

4.4.7 TEST RESULTS

802.11b DSSS MODULATION:

MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 63%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
1	2412	80.538	19.06	30	PASS
6	2437	79.983	19.03	30	PASS
11	2462	80.168	19.04	30	PASS

802.11g OFDM MODULATION:

MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 63%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
1	2412	50.699	17.05	30	PASS
6	2437	50.699	17.05	30	PASS
11	2462	45.082	16.54	30	PASS



DRAFT 802.11n (20MHz) OFDM MODULATION: SINGLE TX

MODULATION TYPE	BPSK	TRANSFER RATE	7.2Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 63%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
1	2412	45.186	16.55	30	PASS
6	2437	63.387	18.02	30	PASS
11	2462	36.308	15.60	30	PASS

DRAFT 802.11n (20MHz) OFDM MODULATION: DUAL TX

MODULATION TYPE	BPSK	TRANSFER RATE	14.444Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 63%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)		PEAK POWER OUTPUT (dBm)		TOTAL PEAK POWER (mW)	TOTAL PEAK POWER (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1				
1	2412	40.272	39.994	16.05	16.02	80.266	19.05	30	PASS
6	2437	51.642	50.699	17.13	17.05	102.341	20.10	30	PASS
11	2462	25.704	25.645	14.10	14.09	51.349	17.11	30	PASS



DRAFT 802.11n (40MHz) OFDM MODULATION: SINGLE TX

MODULATION TYPE	BPSK	TRANSFER RATE	15Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 63%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
1	2422	50.466	17.03	30	PASS
4	2437	35.727	15.53	30	PASS
7	2452	22.699	13.56	30	PASS

DRAFT 802.11n (40MHz) OFDM MODULATION: DUAL TX

MODULATION TYPE	BPSK	TRANSFER RATE	30Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 63%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)		PEAK POWER OUTPUT (dBm)		TOTAL PEAK POWER (mW)	TOTAL PEAK POWER (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1				
1	2422	40.458	40.365	16.07	16.06	80.823	19.08	30	PASS
4	2437	40.458	40.087	16.07	16.03	80.545	19.06	30	PASS
7	2452	25.823	25.527	14.12	14.07	51.350	17.11	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	FSEK30	100049	Aug. 14, 2006

NOTE: 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

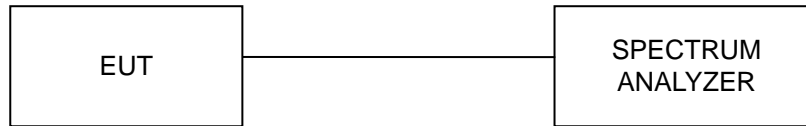
The transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3kHz RBW and 30kHz VBW, set sweep time = span/3kHz. The power spectral density was measured and recorded.

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

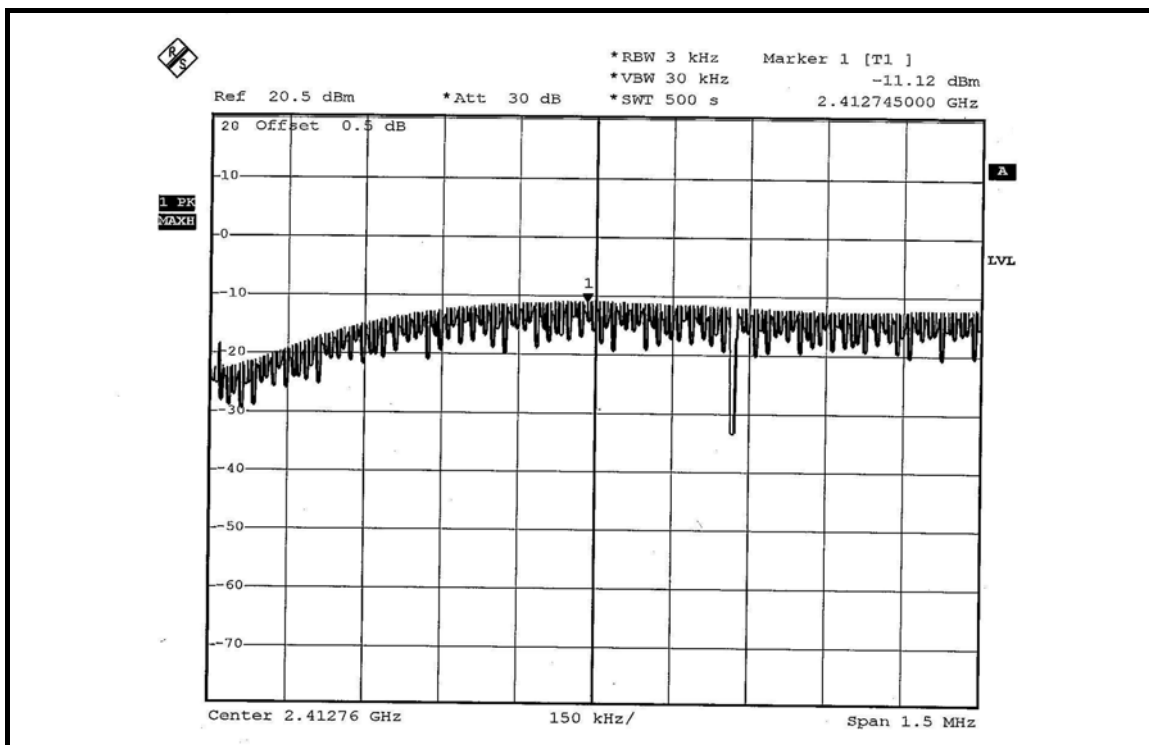
4.5.7 TEST RESULTS

802.11b DSSS MODULATION:

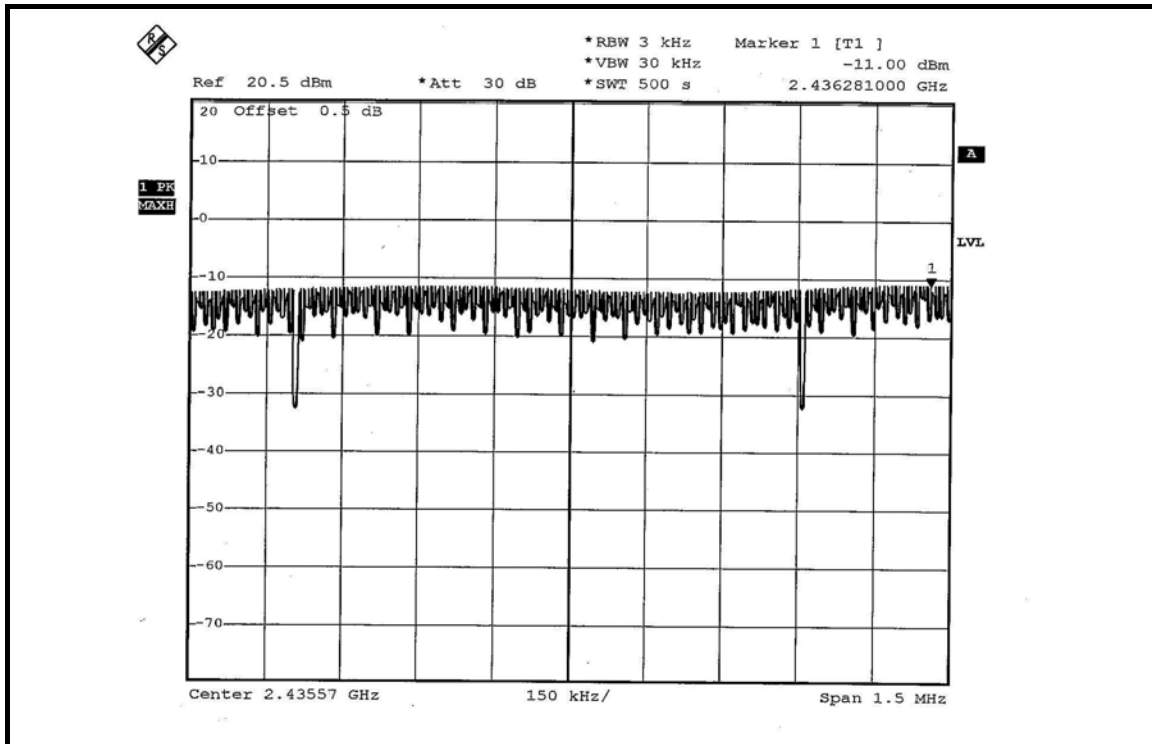
MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 63%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2412	-11.12	8	PASS
6	2437	-11.00	8	PASS
11	2462	-11.01	8	PASS

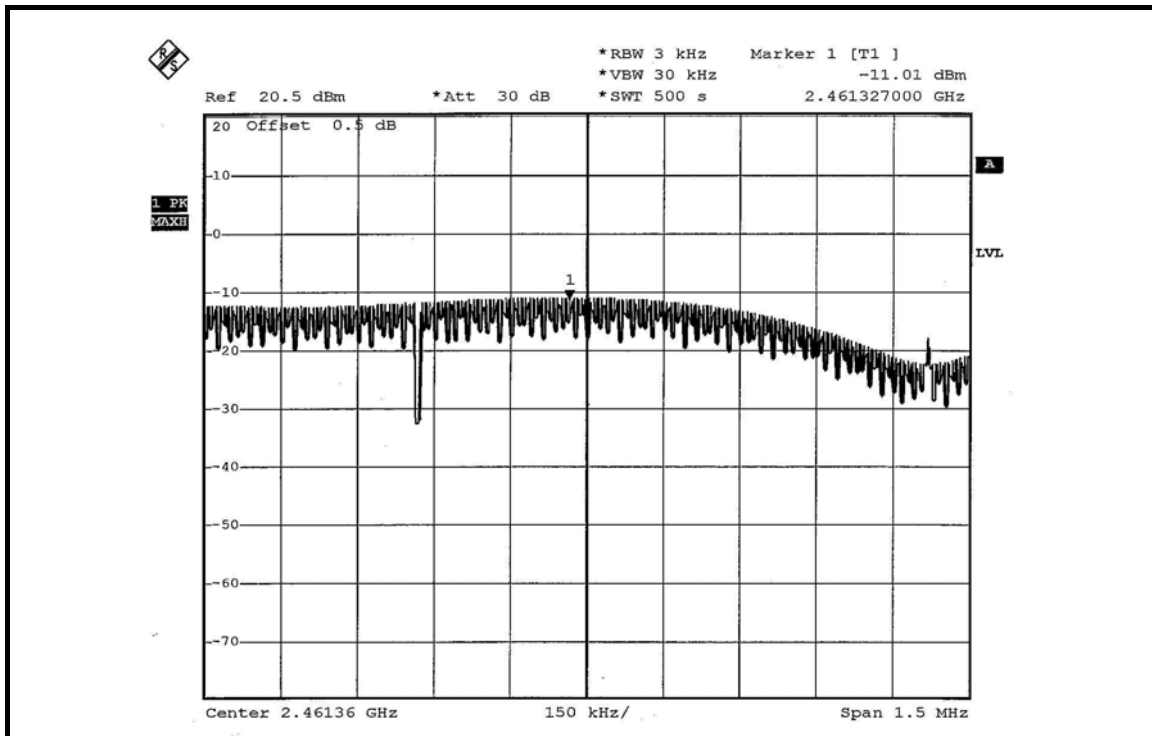
CH 1



CH 6



CH 11

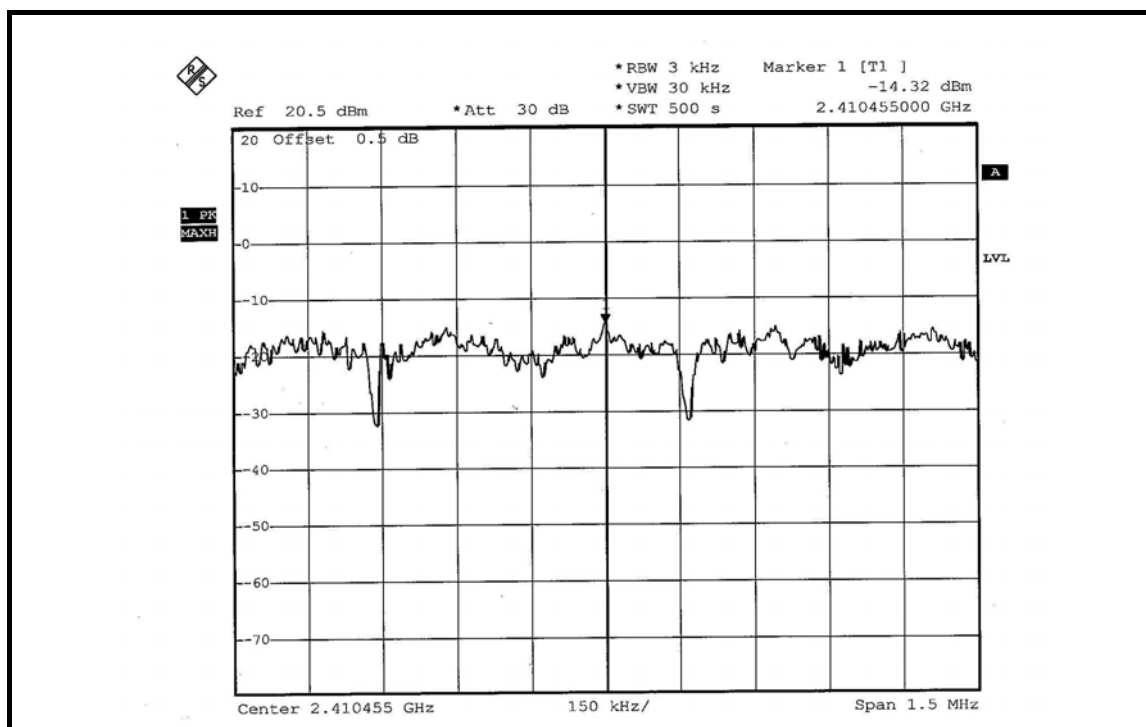


802.11g OFDM MODULATION:

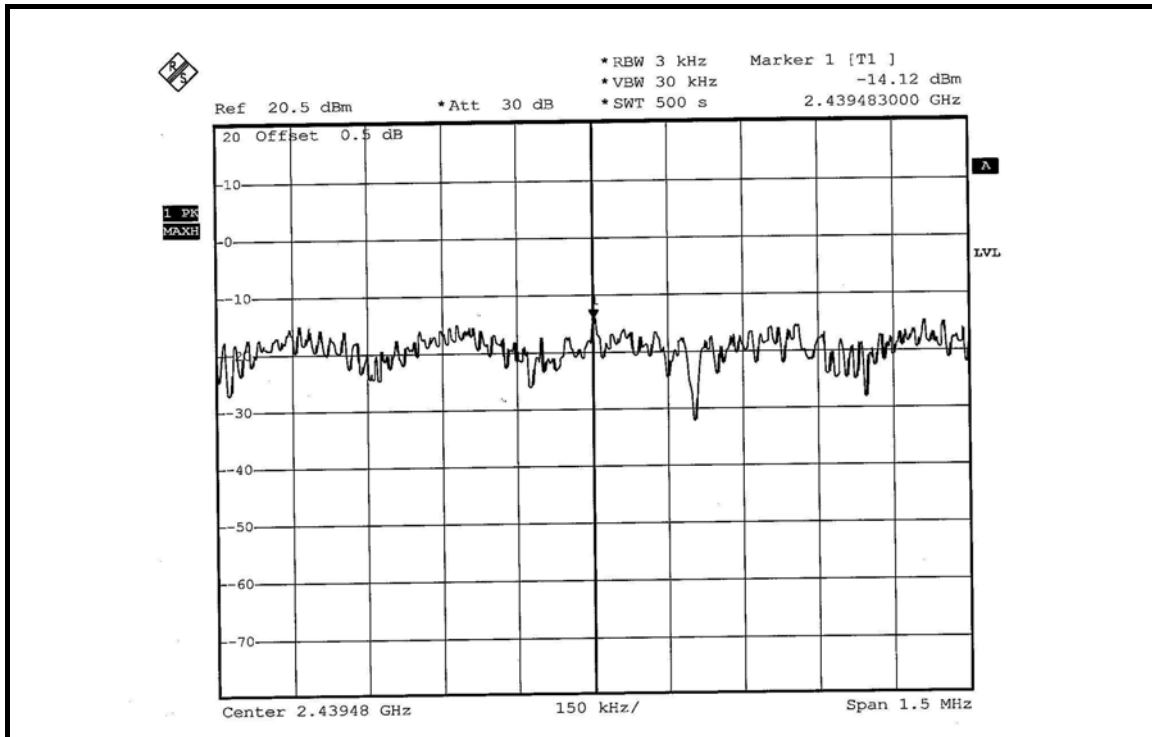
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 63%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2412	-14.32	8	PASS
6	2437	-14.12	8	PASS
11	2462	-15.56	8	PASS

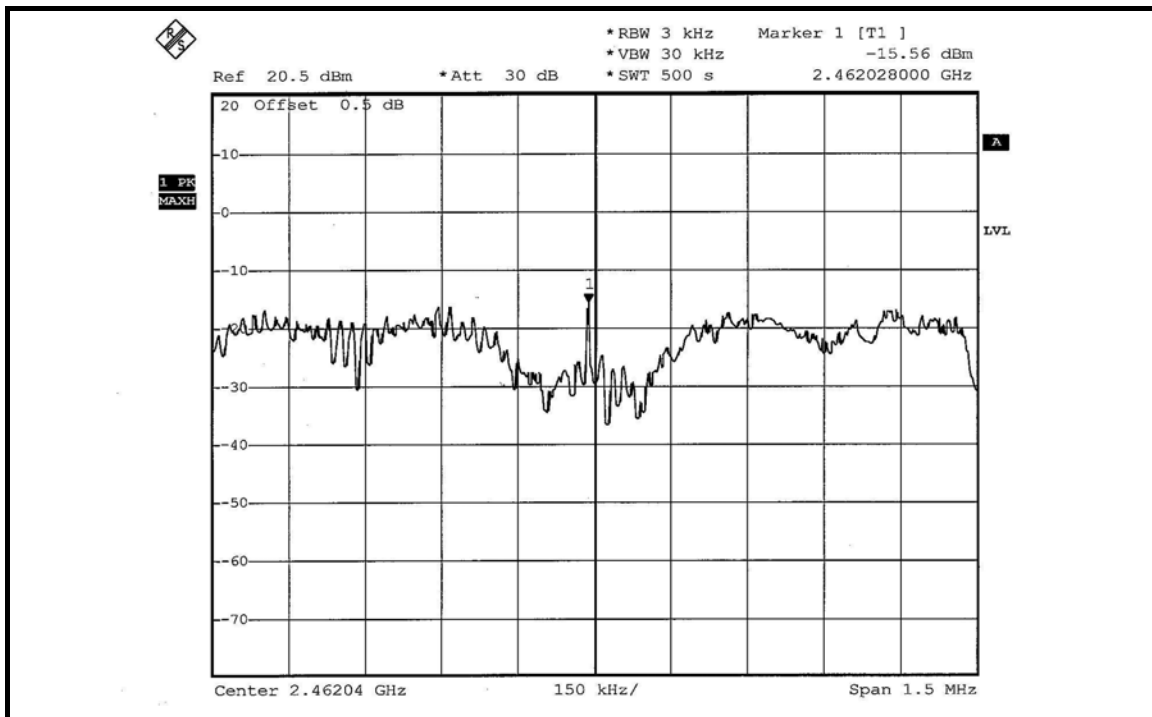
CH 1



CH 6



CH 11



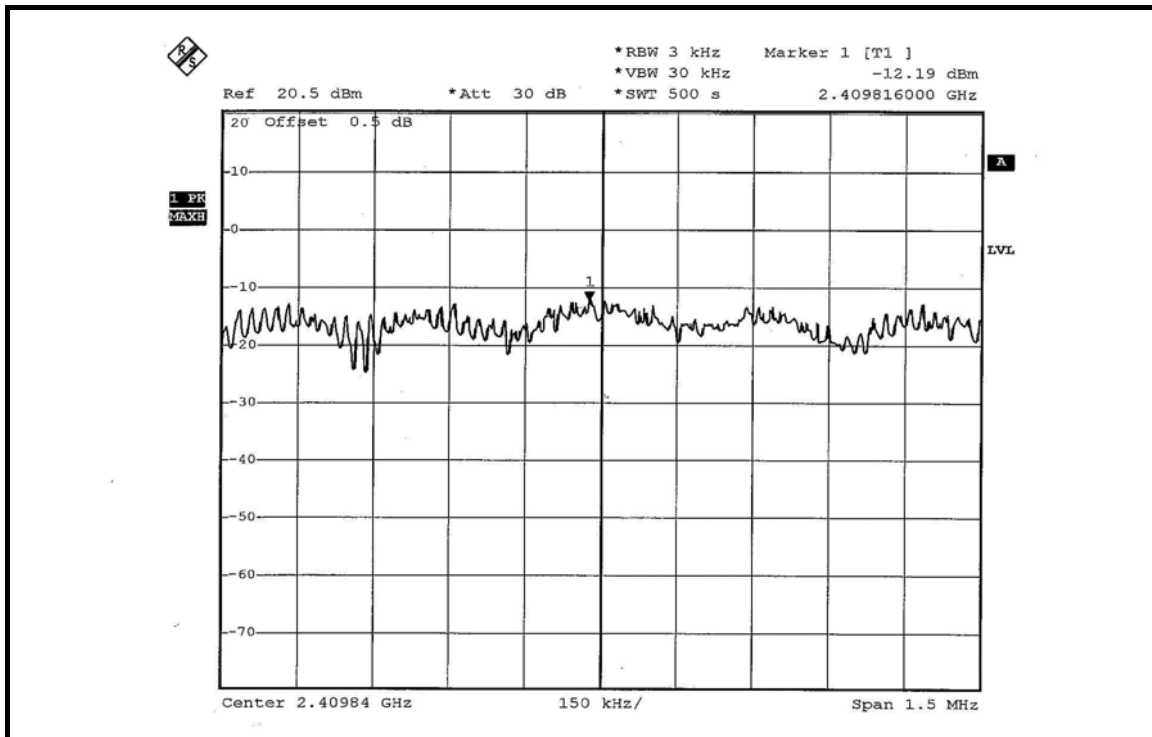


DRAFT 802.11n (20MHz) OFDM MODULATION: SINGLE TX

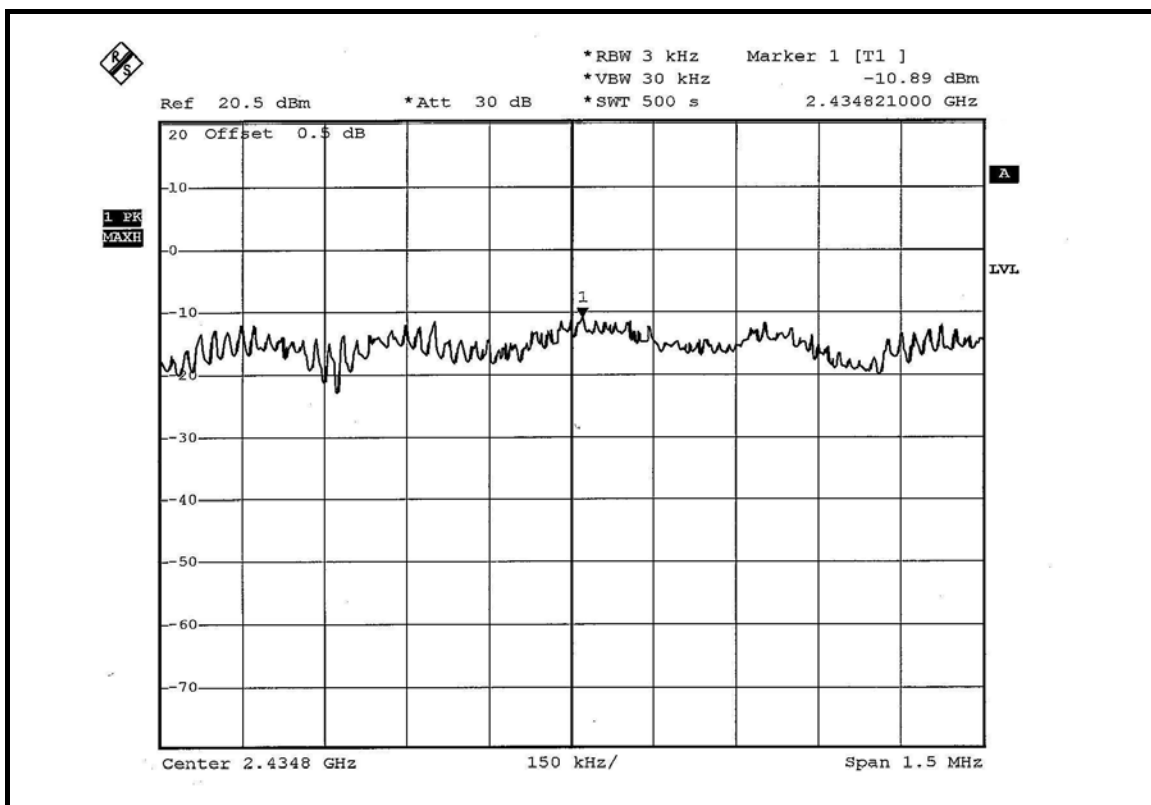
MODULATION TYPE	BPSK	TRANSFER RATE	7.2Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 63%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2412	-12.19	8	PASS
6	2437	-10.89	8	PASS
11	2462	-13.38	8	PASS

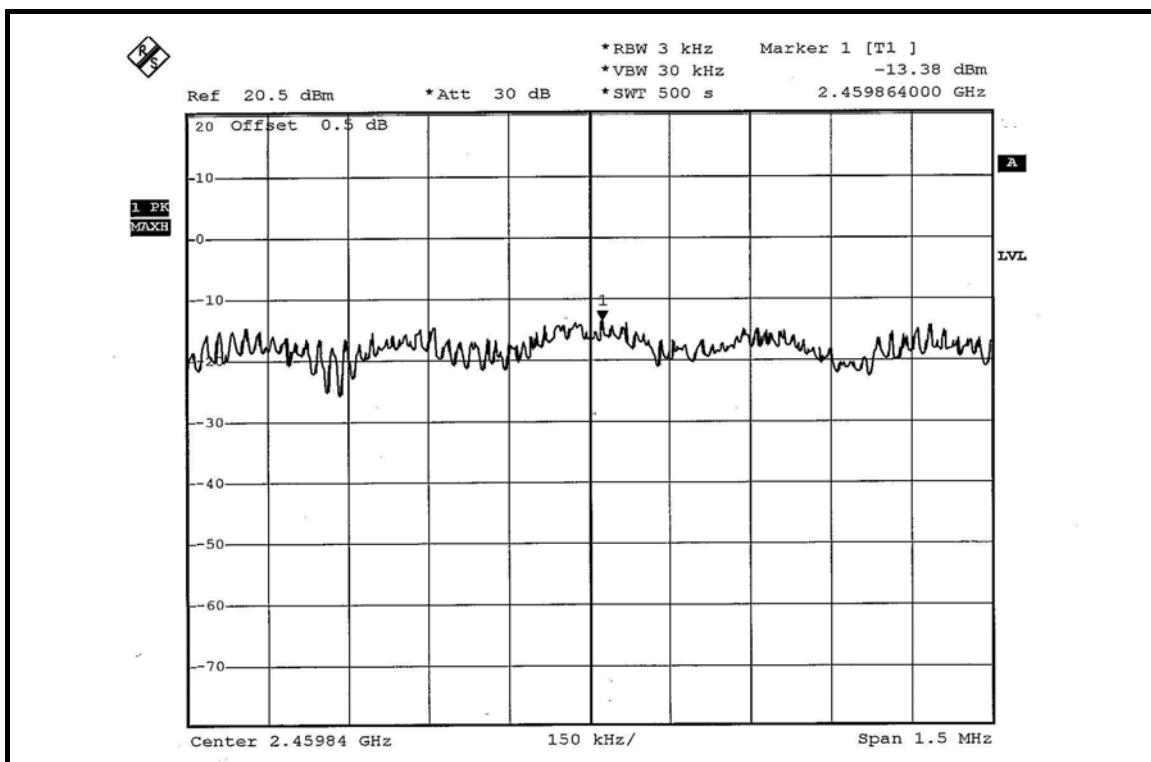
CH 1



CH 6



CH 11



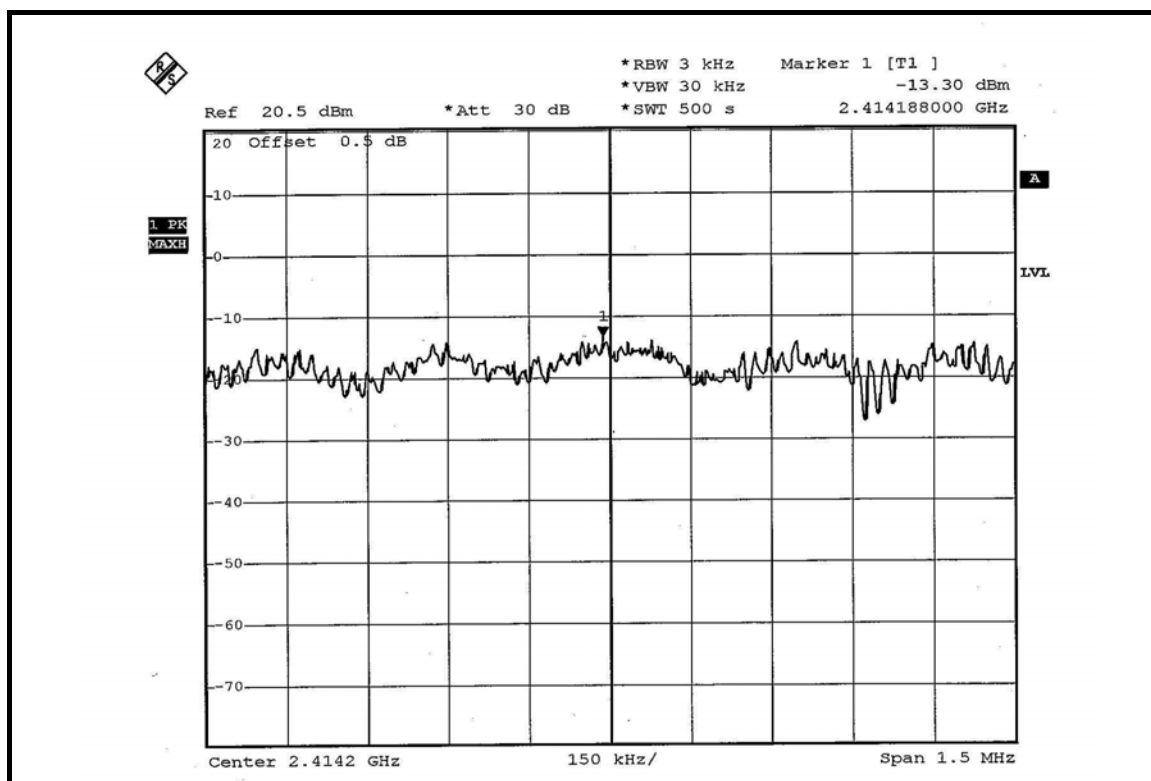


DRAFT 802.11n (20MHz) OFDM MODULATION: DUAL TX

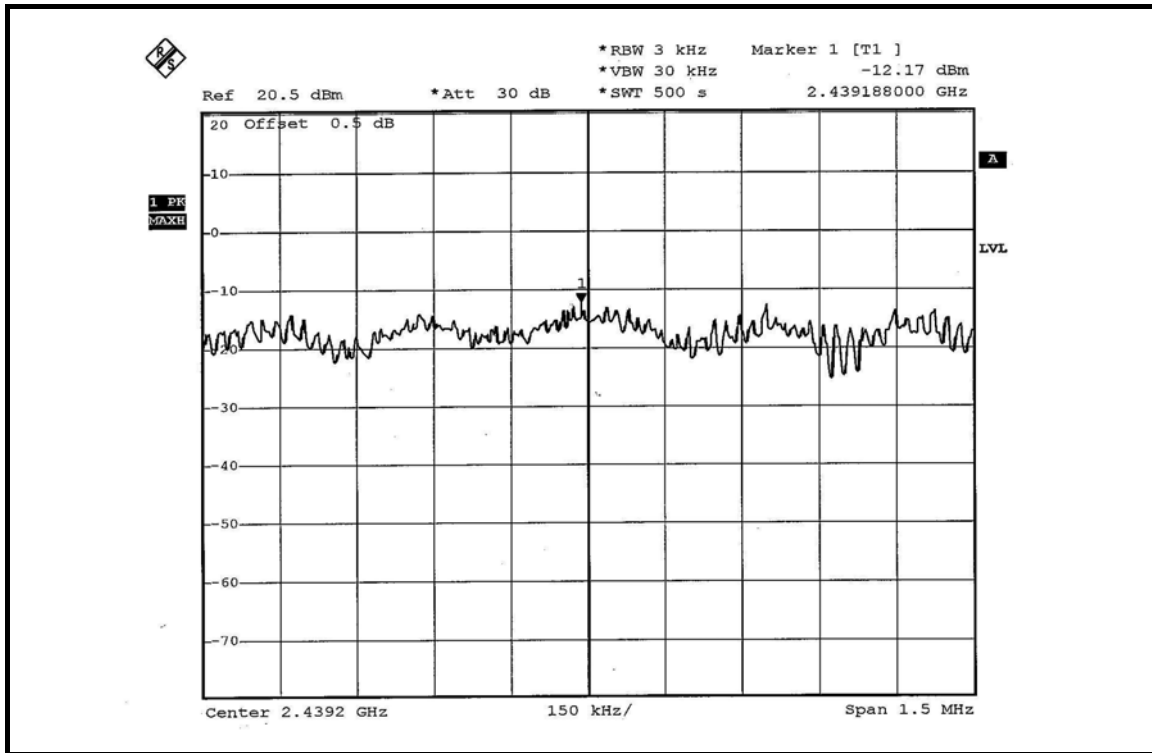
MODULATION TYPE	BPSK	TRANSFER RATE	14.444Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 63%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (mW)		RF POWER LEVEL IN 3kHz BW (dBm)		TOTAL POWER DENSITY (mW)	TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1				
1	2412	0.047	0.043	-13.30	-13.71	0.090	-10.46	8	PASS
6	2437	0.061	0.060	-12.17	-12.24	0.121	-9.17	8	PASS
11	2462	0.030	0.028	-15.16	-15.48	0.058	-12.37	8	PASS

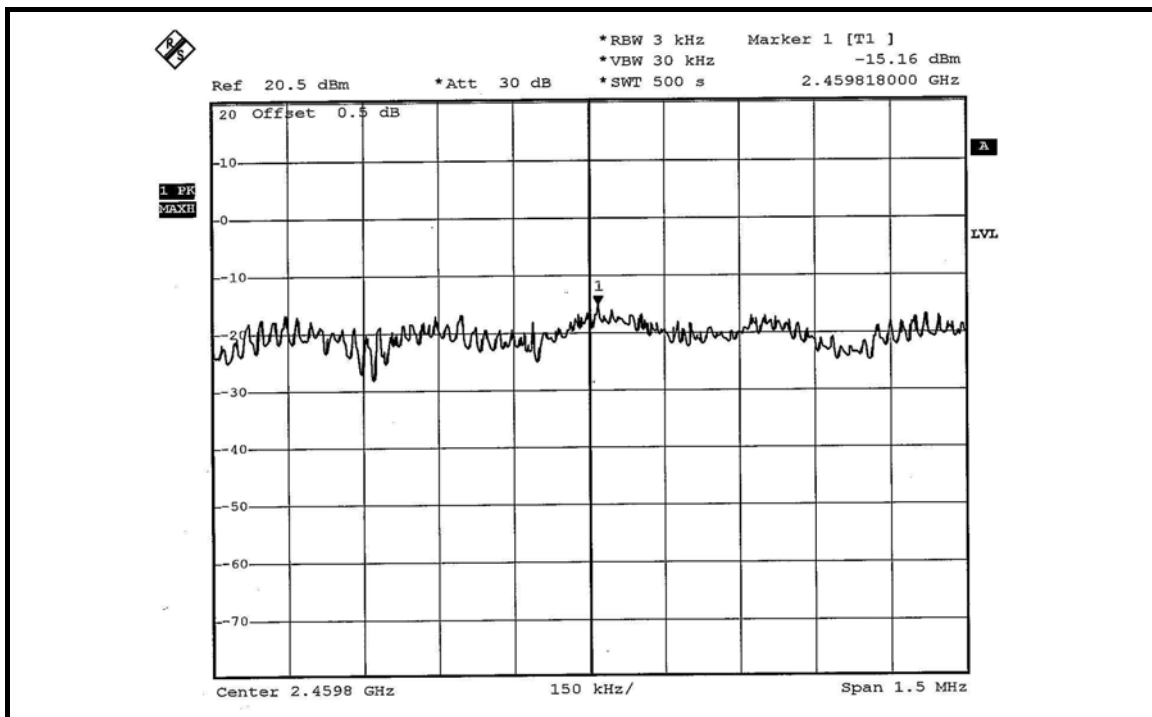
FOR CHAIN 0: CH 1



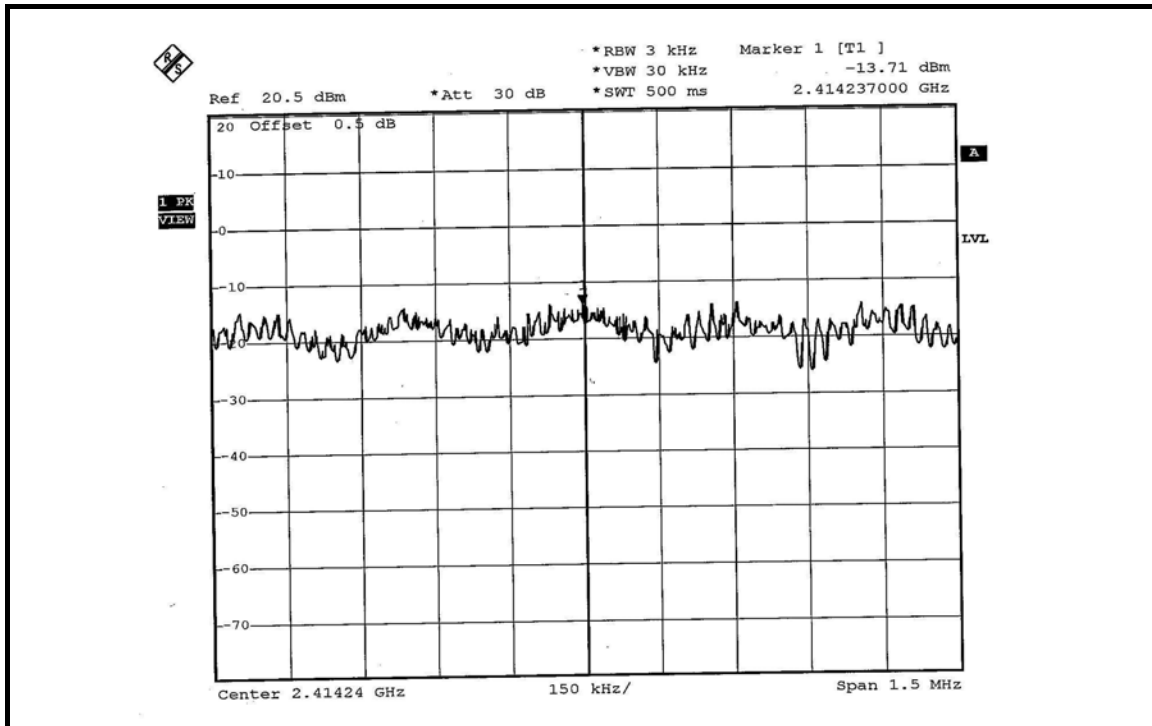
CH 6



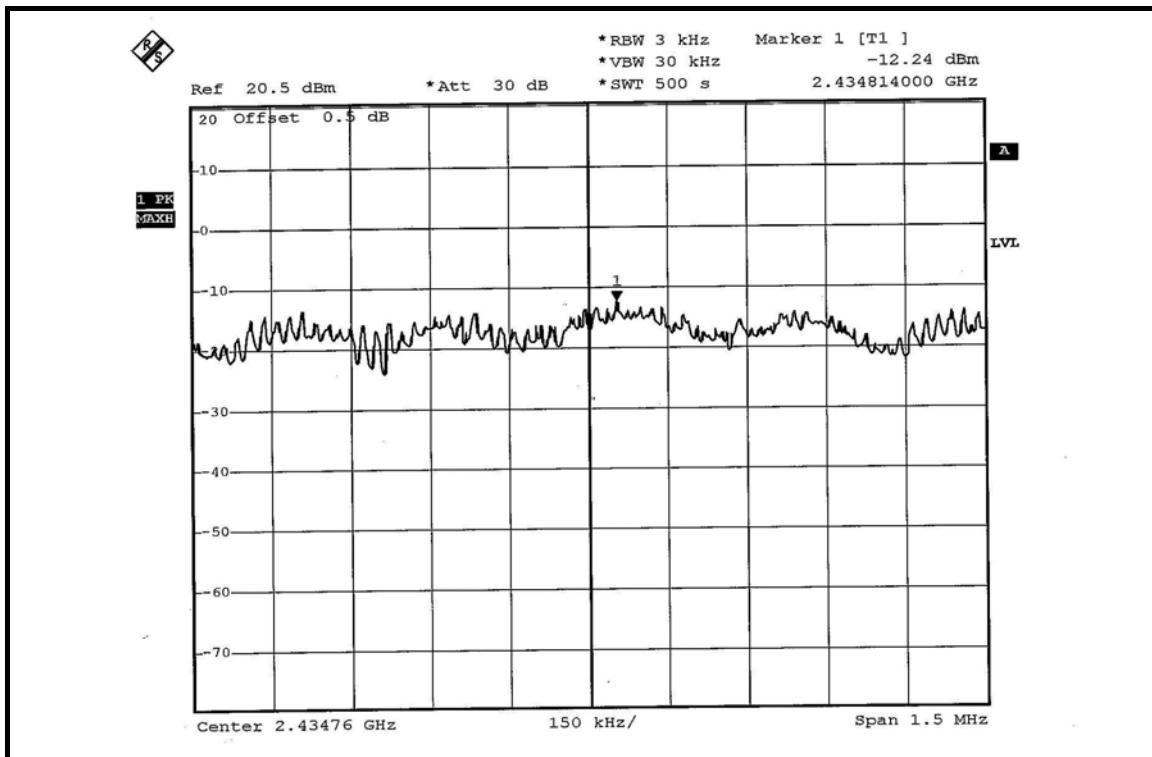
CH 11



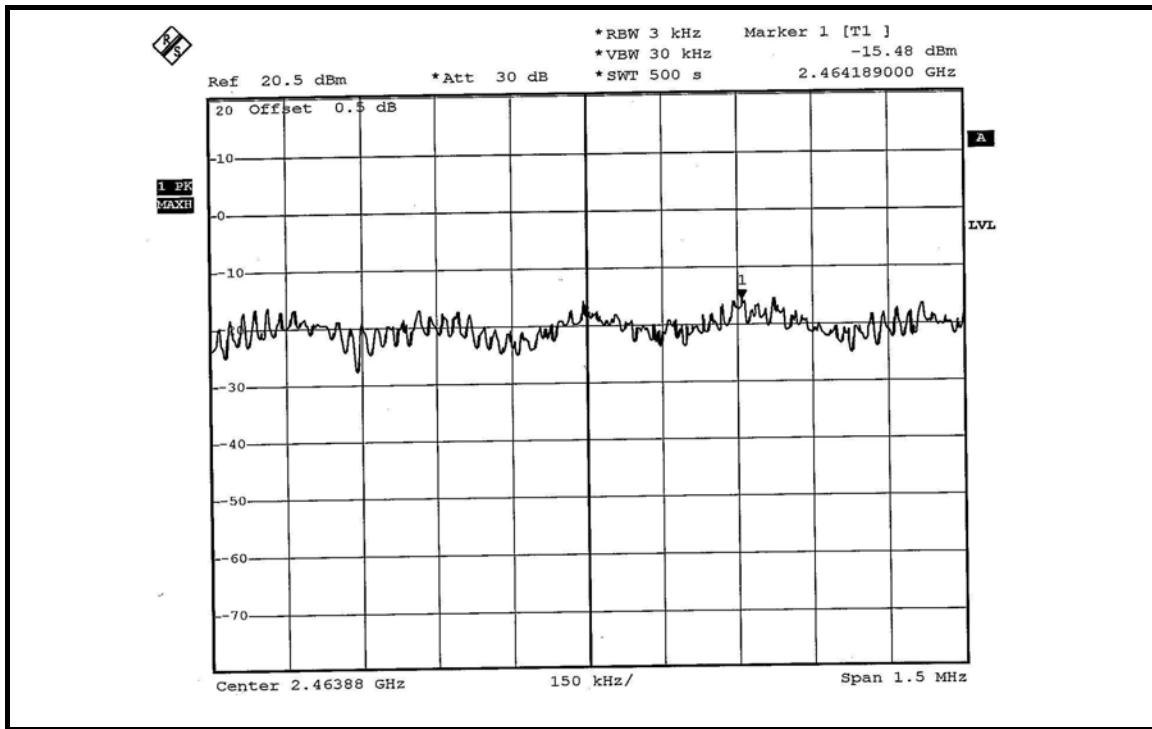
FOR CHAIN 1: CH 1



CH 6



CH 11

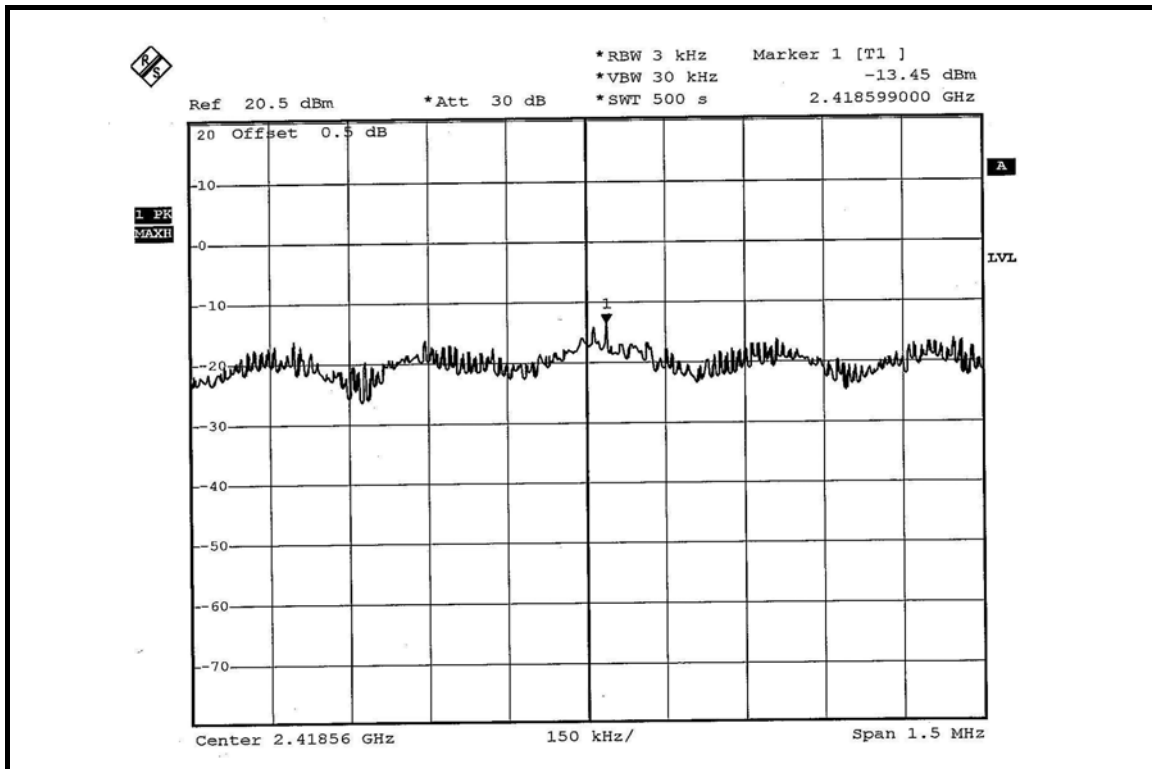


DRAFT 802.11n (40MHz) OFDM MODULATION: SINGLE TX

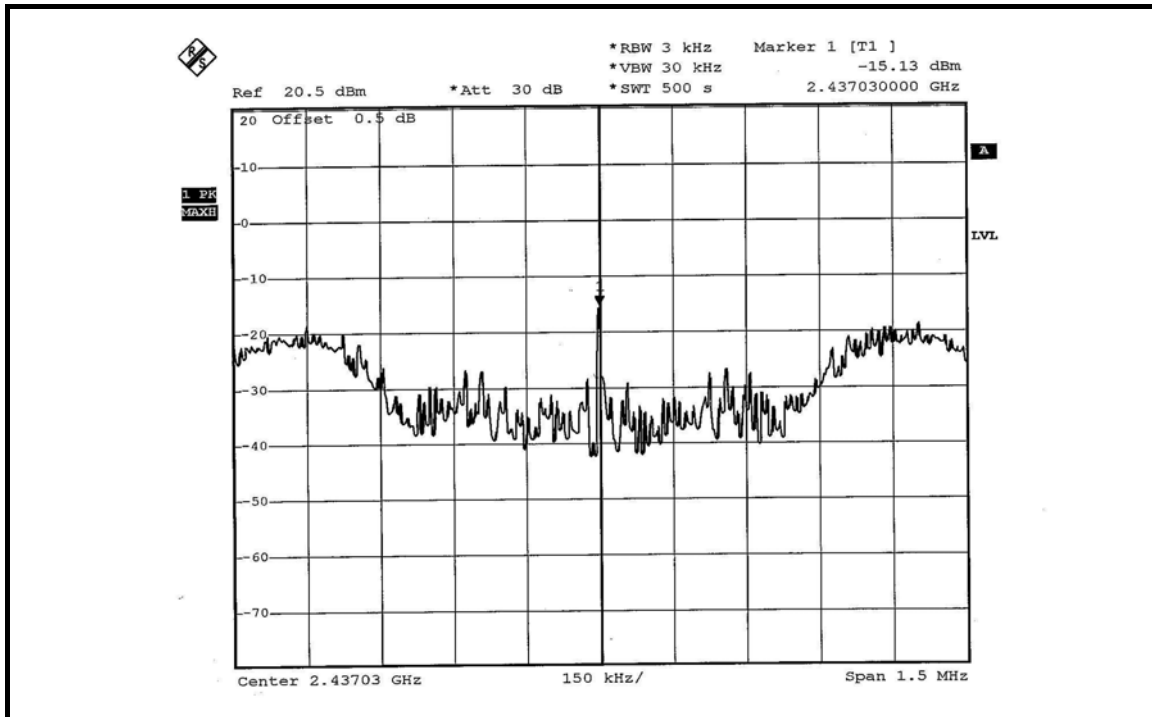
MODULATION TYPE	BPSK	TRANSFER RATE	15Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 63%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
1	2422	-13.45	8	PASS
4	2437	-15.13	8	PASS
7	2452	-16.99	8	PASS

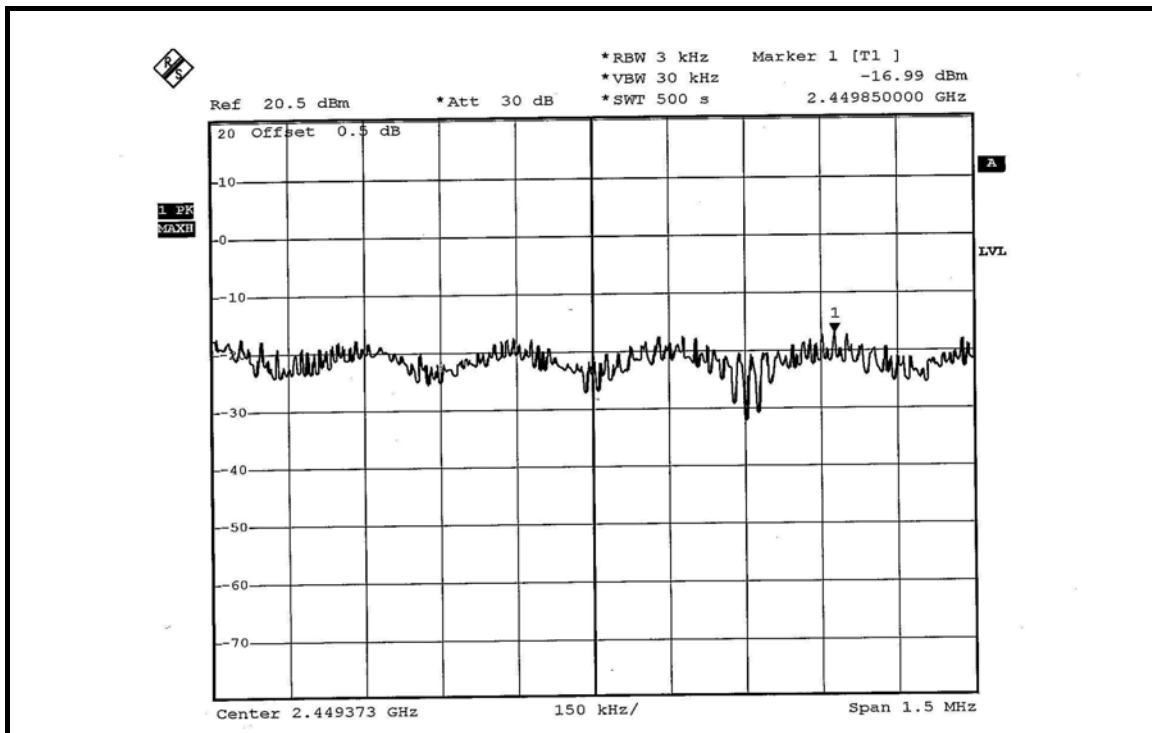
CH 1



CH 4



CH 7

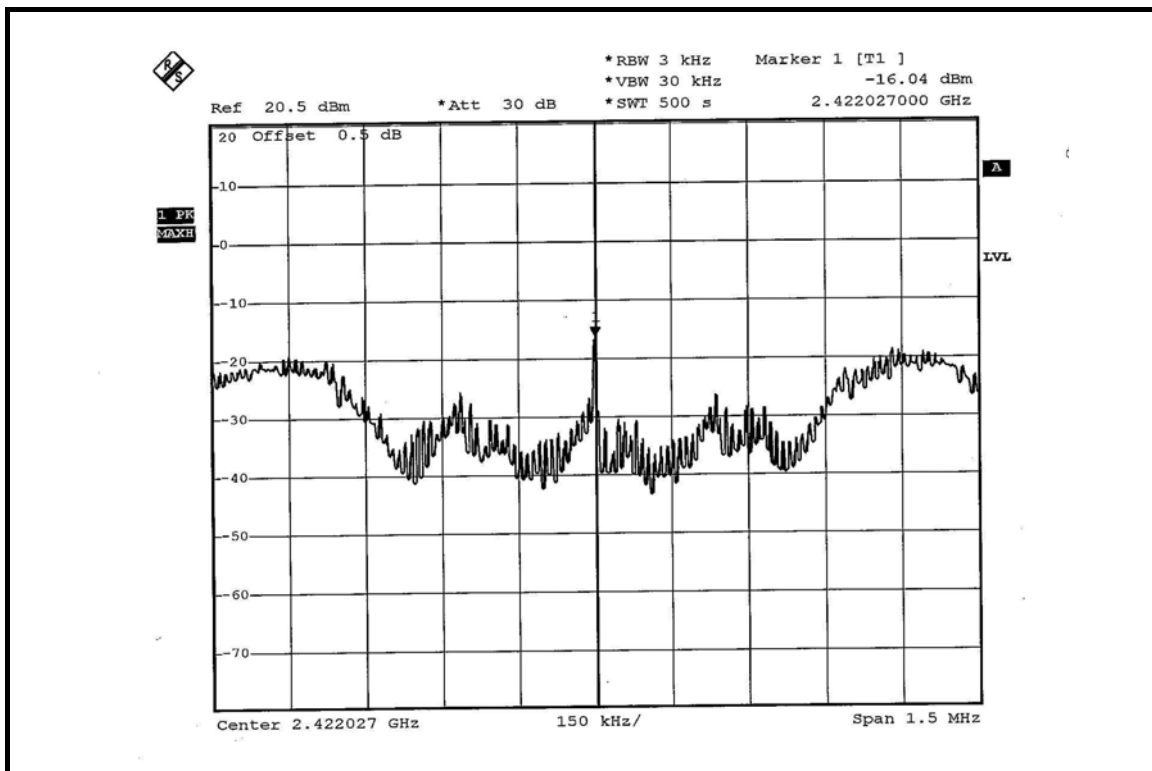


DRAFT 802.11n (40MHz) OFDM MODULATION: DUAL TX

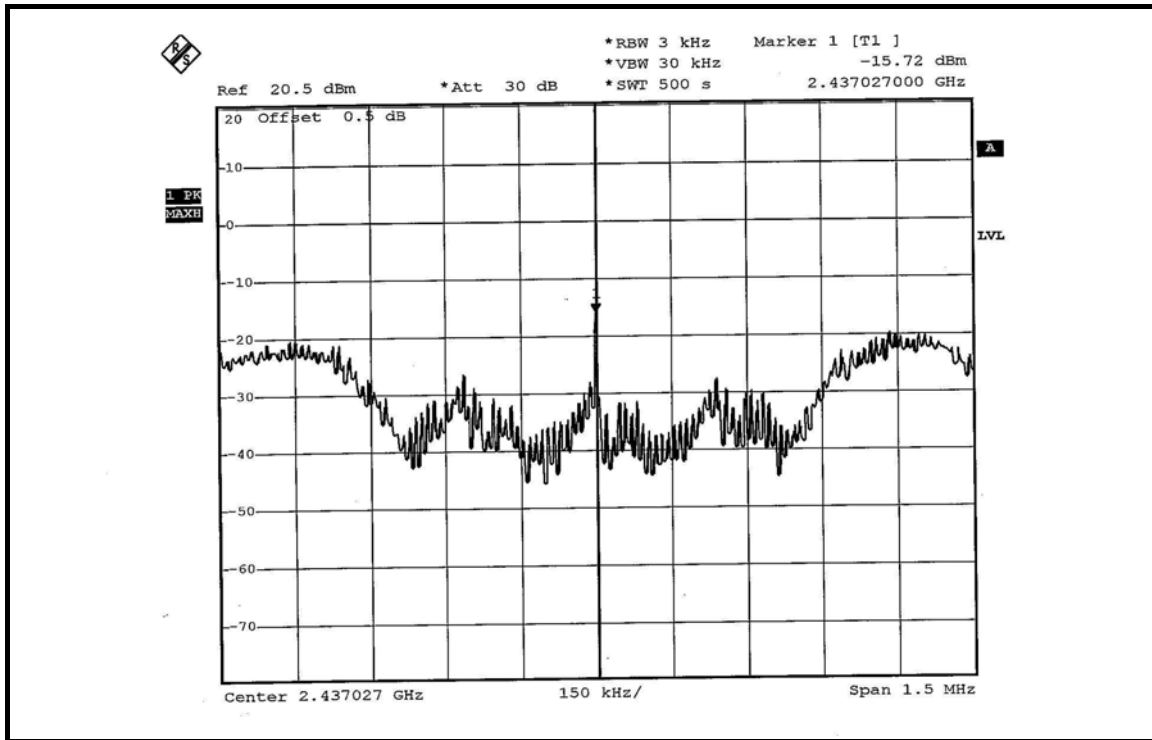
MODULATION TYPE	BPSK	TRANSFER RATE	30Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 63%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (mW)		RF POWER LEVEL IN 3kHz BW (dBm)		TOTAL POWER DENSITY (mW)	TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1				
1	2422	0.025	0.024	-16.04	-16.13	0.049	-13.10	8	PASS
4	2437	0.027	0.024	-15.72	-16.25	0.051	-12.92	8	PASS
7	2452	0.015	0.015	-18.15	-18.22	0.030	-15.23	8	PASS

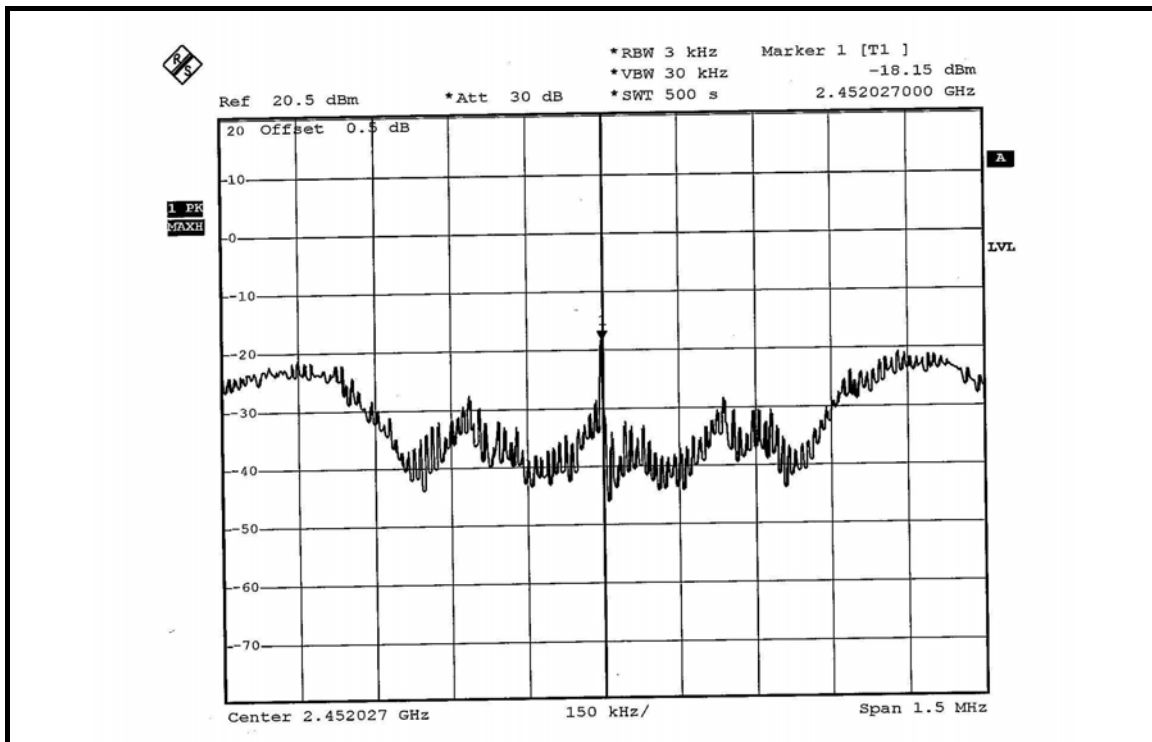
FOR CHAIN 0: CH 1



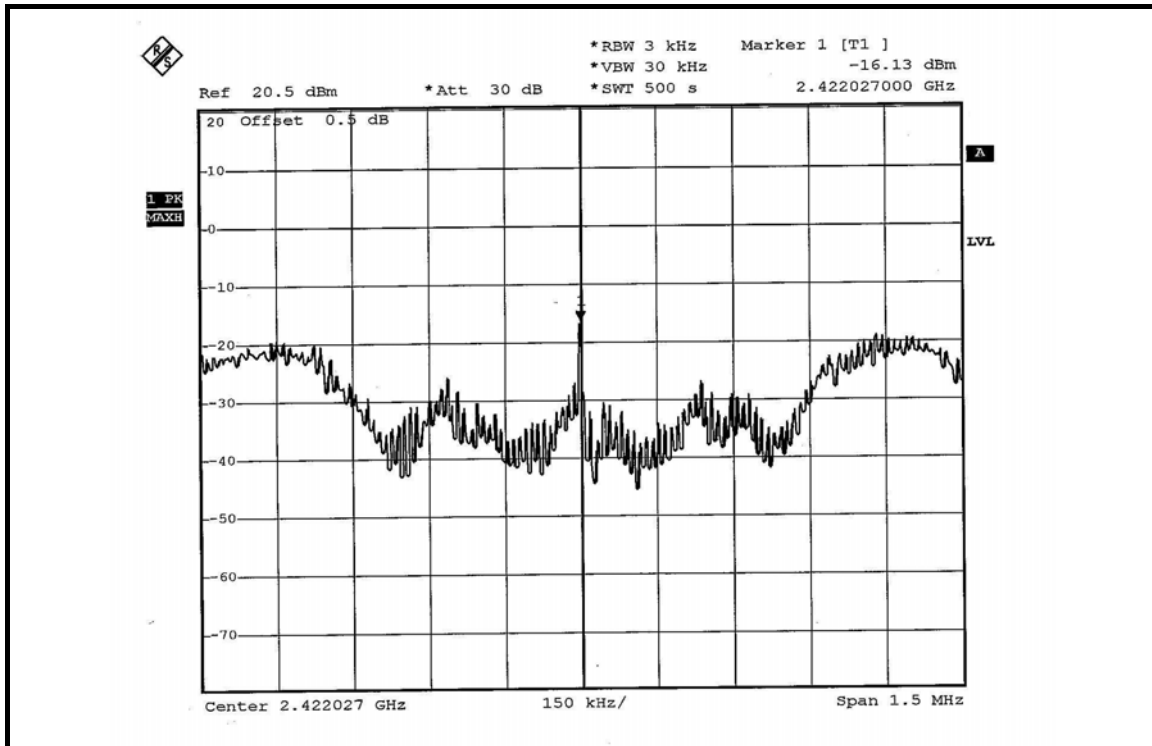
CH 4



CH 7



FOR CHAIN 1: CH 1



CH 4

