EMC
TEST REPORT

Report No. : EME-030276
Model No. : ME101
Issued Date : Mar. 5, 2003

Applicant : NETGEAR, Inc.
4500 Great America Parkway, Santa Clara,
CA 95054 USA

Test By : Intertek Testing Services Taiwan Ltd.
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Reviewed By

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Summary of Tests

802.11B Wireless Ethernet Bridge-Model: ME101
FCC ID: PY3ME101

Test	Reference	Results
Minimum 6dB Bandwidth test	15.247(a)(2)	Complies
Maximum Output Power test	15.247(b)	Complies
Radiated Spurious Emission test	15.205, 15.209	Complies
Power Spectrum Density test	15.247(d)	Complies
Power Line Conducted Emission test	15.207	Complies

1. General information

1.1 Identification of the EUT

Manufacturer	: NETGEAR, Inc.
Product	: 802.11B Wireless Ethernet Bridge
Model No.	: ME101
FCC ID.	: PY3ME101
Frequency Range	: 2412MHz to 2462MHz
Channel Number	: 11 channels
Frequency of Each Channel	: 2412MHz, 2417MHz, 2422MHz, 2427MHz, 2432MHz, 2437MHz, 2442MHz, 2447MHz, 2452MHz, 2457MHz, 2462MHz
Type of Modulation	: CCK (11Mps, 5.5Mbps), DQPSK (2Mbps), DBPSK (1Mbps)
Power Supply	: 120Vac, 60Hz with Adapter (UL110-0520 or M1-10S05)
Power Cord	: N/A
Sample Received	: Feb. 26, 2003
Test Date(s)	: Feb. 26, 2003 to Mar. 1, 2003

A FCC DoC report has been generated for the client.

1.2 Additional information about the EUT

The wireless LAN device – 11Mbps Access Point, brings Ethernet-like performance to the wireless realm. Fully compliant with IEEE802.11b standard, the 11Mbps Access Point also provides powerful features such as the Windows-based configuration utility, WEP security, SNMP and more.

For more detail features, please refer to User's manual as file name “Installation guide.pdf”

1.3 Antenna description

The EUT can be equipped with two kinds of antenna. Besides, it has a internal antenna. And the specification of tree antennas list as below:

The antenna is affixed to the EUT using a unique connector, which allows for replacement of a broken antenna, but DOES NOT use a standard antenna jack or electrical connector.

Antenna Gain : 4dBi
Antenna Type : Dipole antenna
Connector Type : SMA Reverse

Antenna Gain : 2dBi
Antenna Type : Dipole antenna
Connector Type : SMA Reverse

The EUT uses a permanently connected antenna.

Antenna Gain : 0dBi
Antenna Type : PIFA
Connector Type : N/A

We only measured the antenna (4dBi gain) for all the test items and recorded the test result in this report.

1.4 Peripherals equipment

Peripherals	Manufacturer	Product No.	Serial No.	FCC ID
Printer	HP	C2642A	TH86K1N2ZB	FCC DoC Approval
Notebook	HP	XE_3	TW20705468	FCC DoC Approval
Modem	Aski	V1456VQE	700V23100066865	FCC DoC Approval

Signal cable description:
Unshielded RJ 45 Cat.5 UTP Cable length 20 meter ×1

2. Test specifications

2.1 Test standard

The EUT was performed according to the procedures in FCC Part 15 Subpart C Section §15.205、§15.207、§15.209、§15.247 and ANSI C63.4/1992.

The AC power conducted emissions was invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz. (15.207 paragraph)

Radiated emissions were invested cover the frequency range from 30MHz to 1000MHz using a receiver RBW of 120kHz record QP reading, and the frequency over 1GHz using a spectrum analyzer RBW of 1MHz and 10Hz VBW record Average reading. (15.209 paragraph), the Peak reading recorded also on the report.

The test of radiated measurements according to FCC Part15 Section 15.33(a) had been conducted and the field strength of this frequency band were all meet limit requirement, thus we evaluate the EUT pass the specified test.

The EUT setup configurations please refer to the photo of test configuration in item.

2.2 Operation mode

The EUT was supplied with 120Vac to 5Vdc adapter. Connect EUT to Notebook via a 20m length Unshielded RJ45 Cat.5 cable. Run the software “rfb11.exe” under Windows OS.

The EUT was transmitted continuously during the test.

The EUT has two adapters, and we measured the two adapters during conducted emission and radiated spurious equal to or less than 1GHz emission test.

2.4 Test equipment

Equipment	Brand	Frequency range	Model No.	Series No.	Last Cal.Date
EMI Test Receiver	Rohde & Schwarz	9kHz~2.75GHz	ESCS 30	825788/014	May 24, 2002
EMI Test Receiver	Rohde & Schwarz	20Hz~26.5GHz	ESMI	825428/005	June 10, 2002
Spectrum Analyzer	Rohde & Schwarz	9kHz~30GHz	FSP 30	100137	July 10, 2002
Spectrum Analyzer	Rohde & Schwarz	20Hz~40GHz	FSEK 30	100186	Oct. 9, 2002
Horn Antenna	EMCO	1GHz~18GHz	3115	9906-5890	Sep. 19, 2002
Horn Antenna	SCHWARZBECK	14GHz~40GHz	BBHA 9170	159	June 20, 2002
Bilog Antenna	SCHWARZBECK	25MHz~1.7GHz	VULB 9160	3111	June 20, 2002
Turn Table	HDGmbH	N/A	DS 420S	420/669/01	N/A
Antenna Tower	HDGmbH	N/A	MA 240	240/573	N/A
Microwave Amplifier	Agilent	2GHz~26.5GHz	8348A	3111A00567	Dec. 20, 2002
RF Power Meter	Boonton	10kHz~100GHz	4231A	79401	May 22, 2002
Power Sensor	Boonton	30MHz~8GHz	51011-EMC	32482	May 25, 2002

Note:
1. The calibration interval of the above instruments is 12 months.

3. Minimum 6dB Bandwidth test

3.1 Operating environment

Temperature:	23	℃
Relative Humidity:	58	%
Atmospheric Pressure	1023	hPa

3.2 Test setup & procedure

The minimum 6dB bandwidth per FCC §15.247(a)(2) was measured using a 50 ohm spectrum analyzer with the resolutions bandwidth set at 100kHz, the video bandwidth set at 100kHz, and the SPAN>>RBW. The test was performed at 3 channels (lowest, middle and highest channel). The minimum 6-dB modulation bandwidth is in the following Table.

See Minimum 6dB Bandwidth plot as file name “Minimum 6dB Bandwidth plot.pdf”

3.3 Measured data of Minimum 6dB Bandwidth test results

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit
Low	2412	10.18	＞500kHz
Middle	2437	10.34	＞500kHz
High	2462	10.30	＞500kHz

4. Maximum Output Power test

4.1 Operating environment

Temperature:	22	℃
Relative Humidity:	58	%
Atmospheric Pressure	1023	hPa

4.2 Test setup & procedure

The power output per FCC §15.247(b) was measured on the EUT using a 50 ohm SMA cable connected to power meter via power sensor. Power was read directly and cable loss correction (0.5dB) was added to the reading to obtain power at the EUT antenna terminals. The test was performed at 3 channels (lowest, middle and highest channel).

4.3 Measured data of Maximum Output Power test results

Channel	Frequency (MHz)	C.B.L. (dB)	Reading (dBm)	Power Output		Limit (W)
				(dBm)	(mW)	
Lowest	2412	0.5	15.39	15.89	38.82	1
Middle	2437	0.5	15.25	15.75	37.58	1
Highest	2462	0.5	15.27	15.77	37.76	1

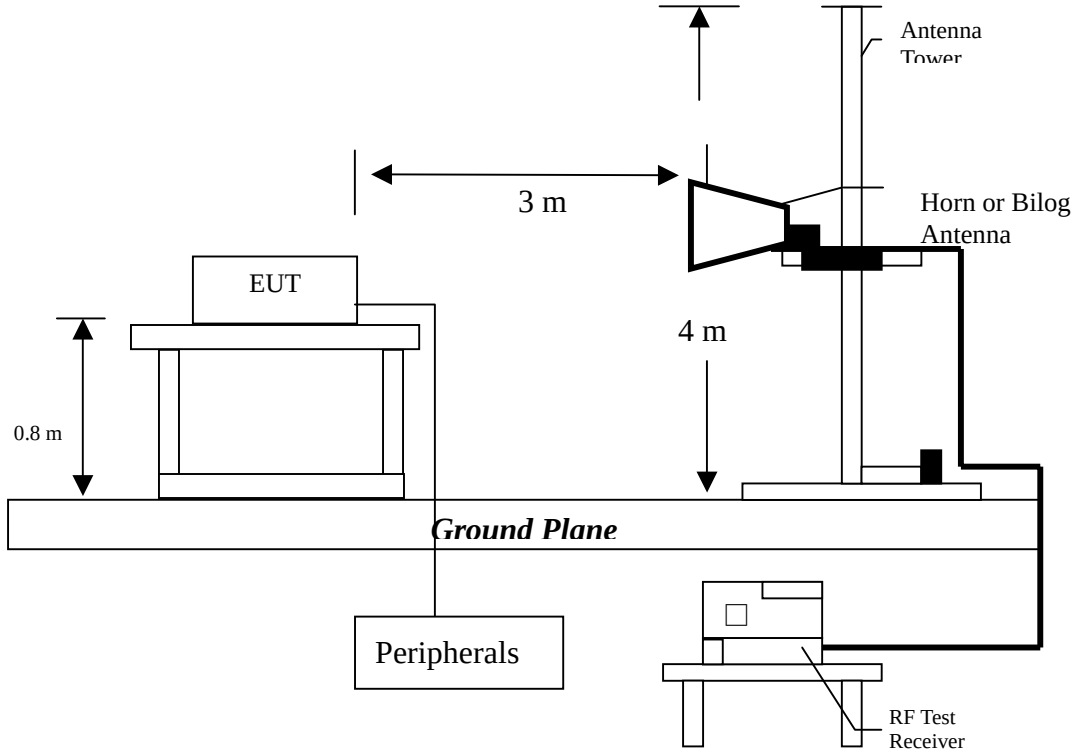
5. Radiated Emission test

5.1 Operating environment

Temperature:	23	℃
Relative Humidity:	58	%
Atmospheric Pressure	1023	hPa

5.2 Test setup & procedure

The Diagram below shows the test setup, which is utilized to make these measurements.



Radiated emission measurements were performed from 30MHz to 25GHz. Spectrum Analyzer Resolution Bandwidth is 100kHz or greater for frequencies 30MHz to 1GHz, 1MHz – for frequencies above 1GHz.
The EUT for testing is arranged on a wooden turntable. If some peripherals apply to the EUT, the peripherals will be connected to EUT and the whole system. During the test, all cables were arranged to produce worst-case emissions. The signal is maximized through rotation. The height of antenna and polarization is changing constantly for exploring for maximum signal level. The height of antenna can be up to 4 meters and down to 1 meter.
The measurement for radiated emission will be done at the distance of three meters unless the signal level is too low to measure at that distance. In the case of the reading under noise floor, a pre-amplifier is used and/or the test is conducted at a closer distance. And then all readings are extrapolated back to the equivalent three meter reading using inverse scaling with distance.

5.3 Emission limits

The spurious Emission shall test through the 10th harmonic. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a).

Frequency (MHz)	Limits (dB μ V/m@3m)
30-88	40
88-216	43.5
216-960	46
Above 960	54

Remark:
1. In the above table, the tighter limit applies at the band edges.
2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system

Uncertainty was calculated in accordance with NAMAS NIS 81.
Expanded uncertainty (k=2) of radiated emission measurement is ±4.98 dB.
Expanded uncertainty (k=2) of conducted emission measurement is ±2.02 dB.

5.4 Radiated spurious emission test data

5.4.1 Measurement results: frequencies equal to or less than 1 GHz

The radiated spurious emissions at

Frequency (MHz)	Margin
747.8000	-4.60

are less than uncertainty. This is within the stated measurement uncertainty, this may affect compliance determined in other test arrangements.

EUT : ME101 (with adapter M1-10S05)
Worst Case Condition : Tx at low channel

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV)	Limit @ 3 m (dBuV)	Margin (dB)
43.6000	QP	V	16.92	14.58	31.50	40.00	-8.50
288.0000	QP	V	14.37	19.13	33.50	46.00	-12.50
319.1000	QP	V	14.69	14.61	29.30	46.00	-16.70
359.8000	QP	V	15.74	11.06	26.80	46.00	-19.20
600.4000	QP	V	21.14	10.26	31.40	46.00	-14.60
747.8000	QP	V	23.43	17.97	41.40	46.00	-4.60
288.0000	QP	H	14.37	18.53	32.90	46.00	-13.10
359.8000	QP	H	15.74	10.66	26.40	46.00	-19.60
439.3000	QP	H	18.06	9.44	27.50	46.00	-18.50
480.1000	QP	H	18.72	12.38	31.10	46.00	-14.90
530.5000	QP	H	19.65	9.15	28.80	46.00	-17.20
747.8000	QP	H	23.43	16.87	40.30	46.00	-5.70

Remark:
1.Corrected Level = Reading Level + Correction Factor
2.Correction Factor = Antenna Factor + Cable Loss
3. “-“ means the emission is below the noise floor.

The radiated spurious emissions at

Frequency (MHz)	Margin
199.60000	-4.30
399.40000	-4.60
199.60000	-3.00

Frequency (MHz)	Margin
399.40000	-0.90
748.00000	-4.60

are less than uncertainty. This is within the stated measurement uncertainty, this may affect compliance determined in other test arrangements.

EUT : ME101 (with adapter UL110-0520)
Worst Case Condition : Tx at low channel

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV)	Limit @ 3 m (dBuV)	Margin (dB)
43.00000	QP	V	14.26	19.94	34.20	40	-5.80
62.40000	QP	V	11.13	22.77	33.90	40	-6.10
159.60000	QP	V	10.82	24.28	35.10	43.5	-8.40
199.60000	QP	V	12.59	26.61	39.20	43.5	-4.30
399.40000	QP	V	19.53	21.87	41.40	46	-4.60
748.00000	QP	V	25.27	11.23	36.50	46	-9.50
199.60000	QP	H	12.59	27.91	40.50	43.5	-3.00
280.00000	QP	H	14.88	23.12	38.00	46	-8.00
368.60000	QP	H	19.53	18.57	38.10	46	-7.90
399.40000	QP	H	19.53	25.57	45.10	46	-0.90
431.60000	QP	H	20.30	16.10	36.40	46	-9.60
748.00000	QP	H	25.27	16.13	41.40	46	-4.60

Remark:
1.Corrected Level = Reading Level + Correction Factor
2.Correction Factor = Antenna Factor + Cable Loss
3. “-“ means the emission is below the noise floor.

5.4.2 Measurement results: frequency above 1GHz

EUT : ME101
Test Condition : Tx at low channel

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV)	Limit @ 3 m (dBuV)	Margin (dB)
2038	PK	V	0	29.36	25.46	54.82	74	-19.18
2038	AV	V	0	29.36	13.52	42.88	54	-11.12
4076	PK	V	31.88	34.59	-	-	74	-
4076	AV	V	31.88	34.59	-	-	54	-
4824	PK	V	32.496	35.47	46.81	49.784	74	-24.216
4824	AV	V	32.496	35.47	35.22	38.194	54	-15.806
7236	PK	V	34.32	38.42	-	-	74	-
7236	AV	V	34.32	38.42	-	-	54	-
2038	PK	H	0	29.36	24.88	54.24	74	-19.76
2038	AV	H	0	29.36	12.94	42.3	54	-11.7
4076	PK	H	31.88	34.59	-	-	74	-
4076	AV	H	31.88	34.59	-	-	54	-
4824	PK	H	32.496	35.47	44.37	47.344	74	-26.656
4824	AV	H	32.496	35.47	32.68	35.654	54	-18.346
7236	PK	H	34.32	38.42	-	-	74	-
7236	AV	H	34.32	38.42	-	-	54	-

Remark:
1.Corrected Level = Reading Level + Correction Factor－Preamp
2.Correction Factor = Antenna Factor + Cable Loss
3. “-“ means the emission is below the noise floor

EUT : ME101
Test Condition : Tx at middle channel

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV)	Limit @ 3 m (dBuV)	Margin (dB)
2063	PK	V	0	29.36	24.75	54.11	74	-19.89
2063	AV	V	0	29.36	14.89	44.25	54	-9.75
4126	PK	V	31.88	34.59	-	-	74	-
4126	AV	V	31.88	34.59	-	-	54	-
4874	PK	V	32.496	35.47	45.12	48.094	74	-25.906
4874	AV	V	32.496	35.47	34.79	37.764	54	-16.236
7311	PK	V	34.32	38.42	-	-	74	-
7311	AV	V	34.32	38.42	-	-	54	-
2063	PK	H	0	29.36	24.21	53.57	74	-20.43
2063	AV	H	0	29.36	13.55	42.91	54	-11.09
4126	PK	H	31.88	34.59	-	-	74	-
4126	AV	H	31.88	34.59	-	-	54	-
4874	PK	H	32.496	35.47	45.81	48.784	74	-25.216
4874	AV	H	32.496	35.47	33.97	36.944	54	-17.056
7311	PK	H	34.32	38.42	-	-	74	-
7311	AV	H	34.32	38.42	-	-	54	-

Remark:
1.Corrected Level = Reading Level + Correction Factor－Preamp
2.Correction Factor = Antenna Factor + Cable Loss
3. “-“ means the emission is below the noise floor

EUT : ME101
Test Condition : Tx at high channel

Frequency (MHz)	Spectrum Analyzer Detector	Antenna Polariz. (H/V)	Preamp (dB)	Correction Factor (dB/m)	Reading (dBuV)	Corrected Level (dBuV)	Limit @ 3 m (dBuV)	Margin (dB)
2088	PK	V	0	29.36	25.11	54.47	74	-19.53
2088	AV	V	0	29.36	13.75	43.11	54	-10.89
4176	PK	V	31.88	34.59	-	-	74	-
4176	AV	V	31.88	34.59	-	-	54	-
4924	PK	V	32.496	35.47	44.94	47.914	74	-26.086
4924	AV	V	32.496	35.47	32.64	35.614	54	-18.386
7386	PK	V	34.32	38.42	-	-	74	-
7386	AV	V	34.32	38.42	-	-	54	-
2088	PK	H	0	29.36	25.89	55.25	74	-18.75
2088	AV	H	0	29.36	14.77	44.13	54	-9.87
4176	PK	H	31.88	34.59	-	-	74	-
4176	AV	H	31.88	34.59	-	-	54	-
4924	PK	H	32.496	35.47	46.01	48.984	74	-25.016
4924	AV	H	32.496	35.47	34.28	37.254	54	-16.746
7386	PK	H	34.32	38.42	-	-	74	-
7386	AV	H	34.32	38.42	-	-	54	-

Remark:
1.Corrected Level = Reading Level + Correction Factor－Preamp
2.Correction Factor = Antenna Factor + Cable Loss
3. “-“ means the emission is below the noise floor

6. Power Spectrum Density test

6.1 Operating environment

Temperature:	25	℃
Relative Humidity:	58	%
Atmospheric Pressure	1023	hPa

6.2 Test setup & procedure

The power spectrum density per FCC §15.247(d) was measured from the antenna port of the EUT using a 50ohm spectrum analyzer with the resolution bandwidth set at 3kHz, the video bandwidth set at 30kHz, a span of 1.5 MHz, and the sweep time set at 500 seconds. Power Density was read directly and cable loss (0.5dB) correction was added to the reading to obtain power at the EUT antenna terminals. The test was performed at 3 channels (lowest, middle and highest channel). The Power Spectral Density measured result is in the following table.

See Power Spectrum Density plot as file name “Power Spectrum Density plot.pdf”

6.3 Measured data of Power Spectrum Density test results

Channel	Frequency (MHz)	Measured level (dBm)	Limit (dBm)
Low	2413.647	-10.7	8
Middle	2437.789	-10.19	8
High	2459.999	-11.7	8

7. Emission on the band edge §FCC 15.247(C)

In any 100kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

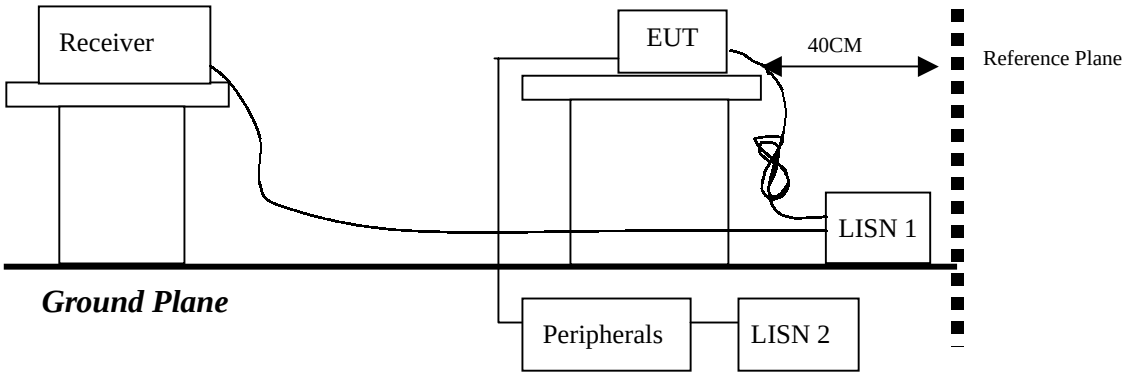
See band-edge plot as file name “Band-edge plot.pdf”.

8. Power Line Conducted Emission test §FCC 15.207

8.1 Operating environment

Temperature: 23 ℃
Relative Humidity: 58 %
Atmospheric Pressure 1023 hPa

8.2 Test setup & procedure



The EUT are connected to the main power through a line impedance stabilization network (LISN). This provides a 50 ohm/50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination.
Both sides (Line and Neutral) of AC line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4/1992 on conducted measurement. The bandwidth of the field strength meter (R & S Test Receiver ESCS 30) is set at 9kHz.

See Power Line Conducted Emission plot as file name “Power Line Conducted Emission plot.pdf”.

Emission Limit

Freq. (MHz)	Conducted Limit (dBuV)	
	Q.P.	Ave.
0.15~0.50	66 – 56*	56 – 46*
0.50~5.00	56	46
5.00~30.0	60	50

*Decreases with the logarithm of the frequency.

8.3 Power Line Conducted Emission test data

(1) Line

EUT : ME101 (with adapter M1-10S05)

Test Condition : Tx at low channel

Freq. (MHz)	Reading (dB μ V) QP	Limit (dB μ V) QP	Reading (dB μ V) AV	Limit (dB μ V) AV	Margin (dB)	
					QP	AV
0.1900	50.10	64.04	39.50	54.04	-13.94	-14.54
0.2380	41.50	62.17	32.90	52.17	-20.67	-19.27
0.4700	37.70	56.51	32.40	46.51	-18.81	-14.11
1.4140	29.60	56.00	20.00	46.00	-26.40	-26.00
3.2060	24.70	56.00	16.10	46.00	-31.30	-29.90
12.6780	19.10	60.00	8.50	50.00	-40.90	-41.50

(2) Neutral

EUT : ME101 (with adapter M1-10S05)

Test Condition : Tx at low channel

Freq. (MHz)	Reading (dB μ V) QP	Limit (dB μ V) QP	Reading (dB μ V) AV	Limit (dB μ V) AV	Margin (dB)	
					QP	AV
0.1900	51.50	64.04	45.00	54.04	-12.54	-9.04
0.2380	42.60	62.17	36.10	52.17	-19.57	-16.07
0.3740	40.90	58.41	36.30	48.41	-17.51	-12.11
0.4700	43.80	56.51	39.30	46.51	-12.71	-7.21
1.6940	28.80	56.00	21.10	46.00	-27.20	-24.90
8.2780	18.70	60.00	8.50	50.00	-41.30	-41.50

Remark:

1. 1. The reading value included cable loss and LISN factor.
2. Uncertainty was calculated in accordance with NAMAS NIS 81.
   Expanded uncertainty (k=2) of conducted emission measurement is ±2.6 dB.

(1) Line

EUT : ME101 (with adapter M1-10S05)

Test Condition : Tx at middle channel

Freq. (MHz)	Reading (dB μ V) QP	Limit (dB μ V) QP	Reading (dB μ V) AV	Limit (dB μ V) AV	Margin (dB)	
					QP	AV
0.1900	48.50	64.04	38.60	54.04	-15.54	-15.44
0.2380	43.00	62.17	34.90	52.17	-19.17	-17.27
0.3740	39.60	58.41	31.80	48.41	-18.81	-16.61
0.4700	41.10	56.51	34.70	46.51	-15.41	-11.81
1.1260	32.00	56.00	23.50	46.00	-24.00	-22.50
1.4060	30.70	56.00	20.90	46.00	-25.30	-25.10

(2) Neutral

EUT : ME101 (with adapter M1-10S05)

Test Condition : Tx at middle channel

Freq. (MHz)	Reading (dB μ V) QP	Limit (dB μ V) QP	Reading (dB μ V) AV	Limit (dB μ V) AV	Margin (dB)	
					QP	AV
0.1900	50.80	64.04	44.00	54.04	-13.24	-10.04
0.2380	42.40	62.17	35.70	52.17	-19.77	-16.47
0.3740	41.20	58.41	35.60	48.41	-17.21	-12.81
0.4700	43.00	56.51	39.00	46.51	-13.51	-7.51
0.7020	31.90	56.00	26.60	46.00	-24.10	-19.40
1.0780	31.80	56.00	26.10	46.00	-24.20	-19.90

Remark:

1. 1. The reading value included cable loss and LISN factor.
2. Uncertainty was calculated in accordance with NAMAS NIS 81.
   Expanded uncertainty (k=2) of conducted emission measurement is ±2.6 dB.

(1) Line

EUT : ME101 (with adapter M1-10S05)

Test Condition : Tx at high channel

Freq. (MHz)	Reading (dB μ V) QP	Limit (dB μ V) QP	Reading (dB μ V) AV	Limit (dB μ V) AV	Margin (dB)	
					QP	AV
0.1900	48.30	64.04	38.50	54.04	-15.74	-15.54
0.2380	39.40	62.17	33.80	52.17	-22.77	-18.37
0.3740	35.80	58.41	29.80	48.41	-22.61	-18.61
0.4700	38.50	56.51	33.90	46.51	-18.01	-12.61
0.7500	29.60	56.00	23.80	46.00	-26.40	-22.20
1.7340	31.10	56.00	21.30	46.00	-24.90	-24.70

(2) Neutral

EUT : ME101 (with adapter M1-10S05)

Test Condition : Tx at high channel

Freq. (MHz)	Reading (dB μ V) QP	Limit (dB μ V) QP	Reading (dB μ V) AV	Limit (dB μ V) AV	Margin (dB)	
					QP	AV
0.1900	51.10	64.04	45.20	54.04	-12.94	-8.84
0.2380	42.60	62.17	36.20	52.17	-19.57	-15.97
0.3740	41.50	58.41	37.20	48.41	-16.91	-11.21
0.4700	44.40	56.51	39.70	46.51	-12.11	-6.81
0.7020	33.20	56.00	26.80	46.00	-22.80	-19.20
1.0780	31.60	56.00	24.00	46.00	-24.40	-22.00

Remark:

1. 1. The reading value included cable loss and LISN factor.
2. Uncertainty was calculated in accordance with NAMAS NIS 81.
   Expanded uncertainty (k=2) of conducted emission measurement is ±2.6 dB.

(1) Line

EUT : ME101 (with adapter UL110-0520)

Test Condition : Tx at low channel

Freq. (MHz)	Reading (dB μ V) QP	Limit (dB μ V) QP	Reading (dB μ V) AV	Limit (dB μ V) AV	Margin (dB)	
					QP	AV
0.1580	48.80	65.57	41.50	55.57	-16.77	-14.07
0.3180	46.00	59.76	42.30	49.76	-13.76	-7.46
0.4860	45.70	56.24	37.80	46.24	-10.54	-8.44
1.2940	45.80	56.00	30.10	46.00	-10.20	-15.90
1.7820	46.50	56.00	29.00	46.00	-9.50	-17.00
3.2380	47.50	56.00	26.50	46.00	-8.50	-19.50

(2) Neutral

EUT : ME101 (with adapter UL110-0520)

Test Condition : Tx at low channel

Freq. (MHz)	Reading (dB μ V) QP	Limit (dB μ V) QP	Reading (dB μ V) AV	Limit (dB μ V) AV	Margin (dB)	
					QP	AV
0.1580	47.70	65.57	40.80	55.57	-17.87	-14.77
0.3260	48.20	59.55	39.30	49.55	-11.35	-10.25
0.4860	48.00	56.24	36.00	46.24	-8.24	-10.24
0.8060	47.50	56.00	37.20	46.00	-8.50	-8.80
1.1340	46.00	56.00	33.20	46.00	-10.00	-12.80
3.0780	46.50	56.00	27.60	46.00	-9.50	-18.40

Remark:

1. 1. The reading value included cable loss and LISN factor.
2. Uncertainty was calculated in accordance with NAMAS NIS 81.
   Expanded uncertainty (k=2) of conducted emission measurement is ±2.6 dB.

(1) Line

EUT : ME101 (with adapter UL110-0520)

Test Condition : Tx at middle channel

Freq. (MHz)	Reading (dB μ V) QP	Limit (dB μ V) QP	Reading (dB μ V) AV	Limit (dB μ V) AV	Margin (dB)	
					QP	AV
0.1580	48.80	65.57	41.00	55.57	-16.77	-14.57
0.3260	46.20	59.55	41.80	49.55	-13.35	-7.75
0.4860	45.90	56.24	39.00	46.24	-10.34	-7.24
1.1260	45.20	56.00	39.70	46.00	-10.80	-6.30
1.7820	45.80	56.00	33.60	46.00	-10.20	-12.40
3.2140	45.70	56.00	31.80	46.00	-10.30	-14.20

(2) Neutral

EUT : ME101 (with adapter UL110-0520)

Test Condition : Tx at middle channel

Freq. (MHz)	Reading (dB μ V) QP	Limit (dB μ V) QP	Reading (dB μ V) AV	Limit (dB μ V) AV	Margin (dB)	
					QP	AV
0.1580	47.90	65.57	40.50	55.57	-17.67	-15.07
0.3260	47.90	59.55	38.90	49.55	-11.65	-10.65
0.4860	47.90	56.24	35.50	46.24	-8.34	-10.74
0.8060	47.50	56.00	36.70	46.00	-8.50	-9.30
1.1340	46.10	56.00	31.90	46.00	-9.90	-14.10
3.0780	47.20	56.00	25.80	46.00	-8.80	-20.20

Remark:

1. 1. The reading value included cable loss and LISN factor.
2. Uncertainty was calculated in accordance with NAMAS NIS 81.
   Expanded uncertainty (k=2) of conducted emission measurement is ±2.6 dB.

(1) Line

EUT : ME101 (with adapter UL110-0520)

Test Condition : Tx at high channel

Freq. (MHz)	Reading (dB μ V) QP	Limit (dB μ V) QP	Reading (dB μ V) AV	Limit (dB μ V) AV	Margin (dB)	
					QP	AV
0.3260	46.20	59.55	42.20	49.55	-13.35	-7.35
0.4860	45.80	56.24	39.40	46.24	-10.44	-6.84
1.1340	45.30	56.00	37.40	46.00	-10.70	-8.60
1.3020	42.80	56.00	22.90	46.00	-13.20	-23.10
1.7900	42.80	56.00	21.50	46.00	-13.20	-24.50
3.2540	40.20	56.00	16.10	46.00	-15.80	-29.90

(2) Neutral

EUT : ME101 (with adapter UL110-0520)

Test Condition : Tx at high channel

Freq. (MHz)	Reading (dB μ V) QP	Limit (dB μ V) QP	Reading (dB μ V) AV	Limit (dB μ V) AV	Margin (dB)	
					QP	AV
0.3260	49.20	59.55	41.20	49.55	-10.35	-8.35
0.4860	47.50	56.24	36.50	46.24	-8.74	-9.74
0.8140	48.00	56.00	34.50	46.00	-8.00	-11.50
0.9820	43.40	56.00	23.70	46.00	-12.60	-22.30
1.1420	45.60	56.00	29.10	46.00	-10.40	-16.90
3.1020	43.80	56.00	18.80	46.00	-12.20	-27.20

Remark:

1. 1. The reading value included cable loss and LISN factor.
2. Uncertainty was calculated in accordance with NAMAS NIS 81.
   Expanded uncertainty (k=2) of conducted emission measurement is ±2.6 dB.