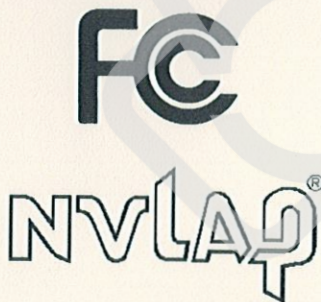


Verification of Compliance

Product Name : PCIE-USB380,PCIE-USB340
Trade Name : Neousys Technology
Model Number : PCIE-USB380,PCIE-USB340
Applicant : Neousys Technology
Address : 15F, No.868-3, Zhongzheng Rd., Zhonghe Dist., New Taipei City
23586, Taiwan
Report Number : F-U070-1311-287
Issue Date : December 5, 2013

Applicable Standards : FCC Part 15, Subpart B Class B ITE
ANSI C63.4:2009
Industry Canada ICES-003 Issue 5
CSA-IEC CISPR22-10 Class B ITE

One sample of the designated product has been tested in our laboratory and found to be in compliance with the FCC rules cited above.



NVLAP LAB CODE 200575-0

TAF 0905

FCC CAB Code TW1053

IC Code 4699A

VCCI Accep. No. R-1527, C-1609, T-1441, G-10,
T-1334, G-10, G-614



Central Research Technology Co.
EMC Test Laboratory
11, Lane 41, Fushuen St., Jungshan Chiu,
Taipei, Taiwan, 104, R.O.C.
Tel : 886-2-25984568
Fax: 886-2-25984546

A handwritten signature in black ink, appearing to read 'J. Y. Shih'.

(Tsun-Yu Shih/ General Manager)

Date: December 5, 2013

Declaration of Conformity (DoC)

Per 47 CFR §2.1077(a) & §15.19(a)(3)

The following device is herewith confirmed to comply with Part 15 of the FCC Rules.

Product Name : PCIE-USB380,PCIE-USB340

Model No. : PCIE-USB380,PCIE-USB340



Operation is subject to the following two conditions :

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

The characteristics of electromagnetic emission has been evaluated by Central Research Technology Co. (NVLAP Lab. Code : 200575-0), and the results are shown in the test report. (Report No. : F-U070-1311-287, issued in 2013)

It is understood that each unit marketed is identical to the device as tested, and any changes to the device that could adversely affect the emission characteristics will require retest.

The following importer/manufacturer is responsible for this declaration:

Company Name : _____

Company Address : _____
(in U.S.)

Telephone : _____ Fax : _____

The person to be responsible for marking this declaration:

Name (Full name)

Position/Title

Legal Signature

Date

FCC DoC Test Report

for

PCIE-USB380,PCIE-USB340

Brand Name : Neousys Technology
Model No. : PCIE-USB380,PCIE-USB340
Report Number : F-U070-1311-287
Date of Receipt : November 26, 2013
Date of Report : December 5, 2013

Prepared for

Neousys Technology

15F, No.868-3, Zhongzheng Rd., Zhonghe Dist., New Taipei City 23586, Taiwan

Prepared by



Central Research Technology Co.

EMC Test Laboratory

11, Lane 41, Fushuen St., Jungshan Chiu, Taipei, Taiwan, 104, R.O.C.



NVLAP LAB CODE 200575-0

This report shall not be reproduced, except in full, without the written approval of Central Research Technology Co.. It may be duplicated completely in its entirety for legal use with the permission of the applicant. It should not be used to claim product endorsement by NVLAP, NIST or any U.S. government agency. The test result in the report applies only to the sample tested.

Verification of Compliance

Equipment Under Test : PCIE-USB380,PCIE-USB340
Model No. : PCIE-USB380,PCIE-USB340
Applicant : Neousys Technology
Address : 15F, No.868-3, Zhongzheng Rd., Zhonghe Dist., New Taipei City 23586, Taiwan
Applicable Standards : **FCC Part 15, Subpart B Class B ITE**
ANSI C63.4:2009
Industry Canada ICES-003 Issue 5
CSA-IEC CISPR22-10 Class B ITE
Date of Testing : November 27~29, 2013
Deviation : N/A
Condition of Test Sample : Engineering Sample



We, **Central Research Technology Co.**, hereby certify that one sample of the designated product was tested in our facility during the period mentioned above. The test records, data evaluation and Equipment Under Test (EUT) configurations shown in the present report are true and accurate representation of the measurements of the sample's EMC characteristics under the conditions herein specified.

The test results show that the EUT as described in the present report is in compliance with the requirements set forth in the standards mentioned above and apply to the tested sample identified in the present report only. The test report shall not be reproduced, except in its entirety, without the written approval of Central Research Technology Co.

PREPARED BY : Iris Chen , **DATE** : Dec. 5, 2013
(Iris Chen/System Executive)
APPROVED BY : Tsun-Yu Shih , **DATE** : Dec. 5, 2013
(Tsun-Yu Shih/General Manager)

Contents

1. General Description	4
1.1 General Description of EUT.....	4
1.2 Test Mode.....	5
1.3 Applied standards	6
1.4 Test Setup for the EUT	7
1.5 The Support Units	7
1.6 Layout of the Setup.....	9
1.7 Test Capability	10
2. Conducted Emission Measurement.....	12
2.1 Limits for Emission Measurement.....	12
2.2 Test Instruments.....	13
2.3 Test Procedures	15
2.4 Test Configurations.....	16
2.5 Photographs of the Test Configurations.....	17
2.6 Test Results	18
3. Radiated Emission Measurement	20
3.1 Limits for Emission Measurement.....	20
3.2 Test Instruments.....	21
3.3 Test Procedures	23
3.4 Test Configurations.....	25
3.5 Photographs of the Test Configurations.....	26
3.6 Test Results	27
Attachment 1 Photographs of EUT	31
Attachment 2 Modifications of EUT	34

1. General Description

1.1 General Description of EUT

Equipment Under Test : PCIE-USB380,PCIE-USB340
Model No. : PCIE-USB380,PCIE-USB340
Power in : Supplied by the connected PC
Highest Operating Frequency : 4.8GHz from the test specification
Manufacturer : Neousys Technology
Function Description :

The EUT is an engineering sample of the PCIE-USB380. Please refer to the user's manual for the details.

The I/O ports of EUT are listed below:

No.	I/O Port Type	Quantity
1	PCIe connected port	1
2	USB 3.0 port	8

1.2 Test Mode

Normal operating as the specification of manufacturer.



1.3 Applied standards

According to the specifications of the manufacturer and the requirements set in 47CFR Part 15, the applied standards to evaluate the compliance of the EUT are as following, and the measurement procedures specified in ANSI C63.4: 2009 are performed.

According to 47CFR Part 15 Section 15.33(b), the test frequency range of radiated emission measurements are listed below and the EUT herein shall be tested as:

Type of EUT	Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
<input type="checkbox"/>	Below 1.705	30
<input type="checkbox"/>	1.705 - 108	1000
<input type="checkbox"/>	108 - 500	2000
<input type="checkbox"/>	500 - 1000	5000
<input checked="" type="checkbox"/>	Above 1000	5 th harmonic of the highest frequency or 40GHz, whichever is lower

All the test items are as following:

Applied Standards	Test Items	Results
FCC Part 15, Subpart B Class B ITE	<input checked="" type="checkbox"/> Conducted Emission Measurement	<u>PASS</u>
	<input checked="" type="checkbox"/> Radiated Emission Measurement	<u>PASS</u>

1.4 Test Setup for the EUT

The EUT is an unique unit connected with other necessary accessories and support units listed in the next section. It has been tested against each standard after the following setup steps:

- a. Install the EUT inside a PC.
- b. Connect all the necessary accessories and support units to the appropriate power source.
- c. Turn on the PC and all the accessories and support units.
- d. Load an EMC test software into the PC and execute it under the Windows environment.
- e. The PC reads/ writes messages from/ to the USB 3.0 HDD by the EUT continuously.
- f. The PC sends “H” patterns to the monitor continuously.
- g. The PC sends messages to the modem.
- h. The PC sends “H” patterns to the printer, which prints them on paper.
- i. Repeat and keep the setup steps listed above before and during all tests.

EUT I/O ports / Peripherals	Exerciser Program (software)	Version of Program
EUT	BurnIn Test.exe	V 7.1
Monitor		
Modem		
USB 3.0 HDD		
Printer		

1.5 The Support Units

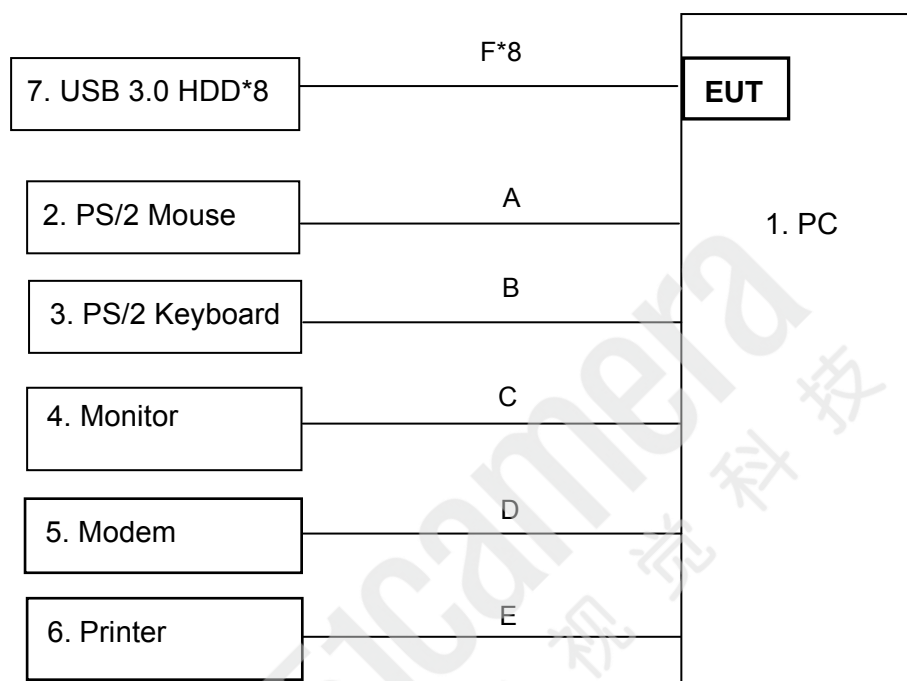
Conducted Emission Test

No.	Unit	Model No.	FCC ID	Trade Name	Power Cord	Supported by lab.
1	PC	Elite 8200 MT	DoC	HP	1.8m	✓
2	PS/2 Mouse	MO71KC	DoC	DELL	N/A	✓
3	PS/2 Keyboard	SK-8110	DoC	DELL	N/A	✓
4	Monitor	U2410	DoC	DELL	1.8m	✓
5	Modem	DM-1414	IFAXDM1414	ACEEX	1.8m	✓
6	Printer	LQ-300+II	N/A	EPSON	1.8m	✓
7	USB 3.0 HDD	HD-PCTU3	DoC	BUFFALO	N/A	✓

Radiated Emission Test

No.	Unit	Model No.	FCC ID	Trade Name	Power Cord	Supported by lab.
1	PC	Elite 8200 MT	DoC	HP	1.8m	✓
2	PS/2 Mouse	MO71KC	DoC	DELL	N/A	✓
3	PS/2 Keyboard	SK-8110	DoC	DELL	N/A	✓
4	Monitor	U2410	DoC	DELL	1.8m	✓
5	Modem	DM-1414	IFAXDM1414	ACEEX	1.8m	✓
6	Printer	LQ-300+II	N/A	EPSON	1.8m	✓
7	USB 3.0 HDD	My Passport Essential	DoC	WD	N/A	✓
		HD-PCTU3	DoC	BUFFALO	N/A	✓
		My Passport	DoC	WD	N/A	✓

1.6 Layout of the Setup



Connecting Cables :

No.	Cable	Length	Shielded	Core	Shielded Backshell	Supported by lab.	Note
A	PS/2 Mouse Cable	1.8m	✓			✓	
B	PS/2 Keyboard Cable	2.0m	✓			✓	
C	VGA Cable	1.7m	✓	✓		✓	2 Cores
D	Modem Cable	1.8m	✓	✓		✓	2 Cores
E	USB Cable	1.8m	✓	✓		✓	2 Cores
F	USB 3.0 Cable	1.0m	✓			✓	

1.7 Test Capability

Test Facility

The test facility used for evaluating the conformance of the EUT with each standard in the present report meets what required in CISPR16-1-4, CISPR16-2-3 and ANSI C63.4: 2009.

Test Room	Type of Test Room	Descriptions
TR1	10m semi-anechoic chamber (23m × 14m × 9m)	Complying with the NSA and the site VSWR requirements in documents CISPR 22 and ANSI C63.4: 2009. for the radiated emission measurement.
TR1	3m fully-anechoic chamber (23m × 14m × 9m)	
TR11	3m semi-anechoic chamber (9m × 6m × 6m)	Complying with the NSA requirements in documents CISPR 22 for the radiated emission measurement.
TR5	Shielding Room (8m × 5m × 4m)	For the conducted emission measurement.
TR4	Shielding Room (5m×3m×3m)	

Test Laboratory Competence Information

Central Research Technology Co. has been accredited / filed / authorized by the agencies listed in the following table.

Certificate	Nation	Agency	Code	Mark
Accreditation Certificate	USA	NVLAP	200575-0	ISO/IEC 17025
	R.O.C. (Taiwan)	TAF	0905	ISO/IEC 17025
	R.O.C. (Taiwan)	BSMI	SL2-IN-E-0033, SL2-IS-E-0033, SL2-R1/R2-E-0033, SL2-A1-E-0033, SL2-L1-E-0033	ISO/IEC 17025
Site Filing Document	USA	FCC	474046,TW1053	Test facility list & NSA Data
	Canada	IC	4699A-1,-3	Test facility list & NSA Data
	Japan	VCCI	R-1527,C-1609, C-4400, T-1441, T-1334, G-10, G-614	Test facility list & NSA Data
Authorization Certificate	Germany	TUV	10021687	ISO/IEC 17025
	Norway	Nemko	ELA 212	ISO/IEC 17025

The copy of each certificate can be downloaded from our web site: www.crc-lab.com

2. Conducted Emission Measurement

Test Result : PASS

2.1 Limits for Emission Measurement

☒ Limits for conducted disturbances at the power mains

Frequency (MHz)	Class A Equipment		Class B Equipment	
	Quasi-peak (dB μ V)	Average (dB μ V)	Quasi-peak (dB μ V)	Average (dB μ V)
0.15 to 0.5	79	66	66 – 56	56 – 46
0.5 to 5	73	60	56	46
5 to 30	73	60	60	50

Note 1- The lower limit shall apply at the transition frequency.
Note 2- The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5MHz for Class B equipment.

2.2 Test Instruments

Test Site and Equipment	Manufacturer	Model No./ Serial No.	Last Calibration Date	Calibration Due Date
Test Receiver	R&S	ESCS 30/ 836858/021	Jan. 14, 2013	Jan. 14, 2014
LISN	R&S	ESH2-Z5/ 880669/039	March 15, 2013	March 15, 2014
2 nd LISN	R&S	ENV4200/ 833209/010	March 29, 2013	March 29, 2014
50Ω terminator	N/A	N/A/ 001	Aug. 19, 2013	Aug. 19, 2014
RF Switch	R&S	RSU28/ 338965/002	Aug. 19, 2013	Feb. 19, 2014
RF Cable	N/A	N/A/ C0052 ~ 56	Aug. 19, 2013	Feb. 19, 2014
Test Software	Audix	e3/ Ver. 5.2004-2-19k	NCR	NCR
TR5 shielded room	ETS LINDGREN	TR5/ 15353-F	NCR	NCR

Note:

1. The calibrations are traceable to NML/ROC.
2. NCR : No Calibration Required.

Measurement Uncertainty

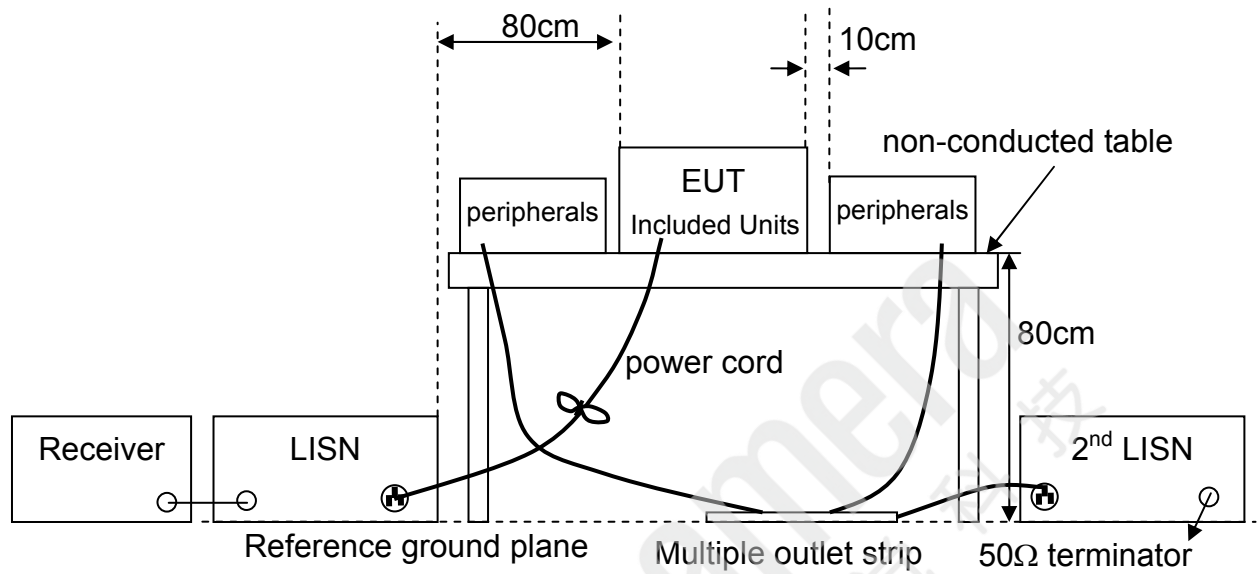
The assessed measurement uncertainty with a suitable coverage factor K to ensure 95% confidence level for the normal distribution are shown as below, the values are less than U_{CISPR} in table 1 of CISPR 16-4-2.

Equipment	Model Number	Uncertainty Value
LISN	ESH2-Z5	3.0dB
	ENV 4200	3.0dB

2.3 Test Procedures

- a. The EUT was set up per the test configuration figured in the next section of this chapter to simulate the typical usage per the user's manual.
- b. If the EUT is tabletop equipment, it was placed on a non-conducted table with a height of 0.8 meters above the reference ground plane and 0.4 meters from the conducting wall of the shielded room. Also if the EUT is floor-standing equipment, it was placed on a non-conducted support with a height of 12 millimeters above the reference ground plane.
- c. Connect the EUT's power source to the appropriate power mains through the LISN.
- d. All the other peripherals are connected to the 2nd LISN, if any.
- e. The LISN was placed 0.8 meters from the EUT and at least 0.8 meters from other units and other metal planes.
- f. Measure the conducted emissions on each power line (Neutral Line and Line 1 – Hot side) of the EUT's power source by using the test receiver connected to the coupling RF output port of LISN.
- g. Rapidly scan the signal from 150kHz to 30MHz by using the receiver through the Maximum-Peak detector to determine those frequencies associated with higher emission levels for each measured line.
- h. Then measure the maximum level of conducted disturbance for each frequency found from step g. by using the receiver through the Quasi-Peak and Average detectors per CISPR 16-1.
- i. Record the level for each frequency and compare with the required limit.

2.4 Test Configurations

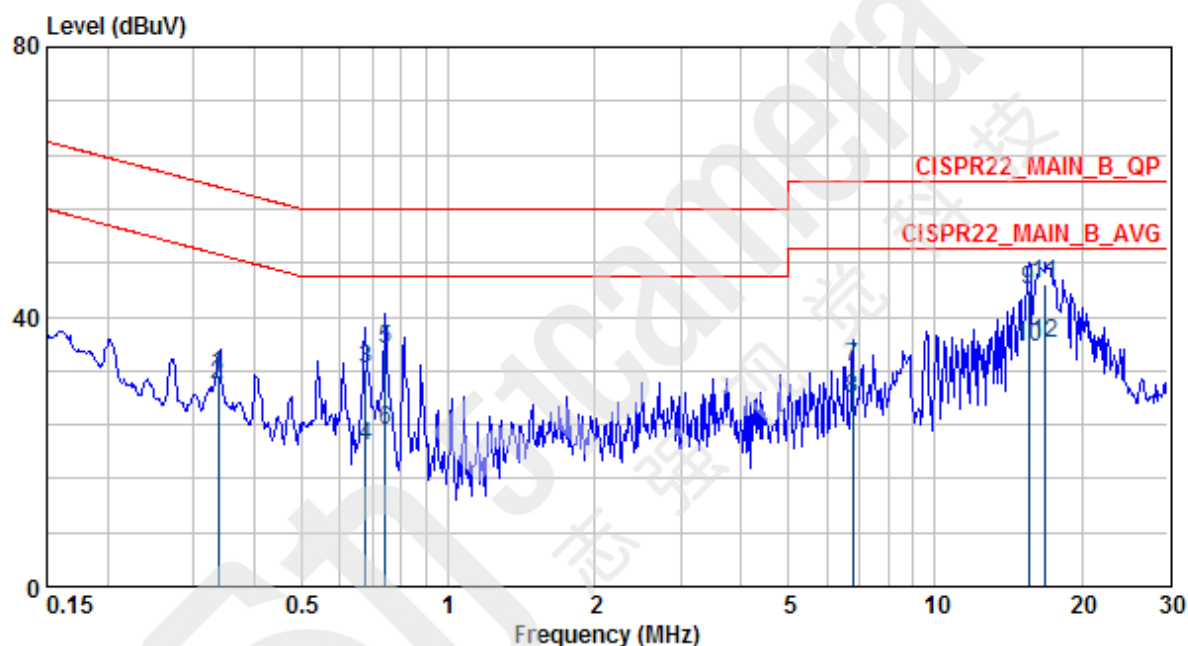


2.5 Photographs of the Test Configurations



2.6 Test Results

Test Mode : Normal
Test Voltage : 120V/60Hz to the connected PC
Tester : Kent **Temperature** : 27°C
Humidity : 50%RH **Frequency Range** : 150kHz~30MHz
IF Bandwidth : 9kHz **Phase** : Line

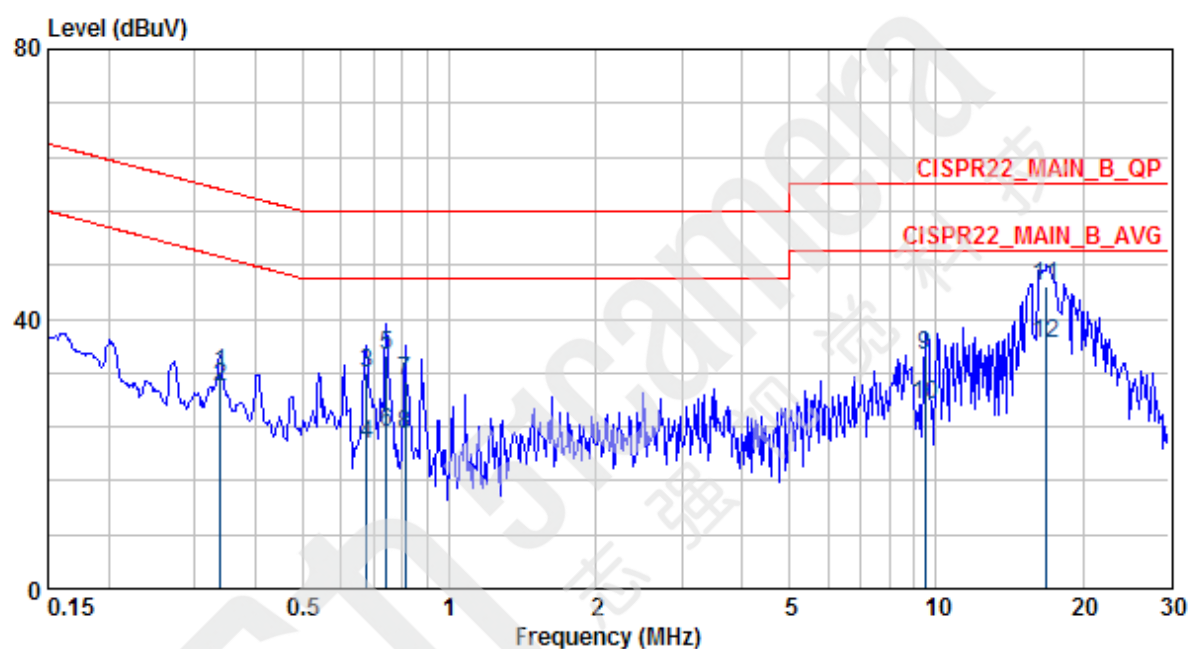


	Freq	Level	Factor	Read	Limit	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Pol/Phase	Remark
1	0.338	31.46	0.16	31.30	59.25	-27.79	LINE	QP
2	0.338	29.85	0.16	29.69	49.25	-19.40	LINE	AVERAGE
3	0.676	32.23	0.20	32.03	56.00	-23.77	LINE	QP
4	0.676	20.73	0.20	20.53	46.00	-25.27	LINE	AVERAGE
5	0.744	35.09	0.20	34.89	56.00	-20.91	LINE	QP
6	0.744	23.23	0.20	23.03	46.00	-22.77	LINE	AVERAGE
7	6.764	32.40	0.49	31.91	60.00	-27.60	LINE	QP
8	6.764	27.94	0.49	27.45	50.00	-22.06	LINE	AVERAGE
9	15.548	43.89	0.78	43.11	60.00	-16.11	LINE	QP
10	15.548	35.58	0.78	34.80	50.00	-14.42	LINE	AVERAGE
11	16.835	44.72	0.80	43.92	60.00	-15.28	LINE	QP
12	16.835	35.99	0.80	35.19	50.00	-14.01	LINE	AVERAGE

Note:

1. Emission Level = reading value + correction factor.
2. Correction factor = cable loss + insertion loss of LISN.
3. Q.P. is abbreviation of quasi-peak.

Test Mode : Normal
Test Voltage : 120V/60Hz to the connected PC
Tester : Kent **Temperature** : 27°C
Humidity : 50%RH **Frequency Range** : 150kHz~30MHz
IF Bandwidth : 9kHz **Phase** : Neutral



	Freq	Level	Factor	Read Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB		
1	0.338	31.83	0.18	31.65	59.24	-27.42	NEUTRAL	QP
2	0.338	29.77	0.18	29.59	49.24	-19.48	NEUTRAL	AVERAGE
3	0.676	31.83	0.21	31.62	56.00	-24.17	NEUTRAL	QP
4	0.676	21.39	0.21	21.18	46.00	-24.61	NEUTRAL	AVERAGE
5	0.744	34.62	0.21	34.41	56.00	-21.38	NEUTRAL	QP
6	0.744	23.26	0.21	23.05	46.00	-22.74	NEUTRAL	AVERAGE
7	0.812	30.91	0.21	30.70	56.00	-25.09	NEUTRAL	QP
8	0.812	22.90	0.21	22.69	46.00	-23.10	NEUTRAL	AVERAGE
9	9.469	34.60	0.52	34.08	60.00	-25.40	NEUTRAL	QP
10	9.469	27.28	0.52	26.76	50.00	-22.72	NEUTRAL	AVERAGE
11	16.835	44.80	0.83	43.97	60.00	-15.20	NEUTRAL	QP
12	16.835	36.22	0.83	35.39	50.00	-13.78	NEUTRAL	AVERAGE

Note:

1. Emission Level = reading value + correction factor.
2. Correction factor = cable loss + insertion loss of LISN.
3. Q.P. is abbreviation of quasi-peak.

3. Radiated Emission Measurement

Test Result : PASS

3.1 Limits for Emission Measurement

☒ Limits for radiated disturbances below 1000MHz

Frequency (MHz)	Class A Equipment (10m distance)	Class B Equipment (3m distance)
	Quasi-peak (dB μ V/m)	Quasi-peak (dB μ V/m)
30 to 88	39.1	40
88 to 216	43.5	43.5
216 to 960	46.4	46
960 to 1000	49.5	54
Note 1- The lower limit shall apply at the transition frequency.		
Note 2- Additional provisions may be required for cases where interference occurs.		
Note 3- According to 15.109(g), as an alternative to the radiated emission limits shown above, digital devices may be shown to comply with the standards (CISPR), Pub. 22 shown as below.		
30 to 230	40	30
230 to 1000	47	37

☒ Limits for radiated disturbances above 1000MHz at a measuring distance of 3m

Frequency (GHz)	Class A Equipment		Class B Equipment	
	Peak (dB μ V/m)	Average (dB μ V/m)	Peak (dB μ V/m)	Average (dB μ V/m)
1 to 40	80	60	74	54

3.2 Test Instruments

☒ Below 1GHz measurement

Test Site and Equipment	Manufacturer	Model No./ Serial No.	Last Calibration Date	Calibration Due Date
EMI Test Receiver	R&S	ESCS 30/ 836858/020	Sept. 9, 2013	Sept. 9, 2014
Broadband Antenna	R&S	HL-562/ 360543/007	March 27, 2013	March 27, 2014
Broadband Antenna	R&S	HL-562/ 830547/010	April 30, 2013	April 30, 2014
Pre-Amplifier	Mini Circuit	ZKL-2/ 001	July 15, 2013	Jan. 15, 2014
Pre-Amplifier	Mini Circuit	ZKL-2/ 002	July 15, 2013	Jan. 15, 2014
Spectrum Analyzer	R&S	FSP7/ 100108	August 19, 2013	August 19, 2014
Spectrum Analyzer	R&S	FSP7/ 100384	Jan. 10, 2013	Jan. 10, 2014
RF Cable	JYEBAO	0214/ C0049	July 15, 2013	Jan. 15, 2014
RF Cable	JYEBAO	0214/ C0050	July 15, 2013	Jan. 15, 2014
Test Software	Audix	e3/ Ver. 4.3.714.e	NCR	NCR
TR1 Semi - anechoic Chamber	ETS. LINDGREN	TR1/ 17627-B	May 4, 2013	May 4, 2014

Note:

1. The calibrations are traceable to NML/ROC.
2. NCR : No Calibration Required.
3. The calibration date of the chamber TR1 listed above is the date of NSA measurement.

☒ Above 1GHz measurement (TR1)

Test Site and Equipment	Manufacturer	Model No./ Serial No.		Last Calibration Date	Calibration Due Date
Horn Antenna	EMCO	3117/ 00082847		March 5, 2013	March 5, 2014
Bore-sight Antenna Mast	Sunol	TLT2/ 051110-5		NCR	NCR
Pre-Amplifier	KMIC	<input type="checkbox"/>	KMA010180A01/ 99056	Oct. 17, 2013	Oct. 17, 2014
	MITEQ	<input checked="" type="checkbox"/>	JS4-00101800- 28-10P/1498979	Dec. 21, 2012	Dec. 21, 2013
		<input checked="" type="checkbox"/>	JS4-00101800- 28-5A/742309	Dec. 19, 2012	Dec. 19, 2013
Spectrum Analyzer	R&S	FSP40/ 100031		July 15, 2013	July 15, 2014
RF Cable	Suhner	Sucoflex 106P / C0091 + C0092		Oct. 14, 2013	April 14, 2014
Test Software	Audix	e3/ Ver. 4.3.714.e		NCR	NCR
TR1 Fully - anechoic Chamber	ETS. LINDGREN	TR1/ 17627-B		Feb. 23, 2013	Feb. 23, 2014

Note:

1. The calibrations are traceable to NML/ROC.
2. NCR : No Calibration Required.
3. The calibration date of the chamber TR1 listed above is the date of site VSWR measurement.

Measurement Uncertainty

The assessed measurement uncertainty with a suitable coverage factor K to ensure 95% confidence level for the normal distribution are shown as below, the values are less than U_{cispr} in table 1 of CISPR 16-4-2.

Test Site (Measuring distance)	Polarization	Frequency Range	
		30MHz ~200MHz	200MHz ~1000MHz
TR1(10m)	Horizontal	3.7dB	3.7dB
	Vertical	3.5dB	3.9dB
TR11(3m)	Horizontal	3.3dB	3.8dB
	Vertical	4.1dB	5.1dB

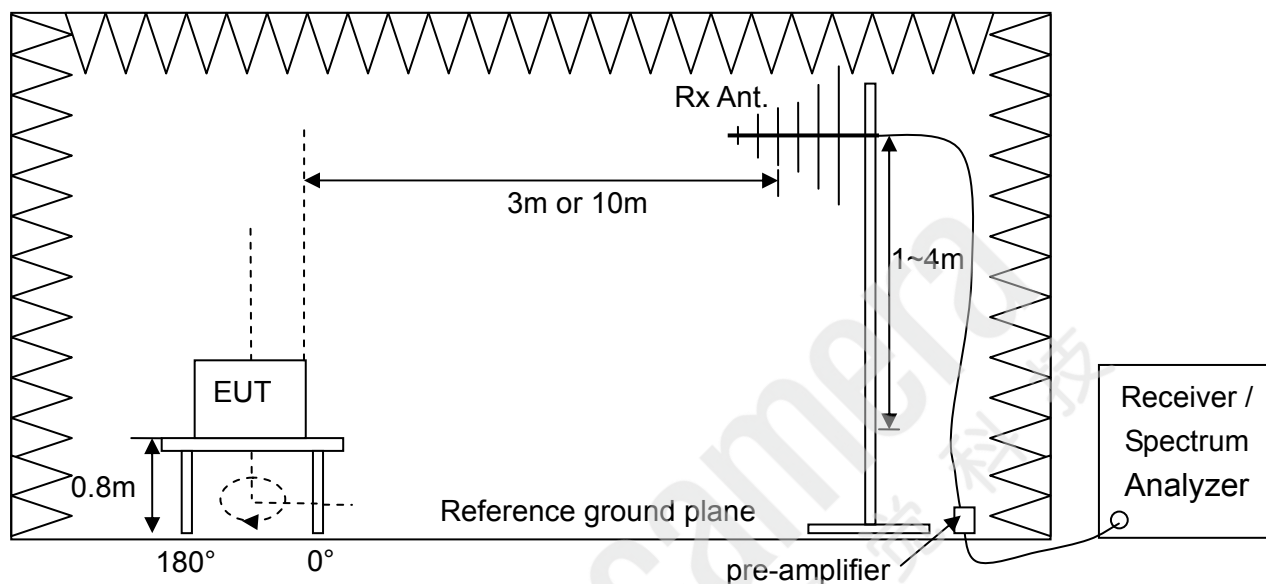
Test Site (Measuring distance)	Polarization	Frequency Range	
		1GHz~6GHz	6GHz~18GHz
TR1(3m)	Horizontal	4.8dB	4.9dB
	Vertical	4.8dB	4.8dB

3.3 Test Procedures

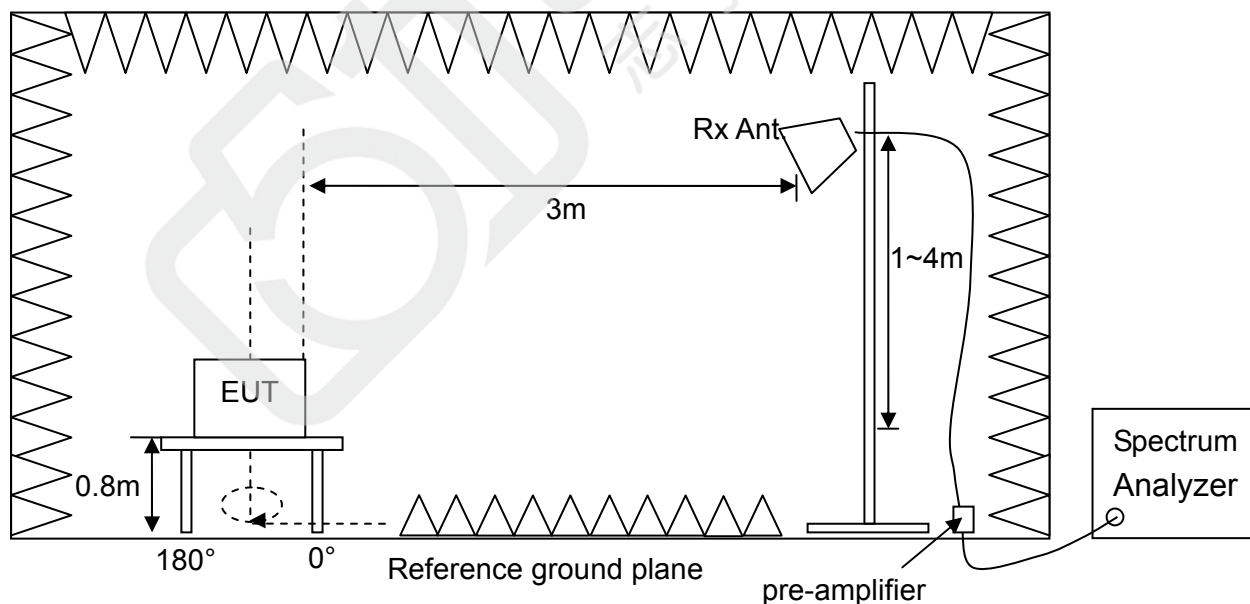
- a. The EUT was set up per the test configuration figured in the next section of this chapter to simulate the typical usage per the user's manual.
- b. If the EUT is tabletop equipment, it was placed on a non-conducted table with a height of 0.8 meters above the reference ground plane in the semi-anechoic chamber. If the EUT is floor-standing equipment, it was placed on a non-conducted support with a height of 12 millimeters above the reference ground plane in the semi-anechoic chamber.
- c. For the measurement of frequency below 1000MHz, the EUT was set 10m away from the interference receiving antenna for the limit of Class A equipment or CISPR 22. For Class B equipment and the measurement of frequency above 1000MHz, the EUT was set 3m away from the interference receiving antenna.
- d. Rapidly sweep the signal in the test frequency range by using the spectrum through the Maximum-peak detector.
- e. Rotate the EUT from 0° to 360° and position the receiving antenna at heights from 1 to 4 meters above the reference ground plane continuously to determine at least six frequencies associated with higher emission levels and record them.
- f. For measurement of frequency above 1000MHz, the beamwidth of receiving horn antenna should keep covering EUT when the receiving horn antenna height varied.
- g. Then measure each frequency found from step e. by using the spectrum with rotating the EUT and positioning the receiving antenna height to determine the maximum level.
- h. Finely tune the antenna and turntable around the recorded position of each frequency found from step f.
- i. For measurement of frequency below 1000MHz, set the receiver detector to be Quasi-Peak per CISPR 16-1 to find out the maximum level occurred.
- j. For measurement of frequency above 1000MHz, set the spectrum detector to be Peak or Average to find out the maximum level occurred, if any.
- k. Record frequency, azimuth angle of the turntable, height, and polarization of the receiving antenna and compare the maximum level with the required limit.
- l. Change the receiving antenna to another polarization to measure radiated emission by following step d. to k. again.
- m. If the peak emission level measured from step e. is 4dB lower than the limit specified, then the emission values presented will be the peak value only. Otherwise, accurate Q.P. value will be measured and presented.

3.4 Test Configurations

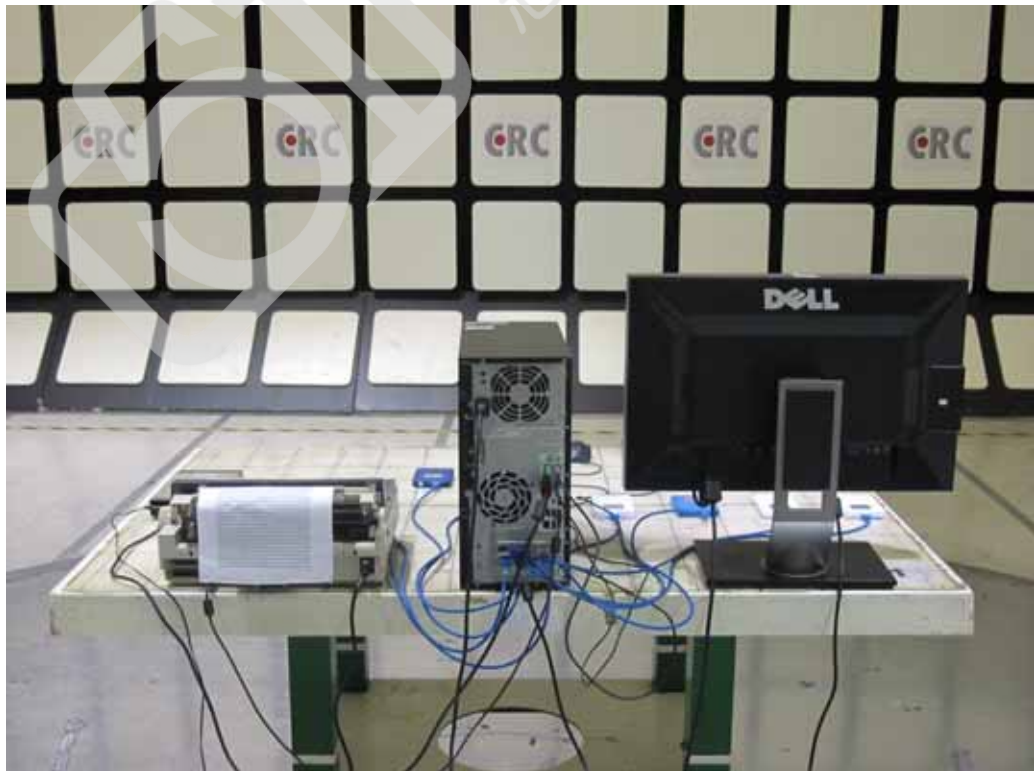
Radiated Emission Measurement below 1000MHz



Radiated Emission Measurement above 1000MHz



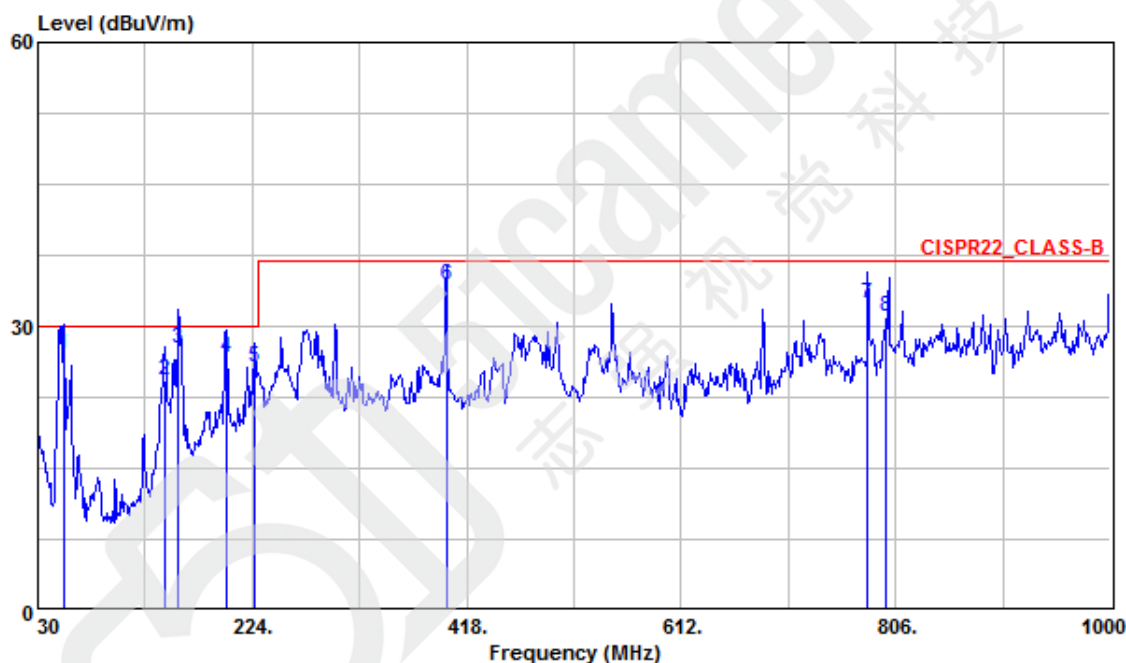
3.5 Photographs of the Test Configurations



3.6 Test Results

Radiated Emission Measurement below 1000MHz

Test Mode : Normal
Test Voltage : 120V/60Hz to the connected PC
Tester : Carl **Temperature** : 23°C
Humidity : 69%RH **Frequency Range** : 30MHz~1GHz
IF Bandwidth : 120kHz **Polarization** : Horizontal

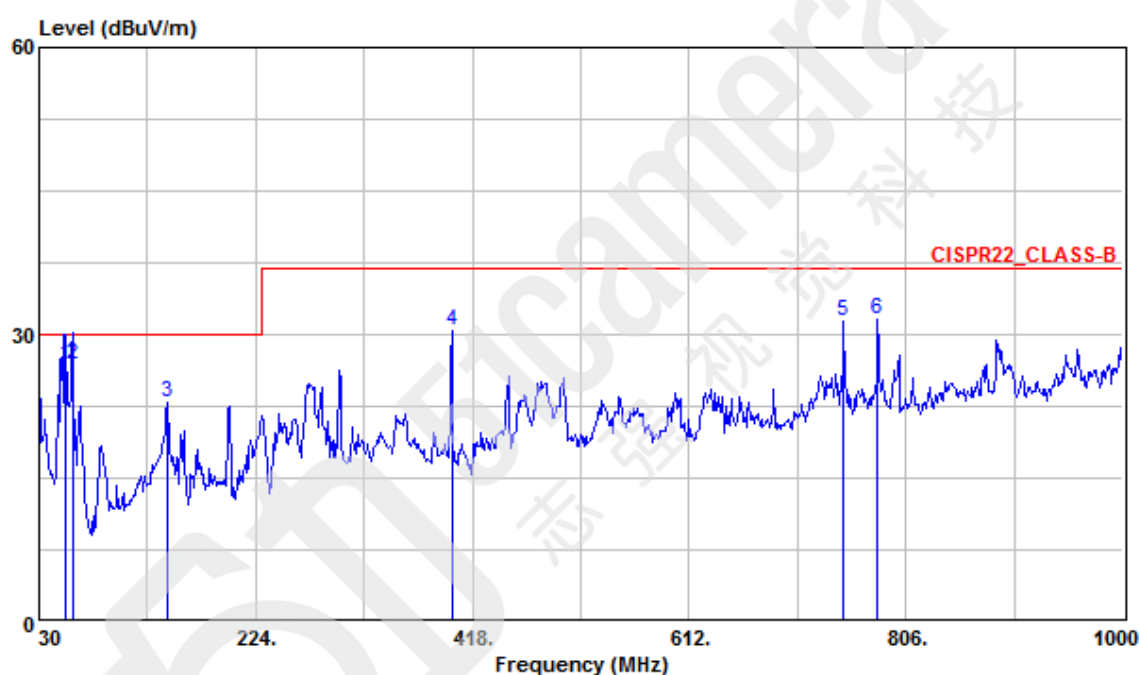


	Freq	Level	Read	Limit	Over	Ant	Table		
	MHz	dBuV/m	Level	Line	Limit	Pos	Pos	Pol/Phase	Remark
			dBuV	dB/m	dBuV/m	dB	cm	deg	
1 @	53.420	27.08	49.25	-22.17	30.00	-2.92	363	16	HORIZONTAL QP
2	144.340	24.24	45.20	-20.96	30.00	-5.76	336	127	HORIZONTAL QP
3 @	157.070	27.64	48.98	-21.34	30.00	-2.36	257	93	HORIZONTAL QP
4	199.982	26.65	47.16	-20.51	30.00	-3.35	294	203	HORIZONTAL QP
5	226.080	25.62	44.82	-19.20	30.00	-4.38	227	64	HORIZONTAL QP
6 @	399.931	34.44	47.60	-13.16	37.00	-2.56	310	181	HORIZONTAL QP
7	780.886	32.33	38.12	-5.79	37.00	-4.67	317	245	HORIZONTAL QP
8	796.660	30.96	36.50	-5.54	37.00	-6.04	304	231	HORIZONTAL QP

Note:

1. Emission Level = reading value + correction factor.
2. Correction factor = cable loss + antenna factor – gain of pre-amplifier.
3. Q.P is abbreviation of quasi-peak.

Test Mode : Normal
Test Voltage : 120V/60Hz to the connected PC
Tester : Carl **Temperature** : 23°C
Humidity : 69%RH **Frequency Range** : 30MHz~1GHz
IF Bandwidth : 120kHz **Polarization** : Vertical



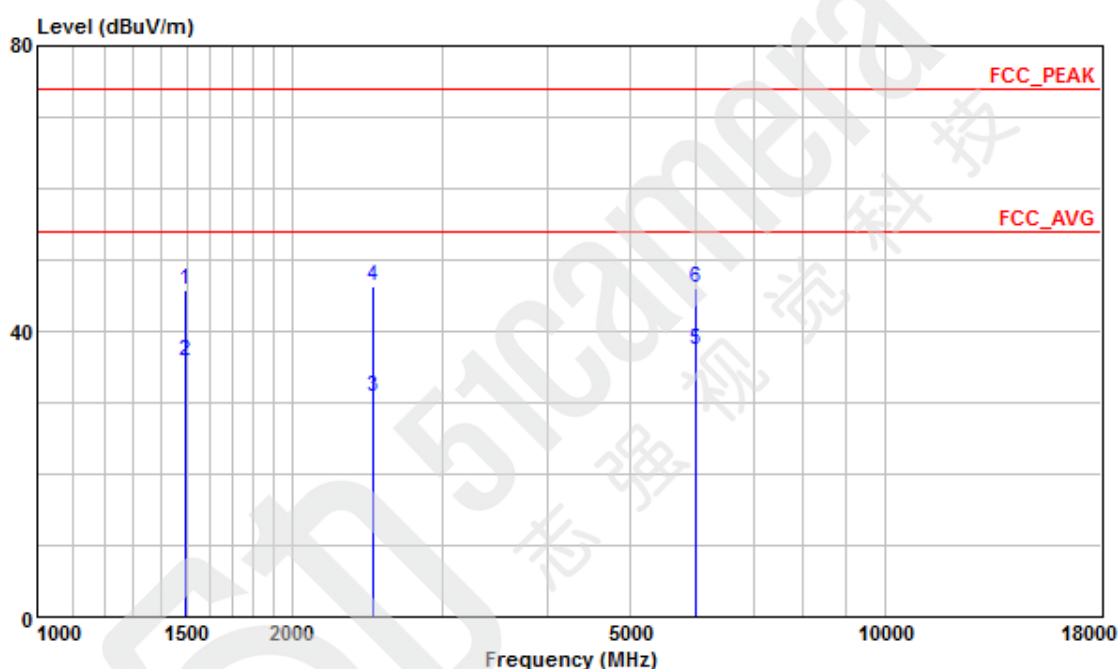
	Freq	Level	Read	Limit	Over	Ant	Table		
	MHz	dBuV/m	Level	Factor	Line	Limit	Pos	Pos	Pol/Phase
			dBuV	dB/m	dBuV/m	dB	cm	deg	Remark
1	53.430	26.83	48.69	-21.86	30.00	-3.17	351	0	VERTICAL
2 @	59.980	26.86	50.54	-23.68	30.00	-3.14	377	41	VERTICAL
3	144.460	22.85	43.14	-20.29	30.00	-7.15	---	---	VERTICAL
4	399.570	30.36	43.02	-12.66	37.00	-6.64	---	---	VERTICAL
5	750.710	31.36	36.41	-5.05	37.00	-5.64	---	---	VERTICAL
6	780.780	31.50	36.18	-4.68	37.00	-5.50	---	---	VERTICAL

Note:

1. Emission Level = reading value + correction factor.
2. Correction factor = cable loss + antenna factor – gain of pre-amplifier.
3. Q.P is abbreviation of quasi-peak.

Radiated Emission Measurement above 1000MHz

Test Mode : Normal
Test Voltage : 120V/60Hz to the connected PC
Tester : Carl **Temperature** : 26°C
Humidity : 69%RH **Frequency Range** : 1GHz~24GHz
IF Bandwidth : 1MHz **Polarization** : Horizontal



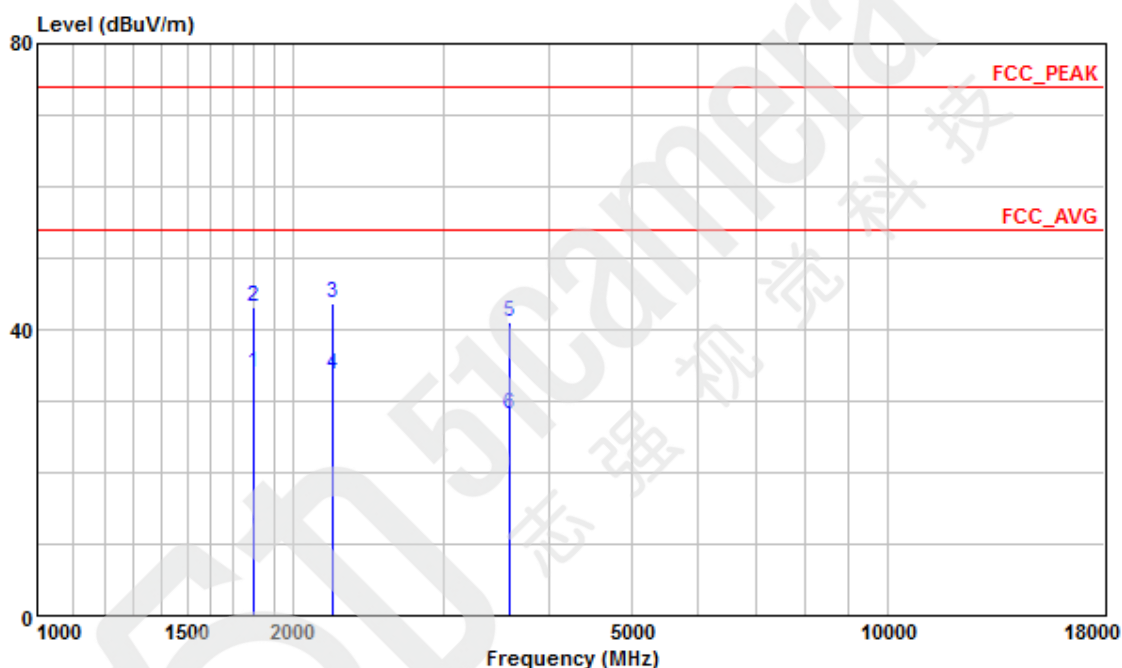
	Freq	Level	Read Level	Factor	Limit Line	Over Limit	Ant Pos	Table Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	1493.460	45.67	89.15	-43.48	74.00	-28.33	138	334	HORIZONTAL	Peak
2	1494.600	35.82	79.30	-43.48	54.00	-18.18	135	331	HORIZONTAL	Average
3	2495.200	30.91	68.70	-37.79	54.00	-23.09	288	103	HORIZONTAL	Average
4	2496.440	46.37	84.16	-37.79	74.00	-27.63	282	99	HORIZONTAL	Peak
5	5997.500	37.31	69.20	-31.89	54.00	-16.69	284	100	HORIZONTAL	Average
6	5998.160	45.99	77.88	-31.89	74.00	-28.01	288	104	HORIZONTAL	Peak

Note:

1. Emission Level = reading value + correction factor.
2. Correction factor = cable loss + antenna factor – gain of pre-amplifier.

No signal can be detected from 18GHz to 25GHz, so the graphs are omitted above 18GHz.

Test Mode : Normal
Test Voltage : 120V/60Hz to the connected PC
Tester : Carl **Temperature** : 26°C
Humidity : 69%RH **Frequency Range** : 1GHz~24GHz
IF Bandwidth : 1MHz **Polarization** : Vertical



	Freq	Level	Read Level	Factor	Limit	Over Limit	Ant Pos	Table Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	1797.400	34.00	74.70	-40.70	54.00	-20.00	174	177	VERTICAL	Average
2	1799.460	43.29	83.96	-40.67	74.00	-30.71	176	174	VERTICAL	Peak
3	2224.160	43.56	82.12	-38.56	74.00	-30.44	299	358	VERTICAL	Peak
4	2225.800	33.65	72.19	-38.54	54.00	-20.35	296	355	VERTICAL	Average
5	3601.160	41.15	77.75	-36.60	74.00	-32.85	232	167	VERTICAL	Peak
6	3602.700	28.21	64.81	-36.60	54.00	-25.79	235	163	VERTICAL	Average

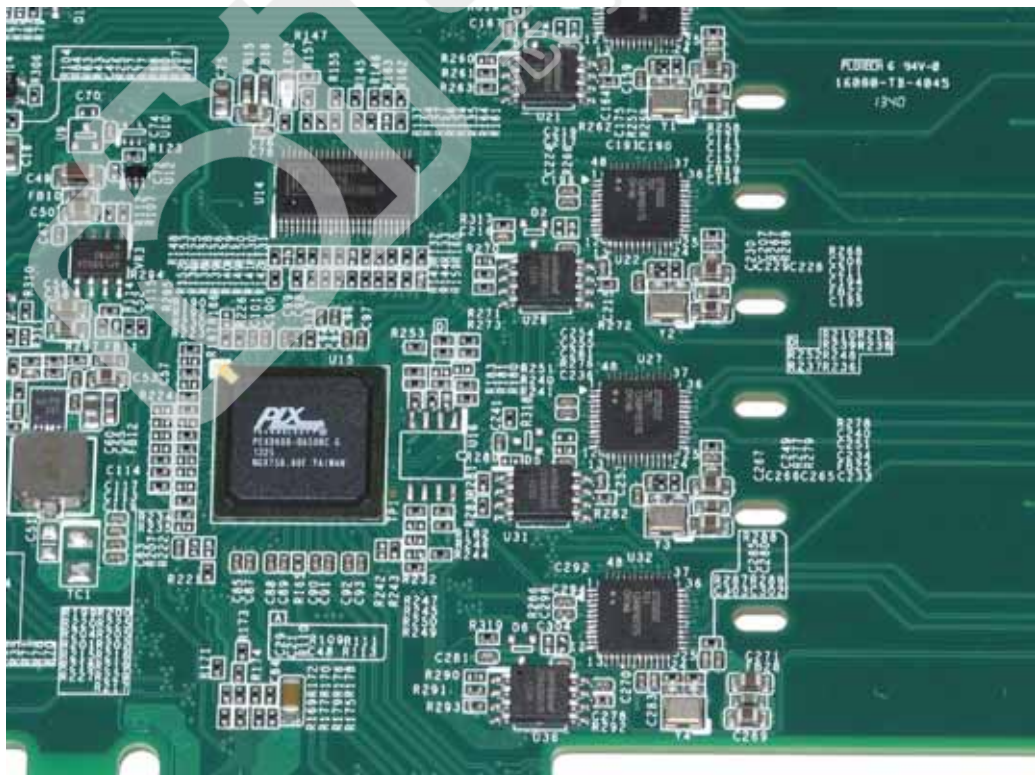
Note:

1. Emission Level = reading value + correction factor.
2. Correction factor = cable loss + antenna factor – gain of pre-amplifier.

No signal can be detected from 18GHz to 25GHz, so the graphs are omitted above 18GHz.

Attachment 1
Photographs of EUT





Attachment 2

Modifications of EUT

Statement of the EUT Modifications

According to the rules of ANSI C63.4-2009 clause 10.2.13, the following equipment (EUT):

Equipment Under Test : PCIE-USB380,PCIE-USB340
Model No. : PCIE-USB380,PCIE-USB340
Applicant : Neousys Technology
Address : 15F, No.868-3, Zhongzheng Rd., Zhonghe Dist., New Taipei City 23586, Taiwan

☐ should be without any modifications made

☐ should be with some modifications made

to bring the EUT into compliance with the appropriate specifications (47CFR Part 15, Subpart B). If any, the details of the modifications including the complete descriptions, reasons and so on are described in next page of this report.

We , Neousys Technology hereby ensure that the product specified above will have all of the modifications incorporated in the product when manufactured and placed on the market.

The following importer or manufacturer is responsible for this statement:

Company Name : _____

Company Address : _____

Telephone : _____ E-mail : _____

Legal Signature of the responsible personal:

Title / Name (full name)

Date

The details of the modifications:

Item	Solution Component	Specifications	Manufacturer	Quantity	Reasons
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

If needed, some modification items are shown in the photographs in the following.