TEST REPORT

CERTIFICATE OF CONFORMITY

Standard:	**47 CFR FCC Part 15, Subpart C (Section 15.225)**
Report No.:	RFBDBO-WTW-P25100521-1
FCC ID:	G7H-PARARDR005
Product:	XCESS-DUAL
Brand:	SEMNOX
Model No.:	PARARDR005
Series Model:	PARARDR005-2
Received Date:	2025/10/27
Test Date:	2025/11/21 ~ 2025/12/17
Issued Date:	2025/12/24
Applicant:	Semnox Solutions Private Limited
Address:	No.4-1-145, 3rd Floor, Punja Building Annexe M G Road, Lalbagh, Mangalore, India - 575003
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Lin Kou Laboratories
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
Test Location:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
FCC Registration / Designation Number:	198487 / TW2021

Approved by: Jeremy Lin , **Date:** 2025/12/24

Jeremy Lin / Project Engineer

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Prepared by : Annie Chang / Senior Specialist

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Release Control Record

Issue No.	Description	Date Issued
RFBDBO-WTW-P25100521-1	Original release.	2025/12/24

1 Certificate

Product:	XCESS-DUAL
Brand:	SEMNOX
Test Model:	PARARDR005
Series Model:	PARARDR005-2
Sample Status:	Engineering sample
Applicant:	Semnox Solutions Private Limited
Test Date:	2025/11/21 ~ 2025/12/17
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 -2.02 dB at 0.36000 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 -4.6 dB at 53.28 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	9 kHz ~ 30 MHz	2.9 dB
Radiated Emissions below 30 MHz	9 kHz ~ 30 MHz	2.55 dB
Radiated Emissions above 30 MHz	9 kHz ~ 30 MHz	2.55 dB
	30 MHz ~ 1 GHz	5.77 dB
Frequency Stability	-	0.016 ppm
20 dB Bandwidth	-	960 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	XCESS-DUAL
Brand	SEMNOX
Test Model	PARARDR005
Series Model	PARARDR005-2
Model Difference	Refer to note as below
Status of EUT	Engineering sample
Power Supply Rating	12Vdc or 37-57Vdc from PoE
Modulation Type	ASK(OOK)
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	21.5 dBuV/m (Quasi-Peak) at 30 meters

Note:

1. All models are listed as below.

Brand	Model	Appearance	Specification
SEMNOX	PARARDR005		1. 2.4G wifi: 802.11b/g/n(20M, 40M)/ ax(20M) 2. 13.56MHz 3. Barcode
	PARARDR005-2		1. 2.4G wifi: 802.11b/g/n(20M, 40M)/ ax(20M) 2. Barcode

2. The EUT has following accessories:

Item	Specification
LAN cable	Non-shielded 1m
DC cable	Non-shielded 0.3m
Data cable	Non-shielded 0.05m

3. There are WLAN 2.4GHz and NFC technology used for the EUT.
4. WLAN 2.4GHz and NFC technology can not transmit at same time.
5. 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

The antenna information is listed as below.

Antenna Type	Connector Type
Coil	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 Radiated Emission Test has mode (A)EUT Powered by Adapter(Operating mode with RFID card) (B)EUT Powered by Adapter(Operating mode without RFID card) (C)EUT Powered by POE(Operating mode with RFID card) (D)EUT Powered by POE(Operating mode without RFID card) Pre-scan these modes and find the worst case as a representative test condition. 2.For AC Conduction Test has mode (A)EUT Powered by Adapter(Operating mode with RFID card) (B)EUT Powered by Adapter(Operating mode without RFID card) (C)EUT Powered by POE(Operating mode with RFID card) (D)EUT Powered by POE(Operating mode without RFID card) Pre-scan these modes and find the worst case as a representative test condition.
Worst Case:	1. For Radiated Emission Test worst condition: Mode B. 2. For AC Conduction Test worst condition: Mode B / D.

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

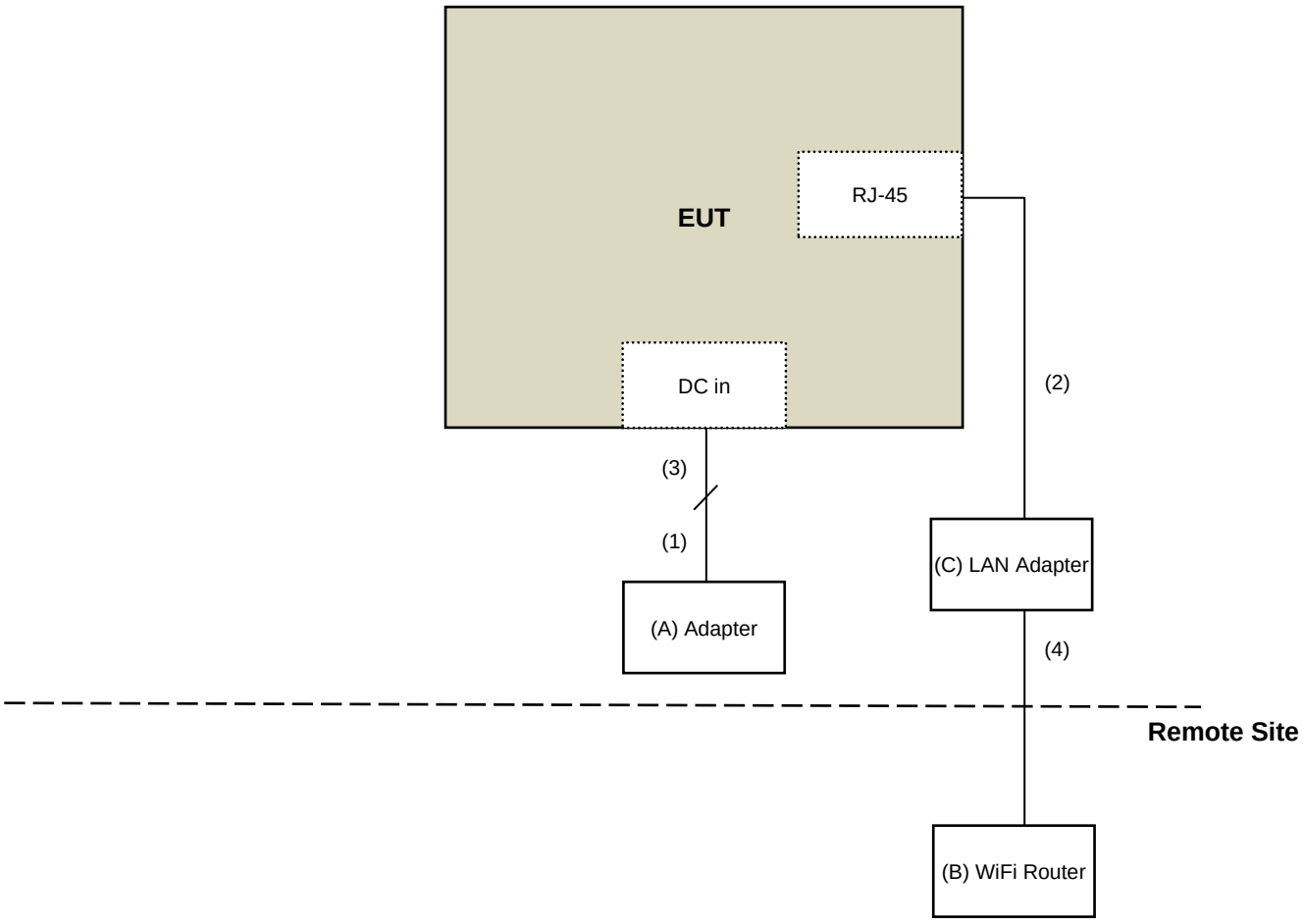
Test Item	EUT Configure Mode	Type	Tested Channel	Modulation	Data Rate Parameter
AC Power Conducted Emissions	B	A	13.56MHz	100%, ASK(OOK)	106 kbit/s
	D	A	13.56MHz	100%, ASK(OOK)	106 kbit/s
Radiated Emissions below 30 MHz	B	A	13.56MHz	100%, ASK(OOK)	106 kbit/s
Radiated Emissions above 30 MHz	B	A	13.56MHz	100%, ASK(OOK)	106 kbit/s
Frequency Stability	B	-	-	unmodulated	-
20 dB Bandwidth	B	A	13.56MHz	100%, ASK(OOK)	106 kbit/s
EUT Configure Mode:	A	EUT Powered by Adapter(Operating mode with RFID card)			
	B	EUT Powered by Adapter(Operating mode without RFID card)			
	C	EUT Powered by POE(Operating mode with RFID card)			
	D	EUT Powered by POE(Operating mode without RFID card)			

3.5 Test Program Used and Operation Descriptions

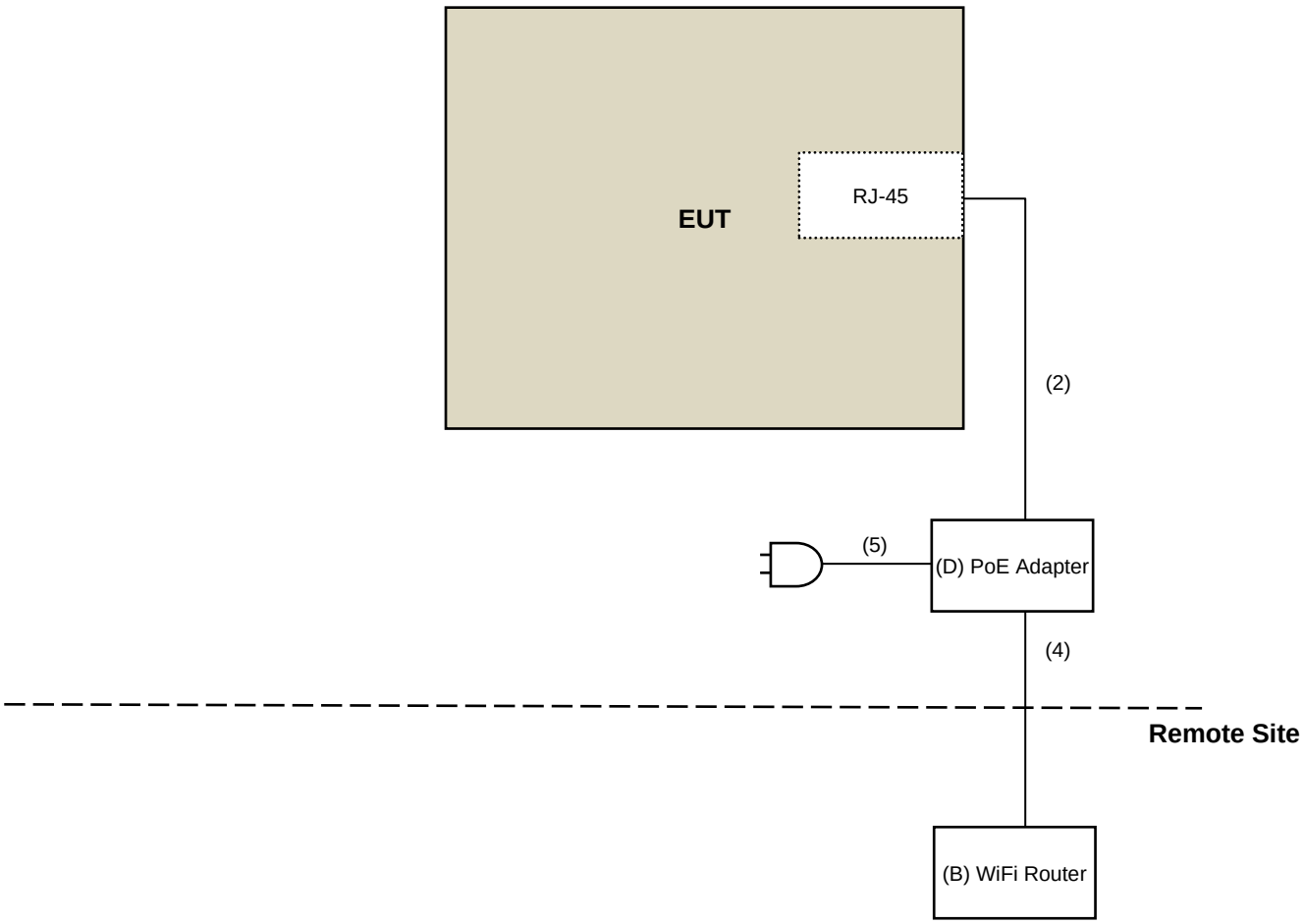
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

3.6 Connection Diagram of EUT and Peripheral Devices

Mode B



Mode D



3.7 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Adapter	Shenzhen Myixi	MYX-1202000EU	N/A	N/A	Supplied by applicant
B	WiFi Router	ASUS	RT-AX88U	K4ITHP000239	MSQ-RTAXHP00	Provided by Lab
C	LAN Adapter	HSIN TING	XTMK005	N/A	N/A	Provided by Lab
D	PoE Adapter	Microsemi	PD-9001GR/AT/AC	N/A	N/A	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	DC cable	1	1.2	N	0	Supplied by applicant
2	LAN Cable	1	1	N	0	Accessory of EUT
3	DC cable	1	0.3	N	0	Accessory of EUT
4	LAN Cable	1	10	N	0	Provided by Lab
5	AC cable	1	0.9	N	0	Provided by Lab

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 LYNICS	0900510	E1-01-300	2025/2/5	2026/2/4
		E1-01-301	2025/2/5	2026/2/4
		E1-011284	2025/9/18	2026/9/17
DC LISN R&S	ESH3-Z6	100219	2025/7/10	2026/7/9
		844950/018	2025/7/10	2026/7/9
Diode Pulse Limiter Schwarzbeck	VTSD 9561 F-N	01422	2025/5/2	2026/5/1
EMI Test Receiver R&S	ESR3	102413	2025/1/22	2026/1/21
		102414	2025/12/9	2026/12/8
Fixed Attenuator EMEC	EM-ATT30002602NN	N/A	2025/3/21	2026/3/20
High Pass Filter EMCI	150HPF-ME	114005	2025/5/2	2026/5/1
		114006	2025/5/2	2026/5/1
	150HPF-MF	113009	2025/5/2	2026/5/1
High Voltage Probe Schwarzbeck	TK9420	00982	2025/12/3	2026/12/2
LISN R&S	ENV216	101195	2025/7/18	2026/7/17
		101196	2025/5/19	2026/5/18
		101197	2025/7/4	2026/7/3
	ESH3-Z5	100220	2025/11/21	2026/11/20
LISN Schwarzbeck	NNLK 8121	8121-731	2025/6/10	2026/6/9
		8121-00759	2025/8/12	2026/8/11
		8121-808	2025/4/23	2026/4/22
	NNLK 8129	00624	2025/10/9	2026/10/8
		8129229	2025/10/14	2026/10/13
RF Coaxial Cable PEWC	5D-FB	Cable-CO3-01	2025/9/11	2026/9/10
Software BVADT	Cond_V7.4.1.0	N/A	N/A	N/A

Notes:

1. The test was performed in Linkou Conduction 3.
2. Tested Date: 2025/12/17

4.2 Radiated Emissions below 30 MHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
MXE EMI Receiver Agilent	N9038A	MY51210114	2025/2/10	2026/2/9
Radiating Loop Antenna TESEQ	RLA 6120-20	80002	2025/7/29	2026/7/28
RF Coaxial Cable Pacific	8D-FB	Cable-CH6-02	2025/6/24	2026/6/23
Signal Analyzer R&S	FSV40	101544	2025/7/1	2026/6/30
Software BVADT	Radiated_V7.7.1.1.1	N/A	N/A	N/A
Tower ADT	AT100	0306	N/A	N/A
Turn Table ADT	TT100	0306	N/A	N/A

Notes:

1. The test was performed in Linkou 966 Chamber 6 (CH 6).
2. Tested Date: 2025/11/21 ~ 2025/12/16

4.3 Radiated Emissions above 30 MHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Bi_Log Antenna Schwarzbeck	VULB 9168	137	2025/9/17	2026/9/16
Coupling / Decoupling Network Schwarzbeck	CDNE-M2	00097	2025/5/28	2026/5/27
	CDNE-M3	00091	2025/3/20	2026/3/19
MXE EMI Receiver Agilent	N9038A	MY51210114	2025/2/10	2026/2/9
Preamplifier Agilent	8447D	2944A11064	2025/2/14	2026/2/13
Radiating Loop Antenna TESEQ	RLA 6120-20	80002	2025/7/29	2026/7/28
RF Coaxial Cable Pacific	8D-FB	Cable-CH6-02	2025/6/24	2026/6/23
Signal Analyzer R&S	FSV40	101544	2025/7/1	2026/6/30
Software BVADT	Radiated_V7.7.1.1.1	N/A	N/A	N/A
Tower ADT	AT100	0306	N/A	N/A
Turn Table ADT	TT100	0306	N/A	N/A

Notes:

1. The test was performed in Linkou 966 Chamber 6 (CH 6).
2. Tested Date: 2025/11/29

4.4 Frequency Stability

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
AC Power Source Schaffner	Profline2105-208NSG1007	55616	N/A	N/A
Digital Multimeter Fluke	8050A	4660081	2025/6/6	2026/6/5
Fixed Attenuator Woken	00800A1K01A-20	00800A1K01A-20-02	2025/5/23	2026/5/22
HV Probe Fluke	80K-40HV	9606869	2025/6/10	2026/6/9
Preamplifier HP	8447D	2944A08313	2025/2/5	2026/2/4
PXA Signal Analyzer Keysight	N9030A	MY54490260	2025/7/24	2026/7/23
Radiating Loop Antenna TESEQ	RLA 6120-20	80002	2025/7/29	2026/7/28
RF Coaxial Cable Pacific	8D-FB	Cable-CH6-02	2025/6/24	2026/6/23
Signal Analyzer R&S	FSV40	101544	2025/7/1	2026/6/30
Software	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A
Temperature & Humidity Chamber Terchy	MHU-225AU	920409	2025/6/12	2026/6/11

Notes:

1. The test was performed in LK - Oven
2. Tested Date: 2025/12/2

4.5 20 dB Bandwidth

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Fixed Attenuator Woken	00800A1K01A-20	00800A1K01A-20-02	2025/5/23	2026/5/22
Preamplifier HP	8447D	2944A08313	2025/2/5	2026/2/4
PXA Signal Analyzer Keysight	N9030A	MY54490260	2025/7/24	2026/7/23
Radiating Loop Antenna TESEQ	RLA 6120-20	80002	2025/7/29	2026/7/28
RF Coaxial Cable Pacific	8D-FB	Cable-CH6-02	2025/6/24	2026/6/23
Signal Analyzer R&S	FSV40	101544	2025/7/1	2026/6/30
Software	ADT_RF Test Software V6.6.5.4	N/A	N/A	N/A

Notes:

1. The test was performed in LK - Oven
2. Tested Date: 2025/12/2

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 +/- 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.

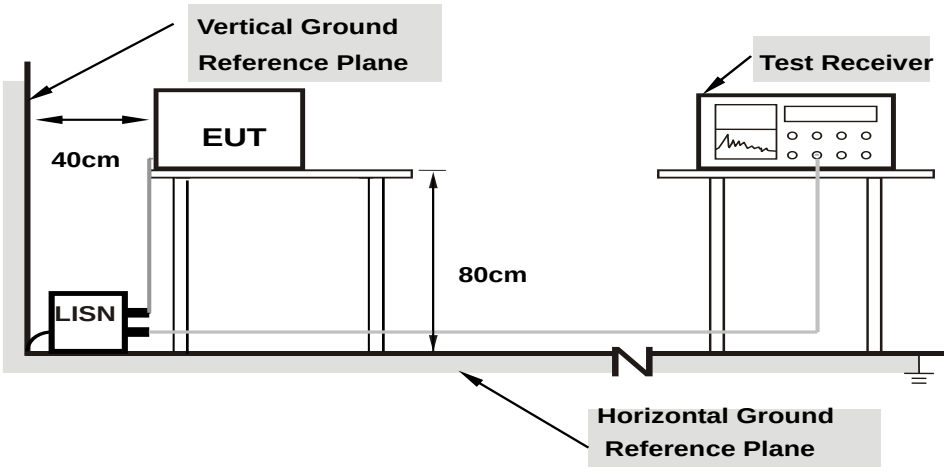
5.5 20 dB Bandwidth

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

a. 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.

b. 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.

c. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

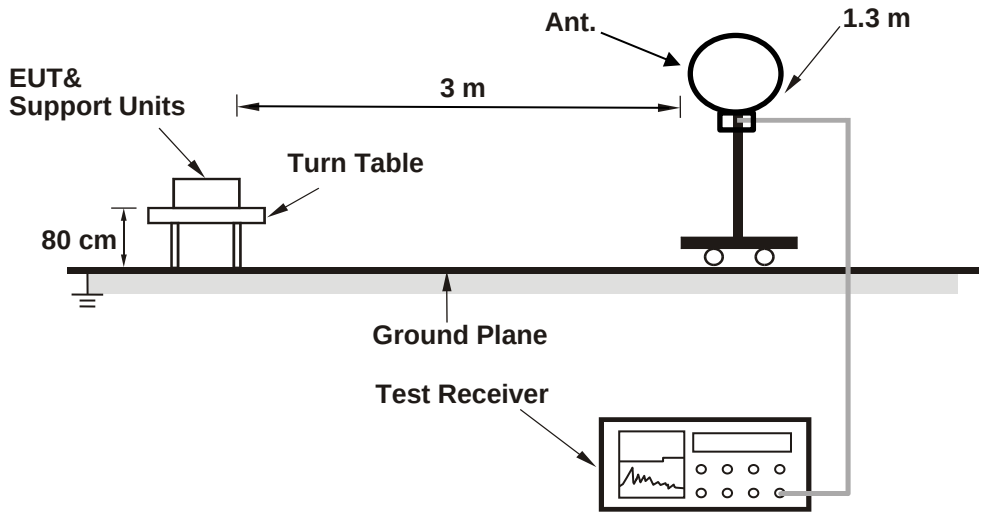
d. The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit – 20 dB) was not recorded.

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

a. 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.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.

d. 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.

e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode, 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.

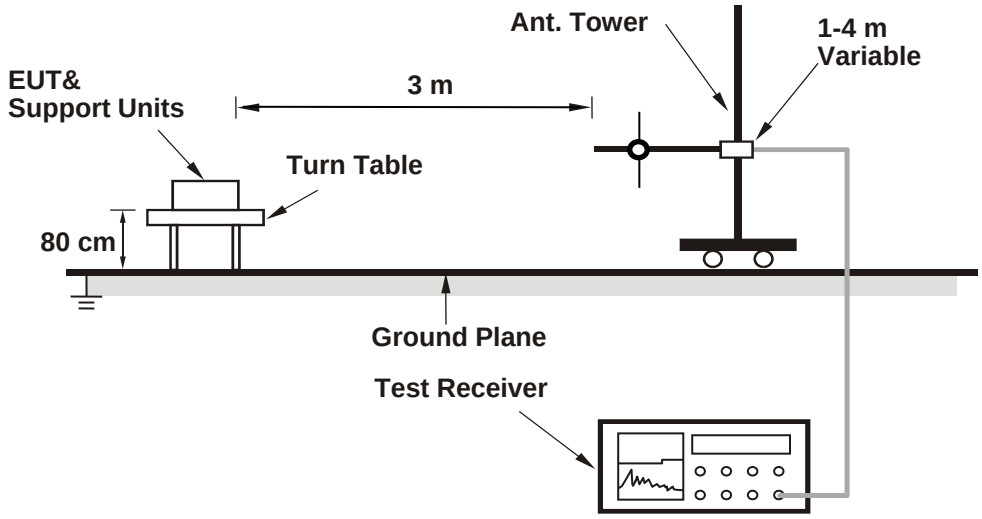
Notes:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 200 Hz at frequency below 150 kHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9 kHz or 10 kHz at frequency (150 kHz to 30 MHz).
3. All modes of operation were investigated and the worst-case emissions are reported.
4. 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

a. 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.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. 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.

d. 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.

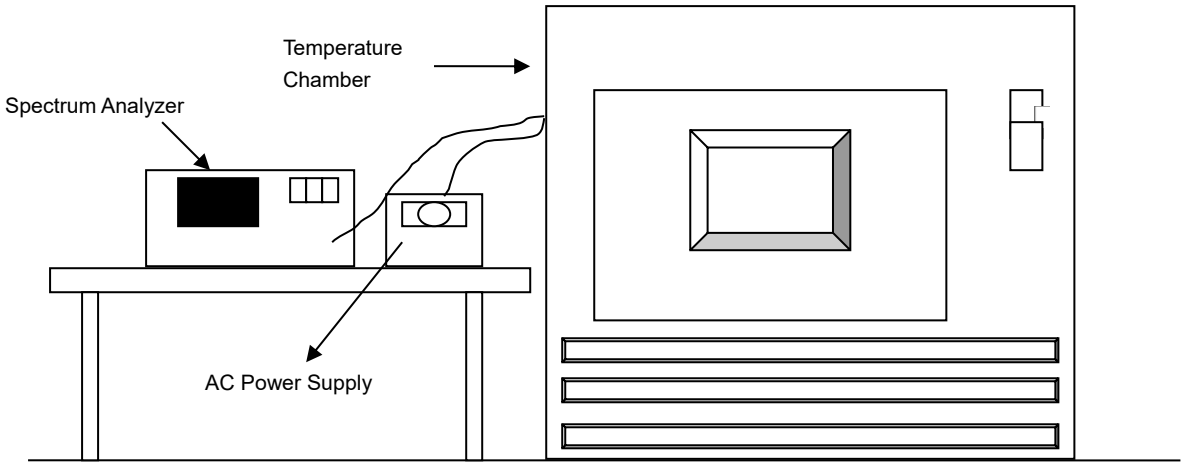
e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

Notes:

1. 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.
2. All modes of operation were investigated and the worst-case emissions are reported.

6.4 Frequency Stability

6.4.1 Test Setup

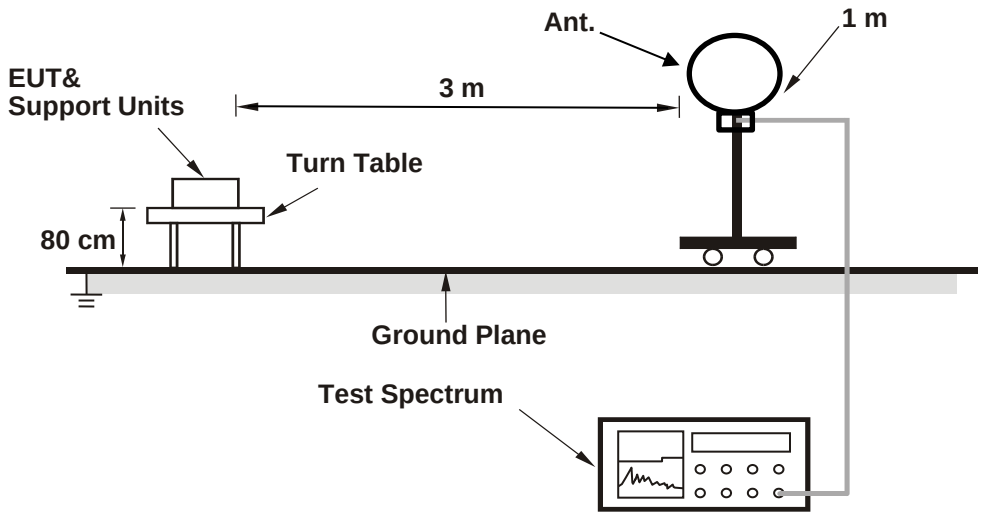


6.4.2 Test Procedure

a. The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.
b. Turn the EUT on and couple its output to a spectrum analyzer.
c. Turn the EUT off and set the chamber to the highest temperature specified.
d. 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.
e. Repeat step (d) with the temperature chamber set to the next desired temperature until measurements down to the lowest specified temperature have been completed.
f. 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:

a. 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.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.

d. 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.

e. The test-spectrum system was set to Peak Detect Function and Maximum Hold.

f. Set resolution bandwidth (RBW) = 1% to 5% of the OBW.

g. Set the video bandwidth (VBW) ≥ 3 x RBW.

h. 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 (OBW/RBW)] below the reference level.

i. Sweep = auto couple.

j. 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

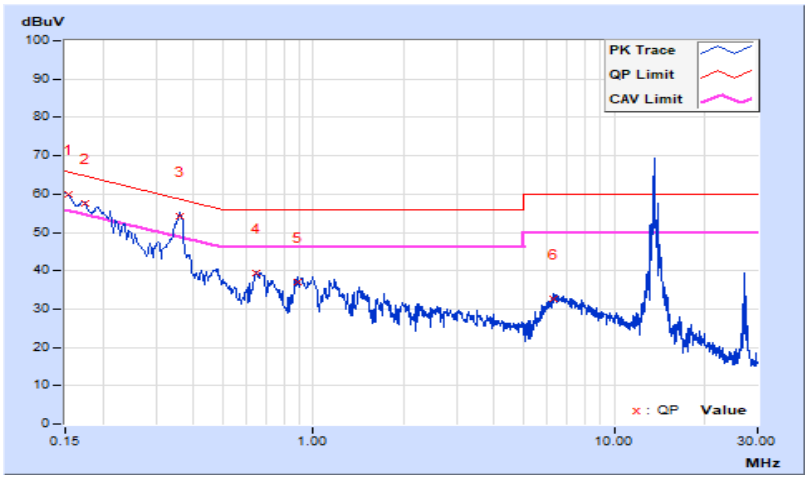
Mode B

RF Mode	NFC	**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, 75% RH
Tested By	Jed Wu		

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	0.15400	9.54	50.23	34.43	59.77	43.97	65.78	55.78	-6.01	-11.81
2	0.17384	9.55	48.10	32.81	57.65	42.36	64.77	54.77	-7.12	-12.41
3	**0.36000**	**9.59**	**44.71**	**37.12**	**54.30**	**46.71**	**58.73**	**48.73**	**-4.43**	**-2.02**
4	0.64800	9.60	29.63	21.45	39.23	31.05	56.00	46.00	-16.77	-14.95
5	0.88400	9.61	27.59	19.27	37.20	28.88	56.00	46.00	-18.80	-17.12
6	6.26800	9.78	22.78	15.49	32.56	25.27	60.00	50.00	-27.44	-24.73

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
6. The 13.56MHz frequency is due to the operating mode causing the signal to be sensed in the receiver, not generated by the EUT from AC conducted emission.

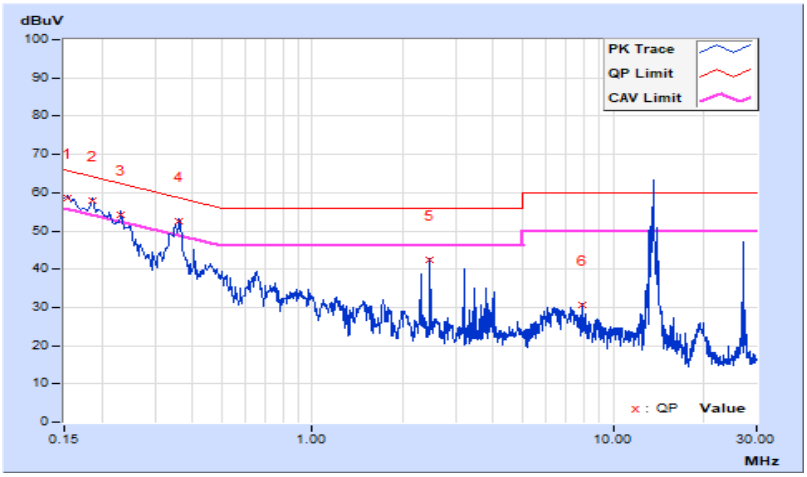


RF Mode	NFC	**Channel**	CH 1：13.56 MHz
Frequency Range	150 kHz ~ 30 MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	25 °C, 75% RH
Tested By	Jed Wu		

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	0.15400	9.34	49.27	29.98	58.61	39.32	65.78	55.78	-7.17	-16.46
2	0.18600	9.34	48.68	31.11	58.02	40.45	64.21	54.21	-6.19	-13.76
3	0.23200	9.34	44.97	29.78	54.31	39.12	62.38	52.38	-8.07	-13.26
4	0.36000	9.36	43.00	32.88	52.36	42.24	58.73	48.73	-6.37	-6.49
5	2.44800	9.47	33.12	19.76	42.59	29.23	56.00	46.00	-13.41	-16.77
6	7.87200	9.64	20.94	13.41	30.58	23.05	60.00	50.00	-29.42	-26.95

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
6. The 13.56MHz frequency is due to the operating mode causing the signal to be sensed in the receiver, not generated by the EUT from AC conducted emission.



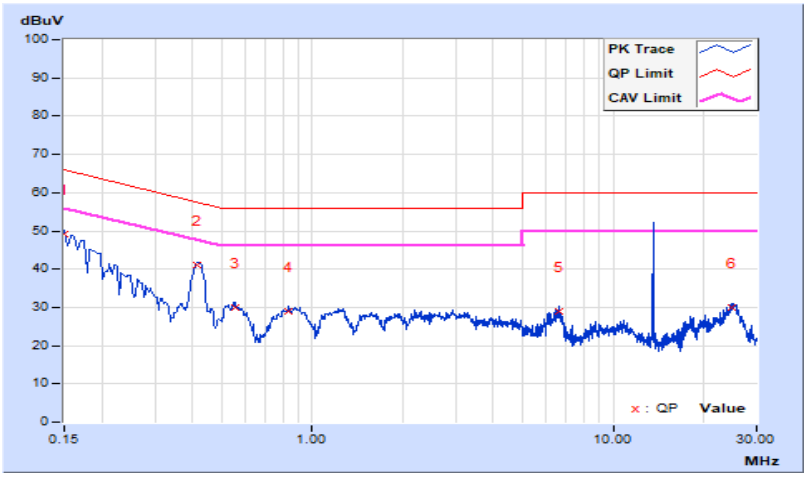
Mode D

RF Mode	NFC	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, 75% RH
Tested By	Jed Wu		

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	0.15000	9.54	39.69	26.56	49.23	36.10	66.00	56.00	-16.77	-19.90
2	0.41253	9.59	31.49	23.69	41.08	33.28	57.60	47.60	-16.52	-14.32
3	0.55200	9.60	20.45	13.84	30.05	23.44	56.00	46.00	-25.95	-22.56
4	0.83140	9.60	19.52	12.55	29.12	22.15	56.00	46.00	-26.88	-23.85
5	6.60400	9.79	19.25	14.65	29.04	24.44	60.00	50.00	-30.96	-25.56
6	24.64000	10.00	19.89	14.80	29.89	24.80	60.00	50.00	-30.11	-25.20

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
6. The 13.56MHz frequency is due to the operating mode causing the signal to be sensed in the receiver, not generated by the EUT from AC conducted emission.

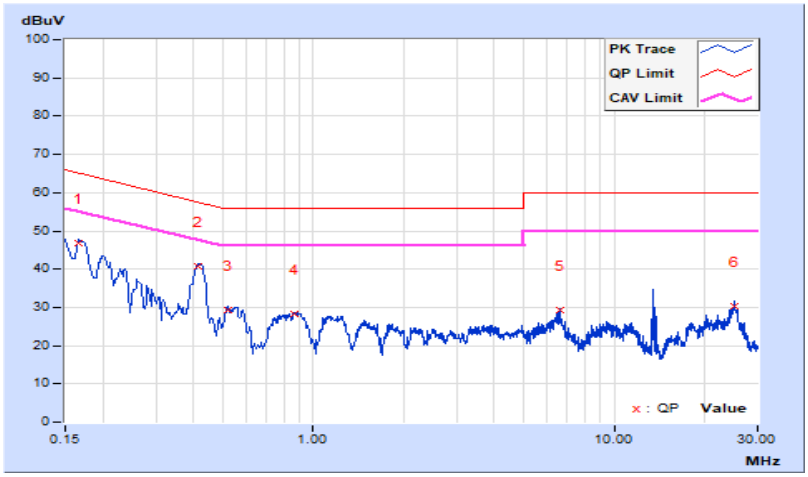


RF Mode	NFC	**Channel**	CH 1：13.56 MHz
Frequency Range	150 kHz ~ 30 MHz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	25 °C, 75% RH
Tested By	Jed Wu		

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	0.16600	9.34	37.46	21.89	46.80	31.23	65.16	55.16	-18.36	-23.93
2	0.41470	9.37	31.47	24.20	40.84	33.57	57.55	47.55	-16.71	-13.98
3	0.52400	9.38	19.94	12.58	29.32	21.96	56.00	46.00	-26.68	-24.04
4	0.86719	9.39	18.99	12.10	28.38	21.49	56.00	46.00	-27.62	-24.51
5	6.60400	9.61	19.63	15.11	29.24	24.72	60.00	50.00	-30.76	-25.28
6	24.97600	9.93	20.23	15.23	30.16	25.16	60.00	50.00	-29.84	-24.84

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
6. The 13.56MHz frequency is due to the operating mode causing the signal to be sensed in the receiver, not generated by the EUT from AC conducted emission.



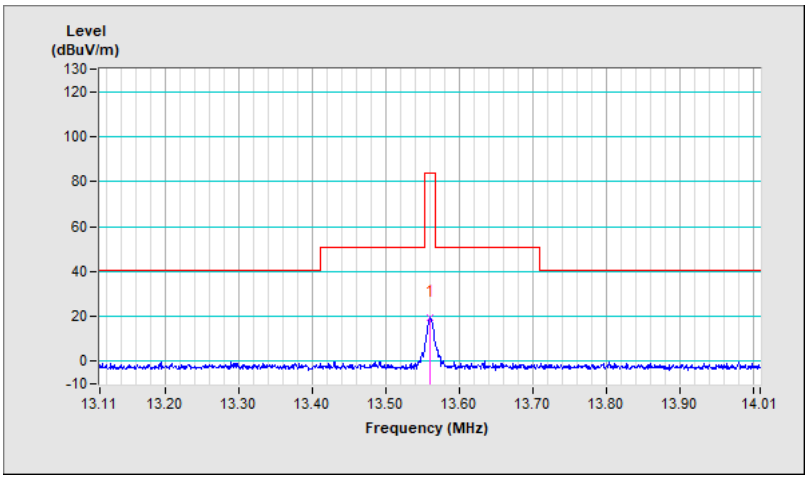
7.2 Radiated Emissions below 30 MHz

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**	23.4 °C, 73.8% RH
Tested By	Ian 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	*13.56	19.2 QP	84.0	-64.8	1.00	141	32.6	-13.4

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*log(3/30) = -40 dB

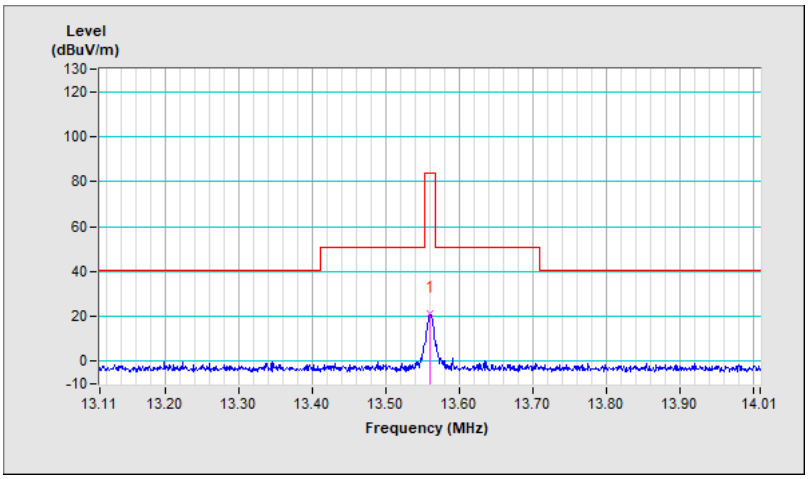


RF Mode	NFC-13.56MHz	**Channel**	CH 1：13.56 MHz
Frequency Range	13.11 MHz ~ 14.01 MHz	**Detector Function & Bandwidth**	Quasi-Peak (QP), 9 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	23.4 °C, 73.8% RH
Tested By	Ian Chang		

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	*13.56	21.5 QP	84.0	-62.5	1.00	164	34.9	-13.4

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*log(3/30) = -40 dB

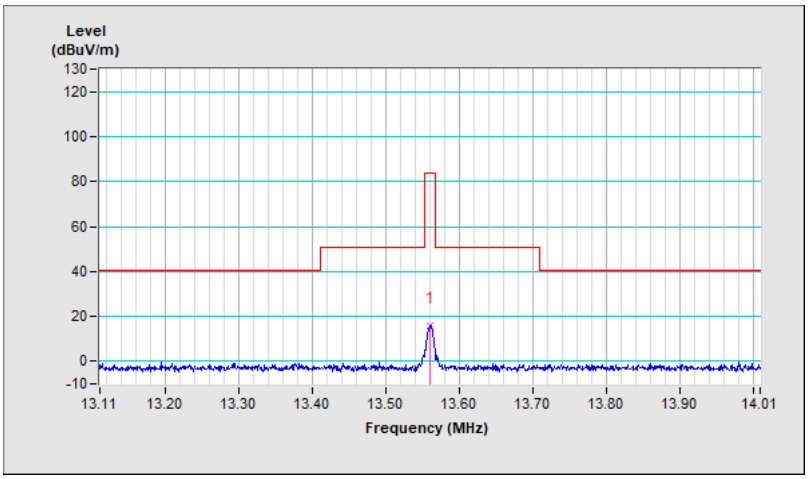


RF Mode	NFC-13.56MHz	Channel	CH 1：13.56 MHz
Frequency Range	13.11 MHz ~ 14.01 MHz	Detector Function & Bandwidth	Quasi-Peak (QP), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23.4 °C, 73.8% RH
Tested By	Ian Chang		

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	*13.56	16.2 QP	84.0	-67.8	1.00	125	29.6	-13.4

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*log(3/30) = -40 dB

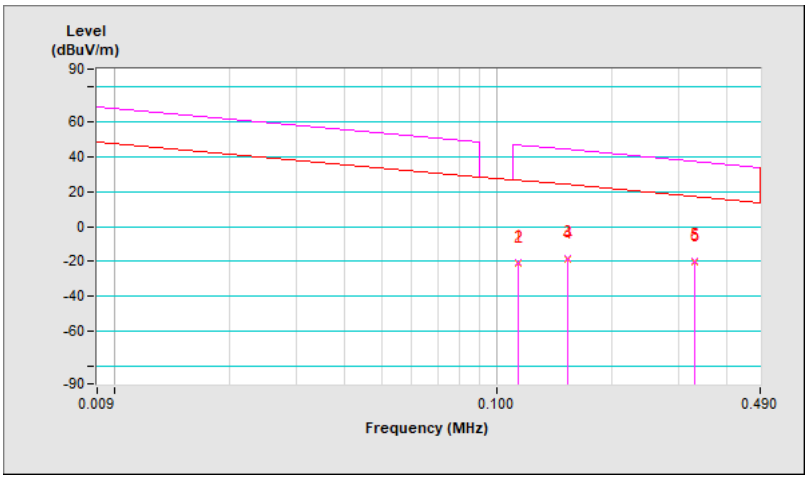


RF Mode	NFC-13.56MHz	Channel	CH 1：13.56 MHz
Frequency Range	9 kHz ~ 150 kHz; 150 kHz ~ 490 kHz	Detector Function & Bandwidth	Peak (PK) / Average (AV), 200 Hz; Peak (PK) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23.4 °C, 73.8% RH
Tested By	Ian Chang		

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	0.1139	-20.1 PK	46.4	-66.5	1.00	316	35.6	-55.7
2	0.1139	-20.9 AV	26.4	-47.3	1.00	316	34.8	-55.7
3	0.1538	-18.2 PK	43.8	-62.0	1.00	124	37.2	-55.4
4	0.1538	-19.0 AV	23.8	-42.8	1.00	124	36.4	-55.4
5	0.3304	-19.5 PK	37.2	-56.7	1.00	277	35.7	-55.2
6	0.3304	-20.3 AV	17.2	-37.5	1.00	277	34.9	-55.2

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*log(3/300) = -80 dB

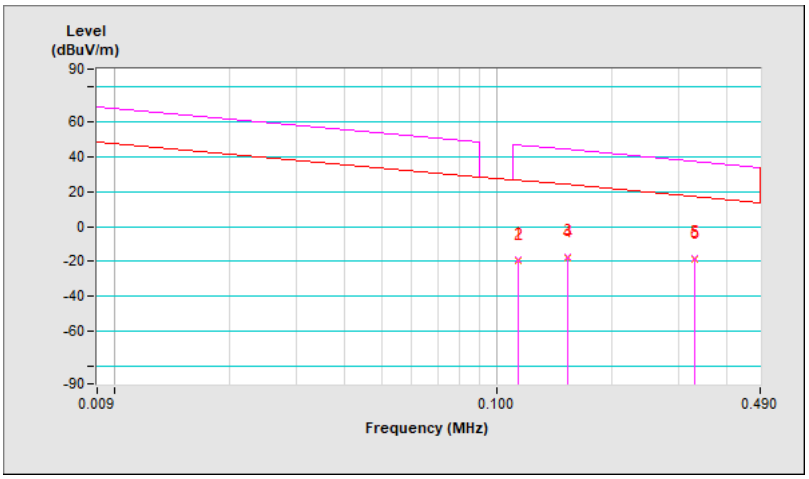


RF Mode	NFC-13.56MHz	Channel	CH 1：13.56 MHz
Frequency Range	9 kHz ~ 150 kHz; 150 kHz ~ 490 kHz	Detector Function & Bandwidth	Peak (PK) / Average (AV), 200 Hz; Peak (PK) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23.4 °C, 73.8% RH
Tested By	Ian Chang		

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	0.1139	-19.1 PK	46.4	-65.5	1.00	125	36.6	-55.7
2	0.1139	-19.9 AV	26.4	-46.3	1.00	125	35.8	-55.7
3	0.1538	-17.2 PK	43.8	-61.0	1.00	218	38.2	-55.4
4	0.1538	-18.0 AV	23.8	-41.8	1.00	218	37.4	-55.4
5	0.3304	-18.5 PK	37.2	-55.7	1.00	58	36.7	-55.2
6	0.3304	-19.3 AV	17.2	-36.5	1.00	58	35.9	-55.2

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*log(3/300) = -80 dB

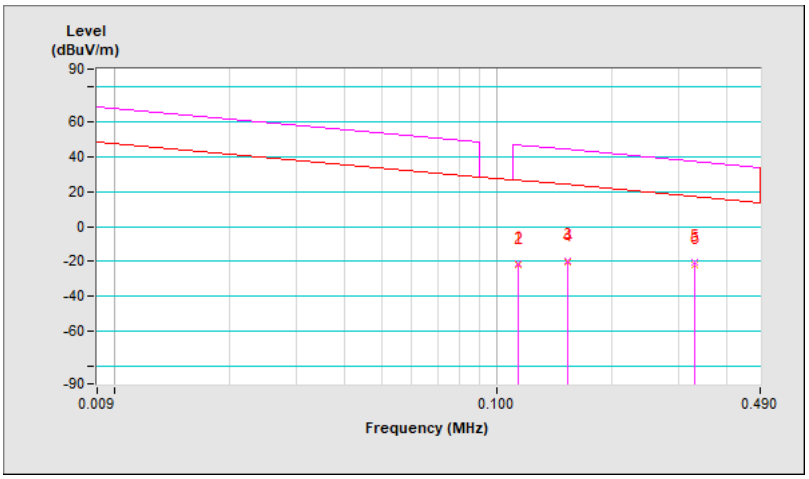


RF Mode	NFC-13.56MHz	Channel	CH 1：13.56 MHz
Frequency Range	9 kHz ~ 150 kHz; 150 kHz ~ 490 kHz	Detector Function & Bandwidth	Peak (PK) / Average (AV), 200 Hz; Peak (PK) / Average (AV), 9 kHz
Input Power	120 Vac, 60 Hz	Environmental Conditions	23.4 °C, 73.8% RH
Tested By	Ian Chang		

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	0.1139	-21.5 PK	46.4	-67.9	1.00	247	34.2	-55.7
2	0.1139	-22.2 AV	26.4	-48.6	1.00	247	33.5	-55.7
3	0.1538	-19.6 PK	43.8	-63.4	1.00	187	35.8	-55.4
4	0.1538	-20.4 AV	23.8	-44.2	1.00	187	35.0	-55.4
5	0.3304	-20.6 PK	37.2	-57.8	1.00	332	34.6	-55.2
6	0.3304	-21.7 AV	17.2	-38.9	1.00	332	33.5	-55.2

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*log(3/300) = -80 dB

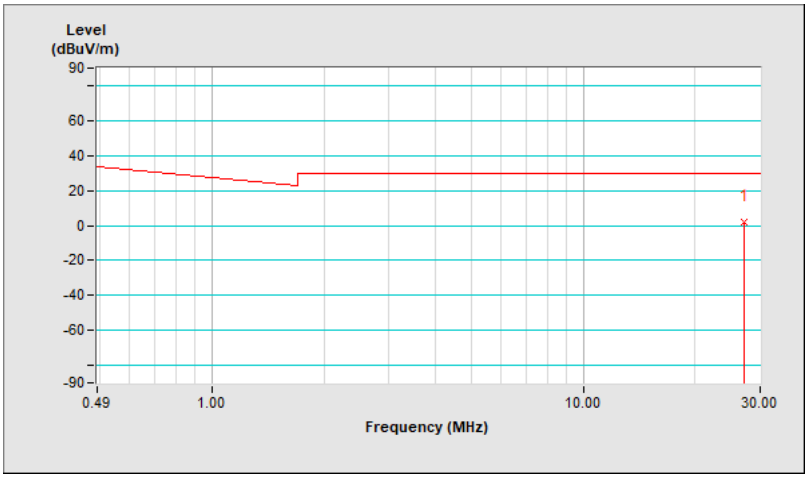


RF Mode	NFC-13.56MHz	**Channel**	CH 1：13.56 MHz
Frequency Range	490 kHz ~ 30 MHz	**Detector Function & Bandwidth**	Quasi-Peak (QP), 9 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	23.4 °C, 73.8% RH
Tested By	Ian Chang		

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	27.1200	1.6 QP	29.5	-27.9	1.00	310	14.2	-12.6

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*log(3/30) = -40 dB

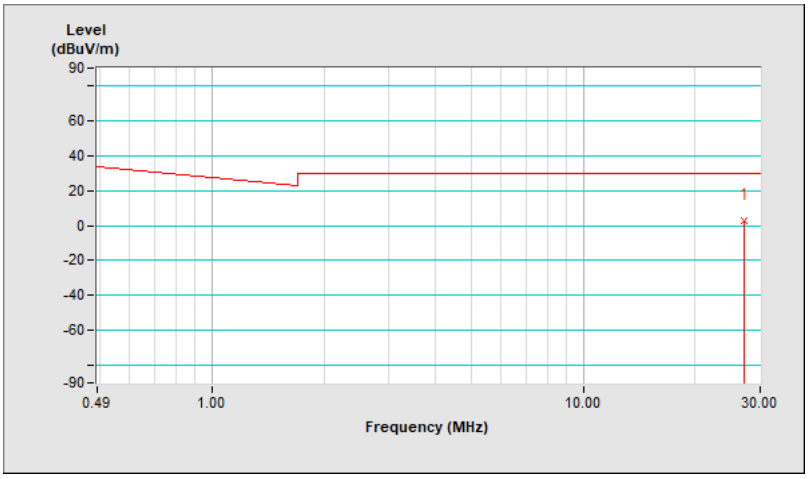


RF Mode	NFC-13.56MHz	**Channel**	CH 1：13.56 MHz
Frequency Range	490 kHz ~ 30 MHz	**Detector Function & Bandwidth**	Quasi-Peak (QP), 9 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	23.4 °C, 73.8% RH
Tested By	Ian Chang		

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	27.1200	2.6 QP	29.5	-26.9	1.00	157	15.2	-12.6

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*log(3/30) = -40 dB

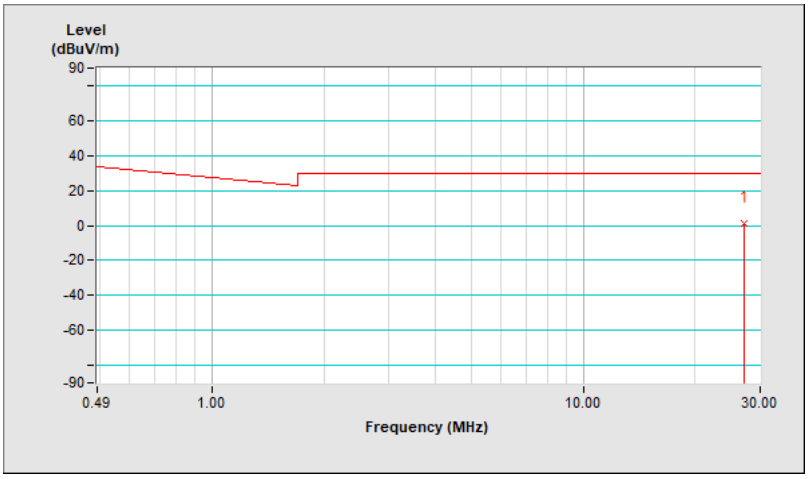


RF Mode	NFC-13.56MHz	**Channel**	CH 1：13.56 MHz
Frequency Range	490 kHz ~ 30 MHz	**Detector Function & Bandwidth**	Quasi-Peak (QP), 9 kHz
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	23.4 °C, 73.8% RH
Tested By	Ian Chang		

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	27.1200	0.9 QP	29.5	-28.6	1.00	118	13.5	-12.6

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*log(3/30) = -40 dB



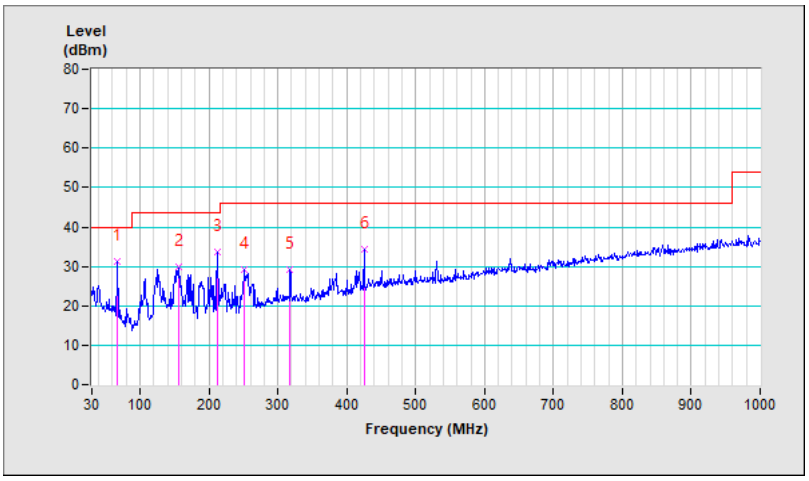
7.3 Radiated Emissions above 30 MHz

RF Mode	NFC	**Channel**	CH 1：13.56 MHz
Frequency Range	30 MHz ~ 1 GHz	**Detector Function & Bandwidth**	QP: RB=120 kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	25.2 °C, 74.3% RH
Tested By	Jed Wu		

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	66.86	31.3 QP	40.0	-8.7	1.21 H	301	41.2	-9.9
2	155.13	29.7 QP	43.5	-13.8	1.43 H	104	37.6	-7.9
3	212.36	33.7 QP	43.5	-9.8	1.78 H	252	43.9	-10.2
4	251.16	29.3 QP	46.0	-16.7	1.95 H	209	37.1	-7.8
5	318.09	29.3 QP	46.0	-16.7	1.68 H	297	34.3	-5.0
6	424.79	34.3 QP	46.0	-11.7	1.35 H	260	37.0	-2.7

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.

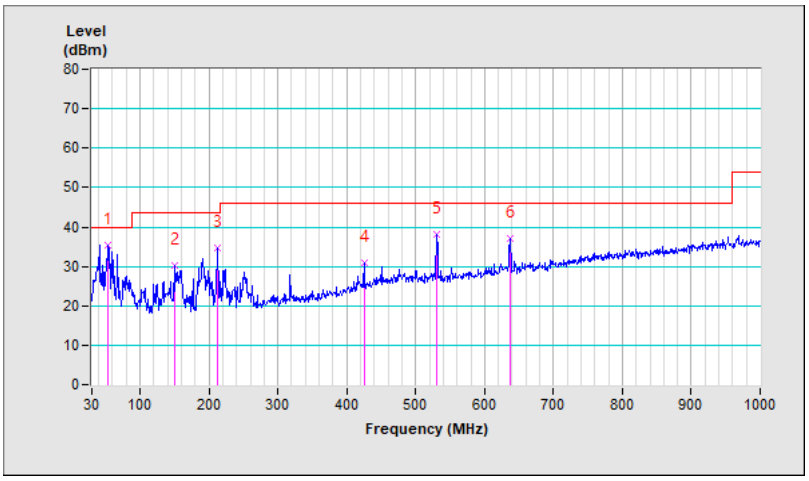


RF Mode	NFC	**Channel**	CH 1：13.56 MHz
Frequency Range	30 MHz ~ 1 GHz	**Detector Function & Bandwidth**	QP: RB=120 kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	**Environmental Conditions**	25.2 °C, 74.3% RH
Tested By	Jed Wu		

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	**53.28**	**35.4 QP**	**40.0**	**-4.6**	**1.56 V**	**88**	**44.1**	**-8.7**
2	149.31	30.1 QP	43.5	-13.4	1.79 V	3	38.1	-8.0
3	212.36	34.6 QP	43.5	-8.9	1.32 V	195	44.8	-10.2
4	424.79	31.0 QP	46.0	-15.0	1.18 V	14	33.7	-2.7
5	530.52	38.1 QP	46.0	-7.9	1.95 V	147	38.9	-0.8
6	637.22	37.2 QP	46.0	-8.8	1.04 V	284	34.9	2.3

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, 76% RH	Tested By:	Dalen Dai

Frequency Stability Versus Temperature									
Operating Frequency: 13.56 MHz									
Temp. (℃)	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	13.56009	0.00066	13.56006	0.00044	13.56012	0.00088	13.56009	0.00066
40	120	13.56007	0.00052	13.55996	-0.00029	13.56006	0.00044	13.56005	0.00037
30	120	13.55997	-0.00022	13.56004	0.00029	13.55996	-0.00029	13.55999	-0.00007
20	120	13.56001	0.00007	13.56006	0.00044	13.56002	0.00015	13.56003	0.00022
10	120	13.55997	-0.00022	13.55996	-0.00029	13.55994	-0.00044	13.55999	-0.00007
0	120	13.56003	0.00022	13.56009	0.00066	13.56001	0.00007	13.56003	0.00022
-10	120	13.55997	-0.00022	13.55998	-0.00015	13.56002	0.00015	13.55994	-0.00044
-20	120	13.55997	-0.00022	13.55999	-0.00007	13.55998	-0.00015	13.55992	-0.00059

Frequency Stability Versus Voltage									
Operating Frequency: 13.56 MHz									
Temp. (℃)	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	13.56001	0.00007	13.56006	0.00044	13.56002	0.00015	13.56003	0.00022
	120	13.56001	0.00007	13.56006	0.00044	13.56002	0.00015	13.56003	0.00022
	102	13.56001	0.00007	13.56006	0.00044	13.56002	0.00015	13.56003	0.00022

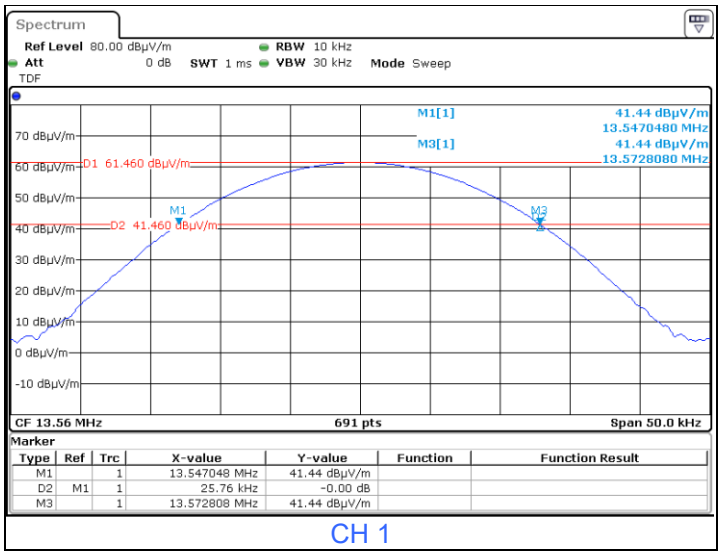
7.5 20 dB Bandwidth

Input Power:	120 Vac, 60 Hz	Environmental Conditions:	25°C, 76% RH	Tested By:	Dalen Dai

Channel	Channel Frequency (MHz)	20 dB Bandwidth (MHz)	Measured Frequencies		Operating Frequency Band (MHz)	Test Result
			FL (MHz)	FH (MHz)		
1	13.56	0.02576	13.547048	13.572808	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.



CH 1

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

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