





ISO/IEC17025Accredited Lab.

Report No: FCC 0711080 File reference No: 2007-12-04

Applicant: Group Sense Mobile-Tech Limited

Product: WiFi PMP

Model No: i280

Trademark: Xplore

Test Standards: FCC Part 15 Subpart C, Paragraph 15.247

Test result:

It is herewith confirmed and found to comply with the

requirements set up by ANSI C63.4&FCC Part 15 Subpart C, Paragraph 15.247 regulations for the evaluation of

electromagnetic compatibility

Approved By

Jack Chung

Jack Chung Manager

Dated: Dec 04,2007

Results appearing herein relate only to the sample tested The technical reports is issued errors and omissions exempt and is subject to withdrawal at

SHENZHEN TIMEWAY TECHNOLOGY CONSULTING CO LTD

5/F,Block 4, Anhua Industrial Zone.,No.8 TaiRan Rd.CheGongMiao,FuTian District, Shenzhen,CHINA.

Tel (755) 83448688 Fax (755) 83442996

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Special Statement:

The testing quality ability of our laboratory meet with "Quality Law of People's Republic of China" Clause 19.

The testing quality system of our laboratory meet with ISO/IEC-17025 requirements, which is approved by CNAL. This approval result is accepted by MRA of APLAC.

Our test facility is recognized, certified, or accredited by the following organizations:

CNAL-LAB Code: L2292

The EMC Laboratory has been assessed and in compliance with CNAL/AC01:2002 accreditation criteria for testing Laboratories (identical to ISO/IEC 17025:1999 General Requirements) for the Competence of testing Laboratories.

FCC-Registration No.: 899988

The EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications commission. The acceptance letter from the FCC is maintained in our files. Registration No.: 899988.

IC- Registration No.: IC5205A-01

The EMC Laboratory has been registered and fully described in a report filed with the (IC) Industry Canada. The acceptance letter from the IC is maintained in our files. Registration IC No.: 5205A-01.

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1.0 **General Details**

Test Lab Details

Name: SHENZHEN TIMEWAY TECHNOLOGY CONSULTING CO LTD

Address: 5/F,Block 4, Anhua Industrial Zone.,No.8 TaiRan Rd.CheGongMiao,FuTian District,

Shenzhen, CHINA.

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Site on File with the Federal Communications Commission – United Sates

Registration Number: 899988

For 3m & 10 m OATS

Site Listed with Industry Canada of Ottawa, Canada

Registration Number: IC: 5205A-01

For 3m & 10 m OATS

1.2 Applicant Details

Applicant: Group Sense Mobile-Tech Limited

Address: 6/F, Bldg 9, 5 Science Park West Ave., Hong Kong Science Park, Shatin, N.T., Hong Kong

Telephone: 00852-28328271 Fax: 00852-25912360

1.3 Description of EUT

Product: WiFi PMP

Manufacturer: Group Sense Mobile-Tech Limited

Brand Name: Xplore Model Number: i280 Additional Model Name N/A Additional Trade Name N/A

Rating: Input: DC3.4-4.2V 1A max;

Power Supply: Model: CP39B0050V100V, Input: 110-240V~, 50-60Hz; Output: 5V, 1A

Type of Modulation DBPSK、DQPSK、CCK、OFDM

Frequency range 2412-2462MHz

Number of Channel

Air Data Rate 54, 48, 36, 24, 18, 12, 9, 6Mbps at 802.11g mode; 11, 5.5, 2, 1Mbps

at 802.11b mode

Frequency Selection By software

Printed antenna on PCB, and the antenna gain is -3.0dBi Antenna type

1.4 Submitted Sample

1 Sample

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1.5 Test Duration 2007-11-14 to 2007-12-03

1.6 Test Uncertainty

Conducted Emissions Uncertainty = ± 2.4 dB Radiated Emissions Uncertainty = ± 6.0 dB

1.7 Test Engineer

Terry Tang

The sample tested by

Print Name: Terry Tang

2.0		Test Equi	pments		
Instrument Type	Manufacturer	Model	Serial No.	Date of Cal.	Due Date
ESPI Test Receiver	ROHDE&SCHWARZ	ESPI 3	100379	2006-12-06	2007-12-05
Absorbing Clamp	ROHDE&SCHWARZ	MDS-21	100126	2006-12-06	2007-12-05
TWO Line-V-NETW	ROHDE&SCHWARZ	EZH3-Z5	100294	2006-12-06	2007-12-05
TWO Line-V-NETW	ROHDE&SCHWARZ	EZH3-Z5	100253	2006-12-06	2007-12-05
Ultra Broadband ANT	ROHDE&SCHWARZ	HL562	100157	2006-12-06	2007-12-05
ESDV Test Receiver	ROHDE&SCHWARZ	ESDV	100008	2007-03-30	2008-03-29
4-WIRE ISN	ROHDE&SCHWARZ	ENY 41	830663/044	2007-02-19	2008-02-18
GG ENY22 Double 2-Wire ISN	ROHDE&SCHWARZ	ENY22	83066/016	2007-02-19	2008-02-18
Impuls-Begrenzer	ROHDE&SCHWARZ	ESH3-Z2	100281	2007-02-19	2008-02-18
System Controller	CT	SC100	-	2007-02-19	2008-02-18
Printer	EPSON	РНОТО ЕХЗ	CFNH234850	2007-02-19	2008-02-18
FM-AM Signal Generator	JUNGJIN	SG-150M	389911177	2007-02-19	2008-02-18
Color TV Pattern Generator	PHILIPS	PM5418	LO621747	2007-02-19	2008-02-18

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Computer	IBM	8434	1S8434KCE99BLX LO*	-	-		
Oscillator	KENWOOD	AG-203D	3070002	2007-02-23	2008-02-22		
Power meter	Anritsu	ML2487A	6K00003613	2007-02-23	2008-02-22		
Power sensor	Anritsu	MA2491A	32263	2007-02-23	2008-02-22		
Spectrum Analyzer	HAMEG	HM5012	-	-	-		
Power Supply	LW	APS1502	-	-	-		
5K VA AC Power Source	California Instruments	5001iX	56060	2007-02-19	2008-02-18		
CDN	EM TEST	CDN M2/M3	-	2007-02-19	2008-02-18		
Attenuation	EM TEST	ATT6/75	-	2007-02-19	2008-02-18		
Resistance	EM TEST	R100	-	2007-02-19	2008-02-18		
Electromagnetic Injection Clamp	LITTHI	EM101	35708	2007-02-19	2008-02-18		
Inductive Components	EM TEST	MC2630	-	2007-02-19	2008-02-18		
Antenna	EM TEST	MS100	-	2007-02-19	2008-02-18		
Signal Generator	ROHDE&SCHWARZ	SMT03	100029	2007-02-05	2008-02-04		
Power Amplifier	AR	150W1000	300999	2007-02-05	2008-02-04		
Field probe	Holaday	HI-6005	105152	2007-02-05	2008-02-04		
Bilog Antenna	Chase	CBL6111C	2576	2007-02-05	2008-02-04		
Loop Antenna	EMCO	6502	00042960	2007-02-05	2008-02-04		
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170265	2007-08-16	2008-08-15		
ESPI Test Receiver	ROHDE&SCHWARZ	ESI26	838786/013	2007-02-05	2008-02-04		
3m OATS			N/A	2007-02-05	2008-02-04		
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-631	2007-07-03	2008-07-02		
Spectrum Analyzer	ROHDE&SCHWARZ	FSEM	8485971001	2007-06-05	2008-06-04		

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3.0 Technical Details

3.1 Summary of test results

The EUT has been tested ac	cording to the following speci	fications:		
G ₄ 1 1	TD 4 TD	D 14		

Standard	Test Type	Result	Notes
FCC Part 15, Paragraph 15.107 & 15.207	Conducted Emission Test	PASS	Complies
FCC Part 15 Subpart C Paragraph 15.247(a)(2) Limit	Spectrum bandwidth of a Orthogonal Frequency Division Multiplex System Limit: 6dB bandwidth>500kHz	PASS	Complies
FCC Part 15, Paragraph 15.247(b)	Maximum peak output power Limit: max. 30dBm	PASS	Complies
FCC Part 15, Paragraph 15.109,15.205 & 15.209	Transmitter Radiated Emission Limit: Table 15.209	PASS	Complies
FCC Part 15, Paragraph 15.247(d)	Power Spectral Density Limit: max. 8dBm	PASS	Complies
FCC Part 15, Paragraph 15.247(c)	Out of Band Emission and Restricted Band Radiation Limit: 20dB less than peak value of fundamental frequency Restricted band limit: Table 15.209	PASS	Complies

3.2 Test Standards

FCC Part 15 Subpart & Subpart C, Paragraph 15.247

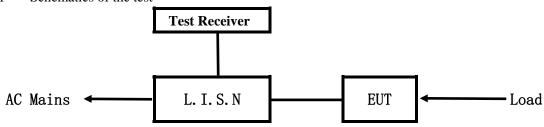
4.0 EUT Modification

No modification by Shenzhen Timeway Technology Consulting Co.,Ltd



5. Power Line Conducted Emission Test

5.1 Schematics of the test

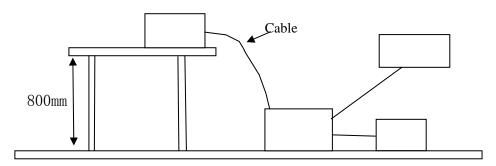


EUT: Equipment Under Test

5.2 Test Method and test Procedure

The EUT was tested according to ANSI C63.4-2003. The Frequency spectrum From 0.15MHz to 30MHz was investigated. The LISN used was 50ohm/50uH as specified by section 5.1 of ANSI C63.4 –2003.

Block diagram of Test setup



5.3 Configuration of The EUT

The EUT was configured according to ANSI C63.4-2003. All interface ports were connected to the appropriate peripherals. All peripherals and cables are listed below.

Two channels are provided to the EUT

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	7	2442
2	2417	8	2447
3	2422	9	2452
4	2427	10	2457
5	2432	11	2462
6	2437		

The report refers only to the sample tested and does not apply to the bulk.

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A. EUT

Device	Manufacturer	Model	FCC ID
WiFi PMP	Group Sense Mobile-Tech Limited	i280	VRI-I280

B. Internal Device

Device	Manufacturer	Model	FCC ID/DOC
N/A			

C. Peripherals

Device	Manufacturer	Model	FCC ID/DOC	Cable
N/A				

5.4 EUT Operating Condition

Operating condition is according to ANSI C63.4 -2003.

- A Setup the EUT and simulators as shown on follow
- B Enable AF signal and confirm EUT active to normal condition

5.5 Power line conducted Emission Limit according to Paragraph 15.207

Frequency		Class A Lim	its (dB µ V)	Class B Limits (dB \(\mu \) V)		
	(MHz)	Quasi-peak Level Average Level		Quasi-peak Level	Average Level	
	$0.15 \sim 0.50$	79.0	66.0	66.0~56.0*	56.0~46.0*	
	$0.50 \sim 5.00$	73.0	60.0	56.0	46.0	
-	5.00 ~ 30.00	73.0	60.0	60.0	50.0	

Notes:

- 1. *Decreasing linearly with logarithm of frequency.
- 2. The tighter limit shall apply at the transition frequencies

5.6 Test Results

The frequency spectrum from 0.15MHz to 30MHz was investigated. All reading are quasi-peak values with a resolution bandwidth of 9kHz.

Note: the worse cases was selected to conducted the test

30 MHz

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Conducted Emission on Line Terminal of the power line (150kHz to 30MHz)

EUT set Condition: Normal Operation

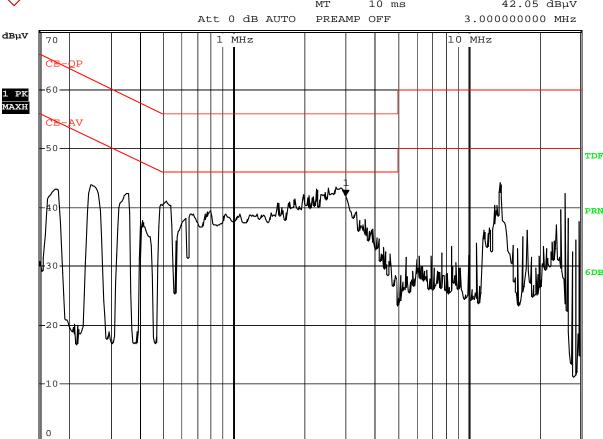
Test Voltage 110V **Results: Pass**

Please refer to following diagram for individual



RBW 9 kHz Marker 1 [T1]

42.05 dBμV МТ 10 ms



Date: 19.NOV.2007 15:48:07

150 kHz

Frequency (MHz)	Reading(dB μ V)				Limi	t
	Line	;	Neutral		(dB µ	V)
(WITIZ)	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.358	41.1	29.8			58.8	48.8
2.264	40.3	25.8			56.0	46.0
2.852	41.4	26.2			56.0	46.0

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B Conducted Emission on Neutral Terminal of the power line (150kHz to 30MHz)

EUT set Condition: Normal Operation

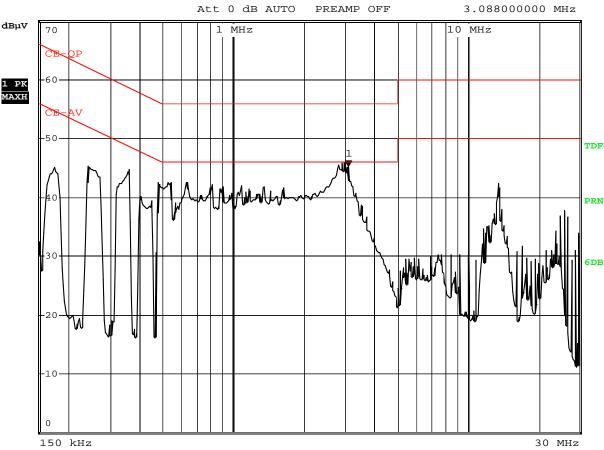
Test Voltage 110V **Results:** Pass

Please refer to following diagram for individual



RBW 9 kHz Marker 1 [T1]

MT 10 ms 45.31 dB μ V



Date: 19.NOV.2007 15:45:00

Fraguenay		Reading	Limi	t		
Frequency (MHz)	Live	;	Neutr	al	(dB µ	V)
(MHZ)	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.358			42.2	31.4	58.8	48.8
0.636			41.1	24.6	56.0	46.0
2.992			43.5	29.6	56.0	46.0

The report refers only to the sample tested and does not apply to the bulk.

Conducted Emission on Neutral Terminal of the power line (150kHz to 30MHz)

EUT set Condition: Normal Operation

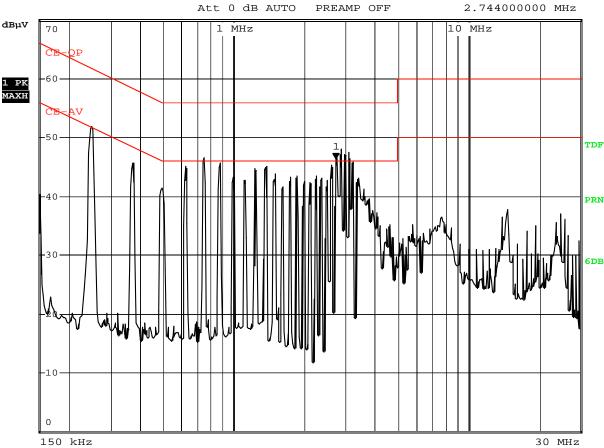
Test Voltage 240V **Results: Pass**

Please refer to following diagram for individual



RBW 9 kHz Marker 1 [T1]

MT 10 ms 46.33 dB μ V



Date: 19.NOV.2007 15:41:25

Fraguanay	Reading(dB \(\mu \)			Limit		
Frequency (MHz)	Live		Neutral		$(dB \mu V)$	
(WITIZ)	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.250	-	-	51.1	50.1	61.8	51.8
0.748			44.7	39.3	56.0	46.0
2.856			45.5	34.5	56.0	46.0
3.092			45.7	34.7	56.0	46.0

The report refers only to the sample tested and does not apply to the bulk.

D Conducted Emission on Line Terminal of the power line (150kHz to 30MHz)

EUT set Condition: Normal Operation

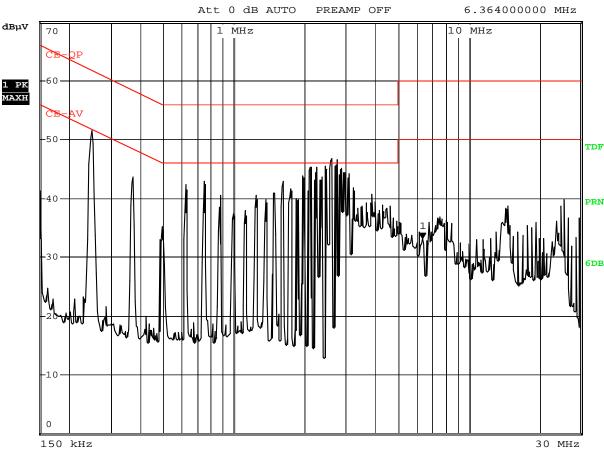
Test Voltage 240V **Results: Pass**

Please refer to following diagram for individual



RBW 9 kHz Marker 1 [T1]

MT 10 ms 33.16 dB μ V



Date: 19.NOV.2007 15:38:05

Fraguanay	Reading(dB \(\mu \)			Limit		
Frequency (MHz)	Line		Neutral		$(dB \mu V)$	
(WIT1Z)	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.250	51.1	50.2			61.8	51.8
2.116	43.5	31.1			56.0	46.0
2.628	44.4	29.8			56.0	46.0
2.744	44.1	34.1			56.0	46.0

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6 Radiated Emission Test

- 6.1 Test Method and test Procedure:
- (1) The EUT was tested according to ANSI C63.4 –2003. The radiated test was performed at Timeway Laboratory. This site is on file with the FCC laboratory division, Registration No.899988
- (2) The EUT, peripherals were put on the turntable which table size is 1m x 1.5 m, table high 0.8 m. All set up is according to ANSI C63.4-2003.
- (3) The frequency spectrum from 30 MHz to 1 GHz was investigated. All readings from 30 MHz to 1 GHz are quasi-peak values with a resolution bandwidth of 120 kHz. All readings are above 1 GHz, peak values with a resolution bandwidth of 1 MHz. Measurements were made at 3 meters.
- (4) The antenna high is varied from 1 m to 4 m high to find the maximum emission for each frequency.
- (5) Maximizing procedure was performed on the six (6) highest emissions to ensure EUT compliance is with all installation combinations. All data was recorded in the peak detection mode. Quasi-peak readings was performed only when an emission was found to be marginal (within -4 dB of specification limit), and are distinguished with a "QP" in the data table.
- (6) The antenna polarization: Vertical polarization and Horizontal polarization.

Block diagram of Test setup Distance = 3m Computer Pre -Amplifier EUT Turn-table Receiver

- 6.2 Configuration of The EUT

 Same as section 5.3 of this report
- 6.3 EUT Operating Condition

 Same as section 5.4 of this report.

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6.4 Radiated Emission Limit

All emission from a digital device, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strength specified below:

Frequencies in restricted band are complied to limit on Paragraph 15.209.

Frequency Range (MHz)	Distance (m)	Field strength (dB µ V/m)
30-88	3	40.0
88-216	3	43.5
216-960	3	46.0
Above 960	3	54.0

Note:

- 1. RF Voltage $(dBuV) = 20 \log RF \text{ Voltage } (uV)$
- 2. In the Above Table, the higher limit applies at the band edges.
- 3. Distance refers to the distance in meters between the measuring instrument antenna and the EUT

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Test result

General Radiated Emission Data and Harmonics Radiated Emission Data

Radiated Emission In Horizontal (30MHz----1000MHz)

EUT set Condition: Wireless 802.11g mode under CH1 at 6Mbps

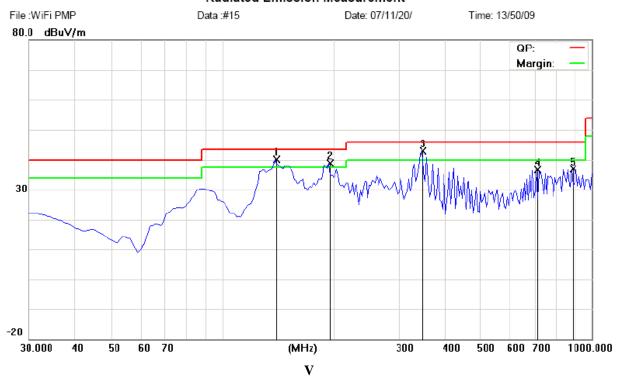
Results: Pass

Frequency (MHz)	Level@3m (dB \mu V/m)	Antenna Polarity	Limit@3m (dB \mu V/m)
139.125	39.12	Н	43.50
194.900	38.84	Н	43.50
347.675	43.00	Н	46.00
711.425	36.61	Н	46.00
886.025	36.98	Н	46.00
88.200	36.13	V	43.50
151.250	36.57	V	43.50
194.900	38.21	V	43.50
347.675	35.89	V	46.00



Test Figure: CH1 at 6Mbps

Radiated Emission Measurement



Radiated Emission Measurement



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EUT set Condition: Wireless 802.11b mode under CH1 at 1Mbps

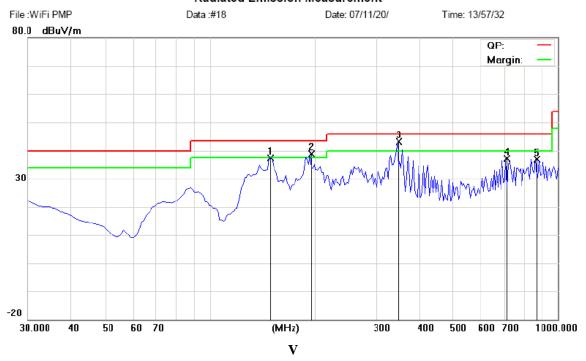
Results: Pass

Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \(\mu \)V/m)
148.825	37.46	Н	43.50
194.400	38.95	Н	43.50
347.675	43.12	Н	46.00
711.250	37.06	Н	46.00
864.200	37.00	Н	46.00
49.400	33.28	V	40.00
76.075	34.88	V	40.00
88.200	36.11	V	43.50
148.825	35.82	V	46.00
190.050	37.52	V	46.00
347.675	34.68	V	46.00



Test Figure: CH1 at 1Mbps

Radiated Emission Measurement



Radiated Emission Measurement



Note: 1. Emission level $(dB\mu V/m)$ = Antenna Factor (dB/m) + Cable loss (dB) + Meter Reading $(dB\mu V)$.

2. According to technical experiences, all spurious emission at channel 1,6,11 are almost the same below 1GHz,so that the channel 1 was chosen as representation for the test.

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Operation Mode: Transmitting & Receiving under CH01 at 6Mbps

	Trung of receiving to	2202 01102 01120	
Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \(\mu \)V/m)
2412.00	92.5 (PK) /83.6 (AV)	Н	Fundamental Frequency
2412.00	96.8 (PK) /87.5 (AV)	V	Tundamental Trequency
4824.00		H/V	74(Peak)/ 54(AV)
7236.00		H/V	74(Peak)/ 54(AV)
9648.00		H/V	74(Peak)/ 54(AV)
12060		H/V	74(Peak)/ 54(AV)
14472		H/V	74(Peak)/ 54(AV)
16684		H/V	74(Peak)/ 54(AV)
19296		H/V	74(Peak)/ 54(AV)
21708		H/V	74(Peak)/ 54(AV)
24120		H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11g mode 6Mbps

Operation Mode: Transmitting & Receiving under CH06 at 6Mbps

Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \(\mu \)V/m)
2437.00	94.3 (PK) /85.6 (AV)	Н	Fundamental Frequency
2437.00	100.5 (PK) /90.2 (AV)	V	Tundamental Prequency
4874.00	49.3 (Peak)/ 41.6 (AV)	V	74(Peak)/ 54(AV)
4874.00		Н	74(Peak)/ 54(AV)
7311.00		H/V	74(Peak)/ 54(AV)
9748.00	1	H/V	74(Peak)/ 54(AV)
12185		H/V	74(Peak)/ 54(AV)
14622		H/V	74(Peak)/ 54(AV)
17059		H/V	74(Peak)/ 54(AV)
19496	1	H/V	74(Peak)/ 54(AV)
21933		H/V	74(Peak)/ 54(AV)
24370		H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11g mode 6Mbps

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Operation Mode: Transmitting & Receiving	g under CH11 at 6Mbps
---	-----------------------

operation vious. Transmitting a Receiving unter citiz at 01/15/15				
Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \(\mu \)V/m)	
2462.00	93.3PK) /85.2 (AV)	Н	Fundamental Frequency	
2462.00	98.7PK) /89.3 (AV)	V	Fundamental Frequency	
4924	48.5 (Peak)/ 40.6 (AV)	V	74(Peak)/ 54(AV)	
4824		Н	74(Peak)/ 54(AV)	
7368	52.3 (Peak)/ 41.3 (AV)	V	74(Peak)/ 54(AV)	
7368		Н	74(Peak)/ 54(AV)	
9848		H/V	74(Peak)/ 54(AV)	
12310		H/V	74(Peak)/ 54(AV)	
14772		H/V	74(Peak)/ 54(AV)	
17234		H/V	74(Peak)/ 54(AV)	
19696		H/V	74(Peak)/ 54(AV)	
22158		H/V	74(Peak)/ 54(AV)	
24650		H/V	74(Peak)/ 54(AV)	
	-			

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11g mode at 6Mbps

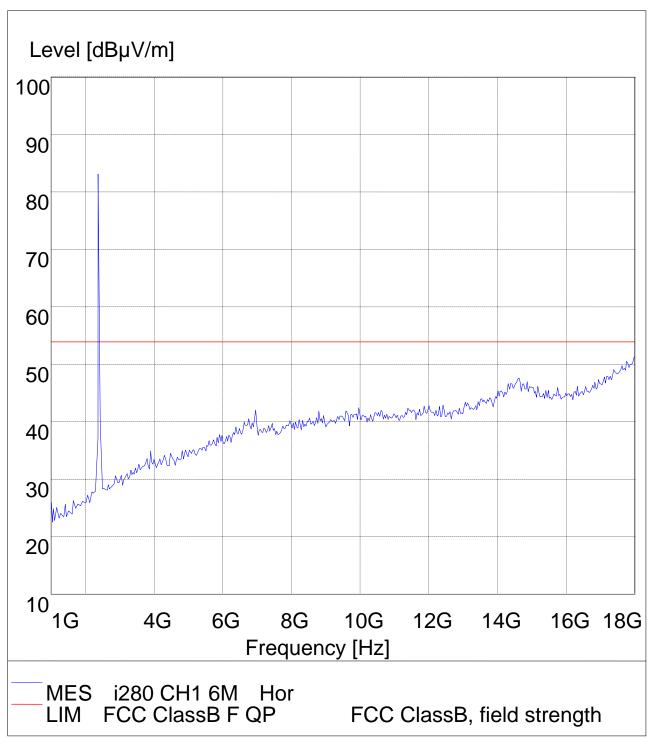
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Please refer to the following test plots for details

CH01 at 6Mbps: Horizontal



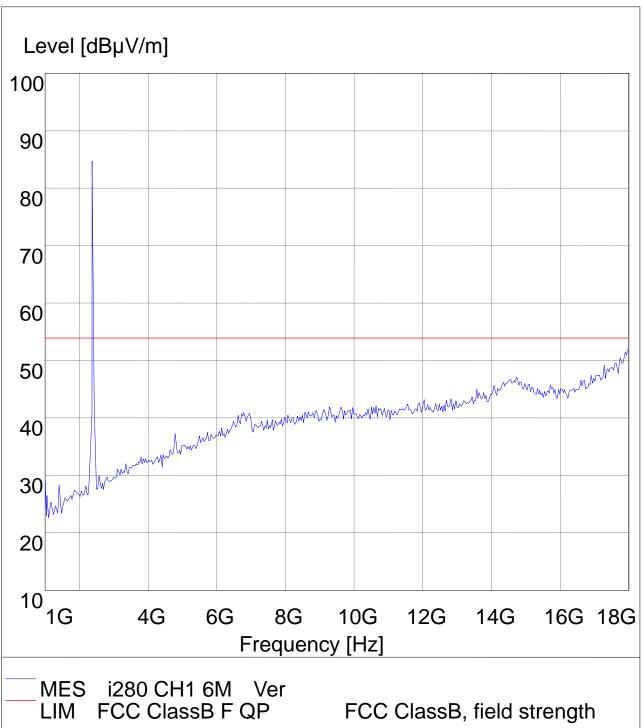
The report refers only to the sample tested and does not apply to the bulk.

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CH01 at 6Mbps: Veritcal

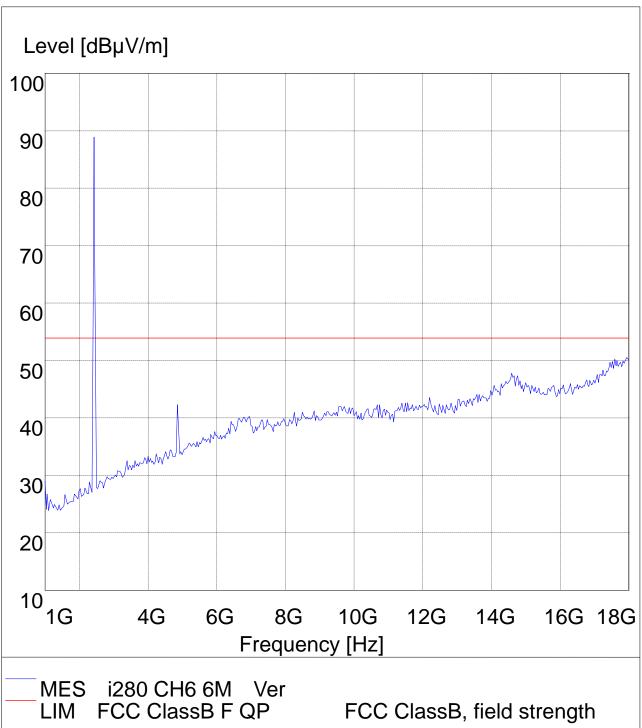


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CH06 at 6Mbps: Vertical

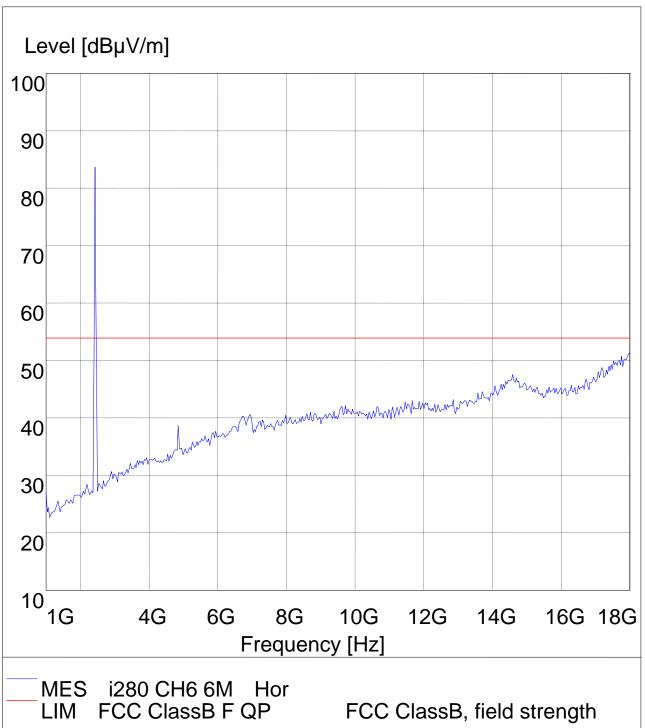


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CH06 at 6Mbps: Horizontal

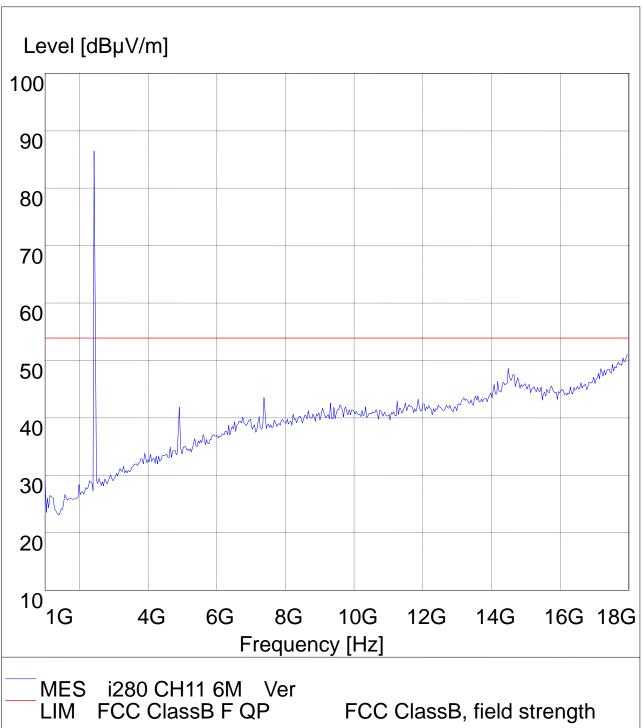


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CH11 at 6Mbps: Vertical

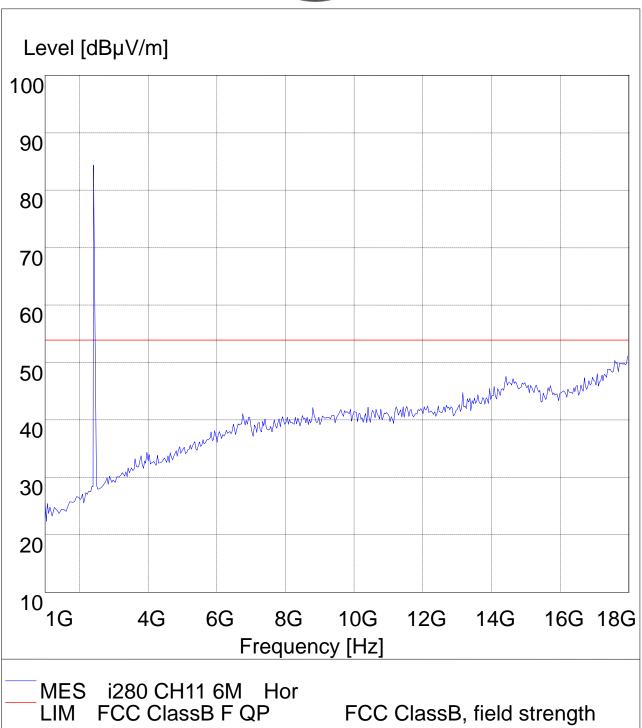


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CH11at 6Mbps: Horizontal

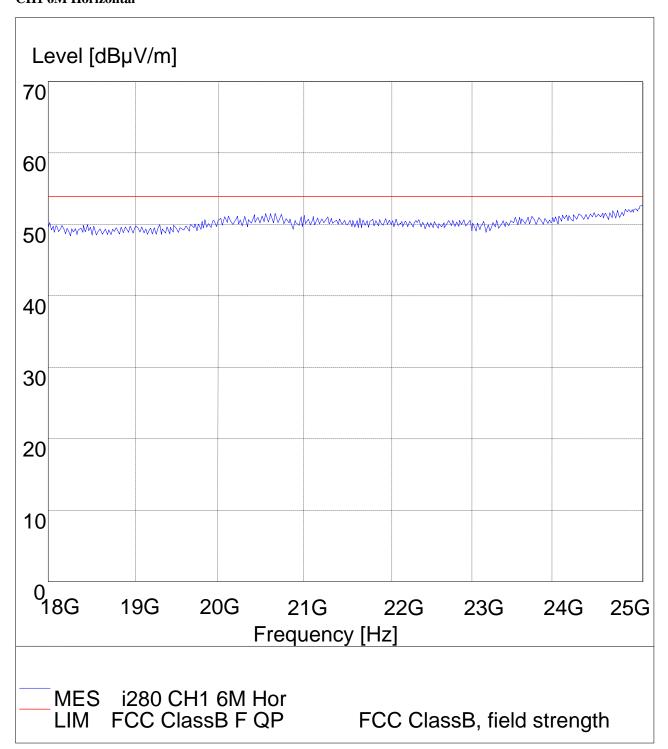


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18-25G CH1 6M Horizontal

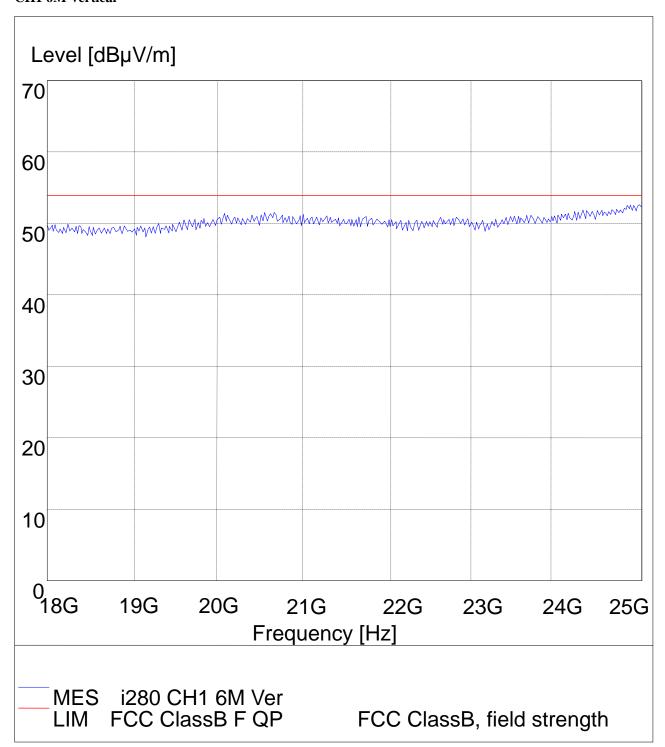


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18-25G CH1 6M Vertical



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Operation Mode: Transmitting & Receiving under CH01 at 1Mbps

		1	
Frequency (MHz)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB \mu V/m)
2412.00	84.3 (PK)/ 76.7(AV)	Н	Fundamental Frequency
2412.00	88.5(PK)/80.6 (AV)	V	Fundamental Frequency
4824.00		H/V	74(Peak)/ 54(AV)
7236.00		H/V	74(Peak)/ 54(AV)
9648.00		H/V	74(Peak)/ 54(AV)
12060		H/V	74(Peak)/ 54(AV)
14472		H/V	74(Peak)/ 54(AV)
16684		H/V	74(Peak)/ 54(AV)
19296		H/V	74(Peak)/ 54(AV)
21708		H/V	74(Peak)/ 54(AV)
24120		H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

2. Remark "---" means that the emissions level is too low to be measured

3. For 802.11b mode 1Mbps

Operation Mode: Transmitting & Receiving under CH06 at 1Mbps

Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \(\mu \)V/m)
2437.00	88.3(PK)/ 81.5 (AV)	Н	Fundamental Frequency
2437.00	93.5(PK)/ 84.1 (AV)	V	Tundamental Mequency
4874.00	52.6 (Peak)/43.8 (AV)	V	74(Peak)/ 54(AV)
4874.00	50.8 (Peak)/42.7 (AV)	Н	74(Peak)/ 54(AV)
7311.00	1	H/V	74(Peak)/ 54(AV)
9748.00	1	H/V	74(Peak)/ 54(AV)
12185		H/V	74(Peak)/ 54(AV)
14622	1	H/V	74(Peak)/ 54(AV)
17059	1	H/V	74(Peak)/ 54(AV)
19496	1	H/V	74(Peak)/ 54(AV)
21933		H/V	74(Peak)/ 54(AV)
24370		H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11b mode 1Mbps

The report refers only to the sample tested and does not apply to the bulk.

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Operation Mode:	Operation Mode: Transmitting & Receiving under CH11 at 1Mbps					
Frequency (MHz)	Level@3m (dB \u03b4 V/m)	Antenna Polarity	Limit@3m (dB \mu V/m)			
2462.00	86.4 (PK) /77.9AV)	Н	Fundamental Frequency			
2462.00	90.2 (PK) /82.6 (AV)	V	Fundamental Frequency			
4924	51.6 (Peak)/ 43.2 (AV)	V	74(Peak)/ 54(AV)			
4924	50.8 (Peak)/ 42.6 (AV)	Н	74(Peak)/ 54(AV)			
7368		H/V	74(Peak)/ 54(AV)			
9848		H/V	74(Peak)/ 54(AV)			
12310		H/V	74(Peak)/ 54(AV)			
14772		H/V	74(Peak)/ 54(AV)			
17234		H/V	74(Peak)/ 54(AV)			
19696		H/V	74(Peak)/ 54(AV)			
22158		H/V	74(Peak)/ 54(AV)			
24650		H/V	74(Peak)/ 54(AV)			

Note: 1. Level = Reading + AF + Cable - Preamp + Filter - Dist, Margin = Level - Limit

- 2. Remark "---" means that the emissions level is too low to be measured
- 3. For 802.11b mode at 1Mbps

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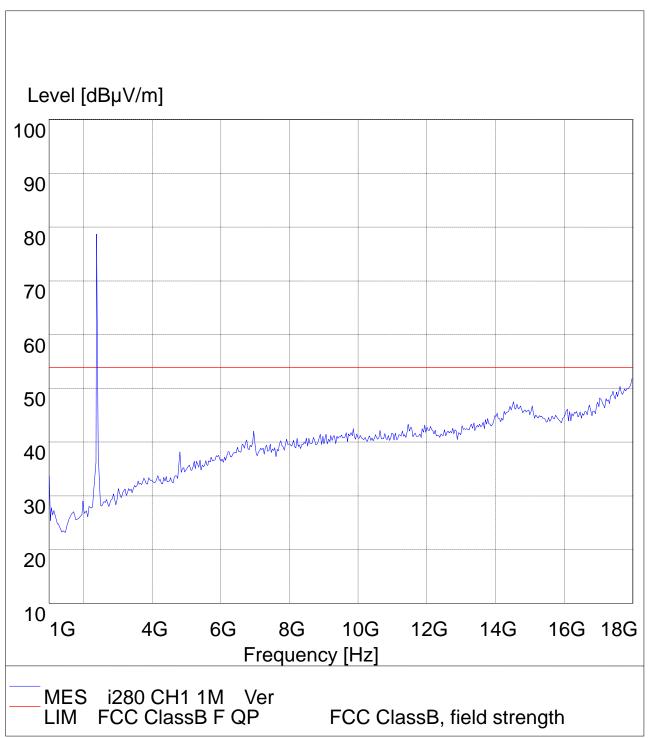
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Please refer to the following test plots for details

CH01 at 1Mbps: Vertical



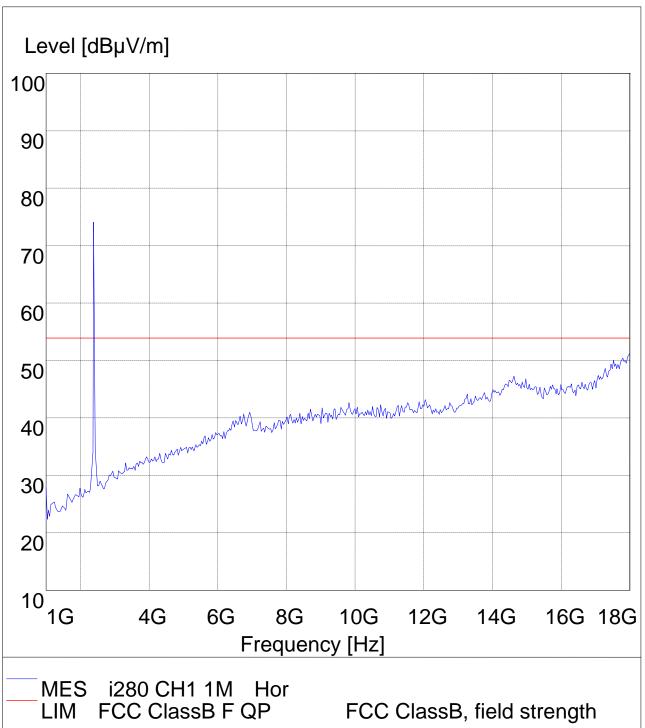
The report refers only to the sample tested and does not apply to the bulk.

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CH01 at 1Mbps: Horizontal

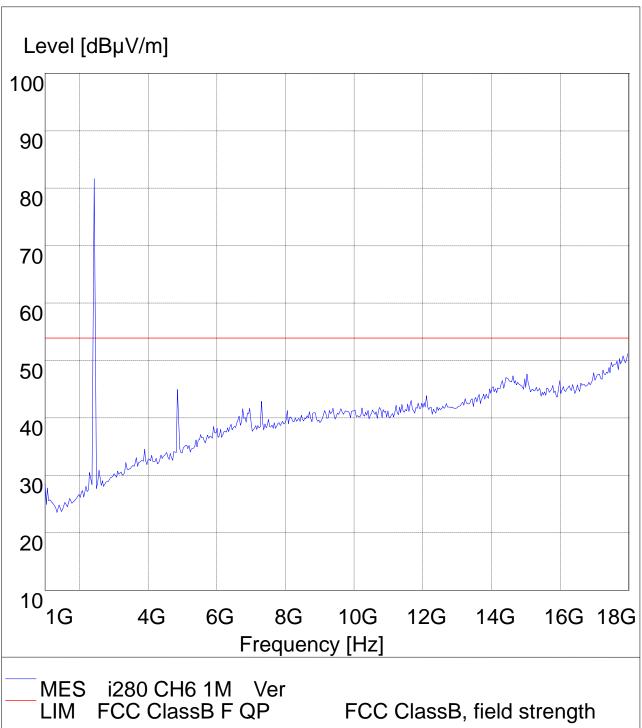


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CH06 at 1Mbps: Vertical

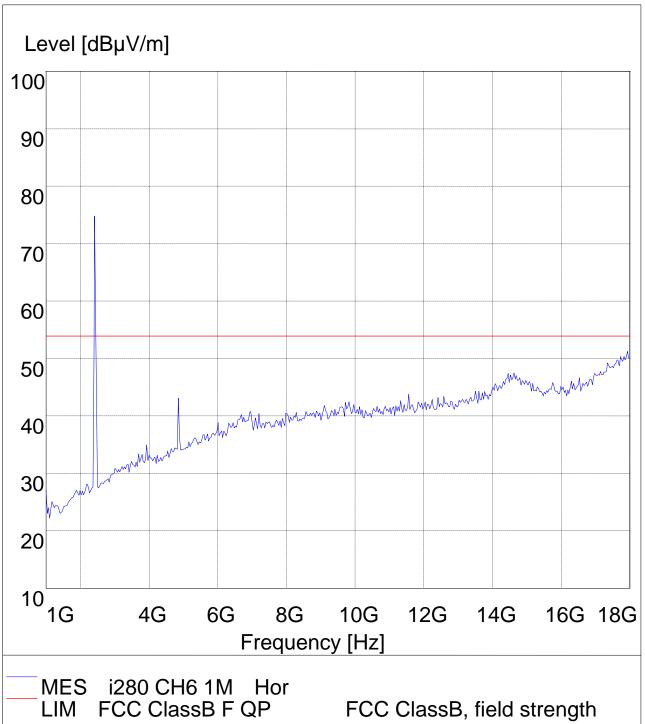


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CH06 at 1Mbps: Horizontal

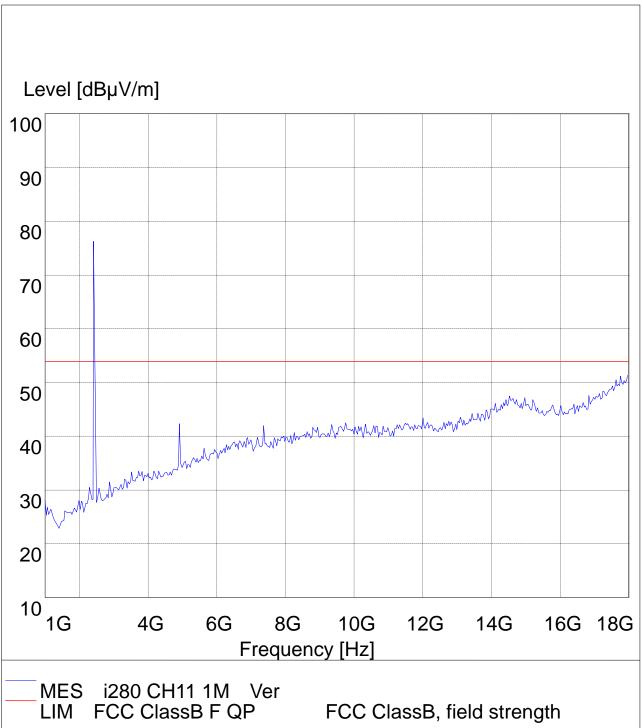


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CH11 at 1Mbps: Vertical



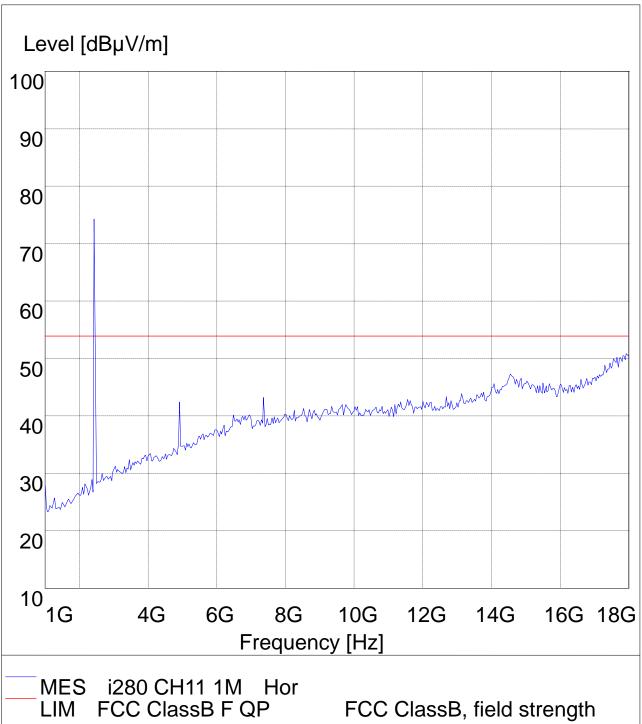
The report refers only to the sample tested and does not apply to the bulk.

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CH11 at 1Mbps: Horizontal

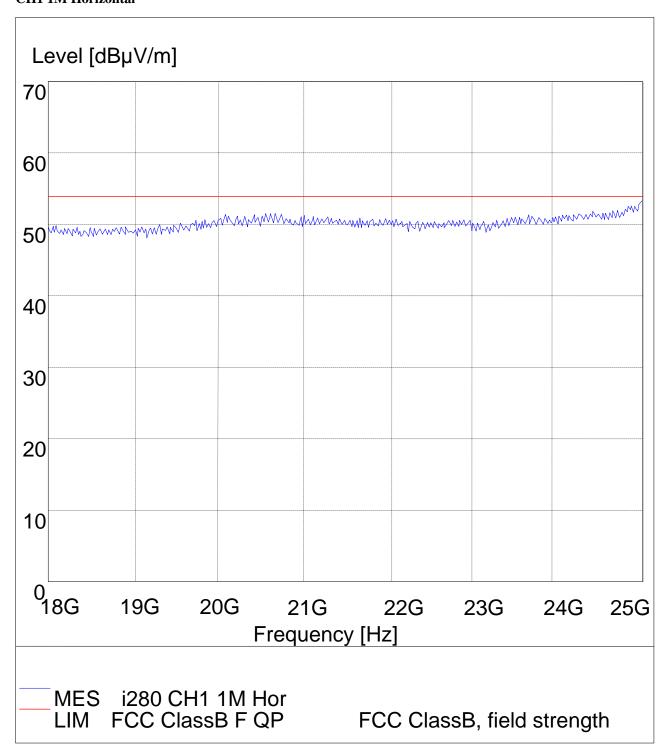


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18-25G CH1 1M Horizontal

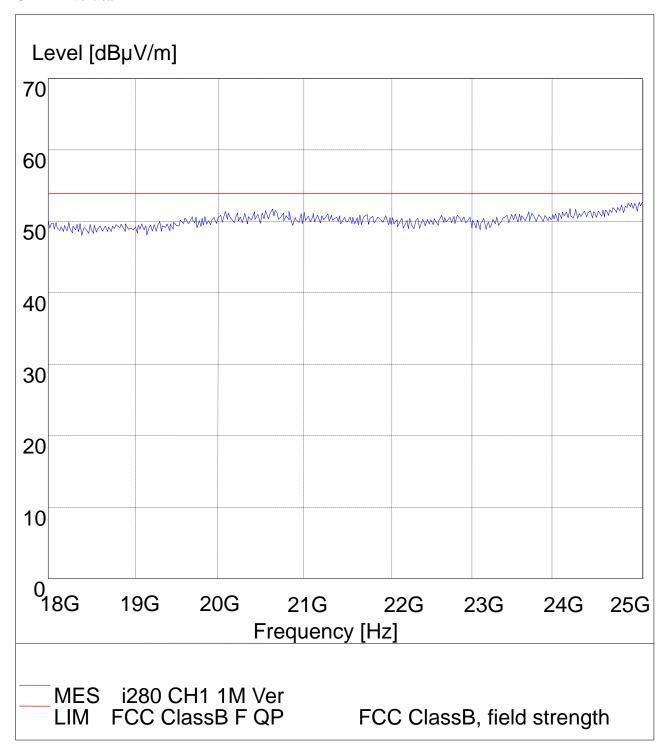


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18-25G CH1 1M Vertical



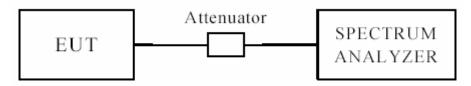
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7.0 6dB Bandwidth Measurement

7.1 Test Setup



7.2 Limits of 6dB Bandwidth Measurement

The minimum of 6dB Bandwidth Measurement is >500KHz

7.3 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator.

The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100 KHz RBW and 100 KHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

7.4 Test Result

EUT		WiFi PMP		Model		i280		
Mode		802.11b		Input Voltage		DC3.7V		
Temperat	ure	24 deg. C,	24 deg. C,		Humidity		56% RH	
Channel		el Frequency (MHz)	Data Transfer Rate (Mbps)		undwidth Hz)		num Limit MHz)	Pass/ Fail
1		2412	1 11		.10		0.5	Pass
6		2437	1 11		98 98		0.5	Pass
11		2462	1 11		.06		0.5	Pass

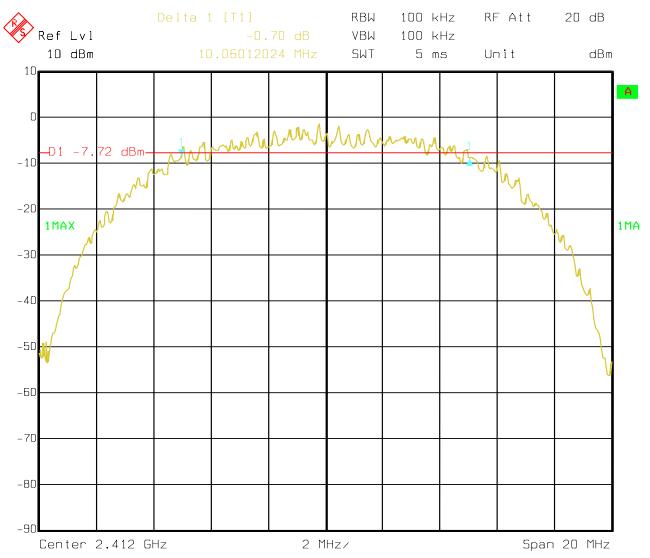
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Test Figure:

1. Condition: 802.11b at 11Mbps of CH01



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2. Condition: 802.11b at 11Mbps of CH06



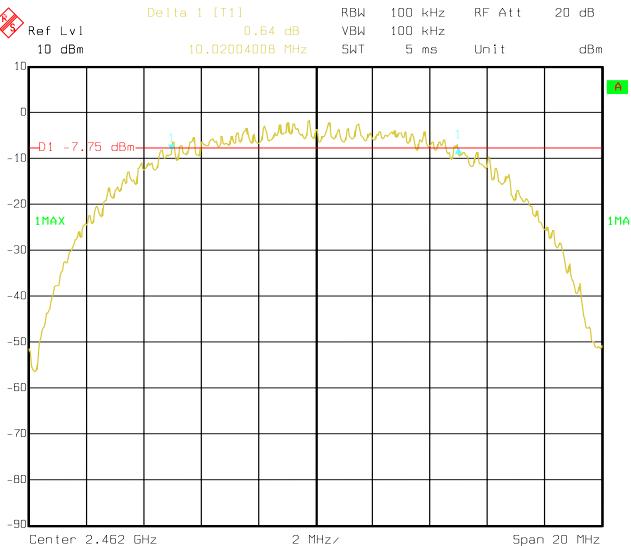
Date: 16.NOV.2007 10:54:14

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3. 802.11b at 11Mbps of CH11



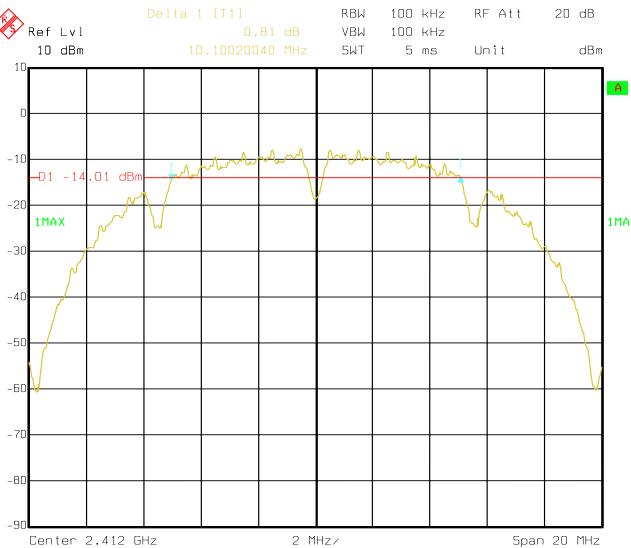
Date: 16.NOV.2007 10:52:14

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4. 802.11b at 1Mbps of CH01



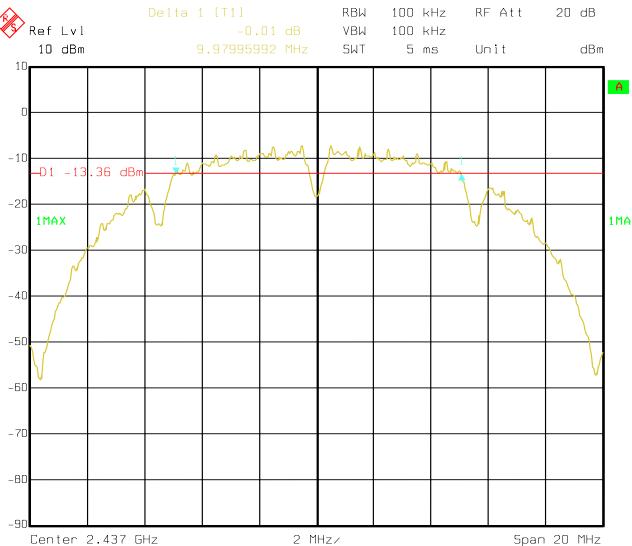
Date: 16.NOV.2007 10:44:09

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5. 802.11b at 1Mbps of CH06



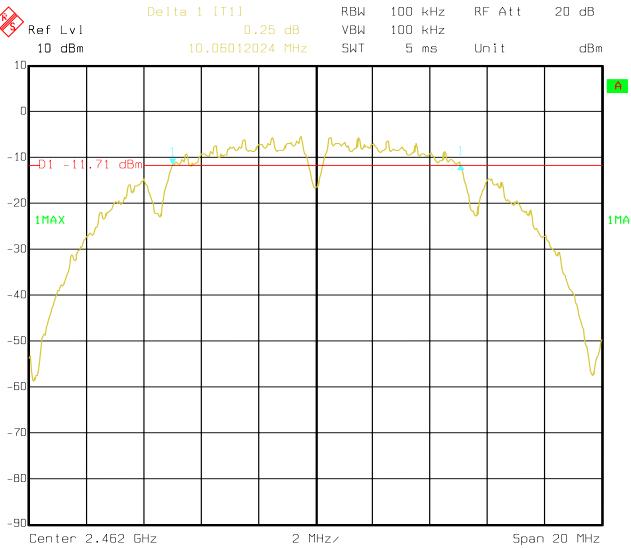
Date: 16.NOV.2007 10:48:03

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6. 802.11b at 1Mbps of CH11



Date: 16.NOV.2007 10:49:59

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EUT		WiFi PMP			Model		i280	
Mode		8	302.11g		Input Vo	oltage	tage DC3.7V	
Temperat	ure	24	4 deg. C,		Humi	dity	56% l	RH
	CI	1.5	Data	c ID D	1 111		T: '-	D /
Channel	Cnann	el Frequency	Transfer	6 aB Ba	ındwidth	Minir	num Limit	Pass/
Chamici		(MHz)	Rate	(M	Hz)	(MHz)	Fail
			(Mbps)					
1		2412	6	16	.59		0.5	Pass
		2412	54	16	.59			
6		2437	6	16	.59		0.5	Pass
		<i>2431</i>	54	16	.59			
11		2462	6	16	.59		0.5	Pass
		2402	54	16	.59			

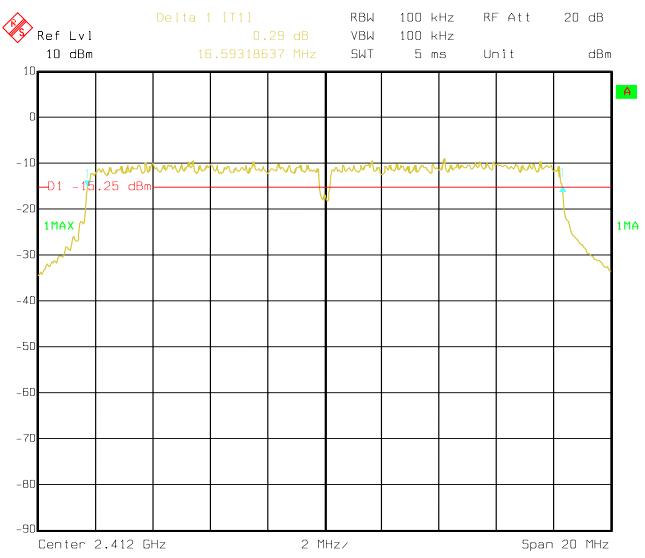
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Test Plots:

1. 802.11g at 6Mbps of CH01



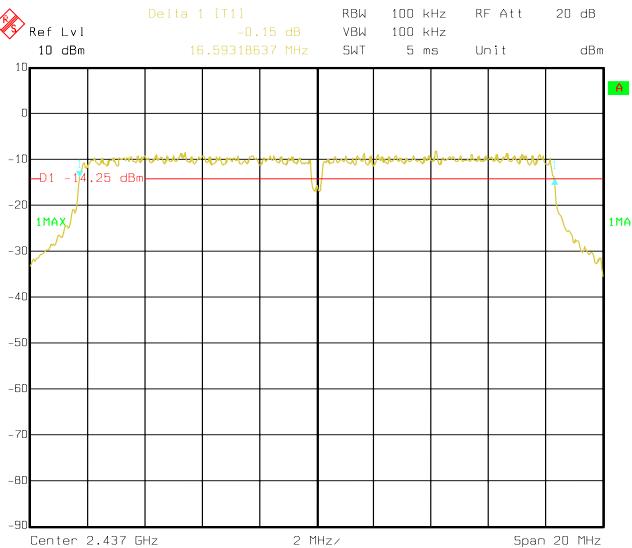
Date: 16.NOV.2007 11:02:15

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2. 802.11g at 6Mbps of CH06



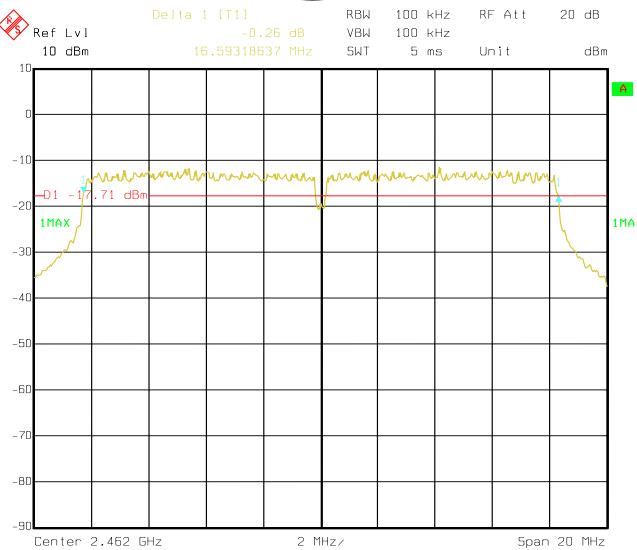
Date: 16.NOV.2007 11:04:17

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3. 802.11g at 6Mbps of CH11



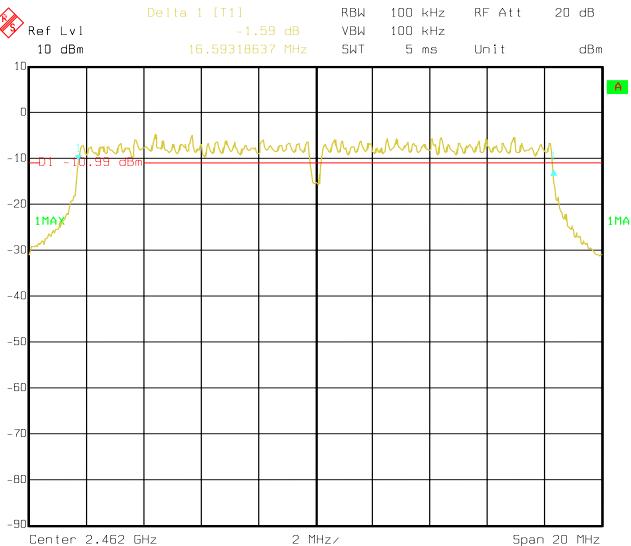
Date: 16.NOV.2007 11:07:24

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4. 802.11g at 54Mbps of CH11



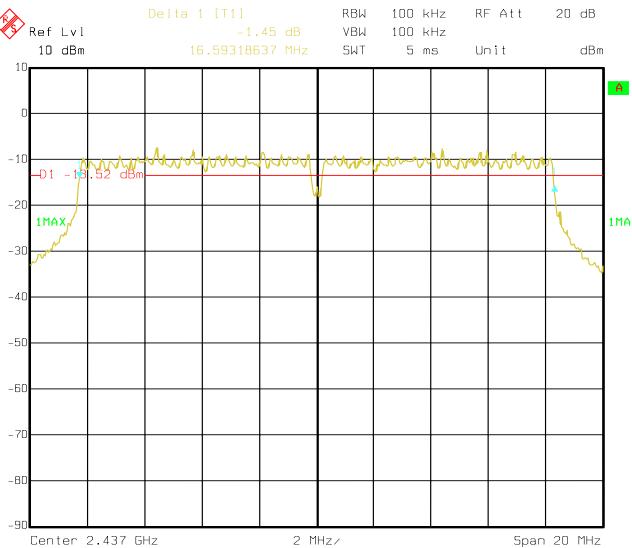
Date: 16.NOV.2007 11:08:47

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5. 802.11g at 54Mbps of CH06



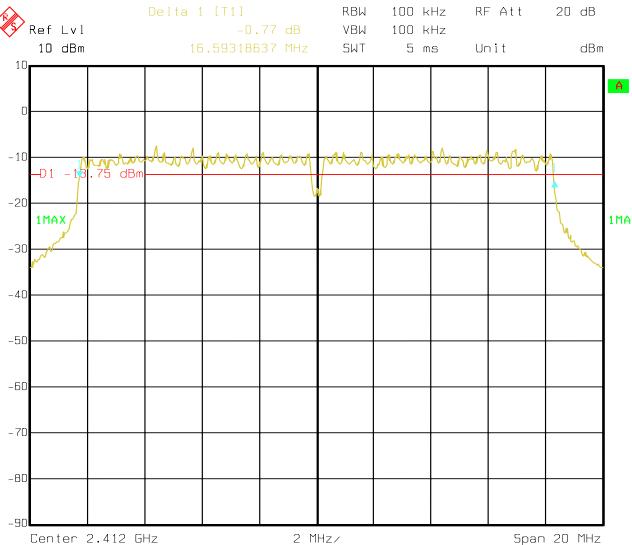
Date: 16.NOV.2007 11:12:19

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6. 802.11g at 54Mbps of CH01



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8. Maximum Peak Output Power

8.1 Test Setup



8.2 Limits of Maximum Peak Output Power

The Maximum Peak Output Power Measurement is 30dBm.

8.3 Test Procedure

The RF power output was measured with a power meter connected to the RF Antenna connector (conducted measurement) while EUT was operating in transmit mode at the appropriate centre frequency.

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8.4Test Results

EUT		WiFi PMP		Model		i280			
Mode		802.11b Input		Input Voltage		b Input Voltage		D	C3.7V
Temperature	e	24 deg	24 deg. C, Humidity		ty 5		5% RH		
Channel	Cha	annel Frequency (MHz)	Peak Power Output (dBm)		Peak P Lin (dB	nit	Pass/ Fail		
1		2412	10.23		30)	Pass		
6		2437	11.56		30)	Pass		
11		2462	10.86		30)	Pass		

Note: 1. At finial test to get the worst-case emission at 1Mbps for CH01, CH06 and CH11

2. The result basic equation calculation as follow:

Peak Power Output = Peak Power Reading + Cable loss + Attenuator

EUT		WiFi F	WiFi PMP Model i2:		Model		i280						
Mode		802.11g Input Vo		Input Voltage		Input Voltage		D	C3.7V				
Temperature	e	24 deg	g. C, Humidity		g. C, Humidity		g. C, Humidity		g. C, Humidity		Humidity		5% RH
Channel	Ch	annel Frequency (MHz)	Peak Power (dBm)	Peak Power Output (dBm)		Power nit m)	Pass/ Fail						
1		2412	12.06		30)	Pass						
6		2437	13.23		30)	Pass						
11		2462	12.62		30)	Pass						

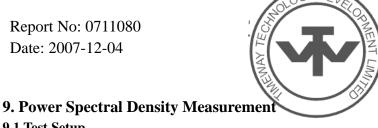
Note: 1. At finial test to get the worst-case emission at 6Mbps for CH06, CH11 and CH01

2. The result basic equation calculation as follow:

Peak Power Output = Peak Power Reading + Cable loss + Attenuator

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9.1 Test Setup



9.2 Limits of Power Spectral Density Measurement

The Maximum Power Spectral Density Measurement is 8dBm.

9.3 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3KHz RBW and 10kHz VBW, set sweep time=100000.00ms

The power spectral density was measured and recorded.

The sweep time is allowed to be longer than span / 3KHz for a full response of the mixer in the spectrum analyzer.

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9.4Test Result

EUT		WiFi PMP		Model			i280		
Mode		802.11b I		Input Voltage		Input Voltage Γ		D	C3.7V
Temperati	ure	24 deg	24 deg. C, Humid		nidity 56		5% RH		
Channel	Ch	annel Frequency (MHz)	Level in 3kHz BW		Maximur (dB		Pass/ Fail		
1		2412 -21.73		8			Pass		
6		2437 -13.26			8		Pass		
11		2462	2 -13.37		8		Pass		

Note: For 802.11b mode at finial test to get the worst-case emission at 1Mbps for CH1 and CH11. 11Mbps for CH06

EUT		WiFi PMP		Model		i280						
Mode		802.11b Inp		Input Voltage		1b Input Voltage		D	C3.7V			
Temperati	ure	24 deg	. C, Humidity		g. C, Humidity		g. C, Humidity		24 deg. C, Humidity		50	5% RH
Channel	Cha	annel Frequency (MHz)	Final RF Po Level in 3kH: (dBm)	Zz BW Maximu			Pass/ Fail					
1		2412	-26.30	-26.30		-26.30			Pass			
6		2437	-27.24		8		Pass					
11		2462	-28.91		8		Pass					

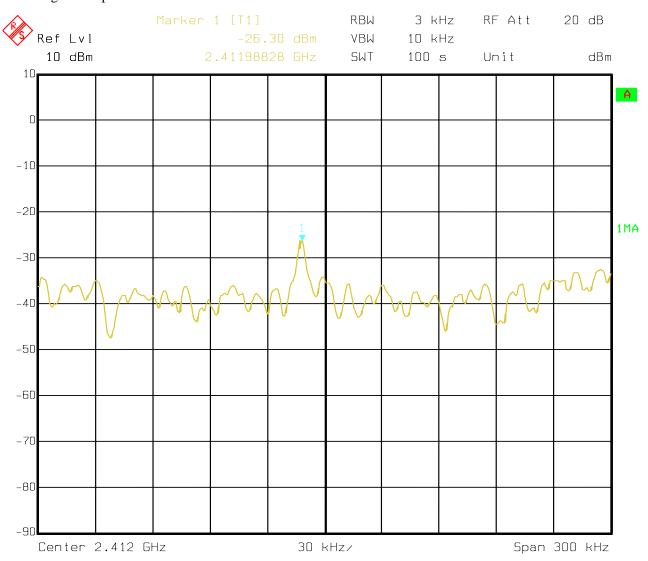
Note: For 802.11g mode at finial test to get the worst-case emission at 6Mbps for CH01,CH11 and 54Mbps for CH06

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9.5Photo of Power Spectral Density Measurement

1.802.11g at 6Mbps of CH01



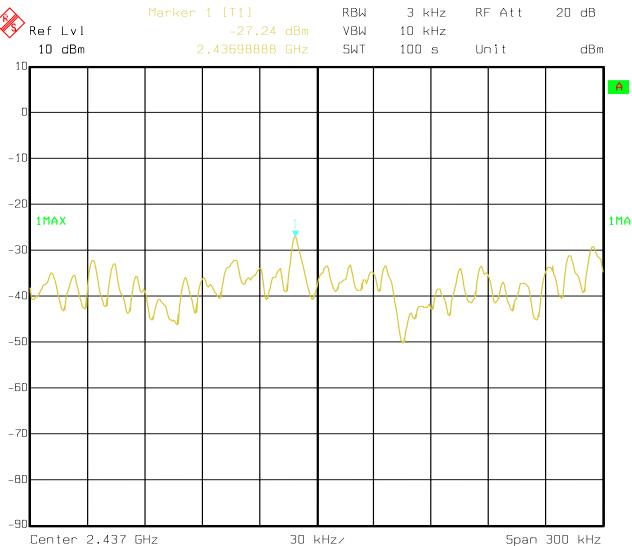
Date: 16.NOV.2007 11:55:19

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2. 802.11g at 54Mbps at CH06



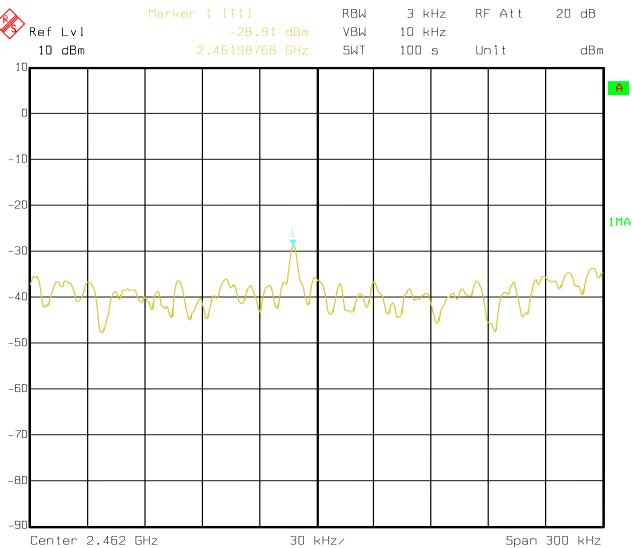
Date: 16.NOV.2007 12:13:08

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3. 802.11g at 6Mbps of CH11



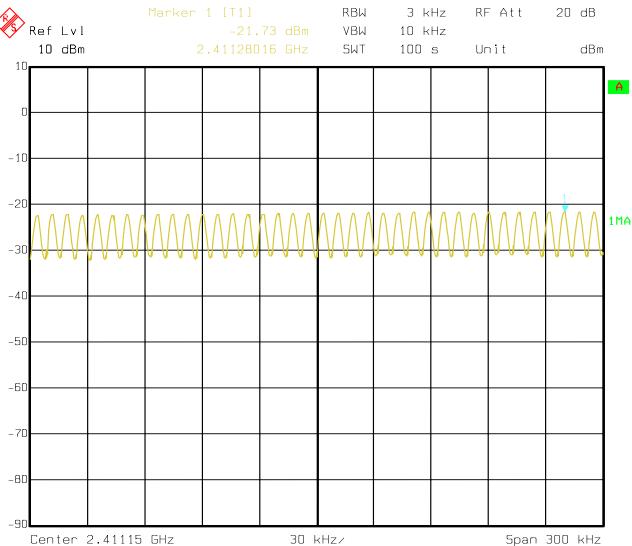
Date: 16.NOV.2007 12:04:35

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4. 802.11b at 1Mbps of CH01



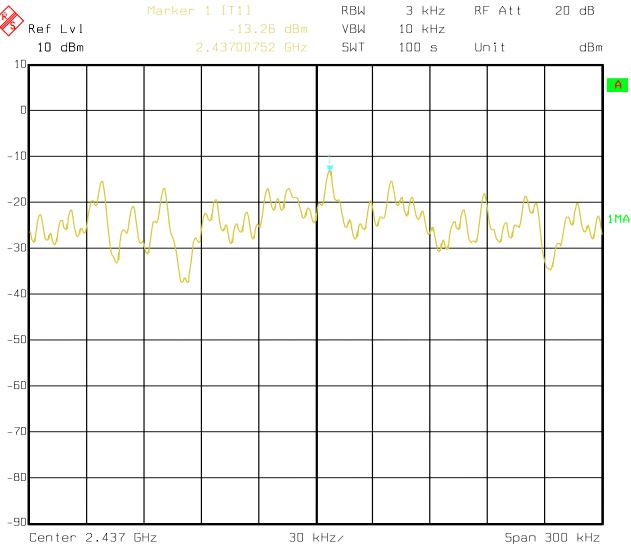
Date: 16.NOV.2007 11:50:57

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5. 802.11b at 11Mbps of CH06



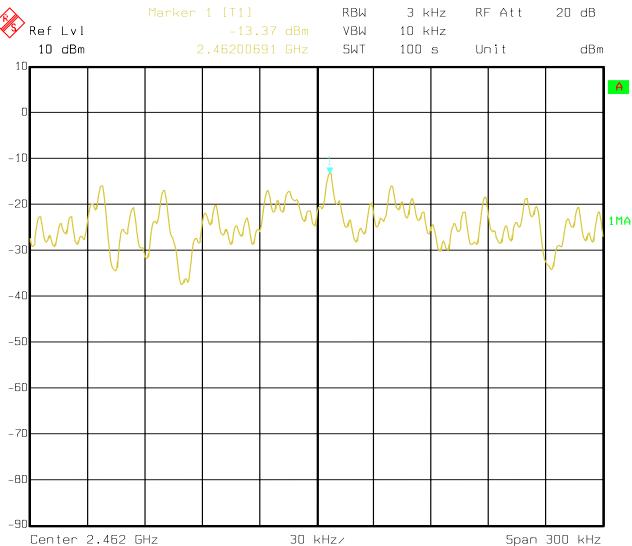
Date: 16.NOV.2007 11:28:16

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6. 802.11b at 1Mbps of CH11



Date: 16.NOV.2007 11:32:35

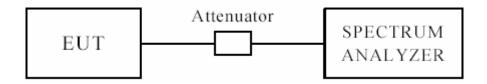
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10 Out of Band Measurement

10.1 Test Setup



10.2 Limits of Out of Band Emissions Measurement

- 1. Below –20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).
- 2. Fall in the restricted bands listed in section 15.205. The maximum permitted average field strength is listed in section 15.209.

10.3 Test Procedure

For signals in the restricted bands above and below the 2.4-2.483GHz allocated band a measurement was made of the amplitude of the spurious emissions with respect to the intentional signals. The relative amplitude, in dBc, was applied to the average and peak filed strength of the intentional signal made on the OATS to calculate the field strength of the unintentional signals.

The spectrum plots (Peak RBW=VBW=1MHz; Average RBW=1MHz, VBW=10Hz) are attached on the following pages.

10.4Test Result

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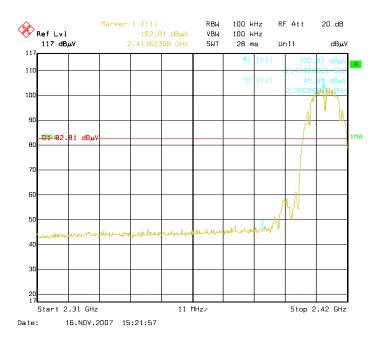
For 802.11b mode

10.4 Below –20dB of the highest emission level of operating band

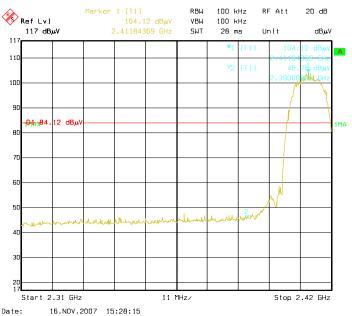
Product:	WiFi PMP	Test Mode:	CH01 at 1 Mbps and 11Mbps
Mode	Keeping Transmitting	Input Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK

Test Figure:

1Mbps



11Mbps



The report refers only to the sample tested and does not apply to the bulk.

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Report No: 0711080 Date: 2007-12-04

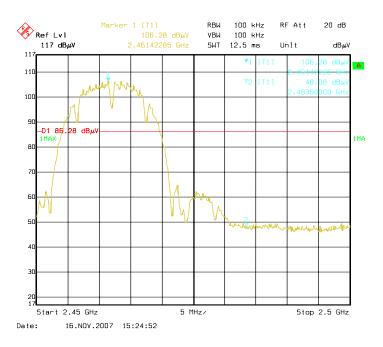


10.4 Below –20dB of the highest emission level of operating band

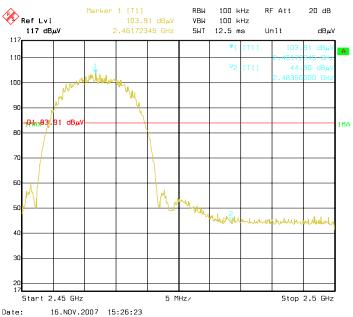
Product:	WiFi PMP	Test Mode:	CH11 at 1 Mbps and 11Mbps
Mode	Keeping Transmitting	Input Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK

Test Figure:

1Mbps



11Mbps



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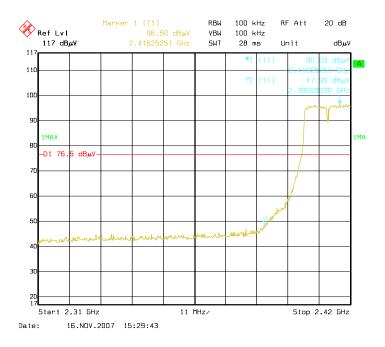
For 802.11g mode

10.4 Below –20dB of the highest emission level of operating band

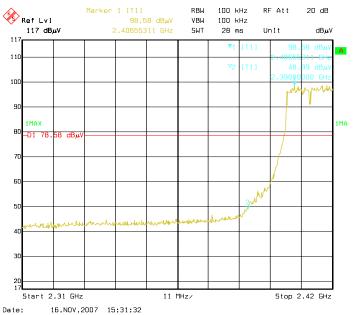
Product:	WiFi PMP	Test Mode:	CH01 at 6 Mbps and 54Mbps
Mode	Keeping Transmitting	Input Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK

Test Figure:

6Mbps



54Mbps



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Report No: 0711080 Date: 2007-12-04

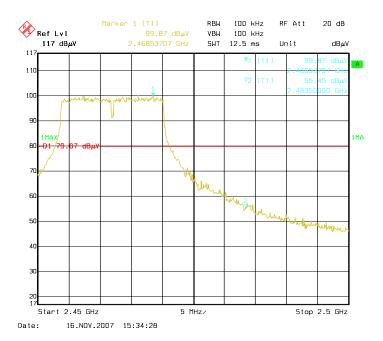


10.4 Below –20dB of the highest emission level of operating band

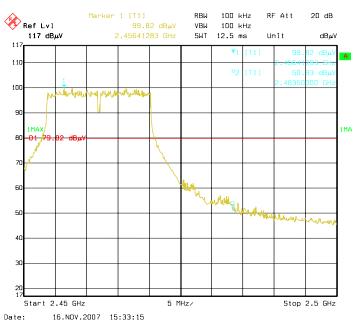
		_	
Product:	WiFi PMP	Test Mode:	CH11 at 6 Mbps and 54Mbps
Mode	Keeping Transmitting	Input Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK

Test Figure:

6Mbps



54Mbps



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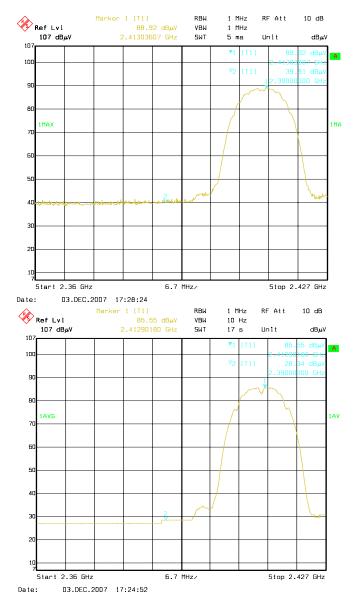


For 802.11b mode

10.4 Restricted bands

Product:	WiFi PMP		Test Mode:	CH01 at 1Mbps
Mode	Keeping Transmitting		Input Voltage	DC3.7V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	F	Pass Pass	Detector	PK/AV
The Max. FS in	PK (dB µ V/m)	35.8	Limit	74(dB µ V/m)
Restrict Band	$AV(dB \mu V/m)$	26.2	Lillit	54(dB µ V/m)

Test Figure: Horizontal



Note: 1. FS= Field Strength

2. Band-edge measurement are made in the conventional manner

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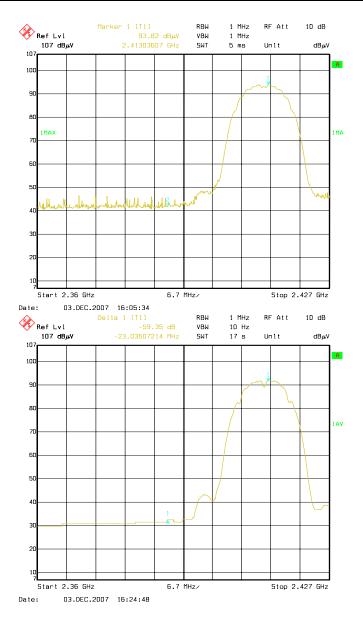
Report No: 0711080 Date: 2007-12-04



10.4 Restricted bands

Product:	WiFi PMP		Test Mode:	CH01 at 1Mbps
Mode	Keeping Transmitting		Input Voltage	DC3.7V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK/AV
The Max. FS in	PK (dB µ V/m)	36.9	Limit	74(dB µ V/m)
Restrict Band	AV(dB μ V/m)	25.6		54(dB μ V/m)

Test Figure: Vertical



Note: 1. FS= Field Strength

2. Band-edge measurement are made in the conventional manner

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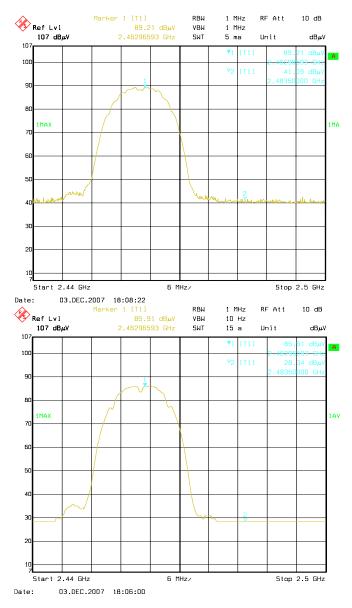
Report No: 0711080 Date: 2007-12-04



10.4 Restricted bands

Product:	WiFi PMP		Test Mode:	CH11 at 1Mbps
Mode	Keeping Transmitting		Input Voltage	DC3.7V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK/AV
The Max. FS in	PK (dB µ V/m)	38.3	Limit	74(dB µ V/m)
Restrict Band	AV(dB μ V/m)	30.2		54(dB μ V/m)

Test Figure: Horizontal



Note: 1. FS= Field Strength

2. Band-edge measurement are made in the conventional manner

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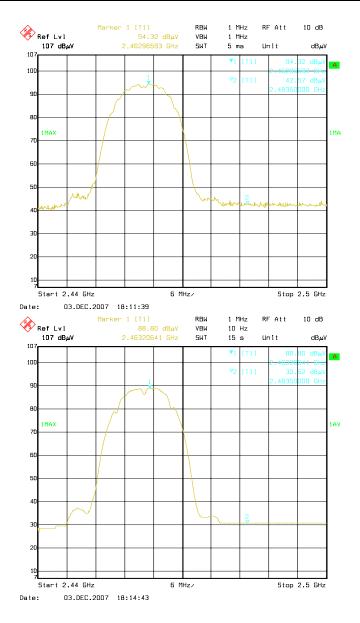
Report No: 0711080 Date: 2007-12-04



10.4 Restricted bands

Product:	WiFi PMP		Test Mode:	CH11 at 1Mbps
Mode	Keeping Transmitting		Input Voltage	DC3.7V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK/AV
The Max. FS in	PK (dB µ V/m)	40.3	Limit	74(dB µ V/m)
Restrict Band	AV(dB μ V/m)	32.6		54(dB μ V/m)

Test Figure: Vertical



Note: 1. FS= Field Strength

2. Band-edge measurement are made in the conventional manner

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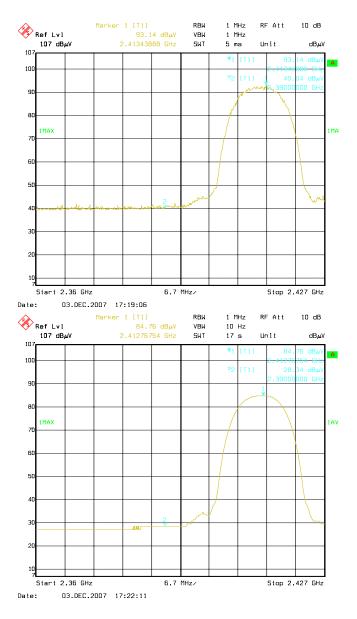
Report No: 0711080 Date: 2007-12-04



10.4 Restricted bands

Product:	WiFi PMP		Test Mode:	CH1 at 11Mbps
Mode	Keeping Transmitting		Input Voltage	DC3.7V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK/AV
The Max. FS in	PK (dB µ V/m)	37.6	Limit	74(dB µ V/m)
Restrict Band	AV(dB μ V/m)	28.1	Liffill	54(dB μ V/m)

Test Figure: Horizontal



Note: 1. FS= Field Strength

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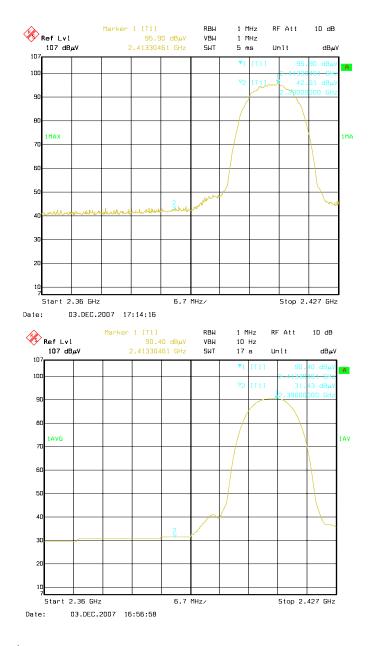
Report No: 0711080 Date: 2007-12-04



10.4 Restricted bands

Product:	WiFi PMP		Test Mode:	CH1 at 11Mbps
Mode	Keeping Transmitting		Input Voltage	DC3.7V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK/AV
The Max. FS in	PK (dB µ V/m)	38.2	Limit	74(dB µ V/m)
Restrict Band	AV(dB μ V/m)	27.3	Lillit	54(dB μ V/m)

Test Figure: Vertical



Note: 1. FS= Field Strength

2. Band-edge measurement are made in the conventional manner

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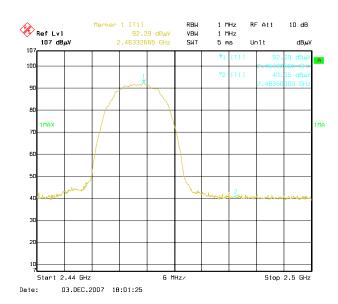
Report No: 0711080 Date: 2007-12-04

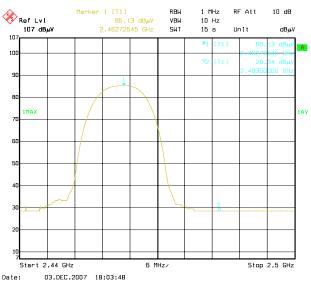


10.4 Restricted bands

Product:	WiFi PMP		Test Mode:	CH11 at 11Mbps
Mode	Keeping Transmitting		Input Voltage	DC3.7V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK/AV
The Max. FS in	PK (dB µ V/m)	37.0	Limit	74(dB µ V/m)
Restrict Band	AV(dB μ V/m)	27.3	Liffilt	54(dB μ V/m)

Test Figure: Horizontal





Note: 1. FS= Field Strength

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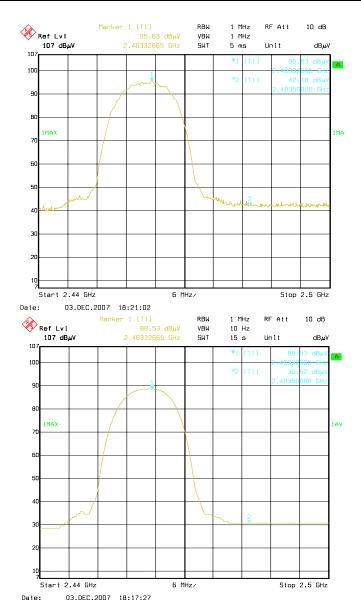
Report No: 0711080 Date: 2007-12-04



10.4 Restricted bands

Product:	WiFi PMP		Test Mode:	CH11 at 11Mbps
Mode	Keeping Transmitting		Input Voltage	DC3.7V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK/AV
The Max. FS in	PK (dB µ V/m)	37.3	Limit	74(dB µ V/m)
Restrict Band	AV(dB μ V/m)	28.6	Lillill	54(dB μ V/m)

Test Figure: Vertical



Note: 1. FS= Field Strength

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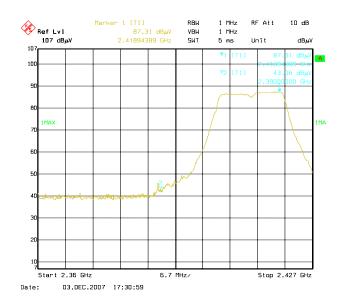


802.11g Mode

10.4 Restricted bands

Product:	WiFi PMP		Test Mode:	CH1 at 6Mbps
Mode	Keeping Transmitting		Input Voltage	DC5V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK/AV
The Max. FS in	PK (dB µ V/m)	50.6	Limit	74(dB µ V/m)
Restrict Band	$AV(dB \mu V/m)$	36.6	Lillit	54(dB μ V/m)

Test Figure: Horizontal





Note: 1. FS= Field Strength

2. Band-edge measurement are made in the conventional manner

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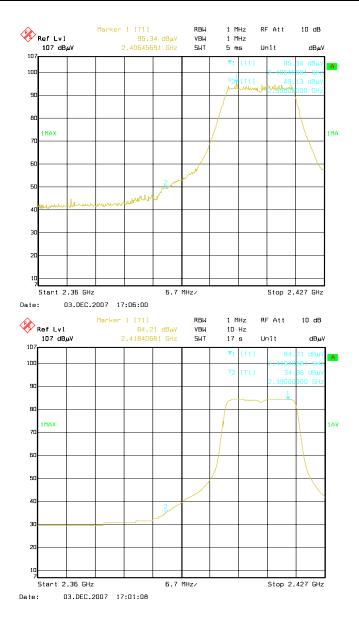
Report No: 0711080 Date: 2007-12-04



10.4 Restricted bands

Product:	WiFi PMP		Test Mode:	CH1 at 6Mbps
Mode	Keeping Transmitting		Input Voltage	DC5V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK/AV
The Max. FS in	PK (dB µ V/m)	52.3	Limit	74(dB µ V/m)
Restrict Band	AV(dB μ V/m)	38.6	Lillit	54(dB μ V/m)

Test Figure: Vertical



Note: 1. FS= Field Strength

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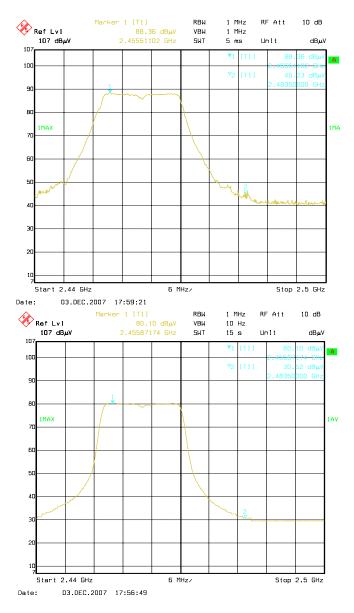
Report No: 0711080 Date: 2007-12-04



10.4 Restricted bands

Product:	WiFi PMP		Test Mode:	CH11 at 6Mbps
Mode	Keeping Transmitting		Input Voltage	DC3.7V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK/AV
The Max. FS in	PK (dB µ V/m)	51.2	Limit	74(dB µ V/m)
Restrict Band	AV(dB μ V/m)	40.8	Lillit	54(dB μ V/m)

Test Figure: Horizontal



Note: 1. FS= Field Strength

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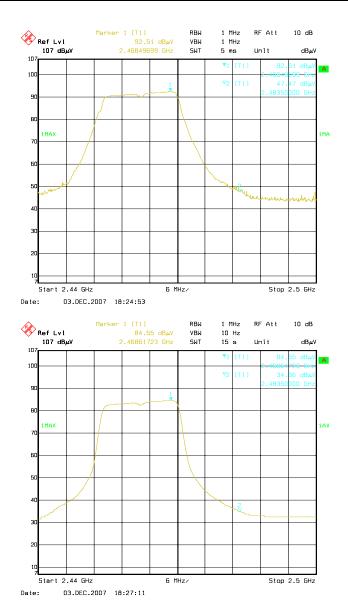
Report No: 0711080 Date: 2007-12-04



10.4 Restricted bands

Product:	WiFi PMP		Test Mode:	CH11 at 6Mbps
Mode	Keeping Transmitting		Input Voltage	DC3.7V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK/AV
The Max. FS in	PK (dB µ V/m)	53.7	Limit	74(dB µ V/m)
Restrict Band	AV(dB μ V/m)	42.3	Liffill	54(dB μ V/m)

Test Figure: Vertical



Note: 1. FS= Field Strength

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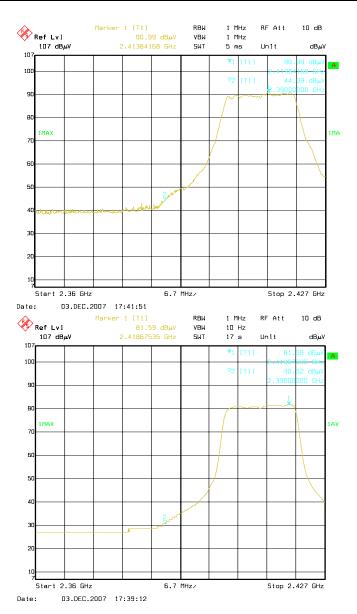
Report No: 0711080 Date: 2007-12-04



10.4 Restricted bands

Product:	WiFi PMP		Test Mode:	CH1 at 54Mbps
Mode	Keeping Transmitting		Input Voltage	DC3.7V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK/AV
The Max. FS in	PK (dB µ V/m)	52.1	Limit	74(dB µ V/m)
Restrict Band	AV(dB μ V/m)	43.6	Lillit	54(dB μ V/m)

Test Figure: Horizontal



Note: 1. FS= Field Strength

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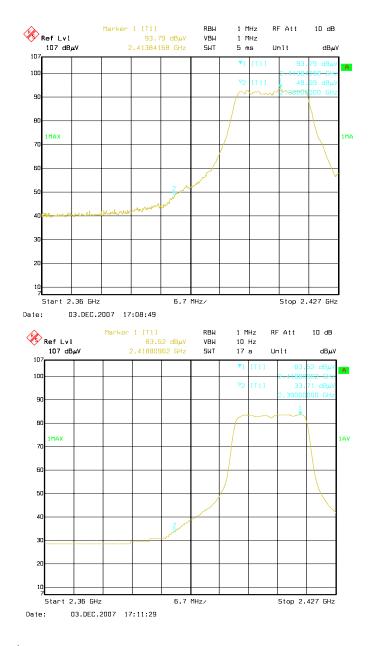
Report No: 0711080 Date: 2007-12-04



10.4 Restricted bands

Product:	WiFi PMP		Test Mode:	CH1 at 54Mbps
Mode	Keeping Transmitting		Input Voltage	DC3.7V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK/AV
The Max. FS in	PK (dB µ V/m)	54.6	Limit	74(dB µ V/m)
Restrict Band	AV(dB μ V/m)	43.8	Lillill	54(dB μ V/m)

Test Figure: Vertical



Note: 1. FS= Field Strength

2. Band-edge measurement are made in the conventional manner

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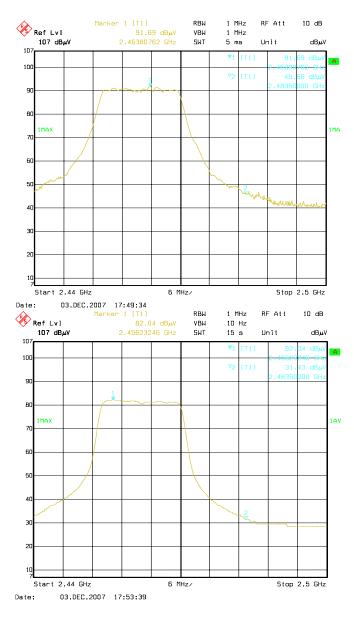
Report No: 0711080 Date: 2007-12-04



10.4 Restricted bands

Product:	WiFi PMP		Test Mode:	CH11 at 54Mbps
Mode	Keeping Transmitting		Input Voltage	DC3.7V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK/AV
The Max. FS in	PK (dB µ V/m)	51.8	Limit	74(dB µ V/m)
Restrict Band	AV(dB μ V/m)	40.7	Lillit	54(dB μ V/m)

Test Figure: Horizontal



Note: 1. FS= Field Strength

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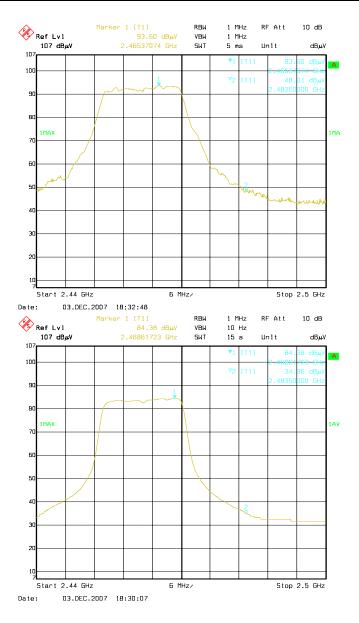
Report No: 0711080 Date: 2007-12-04



10.4 Restricted bands

Product:	WiFi PMP		Test Mode:	CH11 at 54Mbps
Mode	Keeping Transmitting		Input Voltage	DC3.7V
Temperature	24 deg. C,		Humidity	56% RH
Test Result:	Pass		Detector	PK/AV
The Max. FS in	PK (dB µ V/m)	53.2	Limit	74(dB µ V/m)
Restrict Band	AV(dB μ V/m)	43.6	Lillit	54(dB μ V/m)

Test Figure: Vertical



Note: 1. FS= Field Strength

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11.0 Antenna Requirement

11.1 Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.247 (b), if transmitter antennas of directional gain greater than 6 dBi

are used, the power shall be reduced by the mount in dB that the directional gain of the antenna exceeds 6 dBi.

11.2 Antenna Connected construction

An RF cable connected the IPX connector with the antenna board. The maximum Gain of this antenna is -3dBi.

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12.0 Maximum Permissible Exposure

12.1 Applicable Standard

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2m normally can be maintained between the user and the device.

(a) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Times E 2 , H 2 or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100000			5	6

(b) Limits for General Population / Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Times E 2 , H 2 or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100000			1.0	30

Note: f=frequency in MHz; *Plane-wave equivalent power density

MPE Calculation Method

 $E(V/m) = (30*P*G)^{0.5}/d$ Power Density: $Pd(W/m^2) = E^2/377$

 $\mathbf{E} = \text{Electric Field (V/m)}$

P = Peak RF output Power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

 $Pd = (30*P*G) / (377*d^2)$

From the peak EUT RF output power, the minimum mobile separation distance, d=0.2m, as well as the gain of the used antenna, the RF power density can be obtained.

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12.2 Calculated Result and Limit

802.11b Mode

Antenna Gain (Numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
0.501	11.56	14.32	0.001427	1	Compiles

802.11g Mode

Antenna Gain (Numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
0.501	13.23	21.04	0.002097	1	Compiles

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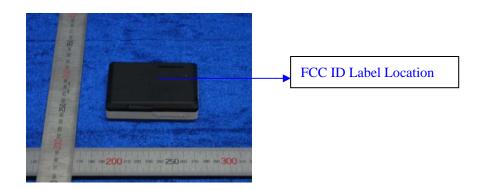
13.0 FCC ID Label

FCC ID: VRI-I280

This device complies with part 15 of the FCC rules. 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 label must not be a stick-on paper label. The label on these products must be permanently affixed to the product and readily visible at the time of purchase and must last the expected lifetime of the equipment not be readily detachable.

Mark Location:



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14.0 Photo of testing

14.1 Conducted test View--



14.2 Emission Radiated test View--

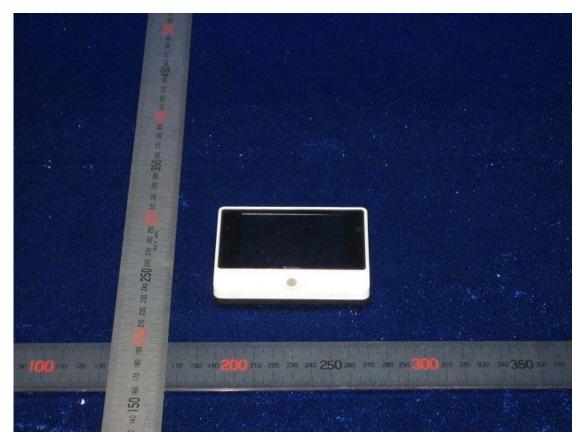


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14.3 Photo for the EUT



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14.3 Photo for the EUT



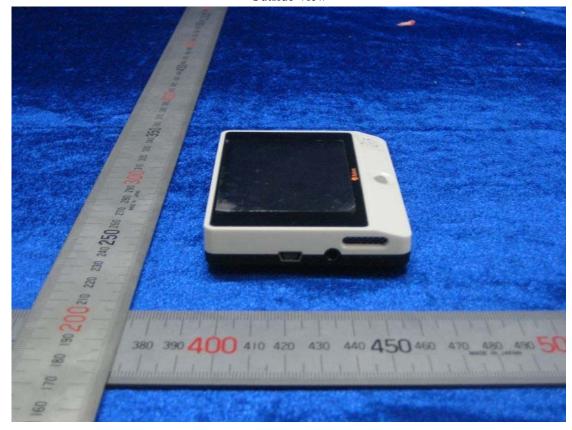
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14.3 Photo for the EUT





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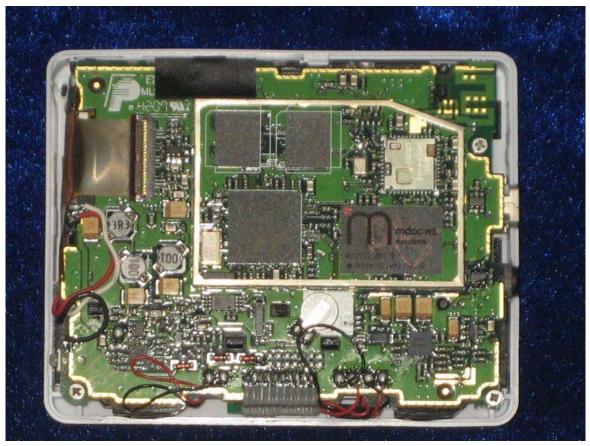
Interior View



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Interior View



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Interior View



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End of the report