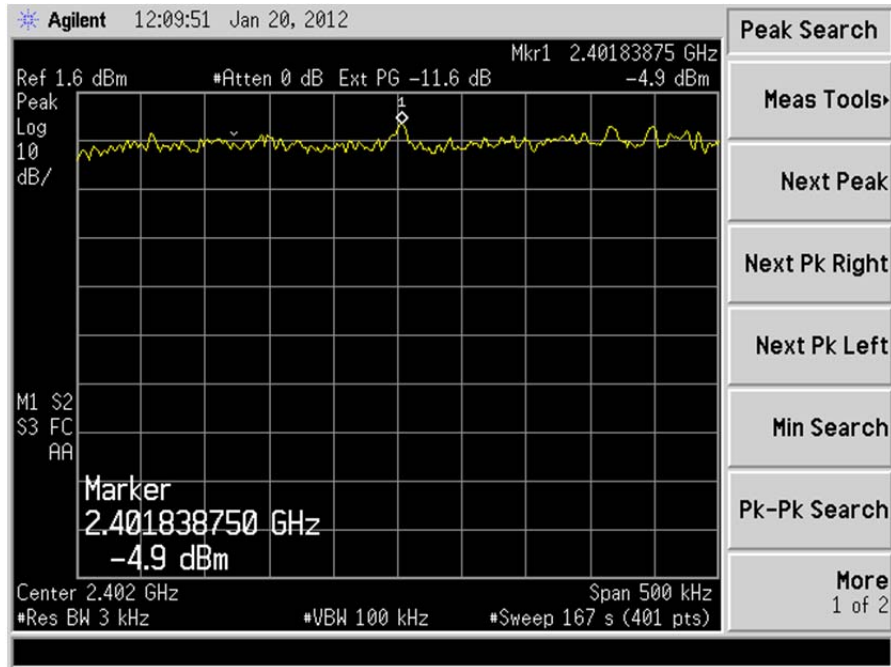


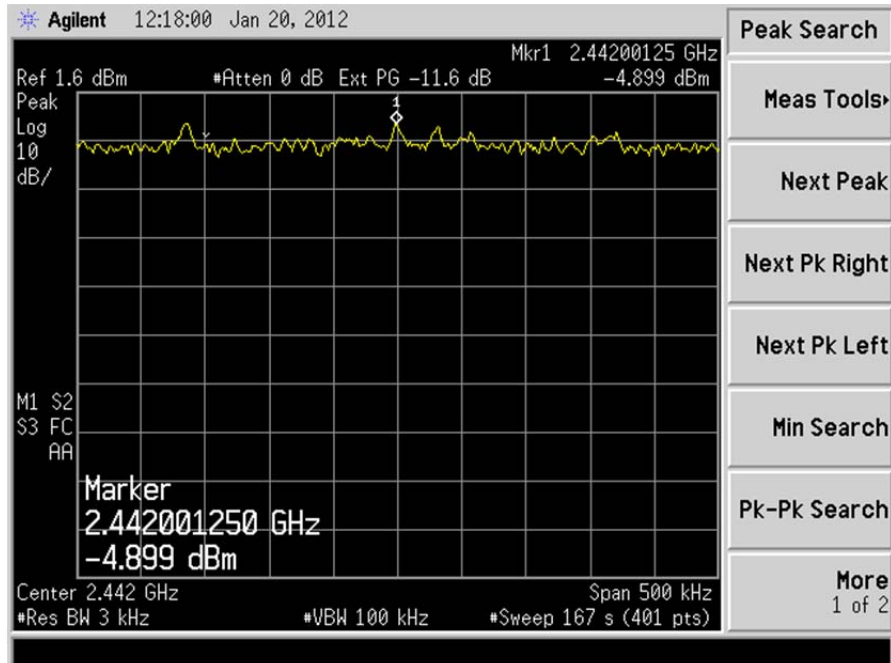
10.4 - Screen Captures – Power Spectral Density

Bluetooth BLE:

Channel 0

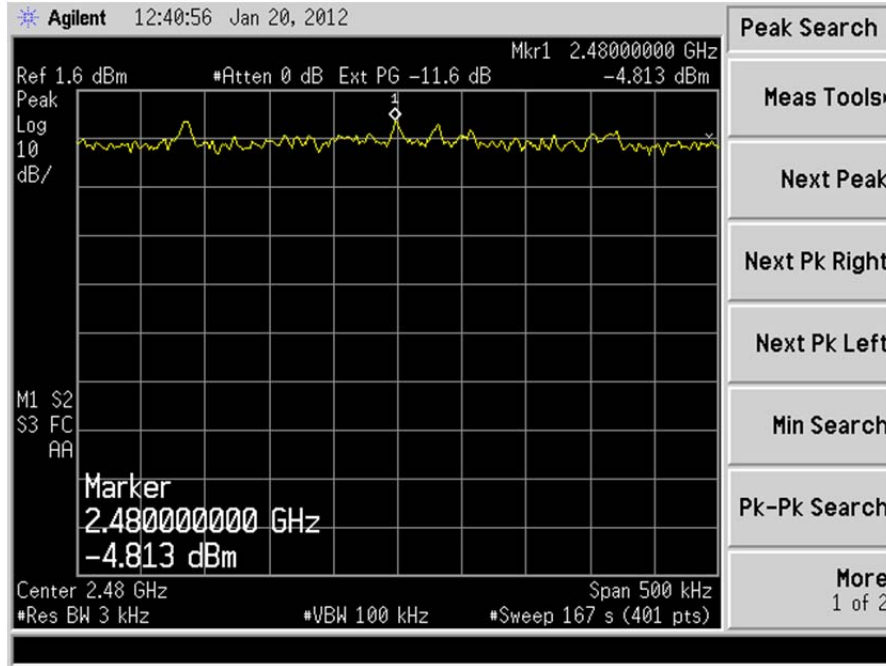


Channel 20



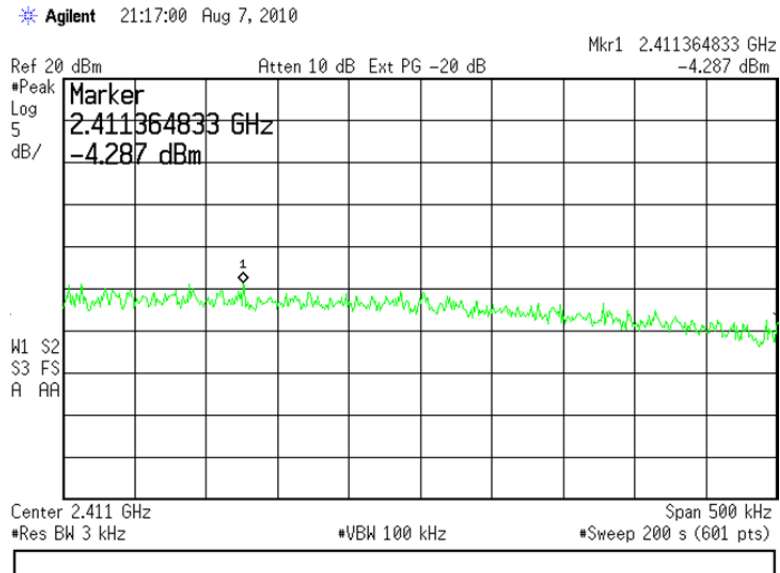
Prepared For: LS Research	Model Number: TiWi-R2	Report #: 311258
EUT: TiWi-R2	Serial Number: 031202	LSR Job #: C-1285

Channel 39



WLAN 1 Mbps:

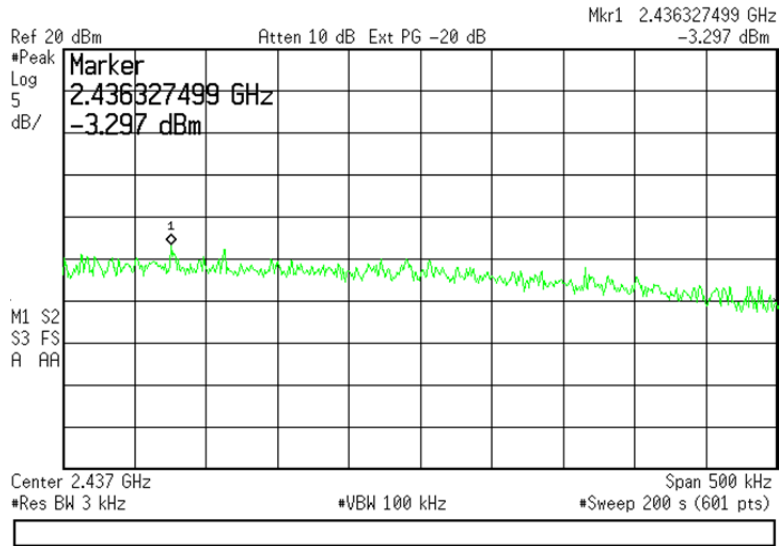
Channel 1



Prepared For: LS Research	Model Number: TiWi-R2	Report #: 311258
EUT: TiWi-R2	Serial Number: 031202	LSR Job #: C-1285

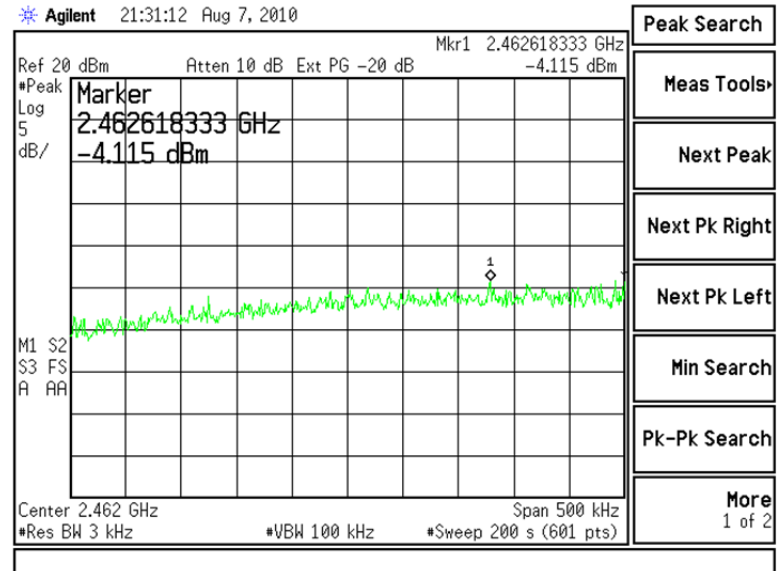
Channel 6

Agilent 21:25:36 Aug 7, 2010



Channel 11

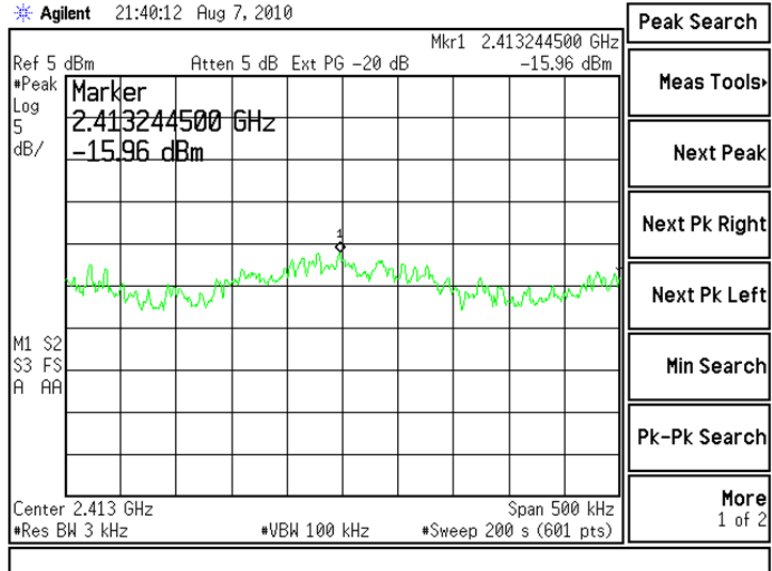
Agilent 21:31:12 Aug 7, 2010



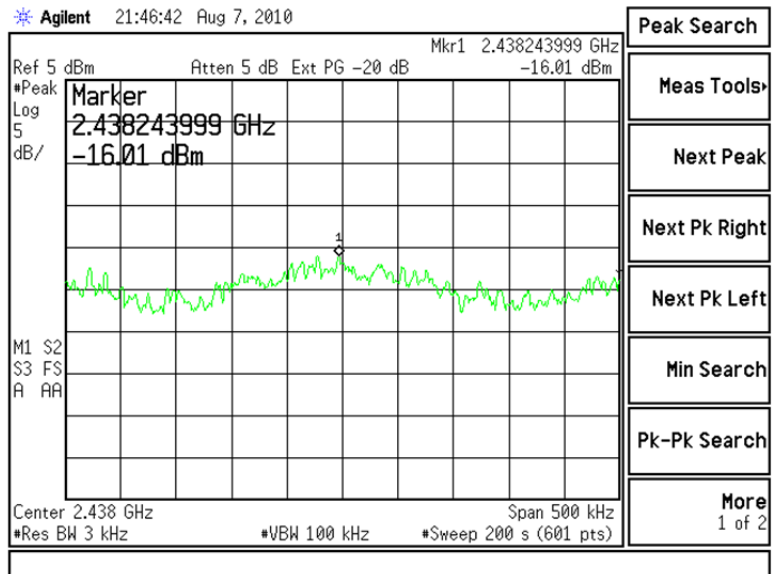
Prepared For: LS Research	Model Number: TiWi-R2	Report #: 311258
EUT: TiWi-R2	Serial Number: 031202	LSR Job #: C-1285

WLAN MCS7:

Channel 1

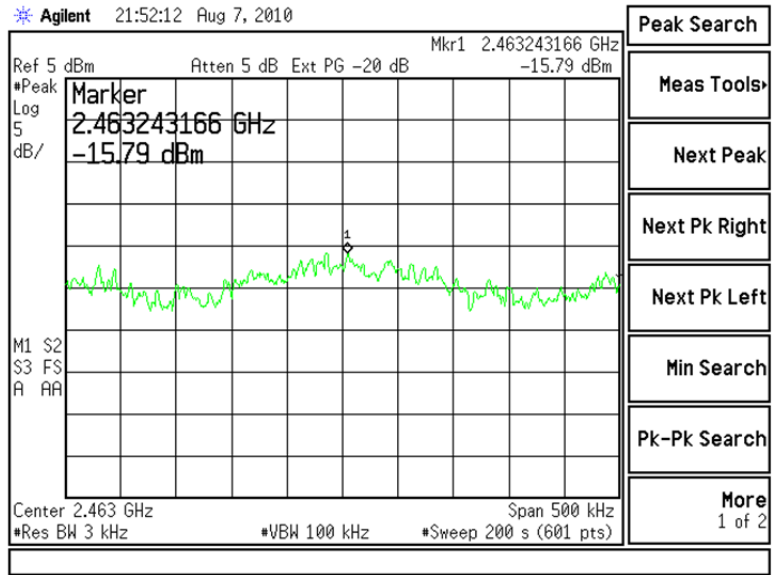


Channel 6



Prepared For: LS Research	Model Number: TiWi-R2	Report #: 311258
EUT: TiWi-R2	Serial Number: 031202	LSR Job #: C-1285

Channel 11



Prepared For: LS Research	Model Number: TiWi-R2	Report #: 311258
EUT: TiWi-R2	Serial Number: 031202	LSR Job #: C-1285

EXHIBIT 11. SPURIOUS CONDUCTED EMISSIONS: 15.247(d)

11.1 - Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 db below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

In addition, radiated emissions, which fall in the restricted band, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(e)

Remarks:

Applies to harmonics/spurious emissions that fall in the restricted bands listed in Section 15.205. The maximum permitted average field strength is listed in Section 15.209.

The emission limits as specified above are based on measurement instrument employing an average detector. The provisions in Section 15.35 for limiting peak emissions apply.

FCC 47 CFR 15.205(a) – Restricted Frequency Bands

MHz	MHz	MHz	GHz
0.090 – 0.110	162.0125 – 167.17	2310 – 2390	9.3 – 9.5
0.49 – 0.51	167.72 – 173.2	2483.5 – 2500	10.6 – 12.7
2.1735 – 2.1905	240 – 285	2655 – 2900	13.25 – 13.4
8.362 – 8.366	322 – 335.4	3260 – 3267	14.47 – 14.5
13.36 – 13.41	399.9 – 410	3332 – 3339	14.35 – 16.2
25.5 – 25.67	608 – 614	3345.8 – 3358	17.7 – 21.4
37.5 – 38.25	960 – 1240	3600 – 4400	22.01 – 23.12
73 – 75.4	1300 – 1427	4500 – 5250	23.6 – 24.0
108 – 121.94	1435 – 1626.5	5350 – 5460	31.2 – 31.8
123 – 138	1660 – 1710	7250 – 7750	36.43 – 36.5
149.9 – 150.05	1718.8 – 1722.2	8025 – 8500	Above 38.6
156.7 – 156.9	2200 – 2300	9000 – 9200	

Reported data is the raw data corrected for all applicable factors such as antenna factors, cable loss, etc.

Prepared For: LS Research	Model Number: TiWi-R2	Report #: 311258
EUT: TiWi-R2	Serial Number: 031202	LSR Job #: C-1285

11.2 - Conducted Harmonic And Spurious RF Measurements

FCC Part 15.247(d) and IC RSS 210 A8.5 both require a measurement of conducted harmonic and spurious RF emission levels, as reference to the carrier level when measured in a 100 kHz bandwidth. For this test, the spurious and harmonic RF emissions from the EUT were measured at the EUT antenna port using a short RF cable. An Agilent E4446A spectrum analyzer was used with the resolution bandwidth set to 100 kHz for this portion of the tests. The unit was configured to run in a continuous transmit mode, while being supplied with typical data as a modulation source. The spectrum analyzer was used with measurements from a peak detector presented in the chart below. Screen captures were acquired and any noticeable spurious and harmonic signals were identified and measured.

No significant emissions could be noted within -50 dBc of the fundamental level for this product.

Bluetooth:

Frequency	2402 MHz [dBm]	2441 MHz [dBm]	2480 MHz [dBm]
2 nd Harmonic	- 55.9	- 59.2	- 53.7
3 rd Harmonic	- 61.1	- 62.7	- 63.0
4 th Harmonic	- 60.6	- 66.1	- 67.3
5 th Harmonic	- 69.6	Note (1)	- 67.6
6 th Harmonic	- 61.7	- 62.4	- 66.3
7 th Harmonic	- 65.7	- 66.8	- 67.7
8 th Harmonic	Note (1)	Note (1)	Note (1)
9 th Harmonic	Note (1)	Note (1)	Note (1)
10 th Harmonic	Note (1)	Note (1)	Note (1)

Spurious Conducted Emissions

Freq(MHz)	Channel	Level(dBm)
479.40	39	-70.2
814.10	39	-53.2
1630.00	39	-50.3
801.15	1	-52.0
1600.00	1	-51.2
827.00	79	-50.5
1660.00	79	-50.0

Prepared For: LS Research	Model Number: TiWi-R2	Report #: 311258
EUT: TiWi-R2	Serial Number: 031202	LSR Job #: C-1285

Bluetooth BLE:

Frequency	2402 MHz [dBm]	2442 MHz [dBm]	2480 MHz [dBm]
Fundamental	+7.19	+6.77	+6.72
2 nd Harmonic	-48.33	-48.22	-44.98
3 rd Harmonic	-65.70	Note (1)	Note (1)
4 th Harmonic	Note (1)	Note (1)	Note (1)
5 th Harmonic	Note (1)	Note (1)	Note (1)
6 th Harmonic	Note (1)	Note (1)	Note (1)
7 th Harmonic	Note (1)	Note (1)	Note (1)
8 th Harmonic	Note (1)	Note (1)	Note (1)
9 th Harmonic	Note (1)	Note (1)	Note (1)
10 th Harmonic	Note (1)	Note (1)	Note (1)

Note 1): Measurement at system noise floor.

Spurious Conducted Emissions

Freq(MHz)	Channel	Level(dBm)
827.8	39	-57.73
837.5	20	-63.1
481.1	20	-62.59
801.2	0	-56.22

WLAN 1Mbps:

Frequency	2412 MHz [dBm]	2437 MHz [dBm]	2462 MHz [dBm]
2 nd Harmonic	- 53.0	Note (1)	- 54.8
3 rd Harmonic	Note (1)	Note (1)	Note (1)
4 th Harmonic	- 47.9	- 48.3	- 48.2
5 th Harmonic	Note (1)	Note (1)	Note (1)
6 th Harmonic	Note (1)	Note (1)	Note (1)
7 th Harmonic	Note (1)	Note (1)	Note (1)
8 th Harmonic	Note (1)	Note (1)	Note (1)
9 th Harmonic	Note (1)	Note (1)	Note (1)
10 th Harmonic	Note (1)	Note (1)	Note (1)

Note 1): Measurement at system noise floor.

Prepared For: LS Research	Model Number: TiWi-R2	Report #: 311258
EUT: TiWi-R2	Serial Number: 031202	LSR Job #: C-1285

Spurious Conducted Emissions

Freq(MHz)	Channel	Level(dBm)
479.40	6	-70.2
814.10	6	-53.2
1630.00	6	-50.3
801.15	1	-52.0
1600.00	1	-51.2
827.00	11	-50.5
1660.00	11	-50.0

WLAN MCS7:

Frequency	2412 MHz [dBm]	2437 MHz [dBm]	2462 MHz [dBm]
2 nd Harmonic	Note (1)	Note (1)	Note (1)
3 rd Harmonic	Note (1)	Note (1)	Note (1)
4 th Harmonic	- 47.9	- 48.3	- 48.2
5 th Harmonic	Note (1)	Note (1)	Note (1)
6 th Harmonic	Note (1)	Note (1)	Note (1)
7 th Harmonic	Note (1)	Note (1)	Note (1)
8 th Harmonic	Note (1)	Note (1)	Note (1)
9 th Harmonic	Note (1)	Note (1)	Note (1)
10 th Harmonic	Note (1)	Note (1)	Note (1)

Note 1): Measurement at system noise floor.

Spurious Conducted Emissions

Freq(MHz)	Channel	Level(dBm)
479.40	6	-70.2
814.10	6	-53.2
1630.00	6	-50.3
801.15	1	-52.0
1600.00	1	-51.2
827.00	11	-50.5
1660.00	11	-50.0

11.3 - Test Equipment List

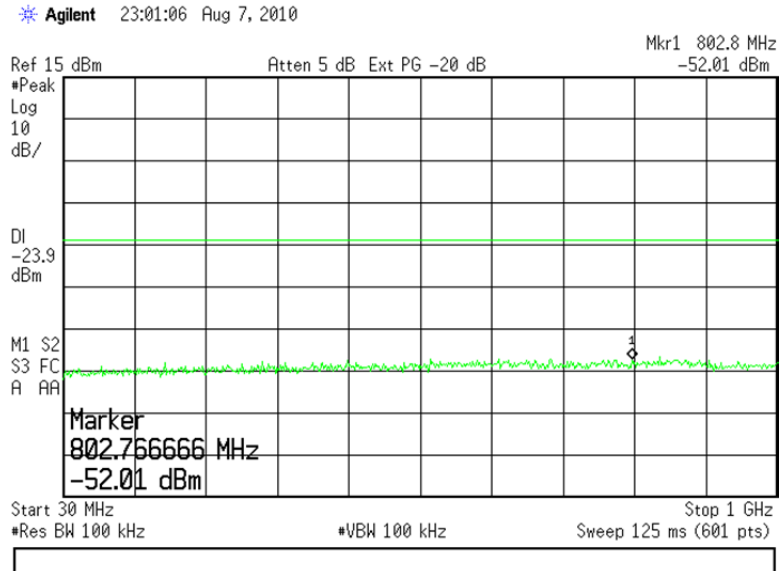
A complete list of test equipment that was used for this test can be found in Appendix A.

Prepared For: LS Research	Model Number: TiWi-R2	Report #: 311258
EUT: TiWi-R2	Serial Number: 031202	LSR Job #: C-1285

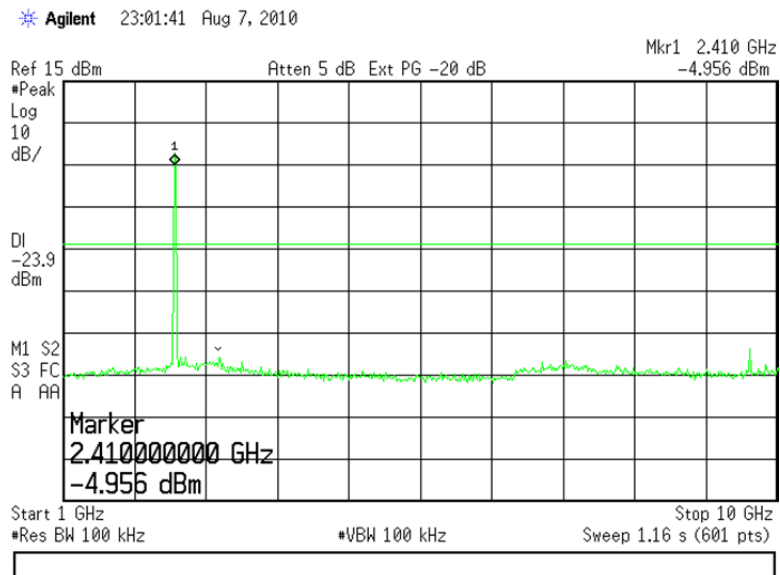
11.4 - Screen Captures - Spurious Radiated Emissions

Bluetooth:

Channel 2402, shown from 30 MHz up to 1000 MHz

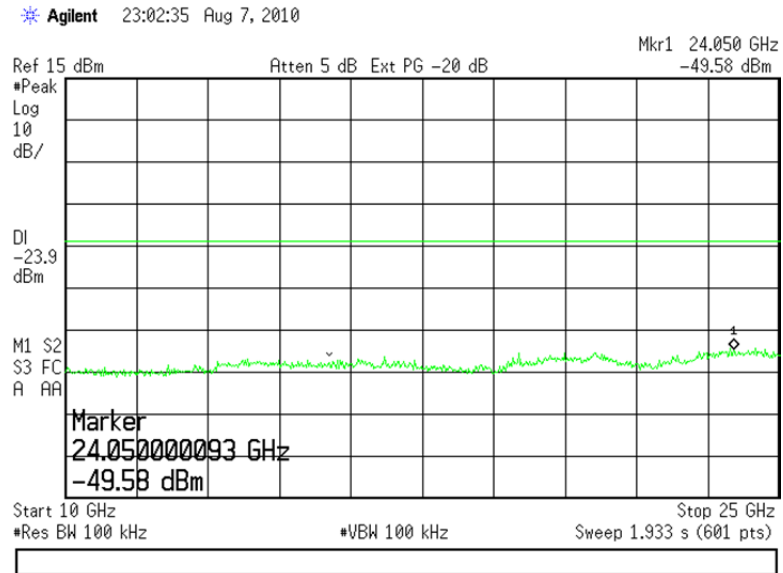


Channel 2402, shown from 1000 MHz up to 10000 MHz



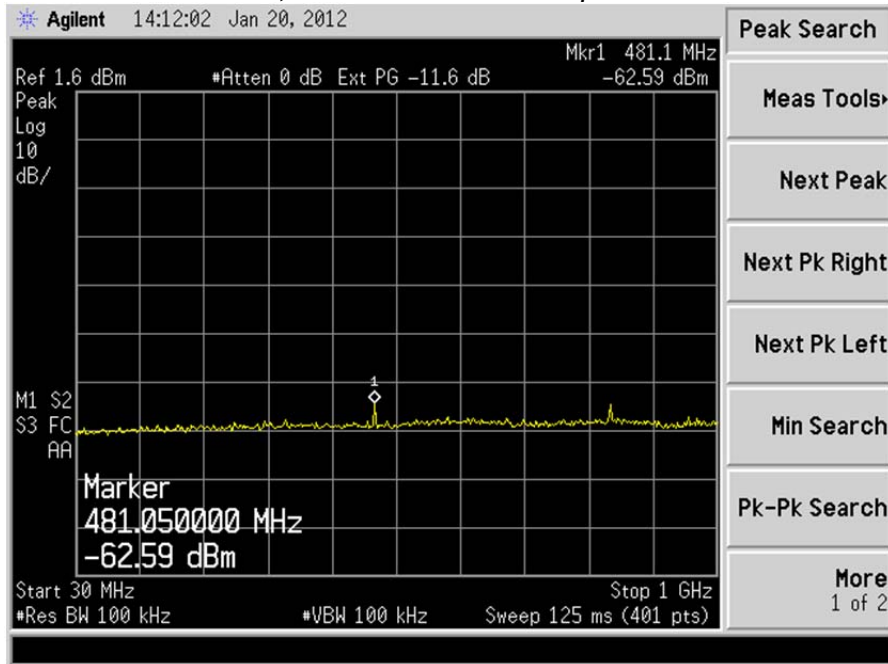
Prepared For: LS Research	Model Number: TiWi-R2	Report #: 311258
EUT: TiWi-R2	Serial Number: 031202	LSR Job #: C-1285

Channel 2402, shown from 10000 MHz up to 25000 MHz



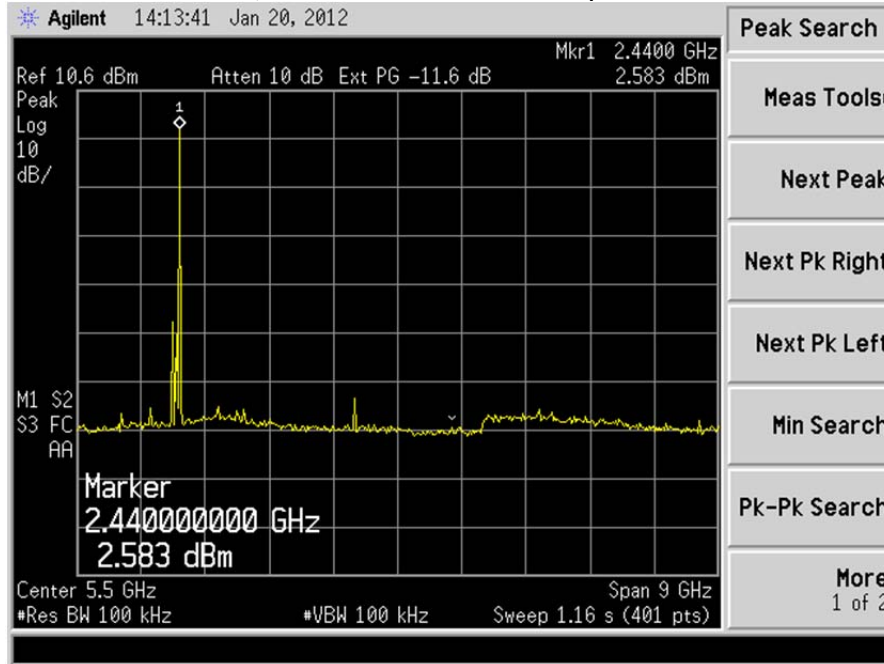
Bluetooth BLE:

Channel 20, shown from 30 MHz up to 1000 MHz

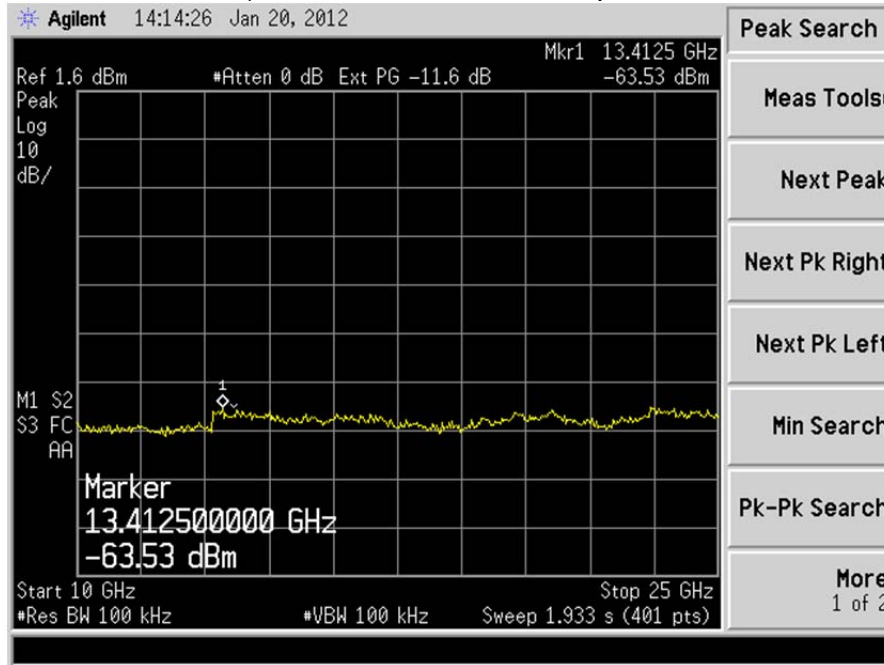


Prepared For: LS Research	Model Number: TiWi-R2	Report #: 311258
EUT: TiWi-R2	Serial Number: 031202	LSR Job #: C-1285

Channel 20, shown from 1000 MHz up to 10000 MHz

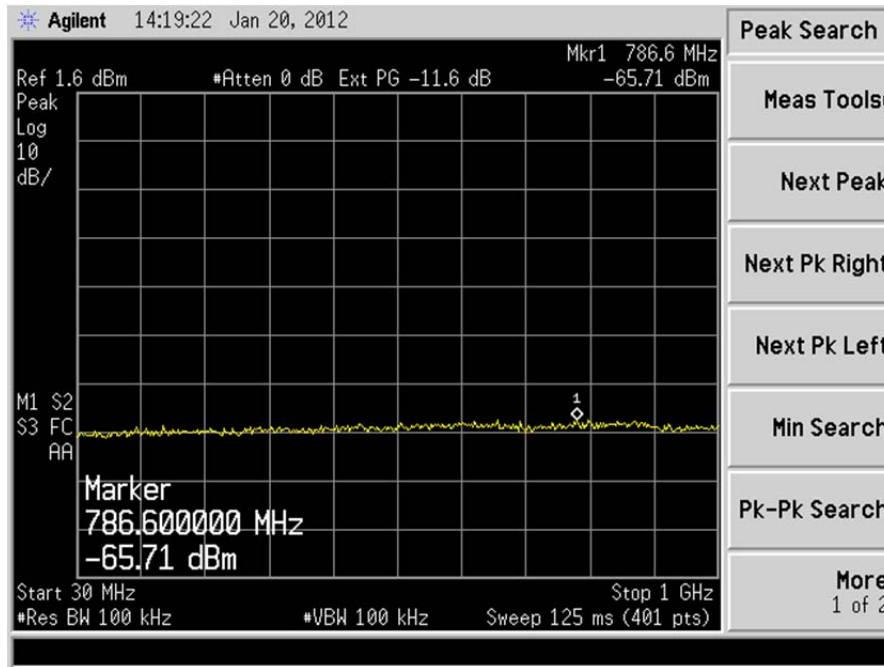


Channel 20, shown from 10000 MHz up to 25000 MHz

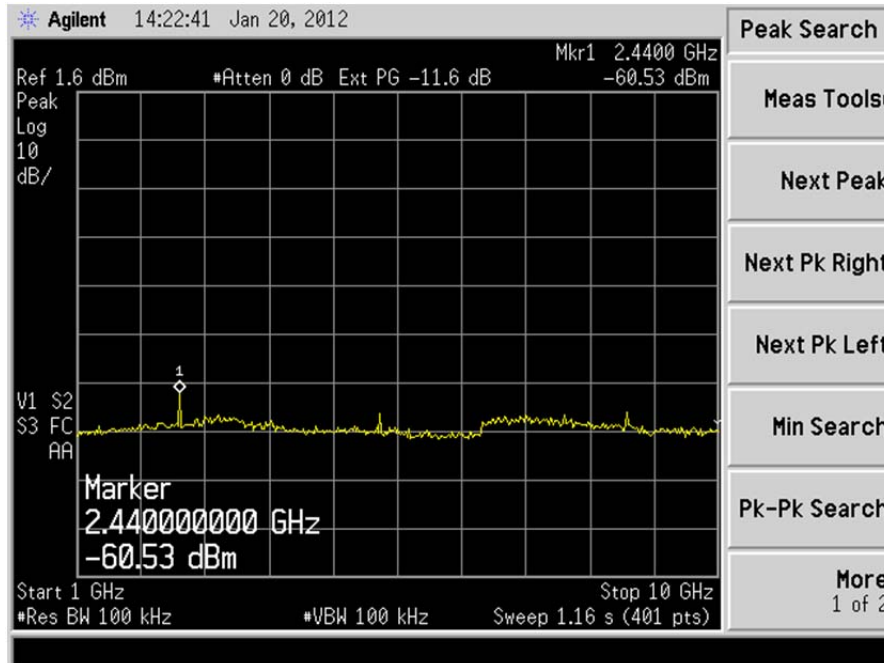


Prepared For: LS Research	Model Number: TiWi-R2	Report #: 311258
EUT: TiWi-R2	Serial Number: 031202	LSR Job #: C-1285

Channel 20, shown from 30 MHz up to 1000 MHz
Receive Mode

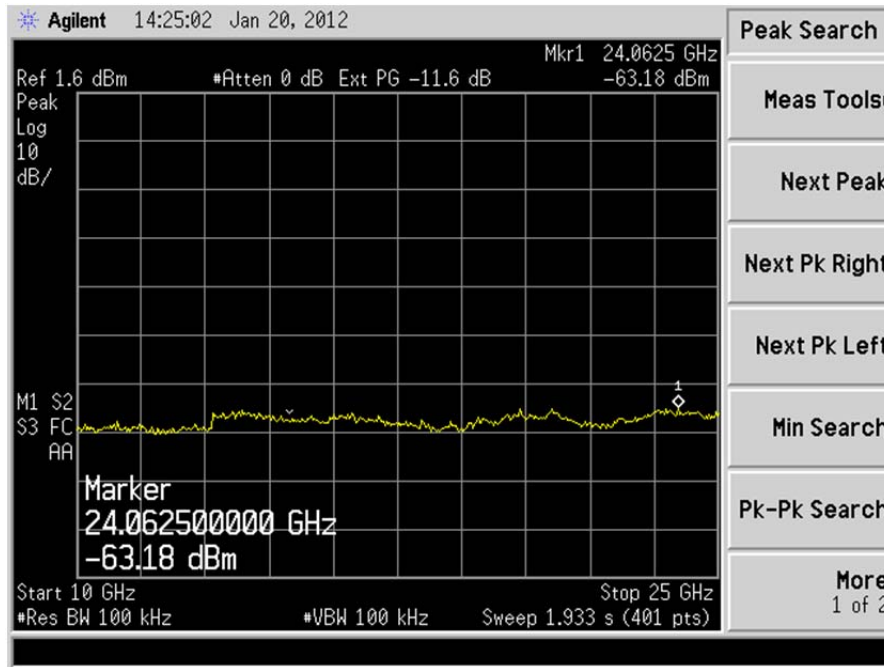


Channel 20, shown from 1000 MHz up to 10000 MHz
Receive Mode



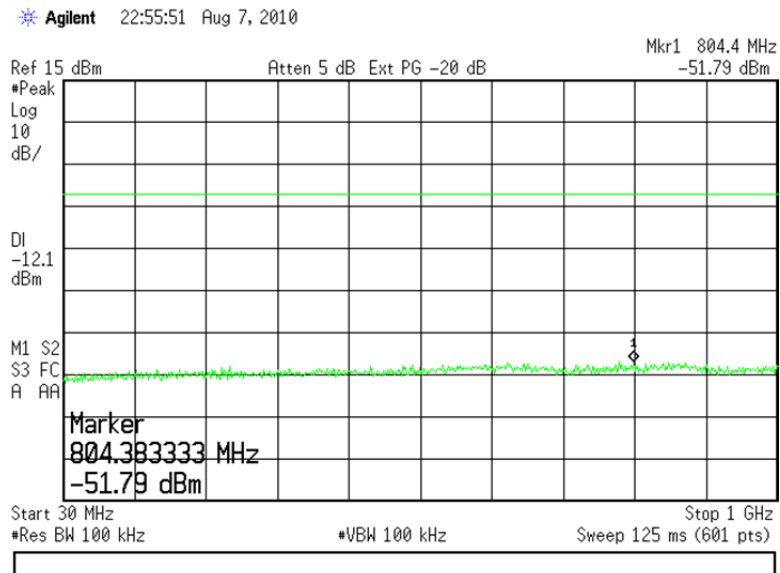
Prepared For: LS Research	Model Number: TiWi-R2	Report #: 311258
EUT: TiWi-R2	Serial Number: 031202	LSR Job #: C-1285

Channel 20, shown from 10000 MHz up to 25000 MHz
Receive Mode



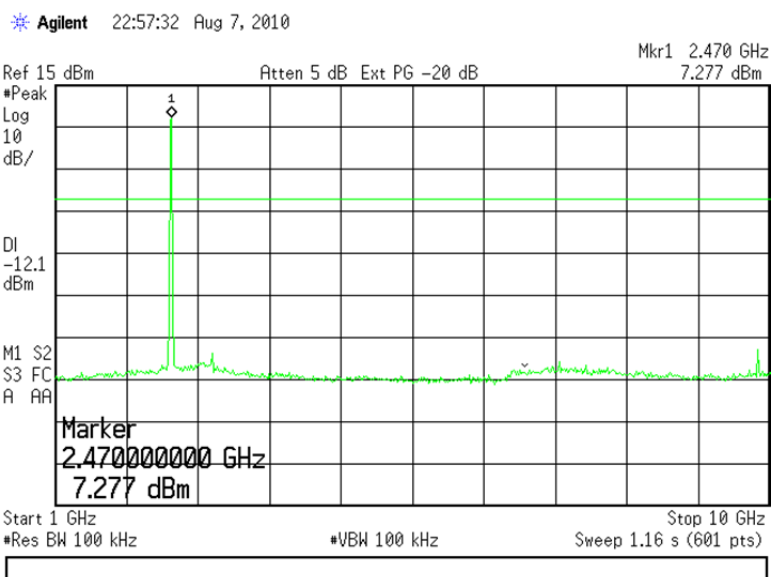
WLAN 1Mbps:

Channel 2480, shown from 30 MHz up to 1000 MHz

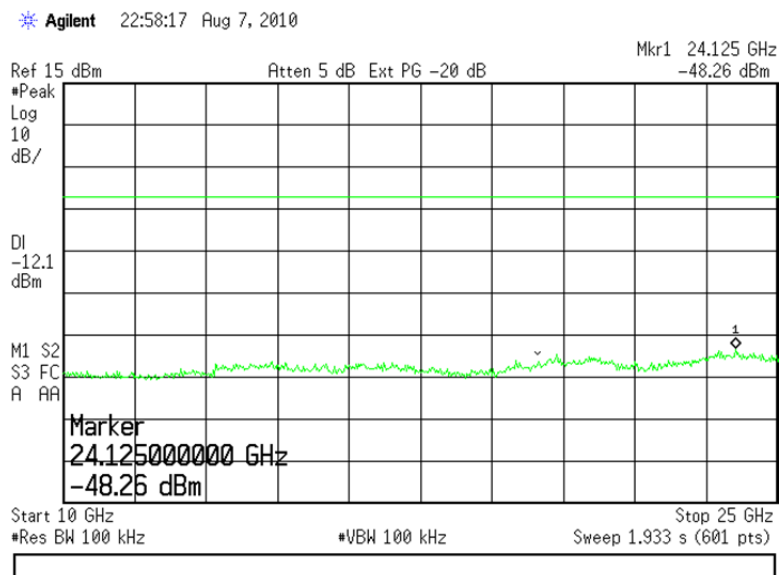


Prepared For: LS Research	Model Number: TiWi-R2	Report #: 311258
EUT: TiWi-R2	Serial Number: 031202	LSR Job #: C-1285

Channel 2480, shown from 1000 MHz up to 10000 MHz



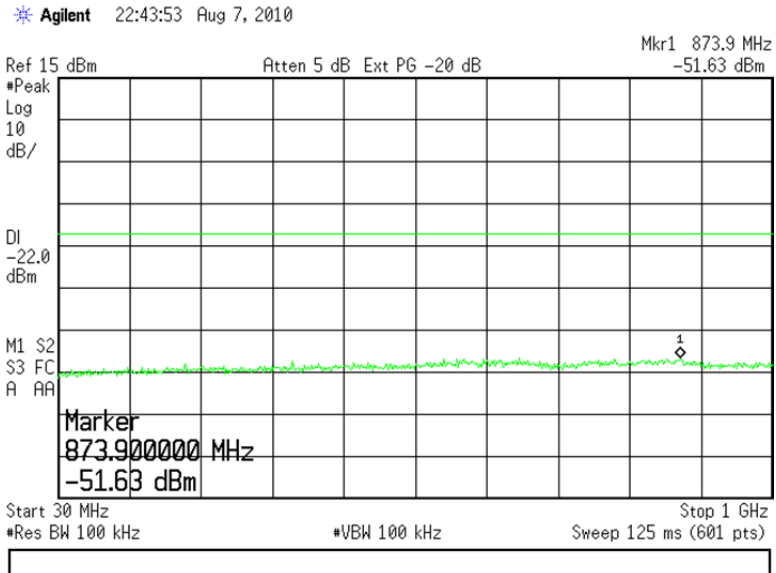
Channel 2480, shown from 10000 MHz up to 25000 MHz



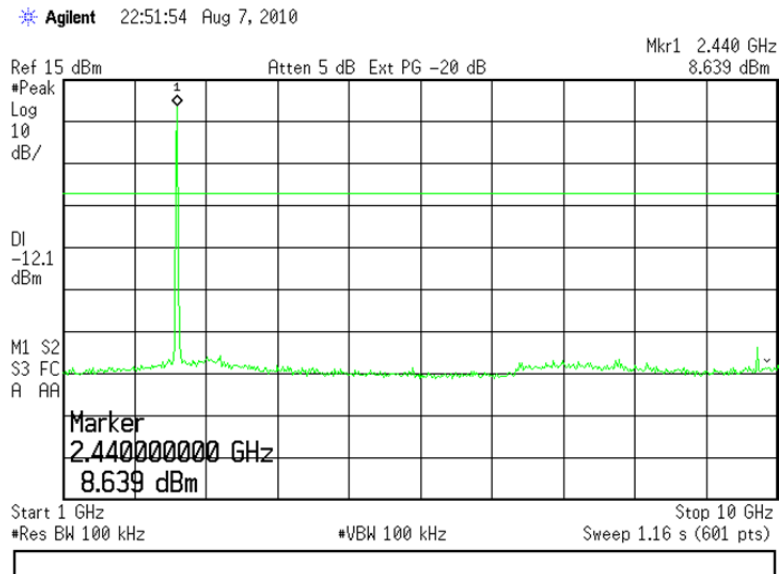
Prepared For: LS Research	Model Number: TiWi-R2	Report #: 311258
EUT: TiWi-R2	Serial Number: 031202	LSR Job #: C-1285

WLAN MCS7:

Channel 2437, shown from 30 MHz up to 1000 MHz



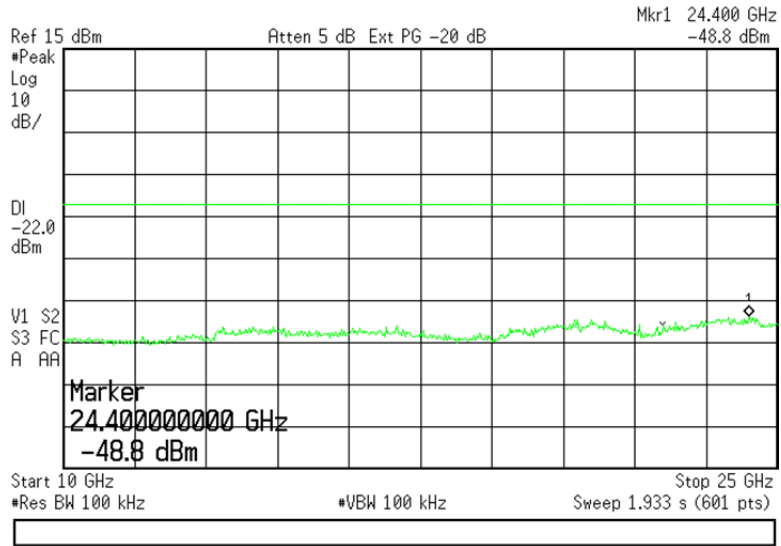
Channel 2437, shown from 1000 MHz up to 10000 MHz



Prepared For: LS Research	Model Number: TiWi-R2	Report #: 311258
EUT: TiWi-R2	Serial Number: 031202	LSR Job #: C-1285

Channel 2437, shown from 10000 MHz up to 25000 MHz

* Agilent 22:42:07 Aug 7, 2010



Prepared For: LS Research	Model Number: TiWi-R2	Report #: 311258
EUT: TiWi-R2	Serial Number: 031202	LSR Job #: C-1285

EXHIBIT 12. FREQUENCY & POWER STABILITY OVER VOLTAGE & TEMPERATURE VARIATIONS

A spectrum analyzer was used to measure the frequency at the appropriate frequency markers. For this test, the EUT was placed in continuous transmit CW mode. Power to the EUT was supplied by an external bench-type variable power supply. The frequency of operation was monitored using the spectrum analyzer with RBW=VBW=1 kHz settings while the voltage was varied.

Channel	2.8VDC		3.3VDC		3.8VDC	
	Power (dBm)	Frequency (Hz)	Power (dBm)	Frequency (Hz)	Power (dBm)	Frequency (Hz)
0	9.71	2402002000	9.757	2402002750	9.756	2402002250
20	10.02	2442254500	9.967	2442254250	9.951	2442254750
39	9.98	2479837250	9.98	2479838250	10.00	2479837000

Channel	Maximum Frequency (Hz)	Minimum Frequency (Hz)	Frequency Drift (Hz)
0	2402002750	2402002000	750
20	2442254750	2442254250	500
39	2479837250	2479835250	2000

Prepared For: LS Research	Model Number: TiWi-R2	Report #: 311258
EUT: TiWi-R2	Serial Number: 031202	LSR Job #: C-1285

EXHIBIT 13. CHANNEL PLAN AND SEPARATION

An HP E4407B spectrum analyzer was used with a resolution bandwidth of 30 kHz to measure the channel separation of the Bluetooth FHSS Radio on the TiWi product.

The minimum and maximum channel-separations measured for this device are 997.50 kHz and 1021.25 kHz respectively. The maximum occupied bandwidth of the device, as reported in the previous section is 875.00 kHz. The following plots describe this spacing, and also establish the channel separation and plan.

13.1 Data Table

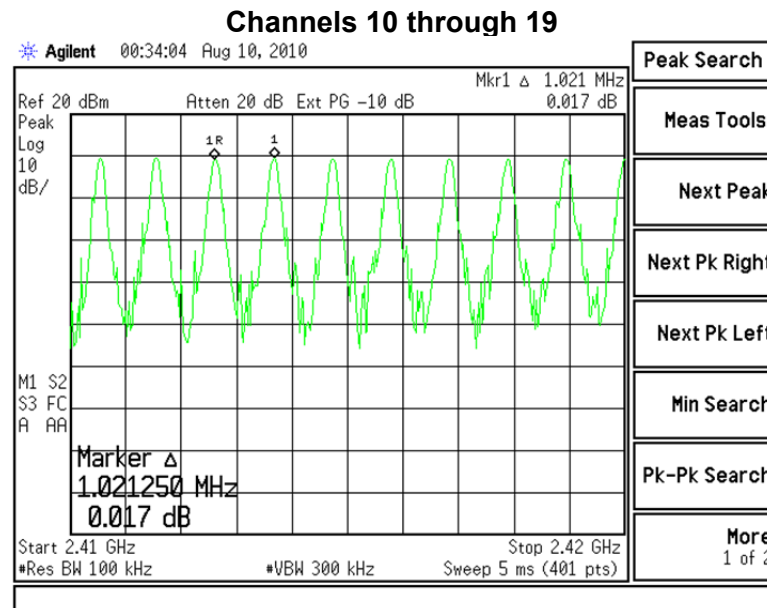
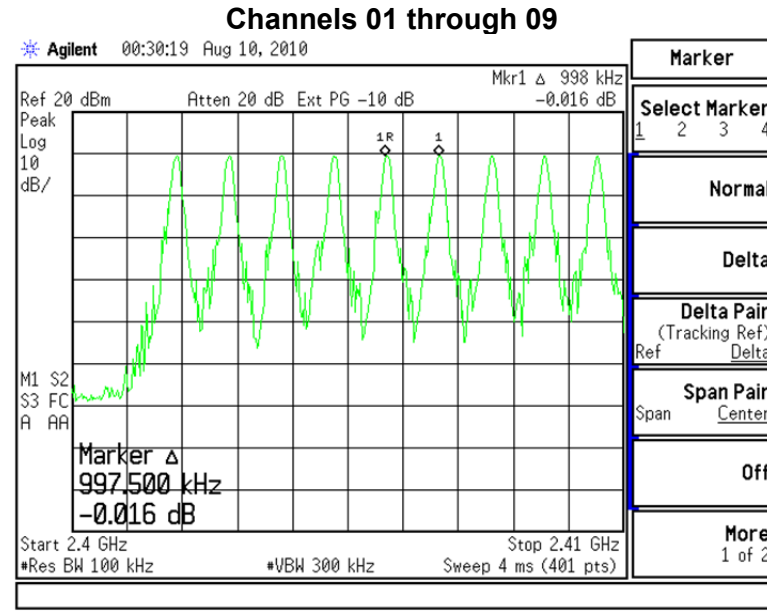
Range (MHz)	Number of Channels	Max Separation (Hz)
2400 - 2410.5	9.0	997.50
2410.5 - 2420	9.5	1021.25
2420 - 2430	10.0	1000.00
2430 - 2440	10.0	1000.00
2440-2450	10.0	1000.00
2450-2460	10.0	1000.00
2460-2470	10.0	1000.00
2470-2483.5	10.5	1011.25

13.2 Summary Table

Total Channels	79
Max separation	1021.25
Min Separation	997.50

Prepared For: LS Research	Model Number: TiWi-R2	Report #: 311258
EUT: TiWi-R2	Serial Number: 031202	LSR Job #: C-1285

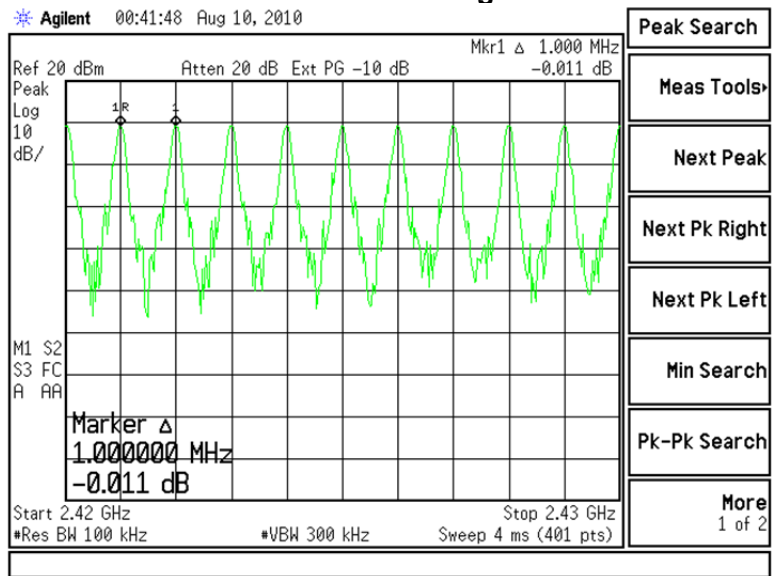
13.3 Screen Captures – Channel Separation



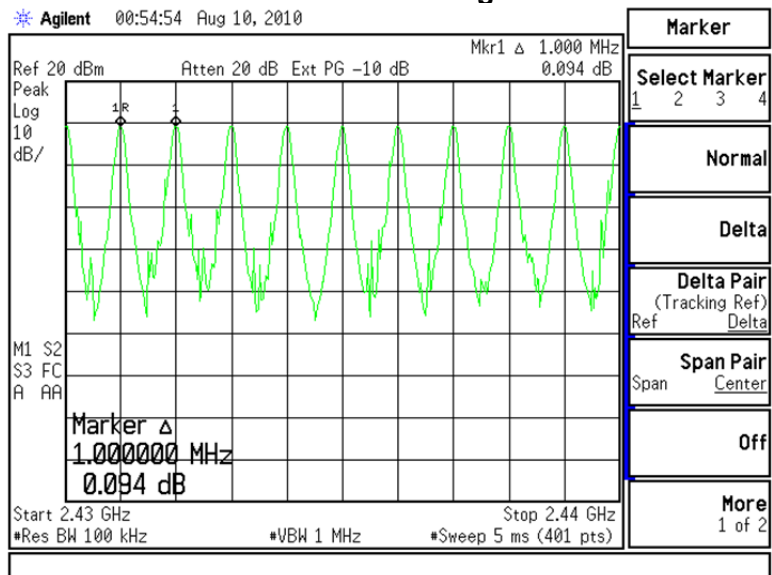
Prepared For: LS Research	Model Number: TiWi-R2	Report #: 311258
EUT: TiWi-R2	Serial Number: 031202	LSR Job #: C-1285

Screen Captures – Channel Separation (continued)

Channels 19 through 29



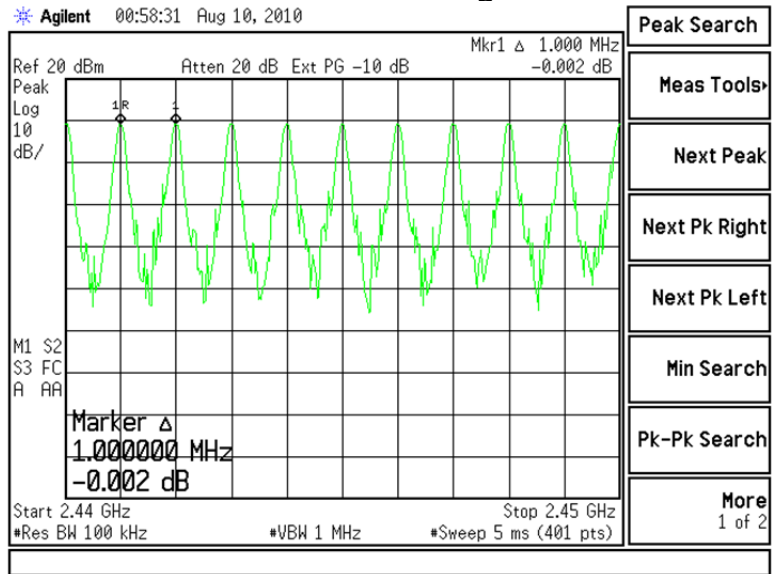
Channels 29 through 39



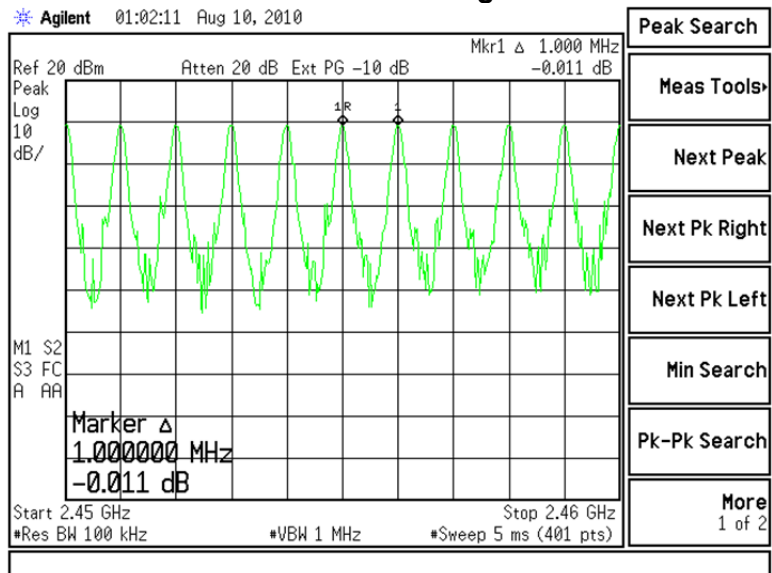
Prepared For: LS Research	Model Number: TiWi-R2	Report #: 311258
EUT: TiWi-R2	Serial Number: 031202	LSR Job #: C-1285

Screen Captures – Channel Separation (continued)

Channels 39 through 49



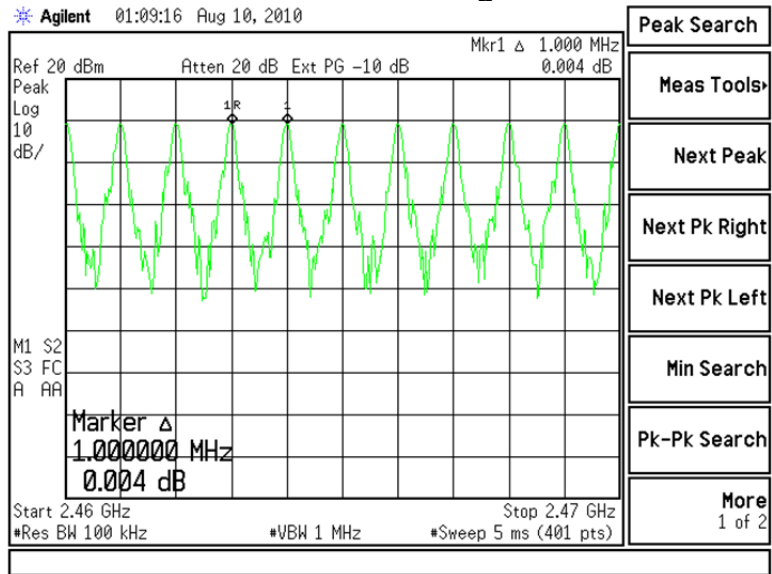
Channels 49 through 59



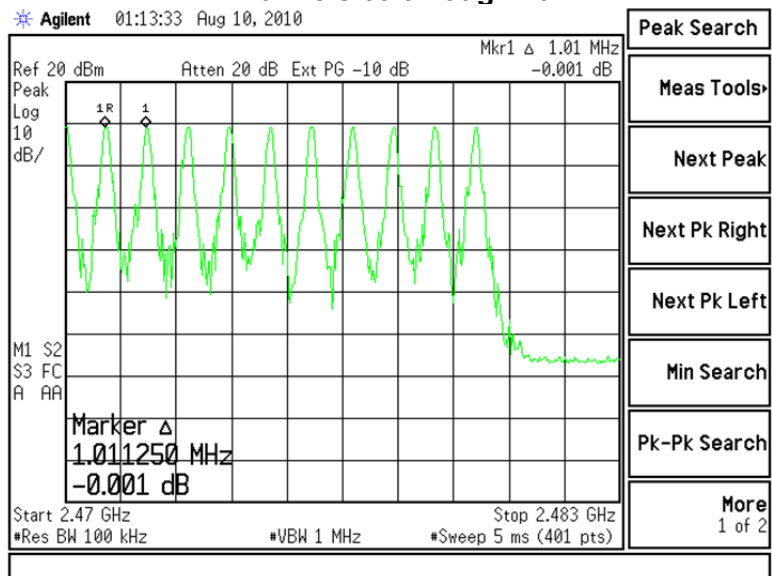
Prepared For: LS Research	Model Number: TiWi-R2	Report #: 311258
EUT: TiWi-R2	Serial Number: 031202	LSR Job #: C-1285

Screen Captures – Channel Separation (continued)

Channels 59 through 69



Channels 69 through 79



Prepared For: LS Research	Model Number: TiWi-R2	Report #: 311258
EUT: TiWi-R2	Serial Number: 031202	LSR Job #: C-1285



Date: 18-Jan-2012 Type Test: Conducted Power Output Job #: C-1285
 Prepared By: Shane Rismeyer Customer: LSR Quote #: 31258

No.	Asset #	Description	Manufacturer	Model #	Serial #	Cal Date	Cal Due Date	Equipment Status
1	AA 960143	Phaseflex	Gore	EKD01D01048.0	5546519	6/11/2011	6/11/2012	Active Calibration
2	EE 960073	Spectrum Analyzer	Agilent	E4446A	US45300564	4/25/2011	4/25/2012	Active Calibration
3	CC 000221C	Spectrum Analyzer	HP	E4407B	US39160256	5/4/2011	5/4/2012	Active Calibration

Project Engineer: *Shane Rismeyer* Quality Assurance: *Peter Fidler*



Date: 18-Jan-2012 Type Test: Band-Edge Job #: C-1285
 Prepared By: Shane Rismeyer Customer: LSR Quote #: 31258

No.	Asset #	Description	Manufacturer	Model #	Serial #	Cal Date	Cal Due Date	Equipment Status
1	EE 960158	RF Preselector	Agilent	N9039A	MY46520110	6/11/2011	6/11/2012	Active Calibration
2	EE 960157	3Hz-13.2GHz Spectrum Analyzer	Agilent	E4445A	MY48250225	6/6/2011	6/6/2012	Active Calibration
3	AA 960007	Double Ridge Horn Antenna	EMCO	3115	9311-4138	4/27/2011	4/27/2012	Active Calibration
4	EE 960147	Pre-Amp	Adv. Micro	WLA612	123101	1/6/2012	1/6/2013	Active Calibration
5	EE 960156	100kHz-1GHz Analog Signal Generator	Agilent	N5181A	MY49060062	6/6/2011	6/6/2012	Active Calibration

Project Engineer: *Shane Rismeyer* Quality Assurance: *Peter Fidler*



Date: 29-Sep-2010 Type Test: Radiated Emissions Job #: C-884
 Prepared By: Peter Customer: LSR Quote #: 310117

No.	Asset #	Description	Manufacturer	Model #	Serial #	Cal Date	Cal Due Date	Equipment Status
1	EE 960157	3Hz-13.2GHz Spectrum Analyzer	Agilent	E4445A	MY48250225	3/17/2009	3/17/2010	Active Calibration
2	EE 960158	RF Preselector	Agilent	N9039A	MY46520110	7/2/2009	7/2/2010	Active Calibration
3	AA 960007	Double Ridge Horn Antenna	EMCO	3115	9311-4138	11/10/2009	11/10/2010	Active Calibration
4	AA 960078	Log Periodic Antenna	EMCO	93146	9701-4855	10/16/2009	10/16/2010	Active Calibration
5	AA 960081	Double Ridge Horn Antenna	EMCO	3115	6907	12/22/2009	12/22/2010	Active Calibration
6	EE 960147	Pre-Amp	Adv. Micro	WLA612	123101	12/28/2009	12/28/2010	Active Calibration
7	AA 960144	Phaseflex	Gore	EKD01D010720	5800373	6/25/2009	6/25/2010	Active Calibration
8	AA 960150	Bicon Antenna	ETS	3110B	0003-3346	11/3/2009	11/3/2010	Active Calibration



Date: 29-Sep-2010 Type Test: Spurious Emissions Job #: C-884
 Prepared By: Peter Customer: LSR Quote #: 310117

No.	Asset #	Description	Manufacturer	Model #	Serial #	Cal Date	Cal Due Date	Equipment Status
1	CC 000221C	Spectrum Analyzer	HP	E4407B	US39160256	3/9/2009	3/9/2010	Active Calibration
2	AA 960143	Phaseflex	Gore	EKD01D01048.0	5546519	9/16/2009	9/16/2010	Active Calibration
3	EE 960157	3Hz-13.2GHz Spectrum Analyzer	Agilent	E4445A	MY48250225	3/17/2009	3/17/2010	Active Calibration
4	EE 960158	RF Preselector	Agilent	N9039A	MY46520110	7/2/2009	7/2/2010	Active Calibration
5	AA 960007	Double Ridge Horn Antenna	EMCO	3115	9311-4138	11/10/2009	11/10/2010	Active Calibration
6	AA 960078	Log Periodic Antenna	EMCO	93146	9701-4855	10/16/2009	10/16/2010	Active Calibration
7	AA 960081	Double Ridge Horn Antenna	EMCO	3115	6907	12/22/2009	12/22/2010	Active Calibration
8	EE 960147	Pre-Amp	Adv. Micro	WLA612	123101	12/28/2009	12/28/2010	Active Calibration
9	AA 960144	Phaseflex	Gore	EKD01D010720	5800373	6/25/2009	6/25/2010	Active Calibration
10	AA 960150	Bicon Antenna	ETS	3110B	0003-3346	11/3/2009	11/3/2010	Active Calibration

Prepared For: LS Research	Model Number: TiWi-R2	Report #: 311258
EUT: TiWi-R2	Serial Number: 031202	LSR Job #: C-1285



Date: 15-Jun-2010

Type Test: Occupied Bandwidth (6dB & 20dB)

Job #: C-884

Prepared By: Peter

Customer: LSR

Quote #: 310117

No.	Asset #	Description	Manufacturer	Model #	Serial #	Cal Date	Cal Due Date	Equipment Status
1	CC 000221C	Spectrum Analyzer	HP	E4407B	US39160256	3/9/2009	3/9/2010	Active Calibration
2	AA 960143	Phaseflex	Gore	EKD01D01048.0	5546519	9/16/2009	9/16/2010	Active Calibration
3	EE 960073	Spectrum Analyzer	Agilent	E4446A	US45300564	9/17/2009	9/17/2010	Active Calibration
4	AA 960144	Phaseflex	Gore	EKD01D010720	5800373	6/25/2009	6/25/2010	Active Calibration



Date: 5-Jun-2010

Type Test: Conducted Power Output

Job #: C-884

Prepared By: Peter

Customer: LSR

Quote #: 310117

No.	Asset #	Description	Manufacturer	Model #	Serial #	Cal Date	Cal Due Date	Equipment Status
1	AA 960143	Phaseflex	Gore	EKD01D01048.0	5546519	9/16/2009	9/16/2010	Active Calibration
2	CC 000221C	Spectrum Analyzer	HP	E4407B	US39160256	3/9/2009	3/9/2010	Active Calibration
3	EE 960073	Spectrum Analyzer	Agilent	E4446A	US45300564	9/17/2009	9/17/2010	Active Calibration
4	AA 960144	Phaseflex	Gore	EKD01D010720	5800373	6/25/2009	6/25/2010	Active Calibration



Date: 15-Jun-2010

Type Test: Power Spectral Density

Job #: C-884

Prepared By: Peter

Customer: LSR

Quote #: 310117

No.	Asset #	Description	Manufacturer	Model #	Serial #	Cal Date	Cal Due Date	Equipment Status
1	CC 000221C	Spectrum Analyzer	HP	E4407B	US39160256	3/9/2009	3/9/2010	Active Calibration
2	AA 960143	Phaseflex	Gore	EKD01D01048.0	5546519	9/16/2009	9/16/2010	Active Calibration
3	EE 960073	Spectrum Analyzer	Agilent	E4446A	US45300564	9/17/2009	9/17/2010	Active Calibration
4	AA 960144	Phaseflex	Gore	EKD01D010720	5800373	6/25/2009	6/25/2010	Active Calibration



Date: 29-Sep-2010

Type Test: Band-Edge

Job #: C-884

Prepared By: Peter

Customer: LSR

Quote #: 310117

No.	Asset #	Description	Manufacturer	Model #	Serial #	Cal Date	Cal Due Date	Equipment Status
1	EE 960157	3Hz-13.2GHz Spectrum Analyzer	Agilent	E4445A	MY48250225	3/17/2010	3/17/2011	Active Calibration
2	EE 960158	RF Preselector	Agilent	N9039A	MY48520110	7/2/2009	7/2/2010	Active Calibration
3	AA 960081	Double Ridge Horn Antenna	EMCO	3115	6907	12/22/2009	12/22/2010	Active Calibration



Date: 20-Apr-2010

Type Test: Radiated Emissions (109)

Job #: C-884

Prepared By:

Customer: LSR

Quote #: 310117

No.	Asset #	Description	Manufacturer	Model #	Serial #	Cal Date	Cal Due Date	Equipment Status
1	EE 960157	3Hz-13.2GHz Spectrum Analyzer	Agilent	E4445A	MY48250225	3/17/2009	3/17/2010	Active Calibration
2	EE 960158	RF Preselector	Agilent	N9039A	MY48520110	7/2/2009	7/2/2010	Active Calibration
3	AA 960007	Double Ridge Horn Antenna	EMCO	3115	9311-4138	11/10/2009	11/10/2010	Active Calibration
4	AA 960078	Log Periodic Antenna	EMCO	93146	9701-4855	10/16/2009	10/16/2010	Active Calibration
5	AA 960081	Double Ridge Horn Antenna	EMCO	3115	6907	12/22/2009	12/22/2010	Active Calibration
6	EE 960147	Pre-Amp	Adv. Micro	WLA612	123101	12/28/2009	12/28/2010	Active Calibration
7	AA 960150	Bicon Antenna	ETS	3110B	0003-3346	11/3/2009	11/3/2010	Active Calibration



Date: 28-Sep-2010

Type Test: Conducted AC Emissions

Job #: C-884

Prepared By: Peter

Customer: LSR

Quote #: 310117

No.	Asset #	Description	Manufacturer	Model #	Serial #	Cal Date	Cal Due Date	Equipment Status
1	AA 960008	LISN	EMCO	3816/2NM	9701-1057	12/15/2009	12/15/2010	Active Calibration
2	EE 960157	3Hz-13.2GHz Spectrum Analyzer	Agilent	E4445A	MY48250225	3/17/2009	3/17/2010	Active Calibration
3	EE 960158	RF Preselector	Agilent	N9039A	MY48520110	7/2/2009	7/2/2010	Active Calibration
4	AA 960072	Transient Limiter	HP	11947A	3107A01708	9/15/2009	10/15/2010	Active Calibration

Prepared For: LS Research	Model Number: TiWi-R2	Report #: 311258
EUT: TiWi-R2	Serial Number: 031202	LSR Job #: C-1285

APPENDIX C - Uncertainty Statement

This uncertainty represents an expanded uncertainty expressed at approximately the 95 % confidence level, using a coverage factor of $k=2$.

Table of Expanded Uncertainty Values, ($K=2$) for Specified Measurements

Measurement Type	Particular Configuration	Uncertainty Values
Radiated Emissions	3 – Meter chamber, Biconical Antenna	4.24 dB
Radiated Emissions	3-Meter Chamber, Log Periodic Antenna	4.8 dB
Radiated Emissions	10-Meter OATS, Biconical Antenna	4.18 dB
Radiated Emissions	10-Meter OATS, Log Periodic Antenna	3.92 dB
Conducted Emissions	Shielded Room/EMCO LISN	1.60 dB
Radiated Immunity	3 Volts/Meter in 3-Meter Chamber	1.128 Volts/Meter
Conducted Immunity	3 Volts level	1.0 V

Prepared For: LS Research	Model Number: TiWi-R2	Report #: 311258
EUT: TiWi-R2	Serial Number: 031202	LSR Job #: C-1285