

|                                |   | -                               |                                 |             |
|--------------------------------|---|---------------------------------|---------------------------------|-------------|
| Agilent Spectrum Analyzer - Sv | wept SA   |                                 |                                 |             |
| 50 Ω                           | AC SENSE  | ALIGN AUTO<br>#Avg Type: Pwr(RM |                                 | Peak Search |
| larker 1 5.22662500<br>Inpu    | ut: RF PNO: Fast  Trig: Free Ru<br>IFGain:Low #Atten: 30 dB |                                 | TYPE A WWWWW<br>DET S N N N N N |             |
| 0 dB/div Ref 20.00 dl          | Bm  | Mkr1                            | 1 5.226 625 GHz<br>-0.378 dBm   | NextPea     |
| og<br>10.0                     |   |                                 |                                 | Next Rig    |
| 0.00                           | - Marrad Marray Marray and Marray Street Marray             | 1<br>                           |                                 |             |
| 0.0                            |   |                                 |                                 | Next Le     |
| 0.0                            |   |                                 |                                 | Marker De   |
| D.0                            |   |                                 | an inderender of the second     |             |
| 0.0                            |   |                                 |                                 | Mkr→C       |
| 5.0                            |   |                                 |                                 | Mkr→RefL    |
| 0.0                            |   |                                 |                                 |             |
| enter 5.22000 GHz              |   |                                 | Span 25.00 MHz                  | Mo<br>1 o   |
| Res BW 1.0 MHz                 | #VBW 3.0 MHz  | #Sweep                          | 500 ms (1001 pts)               | 10          |
| G                              |   | STATU                           | JS                              |             |

#### Channel 44:

Channel 48:

| 50 Ω<br>larker 1 5.24380000000<br>Input: RF | PNO: Fast 😱 Trig: Free Run                  | ALIGNAUTO<br>#Avg Type: Pwr(RMS<br>Avg Hold>100/100 | 02:46:43 AM Jun 12, 2009<br>TRACE 1 2 3 4 5 6<br>TYPE A WWWWW<br>DET S N N N N N | Peak Search       |
|---|---|---|--|-------------------|
|   | IFGain:Low #Atten: 30 dB                    | Mkr1  | 5.243 800 GHz<br>0.298 dBm   | Next Pea          |
| 0 dB/div Ref 20.00 dBm                      |   |   |  | Next Rig          |
| 10.0  | hlenservallikerstaansternikersvandelikerval |   |  | Next Le           |
| 0.0<br>0.0<br>0.0                           |   |   | han har                                      | Marker De         |
| 0.0   |   |   |  | Mkr→              |
| 5.0   |   |   |  | Mkr→Refl          |
| enter 5.24000 GHz<br>Res BW 1.0 MHz         | #VBW 3.0 MHz                                | #Sween  | Span 25.00 MHz<br>500 ms (1001 pts)  | <b>М</b> а<br>1 о |



| SG                  |                      |   |   |   |               |                        | STATUS      |            |   |             |
|---------------------|----------------------|---|---|---|---------------|------------------------|-------------|------------|---|-------------|
| enter 5.2<br>Res BW | 26000 GHz<br>1.0 MHz |   | #VBW  | 3.0 MHz                                 |               | 1                      | #Sweep      |            | 25.00 MHz<br>(1001 pts)                           | 1 of        |
| 0.0                 |                      |   |   |   |               |                        |             |            |   | Mor         |
| 70.0                |                      |   |   |   |               |                        |             |            |   | Mkr→RefL    |
| 60.0                |                      |   |   |   |               |                        |             |            |   |             |
| 0.0                 | _                    |   |   |   |               |                        |             |            |   | Mkr→C       |
| 0.0 איזאינאיל       | weel.W               |   |   |   |               |                        |             | 1          | M. Margan   | Marker De   |
| 0.0                 |                      |   |   |   |               |                        |             | <u>\</u>   |   |             |
| 0.0                 | / or the             | ₽₽ <b>╱┫</b> ᠓ <b>₽₽</b> ╱ <mark>⋛</mark> ⋿⋠⋩⋩∊⋏⋠ | પ્રમાણવામાં જેવું છે.<br>આ ગામમાં આ ગ<br>આ ગામમાં આ ગ | ᡔ <del>ᢛ᠖ᡌ</del> ᡗᢛᡰᢪᡟᡌᡟᢁᠾ <sub>┥</sub> | REPART OF ANY | A. Arton and Andrea    | ₩₩₩₩₩₩₩₩₩₩₩ | alma 1     |   | Next Le     |
| 0.0                 |                      |   |   |   | •             |                        |             |            |   | Next Rig    |
| odB/div             | Ref 20.00 c          | 1Bm   |   |   |               |                        |             | 0.7        |   |             |
|                     |                      |   | Gain:Low  | #Atten: 30                              | d B           |                        | Mkr1        | 5.262      | 025 GHz<br>768 dBm                                | NextPea     |
| arker 1             | 5.2620250            | out: RF F   | GHz<br>PNO: Fast 😱  | Trig: Free<br>#Atten: 30                | Run           | #Avg Type<br>Avg Hold> | : Pwr(RMS   | ) TRA<br>T | ACE 1 2 3 4 5 6<br>YPE A WWWWW<br>DET S N N N N N | Peak Search |
|                     | 50 Ω                 | Swept SA  | Α   | C SE                                    | NSE:INT       |                        | ALIGN AUTO  | 02:47:51   | AM Jun 12, 2009                                   |             |

Channel 52:

Channel 60:

|                   |   |                   |                         |                    |         |                          |                               | Swept SA  | m Analyzer - S    | ilent Spectru  | Agil              |
|-------------------|---|-------------------|-------------------------|--------------------|---------|--------------------------|-------------------------------|-----------|-------------------|----------------|-------------------|
|                   | M Jun 12, 2009                              |                   | ALIGN AUTO              |                    | NSE:INT | .C SE                    | Α                             |           | DΩ                | 5              | d                 |
| Peak Search       | E 1 2 3 4 5 6<br>E A WWWWW<br>T S N N N N N | TRAC<br>TYP<br>DE | e: Pwr(RMS)<br>>100/100 | #Avg<br>Avg H      |         | Trig: Free<br>#Atten: 30 | iHz<br>NO: Fast 😱<br>Gain:Low | out: RF P | 3012000<br>Int    | ker 1 5.       | larl              |
| NextPe            | 00 GHz<br>37 dBm                            |                   | Mkr1                    |                    |         |                          |                               | 1Bm       | ef 20.00 c        | B/div <b>R</b> |                   |
| Next Rig          |   |                   |                         |                    |         |                          |                               |           |                   |                | <b>og</b><br>10.0 |
|                   |   | ~~ <b>L</b>       | and the second second   | e stafferstelderte |         | a manta manan            |                               |           |                   |                | 0.00              |
| Next L            |   |                   |                         |                    |         |                          |                               |           |                   |                | 0.0               |
|                   |   | <u>}</u>          |                         |                    |         |                          |                               |           |                   |                | 0.0               |
| Marker De         | Multinen and                                | ٦<br>ا            |                         |                    |         |                          |                               |           | w <sup>r.v.</sup> | white water    | 0.0               |
|                   | F   |                   |                         |                    | -       |                          |                               |           |                   |                | 0.0               |
| Mkr→              |   |                   |                         |                    |         |                          |                               |           |                   |                | 0.0               |
| Mkr→Ref           |   |                   |                         |                    |         |                          |                               |           |                   |                | 0.0               |
|                   |   |                   |                         |                    |         |                          |                               |           |                   |                | 0.0               |
| <b>M</b> o<br>1 o | 5.00 MHz                                    | Snan 2            |                         |                    |         | 5                        |                               |           | 00 GH7            | ter 5.300      | ent               |
|                   | 1001 pts)                                   | 500 ms (          | #Sweep                  |                    |         | 3.0 MHz                  | #VBW                          |           |                   | s BW 1.0       |                   |
|                   |   |                   | STATUS                  |                    |         |                          |                               |           |                   |                | G                 |



|             |                                 |          |                          |       |                       | Chan         |                          |                                  |                    |                   |
|-------------|---------------------------------|----------|--------------------------|-------|-----------------------|--------------|--------------------------|----------------------------------|--------------------|-------------------|
|             |                                 |          |                          |       |                       |              |                          | Swept SA                         | rum Analyzer -     | Agilent Spec      |
| Peak Search | M Jun 12, 2009<br>E 1 2 3 4 5 6 |          | ALIGNAUTO<br>e: Pwr(RMS) | #Ava  | NSE:INT               | AC SE        |                          | 00000                            | 50 Ω<br>5.3267500  | larker 1          |
|             | T S N N N N N                   | TYF      | :>100/100                | Avg H |                       | #Atten: 3    | PNO: Fast 🖵<br>FGain:Low | put: RF                          |                    |                   |
| NextPe      | 50 GHz<br>41 dBm                |          | Mkr1                     |       |                       |              |                          | dBm                              | Ref 20.00 (        | 0 dB/div          |
| Next Rig    |                                 |          |                          |       |                       |              |                          |                                  |                    | <b>og</b><br>10.0 |
|             |                                 | w        |                          | -     | and the second second | min manuel . | men man                  | proventing the providence of the |                    | 0.00              |
| Next Le     |                                 | N.       |                          |       |                       |              |                          |                                  | /                  | 10.0              |
|             |                                 | <u> </u> |                          |       |                       |              |                          |                                  | /                  | 20.0              |
| Marker De   | Hallon Christer Carrow          | ч        |                          |       |                       | 0            |                          |                                  | LWY <sup>N N</sup> | 30.0              |
|             |                                 |          |                          |       |                       |              |                          |                                  |                    | 0.0               |
| Mkr→C       |                                 |          |                          |       |                       |              |                          |                                  |                    | i0.0              |
| Mkr→RefL    |                                 |          |                          |       |                       |              |                          |                                  |                    | 0.0               |
|             |                                 |          |                          |       |                       |              |                          |                                  |                    | 0.0               |
| Mo          | 5 00 MH-                        | Snor 2   |                          |       |                       | 0            |                          |                                  | 2000 GHz           | ontor E 7         |
| 1 0         | 5.00 MHz<br>1001 pts)           | 500 ms ( | #Sweep                   |       |                       | 3.0 MHz      | #VBW                     |                                  |                    | Res BW            |
|             |                                 |          | STATUS                   |       |                       |              |                          |                                  |                    | ŝG                |

#### Channel 64:

#### Channel 100:

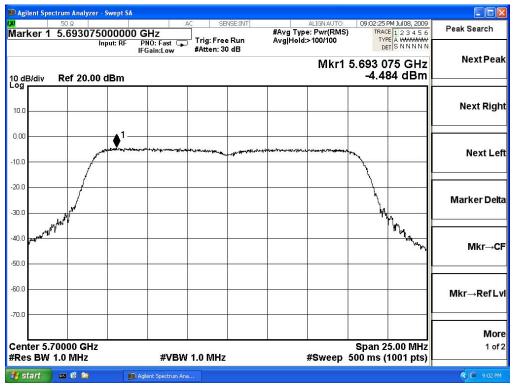
|                                     | 100000 GHz<br>put: RF PNO: Fa<br>IFGain:Lo | AC SENSE:INT<br>Trig: Free Run<br>w #Atten: 30 dB  | ALIGN AUTO<br>#Avg Type: Pwr(RMS<br>Avg Hold>100/100              | 08:59:45 PM Jul 08, 2009<br>TRACE 1 2 3 4 5 6<br>TYPE A WWWW<br>DET S N N N N N  | Peak Search       |
|-------------------------------------|--|--|---|--|-------------------|
| dB/div Ref 20.00 d                  | dBm  |  | Mkr1  | 5.493 650 GHz<br>0.058 dBm   | NextPea           |
| 0.0                                 |  |  |   |  | Next Rig          |
| 0.0                                 | proprint and the second                    | adlineastriction of the states | นรูแกร่ง <sub>น</sub> ารีมาสู่รรมร้างการจุบัทร่างสีนระชุญาชบัตนาย | Auron and a second seco | Next Lo           |
| 0.0                                 |  |  |   | h h h h h h h h h h h h h h h h h h h  | Marker De         |
| 0.0                                 |  |  |   | - Martin Martin  | Mkr→              |
| 0.0                                 |  |  |   |  | Mkr→Ref           |
| enter 5.50000 GHz<br>Res BW 1.0 MHz |  | VBW 1.0 MHz  | #Eween  | Span 25.00 MHz<br>500 ms (1001 pts)  | <b>M</b> c<br>1 c |



| PNO: Fast Trig: Free Run Avg Hold:>100/100   | nt Spectrum Analyzer - Swept SA      |
|--|--------------------------------------|
| GHz      #Avg Type: Pwr(RMS)      TRACE 1 2 3 4 5 6      Peak Search        PN0: Fast Gain:Low      Trig: Free Run      Avg Hold>100/100      TVPE A www.ww<br>DET S NNNN      Pask Search | 50.0                                 |
| GHZ #Avg I ype. Pwr(twis)<br>PRO: Fast Trig: Free Run Avg Hold>100/100<br>FGain:Low #Atten: 30 dB  | SU SU AC                             |
| Mkr1 5 594 825 GHz NextPea   |                                      |
| 4.440 dBm  | div Ref 20.00 dBm                    |
| 1 Next Rig   |                                      |
|  |                                      |
| Next Le  |                                      |
|  | W                                    |
| Marker Del   | www.sections.                        |
|  |                                      |
| Mkr→0  |                                      |
|  |                                      |
| Mkr→RefL   |                                      |
|  |                                      |
| Mo   |                                      |
| Span 25.00 MHz 1 o<br>#VBW 1.0 MHz #Sweep 500 ms (1001 pts)  | er 5.60000 GHz<br>BW 1.0 MHz #VBW 1. |
| allent Spectrum Ana  | rt 🛛 📽 🎽 🚺 Agilent Spectrum Ana      |

Channel 120:

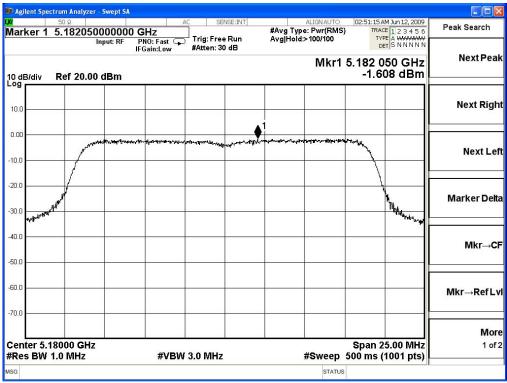
Channel 140:



| Product   | : | Notebook                                    |
|-----------|---|---|
| Test Item | : | Peak Power Spectral Density                 |
| Test Site | : | No.3 OATS                                   |
| Test Mode | : | Mode 2: Transmitter (802.11n-20BW 13.5Mbps) |

| Channel No. | Frequency<br>(MHz) | Measurement Level<br>(dBm) | Required Limit<br>(dBm) | Result |
|-------------|--------------------|----------------------------|-------------------------|--------|
| 36          | 5180               | -1.61                      | <4                      | Pass   |
| 44          | 5220               | -0.72                      | <4                      | Pass   |
| 48          | 5240               | -0.10                      | <4                      | Pass   |
| 52          | 5260               | 0.27                       | <11                     | Pass   |
| 60          | 5300               | 0.99                       | <11                     | Pass   |
| 64          | 5320               | 1.48                       | <11                     | Pass   |
| 100         | 5500               | -1.593                     | <11                     | Pass   |
| 120         | 5600               | -0.976                     | <11                     | Pass   |
| 140         | 5700               | -2.888                     | <11                     | Pass   |

### Channel 36:





|             |                            |                 |                             |                 |                          |                                |  | Swept SA      | ım Analyzer -   | Agilent Spect          |
|-------------|----------------------------|-----------------|-----------------------------|-----------------|--------------------------|--------------------------------|--|---------------|-----------------|------------------------|
| Peak Search | M Jun 12, 2009             | TRAC            | ALIGNAUTO<br>e: Pwr(RMS)    | #Avg Typ        | VSE:INT                  | IC SE                          |  | 00000 G       | <sup>50 Ω</sup> | arker 1                |
|             | E A WWWWW<br>T S N N N N N | TYF             |                             | AvgiHold        |                          | Trig: Free<br>#Atten: 30       | NO: Fast 🖵<br>Gain:Low                   | put: RF P     |                 |                        |
| NextPe      | 25 GHz<br>16 dBm           |                 | Mkr1                        |                 |                          |                                |  | dBm           | lef 20.00       |                        |
| Next Rig    |                            |                 |                             |                 |                          |                                |  |               |                 | 0.0                    |
| Next Le     |                            | ا<br>مىسىرىمەرس | y mining a pure of the last | eriseriyasinger | - Charleson and a second | May - instantion of the second | an a | ahddarftra.rh |                 | .00                    |
|             |                            | Ì               |                             |                 |                          |                                |  |               |                 | 0.0                    |
| Marker De   | Why was a second           |                 |                             |                 | 2                        |                                |  |               | 1               | 0.0                    |
| Mkr→(       |                            |                 |                             |                 |                          |                                |  |               |                 | 0.0<br>0.0             |
| Mkr→Refl    |                            |                 |                             |                 |                          |                                |  |               |                 | .0                     |
| Мо          |                            |                 |                             |                 |                          |                                |  |               |                 | 0.0                    |
| 1 of        | 5.00 MHz                   | Span 2          | #Sweep                      | 1               |                          | 3.0 MHz                        | #VBW                                     | 3 <b>1</b>    |                 | enter 5.2:<br>Res BW 1 |

Channel 44:

Channel 48:

|                   |   |                     |                         |            |                       |                                |                                | Swept SA                        | n Analyzer - | ent Spectrun       | 🛛 Agilo           |
|-------------------|---|---------------------|-------------------------|------------|-----------------------|--------------------------------|--------------------------------|---------------------------------|--------------|--------------------|-------------------|
| Peak Search       | 4 Jun 12, 2009                                  | 02:54:08 A          | ALIGN AUTO              | 40         | NSE:INT               | AC SE                          |                                | 000000                          | ן גַר        |                    |                   |
|                   | 123456<br>A WWWWW<br>T S N N N N N              | TYP                 | e: Pwr(RMS)<br>>100/100 |            |                       | Trig: Free<br>#Atten: 30       | GHZ<br>PNO: Fast 🖵<br>Gain:Low | 000000 (<br>nput: RF F<br>IF    |              | (er 1 5.)          | lark              |
| Next Pea          | 50 GHz<br>97 dBm                                | 5.247 3<br>0.09-    | Mkr1                    |            |                       |                                |                                | dBm                             | ef 20.00     | /div Re            | 0 dB              |
| Next Rig          |   | 1                   |                         |            |                       |                                |                                |                                 |              |                    | <b>og</b><br>10.0 |
| Nevel             |   | TUN BUNN            | Annon Marine            | vietan and | and the second second | the of the state of the second | an have a start and            | loof galiny days again again ag | portante.    |                    | ).00              |
| Next L            |   |                     |                         |            |                       |                                |                                |                                 |              |                    | 0.0               |
| Marker Del        | Willing when when when when when when when when |                     |                         |            |                       |                                |                                |                                 | /            | Marria Marrial C   | 0.0               |
| Mkr→              |   |                     |                         |            |                       |                                |                                |                                 |              |                    | 0.0<br>0.0        |
| Mkr→Refl          |   |                     |                         |            |                       |                                |                                |                                 |              |                    | ).0               |
|                   |   |                     |                         |            |                       |                                |                                |                                 |              |                    | 0.0               |
| <b>М</b> а<br>1 о | 5.00 MHz<br>1001 pts)                           | Span 2<br>500 ms (* | #Sweep                  |            | <u> </u>              | 3.0 MHz                        | #VBW                           |                                 |              | er 5.240<br>BW 1.0 |                   |
|                   |   |                     | STATUS                  |            |                       |                                |                                |                                 |              |                    | G                 |



|                  |                   |            |                          |                       |   | Chann                    |   |  |                  |               |
|------------------|-------------------|------------|--------------------------|-----------------------|---|--------------------------|---|--|------------------|---------------|
|                  |                   |            |                          |                       |   |                          |   | Swept SA   | rum Analyzer -   | Agilent Spe   |
| Peak Search      | M Jun 12, 2009    | TRAC       | ALIGNAUTO<br>e: Pwr(RMS) | #Avg Typ              | NSE:INT   | IC SE                    |   | 000000   | 50 Ω<br>5.264925 | l<br>Jarker 1 |
|                  | EAWWWW<br>TSNNNNN | TYP        |                          | Avg Hold              | eRun<br>)dB   | Trig: Free<br>#Atten: 30 | PNO: Fast 🖵<br>FGain:Low                    | nput: RF   |                  |               |
| Next Pe          | 25 GHz<br>59 dBm  |            | Mkr1                     |                       |   |                          |   | dBm  | Ref 20.00        | 0 dB/div      |
| Next Rig         |                   |            |                          |                       |   |                          |   |  |                  | og            |
|                  |                   |            | 1                        |                       |   |                          |   |  |                  | 10.0          |
| Next Le          |                   | manyahorah | <b>พระทุสาข</b> มหางได้  | ard Alatha fear while | and the state of the | han the second second    | ⋫ <b>∊</b> ₩⋫ <b>⋎⋎</b> ⋎⋻⋻⋧⋖⋎ <b>⋶</b> ⋺⋹⋏ | en and a second a se | 100              | ).00          |
| Next             |                   | -          |                          |                       |   |                          |   | -  | +                | 0.0           |
|                  |                   |            |                          |                       |   |                          |   |  |                  | 20.0          |
| Marker De        | N. Whyley wagen . |            |                          |                       |   |                          |   |  | *                | 10.0          |
|                  |                   |            |                          |                       |   |                          |   |  |                  | 0.0           |
| Mkr→C            |                   |            |                          |                       |   |                          |   |  |                  |               |
|                  |                   |            |                          |                       |   |                          |   |  |                  | 0.0           |
| Mkr→RefL         |                   |            |                          |                       |   |                          |   |  |                  | 0.0           |
|                  |                   |            |                          |                       |   |                          |   |  |                  | 0.0           |
| <b>Mo</b><br>1 o | 5.00 MHz          | Enon 2     |                          |                       |   |                          |   |  | 000 GHz          |               |
| 10               |                   |            | #Sweep                   |                       |   | 3.0 MHz                  | #VBW  |  |                  | Res BW        |
|                  |                   |            | STATUS                   |                       |   |                          |   |  |                  | SG            |

Channel 52:

Channel 60:

|                   |   |  |  |                    |                  |                     |  | Sector States | 1. Taylor and the second        | n and a second statement | -                       |
|-------------------|---|--|--|--------------------|------------------|---------------------|--|---------------|---------------------------------|--------------------------|-------------------------|
|                   | M 2 - 10 - 0000   | 00,55,00,0   |  |                    |                  |                     |  | Swept SA      | <mark>m Analyzer</mark> -<br>ΓΩ |                          | Agile                   |
| Peak Search       | M Jun 12, 2009<br>E 1 2 3 4 5 6<br>E A WWWWW<br>S N N N N N | TRAC   | ALIGN AUTO<br>ype: Pwr(RMS)<br>Id:>100/100 |                    |                  | Trig: Fr<br>#Atten: |  |               | 3061750                         |                          |                         |
| NextPea           | 75 GHz<br>92 dBm  |  | Mkr1                                       |                    |                  |                     |  | 1000          | ef 20.00                        | div R                    | 0 dB                    |
| Next Rig          |   |  |  |                    |                  |                     |  | · ·           |                                 |                          | . <b>og</b><br>10.0     |
| Next Le           |   | where a first the second secon | march                                      | allight Connection | water and a cost | tan yakayardara     | <del>ՠՠ<sup>ֈ</sup>ՙ</del> ՙֈ <mark>ՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠՠ</mark> | #Attenante    |                                 |                          | 0.00 -                  |
| Marker De         | Martin  | \<br>  |  |                    |                  |                     |  |               |                                 | why                      | 20.0 -<br>30.0 <b>a</b> |
| Mkr→              |   |  |  |                    |                  |                     |  |               |                                 |                          | 0.0                     |
| Mkr→Refl          |   |  |  | _                  |                  |                     |  |               |                                 |                          | 0.0 -                   |
| <b>M</b> a<br>1 o | 5.00 MHz  | Span 2   |  |                    |                  |                     |  |               |                                 | er 5.300                 |                         |
|                   | 1001 pts)   | 500 ms (   | #Sweep                                     |                    | IZ               | 3.0 MH              | #VBW   |               | MHz                             | BW 1.0                   | Res                     |



| mer         |                                 |                    |                          |          |                         | Chann                    |                         |                  |               |                         |
|-------------|---------------------------------|--------------------|--------------------------|----------|-------------------------|--------------------------|-------------------------|------------------|---------------|-------------------------|
|             |                                 |                    |                          |          |                         |                          |                         | Swept SA         | m Analyzer -  | Agilent Spectr          |
| Peak Search | M Jun 12, 2009<br>E 1 2 3 4 5 6 | TRAC               | ALIGNAUTO<br>e: Pwr(RMS) | #Avg T   | VSE:INT                 | 1                        |                         |                  | οΩ<br>.316700 | arker 15                |
| NextPea     |                                 |                    | >100/100                 | Avg Ho   |                         | Trig: Free<br>#Atten: 30 | PNO: Fast 😱<br>Gain:Low | nput: RF P<br>IF | lr            |                         |
|             | 00 GHz<br>32 dBm                |                    | MKr1                     |          |                         |                          |                         | dBm              | ef 20.00      |                         |
| Next Rig    |                                 |                    |                          |          |                         |                          |                         |                  |               | g                       |
| Nexting     |                                 |                    |                          |          |                         |                          | 1                       |                  | <             | ).0                     |
|             |                                 | Tol And            | harshing approx          | warpathe | the state of the second | -                        | Report a salinger       | -                | - Alexandre   | 00                      |
| Next Le     |                                 | Ň                  |                          |          |                         |                          |                         |                  |               | 0.0                     |
|             |                                 | ١                  |                          |          |                         |                          |                         |                  |               | 1.0                     |
| Marker Del  | Wy Wall water                   |                    |                          |          |                         |                          |                         |                  | ſ             | 1.0                     |
|             |                                 |                    |                          |          |                         |                          |                         |                  |               |                         |
| Mkr→C       |                                 |                    |                          |          |                         |                          |                         |                  |               | ).0                     |
|             |                                 |                    |                          | -        |                         |                          |                         |                  |               | 0.0                     |
| Mkr→RefL    |                                 |                    |                          |          |                         |                          |                         |                  |               | ).0                     |
|             |                                 |                    |                          |          |                         | 3                        |                         |                  |               | 1.0                     |
| Мо          |                                 |                    |                          |          |                         | y                        |                         |                  |               |                         |
| 1 of        | 5.00 MHz<br>1001 pts) _         | Span 2<br>500 ms ( | #Sweep                   |          |                         | 3.0 MHz                  | #VBW                    |                  |               | enter 5.32<br>Res BW 1. |
|             |                                 |                    | STATUS                   |          |                         |                          |                         |                  |               | 3                       |

### Channel 64:

#### Channel 120:

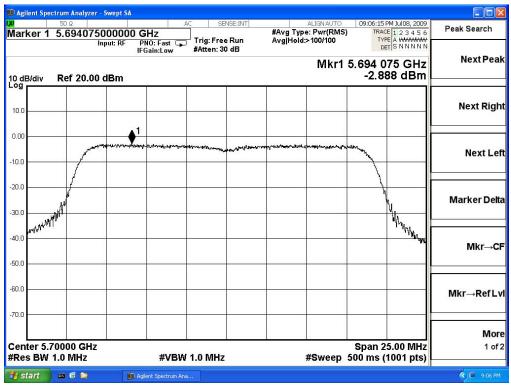
|             |   |         |                         |  |                  |   |                                      | Swept SA                              | m Analyzer - | lent Spectrur         | 🛛 Agil           |
|-------------|---|---------|-------------------------|--|------------------|---|--------------------------------------|---------------------------------------|--------------|-----------------------|------------------|
| Peak Search | PM Jul 08, 2009                             |         | ALIGN AUTO              |  | NSE:INT          | KC SE   |                                      |                                       | 0Ω           |                       | u –              |
|             | E 1 2 3 4 5 6<br>E A WWWWW<br>T S N N N N N | TYP     | e: Pwr(RMS)<br>>100/100 | #Avg Typ<br>Avg Hold                           |                  | Trig: Free<br>#Atten: 30  | <b>iHz</b><br>NO: Fast 😱<br>Gain:Low |                                       |              | ker 1 5.              | lari             |
| NextPe      | 25 GHz<br>93 dBm                            |         | Mkr1 ∜                  |  |                  |   |                                      | dBm                                   | ef 20.00 (   | 3/div R               |                  |
| Next Rig    |   |         |                         |  |                  |   |                                      | · · · · · · · · · · · · · · · · · · · |              |                       | <b>og</b><br>0.0 |
|             |   | 24      | <b>∮</b> <sup>1</sup>   |  |                  |   | uh dama a                            |                                       | لي بعد       |                       | 0.00             |
| Next L      |   | - A man |                         | ₿ <b>₽₽₽₽</b> ₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽₽ | entrophy and the | and an and a start of the second s | al-dependent of the frequence        |                                       | - Martin     |                       | 0.0              |
|             |   |         |                         |  |                  |   |                                      |                                       | /            |                       | 0.0              |
| Marker De   | W How way                                   |         |                         |  |                  |   |                                      |                                       | ſ            | WHW NYM               | 0.0              |
|             | "YUUUAN                                     |         |                         |  |                  |   |                                      | 2                                     |              | a MANTAN'             | 0.0              |
| Mkr→        |   |         |                         |  |                  |   |                                      | <u>.</u>                              |              |                       | 0.0              |
| Mkr→Ref     |   |         |                         |  |                  |   |                                      | 2                                     |              |                       | 0.0              |
|             |   |         |                         |  |                  |   |                                      |                                       |              |                       | 0.0              |
| M           |   | 0       |                         |  |                  |   |                                      |                                       |              |                       |                  |
| 10          | 5.00 MHz<br>1001 pts)                       |         | #Sweep \$               |  |                  | 1.0 MHz   | #VBW                                 |                                       |              | ter 5.500<br>s BW 1.0 |                  |
| 🤹 👼 9:03    |   |         | _                       |  |                  |   | lent Spectrum Ani                    | The second                            | 6 😋          | art 📖                 | y st             |



|                                     | 00000 GHz                         | Trig: Free Run               | ALIGN AUTO<br>#Avg Type: Pwr(RMS<br>Avg Hold>100/100           | 09:05:00 PM Jul 08, 2009            | Peak Search       |
|-------------------------------------|-----------------------------------|------------------------------|--|-------------------------------------|-------------------|
| 1000<br>1000                        | out: RF PNO: Fast 🕞<br>IFGain:Low | #Atten: 30 dB                | 2019   | 5.596 600 GHz                       | NextPea           |
| 0 dB/div Ref 20.00 c                |                                   |                              |  | -0.976 dBm                          | Next Rig          |
| 0.0                                 |                                   | and the second of the second | 81.5~.54254.885.18001 <sup>6.5</sup> 55.911-9 <sup>6.5</sup> 5 |                                     | Next Le           |
| 0.0<br>0.0<br>www.www.www.          |                                   |                              |  | Minitary Contraction                | Marker Del        |
| 0.0                                 |                                   |                              |  |                                     | Mkr→C             |
| 0.0                                 |                                   |                              |  |                                     | Mkr→RefL          |
| enter 5.60000 GHz<br>Res BW 1.0 MHz | #VBW                              | 1.0 MHz                      | #Sweep   | Span 25.00 MHz<br>500 ms (1001 pts) | <b>Mo</b><br>1 of |

Channel 120:

Channel 140:



| : | Notebook                                  |
|---|---|
| : | Peak Power Spectral Density               |
| : | No.3 OATS                                 |
| : | Mode 3: Transmitter (802.11n-40BW 27Mbps) |
|   | •   |

| Channel No. | Frequency<br>(MHz) | Measurement Level<br>(dBm) | Required Limit<br>(dBm) | Result |
|-------------|--------------------|----------------------------|-------------------------|--------|
| 38          | 5190               | -6.04                      | <4                      | Pass   |
| 46          | 5230               | -4.47                      | <4                      | Pass   |
| 54          | 5270               | -3.75                      | <11                     | Pass   |
| 62          | 5310               | -2.72                      | <11                     | Pass   |
| 102         | 5510               | -2.056                     | <11                     | Pass   |
| 118         | 5590               | -2.420                     | <11                     | Pass   |
| 134         | 5670               | -3.923                     | <11                     | Pass   |

| C   | nannei 58:  |                         |  |  |
|---|---|-------------------------|--|--|
| wept SA   |   |                         |  |  |
|   | ree Run Avg   | g Type: Pwr(RMS)        | TRACE 123456<br>TYPE A WARMAN  | Peak Search  |
| IFGain:Low #Atten                                     | : 30 dB   | Mkr1 ∜                  | Colorador and the Arrent Management  | Next Pea   |
|   |   |                         |  | Next Rig   |
| wherefored and the appropriation of the second second | a manual man  | and an an an an an an a |  | Next Le  |
|   |   |                         |  | Marker De  |
|   |   |                         | harring  | Mkr→C  |
|   |   |                         |  | Mkr→RefL   |
|   |   |                         | Span 50.00 MHz   | <b>Mo</b><br>1 of  |
|   | AC<br>DOOOD GHZ<br>It: RF PN0: Fast Trig: F<br>IFGain:Low #Atten<br>BM<br>AC<br>Trig: F<br>#Atten | AC SENSE:INT #Avg       | AC  SENSE:INT  ALIGNAUTO    200000 GHz  Trig: Free Run  #Avg Type: Pwr(RMS)<br>Avg Hold:>100/100    #Avg Type: Pwr(RMS)  #Mkr1 f    Bm | Acc    SENSE:INT    ALIGNAUTO    IO2:58:59 AM Jun 12, 2009      MO000 GHz    Trig: Free Run    #Avg Type: Pwr(RMS)    Trig: Comparison of the sense of the sens |

#### Channel 38:



|              | 23000 GHz<br>1.0 MHz        |                         | #VBM  | 3.0 MHz                  |                     |                       | #Sween                                | Span 5 | 0.00 MHz<br>1001 pts)   | <b>Mor</b><br>1 of |
|--------------|-----------------------------|-------------------------|---|--------------------------|---------------------|-----------------------|---------------------------------------|--------|---|--------------------|
| i0.0<br>i0.0 |                             |                         |   |                          |                     |                       |                                       |        |   | Mkr→RefL           |
| 0.0          | ******                      |                         |   |                          |                     |                       |                                       |        | mar horizon   | Mkr→C              |
| 0.0 <u> </u> |                             |                         |   |                          |                     |                       |                                       |        |   | Marker De          |
| 0.0          |                             | -derawaranger-source-fr | <sup>เรลิ</sup> างปร <sup>ะ</sup> สร้องระบรุต | thereast and a           | and a second second | defrance-frankered-s  | 1<br>                                 | warmen |   | Next Le            |
| 0.0          |                             |                         |   |                          |                     |                       |                                       |        |   | Next Rig           |
| ) dB/div     | Ref 20.00                   | ) dBm                   |   |                          |                     |                       | Mkr                                   |        | 05 GHz<br>69 dBm  | Next Pea           |
| arker 1      | <sup>50 Ω</sup><br>5.241050 | Input: RF F             | A<br>GHz<br>PNO: Fast<br>Gain:Low             | Trig: Free<br>#Atten: 30 |                     | #Avg Typ<br>Avg Hold: | ALIGN AUTO<br>e: Pwr(RMS)<br>>100/100 | TRAC   | M Jun 12, 2009<br>E 1 2 3 4 5 6<br>E A WWWWW<br>T S N N N N N | Peak Search        |

Channel 46:

Channel 54:

|   |   |   |                          |         |         |                        | -                             |               |              |                                 |                |  |  |
|---|---|---|--------------------------|---------|---------|------------------------|-------------------------------|---------------|--------------|---------------------------------|----------------|--|--|
|   |   |   |                          |         |         | 5 M                    |                               | owept SA      | Analyzer - S | ent Spectrum                    | 🛛 Agile        |  |  |
| Peak Search   | M Jun 12, 2009                              |   | ALIGN AUTO               |         | NSE:INT | AC SE                  |                               |               |              | 50 \$                           |                |  |  |
|   | E 1 2 3 4 5 6<br>E A WWWWW<br>T S N N N N N | TRAC<br>TYF<br>DE                             | e: Pwr(RMS)<br>:>100/100 |         |         | Trig: Fre<br>#Atten: 3 | iHz<br>NO: Fast 😱<br>Gain:Low | out: RF P     |              | (er 1 5.2                       | lark           |  |  |
| NextPea   |   | 10 dB/div Ref 20.00 dBm -3.745 dBm -3.745 dBm |                          |         |         |                        |                               |               |              |                                 |                |  |  |
| Next Rig  |   |   |                          |         |         |                        |                               |               |              |                                 | og<br>0.0      |  |  |
| Next Por<br>Next Ri<br>Next Ri<br>Marker D<br>Mkr→Ref |   | ware way                                      | 1                        | present | farming | ministrymy             | eni a escativ                 | pinskappianta | frontion     |                                 | .00 -<br>0.0 - |  |  |
| Marker De   |   |   |                          |         |         |                        |                               |               |              |                                 | 0.0<br>0.0     |  |  |
| Mkr→  | Wyerner                                     | <u>ب</u>                                      |                          |         |         |                        |                               |               | <u></u>      | seefingt <sup>een o</sup> nsast | D.O            |  |  |
| Mkr→Refl  |   |   |                          |         |         |                        |                               |               |              |                                 | 0.0 -<br>0.0 - |  |  |
| Mo  |   |   |                          |         |         |                        |                               |               |              |                                 | 0.0            |  |  |
|   | 0.00 MHz<br>1001 pts) –                     |   | #Sweep                   |         |         | 3.0 MHz                | #VBW                          |               |              | er 5.2700<br>BW 1.0 I           |                |  |  |
|   |   |   | STATUS                   |         |         |                        |                               |               |              |                                 | G              |  |  |



|             |  |                 |                                | -                        |                               |                                 |                             |                      |          |
|-------------|--|-----------------|--------------------------------|--------------------------|-------------------------------|---------------------------------|-----------------------------|----------------------|----------|
|             |  |                 |                                |                          |                               |                                 | er - Swept SA               | ectrum Analyz        |          |
| Peak Search | 02:17 AM Jun 12, 2009                                |                 | ALIGN AUTO                     |                          | SENSE:                        | AC                              |                             | 50 Ω                 |          |
|             | TRACE 1 2 3 4 5 6<br>TYPE A WWWWW<br>DET S N N N N N |                 | Type: Pwr(RM:<br>Iold:>100/100 |                          | Frig: Free Ru<br>Atten: 30 dE | GHz<br>PNO: Fast 😱<br>FGain:Low | 500000000<br>Input: RF      | 5.32545              | arker '  |
| Next Pea    | 325 45 GHz<br>2.715 dBm                              |                 | Mkı                            |                          |                               |                                 | )0 dBm                      | Ref 20.0             | ) dB/div |
| Next Rig    |  |                 |                                |                          |                               |                                 |                             |                      |          |
| Next Lo     | $\downarrow$   | anjer turna     | h-landra-carte-raster-t-state  | ganeral for the standard | www.                          | ~JTq444~46~461997,771-4-81      | والالمحموم والمحموم والمحمو |                      | .00      |
| Marker De   |  |                 |                                |                          |                               |                                 |                             |                      | D.O      |
| Mkr→        | Waller Marter  |                 |                                |                          |                               |                                 |                             | whyt                 | ).0      |
| Mkr→RefL    |  |                 |                                |                          |                               |                                 |                             |                      | 0.0      |
| Мо          |  |                 |                                |                          |                               |                                 |                             |                      |          |
| 1 0         | an 50.00 MHz<br>ms (1001 pts)                        | spa<br>sp 500 r | #Sweep                         |                          | 0 MHz                         | #VBW                            | Z                           | .31000 GH<br>1.0 MHz |          |
|             |  | TUS             | STATU                          |                          |                               |                                 |                             |                      | 3        |

#### Channel 62:

#### Channel 102:

| Peak Search              | PM Jul 08, 2009<br>E 1 2 3 4 5 6<br>PE A WWWWW | TRAC | ALIGNAUTO<br>e: Pwr(RMS)<br>> 100/100  | #Avg Typ<br>Avg Hold | ENSE:INT | 7                 |                        |                         | 50 Ω<br>5.496800 | arker 1                |  |  |  |  |  |
|--------------------------|--|------|--|----------------------|----------|-------------------|------------------------|-------------------------|------------------|------------------------|--|--|--|--|--|
| NextPe                   | 80 GHz   | 83). |  |                      |          | #Atten: 3         | Gain:Low               |                         | 1                |                        |  |  |  |  |  |
|                          | 56 dBm   |      |  |                      | -        |                   | 0 dB/div Ref 20.00 dBm |                         |                  |                        |  |  |  |  |  |
| Next Rig                 |  |      |  |                      |          |                   |                        | 0                       |                  | .0                     |  |  |  |  |  |
|                          |  |      |  |                      |          |                   |                        | <b>●</b> <sup>1</sup>   |                  | 00                     |  |  |  |  |  |
| Next L                   |  |      | ************************************** | ward and a second    | V        | alminely when the | Werkelphanelyter       | ar had a star should be |                  | .0                     |  |  |  |  |  |
|                          |  |      |  |                      |          |                   |                        | -                       |                  | .0                     |  |  |  |  |  |
| Marker De                |  | \    |  |                      |          |                   |                        |                         |                  | .0                     |  |  |  |  |  |
|                          | manhaumin                                      | 3    |  |                      |          |                   |                        |                         | æ                | - and a start          |  |  |  |  |  |
| Mkr→                     |  |      |  |                      |          |                   |                        |                         |                  | .0                     |  |  |  |  |  |
|                          |  |      |  |                      |          |                   |                        |                         |                  |                        |  |  |  |  |  |
| Mkr→Refl                 |  |      |  |                      |          |                   |                        |                         |                  | .0                     |  |  |  |  |  |
|                          |  |      |  |                      |          |                   |                        | 8                       |                  | .0                     |  |  |  |  |  |
| <b>M</b> o<br>1 o        | 0.00 MHz<br>1001 pts)                          |      | #Sweep :                               |                      | z        | 1.0 MHz           | #VBW                   |                         | 000 GHz<br>0 MHz | enter 5.57<br>tes BW 1 |  |  |  |  |  |
| <b>(</b> ) <b>(</b> 9:08 |  |      |  |                      | -        | 10                | lent Spectrum An       | Care of                 | an 🙆 🔯           |                        |  |  |  |  |  |



|   | e: Pwr(RMS)         |                     | ig: Free Run          | GHz<br>PNO: Fast 😱 1   | 00000000<br>Input: RF   | <sup>50 Ω</sup><br>1 5.5787 | arker 1 |
|---|---------------------|---------------------|-----------------------|--|-------------------------|-----------------------------|---------|
| Mkr1 5.578 70 GHz                                       | Mkr1 5.5            |                     | itten: 30 dB          | FGain:Low #  | 00 dBm                  | <b>D</b> -5 20              |         |
|   |                     |                     |                       |  |                         | Rei 20.                     | dB/div  |
|   |                     | line and really and | and the second second | 1<br>101-111/10-00-0-6-6-11-11-11-11-11-11-11-11-11-11-11-11 | Marand Saman April Sama |                             | .0      |
|   |                     |                     |                       |  |                         |                             | .0      |
|   |                     |                     |                       |  |                         | 4° ° ° °                    | .0      |
|   |                     |                     |                       |  |                         |                             | .0      |
| Span 50.00 MHz<br>#VBW 1.0 MHz #Sweep 500 ms (1001 pts) | Spa<br>#Sweep 500 n |                     | MHz                   | #VBW 1.  | łz                      | 5.59000 GH<br>N 1.0 MHz     | enter 5 |

Channel 118:

Channel 134:

| Marker 1      5.656/0000000 GHz      Trig: Free Run      Avg (type: Fur(Rus))      Trig: 63436      Next P        10 dB/div      Ref 20.00 dBm      -3.923 dBm      -3.923 dBm      Next R        000      -1      -3.923 dBm      Next R      Next R        000      -1      -3.923 dBm      Next R        -200      -1      -3.923 dBm      Next R        -3.92      -1      -3.923 dBm      Next R        -3.92      -1      -1      -1      Next R        -3.92      -1      -1      -1      Next R        -3.92      -1      -1      -1      Next R        -3.92      -1< | Center 5.67000 (<br>Res BW 1.0 MH |                         | #VBW 1.0 MH | łz          | #Sweep                               | Span 50.00 MHz<br>500 ms (1001 pts) | 1 of        |
|---|-----------------------------------|-------------------------|-------------|-------------|--------------------------------------|-------------------------------------|-------------|
| Marker 1 5.0506 /0000000 GHz    Trig: Free Run    Avg Heide / 100 /100    Trig: Free Run    Avg Heide / 100 /100    Trig: Free Run    Next P      10 dB/div    Ref 20.00 dBm    -3.923 dBm    Next R    Next R      000    1    -3.923 dBm    Next R    Next R      000    -3.923 dBm    -3.923 dBm    Next R    Next R   |                                   |                         |             |             |                                      |                                     | Мо          |
| Avg Hpe. rwitkins<br>Avg Hpe. rwitkins<br>Avg Hpe. rwitkins<br>Avg Hold>100/00000 GHz<br>Trig: Free Run<br>#Atten: 30 dB<br>Mkr1 5.656 70 GHz<br>-3.923 dBm<br>Next R<br>Next R<br>Next R<br>Next R<br>Next R<br>Marker D   |                                   |                         |             |             |                                      |                                     | Mkr→RefL    |
| Avg type. rutrens)<br>Avg type. rutrens)<br>Avg type. rutrens)<br>Avg type. rutrens)<br>Avg type. rutrens)<br>Mkr1 5.656 70 GHz<br>-3.923 dBm<br>Next R<br>Next R<br>Next R<br>Next R<br>Next R<br>Next R   | 0.0                               |                         |             |             |                                      |                                     |             |
| Avg type. rutrens)<br>Avg type. rutrens)<br>Avg type. rutrens)<br>Avg type. rutrens)<br>Avg type. rutrens)<br>Mkr1 5.656 70 GHz<br>-3.923 dBm<br>Next P<br>Next R<br>Next R<br>Next R   | 0.0                               |                         |             |             |                                      |                                     | Micro       |
| Avg type. Fwittens)<br>Input: RF PNO: Fast<br>IFGain:Low #Atten: 30 dB<br>Mkr1 5.656 70 GHz<br>-3.923 dBm<br>Next R<br>Next R   |                                   |                         |             |             |                                      |                                     | Marker De   |
| Marker 1      5.5557/00000000 GHZ      Trig: Free Run      Mark g type: Fwit(RMS)      Trig: S to 5        Input: RF      PNO: Fast      Trig: Free Run      #Avg type: Fwit(RMS)      Trig: S to 5        Mkr1      5.656 70 GHz      -3.923 dBm      Next P        IdB/div      Ref 20.00 dBm      Next R      Next R   |                                   |                         |             | Y           |                                      |                                     |             |
| Arker 1 5.656700000000 GHZ<br>Input: RF PN0: Fast Free Run #Atten: 30 dB<br>Mkr1 5.656 70 GHz<br>-3.923 dBm<br>Next P   |                                   | providence in running o |             | m permanent | wyayya-augar darifafiwati dahar yana | ronderige                           | Next Lef    |
| arker 1  5.656700000000 GHz  Trig: Free Run  Avg type. rwt(RM3)  Trig: State  Avg type. rwt(RM3)    Input: RF  PR0: Fast  Trig: Free Run  #Avg type. rwt(RM3)  Trig: State    0 dB/div  Ref 20.00 dBm  -3.923 dBm   | 0.0                               |                         |             |             |                                      |                                     | Next Rig    |
| Arker 1 5.5557/0000000 GHz<br>Input: RF PRO: Fast Trig: Free Run<br>IFGain:Low #Atten: 30 dB  |                                   | 0.00 dBm                |             |             |                                      |                                     | A/7 244-252 |
| arker 1 5 555 (00000000 GHZ #8Y9 VPC, FW((KW2) 10455  |                                   |                         |             |             | 809                                  |                                     | NextPe      |
| 50 Ω AC SENSE:INT ALIGNAUTO 09:10:52 PM Jul08, 2009 Peak Search   |                                   |                         | Hz          | #.          | Avg Type: Pwr(RMS)                   | TRACE 1 2 3 4 5 6                   | Peak Search |

# 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.  |
|------|-------------------|--------------|----------------------|------------|
| Х    | Spectrum Analyzer | Agilent      | N9010A / MY48030495  | Apr., 2009 |
| NT / | 1 4 11            | 1.1 / 1      |                      |            |

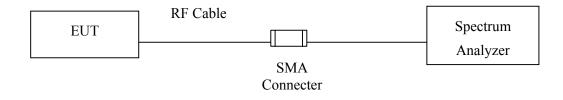
Note: 1. All equipments are calibrated every one year.

2. The test instruments marked by "X" are used to measure the final test results.

# 5.2. Test Setup

\_\_\_\_

### **Conduction Power Measurement**



# 5.3. Limits

The ratio of the peak excursion of the modulation envelope (measured suing 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

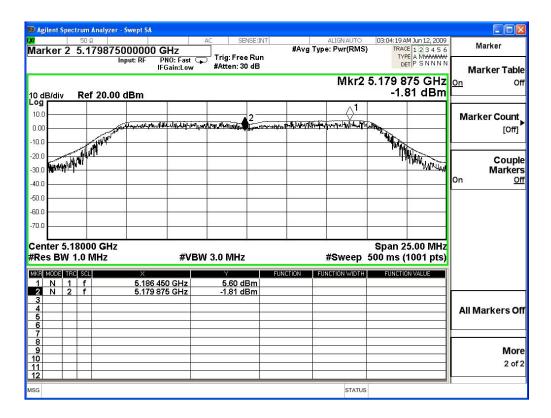
± 1.27 dB

# 5.6. Test Result of Peak Excursion

| Product   | : | Notebook                            |
|-----------|---|-------------------------------------|
| Test Item | : | Peak Excursion                      |
| Test Site | : | No.3 OATS                           |
| Test Mode | : | Mode 1: Transmitter (802.11a-6Mbps) |

| Channel No. | Frequency<br>(MHz) | Measurement Level<br>(dB) | Required Limit<br>(dB) | Result |
|-------------|--------------------|---------------------------|------------------------|--------|
| 36          | 5180               | 7.41                      | <13                    | Pass   |
| 44          | 5220               | 9.67                      | <13                    | Pass   |
| 48          | 5240               | 7.85                      | <13                    | Pass   |
| 52          | 5260               | 9.02                      | <13                    | Pass   |
| 60          | 5300               | 7.89                      | <13                    | Pass   |
| 64          | 5320               | 8.46                      | <13                    | Pass   |
| 100         | 5500               | 9.72                      | <13                    | Pass   |
| 120         | 5600               | 10.35                     | <13                    | Pass   |
| 140         | 5700               | 9.24                      | <13                    | Pass   |

### Channel 36:





|             |   |           |                             | •      |                 | Chai                                     |                    |                   |           |             |       |       |           |
|-------------|---|-----------|-----------------------------|--------|-----------------|--|--------------------|-------------------|-----------|-------------|-------|-------|-----------|
|             |   |           |                             |        |                 |  |                    | Swept SA          | nalyzer - | trum /      | Spect | ilent | l Ag      |
| Peak Search | M Jun 12, 2009<br>E 1 2 3 4 5 6<br>E MM <del>WWWW</del> | TRAC      | ALIGN AUTO<br>e: Pwr(RMS)   | #Avg T |                 | Trig: Free                               | GHz<br>PNO: Fast   | 100000<br>put: RF |           | 50 Ω<br>5.2 | 2     | ker   | l<br>lai  |
| NextPe      | 75 GHz  | 5.222 6   | Mkr2 :                      |        | dB              |  | IFGain:Lov         |                   |           |             |       |       |           |
|             | 50 dBm  | -2.3      |                             |        |                 |  |                    | dBm               | 20.00     | Ref         | 1     | B/di  | ) d<br>og |
|             | [   |           | $\bigcirc$ <sup>1</sup>     |        |                 |  |                    |                   |           |             |       |       | 10.0      |
| Next Rig    |   | Der ma    | appropriation Participation | - HANA | market when her | work man for the state of the            | Whytheren          | anthronamle       | - A       |             |       |       | .00       |
|             |   | NUM       |                             | •      |                 |  |                    |                   | Ter       | 1           |       |       | 0.0       |
|             | In the second   | (M)       |                             |        |                 |  |                    |                   | 44        | Jun         | í lu  |       | D.O       |
| Next Le     | 1 M WWW WWWW  | T         |                             |        |                 |  |                    |                   |           | 7           | 1.11  | 44/10 | -<br>- n  |
| Hext E      | · · ·   |           |                             |        |                 |  |                    |                   |           |             | 10    |       | 0.0       |
|             |   |           |                             |        |                 |  |                    |                   |           |             |       |       | 0.0       |
|             |   |           |                             |        |                 |  |                    |                   |           |             |       |       | 0.0       |
| Marker De   |   |           |                             |        |                 |  |                    |                   |           |             |       |       | 0.0       |
|             | _   |           |                             |        |                 |  |                    |                   |           |             |       |       | U.U       |
|             | 5.00 MHz  |           |                             |        |                 | en e | 100                |                   | ) GHz     |             |       |       |           |
| Mkr→        | 1001 pts)   | 500 ms (* | #Sweep \$                   |        |                 | 3W 3.0 MHz                               | #V                 |                   | IHz       | .0 N        | W 1   | s B   | Re        |
|             | N VALUE   | FUNCTIO   | NCTION WIDTH                | CTION  |                 | Y  |                    | Х                 |           |             |       | MODE  | _         |
|             |   |           |                             |        |                 | 7.17 di<br>-2.50 di                      | 450 GHz<br>675 GHz |                   |           | f           | 1 2   | N     | 1<br>2    |
|             |   |           |                             |        |                 | C C C                                    |                    |                   |           |             | _     |       | 3         |
| Mkr→Refl    |   |           |                             |        |                 |  |                    |                   |           |             |       |       | 4<br>5    |
|             | ] _   |           |                             |        |                 |  |                    |                   |           |             |       |       | 6<br>7    |
|             |   |           |                             |        |                 |  |                    |                   |           |             |       |       | 8         |
| Mo          |   |           |                             |        | _               |  |                    |                   |           |             | -     |       | 9         |
| 1 c         |   |           |                             |        |                 |  |                    |                   |           |             |       |       | 1         |
|             |   |           |                             |        |                 |  |                    |                   |           |             |       | _     | 2         |
|             |   |           | STATUS                      |        |                 |  |                    |                   |           |             |       |       | G         |

#### Channel 44:

Channel 48:

|                   |  |                           |  |                       |                    | pt SA                    | nalyzer - Sw |              | nt Spe |                            |
|-------------------|--|---------------------------|--|-----------------------|--------------------|--------------------------|--------------|--------------|--------|----------------------------|
| Peak Search       | 03:06:06 AM Jun 12, 2009<br>TRACE 1 2 3 4 5 6<br>TYPE MMWWWW   | ALIGN AUTO<br>e: Pwr(RMS) | #Avg Ty                                    | SENSE:IN              | AC<br>Tria:        | 1000 GHz<br>RF PN0: Fast |              | 50 Ω<br>5.24 | er 2   | lark                       |
| Next Peal         | .243 950 GHz<br>0.25 dBm   | Mkr2 t                    |  | n: 30 dB              |                    | IFGain:Low               | 20.00 dE     | Ref          | (div   | ) dB                       |
| Next Rigi         | All and a second s | / <sup>4</sup>            | 1<br>1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1 | runu<br>hispachiliphu | nythonyapathistofu | Laboritheria, Landonaph  | Hunder Walky |              |        | og<br>10.0<br>0.00         |
| Next Le           | White white  |                           |  |                       |                    |                          |              | WH H         | JINIT  | 20.0<br>20.0<br>20.0       |
| Marker Del        |  |                           |  |                       |                    |                          |              |              |        | i0.0<br>i0.0<br>'0.0 =     |
| Mkr→C             | Span 25.00 MHz<br>00 ms (1001 pts)<br>FUNCTION VALUE   | #Sweep 5                  | INCTION                                    | 1Hz<br>10 dBm         | BW 3.0 N           | #V<br>×<br>5.242 875 GHz | ) GHz<br>IHz | 1.0 N        | BW     | Res<br>Krim                |
| Mkr→RefL          |  |                           |  | 25 dBm                |                    | 5.243 950 GHz            |              |              | N 2    |                            |
| <b>Mo</b><br>1 of |  |                           |  |                       |                    |                          |              |              |        | /<br>8<br>9<br>0<br>1<br>2 |
|                   |  | STATUS                    |  |                       |                    |                          |              |              |        | G                          |



| AC  SENSE.INT  ALIGNAUTO  03:06:45 AM Jun 12, 2009  Peak Search    259875000000 GHz  Trig: Free Run<br>#Atten: 30 dB  #Avg Type: Pwr(RMS)  Trig: Gain: Low  Peak Search    Mkr2 5.259 875 GHz<br>-0.90 dBm    1    1    1    1    Mkr2 5.259 875 GHz<br>-0.90 dBm    0.90 dBm    Next Peak    Next Righ    Next Righ    Next Righ    Next Lef    Marker Delta    Next Lef    Marker Delta    Marker Delta    Marker Delta    Mkr2    Span 25.00 MHz    Mkr - CF  |                                      | Channel 5                                      |                                       |   |             |
|--|--------------------------------------|--|---------------------------------------|---|-------------|
| 259875000000 GHz      Trig: Free Run      #Avg Type: Pwr(RMS)      TRACE 1/2/3/4.5.6      Peak Search        Input: RF      PNO: Fast      Trig: Free Run      #Atten: 30 dB      Mkr2 5.259 875 GHz      Next Peal        If 20.00 dBm      -0.90 dBm      -0.90 dBm      Next Right      Next Right        Imput: RF      PNO: Fast      2      1      Next Right      Next Right        Imput: RF      Imput: RF      Imput: RF      Imput: RF      Imput: RF      Next Right        Imput: RF      Imput: RF      Imput: RF      Imput: RF      Imput: RF      Next Right        Imput: RF      Imput: RF      Imput: RF      Imput: RF      Imput: RF      Next Right        Imput: RF      Imput: RF      Imput: RF      Imput: RF      Imput: RF      Next Right        Imput: RF      Imput: RF      Imput: RF      Imput: RF      Imput: RF      Next Right        Imput: RF      Imput: RF      Imput: RF      Imput: RF      Imput: RF      Next Right        Imput: RF      Imput: RF      Imput: RF      Imput: RF      Imput: RF      Next Right        Imput: RF      Imput: RF </th <th>Agilent Spectrum Analyzer - Swept SA</th> <th></th> <th></th> <th></th> <th></th>  | Agilent Spectrum Analyzer - Swept SA |  |                                       |   |             |
| Input: R      PRO: Fast      Trig: Free Run<br>#Atten: 30 dB      Mkr2 5.259 875 GHz<br>-0.90 dBm      Next Pea        f 20.00 dBm      -0.90 dBm      -0.90 dBm      Next Right      Next Left      Next Left      Marker Dett      Marker Dett      Marker Dett      Marker Dett      Metr -C   | 50 Ω<br>Jarkor 2, 5, 25097500000     |  |                                       |   | Peak Search |
| Mikr2 5.259 875 GHz      Next Right        6 20.00 dBm      -0.90 dBm        1      -0.90 dBm  | Input: RF                            | PNO: Fast 😱 Trig: Free Run                     |                                       | DET P S N N N N   |             |
| Next Right        Image: Second s                                    | 0 dB/div Ref 20.00 dBm               |  | Mkr2 5.                               |   |             |
| Image: Second       | og                                   |  | <b>∩1</b>                             |   |             |
| Image: Second       | 0.0                                  | ating a strate the star and a far a strate bar | rilling the share with a full the set | in the second | Next Ria    |
| Image: Second secon | JUU                                  |  |                                       | Marking .   |             |
| Image: Second       |                                      |  |                                       |   |             |
| Image: Second       |                                      |  |                                       | T PP PARA   |             |
| X      Y      EUNCTION      FUNCTION WIDTH      FUNCTION WALLE        5.263 850 GHz      8.12 dBm      6.259 875 GHz      0.90 dBm      Mkr → RefL   |                                      |  |                                       | 1 4.4.10  | Next Le     |
| X      Y      EUNCTION      FUNCTION WIDTH      FUNCTION WALLE        5.263 850 GHz      8.12 dBm      6.259 875 GHz      0.90 dBm      Mkr → RefL   | 40.0                                 |  |                                       |   |             |
| 00 GHz<br>MHz #VBW 3.0 MHz Span 25.00 MHz<br>#Sweep 500 ms (1001 pts)<br>× × × × × × × × × × × × × × × × × × ×   | 50.0                                 |  |                                       |   |             |
| NO GHz      Span 25.00 MHz        MHz      #VBW 3.0 MHz      #Sweep 500 ms (1001 pts)        MHz      #Sweep 500 ms (1001 pts)      Mkr→C        5.263 850 GHz      8.12 dBm      Mkr→RefL        5.259 875 GHz      0.90 dBm      Mkr→RefL  | 60.0                                 |  |                                       |   | MarkerDel   |
| MHz      #VBW 3.0 MHz      #Sweep 500 ms (1001 pts)        X      Y      FUNCTION      FUNCTION WIDTH      FUNCTION VALUE        5.263 850 GHz      8.12 dBm      Mkr→C        5.259 875 GHz      -0.90 dBm      Mkr→RefL  | 70.0                                 |  |                                       |   | Marker Dei  |
| MHz      #VBW 3.0 MHz      #Sweep 500 ms (1001 pts)        ×      Y      FUNCTION      FUNCTION WIDTH      FUNCTION VALUE        5.263 850 GHz      8.12 dBm      Mkr→C        5.259 875 GHz      -0.90 dBm      Mkr→RefL  | 2020                                 |  |                                       |   |             |
| X      Y      FUNCTION      FUNCTION WIDTH      FUNCTION VALUE        5.263 850 GHz      8.12 dBm            5.269 875 GHz      -0.90 dBm             6.269 875 GHz      -0.90 dBm              0  | enter 5.26000 GHz                    |  |                                       |   |             |
| 5.263 850 GHz      8.12 dBm        5.259 875 GHz      -0.90 dBm  | Res BW 1.0 MHz                       | #VBW 3.0 MHz                                   | #Sweep 50                             | 00 ms (1001 pts)  | Mkr→C       |
| 5.259 875 GHz -0.90 dBm Mkr→RefL   |                                      |  | NCTION FUNCTION WIDTH                 | FUNCTION VALUE  |             |
| Mkr→RefL   |                                      |  |                                       |   |             |
|  | 3                                    |  | 1                                     |   |             |
|  | 4<br>5                               |  |                                       |   | Mkr→RefL    |
|  | 6                                    |  |                                       |   |             |
|  | 8                                    |  |                                       |   |             |
|  | 9                                    |  |                                       |   | Мо          |
|  |                                      |  |                                       |   | 1 of        |
|  | 12                                   |  |                                       |   | 1000        |
| STATUS   | sg                                   |  | STATUS                                |   |             |

Channel 52:

Channel 60:

|                    |                                       |  |                          |                          |            |                          |  | wept SA                   | nalyzer - |             | nt Spec  | Agiler |
|--------------------|---------------------------------------|--|--------------------------|--------------------------|------------|--------------------------|--|---------------------------|-----------|-------------|----------|--------|
| Marker             | 4 AM Jun 12, 2009<br>RACE 1 2 3 4 5 6 | TRA  | ALIGNAUTO<br>e: Pwr(RMS) | #Avg Ty                  | NSE:INT    |                          |  | 00000 G                   |           | 50 Ω<br>5.3 | er 2     | arke   |
| Select Marker<br>2 | DET P S N N N N                       |  |                          |                          |            | Trig: Free<br>#Atten: 30 | :Fast 🕞<br>in:Low                                  |                           | In        |             |          |        |
|                    | 325 GHz<br>.80 dBm                    |  | Mkr2 8                   |                          |            |                          |  | Bm                        | 20.00 0   | Ref         | div      | dB/    |
|                    |                                       |  | 2                        |                          |            |                          | <u>⟩</u> 1   |                           |           |             |          |        |
| Norm               | lan<br>Na Van                         | No. 10 AND | n frederichten fi        | white and a stand of the | aliterrain | Had ANU Upor             | i-q≈d][\$].(1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1, | ₽ <b>└.a∖.</b> Ŀ↑•₽€₿•₽¥₽ | WWW       | - www.      |          | 00     |
|                    | Non Andread                           | 170  |                          | -                        |            |                          |  |                           |           |             | in the   |        |
| Del                | · · · WYAANA                          |  |                          |                          |            |                          |  |                           |           |             | Υ.Υ. ··· |        |
|                    | _                                     |  |                          | 1                        |            |                          |  |                           |           |             |          | .0 -   |
| Fixed              |                                       |  |                          |                          |            |                          |  |                           |           |             |          | .0     |
|                    | 25.00 MHz                             | Span :   | 79 10                    |                          |            |                          |  |                           | ) GHz     | 10000       | er 5.3   | ente   |
| o                  | ; (1001 pts)                          | 600 ms   |                          |                          |            | 3.0 MHz                  | #VBW   |                           | IHz       |             | BW 1     |        |
|                    | TION VALUE                            | FUNCT  | NCTION WIDTH             | ICTION F                 | Bm         | 9.69 dl<br>1.80 dl       |  | ×<br>5.295 32<br>5.305 32 |           | f<br>f      |          |        |
| Properties         |                                       |  |                          |                          | BIII       | 1.80 01                  | 512  | 5.305 32                  |           | 1           | N 2      |        |
| Toperace           | ]                                     |  |                          |                          |            |                          |  |                           |           |             |          | 5      |
| Мо                 |                                       |  |                          |                          |            |                          |  |                           |           |             |          | 3      |
| 1 of               |                                       |  |                          |                          |            |                          |  |                           |           |             |          | 2      |
|                    |                                       |  | STATUS                   |                          |            |                          |  |                           |           |             | - J.     |        |



|                          |   |          |                           | r •     | mer o-              | Unun       |   |            |                |               |                 |              |
|--------------------------|---|----------|---------------------------|---------|---------------------|------------|---|------------|----------------|---------------|-----------------|--------------|
|                          |   |          |                           |         |                     |            |   | - Swept SA | Analyzer       | ectrum        | ilent S         | Ag           |
| Peak Search<br>Next Peak | M Jun 12, 2009<br>E 1 2 3 4 5 6<br>E MM <del>WWWW</del> | TRAC     | ALIGNAUTO<br>e: Pwr(RMS)  | #Avg Ty |                     | Trig: Free | GHz<br>PNO: Fast (                          | 1000000    | 23050          | 50 s<br>2 5.3 | ker             | ø<br>Nar     |
| NextPea                  | 50 GHz  | 370      | Mkr2 5                    |         | dB                  | #Atten: 30 | Gain:Low                                    | I          |                |               |                 |              |
|                          | 38 dBm  |          |                           | T       |                     | ,,         |   | dBm        | 20.00          | Ref           | B/div           | 0 d          |
| Next Righ                |   | Law.     | yervelespel-ap-reproduced | 2       | . Ja Muranik        |            |   | Windowski  |                |               |                 | 10.0         |
|                          | hu  | WIN MANA |                           |         | Provident of states | 11         |   |            | . July and the |               |                 | 0.00<br>10.0 |
|                          | Mary mary   | ha M     |                           |         |                     |            |   |            | V              | light         | mer<br>Apple of |              |
| Next Le                  | 1.11.11.44944   |          |                           |         |                     |            |   |            |                | A             | M. A. A.        | 30.0         |
|                          |   |          |                           |         |                     |            |   |            |                |               |                 | 40.0         |
| MarkerDa                 |   |          |                           |         |                     |            |   |            |                |               |                 | 50.0<br>60.0 |
| Marker De                |   |          |                           |         |                     |            | -   |            |                |               |                 | 70.0         |
|                          | 5.00 MHz  |          |                           |         |                     |            | 100<br>100 (100 (100 (100 (100 (100 (100 (1 |            | 0 GHz          |               |                 |              |
| Mkr→C                    |   |          | #Sweep 5                  |         |                     | / 3.0 MHz  | #VB   |            |                | 1.0 P         |                 |              |
|                          | IN VALUE  | FUNCTIO  | NCTION WIDTH              | CTION F | 3m                  | 9.84 dE    | 50 GHz                                      |            |                | RC SCL<br>1 f | N               | 1            |
|                          |   |          |                           |         | 3m                  | 1.38 dE    | 50 GHz                                      | 5.323 0    |                | 2 f           | N               | 2            |
| Mkr→RefL                 |   |          |                           |         | _                   |            |   |            |                |               | _               | 4<br>5<br>6  |
|                          |   |          |                           |         |                     |            |   |            |                |               |                 | 7            |
| Мо                       |   |          |                           |         |                     |            |   |            |                | -             | _               | 9<br>10      |
| 1 of                     |   |          |                           |         |                     |            |   |            |                |               |                 | 11<br>12     |
|                          |   |          | STATUS                    |         |                     |            |   |            |                |               |                 | SG           |

#### Channel 64:

#### Channel 100:

