

FCC TEST REPORT (15.407)

REPORT NO.: RF931026L19A

MODEL NO.: DWL-AG132

RECEIVED: Oct. 21, 2004

TESTED: Oct. 21, 2004 ~ Jan. 22, 2005

ISSUED: Jan. 25, 2005

APPLICANT: D-Link Corporation

ADDRESS: No. 8, Li-Hsin VII Road Science Based
Industrial Park Hsin-Chu, Taiwan, R.O.C.

ISSUED BY: Advance Data Technology Corporation

LAB ADDRESS: No. 47, 14th Ling, Chia Pau Tsuen, Lin Kou
Hsiang 244, Taipei Hsien, Taiwan, R.O.C.

TEST LOCATION: No. 19, Hwa Ya 2nd Rd., Wen Hwa Tsuen,
Kwei Shan Hsiang, Taoyuan Hsien 333,
Taiwan, R.O.C.

This test report consists of 107 pages in total. It may be duplicated completely for legal use with the approval of the applicant. It should not be reproduced except in full, without the written approval of our laboratory. The client should not use it to claim product endorsement by CNLA, A2LA or any government agencies. The test results in the report only apply to the tested sample.



0528
ILAC MRA



No. 2177-01

Table of Contents

1.	CERTIFICATION.....	4
2.	SUMMARY OF TEST RESULTS	5
2.1	MEASUREMENT UNCERTAINTY	6
3.	GENERAL INFORMATION	7
3.1	GENERAL DESCRIPTION OF EUT	7
3.2	DESCRIPTION OF TEST MODES	8
3.3	GENERAL DESCRIPTION OF APPLIED STANDARDS	11
3.4	DESCRIPTION OF SUPPORT UNITS	12
3.5	CONFIGURATION OF SYSTEM UNDER TEST	13
4.	TEST TYPES AND RESULTS (5.15 TO 5.35G BAND).....	14
4.1	CONDUCTED EMISSION MEASUREMENT	14
4.1.1	LIMITS OF CONDUCTED EMISSION MEASUREMENT	14
4.1.2	TEST INSTRUMENTS	14
4.1.3	TEST PROCEDURES	15
4.1.4	DEVIATION FROM TEST STANDARD	15
4.1.5	TEST SETUP	16
4.1.6	EUT OPERATING CONDITIONS.....	16
4.1.7	TEST RESULTS	17
4.2	Radiated Emission Measurement.....	21
4.2.1	LIMITS OF RADIATED EMISSION MEASUREMENT	21
4.2.2	LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS	22
4.2.3	TEST INSTRUMENTS	23
4.2.4	TEST PROCEDURES	24
4.2.5	DEVIATION FROM TEST STANDARD	24
4.2.6	TEST SETUP	25
4.2.7	EUT OPERATING CONDITION	25
4.2.8	RESULT	26
4.3	Peak transmit power MEASUREMENT	44
4.3.1	LIMITS OF PEAK TRANSMIT POWER MEASUREMENT	44
4.3.2	TEST INSTRUMENTS	44
4.3.3	TEST PROCEDURE	45
4.3.4	DEVIATION FROM TEST STANDARD	45
4.3.5	TEST SETUP	45
4.3.6	EUT OPERATING CONDITIONS.....	45
4.3.7	TEST RESULTS	46
4.4	Peak power EXCURSION MEASUREMENT	62
4.4.1	LIMITS OF PEAK POWER EXCURSION MEASUREMENT	62
4.4.2	TEST INSTRUMENTS	62
4.4.3	TEST PROCEDURE	63



4.4.4	DEVIATION FROM TEST STANDARD	63
4.4.5	TEST SETUP	63
4.4.6	EUT OPERATING CONDITIONS.....	63
4.4.7	TEST RESULTS	64
4.5	PEAK power spectral density measurement	73
4.5.1	LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT	73
4.5.2	TEST INSTRUMENTS	73
4.5.3	TEST PROCEDURES	74
4.5.4	DEVIATION FROM TEST STANDARD	74
4.5.5	TEST SETUP	74
4.5.6	EUT OPERATING CONDITIONS.....	74
4.5.7	TEST RESULTS	75
4.6	FREQUENCY STABILITY	84
4.6.1	LIMITS OF FREQUENCY STABILITY MEASUREMENT	84
4.6.2	TEST INSTRUMENTS	84
4.6.3	TEST PROCEDURE	84
4.6.4	DEVIATION FROM TEST STANDARD	84
4.6.5	TEST SETUP	85
4.6.6	EUT OPERATING CONDITION	85
4.6.7	TEST RESULTS	86
4.7	BAND EDGES MEASUREMENT	87
4.7.1	TEST INSTRUMENTS	87
4.7.2	TEST PROCEDURE	87
4.7.3	EUT OPERATING CONDITION	87
4.7.4	TEST RESULTS	87
4.8	ANTENNA REQUIREMENT	102
4.8.1	STANDARD APPLICABLE	102
4.8.2	ANTENNA CONNECTED CONSTRUCTION.....	102
5.	PHOTOGRAPHS OF THE TEST CONFIGURATION	103
6.	INFORMATION ON THE TESTING LABORATORIES.....	107



1. CERTIFICATION

PRODUCT: D-Link AirPremier AG DWL-AG132 Wireless USB Adapter
BRAND NAME: D-Link
MODEL NO.: DWL-AG132
APPLICANT: D-Link Corporation
TEST SAMPLE: Engineering Sample
TESTED: Oct. 21, 2004 ~ Jan. 22, 2005
STANDARDS: FCC Part 15, Subpart C (Section 15.247),
Subpart E (Section 15.407), ANSI C63.4-2003

The above equipment has been tested by **Advance Data Technology Corporation**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : Windy Chou, **DATE:** Jan. 25, 2005
(Windy Chou)

TECHNICAL ACCEPTANCE : Gary Chang, **DATE:** Jan. 25, 2005
Responsible for RF (Gary Chang)

APPROVED BY : Cody Chang, **DATE:** Jan. 25, 2005
(Cody Chang, Deputy Manager)

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart E (Section 15.407)			
Standard Section	Test Type	Result	Remark
15.407(b)(5)	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -18.88dB at 0.224MHz
15.407(b/1/2/3)(b)(5)	Electric Field Strength Spurious Emissions, 30MHz ~ 40000MHz	PASS	Meet the requirement of limit. Minimum passing margin is -1.42dB at 15720.00MHz
15.407(a/1/2/3)	Peak Transmit Power	PASS	Meet the requirement of limit.
15.407(a)(6)	Peak Power Excursion	PASS	Meet the requirement of limit.
15.407(a/1/2/3)	Peak Power Spectral Density	PASS	Meet the requirement of limit.
15.407(g)	Frequency Stability	PASS	Meet the requirement of limit.

2.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4:

Measurement	Frequency	Uncertainty
Conducted emissions	9kHz~30MHz	2.44 dB
Radiated emissions	30MHz ~ 200MHz	3.73 dB
	200MHz ~1000MHz	3.74 dB
	1GHz ~ 18GHz	2.20 dB
	18GHz ~ 40GHz	1.88 dB

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

EUT	D-Link AirPremier AG DWL-AG132 Wireless USB Adapter
MODEL NO.	DWL-AG132
POWER SUPPLY	5.0Vdc from host equipment
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	802.11b: 11/5.5/2/1Mbps 802.11g: 54/48/36/24/18/12/9/6Mbps (Turbo mode: up to 108Mbps *see Note 2) 802.11a: 54/48/36/24/18/12/9/6Mbps (Turbo mode: up to 108Mbps *see Note 2)
FREQUENCY RANGE	802.11b & 802.11g: 2412 ~ 2462MHz 802.11a: 5.15 ~ 5.35GHz and 5.725 ~ 5.850GHz
NUMBER OF CHANNEL	802.11b & 802.11g: 11 for Normal mode 802.11a: 13 for Normal mode / 5 for Turbo mode
CHANNEL SPACING	802.11b & 802.11g: 5MHz 802.11a: 20MHz for Normal mode / 40MHz for Turbo mode
OUTPUT POWER	52.481mW for 802.11b 44.875mW for 802.11g 41.210mW for 5.15 ~ 5.35GHz 41.305mW for 5.725 ~ 5.850GHz
DATA CABLE	Non-shielded, 1.6m without core
ANTENNA TYPE	Chip antenna with 2.0dBi gain for 2.4GHz Chip antenna with 4.0dBi gain for 5GHz
I/O PORTS	USB
ASSOCIATED DEVICES	NA

NOTE:

1. The EUT operates in both the 5GHz and 2.4GHz Bands and compatibility with 802.11a and 802.11b, 802.11g technology.
2. This EUT is capable of providing data rates of up to 108 Mbps in Turbo mode depending upon reception quality.
3. The above EUT information was declared by the manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 DESCRIPTION OF TEST MODES

For 802.11a: Thirteen channels are provided to this EUT.

Channel	Frequency	Channel	Frequency
1	5180 MHz	8	5320 MHz
2	5200 MHz	9	5745 MHz
3	5220 MHz	10	5765 MHz
4	5240 MHz	11	5785 MHz
5	5260 MHz	12	5805 MHz
6	5280 MHz	13	5825 MHz
7	5300 MHz		

This report covers only channels 1-8 for 15.407 rule part. For channels 9-13 test data please refer to 15.247 test report.

Five channels are provided to this EUT for Turbo Mode.

Channel	Frequency	Channel	Frequency
1	5210 MHz	4	5760 MHz
2	5250 MHz	5	5800 MHz
3	5290 MHz		

This report covers only channels 1-3 for 15.407 portion. For channels 4-5 test data please refer to 15.247 test report.

Test Mode Applicability:

EUT configure mode	Applicable to				Description
	PLC	RE<1G	RE≥1G	APCM	
With Cradle	x	x	x	x	EUT tested with USB cradle
Without Cradle	x	x	Note 1	Note 2	EUT tested without USB cradle

Where PLC: Power Line Conducted Emission

RE<1G RE: Radiated Emission below 1GHz

RE≥1G: Radiated Emission above 1GHz

APCM: Antenna Port Conducted Measurement

Note 1: Pre-scan shown USB cradle has no effect for radiated emission above 1 GHz.

Note 2: Conducted RF measurement is independent of Cradle.

Power Line Conducted Emission Test:

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

Mode	Available Channels	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11a	1 to 8	5	OFDM	BPSK	6

Radiated Emission Test (Below 1 GHz):

- ☒ Pre-Scan has been conducted to determine the worst-cast mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

Mode	Available Channels	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11a	1 to 8	5	OFDM	BPSK	6

Radiated Emission Test (Above 1 GHz):

- ☒ Pre-Scan has been conducted to determine the worst-cast mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

Mode	Available Channels	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11a	1 to 8	1, 4, 5, 8	OFDM	BPSK	6
802.11a Turbo	1 to 3	1, 2, 3	OFDM		12

Bandedge Measurement:

- ☒ Pre-Scan has been conducted to determine the worst-cast mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channels, those sit next to the investigated bandedge were selected for the final test as listed below.

Mode	Available Channels	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11a	1 to 8	1, 8	OFDM	BPSK	6
802.11a Turbo	1 to 3	1, 3	OFDM		12

**Antenna Port Conducted Measurement:**

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

Mode	Available Channels	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11a	1 to 8	1, 4, 5, 8	OFDM	BPSK	6
802.11a Turbo	1 to 3	1, 2, 3	OFDM		12



3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a D-Link AirPremier AG DWL-AG132 Wireless USB Adapter. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart E (15.407).

ANSI C63.4-2003

All test items have been performed and recorded as per the above standards.

NOTE: The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

3.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

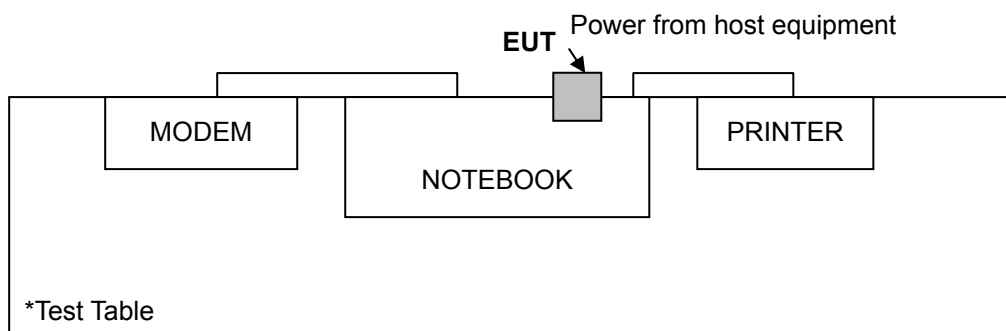
NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK COMPUTER	DELL	PP05L	12130898320	E2K24CLNS
2	PRINTER	EPSON	LQ-300+	DCGY054147	FCC DoC Approved
3	MODEM	ACEEX	1414V/3	0401008269	IFAXDM1414

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	NA
2	1.2m shielded cable without core
3	1.2m shielded cable without core

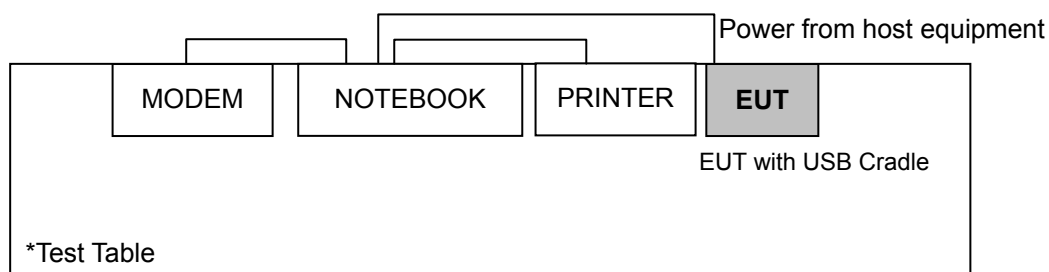
NOTE: All power cords of the above support units are non shielded (1.8m).

3.5 CONFIGURATION OF SYSTEM UNDER TEST

For test mode 1 – without USB cradle



For test mode 2 – with USB cradle



4. TEST TYPES AND RESULTS (5.15 TO 5.35G BAND)

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50

- NOTE:**
1. The lower limit shall apply at the transition frequencies.
 2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.
 3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESCS30	100291	Nov. 16, 2005
RF signal cable Woken	5D-FB	Cable-HYC01-01	Mar. 02, 2005
LISN ROHDE & SCHWARZ	ESH3-Z5	100312	Mar. 03, 2005
LISN ROHDE & SCHWARZ	ESH2-Z5	100104	Mar. 02, 2005
Software ADT	ADT_Cond_V3	NA	NA

- NOTE:**
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 2. The test was performed in HwaYa Shielded Room 1.
 3. The VCCI Site Registration No. is C-2040.



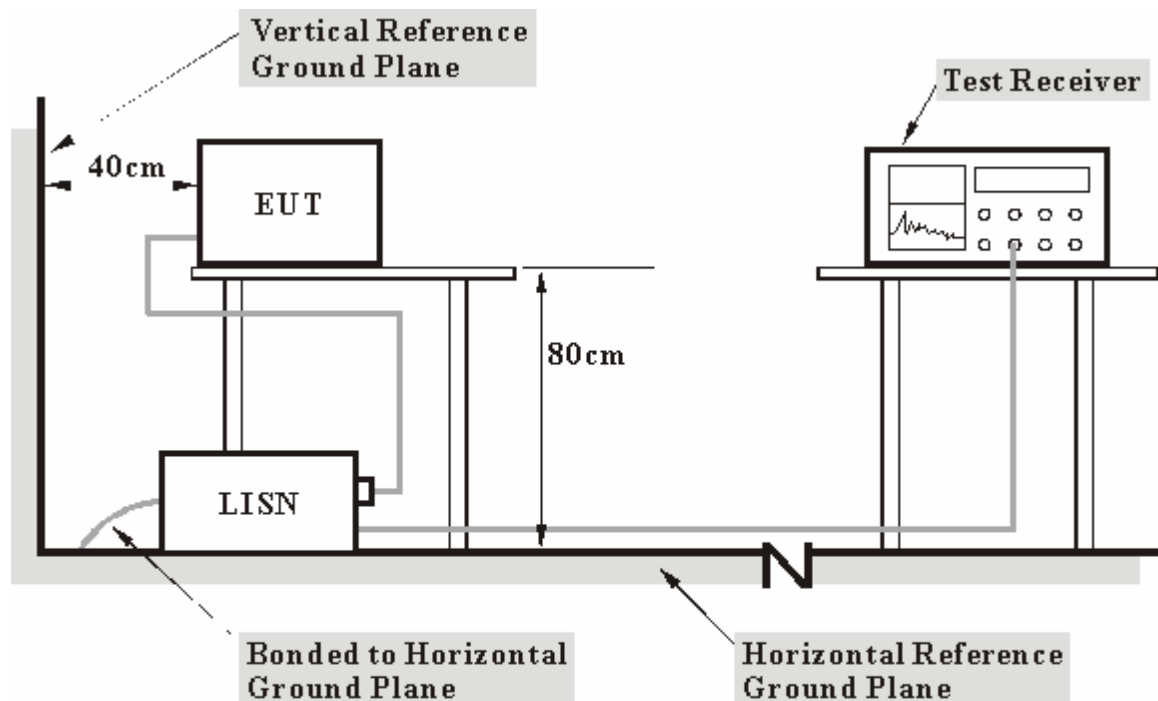
4.1.3 TEST PROCEDURES

- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 TEST SETUP



- Note:** 1. Support units were connected to second LISN.
 2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

4.1.6 EUT OPERATING CONDITIONS

Same as 4.1.6

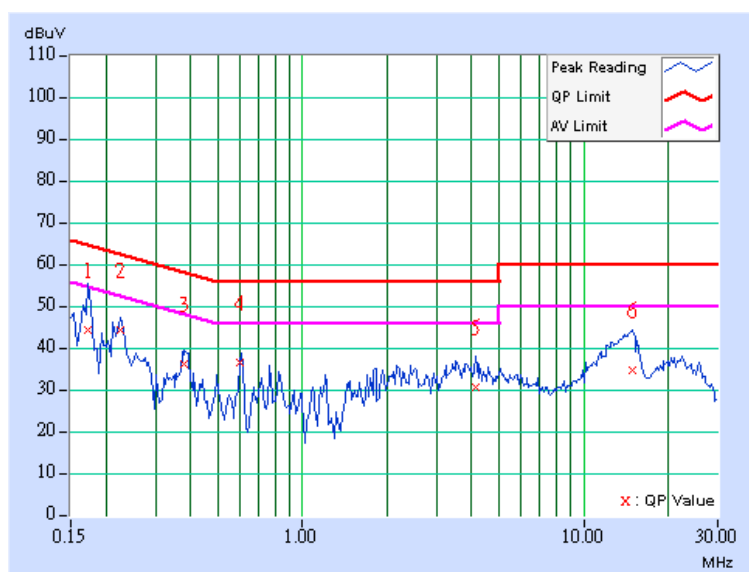
4.1.7 TEST RESULTS

802.11a Worst-Case (Without Cradle)

EUT	D-Link AirPremier AG DWL-AG132 Wireless USB Adapter	MODEL	DWL-AG132
		6dB BANDWIDTH	9 kHz
CHANNEL	5	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH, 991hPa	PHASE	Line (L)
TEST MOED	1 (Without USB Cradle)	TESTED BY	Steven Lu

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.173	0.11	43.78	-	43.89	-	64.79	54.79	-20.90	-
2	0.224	0.12	43.66	-	43.78	-	62.66	52.66	-18.88	-
3	0.380	0.13	35.59	-	35.72	-	58.27	48.27	-22.55	-
4	0.601	0.13	35.99	-	36.12	-	56.00	46.00	-19.88	-
5	4.117	0.21	29.88	-	30.09	-	56.00	46.00	-25.91	-
6	14.879	0.77	34.14	-	34.91	-	60.00	50.00	-25.09	-

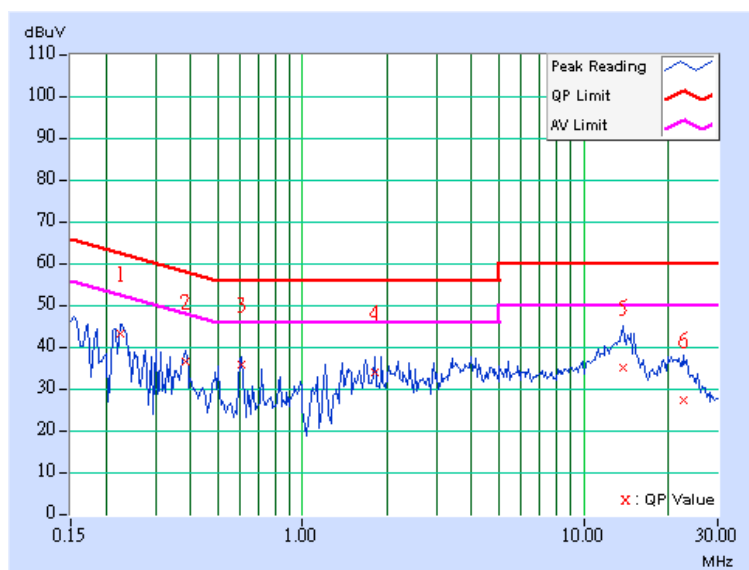
- REMARKS:** 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT	D-Link AirPremier AG DWL-AG132 Wireless USB Adapter	MODEL	DWL-AG132
		6dB BANDWIDTH	9 kHz
CHANNEL	5	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH, 991hPa	PHASE	Neutral (N)
TEST MODE	1 (Without USB Cradle)	TESTED BY	Steven Lu

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.224	0.11	42.71	-	42.82	-	62.66	52.66	-19.84	-
2	0.384	0.12	36.05	-	36.17	-	58.18	48.18	-22.02	-
3	0.603	0.12	35.18	-	35.30	-	56.00	46.00	-20.70	-
4	1.813	0.16	33.50	-	33.66	-	56.00	46.00	-22.34	-
5	13.789	0.55	34.66	-	35.21	-	60.00	50.00	-24.79	-
6	22.676	0.69	26.66	-	27.35	-	60.00	50.00	-32.65	-

- REMARKS:** 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.

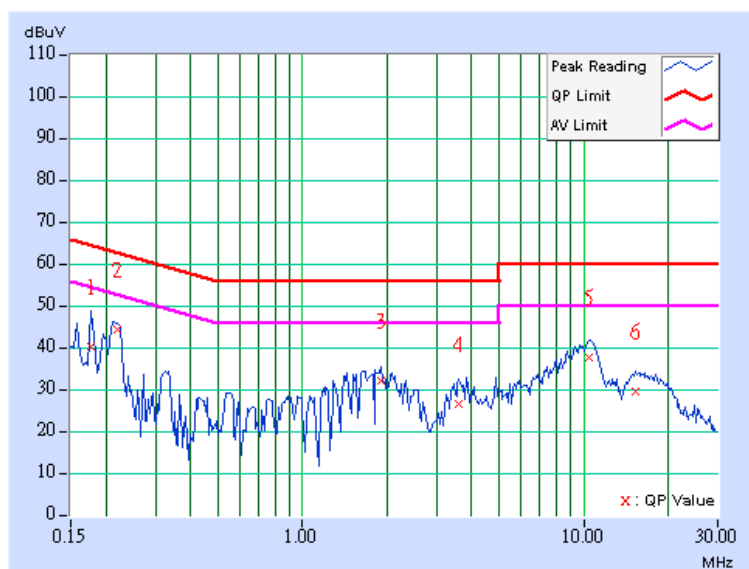


802.11a Worst-Case (With Cradle)

EUT	D-Link AirPremier AG DWL-AG132 Wireless USB Adapter	MODEL	DWL-AG132
		6dB BANDWIDTH	9 kHz
CHANNEL	5	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	PHASE	Line (L)
TEST MOED	2 (With USB Cradle)	TESTED BY	Match Tsui

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.177	0.11	39.54	-	39.65	-	64.61	54.61	-24.96	-
2	0.220	0.12	43.59	-	43.71	-	62.81	52.81	-19.10	-
3	1.898	0.16	31.57	-	31.73	-	56.00	46.00	-24.27	-
4	3.613	0.20	25.77	-	25.97	-	56.00	46.00	-30.03	-
5	10.492	0.35	36.84	-	37.19	-	60.00	50.00	-22.81	-
6	15.367	0.80	28.75	-	29.55	-	60.00	50.00	-30.45	-

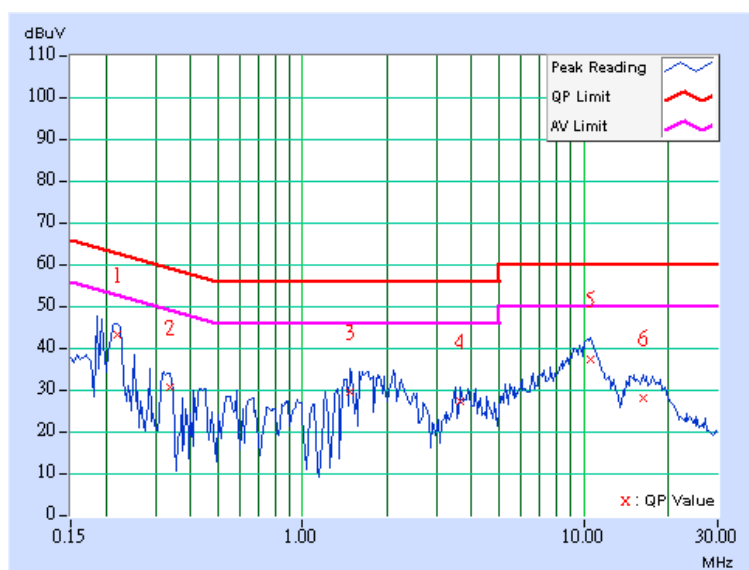
- REMARKS:** 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT	D-Link AirPremier AG DWL-AG132 Wireless USB Adapter	MODEL	DWL-AG132
		6dB BANDWIDTH	9 kHz
CHANNEL	5	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	PHASE	Neutral (N)
TEST MODE	2 (With USB Cradle)	TESTED BY	Match Tsui

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.220	0.11	42.83	-	42.94	-	62.81	52.81	-19.87	-
2	0.338	0.11	29.90	-	30.01	-	59.26	49.26	-29.25	-
3	1.484	0.15	29.11	-	29.26	-	56.00	46.00	-26.74	-
4	3.660	0.19	26.76	-	26.95	-	56.00	46.00	-29.05	-
5	10.586	0.32	36.84	-	37.16	-	60.00	50.00	-22.84	-
6	16.230	0.66	27.33	-	27.99	-	60.00	50.00	-32.01	-

- REMARKS:** 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



4.2 RADIATED EMISSION MEASUREMENT

4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

Frequencies (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.



4.2.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

Frequencies (MHz)	EIRP Limit (dBm)	Equivalent Field Strength at 3m (dBμV/m) *note 3
5150~5250	-27	68.3
5250~5350	-27	68.3
5725~5825	-27 *note 1	68.3
	-17 *note 2	78.3

NOTE:

1. For frequencies 10MHz or greater above or below the band edge.
2. All emissions within the frequency range from the band edge to 10MHz above or below the band edge.
3. The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength

$$E = \frac{1000000\sqrt{30P}}{3} \mu\text{V/m, where P is the eirp (Watts)}$$



4.2.3 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESIB7	100188	Jan. 13, 2005
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100039	Nov. 21, 2005
BILOG Antenna SCHWARZBECK	VULB9168	9168-157	Feb. 03, 2005
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-407	Feb. 03, 2005
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA 9170241	Feb. 23, 2005
Preamplifier Agilent	8449B	3008A01961	Nov. 09, 2005
Preamplifier Agilent	8447D	2944A10629	Nov. 09, 2005
RF signal cable HUBER+SUHNER	SUCOFLEX 104	218182/4	Mar. 04, 2005
RF signal cable HUBER+SUHNER	SUCOFLEX 104	218194/4	Mar. 04, 2005
Software ADT.	ADT_Radiated_V5.14	NA	NA
Antenna Tower ADT.	AT100	AT93021702	NA
Turn Table ADT.	TT100.	TT93021702	NA
Controller ADT.	SC100.	SC93021702	NA

- NOTE:**
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 2. The test was performed in HwaYa Chamber 1.
 3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
 4. The IC Site Registration No. is IC4924-2.



4.2.4 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

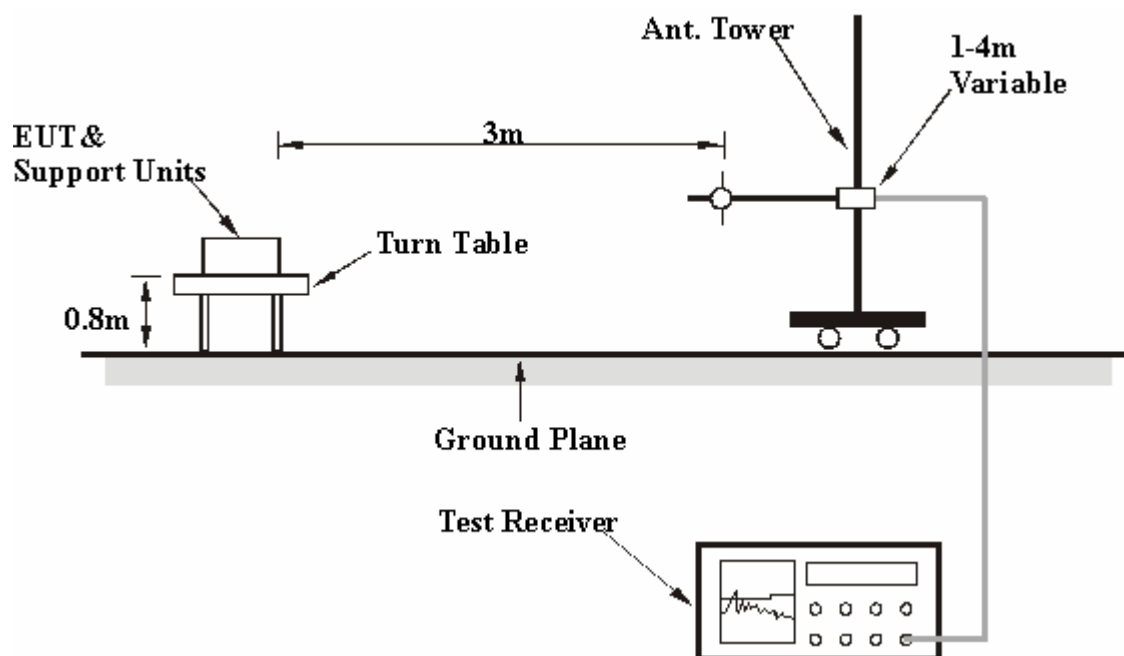
NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 Hz for Average detection (AV) at frequency above 1GHz.

4.2.5 DEVIATION FROM TEST STANDARD

No deviation

4.2.6 TEST SETUP



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

4.2.7 EUT OPERATING CONDITION

Same as 4.1.6

4.2.8 RESULT

802.11a Radiated Emission Below 1 GHz Worst-Case (Without Cradle)

EUT	D-Link AirPremier AG DWL-AG132 Wireless USB Adapter	MODEL	DWL-AG132
CHANNEL	5		
FREQUENCY RANGE	Below 1000MHz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	1 (Without USB Cradle)	TESTED BY	Match Tsui

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	115.53	37.75 QP	43.50	-5.75	1.50 H	46	25.17	12.57
2	168.02	32.41 QP	43.50	-11.09	1.50 H	241	18.29	14.12
3	199.12	35.30 QP	43.50	-8.20	1.50 H	268	23.84	11.46
4	249.66	28.14 QP	46.00	-17.86	1.00 H	268	14.93	13.22
5	356.57	32.81 QP	46.00	-13.19	1.00 H	277	17.02	15.79
6	455.71	30.38 QP	46.00	-15.62	2.00 H	79	12.23	18.15
7	500.42	33.13 QP	46.00	-12.87	1.50 H	337	14.39	18.74
8	533.47	27.38 QP	46.00	-18.62	1.50 H	16	8.01	19.37
9	599.56	33.18 QP	46.00	-12.82	1.50 H	82	12.18	21.00
10	667.60	31.89 QP	46.00	-14.11	1.50 H	220	9.99	21.90
11	731.74	33.95 QP	46.00	-12.05	1.00 H	310	10.86	23.08
12	760.90	33.57 QP	46.00	-12.43	2.00 H	49	9.98	23.59
13	799.78	32.89 QP	46.00	-13.11	1.00 H	43	9.07	23.82
14	863.93	34.51 QP	46.00	-11.49	2.50 H	64	10.06	24.45
15	961.12	34.07 QP	54.00	-19.93	1.50 H	247	8.39	25.68

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value

EUT	D-Link AirPremier AG DWL-AG132 Wireless USB Adapter	MODEL	DWL-AG132
CHANNEL	5		
FREQUENCY RANGE	Below 1000MHz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	1 (Without USB Cradle)	TESTED BY	Match Tsui

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	70.82	31.40 QP	40.00	-8.60	1.00 V	301	19.04	12.37
2	117.47	29.15 QP	43.50	-14.35	1.50 V	217	16.38	12.77
3	156.35	28.38 QP	43.50	-15.12	1.00 V	97	13.58	14.80
4	171.90	29.10 QP	43.50	-14.40	1.00 V	181	15.36	13.74
5	249.66	25.47 QP	46.00	-20.53	1.50 V	337	12.25	13.22
6	346.85	27.34 QP	46.00	-18.66	2.00 V	328	11.76	15.58
7	399.34	34.06 QP	46.00	-11.94	1.00 V	13	17.32	16.74
8	455.71	34.84 QP	46.00	-11.16	1.00 V	13	16.69	18.15
9	533.47	31.26 QP	46.00	-14.74	1.00 V	1	11.89	19.37
10	605.39	35.23 QP	46.00	-10.77	1.50 V	331	14.15	21.08
11	665.65	31.15 QP	46.00	-14.85	1.00 V	301	9.28	21.87
12	731.74	31.43 QP	46.00	-14.57	2.00 V	10	8.35	23.08
13	797.84	31.60 QP	46.00	-14.40	2.00 V	4	7.79	23.81
14	863.93	32.89 QP	46.00	-13.11	2.00 V	349	8.45	24.45
15	933.91	33.80 QP	46.00	-12.20	1.00 V	25	8.33	25.47

REMARKS:

1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value

802.11a Radiated Emission Below 1 GHz Worst-Case (With Cradle)

EUT	D-Link AirPremier AG DWL-AG132 Wireless USB Adapter	MODEL	DWL-AG132
CHANNEL	5		
FREQUENCY RANGE	Below 1000MHz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	21deg. C, 64%RH, 991hPa	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	2 (With USB Cradle)	TESTED BY	Match Tsui

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	64.99	15.56 QP	40.00	-24.44	1.25 H	16	38.93	-23.37
2	113.59	29.90 QP	43.50	-13.60	1.50 H	268	54.98	-25.08
3	199.12	30.63 QP	43.50	-12.87	1.75 H	244	54.62	-23.99
4	350.74	33.14 QP	46.00	-12.86	1.00 H	346	50.86	-17.72
5	399.34	28.48 QP	46.00	-17.52	1.00 H	349	43.12	-14.64
6	449.88	25.47 QP	46.00	-20.53	1.75 H	319	39.99	-14.53
7	533.47	21.88 QP	46.00	-24.12	1.50 H	358	36.43	-14.55
8	595.67	26.49 QP	46.00	-19.51	1.50 H	274	39.78	-13.30
9	667.60	31.51 QP	46.00	-14.49	1.00 H	40	42.99	-11.48
10	720.08	26.92 QP	46.00	-19.08	1.75 H	7	39.42	-12.51
11	801.72	24.44 QP	46.00	-21.56	1.00 H	97	34.81	-10.37
12	863.93	24.60 QP	46.00	-21.40	1.00 H	139	33.27	-8.68
13	931.96	24.09 QP	46.00	-21.91	1.75 H	214	32.56	-8.47

REMARKS:

1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value

EUT	D-Link AirPremier AG DWL-AG132 Wireless USB Adapter	MODEL	DWL-AG132
CHANNEL	5		
FREQUENCY RANGE	Below 1000MHz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	2 (With USB Cradle)	TESTED BY	Match Tsui

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	64.99	29.51 QP	40.00	-10.49	1.00 V	43	48.65	-19.14
2	113.59	27.13 QP	43.50	-16.37	1.25 V	16	47.33	-20.20
3	133.03	26.38 QP	43.50	-17.12	1.00 V	229	45.33	-18.95
4	164.13	28.15 QP	43.50	-15.35	1.00 V	313	46.71	-18.57
5	199.12	28.27 QP	43.50	-15.23	1.50 V	310	46.76	-18.50
6	350.74	24.11 QP	46.00	-21.89	1.50 V	277	44.27	-20.16
7	399.34	26.08 QP	46.00	-19.92	1.25 V	280	46.40	-20.33
8	457.66	24.87 QP	46.00	-21.13	1.00 V	298	42.26	-17.39
9	533.47	19.54 QP	46.00	-26.46	1.00 V	337	35.06	-15.52
10	599.56	22.33 QP	46.00	-23.67	1.00 V	115	35.92	-13.60
11	733.69	19.41 QP	46.00	-26.59	1.50 V	262	33.28	-13.87
12	801.72	21.51 QP	46.00	-24.49	1.25 V	169	33.95	-12.45
13	935.85	23.96 QP	46.00	-22.04	1.00 V	55	31.72	-7.76

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value

802.11a Radiated Emission Above 1G (Without Cradle)

EUT	D-Link AirPremier AG DWL-AG132 Wireless USB Adapter	MODEL	DWL-AG132
MODE	Normal Mode	CHANNEL	1
FREQUENCY RANGE	1 ~ 40 GHz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 62%RH, 991hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
TEST MODE	1 (Without USB Cradle)	TESTED BY	Match Tsui

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#1053.00	48.50 PK	74.00	-25.50	1.37 H	120	21.97	26.53
1	#1053.00	46.11 AV	54.00	-7.89	1.37 H	120	19.58	26.53
2	#5150.00	52.98 PK	74.00	-15.32	1.19 H	115	13.88	39.10
2	#5150.00	42.21 AV	54.00	-11.79	1.19 H	115	3.11	39.10
3	*5180.00	103.04 PK			1.19 H	115	63.87	39.17
3	*5180.00	92.27 AV			1.19 H	115	53.10	39.17
4	6906.00	56.81 PK	68.30	-11.49	1.37 H	106	15.30	41.51
5	10360.00	59.53 PK	68.30	-8.77	1.36 H	133	14.24	45.29
6	#15540.00	64.97 PK	74.00	-9.03	1.23 H	130	16.43	48.54
6	#15540.00	50.90 AV	54.00	-3.10	1.23 H	130	2.36	48.54

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#1052.00	47.03 PK	74.00	-26.97	1.28 V	41	20.50	26.53
1	#1052.00	44.54 AV	54.00	-9.46	1.28 V	41	18.01	26.53
2	3453.00	48.35 PK	68.30	-19.95	1.00 V	207	12.77	35.58
3	#5150.00	51.35 PK	74.00	-22.65	1.22 V	198	12.25	39.10
3	#5150.00	41.69 AV	54.00	-12.31	1.22 V	198	2.59	39.10
4	*5180.00	101.41 PK			1.22 V	198	62.24	39.17
4	*5180.00	91.75 AV			1.22 V	198	52.58	39.17
5	6906.00	55.15 PK	68.30	-13.15	1.19 V	168	13.64	41.51
6	10360.00	60.04 PK	68.30	-8.26	1.47 V	199	14.75	45.29
7	15540.00	67.44 PK	74.00	-6.56	1.52 V	133	18.90	48.54
7	15540.00	52.45 AV	54.00	-1.55	1.52 V	133	3.91	48.54

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value
 5. “*” : Fundamental frequency
 6. “#” The radiated frequency falling in the restricted band.



EUT	D-Link AirPremier AG DWL-AG132 Wireless USB Adapter	MODEL	DWL-AG132
MODE	Normal Mode	CHANNEL	4
FREQUENCY RANGE	1 ~ 40 GHz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 62%RH, 991hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
TEST MODE	1 (Without USB Cradle)	TESTED BY	Match Tsui

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#1053.00	48.83 PK	74.00	-25.17	1.35 H	102	22.30	26.53
1	#1053.00	46.72 AV	54.00	-7.28	1.35 H	102	20.19	26.53
2	*5240.00	103.69 PK			1.04 H	140	64.51	39.18
2	*5240.00	93.96 AV			1.04 H	140	54.78	39.18
3	6986.00	56.00 PK	68.30	-12.30	1.14 H	207	14.30	41.70
4	#15720.00	61.42 PK	74.00	-12.58	1.00 H	315	13.66	47.76
4	#15720.00	48.24 AV	54.00	-5.76	1.00 H	315	0.48	47.76

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#1053.00	46.33 PK	74.00	-27.67	1.13 V	28	19.80	26.53
1	#1053.00	43.35 AV	54.00	-10.65	1.13 V	28	16.82	26.53
2	*5240.00	102.74 PK			1.01 V	139	63.56	39.18
2	*5240.00	93.10 AV			1.01 V	139	53.92	39.18
3	6986.00	55.17 PK	68.30	-13.13	1.38 V	356	13.47	41.70
4	#15720.00	67.38 PK	74.00	-6.62	1.20 V	136	19.62	47.76
4	#15720.00	52.58 AV	54.00	-1.42	1.20 V	136	4.82	47.76

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value
 5. “*” : Fundamental frequency
 6. “#” The radiated frequency falling in the restricted band.

EUT	D-Link AirPremier AG DWL-AG132 Wireless USB Adapter	MODEL	DWL-AG132
MODE	Normal Mode	CHANNEL	5
FREQUENCY RANGE	1 ~ 40 GHz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 62%RH, 991hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
TEST MODE	1 (Without USB Cradle)	TESTED BY	Match Tsui

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#1053.00	48.16 PK	74.00	-25.84	1.31 H	60	21.63	26.53
1	#1053.00	46.20 AV	54.00	-7.80	1.31 H	60	19.67	26.53
2	*5260.00	105.25 PK			1.44 H	104	66.09	39.16
2	*5260.00	94.96 AV			1.44 H	104	55.80	39.16
3	7013.00	56.30 PK	68.30	-12.00	1.64 H	210	14.45	41.85
4	#15780.00	61.31 PK	74.00	-12.69	1.48 H	216	14.05	47.25
4	#15780.00	47.49 AV	54.00	-6.51	1.48 H	216	0.23	47.25

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#1053.00	46.85 PK	74.00	-27.15	1.02 V	61	20.32	26.53
1	#1053.00	44.06 AV	54.00	-9.94	1.02 V	61	17.53	26.53
2	*5260.00	101.43 PK			1.33 V	22	62.27	39.16
2	*5260.00	91.24 AV			1.33 V	22	52.08	39.16
3	7013.00	54.01 PK	68.30	-14.29	1.18 V	357	12.16	41.85
4	#15780.00	65.22 PK	74.00	-8.78	1.20 V	160	17.96	47.25
4	#15780.00	50.20 AV	54.00	-3.80	1.20 V	160	2.94	47.25

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value
 5. “*” : Fundamental frequency
 6. “#” The radiated frequency falling in the restricted band.

EUT	D-Link AirPremier AG DWL-AG132 Wireless USB Adapter	MODEL	DWL-AG132
MODE	Normal Mode	CHANNEL	8
FREQUENCY RANGE	1 ~ 40 GHz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 62%RH, 991hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
TEST MODE	1 (Without USB Cradle)	TESTED BY	Match Tsui

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)
1	#1053.00	48.14 PK	74.00	-25.86	1.34 H	118	21.61	26.53
1	#1053.00	45.73 AV	54.00	-8.27	1.34 H	118	19.20	26.53
2	*5320.00	107.29 PK			1.40 H	105	68.14	39.15
2	*5320.00	97.21 AV			1.40 H	105	58.06	39.15
3	#5350.00	56.03 PK	74.00	-17.94	1.40 H	105	16.83	39.20
3	#5350.00	45.95 AV	54.00	-8.05	1.40 H	105	6.75	39.20
4	7093.00	56.14 PK	68.30	-12.16	1.65 H	253	13.62	42.52
5	#15960.00	60.31 PK	74.00	-13.69	1.45 H	174	15.35	44.96
5	#15960.00	46.88 AV	54.00	-7.12	1.45 H	174	1.92	44.96

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)
1	#1053.00	46.08 PK	74.00	-27.92	1.13 V	1	19.55	26.53
1	#1053.00	42.80 AV	54.00	-11.20	1.13 V	1	16.27	26.53
2	*5320.00	102.93 PK			1.32 V	24	63.78	39.15
2	*5320.00	92.96 AV			1.32 V	24	53.81	39.15
3	7093.00	55.97 PK	68.30	-12.33	1.02 V	172	13.45	42.52
4	#10640.00	57.05 PK	74.00	-16.95	1.10 V	152	10.82	46.23
4	#10640.00	44.96 AV	54.00	-9.04	1.10 V	152	-1.27	46.23
5	#15960.00	66.05 PK	74.00	-7.95	1.15 V	162	21.09	44.96
5	#15960.00	50.86 AV	54.00	-3.14	1.15 V	162	5.90	44.96

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value
 5. “*” : Fundamental frequency
 6. “#”The radiated frequency falling in the restricted band.

802.11a Radiated Emission Above 1G (With Cradle)

EUT	D-Link AirPremier AG DWL-AG132 Wireless USB Adapter	MODEL	DWL-AG132
MODE	Normal Mode	CHANNEL	1
FREQUENCY RANGE	1 ~ 40 GHz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 64%RH, 991hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
TEST MODE	2 (With USB Cradle)	TESTED BY	Match Tsui

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5150.00	49.32 PK	74.00	-24.68	1.48 H	312	11.87	37.45
1	#5150.00	39.42 AV	54.00	-14.58	1.48 H	312	1.97	37.45
2	*5180.00	97.57 PK			1.48 H	312	60.08	37.49
2	*5180.00	87.67 AV			1.48 H	312	50.18	37.49
3	6906.00	58.38 PK	68.30	-9.92	1.02 H	348	16.77	41.61
4	#15540.00	63.49 PK	74.00	-10.51	1.04 H	342	14.56	48.93
4	#15540.00	47.82 AV	54.00	-6.18	1.04 H	342	-1.11	48.93

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5150.00	53.10 PK	74.00	-20.90	1.03 V	110	15.65	37.45
1	#5150.00	43.00 AV	54.00	-11.00	1.03 V	110	5.55	37.45
2	*5180.00	101.35 PK			1.03 V	110	63.86	37.49
2	*5180.00	91.25 AV			1.03 V	110	53.76	37.49
3	6906.00	58.70 PK	68.30	-9.60	1.21 V	5	17.09	41.61
4	#15540.00	62.86 PK	74.00	-11.14	1.00 V	358	13.93	48.93
4	#15540.00	47.86 AV	54.00	-6.14	1.00 V	358	-1.07	48.93

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value
 5. “*” : Fundamental frequency
 6. “#” The radiated frequency falling in the restricted band.

EUT	D-Link AirPremier AG DWL-AG132 Wireless USB Adapter	MODEL	DWL-AG132
MODE	Normal Mode	CHANNEL	4
FREQUENCY RANGE	1 ~ 40 GHz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 64%RH, 991hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
TEST MODE	2 (With USB Cradle)	TESTED BY	Match Tsui

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	98.55 PK			1.35 H	20	61.11	37.44
1	*5240.00	87.98 AV			1.35 H	20	50.54	37.44
2	6986.00	56.56 PK	68.30	-11.74	1.12 H	350	14.67	41.89
3	#15720.00	63.70 PK	74.00	-10.30	1.04 H	120	15.82	47.88
3	#15720.00	48.11 AV	54.00	-5.89	1.04 H	120	0.23	47.88

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5240.00	102.11 PK			1.00 V	240	64.67	37.44
1	*5240.00	91.80 AV			1.00 V	240	54.36	37.44
2	*5240.00	62.22 PK	68.30	-6.08	1.02 V	200	24.78	37.44
2	*5240.00	47.50 AV	54.00	-6.50	1.02 V	200	10.06	37.44
3	6986.00	56.11 PK	68.30	-12.19	1.21 V	100	14.22	41.89

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value
 5. "*" : Fundamental frequency
 6. "#"The radiated frequency falling in the restricted band.

EUT	D-Link AirPremier AG DWL-AG132 Wireless USB Adapter	MODEL	DWL-AG132
MODE	Normal Mode	CHANNEL	5
FREQUENCY RANGE	1 ~ 40 GHz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 64%RH, 991hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
TEST MODE	2 (With USB Cradle)	TESTED BY	Match Tsui

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5260.00	99.68 PK			1.14 H	230	62.28	37.40
1	*5260.00	89.72 AV			1.14 H	230	52.32	37.40
2	7013.00	54.20 PK	68.30	-14.10	1.20 H	210	12.16	42.04
3	#15780.00	62.10 PK	74.00	-11.90	1.04 H	100	14.82	47.28
3	#15780.00	47.25 AV	54.00	-6.75	1.04 H	100	-0.03	47.28

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5260.00	103.59 PK			1.21 V	150	66.19	37.40
1	*5260.00	93.44 AV			1.21 V	150	56.04	37.40
2	7013.00	54.20 PK	68.30	-14.10	1.20 V	210	12.16	42.04
3	#15780.00	64.58 PK	74.00	-9.42	1.04 V	100	17.30	47.28
3	#15780.00	49.03 AV	54.00	-4.97	1.04 V	100	1.75	47.28

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value
 5. "*" : Fundamental frequency
 6. "#" The radiated frequency falling in the restricted band.

EUT	D-Link AirPremier AG DWL-AG132 Wireless USB Adapter	MODEL	DWL-AG132
MODE	Normal Mode	CHANNEL	8
FREQUENCY RANGE	1 ~ 40 GHz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 64%RH, 991hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
TEST MODE	2 (With USB Cradle)	TESTED BY	Match Tsui

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)
1	*5320.00	103.00 PK			1.10 H	342	65.67	37.33
1	*5320.00	93.55 AV			1.10 H	342	56.22	37.33
2	#5350.00	50.94 PK	74.00	-23.06	1.10 H	342	13.59	37.35
2	#5350.00	40.73 AV	54.00	-13.27	1.10 H	342	3.38	37.35
3	7093.00	52.64 PK	68.30	-15.66	1.26 H	155	9.98	42.65
4	#15960.00	66.80 PK	74.00	-7.20	1.00 H	342	22.07	44.72
4	#15960.00	51.49 AV	54.00	-2.51	1.00 H	342	6.76	44.72

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)
1	*5320.00	106.34 PK			1.24 V	298	69.01	37.33
1	*5320.00	95.59 AV			1.24 V	298	58.26	37.33
2	#5350.00	53.53 PK	74.00	-20.47	1.24 V	298	16.18	37.35
2	#5350.00	42.78 AV	54.00	-11.22	1.24 V	298	5.43	37.35
3	7093.00	54.44 PK	68.30	-13.86	1.00 V	360	11.78	42.65
4	#15960.00	64.14 PK	74.00	-9.86	1.00 V	10	19.41	44.72
4	#15960.00	48.65 AV	54.00	-5.35	1.00 V	10	3.92	44.72

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value
 5. "*" : Fundamental frequency
 6. "#"The radiated frequency falling in the restricted band.

802.11a Turbo Radiated Emission Above 1G (Without Cradle)

EUT	D-Link AirPremier AG DWL-AG132 Wireless USB Adapter	MODEL	DWL-AG132
MODE	Turbo Mode	CHANNEL	1
FREQUENCY RANGE	1 ~ 40 GHz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
TEST MODE	1 (Without USB Cradle)	TESTED BY	Match Tsui

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3473.00	46.53 PK	68.30	-21.77	1.10 H	104	10.89	35.64
2	#5150.00	47.26 PK	74.00	-26.74	1.20 H	199	8.16	39.10
2	#5150.00	37.39 AV	54.00	-16.61	1.20 H	199	-1.71	39.10
3	*5210.00	101.89 PK			1.20 H	199	62.68	39.21
3	*5210.00	92.02 AV			1.20 H	199	52.81	39.21
4	6946.00	56.31 PK	68.30	-11.99	1.10 H	104	14.70	41.61
5	10420.00	54.62 PK	68.30	-13.68	1.04 H	92	8.85	45.77

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5150.00	44.43 PK	74.00	-29.57	1.03 V	38	5.33	39.10
1	#5150.00	35.80 AV	54.00	-18.20	1.03 V	38	-3.30	39.10
2	*5210.00	99.06 PK			1.03 V	38	59.85	39.21
2	*5210.00	90.43 AV			1.03 V	38	51.22	39.21
3	6946.00	51.88 PK	68.30	-16.42	1.02 V	42	10.27	41.61
4	10420.00	53.98 PK	68.30	-14.32	1.03 V	110	8.21	45.77

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value
 5. "*" : Fundamental frequency
 6. "#"The radiated frequency falling in the restricted band.

EUT	D-Link AirPremier AG DWL-AG132 Wireless USB Adapter	MODEL	DWL-AG132
MODE	Turbo Mode	CHANNEL	2
FREQUENCY RANGE	1 ~ 40 GHz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
TEST MODE	1 (Without USB Cradle)	TESTED BY	Match Tsui

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5250.00	100.37 PK			1.20 H	37	61.20	39.17
1	*5250.00	91.30 AV			1.20 H	37	52.13	39.17
2	7000.00	54.90 PK	68.30	-13.40	1.02 H	188	13.16	41.74
3	10500.00	56.45 PK	68.30	-11.85	1.12 H	300	10.26	46.19

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5250.00	99.69 PK			1.05 V	326	60.52	39.17
1	*5250.00	90.13 AV			1.05 V	326	50.96	39.17
2	7000.00	51.45 PK	68.30	-16.85	1.00 V	144	9.71	41.74
3	10500.00	57.12 PK	68.30	-11.18	1.01 V	250	10.93	46.19

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value
 5. “*” : Fundamental frequency
 6. “#”The radiated frequency falling in the restricted band.

EUT	D-Link AirPremier AG DWL-AG132 Wireless USB Adapter	MODEL	DWL-AG132
MODE	Turbo Mode	CHANNEL	3
FREQUENCY RANGE	1 ~ 40 GHz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 991hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
TEST MODE	1 (Without USB Cradle)	TESTED BY	Match Tsui

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5290.00	101.21 PK			1.02 H	300	62.08	39.13
1	*5290.00	99.01 AV			1.02 H	300	59.88	39.13
2	#5350.00	44.97 PK	68.30	-23.33	1.02 H	300	5.77	39.20
2	#5350.00	35.71 AV	54.00	-18.29	1.02 H	300	-3.49	39.20
3	7053.00	56.42 PK	68.30	-11.88	1.21 H	258	14.24	42.18
4	10580.00	57.46 PK	68.30	-10.84	1.17 H	247	11.39	46.07

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5290.00	99.43 PK			1.11 V	300	60.30	39.13
1	*5290.00	90.24 AV			1.11 V	300	51.11	39.13
2	#5350.00	43.13 PK	68.30	-25.17	1.11 V	300	3.93	39.20
2	#5350.00	33.94 AV	54.00	-20.06	1.11 V	300	-5.26	39.20
3	7053.00	53.40 PK	68.30	-14.90	1.00 V	240	11.22	42.18
4	10580.00	58.11 PK	68.30	-10.19	1.01 V	321	12.04	46.07

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value
 5. “*” : Fundamental frequency
 6. “#”The radiated frequency falling in the restricted band.

802.11a Turbo Radiated Emission Above 1G (with Cradle)

EUT	D-Link AirPremier AG DWL-AG132 Wireless USB Adapter	MODEL	DWL-AG132
MODE	Turbo Mode	CHANNEL	1
FREQUENCY RANGE	1 ~ 40 GHz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 64%RH, 991hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
TEST MODE	2 (With USB Cradle)	TESTED BY	Match Tsui

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5150.00	49.50 PK	74.00	-24.50	1.02 H	345	12.05	37.45
1	#5150.00	39.53 AV	54.00	-14.47	1.02 H	345	2.08	37.45
2	*5210.00	102.62 PK			1.02 H	345	65.12	37.50
2	*5210.00	92.65 AV			1.02 H	345	55.15	37.50
3	6946.00	54.55 PK	68.30	-13.75	1.33 H	163	12.80	41.75
4	#15630.00	66.88 PK	74.00	-7.12	1.01 H	308	18.55	48.33
4	#15630.00	51.99 AV	54.00	-2.01	1.01 H	308	3.66	48.33

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5150.00	48.09 PK	74.00	-25.91	1.01 V	264	10.64	37.45
1	#5150.00	38.70 AV	54.00	-15.30	1.01 V	264	1.25	37.45
2	*5210.00	101.21 PK			1.01 V	264	63.71	37.50
2	*5210.00	91.82 AV			1.01 V	264	54.32	37.50
3	6946.00	55.35 PK	68.30	-12.95	1.04 V	158	13.60	41.75
4	#15630.00	62.45 PK	74.00	-11.55	1.03 V	7	14.12	48.33
4	#15630.00	48.09 AV	54.00	-5.91	1.03 V	7	-0.24	48.33

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value
 5. “*” : Fundamental frequency
 6. “#”The radiated frequency falling in the restricted band.

EUT	D-Link AirPremier AG DWL-AG132 Wireless USB Adapter	MODEL	DWL-AG132
MODE	Turbo Mode	CHANNEL	2
FREQUENCY RANGE	1 ~ 40 GHz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 64%RH, 991hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
TEST MODE	2 (With USB Cradle)	TESTED BY	Match Tsui

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5250.00	103.48 PK			1.05 H	170	66.06	37.42
1	*5250.00	93.60 AV			1.05 H	170	56.18	37.42
2	7000.00	53.40 PK	68.30	-14.90	1.08 H	300	11.46	41.94
3	#15750.00	66.61 PK	74.00	-7.39	1.04 H	140	19.03	47.58
3	#15750.00	51.48 AV	54.00	-2.52	1.04 H	140	3.90	47.58

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5250.00	102.83 PK			1.27 V	100	65.41	37.42
1	*5250.00	92.70 AV			1.27 V	100	55.28	37.42
2	7000.00	53.61 PK	68.30	-14.69	1.04 V	140	11.67	41.94
3	#15750.00	63.41 PK	74.00	-10.59	1.01 V	135	15.83	47.58
3	#15750.00	49.53 AV	54.00	-4.47	1.01 V	135	1.95	47.58

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value
 5. “*” : Fundamental frequency
 6. “#”The radiated frequency falling in the restricted band.

EUT	D-Link AirPremier AG DWL-AG132 Wireless USB Adapter	MODEL	DWL-AG132
MODE	Turbo Mode	CHANNEL	3
FREQUENCY RANGE	1 ~ 40 GHz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 64%RH, 991hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
TEST MODE	2 (With USB Cradle)	TESTED BY	Match Tsui

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5290.00	104.36 PK			1.11 H	343	67.02	37.34
1	*5290.00	94.40 AV			1.11 H	343	57.06	37.34
2	#5350.00	54.52 PK	74.00	-19.48	1.11 H	343	17.17	37.35
2	#5350.00	44.56 AV	54.00	-9.44	1.11 H	343	7.21	37.35
3	7053.00	52.67 PK	68.30	-15.63	1.00 H	164	10.32	42.35
4	#15870.00	66.74 PK	74.00	-7.26	1.00 H	327	20.74	46.00
4	#15870.00	51.51 AV	54.00	-2.49	1.00 H	327	5.51	46.00

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*5290.00	104.65 PK			1.10 V	71	67.31	37.34
1	*5290.00	94.15 AV			1.10 V	71	56.81	37.34
2	#5350.00	54.81 PK	74.00	-19.19	1.10 V	71	17.46	37.35
2	#5350.00	44.31 AV	54.00	-9.69	1.10 V	71	6.96	37.35
3	7053.00	52.98 PK	68.30	-15.32	1.02 V	152	10.63	42.35
4	#15870.00	64.59 PK	74.00	-9.41	1.00 V	325	18.59	46.00
4	#15870.00	50.68 AV	54.00	-3.32	1.00 V	325	4.68	46.00

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value
 5. “*” : Fundamental frequency
 6. “#”The radiated frequency falling in the restricted band.

4.3 PEAK TRANSMIT POWER MEASUREMENT

4.3.1 LIMITS OF PEAK TRANSMIT POWER MEASUREMENT

Frequency Band	Limit
5.15 – 5.25GHz	The lesser of 50mW (17dBm) or 4dBm + 10logB
5.25 – 5.35GHz	The lesser of 250mW (24dBm) or 11dBm + 10logB
5.725 – 5.825GHz	The lesser of 1W (30dBm) or 17dBm + 10logB

NOTE: Where B is the 26dB emission bandwidth in MHz.

4.3.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005

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

4.3.3 TEST PROCEDURE

1. The transmitter output was connected to the spectrum analyzer.
2. Set span to encompass the entire emission bandwidth of the signal.
3. Set RBW to 1MHz, VBW to 300kHz.
4. Using the spectrum analyzer's channel power measurement function to measure the output power.

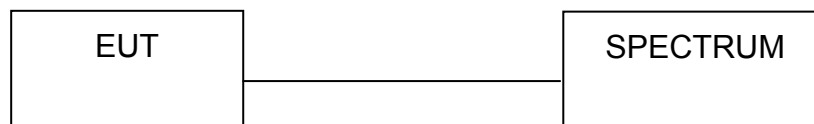
Note: The test is performed in accordance with FCC Public Notice: APPENDIX A Guidelines for Assessing Unlicensed National Information Infrastructure (U-NII) Devices – Part 15, Subpart E, August 2002.

The transmitter output operates continuously therefore Method # 3 is used.

4.3.4 DEVIATION FROM TEST STANDARD

No deviation

4.3.5 TEST SETUP



4.3.6 EUT OPERATING CONDITIONS

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

4.3.7 TEST RESULTS

EUT	D-Link AirPremier AG DWL-AG132 Wireless USB Adapter	MODEL	DWL-AG132
MODE	Normal	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH, 991hPa	TESTED BY	Leo Hung

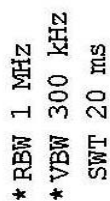
CHANNEL	CHANNEL FREQUEN CY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	26dBc Occupied Bandwidth (MHz)	PASS/FAIL
1	5180	35.727	15.53	17.00	29.26	PASS
4	5240	32.063	15.06	17.00	26.32	PASS
5	5260	25.293	14.03	24.00	27.86	PASS
8	5320	31.623	15.00	24.00	26.67	PASS

NOTE: The 26dBc Occupied Bandwidth plot, please refer to the following pages.

The figure shows a spectrum analyzer display with a grid. The horizontal axis represents frequency, and the vertical axis represents power in dBm. A signal trace is visible, showing a peak at 5.18 GHz. The power level is indicated as 15.53 dBm. The display also shows various measurement parameters such as RBW (1 MHz), VFW (300 kHz), and SWT (20 ms). The center frequency is 5.18 GHz, and the span is 35 MHz. The display is labeled with 'A' in the top right corner.

Parameter	Value
Center Frequency	5.18 GHz
Span	35 MHz
Power	15.53 dBm
Bandwidth	30 MHz
RBW	1 MHz
VFW	300 kHz
SWT	20 ms
Att	30 dB
Offset	0.5 dB
Marker 1 [T1]	5.181400000 GHz
Marker 2 [T1]	-28.15 dBm
Marker 3 [T1]	5.197500000 GHz
Marker 4 [T1]	-28.15 dBm

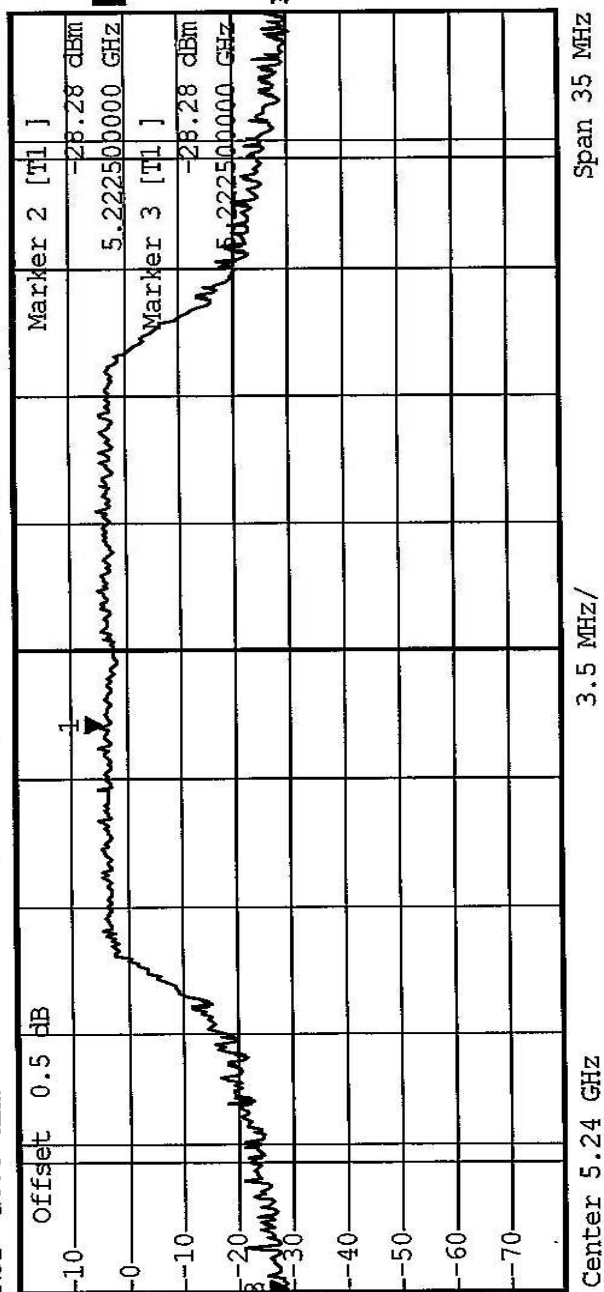
Marker 1 [T1]
4.88 dBm
5.23790000 GHz



5.23790000 GHz

*Att 30 dB

Ref 20.5 dBm



Span 35 MHz

3.5 MHz/

Center 5.24 GHz

Tx channel
Bandwidth

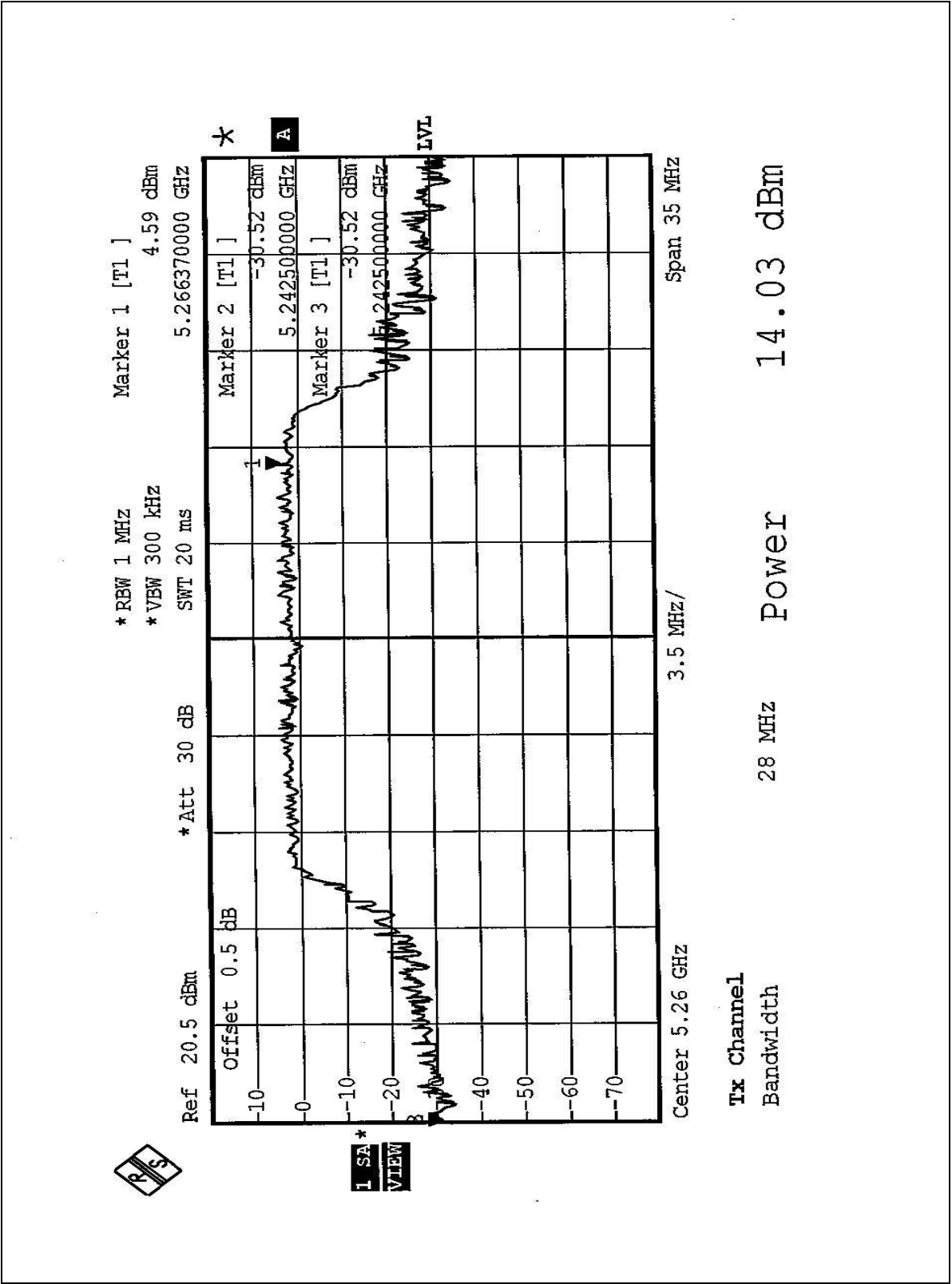
27 MHz

Power

15.06 dBm

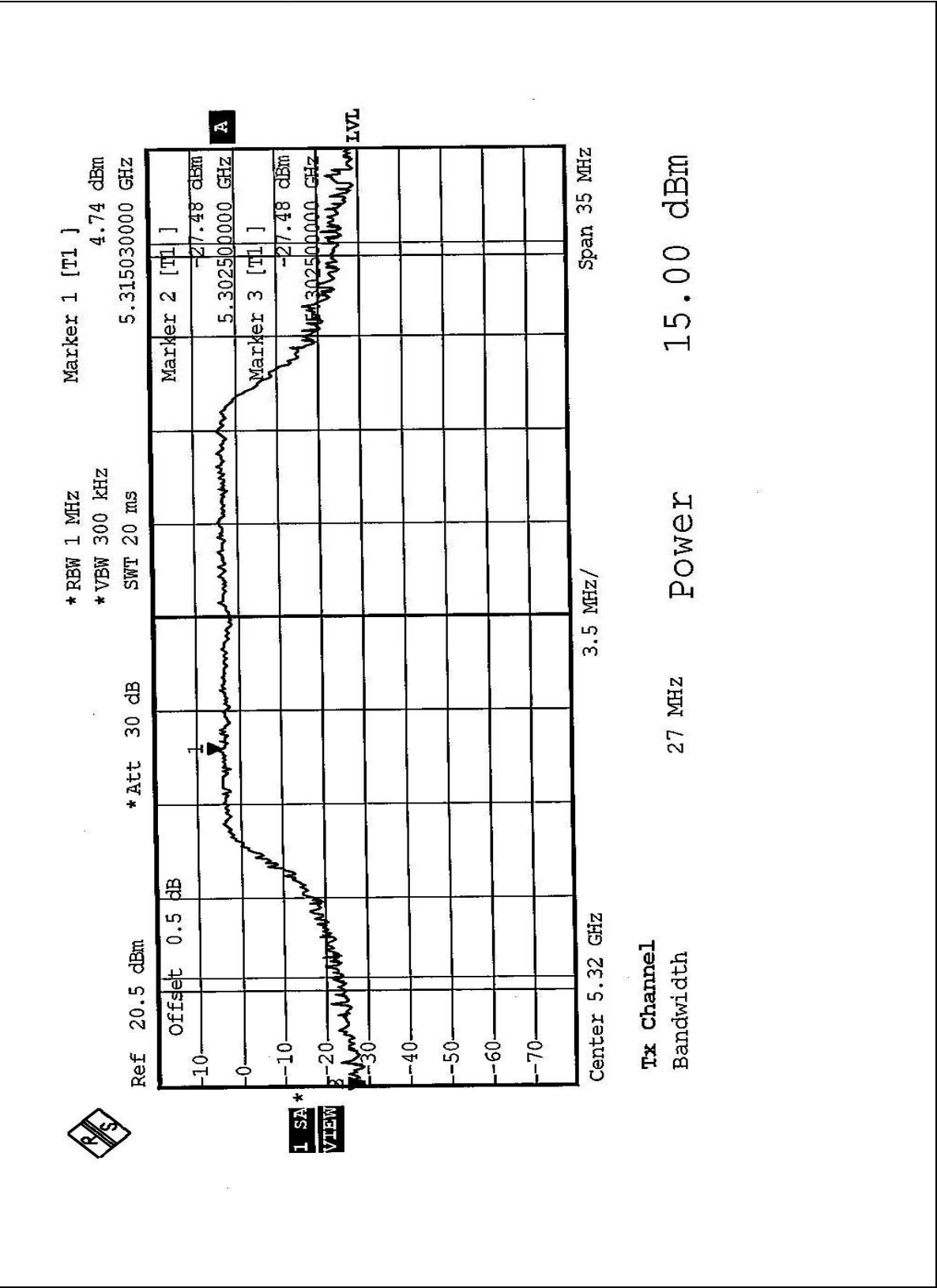


CH 5

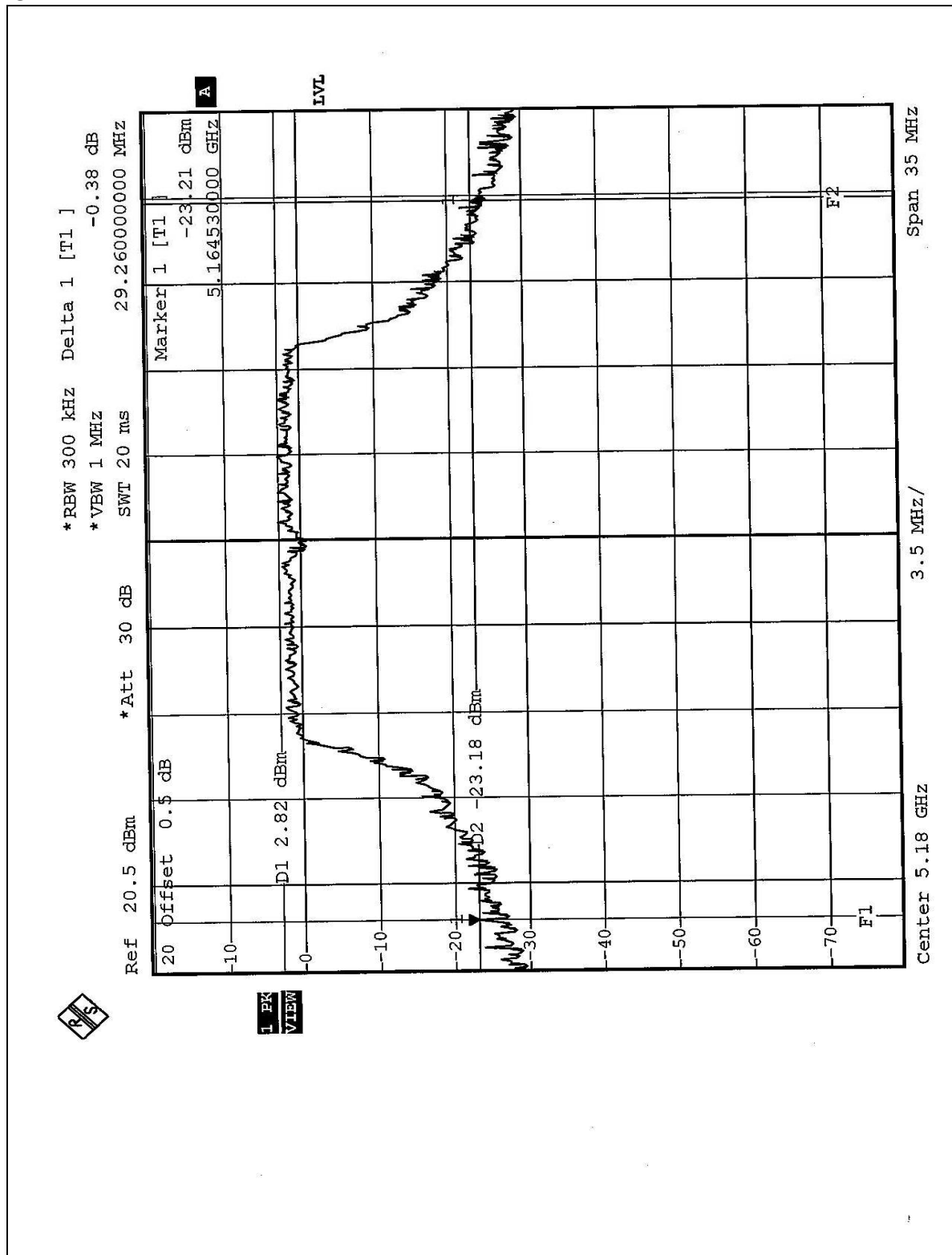




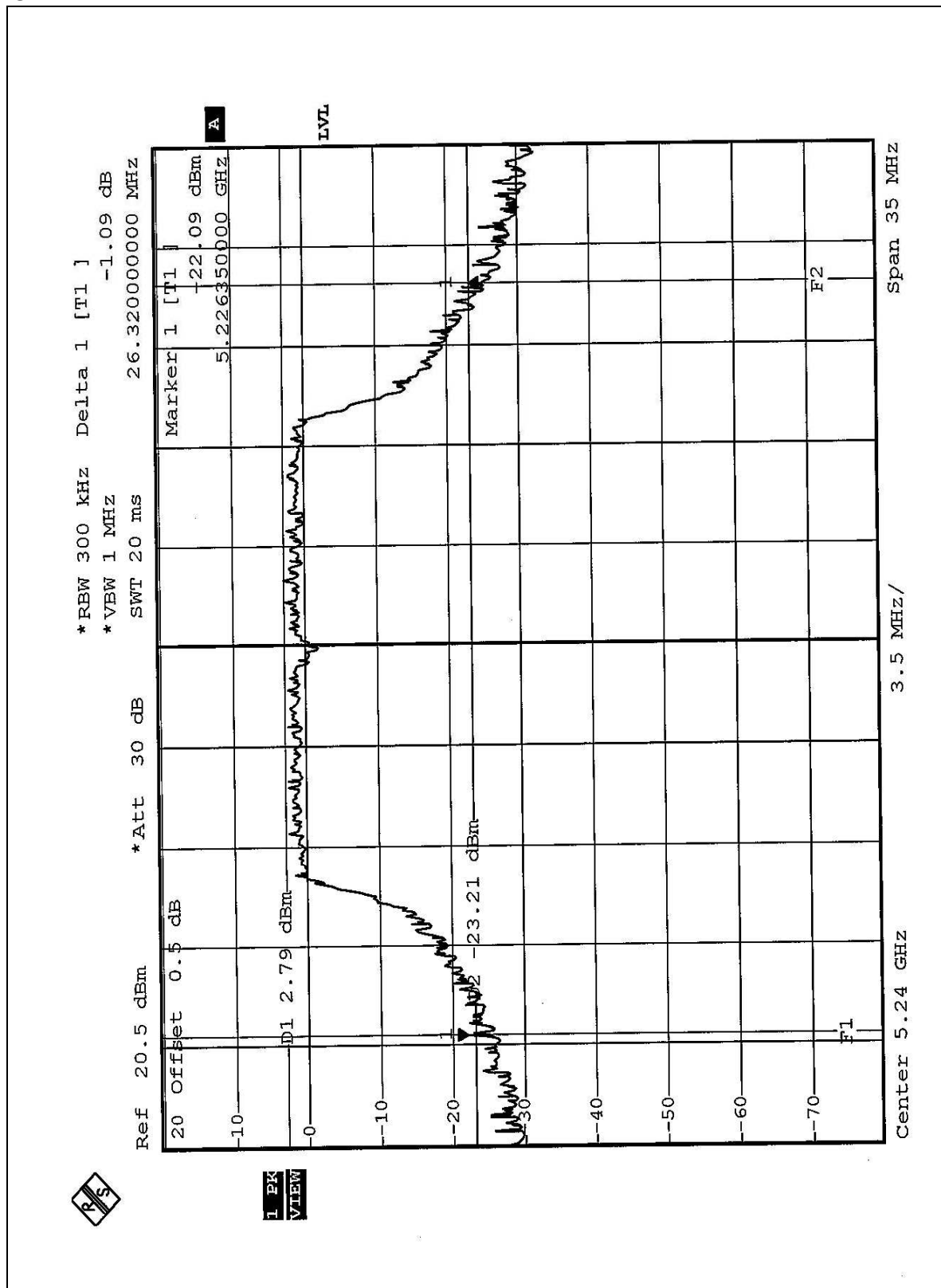
CH 8



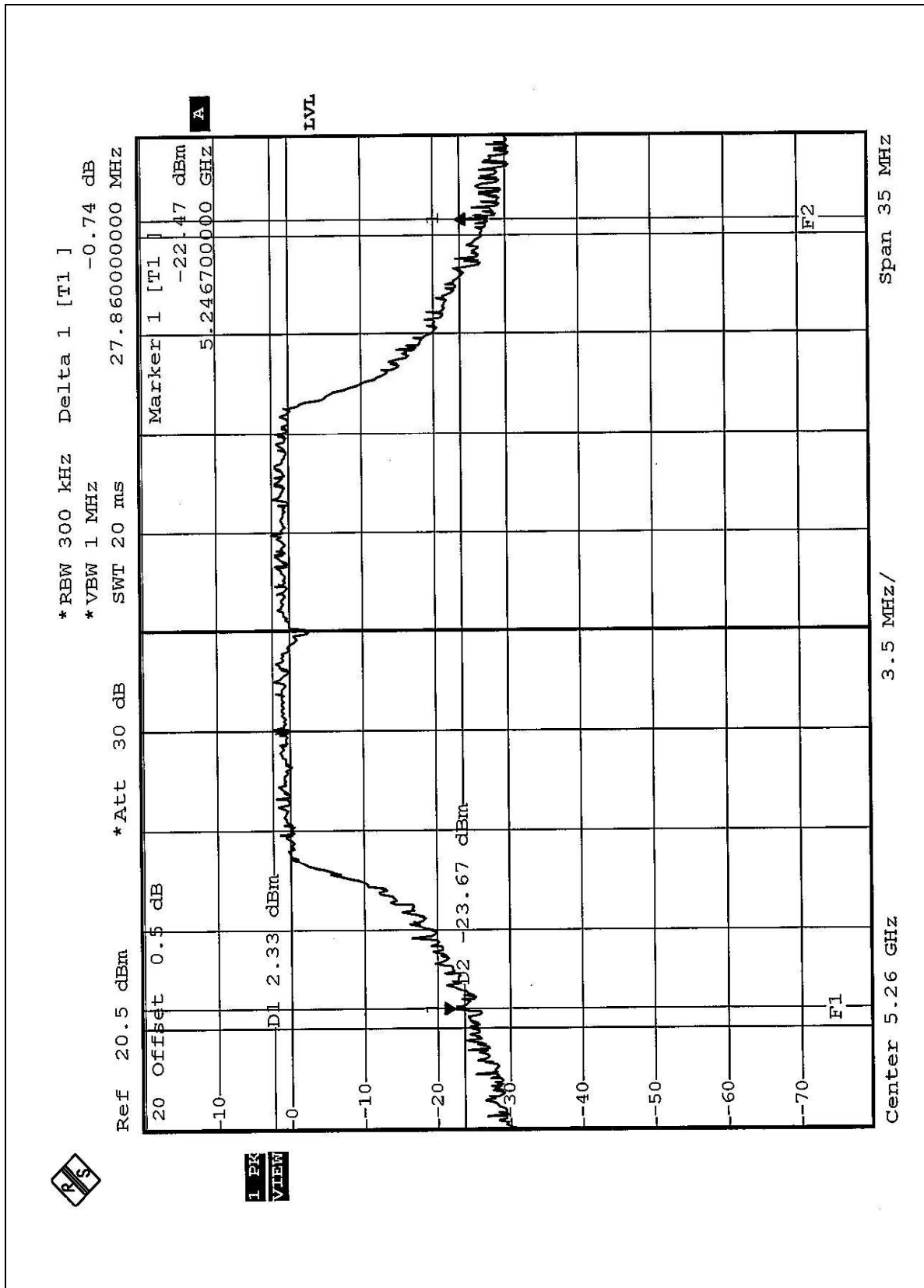
26dB Occupied Bandwidth: CH 1



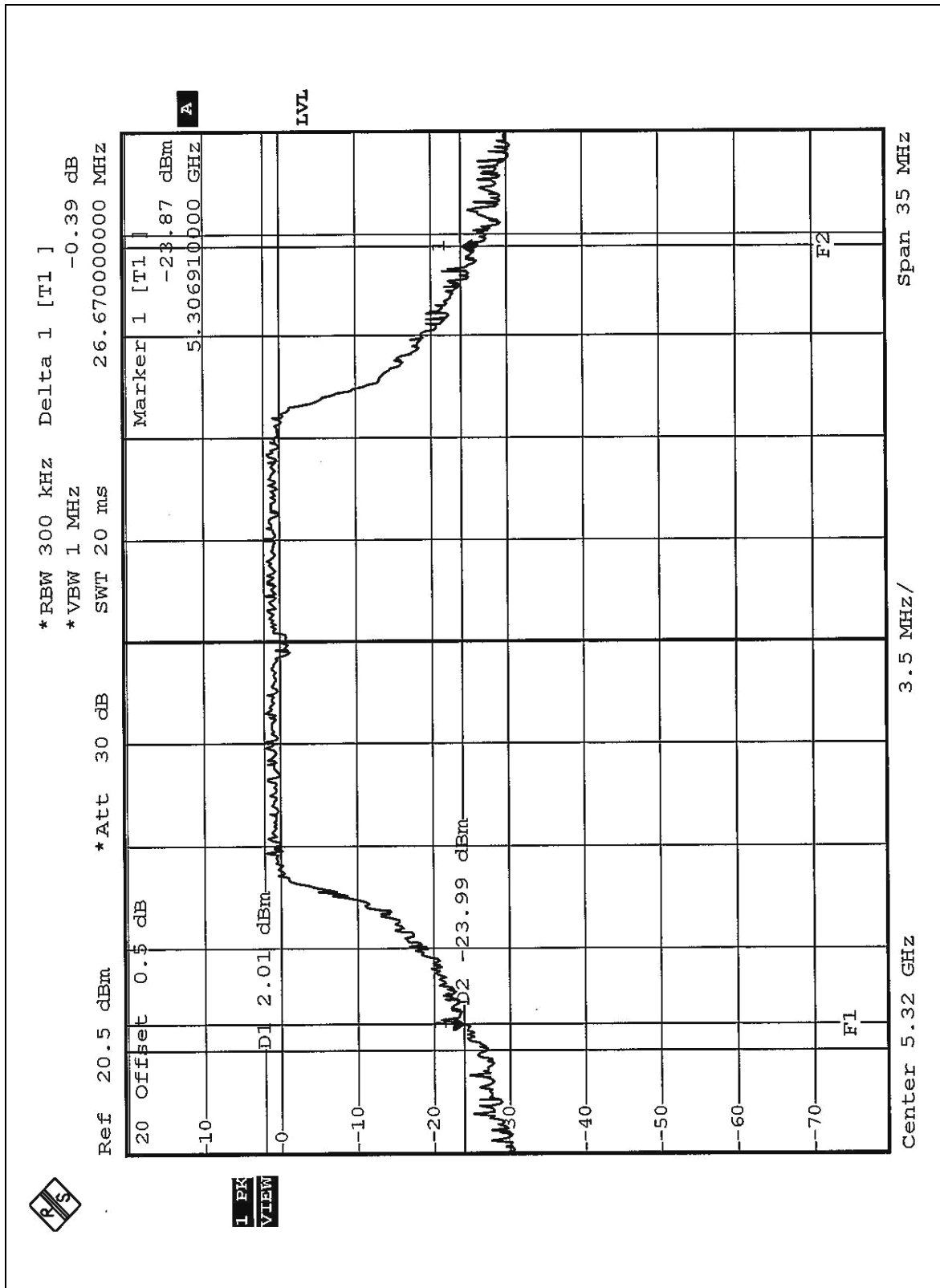
CH 4



CH 5



CH 8



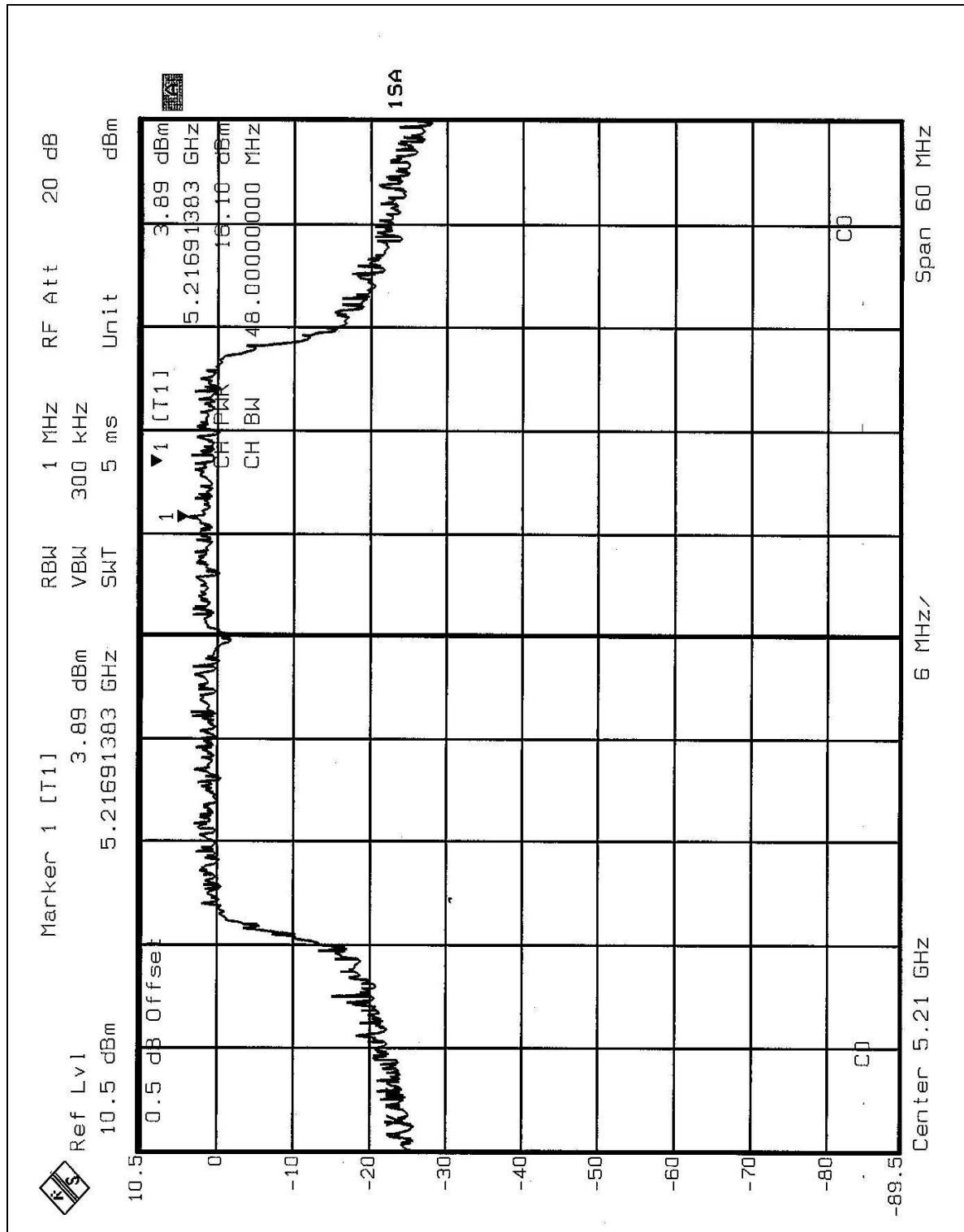
EUT	D-Link AirPremier AG DWL-AG132 Wireless USB Adapter	MODEL	DWL-AG132
MODE	Turbo	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH, 991hPa	TESTED BY	Leo Hung

CHANNEL	CHANNEL FREQUEN CY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	26dBc Occupied Bandwidth (MHz)	PASS/FAIL
1	5210	40.738	16.10	17.00	47.25	PASS
2	5250	40.644	16.09	17.00	49.19	PASS
3	5290	41.210	16.15	24.00	46.29	PASS

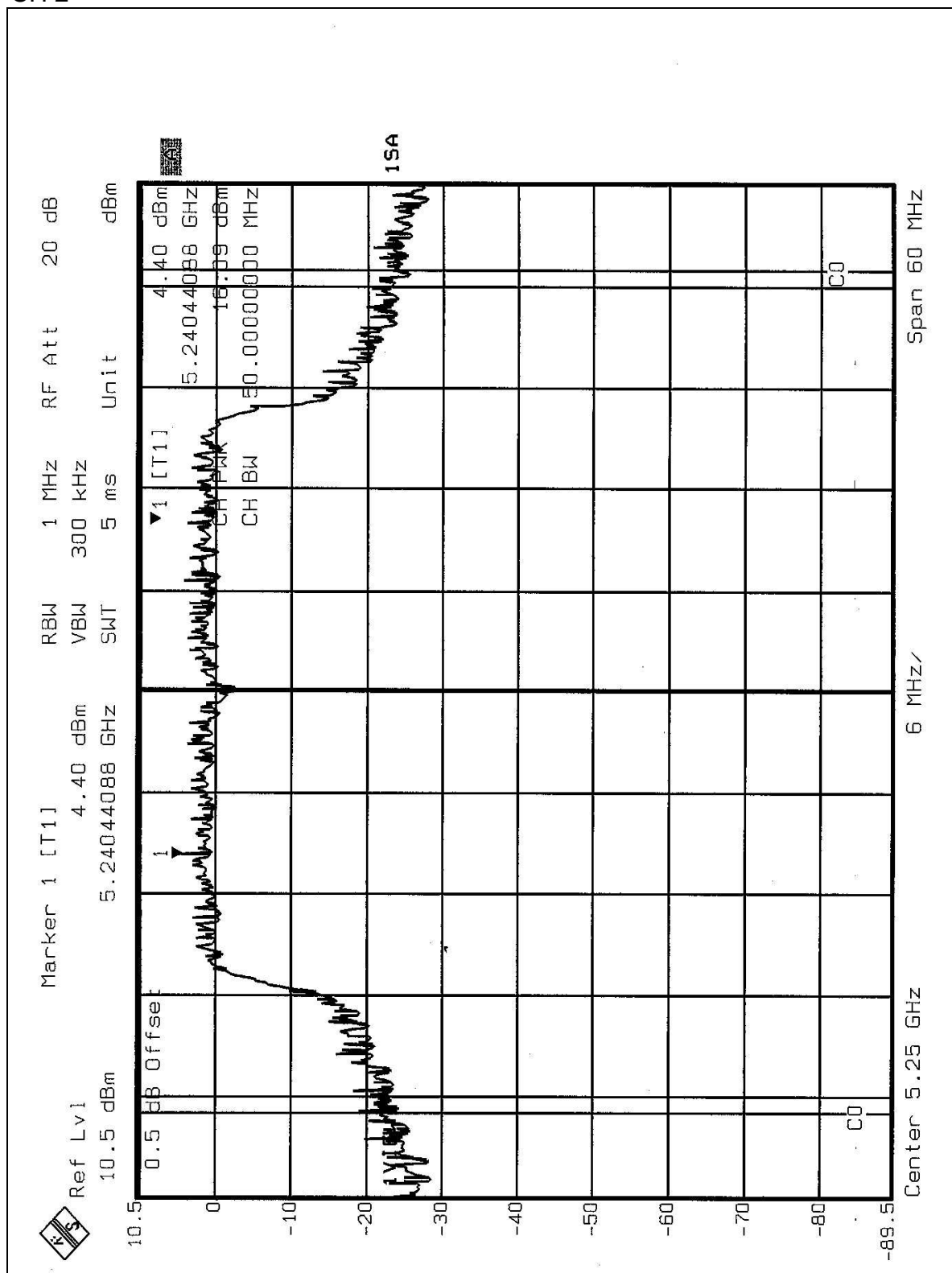
NOTE: The 26dBc Occupied Bandwidth plot, please refer to the following pages.

Peak Power Output:

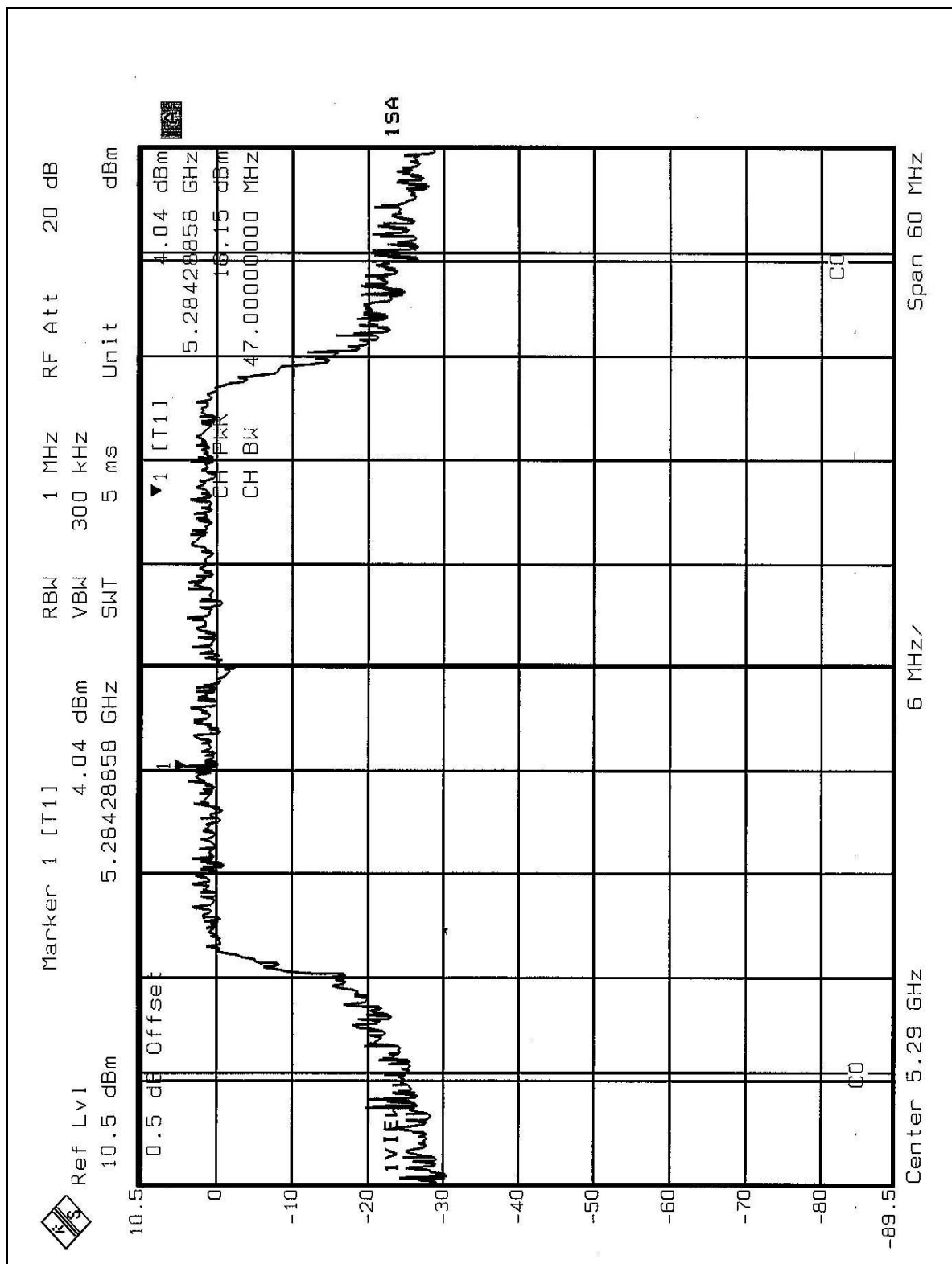
CH 1

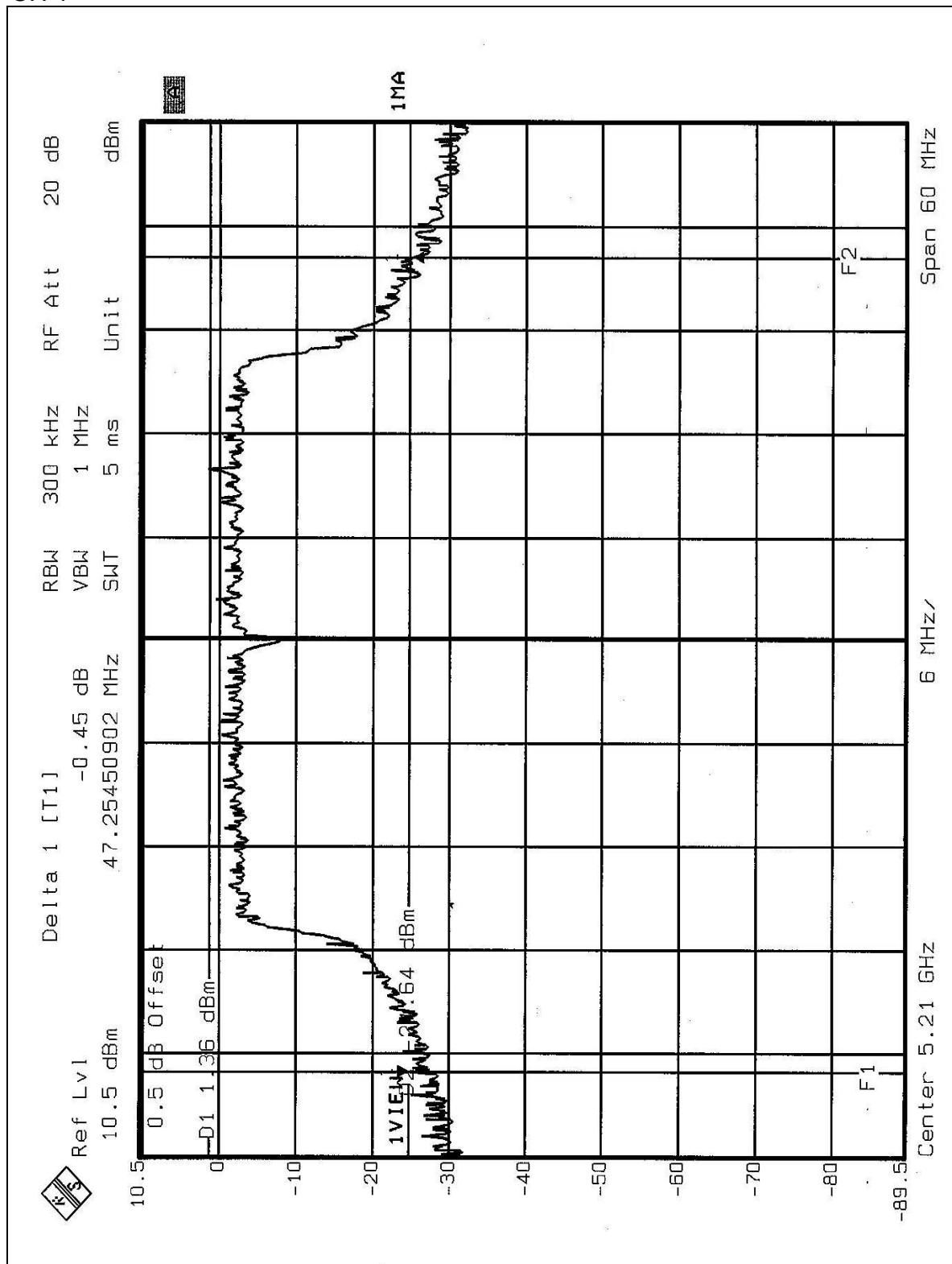


CH 2

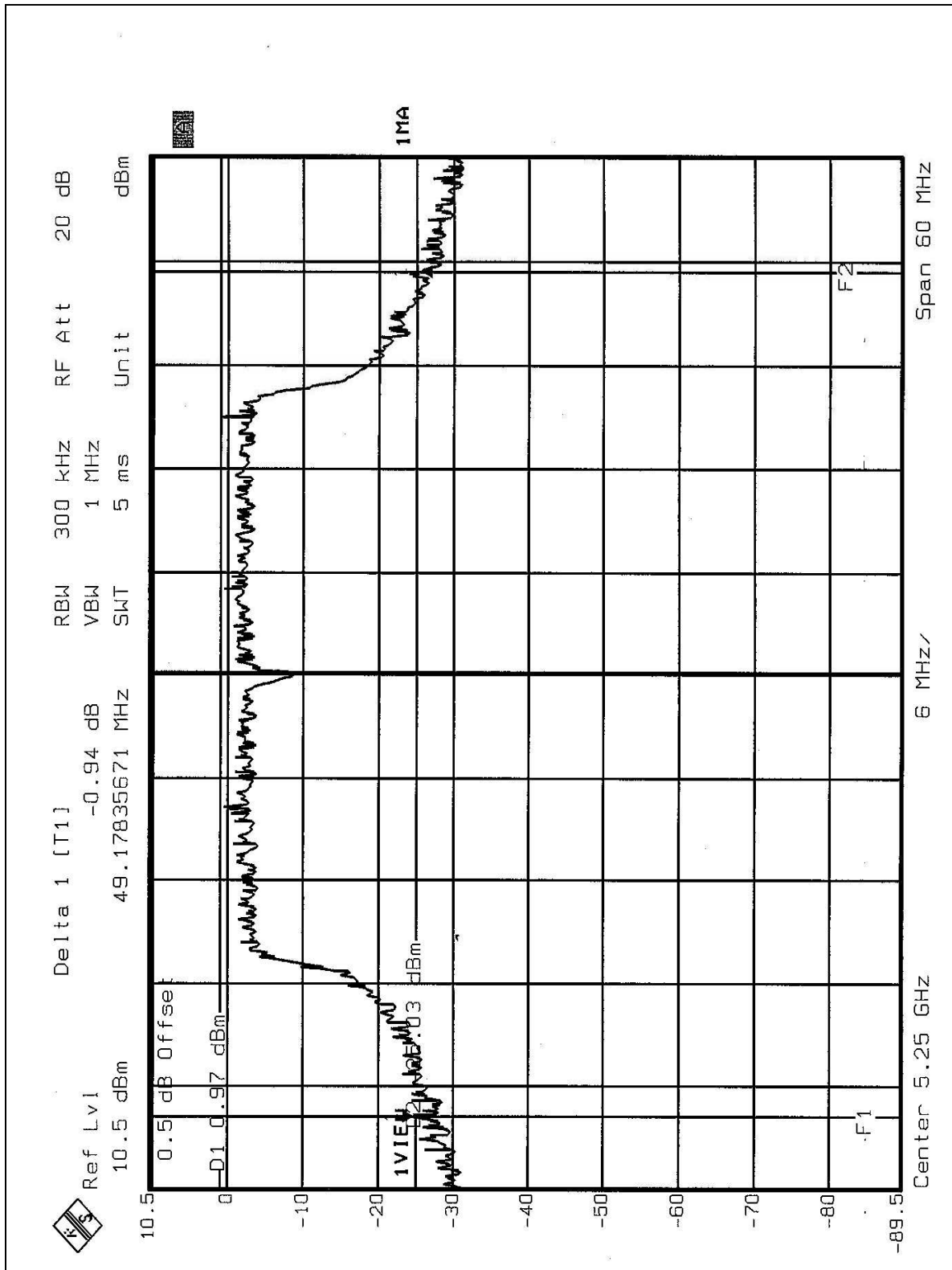


CH 3





CH 2



Delta 1 [T1]
Ref Lvl 10.5 dBm
-0.10 dB
46.29258517 MHz
RBW 300 kHz
VBW 1 MHz
SWT 5 ms
RF Att 20 dB
Unit dBm

10.5
0
-10
-20
-30
-40
-50
-60
-70
-80
-89.5

0.5 dB Offset
-01 1.13 dBm
1VIEH
F1
F2
1MA

Center 5.29 GHz
Span 60 MHz
6 MHz/