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
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With Phycomp Antenna
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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

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
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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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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

FCC 15.247
Intel Corporation Date: 3/07/05
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Model: WM3A2200BG Tested By: Benigno Chavez
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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

FCC 15.247
Intel Corporation Date: 3/07/05
Intel Mini PCI Type 3A 802.11BG Wireless LAN Adapter Lab: B
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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

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	37.28	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

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

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

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

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

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

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

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

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 MHz	Rdng dBuV	Cable loss dB	Ant factor dB	Amp gain dB	Cor'd rdg = R dBuV	Limit = L dBuV/m	Delta R-L 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

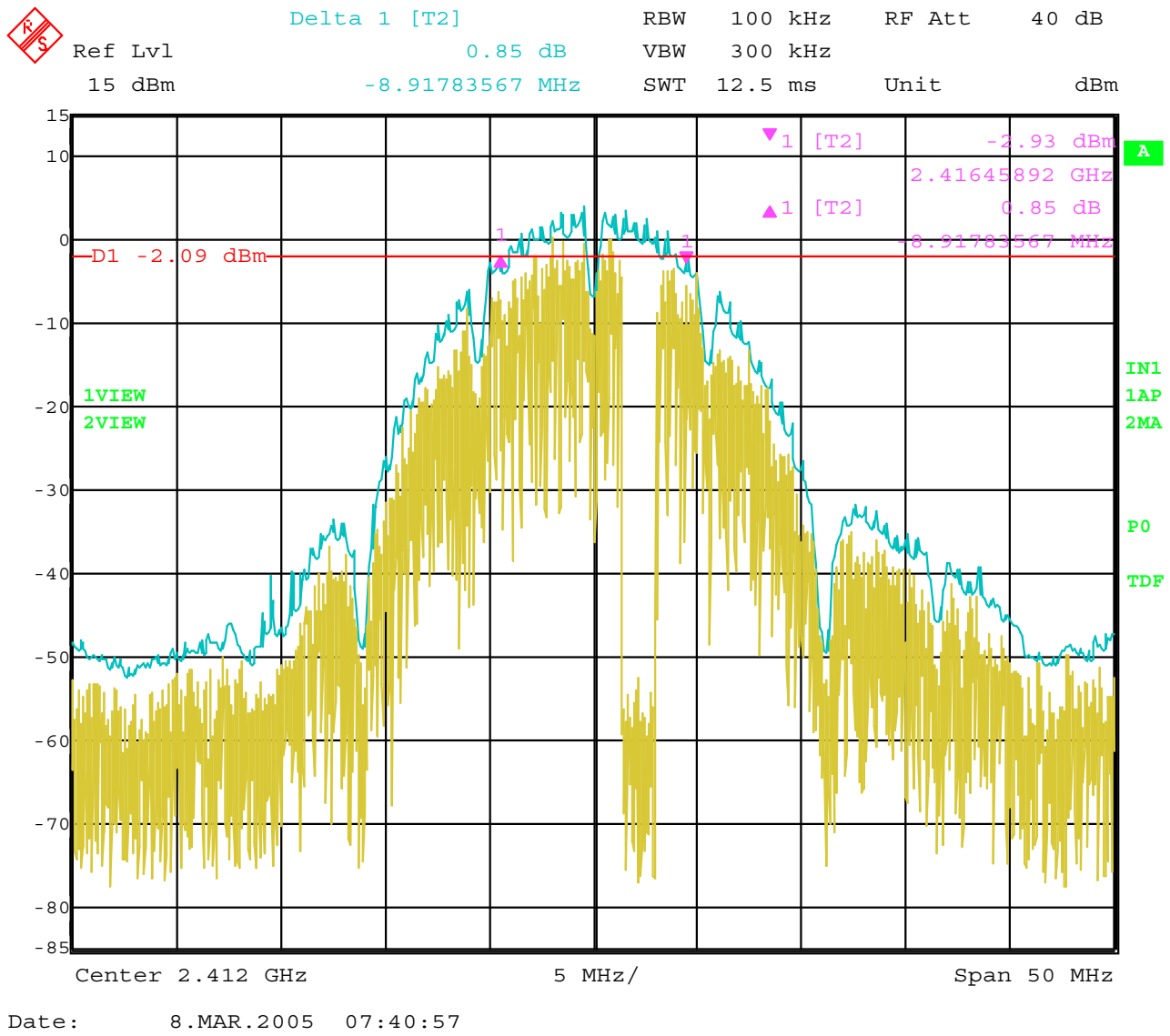
FCC Class B
Intel Corporation
Intel Mini PCI Type 3A 802.11BG Wireless LAN Adapter
Model: WM3A2200BG
Configuration: Dell Latitude Laptop D510 Agency Series Number: PP17L -- Main Port
Phycomp Antenna
Digital Portion - 1 GHz to 25 GHz

Date: 3/08/05
Lab: B
Tested By: Kyle Fujimoto

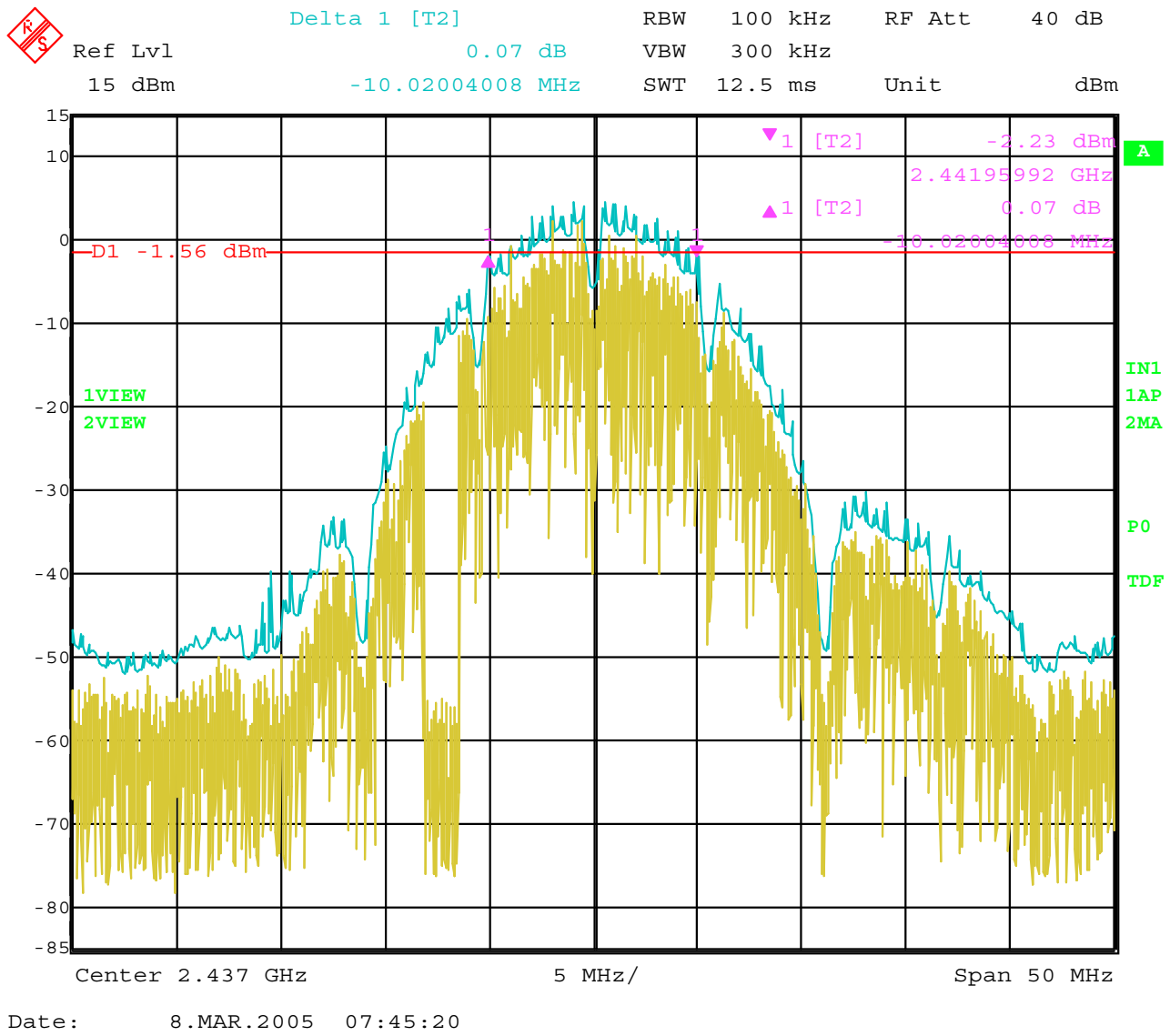
Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1150	37.06	V	74	-36.94	Peak	1.98	315	
1150	22.24	V	54	-31.76	Avg	1.98	315	
1622.5	40.41	V	74	-33.59	Peak	1.98	315	
1622.5	22.85	V	54	-31.15	Avg	1.98	315	
2196.8	48.69	V	74	-25.31	Peak	1.19	270	
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	

-6 dB BANDWIDTH

DATA SHEETS

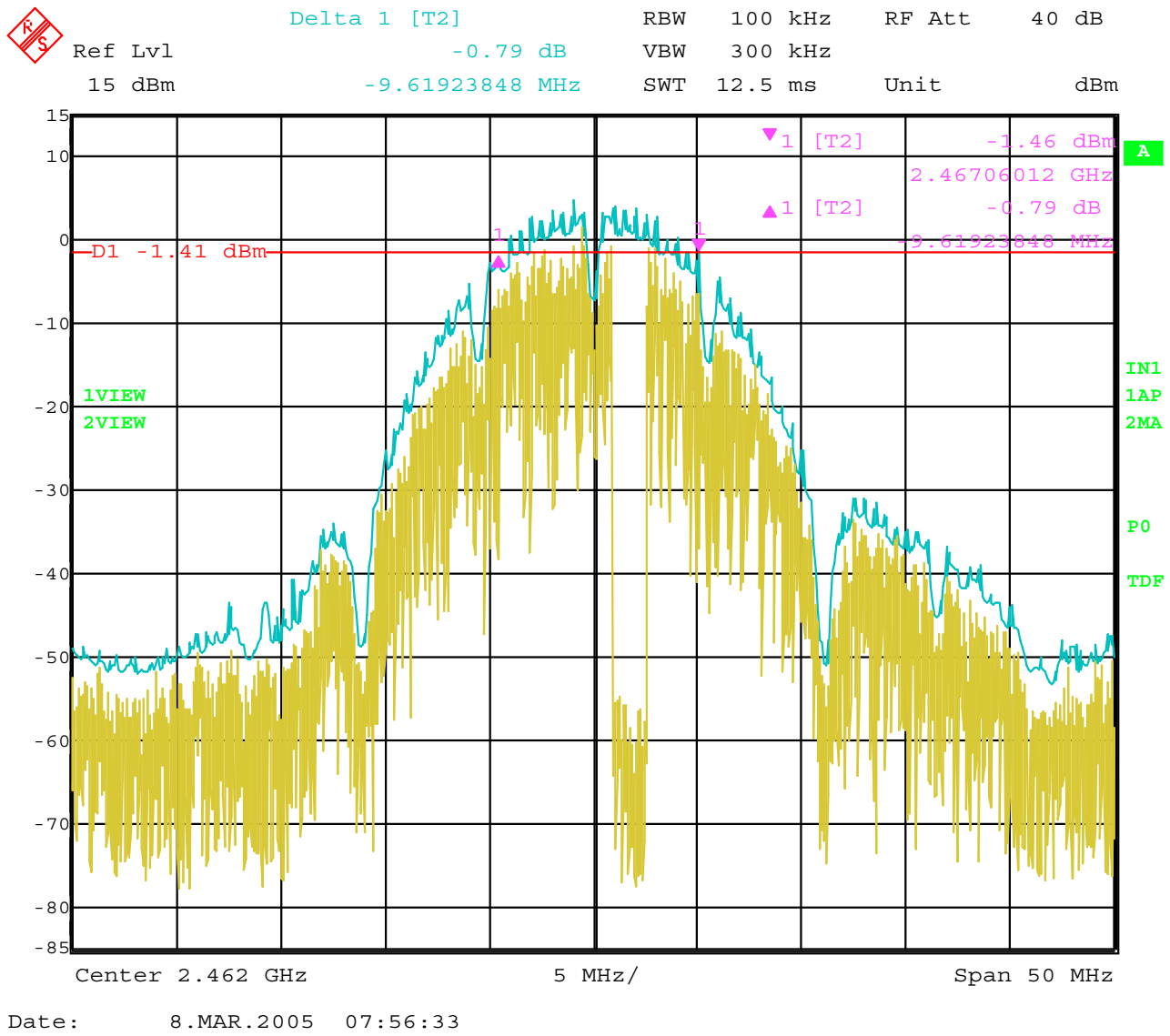


Bandwidth 6 dB – Channel 1—802.11 b Mode – Phycomp Antenna



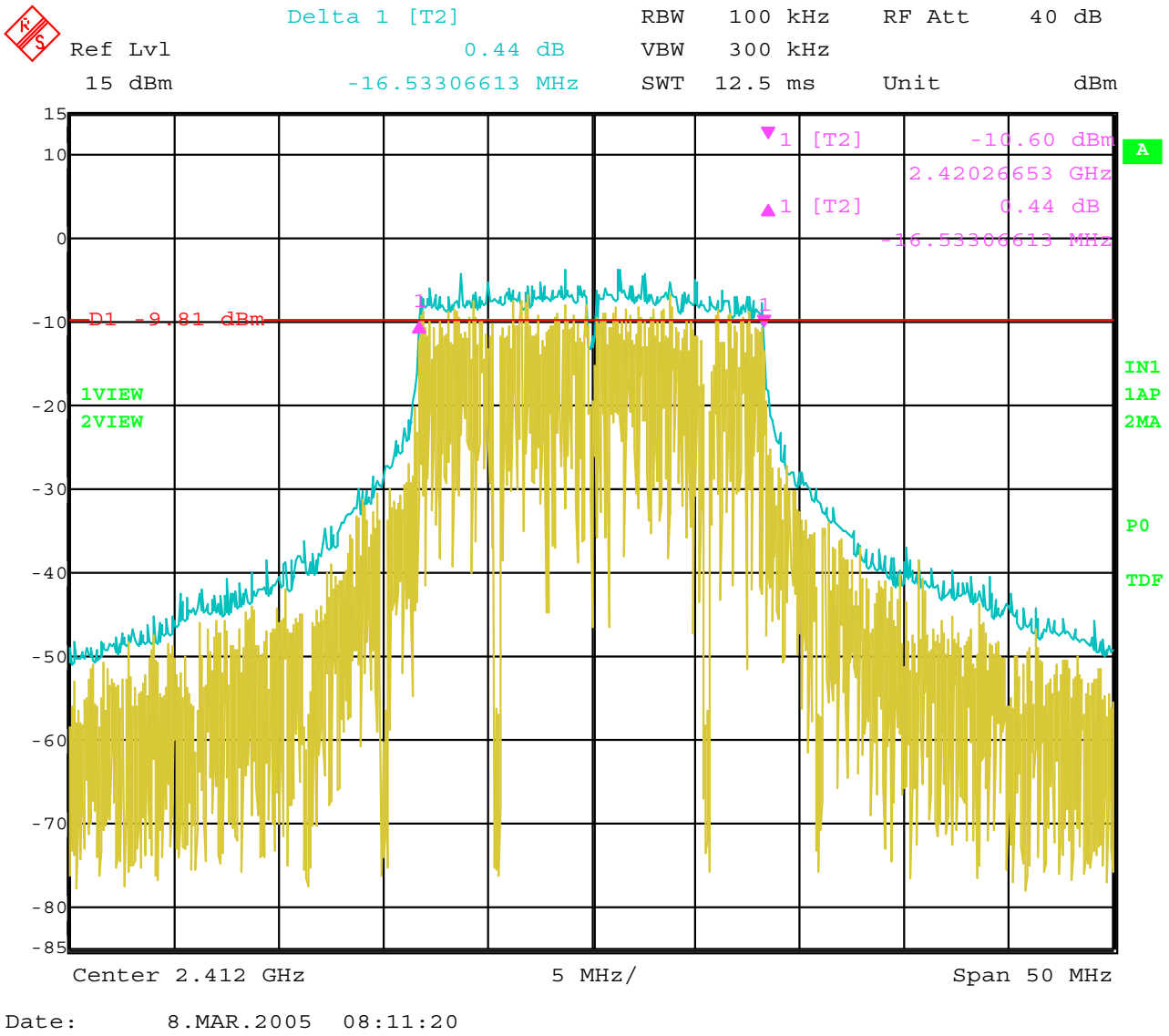
Date: 8.MAR.2005 07:45:20

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



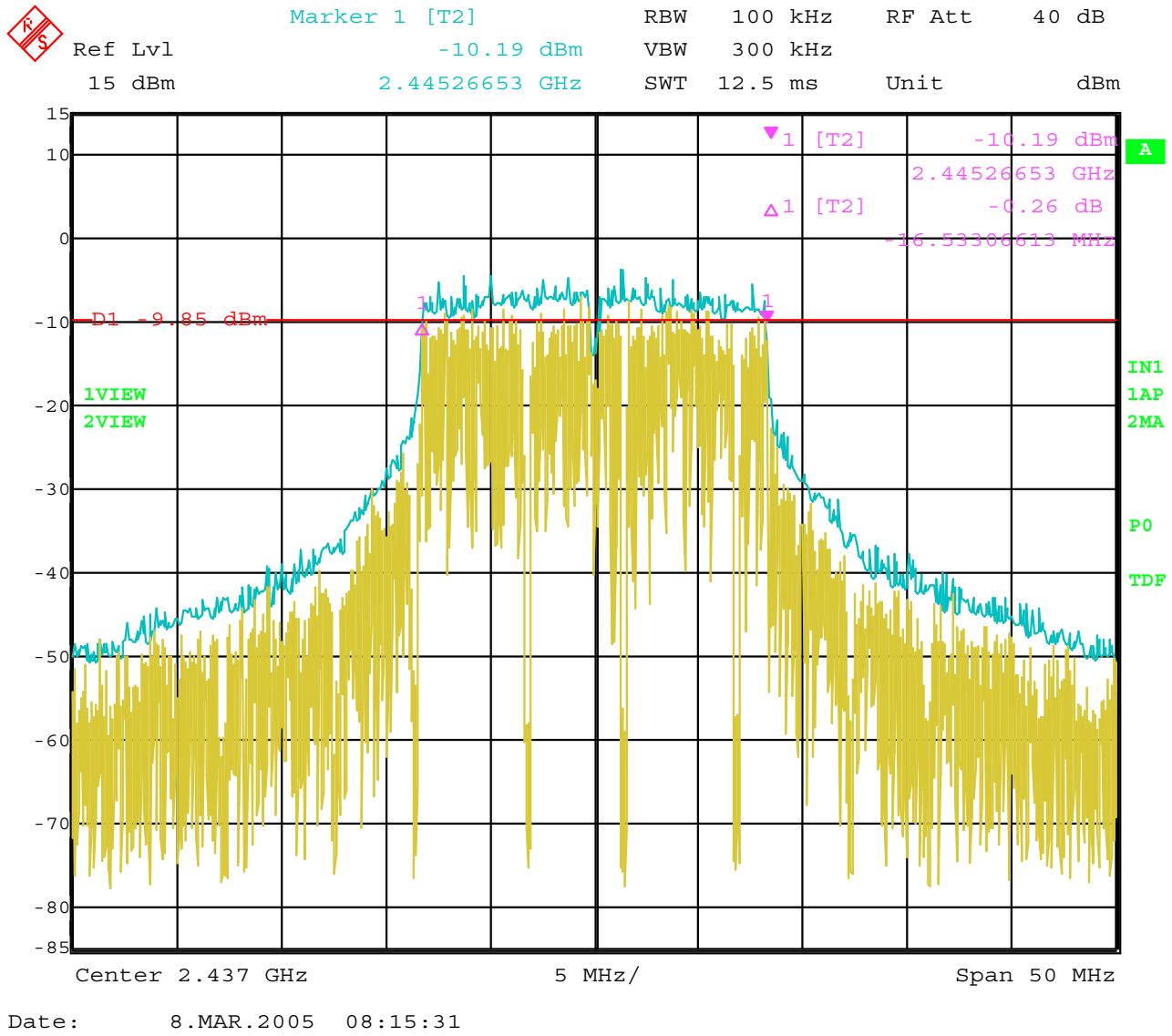
Date: 8.MAR.2005 07:56:33

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



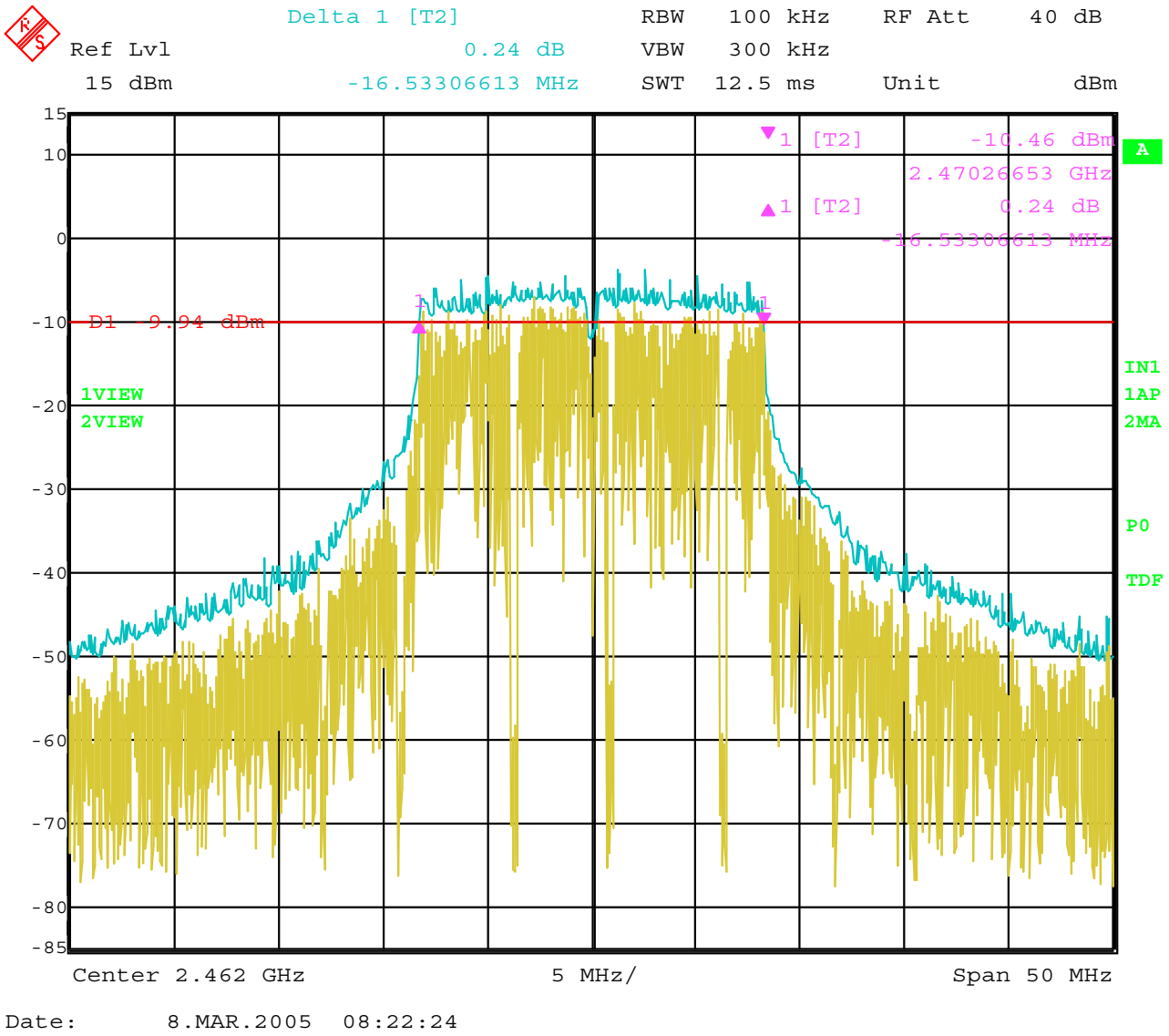
Date: 8.MAR.2005 08:11:20

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



Date: 8.MAR.2005 08:15:31

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

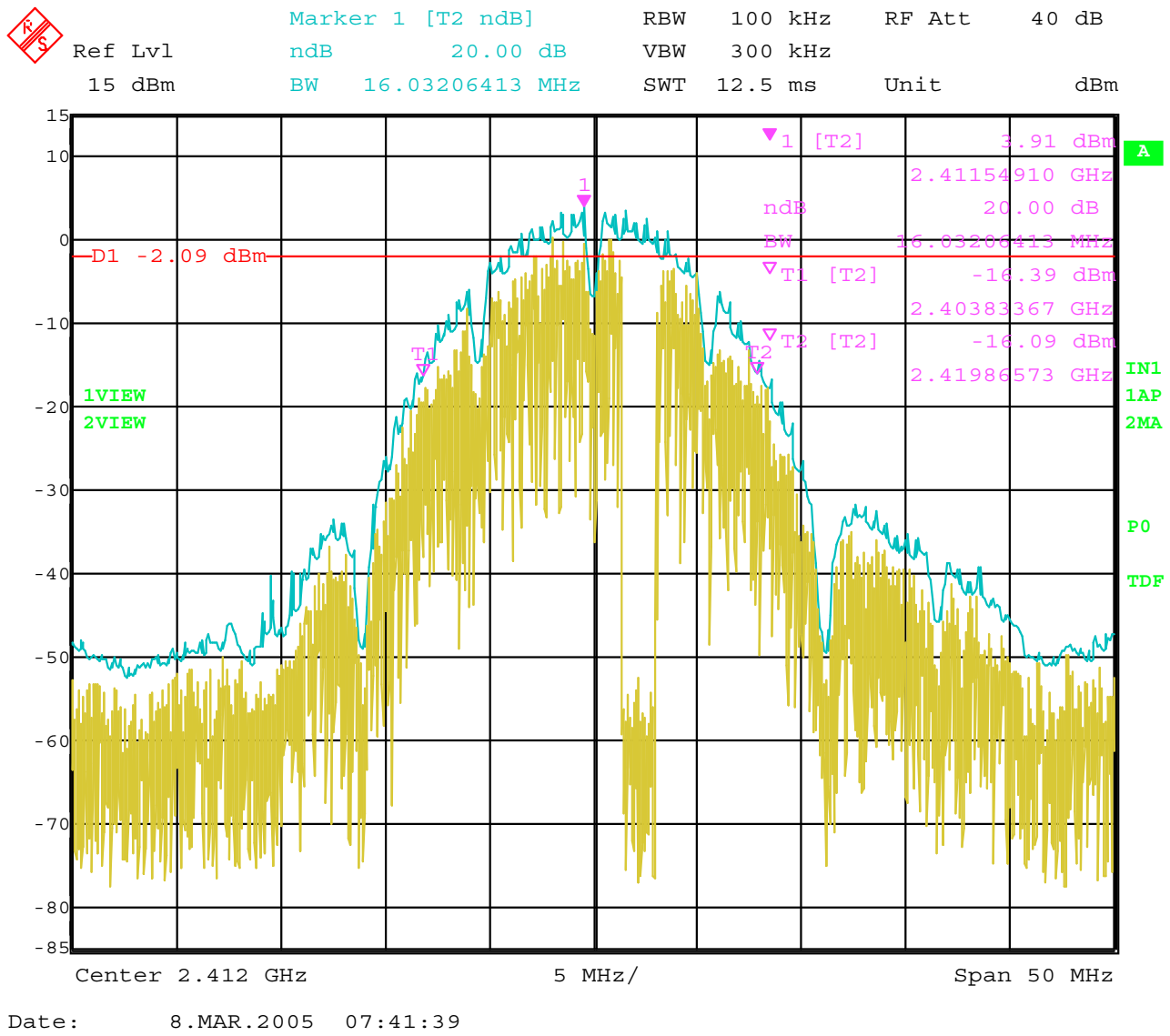


Date: 8.MAR.2005 08:22:24

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

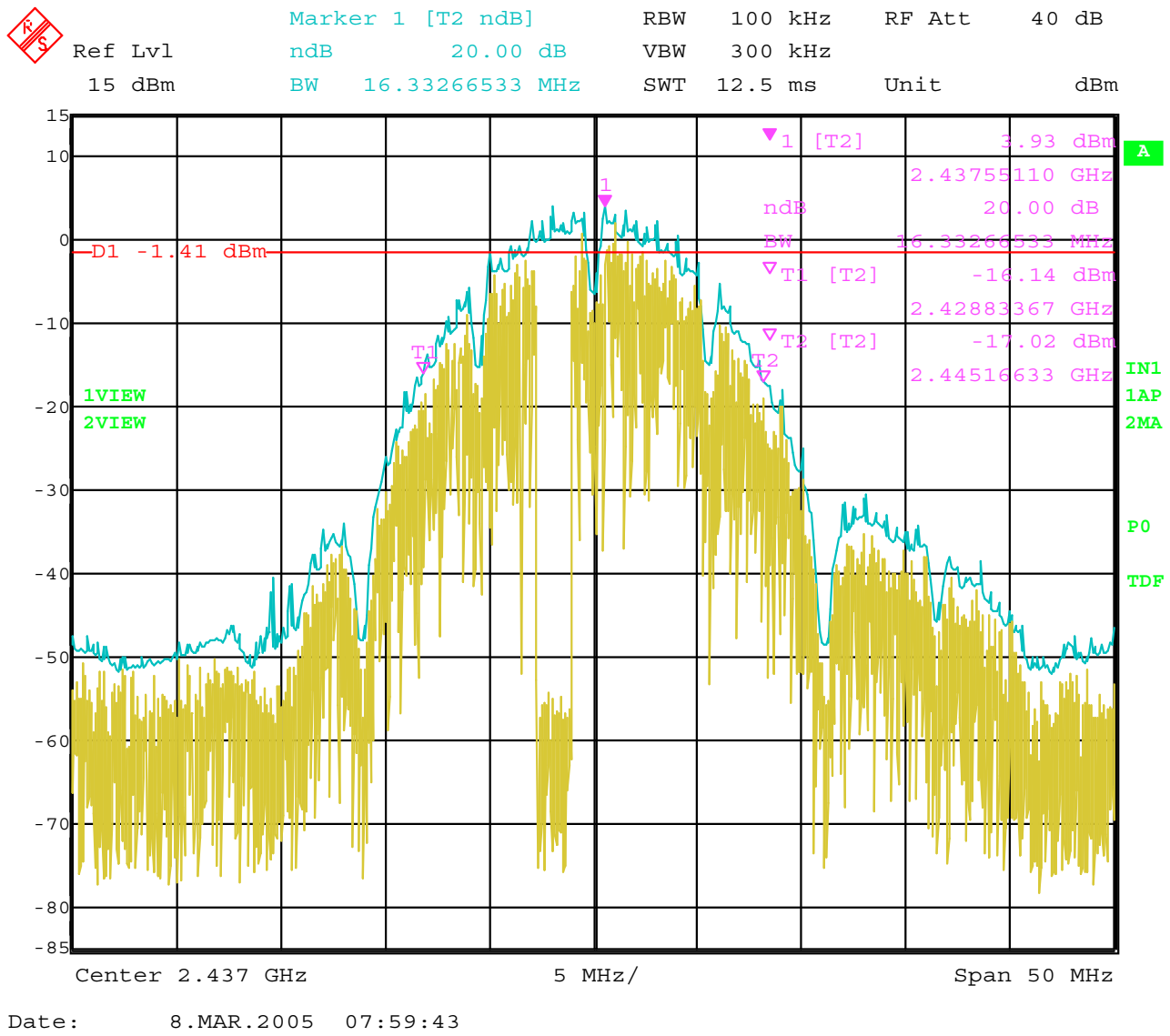
-20 dB BANDWIDTH

DATA SHEETS

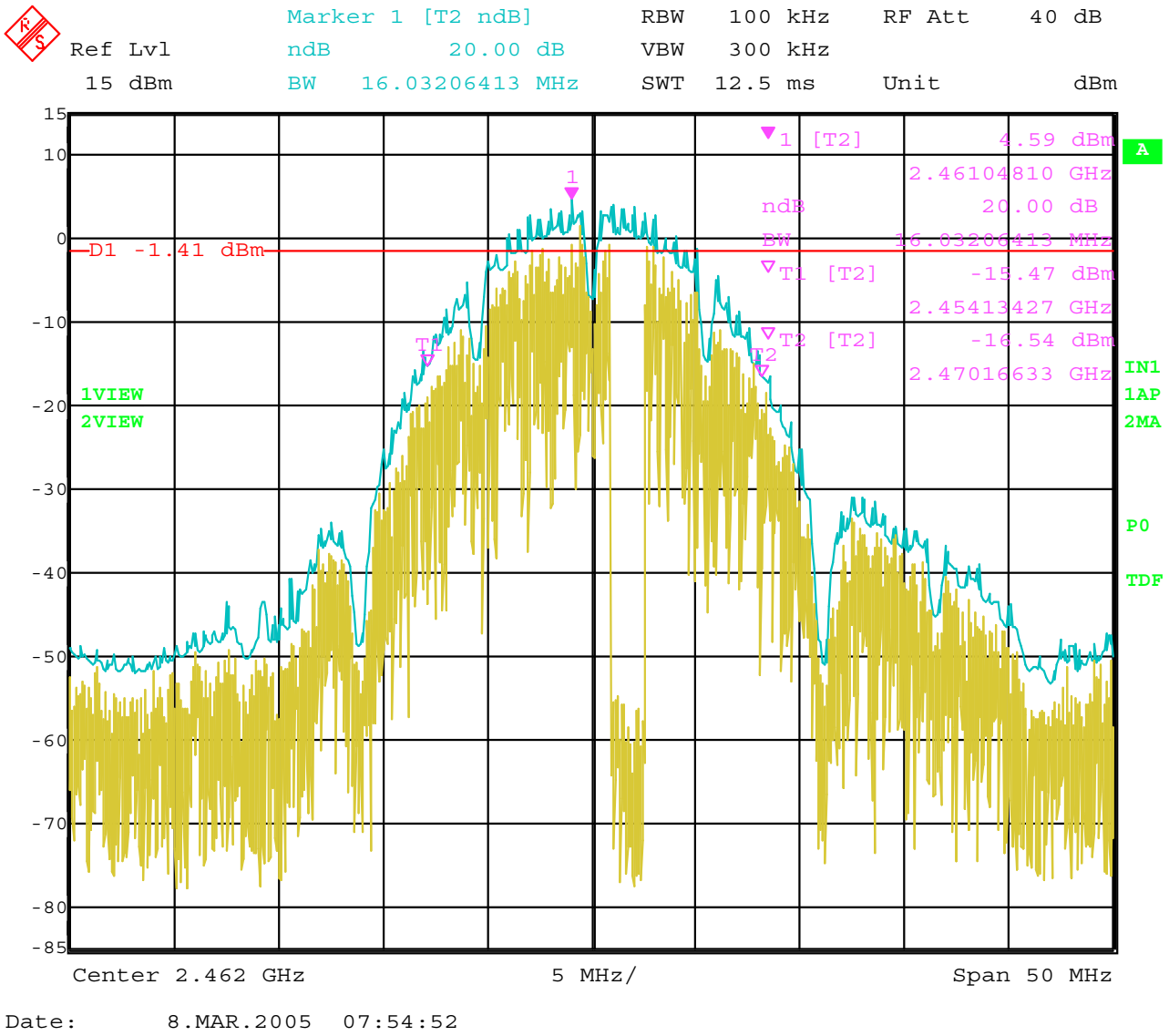


Date: 8.MAR.2005 07:41:39

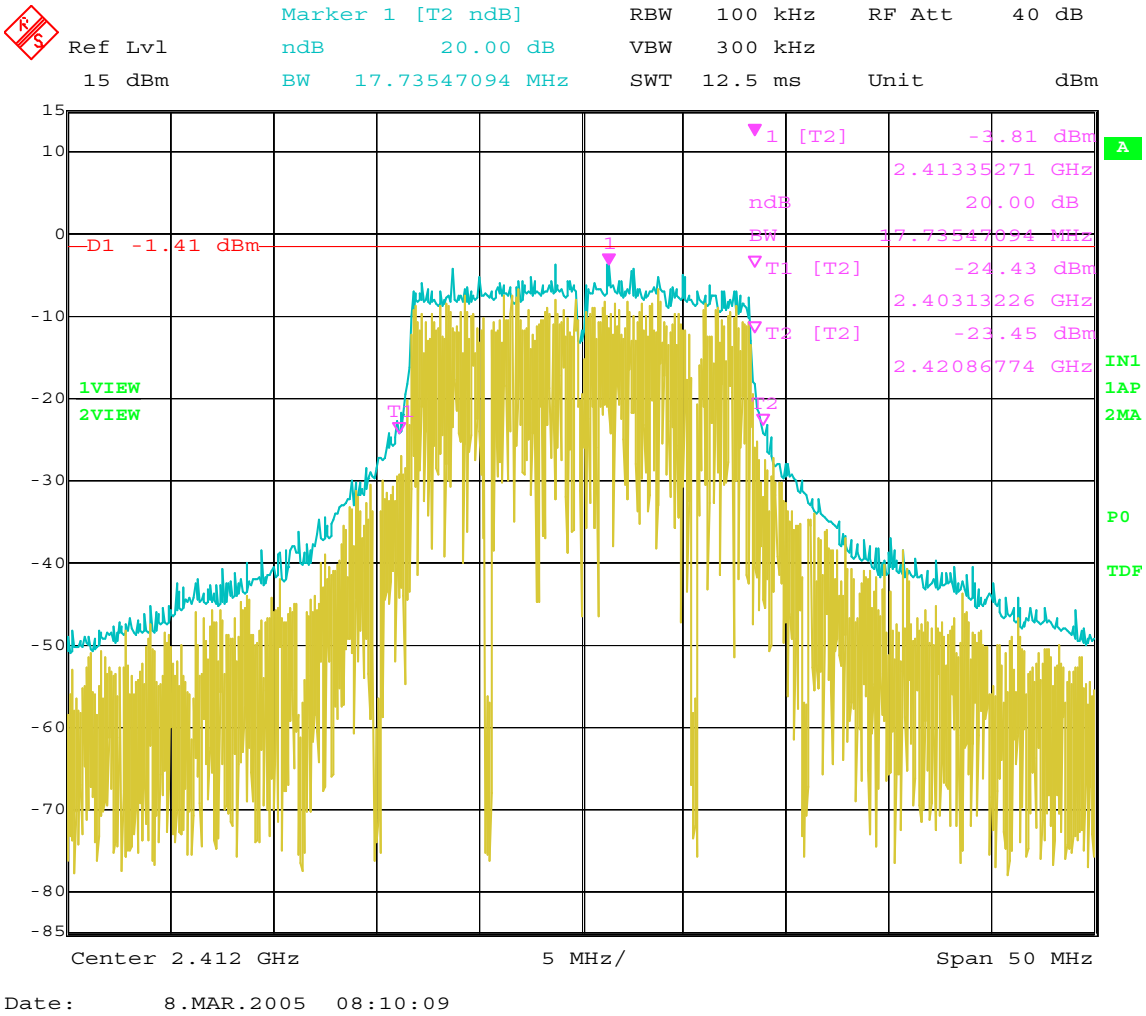
Bandwidth 20 dB – Channel 1 – 802.11 b Mode – Phycomp Antenna



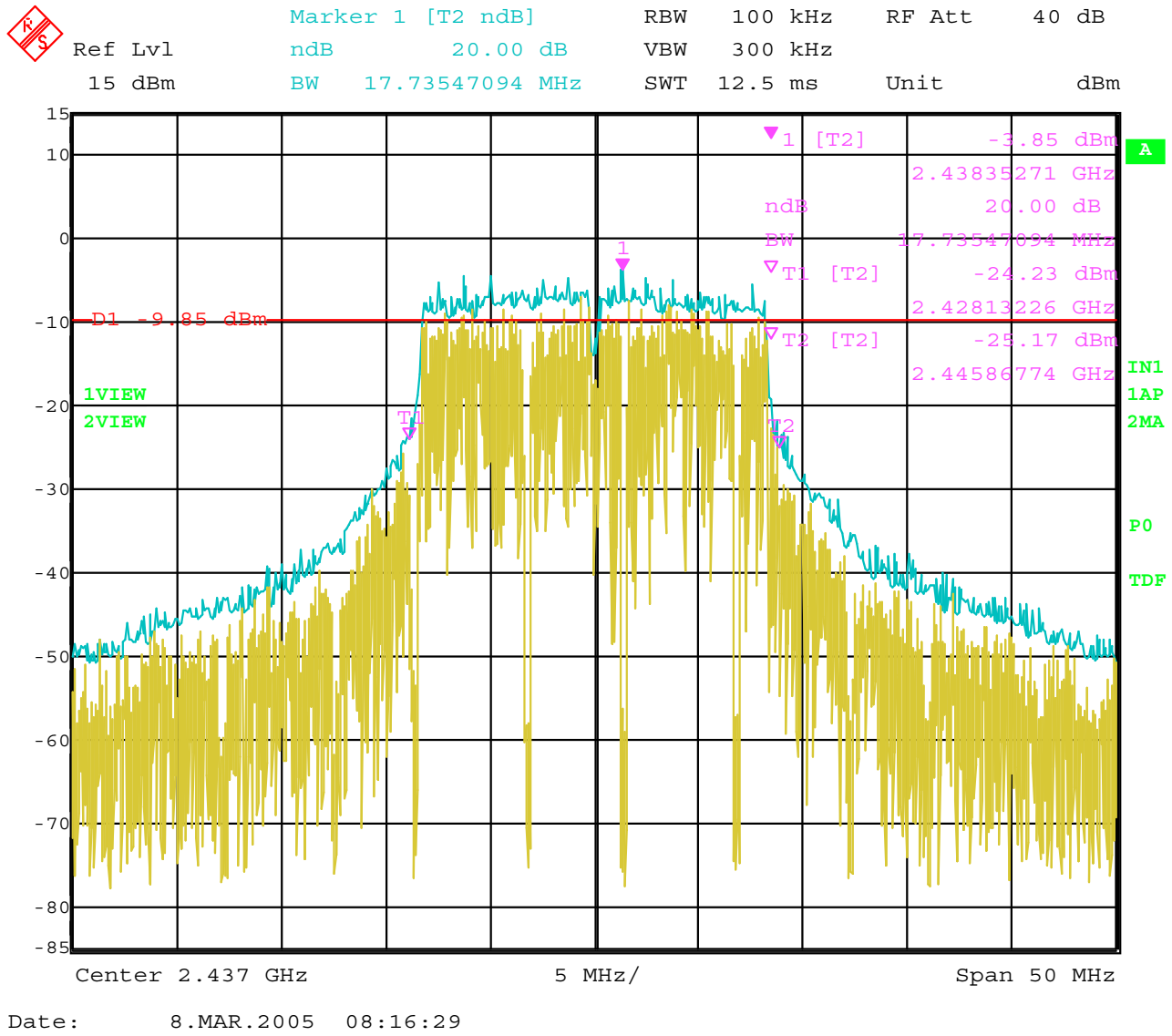
Bandwidth 20 dB – Channel 6 – 802.11 b Mode – Phycomp Antenna



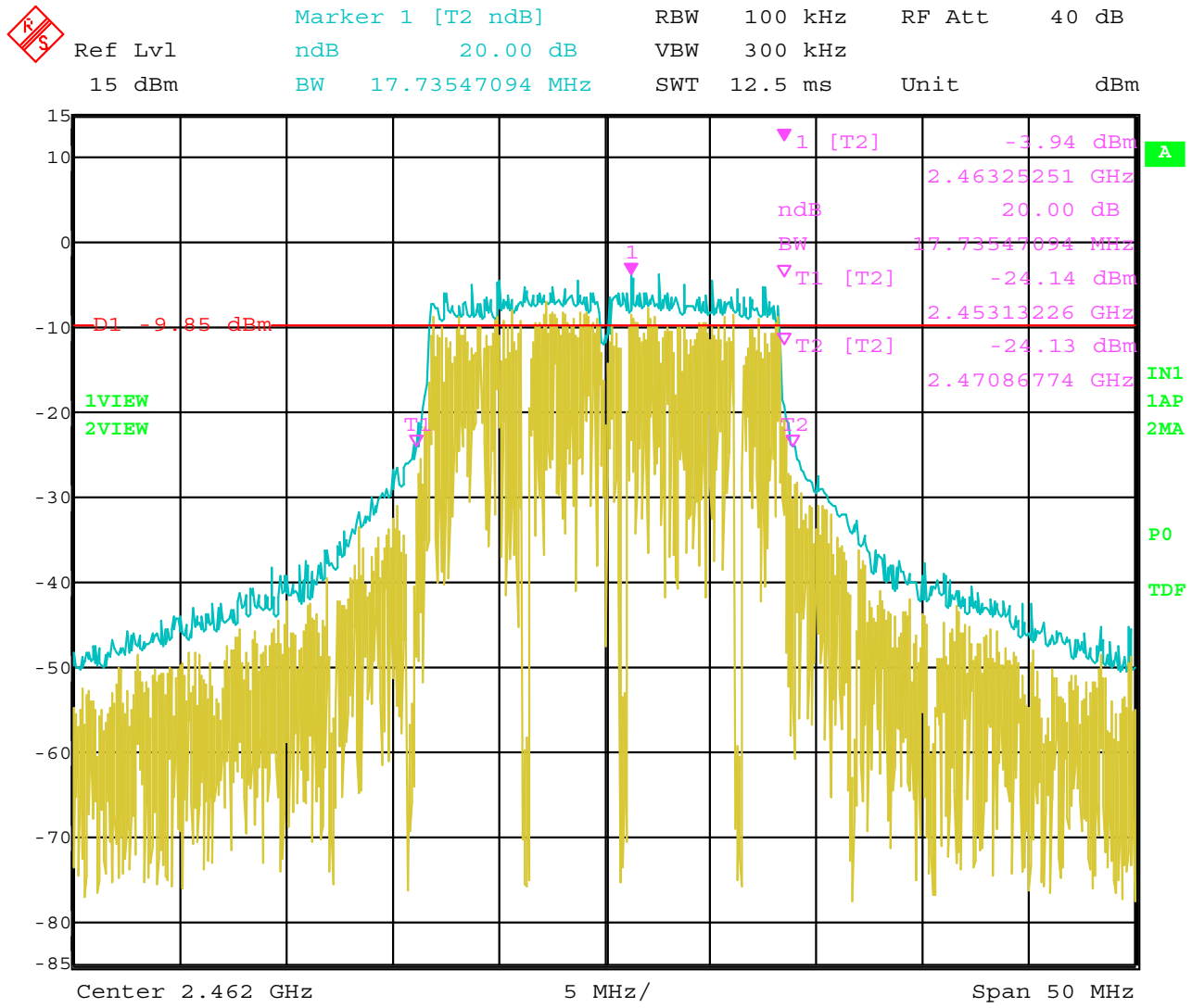
Bandwidth 20 dB – Channel 11 – 802.11 b Mode – Phycomp Antenna



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



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



Date: 8.MAR.2005 08:21:23

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)

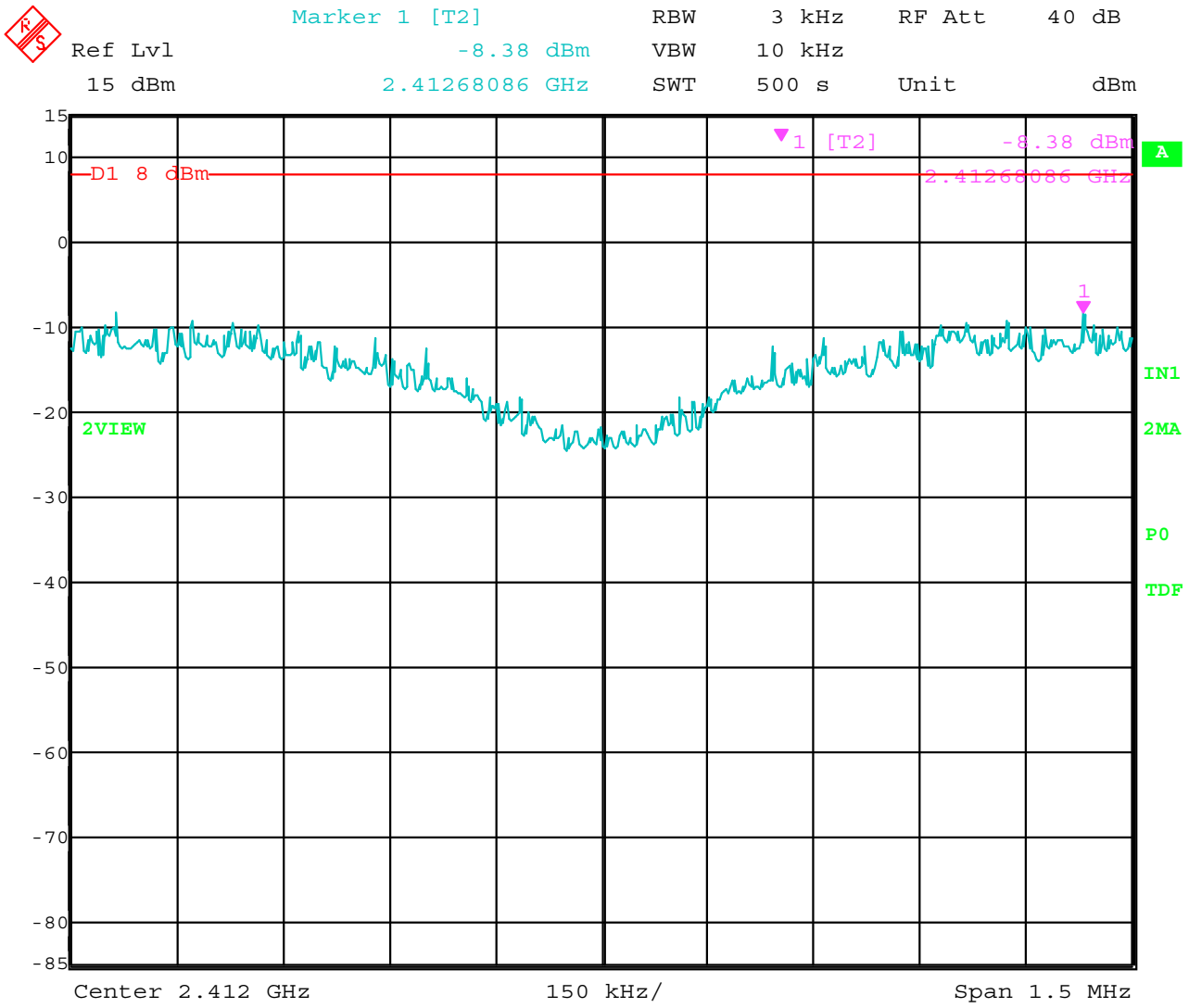
CHANNEL	GAIN	PEAK POWER OUTPUT (dBm)
1 (2412 MHz)	28.0	17.15
6 (2437 MHz)	28.5	17.59
11 (2462 MHz)	28.5	17.61

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

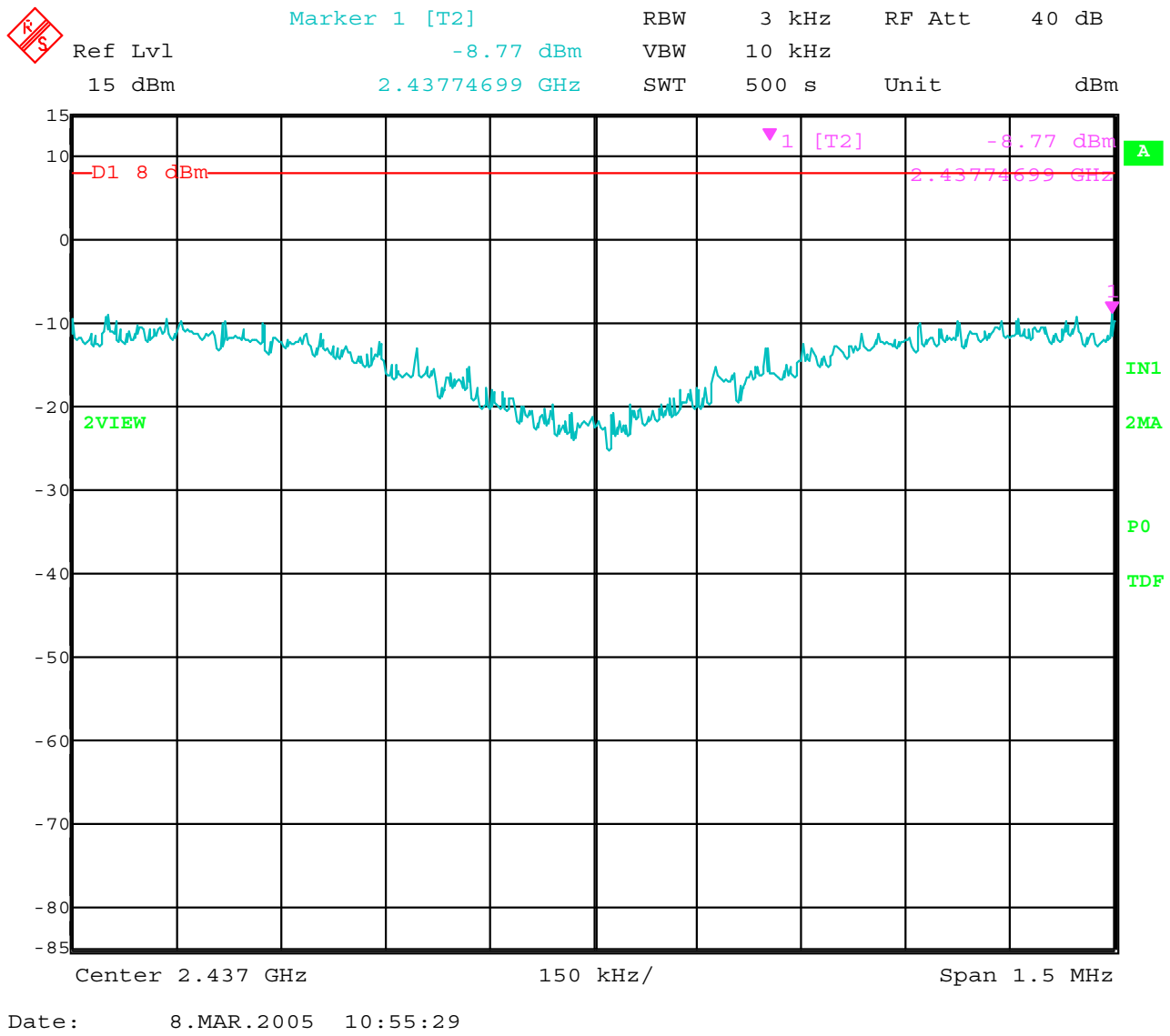
PEAK POWER SPECTRAL DENSITY

DATA SHEETS



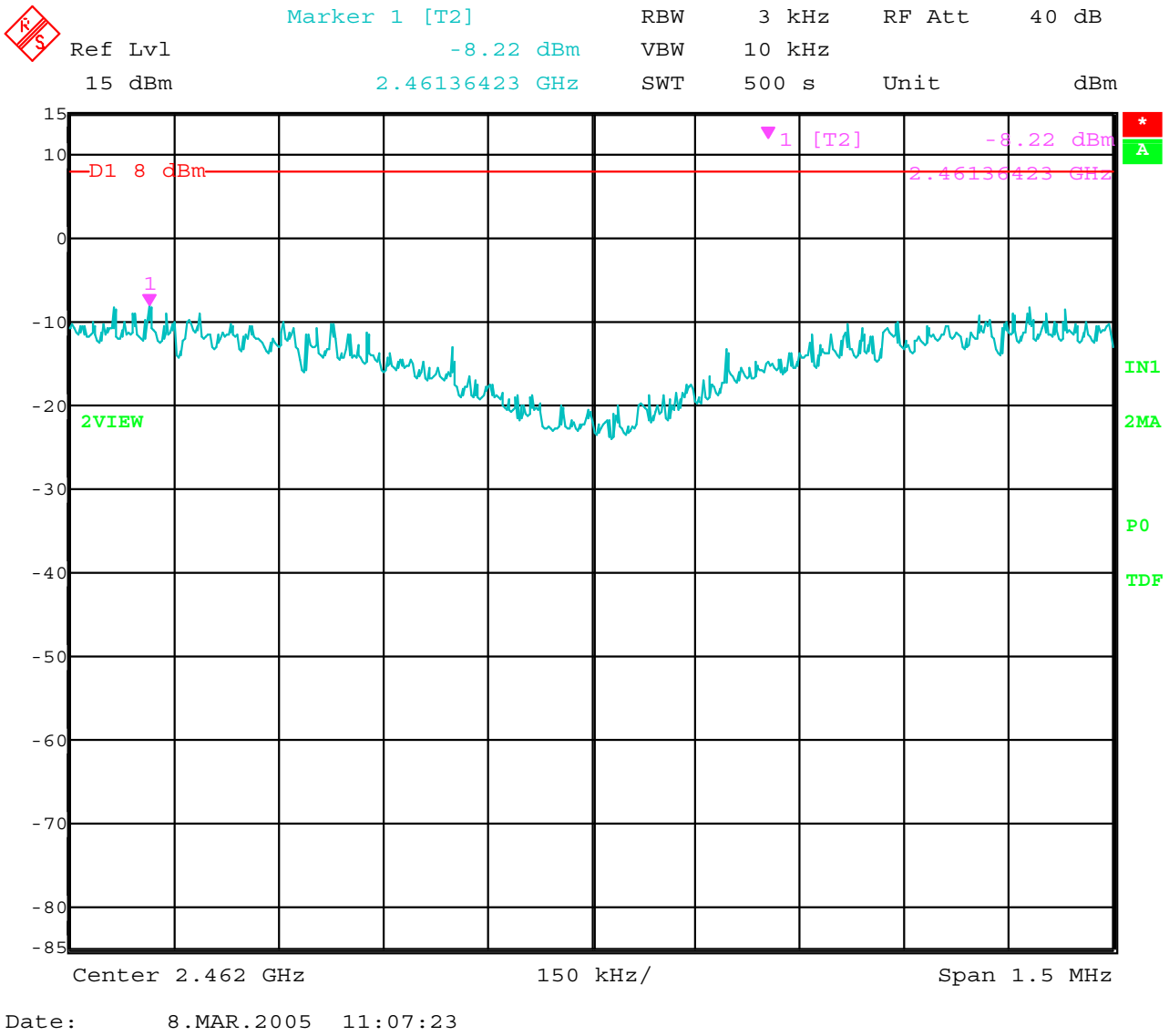
Date: 8.MAR.2005 10:43:18

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



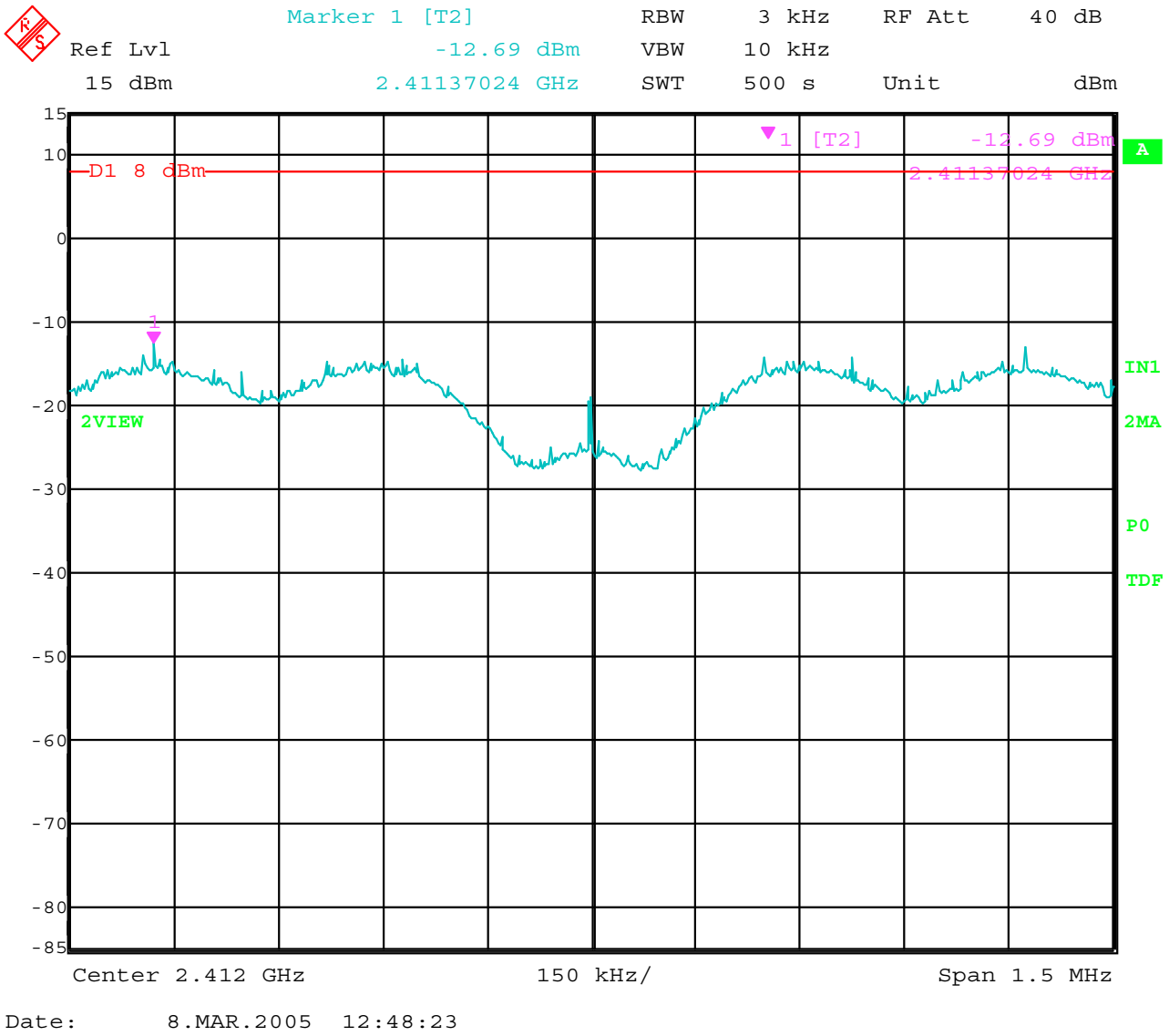
Date: 8.MAR.2005 10:55:29

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



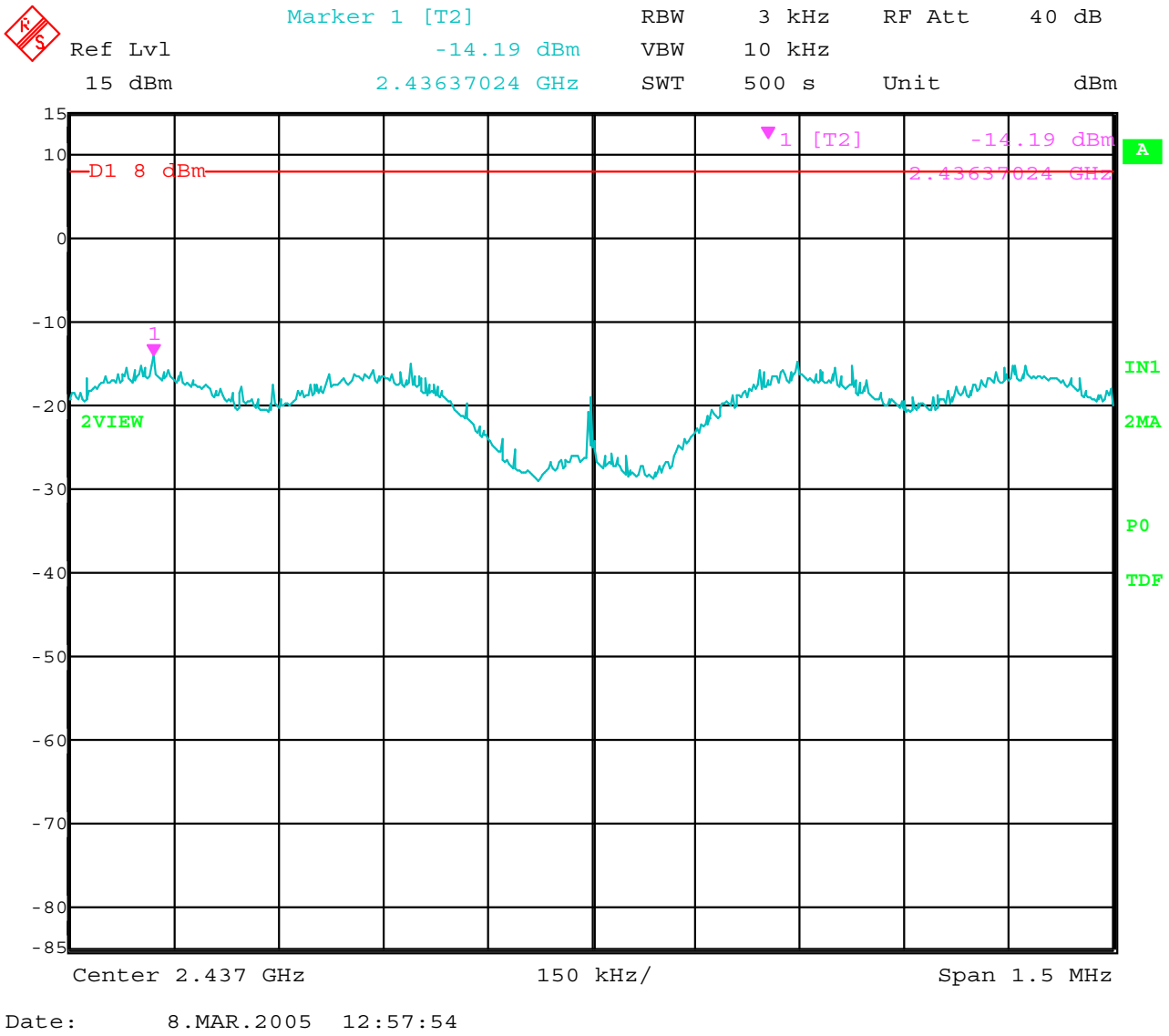
Date: 8.MAR.2005 11:07:23

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



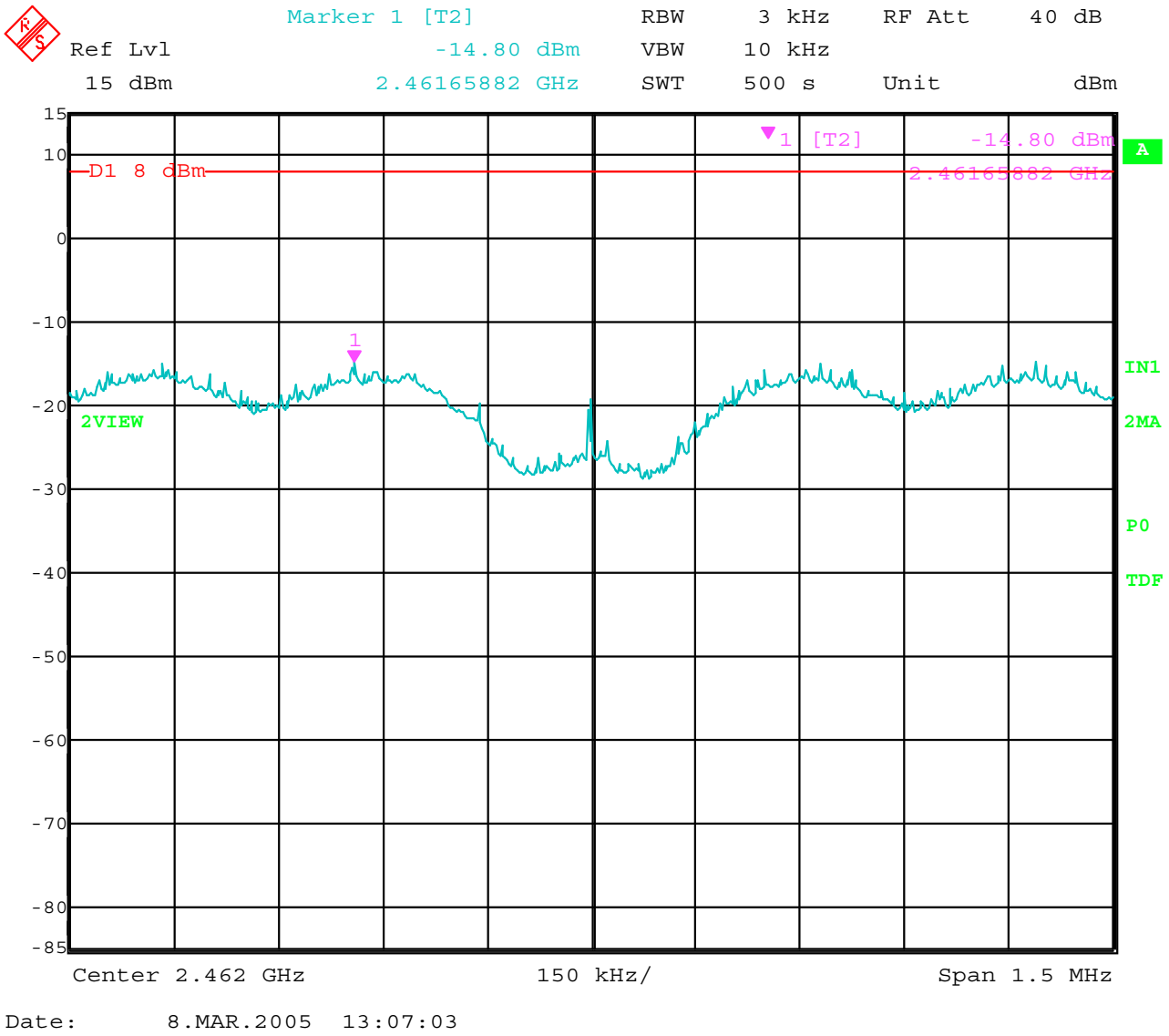
Date: 8.MAR.2005 12:48:23

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



Date: 8.MAR.2005 12:57:54

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

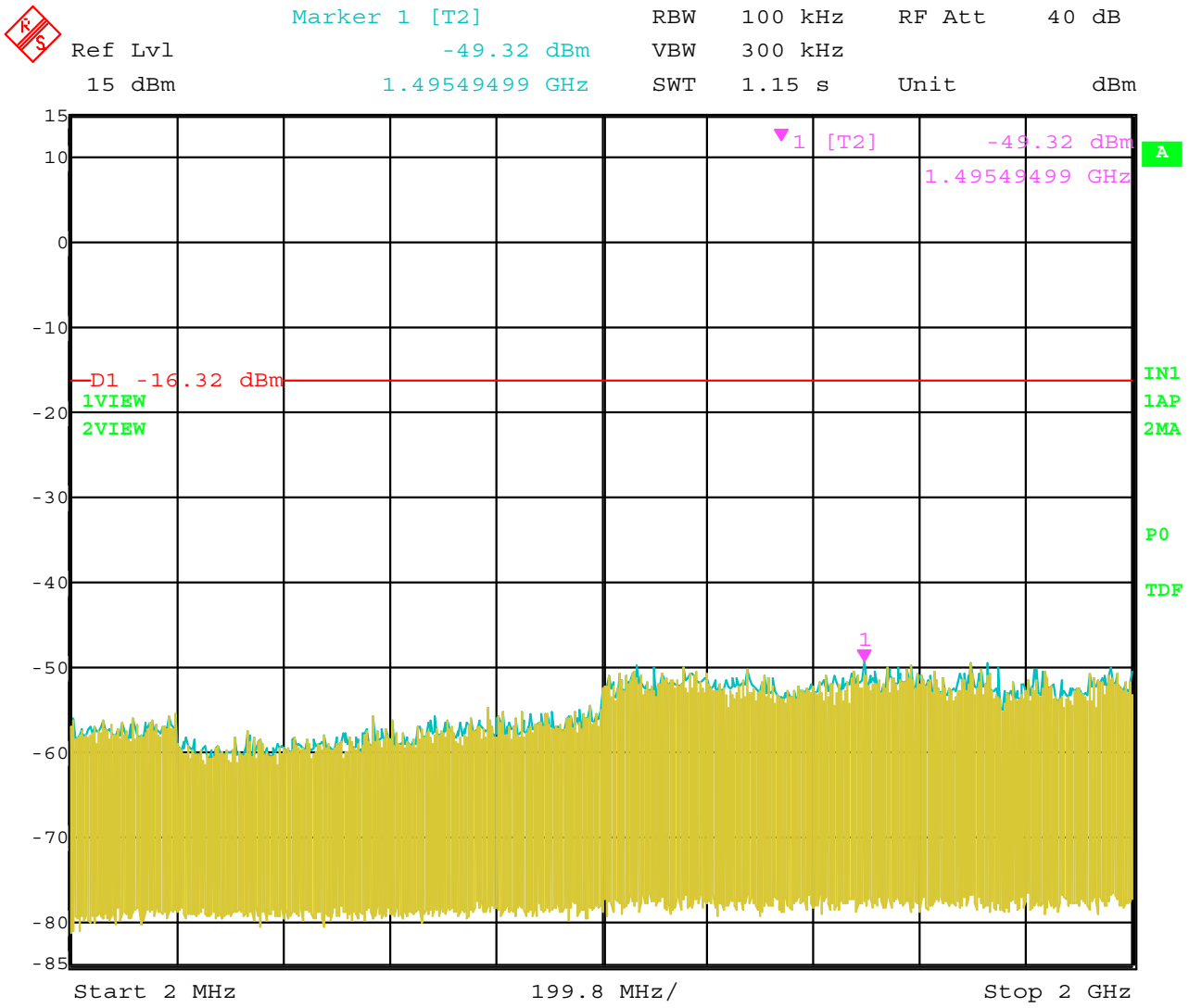


Date: 8.MAR.2005 13:07:03

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

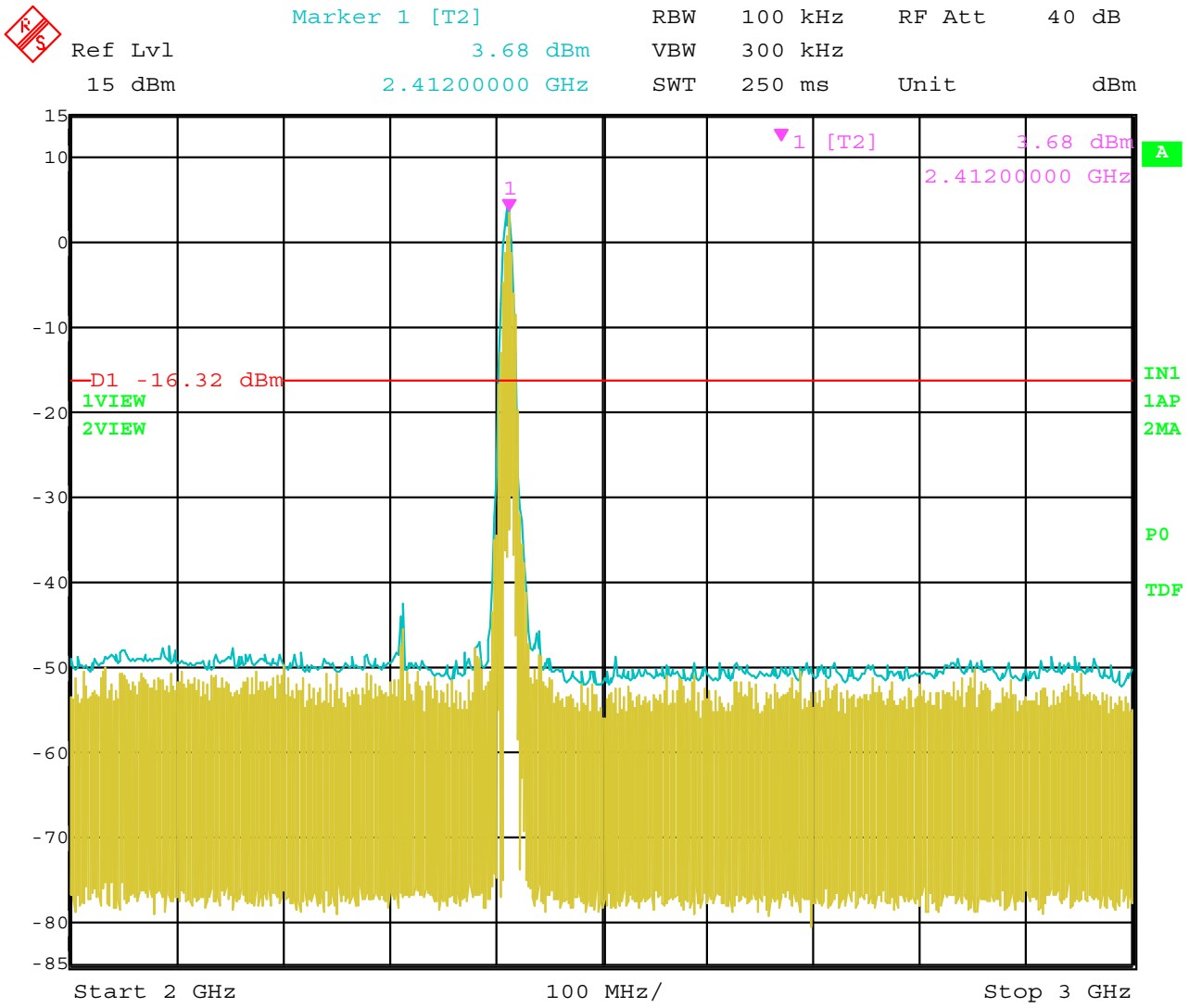
RF ANTENNA CONDUCTED

DATA SHEETS



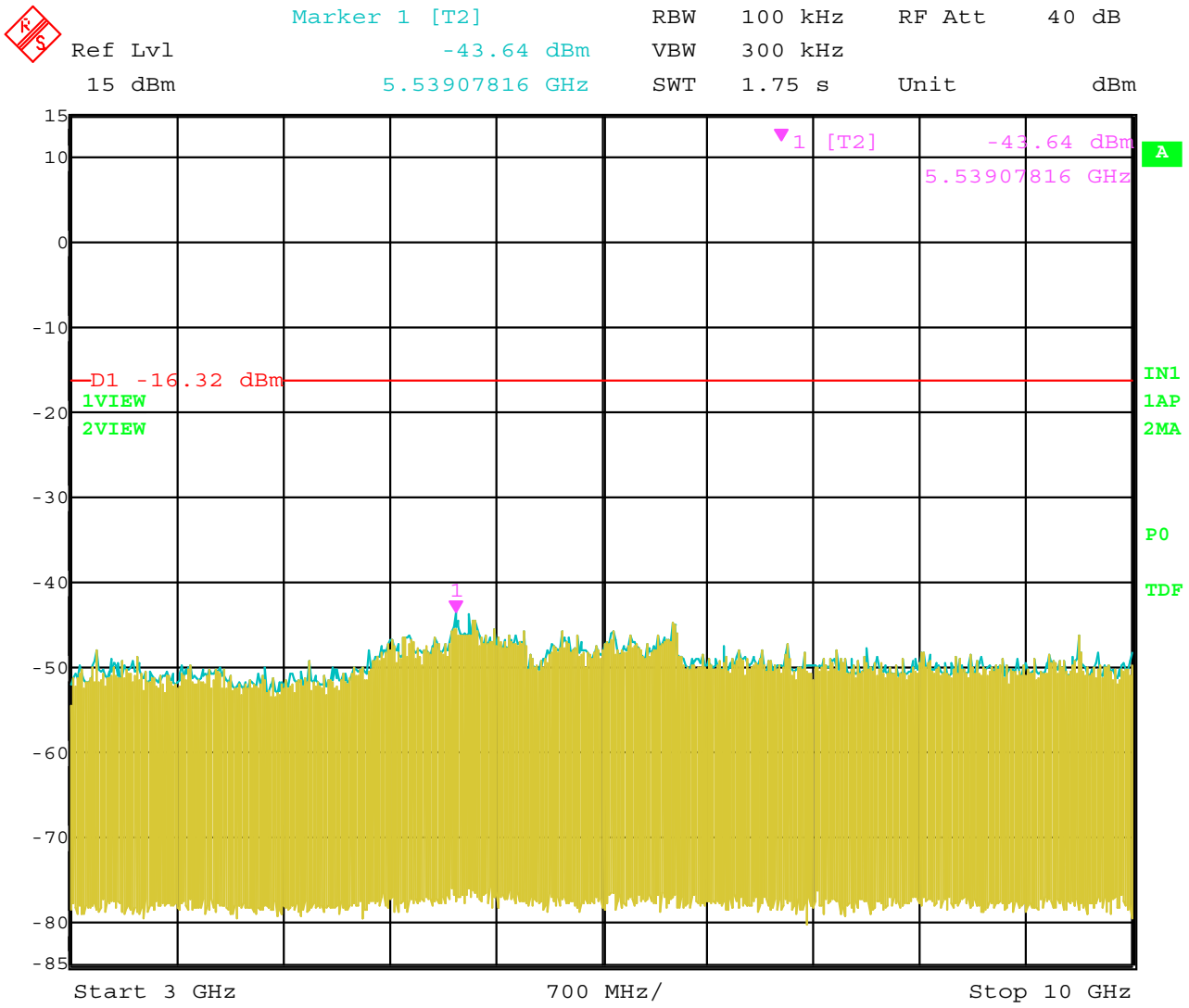
Date: 8.MAR.2005 09:00:14

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



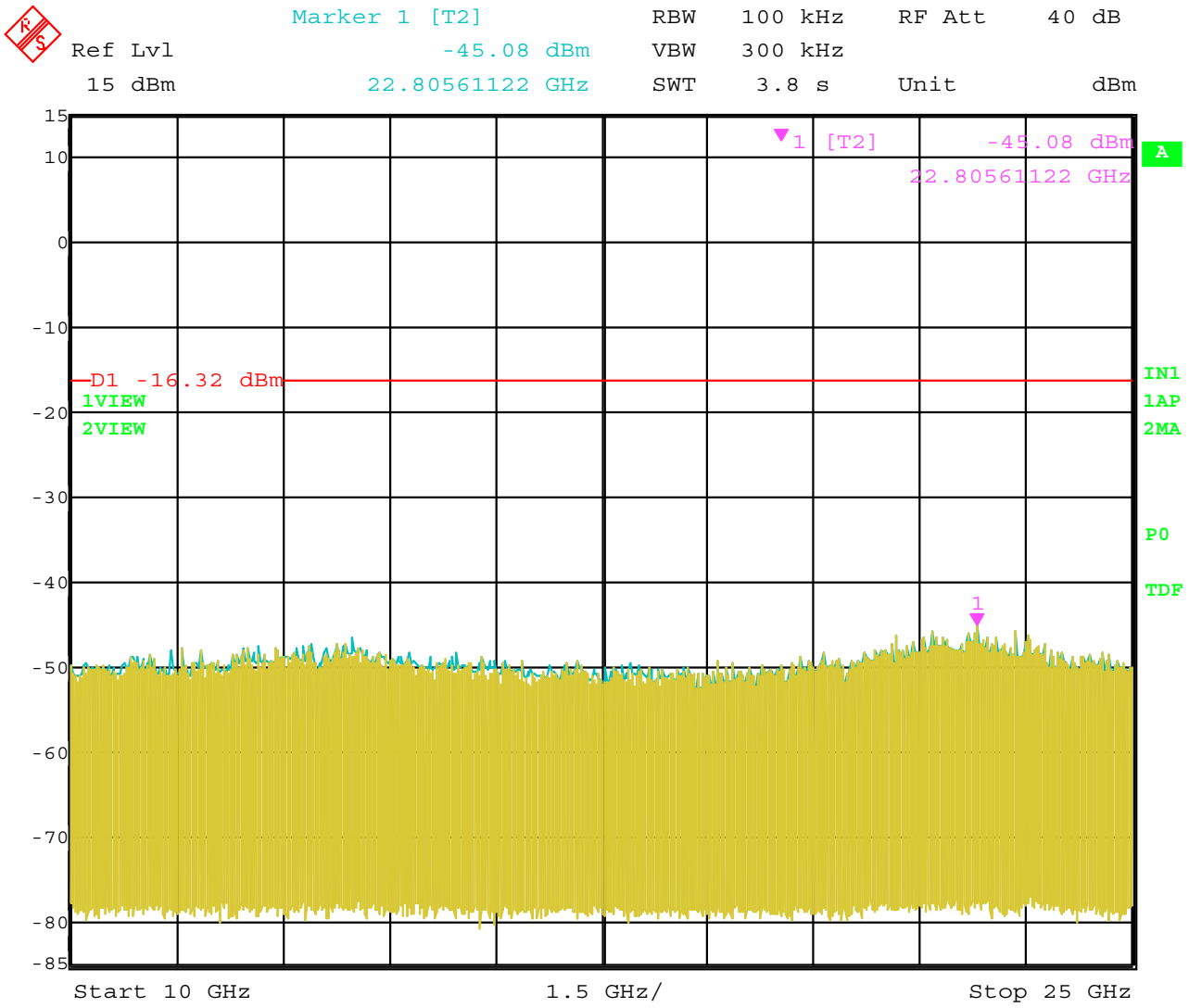
Date: 8.MAR.2005 08:59:40

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



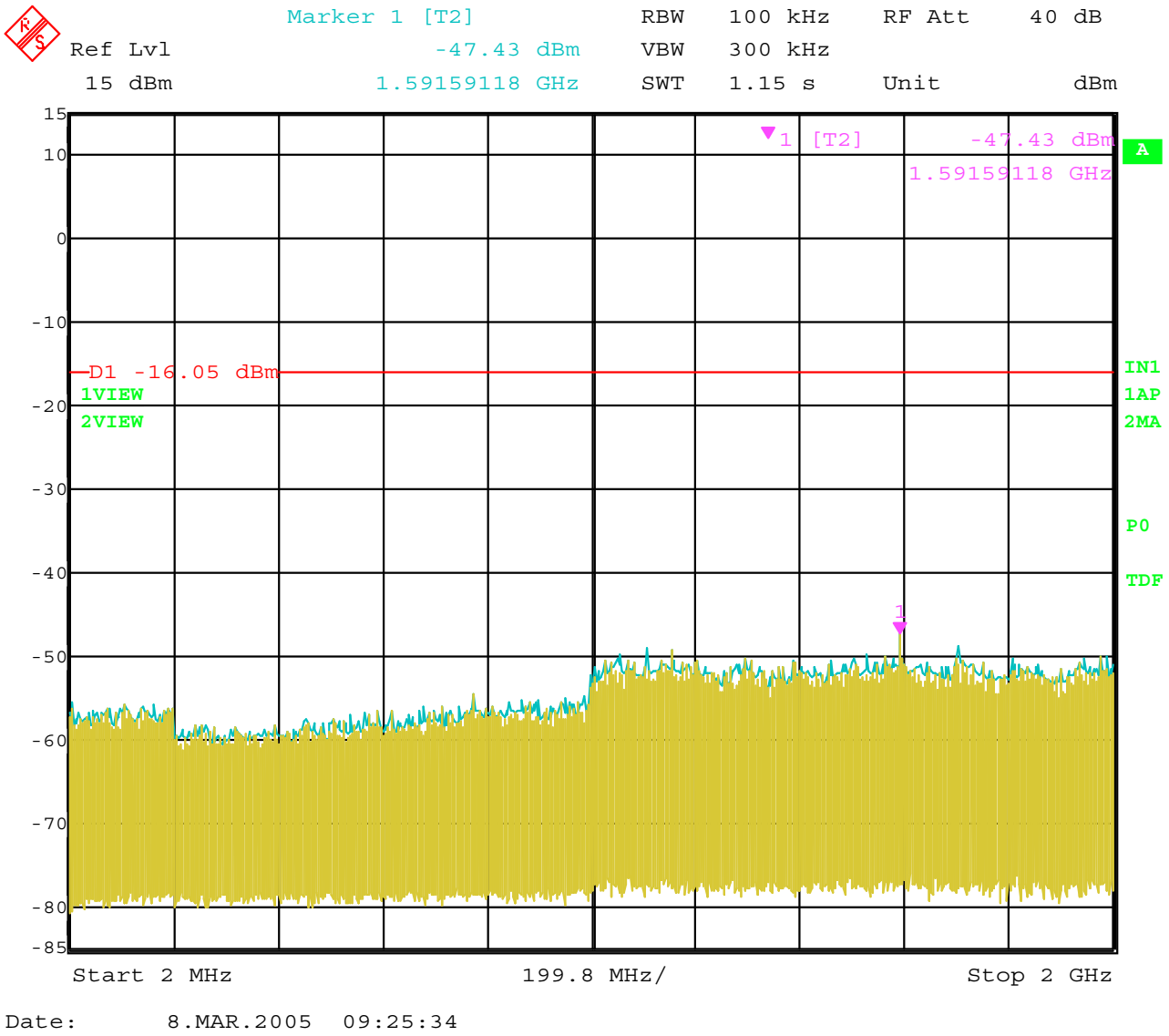
Date: 8.MAR.2005 09:20:18

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



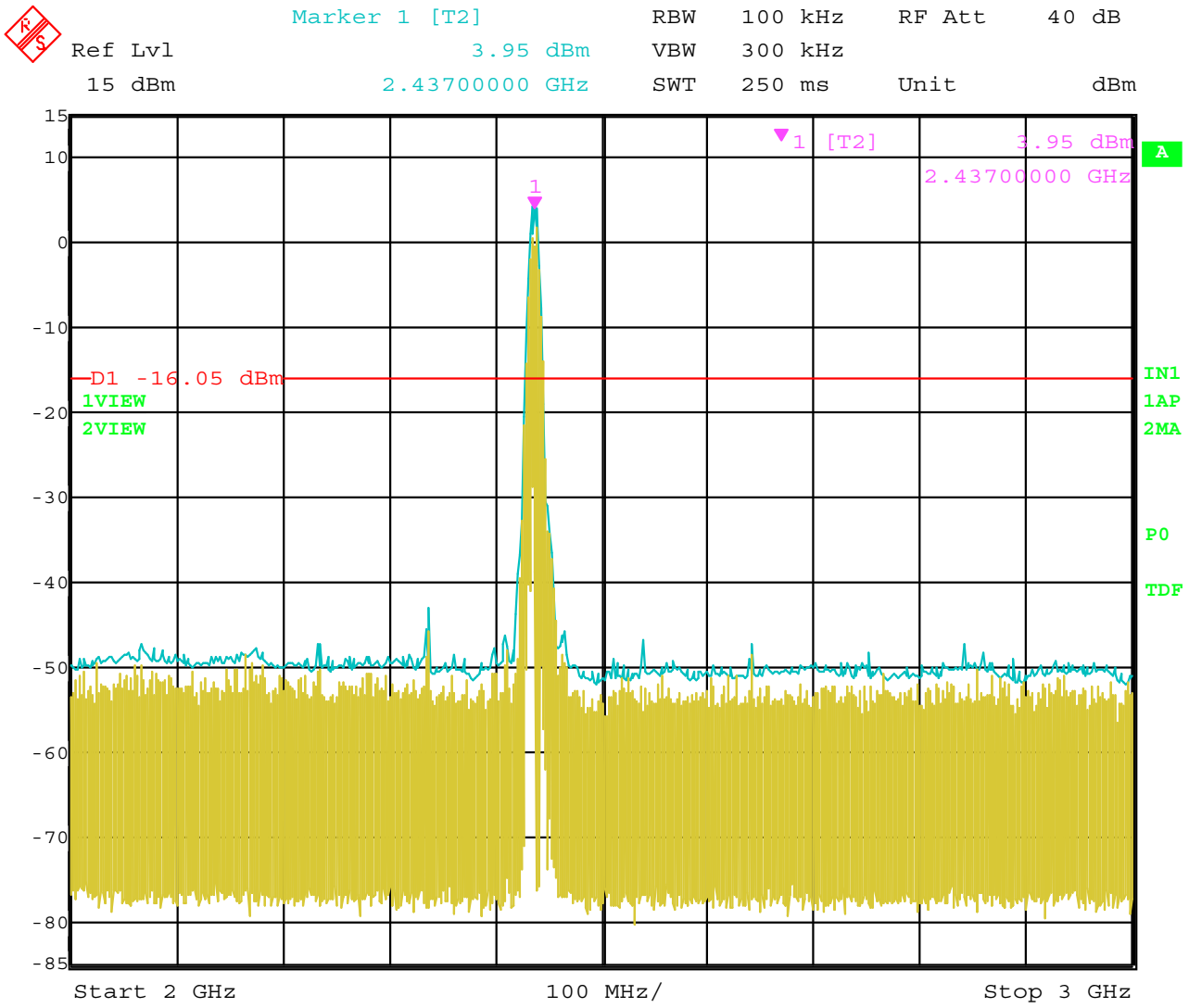
Date: 8.MAR.2005 09:20:54

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



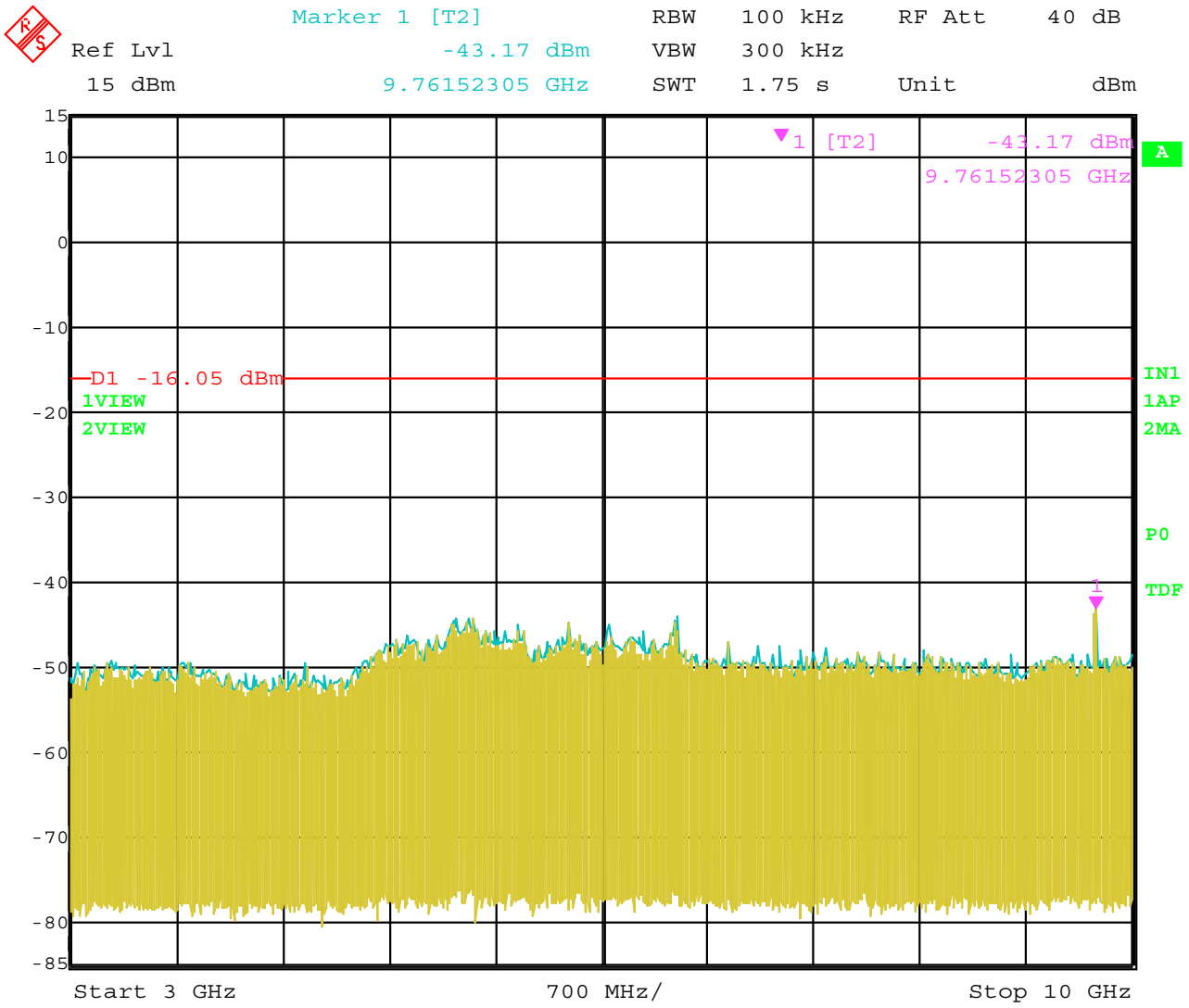
Date: 8.MAR.2005 09:25:34

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



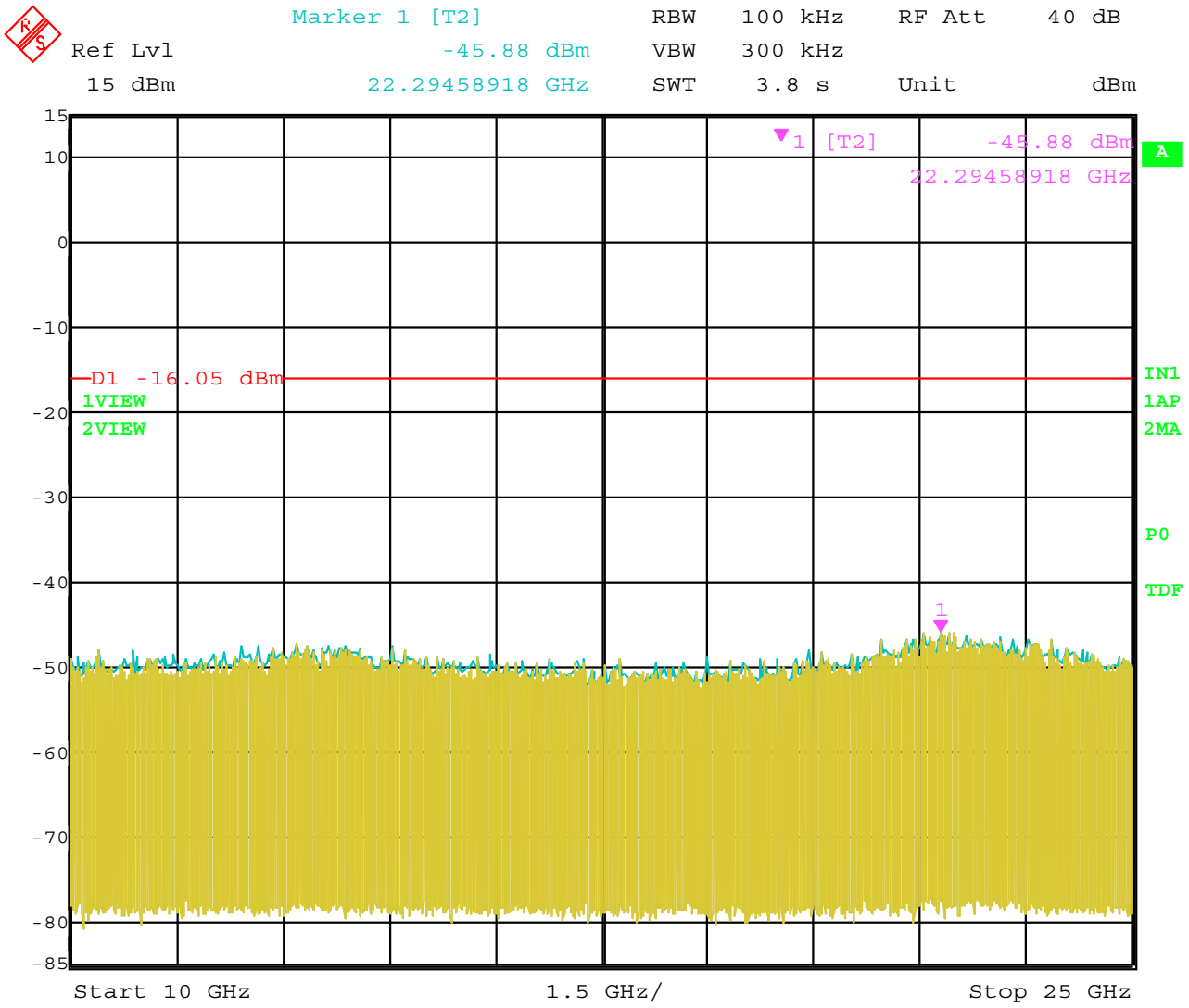
Date: 8.MAR.2005 09:24:56

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



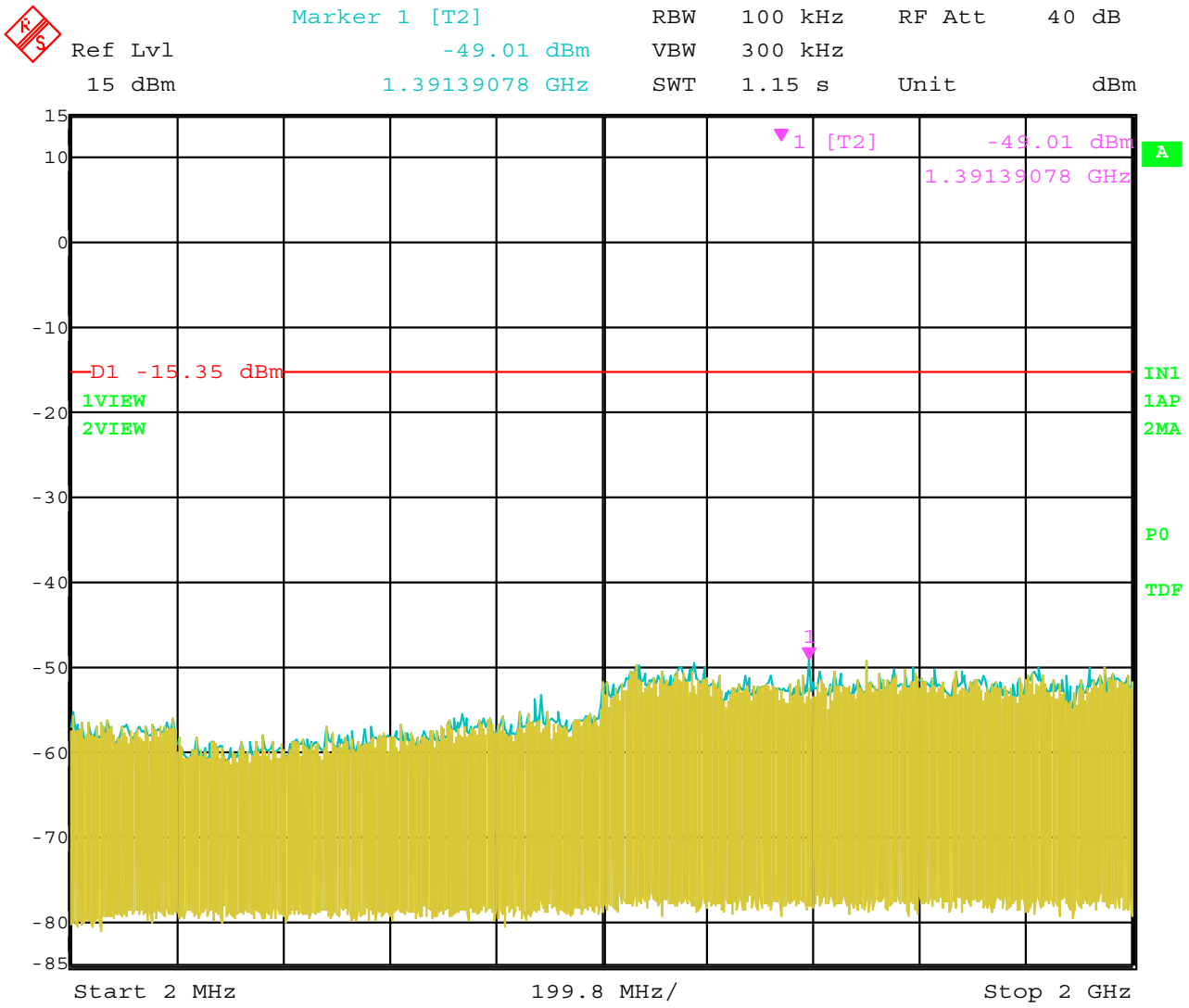
Date: 8.MAR.2005 09:26:09

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



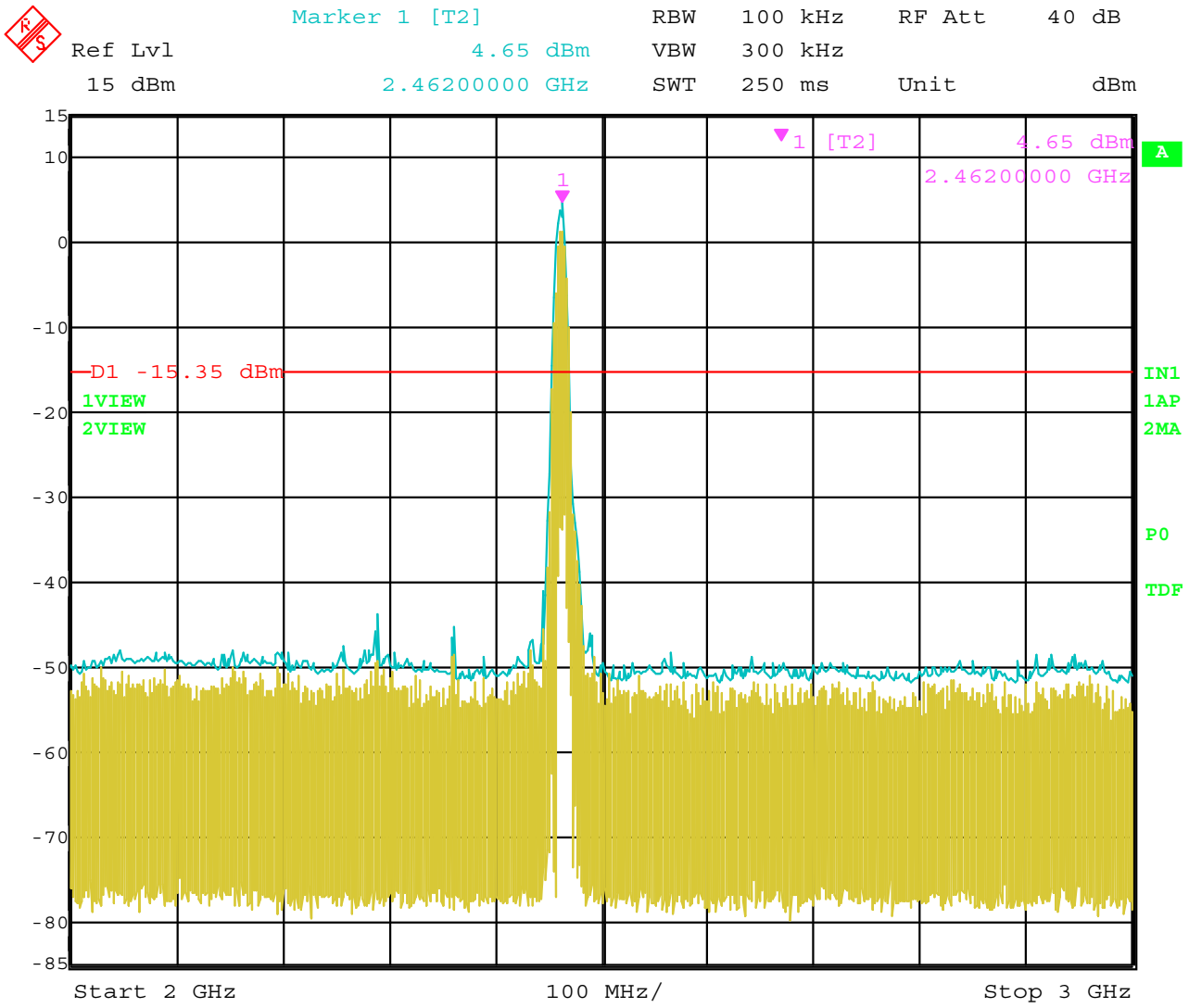
Date: 8.MAR.2005 09:26:48

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



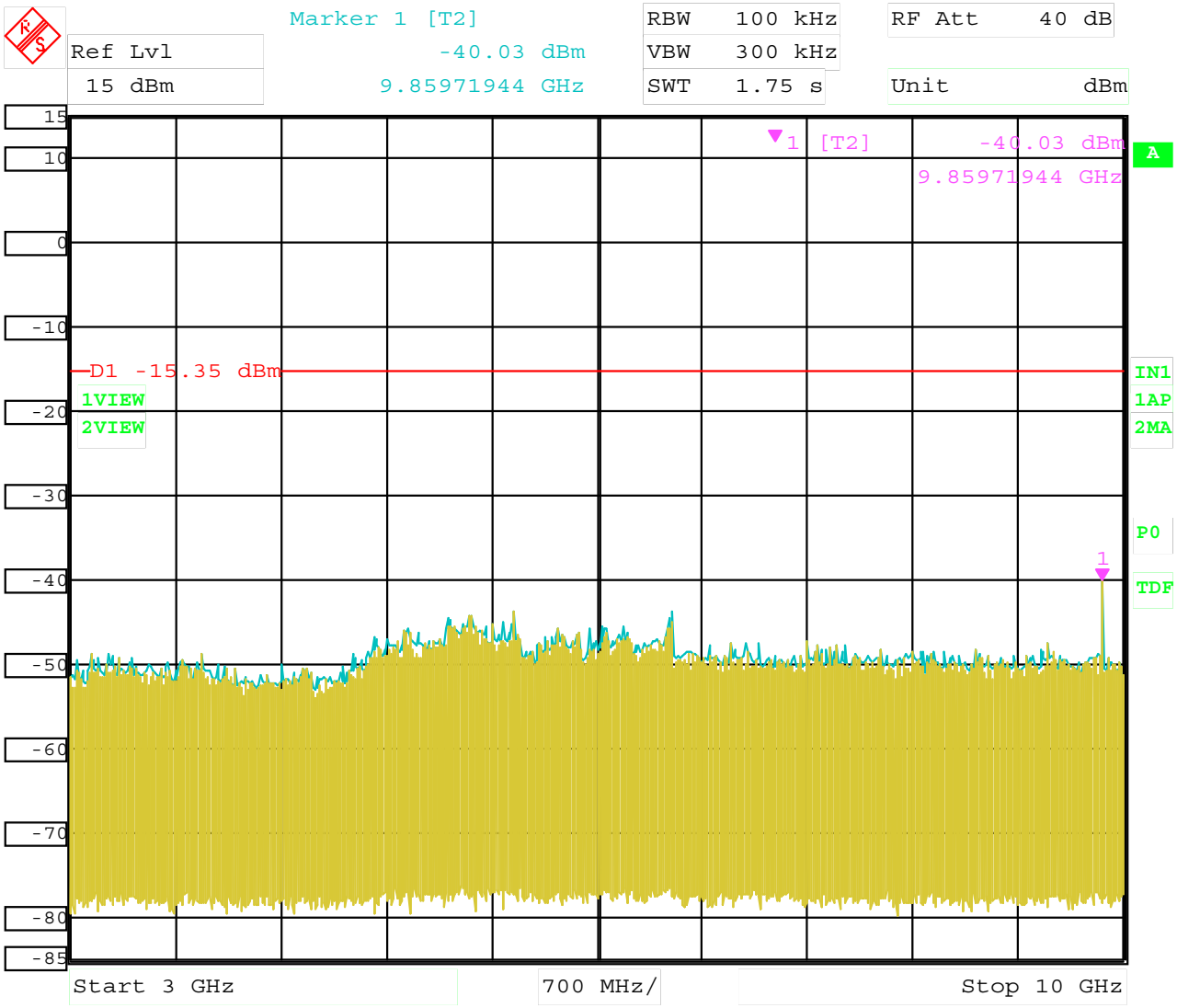
Date: 8.MAR.2005 09:30:57

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



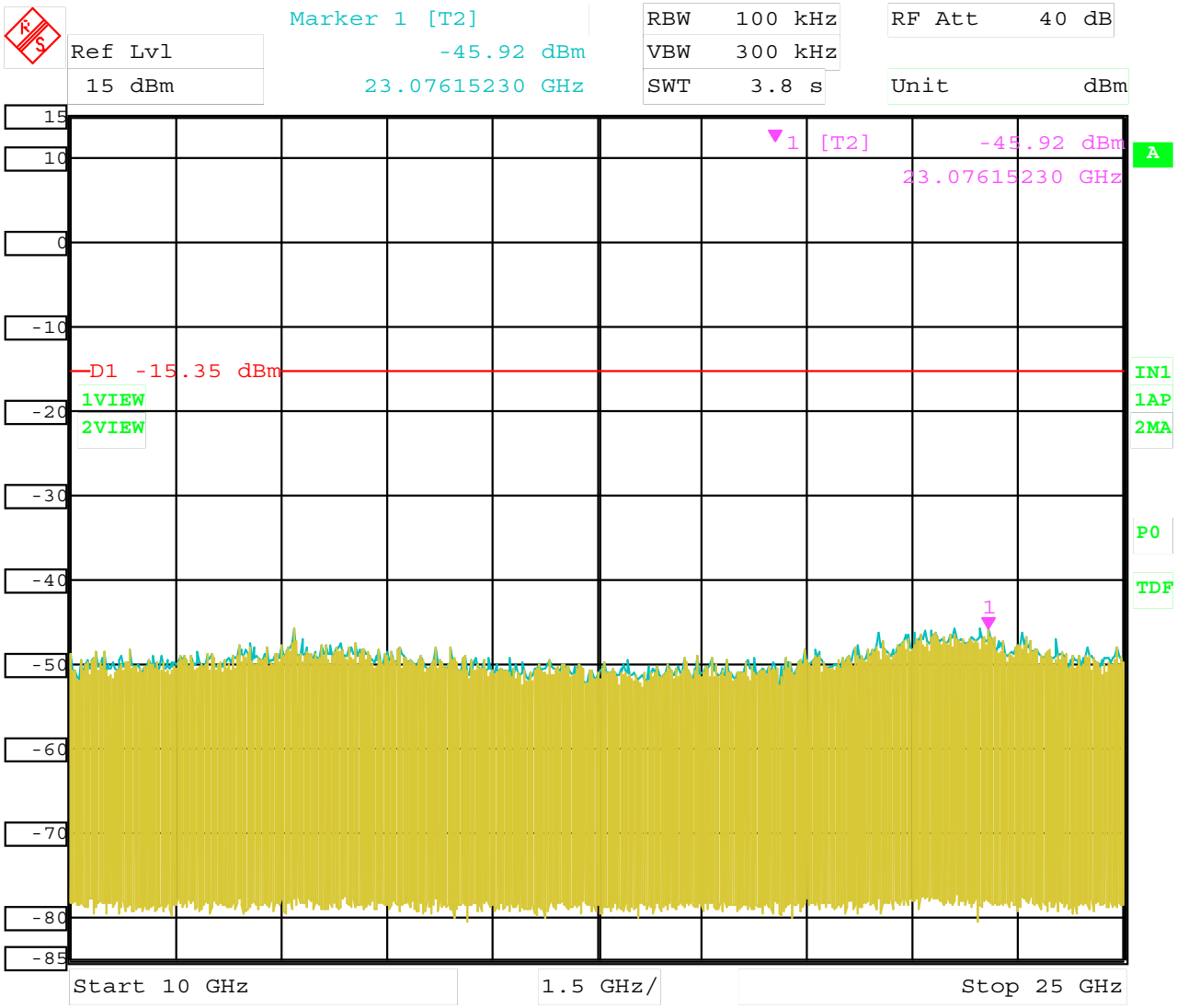
Date: 8.MAR.2005 09:30:25

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



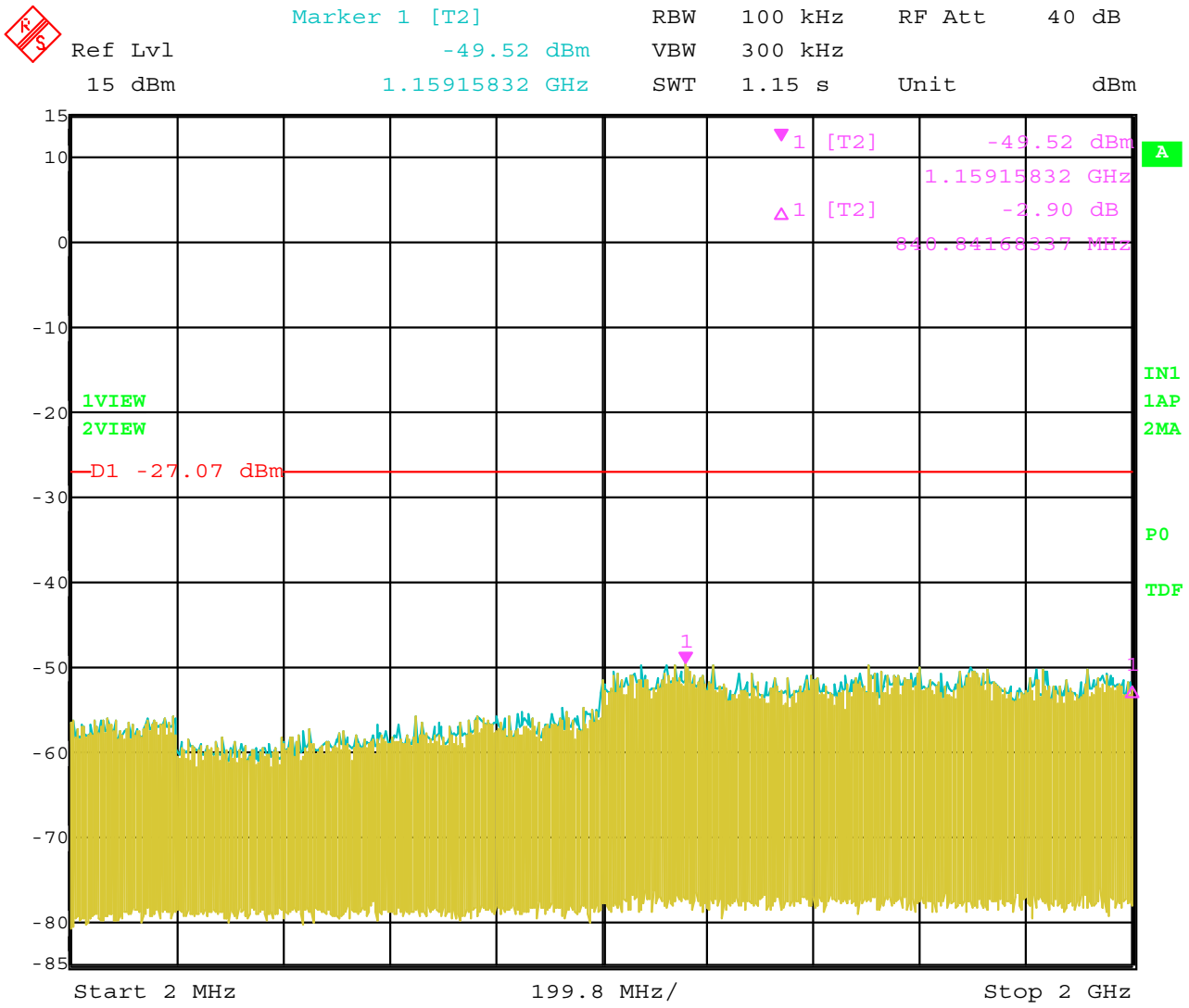
Date: 8.MAR.2005 09:32:10

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



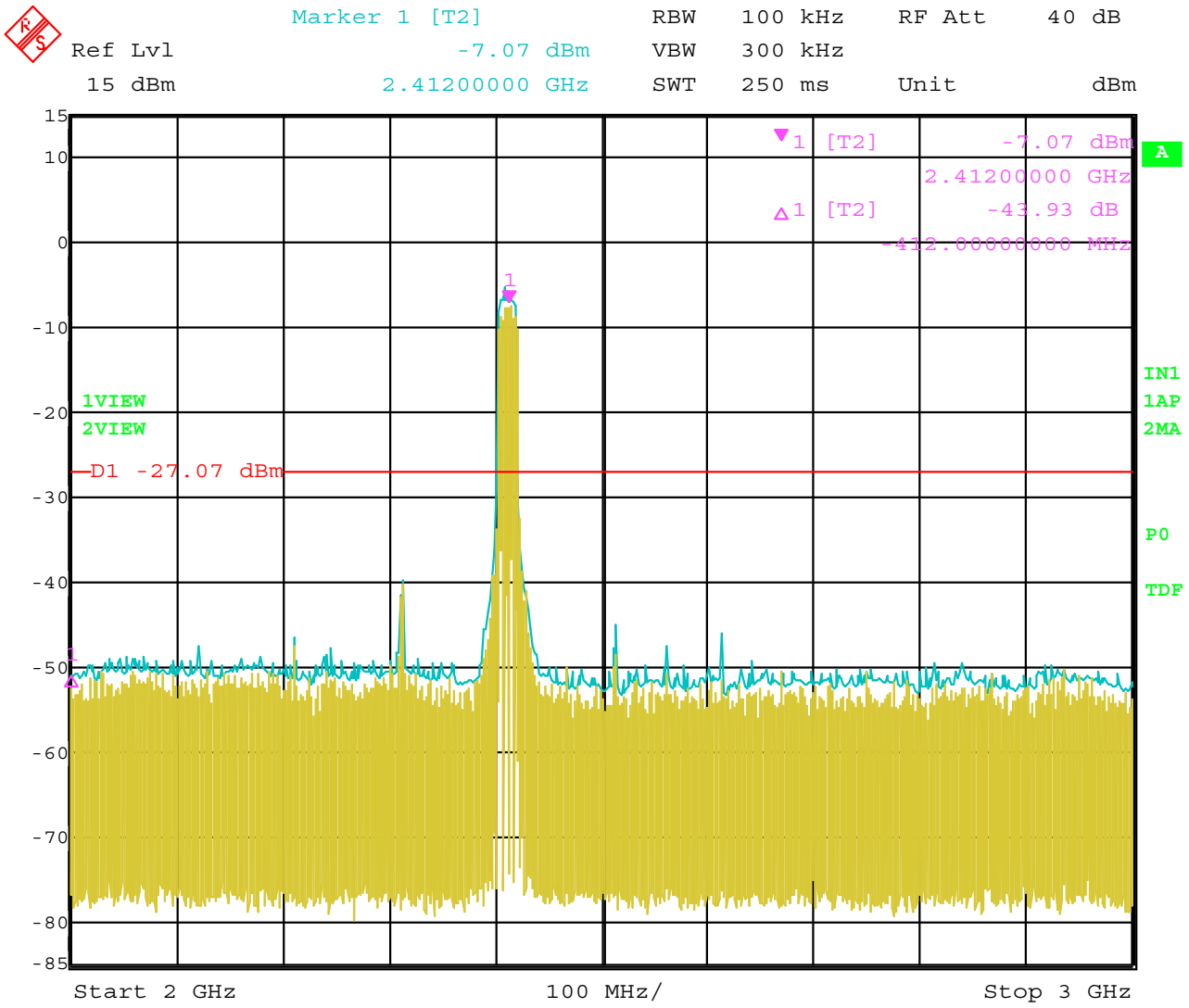
Date: 8.MAR.2005 09:32:50

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



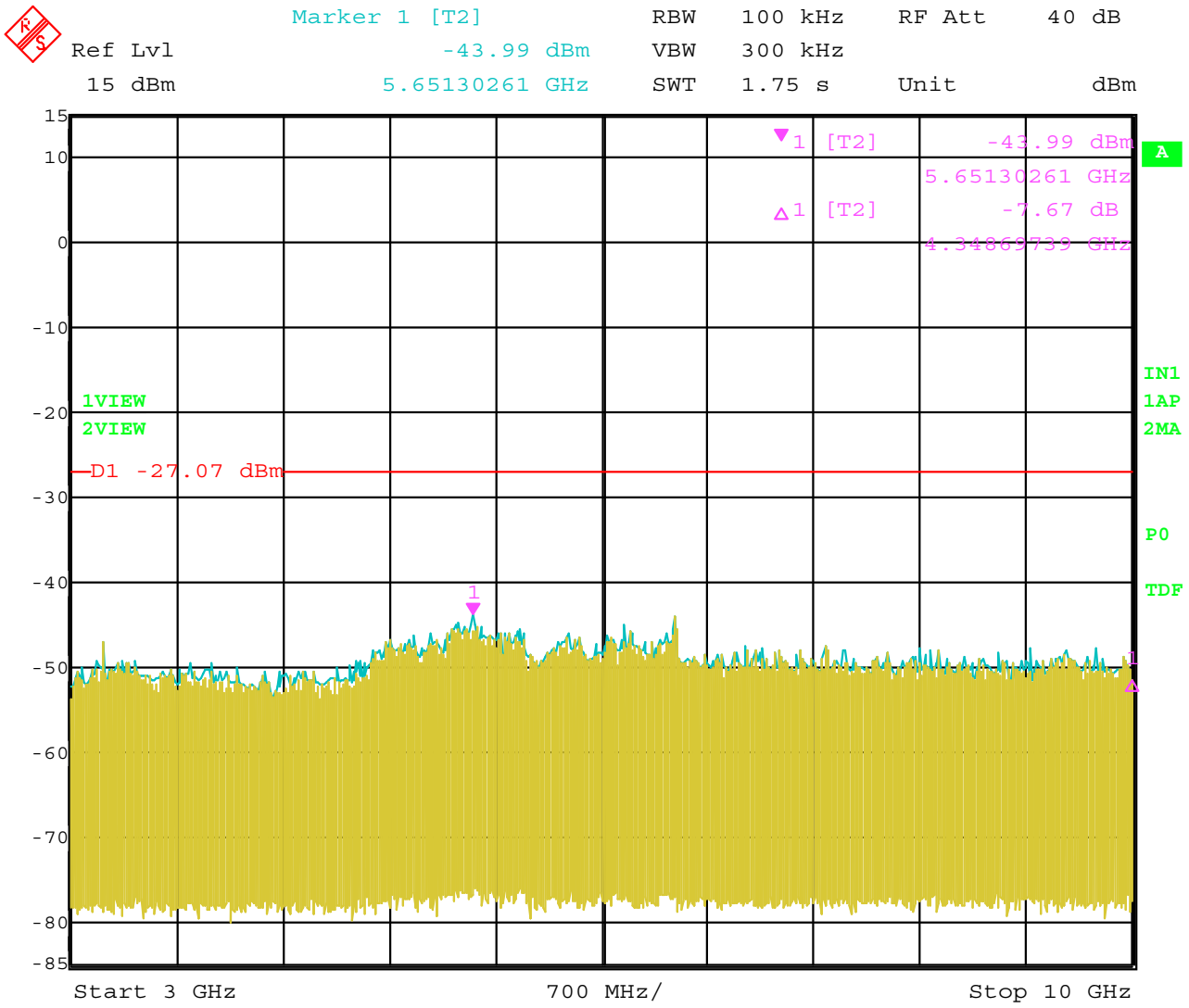
Date: 8.MAR.2005 08:38:58

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



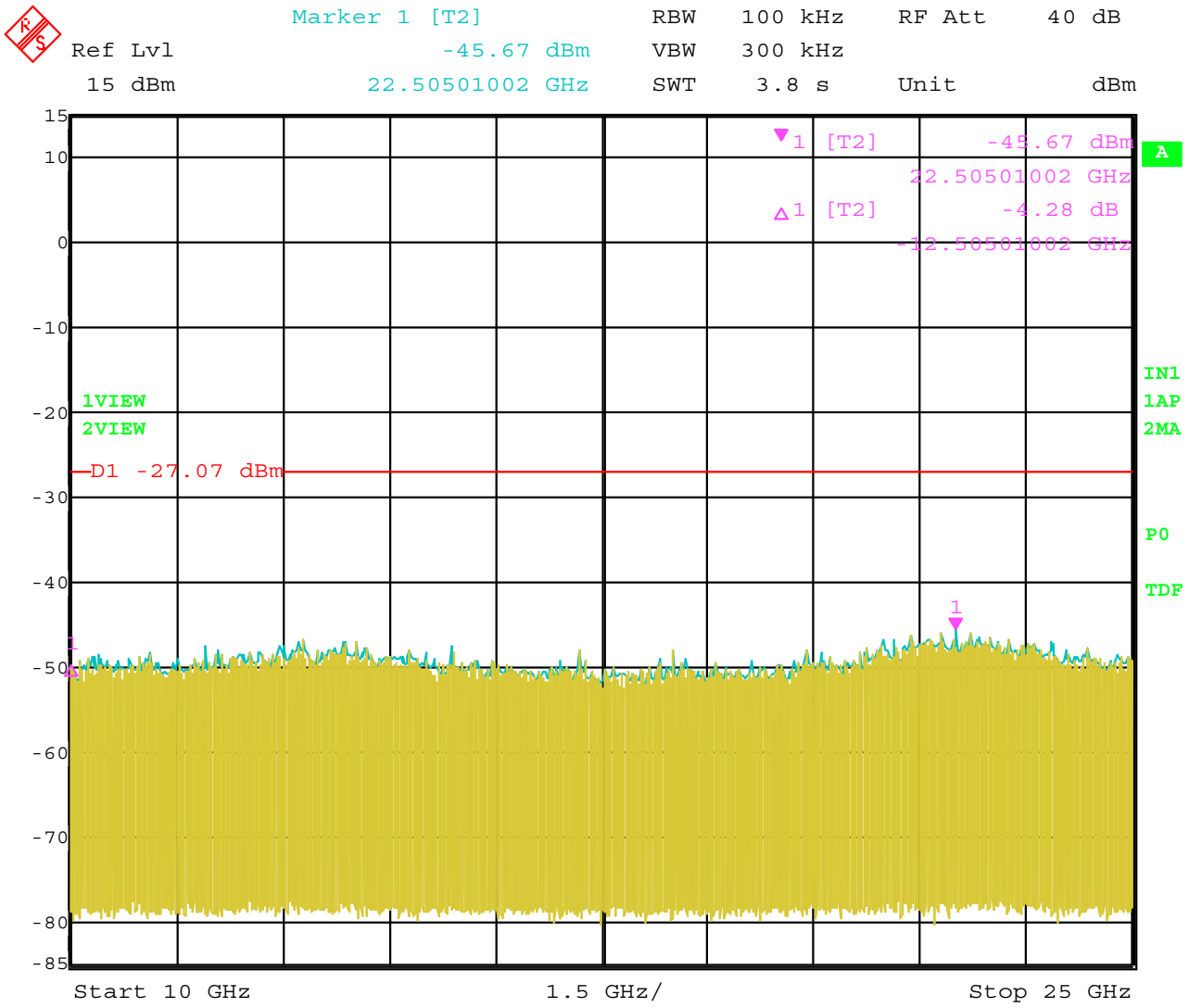
Date: 8.MAR.2005 08:32:51

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



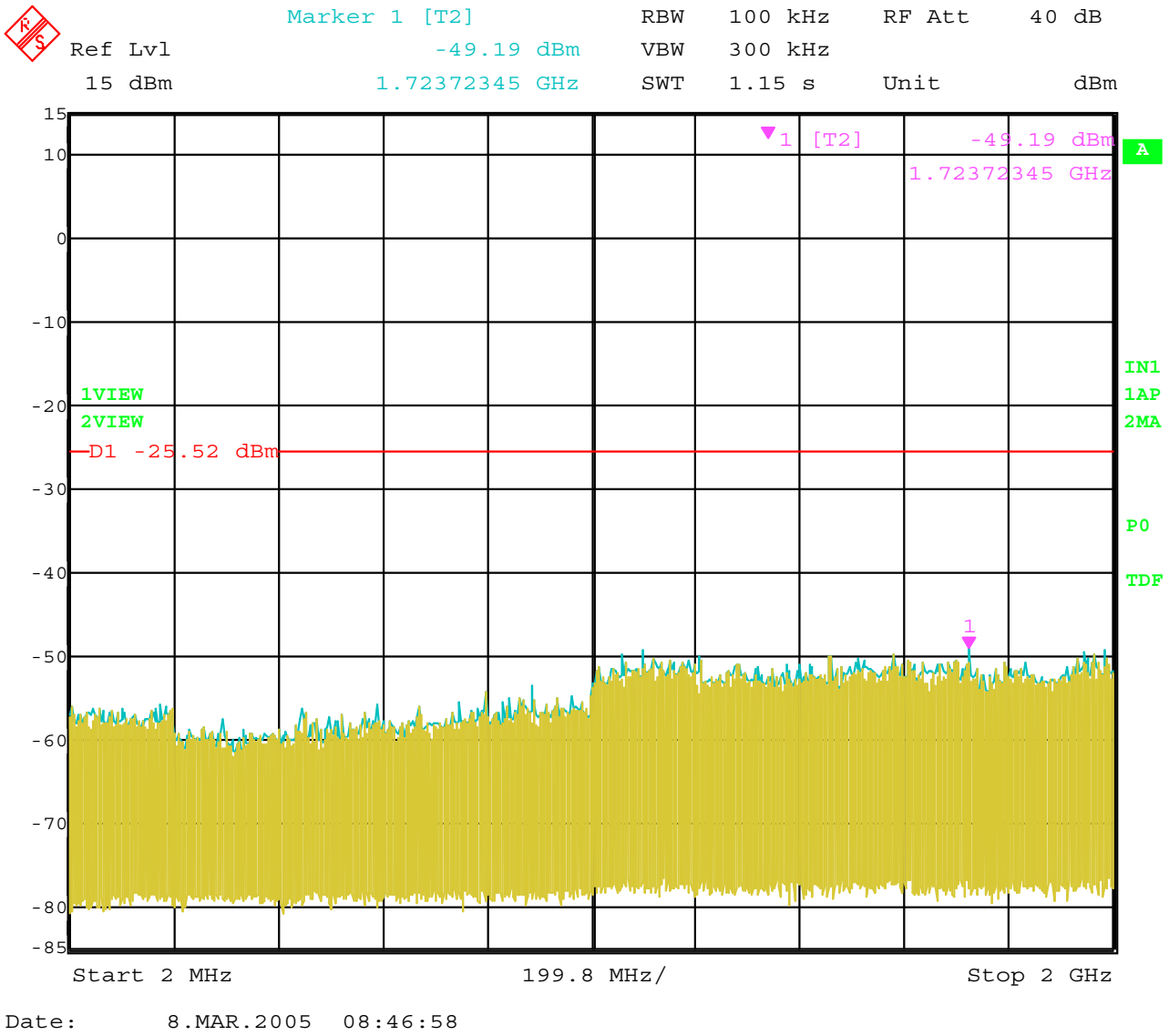
Date: 8.MAR.2005 08:40:37

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



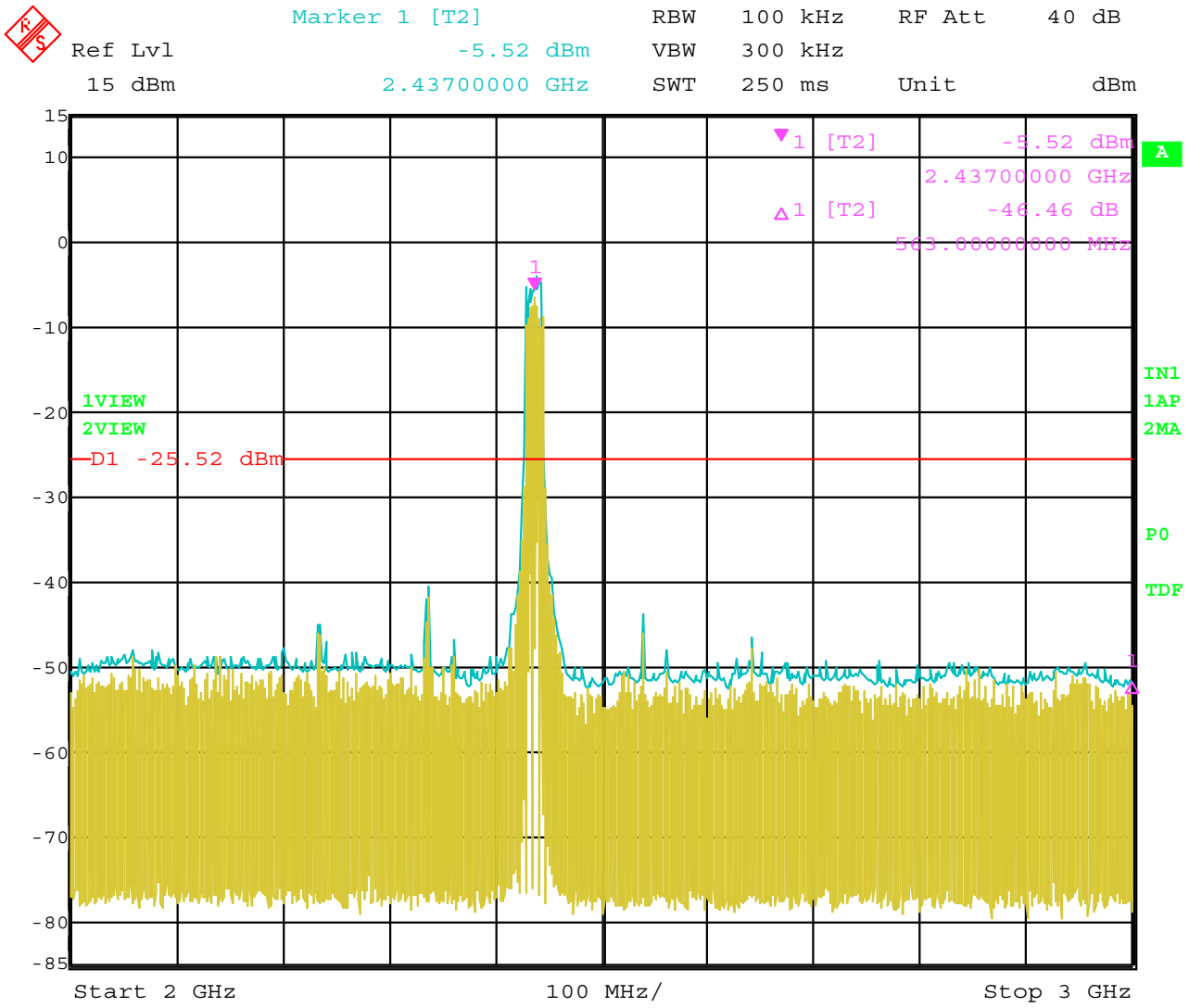
Date: 8.MAR.2005 08:41:28

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



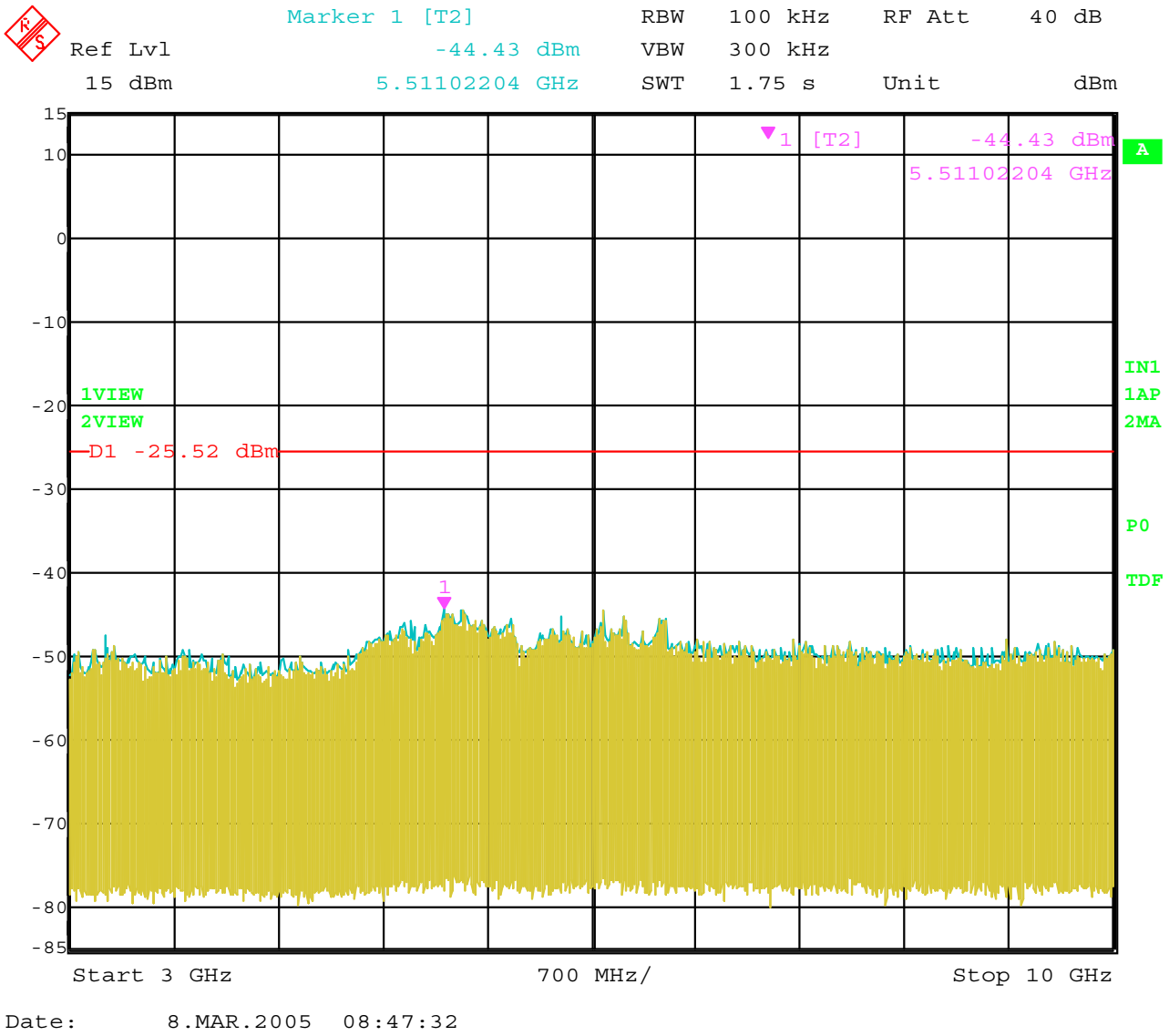
Date: 8.MAR.2005 08:46:58

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



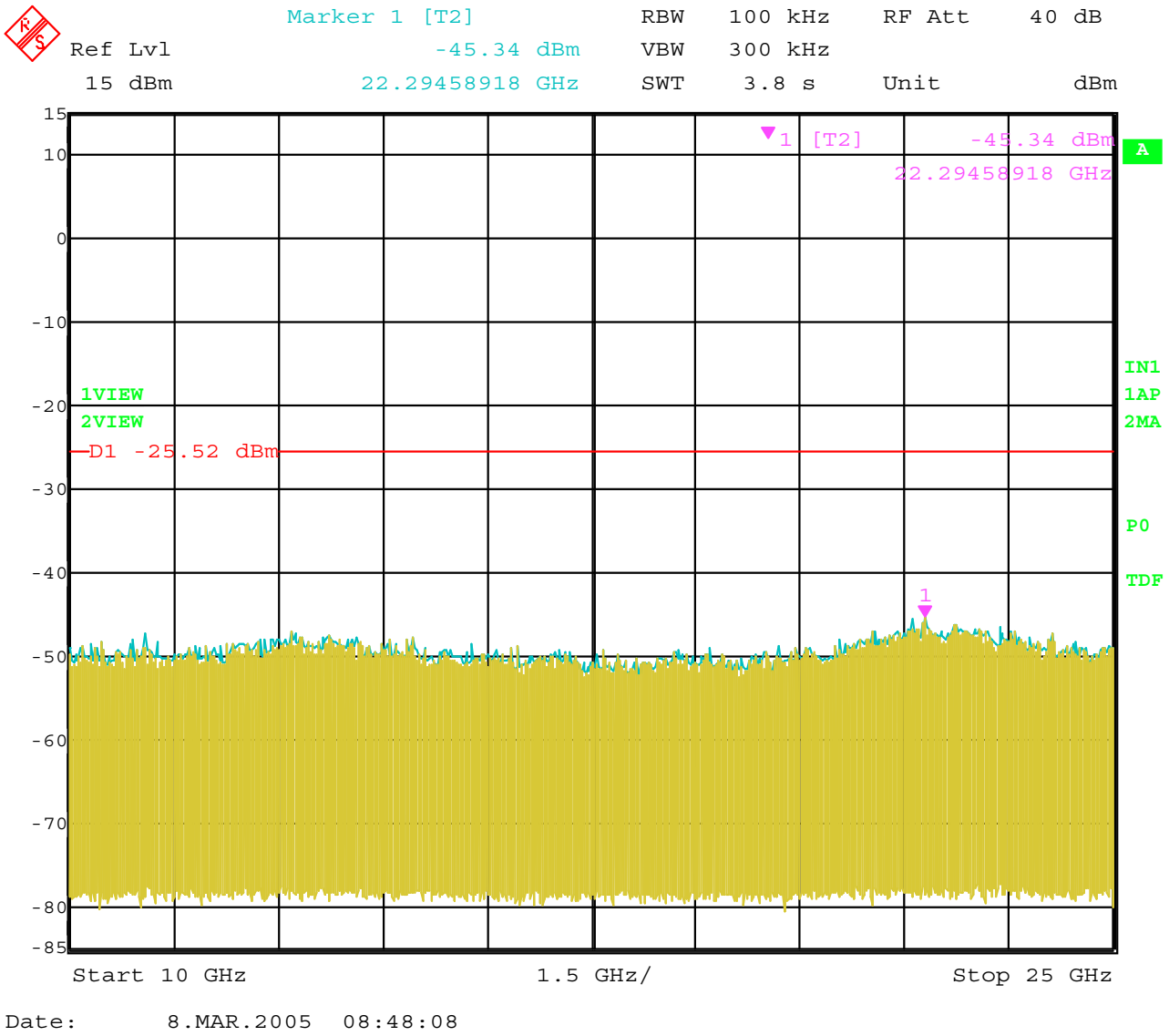
Date: 8.MAR.2005 08:46:16

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



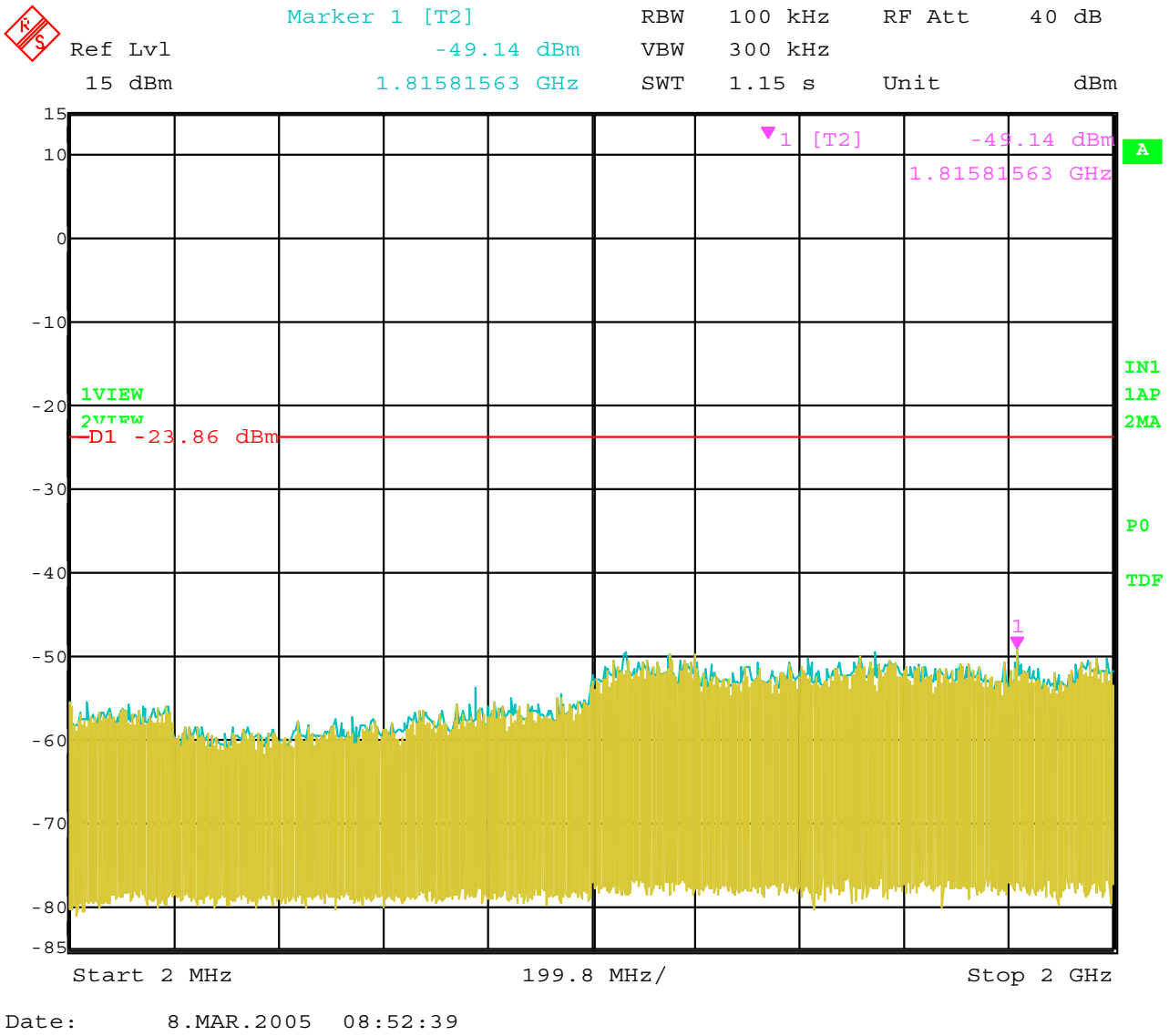
Date: 8.MAR.2005 08:47:32

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



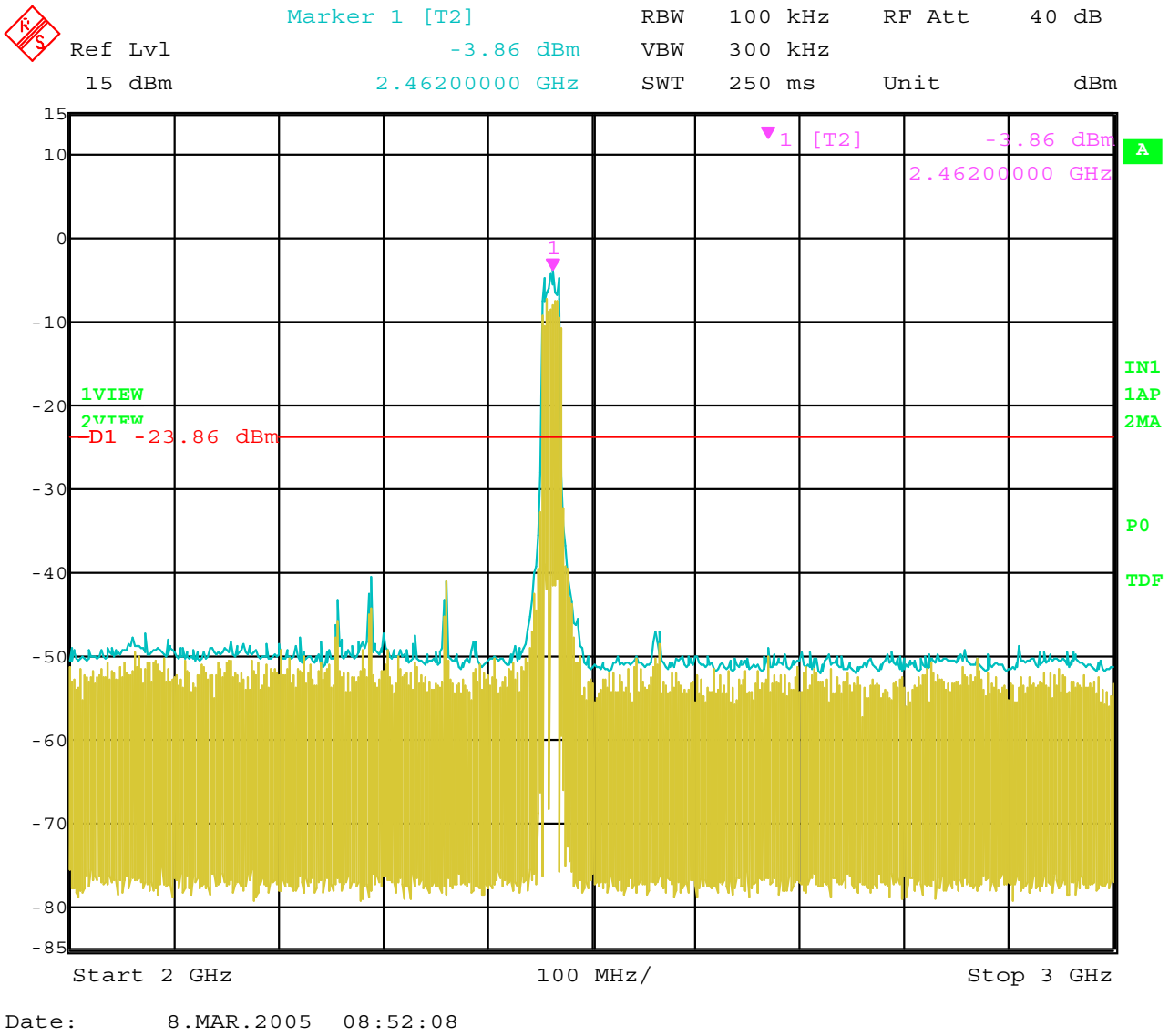
Date: 8.MAR.2005 08:48:08

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



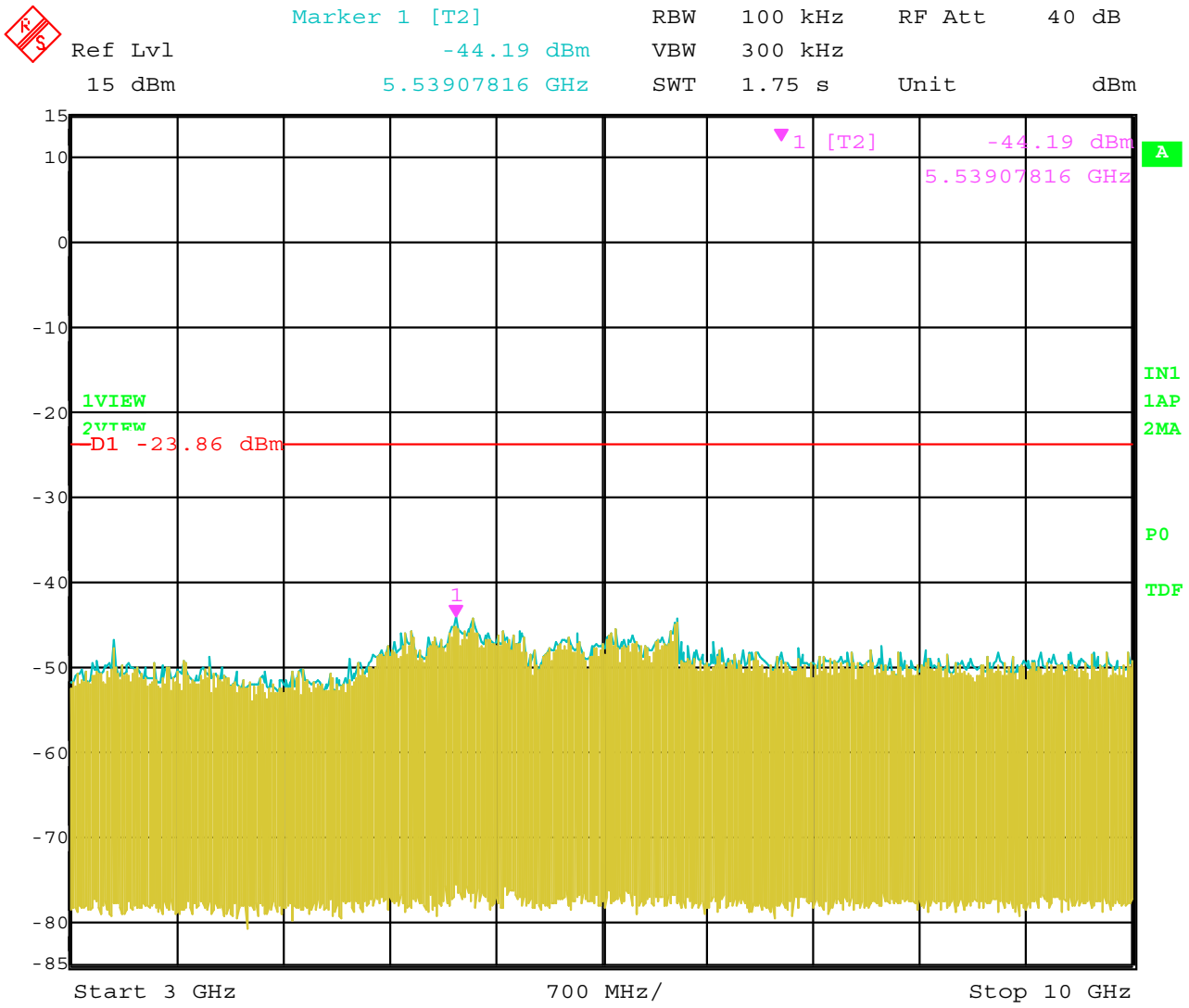
Date: 8.MAR.2005 08:52:39

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



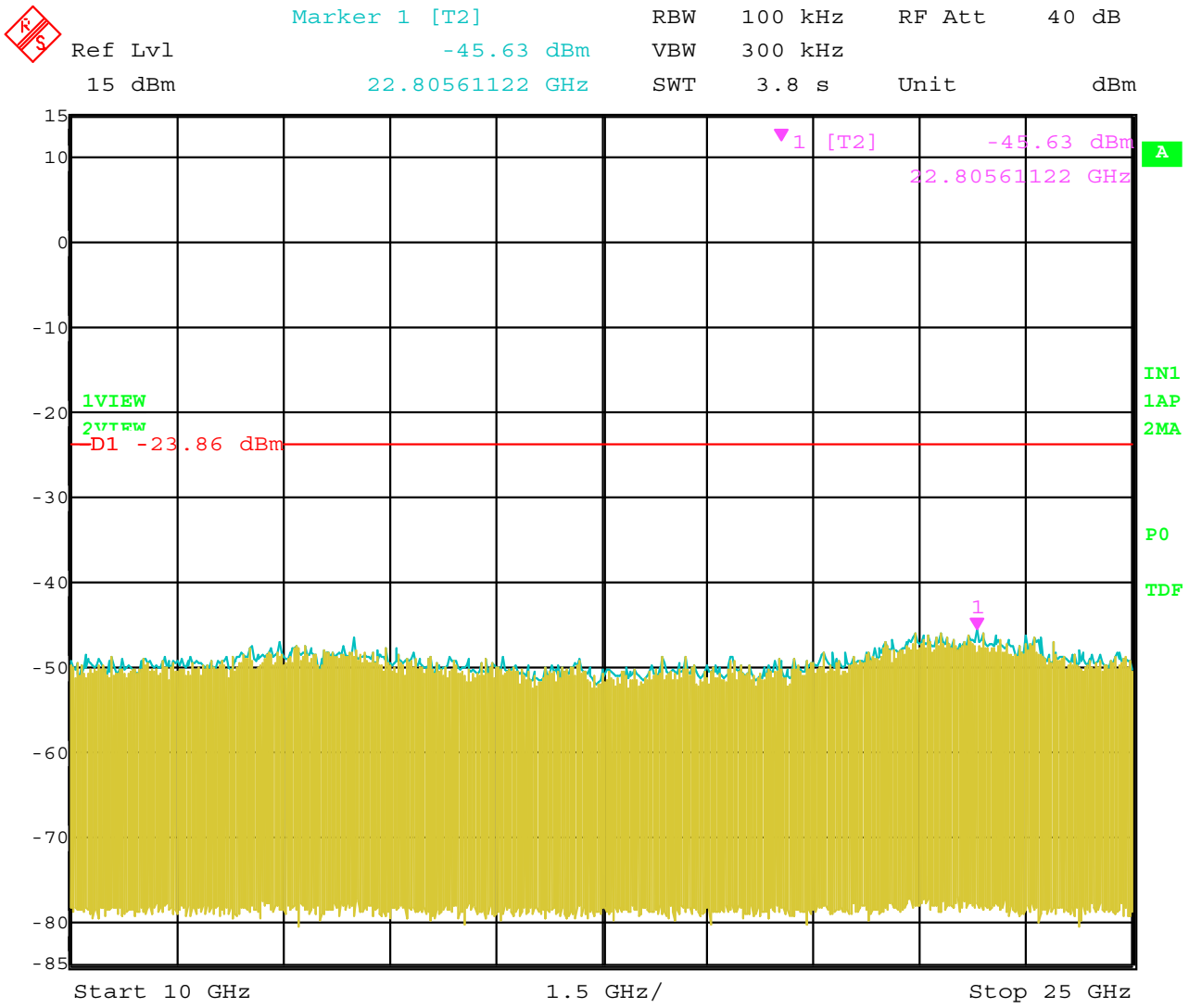
Date: 8.MAR.2005 08:52:08

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



Date: 8.MAR.2005 08:53:19

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



Date: 8.MAR.2005 08:55:50

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

BAND EDGES

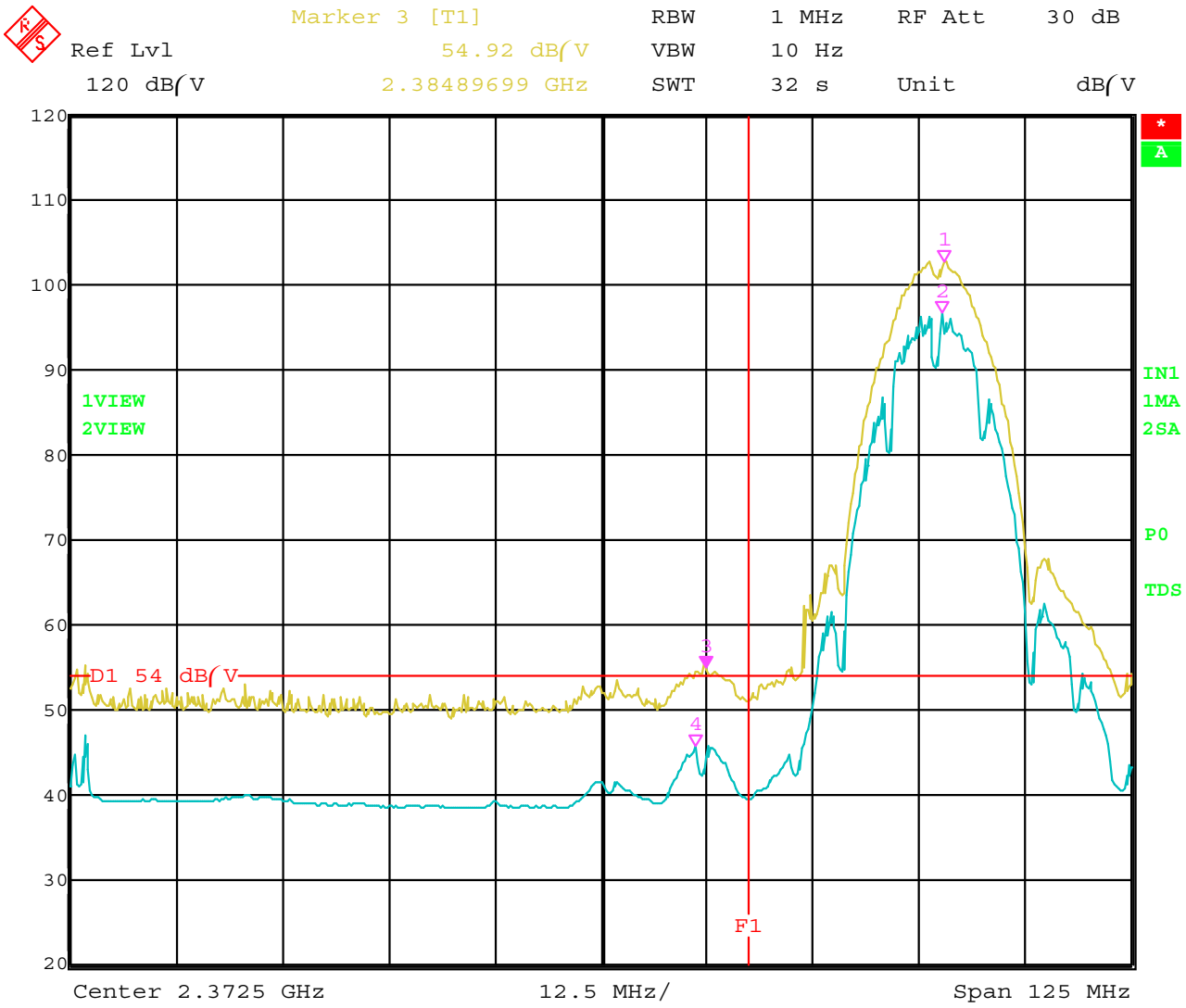
DATA SHEETS

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

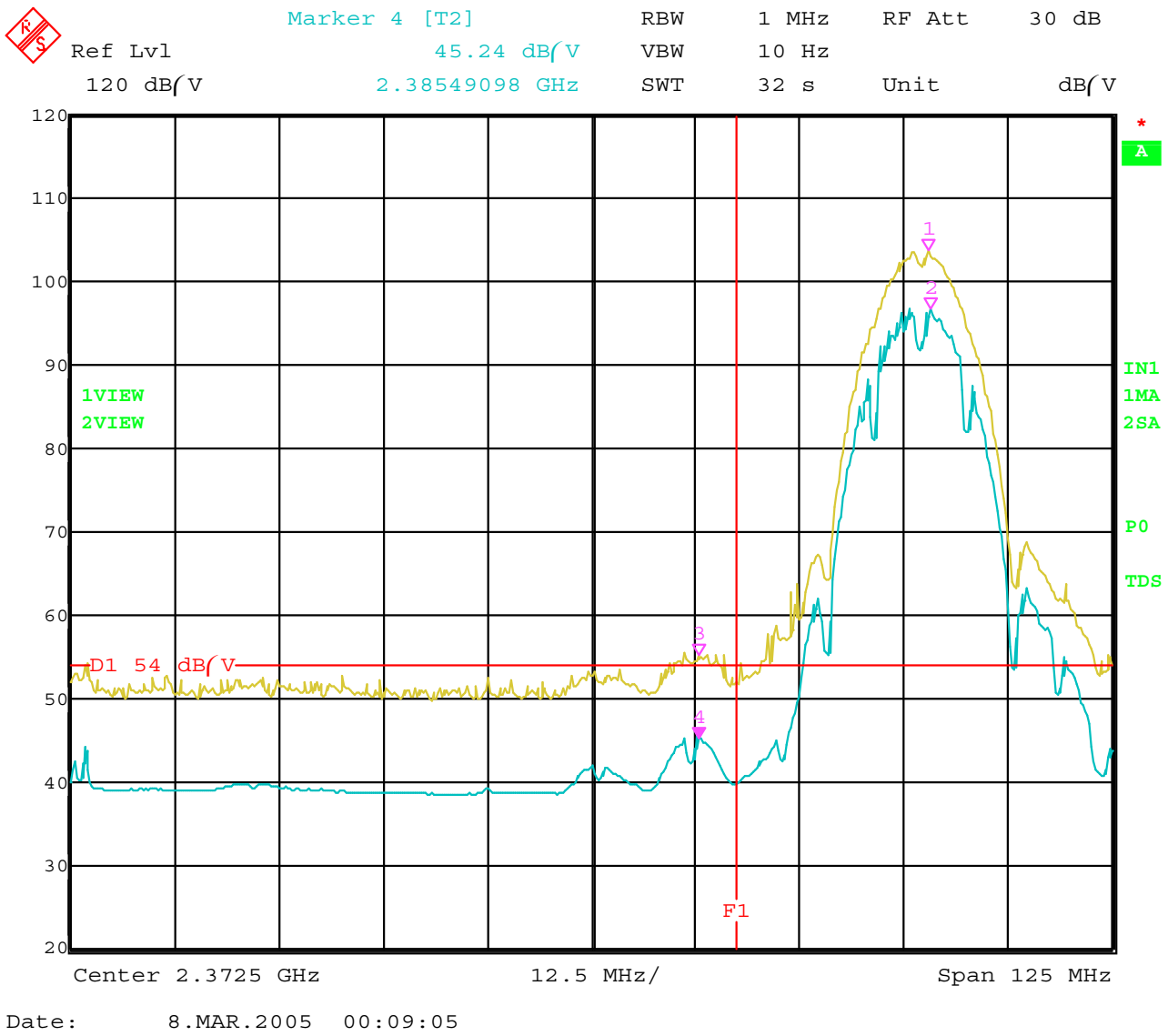
FCC 15.247
Intel Corporation Date: 3/08/05
Intel Mini PCI Type 3A 802.11BG Wireless LAN Adapter Lab: B
Model: WM3A2200BG Tested By: Kyle Fujimoto
Configuration: Dell Latitude Laptop D510 Agency Series Number: PP17L -- Main Port
With Phycomp Antenna
Channel 1 - 802.11 b Mode Gain : 28.0 Peak Power: 17.15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



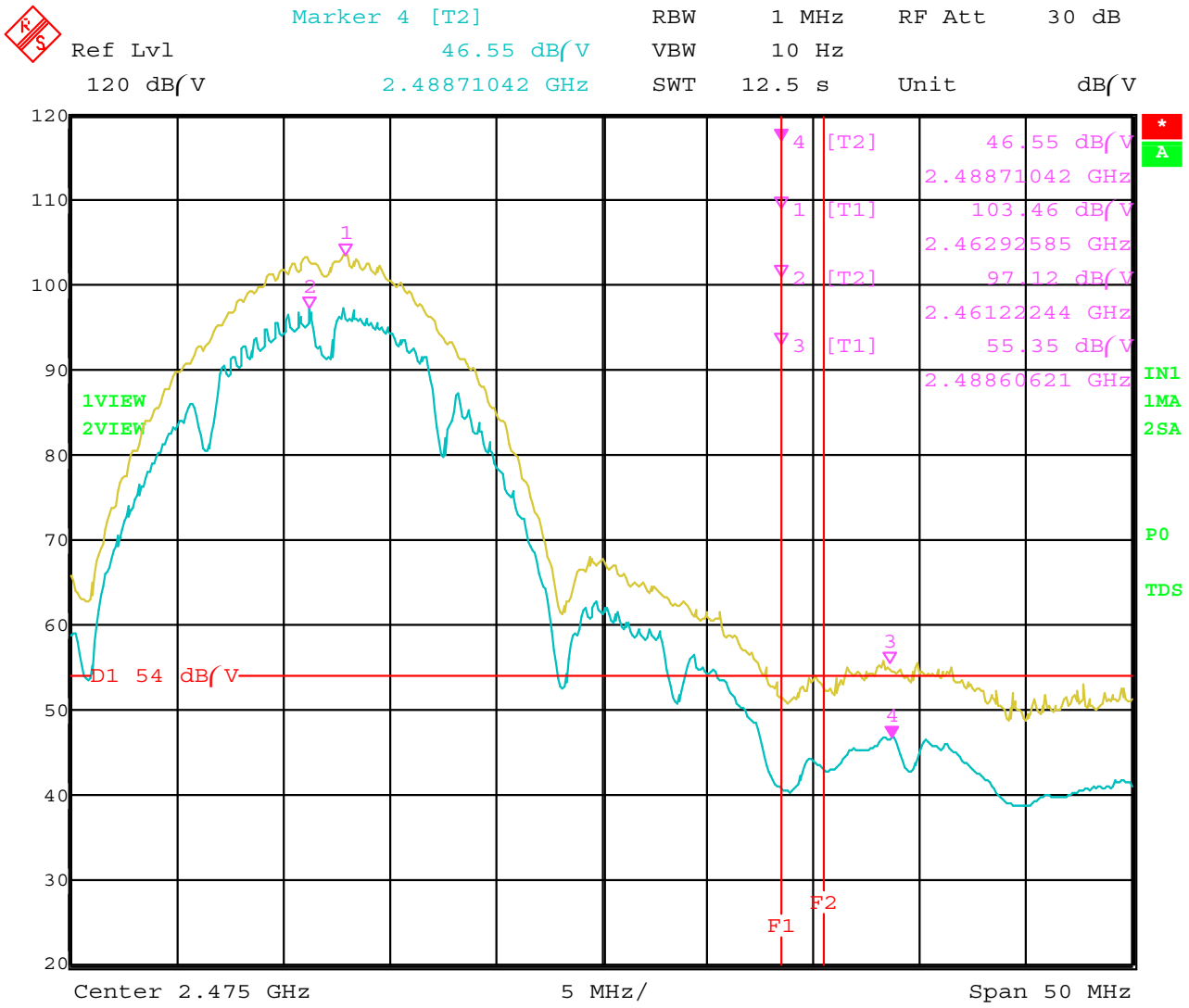
Date: 8.MAR.2005 00:51:36

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



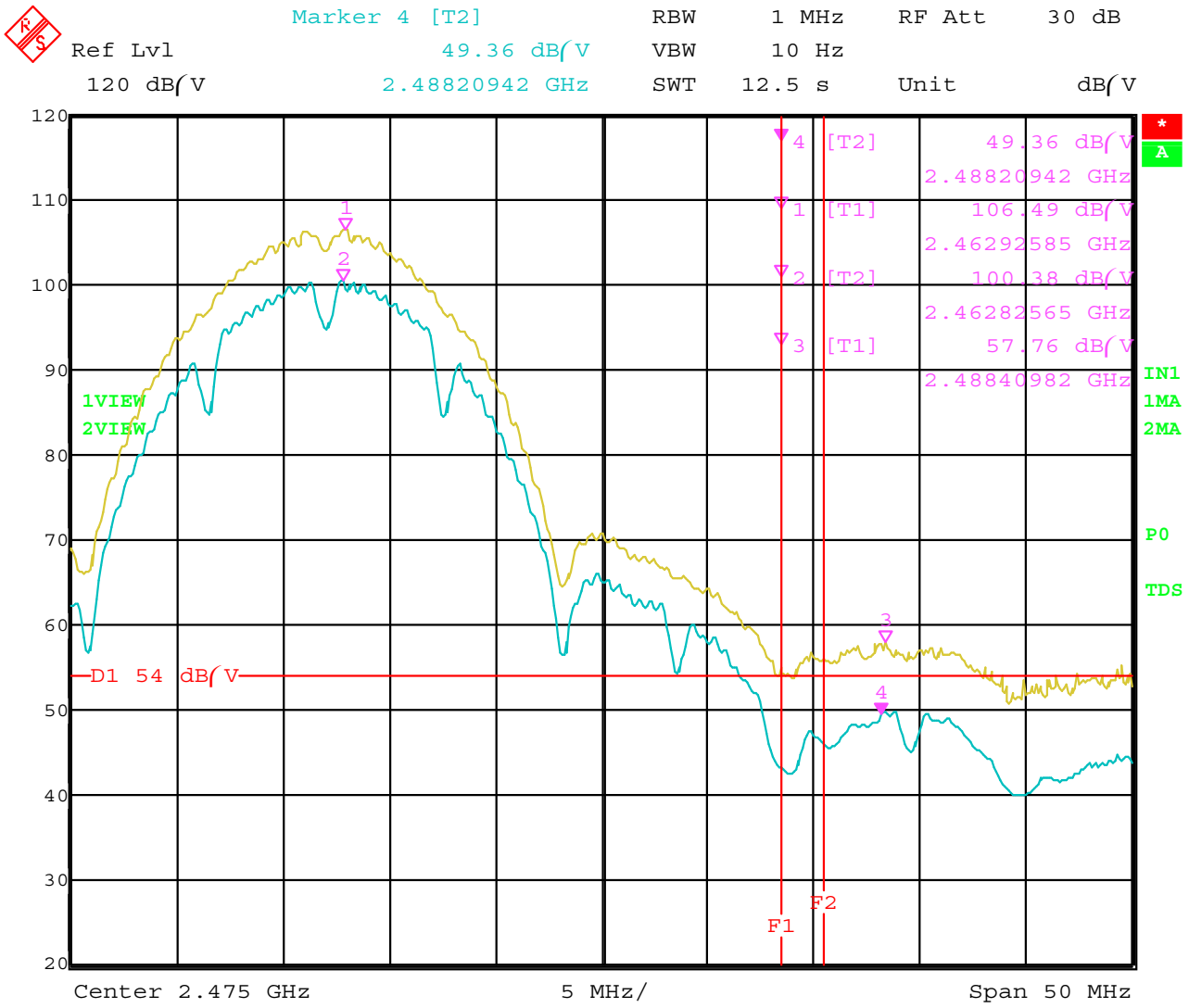
Date: 8.MAR.2005 00:09:05

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



Date: 8.MAR.2005 00:27:07

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



Date: 8.MAR.2005 00:19:18

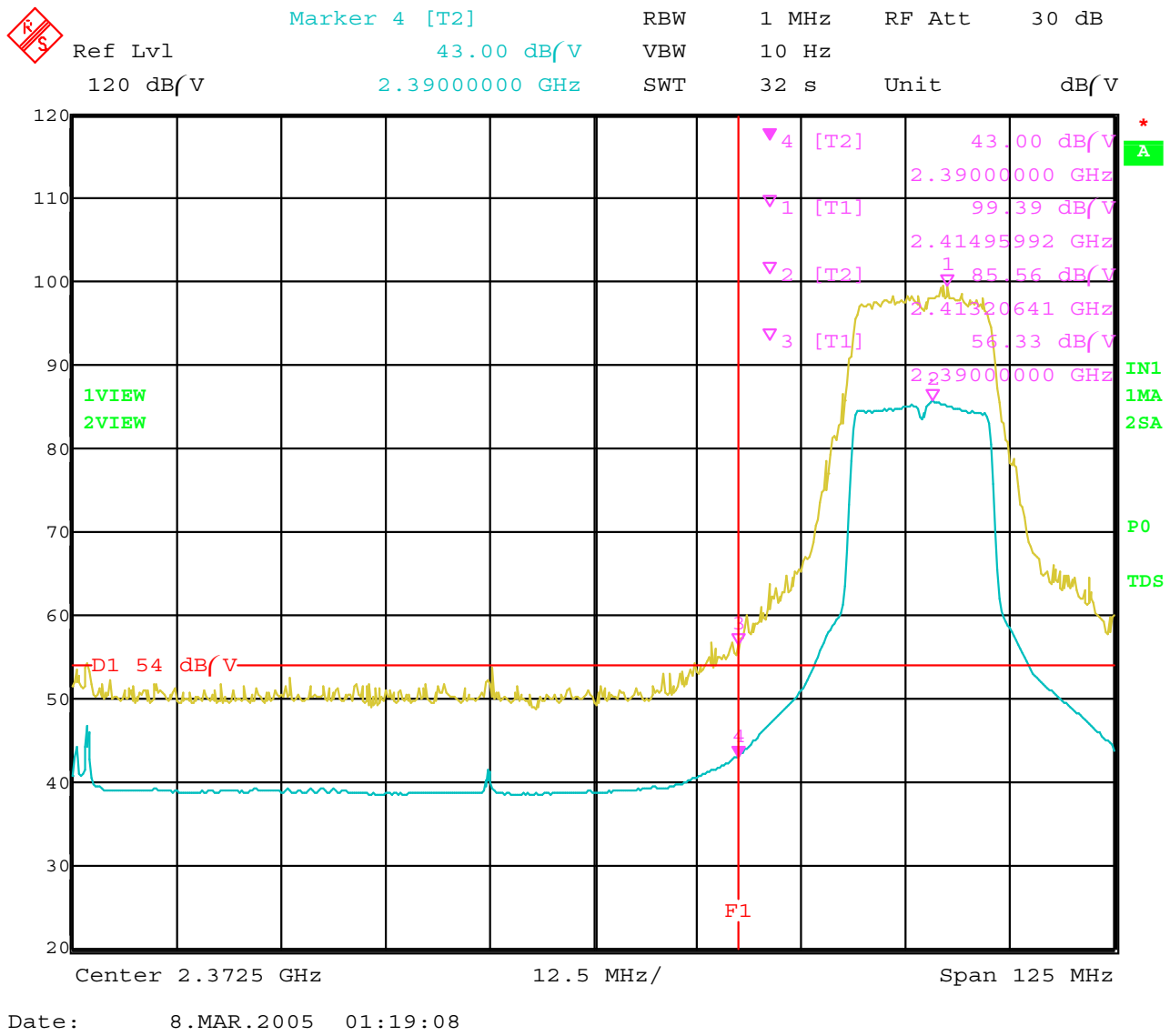
Band Edge Channel 11 – Horizontal Polarization – 802.11 b Mode – Phycomp Antenna

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

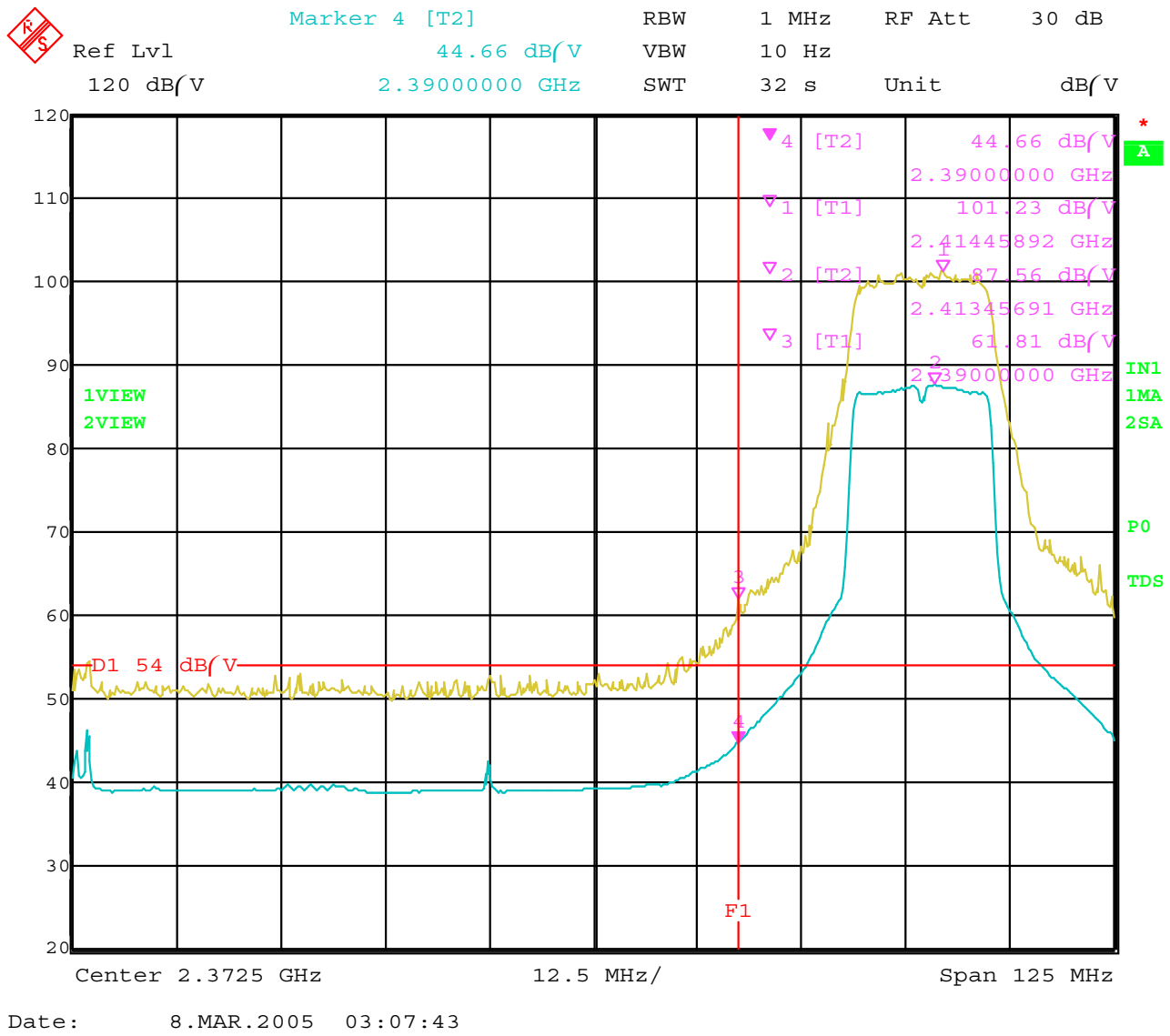
FCC 15.247
Intel Corporation Date: 3/08/05
Intel Mini PCI Type 3A 802.11BG Wireless LAN Adapter Lab: B
Model: WM3A2200BG Tested By: Kyle Fujimoto
Configuration: Dell Latitude Laptop D510 Agency Series Number: PP17L -- Main Port
With Phycomp Antenna
Channel 1 - 802.11 g Mode Gain : 22.5 Peak Power: 16.38 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

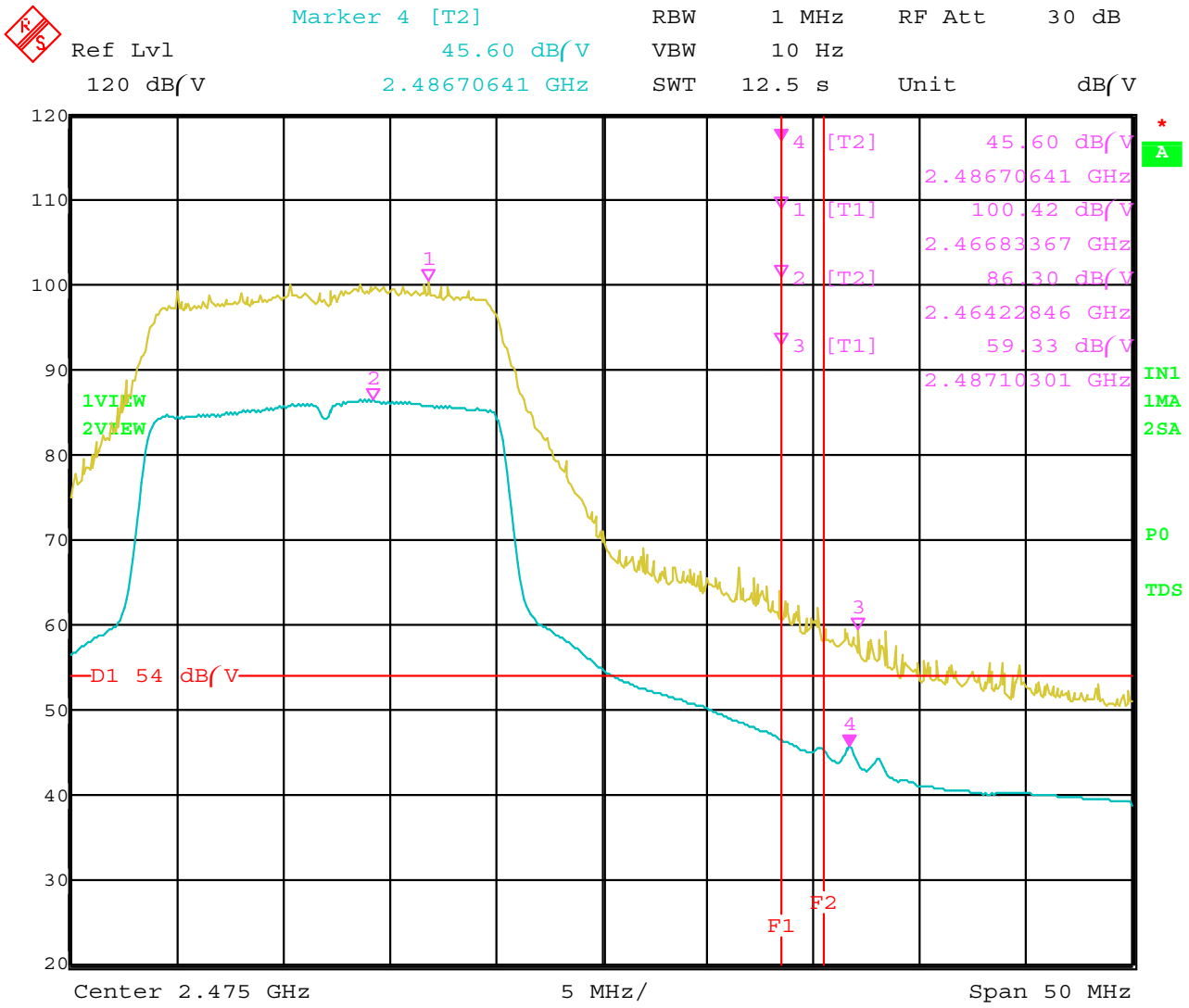


Date: 8.MAR.2005 01:19:08

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

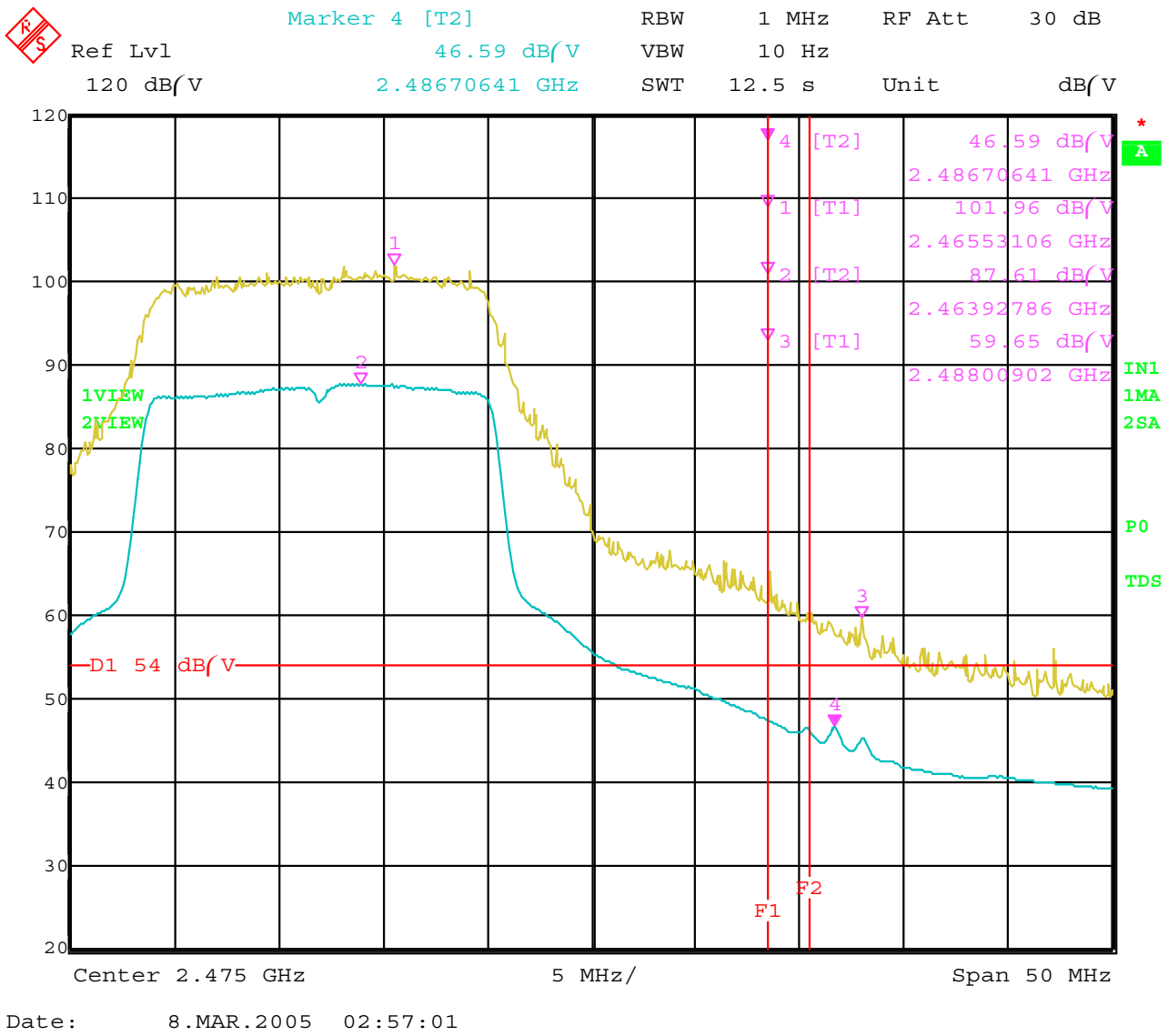


Band Edge – Channel 1 – Horizontal Polarization – 802.11 g Mode – Phycomp Antenna



Date: 8.MAR.2005 01:29:44

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



Date: 8.MAR.2005 02:57:01

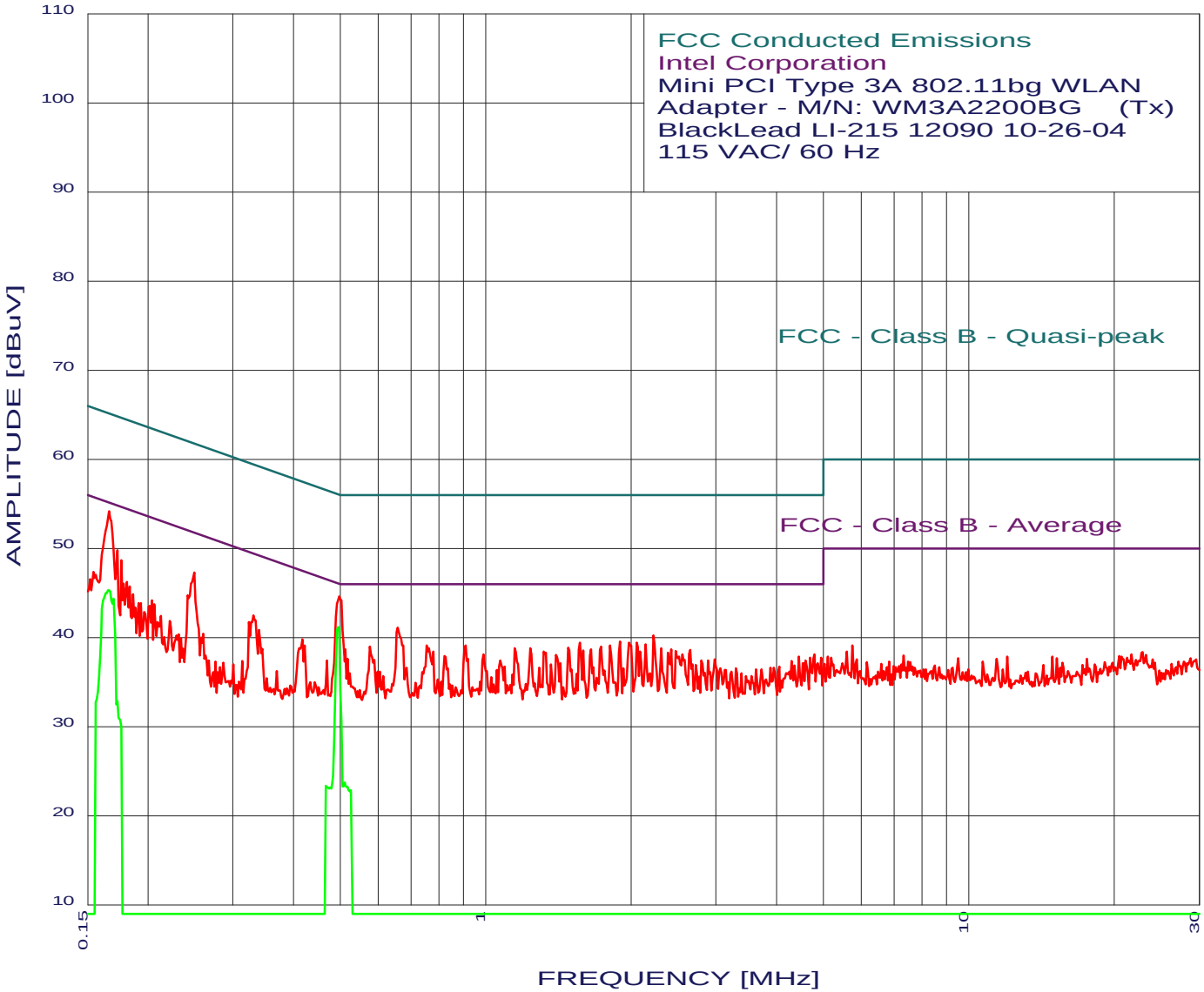
Band Edge – Channel 11 – Horizontal Polarization – 802.11 g Mode – Phycomp Antenna

CONDUCTED EMISSIONS

DATA SHEETS

EMISSION LEVEL [dBuV] PEAK 3/09/2005 14:05:53

Graph forPeak& Average



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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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

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

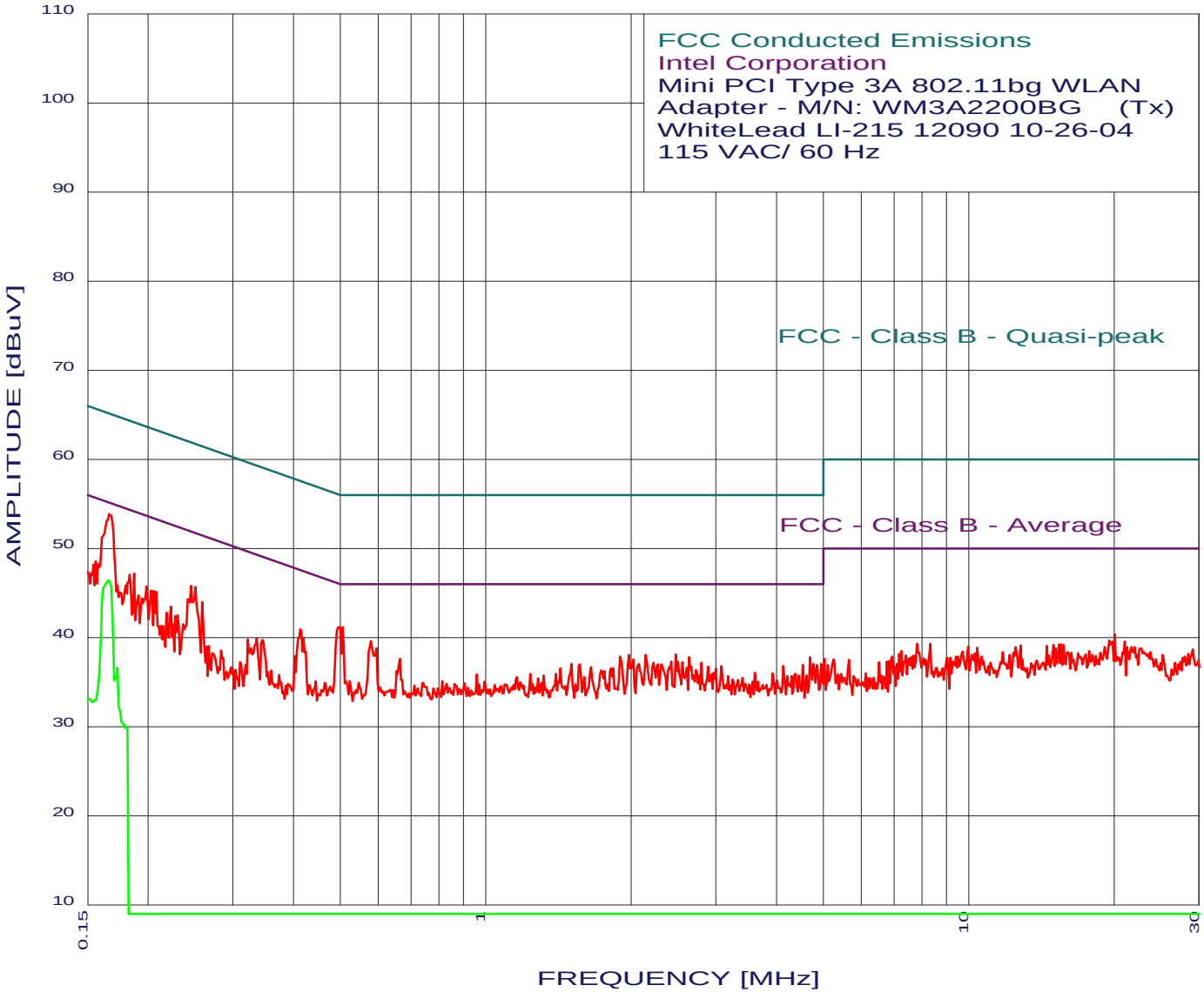
Intel Corporation 3/09/2005 14:05:53
Mini PCI Type 3A 802.11bg Wireless LAN Adapter
Model: WM3A2200BG (Transmit Mode)
Black Lead - 115 VAC/ 60 Hz
TEST ENGINEER : James Ross

---
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



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

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

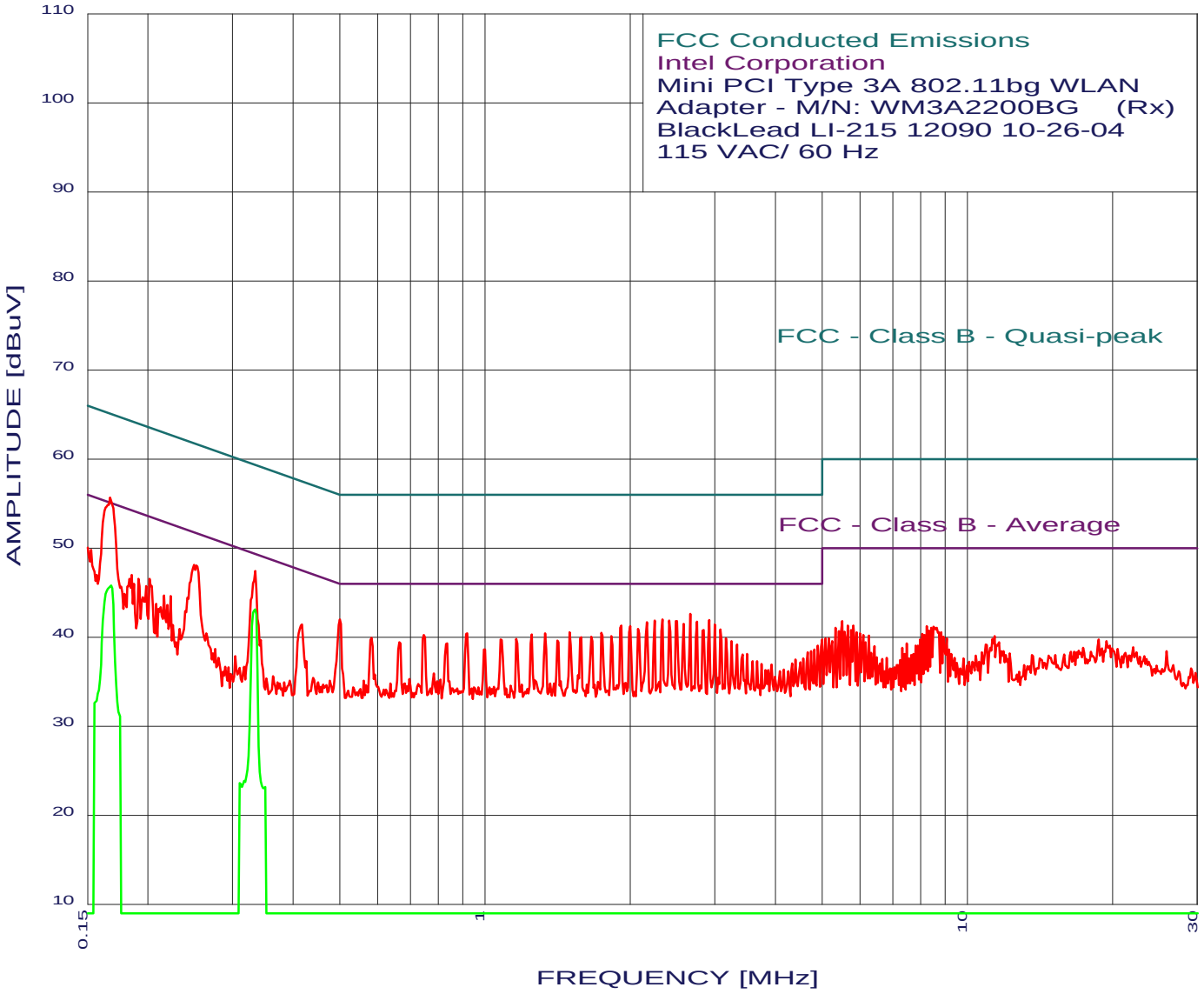
Intel Corporation 3/09/2005 14:26:00
Mini PCI Type 3A 802.11bg Wireless LAN Adapter
Model: WM3A2200BG (Transmit Mode)
White Lead - 115 VAC/ 60 Hz
TEST ENGINEER : James Ross

---
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



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

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

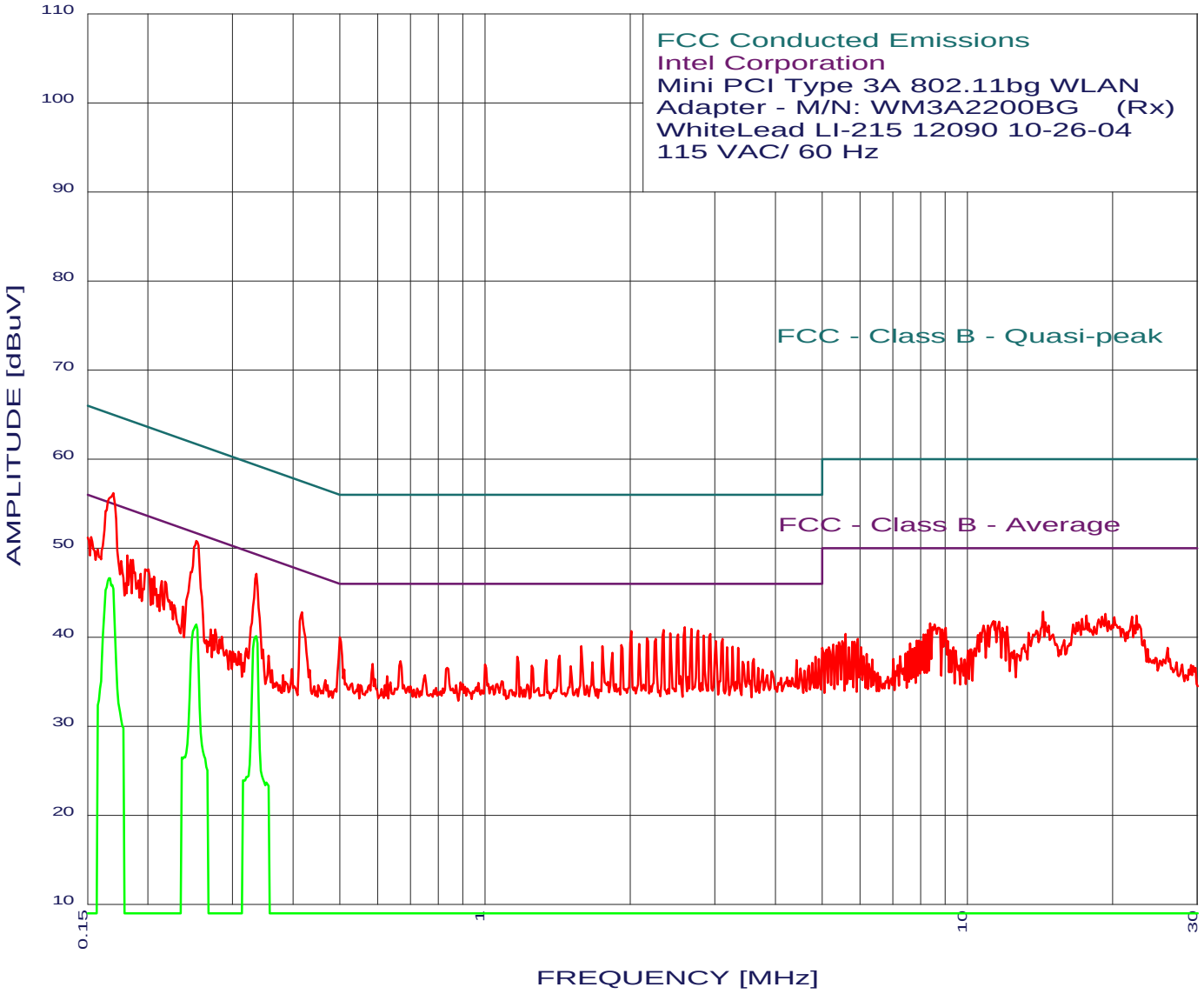
Intel Corporation 3/09/2005 14:39:21
Mini PCI Type 3A 802.11bg Wireless LAN Adapter
Model: WM3A2200BG (Receive Mode)
Black Lead - 115 VAC/ 60 Hz
TEST ENGINEER : James Ross

---
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

EMISSION LEVEL [dBuV] PEAK 3/09/2005 14:48:37

Graph forPeak& Average



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

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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

**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

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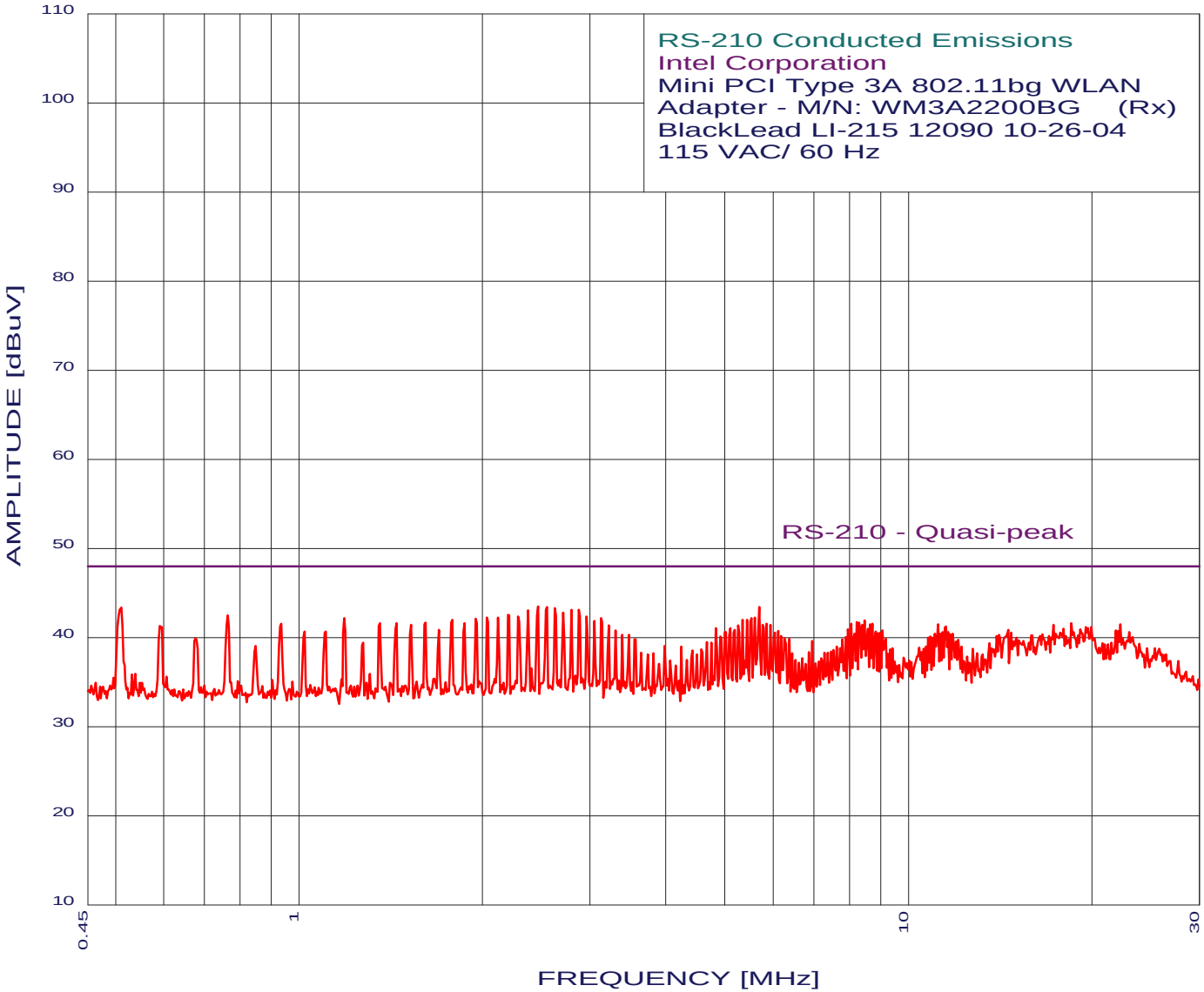
3 highest peaks above -50.00 dB of FCC - Class B - Average limit line
Peak criteria : 3.00 dB, Curve : Average

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



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

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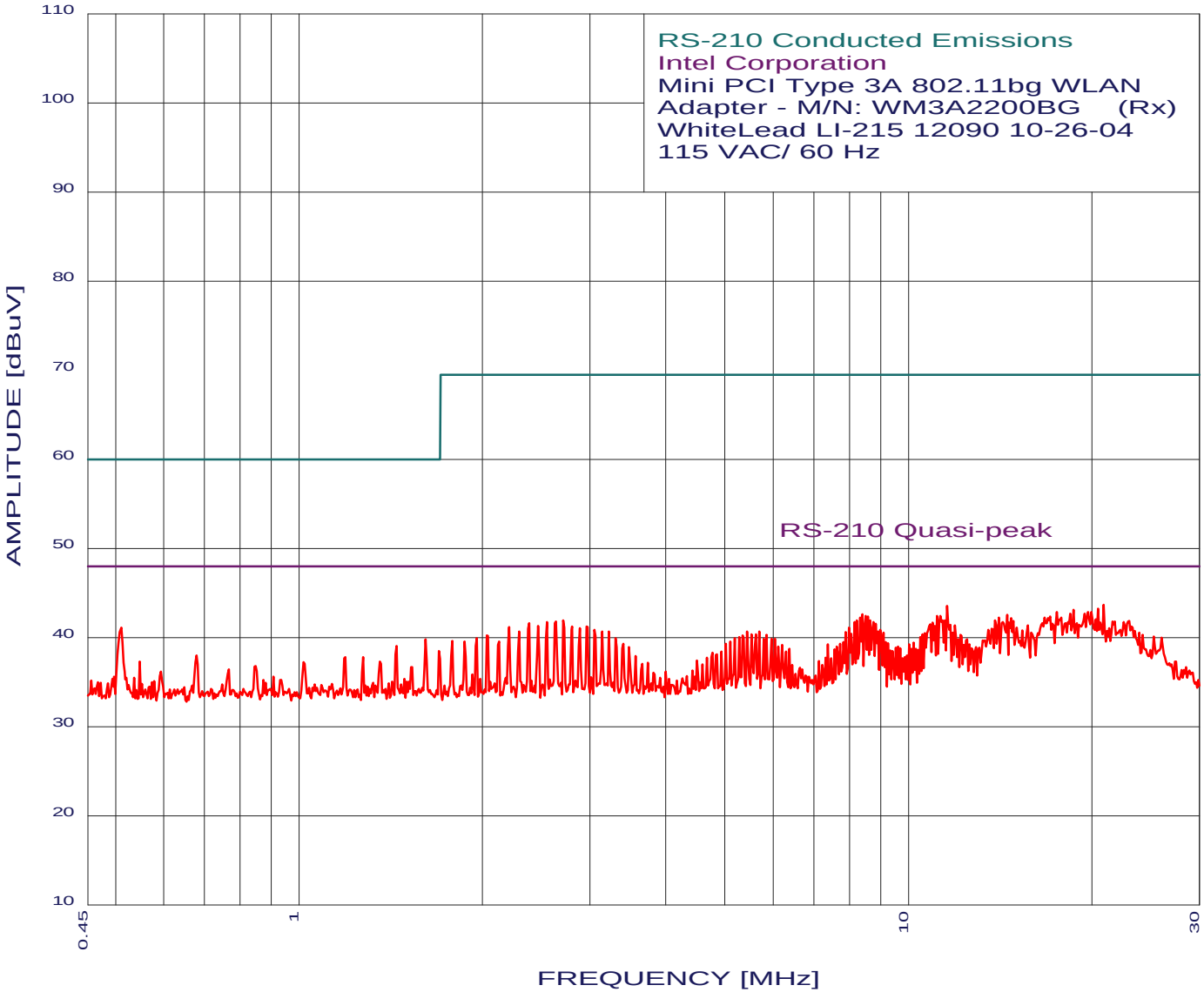
49 highest peaks above -50.00 dB of RS-210 - Quasi-peak limit line
Peak criteria : 3.00 dB, Curve : Peak

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	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

EMISSION LEVEL [dBuV] PEAK 3/09/2005 15:39:57

Graph forPeak



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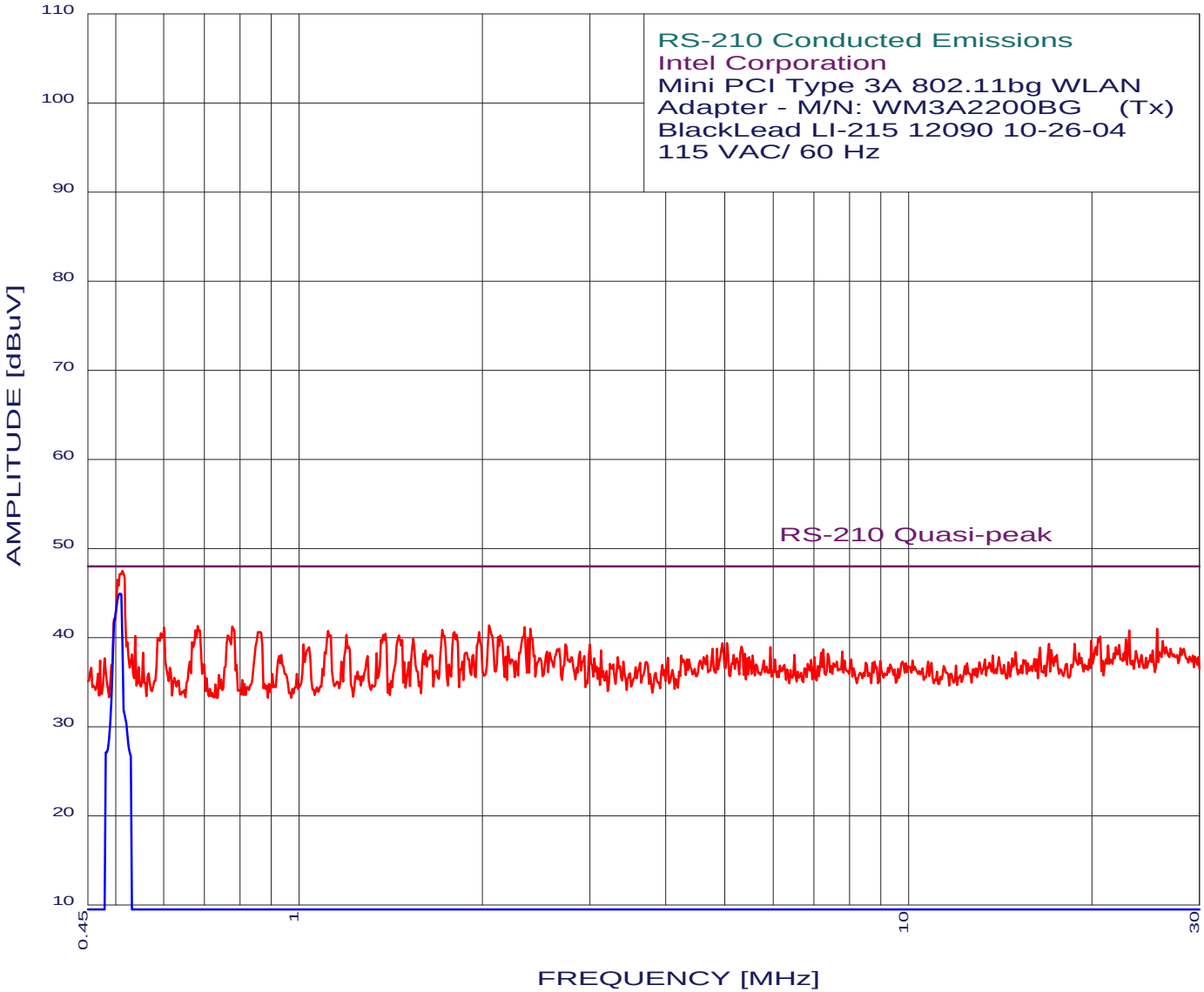
49 highest peaks above -50.00 dB of RS-210 - Quasi-peak limit line
Peak criteria : 3.00 dB, Curve : Peak

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

EMISSION LEVEL [dBuV] PEAK 3/09/2005 15:57:22

Graph forPeak& Quasi-Peak



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

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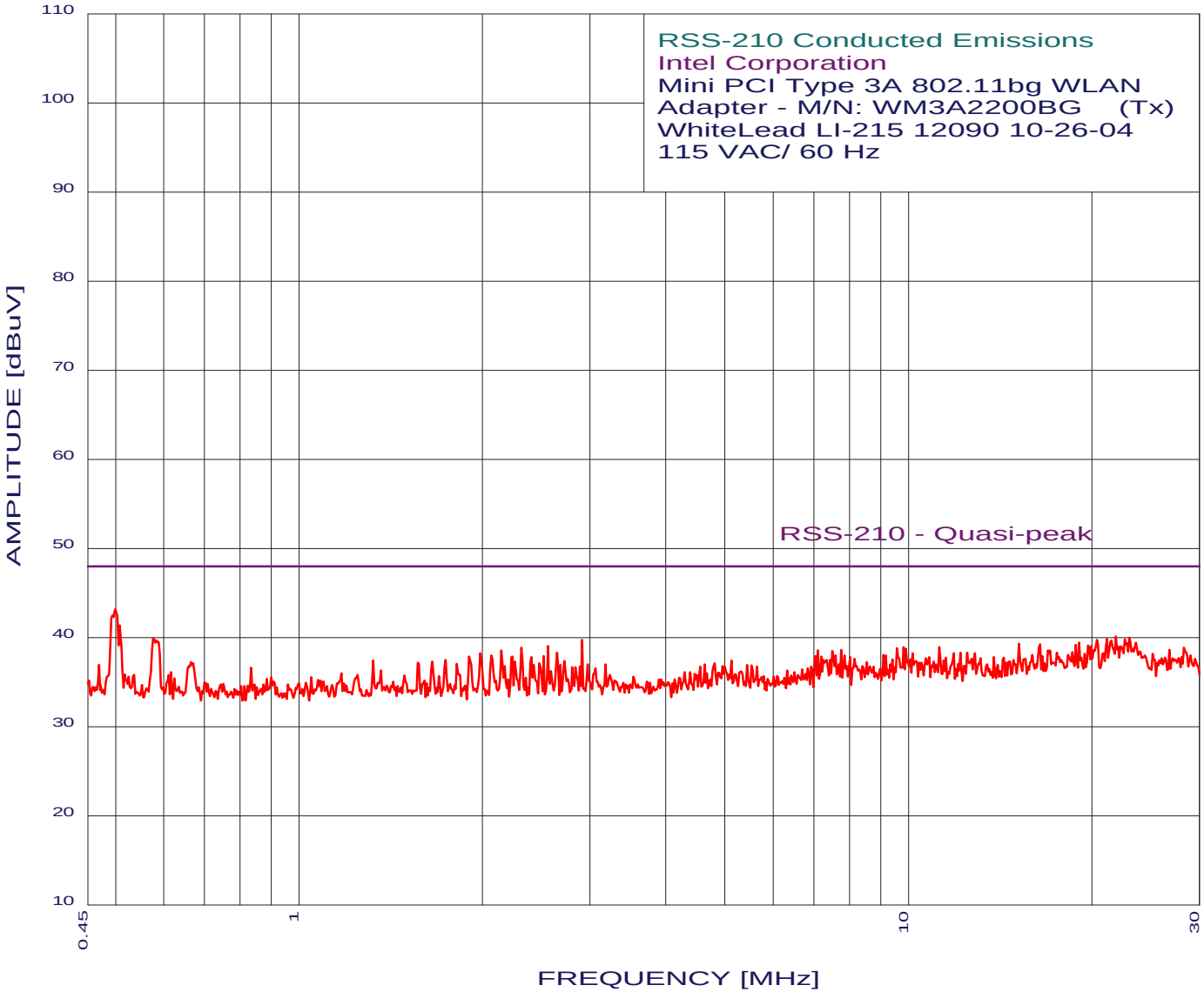
1 highest peaks above -50.00 dB of RS-210 - Quasi-peak limit line
Peak criteria : 3.00 dB, Curve : Quasi-peak

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

EMISSION LEVEL [dBuV] PEAK 3/09/2005 16:10:29

Graph forPeak



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