# APPENDIX E

# *DATA SHEETS*

# *RADIATED EMISSIONS*

# *DATA SHEETS*

**FCC 15.247**

Intel Corporation — Date: 3/07/05

Intel Mini PCI Type 3A 802.11BG Wireless LAN Adapter — Lab: B

Model: WM3A2200BG — Tested By: Benigno Chavez

Configuration: Dell Latitude Laptop D510 Agency Series Number: PP17L -- Main Port

**With Phycomp Antenna**

**Channel 1 - 802.11 b Mode** Gain : 28.0 Peak Power: 17.15 dBm Avg. Power: 14.80 dBm

**Transmit Mode**

| Freq. (MHz) | Level (dBuV) | Pol (v/h) | Limit | Margin | Peak / QP / Avg | Ant. Height (m) | Table Angle (deg) | Comments |
|---|---|---|---|---|---|---|---|---|
| 4824 | 36.03 | V | 74 | -37.97 | Peak | 1.38 | 225 | |
| 4824 | 22.96 | V | 54 | -31.04 | Avg | 1.38 | 225 | |
| | | | | | | | | |
| 7236 | 39.93 | V | 74 | -34.07 | Peak | 1.69 | 315 | |
| 7236 | 26.9 | V | 54 | -27.1 | Avg | 1.69 | 315 | |
| | | | | | | | | |
| 9648 | 52.81 | V | -- | -- | Peak | 2.58 | 45 | Not in Restricted Band |
| 9648 | 45.1 | V | -- | -- | Avg | 2.58 | 45 | Not in Restricted Band |
| | | | | | | | | |
| 12060 | 45.01 | V | 74 | -28.99 | Peak | 1.69 | 135 | |
| 12060 | 32.84 | V | 54 | -21.16 | Avg | 1.69 | 135 | |
| | | | | | | | | |
| 14472 | 49.89 | V | 74 | -24.11 | Peak | 1.69 | 45 | |
| 14472 | 35.88 | V | 54 | -18.12 | Avg | 1.69 | 45 | |
| | | | | | | | | |
| 16884 | 48.14 | V | -- | -- | Peak | 1.48 | 225 | Not in Restricted Band |
| 16884 | 34.98 | V | -- | -- | Avg | 1.48 | 225 | Not in Restricted Band |
| | | | | | | | | |
| 19296 | | V | 74 | -74 | Peak | | | No Emissions |
| 19296 | | V | 54 | -54 | Avg | | | Detected |
| | | | | | | | | |
| 21708 | | V | -- | -- | Peak | | | No Emissions |
| 21708 | | V | -- | -- | Avg | | | Detected |
| | | | | | | | | |
| 24120 | | V | -- | -- | Peak | | | No Emissions |
| 24120 | | V | -- | -- | Avg | | | Detected |
| | | | | | | | | |

**FCC 15.247**
Intel Corporation Date: 3/07/05
Intel Mini PCI Type 3A 802.11BG Wireless LAN Adapter Lab: B
Model: WM3A2200BG Tested By: Benigno Chavez
Configuration: Dell Latitude Laptop D510 Agency Series Number: PP17L -- Main Port
**With Phycomp Antenna**
**Channel 1 - 802.11 b Mode** Gain : 28.0 Peak Power: 17.15 dBm Avg. Power: 14.80 dBm
**Transmit Mode**

| Freq. (MHz) | Level (dBuV) | Pol (v/h) | Limit | Margin | Peak / QP / Avg | Ant. Height (m) | Table Angle (deg) | Comments |
|---|---|---|---|---|---|---|---|---|
| 4824 | 37.25 | H | 74 | -36.75 | Peak | 1.66 | 225 | |
| 4824 | 24.18 | H | 54 | -29.82 | Avg | 1.66 | 225 | |
| | | | | | | | | |
| 7236 | 41.12 | H | 74 | -32.88 | Peak | 1.93 | 225 | |
| 7236 | 27.25 | H | 54 | -26.75 | Avg | 1.93 | 225 | |
| | | | | | | | | |
| 9648 | 54.12 | H | -- | -- | Peak | 2.59 | 45 | Not in Restricted Band |
| 9648 | 49.29 | H | -- | -- | Avg | 2.59 | 45 | Not in Restricted Band |
| | | | | | | | | |
| 12060 | 46.13 | H | 74 | -27.87 | Peak | 1.66 | 225 | |
| 12060 | 32.54 | H | 54 | -21.46 | Avg | 1.66 | 225 | |
| | | | | | | | | |
| 14472 | 48.68 | H | 74 | -25.32 | Peak | 1.94 | 180 | |
| 14472 | 34.68 | H | 54 | -19.32 | Avg | 1.94 | 180 | |
| | | | | | | | | |
| 16884 | 49.17 | H | -- | -- | Peak | 2.3 | 225 | Not in Restricted Band |
| 16884 | 35.47 | H | -- | -- | Avg | 2.3 | 225 | Not in Restricted Band |
| | | | | | | | | |
| 19296 | | H | 74 | -74 | Peak | | | No Emissions |
| 19296 | | H | 54 | -54 | Avg | | | Detected |
| | | | | | | | | |
| 21708 | | H | -- | -- | Peak | | | No Emissions |
| 21708 | | H | -- | -- | Avg | | | Detected |
| | | | | | | | | |
| 24120 | | H | -- | -- | Peak | | | No Emissions |
| 24120 | | H | -- | -- | Avg | | | Detected |
| | | | | | | | | |

**FCC 15.247**

Intel Corporation — Date: 3/07/05

Intel Mini PCI Type 3A 802.11BG Wireless LAN Adapter — Lab: B

Model: WM3A2200BG — Tested By: Benigno Chavez

Configuration: Dell Latitude Laptop D510 Agency Series Number: PP17L -- Main Port

**With Phycomp Antenna**

**Channel 6 - 802.11 b Mode** Gain : 28.5 Peak Power: 17.59 dBm Avg. Power: 15.22 dBm

**Transmit Mode**

| Freq. (MHz) | Level (dBuV) | Pol (v/h) | Limit | Margin | Peak / QP / Avg | Ant. Height (m) | Table Angle (deg) | Comments |
|---|---|---|---|---|---|---|---|---|
| 4874 | 36 | V | 74 | -38 | Peak | 1.58 | 135 | |
| 4874 | 22.73 | V | 54 | -31.27 | Avg | 1.58 | 135 | |
| | | | | | | | | |
| 7311 | 40.63 | V | 74 | -33.37 | Peak | 1.87 | 225 | |
| 7311 | 27.38 | V | 54 | -26.62 | Avg | 1.87 | 225 | |
| | | | | | | | | |
| 9748 | 55.33 | V | -- | -- | Peak | 1.87 | 225 | Not in Restricted Band |
| 9748 | 51.35 | V | -- | -- | Avg | 1.87 | 225 | Not in Restricted Band |
| | | | | | | | | |
| 12185 | 45.23 | V | 74 | -28.77 | Peak | 1.87 | 225 | |
| 12185 | 32.09 | V | 54 | -21.91 | Avg | 1.87 | 225 | |
| | | | | | | | | |
| 14622 | 47.78 | V | -- | -- | Peak | 1.87 | 180 | Not in Restricted Band |
| 14622 | 35.08 | V | -- | -- | Avg | 1.87 | 180 | Not in Restricted Band |
| | | | | | | | | |
| 17059 | 48.82 | V | -- | -- | Peak | 2.16 | 135 | Not in Restricted Band |
| 17059 | 35.7 | V | -- | -- | Avg | 2.16 | 135 | Not in Restricted Band |
| | | | | | | | | |
| 19496 | | V | 74 | -74 | Peak | | | No Emissions |
| 19496 | | V | 54 | -54 | Avg | | | Detected |
| | | | | | | | | |
| 21933 | | V | -- | -- | Peak | | | No Emissions |
| 21933 | | V | -- | -- | Avg | | | Detected |
| | | | | | | | | |
| 22001 | | V | 74 | -74 | Peak | | | No Emissions |
| 22001 | | V | 54 | -54 | Avg | | | Detected |
| | | | | | | | | |
| 24370 | | V | -- | -- | Peak | | | No Emissions |
| 24370 | | V | -- | -- | Avg | | | Detected |
| | | | | | | | | |

**FCC 15.247**
Intel Corporation Date: 3/07/05
Intel Mini PCI Type 3A 802.11BG Wireless LAN Adapter Lab: B
Model: WM3A2200BG Tested By: Benigno Chavez
Configuration: Dell Latitude Laptop D510 Agency Series Number: PP17L -- Main Port
**With Phycomp Antenna**
**Channel 6 - 802.11 b Mode** Gain : 28.5 Peak Power: 17.59 dBm Avg. Power: 15.22 dBm
**Transmit Mode**

| Freq. (MHz) | Level (dBuV) | Pol (v/h) | Limit | Margin | Peak / QP / Avg | Ant. Height (m) | Table Angle (deg) | Comments |
|---|---|---|---|---|---|---|---|---|
| 4874 | 37.22 | H | 74 | -36.78 | Peak | 2.35 | 225 | |
| 4874 | 24.55 | H | 54 | -29.45 | Avg | 2.35 | 225 | |
| | | | | | | | | |
| 7311 | 41.28 | H | 74 | -32.72 | Peak | 2.06 | 225 | |
| 7311 | 26.81 | H | 54 | -27.19 | Avg | 2.06 | 225 | |
| | | | | | | | | |
| 9748 | 52.88 | H | -- | -- | Peak | 3.86 | 45 | Not in Restricted Band |
| 9748 | 48.28 | H | -- | -- | Avg | 3.86 | 45 | Not in Restricted Band |
| | | | | | | | | |
| 12185 | 45.44 | H | 74 | -28.56 | Peak | 2.43 | 225 | |
| 12185 | 32.33 | H | 54 | -21.67 | Avg | 2.43 | 225 | |
| | | | | | | | | |
| 14622 | 47.44 | H | -- | -- | Peak | 1.84 | 180 | Not in Restricted Band |
| 14622 | 34.48 | H | -- | -- | Avg | 1.84 | 180 | Not in Restricted Band |
| | | | | | | | | |
| 17059 | 49.57 | H | -- | -- | Peak | 1.73 | 225 | Not in Restricted Band |
| 17059 | 36.41 | H | -- | -- | Avg | 1.73 | 225 | Not in Restricted Band |
| | | | | | | | | |
| 19496 | | H | 74 | -74 | Peak | | | No Emissions |
| 19496 | | H | 54 | -54 | Avg | | | Detected |
| | | | | | | | | |
| 21933 | | H | -- | -- | Peak | | | No Emissions |
| 21933 | | H | -- | -- | Avg | | | Detected |
| | | | | | | | | |
| 22001 | | H | 74 | -74 | Peak | | | No Emissions |
| 22001 | | H | 54 | -54 | Avg | | | Detected |
| | | | | | | | | |
| 24370 | | H | -- | -- | Peak | | | No Emissions |
| 24370 | | H | -- | -- | Avg | | | Detected |
| | | | | | | | | |

**FCC 15.247**

Intel Corporation — Date: 3/07/05

Intel Mini PCI Type 3A 802.11BG Wireless LAN Adapter — Lab: B

Model: WM3A2200BG — Tested By: Benigno Chavez

Configuration: Dell Latitude Laptop D510 Agency Series Number: PP17L -- Main Port

**With Phycomp Antenna**

**Channel 11 - 802.11 b Mode** Gain : 28.5 Peak Power: 17.61 dBm Avg. Power: 14.56 dBm

**Transmit Mode**

| Freq. (MHz) | Level (dBuV) | Pol (v/h) | Limit | Margin | Peak / QP / Avg | Ant. Height (m) | Table Angle (deg) | Comments |
|---|---|---|---|---|---|---|---|---|
| 4924 | 38.41 | V | 74 | -35.59 | Peak | 2.24 | 225 | |
| 4924 | 25.32 | V | 54 | -28.68 | Avg | 2.24 | 225 | |
| | | | | | | | | |
| 7386 | 40.16 | V | 74 | -33.84 | Peak | 2.23 | 225 | |
| 7386 | 26.97 | V | 54 | -27.03 | Avg | 2.23 | 225 | |
| | | | | | | | | |
| 9848 | 55.68 | V | -- | -- | Peak | 2.24 | 225 | Not in Restricted Band |
| 9848 | 52.77 | V | -- | -- | Avg | 2.24 | 225 | Not in Restricted Band |
| | | | | | | | | |
| 12310 | 44.09 | V | 74 | -29.91 | Peak | 1.41 | 225 | |
| 12310 | 31.99 | V | 54 | -22.01 | Avg | 1.41 | 225 | |
| | | | | | | | | |
| 14772 | 49.29 | V | -- | -- | Peak | 1.4 | 270 | Not in Restricted Band |
| 14772 | 35.57 | V | -- | -- | Avg | 1.4 | 270 | Not in Restricted Band |
| | | | | | | | | |
| 17234 | 50.39 | V | -- | -- | Peak | 1.82 | 225 | Not in Restricted Band |
| 17234 | 35.61 | V | -- | -- | Avg | 1.82 | 225 | Not in Restricted Band |
| | | | | | | | | |
| 19696 | | V | 74 | -74 | Peak | | | No Emissions |
| 19696 | | V | 54 | -54 | Avg | | | Detected |
| | | | | | | | | |
| 22158 | | V | 74 | -74 | Peak | | | No Emissions |
| 22158 | | V | 54 | -54 | Avg | | | Detected |
| | | | | | | | | |
| 24620 | | V | -- | -- | Peak | | | No Emissions |
| 24620 | | V | -- | -- | Avg | | | Detected |
| | | | | | | | | |

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Intel Corporation — Date: 3/07/05

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Model: WM3A2200BG — Tested By: Benigno Chavez

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**With Phycomp Antenna**

**Channel 11 - 802.11 b Mode** Gain : 28.5 Peak Power: 17.61 dBm Avg. Power: 14.56 dBm

**Transmit Mode**

| Freq. (MHz) | Level (dBuV) | Pol (v/h) | Limit | Margin | Peak / QP / Avg | Ant. Height (m) | Table Angle (deg) | Comments |
|---|---|---|---|---|---|---|---|---|
| 4924 | 36.73 | H | 74 | -37.27 | Peak | 2.02 | 315 | |
| 4924 | 23.62 | H | 54 | -30.38 | Avg | 2.02 | 315 | |
| | | | | | | | | |
| 7386 | 39.39 | H | 74 | -34.61 | Peak | 2.02 | 225 | |
| 7386 | 26.03 | H | 54 | -27.97 | Avg | 2.02 | 225 | |
| | | | | | | | | |
| 9848 | 54.73 | H | -- | -- | Peak | 1.55 | 270 | Not in Restricted Band |
| 9848 | 51.23 | H | -- | -- | Avg | 1.55 | 270 | Not in Restricted Band |
| | | | | | | | | |
| 12310 | 45.23 | H | 74 | -28.77 | Peak | 1.55 | 180 | |
| 12310 | 31.78 | H | 54 | -22.22 | Avg | 1.55 | 180 | |
| | | | | | | | | |
| 14772 | 48.82 | H | -- | -- | Peak | 2.6 | 180 | Not in Restricted Band |
| 14772 | 34.94 | H | -- | -- | Avg | 2.6 | 180 | Not in Restricted Band |
| | | | | | | | | |
| 17234 | 50.39 | H | -- | -- | Peak | 1.79 | 225 | Not in Restricted Band |
| 17234 | 36.35 | H | -- | -- | Avg | 1.79 | 225 | Not in Restricted Band |
| | | | | | | | | |
| 19696 | | H | 74 | -74 | Peak | | | No Emissions |
| 19696 | | H | 54 | -54 | Avg | | | Detected |
| | | | | | | | | |
| 22158 | | H | 74 | -74 | Peak | | | No Emissions |
| 22158 | | H | 54 | -54 | Avg | | | Detected |
| | | | | | | | | |
| 24620 | | H | -- | -- | Peak | | | No Emissions |
| 24620 | | H | -- | -- | Avg | | | Detected |
| | | | | | | | | |

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Intel Corporation — Date: 3/07/05

Intel Mini PCI Type 3A 802.11BG Wireless LAN Adapter — Lab: B

Model: WM3A2200BG — Tested By: Benigno Chavez

Configuration: Dell Latitude Laptop D510 Agency Series Number: PP17L -- Main Port

**With Phycomp Antenna**

**Channel 1 - 802.11 g Mode** Gain : 22.5 Peak Power: 16.38 dBm Avg. Power: 10.07 dBm

**Transmit Mode**

| Freq. (MHz) | Level (dBuV) | Pol (v/h) | Limit | Margin | Peak / QP / Avg | Ant. Height (m) | Table Angle (deg) | Comments |
|---|---|---|---|---|---|---|---|---|
| 4824 | 36.54 | V | 74 | -37.46 | Peak | 2.06 | 135 | |
| 4824 | 22.58 | V | 54 | -31.42 | Avg | 2.06 | 135 | |
| | | | | | | | | |
| 7236 | 41.43 | V | 74 | -32.57 | Peak | 2.4 | 135 | |
| 7236 | 27.48 | V | 54 | -26.52 | Avg | 2.4 | 135 | |
| | | | | | | | | |
| 9648 | 47.72 | V | -- | -- | Peak | 3.04 | 270 | Not in Restricted Band |
| 9648 | 34.34 | V | -- | -- | Avg | 3.04 | 270 | Not in Restricted Band |
| | | | | | | | | |
| 12060 | 46.03 | V | 74 | -27.97 | Peak | 2.37 | 225 | |
| 12060 | 32.16 | V | 54 | -21.84 | Avg | 2.37 | 225 | |
| | | | | | | | | |
| 14472 | 48.08 | V | 74 | -25.92 | Peak | 1.69 | 180 | |
| 14472 | 33.6 | V | 54 | -20.4 | Avg | 1.69 | 180 | |
| | | | | | | | | |
| 16884 | 41.19 | V | -- | -- | Peak | 162.8 | 225 | Not in Restricted Band |
| 16884 | 28.78 | V | -- | -- | Avg | 162.8 | 225 | Not in Restricted Band |
| | | | | | | | | |
| 19296 | | V | 74 | -74 | Peak | | | No Emissions |
| 19296 | | V | 54 | -54 | Avg | | | Detected |
| | | | | | | | | |
| 21708 | | V | -- | -- | Peak | | | No Emissions |
| 21708 | | V | -- | -- | Avg | | | Detected |
| | | | | | | | | |
| 24120 | | V | -- | -- | Peak | | | No Emissions |
| 24120 | | V | -- | -- | Avg | | | Detected |
| | | | | | | | | |

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Intel Corporation Date: 3/07/05
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Model: WM3A2200BG Tested By: Benigno Chavez
Configuration: Dell Latitude Laptop D510 Agency Series Number: PP17L -- Main Port
**With Phycomp Antenna**
**Channel 1 - 802.11 g Mode** Gain : 22.5 Peak Power: 16.38 dBm Avg. Power: 10.07 dBm
**Transmit Mode**

| Freq. (MHz) | Level (dBuV) | Pol (v/h) | Limit | Margin | Peak / QP / Avg | Ant. Height (m) | Table Angle (deg) | Comments |
|---|---|---|---|---|---|---|---|---|
| 4824 | 36.52 | H | 74 | -37.48 | Peak | 2.26 | 180 | |
| 4824 | 22.62 | H | 54 | -31.38 | Avg | 2.26 | 180 | |
| | | | | | | | | |
| 7236 | 41.25 | H | 74 | -32.75 | Peak | 2.14 | 180 | |
| 7236 | 27.28 | H | 54 | -26.72 | Avg | 2.14 | 180 | |
| | | | | | | | | |
| 9648 | 46.29 | H | -- | -- | Peak | 1.8 | 225 | Not in Restricted Band |
| 9648 | 32.96 | H | -- | -- | Avg | 1.8 | 225 | Not in Restricted Band |
| | | | | | | | | |
| 12060 | 46.93 | H | 74 | -27.07 | Peak | 1.69 | 180 | |
| 12060 | 32.57 | H | 54 | -21.43 | Avg | 1.69 | 180 | |
| | | | | | | | | |
| 14472 | 49.1 | H | 74 | -24.9 | Peak | 2.1 | 225 | |
| 14472 | 34.66 | H | 54 | -19.34 | Avg | 2.1 | 225 | |
| | | | | | | | | |
| 16884 | 50.23 | H | -- | -- | Peak | 1.92 | 180 | Not in Restricted Band |
| 16884 | 35.41 | H | -- | -- | Avg | 1.92 | 180 | Not in Restricted Band |
| | | | | | | | | |
| 19296 | | H | 74 | -74 | Peak | | | No Emissions |
| 19296 | | H | 54 | -54 | Avg | | | Detected |
| | | | | | | | | |
| 21708 | | H | -- | -- | Peak | | | No Emissions |
| 21708 | | H | -- | -- | Avg | | | Detected |
| | | | | | | | | |
| 24120 | | H | -- | -- | Peak | | | No Emissions |
| 24120 | | H | -- | -- | Avg | | | Detected |
| | | | | | | | | |

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Intel Mini PCI Type 3A 802.11BG Wireless LAN Adapter Lab: B
Model: WM3A2200BG Tested By: Benigno Chavez
Configuration: Dell Latitude Laptop D510 Agency Series Number: PP17L -- Main Port
**With Phycomp Antenna**
**Channel 6 - 802.11 g Mode** Gain : 22.5 Peak Power: 16.25 dBm Avg. Power: 9.93 dBm
**Transmit Mode**

| Freq. (MHz) | Level (dBuV) | Pol (v/h) | Limit | Margin | Peak / QP / Avg | Ant. Height (m) | Table Angle (deg) | Comments |
|---|---|---|---|---|---|---|---|---|
| 4874 | 36.45 | V | 74 | -37.55 | Peak | 1.48 | 180 | |
| 4874 | 22.94 | V | 54 | -31.06 | Avg | 1.48 | 180 | |
| | | | | | | | | |
| 7311 | 40.98 | V | 74 | -33.02 | Peak | 2.67 | 180 | |
| 7311 | 26.89 | V | 54 | -27.11 | Avg | 2.67 | 180 | |
| | | | | | | | | |
| 9748 | 45.38 | V | -- | -- | Peak | 2.28 | 180 | Not in Restricted Band |
| 9748 | 31.55 | V | -- | -- | Avg | 2.28 | 180 | Not in Restricted Band |
| | | | | | | | | |
| 12185 | 45.98 | V | 74 | -28.02 | Peak | 2.07 | 225 | |
| 12185 | 32.21 | V | 54 | -21.79 | Avg | 2.07 | 225 | |
| | | | | | | | | |
| 14622 | 48.39 | V | -- | -- | Peak | 2.19 | 135 | Not in Restricted Band |
| 14622 | 33.73 | V | -- | -- | Avg | 2.19 | 135 | Not in Restricted Band |
| | | | | | | | | |
| 17059 | 37.82 | V | -- | -- | Peak | 1.96 | 135 | Not in Restricted Band |
| 17059 | 24.08 | V | -- | -- | Avg | 1.96 | 135 | Not in Restricted Band |
| | | | | | | | | |
| 19496 | | V | 74 | -74 | Peak | | | No Emissions |
| 19496 | | V | 54 | -54 | Avg | | | Detected |
| | | | | | | | | |
| 21933 | | V | -- | -- | Peak | | | No Emissions |
| 21933 | | V | -- | -- | Avg | | | Detected |
| | | | | | | | | |
| 22001 | | V | 74 | -74 | Peak | | | No Emissions |
| 22001 | | V | 54 | -54 | Avg | | | Detected |
| | | | | | | | | |
| 24370 | | V | -- | -- | Peak | | | No Emissions |
| 24370 | | V | -- | -- | Avg | | | Detected |
| | | | | | | | | |

**FCC 15.247**
Intel Corporation Date: 3/07/05
Intel Mini PCI Type 3A 802.11BG Wireless LAN Adapter Lab: B
Model: WM3A2200BG Tested By: Benigno Chavez
Configuration: Dell Latitude Laptop D510 Agency Series Number: PP17L -- Main Port
**With Phycomp Antenna**
**Channel 6 - 802.11 g Mode** Gain : 22.5 Peak Power: 16.25 dBm Avg. Power: 9.93 dBm
**Transmit Mode**

| Freq. (MHz) | Level (dBuV) | Pol (v/h) | Limit | Margin | Peak / QP / Avg | Ant. Height (m) | Table Angle (deg) | Comments |
|---|---|---|---|---|---|---|---|---|
| 4874 | 37.14 | H | 74 | -36.86 | Peak | 2.2 | 225 | |
| 4874 | 23.1 | H | 54 | -30.9 | Avg | 2.2 | 225 | |
| | | | | | | | | |
| 7311 | 40.9 | H | 74 | -33.1 | Peak | 2.16 | 180 | |
| 7311 | 27.07 | H | 54 | -26.93 | Avg | 2.16 | 180 | |
| | | | | | | | | |
| 9748 | 45.82 | H | -- | -- | Peak | 2.01 | 180 | Not in Restricted Band |
| 9748 | 31.68 | H | -- | -- | Avg | 2.01 | 180 | Not in Restricted Band |
| | | | | | | | | |
| 12185 | 45.5 | H | 74 | -28.5 | Peak | 1.9 | 225 | |
| 12185 | 32.16 | H | 54 | -21.84 | Avg | 1.9 | 225 | |
| | | | | | | | | |
| 14622 | 47.91 | H | -- | -- | Peak | 1.84 | 180 | Not in Restricted Band |
| 14622 | 33.76 | H | -- | -- | Avg | 1.84 | 180 | Not in Restricted Band |
| | | | | | | | | |
| 17059 | 49.64 | H | -- | -- | Peak | 1.64 | 135 | Not in Restricted Band |
| 17059 | 36.1 | H | -- | -- | Avg | 1.64 | 135 | Not in Restricted Band |
| | | | | | | | | |
| 19496 | | H | 74 | -74 | Peak | | | No Emissions |
| 19496 | | H | 54 | -54 | Avg | | | Detected |
| | | | | | | | | |
| 21933 | | H | -- | -- | Peak | | | No Emissions |
| 21933 | | H | -- | -- | Avg | | | Detected |
| | | | | | | | | |
| 22001 | | H | 74 | -74 | Peak | | | No Emissions |
| 22001 | | H | 54 | -54 | Avg | | | Detected |
| | | | | | | | | |
| 24370 | | H | -- | -- | Peak | | | No Emissions |
| 24370 | | H | -- | -- | Avg | | | Detected |
| | | | | | | | | |

**FCC 15.247**

Intel Corporation — Date: 3/07/05

Intel Mini PCI Type 3A 802.11BG Wireless LAN Adapter — Lab: B

Model: WM3A2200BG — Tested By: Benigno Chavez

Configuration: Dell Latitude Laptop D510 Agency Series Number: PP17L -- Main Port

**With Phycomp Antenna**

**Channel 11 - 802.11 g Mode** Gain : 22.5 Peak Power: 16.38 dBm Avg. Power: 9.99 dBm

**Transmit Mode**

| Freq. (MHz) | Level (dBuV) | Pol (v/h) | Limit | Margin | Peak / QP / Avg | Ant. Height (m) | Table Angle (deg) | Comments |
|---|---|---|---|---|---|---|---|---|
| 4924 | 37.22 | V | 74 | -36.78 | Peak | 2.08 | 225 | |
| 4924 | 23.62 | V | 54 | -30.38 | Avg | 2.08 | 225 | |
| | | | | | | | | |
| 7386 | 40.51 | V | 74 | -33.49 | Peak | 2.59 | 135 | |
| 7386 | 26.94 | V | 54 | -27.06 | Avg | 2.59 | 135 | |
| | | | | | | | | |
| 9848 | 46.95 | V | -- | -- | Peak | 2.8 | 270 | Not in Restricted Band |
| 9848 | 33.2 | V | -- | -- | Avg | 2.8 | 270 | Not in Restricted Band |
| | | | | | | | | |
| 12310 | 45.22 | V | 74 | -28.78 | Peak | 1.88 | 180 | |
| 12310 | 31.85 | V | 54 | -22.15 | Avg | 1.88 | 180 | |
| | | | | | | | | |
| 14772 | 47.91 | V | -- | -- | Peak | 1.96 | 225 | Not in Restricted Band |
| 14772 | 34.65 | V | -- | -- | Avg | 1.96 | 225 | Not in Restricted Band |
| | | | | | | | | |
| 17234 | 38.1 | V | -- | -- | Peak | 2.08 | 180 | Not in Restricted Band |
| 17234 | 25.25 | V | -- | -- | Avg | 2.08 | 180 | Not in Restricted Band |
| | | | | | | | | |
| 19696 | | V | 74 | -74 | Peak | | | No Emissions |
| 19696 | | V | 54 | -54 | Avg | | | Detected |
| | | | | | | | | |
| 22158 | | V | 74 | -74 | Peak | | | No Emissions |
| 22158 | | V | 54 | -54 | Avg | | | Detected |
| | | | | | | | | |
| 24620 | | V | -- | -- | Peak | | | No Emissions |
| 24620 | | V | -- | -- | Avg | | | Detected |
| | | | | | | | | |

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Intel Corporation — Date: 3/07/05

Intel Mini PCI Type 3A 802.11BG Wireless LAN Adapter — Lab: B

Model: WM3A2200BG — Tested By: Benigno Chavez

Configuration: Dell Latitude Laptop D510 Agency Series Number: PP17L -- Main Port

**With Phycomp Antenna**

**Channel 11 - 802.11 g Mode** Gain : 22.5 Peak Power: 16.38 dBm Avg. Power: 9.99 dBm

**Transmit Mode**

| Freq. (MHz) | Level (dBuV) | Pol (v/h) | Limit | Margin | Peak / QP / Avg | Ant. Height (m) | Table Angle (deg) | Comments |
|---|---|---|---|---|---|---|---|---|
| 4924 | 37.28 | H | 74 | -36.72 | Peak | 2.14 | 225 | |
| 4924 | 23.47 | H | 54 | -30.53 | Avg | 2.14 | 225 | |
| | | | | | | | | |
| 7386 | 40.18 | H | 74 | -33.82 | Peak | 2.12 | 180 | |
| 7386 | 26.74 | H | 54 | -27.26 | Avg | 2.12 | 180 | |
| | | | | | | | | |
| 9848 | 47.8 | H | -- | -- | Peak | 2.61 | 270 | Not in Restricted Band |
| 9848 | 33.09 | H | -- | -- | Avg | 2.61 | 270 | Not in Restricted Band |
| | | | | | | | | |
| 12310 | 44.76 | H | 74 | -29.24 | Peak | 2.47 | 225 | |
| 12310 | 32.03 | H | 54 | -21.97 | Avg | 2.47 | 225 | |
| | | | | | | | | |
| 14772 | 48.32 | H | -- | -- | Peak | 1.93 | 135 | Not in Restricted Band |
| 14772 | 35.33 | H | -- | -- | Avg | 1.93 | 135 | Not in Restricted Band |
| | | | | | | | | |
| 17234 | 49.16 | H | -- | -- | Peak | 2.17 | 180 | Not in Restricted Band |
| 17234 | 35.97 | H | -- | -- | Avg | 2.17 | 180 | Not in Restricted Band |
| | | | | | | | | |
| 19696 | | H | 74 | -74 | Peak | | | No Emissions |
| 19696 | | H | 54 | -54 | Avg | | | Detected |
| | | | | | | | | |
| 22158 | | H | 74 | -74 | Peak | | | No Emissions |
| 22158 | | H | 54 | -54 | Avg | | | Detected |
| | | | | | | | | |
| 24620 | | H | -- | -- | Peak | | | No Emissions |
| 24620 | | H | -- | -- | Avg | | | Detected |
| | | | | | | | | |

**FCC 15.247**

Intel Corporation — Date: 3/08/05

Intel Mini PCI Type 3A 802.11BG Wireless LAN Adapter — Lab: B

Model: WM3A2200BG — Tested By: Kyle Fujimoto

Configuration: Dell Latitude Laptop D510 Agency Series Number: PP17L -- Main Port

**With Phycomp Antenna**

**Channel 1 - 802.11 b Mode** Gain : 28.0 Peak Power: 17.15 dBm Avg. Power: 14.80 dBm

**Channel 6 - 802.11 b Mode** Gain : 28.5 Peak Power: 17.59 dBm Avg. Power: 15.22 dBm

**Channel 11 - 802.11 b Mode** Gain : 28.5 Peak Power: 17.61 dBm Avg. Power: 15.23 dBm

| Freq. (MHz) | Level (dBuV) | Pol (v/h) | Limit | Margin | Peak / QP / Avg | Ant. Height (m) | Table Angle (deg) | Comments |
|---|---|---|---|---|---|---|---|---|
| 2312 | 53.65 | V | 74 | -20.35 | Peak | 2.87 | 270 | 103 MHz Below the Fundamental |
| 2312 | 48.76 | V | 54 | -5.24 | Avg | 2.87 | 270 | of Channel 1 |
| | | | | | | | | |
| 2512 | 48.47 | V | 74 | -25.53 | Peak | 1.85 | 270 | 103 MHz Above the Fundamental |
| 2512 | 40.36 | V | 54 | -13.64 | Avg | 1.85 | 270 | of Channel 1 |
| | | | | | | | | |
| 2312 | 52.46 | H | 74 | -21.54 | Peak | 2.21 | 180 | 103 MHz Below the Fundamental |
| 2312 | 48.13 | H | 54 | -5.87 | Avg | 2.21 | 180 | of Channel 1 |
| | | | | | | | | |
| 2512 | 48.6 | H | 74 | -25.4 | Peak | 2.32 | 225 | 103 MHz Above the Fundamental |
| 2512 | 41.15 | H | 54 | -12.85 | Avg | 2.32 | 225 | of Channel 1 |
| | | | | | | | | |
| 2336 | 52.37 | V | 74 | -21.63 | Peak | 2.72 | 225 | 103 MHz Below the Fundamental |
| 2336 | 47.15 | V | 54 | -6.85 | Avg | 2.72 | 225 | of Channel 6 |
| | | | | | | | | |
| 2538.7 | 48.27 | V | 74 | -25.73 | Peak | 2.44 | 135 | 103 MHz Above the Fundamental |
| 2538.7 | 40.97 | V | 54 | -13.03 | Avg | 2.44 | 135 | of Channel 6 |
| | | | | | | | | |
| 2336 | 54.28 | H | 74 | -19.72 | Peak | 1 | 45 | 103 MHz Below the Fundamental |
| 2336 | 48.36 | H | 54 | -5.64 | Avg | 1 | 45 | of Channel 6 |
| | | | | | | | | |
| 2538.7 | 48.43 | H | 74 | -25.57 | Peak | 2.02 | 45 | 103 MHz Above the Fundamental |
| 2538.7 | 40.5 | H | 54 | -13.5 | Avg | 2.02 | 45 | of Channel 6 |
| | | | | | | | | |
| 2360 | 51.05 | V | 74 | -22.95 | Peak | 2.39 | 135 | 103 MHz Below the Fundamental |
| 2360 | 42.52 | V | 54 | -11.48 | Avg | 2.39 | 135 | of Channel 11 |
| | | | | | | | | |
| 2565 | 45.3 | V | 74 | -28.7 | Peak | 2.03 | 270 | 103 MHz Above the Fundamental |
| 2565 | 34.62 | V | 54 | -19.38 | Avg | 2.03 | 270 | of Channel 11 |
| | | | | | | | | |
| 2360 | 52.95 | H | 74 | -21.05 | Peak | 1.32 | 135 | 103 MHz Below the Fundamental |
| 2360 | 47.33 | H | 54 | -6.67 | Avg | 1.32 | 135 | of Channel 11 |
| | | | | | | | | |
| 2564 | 46.31 | H | 74 | -27.69 | Peak | 1.64 | 225 | 103 MHz Above the Fundamental |
| 2564 | 37.66 | H | 54 | -16.34 | Peak | 1.64 | 225 | of Channel 11 |
| | | | | | | | | |

**FCC 15.247**

Intel Corporation — Date: 3/08/05

Intel Mini PCI Type 3A 802.11BG Wireless LAN Adapter — Lab: B

Model: WM3A2200BG — Tested By: Kyle Fujimoto

Configuration: Dell Latitude Laptop D510 Agency Series Number: PP17L -- Main Port

**With Phycomp Antenna**

**Channel 1 - 802.11 g Mode** Gain : 22.5 Peak Power: 16.38 dBm Avg. Power: 10.07 dBm

**Channel 6 - 802.11 g Mode** Gain : 22.5 Peak Power: 16.25 dBm Avg. Power: 9.93 dBm

**Channel 11 - 802.11 g Mode** Gain : 22.5 Peak Power: 16.38 dBm Avg. Power: 9.99 dBm

| Freq. (MHz) | Level (dBuV) | Pol (v/h) | Limit | Margin | Peak / QP / Avg | Ant. Height (m) | Table Angle (deg) | Comments |
|---|---|---|---|---|---|---|---|---|
| 2312 | 57.22 | V | 74 | -16.78 | Peak | 1.96 | 135 | 103 MHz Below the Fundamental |
| 2312 | 52.23 | V | 54 | -1.77 | Avg | 1.96 | 135 | of Channel 1 |
| | | | | | | | | |
| 2512 | 51.88 | V | 74 | -22.12 | Peak | 2.42 | 270 | 103 MHz Above the Fundamental |
| 2512 | 46.01 | V | 54 | -7.99 | Avg | 2.42 | 270 | of Channel 1 |
| | | | | | | | | |
| 2312 | 57.09 | H | 74 | -16.91 | Peak | 1.5 | 225 | 103 MHz Below the Fundamental |
| 2312 | 51.62 | H | 54 | -2.38 | Avg | 1.5 | 225 | of Channel 1 |
| | | | | | | | | |
| 2512 | 53 | H | 74 | -21 | Peak | 1.2 | 135 | 103 MHz Above the Fundamental |
| 2512 | 46.62 | H | 54 | -7.38 | Avg | 1.2 | 135 | of Channel 1 |
| | | | | | | | | |
| 2336 | 57.83 | V | 74 | -16.17 | Peak | 3.26 | 135 | 103 MHz Below the Fundamental |
| 2336 | 52.79 | V | 54 | -1.21 | Avg | 3.26 | 135 | of Channel 6 |
| | | | | | | | | |
| 2538.7 | 51.53 | V | 74 | -22.47 | Peak | 2.34 | 135 | 103 MHz Above the Fundamental |
| 2538.7 | 46.07 | V | 54 | -7.93 | Avg | 2.34 | 135 | of Channel 6 |
| | | | | | | | | |
| 2336 | 57.92 | H | 74 | -16.08 | Peak | 1.3 | 135 | 103 MHz Below the Fundamental |
| 2336 | 52.38 | H | 54 | -1.62 | Avg | 1.3 | 135 | of Channel 6 |
| | | | | | | | | |
| 2538.7 | 52.48 | H | 74 | -21.52 | Peak | 1.41 | 135 | 103 MHz Above the Fundamental |
| 2538.7 | 45.92 | H | 54 | -8.08 | Avg | 1.41 | 135 | of Channel 6 |
| | | | | | | | | |
| 2360 | 57.2 | V | 74 | -16.8 | Peak | 3.28 | 135 | 103 MHz Below the Fundamental |
| 2360 | 51.9 | V | 54 | -2.1 | Avg | 3.28 | 135 | of Channel 11 |
| | | | | | | | | |
| 2565 | 50.63 | V | 74 | -23.37 | Peak | 2.36 | 135 | 103 MHz Above the Fundamental |
| 2565 | 42.82 | V | 54 | -11.18 | Avg | 2.36 | 135 | of Channel 11 |
| | | | | | | | | |
| 2360 | 57.16 | H | 74 | -16.84 | Peak | 1.31 | 135 | 103 MHz Below the Fundamental |
| 2360 | 51.51 | H | 54 | -2.49 | Avg | 1.31 | 135 | of Channel 11 |
| | | | | | | | | |
| 2564 | 50.36 | H | 74 | -23.64 | Peak | 1.84 | 180 | 103 MHz Above the Fundamental |
| 2564 | 42.18 | H | 54 | -11.82 | Peak | 1.84 | 180 | of Channel 11 |
| | | | | | | | | |

**FCC 15.247**
Intel Corporation Date: 3/08/05
Intel Mini PCI Type 3A 802.11BG Wireless LAN Adapter Lab: B
Model: WM3A2200BG Tested By: Kyle Fujimoto
Configuration: Dell Latitude Laptop D510 Agency Series Number: PP17L -- Main Port
**With Phycomp Antenna**
**Channel 1 - 802.11 b Mode** Gain : 28.0 Peak Power: 17.15 dBm Avg. Power: 14.80 dBm
**Transmit Mode**

| Freq. (MHz) | Level (dBuV) | Pol (v/h) | Limit | Margin | Peak / QP / Avg | Ant. Height (m) | Table Angle (deg) | Comments |
|---|---|---|---|---|---|---|---|---|
| 3216 | 44.99 | V | 74 | -29.01 | Peak | 1.76 | 270 | Fundamental of LO for |
| 3216 | 42.67 | V | 54 | -11.33 | Avg | 1.76 | 270 | Channel 1 |
| | | | | | | | | |
| 6432 | 36.88 | V | -- | -- | Peak | 2.28 | 225 | 2nd Harmonic of LO for |
| 6432 | 23.64 | V | -- | -- | Avg | 2.28 | 225 | Channel 1 |
| | | | | | | | | |
| 9648 | 55.38 | V | -- | -- | Peak | 2.23 | 45 | 3rd Harmonic of LO = |
| 9648 | 51.47 | V | -- | -- | Avg | 2.23 | 45 | 4th Harmonic of Tx for Channel 1 |
| | | | | | | | | |
| 12864 | 45.08 | V | -- | -- | Peak | 2.23 | 270 | 4th Harmonic of LO for |
| 12864 | 31.28 | V | -- | -- | Avg | 2.23 | 270 | Channel 1 |
| | | | | | | | | |
| 3216 | 44.22 | H | 74 | -29.78 | Peak | 1.85 | 45 | Fundamental of LO for |
| 3216 | 41.55 | H | 54 | -12.45 | Avg | 1.85 | 45 | Channel 1 |
| | | | | | | | | |
| 6432 | 38.92 | H | -- | -- | Peak | 1.85 | 180 | 2nd Harmonic of LO for |
| 6432 | 23.99 | H | -- | -- | Avg | 1.85 | 180 | Channel 1 |
| | | | | | | | | |
| 9648 | 54.12 | H | -- | -- | Peak | 2.59 | 45 | 3rd Harmonic of LO = |
| 9648 | 49.29 | H | -- | -- | Avg | 2.59 | 45 | 4th Harmonic of Tx for Channel 1 |
| | | | | | | | | |
| 12864 | 46.53 | H | -- | -- | Peak | 1.61 | 45 | 4th Harmonic of LO for |
| 12864 | 31.27 | H | -- | -- | Avg | 1.61 | 45 | Channel 1 |
| | | | | | | | | |
| | | | | | | | | Only the Fundamental of the LO |
| | | | | | | | | is in the Restricted Band |
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**FCC 15.247**

Intel Corporation — Date: 3/08/05

Intel Mini PCI Type 3A 802.11BG Wireless LAN Adapter — Lab: B

Model: WM3A2200BG — Tested By: Kyle Fujimoto

Configuration: Dell Latitude Laptop D510 Agency Series Number: PP17L -- Main Port

**With Phycomp Antenna**

**Channel 6 - 802.11 b Mode** Gain : 28.5 Peak Power: 17.59 dBm Avg. Power: 15.22 dBm

**Transmit Mode**

| Freq. (MHz) | Level (dBuV) | Pol (v/h) | Limit | Margin | Peak / QP / Avg | Ant. Height (m) | Table Angle (deg) | Comments |
|---|---|---|---|---|---|---|---|---|
| 3249.33 | 44.63 | V | 74 | -29.37 | Peak | 1.93 | 270 | Fundamental of LO for |
| 3249.33 | 42.4 | V | 54 | -11.6 | Avg | 1.93 | 270 | Channel 6 |
| | | | | | | | | |
| 6498.67 | 37.15 | V | -- | -- | Peak | 1.61 | 225 | 2nd Harmonic of LO for |
| 6498.67 | 23.87 | V | -- | -- | Avg | 1.61 | 225 | Channel 6 |
| | | | | | | | | |
| 9748 | 57.04 | V | -- | -- | Peak | 2.36 | 135 | 3rd Harmonic of LO = |
| 9748 | 53.77 | V | -- | -- | Avg | 2.36 | 135 | 4th Harmonic of Tx for Channel 6 |
| | | | | | | | | |
| 12997.3 | 43.2 | V | -- | -- | Peak | 2.36 | 270 | 4th Harmonic of LO for |
| 12997.3 | 30.81 | V | -- | -- | Avg | 2.36 | 270 | Channel 6 |
| | | | | | | | | |
| 3249.33 | 40.78 | H | 74 | -33.22 | Peak | 2.95 | 45 | Fundamental of LO for |
| 3249.33 | 36.75 | H | 54 | -17.25 | Avg | 2.95 | 45 | Channel 6 |
| | | | | | | | | |
| 6498.67 | 35.83 | H | -- | -- | Peak | 2.94 | 180 | 2nd Harmonic of LO for |
| 6498.67 | 23.74 | H | -- | -- | Avg | 2.94 | 180 | Channel 6 |
| | | | | | | | | |
| 9748 | 52.88 | H | -- | -- | Peak | 3.86 | 45 | 3rd Harmonic of LO = |
| 9748 | 48.28 | H | -- | -- | Avg | 3.86 | 45 | 4th Harmonic of Tx for Channel 6 |
| | | | | | | | | |
| 12997.3 | 43.98 | H | -- | -- | Peak | 2.94 | 180 | 4th Harmonic of LO for |
| 12997.3 | 31.16 | H | -- | -- | Avg | 2.94 | 180 | of Channel 6 |
| | | | | | | | | |
| | | | | | | | | Only the Fundamental of the LO |
| | | | | | | | | is in the Restricted Band |
| | | | | | | | | |
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**FCC 15.247**

Intel Corporation — Date: 3/08/05

Intel Mini PCI Type 3A 802.11BG Wireless LAN Adapter — Lab: B

Model: WM3A2200BG — Tested By: Kyle Fujimoto

Configuration: Dell Latitude Laptop D510 Agency Series Number: PP17L -- Main Port

**With Phycomp Antenna**

**Channel 11 - 802.11 b Mode** Gain : 28.5 Peak Power: 17.61 dBm Avg. Power: 15.23 dBm

**Transmit Mode**

| Freq. (MHz) | Level (dBuV) | Pol (v/h) | Limit | Margin | Peak / QP / Avg | Ant. Height (m) | Table Angle (deg) | Comments |
|---|---|---|---|---|---|---|---|---|
| 3282.67 | 41.6 | V | 74 | -32.4 | Peak | 2.26 | 270 | Fundamental of LO for |
| 3282.67 | 38.33 | V | 54 | -15.67 | Avg | 2.26 | 270 | Channel 11 |
| | | | | | | | | |
| 6565.33 | 36.83 | V | -- | -- | Peak | 1.39 | 315 | 2nd Harmonic of LO for |
| 6565.33 | 23.96 | V | -- | -- | Avg | 1.39 | 315 | Channel 11 |
| | | | | | | | | |
| 9848 | 55.68 | V | -- | -- | Peak | 2.24 | 225 | 3rd Harmonic of LO = |
| 9848 | 52.77 | V | -- | -- | Avg | 2.24 | 225 | 4th Harmonic of Tx for Channel 11 |
| | | | | | | | | |
| 13130.7 | 43.98 | V | -- | -- | Peak | 1.61 | 270 | 4th Harmonic of LO for |
| 13130.7 | 29.3 | V | -- | -- | Avg | 1.61 | 270 | of Channel 11 |
| | | | | | | | | |
| 3282.67 | 42.34 | H | 74 | -31.66 | Peak | 1.17 | 225 | Fundamental of LO for |
| 3282.67 | 40.06 | H | 54 | -13.94 | Avg | 1.17 | 225 | Channel 11 |
| | | | | | | | | |
| 6565.33 | 36.74 | H | -- | -- | Peak | 1.85 | 270 | 2nd Harmonic of LO for |
| 6565.33 | 24.17 | H | -- | -- | Avg | 1.85 | 270 | Channel 11 |
| | | | | | | | | |
| 9848 | 54.73 | H | -- | -- | Peak | 1.55 | 270 | 3rd Harmonic of LO = |
| 9848 | 51.23 | H | -- | -- | Avg | 1.55 | 270 | 4th Harmonic of Tx for Channel 11 |
| | | | | | | | | |
| 13130.7 | 42.31 | H | -- | -- | Peak | 1.85 | 270 | 4th Harmonic of LO for |
| 13130.7 | 29.8 | H | -- | -- | Avg | 1.85 | 270 | of Channel 11 |
| | | | | | | | | |
| | | | | | | | | Only the Fundamental of the LO |
| | | | | | | | | is in the Restricted Band |
| | | | | | | | | |
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**FCC 15.247**
Intel Corporation Date: 3/08/05
Intel Mini PCI Type 3A 802.11BG Wireless LAN Adapter Lab: B
Model: WM3A2200BG Tested By: Kyle Fujimoto
Configuration: Dell Latitude Laptop D510 Agency Series Number: PP17L -- Main Port
**With Phycomp Antenna**
**Channel 1 - 802.11 g Mode** Gain : 22.5 Peak Power: 16.38 dBm Avg. Power: 10.07 dBm
**Transmit Mode**

| Freq. (MHz) | Level (dBuV) | Pol (v/h) | Limit | Margin | Peak / QP / Avg | Ant. Height (m) | Table Angle (deg) | Comments |
|---|---|---|---|---|---|---|---|---|
| 3216 | 45.42 | V | 74 | -28.58 | Peak | 1.65 | 270 | Fundamental of LO for |
| 3216 | 42.67 | V | 54 | -11.33 | Avg | 1.65 | 270 | Channel 1 |
| | | | | | | | | |
| 6432 | 37.57 | V | -- | -- | Peak | 1.66 | 270 | 2nd Harmonic of LO for |
| 6432 | 23.78 | V | -- | -- | Avg | 1.66 | 270 | Channel 1 |
| | | | | | | | | |
| 9648 | 47.72 | V | -- | -- | Peak | 3.04 | 270 | 3rd Harmonic of LO = |
| 9648 | 34.34 | V | -- | -- | Avg | 3.04 | 270 | 4th Harmonic of Tx for Channel 1 |
| | | | | | | | | |
| 12864 | 46.14 | V | -- | -- | Peak | 2.15 | 180 | 4th Harmonic of LO for |
| 12864 | 31.33 | V | -- | -- | Avg | 2.15 | 180 | Channel 1 |
| | | | | | | | | |
| 3216 | 47.77 | H | 74 | -26.23 | Peak | 2.44 | 180 | Fundamental of LO for |
| 3216 | 45.22 | H | 54 | -8.78 | Avg | 2.44 | 180 | Channel 1 |
| | | | | | | | | |
| 6432 | 39.31 | H | -- | -- | Peak | 2.64 | 180 | 2nd Harmonic of LO for |
| 6432 | 23.85 | H | -- | -- | Avg | 2.64 | 180 | Channel 1 |
| | | | | | | | | |
| 9648 | 46.29 | H | -- | -- | Peak | 1.8 | 225 | 3rd Harmonic of LO = |
| 9648 | 32.96 | H | -- | -- | Avg | 1.8 | 225 | 4th Harmonic of Tx for Channel 1 |
| | | | | | | | | |
| 12864 | 44.5 | H | -- | -- | Peak | 2.28 | 270 | 4th Harmonic of LO for |
| 12864 | 31.5 | H | -- | -- | Avg | 2.28 | 270 | Channel 1 |
| | | | | | | | | |
| | | | | | | | | Only the Fundamental of the LO |
| | | | | | | | | is in the Restricted Band |
| | | | | | | | | |
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**FCC 15.247**
Intel Corporation Date: 3/08/05
Intel Mini PCI Type 3A 802.11BG Wireless LAN Adapter Lab: B
Model: WM3A2200BG Tested By: Kyle Fujimoto
Configuration: Dell Latitude Laptop D510 Agency Series Number: PP17L -- Main Port
**With Phycomp Antenna**
**Channel 6 - 802.11 g Mode** Gain : 22.5 Peak Power: 16.25 dBm Avg. Power: 9.93 dBm
**Transmit Mode**

| Freq. (MHz) | Level (dBuV) | Pol (v/h) | Limit | Margin | Peak / QP / Avg | Ant. Height (m) | Table Angle (deg) | Comments |
|---|---|---|---|---|---|---|---|---|
| 3249.33 | 45.08 | V | 74 | -28.92 | Peak | 2.09 | 90 | Fundamental of LO for |
| 3249.33 | 43.42 | V | 54 | -10.58 | Avg | 2.09 | 90 | Channel 6 |
| | | | | | | | | |
| 6498.67 | 37.85 | V | -- | -- | Peak | 1.62 | 180 | 2nd Harmonic of LO for |
| 6498.67 | 23.73 | V | -- | -- | Avg | 1.62 | 180 | Channel 6 |
| | | | | | | | | |
| 9748 | 45.38 | V | -- | -- | Peak | 2.28 | 180 | 3rd Harmonic of LO = |
| 9748 | 31.55 | V | -- | -- | Avg | 2.28 | 180 | 4th Harmonic of Tx for Channel 6 |
| | | | | | | | | |
| 12997.3 | 43.8 | V | -- | -- | Peak | 2.43 | 180 | 4th Harmonic of LO for |
| 12997.3 | 30.96 | V | -- | -- | Avg | 2.43 | 180 | Channel 6 |
| | | | | | | | | |
| 3249.33 | 44.33 | H | 74 | -29.67 | Peak | 2.69 | 315 | Fundamental of LO for |
| 3249.33 | 41.95 | H | 54 | -12.05 | Avg | 2.69 | 315 | Channel 6 |
| | | | | | | | | |
| 6498.67 | 36.42 | H | -- | -- | Peak | 2.69 | 315 | 2nd Harmonic of LO for |
| 6498.67 | 23.58 | H | -- | -- | Avg | 2.69 | 315 | Channel 6 |
| | | | | | | | | |
| 9748 | 45.82 | H | -- | -- | Peak | 2.01 | 180 | 3rd Harmonic of LO = |
| 9748 | 31.68 | H | -- | -- | Avg | 2.01 | 180 | 4th Harmonic of Tx for Channel 6 |
| | | | | | | | | |
| 12997.3 | 43.74 | H | -- | -- | Peak | 2.45 | 270 | 4th Harmonic of LO for |
| 12997.3 | 30.29 | H | -- | -- | Avg | 2.45 | 270 | of Channel 6 |
| | | | | | | | | |
| | | | | | | | | Only the Fundamental of the LO |
| | | | | | | | | is in the Restricted Band |
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**FCC 15.247**
Intel Corporation Date: 3/08/05
Intel Mini PCI Type 3A 802.11BG Wireless LAN Adapter Lab: B
Model: WM3A2200BG Tested By: Kyle Fujimoto
Configuration: Dell Latitude Laptop D510 Agency Series Number: PP17L -- Main Port
**With Phycomp Antenna**
**Channel 11 - 802.11 g Mode** Gain : 22.5 Peak Power: 16.38 dBm Avg. Power: 9.99 dBm
**Transmit Mode**

| Freq. (MHz) | Level (dBuV) | Pol (v/h) | Limit | Margin | Peak / QP / Avg | Ant. Height (m) | Table Angle (deg) | Comments |
|---|---|---|---|---|---|---|---|---|
| 3282.67 | 43.79 | V | 74 | -30.21 | Peak | 2.03 | 90 | Fundamental of LO for |
| 3282.67 | 41.42 | V | 54 | -12.58 | Avg | 2.03 | 90 | Channel 11 |
| | | | | | | | | |
| 6565.33 | 38.21 | V | -- | -- | Peak | 2.34 | 135 | 2nd Harmonic of LO for |
| 6565.33 | 24.22 | V | -- | -- | Avg | 2.34 | 135 | Channel 11 |
| | | | | | | | | |
| 9848 | 46.95 | V | -- | -- | Peak | 2.8 | 270 | 3rd Harmonic of LO = |
| 9848 | 33.2 | V | -- | -- | Avg | 2.8 | 270 | 4th Harmonic of Tx for Channel 11 |
| | | | | | | | | |
| 13130.7 | 41.88 | V | -- | -- | Peak | 2.34 | 315 | 4th Harmonic of LO for |
| 13130.7 | 29.45 | V | -- | -- | Avg | 2.34 | 315 | of Channel 11 |
| | | | | | | | | |
| 3282.67 | 41.85 | H | 74 | -32.15 | Peak | 1.75 | 315 | Fundamental of LO for |
| 3282.67 | 37.86 | H | 54 | -16.14 | Avg | 1.75 | 315 | Channel 11 |
| | | | | | | | | |
| 6565.33 | 39.49 | H | -- | -- | Peak | 1.75 | 315 | 2nd Harmonic of LO for |
| 6565.33 | 24.25 | H | -- | -- | Avg | 1.75 | 315 | Channel 11 |
| | | | | | | | | |
| 9848 | 47.8 | H | -- | -- | Peak | 2.61 | 270 | 3rd Harmonic of LO = |
| 9848 | 33.09 | H | -- | -- | Avg | 2.61 | 270 | 4th Harmonic of Tx for Channel 11 |
| | | | | | | | | |
| 13130.7 | 43.68 | H | -- | -- | Peak | 1.79 | 180 | 4th Harmonic of LO for |
| 13130.7 | 30.33 | H | -- | -- | Avg | 1.79 | 180 | of Channel 11 |
| | | | | | | | | |
| | | | | | | | | Only the Fundamental of the LO |
| | | | | | | | | is in the Restricted Band |
| | | | | | | | | |
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**RSS-210**
Intel Corporation
Intel Mini PCI Type 3A 802.11BG Wireless LAN Adapter
Model: WM3A2200BG
Date: 3/07/05
Lab: B
Tested By: Benigno Chavez
Configuration: Dell Latitude Laptop D510 Agency Series Number: PP17L -- Main Port
**With Phycomp Antenna**
**Channel 6 - 802.11 b Mode**
**Receive Mode**

| Freq. (MHz) | Level (dBuV) | Pol (v/h) | Limit | Margin | Peak / QP / Avg | Ant. Height (m) | Table Angle (deg) | Comments |
|---|---|---|---|---|---|---|---|---|
| 3249.33 | 42.64 | V | 80 | -37.36 | Peak | 1.6 | 180 | Fundamental of LO for |
| 3249.33 | 39.76 | V | 60 | -20.24 | Avg | 1.6 | 180 | Channel 6 |
| | | | | | | | | |
| 6498.67 | 38.44 | V | 80 | -41.56 | Peak | 1.54 | 225 | 2nd Harmonic of LO for |
| 6498.67 | 24.82 | V | 60 | -35.18 | Avg | 1.54 | 225 | Channel 6 |
| | | | | | | | | |
| 9748 | 45.83 | V | 80 | -34.17 | Peak | 1.77 | 225 | 3rd Harmonic of LO for |
| 9748 | 32.36 | V | 60 | -27.64 | Avg | 1.77 | 225 | Channel 6 |
| | | | | | | | | |
| 3249.33 | 40.45 | H | 80 | -39.55 | Peak | 2.98 | 180 | Fundamental of LO for |
| 3249.33 | 35.94 | H | 60 | -24.06 | Avg | 2.98 | 180 | Channel 6 |
| | | | | | | | | |
| 6498.67 | 38.74 | H | 80 | -41.26 | Peak | 2.79 | 180 | 2nd Harmonic of LO for |
| 6498.67 | 24.79 | H | 60 | -35.21 | Avg | 2.79 | 180 | Channel 6 |
| | | | | | | | | |
| 9748 | 45.54 | H | 80 | -34.46 | Peak | 2.7 | 225 | 3rd Harmonic of LO for |
| 9748 | 31.97 | H | 60 | -28.03 | Avg | 2.7 | 225 | Channel 6 |
| | | | | | | | | |
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**RSS-210**
Intel Corporation
Intel Mini PCI Type 3A 802.11BG Wireless LAN Adapter
Model: WM3A2200BG
Date: 3/07/05
Lab: B
Tested By: Benigno Chavez
Configuration: Dell Latitude Laptop D510 Agency Series Number: PP17L -- Main Port
**With Phycomp Antenna**
**Channel 6 - 802.11 g Mode**
**Receive Mode**

| Freq. (MHz) | Level (dBuV) | Pol (v/h) | Limit | Margin | Peak / QP / Avg | Ant. Height (m) | Table Angle (deg) | Comments |
|---|---|---|---|---|---|---|---|---|
| 3249.33 | 42.24 | V | 80 | -37.76 | Peak | 1.69 | 270 | Fundamental of LO for |
| 3249.33 | 38.2 | V | 60 | -21.8 | Avg | 1.69 | 270 | Channel 6 |
| | | | | | | | | |
| 6498.67 | 39.25 | V | 80 | -40.75 | Peak | 2.16 | 270 | 2nd Harmonic of LO for |
| 6498.67 | 26.06 | V | 60 | -33.94 | Avg | 2.16 | 270 | Channel 6 |
| | | | | | | | | |
| 9748 | 46.13 | V | 80 | -33.87 | Peak | 1.82 | 225 | 3rd Harmonic of LO for |
| 9748 | 31.94 | V | 60 | -28.06 | Avg | 1.82 | 225 | Channel 6 |
| | | | | | | | | |
| 3249.33 | 42.3 | H | 80 | -37.7 | Peak | 1.03 | 225 | Fundamental of LO for |
| 3249.33 | 38.83 | H | 60 | -21.17 | Avg | 1.03 | 225 | Channel 6 |
| | | | | | | | | |
| 6498.67 | 38.39 | H | 80 | -41.61 | Peak | 1.72 | 180 | 2nd Harmonic of LO for |
| 6498.67 | 24.65 | H | 60 | -35.35 | Avg | 1.72 | 180 | Channel 6 |
| | | | | | | | | |
| 9748 | 45.94 | H | 80 | -34.06 | Peak | 1.33 | 225 | 3rd Harmonic of LO for |
| 9748 | 31.76 | H | 60 | -28.24 | Avg | 1.33 | 225 | Channel 6 |
| | | | | | | | | |
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Test Location : Compatible Electronics Page : 1/1
Customer : Intel Corporation Date : 3/09/2005
Manufacturer : Intel Corporation Time : 9:38:11
Eut name : Mini PCI Type 3A 802.11bg Wireless LAN Adapter Lab : A
Model : WM3A2200BG Test Distance : 3.0 Meters
Serial # : N/A
Specification : FCC B
Distance correction factor (20 * log(test/spec) : 0.00
Test Mode : Configuration: Phycomp Antenna - Dell Laptop PPxxxx
Scan Range: 10 kHz to 1000 MHz (Vertical & Horizontal)
Mode of Operation (worst case): Transmit
Test Engineer: James Ross

| Pol | Freq | Rdng | Cable loss | Ant factor | Amp gain | Cor'd rdg = R | Limit = L | Delta R-L |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV | dB | dB | dB | dBuV | dBuV/m | dB |
| H | 135.291 | 46.40 | 2.82 | 12.15 | 32.31 | 29.06 | 43.50 | -14.44 |
| H | 139.346 | 48.70 | 2.90 | 11.76 | 32.28 | 31.08 | 43.50 | -12.42 |
| H | 143.410 | 52.30 | 2.98 | 11.77 | 32.25 | 34.80 | 43.50 | -8.70 |
| H | 149.564 | 54.00 | 3.09 | 11.89 | 32.20 | 36.78 | 43.50 | -6.72 |
| H | 155.697 | 52.50 | 3.05 | 12.65 | 32.25 | 35.95 | 43.50 | -7.55 |
| H | 173.297 | 42.40 | 2.91 | 15.61 | 32.39 | 28.53 | 43.50 | -14.97 |
| H | 249.351 | 43.80 | 3.30 | 17.68 | 32.30 | 32.47 | 46.00 | -13.53 |
| V | 338.393 | 47.70 | 3.76 | 13.12 | 32.22 | 32.35 | 46.00 | -13.65 |
| V | 400.059 | 42.90 | 4.30 | 13.70 | 32.20 | 28.70 | 46.00 | -17.30 |
| V | 406.351 | 47.00 | 4.37 | 13.86 | 32.17 | 33.06 | 46.00 | -12.94 |
| V | 473.982 | 44.90 | 5.00 | 15.45 | 32.00 | 33.35 | 46.00 | -12.65 |
| H | 314.712 | 49.70 | 3.66 | 12.87 | 32.27 | 33.96 | 46.00 | -12.04 |
| H | 518.206 | 45.10 | 5.28 | 16.10 | 31.92 | 34.55 | 46.00 | -11.45 |
| H | 715.830 | 50.40 | 6.14 | 19.23 | 31.76 | 44.00 | 46.00 | -2.00 |
| H | 715.831Qp | 49.23 | 6.14 | 19.23 | 31.76 | 42.83 | 46.00 | -3.17 |
| H | 739.814 | 43.80 | 6.04 | 19.28 | 31.86 | 37.26 | 46.00 | -8.74 |
| H | 879.635 | 46.90 | 6.14 | 21.09 | 31.16 | 42.97 | 46.00 | -3.03 |

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**FCC Class B**

Intel Corporation — Date: 3/08/05

Intel Mini PCI Type 3A 802.11BG Wireless LAN Adapter — Lab: B

Model: WM3A2200BG — Tested By: Kyle Fujimoto

Configuration: Dell Latitude Laptop D510 Agency Series Number: PP17L -- Main Port

**Phycomp Antenna**

**Digital Portion - 1 GHz to 25 GHz**

| Freq. (MHz) | Level (dBuV) | Pol (v/h) | Limit | Margin | Peak / QP / Avg | Ant. Height (m) | Table Angle (deg) | Comments |
|---|---|---|---|---|---|---|---|---|
| 1150 | 37.06 | V | 74 | -36.94 | Peak | 1.98 | 315 | |
| 1150 | 22.24 | V | 54 | -31.76 | Avg | 1.98 | 315 | |
| | | | | | | | | |
| 1622.5 | 40.41 | V | 74 | -33.59 | Peak | 1.98 | 315 | |
| 1622.5 | 22.85 | V | 54 | -31.15 | Avg | 1.98 | 315 | |
| | | | | | | | | |
| 2196.8 | 48.69 | V | 74 | -25.31 | Peak | 1.19 | 270 | |
| 2196.8 | 42.04 | V | 54 | -11.96 | Avg | 1.19 | 270 | |
| | | | | | | | | |
| 1150 | 38.85 | H | 74 | -35.15 | Peak | 2.02 | 135 | |
| 1150 | 22.36 | H | 54 | -31.64 | Avg | 2.02 | 135 | |
| | | | | | | | | |
| 1622.5 | 39.92 | H | 74 | -34.08 | Peak | 2.78 | 135 | |
| 1622.5 | 24.12 | H | 54 | -29.88 | Avg | 2.78 | 135 | |
| | | | | | | | | |
| 2196.8 | 47.19 | H | 74 | -26.81 | Peak | 1.18 | 45 | |
| 2196.8 | 40.28 | H | 54 | -13.72 | Avg | 1.18 | 45 | |
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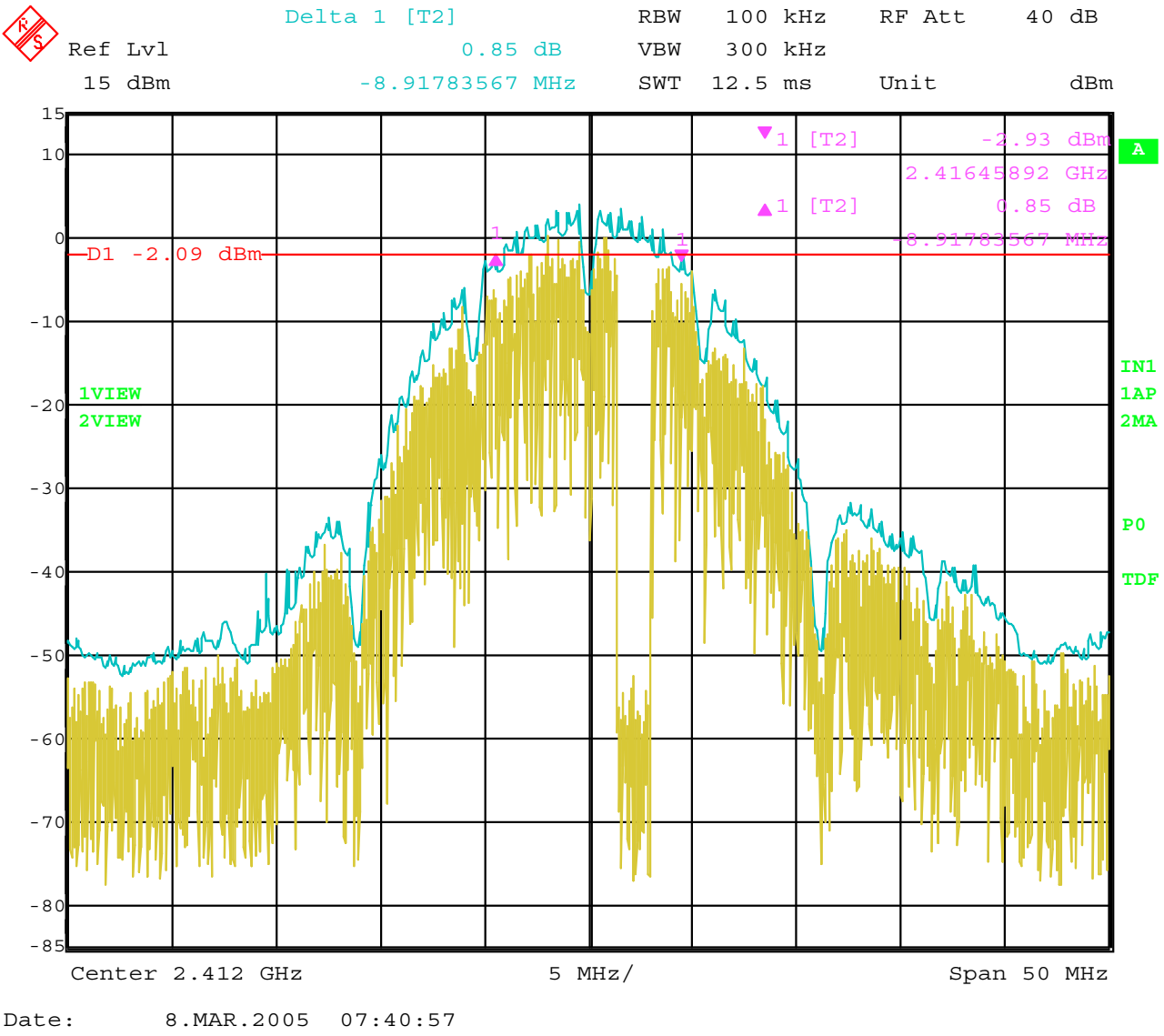
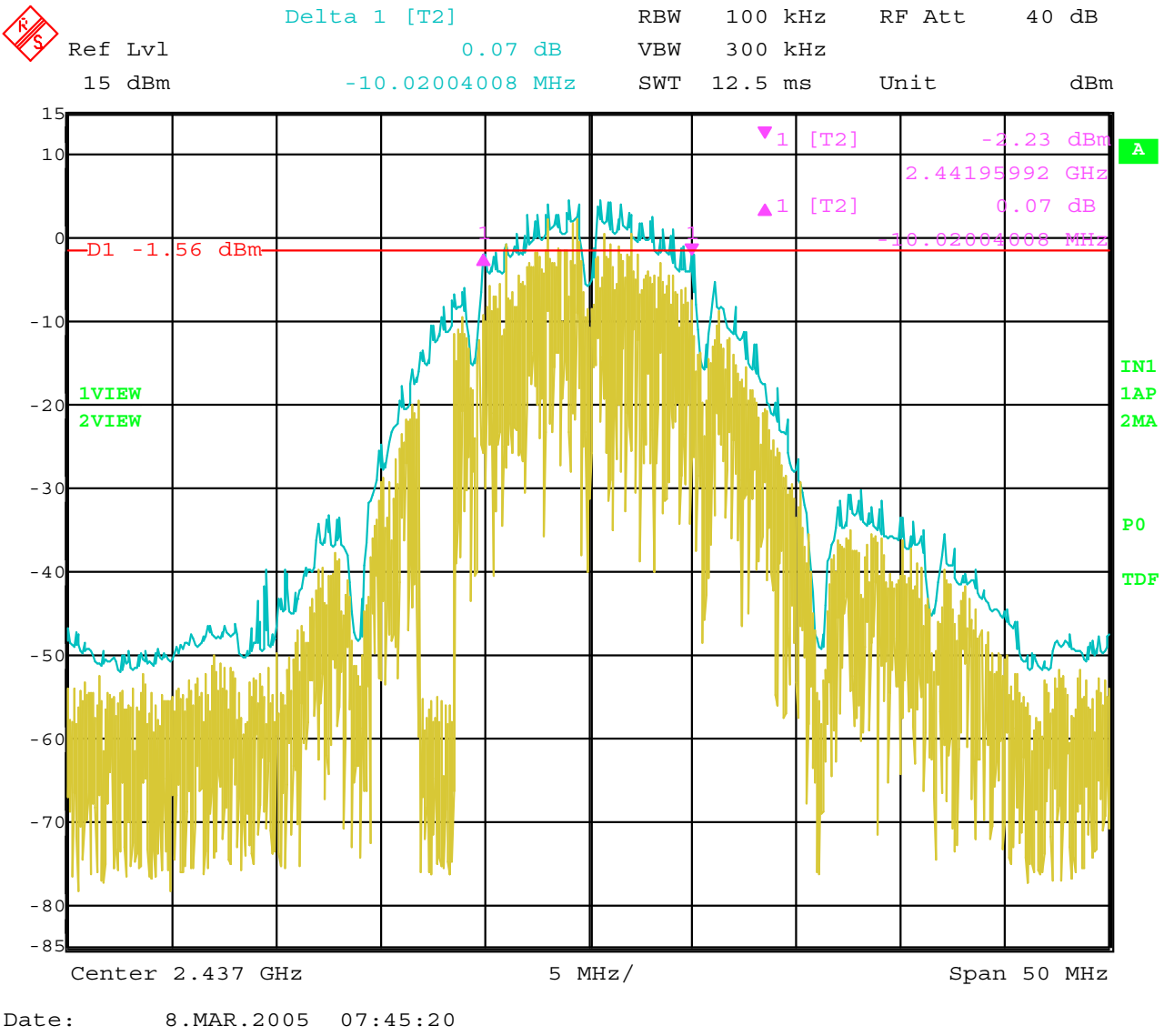
# *-6 dB BANDWIDTH*

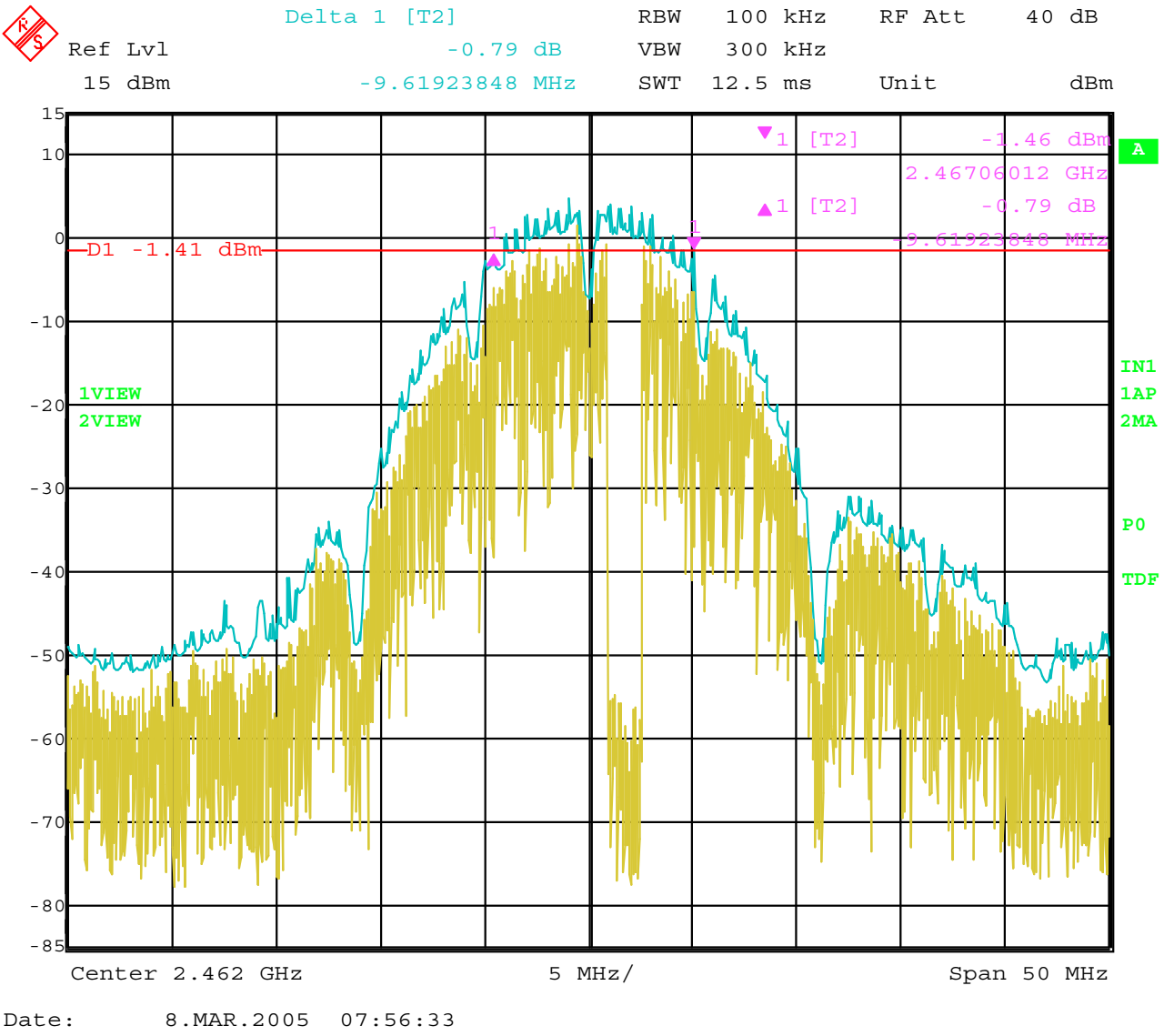
# *DATA SHEETS*



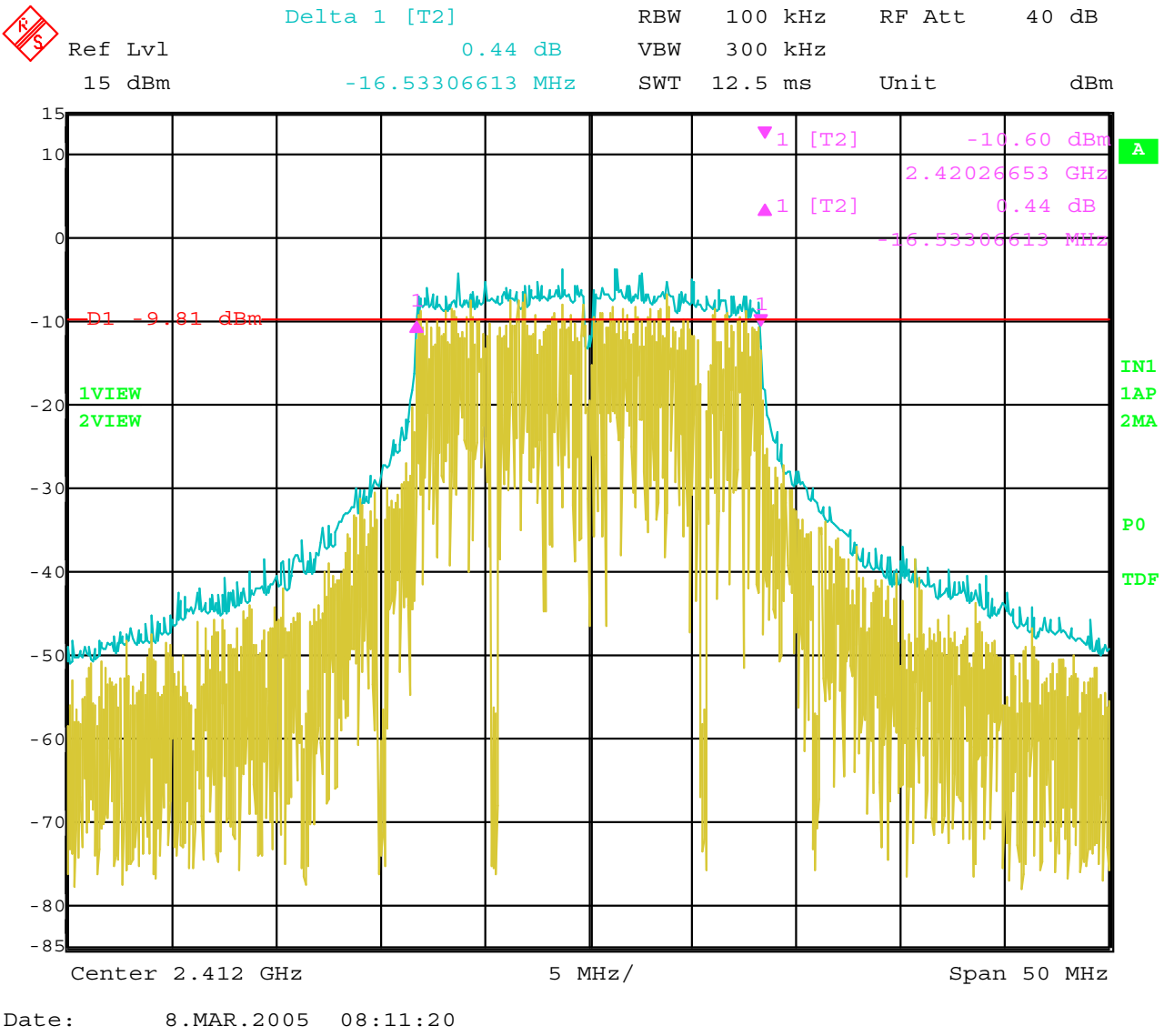

Bandwidth 6 dB – Channel 1—802.11 b Mode – Phycomp Antenna



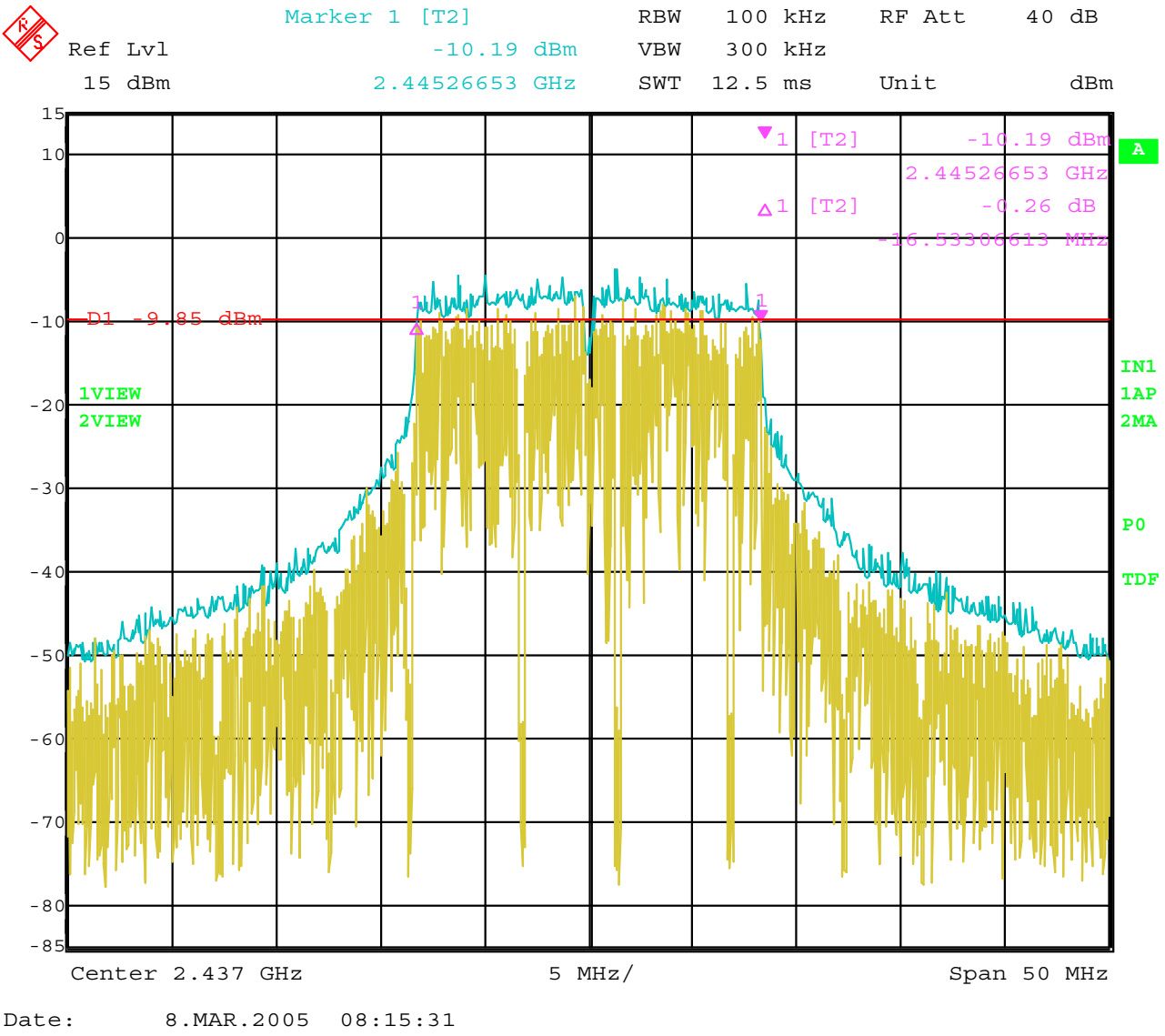

Bandwidth 6 dB – Channel 6 – 802.11 b Mode – Phycomp Antenna



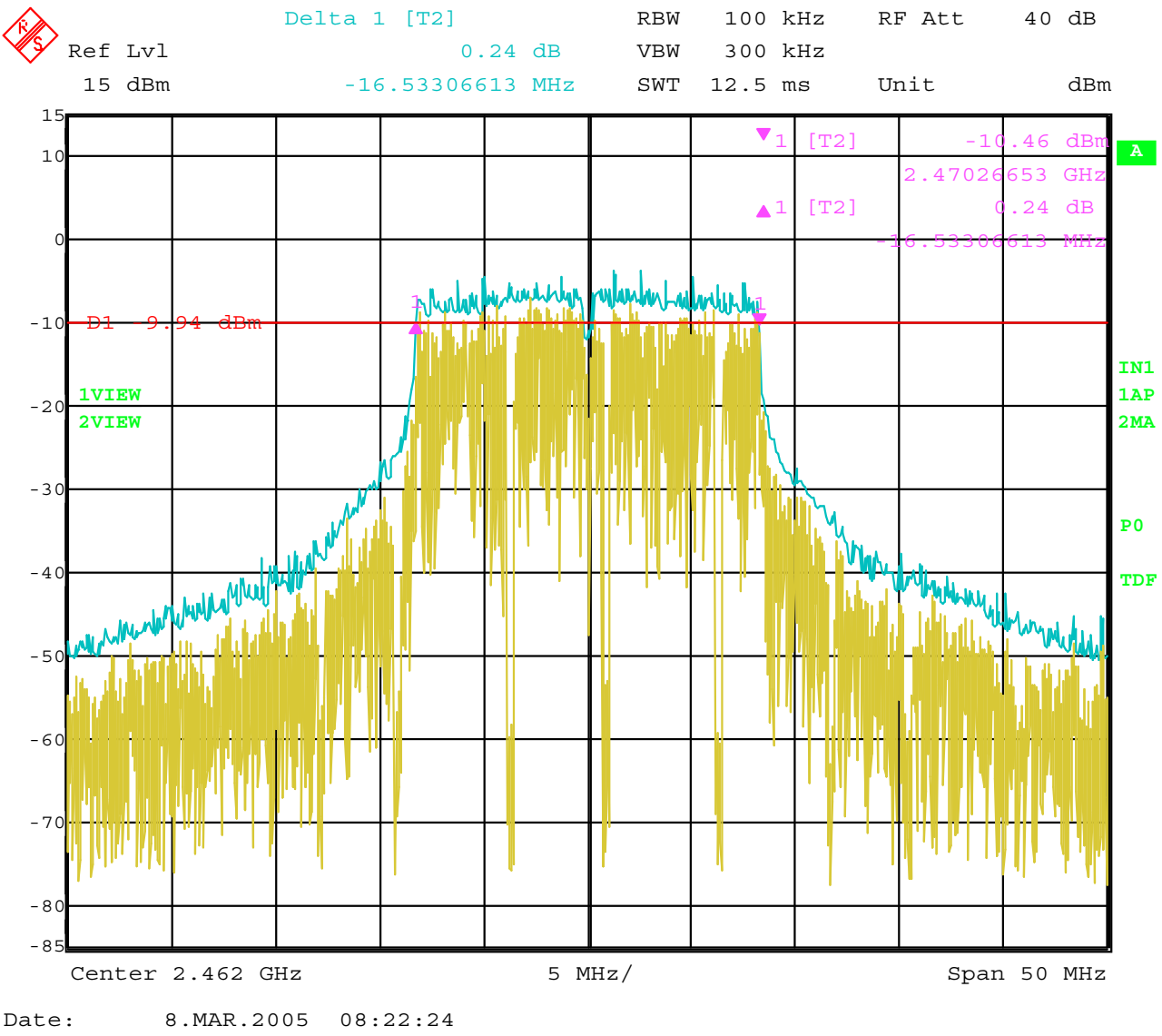

Bandwidth 6 dB – Channel 11 – 802.11 b Mode – Phycomp Antenna




Bandwidth 6 dB – Channel 1 – 802. 11 g Mode – Phycomp Antenna



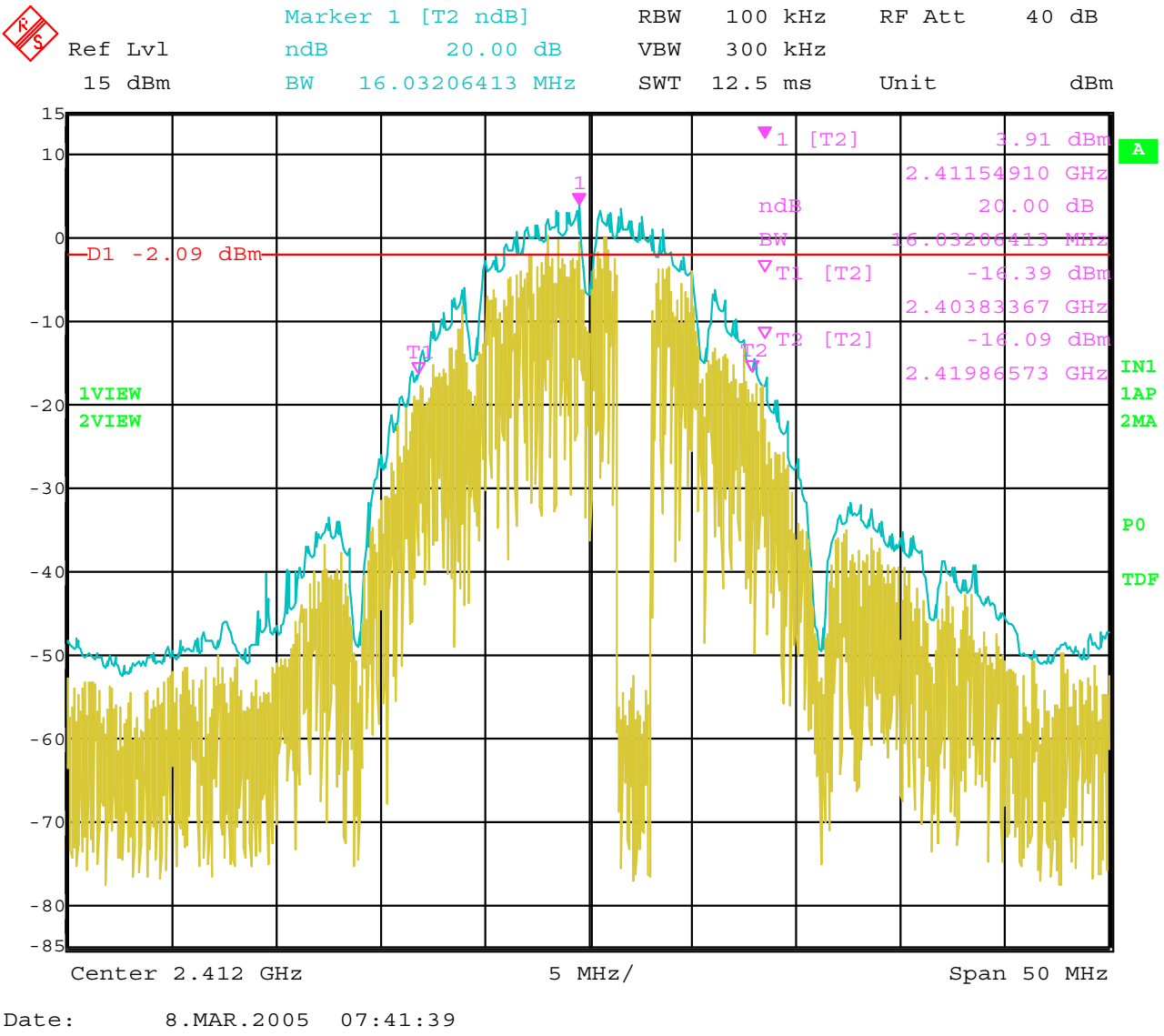

Bandwidth 6 dB – Channel 6 – 802.11 g Mode – Phycomp Antenna



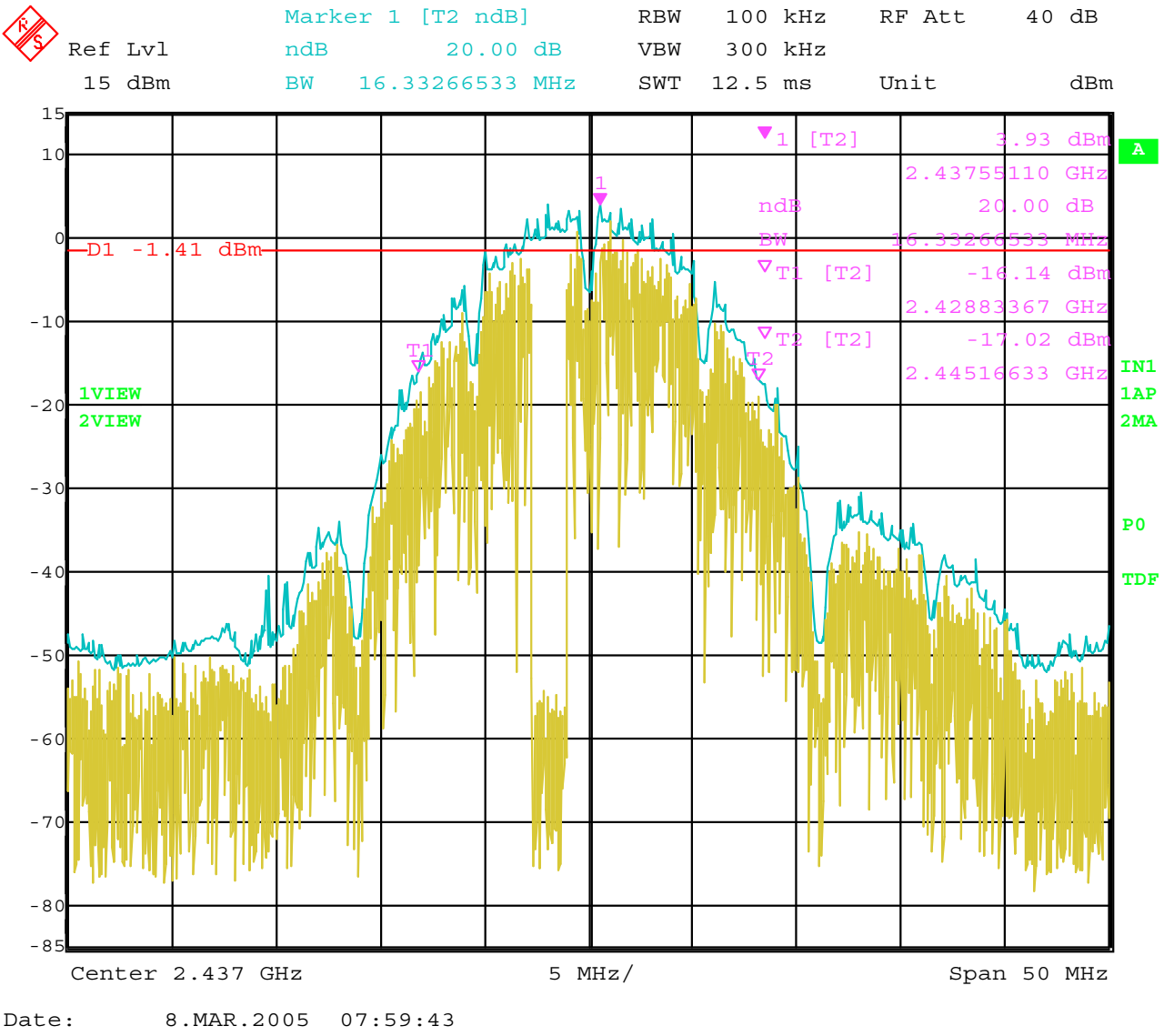

Bandwidth 6 dB – Channel 11 – 802.11 g Mode – Phycomp Antenna

# *-20 dB BANDWIDTH*

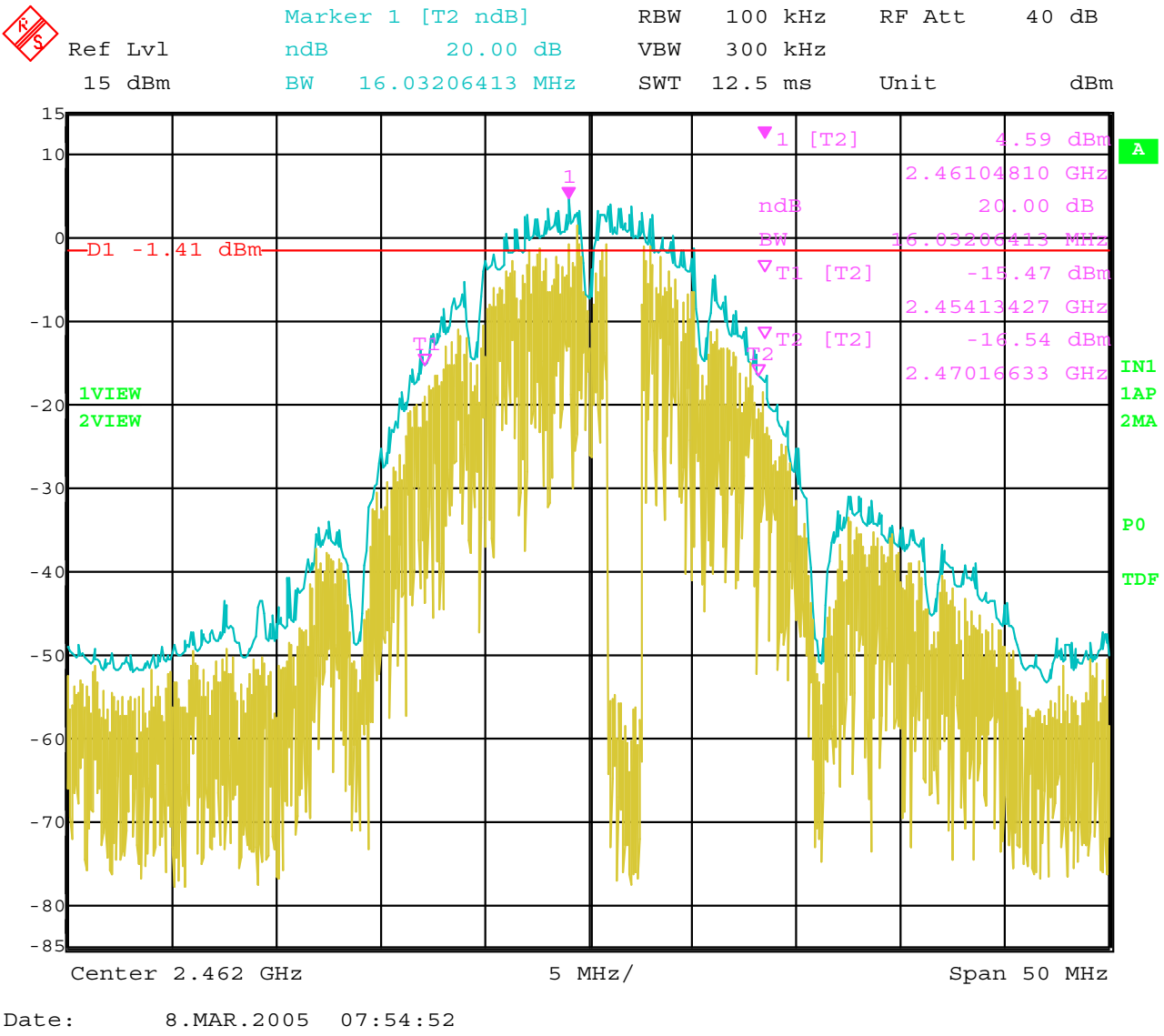
# *DATA SHEETS*



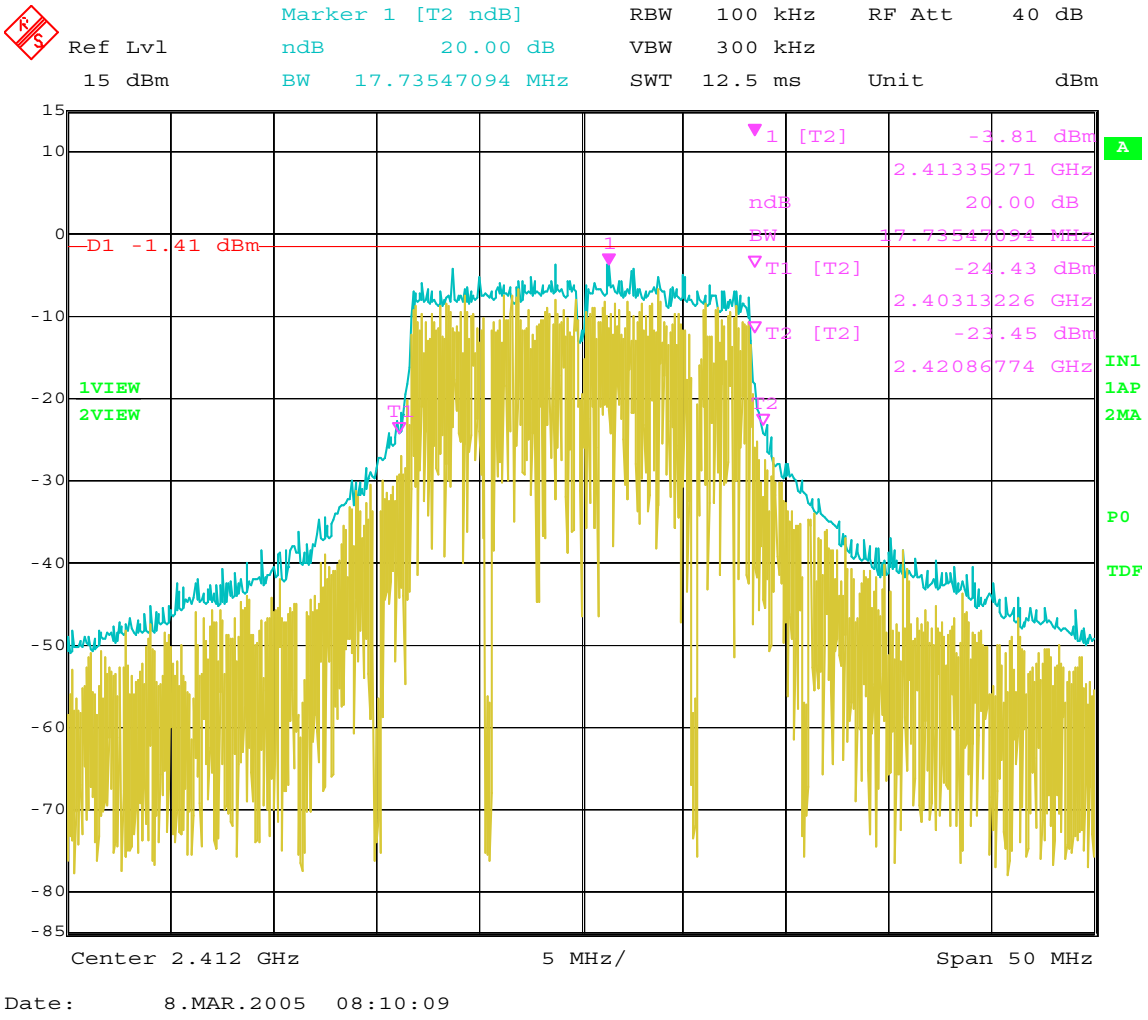

Bandwidth 20 dB – Channel 1 – 802.11 b Mode – Phycomp Antenna



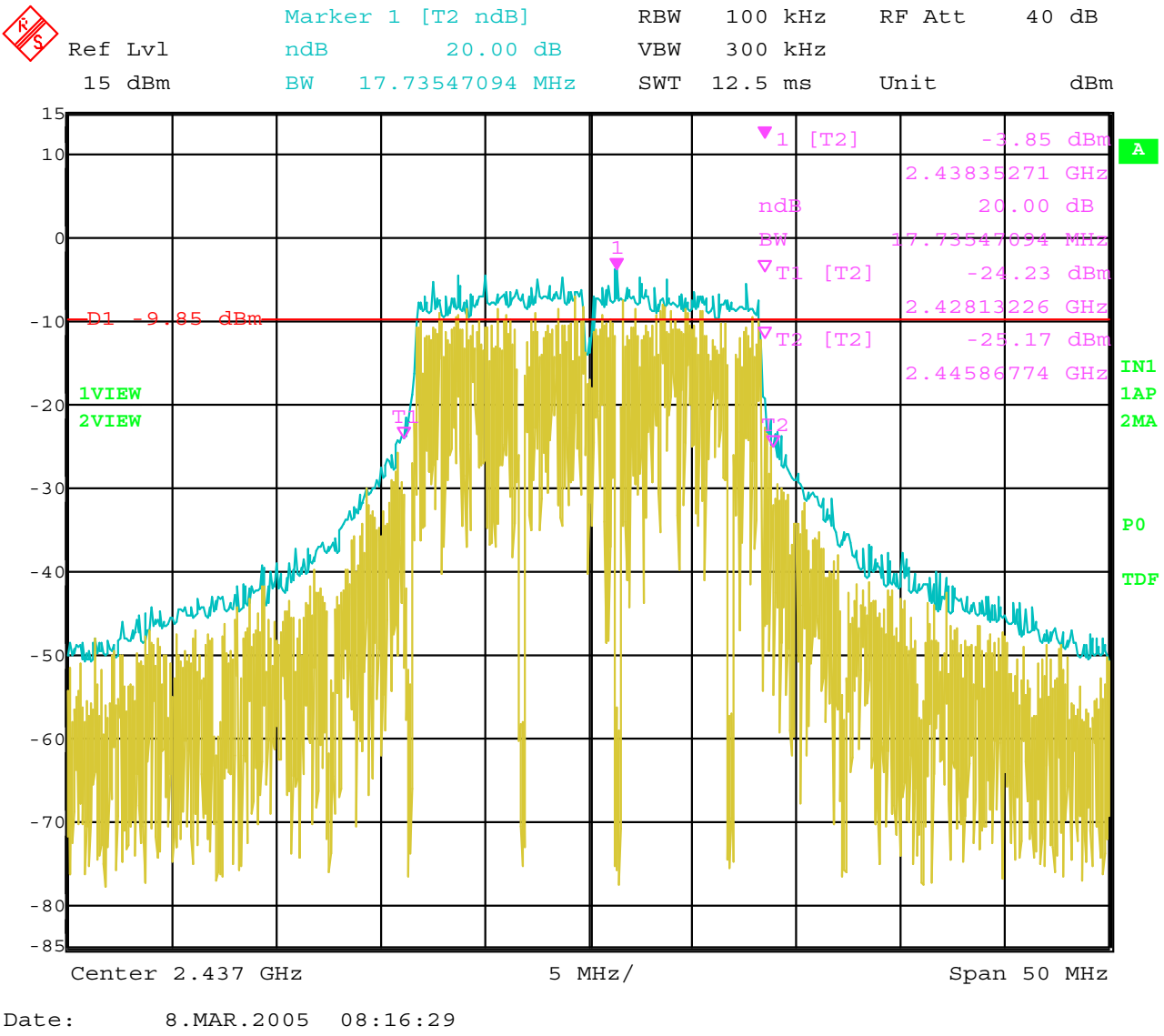

Bandwidth 20 dB – Channel 6 – 802.11 b Mode – Phycomp Antenna



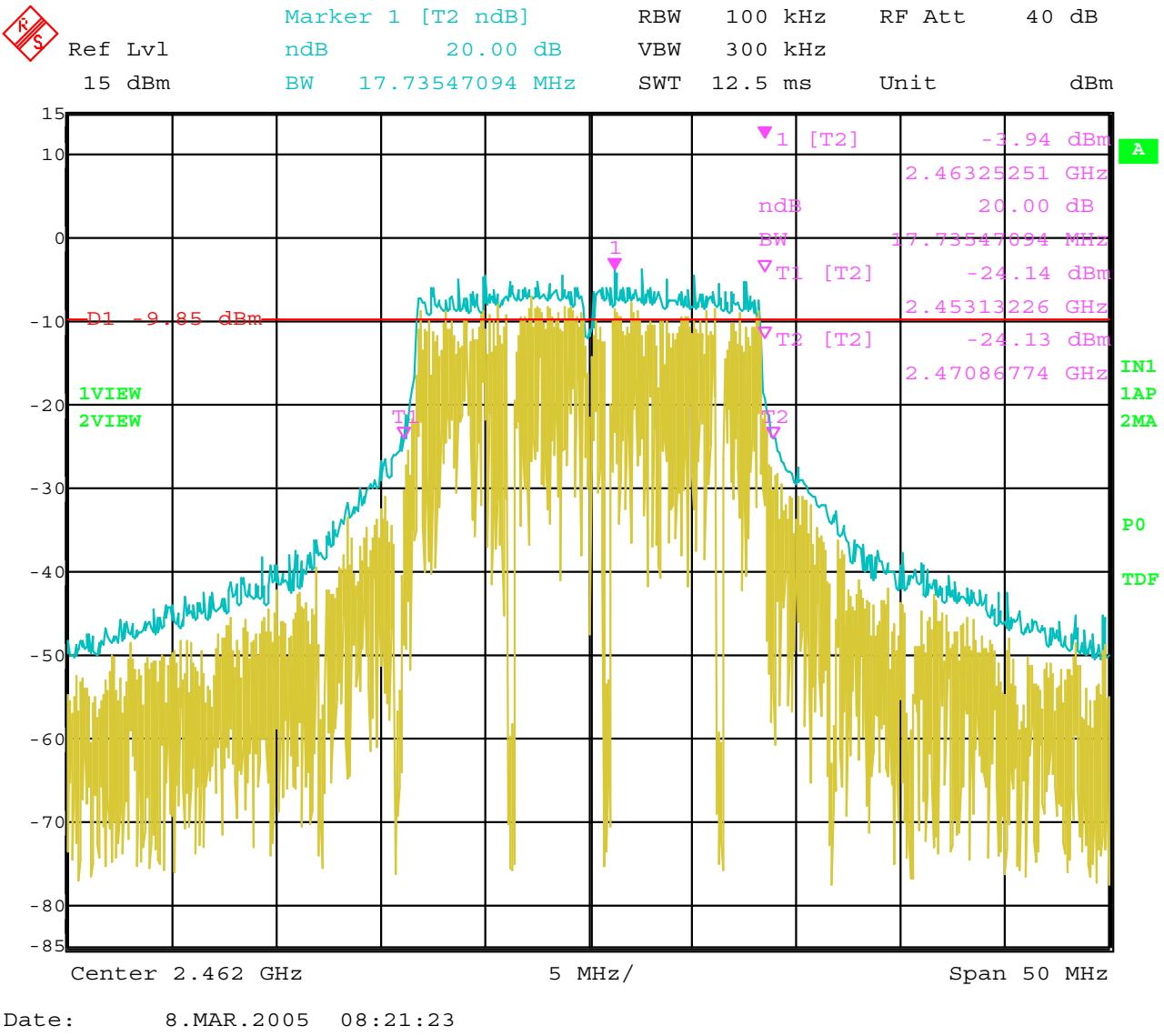

Bandwidth 20 dB – Channel 11 – 802.11 b Mode – Phycomp Antenna




Bandwidth 20 dB – Channel 1 – 802.11 g Mode – Phycomp Antenna




Bandwidth 20 dB – Channel 6 – 802.11 g Mode – Phycomp Antenna




Bandwidth 20 dB – Channel 11 – 802.11 g Mode – Phycomp Antenna

# *PEAK POWER OUTPUT*

# *DATA SHEETS*

# PEAK OUTPUT POWER

## Intel Corporation

## Intel Mini PCI Type 3A 802.11 BG Wireless LAN Adapter

## MODEL: WM3A2200BG

## For use in the Dell Agency Series #: PP17L

## With Phycomp Antenna

## 802.11 b Mode (Worst Case Rate is 1 Mbps)

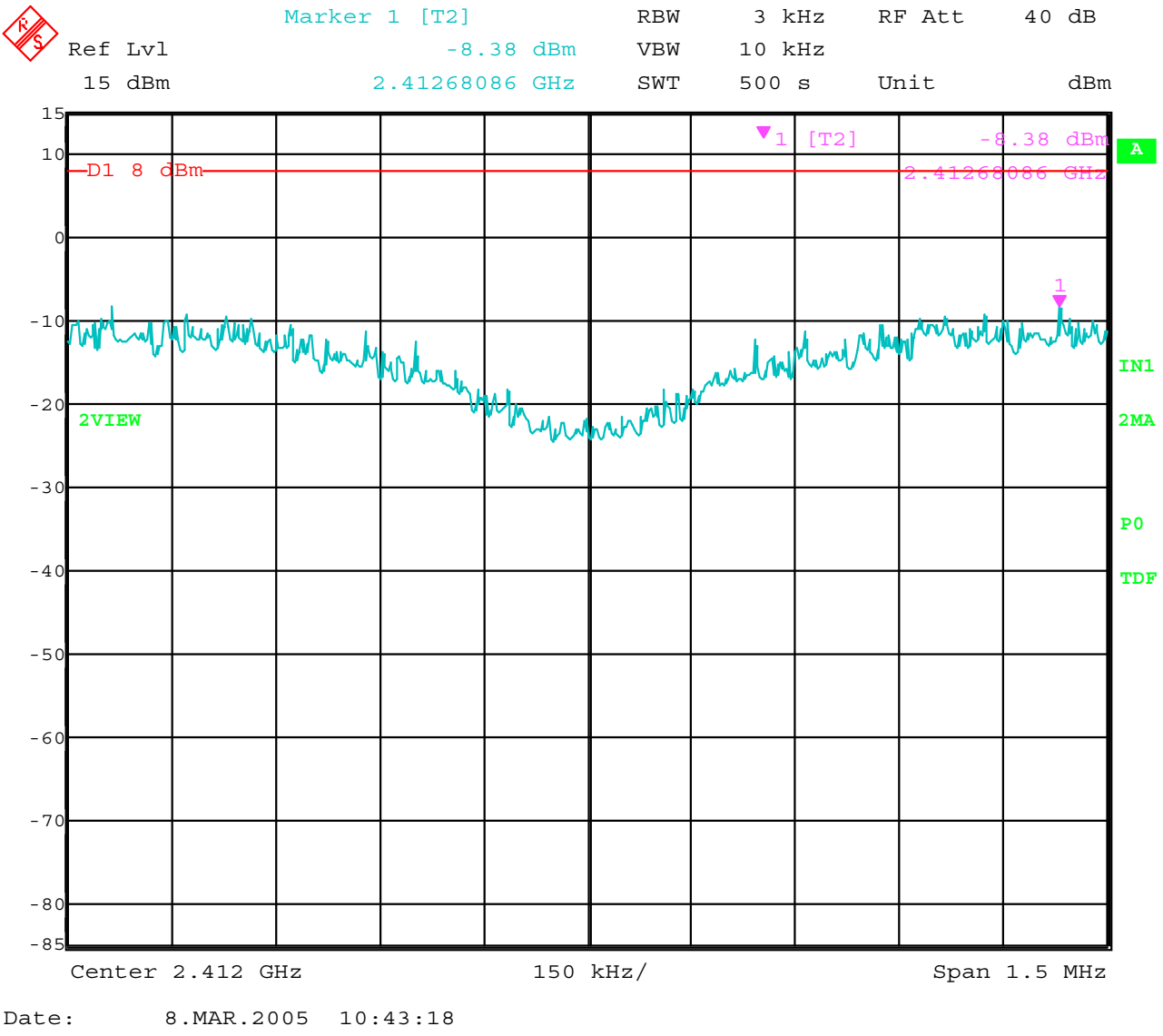
| CHANNEL | GAIN | PEAK POWER OUTPUT (dBm) |
|---|---|---|
| 1 (2412 MHz) | 28.0 | 17.15 |
| 6 (2437 MHz) | 28.5 | 17.59 |
| 11 (2462 MHz) | 28.5 | 17.61 |

## 802.11 g Mode (Worst Case Rate is 6 Mbps)

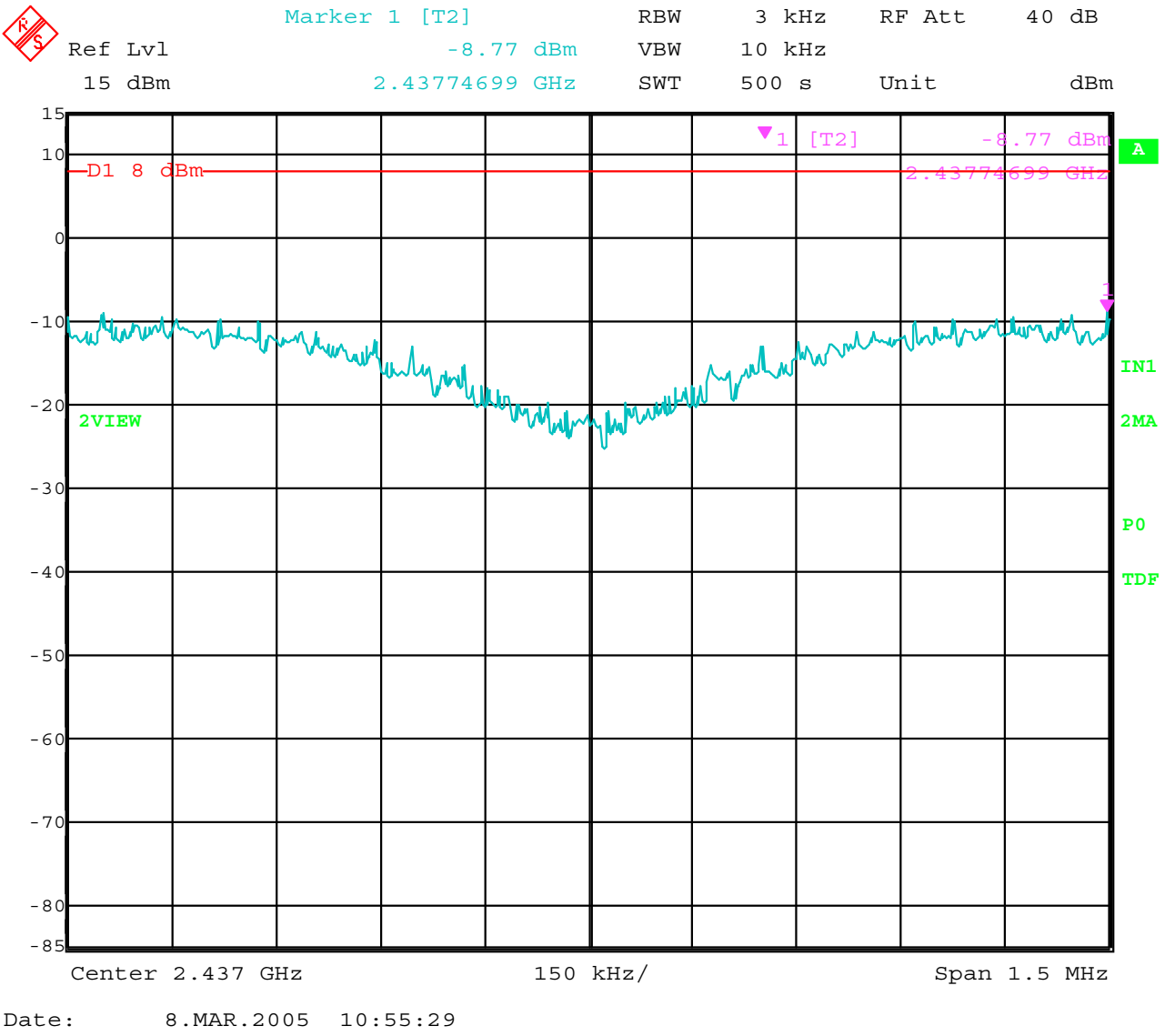
| CHANNEL | GAIN | PEAK POWER OUTPUT (dBm) |
|---|---|---|
| 1 (2412 MHz) | 22.5 | 16.38 |
| 6 (2437 MHz) | 22.5 | 16.25 |
| 11 (2462 MHz) | 22.5 | 16.38 |

# *PEAK POWER SPECTRAL DENSITY*

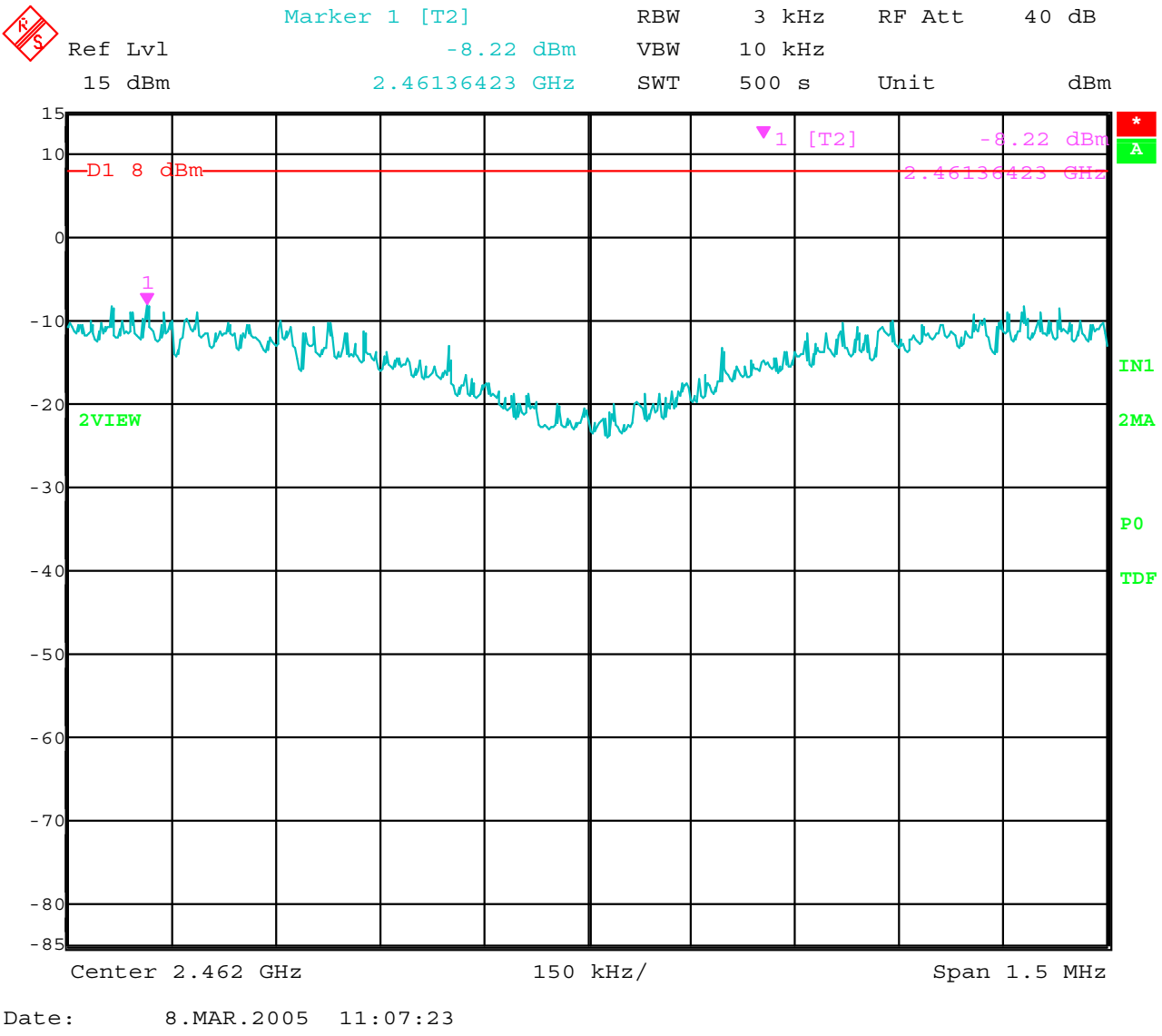
# *DATA SHEETS*



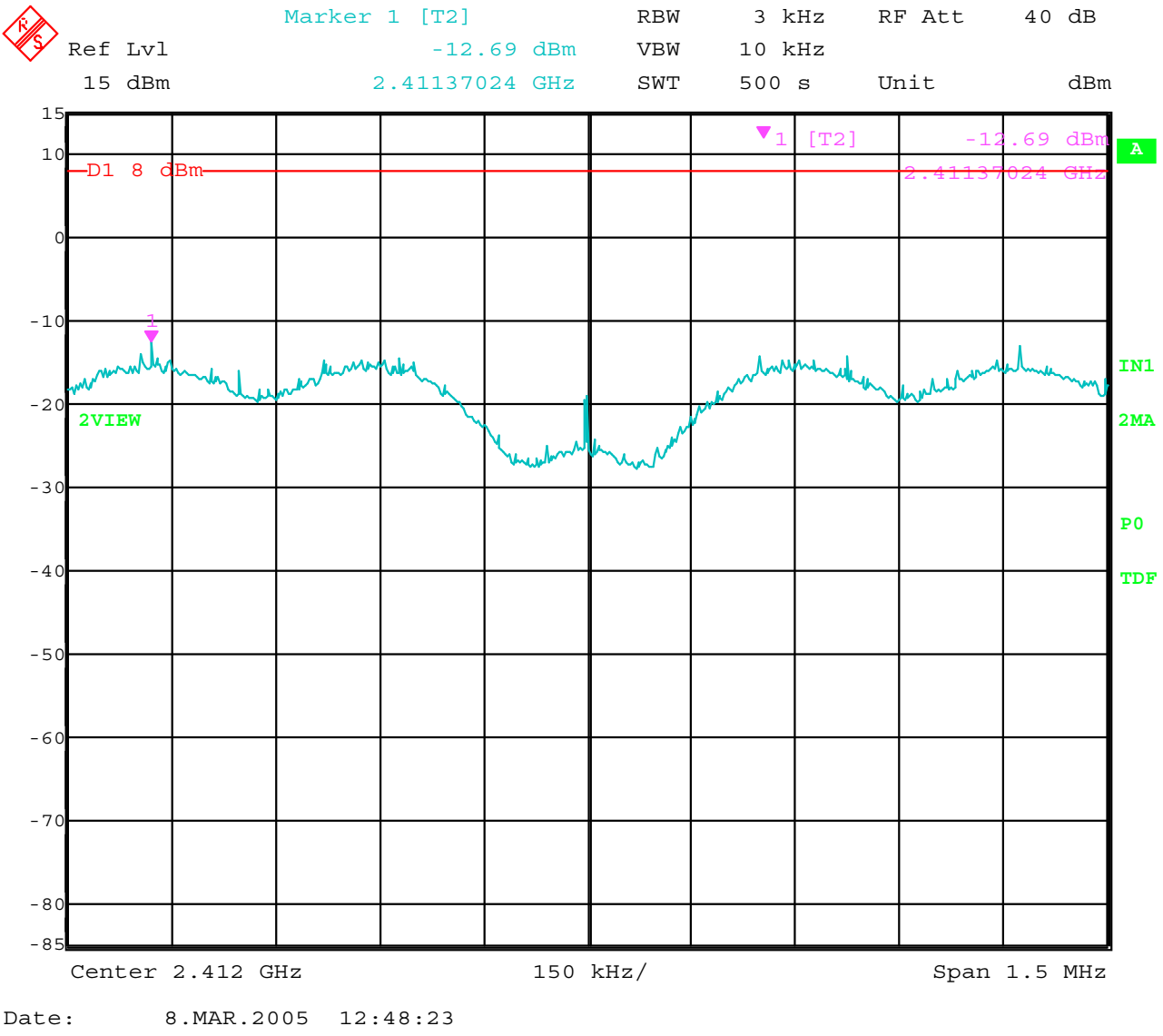

Spectral Density Output – Channel 1 – 802.11 b Mode – Phycomp Antenna



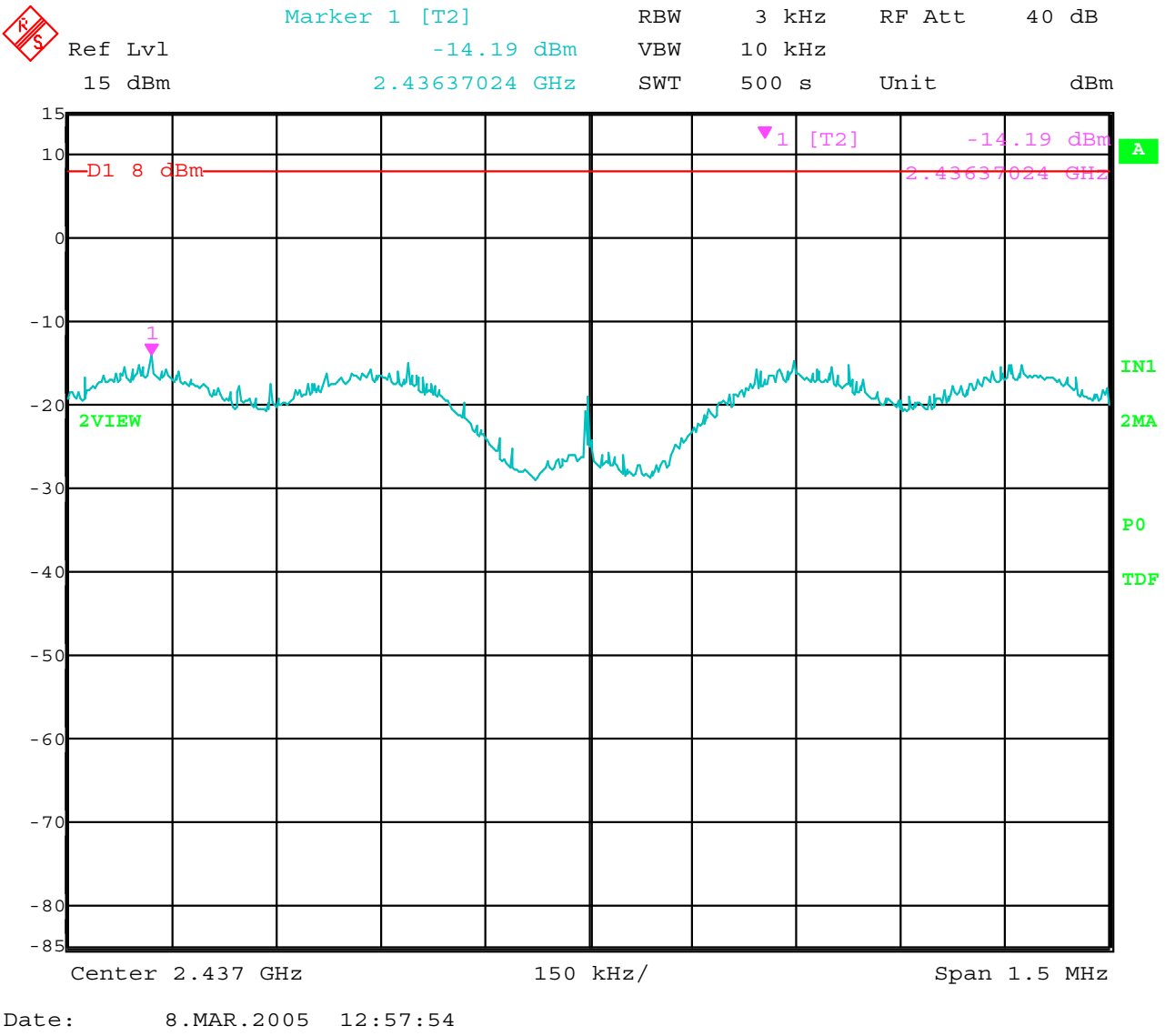

Spectral Density Output – Channel 6 – 802.11 b Mode – Phycomp Antenna



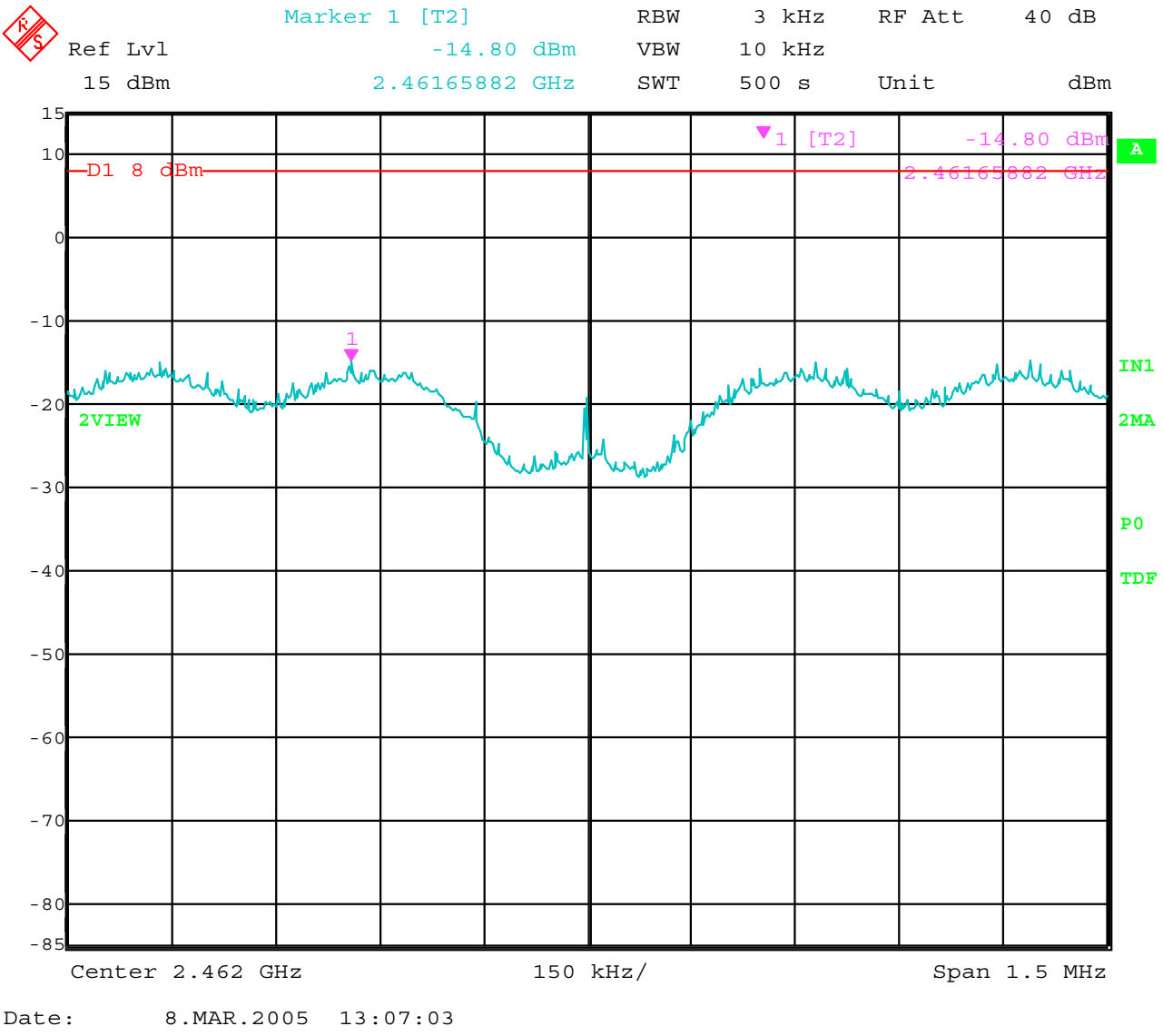

Spectral Density Output – Channel 11 – 802.11 b Mode – Phycomp Antenna




Spectral Density Output – Channel 1 – 802.11 g Mode – Phycomp Antenna



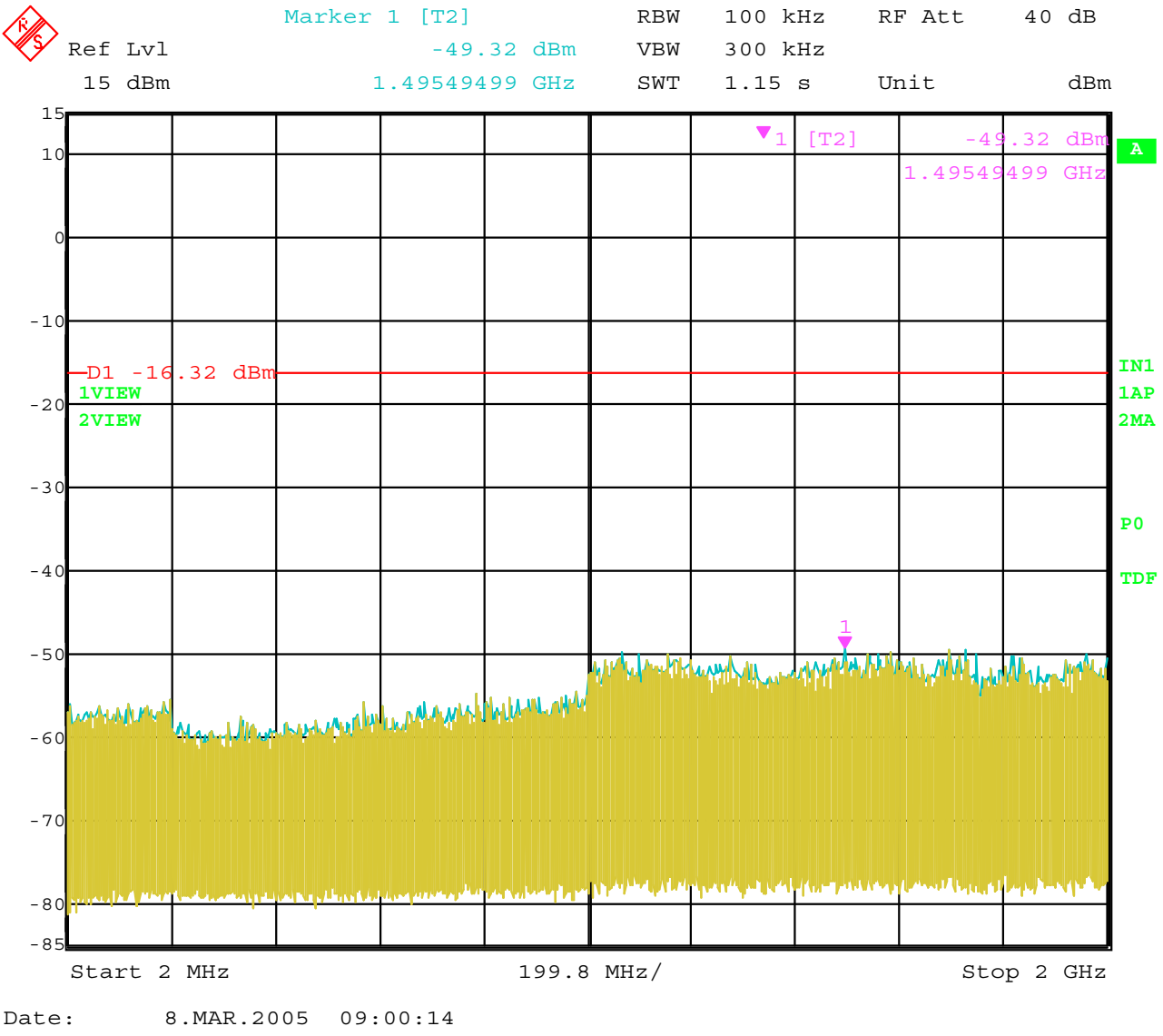

Spectral Density Output – Channel 6 – 802.11 g Mode – Phycomp Antenna



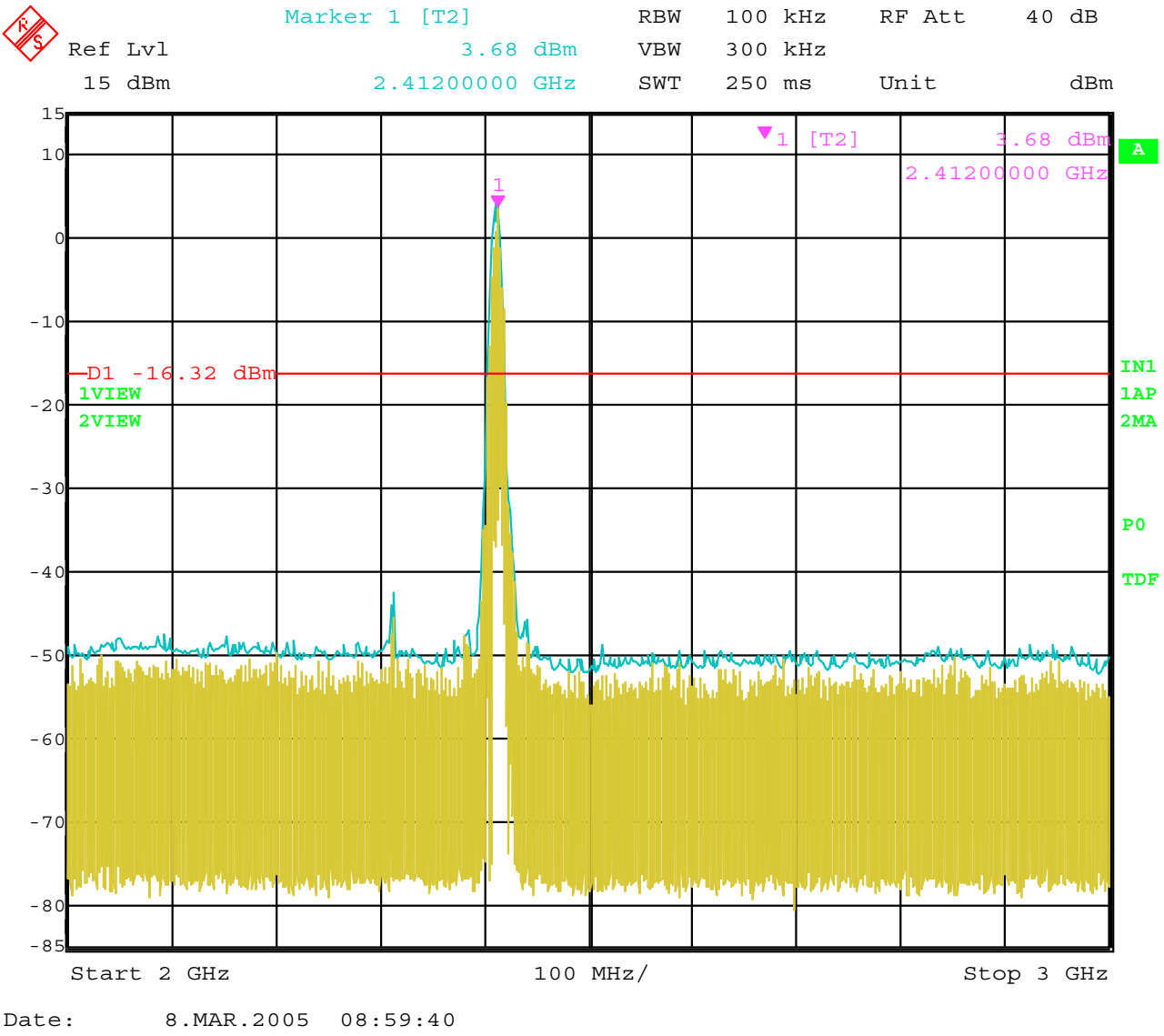

Spectral Density Output – Channel 11 – 802.11 g Mode – Phycomp Antenna

# *RF ANTENNA CONDUCTED*

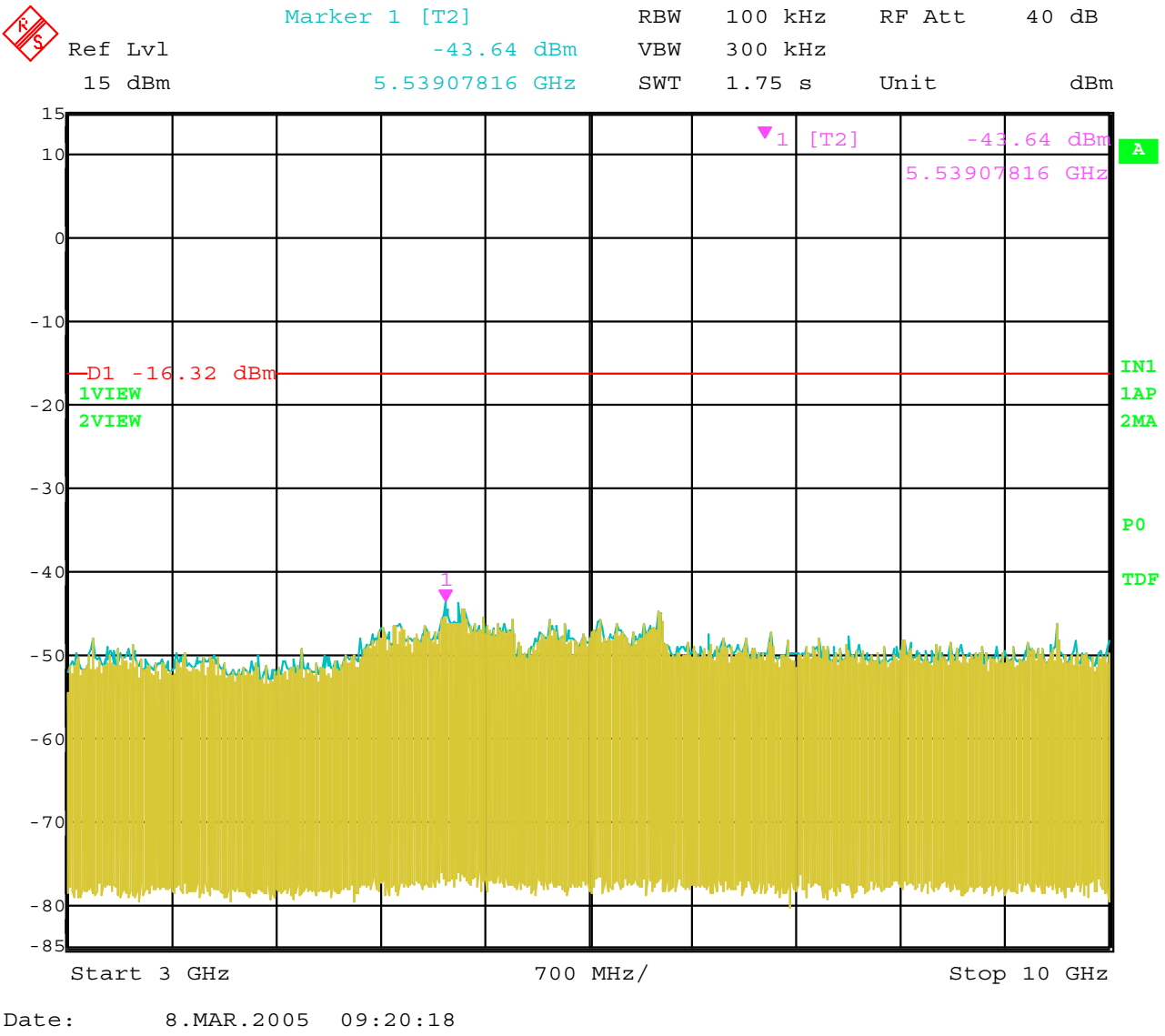
# *DATA SHEETS*



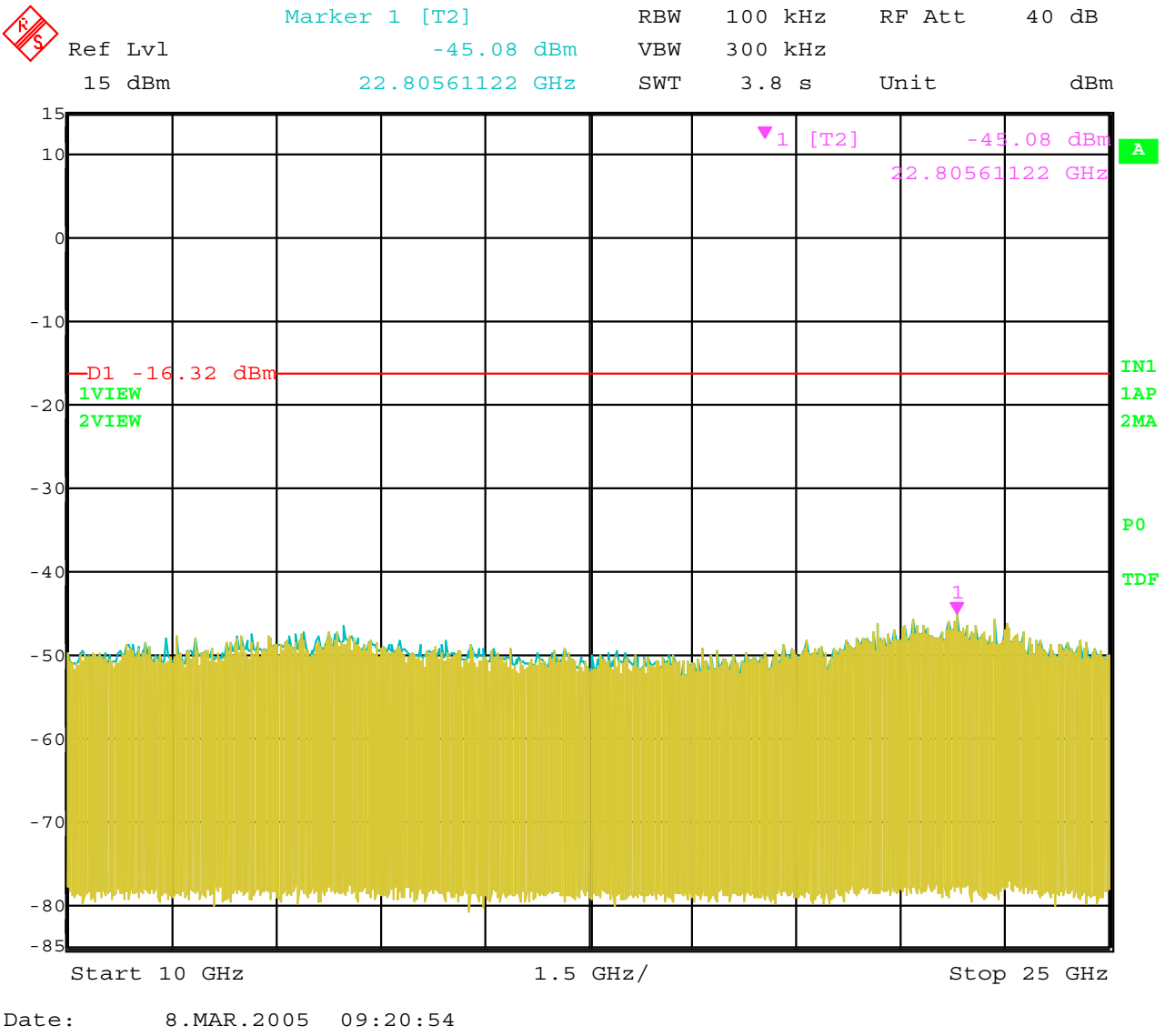

RF Antenna Conducted – Channel 1 – 802.11 b Mode – Phycomp Antenna – 2 MHz to 2 GHz



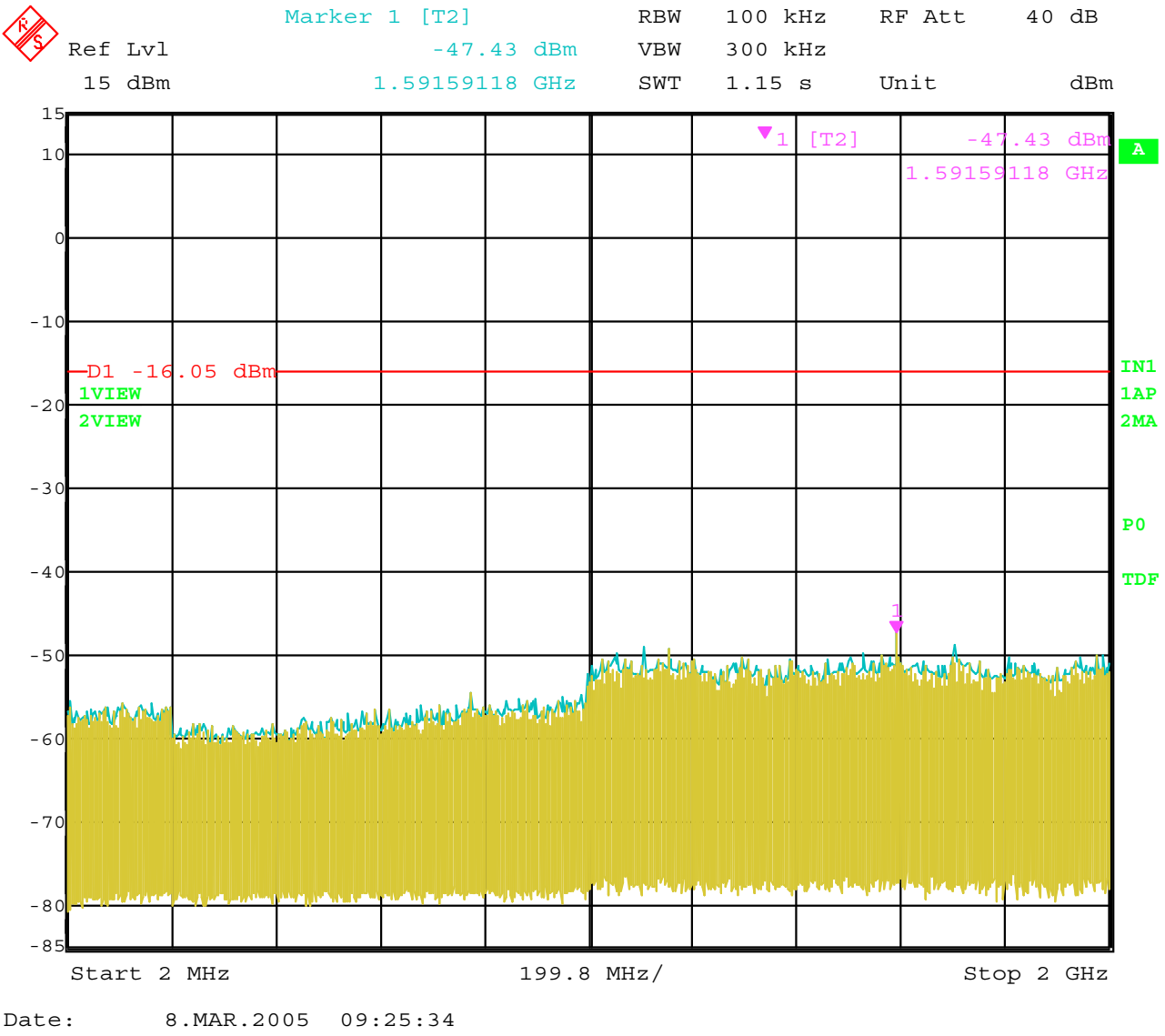

RF Antenna Conducted – Channel 1 – 802.11 b Mode – Phycomp Antenna – 2 GHz to 3 GHz



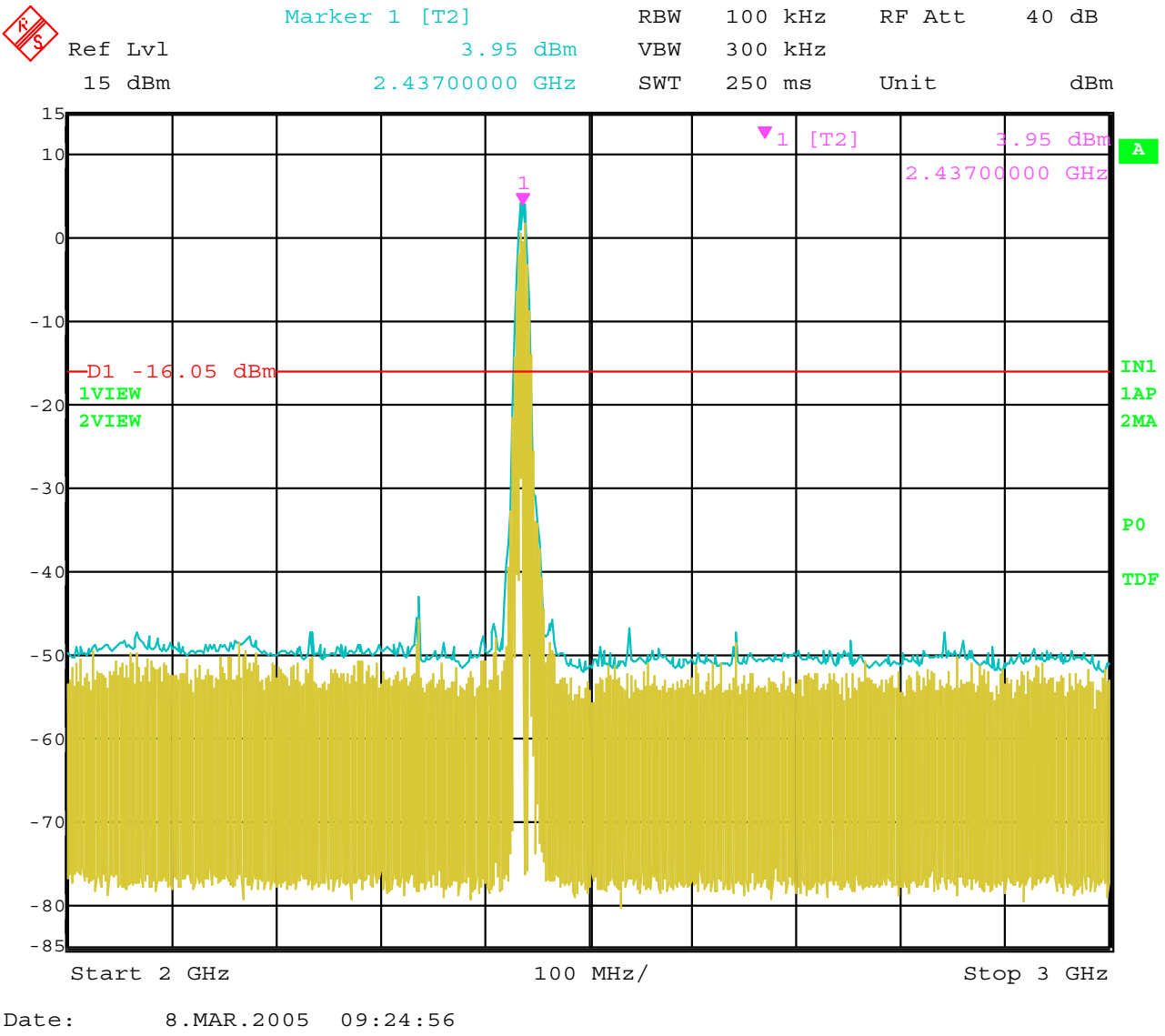

RF Antenna Conducted – Channel 1 – 802.11 b Mode – Phycomp Antenna – 3 GHz to 10 GHz



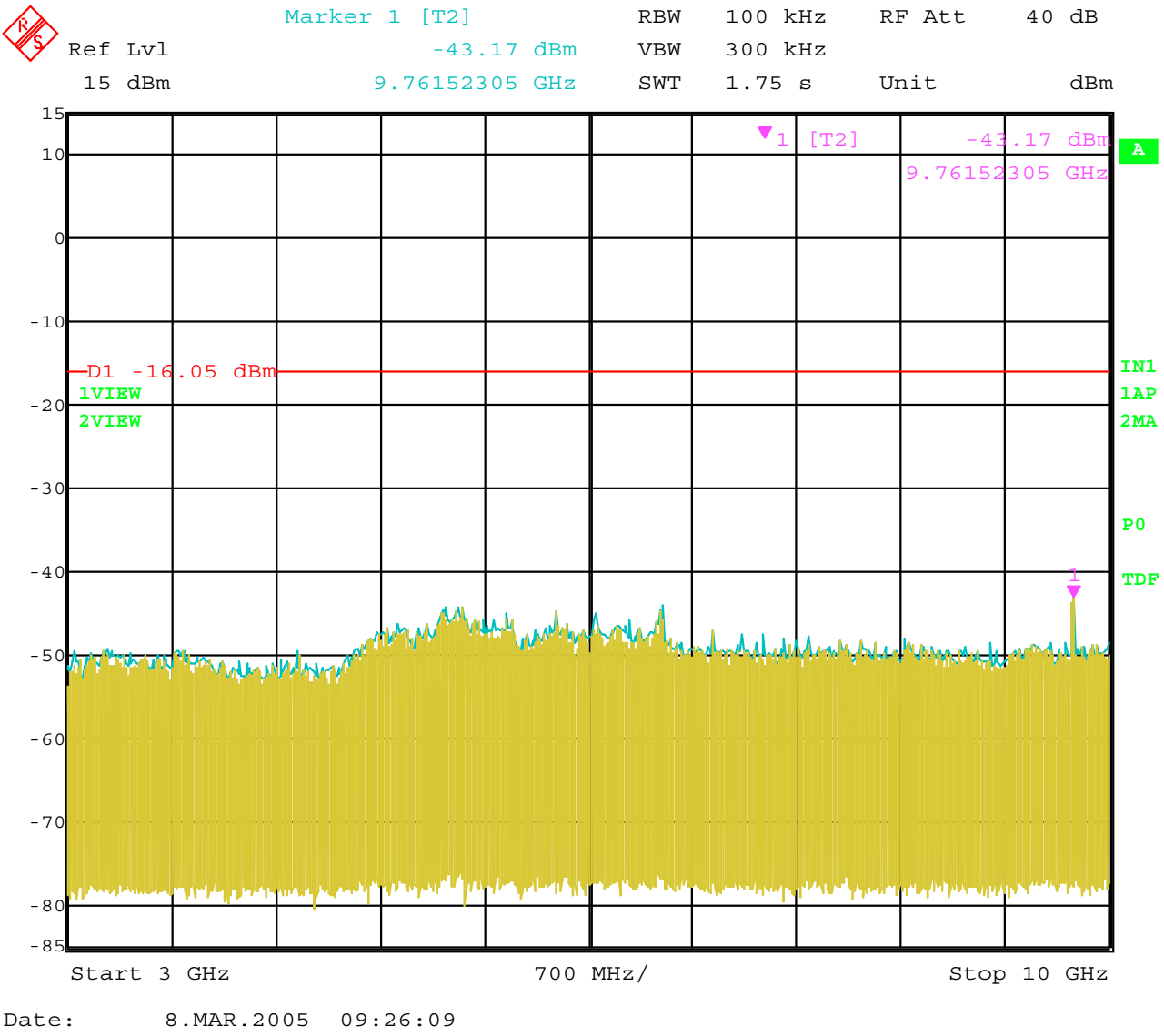

RF Antenna Conducted – Channel 1 – 802.11 b Mode – Phycomp Antenna – 10 GHz to 25 GHz



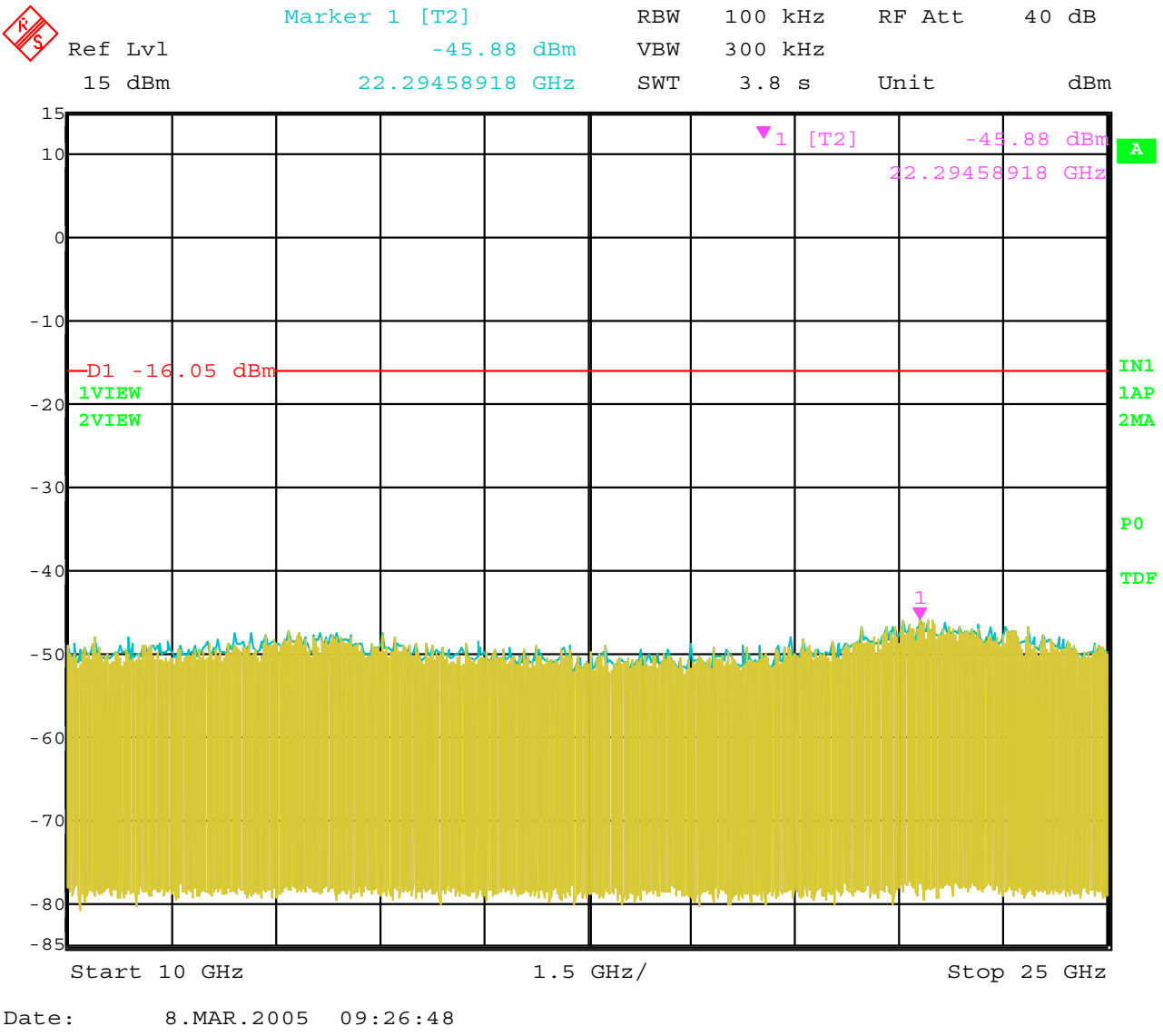

RF Antenna Conducted – Channel 6 – 802.11 b Mode – Phycomp Antenna – 2 MHz to 2 GHz



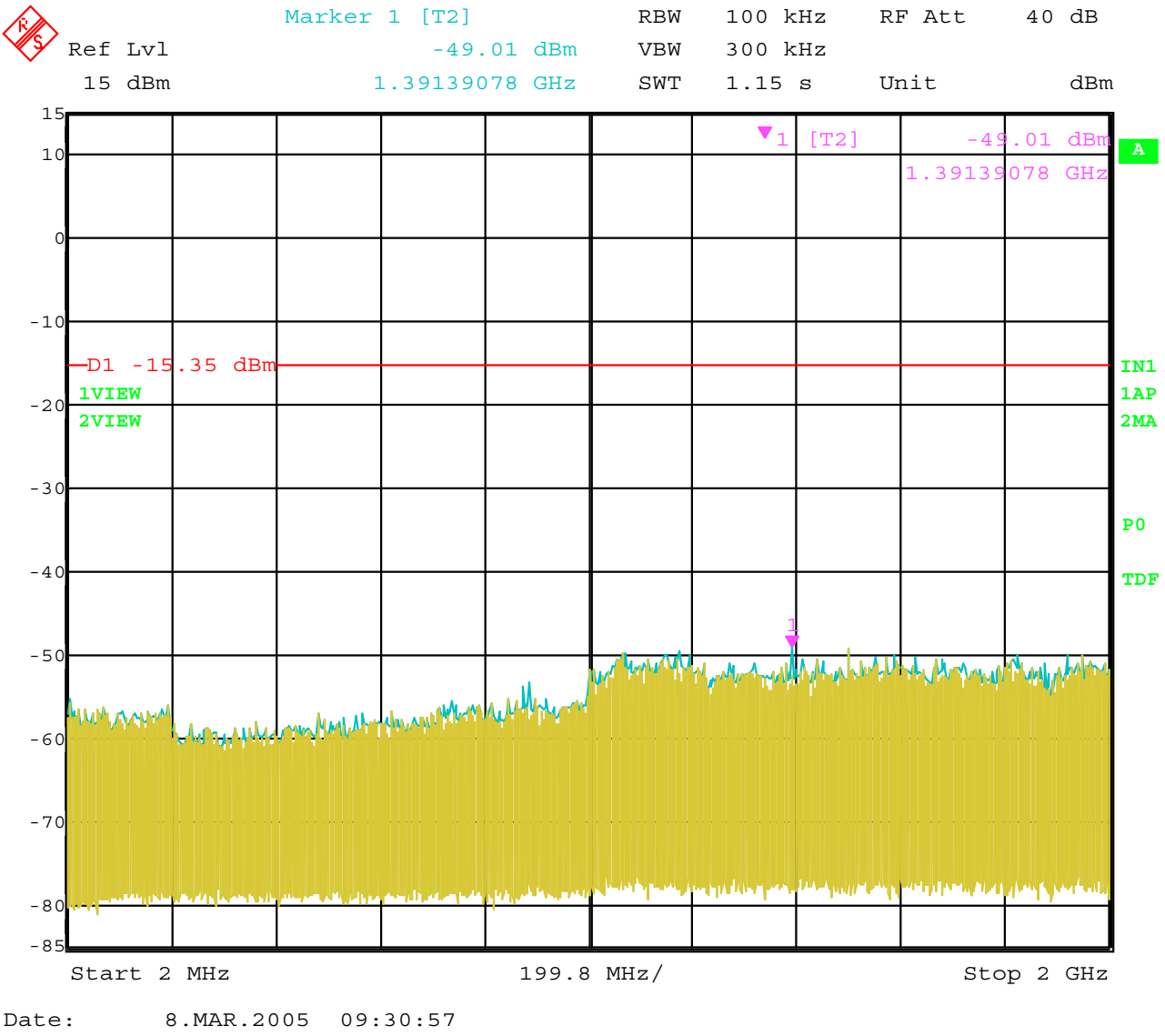

RF Antenna Conducted – Channel 6 – 802.11 b Mode – Phycomp Antenna – 2 GHz to 3 GHz



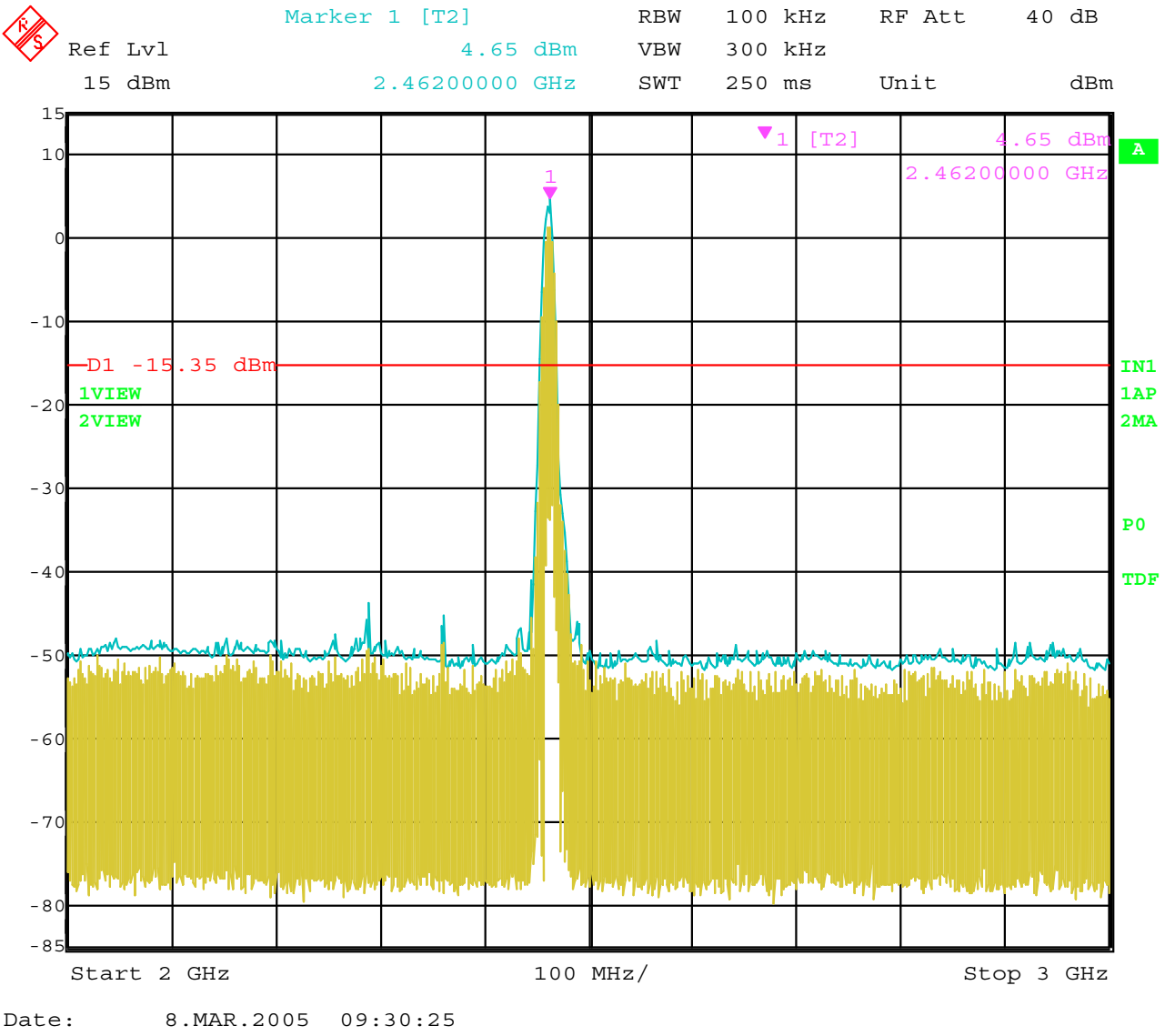

RF Antenna Conducted – Channel 6 – 802.11 b Mode – Phycomp Antenna – 3 GHz to 10 GHz



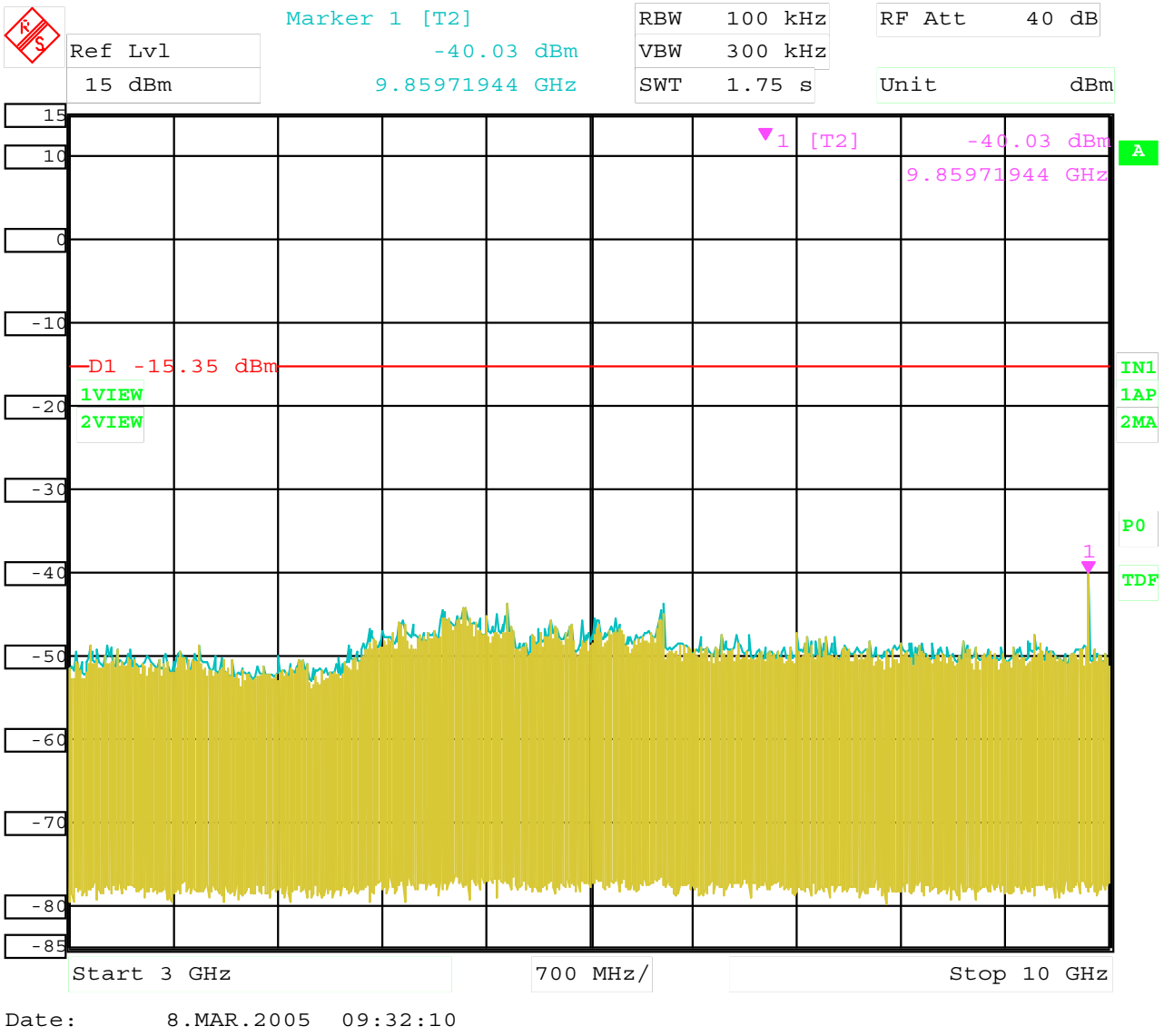

RF Antenna Conducted – Channel 6 – 802.11 b Mode – Phycomp Antenna – 10 GHz to 25 GHz



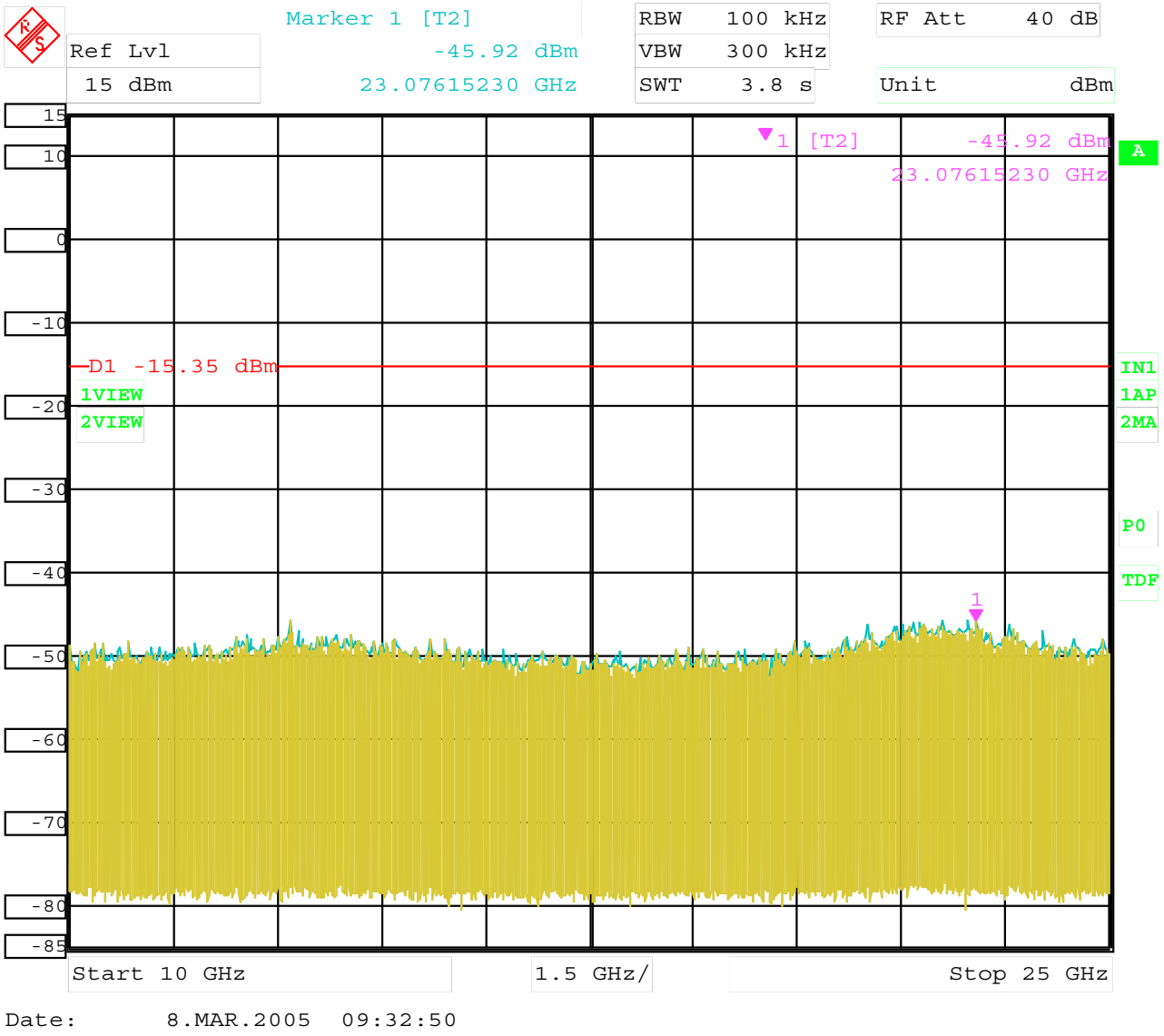

RF Antenna Conducted – Channel 11 – 802.11 b Mode – Phycomp Antenna – 2 MHz to 2 GHz



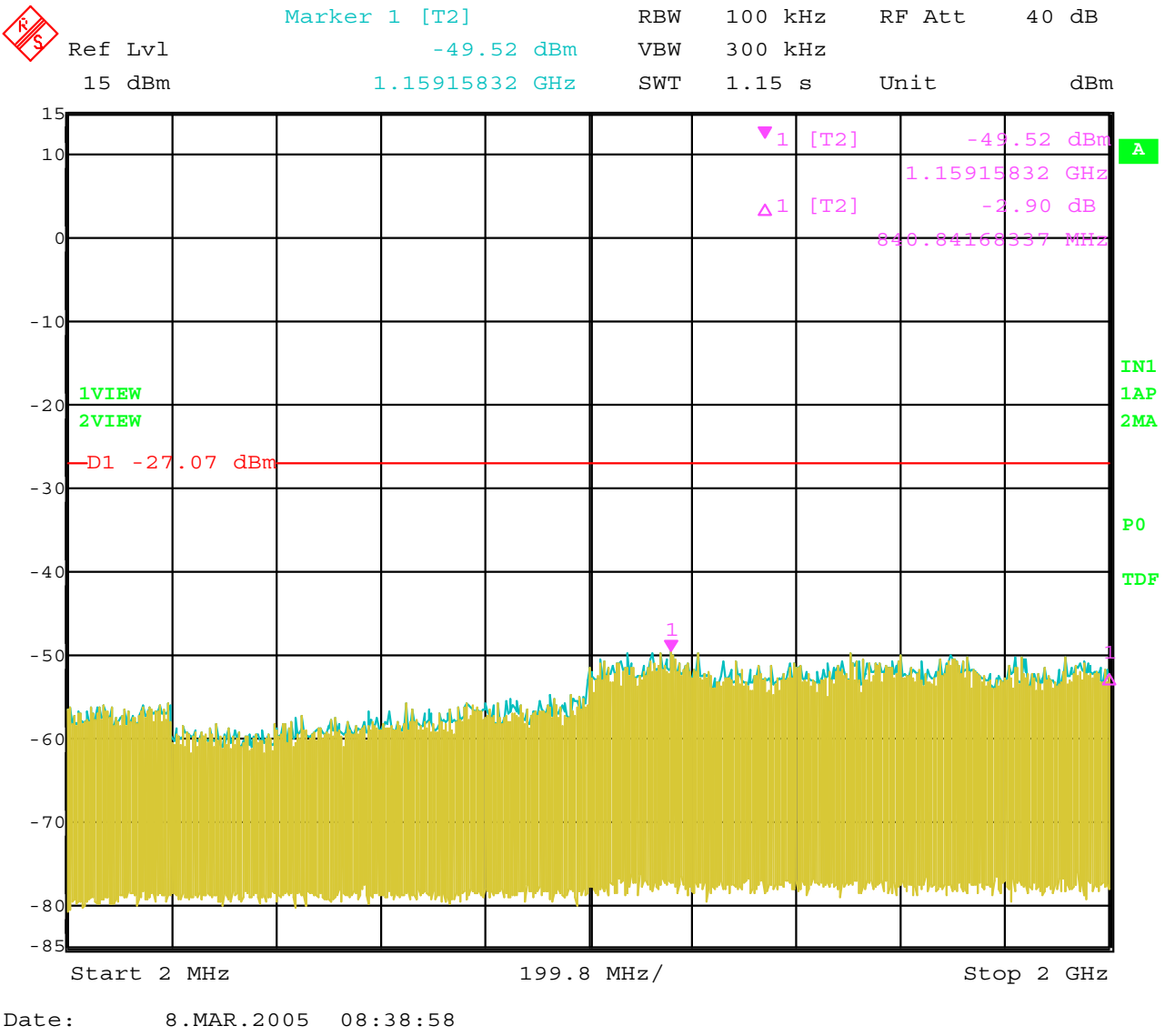

RF Antenna Conducted – Channel 11 – 802.11 b Mode – Phycomp Antenna – 2 GHz to 3 GHz



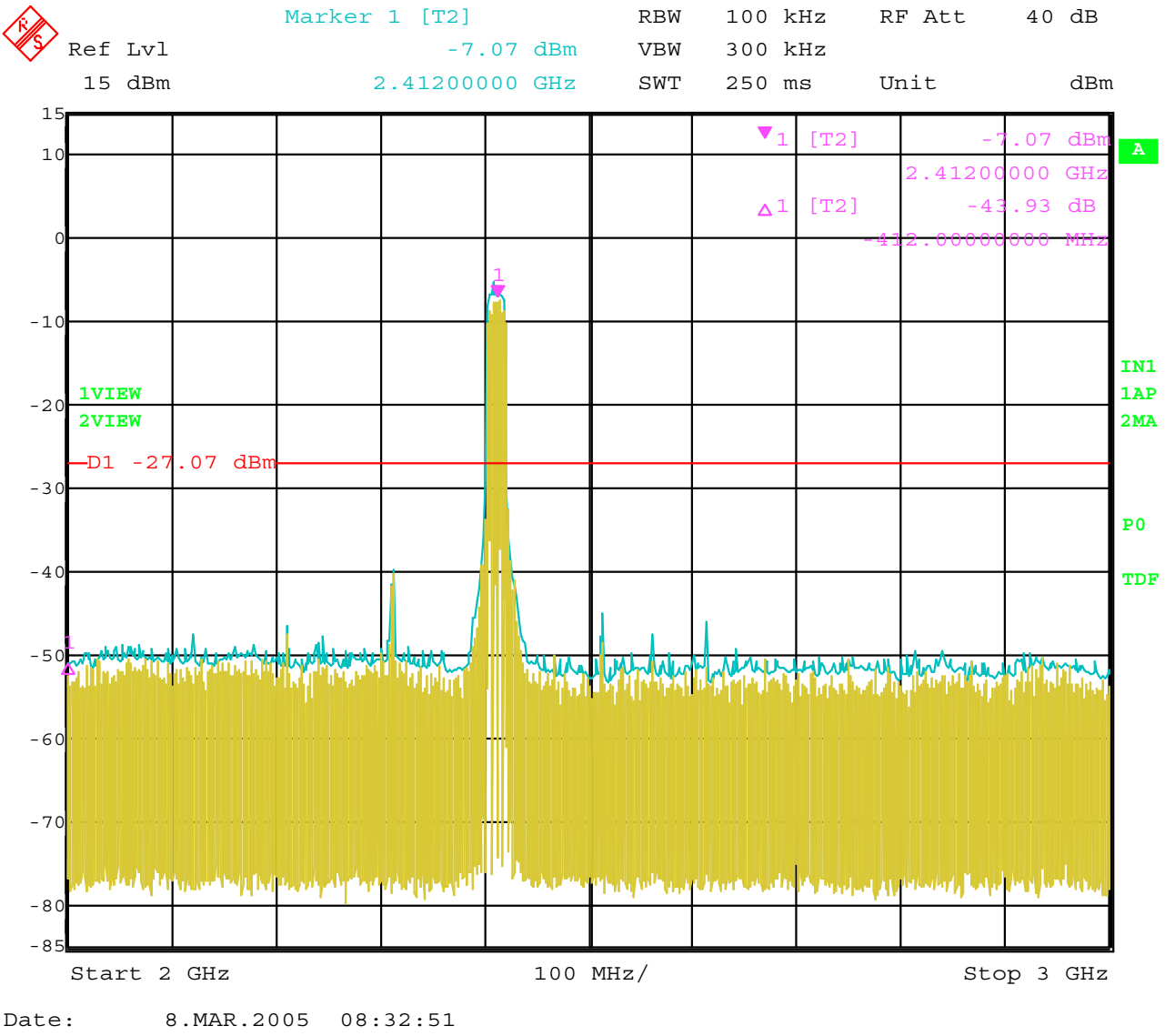

RF Antenna Conducted – Channel 11 – 802.11 b Mode – Phycomp Antenna – 3 GHz to 10 GHz



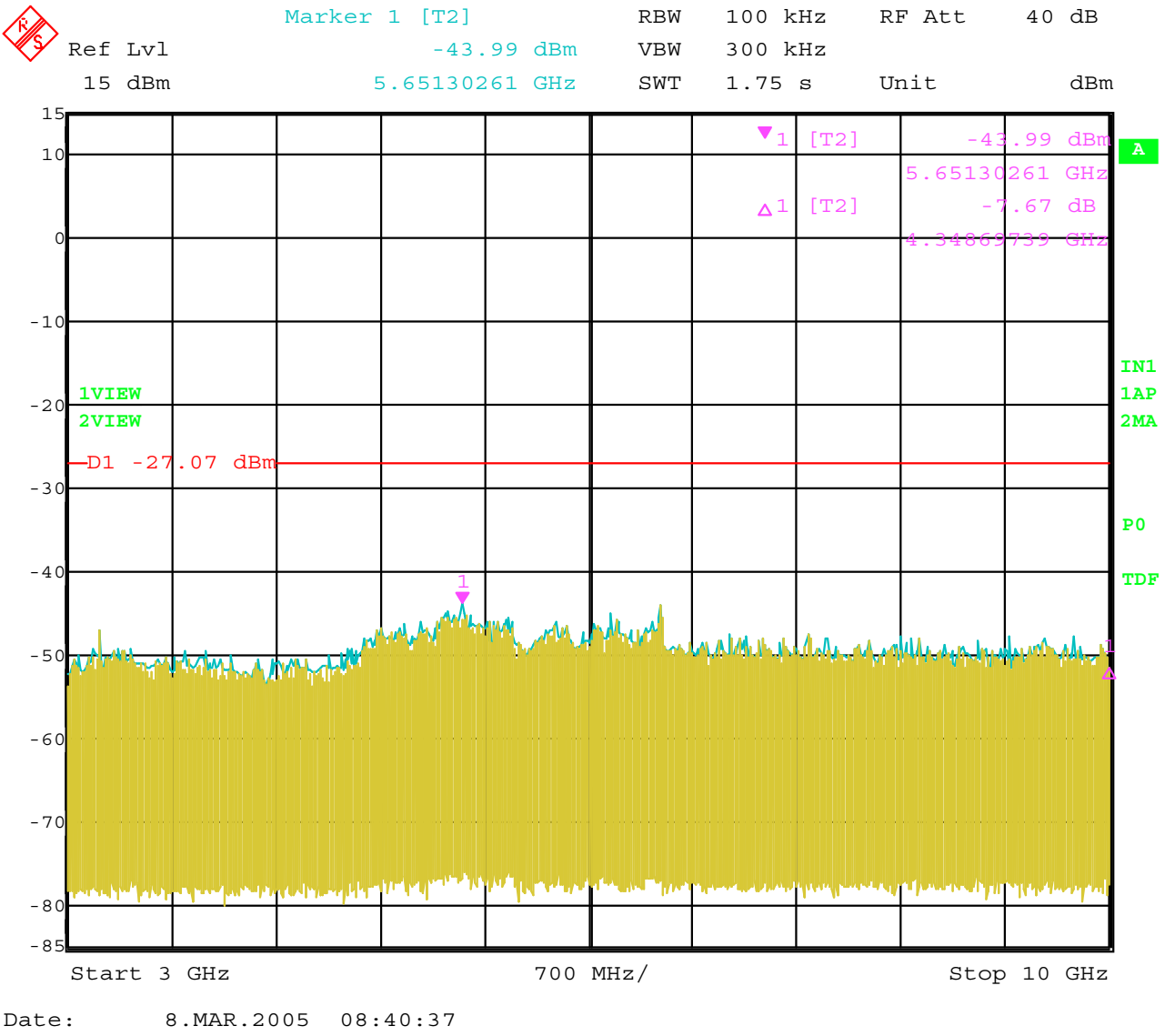

RF Antenna Conducted – Channel 11 – 802.11 b Mode – Phycomp Antenna – 10 GHz to 25 GHz



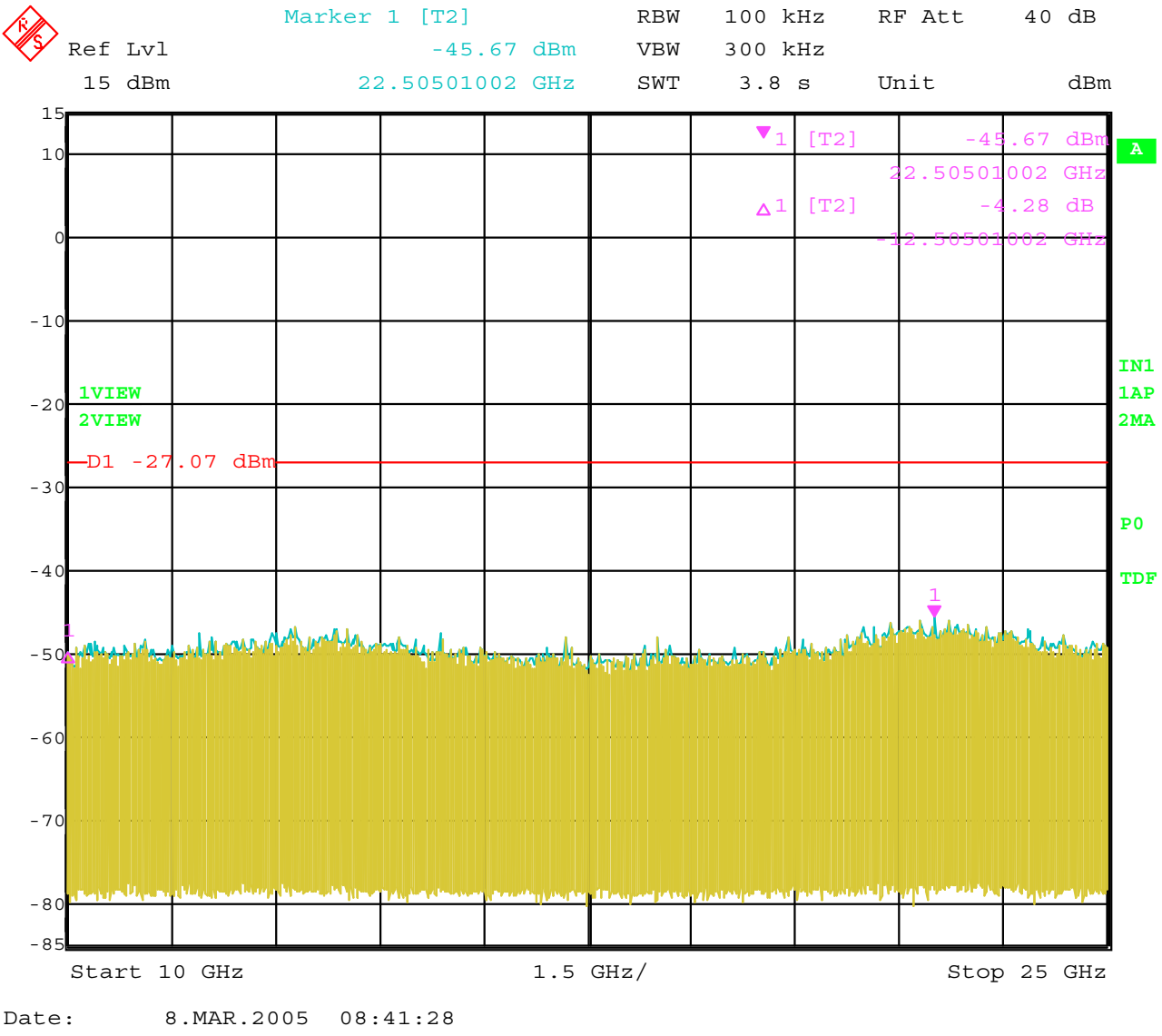

RF Antenna Conducted – Channel 1 – 802.11 g Mode – Phycomp Antenna – 2 MHz to 2 GHz



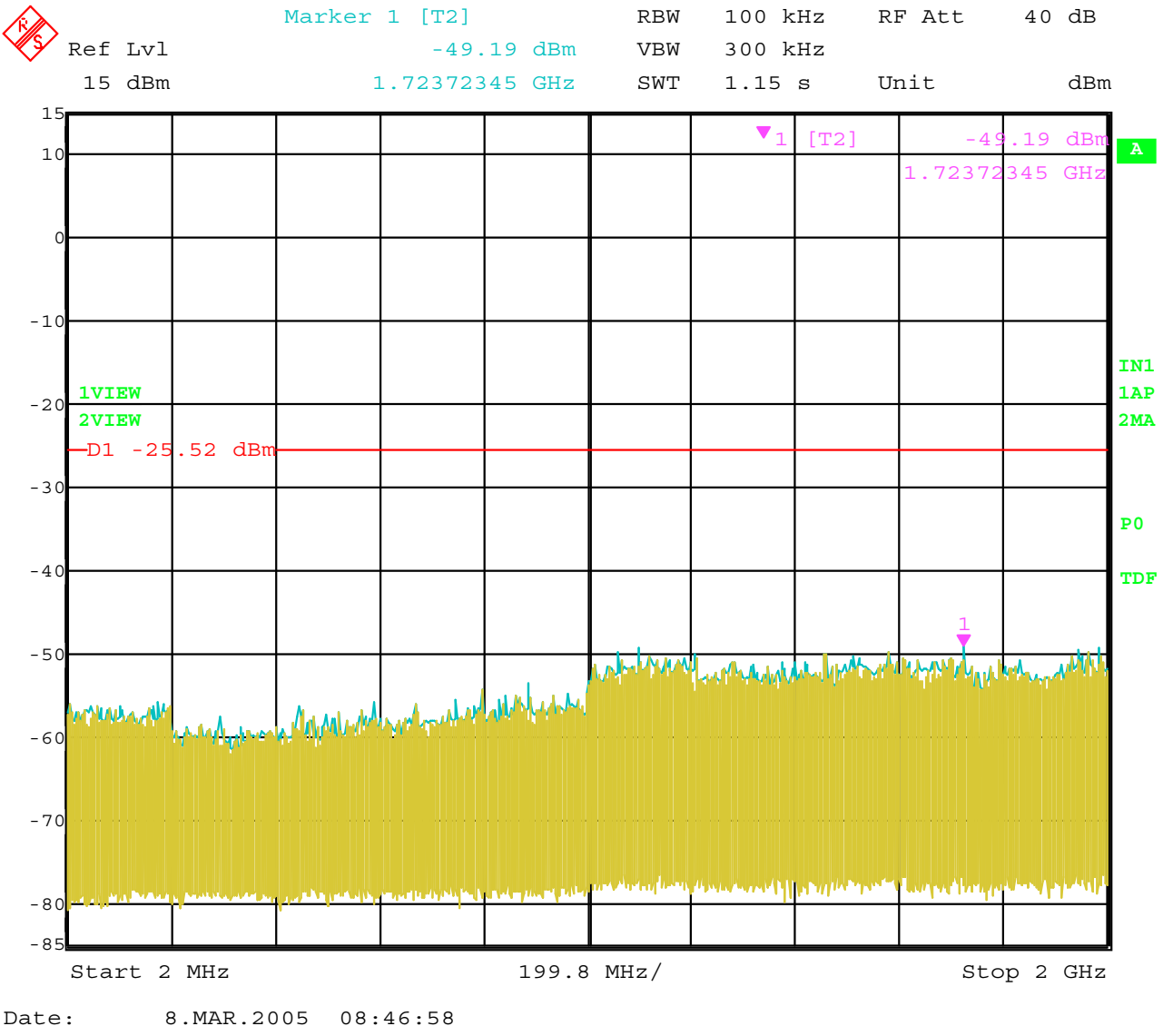

RF Antenna Conducted – Channel 1 – 802.11 gMode – Phycomp Antenna – 2 GHz to 3 GHz



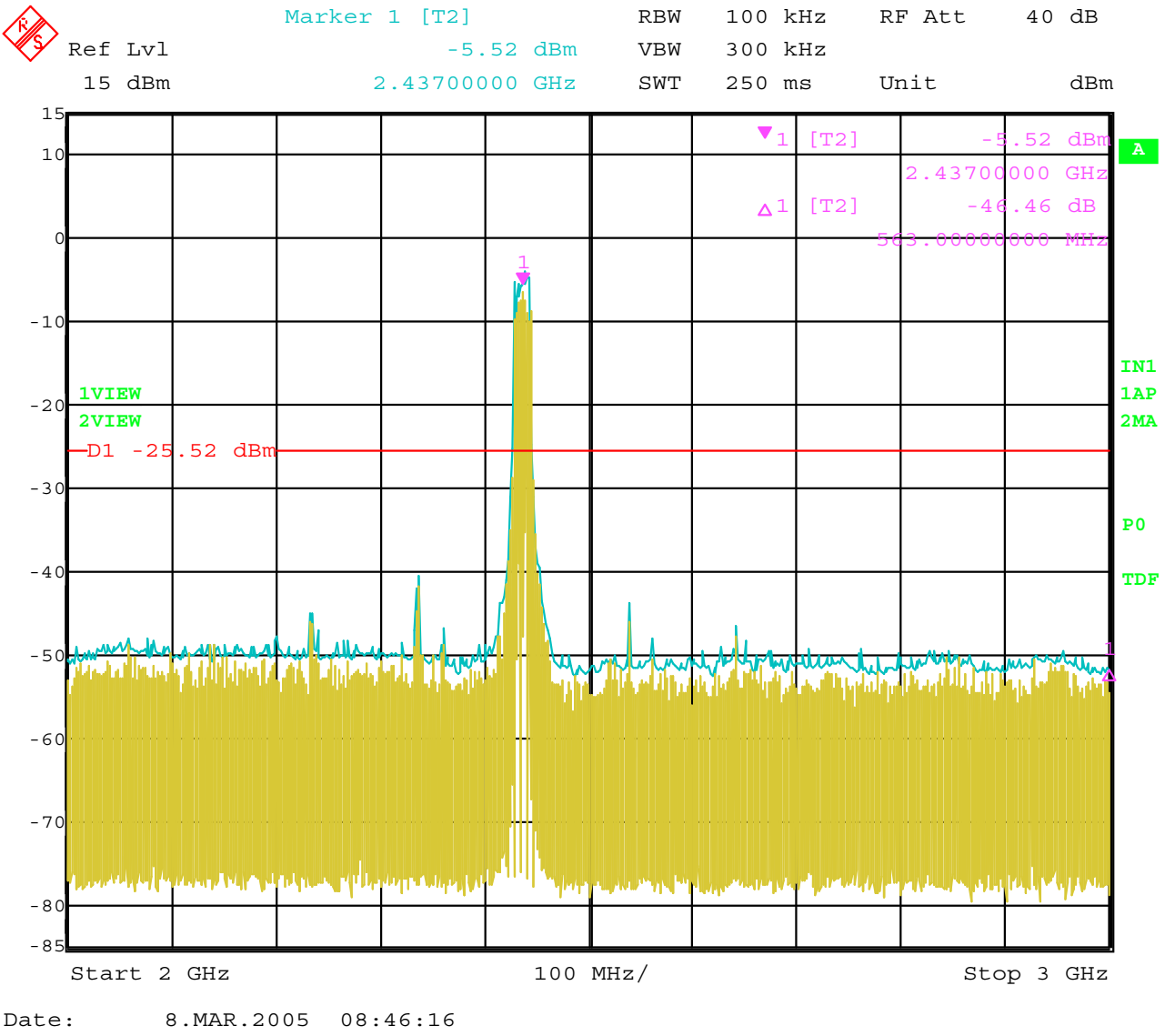

RF Antenna Conducted – Channel 1 – 802.11 g Mode – Phycomp Antenna – 3 GHz to 10 GHz



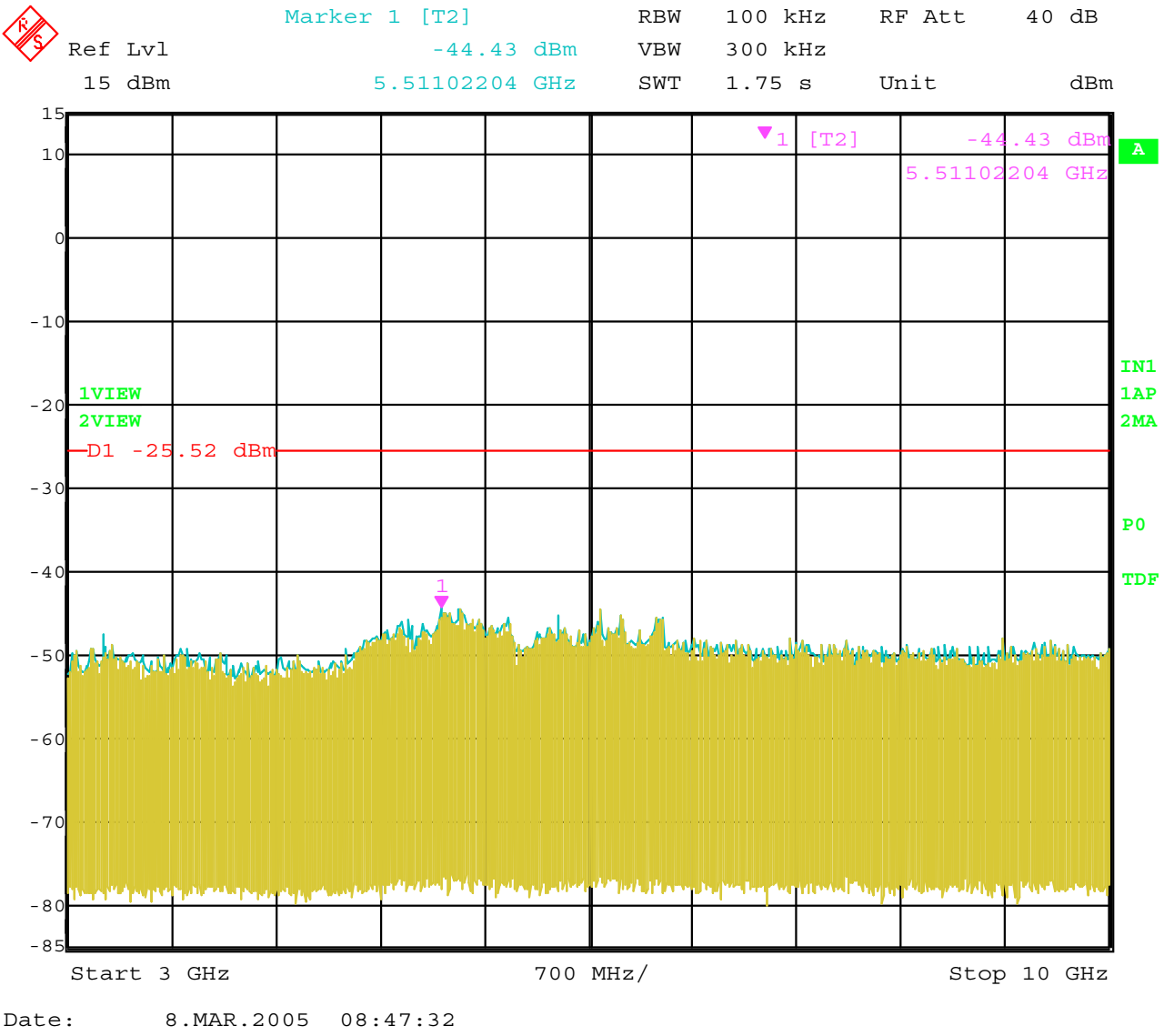

RF Antenna Conducted – Channel 1 – 802.11 g Mode – Phycomp Antenna – 10 GHz to 25 GHz



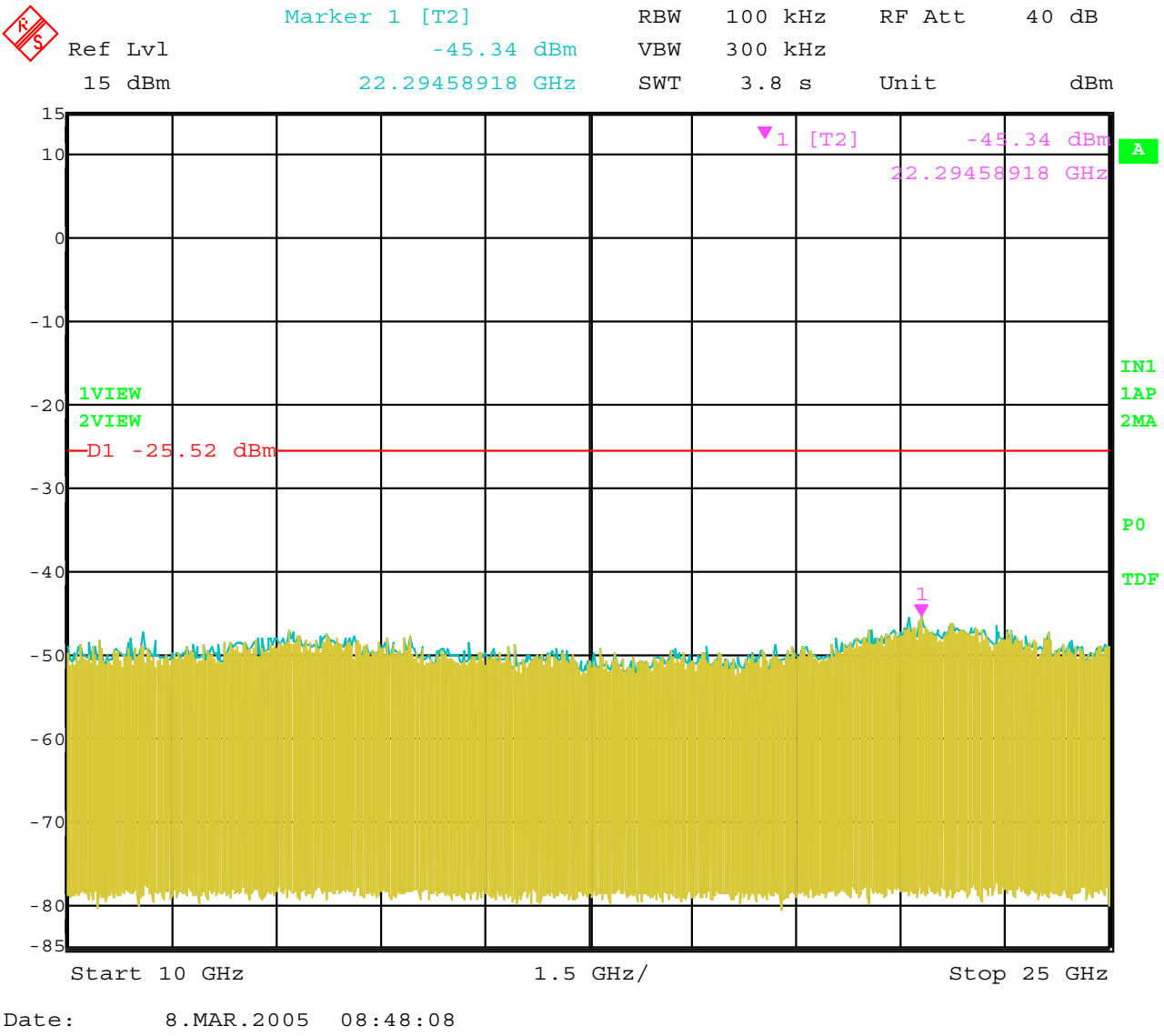

RF Antenna Conducted – Channel 6 – 802.11 g Mode – Phycomp Antenna – 2 MHz to 2 GHz



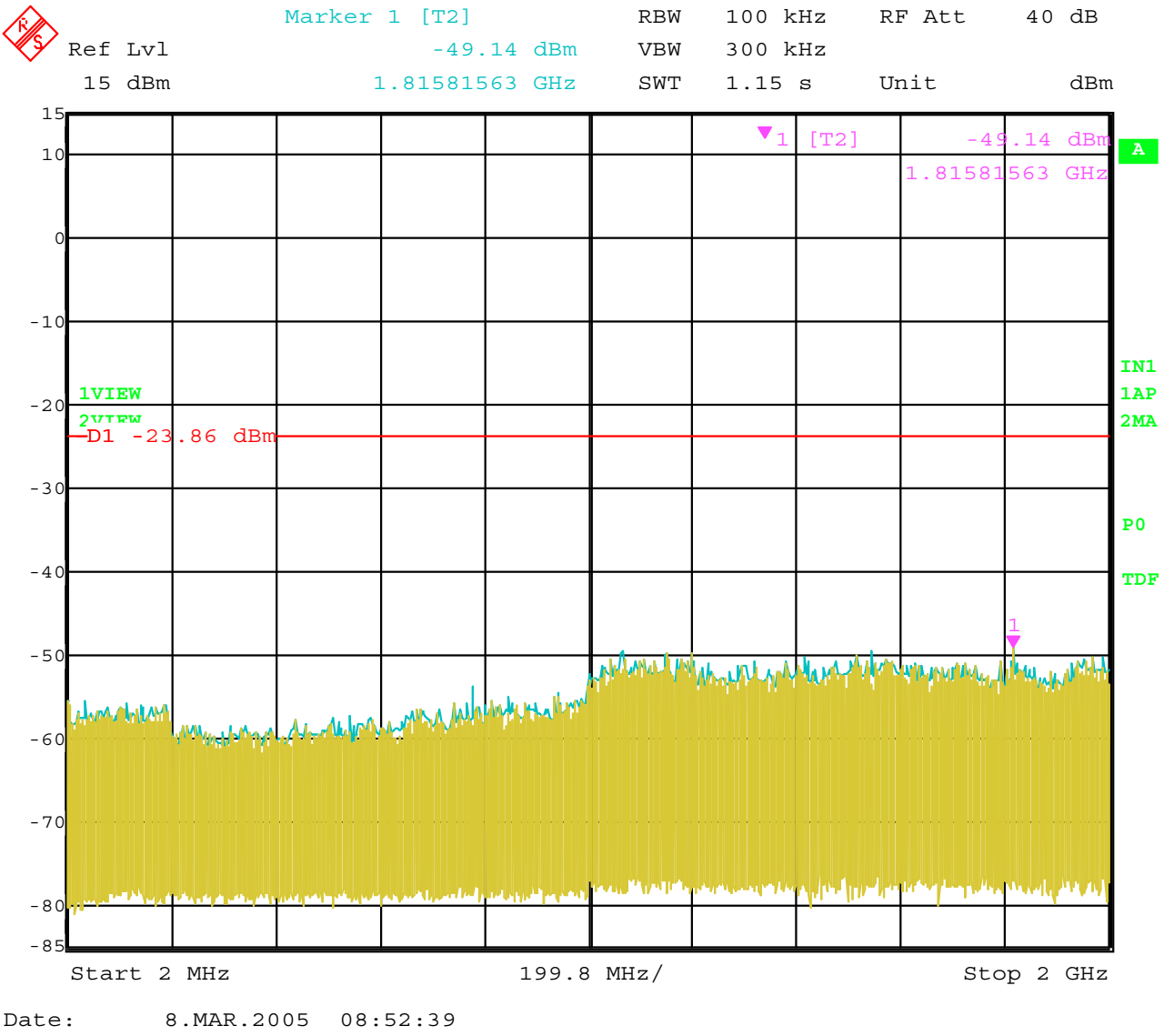

RF Antenna Conducted – Channel 6 – 802.11 g Mode – Phycomp Antenna – 2 GHz to 3 GHz



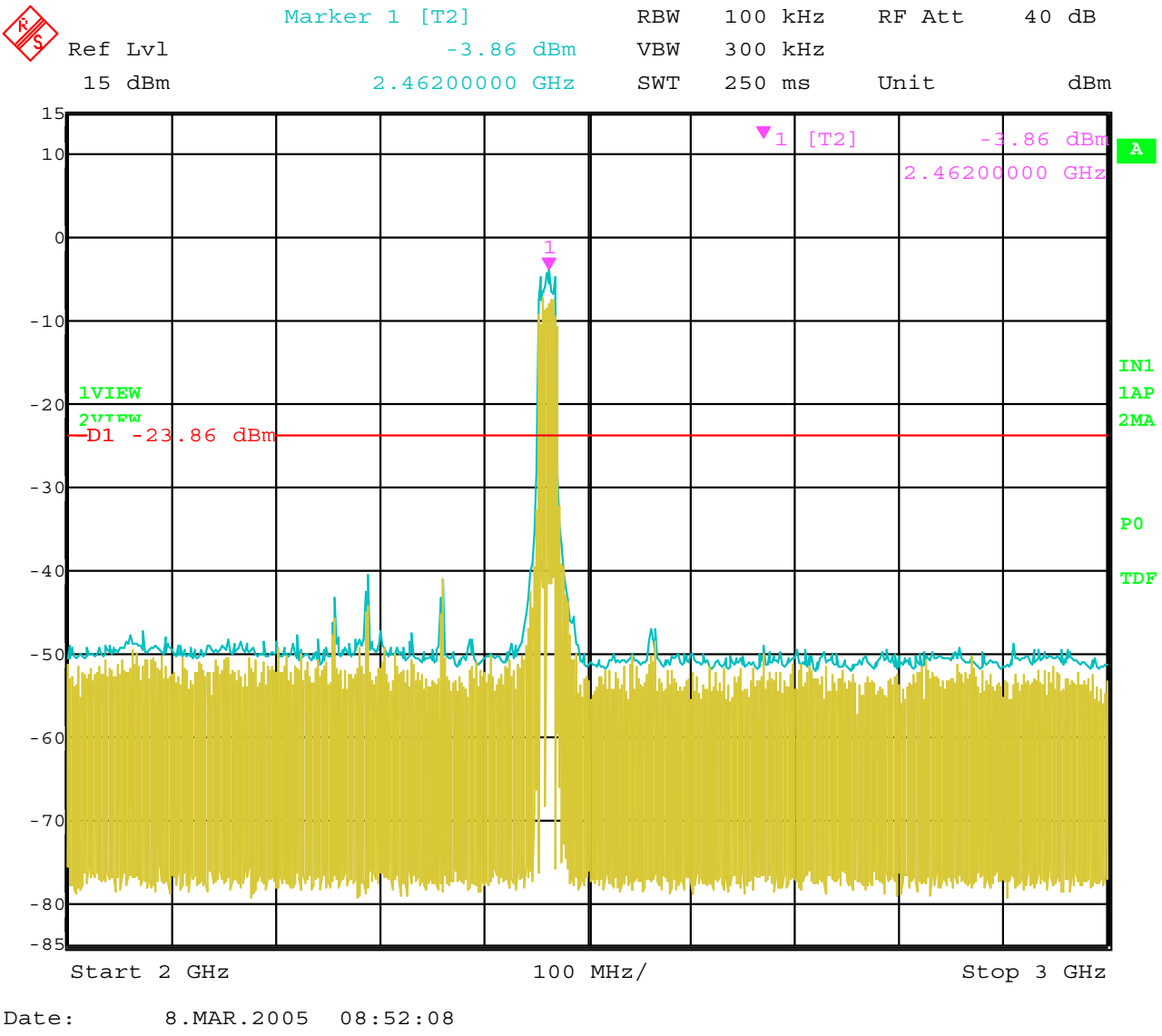

RF Antenna Conducted – Channel 6 – 802.11 g Mode – Phycomp Antenna – 3 GHz to 10 GHz



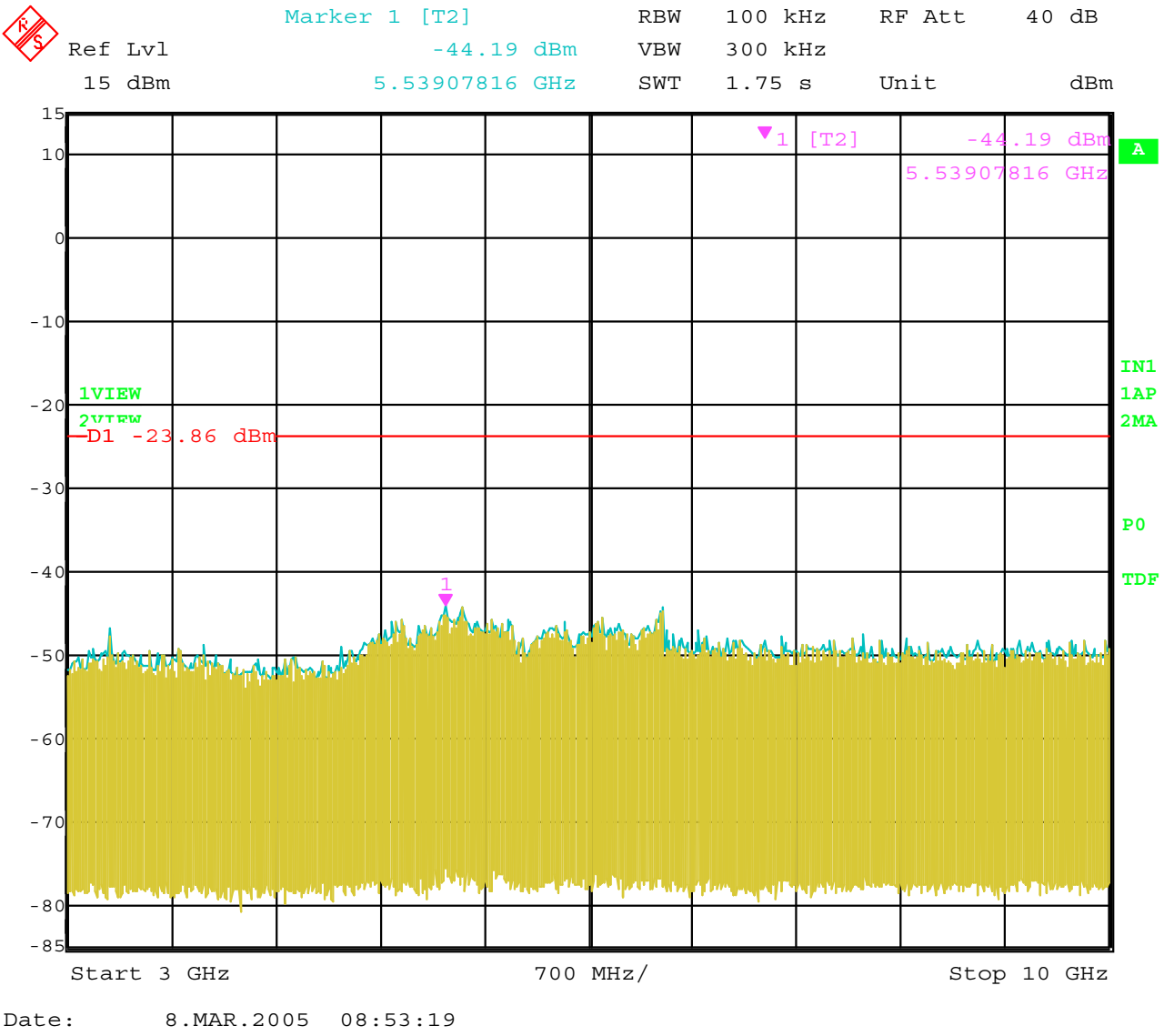

RF Antenna Conducted – Channel 6 – 802.11 g Mode – Phycomp Antenna – 10 GHz to 25 GHz



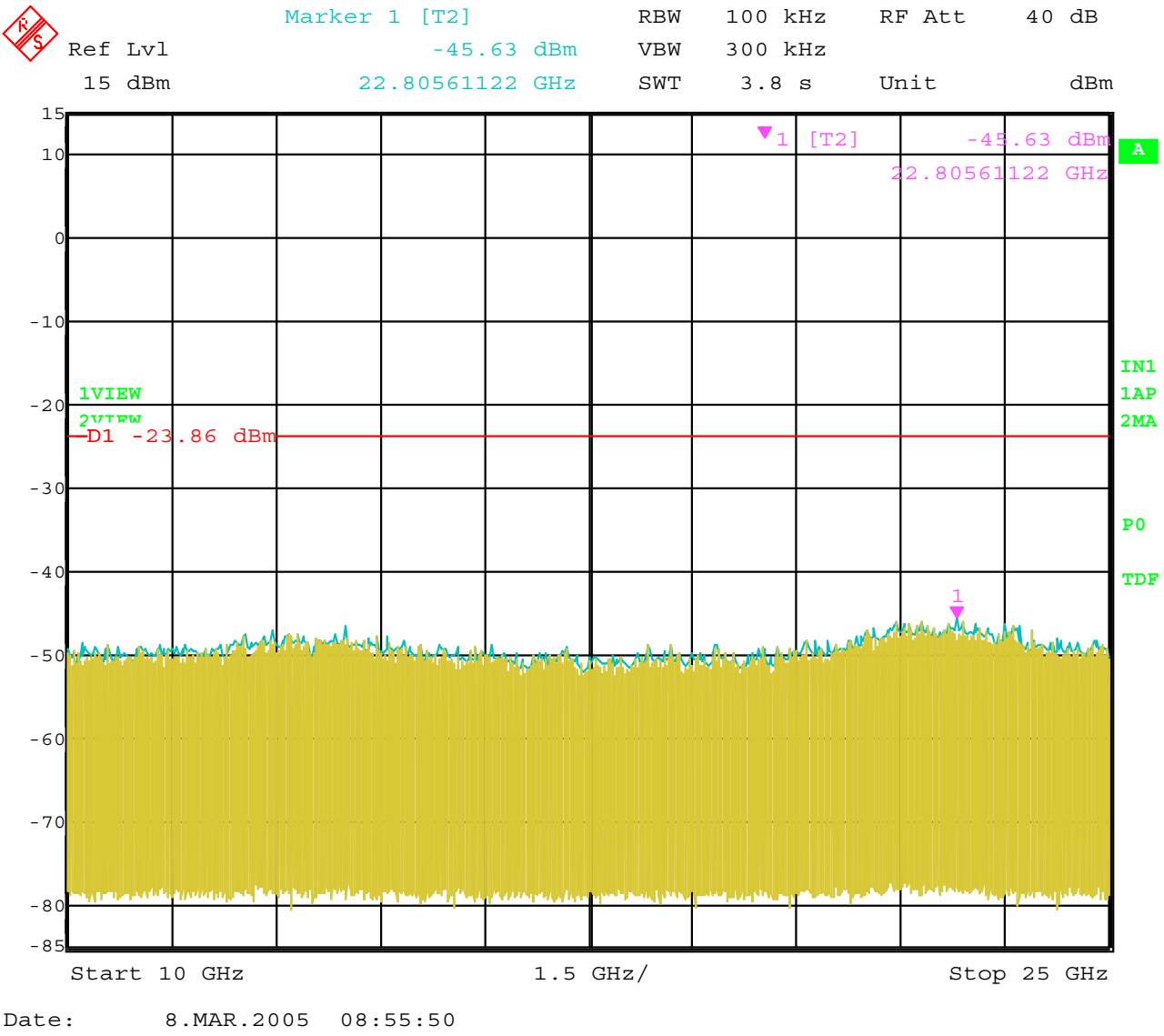

RF Antenna Conducted – Channel 11 – 802.11 g Mode – Phycomp Antenna – 2 MHz to 2 GHz




RF Antenna Conducted – Channel 11 – 802.11 g Mode – Phycomp Antenna – 2 GHz to 3 GHz




RF Antenna Conducted – Channel 11 – 802.11 g Mode – Phycomp Antenna – 3 GHz to 10 GHz




RF Antenna Conducted – Channel 11 – 802.11 g Mode – Phycomp Antenna – 10 GHz to 25 GHz

# *BAND EDGES*

# *DATA SHEETS*

**FCC 15.247**

Intel Corporation — Date: 3/08/05

Intel Mini PCI Type 3A 802.11BG Wireless LAN Adapter — Lab: B

Model: WM3A2200BG — Tested By: Kyle Fujimoto

Configuration: Dell Latitude Laptop D510 Agency Series Number: PP17L -- Main Port

**With Phycomp Antenna**

**Channel 1 - 802.11 b Mode** Gain : 28.0 Peak Power: 17.15 dBm Avg. Power: 14.80 dBm

**Channel 6 - 802.11 b Mode** Gain : 28.5 Peak Power: 17.59 dBm Avg. Power: 15.22 dBm

**Channel 11 - 802.11 b Mode** Gain : 28.5 Peak Power: 17.61 dBm Avg. Power: 15.23 dBm

**Transmit Mode**

| Freq. (MHz) | Level (dBuV) | Pol (v/h) | Limit | Margin | Peak / QP / Avg | Ant. Height (m) | Table Angle (deg) | Comments |
|---|---|---|---|---|---|---|---|---|
| 2412 | 102.67 | V | -- | -- | Peak | 2.71 | 90 | Fundamental of Channel 1 |
| 2412 | 96.67 | V | -- | -- | Avg | 2.71 | 90 | @ 3 meters |
| | | | | | | | | |
| 2390 | 50.77 | V | 74 | -23.23 | Peak | 2.71 | 90 | **No** Marker Delta Method |
| 2390 | 39.47 | V | 54 | -14.53 | Avg | 2.71 | 90 | Method Used |
| | | | | | | | | |
| 2384.9 | 54.92 | V | 74 | -19.08 | Peak | 2.71 | 90 | **No** Marker Delta Method |
| 2383.7 | 45.61 | V | 54 | -8.39 | Avg | 2.71 | 90 | Method Used |
| | | | | | | | | |
| 2437 | 103.4 | V | -- | -- | Peak | 2.63 | 135 | Fundamental of Channel 6 |
| 2437 | 97.2 | V | -- | -- | Avg | 2.63 | 135 | @ 3 meters |
| | | | | | | | | |
| 2462 | 103.46 | V | -- | -- | Peak | 2.62 | 135 | Fundamental of Channel 11 |
| 2462 | 97.12 | V | -- | -- | Avg | 2.62 | 135 | @ 3 meters |
| | | | | | | | | |
| 2483.5 | 51.46 | V | 74 | -22.54 | Peak | 2.62 | 135 | **No** Marker Delta Method |
| 2483.5 | 40.6 | V | 54 | -13.4 | Avg | 2.62 | 135 | Method Used |
| | | | | | | | | |
| 2485.5 | 55.35 | V | 74 | -18.65 | Peak | 2.62 | 135 | **No** Marker Delta Method |
| 2485.5 | 46.55 | V | 54 | -7.45 | Avg | 2.62 | 135 | Method Used |
| | | | | | | | | |

**FCC 15.247**

Intel Corporation — Date: 3/08/05

Intel Mini PCI Type 3A 802.11BG Wireless LAN Adapter — Lab: B

Model: WM3A2200BG — Tested By: Kyle Fujimoto

Configuration: Dell Latitude Laptop D510 Agency Series Number: PP17L -- Main Port

**With Phycomp Antenna**

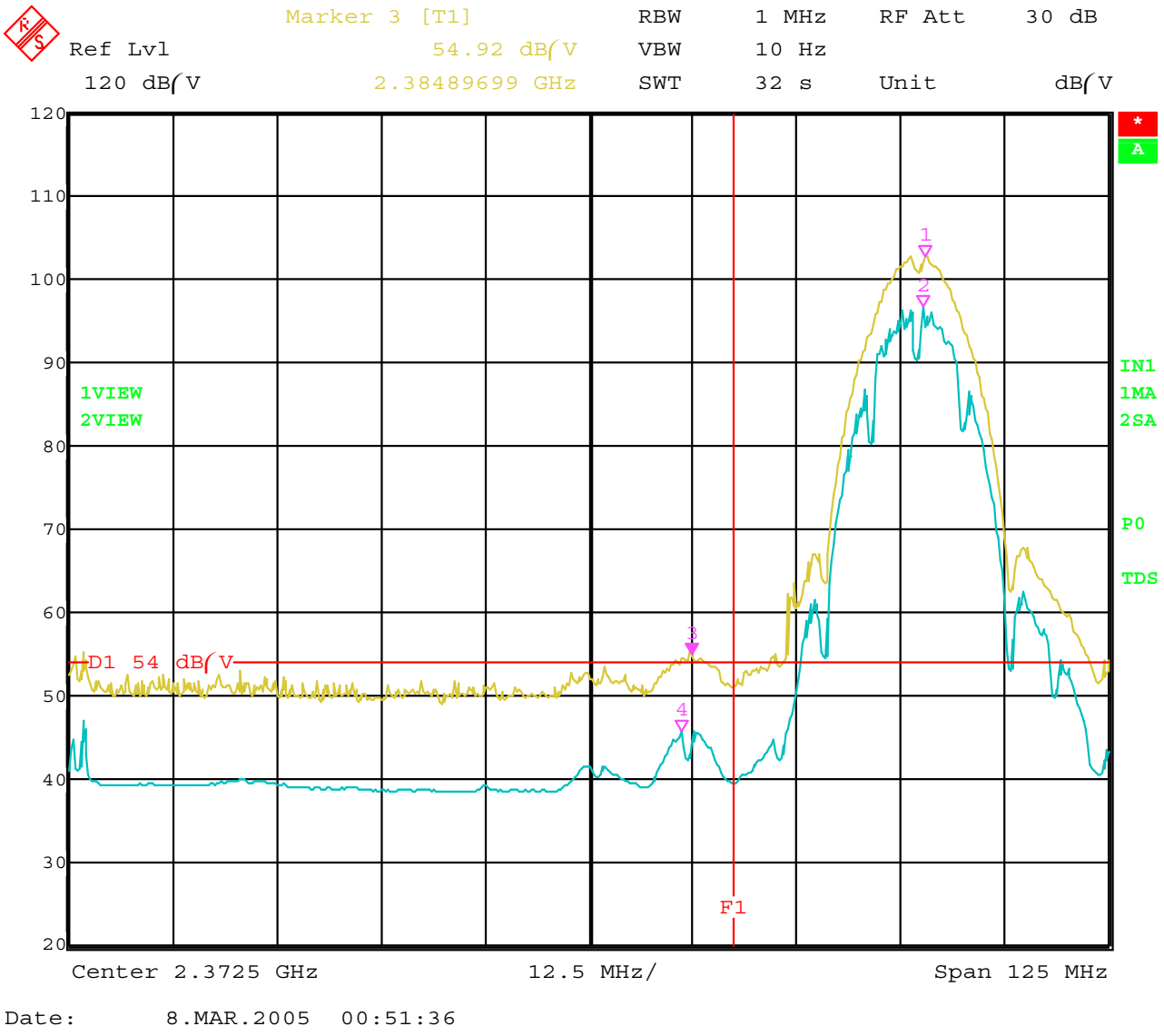
**Channel 1 - 802.11 b Mode** Gain : 28.0 Peak Power: 17.15 dBm Avg. Power: 14.80 dBm

**Channel 6 - 802.11 b Mode** Gain : 28.5 Peak Power: 17.59 dBm Avg. Power: 15.22 dBm

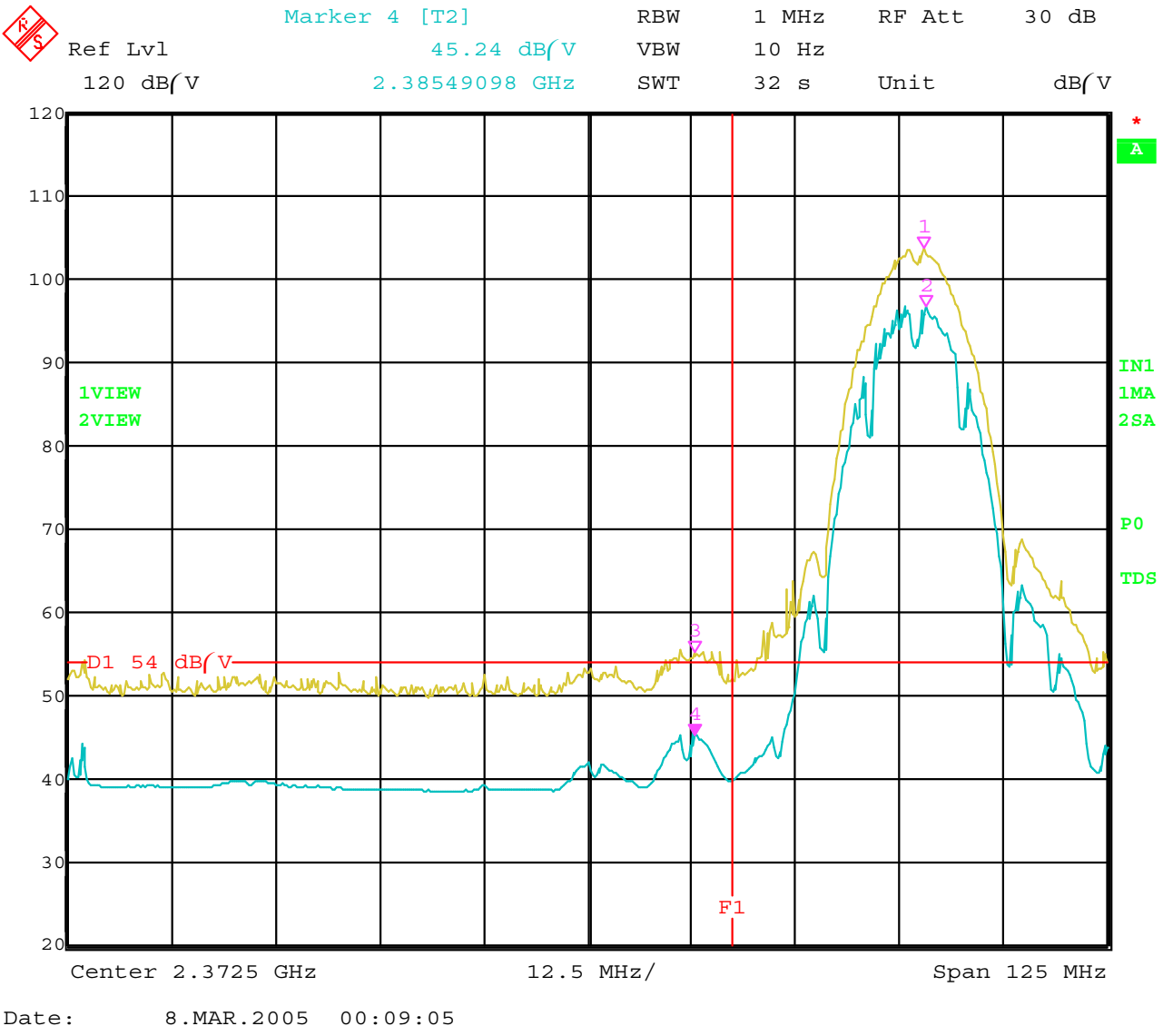
**Channel 11 - 802.11 b Mode** Gain : 28.5 Peak Power: 17.61 dBm Avg. Power: 15.23 dBm

**Transmit Mode**

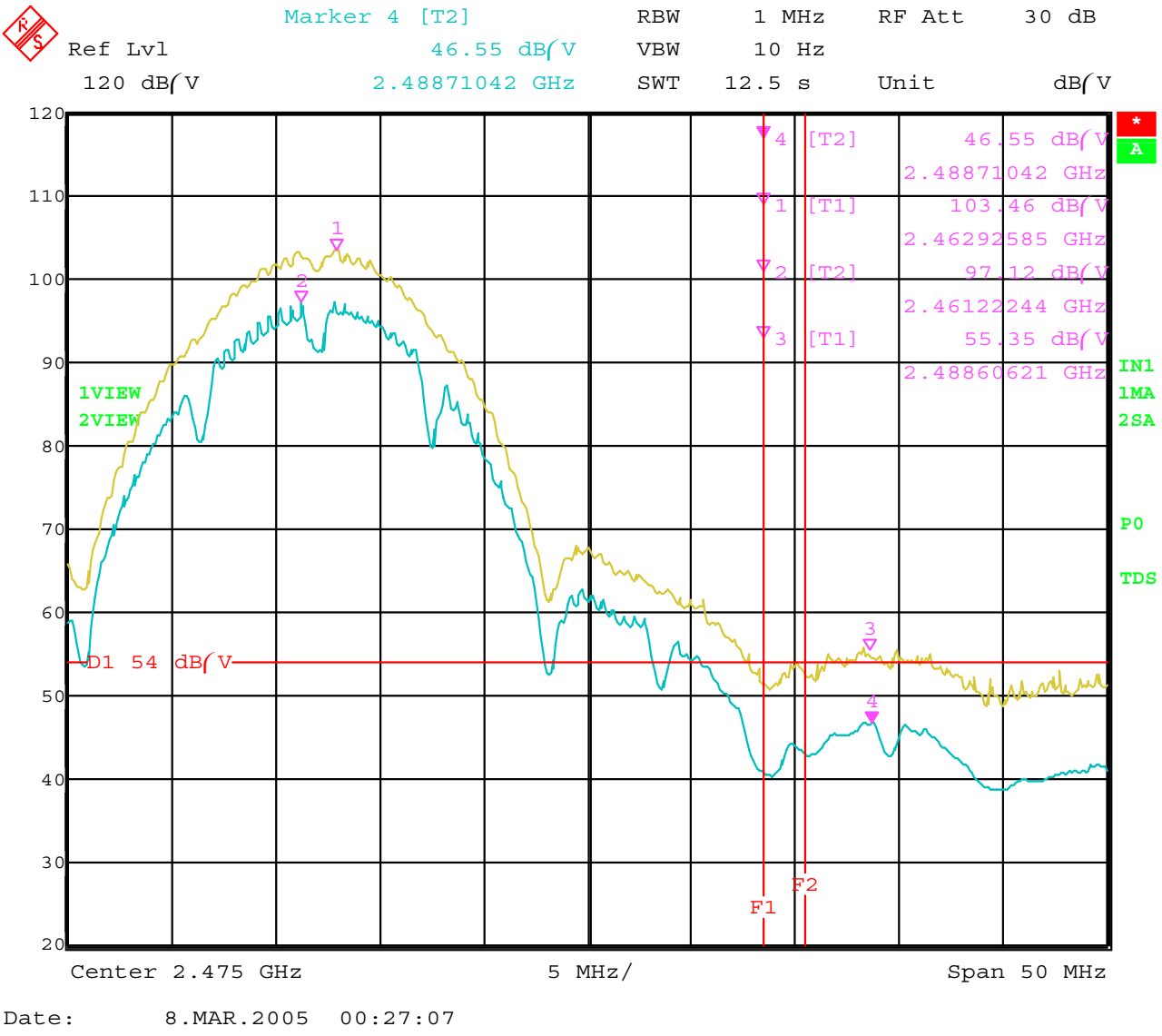
| Freq. (MHz) | Level (dBuV) | Pol (v/h) | Limit | Margin | Peak / QP / Avg | Ant. Height (m) | Table Angle (deg) | Comments |
|---|---|---|---|---|---|---|---|---|
| 2412 | 103.47 | H | -- | -- | Peak | 1.56 | 225 | Fundamental of Channel 1 |
| 2412 | 96.65 | H | -- | -- | Avg | 1.56 | 225 | @ 3 meters |
| | | | | | | | | |
| 2390 | 52.04 | H | 74 | -21.96 | Peak | 1.56 | 225 | **No** Marker Delta Method |
| 2390 | 39.58 | H | 54 | -14.42 | Avg | 1.56 | 225 | Method Used |
| | | | | | | | | |
| 2385.4 | 55.03 | H | 74 | -18.97 | Peak | 1.56 | 225 | **No** Marker Delta Method |
| 2385.4 | 45.24 | H | 54 | -8.76 | Avg | 1.56 | 225 | Method Used |
| | | | | | | | | |
| 2437 | 105.95 | H | -- | -- | Peak | 1 | 180 | Fundamental of Channel 6 |
| 2437 | 98.7 | H | -- | -- | Avg | 1 | 180 | @ 3 meters |
| | | | | | | | | |
| 2462 | 106.49 | H | -- | -- | Peak | 1 | 180 | Fundamental of Channel 11 |
| 2462 | 100.38 | H | -- | -- | Avg | 1 | 180 | @ 3 meters |
| | | | | | | | | |
| 2483.5 | 54.86 | H | 74 | -19.14 | Peak | 1 | 180 | **No** Marker Delta Method |
| 2483.5 | 43 | H | 54 | -11 | Peak | 1 | 180 | Method Used |
| | | | | | | | | |
| 2488.4 | 57.76 | H | 74 | -16.24 | Peak | 1 | 180 | **No** Marker Delta Method |
| 2488.2 | 49.36 | H | 54 | -4.64 | Peak | 1 | 180 | Method Used |
| | | | | | | | | |



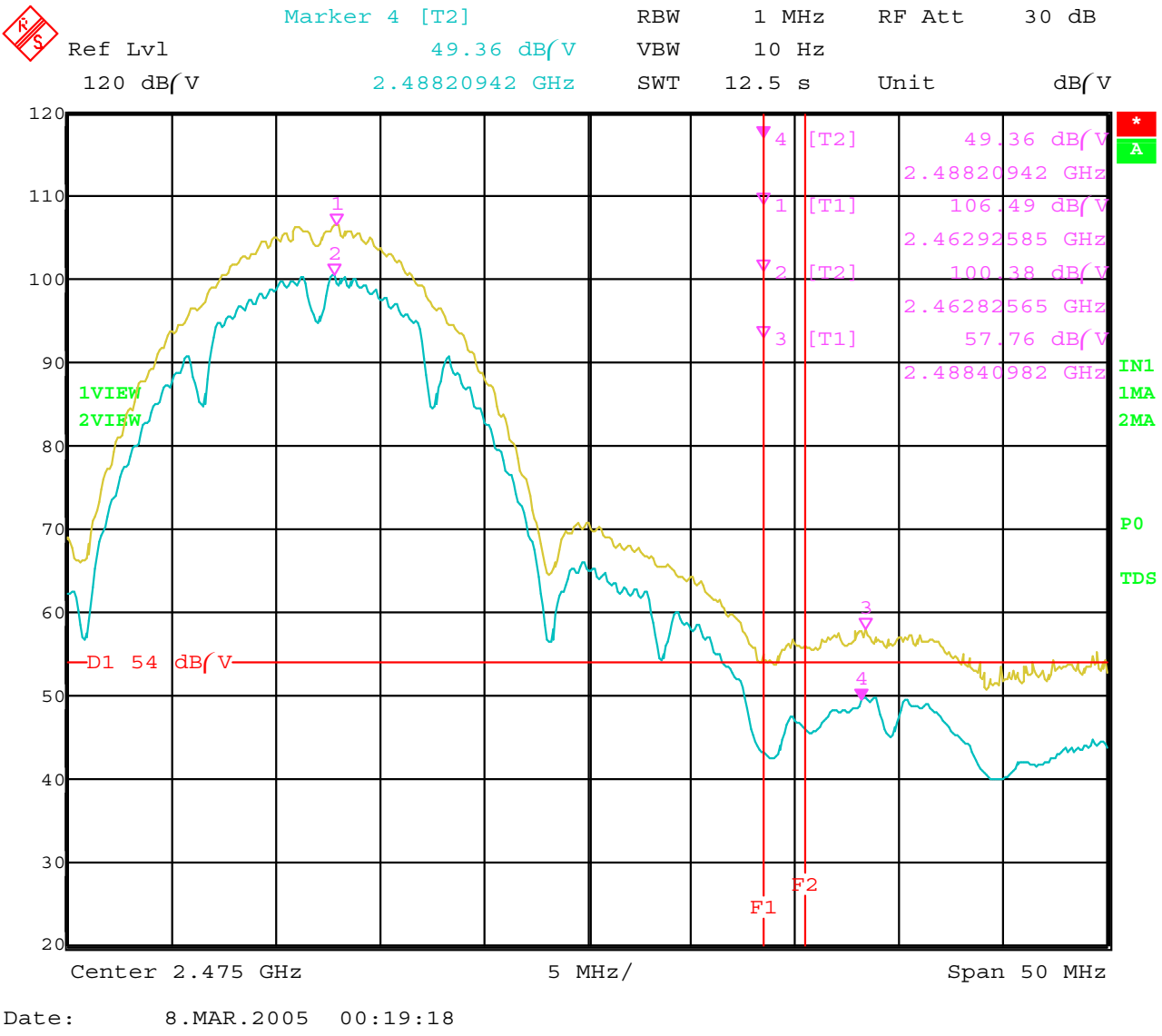

Band Edge – Channel 1 – Vertical Polarization – 802.11 b Mode – Phycomp Antenna




Band Edge – Channel 1 – Horizontal Polarization – 802.11 b Mode – Phycomp Antenna




Band Edge – Channel 11 – Vertical Polarization – 802.11 b Mode – Phycomp Antenna




Band Edge Channel 11 – Horizontal Polarization – 802.11 b Mode – Phycomp Antenna

**FCC 15.247**

Intel Corporation — Date: 3/08/05

Intel Mini PCI Type 3A 802.11BG Wireless LAN Adapter — Lab: B

Model: WM3A2200BG — Tested By: Kyle Fujimoto

Configuration: Dell Latitude Laptop D510 Agency Series Number: PP17L -- Main Port

**With Phycomp Antenna**

**Channel 1 - 802.11 g Mode** Gain : 22.5 Peak Power: 16.38 dBm Avg. Power: 10.07 dBm

**Channel 6 - 802.11 g Mode** Gain : 22.5 Peak Power: 16.25 dBm Avg. Power: 9.93 dBm

**Channel 11 - 802.11 g Mode** Gain : 22.5 Peak Power: 16.38 dBm Avg. Power: 9.99 dBm

**Transmit Mode**

| Freq. (MHz) | Level (dBuV) | Pol (v/h) | Limit | Margin | Peak / QP / Avg | Ant. Height (m) | Table Angle (deg) | Comments |
|---|---|---|---|---|---|---|---|---|
| 2412 | 99.39 | V | -- | -- | Peak | 2.59 | 135 | Fundamental of Channel 1 |
| 2412 | 85.56 | V | -- | -- | Avg | 2.59 | 135 | @ 3 meters |
| | | | | | | | | |
| 2390 | 56.33 | V | 74 | -17.67 | Peak | 2.59 | 135 | **No** Marker Delta Method |
| 2390 | 43 | V | 54 | -11 | Avg | 2.59 | 135 | Method Used |
| | | | | | | | | |
| 2437 | 99.78 | V | -- | -- | Peak | 2.53 | 135 | Fundamental of Channel 6 |
| 2437 | 85.85 | V | -- | -- | Avg | 2.53 | 135 | @ 3 meters |
| | | | | | | | | |
| 2462 | 100.42 | V | -- | -- | Peak | 2.48 | 135 | Fundamental of Channel 11 |
| 2462 | 86.3 | V | -- | -- | Avg | 2.48 | 135 | @ 3 meters |
| | | | | | | | | |
| 2483.5 | 60.4 | V | 74 | -13.6 | Peak | 2.48 | 135 | **No** Marker Delta Method |
| 2483.5 | 46.33 | V | 54 | -7.67 | Avg | 2.48 | 135 | Method Used |
| | | | | | | | | |
| 2487.1 | 59.33 | V | 74 | -14.67 | Peak | 2.48 | 135 | **With** Marker Delta Method |
| 2486.7 | 45.6 | V | 54 | -8.4 | Avg | 2.48 | 135 | Method Used |
| | | | | | | | | |

**FCC 15.247**

Intel Corporation — Date: 3/08/05

Intel Mini PCI Type 3A 802.11BG Wireless LAN Adapter — Lab: B

Model: WM3A2200BG — Tested By: Kyle Fujimoto

Configuration: Dell Latitude Laptop D510 Agency Series Number: PP17L -- Main Port

**With Phycomp Antenna**

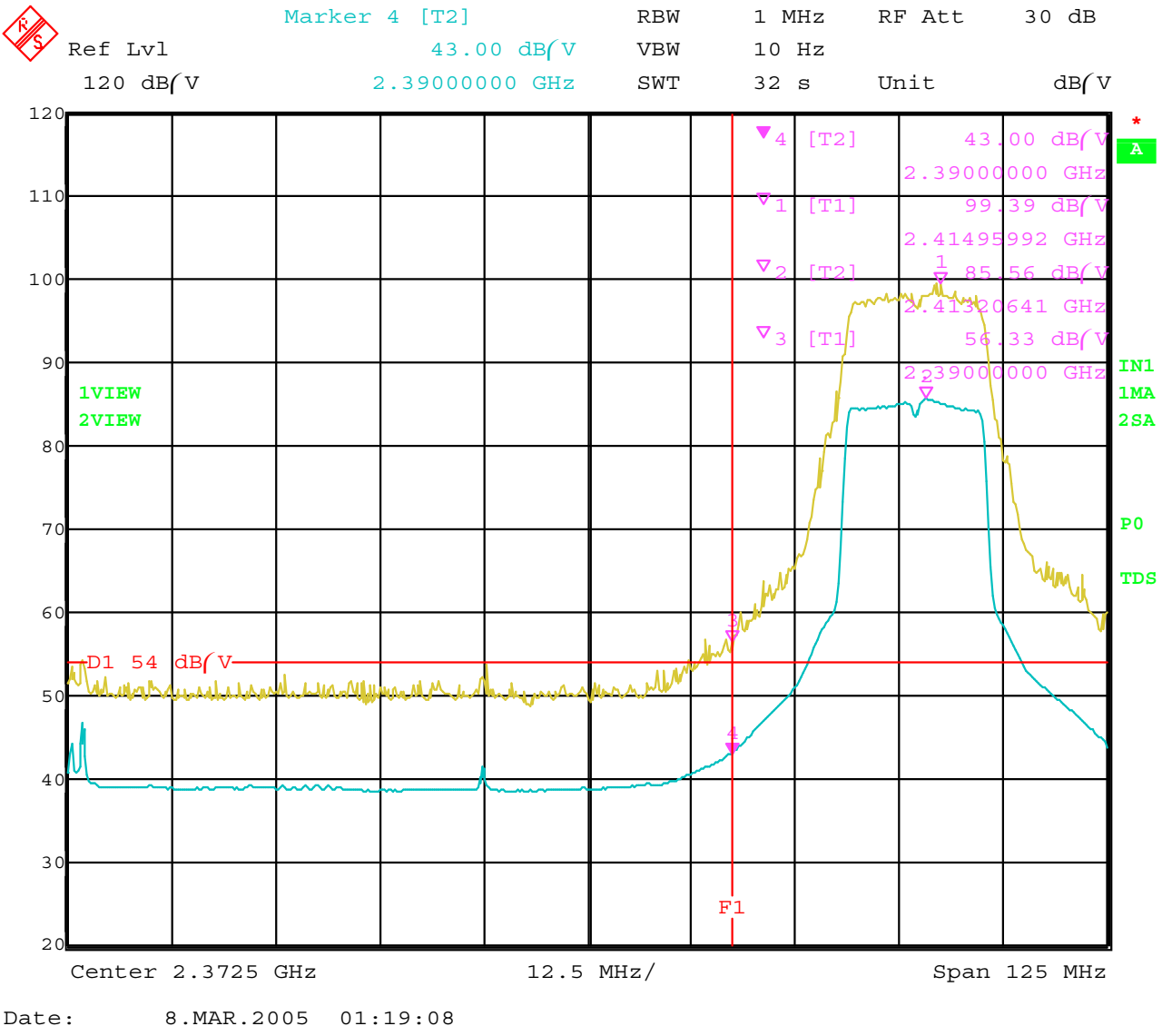
**Channel 1 - 802.11 g Mode** Gain : 22.5 Peak Power: 16.38 dBm Avg. Power: 10.07 dBm

**Channel 6 - 802.11 g Mode** Gain : 22.5 Peak Power: 16.25 dBm Avg. Power: 9.93 dBm

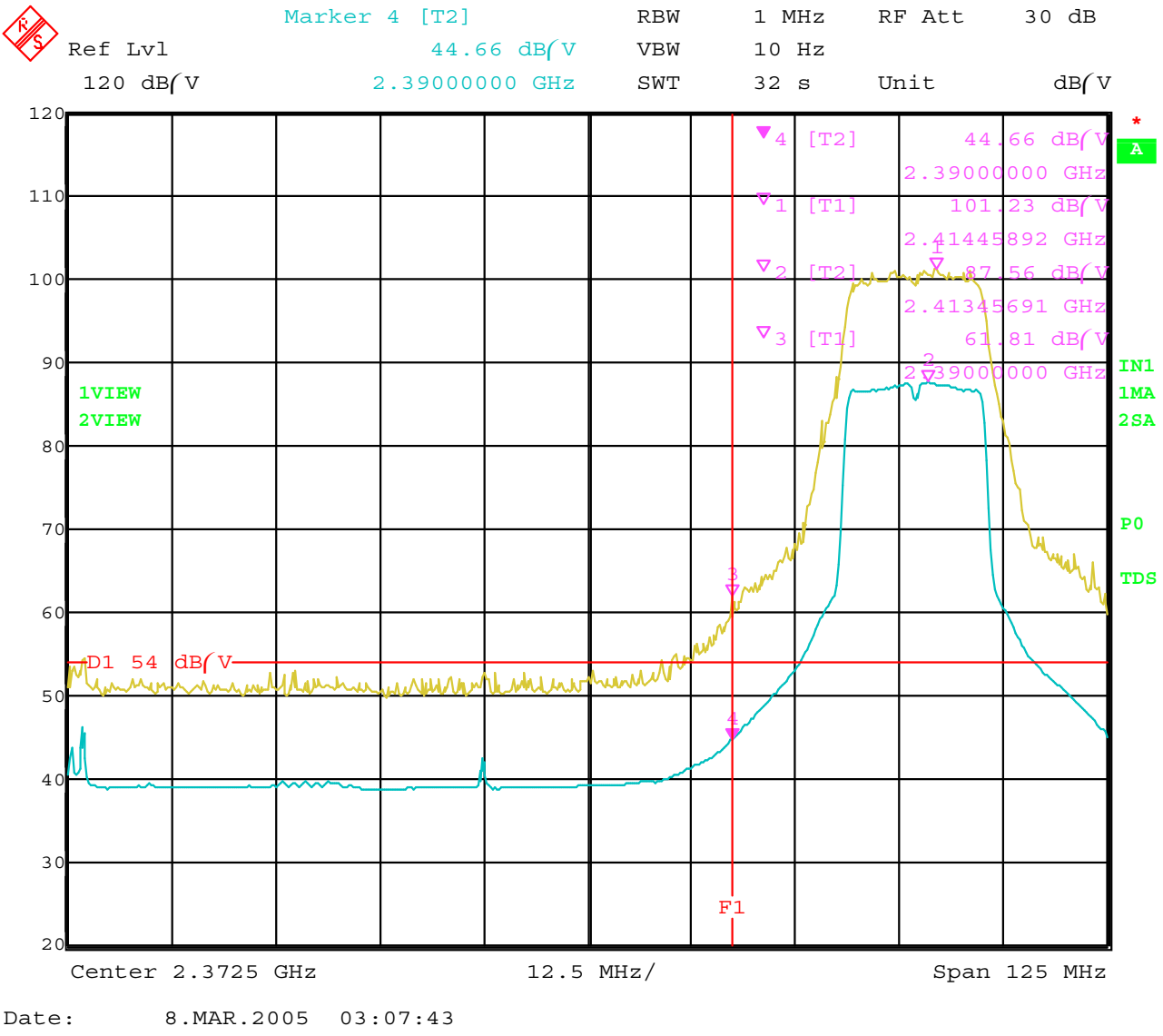
**Channel 11 - 802.11 g Mode** Gain : 22.5 Peak Power: 16.38 dBm Avg. Power: 9.99 dBm

**Transmit Mode**

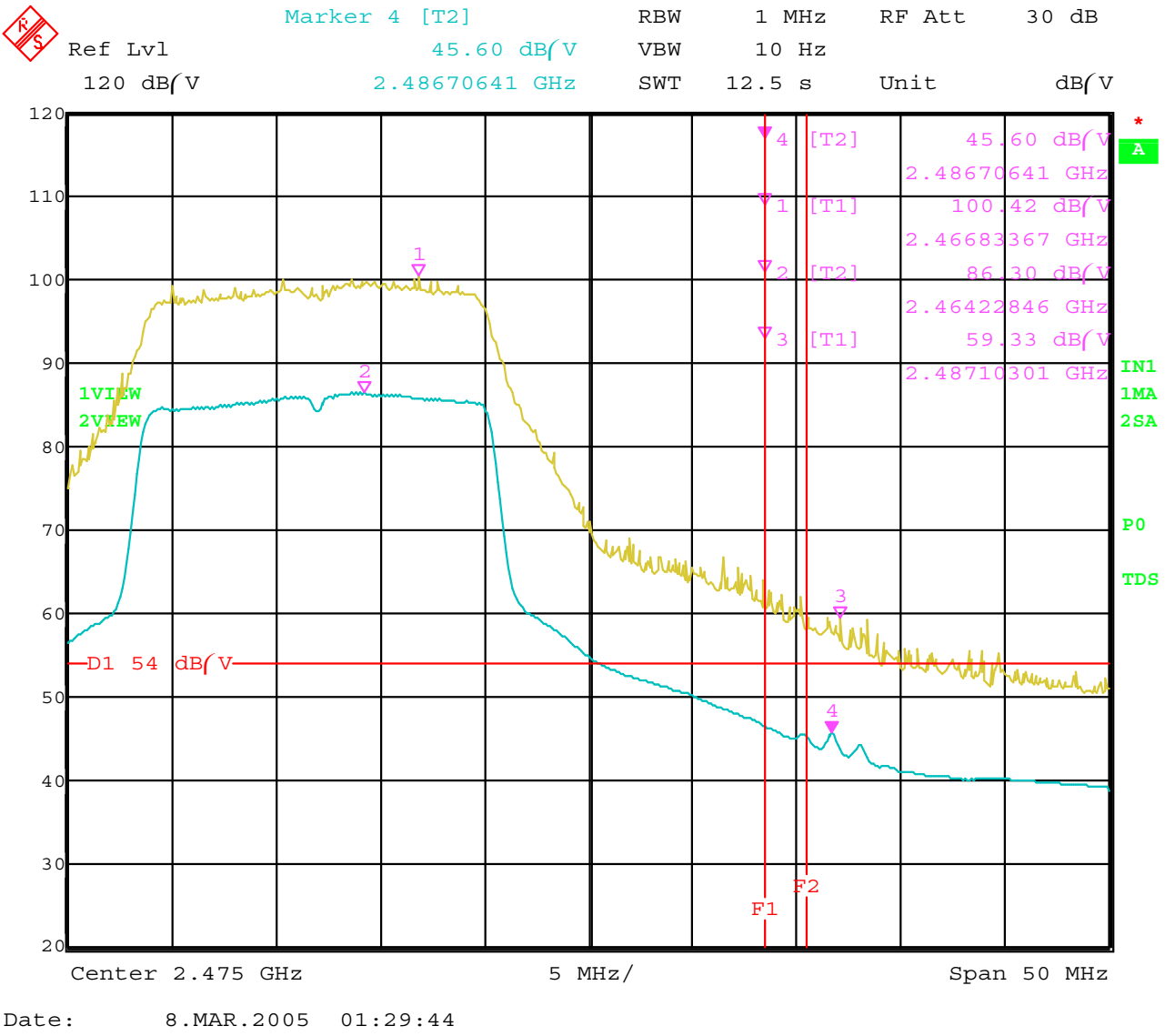
| Freq. (MHz) | Level (dBuV) | Pol (v/h) | Limit | Margin | Peak / QP / Avg | Ant. Height (m) | Table Angle (deg) | Comments |
|---|---|---|---|---|---|---|---|---|
| 2412 | 101.23 | H | -- | -- | Peak | 1.74 | 225 | Fundamental of Channel 1 |
| 2412 | 87.56 | H | -- | -- | Avg | 1.74 | 225 | @ 3 meters |
| | | | | | | | | |
| 2390 | 61.81 | H | 74 | -12.19 | Peak | 1.74 | 225 | **No** Marker Delta Method |
| 2390 | 44.66 | H | 54 | -9.34 | Avg | 1.74 | 225 | Method Used |
| | | | | | | | | |
| 2437 | 100.3 | H | -- | -- | Peak | 1.74 | 225 | Fundamental of Channel 6 |
| 2437 | 86.22 | H | -- | -- | Avg | 1.74 | 225 | @ 3 meters |
| | | | | | | | | |
| 2462 | 101.96 | H | -- | -- | Peak | 1.69 | 180 | Fundamental of Channel 11 |
| 2462 | 87.61 | H | -- | -- | Avg | 1.69 | 180 | @ 3 meters |
| | | | | | | | | |
| 2483.5 | 63.93 | H | 74 | -10.07 | Peak | 1.69 | 180 | **No** Marker Delta Method |
| 2483.5 | 47.28 | H | 54 | -6.72 | Peak | 1.69 | 180 | Method Used |
| | | | | | | | | |
| 2488 | 59.65 | H | 74 | -14.35 | Peak | 1.69 | 180 | **With** Marker Delta Method |
| 2486.7 | 46.59 | H | 54 | -7.41 | Peak | 1.69 | 180 | Method Used |
| | | | | | | | | |



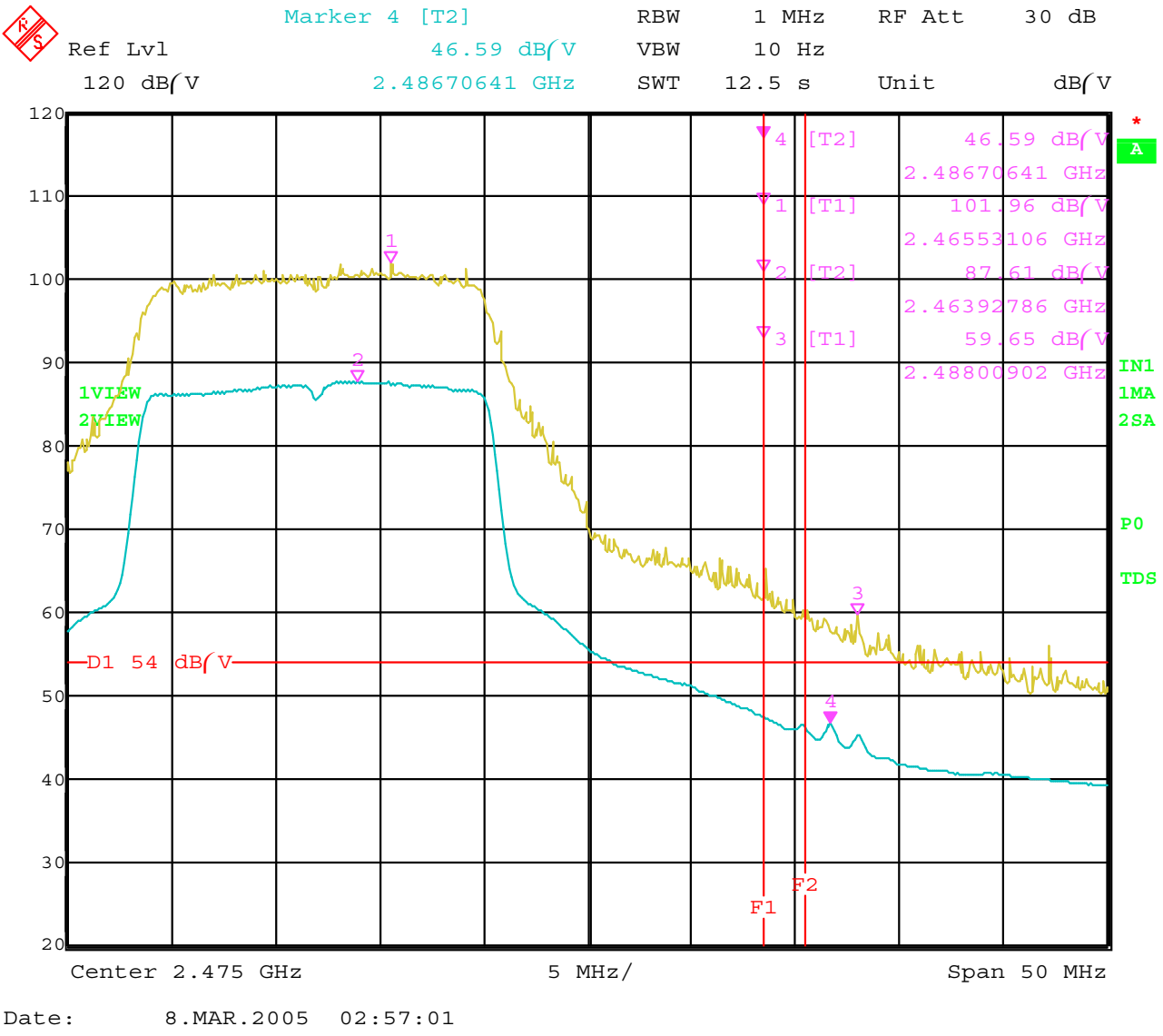

Band Edge – Channel 1 – Vertical Polarization – 802.11 g Mode – Phycomp Antenna




Band Edge – Channel 1 – Horizontal Polarization – 802.11 g Mode – Phycomp Antenna



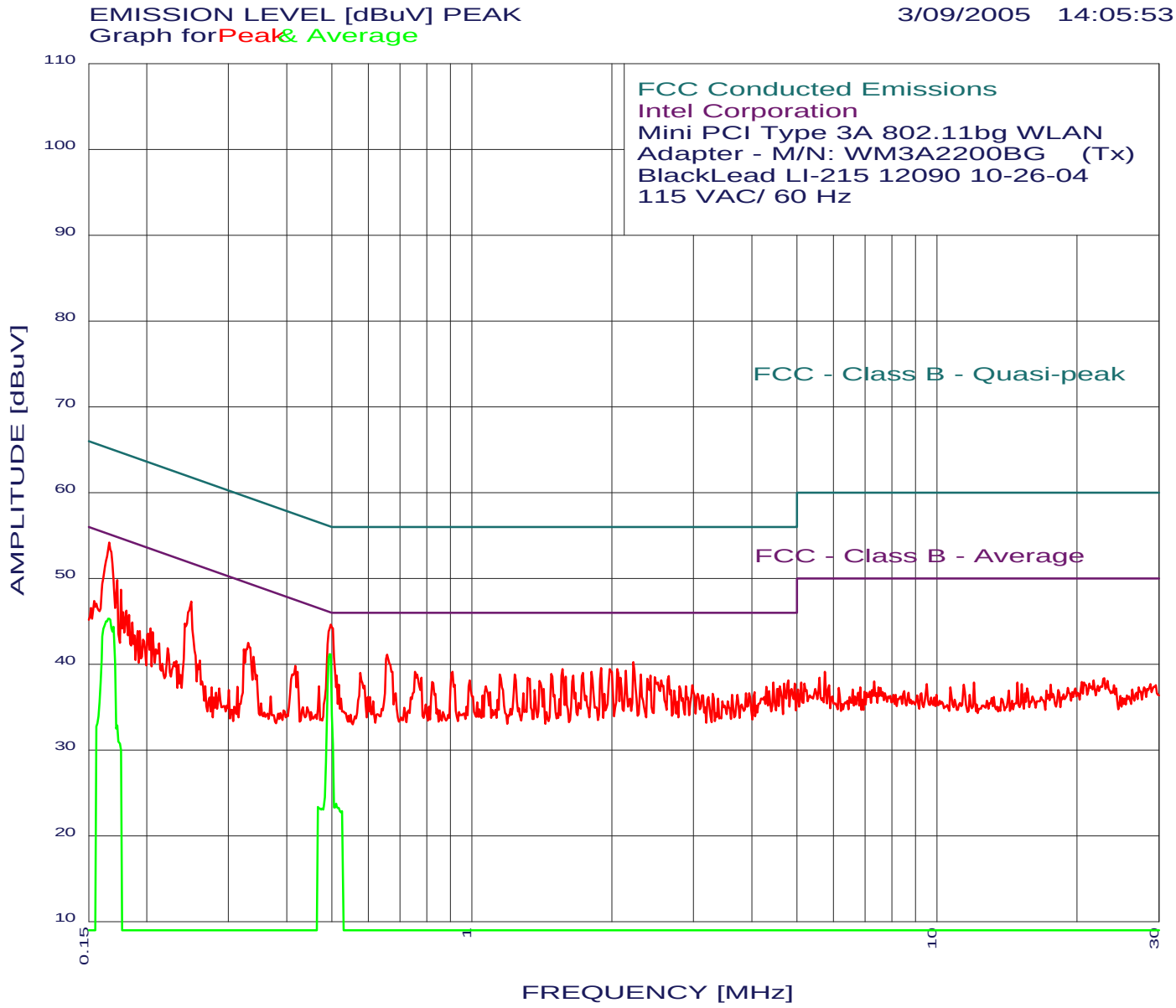

Band Edge – Channel 11 – Vertical Polarization – 802.11 g Mode – Phycomp Antenna




Band Edge – Channel 11 – Horizontal Polarization – 802.11 g Mode – Phycomp Antenna

# *CONDUCTED EMISSIONS*

# *DATA SHEETS*


EMISSION LEVEL [dBuV] PEAK
3/09/2005 14:05:53
Graph forPeak& Average
FCC Conducted Emissions
Intel Corporation
Mini PCI Type 3A 802.11bg WLAN
Adapter - M/N: WM3A2200BG (Tx)
BlackLead LI-215 12090 10-26-04
115 VAC/ 60 Hz
FCC - Class B - Quasi-peak
FCC - Class B - Average
AMPLITUDE [dBuV]
110
100
90
80
70
60
50
40
30
20
10
0.15
1
10
30
FREQUENCY [MHz]

Intel Corporation 3/09/2005 14:05:53
Mini PCI Type 3A 802.11bg Wireless LAN Adapter
Model: WM3A2200BG (Transmit Mode)
Black Lead - 115 VAC/ 60 Hz
TEST ENGINEER : James Ross

---

49 highest peaks above -50.00 dB of FCC - Class B - Average limit line
Peak criteria : 3.00 dB, Curve : Peak

| Peak# | Freq(MHz) | Amp(dBuV) | Limit(dB) | Delta(dB) |
|---|---|---|---|---|
| 1 | 0.166 | 54.15 | 55.16 | -1.00** |
| 2 | 0.497 | 44.57 | 46.05 | -1.48** |
| 3 | 0.250 | 47.30 | 51.77 | -4.47 |
| 4 | 0.658 | 41.09 | 46.00 | -4.91 |
| 5 | 0.173 | 49.75 | 54.81 | -5.06 |
| 6 | 2.226 | 40.24 | 46.00 | -5.76 |
| 7 | 0.176 | 48.65 | 54.68 | -6.02 |
| 8 | 1.899 | 39.50 | 46.00 | -6.50 |
| 9 | 1.569 | 39.43 | 46.00 | -6.57 |
| 10 | 2.055 | 39.43 | 46.00 | -6.57 |
| 11 | 1.981 | 39.42 | 46.00 | -6.58 |
| 12 | 2.145 | 39.24 | 46.00 | -6.76 |
| 13 | 0.909 | 39.11 | 46.00 | -6.89 |
| 14 | 0.755 | 39.10 | 46.00 | -6.90 |
| 15 | 1.810 | 39.08 | 46.00 | -6.92 |
| 16 | 0.331 | 42.44 | 49.44 | -7.00 |
| 17 | 0.577 | 38.98 | 46.00 | -7.02 |
| 18 | 1.735 | 38.97 | 46.00 | -7.03 |
| 19 | 1.480 | 38.82 | 46.00 | -7.18 |
| 20 | 1.236 | 38.77 | 46.00 | -7.23 |
| 21 | 2.310 | 38.75 | 46.00 | -7.25 |
| 22 | 1.148 | 38.75 | 46.00 | -7.25 |
| 23 | 2.423 | 38.66 | 46.00 | -7.34 |
| 24 | 1.654 | 38.65 | 46.00 | -7.35 |
| 25 | 2.651 | 38.59 | 46.00 | -7.41 |
| 26 | 1.594 | 38.54 | 46.00 | -7.46 |
| 27 | 2.475 | 38.47 | 46.00 | -7.53 |
| 28 | 1.318 | 38.38 | 46.00 | -7.62 |
| 29 | 0.417 | 39.79 | 47.50 | -7.71 |
| 30 | 0.990 | 38.12 | 46.00 | -7.88 |
| 31 | 4.799 | 38.10 | 46.00 | -7.90 |
| 32 | 1.397 | 38.00 | 46.00 | -8.00 |
| 33 | 0.822 | 37.90 | 46.00 | -8.10 |
| 34 | 4.456 | 37.87 | 46.00 | -8.13 |
| 35 | 2.979 | 37.52 | 46.00 | -8.48 |
| 36 | 1.072 | 37.44 | 46.00 | -8.56 |
| 37 | 2.885 | 37.41 | 46.00 | -8.59 |
| 38 | 2.796 | 37.40 | 46.00 | -8.60 |
| 39 | 1.367 | 36.99 | 46.00 | -9.01 |
| 40 | 0.469 | 37.38 | 46.53 | -9.15 |
| 41 | 0.204 | 44.14 | 53.44 | -9.31 |
| 42 | 3.945 | 36.61 | 46.00 | -9.39 |
| 43 | 3.294 | 36.55 | 46.00 | -9.45 |
| 44 | 0.206 | 43.74 | 53.35 | -9.62 |
| 45 | 0.194 | 43.84 | 53.88 | -10.04 |
| 46 | 0.192 | 43.84 | 53.97 | -10.13 |
| 47 | 5.745 | 39.11 | 50.00 | -10.89 |
| 48 | 0.222 | 41.82 | 52.74 | -10.92 |
| 49 | 22.896 | 38.33 | 50.00 | -11.67 |

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**Please see the previous graph and the following data sheet for Averaged information

Intel Corporation 3/09/2005 14:05:53
Mini PCI Type 3A 802.11bg Wireless LAN Adapter
Model: WM3A2200BG (Transmit Mode)
Black Lead - 115 VAC/ 60 Hz
TEST ENGINEER : James Ross

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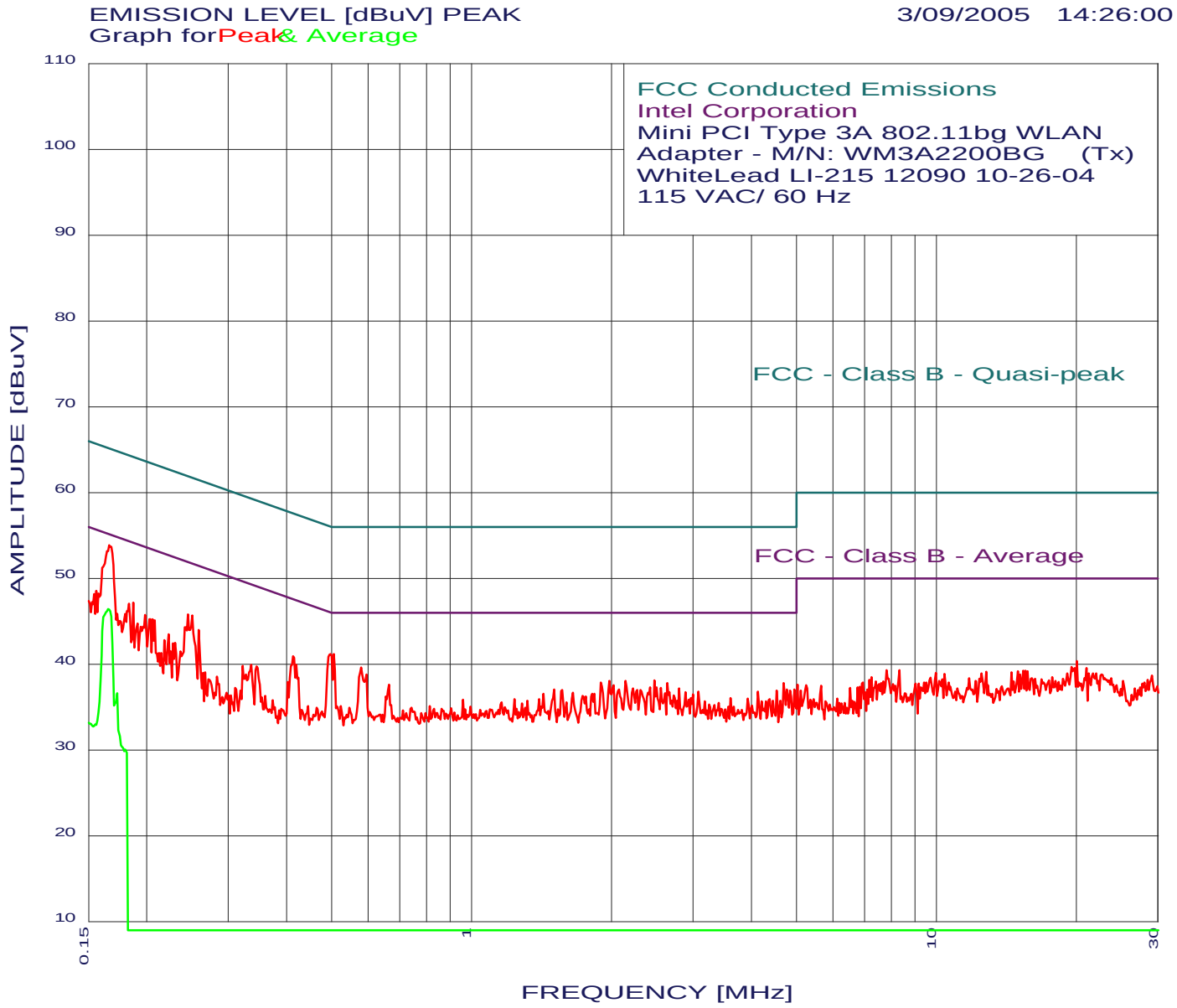
2 highest peaks above -50.00 dB of FCC - Class B - Average limit line
Peak criteria : 3.00 dB, Curve : Average

| Peak# | Freq(MHz) | Amp(dBuV) | Limit(dB) | Delta(dB) |
|---|---|---|---|---|
| 1 | 0.494 | 41.18 | 46.09 | -4.91 |
| 2 | 0.166 | 45.30 | 55.16 | -9.85 |

---


EMISSION LEVEL [dBuV] PEAK
3/09/2005 14:26:00
Graph forPeak& Average
FCC Conducted Emissions
Intel Corporation
Mini PCI Type 3A 802.11bg WLAN
Adapter - M/N: WM3A2200BG (Tx)
WhiteLead LI-215 12090 10-26-04
115 VAC/ 60 Hz
FCC - Class B - Quasi-peak
FCC - Class B - Average
AMPLITUDE [dBuV]
110
100
90
80
70
60
50
40
30
20
10
0.15
1
10
30
FREQUENCY [MHz]

Intel Corporation 3/09/2005 14:26:00
Mini PCI Type 3A 802.11bg Wireless LAN Adapter
Model: WM3A2200BG (Transmit Mode)
White Lead - 115 VAC/ 60 Hz
TEST ENGINEER : James Ross

---

42 highest peaks above -50.00 dB of FCC - Class B - Average limit line
Peak criteria : 3.00 dB, Curve : Peak

| Peak# | Freq(MHz) | Amp(dBuV) | Limit(dB) | Delta(dB) |
|---|---|---|---|---|
| 1 | 0.166 | 53.84 | 55.16 | -1.32** |
| 2 | 0.505 | 41.17 | 46.00 | -4.83 |
| 3 | 0.497 | 41.17 | 46.05 | -4.88 |
| 4 | 0.246 | 45.77 | 51.90 | -6.13 |
| 5 | 0.580 | 39.58 | 46.00 | -6.42 |
| 6 | 0.413 | 40.89 | 47.59 | -6.70 |
| 7 | 0.187 | 47.13 | 54.15 | -7.02 |
| 8 | 0.183 | 47.03 | 54.33 | -7.30 |
| 9 | 0.259 | 43.96 | 51.47 | -7.50 |
| 10 | 2.475 | 38.09 | 46.00 | -7.91 |
| 11 | 2.145 | 38.06 | 46.00 | -7.94 |
| 12 | 0.199 | 45.72 | 53.67 | -7.95 |
| 13 | 1.981 | 38.04 | 46.00 | -7.96 |
| 14 | 0.206 | 45.21 | 53.35 | -8.14 |
| 15 | 1.899 | 37.82 | 46.00 | -8.18 |
| 16 | 2.637 | 37.81 | 46.00 | -8.19 |
| 17 | 4.696 | 37.80 | 46.00 | -8.20 |
| 18 | 0.203 | 45.21 | 53.49 | -8.27 |
| 19 | 0.665 | 37.59 | 46.00 | -8.41 |
| 20 | 2.796 | 37.13 | 46.00 | -8.87 |
| 21 | 1.504 | 37.03 | 46.00 | -8.97 |
| 22 | 1.569 | 36.95 | 46.00 | -9.05 |
| 23 | 4.528 | 36.89 | 46.00 | -9.11 |
| 24 | 0.223 | 43.50 | 52.70 | -9.20 |
| 25 | 4.137 | 36.78 | 46.00 | -9.22 |
| 26 | 1.654 | 36.67 | 46.00 | -9.33 |
| 27 | 0.345 | 39.71 | 49.09 | -9.38 |
| 28 | 0.336 | 39.91 | 49.31 | -9.40 |
| 29 | 20.059 | 40.35 | 50.00 | -9.65 |
| 30 | 0.230 | 42.49 | 52.43 | -9.94 |
| 31 | 8.327 | 39.30 | 50.00 | -10.70 |
| 32 | 7.815 | 39.27 | 50.00 | -10.73 |
| 33 | 12.791 | 39.11 | 50.00 | -10.89 |
| 34 | 9.967 | 38.99 | 50.00 | -11.01 |
| 35 | 21.263 | 38.92 | 50.00 | -11.08 |
| 36 | 29.078 | 38.66 | 50.00 | -11.34 |
| 37 | 0.267 | 39.05 | 51.20 | -12.14 |
| 38 | 6.954 | 37.82 | 50.00 | -12.18 |
| 39 | 5.031 | 37.61 | 50.00 | -12.39 |
| 40 | 5.252 | 37.52 | 50.00 | -12.48 |
| 41 | 5.656 | 37.45 | 50.00 | -12.55 |
| 42 | 6.773 | 37.31 | 50.00 | -12.69 |

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**Please see the previous graph and the following data sheet for Averaged information

Intel Corporation 3/09/2005 14:26:00
Mini PCI Type 3A 802.11bg Wireless LAN Adapter
Model: WM3A2200BG (Transmit Mode)
White Lead - 115 VAC/ 60 Hz
TEST ENGINEER : James Ross

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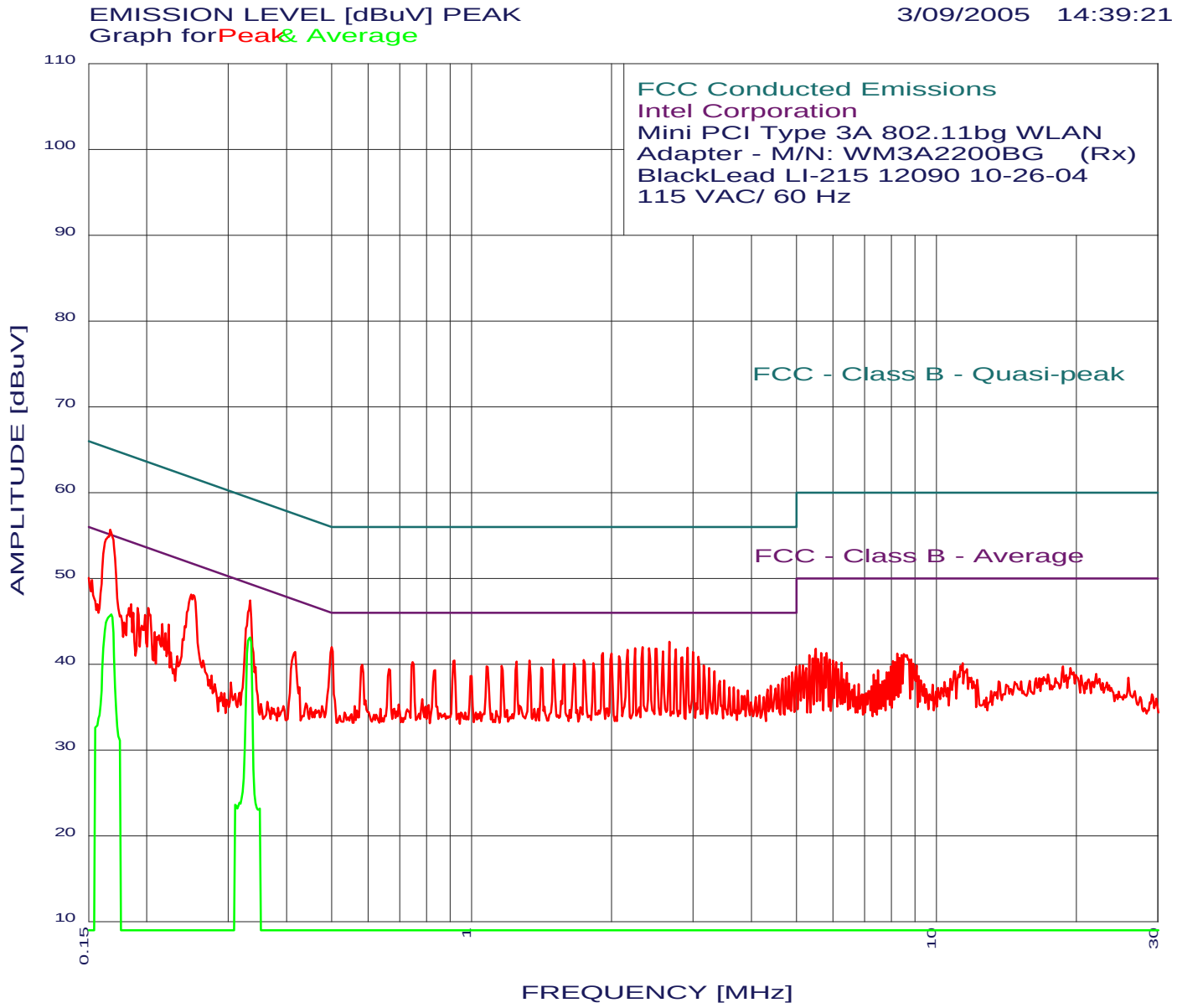
1 highest peaks above -50.00 dB of FCC - Class B - Average limit line
Peak criteria : 3.00 dB, Curve : Average

| Peak# | Freq(MHz) | Amp(dBuV) | Limit(dB) | Delta(dB) |
|---|---|---|---|---|
| 1 | 0.165 | 46.40 | 55.20 | -8.80 |

---


EMISSION LEVEL [dBuV] PEAK
3/09/2005 14:39:21
Graph forPeak& Average
FCC Conducted Emissions
Intel Corporation
Mini PCI Type 3A 802.11bg WLAN
Adapter - M/N: WM3A2200BG (Rx)
BlackLead LI-215 12090 10-26-04
115 VAC/ 60 Hz
FCC - Class B - Quasi-peak
FCC - Class B - Average
AMPLITUDE [dBuV]
110
100
90
80
70
60
50
40
30
20
10
0.15
1
10
30
FREQUENCY [MHz]

Intel Corporation 3/09/2005 14:39:21
Mini PCI Type 3A 802.11bg Wireless LAN Adapter
Model: WM3A2200BG (Receive Mode)
Black Lead - 115 VAC/ 60 Hz
TEST ENGINEER : James Ross

---

49 highest peaks above -50.00 dB of FCC - Class B - Average limit line
Peak criteria : 3.00 dB, Curve : Peak

| Peak# | Freq(MHz) | Amp(dBuV) | Limit(dB) | Delta(dB) |
|---|---|---|---|---|
| 1 | 0.167 | 55.65 | 55.11 | 0.54** |
| 2 | 0.334 | 47.44 | 49.35 | -1.91** |
| 3 | 2.665 | 42.59 | 46.00 | -3.41 |
| 4 | 0.250 | 48.10 | 51.77 | -3.67 |
| 5 | 0.500 | 41.97 | 46.01 | -4.03 |
| 6 | 2.334 | 41.95 | 46.00 | -4.05 |
| 7 | 2.916 | 41.91 | 46.00 | -4.09 |
| 8 | 2.410 | 41.86 | 46.00 | -4.14 |
| 9 | 2.250 | 41.85 | 46.00 | -4.15 |
| 10 | 2.501 | 41.77 | 46.00 | -4.23 |
| 11 | 2.751 | 41.70 | 46.00 | -4.30 |
| 12 | 2.168 | 41.64 | 46.00 | -4.36 |
| 13 | 2.582 | 41.48 | 46.00 | -4.52 |
| 14 | 2.995 | 41.42 | 46.00 | -4.58 |
| 15 | 1.918 | 41.30 | 46.00 | -4.70 |
| 16 | 2.002 | 41.22 | 46.00 | -4.78 |
| 17 | 2.077 | 40.93 | 46.00 | -5.07 |
| 18 | 3.075 | 40.83 | 46.00 | -5.17 |
| 19 | 2.840 | 40.80 | 46.00 | -5.20 |
| 20 | 1.496 | 40.52 | 46.00 | -5.48 |
| 21 | 1.745 | 40.47 | 46.00 | -5.53 |
| 22 | 0.919 | 40.41 | 46.00 | -5.59 |
| 23 | 1.331 | 40.39 | 46.00 | -5.61 |
| 24 | 1.249 | 40.27 | 46.00 | -5.73 |
| 25 | 0.747 | 40.20 | 46.00 | -5.80 |
| 26 | 1.830 | 40.09 | 46.00 | -5.91 |
| 27 | 1.663 | 40.05 | 46.00 | -5.95 |
| 28 | 1.586 | 39.94 | 46.00 | -6.06 |
| 29 | 0.417 | 41.39 | 47.50 | -6.11 |
| 30 | 0.583 | 39.88 | 46.00 | -6.12 |
| 31 | 3.158 | 39.84 | 46.00 | -6.16 |
| 32 | 1.160 | 39.75 | 46.00 | -6.25 |
| 33 | 1.077 | 39.74 | 46.00 | -6.26 |
| 34 | 1.412 | 39.60 | 46.00 | -6.40 |
| 35 | 3.243 | 39.54 | 46.00 | -6.46 |
| 36 | 0.665 | 39.39 | 46.00 | -6.61 |
| 37 | 0.835 | 39.30 | 46.00 | -6.70 |
| 38 | 3.328 | 39.15 | 46.00 | -6.85 |
| 39 | 4.902 | 39.01 | 46.00 | -6.99 |
| 40 | 0.202 | 46.54 | 53.53 | -6.99 |
| 41 | 0.185 | 46.95 | 54.24 | -7.29 |
| 42 | 1.000 | 38.62 | 46.00 | -7.38 |
| 43 | 4.825 | 38.60 | 46.00 | -7.40 |
| 44 | 0.192 | 46.54 | 53.97 | -7.43 |
| 45 | 4.748 | 38.39 | 46.00 | -7.61 |
| 46 | 4.672 | 38.29 | 46.00 | -7.71 |
| 47 | 0.199 | 45.74 | 53.67 | -7.93 |
| 48 | 3.492 | 38.07 | 46.00 | -7.93 |
| 49 | 3.419 | 38.06 | 46.00 | -7.94 |

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**Please see the previous graph and the following data sheet for Averaged information

Intel Corporation 3/09/2005 14:39:21
Mini PCI Type 3A 802.11bg Wireless LAN Adapter
Model: WM3A2200BG (Receive Mode)
Black Lead - 115 VAC/ 60 Hz
TEST ENGINEER : James Ross

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2 highest peaks above -50.00 dB of FCC - Class B - Average limit line
Peak criteria : 3.00 dB, Curve : Average

| Peak# | Freq(MHz) | Amp(dBuV) | Limit(dB) | Delta(dB) |
|---|---|---|---|---|
| 1 | 0.334 | 43.11 | 49.35 | -6.24 |
| 2 | 0.168 | 45.80 | 55.07 | -9.27 |

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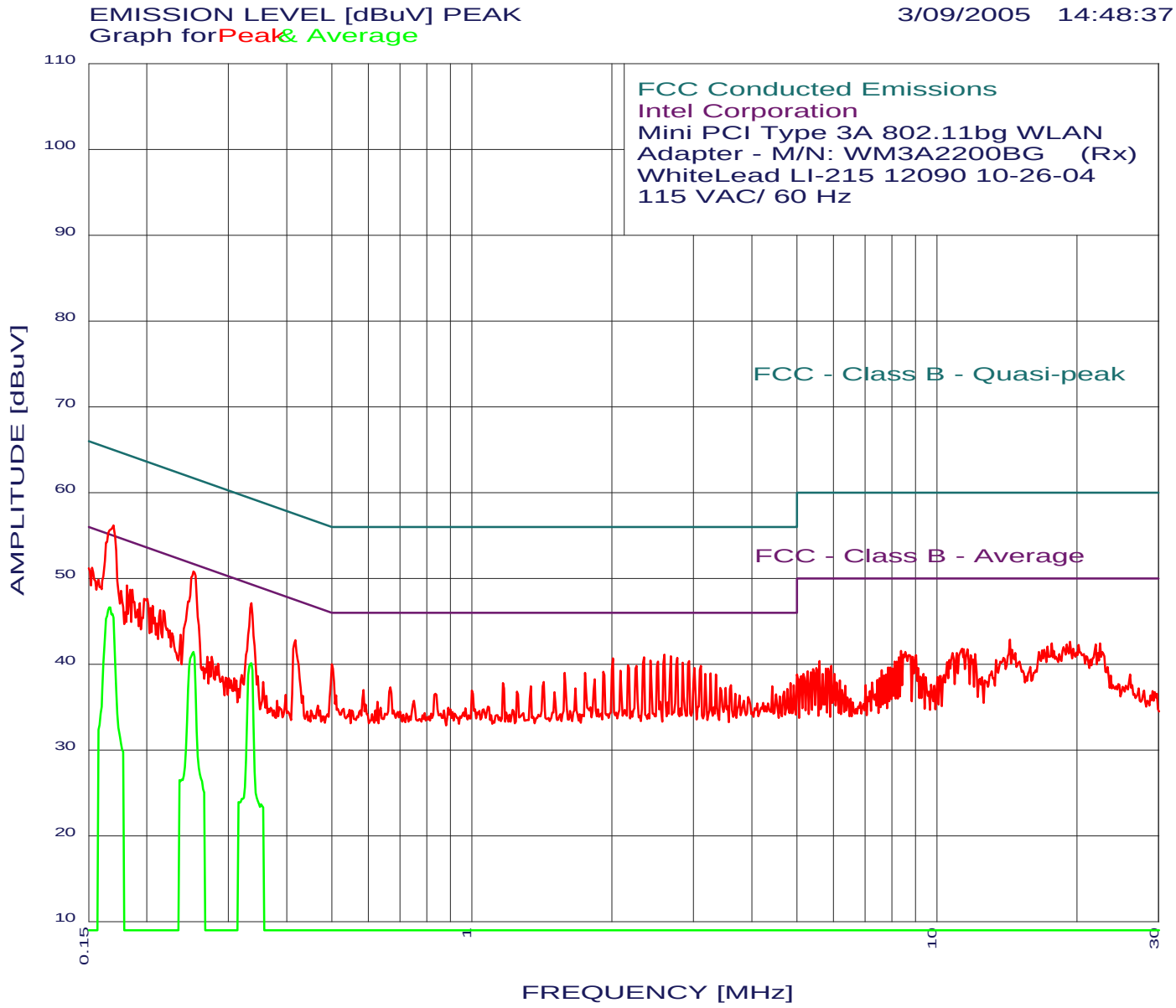
EMISSION LEVEL [dBuV] PEAK
3/09/2005 14:48:37
Graph forPeak& Average
FCC Conducted Emissions
Intel Corporation
Mini PCI Type 3A 802.11bg WLAN
Adapter - M/N: WM3A2200BG (Rx)
WhiteLead LI-215 12090 10-26-04
115 VAC/ 60 Hz
FCC - Class B - Quasi-peak
FCC - Class B - Average
AMPLITUDE [dBuV]
110
100
90
80
70
60
50
40
30
20
10
0.15
1
10
30
FREQUENCY [MHz]

Intel Corporation 3/09/2005 14:48:37
Mini PCI Type 3A 802.11bg Wireless LAN Adapter
Model: WM3A2200BG (Receive Mode)
White Lead - 115 VAC/ 60 Hz
TEST ENGINEER : James Ross

---

49 highest peaks above -50.00 dB of FCC - Class B - Average limit line
Peak criteria : 3.00 dB, Curve : Peak

| Peak# | Freq(MHz) | Amp(dBuV) | Limit(dB) | Delta(dB) |
|---|---|---|---|---|
| 1 | 0.170 | 56.14 | 54.98 | 1.15** |
| 2 | 0.252 | 50.77 | 51.68 | -0.91** |
| 3 | 0.336 | 47.11 | 49.31 | -2.20** |
| 4 | 0.417 | 42.79 | 47.50 | -4.71 |
| 5 | 2.596 | 41.11 | 46.00 | -4.89 |
| 6 | 2.679 | 40.92 | 46.00 | -5.08 |
| 7 | 2.346 | 40.78 | 46.00 | -5.22 |
| 8 | 2.766 | 40.73 | 46.00 | -5.27 |
| 9 | 0.182 | 49.13 | 54.41 | -5.28 |
| 10 | 2.013 | 40.64 | 46.00 | -5.36 |
| 11 | 0.186 | 48.63 | 54.19 | -5.57 |
| 12 | 2.423 | 40.39 | 46.00 | -5.61 |
| 13 | 2.932 | 40.34 | 46.00 | -5.66 |
| 14 | 2.514 | 40.30 | 46.00 | -5.70 |
| 15 | 2.840 | 40.13 | 46.00 | -5.87 |
| 16 | 0.500 | 39.97 | 46.01 | -6.03 |
| 17 | 0.198 | 47.62 | 53.71 | -6.09 |
| 18 | 2.168 | 39.86 | 46.00 | -6.14 |
| 19 | 2.262 | 39.77 | 46.00 | -6.23 |
| 20 | 3.107 | 39.76 | 46.00 | -6.24 |
| 21 | 3.011 | 39.55 | 46.00 | -6.45 |
| 22 | 0.206 | 46.81 | 53.35 | -6.54 |
| 23 | 0.217 | 46.20 | 52.91 | -6.71 |
| 24 | 0.214 | 46.30 | 53.05 | -6.74 |
| 25 | 2.089 | 39.25 | 46.00 | -6.75 |
| 26 | 1.918 | 39.12 | 46.00 | -6.88 |
| 27 | 1.754 | 38.99 | 46.00 | -7.01 |
| 28 | 1.586 | 38.95 | 46.00 | -7.05 |
| 29 | 3.260 | 38.88 | 46.00 | -7.12 |
| 30 | 3.175 | 38.87 | 46.00 | -7.13 |
| 31 | 14.370 | 42.83 | 50.00 | -7.17 |
| 32 | 3.346 | 38.79 | 46.00 | -7.21 |
| 33 | 19.337 | 42.59 | 50.00 | -7.41 |
| 34 | 1.840 | 38.21 | 46.00 | -7.79 |
| 35 | 1.426 | 37.92 | 46.00 | -8.08 |
| 36 | 4.851 | 37.80 | 46.00 | -8.20 |
| 37 | 11.322 | 41.80 | 50.00 | -8.20 |
| 38 | 1.166 | 37.76 | 46.00 | -8.24 |
| 39 | 3.605 | 37.52 | 46.00 | -8.48 |
| 40 | 4.928 | 37.51 | 46.00 | -8.49 |
| 41 | 8.372 | 41.50 | 50.00 | -8.50 |
| 42 | 8.551 | 41.41 | 50.00 | -8.59 |
| 43 | 1.338 | 37.40 | 46.00 | -8.60 |
| 44 | 4.432 | 37.39 | 46.00 | -8.61 |
| 45 | 0.669 | 37.29 | 46.00 | -8.71 |
| 46 | 10.792 | 41.26 | 50.00 | -8.74 |
| 47 | 3.511 | 37.21 | 46.00 | -8.79 |
| 48 | 1.671 | 37.17 | 46.00 | -8.83 |
| 49 | 12.066 | 41.15 | 50.00 | -8.85 |

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**Please see the previous graph and the following data sheet for Averaged information

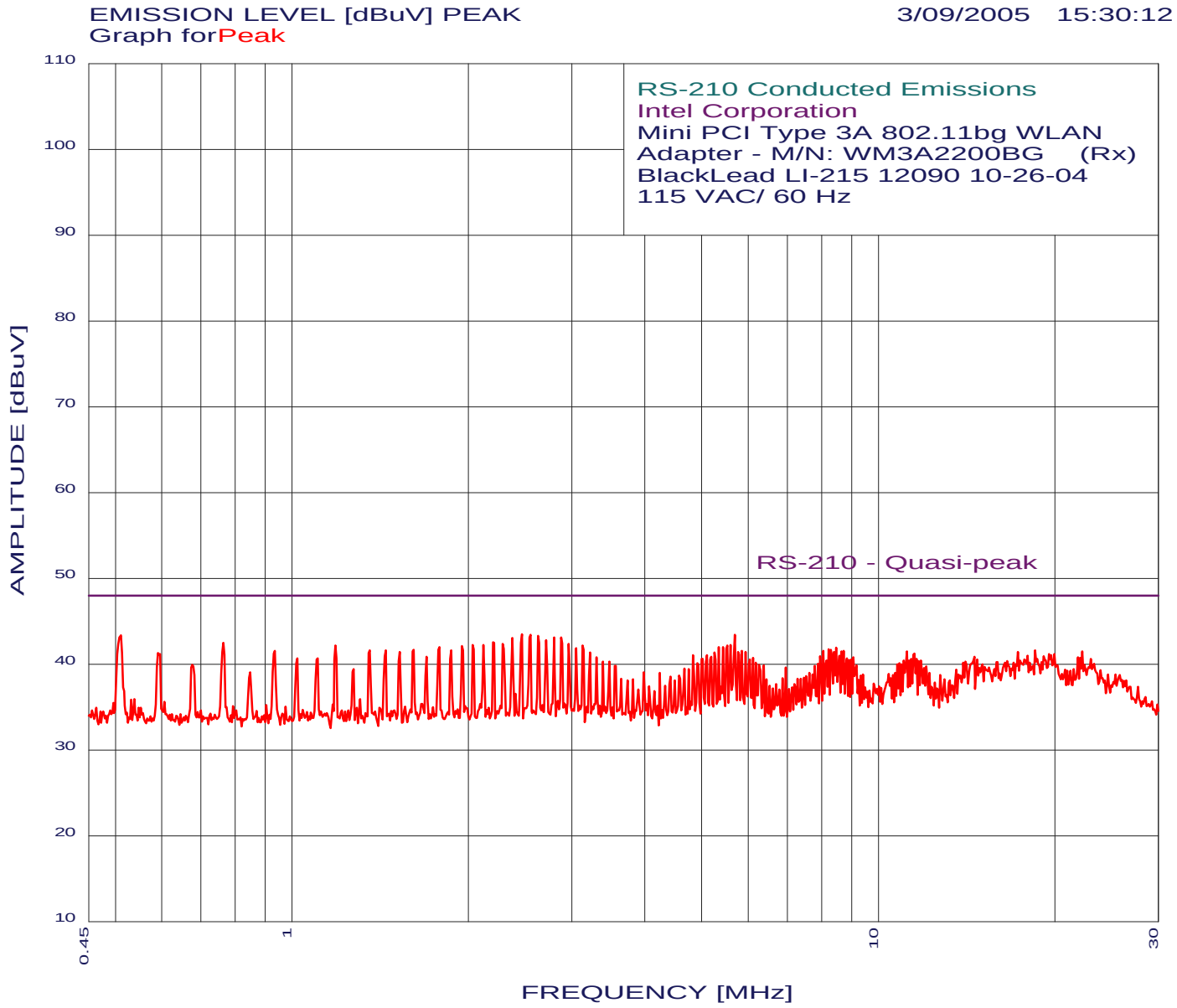
Intel Corporation 3/09/2005 14:48:37
Mini PCI Type 3A 802.11bg Wireless LAN Adapter
Model: WM3A2200BG (Receive Mode)
White Lead - 115 VAC/ 60 Hz
TEST ENGINEER : James Ross

---

3 highest peaks above -50.00 dB of FCC - Class B - Average limit line
Peak criteria : 3.00 dB, Curve : Average

| Peak# | Freq(MHz) | Amp(dBuV) | Limit(dB) | Delta(dB) |
|---|---|---|---|---|
| 1 | 0.166 | 46.57 | 55.16 | -8.59 |
| 2 | 0.336 | 40.11 | 49.31 | -9.20 |
| 3 | 0.252 | 41.41 | 51.68 | -10.27 |

---


EMISSION LEVEL [dBuV] PEAK
3/09/2005 15:30:12
Graph forPeak
RS-210 Conducted Emissions
Intel Corporation
Mini PCI Type 3A 802.11bg WLAN
Adapter - M/N: WM3A2200BG (Rx)
BlackLead LI-215 12090 10-26-04
115 VAC/ 60 Hz
RS-210 - Quasi-peak
AMPLITUDE [dBuV]
110
100
90
80
70
60
50
40
30
20
10
0.45
1
10
30
FREQUENCY [MHz]

Intel Corporation 3/09/2005 15:30:12
Mini PCI Type 3A 802.11bg Wireless LAN Adapter
Model: WM3A2200BG (Receive Mode)
Black Lead - 115 VAC/ 60 Hz
TEST ENGINEER : James Ross

---

49 highest peaks above -50.00 dB of RS-210 - Quasi-peak limit line
Peak criteria : 3.00 dB, Curve : Peak

| Peak# | Freq(MHz) | Amp(dBuV) | Limit(dB) | Delta(dB) |
|---|---|---|---|---|
| 1 | 2.466 | 43.47 | 48.00 | -4.53 |
| 2 | 5.689 | 43.40 | 48.00 | -4.60 |
| 3 | 2.550 | 43.38 | 48.00 | -4.62 |
| 4 | 0.511 | 43.37 | 48.00 | -4.63 |
| 5 | 2.627 | 43.28 | 48.00 | -4.72 |
| 6 | 2.880 | 43.11 | 48.00 | -4.89 |
| 7 | 2.798 | 43.10 | 48.00 | -4.90 |
| 8 | 2.375 | 43.06 | 48.00 | -4.94 |
| 9 | 2.716 | 42.79 | 48.00 | -5.21 |
| 10 | 2.201 | 42.54 | 48.00 | -5.46 |
| 11 | 0.764 | 42.50 | 48.00 | -5.50 |
| 12 | 2.287 | 42.35 | 48.00 | -5.65 |
| 13 | 2.967 | 42.32 | 48.00 | -5.68 |
| 14 | 2.120 | 42.23 | 48.00 | -5.77 |
| 15 | 2.033 | 42.22 | 48.00 | -5.78 |
| 16 | 5.593 | 42.19 | 48.00 | -5.81 |
| 17 | 5.522 | 42.18 | 48.00 | -5.82 |
| 18 | 1.188 | 42.16 | 48.00 | -5.84 |
| 19 | 3.133 | 42.13 | 48.00 | -5.87 |
| 20 | 1.949 | 42.11 | 48.00 | -5.89 |
| 21 | 1.785 | 41.98 | 48.00 | -6.02 |
| 22 | 5.432 | 41.97 | 48.00 | -6.03 |
| 23 | 5.341 | 41.96 | 48.00 | -6.04 |
| 24 | 8.477 | 41.93 | 48.00 | -6.07 |
| 25 | 3.055 | 41.83 | 48.00 | -6.17 |
| 26 | 8.231 | 41.72 | 48.00 | -6.28 |
| 27 | 1.614 | 41.64 | 48.00 | -6.36 |
| 28 | 8.302 | 41.63 | 48.00 | -6.37 |
| 29 | 1.447 | 41.61 | 48.00 | -6.39 |
| 30 | 1.869 | 41.59 | 48.00 | -6.41 |
| 31 | 1.358 | 41.59 | 48.00 | -6.41 |
| 32 | 18.511 | 41.58 | 48.00 | -6.42 |
| 33 | 8.730 | 41.55 | 48.00 | -6.45 |
| 34 | 8.060 | 41.52 | 48.00 | -6.48 |
| 35 | 0.935 | 41.51 | 48.00 | -6.49 |
| 36 | 5.856 | 41.51 | 48.00 | -6.49 |
| 37 | 11.184 | 41.49 | 48.00 | -6.51 |
| 38 | 8.656 | 41.44 | 48.00 | -6.56 |
| 39 | 22.273 | 41.44 | 48.00 | -6.56 |
| 40 | 1.528 | 41.43 | 48.00 | -6.57 |
| 41 | 5.932 | 41.41 | 48.00 | -6.59 |
| 42 | 5.761 | 41.41 | 48.00 | -6.59 |
| 43 | 5.250 | 41.35 | 48.00 | -6.65 |
| 44 | 3.226 | 41.34 | 48.00 | -6.66 |
| 45 | 0.591 | 41.28 | 48.00 | -6.72 |
| 46 | 11.519 | 41.21 | 48.00 | -6.79 |
| 47 | 5.100 | 41.03 | 48.00 | -6.97 |
| 48 | 4.829 | 41.00 | 48.00 | -7.00 |
| 49 | 8.582 | 40.94 | 48.00 | -7.06 |

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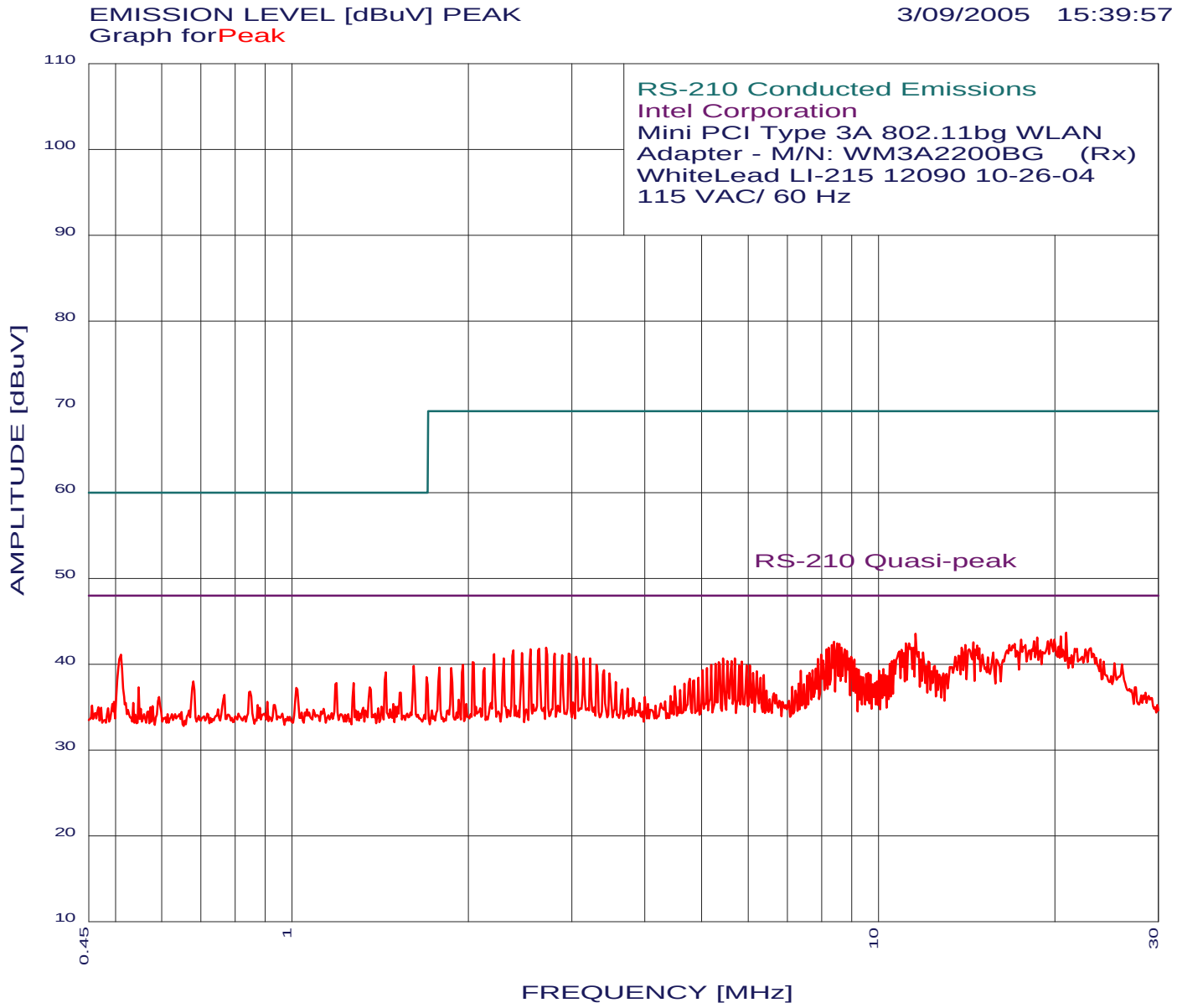
EMISSION LEVEL [dBuV] PEAK
3/09/2005 15:39:57
Graph forPeak
RS-210 Conducted Emissions
Intel Corporation
Mini PCI Type 3A 802.11bg WLAN
Adapter - M/N: WM3A2200BG (Rx)
WhiteLead LI-215 12090 10-26-04
115 VAC/ 60 Hz
RS-210 Quasi-peak
AMPLITUDE [dBuV]
110
100
90
80
70
60
50
40
30
20
10
0.45
1
10
30
FREQUENCY [MHz]

Intel Corporation 3/09/2005 15:39:57
Mini PCI Type 3A 802.11bg Wireless LAN Adapter
Model: WM3A2200BG (Receive Mode)
White Lead - 115 VAC/ 60 Hz
TEST ENGINEER : James Ross

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49 highest peaks above -50.00 dB of RS-210 - Quasi-peak limit line
Peak criteria : 3.00 dB, Curve : Peak

| Peak# | Freq(MHz) | Amp(dBuV) | Limit(dB) | Delta(dB) |
|---|---|---|---|---|
| 1 | 20.912 | 43.63 | 48.00 | -4.37 |
| 2 | 11.568 | 43.52 | 48.00 | -4.48 |
| 3 | 18.670 | 43.06 | 48.00 | -4.94 |
| 4 | 8.407 | 42.60 | 48.00 | -5.40 |
| 5 | 14.512 | 42.54 | 48.00 | -5.46 |
| 6 | 8.512 | 42.41 | 48.00 | -5.59 |
| 7 | 11.276 | 42.39 | 48.00 | -5.61 |
| 8 | 11.138 | 42.38 | 48.00 | -5.62 |
| 9 | 8.582 | 42.31 | 48.00 | -5.69 |
| 10 | 14.088 | 42.21 | 48.00 | -5.79 |
| 11 | 14.755 | 42.16 | 48.00 | -5.84 |
| 12 | 2.716 | 41.92 | 48.00 | -6.08 |
| 13 | 8.656 | 41.92 | 48.00 | -6.08 |
| 14 | 8.231 | 41.89 | 48.00 | -6.11 |
| 15 | 2.638 | 41.81 | 48.00 | -6.19 |
| 16 | 8.767 | 41.73 | 48.00 | -6.27 |
| 17 | 2.550 | 41.70 | 48.00 | -6.30 |
| 18 | 8.161 | 41.69 | 48.00 | -6.31 |
| 19 | 10.953 | 41.67 | 48.00 | -6.33 |
| 20 | 2.385 | 41.58 | 48.00 | -6.42 |
| 21 | 8.841 | 41.53 | 48.00 | -6.47 |
| 22 | 10.861 | 41.46 | 48.00 | -6.54 |
| 23 | 11.909 | 41.34 | 48.00 | -6.66 |
| 24 | 2.466 | 41.29 | 48.00 | -6.71 |
| 25 | 2.967 | 41.25 | 48.00 | -6.75 |
| 26 | 2.809 | 41.23 | 48.00 | -6.77 |
| 27 | 2.211 | 41.16 | 48.00 | -6.84 |
| 28 | 7.993 | 41.08 | 48.00 | -6.92 |
| 29 | 0.511 | 41.07 | 48.00 | -6.93 |
| 30 | 2.892 | 41.04 | 48.00 | -6.96 |
| 31 | 3.055 | 40.86 | 48.00 | -7.14 |
| 32 | 8.990 | 40.84 | 48.00 | -7.16 |
| 33 | 3.226 | 40.68 | 48.00 | -7.32 |
| 34 | 2.296 | 40.67 | 48.00 | -7.33 |
| 35 | 3.147 | 40.67 | 48.00 | -7.33 |
| 36 | 5.689 | 40.65 | 48.00 | -7.35 |
| 37 | 5.432 | 40.63 | 48.00 | -7.37 |
| 38 | 7.894 | 40.58 | 48.00 | -7.42 |
| 39 | 9.103 | 40.54 | 48.00 | -7.46 |
| 40 | 5.617 | 40.35 | 48.00 | -7.65 |
| 41 | 5.522 | 40.34 | 48.00 | -7.66 |
| 42 | 10.546 | 40.34 | 48.00 | -7.66 |
| 43 | 12.166 | 40.26 | 48.00 | -7.74 |
| 44 | 5.856 | 40.26 | 48.00 | -7.74 |
| 45 | 2.033 | 40.24 | 48.00 | -7.76 |
| 46 | 5.341 | 40.23 | 48.00 | -7.77 |
| 47 | 10.459 | 40.03 | 48.00 | -7.97 |
| 48 | 5.273 | 40.03 | 48.00 | -7.97 |
| 49 | 1.957 | 39.93 | 48.00 | -8.07 |

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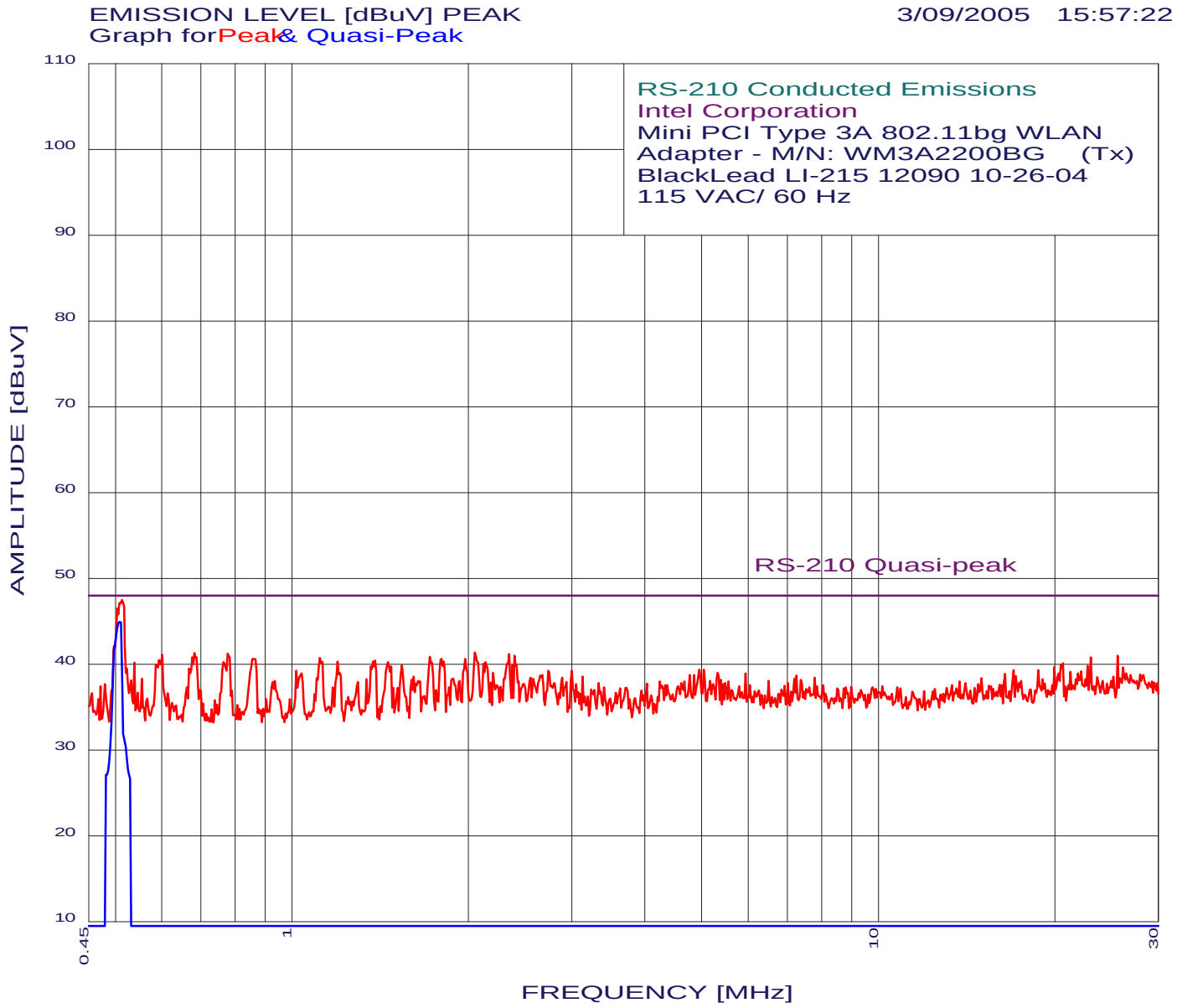
EMISSION LEVEL [dBuV] PEAK
3/09/2005 15:57:22
Graph forPeak& Quasi-Peak
RS-210 Conducted Emissions
Intel Corporation
Mini PCI Type 3A 802.11bg WLAN
Adapter - M/N: WM3A2200BG (Tx)
BlackLead LI-215 12090 10-26-04
115 VAC/ 60 Hz
RS-210 Quasi-peak
AMPLITUDE [dBuV]
110
100
90
80
70
60
50
40
30
20
10
0.45
1
10
30
FREQUENCY [MHz]

Intel Corporation 3/09/2005 15:57:22
Mini PCI Type 3A 802.11bg Wireless LAN Adapter
Model: WM3A2200BG (Transmit Mode)
Black Lead - 115 VAC/ 60 Hz
TEST ENGINEER : James Ross

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46 highest peaks above -50.00 dB of RS-210 - Quasi-peak limit line
Peak criteria : 3.00 dB, Curve : Peak

| Peak# | Freq(MHz) | Amp(dBuV) | Limit(dB) | Delta(dB) |
|---|---|---|---|---|
| 1 | 0.513 | 47.47 | 48.00 | -0.53** |
| 2 | 2.050 | 41.33 | 48.00 | -6.67 |
| 3 | 0.682 | 41.29 | 48.00 | -6.71 |
| 4 | 0.777 | 41.20 | 48.00 | -6.80 |
| 5 | 2.345 | 41.16 | 48.00 | -6.84 |
| 6 | 0.601 | 41.08 | 48.00 | -6.92 |
| 7 | 2.395 | 40.96 | 48.00 | -7.04 |
| 8 | 25.575 | 40.96 | 48.00 | -7.04 |
| 9 | 1.719 | 40.86 | 48.00 | -7.14 |
| 10 | 23.028 | 40.77 | 48.00 | -7.23 |
| 11 | 1.115 | 40.74 | 48.00 | -7.26 |
| 12 | 1.974 | 40.62 | 48.00 | -7.38 |
| 13 | 0.863 | 40.61 | 48.00 | -7.39 |
| 14 | 1.800 | 40.58 | 48.00 | -7.42 |
| 15 | 1.387 | 40.40 | 48.00 | -7.60 |
| 16 | 1.197 | 40.26 | 48.00 | -7.74 |
| 17 | 2.138 | 40.23 | 48.00 | -7.77 |
| 18 | 1.459 | 40.21 | 48.00 | -7.79 |
| 19 | 0.539 | 40.18 | 48.00 | -7.82 |
| 20 | 20.646 | 40.12 | 48.00 | -7.88 |
| 21 | 2.375 | 39.86 | 48.00 | -8.14 |
| 22 | 1.541 | 39.83 | 48.00 | -8.17 |
| 23 | 5.036 | 39.32 | 48.00 | -8.68 |
| 24 | 18.749 | 39.30 | 48.00 | -8.70 |
| 25 | 17.024 | 39.28 | 48.00 | -8.72 |
| 26 | 1.016 | 39.22 | 48.00 | -8.78 |
| 27 | 3.004 | 39.22 | 48.00 | -8.78 |
| 28 | 2.739 | 39.19 | 48.00 | -8.81 |
| 29 | 5.318 | 38.96 | 48.00 | -9.04 |
| 30 | 2.201 | 38.94 | 48.00 | -9.06 |
| 31 | 5.932 | 38.91 | 48.00 | -9.09 |
| 32 | 16.457 | 38.84 | 48.00 | -9.16 |
| 33 | 2.671 | 38.69 | 48.00 | -9.31 |
| 34 | 7.256 | 38.68 | 48.00 | -9.32 |
| 35 | 1.614 | 38.54 | 48.00 | -9.46 |
| 36 | 3.133 | 38.53 | 48.00 | -9.47 |
| 37 | 2.892 | 38.41 | 48.00 | -9.59 |
| 38 | 0.555 | 38.28 | 48.00 | -9.72 |
| 39 | 6.505 | 38.04 | 48.00 | -9.96 |
| 40 | 0.935 | 38.01 | 48.00 | -9.99 |
| 41 | 1.297 | 37.88 | 48.00 | -10.12 |
| 42 | 3.337 | 37.75 | 48.00 | -10.25 |
| 43 | 4.031 | 37.72 | 48.00 | -10.28 |
| 44 | 0.479 | 37.68 | 48.00 | -10.32 |
| 45 | 0.471 | 37.38 | 48.00 | -10.62 |
| 46 | 3.722 | 37.19 | 48.00 | -10.81 |

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**Please see the previous graph and the following data sheet for Quasi-peaked information

Intel Corporation 3/09/2005 15:57:22
Mini PCI Type 3A 802.11bg Wireless LAN Adapter
Model: WM3A2200BG (Transmit Mode)
Black Lead - 115 VAC/ 60 Hz
TEST ENGINEER : James Ross

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1 highest peaks above -50.00 dB of RS-210 - Quasi-peak limit line
Peak criteria : 3.00 dB, Curve : Quasi-peak

| Peak# | Freq(MHz) | Amp(dBuV) | Limit(dB) | Delta(dB) |
|---|---|---|---|---|
| 1 | 0.508 | 44.91 | 48.00 | -3.09 |

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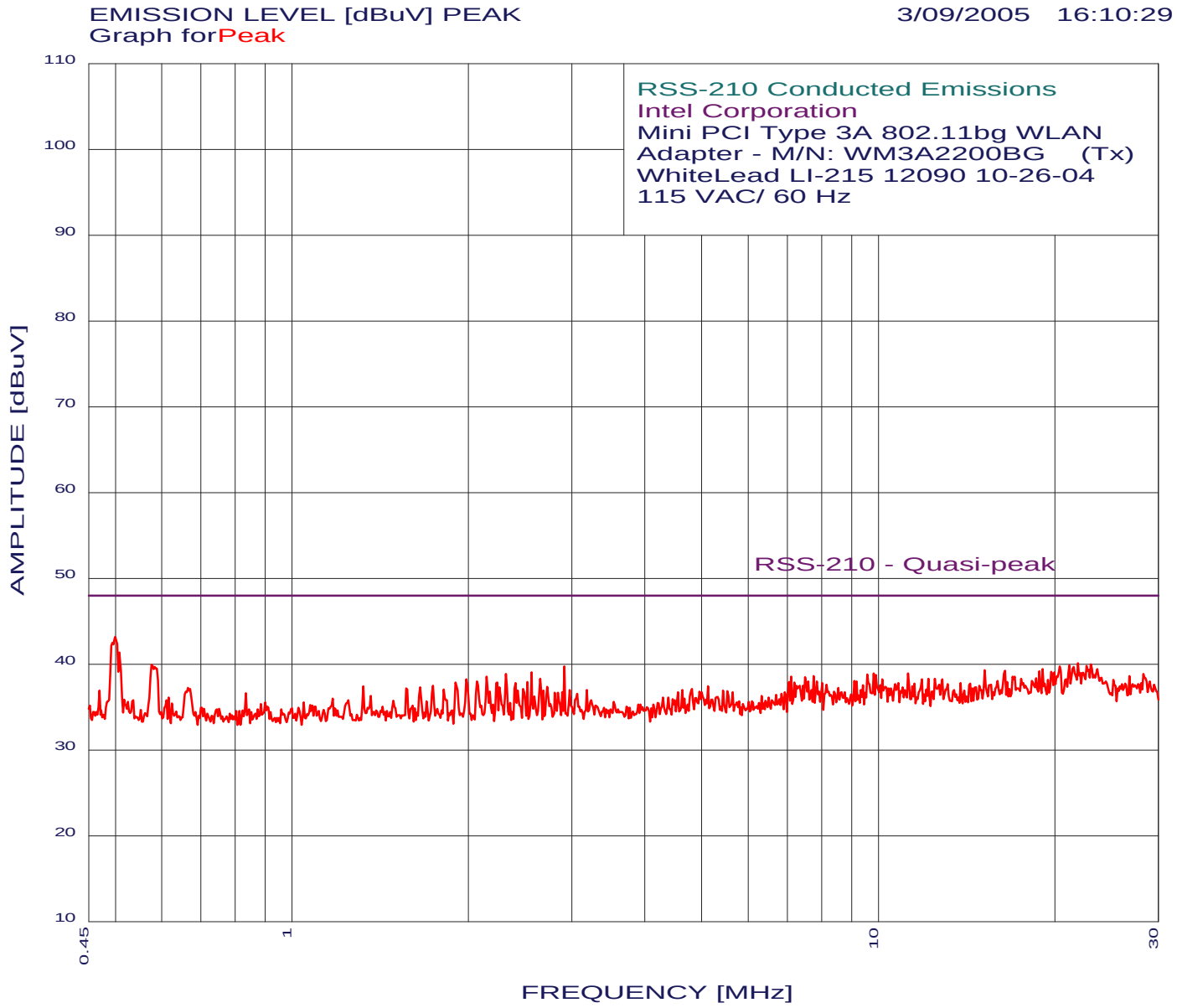
EMISSION LEVEL [dBuV] PEAK
3/09/2005 16:10:29
Graph forPeak
RSS-210 Conducted Emissions
Intel Corporation
Mini PCI Type 3A 802.11bg WLAN
Adapter - M/N: WM3A2200BG (Tx)
WhiteLead LI-215 12090 10-26-04
115 VAC/ 60 Hz
RSS-210 - Quasi-peak
AMPLITUDE [dBuV]
110
100
90
80
70
60
50
40
30
20
10
0.45
1
10
30
FREQUENCY [MHz]

Intel Corporation 3/09/2005 16:10:29
Mini PCI Type 3A 802.11bg Wireless LAN Adapter
Model: WM3A2200BG (Transmit Mode)
White Lead - 115 VAC/ 60 Hz
TEST ENGINEER : James Ross

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34 highest peaks above -50.00 dB of RS-210 - Quasi-peak limit line
Peak criteria : 3.00 dB, Curve : Peak

| Peak# | Freq(MHz) | Amp(dBuV) | Limit(dB) | Delta(dB) |
|---|---|---|---|---|
| 1 | 0.500 | 43.17 | 48.00 | -4.83 |
| 2 | 21.898 | 40.09 | 48.00 | -7.91 |
| 3 | 0.577 | 39.88 | 48.00 | -8.12 |
| 4 | 2.917 | 39.74 | 48.00 | -8.26 |
| 5 | 20.389 | 39.74 | 48.00 | -8.26 |
| 6 | 15.199 | 39.30 | 48.00 | -8.70 |
| 7 | 2.561 | 39.00 | 48.00 | -9.00 |
| 8 | 11.230 | 38.89 | 48.00 | -9.11 |
| 9 | 9.820 | 38.89 | 48.00 | -9.11 |
| 10 | 2.315 | 38.87 | 48.00 | -9.13 |
| 11 | 28.292 | 38.82 | 48.00 | -9.18 |
| 12 | 7.761 | 38.57 | 48.00 | -9.43 |
| 13 | 2.147 | 38.56 | 48.00 | -9.44 |
| 14 | 7.107 | 38.53 | 48.00 | -9.47 |
| 15 | 2.649 | 38.31 | 48.00 | -9.69 |
| 16 | 1.982 | 38.24 | 48.00 | -9.76 |
| 17 | 2.067 | 37.95 | 48.00 | -10.05 |
| 18 | 2.519 | 37.90 | 48.00 | -10.10 |
| 19 | 2.239 | 37.87 | 48.00 | -10.13 |
| 20 | 1.901 | 37.82 | 48.00 | -10.18 |
| 21 | 2.405 | 37.78 | 48.00 | -10.22 |
| 22 | 1.740 | 37.48 | 48.00 | -10.52 |
| 23 | 5.122 | 37.42 | 48.00 | -10.58 |
| 24 | 1.325 | 37.40 | 48.00 | -10.60 |
| 25 | 2.727 | 37.32 | 48.00 | -10.68 |
| 26 | 1.655 | 37.27 | 48.00 | -10.73 |
| 27 | 0.665 | 37.19 | 48.00 | -10.81 |
| 28 | 1.567 | 37.15 | 48.00 | -10.85 |
| 29 | 2.476 | 37.09 | 48.00 | -10.91 |
| 30 | 1.815 | 37.00 | 48.00 | -11.00 |
| 31 | 3.186 | 36.97 | 48.00 | -11.03 |
| 32 | 2.979 | 36.95 | 48.00 | -11.05 |
| 33 | 0.469 | 36.88 | 48.00 | -11.12 |
| 34 | 0.835 | 36.61 | 48.00 | -11.39 |

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