

Appendix 1

Test results

Disturbance Voltage on AC Mains

Date: 12 Jan 2006

EUT: S21

Company: Innovi

Humidity: 50%

Temperature: 23°C

Voltage supply: 3.8 V from Lithium battery

Test by: Sharon Li

Op. mode: Charging

Live measurement

Frequency (MHz)	QP reading (dB μ V)	Av reading (dB μ V)	Results
0.228000	46.2	37.3	Pass
1.366720	37.9	25.7	Pass
1.820180	34.7	18.8	Pass
24.450000	30.6	13.8	Pass

Neutral measurement

Frequency (MHz)	QP reading (dB μ V)	Av reading (dB μ V)	Results
0.228000	46.2	36.4	Pass
0.456000	43.4	34.0	Pass
1.135280	38.4	24.7	Pass
2.046000	35.5	21.1	Pass
24.439270	30.9	13.8	Pass

Carrier Frequency Separation

Date: 12 Jan 2006

EUT: S21

Company: Innovi

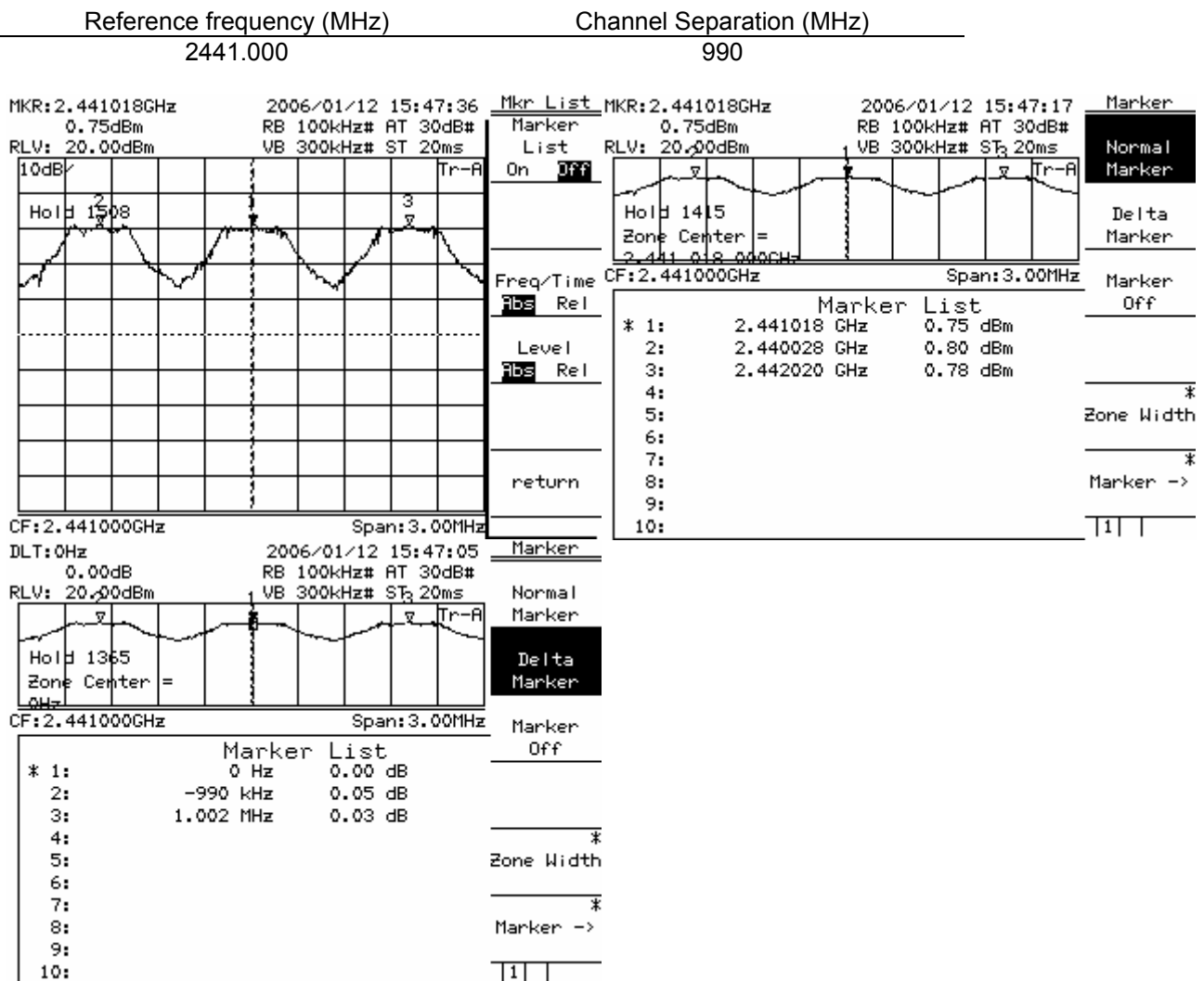
Humidity: 50%

Temperature: 23°C

Voltage supply: 3.8 V from Lithium battery

Test by: Sharon Li

Op. mode: Hopping on



Dwell Time

Date: 12 Jan 2006

EUT: S21

Company: Innovi

Humidity: 50%

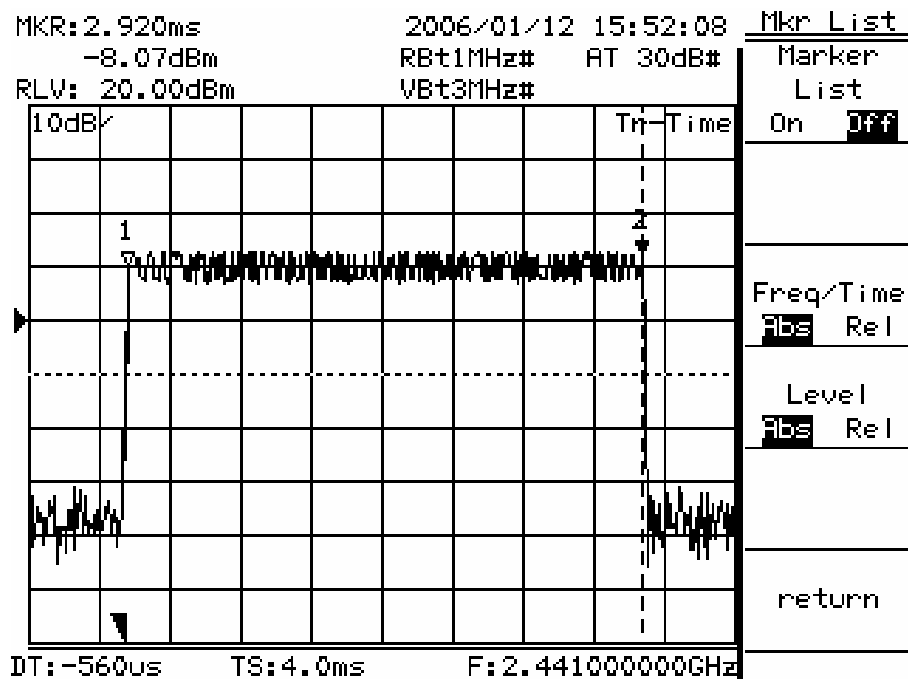
Temperature: 23°C

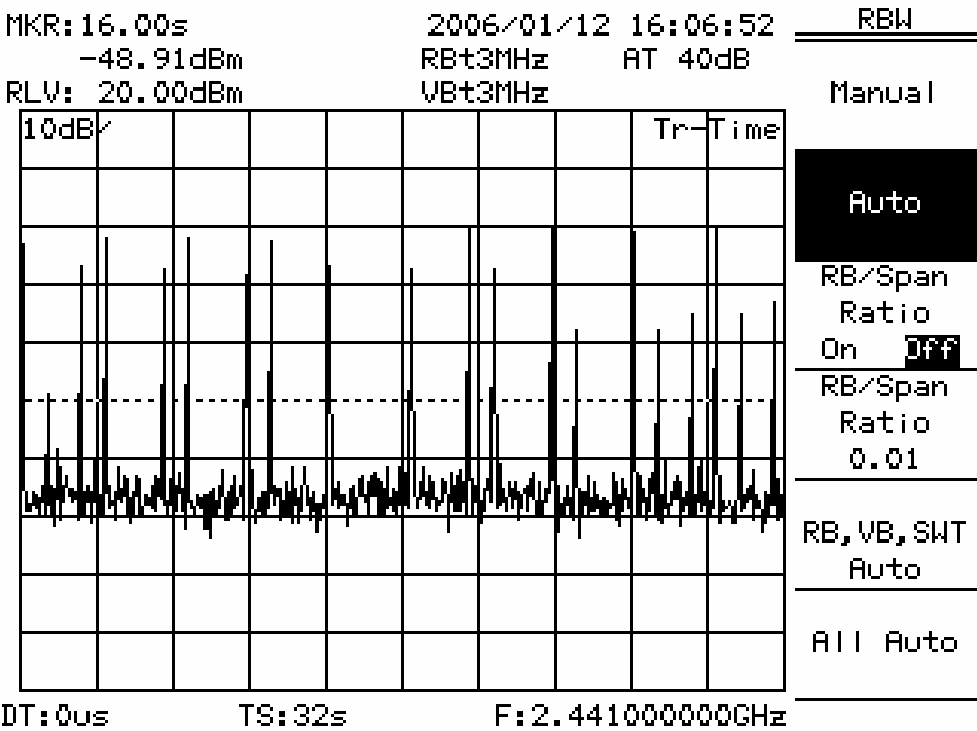
Voltage supply: 3.8 V from Lithium battery

Test by: Sharon Li

Op. mode: Hopping on

Burst Duration (ms)	Number of hopping	Time of occupancy (s)	Results
2.920	64	$64 \times 2.920 \times 10^{-3} =$ 0.18688	Pass





20dB Bandwidth

Date: 12 Jan 2006

EUT: S21

Company: Innovi

Humidity: 50%

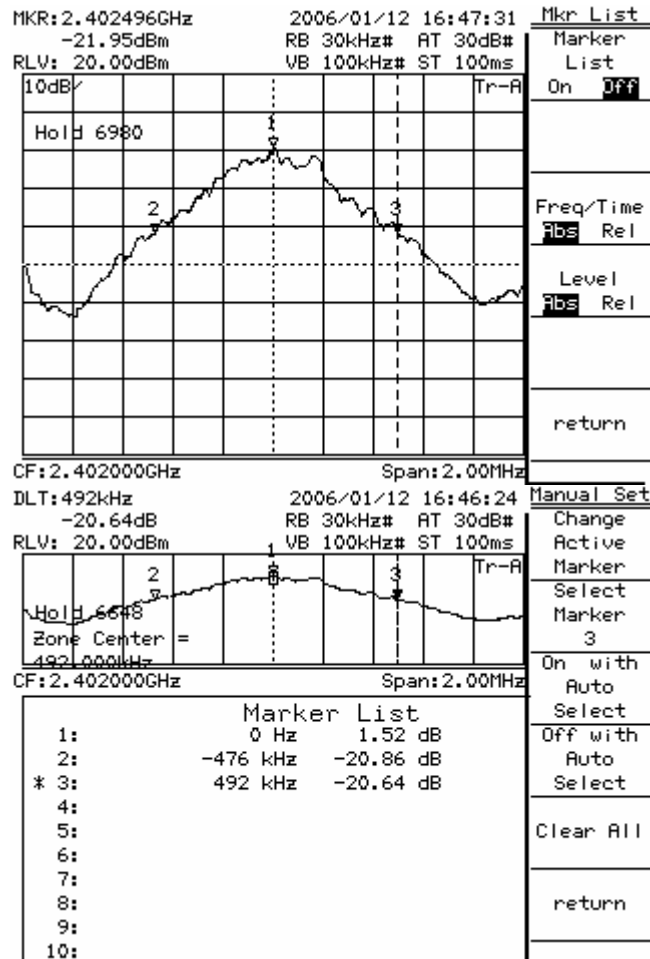
Temperature: 23°C

Voltage supply: 3.8 V from Lithium battery

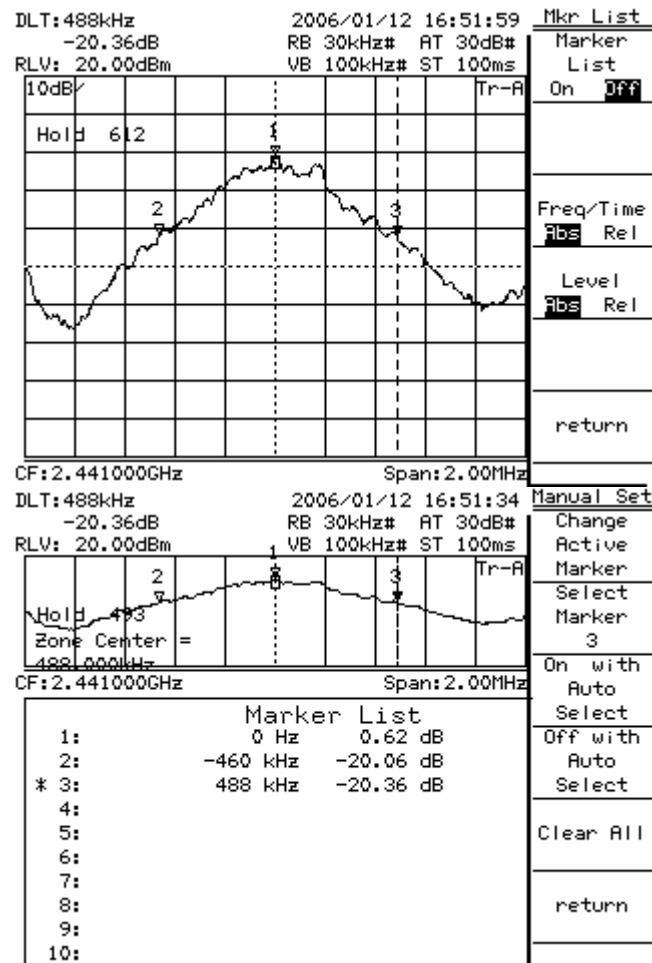
Test by: Sharon Li

Op. mode: TX mode, DH5 with PRBS9 payload

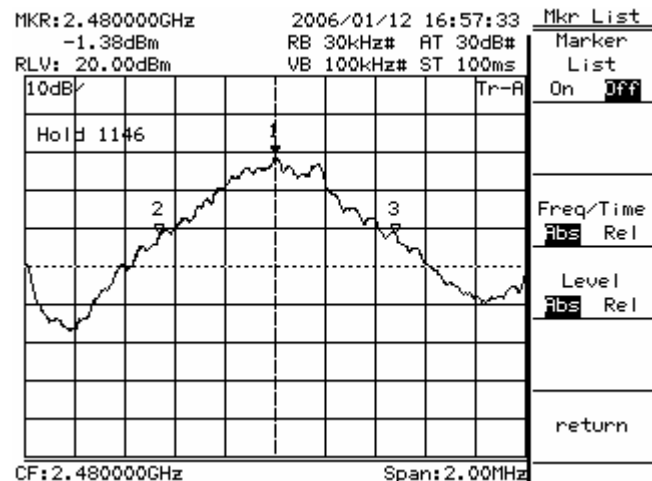
Tx frequency (MHz)	Δf_L (MHz)	Δf_H (MHz)	$ \Delta f_H + \Delta f_L $ (MHz)	Results
2402	476	492	968	Pass
2441	460	488	948	Pass
2480	456	484	940	Pass

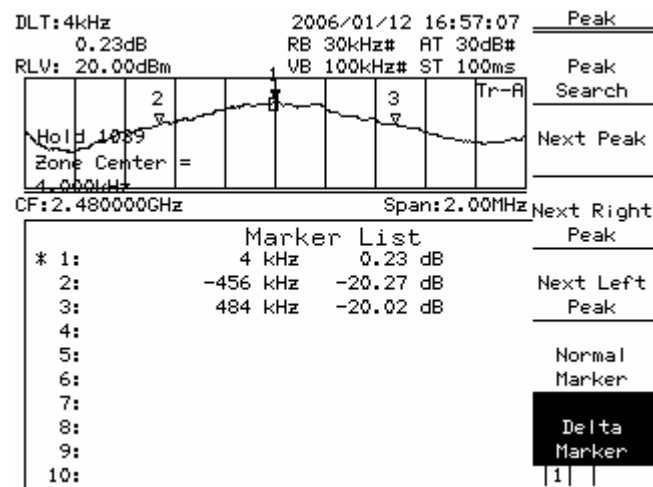


Tx frequency: 2402MHz



Tx frequency: 2441MHz





Tx frequency: 2480MHz

Peak Output Power

Date: 12 Jan 2006

EUT: S21

Company: Innovi

Humidity: 50%

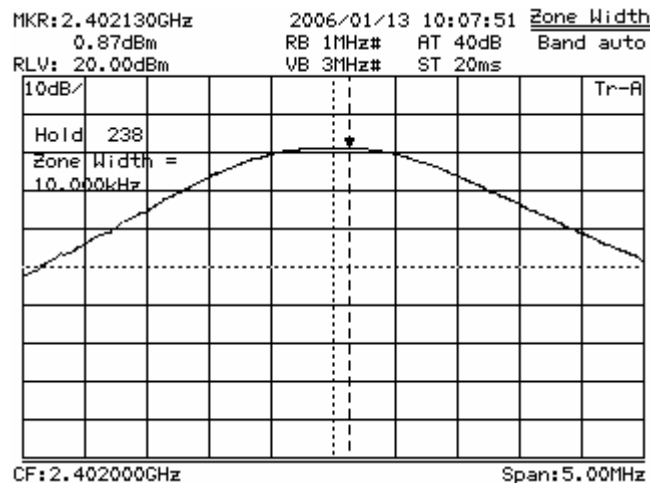
Temperature: 23°C

Voltage supply: 3.8 V from Lithium battery

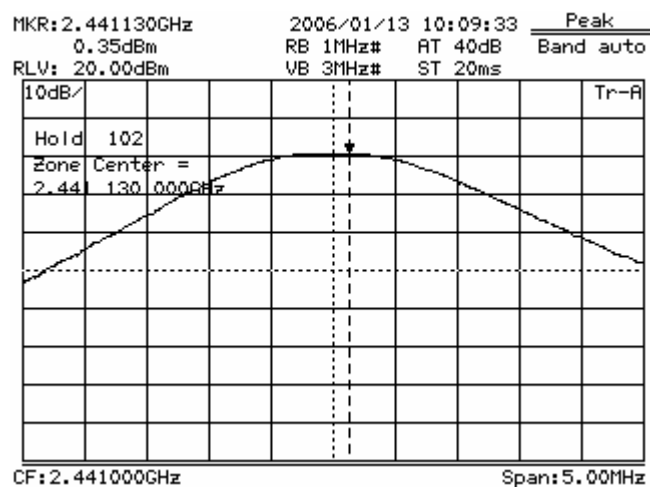
Test by: Sharon Li

Op. mode: TX mode, DH1 with PRBS9 payload

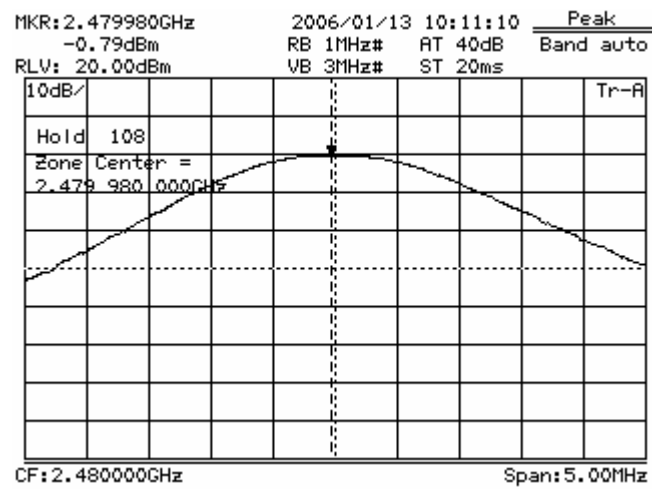
Tx Frequency (MHz)	Power P _{PK} (dBm)	Cable Attenuation (dB)	Actual Peak Power (dBm)	Results
2402	0.87	3.52	4.39	Pass
2441	0.35	3.65	4.00	Pass
2480	-0.79	3.60	2.81	Pass



Tx frequency: 2402MHz



Tx frequency: 2441MHz



Tx frequency: 2480MHz

Band Edge Compliance

Date: 12 Jan 2006

EUT: S21

Company: Innovi

Humidity: 50%

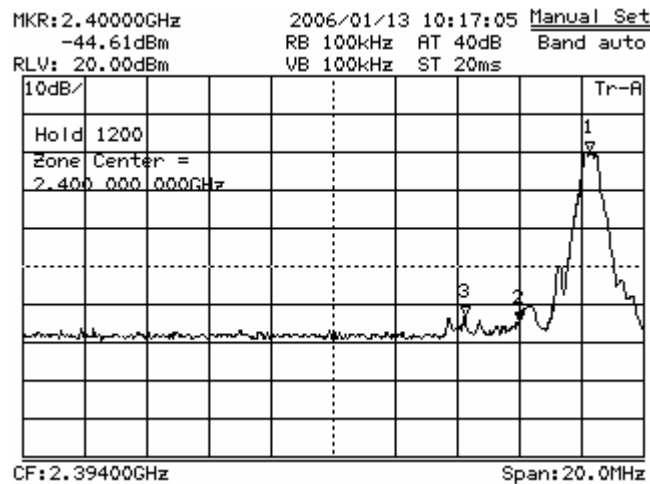
Temperature: 23°C

Voltage supply: 3.8 V from Lithium battery

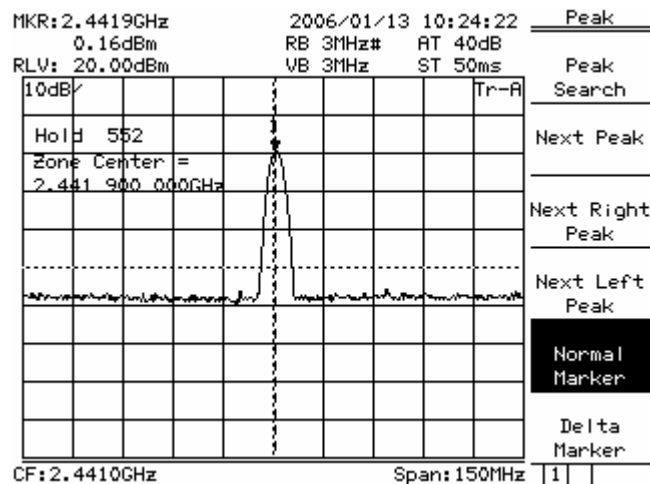
Test by: Sharon Li

Op. mode: TX mode, DH1 with PRBS9 payload

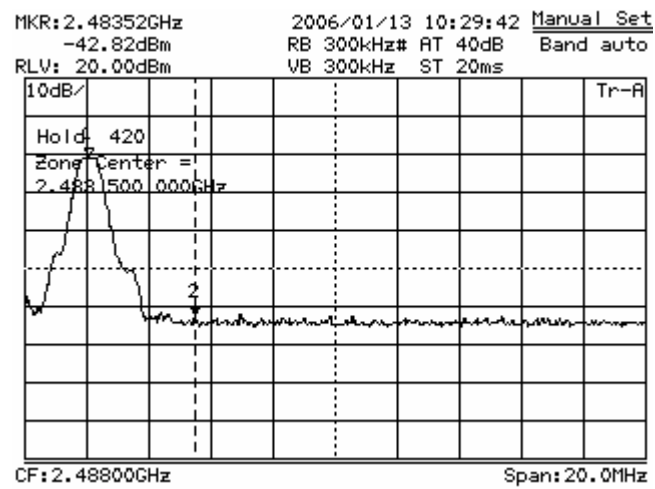
Tx Frequency (MHz)	Peak in band Power level (dBm)	RF power outside 100kHz BW (MHz)	RF power difference outside 100kHz BW (dB)	Results
2402	-	No Peak	-	Pass
2480	-	No Peak	-	Pass



Tx frequency: 2402MHz



Tx frequency: 2441MHz



Tx frequency: 2480MHz

Spurious Emissions - Conducted

Date: 12 Jan 2006

EUT: S21

Company: Innovi

Humidity: 50%

Temperature: 23°C

Voltage supply: 3.8 V from Lithium battery

Test by: Sharon Li

Op. mode: TX mode, DH1 with PRBS9 payload

Tx frequency : 2402MHz

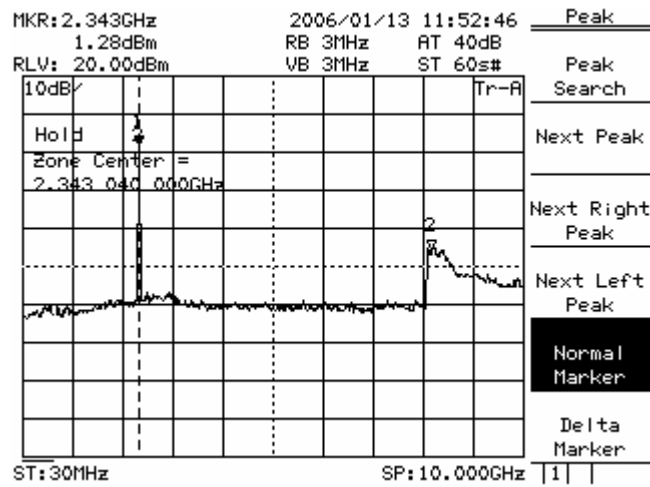
Spurious Frequency (MHz)	Power level (dBm)	Reference value (dBm)	Delta to reference level (dB)	Results
No peak found	-	-	-	Pass

Tx frequency : 2441MHz

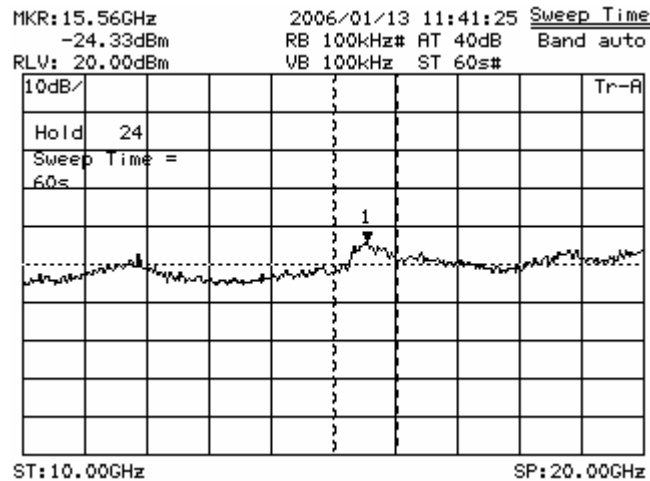
Spurious Frequency (MHz)	Power level (dBm)	Reference value (dBm)	Delta to reference level (dB)	Results
No peak found	-	-	-	Pass

Tx frequency : 2480MHz

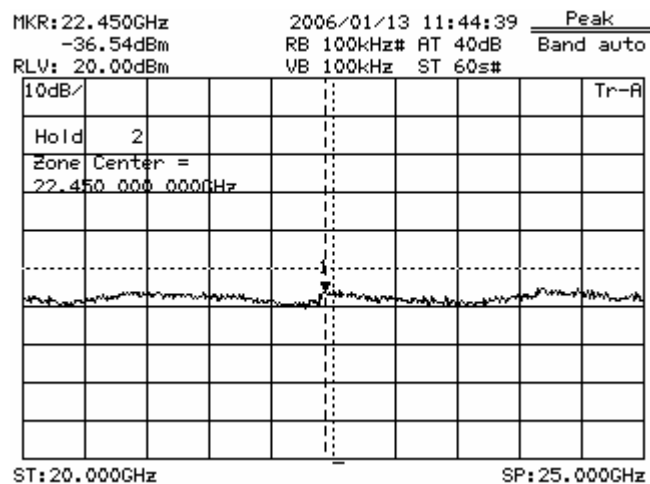
Spurious Frequency (MHz)	Power level (dBm)	Reference value (dBm)	Delta to reference level (dB)	Results
No peak found	-	-	-	Pass



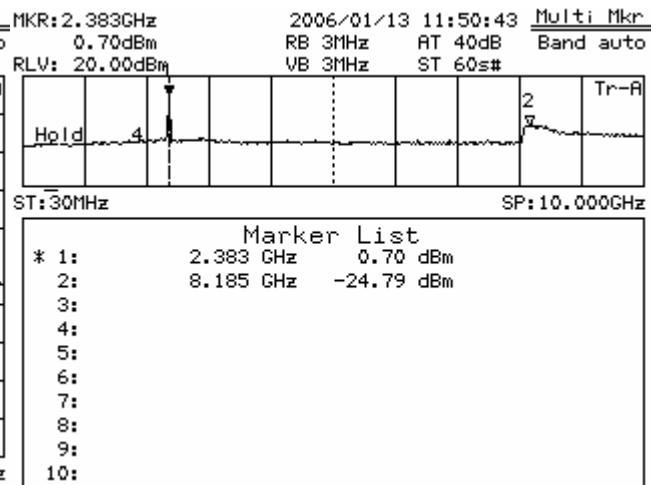
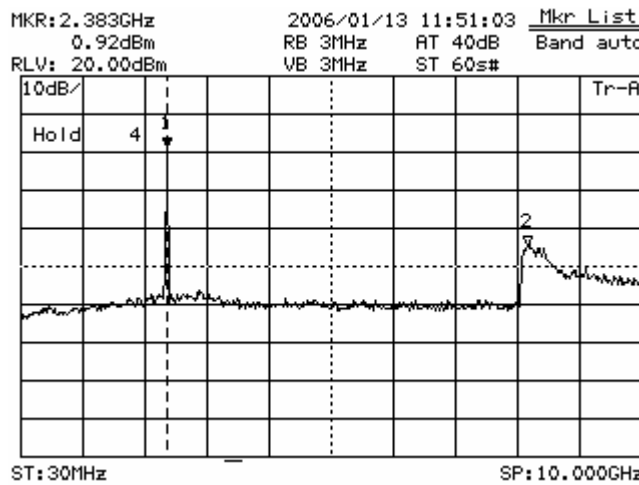
Tx frequency: 2402MHz



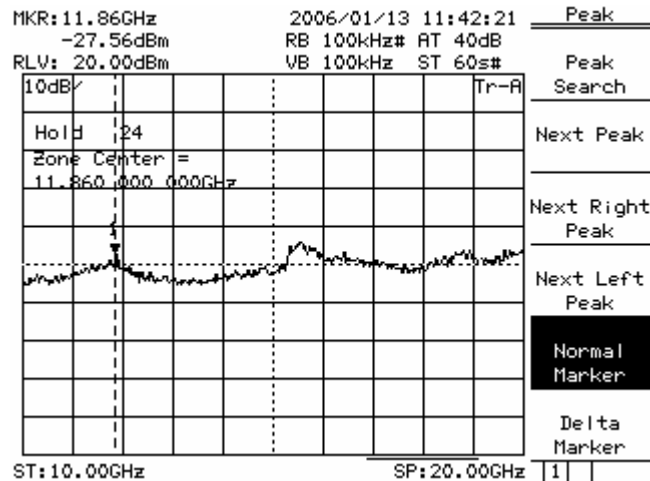
Tx frequency: 2402MHz



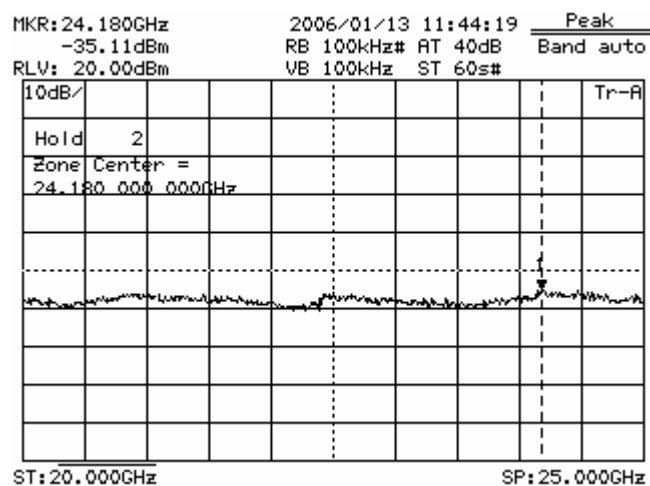
Tx frequency: 2402MHz



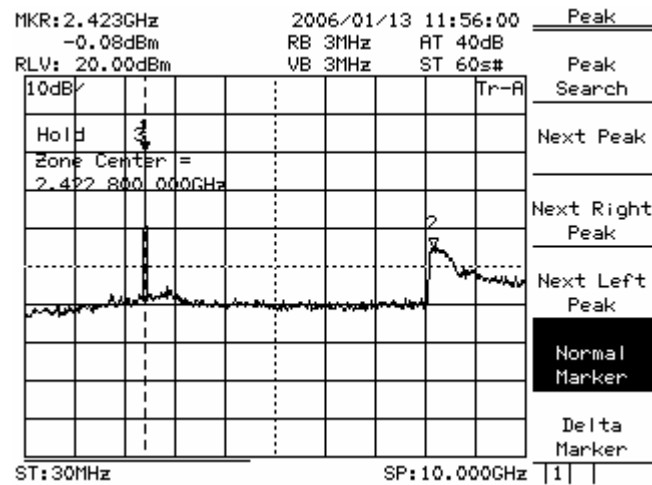
Tx frequency: 2441MHz



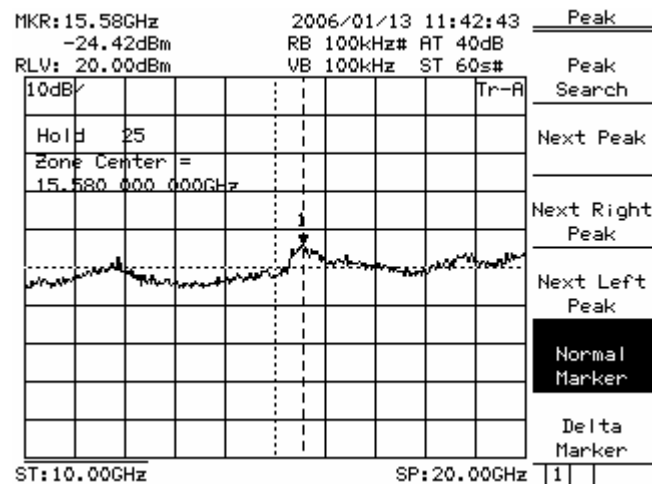
Tx frequency: 2441MHz



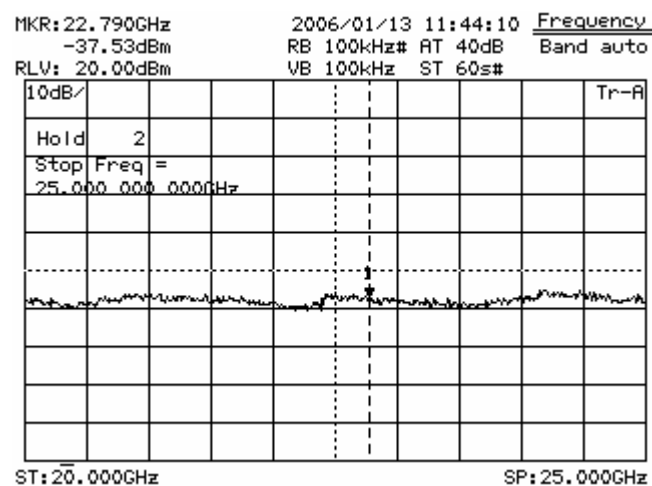
Tx frequency: 2441MHz



Tx frequency: 2480MHz



Tx frequency: 2480MHz



Tx frequency: 2480MHz

Spurious Emissions - Radiated

Date: 12 Jan 2006

EUT: S21

Company: Innovi

Voltage supply: 3.8 V from Lithium battery

Test by: Sharon Li

Op. mode: TX mode, DH1 with PRBS9 payload

Tx frequency (MHz)	Polarization	Spurious Frequency (MHz)	Power Level (dBuV/m)	Detector (P/QP/A)
2402	V	1200.14	33.77	P
2402	V	1199.84	39.81	A
Tx frequency (MHz)	Polarization	Spurious Frequency (MHz)	Power Level (dBuV/m)	Detector (P/QP/A)
2441	V	4881.66	43.66	P
2441	V	4881.58	38.59	A
Tx frequency (MHz)	Polarization	Spurious Frequency (MHz)	Power Level (dBuV/m)	Detector (P/QP/A)
2480	V	1239.08	33.52	P
2480	V	1239.04	29.83	A