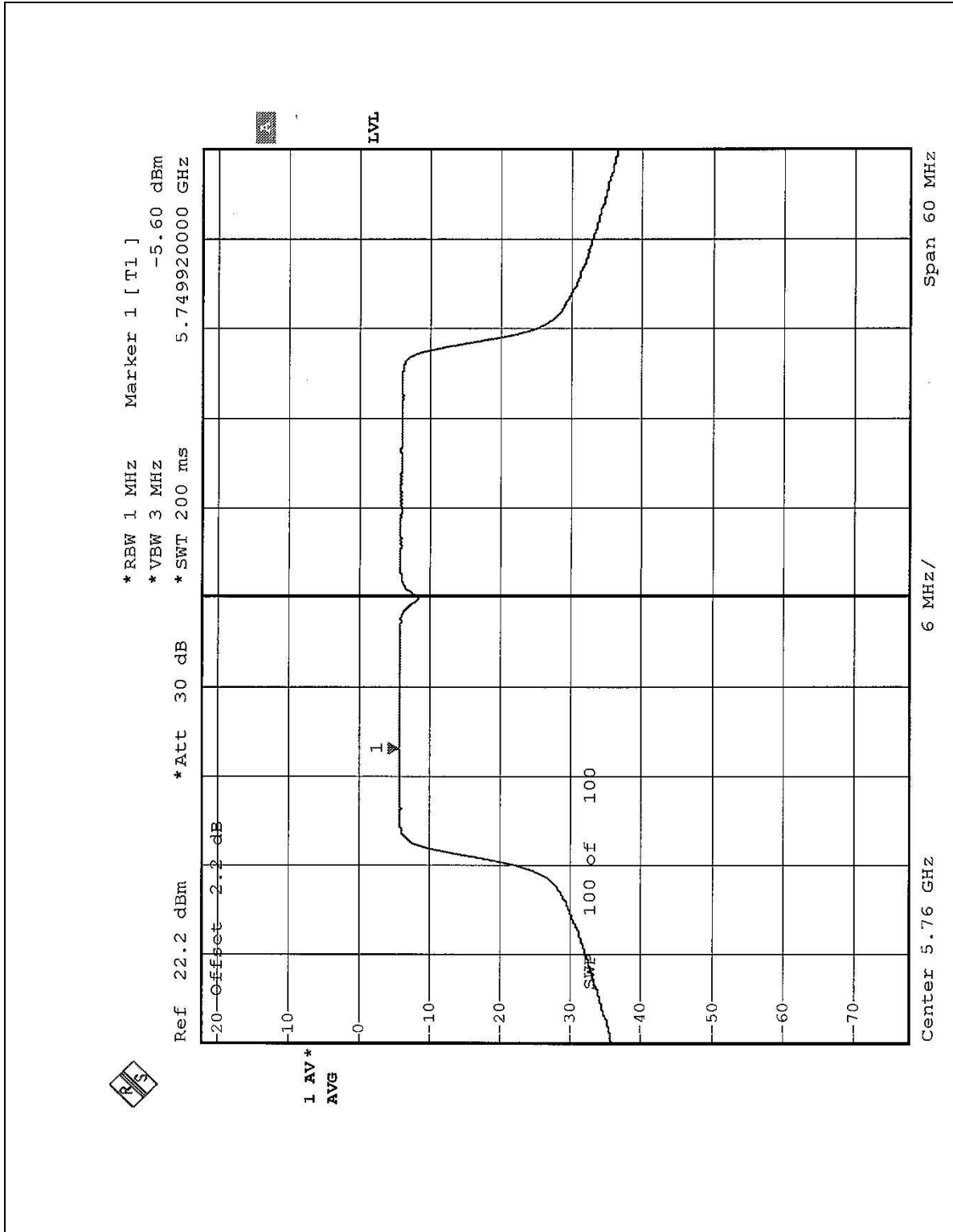


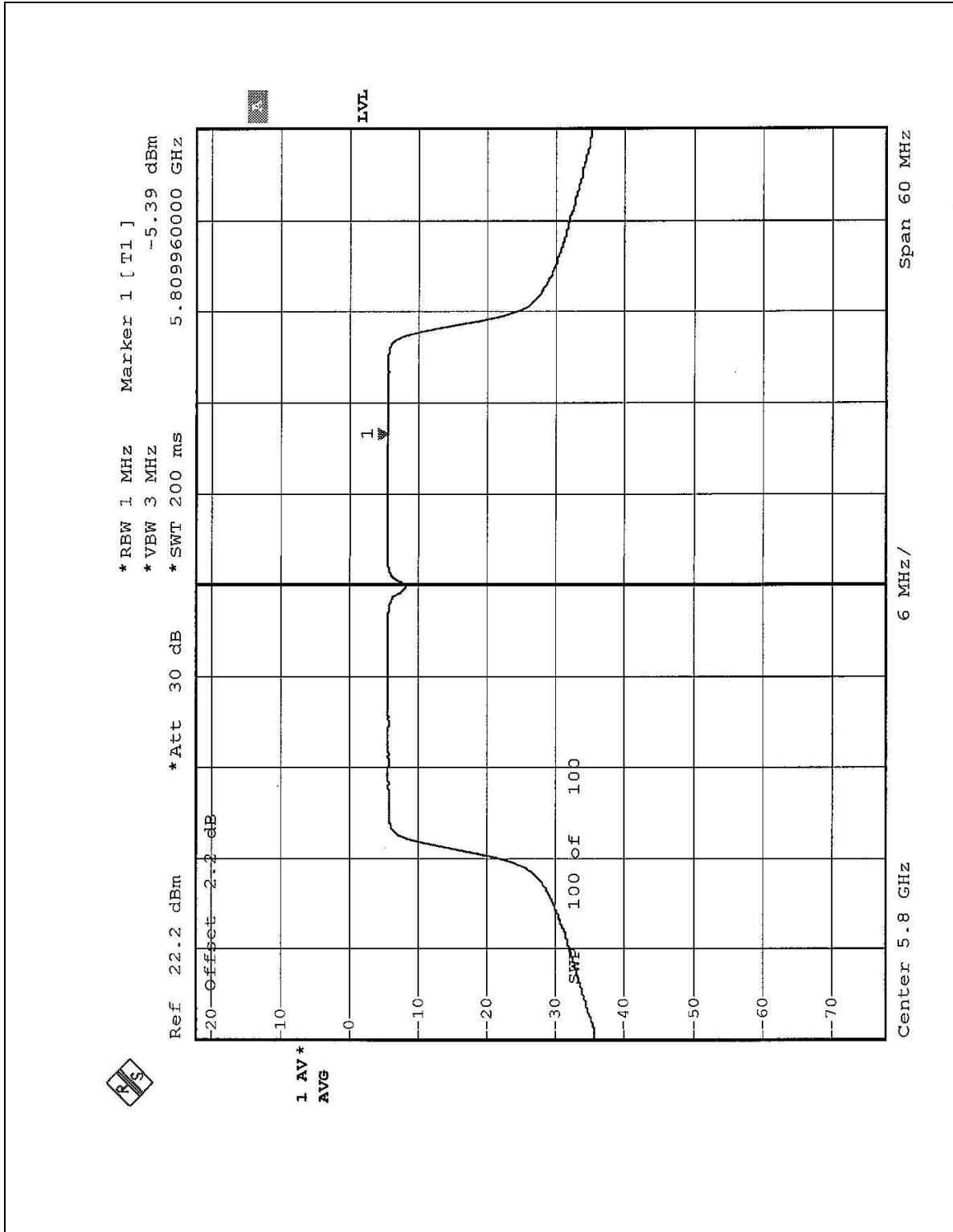


CHANNEL 4





CHANNEL 5





4.6 EFFECTIVE ISOTROPIC RADIATED POWER SPURIOUS EMISSIONS MEASUREMENT

4.6.1 LIMITS OF EFFECTIVE ISOTROPIC RADIATED POWER SPURIOUS EMISSIONS MEASUREMENT

- (1) For transmitters operating in the 5.15 – 5.25 GHz band:
All emissions outside of the 5.15 – 5.25 GHz band shall not exceed an EIRP of -27dBm/MHz .
- (2) For transmitters operating in the 5.25 – 5.35 GHz band:
All emissions outside of the 5.25 – 5.35 GHz band shall not exceed an EIRP of -27dBm/MHz .
- (3) For transmitters operating in the 5.725 – 5.825 GHz band:
All emissions operating within the frequency range from the band edge 10 MHz above or below the band edge shall not exceed an EIRP of -17dBm/MHz ; for frequencies 10 MHz or greater above or below the band edge shall not exceed an EIRP of -27dBm/MHz .

4.6.2 TEST INSTRUMENTS

| DESCRIPTION & MANUFACTURER | MODEL NO. | SERIAL NO. | CALIBRATED UNTIL |
|--|-------------|------------|------------------|
| * ROHDE & SCHWARZ Spectrum Analyzer | FSEK30 | 100049 | July 24, 2003 |
| ROHDE & SCHWARZ Signal Generator | 68247B | 984703 | May 31, 2003 |
| * EMCO Horn Antenna | 3115 | 5623 | May 23, 2003 |
| * EMCO Horn Antenna | 3115 | 5619 | May 22, 2003 |
| MITEQ Preamplifier | AMF-4D-0051 | 692677 | NA |
| MITEQ Preamplifier | AFS33-18002 | 690751 | NA |
| Broadband Horn Antenna | BBHA 9170 | 147 | May 30, 2003 |
| Broadband Horn Antenna | BBHA 9170 | 148 | May 31, 2003 |

NOTE:

1. The measurement uncertainty is less than $\pm 2.6\text{dB}$, which is calculated as per the NAMAS document NIS81.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.



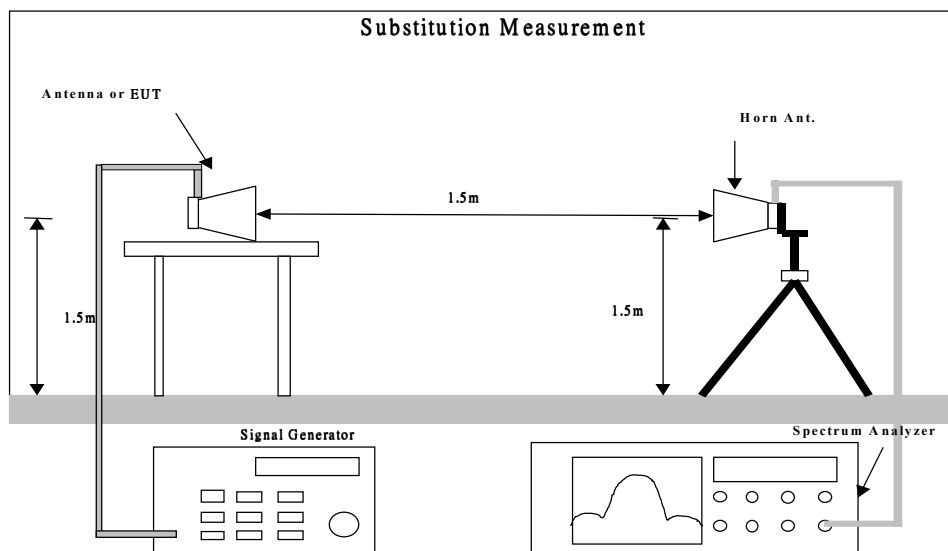
4.6.3 TEST PROCEDURE

1. The EUT was placed on the top of a rotating table 1.5 meters above the ground.
2. The table was rotated 360 degrees to determine the position of the highest radiation.
3. The EUT was set 1.5 meters away from the receiving antenna, which was mounted on antenna tower and its position at 1.5 m above the ground.
4. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading and recorded the value.
5. The EUT is replaced by a horn antenna connected to a signal generator tuned to the frequency of emission and with the same radiation nature.
6. The radiated power can be calculated via the factor and antenna gain.
7. Repeat step 1-6 for horizontal polarization.

4.6.4 DEVIATION FROM TEST STANDARD

No deviation

4.6.5 TEST SETUP



4.6.6 EUT OPERATING CONDITION

Same as Item 4.3.5



4.6.7 TEST RESULTS (A)

| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Normal Mode | CHANNEL | 1 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

| EIRP SPURIOUS EMISSION LEVEL | | | | | |
|------------------------------|----------------------|-------------|-------------|--------|--------|
| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
| 5180.00 | - | - | - | - | NOTE |
| 10357.90 | H | -37.6 | -27.0 | -10.6 | |
| 10360.30 | V | -29.2 | -27.0 | -2.2 | |
| 15540.00 | - | - | - | - | NOTE |
| 20717.70 | - | - | - | - | NOTE |
| 25877.96 | V | -51.5 | -27.0 | -24.5 | |
| 25917.94 | H | -53.7 | -27.0 | -26.7 | |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Normal Mode | CHANNEL | 4 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

EIRP SPURIOUS EMISSION LEVEL

| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
|-----------------|----------------------|-------------|-------------|--------|--------|
| 5240.00 | - | - | - | - | NOTE |
| 10479.30 | V | -31.7 | -27.0 | -4.7 | |
| 10482.63 | H | -36.7 | -27.0 | -9.7 | |
| 15720.00 | - | - | - | - | NOTE |
| 20962.30 | - | - | - | - | NOTE |
| 26167.54 | V | -51.7 | -27.0 | -24.7 | |
| 26182.46 | H | -52.4 | -27.0 | -25.4 | |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Normal Mode | CHANNEL | 5 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

EIRP SPURIOUS EMISSION LEVEL

| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
|-----------------|----------------------|-------------|-------------|--------|--------|
| 5260.00 | - | - | - | - | NOTE |
| 10518.30 | H | -35.0 | -27.0 | -8.0 | |
| 10518.50 | V | -29.6 | -27.0 | -2.6 | |
| 15780.00 | - | - | - | - | NOTE |
| 21042.91 | - | - | - | - | NOTE |
| 26192.99 | V | -51.3 | -27.0 | -24.3 | |
| 26272.04 | H | -52.5 | -27.0 | -25.5 | |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Normal Mode | CHANNEL | 8 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

| EIRP SPURIOUS EMISSION LEVEL | | | | | |
|-------------------------------------|-----------------------------|--------------------|--------------------|---------------|---------------|
| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
| 5320.00 | - | - | - | - | NOTE |
| 10640.00 | - | - | - | - | NOTE |
| 15960.00 | - | - | - | - | NOTE |
| 21243.63 | - | - | - | - | NOTE |
| 26534.67 | V | -49.7 | -27.0 | -22.7 | |
| 26616.53 | H | -50.9 | -27.0 | -23.9 | |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Normal Mode | CHANNEL | 9 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

EIRP SPURIOUS EMISSION LEVEL

| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
|-----------------|----------------------|-------------|-------------|--------|--------|
| 5715.00 | H | -37.2 | -27.0 | -10.2 | |
| 5715.00 | V | -33.0 | -27.0 | -6.0 | |
| 5725.00 | H | -24.5 | -17.0 | -7.5 | |
| 5725.00 | V | -24.4 | -17.0 | -7.4 | |
| 11490.00 | - | - | - | - | NOTE |
| 17227.03 | H | -44.4 | -27.0 | -17.4 | |
| 17239.71 | V | -35.6 | -27.0 | -8.6 | |
| 22980.00 | - | - | - | - | NOTE |
| 28725.00 | - | - | - | - | NOTE |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Normal Mode | CHANNEL | 12 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

EIRP SPURIOUS EMISSION LEVEL

| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
|-----------------|----------------------|-------------|-------------|--------|--------|
| 5825.00 | H | -31.1 | -17.0 | -14.1 | |
| 5825.00 | V | -20.2 | -17.0 | -3.2 | |
| 5835.00 | H | -35.9 | -27.0 | -8.9 | |
| 5835.00 | V | -30.7 | -27.0 | -3.7 | |
| 11610.00 | - | - | - | - | NOTE |
| 17408.09 | V | -35.3 | -27.0 | -8.3 | |
| 17416.65 | H | -43.3 | -27.0 | -16.3 | |
| 23231.52 | V | -50.5 | -27.0 | -23.5 | |
| 23260.13 | H | -55.4 | -27.0 | -28.4 | |
| 29025.00 | - | - | - | - | NOTE |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Turbo Mode | CHANNEL | 1 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

EIRP SPURIOUS EMISSION LEVEL

| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
|-----------------|----------------------|-------------|-------------|--------|--------|
| 5210.00 | - | - | - | - | NOTE |
| 10414.49 | V | -33.3 | -27.0 | -6.3 | |
| 10422.30 | H | -33.8 | -27.0 | -6.8 | |
| 15630.00 | - | - | - | - | NOTE |
| 20870.06 | - | - | - | - | NOTE |
| 26080.36 | H | -53.9 | -27.0 | -26.9 | |
| 26162.63 | V | -50.7 | -27.0 | -23.7 | |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Turbo Mode | CHANNEL | 2 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

EIRP SPURIOUS EMISSION LEVEL

| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
|-----------------|----------------------|-------------|-------------|--------|--------|
| 5250.00 | - | - | - | - | NOTE |
| 10497.56 | H | -37.6 | -27.0 | -10.6 | |
| 10502.30 | V | -32.6 | -27.0 | -5.6 | |
| 15750.00 | - | - | - | - | NOTE |
| 21048.80 | - | - | - | - | NOTE |
| 26190.28 | V | -51.8 | -27.0 | -24.8 | |
| 26266.73 | H | -52.8 | -27.0 | -25.8 | |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Turbo Mode | CHANNEL | 3 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

EIRP SPURIOUS EMISSION LEVEL

| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
|-----------------|----------------------|-------------|-------------|--------|--------|
| 5290.00 | - | - | - | - | NOTE |
| 10580.72 | H | -35.6 | -27.0 | -8.6 | |
| 10582.30 | V | -29.6 | -27.0 | -2.6 | |
| 15870.00 | - | - | - | - | NOTE |
| 21157.29 | | | | | |
| 26450.30 | H | -51.7 | -27.0 | -24.7 | |
| 26588.28 | V | -48.9 | -27.0 | -21.9 | |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Turbo Mode | CHANNEL | 4 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

EIRP SPURIOUS EMISSION LEVEL

| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
|-----------------|----------------------|-------------|-------------|--------|--------|
| 5715.00 | H | -37.0 | -27.0 | -10.0 | |
| 5715.00 | V | -33.6 | -27.0 | -6.6 | |
| 5725.00 | H | -36.6 | -17.0 | -19.6 | |
| 5725.00 | V | -29.1 | -17.0 | -12.1 | |
| 11520.00 | - | - | - | - | NOTE |
| 17271.43 | H | -43.8 | -27.0 | -16.8 | |
| 17271.48 | V | -38.1 | -27.0 | -11.1 | |
| 23050.32 | - | - | - | - | NOTE |
| 28800.00 | - | - | - | - | NOTE |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Turbo Mode | CHANNEL | 5 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

EIRP SPURIOUS EMISSION LEVEL

| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
|-----------------|----------------------|-------------|-------------|--------|--------|
| 5825.00 | H | -31.8 | -17.0 | -14.8 | |
| 5825.00 | V | -20.5 | -17.0 | -3.5 | |
| 5835.00 | H | -35.3 | -27.0 | -8.3 | |
| 5835.00 | V | -29.6 | -27.0 | -2.6 | |
| 11600.00 | - | - | - | - | NOTE |
| 17381.81 | V | -44.3 | -27.0 | -17.3 | |
| 17392.33 | H | -50.0 | -27.0 | -23.0 | |
| 23134.62 | H | -55.4 | -27.0 | -28.4 | |
| 23263.28 | V | -55.2 | -27.0 | -28.2 | |
| 29000.00 | - | - | - | - | NOTE |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



4.6.8 TEST RESULTS (B)

| | | | |
|---------------------------------|---------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Normal Mode | CHANNEL | 1 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

| EIRP SPURIOUS EMISSION LEVEL | | | | | |
|------------------------------|----------------------|-------------|-------------|--------|--------|
| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
| 5180.00 | - | - | - | - | NOTE |
| 10358.30 | V | -36.9 | -27.0 | -9.9 | |
| 10360.30 | H | -39.2 | -27.0 | -12.2 | |
| 15540.00 | - | - | - | - | NOTE |
| 20697.66 | - | - | - | - | NOTE |
| 25851.00 | H | -39.9 | -27.0 | -12.9 | |
| 25870.64 | V | -39.0 | -27.0 | -12.0 | |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Normal Mode | CHANNEL | 4 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

EIRP SPURIOUS EMISSION LEVEL

| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
|-----------------|----------------------|-------------|-------------|--------|--------|
| 5240.00 | - | - | - | - | NOTE |
| 10479.64 | V | -29.4 | -27.0 | -2.4 | |
| 10483.65 | H | -33.1 | -27.0 | -6.1 | |
| 15720.00 | - | - | - | - | NOTE |
| 20932.65 | - | - | - | - | NOTE |
| 26159.42 | H | -39.7 | -27.0 | -12.7 | |
| 26168.84 | V | -38.2 | -27.0 | -11.2 | |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Normal Mode | CHANNEL | 5 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

EIRP SPURIOUS EMISSION LEVEL

| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
|-----------------|----------------------|-------------|-------------|--------|--------|
| 5260.00 | - | - | - | - | NOTE |
| 10519.12 | V | -29.2 | -27.0 | -2.2 | |
| 10520.62 | H | -29.6 | -27.0 | -2.6 | |
| 15780.00 | - | - | - | - | NOTE |
| 21025.87 | - | - | - | - | NOTE |
| 26256.01 | V | -38.9 | -27.0 | -11.9 | |
| 26270.84 | H | -39.8 | -27.0 | -12.8 | |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Normal Mode | CHANNEL | 8 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

EIRP SPURIOUS EMISSION LEVEL

| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
|-----------------|----------------------|-------------|-------------|--------|--------|
| 5320.00 | - | - | - | - | NOTE |
| 10640.00 | - | - | - | - | NOTE |
| 15960.00 | - | - | - | - | NOTE |
| 21263.07 | - | - | - | - | NOTE |
| 26573.65 | H | -38.0 | -27.0 | -11.0 | |
| 26591.28 | V | -37.5 | -27.0 | -10.5 | |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Normal Mode | CHANNEL | 9 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

EIRP SPURIOUS EMISSION LEVEL

| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
|-----------------|----------------------|-------------|-------------|--------|--------|
| 5715.00 | H | -34.2 | -27.0 | -7.2 | |
| 5715.00 | V | -30.6 | -27.0 | -3.6 | |
| 5725.00 | H | -28.9 | -17.0 | -11.9 | |
| 5725.00 | V | -21.9 | -17.0 | -4.9 | |
| 11490.00 | - | - | - | - | NOTE |
| 17233.10 | H | -39.1 | -27.0 | -12.1 | |
| 17241.31 | V | -31.2 | -27.0 | -4.2 | |
| 22980.00 | - | - | - | - | NOTE |
| 28725.00 | - | - | - | - | NOTE |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Normal Mode | CHANNEL | 12 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

| EIRP SPURIOUS EMISSION LEVEL | | | | | |
|-------------------------------------|-----------------------------|--------------------|--------------------|---------------|---------------|
| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
| 5825.00 | H | -31.7 | -17.0 | -14.7 | |
| 5825.00 | V | -21.0 | -17.0 | -4.0 | |
| 5835.00 | H | -34.7 | -27.0 | -7.7 | |
| 5835.00 | V | -29.0 | -27.0 | -2.0 | |
| 11610.00 | - | - | - | - | NOTE |
| 17404.84 | H | -39.7 | -27.0 | -12.7 | |
| 17407.85 | V | -31.4 | -27.0 | -4.4 | |
| 23220.00 | - | - | - | - | NOTE |
| 29025.00 | - | - | - | - | NOTE |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Turbo Mode | CHANNEL | 1 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

EIRP SPURIOUS EMISSION LEVEL

| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
|-----------------|----------------------|-------------|-------------|--------|--------|
| 5210.00 | - | - | - | - | NOTE |
| 10414.68 | H | -36.1 | -27.0 | -9.1 | |
| 10429.04 | V | -29.4 | -27.0 | -2.4 | |
| 15630.00 | - | - | - | - | NOTE |
| 20815.25 | - | - | - | - | NOTE |
| 20838.72 | - | - | - | - | NOTE |
| 26081.04 | V | -39.4 | -27.0 | -12.4 | |
| 26086.57 | H | -40.0 | -27.0 | -13.0 | |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Turbo Mode | CHANNEL | 2 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

EIRP SPURIOUS EMISSION LEVEL

| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
|-----------------|----------------------|-------------|-------------|--------|--------|
| 5250.00 | - | - | - | - | NOTE |
| 10498.33 | V | -31.8 | -27.0 | -4.8 | |
| 10503.89 | H | -37.3 | -27.0 | -10.3 | |
| 15750.00 | - | - | - | - | NOTE |
| 21035.37 | - | - | - | - | NOTE |
| 26224.22 | V | -37.5 | -27.0 | -10.5 | |
| 26266.53 | H | -39.6 | -27.0 | -12.6 | |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Turbo Mode | CHANNEL | 3 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

EIRP SPURIOUS EMISSION LEVEL

| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
|-----------------|----------------------|-------------|-------------|--------|--------|
| 5290.00 | - | - | - | - | NOTE |
| 10582.42 | H | -34.0 | -27.0 | -7.0 | |
| 10582.72 | V | -30.7 | -27.0 | -3.7 | |
| 15870.00 | - | - | - | - | NOTE |
| 21174.65 | - | - | - | - | NOTE |
| 21205.79 | - | - | - | - | NOTE |
| 26428.28 | V | -38.6 | -27.0 | -11.6 | |
| 26480.56 | H | -39.8 | -27.0 | -12.8 | |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Turbo Mode | CHANNEL | 4 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

EIRP SPURIOUS EMISSION LEVEL

| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
|-----------------|----------------------|-------------|-------------|--------|--------|
| 5715.00 | H | -34.0 | -27.0 | -7.0 | |
| 5715.00 | V | -30.2 | -27.0 | -3.2 | |
| 5725.00 | H | -29.9 | -17.0 | -12.9 | |
| 5725.00 | V | -23.7 | -17.0 | -6.7 | |
| 11520.00 | - | - | - | - | NOTE |
| 17262.46 | H | -38.8 | -27.0 | -11.8 | |
| 17267.07 | V | -32.9 | -27.0 | -5.9 | |
| 23024.87 | - | - | - | - | NOTE |
| 23062.95 | - | - | - | - | NOTE |
| 28800.00 | - | - | - | - | NOTE |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Turbo Mode | CHANNEL | 5 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

EIRP SPURIOUS EMISSION LEVEL

| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
|-----------------|----------------------|-------------|-------------|--------|--------|
| 5825.00 | H | -33.1 | -17.0 | -16.1 | |
| 5825.00 | V | -25.7 | -17.0 | -8.7 | |
| 5835.00 | H | -35.2 | -27.0 | -8.2 | |
| 5835.00 | V | -33.0 | -27.0 | -6.0 | |
| 11600.00 | - | - | - | - | NOTE |
| 17356.21 | H | -39.4 | -27.0 | -12.4 | |
| 17397.70 | V | -32.0 | -27.0 | -5.0 | |
| 23150.00 | H | -41.8 | -27.0 | -14.8 | |
| 23167.03 | V | -42.6 | -27.0 | -15.6 | |
| 29000.00 | - | - | - | - | NOTE |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



4.6.9 TEST RESULTS (C)

| | | | |
|---------------------------------|---------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Normal Mode | CHANNEL | 1 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

| EIRP SPURIOUS EMISSION LEVEL | | | | | |
|------------------------------|----------------------|-------------|-------------|--------|--------|
| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
| 5180.00 | - | - | - | - | NOTE |
| 10356.59 | H | -36.5 | -27.0 | -9.5 | |
| 10360.90 | V | -33.3 | -27.0 | -6.3 | |
| 15538.50 | - | - | - | - | NOTE |
| 20725.31 | - | - | - | - | NOTE |
| 25890.28 | H | -53.1 | -27.0 | -26.1 | |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Normal Mode | CHANNEL | 4 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

| EIRP SPURIOUS EMISSION LEVEL | | | | | |
|-------------------------------------|-----------------------------|--------------------|--------------------|---------------|---------------|
| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
| 5240.00 | - | - | - | - | NOTE |
| 10471.48 | V | -35.9 | -27.0 | -8.9 | |
| 10480.60 | H | -39.7 | -27.0 | -12.7 | |
| 15724.11 | - | - | - | - | NOTE |
| 20920.42 | - | - | - | - | NOTE |
| 26170.04 | H | -52.5 | -27.0 | -25.5 | |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Normal Mode | CHANNEL | 5 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

EIRP SPURIOUS EMISSION LEVEL

| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
|-----------------|----------------------|-------------|-------------|--------|--------|
| 5260.00 | - | - | - | - | NOTE |
| 10520.70 | H | -37.8 | -27.0 | -10.8 | |
| 10521.18 | V | -36.1 | -27.0 | -9.1 | |
| 15779.02 | - | - | - | - | NOTE |
| 21082.18 | - | - | - | - | NOTE |
| 26250.00 | H | -52.7 | -27.0 | -25.7 | |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Normal Mode | CHANNEL | 8 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

EIRP SPURIOUS EMISSION LEVEL

| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
|-----------------|----------------------|-------------|-------------|--------|--------|
| 5320.00 | - | - | - | - | NOTE |
| 10640.00 | - | - | - | - | NOTE |
| 15959.30 | - | - | - | - | NOTE |
| 21296.33 | - | - | - | - | NOTE |
| 26636.37 | H | -51.0 | -27.0 | -24.0 | |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Normal Mode | CHANNEL | 9 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

EIRP SPURIOUS EMISSION LEVEL

| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
|-----------------|----------------------|-------------|-------------|--------|--------|
| 5715.00 | H | -35.3 | -27.0 | -8.3 | |
| 5715.00 | V | -29.5 | -27.0 | -2.5 | |
| 5725.00 | H | -26.1 | -17.0 | -9.1 | |
| 5725.00 | V | -19.2 | -17.0 | -2.2 | |
| 11490.00 | - | - | - | - | NOTE |
| 17236.10 | V | -45.7 | -27.0 | -18.7 | |
| 17241.91 | H | -47.8 | -27.0 | -20.8 | |
| 22980.00 | - | - | - | - | NOTE |
| 28725.00 | - | - | - | - | NOTE |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Normal Mode | CHANNEL | 12 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

EIRP SPURIOUS EMISSION LEVEL

| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
|-----------------|----------------------|-------------|-------------|--------|--------|
| 5825.00 | H | -29.2 | -17.0 | -12.2 | |
| 5825.00 | V | -19.9 | -17.0 | -2.9 | |
| 5835.00 | H | -34.7 | -27.0 | -7.7 | |
| 5835.00 | V | -29.1 | -27.0 | -2.1 | |
| 11610.00 | - | - | - | - | NOTE |
| 17413.10 | H | -46.1 | -27.0 | -19.1 | |
| 17415.10 | V | -46.1 | -27.0 | -19.1 | |
| 23250.56 | V | -55.2 | -27.0 | -28.2 | |
| 29025.00 | - | - | - | - | NOTE |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Turbo Mode | CHANNEL | 1 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

EIRP SPURIOUS EMISSION LEVEL

| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
|-----------------|----------------------|-------------|-------------|--------|--------|
| 5210.00 | - | - | - | - | NOTE |
| 10419.50 | V | -33.9 | -27.0 | -6.9 | |
| 10421.90 | H | -32.3 | -27.0 | -5.3 | |
| 15630.00 | - | - | - | - | NOTE |
| 20803.83 | - | - | - | - | NOTE |
| 26090.78 | V | -53.8 | -27.0 | -26.8 | |
| 26091.78 | H | -53.7 | -27.0 | -26.7 | |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Turbo Mode | CHANNEL | 2 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

EIRP SPURIOUS EMISSION LEVEL

| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
|-----------------|----------------------|-------------|-------------|--------|--------|
| 5250.00 | - | - | - | - | NOTE |
| 10502.30 | H | -33.5 | -27.0 | -6.5 | |
| 10504.71 | V | -30.6 | -27.0 | -3.6 | |
| 15750.00 | - | - | - | - | NOTE |
| 21008.32 | - | - | - | - | NOTE |
| 26231.66 | V | -51.2 | -27.0 | -24.2 | |
| 26241.48 | H | -52.4 | -27.0 | -25.4 | |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Turbo Mode | CHANNEL | 3 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

EIRP SPURIOUS EMISSION LEVEL

| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
|-----------------|----------------------|-------------|-------------|--------|--------|
| 5290.00 | - | - | - | - | NOTE |
| 10582.51 | H | -32.3 | -27.0 | -5.3 | |
| 10582.51 | V | -31.9 | -27.0 | -4.9 | |
| 15870.00 | - | - | - | - | NOTE |
| 21170.72 | - | - | - | - | NOTE |
| 26460.52 | V | -50.8 | -27.0 | -23.8 | |
| 26499.40 | H | -52.9 | -27.0 | -25.9 | |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Turbo Mode | CHANNEL | 4 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

EIRP SPURIOUS EMISSION LEVEL

| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
|-----------------|----------------------|-------------|-------------|--------|--------|
| 5715.00 | H | -36.9 | -27.0 | -9.9 | |
| 5715.00 | V | -34.1 | -27.0 | -7.1 | |
| 5725.00 | H | -36.6 | -17.0 | -19.6 | |
| 5725.00 | V | -27.8 | -17.0 | -10.8 | |
| 11520.00 | - | - | - | - | NOTE |
| 17274.49 | V | -44.8 | -27.0 | -17.8 | |
| 17277.70 | H | -49.0 | -27.0 | -22.0 | |
| 23056.13 | - | - | - | - | NOTE |
| 28800.00 | - | - | - | - | NOTE |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



| | | | |
|---------------------------------|------------------------------|-----------------------------|---------------|
| EUT | Wireless 54Mbps MiniPCI Card | MODEL | GL5054MP-AA0 |
| MODE | Turbo Mode | CHANNEL | 5 |
| FREQUENCY RANGE | Above 1000 MHz | DETECTOR FUNCTION | Peak(PK) |
| ENVIRONMENTAL CONDITIONS | 25 deg. C, 70%RH, 1050 hPa | INPUT POWER (SYSTEM) | 120Vac, 60 Hz |
| TESTED BY | Ansen Lei | | |

| EIRP SPURIOUS EMISSION LEVEL | | | | | |
|-------------------------------------|-----------------------------|--------------------|--------------------|---------------|---------------|
| Frequency (MHz) | Antenna Polarization | Level (dBm) | Limit (dBm) | Margin | Remark |
| 5825.00 | H | -29.3 | -17.0 | -12.3 | |
| 5825.00 | V | -20.9 | -17.0 | -3.9 | |
| 5835.00 | H | -34.2 | -27.0 | -7.2 | |
| 5835.00 | V | -29.8 | -27.0 | -2.8 | |
| 11600.00 | - | - | - | - | NOTE |
| 17391.85 | H | -48.5 | -27.0 | -21.5 | |
| 17397.29 | V | -45.8 | -27.0 | -18.8 | |
| 23153.21 | V | -55.2 | -27.0 | -28.2 | |
| 23260.78 | H | -55.9 | -27.0 | -28.9 | |
| 29000.00 | - | - | - | - | NOTE |

NOTE: The emissions appearing in the restricted Bands shall not exceed the general limits of 15.209.



4.7 FREQUENCY STABILITY

4.7.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

The frequency tolerance of the carrier signal shall be maintained within +/- 0.01% of the operating frequency over a temperature variation of -30 degrees to 50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.

4.7.2 TEST INSTRUMENTS

| Description & Manufacturer | Model No. | Serial No. | Calibrated Until |
|---|-----------|------------|------------------|
| ANRITSU SPECTRUM ANALYZER | MS2667C | M10281 | Mar. 15, 2003 |
| WIT STANDARD TEMPERATURE AND HUMIDITY CHAMBER | TH-4S-C | W901030 | Jun. 24, 2003 |

NOTE:

The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.

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

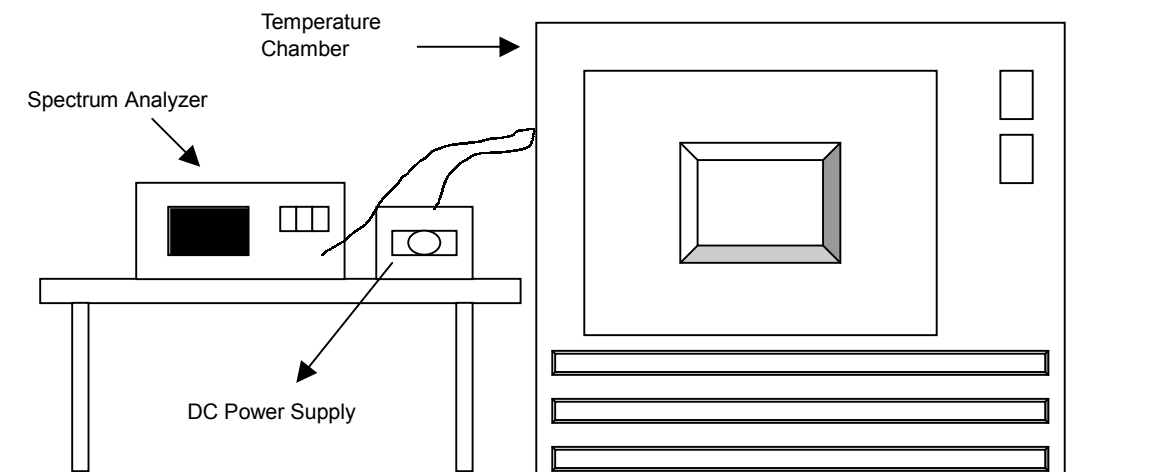
4.7.3 TEST PROCEDURE

1. The EUT was placed inside the environmental test chamber and powered by nominal DC voltage.
2. Turn the EUT on and couple its output to a spectrum analyzer.
3. Turn the EUT off and set the chamber to the highest temperature specified.
4. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.
5. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
6. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

4.7.4 DEVIATION FROM TEST STANDARD

No deviation

4.7.5 TEST SETUP



4.7.6 EUT OPERATING CONDITION

Same as Item 4.1.5



4.7.7 TEST RESULTS

| Operating frequency: 5180MHz | | | | Limit : ± 0.02% | | | |
|------------------------------|--------------------|-----------|----------|-----------------|----------|-----------|----------|
| Temp. (°C) | Power supply (VDC) | 2 minute | | 5 minute | | 10 minute | |
| | | (MHz) | (%) | (MHz) | (%) | (MHz) | (%) |
| 50 | 126.5 | 5179.9168 | 0.001606 | 5179.9166 | 0.001610 | 5179.9166 | 0.001610 |
| | 110.0 | 5179.9168 | 0.001606 | 5179.9166 | 0.001610 | 5179.9166 | 0.001610 |
| | 93.5 | 5179.9166 | 0.001610 | 5179.9166 | 0.001610 | 5179.9166 | 0.001610 |
| 40 | 126.5 | 5179.9086 | 0.001764 | 5179.9088 | 0.001761 | 5179.9086 | 0.001764 |
| | 110.0 | 5179.9086 | 0.001764 | 5179.9086 | 0.001764 | 5179.9086 | 0.001764 |
| | 93.5 | 5179.9086 | 0.001764 | 5179.9086 | 0.001764 | 5179.9088 | 0.001761 |
| 30 | 126.5 | 5179.9088 | 0.001761 | 5179.9088 | 0.001761 | 5179.9090 | 0.001757 |
| | 110.0 | 5179.9088 | 0.001761 | 5179.9088 | 0.001761 | 5179.9090 | 0.001757 |
| | 93.5 | 5179.9086 | 0.001764 | 5179.9090 | 0.001757 | 5179.9092 | 0.001753 |
| 20 | 126.5 | 5179.9138 | 0.001664 | 5179.9134 | 0.001672 | 5179.9132 | 0.001676 |
| | 110.0 | 5179.9138 | 0.001664 | 5179.9134 | 0.001672 | 5179.9132 | 0.001676 |
| | 93.5 | 5179.9136 | 0.001668 | 5179.9136 | 0.001668 | 5179.9134 | 0.001672 |
| 10 | 126.5 | 5179.9220 | 0.001505 | 5179.9220 | 0.001506 | 5179.9220 | 0.001506 |
| | 110.0 | 5179.9224 | 0.001498 | 5179.9222 | 0.001502 | 5179.9220 | 0.001506 |
| | 93.5 | 5179.9220 | 0.001505 | 5179.9222 | 0.001502 | 5179.9220 | 0.001506 |
| 0 | 126.5 | 5179.9206 | 0.001532 | 5179.9206 | 0.001533 | 5179.9210 | 0.001525 |
| | 110.0 | 5179.9204 | 0.001536 | 5179.9208 | 0.001529 | 5179.9210 | 0.001525 |
| | 93.5 | 5179.9208 | 0.001528 | 5179.9206 | 0.001533 | 5179.9210 | 0.001525 |
| -10 | 126.5 | 5179.9216 | 0.001513 | 5179.9222 | 0.001502 | 5179.9222 | 0.001502 |
| | 110.0 | 5179.9216 | 0.001513 | 5179.9218 | 0.001510 | 5179.9222 | 0.001502 |
| | 93.5 | 5179.9218 | 0.001509 | 5179.9220 | 0.001506 | 5179.9222 | 0.001502 |
| -20 | 126.5 | 5179.9140 | 0.001660 | 5179.9132 | 0.001676 | 5179.9124 | 0.001691 |
| | 110.0 | 5179.9140 | 0.001660 | 5179.9134 | 0.001672 | 5179.9130 | 0.001680 |
| | 93.5 | 5179.9138 | 0.001664 | 5179.9130 | 0.001680 | 5179.9126 | 0.001687 |
| -30 | 126.5 | 5179.9036 | 0.001861 | 5179.9032 | 0.001869 | 5179.9018 | 0.001896 |
| | 110.0 | 5179.9036 | 0.001861 | 5179.9034 | 0.001865 | 5179.9026 | 0.001880 |
| | 93.5 | 5179.9034 | 0.001864 | 5179.9032 | 0.001869 | 5179.9026 | 0.001880 |



4.8 BAND EDGES MEASUREMENT

4.8.1 TEST INSTRUMENTS

| Description & Manufacturer | Model No. | Serial No. | Calibrated Until |
|----------------------------|-----------|------------|------------------|
| SPECTRUM ANALYZER | FSEK30 | 100049 | July 24, 2003 |

NOTE:

- 1.The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
- 2.The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.8.2 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer via a low lose cable. Set both RBW and VBW of spectrum analyzer to 1MHz with suitable frequency span including 100 MHz bandwidth from band edge. The band edges was measured and recorded.

4.8.3 EUT OPERATING CONDITION

The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

4.8.4 TEST RESULTS

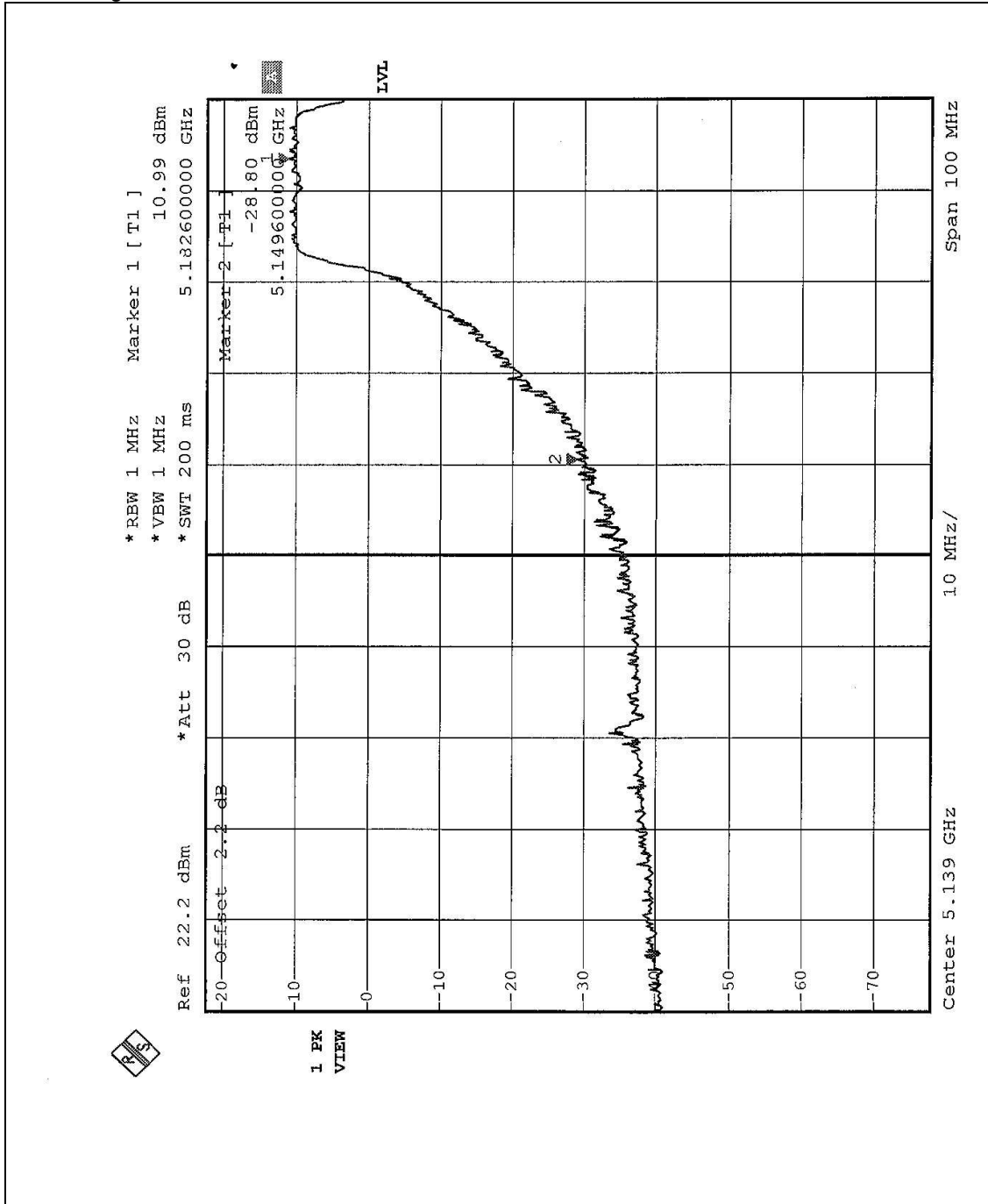
For signals in the restricted bands above and below the 5.15 to 5.35 GHz allocated band a measurement was made of the amplitude of the spurious emissions with respect to the intentional signals. The relative amplitude, in dBc, was applied to the average and peak filed strength of the intentional signal made on the OATS to calculate the field strength of the unintentional signals.

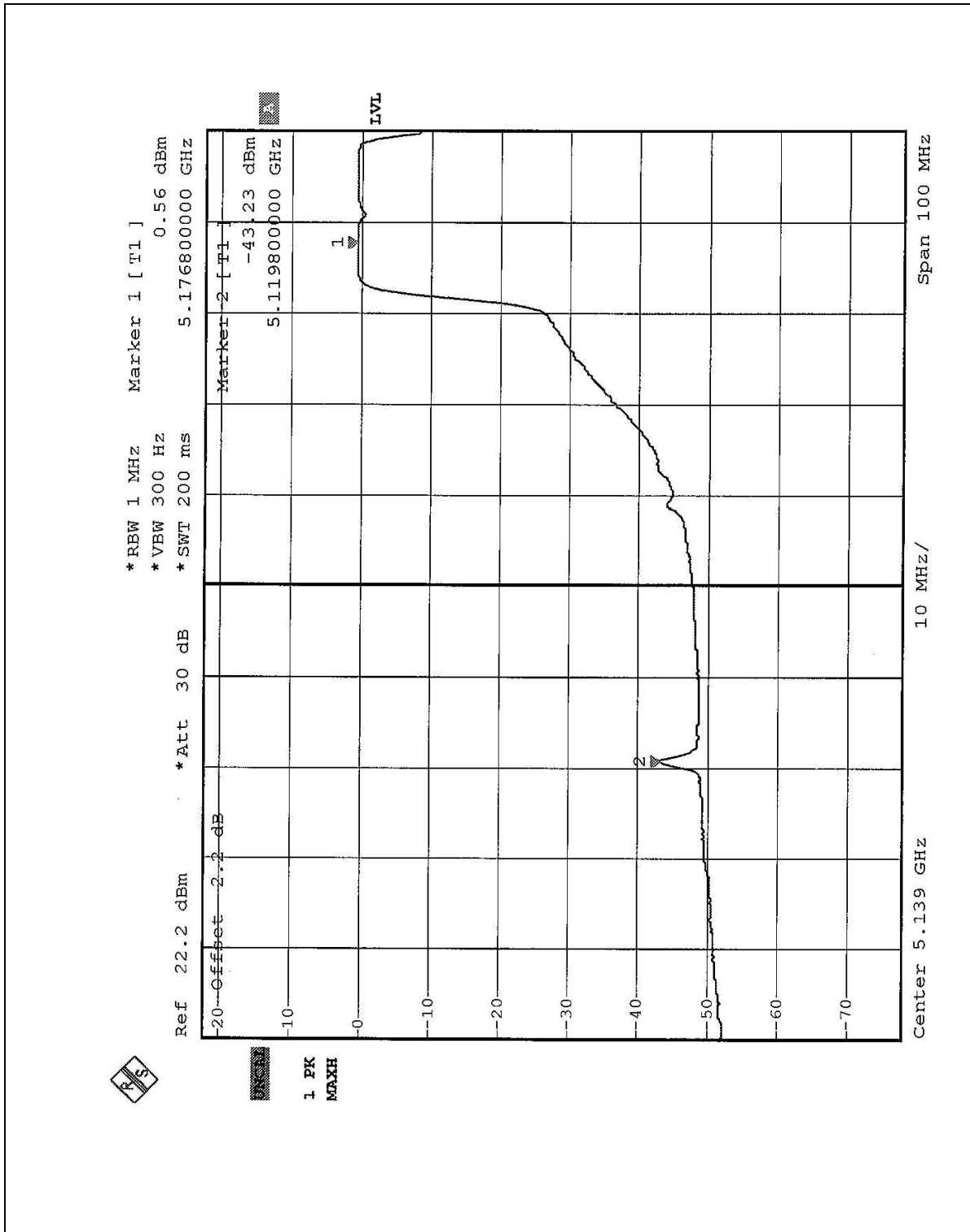
The spectrum plots (Peak RBW=VBW=1MHz; Average RBW=1MHz, VBW=300Hz) are attached on the following 8 pages.



Normal Mode: Channel 1 (5180 MHz)

The band edge emission plot on the following 2 pages shows 39.79dBc (Peak) / 43.79dBc (Average) between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 1 (normal mode) is 89.6dBuV/m, so the maximum field strength in restrict band is $89.6 - 43.79 = 45.81$ dBuV/m which is under 54 dBuV/m limit.

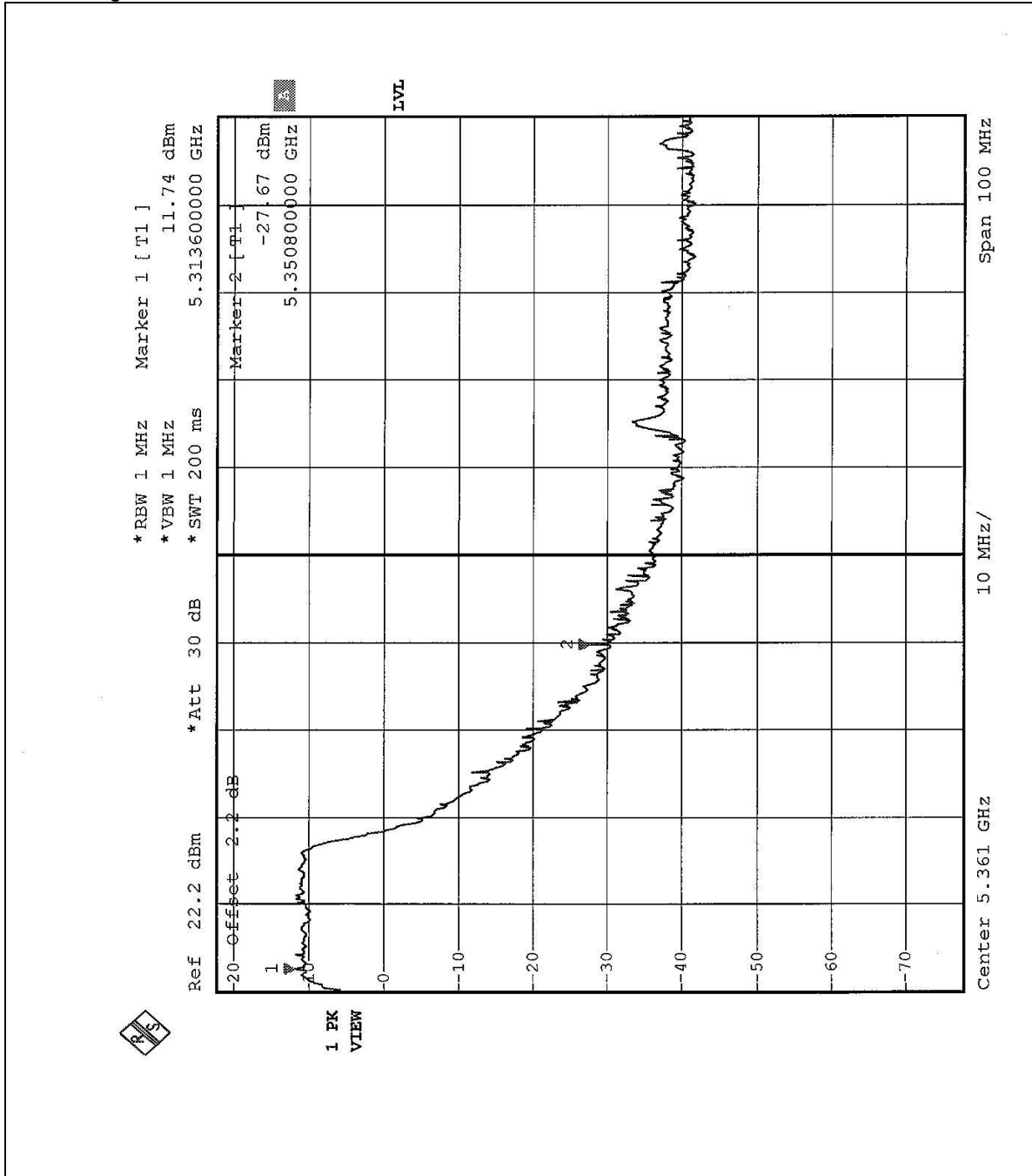


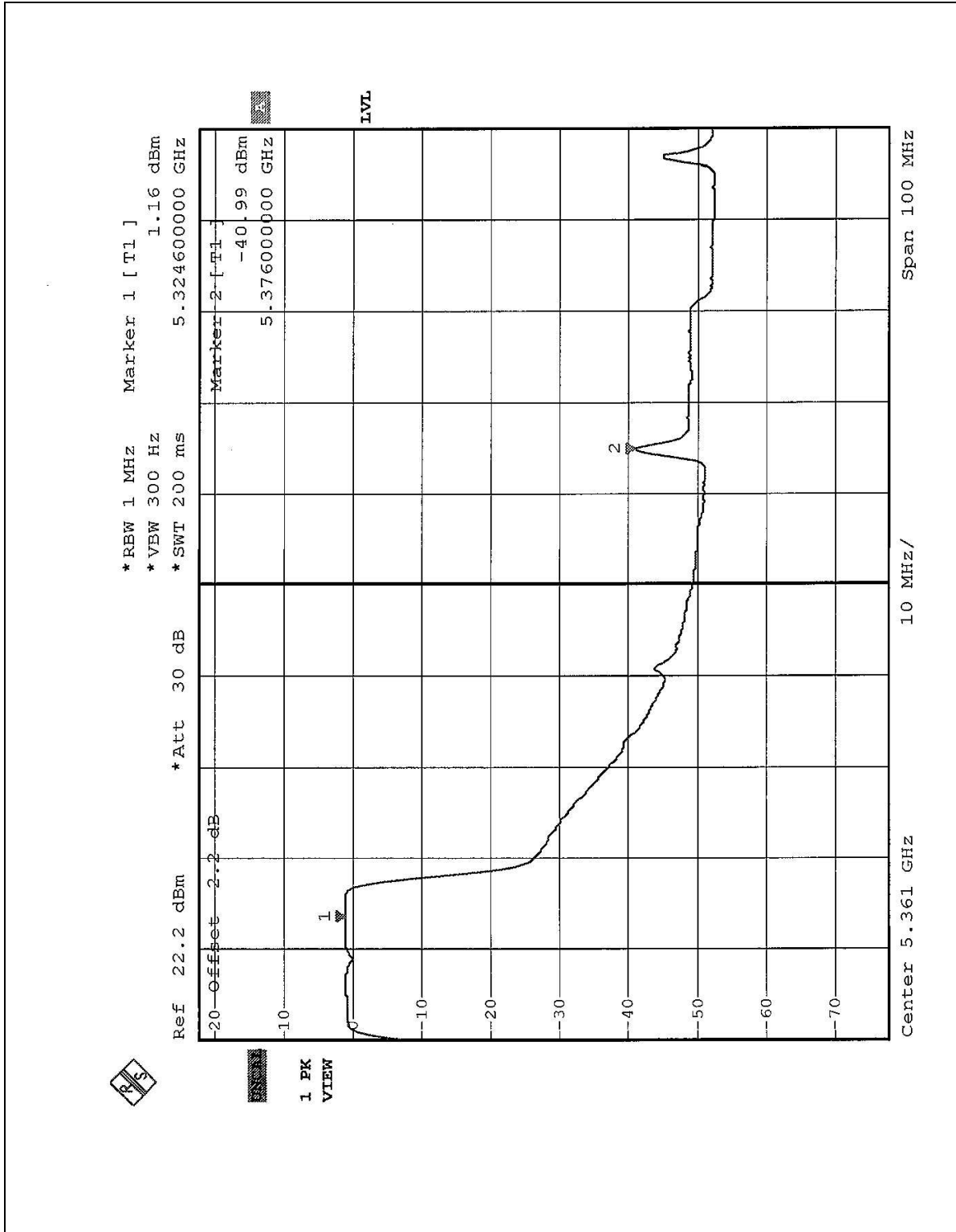




Normal Mode: Channel 8 (5320 MHz)

The band edge emission plot on the following 2 pages shows 39.41dBc (Peak) / 42.15dBc (Average) between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 8 (normal mode) is 88.1dBuV/m, so the maximum field strength in restrict band is $88.1 - 42.15 = 45.95$ dBuV/m which is under 54 dBuV/m limit.

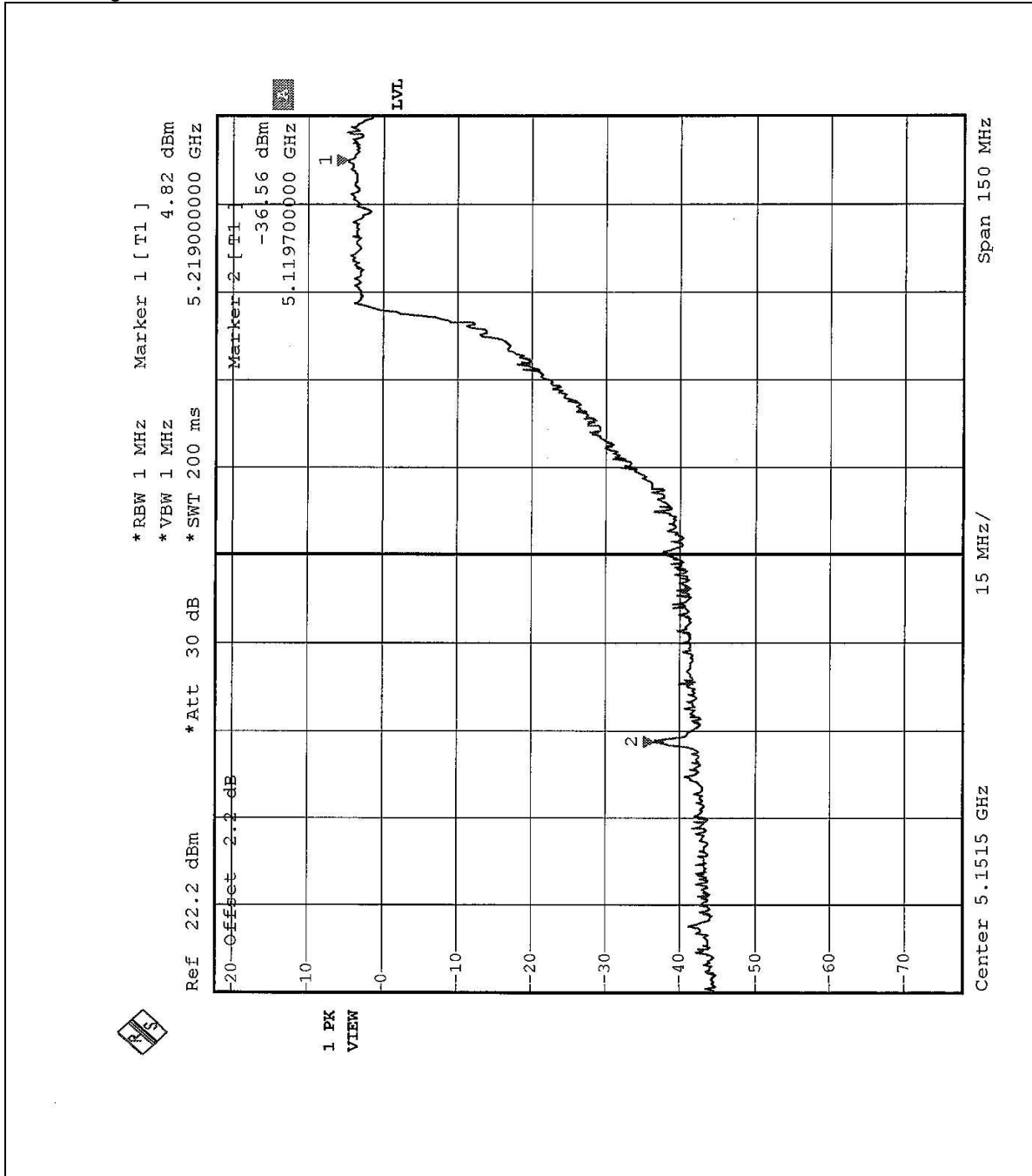


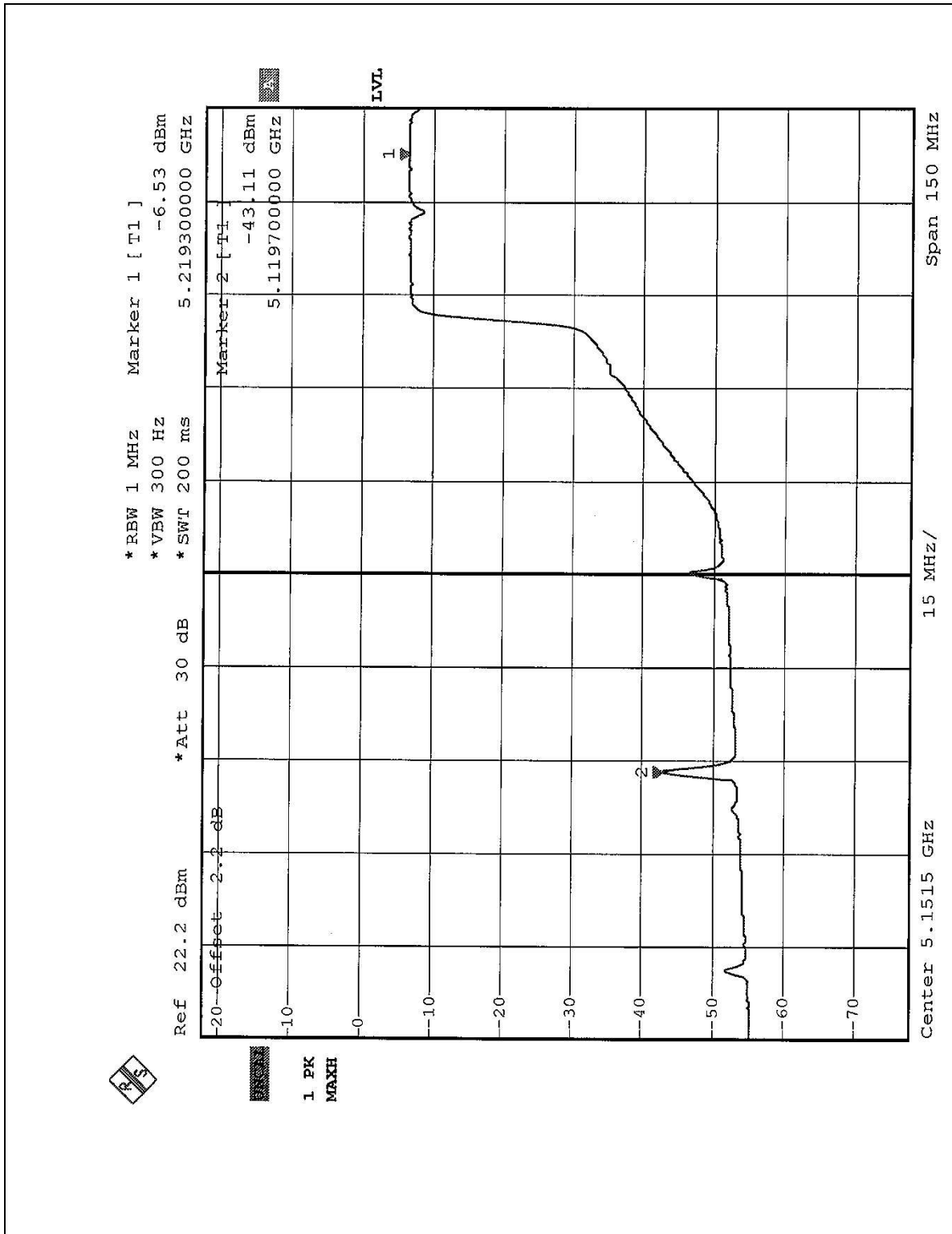




Turbo Mode: Channel 1 (5210 MHz)

The band edge emission plot on the following 2 pages shows 41.38dBc (Peak) / 36.58dBc (Average) between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 1 (normal mode) is 89.9dBuV/m, so the maximum field strength in restrict band is $89.9 - 36.58 = 53.32$ dBuV/m which is under 54 dBuV/m limit.

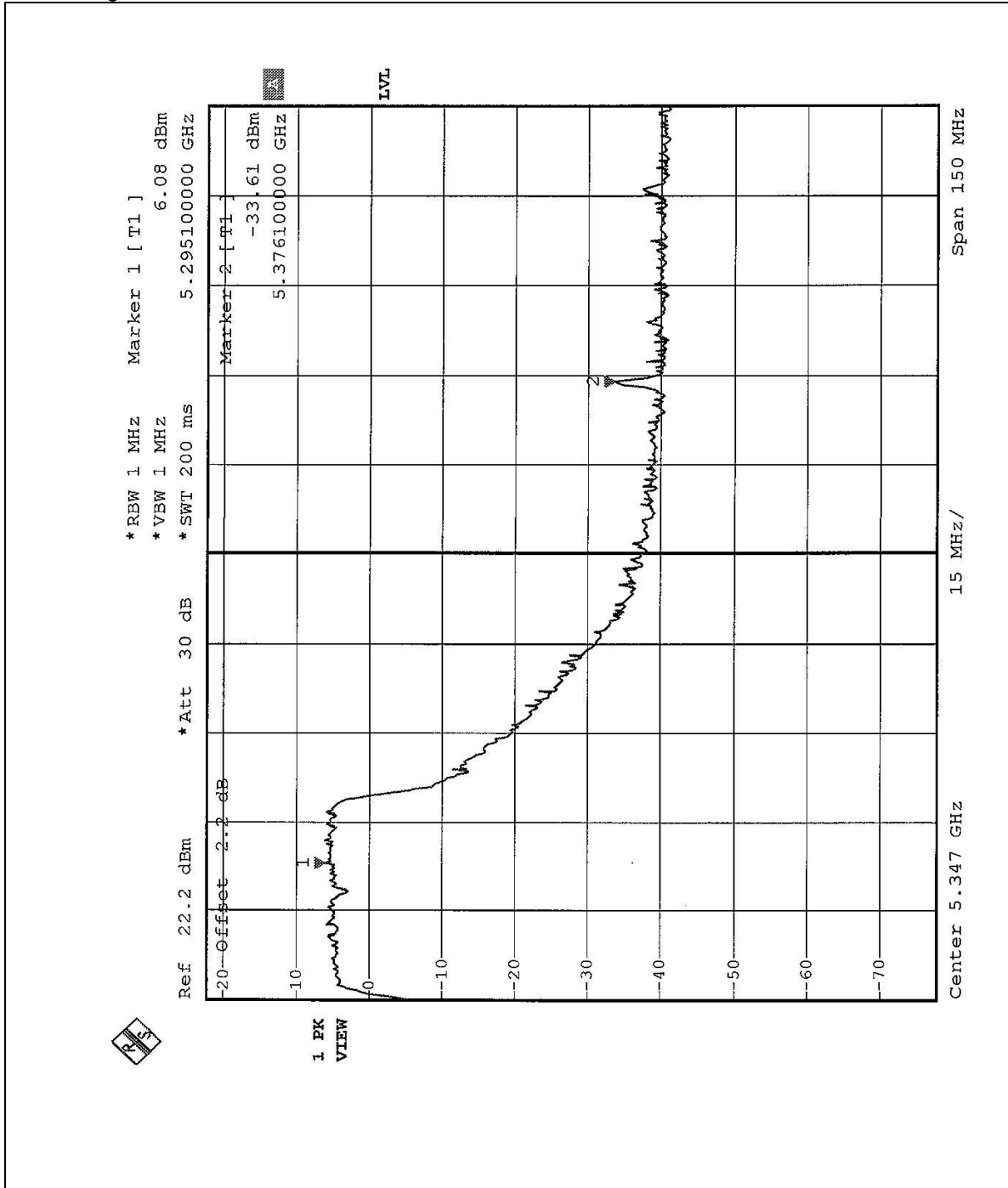


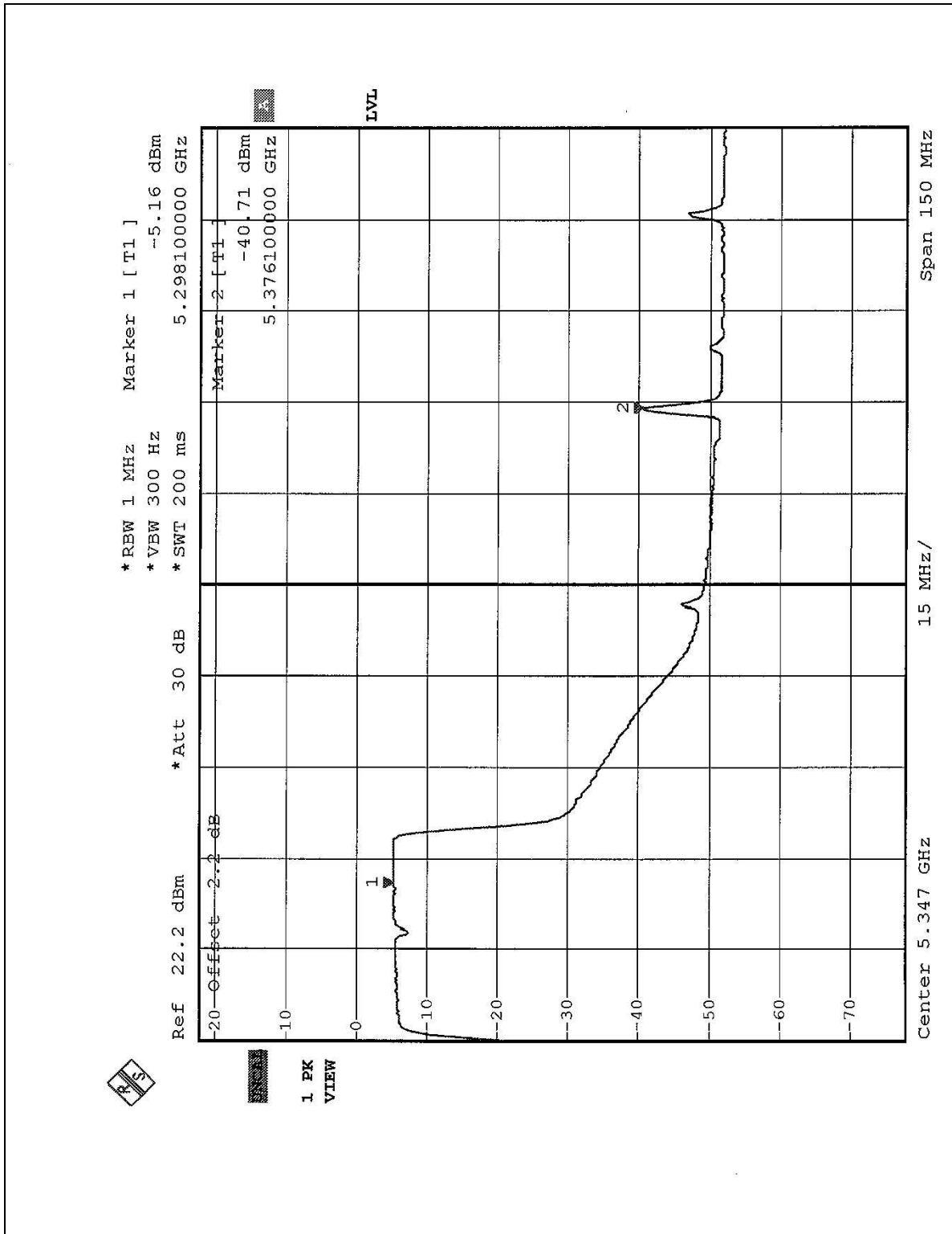




Turbo Mode: Channel 3 (5290 MHz)

The band edge emission plot on the following 2 pages shows 39.69dBc (Peak) / 35.55dBc (Average) between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 3 (normal mode) is 88.2dBuV/m, so the maximum field strength in restrict band is $88.2 - 35.55 = 52.65$ dBuV/m which is under 54 dBuV/m limit.







4.9 ANTENNA REQUIREMENT

4.9.1 STANDARD APPLICABLE

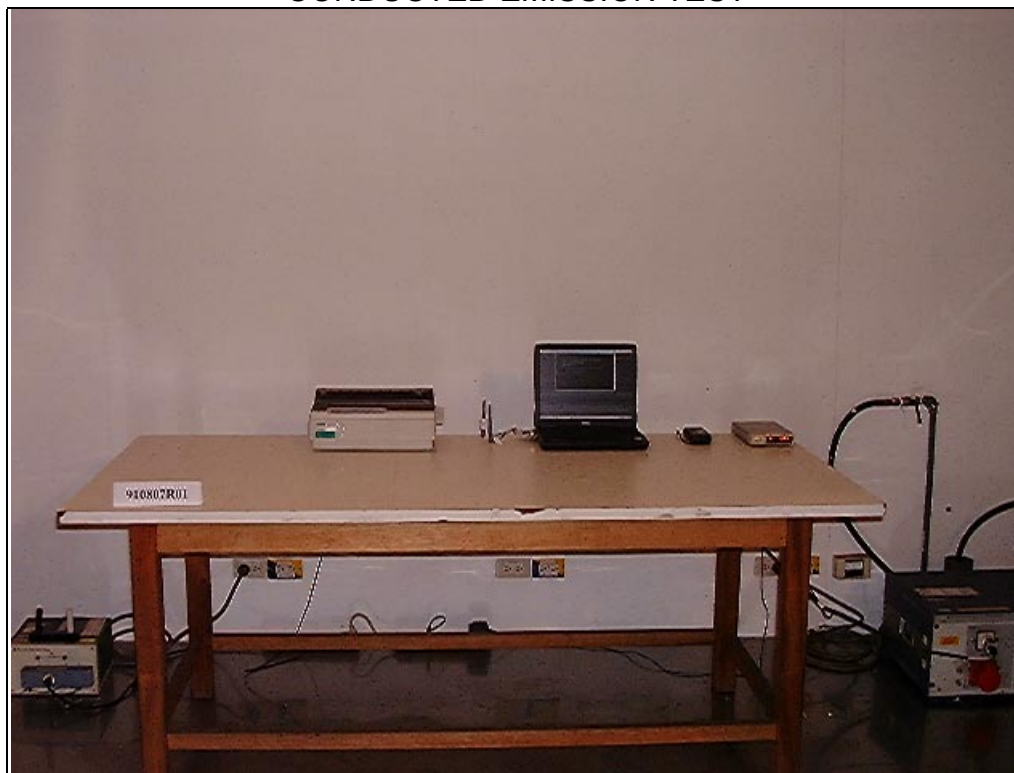
For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.407(a), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

4.9.2 ANTENNA CONNECTED CONSTRUCTION

The antennas used in this product are Dipole and Inverted F Antennas. MMCX type or detachable connector is used. And the maximum Gain of this antenna is only 3.5dBi.

5 PHOTOGRAPHS OF THE TEST CONFIGURATION CONDUCTED EMISSION TEST





RADIATED EMISSION TEST







6 INFORMATION ON THE TESTING LABORATORIES

We, ADT Corp., were founded in 1988 to provide our best service in EMC and Safety consultation. Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025, Guide 25 or EN 45001:

| | |
|--------------------|-----------------|
| USA | FCC, NVLAP |
| Germany | TUV Rheinland |
| Japan | VCCI |
| New Zealand | MoC |
| Norway | NEMKO |
| R.O.C. | BSMI, DGT, CNLA |

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site:

www.adt.com.tw/index.5/phtml.

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The address and road map of all our labs can be found in our web site also.