The Measurement of Conducted Spurious Emissions

CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

1. LIMITS OF CONDUCTED SPURIOUS EMISSIONS EASUREMENT

Below 20dB of the highest emission level of operating band (in 100KHz Resolution Bandwidth, see Section 15.247(c)). Emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the limits specified in Section 15.209(a) (see Section 15.205(c)).

2. TEST INSTRUMENTS

| Description & Manufacturer | Model No. | Serial No. | Calibrated Until |
|----------------------------|---------------------|------------|------------------|
| R&S SPECTRUM ANALYZER | FSP40 | 100036 | Nov. 27, 2005 |
| High pass filter | WHK3.1/18G- 10SS | SN4 | Jun. 8, 2005 |

NOTE:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

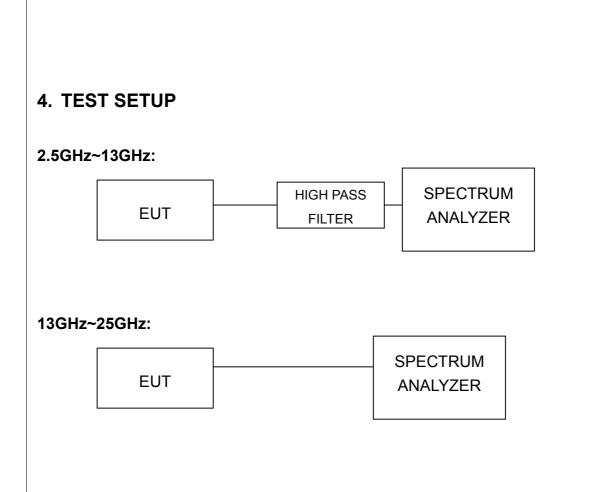
3. TEST PROCEDURE

2.5GHz~13GHz:

The transmitter output was connected to the spectrum analyzer via a low lose cable and a high pass filter. Set both RBW and VBW of spectrum analyzer to 100 kHz with suitable frequency span including 100 kHz bandwidth from band edge. The band edges was measured and recorded.

13GHz~25GHz:

The transmitter output was connected to the spectrum analyzer via a low lose cable. Set both RBW and VBW of spectrum analyzer to 100 kHz with suitable frequency span including 100 kHz bandwidth from band edge. The band edges was measured and recorded.



5. EUT OPERATING CONDITIONS

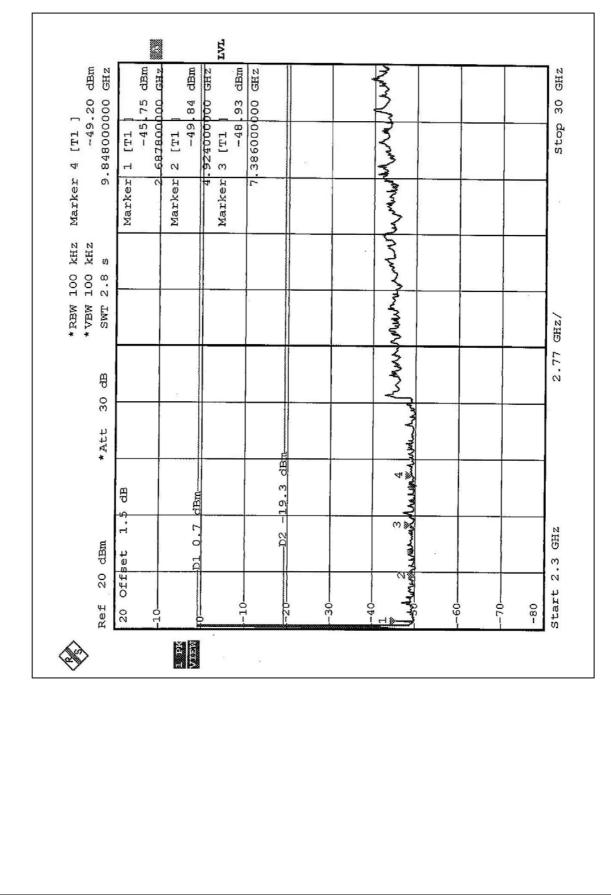
The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

TEST RESULTS - For 802.11b

The spectrum plots are attached on the following 2 pages. It shows compliance with the requirement in part 15.247(C), 15.205 and 15.209.

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|-------------------------------------|--------------------------------|---------------------------------|---------------|-------------|------|--|----|----|
| 04 dBm 00 GHz | .59 dBm | 1 31 | | 1 F I | | MAN | | |
| er 4 [T1] -49.94 12.06000000 | 1 [T1] -49.59 824000000 | 2 [T1]. -50 05 236000000 | [T1] -49.2 | 9.648000000 | | T | | |
| - 4 [2.060 | | | | 9.648 | - | A.A.A.A.A.A.A.A.A.A.A.A.A.A.A.A.A.A.A. | | |
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| kHz kHz s | | | <u> </u> | | | 3 | | - |
| | | | | | | 2 | | |
| *RBW 100 *VBW 100 SWT 2.8 | | | | | | Jours | | |
| | | | | | | VYMMY | | |
| 30 dB | | | | | | Z | | - |
| *Att | | | | | | 4 P | | |
| * | | | | 4 dBm | | C W | | |
| | 5 dB | 6 dBm | | -1.7.64 | | | | |
| dBm | t 1.5 | 2.36 | | -D2 | | 2 | | |
| 20 0 | Offset | | | | | | | |
| Ref | 20 0 | | C F | -20- | -30- | 40- | 60 | 70 |
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TEST RESULTS – For 802.11g

The spectrum plots are attached on the following 2 pages. It shows compliance with the requirement in part 15.247(C), 15.205 and 15.209.

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|-------------------------------------|--------------------------------|-----------------------|-----------------|-----------------|-----------|--|-----|--------|
| 75 dBm 00 GHz | .47 dBm | 23 dBm | | 00 GH | | 1 North | | 243 Oc |
| er 4 [T1] -48.75 12.06000000 | 1 [T1 -49,47 824000000 | 2 [T1] -49.23 dBm | T1 -49 4 | 9.648000000 GHz | | - The second | | |
| 4 [| | 2 [| | . 648 | <i>.</i> | Mar. | | 0 |
| Marker 12 | Marker 4 | Marker | Marker | ທ | | whether . | | |
| | 2 | 24 | 2 | | | | | |
| 100 kHz 100 kHz 2.8 s | | | | | | Mary Row | | |
| *RBW 100 *VBW 100 SWT 2.8 | | | | | | M. martin martin M | | /~m |
| | | | | | | - my | | LL C |
| 30 dB | | | | | | 2 | | ` |
| *Att | | | | , | | 4 de la companya de l | | |
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| | dB (| | | | 5.0.7 | Buyda | | |
| E | 1.5 | <u>+</u> .0 | | | 20 | 24484 | | - 110 |
| 20 dBm | Offset | 10 | | | | L L MARA | | , , |
| Ref | 20 Of | | | 01 | -30 | -40 | -60 | -80 |
| × | <u></u> | 1 PY | | | 1 <u></u> | | | 0 |
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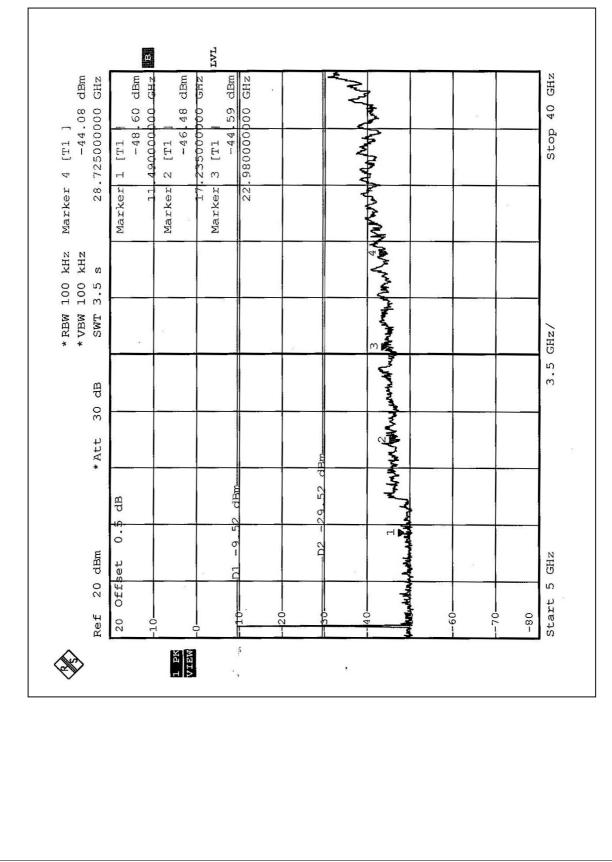
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| *RBM 100 KHZ Marker 4 [T1] *VBM 100 KHZ Marker 4 [T1] *VBM 100 KHZ 2.3 12.31000000 GHZ 20 Offbet 1.5 dB 20 Offbet 1.5 dB -49.50 dBm -49.50 dBm -49.50 dBm -20 D1 -2.11 dBm Marker 2 [T1] -30 D1 -2.11 dBm -20 D1 -2.11 dB | dBm GH z | dBm GHz | dBm | LVL | dBm GHz | | | | 2 | | | |
|---|-----------------------|----------------------|---------------------------------------|------------|------------|------|------|-----|---------|----|----|-----|
| *RBW 100 kHz *RBW 100 kHz Marke *VBW 100 kHz *VBW 100 kHz *VBW 100 kHz Marke 20 offset 1:5 dB *Att 30 dB SWT 2.8 s 1 10 D1 -2.11 dBm Marke Marke -0 D1 -2.11 dBm Marke Marke -10 D1 -2.11 dBm Marke Marke -20 D2 -22.11 dBm Marke Marke -10 -10 Marke Marke -20 D2 -22.11 dBm Marke Marke -20 -10 -10 Marke -10 -10 Marke Marke -20 -10 Marke Marke -30 -30 -40 Marke -10 -10 -10 -10 -60 -10 -10 -10 -70 -80 -70 -70 | | | 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | | 07 d1 | | | | Mr. | | | |
| *RBW 100 kHz *RBW 100 kHz Marke *VBW 100 kHz *VBW 100 kHz *VBW 100 kHz Marke 20 offset 1:5 dB *Att 30 dB SWT 2.8 s 1 10 D1 -2.11 dBm Marke Marke -0 D1 -2.11 dBm Marke Marke -10 D1 -2.11 dBm Marke Marke -20 D2 -22.11 dBm Marke Marke -10 -10 Marke Marke -20 D2 -22.11 dBm Marke Marke -20 -10 -10 Marke -10 -10 Marke Marke -20 -10 Marke Marke -30 -30 -40 Marke -10 -10 -10 -10 -60 -10 -10 -10 -70 -80 -70 -70 | T1] -48. 0000 | T1 -49. 0000 | T1 -49. | LT L | -50. | | | | A. A. | | - | |
| *RBW 100 kHz *RBW 100 kHz Marke *VBW 100 kHz *VBW 100 kHz *VBW 100 kHz Marke 20 offset 1:5 dB *Att 30 dB SWT 2.8 s 1 10 D1 -2.11 dBm Marke Marke -0 D1 -2.11 dBm Marke Marke -10 D2 -22.11 dBm Marke Marke -20 D2 -22.11 dBm Marke Marke -10 -10 Marke Marke -20 D2 -22.11 dBm Marke Marke -20 D2 -22.11 dBm Marke Marke -10 -10 -10 Marke Marke -20 -10 -20 -20 -20 Marke -30 -30 -30 -40 -40 -40 -40 -60 -70 | 4 [| | 2 | 3 [| 848 | 1 | | | mu hu | | | |
| *RBW 100 kHz Ref 20 dBm *Att 30 dB 20 offfset 1.5 dB *NT 2.8 s 10 5877 2.8 s -10 511 -2.11 dBm -10 -22.11 dBm -10 -20 -20 -22.11 dBm -30 -40 -30 -22.11 dBm -90 -22.11 dBm -90 -90 -90 -90 -90 -90 -60 -90 -60 -90 -60 -90 -70 -90 | rker 12 | rker 4 | rker | rker | 0 | | | | 3 | | | |
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| Ref 20 dBm *Att 30 20 Offset 1.5 dB *Att 30 -10 D1 -2.11 -10 D2 -22.11 -20 D2 -22.11 -30 -22.11 -40 -40 -50 -22.11 -10 -22.11 -10 -22.11 -20 -22.11 -10 -22.11 -20 -22.11 -10 -22.11 -20 -22.11 -30 -22.11 -10 -22.11 -20 -22.11 -30 -22.11 -30 -22.11 -30 -22.11 -40 -40 -60 -70 -80 -70 | | | | | | | | | M | | | |
| Ref 20 dBm *Att 20 Offset 1.5 dB *Att 20 Offset 1.5 dB *Att -10 D1 -2.11 dBm -20 D2 -22.11 dBm -30 -22.11 dBm *Att -40 -22.11 dBm *Att -30 -32 -32.11 dBm -10 -10 -22.11 dBm -20 -12 -22.11 dBm -30 -22 -22.11 dBm -30 -30 -22.11 dBm | | | | | | | | | 3 | | | |
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| Ref 20 Offset 1.5 dB 20 Offset 1.5 dB -10 D1 2.11 dBm -20 D1 -2.11 dBm -30 D2 -22.11 -40 -22.11 -32.11 -30 -12 -22.11 -30 -12 -22.11 -20 -12 -22.11 -30 -12 -22.11 -30 -22 -22.11 -30 -32 -22.11 -30 -32 -22.11 -30 -32 -22.11 -30 -32 -22.11 -30 -30 -22.11 -40 -30 -22.11 -60 -70 -70 -80 -60 -70 | * At | | | | _ | | | | | | | |
| Ref 20 dBm 20 Offset 1.5 20 Offset 1.5 -10 D1 -2.11 -20 D2 -22 -30 | | 9 | | dBm- | | | | | E SUA | | | |
| Ref 20 dB 20 Offset 10 0 -10 0 -10 0 -30 0 | | -19 | | | | | | | N N | | | |
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| Ref. 20 | 20 | Offs | | 1 | | | | | Link - | | | |
| | Ref | | 0 | | -10- | -20- | -30- | 070 | A REAL | 60 | 70 | -80 |
| | × | | 1 PK VIEW | | | | | | | | | |
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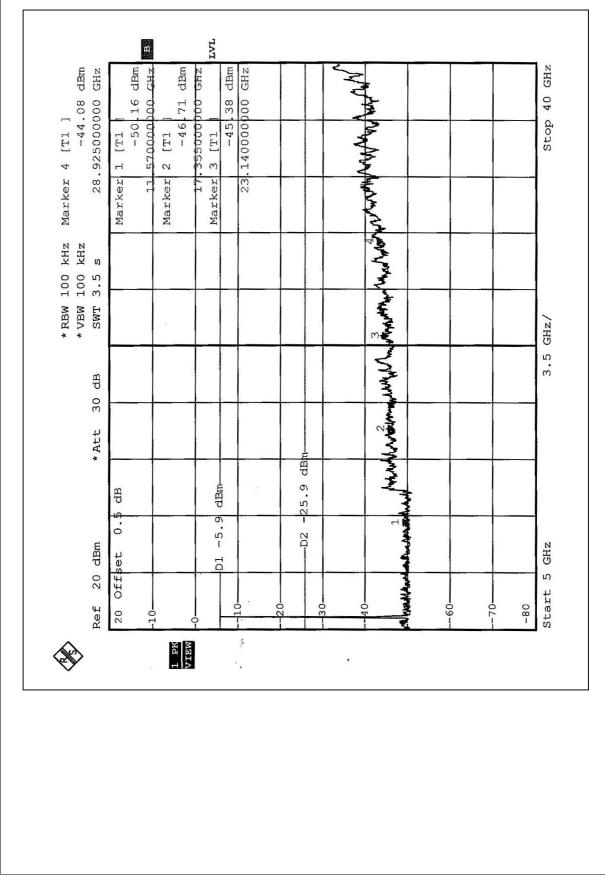
TEST RESULTS – For 802.11a, Normal mode (Antenna 1)

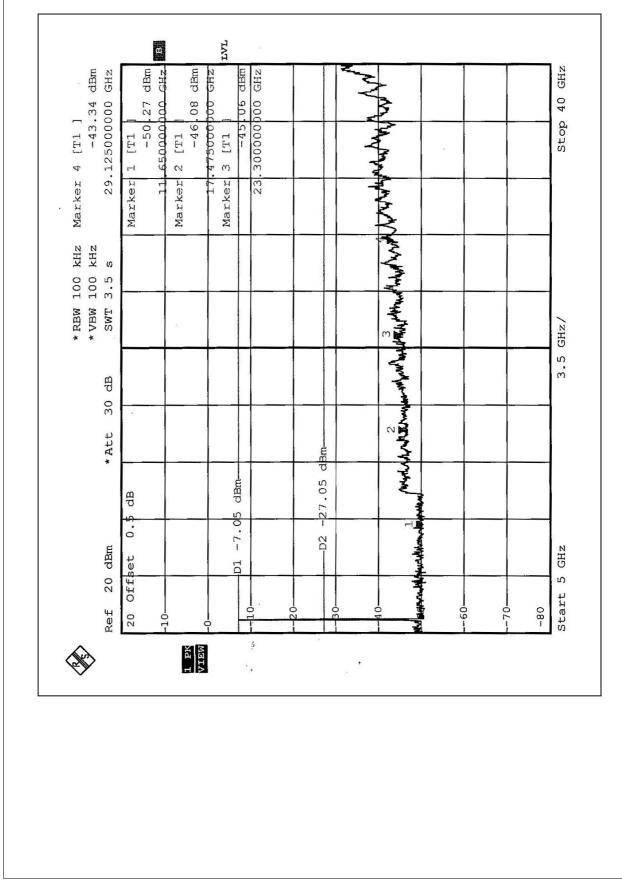
The spectrum plots are attached on the following 3 pages. It shows compliance with the requirement in part 15.247(C), 15.205 and 15.209.

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TEST RESULTS – For 802.11a, Turbo

The spectrum plots are attached on the following 2 pages. It shows compliance with the requirement in part 15.247(C), 15.205 and 15.209.

