

#### 4.3 6dB BANDWIDTH MEASUREMENT

#### 4.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

#### 4.3.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSP40	100036	Dec. 09, 2007

#### NOTE:

- 1.The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.
- 2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.



#### 4.3.3 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 100kHz RBW and 100kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

#### 4.3.4 DEVIATION FROM TEST STANDARD

No deviation

#### 4.3.5 TEST SETUP



#### 4.3.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.



# 4.3.7 TEST RESULTS (ANTENNA 1)

## 802.11b DSSS modulation

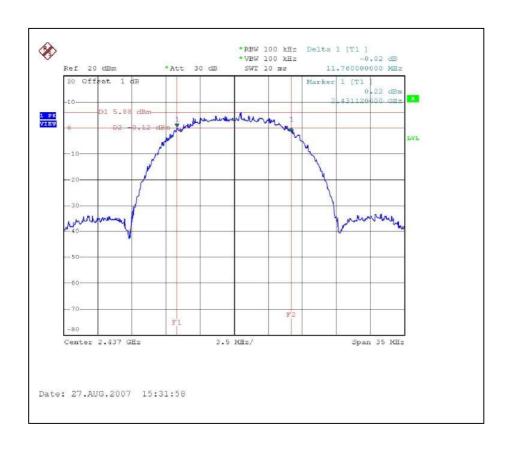
MODULATION TYPE	ССК	TRANSFER RATE	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	28 deg. C, 62 %RH, 961 hPa
TESTED BY	Phoenix Huang		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	12.39	0.5	PASS
6	2437	11.76	0.5	PASS
11	2462	11.13	0.5	PASS

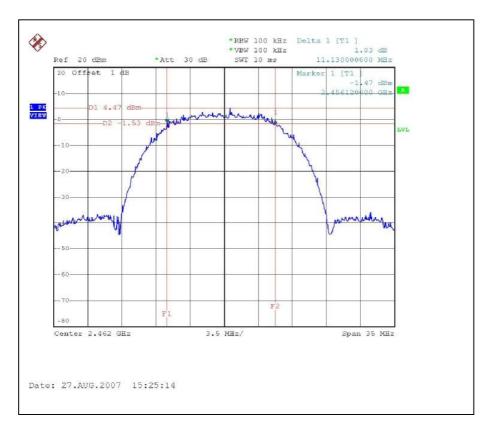
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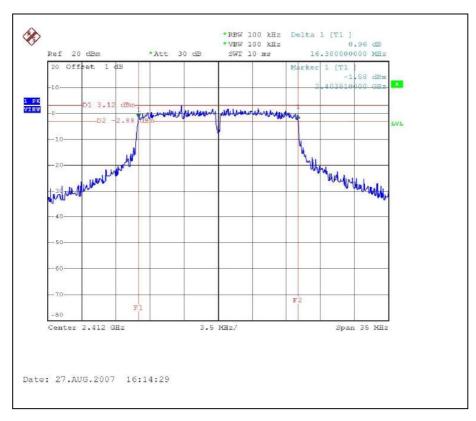


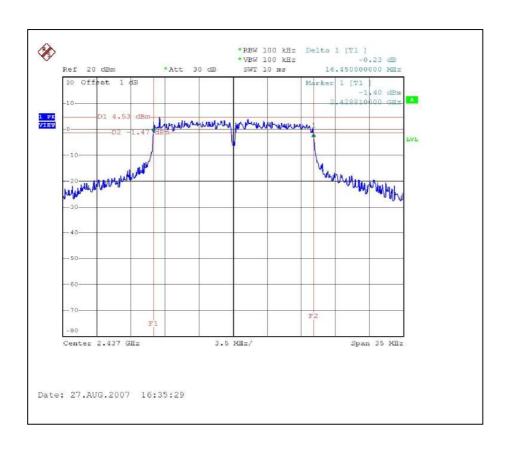
# 802.11g OFDM modulation

MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	28 deg. C, 62 %RH, 961 hPa
TESTED BY	Phoenix Huang		

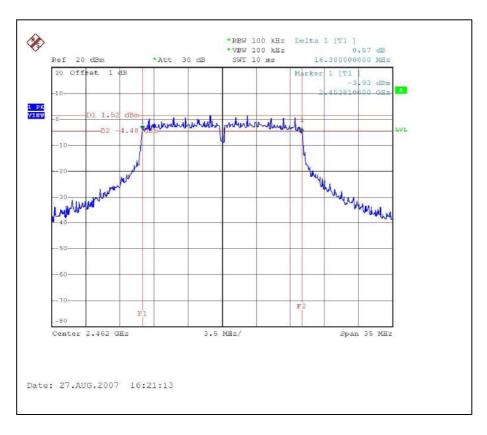
CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	16.38	0.5	PASS
6	2437	16.45	0.5	PASS
11	2462	16.38	0.5	PASS













# 4.3.8 TEST RESULTS (ANTENNA 2)

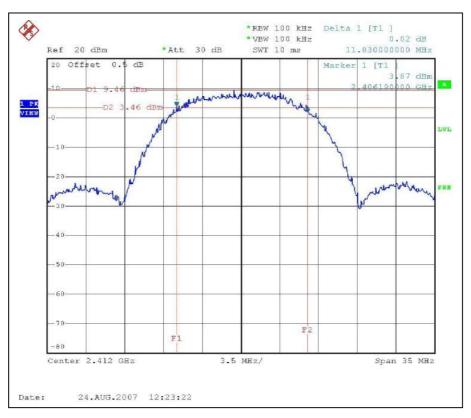
## 802.11b DSSS modulation

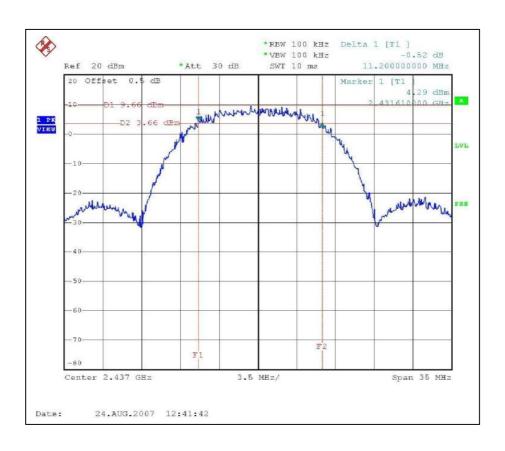
MODULATION TYPE	ССК	TRANSFER RATE	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	28 deg. C, 62 %RH, 961 hPa
TESTED BY	Phoenix Huang		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	11.83	0.5	PASS
6	2437	11.2	0.5	PASS
11	2462	10.85	0.5	PASS

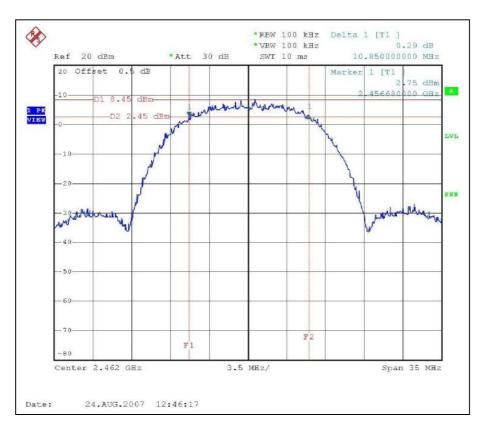
Report No.: RF960705H04 98 Report Format Version 2.0.6











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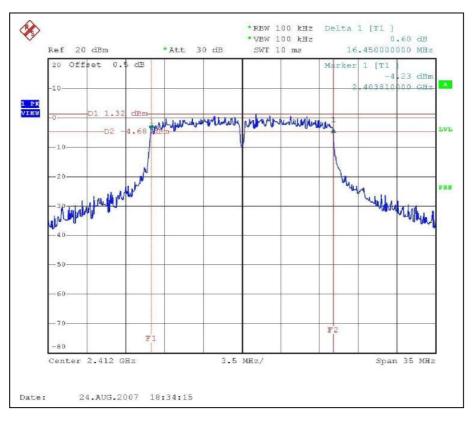


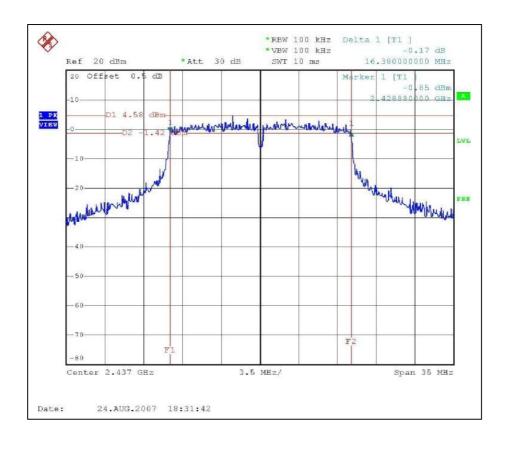
# 802.11g OFDM modulation

MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	28 deg. C, 62 %RH, 961 hPa
TESTED BY	Phoenix Huang		

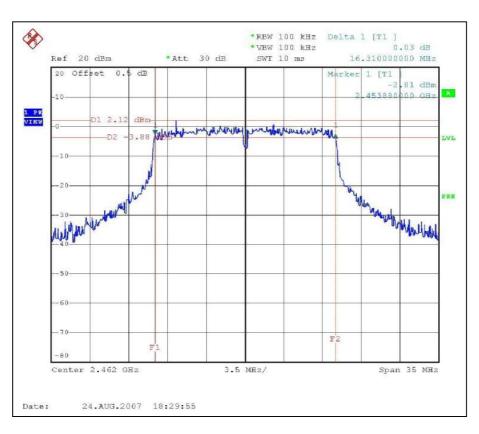
CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	16.45	0.5	PASS
6	2437	16.38	0.5	PASS
11	2462	16.31	0.5	PASS











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# 4.3.9 TEST RESULTS (ANTENNA 3)

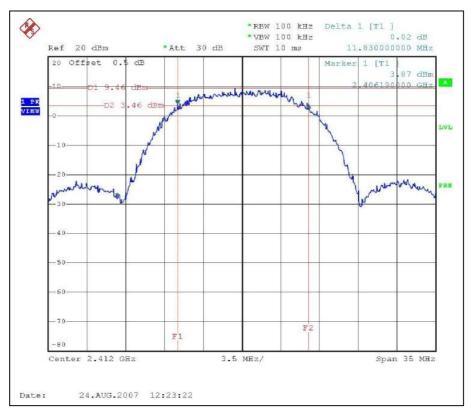
## 802.11b DSSS modulation

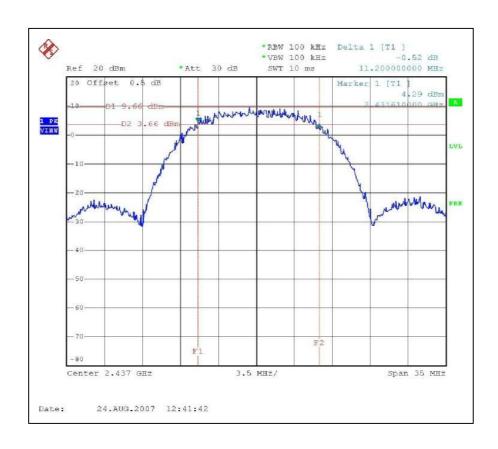
MODULATION TYPE	ССК	TRANSFER RATE	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	28 deg. C, 62 %RH, 961 hPa
TESTED BY	Phoenix Huang		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	11.83	0.5	PASS
6	2437	11.2	0.5	PASS
11	2462	11.76	0.5	PASS

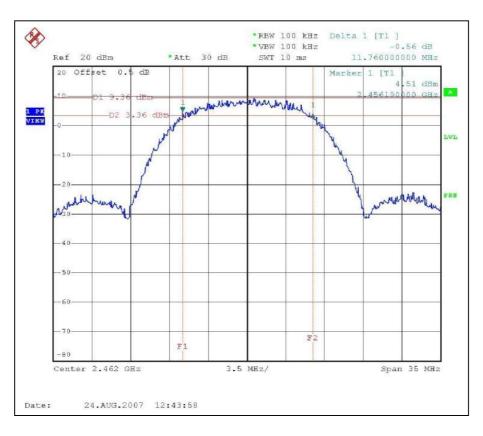
Report No.: RF960705H04 104 Report Format Version 2.0.6











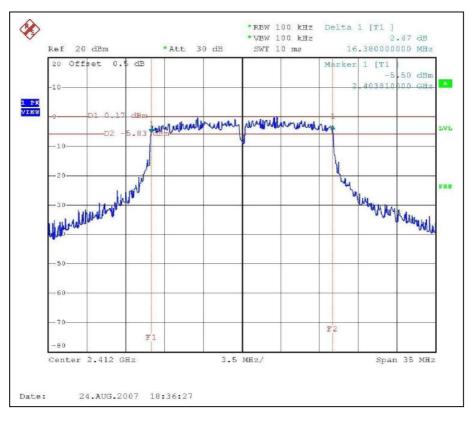


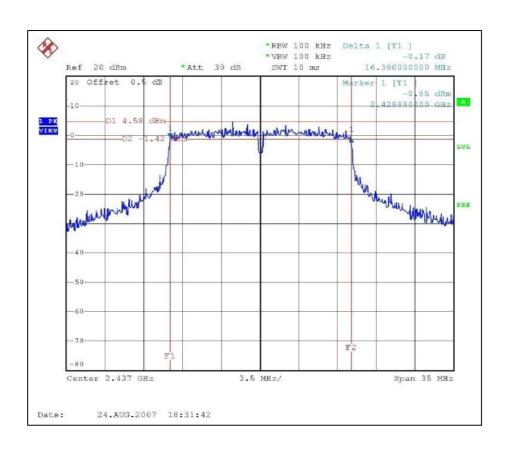
# 802.11g OFDM modulation

MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	28 deg. C, 62 %RH, 961 hPa
TESTED BY	Phoenix Huang		

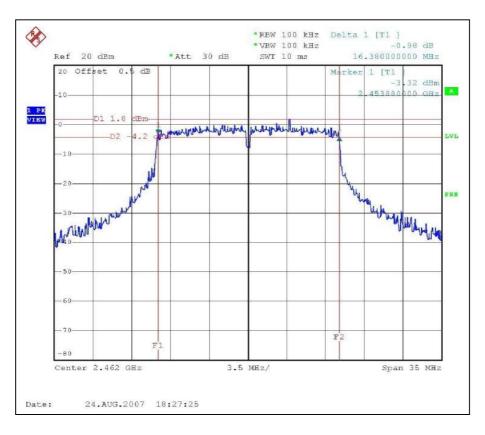
CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	16.38	0.5	PASS
6	2437	16.38	0.5	PASS
11	2462	16.38	0.5	PASS













# 4.3.10 TEST RESULTS (ANTENNA 4)

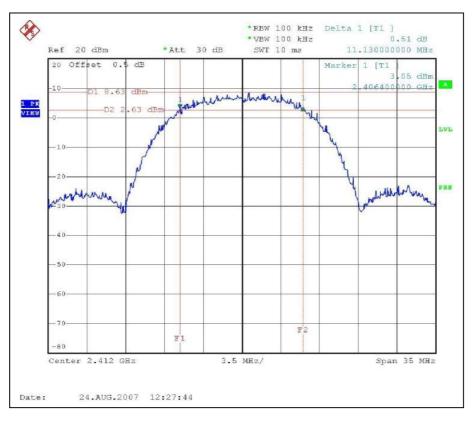
## 802.11b DSSS modulation

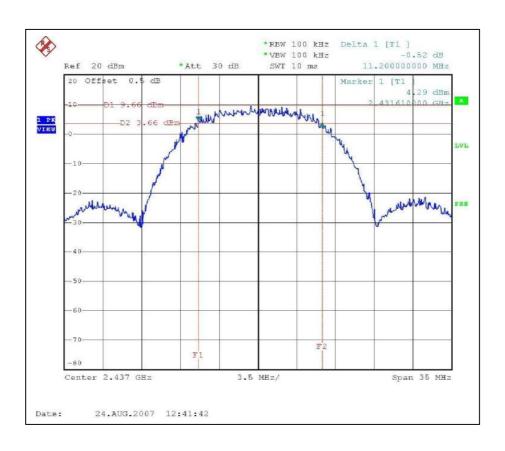
MODULATION TYPE	ССК	TRANSFER RATE	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	28 deg. C, 62 %RH, 961 hPa
TESTED BY	Phoenix Huang		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	11.13	0.5	PASS
6	2437	11.2	0.5	PASS
11	2462	11.83	0.5	PASS

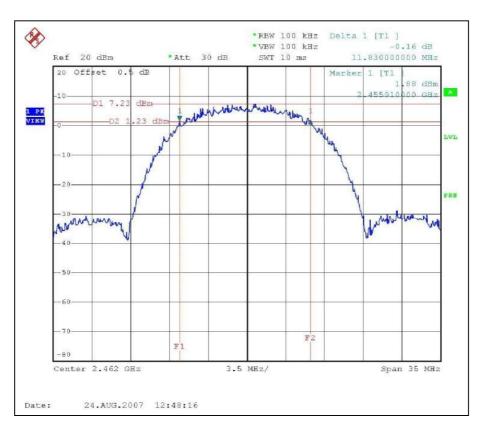
Report No.: RF960705H04 110 Report Format Version 2.0.6











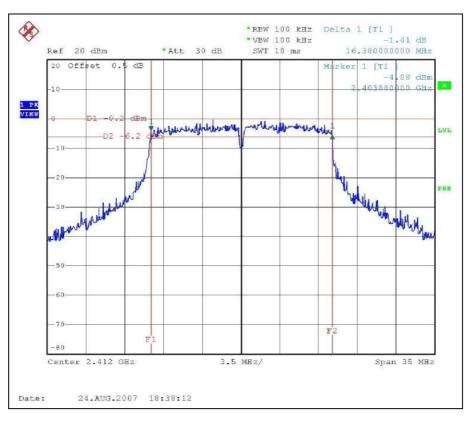


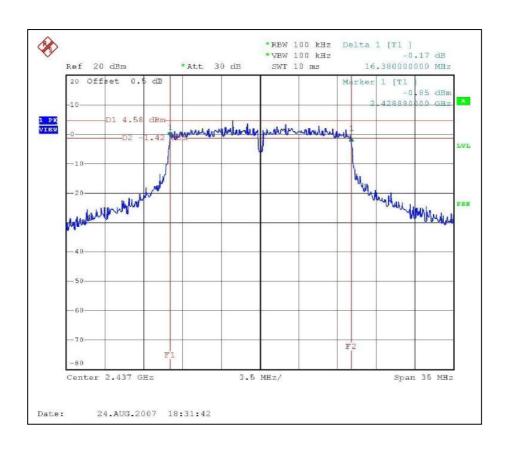
# 802.11g OFDM modulation

MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	28 deg. C, 62 %RH, 961 hPa
TESTED BY	Phoenix Huang		

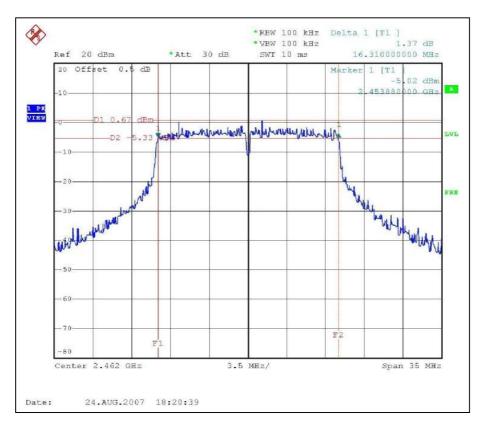
CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	16.38	0.5	PASS
6	2437	16.38	0.5	PASS
11	2462	16.31	0.5	PASS













#### 4.4 MAXIMUM PEAK OUTPUT POWER

#### 4.4.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT

The Maximum Peak Output Power Measurement is 30dBm.

#### 4.4.2 INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSP40	100036	Dec. 09, 2007
Agilent SIGNAL GENERATOR	E8257C	MY43320668	Dec. 07, 2007
TEKTRONIX OSCILLOSCOPE	TDS380	B016335	July. 15, 2008
NARDA DETECTOR	4503A	FSCM99899	NA

#### NOTE:

The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.



#### 4.4.3 TEST PROCEDURES

- 1. A detector was used on the output port of the EUT. An oscilloscope was used to read the response of the detector.
- 2. Replaced the EUT by the signal generator. The center frequency of the S.G was adjusted to the center frequency of the measured channel.
- 3. Adjusted the power to have the same reading on oscilloscope. Record the power level.

#### 4.4.4 DEVIATION FROM TEST STANDARD

No deviation

#### 4.4.5 TEST SETUP



#### 4.4.6 EUT OPERATING CONDITIONS

Same as Item 4.3.6



#### 4.4.7 TEST RESULTS

#### 802.11b DSSS modulation

MODULATION TYPE	ССК	TRANSFER RATE	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	28 deg. C, 62 %RH, 961 hPa
TESTED BY	Phoenix Huang		

Antenna 1 (Gain : 2 dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	157.036	21.96	30	PASS
6	2437	81.658	19.12	30	PASS
11	2462	52.845	17.23	30	PASS

Antenna 2 (Gain : 2 dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	164.059	22.15	30	PASS
6	2437	193.642	22.87	30	PASS
11	2462	129.420	21.12	30	PASS

Antenna 3 (Gain: 7 dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	164.059	22.15	29	PASS
6	2437	193.642	22.87	29	PASS
11	2462	190.108	22.79	29	PASS

Antenna 4 (Gain :9 dBi, Cable loss: 1.5dB)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	146.218	21.65	28.5	PASS
6	2437	193.642	22.87	28.5	PASS
11	2462	112.980	20.53	28.5	PASS



# 802.11g OFDM modulation

MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	28 deg. C, 62 %RH, 961 hPa
TESTED BY	Phoenix Huang		

Antenna 1 (Gain : 2 dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	154.525	21.89	30	PASS
6	2437	248.886	23.96	30	PASS
11	2462	111.173	20.46	30	PASS

Antenna 2 (Gain: 2 dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	95.940	19.82	30	PASS
6	2437	174.985	22.43	30	PASS
11	2462	99.083	19.96	30	PASS

Antenna 3 (Gain: 7 dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	95.060	19.78	29	PASS
6	2437	174.985	22.43	29	PASS
11	2462	88.105	19.45	29	PASS

Antenna 4 (Gain :9 dBi, Cable loss: 1.5dB)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	67.764	18.31	28.5	PASS
6	2437	174.985	22.43	28.5	PASS
11	2462	60.534	17.82	28.5	PASS



#### 4.5 POWER SPECTRAL DENSITY MEASUREMENT

#### 4.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

#### 4.5.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSP40	100036	Dec. 09, 2007

#### NOTE:

- 1.The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.
- 2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.



#### 4.5.3 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 30kHz VBW, set sweep time = span/3kHz. 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.

#### 4.5.4 DEVIATION FROM TEST STANDARD

No deviation

#### 4.5.5 TEST SETUP

EUT SPECTRUM ANALYZER

#### 4.5.6 EUT OPERATING CONDITION

Same as Item 4.3.6



# 4.5.7 TEST RESULTS (ANTENNA 1)

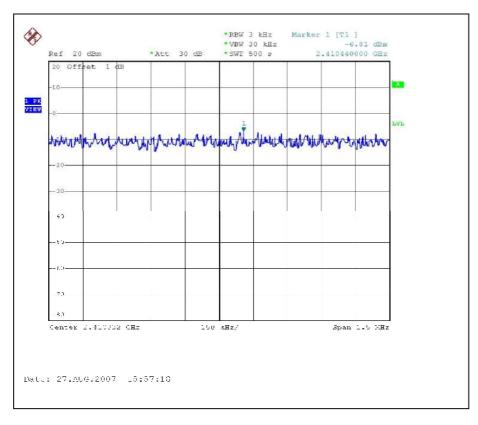
# 802.11b DSSS modulation

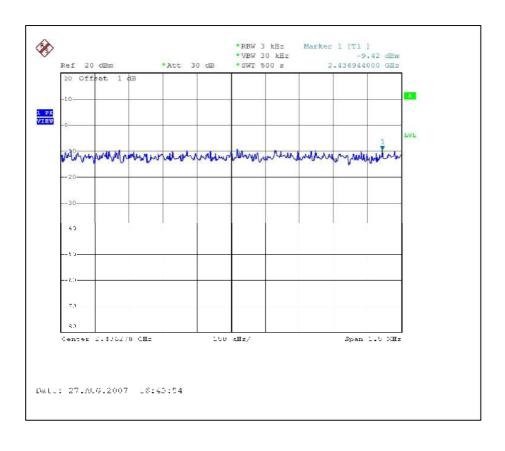
MODULATION TYPE	ССК	TRANSFER RATE	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	28 deg.C, 62 %RH, 961 hPa
TESTED BY	Phoenix Huang		

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 KHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-6.81	8	PASS
6	2437	-9.42	8	PASS
11	2462	-11.64	8	PASS

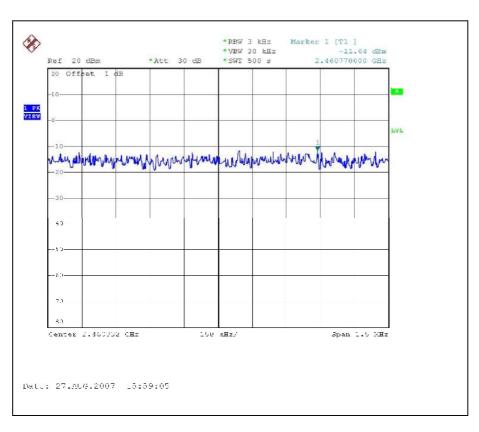
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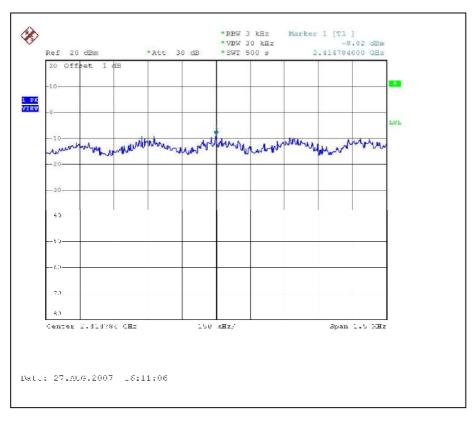


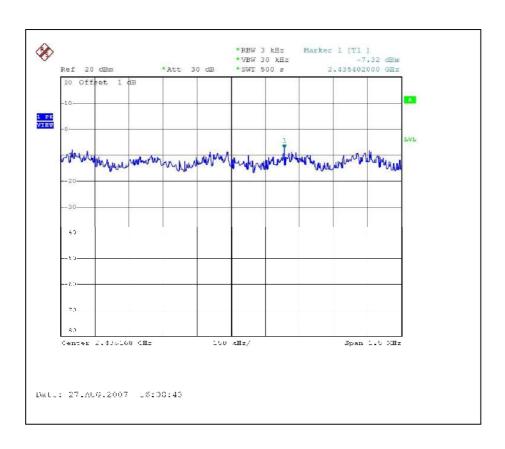
# 802.11g OFDM modulation

MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	28 deg.C, 62 %RH, 961 hPa
TESTED BY	Phoenix Huang		

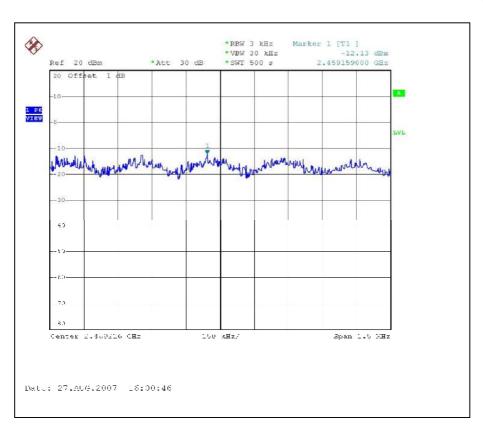
CHANNEL NUMBER	CHANNEL FREQUENCY (MHz )	RF POWER LEVEL IN 3 KHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-8.82	8	PASS
6	2437	-7.32	8	PASS
11	2462	-12.13	8	PASS













# 4.5.8 TEST RESULTS (ANTENNA 2)

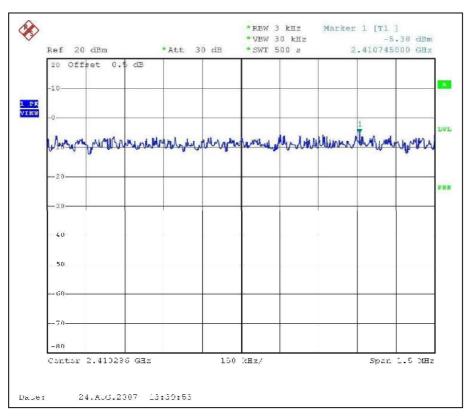
# 802.11b DSSS modulation

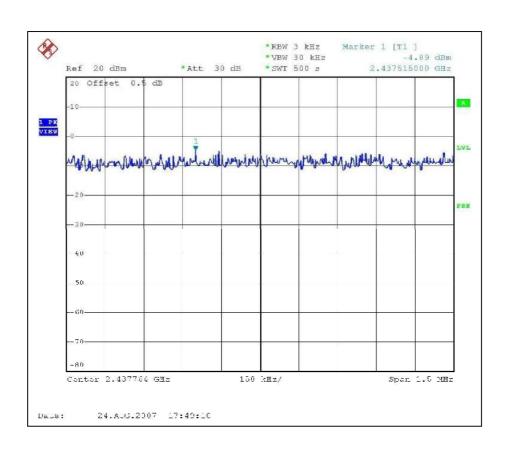
MODULATION TYPE	ССК	TRANSFER RATE	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	28 deg.C, 62 %RH, 961 hPa
TESTED BY	Phoenix Huang		

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 KHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-5.38	8	PASS
6	2437	-4.89	8	PASS
11	2462	-6.14	8	PASS

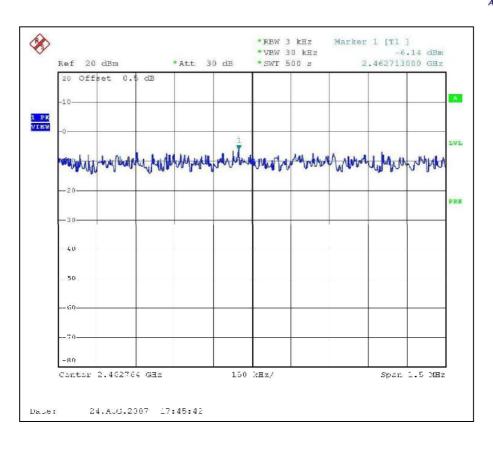
Report No.: RF960705H04 128 Report Format Version 2.0.6







# D.



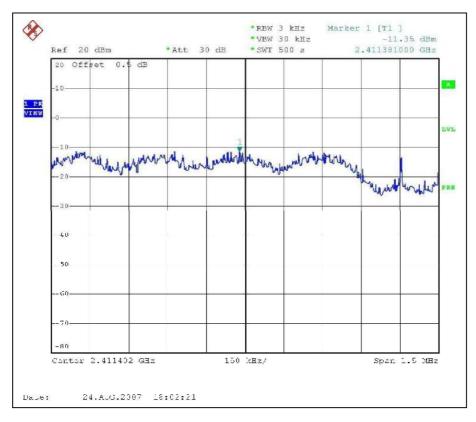


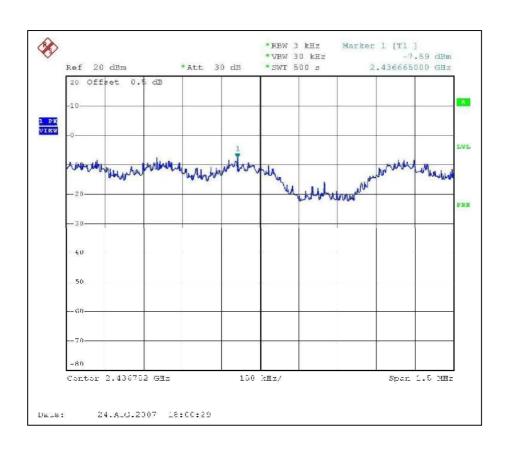
# 802.11g OFDM modulation

MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	28 deg.C, 62 %RH, 961 hPa
TESTED BY	Phoenix Huang		

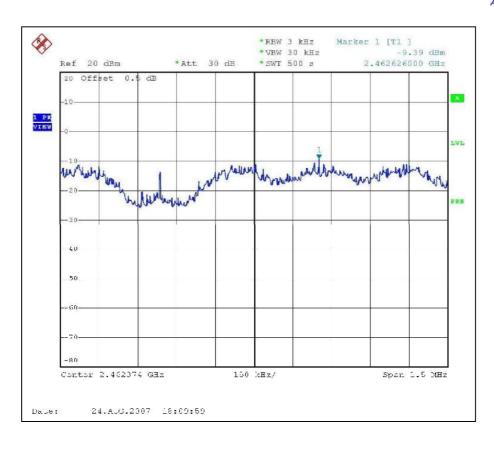
CHANNEL NUMBER	CHANNEL FREQUENCY (MHz )	RF POWER LEVEL IN 3 KHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-11.35	8	PASS
6	2437	-7.59	8	PASS
11	2462	-9.39	8	PASS







# D.





# 4.5.9 TEST RESULTS (ANTENNA 3)

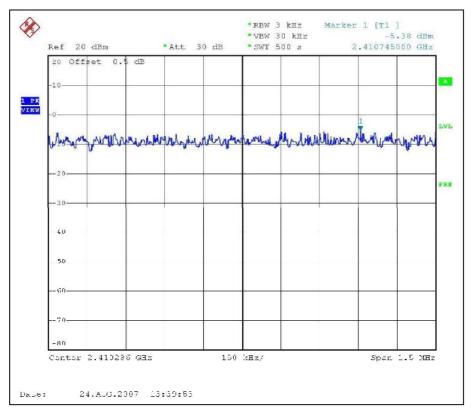
## 802.11b DSSS modulation

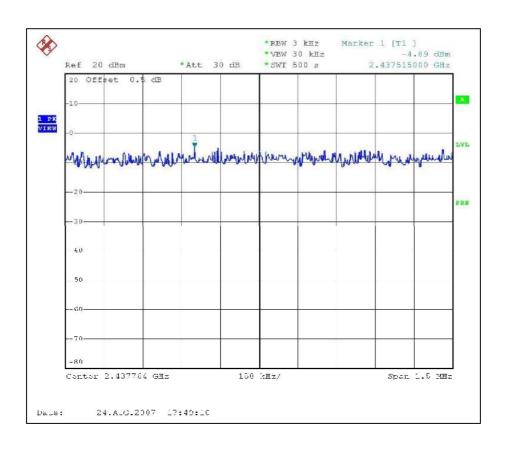
MODULATION TYPE	ССК	TRANSFER RATE	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	28 deg.C, 62 %RH, 961 hPa
TESTED BY	Phoenix Huang		

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 KHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-5.38	8	PASS
6	2437	-4.89	8	PASS
11	2462	-4.93	8	PASS

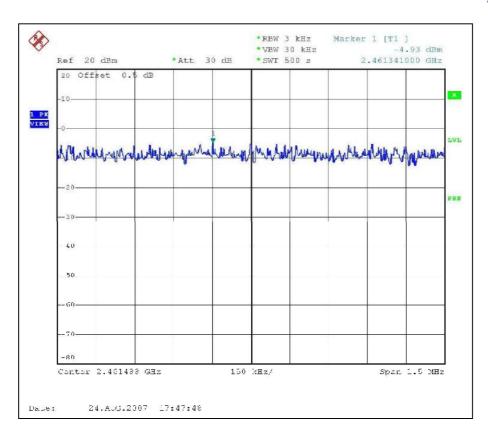
Report No.: RF960705H04 134 Report Format Version 2.0.6











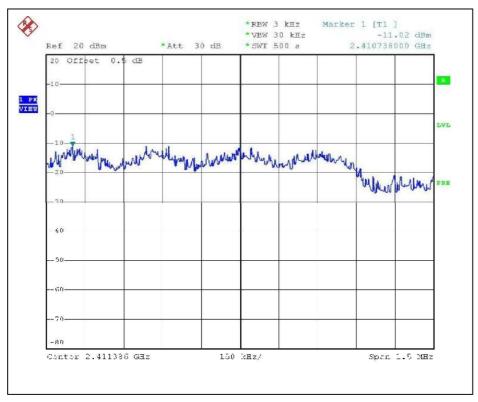


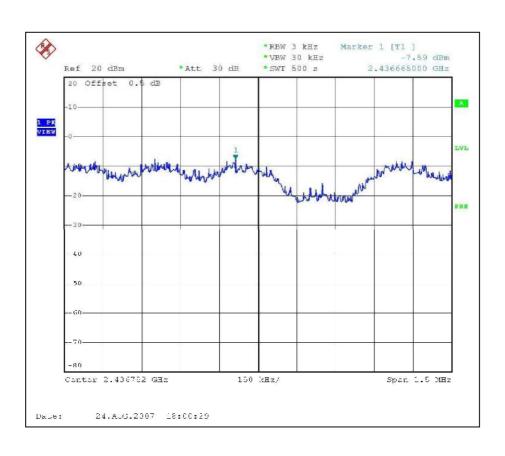
# 802.11g OFDM modulation

MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	28 deg.C, 62 %RH, 961 hPa
TESTED BY	Phoenix Huang		

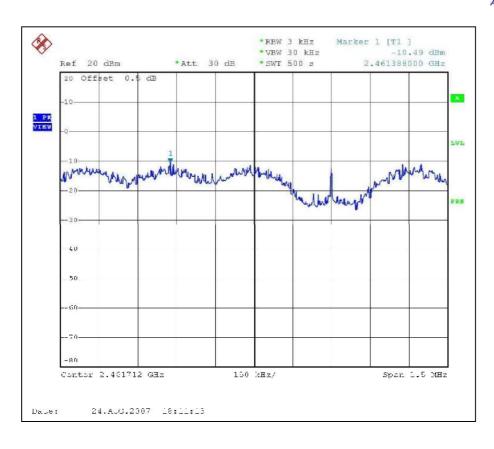
CHANNEL NUMBER	CHANNEL FREQUENCY (MHz )	RF POWER LEVEL IN 3 KHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-11.02	8	PASS
6	2437	-7.59	8	PASS
11	2462	-10.49	8	PASS







# D.





# 4.5.10 TEST RESULTS (ANTENNA 4)

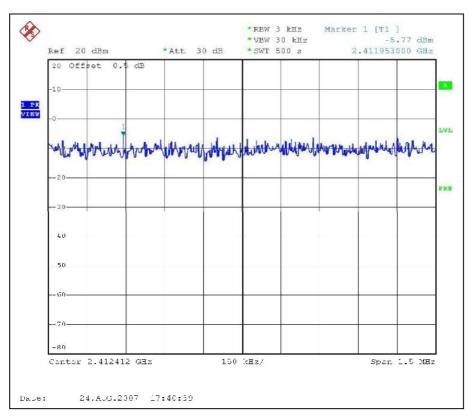
## 802.11b DSSS modulation

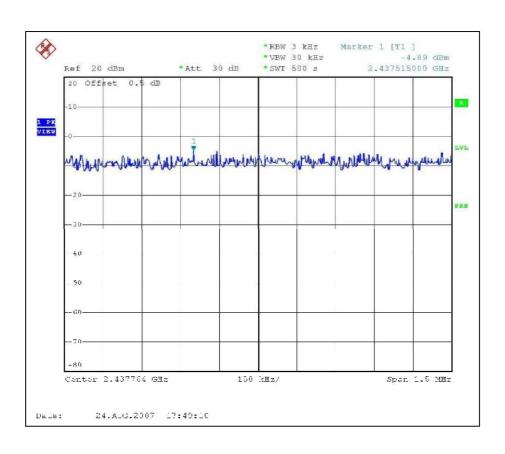
MODULATION TYPE	ССК	TRANSFER RATE	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	28 deg.C, 62 %RH, 961 hPa
TESTED BY	Phoenix Huang		

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 KHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-5.77	8	PASS
6	2437	-4.89	8	PASS
11	2462	-7.01	8	PASS

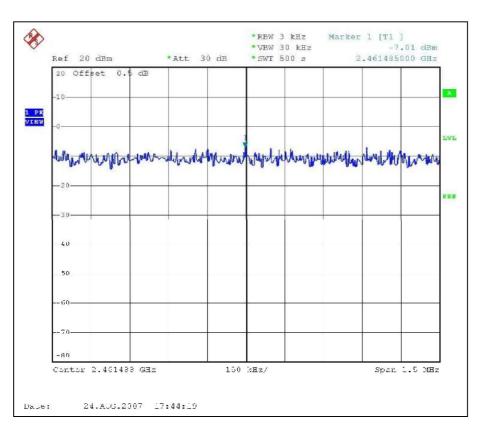
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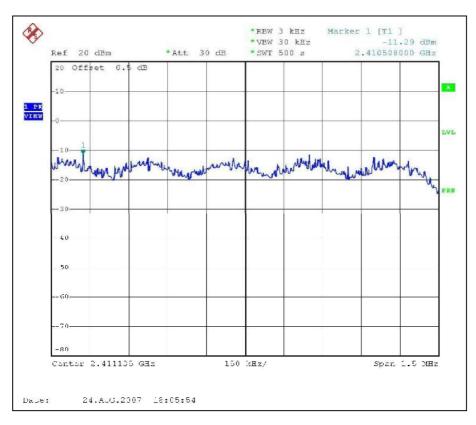
# 802.11g OFDM modulation

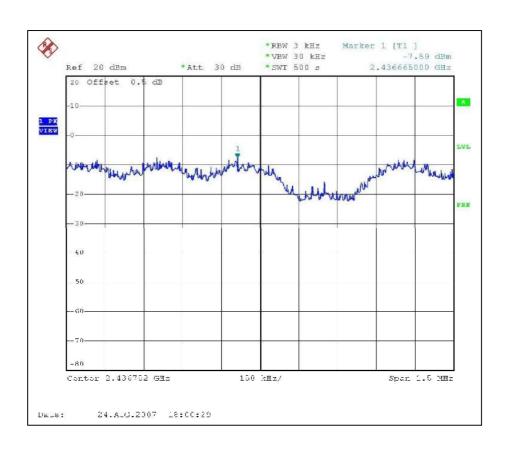
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	28 deg.C, 62 %RH, 961 hPa
TESTED BY	Phoenix Huang		

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz )	RF POWER LEVEL IN 3 KHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-11.29	8	PASS
6	2437	-7.59	8	PASS
11	2462	-12.75	8	PASS

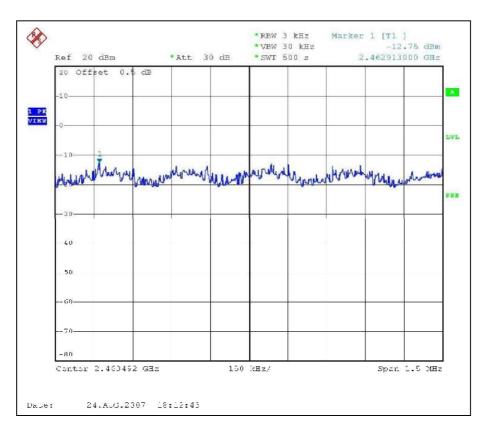
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#### 4.6 BAND EDGES MEASUREMENT

#### 4.6.1 LIMITS OF BAND EDGES MEASUREMENT

Below –20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).

#### 4.6.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSP40	100036	Dec. 09, 2007

#### NOTE:

- 1.The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.
- 2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

#### 4.6.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer via a low lose cable. Set both RBW and VBW of spectrum analyzer to 100kHz with suitable frequency span including 100 MHz bandwidth from band edge. The band edges was measured and recorded.

The spectrum plots (RBW = VBW = 100kHz) are attached on the following pages

#### 4.6.4 EUT OPERATING CONDITION

Same as Item 4.3.6



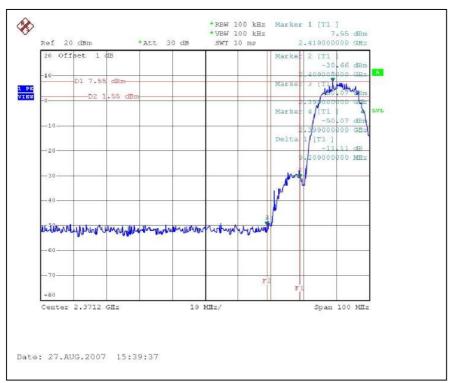
# 4.6.5 TEST RESULTS (ANTENNA 1)

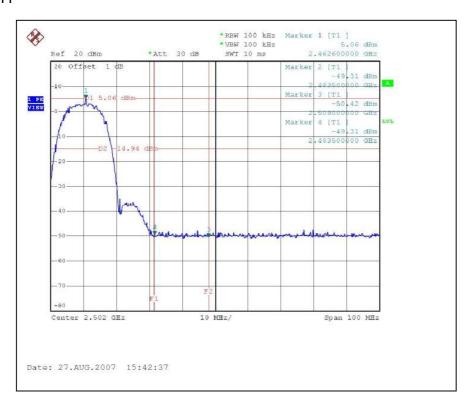
4.0.3 TEST RESOLTS (AINTENNA T)				
The spectrum plots are attached on the following pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(d).				



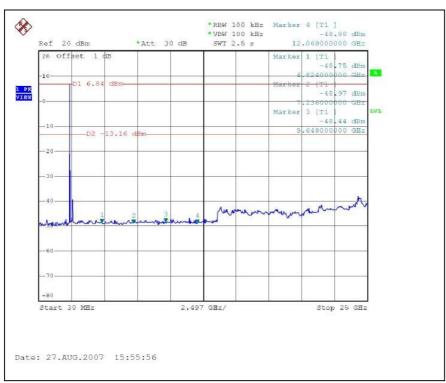
#### **802.11b DSSS MODULATION:**

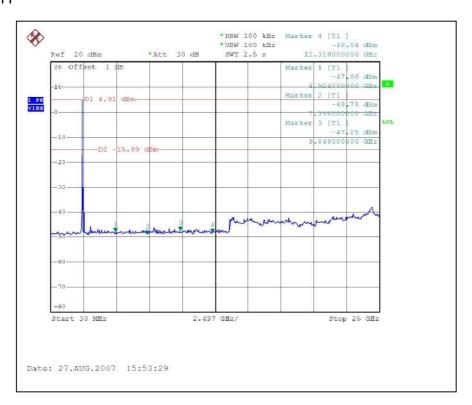
#### CH1







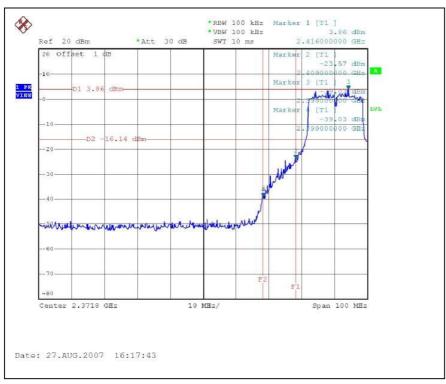


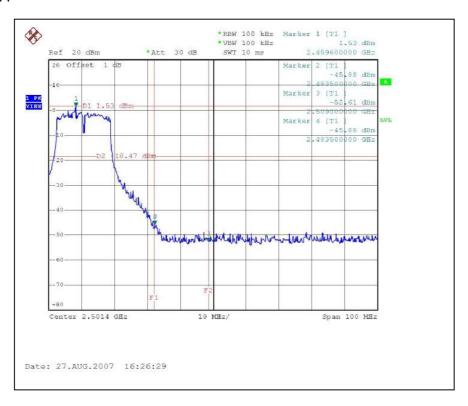




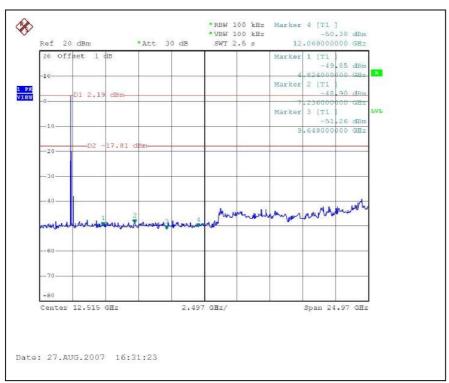
# **802.11g OFDM MODULATION:**

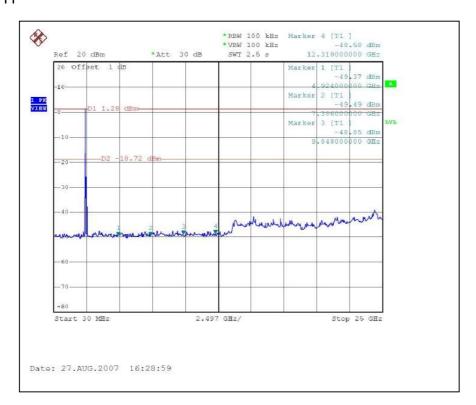
#### CH1













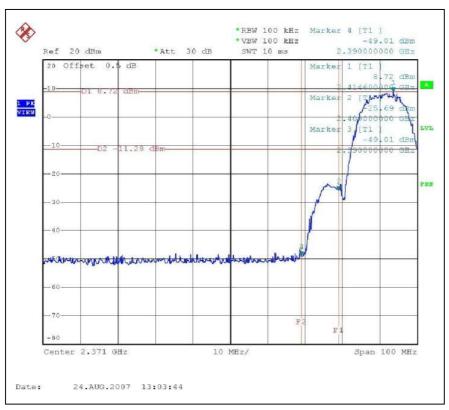
# 4.6.6 TEST RESULTS (ANTENNA 2)

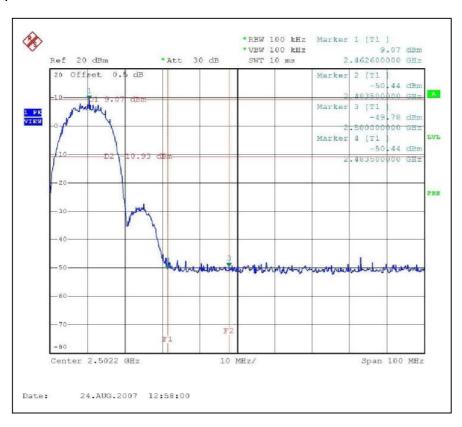
4.0.0 TEST RESULTS (ANTENNA 2)
The spectrum plots are attached on the following pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(d).



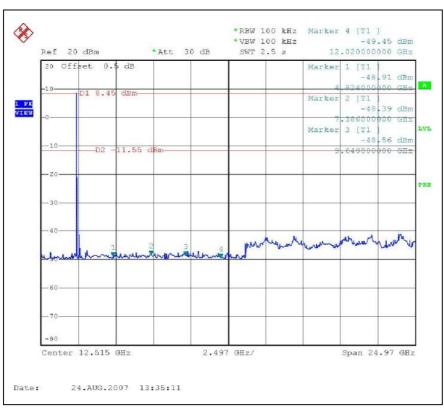
#### **802.11b DSSS MODULATION:**

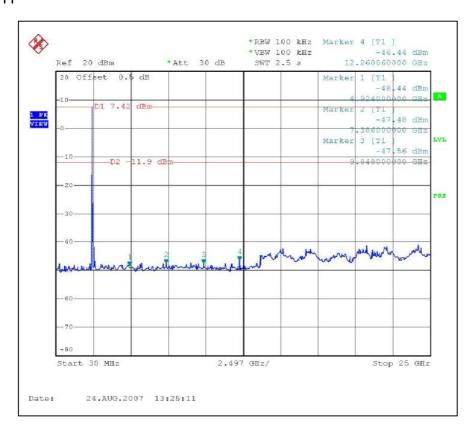
#### CH1







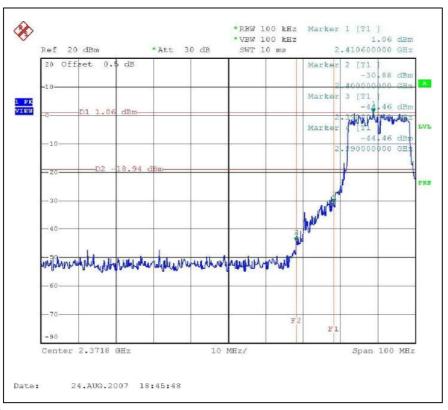


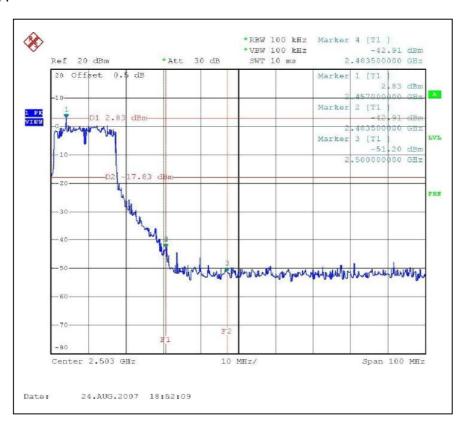




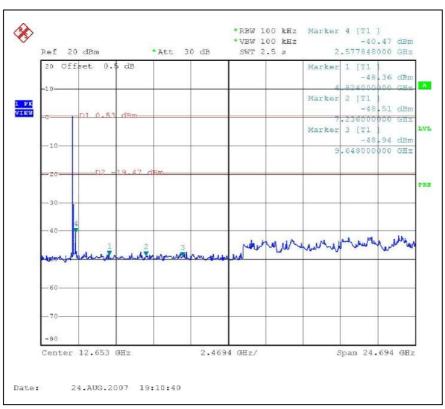
### **802.11g OFDM MODULATION:**

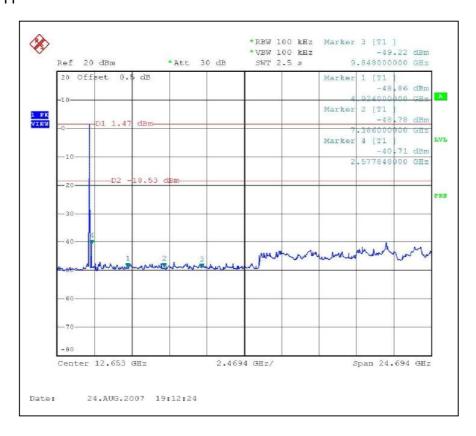
#### CH1













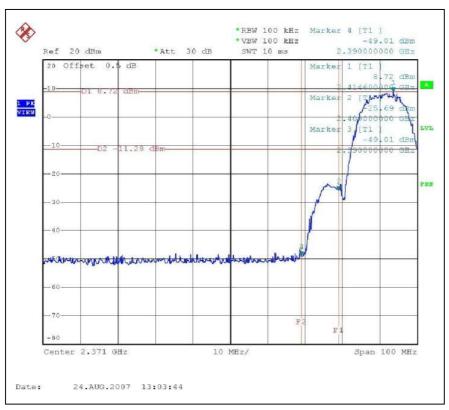
# 4.6.7 TEST RESULTS (ANTENNA 3)

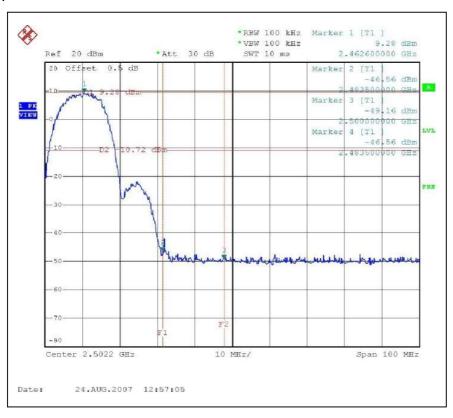
4.6.7 TEST RESULTS (AINTEININAS)
The spectrum plots are attached on the following pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(d).



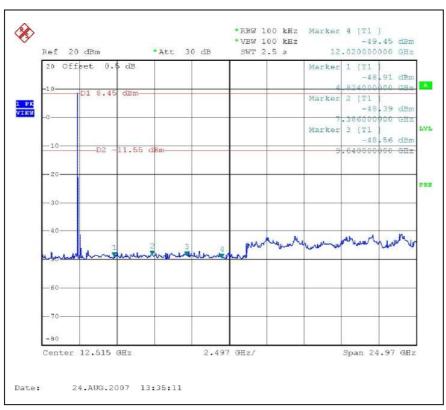
#### **802.11b DSSS MODULATION:**

#### CH1

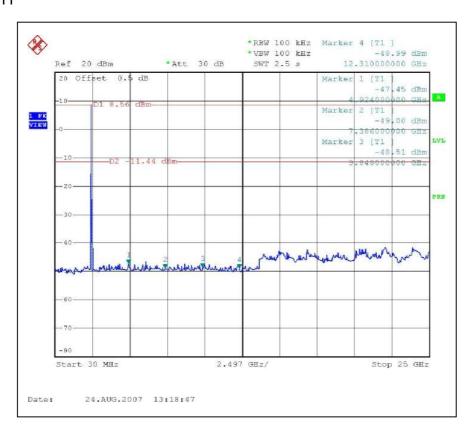








#### **CH11**

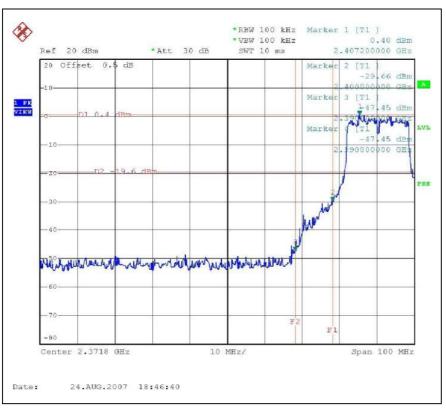


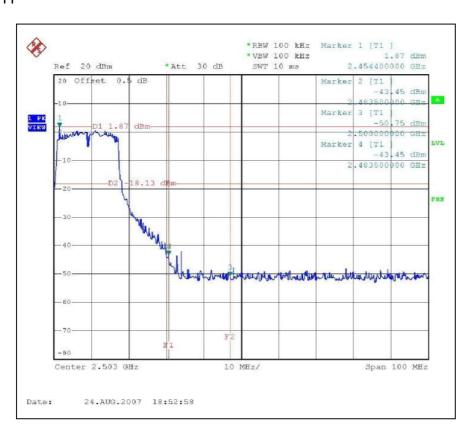
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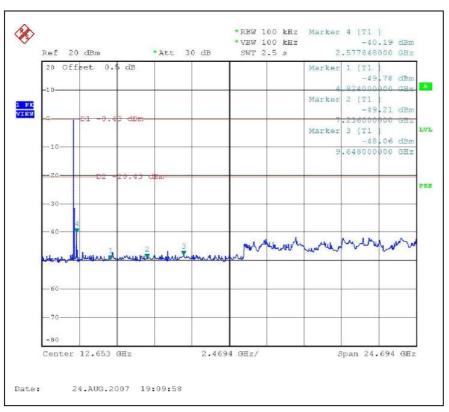
#### **802.11g OFDM MODULATION:**

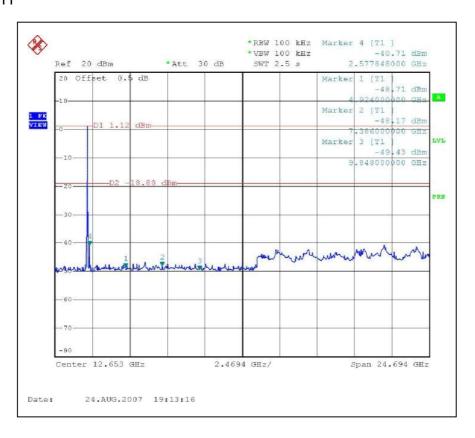
#### CH1













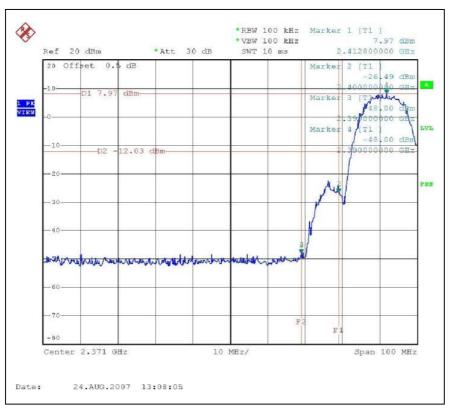
### 4.6.8 TEST RESULTS (ANTENNA 4)

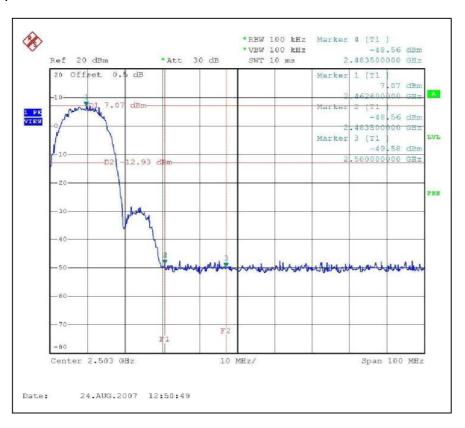
4.0.0 TEST RESOLTS (ANTENNA 4)				
The spectrum plots are attached on the following pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(d).				



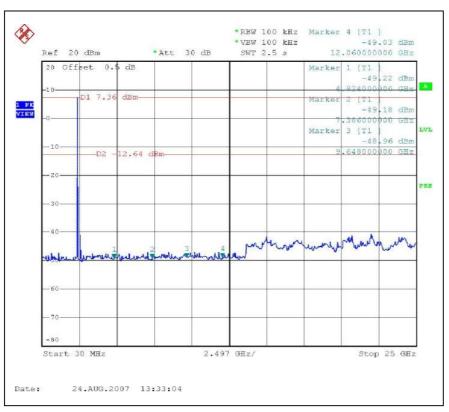
#### **802.11b DSSS MODULATION:**

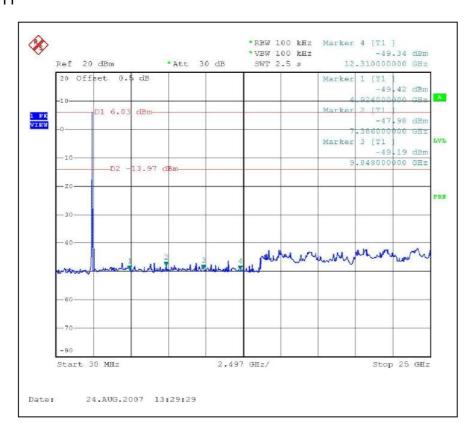
#### CH1







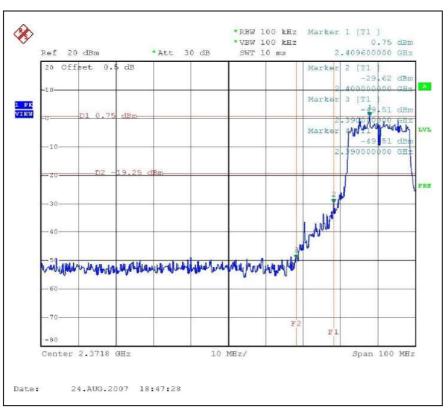


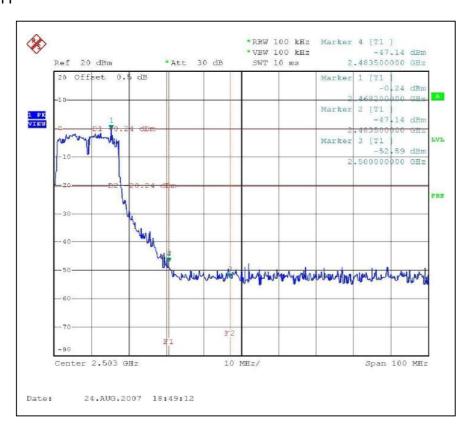




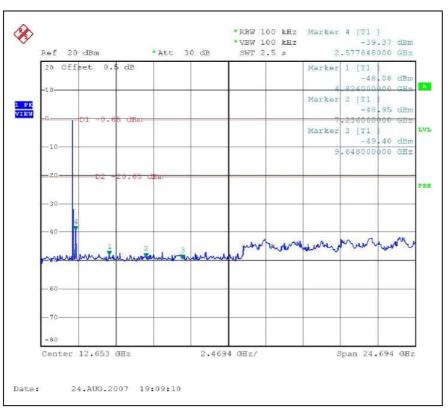
### **802.11g OFDM MODULATION:**

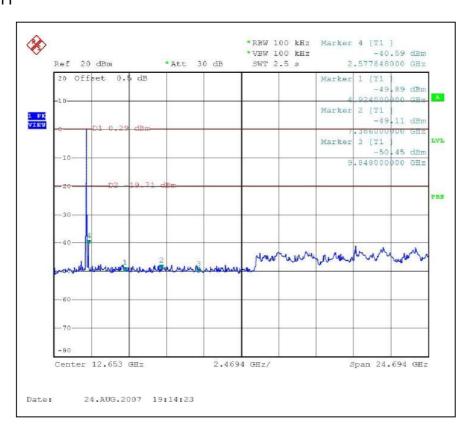
#### CH1













#### 4.7 ANTENNA REQUIREMENT

#### 4.7.1 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 transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

#### 4.7.2 ANTENNA CONNECTED CONSTRUCTION

The antennas used in this product are as following:

No.	Model No.	Gain (dBi)	Cable lose (dB)	Net Gain (dBi)	Antenna Type	Connector
1	RFANT5220110A0T	2	0	2	Chip	NA
2	ODU-OA-24-0201-A-W	2	0	2	Omni-Directional (Dipole)	RP SMA Plug
3	ODU-OA-24-0701-A	7	0	7	Omni-Directional (Dipole)	RP SMA Plug
4	ODU-DA-24-0904-A2	9	1.5	7.5	Directional (Panel)	RP SMA Jack

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#### **5.INFORMATION ON THE TESTING LABORATORIES**

We, ADT Corp., were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025.

USA FCC, UL, A2LA TUV Rheinland

Japan VCCI Norway NEMKO

Canada INDUSTRY CANADA, CSA

**R.O.C.** TAF, BSMI, NCC

**Netherlands** Telefication

Singapore GOST-ASIA(MOU) Russia CERTIS(MOU)

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site:

<u>www.adt.com.tw/index.5/phtml</u>. If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab:Hsin Chu EMC/RF Lab:Tel: 886-2-26052180Tel: 886-3-5935343Fax: 886-2-26052943Fax: 886-3-5935342

#### Hwa Ya EMC/RF/Safety Telecom Lab:

Tel: 886-3-3183232 Fax: 886-3-3185050

Web Site: www.adt.com.tw

The address and road map of all our labs can be found in our web site also



# 6. APPENDIX A - MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.						