

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 DATE	CALIBRATED UNTIL
R&S SPECTRUM ANALYZER	FSP40	100037	Aug. 09, 2008	Aug. 08, 2009

NOTE:

1. 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.

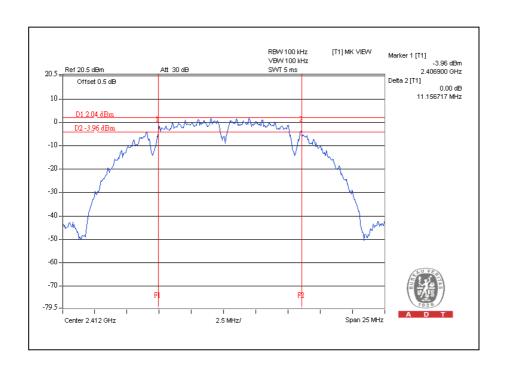


4.3.7 TEST RESULTS - Antenna 1

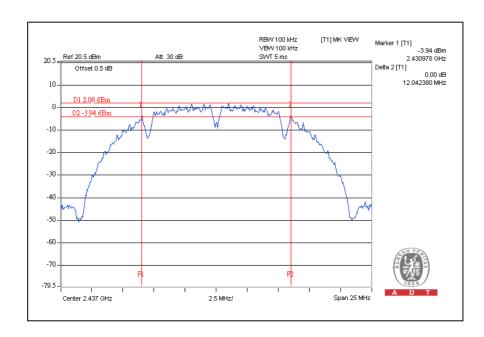
802.11b DSSS MODULATION:

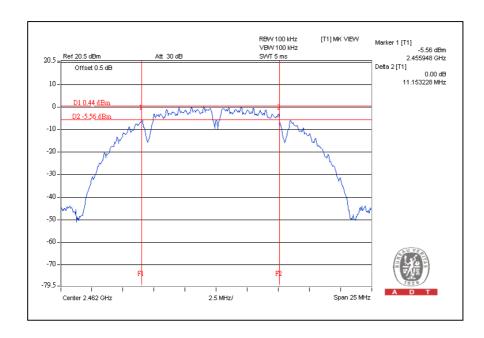
MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	11.15	0.5	PASS
6	2437	12.04	0.5	PASS
11	2462	11.15	0.5	PASS







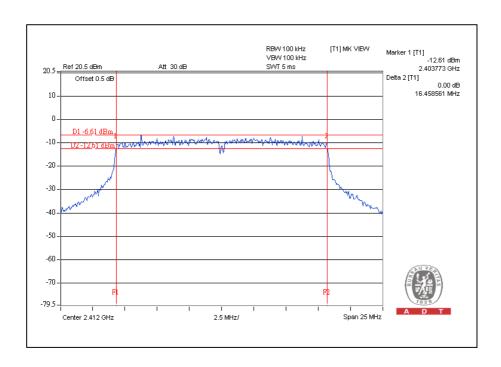




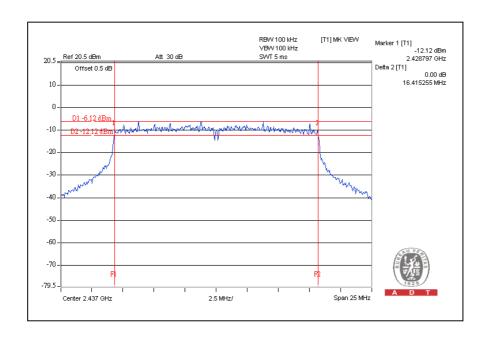
802.11g OFDM MODULATION:

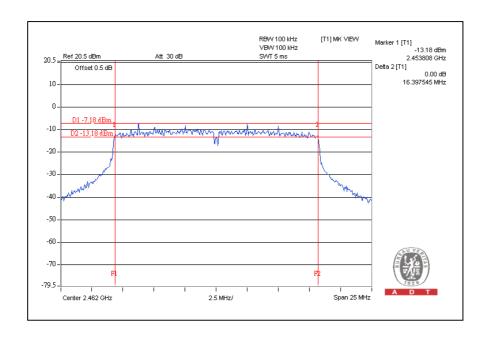
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	16.45	0.5	PASS
6	2437	16.41	0.5	PASS
11	2462	16.39	0.5	PASS







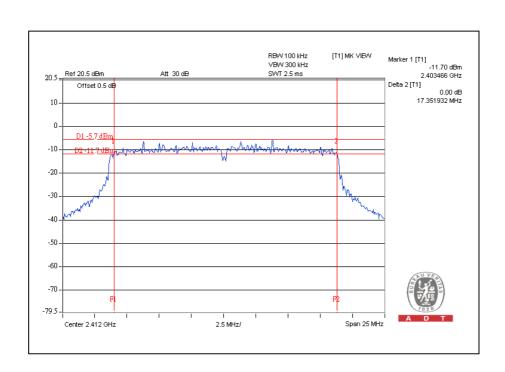




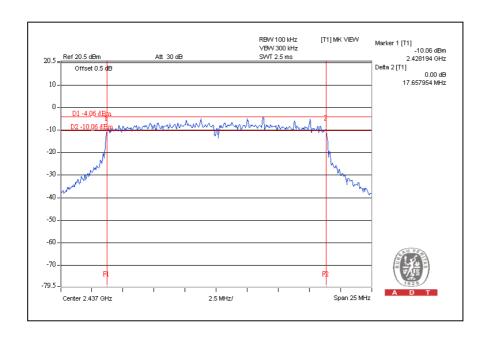
DRAFT 802.11n (20MHz) OFDM MODULATION:

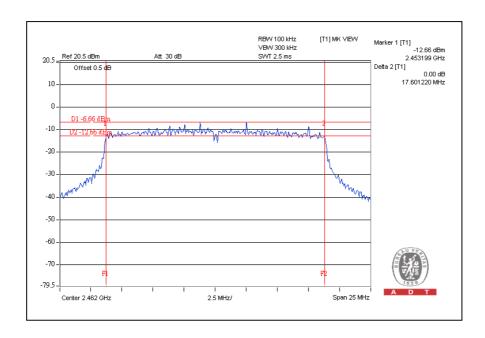
MODULATION TYPE	BPSK	TRANSFER RATE	6.5Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	17.35	0.5	PASS
6	2437	17.65	0.5	PASS
11	2462	17.60	0.5	PASS







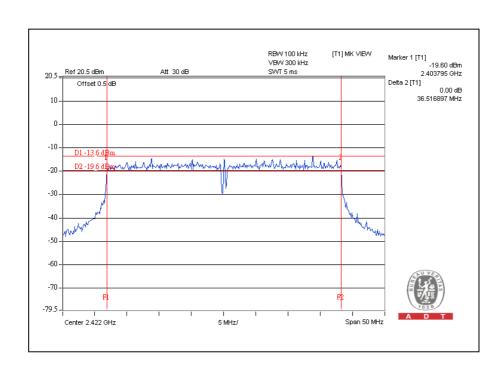




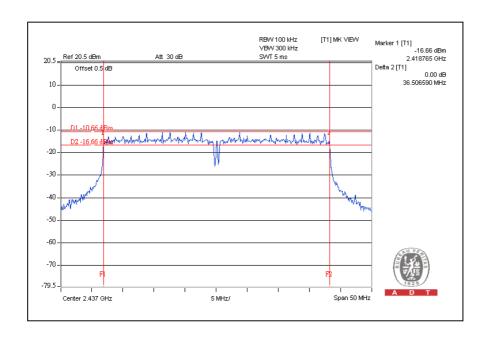
DRAFT 802.11n (40MHz) OFDM MODULATION:

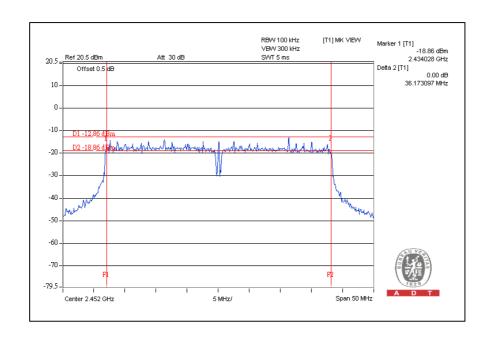
MODULATION TYPE	BPSK	TRANSFER RATE	13.5Mbps
INPUT POWER	1120\/ac_60 Hz		25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2422	36.51	0.5	PASS
4	2437	36.50	0.5	PASS
7	2452	39.17	0.5	PASS









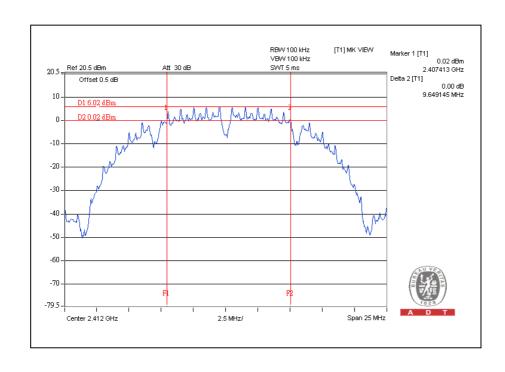


4.3.8 TEST RESULTS - Antenna 2

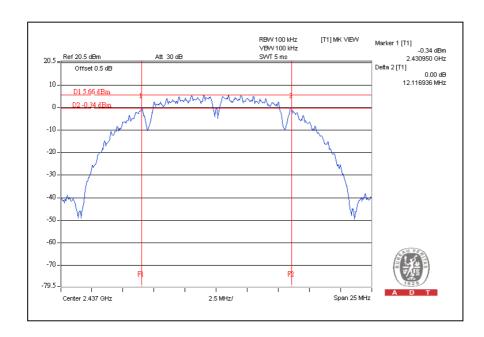
802.11b DSSS MODULATION:

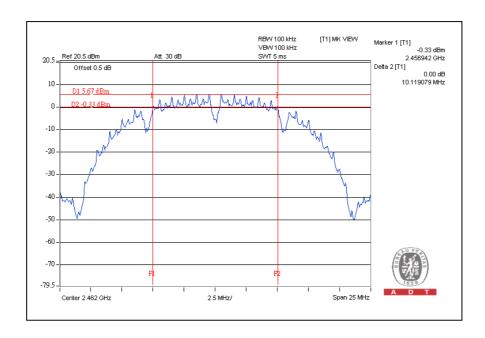
MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	9.64	0.5	PASS
6	2437	12.11	0.5	PASS
11	2462	10.11	0.5	PASS







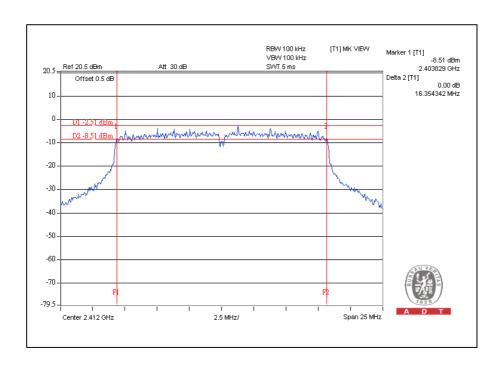




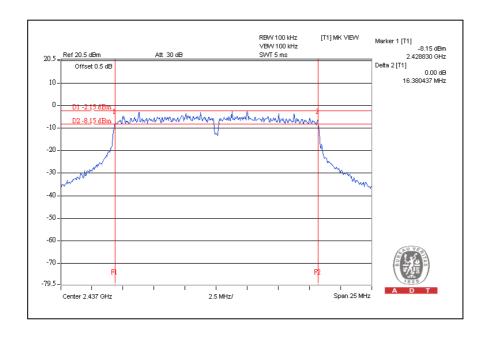
802.11g OFDM MODULATION:

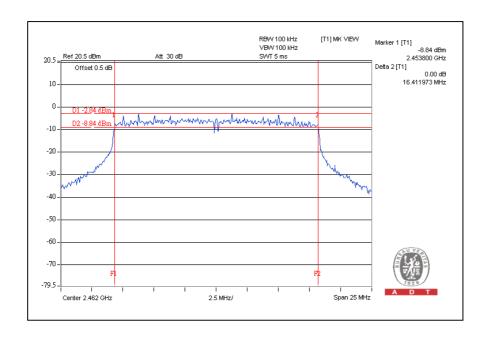
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	16.35	0.5	PASS
6	2437	16.38	0.5	PASS
11	2462	16.41	0.5	PASS







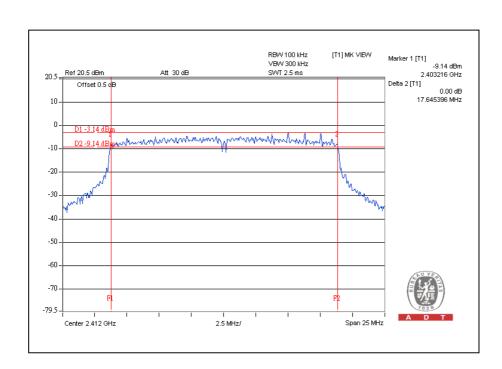




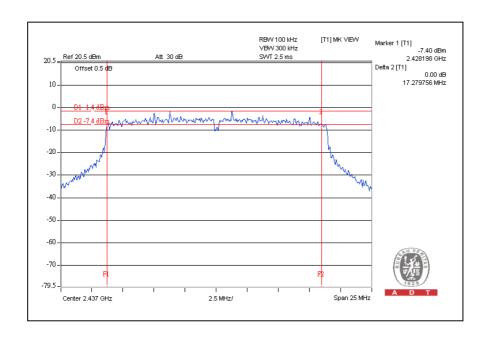
DRAFT 802.11n (20MHz) OFDM MODULATION:

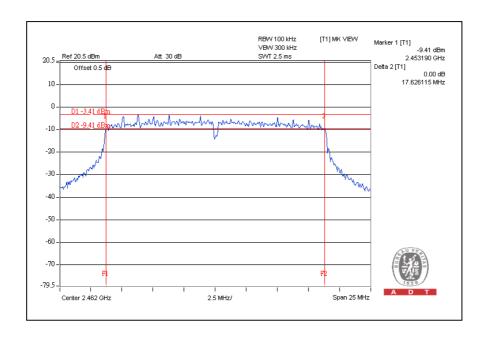
MODULATION TYPE	BPSK	TRANSFER RATE	6.5Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	17.64	0.5	PASS
6	2437	17.27	0.5	PASS
11	2462	17.62	0.5	PASS







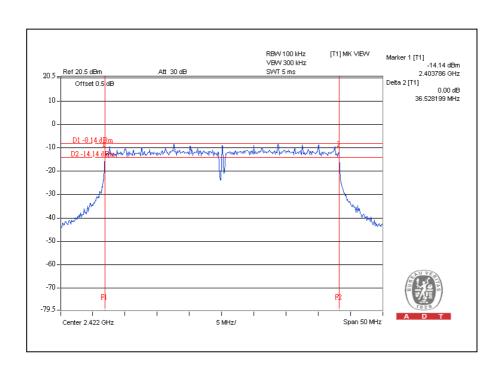




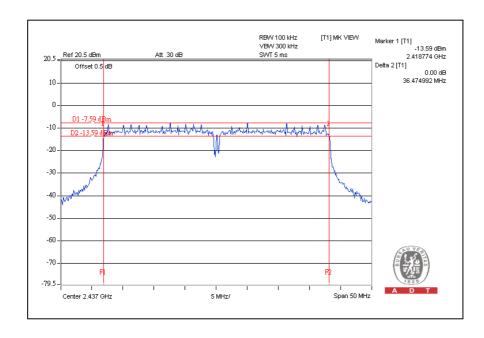
DRAFT 802.11n (40MHz) OFDM MODULATION:

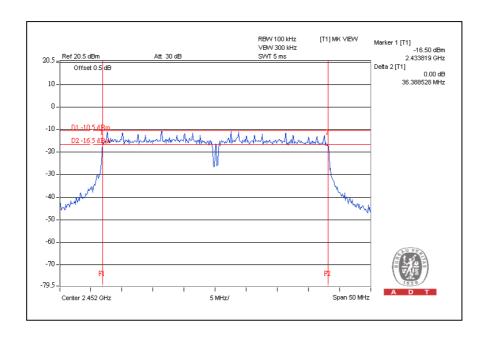
MODULATION TYPE	BPSK	TRANSFER RATE	13.5Mbps
INPUT POWER	1120\/ac_60 Hz		25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2422	36.52	0.5	PASS
4	2437	36.47	0.5	PASS
7	2452	36.38	0.5	PASS









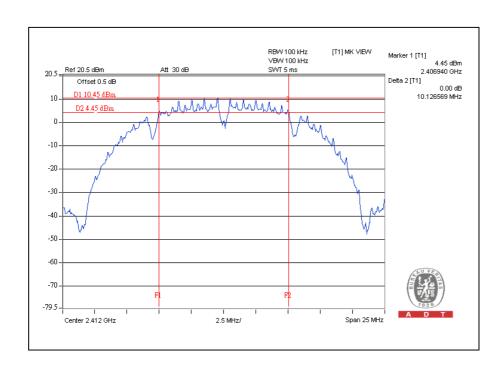


4.3.9 TEST RESULTS - Antenna 4

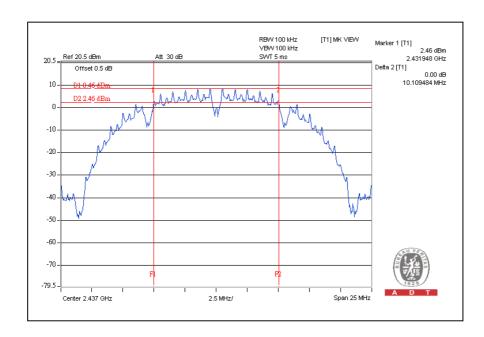
802.11b DSSS MODULATION:

MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

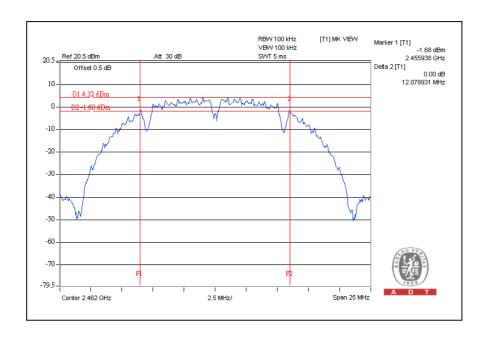
CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	10.12	0.5	PASS
6	2437	10.10	0.5	PASS
11	2462	12.07	0.5	PASS







CH11



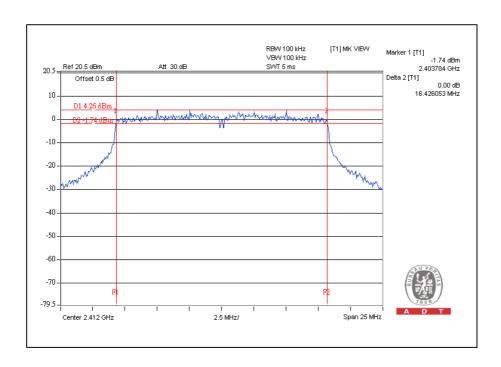
208



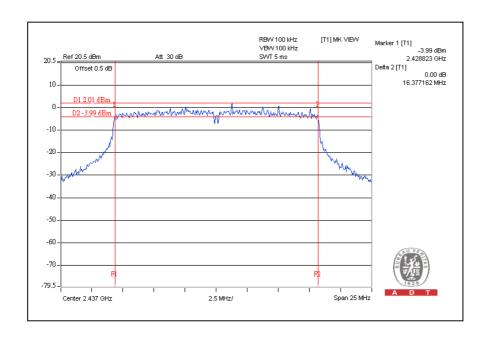
802.11g OFDM MODULATION:

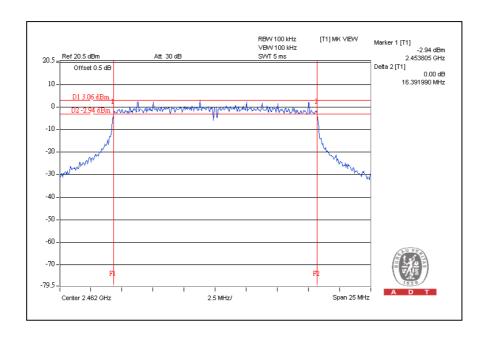
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER	120Vac, 60 Hz		25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	16.42	0.5	PASS
6	2437	16.37	0.5	PASS
11	2462	16.39	0.5	PASS







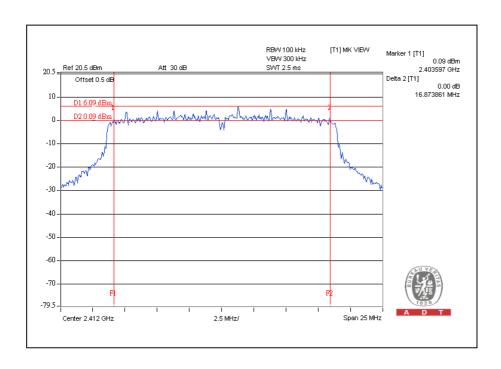




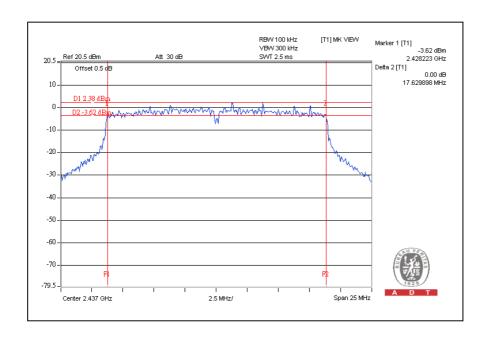
DRAFT 802.11n (20MHz) OFDM MODULATION:

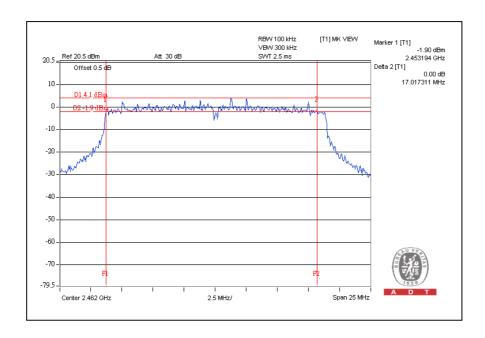
MODULATION TYPE	BPSK	TRANSFER RATE	6.5Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	16.87	0.5	PASS
6	2437	17.62	0.5	PASS
11	2462	17.01	0.5	PASS







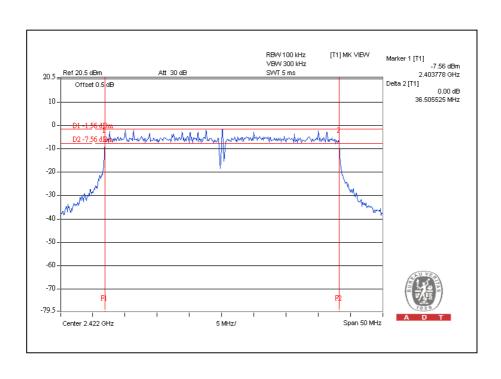




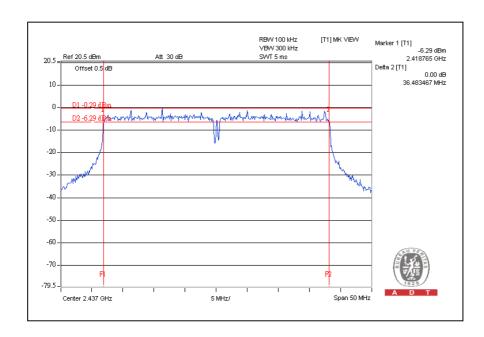
DRAFT 802.11n (40MHz) OFDM MODULATION:

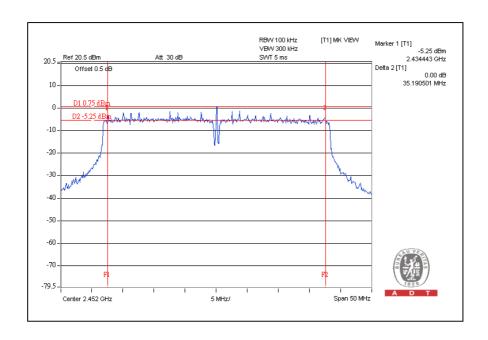
MODULATION TYPE	BPSK	TRANSFER RATE	13.5Mbps
INPUT POWER	120Vac, 60 Hz		25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2422	36.50	0.5	PASS
4	2437	36.48	0.5	PASS
7	2452	35.19	0.5	PASS









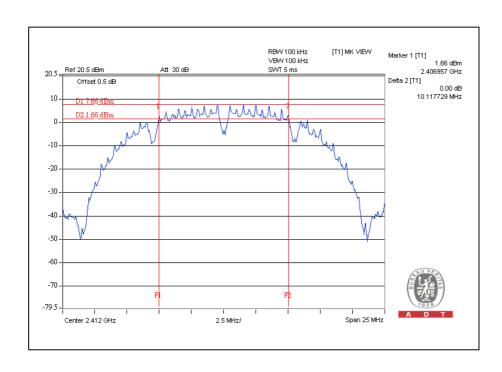


4.3.10 TEST RESULTS - Antenna 6

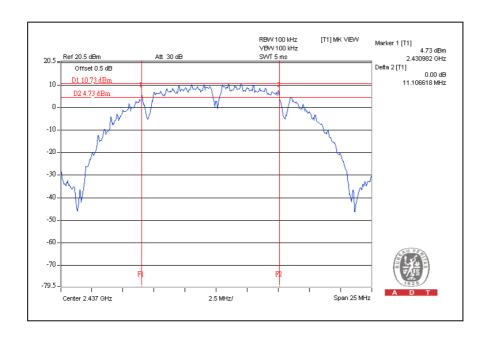
802.11b DSSS MODULATION:

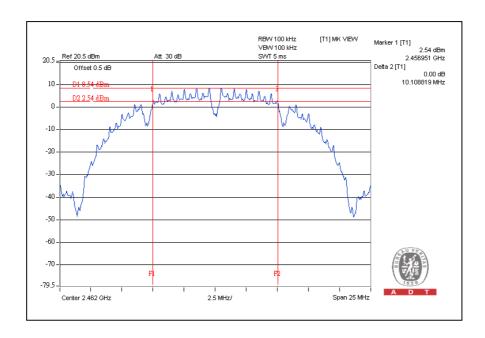
MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	10.11	0.5	PASS
6	2437	11.10	0.5	PASS
11	2462	10.10	0.5	PASS







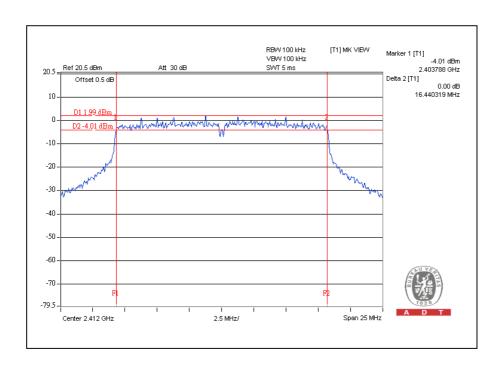




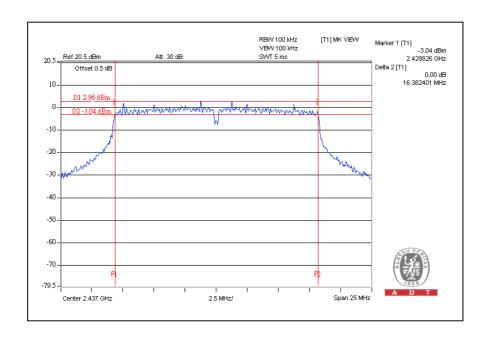
802.11g OFDM MODULATION:

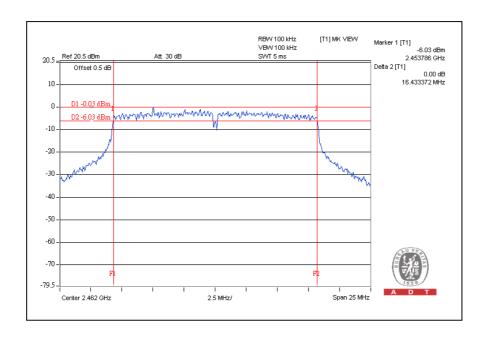
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	16.44	0.5	PASS
6	2437	16.38	0.5	PASS
11	2462	16.43	0.5	PASS







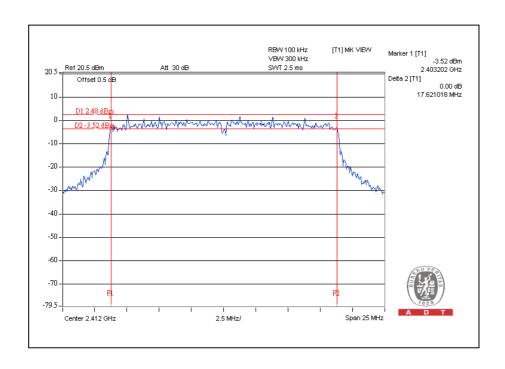




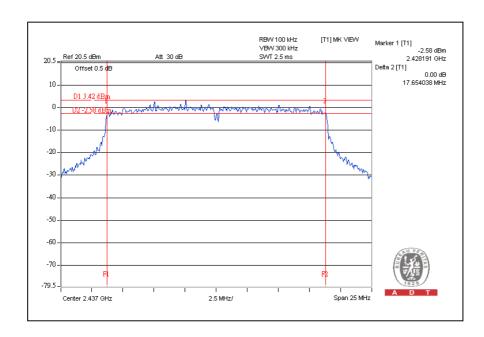
DRAFT 802.11n (20MHz) OFDM MODULATION:

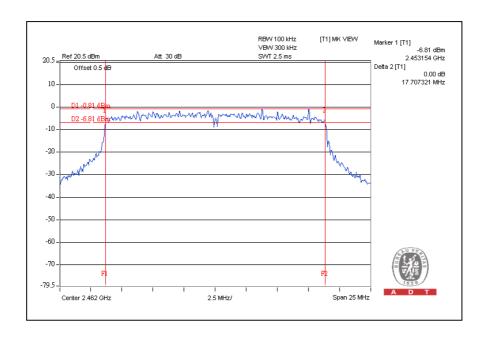
MODULATION TYPE	BPSK	TRANSFER RATE	6.5Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	17.62	0.5	PASS
6	2437	17.65	0.5	PASS
11	2462	17.70	0.5	PASS







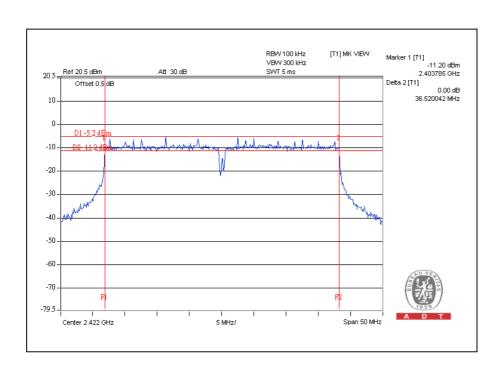




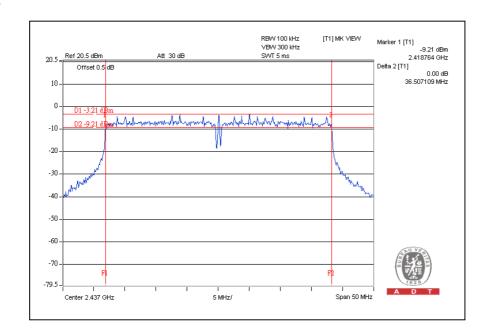
DRAFT 802.11n (40MHz) OFDM MODULATION:

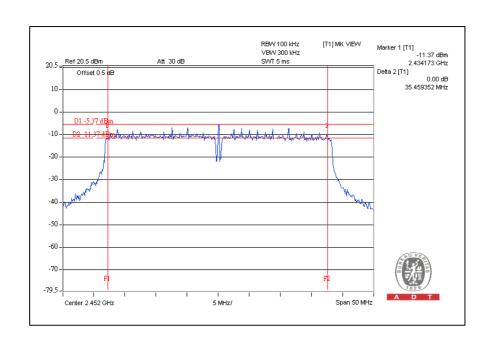
MODULATION TYPE	BPSK	TRANSFER RATE	13.5Mbps
INPUT POWER	120\/ac_60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2422	36.52	0.5	PASS
4	2437	36.50	0.5	PASS
7	2452	35.45	0.5	PASS









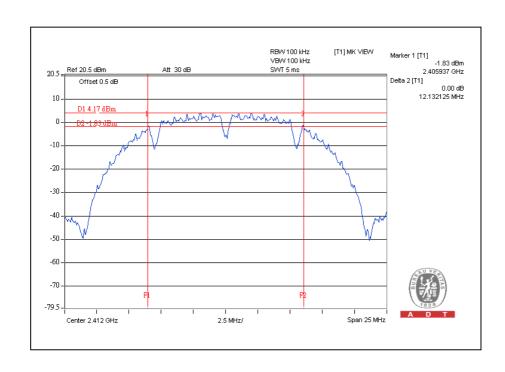


4.3.11 TEST RESULTS - Antenna 8

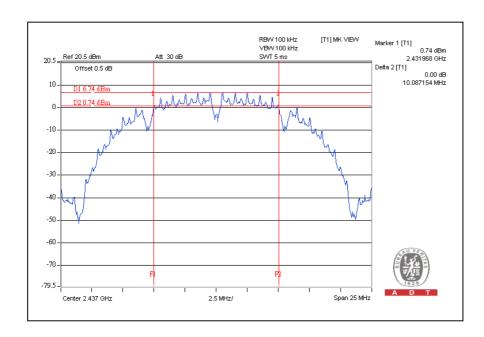
802.11b DSSS MODULATION:

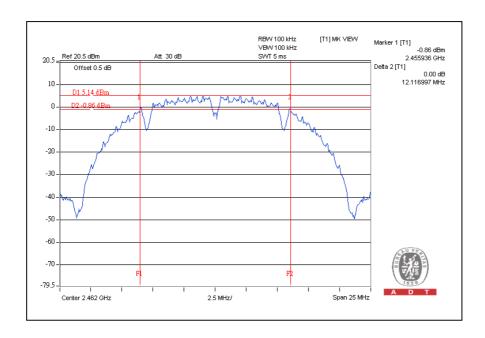
MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	12.13	0.5	PASS
6	2437	10.08	0.5	PASS
11	2462	12.11	0.5	PASS







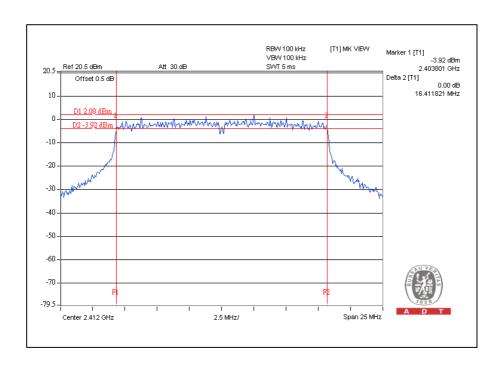




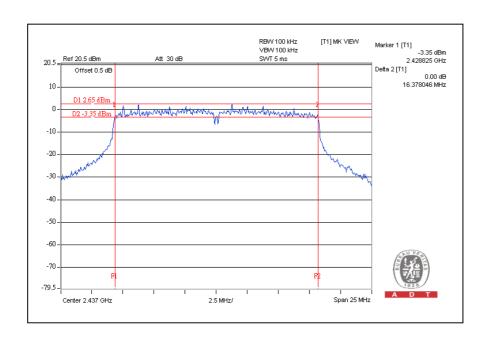
802.11g OFDM MODULATION:

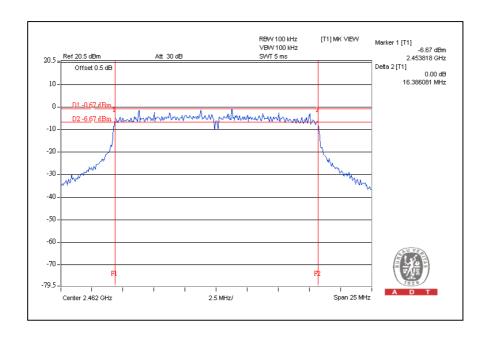
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	16.41	0.5	PASS
6	2437	16.37	0.5	PASS
11	2462	16.38	0.5	PASS







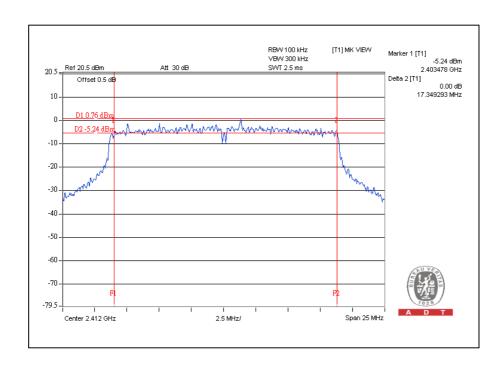




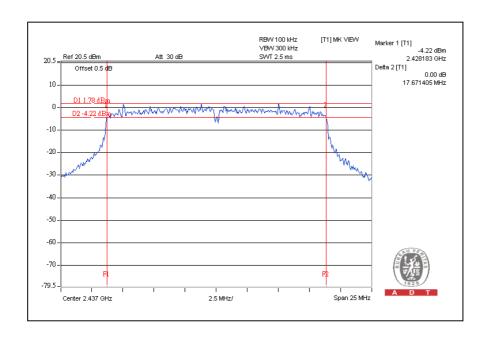
DRAFT 802.11n (20MHz) OFDM MODULATION:

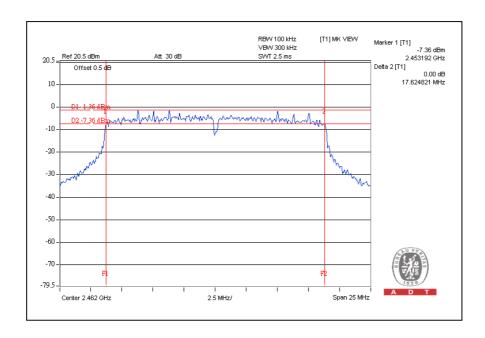
MODULATION TYPE	BPSK	TRANSFER RATE	6.5Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	17.34	0.5	PASS
6	2437	17.67	0.5	PASS
11	2462	17.62	0.5	PASS







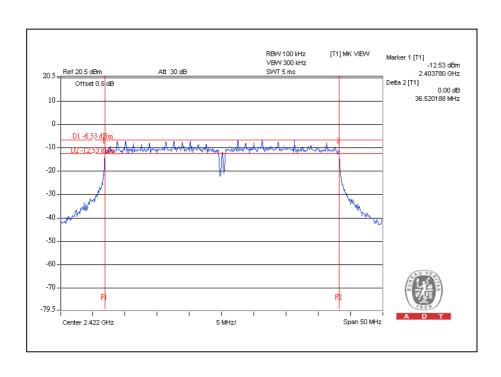




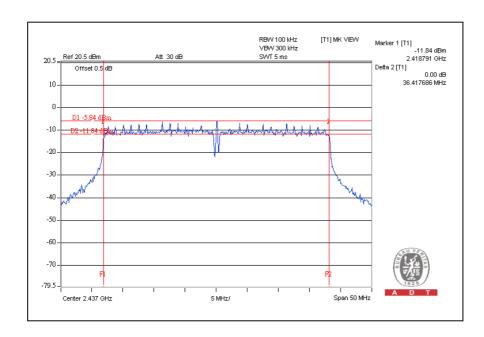
DRAFT 802.11n (40MHz) OFDM MODULATION:

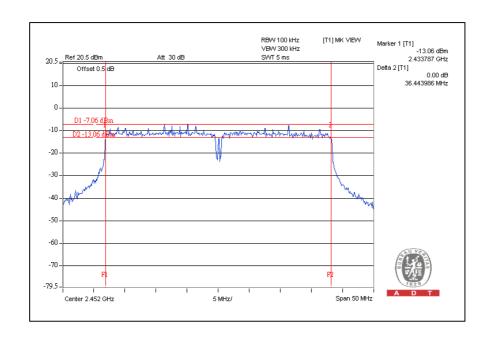
MODULATION TYPE	BPSK	TRANSFER RATE	13.5Mbps
INPUT POWER	1120\/ac_60 Hz		25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2422	36.52	0.5	PASS
4	2437	36.41	0.5	PASS
7	2452	36.44	0.5	PASS









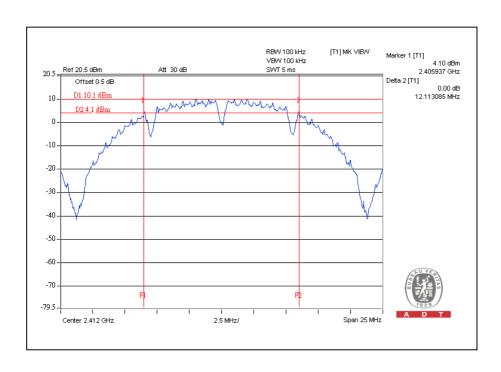


4.3.12 TEST RESULTS - Antenna 12

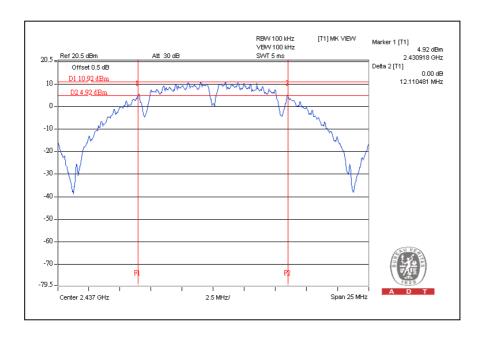
802.11b DSSS MODULATION:

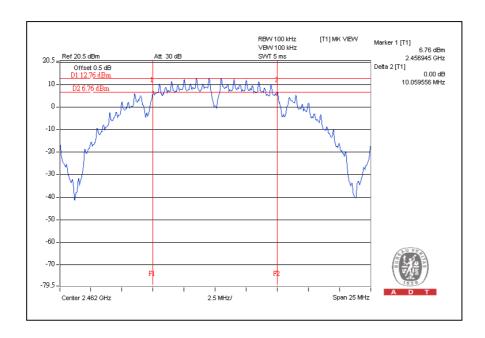
MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	12.11	0.5	PASS
6	2437	12.11	0.5	PASS
11	2462	10.05	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 DATE	CALIBRATED UNTIL
Anritsu Power Meter	ML2495A	0824006	July 08, 2008	July 07, 2008
Pulse Power Sensor	MA2411B	0738172	April 17, 2009	April 16, 2010

NOTE:

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

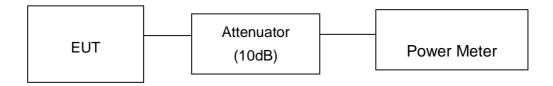
4.4.3 TEST PROCEDURES

- 1. The transmitter output was connected to the power meter through an attenuator; the bandwidth of the fundamental frequency was measured with the power meter.
- 2. Record the power level.

4.4.4 DEVIATION FROM TEST STANDARD

No deviation

4.4.5 TEST SETUP



Report No.: RF980406H01A Reference No.:980624H01



4.4.6 EUT OPERATING CONDITIONS

Same as Item 4.3.6

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4.4.7 TEST RESULTS -ANTENNA 1

802.11b DSSS MODULATION:

MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER	1120\/ac 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY	PEAK POWER OUTPUT (dBm)		PEAK POWER OUTPUT (mW)		TOTAL PEAK	TOTAL PEAK	PEAK POWER	PASS/		
	(MHz)	Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2	POWER (mW)	POWER (dBm)	LIMIT (dBm)	FAIL
1	2412	16.05	14.1	16.08	40.272	25.704	40.551	106.527	20.270	22.10	PASS
6	2437	16.01	14.2	16.3	39.902	26.303	42.658	108.863	20.370	22.10	PASS
11	2462	14.64	14.11	15.48	29.107	25.763	35.318	90.188	19.550	22.10	PASS

Note: Power limitation=30-(13.9-6) =22.1dBm (For non-point to point application).

802.11g OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER	1120\/ac 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY	(dBm) (m				POWER O	UTPUT	TOTAL PEAK	TOTAL PEAK	PEAK POWER	PASS /
	(MHz)	Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2	POWER (mW)	POWER (dBm)	LIMIT (dBm)	FAIL
1	2412	16.73	15.73	16.33	47.098	37.411	42.954	127.463	21.050	22.10	PASS
6	2437	16.8	16.39	16.83	47.863	43.551	48.195	139.609	21.450	22.10	PASS
11	2462	15.11	15.33	16.1	32.434	34.119	40.738	107.291	20.310	22.10	PASS

Note: Power limitation=30-(13.9-6) =22.1dBm (For non-point to point application).



DRAFT 802.11n (20MHz) OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	6.5Mbps
INPUT POWER	1120\/ac 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY	(dBm)				PEAK POWER OUTPUT (mW)		TOTAL PEAK	TOTAL PEAK	PEAK POWER	PASS /
	(MHz)	Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2	POWER (mW)	POWER (dBm)	LIMIT (dBm)	FAIL
1	2412	15.93	14.88	15.4	39.174	30.761	34.674	104.609	20.200	22.10	PASS
6	2437	16.89	16.8	17.26	48.865	47.863	53.211	149.939	21.760	22.10	PASS
11	2462	14.41	14.53	15.04	27.606	28.379	31.915	87.900	19.440	22.10	PASS

Note: Power limitation=30-(13.9-6) =22.1dBm (For non-point to point application).

DRAFT 802.11n (40MHz) OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	13.5Mbps
INPUT POWER	1120\/ac 60 Hz		25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY	PEAK POWER OUTPUT (dBm)		PEAK I	POWER O	PEAK		TOTAL PEAK	PEAK POWER	PASS/	
	(MHz)	Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2	POWER (mW)	POWER (dBm)	LIMIT (dBm)	FAIL
1	2422	13.42	12.58	13.58	21.979	18.113	22.803	62.895	17.990	22.10	PASS
4	2437	16.4	16.68	15.55	43.652	46.559	35.892	126.103	21.010	22.10	PASS
7	2452	12.82	12.17	13.6	19.143	16.482	22.909	58.534	17.670	22.10	PASS

Note: Power limitation=30-(13.9-6) =22.1dBm (For non-point to point application).



4.4.8 TEST RESULTS -ANTENNA 2

802.11b DSSS MODULATION:

MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER	120\/ac 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY	PEAK POWER OUTPUT (dBm)		PEAK POWER OUTPUT (mW)		TOTAL PEAK	TOTAL PEAK	PEAK POWER	PASS/		
	(MHz)	Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2	POWER (mW)	POWER (dBm)	LIMIT (dBm)	FAIL
1	2412	18.41	17.34	18.49	69.343	54.200	70.632	194.175	22.880	27.50	PASS
6	2437	20.09	19.5	20.68	102.094	89.125	116.950	308.169	24.890	27.50	PASS
11	2462	18.22	18.49	18.75	66.374	70.632	74.989	211.995	23.260	27.50	PASS

Note: Power limitation=30-(8.5-6) =27.5dBm (For non-point to point application).

802.11g OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER	1120\/ac 60 Hz		25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY		POWER O	UTPUT	PEAK I	PEAK POWER OUTPUT (mW)		TOTAL PEAK POWER	TOTAL PEAK	PEAK POWER	PASS/
	(MHz)	Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2	(mW)	POWER (dBm)	LIMIT (dBm)	FAIL
1	2412	20.17	19.46	19.84	103.992	88.308	96.383	288.683	24.600	27.50	PASS
6	2437	20.22	19.82	20.9	105.196	95.940	123.027	324.163	25.110	27.50	PASS
11	2462	19.9	20.38	19.89	97.724	109.144	97.499	304.367	24.830	27.50	PASS

Note: Power limitation=30-(8.5-6) = 27.5dBm (For non-point to point application).



DRAFT 802.11n (20MHz) OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	6.5Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY	PEAK I	POWER O	UTPUT	PEAK I	K POWER OUTPUT (mW)		TOTAL PEAK	TOTAL PEAK	PEAK POWER	PASS /
	(MHz)	Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2	POWER (mW)	POWER (dBm)	LIMIT (dBm)	FAIL
1	2412	19.4	18.8	19.24	87.096	75.858	83.946	246.900	23.930	27.50	PASS
6	2437	19.48	19.81	20.2	88.716	95.719	104.713	289.148	24.610	27.50	PASS
11	2462	17.94	18.28	18.25	62.230	67.298	66.834	196.362	22.930	27.50	PASS

Note: Power limitation=30-(8.5-6) = 27.5dBm (For non-point to point application).

DRAFT 802.11n (40MHz) OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	13.5Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY	PEAK POWER OUTPUT (dBm)		(mW) PEA		PEAK PI		PEAK POWER	PASS/		
	(MHz)	Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2	(mW)	POWER (dBm)	LIMIT (dBm)	FAIL
1	2422	19.4	19.3	16.18	87.096	85.114	41.495	213.705	23.300	27.50	PASS
4	2437	19.69	19.7	16.74	93.111	93.325	47.206	233.642	23.690	27.50	PASS
7	2452	15.73	16.78	16.85	37.411	47.643	48.417	133.471	21.250	27.50	PASS

Note: Power limitation=30-(8.5-6) = 27.5dBm (For non-point to point application).



4.4.9 TEST RESULTS -ANTENNA 4

802.11b DSSS MODULATION:

MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY		POWER O	UTPUT	PEAK POWER OUTPUT (mW)		PEAK PEA	TOTAL PEAK	PEAK POWER	PASS/	
	(MHz)	Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2	POWER (mW)	POWER (dBm)	LIMIT (dBm)	FAIL
1	2412	22.40	22.41	22.79	173.780	174.181	190.108	538.069	27.310	30.00	PASS
6	2437	20.41	20.19	21.16	109.901	104.472	130.617	344.990	25.380	30.00	PASS
11	2462	18.74	18.83	19.07	74.817	76.384	80.724	231.925	23.650	30.00	PASS

802.11g OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER	120\/ac 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY		POWER O	UTPUT	PEAK	POWER O	UTPUT	TOTAL PEAK	TOTAL PEAK	PEAK POWER	PASS /
	(MHz)	Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2	POWER (mW)	POWER (dBm)	LIMIT (dBm)	FAIL
1	2412	25.15	25.08	25.29	327.341	322.107	338.065	987.513	29.950	30.00	PASS
6	2437	24.34	23.9	23.97	271.644	245.471	249.459	766.574	28.850	30.00	PASS
11	2462	25.28	25.05	25.31	337.287	319.890	339.625	996.802	29.990	30.00	PASS



DRAFT 802.11n (20MHz) OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	6.5Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY	PEAK	POWER OUTPUT PEAK POWER OUTPUT (dBm) (mW)		TOTAL PEAK	PEAK	PEAK POWER	PASS/			
	(MHz)	Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2	POWER (mW)	(dBm)	LIMIT (dBm)	FAIL
1	2412	25.18	25.08	25.25	329.610	322.107	334.965	986.682	29.940	30.00	PASS
6	2437	24.56	24.58	24.18	285.759	287.078	261.818	834.655	29.220	30.00	PASS
11	2462	25.08	25.21	24.91	322.107	331.894	309.742	963.743	29.840	30.00	PASS

DRAFT 802.11n (40MHz) OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	13.5Mbps
INPUT POWER	1120\/ac_60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY		POWER O	UTPUT	PEAK	POWER O	UTPUT	TOTAL PEAK	TOTAL PEAK	PEAK POWER	PASS /
	(MHz)	Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2	POWER (mW)	POWER (dBm)	LIMIT (dBm)	FAIL
1	2422	25.12	24.85	25.14	325.087	305.492	326.588	957.167	29.810	30.00	PASS
4	2437	25.04	25.21	25.42	319.154	331.894	348.337	999.385	30.000	30.00	PASS
7	2452	25.12	25.14	25.33	325.087	326.588	341.193	992.868	29.970	30.00	PASS



4.4.10 TEST RESULTS -ANTENNA 6

802.11b DSSS MODULATION:

MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY		POWER O (dBm)	UTPUT	PEAK	PEAK POWER OUTPUT (mW)		PEAK	TOTAL PEAK	PEAK POWER	PASS/
	(MHz)	Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2	POWER (mW)	POWER (dBm)	LIMIT (dBm)	FAIL
1	2412	20.28	19.39	20.53	106.660	86.896	112.980	306.536	24.860	30.00	PASS
6	2437	24.78	24.9	25.4	300.608	309.030	346.737	956.375	29.810	30.00	PASS
11	2462	20.45	21.2	20.92	110.917	131.826	123.595	366.338	25.640	30.00	PASS

802.11g OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY	PEAK POWER OUTPUT (dBm)		PEAK	PEAK POWER OUTPUT (mW)			TOTAL PEAK	PEAK POWER	PASS /	
	(MHz)	Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2	POWER (mW)	POWER (dBm)	LIMIT (dBm)	FAIL
1	2412	24.43	23.78	24.56	277.332	238.781	285.759	801.872	29.040	30.00	PASS
6	2437	24.72	24.25	25.33	296.483	266.073	341.193	903.749	29.560	30.00	PASS
11	2462	22.5	23.2	23.04	177.828	208.930	201.372	588.130	27.690	30.00	PASS

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DRAFT 802.11n (20MHz) OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	6.5Mbps
INPUT POWER	120\/ac 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY	PEAK	POWER O (dBm)	UTPUT	PEAK POWER OUTPUT (mW)		TOTAL PEAK POWER	TOTAL PEAK	PEAK POWER	PASS /	
	(MHz)	Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2	(mW)	POWER (dBm)	LIMIT (dBm)	FAIL
1	2412	23.57	23.03	24.2	227.510	200.909	263.027	691.446	28.400	30.00	PASS
6	2437	24.55	24.84	25.49	285.102	304.789	353.997	943.888	29.750	30.00	PASS
11	2462	21.39	21.78	22.01	137.721	150.661	158.855	447.237	26.510	30.00	PASS

DRAFT 802.11n (40MHz) OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	13.5Mbps
INPUT POWER	1120\/ac_60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY		POWER O	UTPUT	PEAK	POWER O	UTPUT	TOTAL PEAK	TOTAL PEAK	PEAK POWER	PASS /
	(MHz)	Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2	POWER (mW)	POWER (dBm)	LIMIT (dBm)	FAIL
1	2422	21.93	21.79	18.89	155.955	151.008	77.446	384.409	25.850	30.00	PASS
4	2437	23.81	24.35	21.28	240.436	272.270	134.276	646.982	28.110	30.00	PASS
7	2452	20.36	21.65	21.07	108.643	146.218	127.938	382.799	25.830	30.00	PASS



4.4.11 TEST RESULTS -ANTENNA 8

802.11b DSSS MODULATION:

MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY		POWER O	UTPUT	PEAK	PEAK POWER OUTPUT (mW)		TOTAL PEAK	TOTAL PEAK	PEAK POWER	PASS/
	(MHz)	Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2	POWER (mW)	POWER (dBm)	LIMIT (dBm)	FAIL
1	2412	18.93	18.05	19.02	78.163	63.826	79.799	221.788	23.460	30.00	PASS
6	2437	22.43	22.03	22.42	174.985	159.588	174.582	509.155	27.070	30.00	PASS
11	2462	19.86	20.52	20.24	96.828	112.720	105.682	315.230	24.990	30.00	PASS

802.11g OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER	120\/ac_60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY		POWER O	UTPUT	PEAK	POWER O	UTPUT	TOTAL PEAK	TOTAL PEAK	PEAK POWER	PASS /
	(MHz)	Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2	POWER (mW)	POWER (dBm)	LIMIT (dBm)	FAIL
1	2412	24.06	23.23	24.38	254.683	210.378	274.157	739.218	28.690	30.00	PASS
6	2437	24.46	23.71	24.59	279.254	234.963	287.740	801.957	29.040	30.00	PASS
11	2462	20.87	21.88	21.98	122.180	154.170	157.761	434.111	26.380	30.00	PASS



DRAFT 802.11n (20MHz) OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	6.5Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY	PEAK	POWER O	UTPUT	PEAK POWER OUTPUT (mW)		TOTAL PEAK POWER	TOTAL PEAK	PEAK POWER	PASS/	
	(MHz)	Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2	(mW)	POWER (dBm)	LIMIT (dBm)	FAIL
1	2412	21.62	19.24	21.52	145.211	83.946	141.906	371.063	25.690	30.00	PASS
6	2437	23.7	23.69	23.99	234.423	233.884	250.611	718.918	28.570	30.00	PASS
11	2462	19.92	20.81	20.56	98.175	120.504	113.763	332.442	25.220	30.00	PASS

DRAFT 802.11n (40MHz) OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	13.5Mbps
INPUT POWER	1120\/ac_60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL PEAK POWER (dBm)		POWER O	UTPUT	PEAK	POWER O	UTPUT	TOTAL PEAK	TOTAL PEAK	PEAK POWER	PASS /
	(MHz)	Chain 0	Chain 1	Chain 2	Chain 0	Chain 1	Chain 2	POWER (mW)	POWER (dBm)	LIMIT (dBm)	FAIL
1	2422	21.12	20.45	17.82	129.420	110.917	60.534	300.871	24.780	30.00	PASS
4	2437	23.47	21.99	21.44	222.331	158.125	139.316	519.772	27.160	30.00	PASS
7	2452	19.82	20.86	20.88	95.940	121.899	122.462	340.301	25.320	30.00	PASS



4.4.12 TEST RESULTS -ANTENNA 12

802.11b DSSS MODULATION:

MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER (mW)	PEAK POWER (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
1	2412	276.058	24.41	30.00	PASS
6	2437	283.792	24.53	30.00	PASS
11	2462	282.488	24.51	30.00	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 DATE	CALIBRATED UNTIL
R&S SPECTRUM ANALYZER	FSP40	100037	Aug. 09, 2008	Aug. 08, 2009

NOTE:

1. 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



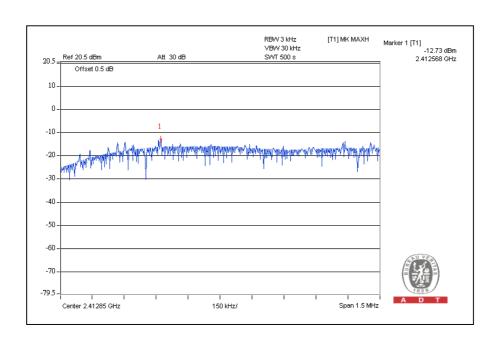
4.5.7 TEST RESULTS - ANTENNA 1

802.11b DSSS MODULATION:

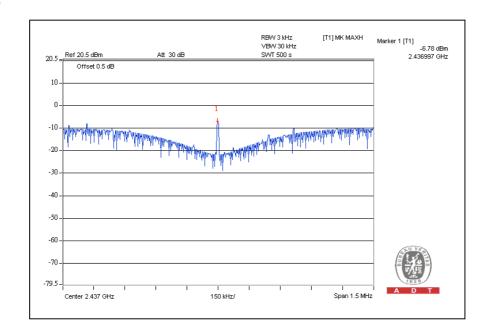
MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER	1120\/ac 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

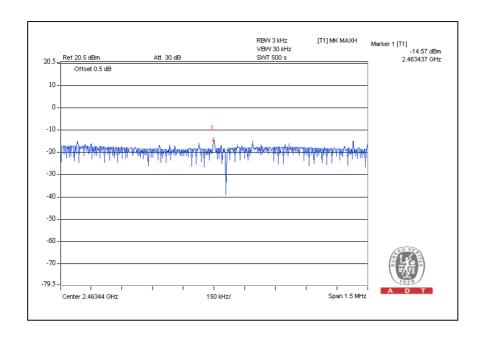
CHANNEL	CHANNEL FREQUENCY		ER LEVEL BW (mW)	. IN 3kHz	_	RF POWER LEVEL IN 3 BW (dBm)		RF POWER LEVEL IN 3kHz BW (dBm)				MAXIMUM	PASS /
	(MHz)	CHAIN 0	CHAIN 1	CHAIN 2	CHAIN 0	CHAIN 1	CHAIN 2	(mW)	(dBm)	LIMIT (dBm)	FAIL		
1	2412	0.053	0.046	0.036	-12.73	-13.36	-14.38	0.135	-8.697	8	PASS		
6	2437	0.210	0.058	0.040	-6.78	-12.38	-14.03	0.308	-5.114	8	PASS		
11	2462	0.035	0.046	0.059	-14.57	-13.35	-12.28	0.140	-8.539	8	PASS		

Chain 0 CH1



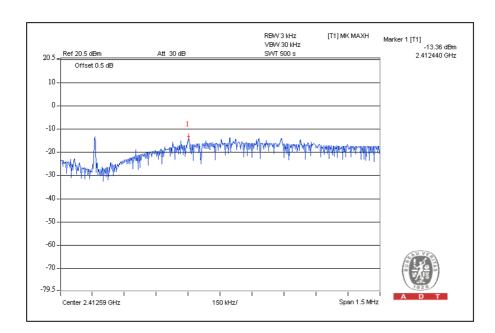


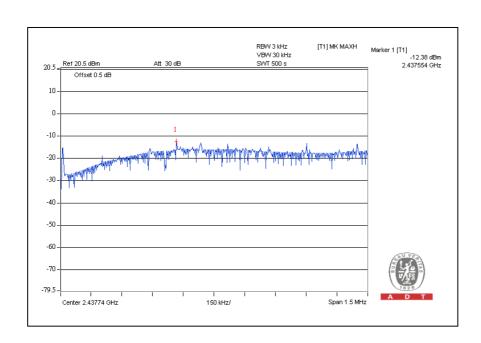




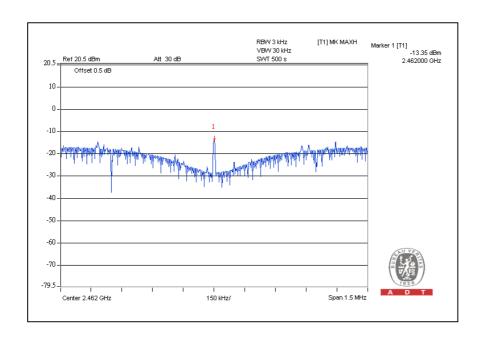


Chain 1 CH1



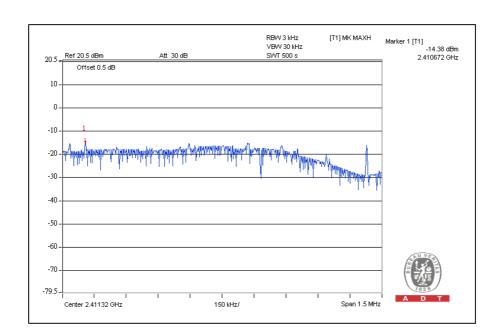


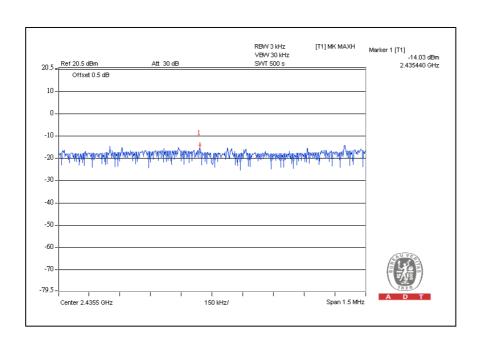




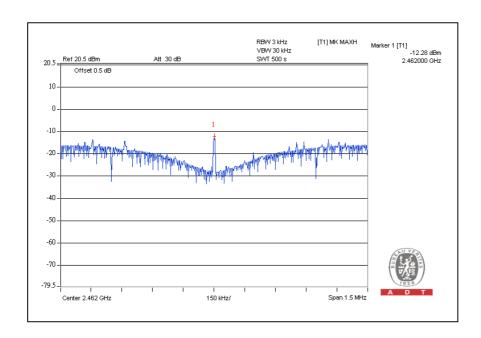


Chain 2 CH1









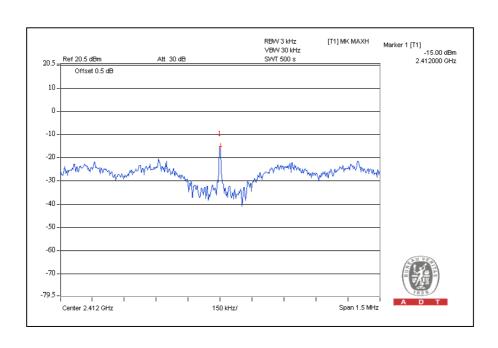


802.11g OFDM MODULATION:

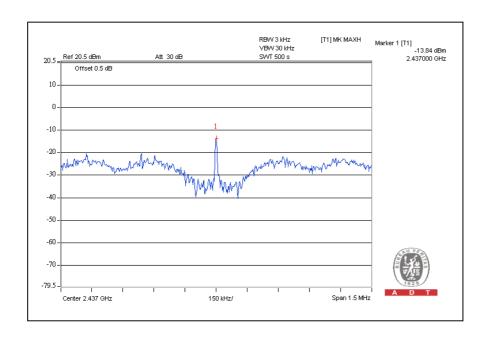
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER	120\/ac 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

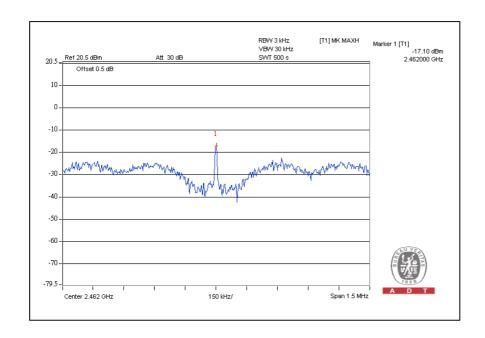
CHANNEL	CHANNEL FREQUENCY	RF POWER LEVEL IN 3kHz BW (mW)		_	RF POWER LEVEL IN 3kHz BW (dBm)			TOTAL POWER DENSITY	MAXIMUM	PASS /	
	(MHz)	CHAIN 0	CHAIN 1	CHAIN 2	CHAIN 0	CHAIN 1	CHAIN 2	DENSITY (mW)	(dBm)	LIMIT (dBm)	FAIL
1	2412	0.032	0.010	0.018	-15.00	-19.86	-17.38	0.060	-12.218	8	PASS
6	2437	0.041	0.021	0.052	-13.84	-16.78	-12.83	0.114	-9.431	8	PASS
11	2462	0.019	0.045	0.068	-17.10	-13.42	-11.67	0.132	-8.794	8	PASS

Chain 0 CH1



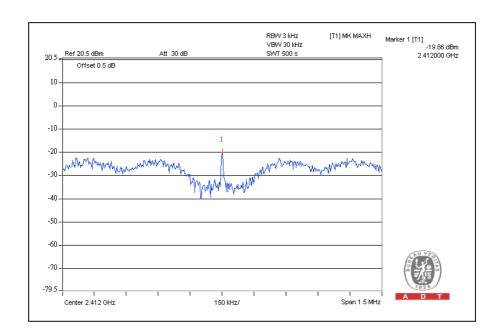


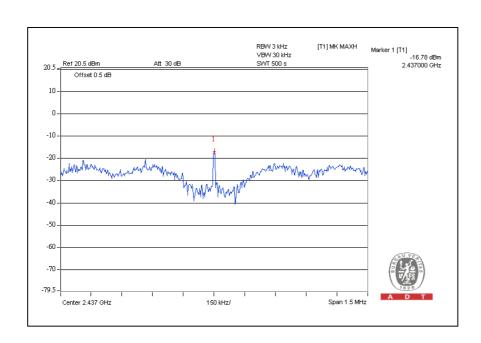




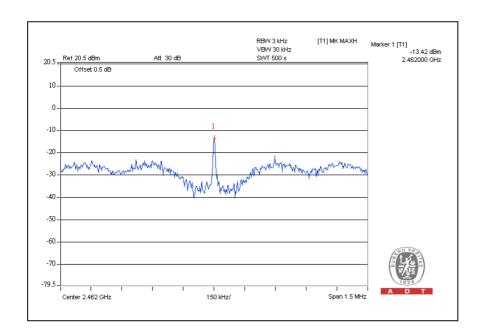


Chain 1 CH1



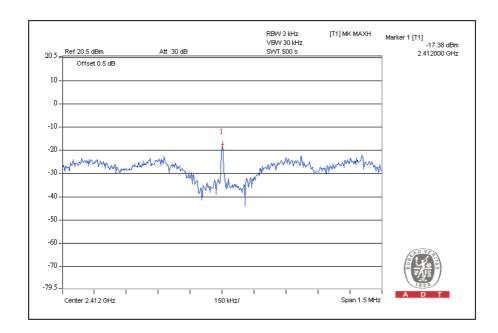


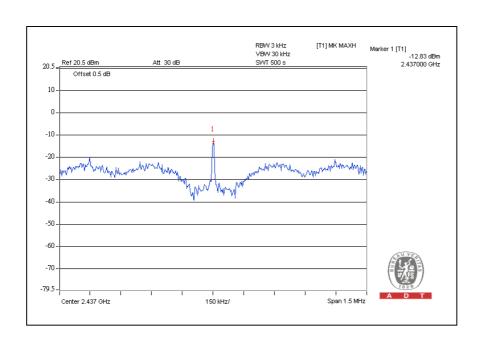




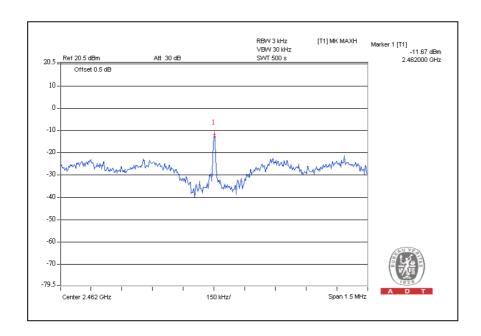


Chain 2 CH1









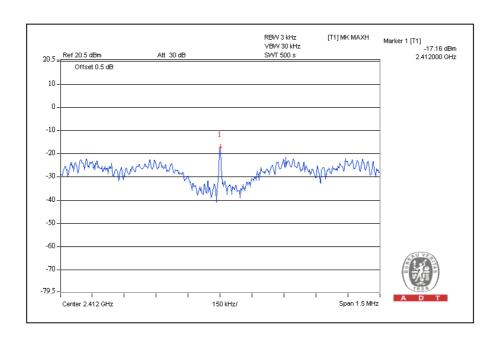


DRAFT 802.11n (20MHz) OFDM MODULATION:

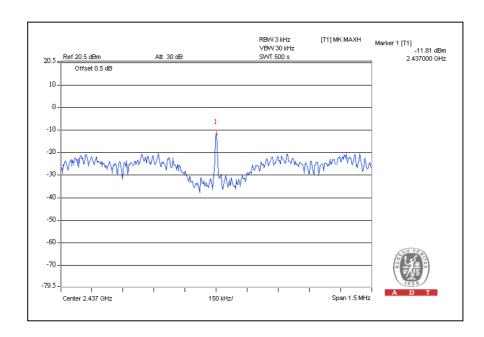
MODULATION TYPE	BPSK	TRANSFER RATE	6.5Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25 deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

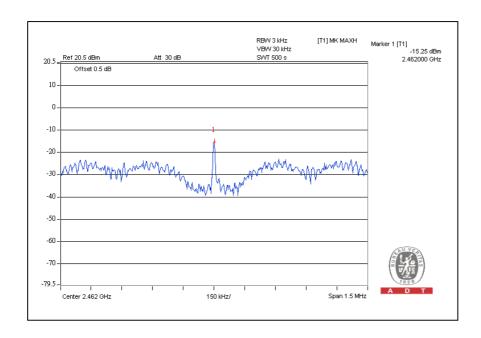
CHANN	CHANNEL EL FREQUENCY	BW (mW)			ER LEVEL BW (dBm)		TOTAL POWER	TOTAL POWER	MAXIMUM	PASS /	
	(MHz)	CHAIN 0	CHAIN 1	CHAIN 2	CHAIN 0	CHAIN 1	CHAIN 2	DENSITY (mW)	(dBm)	LIMIT (dBm)	FAIL
1	2412	0.019	0.023	0.027	-17.16	-16.31	-15.65	0.069	-11.612	8	PASS
6	2437	0.066	0.039	0.096	-11.81	-14.04	-10.18	0.201	-6.968	8	PASS
11	2462	0.030	0.027	0.051	-15.25	-15.72	-12.89	0.108	-9.666	8	PASS

Chain 0 CH1



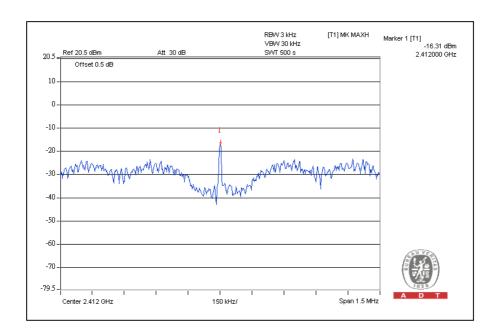


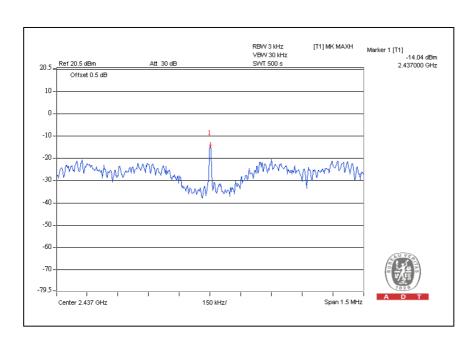




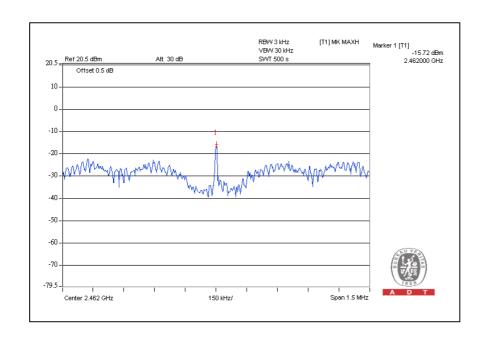


Chain 1 CH1



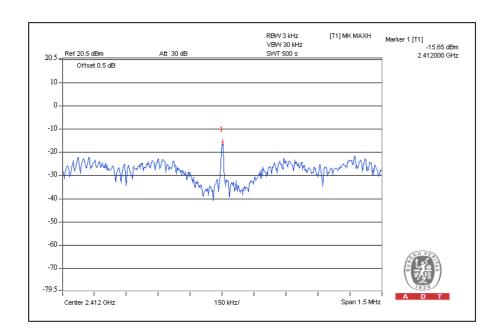


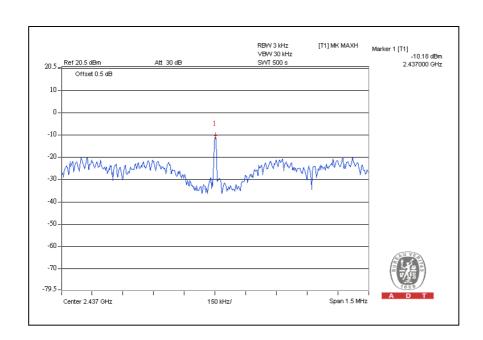




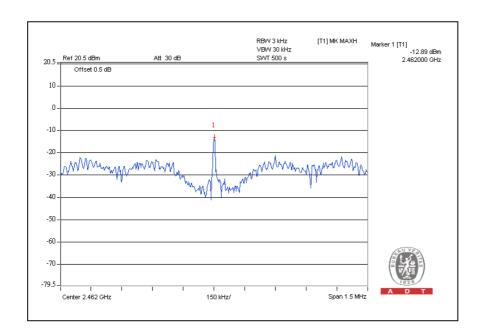


Chain 2 CH1









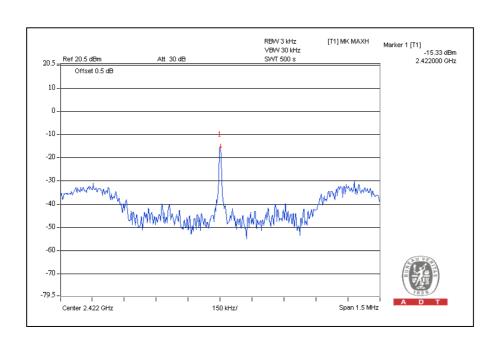


DRAFT 802.11n (40MHz) OFDM MODULATION:

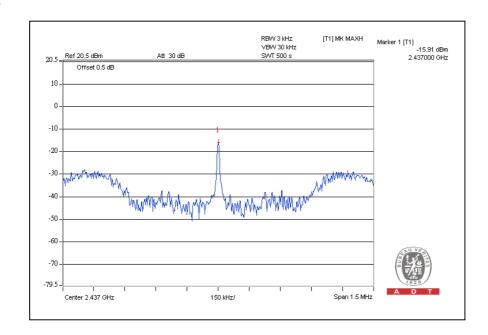
MODULATION TYPE	BPSK	TRANSFER RATE	13.5Mbps
INPUT POWER	1120\/ac 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

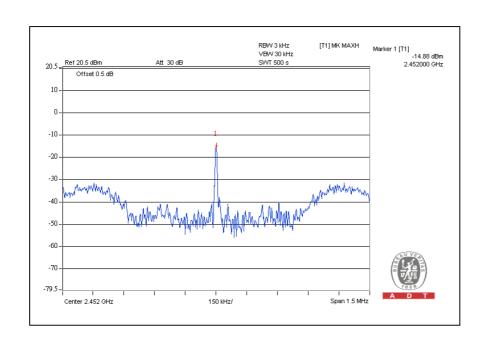
CHANNEL	CHANNEL FREQUENCY	BW (mW) BW (dBm)				-	TOTAL POWER	TOTAL POWER	MAXIMUM	PASS /	
	(MHz)	CHAIN 0	CHAIN 1	CHAIN 2	CHAIN 0	CHAIN 1	CHAIN 2	DENSITY (mW)	(dBm)	LIMIT (dBm)	FAIL
1	2422	0.029	0.015	0.062	-15.33	-18.13	-12.10	0.106	-9.747	8	PASS
4	2437	0.026	0.064	0.072	-15.91	-11.96	-11.43	0.162	-7.905	8	PASS
7	2452	0.033	0.004	0.052	-14.88	-23.49	-12.85	0.089	-10.506	8	PASS

Chain 0 CH1



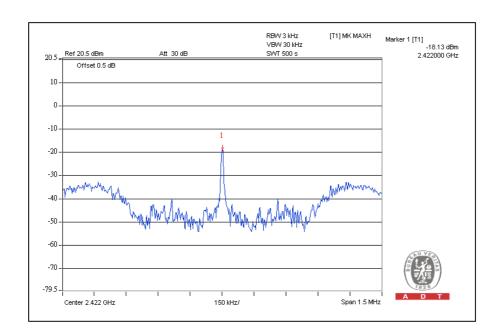


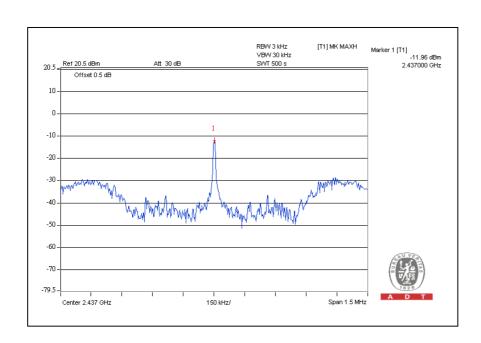




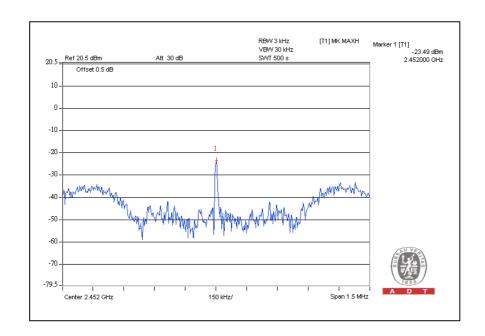


Chain 1 CH1



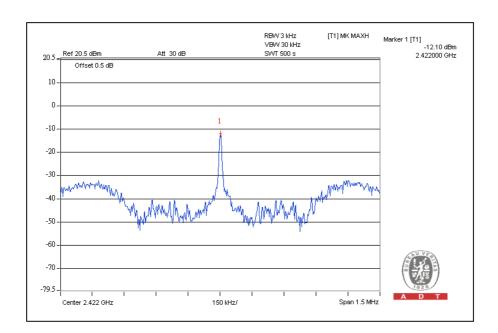


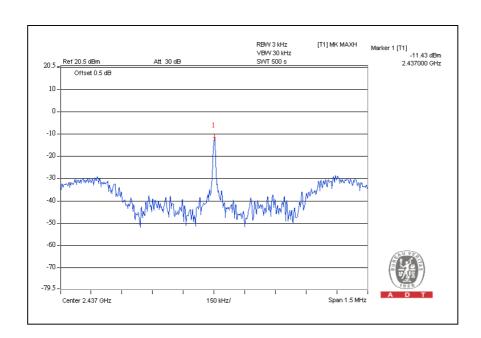




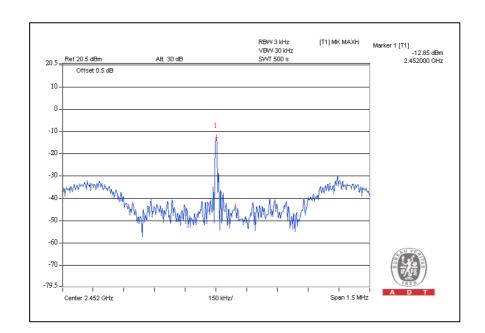


Chain 2 CH1











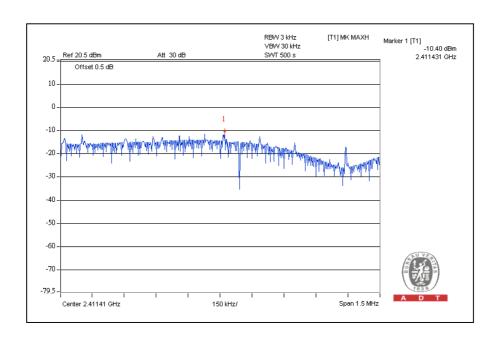
4.5.8 TEST RESULTS - ANTENNA 2

802.11b DSSS MODULATION:

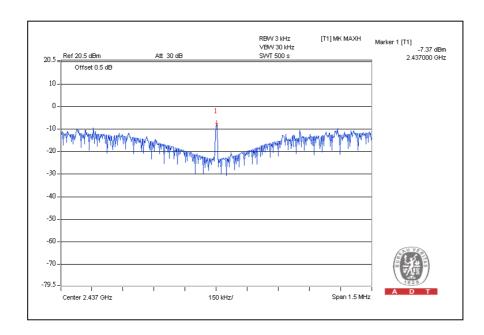
MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

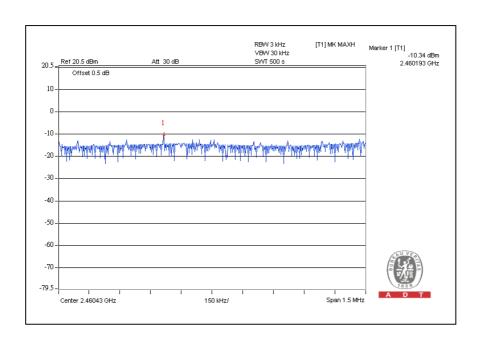
CHANNEL	CHANNEL FREQUENCY	REQUENCY BW (mW)			RF POWER LEVEL IN 3kHz BW (dBm)			TOTAL POWER	TOTAL POWER	MAXIMUM	PASS /
	(MHz)	CHAIN 0	CHAIN 1	CHAIN 2	CHAIN 0	CHAIN 1	CHAIN 2	DENSITY (mW)	(dBm)	LIMIT (dBm)	FAIL
1	2412	0.091	0.084	0.080	-10.40	-10.78	-10.96	0.255	-5.935	8	PASS
6	2437	0.183	0.161	0.254	-7.37	-7.92	-5.95	0.598	-2.233	8	PASS
11	2462	0.092	0.084	0.094	-10.34	-10.77	-10.28	0.270	-5.686	8	PASS

Chain 0 CH1



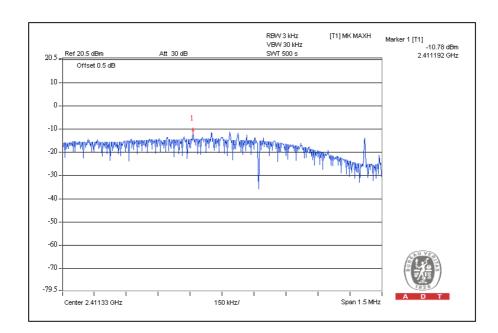


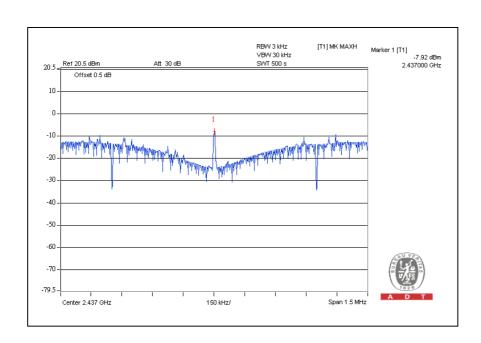




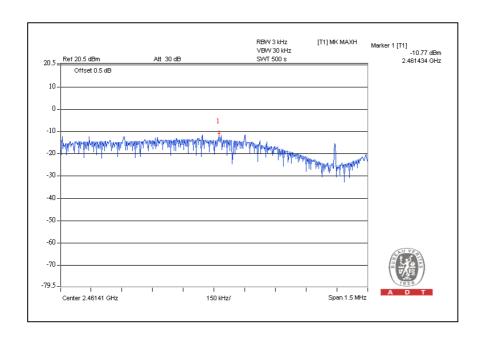


Chain 1 CH1



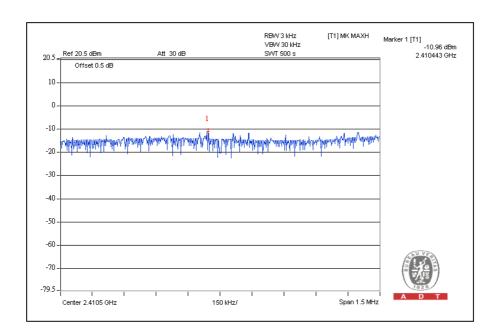




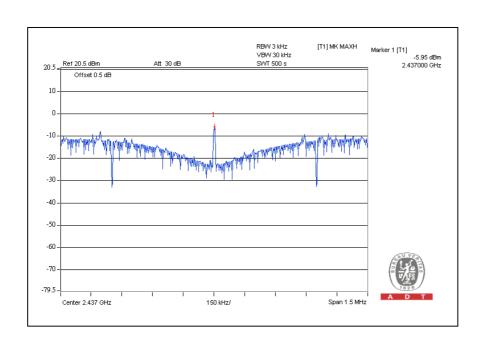




Chain 2 CH1

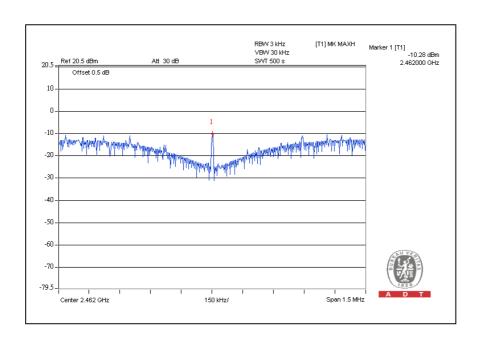


CH6



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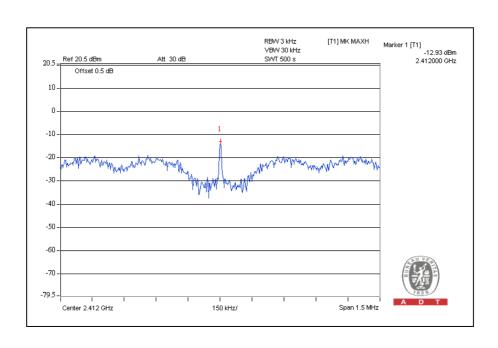


802.11g OFDM MODULATION:

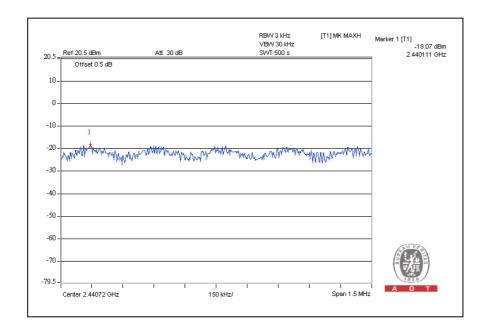
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

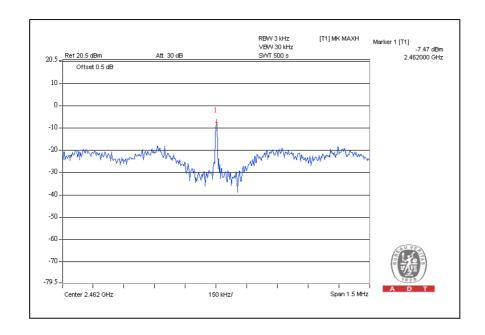
CHANNEL	CHANNEL FREQUENCY	RF POWER LEVEL IN 3kHz BW (mW)			RF POWER LEVEL IN 3kHz BW (dBm)			TOTAL POWER	TOTAL POWER	MAXIMUM	PASS /
	(MHz)	CHAIN 0	CHAIN 1	CHAIN 2	CHAIN 0	CHAIN 1	CHAIN 2	DENSITY (mW)	(dBm)	LIMIT (dBm)	FAIL
1	2412	0.051	0.087	0.233	-12.93	-10.62	-6.32	0.371	-4.306	8	PASS
6	2437	0.016	0.199	0.177	-18.07	-7.01	-7.53	0.392	-4.067	8	PASS
11	2462	0.179	0.086	0.179	-7.47	-10.67	-7.48	0.444	-3.526	8	PASS

Chain 0 CH1



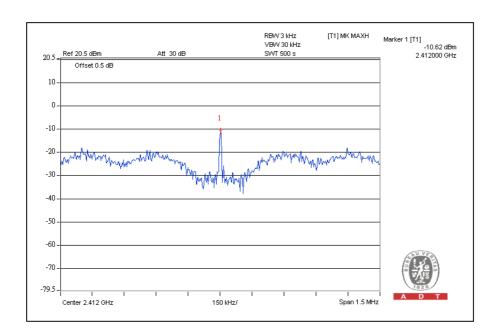


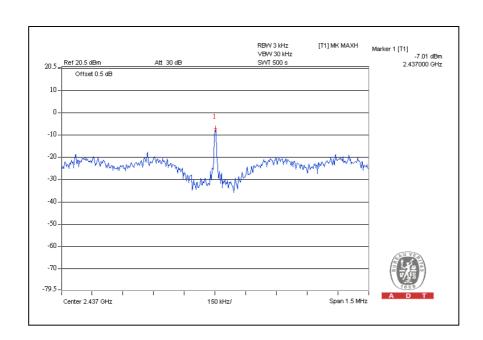




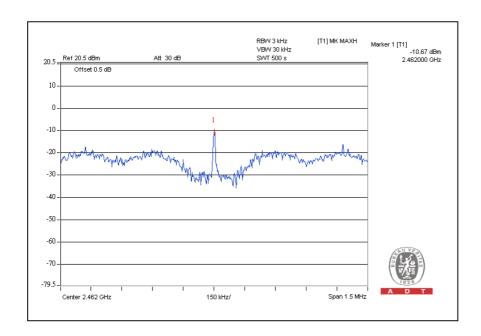


Chain 1 CH1



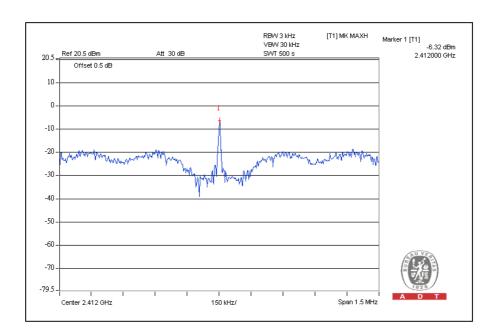


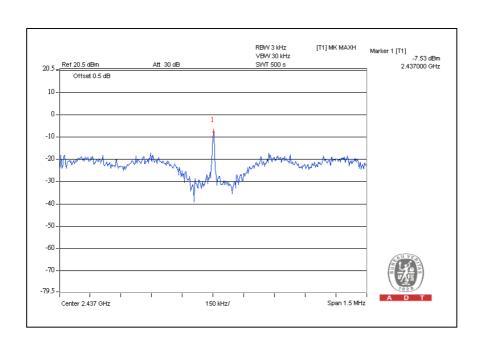




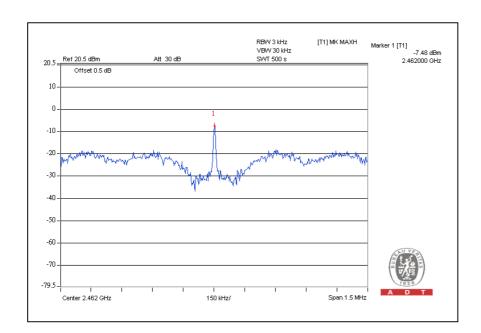


Chain 2 CH1









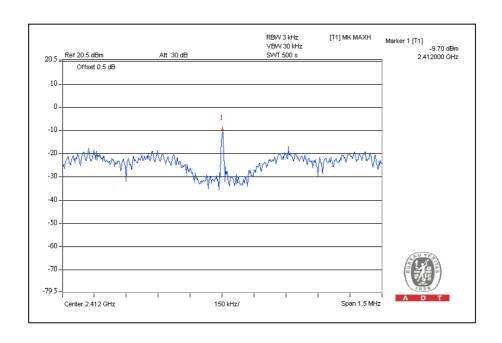


DRAFT 802.11n (20MHz) OFDM MODULATION:

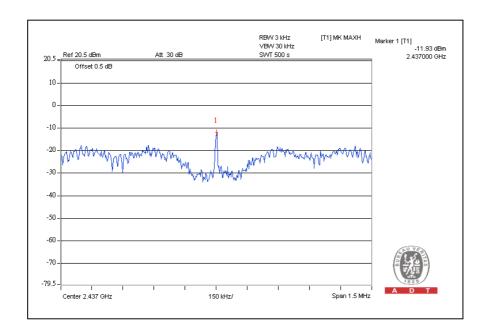
MODULATION TYPE	BPSK	TRANSFER RATE	6.5Mbps
INPUT POWER	1120\/ac_60 Hz	ENVIRONMENTAL CONDITIONS	25 deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

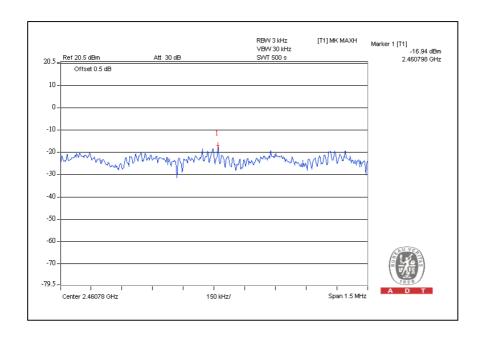
CHANNEL	CHANNEL FREQUENCY		OWER LEVEL IN 3kHz BW (mW)		RF POWER LEVEL IN 3kHz BW (dBm)			TOTAL POWER	TOTAL POWER	MAXIMUM	PASS /
	(MHz)		CHAIN 1	CHAIN 2	CHAIN 0	CHAIN 1	CHAIN 2	DENSITY (mW)	(dBm)	LIMIT (dBm)	FAIL
1	2412	0.107	0.107	0.197	-9.70	-9.71	-7.06	0.411	-3.862	8	PASS
6	2437	0.064	0.194	0.195	-11.93	-7.13	-7.09	0.453	-3.439	8	PASS
11	2462	0.020	0.108	0.109	-16.94	-9.67	-9.61	0.237	-6.253	8	PASS

Chain 0 CH1



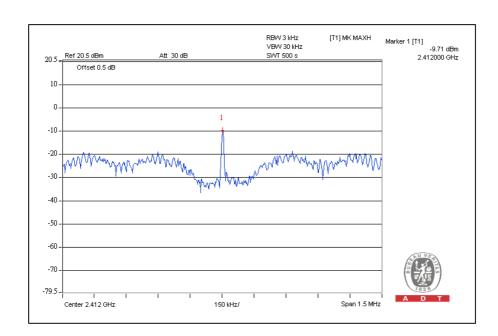


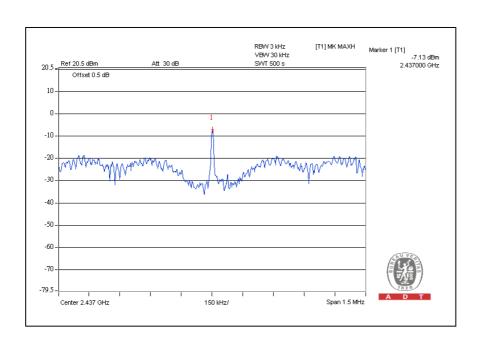




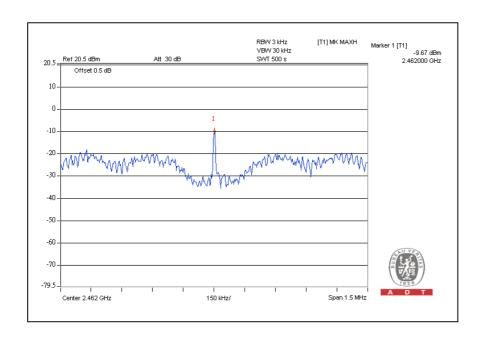


Chain 1 CH1



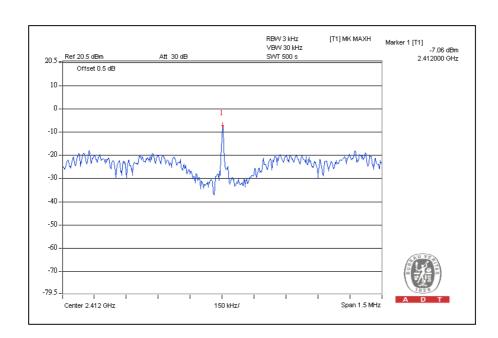


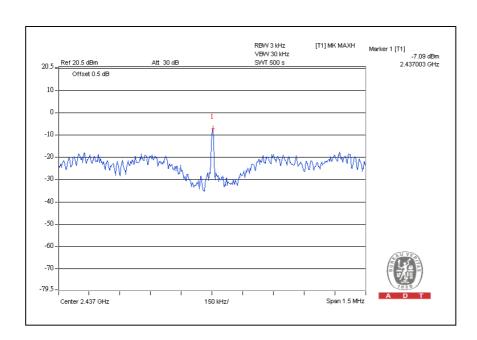




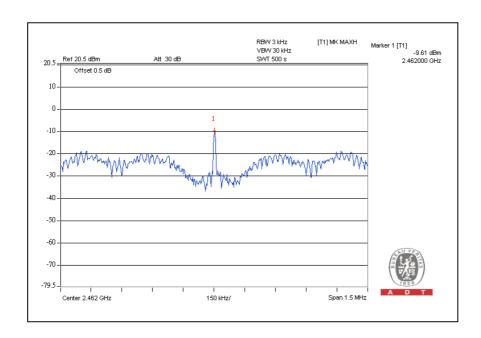


Chain 2 CH1









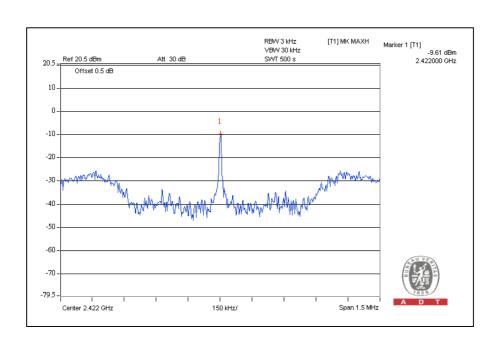


DRAFT 802.11n (40MHz) OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	13.5Mbps
INPUT POWER	1120\/ac 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

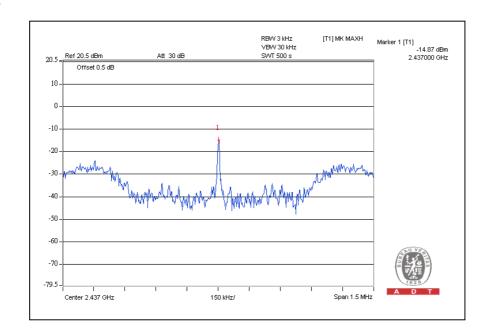
CHANNEL	CHANNEL FREQUENCY	BW (mW) BW (dBm)				-	TOTAL POWER	TOTAL POWER	MAXIMUM	PASS /	
	(MHz)	CHAIN 0	CHAIN 1	CHAIN 2	CHAIN 0	CHAIN 1	CHAIN 2	DENSITY (mW)	(dBm)	LIMIT (dBm)	FAIL
1	2422	0.109	0.020	0.029	-9.61	-17.01	-15.33	0.158	-8.013	8	PASS
4	2437	0.033	0.007	0.146	-14.87	-21.67	-8.36	0.186	-7.305	8	PASS
7	2452	0.015	0.007	0.104	-18.24	-21.34	-9.81	0.126	-8.996	8	PASS

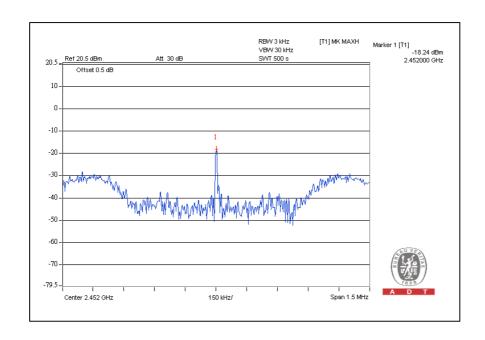
Chain 0 CH1



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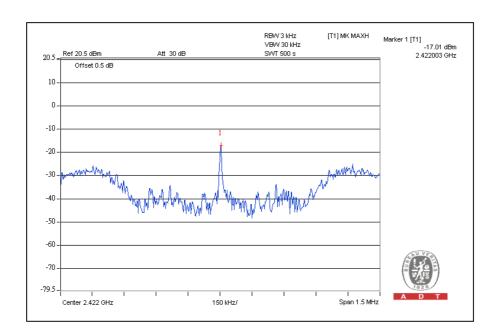


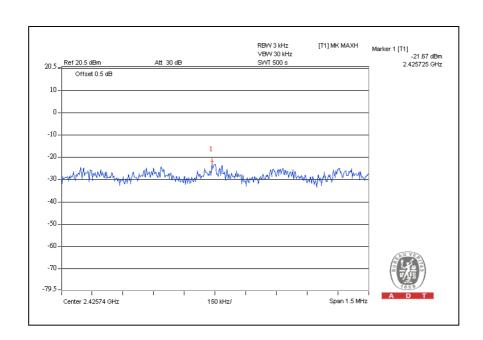




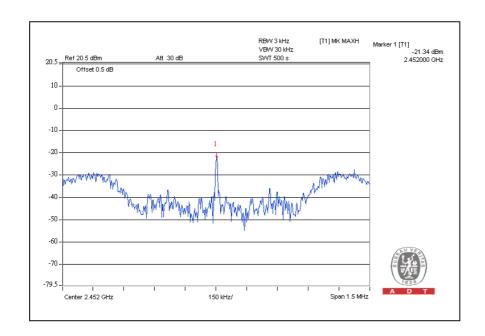


Chain 1 CH1



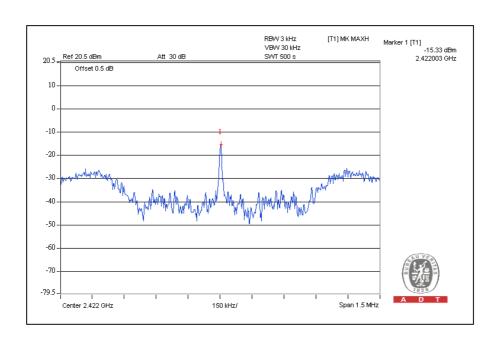


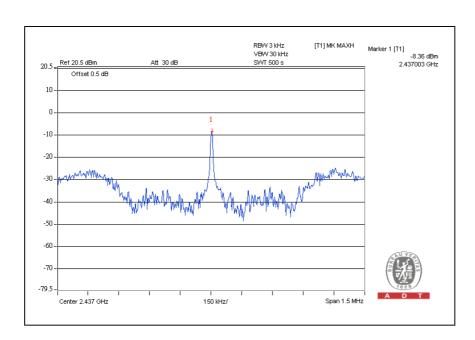




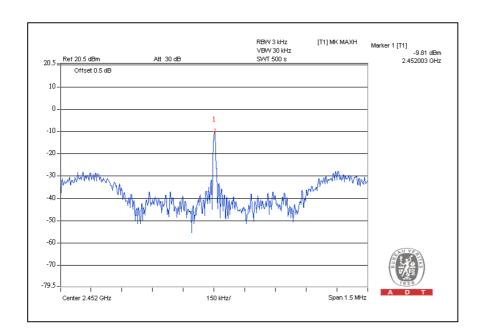


Chain 2 CH1











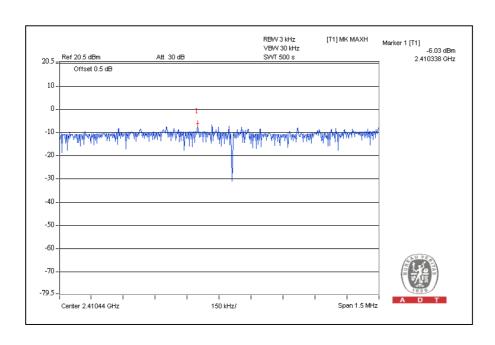
4.5.9 TEST RESULTS - ANTENNA 4

802.11b DSSS MODULATION:

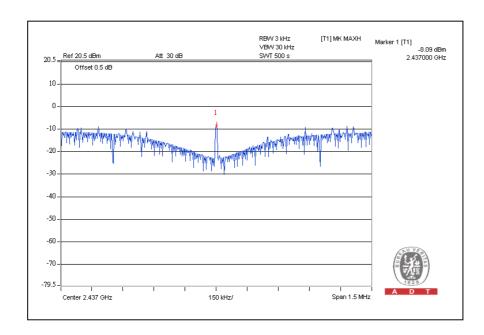
MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

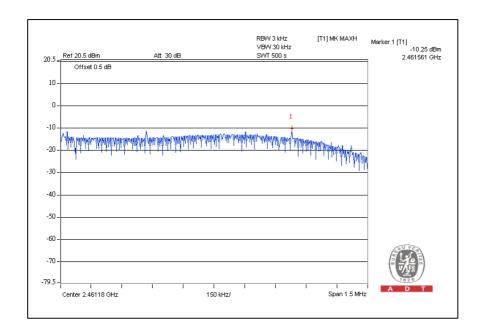
CHANNEL	CHANNEL FREQUENCY	BW (mW)			RF POWER LEVEL IN 3kHz BW (dBm)			TOTAL POWER	TOTAL POWER	MAXIMUM	PASS /
	(MHz)	CHAIN 0	CHAIN 1	CHAIN 2	CHAIN 0	CHAIN 1	CHAIN 2	DENSITY (mW)	(dBm)	LIMIT (dBm)	FAIL
1	2412	0.249	0.260	0.246	-6.03	-5.85	-6.09	0.755	-1.221	8	PASS
6	2437	0.155	0.163	0.190	-8.09	-7.87	-7.21	0.508	-2.941	8	PASS
11	2462	0.094	0.087	0.107	-10.25	-10.61	-9.72	0.288	-5.406	8	PASS

Chain 0 CH1



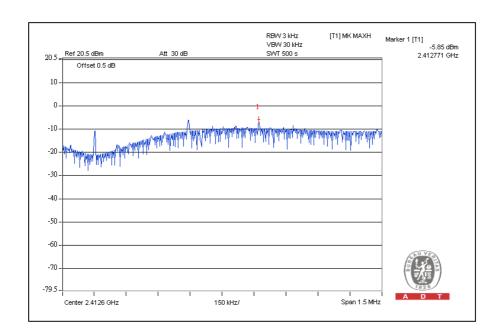


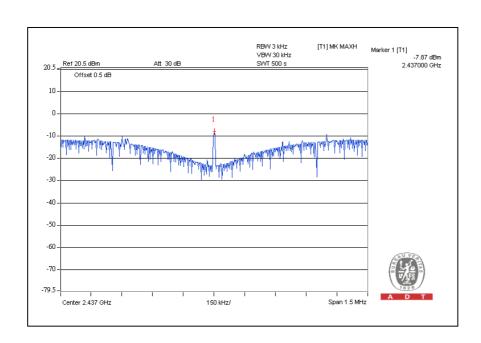




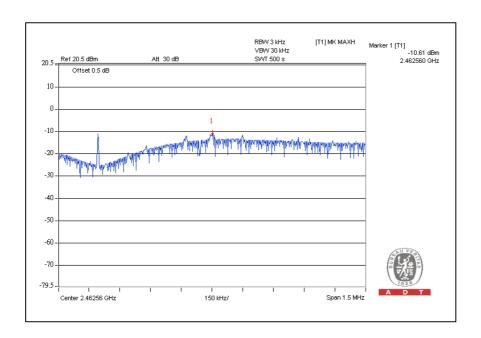


Chain 1 CH1



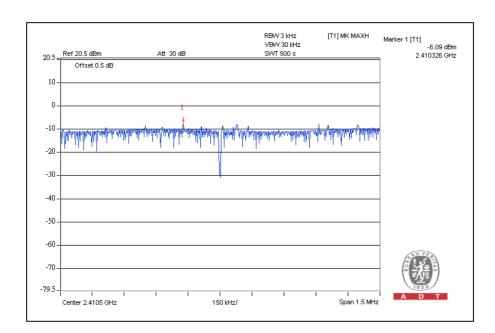


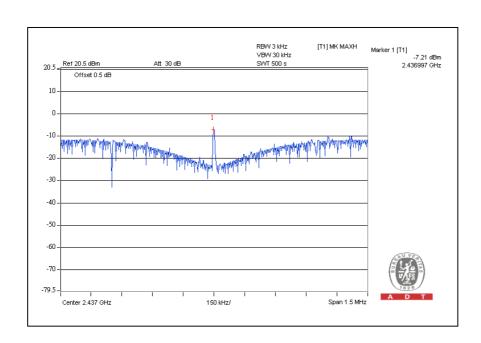




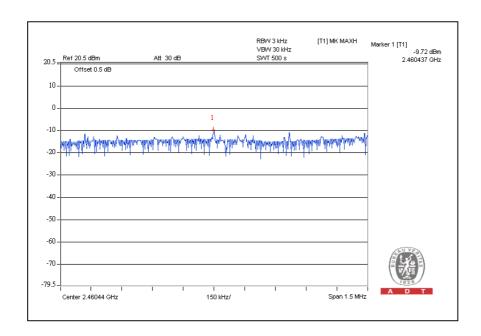


Chain 2 CH1











802.11g OFDM MODULATION:

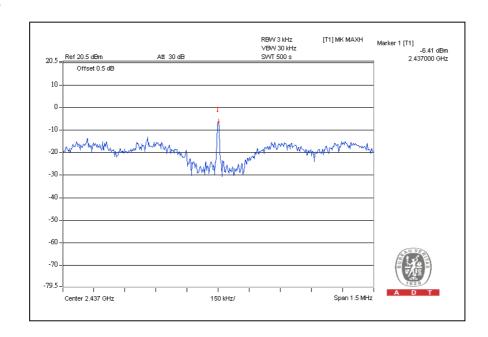
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER	120\/ac 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

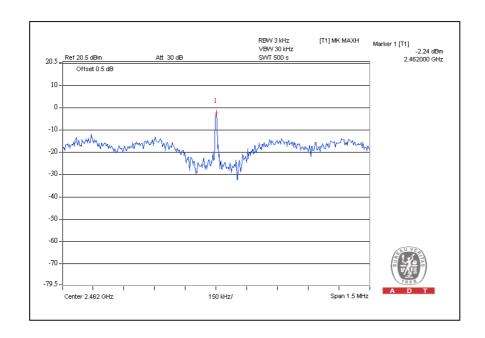
CHANNEL	CHANNEL BW (mW) RF POWER LEVEL IN 3kHz BW (dBm)				-	TOTAL POWER DENSITY	TOTAL POWER DENSITY	MAXIMUM	PASS /		
	(MHz)		CHAIN 1	CHAIN 2	CHAIN 0	CHAIN 1	CHAIN 2	(mW)	(dBm)	LIMIT (dBm)	FAIL
1	2412	0.565	0.839	0.352	-2.48	-0.76	-4.54	1.756	2.445	8	PASS
6	2437	0.229	0.288	0.158	-6.41	-5.41	-8.00	0.675	-1.707	8	PASS
11	2462	0.597	0.201	0.215	-2.24	-6.96	-6.67	1.013	0.056	8	PASS

Chain 0 CH1



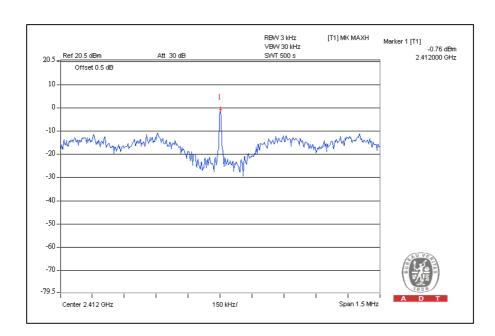


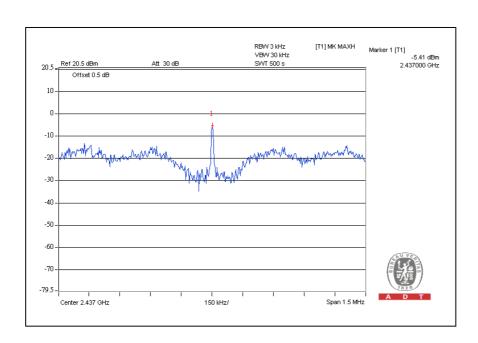






Chain 1 CH1



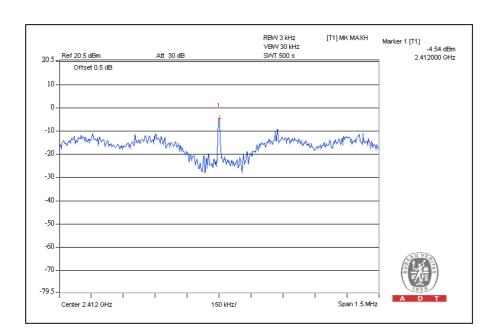


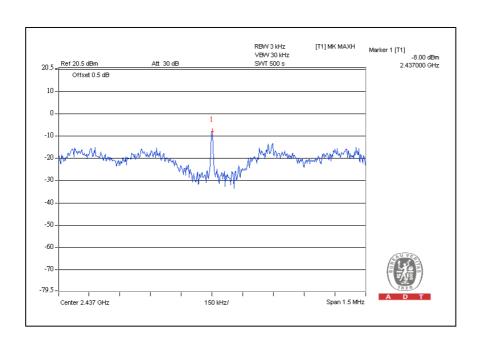




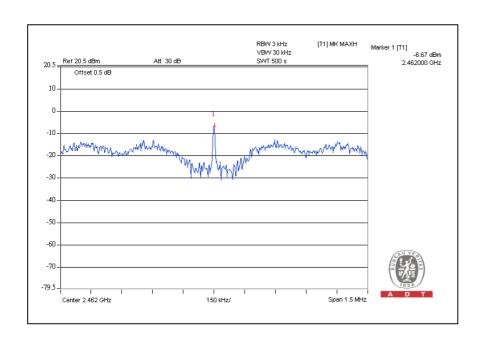


Chain 2 CH1









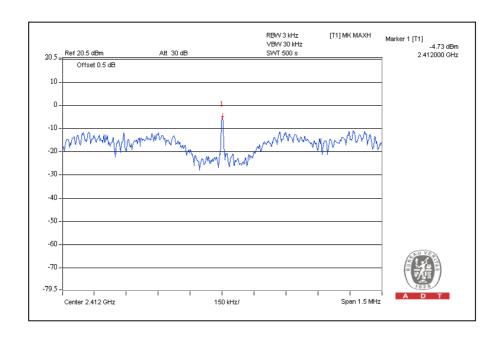


DRAFT 802.11n (20MHz) OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	6.5Mbps
INPUT POWER	1120\/ac_60 Hz	ENVIRONMENTAL CONDITIONS	25 deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

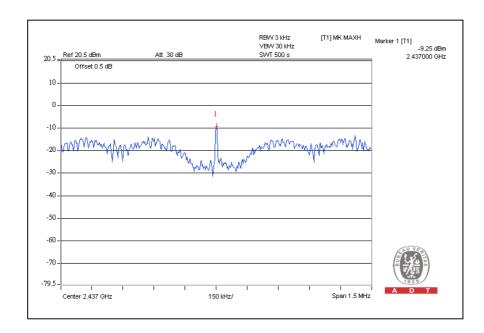
С	HANNEL	CHANNEL FREQUENCY		ER LEVEL BW (mW)	. IN 3kHz		ER LEVEL BW (dBm)		TOTAL POWER	TOTAL POWER	MAXIMUM	PASS/
		(MHz)			CHAIN 2	CHAIN 0	CHAIN 1	CHAIN 2	DENSITY (mW)	(dBm)	LIMIT (dBm)	FAIL
	1	2412	0.337	0.339	0.357	-4.73	-4.70	-4.47	1.033	0.141	8	PASS
	6	2437	0.119	0.279	0.288	-9.25	-5.55	-5.41	0.686	-1.637	8	PASS
	11	2462	0.245	0.378	0.470	-6.11	-4.22	-3.28	1.093	0.386	8	PASS

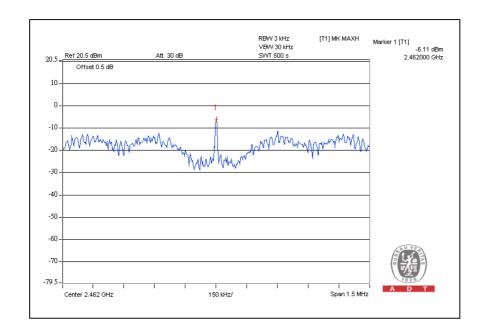
Chain 0 CH1



308

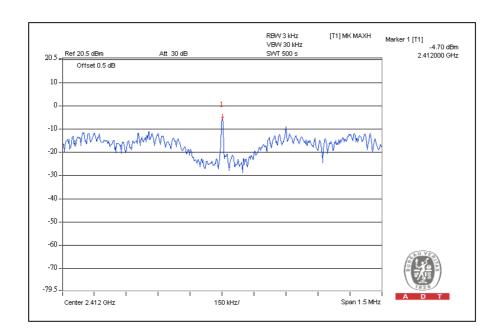


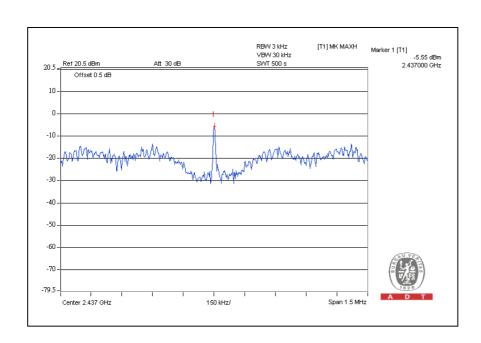




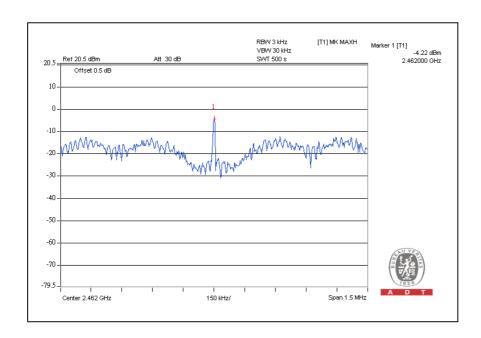


Chain 1 CH1



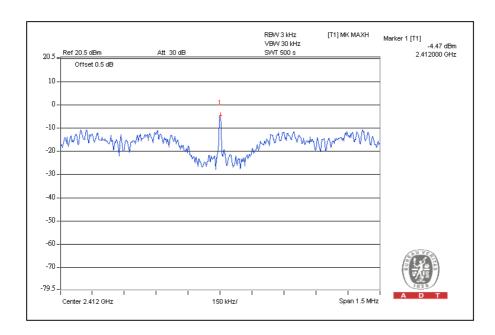




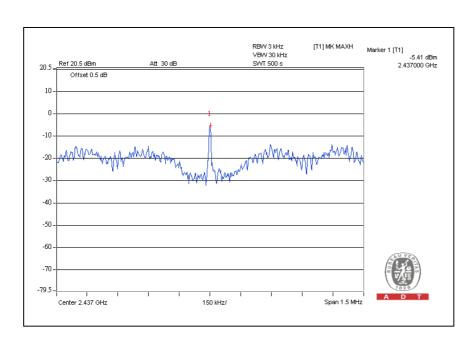




Chain 2 CH1

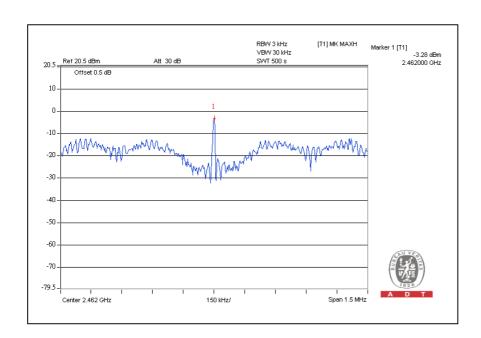


CH6



312





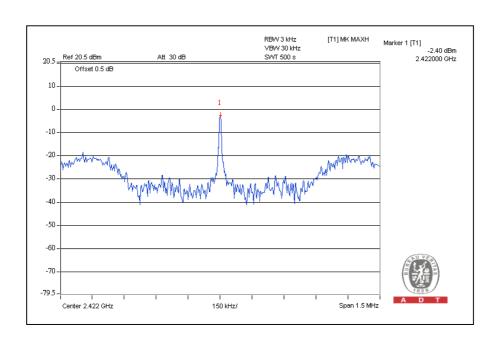


DRAFT 802.11n (40MHz) OFDM MODULATION:

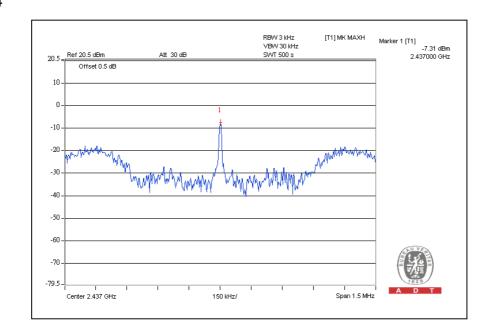
MODULATION TYPE	BPSK	TRANSFER RATE	13.5Mbps
INPUT POWER	1120\/ac 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

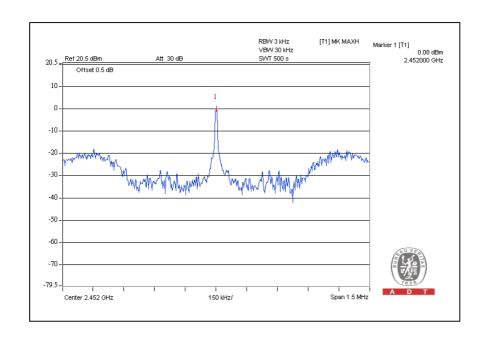
CHANNEL	CHANNEL FREQUENCY	BW (mW)		-	_	/ER LEVEL BW (dBm)	-	TOTAL POWER	TOTAL POWER DENSITY	MAXIMUM	PASS /
	(MHz)	CHAIN 0	CHAIN 1	CHAIN 2	CHAIN 0	CHAIN 1	CHAIN 2	DENSITY (mW)	(dBm)	LIMIT (dBm)	FAIL
1	2422	0.575	0.202	0.145	-2.40	-6.94	-8.38	0.922	-0.353	8	PASS
4	2437	0.186	0.037	0.115	-7.31	-14.35	-9.40	0.338	-4.711	8	PASS
7	2452	1.019	0.035	0.023	0.08	-14.57	-16.32	1.077	0.322	8	PASS

Chain 0 CH1



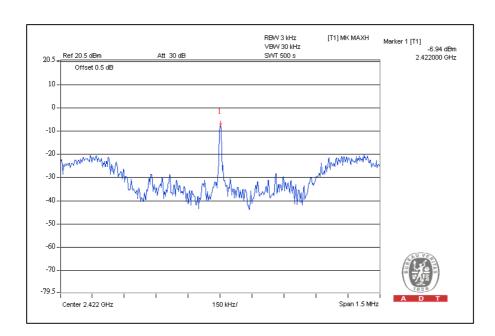


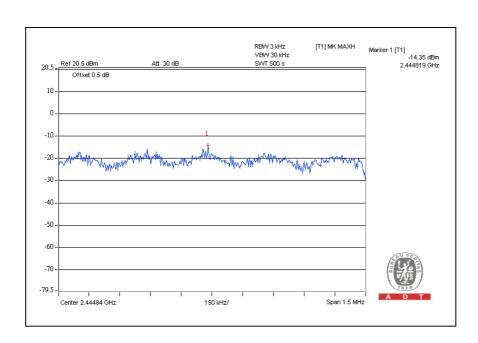




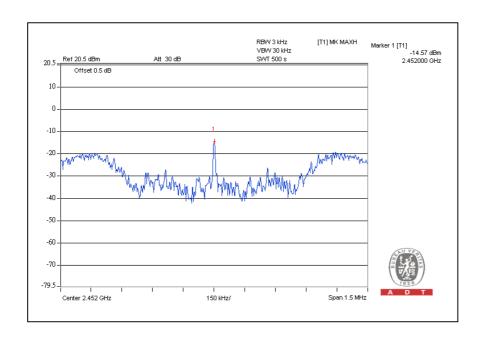


Chain 1 CH1



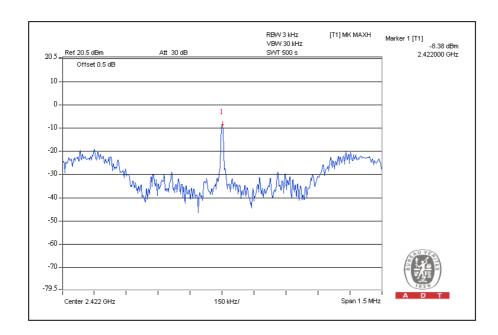


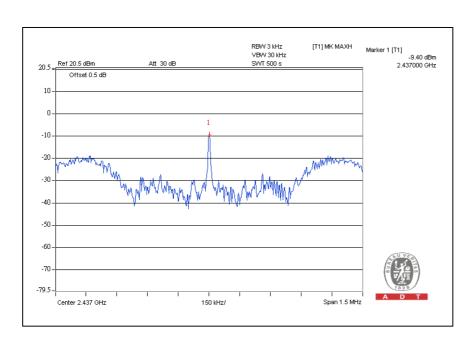




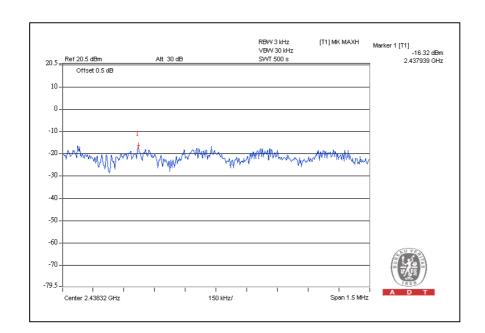


Chain 2 CH1











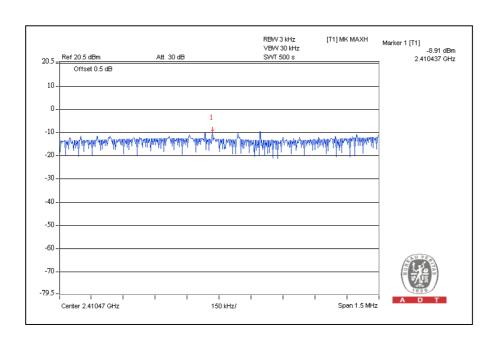
4.5.10 TEST RESULTS - ANTENNA 6

802.11b DSSS MODULATION:

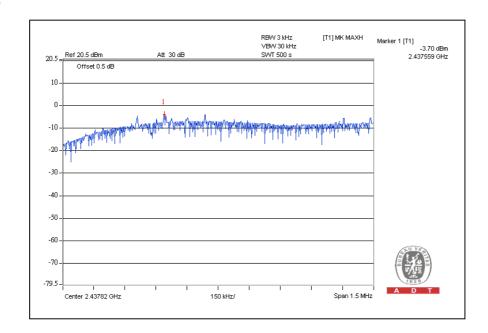
MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

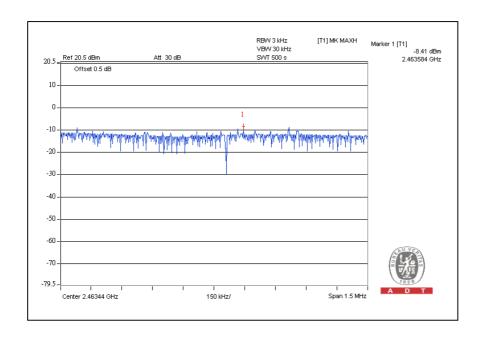
CHANNEL	CHANNEL RF POWER LE FREQUENCY BW (m		ER LEVEL BW (mW)			F POWER LEVEL IN 3kHz BW (dBm)		TOTAL POWER	TOTAL POWER DENSITY	MAXIMUM LIMIT (dBm)	PASS/
	(MHz)	CHAIN 0	CHAIN 1	CHAIN 2	CHAIN 0	CHAIN 1	CHAIN 2	DENSITY (mW)	(dBm)	LIMII (abm)	FAIL
1	2412	0.129	0.075	0.141	-8.91	-11.26	-8.52	0.345	-4.622	8	PASS
6	2437	0.427	0.324	1.054	-3.70	-4.89	0.23	1.805	2.565	8	PASS
11	2462	0.144	0.146	0.209	-8.41	-8.35	-6.79	0.499	-3.019	8	PASS

Chain 0 CH1



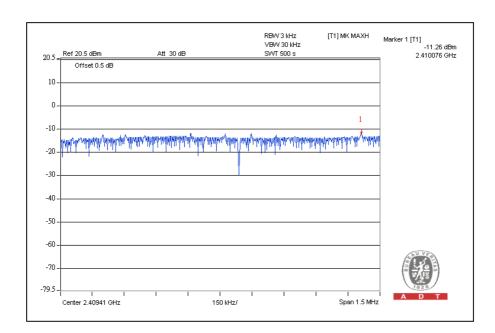


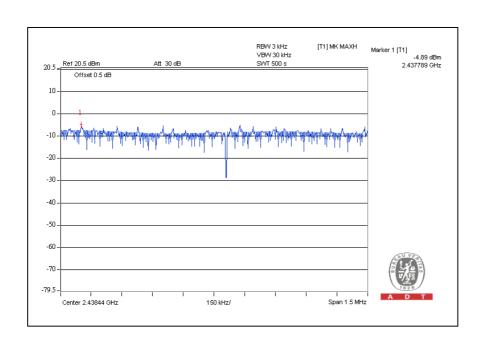




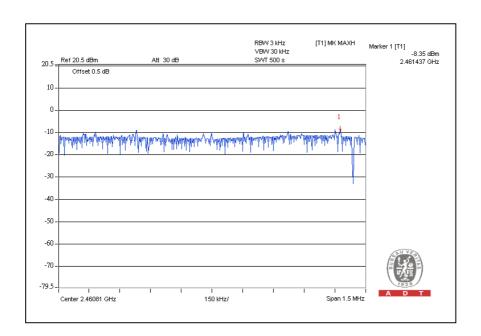


Chain 1 CH1



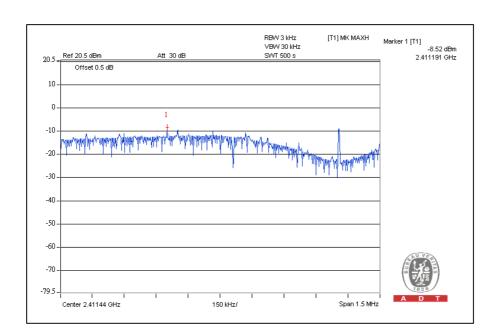


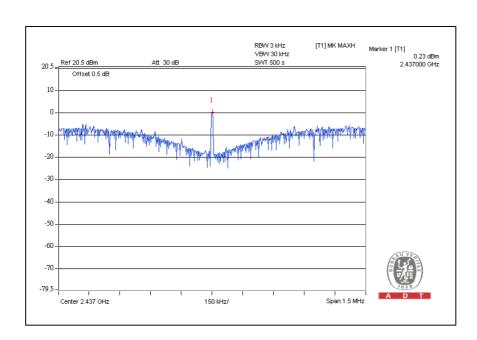




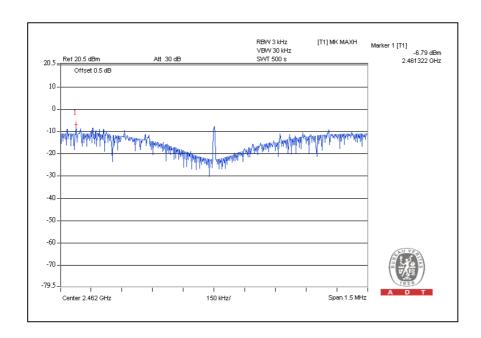


Chain 2 CH1











802.11g OFDM MODULATION:

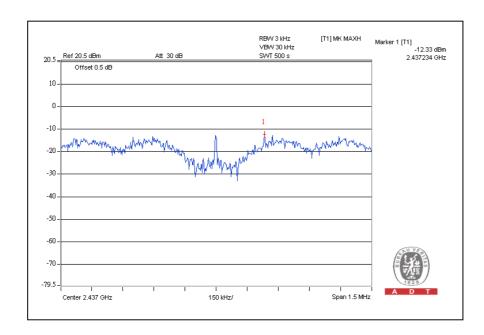
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

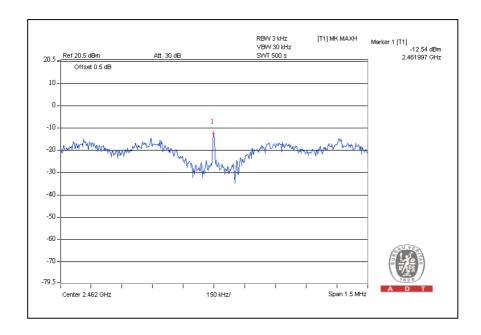
CHANNEL	CHANNEL FREQUENCY	BW (m)				RF POWER LEVEL IN 3kHz BW (dBm)		TOTAL POWER	TOTAL POWER DENSITY	MAXIMUM LIMIT (dBm)	PASS /
	(MHz)	CHAIN 0	CHAIN 1	CHAIN 2	CHAIN 0	CHAIN 1	CHAIN 2	DENSITY (mW)	(dBm)	LIWIT (GBM)	FAIL
1	2412	0.184	0.116	0.400	-7.35	-9.36	-3.98	0.700	-1.549	8	PASS
6	2437	0.058	0.166	1.009	-12.33	-7.80	0.04	1.233	0.910	8	PASS
11	2462	0.056	0.096	0.444	-12.54	-10.18	-3.53	0.596	-2.248	8	PASS

Chain 0 CH1



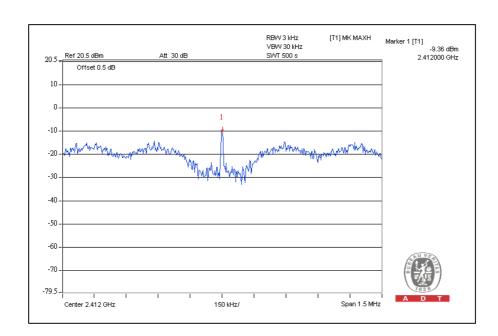


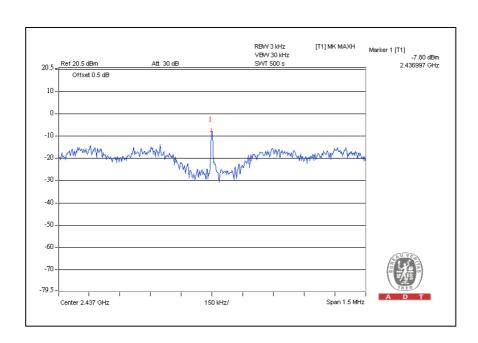




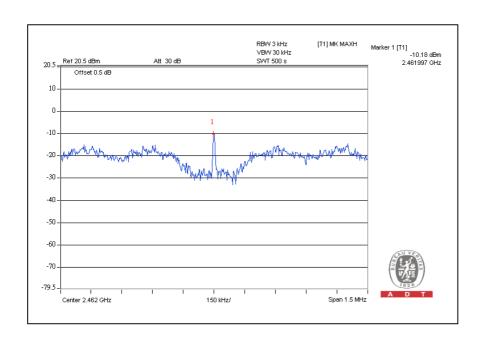


Chain 1 CH1



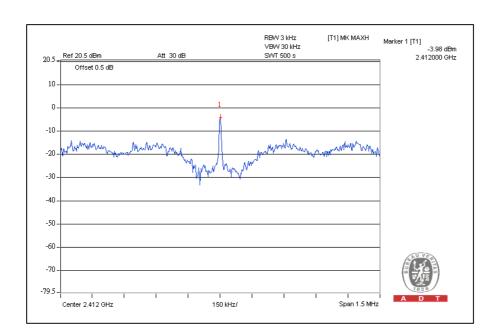




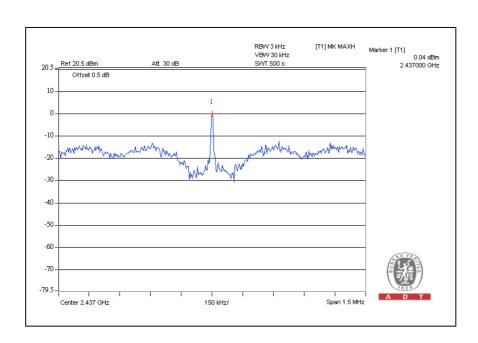




Chain 2 CH1

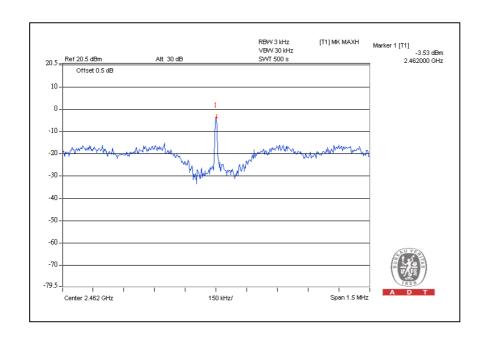


CH6



330





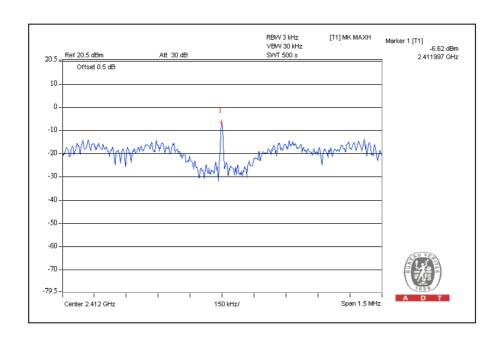


DRAFT 802.11n (20MHz) OFDM MODULATION:

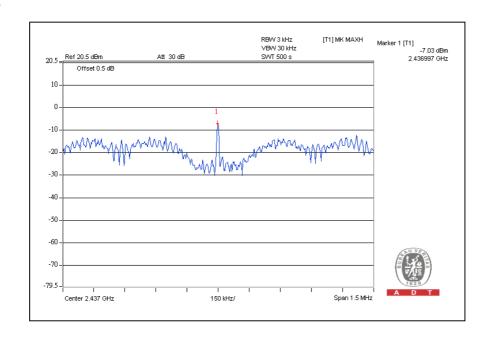
MODULATION TYPE	BPSK	TRANSFER RATE	6.5Mbps
INPUT POWER	1120\/ac_60 Hz	ENVIRONMENTAL CONDITIONS	25 deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

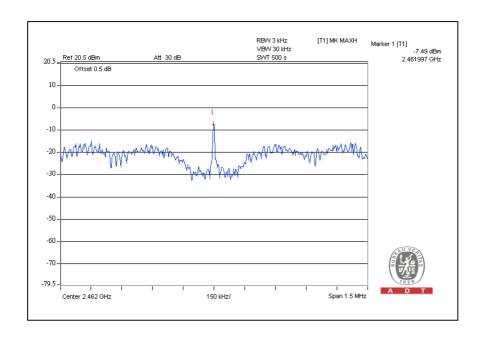
(CHANNEL	CHANNEL FREQUENCY		ER LEVEL BW (mW)	. IN 3kHz		ER LEVEL BW (dBm)		TOTAL POWER	TOTAL POWER	MAXIMUM	PASS /
		(MHz)			CHAIN 2	CHAIN 0	CHAIN 1	CHAIN 2	DENSITY (mW)	(dBm)	LIMIT (dBm)	FAIL
	1	2412	0.218	0.164	0.358	-6.62	-7.84	-4.46	0.740	-1.308	8	PASS
	6	2437	0.198	0.199	0.479	-7.03	-7.02	-3.20	0.876	-0.575	8	PASS
	11	2462	0.178	0.106	0.327	-7.49	-9.76	-4.86	0.611	-2.140	8	PASS

Chain 0 CH1



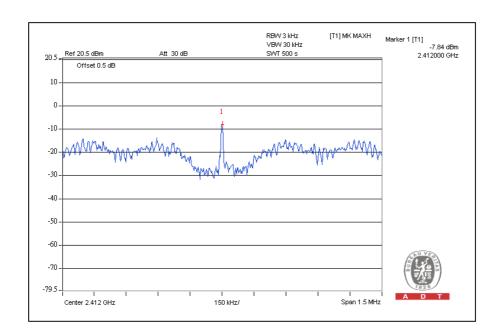


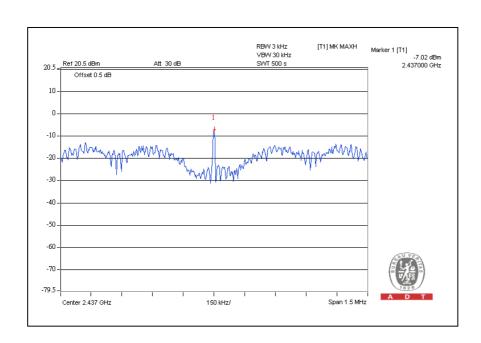




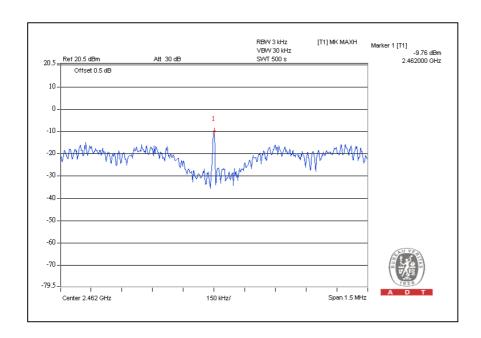


Chain 1 CH1



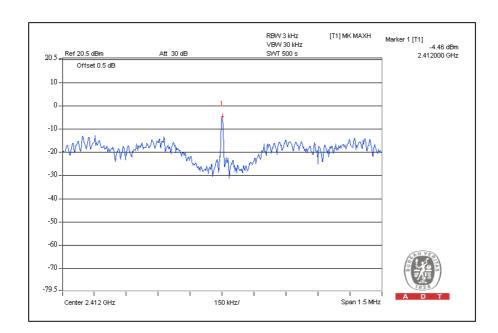


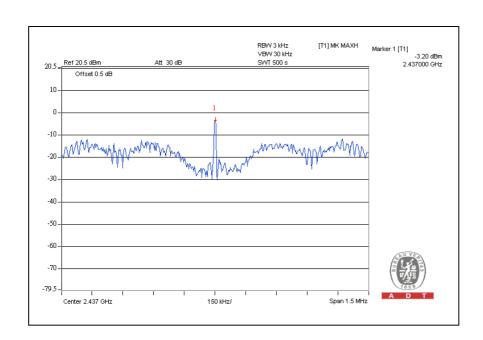




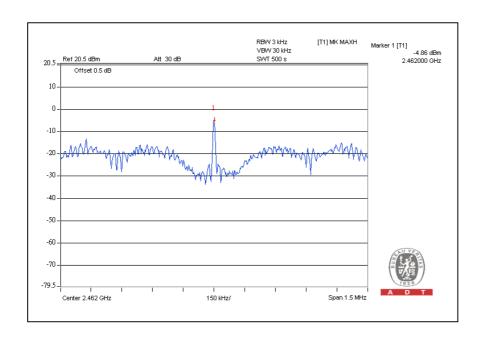


Chain 2 CH1









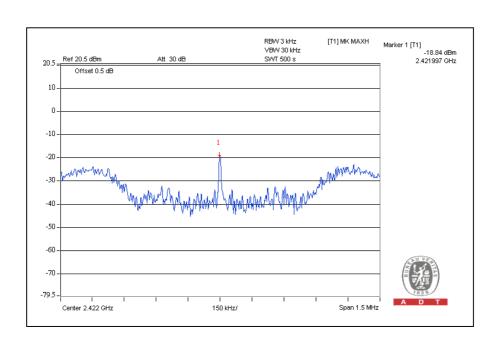


DRAFT 802.11n (40MHz) OFDM MODULATION:

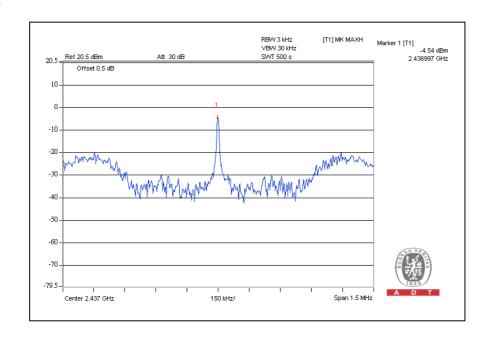
MODULATION TYPE	BPSK	TRANSFER RATE	13.5Mbps
INPUT POWER	1120\/ac 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

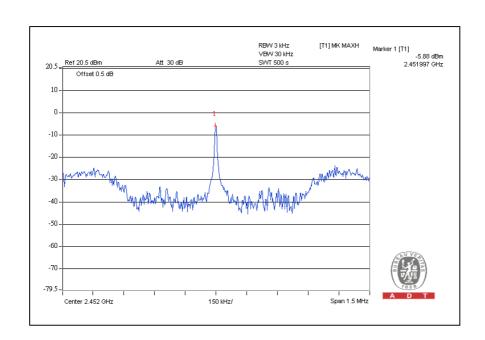
CHANNEL	CHANNEL FREQUENCY	RF POWER LEVEL IN 3kHz BW (mW)			NEL BW (mW) BW (dBm)		_		TOTAL POWER	MAXIMUM	PASS /
	(MHz)	CHAIN 0	CHAIN 1	CHAIN 2	CHAIN 0	CHAIN 1	CHAIN 2	(mW)	DENSITY (dBm)	LIMIT (dBm)	FAIL
1	2422	0.013	0.005	0.109	-18.84	-22.65	-9.62	0.127	-8.962	8	PASS
4	2437	0.352	0.229	0.108	-4.54	-6.41	-9.65	0.689	-1.618	8	PASS
7	2452	0.258	0.006	0.094	-5.88	-22.04	-10.26	0.358	-4.461	8	PASS

Chain 0 CH1



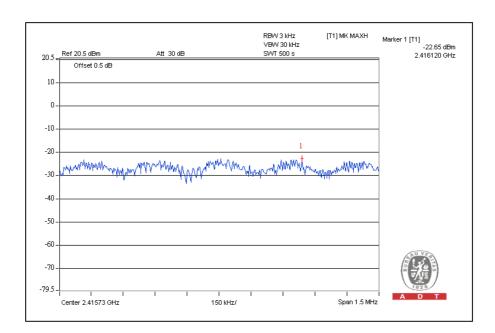


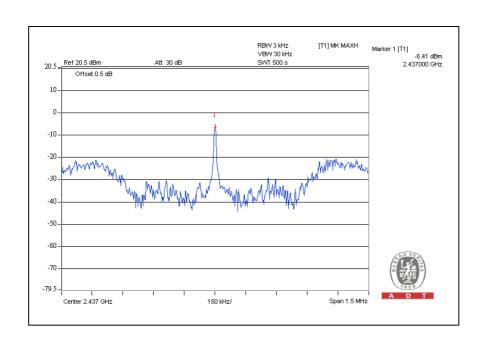




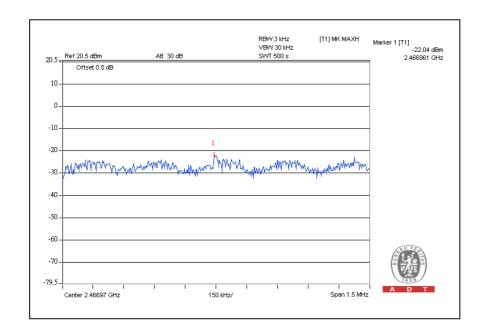


Chain 1 CH1



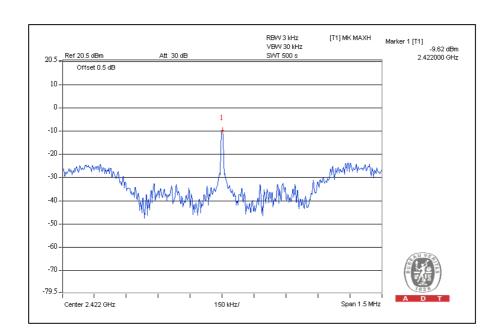


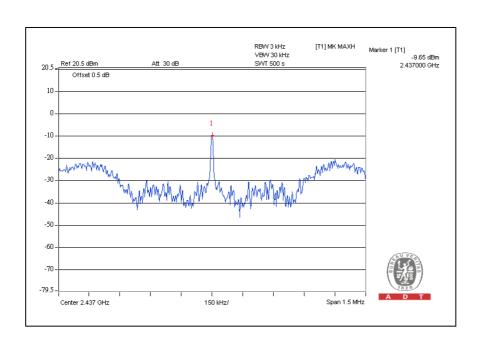




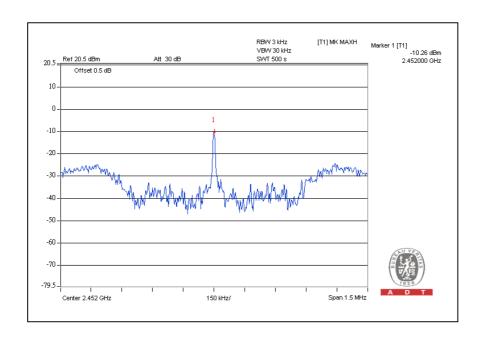


Chain 2 CH1











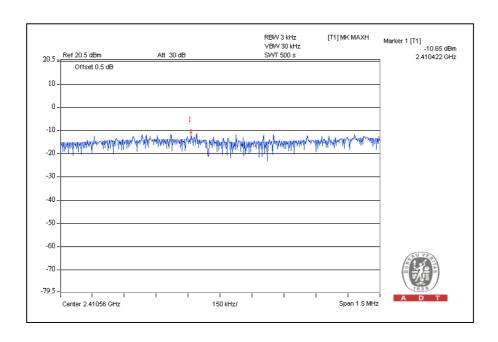
4.5.11 TEST RESULTS - ANTENNA 8

802.11b DSSS MODULATION:

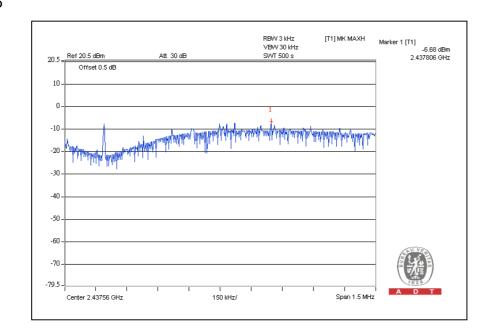
MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

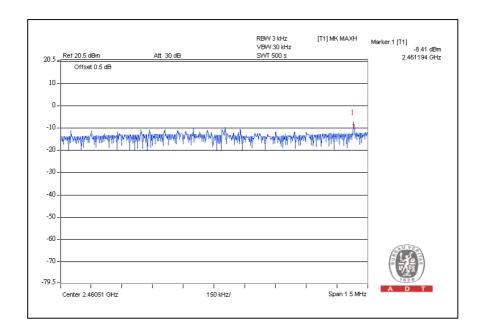
CHANNEL	CHANNEL FREQUENCY	BW (mW) BW (dBm)						TOTAL POWER DENSITY	TOTAL POWER	MAXIMUM	PASS /
	(MHz)	CHAIN 0	CHAIN 1	CHAIN 2	CHAIN 0	CHAIN 1	CHAIN 2	DENSITY (mW)	(dBm)	LIMIT (dBm)	FAIL
1	2412	0.086	0.123	0.077	-10.65	-9.11	-11.13	0.286	-5.436	8	PASS
6	2437	0.215	0.215	0.227	-6.68	-6.68	-6.44	0.657	-1.824	8	PASS
11	2462	0.144	0.152	0.148	-8.41	-8.18	-8.29	0.444	-3.526	8	PASS

Chain 0 CH1



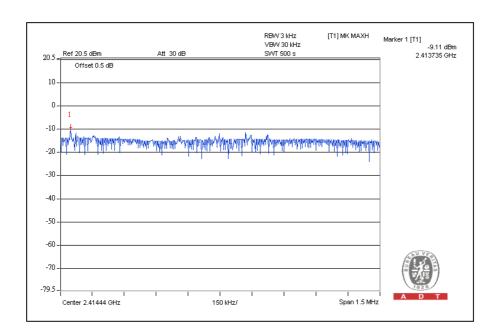


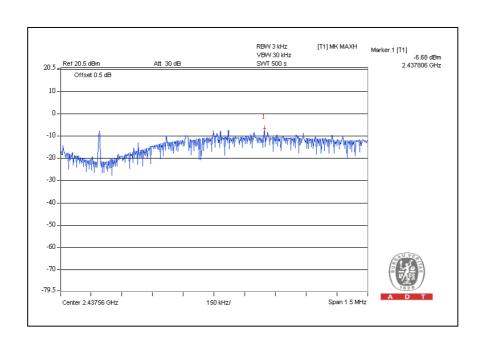




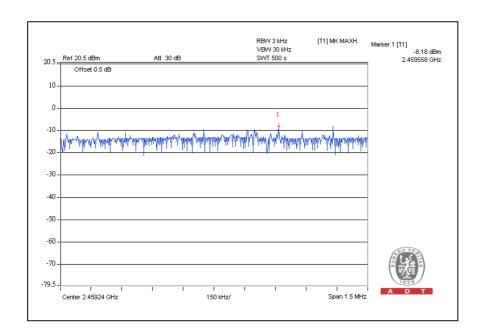


Chain 1 CH1



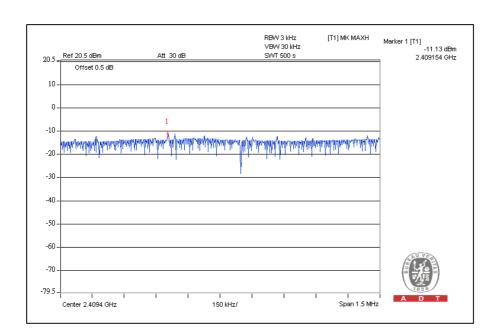


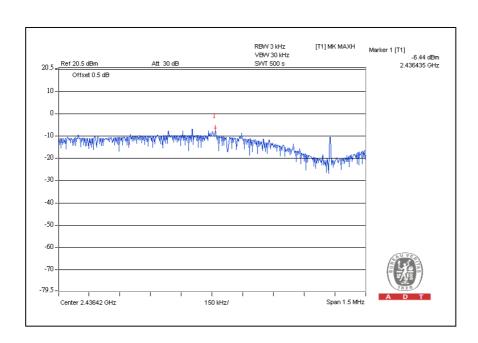




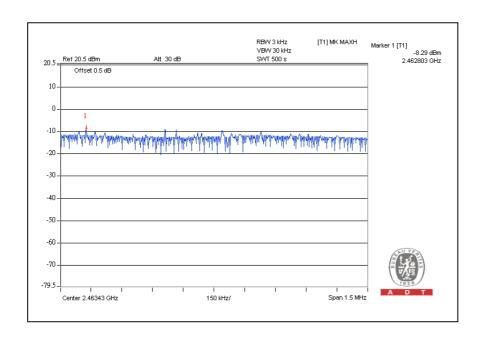


Chain 2 CH1











802.11g OFDM MODULATION:

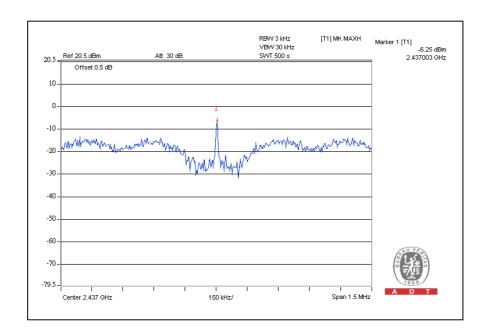
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER	120\/ac 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

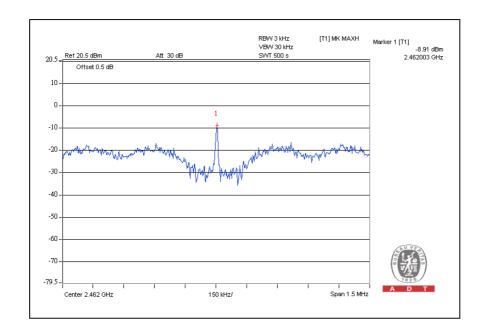
CHANNEL	CHANNEL FREQUENCY	RF POWER LEVEL IN 3kHz BW (mW)			NNEL BW (mW) BW (dBm)		TOTAL POWER DENSITY	TOTAL POWER	MAXIMUM	PASS /	
	(MHz)	CHAIN 0	CHAIN 1	CHAIN 2	CHAIN 0	CHAIN 1	CHAIN 2	(mW)	(dBm)	LIMIT (dBm)	FAIL
1	2412	0.262	0.107	0.286	-5.82	-9.71	-5.43	0.655	-1.838	8	PASS
6	2437	0.237	0.187	0.223	-6.25	-7.28	-6.52	0.647	-1.891	8	PASS
11	2462	0.129	0.150	0.051	-8.91	-8.24	-12.90	0.330	-4.815	8	PASS

Chain 0 CH1



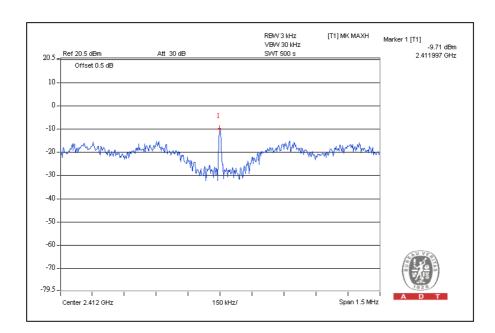


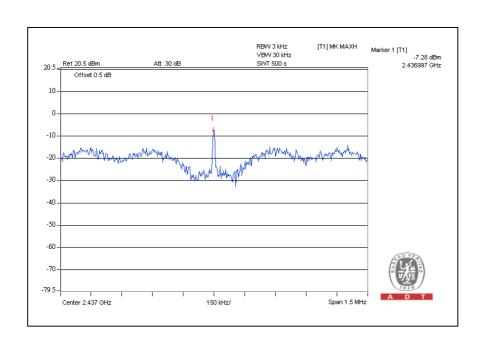




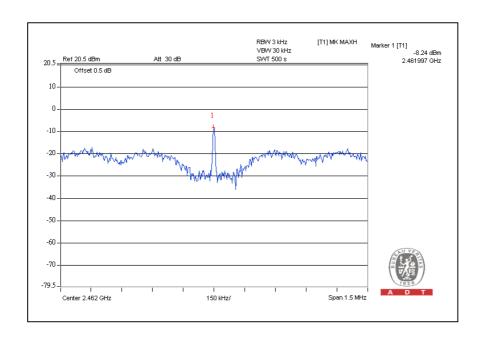


Chain 1 CH1



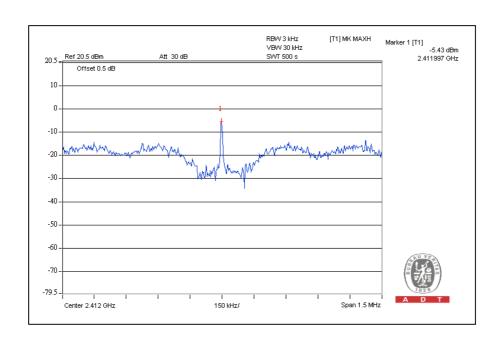


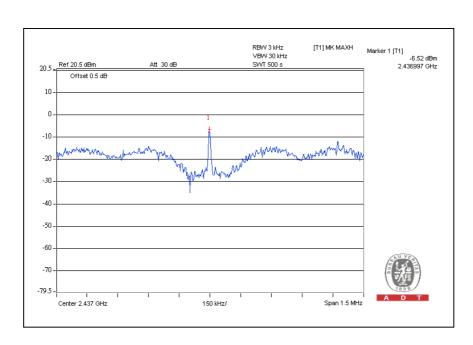




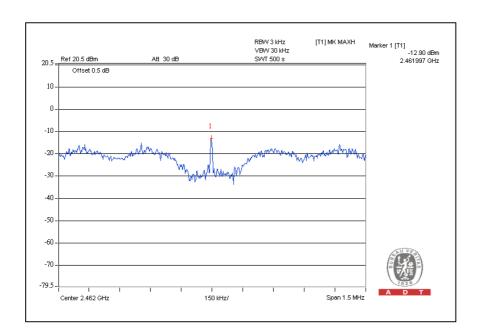


Chain 2 CH1









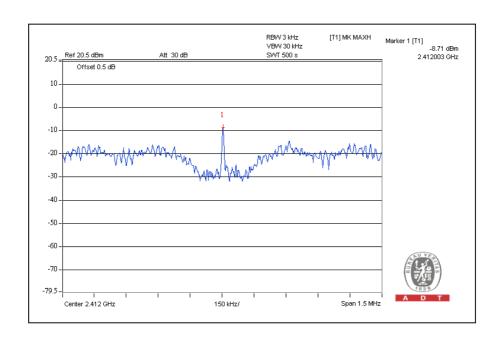


DRAFT 802.11n (20MHz) OFDM MODULATION:

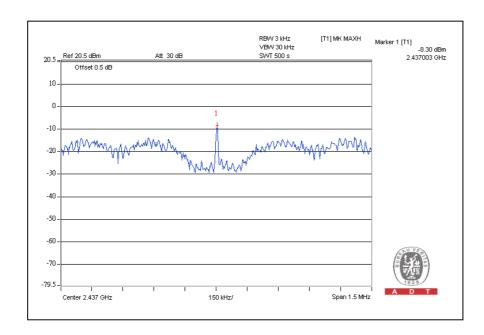
MODULATION TYPE	BPSK	TRANSFER RATE	6.5Mbps
INPUT POWER	1701/ac 60 Hz	ENVIRONMENTAL CONDITIONS	25 deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

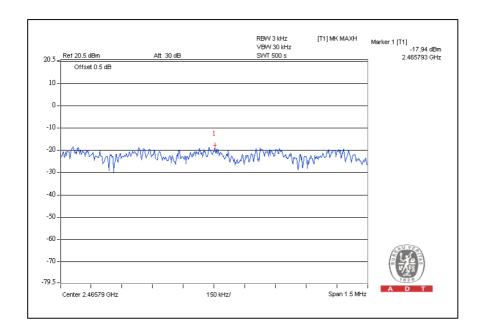
CHANNEL	CHANNEL FREQUENCY	RF POWER LEVEL IN 3kHz BW (mW)			BW (mW) BW (dBm)				TOTAL POWER	TOTAL POWER	MAXIMUM	PASS /
	(MHz)	CHAIN 0	CHAIN 1	CHAIN 2	CHAIN 0	CHAIN 1	CHAIN 2	(mW)	(dBm)	LIMIT (dBm)	FAIL	
1	2412	0.135	0.124	0.169	-8.71	-9.06	-7.71	0.428	-3.686	8	PASS	
6	2437	0.157	0.097	0.389	-8.03	-10.15	-4.10	0.643	-1.918	8	PASS	
11	2462	0.016	0.047	0.072	-17.94	-13.27	-11.42	0.135	-8.697	8	PASS	

Chain 0 CH1



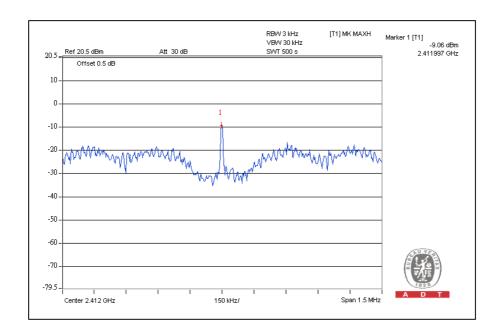


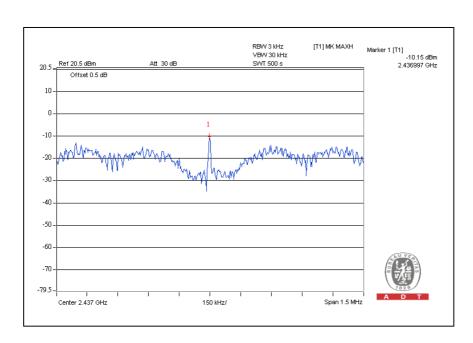




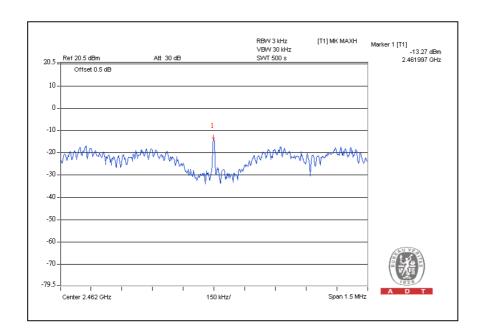


Chain 1 CH1



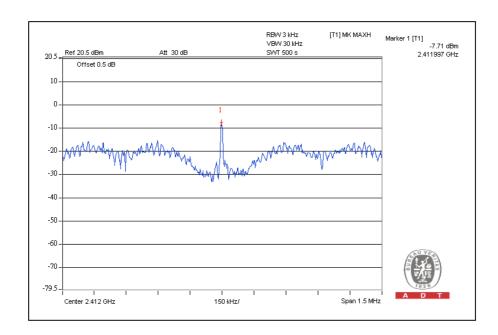


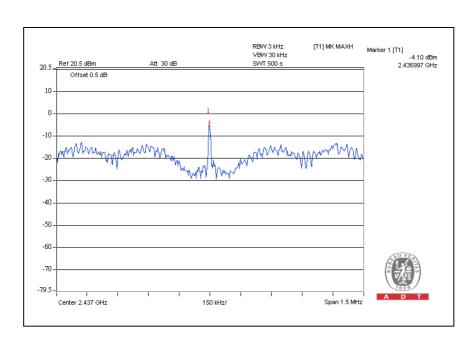




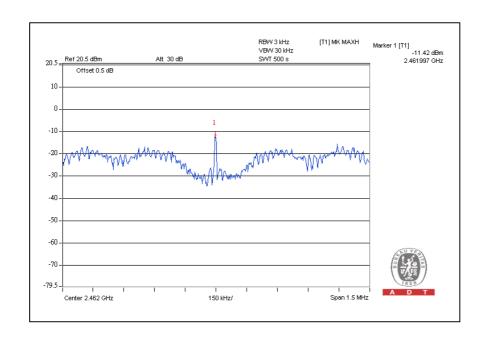


Chain 2 CH1









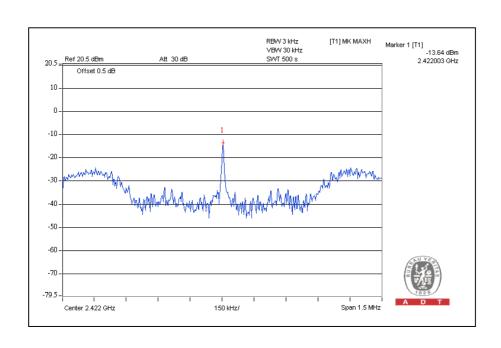


DRAFT 802.11n (40MHz) OFDM MODULATION:

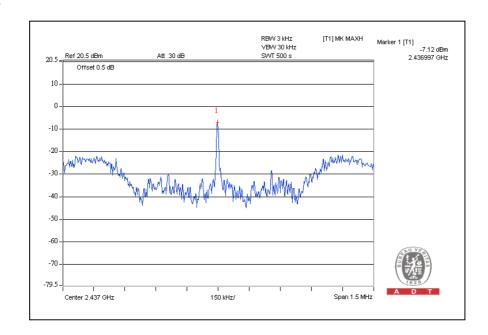
MODULATION TYPE	BPSK	TRANSFER RATE	13.5Mbps
INPUT POWER	1120\/ac 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

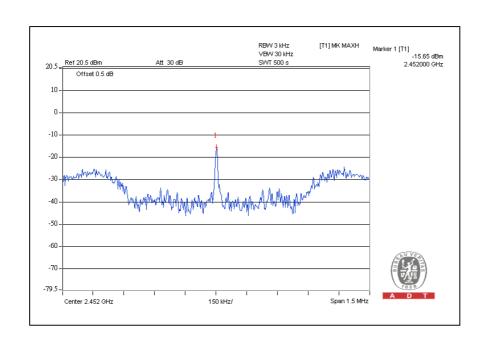
CHANNEL	CHANNEL FREQUENCY	RF POWER LEVEL IN 3kHz BW (mW)			BW (mW) BW (dBm)				-	TOTAL POWER DENSITY	TOTAL POWER	MAXIMUM	PASS /
	(MHz)	CHAIN 0	CHAIN 1	CHAIN 2	CHAIN 0	CHAIN 1	CHAIN 2	(mW)	(dBm)	LIMIT (dBm)	FAIL		
1	2422	0.043	0.011	0.078	-13.64	-19.64	-11.07	0.132	-8.794	8	PASS		
4	2437	0.194	0.317	0.148	-7.12	-4.99	-8.29	0.659	-1.811	8	PASS		
7	2452	0.027	0.005	0.106	-15.65	-23.08	-9.74	0.138	-8.601	8	PASS		

Chain 0 CH1



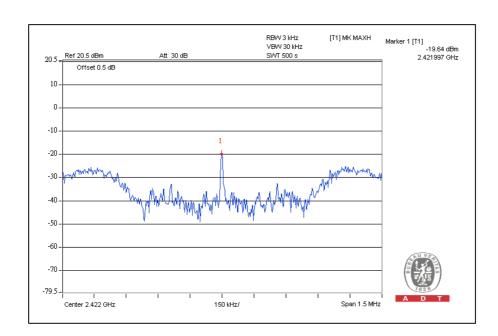


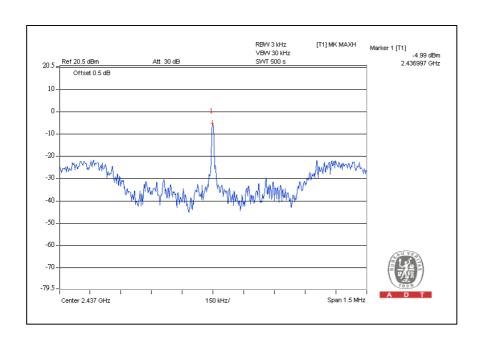




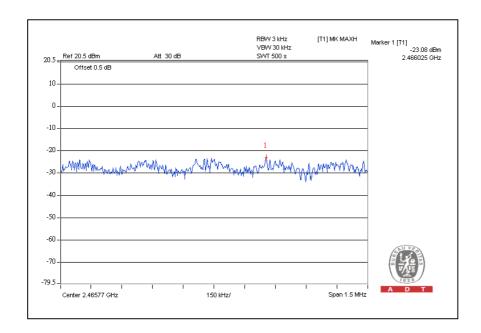


Chain 1 CH1



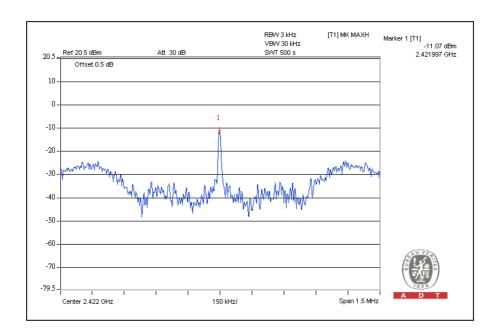


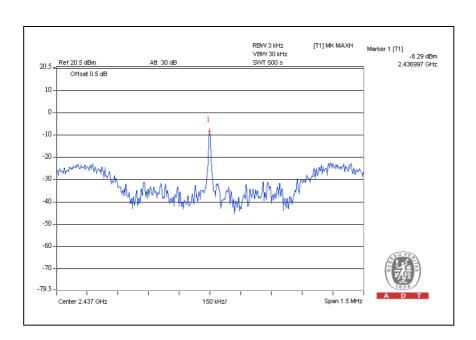




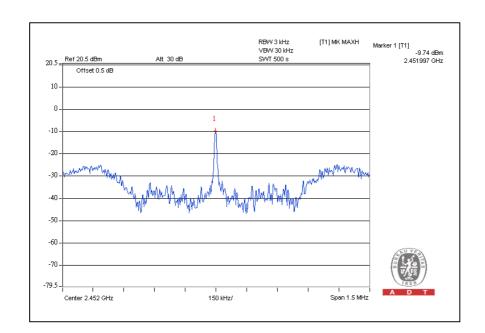


Chain 2 CH1











4.5.12 TEST RESULTS - ANTENNA 12

802.11b DSSS MODULATION:

MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 965hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)			PASS / FAIL
1	2412	-4.47	8	PASS
6	2437	-2.97	8	PASS
11	2462	-4.93	8	PASS

