



## **Radio Test Report: EDCS - 1248892**

### **CP-DX650**

### **Next Generation Video Endpoint**

### **5150-5250 MHz**

**Against the following Specifications:**

**CFR47 Part 15.407**

**RSS210**

**Cisco Systems**

EMC Laboratory

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San Jose, CA 95134

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**Title:** Regulatory Compliance Manager

This report replaces any previously entered test report under EDCS - 1248892



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## Section 1: Overview

### 1.1 Test Summary

**samples were assessed against the tests detailed in section 3 under the requirements of the following specifications:**

Emission	Immunity
CFR47 Part 15.407 RSS-210	N/A

The specifications listed above represent actual tests performed to demonstrate compliance against the specifications and basic standards listed on the front cover of this report. This list is not a one to one match to the front cover for one or more of the following reasons.

1. Basic standards call up many different test phenomena specifications such as the 61000-4-X series. The basic standards define which elements and levels shall be applied from these specifications and as such it is not appropriate to list the individual specifications on the front cover.
2. A Standard listed on the front cover may be required in a particular country but is not appropriate for the particular technologies included in the equipment under test. E.g. You cannot test a DC product to the mains Harmonics requirements in EN61000-3-2. See section 3.2.
3. Test results against a particular standard or specification may be included in a different test report. See section 3.2 for an EDCS reference of this data.
4. Where appropriate, Cisco may have substituted a later revision of a basic standard to those referenced in the specification on the front sheet of this test report. This decision was based upon improved test methodology and repeatability and/or where the newer revision represented a more stringent test.
5. Where relevant, testing has been carried out to the requirements of both EN and IEC Specifications. This was possible because of the similarities of the test methods involved and the Cisco EMC test procedures.
6. Testing may have been performed to an equivalent test that satisfies the requirements of the standards and specifications listed on the front cover of the report. See section 3.2.
7. Where radiated emissions testing has been performed to EN55022/CISPR22 the additional requirements of VCCI: V-3/2006.04, EN55022: 1994 +A1/2 and CAN/CSA- CISPR 22-02 have also been evaluated unless otherwise stated.
8. Testing to the requirements of CFR47 Part 15 was performed against the CISPR22 limits. The results are therefore deemed satisfactory evidence of compliance with Industry Canada Interference Causing Equipment Standard ICES-003.
9. Where assessment has been performed to CISPR24, all the applicable test requirements may have not been covered. Refer to the results section for the tests performed.

#### Notes:

- 1) Where a specification listed on the front cover of this report has deviations from the basic standards listed above, the additional technical requirements of the specification were also assessed.
- 2) Where appropriate, Cisco may have substituted a later revision of a basic standard to those referenced in the specification on the front sheet of this test report. This decision was based upon improved test methodology and repeatability and/or where the newer revision represented a more stringent test.
- 3) Where relevant, testing has been carried out to the requirements of both EN and IEC Specifications. This was possible because of the similarities of the test methods involved and the Cisco EMC test procedures.



## **Section 2: Assessment Information**

### **2.1 General**

This report contains an assessment of an apparatus against Electromagnetic Compatibility Standards based upon tests carried out on the samples submitted. The testing was performed by and for the use of Cisco systems Inc:

With regard to this assessment, the following points should be noted:

- a) The results contained in this report relate only to the items tested and were obtained in the period between the date of the initial assessment and the date of issue of the report. Manufactured products will not necessarily give identical results due to production and measurement tolerances.
- b) The apparatus was set up and exercised using the configuration and modes of operation defined in this report only.
- c) Where relevant, the apparatus was only assessed using the susceptibility criteria defined in this report and the Test Assessment Plan (TAP).
- d) All testing was performed under the following environmental conditions:
  - Temperature                15°C to 35°C (54°F to 95°F)
  - Atmospheric Pressure    860mbar to 1060mbar (25.4" to 31.3")
  - Humidity                    10% to 75\*%

\*[Where applicable] For ESD testing the humidity limits used were 30% to 60% and for EFT/B tests the humidity limits used were 25% to 75%.
- e) All AC testing was performed at one or more of the following supply voltages:
  - 110V 60 Hz (+/-20%)
  - 220V 50 Hz (+/-20%)

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## 2.2 Date of testing

15-October-2012

## 2.3 Report Issue Date

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## 2.4 Testing facilities

This assessment was performed by:

### Testing Laboratory

Cisco Systems, Inc.,  
170 West Tasman Drive  
San Jose, CA 95134,  
USA

#### Registration Numbers for Industry Canada

Cisco System Site	Site Identifier
Building P, 10m Chamber	Company #: 4624-2
Building P, 5m Chamber	Company #: 4624-1
Building N, 5m Chamber	Company #: 6111
Building I, 5m Chamber	Company #: 6112

### Test Engineers

Phillip Carranco

## 2.5 Equipment Assessed (EUT)

CP-DX650 Next Generation Video Endpoint



## 2.6 EUT Description

The CP-DX650 is the next generation 1080p Video Endpoint with key expansion module support. This new generation of desktop phone incorporates an Android based operating system. Three USB ports, one micro OTG USB port, one higher powered USB-proprietary connector combination (AUX) and one standard USB Port. Support HDMI with a maximum external resolution of 1920 x 1200, also includes a single 3.5mm headset jack.

WiFi (802.11 a/b/g/n) & Bluetooth 3.0 capabilities (Bluetooth operating at ver 2.1 + EDR)

Murata module, LBEH1ZNSXC-526, supports for 802.11/a/b/g/n + Bluetooth 3.0 module

SDIO interface to WLAN – Omap4 SD host controller port 5

PCM (McBSP1) interface to Bluetooth

WiFi + BT chip - Marvell 88W8787

Clocks – 38.4MHz 20ppm for main clock, 32.768KHz sleep clock

Supports 802.11i security standard

Coexistence between WiFi and BT with one antenna to both connected to the 2.4GHz radios

Single antenna for 2.4 and 5GHz bands with diplex inside the module

Up to 72Mbps (20 MHz channel)

Non HT-20, One Antenna, 6 to 54 Mbps

HT-20, One Antenna, M0 to M7

HT-40, One Antenna, M0 to M7

### Section 3: Result Summary

#### Conducted emissions

Basic Standard	Result
99% and 26dB Bandwidth	Pass
Peak Output Power	Pass
Power Spectral Density	Pass
Peak Excursion	Pass
Conducted Spurious Emissions	Pass
Restricted Band Edge Measurements	Pass

#### Radiated emissions

Basic Standard	Result
Radiated Spurious and Harmonic Emissions	Pass
Co-Locator Radiated Spurious Emissions	Pass



#### Section4: Sample Details

Note: Each sample was evaluated to ensure that its condition was suitable to be used as a test sample prior to the commencement of testing. During preliminary testing all three planes (X,Y & Z) were evaluated to determine "Worst Case". The orientation used for this report was demined "Worst Case".

##### 4.1 Sample Details

Sample Number	Equipment Details	Serial Number	Part Number
S01	CP-DX650	FCH1627A5AU	73-15144-01

The following antennas were evaluated as part of this testing process. The antennas listed reflect the maximum gain allowed for each family type of antenna:

Fixed internal Amphenol Dual Band Antenna at 5GHz, Gain: ( no external antenna can be used. )

5150 – 5250MHz: 2.4 dBi  
5250 – 5350MHz: 3.9 dBi  
5500 – 5700MHz: 3.8 dBi  
5745 – 5805MHz: 3.3 dBi

##### 4.2 System Details

System #	Description	Samples
1	Radio Test Sample	S01

##### 4.3 Mode of Operation Details

Mode#	Description	Comments
1	802.11AN Test Mode	System is placed in a continuous Transmit Mode at various channels per Test Requirements. Worse Case Data Rate used for all Testing. 802.11A set to 6Mbps, HT20 set to M0 & HT40 set to M0

#### Section 5: Modifications

##### 5.1 Sample Modifications Performed During Assessment

No modifications were performed during assessment.





## Appendix A: Emission Test Results

### Target Maximum Channel Power

The following table details the maximum supported Total Channel Power for all operating modes.

Operating Mode	Maximum Channel Power (dBm)		
	Frequency (MHz)		
	5180	5200	5240
Non HT-20, 6 to 54 Mbps	16	16	16
HT-20, M0 to M23	16	16	16
	5190	5230	
HT-40, M0 to M23	16	16	



## 99% and 26dB Bandwidth

Connect the antenna port(s) to the spectrum analyzer input. Using the spectrum analyzer Channel Bandwidth mode, configure the spectrum analyzer as shown below (enter all losses between the transmitter output and the spectrum analyzer).

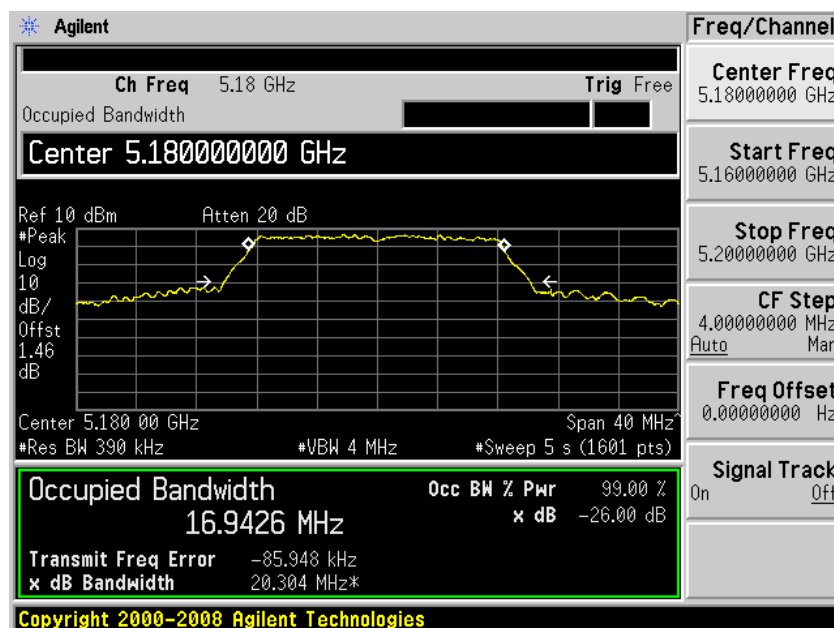
Center Frequency: Frequency from table below  
Span: 2 x Nominal Bandwidth (e.g. 40MHz for a 20MHz channel)  
Reference Level: 20 dBm  
Attenuation: 10 dB  
Sweep Time: 5 s  
Resolution Bandwidth: 1%-3% of 26 dB Bandwidth  
Video Bandwidth: ≥Resolution Bandwidth  
X dB Bandwidth: 26 dB  
Detector: Peak  
Trace: Single

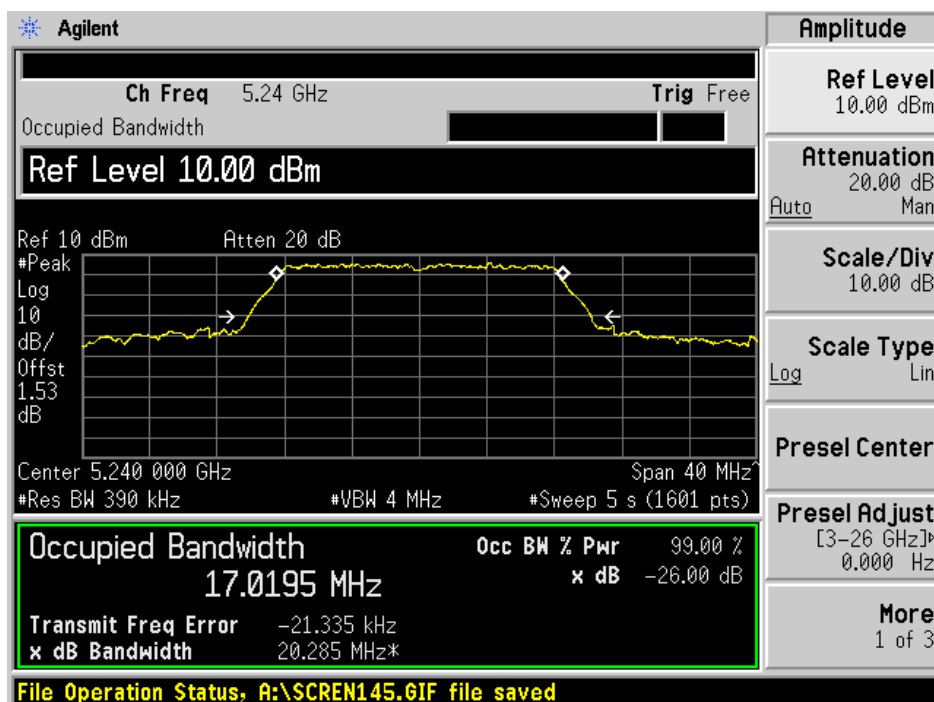
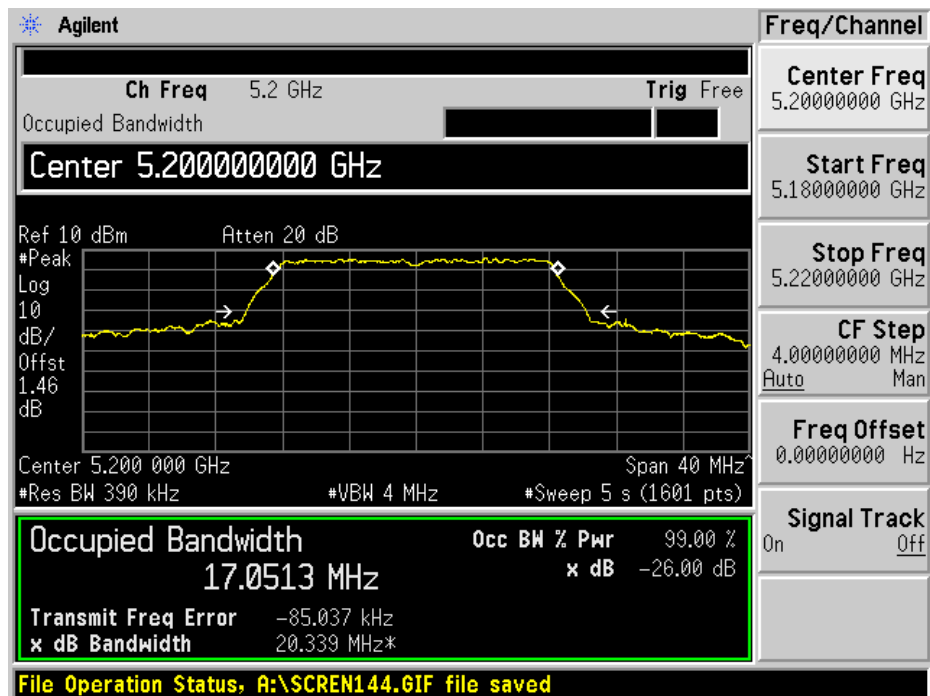
Place the radio in continuous transmit mode. View the transmitter waveform on the spectrum analyzer, and record the pertinent measurements:

### 99% and 26dB Bandwidth for 802.11A

Frequency (MHz)	Data Rate (Mbps)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)
5180	6	16.943	20.304
5200	6	17.051	20.339
5240	6	17.020	20.285

### Graphical Test Results for 802.11a:



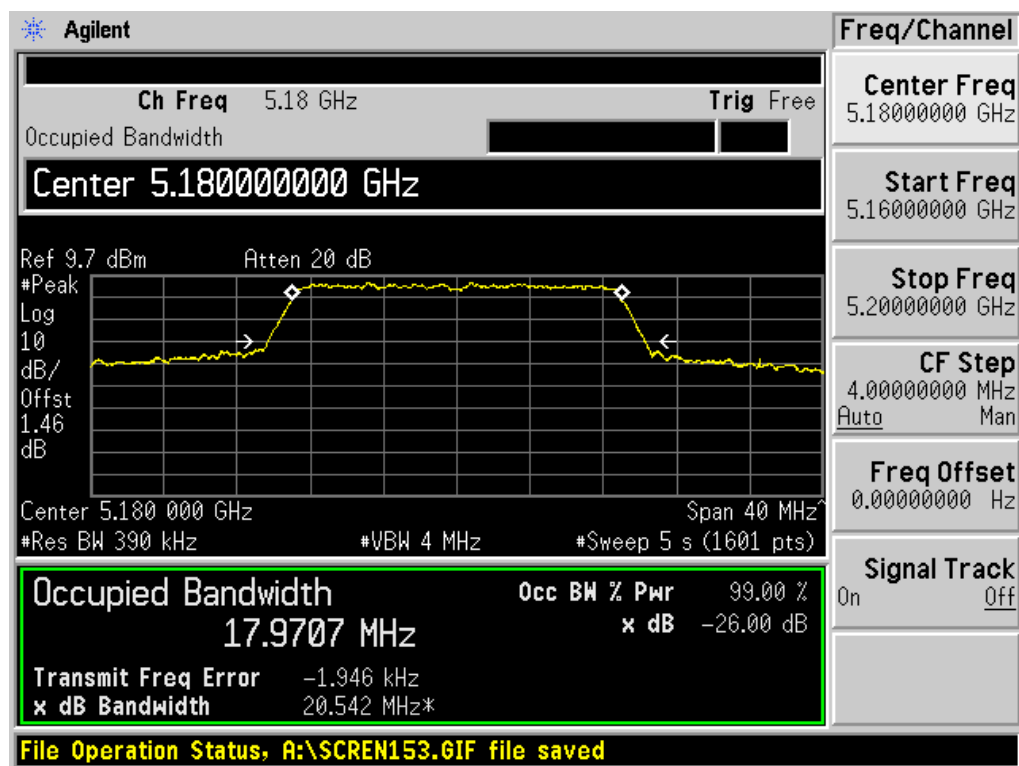


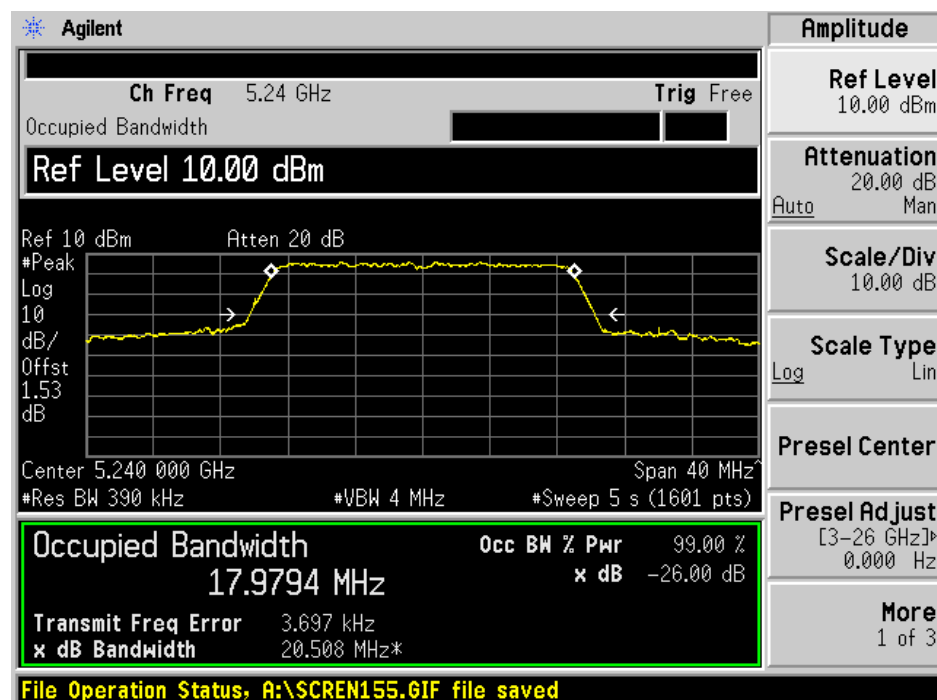
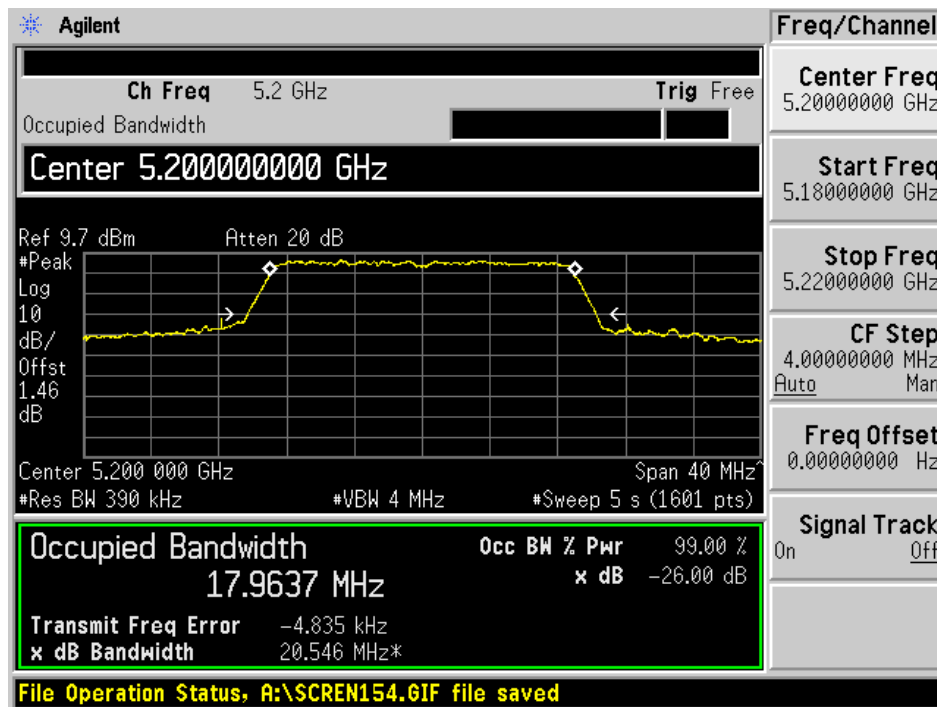


**99% and 26dB Bandwidth for 802.11AN (HT20)**

Frequency (MHz)	Data Rate (Mbps)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)
5180	M0	17.971	20.542
5200	M0	17.964	20.546
5240	M0	17.979	20.508

**Graphical Test Results for 802.11A (HT20):**



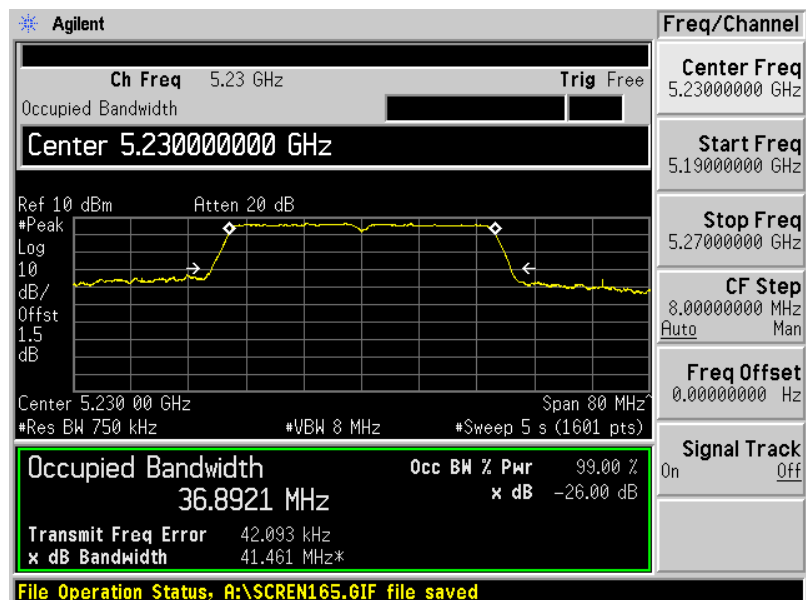
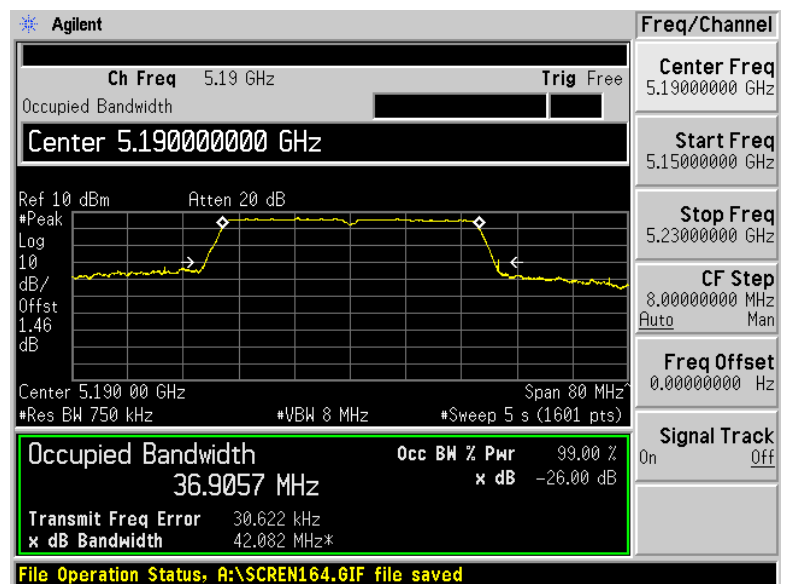




**99% and 26dB Bandwidth for 802.11AN (HT40)**

Frequency (MHz)	Data Rate (Mbps)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)
5190	13.5	36.906	42.082
5230	13.5	36.892	41.461

**Graphical Test Results for 802.11A (HT40):**





## Peak Output Power

15.407: For the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 50 mW or  $4 \text{ dBm} + 10 \log B$ , where B is the 26-dB emission bandwidth in MHz. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

The smallest 26dB bandwidth for all channels is 20.7 MHz. The maximum conducted output power is calculated as  $4\text{dBm} + 10 \cdot \log(20.7\text{MHz}) = 17\text{dBm}$

The maximum supported antenna gain is 6dBi. The peak correlated gain for each mode is listed in the table below. See the Theory of Operation for details on the correlated gain for each mode.

The “measure-and-sum technique” is used for measuring in-band transmit power of a device. In the measure-and-sum approach, the conducted emission level is measured at each antenna port. The measured results at the various antenna ports are then summed mathematically to determine the total emission level from the device. Summing is performed in linear power units.

## Power Spectral Density

15.407: For the band 5.15-5.25 GHz, the peak power spectral density shall not exceed 4 dBm in any 1-MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

The maximum supported antenna gain is 6dBi. The peak correlated gain for each mode is listed in the table below. See the Theory of Operation for details on the correlated gain for each mode.

The “Measure and add  $10 \log(N)$  dB technique”, where N is the number of outputs, is used for measuring in-band Power Spectral Density. With this technique, spectrum measurements are performed at each output of the device, and the quantity  $10 \log(1)$  (or 0dB) is added to the worst case spectrum value before comparing to the emission limit.



Connect the antenna port(s) to the spectrum analyzer input. Place the radio in continuous transmit mode. Configure the spectrum analyzer as shown below.

Enable "Channel Power" function of analyzer  
Center Frequency: Frequency from table below  
Span: 20 MHz (must be greater than 26dB bandwidth, adjust as necessary)  
Ref Level Offset: Correct for attenuator and cable loss.  
Reference Level: 20 dBm  
Attenuation: 20 dB  
Sweep Time: 100ms, Single sweep  
Resolution Bandwidth: 1 MHz  
Video Bandwidth: 3 MHz  
Detector: Sample  
Trace: Trace Average 100 traces in Power Averaging Mode  
Integration BW: =99 % BW from 99% Bandwidth Data

After averaging 100 traces of the transmitter waveform on the spectrum analyzer, record the spectrum analyzer Channel Power. Perform a Marker Peak Search function, and record this value as the Power Spectral Density.

**Peak Output Power for 11a:**

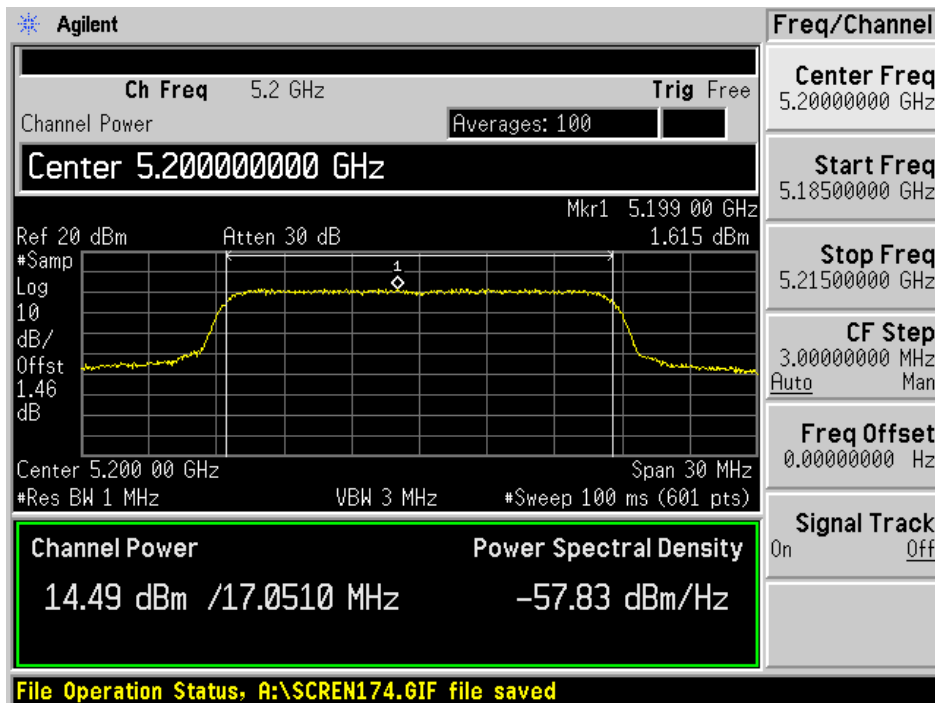
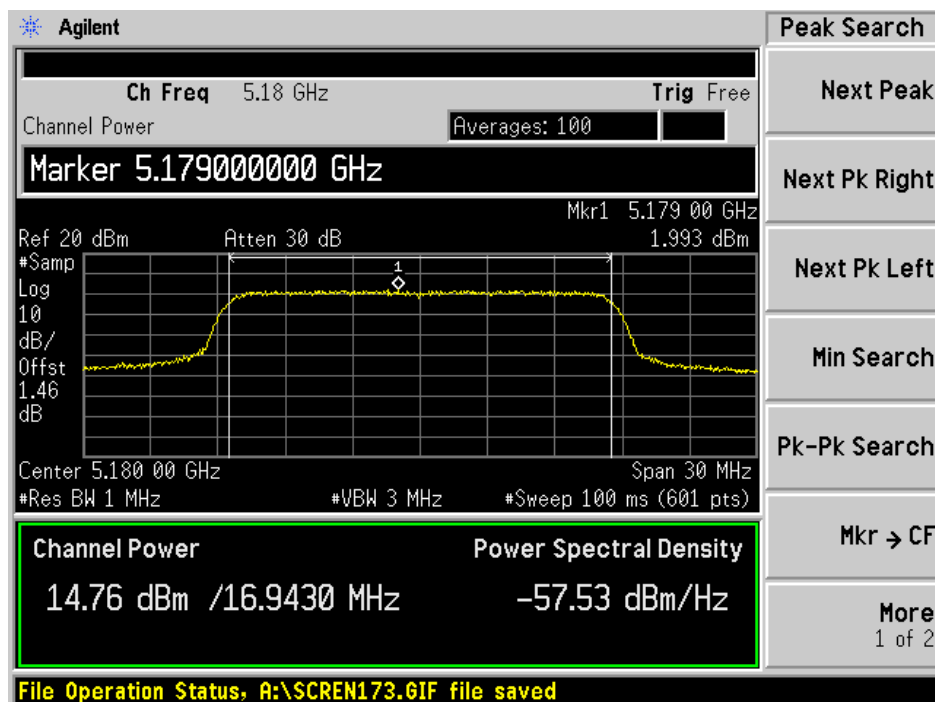
Frequency (MHz)	Data Rate (Mbps)	Peak Output Power (dBm)	Limit (dBm)	Margin (dB)
5180	6	14.76	17	-2.24
5200	6	14.49	17	-2.51
5240	6	14.49	17	-2.51

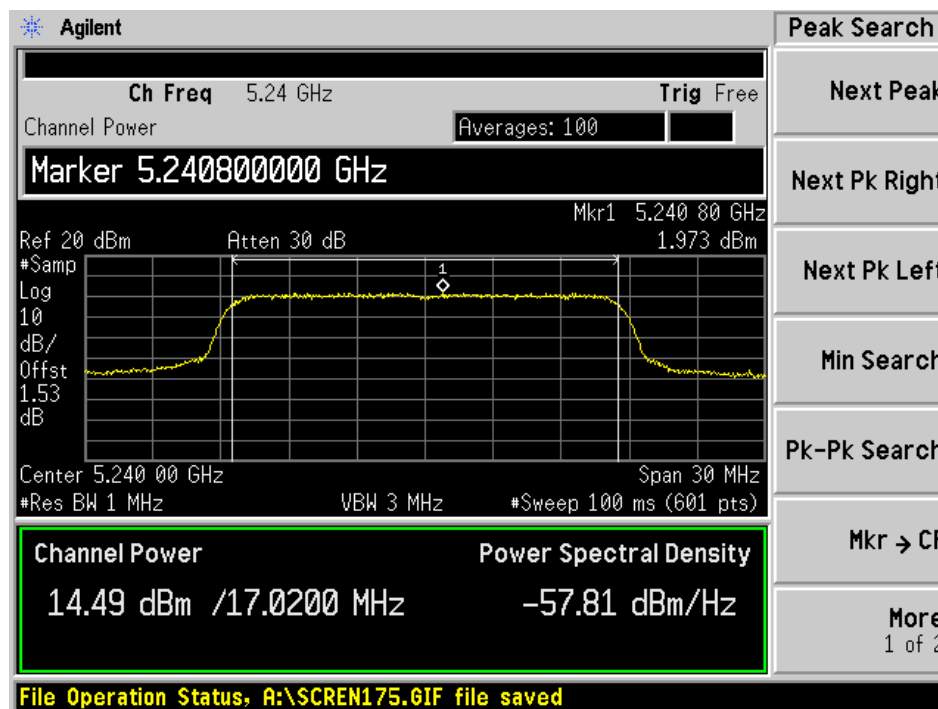
**Power Spectral Density for 11a:**

Frequency (MHz)	Data Rate (Mbps)	Peak Power Spectral Density (dBm/MHz)	Limit (dBm)	Margin (dB)
5180	6	1.993	4	-2.007
5200	6	1.615	4	-2.385
5240	6	1.973	4	-2.027



Graphical Test Results for 802.11a:





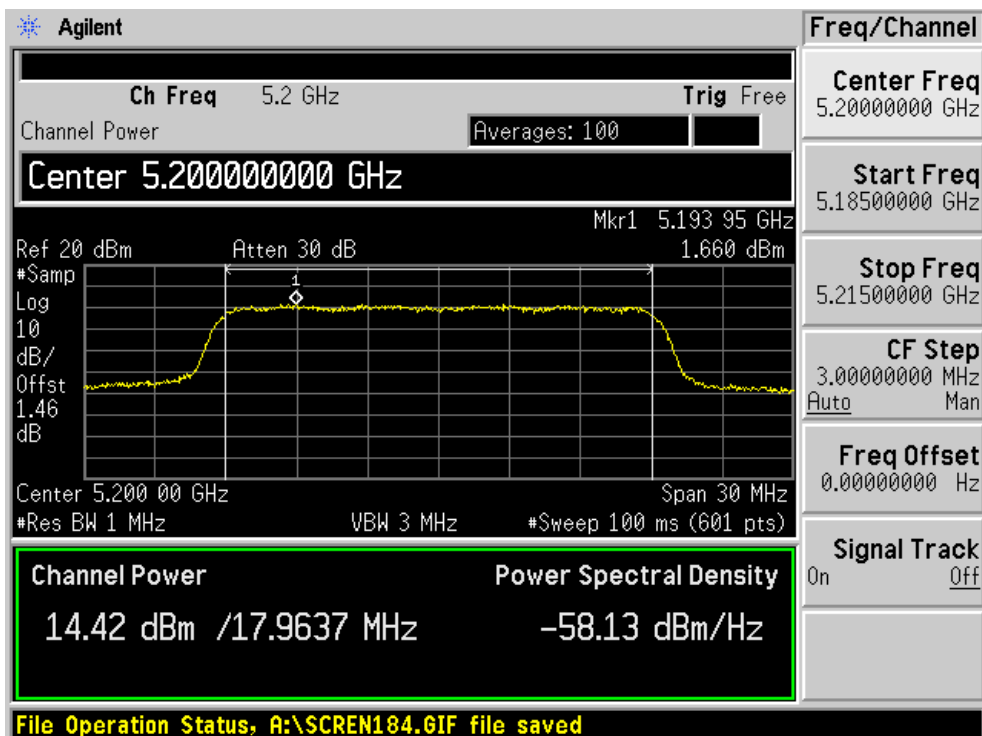
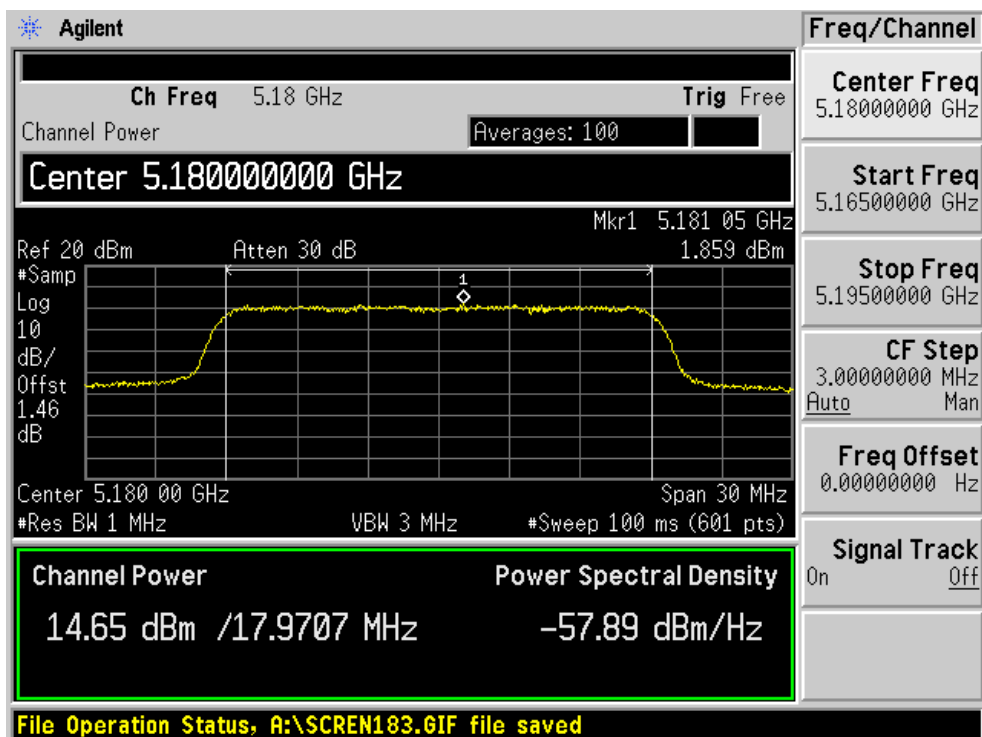
**Peak Output Power for 802.11an (HT20):**

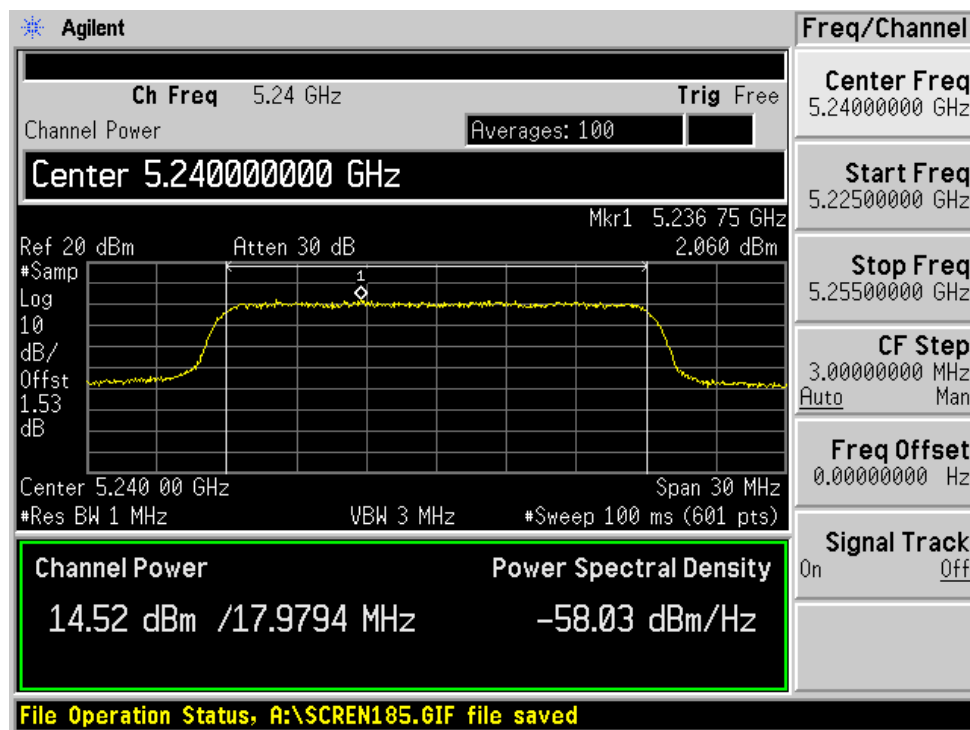
Frequency (MHz)	Data Rate (Mbps)	Peak Output Power (dBm)	Limit (dBm)	Margin (dB)
5180	M0	14.65	17	-2.35
5200	M0	14.42	17	-2.58
5240	M0	14.52	17	-2.48

**Power Spectral Density for 11a:**

Frequency (MHz)	Data Rate (Mbps)	Peak Power Spectral Density (dBm/MHz)	Limit (dBm)	Margin (dB)
5180	M0	1.859	4	-2.141
5200	M0	1.66	4	-2.34
5240	M0	2.06	4	-1.94

**Graphical Test Results for 802.11an (HT20):**





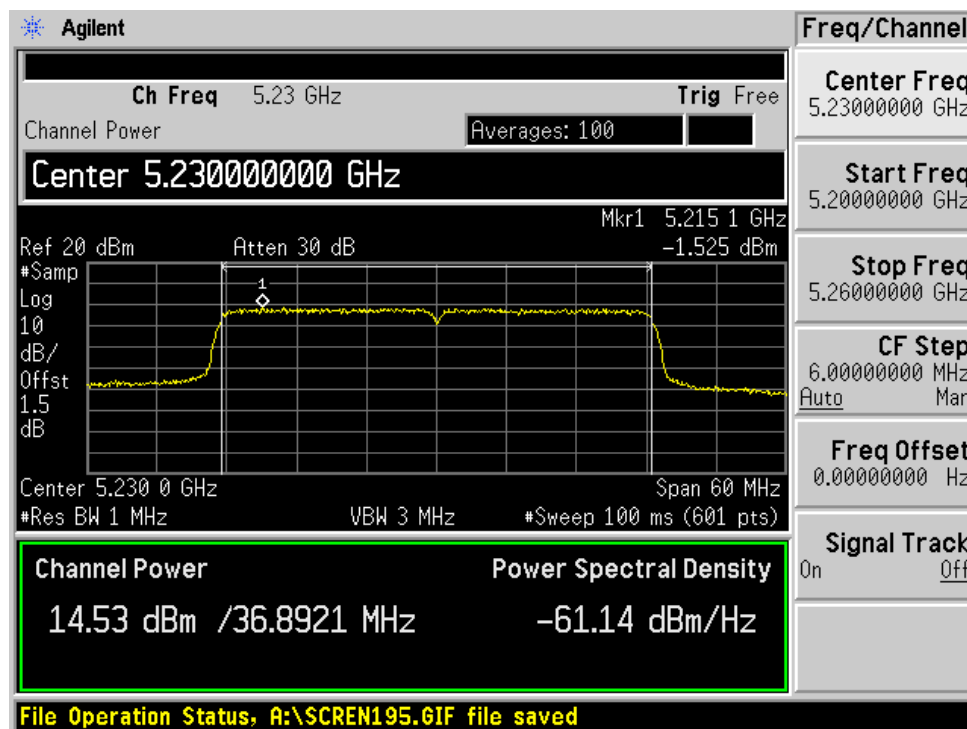
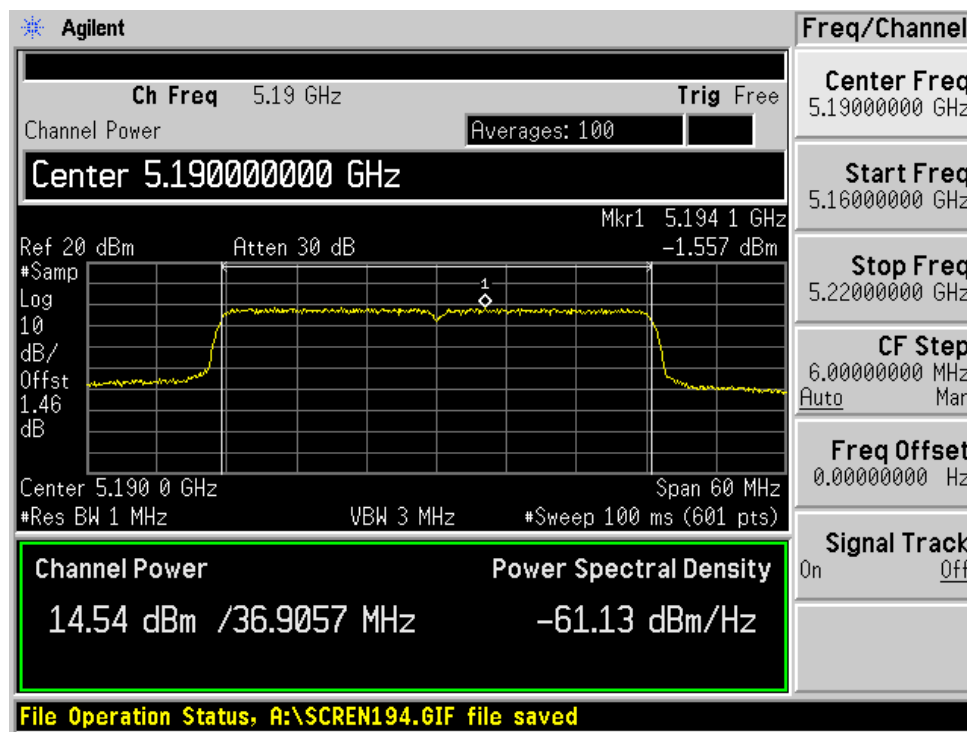
**Peak Output Power for 802.11an (HT40):**

Frequency (MHz)	Data Rate (Mbps)	Peak Output Power (dBm)	Limit (dBm)	Margin (dB)
5190	M0	14.54	17	-2.46
5230	M0	14.53	17	-2.47

**Power Spectral Density for 802.11an (HT40):**

Frequency (MHz)	Data Rate (Mbps)	Peak Power Spectral Density (dBm/MHz)	Limit (dBm)	Margin (dB)
5190	M0	-1.557	4	-5.557
5230	M0	-1.525	4	-5.525

**Graphical Test Results for 802.11an (HT40):**



## Peak Excursion

15.407: The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the maximum conducted output power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

Set the spectrum analyzer span to view the entire emission bandwidth. The largest difference between the following two traces must be  $\leq 13$  dB for all frequencies across the emission bandwidth.

Set the spectrum analyzer span to view the entire emission bandwidth. The largest difference between the following two traces must be  $\leq 13$  dB for all frequencies across the emission bandwidth.

### 1st Trace: (Peak)

Set Span to encompass the entire emission bandwidth of the signal.

RBW = 1 MHz, VBW = 3 MHz

Detector = Peak

Sweep = 10 s

Trace 1 = Max-hold

Ref Level Offset = correct for attenuator and cable loss

Ref Level = 20dBm

Atten = 10dBm

### 2nd Trace: (Average)

Trace 2 = clear right

Detector = Sample

Avg/VBW type = Pwr(RMS)

Average = 100

Sweep = single

### Set marker Deltas

Trace 1 & Peak search

Marker Delta

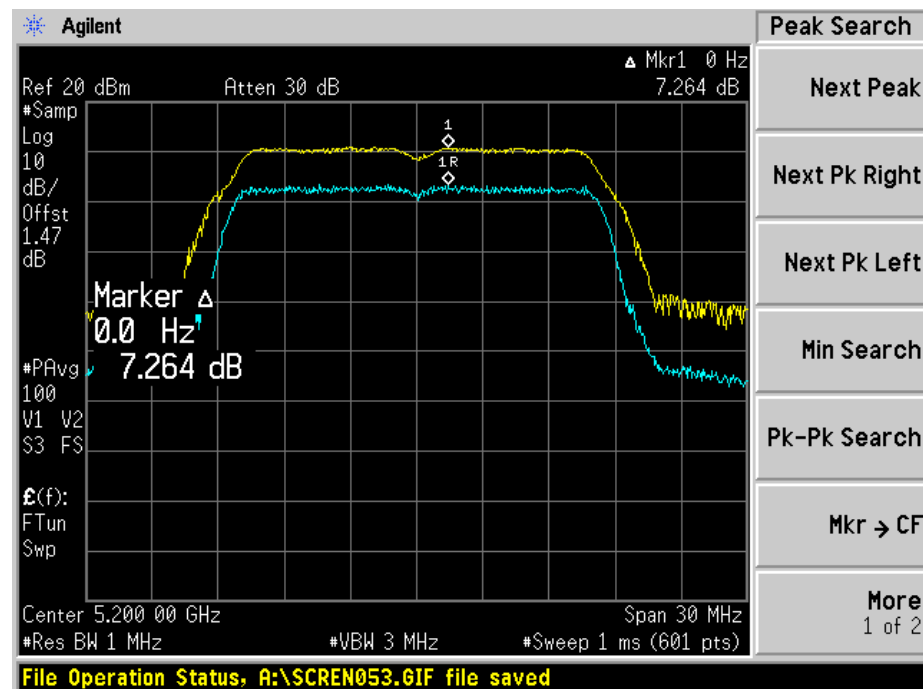
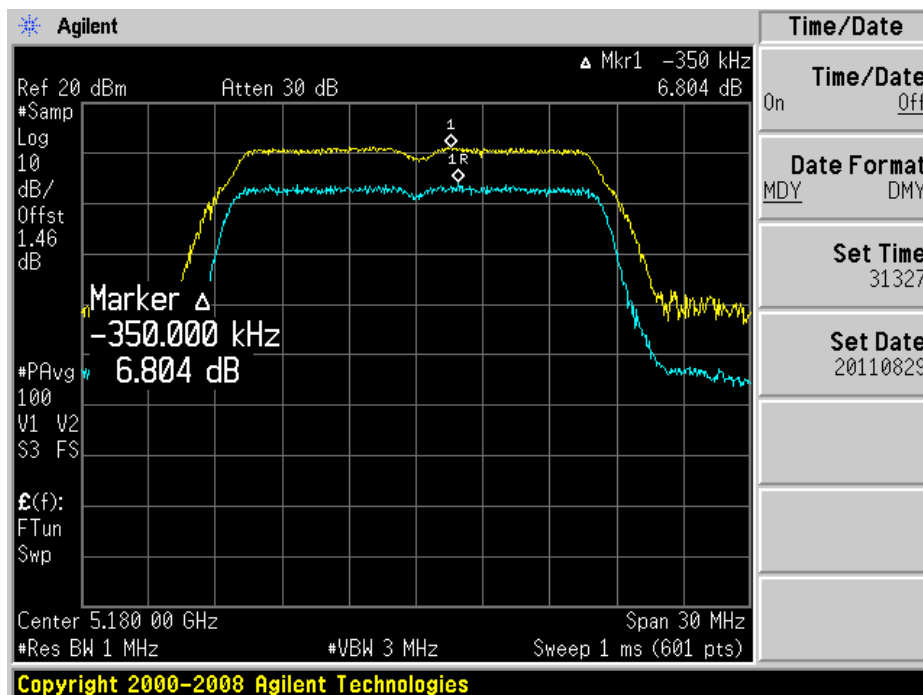
Trace 2 & Peak search

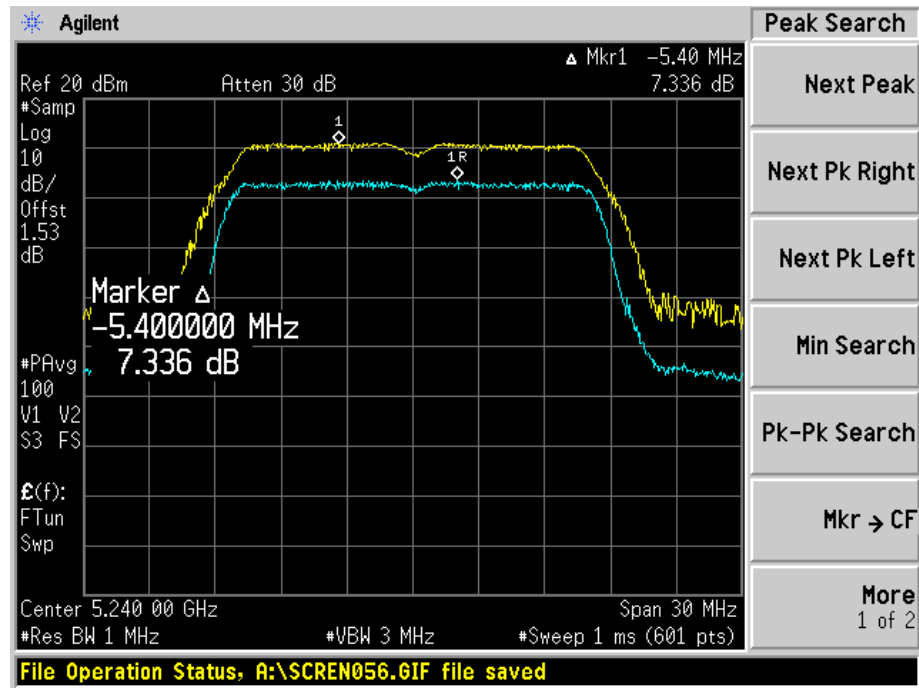
Record the difference between the Peak and Average Markers

### Results for 802.11a:

Frequency (MHz)	Data Rate (Mbps)	Peak Excursion (dB)	Limit (dBm)	Margin (dB)
5180	6	6.804	13	-6.196
5200	6	7.264	13	-5.736
5240	6	7.336	13	-5.664

**Graphical Test Results for 802.11a:**





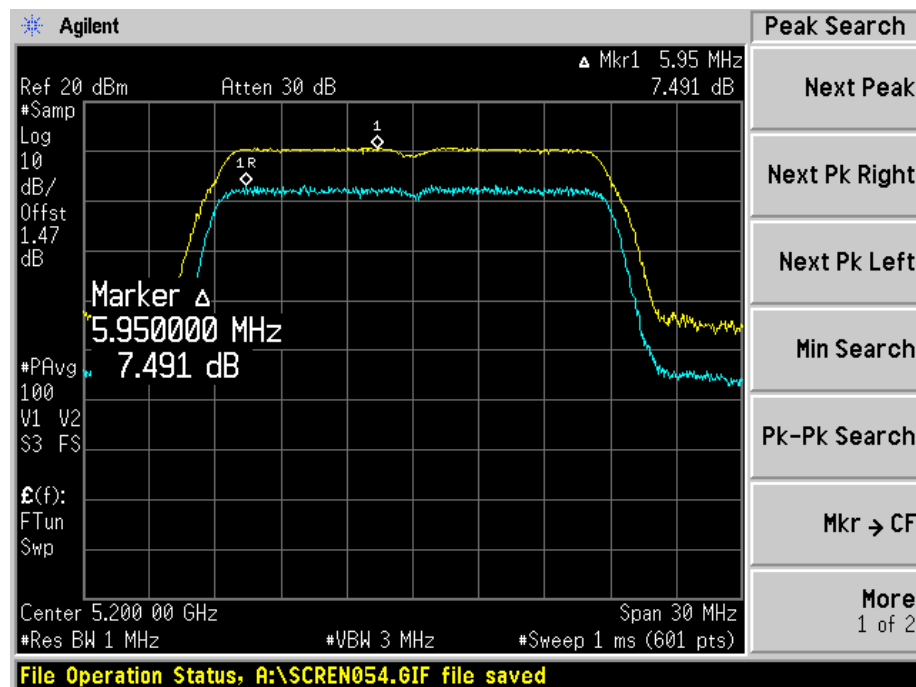
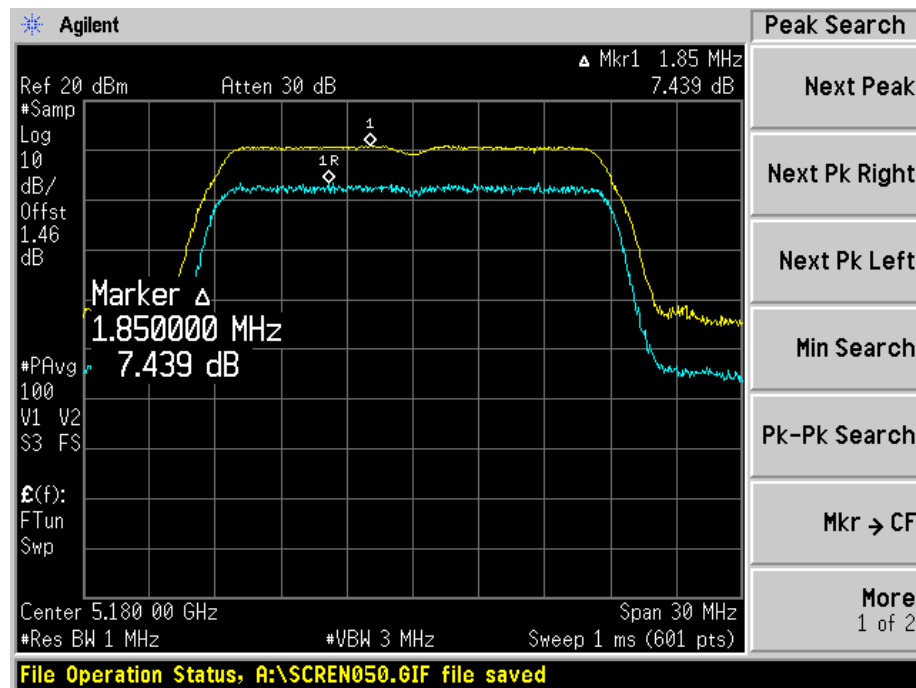
**Peak Excursion Results for HT20:**

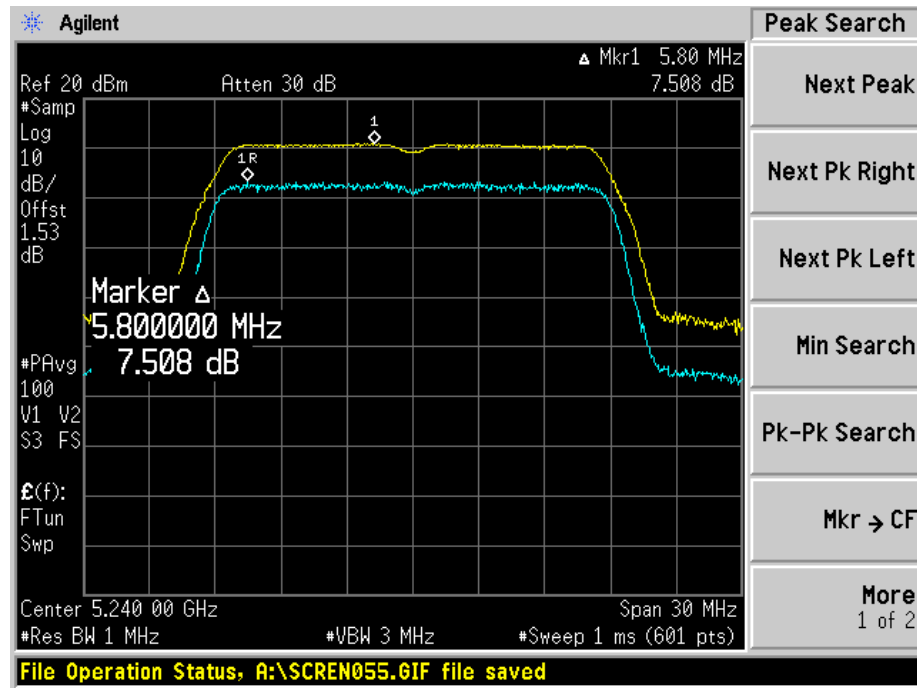
Frequency (MHz)	Data Rate (Mbps)	Peak Excursion (dB)	Limit (dBm)	Margin (dB)
5180	6.5	7.439	13	-5.561
5200	6.5	7.491	13	-5.509
5240	6.5	7.508	13	-5.492





**Graphical Test Results for 802.11an (HT20):**



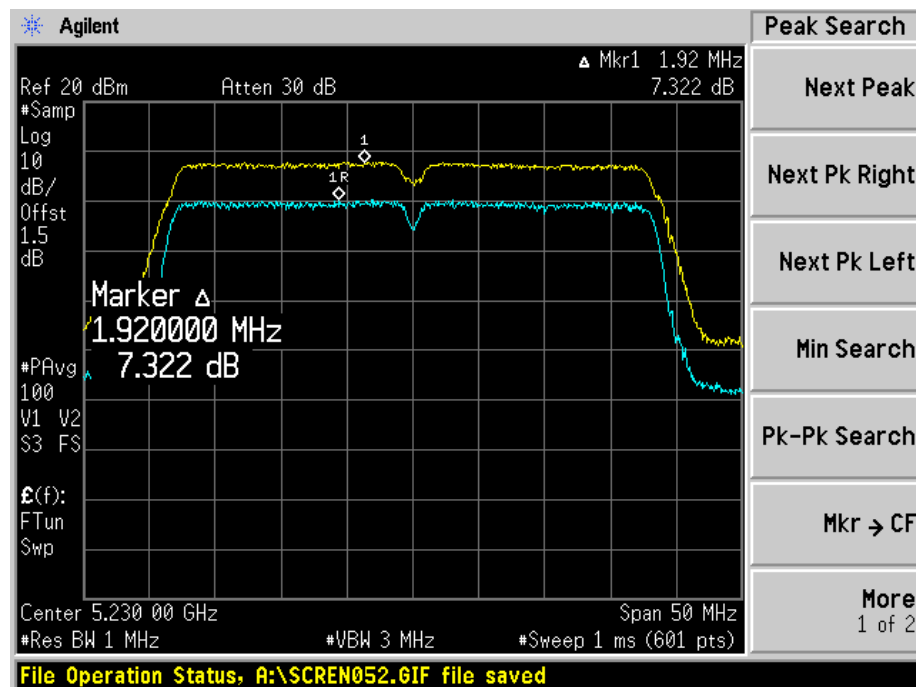
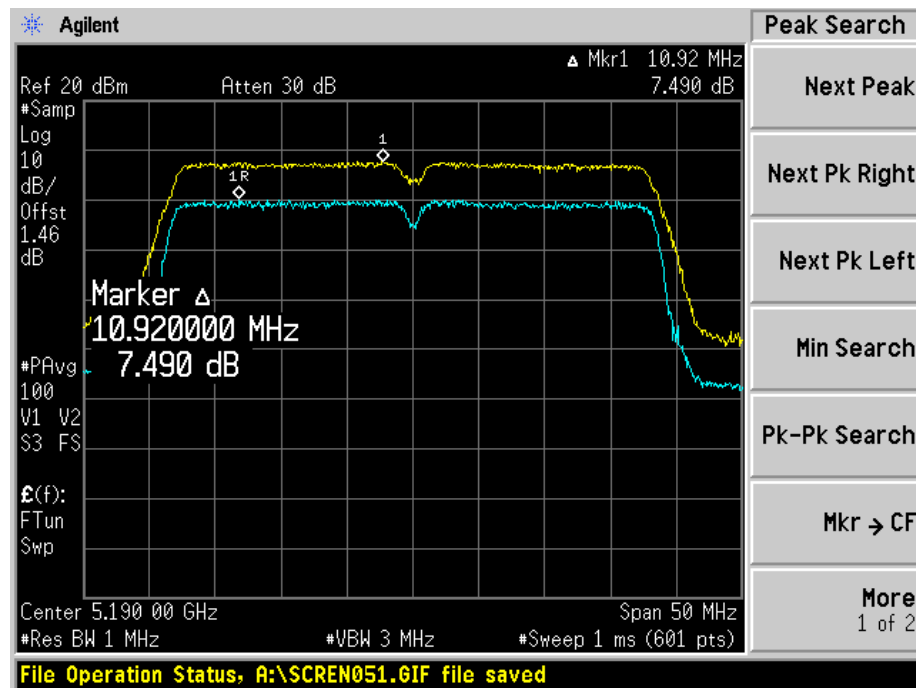


**Peak Excursion Results for HT40:**

Frequency (MHz)	Data Rate (Mbps)	Peak Excursion (dB)	Limit (dBm)	Margin (dB)
5190	13.5	7.49	13	-5.51
5230	13.5	7.322	13	-5.678



**Graphical Test Results for 802.11an (HT40):**





## Conducted Spurious Emissions:

15.407: For transmitters operating in the 5.15-5.25 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27dBm/MHz.

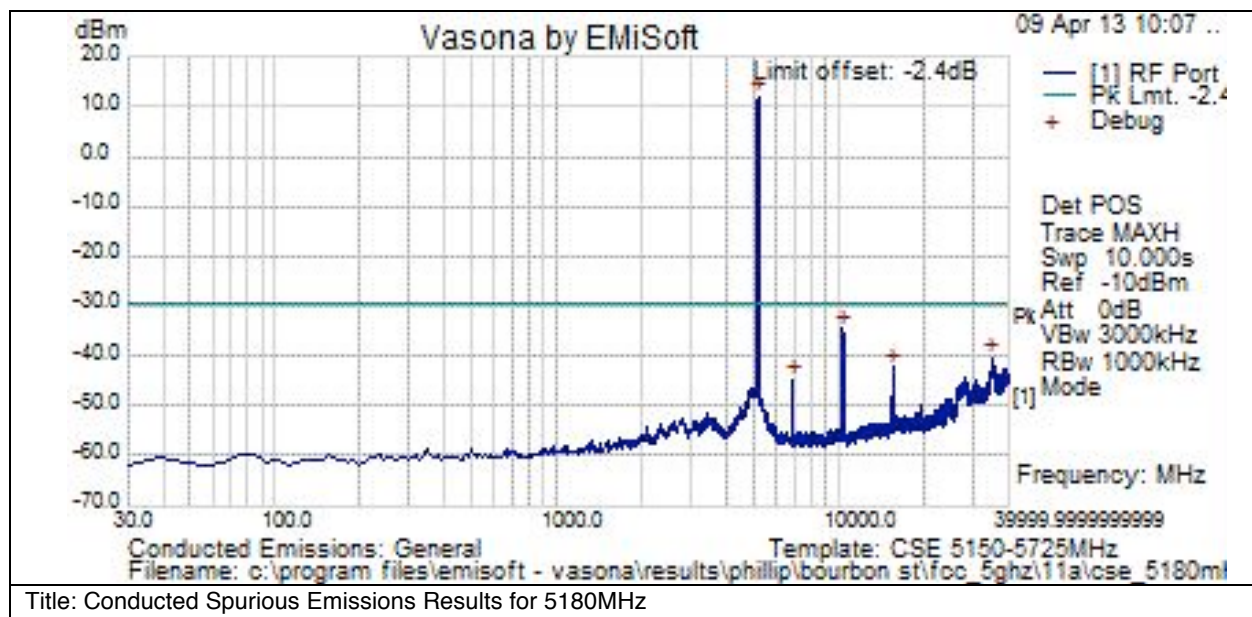
Connect the antenna port(s) to the spectrum analyzer input. Place the radio in continuous transmit mode. Configure the spectrum analyzer as shown below (be sure to enter all losses between the transmitter output and the spectrum analyzer).

Span:	30 MHz-40 GHz
Reference Level:	20 dBm
Attenuation:	10 dB
Sweep Time:	10 s
Resolution Bandwidth:	1 MHz
Video Bandwidth:	3 MHz
Detector:	Peak
Trace:	Single
Marker:	Peak

Record the marker waveform peak to spur difference

### 802.11A Graphical Test Results at 5180MHz:

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

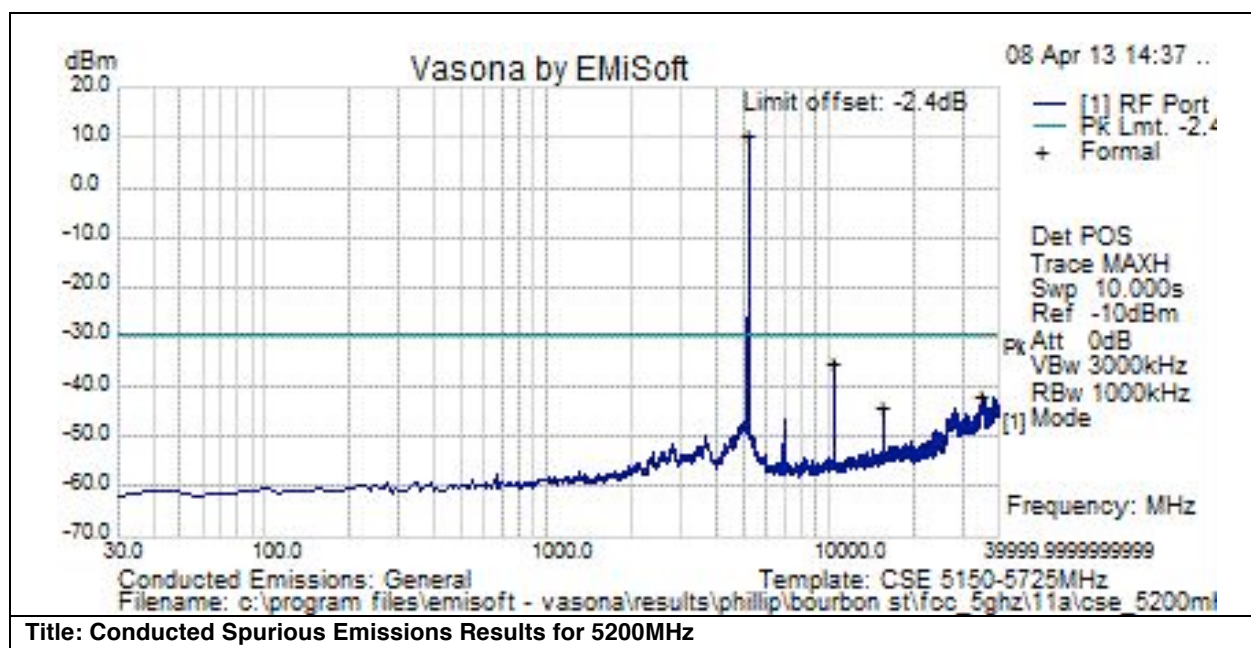


### Test Results Table

Frequency MHz	Raw dBm	Cable Loss	Factors dB	Level dBm	Measurement Type	Line	Limit dBm	Margin dB	Pass /Fail	Comments
5178.405	-9.8	22	0	12.1	Pk	RF	-29.4	41.5	Fail	Tx Signal
10362.75	-55.3	20.9	0	-34.4	Pk	RF	-29.4	-5.1	Pass	
35234.5	-63.2	22.8	0	-40.4	Pk	RF	-29.4	-11	Pass	
15538.11	-63.4	21.3	0	-42.1	Pk	RF	-29.4	-12.7	Pass	
6903.525	-65.4	20.6	0	-44.8	Pk	RF	-29.4	-15.4	Pass	

### 802.11A Graphical Test Results at 5200MHz:

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

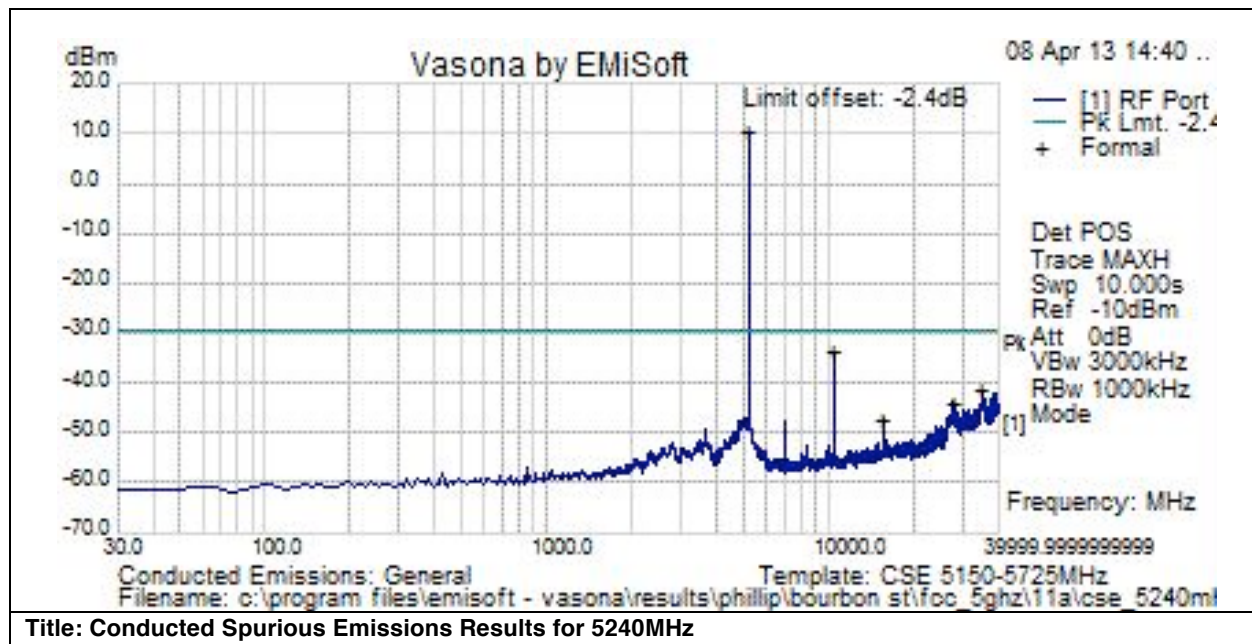


### Test Results Table

Frequency MHz	Raw dBm	Cable Loss	Factors dB	Level dBm	Measurement Type	Line	Limit dBm	Margin dB	Pass /Fail	Comments
5205.36	-11.7	22	0	10.3	Pk	RF	-29.4	39.7	Fail	Tx Signal
10398.69	-56.1	20.9	0	-35.2	Pk	RF	-29.4	-5.8	Pass	
35207.5	-64.4	22.8	0	-41.6	Pk	RF	-29.4	-12.2	Pass	
15601.005	-65.6	21.3	0	-44.3	Pk	RF	-29.4	-14.9	Pass	

### 802.11A Graphical Test Results at 5240MHz:

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements



### Test Results Table

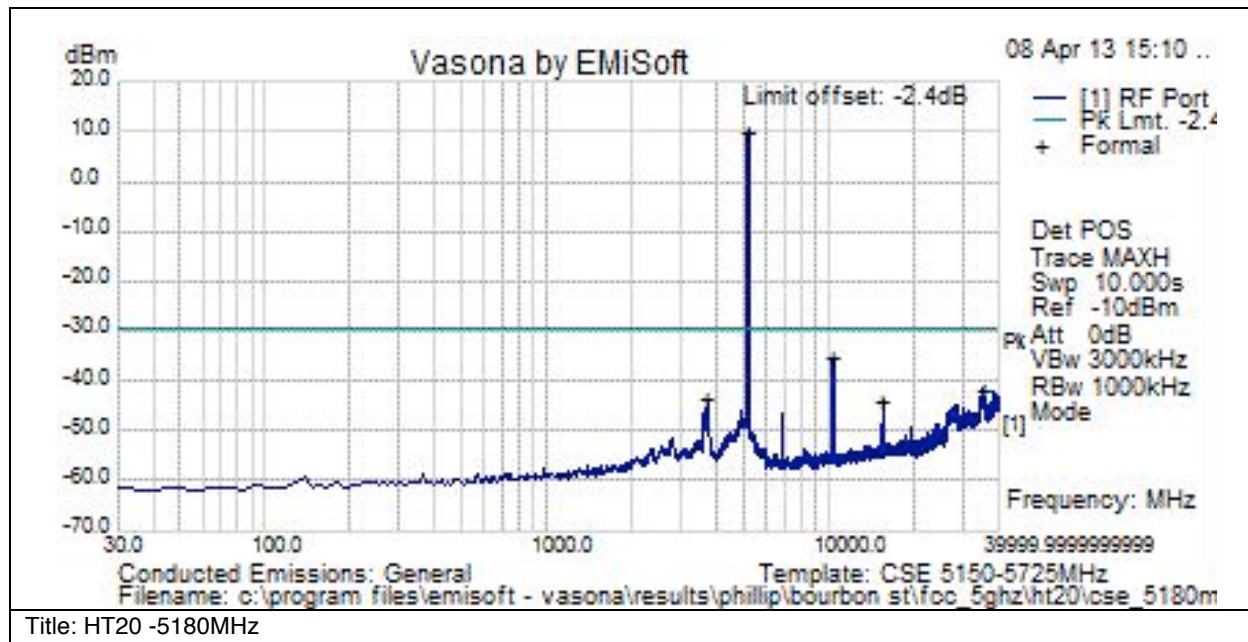
Frequency MHz	Raw dBm	Cable Loss	Factors dB	Level dBm	Measurement Type	Line	Limit dBm	Margin dB	Pass /Fail	Comments
5241.3	-11.8	22	0	10.2	Pk	RF	-29.4	39.6	Fail	Tx Signal
10479.555	-54.7	20.9	0	-33.8	Pk	RF	-29.4	-4.4	Pass	
35173.75	-64.2	22.8	0	-41.4	Pk	RF	-29.4	-12	Pass	
27755.5	-66.2	22.2	0	-44	Pk	RF	-29.4	-14.6	Pass	
15717.81	-68.5	21.3	0	-47.2	Pk	RF	-29.4	-17.8	Pass	



## Conducted Spurious Emissions Results for 802.11A – HT20 Mode:

### Graphical Test Results for 5180MHz:

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements



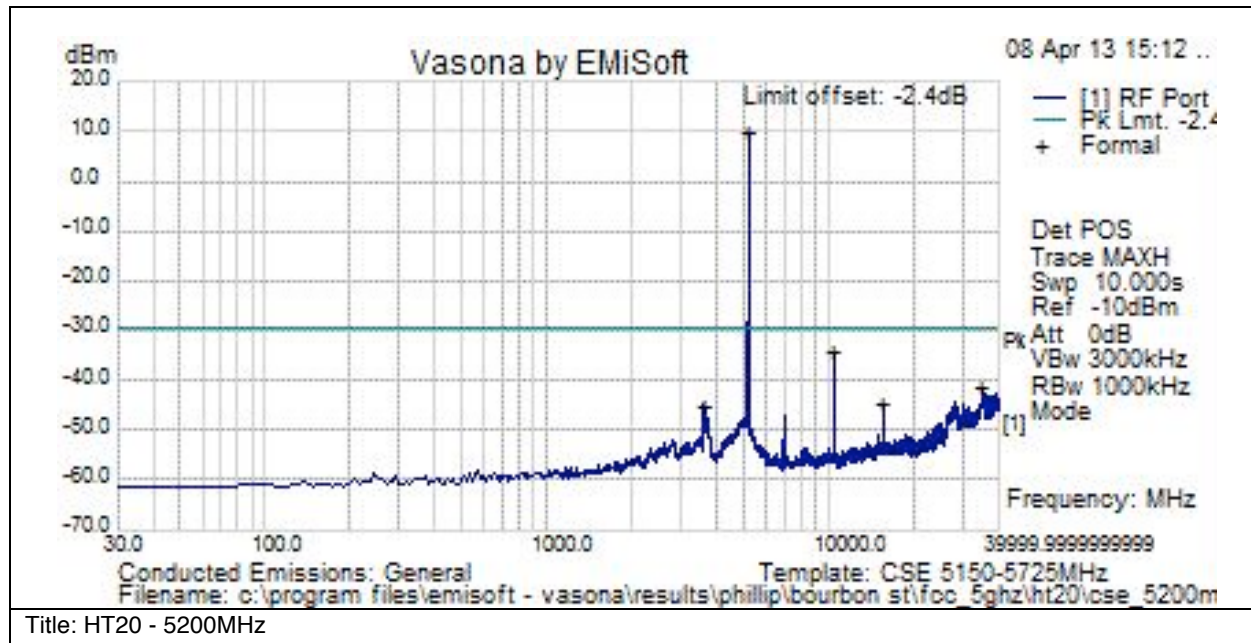
### Test Results Table

Frequency MHz	Raw dBm	Cable Loss	Factors dB	Level dBm	Measurement Type	Line	Limit dBm	Margin dB	Pass /Fail	Comments
5178.405	-11.9	22	0	10.1	Pk	RF	-29.4	39.5	Fail	Tx Signal
10371.735	-56.1	20.9	0	-35.2	Pk	RF	-29.4	-5.8	Pass	
35504.5	-64.4	22.8	0	-41.6	Pk	RF	-29.4	-12.2	Pass	
3731.82	-65.1	21.5	0	-43.6	Pk	RF	-29.4	-14.2	Pass	
15547.095	-65.1	21.3	0	-43.8	Pk	RF	-29.4	-14.4	Pass	



### Graphical Test Results for 5200MHz:

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

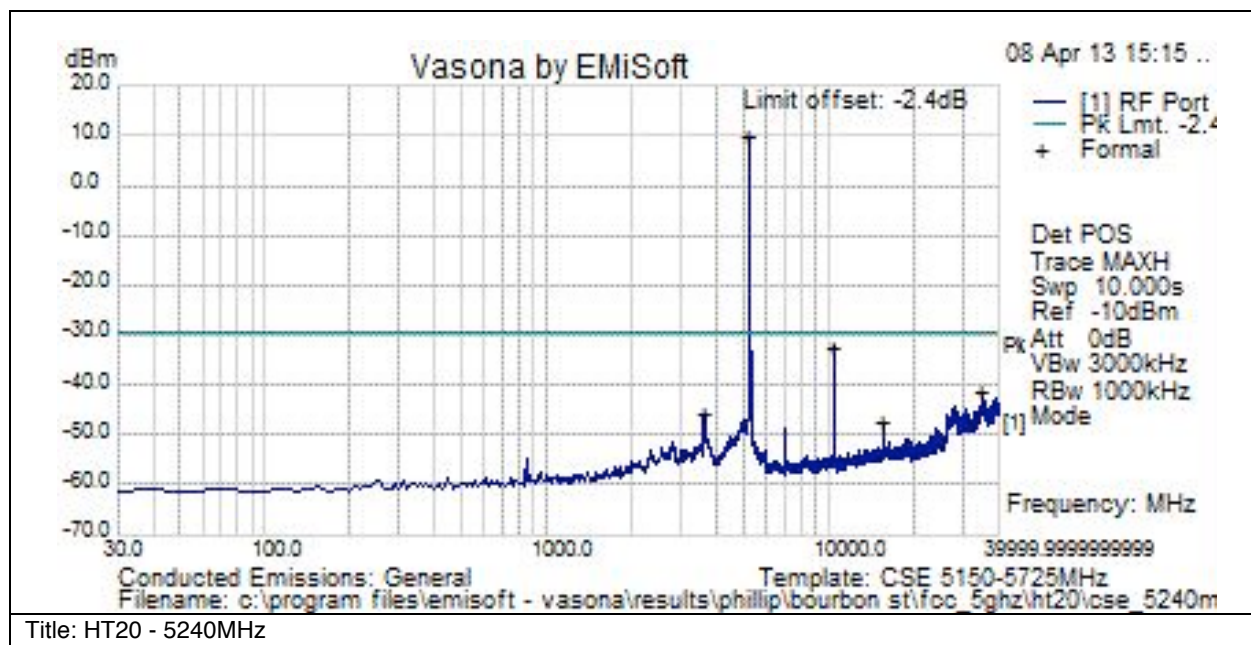


### Test Results Table

Frequency MHz	Raw dBm	Cable Loss	Factors dB	Level dBm	Measurement Type	Line	Limit dBm	Margin dB	Pass /Fail	Comments
5196.375	-12.1	22	0	9.9	Pk	RF	-29.4	39.3	Fail	Tx Signal
10398.69	-55.2	20.9	0	-34.3	Pk	RF	-29.4	-4.9	Pass	
35221	-64.2	22.8	0	-41.4	Pk	RF	-29.4	-12	Pass	
15601.005	-66.1	21.3	0	-44.8	Pk	RF	-29.4	-15.4	Pass	
3606.163	-66.6	21.5	0	-45.1	Pk	RF	-29.4	-15.7	Pass	

### Graphical Test Results for 5240MHz:

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements



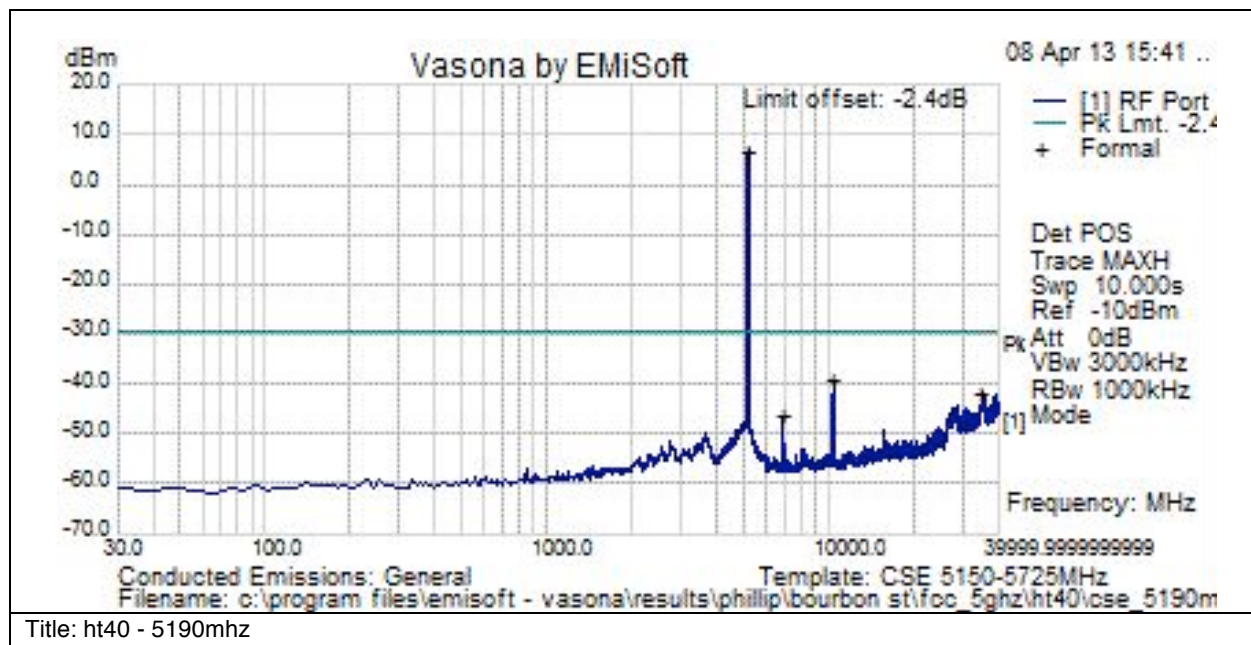
### Test Results Table

Frequency MHz	Raw dBm	Cable Loss	Factors dB	Level dBm	Measurement Type	Line	Limit dBm	Margin dB	Pass /Fail	Comments
5241.3	-12.2	22	0	9.8	Pk	RF	-29.4	39.2	Fail	Tx Signal
10479.555	-53.3	20.9	0	-32.4	Pk	RF	-29.4	-3	Pass	
35207.5	-64.3	22.8	0	-41.5	Pk	RF	-29.4	-12.1	Pass	
3624	-67.4	21.6	0	-45.9	Pk	RF	-29.4	-16.5	Pass	
15717.81	-68.8	21.3	0	-47.5	Pk	RF	-29.4	-18.1	Pass	

## Conducted Spurious Emissions Results for 802.11A – HT40 Mode:

### Graphical Test Results for 5190MHz:

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements

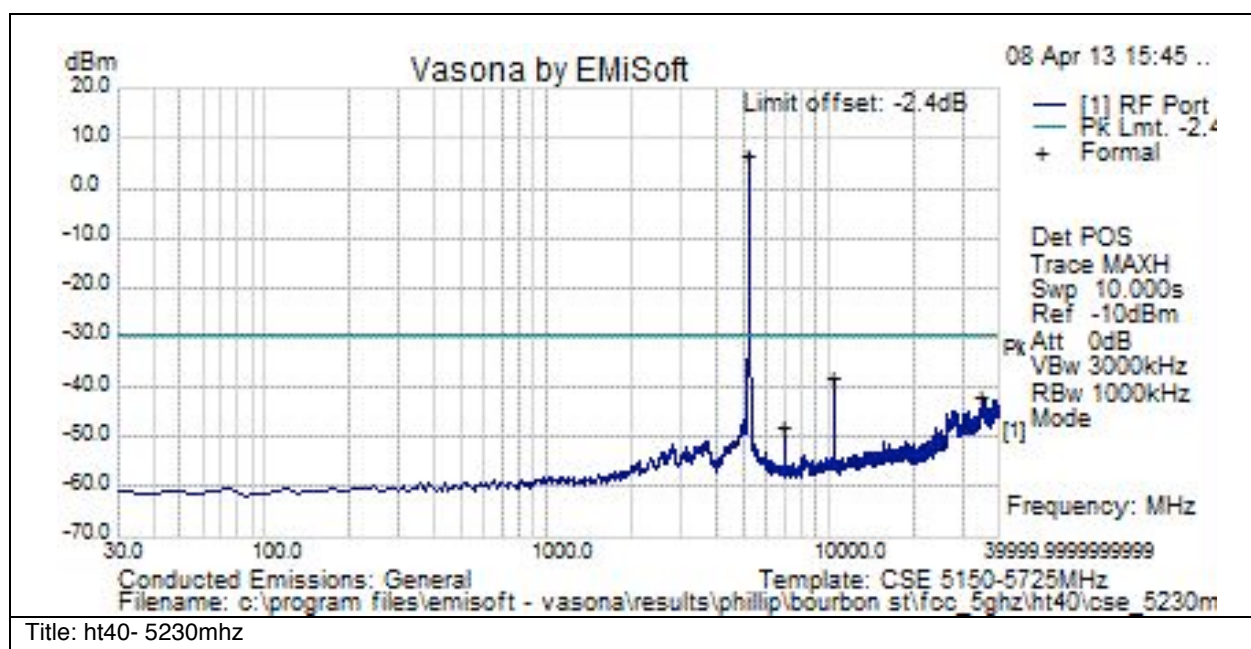


### Test Results Table

Frequency MHz	Raw dBm	Cable Loss	Factors dB	Level dBm	Measurement Type	Line	Limit dBm	Margin dB	Pass /Fail	Comments
5187.39	-15	22	0	6.9	Pk	RF	-29.4	36.3	Fail	Tx Signal
10380.72	-60	20.9	0	-39.2	Pk	RF	-29.4	-9.8	Pass	
35221	-64.5	22.8	0	-41.7	Pk	RF	-29.4	-12.3	Pass	
6921.495	-67	20.6	0	-46.3	Pk	RF	-29.4	-16.9	Pass	

### Graphical Test Results for 5230MHz:

Note that the data displayed on the plots detailed in this appendix were measured using a 'Peak Detector'. Please refer to the results table for the detectors used during formal measurements



### Test Results Table

Frequency MHz	Raw dBm	Cable Loss	Factors dB	Level dBm	Measurement Type	Line	Limit dBm	Margin dB	Pass /Fail	Comments
5214.345	-15.3	22	0	6.7	Pk	RF	-29.4	36.1	Fail	Tx Signal
10461.585	-59	20.9	0	-38.1	Pk	RF	-29.4	-8.7	Pass	
35234.5	-64.7	22.8	0	-41.9	Pk	RF	-29.4	-12.5	Pass	
6975.405	-68.5	20.6	0	-47.9	Pk	RF	-29.4	-18.5	Pass	