| Product | : | Multi-functional Gigabit Wireless N Router |
|-----------|---|---|
| Test Item | : | Band Edge Data |
| Test Site | : | No.3 OATS |
| Test Mode | : | Mode 3: Transmitter (802.11n MCS8 13Mbps 20M-BW)-Adapter 1 -Channel 1 |

| Antenna | Frequency | Reading Level | Correction Factor | Emission Level | Detector |
|------------|-----------|---------------|-------------------|----------------|----------|
| Pole | [MHz] | [dBuV] | [dB/m] | [dBuV/m] | |
| Horizontal | 2412 | 62.570 | 29.730 | 92.300 | Peak |
| Horizontal | 2412 | 47,851 | 29.736 | 77,587 | Average |
| Vertical | 2412 | 75.910 | 29.730 | 105.640 | Peak |
| Vertical | 2412 | 60.002 | 29.736 | 89.738 | Average |

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=30Hz

Band Edge Test Data

| Antenna Pole | Test Frequency (MHz) | Fundamental (dBuV/m) | Δ (dB) | Band Edge Field Strength (dBuV/m) | Detector |
|-----------------|-------------------------|-------------------------|---------------|---|----------|
| Horizontal | 2389.1 | 92.300 | 40.742 | 51.558 | Peak |
| Horizontal | 2390 | 77.587 | 42.678 | 34.909 | Average |
| Vertical | 2389.1 | 105.640 | 40.742 | 64.898 | Peak |
| Vertical | 2390 | 89.738 | 42.678 | 47.060 | Average |

Note:

The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

F = Fundamental field Strength (Peak or Average)



| | Реак Det | ector of cond | lucted Band Ed | ge Delta | |
|--|----------------------------|----------------------------|---|---|--------------------|
| 🛙 Agilent Spectrum Analyzer - | Swept SA | | | | |
| | DOOOOO GHz | | ALIGNAUTO Avg Type: Log-Pwr Avg Hold:>100/100 | 04:36:17 PM Apr 06, 2009 TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P N N N N | Save As |
| Ref Offset -1 10 dB/div Ref 0.00 d | | Atten: 20 dB | Mk | r1 2.412 5 GHz -7.045 dBm | Sav |
| -10.0 -20.0 -30.0 | | | 2 | <u>1</u> | File/Folde Lis |
| 40.0 50.0 60.0 | | nicologia the way and the | 3 Multimeter | | File name |
| 90.0 | | | | | Save A type |
| Start 2.33000 GHz Res BW 1.0 MHz | #VE 2.412 5 GHz | 3W 1.0 MHz -7.045 dBm | #Sweep | Stop 2.43000 GHz 500 ms (1001 pts) FUNCTION VALUE | 🏂 Up Or Lev |
| 2 N 1 f 3 N 1 f 4 5 6 7 | 2.400 0 GHz 2.389 1 GHz | -33,865 dBm -47.787 dBm | | | Create Ne Folde |
| 7 8 9 10 11 12 | | | | | Canc |
| ISG | | | STATUS | ADC Over Range | |

| 💴 Agilent Spectrum Analyzer - | Swept SA | | | | |
|---|---|---|---|--|-------------------------|
| | 000000 GHz | AC SENSE:INT | ALIGNAUTO Avg Type: Log-Pwr Avg Hold: 2/100 | 04:41:23 PM Apr 06, 2009 TRACE 1 2 3 4 5 6 TYPE MWWWWW | Save As |
| Ref Offset -1 10 dB/div Ref 0.00 d | | Atten: 20 dB | | r1 2.408 7 GHz -23.884 dBm | Save |
| -10.0 -20.0 -30.0 | | | | 1 | File/Folde Lis |
| -40.0 -50.0 -60.0 | | | 3 | | File name |
| -70.0 -80.0 | | | | | Save A type |
| Start 2.33000 GHz #Res BW 1.0 MHz | × | | Sweep | Stop 2.43000 GHz 7.80 s (1001 pts) | Dup One Leve |
| 1 N 1 f 2 N 1 f 3 N 1 f 4 | 2.408 7 GHz 2.400 0 GHz 2.390 0 GHz | -23.884 dBm -50.167 dBm -66.562 dBm | | | Create Nev ờ Create Nev |
| 8 9 10 11 12 | | | | | Cance |
| MSG | | | STATUS | ADC Over Range | |

| Product | : | Multi-functional Gigabit Wireless N Router |
|-----------|---|--|
| Test Item | : | Band Edge Data |
| Test Site | : | No.3 OATS |
| Test Mode | : | Mode 3: Transmitter (802.11n MCS8 13Mbps 20M-BW)-Adapter 1 -Channel 11 |

| Antenna | Frequency | Reading Level | Correction Factor | Emission Level | Detector |
|------------|-----------|---------------|-------------------|----------------|----------|
| Pole | [MHz] | [dB(uV)] | [dB/m] | [dB(uV/m)] | |
| Horizontal | 2462 | 60.639 | 29.944 | 90.583 | Peak |
| Horizontal | 2462 | 46.367 | 29.992 | 76.289 | Average |
| Vertical | 2462 | 68.340 | 29.953 | 98.292 | Peak |
| Vertical | 2462 | 53.314 | 29.952 | 83.266 | Average |

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=30Hz

Band Edge Test Data

| Antenna Pole | Test Frequency (MHz) | Fundamental (dBuV/m) | Δ (dB) | Band Edge Field Strength (dBuV/m) | Detector |
|-----------------|-------------------------|-------------------------|---------------|---|----------|
| Horizontal | 2483.5 | 90.583 | 42.541 | 48.042 | Peak |
| Horizontal | 2483.5 | 76.289 | 42.868 | 29.421 | Average |
| Vertical | 2483.5 | 98.292 | 42.541 | 55.751 | Peak |
| Vertical | 2483.5 | 83.266 | 42.868 | 40.398 | Average |

Note:

The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = $F - \Delta$

F = Fundamental field Strength (Peak or Average)



| Peak De | tector of conduc | cted Band Ed | ge Delta | |
|---|--------------------------------|---|---|----------------------|
| 🗊 Agilent Spectrum Analyzer - Swept SA | | | | |
| X 50 Ω Marker 1 2.465700000000 GHz Input: RF PNO: Fast IFGaint.or | | ALIGN AUTO Avg Type: Log-Pwr Avg Hold: 38/100 | 04:39:38 PM Apr 06, 2009 TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P N N N N N | Save As |
| Ref Offset -10 dB 10 dB/div Ref 0.00 dBm | Save | | | |
| -10.0 -20.0 -30.0 | | | | File/Folder List |
| -40.0 / | Mush Harbel warder and row man | مستوعيت مريدور ووالع مراسع المتواسع المراسع | and a second a second a second a | File name: |
| -70.0 | | | | Save As type: |
| Start 2.45000 GHz #Res BW 1.0 MHz #W MKR MODE TRO SCI X 1 N 1 f 2.465 7 GHz | | | Stop 2.55000 GHz 500 ms (1001 pts) FUNCTION VALUE | Dp One |
| 2 N 1 f 2.463 5 GHz 3 4 4 5 6 7 9 | | | | Create New Folder |
| 7 8 9 10 11 11 12 12 | | | | Cance |
| MSG | | STATUS | ADC Over Range | |

| 💴 Agilent Sp | | er - Swept SA | | | | | |
|-------------------------------|----------------------|------------------------|------------|----------|---------------------------------|---|----------------------|
| ⋈ Marker 1 | ^{50 Ω} | 00000000 GHz | | Avg Type | ALIGNAUTO : Log-Pwr 2/100 | 04:39:03 PM Apr 06, 2009 TRACE 1 2 3 4 5 6 TYPE MWWWWMA | Save As |
| 10 dB/div | Ref Offse Ref 0.0 | IFGain | | | | DET P NNNNN 1 2.463 6 GHz -24.025 dBm | Save |
| -10.0 -20.0 -30.0 | 1 | ~~~~ | | | | | File/Folder List |
| -40.0 -50.0 -60.0 | | | | | | | File name: |
| -70.0 -80.0 -90.0 | | | | | | | Save As type: |
| #Res BW | RC SCL | × × | #VBW 10 Hz | | | top 2.55000 GHz 7.80 s (1001 pts) FUNCTION VALUE | |
| 2 N 3 4 5 6 | 1 f 1 f | 2.463 6 G 2.483 5 G | | | | | Create New Folder |
| 7 8 9 10 11 12 | | | | | | | Cance |
| MSG | | | | | STATUS | LADC Over Range | |

| Product | : | Multi-functional Gigabit Wireless N Router |
|-----------|---|---|
| Test Item | : | Band Edge Data |
| Test Site | : | No.3 OATS |
| Test Mode | : | Mode 4: Transmitter (802.11n MCS8 27Mbps 40M-BW)-Adapter 1 -Channel 1 |

| Antenna | Frequency | Reading Level | Correction Factor | Emission Level | Detector |
|------------|-----------|---------------|-------------------|----------------|----------|
| Pole | [MHz] | [dBuV] | [dB/m] | [dBuV/m] | |
| Horizontal | 2422 | 64.045 | 29.752 | 93.797 | Peak |
| Horizontal | 2422 | 46.663 | 29.789 | 76.452 | Average |
| Vertical | 2422 | 72.335 | 29.774 | 102.109 | Peak |
| Vertical | 2422 | 52.263 | 29.784 | 82.047 | Average |

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=30Hz

Band Edge Test Data

| Antenna Pole | Test Frequency (MHz) | Fundamental (dBuV/m) | Δ (dB) | Band Edge Field Strength (dBuV/m) | Detector |
|-----------------|-------------------------|-------------------------|---------------|---|----------|
| Horizontal | 2390 | 93.797 | 36.178 | 57.619 | Peak |
| Horizontal | 2390 | 76.452 | 32.02 | 44.432 | Average |
| Vertical | 2390 | 102.109 | 36.178 | 65.931 | Peak |
| Vertical | 2390 | 82.047 | 32.02 | 50.027 | Average |

Note:

The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements

per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

F = Fundamental field Strength (Peak or Average)



| | เล | ge Dei | and Ed | licted . | conc | or of | Detect | Реак | | | | | |
|---------------------|--|----------|--|----------|------|------------------------|-------------|------------|----------------------------|---------------|---------------|-----------|--------------|
| | | | | | | | | wept SA | alyzer - S | | t Spect | gilent | |
| Save As | M Apr 06, 2009 E 1 2 3 4 5 6 E M WWWWWW T P N N N N N | TRAC | ALIGN AUTO pe: Log-Pwr d: 34/100 | | | Trig: Fre | I0: Fast 😱 | ut:RF P | 00 ms | 50 Ω 1e \$ | o Tin | eep | xı Swe |
| Sav | 6 2 GHz 95 dBm | r1 2.426 | Mk | 20.07 | 0 dB | Atten: 20 | ain:Low | dB | ffset -10 | | | | |
| | | -10.73 | | _ | | | | m | 0.00 dB | Ref | iv | dB/di | 10 d Log |
| File/Folde | ١. | - | - Andrew P | | 7 | | 2 | | | + | | 0 | -10.0 |
| Lis | $\left\{ - \right\}$ | | | | 2 | | | | | | | | -20.0 |
| | hay have | | | | X | 3 | | | | + | | 0 | -40.0 |
| File name | ~~~~ | | | | | A Parta Prove | where ready | - | مە ^{ر بىر} ىرىدۇر | | | | -50.0 |
| | | | | | | | | | - | Maria | -Arri | ⊷بر −0 | -70.0 |
| Save A | | | | _ | | | | | | | | | -80.0 |
| type | | | | | | | | | | | | Ľ | -90.0 |
| A Up On | 5000 GHz 1001 pts) | | #Sweep | | 2 | 1.0 MHz | #VBW | | | | 2.350 3W 1 | | |
| Leve | IN VALUE | FUNCTIO | UNCTION WIDTH | UNCTION | Bm | Y -10.795 d | 2 GHz | × 2.426 | | SCL | E TRC | MOD N | MKR 1 |
| One of a New | | | | | Bm | -36.750 d -46.973 d |) GHz | 2.400 | | f | 1 | N | 23 |
| Create Nev Folde | | | | | | | | | | | | | 4 |
| | | | | | | | | | | | | | 6 |
| Canc | | | | | | | | | | | - | | 8 9 10 |
| Carro | | | | | | | | | | | | | 11 12 |
| | | - | STATUS | | | | | | | | | | ISG |

| ectrum Analyzer - Swept SA | |
|---|---------------------|
| 50 x AC SENSE:INT ALIGNAUTO 04:44:55 PM Apr 06, 2005 1 2.426200000000 GHz AVg Type: Log-Pwr Trace [1 2:3 4:5 5 Trace [2 3:4 5:5 5 Image: Data of the part of th | Save As |
| Ref Offset -10 dB Mkr1 2.426 2 GHz | Save |
| Ref 0.00 dBm -33.53 dBm | |
| | File/Folder List |
| manutes manufactures | |
| | File name |
| 3 | |
| | Save A |
| | type |
| 5000 GHz Stop 2.45000 GHz / 1.0 MHz #VBW 10 Hz Sweep 7.80 s (1001 pts) | |
| FILO MINE2 #VBW 10 H2 Sweep 7.80 S (100 Fpts) TRC[sct] X Y Function Function width Function value | Leve |
| 1 f 2.426 2 GHz -33.53 dBm 1 f 2.400 0 GHz -53.98 dBm | 1 |
| 1 f 2.390 0 GHz -65.54 dBm | Create New |
| | Folde |
| | |
| | Cance |
| STATUS | |

| Product | : | Multi-functional Gigabit Wireless N Router |
|-----------|---|---|
| Test Item | : | Band Edge Data |
| Test Site | : | No.3 OATS |
| Test Mode | : | Mode 4: Transmitter (802.11n MCS8 27Mbps 40M-BW)-Adapter 1 -Channel 7 |

| Antenna | Frequency | Reading Level | Correction Factor | Emission Level | Detector |
|------------|-----------|---------------|-------------------|----------------|----------|
| Pole | [MHz] | [dB(uV)] | [dB/m] | [dB(uV/m)] | |
| Horizontal | 2452 | 58.534 | 29.914 | 88.449 | Peak |
| Horizontal | 2452 | 40.629 | 29.876 | 70.050 | Average |
| Vertical | 2452 | 71.968 | 29.917 | 101.884 | Peak |
| Vertical | 2452 | 52.016 | 29.950 | 81.996 | Average |

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=30Hz

Band Edge Test Data

| Antenna Pole | Test Frequency (MHz) | Fundamental (dBuV/m) | Δ (dB) | Band Edge Field Strength (dBuV/m) | Detector |
|-----------------|-------------------------|-------------------------|---------------|---|----------|
| Horizontal | 2483.5 | 88.449 | 37.951 | 50.498 | Peak |
| Horizontal | 2483.5 | 70.050 | 30.540 | 39.510 | Average |
| Vertical | 2483.5 | 101.884 | 37.951 | 63.933 | Peak |
| Vertical | 2483.5 | 81.996 | 30.540 | 51.456 | Average |

Note:

The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = $F - \Delta$

F = Fundamental field Strength (Peak or Average)



| | Peak Dete | ctor of conat | icted Band Ed | ge Della | |
|---------------------------------------|--|--|--|---|-------------------|
| 🛙 Agilent Spectrum Analyzer - | - Swept SA | | | | |
| Δarker 2 2.483500 | 000000 GHz nput: RF PNO: Fast C IEGain:Low | AC SENSE:INT Trig: Free Run Atten: 20 dB | ALIGNAUTO Avg Type: Log-Pwr Avg Hold: 51/100 | 04:47:41 PM Apr 06, 2009 TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P N N N N N | Save As |
| Ref Offset -1 I0 dB/div Ref 0.00 d | 10 dB | | Mk | r2 2.483 5 GHz -48.209 dBm | Sav |
| .og 10.0 20.0 30.0 | | | | | File/Folde |
| 40.0 | | 2- | where we are a strategy and the strategy | Home in the standers of the | File name |
| 70.0 80.0 90.0 | | | | | Save A type |
| tart 2.43000 GHz Res BW 1.0 MHz | #VB | W 1.0 MHz | #Sweep | Stop 2.53000 GHz 500 ms (1001 pts) FUNCTION VALUE | り Up Or Lev |
| 2 N 1 f 3 4 5 5 6 7 | 2.483 5 GHz | -48.209 dBm | | | Create Ne Fold |
| 8 9 10 11 | | | | | Canc |
| sg | | 1 | STATUS | · | |

| 🍺 Agilent Spectrum Analyzer - | Swept SA | | |
|--------------------------------------|--|---|--------------|
| 50 Ω Sweep Time 7.80 s | AC SENSE: | Avg Type: Log-Pwr TRACE 1 2 3 4 5 6 | Save As |
| In Ref Offset -1 | IFGain:Low Atten: 20 dB | | Save |
| 10 dB/div Ref 0.00 d | | -65.44 dBm | |
| -10.0 | | | File/Folder |
| -20.0 | 1 | | List |
| -40.0 | | | |
| -50.0 | | 2 | File name: |
| -60.0 | | - | |
| -80.0 | | | Save As |
| -90.0 | | | type: |
| Start 2.43000 GHz #Res BW 1.0 MHz | #VBW 10 Hz | Stop 2.53000 GHz Sweep 7.80 s (1001 pts) | |
| MKR MODE TRC SCL | ##B##10112 | FUNCTION FUNCTION WIDTH FUNCTION VALUE | Level |
| 1 N 1 f 2 N 1 f | 2.461 7 GHz -34.90 dBm 2.483 5 GHz -65.44 dBm | | |
| 3 4 | | | 🦂 Create New |
| 5 6 | | | - Folder |
| 7 8 | | | |
| 9 | | | Cance |
| 11 12 | | | |
| MSG | | STATUS | |

7. Occupied Bandwidth

7.1. Test Equipment

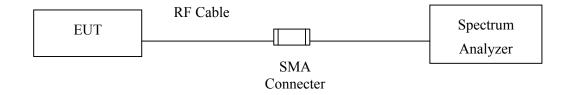
The following test equipments are used during the radiated emission tests:

| | Equipment | Manufacturer | Model No./Serial No. | Last Cal. | |
|-----|-------------------|--------------|----------------------|-----------|--|
| Х | Spectrum Analyzer | Agilent | N9010A / MY48030495 | Apr, 2009 | |
| т., | 1 4 11 1 4 | 1.1 / 1 | | | |

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

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

7.2. Test Setup



7.3. Limits

The minimum bandwidth shall be at least 500 kHz.

7.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003; tested according to DTS test procedure of Mar. 2005 KDB558074 for compliance to FCC 47CFR 15.247 requirements. Set RBW = 100 kHz, Span greater than RBW.

7.5. Uncertainty

± 150Hz

7.6. Test Result of Occupied Bandwidth

| Product | : | Multi-functional Gigabit Wireless N Router |
|-----------|---|---|
| Test Item | : | Occupied Bandwidth Data |
| Test Site | : | No.3 OATS |
| Test Mode | : | Mode 1: Transmitter (802.11b 1Mbps)-Adapter 1 (2412MHz) |

| Channel No. | Frequency (MHz) | Measurement Level (kHz) | Required Limit (kHz) | Result |
|-------------|--------------------|----------------------------|-------------------------|--------|
| 1 | 2412.00 | 10050 | >500 | Pass |

Figure Channel 1:

| 50 Ω larker 3 2.41705 | Input: RF PNO: Fast | | ALIGN OFF Avg Type: Log-Pwr | 11:01:31 AM Mar 31, 2009 TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P N N N N N | Marker |
|--|------------------------------|----------------------------------|---|---|---------------|
| | IFGain:Lov | W #Atten: 30 dB | Mkr | 3 2.417 05 GHz | Marker Tab |
| 0 dB/div Ref 20.0 | 0 dBm | | 1 | 1.47 dBm | |
| | | 2 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | -1.20 dBm | Marker Coun |
| 0.0 | <u>ب</u> | M Y | -V~ | | Į. |
| 0.0 | - A | | - Vry | | Coup Marke |
| 0.0 | in many 1 | | - Ungulow | have some winder and a second | 0n <u>(</u> |
| 0.0 material & have the second | | | | | |
| 70.0 | | | | | |
| enter 2.41200 GH Res BW 100 kHz | | /BW 100 kHz | #Sweep | Span 50.00 MHz 500 ms (1001 pts) | |
| KR MODE TRC SCL | × | Y | FUNCTION FUNCTION WIDTH | | |
| 1 N 1 F 2 N 1 F 3 N 1 F | 2.415 05 GHz 2.407 00 GHz | 4.80 dBm 2.83 dBm 1.47 dBm | | | |
| 4 1 T 5 1 1 T | 2.417 05 GHz | 1.47 dBm | | | All Markers C |
| 6 7 | | | | | |
| 8 9 0 | | | | | Mo |
| 1 | | | | | 2 0 |
| 2 | | | | | |

| Product | : | Multi-functional Gigabit Wireless N Router |
|-----------|---|---|
| Test Item | : | Occupied Bandwidth Data |
| Test Site | : | No.3 OATS |
| Test Mode | : | Mode 1: Transmitter (802.11b 1Mbps)-Adapter 1 (2437MHz) |

| Channel No. | Frequency (MHz) | Measurement Level (kHz) | Required Limit (kHz) | Result |
|-------------|--------------------|----------------------------|-------------------------|--------|
| 6 | 2437.00 | 10050 | >500 | Pass |

Figure Channel 6:

| Marker | 6 AM Mar 31, 2009 RACE 1 2 3 4 5 6 TYPE MWWWWW | TRAC | ALIGN OFF Pwr(RMS) | #Avg Ty | | | | 42050000 | 50 s r 3 2.4 | rker |
|---------------|--|-----------------|-----------------------|----------|-------|-------------------|--|------------------------|------------------------|--------|
| Marker Tal | DETPNNNNN | DE | | | | | : RF PNO: Fast IFGain:Lov | Input: | | |
| | 2 05 GHz 2.13 dBm | | Mkr3 | | | | m | f 20.00 dBr | v Ref | dB/di |
| Marker Cour | | | | 3 | | 2 () ¹ | | | | |
| | -0.36 dBm | | | 7 | MARIN | Juniary | | | | |
| | | | | W. | ¥ | prv | - V | | | 0 |
| Couple | | | | 1 | _ | | wh f | | | 0 |
| On Marke | | (| 4 M | V | - | | Man and speed | Warding Mr. A. Milling | | 0 |
| | - | wa Jun har land | hay don't | | | | 0-0-wi/ F | nter the state of the | marina | |
| | | | | | | | | | | 0 440 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | s 50.00 MHz (1001 pts) | | #Sweep # | | 2 | 'BW 100 kHz | #V | | 2.4370 W 100 | |
| | TION VALUE | FUNCTIO | ICTION WIDTH | ICTION F | | Y | X | | e TRC SCL | NODE |
| T | STION VALUE | | | | IBm | 5.64 d | 0 404 00 011- | | 1 f | N |
| Ţ | | | | | Bm | | 2.434 00 GHz 2 432 00 GHz | | | |
| | | | | | | 2.58 d 2.13 d | 2.434 00 GHz 2.432 00 GHz 2.442 05 GHz | | | N N |
| All Markers (| | | | | | 2.58 d | 2.432 00 GHz | | 1 f | N |
| All Markers (| | | | | | 2.58 d | 2.432 00 GHz | | 1 f | N |
| All Markers (| | | | | | 2.58 d | 2.432 00 GHz | | 1 f | NN |
| | | | | | | 2.58 d | 2.432 00 GHz | | 1 f | NN |

| Product | : | Multi-functional Gigabit Wireless N Router |
|-----------|---|---|
| Test Item | : | Occupied Bandwidth Data |
| Test Site | : | No.3 OATS |
| Test Mode | : | Mode 1: Transmitter (802.11b 1Mbps)-Adapter 1 (2462MHz) |

| Channel No. | Frequency (MHz) | Measurement Level (kHz) | Required Limit (kHz) | Result |
|-------------|--------------------|----------------------------|-------------------------|--------|
| 11 | 2462.00 | 10000 | >500 | Pass |

Figure Channel 11:

| | 50 Ω | | rept SA | | AC SE | NSE:INT | | 🛕 ALIGN OFF | | AM Mar 31, 2009 | Marke | |
|---------------------|------------|---|--------------------|------------------|------------------|---------|---------|-----------------|--------|----------------------------|-----------|-------------|
| arker | 3 2.46 | 700000 | | Hz NO: Fast G | Trig: Fre | e Run | #Avg T | ype: Pwr(RMS | TY | CE 1 2 3 4 5 6 PE MWWWW | Marke | r |
| | | inpu | IFO | Gain:Low | #Atten: 3 | 0 dB | | | | PNNNNN | Marker | Tab |
| dB/div | Ref | 20.00 dE | 3m | | | | | Mkr | | 00 GHz 79 dBm | <u>On</u> | c |
| | | | | | 2 | 1 | 3 | | | | Marker | |
| | | | | | Juning | Marine | LU. | | | -0.50 dBm | Marker C | oun [Off |
| ~ | | | | M | Л | Ψ | M | | | | | lou |
| .0 | | | | J. | | | Γ 'n | | | | - | |
| | | | | M | | | 1 | <u>A</u> | | | | oup |
| .0 | | water and the second | Mar | N V | | | l l | My way alwarder | h., | | On | arke (|
| .0 | marken | way have a | | | | | | - And And a | munn | Marrie Jonathingo | | |
| | | | | | | | | | | | | |
| .0 | | | | - | | | - | | | | | |
| .0 | | | | | 6 | | - | | | | | |
| nter 2 | 2.46200 | GHZ | | | 20 | | | | Span : | 50.00 MHz | | |
| | N 100 k | | | #VB | N 100 kHz | | | #Sweep | 500 ms | (1001 pts) | | |
| | | | × | ص عد عد | Y | FL | JNCTION | FUNCTION WIDTH | FUNCT | ON VALUE | | |
| | TRC SCL | | 2.465 0 | | 5.50 d | | | | | | | |
| MODE | 1 f | | | | | Bmi | | | | | | |
| MODE N N | | | 2.457 0 | | 2.63 d | | | | | | | |
| NODE N N N | 1 f 1 f | | 2.457 0 2.467 0 | | 2.63 d 2.79 d | | | | | | All Marke | ers (|
| N N N | 1 f 1 f | | | | | | | | | | All Marke | ers (|
| MODE N N N | 1 f 1 f | | | | | | | | | | All Marke | ers C |
| | 1 f 1 f | | | | | | | | | | All Marke | |
| | 1 f 1 f | | | | | | | | | | All Marke | Mo 2 o |

| Product | : | Multi-functional Gigabit Wireless N Router |
|-----------|---|---|
| Test Item | : | Occupied Bandwidth Data |
| Test Site | : | No.3 OATS |
| Test Mode | : | Mode 2: Transmitter (802.11g 6Mbps)-Adapter 1 (2412MHz) |

| Channel No. | Frequency (MHz) | Measurement Level (kHz) | Required Limit (kHz) | Result |
|-------------|--------------------|----------------------------|-------------------------|--------|
| 1 | 2412.00 | 16250 | >500 | Pass |

Figure Channel 1:

| Swept SA | AC SENSE:INT | ALIGN OFF | 11:23:18 AM Mar 31, 2009 | Marker |
|------------------------------|---|---|--|--|
| | Trig: Free Run #Atten: 30 dB | #Avg Type, Pwr(KWS | DET P N N N N | Marker Tab |
| dBm | | Mkr | 3 2.420 10 GHz -1.11 dBm | <u>On</u> (|
| 2 John Mar | 1 | | -3.00 dDm | Marker Coun |
| hours low and and and | | have a second | how we will the state of the st | Coup Marke On |
| | | | | |
| #VBV | V 100 kHz | #Sweep | Span 50.00 MHz 500 ms (1001 pts) | |
| × 2.414 50 GHz | 3.00 dBm | INCTION FUNCTION WIDTH | FUNCTION VALUE | |
| 2.403 86 GHz 2.420 10 GHz | -0.73 dBm -1.11 dBm | | | All Markers |
| | | | | м |
| | IFGain:Low dBm 2 4 4 4 4 4 4 4 4 4 4 4 4 4 | 000000 GHz Trig: Free Run nput: RF PN0: Fast Trig: Free Run dBm #Atten: 30 dB dbm | 000000 GHz Trig: Free Run #Avg Type: Pwr(RMS) nput: RF PNO: Fast #Atten: 30 dB dBm 1 3 dbm 1 3 dbm 1 3 dbm 1 3 dbm 4 4 dbm 4 4 <td>000000 GHz Trig: Free Run #Avg Type: Pwr(RMS) Trace: 12.345 6 nput: RF PNO: Fast Trig: Free Run #Atten: 30 dB dBm -1.11 dBm 2 1 -1.11 dBm 2 1 -300 dBm 2 1 -300 dBm 3 -300 dBm 4 4 4 5</td> | 000000 GHz Trig: Free Run #Avg Type: Pwr(RMS) Trace: 12.345 6 nput: RF PNO: Fast Trig: Free Run #Atten: 30 dB dBm -1.11 dBm 2 1 -1.11 dBm 2 1 -300 dBm 2 1 -300 dBm 3 -300 dBm 4 4 4 5 |

| Product | : | Multi-functional Gigabit Wireless N Router |
|-----------|---|---|
| Test Item | : | Occupied Bandwidth Data |
| Test Site | : | No.3 OATS |
| Test Mode | : | Mode 2: Transmitter (802.11g 6Mbps)-Adapter 1 (2437MHz) |

| Channel No. | Frequency (MHz) | Measurement Level (kHz) | Required Limit (kHz) | Result |
|-------------|--------------------|----------------------------|-------------------------|--------|
| 6 | 2437.00 | 16300 | >500 | Pass |

Figure Channel 6:

| Marker | 11:27:10 AM Mar 31, 2009 TRACE 1 2 3 4 5 6 TYPE MWWWWW | ALIGN OFF e: Pwr(RMS) | | SENSE:INT | | 0000 GHz | 4515000 | er 3 2.4 | arke |
|------------------------------|--|--|------------|-----------|--|------------------------------|---|--------------------|--------------------------------|
| Marker Tab | DET P N N N N N | | | | | : RF PNO: Fast IFGain:Lov | Inpu | | |
| <u>On</u> | 2.445 15 GHz -0.08 dBm | Mkr3 | | | | m | f 20.00 dE | div Re | dB/ |
| Marker Coun | | | 3 | | 1 | | | | |
| [Off | -2.74 dBm | | - when the | monder | wellow Constraints and the second | | | | 00 |
| | | | | | | لمر ا | | | |
| Cour Marke | | and the state of t | | | | when the second | and the second level | | |
| On g | Mullingellentresserver | Р Г | | | | | held the second s | washington |).0 u . |
| | Cristowe | | | | | | | ······ | |
| | | | | | | | | | |
| | | | | | | | | | |
| | Span 50.00 MHz 0 ms (1001 pts) | #Sweep 5 | | z | 'BW 100 kHz | #V | | r 2.4370 BW 100 | |
| | | | | | Y | × | | de tro sci | R MO |
| | FUNCTION VALUE | NCTION WIDTH | ICTION F | | 200 - | | | | 1 . |
| | FUNCTION VALUE | NCTION WIDTH | | dBm | 3.26 d -0.03 d | 2.430 75 GHz 2.428 85 GHz | | 1 f 1 f | 1 N 2 N |
| All Markers (| FUNCTION VALUE | NCTION WIDTH | | dBm | | 2.430 75 GHz | | 1 f 1 f | 2 N 3 N 4 |
| All Markers (| FUNCTION VALUE | NCTION WIDTH | | dBm | -0.03 d | 2.430 75 GHz 2.428 85 GHz | | 1 f 1 f | 2 N 3 N 4 5 |
| | FUNCTION VALUE | NCTION WIDTH | | dBm | -0.03 d | 2.430 75 GHz 2.428 85 GHz | | 1 f 1 f | 2 N 5 N 4 5 7 8 |
| All Markers (Markers 2 a | FUNCTION VALUE | | | dBm | -0.03 d | 2.430 75 GHz 2.428 85 GHz | | 1 f 1 f | 2 N 3 N 4 5 7 |

| : | Multi-functional Gigabit Wireless N Router |
|---|---|
| : | Occupied Bandwidth Data |
| : | No.3 OATS |
| : | Mode 2: Transmitter (802.11g 6Mbps)-Adapter 1 (2462MHz) |
| | |

| Channel No. | Frequency (MHz) | Measurement Level (kHz) | Required Limit (kHz) | Result |
|-------------|--------------------|----------------------------|-------------------------|--------|
| 11 | 2462.00 | 16300 | >500 | Pass |

Figure Channel 11:

| Marker | M Mar 31, 2009 | | ALIGN OFF | | EINT | AC SENS | | | | 50 Ω | | |
|----------------------|-------------------------------------|-------------------|-----------------|-------------|---------------|------------------------------|------------------------------|--------------|--------------|----------------|----------------|------|
| Marker Marker Tal | 123456 E MWWWWW T P N N N N N | TYP | e: Pwr(RMS) | #Avg Ty | | Trig: Free F #Atten: 30 d | Hz 10: Fast ⊂ Gain:Low | | | 2.47 | er 3 | ırk |
| | 15 GHz 26 dBm | | Mkr3 | | | | | Bm | 20.00 c | Ref | div | dB/ |
| Marker Cour | | | | 1 | | | • | | 20.000 | | urr | |
| [Of | -4.36 dBm | | | - minualina | www.alivanter | antivalentera p | 2 Almanda | | | | | 00- |
| | | | | | | Ų. | | | | | | .0 - |
| Cou | | 0 | and patrimenter | | | | Part . | www. | | | | |
| Marke On | | the way way | N m | | | | | the free | May Works | | | |
| | the manual and | tonul was by What | | | | | | | provenuer | WINNIA | and the second | • |
| | | | | | | | | | | | | .0 - |
| | | | | | | | | | | | | .0 - |
| | 0.00 MHz 1001 pts) | | #Sweep | | | 100 kHz | #VB | |) GHz (Hz | 16200 100 I | | |
| | N VALUE | FUNCTIO | NCTION WIDTH | TION | | Y 1.64 dBr | | × 2.467 0 | | | IDE TR | |
| | | | | | n | -2.02 dBr -2.26 dBr | 5 GHz | 2.453 8 | | f | | 1 |
| All Markers | | | | | | -2.20 001 | | 2.470 1 | | | · · | F |
| | | | | | | | | | | | _ | |
| м | | | | | | | 0 | | | | | |
| 20 | | | | | | | Ĵ | | | | | |
| | | | | | | | | | | | | |

| Product | : | Multi-functional Gigabit Wireless N Router |
|-----------|---|--|
| Test Item | : | Occupied Bandwidth Data |
| Test Site | : | No.3 OATS |
| Test Mode | : | Mode 3: Transmitter (802.11n MCS8 13Mbps 20M-BW)-Adapter 1 (2412MHz) |

| Channel No. | Frequency (MHz) | Measurement Level (kHz) | Required Limit (kHz) | Result |
|-------------|--------------------|----------------------------|-------------------------|--------|
| 1 | 2412.00 | 17500 | >500 | Pass |

Figure Channel 1:

| 6 Marker | 11:47:38 AM Mar 31, 2009 TRACE 1 2 3 4 5 6 TYPE MWWWWW | ALIGN OFF ype: Pwr(RMS) | #Avg | AC SENSE | 00000 GHz | | |
|------------------|--|----------------------------|-----------------------|---------------------------|-----------------------------------|------------------------------|------------------------|
| Marker Ta | DETPNNNN | | 1 | | ıt: RF PNO: Fast IFGain:Lov | Inpu | |
| z <u>on</u> | 2.420 75 GHz 0.25 dBm | Mkr3 | | | | ef Offset 10 d ef 20.00 d | |
| Marker Cour | | 3 | ¹ | | 2 | | |
| " [Of | -0.12 dBm | | and the second second | A COLOR OF A COLOR | | | |
| | | N. | | | لمرم | | |
| Cou Marke | | Monthly | | | when the work | | |
| On | the work was and work when the | 1 ->~W | | | | - When the Archive | . Larriellaste |
| 1 | in white and | | | | | - John Marshin Marth | |
| | | | | | | | |
| | Span 50.00 MHz | | | | | | ter 2.412 |
| 7 | | | | | | OU GHZ | |
| | 500 ms (1001 pts) | #Sweep 5 | | BW 100 kHz | #V | 0 kHz | s BW 10 |
| | | #Sweep 5 | FUNCTION | Y | X | CL | MODE TRC 1 |
| | 500 ms (1001 pts) | | FUNCTION | Y 5.88 dBm 0.18 dBm | × 2.417 00 GHz 2.403 25 GHz | EL CONTRACTOR | Mode TRC N 1 N 1 |
| | 500 ms (1001 pts) | | FUNCTION | Y 5.88 dBm | × 2.417 00 GHz | CL | Mode TRC N 1 N 1 |
| | 500 ms (1001 pts) | | FUNCTION | Y 5.88 dBm 0.18 dBm | × 2.417 00 GHz 2.403 25 GHz | EL CONTRACTOR | Mode TRC N 1 N 1 |
|) All Markers | 500 ms (1001 pts) | | FUNCTION | Y 5.88 dBm 0.18 dBm | × 2.417 00 GHz 2.403 25 GHz | EL CONTRACTOR | Mode TRC N 1 N 1 |
| | 500 ms (1001 pts) | | FUNCTION | Y 5.88 dBm 0.18 dBm | × 2.417 00 GHz 2.403 25 GHz | EL CONTRACTOR | Mode TRC N 1 N 1 |

| Product | : | Multi-functional Gigabit Wireless N Router |
|-----------|---|--|
| Test Item | : | Occupied Bandwidth Data |
| Test Site | : | No.3 OATS |
| Test Mode | : | Mode 3: Transmitter (802.11n MCS8 13Mbps 20M-BW)-Adapter 1 (2437MHz) |

| Channel No. | Frequency (MHz) | Measurement Level (kHz) | Required Limit (kHz) | Result |
|-------------|--------------------|----------------------------|-------------------------|--------|
| 6 | 2437.00 | 17500 | >500 | Pass |

Figure Channel 6:

| arkei | 50 r 3 2. 4 | 4458000 | 00000 G | iHz NO: Fast | | | ALIGN OFF | IS) TRA | PM Mar 31, 2009 CE 1 2 3 4 5 6 PE M WWWWW | Marker |
|---|-----------------------|-----------------------------------|--------------------|----------------------|---|-------------|---------------|----------------|---|---------------------------------------|
| | | In | | NU: Fast Gain:Low | #Atten: 20 | | | D | ET P NNNNN | Marker Tab |
|) dB/di | | of Offset 10 of 20.00 c | | | | | Mk | r3 2.445 4. | 80 GHz 24 dBm | <u>On</u> |
| | | | | 2 | | 1 | 3 | | | Marker Coun |
| .00 | | | | Justia | and | water water | white | | 3.83 dBm | [Off] |
| 0.0 | | | | pl | | | | | | |
| 0.0 | | | when a when | ¢. | | | - h. h. | | | Cou |
| 0.0 | | he wat | Marine An | | | | why we way | hall as | | Marke |
| 0.0 | and WALLAND | wandawin | | | | | | hall warry of | Winner | On |
| 0.0 | | | | | | | | | - n. | |
| 0.0 | | | | - | | | | | | |
| 0.0 | | | | | | | | - 0 | | |
| | 2 4 2 7 | 00 GHz | | | | | 25 | Cnon é | 50.00 MHz | |
| | | | | #VE | 3W 100 kHz | | #Sweep | 500 ms (| | |
| Res B | | | | _ | Y | FUNCTION | FUNCTION WIDT | H FUNCTI | ON VALUE | |
| Res B | TRC SC | | X | 0.011 | a aa 15 | | | | | |
| Res B Remote 1 N 2 N | | | 2.442 0 2.428 2 | 5 GHz | 9.83 dE 5.04 dE | 3m | | | | · · · · · · · · · · · · · · · · · · · |
| Res B Kr Mode 1 N 2 N 3 N | TRD SO | | 2.442 0 | 5 GHz | | 3m | | | | All Markers |
| Res B 1 N 2 N 3 N 4 5 | 1 f 1 f | | 2.442 0 2.428 2 | 5 GHz | 5.04 dE | 3m | | | | All Markers |
| Res B 1 N 2 N 3 N 4 5 6 7 | 1 f 1 f | | 2.442 0 2.428 2 | 5 GHz | 5.04 dE | 3m | | | | All Markers (|
| Res B 1 N 2 N 3 N 4 5 6 | 1 f 1 f | | 2.442 0 2.428 2 | 5 GHz | 5.04 dE | 3m | | | | |
| Res B 1 N 2 N 3 N 4 5 3 7 3 | 1 f 1 f | | 2.442 0 2.428 2 | 5 GHz | 5.04 dE | 3m | | | | All Markers |

| Product | : | Multi-functional Gigabit Wireless N Router |
|-----------|---|--|
| Test Item | : | Occupied Bandwidth Data |
| Test Site | : | No.3 OATS |
| Test Mode | : | Mode 3: Transmitter (802.11n MCS8 13Mbps 20M-BW)-Adapter 1 (2462MHz) |

| Channel No. | Frequency (MHz) | Measurement Level (kHz) | Required Limit (kHz) | Result |
|-------------|--------------------|----------------------------|-------------------------|--------|
| 11 | 2462.00 | 17450 | >500 | Pass |

Figure Channel 11:

| | | | | | | | | | wept SA | nalyzer - S | | Spect | lent : | Agi |
|-------------|------------------|----------------|-------------------------|-----------|---------|-------------|--------------------------|------------------------|--------------|----------------------|-------------|-------|----------|-----------------|
| Marker | Mar 31, 2009 | TRACE | ALIGN OFF : Pwr(RMS) | | NT | SENSE:1 | AC S | Hz | 00000 G | 707500 | 50Ω 2/17 | 2 | kor | ar |
| Marker Tal | | TYP | , | | n | | Trig: Fr #Atten: | IO: Fast (iain:Low | ut: RF PI | | 2.47 | 5 | NCI | |
| n | 75 GHz 6 dBm | 3 2.470 0.1 | Mkr3 | | | | | | | Offset 10 20.00 d | | | 3/div |) dE |
| Marker Cour | | | | | (| | | 2 | | | | | | 9 0.0 |
| [Of | -0.34 dBm | | | Junha | harrent | Array March | , and the set of the set | Jown | | | _ | | | .00 |
| | | | | — <u></u> | | - P | | 1 | | | | | _ | .0 |
| Cou | | | My and have a | N. | | | | ¢' | ر بهالهم . | | | | | .0 .0 |
| n Marke | | Munomed and | W Why | | | | | | way VV | M | | | | 122 |
| | Mulanhampar | - WWWWW | | | | | | | | understander and | when | HANNI | Mar | .0 |
| | | | | | | | | - | | | | | 10203099 | .0 |
| | | | | | | | | | | | | | _ | .0 |
| | 0.00 MHz | Span 50 | - 11 | | | 10.5 | | | | GHz | 5200 | 2.46 | L ter | en' |
| | 1001 pts) | 500 ms (1 | #Sweep \$ | | | Hz | N 100 kH | #VB | | Hz | 00 k | W 1 | s B | te: |
| | N VALUE | FUNCTIO | ICTION WIDTH | Fl | FUNC | 6 dBm | Y 5.66 | | × 2.467 0 | | SCL f | 1 | MODE | R |
| | | | | 1 | | l dBm | -0.01 |) GHz | 2.453 3 | | f | 1 | N | 2 |
| All Markers | | | | | | 6 dBm | 0.16 | GHZ | 2.4707 | | Г | 1 | N | I |
| | | | | | | | | | | | | | | |
| 10000 | | | | | | | | | | | | | | 7 } |
| Mo | | | | | | | | | | | | | | 9 D |
| 2 c | | | | | | | | | | | - | | - | 1 |
| | | | STATUS | | | | | | | | | | | |