



## 6. MAXIMUM OUTPUT POWER TEST

### 6.1 Applied procedures / limit

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Maximum Output Power	1 watt or 30dBm	2400-2483.5	PASS

### 6.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP_40	100129	Jan. 04, 2012

Remark: " N/A" denotes No Model Name. , Serial No. or No Calibration specified.

### 6.1.2 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- Spectrum Setting : RBW= 1MHz, VBW=3MHz, Sample detector, Sweep time = 5 ms.

### 6.1.3 DEVIATION FROM STANDARD

No deviation.

### 6.1.4 TEST SETUP



### 6.1.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing. Transmit output power was measured while the host equipment supply voltage was varied from 85 % to 115 % of the nominal rated supply voltage. No change in transmit output power was observed.

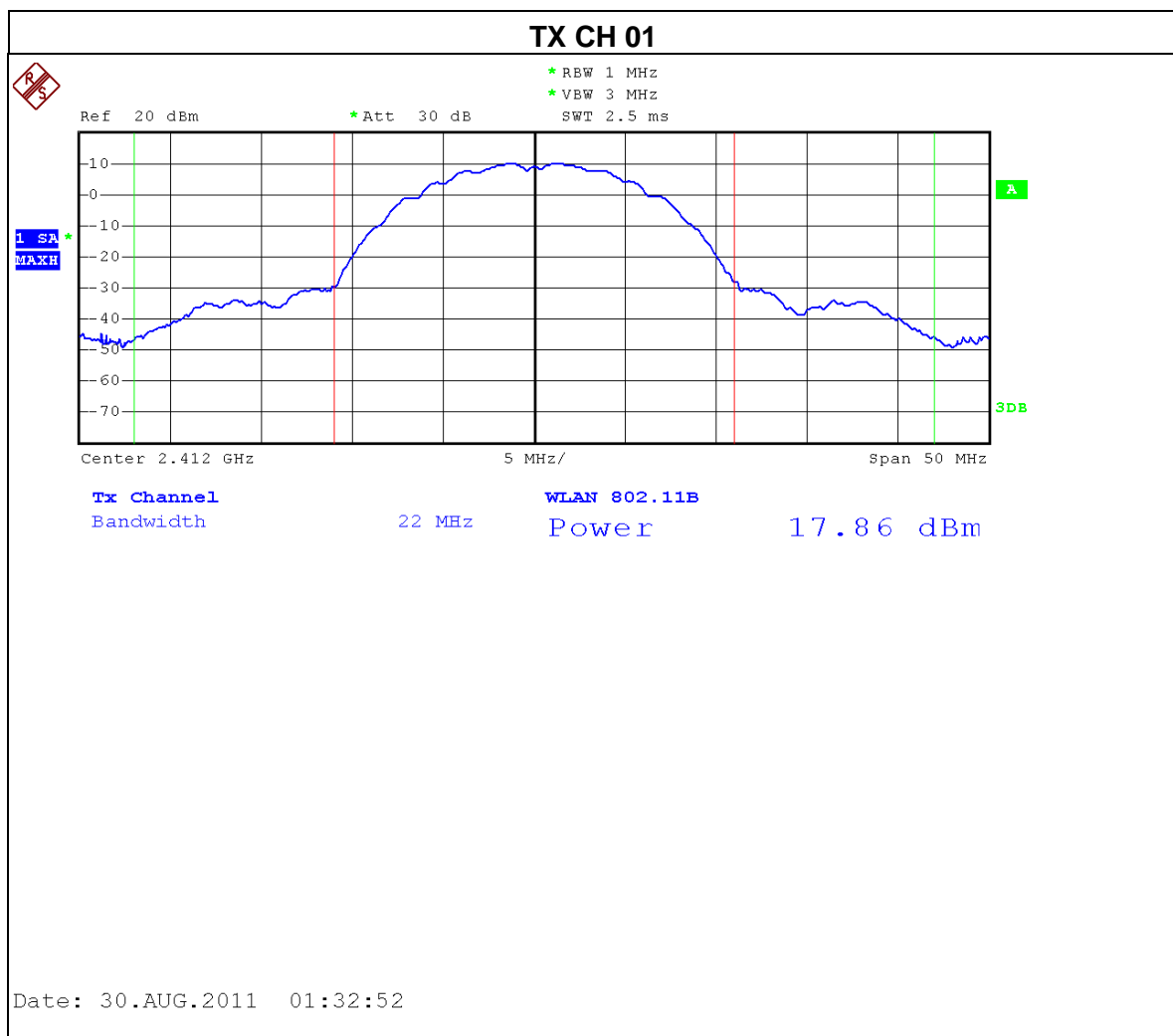


### 6.1.6 TEST RESULTS

EUT :	150Mbps Wireless-N Router/AP	Model Name :	WF-2405
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE /CH01, CH06, CH11		

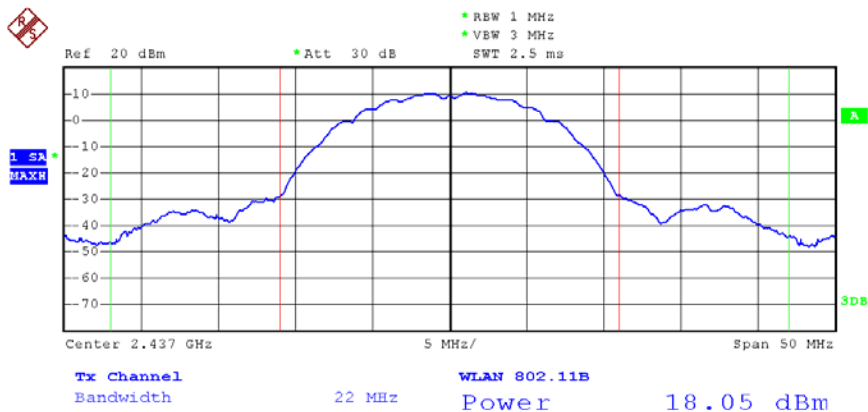
#### Maximum Output Power

Test Channel	Frequency (MHz)	Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH01	2412 MHz	17.86	30	1
CH06	2437 MHz	18.05	30	1
CH11	2462 MHz	18.12	30	1



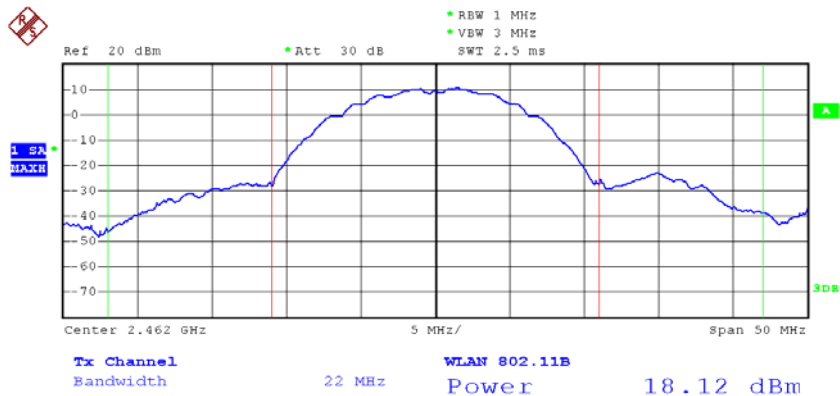


### TX CH 06



Date: 30.AUG.2011 01:34:08

### TX CH 11



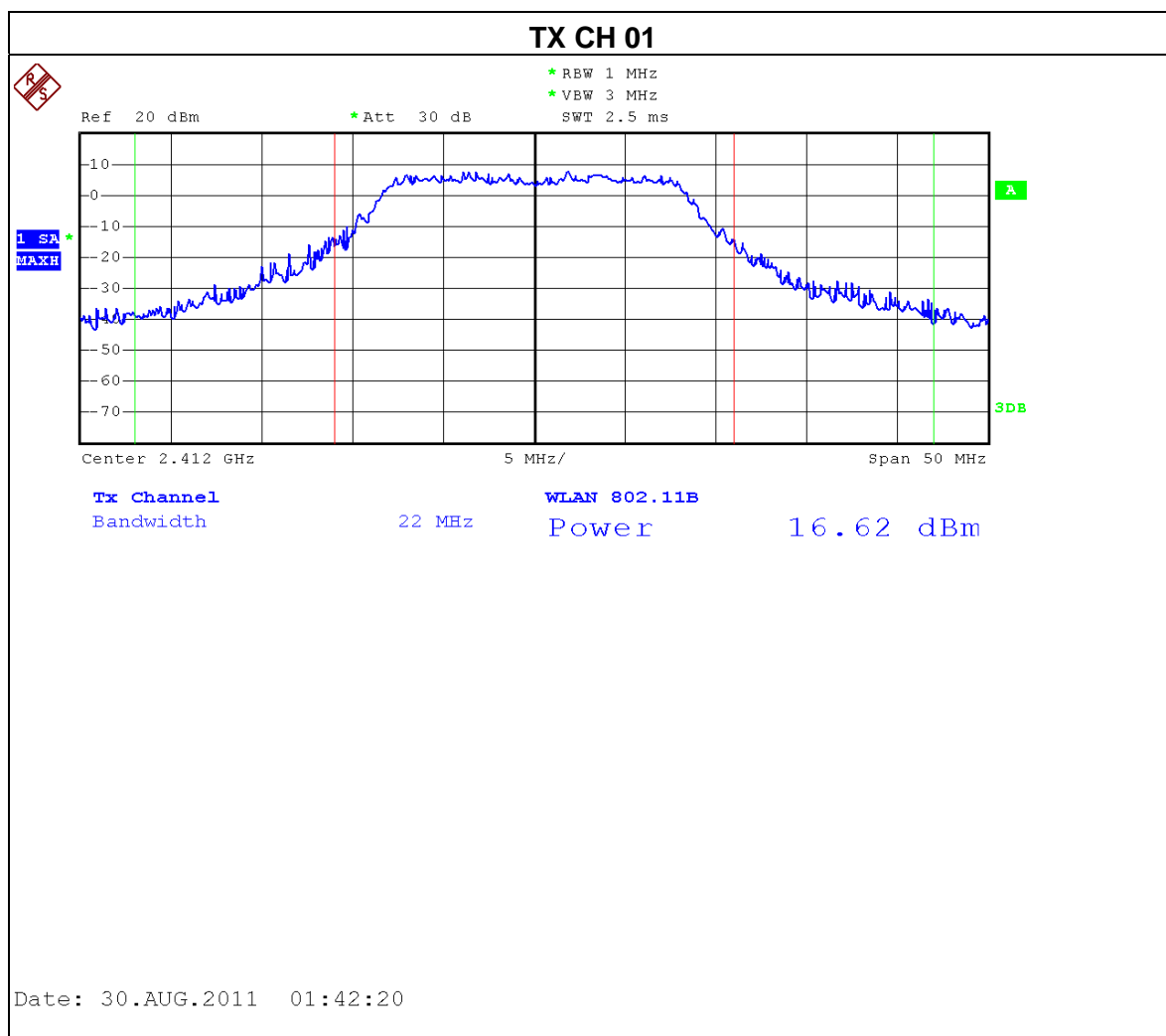
Date: 30.AUG.2011 01:36:19



EUT :	150Mbps Wireless-N Router/AP	Model Name :	WF-2405
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE /CH01, CH06, CH11		

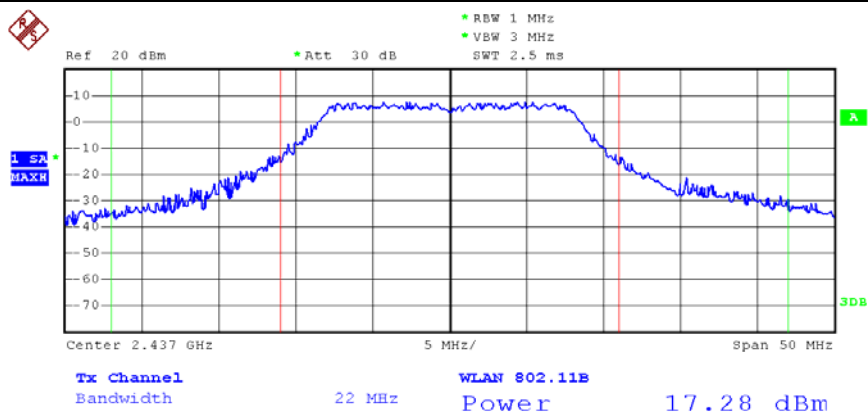
**Maximum Output Power**

Test Channel	Frequency (MHz)	Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH01	2412 MHz	16.62	30	1
CH06	2437 MHz	17.28	30	1
CH11	2462 MHz	17.55	30	1



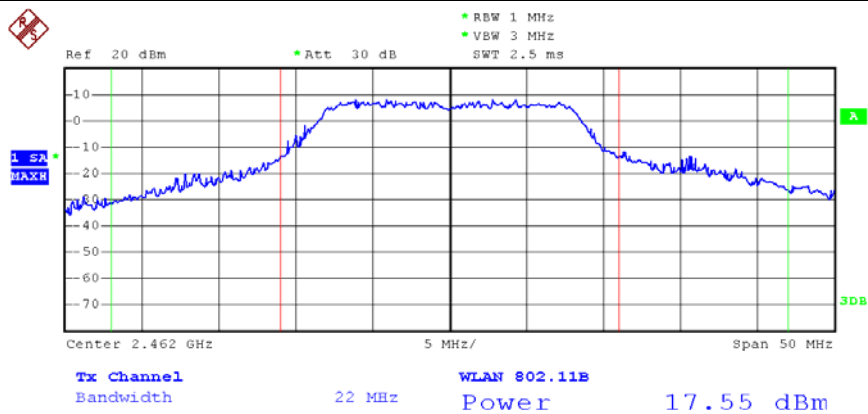


### TX CH 06



Date: 30.AUG.2011 01:43:15

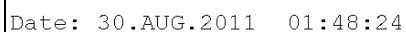
### TX CH 11



Date: 30.AUG.2011 01:45:24

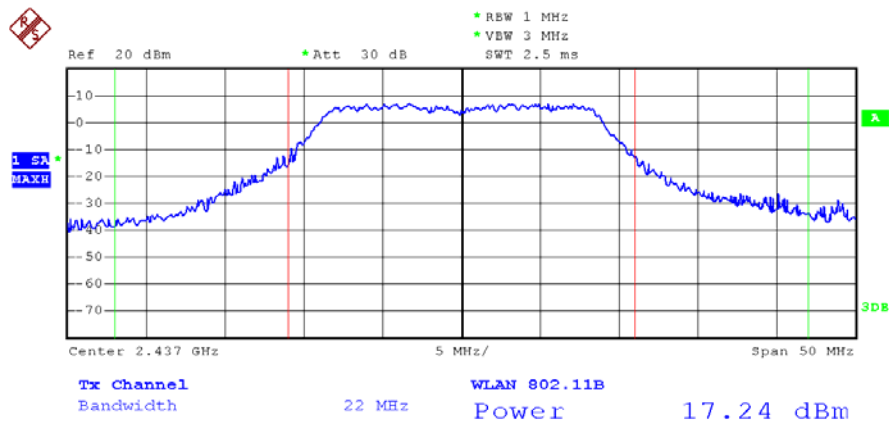


### Maximum Output Power

TX CH 01

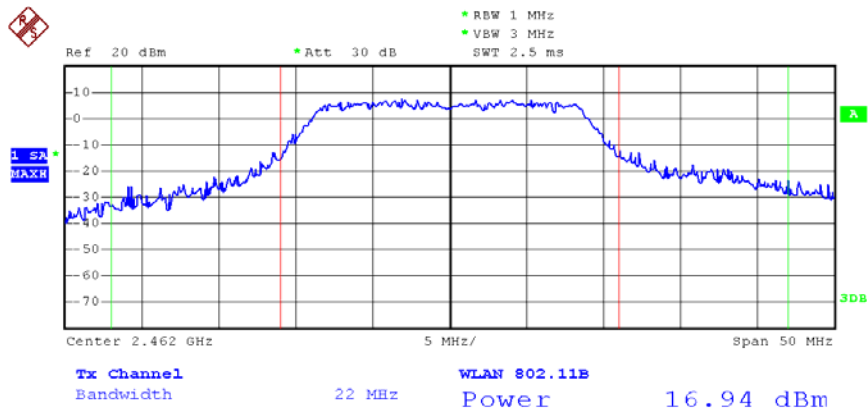


### TX CH 06



Date: 30.AUG.2011 01:49:21

### TX CH 11



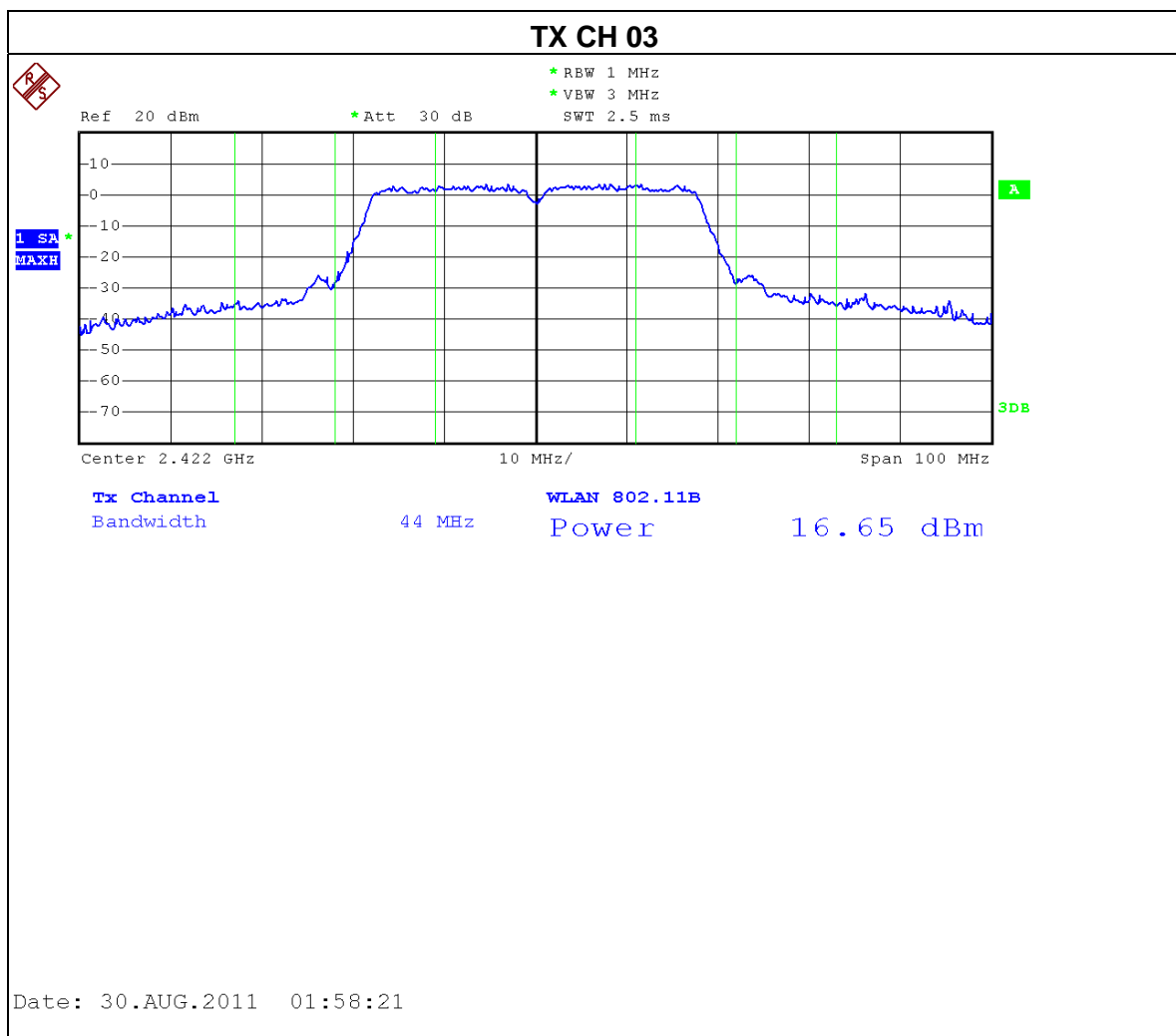
Date: 30.AUG.2011 01:52:39



EUT :	150Mbps Wireless-N Router/AP	Model Name :	WF-2405
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE /CH03, CH06, CH09		

### Maximum Output Power

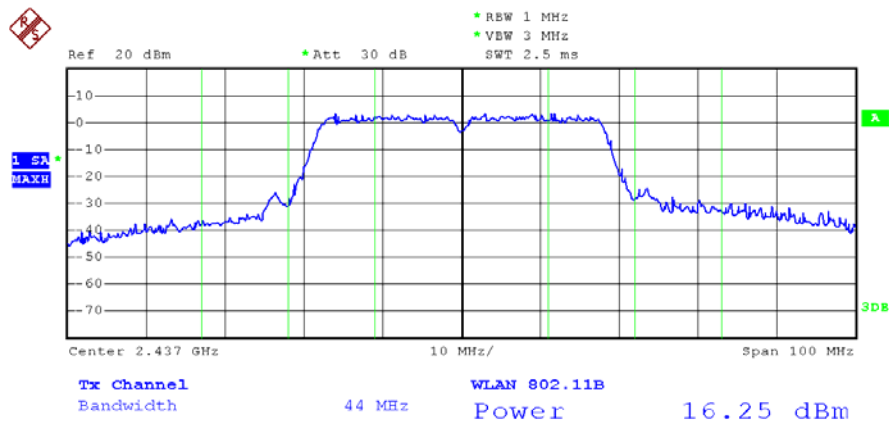
Test Channel	Frequency (MHz)	Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH03	2422 MHz	16.65	30	1
CH06	2437 MHz	16.25	30	1
CH09	2452 MHz	16.82	30	1





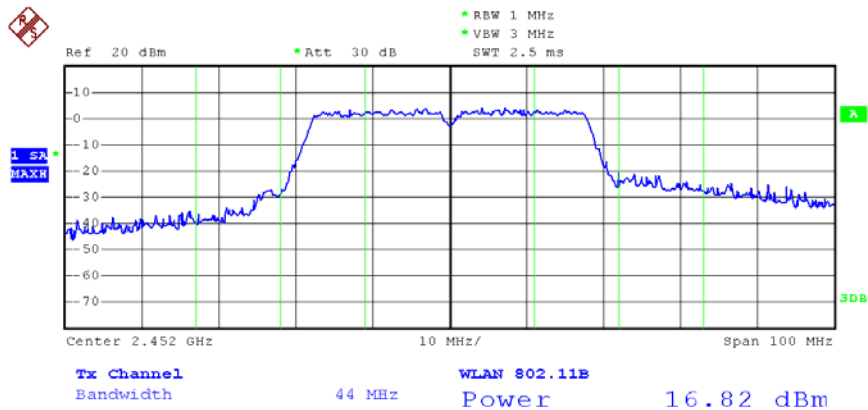


### TX CH 06



Date: 30.AUG.2011 01:58:44

### TX CH 09



Date: 30.AUG.2011 01:59:27



## 7. ANTENNA CONDUCTED SPURIOUS EMISSION

### 7.1 Applied procedures / limit

30dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

### 7.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP_40	100129	Jan. 04, 2012

Remark: " N/A" denotes No Model Name. , Serial No. or No Calibration specified.

### 7.1.2 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- Spectrum Setting : RBW= 100KHz, VBW=100KHz, Sweep time = 10 ms.

### 7.1.3 DEVIATION FROM STANDARD

No deviation.

### 7.1.4 TEST SETUP



### 7.1.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.



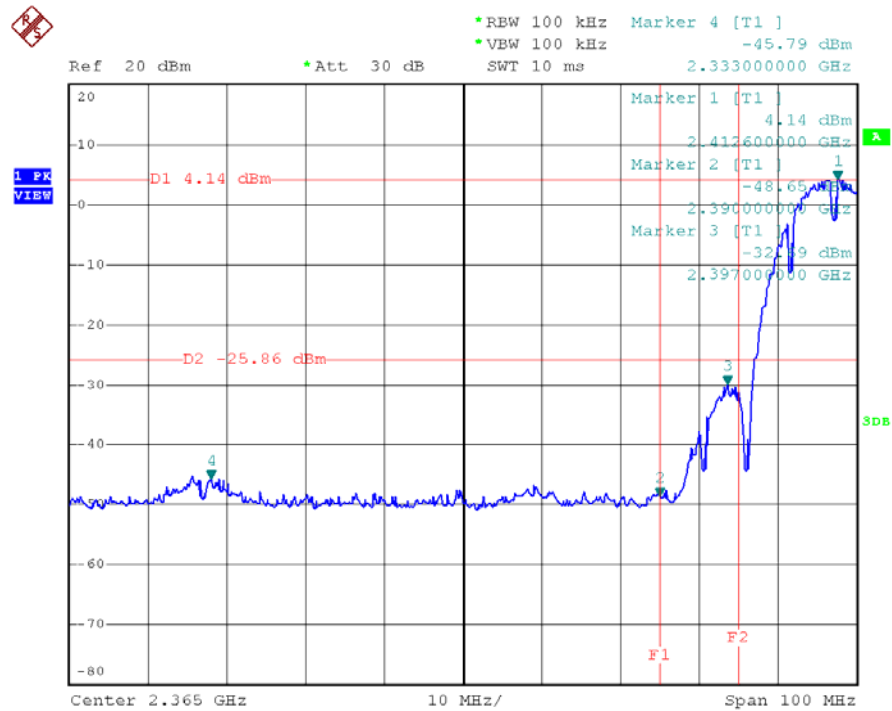
### 7.1.6 TEST RESULTS

EUT :	150Mbps Wireless-N Router/AP	Model Name :	WF-2405
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE /CH01, CH06 , CH11		

Channel of Worst Data: CH01			
The max. radio frequency power in any 100kHz bandwidth within the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2397.00	-32.69	2483.50	-46.05
Result			
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 30dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.			

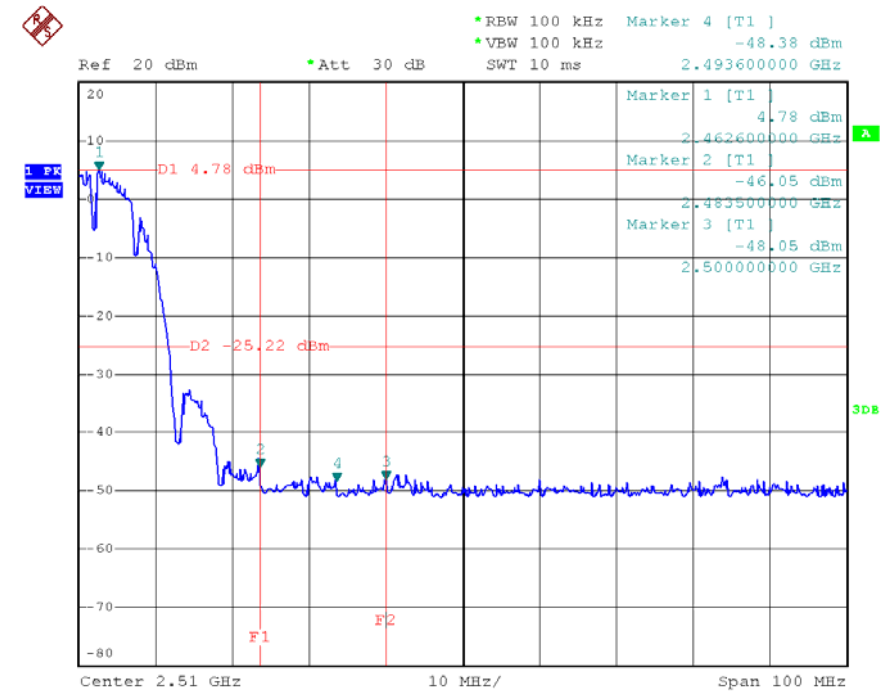


### TX B mode CH01



Date: 23.SEP.2011 12:03:21

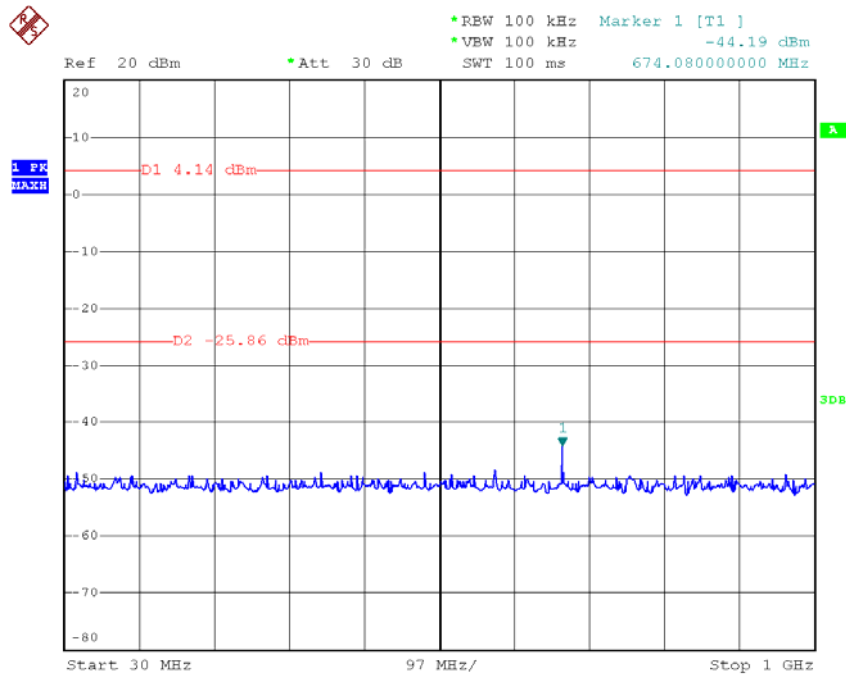
### TX B mode CH11



Date: 23.SEP.2011 12:08:00

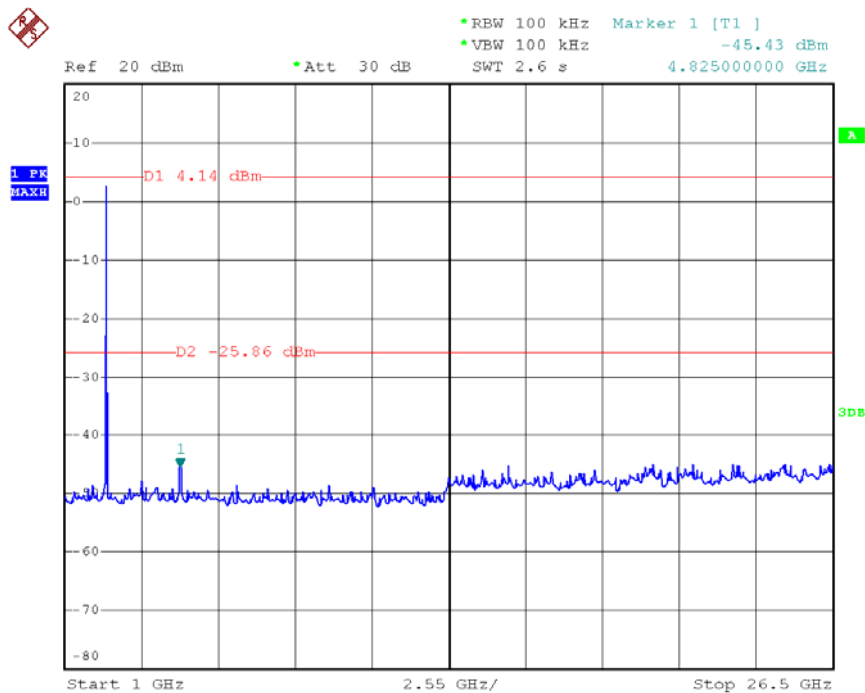


### TX B mode CH01 (30M~1000MHz)

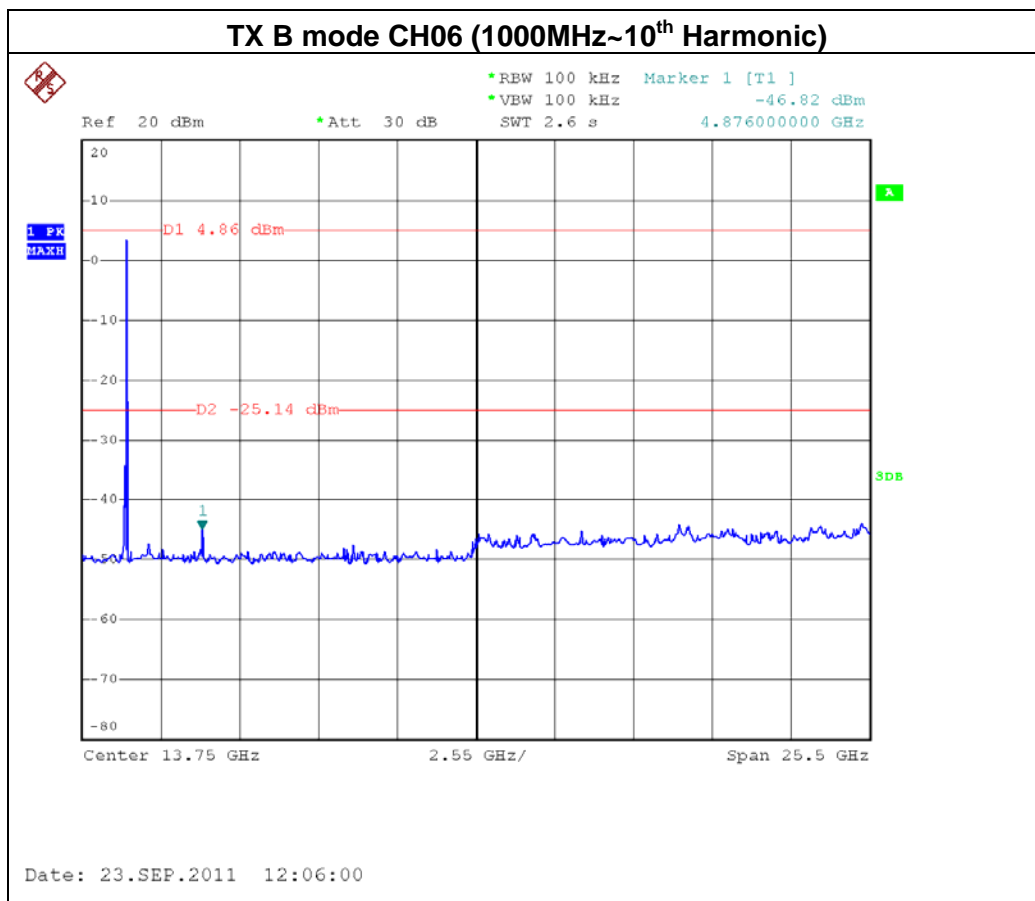
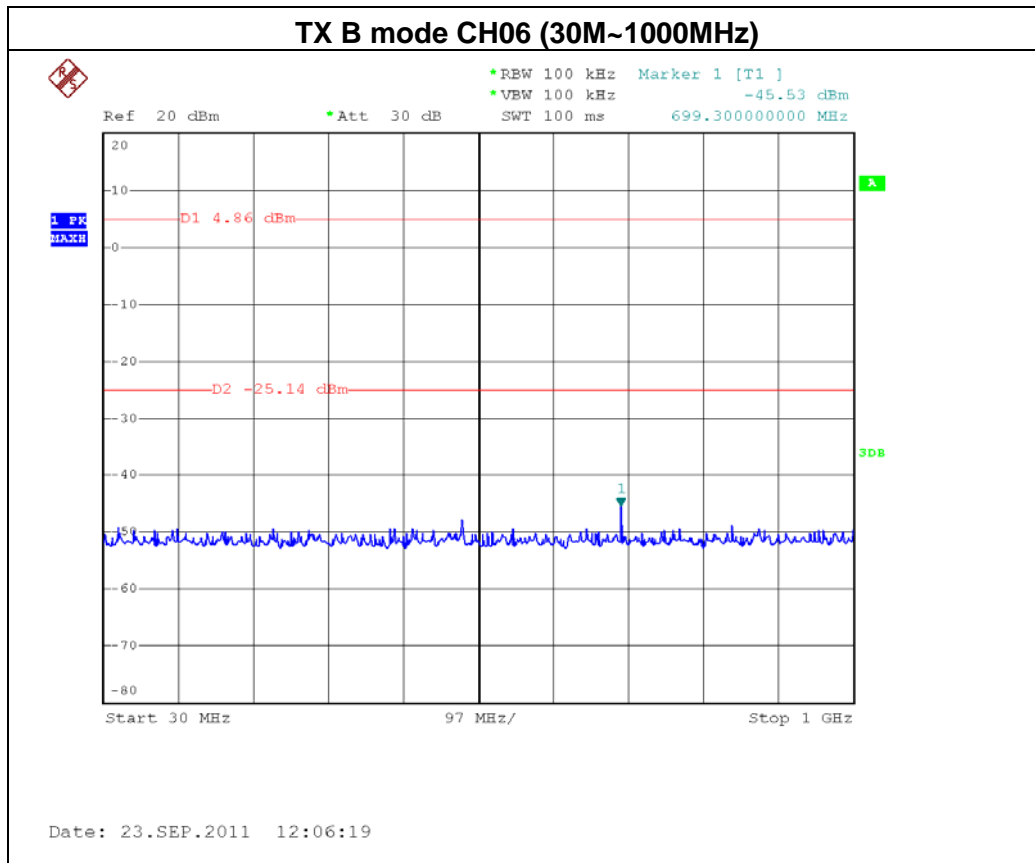


Date: 23.SEP.2011 12:03:47

### TX B mode CH01 (1000MHz~10<sup>th</sup> Harmonic)

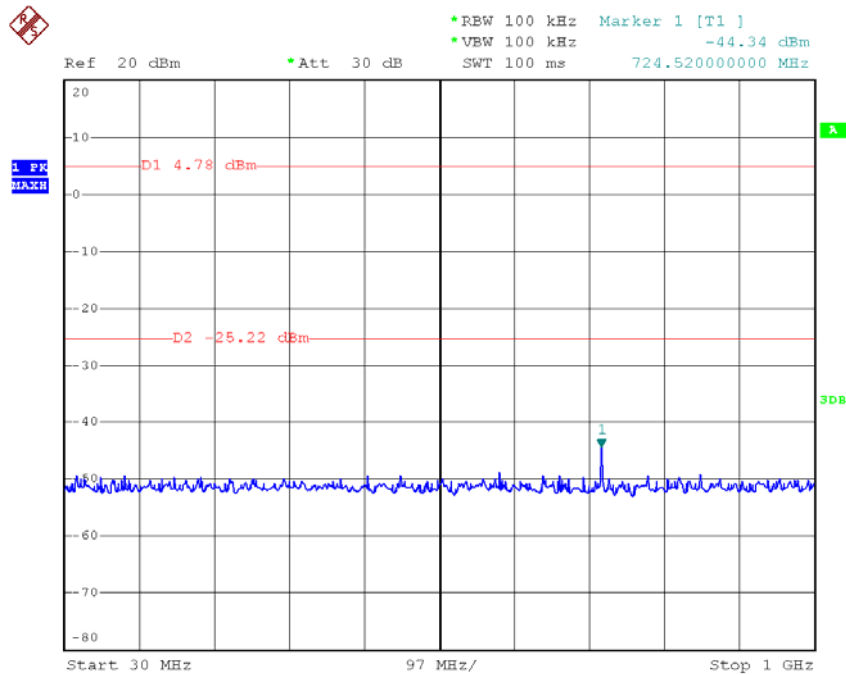


Date: 23.SEP.2011 12:04:30



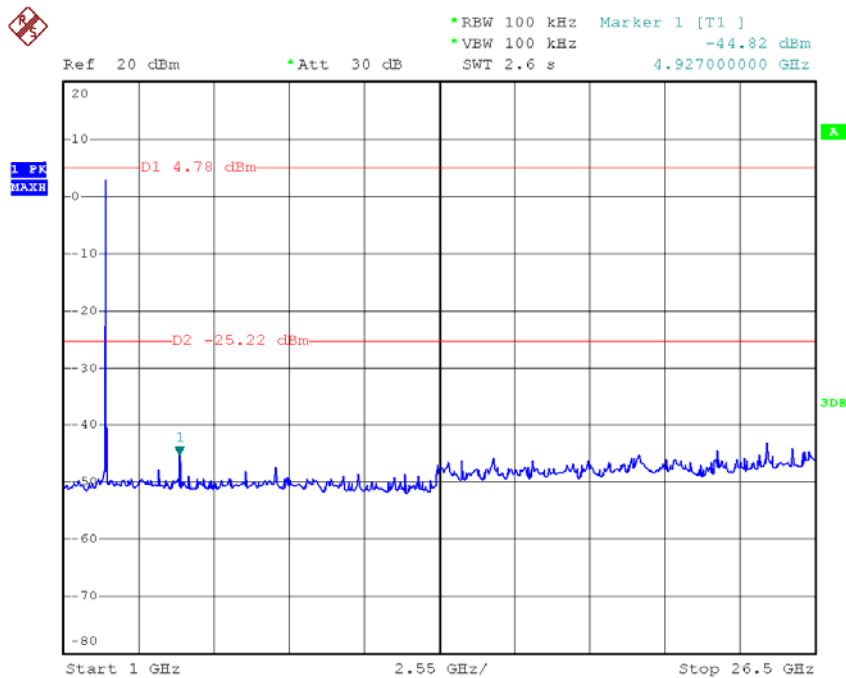


### TX B mode CH11 (30M~1000MHz)



Date: 23.SEP.2011 12:08:33

### TX B mode CH11 (1000MHz~10<sup>th</sup> Harmonic)



Date: 23.SEP.2011 12:08:45



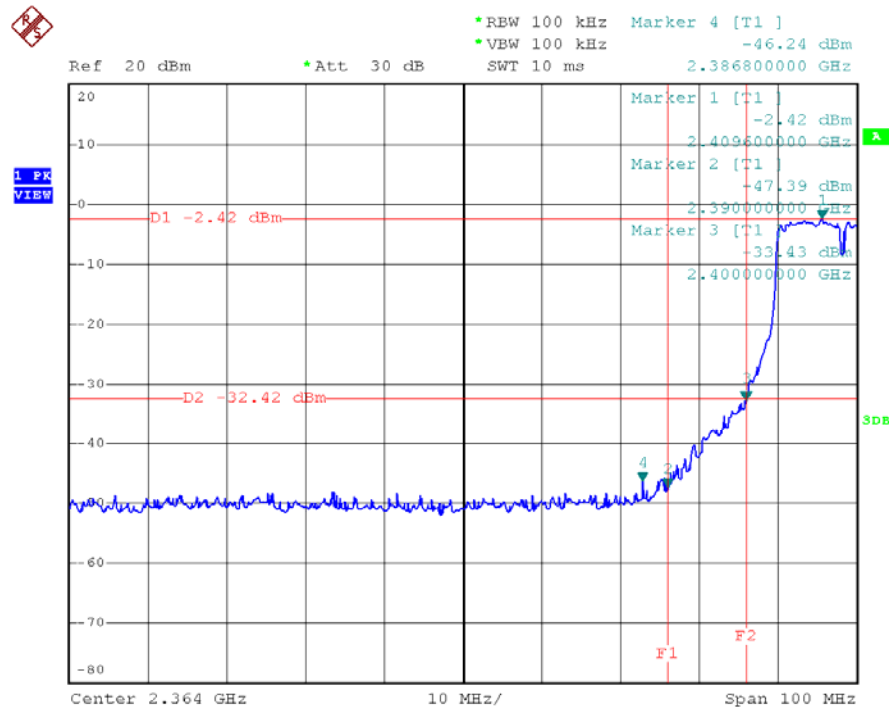
EUT :	150Mbps Wireless-N Router/AP	Model Name :	WF-2405
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE / CH01, CH06 , CH11		

Channel of Worst Data: CH01			
The max. radio frequency power in any 100kHz bandwidth within the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2400.00	-33.43	2483.50	-44.09
Result			
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 30dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.			



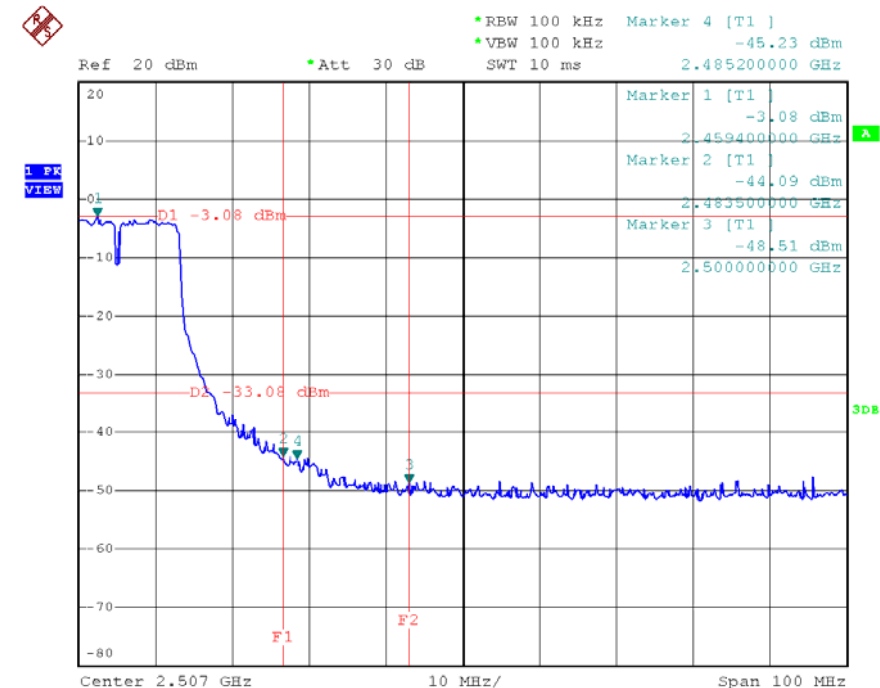


### TX G mode CH01



Date: 23.SEP.2011 13:42:30

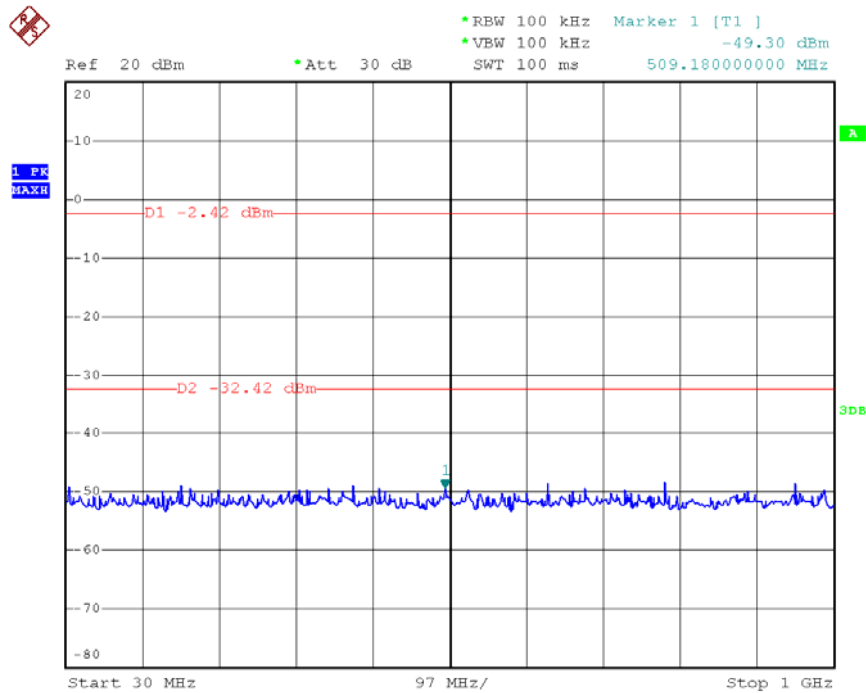
### TX G mode CH11



Date: 23.SEP.2011 13:47:37

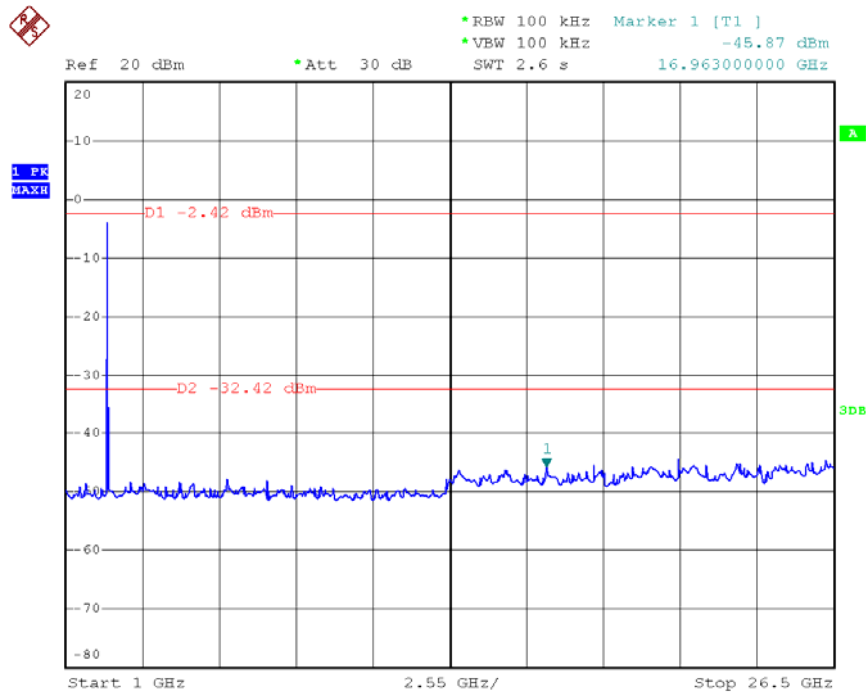


### TX G mode CH01 (30M~1000MHz)



Date: 23.SEP.2011 13:42:50

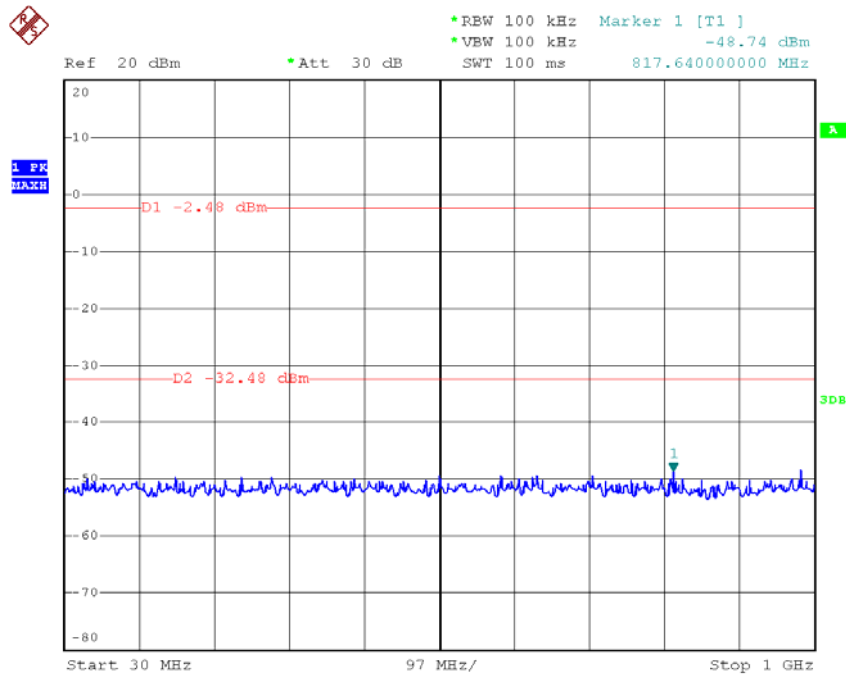
### TX G mode CH01 (1000MHz~10<sup>th</sup> Harmonic)



Date: 23.SEP.2011 13:43:07

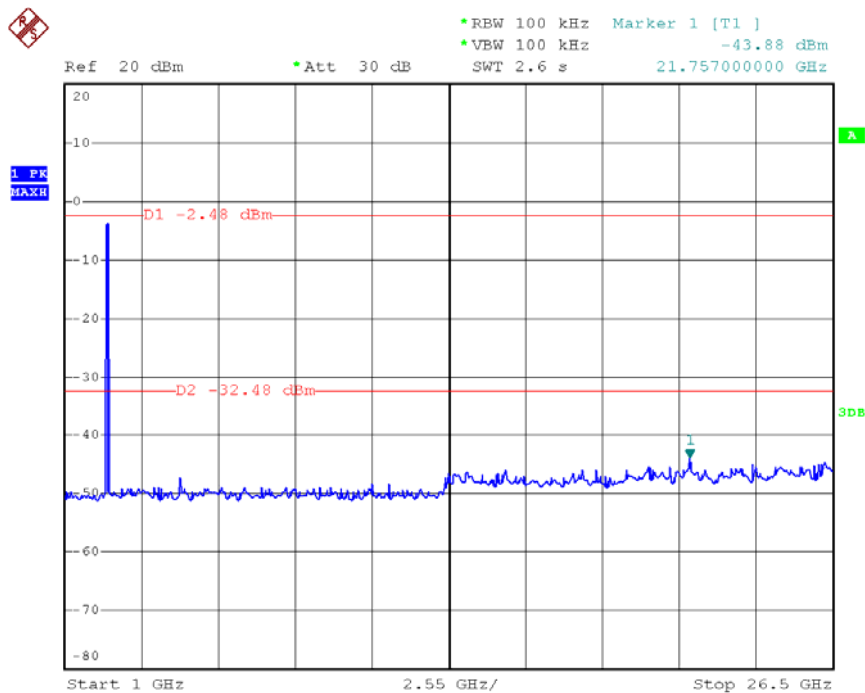


### TX G mode CH06 (30M~1000MHz)



Date: 23.SEP.2011 13:45:48

### TX G mode CH06 (1000MHz~10<sup>th</sup> Harmonic)



Date: 23.SEP.2011 13:45:39

