

# FCC Test Report

**Equipment** : R6100 WiFi Router, R6000 WiFi Router  
**Brand Name** : NETGEAR  
**Model No.** : R6100, R6000  
**Standard** : 47 CFR FCC Part 15B  
Canada Standard ICES-003 Issue 5  
**Device Class** : Class B  
**Applicant** : NETGEAR, Inc.  
**Manufacturer** : 350 East Plumeria Drive, San Jose,  
California 95134, USA

The product sample received on Mar. 06, 2013 and completely tested on Apr. 22, 2013. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.4-2009 and shown compliance with the applicable technical standards.

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

Reviewed by:



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Jordan Hsiao  
Assistant Manager





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### Summary of Test Result

Conformance Test Specifications					
Report Clause	Ref. Std. Clause	Description	Measured	Limit	Result
3.1	15.107	AC Power-line Conducted Emissions	[dBuV]: 0.17491300MHz 43.21 (Margin 11.51dB) - AV 49.61 (Margin 15.11dB) - QP	Ref. 3.1.1	Complied
3.2	15.109	Radiated Emissions	[dBuV/m at 10m]: 749.600MHz 32.41 (Margin 4.59dB) - PK	Ref. 3.2.1	Complied



### Revision History

Report No.	Version	Description	Issued Date
FD330625	Rev. 01	Initial issue of report	Apr. 22, 2013



# 1 General Description

## 1.1 Information

### 1.1.1 Equipment Authorization Category

FCC Equipment Authorization of Unintentional Radiators Category	
<input checked="" type="checkbox"/>	Class B personal computers and peripherals: Declaration of Conformity or Certification
<input type="checkbox"/>	Class A personal computers and peripherals: Verification
<input type="checkbox"/>	Receivers operation above 960 MHz or below 30 MHz, except for radar detectors and CB receivers, do not require equipment authorization (verification, Declaration of Conformity, or certification)
<input checked="" type="checkbox"/>	Receivers operation within 30 MHz to 960 MHz, except for radar detectors and CB receivers, require equipment authorization (Declaration of Conformity)

### 1.1.2 RF General Information

RF General Information	
Frequency Range (MHz)	Evaluation Mode
2400-2483.5	2.4GHz WLAN
5150-5250 / 5725-5850	5GHz WLAN

### 1.1.3 Antenna Information

Antenna Category	
<input checked="" type="checkbox"/>	Integral antenna (antenna permanently attached)
<input type="checkbox"/>	External antenna (dedicated antennas)

### 1.1.4 Type of EUT

Identify EUT	
EUT Serial Number	N/A
Presentation of Equipment	<input type="checkbox"/> Production ; <input checked="" type="checkbox"/> Pre-Production ; <input type="checkbox"/> Prototype
Type of EUT	
<input checked="" type="checkbox"/>	Stand-alone
<input type="checkbox"/>	Combined (EUT where the radio part is fully integrated within another device) Combined Equipment - Brand Name / Model No.: ...
<input type="checkbox"/>	Plug-in radio (EUT intended for a variety of host systems) Host System - Brand Name / Model No.: ...
<input type="checkbox"/>	Other:

### 1.1.5 EUT Operational Condition

Supply Voltage	<input checked="" type="checkbox"/> AC mains	<input type="checkbox"/> DC	
Type of DC Source	<input type="checkbox"/> Internal DC supply	<input type="checkbox"/> Host	<input type="checkbox"/> Battery

### 1.2 Table for Product Listing

No.	Brand Name	Model Name	Product Name	Descriptions
1	NETGEAR	R6100	R6100 WiFi Router	2.4G, 2T2R 5.0G, 2T2R
2	NETGEAR	R6000	R6000 WiFi Router	2.4G, 2T2R 5.0G, 1T1R

Note: Both models are with the same hardware. Difference of 5GHz chain function is using software setting not by hardware modified. After pretested, model R6100 was the worst case for final test.

### 1.3 Accessories and Support Equipment

Accessories					
No.	Equipment	Brand Name	Model Name	P/N	Spec.
1	Adapter 1	NETGEAR	AD817F20	332-10307-02	I/P:100-240Vac, 50~60Hz, 0.56A O/P:12Vdc, 1.5A Power cord: 1.85m non-shielded cable w/o core
2	Adapter 2	NETGEAR	SAL018F1 NA	332-10375-01	I/P:100-120Vac, 47~63Hz, 0.6A O/P:12Vdc, 1.5A Power cord: 1.85m non-shielded cable w/o core
3	Adapter 3	NETGEAR	MU18-D1201 50-A1	332-10268-01	I/P:100-240Vac, 50~60Hz, 0.6A O/P:12Vdc, 1.5A Power cord: 1.85m non-shielded cable w/o core
4	Adapter 4	NETGEAR	AD817F10	332-10301-02	I/P:100-120Vac, 50~60Hz, 0.56A O/P:12Vdc, 1.5A Power cord: 1.85m non-shielded cable w/o core
5	RJ45 Cable	---	---	---	1.5m shielded cable w/o core

Support Equipment				
No.	Equipment	Brand Name	Model Name	Serial No.
1	Notebook	DELL	Latitude E5430	DoC
2	USB Flash	Transcend	JetFlash V85	---
3	Printer	EPSON	XP-30	---
4	Mouse	DELL	MS111-L	---
5	NB x2 (at remote station)	DELL	Latitude E5430	DoC

## 1.4 Testing Applied Standards

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

- ◆ 47 CFR FCC Part 15B
- ◆ Canada Standard ICES-003 Issue 5
- ◆ ANSI C63.4-2009

## 1.5 Testing Location Information

Testing Location				
<input checked="" type="checkbox"/>	HWA YA	ADD : No. 52, Hwa Ya 1 <sup>st</sup> Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.		
		TEL : 886-3-327-3456	FAX : 886-3-327-0973	
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Bill Hsiao	22°C / 54%	Apr. 17, 2013
Radiated Emission below 1GHz	10CH01-HY	Daniel Hsu	18°C / 66%	Apr. 22, 2013
Radiated Emission below 1GHz	03CH03-HY	Daniel Hsu	21°C / 53%	Apr. 22, 2013

## 1.6 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

Measurement Uncertainty			
Test Item		Uncertainty	Limit
AC power-line conducted emissions		±2.26 dB	N/A
All emissions, radiated	30 – 1000 MHz	±2.56 dB	N/A
	1 – 18 GHz	±3.59 dB	N/A
	18 – 40 GHz	±3.82 dB	N/A
	40 – 200 GHz	N/A	N/A

## 2 Test Configuration of EUT

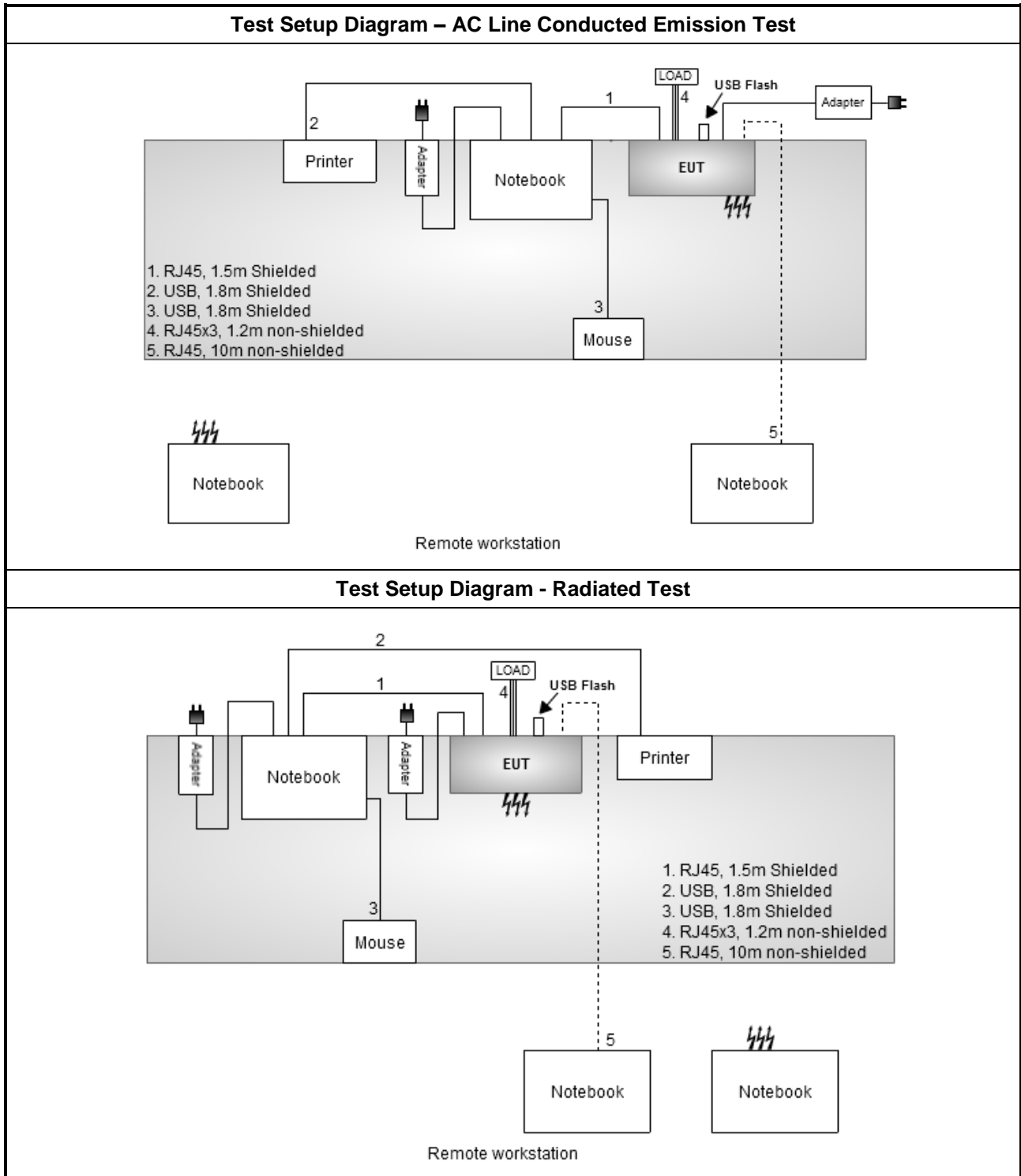
### 2.1 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
<b>Tests Item</b>	AC power-line conducted emissions
<b>Condition</b>	AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz
<b>Operating Mode</b>	<b>Operating Mode Description</b>
1	LAN / WAN: 100Mbps, Adapter 1: AD817F20
2	LAN / WAN: 100Mbps, Adapter 2: SAL018F1 NA
3	LAN / WAN: 100Mbps, Adapter 3: MU18-D120150-A1
4	LAN / WAN: 100Mbps, Adapter 4: AD817F10

The Worst Case Mode for Following Conformance Tests		
<b>Tests Item</b>	Radiated Emissions	
<b>Test Condition</b>	Radiated measurement	
<b>Search Range</b>	<b>Highest Frequency Generated or Used in Device</b>	<b>Upper Frequency of Radiated Measurement</b>
	Below 1.705MHz	No radiated testing required
	1.705MHz-108MHz	1GHz
	108MHz-500MHz	2GHz
	500MHz-1GHz	5GHz
	Above 1GHz	5th harmonic of the highest frequency or 40 GHz, whichever is lower.
<b>User Position</b>	<input checked="" type="checkbox"/> EUT will be placed in fixed position.	
	<input type="checkbox"/> EUT will be placed in mobile position and operating multiple positions. EUT shall be performed two orthogonal planes.	
	<input type="checkbox"/> EUT will be a hand-held or body-worn battery-powered devices and operating multiple positions. EUT shall be performed two or three orthogonal planes.	
<b>Operating Mode ≤1GHz</b>	<b>Operating Mode Description</b>	
1	LAN / WAN: 100Mbps, Adapter 2: SAL018F1 NA	
<b>Operating Mode &gt;1GHz</b>	<b>Operating Mode Description</b>	
1	LAN / WAN: 100Mbps, Adapter 2: SAL018F1 NA	
Note: Adapter 1, adapter 2, adapter 3 and adapter 4 had been pretested and found that the adapter 2 was the worst case and was selected for final test.		



## 2.2 Test Setup Diagram



### 3 Transmitter Test Result

#### 3.1 AC Power-line Conducted Emissions

##### 3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit (Class B)		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: \* Decreases with the logarithm of the frequency.

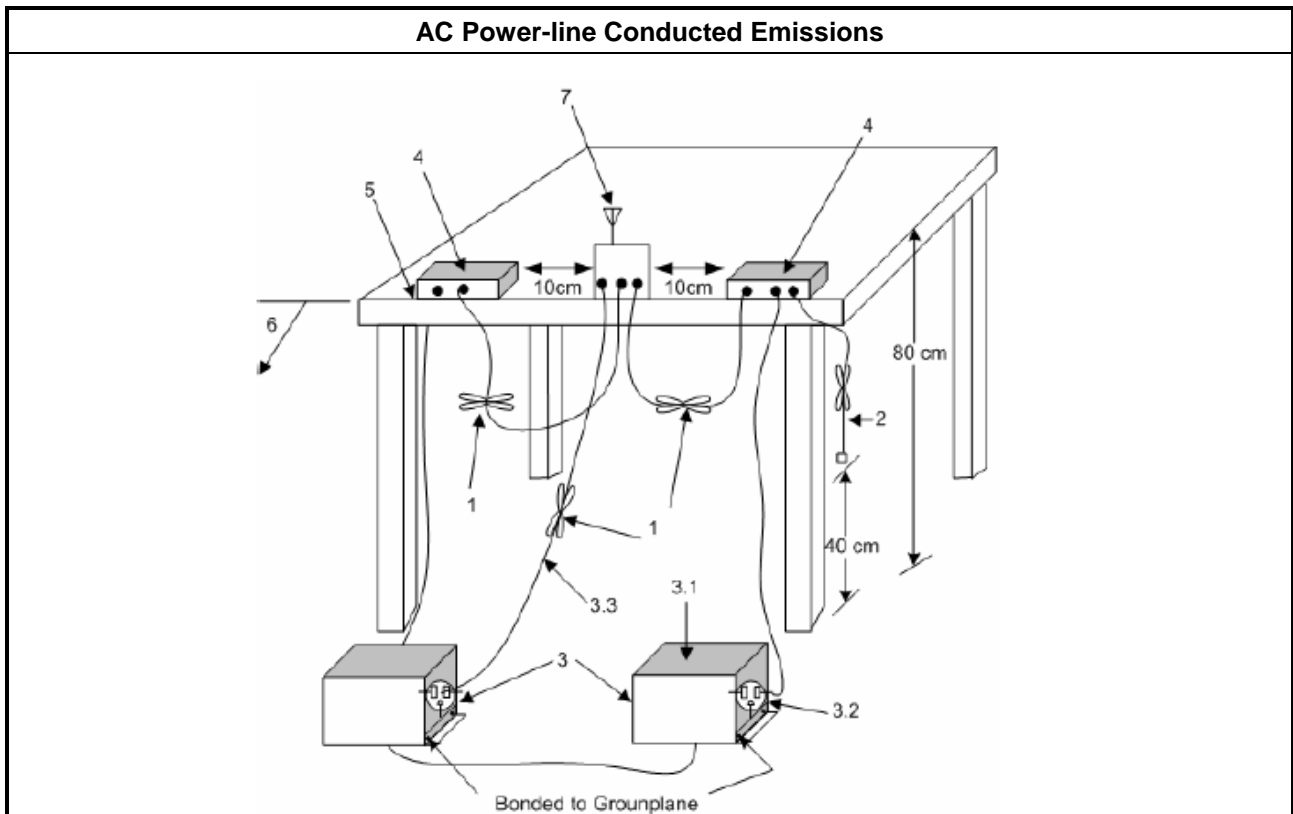
##### 3.1.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

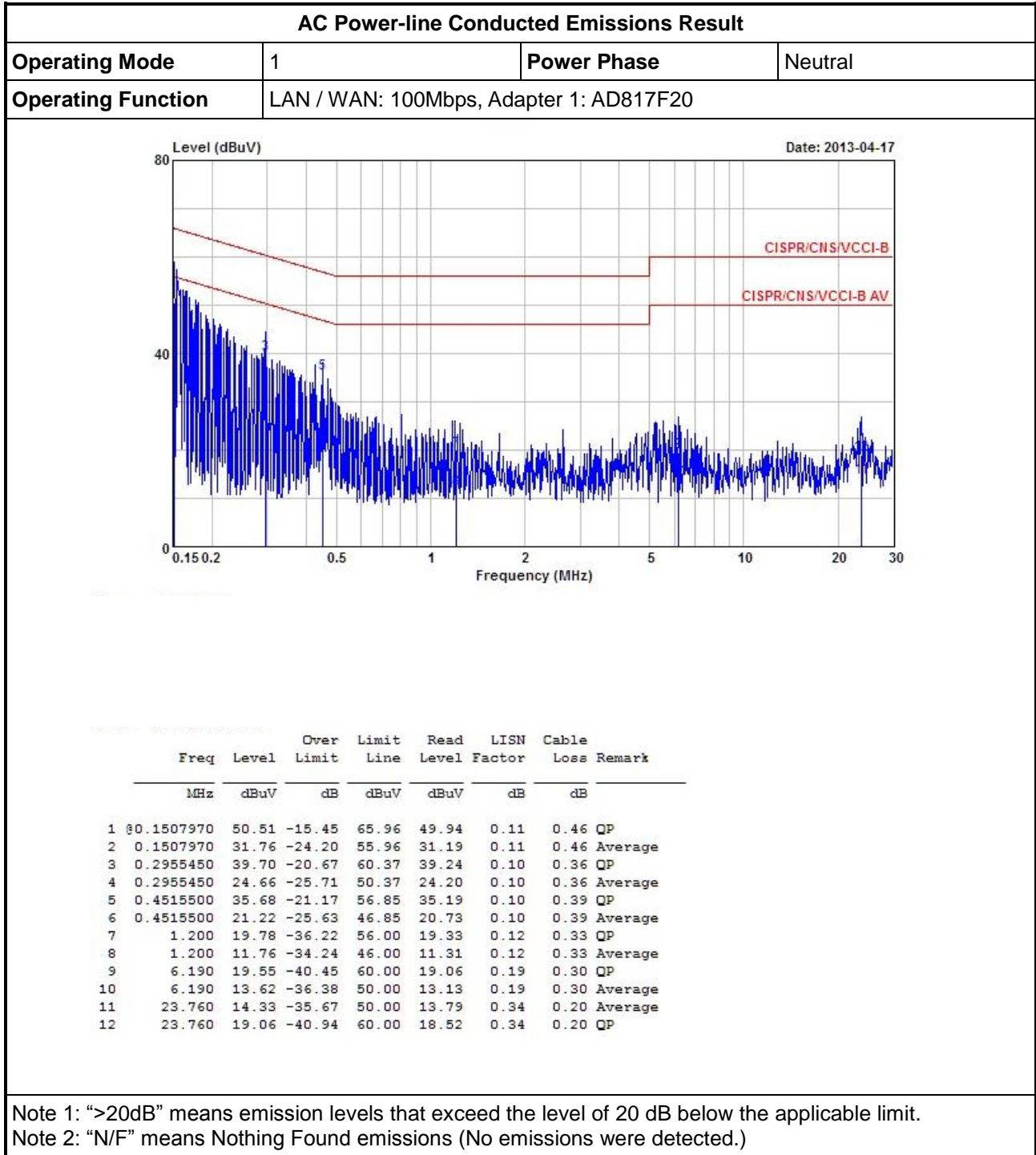
##### 3.1.3 Test Procedures

Test Method
<input checked="" type="checkbox"/> Refer as ANSI C63.4, clause 7.3 for AC power-line conducted emissions.

##### 3.1.4 Test Setup



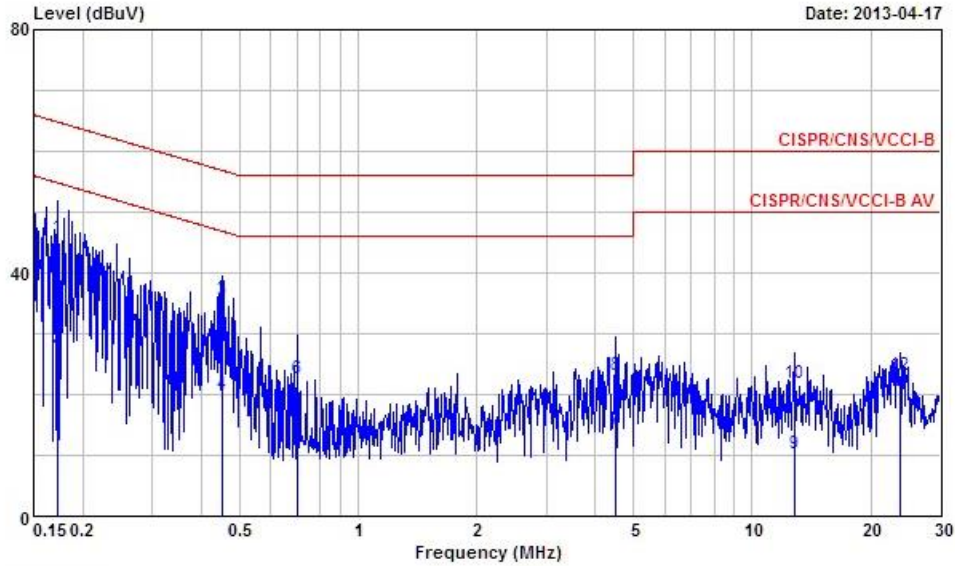
3.1.5 Test Result of AC Power-line Conducted Emissions





AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Line
Operating Function	LAN / WAN: 100Mbps, Adapter 1: AD817F20		

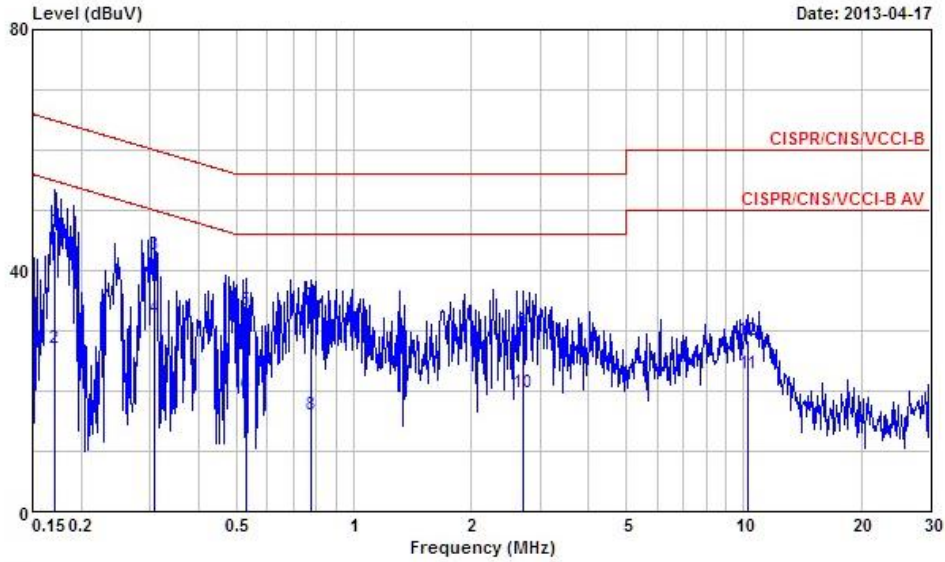


	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.1730690	45.78	-19.03	64.81	45.16	0.24	0.38	QP
2	0.1730690	27.54	-27.27	54.81	26.92	0.24	0.38	Average
3	0.4515500	35.46	-21.39	56.85	34.85	0.22	0.39	QP
4	0.4515500	19.93	-26.92	46.85	19.32	0.22	0.39	Average
5	0.7009560	13.12	-32.88	46.00	12.55	0.23	0.34	Average
6	0.7009560	22.76	-33.24	56.00	22.19	0.23	0.34	QP
7	4.500	14.27	-31.73	46.00	13.66	0.31	0.30	Average
8	4.500	23.29	-32.71	56.00	22.68	0.31	0.30	QP
9	12.780	10.27	-39.73	50.00	9.44	0.47	0.36	Average
10	12.780	21.84	-38.16	60.00	21.01	0.47	0.36	QP
11	23.760	20.62	-29.38	50.00	19.79	0.63	0.20	Average
12	23.760	23.04	-36.96	60.00	22.21	0.63	0.20	QP

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.  
 Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

AC Power-line Conducted Emissions Result

Operating Mode	2	Power Phase	Neutral
Operating Function	LAN / WAN: 100Mbps, Adapter 2: SAL018F1 NA		



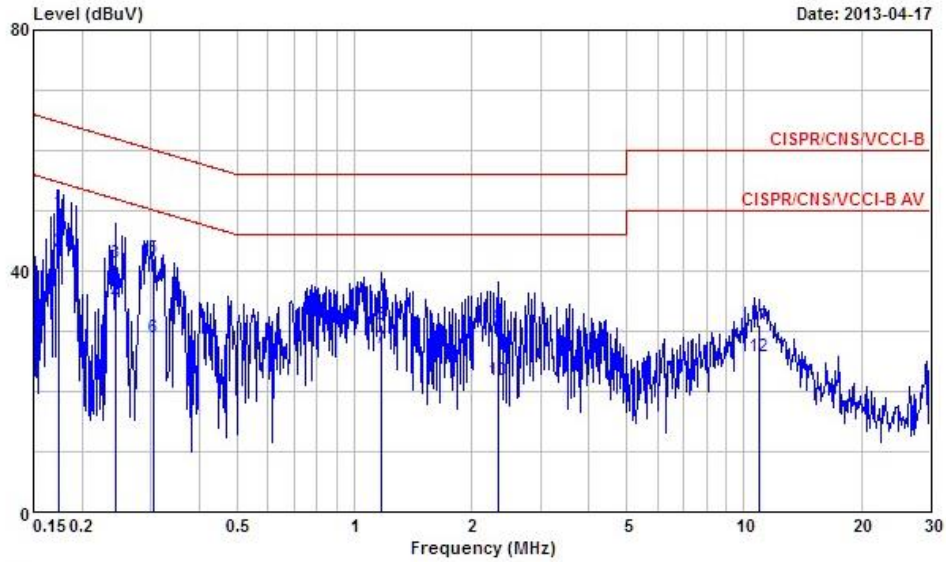
	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
			dB	dBuV	dBuV	dB	dB	
1	0.1703400	46.71	-18.23	64.94	46.21	0.11	0.39	QP
2	0.1703400	27.02	-27.92	54.94	26.52	0.11	0.39	Average
3	0.3067120	42.71	-17.35	60.06	42.25	0.10	0.36	QP
4	0.3067120	31.98	-18.08	50.06	31.52	0.10	0.36	Average
5	0.5293420	33.46	-22.54	56.00	32.99	0.10	0.37	QP
6	0.5293420	19.53	-26.47	46.00	19.06	0.10	0.37	Average
7	0.7793120	34.23	-21.77	56.00	33.79	0.11	0.33	QP
8	0.7793120	16.06	-29.94	46.00	15.62	0.11	0.33	Average
9	2.720	30.05	-25.95	56.00	29.55	0.14	0.36	QP
10	2.720	19.84	-26.16	46.00	19.34	0.14	0.36	Average
11	10.290	22.93	-27.07	50.00	22.38	0.24	0.31	Average
12	10.290	28.53	-31.47	60.00	27.98	0.24	0.31	QP

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.  
 Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)



AC Power-line Conducted Emissions Result

Operating Mode	2	Power Phase	Line
Operating Function	LAN / WAN: 100Mbps, Adapter 2: SAL018F1 NA		



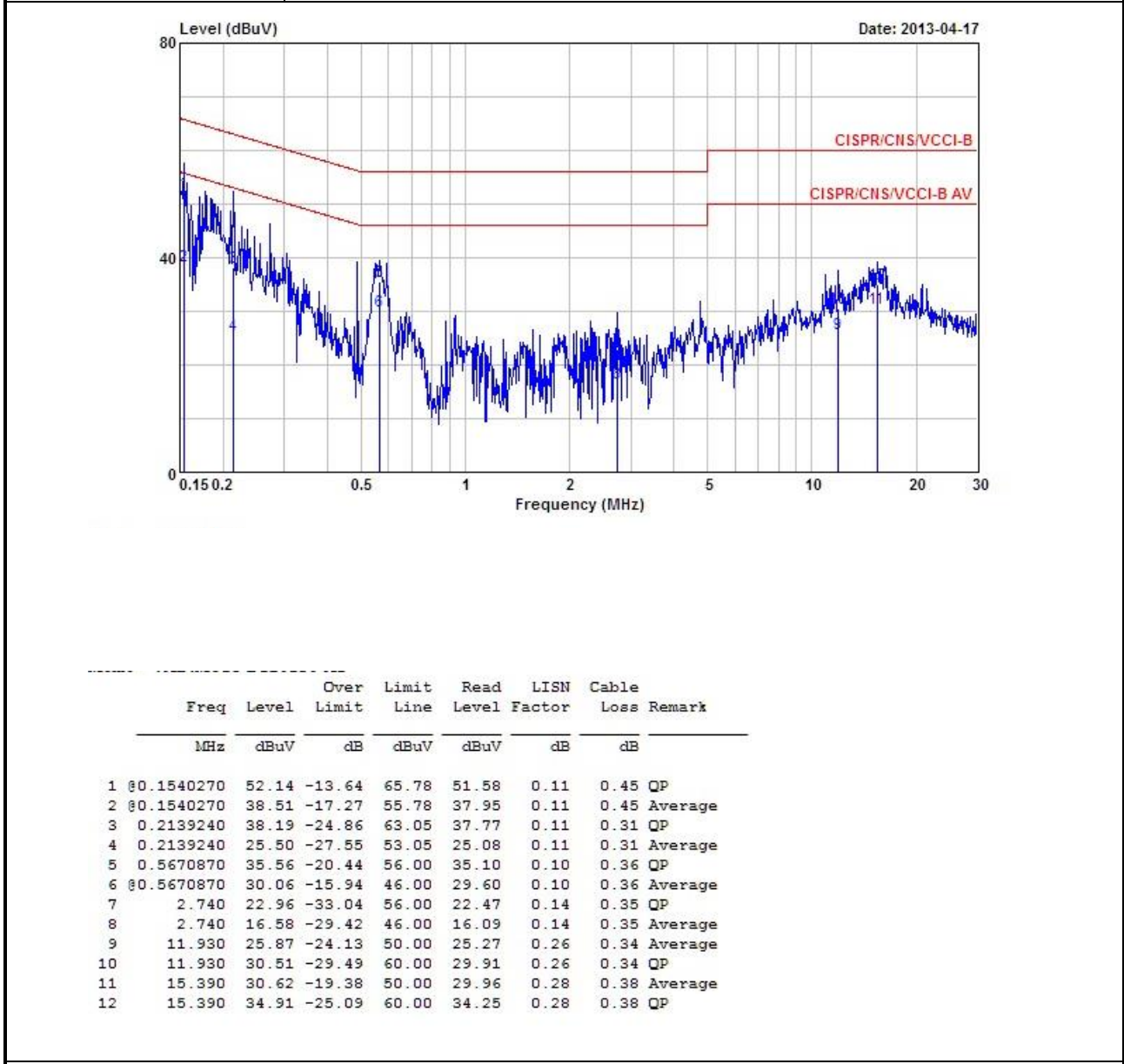
	Freq	Level	Over	Limit	Read	LISN	Cable	Remark
	MHz	dBuV	Limit	Line	Level	Factor	Loss	
			dB	dBuV	dBuV	dB	dB	
1	0.1749130	49.61	-15.11	64.72	49.00	0.23	0.38	QP
2	0.1749130	43.21	-11.51	54.72	42.60	0.23	0.38	Average
3	0.2429320	41.22	-20.78	62.00	40.66	0.23	0.33	QP
4	0.2429320	34.77	-17.23	52.00	34.21	0.23	0.33	Average
5	0.3050910	42.20	-17.90	60.10	41.62	0.22	0.36	QP
6	0.3050910	28.90	-21.20	50.10	28.32	0.22	0.36	Average
7	1.170	27.20	-18.80	46.00	26.65	0.23	0.32	Average
8	1.170	31.07	-24.93	56.00	30.52	0.23	0.32	QP
9	2.350	30.65	-25.35	56.00	30.01	0.26	0.38	QP
10	2.350	21.84	-24.16	46.00	21.20	0.26	0.38	Average
11	10.960	31.10	-28.90	60.00	30.34	0.44	0.32	QP
12	10.960	25.72	-24.28	50.00	24.96	0.44	0.32	Average

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.  
 Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)



**AC Power-line Conducted Emissions Result**

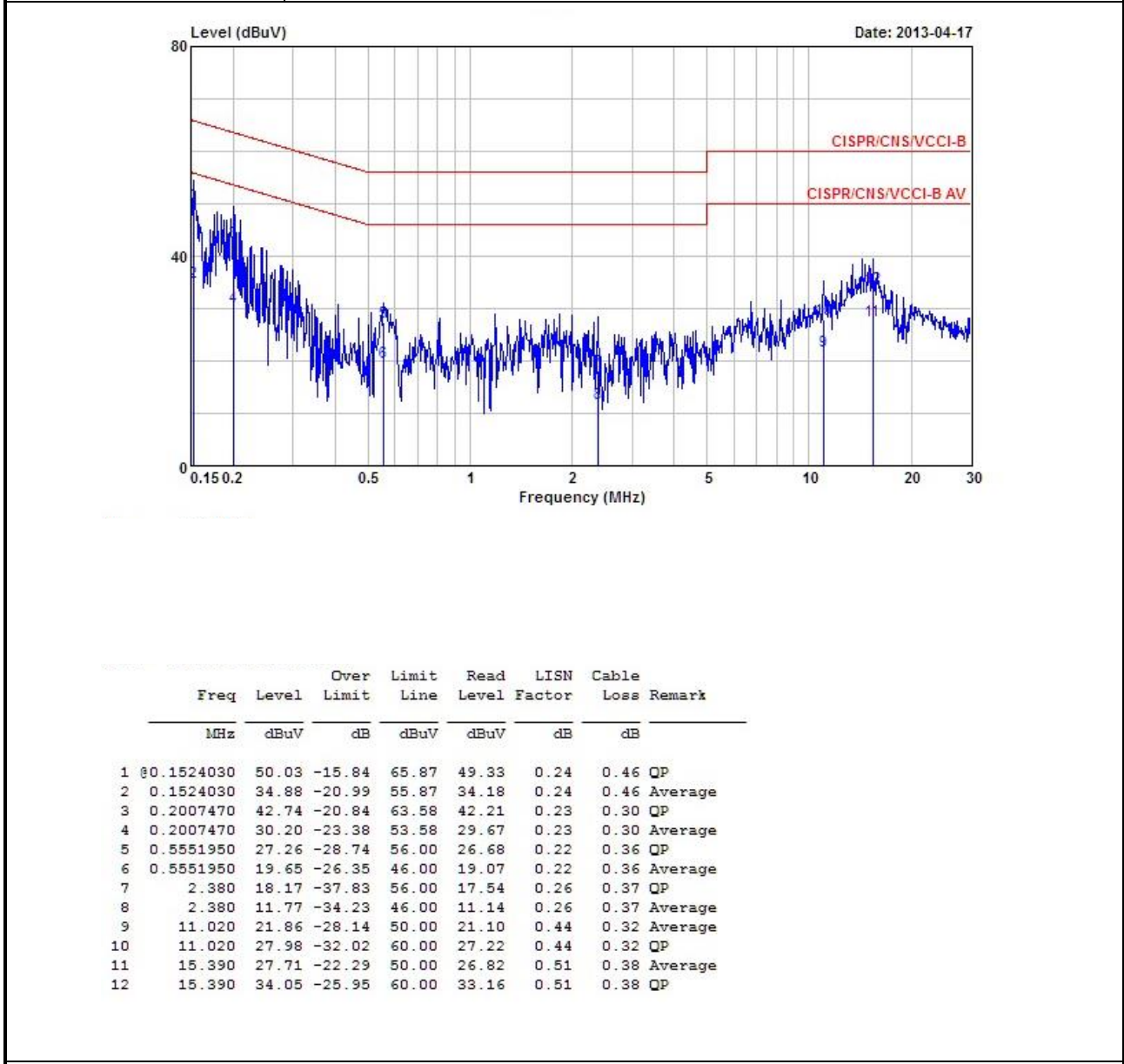
<b>Operating Mode</b>	3	<b>Power Phase</b>	Neutral
<b>Operating Function</b>	LAN / WAN: 100Mbps, Adapter 3: MU18-D120150-A1		



Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.  
 Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

**AC Power-line Conducted Emissions Result**

<b>Operating Mode</b>	3	<b>Power Phase</b>	Line
<b>Operating Function</b>	LAN / WAN: 100Mbps, Adapter 3: MU18-D120150-A1		



	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
			dB	dBuV	dBuV	dB	dB	
1	0.1524030	50.03	-15.84	65.87	49.33	0.24	0.46	QP
2	0.1524030	34.88	-20.99	55.87	34.18	0.24	0.46	Average
3	0.2007470	42.74	-20.84	63.58	42.21	0.23	0.30	QP
4	0.2007470	30.20	-23.38	53.58	29.67	0.23	0.30	Average
5	0.5551950	27.26	-28.74	56.00	26.68	0.22	0.36	QP
6	0.5551950	19.65	-26.35	46.00	19.07	0.22	0.36	Average
7	2.380	18.17	-37.83	56.00	17.54	0.26	0.37	QP
8	2.380	11.77	-34.23	46.00	11.14	0.26	0.37	Average
9	11.020	21.86	-28.14	50.00	21.10	0.44	0.32	Average
10	11.020	27.98	-32.02	60.00	27.22	0.44	0.32	QP
11	15.390	27.71	-22.29	50.00	26.82	0.51	0.38	Average
12	15.390	34.05	-25.95	60.00	33.16	0.51	0.38	QP

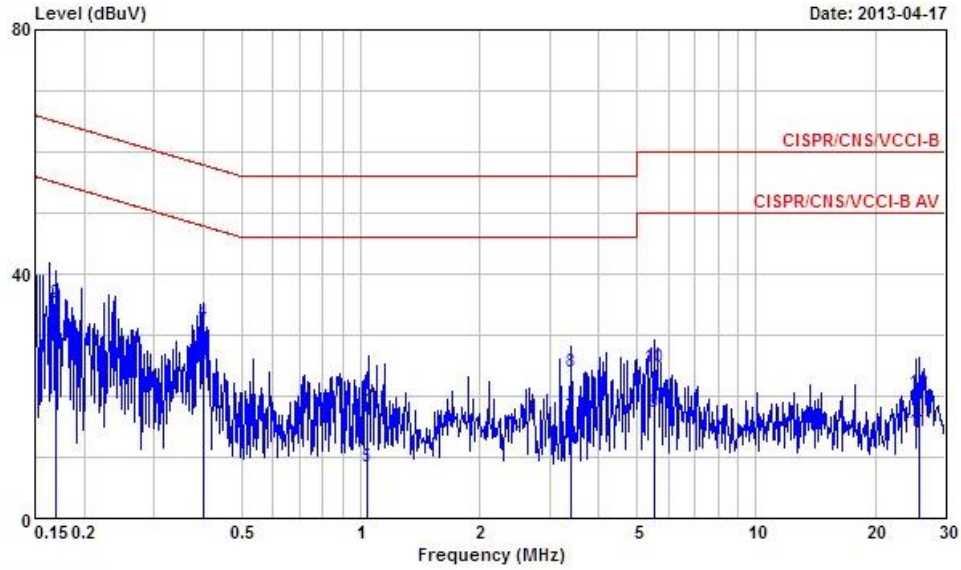
Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.  
 Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)





AC Power-line Conducted Emissions Result

Operating Mode	4	Power Phase	Neutral
Operating Function	LAN / WAN: 100Mbps, Adapter 4: AD817F10		

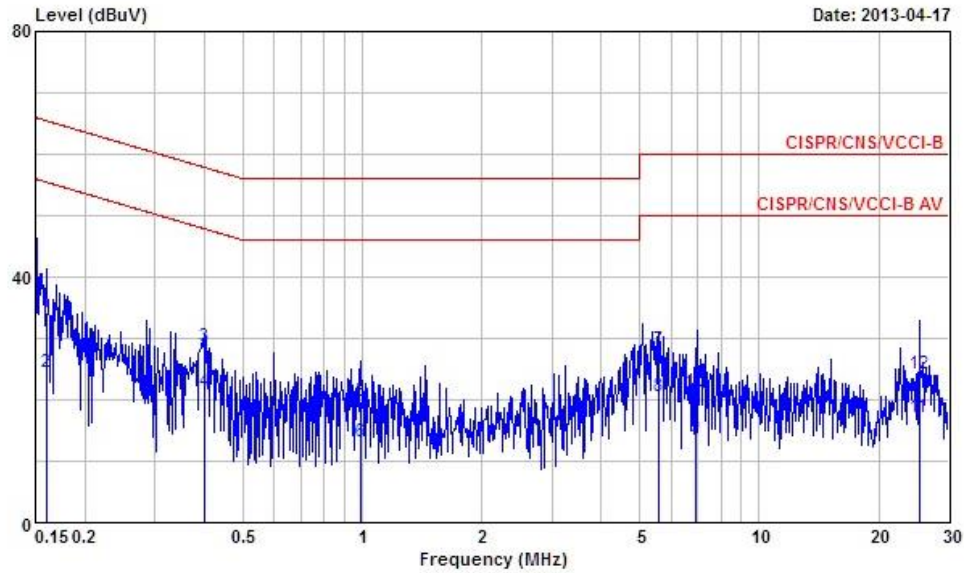


	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
			dB	dBuV	dBuV	dB	dB	
1	0.1694400	27.52	-27.47	54.99	27.02	0.11	0.39	Average
2	0.1694400	35.16	-29.83	64.99	34.66	0.11	0.39	QP
3	0.3997440	24.90	-22.96	47.86	24.40	0.10	0.40	Average
4	0.3997440	32.22	-25.64	57.86	31.72	0.10	0.40	QP
5	1.040	8.32	-37.68	46.00	7.90	0.11	0.31	Average
6	1.040	19.27	-36.73	56.00	18.85	0.11	0.31	QP
7	3.400	16.50	-29.50	46.00	16.03	0.15	0.32	Average
8	3.400	23.95	-32.05	56.00	23.48	0.15	0.32	QP
9	5.510	17.35	-32.65	50.00	16.87	0.18	0.30	Average
10	5.510	24.62	-35.38	60.00	24.14	0.18	0.30	QP
11	25.730	14.28	-35.72	50.00	13.68	0.35	0.25	Average
12	25.730	20.53	-39.47	60.00	19.93	0.35	0.25	QP

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.  
 Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

AC Power-line Conducted Emissions Result

Operating Mode	4	Power Phase	Line
Operating Function	LAN / WAN: 100Mbps, Adapter 4: AD817F10		



	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
			dB	dBuV	dBuV	dB	dB	
1	0.1598470	34.28	-31.19	65.47	33.61	0.24	0.43	QP
2	0.1598470	24.52	-30.95	55.47	23.85	0.24	0.43	Average
3	0.4018680	28.69	-29.12	57.81	28.07	0.22	0.40	QP
4	0.4018680	21.24	-26.57	47.81	20.62	0.22	0.40	Average
5	0.9891400	19.73	-36.27	56.00	19.20	0.23	0.30	QP
6	0.9891400	13.07	-32.93	46.00	12.54	0.23	0.30	Average
7	5.590	28.08	-31.92	60.00	27.44	0.34	0.30	QP
8	5.590	20.47	-29.53	50.00	19.83	0.34	0.30	Average
9	6.950	14.05	-35.95	50.00	13.38	0.37	0.30	Average
10	6.950	21.36	-38.64	60.00	20.69	0.37	0.30	QP
11	25.320	17.10	-32.90	50.00	16.23	0.65	0.22	Average
12	25.320	24.10	-35.90	60.00	23.23	0.65	0.22	QP

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.  
 Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

### 3.2 Radiated Spurious Emissions

#### 3.2.1 Radiated Spurious Emissions Limit

CISPR 22 Limits for radiated disturbance of class B ITE at a measuring distance of 10 m	
Frequency range (MHz)	Quasi-peak limits (dBµV/m)
30 to 230	30
230 to 1000	37

Note 1: The lower limit shall apply at the transition frequency.  
 Note 2: Additional provisions may be required for cases where interference occurs.

CISPR 22 Limits for radiated disturbance of Class B ITE at a measurement distance of 3 m		
Frequency range (GHz)	Average limit (dBµV/m)	Peak limit (dBµV/m)
1 to 3	50	70
3 to 6	54	74

Note 1: The lower limit applies at the transition frequency.

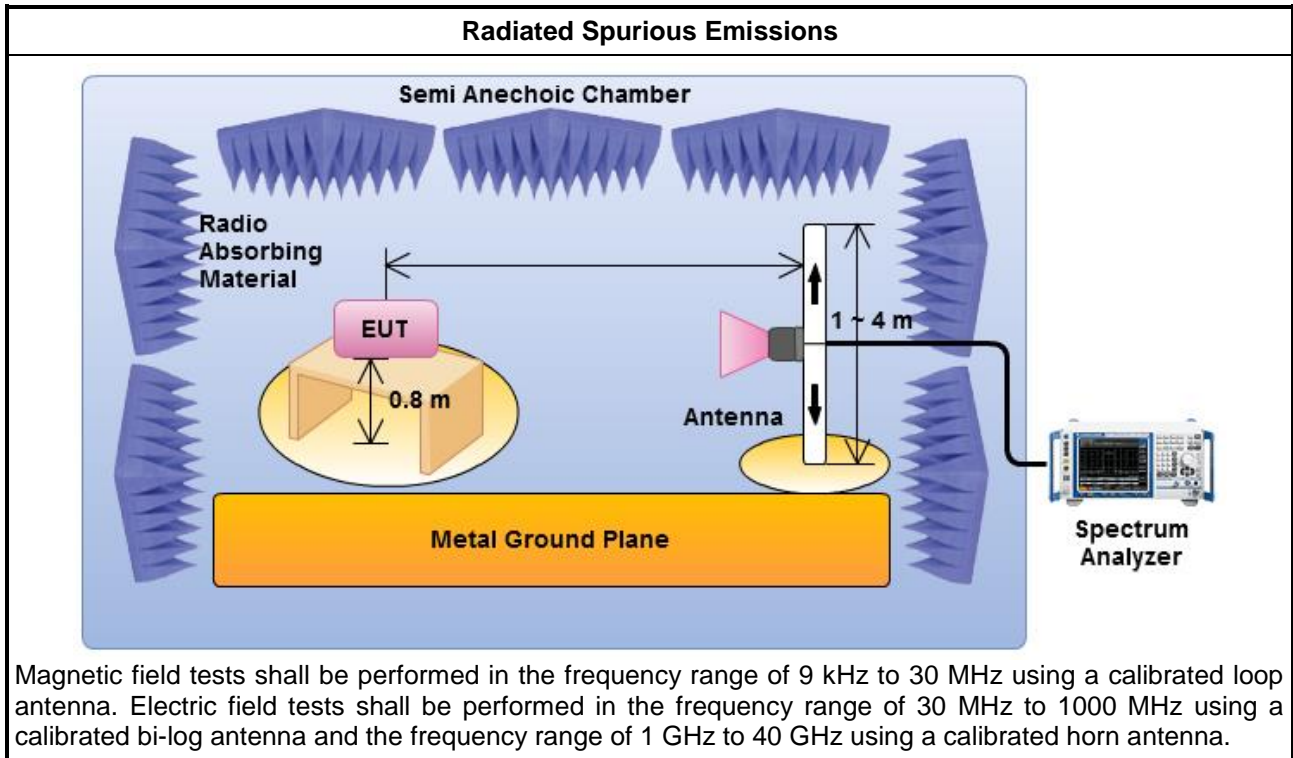
#### 3.2.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

#### 3.2.3 Test Procedures

Test Method – General Information	
<input checked="" type="checkbox"/>	The search for spurious emissions shall be from the lowest frequency internally generated or used in the receiver (e.g. local oscillator, intermediate or carrier frequency), or 30 MHz, whichever is higher, to at least 5 times the highest tunable or local oscillator frequency, whichever is higher, without exceeding 40 GHz.
<input checked="" type="checkbox"/>	Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).
<input checked="" type="checkbox"/>	Measurements in the frequency range 10 GHz - 40GHz are typically made at a closer distance 1m, because the instrumentation noise floor is typically close to the radiated emission limit.
<input checked="" type="checkbox"/>	For radiated measurement.
<input type="checkbox"/>	Refer as ANSI C63.4, clause 8.3.1.1 and 8.3.2.2 for radiated emissions from below 30 MHz.
<input checked="" type="checkbox"/>	Refer as ANSI C63.4, clause 8.3.1.1 and 8.3.2.2 for radiated emissions from 30 MHz-1 GHz. For the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the QP-Limit so that the QP level does not need to be reported in addition.
<input checked="" type="checkbox"/>	Refer as ANSI C63.4, clause 8.3.2.1 and 8.3.2 for radiated emissions from above 1 GHz. For the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

### 3.2.4 Test Setup

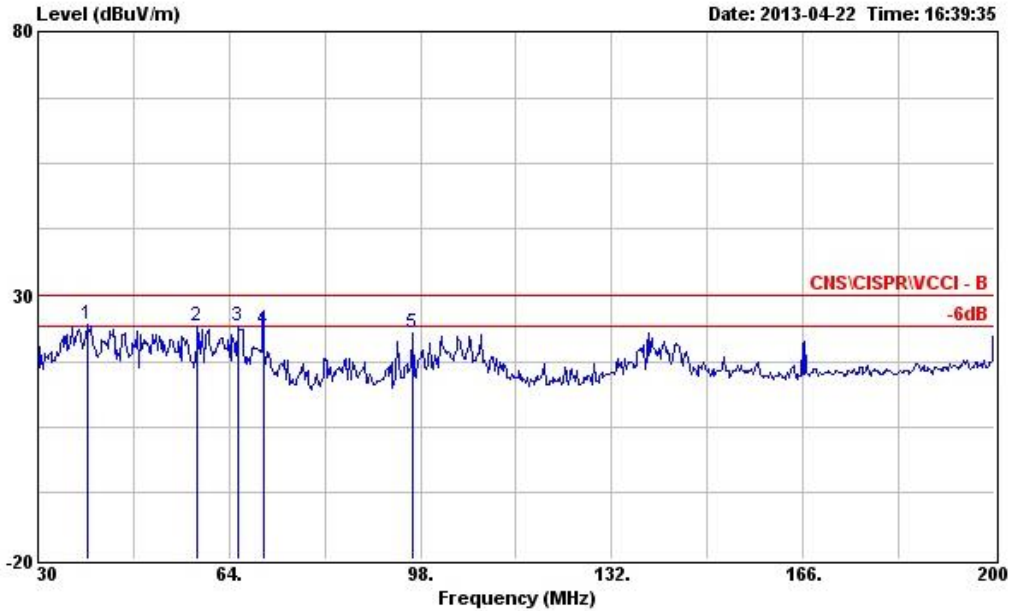


Magnetic field tests shall be performed in the frequency range of 9 kHz to 30 MHz using a calibrated loop antenna. Electric field tests shall be performed in the frequency range of 30 MHz to 1000 MHz using a calibrated bi-log antenna and the frequency range of 1 GHz to 40 GHz using a calibrated horn antenna.



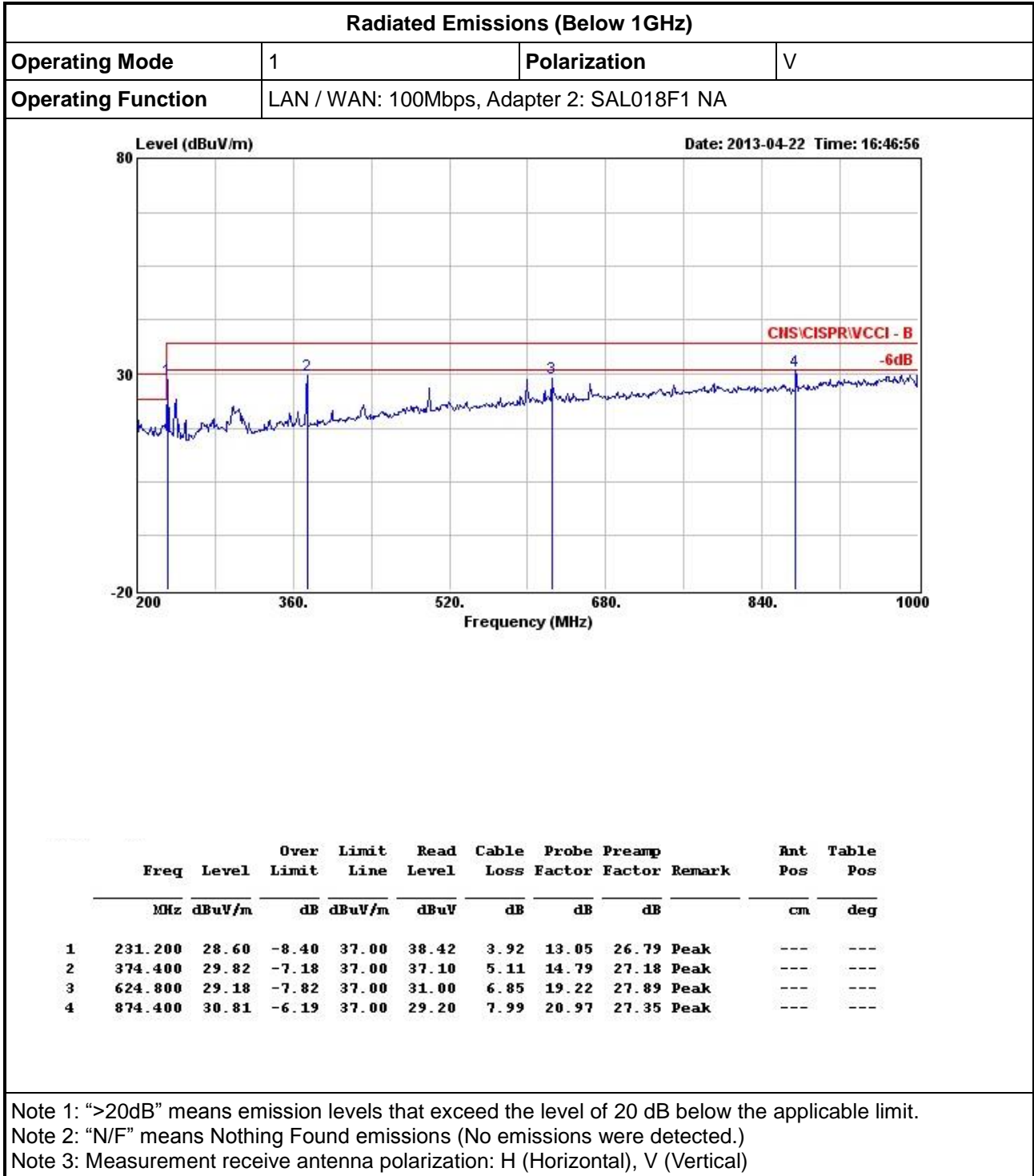
3.2.5 Radiated Emissions (Below 1GHz)

Radiated Emissions (Below 1GHz)			
Operating Mode	1	Polarization	V
Operating Function	LAN / WAN: 100Mbps, Adapter 2: SAL018F1 NA		



	Freq	Level	Over Limit	Limit Line	Read Level	Cable Loss	Probe Factor	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1 !	38.670	24.60	-5.40	30.00	40.34	1.57	11.31	28.62	Peak	100	167
2 !	58.390	24.00	-6.00	30.00	40.84	1.92	9.81	28.57	Peak	---	---
3 !	65.700	24.25	-5.75	30.00	41.20	2.08	9.52	28.55	Peak	---	---
4	70.120	23.60	-6.40	30.00	40.49	2.28	9.36	28.53	Peak	---	---
5	96.470	22.77	-7.23	30.00	39.20	2.48	9.53	28.44	Peak	---	---

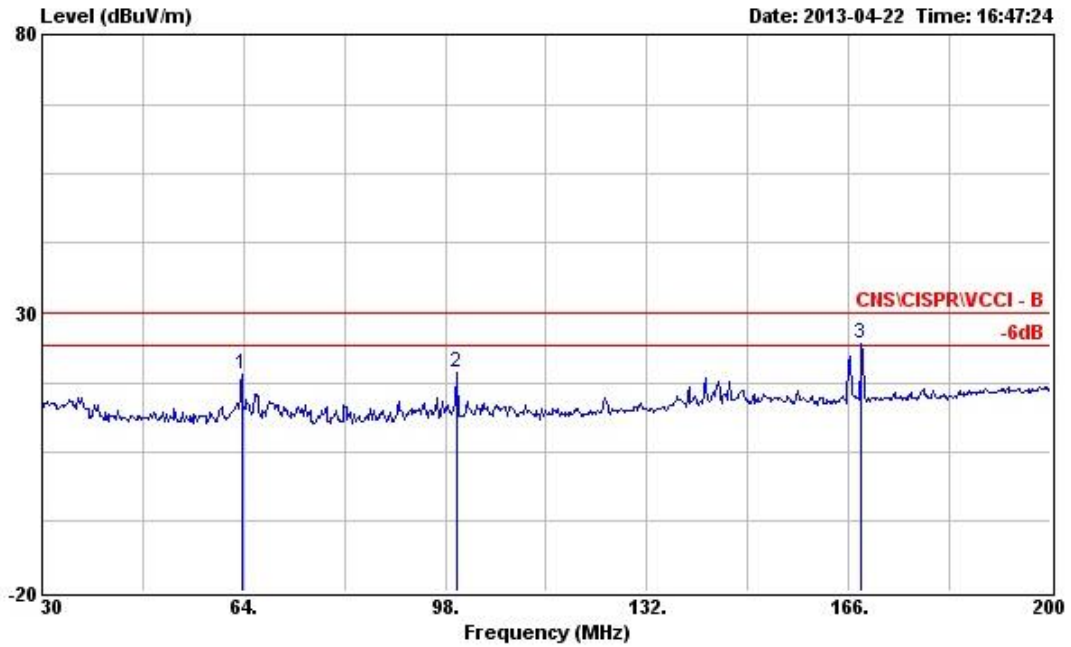
Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.  
 Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)  
 Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)







Radiated Emissions (Below 1GHz)			
Operating Mode	1	Polarization	H
Operating Function	LAN / WAN: 100Mbps, Adapter 2: SAL018F1 NA		



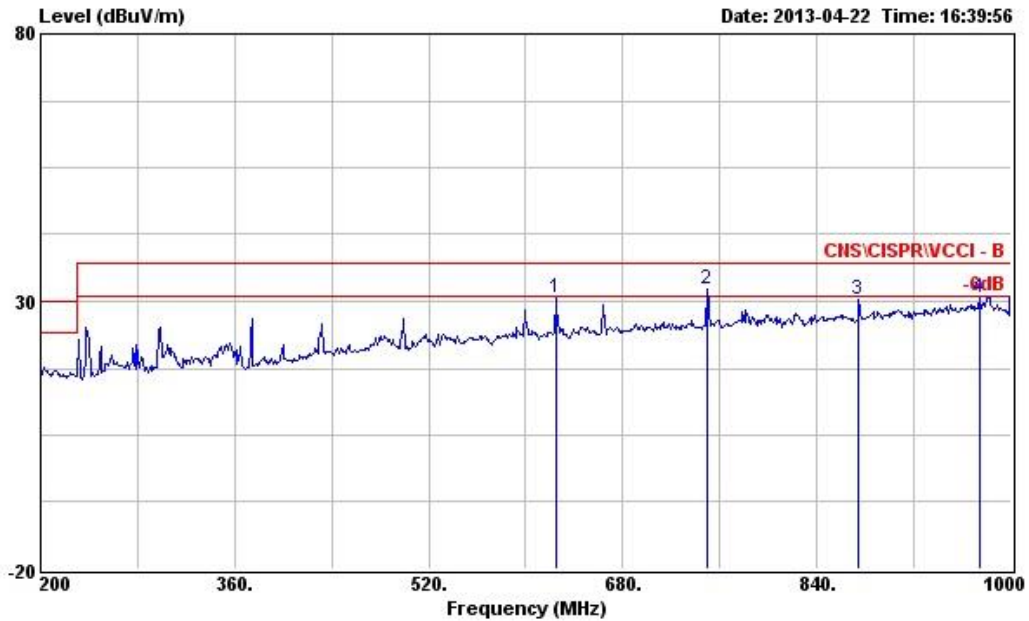
	Freq	Level	Over Limit	Limit Line	Read Level	Cable Loss	Probe Factor	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	63.660	19.03	-10.97	30.00	35.96	2.03	9.59	28.55	Peak	---	---
2	99.870	19.21	-10.79	30.00	35.36	2.52	9.76	28.43	Peak	---	---
3 !	168.210	24.46	-5.54	30.00	36.50	3.36	12.73	28.13	Peak	---	---

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.  
 Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)  
 Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)



Radiated Emissions (Below 1GHz)

Operating Mode	1	Polarization	H
Operating Function	LAN / WAN: 100Mbps, Adapter 2: SAL018F1 NA		



	Freq	Level	Over	Limit	Read	Cable	Probe	Preamp	Remark	Ant	Table
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Factor		Pos	Pos
			dB	dBuV/m	dBuV	dB	dB	dB		cm	deg
1	624.800	30.72	-6.28	37.00	32.54	6.85	19.22	27.89	Peak	---	---
2	749.600	32.41	-4.59	37.00	32.31	7.34	20.47	27.71	Peak	250	97
3	874.400	30.30	-6.70	37.00	28.69	7.99	20.97	27.35	Peak	---	---
4	973.600	30.62	-6.38	37.00	27.39	8.46	21.77	27.00	Peak	---	---

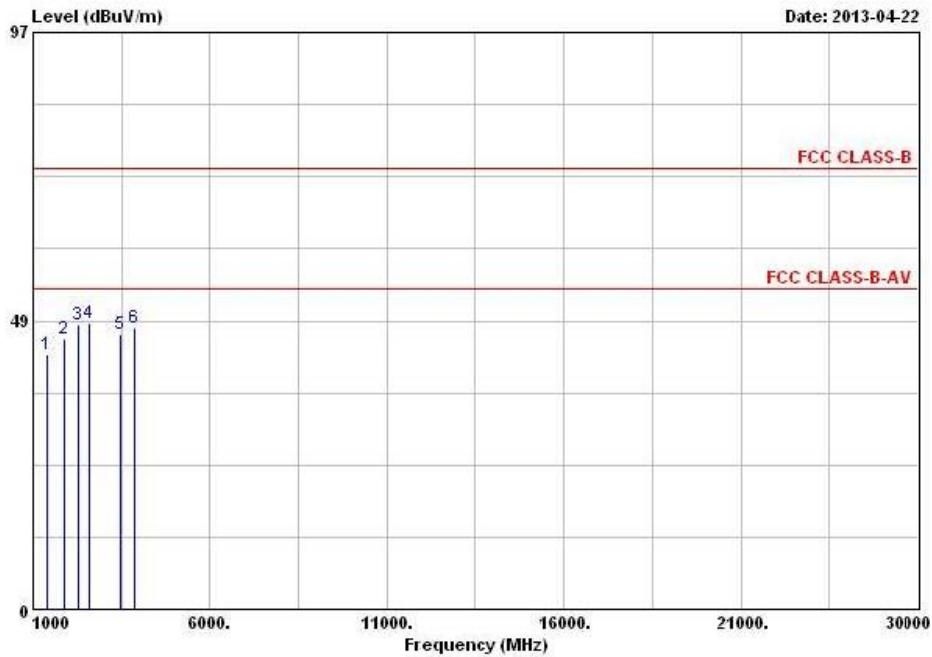
Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.  
 Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)  
 Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)





3.2.6 Radiated Emissions (Above 1GHz)

Radiated Emissions (Above 1GHz)			
Operating Mode	1	Polarization	V
Operating Function	LAN / WAN: 100Mbps, Adapter 2: SAL018F1 NA		



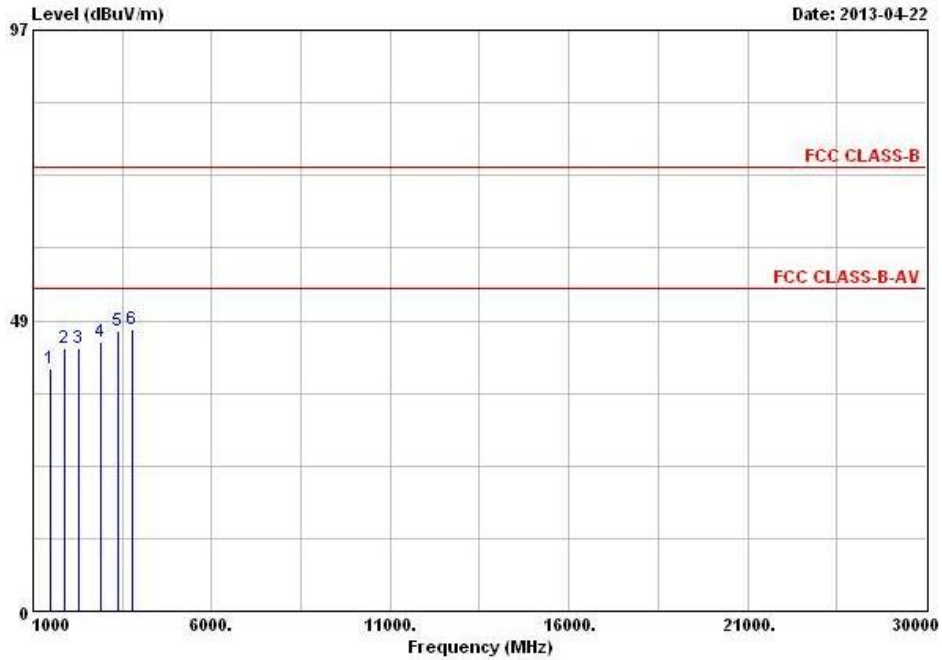
	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Remark	Rnt	Table
	MHz	dBuV/m	dB	dBuV/m	Level	Factor	Loss	Factor		Pos	Pos
					dBuV	dB/m	dB	dB		cm	deg
1	1375.000	42.89	-31.11	74.00	49.24	24.88	2.03	33.26	Peak	---	---
2	1875.000	45.45	-28.55	74.00	49.26	26.64	2.29	32.74	Peak	---	---
3	2275.000	47.75	-26.25	74.00	50.18	27.70	2.56	32.69	Peak	---	---
4	2575.000	48.05	-25.95	74.00	49.69	28.38	2.72	32.74	Peak	100	135
5	3450.000	46.23	-27.77	74.00	45.07	30.70	3.19	32.73	Peak	---	---
6	3875.000	47.32	-26.68	74.00	44.85	31.94	3.18	32.65	Peak	---	---

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.  
 Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)  
 Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)



Radiated Emissions (Above 1GHz)

Operating Mode	1	Polarization	H
Operating Function	LAN / WAN: 100Mbps, Adapter 2: SAL018F1 NA		



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Remark	Ant	Table
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	1475.000	40.39	-33.61	74.00	46.29	25.07	2.07	33.04	Peak	---
2	1875.000	43.87	-30.13	74.00	47.68	26.64	2.29	32.74	Peak	---
3	2275.000	43.99	-30.01	74.00	46.42	27.70	2.56	32.69	Peak	---
4	2875.000	44.92	-29.08	74.00	45.48	29.35	2.88	32.79	Peak	---
5	3375.000	46.72	-27.28	74.00	45.75	30.56	3.15	32.74	Peak	---
6	3775.000	47.13	-26.87	74.00	44.98	31.63	3.19	32.67	Peak	150 324

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.  
 Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)  
 Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)



## 4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMC Receiver	R&S	ESCS 30	100174	9kHz ~ 2.75GHz	Mar. 26, 2013	Conduction (CO04-HY)
LISN	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	8127-477	9kHz ~ 30MHz	Jan. 21, 2013	Conduction (CO04-HY)
LISN (Support Unit)	EMCO	3810/2NM	9703-1839	9kHz ~ 30MHz	Apr. 16, 2013	Conduction (CO04-HY)
RF Cable-CON	HUBER+SUHNER	RG213/U	7.61183201e+ 012	9kHz ~ 30MHz	Nov. 09, 2012	Conduction (CO04-HY)

Note: Calibration Interval of instruments listed above is one year.

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
10m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-10M	10CH01-HY	30MHz ~ 1GHz 10m/3m	Jun. 11, 2012	Radiation (10CH01-HY)
Spectrum Analyzer	R&S	FSP7	838858/013	9kHz ~ 7GHz	Feb. 21, 2013	Radiation (10CH01-HY)
Receiver	R&S	ESR	101062	9kHz ~ 7GHz	Jul. 25, 2012	Radiation (10CH01-HY)
Amplifier	Agilent	8447D	2944A10825	100kHz ~ 1.3GHz	Apr. 19, 2013	Radiation (10CH01-HY)
Amplifier	Agilent	8447D	2944A10826	100kHz ~ 1.3GHz	Apr. 12, 2013	Radiation (10CH01-HY)
Biconical Antenna	Schwarz beck	VHBB 9124	286	30MHz ~ 200MHz	Aug. 03, 2012	Radiation (10CH01-HY)
Log Antenna	Schwarz beck	VUSLP 9111	206	200MHz ~ 1GHz	Aug. 03, 2012	Radiation (10CH01-HY)
Turn Table	HD	DT 60 RPS	1513/004/00	0 ~ 360 degree	N/A	Radiation (10CH01-HY)
Antenna Mast	HD	MA240	240/556/00	1 ~ 4 m	N/A	Radiation (10CH01-HY)
Antenna Mast	HD	MA240	240/559/00	1 ~ 4 m	N/A	Radiation (10CH01-HY)
RF Cable-R10m	BELDEN	RG8/U	CB023-INSID E	30MHz ~ 1GHz	Nov. 15, 2012	Radiation (10CH01-HY)
RF Cable-R10m	Suhner Switzerland + Rosenberger	RG223/U + UAA220A-0	CB022-DOO R	30MHz ~ 1GHz	Nov. 15, 2012	Radiation (10CH01-HY)

Note: Calibration Interval of instruments listed above is one year.



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz ~ 1GHz 3m	Dec. 01, 2012	Radiation (03CH03-HY)
Amplifier	Agilent	8449B	3008A02120	1GHz ~ 26.5GHz	Aug. 16, 2012	Radiation (03CH03-HY)
Spectrum Analyzer	R&S	FSP30	100793	9kHz ~ 30GHz	Sep. 26, 2012	Radiation (03CH03-HY)
Receiver	R&S	ESU26	1302.6005.26	20Hz ~ 26.5GHz	Apr. 02, 2013	Radiation (03CH03-HY)
Horn Antenna	EMCO	3115	6741	1GHz ~ 18GHz	May 30, 2012	Radiation (03CH03-HY)
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	15GHz ~ 40GHz	Jan. 08, 2013	Radiation (03CH03-HY)
RF Cable-high	SUHNER	SUCOFLEX 106	03CH03-HY	1GHz ~ 40GHz	Jan. 17, 2013	Radiation (03CH03-HY)
Turn Table	HD	DS 420	420/650/00	0 ~ 360 degree	N/A	Radiation (03CH03-HY)
Antenna Mast	MF	MF-7802	MF780208179	1 ~ 4 m	N/A	Radiation (03CH03-HY)

Note: Calibration Interval of instruments listed above is one year.