

4. Peak Power Spectral Density

4.1. Test Equipment

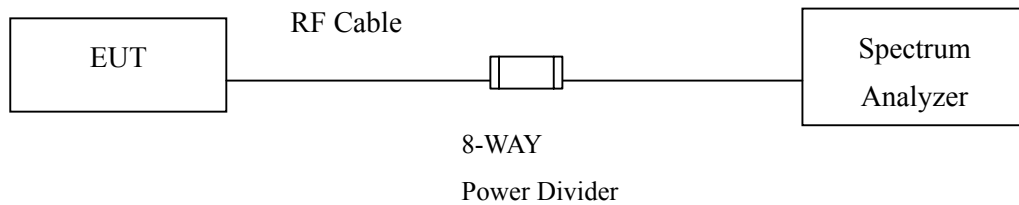
The following test equipments are used during the radiated emission tests:

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2009
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2009
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2010
X	8-WAY Power Divider	JFW	50PD-647 / 526770 0916	Apr., 2010

Note:

1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
2. The test instruments marked with “X” are used to measure the final test results.
3. The power combiner is used for measure 11n mode.

4.2. Test Setup



4.3. Limits

- (4) 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 antenna of directional gain greater than 6 dBi are used, the peak power spectral density shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.
- (5) For the band 5.25-5.35 GHz, the peak power spectral density shall not exceed 11 dBm in any 1-MHz band. If transmitting antenna of directional gain greater than 6 dBi are used, the peak power spectral density shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.
- (6) For the band 5.725-5.825 GHz, the peak power spectral density shall not exceed 17 dBm in any 1-MHz band. If transmitting antenna of directional gain greater than 6 dBi are used, the peak power spectral density shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.

4.4. Test Procedure

The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Aug 2002 DA 02-2138 for compliance to FCC 47CFR Subpart E requirements.

4.5. Uncertainty

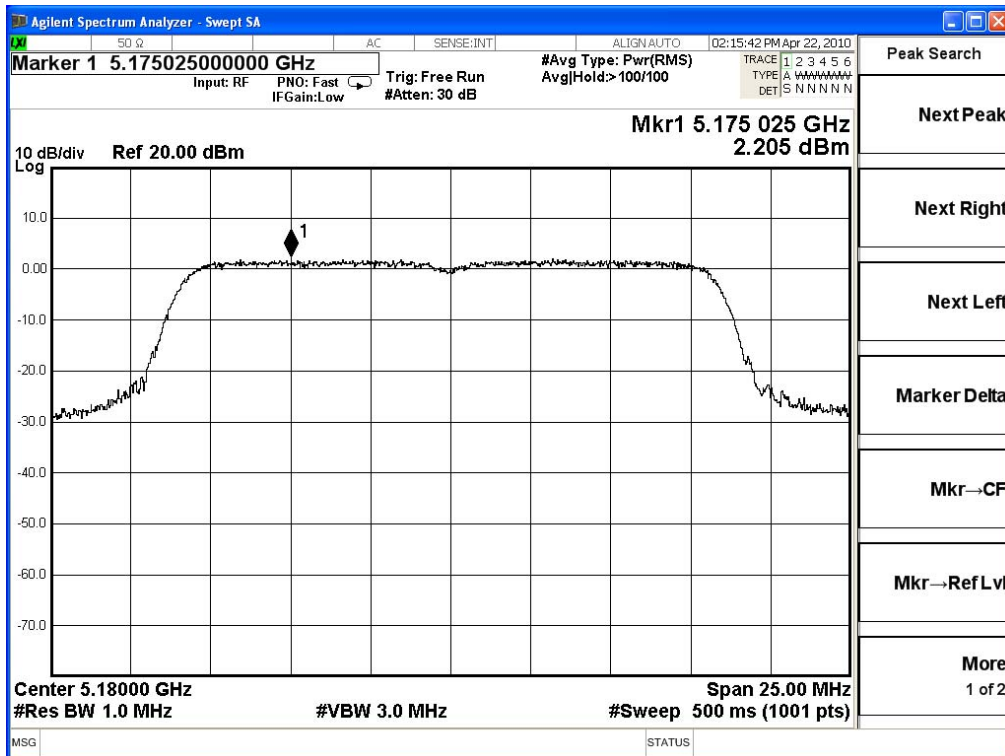
± 1.27 dB

4.6. Test Result of Peak Power Spectral Density

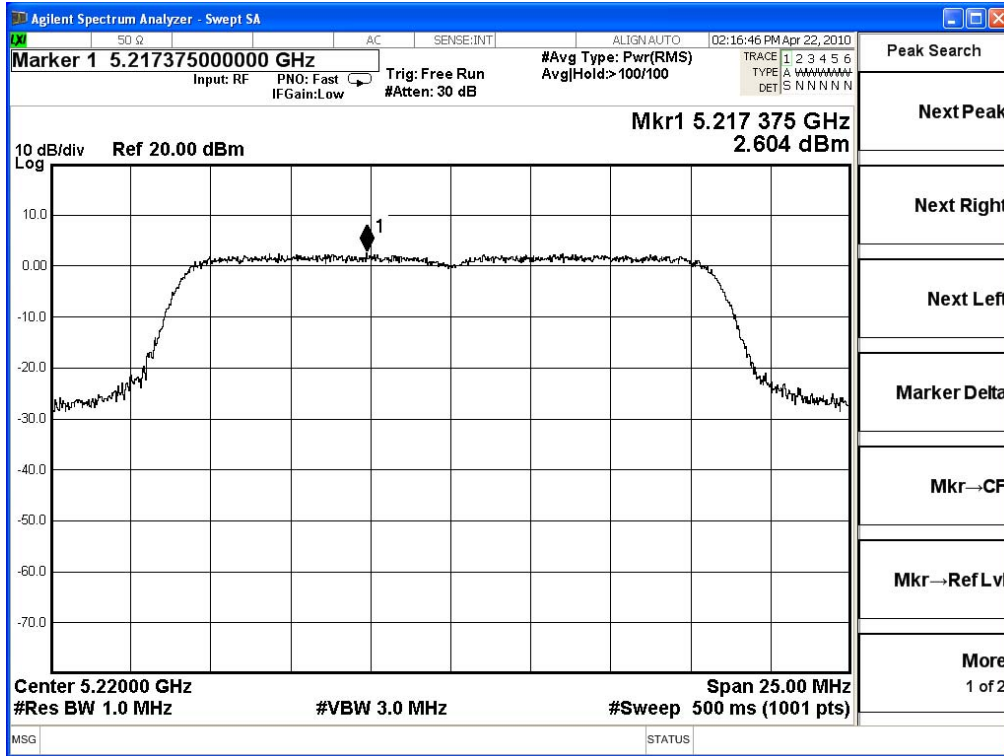
Product : Tablet PC MC-C5 / MC-F5
 Test Item : Peak Power Spectral Density
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (802.11a-6Mbps)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
36	5180	2.205	<4	Pass
44	5220	2.604	<4	Pass
48	5240	2.314	<4	Pass
52	5260	2.330	<11	Pass
60	5300	3.579	<11	Pass
64	5320	3.418	<11	Pass
100	5500	3.285	<11	Pass
120	5600	4.059	<11	Pass
140	5700	3.198	<11	Pass

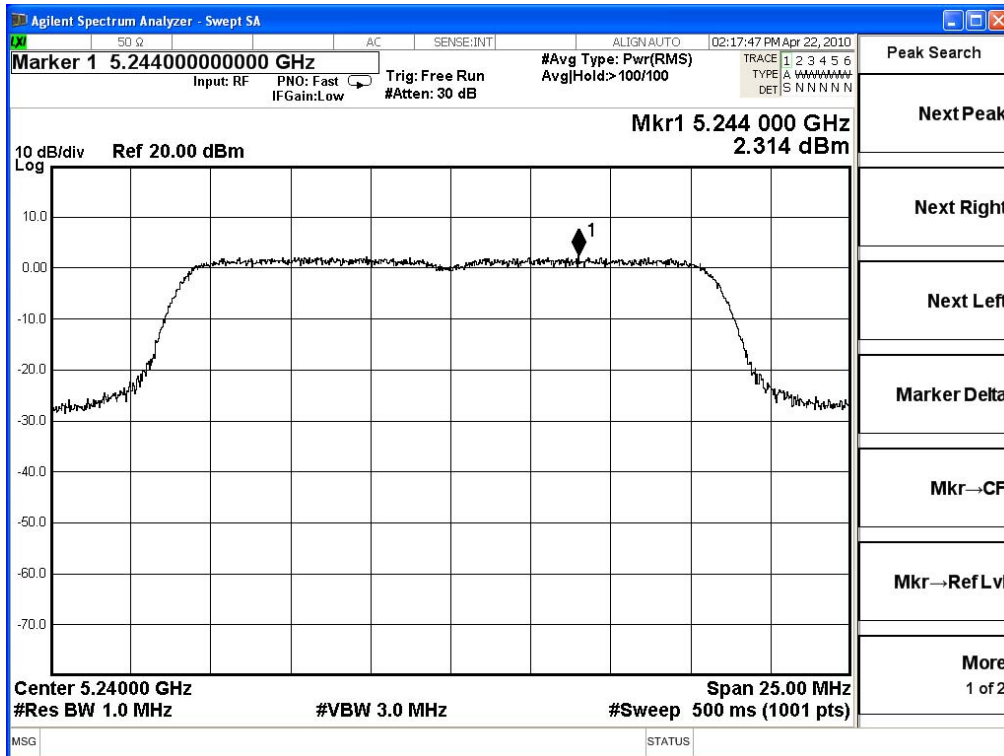
Channel 36:



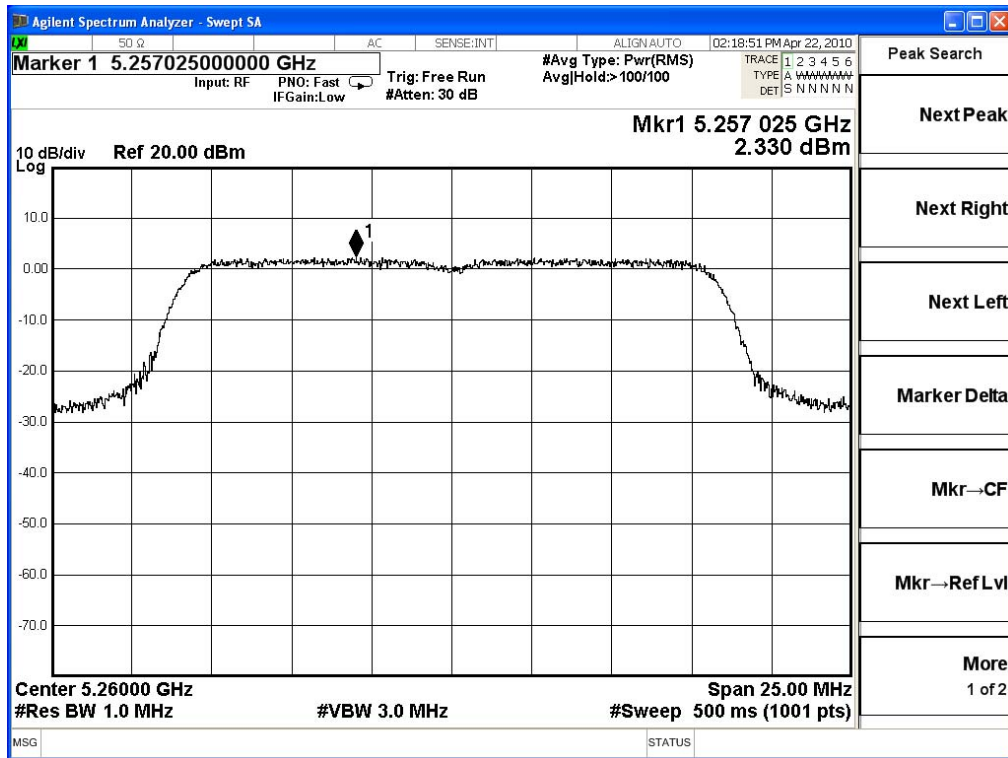
Channel 44:



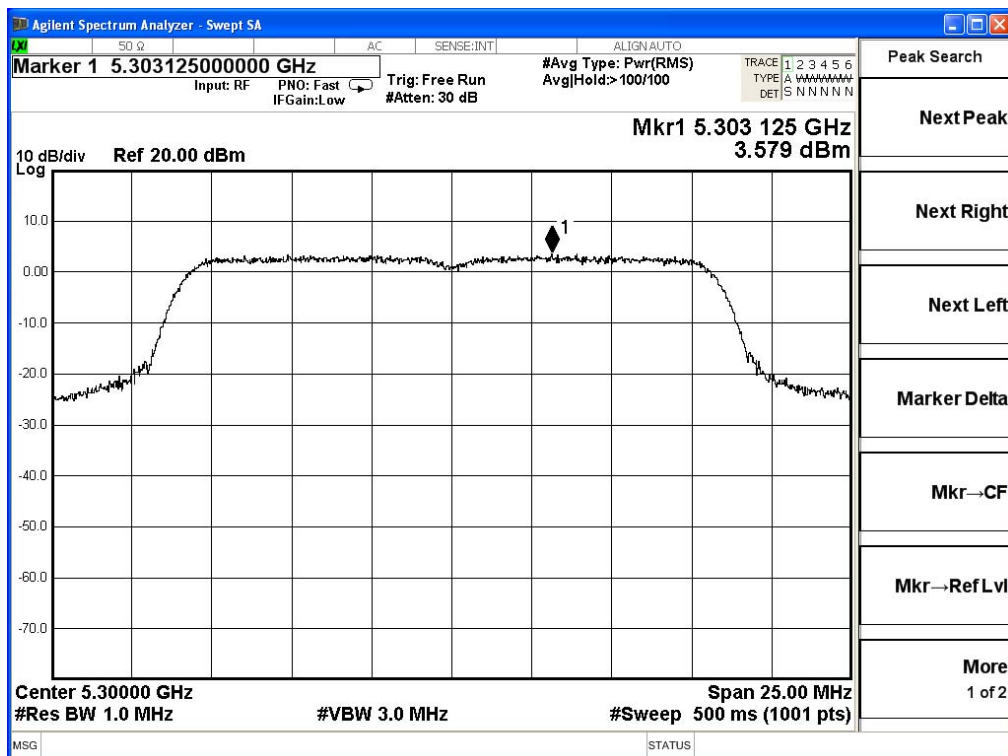
Channel 48:



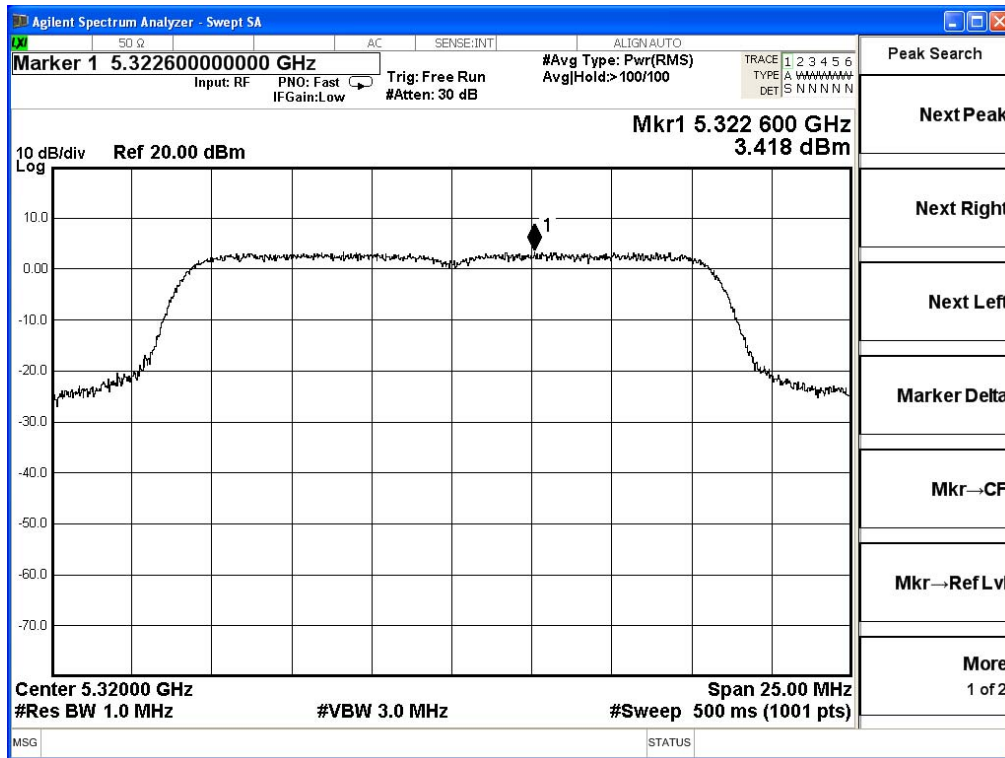
Channel 52:



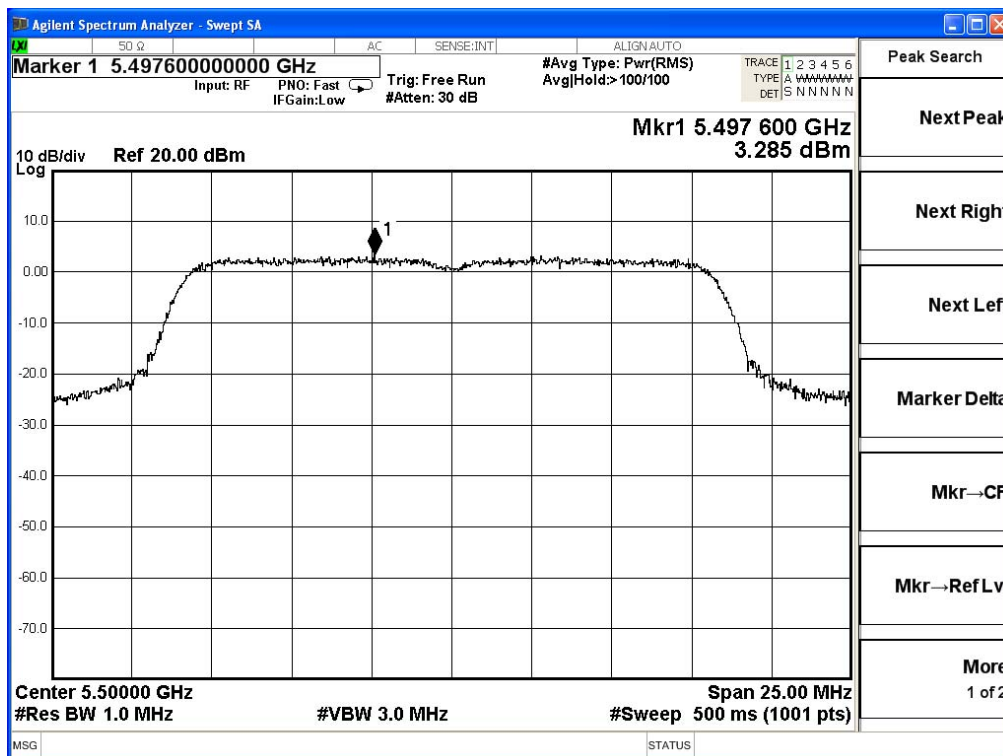
Channel 60:



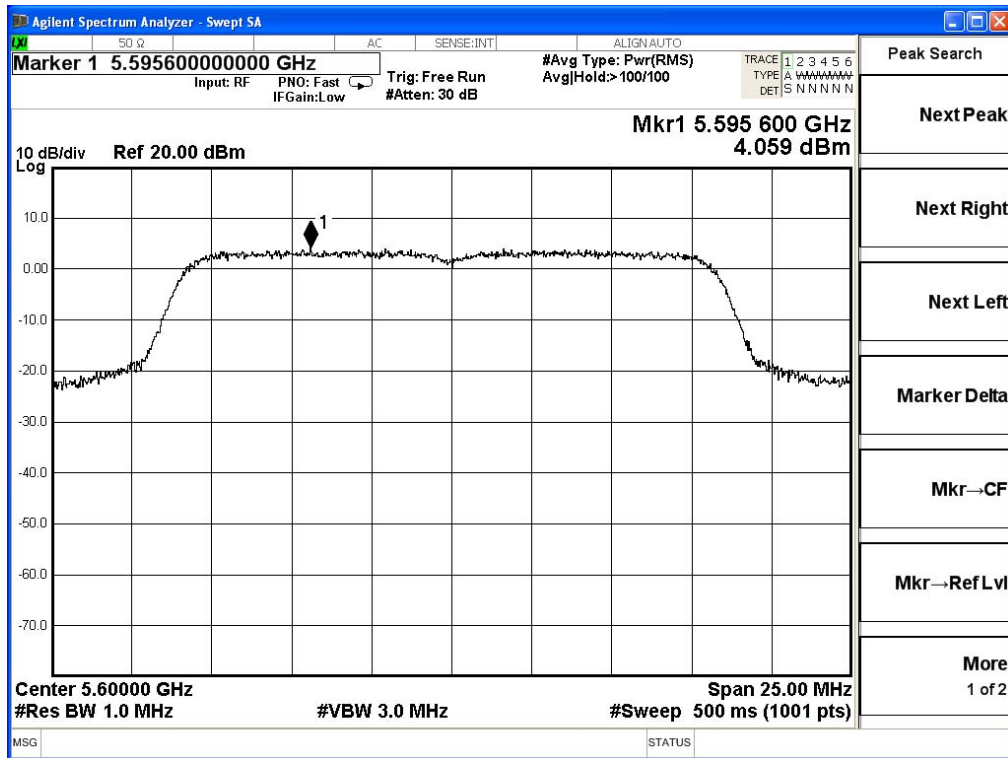
Channel 64:



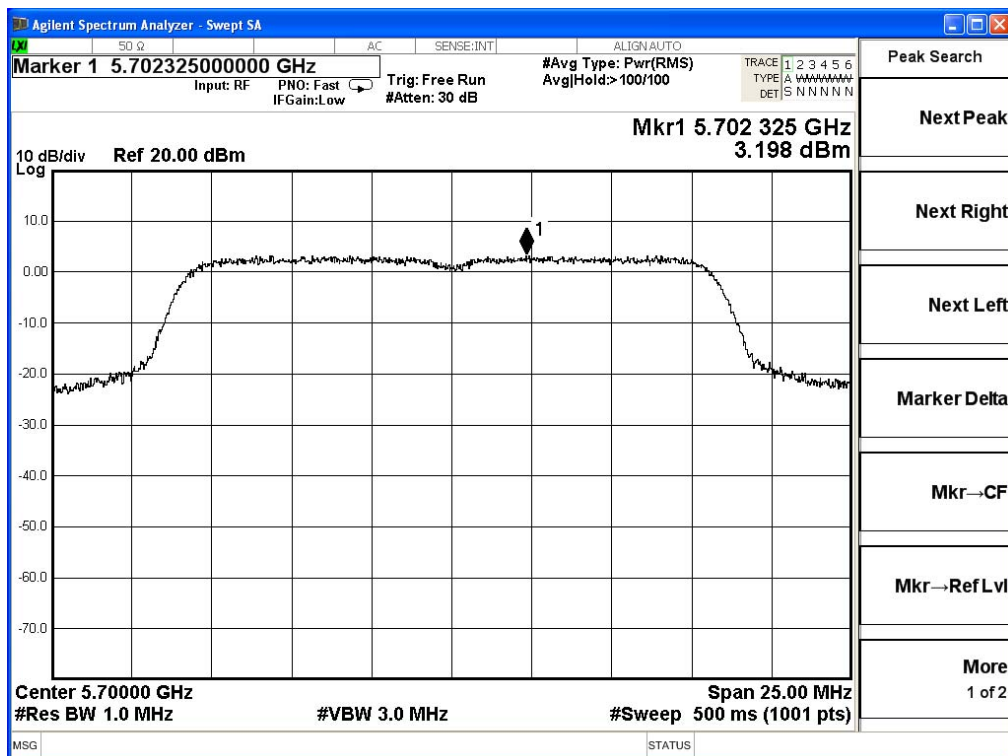
Channel 100:



Channel 120:



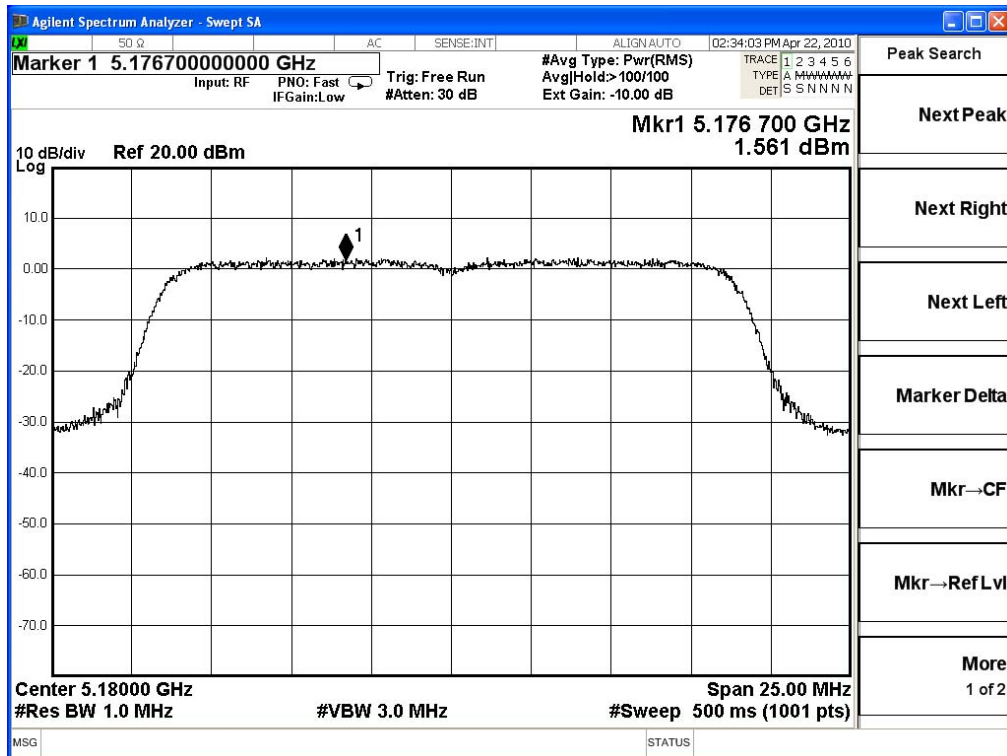
Channel 140:



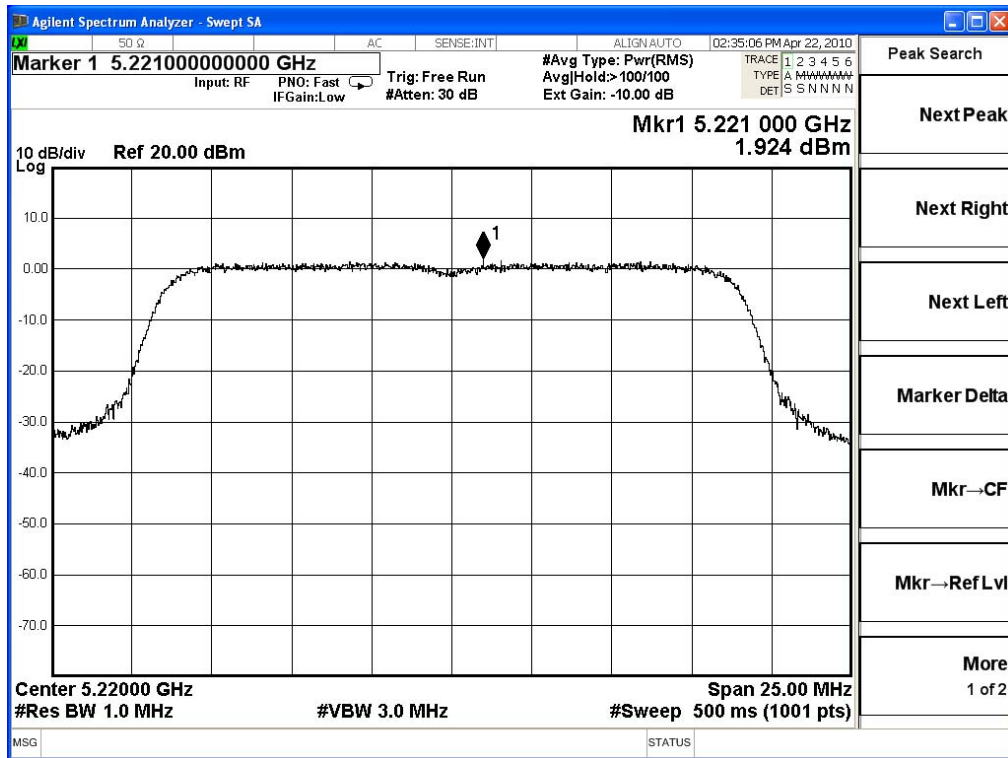
Product : Tablet PC MC-C5 / MC-F5
 Test Item : Peak Power Spectral Density
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter (802.11n-20BW 13Mbps)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
36	5180	1.561	<4	Pass
44	5220	1.924	<4	Pass
48	5240	1.790	<4	Pass
52	5260	1.360	<11	Pass
60	5300	3.534	<11	Pass
64	5320	3.607	<11	Pass
100	5500	2.555	<11	Pass
120	5600	2.182	<11	Pass
140	5700	2.404	<11	Pass

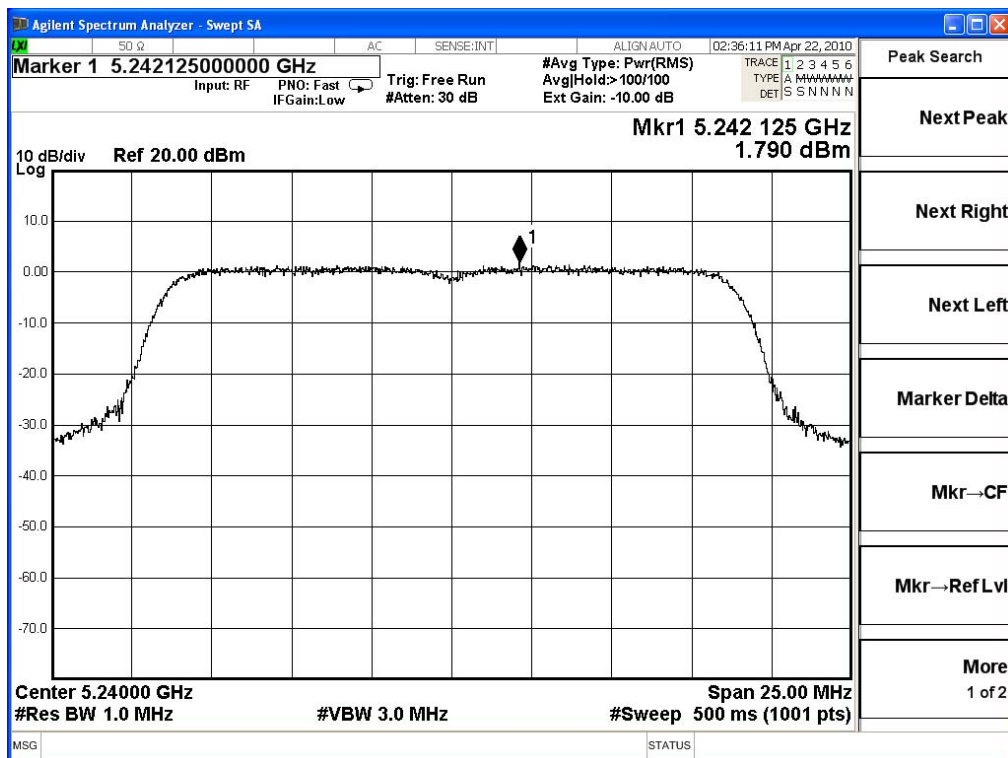
Channel 36:



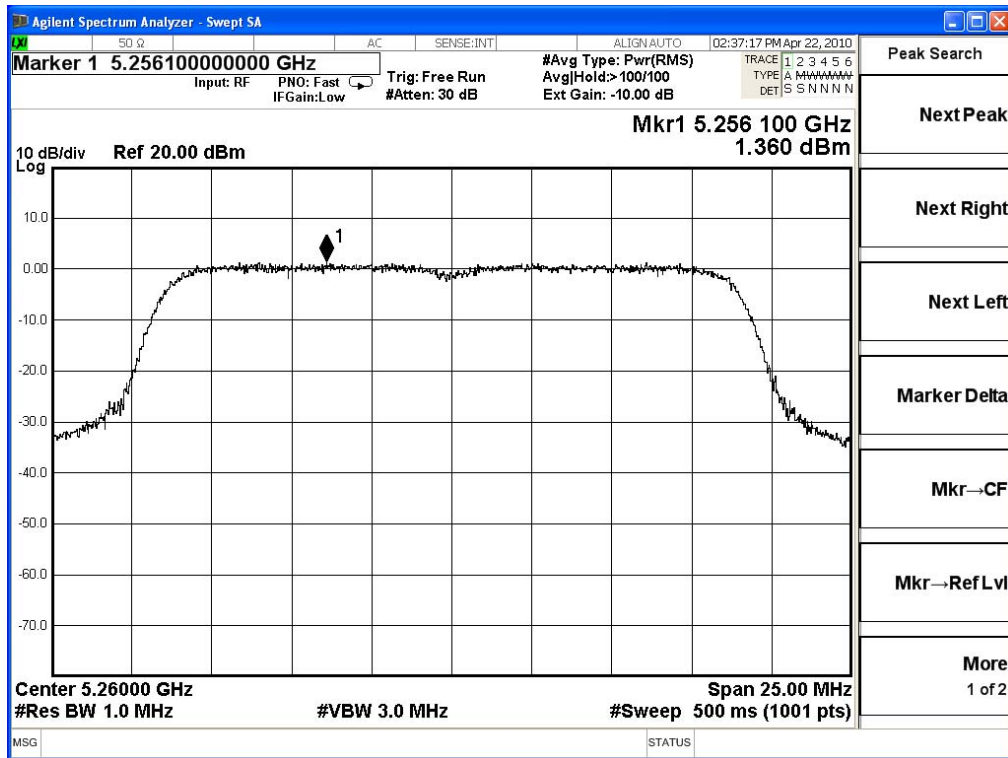
Channel 44:



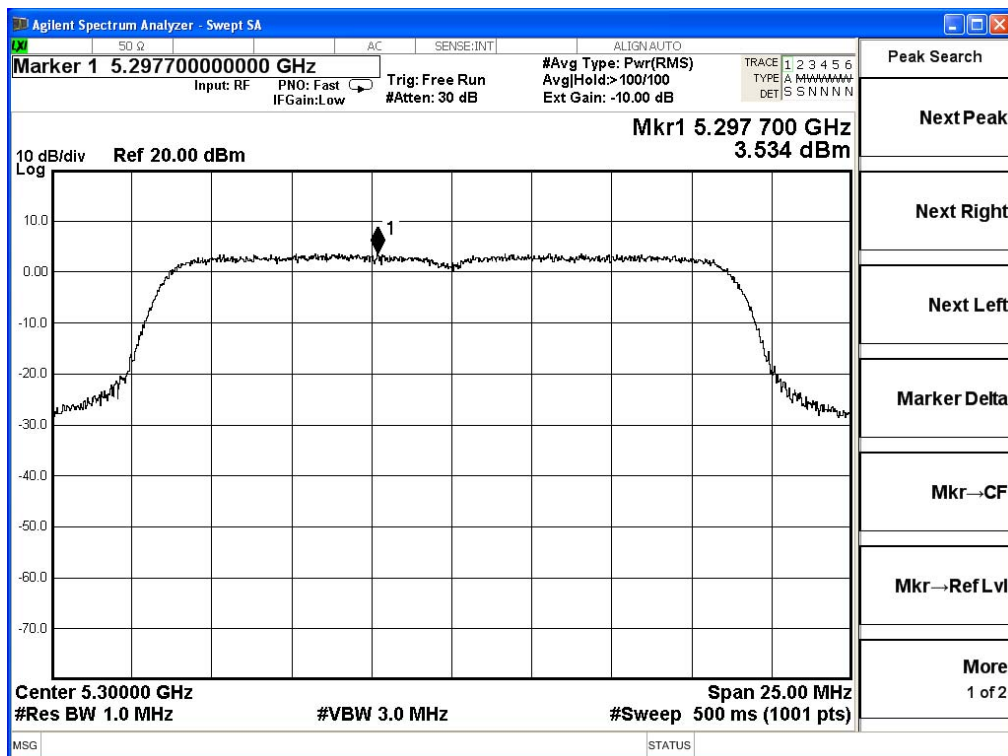
Channel 48:



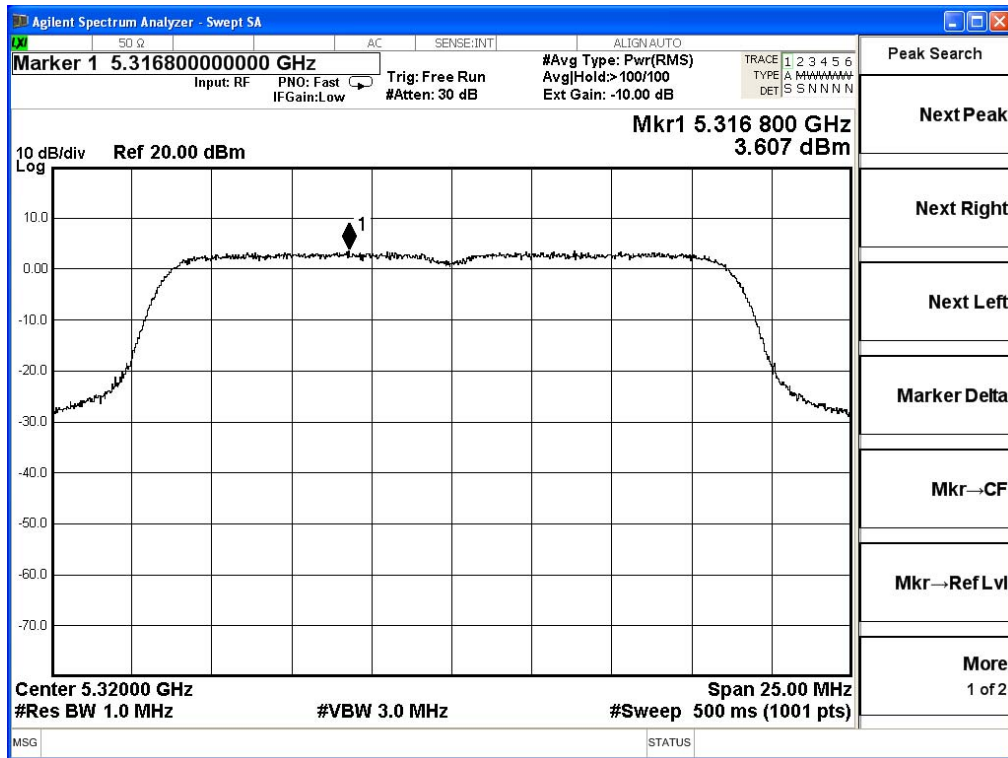
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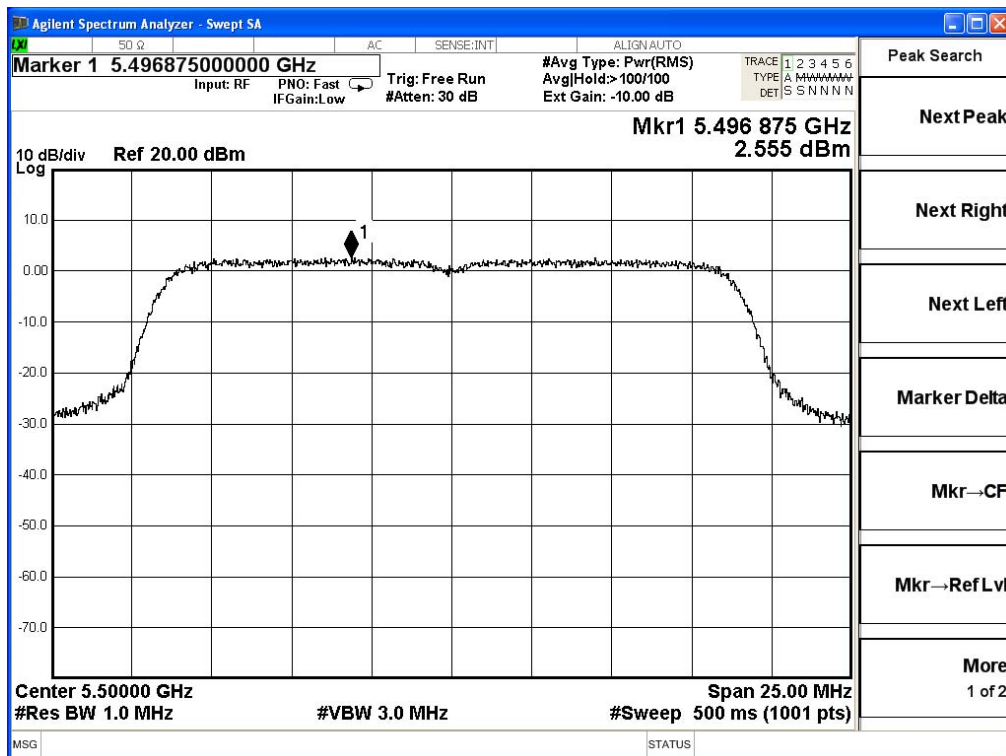
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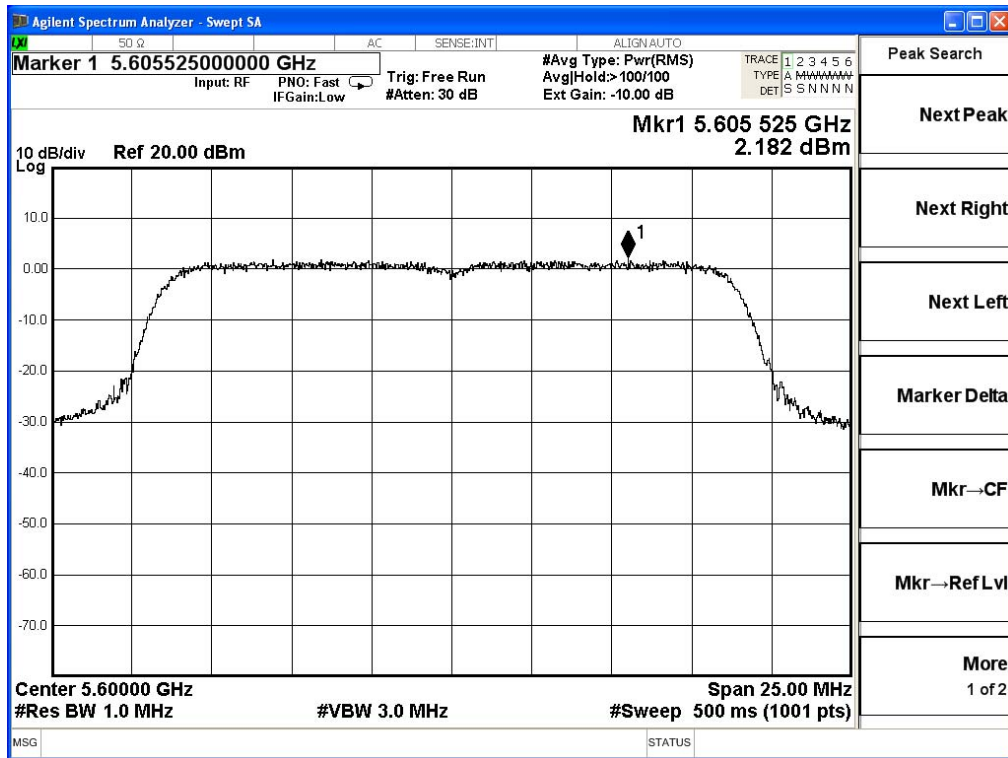
Channel 64:



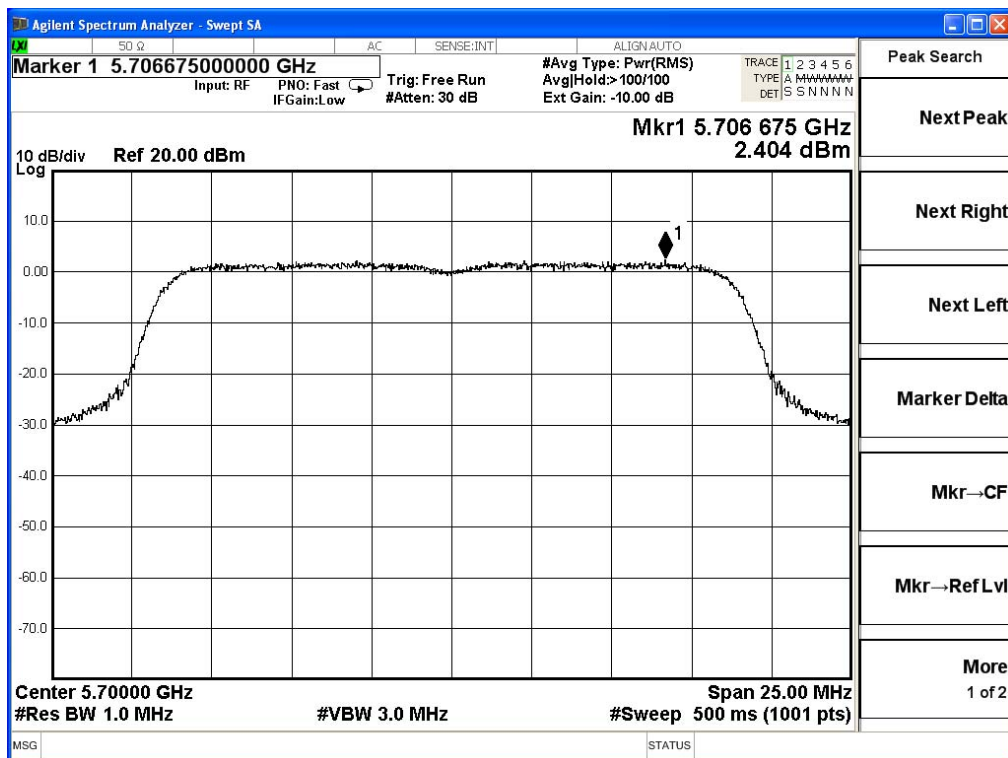
Channel 100:



Channel 120:



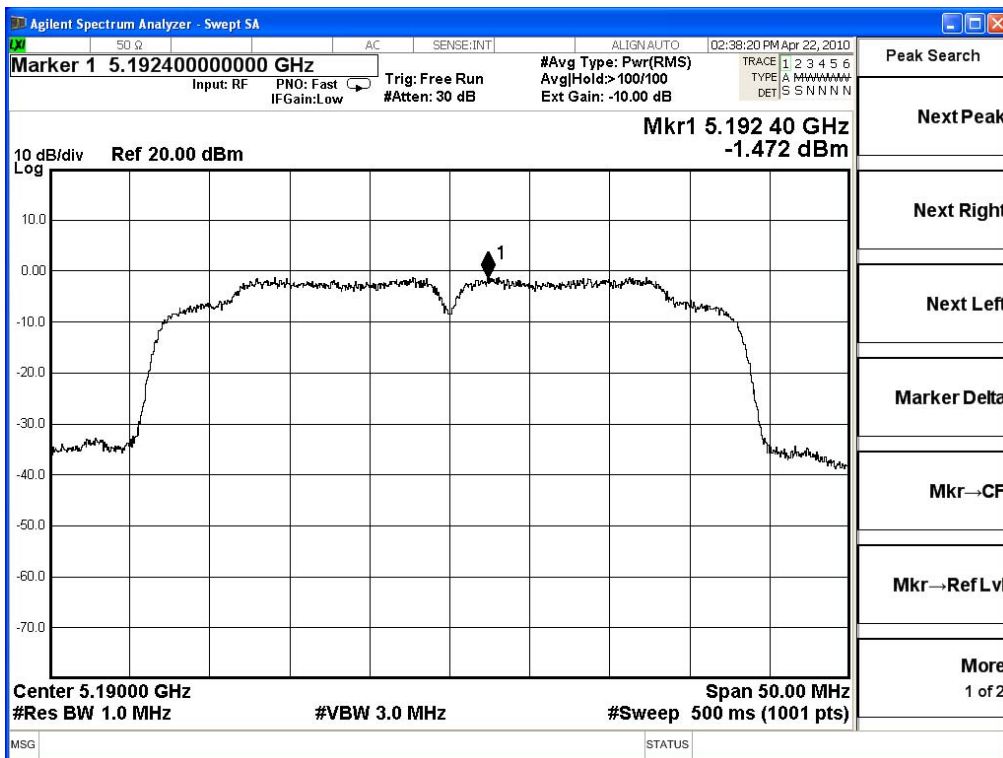
Channel 140:



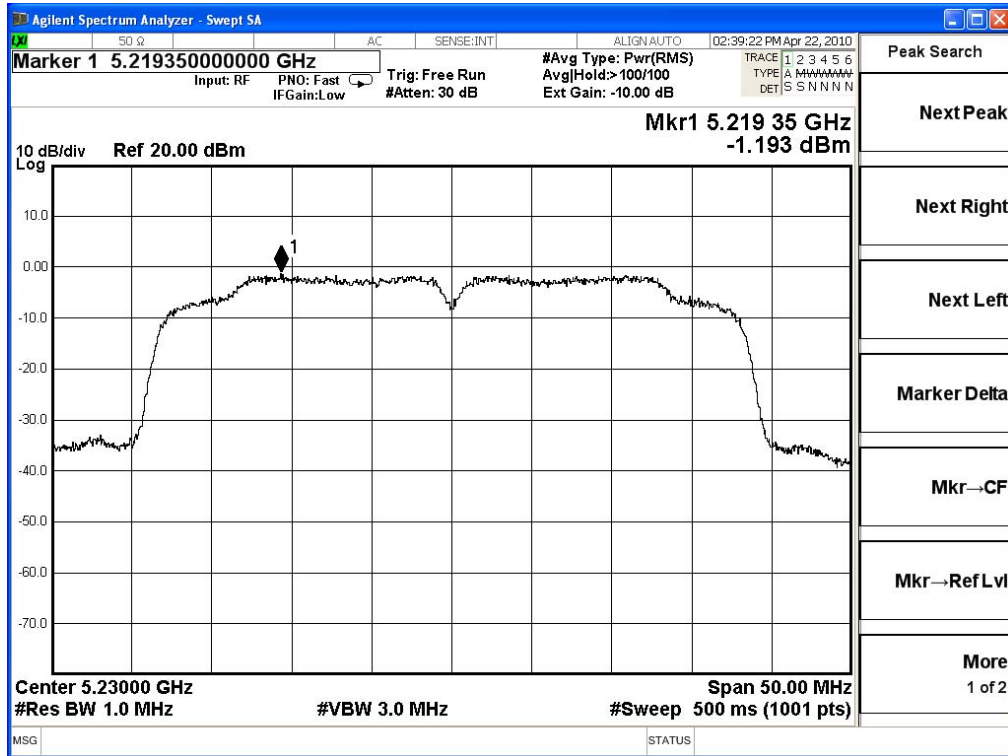
Product : Tablet PC MC-C5 / MC-F5
 Test Item : Peak Power Spectral Density
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter (802.11n-40BW 27Mbps)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
38	5190	-1.472	<4	Pass
46	5230	-1.193	<4	Pass
54	5270	-0.523	<11	Pass
62	5310	-1.468	<11	Pass
102	5510	-1.460	<11	Pass
118	5590	-1.099	<11	Pass
134	5670	-0.911	<11	Pass

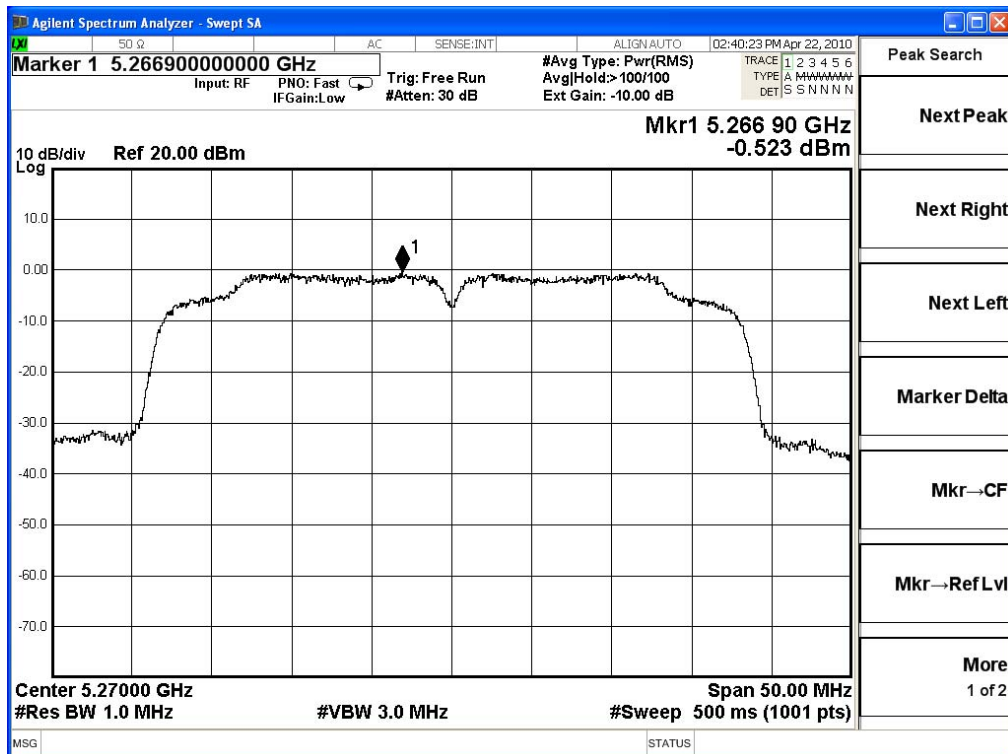
Channel 38:



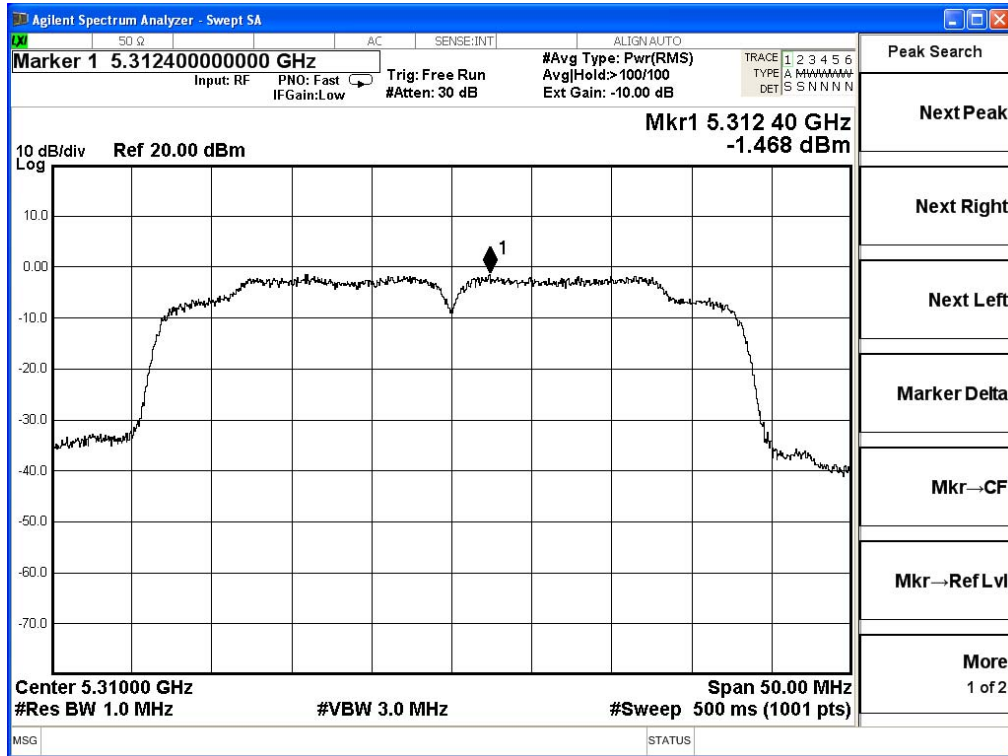
Channel 46:



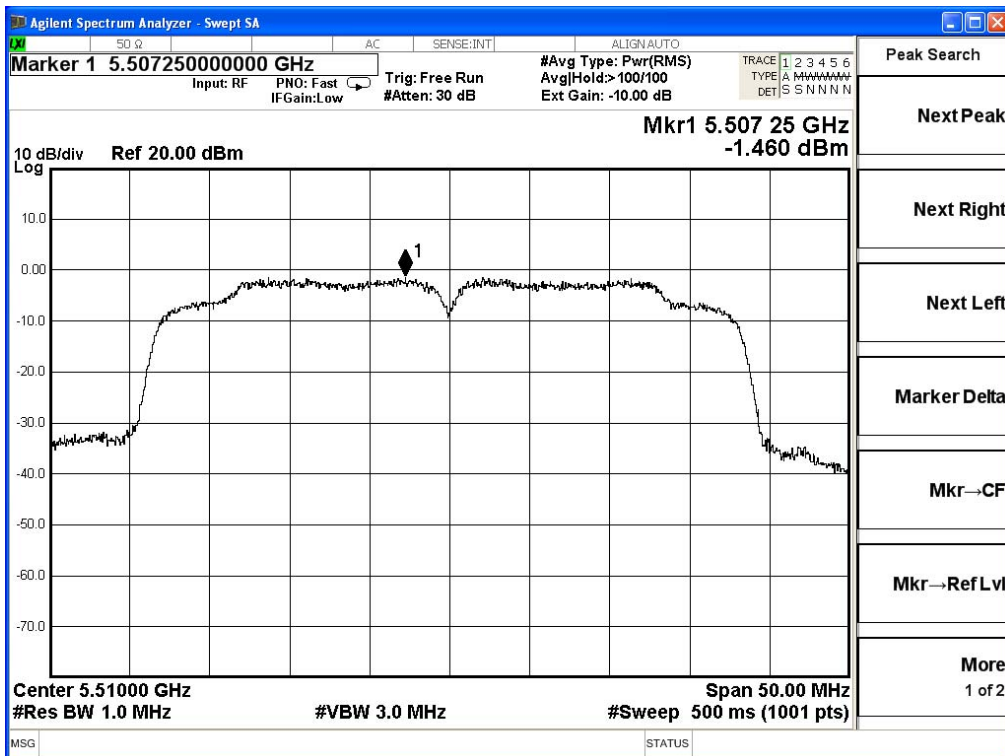
Channel 54:



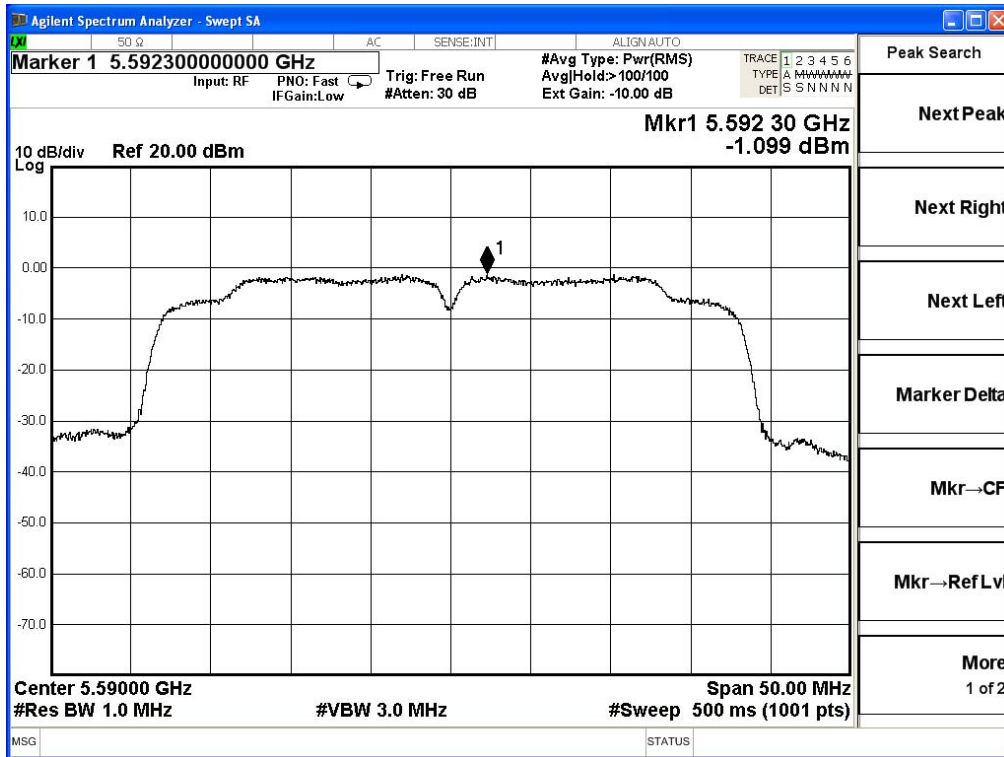
Channel 62:



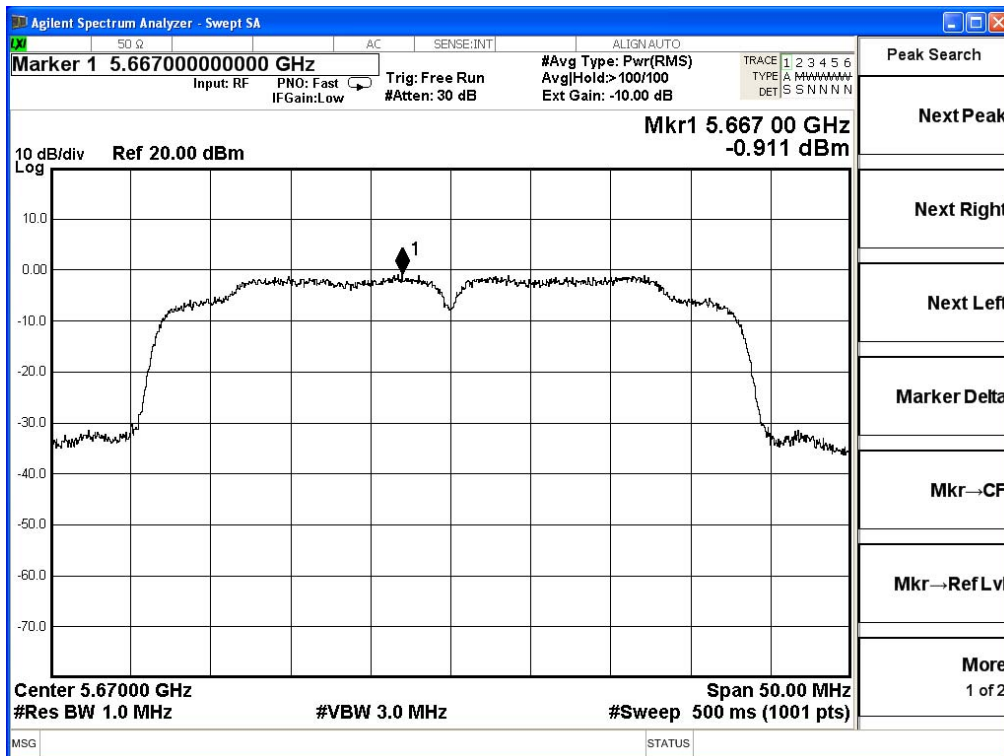
Channel 102:



Channel 118:



Channel 134:



5. Peak Excursion

5.1. Test Equipment

The following test equipments are used during the radiated emission tests:

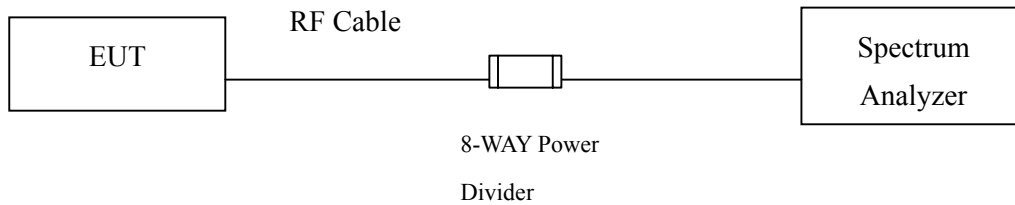
	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2009
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2009
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2010
X	8-WAY Power Divider	JFW	50PD-647 / 526770 0916	Apr., 2010

Note:

1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
2. The test instruments marked with “X” are used to measure the final test results.
3. The power combiner is used for measure 11n mode.

5.2. Test Setup

Conduction Power Measurement



5.3. Limits

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

5.4. Test Procedure

The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Aug 2002 DA 02-2138 for compliance to FCC 47CFR Subpart E requirements.

5.5. Uncertainty

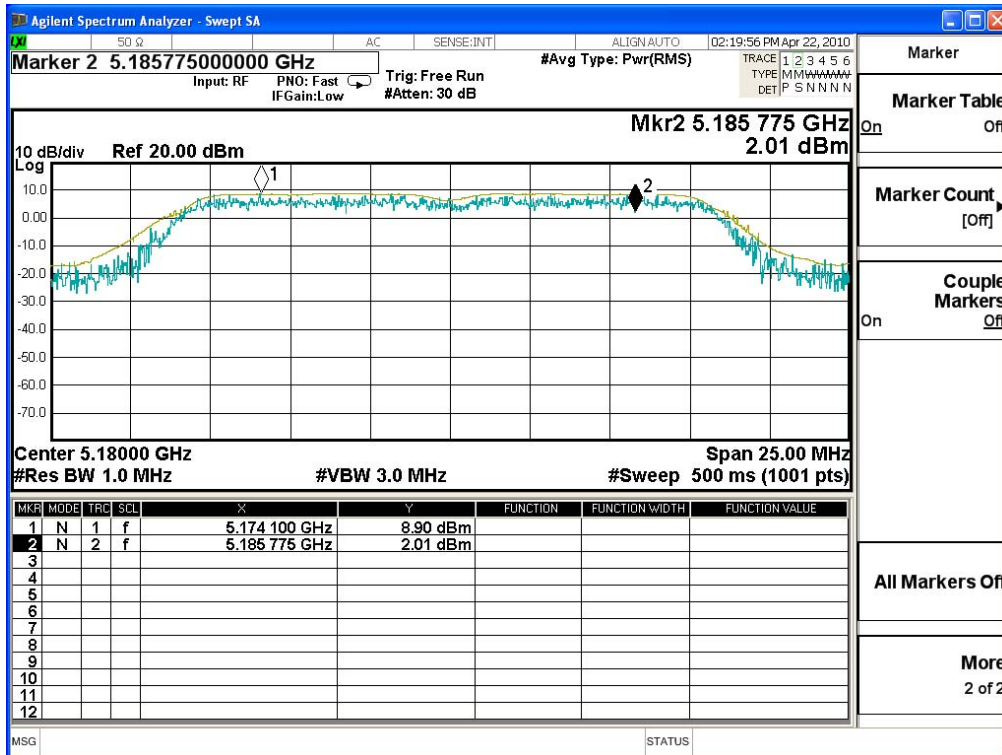
± 1.27 dB

5.6. Test Result of Peak Excursion

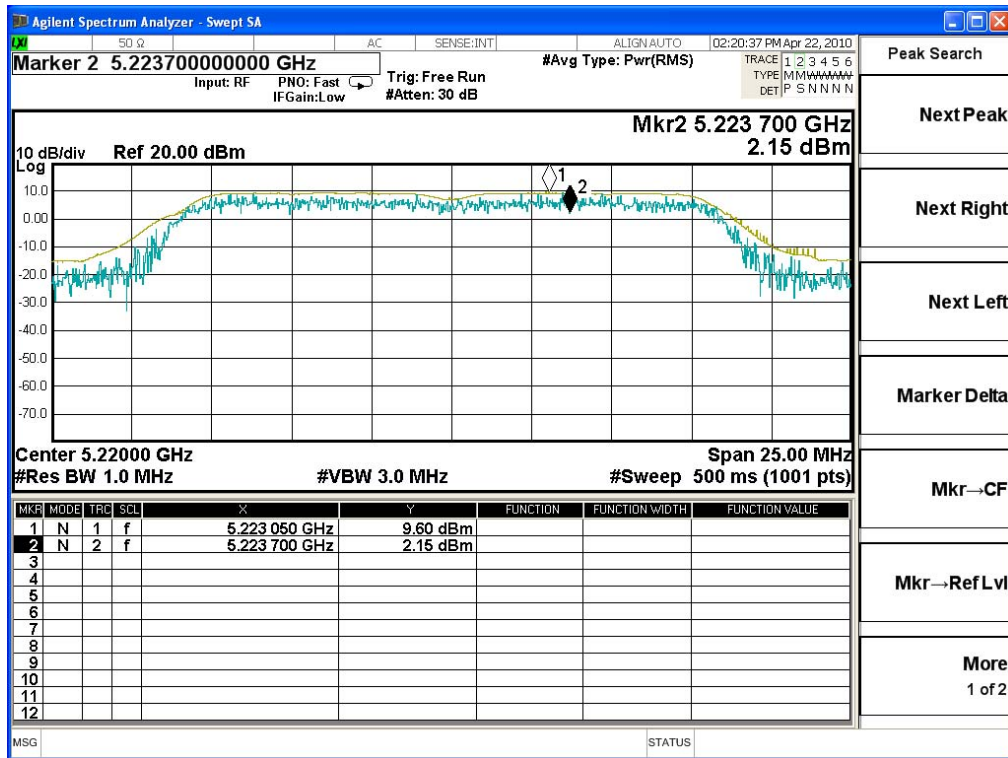
Product : Tablet PC MC-C5 / MC-F5
 Test Item : Peak Excursion
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter (802.11a-6Mbps)

Channel No.	Frequency (MHz)	Measurement Level (dB)	Required Limit (dB)	Result
36	5180	6.89	<13	Pass
44	5220	7.45	<13	Pass
48	5240	8.25	<13	Pass
52	5260	6.95	<13	Pass
60	5300	12.57	<13	Pass
64	5320	9.88	<13	Pass
100	5500	11.15	<13	Pass
120	5600	10.44	<13	Pass
140	5700	9.74	<13	Pass

Channel 36:



Channel 44:



Channel 48:

