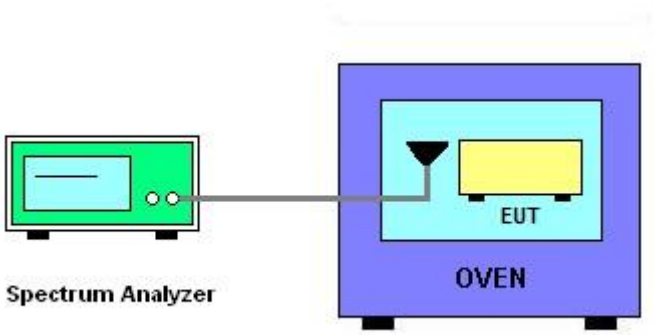
3.2.2 Measuring Instruments

See list of measuring instruments of this test report.

3.2.3 Test Procedures

1. The spectrum analyzer connected via a receive antenna placed near the EUT.
2. EUT have transmitted signal and fixed channelize.
3. Set the spectrum analyzer span to view the entire emissions bandwidth.
4. Set RBW = 1 kHz, VBW = 3 kHz with peak detector and maxhold settings.
5. The fc is declaring of channel frequency. Then the frequency error formula is (fc-f)/fc × 10^6 ppm and the limit is less than ±100ppm.
6. Extreme temperature rule is -20°C~50°C.

3.2.4 Test Setup



3.2.5 Test Result of Conducted Test Items

Please refer to Appendix A.

3.3 Field Strength of Fundamental Emissions and Mask Measurement

3.3.1 Limit

Rules and specifications	FCC CFR 47 Part 15 section 15.225			
Description	Compliance with the spectrum mask is tested with RBW set to 9kHz.			
Freq. of Emission (MHz)	Field Strength (μV/m) at 30m	Field Strength (dBμV/m) at 30m	Field Strength (dBμV/m) at 10m	Field Strength (dBμV/m) at 3m
1.705~13.110	30	29.5	48.58	69.5
13.110~13.410	106	40.5	59.58	80.5
13.410~13.553	334	50.5	69.58	90.5
13.553~13.567	15848	84.0	103.08	124.0
13.567~13.710	334	50.5	69.58	90.5
13.710~14.010	106	40.5	59.58	80.5
14.010~30.000	30	29.5	48.58	69.5

3.3.2 Measuring Instruments

See list of measuring instruments of this test report.

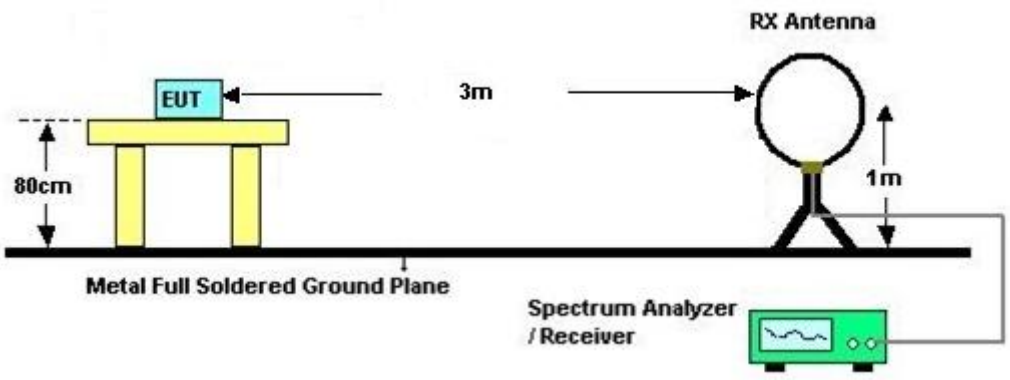
3.3.3 Test Procedures

1. Configure the EUT according to ANSI C63.10. The EUT was placed on the top of the turntable 0.8 meter above ground. The phase center of the loop receiving antenna mounted antenna tower was placed 3 meters far away from the turntable.
2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
3. The height of the receiving antenna was fixed at one meter above ground to find the maximum emissions field strength.
4. For Fundamental emissions, use the receiver to measure QP reading.
5. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.
6. Compliance with the spectrum mask is tested with RBW set to 9kHz.

   Note: Emission level (dBμV/m) = 20 log Emission level (μV/m).

3.3.4 Test Setup

For radiated emissions below 30MHz



3.3.5 Test Result of Field Strength of Fundamental Emissions and Mask

Please refer to Appendix B.

3.4 Radiated Emissions Measurement

3.4.1 Limit

The field strength of any emissions which appear outside of 13.110 ~14.010MHz band shall not exceed the general radiated emissions limits.

Frequencies (MHz)	Field Strength (μV/m)	Measurement Distance (meters)
0.009~0.490	2400/F(kHz)	300
0.490~1.705	24000/F(kHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

3.4.2 Measuring Instruments

See list of measuring instruments of this test report.

3.4.3 Measuring Instrument Setting

The following table is the setting of receiver:

Receiver Parameter	Setting
Attenuation	Auto
Frequency Range: 9kHz~150kHz	RBW 200Hz for QP
Frequency Range: 150kHz~30MHz	RBW 9kHz for QP
Frequency Range: 30MHz~1000MHz	RBW 120kHz for Peak

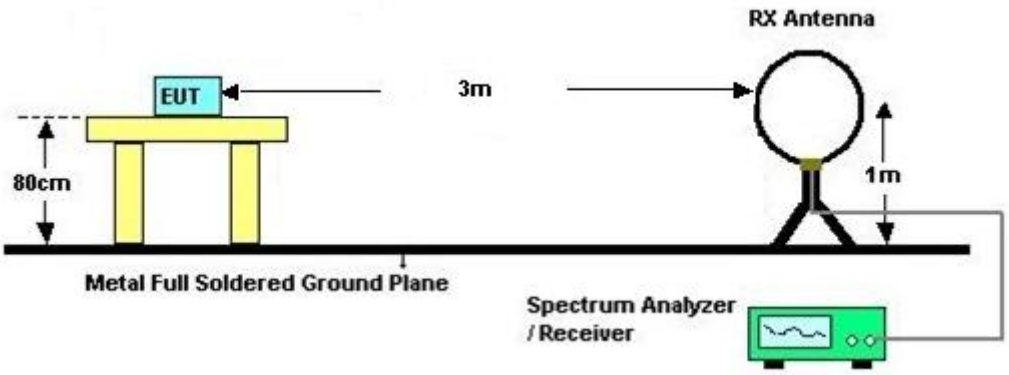
Note: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz and 110-490 kHz. Radiated emission limits in these two bands are based on measurements employing an average detector.

3.4.4 Test Procedures

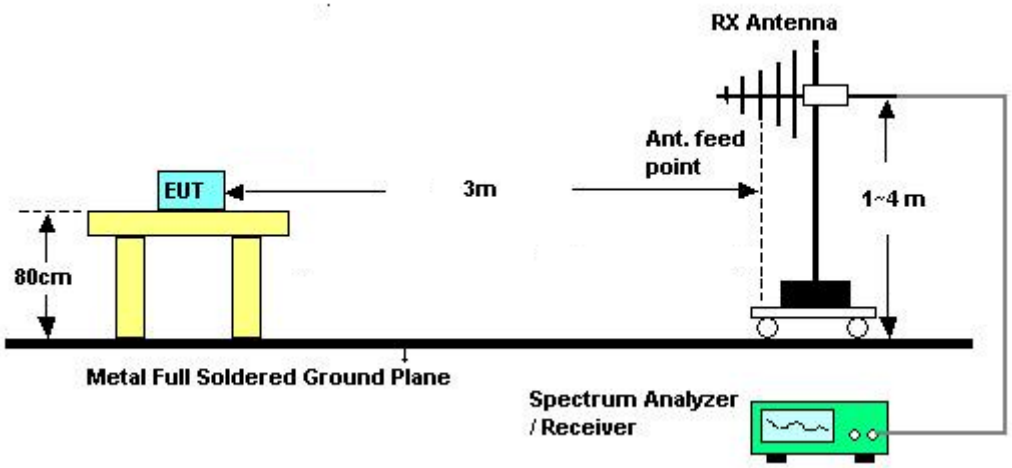
1. Configure the EUT according to ANSI C63.10. The EUT was placed on the top of the turntable 0.8 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
6. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.
7. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver.

3.4.5 Test Setup

For radiated emissions below 30MHz



For radiated emissions above 30MHz



3.4.6 Test Result of Radiated Emissions Measurement

Please refer to Appendix B.

Remark: There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

3.5 Antenna Requirements

3.5.1 Standard Applicable

Except for special regulations, the Low-power Radio-frequency Devices must not be equipped with any jacket for installing an antenna with extension cable. An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited.

The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the rule.

3.5.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Programmable Power Supply	GW Instek	PSS-2005	EL883644	Voltage:0~20V; Current:0~5A	Dec. 06, 2017	Mar. 29, 2019	Dec. 05, 2019	Conducted (TH03-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP30	101329	9kHz~30GHz	Jun. 29, 2018	Mar. 29, 2019	Jun. 28, 2019	Conducted (TH03-HY)
Temperature Chamber	ESPEC	SU-641	92013721	-30℃ ~70℃	Dec. 06, 2017	Mar. 29, 2019	Dec. 05, 2019	Conducted (TH03-HY)
Bilog Antenna	Schaffner	CBL6111C&N-6-06	2725&AT-N0601	30MHz~1GHz	Jan. 10, 2019	Mar. 27, 2019 ~Apr. 03, 2019	Jan. 09, 2020	Radiation (03CH07-HY)
EMI Test Receiver	Agilent	N9038A (MXE)	MY53290053	20Hz to 26.5GHz	Jan. 23, 2019	Mar. 27, 2019 ~Apr. 03, 2019	Jan. 22, 2020	Radiation (03CH07-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Jan. 11, 2019	Mar. 27, 2019 ~Apr. 03, 2019	Jan. 10, 2020	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz-1GHz	May 21, 2018	Mar. 27, 2019 ~Apr. 03, 2019	May 20, 2019	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24971/4,MY28655/4	9KHz~30MHz	Feb. 26, 2019	Mar. 27, 2019 ~Apr. 03, 2019	Feb. 25, 2020	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4,MY24971/4,MY15682/4	30MHz~1GHz	Feb. 26, 2019	Mar. 27, 2019 ~Apr. 03, 2019	Feb. 25, 2020	Radiation (03CH07-HY)
Software	Audix	E3 6.2009-8-24	80504004656H	N/A	N/A	Mar. 27, 2019 ~Apr. 03, 2019	N/A	Radiation (03CH07-HY)
Antenna Mast	Max-Full	MFA520BS	N/A	1m~4m	N/A	Mar. 27, 2019 ~Apr. 03, 2019	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Mar. 27, 2019 ~Apr. 03, 2019	N/A	Radiation (03CH07-HY)

5. Uncertainty of Evaluation

Uncertainty of Radiated Emission Measurement (9 kHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.4**

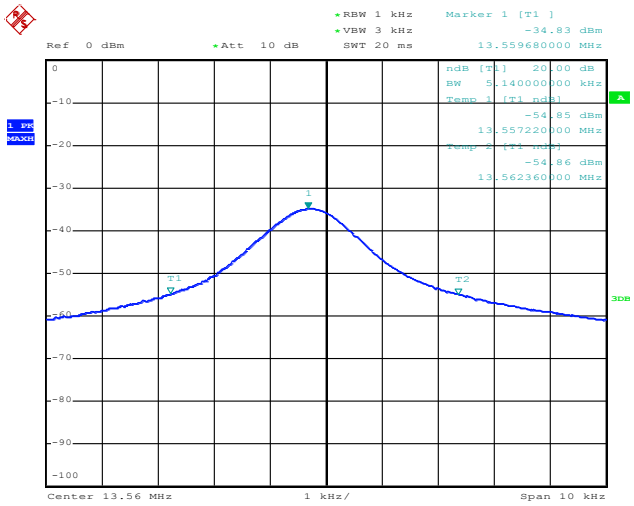
Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

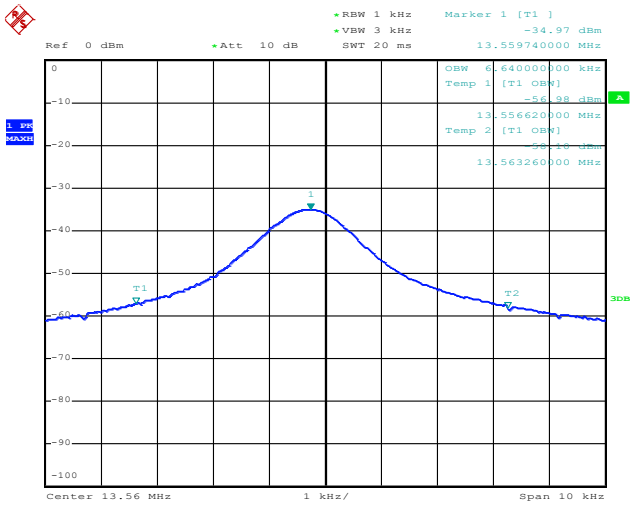
Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.7**

Appendix A. Test Results of Conducted Test Items

A1. Test Result of 20dB Spectrum Bandwidth

Test mode	NFC Tx	Test Frequency (MHz)	13.56





20dB Bandwidth (kHz)	5.14	99% OccupiedBW(kHz)	6.64
Frequency range (MHz)	**f_L > 13.553**	13.55722	**Test Result**
	f_H < 13.567	13.56236	**Complies**

Remark: Because the measured signal is CW adjusting the RBW per C63.10 would not be practical since measured bandwidth will always follow the RBW and the result will be approximately twice the RBW.

A2. Test Result of Frequency Stability

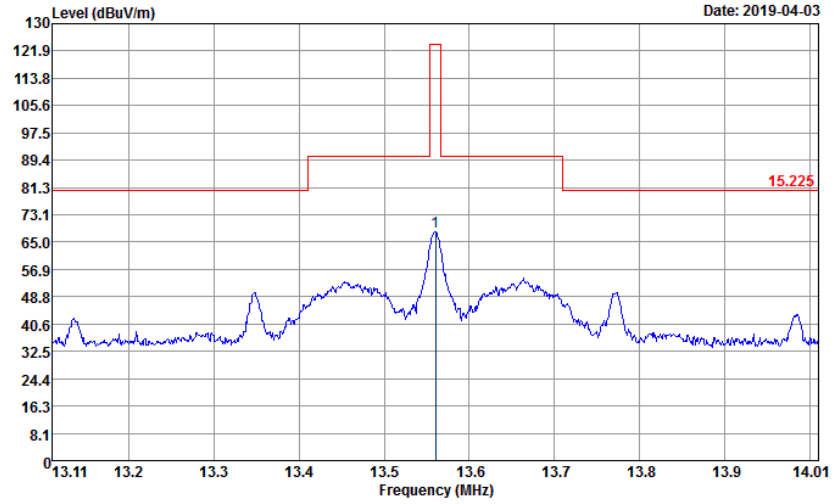
A3. Voltage vs. Frequency Stability		Temperature vs. Frequency Stability		
Voltage (Vac)	Measurement Frequency (MHz)	Temperature (℃)	Time	Measurement Frequency (MHz)
120	13.559790	**-20**	**0**	13.559690
102	13.559840		**2**	13.559720
138	13.559790		**5**	13.559680
			10	13.559680
		-10	**0**	13.559690
			2	13.559700
			5	13.559700
			10	13.559700
		0	**0**	13.559710
			2	13.559720
			5	13.559710
			10	13.559720
		10	**0**	13.559750
			2	13.559720
			5	13.559720
			10	13.559710
		20	**0**	13.559790
			2	13.559770
			5	13.559740
			10	13.559770
		30	**0**	13.559730
			2	13.559700
			5	13.559700
			10	13.559800
		40	**0**	13.559750
			2	13.559760
			5	13.559730
			10	13.559760

Voltage vs. Frequency Stability		Temperature vs. Frequency Stability		
Voltage (Vac)	**Measurement Frequency (MHz)**	**Temperature (℃)**	**Time**	**Measurement Frequency (MHz)**
		50	**0**	13.559770
			2	13.559770
			5	13.559780
			10	13.559810
Max.Deviation (MHz)	-0.000210	**Max.Deviation (MHz)**		-0.000320
Max.Deviation (ppm)	-15.4867	**Max.Deviation (ppm)**		-23.5988
Limit	**FS < ±100 ppm**	**Limit**		**FS < ±100 ppm**
Test Result	**PASS**	**Test Result**		**PASS**

Appendix B. Test Results of Radiated Test Items

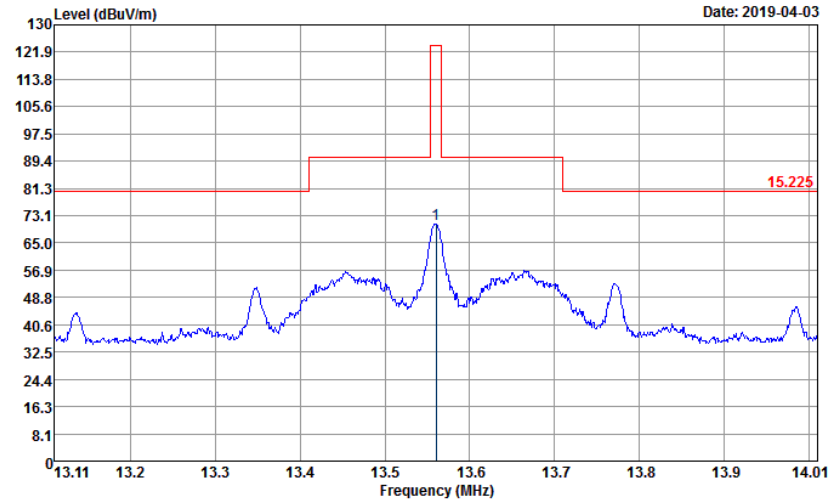
B1. Test Result of Field Strength of Fundamental Emissions

Test Mode :	NFC Tx	Test Frequency (MHz)	13.56



Site : 03CH07-HY
Condition : 15.225 3m LOOP_ANT(H)_100315 HORIZONTAL
: RBW:9.000KHz VBW:9.000KHz SWT:Auto
Project : 912611
Mode : 1

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	cm	deg	
1	13.56	67.95	-56.05	124.00	47.59	19.80	0.56	100	157	QP

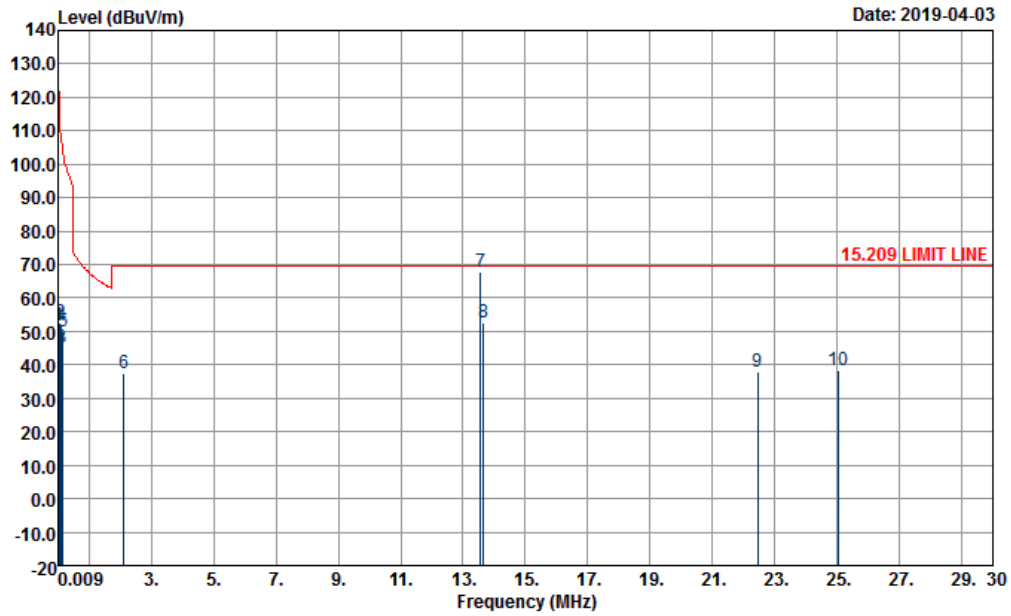


Site : 03CH07-HY
Condition : 15.225 3m LOOP_ANT(V)_100315 VERTICAL
: RBW:9.000KHz VBW:9.000KHz SWT:Auto
Project : 912611
Mode : 1

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	cm	deg	
1	13.56	70.73	-53.27	124.00	50.37	19.80	0.56	100	73	QP

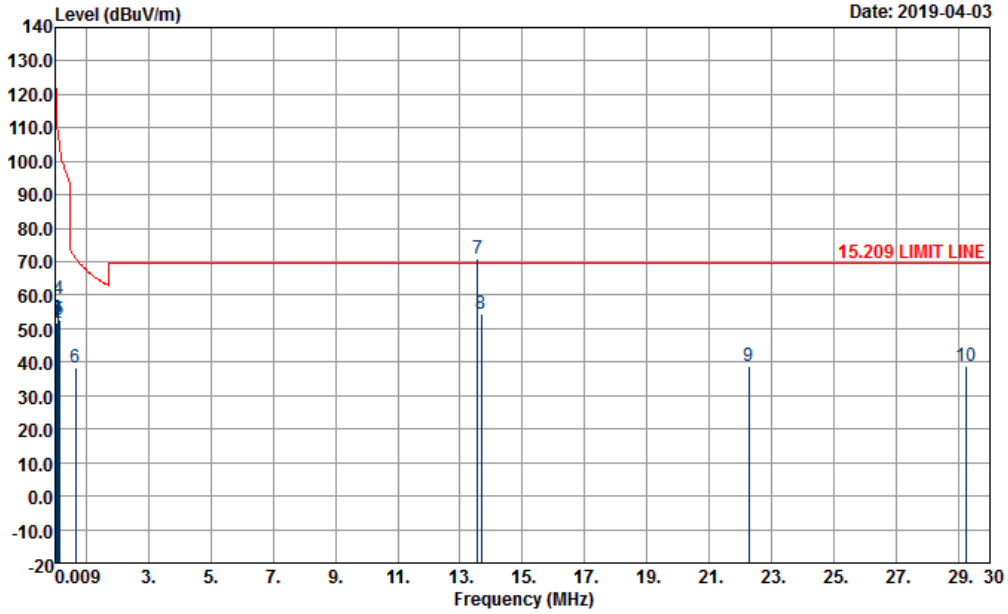
B2. Results of Radiated Spurious Emissions (9 kHz~30MHz)

Test Mode :	NFC Tx	Polarization :	Horizontal



Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
0.00971	51.62	-76.24	127.86	31.05	20.01	0.56	-	-	Average
0.0609	52.52	-59.39	111.91	32.06	19.9	0.56	-	-	Average
0.10482	44.89	-62.31	107.2	24.44	19.89	0.56	-	-	QP
0.12164	51.65	-54.25	105.9	31.22	19.87	0.56	-	-	Average
0.15442	50.15	-53.68	103.83	29.75	19.84	0.56	-	-	Average
2.112	37.4	-32.1	69.5	17.02	19.82	0.56	-	-	QP
13.56	67.95	-1.55	69.5	47.59	19.8	0.56	-	-	QP
13.664	52.78	-16.72	69.5	32.41	19.81	0.56	100	0	QP
22.444	37.96	-31.54	69.5	16.4	20.37	1.19	-	-	QP
25.03	38.35	-31.15	69.5	16.7	20.46	1.19	-	-	QP

Test Mode :	NFC Tx	Polarization :	Vertical



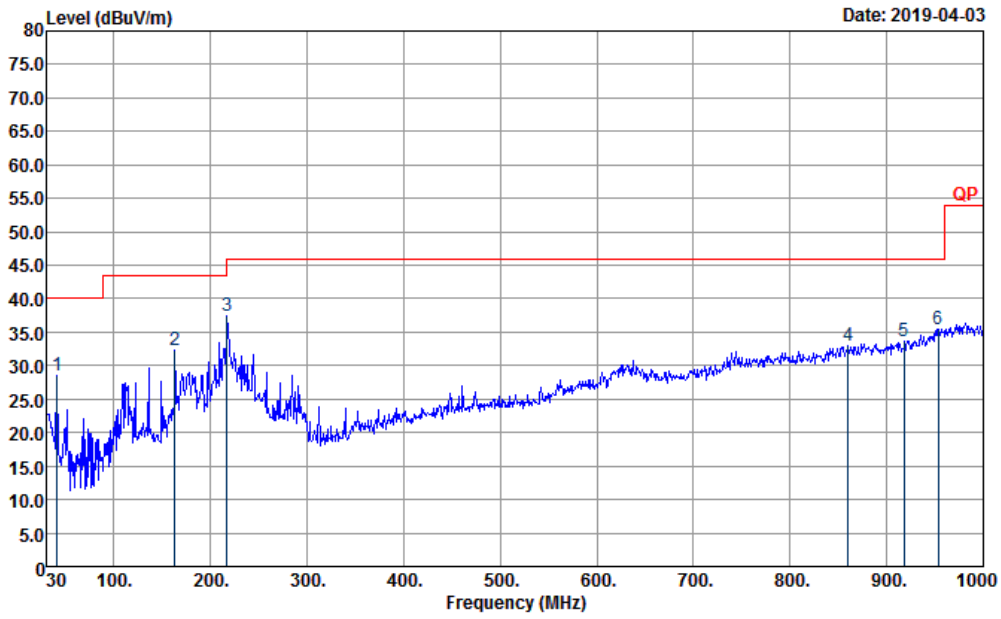
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
0.00956	51.79	-76.2	127.99	31.22	20.01	0.56	-	-	Average
0.06669	51.7	-59.42	111.12	31.24	19.9	0.56	-	-	Average
0.09598	52.97	-54.99	107.96	32.52	19.89	0.56	-	-	QP
0.11048	58.92	-47.82	106.74	38.47	19.89	0.56	-	-	Average
0.15	52.66	-51.42	104.08	32.26	19.84	0.56	-	-	Average
0.66273	38.23	-32.95	71.18	17.9	19.77	0.56	-	-	QP
13.56	70.73	1.23	69.5	50.37	19.8	0.56	-	-	QP
13.672	54.53	-14.97	69.5	34.16	19.81	0.56	100	0	QP
22.255	38.61	-30.89	69.5	17.05	20.37	1.19	-	-	QP
29.245	38.7	-30.8	69.5	17.28	20.23	1.19	-	-	QP

Note:

1. 13.56 MHz is fundamental signal which can be ignored.
2. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
3. Distance extrapolation factor = 40 log (specific distance / test distance) (dB);
4. Limit line = specific limits (dBµV) + distance extrapolation factor.

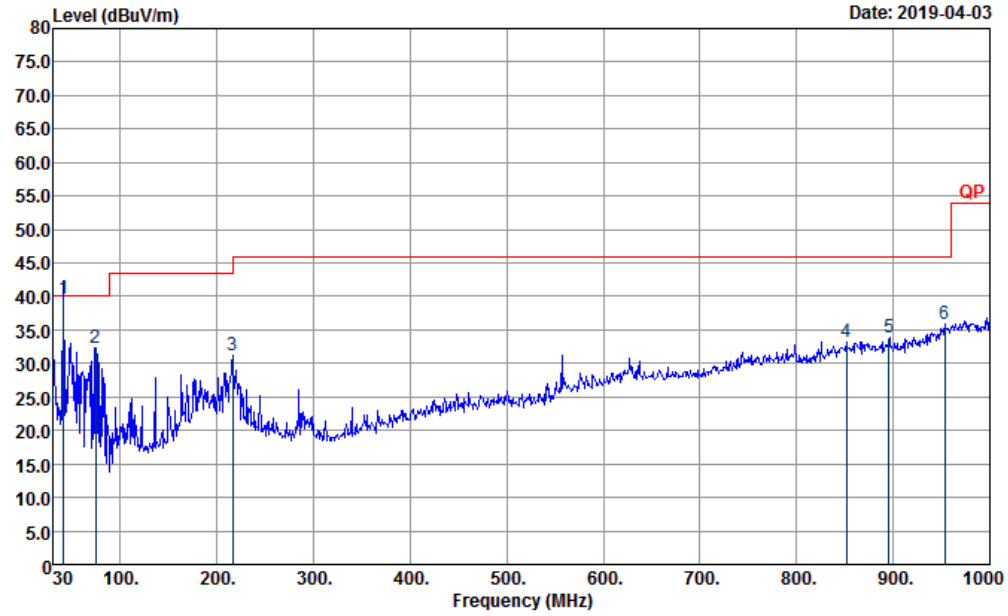
B3. Results of Radiated Spurious Emissions (30MHz~1GHz)

Test Mode :	NFC Tx	Polarization :	Horizontal



Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
40.8	28.44	-11.56	40	38.48	18.81	1.19	30.17	-	-	Peak
162.84	32.41	-11.09	43.5	43.92	16.26	2.07	30.01	-	-	Peak
216.84	37.38	-8.62	46	49.72	15.26	2.18	29.96	100	0	Peak
860	32.96	-13.04	46	27.22	29.03	4.48	29.07	-	-	Peak
918.1	33.6	-12.4	46	27.05	29.13	4.68	28.78	-	-	Peak
953.1	35.52	-10.48	46	26.91	30.54	4.74	28.54	-	-	Peak

Test Mode :	NFC Tx	Polarization :	Vertical



Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
40.8	39.77	-0.23	40	49.81	18.81	1.19	30.17	100	97	QP
74.28	32.38	-7.62	40	48.09	12.75	1.55	30.12	-	-	Peak
216.03	31.19	-14.81	46	43.55	15.24	2.18	29.96	-	-	Peak
851.6	33.29	-12.71	46	27.82	28.81	4.48	29.11	-	-	Peak
895.7	33.85	-12.15	46	28.04	28.76	4.63	28.92	-	-	Peak
953.1	35.79	-10.21	46	27.18	30.54	4.74	28.54	-	-	Peak

Note:

1. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
2. Emission level (dBµV/m) = 20 log Emission level (µV/m).
3. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor= Level.