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	Nov. 23, 2007

NOTE:

1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

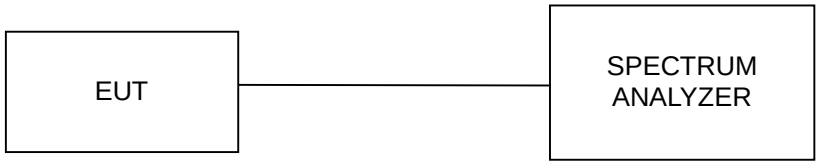
4.3.3 TEST PROCEDURE

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.

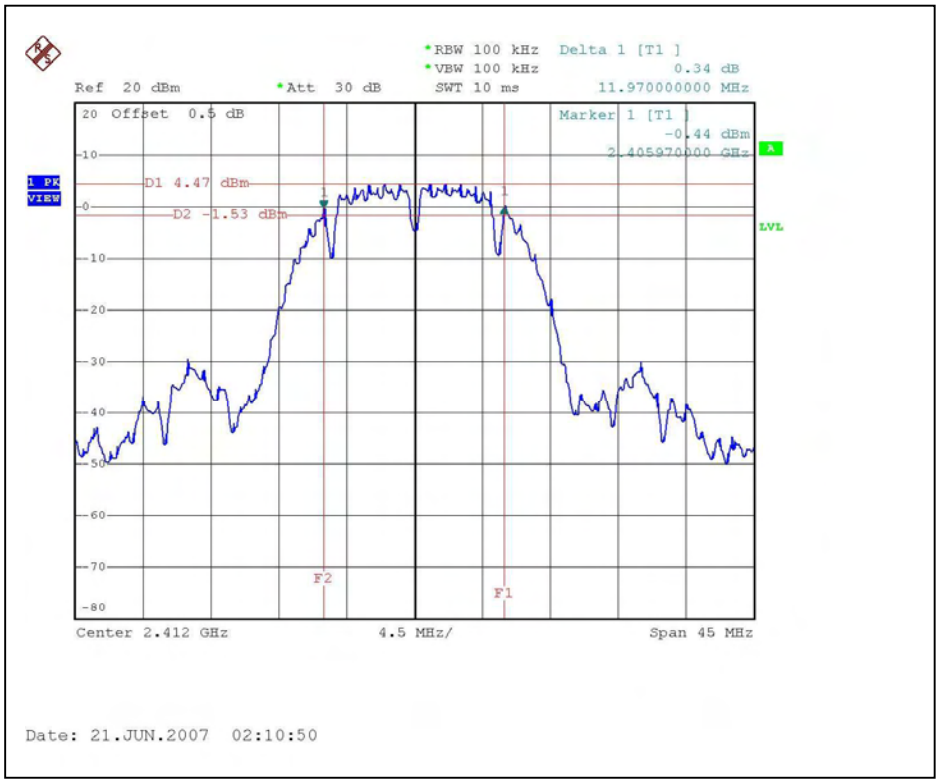
4.3.7 TEST RESULTS

802.11b DSSS MODULATION:

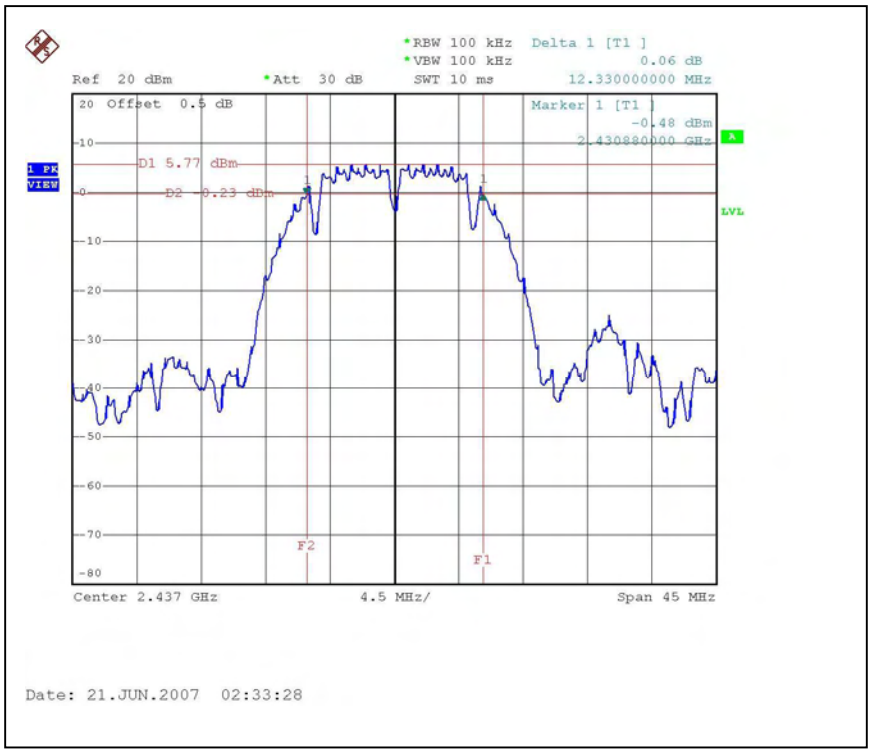
MODULATION TYPE	CCK	TRANSFER RATE	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	28deg.C, 62%RH, 960hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	11.97	0.5	PASS
6	2437	12.33	0.5	PASS
11	2462	12.33	0.5	PASS

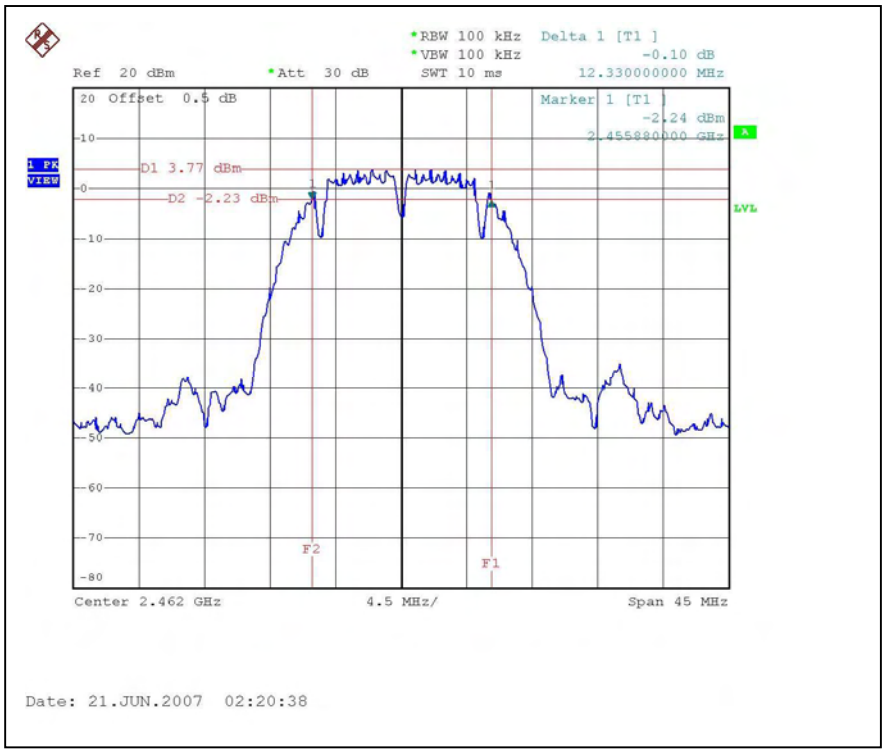
CH1



CH6


*RBW 100 kHz
*VBW 100 kHz
SWT 10 ms
Delta 1 [T1]
0.06 dB
12.330000000 MHz
Ref 20 dBm
*Att 30 dB
20 Offset 0.5 dB
Marker 1 [T1]
-0.48 dBm
2.430880000 GHz
D1 5.77 dBm
D2 -0.23 dBm
1 PK VIEW
LVL
F2
F1
Center 2.437 GHz
4.5 MHz/
Span 45 MHz
Date: 21.JUN.2007 02:33:28

CH11

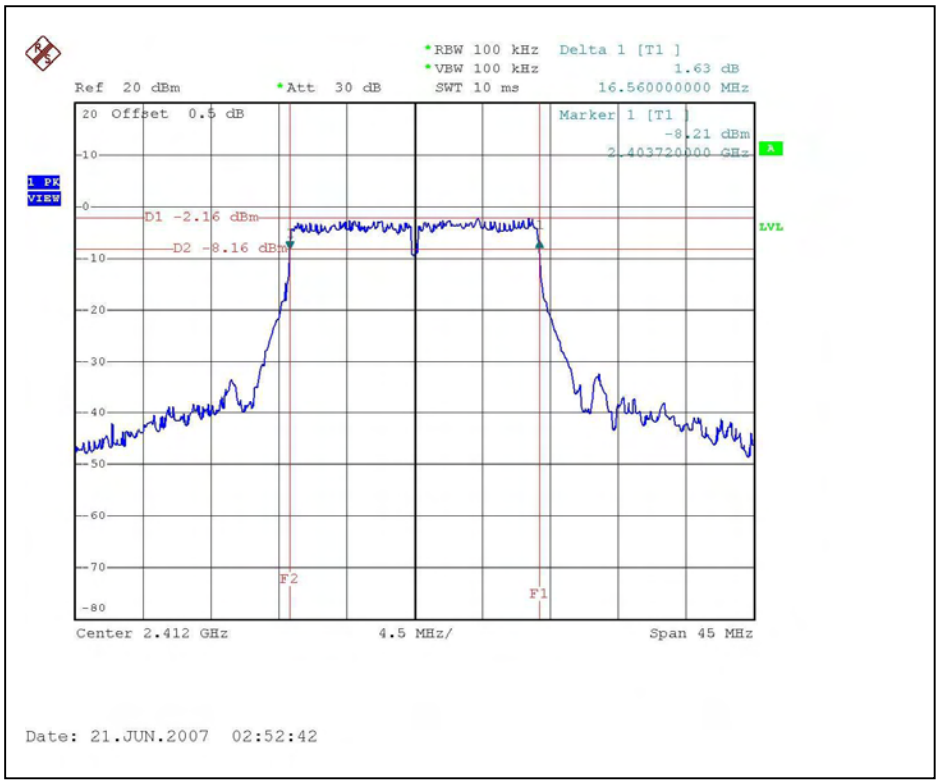

*RBW 100 kHz
*VBW 100 kHz
SWT 10 ms
Delta 1 [T1]
-0.10 dB
12.330000000 MHz
Ref 20 dBm
*Att 30 dB
20 Offset 0.5 dB
Marker 1 [T1]
-2.24 dBm
2.455880000 GHz
D1 3.77 dBm
D2 -2.23 dBm
1 PK VIEW
LVL
F2
F1
Center 2.462 GHz
4.5 MHz/
Span 45 MHz
Date: 21.JUN.2007 02:20:38

802.11g OFDM MODULATION:

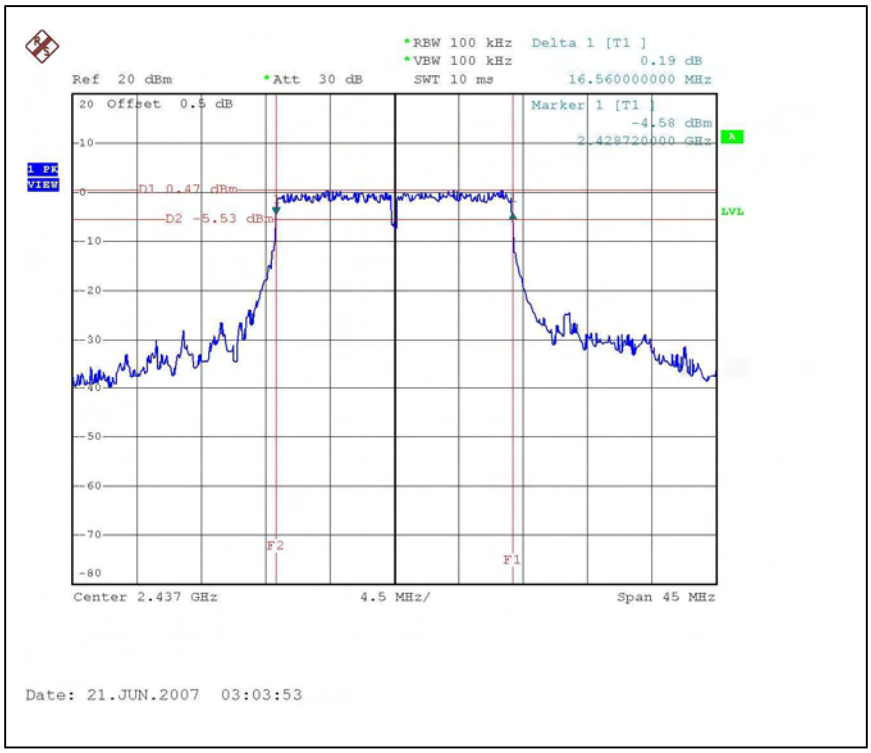
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	28deg.C, 62%RH, 960hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	16.56	0.5	PASS
6	2437	16.56	0.5	PASS
11	2462	16.56	0.5	PASS

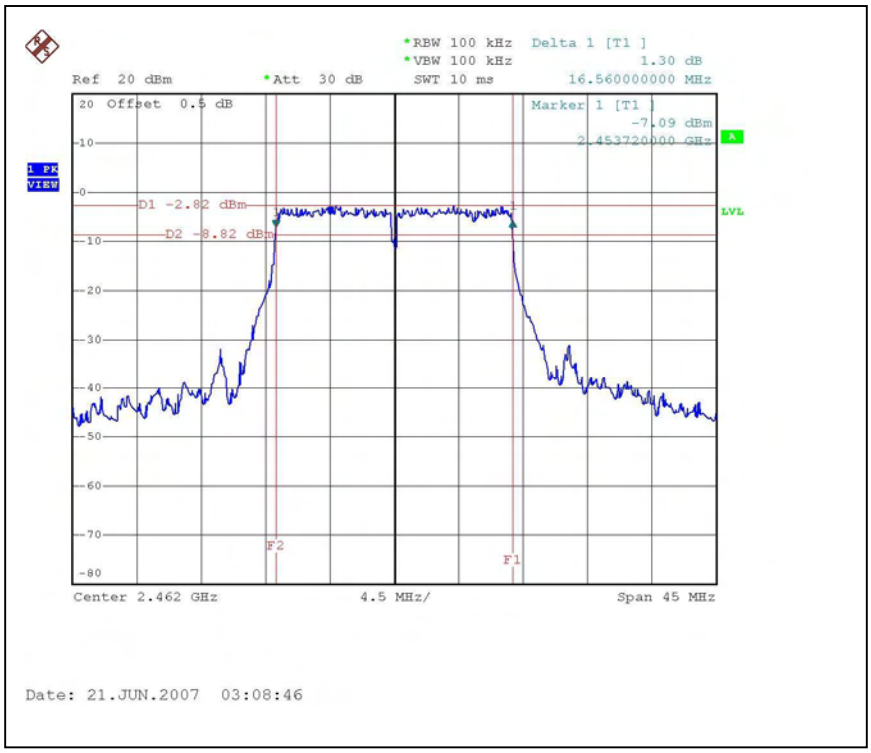
CH1



CH6


*RBW 100 kHz
*VBW 100 kHz
SWT 10 ms
Delta 1 [T1]
0.19 dB
16.560000000 MHz
Ref 20 dBm
*Att 30 dB
20 Offset 0.5 dB
Marker 1 [T1]
-4.58 dBm
2.428720000 GHz
1 PK VIEW
D1 0.47 dBm
D2 -5.53 dBm
LVL
F2
F1
Center 2.437 GHz
4.5 MHz/
Span 45 MHz
Date: 21.JUN.2007 03:03:53

CH11

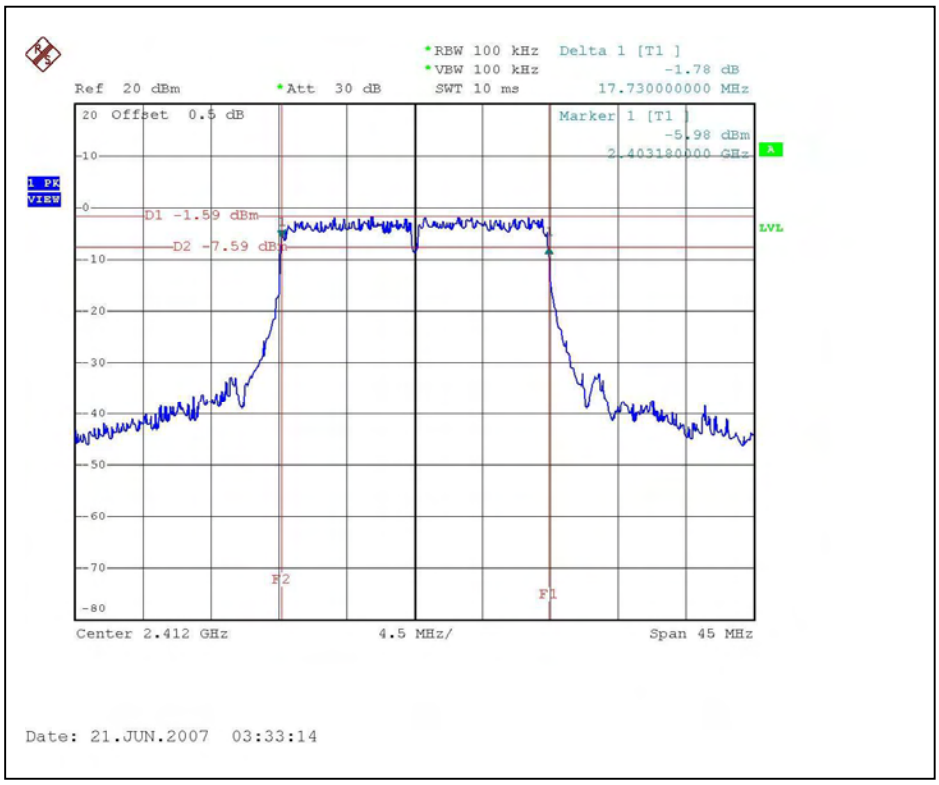

*RBW 100 kHz
*VBW 100 kHz
SWT 10 ms
Delta 1 [T1]
1.30 dB
16.560000000 MHz
Ref 20 dBm
*Att 30 dB
20 Offset 0.5 dB
Marker 1 [T1]
-7.09 dBm
2.453720000 GHz
1 PK VIEW
D1 -2.82 dBm
D2 -8.82 dBm
LVL
F2
F1
Center 2.462 GHz
4.5 MHz/
Span 45 MHz
Date: 21.JUN.2007 03:08:46

DRAFT 802.11n (20MHz) OFDM MODULATION:

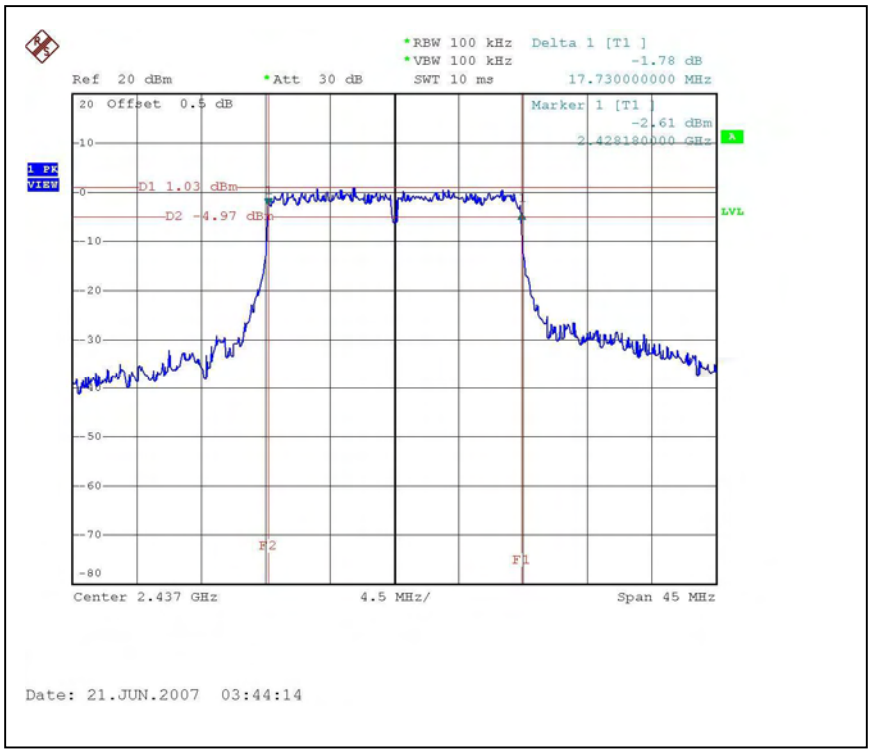
MODULATION TYPE	BPSK	**TRANSFER RATE**	6.5Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	28deg.C, 62%RH, 960hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	17.73	0.5	PASS
6	2437	17.73	0.5	PASS
11	2462	17.73	0.5	PASS

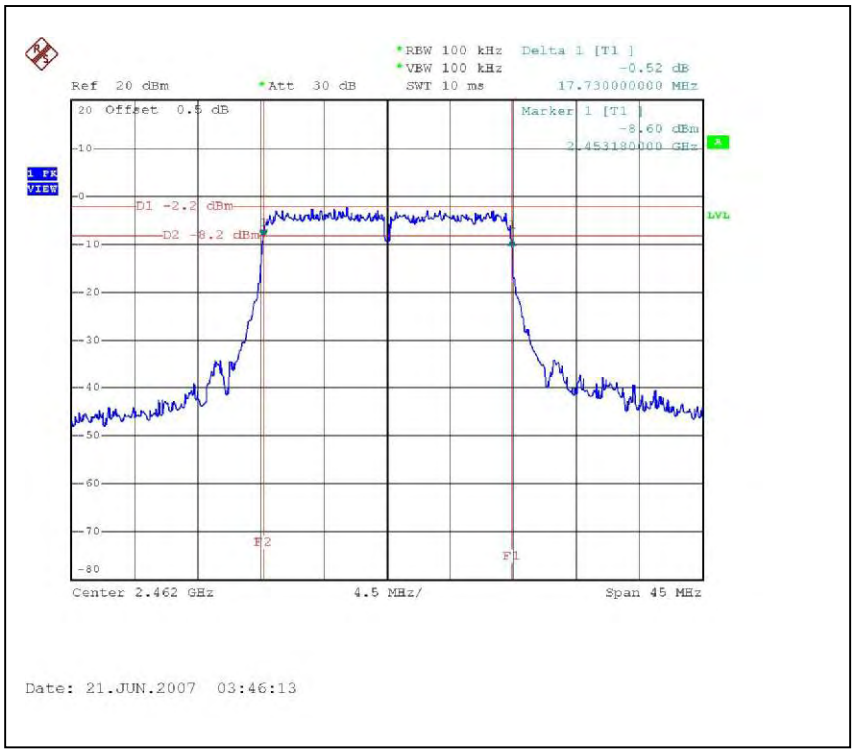
CH1



CH6


*RBW 100 kHz
*VBW 100 kHz
SWT 10 ms
Delta 1 [T1]
-1.78 dB
17.730000000 MHz
Ref 20 dBm
*Att 30 dB
20 Offset 0.5 dB
Marker 1 [T1]
-2.61 dBm
2.428180000 GHz
D1 1.03 dBm
D2 -4.97 dBm
LVL
F2
F1
Center 2.437 GHz
4.5 MHz/
Span 45 MHz
Date: 21.JUN.2007 03:44:14

CH11

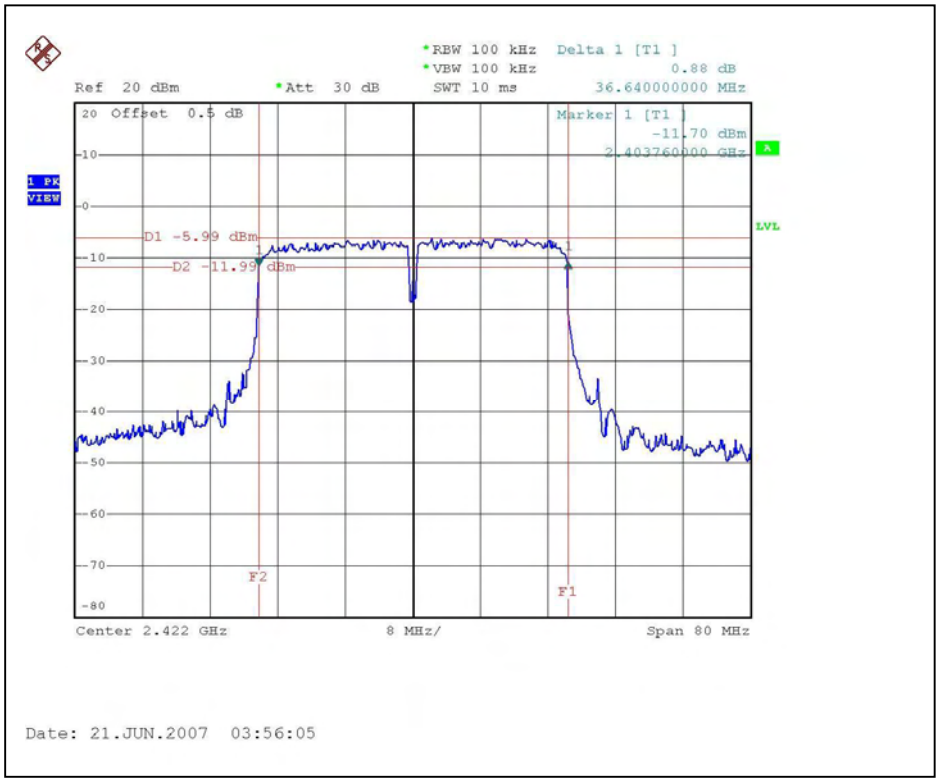

*RBW 100 kHz
*VBW 100 kHz
SWT 10 ms
Delta 1 [T1]
-0.52 dB
17.730000000 MHz
Ref 20 dBm
*Att 30 dB
20 Offset 0.5 dB
Marker 1 [T1]
-8.60 dBm
2.453180000 GHz
D1 -2.2 dBm
D2 -8.2 dBm
LVL
F2
F1
Center 2.462 GHz
4.5 MHz/
Span 45 MHz
Date: 21.JUN.2007 03:46:13

DRAFT 802.11n (40MHz) OFDM MODULATION:

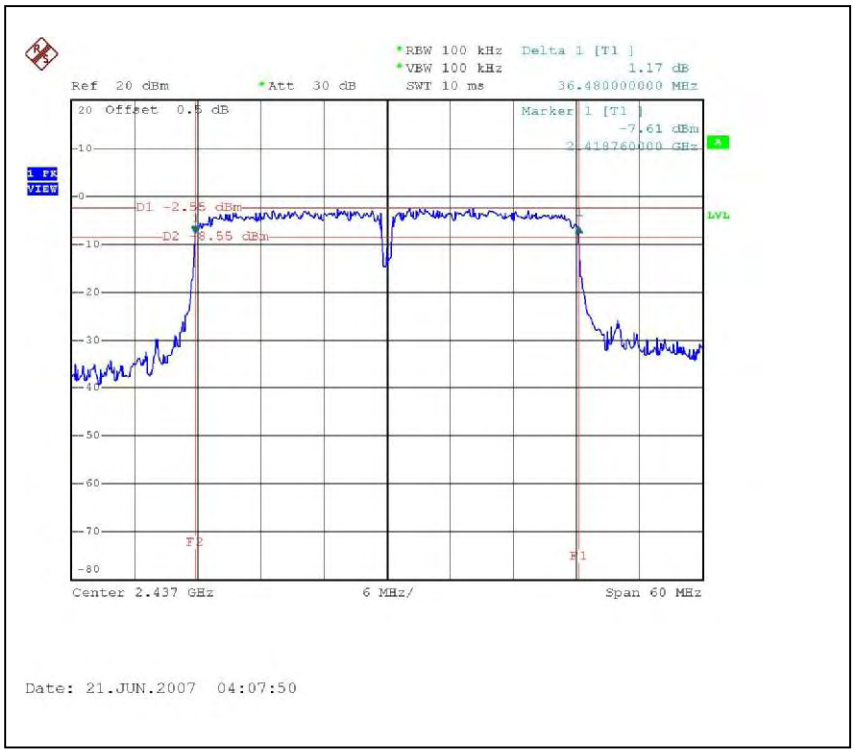
MODULATION TYPE	BPSK	TRANSFER RATE	13.5Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	28deg.C, 62%RH, 960hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2422	36.64	0.5	PASS
4	2437	36.48	0.5	PASS
7	2452	36.48	0.5	PASS

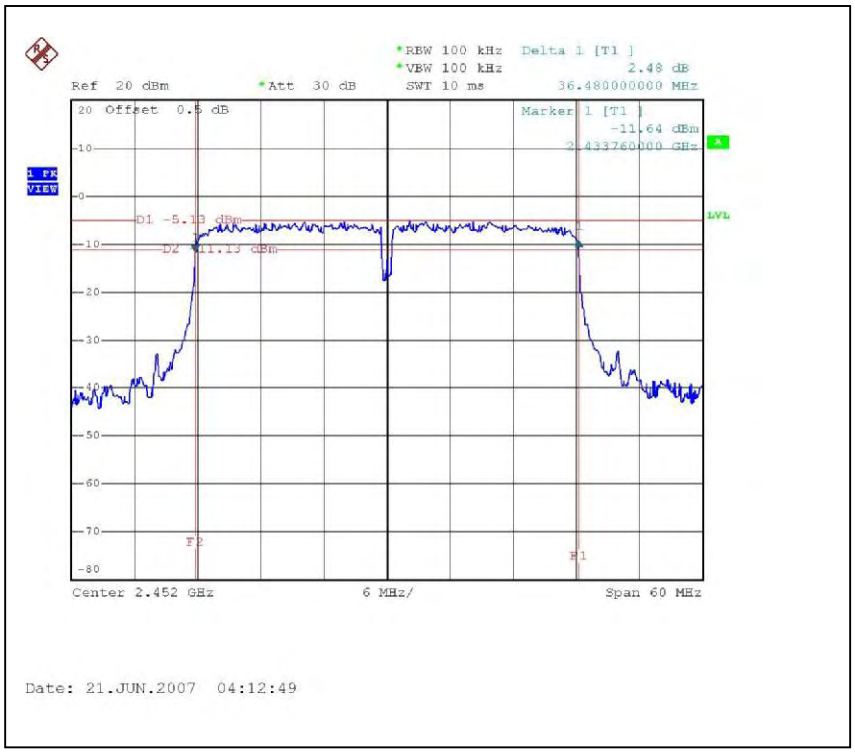
CH1



CH4


*RBW 100 kHz
*VBW 100 kHz
SWT 10 ms
Delta 1 [T1]
1.17 dB
36.480000000 MHz
Ref 20 dBm
*Att 30 dB
20 Offset 0.5 dB
Marker 1 [T1]
-7.61 dBm
2.418760000 GHz
D1 -2.55 dBm
D2 -8.55 dBm
Center 2.437 GHz
6 MHz/
Span 60 MHz
Date: 21.JUN.2007 04:07:50

CH7


*RBW 100 kHz
*VBW 100 kHz
SWT 10 ms
Delta 1 [T1]
2.48 dB
36.480000000 MHz
Ref 20 dBm
*Att 30 dB
20 Offset 0.5 dB
Marker 1 [T1]
-11.64 dBm
2.433760000 GHz
D1 -5.13 dBm
D2 -11.13 dBm
Center 2.452 GHz
6 MHz/
Span 60 MHz
Date: 21.JUN.2007 04:12:49

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	Nov. 23, 2007
Agilent SIGNAL GENERATOR	E8257C	MY43320668	Dec. 28, 2007
TEKTRONIX OSCILLOSCOPE	TDS380	B016335	July 14, 2007
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	CCK	TRANSFER RATE	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	28deg.C, 62%RH, 960hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
1	2412	89.125	19.50	30	PASS
6	2437	112.202	20.50	30	PASS
11	2462	65.615	18.17	30	PASS

802.11g OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	28deg.C, 62%RH, 960hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
1	2412	56.234	17.50	30	PASS
6	2437	107.152	20.30	30	PASS
11	2462	52.119	17.17	30	PASS

DRAFT 802.11n (20MHz) OFDM MODULATION:

MODULATION TYPE	BPSK	**TRANSFER RATE**	6.5Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	28deg.C, 62%RH, 960hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
1	2412	65.615	18.17	30	PASS
6	2437	107.152	20.30	30	PASS
11	2462	52.119	17.17	30	PASS

DRAFT 802.11n (40MHz) OFDM MODULATION:

MODULATION TYPE	BPSK	**TRANSFER RATE**	13.5Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	28deg.C, 62%RH, 960hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
1	2412	39.811	16.00	30	PASS
6	2437	93.325	19.70	30	PASS
11	2462	50.119	17.00	30	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	Nov. 23, 2007

NOTE:

1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
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

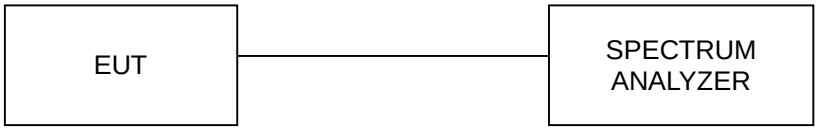
The transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3kHz RBW and 30kHz VBW, set sweep time = span/3kHz. The power spectral density was measured and recorded.

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



4.5.6 EUT OPERATING CONDITION

Same as Item 4.3.6

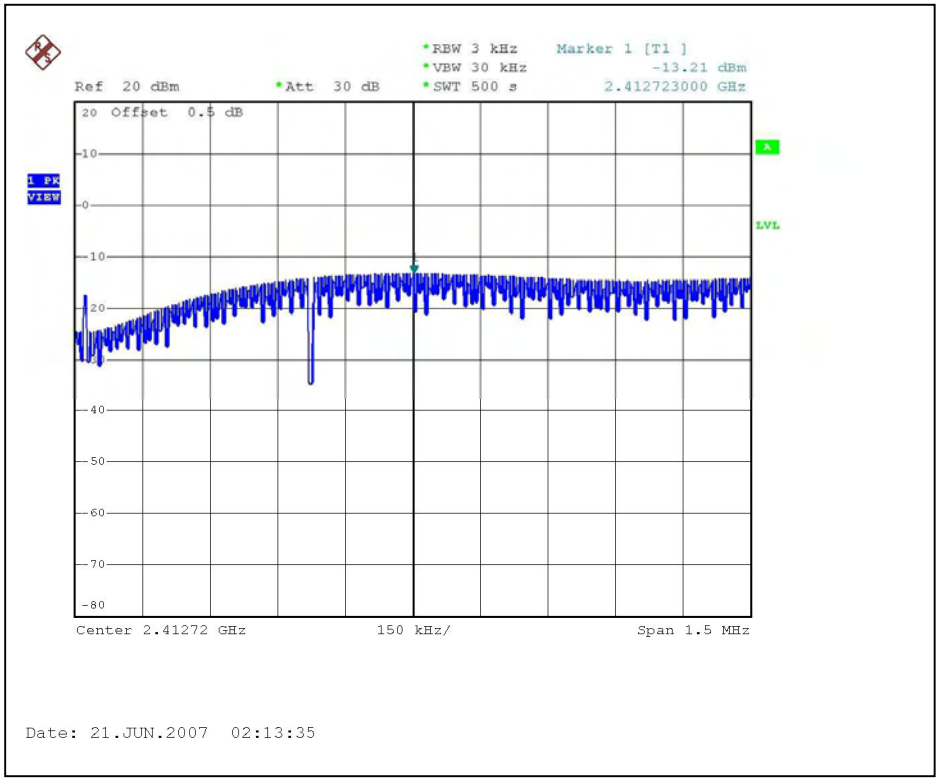
4.5.7 TEST RESULTS

802.11b DSSS MODULATION:

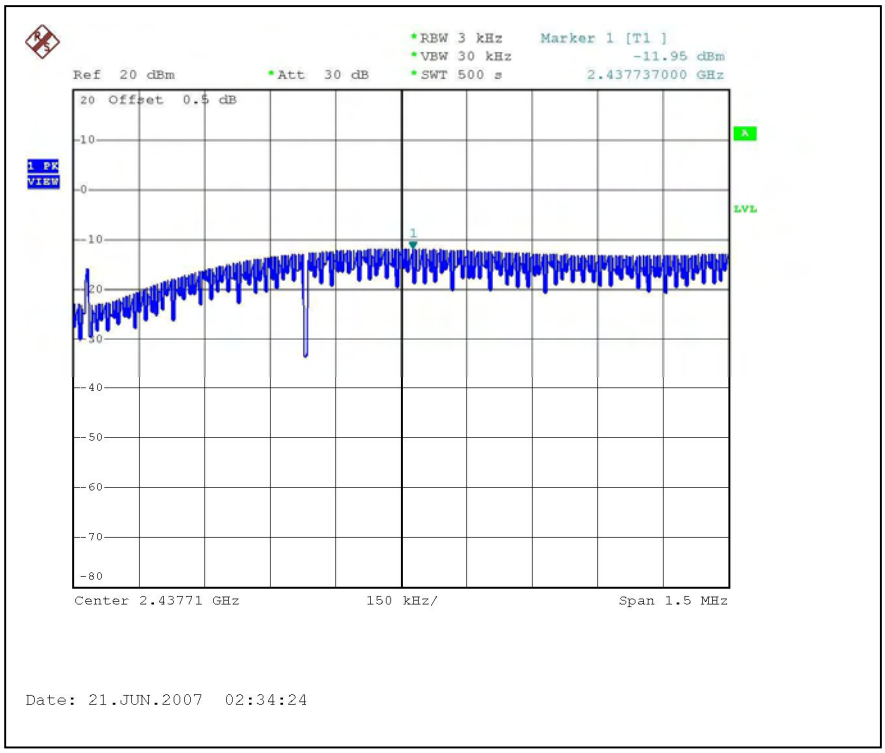
MODULATION TYPE	CCK	TRANSFER RATE	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	28deg.C, 62%RH, 960hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2412	-13.21	8	PASS
6	2437	-11.95	8	PASS
11	2462	-14.07	8	PASS

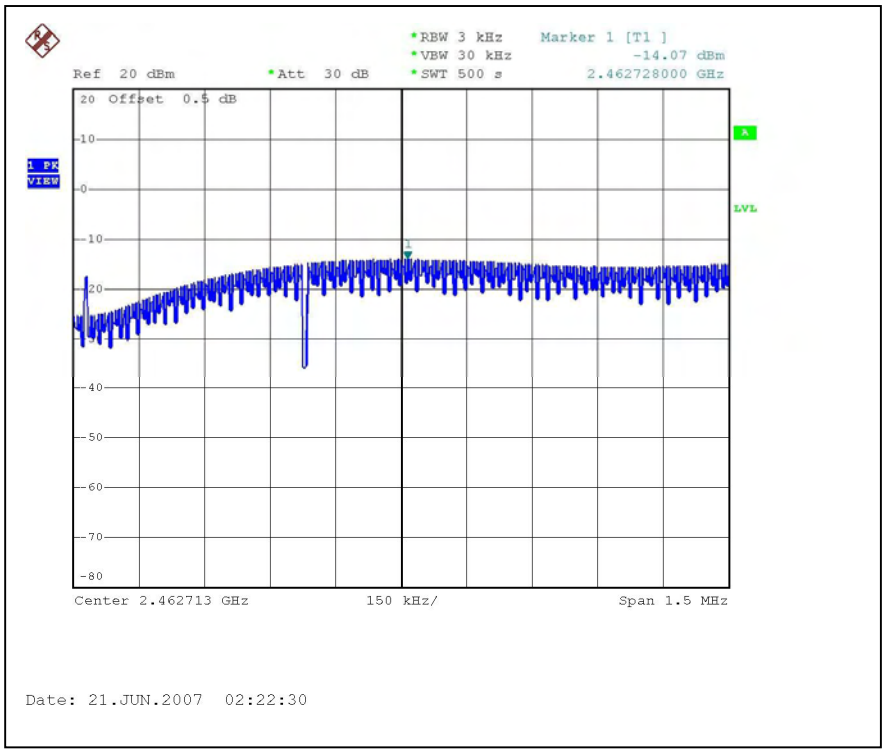
CH1



CH6


RBW 3 kHz
VBW 30 kHz
SWT 500 s
Marker 1 [T1]
-11.95 dBm
2.437737000 GHz
Ref 20 dBm
Att 30 dB
20 Offset 0.5 dB
1 PK VIEW
A
LVL
Center 2.43771 GHz
150 kHz/
Span 1.5 MHz
Date: 21.JUN.2007 02:34:24

CH11

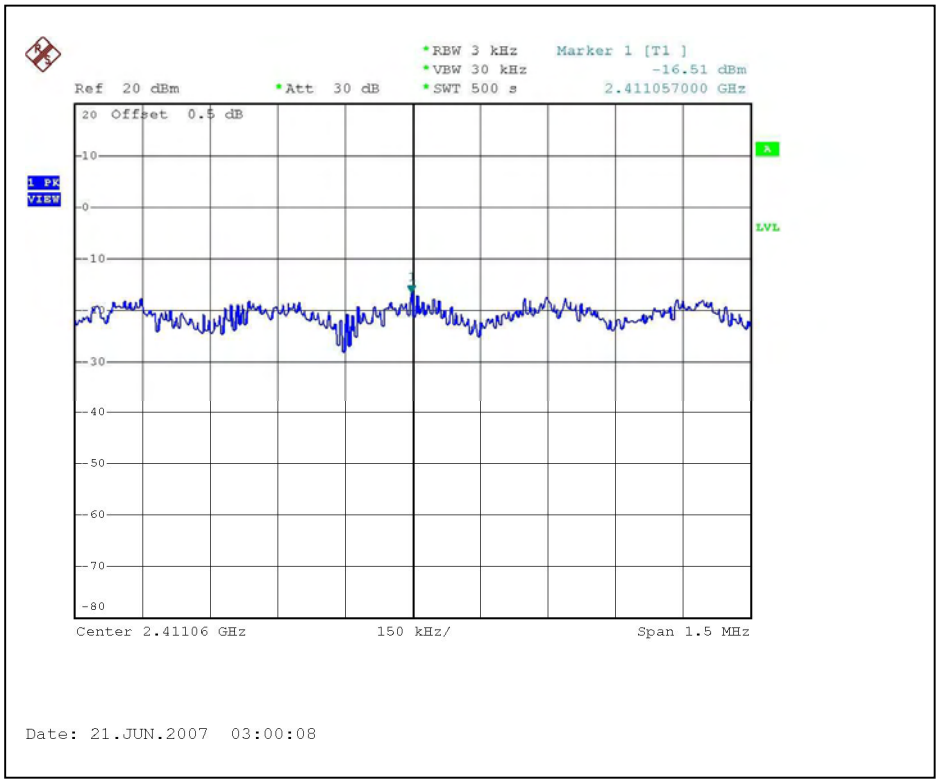

RBW 3 kHz
VBW 30 kHz
SWT 500 s
Marker 1 [T1]
-14.07 dBm
2.462728000 GHz
Ref 20 dBm
Att 30 dB
20 Offset 0.5 dB
1 PK VIEW
A
LVL
Center 2.462713 GHz
150 kHz/
Span 1.5 MHz
Date: 21.JUN.2007 02:22:30

802.11g OFDM MODULATION:

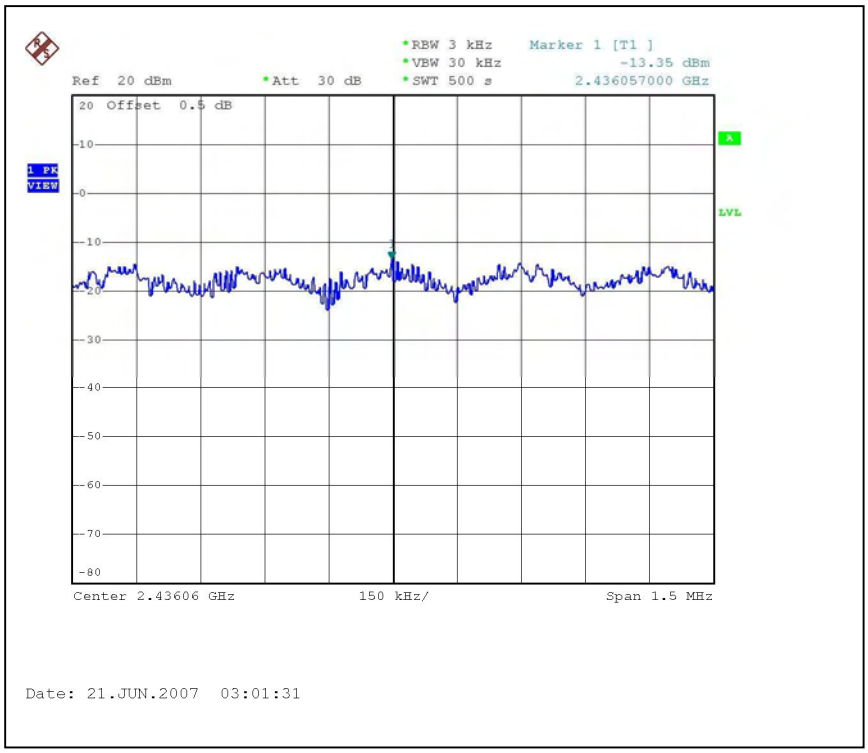
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	28deg.C, 62%RH, 960hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2412	-16.51	8	PASS
6	2437	-13.35	8	PASS
11	2462	-16.10	8	PASS

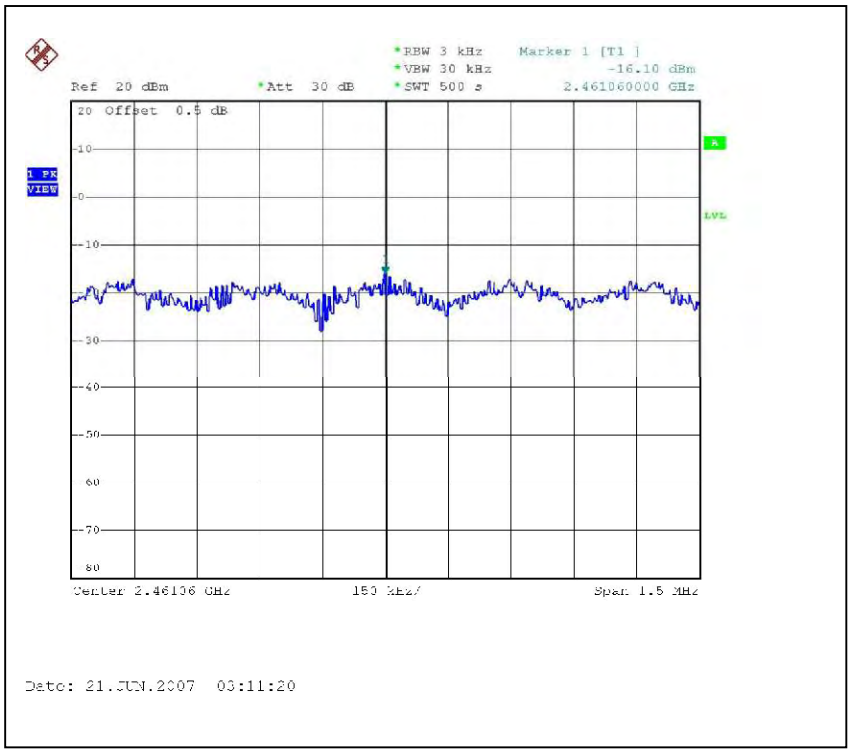
CH1



CH6


RBW 3 kHz
VBW 30 kHz
SWT 500 s
Marker 1 [T1]
-13.35 dBm
2.436057000 GHz
Ref 20 dBm
Att 30 dB
20 Offset 0.5 dB
1 PK VIEW
LVL
Center 2.43606 GHz
150 kHz/
Span 1.5 MHz
Date: 21.JUN.2007 03:01:31

CH11

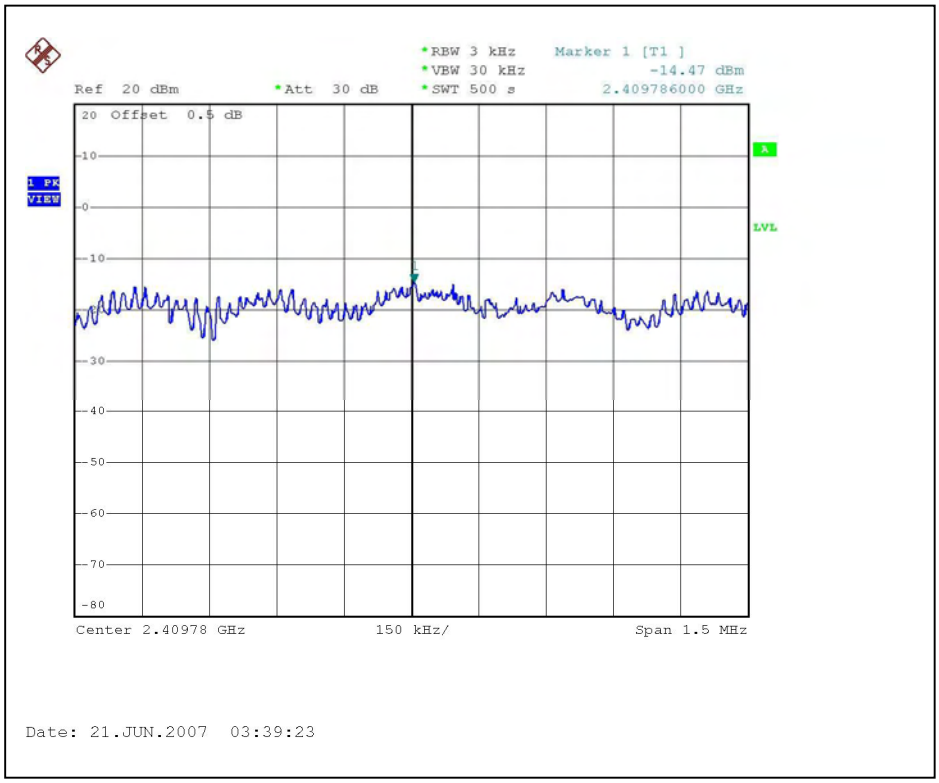

RBW 3 kHz
VBW 30 kHz
SWT 500 s
Marker 1 [T1]
-16.10 dBm
2.461060000 GHz
Ref 20 dBm
Att 30 dB
20 Offset 0.5 dB
1 PK VIEW
LVL
Center 2.46106 GHz
150 kHz/
Span 1.5 MHz
Date: 21.JUN.2007 03:11:20

DRAFT 802.11n (20MHz) OFDM MODULATION:

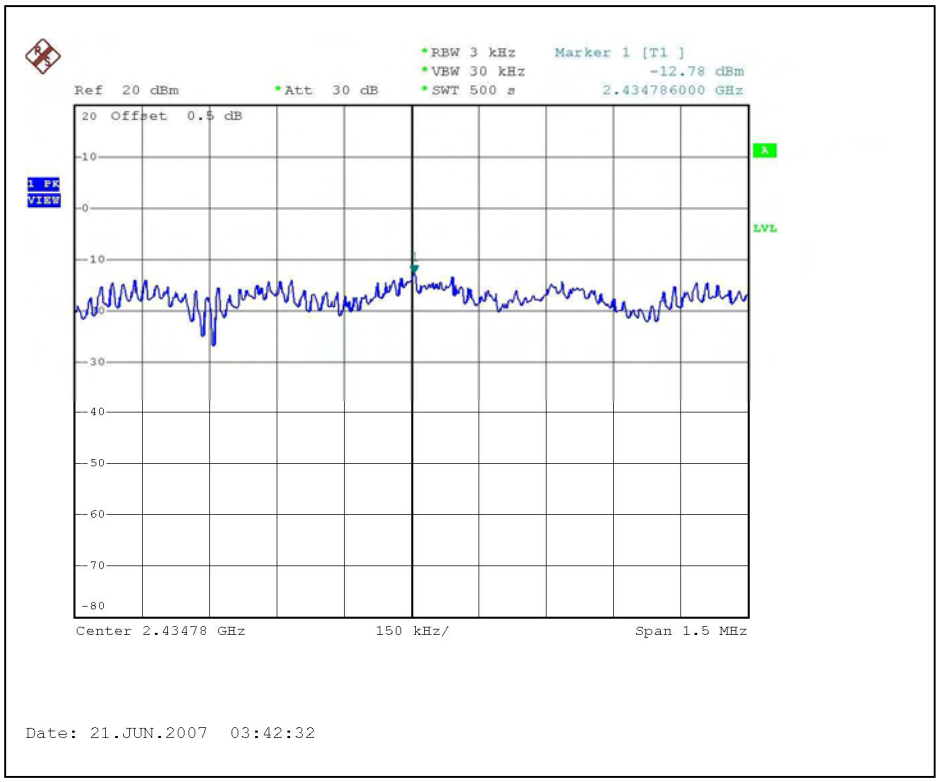
MODULATION TYPE	BPSK	TRANSFER RATE	6.5Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	28deg.C, 62%RH, 960hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2412	-14.47	8	PASS
6	2437	-12.78	8	PASS
11	2462	-15.73	8	PASS

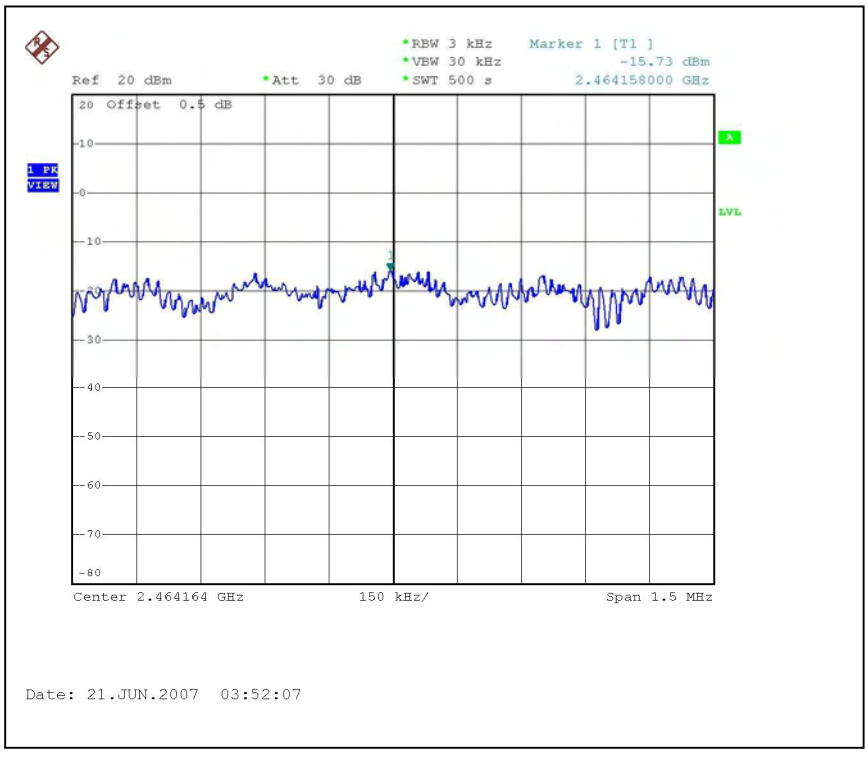
CH1



CH6


RBW 3 kHz
VBW 30 kHz
SWT 500 s
Marker 1 [T1]
-12.78 dBm
2.434786000 GHz
Ref 20 dBm
Att 30 dB
20 Offset 0.5 dB
1 PK VIEW
A
LVL
-10
-0
-10
-30
-40
-50
-60
-70
-80
Center 2.43478 GHz
150 kHz/
Span 1.5 MHz
Date: 21.JUN.2007 03:42:32

CH11

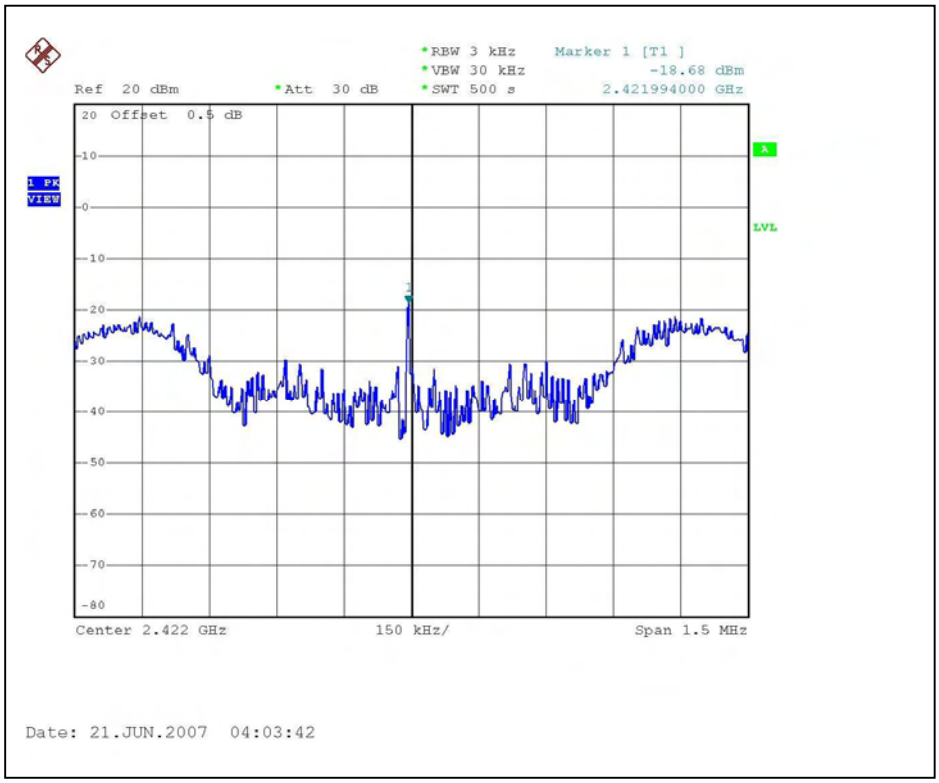

RBW 3 kHz
VBW 30 kHz
SWT 500 s
Marker 1 [T1]
-15.73 dBm
2.464158000 GHz
Ref 20 dBm
Att 30 dB
20 Offset 0.5 dB
1 PK VIEW
A
LVL
-10
-0
-10
-30
-40
-50
-60
-70
-80
Center 2.464164 GHz
150 kHz/
Span 1.5 MHz
Date: 21.JUN.2007 03:52:07

DRAFT 802.11n (40MHz) OFDM MODULATION:

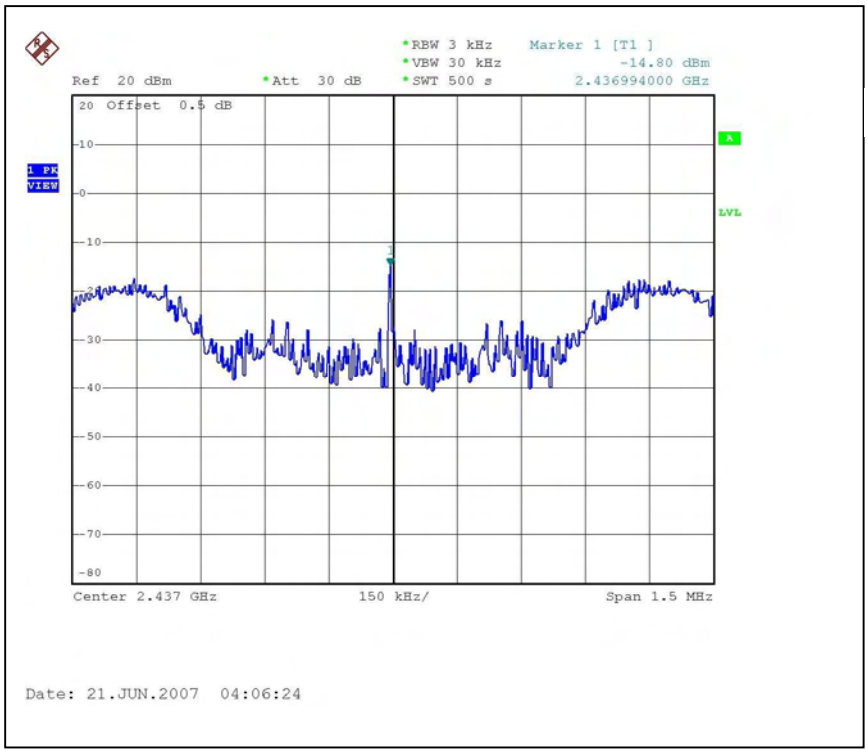
MODULATION TYPE	BPSK	**TRANSFER RATE**	13.5Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	28deg.C, 62%RH, 960hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2412	-18.68	8	PASS
6	2437	-14.80	8	PASS
11	2462	-17.24	8	PASS

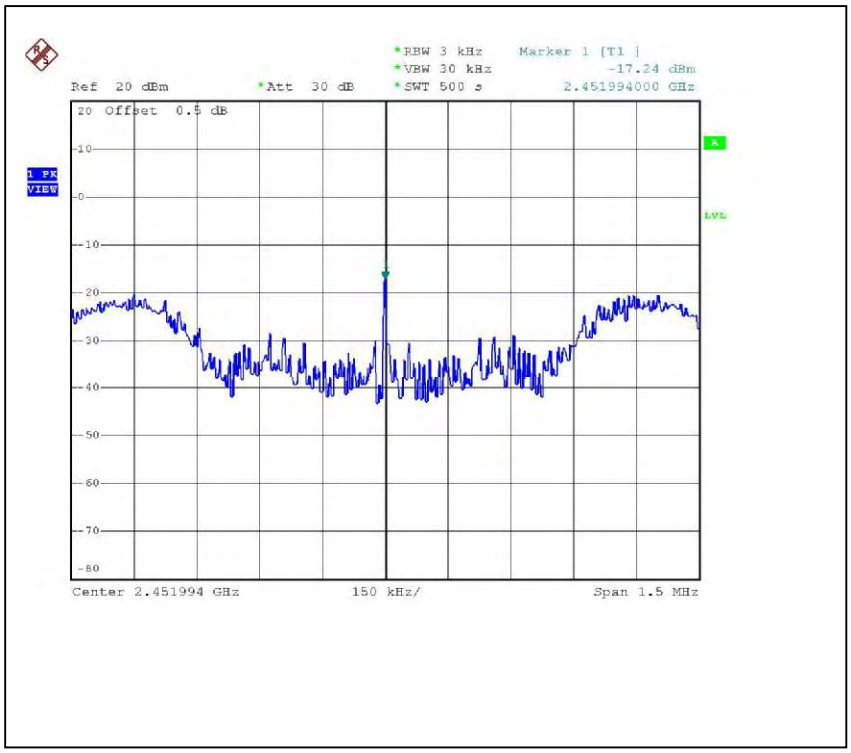
CH1



CH4


RBW 3 kHz
VBW 30 kHz
SWT 500 s
Marker 1 [T1]
-14.80 dBm
2.436994000 GHz
Ref 20 dBm
Att 30 dB
20 Offset 0.5 dB
1 PK VIEW
LVL
Center 2.437 GHz
150 kHz/
Span 1.5 MHz
Date: 21.JUN.2007 04:06:24

CH7


RBW 3 kHz
VBW 30 kHz
SWT 500 s
Marker 1 [T1]
-17.24 dBm
2.451994000 GHz
Ref 20 dBm
Att 30 dB
20 Offset 0.5 dB
1 PK VIEW
LVL
Center 2.451994 GHz
150 kHz/
Span 1.5 MHz

4.6 CONDUCTED EMISSION AND BAND EDGES MEASUREMENT

4.6.1 LIMITS OF CONDTCTED EMISSION AND 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	Nov. 23, 2007

NOTE:

1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
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 DEVIATION FROM TEST STANDARD

No deviation

4.6.5 EUT OPERATING CONDITION

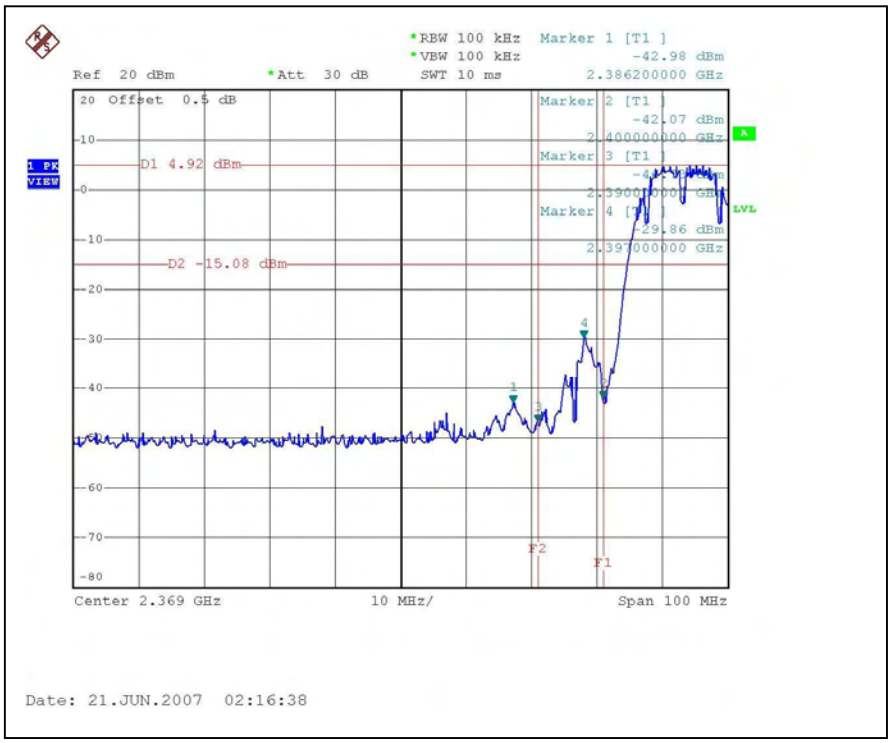
Same as Item 4.3.6

4.6.6 TEST RESULTS

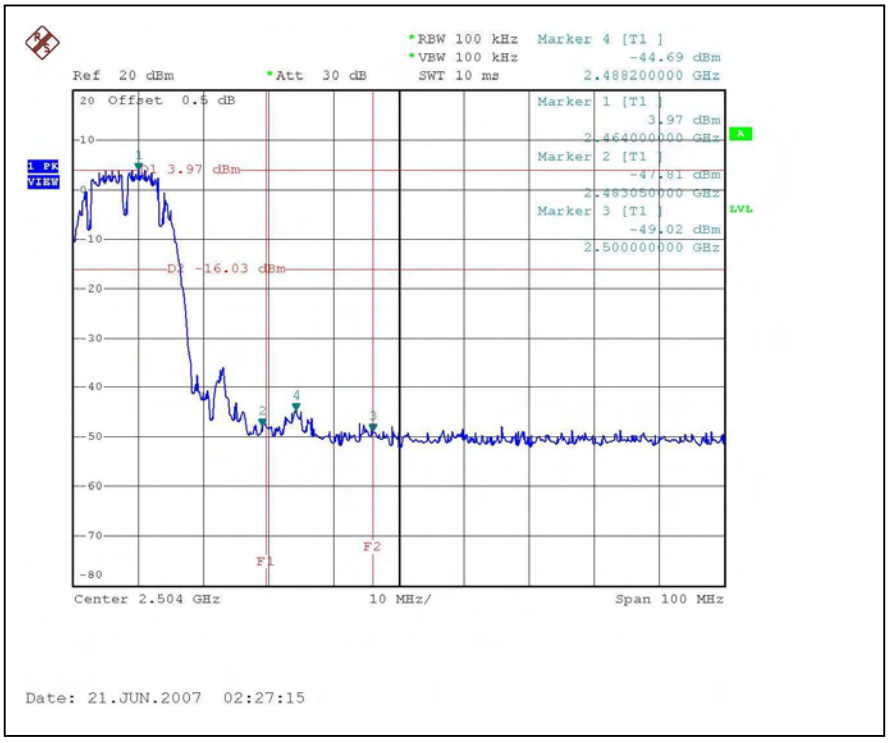
The spectrum plots are attached on the following 8 images. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(d).

802.11b DSSS MODULATION:

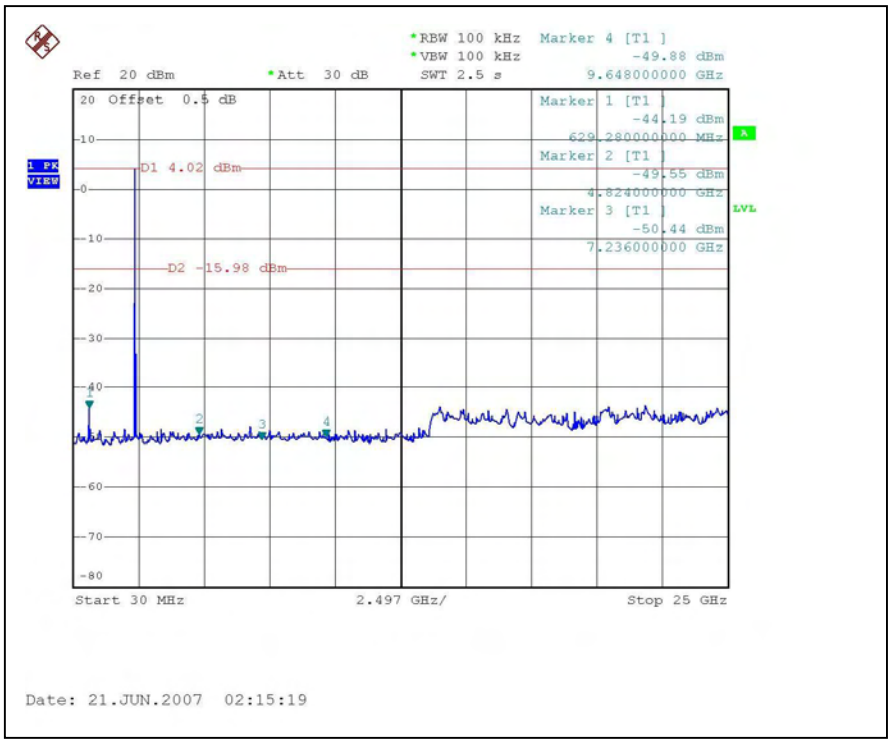
CH1



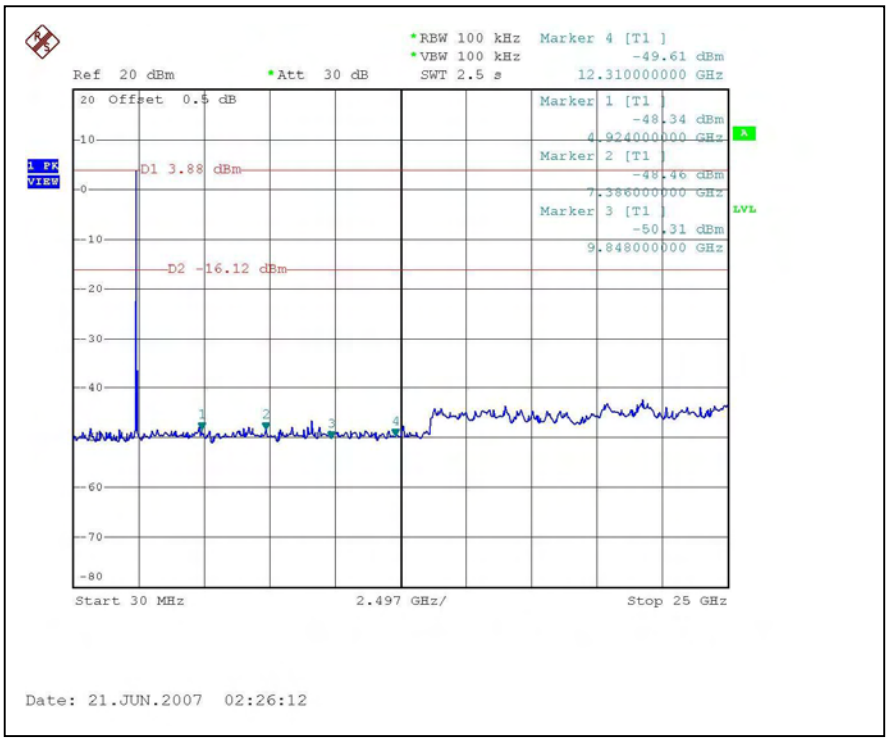
CH11



CH1

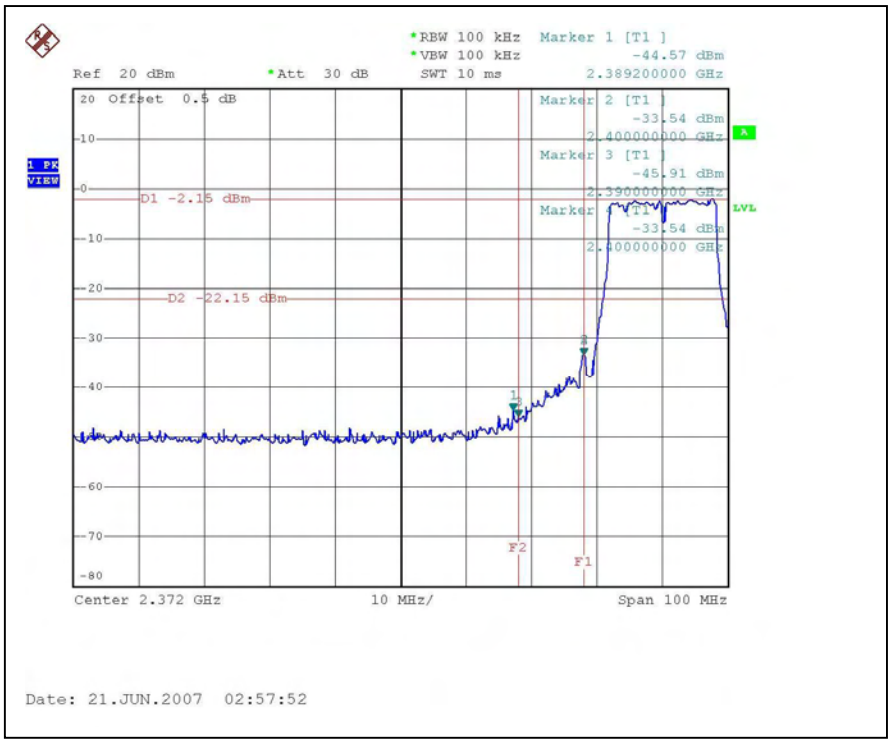

*RBW 100 kHz
*VBW 100 kHz
Ref 20 dBm
*Att 30 dB
SWT 2.5 s
Marker 4 [T1]
-49.88 dBm
9.648000000 GHz
20 Offset 0.5 dB
Marker 1 [T1]
-44.19 dBm
629.280000000 MHz
Marker 2 [T1]
-49.55 dBm
4.824000000 GHz
Marker 3 [T1]
-50.44 dBm
7.236000000 GHz
D1 4.02 dBm
D2 -15.98 dBm
1 PK VIEW
LVL
Start 30 MHz
2.497 GHz/
Stop 25 GHz
Date: 21.JUN.2007 02:15:19

CH11

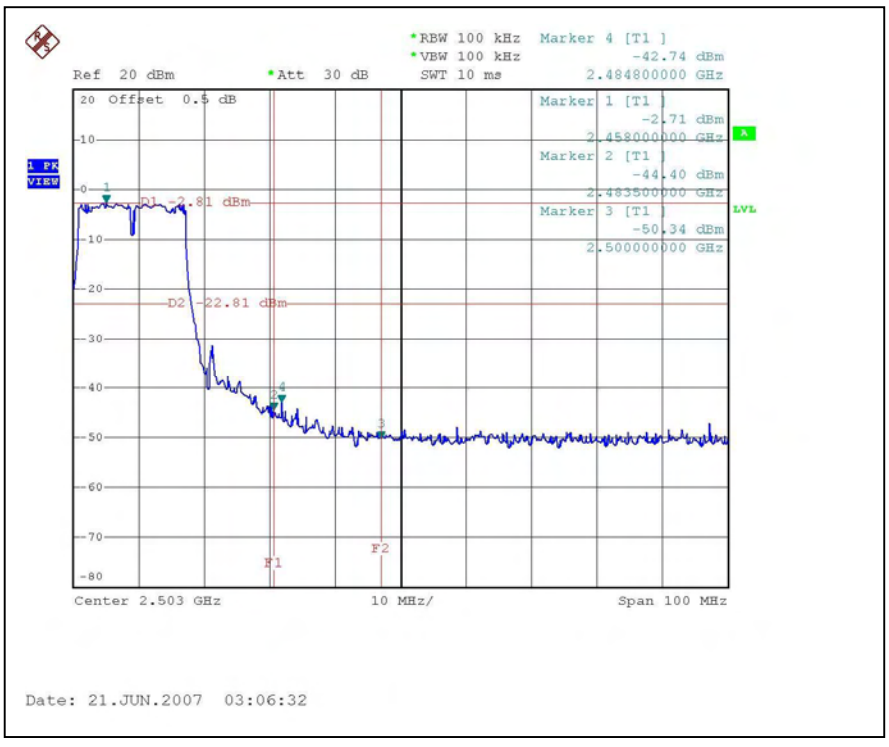

*RBW 100 kHz
*VBW 100 kHz
Ref 20 dBm
*Att 30 dB
SWT 2.5 s
Marker 4 [T1]
-49.61 dBm
12.310000000 GHz
20 Offset 0.5 dB
Marker 1 [T1]
-48.34 dBm
4.924000000 GHz
Marker 2 [T1]
-48.46 dBm
7.386000000 GHz
Marker 3 [T1]
-50.31 dBm
9.848000000 GHz
D1 3.88 dBm
D2 -16.12 dBm
1 PK VIEW
LVL
Start 30 MHz
2.497 GHz/
Stop 25 GHz
Date: 21.JUN.2007 02:26:12

802.11g OFDM MODULATION:

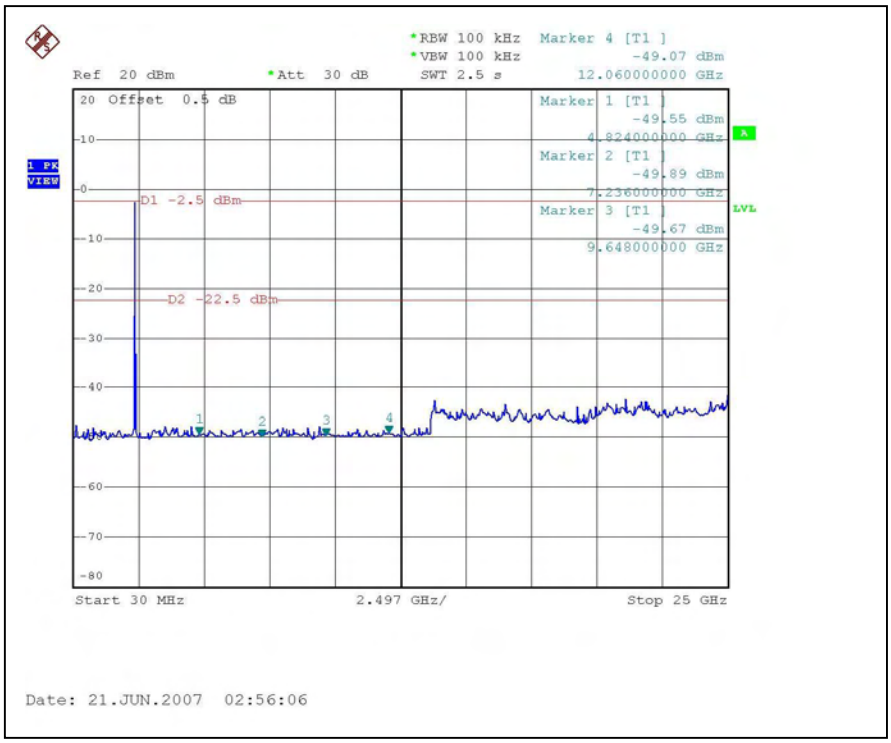
CH 1



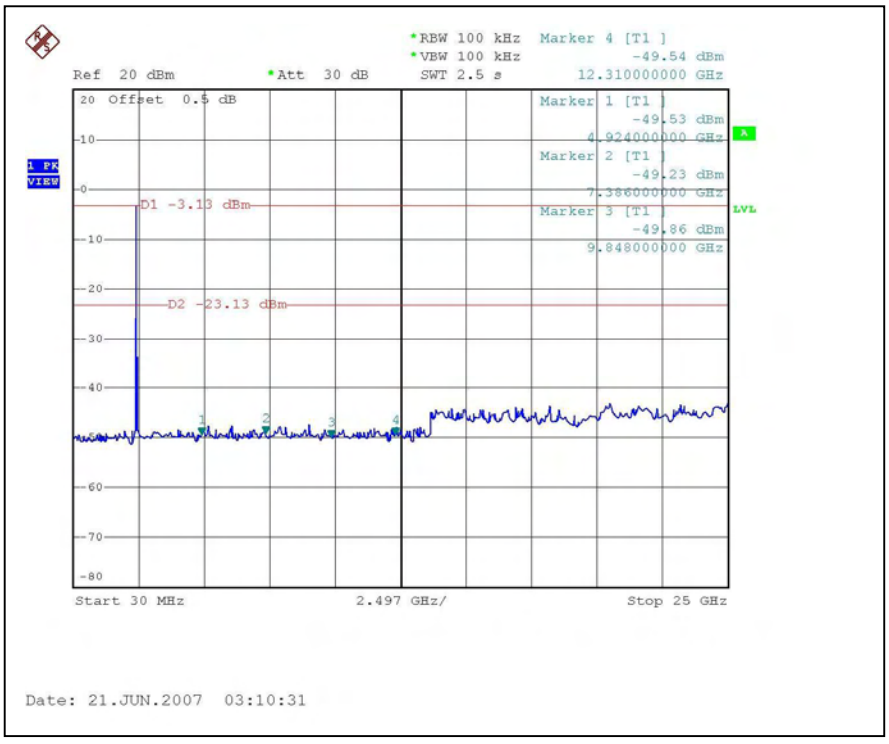
CH11



CH1

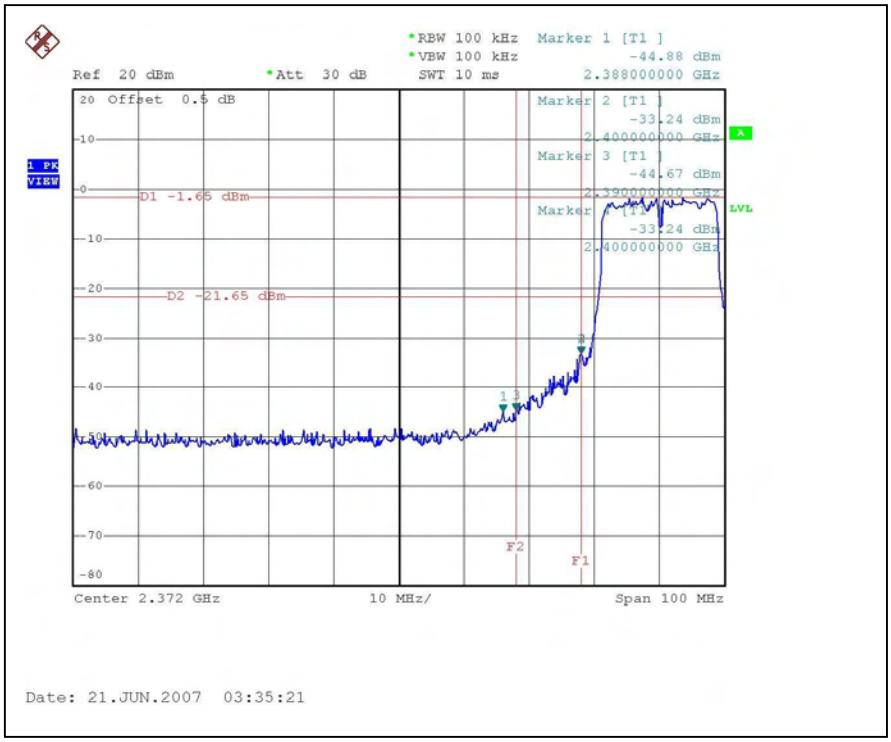

*RBW 100 kHz
*VBW 100 kHz
Ref 20 dBm
*Att 30 dB
SWT 2.5 s
Marker 4 [T1]
-49.07 dBm
12.060000000 GHz
20 Offset 0.5 dB
Marker 1 [T1]
-49.55 dBm
4.824000000 GHz
Marker 2 [T1]
-49.89 dBm
7.236000000 GHz
Marker 3 [T1]
-49.67 dBm
9.648000000 GHz
1 PK VIEW
D1 -2.5 dBm
D2 -22.5 dBm
LVL
Start 30 MHz
2.497 GHz/
Stop 25 GHz
Date: 21.JUN.2007 02:56:06

CH11

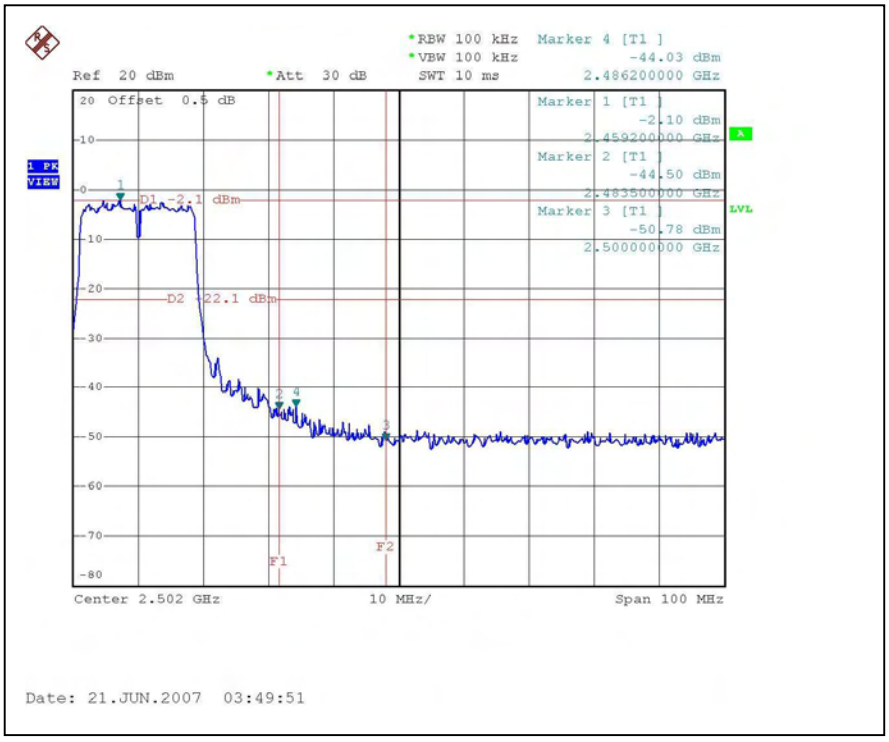

*RBW 100 kHz
*VBW 100 kHz
Ref 20 dBm
*Att 30 dB
SWT 2.5 s
Marker 4 [T1]
-49.54 dBm
12.310000000 GHz
20 Offset 0.5 dB
Marker 1 [T1]
-49.53 dBm
4.924000000 GHz
Marker 2 [T1]
-49.23 dBm
7.386000000 GHz
Marker 3 [T1]
-49.86 dBm
9.848000000 GHz
1 PK VIEW
D1 -3.13 dBm
D2 -23.13 dBm
LVL
Start 30 MHz
2.497 GHz/
Stop 25 GHz
Date: 21.JUN.2007 03:10:31

DRAFT 802.11n (20MHz) OFDM MODULATION:

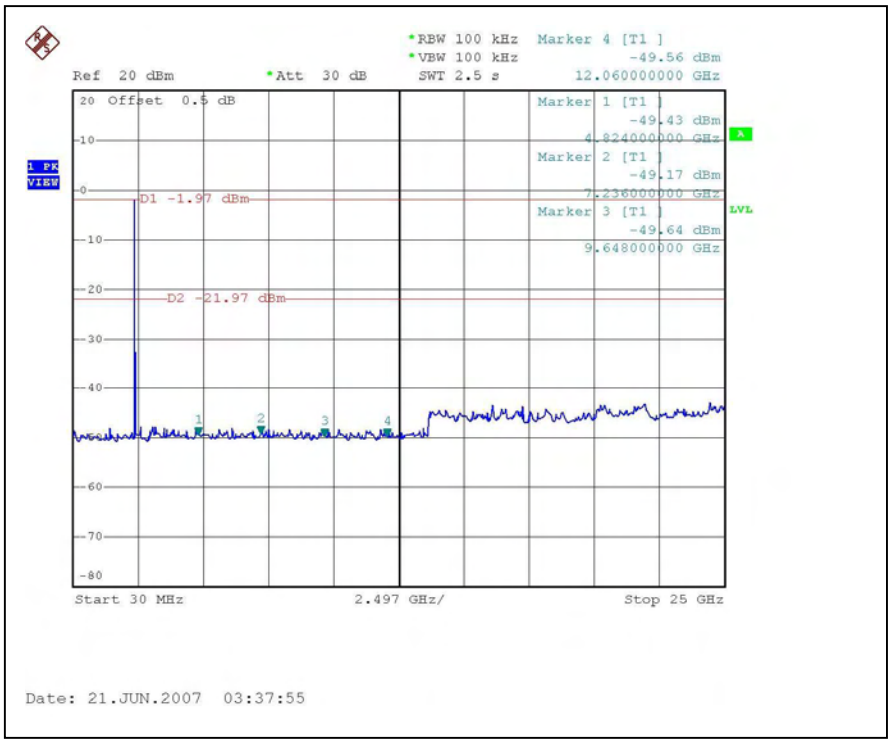
CH1



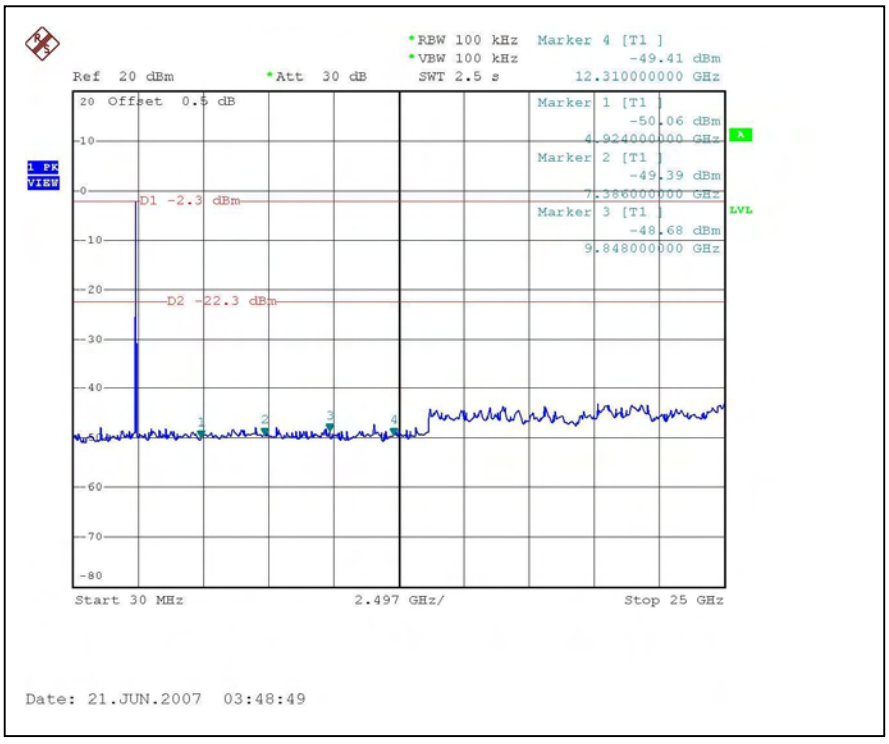
CH11



CH1

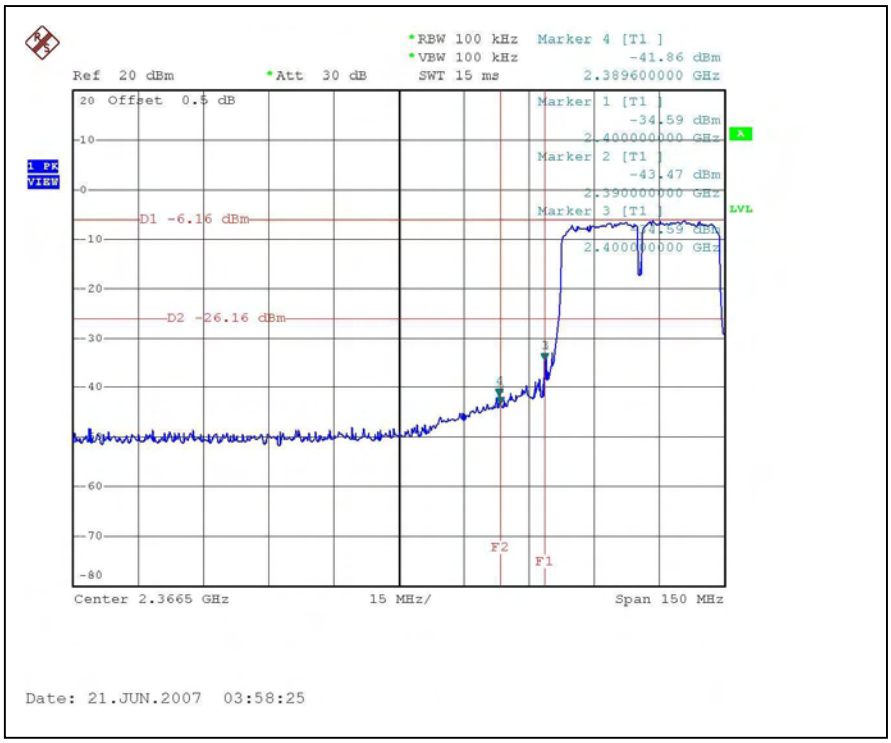

*RBW 100 kHz
*VBW 100 kHz
SWT 2.5 s
Marker 4 [T1]
-49.56 dBm
12.060000000 GHz
Ref 20 dBm
*Att 30 dB
20 Offset 0.5 dB
Marker 1 [T1]
-49.43 dBm
4.824000000 GHz
Marker 2 [T1]
-49.17 dBm
7.236000000 GHz
Marker 3 [T1]
-49.64 dBm
9.648000000 GHz
1 PK VIEW
D1 -1.97 dBm
D2 -21.97 dBm
A
LVL
Start 30 MHz
2.497 GHz/
Stop 25 GHz
Date: 21.JUN.2007 03:37:55

CH11

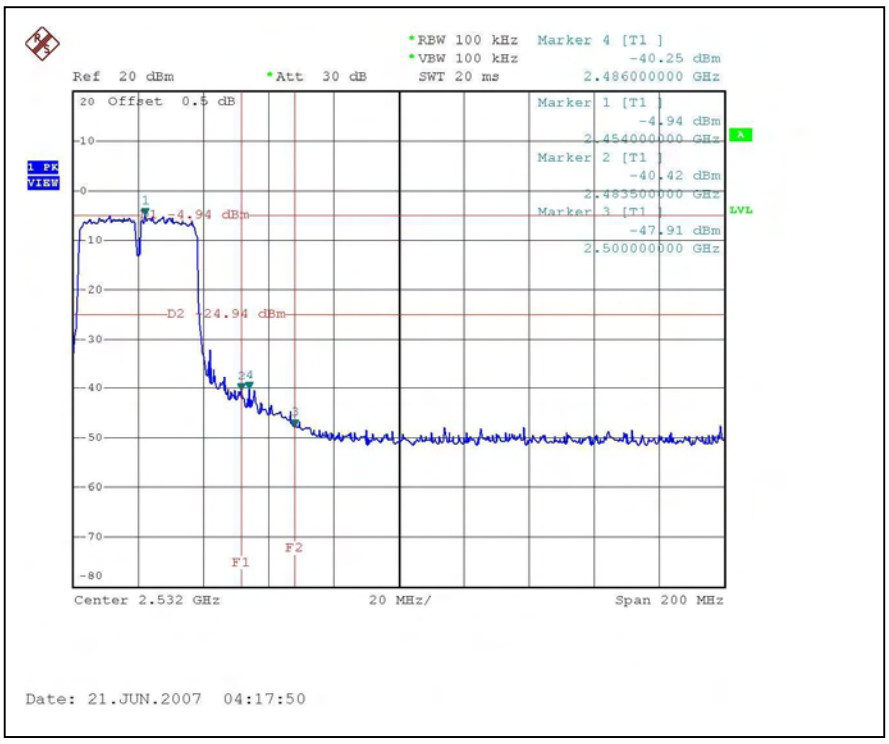

*RBW 100 kHz
*VBW 100 kHz
SWT 2.5 s
Marker 4 [T1]
-49.41 dBm
12.310000000 GHz
Ref 20 dBm
*Att 30 dB
20 Offset 0.5 dB
Marker 1 [T1]
-50.06 dBm
4.924000000 GHz
Marker 2 [T1]
-49.39 dBm
7.386000000 GHz
Marker 3 [T1]
-48.68 dBm
9.848000000 GHz
1 PK VIEW
D1 -2.3 dBm
D2 -22.3 dBm
A
LVL
Start 30 MHz
2.497 GHz/
Stop 25 GHz
Date: 21.JUN.2007 03:48:49

DRAFT 802.11n (40MHz) OFDM MODULATION:

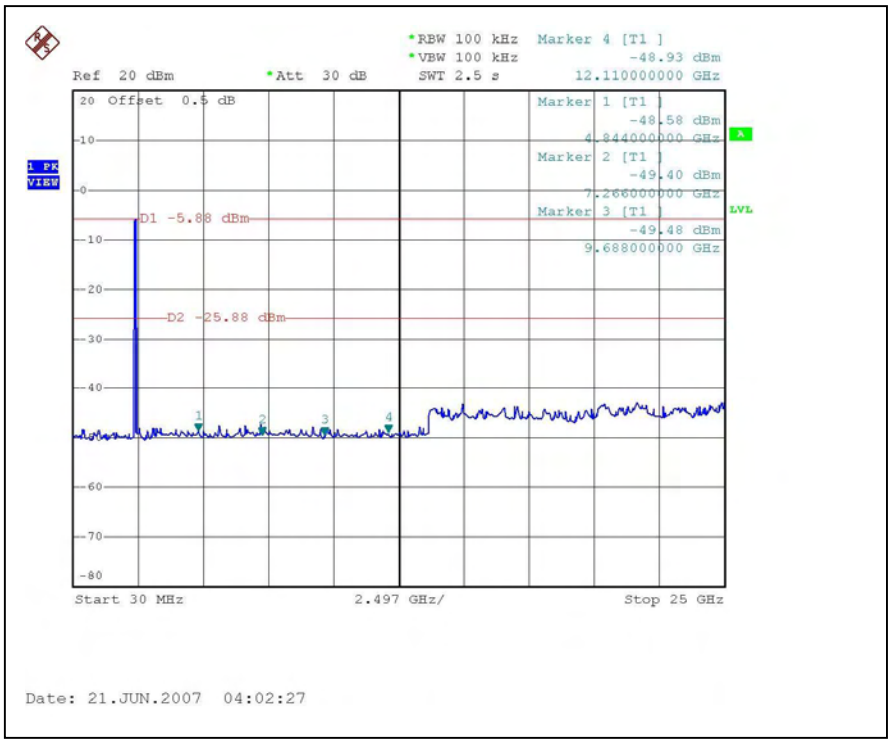
CH1



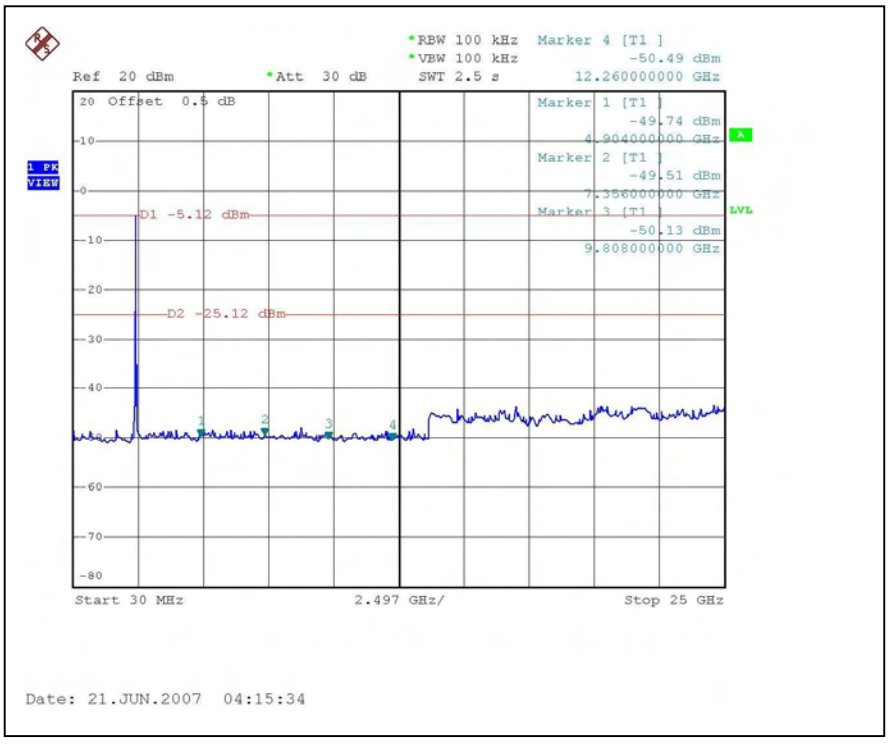
CH7



CH1


RBW 100 kHz
VBW 100 kHz
SWT 2.5 s
Marker 4 [T1]
-48.93 dBm
12.110000000 GHz
Ref 20 dBm
Att 30 dB
20 Offset 0.5 dB
Marker 1 [T1]
-48.58 dBm
4.844000000 GHz
Marker 2 [T1]
-49.40 dBm
7.266000000 GHz
Marker 3 [T1]
-49.48 dBm
9.688000000 GHz
1 PK VIEW
D1 -5.88 dBm
D2 -25.88 dBm
LVL
Start 30 MHz
2.497 GHz/
Stop 25 GHz
Date: 21.JUN.2007 04:02:27

CH7


RBW 100 kHz
VBW 100 kHz
SWT 2.5 s
Marker 4 [T1]
-50.49 dBm
12.260000000 GHz
Ref 20 dBm
Att 30 dB
20 Offset 0.5 dB
Marker 1 [T1]
-49.74 dBm
4.904000000 GHz
Marker 2 [T1]
-49.51 dBm
7.356000000 GHz
Marker 3 [T1]
-50.13 dBm
9.808000000 GHz
1 PK VIEW
D1 -5.12 dBm
D2 -25.12 dBm
LVL
Start 30 MHz
2.497 GHz/
Stop 25 GHz
Date: 21.JUN.2007 04:15:34

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 below.

No.	Brand Name	Model No.	Antenna Type	Gain (dBi)	Antenna Connector
1	GoldenBridege	13G018004000	1/2 λ Dipole	2.3803	RSMA
2	INPAQ	13G010067000	1/2 λ Dipole	2.21	RSMA
3	INPAQ	13G010067010	1/2 λ Dipole	1.98	RSMA
4	INPAQ	13G010071001	1/2 λ Dipole	1	RSMA
5	GoldenBridege	13G010071000	1/2 λ Dipole	2.38	RSMA
6	GoldenBridege	13-120001022	1/2 λ Dipole	0.92	RSMA

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
Germany	TUV Rheinland
Japan	VCCI
Norway	NEMKO
Canada	INDUSTRY CANADA , CSA
R.O.C.	TAF, BSMI, NCC
Netherlands	Telefication
Singapore	PSB , GOST-ASIA(MOU)
Russia	CERTIS(MOU)

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site: www.adt.com.tw/index.5/phtml. If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab:
Tel: 886-2-26052180
Fax: 886-2-26052943

Hsin Chu EMC/RF Lab:
Tel: 886-3-5935343
Fax: 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