

TEST REPORT

CERTIFICATE OF CONFORMITY

Standard: 47 CFR FCC Part 15, Subpart C (Section 15.225)

Report No.: RFBEOE-WTW-P26040365-6

FCC ID: MQT-AT160EL18U

Product: Terminal

Brand: XAC

Model No.: xCL_AT-160-EL-18U

Received Date: 2026/4/14

Test Date: 2026/5/18 ~ 2026/6/25

Issued Date: 2026/6/30

Applicant: XAC AUTOMATION CORP.

Address: 4F, No. 30, INDUSTRY E. RD. IX, SCIENCE-BASED INDUSTRIAL PARK, HSINCHU, TAIWAN

Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Hsin Chu Laboratory

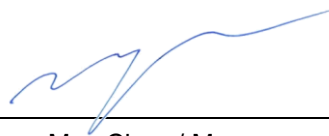
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Test Location: E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan

FCC Registration / 723255 / TW2022

Designation Number:

Approved by: _____



May Chen / Manager

, Date: _____

2026/6/30

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Prepared by: Vito Lung / Specialist



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Release Control Record

Issue No.	Description	Date Issued
RFBEOE-WTW-P26040365-6	Original release.	2026/6/30

1 Certificate

Product: Terminal

Brand: XAC

Test Model: xCL_AT-160-EL-18U

Sample Status: Engineering sample

Applicant: XAC AUTOMATION CORP.

Test Date: 2026/5/18 ~ 2026/6/25

Standard: 47 CFR FCC Part 15, Subpart C (Section 15.225)

**Measurement
procedure:** ANSI C63.10-2020

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

2 Summary of Test Results

47 CFR FCC Part 15, Subpart C (Section 15.225)			
Standard / Clause	Test Item	Result	Remark
15.207	AC Power Conducted Emissions	Pass	Minimum passing margin is -19.63 dB at 0.63438 MHz
15.225 (a)	The field strength of any emissions within the band 13.553-13.567 MHz	Pass	Meet the requirement of limit.
15.225 (b)	The field strength of any emissions within the bands 13.410-13.553 MHz and 13.567-13.710 MHz	Pass	Meet the requirement of limit.
15.225 (c)	The field strength of any emissions within the bands 13.110-13.410 MHz and 13.710-14.010 MHz	Pass	Meet the requirement of limit.
15.225 (d)	The field strength of any emissions appearing outside of the 13.110-14.010 MHz band below 30MHz	Pass	Meet the requirement of limit.
15.225 (d)	The field strength of any emissions appearing outside of the 13.110-14.010 MHz band above 30MHz	Pass	Minimum passing margin is -4.7 dB at 30.27 MHz
15.225 (e)	Frequency Stability	Pass	Meet the requirement of limit.
15.215 (c)	20 dB Bandwidth	Pass	Meet the requirement of limit.
15.203	Antenna Requirement	Pass	No antenna connector is used.

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Specification	Expanded Uncertainty (k=2) (±)
AC Power Conducted Emissions	150 kHz ~ 30 MHz	1.9 dB
Radiated Emissions below 30 MHz	9 kHz ~ 30 MHz	3.1 dB
Radiated Emissions above 30 MHz	9 kHz ~ 30 MHz	3.1 dB
	30 MHz ~ 1 GHz	5.1 dB
Frequency Stability	-	0.16 ppm
20 dB Bandwidth	-	1050.00 Hz

The other instruments specified are routine verified to remain within the calibrated levels, no measurement uncertainty is required to be calculated.

2.2 Supplementary Information

There is not any deviation from the test standards for the test method, and no modifications required for compliance.

3 General Information

3.1 General Description

Product	Terminal
Brand	XAC
Test Model	xCL_AT-160-EL-18U
Status of EUT	Engineering sample
Power Supply Rating	7.6 Vdc from battery 5 Vdc from adapter 9 Vdc from Pogo charger
Modulation Type	ASK
NFC Technology Type	NFC-A (ISO/IEC 14443 Type A)
Data Rate	Type A: 106 kbit/s
Operating Frequency	13.56 MHz
Number of Channel	1
Field Strength Of Fundamental	19.16 dBuV/m (Quasi-Peak) at 30 meters

Note:

1. The EUT uses following accessories.

Item	Brand	Model	Specification
Battery	SHENZHEN UTILITY ENERGY CO., LTD.	U752886PV	Power Rating: 7.6 Vdc, 2400mAh, 18.24Wh

2. The EUT has below radios as following table:

Radio 1	Radio 2	Radio 3
WLAN (2.4 GHz+5 GHz) + Bluetooth	WWAN (LTE)	NFC

3. Simultaneously transmission combination.

Combination	Technology			
1	NFC	Bluetooth	WLAN (5 GHz)	WWAN(LTE)

Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.

4. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 Antenna Description of EUT

1. The antenna information is listed as below.

Antenna NO.	RF Chain NO.	Brand	Model	Antenna Net Gain(dBi)	Frequency range (MHz)	Antenna Type	Connector Type
1	NFC	XAC	RTOS	5	13.56	Loop	None

Due to radiated measurements are made and the antenna gain is already accounted for this device, so provide an antenna datasheet and/or antenna measurement report is not required. The antenna dimensions and pictures (include antenna wire length if have) are stated in EUT photo exhibit.

3.3 Channel List

1 channel is provided to this EUT:

Channel	Frequency (MHz)
1	13.56

3.4 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	1. For Unwanted Emission (below 1GHz) and AC Power Conducted Emission item: Battery / AC Adapter / Pogo Charger. Pre-scan these modes and find the worst case as a representative test condition. 2. EUT can be used in the following ways: X-axis / Y-axis / Z-axis. Pre-scan these ways and find the worst case as a representative test condition. 3. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
Worst Case:	1. Power Supply Worst Condition: ➤ Unwanted Emission below 1GHz: AC Adapter ➤ AC Power Conducted Emission: Pogo Charger 2. X-axis/ Y-axis/ Z-axis Worst Condition: X-axis

Following channel(s) was (were) selected for the final test as listed below:

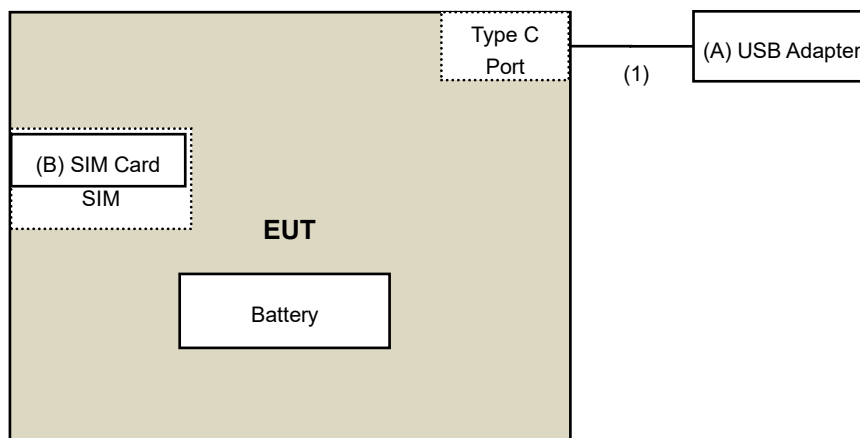
Test Item	Type	Tested Channel	Modulation	Data Rate Parameter
AC Power Conducted Emissions	A	13.56MHz	100%, ASK	106 kbit/s
Radiated Emissions below 30 MHz	A	13.56MHz	100%, ASK	106 kbit/s
Radiated Emissions above 30 MHz	A	13.56MHz	100%, ASK	106 kbit/s
Frequency Stability	A	13.56MHz	unmodulated	-
20 dB Bandwidth	A	13.56MHz	100%, ASK	106 kbit/s

3.5 Test Program Used and Operation Descriptions

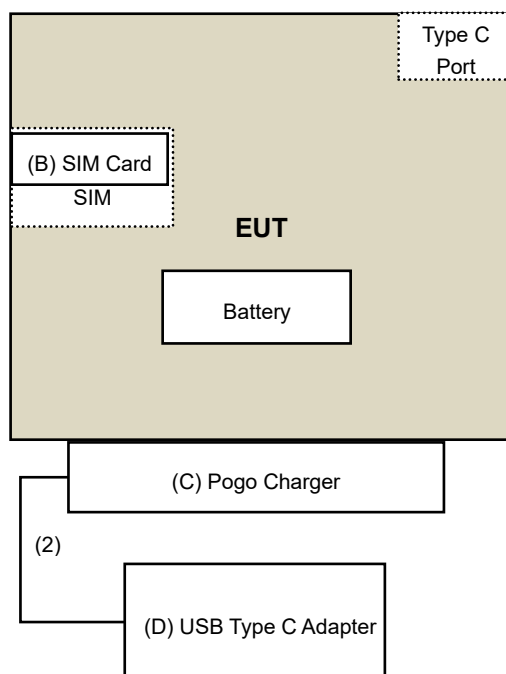
Controlling software (Run E.P.T) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.6 Connection Diagram of EUT and Peripheral Devices

For Unwanted Emissions test:



For AC Power Conducted Emission test:



3.7 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	AC (USB) Adapter	MASS POWER	NBS10B050200VUU	N/A	N/A	Supplied by applicant
B	SIM Card	Keysight	E7515-10910	N/A	N/A	Provided by Lab
C	Pogo Charger	XAC	Pogo Charger	N/A	N/A	Supplied by applicant
D	AC (USB Type C) Adapter	DEEVAN	DSA-33PDA FUS	N/A	N/A	Supplied by applicant

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	USB Cable	1	1.2	YES	0	Supplied by applicant
2	USB Cable	1	1	YES	0	Supplied by applicant

4 Test Instruments

The calibration interval of the all test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.1 AC Power Conducted Emissions

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
50 ohm terminal resistance Telegartner	50 ohm	3	2025/10/29	2026/10/28
EMI Test Receiver R&S	ESCS 30	100375	2026/5/20	2027/5/19
Fixed Attenuator STI	STI02-2200-10	005	2026/2/9	2027/2/8
LISN R&S	ESH3-Z5	835239/001	2026/3/30	2027/3/29
		848773/004	2025/10/3	2026/10/2
RF Coaxial Cable JYEBAO	5D-FB	COCCAB-001	2026/2/9	2027/2/8
Software BVADT	BVADT_Cond_V7.4.1.0	N/A	N/A	N/A

Notes:

1. The test was performed in HC - Conduction 1(Hsinchu).
2. Tested Date: 2026/6/23

4.2 Radiated Emissions below 30 MHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	N/A	N/A
Loop Antenna TESEQ	HLA 6121	63620	2025/10/20	2026/10/19
MXE EMI Receiver Keysight	N9038A	MY59050100	2025/6/25	2026/6/24
PXA Signal Analyzer Keysight	N9030B	MY57141948	2026/5/25	2027/5/24
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A

Notes:

1. The test was performed in HC - 966 Chamber No. 5(Hsinchu).
2. Tested Date: 2026/6/2 ~ 2026/6/16

4.3 Radiated Emissions above 30 MHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Bi_Log Antenna Schwarzbeck	VULB 9168	9168-0842	2025/9/16	2026/9/15
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	N/A	N/A
Fixed Attenuator Mini-Circuits	UNAT-5+	PAD-ATT5-02	2026/3/15	2027/3/14
Loop Antenna TESEQ	HLA 6121	63620	2025/10/20	2026/10/19
MXE EMI Receiver Keysight	N9038A	MY59050100	2025/6/25	2026/6/24
Preamplifier EMCI	EMC330N	980538	2026/3/15	2027/3/14
PXA Signal Analyzer Keysight	N9030B	MY57141948	2025/5/20 2026/5/25	2026/5/19 2027/5/24
RF Coaxial Cable PEWC	8D	966-5-1	2026/3/15	2027/3/14
		966-5-2	2026/3/15	2027/3/14
		966-5-3	2026/3/15	2027/3/14
Software	ADT_Radiated_V8.7.08	N/A	N/A	N/A

Notes:

1. The test was performed in HC - 966 Chamber No. 5(Hsinchu).
2. Tested Date: 2026/5/18 ~ 2026/6/11

4.4 Frequency Stability

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
AC Power Source GOOD WILL	6905S	1991551	N/A	N/A
EXA Signal Analyzer Keysight	N9010A	MY56070348	2025/7/14	2026/7/13
Fixed Attenuator Woken	00800A1K01A-10	00800A1K01A-10-01	2026/5/21	2027/5/20
Software	ADT_RF Test Software v8.5.6.4	N/A	N/A	N/A
Temperature & Humidity Chamber Giant Force	GTH-150-40-SP-AR	MAA0812-008	2025/12/18	2026/12/17
True RMS Clamp Meter FLUKE	325	31130711WS	2025/6/12	2026/6/11

Notes:

1. The test was performed in HC - Oven room 2(Hsinchu).
2. Tested Date: 2026/6/9

4.5 20 dB Bandwidth

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Fixed Attenuator Woken	00800A1K01A-10	00800A1K01A-10-01	2026/5/21	2027/5/20
MXE EMI Receiver Agilent	N9038A	MY50010156	2026/6/22	2027/6/21

Notes:

1. The test was performed in HC - Oven room 2(Hsinchu).
2. Tested Date: 2026/6/25

5 Limits of Test Items

5.1 AC Power Conducted Emissions

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

Notes:

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.

5.2 Radiated Emissions below 30 MHz

- (a) The field strength of any emissions within the band 13.553-13.567 MHz shall not exceed 15,848 microvolts/meter at 30 meters.
- (b) Within the bands 13.410-13.553 MHz and 13.567-13.710 MHz, the field strength of any emissions shall not exceed 334 microvolts/meter at 30 meters.
- (c) Within the bands 13.110-13.410 MHz and 13.710-14.010 MHz the field strength of any emissions shall not exceed 106 microvolts/meter at 30 meters.
- (d) The field strength of any emissions appearing outside of the 13.110-14.010 MHz band shall not exceed the general radiated emission limits in §15.209 as below table:

Frequency (MHz)	Field Strength (microvolts/meter)	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

Notes:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detect or except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, and the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20 dB under any condition of modulation.

5.3 Radiated Emissions above 30 MHz

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table.

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

Notes:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).

5.4 Frequency Stability

The frequency tolerance of the carrier signal shall be maintained within $\pm 0.01\%$ 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.

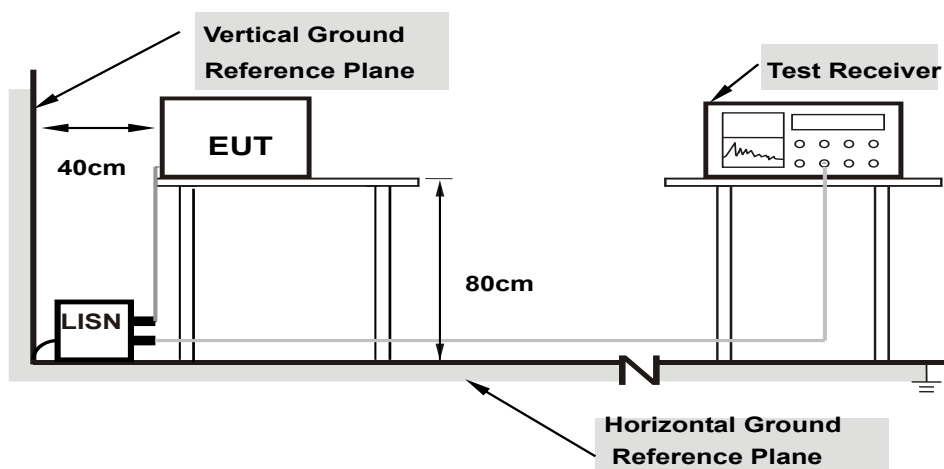
5.5 20 dB Bandwidth

The 20dB bandwidth shall be specified in operating frequency band.

6 Test Arrangements

6.1 AC Power Conducted Emissions

6.1.1 Test Setup



Note: 1.Support units were connected to second LISN.

For the actual test configuration, please refer to the attached file (Test Setup Photo).

6.1.2 Test Procedure

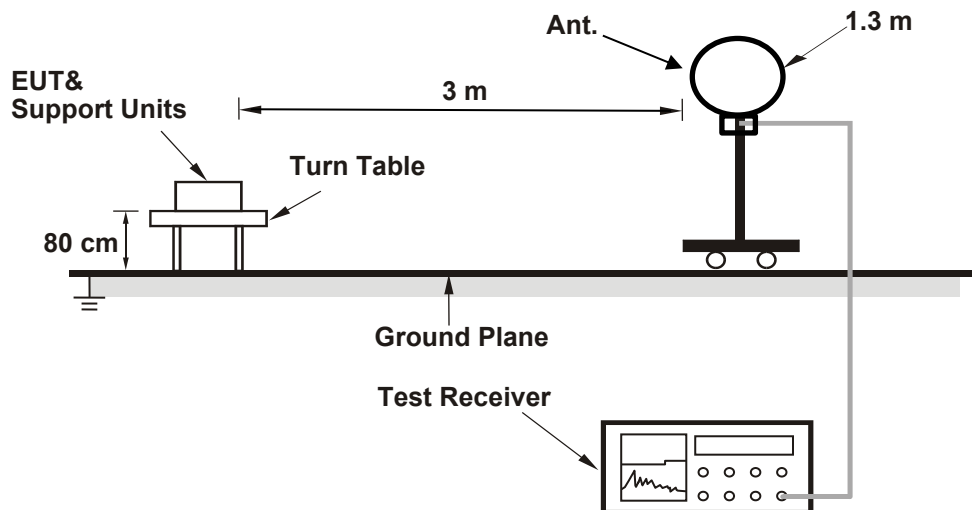
- Exploratory ac power-line conducted emission measurements: The EUT shall be operated on the mid channel and in the mode with highest output power unless the fundamental operates in the AC power-line emission test range then the EUT shall be operated in the range of typical modes of operation.
- The EUT was placed on a 0.8 meter to the top of table and placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50 uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

Note: The resolution bandwidth and video bandwidth of test receiver is 9 kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15 MHz-30 MHz.

6.2 Radiated Emissions below 30 MHz

6.2.1 Test Setup

For Radiated emission below 30 MHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

6.2.2 Test Procedure

For Radiated emission below 30 MHz

- The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode (however, peak detector measurements may be used to determine compliance with QP requirements), except for the frequency band (9 kHz to 90 kHz and 110 kHz to 490 kHz) set to average detect function and peak detect function.

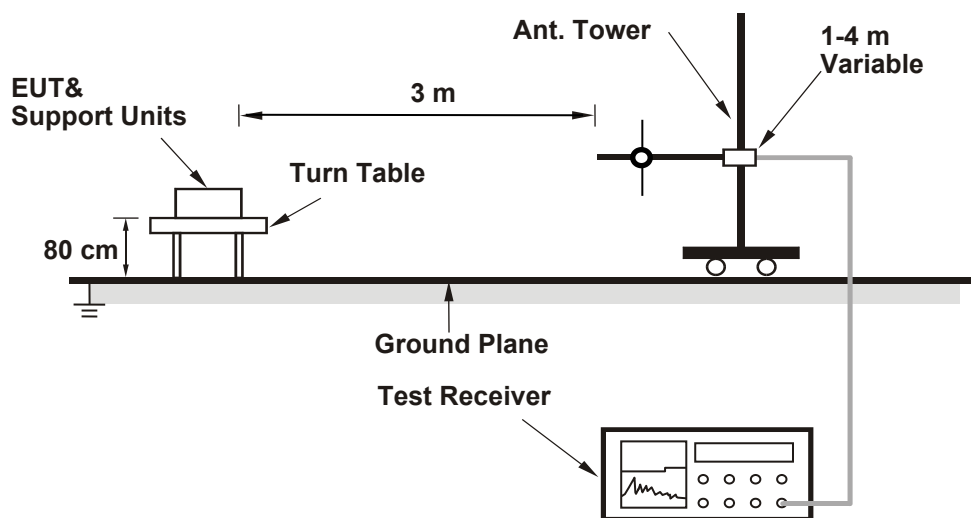
Notes:

- The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 200 Hz at frequency below 150 kHz.
- The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9 kHz or 10 kHz at frequency (150 kHz to 30 MHz).
- All modes of operation were investigated and the worst-case emissions are reported.
- KDB 414788 OATS and Chamber Correlation Justification.
 - Based on FCC 15.31(f)(2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.
 - OATs and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

6.3 Radiated Emissions above 30 MHz

6.3.1 Test Setup

For Radiated emission above 30 MHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

6.3.2 Test Procedure

For Radiated emission above 30 MHz

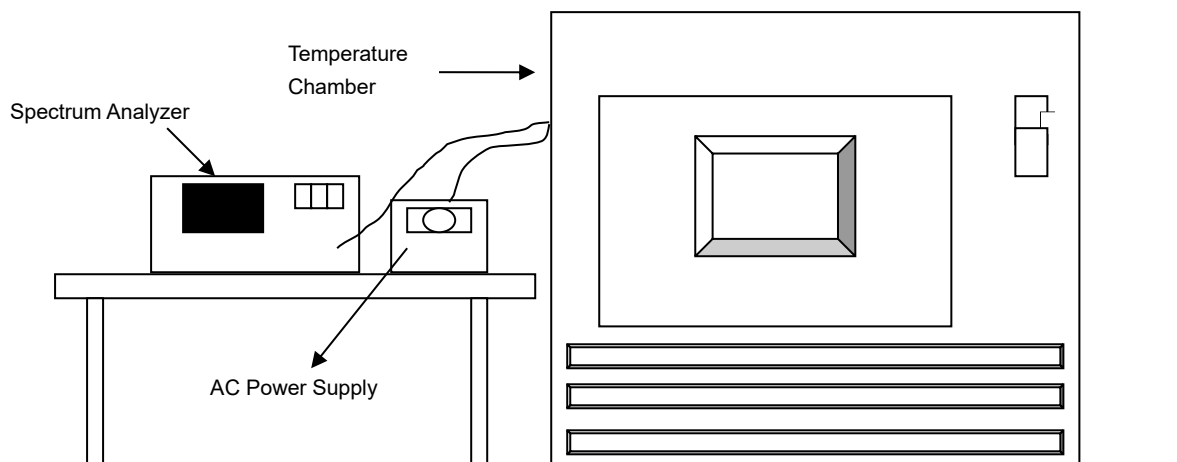
- The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz (however, peak detector measurements may be used to determine compliance with QP requirements).

Notes:

- The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequencies less than or equal to 1 GHz (however, peak detector measurements may be used to determine compliance with QP requirements).
- All modes of operation were investigated and the worst-case emissions are reported.

6.4 Frequency Stability

6.4.1 Test Setup

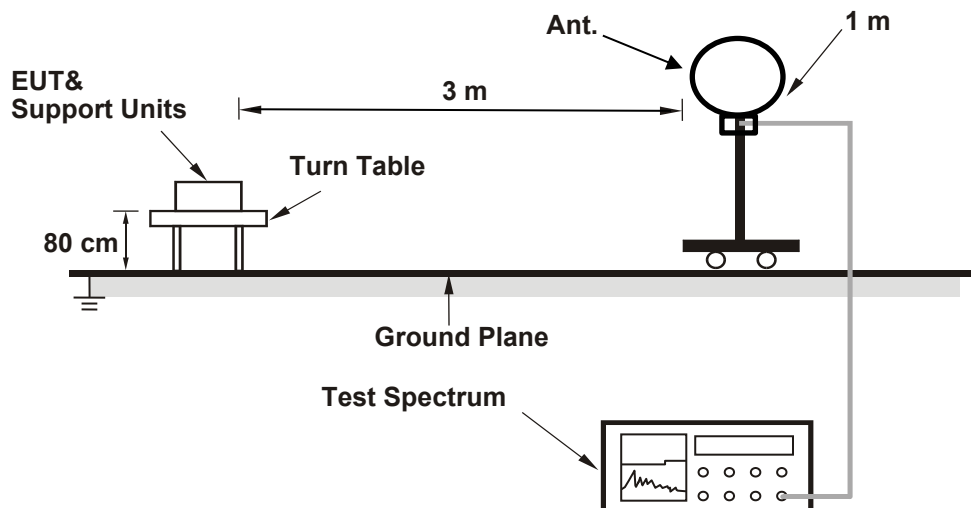


6.4.2 Test Procedure

- The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.
- Turn the EUT on and couple its output to a spectrum analyzer.
- Turn the EUT off and set the chamber to the highest temperature specified.
- Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 Minutes.
- Repeat step (d) with the temperature chamber set to the next desired temperature until measurements down to the lowest specified temperature have been completed.
- The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 Minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

6.5 20 dB Bandwidth

6.5.1 Test Setup



For the actual test configuration, please refer to the attached file (Test Setup Photo)

6.5.2 Test Procedure

Radiated Measurement:

- The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-spectrum system was set to Peak Detect Function and Maximum Hold.
- Set resolution bandwidth (RBW) = 1% to 5% of the OBW.
- Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
- Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (\text{OBW}/\text{RBW})]$ below the reference level.
- Sweep = auto couple.
- Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 20 dB relative to the maximum level measured in the fundamental emission.

7 Test Results of Test Item

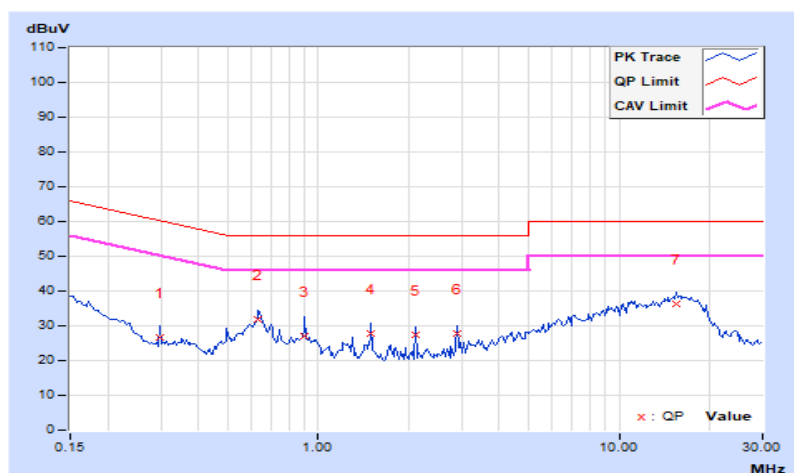
7.1 AC Power Conducted Emissions

RF Mode	NFC-13.56MHz	Channel	CH 1 : 13.56 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 66% RH
Tested By	Felix Chang		

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.29844	10.04	16.48	0.51	26.52	10.55	60.29	50.29	-33.77	-39.74
2	0.63438	10.14	21.62	16.23	31.76	26.37	56.00	46.00	-24.24	-19.63
3	0.90000	10.20	16.72	5.92	26.92	16.12	56.00	46.00	-29.08	-29.88
4	1.50391	10.26	17.52	3.68	27.78	13.94	56.00	46.00	-28.22	-32.06
5	2.10547	10.30	17.14	-0.73	27.44	9.57	56.00	46.00	-28.56	-36.43
6	2.90625	10.38	17.34	3.42	27.72	13.80	56.00	46.00	-28.28	-32.20
7	15.54297	11.28	24.99	17.37	36.27	28.65	60.00	50.00	-23.73	-21.35

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

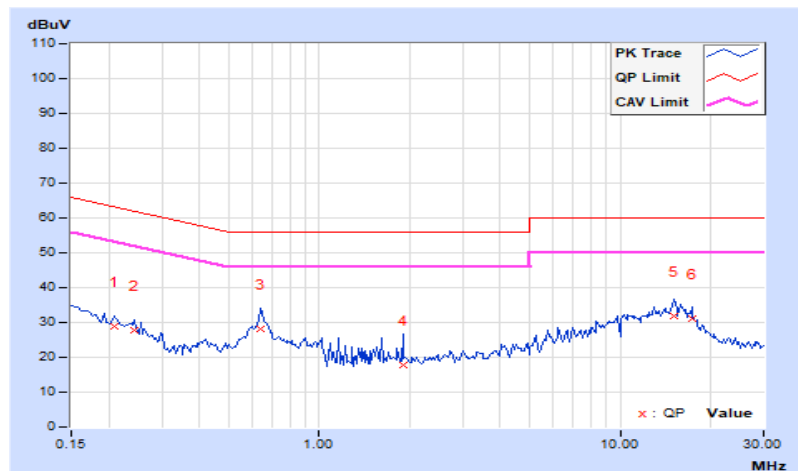


RF Mode	NFC-13.56MHz	Channel	CH 1 : 13.56 MHz
Frequency Range	150 kHz ~ 30 MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 66% RH
Tested By	Felix Chang		

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20859	9.99	18.87	5.43	28.86	15.42	63.26	53.26	-34.40	-37.84
2	0.24375	9.98	17.93	2.96	27.91	12.94	61.97	51.97	-34.06	-39.03
3	0.63828	9.97	18.06	13.11	28.03	23.08	56.00	46.00	-27.97	-22.92
4	1.90234	10.08	7.55	-2.72	17.63	7.36	56.00	46.00	-38.37	-38.64
5	15.03516	10.89	20.89	11.28	31.78	22.17	60.00	50.00	-28.22	-27.83
6	17.40234	11.01	20.22	10.80	31.23	21.81	60.00	50.00	-28.77	-28.19

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



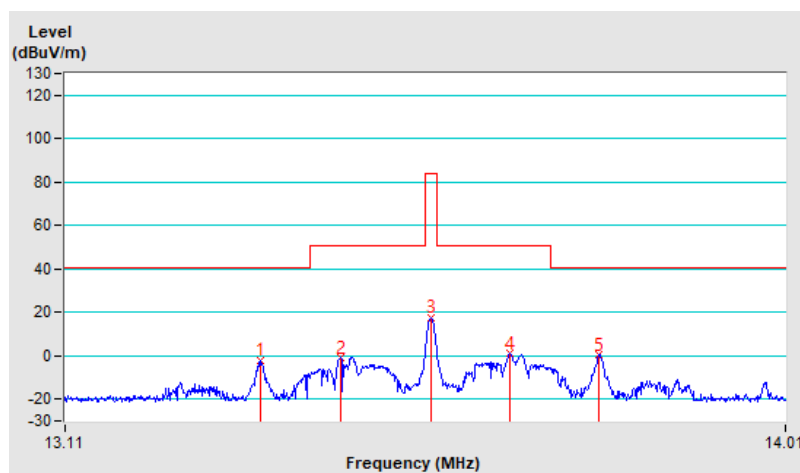
7.2 Radiated Emissions below 30 MHz

RF Mode	NFC-13.56MHz	Channel	CH 1 : 13.56 MHz
Frequency Range	13.11 MHz ~ 14.01 MHz	Detector Function & Bandwidth	Quasi-Peak (QP), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 61% RH
Tested By	Felix Chang		

Antenna Polarity : Parallel								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	13.348	-1.89 QP	40.51	-42.40	1.00	212	16.18	-18.07
2	13.447	-0.98 QP	50.47	-51.45	1.00	215	17.11	-18.09
3	*13.560	17.55 QP	84.00	-66.45	1.00	216	35.66	-18.11
4	13.659	1.24 QP	50.47	-49.23	1.00	218	19.37	-18.13
5	13.771	0.41 QP	40.51	-40.10	1.00	217	18.56	-18.15

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + Distance Factor
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. The test distance for 0.49 ~ 30 MHz is 3 m, extrapolate the measured field strength to a distance of 30 meters.
Distance factor@3 m = $40 \cdot \log(3/30) = -40$ dB

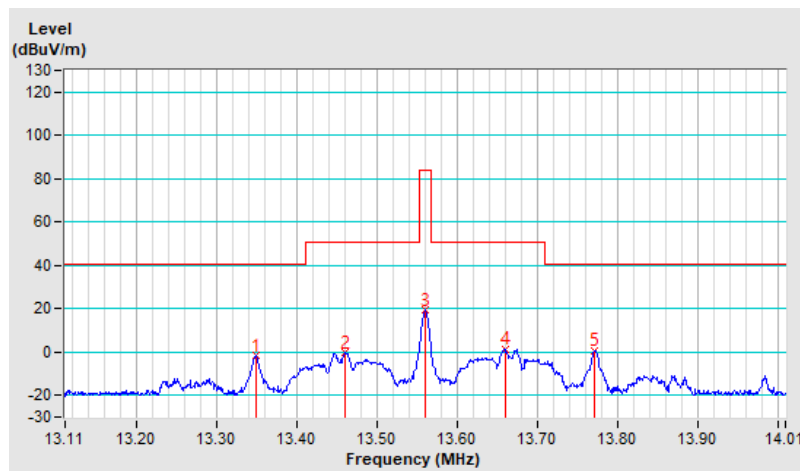


RF Mode	NFC-13.56MHz	Channel	CH 1 : 13.56 MHz
Frequency Range	13.11 MHz ~ 14.01 MHz	Detector Function & Bandwidth	Quasi-Peak (QP), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 61% RH
Tested By	Felix Chang		

Antenna Polarity : Perpendicular								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	13.348	-1.80 QP	40.51	-42.31	1.00	30	16.27	-18.07
2	13.459	-0.18 QP	50.47	-50.65	1.00	64	17.91	-18.09
3	*13.560	19.16 QP	84.00	-64.84	1.00	94	37.27	-18.11
4	13.660	1.52 QP	50.47	-48.95	1.00	271	19.65	-18.13
5	13.772	0.68 QP	40.51	-39.83	1.00	269	18.83	-18.15

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + Distance Factor
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * ": Fundamental frequency.
6. The test distance for 0.49 ~ 30 MHz is 3 m, extrapolate the measured field strength to a distance of 30 meters.
Distance factor@3 m = $40 \cdot \log(3/30) = -40$ dB

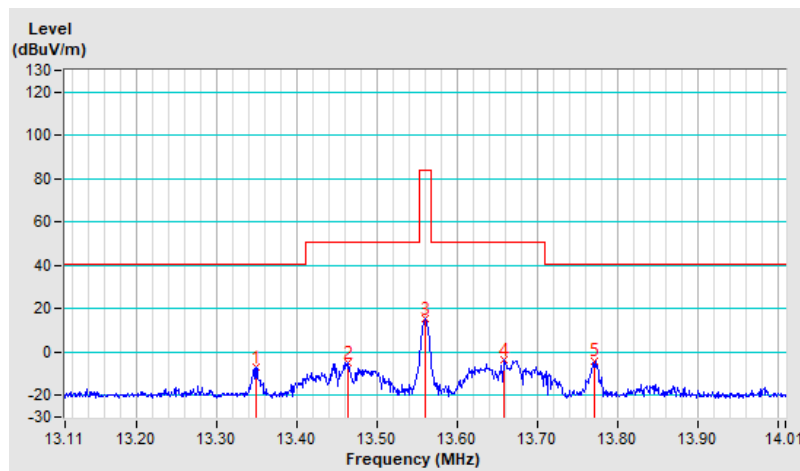


RF Mode	NFC-13.56MHz	Channel	CH 1 : 13.56 MHz
Frequency Range	13.11 MHz ~ 14.01 MHz	Detector Function & Bandwidth	Quasi-Peak (QP), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23 °C, 61% RH
Tested By	Felix Chang		

Antenna Polarity : Ground-parallel								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	13.349	-7.14 QP	40.51	-47.65	1.00	114	10.93	-18.07
2	13.463	-4.94 QP	50.47	-55.41	1.00	237	13.15	-18.09
3	*13.560	15.28 QP	84.00	-68.72	1.00	177	33.39	-18.11
4	13.658	-3.65 QP	50.47	-54.12	1.00	332	14.48	-18.13
5	13.772	-3.99 QP	40.51	-44.50	1.00	199	14.16	-18.15

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + Distance Factor
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " * " : Fundamental frequency.
6. The test distance for 0.49 ~ 30 MHz is 3 m, extrapolate the measured field strength to a distance of 30 meters.
Distance factor@3 m = $40 \cdot \log(3/30) = -40$ dB

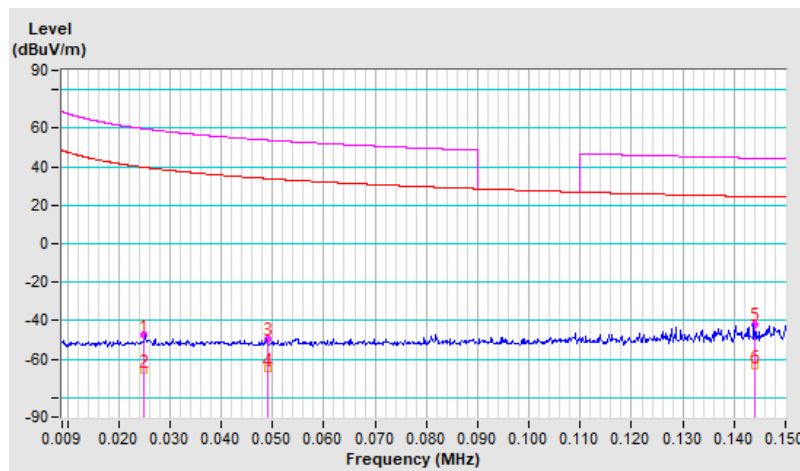


RF Mode	NFC-13.56MHz	Channel	CH 1 : 13.56 MHz
Frequency Range	9 kHz ~ 150 kHz	Detector Function & Bandwidth	Peak (PK) / Average (AV), 200 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 63% RH
Tested By	Felix Chang		

Antenna Polarity : Parallel								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	0.025	-47.57 PK	59.64	-107.21	1.00	231	12.58	-60.15
2	0.025	-65.67 AV	39.64	-105.31	1.00	231	-5.52	-60.15
3	0.049	-49.45 PK	53.79	-103.24	1.00	278	9.94	-59.39
4	0.049	-64.98 AV	33.79	-98.77	1.00	278	-5.59	-59.39
5	0.144	-41.90 PK	44.43	-86.33	1.00	311	18.54	-60.44
6	0.144	-63.45 AV	24.43	-87.88	1.00	311	-3.01	-60.44

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + Distance Factor
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. The test distance for below 0.49 MHz is 3 m, extrapolate the measured field strength to a distance of 300 meters.
Distance factor@3 m = $40 \cdot \log(3/300) = -80$ dB

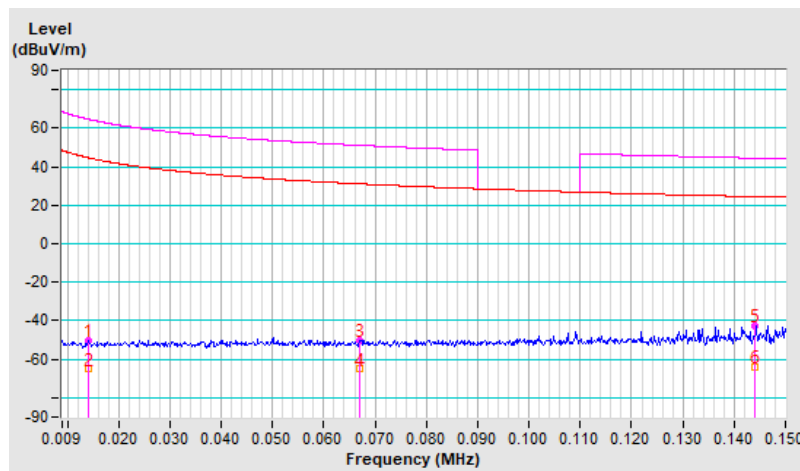


RF Mode	NFC-13.56MHz	Channel	CH 1 : 13.56 MHz
Frequency Range	9 kHz ~ 150 kHz	Detector Function & Bandwidth	Peak (PK) / Average (AV), 200 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 63% RH
Tested By	Felix Chang		

Antenna Polarity : Perpendicular								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	0.014	-50.35 PK	64.68	-115.03	1.00	122	11.47	-61.82
2	0.014	-64.90 AV	44.68	-109.58	1.00	122	-3.08	-61.82
3	0.067	-50.03 PK	51.07	-101.10	1.00	39	10.51	-60.54
4	0.067	-65.00 AV	31.07	-96.07	1.00	39	-4.46	-60.54
5	0.144	-42.48 PK	44.43	-86.91	1.00	64	17.96	-60.44
6	0.144	-63.90 AV	24.43	-88.33	1.00	64	-3.46	-60.44

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + Distance Factor
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. The test distance for below 0.49 MHz is 3 m, extrapolate the measured field strength to a distance of 300 meters.
Distance factor@3 m = $40 \cdot \log(3/300) = -80$ dB

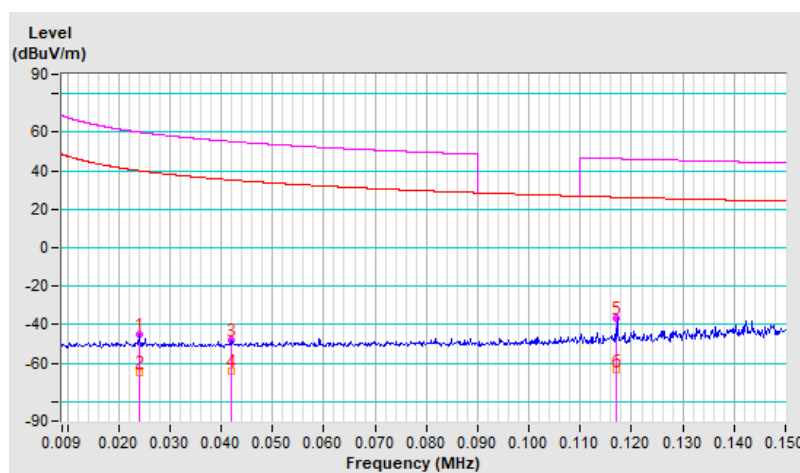


RF Mode	NFC-13.56MHz	Channel	CH 1 : 13.56 MHz
Frequency Range	9 kHz ~ 150 kHz	Detector Function & Bandwidth	Peak (PK) / Average (AV), 200 Hz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 63% RH
Tested By	Felix Chang		

Antenna Polarity : Ground-parallel								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	0.024	-44.94 PK	60.00	-104.94	1.00	325	15.28	-60.22
2	0.024	-64.67 AV	40.00	-104.67	1.00	325	-4.45	-60.22
3	0.042	-47.88 PK	55.13	-103.01	1.00	337	11.44	-59.32
4	0.042	-63.70 AV	35.13	-98.83	1.00	337	-4.38	-59.32
5	0.117	-36.45 PK	46.23	-82.68	1.00	159	24.15	-60.60
6	0.117	-63.37 AV	26.23	-89.60	1.00	159	-2.77	-60.60

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + Distance Factor
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. The test distance for below 0.49 MHz is 3 m, extrapolate the measured field strength to a distance of 300 meters.
Distance factor@3 m = $40 \cdot \log(3/300) = -80$ dB

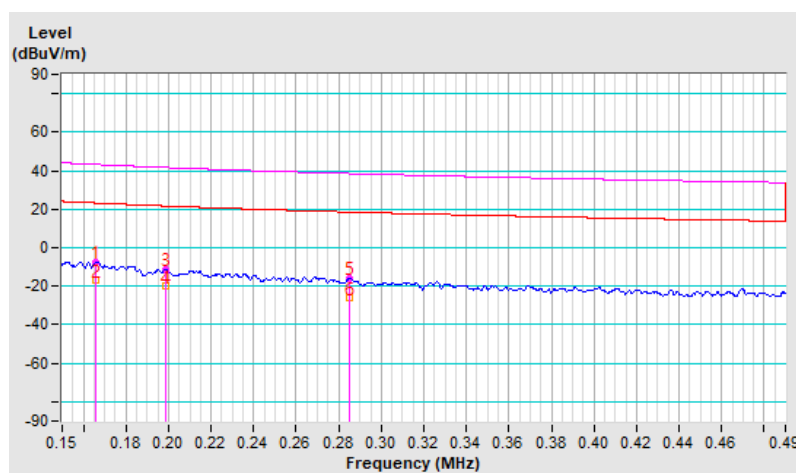


RF Mode	NFC-13.56MHz	Channel	CH 1 : 13.56 MHz
Frequency Range	150 kHz ~ 490 kHz	Detector Function & Bandwidth	Peak (PK) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 63% RH
Tested By	Felix Chang		

Antenna Polarity : Parallel								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	0.166	-7.31 PK	43.20	-50.51	1.00	168	52.99	-60.30
2	0.166	-17.02 AV	23.20	-40.22	1.00	168	43.28	-60.30
3	0.199	-11.14 PK	41.63	-52.77	1.00	217	48.97	-60.11
4	0.199	-20.17 AV	21.63	-41.80	1.00	217	39.94	-60.11
5	0.285	-15.69 PK	38.51	-54.20	1.00	264	44.41	-60.10
6	0.285	-26.00 AV	18.51	-44.51	1.00	264	34.10	-60.10

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + Distance Factor
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. The test distance for below 0.49 MHz is 3 m, extrapolate the measured field strength to a distance of 300 meters.
Distance factor@3 m = $40 \cdot \log(3/300) = -80$ dB

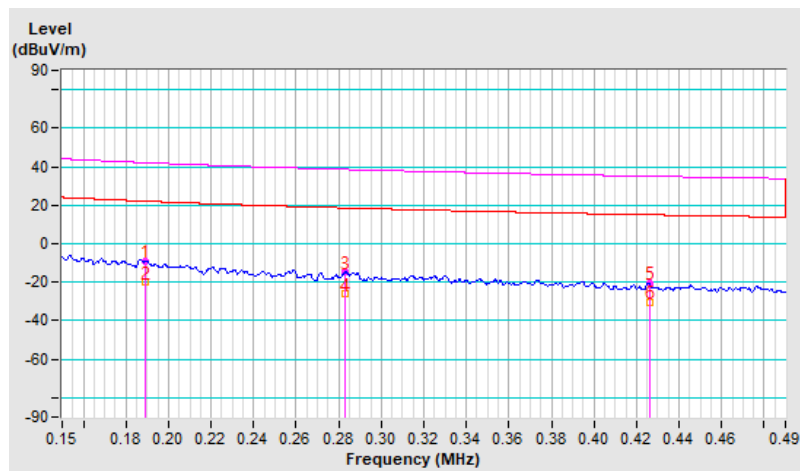


RF Mode	NFC-13.56MHz	Channel	CH 1 : 13.56 MHz
Frequency Range	150 kHz ~ 490 kHz	Detector Function & Bandwidth	Peak (PK) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 63% RH
Tested By	Felix Chang		

Antenna Polarity : Perpendicular								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	0.189	-8.89 PK	42.07	-50.96	1.00	187	51.28	-60.17
2	0.189	-19.89 AV	22.07	-41.96	1.00	187	40.28	-60.17
3	0.283	-14.78 PK	38.57	-53.35	1.00	198	45.32	-60.10
4	0.283	-26.24 AV	18.57	-44.81	1.00	198	33.86	-60.10
5	0.426	-20.33 PK	35.02	-55.35	1.00	345	39.74	-60.07
6	0.426	-30.49 AV	15.02	-45.51	1.00	345	29.58	-60.07

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + Distance Factor
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. The test distance for below 0.49 MHz is 3 m, extrapolate the measured field strength to a distance of 300 meters.
Distance factor@3 m = $40 \cdot \log(3/300) = -80$ dB

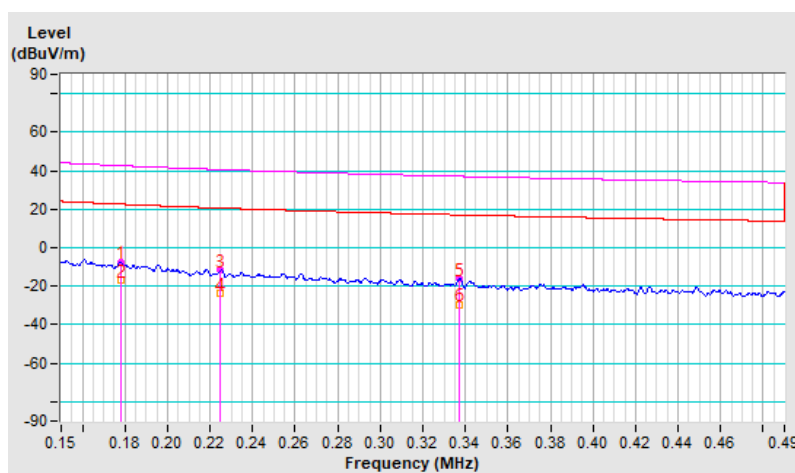


RF Mode	NFC-13.56MHz	Channel	CH 1 : 13.56 MHz
Frequency Range	150 kHz ~ 490 kHz	Detector Function & Bandwidth	Peak (PK) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 63% RH
Tested By	Felix Chang		

Antenna Polarity : Ground-parallel								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	0.178	-7.48 PK	42.59	-50.07	1.00	237	52.75	-60.23
2	0.178	-16.84 AV	22.59	-39.43	1.00	237	43.39	-60.23
3	0.225	-11.65 PK	40.56	-52.21	1.00	322	48.45	-60.10
4	0.225	-23.75 AV	20.56	-44.31	1.00	322	36.35	-60.10
5	0.337	-16.19 PK	37.05	-53.24	1.00	113	43.91	-60.10
6	0.337	-29.77 AV	17.05	-46.82	1.00	113	30.33	-60.10

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + Distance Factor
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. The test distance for below 0.49 MHz is 3 m, extrapolate the measured field strength to a distance of 300 meters.
Distance factor@3 m = $40 \cdot \log(3/300) = -80$ dB

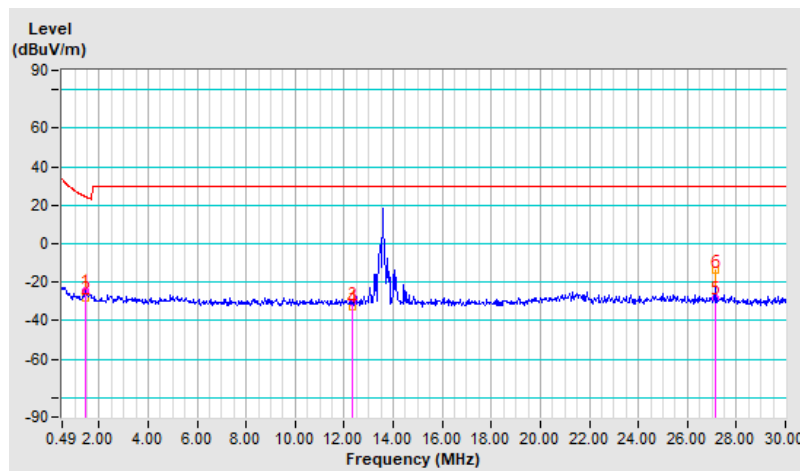


RF Mode	NFC-13.56MHz	Channel	CH 1 : 13.56 MHz
Frequency Range	490 kHz ~ 30 MHz	Detector Function & Bandwidth	Peak (PK) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 63% RH
Tested By	Felix Chang		

Antenna Polarity : Parallel								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1.423	-24.18 PK	24.53	-48.71	1.00	149	-4.18	-20.00
2	1.423	-27.86 AV	24.53	-52.39	1.00	149	-7.86	-20.00
3	12.319	-30.59 PK	29.54	-60.13	1.00	154	-12.73	-17.86
4	12.319	-32.46 AV	29.54	-62.00	1.00	154	-14.60	-17.86
5	27.118	-28.20 PK	29.54	-57.74	1.00	174	-11.14	-17.06
6	27.118	-14.00 AV	29.54	-43.54	1.00	174	3.06	-17.06

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + Distance Factor
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. The test distance for 0.49 ~ 30 MHz is 3 m, extrapolate the measured field strength to a distance of 30 meters.
Distance factor@3 m = $40 \cdot \log(3/30) = -40$ dB

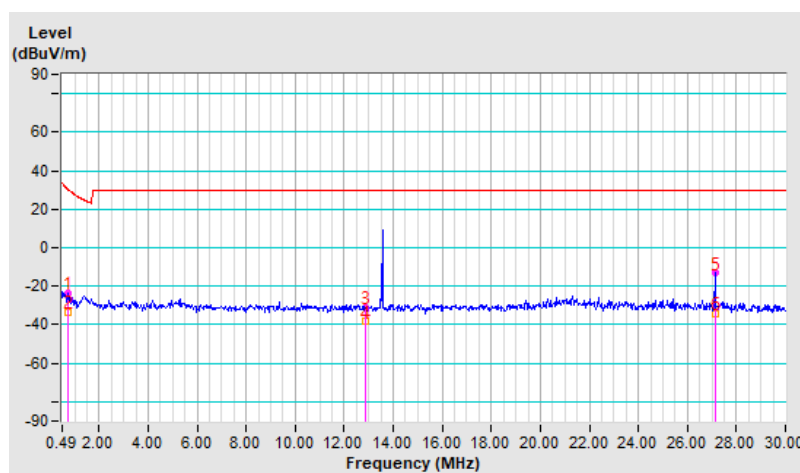


RF Mode	NFC-13.56MHz	Channel	CH 1 : 13.56 MHz
Frequency Range	490 kHz ~ 30 MHz	Detector Function & Bandwidth	Peak (PK) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 63% RH
Tested By	Felix Chang		

Antenna Polarity : Perpendicular								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	0.711	-23.56 PK	30.56	-54.12	1.00	174	-3.56	-20.00
2	0.711	-33.33 AV	30.56	-63.89	1.00	174	-13.33	-20.00
3	12.847	-31.24 PK	29.54	-60.78	1.00	247	-13.27	-17.97
4	12.847	-38.32 AV	29.54	-67.86	1.00	247	-20.35	-17.97
5	27.120	-13.05 PK	29.54	-42.59	1.00	247	4.01	-17.06
6	27.120	-34.00 AV	29.54	-63.54	1.00	247	-16.94	-17.06

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + Distance Factor
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. The test distance for 0.49 ~ 30 MHz is 3 m, extrapolate the measured field strength to a distance of 30 meters.
Distance factor@3 m = $40 \cdot \log(3/30) = -40$ dB

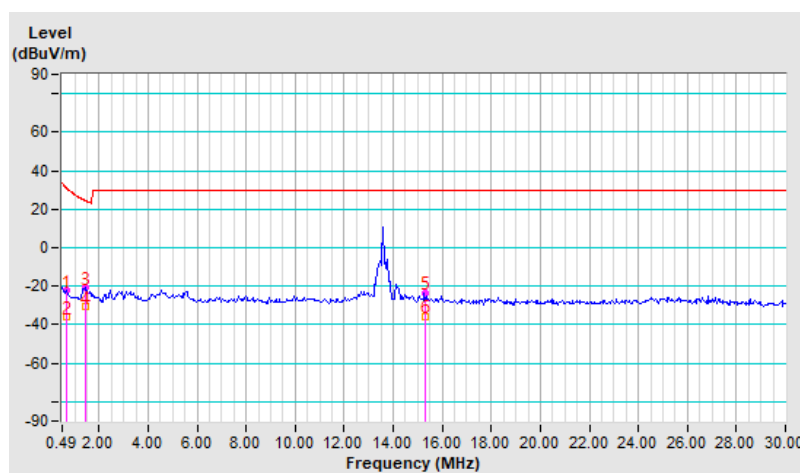


RF Mode	NFC-13.56MHz	Channel	CH 1 : 13.56 MHz
Frequency Range	490 kHz ~ 30 MHz	Detector Function & Bandwidth	Peak (PK) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 63% RH
Tested By	Felix Chang		

Antenna Polarity : Ground-parallel								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	0.697	-22.33 PK	30.74	-53.07	1.00	254	-2.33	-20.00
2	0.697	-36.09 AV	30.74	-66.83	1.00	254	-16.09	-20.00
3	1.434	-20.66 PK	24.46	-45.12	1.00	221	-0.66	-20.00
4	1.434	-30.88 AV	24.46	-55.34	1.00	221	-10.88	-20.00
5	15.275	-23.48 PK	29.54	-53.02	1.00	189	-5.26	-18.22
6	15.275	-35.49 AV	29.54	-65.03	1.00	189	-17.27	-18.22

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + Distance Factor
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. The test distance for 0.49 ~ 30 MHz is 3 m, extrapolate the measured field strength to a distance of 30 meters.
Distance factor@3 m = $40 \cdot \log(3/30) = -40$ dB



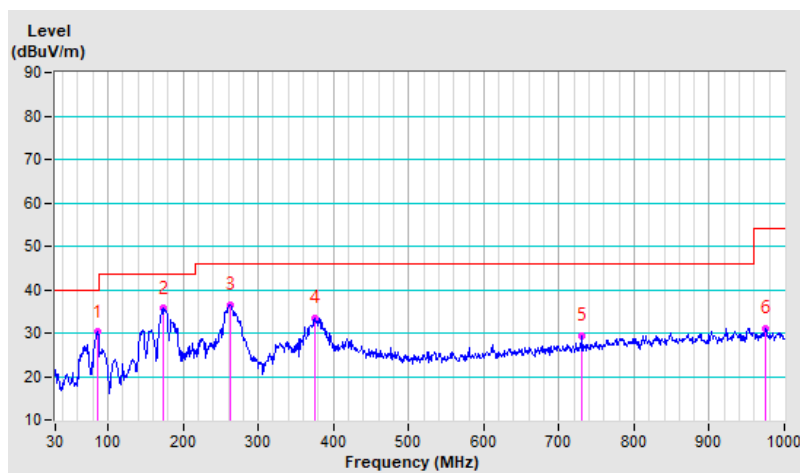
7.3 Radiated Emissions above 30 MHz

RF Mode	NFC-13.56MHz	Channel	CH 1 : 13.56 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	PK: RB=120 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Felix.Chang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	85.87	30.2 PK	40.0	-9.8	2.30 H	270	48.7	-18.5
2	173.17	35.6 PK	43.5	-7.9	2.52 H	335	49.0	-13.4
3	262.15	36.6 PK	46.0	-9.4	1.50 H	52	50.0	-13.4
4	375.49	33.5 PK	46.0	-12.5	2.00 H	220	43.7	-10.2
5	731.14	29.4 PK	46.0	-16.6	1.73 H	75	32.7	-3.3
6	974.83	31.1 PK	54.0	-22.9	3.11 H	292	31.1	0.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

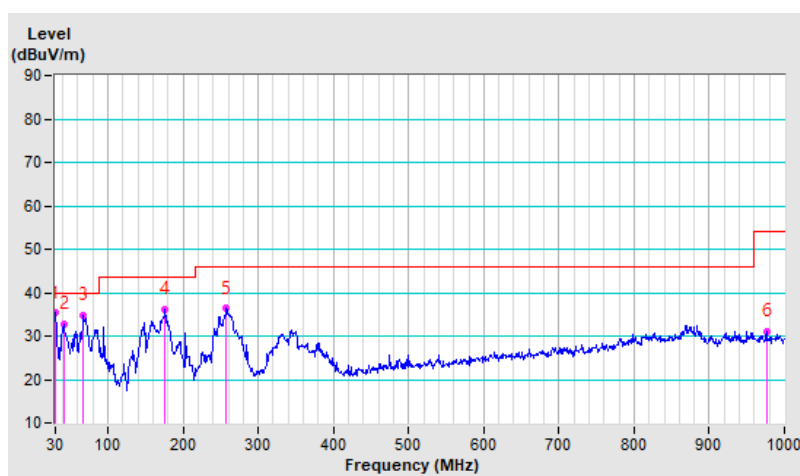


RF Mode	NFC-13.56MHz	Channel	CH 1 : 13.56 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	PK: RB=120 kHz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75% RH
Tested By	Felix.Chang		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	30.27	35.3 PK	40.0	-4.7	1.00 V	331	49.1	-13.8
2	40.67	32.8 PK	40.0	-7.2	1.00 V	67	45.8	-13.0
3	67.81	34.8 PK	40.0	-5.2	2.00 V	24	49.2	-14.4
4	176.28	36.1 PK	43.5	-7.4	1.00 V	172	49.9	-13.8
5	257.66	36.3 PK	46.0	-9.7	1.50 V	66	49.9	-13.6
6	976.53	31.0 PK	54.0	-23.0	1.00 V	252	31.0	0.0

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



7.4 Frequency Stability

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 60% RH	Tested By:	Stars Liu
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Frequency Stability Versus Temperature									
Operating Frequency: 13.56 MHz									
Temp. (°C)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)
50	120	13.56007	0.00052	13.56004	0.00029	13.5601	0.00074	13.56007	0.00052
40	120	13.56005	0.00037	13.55995	-0.00037	13.56004	0.00029	13.56004	0.00029
30	120	13.55995	-0.00037	13.56002	0.00015	13.55994	-0.00044	13.55997	-0.00022
20	120	13.55999	-0.00007	13.56004	0.00029	13.55996	-0.00029	13.55997	-0.00022
10	120	13.55999	-0.00007	13.55999	-0.00007	13.55997	-0.00022	13.56002	0.00015
0	120	13.56006	0.00044	13.55998	-0.00015	13.56005	0.00037	13.56006	0.00044
-10	120	13.56	0.00000	13.56	0.00000	13.56004	0.00029	13.5601	0.00074
-20	120	13.55999	-0.00007	13.56002	0.00015	13.56	0.00000	13.56008	0.00059

Frequency Stability Versus Voltage									
Operating Frequency: 13.56 MHz									
Temp. (°C)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)
20	138	13.55999	-0.00007	13.56004	0.00029	13.55996	-0.00029	13.55997	-0.00022
	120	13.55999	-0.00007	13.56004	0.00029	13.55996	-0.00029	13.55997	-0.00022
	102	13.55999	-0.00007	13.56004	0.00029	13.55996	-0.00029	13.55997	-0.00022

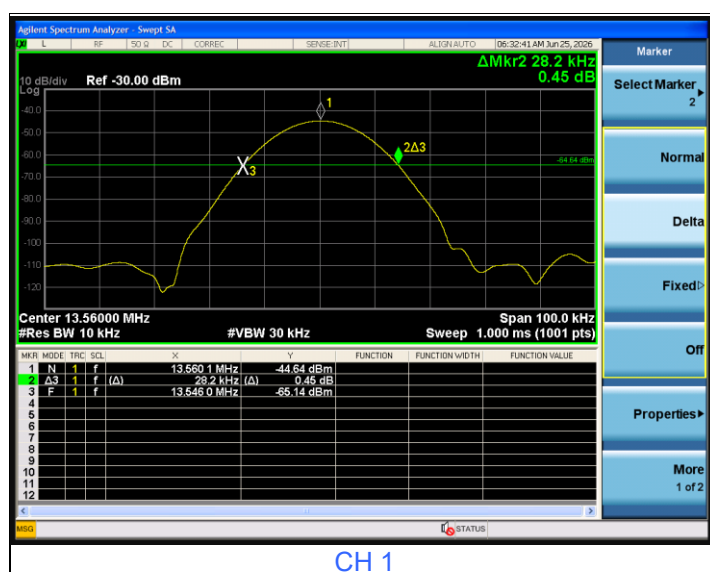
7.5 20 dB Bandwidth

Input Power:	7.6 Vdc	Environmental Conditions:	25°C, 60% RH	Tested By:	Stars Liu
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Channel	Channel Frequency (MHz)	20 dB Bandwidth (MHz)	Measured Frequencies		Operating Frequency Band (MHz)	Test Result
			FL (MHz)	FH (MHz)		
1	13.56	0.0282	13.546	13.5742	13.11 ~ 14.01	Pass

Notes:

1. FL is the lowest frequency of the 20 dB bandwidth of power envelope.
2. FH is the highest frequency of the 20 dB bandwidth of power envelope.



Note: The signal look like CW signal, so RBW can't be match 1~5 % OBW.

8 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo)

9 Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are FCC recognized accredited test firms and accredited according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

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Web Site: <http://ee.bureauveritas.com.tw>

The address and road map of all our labs can be found in our web site also.

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