



Product Service

EMC TEST REPORT

Report Number	: 68.760.10.271.01	Date of Issue: 26 January 2011
Model	: NI3421-A01	
Product Type	: Tablet PC	
Applicant	: Notion Ink Design Labs Pvt. Ltd.	
Address	: 6 th Block, D tower, Subramanya Arcade, Bannerghatta Road, Bangalore, Karnataka, India 560029	
Production Facility	: Wanlida Group Co., Ltd.	
Address	: Wanlida Industry Zone, Nanjing, Fujian, China 363601	
Test Result	: <input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative	
Total pages including Appendices	: 41	

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1 Table of Contents

1	Table of Contents.....	2
2	Details about the Test Laboratory.....	3
3	Description of the Equipment Under Test.....	4
4	Summary of Test Standards.....	5
5	Summary of Test Results.....	6
6	General Remarks.....	7
7	Technical Requirements.....	9
7.1	Conducted Emission AC Power Port.....	9
7.2	Radiated emissions.....	15
8	System Measurement Uncertainty.....	41



Product Service

2 Details about the Test Laboratory

Details about the Test Laboratory

Test site1:

Company name: Jiangsu TÜV Product Service Ltd. – Shenzhen Branch
6th Floor, H Hall,
Century Craftwork Culture Square,
No. 4001, Fuqiang Road,
Futian District 518048,
Shenzhen, P.R.C.

Telephone: 86 755 8828 6998

Fax: 86 755 8828 5299

Test site2:

Company name: Audix Technology (Shenzhen) Co.,Ltd
Block Shenzhen, Science & Industry Park,
Nantou, Shenzhen,
Guangdong,
China

Telephone: 86 755 2663 9496

Fax: 86 755 2663 2877



Product Service

3 Description of the Equipment Under Test

Description of the Equipment Under Test

Product: Tablet PC

Model no.: NI3421-A01

Options and accessories: NIL

Rating: DC 19V, 2.1A
Test with adaptor:
Input: AC 100-240V, 50/60Hz, 1A
Output: DC 19V, 2.1A

Antenna: Integral antenna inside enclosure of EUT, NOT accessible by end user

RF Transmission Frequency:
WiFi/Bluetooth: 2400-2483.5MHz
GSM850/WCDMA850: 824-849MHz
GSM1900/WCDMA1900: 1920-1980MHz

Description of the EUT: NIL

Auxiliary Equipment and Cable Used during Test:

DESCRIPTION	MANUFACTURER	MODEL NO.(SHIELD)	S/N(LENGTH)
LCD monitor	DELL	1907FPt	7735430660P0G WD-04
Keyboard	DELL	SK-8115	E145614
Mouse	DELL	OCJ339	G0203WAZ
Headphone	ODDO	---	----
SD card	Kingston	SD4/4GBFE	----
USB flash drive	Kingston	USB/4GB	---
Laptop	Lenovo	X61	L3-L3729 08/03
VGA cable	DELL	Unshield	140cm
HDMI Cable	DELL	Shield	120cm
AC Power cable	DELL	Unshield	180cm



Product Service

4 Summary of Test Standards

Test Standards	
Part 15 Subpart B, Oct. 1, 2009	PART 15 - RADIO FREQUENCY DEVICES Subpart B - Unintentional Radiators



Product Service

5 Summary of Test Results

Technical Requirements					
FCC Part 15 Subpart B					
Test Condition	Pages	Test Result			Test Location
		Pass	Fail	N/A	
15.107 Conducted Emission AC Power Port	9	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Test Site2
15.109 Spurious radiated emissions	15	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Test Site2



Product Service

6 General Remarks

Remarks

This submittal(s) (test report) is intended for FCC ID: Y2GNI3421A01 filing to comply with Section 15.107, 15.109 of the FCC Part 15, Subpart B Rules.

The product NI3421-A01 alternative 2 kinds of components as listed:

Items	Model	Manufacturer
LCD panel	A101SW01	AUO
	PQ 3Qi-01	Pixel Qi
Touch Panel	1013V04	CANDO
	3FA16-A1CC4H	Sintek Photronic Corp.

All the configurations of the product were tested and only the worst test results are listed in the report.



Product Service

SUMMARY:

All tests according to the regulations cited on page 5 were

- Performed

- **Not** Performed

The Equipment Under Test

- **Fulfills** the general approval requirements.

- **Does not** fulfill the general approval requirements.

Sample Received Date: 5 December 2010

Testing Start Date: 6 December 2010

Testing End Date: 20 December 2010

- Jiangsu TÜV Product Service Ltd. – Shenzhen Branch -

Tested By 2011-01-26 Sunny Lu 
Test Lab Engineer Date Name Signature

Prepared By 2011-01-26 Ken Li 
Project Engineer Date Name Signature

Reviewed By 2011-01-26 Paul Yu 
Assistant EMC Manager Date Name Signature



Product Service

7 Technical Requirement

7.1 Conducted Emission

Test Method

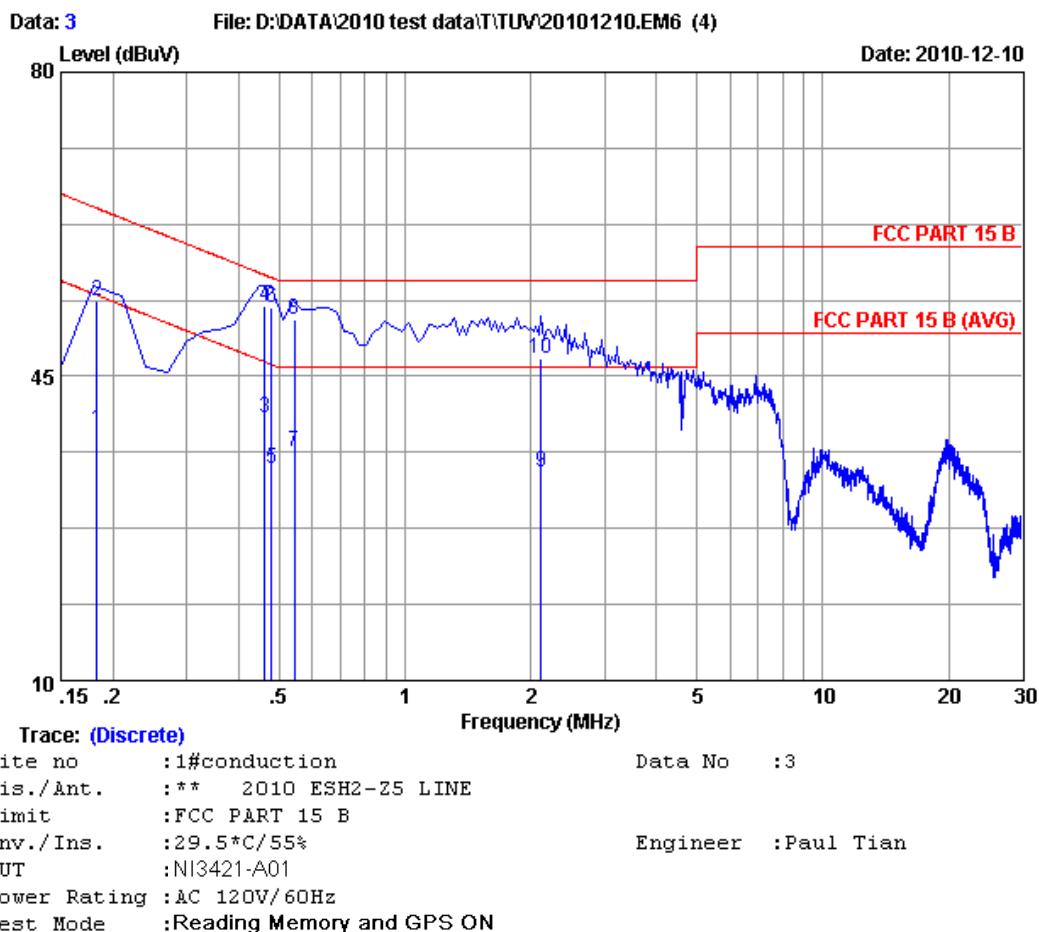
- 1 The EUT was placed on a table, which is 0.8m above ground plane
- 2 The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.).
- 3 Maximum procedure was performed to ensure EUT compliance
- 4 A EMI test receiver is used to test the emissions from both sides of AC line

Limit

Frequency MHz	QP Limit dB μ V	AV Limit dB μ V
0.150-0.500	66-56*	56-46*
0.500-5	56	46
5-30	60	50
Decreasing linearly with logarithm of the frequency		

Remark: The worst test results are listed in report, which the EUT were test with LCD Panel PQ 3Qi-01 and Touch Panel 3FA16-A1CC4H.

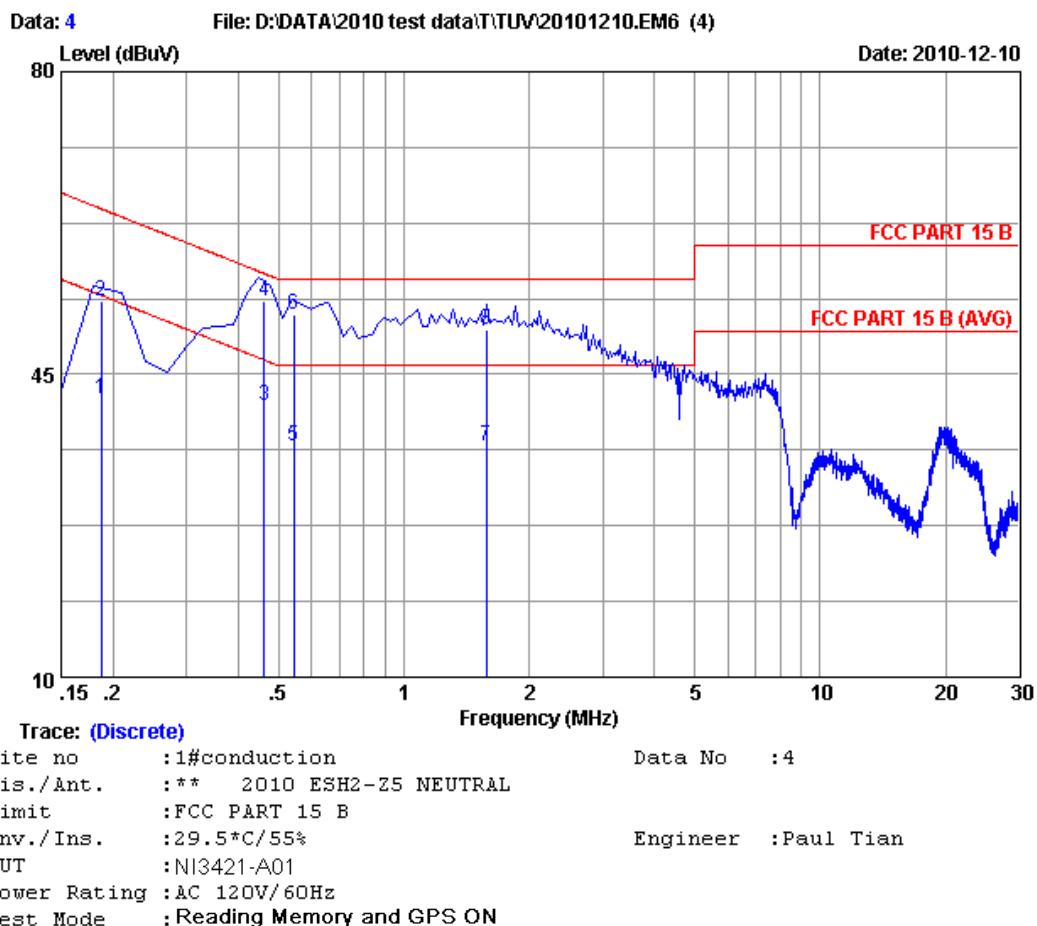
Conducted Emission



No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission			
					Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.18288	0.22	9.88	28.80	38.90	54.35	15.45	Average
2	0.18288	0.22	9.88	43.60	53.70	64.35	10.65	QP
3	0.46100	0.24	9.88	30.10	40.22	46.67	6.45	Average
4	0.46100	0.24	9.88	43.00	53.12	56.67	3.55	QP
5	0.47980	0.24	9.88	24.20	34.32	46.34	12.02	Average
6	0.47980	0.24	9.88	42.70	52.82	56.34	3.52	QP
7	0.54400	0.24	9.88	26.20	36.32	46.00	9.68	Average
8	0.54400	0.24	9.88	41.40	51.52	56.00	4.48	QP
9	2.120	0.25	9.91	23.80	33.96	46.00	12.04	Average
10	2.120	0.25	9.91	36.90	47.06	56.00	8.94	QP

Remarks: 1. Emission Level=LISN Factor+Cable Loss (Include 10dB pulse limit)
 +Reading.
 2. If the average limit is met when using a quasi-peak detector.
 the EUT shall be deemed to meet both limits and measurement
 with average detector is unnecessary.

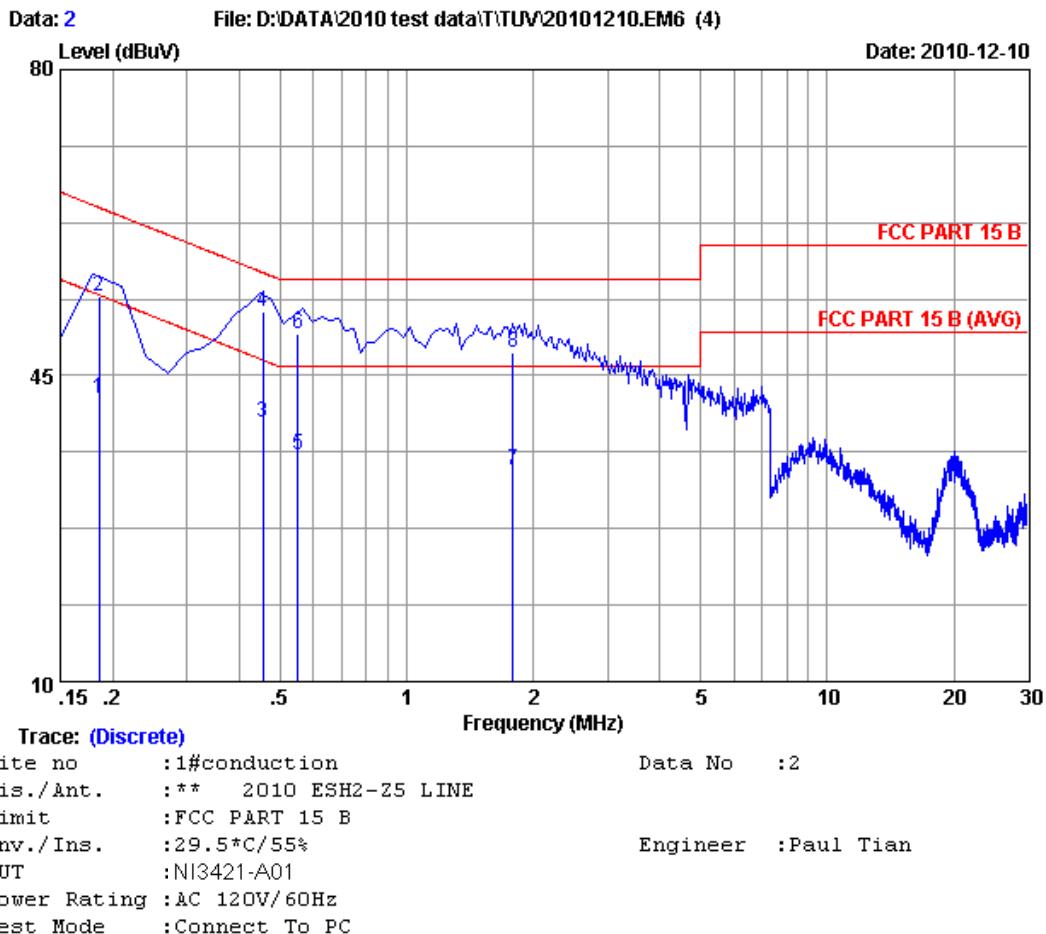
Conducted Emission



No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission			
					Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.18770	0.21	9.88	32.00	42.09	54.14	12.05	Average
2	0.18770	0.21	9.88	43.30	53.39	64.14	10.75	QP
3	0.46100	0.22	9.88	31.30	41.40	46.67	5.27	Average
4	0.46100	0.22	9.88	43.40	53.50	56.67	3.17	QP
5	0.54400	0.22	9.88	26.61	36.71	46.00	9.29	Average
6	0.54400	0.22	9.88	41.81	51.91	56.00	4.09	QP
7	1.580	0.26	9.90	26.60	36.76	46.00	9.24	Average
8	1.580	0.26	9.90	40.00	50.16	56.00	5.84	QP

Remarks: 1. Emission Level=LISN Factor+Cable Loss (Include 10dB pulse limit)
 +Reading.
 2. If the average limit is met when using a quasi-peak detector,
 the EUT shall be deemed to meet both limits and measurement
 with average detector is unnecessary.

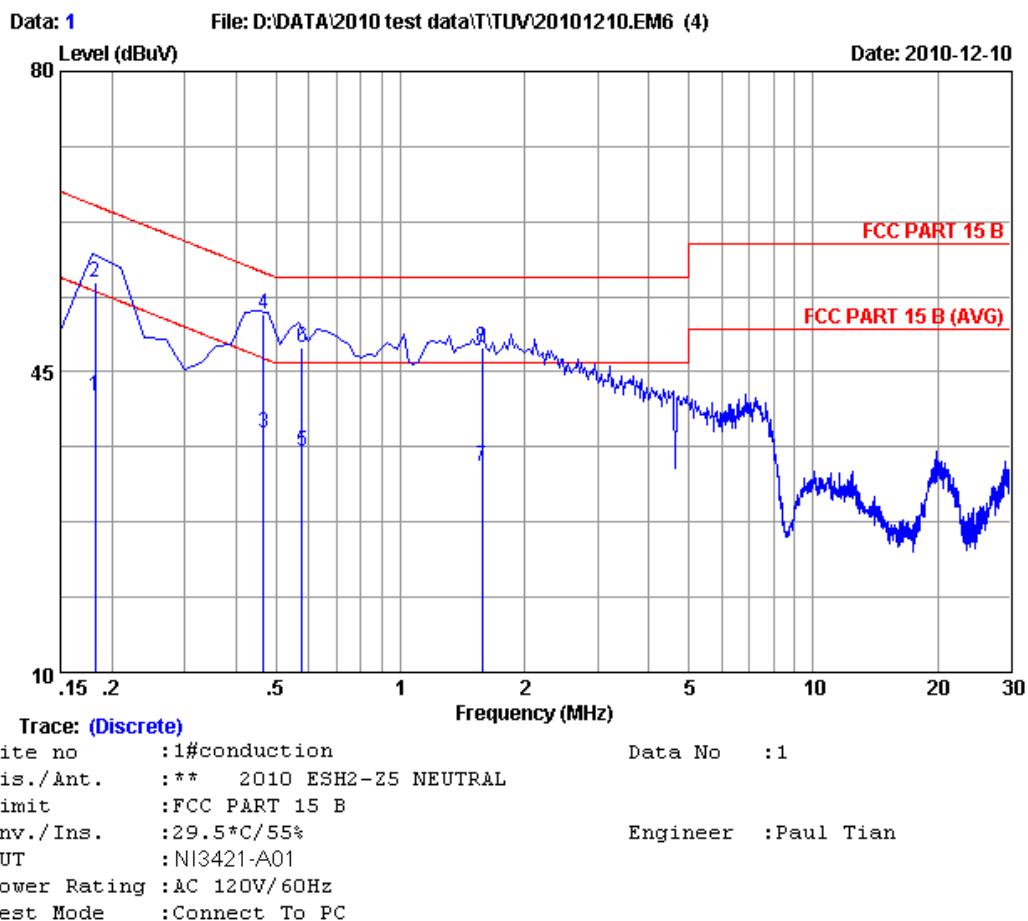
Conducted Emission



No	Freq (MHz)	LISN	Cable	Emission				Remark
		Factor (dB)	Loss (dB)	Reading (dBuV)	Level (dBuV)	Limits (dBuV)	Margin (dB)	
1	0.18527	0.22	9.88	32.30	42.40	54.25	11.85	Average
2	0.18527	0.22	9.88	44.00	54.10	64.25	10.15	QP
3	0.45600	0.24	9.88	29.60	39.72	46.77	7.05	Average
4	0.45600	0.24	9.88	42.10	52.22	56.77	4.55	QP
5	0.55140	0.24	9.88	25.80	35.92	46.00	10.08	Average
6	0.55140	0.24	9.88	39.70	49.82	56.00	6.18	QP
7	1.789	0.25	9.90	24.10	34.25	46.00	11.75	Average
8	1.789	0.25	9.90	37.50	47.65	56.00	8.35	QP

Remarks: 1. Emission Level=LISN Factor+Cable Loss (Include 10dB pulse limit) +Reading.
 2. If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Conducted Emission



No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission			
					Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.18200	0.21	9.88	32.00	42.09	54.39	12.30	Average
2	0.18200	0.21	9.88	45.30	55.39	64.39	9.00	QP
3	0.46500	0.22	9.88	27.70	37.80	46.60	8.80	Average
4	0.46500	0.22	9.88	41.60	51.70	56.60	4.90	QP
5	0.57800	0.23	9.88	25.60	35.71	46.00	10.29	Average
6	0.57800	0.23	9.88	37.70	47.81	56.00	8.19	QP
7	1.580	0.26	9.90	23.80	33.96	46.00	12.04	Average
8	1.580	0.26	9.90	37.70	47.86	56.00	8.14	QP

Remarks: 1. Emission Level=LISN Factor+Cable Loss (Include 10dB pulse limit)+Reading.
 2. If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



Product Service

Test Equipment List

Conducted Emission Test

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL. DUE DATE
Test Receiver	Rohde & Schwarz	ESHS10	838693/001	Dec.18, 11
L.I.S.N.#1	Rohde & Schwarz	ESH2-Z5	834066/011	Mar.30, 11
L.I.S.N.#3	Kyoritsu	KNW-242C	8-1920-1	May.08, 11
Terminator	Hubersuhner	50Ω	No. 1	May.08, 11
Terminator	Hubersuhner	50Ω	No. 2	May.08, 11
RF Cable	Fujikura	3D-2W	LISN Cable 1#	May.08, 11
Coaxial Switch	Anritsu	MP59B	M55367	May.08, 11
Passive Probe	Rohde & Schwarz	ESH2-Z3	299.7810.52	May.08, 11
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100341	May.08, 11

7.2 Radiated emissions

Test Method

- 1 The EUT is placed on a turntable, which is 0.8m above ground plane.
- 2 The turntable shall be rotated for 360 degrees to determine the position of maximum emission level
- 3 EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
- 4 Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 5 Each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.

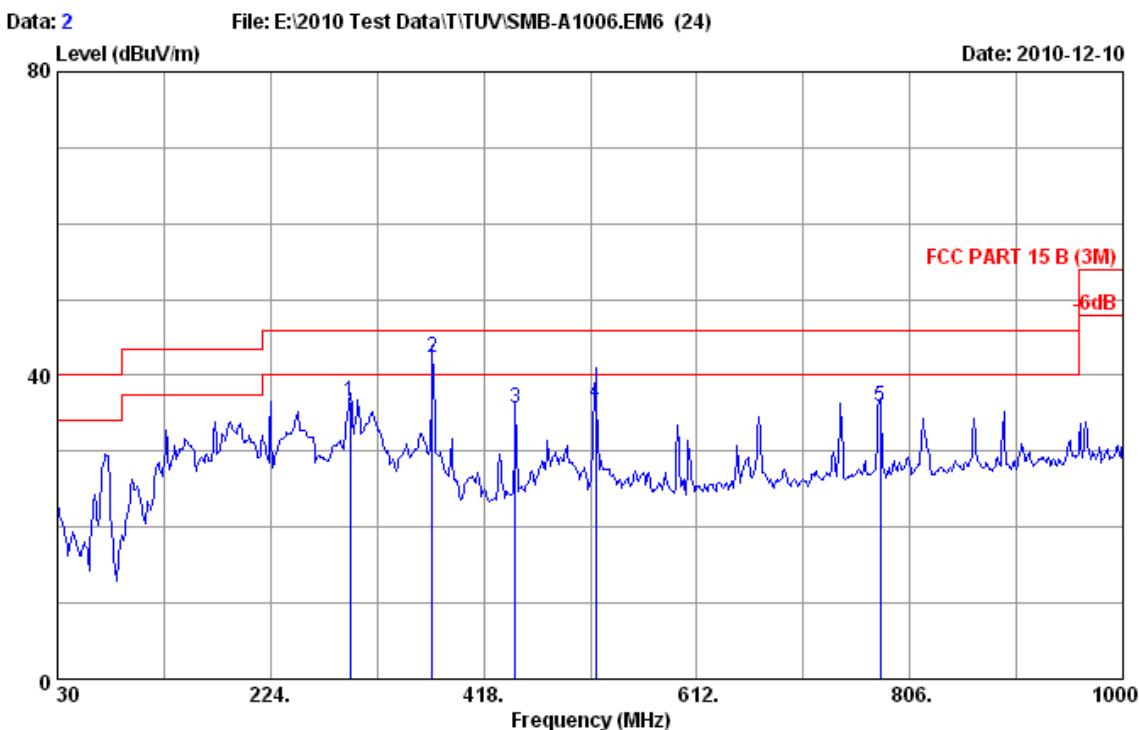
Limit

Frequency MHz	Field Strength uV/m	Field Strength dB μ V/m	Detector
30-88	100	40	QP
88-216	150	43.5	QP
216-960	200	46	QP
960-1000	500	54	QP
Above 1000	500	54	AV
Above 1000	5000	74	PK

Remark: The worst test results are listed in report, which the EUT were test with LCD Panel PQ 3Qi-01 and Touch Panel 3FA16-A1CC4H.

Radiated Emission

TC1-Read Memory mode test result:

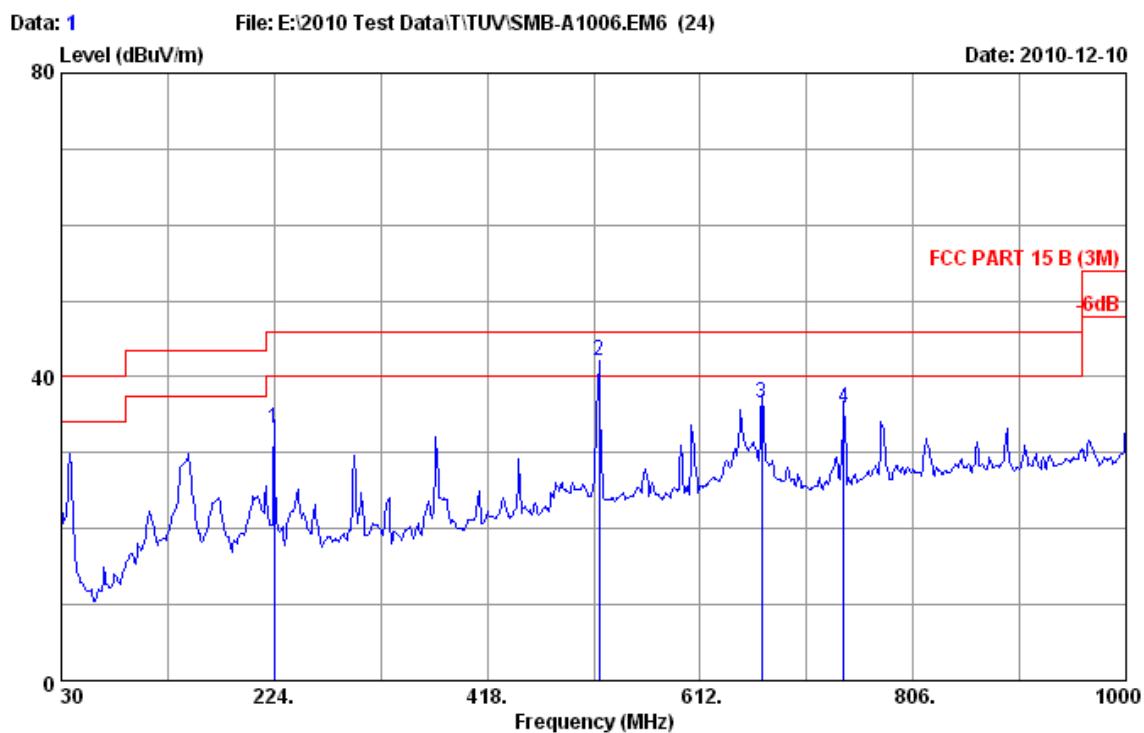


Site no. : 3m Chamber Data no. : 2
 Dis. / Ant. : 3m 2010 CBL6112D Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 B (3M)
 Env. / Ins. : 24°C/56% Engineer : Chris
 EUT : NI3421-A01
 Power rating : AC 120V/60Hz
 Test Mode : Reading Memory and GPS ON

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	296.750	13.84	2.46	20.27	36.57	46.00	9.43	QP
2	371.275	15.52	2.79	24.10	42.41	46.00	3.59	QP
3	447.100	17.00	3.21	15.43	35.64	46.00	10.36	QP
4	519.740	17.90	3.66	14.80	36.36	46.00	9.64	QP
5	778.840	20.48	4.81	10.66	35.95	46.00	10.05	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

Radiated Emission



Site no. : 3m Chamber Data no. : 1
 Dis. / Ant. : 3m 2010 CBL6112D Ant. pol. : VERTICAL
 Limit : FCC PART 15 B (3M)
 Env. / Ins. : 24°C/56% Engineer : Chris
 EUT : NI3421-A01
 Power rating : AC 120V/60Hz
 Test Mode : Reading Memory and GPS ON

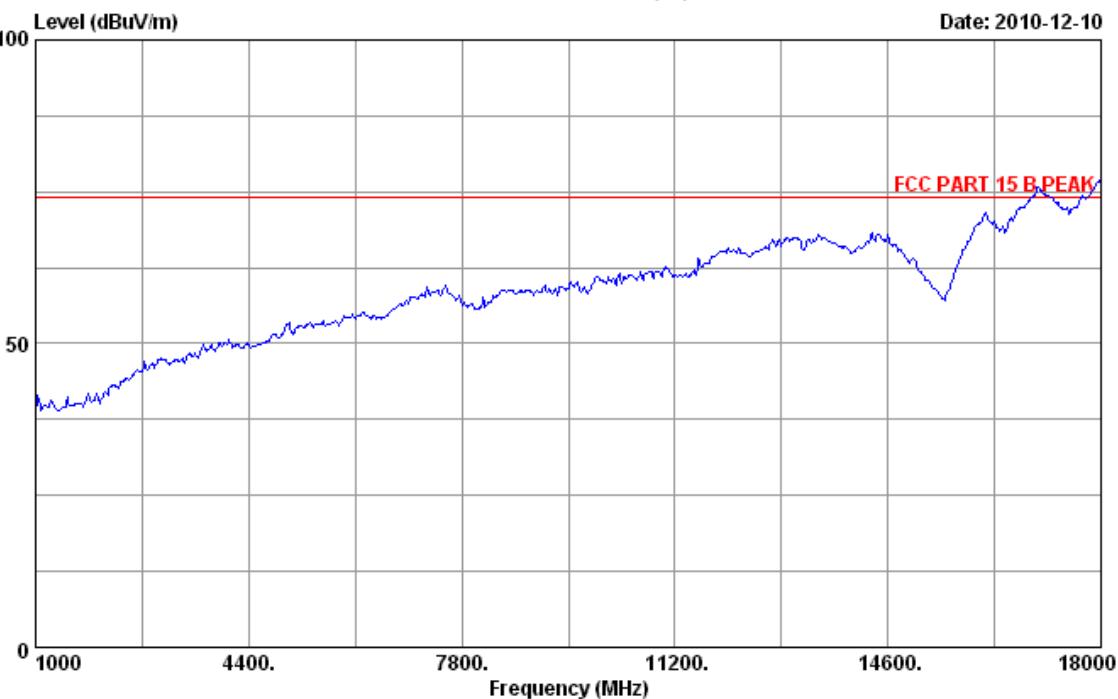
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Emission				Remark
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	
1	224.000	10.78	1.94	20.53	33.25	46.00	12.75	QP
2	519.750	17.90	3.66	20.50	42.06	46.00	3.94	QP
3	668.260	19.50	4.38	12.72	36.60	46.00	9.40	QP
4	742.950	20.15	4.67	11.00	35.82	46.00	10.18	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

Radiated Emission

Data: 13 File: E:\2010 Test Data\T\TUV\SMB-A1006.EM6 (24)

Date: 2010-12-10



Site no.	:	3m Chamber	Data no.	:	13
Dis. / Ant.	:	3m 2009 3115	Ant. pol.	:	HORIZONTAL
Limit	:	FCC PART 15 B PEAK	Engineer	:	Chris
Env. / Ins.	:	24°C/56%			
EUT	:	NI3421-A01			
Power rating	:	AC 120V/60Hz			
Test Mode	:	Reading Memory and GPS ON			



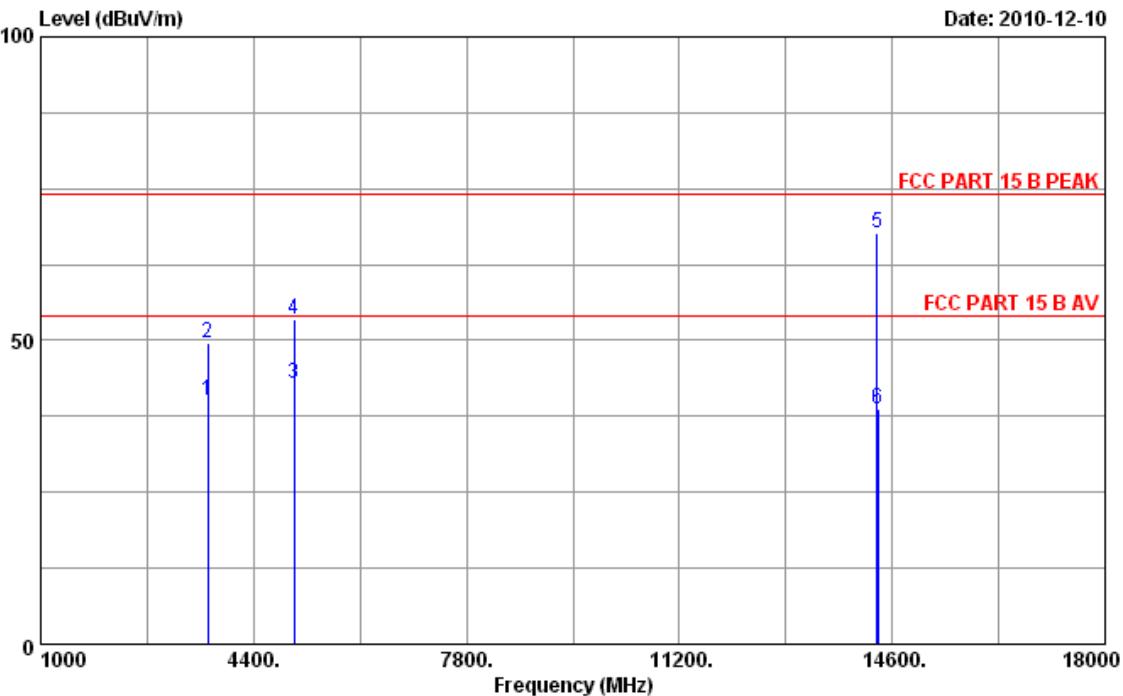
Product Service

Radiated Emission

Data: 14

File: E:\2010 Test Data\T\TUV\ SMB-A1006.EM6 (24)

Date: 2010-12-10

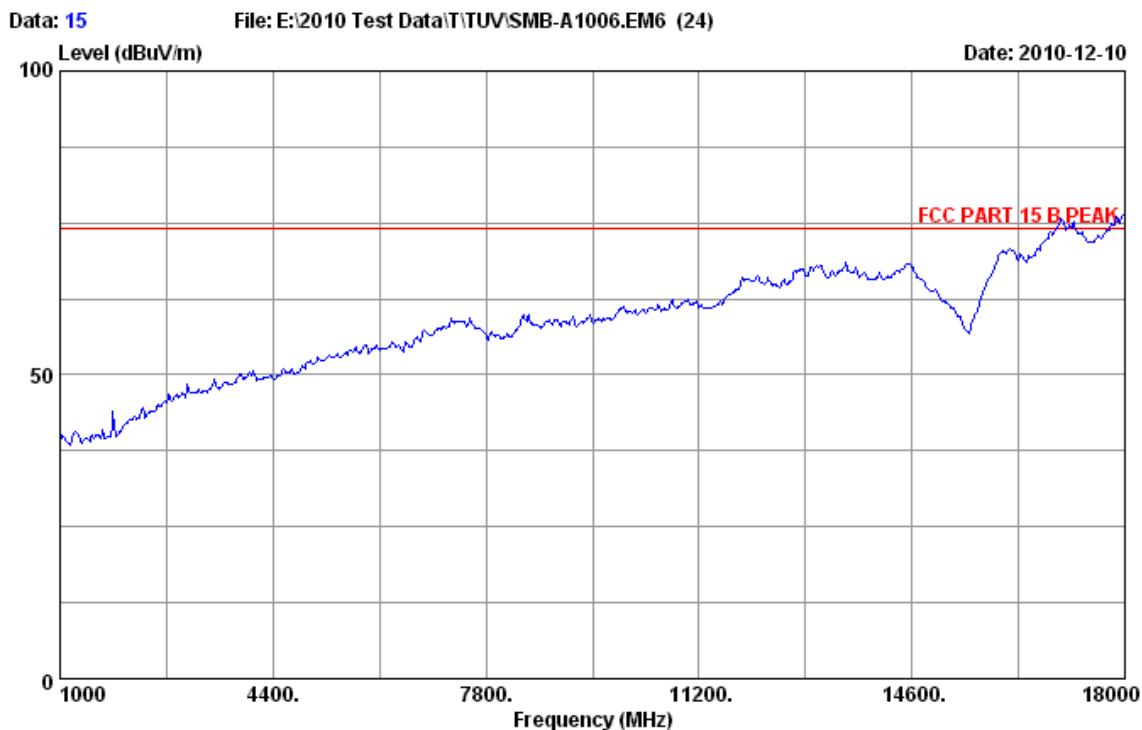


Site no. : 3m Chamber Data no. : 14
Dis. / Ant. : 3m 2009 3115 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 B PEAK
Env. / Ins. : 24°C/56% Engineer : Chris
EUT : NI3421-A01
Power rating : AC 120V/60Hz
Test Mode : Reading Memory and GPS ON

No.	Freq. (MHz)	Ant. (dB/m)	Cable Factor (dB)	Emission				
				Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	3667.530	32.02	7.21	36.72	40.09	54.00	13.91	Average
2	3669.000	32.02	7.21	46.10	49.47	74.00	24.53	Peak
3	5045.060	34.68	8.30	34.74	42.85	54.00	11.15	Average
4	5046.000	34.68	8.30	45.33	53.44	74.00	20.56	Peak
5	14362.000	42.30	14.23	44.74	67.69	74.00	6.31	Peak
6	14364.910	42.30	14.23	15.66	38.61	54.00	15.39	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

Radiated Emission



Site no.	:	3m Chamber	Data no.	:	15
Dis. / Ant.	:	3m 2009 3115	Ant. pol.	:	VERTICAL
Limit	:	FCC PART 15 B PEAK	Engineer	:	Chris
Env. / Ins.	:	24°C/56%			
EUT	:	NI3421-A01			
Power rating	:	AC 120V/60Hz			
Test Mode	:	Reading Memory and GPS ON			



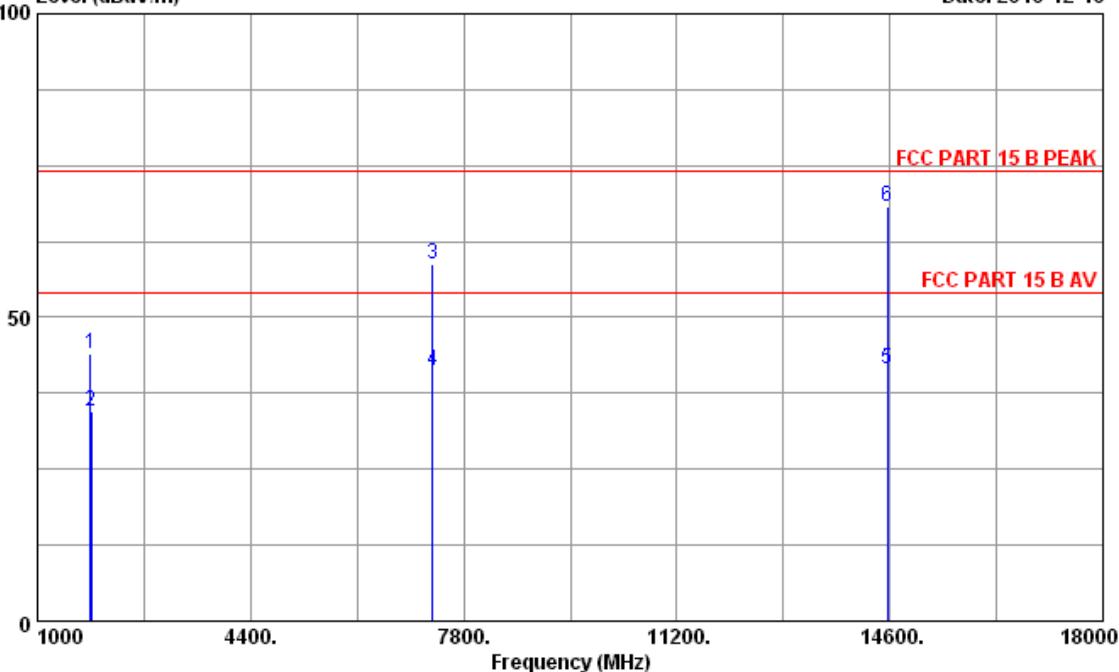
Product Service

Radiated Emission

Data: 16
Level (dBuV/m)

File: E:\2010 Test Data\T\TUV\SMB-A1006.EM6 (24)

Date: 2010-12-10



Site no. : 3m Chamber Data no. : 16
Dis. / Ant. : 3m 2009 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15 B PEAK
Env. / Ins. : 24°C/56% Engineer : Chris
EUT : NI3421-A01
Power rating : AC 120V/60Hz
Test Mode : Reading Memory and GPS ON

No.	Freq. (MHz)	Ant. (dB/m)	Cable (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1850.000	25.97	5.12	49.66	74.00	30.04	Peak
2	1852.690	25.97	5.12	40.28	54.00	19.42	Average
3	7307.000	37.81	10.02	44.76	58.65	15.35	Peak
4	7308.950	37.81	10.02	27.33	41.22	12.78	Average
5	14563.160	41.97	14.35	18.78	41.52	12.48	Average
6	14566.000	41.97	14.35	45.42	68.16	5.84	Peak

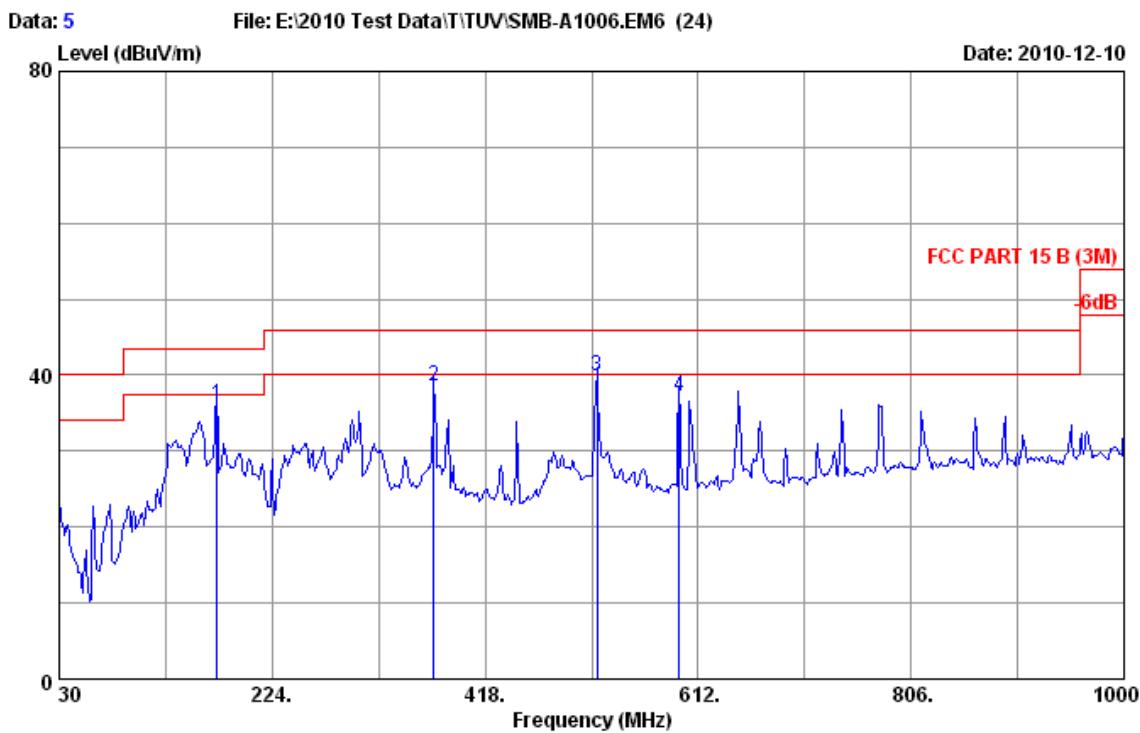
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Product Service

Radiated Emission

TC2-Read SD Card Mode test result:



Site no. : 3m Chamber Data no. : 5
Dis. / Ant. : 3m 2010 CBL6112D Ant. pol. : HORIZONTAL
Limit : FCC PART 15 B (3M)
Env. / Ins. : 24°C/56% Engineer : Chris
EUT : NI3421-A01
Power rating : AC 120V/60Hz
Test Mode : Read SD

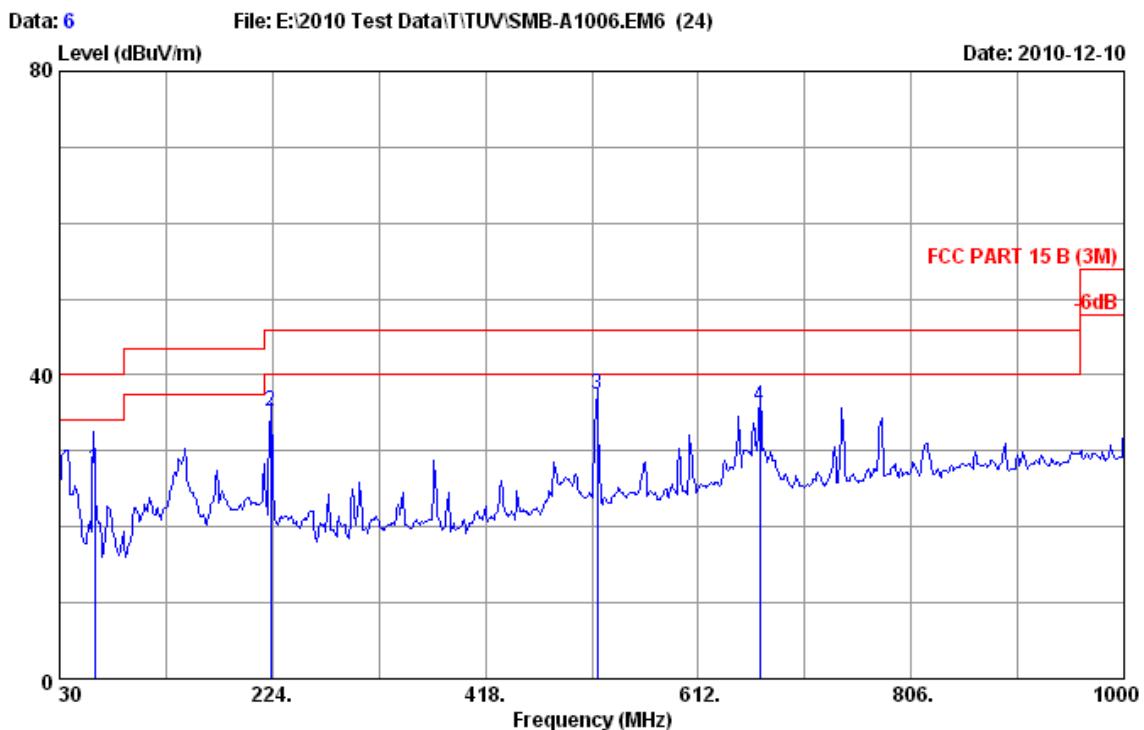
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Emission			
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	173.560	9.88	1.41	52.98	36.21	43.50	7.29
2	371.440	15.52	2.79	49.00	38.60	46.00	7.40
3	519.850	17.90	3.66	47.22	39.98	46.00	6.02
4	594.540	19.05	4.09	42.85	37.30	46.00	8.70

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Product Service

Radiated Emission



Site no. : 3m Chamber Data no. : 6
Dis. / Ant. : 3m 2010 CBL6112D Ant. pol. : VERTICAL
Limit : FCC PART 15 B (3M)
Env. / Ins. : 24°C/56% Engineer : Chris
EUT : NI3421-A01
Power rating : AC 120V/60Hz
Test Mode : Read SD

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	62.010	6.54	0.86	20.20	27.60	40.00	12.40	QP
2	222.060	10.64	1.92	22.66	35.22	46.00	10.78	QP
3	519.850	17.90	3.66	15.77	37.33	46.00	8.67	QP
4	668.260	19.50	4.38	12.05	35.93	46.00	10.07	QP

Remarks: 1. Emission Level = Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



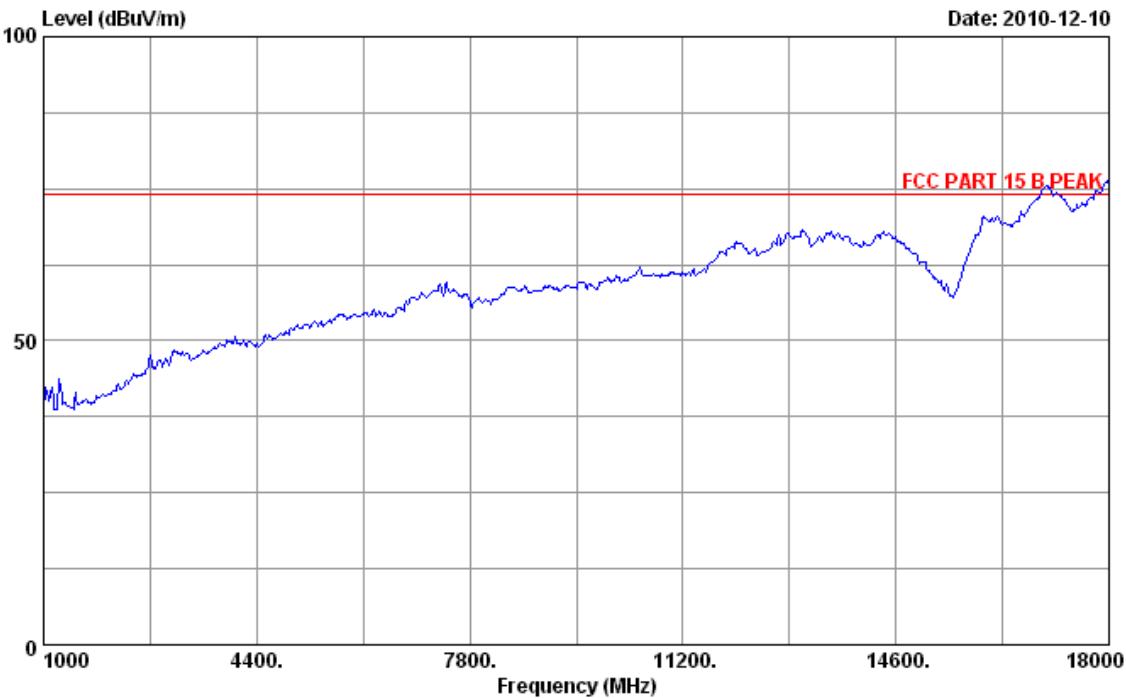
Product Service

Radiated Emission

Data: 21 File: E:\2010 Test Data\T\TUV\SMB-A1006.EM6 (24)

File: E:\2010 Test Data\T\TUV\SMB-A1006.EM6 (24)

Date: 2010-12-10



Site no.	: 3m Chamber	Data no.	: 21
Dis. / Ant.	: 3m 2009 3115	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15 B PEAK		
Env. / Ins.	: 24°C/56%	Engineer	: Chris
EUT	: NI3421-A01		
Power rating	: AC 120V/60Hz		
Test Mode	: Read SD		

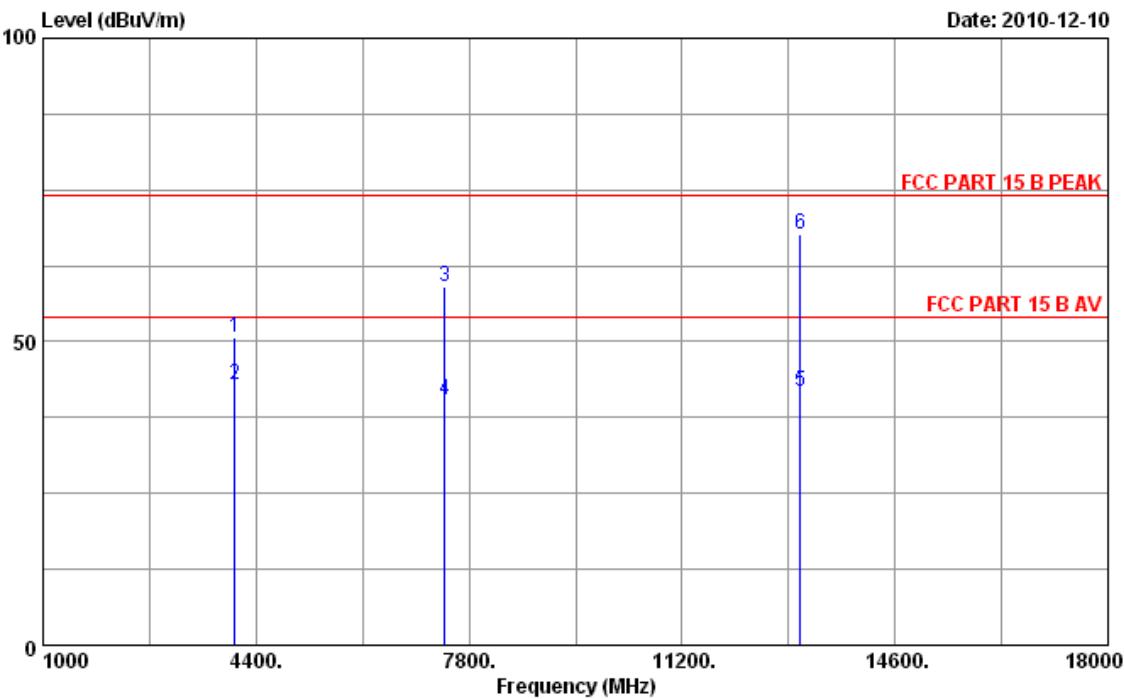


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Radiated Emission

Data: 22 File: E:\2010 Test Data\T\TUV\SMB-A1006.EM6 (24)

Date: 2010-12-10



Site no. : 3m Chamber Data no. : 22
Dis. / Ant. : 3m 2009 3115 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 B PEAK
Env. / Ins. : 24°C/56% Engineer : Chris
EUT : NI3421-A01
Power rating : AC 120V/60Hz
Test Mode : Read SD

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4060.000	33.32	7.52	45.54	50.81	74.00	23.19	Peak
2	4062.810	33.32	7.52	37.51	42.78	54.00	11.22	Average
3	7409.000	37.91	10.08	44.92	58.99	74.00	15.01	Peak
4	7411.200	37.91	10.08	26.41	40.48	54.00	13.52	Average
5	13086.320	41.64	13.45	18.50	41.80	54.00	12.20	Average
6	13087.000	41.64	13.45	44.43	67.73	74.00	6.27	Peak

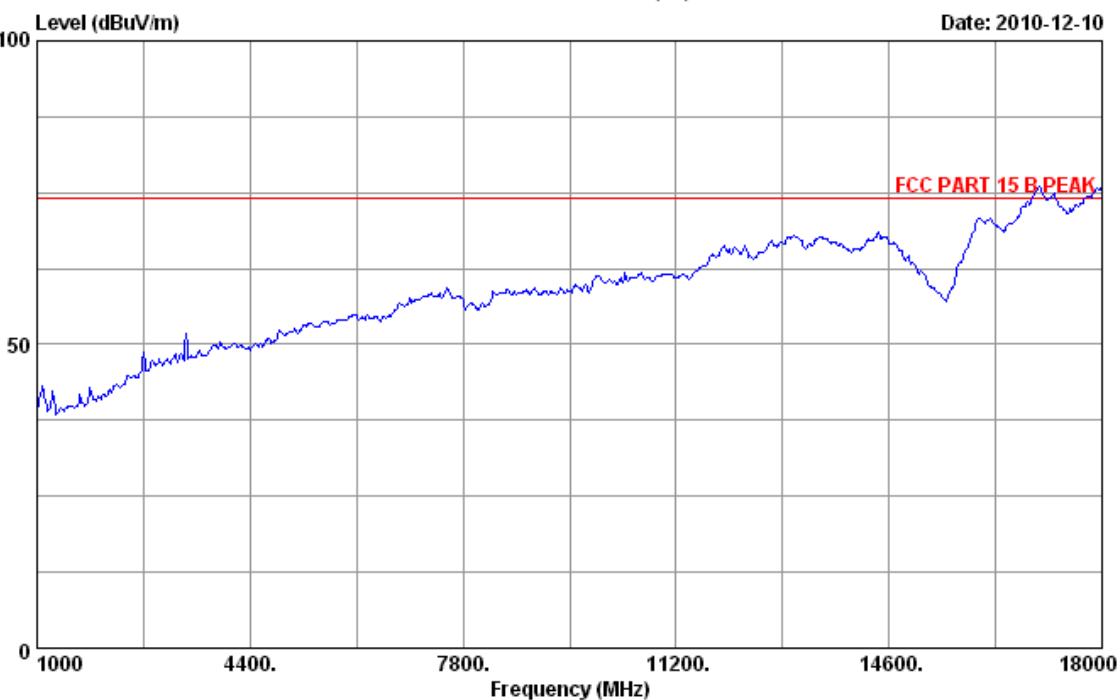
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

Radiated Emission

Data: 23

File: E:\2010 Test Data\T\TUV\SMB-A1006.EM6 (24)

Date: 2010-12-10



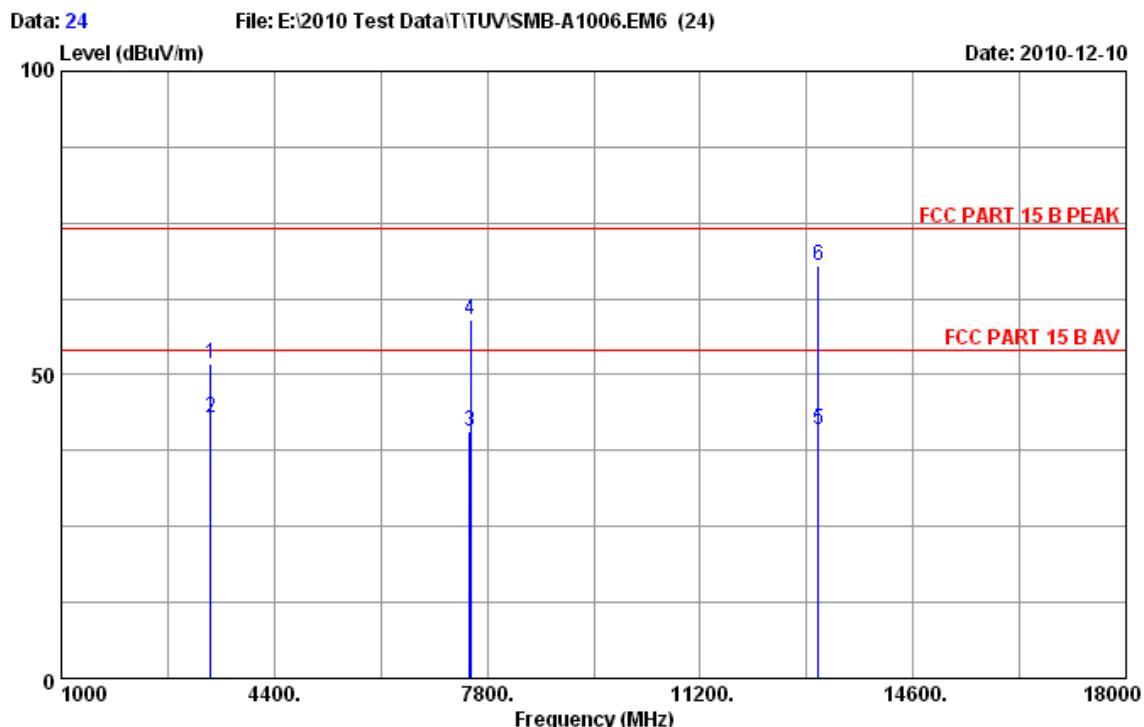
Site no. : 3m Chamber
Dis. / Ant. : 3m 2009 3115
Limit : FCC PART 15 B PEAK
Env. / Ins. : 24°C/56%
EUT : NI3421-A01
Power rating : AC 120V/60Hz
Test Mode : Read SD

Data no. : 23
Ant. pol. : VERTICAL
Engineer : Chris



Product Service

Radiated Emission



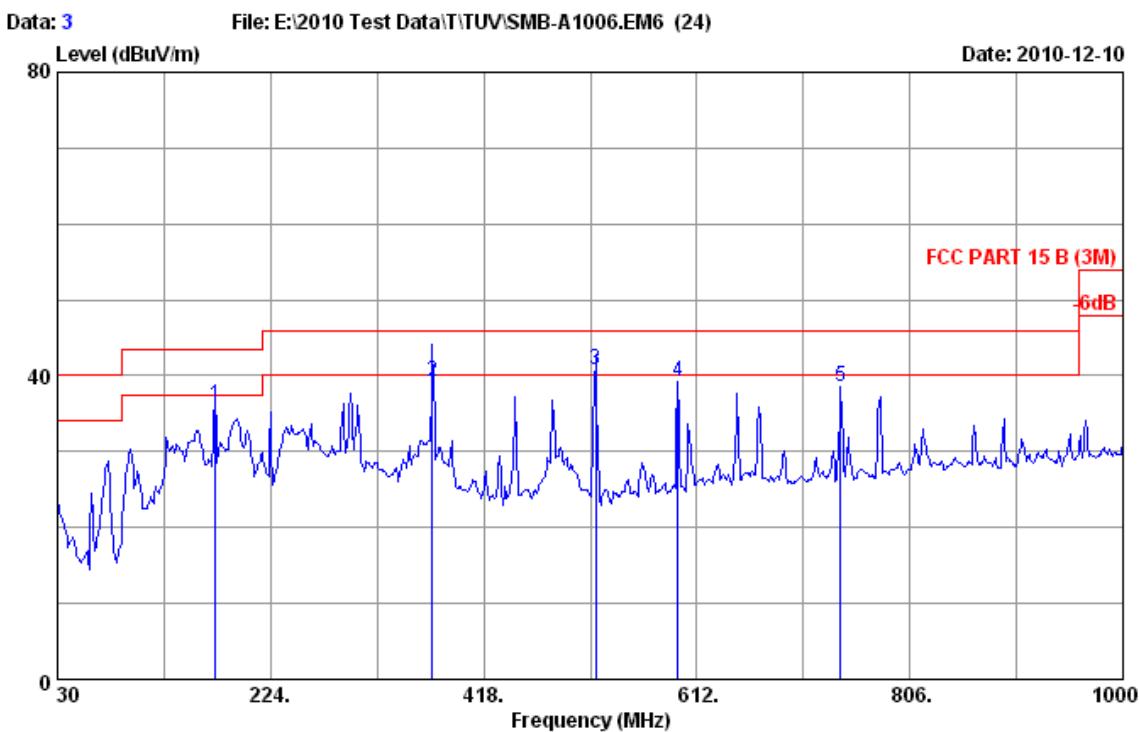
Site no. : 3m Chamber Data no. : 24
Dis. / Ant. : 3m 2009 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15 B PEAK
Env. / Ins. : 24°C/56% Engineer : Chris
EUT : NI3421-A01
Power rating : AC 120V/60Hz
Test Mode : Read SD

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	3380.000	31.20	6.98	49.84	51.90	74.00	22.10	Peak
2	3382.420	31.20	6.98	40.78	42.84	54.00	11.16	Average
3	7526.590	37.85	10.14	26.61	40.64	54.00	13.36	Average
4	7528.000	37.85	10.14	44.92	58.95	74.00	15.05	Peak
5	13085.220	41.64	13.45	17.75	41.05	54.00	12.95	Average
6	13087.000	41.64	13.45	44.60	67.90	74.00	6.10	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

Radiated Emission

TC3-Read USB Mode test result:



Site no. : 3m Chamber Data no. : 3
 Dis. / Ant. : 3m 2010 CBL6112D Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 B (3M)
 Env. / Ins. : 24°C/56% Engineer : Chris
 EUT : NI3421-A01
 Power rating : AC 120V/60Hz
 Test Mode : Read USB

No.	Freq.	Ant.	Cable Factor	Emission			
				Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits Margin (dBuV/m)
1	173.560		9.88	1.41	24.78	36.07	43.50 7.43 QP
2	371.250		15.52	2.79	20.80	39.11	46.00 6.89 QP
3	519.750		17.90	3.66	19.30	40.86	46.00 5.14 QP
4	594.540		19.05	4.09	16.09	39.23	46.00 6.77 QP
5	742.950		20.15	4.67	13.77	38.59	46.00 7.41 QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

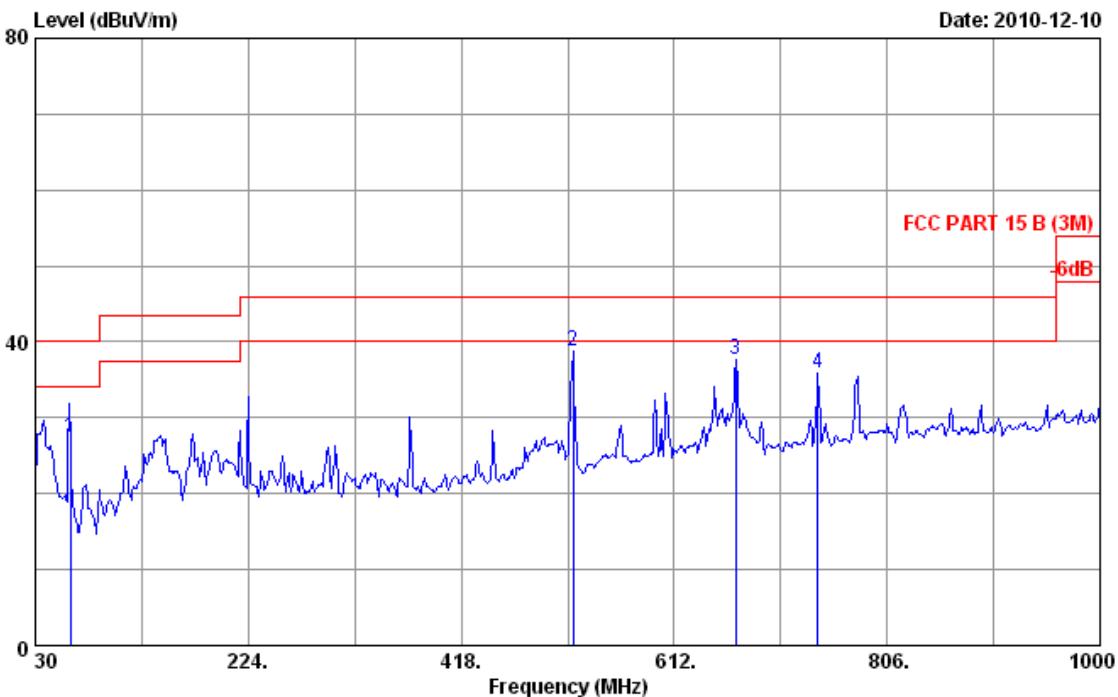


Product Service

Radiated Emission

Data: 4 File: E:\2010 Test Data\T\TUV\SMB-A1006.EM6 (24)

Date: 2010-12-10



Site no. : 3m Chamber Data no. : 4
Dis. / Ant. : 3m 2010 CBL6112D Ant. pol. : VERTICAL
Limit : FCC PART 15 B (3M)
Env. / Ins. : 24°C/56% Engineer : Chris
EUT : NI3421-A01
Power rating : AC 120V/60Hz
Test Mode : Read USB

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	62.010	6.54	0.86	20.02	27.42	40.00	12.58	QP
2	519.850	17.90	3.66	17.15	38.71	46.00	7.29	QP
3	668.260	19.50	4.38	13.83	37.71	46.00	8.29	QP
4	742.950	20.15	4.67	11.13	35.95	46.00	10.05	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



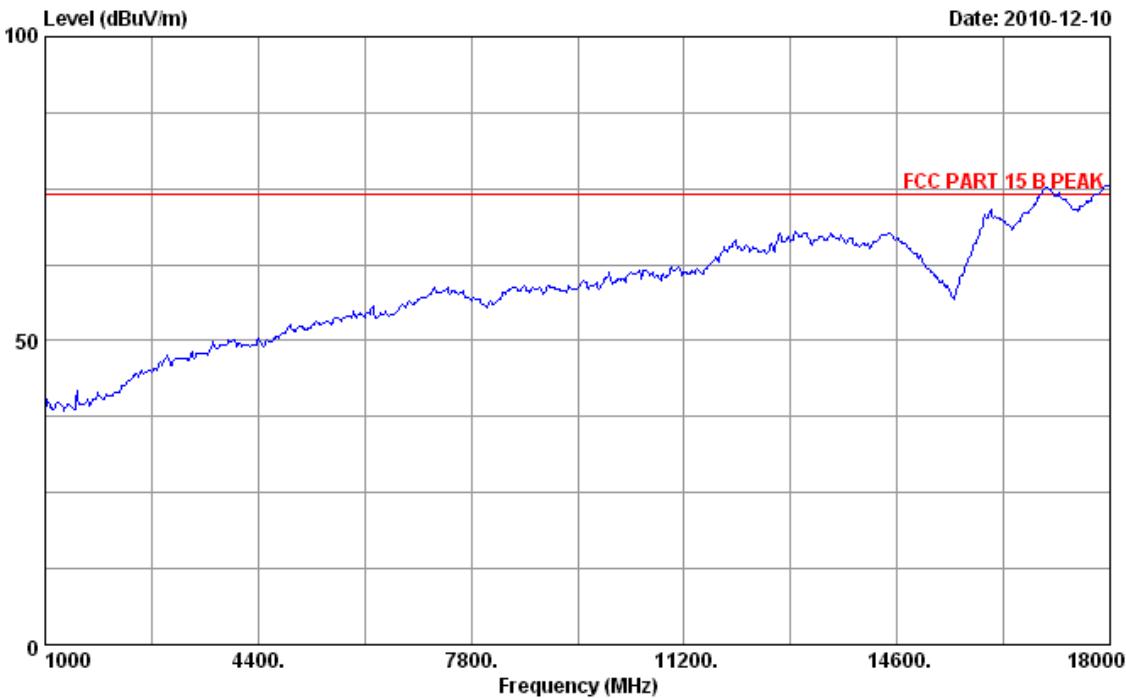
Product Service

Radiated Emission

Data: 19 File: E:\2010 Test Data\T\TUV\SMB-A1006.EM6 (24)

File: E:\2010 Test Data\T\TUV\SMB-A1006.EM6 (24)

Date: 2010-12-10



Site no.	: 3m Chamber	Data no.	: 19
Dis. / Ant.	: 3m 2009 3115	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15 B PEAK		
Env. / Ins.	: 24°C/56%	Engineer	: Chris
EUT	: NI3421-A01		
Power rating	: AC 120V/60Hz		
Test Mode	: Read USB		



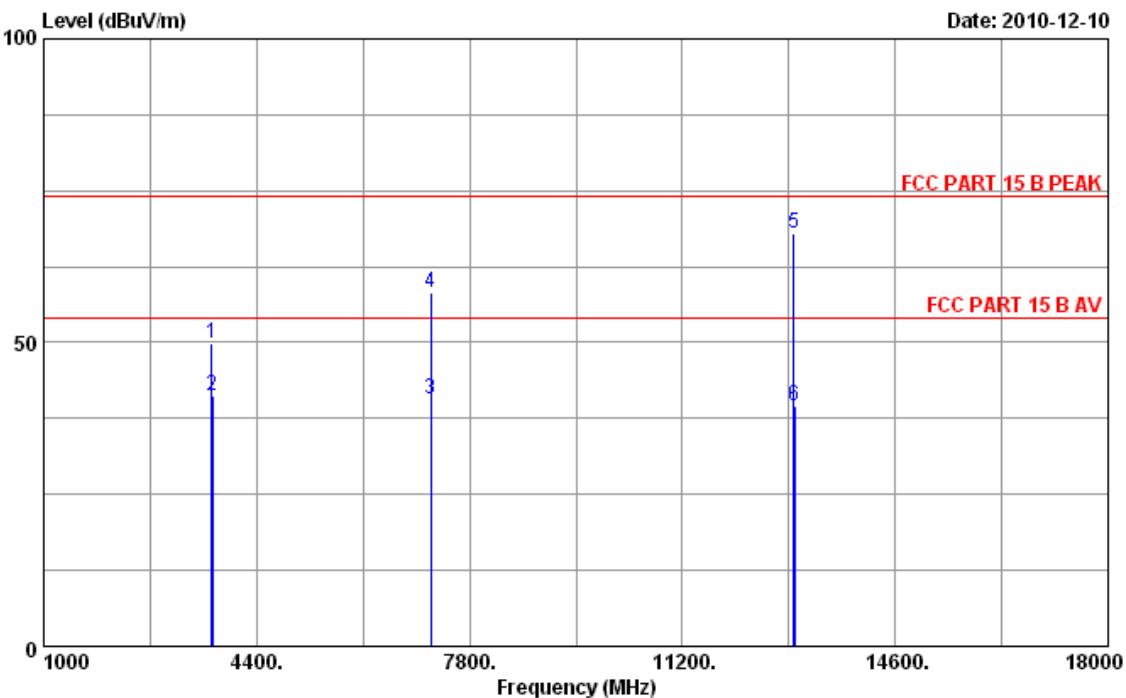
Product Service

Radiated Emission

Data: 20

File: E:\2010 Test Data\T\TUV\ SMB-A1006.EM6 (24)

Date: 2010-12-10



Site no. : 3m Chamber Data no. : 20
Dis. / Ant. : 3m 2009 3115 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 B PEAK
Env. / Ins. : 24°C/56% Engineer : Chris
EUT : NI3421-A01
Power rating : AC 120V/60Hz
Test Mode : Read USB

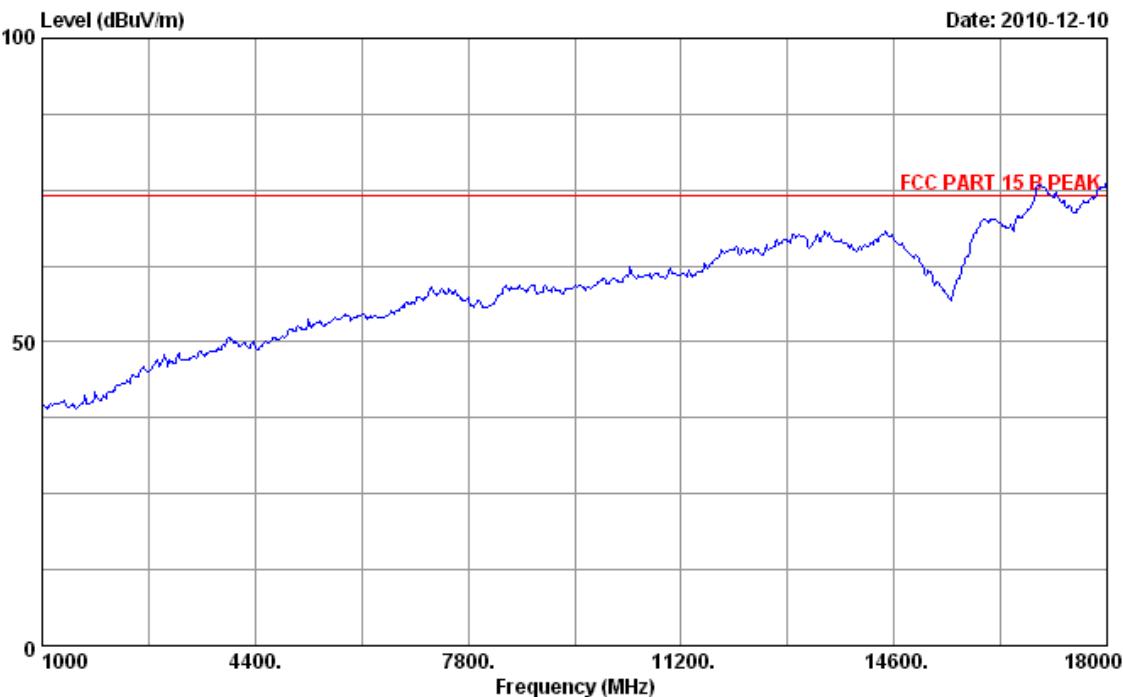
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	3686.000	32.10	7.23	46.46	49.94	74.00	24.06	Peak
2	3689.370	32.10	7.23	37.63	41.11	54.00	12.89	Average
3	7186.170	37.69	9.95	27.08	40.76	54.00	13.24	Average
4	7188.000	37.69	9.95	44.66	58.34	74.00	15.66	Peak
5	12985.000	41.33	13.39	44.96	68.04	74.00	5.96	Peak
6	12988.310	41.33	13.39	16.48	39.56	54.00	14.44	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

Radiated Emission

Data: 17 File: E:\2010 Test Data\TUV\SMB-A1006.EM6 (24)

Date: 2010-12-10



Site no.	:	3m Chamber	Data no.	:	17
Dis. / Ant.	:	3m 2009 3115	Ant. pol.	:	VERTICAL
Limit	:	FCC PART 15 B PEAK	Engineer	:	Chris
Env. / Ins.	:	24°C/56%			
EUT	:	NI3421-A01			
Power rating	:	AC 120V/ 60Hz			
Test Mode	:	Read USB			



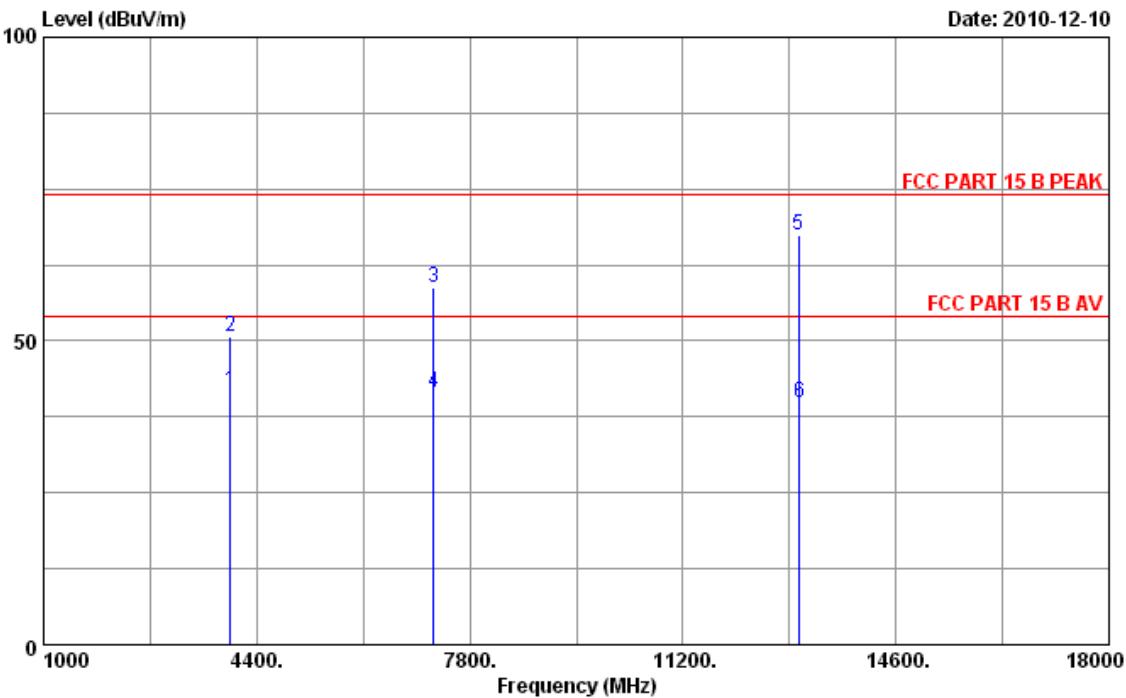
Product Service

Radiated Emission

Data: 18

File: E:\2010 Test Data\T\TÜV\SMB-A1006.EM6 (24)

Date: 2010-12-10



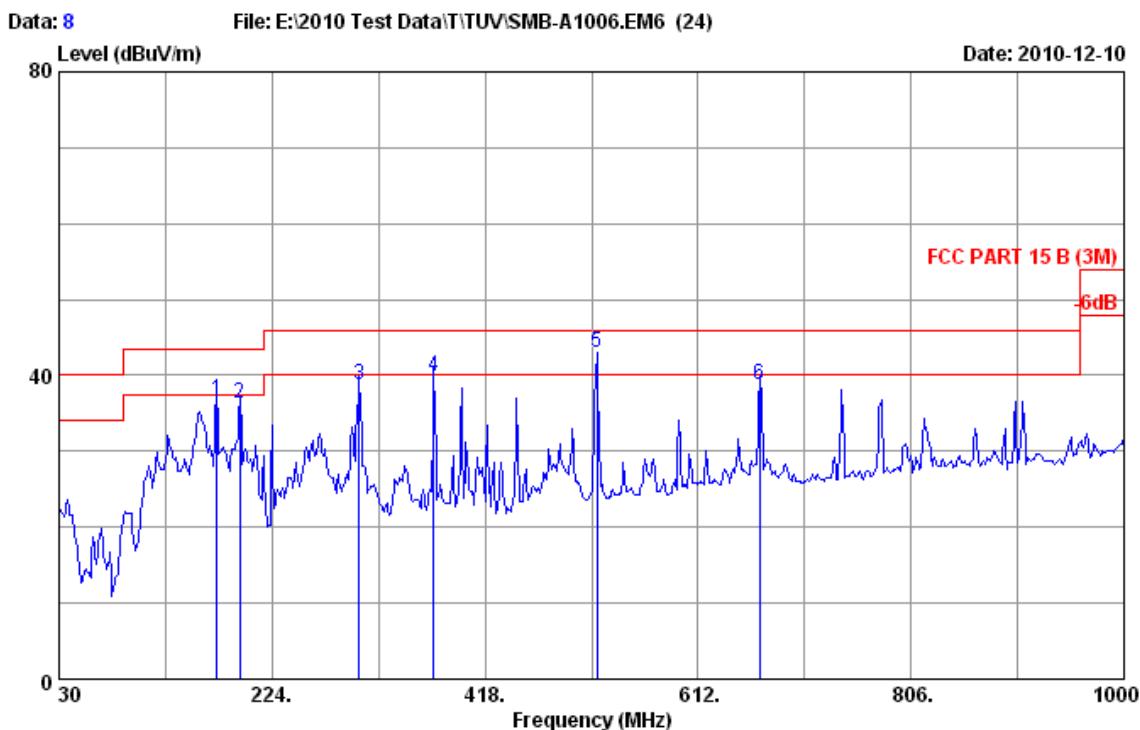
Site no. : 3m Chamber Data no. : 18
Dis. / Ant. : 3m 2009 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15 B PEAK
Env. / Ins. : 24°C/56% Engineer : Chris
EUT : NI3421-A01
Power rating : AC 120V/60Hz
Test Mode : Read USB

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	3973.270	33.33	7.45	36.52	41.69	54.00	12.31	Average
2	3975.000	33.33	7.45	45.43	50.60	74.00	23.40	Peak
3	7222.000	37.72	9.97	45.05	58.78	74.00	15.22	Peak
4	7225.410	37.72	9.97	27.81	41.54	54.00	12.46	Average
5	13053.000	41.54	13.43	44.25	67.51	74.00	6.49	Peak
6	13056.290	41.54	13.43	16.68	39.94	54.00	14.06	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

Radiated Emission

TC4-Connect to PC Mode test result:



Site no. : 3m Chamber Data no. : 8
 Dis. / Ant. : 3m 2010 CBL6112D Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 B (3M)
 Env. / Ins. : 24°C/56% Engineer : Chris
 EUT : NI3421-A01
 Power rating : AC 120V/60Hz
 Test Mode : Connect to PC

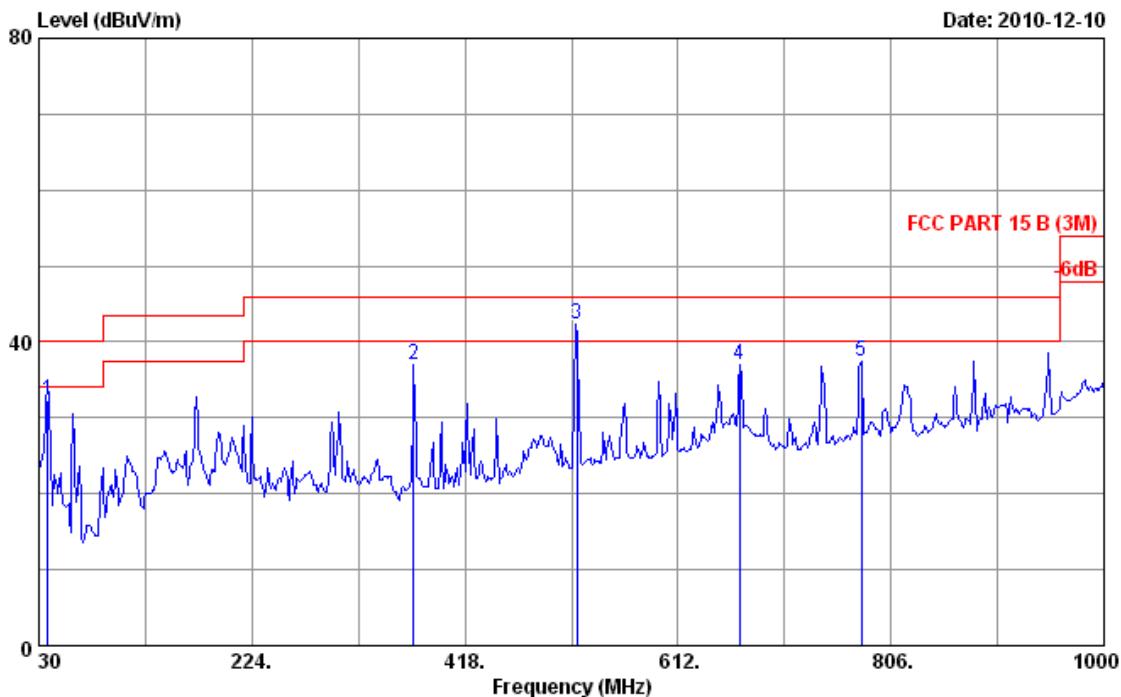
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Emission			
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)
1	173.560	9.88	1.41	25.56	36.85	43.50	6.65
2	194.900	9.90	1.66	24.65	36.21	43.50	7.29
3	303.540	14.02	2.50	22.33	38.85	46.00	7.15
4	371.440	15.52	2.79	21.66	39.97	46.00	6.03
5	519.700	17.90	3.66	21.40	42.96	46.00	3.04
6	668.260	19.50	4.38	14.99	38.87	46.00	7.13

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

Radiated Emission

Data: 7 File: E:\2010 Test Data\T\TUV\SMB-A1006.EM6 (24)

Date: 2010-12-10

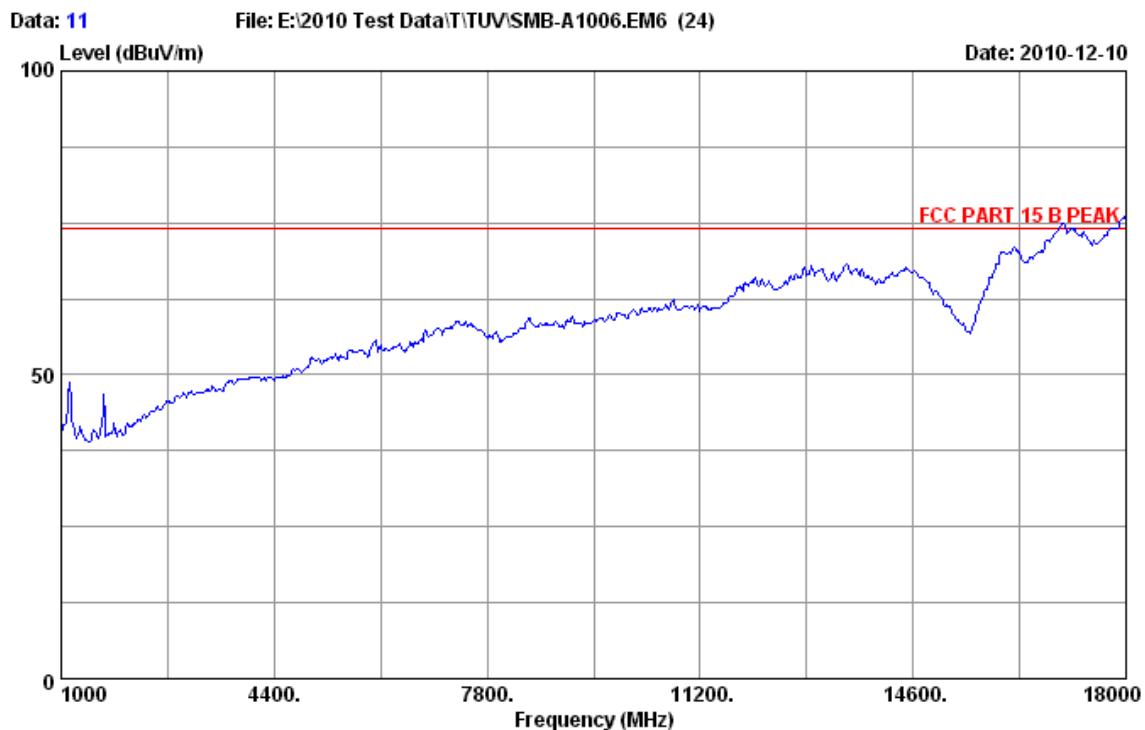


Site no. : 3m Chamber Data no. : 7
 Dis. / Ant. : 3m 2010 CBL6112D Ant. pol. : VERTICAL
 Limit : FCC PART 15 B (3M)
 Env. / Ins. : 24°C/56% Engineer : Chris
 EUT : NI3421-A01
 Power rating : AC 120V/60Hz
 Test Mode : Connect to PC

No.	Freq. (MHz)	Ant. (dB/m)	Cable Loss (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	37.760	14.56	0.67	17.10	32.33	40.00	7.67	QP
2	371.440	15.52	2.79	18.62	36.93	46.00	9.07	QP
3	519.770	17.90	3.66	20.99	42.55	46.00	3.45	QP
4	668.260	19.50	4.38	13.13	37.01	46.00	8.99	QP
5	778.840	20.48	4.81	12.14	37.43	46.00	8.57	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

Radiated Emission



Site no.	:	3m Chamber	Data no.	:	11
Dis. / Ant.	:	3m 2009 3115	Ant. pol.	:	HORIZONTAL
Limit	:	FCC PART 15 B PEAK	Engineer	:	Chris
Env. / Ins.	:	24°C/56%			
EUT	:	NI3421-A01			
Power rating	:	AC 120V/60Hz			
Test Mode	:	Connect to PC			

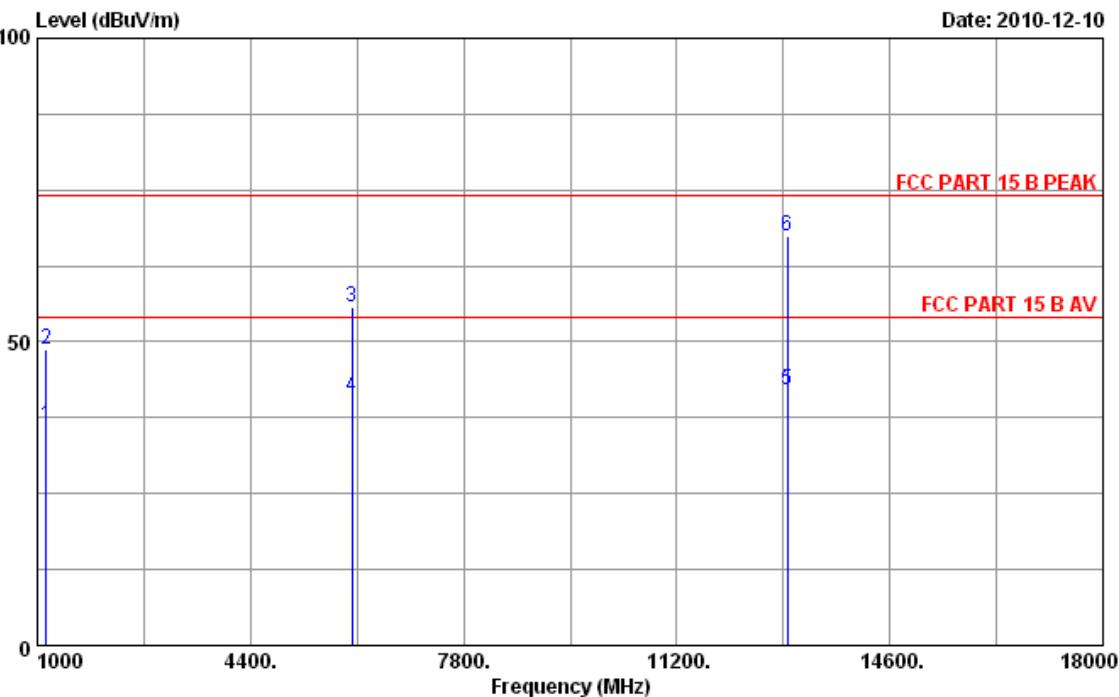


Product Service

Radiated Emission

Data: 12 File: E:\2010 Test Data\T\TUV\SMB-A1006.EM6 (24)

Date: 2010-12-10



Site no. : 3m Chamber Data no. : 12
Dis. / Ant. : 3m 2009 3115 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 B PEAK
Env. / Ins. : 24°C/56% Engineer : Chris
EUT : NI3421-A01
Power rating : AC 120V/60Hz
Test Mode : Connect to PC

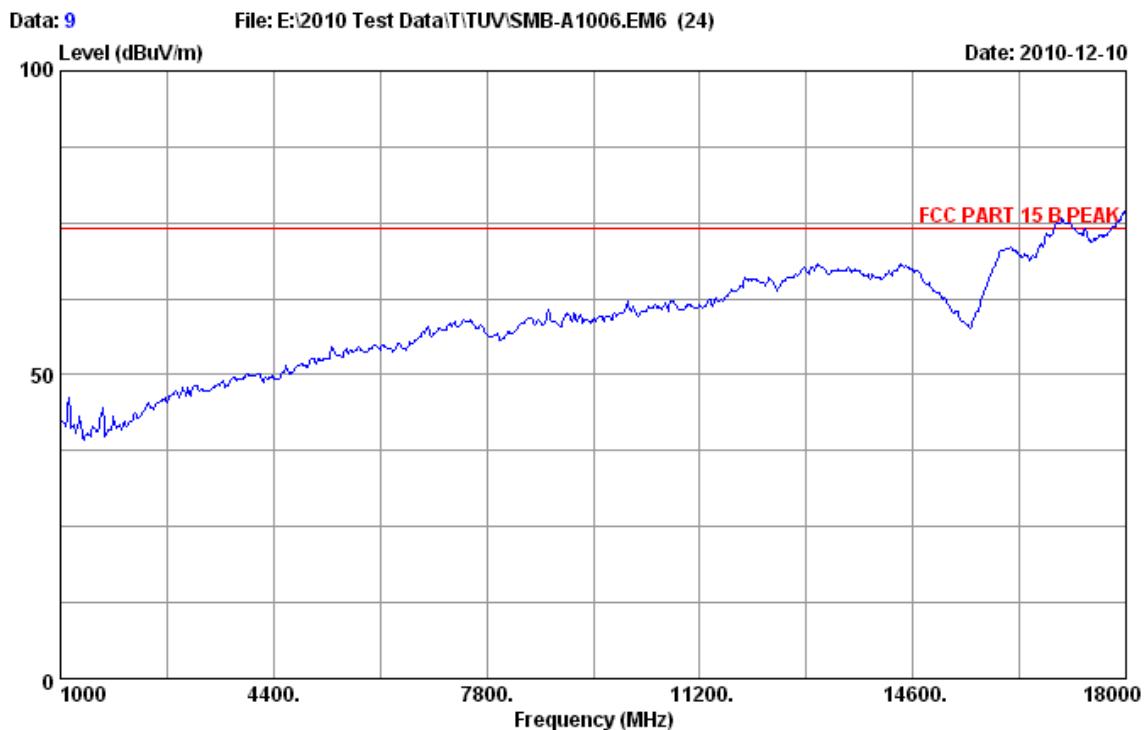
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Emission				
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1135.370	25.34	4.15	44.27	36.11	54.00	17.89	Average
2	1136.000	25.34	4.15	57.02	48.86	74.00	25.14	Peak
3	6015.000	36.08	9.06	44.97	55.72	74.00	18.28	Peak
4	6016.240	36.08	9.06	30.25	41.00	54.00	13.00	Average
5	12967.860	41.26	13.38	19.21	42.18	54.00	11.82	Average
6	12968.000	41.26	13.38	44.47	67.44	74.00	6.56	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Product Service

Radiated Emission



Site no.	:	3m Chamber	Data no.	:	9
Dis. / Ant.	:	3m 2009 3115	Ant. pol.	:	VERTICAL
Limit	:	FCC PART 15 B PEAK	Engineer	:	Chris
Env. / Ins.	:	24°C/56%			
EUT	:	NI3421-A01			
Power rating	:	AC 120V/60Hz			
Test Mode	:	Connect to PC			

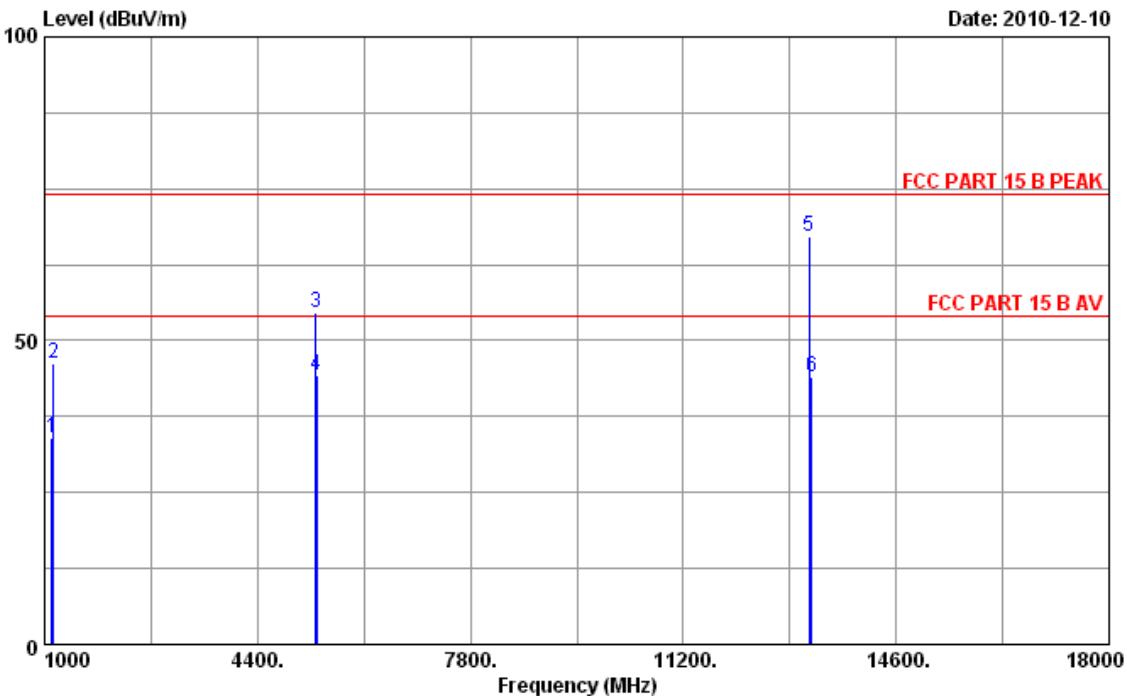


Product Service

Radiated Emission

Data: 10 File: E:\2010 Test Data\T\TÜV\ISMB-A1006.EM6 (24)

Date: 2010-12-10



Site no. : 3m Chamber Data no. : 10
Dis. / Ant. : 3m 2009 3115 Ant. pol. : VERTICAL
Limit : FCC PART 15 B PEAK
Env. / Ins. : 24°C/56% Engineer : Chris
EUT : NI3421-A01
Power rating : AC 120V/60Hz
Test Mode : Connect to PC

No.	Freq. (MHz)	Ant. (dB/m)	Cable Factor (dB)	Emission					
				Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1121.300	25.35	4.12	42.30	34.09	54.00	19.91	19.91	Average
2	1136.000	25.34	4.15	54.33	46.17	74.00	27.83	27.83	Peak
3	5335.000	35.13	8.53	45.72	54.68	74.00	19.32	19.32	Peak
4	5349.775	35.16	8.54	35.41	44.42	54.00	9.58	9.58	Average
5	13206.000	41.98	13.52	43.63	67.07	74.00	6.93	6.93	Peak
6	13252.100	42.12	13.56	20.41	43.92	54.00	10.08	10.08	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Product Service

Test Equipment List

Radiated Emission Test

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL. DUE DATE
EMI Spectrum	Agilent	E4407B	MY41440292	May.08, 11
Test Receiver	Rohde & Schwarz	ESVS10	834468/011	May.08, 11
Amplifier	HP	8447D	2648A04738	May.08, 11
Bilog Antenna	Schaffner	CBL6111C	2598	Dec.14, 10
RF Cable	MIYAZAKI	8D-FB	3# Chamber No.1	May.08, 11
Coaxial Switch	Anritsu	MP59B	M73989	May.08, 11



Product Service

8 System Measurement Uncertainty

For a 95% confidence level, the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 were:

System Measurement Uncertainty

Items		Extended Uncertainty
RE	Field strength (dB μ V/m)	U=4.32dB (30MHz-25GHz)
CE	Disturbance Voltage (dB μ V)	U=2.40dB(150KHz-30MHz)