FCC TEST REPORT

REPORT NO.: RF931028L16
MODEL NO.: WAP55AG ver. 2
RECEIVED: Oct. 15, 2004
TESTED: Oct. 15 ~ Oct. 21, 2004
ISSUED: Nov. 03, 2004

APPLICANT: Cisco-Linksys, LLC

ADDRESS: 121 Theory Drive Irvine, CA 92612, U.S.A.

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.

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ILAC MRA

No. 2177-01

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1. CERTIFICATION

PRODUCT:	Wireless A+G Access Point
BRAND NAME:	Linksys
MODEL NO.:	WAP55AG ver. 2
APPLICANT:	Cisco-Linksys, LLC
TEST SAMPLE:	Engineering Sample
TESTED:	Oct. 15 ~ Oct. 21, 2004
STANDARDS:	FCC Part 15, Subpart C (Section 15.247), Subpart E (Section 15.407), ANSI C63.4-2003

The above equipment have 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 : Andrea Hsia , **DATE:** Nov. 03, 2004
(Andrea Hsia)

TECHNICAL ACCEPTANCE : Gary Chang , **DATE:** Nov. 03, 2004
Responsible for RF (Gary Chang)

APPROVED BY : , **DATE:** Nov. 03, 2004
(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 C (Section 15.247)			
Standard Section	**Test Type and Limit**	**Result**	**Remark**
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is –6.08dB at 0.150MHz
15.247(a)(2)	Spectrum Bandwidth of a Direct Sequence Spread Spectrum System Limit: min. 500kHz	PASS	Meet the requirement of limit.
15.247(b)	Maximum Peak Output Power Limit: max. 30dBm	PASS	Meet the requirement of limit.
15.247(d)	Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit. Minimum passing margin is –1.11dB at 125.00MHz
15.247(e)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit.
15.247(d)	Band Edge Measurement Limit: 20dB less than the peak value of fundamental frequency	PASS	Meet the requirement of limit.

For Freq. 5.15 ~ 5.35GHz:

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 –5.79dB at 0.150MHz
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 –1.00dB at 5150.00MHz
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.

For Freq. 5.725 ~ 5.850GHz：

APPLIED STANDARD: FCC Part 15, Subpart C (Section 15.247)			
Standard Section	**Test Type and Limit**	**Result**	**Remark**
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is –6.08dB at 0.150MHz
15.247(a)(2)	Spectrum Bandwidth of a Direct Sequence Spread Spectrum System Limit: min. 500kHz	PASS	Meet the requirement of limit.
15.247(b)	Maximum Peak Output Power Limit: max. 30dBm	PASS	Meet the requirement of limit.
15.247(d)	Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit. Minimum passing margin is –1.06dB at 11570.00MHz
15.247(e)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit.
15.247(d)	Band Edge Measurement Limit: 20dB less than the peak value of fundamental frequency	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	9k~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	Wireless A+G Access Point
MODEL NO.	WAP55AG ver. 2
POWER SUPPLY	5Vdc from AC Adapter
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 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	64.57mW for 802.11b 41.69mW for 802.11g 40.55mW for 5.15 ~ 5.35GHz 40.18mW for 5.75 ~ 5.850GHz
DATA CABLE	NA
ANTENNA TYPE	Nondetachable Dipole antenna with 2.0dBi gain for 2.4GHz Nondetachable Dipole antenna with 4.0dBi gain for 5GHz
I/O PORTS	RJ45
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 108Mbps in Turbo Mode depending upon reception quality.
3. The EUT were powered by the following adapters:

BRAND:	BH	**BRAND:**	LINKSYS
MODEL :	M1-12S05	**MODEL :**	MT15-5050250-A1
INPUT :	100-120Vac~0.5A, 50-60Hz	**INPUT :**	100-120Vac~0.5A, 50-60Hz
OUTPUT :	5.0Vdc, 2.5A	**OUTPUT :**	5.0Vdc, 2.5A
LENTH :	1.8m non-shielded, without core	**LENTH :**	1.9m non-shielded, without core

4. For Conducted Emission and Radiated Emission below 1000MHz, there are two test modes present in following sections. The test mode 1 is for adapter: M1-12S05, and the test mode 2 is for adapter: MT15-5050250-A1.
5. 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

802.11b and 802.11g: Eleven channels are provided to this EUT.

Channel	Frequency	Channel	Frequency
1	2412 MHz	7	2442 MHz
2	2417 MHz	8	2447 MHz
3	2422 MHz	9	2452 MHz
4	2427 MHz	10	2457 MHz
5	2432 MHz	11	2462 MHz
6	2437 MHz		

NOTE:
1. Below 1GHz, the channel 1, 6, and 11 were pre-tested in chamber. The channel 11with OFDM technique, worst case one, was chosen for final test.
2. Above 1GHz, the channel 1, 6, and 11 were tested individually.
3. After pre-testing all data rates, we have chosen 11Mbps with DSSS technique, 6Mbps with OFDM technique for normal mode and 12Mbps with OFDM technique for turbo mode, as the worst cases for the test among other data rates.
4. For conducted emission test, we have chosen 6Mbps with OFDM technique as the worst case after pre-testing in conducted emission test site.

One channel is provided to this EUT for Turbo Mode.

Channel	Frequency
6	2437 MHz

NOTE: One turbo mode at frequency 2437MHz.

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

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		

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		

NOTE:
1.The EUT was tested in both normal mode (channel bandwidth of approximately 30MHz) and turbo mode (channel bandwidth of approximately 60MHz).
2. "Normal Mode" allows data rates of up to 54Mbps, and "Turbo Mode" allows data rates of up to 108Mbps. After pre-testing all data rates, we have chosen 6Mbps for normal mode and 12Mbps for turbo mode, as the worst cases for the test among other data rates.
3.Channel 1, 4, 5, 8, 9, 11 and 13 are the closest frequencies to the band edge, were chosen for final test of Normal Mode.
4.Channel 1 ~ 5 were chosen for final test of Turbo mode.
5. Below 1GHz test, channel 1 ~ 13 for normal mode and channel 1 ~ 5 for turbo mode were

pre-tested in chamber. Channel 5 with normal mode, worst case one, was chosen for final test and recorded in the report.

6. For conducted emission test, we have chosen normal mode as the worst case after pre-testing in conducted emission test site.

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a Wireless A+G Access Point. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart C. (15.247),
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

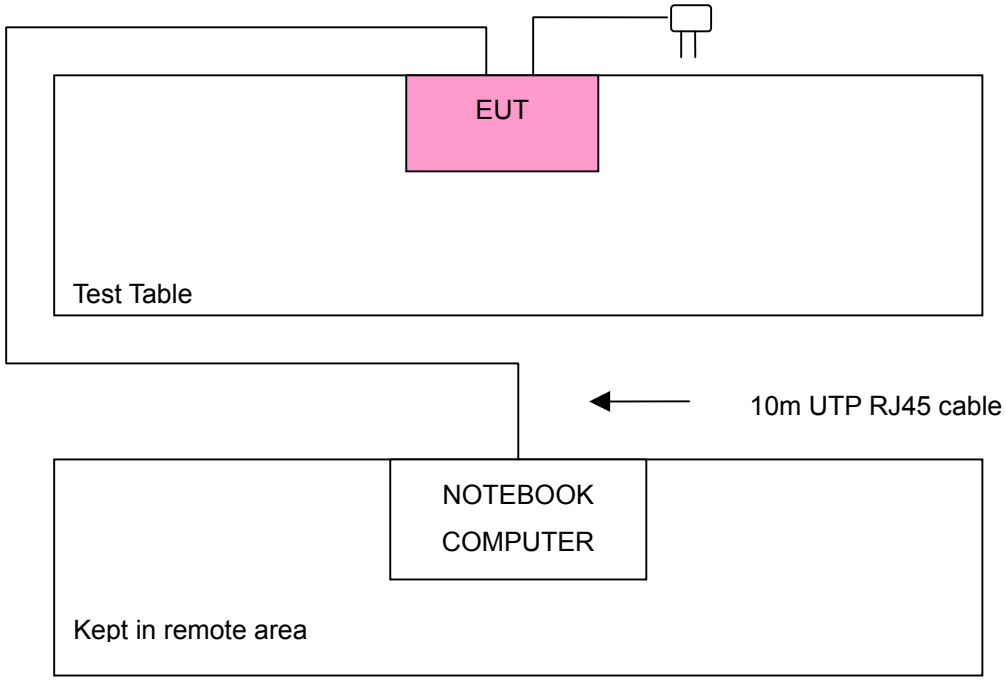
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK COMPUTER	DELL	PP05L	16484462992	E2K24CLNS

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	NA

NOTE: 1. All power cords of the above support units are non shielded (1.8m).
2. Item 1 act as a communication partner to transfer data.

3.5 CONFIGURATION OF SYSTEM UNDER TEST



4. TEST TYPES AND RESULTS (FOR PART 802.11b & 802.11g)

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	Dec. 12, 2004
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.

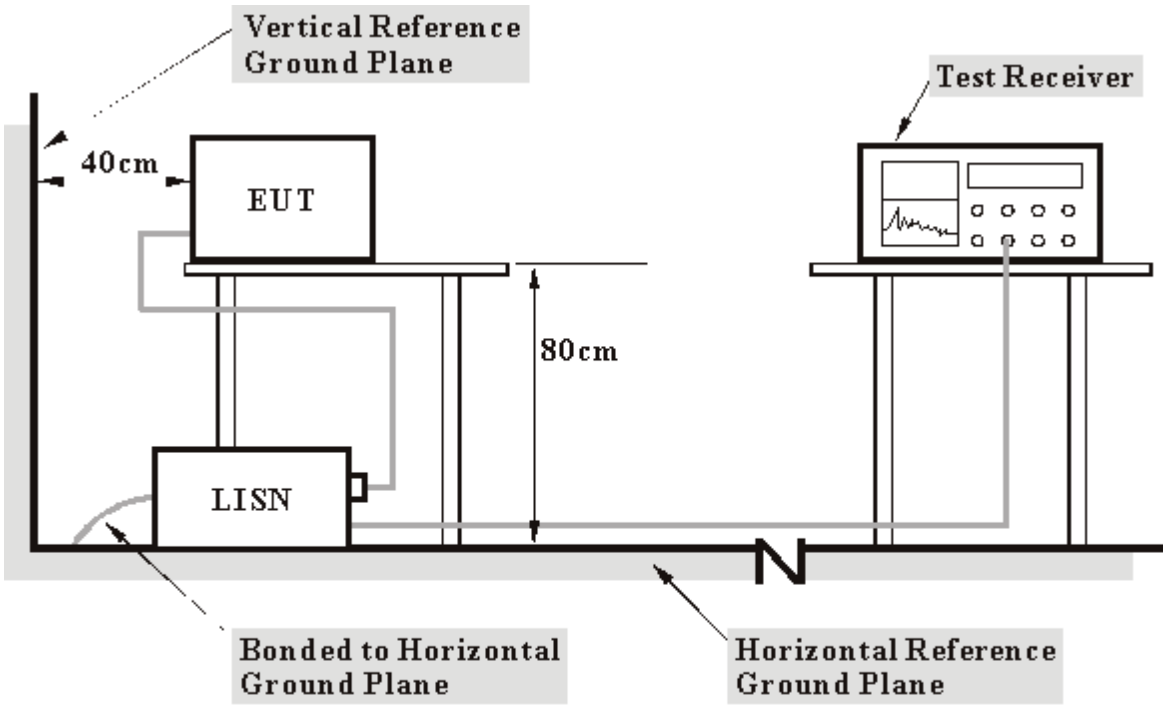
b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

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

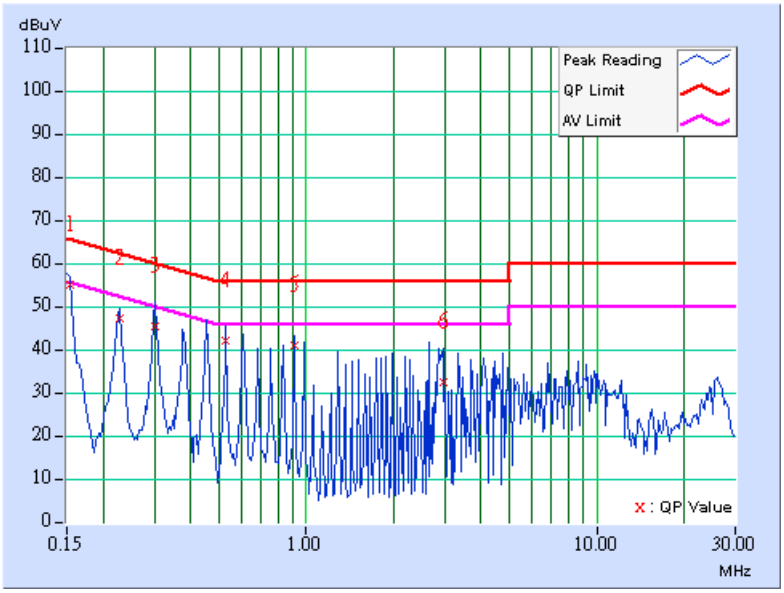
a. Placed the EUT on the testing table.
b. Prepared another notebook system to act as a communication partner and placed it outside of testing area.
c. The communication partner run a test program (provided by manufacturer) to enable EUT under transmission/receiving condition continuously at specific channel frequency via an RJ45 cable.
d. The communication partner sent data to EUT by command "PING".

4.1.7 TEST RESULTS

EUT	Wireless A+G Access Point	MODEL	WAP55AG ver. 2
MODE	Channel 1	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH, 991hPa	TEST MODE	Test Mode 1
TESTED BY	Leo Hung		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.154	0.11	54.85	-	54.96	-	65.79	55.79	-10.83	-
2	0.228	0.12	47.39	-	47.51	-	62.52	52.52	-15.01	-
3	0.302	0.12	45.43	-	45.55	-	60.18	50.18	-14.62	-
4	0.529	0.13	42.07	-	42.20	-	56.00	46.00	-13.80	-
5	0.908	0.15	41.04	-	41.19	-	56.00	46.00	-14.81	-
6	2.953	0.18	32.35	-	32.53	-	56.00	46.00	-23.47	-

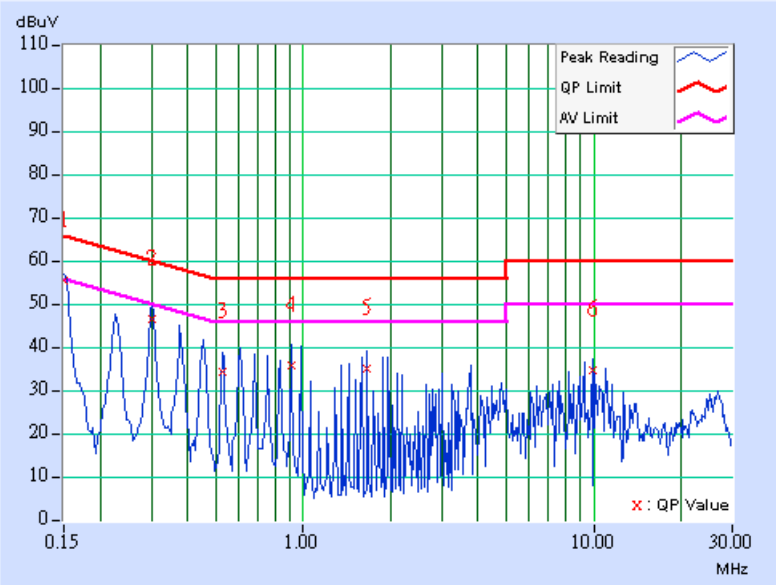
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	Wireless A+G Access Point	MODEL	WAP55AG ver. 2
MODE	Channel 1	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH, 991hPa	TEST MODE	Test Mode 1
TESTED BY	Leo Hung		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.10	55.18	-	55.28	-	66.00	56.00	-10.72	-
2	0.302	0.11	46.44	-	46.55	-	60.18	50.18	-13.62	-
3	0.525	0.12	34.33	-	34.45	-	56.00	46.00	-21.55	-
4	0.908	0.14	35.67	-	35.81	-	56.00	46.00	-20.19	-
5	1.660	0.16	35.04	-	35.20	-	56.00	46.00	-20.80	-
6	9.898	0.28	34.68	-	34.96	-	60.00	50.00	-25.04	-

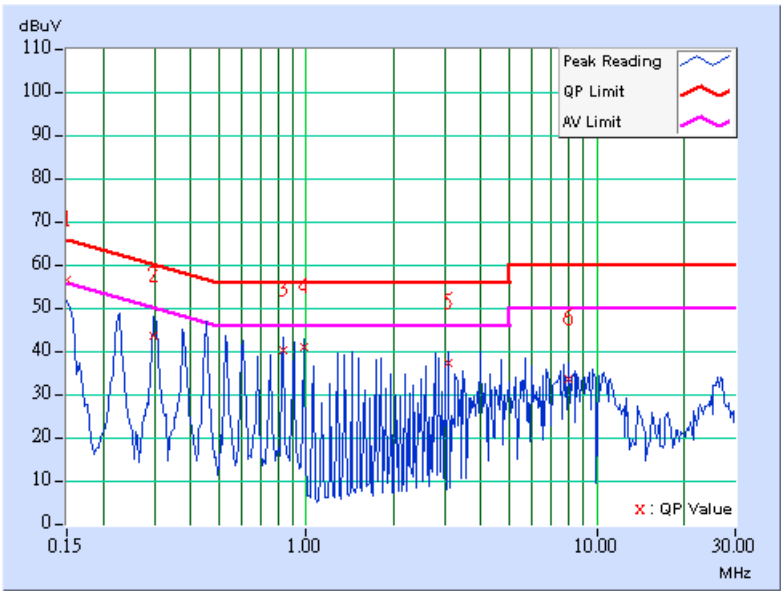
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	Wireless A+G Access Point	MODEL	WAP55AG ver. 2
MODE	Channel 6	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH, 991hPa	TEST MODE	Test Mode 1
TESTED BY	Leo Hung		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.11	56.26	49.68	56.37	49.79	66.00	56.00	-9.63	-6.21
2	0.298	0.12	43.49	-	43.61	-	60.29	50.29	-16.67	-
3	0.830	0.14	40.20	-	40.34	-	56.00	46.00	-15.66	-
4	0.982	0.15	40.89	-	41.04	-	56.00	46.00	-14.96	-
5	3.098	0.19	37.29	-	37.48	-	56.00	46.00	-18.52	-
6	8.004	0.30	33.59	-	33.89	-	60.00	50.00	-26.11	-

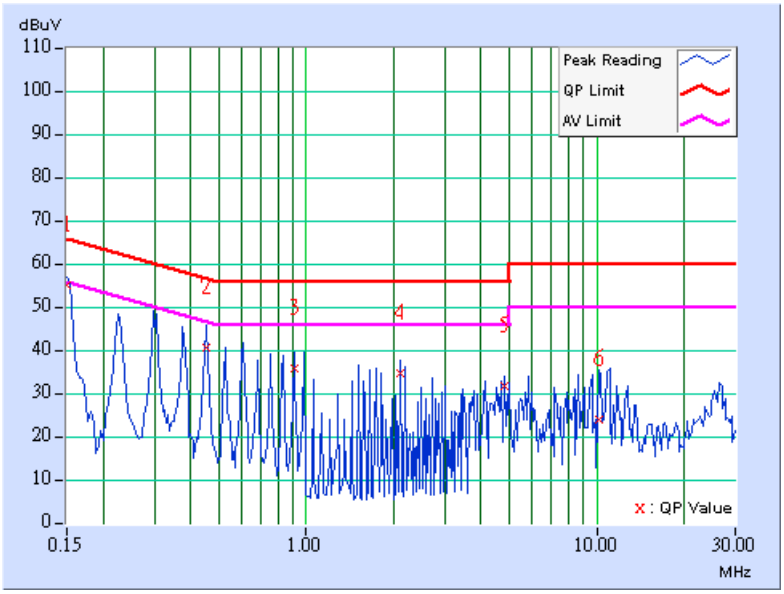
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
MODE	Channel 6	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH, 991hPa	**TEST MODE**	Test Mode 1
TESTED BY	Leo Hung		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.10	55.06	-	55.16	-	66.00	56.00	-10.84	-
2	0.451	0.12	40.31	-	40.43	-	56.86	46.86	-16.43	-
3	0.908	0.14	35.67	-	35.81	-	56.00	46.00	-20.19	-
4	2.113	0.16	34.57	-	34.73	-	56.00	46.00	-21.27	-
5	4.832	0.22	31.55	-	31.77	-	56.00	46.00	-24.23	-
6	10.125	0.29	23.96	-	24.25	-	60.00	50.00	-35.75	-

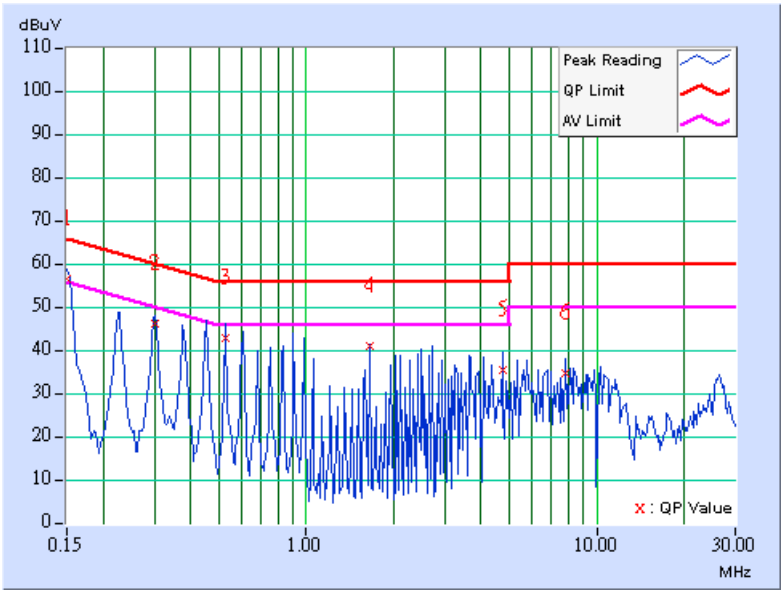
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
MODE	Channel 11	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH, 991hPa	**TEST MODE**	Test Mode 1
TESTED BY	Leo Hung		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	**0.150**	**0.11**	**56.36**	**49.81**	**56.47**	**49.92**	**66.00**	**56.00**	**-9.53**	**-6.08**
2	0.302	0.12	46.07	-	46.19	-	60.18	50.18	-13.98	-
3	0.529	0.13	42.59	-	42.72	-	56.00	46.00	-13.28	-
4	1.660	0.16	40.76	-	40.92	-	56.00	46.00	-15.08	-
5	4.754	0.23	35.08	-	35.31	-	56.00	46.00	-20.69	-
6	7.773	0.30	34.58	-	34.88	-	60.00	50.00	-25.12	-

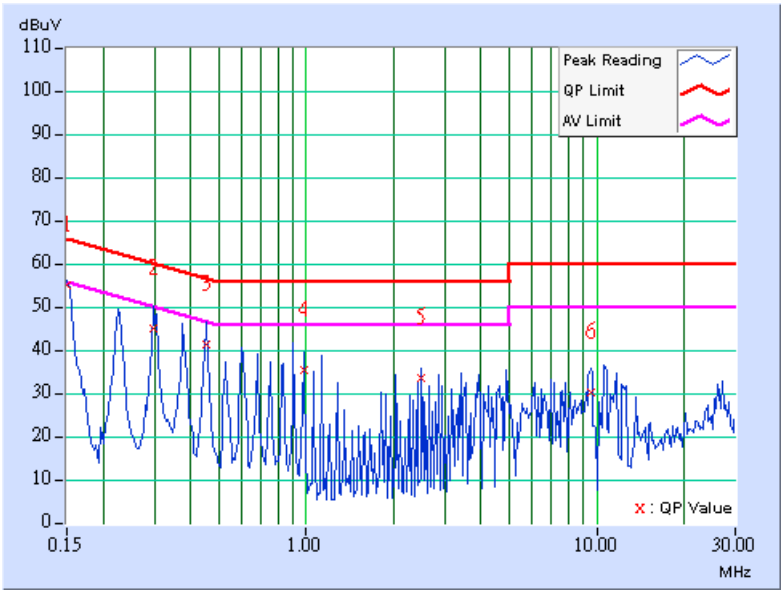
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
MODE	Channel 11	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH, 991hPa	**TEST MODE**	Test Mode 1
TESTED BY	Leo Hung		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.10	54.76	-	54.86	-	66.00	56.00	-11.14	-
2	0.298	0.11	44.94	-	45.05	-	60.29	50.29	-15.23	-
3	0.451	0.12	41.28	-	41.40	-	56.86	46.86	-15.46	-
4	0.978	0.15	35.35	-	35.50	-	56.00	46.00	-20.50	-
5	2.492	0.17	33.52	-	33.69	-	56.00	46.00	-22.31	-
6	9.586	0.28	30.16	-	30.44	-	60.00	50.00	-29.56	-

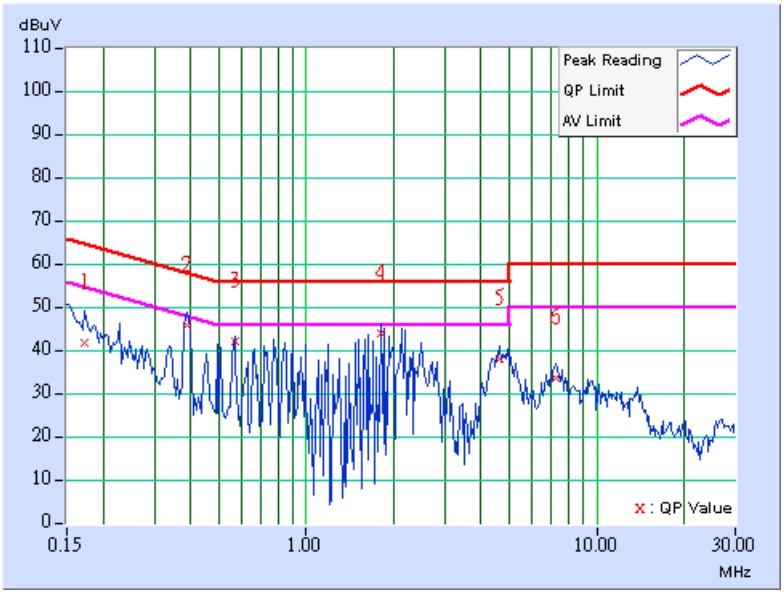
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	Wireless A+G Access Point	MODEL	WAP55AG ver. 2
MODE	Channel 1	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH, 991hPa	TEST MODE	Test Mode 2
TESTED BY	Leo Hung		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.173	0.11	41.49	-	41.60	-	64.79	54.79	-23.19	-
2	0.388	0.13	45.68	-	45.81	-	58.10	48.10	-12.29	-
3	0.568	0.13	41.82	-	41.95	-	56.00	46.00	-14.05	-
4	1.813	0.16	43.71	-	43.87	-	56.00	46.00	-12.13	-
5	4.641	0.22	38.00	-	38.22	-	56.00	46.00	-17.78	-
6	7.188	0.30	33.39	-	33.69	-	60.00	50.00	-26.31	-

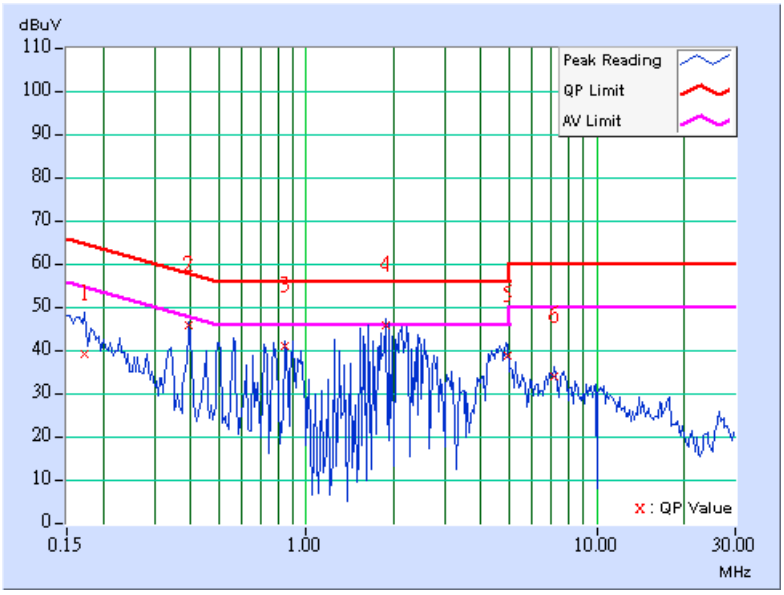
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	Wireless A+G Access Point	MODEL	WAP55AG ver. 2
MODE	Channel 1	6dB BANDWIDTH	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH, 991hPa	TEST MODE	Test Mode 2
TESTED BY	Leo Hung		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.173	0.10	38.99	-	39.09	-	64.79	54.79	-25.70	-
2	0.396	0.12	45.48	-	45.60	-	57.93	47.93	-12.34	-
3	0.849	0.14	40.66	-	40.80	-	56.00	46.00	-15.20	-
4	1.871	0.16	45.69	-	45.85	-	56.00	46.00	-10.15	-
5	4.914	0.22	38.76	-	38.98	-	56.00	46.00	-17.02	-
6	7.172	0.28	33.77	-	34.05	-	60.00	50.00	-25.95	-

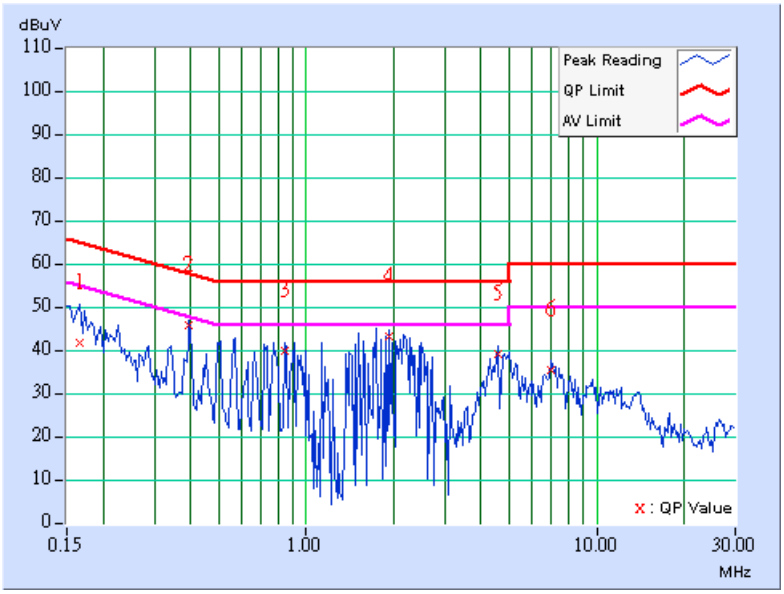
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
MODE	Channel 6	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH, 991hPa	**TEST MODE**	Test Mode 2
TESTED BY	Leo Hung		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.166	0.11	41.73	-	41.84	-	65.18	55.18	-23.34	-
2	0.396	0.13	45.70	-	45.83	-	57.93	47.93	-12.11	-
3	0.849	0.14	39.85	-	39.99	-	56.00	46.00	-16.01	-
4	1.926	0.16	43.01	-	43.17	-	56.00	46.00	-12.83	-
5	4.594	0.22	39.02	-	39.24	-	56.00	46.00	-16.76	-
6	6.980	0.29	35.15	-	35.44	-	60.00	50.00	-24.56	-

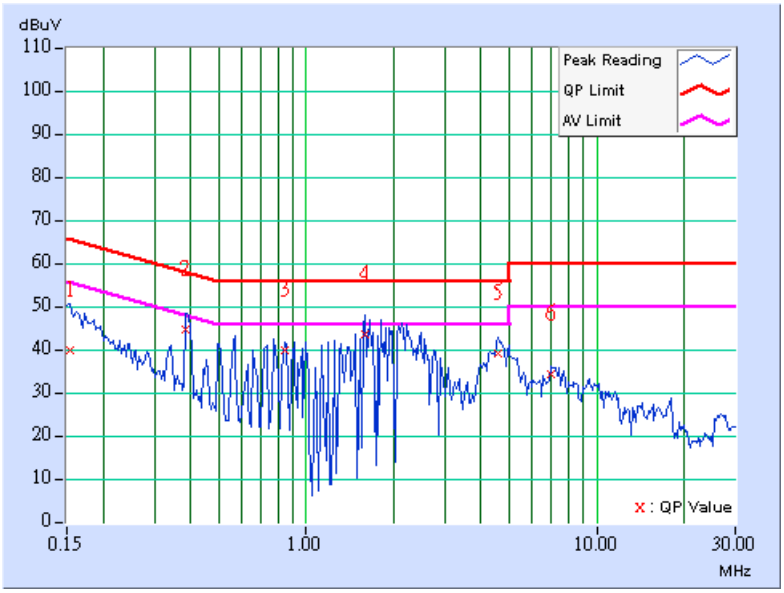
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
MODE	Channel 6	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH, 991hPa	**TEST MODE**	Test Mode 2
TESTED BY	Leo Hung		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.154	0.10	39.72	-	39.82	-	65.79	55.79	-25.97	-
2	0.384	0.12	44.70	-	44.82	-	58.18	48.18	-13.37	-
3	0.849	0.14	39.57	-	39.71	-	56.00	46.00	-16.29	-
4	1.598	0.16	43.58	-	43.74	-	56.00	46.00	-12.26	-
5	4.582	0.21	38.89	-	39.10	-	56.00	46.00	-16.90	-
6	6.977	0.27	34.08	-	34.35	-	60.00	50.00	-25.65	-

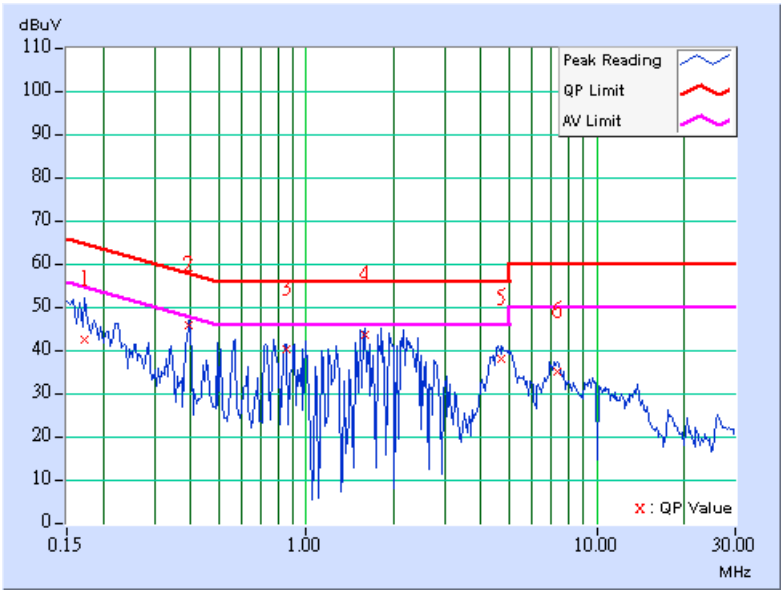
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
MODE	Channel 11	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH, 991hPa	**TEST MODE**	Test Mode 2
TESTED BY	Leo Hung		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.173	0.11	42.38	-	42.49	-	64.79	54.79	-22.30	-
2	0.396	0.13	45.52	-	45.65	-	57.93	47.93	-12.29	-
3	0.853	0.14	39.99	-	40.13	-	56.00	46.00	-15.87	-
4	1.586	0.16	43.56	-	43.72	-	56.00	46.00	-12.28	-
5	4.707	0.22	37.78	-	38.00	-	56.00	46.00	-18.00	-
6	7.332	0.30	34.71	-	35.01	-	60.00	50.00	-24.99	-

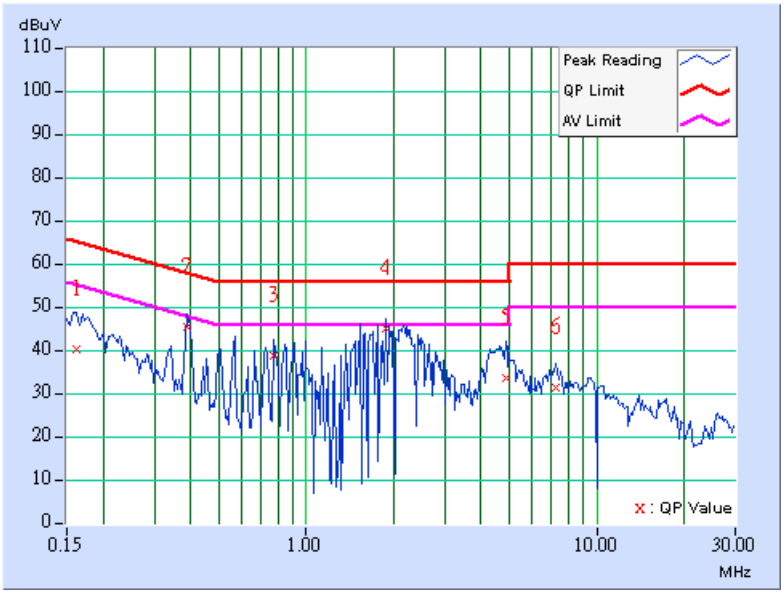
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
MODE	Channel 11	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH, 991hPa	**TEST MODE**	Test Mode 2
TESTED BY	Leo Hung		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
	[MHz]	(dB)	[dB (uV)] Q.P.	AV.	[dB (uV)] Q.P.	AV.	[dB (uV)] Q.P.	AV.	(dB) Q.P.	AV.
1	0.162	0.10	40.08	-	40.18	-	65.38	55.38	-25.19	-
2	0.388	0.12	45.28	-	45.40	-	58.10	48.10	-12.70	-
3	0.771	0.13	38.68	-	38.81	-	56.00	46.00	-17.19	-
4	1.871	0.16	45.02	-	45.18	-	56.00	46.00	-10.82	-
5	4.848	0.22	33.29	-	33.51	-	56.00	46.00	-22.49	-
6	7.246	0.28	31.38	-	31.66	-	60.00	50.00	-28.34	-

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 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	Dec. 15, 2004
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	Jan. 22, 2005
Preamplifier Agilent	8447D	2944A10629	Jan. 14, 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.

4.2.3 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. 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 10 dB 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 10 dB margin would be re-tested one by one using the quasi-peak method or average method as specified and then reported in Data sheet peak mode and QP mode.

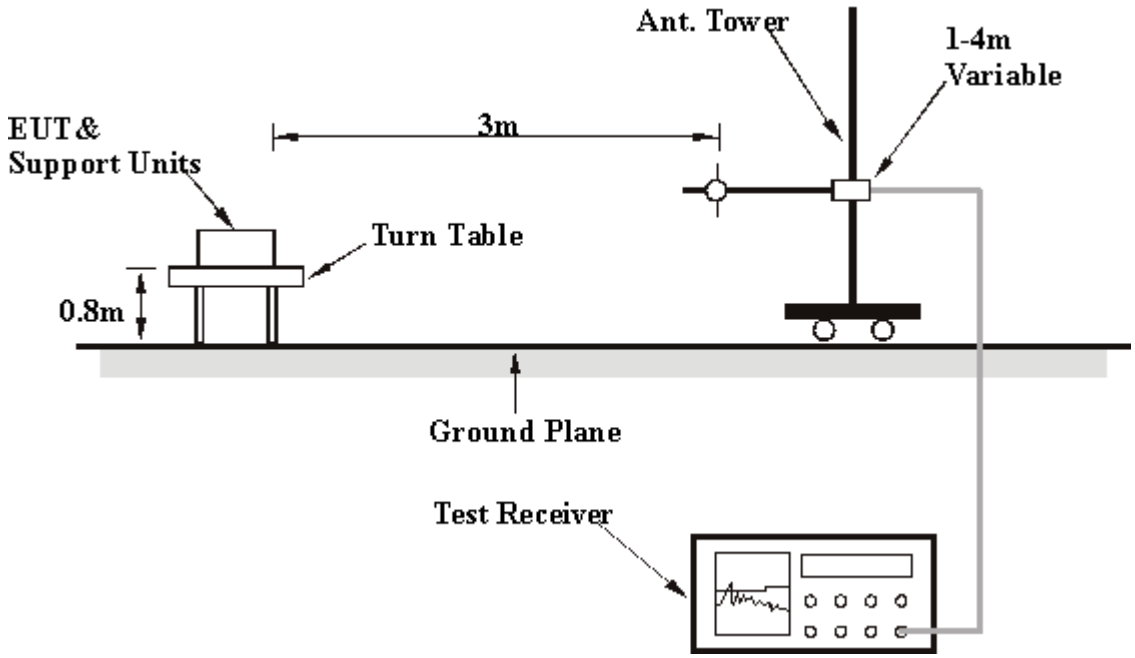
NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection (PK) 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.

4.2.4 DEVIATION FROM TEST STANDARD

No deviation

4.2.5 TEST SETUP



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

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6

4.2.7 TEST RESULTS

EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
CHANNEL	Channel 11	**FREQUENCY RANGE**	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**TEST MODE**	Test Mode 1
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	47.49	28.39 QP	40.00	-11.61	1.00 H	238	13.39	15.00
2	109.70	40.08 QP	43.50	-3.42	1.50 H	274	28.10	11.97
3	123.31	41.64 QP	43.50	-1.86	1.50 H	259	28.38	13.26
4	218.56	37.24 QP	46.00	-8.76	1.25 H	58	25.44	11.80
5	249.66	31.86 QP	46.00	-14.14	1.00 H	283	18.64	13.22
6	329.36	35.88 QP	46.00	-10.12	1.00 H	328	20.71	15.18
7	374.07	32.99 QP	46.00	-13.01	1.00 H	289	16.81	16.18
8	440.16	31.36 QP	46.00	-14.64	1.00 H	319	13.55	17.81
9	546.30	42.82 QP	46.00	-3.18	1.53 H	197	23.20	19.62
10	550.00	44.80 QP	46.00	-1.20	1.00 H	0	25.11	19.69
11	574.29	40.22 QP	46.00	-5.78	1.50 H	196	19.88	20.33
12	603.45	39.46 QP	46.00	-6.54	1.25 H	211	18.41	21.06
13	681.20	37.30 QP	46.00	-8.70	1.25 H	160	15.24	22.07
14	751.18	39.63 QP	46.00	-6.37	1.00 H	25	16.09	23.54
15	881.42	36.39 QP	46.00	-9.61	1.75 H	130	11.63	24.77
16	990.28	35.46 QP	54.00	-18.54	1.50 H	109	9.70	25.77

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	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
CHANNEL	Channel 11	**FREQUENCY RANGE**	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**TEST MODE**	Test Mode 1
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	47.81	36.11 QP	40.00	-3.89	1.24 V	200	21.15	14.96
2	61.10	36.58 QP	40.00	-3.42	1.25 V	115	23.00	13.59
3	109.70	38.45 QP	43.50	-5.05	1.00 V	229	26.48	11.97
4	123.31	39.44 QP	43.50	-4.06	1.00 V	244	26.18	13.26
5	249.66	31.97 QP	46.00	-14.03	1.75 V	352	18.75	13.22
6	329.36	34.63 QP	46.00	-11.37	1.50 V	265	19.46	15.18
7	374.07	31.67 QP	46.00	-14.33	1.00 V	316	15.49	16.18
8	399.34	33.05 QP	46.00	-12.95	1.25 V	40	16.32	16.74
9	479.04	33.50 QP	46.00	-12.50	1.00 V	25	15.05	18.45
10	500.42	38.47 QP	46.00	-7.53	1.00 V	277	19.73	18.74
11	545.13	42.74 QP	46.00	-3.26	1.50 V	166	23.14	19.60
12	624.83	36.78 QP	46.00	-9.22	1.50 V	196	15.44	21.34
13	751.18	34.51 QP	46.00	-11.49	1.00 V	172	10.98	23.54
14	770.62	37.70 QP	46.00	-8.30	1.50 V	280	14.05	23.65
15	881.42	33.91 QP	46.00	-12.09	1.25 V	40	9.14	24.77
16	990.28	36.32 QP	54.00	-17.68	1.00 V	61	10.55	25.77

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	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
CHANNEL	Channel 11	**FREQUENCY RANGE**	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**TEST MODE**	Test Mode 2
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	47.49	28.84 QP	40.00	-11.16	2.00 H	22	13.84	15.00
2	109.70	42.16 QP	43.50	-1.34	1.25 H	79	30.19	11.97
3	**125.00**	**42.39 QP**	**43.50**	**-1.11**	**1.75 H**	**246**	**29.01**	**13.38**
4	218.56	42.12 QP	46.00	-3.88	1.00 H	97	30.32	11.80
5	249.66	34.95 QP	46.00	-11.05	1.00 H	289	21.74	13.22
6	329.36	35.92 QP	46.00	-10.08	1.00 H	313	20.74	15.18
7	374.07	33.36 QP	46.00	-12.64	1.00 H	274	17.18	16.18
8	399.34	30.06 QP	46.00	-15.94	1.00 H	67	13.32	16.74
9	500.42	41.71 QP	46.00	-4.29	1.75 H	277	22.97	18.74
10	550.96	44.31 QP	46.00	-1.69	1.50 H	205	24.60	19.72
11	601.50	44.27 QP	46.00	-1.73	1.50 H	193	23.24	21.03
12	681.20	38.45 QP	46.00	-7.55	1.25 H	154	16.38	22.07
13	751.18	36.23 QP	46.00	-9.77	1.00 H	28	12.69	23.54
14	881.42	33.40 QP	46.00	-12.60	1.50 H	211	8.64	24.77
15	920.30	34.04 QP	46.00	-11.96	1.50 H	190	8.72	25.33
16	990.28	35.37 QP	54.00	-18.63	1.50 H	103	9.61	25.77

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	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
CHANNEL	Channel 11	**FREQUENCY RANGE**	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**TEST MODE**	Test Mode 2
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	45.37	38.78 QP	40.00	-1.22	1.50 V	193	23.52	15.26
2	59.16	36.58 QP	40.00	-3.42	1.50 V	7	22.79	13.79
3	109.70	38.73 QP	43.50	-4.77	1.00 V	229	26.76	11.97
4	125.25	40.47 QP	43.50	-3.03	1.00 V	235	27.08	13.39
5	218.56	34.65 QP	46.00	-11.35	1.00 V	85	22.85	11.80
6	329.36	34.56 QP	46.00	-11.44	1.50 V	52	19.39	15.18
7	399.34	32.52 QP	46.00	-13.48	1.25 V	10	15.79	16.74
8	479.04	32.94 QP	46.00	-13.06	1.00 V	37	14.49	18.45
9	500.42	39.22 QP	46.00	-6.78	1.25 V	253	20.48	18.74
10	550.96	39.33 QP	46.00	-6.67	1.00 V	274	19.61	19.72
11	601.50	43.12 QP	46.00	-2.88	1.50 V	235	22.09	21.03
12	770.62	38.68 QP	46.00	-7.32	1.50 V	280	15.03	23.65
13	881.42	32.40 QP	46.00	-13.60	1.25 V	55	7.63	24.77
14	990.28	36.28 QP	54.00	-17.72	1.00 V	61	10.51	25.77

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	Wireless A+G Access Point	MODEL	WAP55AG ver. 2
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 67%RH, 991hPa	MODE	DSSS
TESTED BY	Leo Hung		

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	1120.00	48.14 PK	74.00	-25.86	1.26 H	103	21.38	26.76
1	1120.00	45.58 AV	54.00	-8.42	1.26 H	103	18.82	26.76
2	2319.99	48.90 PK	74.00	-25.10	1.02 H	28	17.32	31.58
3	2319.00	41.50 AV	54.00	-12.50	1.02 H	28	9.92	31.58
3	*2412.00	104.62 PK			1.02 H	28	72.75	31.87
3	*2412.00	97.22 AV			1.02 H	28	65.35	31.87
4	4824.00	53.63 PK	74.00	-20.37	1.25 H	46	15.52	38.11
4	4824.00	45.08 AV	54.00	-8.92	1.25 H	46	6.97	38.11
5	9648.00	52.91 PK	74.00	-21.09	1.25 H	307	10.63	42.28
5	9648.00	41.38 AV	54.00	-12.62	1.25 H	307	-0.90	42.28

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	1120.00	45.44 PK	74.00	-28.56	1.00 V	72	18.68	26.76
1	1120.00	41.92 AV	54.00	-12.08	1.00 V	72	15.16	26.76
2	2319.99	57.77 PK	74.00	-16.23	1.14 V	1	26.19	31.58
2	2319.99	50.48 AV	54.00	-3.52	1.14 V	1	18.90	31.58
3	*2412.00	113.49 PK			1.14 V	1	81.62	31.87
3	*2412.00	106.20 AV			1.14 V	1	74.33	31.87
4	4824.00	57.67 PK	74.00	-16.33	1.00 V	298	19.56	38.11
4	4824.00	50.96 AV	54.00	-3.04	1.00 V	298	12.85	38.11
5	9648.00	55.72 PK	74.00	-18.28	1.00 V	4	13.44	42.28
5	9648.00	44.14 AV	54.00	-9.86	1.00 V	4	1.86	42.28

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
CHANNEL	Channel 6	**FREQUENCY RANGE**	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 67%RH, 991hPa	**MODE**	DSSS
TESTED BY	Leo Hung		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3M

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	1120.00	47.83 PK	74.00	-26.17	1.29 H	98	21.07	26.76
1	1120.00	45.50 AV	54.00	-8.50	1.29 H	98	18.74	26.76
2	*2437.00	106.63 PK			1.27 H	227	74.68	31.95
2	*2437.00	98.92 AV			1.27 H	227	66.97	31.95
3	4874.00	54.78 PK	74.00	-19.22	1.03 H	37	16.50	38.28
3	4874.00	46.80 AV	54.00	-7.20	1.03 H	37	8.52	38.28
4	9748.00	53.13 PK	74.00	-20.87	1.02 H	114	14.62	38.51
4	9748.00	45.38 AV	54.00	-8.62	1.02 H	114	6.87	38.51

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3M

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	1120.00	44.91 PK	74.00	-29.09	1.00 V	360	18.15	26.76
1	1120.00	42.04 AV	54.00	-11.96	1.00 V	360	15.28	26.76
2	2320.00	66.15 PK	74.00	-7.85	1.18 V	127	34.57	31.58
2	2320.00	52.12 AV	54.00	-1.88	1.18 V	127	20.54	31.58
3	*2437.00	115.21 PK			1.10 V	317	83.26	31.95
3	*2437.00	107.55 AV			1.10 V	317	75.60	31.95
4	4874.00	57.78 PK	74.00	-16.22	1.00 V	1	19.50	38.28
4	4874.00	50.39 AV	54.00	-3.61	1.00 V	1	12.11	38.28
5	9748.00	53.25 PK	74.00	-20.75	1.00 V	360	14.74	38.51
5	9748.00	46.39 AV	54.00	-7.61	1.00 V	360	7.88	38.51

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
CHANNEL	Channel 11	**FREQUENCY RANGE**	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 67%RH, 991hPa	**MODE**	DSSS
TESTED BY	Leo Hung		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3M

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	1120.00	47.42 PK	74.00	-26.58	1.29 H	97	20.66	26.76
1	1120.00	44.84 AV	54.00	-9.16	1.29 H	97	18.08	26.76
2	*2462.00	103.47 PK			1.03 H	222	71.45	32.02
2	*2462.00	95.83 AV			1.03 H	222	63.81	32.02
3	2487.00	48.59 PK	74.00	-25.41	1.03 H	222	16.49	32.10
3	2487.00	40.95 AV	54.00	-13.05	1.03 H	222	8.85	32.10
4	4924.00	53.49 PK	74.00	-20.51	1.24 H	48	15.00	38.49
4	4924.00	44.13 AV	54.00	-9.87	1.24 H	48	5.64	38.49

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3M

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	1120.00	45.40 PK	74.00	-28.60	1.00 V	3	18.64	26.76
1	1120.00	41.96 AV	54.00	-12.04	1.00 V	3	15.20	26.76
2	2320.00	62.68 PK	74.00	-11.32	1.18 V	129	31.10	31.58
2	2320.00	52.38 AV	54.00	-1.62	1.18 V	129	20.80	31.58
3	*2462.00	114.75 PK			1.10 V	318	82.73	32.02
3	*2462.00	106.82 AV			1.10 V	318	74.80	32.02
4	2487.00	59.87 PK	74.00	-14.13	1.10 V	318	27.77	32.10
4	2487.00	51.94 AV	54.00	-2.06	1.10 V	318	19.84	32.10
5	4924.00	56.21 PK	74.00	-17.79	1.00 V	187	17.72	38.49
5	4924.00	49.19 AV	54.00	-4.81	1.00 V	187	10.70	38.49

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

Normal mode

EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 67%RH, 991hPa	**MODE**	OFDM
TESTED BY	Leo Hung		

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	1120.00	48.27 PK	74.00	-25.73	1.28 H	103	21.51	26.76
1	1120.00	45.60 AV	54.00	-8.40	1.28 H	103	18.84	26.76
2	2390.00	53.25 PK	74.00	-20.75	1.02 H	28	21.45	31.80
2	2390.00	42.85 AV	54.00	-11.15	1.02 H	28	11.05	31.80
3	*2412.00	100.68 PK			1.02 H	28	68.81	31.87
3	*2412.00	90.28 AV			1.02 H	28	58.41	31.87
4	4824.00	48.53 PK	74.00	-25.47	1.07 H	190	10.42	38.11
4	4824.00	36.72 AV	54.00	-17.28	1.07 H	190	-1.39	38.11

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	1120.00	45.30 PK	74.00	-28.70	1.00 V	71	18.54	26.76
1	1120.00	41.86 AV	54.00	-12.14	1.00 V	71	15.10	26.76
2	2319.85	61.65 PK	74.00	-12.35	1.16 V	348	30.07	31.58
2	2319.85	51.99 AV	54.00	-2.01	1.16 V	348	20.41	31.58
3	*2412.00	109.08 PK			1.16 V	348	77.21	31.87
3	*2412.00	99.42 AV			1.16 V	348	67.55	31.87
4	4824.00	53.04 PK	74.00	-20.96	1.00 V	16	14.93	38.11
4	4824.00	39.52 AV	54.00	-14.48	1.00 V	16	1.41	38.11

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
CHANNEL	Channel 6	**FREQUENCY RANGE**	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 67%RH, 991hPa	**MODE**	OFDM
TESTED BY	Leo Hung		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3M

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	2320.00	50.07 PK	74.00	-23.93	1.09 H	304	18.49	31.58
1	2320.00	41.32 AV	54.00	-12.68	1.09 H	304	9.74	31.58
2	*2437.00	98.04 PK			1.00 H	34	66.09	31.95
2	*2437.00	88.42 AV			1.00 H	34	56.47	31.95
3	4874.00	49.07 PK	74.00	-24.93	1.01 H	157	10.79	38.28
3	4874.00	36.63 AV	54.00	-17.37	1.01 H	157	-1.65	38.28

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3M

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	1120.00	45.38 PK	74.00	-28.62	1.00 V	74	18.62	26.76
1	1120.00	41.81 AV	54.00	-12.19	1.00 V	74	15.05	26.76
2	2320.00	60.77 PK	74.00	-13.23	1.19 V	221	29.19	31.58
2	2320.00	49.29 AV	54.00	-4.71	1.19 V	221	17.71	31.58
3	*2437.00	109.71 PK			1.10 V	318	77.76	31.95
3	*2437.00	100.14 AV			1.10 V	318	68.19	31.95
4	4874.00	50.72 PK	74.00	-23.28	1.00 V	10	12.44	38.28
4	4874.00	38.21 AV	54.00	-15.79	1.00 V	10	-0.07	38.28

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
CHANNEL	Channel 11	**FREQUENCY RANGE**	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 67%RH, 991hPa	**MODE**	OFDM
TESTED BY	Leo Hung		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3M

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	1120.00	47.96 PK	74.00	-26.04	1.31 H	103	21.20	26.76
1	1120.00	45.60 AV	54.00	-8.40	1.31 H	103	18.84	26.76
2	*2462.00	98.50 PK			1.06 H	206	66.48	32.02
2	*2462.00	88.54 AV			1.06 H	206	56.52	32.02
3	2483.50	50.65 PK	74.00	-23.35	1.06 H	206	18.56	32.09
4	4924.00	49.31 PK	74.00	-24.69	1.17 H	186	10.82	38.49
4	4924.00	36.72 AV	54.00	-17.28	1.17 H	186	-1.77	38.49

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3M

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	1120.00	44.92 PK	74.00	-29.08	1.00 V	360	18.16	26.76
1	1120.00	41.44 AV	54.00	-12.56	1.00 V	360	14.68	26.76
2	2320.00	61.45 PK	74.00	-12.55	1.19 V	211	29.87	31.58
2	2320.00	51.47 AV	54.00	-2.53	1.19 V	211	19.89	31.58
3	*2462.00	110.34 PK			1.08 V	318	78.32	32.02
3	*2462.00	99.84 AV			1.08 V	318	67.82	32.02
4	2483.50	62.49 PK	74.00	-11.51	1.08 V	318	30.40	32.09
4	2483.50	51.99 AV	54.00	-2.01	1.08 V	318	19.90	32.09
5	4924.00	48.41 PK	74.00	-25.59	1.06 V	116	9.92	38.49
5	4924.00	38.26 AV	54.00	-15.74	1.06 V	116	-0.23	38.49

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

Turbo mode

EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
CHANNEL	Channel 6	**FREQUENCY RANGE**	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**MODE**	OFDM
TESTED BY	Leo Hung		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3M

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	1120.00	45.09 PK	74.00	-28.91	1.11 H	14	18.33	26.76
1	1120.00	41.39 AV	54.00	-12.61	1.11 H	14	14.63	26.76
2	2390.00	50.28 PK	74.00	-23.72	1.18 H	43	18.48	31.80
2	2390.00	41.10 AV	54.00	-12.90	1.18 H	43	9.30	31.80
3	*2437.00	100.06 PK			1.18 H	43	68.11	31.95
3	*2437.00	90.88 AV			1.18 H	43	58.93	31.95
4	2483.50	54.04 PK	74.00	-19.96	1.18 H	43	21.95	32.09
4	2483.50	44.86 AV	54.00	-9.14	1.18 H	43	12.77	32.09
5	4874.00	49.21 PK	74.00	-24.79	1.00 H	220	10.93	38.28
5	4874.00	37.17 AV	54.00	-16.83	1.00 H	220	-1.11	38.28

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3M

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	1120.00	46.19 PK	74.00	-27.81	1.38 V	4	19.43	26.76
1	1120.00	42.80 AV	54.00	-11.20	1.38 V	4	16.04	26.76
2	2390.00	58.99 PK	74.00	-15.01	1.15 V	339	27.19	31.80
2	2390.00	48.87 AV	54.00	-5.13	1.15 V	339	17.07	31.80
3	*2437.00	108.77 PK			1.15 V	339	76.82	31.95
3	*2437.00	98.45 AV			1.15 V	339	66.50	31.95
4	2483.50	62.75 PK	74.00	-11.25	1.15 V	339	30.66	32.09
4	2483.50	50.17 AV	54.00	-3.83	1.15 V	339	18.08	32.09
5	4874.00	51.03 PK	74.00	-22.97	1.09 V	300	12.75	38.28
5	4874.00	38.72 AV	54.00	-15.28	1.09 V	300	0.44	38.28

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

4.3 6dB BANDWIDTH MEASUREMENT

4.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

4.3.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SPECTRUM ANALYZER	FSEK 30	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

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100kHz RBW and 100kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

4.3.4 DEVIATION FROM TEST STANDARD

No deviation

4.3.5 TEST SETUP

4.3.6 EUT OPERATING CONDITIONS

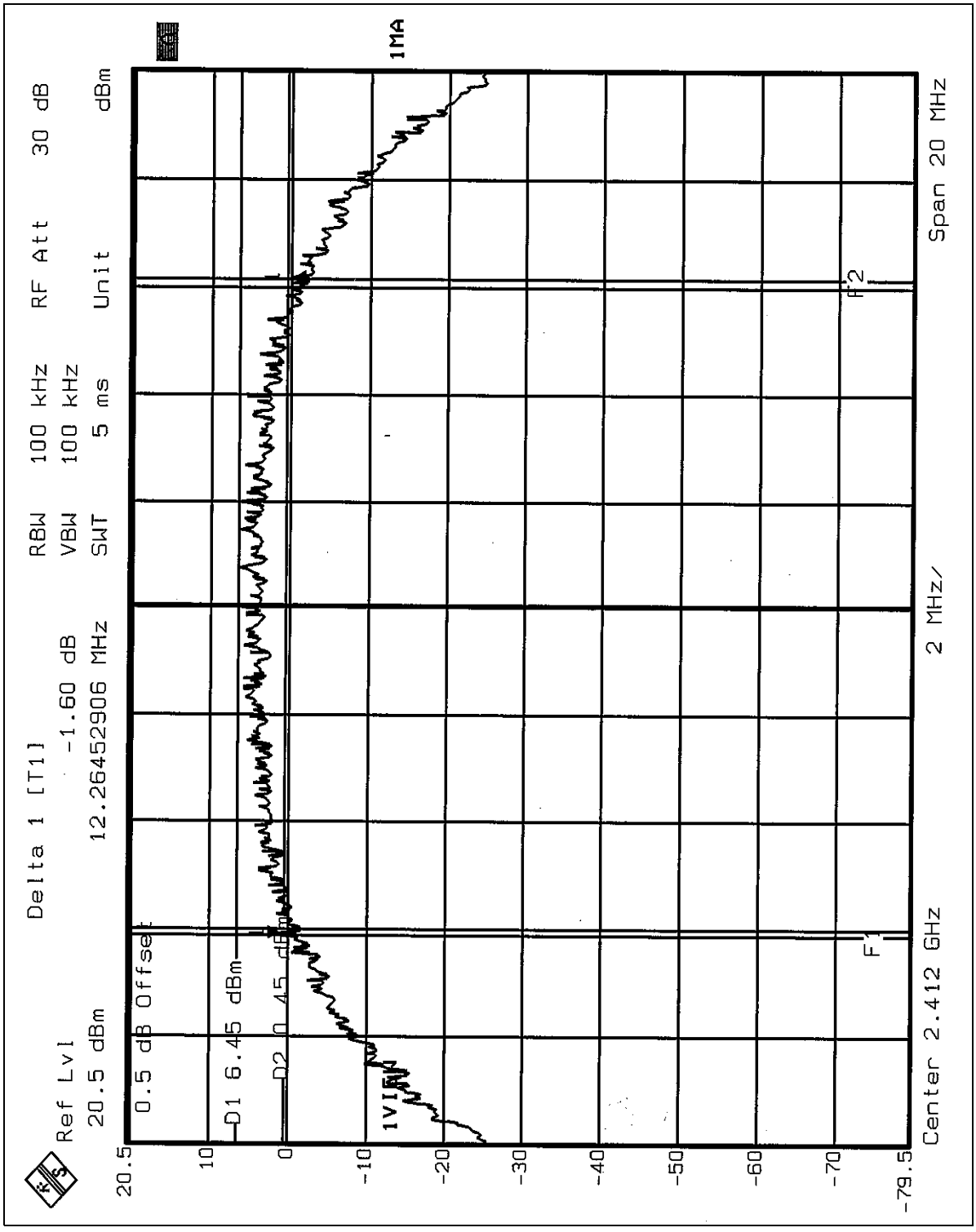
The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.3.7 TEST RESULTS

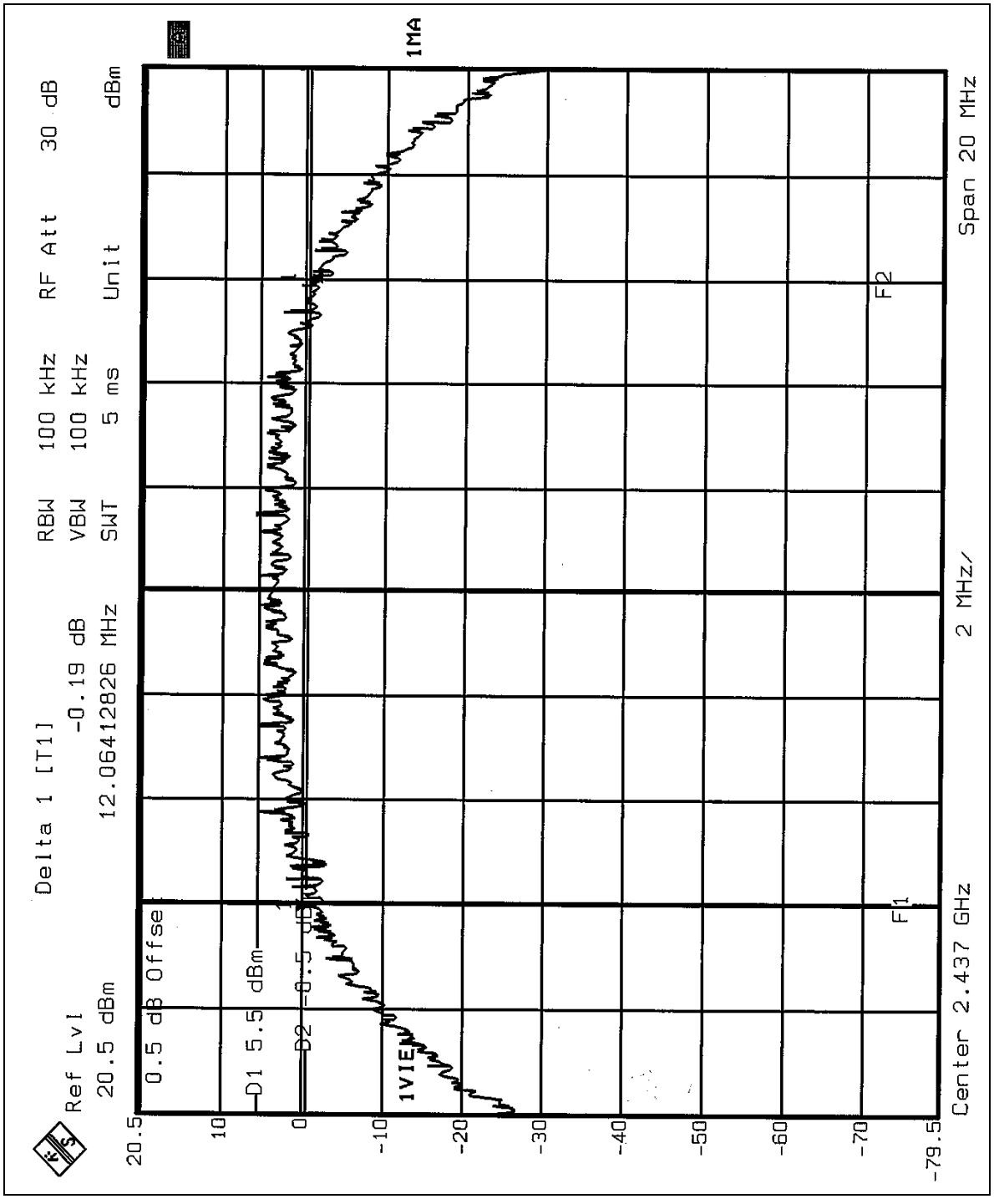
EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
MODE	DSSS	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	24deg.C, 64%RH, 991hPa	**TESTED BY**	Leo Hung

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	12.26	0.5	PASS
6	2437	12.06	0.5	PASS
11	2462	11.82	0.5	PASS

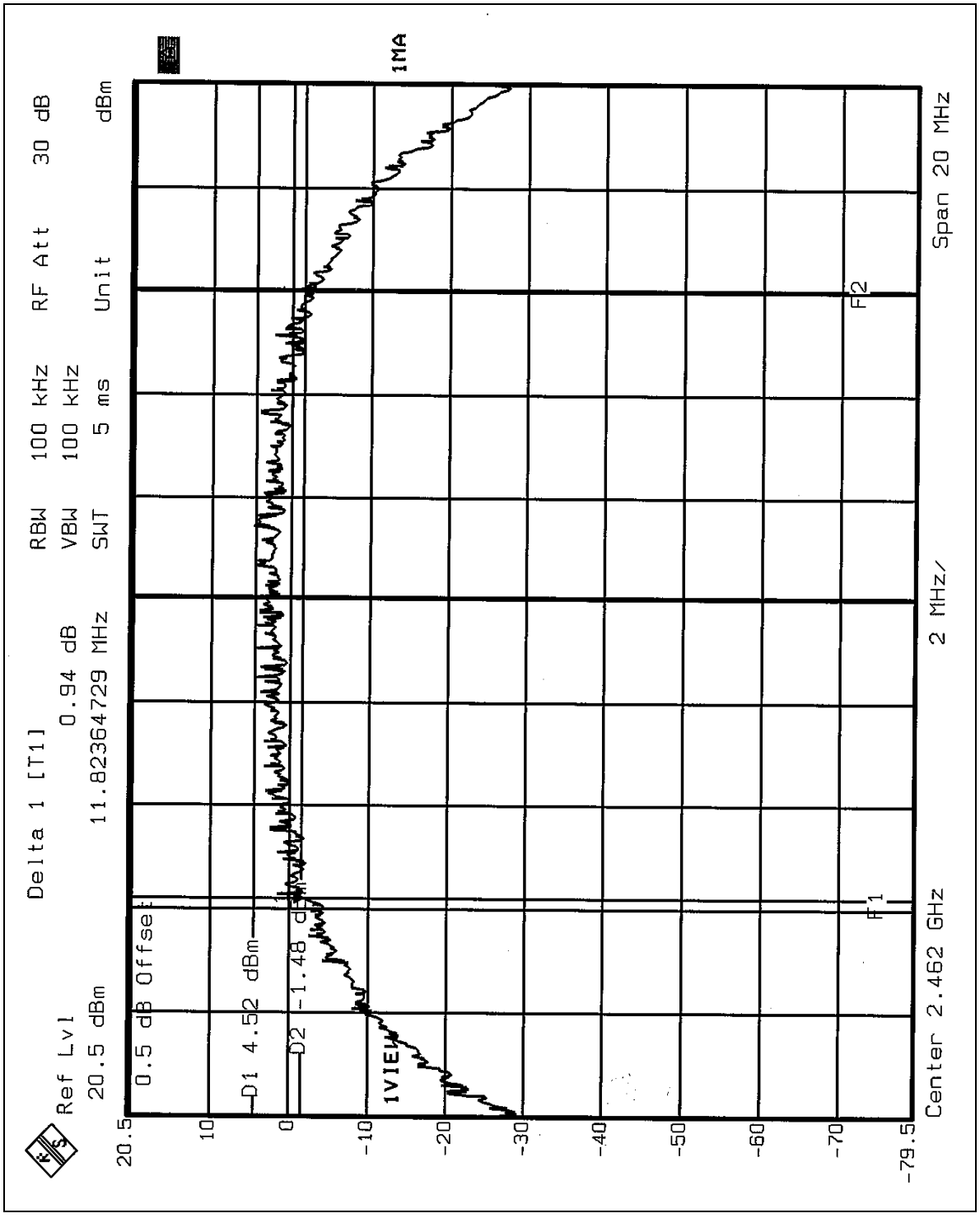
CH1


Delta 1 [T1]
-1.60 dB
12.26452906 MHz
RBW 100 kHz
VBW 100 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 6.45 dBm
D2 0.45 dB
1MA
1VIEW
Span 20 MHz
2 MHz/
Center 2.412 GHz
F1
F2
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

CH6


Delta 1 [T1]
-0.19 dB
12.06412826 MHz
RBW 100 kHz
VBW 100 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 5.5 dBm
D2 -0.5 dB
1MA
1VIEW
F2
F1
Span 20 MHz
2 MHz/
Center 2.437 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

CH11

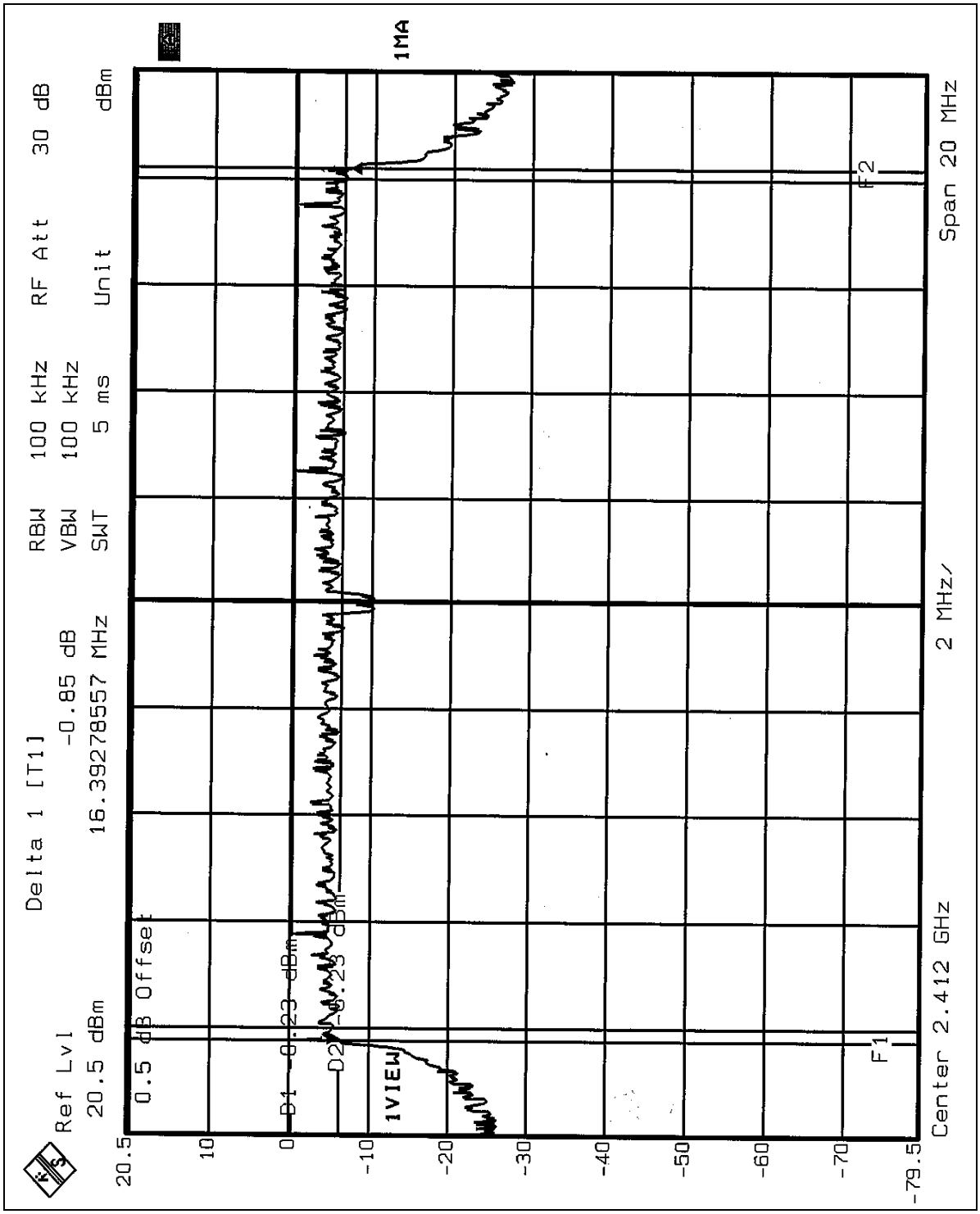

Delta 1 [T1]
0.94 dB
11.82364729 MHz
RBW 100 kHz
VBW 100 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 4.52 dBm
D2 -1.48 dB
1MA
1VIEW
F2
F1
Span 20 MHz
2 MHz/
Center 2.462 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

Normal mode

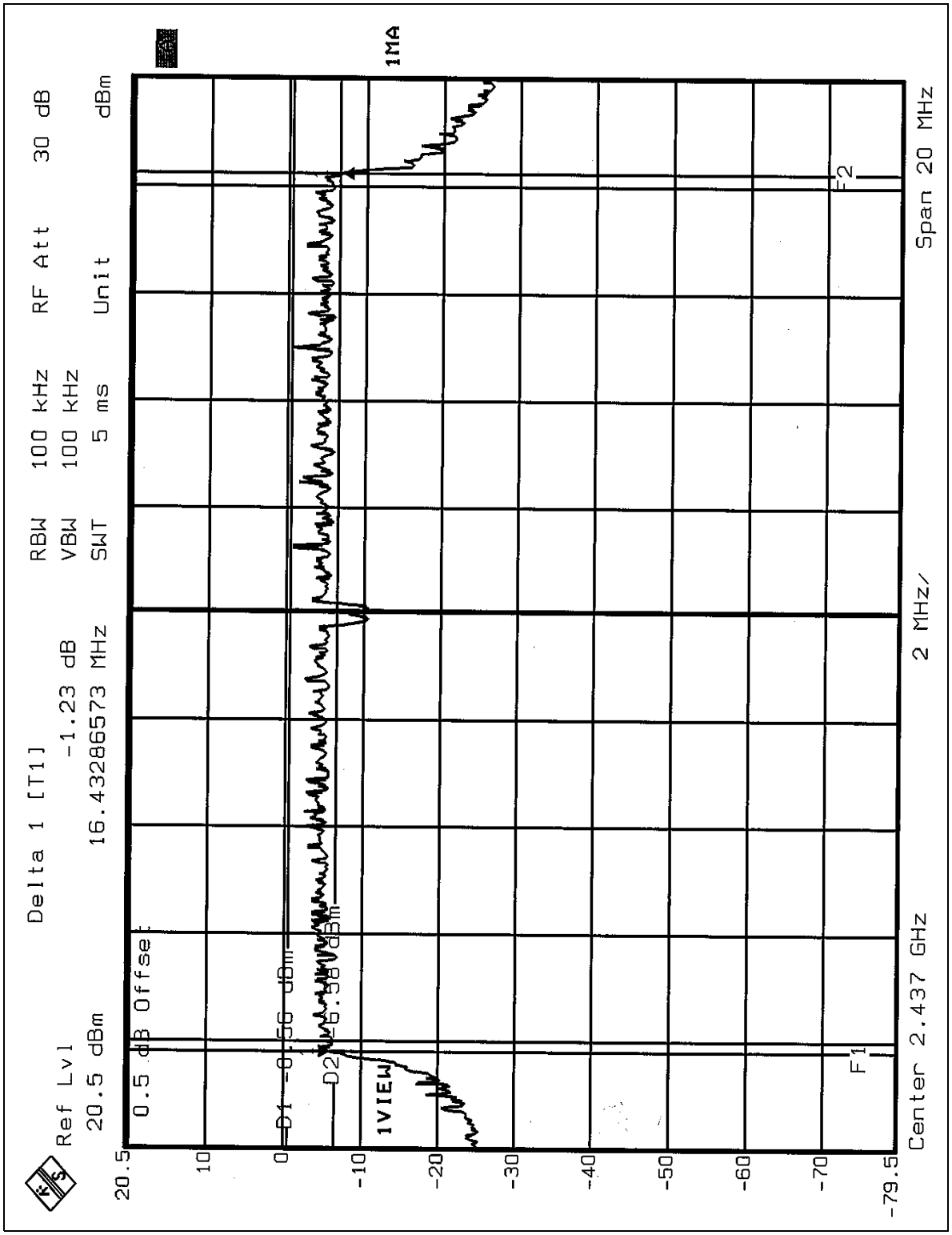
EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
MODE	OFDM	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	24deg.C, 64%RH, 991hPa	**TESTED BY**	Leo Hung

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	16.39	0.5	PASS
6	2437	16.43	0.5	PASS
11	2462	16.39	0.5	PASS

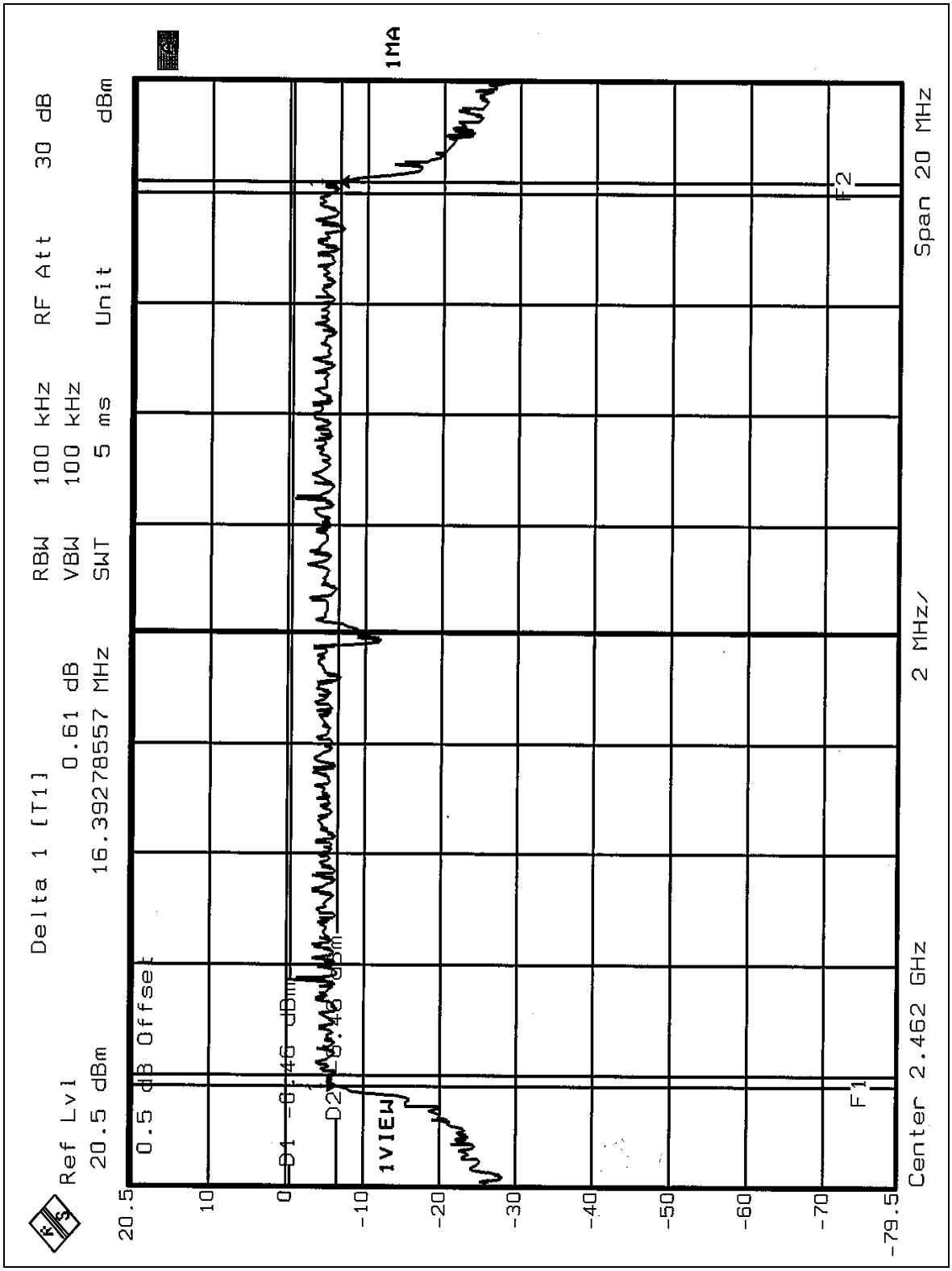
CH1


Delta 1 [T1]
-0.85 dB
16.39278557 MHz
RBW 100 kHz
VBW 100 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 -0.23 dBm
D2 -0.23 dBm
1VIEW
1MA
F1
F2
Center 2.412 GHz
2 MHz/
Span 20 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

CH6


Delta 1 [T1]
-1.23 dB
16.43286573 MHz
RBW 100 kHz
VBW 100 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 -0.56 dBm
D2 -6.98 dBm
1VIEW
1MA
F1
F2
Center 2.437 GHz
2 MHz/
Span 20 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

CH11

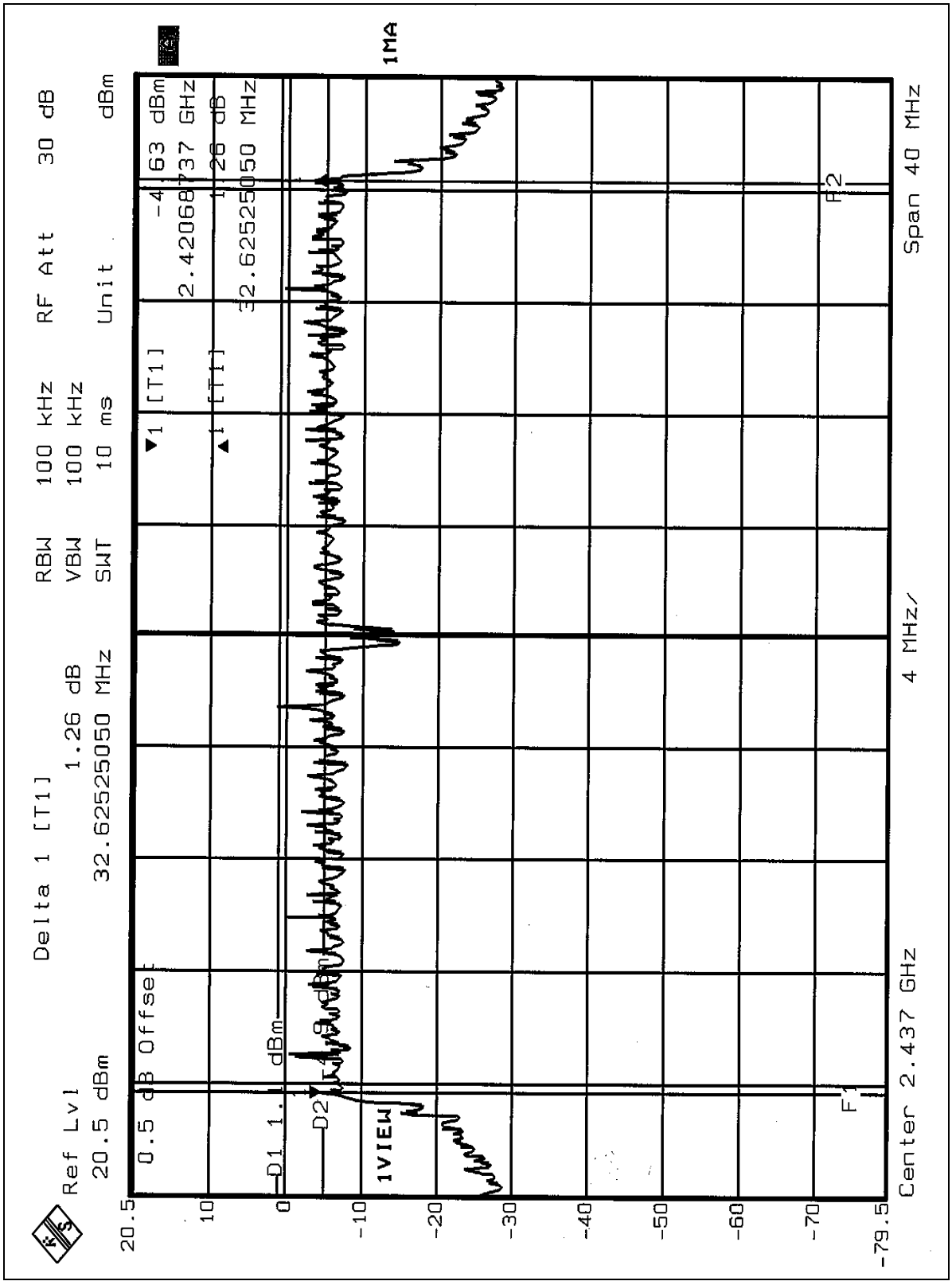

Ref Lvl
20.5 dBm
0.5 dB Offset
Delta 1 [T1]
0.61 dB
16.39278557 MHz
D1 -0.46 dBm
D2 -0.46 dBm
RBW 100 kHz
VBW 100 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1VIEW
1MA
F1
F2
Center 2.462 GHz
2 MHz/
Span 20 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

Turbo mode

EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
MODE	OFDM	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH, 991hPa	**TESTED BY**	Leo Hung

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
6	2437	32.62	0.5	PASS

CH6


Delta 1 [T1]
1.26 dB
32.62525050 MHz
RBW 100 kHz
VBW 100 kHz
SWT 10 ms
RF Att 30 dB
Unit dBm
1 [T1]
-4.63 dBm
2.42068737 GHz
1 [T1]
1.26 dB
32.62525050 MHz
Ref Lvl
20.5 dBm
0.5 dB Offset
1MA
1VIEW
D1 1.1 dBm
D2 -4.9 dBm
Center 2.437 GHz
4 MHz/
Span 40 MHz
F1
F2

4.4 MAXIMUM PEAK OUTPUT POWER

4.4.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT

The Maximum Peak Output Power Measurement is 30dBm.

4.4.2 INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005
AGILENT SIGNAL GENERATOR	E8257C	MY43320668	Dec. 31, 2004
TEKTRONIX OSCILLOSCOPE	TDS 1012	C019167	Feb. 01, 2005
NARDA DETECTOR	4503A	FSCM99899	NA

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

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4.4.1 TEST PROCEDURES

1. A detector was used on the output port of the EUT. An oscilloscope was used to read the response of the detector.
2. Replaced the EUT by the signal generator. The center frequency of the S.G was adjusted to the center frequency of the measured channel.
3. Adjusted the power to have the same reading on oscilloscope. Record the power level.

4.4.2 DEVIATION FROM TEST STANDARD

No deviation

4.4.3 TEST SETUP

4.4.4 EUT OPERATING CONDITIONS

Same as Item 4.3.6

4.4.3 TEST RESULTS

EUT	Wireless A+G Access Point	MODEL	WAP55AG ver. 2
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 64%RH, 991hPa
MODE	DSSS	TESTED BY	Leo Hung

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	64.57	18.10	30	PASS
6	2437	63.10	18.00	30	PASS
11	2462	51.29	17.10	30	PASS

Normal mode

EUT	Wireless A+G Access Point	MODEL	WAP55AG ver. 2
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 64%RH, 991hPa
MODE	OFDM	TESTED BY	Leo Hung

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	39.81	16.00	30	PASS
6	2437	40.74	16.10	30	PASS
11	2462	41.69	16.20	30	PASS

Turbo mode

EUT	Wireless A+G Access Point	MODEL	WAP55AG ver. 2
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 64%RH, 991hPa
MODE	OFDM	TESTED BY	Leo Hung

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
6	2437	41.69	16.20	30	PASS

4.5 POWER SPECTRAL DENSITY MEASUREMENT

4.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

4.5.2 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.

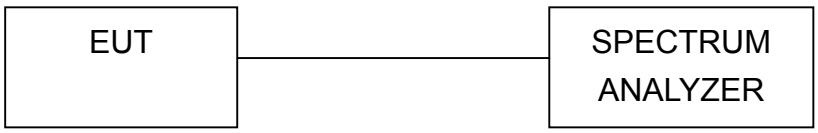
4.5.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3kHz RBW and 30kHz VBW, set sweep time = span/3kHz. The power spectral density was measured and recorded.
The sweep time is allowed to be longer than span/3kHz for a full response of the mixer in the spectrum analyzer.

4.5.4 DEVIATION FROM TEST STANDARD

No deviation

4.5.5 TEST SETUP



4.5.6 EUT OPERATING CONDITION

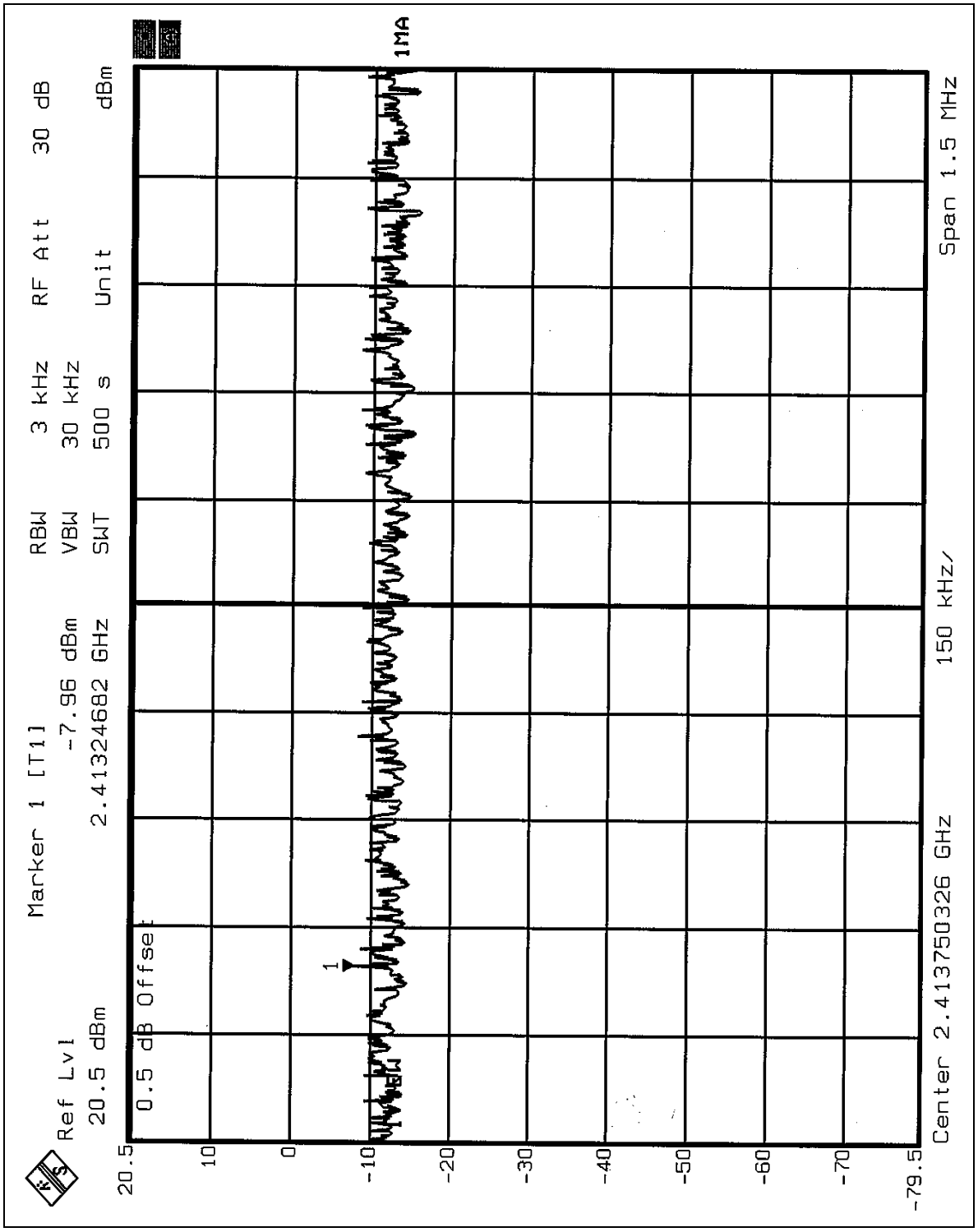
Same as Item 4.3.6

4.5.7 TEST RESULTS

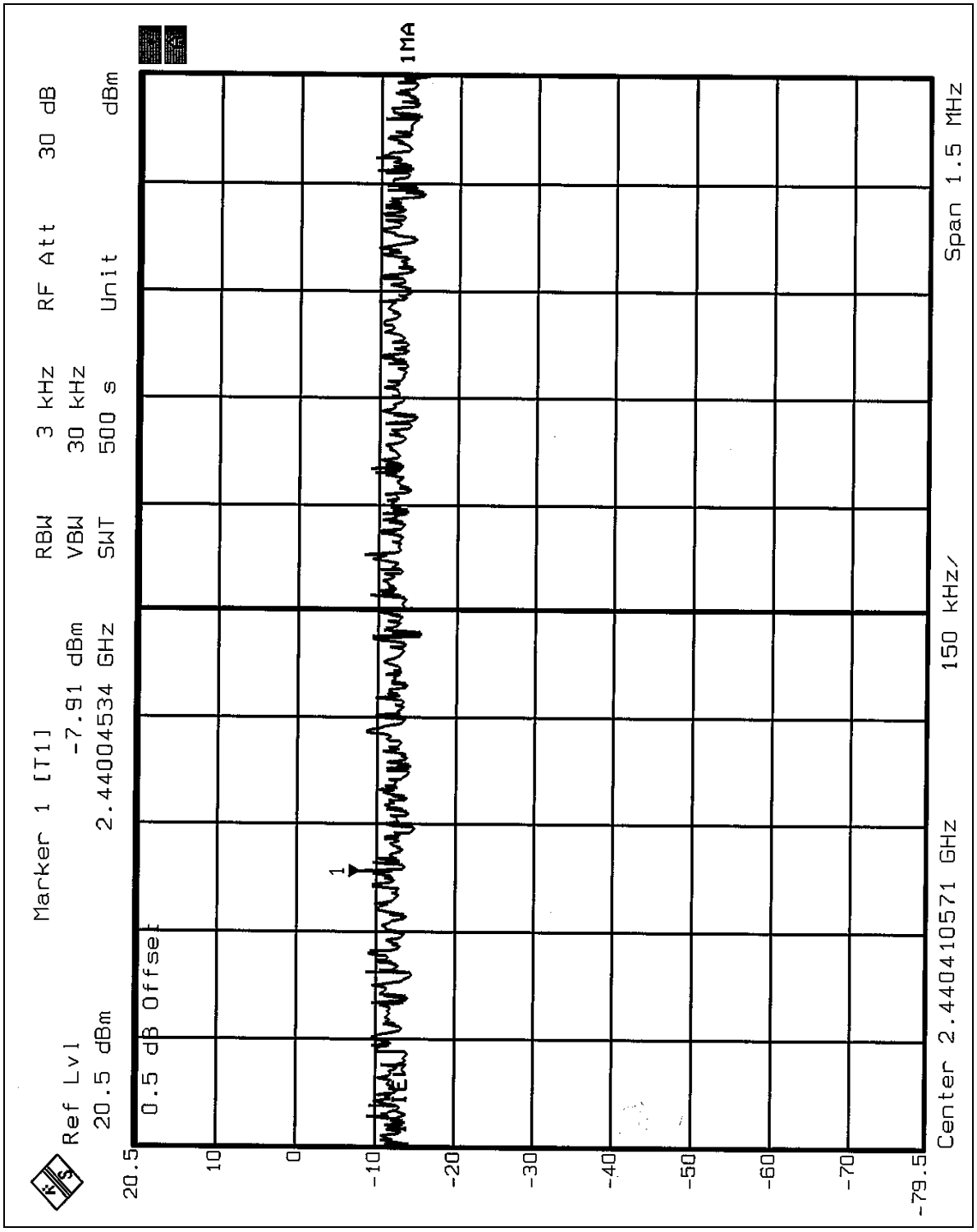
EUT	Wireless A+G Access Point	MODEL	WAP55AG ver. 2
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 64%RH, 991hPa
MODE	DSSS	TESTED BY	Leo Hung

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-7.96	8	PASS
6	2437	-7.91	8	PASS
11	2462	-8.29	8	PASS

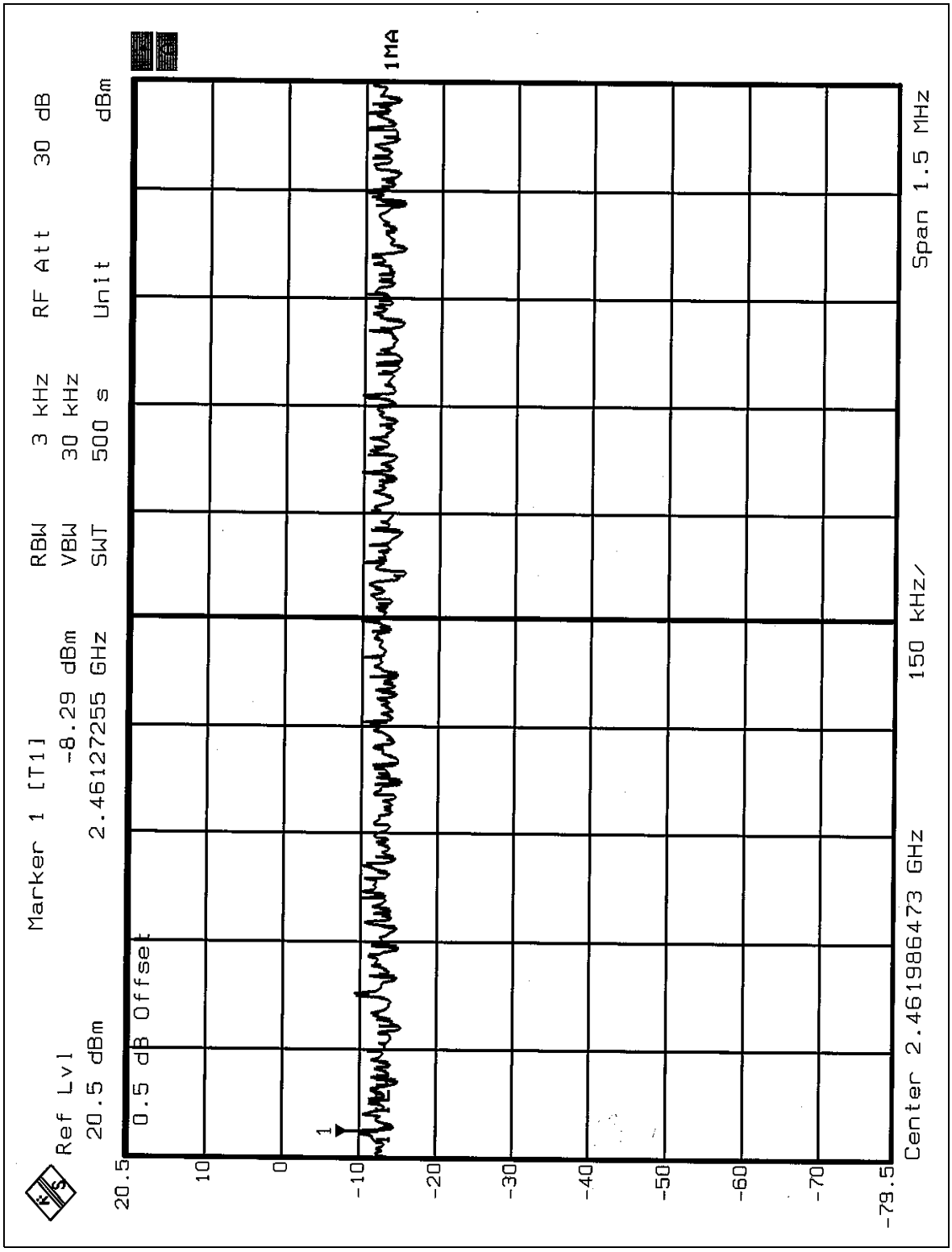
CH1


Marker 1 [T1]
-7.96 dBm
2.41324682 GHz
RBW 3 kHz
VBW 30 kHz
SWT 500 s
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
1MA
Center 2.413750326 GHz
150 kHz/
Span 1.5 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

CH6


Marker 1 [T1]
-7.91 dBm
2.44004534 GHz
RBW 3 kHz
VBW 30 kHz
SWT 500 s
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
1MA
Center 2.44041057 1 GHz
150 kHz/
Span 1.5 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

CH11

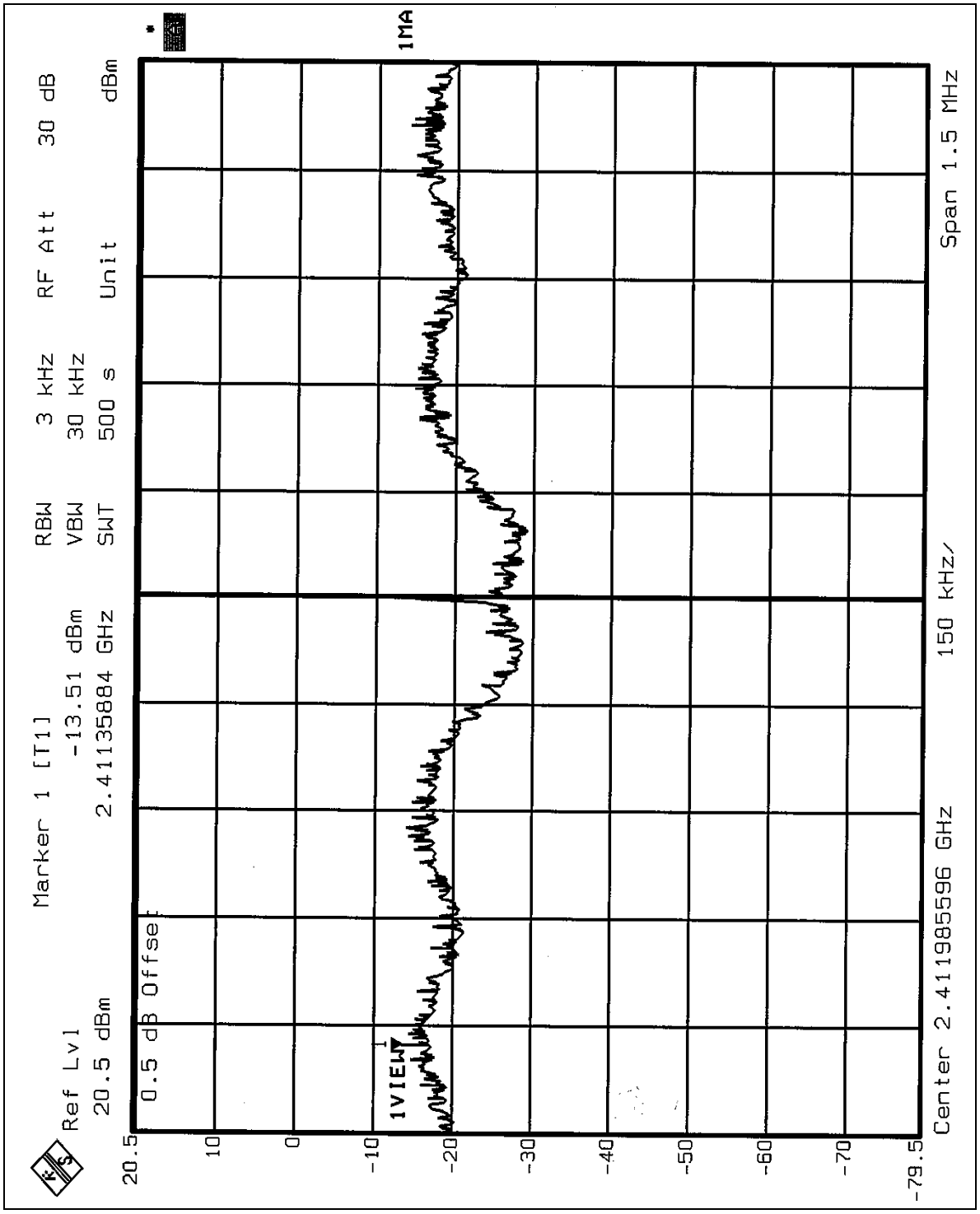

Marker 1 [T1]
-8.29 dBm
2.46127255 GHz
RBW 3 kHz
VBW 30 kHz
SWT 500 s
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
1MA
Center 2.461986473 GHz
150 kHz/
Span 1.5 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

Normal mode

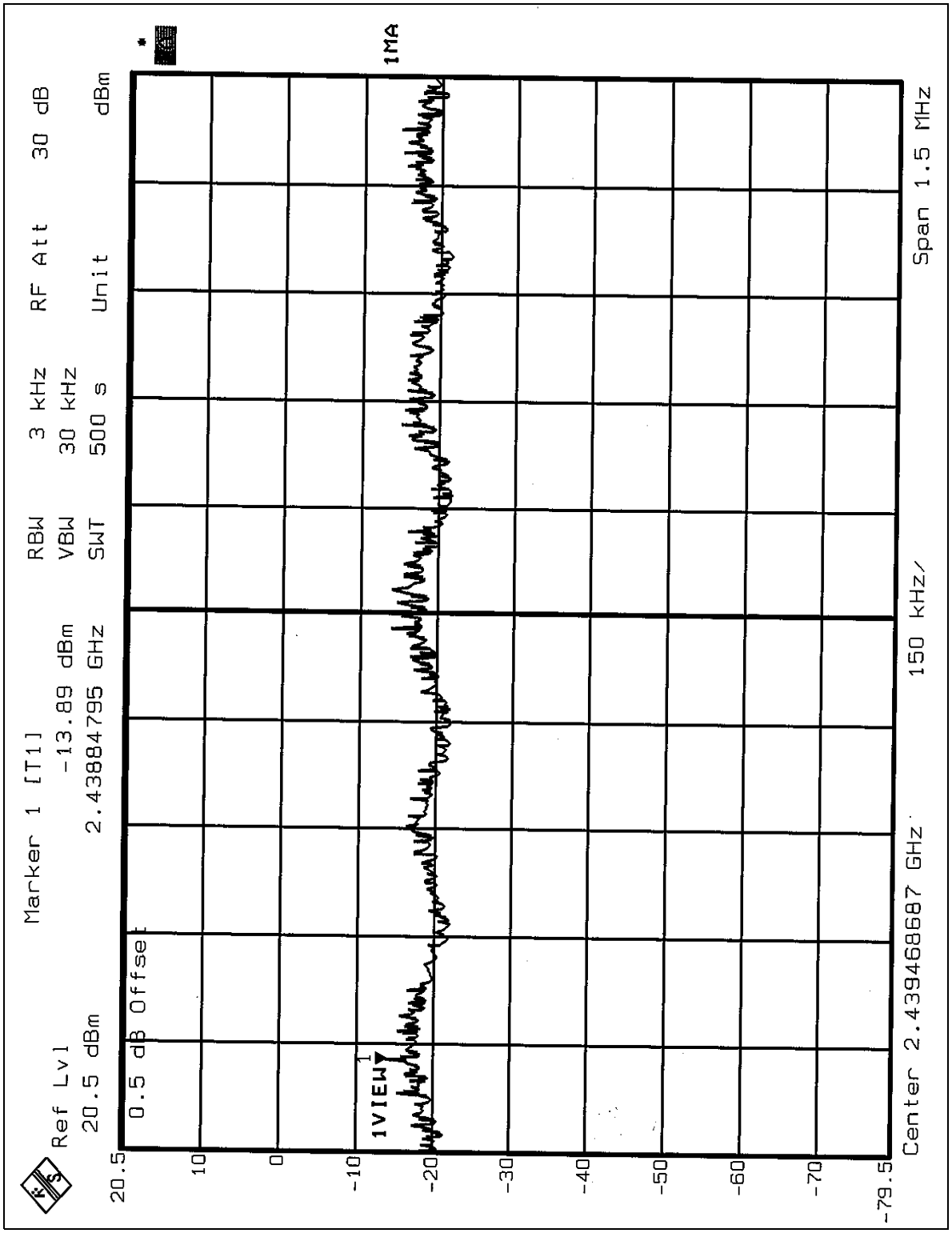
EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
INPUT POWER (SYSTEM)	120Vac, 60Hz	**ENVIRONMENTAL CONDITIONS**	24deg.C, 64%RH, 991hPa
MODE	OFDM	**TESTED BY**	Leo Hung

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-13.51	8	PASS
6	2437	-13.89	8	PASS
11	2462	-13.76	8	PASS

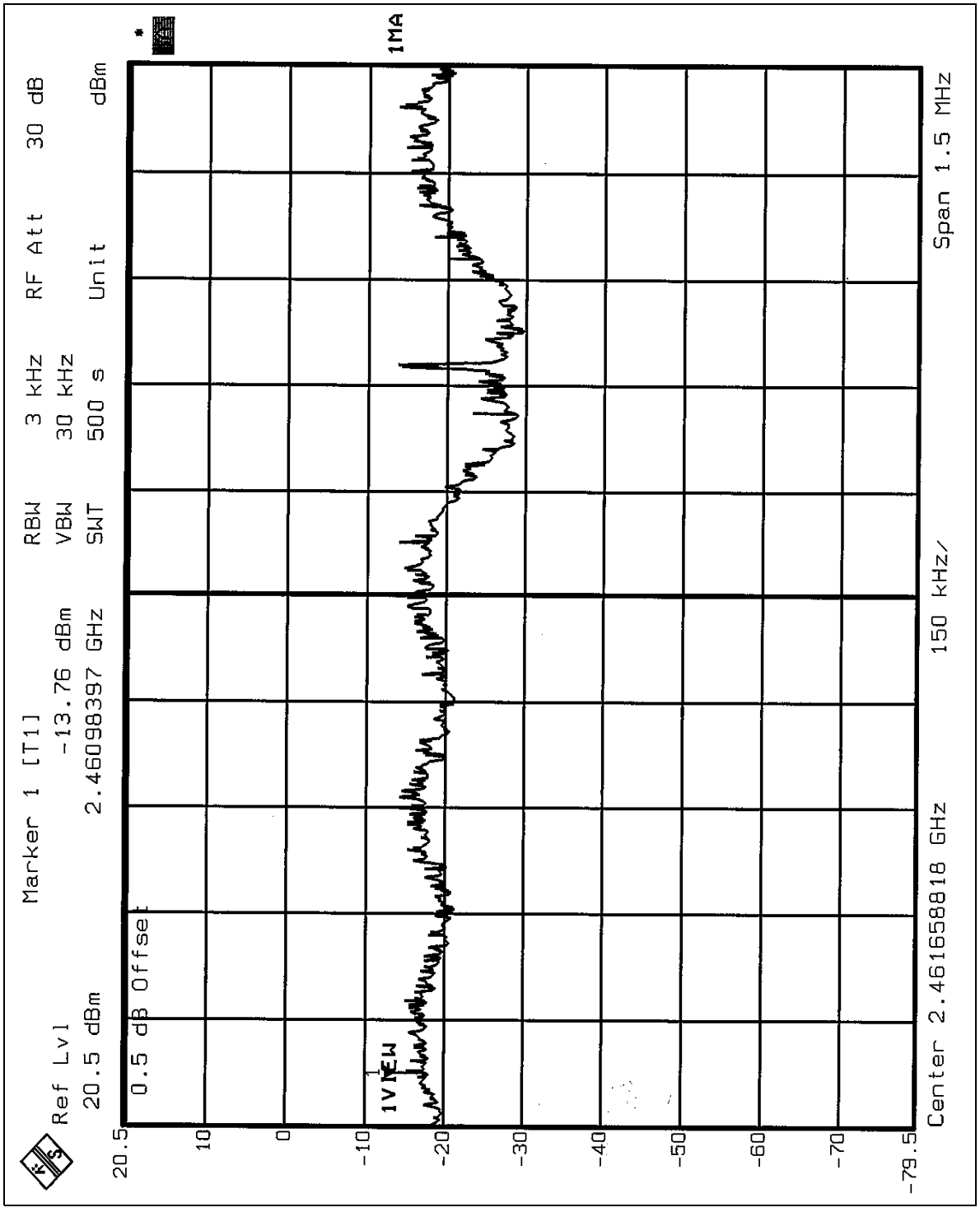
CH1


Marker 1 [T1]
-13.51 dBm
2.41135884 GHz
RBW 3 kHz
VBW 30 kHz
SWT 500 s
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
1VIEW
1MA
Center 2.41198596 GHz
150 kHz/
Span 1.5 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

CH6


Ref Lvl
20.5 dBm
0.5 dB Offset
Marker 1 [T1]
-13.89 dBm
2.43884795 GHz
RBW 3 kHz
VBW 30 kHz
SWT 500 s
RF Att 30 dB
Unit dBm
1MA
1VIEW
Center 2.439468687 GHz
150 kHz/
Span 1.5 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

CH11

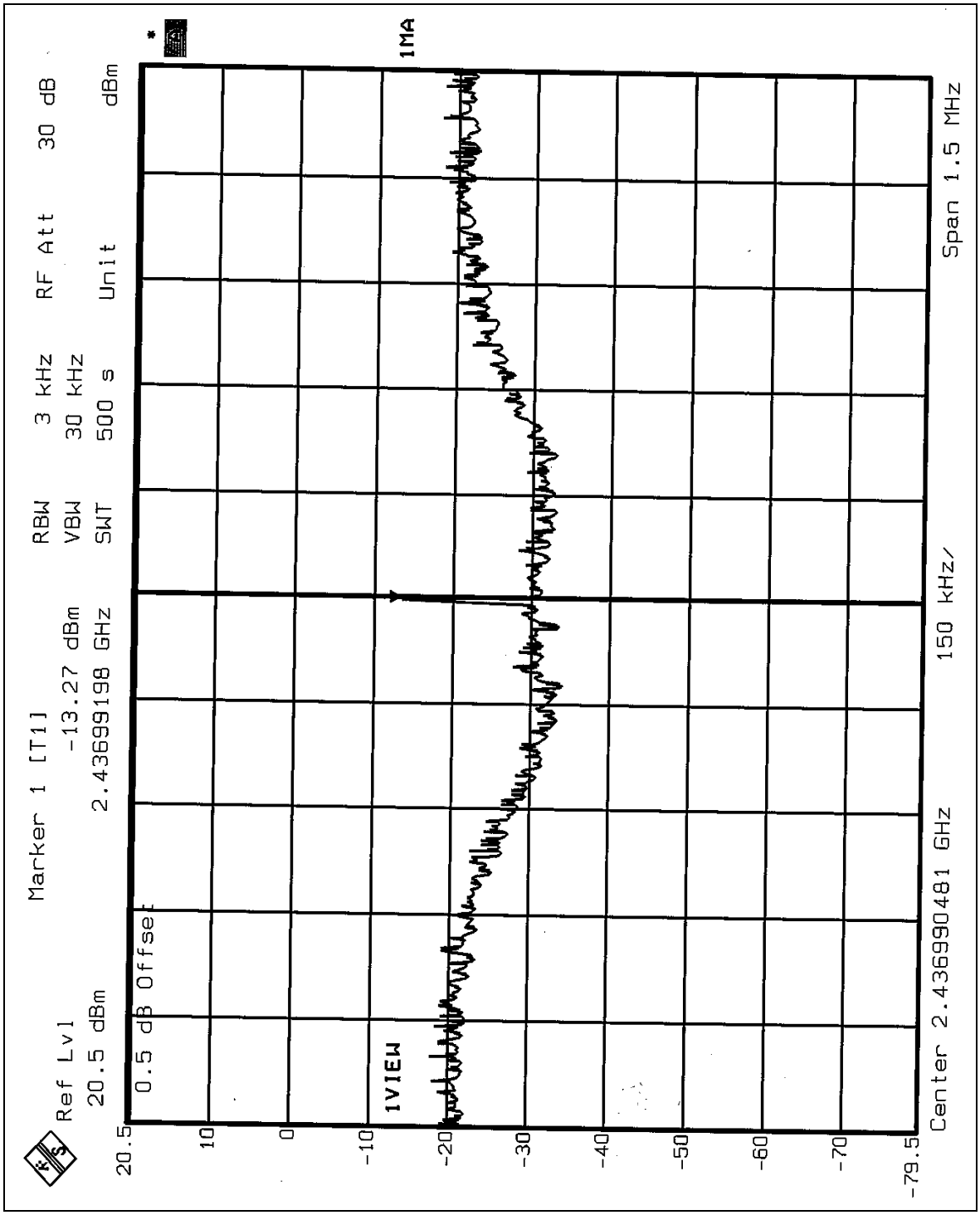

Marker 1 [T1]
-13.76 dBm
2.46098397 GHz
RBW 3 kHz
VBW 30 kHz
SWT 500 s
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
1MA
1VIEW
Center 2.461658818 GHz
150 kHz/
Span 1.5 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

Turbo mode

EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
INPUT POWER (SYSTEM)	120Vac, 60Hz	**ENVIRONMENTAL CONDITIONS**	24deg.C, 64%RH, 991hPa
MODE	OFDM	**TESTED BY**	Leo Hung

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
6	2437	-13.27	8	PASS

CH6


Marker 1 [T1]
-13.27 dBm
2.4369198 GHz
RBW 3 kHz
VBW 30 kHz
SWT 500 s
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
1VIEW
1MA
Center 2.436990481 GHz
150 kHz/
Span 1.5 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

4.6 BAND EDGES MEASUREMENT

4.6.1 LIMITS OF BAND EDGES MEASUREMENT

Below –20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).

4.6.2 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.

4.6.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer via a low lose cable. Set both RBW and VBW of spectrum analyzer to 1MHz and 10Hz with suitable frequency span including 100 MHz bandwidth from band edge. The band edges was measured and recorded.

4.6.4 DEVIATION FROM TEST STANDARD

No deviation

4.6.5 EUT OPERATING CONDITION

Same as Item 4.3.6

4.6.6 TEST RESULTS

The spectrum plots are attached on the following 8 pages. D2 line indicates the highest level, and D1 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(d).

NOTE 1: The band edge emission plot of DSSS technique on page 73 show 54.66dB delta between carrier maximum power and local maximum emission in restrict band (2.3289GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 106.20dBuV/m, so the maximum field strength in restrict band is106.20-54.66=51.54dBuV/m which is under 54dBuV/m limit.

NOTE 2: The band edge emission plot of DSSS technique on page 75 show 56.73dB delta between carrier maximum power and local maximum emission in restrict band (2.4841GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 106.82dBuV/m, so the maximum field strength in restrict band is 106.82-56.73=50.09dBuV/m which is under 54dBuV/m limit.

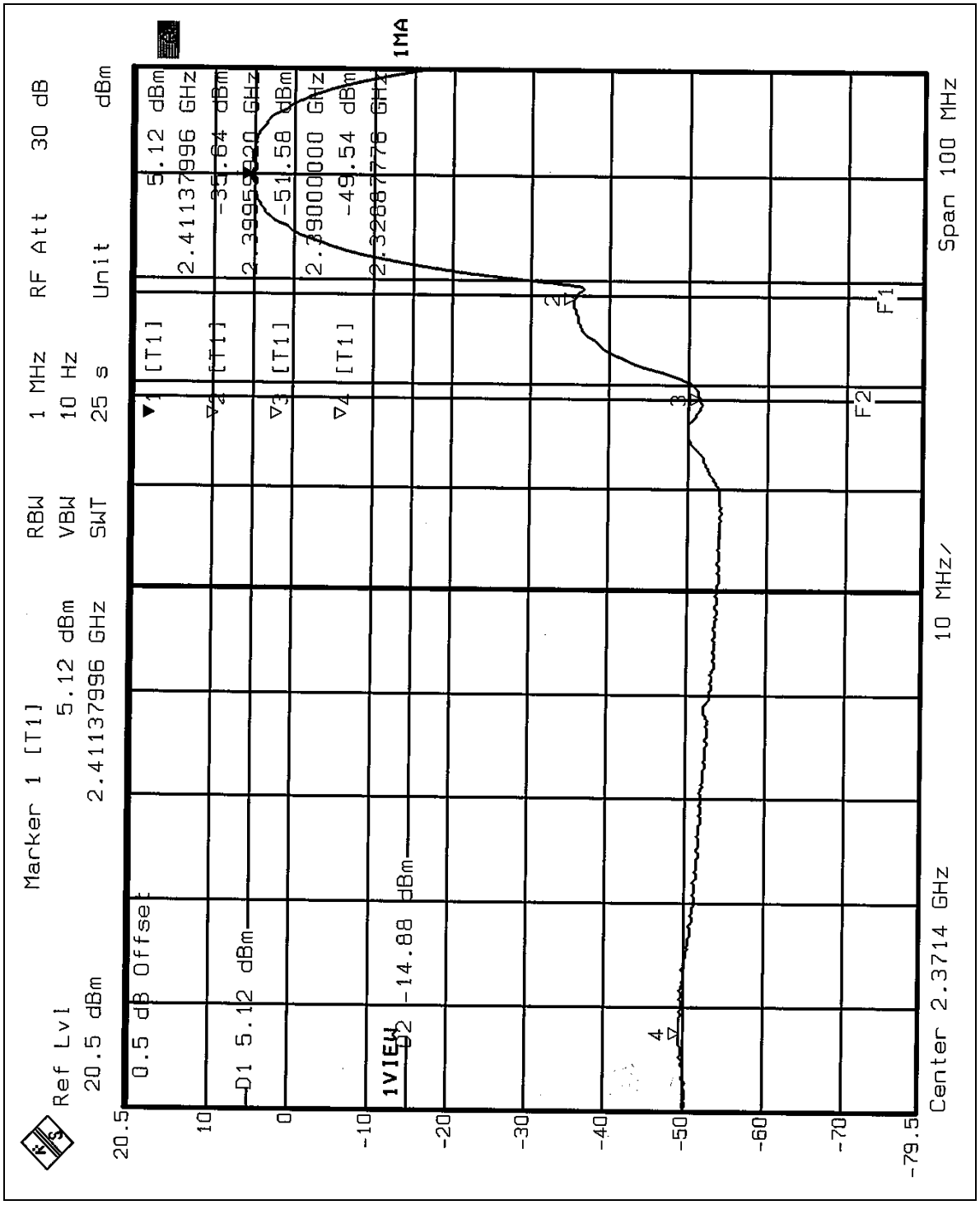
NOTE 3: The band edge emission plot of OFDM technique with Normal mode on page 77 show 46.88dB delta between carrier maximum power and local maximum emission in restrict band (2.3250GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 99.42dBuV/m, so the maximum field strength in restrict band is 99.42-46.88=52.54dBuV/m which is under 54dBuV/m limit.

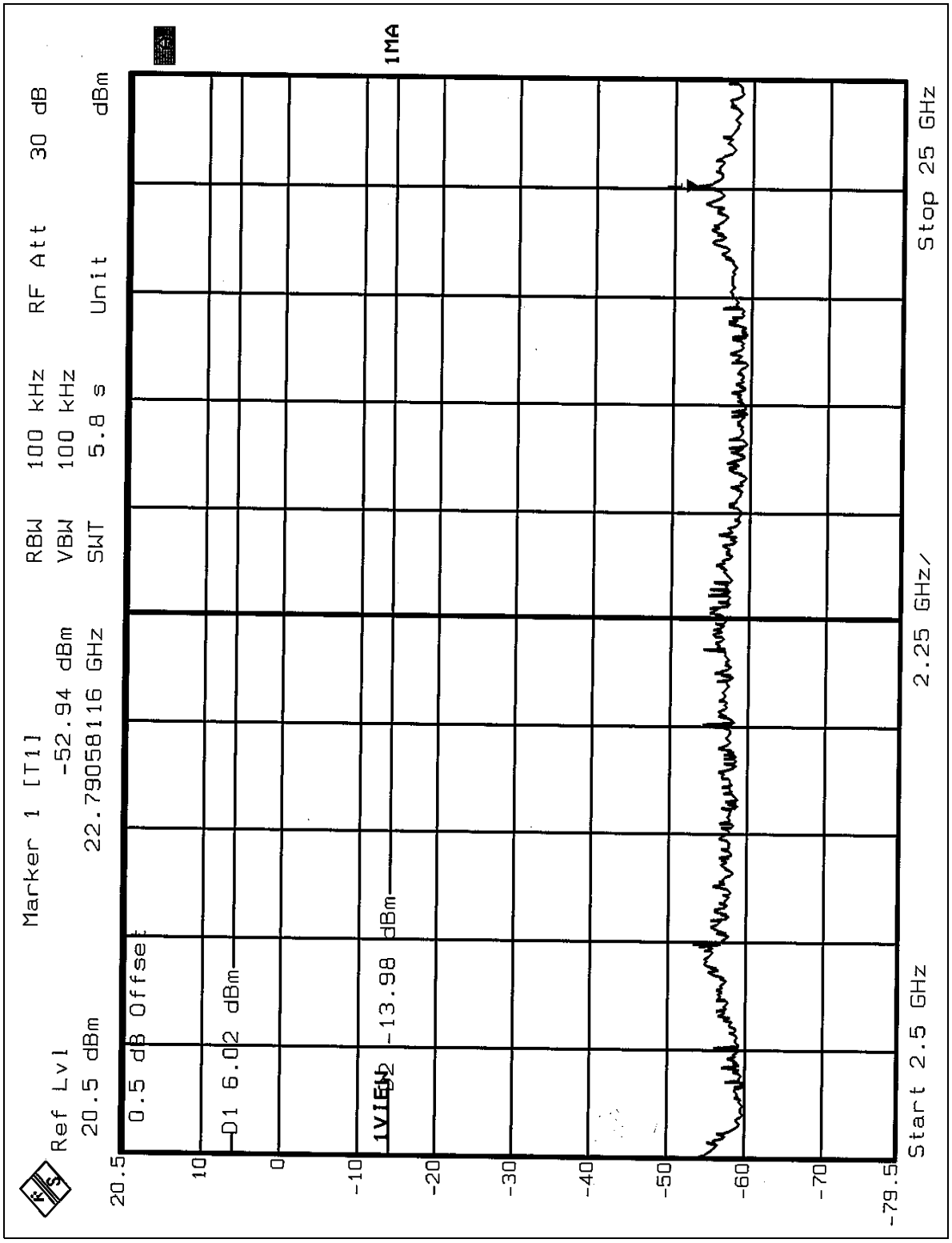
NOTE 4: The band edge emission plot of OFDM technique with Normal mode on page 79 show 46.65dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 99.84dBuV/m, so the maximum field strength in restrict band is 99.84-46.65=53.19dBuV/m which is under 54dBuV/m limit.

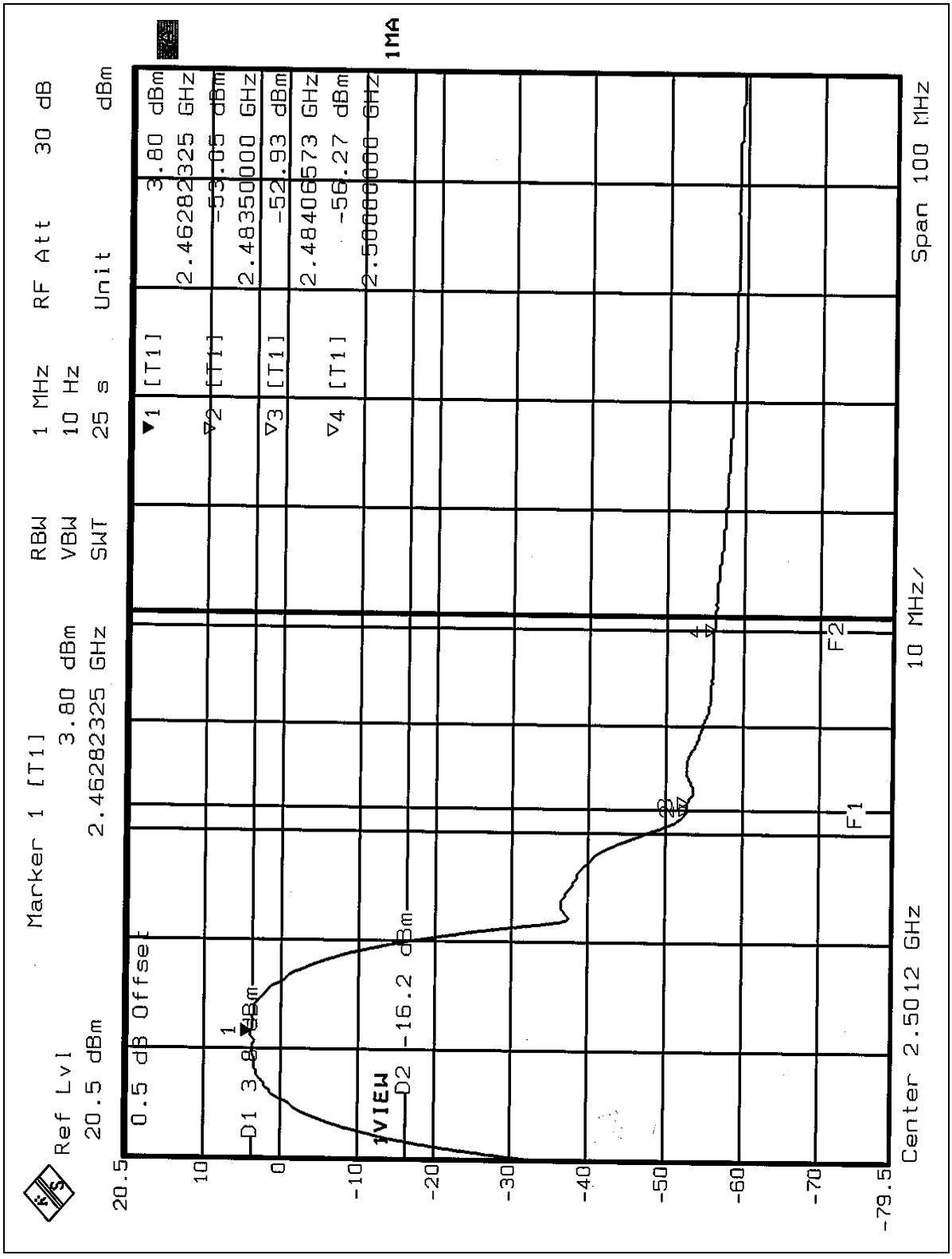
NOTE 5: The band edge emission plot of OFDM technique with Turbo mode on page 81 shows 46.83dB delta between carrier maximum power and local maximum emission in restrict band (2.3199GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 98.40dBuV/m, so the maximum field strength in restrict band is 98.40-46.83=51.57dBuV/m which is under 54dBuV/m limit.

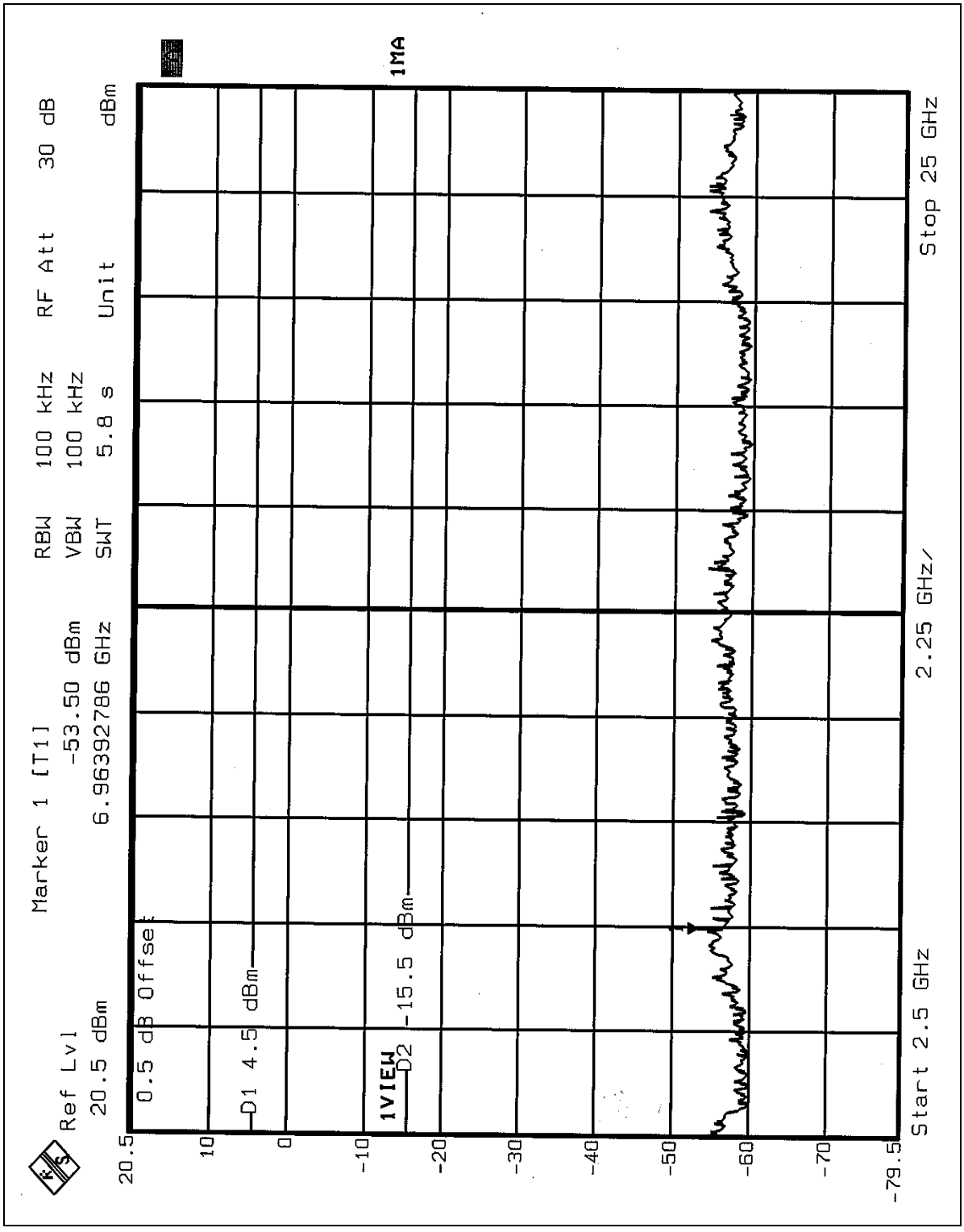
NOTE 6: The band edge emission plot of OFDM technique with Turbo mode on page 83 shows 49.21dB delta between carrier maximum power and local maximum emission in restrict band (2.4855GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 90.88dBuV/m, so the maximum field strength in restrict band is 90.88-49.21=41.67dBuV/m which is under 54dBuV/m limit.

DSSS mode:

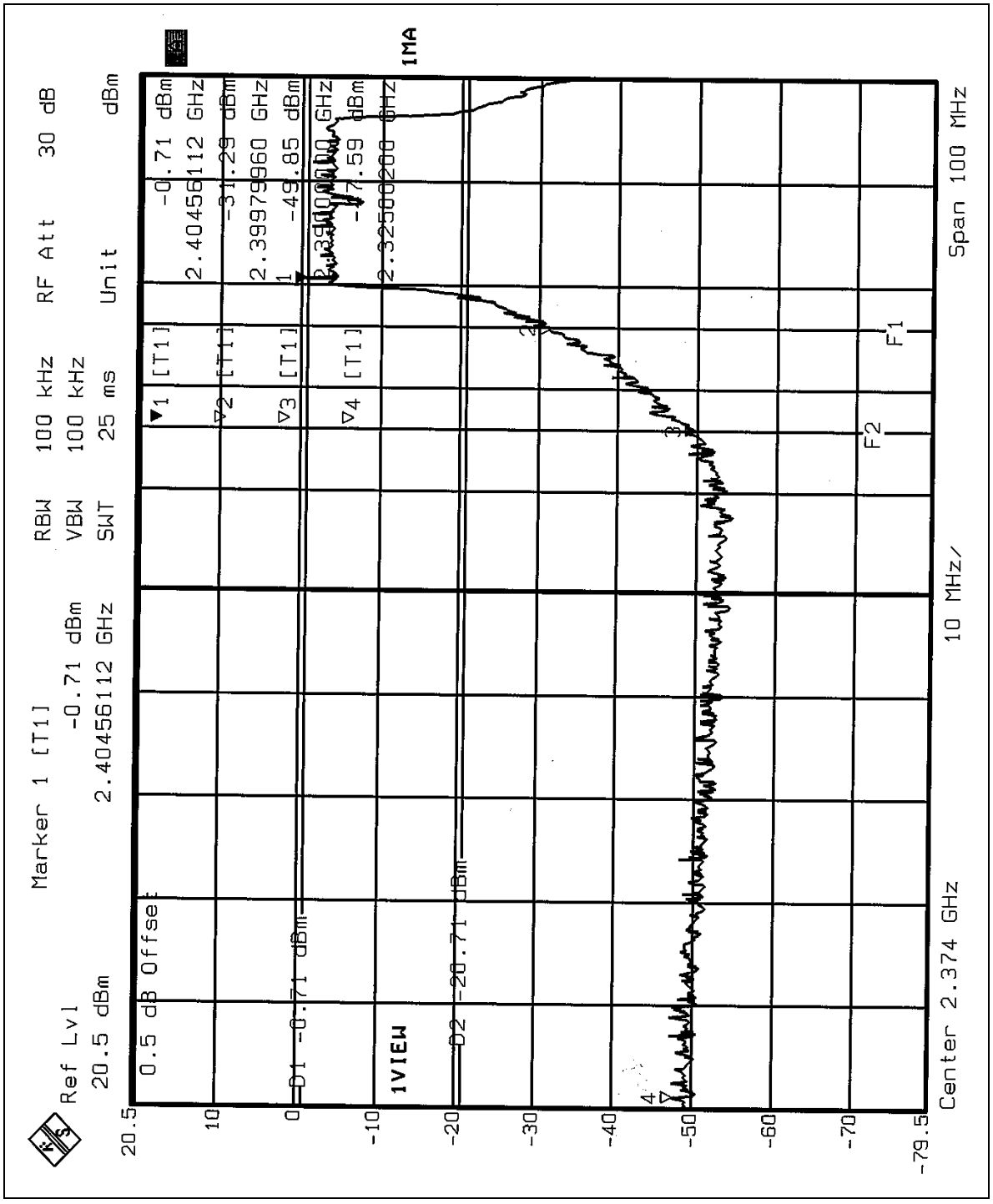

Marker 1 [T1]
5.12 dBm
2.41137996 GHz
RBW 1 MHz
VBW 10 Hz
SWT 25 s
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 5.12 dBm
1VIEW
D2 -14.88 dBm
Center 2.3714 GHz
10 MHz/
Span 100 MHz
1MA
F1
F2

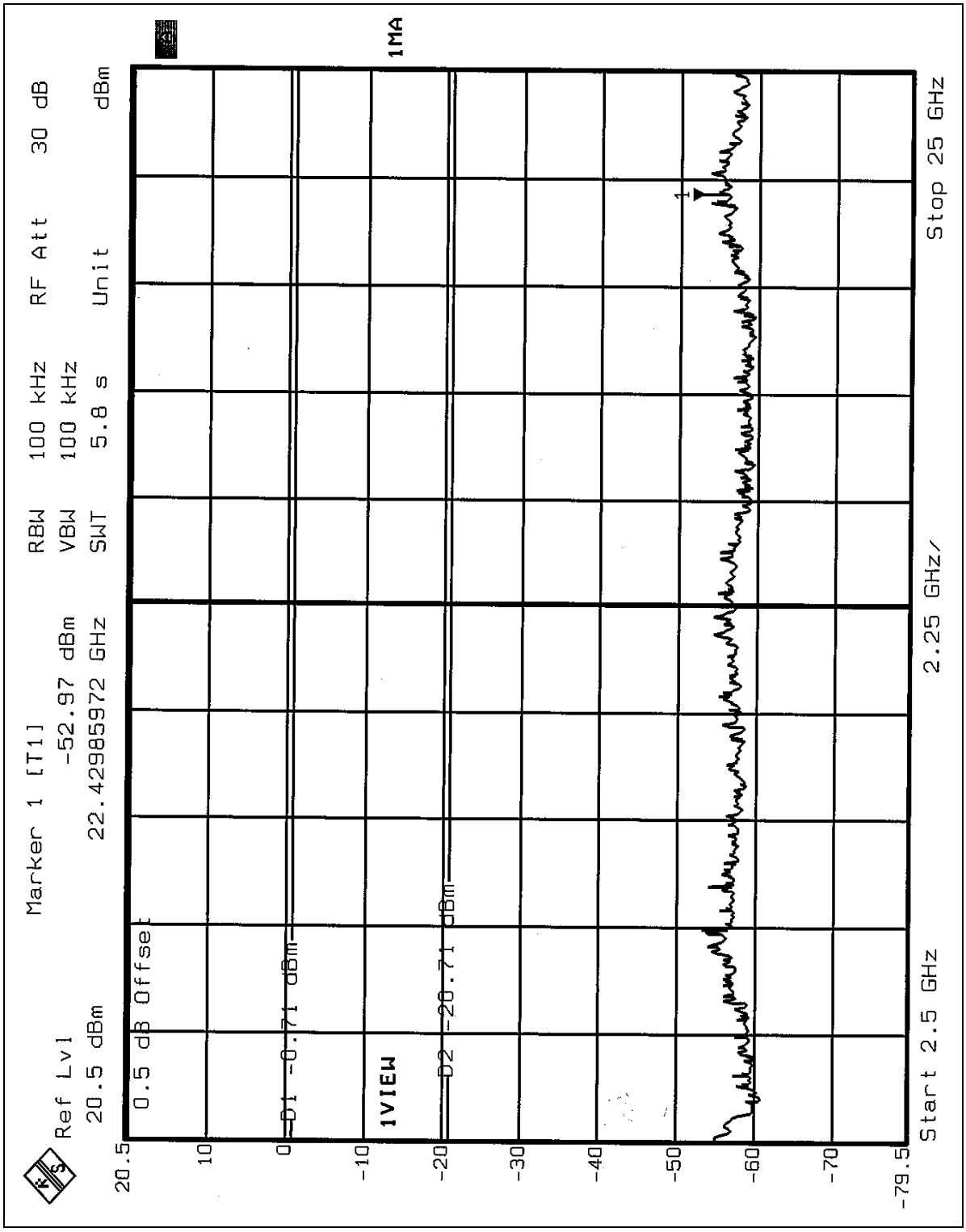

Ref Lvl
20.5 dBm
0.5 dB Offset
D1 6.02 dBm
1VIEW2 -13.98 dBm
Marker 1 [T1]
-52.94 dBm
22.79058116 GHz
RBW 100 kHz
VBW 100 kHz
SWT 5.8 s
RF Att 30 dB
Unit dBm
1MA
Start 2.5 GHz
2.25 GHz/
Stop 25 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

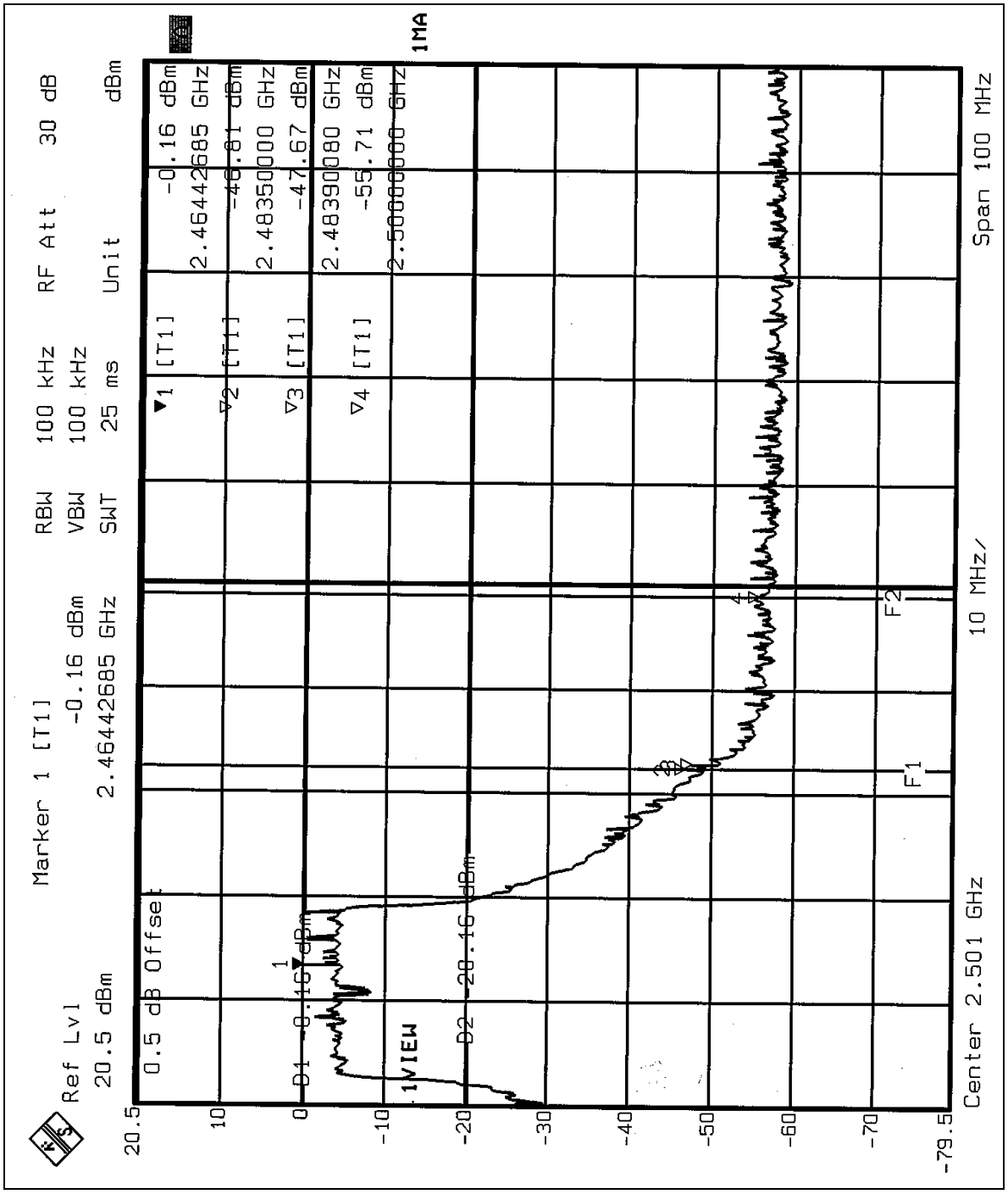

Marker 1 [T1]
3.80 dBm
2.46282325 GHz
RBW 1 MHz
VBW 10 Hz
SWT 25 s
RF Att 30 dB
Unit dBm
1MA
1 [T1] 3.80 dBm 2.46282325 GHz
2 [T1] -53.05 dBm 2.48350000 GHz
3 [T1] -52.93 dBm 2.48406573 GHz
4 [T1] -56.27 dBm 2.50000000 GHz
Ref Lvl
20.5 dBm
0.5 dB Offset
1VIEW
D1 3.8 dBm
D2 -16.2 dBm
F1
F2
Center 2.5012 GHz
10 MHz/
Span 100 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

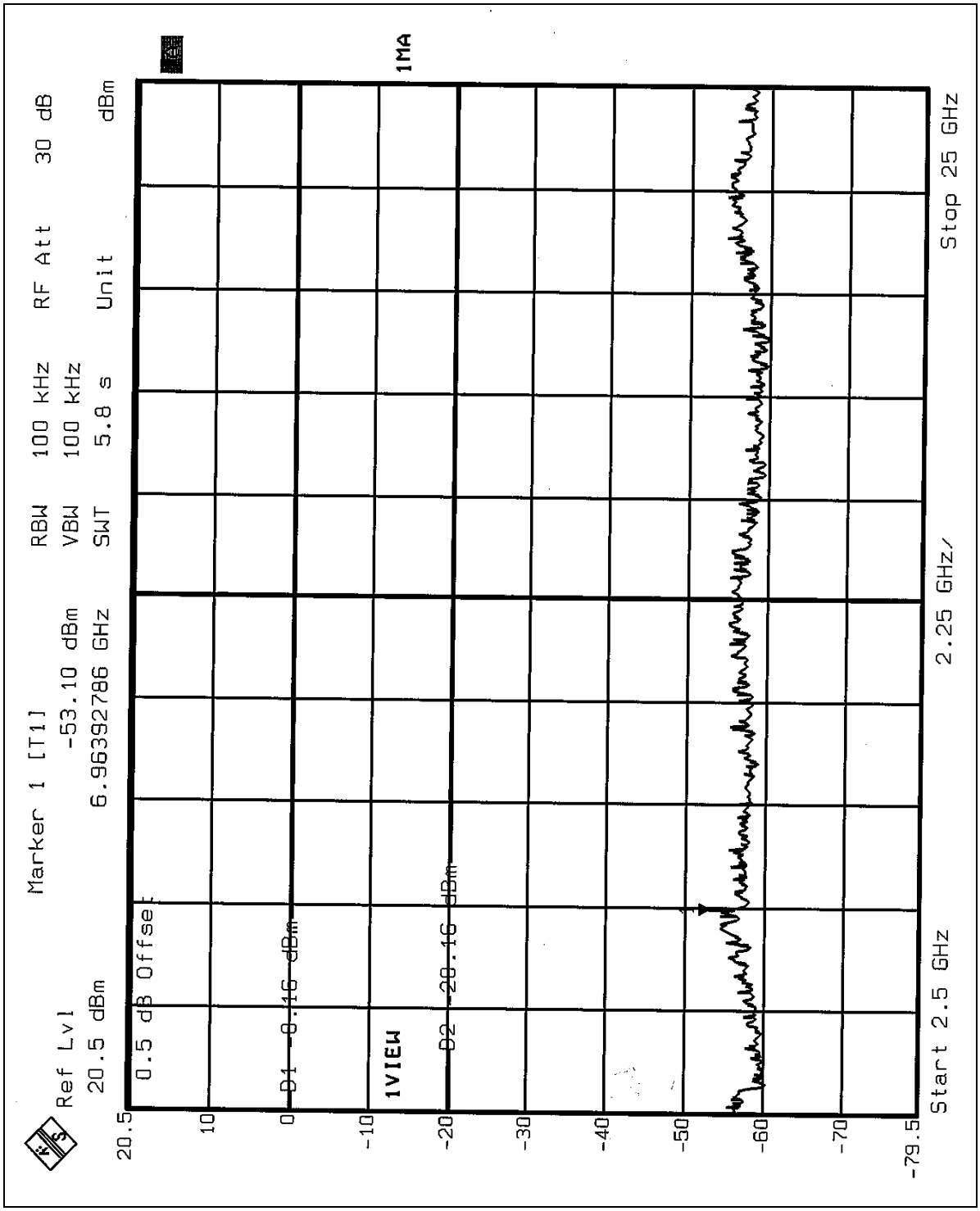

Marker 1 [T1]
-53.50 dBm
6.96392786 GHz
RBW 100 kHz
VBW 100 kHz
SWT 5.8 s
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 4.5 dBm
1VIEW
D2 -15.5 dBm
1MA
Start 2.5 GHz
2.25 GHz/
Stop 25 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

OFDM mode:

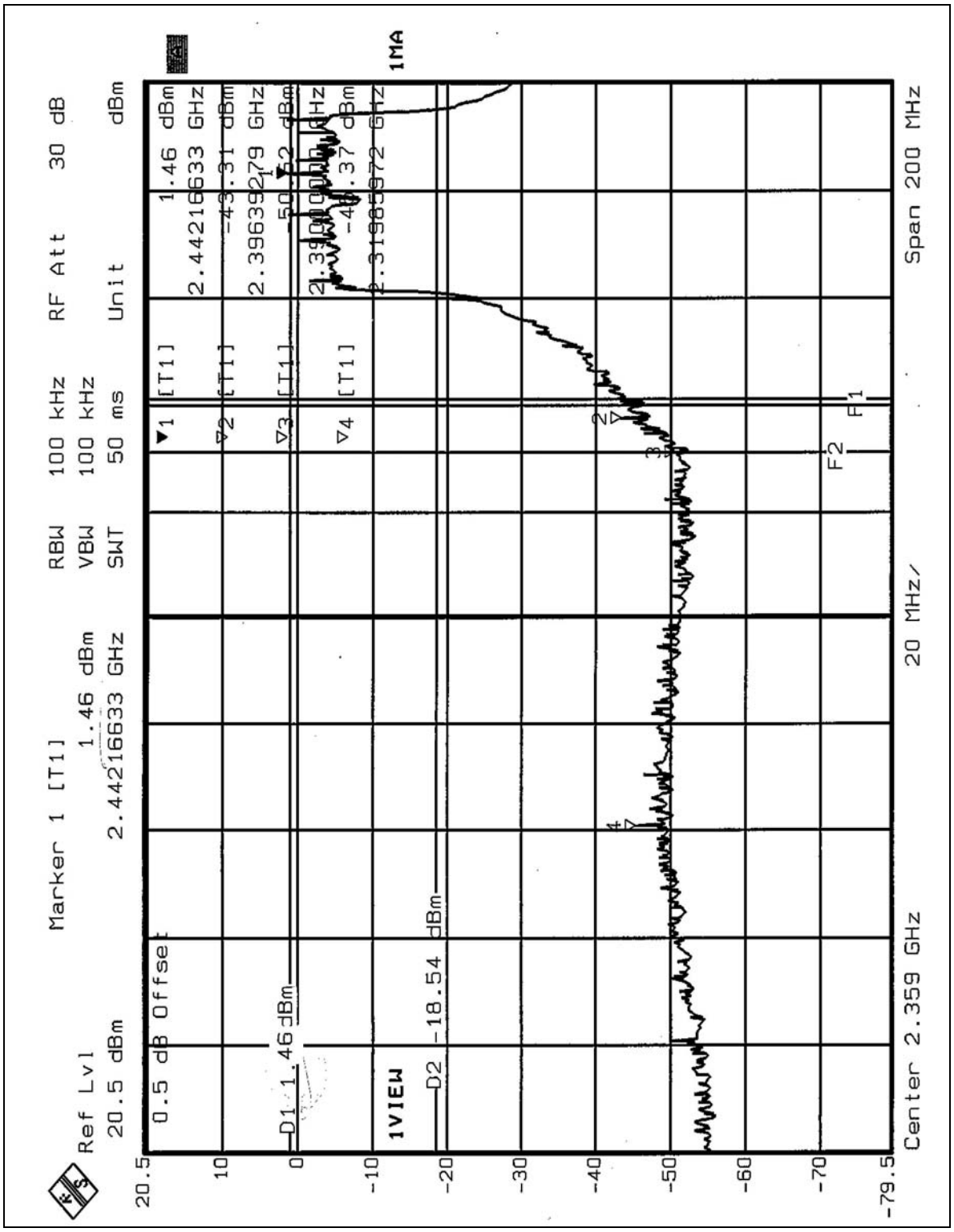

Marker 1 [T1]
-0.71 dBm
2.40456112 GHz
RBW 100 kHz
VBW 100 kHz
SWT 25 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
1MA
1VIEW
D1 -0.71 dBm
D2 -20.71 dBm
Center 2.374 GHz
10 MHz/
Span 100 MHz
F1
F2

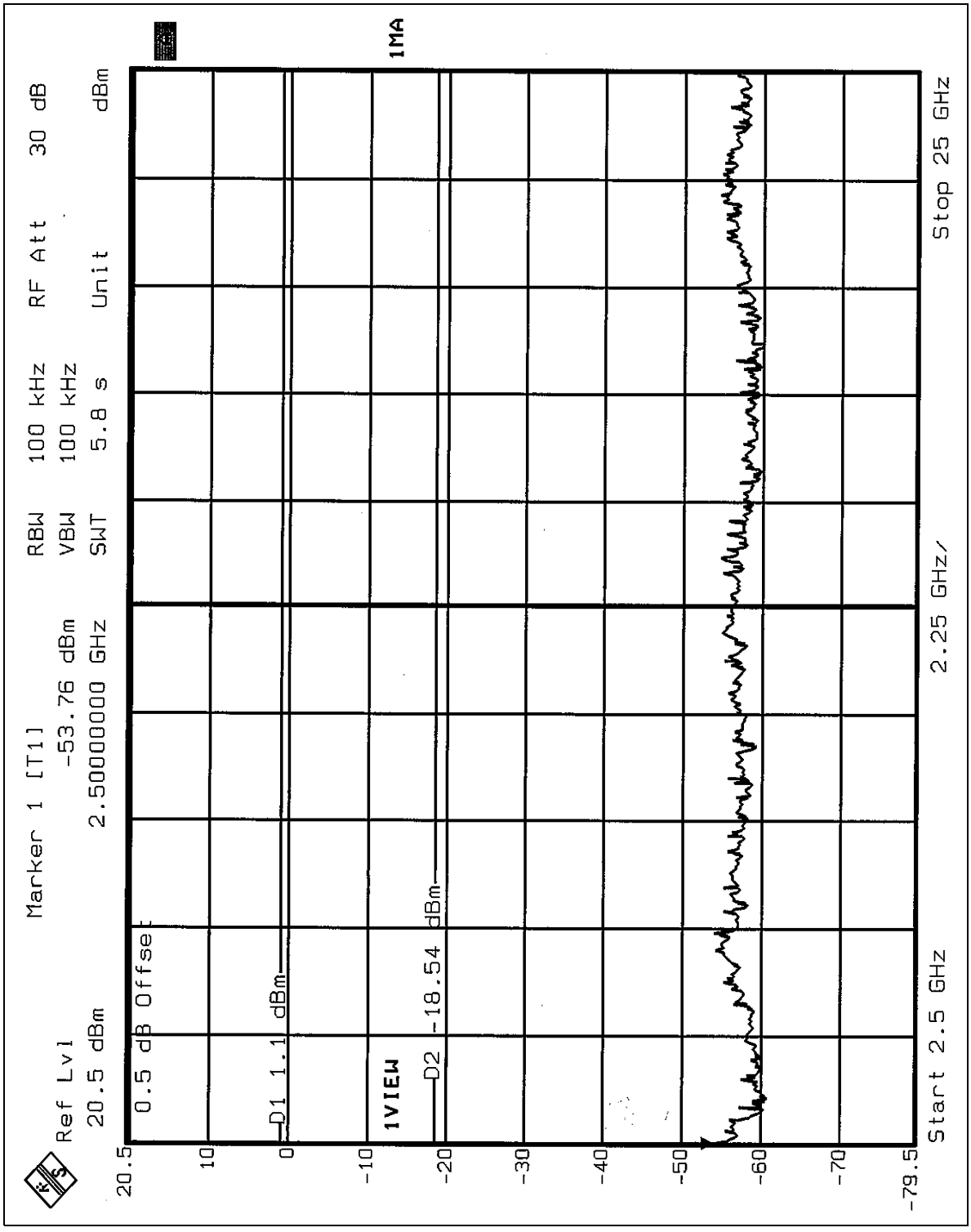

Ref Lvl
20.5 dBm
0.5 dB Offset
Marker 1 [T1]
-52.97 dBm
22.42985972 GHz
RBW 100 kHz
VBW 100 kHz
SWT 5.8 s
RF Att 30 dB
Unit dBm
1MA
D1 -0.71 dBm
D2 -20.71 dBm
1VIEW
Start 2.5 GHz
2.25 GHz/
Stop 25 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

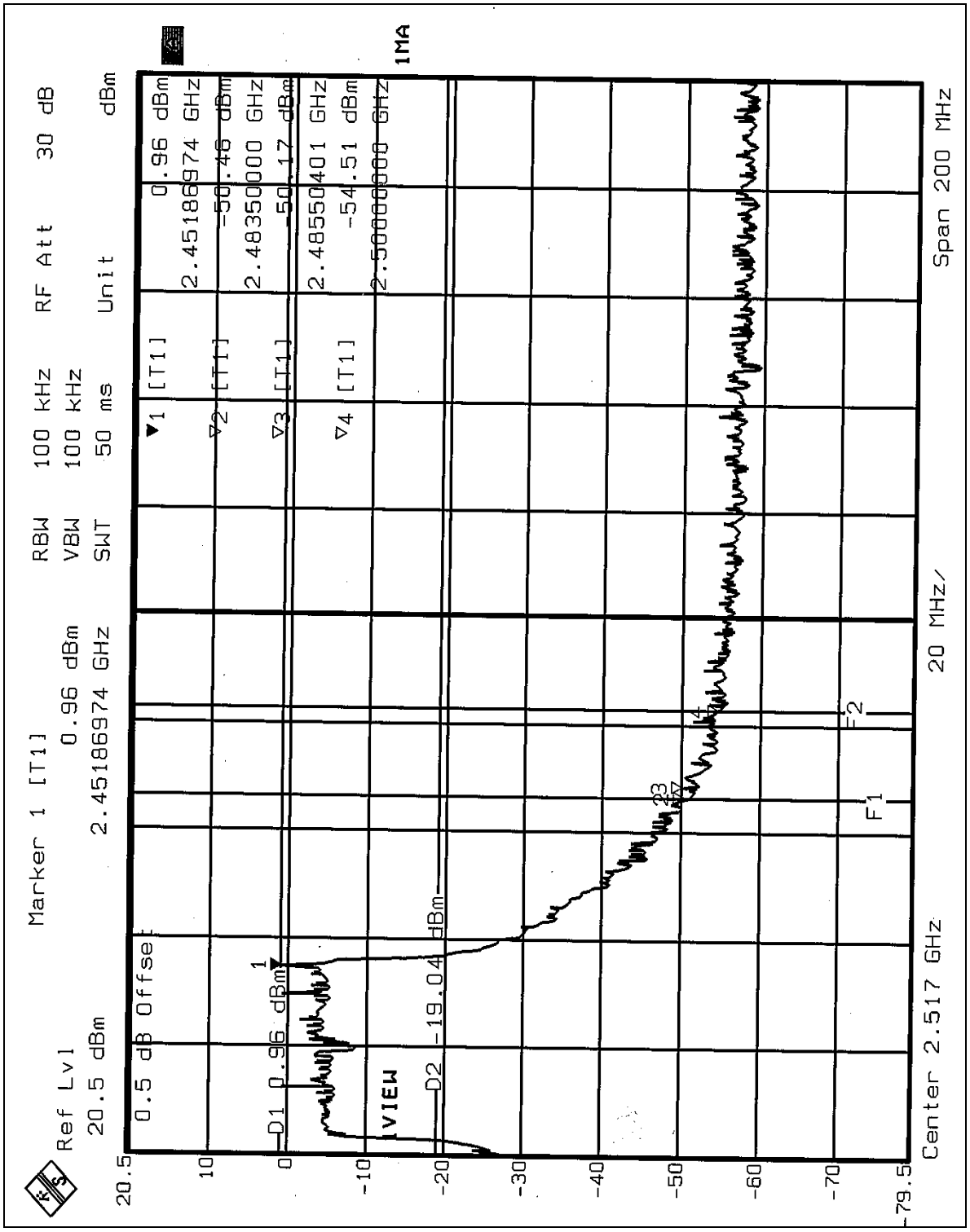

Marker 1 [T1]
-0.16 dBm
2.46442685 GHz
RBW 100 kHz
VBW 100 kHz
SWT 25 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
1 [T1] -0.16 dBm 2.46442685 GHz
2 [T1] -48.81 dBm 2.48350000 GHz
3 [T1] -47.67 dBm 2.48390080 GHz
4 [T1] -55.71 dBm 2.50000000 GHz
1MA
1VIEW
D1 -0.16 dBm
D2 -20.16 dBm
F1
F2
Center 2.501 GHz
10 MHz/
Span 100 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

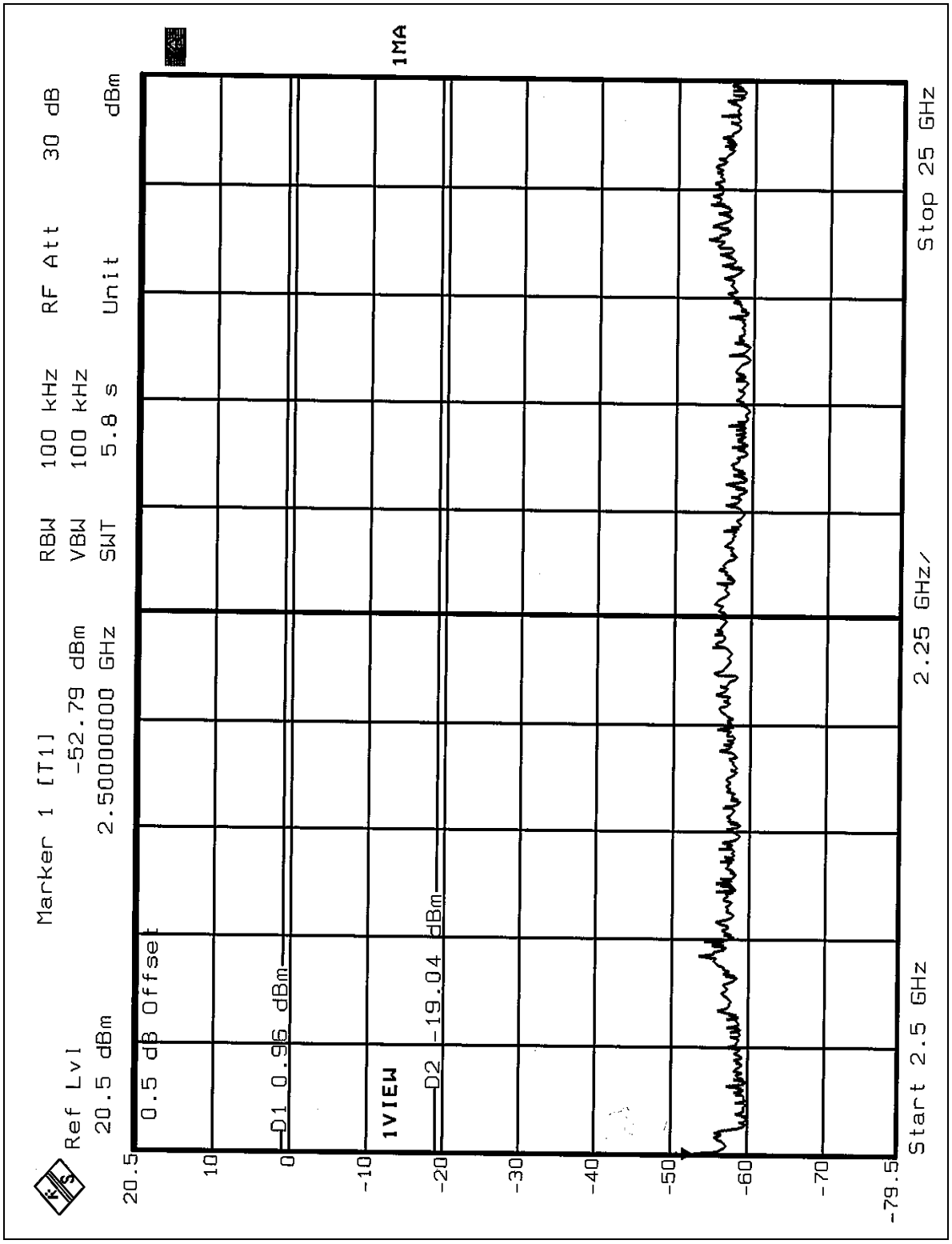

Marker 1 [T1]
-53.10 dBm
6.96392786 GHz
RBW 100 kHz
VBW 100 kHz
SWT 5.8 s
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 -0.16 dBm
D2 -20.16 dBm
1VIEW
1MA
Start 2.5 GHz
2.25 GHz/
Stop 25 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

OFDM Turbo mode:




Marker 1 [T1]
-53.76 dBm
2.50000000 GHz
RBW 100 kHz
VBW 100 kHz
SWT 5.8 s
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 1.1 dBm
1VIEW
D2 -18.54 dBm
1MA
Start 2.5 GHz
2.25 GHz/
Stop 25 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5


Marker 1 [T1]
0.96 dBm
2.45186974 GHz
RBW 100 kHz
VBW 100 kHz
SWT 50 ms
RF Att 30 dB
Unit dBm
1 [T1] 0.96 dBm 2.45186974 GHz
2 [T1] -50.48 dBm 2.48350000 GHz
3 [T1] -50.17 dBm 2.48550401 GHz
4 [T1] -54.51 dBm 2.50000000 GHz
1MA
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 0.96 dBm
D2 -19.04 dBm
VIEW
Center 2.517 GHz
20 MHz/
Span 200 MHz
F1
F2
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5


Ref Lvl
20.5 dBm
0.5 dB Offset
Marker 1 [T1]
-52.79 dBm
2.50000000 GHz
RBW 100 kHz
VBW 100 kHz
SWT 5.8 s
RF Att 30 dB
Unit dBm
1MA
D1 0.96 dBm
1VIEW
D2 -19.04 dBm
Start 2.5 GHz
2.25 GHz/
Stop 25 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

4.7 ANTENNA REQUIREMENT

4.7.1 STANDARD APPLICABLE

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

4.7.2 ANTENNA CONNECTED CONSTRUCTION

The antenna used in this product is Dipole antenna with UFL connector. The maximum Gain of the antenna is 2.0dBi.

5. TEST TYPES AND RESULTS (FOR PART 802.11a)

FOR FREQUENCY 5.15~5.35GHz

5.1 CONDUCTED EMISSION MEASUREMENT

5.1.1 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.

5.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESCS30	100291	Dec. 12, 2004
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.

5.1.3 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.

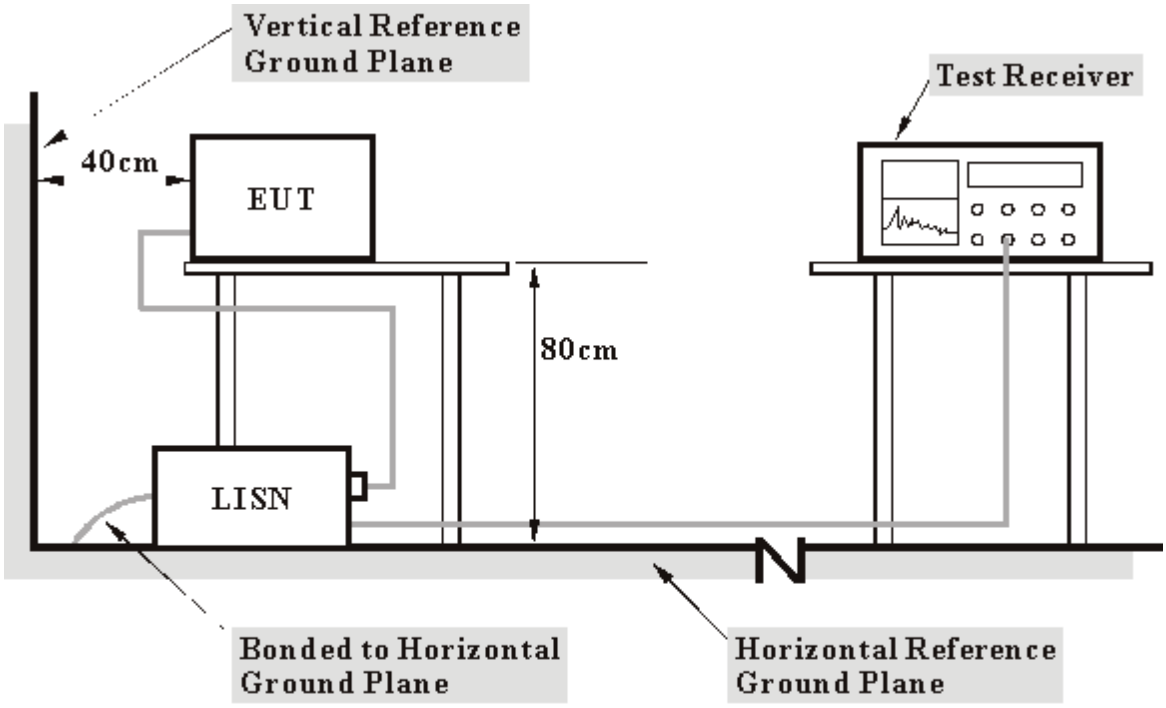
b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

5.1.4 DEVIATION FROM TEST STANDARD

No deviation

5.1.5 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.

5.1.6 EUT OPERATING CONDITIONS

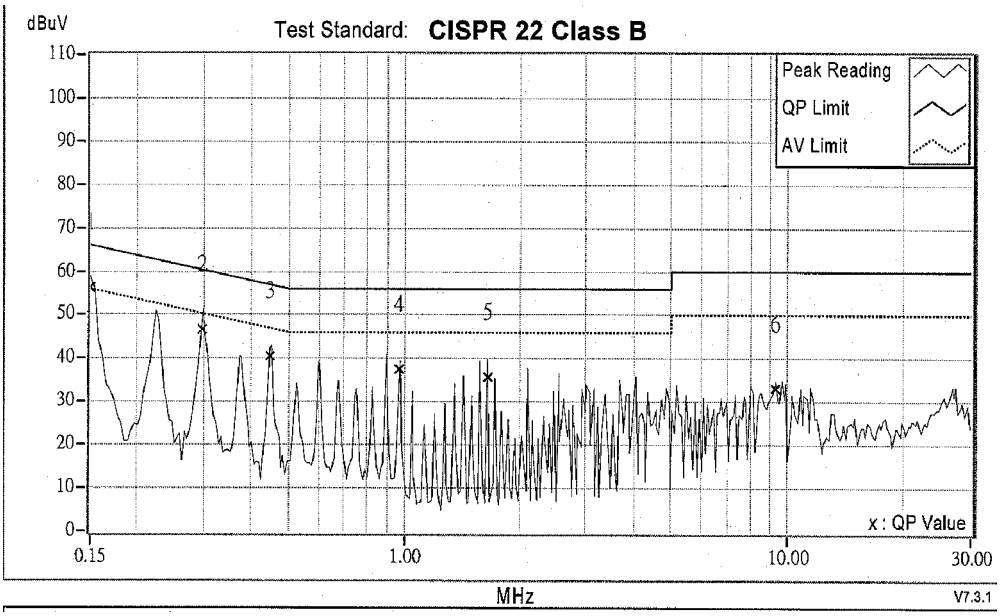
Same as 4.1.6

5.1.7 TEST RESULTS

EUT	Wireless A+G Access Point	MODEL	WAP55AG ver. 2
INPUT POWER (SYSTEM)	120Vac, 60 Hz	6dB BANDWIDTH	9 kHz
ENVIRONMENTAL CONDITIONS	22deg. C, 60%RH, 991hPa	PHASE	Line (L)
TEST MODE	Test Mode 1	TESTED BY	Johan Juo

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.11	56.13	-	56.24	-	66.00	56.00	-9.76	-
2	0.298	0.12	46.32	-	46.44	-	60.29	50.29	-13.84	-
3	0.447	0.13	40.38	-	40.51	-	56.93	46.93	-16.43	-
4	0.973	0.15	37.45	-	37.60	-	56.00	46.00	-18.40	-
5	1.646	0.16	35.55	-	35.71	-	56.00	46.00	-20.29	-
6	9.292	0.30	33.08	-	33.38	-	60.00	50.00	-26.62	-

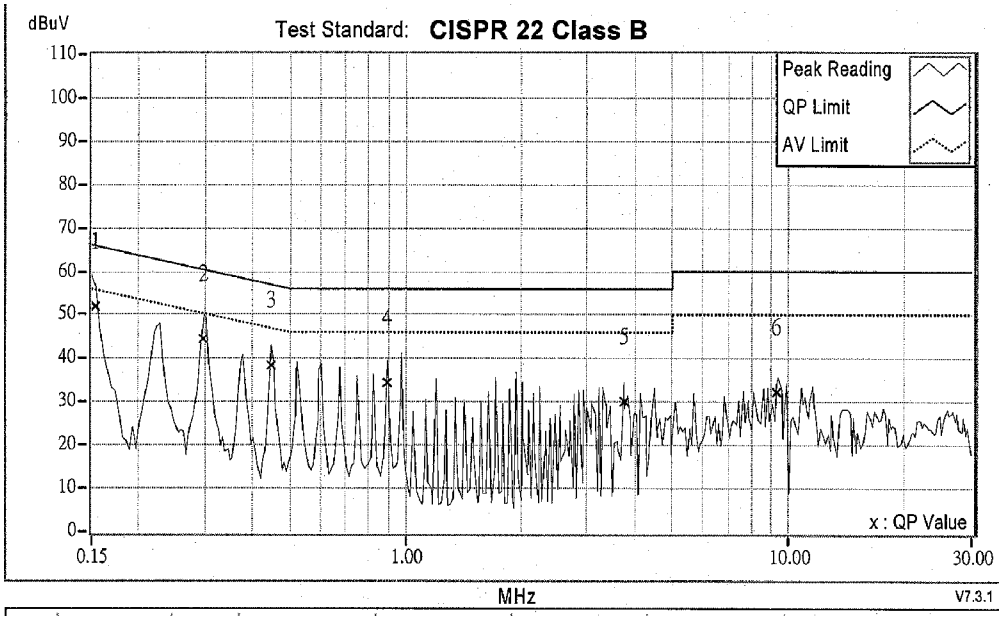
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	Wireless A+G Access Point	MODEL	WAP55AG ver. 2
INPUT POWER (SYSTEM)	120Vac, 60 Hz	6dB BANDWIDTH	9 kHz
ENVIRONMENTAL CONDITIONS	22deg. C, 60%RH, 991hPa	PHASE	Neutral (N)
TEST MODE	Test Mode 1	TESTED BY	Johan Juo

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.154	0.10	51.48	-	51.58	-	65.79	55.79	-14.20	-
2	0.298	0.11	44.40	-	44.51	-	60.29	50.29	-15.77	-
3	0.447	0.12	38.15	-	38.27	-	56.93	46.93	-18.66	-
4	0.896	0.14	34.07	-	34.21	-	56.00	46.00	-21.79	-
5	3.744	0.19	29.77	-	29.96	-	56.00	46.00	-26.04	-
6	9.292	0.28	32.07	-	32.35	-	60.00	50.00	-27.65	-

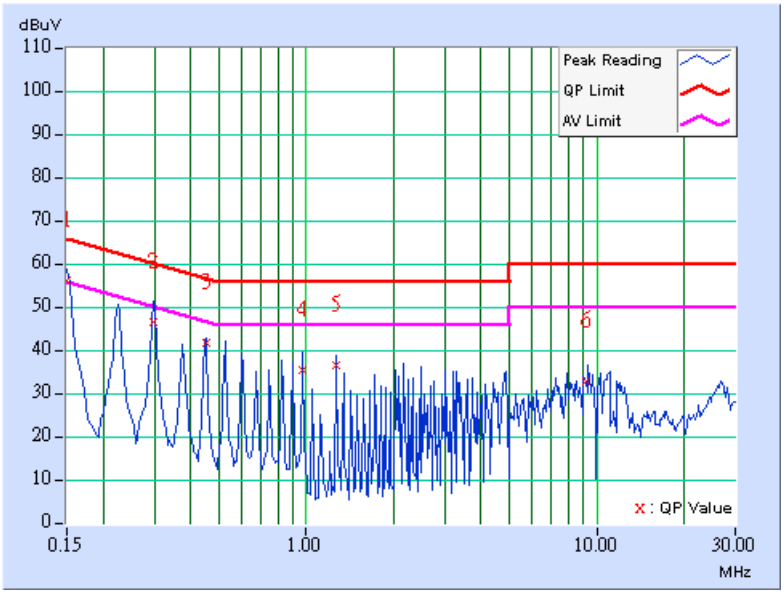
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	Wireless A+G Access Point	MODEL	WAP55AG ver. 2
INPUT POWER (SYSTEM)	120Vac, 60 Hz	6dB BANDWIDTH	9 kHz
ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH, 991hPa	PHASE	Line (L)
TEST MODE	Test Mode 2	TESTED BY	Johan Juo

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	**0.150**	**0.11**	**55.89**	**50.10**	**56.00**	**50.21**	**66.00**	**56.00**	**-10.00**	**-5.79**
2	0.298	0.12	46.45	-	46.57	-	60.29	50.29	-13.71	-
3	0.451	0.13	41.42	-	41.55	-	56.86	46.86	-15.31	-
4	0.970	0.15	35.17	-	35.32	-	56.00	46.00	-20.68	-
5	1.273	0.15	36.48	-	36.63	-	56.00	46.00	-19.37	-
6	9.215	0.30	32.53	-	32.83	-	60.00	50.00	-27.17	-

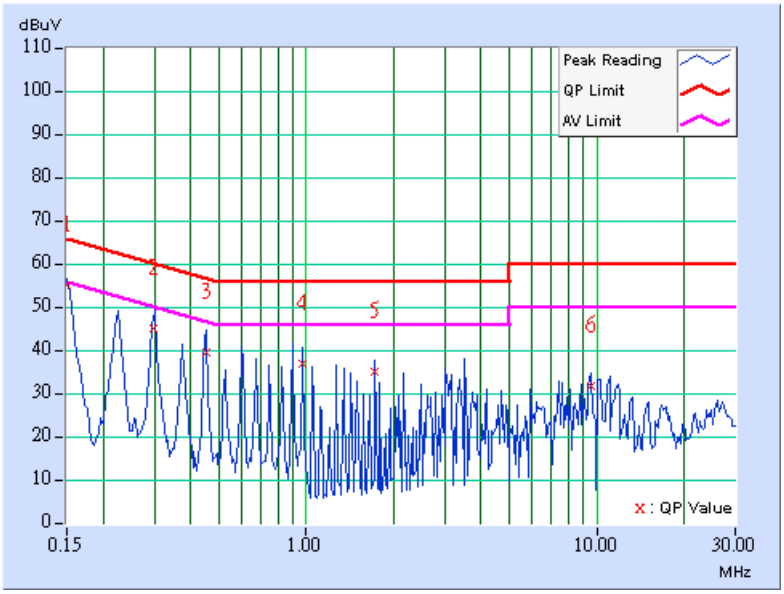
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	Wireless A+G Access Point	MODEL	WAP55AG ver. 2
INPUT POWER (SYSTEM)	120Vac, 60 Hz	6dB BANDWIDTH	9 kHz
ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH, 991hPa	PHASE	Neutral (N)
TEST MODE	Test Mode 2	TESTED BY	Johan Juo

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.10	54.95	-	55.05	-	66.00	56.00	-10.95	-
2	0.298	0.11	44.83	-	44.94	-	60.29	50.29	-15.34	-
3	0.451	0.12	39.27	-	39.39	-	56.86	46.86	-17.48	-
4	0.975	0.15	36.72	-	36.87	-	56.00	46.00	-19.13	-
5	1.721	0.16	34.96	-	35.12	-	56.00	46.00	-20.88	-
6	9.587	0.28	31.66	-	31.94	-	60.00	50.00	-28.06	-

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.



5.2 RADIATED EMISSION MEASUREMENT

5.2.1 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.

5.2.2 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

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

5.2.3 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	Dec. 15, 2004
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	Jan. 22, 2005
Preamplifier Agilent	8447D	2944A10629	Jan. 14, 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.

5.2.4 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 camber. 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.

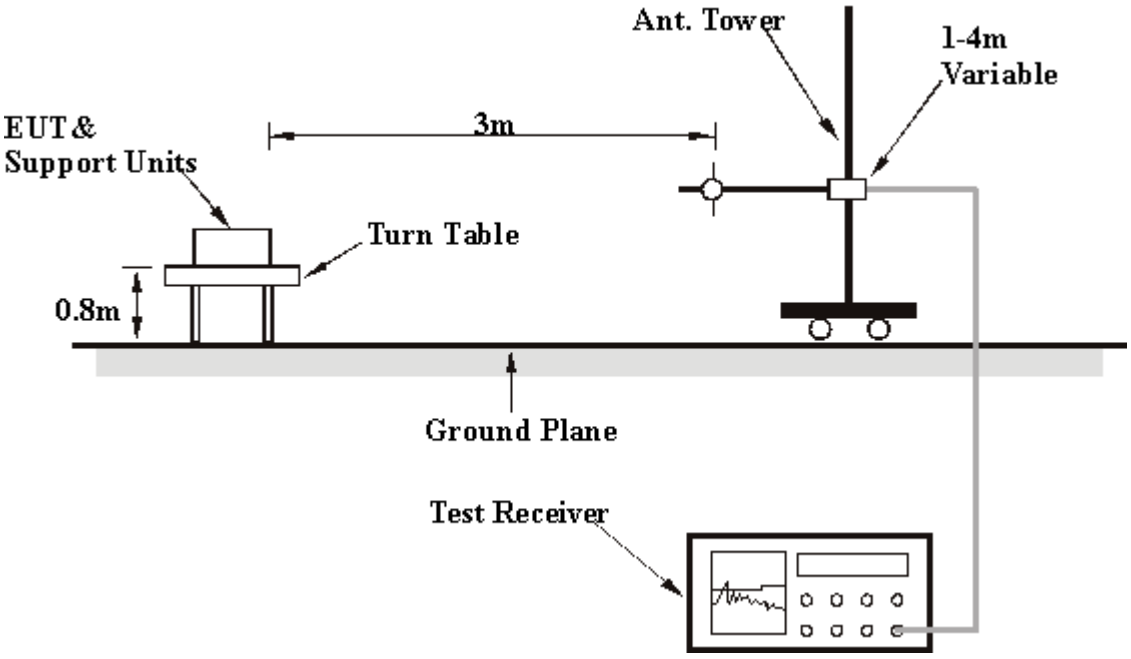
NOTE:

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.

5.2.5 DEVIATION FROM TEST STANDARD

No deviation

5.2.6 TEST SETUP



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

5.2.7 EUT OPERATING CONDITIONS

Same as 4.1.6

5.2.8 TEST RESULTS

EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**FREQUENCY RANGE**	Below 1000MHz
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**DETECTOR FUNCTION**	Quasi-Peak
TESTED BY	Match Tsui	**TEST MODE**	Test Mode 1

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	47.49	28.39 QP	40.00	-11.61	1.00 H	238	13.39	15.00
2	109.70	40.08 QP	43.50	-3.42	1.50 H	274	28.10	11.97
3	123.31	41.64 QP	43.50	-1.86	1.50 H	259	28.38	13.26
4	218.56	37.24 QP	46.00	-8.76	1.25 H	58	25.44	11.80
5	249.66	31.86 QP	46.00	-14.14	1.00 H	283	18.64	13.22
6	329.36	35.88 QP	46.00	-10.12	1.00 H	328	20.71	15.18
7	374.07	32.99 QP	46.00	-13.01	1.00 H	289	16.81	16.18
8	440.16	31.36 QP	46.00	-14.64	1.00 H	319	13.55	17.81
9	546.30	42.82 QP	46.00	-3.18	1.53 H	197	23.20	19.62
10	550.00	44.80 QP	46.00	-1.20	1.00 H	0	25.11	19.69
11	574.29	40.22 QP	46.00	-5.78	1.50 H	196	19.88	20.33
12	603.45	39.46 QP	46.00	-6.54	1.25 H	211	18.41	21.06
13	681.20	37.30 QP	46.00	-8.70	1.25 H	160	15.24	22.07
14	751.18	39.63 QP	46.00	-6.37	1.00 H	25	16.09	23.54
15	881.42	36.39 QP	46.00	-9.61	1.75 H	130	11.63	24.77
16	990.28	35.46 QP	54.00	-18.54	1.50 H	109	9.70	25.77

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	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**FREQUENCY RANGE**	Below 1000MHz
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**DETECTOR FUNCTION**	Quasi-Peak
TESTED BY	Match Tsui	**TEST MODE**	Test Mode 1

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	47.81	36.11 QP	40.00	-3.89	1.24 V	200	21.15	14.96
2	61.10	36.58 QP	40.00	-3.42	1.25 V	115	23.00	13.59
3	109.70	38.45 QP	43.50	-5.05	1.00 V	229	26.48	11.97
4	123.31	39.44 QP	43.50	-4.06	1.00 V	244	26.18	13.26
5	249.66	31.97 QP	46.00	-14.03	1.75 V	352	18.75	13.22
6	329.36	34.63 QP	46.00	-11.37	1.50 V	265	19.46	15.18
7	374.07	31.67 QP	46.00	-14.33	1.00 V	316	15.49	16.18
8	399.34	33.05 QP	46.00	-12.95	1.25 V	40	16.32	16.74
9	479.04	33.50 QP	46.00	-12.50	1.00 V	25	15.05	18.45
10	500.42	38.47 QP	46.00	-7.53	1.00 V	277	19.73	18.74
11	545.13	42.74 QP	46.00	-3.26	1.50 V	166	23.14	19.60
12	624.83	36.78 QP	46.00	-9.22	1.50 V	196	15.44	21.34
13	751.18	34.51 QP	46.00	-11.49	1.00 V	172	10.98	23.54
14	770.62	37.70 QP	46.00	-8.30	1.50 V	280	14.05	23.65
15	881.42	33.91 QP	46.00	-12.09	1.25 V	40	9.14	24.77
16	990.28	36.32 QP	54.00	-17.68	1.00 V	61	10.55	25.77

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	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**FREQUENCY RANGE**	Below 1000MHz
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**DETECTOR FUNCTION**	Quasi-Peak
TESTED BY	Match Tsui	**TEST MODE**	Test Mode 2

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	47.49	28.84 QP	40.00	-11.16	2.00 H	22	13.84	15.00
2	109.70	42.16 QP	43.50	-1.34	1.25 H	79	30.19	11.97
3	125.00	42.39 QP	43.50	-1.11	1.75 H	246	29.01	13.38
4	218.56	42.12 QP	46.00	-3.88	1.00 H	97	30.32	11.80
5	249.66	34.95 QP	46.00	-11.05	1.00 H	289	21.74	13.22
6	329.36	35.92 QP	46.00	-10.08	1.00 H	313	20.74	15.18
7	374.07	33.36 QP	46.00	-12.64	1.00 H	274	17.18	16.18
8	399.34	30.06 QP	46.00	-15.94	1.00 H	67	13.32	16.74
9	500.42	41.71 QP	46.00	-4.29	1.75 H	277	22.97	18.74
10	550.96	44.31 QP	46.00	-1.69	1.50 H	205	24.60	19.72
11	601.50	44.27 QP	46.00	-1.73	1.50 H	193	23.24	21.03
12	681.20	38.45 QP	46.00	-7.55	1.25 H	154	16.38	22.07
13	751.18	36.23 QP	46.00	-9.77	1.00 H	28	12.69	23.54
14	881.42	33.40 QP	46.00	-12.60	1.50 H	211	8.64	24.77
15	920.30	34.04 QP	46.00	-11.96	1.50 H	190	8.72	25.33
16	990.28	35.37 QP	54.00	-18.63	1.50 H	103	9.61	25.77

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	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**FREQUENCY RANGE**	Below 1000MHz
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**DETECTOR FUNCTION**	Quasi-Peak
TESTED BY	Match Tsui	**TEST MODE**	Test Mode 2

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	45.37	38.78 QP	40.00	-1.22	1.50 V	193	23.52	15.26
2	59.16	36.58 QP	40.00	-3.42	1.50 V	7	22.79	13.79
3	109.70	38.73 QP	43.50	-4.77	1.00 V	229	26.76	11.97
4	125.25	40.47 QP	43.50	-3.03	1.00 V	235	27.08	13.39
5	218.56	34.65 QP	46.00	-11.35	1.00 V	85	22.85	11.80
6	329.36	34.56 QP	46.00	-11.44	1.50 V	52	19.39	15.18
7	399.34	32.52 QP	46.00	-13.48	1.25 V	10	15.79	16.74
8	479.04	32.94 QP	46.00	-13.06	1.00 V	37	14.49	18.45
9	500.42	39.22 QP	46.00	-6.78	1.25 V	253	20.48	18.74
10	550.96	39.33 QP	46.00	-6.67	1.00 V	274	19.61	19.72
11	601.50	43.12 QP	46.00	-2.88	1.50 V	235	22.09	21.03
12	770.62	38.68 QP	46.00	-7.32	1.50 V	280	15.03	23.65
13	881.42	32.40 QP	46.00	-13.60	1.25 V	55	7.63	24.77
14	990.28	36.28 QP	54.00	-17.72	1.00 V	61	10.51	25.77

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	Wireless A+G Access Point	MODEL	WAP55AG ver. 2
MODE	Normal Mode	CHANNEL	1
FREQUENCY RANGE	1 ~ 40 GHz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
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)
1	#1120.00	48.08 PK	74.00	-25.92	1.31 H	103	21.32	26.76
1	#1120.00	44.97 AV	54.00	-9.03	1.31 H	103	18.21	26.76
2	3453.00	42.03 PK	68.30	-26.27	1.12 H	90	6.45	35.58
3	#5150.00	44.17 PK	74.00	-29.83	1.05 H	124	5.07	39.10
3	#5150.00	34.08 AV	54.00	-19.92	1.05 H	124	-5.02	39.10
4	*5180.00	103.06 PK			1.05 H	124	63.89	39.17
4	*5180.00	92.67 AV			1.05 H	124	53.50	39.17
5	10360.00	61.21 PK	68.30	-7.09	1.21 H	82	15.92	45.29

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)
1	#1120.00	47.33 PK	74.00	-26.67	1.00 V	330	20.57	26.76
1	#1120.00	44.14 AV	54.00	-9.86	1.00 V	330	17.38	26.76
2	3453.00	45.56 PK	68.30	-22.74	1.02 V	218	9.98	35.58
3	#5150.00	52.09 PK	74.00	-21.91	1.04 V	21	12.99	39.10
3	#5150.00	42.18 AV	54.00	-11.82	1.04 V	21	3.08	39.10
4	*5180.00	110.98 PK			1.04 V	21	71.81	39.17
4	*5180.00	101.07 AV			1.04 V	21	61.90	39.17
5	10360.00	65.23 PK	68.30	-3.07	1.00 V	190	19.94	45.29

NOTE:

1. Emission level = Raw value + Correction Factor
2. Correction Factor = Ant. Factor + Cable loss
3. Margin value = Emission level - Limit value
4. The other emission levels were very low against the limit.
5. "*" : Fundamental frequency
6. "#"The radiated frequency falling in the restricted band.

EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
MODE	Normal Mode	**CHANNEL**	4
FREQUENCY RANGE	1 ~ 40 GHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
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)
1	#1120.00	47.15 PK	74.00	-26.85	1.33 H	103	20.39	26.76
1	#1120.00	44.62 AV	54.00	-9.38	1.33 H	103	17.86	26.76
2	3493.00	49.26 PK	68.30	-19.04	1.11 H	280	13.57	35.70
3	*5240.00	102.14 PK			1.04 H	127	62.96	39.18
3	*5240.00	92.50 AV			1.04 H	127	53.32	39.18
4	10480.00	60.34 PK	68.30	-7.96	1.16 H	207	14.25	46.08

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)
1	#1120.00	46.22 PK	74.00	-27.78	1.00 V	326	19.46	26.76
1	#1120.00	43.32 AV	54.00	-10.68	1.00 V	326	16.56	26.76
2	3493.00	49.77 PK	68.30	-18.53	1.00 V	121	14.08	35.70
3	*5240.00	111.79 PK			1.05 V	18	72.61	39.18
3	*5240.00	101.86 AV			1.05 V	18	62.68	39.18
4	10480.00	63.64 PK	68.30	-4.66	1.19 V	299	17.55	46.08

NOTE:

1. Emission level = Raw value + Correction Factor
2. Correction Factor = Ant. Factor + Cable loss
3. Margin value = Emission level - Limit value
4. The other emission levels were very low against the limit.
5. "*" : Fundamental frequency
6. "#"The radiated frequency falling in the restricted band.

EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
MODE	Normal Mode	**CHANNEL**	5
FREQUENCY RANGE	1 ~ 40 GHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
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)
1	#1120.00	46.21 PK	74.00	-27.79	1.09 H	16	19.45	26.76
1	#1120.00	43.48 AV	54.00	-10.69	1.09 H	16	16.55	26.76
2	3506.00	48.79 PK	68.30	-19.51	1.12 H	217	13.05	35.73
3	*5260.00	102.69 PK			1.14 H	126	63.53	39.16
3	*5260.00	92.62 AV			1.14 H	126	53.46	39.16
4	10520.00	58.02 PK	68.30	-10.28	1.07 H	256	11.87	46.16

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)
1	#1120.00	46.98 PK	74.00	-27.02	1.00 V	330	20.22	26.76
1	#1120.00	43.48 AV	54.00	-10.52	1.00 V	330	16.72	26.76
2	3506.00	50.63 PK	68.30	-17.67	1.00 V	304	14.89	35.73
3	*5260.00	110.46 PK			1.03 V	1	71.30	39.16
3	*5260.00	100.81 AV			1.03 V	1	61.65	39.16
4	10520.00	64.59 PK	68.30	-3.71	1.02 V	186	18.44	46.16

NOTE:

1. Emission level = Raw value + Correction Factor
2. Correction Factor = Ant. Factor + Cable loss
3. Margin value = Emission level - Limit value
4. The other emission levels were very low against the limit.
5. "*" : Fundamental frequency
6. "#"The radiated frequency falling in the restricted band.

EUT	Wireless A+G Access Point	MODEL	WAP55AG ver. 2
MODE	Normal Mode	CHANNEL	8
FREQUENCY RANGE	1 ~ 40 GHz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
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)
1	#1120.00	45.45 PK	74.00	-28.55	1.26 H	103	18.69	26.76
1	#1120.00	44.69 AV	54.00	-9.31	1.26 H	103	17.93	26.76
2	3546.00	40.50 PK	68.30	-27.80	1.24 H	191	4.65	35.85
3	*5320.00	102.73 PK			1.00 H	128	63.58	39.15
3	*5320.00	92.70 AV			1.00 H	128	53.55	39.15
4	#5350.00	43.25 PK	74.00	-30.75	1.00 H	128	4.05	39.20
4	#5350.00	33.22 AV	54.00	-20.78	1.00 H	128	-5.98	39.20
5	#10640.00	60.78 PK	74.00	-13.22	1.12 H	131	14.55	46.23
5	#10640.00	48.13 AV	54.00	-5.87	1.12 H	131	1.90	46.23

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)
1	#1120.00	46.53 PK	74.00	-27.47	1.00 V	329	19.77	26.76
1	#1120.00	43.48 AV	54.00	-10.52	1.00 V	329	16.72	26.76
2	3546.00	49.92 PK	68.30	-18.38	1.18 V	323	14.07	35.85
3	*5320.00	112.29 PK			1.15 V	20	73.14	39.15
3	*5320.00	102.68 AV			1.15 V	20	63.53	39.15
4	#5350.00	52.81 PK	74.00	-21.19	1.15 V	20	13.61	39.20
4	#5350.00	43.20 AV	54.00	-10.80	1.15 V	20	4.00	39.20
5	#10640.00	61.88 PK	74.00	-12.12	1.17 V	297	15.65	46.23
5	#10640.00	49.18 AV	54.00	-4.82	1.17 V	297	2.95	46.23
6	#15960.00	60.67 PK	74.00	-13.33	1.15 V	231	15.71	44.96
6	#15960.00	47.80 AV	54.00	-6.20	1.15 V	231	2.84	44.96

NOTE:

1. Emission level = Raw value + Correction Factor
2. Correction Factor = Ant. Factor + Cable loss
3. Margin value = Emission level - Limit value
4. The other emission levels were very low against the limit.
5. "*" : Fundamental frequency
6. "#"The radiated frequency falling in the restricted band.

EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
MODE	Turbo Mode	**CHANNEL**	1
FREQUENCY RANGE	1 ~ 40 GHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
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)
1	#1120.00	50.27 PK	74.00	-23.73	1.31 H	96	23.51	26.76
1	#1120.00	48.42 AV	54.00	-5.58	1.31 H	96	21.66	26.76
2	#5150.00	53.19 PK	74.00	-20.81	1.04 H	127	14.09	39.10
2	#5150.00	42.92 AV	54.00	-11.08	1.04 H	127	3.82	39.10
3	*5210.00	100.32 PK			1.04 H	127	61.11	39.21
3	*5210.00	90.05 AV			1.04 H	127	50.84	39.21
4	10420.00	59.47 PK	68.30	-8.83	1.18 H	204	13.70	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)
1	#1120.00	46.64 PK	74.00	-27.36	1.00 V	331	19.88	26.76
1	#1120.00	43.14 AV	54.00	-10.86	1.00 V	331	16.38	26.76
2	3474.00	49.89 PK	68.30	-18.41	1.00 V	304	14.25	35.64
2	3474.00	42.29 AV	54.00	-11.71	1.00 V	304	6.65	35.64
3	#5150.00	63.30 PK	74.00	-10.70	1.06 V	131	24.20	39.10
3	**#5150.00**	**53.00 AV**	**54.00**	**-1.00**	**1.06 V**	**131**	**13.90**	**39.10**
4	*5210.00	110.34 PK			1.06 V	131	71.13	39.21
4	*5210.00	100.13 AV			1.06 V	131	60.92	39.21
5	10420.00	64.28 PK	68.30	-4.02	1.10 V	191	18.51	45.77

NOTE:

1. Emission level = Raw value+ Correction Factor
2. Correction Factor = Ant. Factor + Cable loss
3. Margin value = Emission level - Limit value
4. The other emission levels were very low against the limit.
5. “*” : Fundamental frequency
6. “#”The radiated frequency falling in the restricted band.

EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
MODE	Turbo Mode	**CHANNEL**	2
FREQUENCY RANGE	1 ~ 40 GHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
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)
1	#1120.00	50.18 PK	74.00	-23.82	1.25 H	97	23.42	26.76
1	#1120.00	48.28 AV	54.00	-5.72	1.25 H	97	21.52	26.76
2	*5250.00	99.03 PK			1.15 H	124	59.86	39.17
2	*5250.00	89.62 AV			1.15 H	124	50.45	39.17
3	10500.00	56.97 PK	68.30	-11.33	1.01 H	254	10.78	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)
1	#1120.00	47.50 PK	74.00	-26.50	1.48 V	360	20.74	26.76
1	#1120.00	44.49 AV	54.00	-9.51	1.48 V	360	17.73	26.76
2	3500.00	43.81 PK	68.30	-24.49	1.37 V	6	8.09	35.72
3	*5250.00	110.01 PK			1.05 V	360	70.84	39.17
3	*5250.00	99.32 AV			1.05 V	360	60.15	39.17
4	10500.00	60.29 PK	68.30	-8.01	1.02 V	6	14.10	46.19

NOTE:

1. Emission level = Raw value + Correction Factor
2. Correction Factor = Ant. Factor + Cable loss
3. Margin value = Emission level - Limit value
4. The other emission levels were very low against the limit.
5. “*” : Fundamental frequency
6. “#”The radiated frequency falling in the restricted band.

EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
MODE	Turbo Mode	**CHANNEL**	3
FREQUENCY RANGE	1 ~ 40 GHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
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)
1	#1120.00	49.92 PK	74.00	-24.08	1.32 H	96	23.16	26.76
1	#1120.00	48.23 AV	54.00	-5.77	1.32 H	96	21.47	26.76
2	*5290.00	101.49 PK			1.03 H	127	62.36	39.13
2	*5290.00	92.31 AV			1.03 H	127	53.18	39.13
3	10580.00	56.64 PK	68.30	-11.66	1.11 H	329	10.57	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)
1	#1120.00	47.32 PK	74.00	-26.68	1.00 V	2	20.56	26.76
1	#1120.00	44.59 AV	54.00	-9.41	1.00 V	2	17.83	26.76
2	3526.00	50.04 PK	68.30	-18.26	1.23 V	340	14.25	35.79
3	*5290.00	110.13 PK			1.15 V	357	70.96	39.17
3	*5290.00	101.04 AV			1.15 V	357	61.87	39.17
4	10580.00	56.38 PK	68.30	-11.92	1.09 V	123	10.25	46.13

NOTE:

1. Emission level = Raw value + Correction Factor
2. Correction Factor = Ant. Factor + Cable loss
3. Margin value = Emission level - Limit value
4. The other emission levels were very low against the limit.
5. "*" : Fundamental frequency
6. "#"The radiated frequency falling in the restricted band.

5.3 PEAK TRANSMIT POWER MEASUREMENT

5.3.1 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.

5.3.2 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.

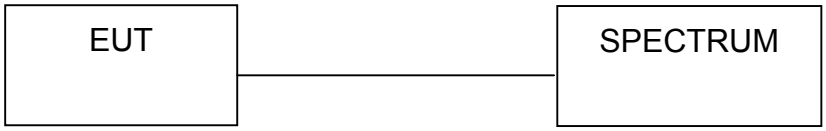
5.3.3 TEST PROCEDURE

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.

5.3.4 DEVIATION FROM TEST STANDARD

No deviation

5.3.5 TEST SETUP



5.3.6 EUT OPERATING CONDITIONS

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

5.3.7 TEST RESULTS

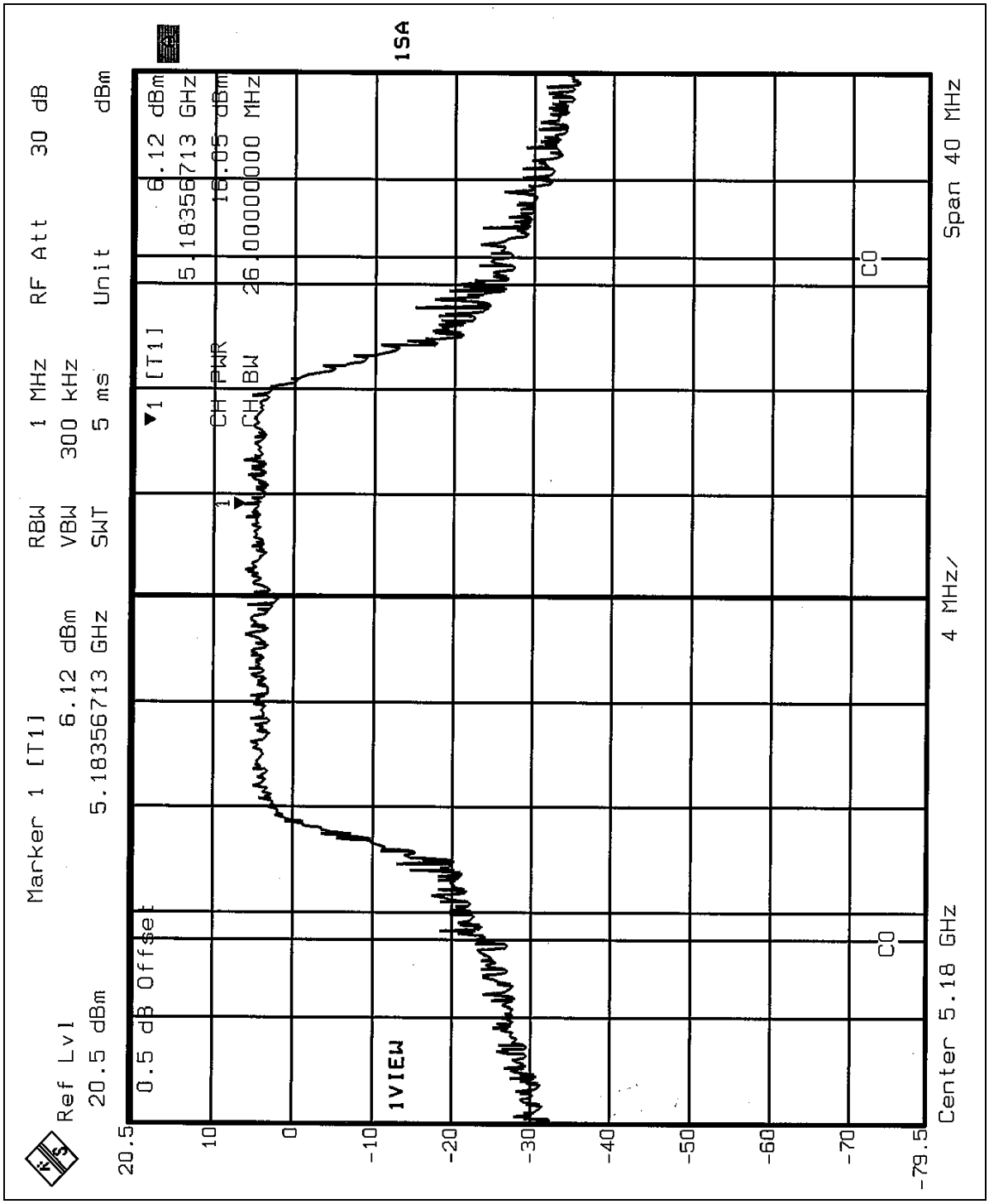
EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
MODE	Normal	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	24deg. C, 67%RH, 991hPa	**TESTED BY**	Leo Hung

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	26dBc Occupied Bandwidth (MHz)	PASS/FAIL
1	5180	40.27	16.05	17.00	21.39	PASS
4	5240	40.46	16.07	17.00	20.34	PASS
5	5260	40.55	16.08	24.00	21.11	PASS
8	5320	40.27	16.05	24.00	20.20	PASS

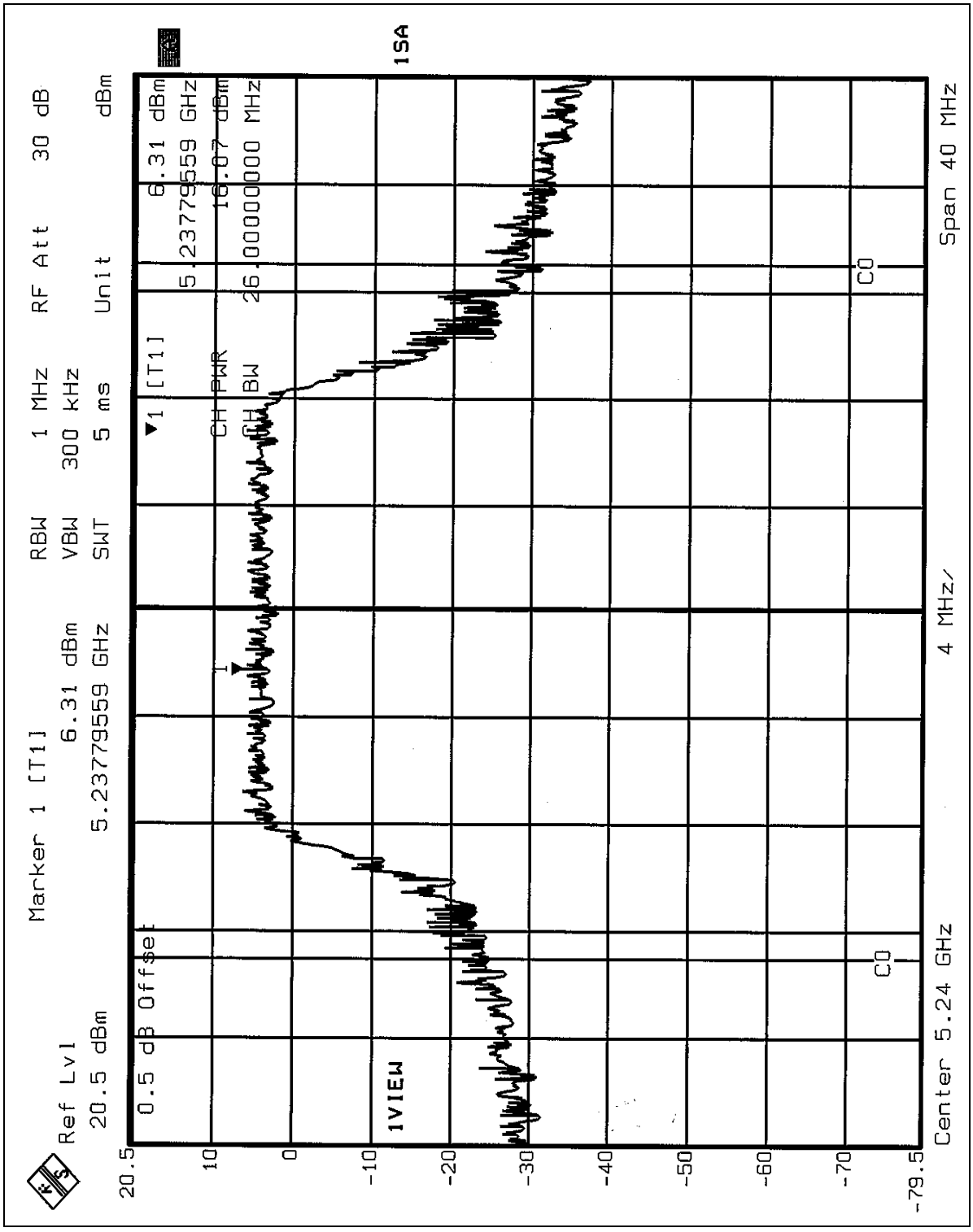
NOTE: The 26dBc Occupied Bandwidth plot, please refer to the following pages.

Peak Power Output:

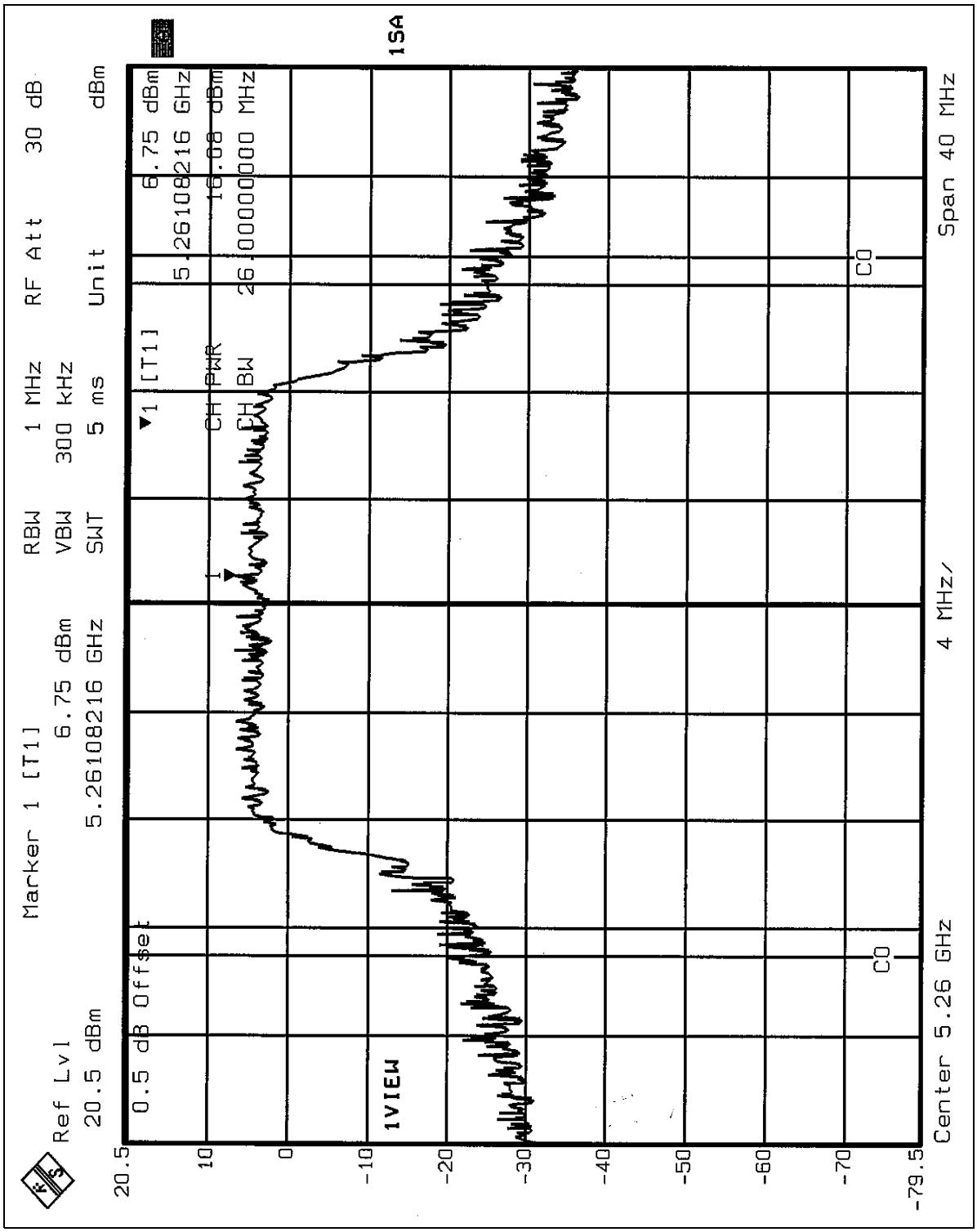
CH1



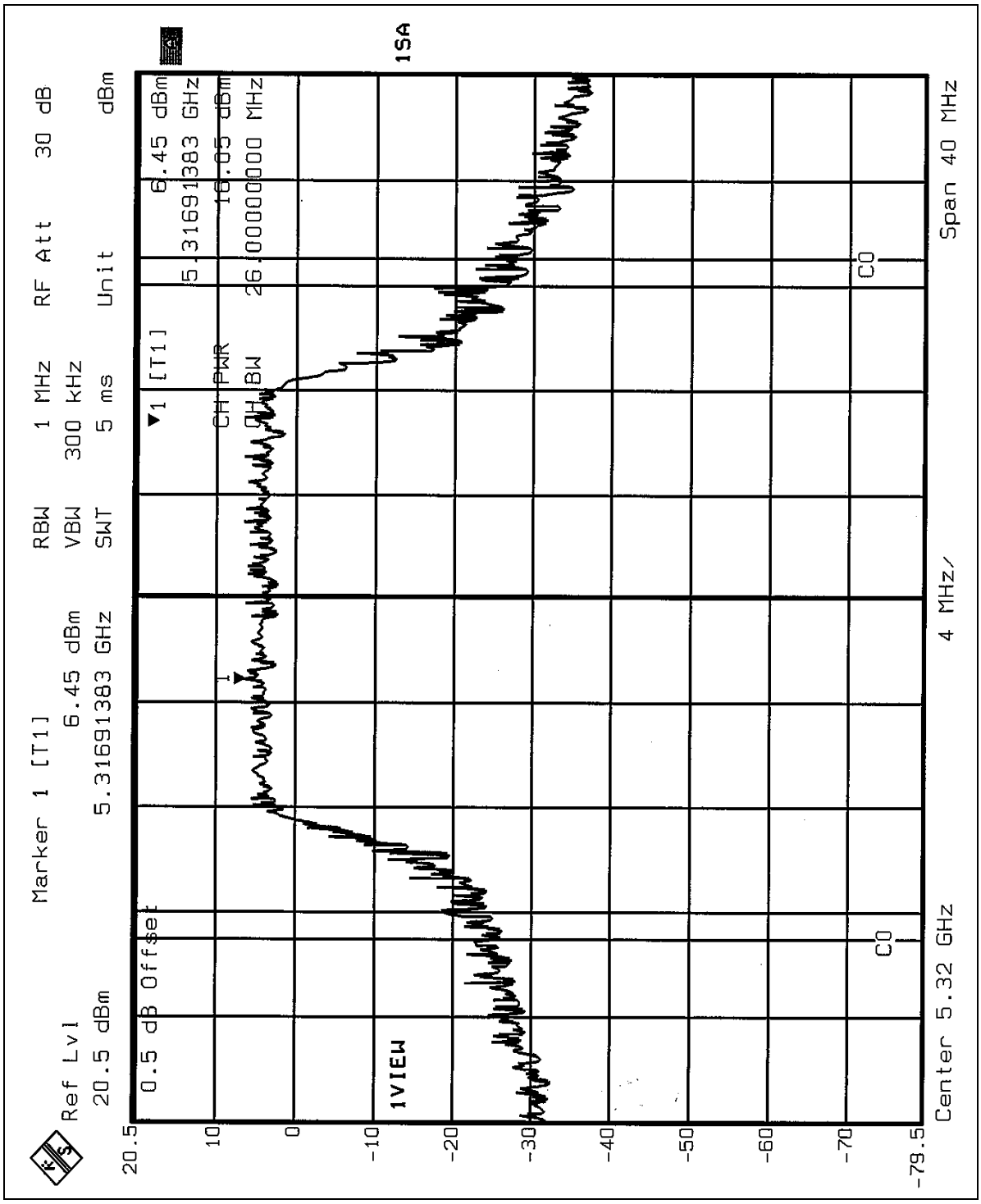
CH4


Marker 1 [T1]
6.31 dBm
5.23779559 GHz
Ref Lvl
20.5 dBm
0.5 dB Offset
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1VIEW
1SA
CH PWR
6.31 dBm
5.23779559 GHz
16.07 dBm
26.00000000 MHz
Center 5.24 GHz
4 MHz/
Span 40 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

CH5

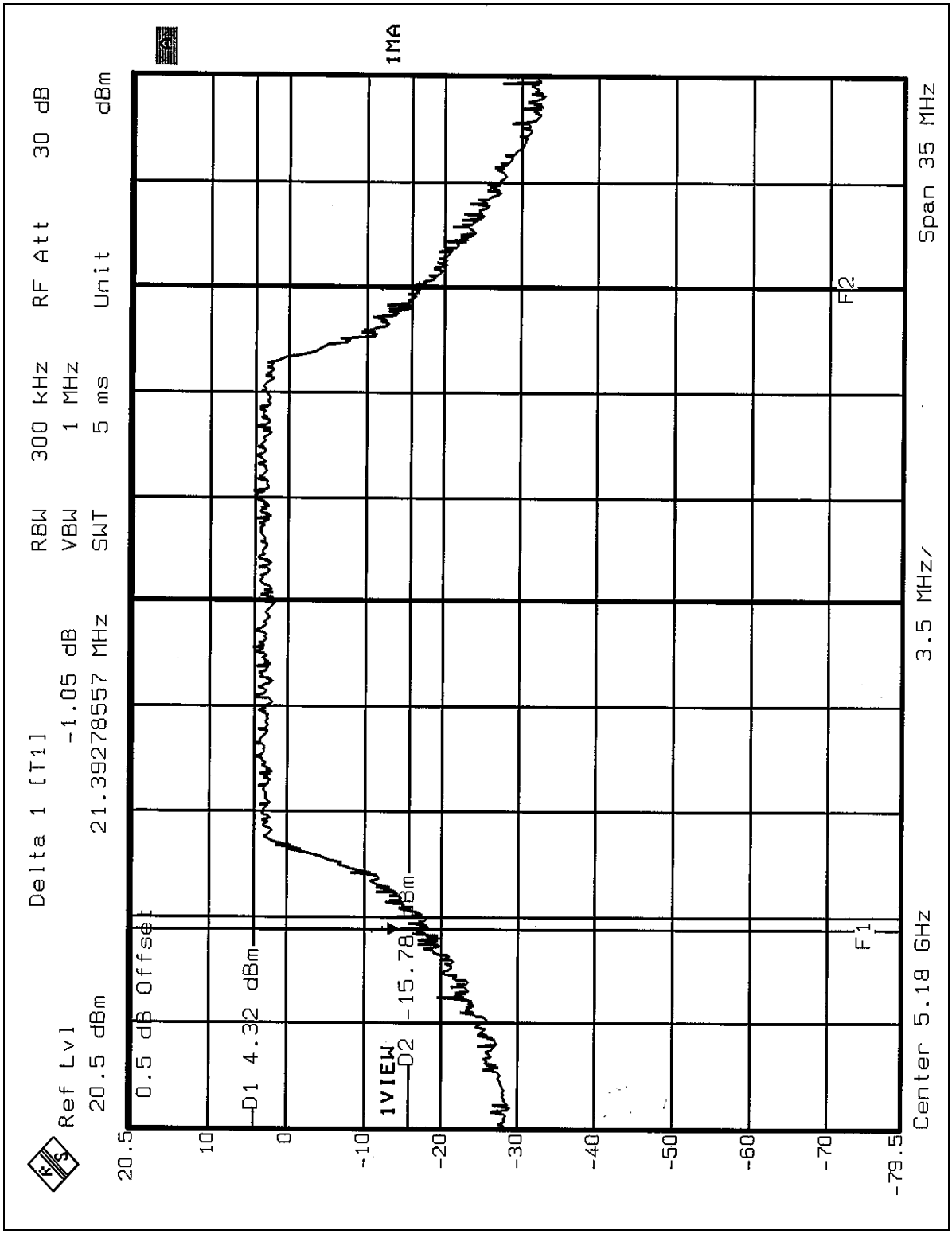

Marker 1 [T1]
6.75 dBm
5.26108216 GHz
Ref Lvl
20.5 dBm
0.5 dB Offset
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1VIEW
1SA
CH PWR
CH BW
6.75 dBm
5.26108216 GHz
16.08 dBm
26.00000000 MHz
Center 5.26 GHz
4 MHz/
Span 40 MHz

CH8

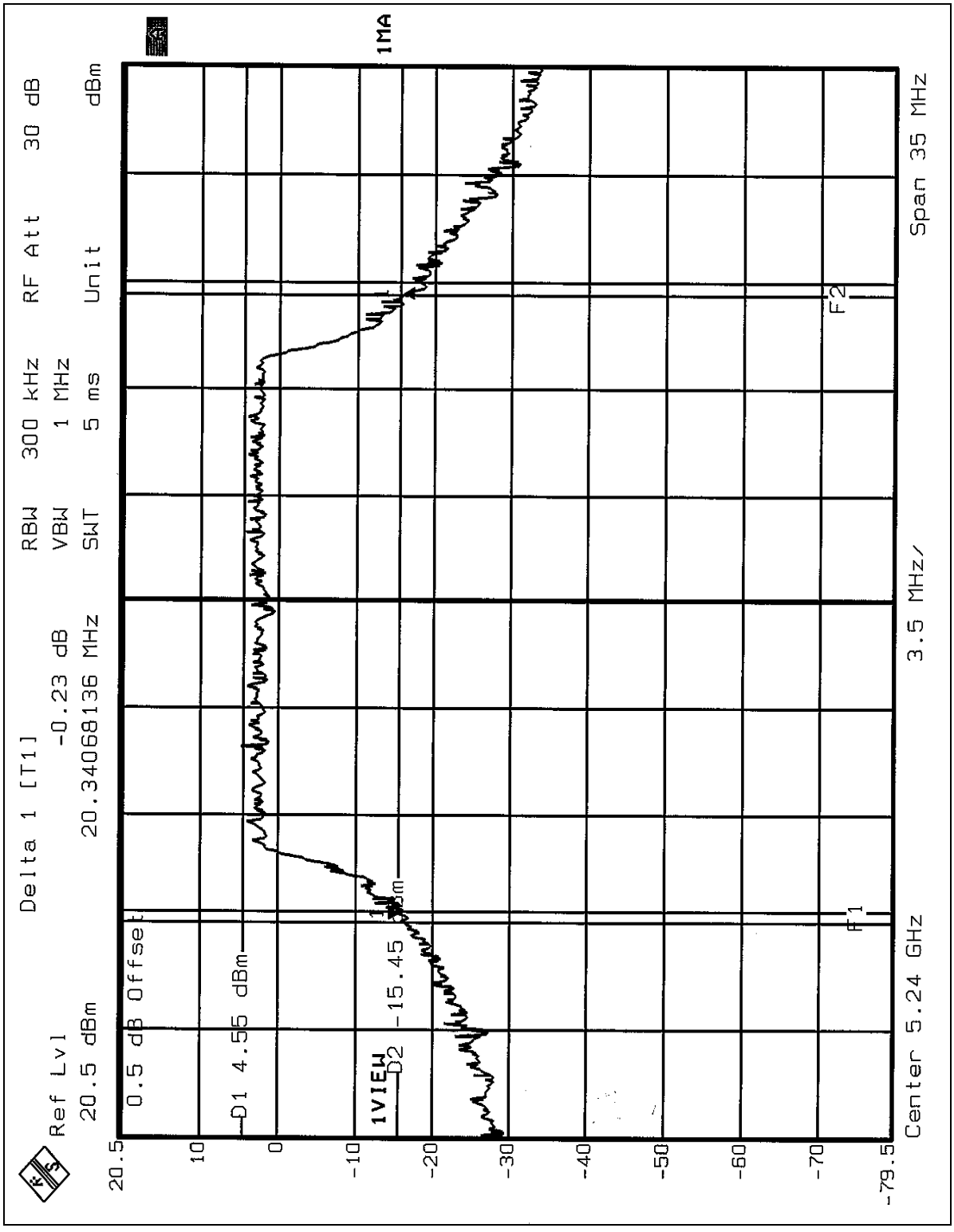

Marker 1 [T1]
6.45 dBm
5.31691383 GHz
Ref Lvl
20.5 dBm
0.5 dB Offset
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1VIEW
1SA
CH PWR
OBW
Center 5.32 GHz
4 MHz/
Span 40 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

26dB Occupied Bandwidth:

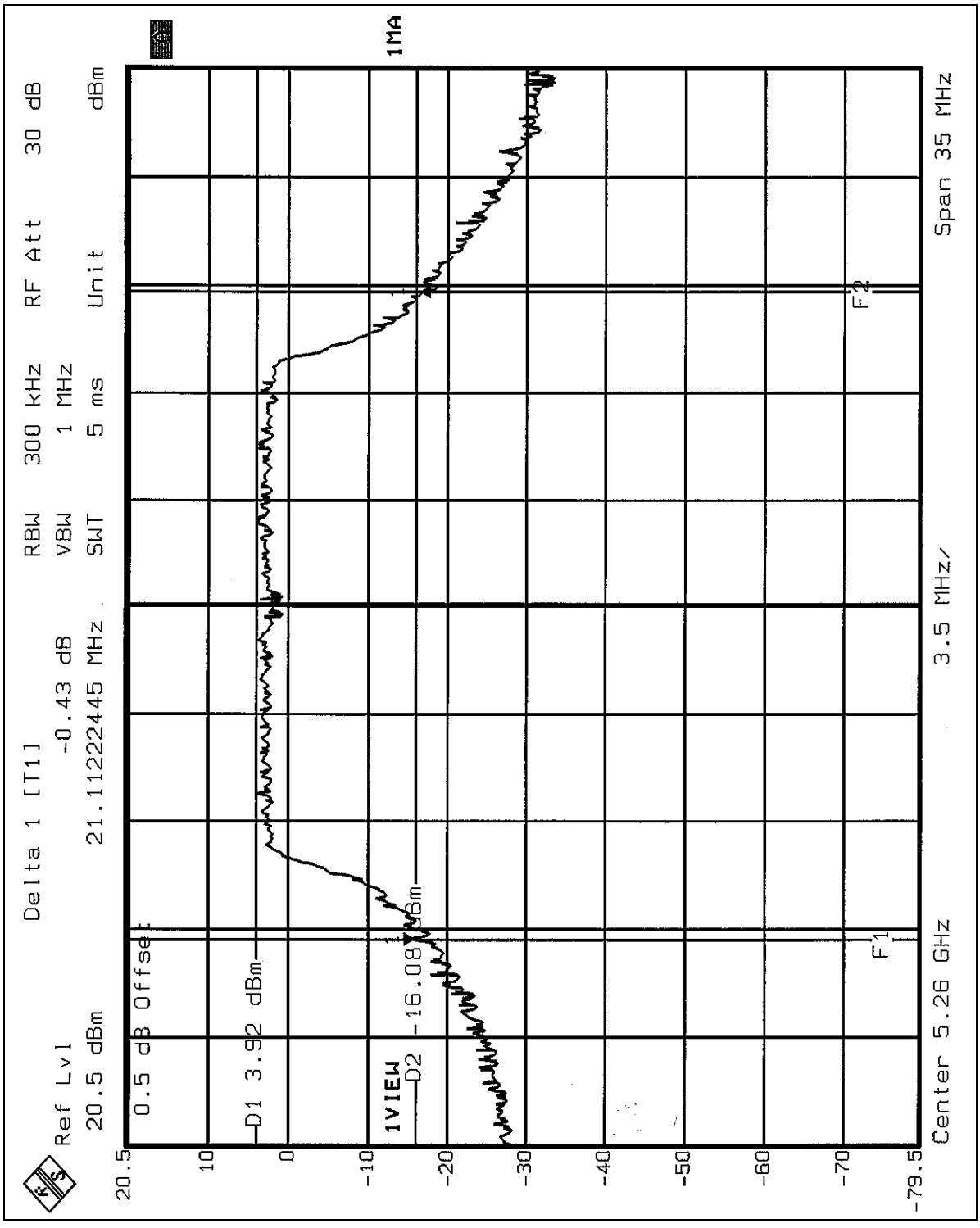
CH1



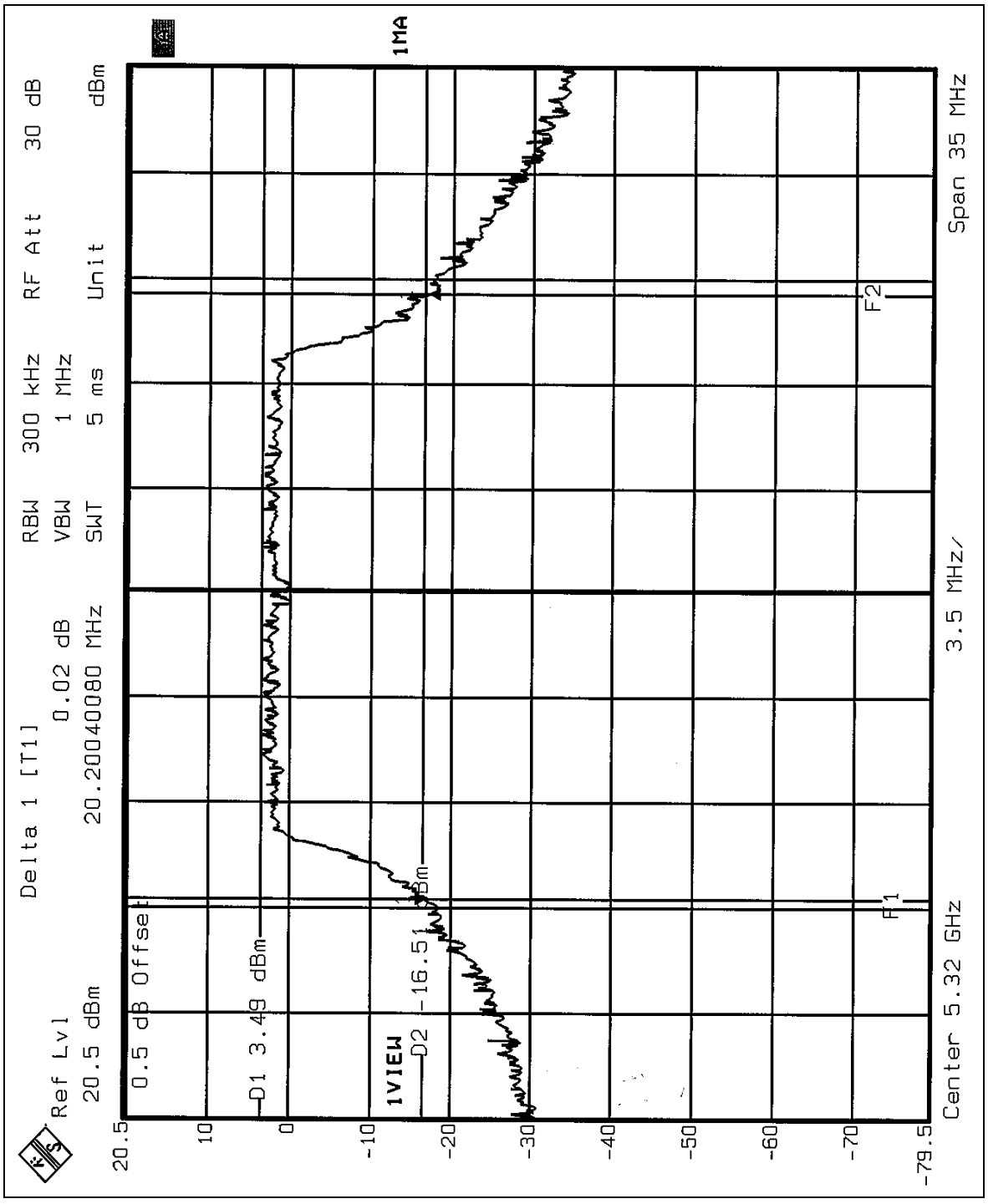
CH4


Delta 1 [T1]
-0.23 dB
20.340681136 MHz
RBW 300 kHz
VBW 1 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 4.55 dBm
1VIEW
D2 -15.45 dBm
1MA
F2
F1
Span 35 MHz
3.5 MHz/
Center 5.24 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

CH5


Delta 1 [T1]
-0.43 dB
21.11222445 MHz
RBW 300 kHz
VBW 1 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 3.92 dBm
1VIEW D2 -16.08 dBm
1MA
Center 5.26 GHz
3.5 MHz/
Span 35 MHz
F1
F2
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

CH8


Delta 1 [T1]
0.02 dB
20.20040080 MHz
RBW 300 kHz
VBW 1 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1MA
1VIEW
D1 3.49 dBm
D2 -16.51 dBm
F1
F2
Ref Lvl
20.5 dBm
0.5 dB Offset
Center 5.32 GHz
3.5 MHz/
Span 35 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

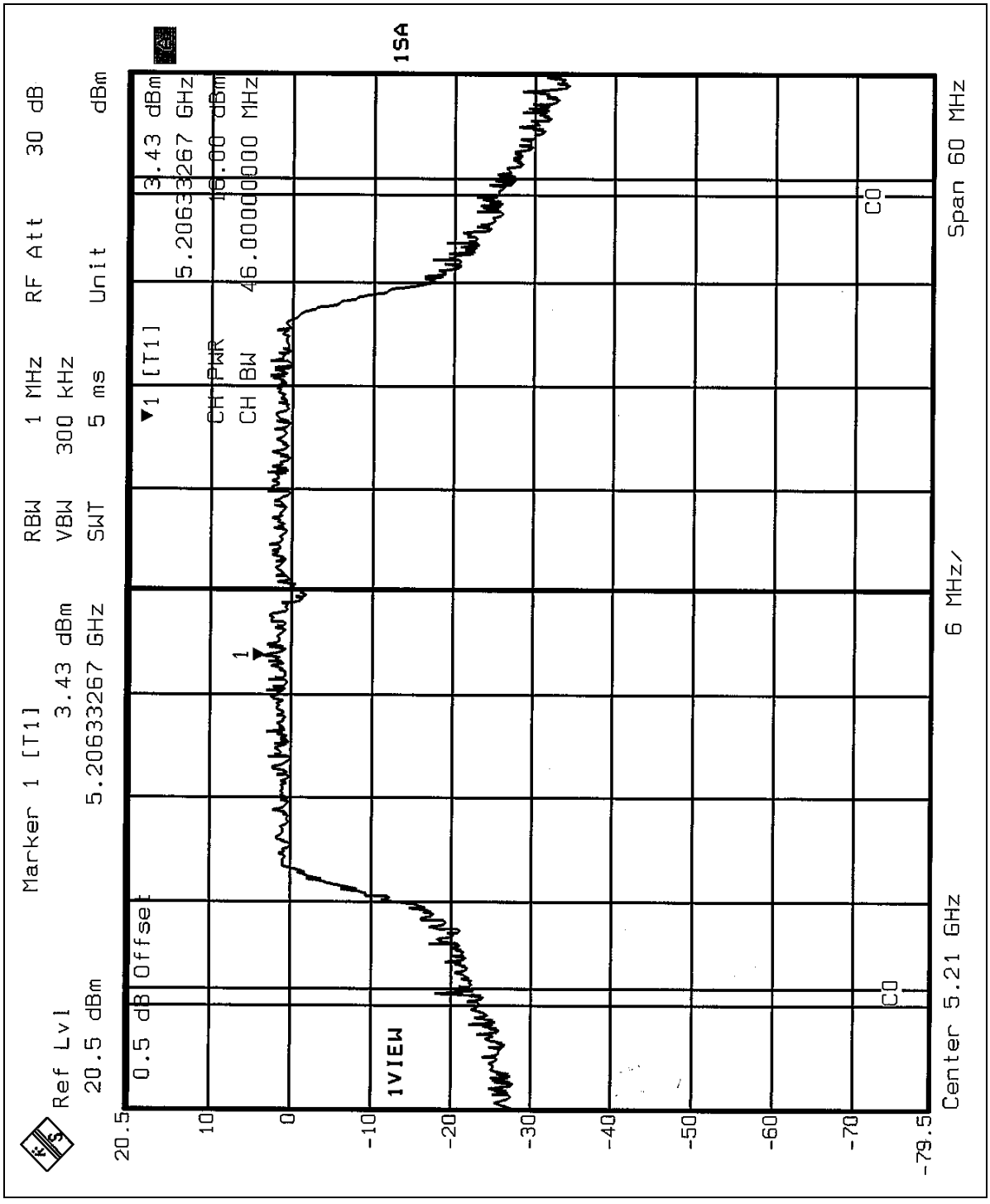
EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
MODE	Turbo	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	24deg. C, 67%RH, 991hPa	**TESTED BY**	Leo Hung

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	26dBc Occupied Bandwidth (MHz)	PASS/FAIL
1	5210	39.81	16.00	17.00	37.51	PASS
2	5250	40.37	16.06	17.00	38.48	PASS
3	5290	40.55	16.08	24.00	37.15	PASS

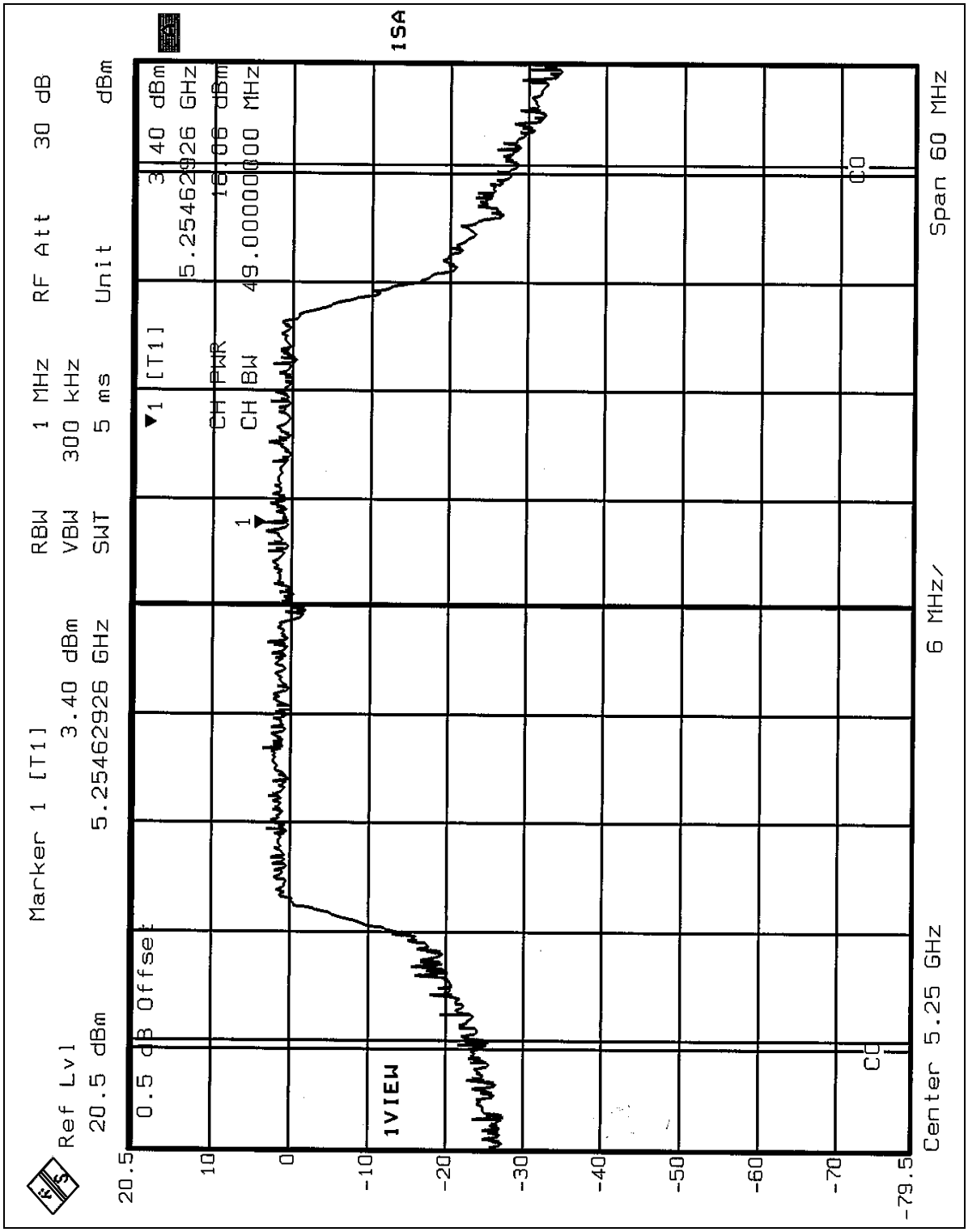
NOTE: The 26dBc Occupied Bandwidth plot, please refer to the following pages.

Peak Power Output:

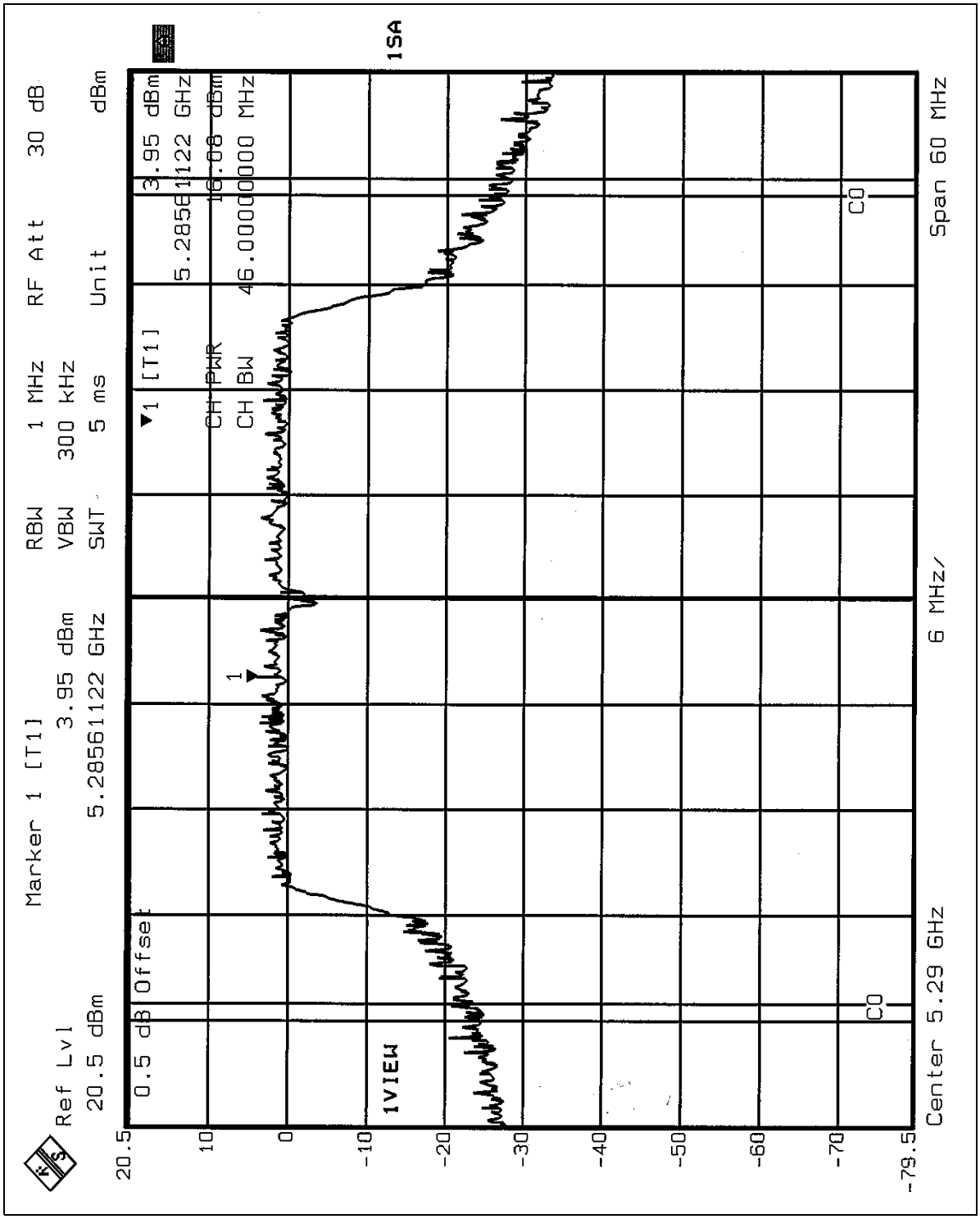
CH1



CH2

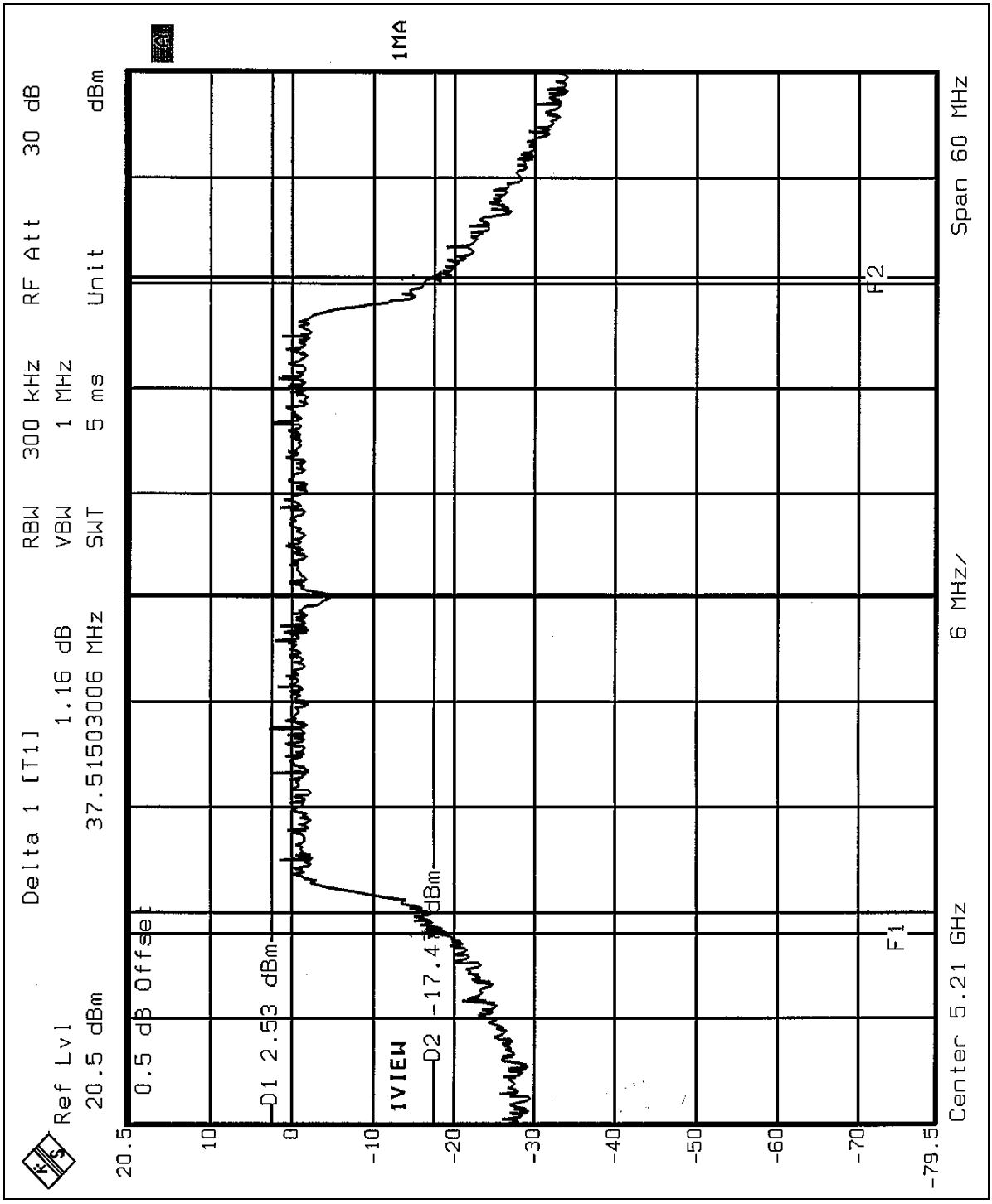

Ref Lvl
20.5 dBm
0.5 dB Offset
Marker 1 [T1]
3.40 dBm
5.25462926 GHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1VIEW
1SA
CH PWR
CH BW
3.40 dBm
5.25462926 GHz
16.06 dBm
49.000000000 MHz
Center 5.25 GHz
6 MHz/
Span 60 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

CH3

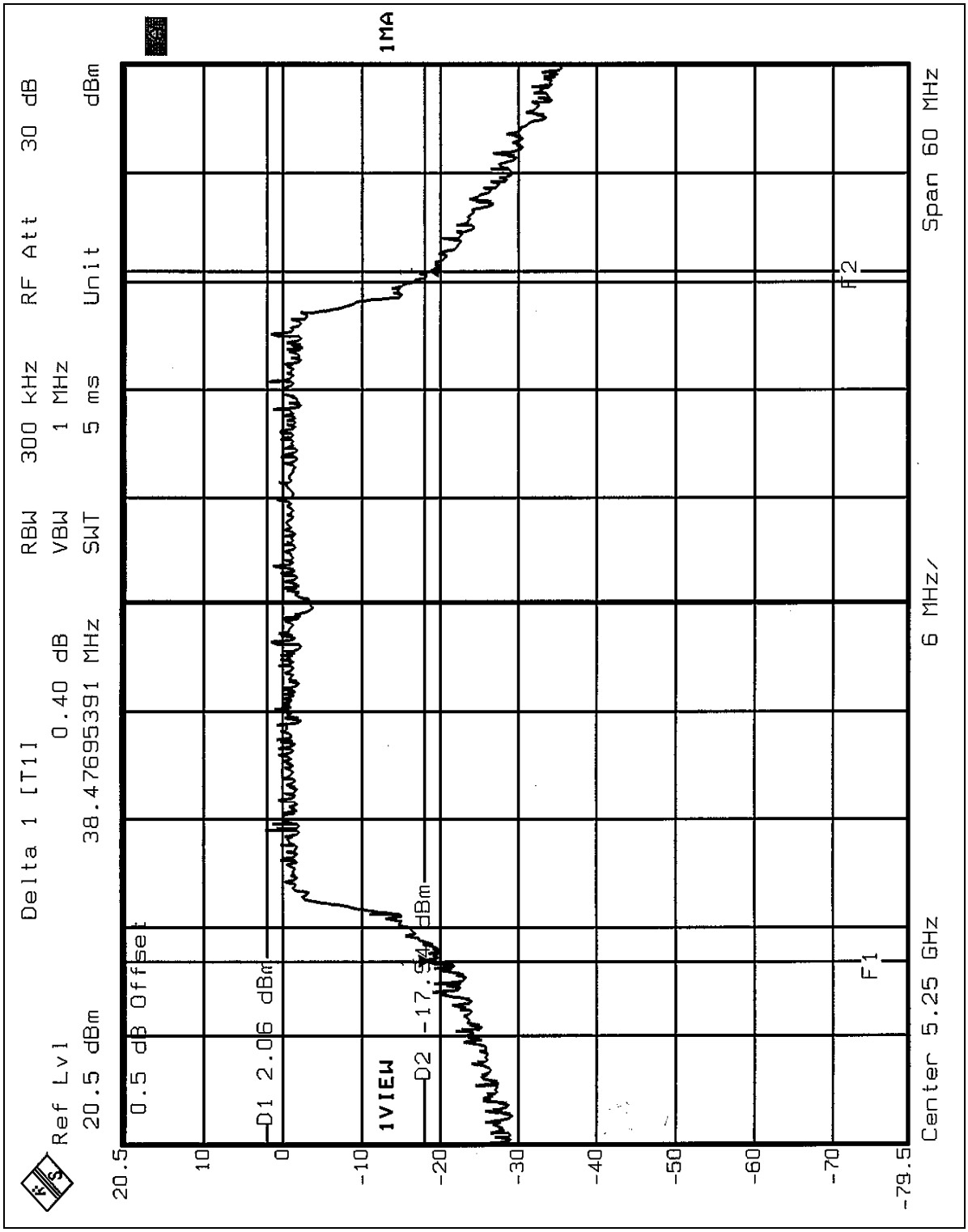

Marker 1 [T1]
3.95 dBm
5.28561122 GHz
Ref Lvl
20.5 dBm
0.5 dB Offset
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1VIEW
1SA
Center 5.29 GHz
6 MHz/
Span 60 MHz
CH PWR 16.08 dBm
CH BW 46.000000000 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

26dB Occupied Bandwidth:

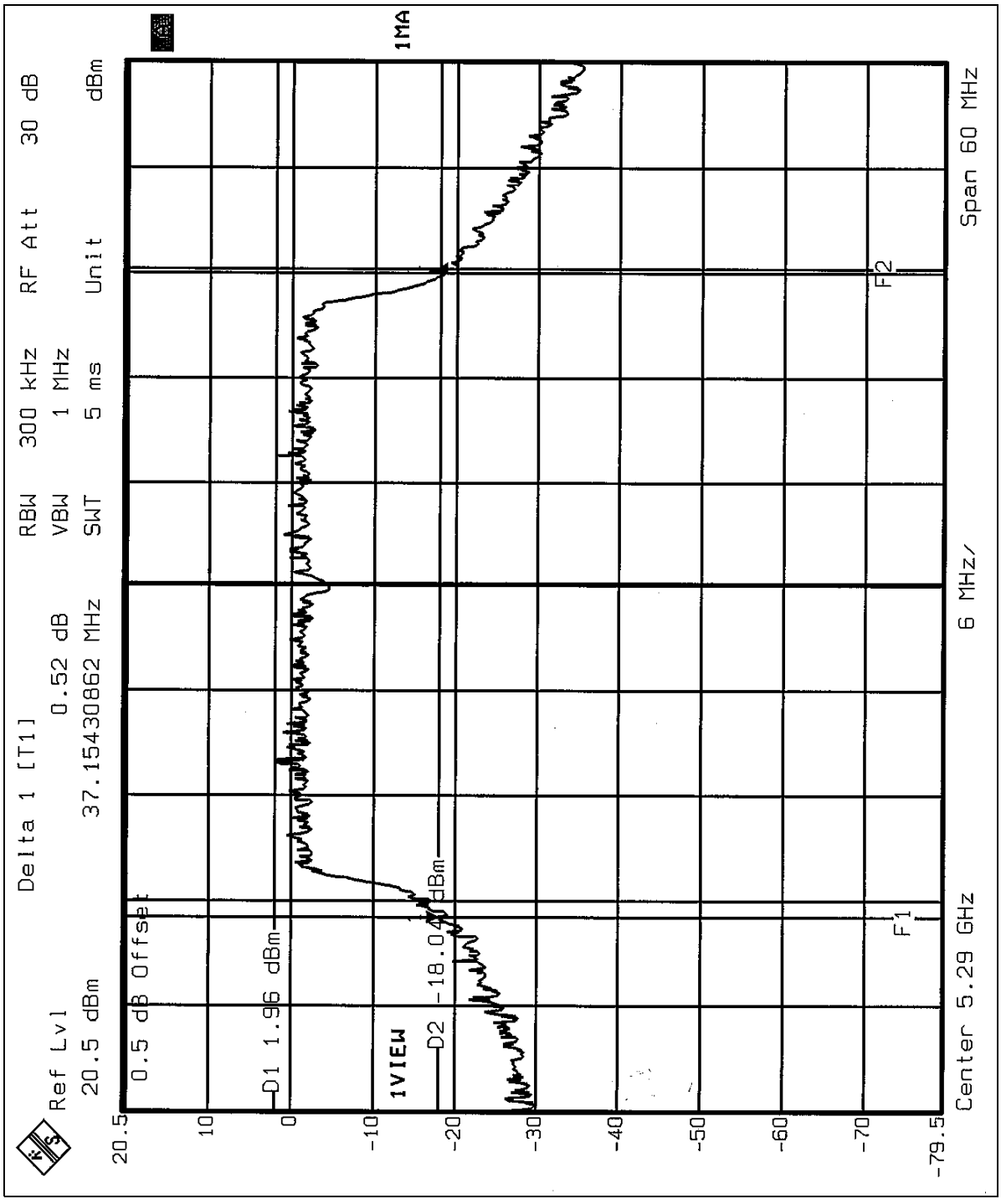
CH1



CH2


Delta 1 [T1]
0.40 dB
38.47695391 MHz
RBW 300 kHz
VBW 1 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 2.06 dBm
D2 -17.94 dBm
1VIEW
1MA
F1
F2
Center 5.25 GHz
6 MHz/
Span 60 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

CH3


Delta 1 [T1]
0.52 dB
37.15430862 MHz
RBW 300 kHz
VBW 1 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 1.96 dBm
D2 -18.04 dBm
1VIEW
1MA
F1
F2
Center 5.29 GHz
6 MHz/
Span 60 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

5.4 PEAK POWER EXCURSION MEASUREMENT

5.4.1 LIMITS OF PEAK POWER EXCURSION MEASUREMENT

Frequency Band	Limit
5.15 – 5.25 GHz	13dB
5.25 – 5.35 GHz	13dB
5.725 – 5.825 GHz	13dB

5.4.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
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.

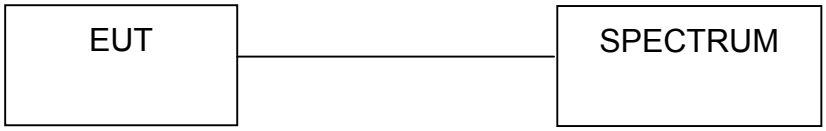
5.4.3 TEST PROCEDURE

1. The transmitter output was connected to the spectrum analyzer.
2. Set the spectrum bandwidth span to view the entire spectrum.
3. Using peak detector and Max-hold function for Trace 1 (RB=1MHz, VB=3MHz) and 2 (RB=1MHz, VB=300KHz).
4. The largest difference between Trace 1 and Trace 2 in any 1MHz band on any frequency was recorded.

5.4.4 DEVIATION FROM TEST STANDARD

No deviation

5.4.5 TEST SETUP



5.4.6 EUT OPERATING CONDITIONS

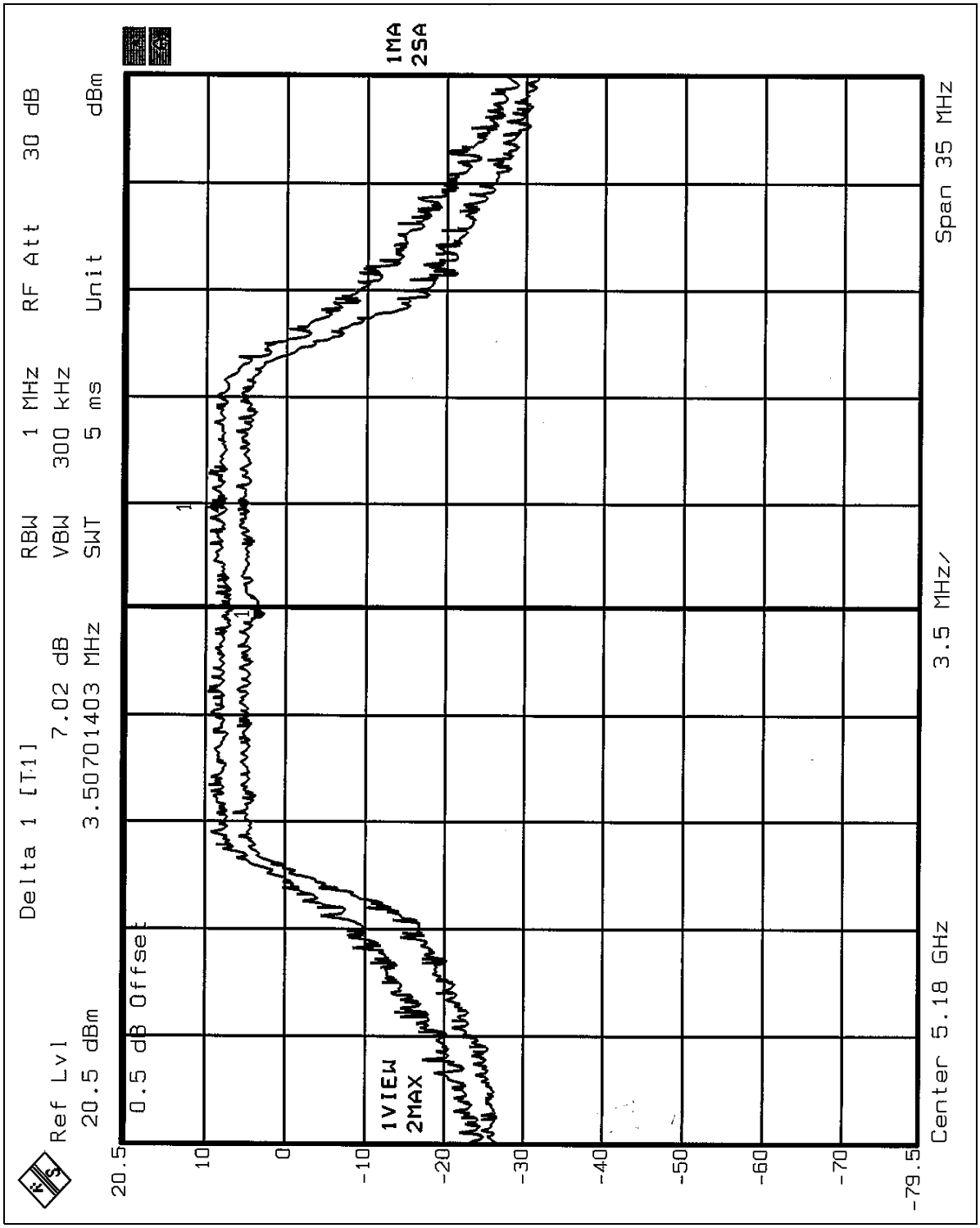
The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

5.4.7 TEST RESULTS

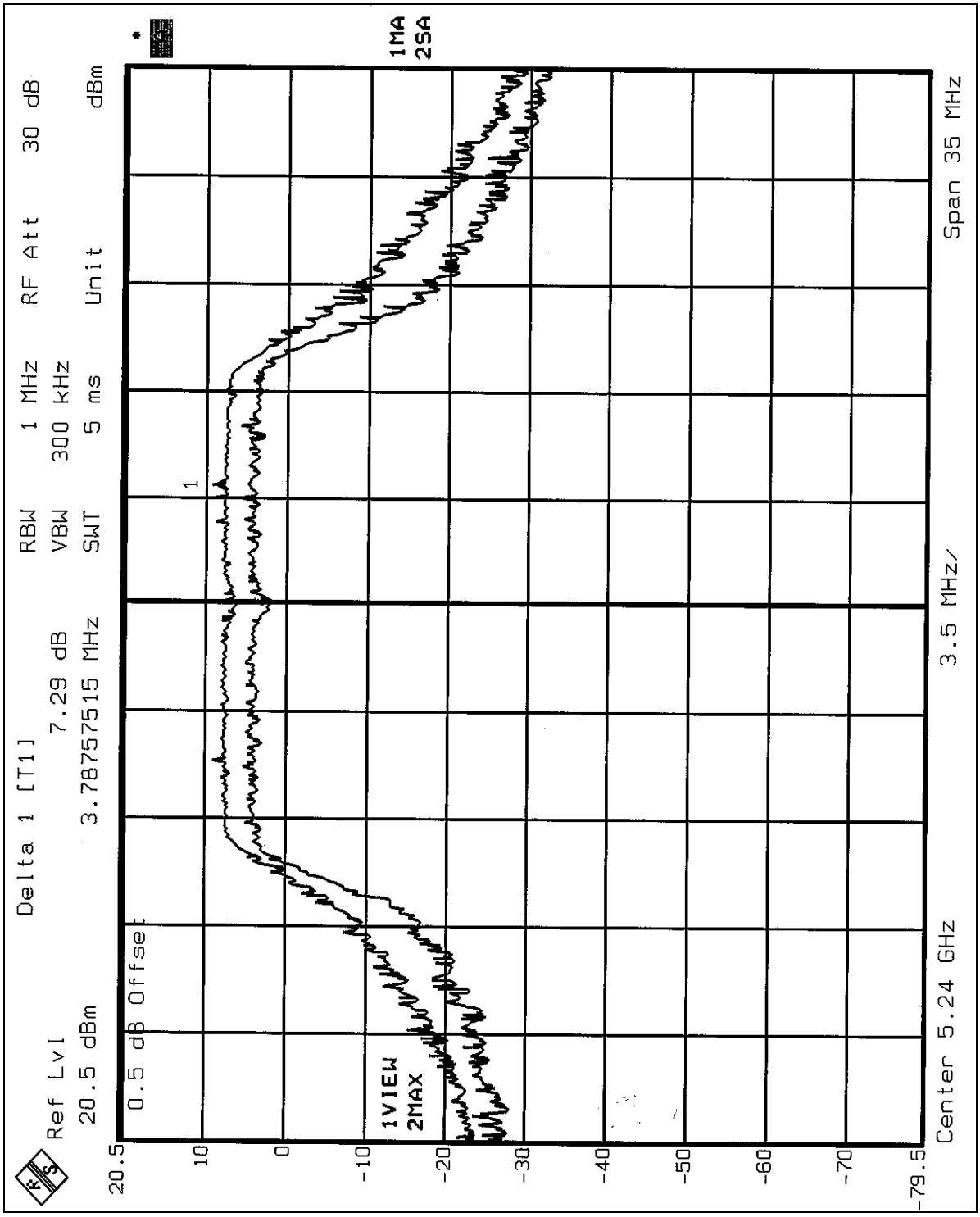
EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
MODE	Normal	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	24deg. C, 67%RH, 991hPa	**TESTED BY**	Leo Hung

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)	PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
1	5180	7.02	13	PASS
4	5240	7.29	13	PASS
5	5260	6.47	13	PASS
8	5320	7.32	13	PASS

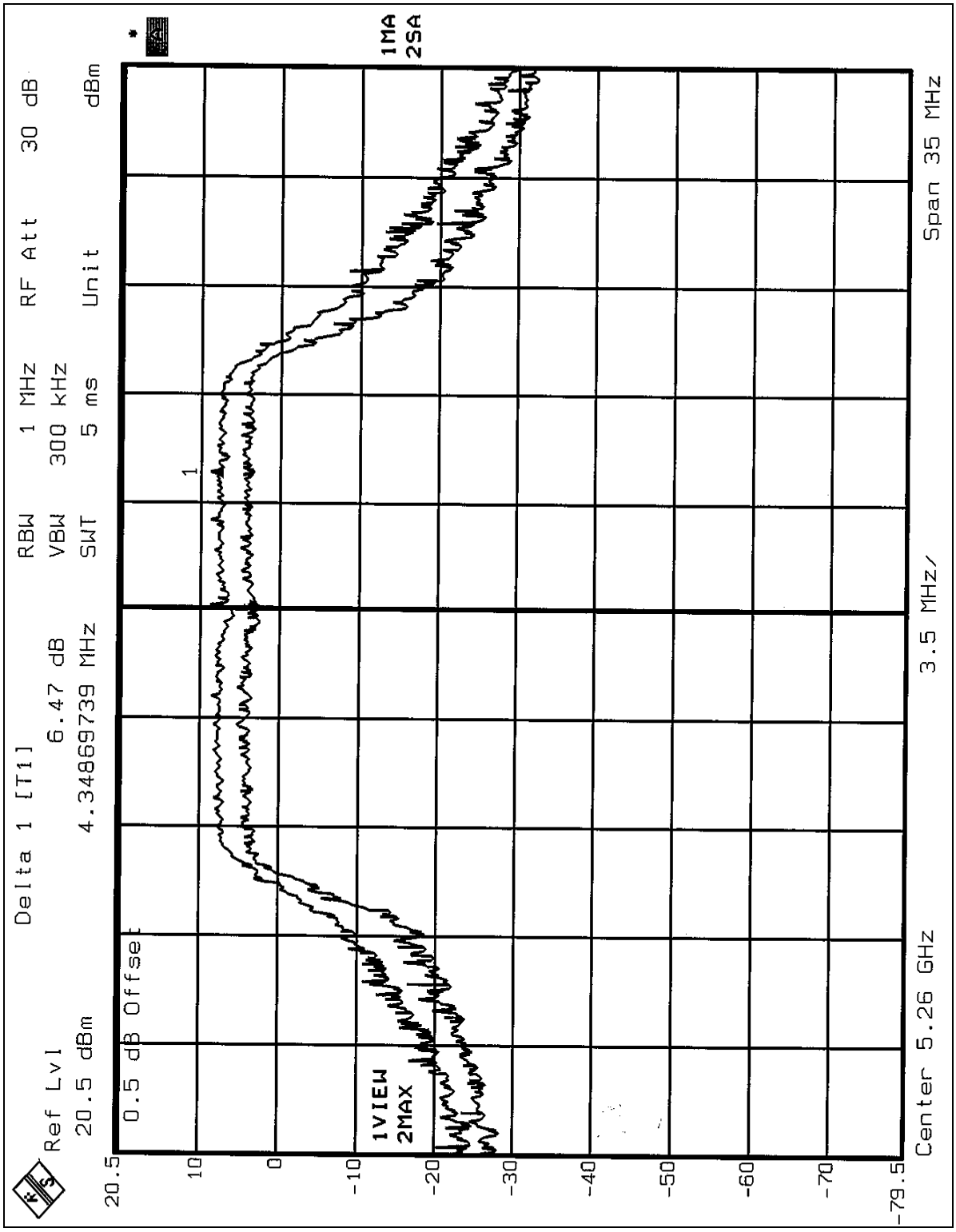
CH1


Delta 1 [T1]
7.02 dB
3.50701403 MHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
1MA
2SA
1VIEW
2MAX
Center 5.18 GHz
3.5 MHz/
Span 35 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

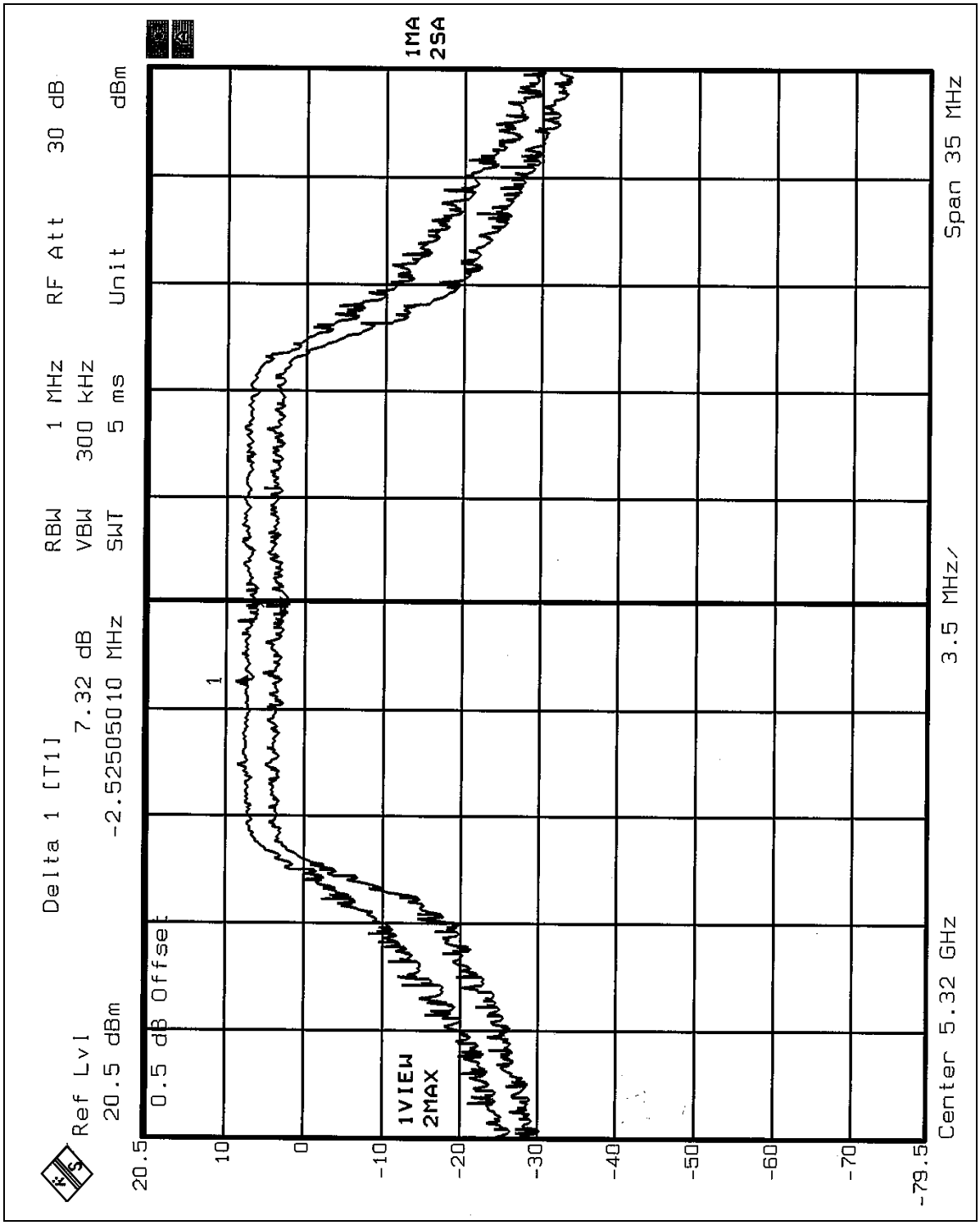
CH4


Delta 1 [T1]
7.29 dB
3.78757515 MHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
1VIEW
2MAX
1MA
2SA
Center 5.24 GHz
3.5 MHz/
Span 35 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

CH5


Ref Lvl
20.5 dBm
0.5 dB Offset
Delta 1 [T1]
6.47 dB
4.34869739 MHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1MA
2SA
1VIEW
2MAX
Center 5.26 GHz
3.5 MHz/
Span 35 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

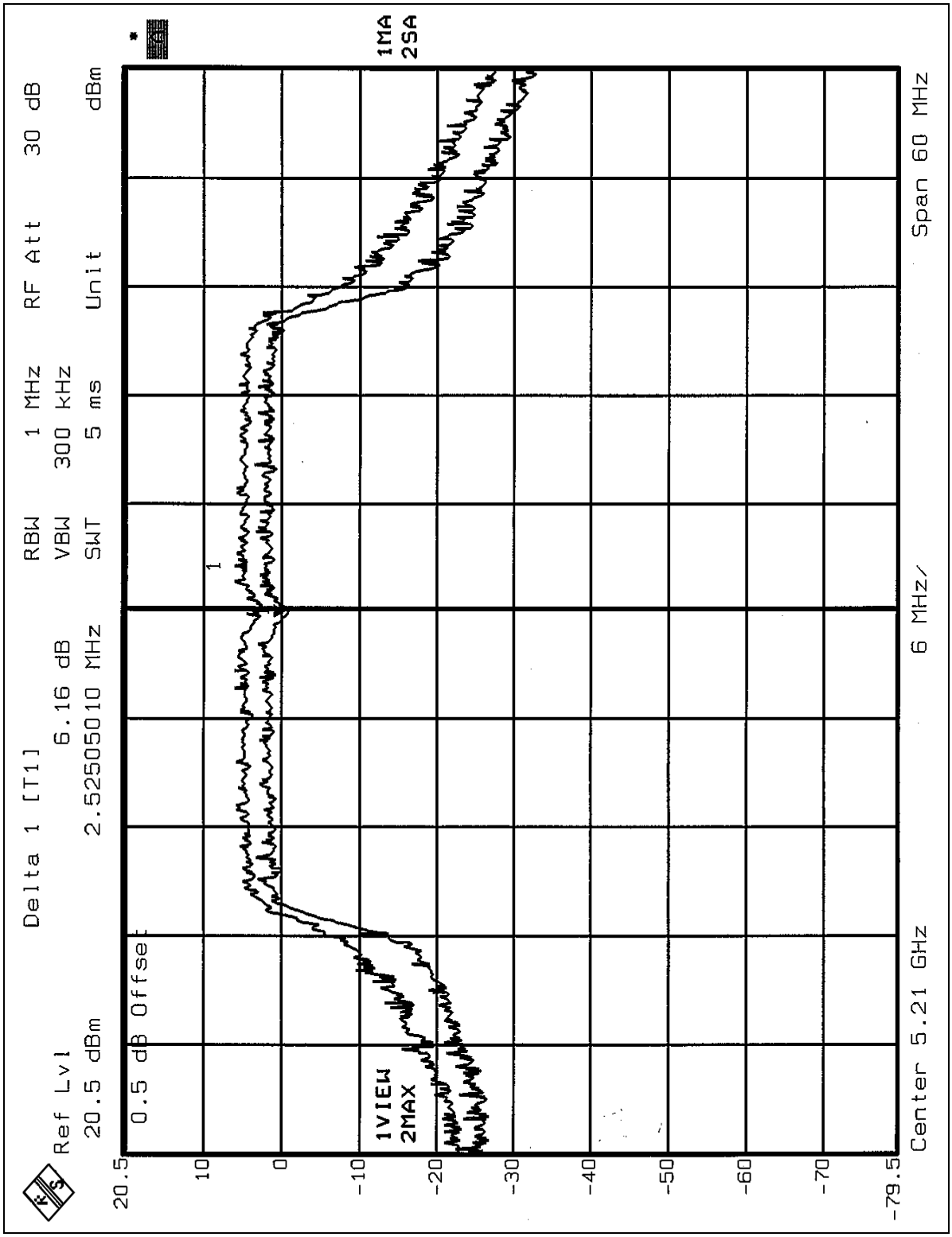
CH8


Ref Lvl
20.5 dBm
0.5 dB Offset
Delta 1 [T1]
7.32 dB
-2.52505010 MHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1MA
2SA
1VIEW
2MAX
Center 5.32 GHz
3.5 MHz/
Span 35 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

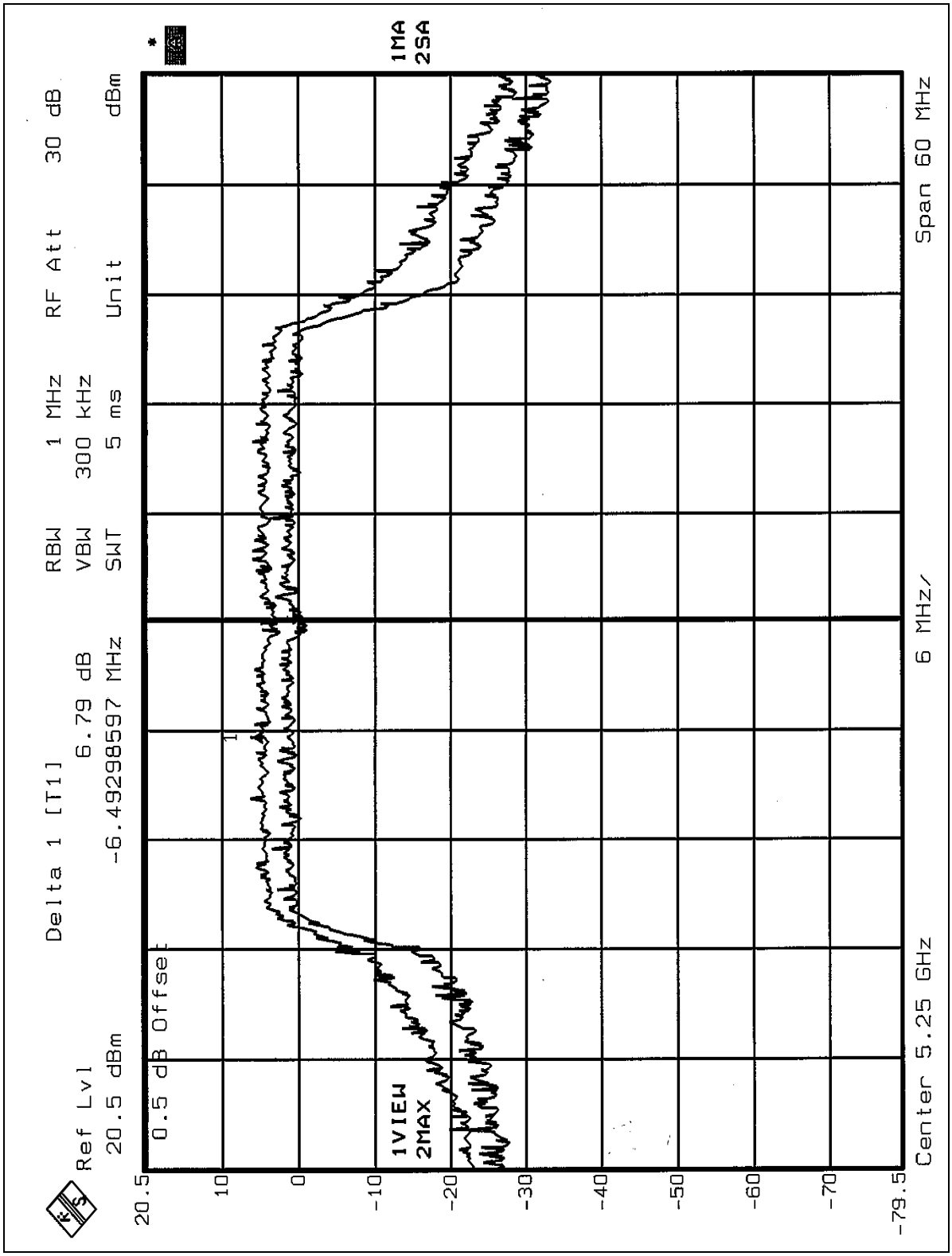
EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
MODE	Turbo	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	24deg. C, 67%RH, 991hPa	**TESTED BY**	Leo Hung

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)	PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
1	5210	6.16	13	PASS
2	5250	6.79	13	PASS
3	5290	6.03	13	PASS

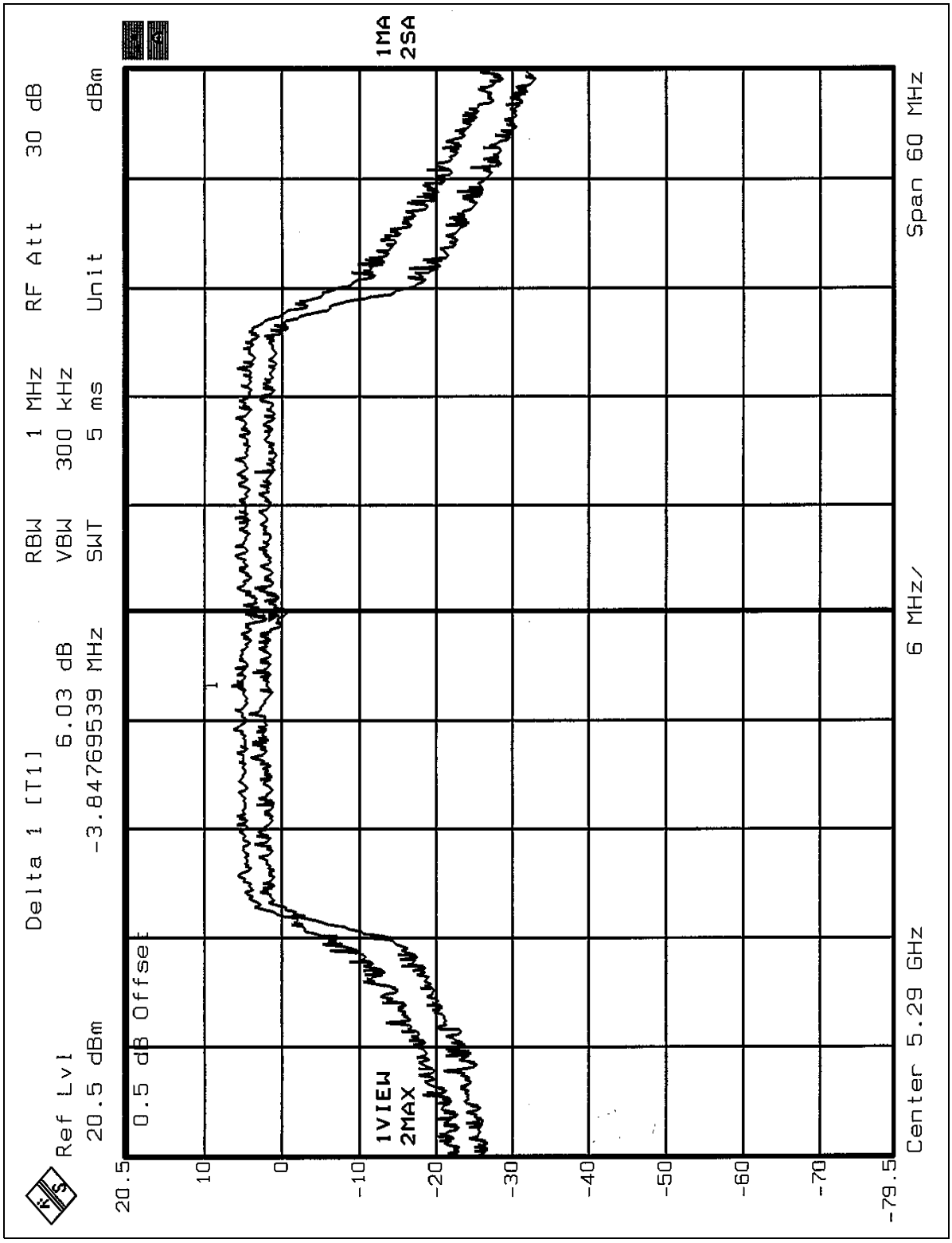
CH1


Delta 1 [T1]
6.16 dB
2.52505010 MHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
1VIEW
2MAX
1MA
2SA
Center 5.21 GHz
6 MHz/
Span 60 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

CH2


Delta 1 [T1]
6.79 dB
-6.49298597 MHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
1MA
2SA
1VIEW
2MAX
Center 5.25 GHz
6 MHz/
Span 60 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

CH3


Delta 1 [T1]
6.03 dB
-3.84769539 MHz
RBW 1 MHz
VBW 300 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
1VIEW
2MAX
1MA
2SA
Center 5.29 GHz
6 MHz/
Span 60 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

5.5 PEAK POWER SPECTRAL DENSITY MEASUREMENT

5.5.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

Frequency Band	Limit
5.15 – 5.25GHz	4dBm
5.25 – 5.35GHz	11dBm
5.725 – 5.825GHz	17dBm

5.5.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
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.

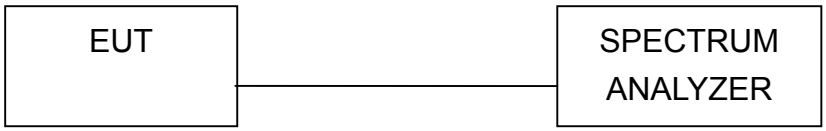
5.5.3 TEST PROCEDURES

1. The transmitter output was connected to the spectrum analyzer.
2. Set RBW=1MHz, VBW=3MHz. The PPSD is the highest level found across the emission in any 1MHz band.

5.5.4 DEVIATION FROM TEST STANDARD

No deviation

5.5.5 TEST SETUP



5.5.6 EUT OPERATING CONDITIONS

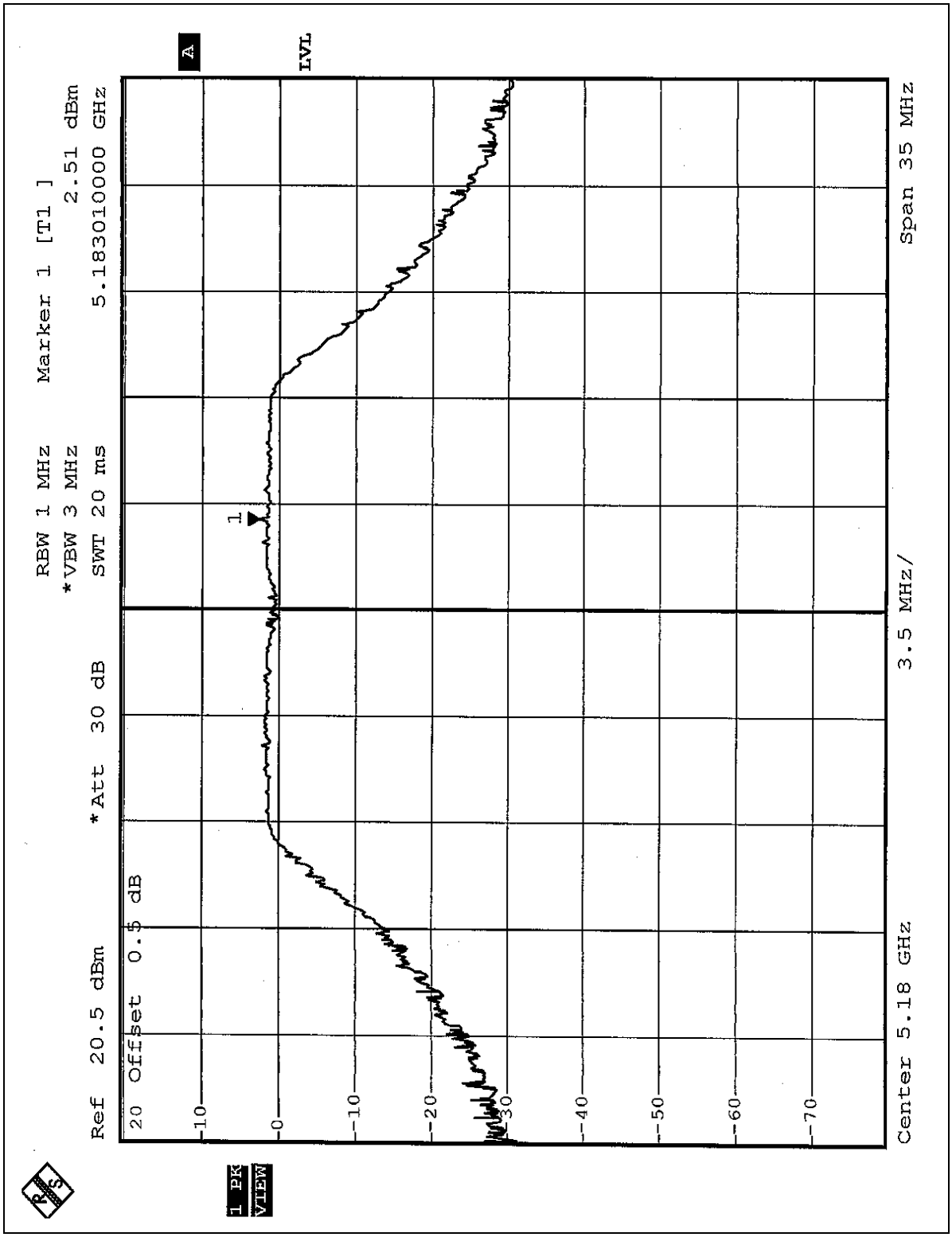
Same as 5.3.6

5.5.7 TEST RESULTS

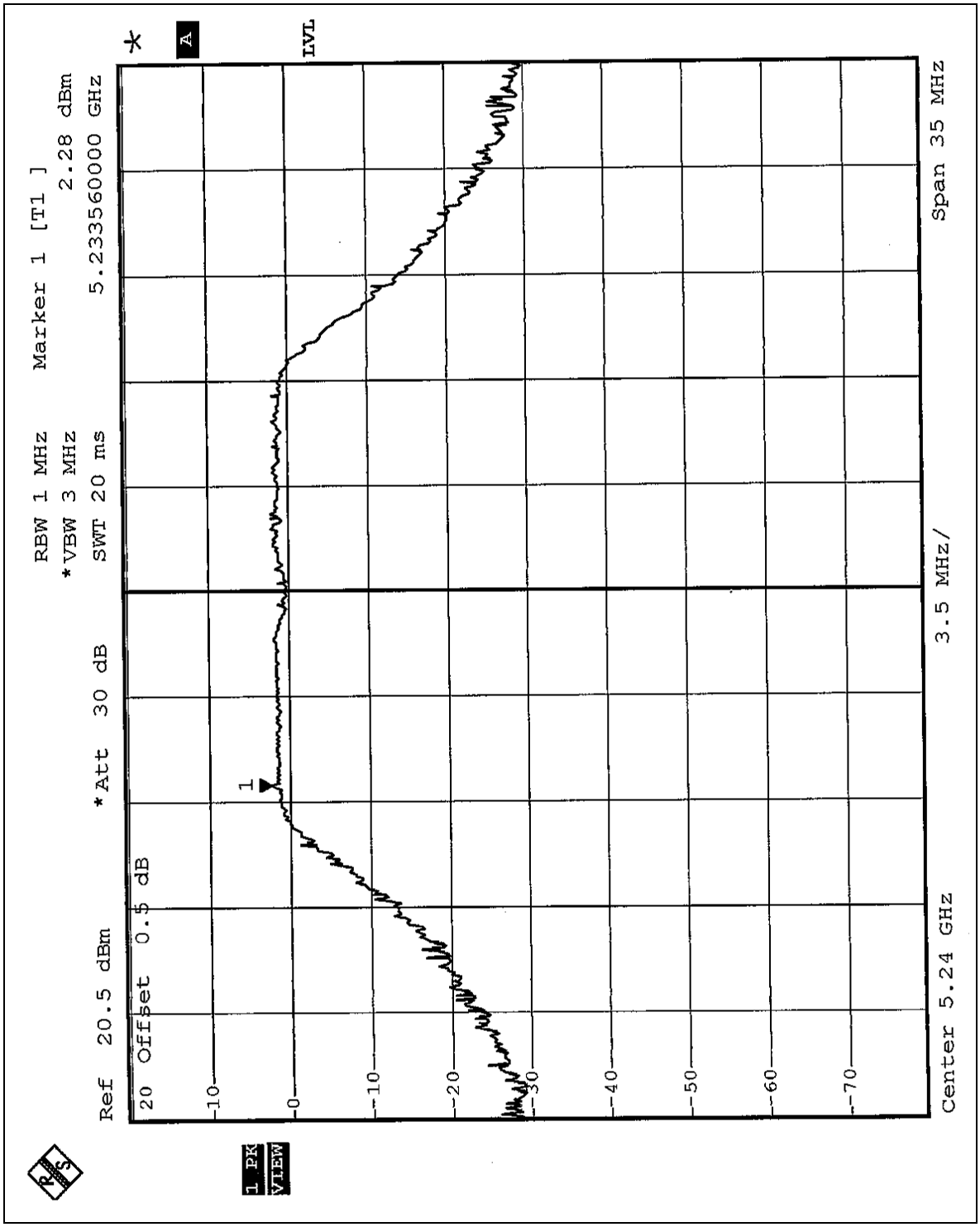
EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
MODE	Normal	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	24deg. C, 67%RH, 991hPa	**TESTED BY**	Leo Hung

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	5180	2.51	4	PASS
4	5240	2.28	4	PASS
5	5260	2.36	11	PASS
8	5320	2.68	11	PASS

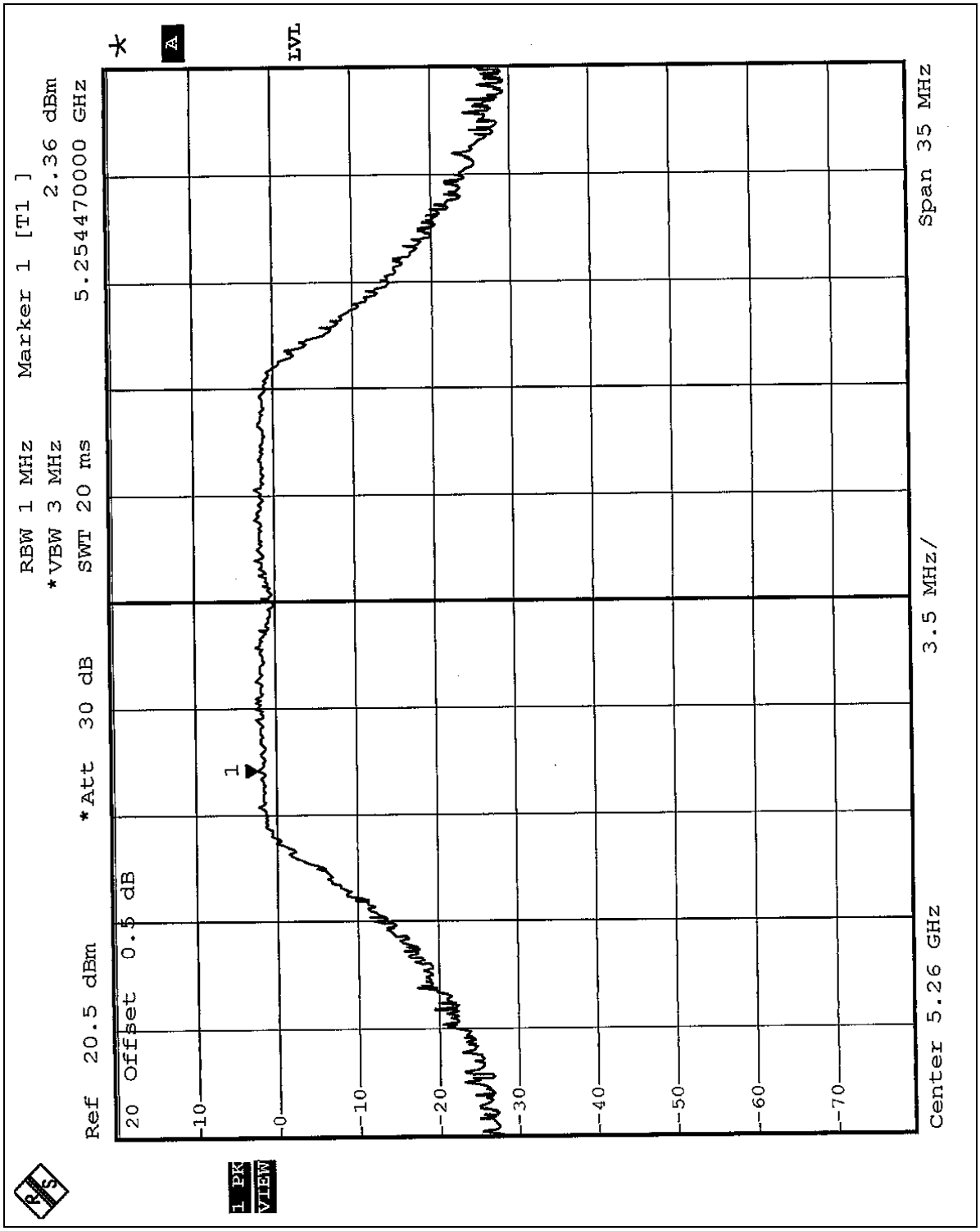
CH1


A
RVL
RBW 1 MHz
*VBW 3 MHz
SWT 20 ms
Marker 1 [T1]
2.51 dBm
5.18301000 GHz
Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
Center 5.18 GHz
3.5 MHz/
Span 35 MHz
1 PK
VIEW

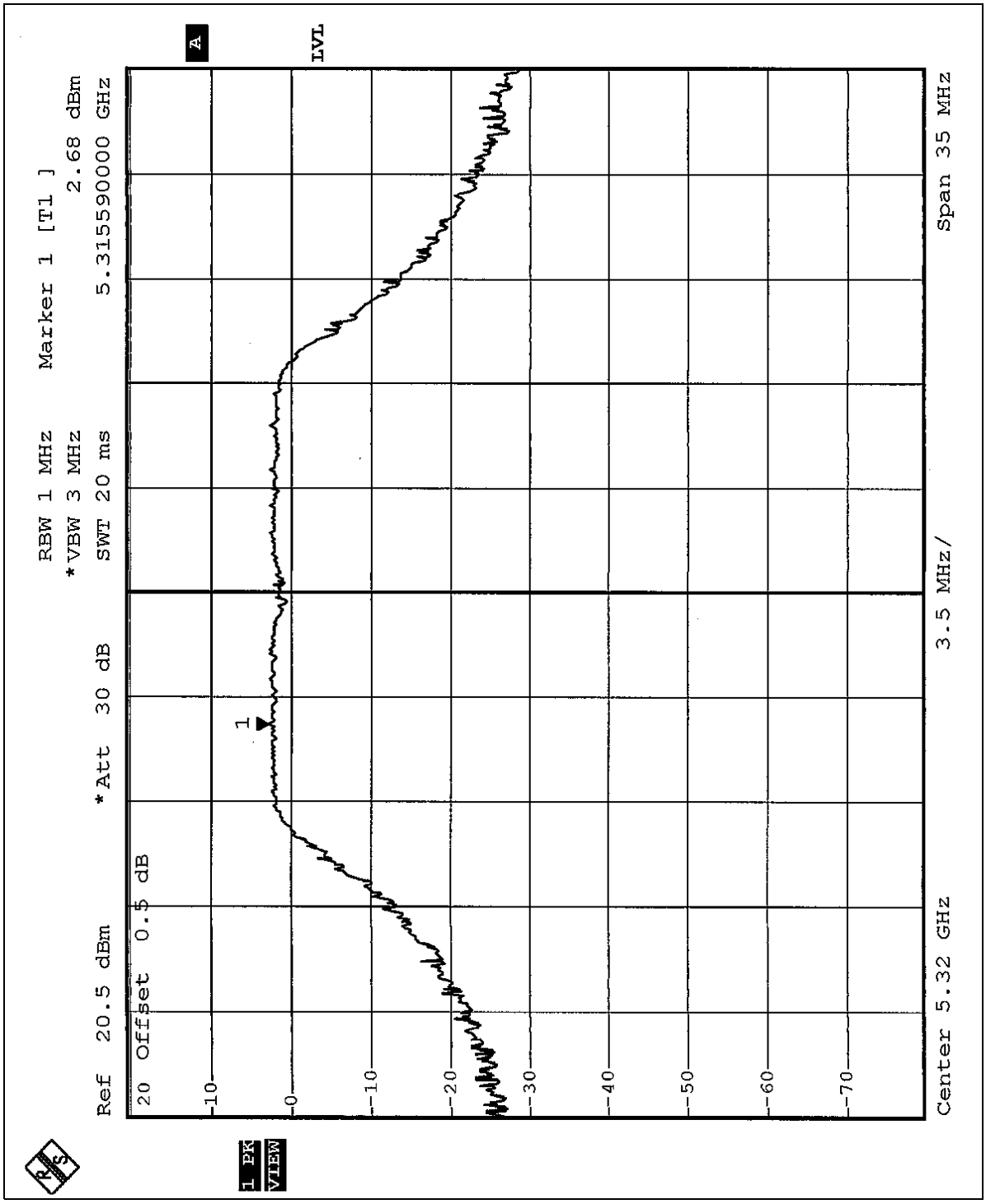
CH4


Marker 1 [T1]
2.28 dBm
5.233560000 GHz
RBW 1 MHz
*VBW 3 MHz
SWT 20 ms
*Att 30 dB
Offset 0.5 dB
Ref 20.5 dBm
Center 5.24 GHz
3.5 MHz/
Span 35 MHz
LVL
1 PK
VIEW

CH5


RBW 1 MHz
*VBW 3 MHz
*Att 30 dB
SWT 20 ms
Marker 1 [T1]
2.36 dBm
5.25447000 GHz
Ref 20.5 dBm
20 Offset 0.5 dB
Center 5.26 GHz
3.5 MHz/
Span 35 MHz
1 PK
MAXA
LVL
A

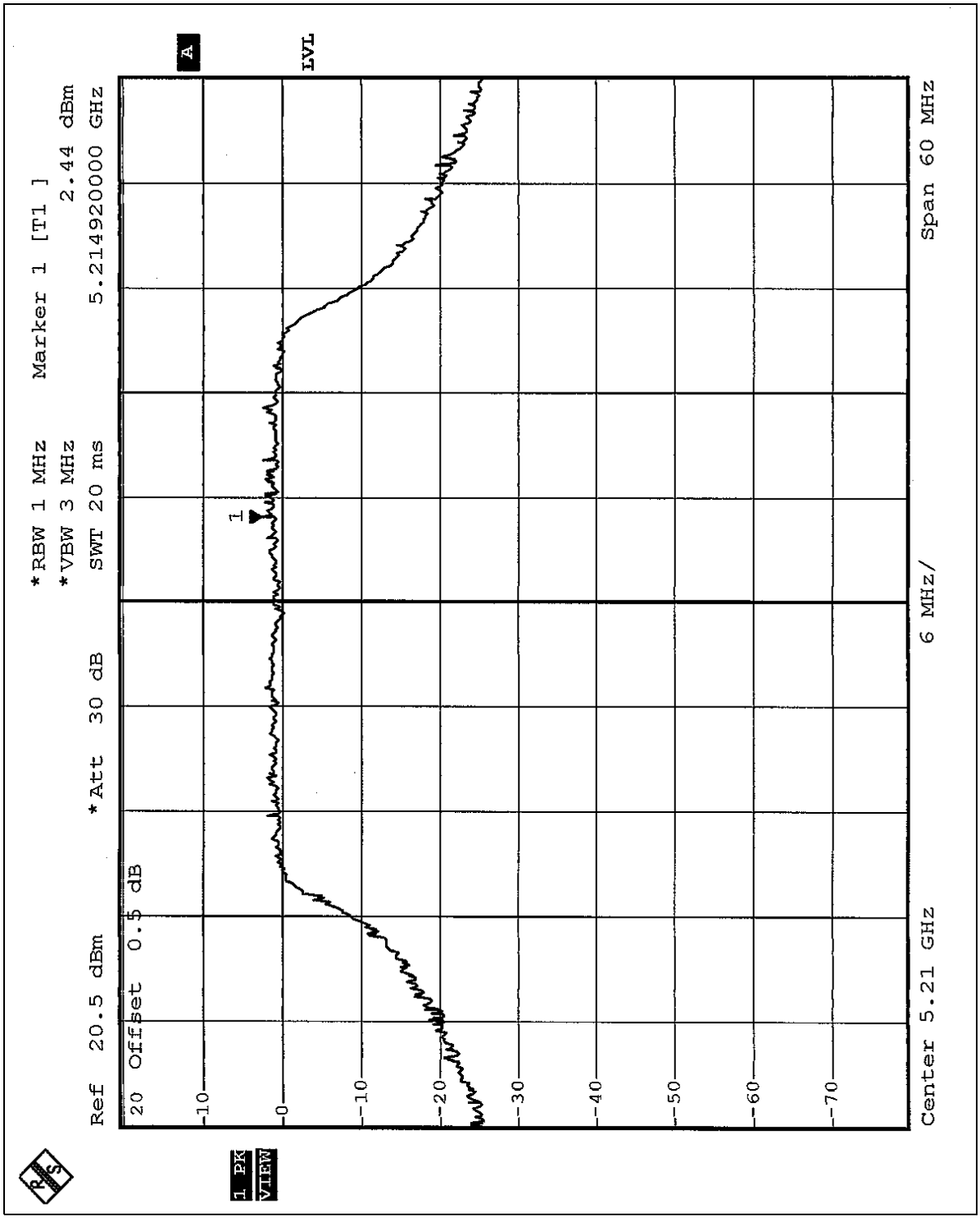
CH8


A
LVL
RBW 1 MHz
*VBW 3 MHz
Marker 1 [T1]
2.68 dBm
5.315590000 GHz
SWT 20 ms
Ref 20.5 dBm
*Att 30 dB
20 Offset 0.5 dB
Span 35 MHz
3.5 MHz/
Center 5.32 GHz
1 PK
VIEW

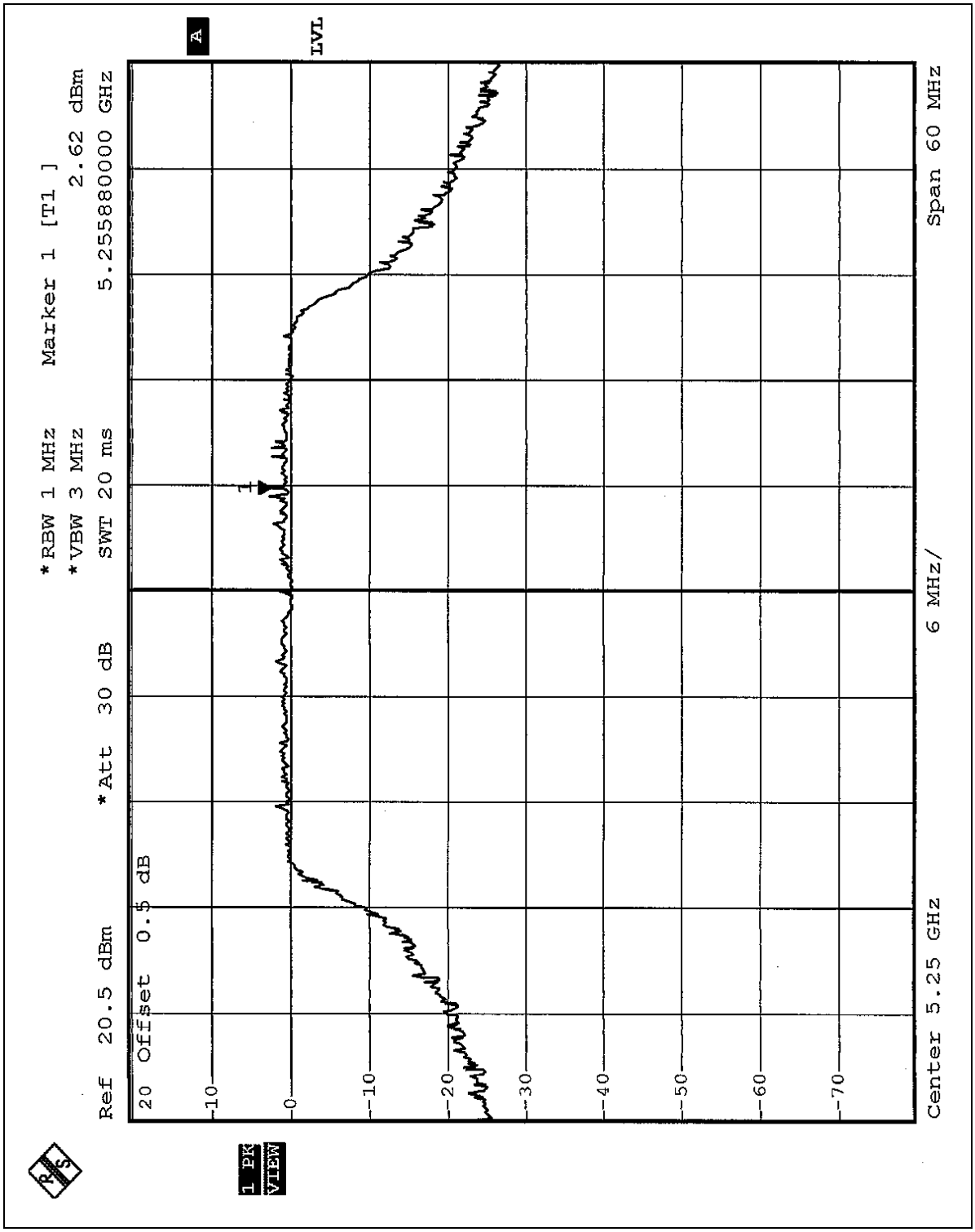
EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
MODE	Turbo	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	24deg. C, 67%RH, 991hPa	**TESTED BY**	Leo Hung

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1 MHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	5210	2.44	4	PASS
2	5250	2.62	4	PASS
3	5290	2.96	11	PASS

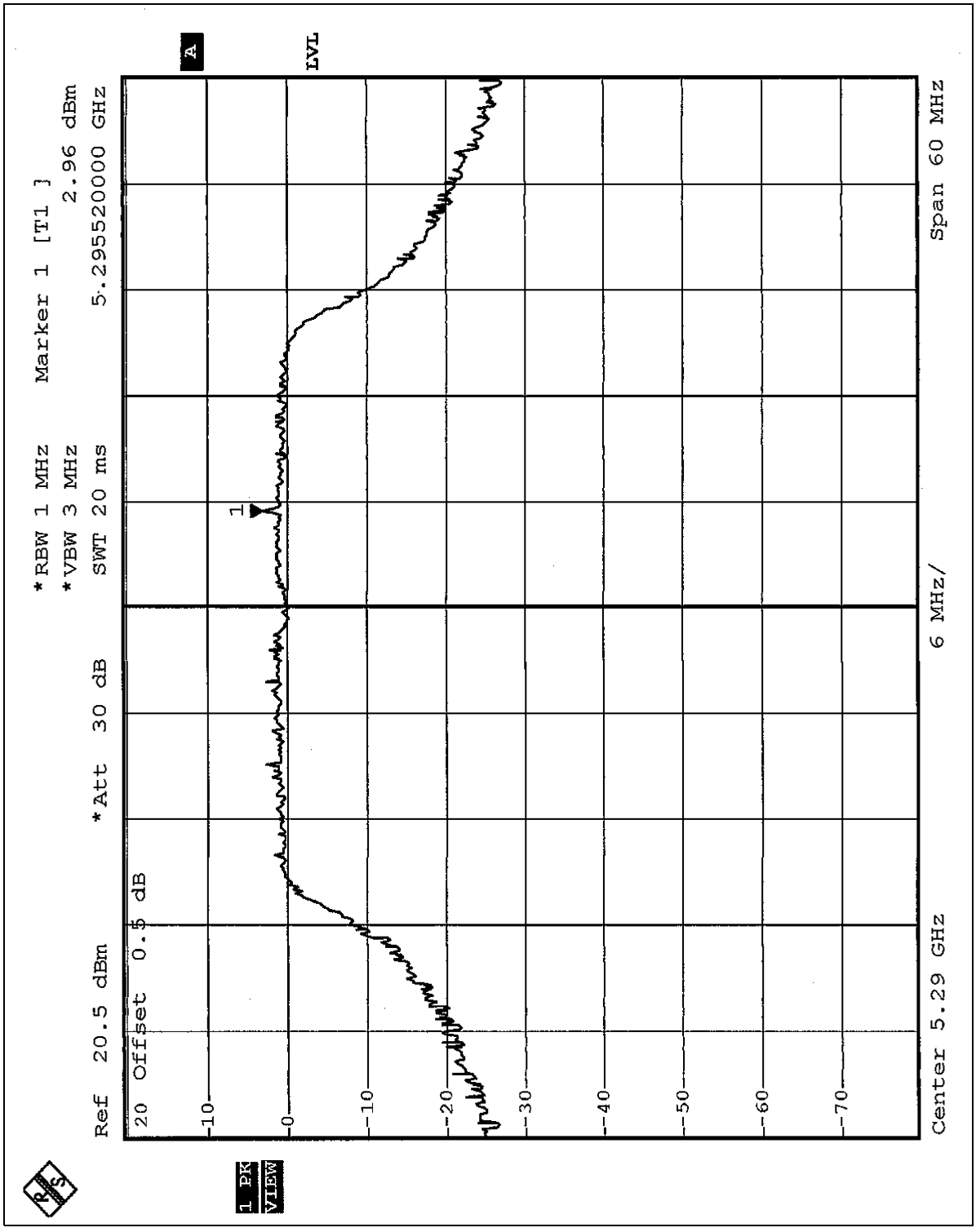
CH1


A
LVL
Marker 1 [T1]
2.44 dBm
5.214920000 GHz
*RBW 1 MHz
*VBW 3 MHz
SWT 20 ms
Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
1 PK
VIEW
Center 5.21 GHz
6 MHz/
Span 60 MHz

CH2


A
LVL
Marker 1 [T1]
2.62 dBm
5.25588000 GHz
*RBW 1 MHz
*VBW 3 MHz
SWT 20 ms
*Att 30 dB
Offset 0.5 dB
Ref 20.5 dBm
Center 5.25 GHz
6 MHz/
Span 60 MHz
1 PK
VIEW

CH3


A
LVL
*RBW 1 MHz
*VBW 3 MHz
SWT 20 ms
Marker 1 [T1]
2.96 dBm
5.295520000 GHz
Ref 20.5 dBm
20 Offset 0.5 dB
*Att 30 dB
1
1 PK
VIEW
Center 5.29 GHz
6 MHz/
Span 60 MHz
10
0
-10
-20
-30
-40
-50
-60
-70

5.6 FREQUENCY STABILITY

5.6.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

The frequency tolerance of the carrier signal shall be maintained within +/- 0.02% of the operating frequency over a temperature variation of –30 degrees to 50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.

5.6.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
ANRITSU SPECTRUM ANALYZER	MS2667C	M10281	Aug. 12, 2005
WIT STANDARD TEMPERATURE AND HUMIDITY CHAMBER	TH-4S-C	W901030	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.

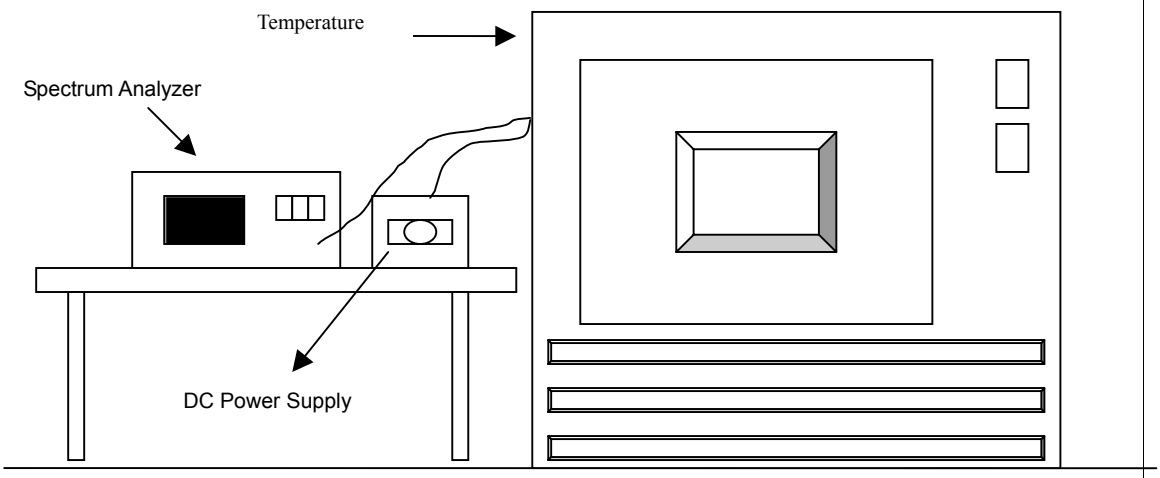
5.6.3 TEST PROCEDURE

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

5.6.4 DEVIATION FROM TEST STANDARD

No deviation

5.6.5 TEST SETUP



5.6.6 EUT OPERATING CONDITION

Same as Item 4.1.6

5.6.7 TEST RESULTS

Operating frequency: 5320MHz				Limit : ± 0.015%			
Temp. (℃)	Power supply (VDC)	2 minute		5 minute		10 minute	
		(MHz)	(%)	(MHz)	(%)	(MHz)	(%)
50	93.5	5319.9708	-0.0005489	5319.9705	-0.0005545	5319.9712	-0.0005414
	110.0	5319.9702	-0.0005602	5319.9707	-0.0005508	5319.9715	-0.0005357
	126.5	5319.9712	-0.0005414	5319.9708	-0.0005489	5319.9717	-0.0005320
40	93.5	5319.9667	-0.0006259	5319.9673	-0.0006147	5319.9675	-0.0006109
	110.0	5319.9672	-0.0006165	5319.9673	-0.0006147	5319.9675	-0.0006109
	126.5	5319.9673	-0.0006147	5319.9673	-0.0006147	5319.9677	-0.0006071
30	93.5	5319.9872	-0.0002406	5319.9827	-0.0003252	5319.9802	-0.0003722
	110.0	5319.9853	-0.0002763	5319.9822	-0.0003346	5319.9795	-0.0003853
	126.5	5319.9838	-0.0003045	5319.9810	-0.0003571	5319.9785	-0.0004041
20	93.5	5319.9747	-0.0004756	5319.9750	-0.0004662	5319.9747	-0.0004756
	110.0	5319.9747	-0.0004756	5319.9752	-0.0004793	5319.9753	-0.0004643
	126.5	5319.9748	-0.0004737	5319.9745	-0.0004850	5319.9748	-0.0004737
10	93.5	5319.9750	-0.0004699	5319.9742	-0.0004850	5319.9742	-0.0004850
	110.0	5319.9740	-0.0004887	5319.9742	-0.0004850	5319.9743	-0.0004831
	126.5	5319.9740	-0.0004887	5319.9742	-0.0003421	5319.9742	-0.0004850
0	93.5	5319.9817	-0.0003440	5319.9818	-0.0003421	5319.9822	-0.0003346
	110.0	5319.9827	-0.0003252	5319.9818	-0.0003346	5319.9823	-0.0003327
	126.5	5319.9818	-0.0003421	5319.9822	-0.0002105	5319.9817	-0.0003440
-10	93.5	5319.9882	-0.0002218	5319.9888	-0.0002105	5319.9888	-0.0002105
	110.0	5319.9885	-0.0002162	5319.9888	-0.0002105	5319.9893	-0.0002011
	126.5	5319.9885	-0.0002162	5319.9888	-0.0002105	5319.9895	-0.0001974
-20	93.5	5319.9828	-0.0003233	5319.9925	-0.0001372	5319.9925	-0.0001410
	110.0	5319.9828	-0.0003233	5319.9927	-0.0001372	5319.9927	-0.0001372
	126.5	5319.9927	-0.0001372	5319.9927	-0.0001447	5319.9925	-0.0001410
-30	93.5	5319.9918	-0.0001541	5319.9923	-0.0001598	5319.9912	-0.0001654
	110.0	5319.9915	-0.0001598	5319.9915	-0.0001635	5319.9910	-0.0001692
	126.5	5319.9917	-0.0001560	5319.9913	-0.0001635	5319.9907	-0.0001748

5.7 BAND EDGES MEASUREMENT

5.7.1 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
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.

5.7.2 TEST PROCEDURE

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

5.7.3 EUT OPERATING CONDITION

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

5.7.4 TEST RESULTS

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

The spectrum plots (Peak RBW=VBW=1MHz; Average RBW=1MHz, VBW=10Hz) are attached on the following pages.

Normal Mode:

Channel 1 (5180MHz)

The band edge emission plot on the following page 1 ~ 2 shows 40.62dBc (Peak) / 50.05Bc (Average) between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 1 is 101.07dBuV/m, so the maximum field strength in restrict band is 101.07-50.05=51.02dBuV/m which is under 54dBuV/m limit.

Channel 8 (5320MHz)

The band edge emission plot on the following page 3 ~ 4 shows 46.21dBc (Peak) / 51.51dBc (Average) between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 8 is 102.68dBuV/m, so the maximum field strength in restrict band is 102.68-51.51=51.17dBuV/m which is under 54dBuV/m limit.

Turbo Mode:

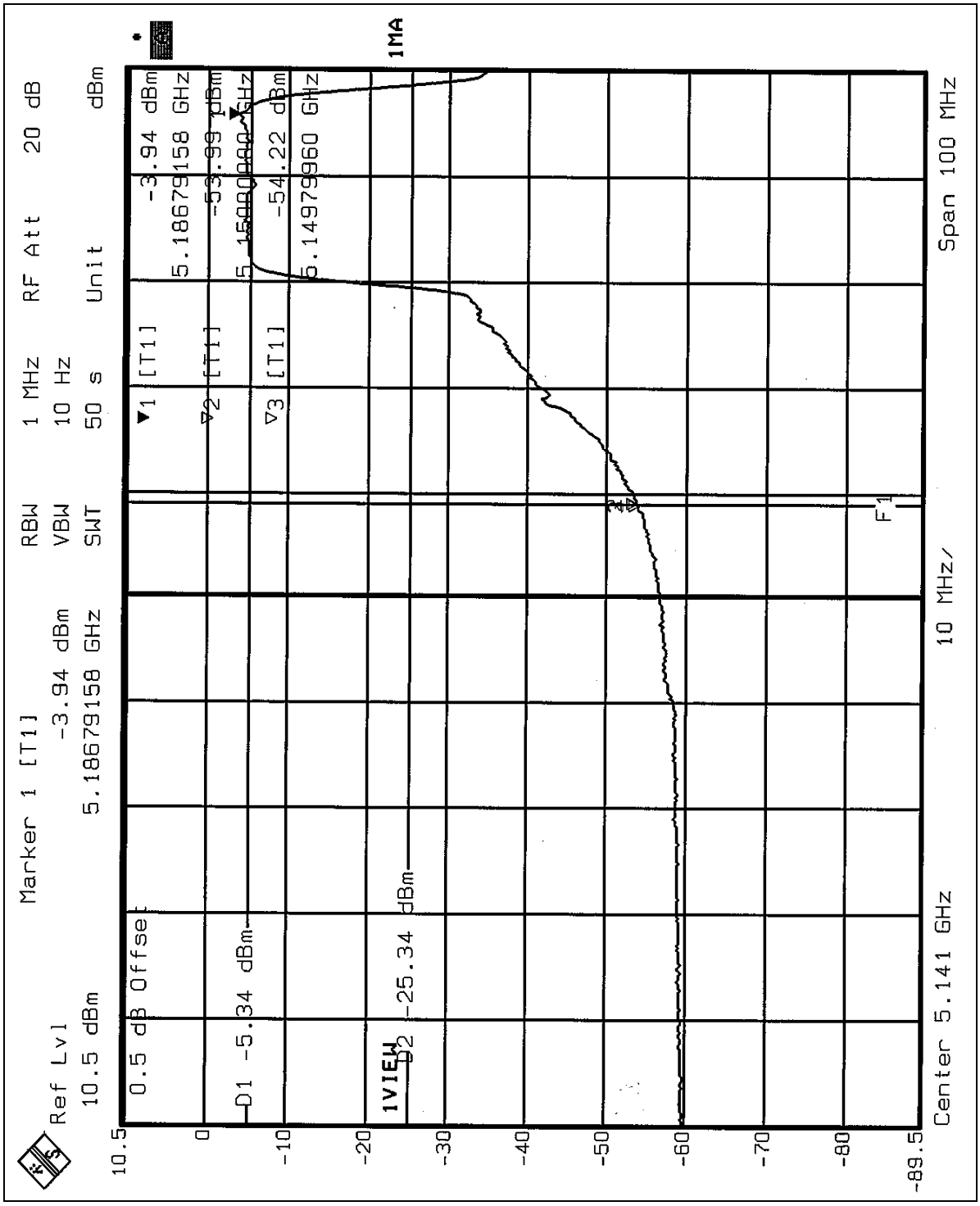
Channel 1 (5210MHz)

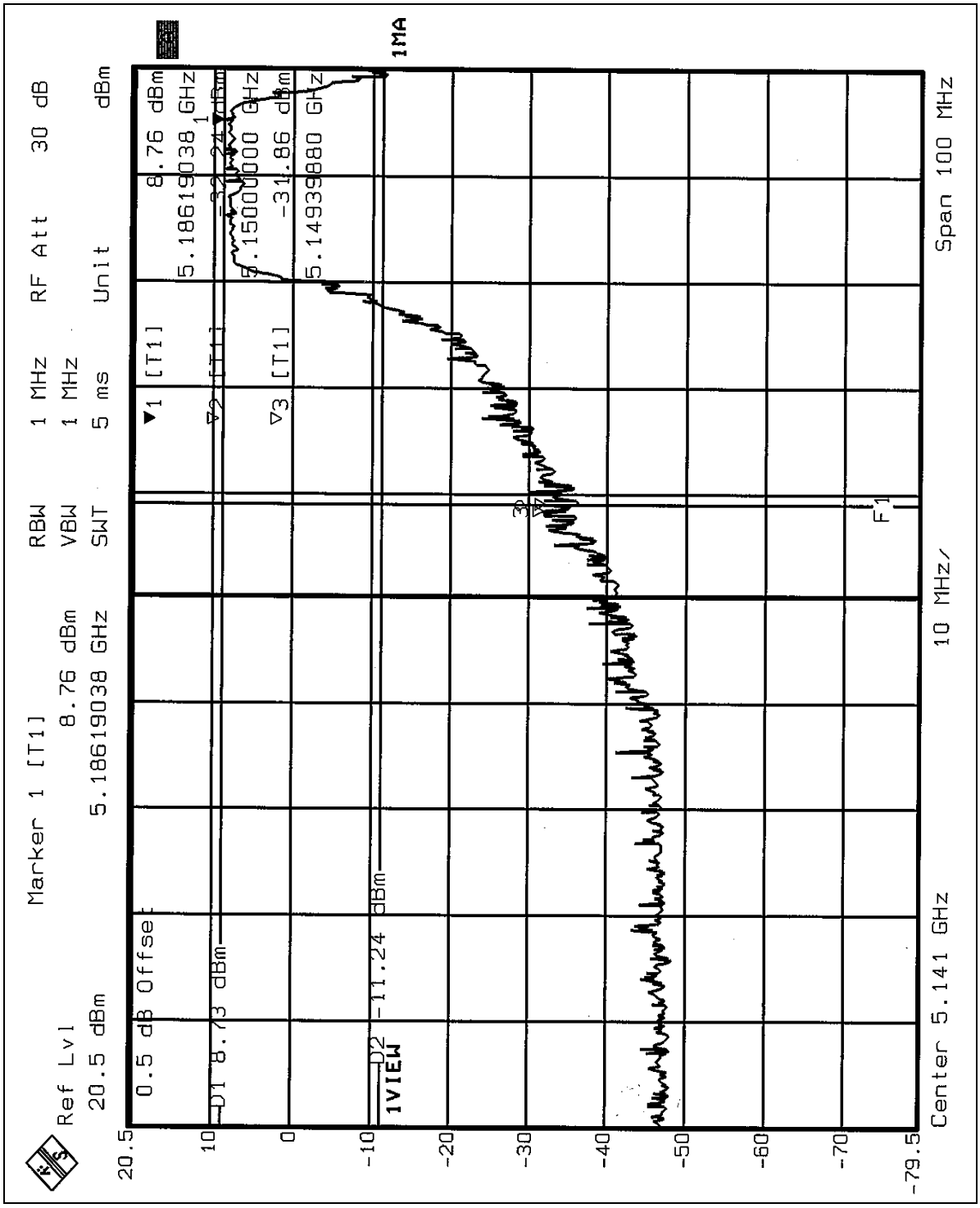
The band edge emission plot on the following page 5 ~ 6 shows 40.00dBc (Peak) / 47.08dBc (Average) between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 1 is 100.13dBuV/m, so the maximum field strength in restrict band is 100.13-47.08=53.05dBuV/m which is under 54dBuV/m limit.

Channel 3 (5290MHz)

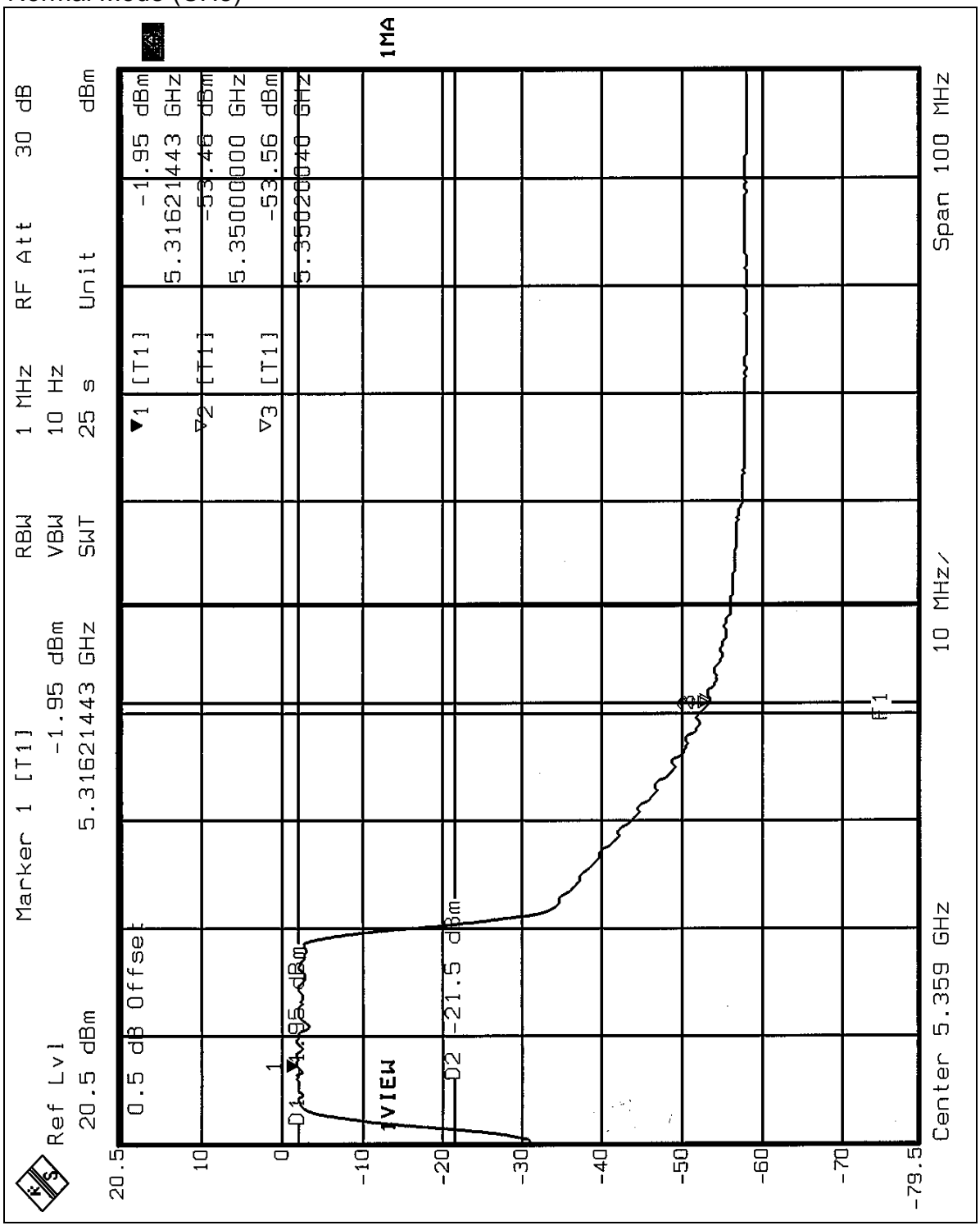
The band edge emission plot on the following page 7 ~ 8 shows 47.40dBc (Peak) / 50.12dBc (Average) between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 3 is 101.04dBuV/m, so the maximum field strength in restrict band is 101.04-50.12=50.92dBuV/m which is under 54dBuV/m limit.

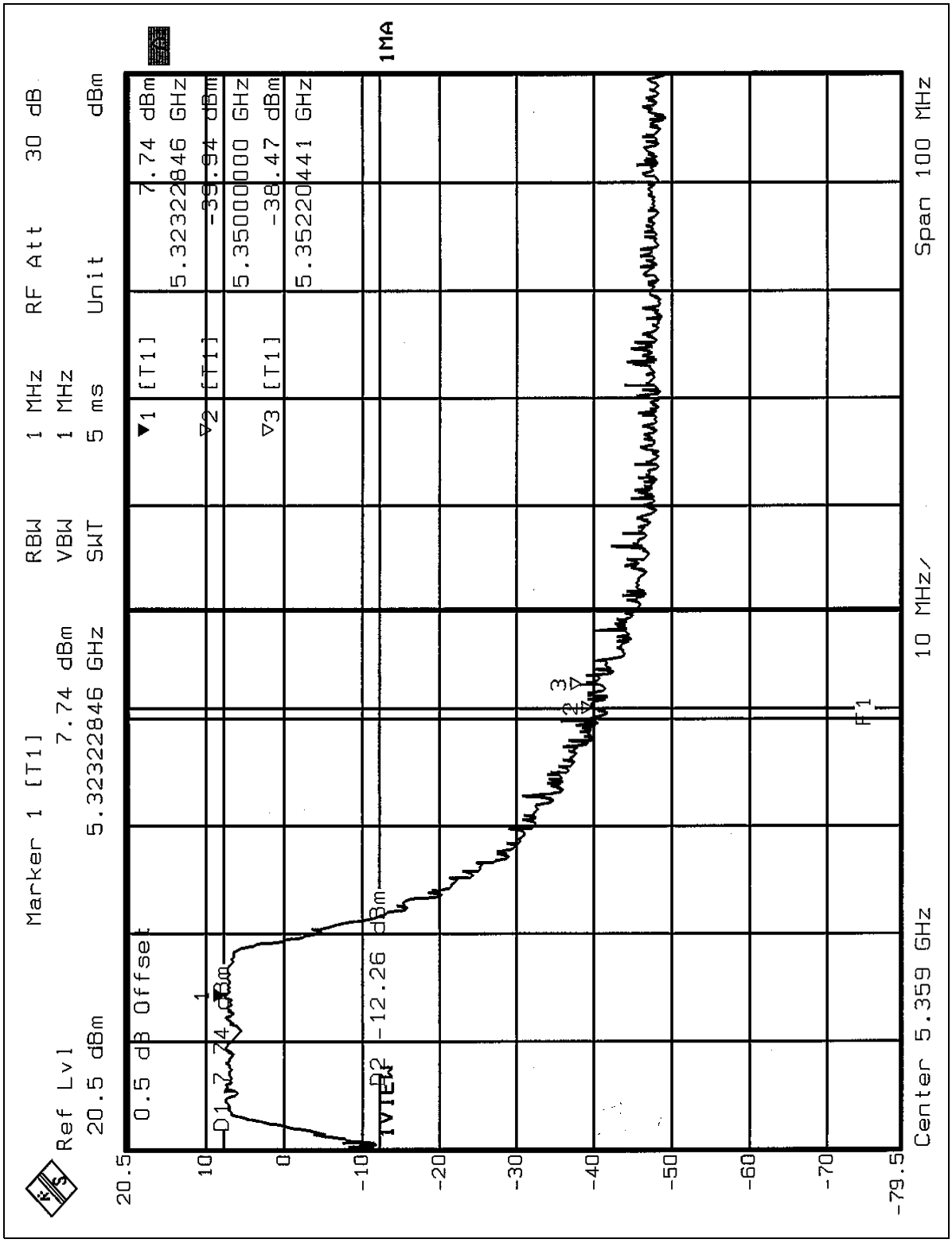
Normal Mode (CH1)



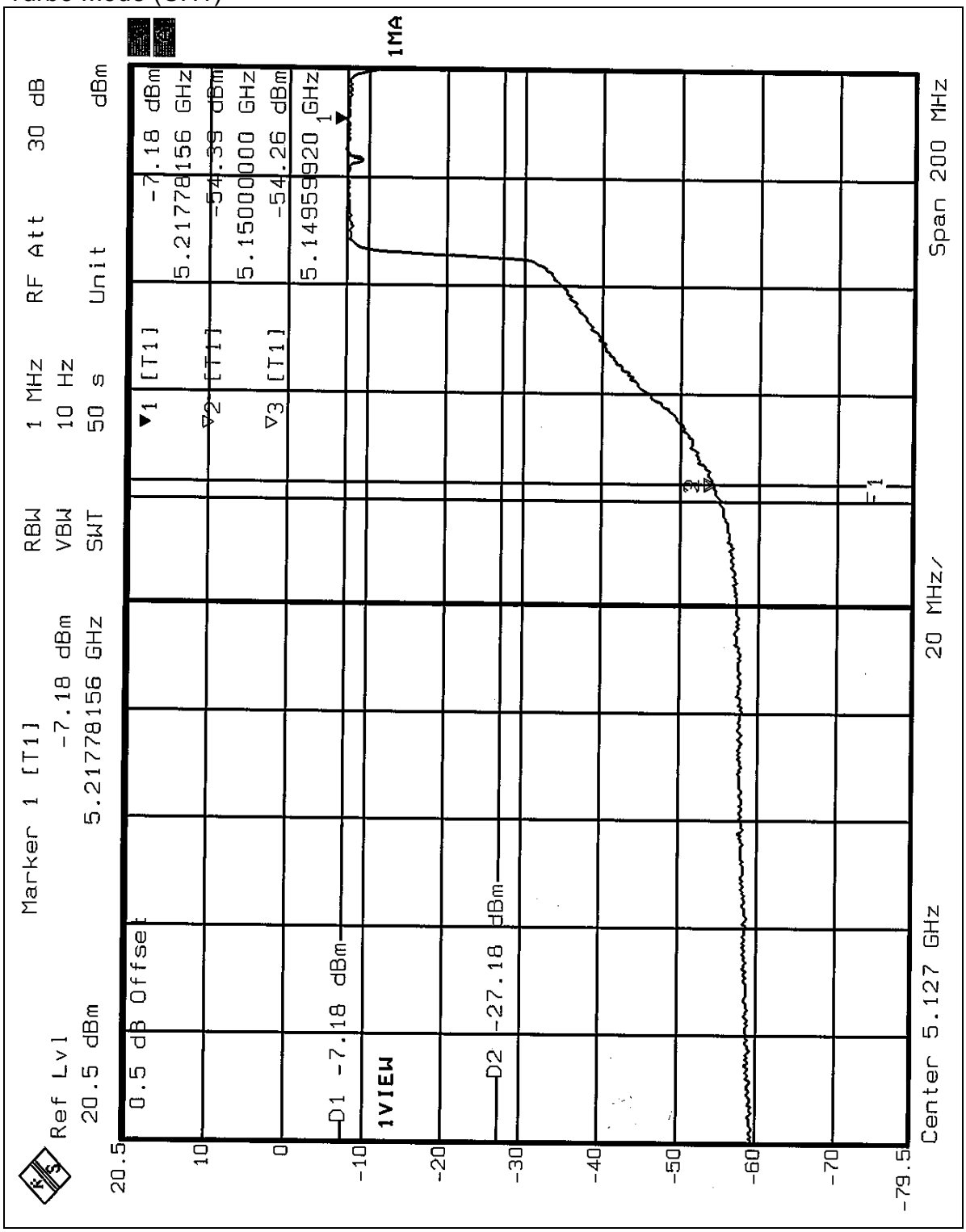

Marker 1 [T1]
8.76 dBm
5.18619038 GHz
RBW 1 MHz
VBW 1 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 8.73 dBm
D2 -11.24 dBm
1VIEW
1MA
Center 5.141 GHz
10 MHz/
Span 100 MHz
F1
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

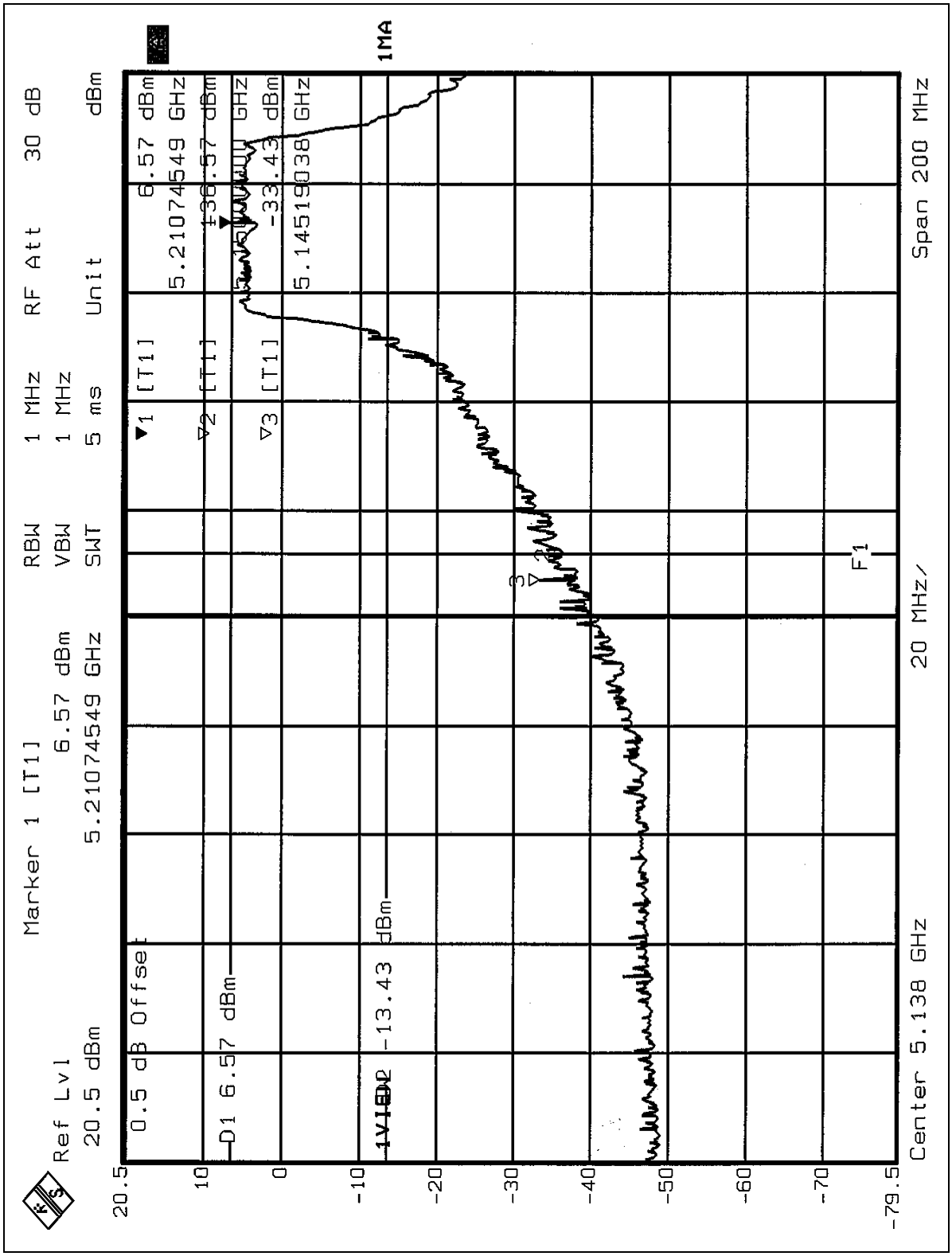
Normal Mode (CH8)



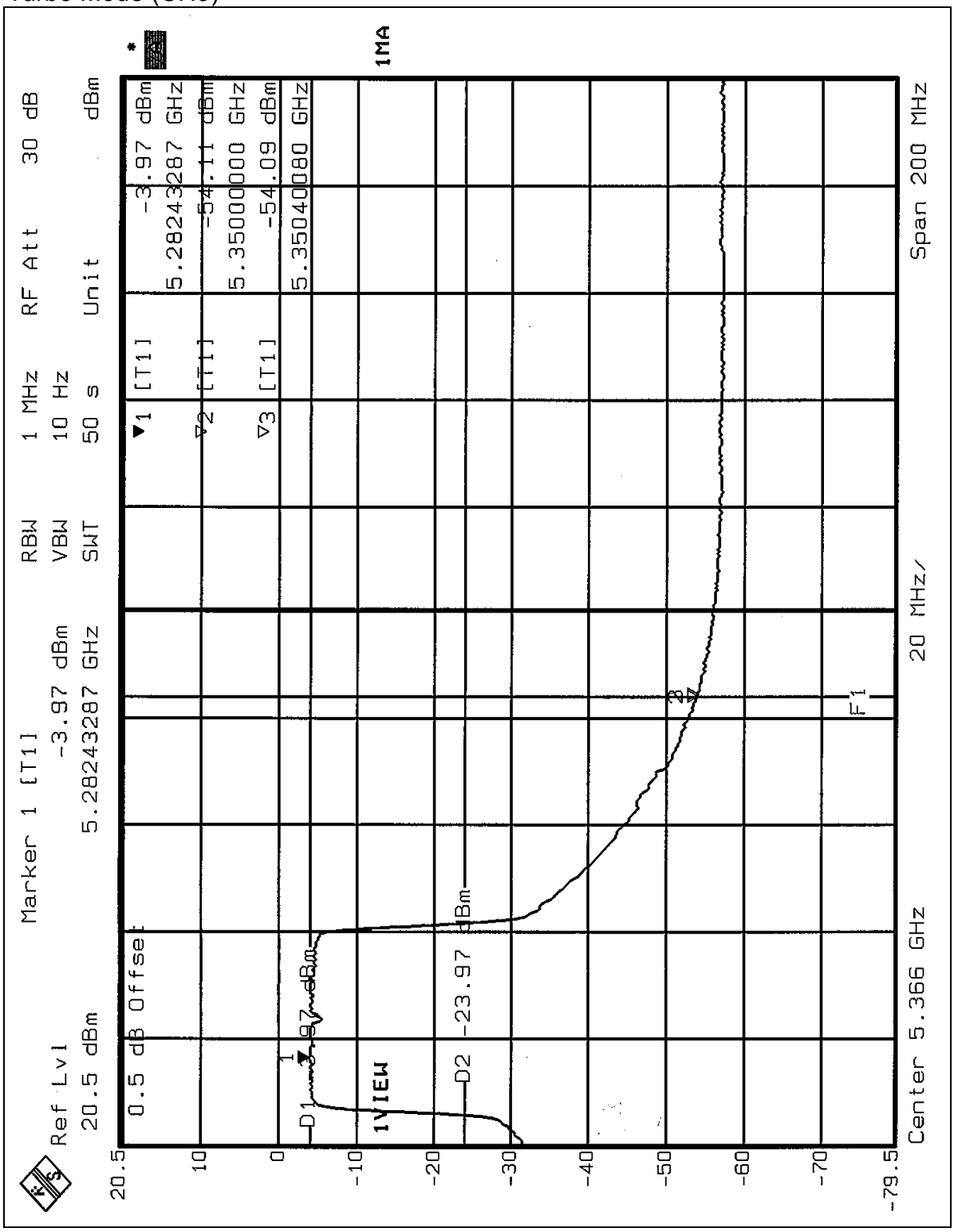

Marker 1 [T1]
7.74 dBm
5.32322846 GHz
Ref Lvl
20.5 dBm
0.5 dB Offset
RBW 1 MHz
VBW 1 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1 [T1] 7.74 dBm 5.32322846 GHz
2 [T1] -39.94 dBm 5.35000000 GHz
3 [T1] -38.47 dBm 5.35220441 GHz
D1 -12.26 dBm
D2
1MA
Center 5.359 GHz
10 MHz/
Span 100 MHz

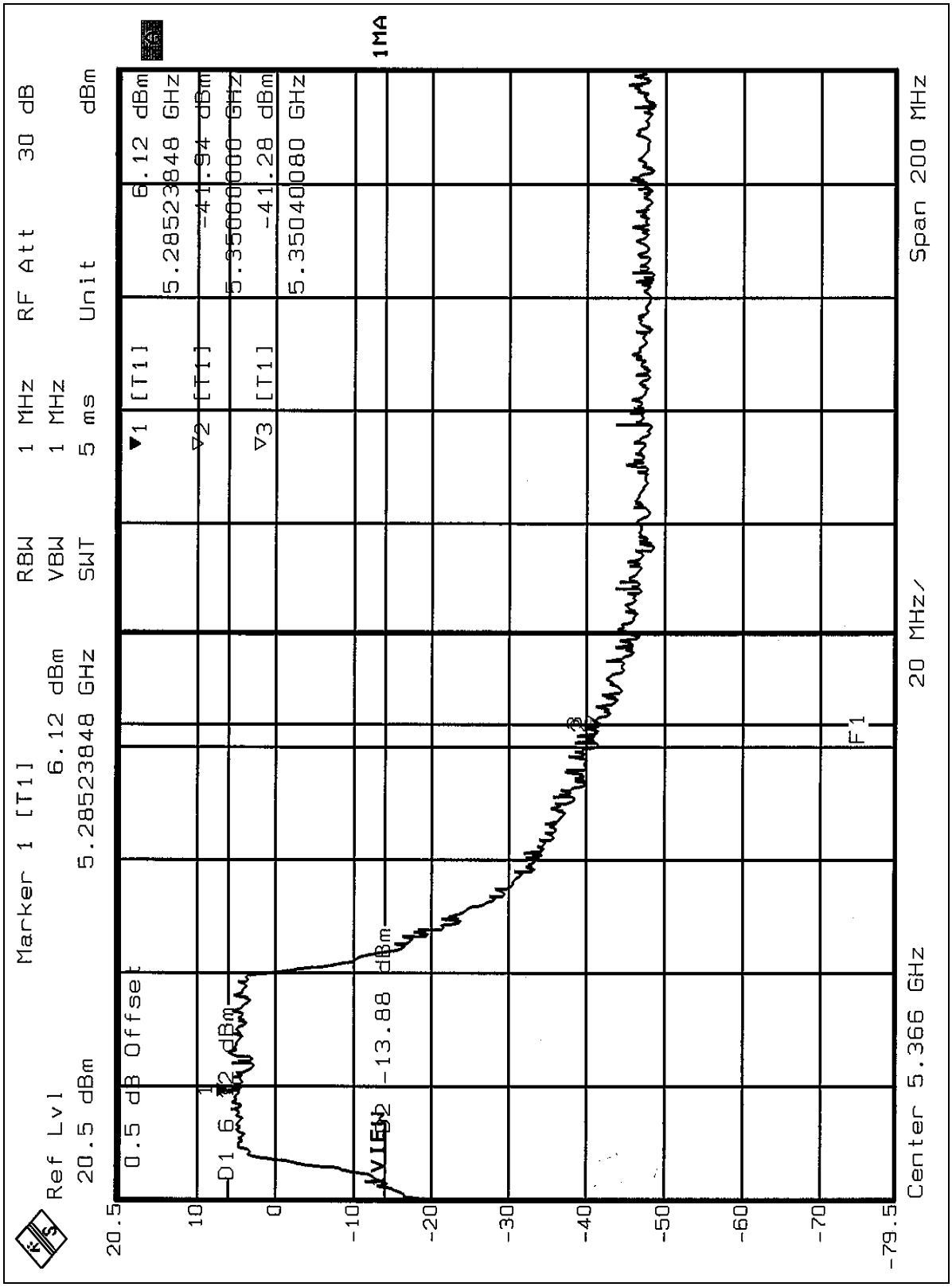
Turbo Mode (CH1)




Marker 1 [T1]
6.57 dBm
5.21074549 GHz
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 6.57 dBm
RBW 1 MHz
VBW 1 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1MA
▼1 [T1] 6.57 dBm 5.21074549 GHz
▽2 [T1] -36.57 dBm 5.21074549 GHz
▽3 [T1] -33.43 dBm 5.14519038 GHz
-13.43 dBm
F1
Center 5.138 GHz
20 MHz/
Span 200 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

Turbo Mode (CH3)




Marker 1 [T1]
6.12 dBm
5.28523848 GHz
Ref Lvl
20.5 dBm
0.5 dB Offset
RBW 1 MHz
VBW 1 MHz
SWT 5 ms
RF Att 30 dB
Unit dBm
1 [T1] 6.12 dBm 5.28523848 GHz
2 [T1] -41.94 dBm 5.35000000 GHz
3 [T1] -41.28 dBm 5.35040080 GHz
1MA
Center 5.366 GHz
20 MHz/
Span 200 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

5.8 ANTENNA REQUIREMENT

5.8.1 STANDARD APPLICABLE

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

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

5.8.2 ANTENNA CONNECTED CONSTRUCTION

The antenna used in this product is Dipole antenna with UFL antenna connector. The maximum Gain of the antenna is 4.0dBi.

FOR FREQUENCY 5.725~5.850GHz

5.9 CONDUCTED EMISSION MEASUREMENT

5.9.1 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.

5.9.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESCS30	100291	Dec. 12, 2004
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.

5.9.3 TEST PROCEDURES

d. 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.

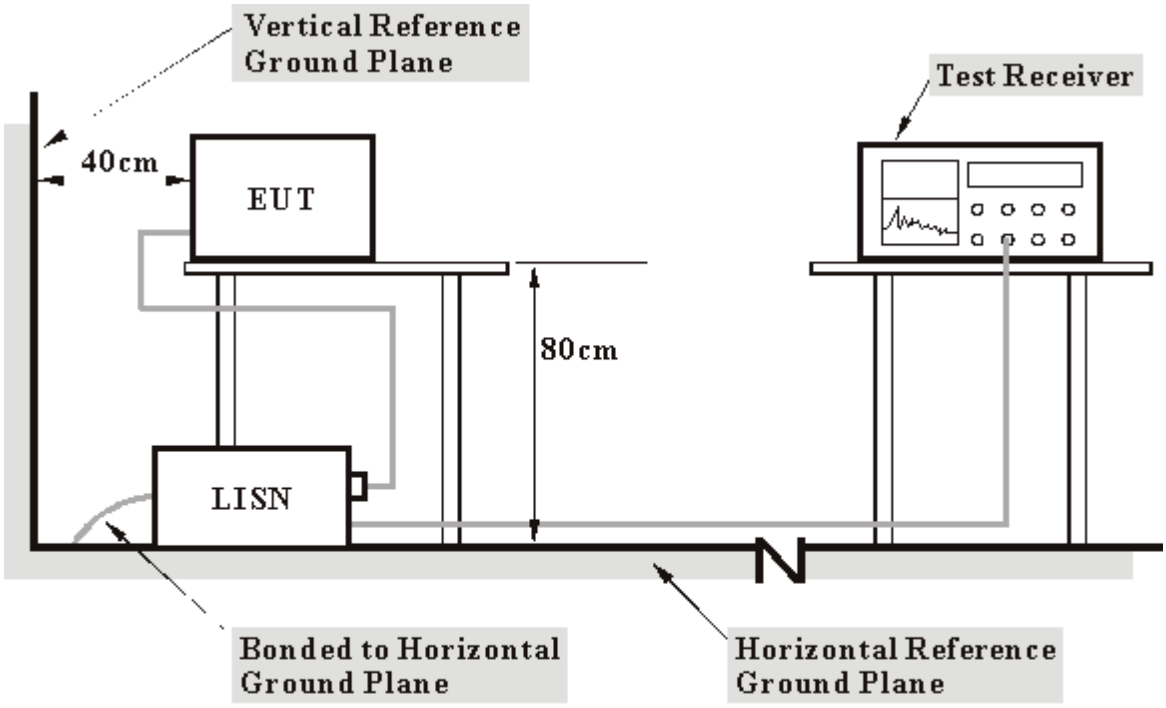
e. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

f. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

5.9.4 DEVIATION FROM TEST STANDARD

No deviation

5.9.5 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.

5.9.6 EUT OPERATING CONDITIONS

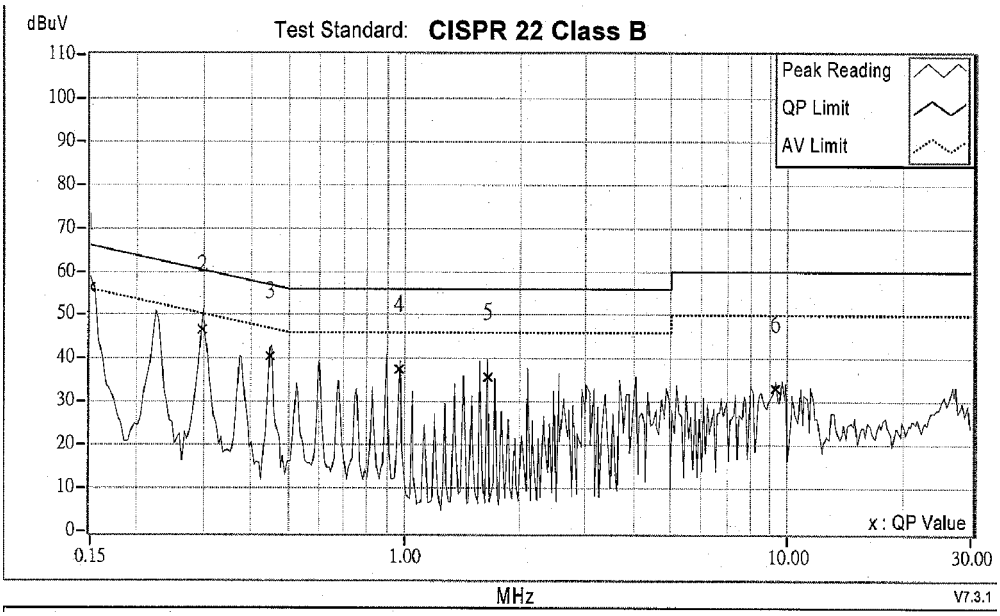
Same as 4.1.6

5.9.7 TEST RESULTS

EUT	Wireless A+G Access Point	MODEL	WAP55AG ver. 2
INPUT POWER (SYSTEM)	120Vac, 60 Hz	6dB BANDWIDTH	9 kHz
ENVIRONMENTAL CONDITIONS	22deg. C, 60%RH, 991hPa	PHASE	Line (L)
TEST MODE	Test Mode 1	TESTED BY	Johan Juo

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.11	56.13	-	56.24	-	66.00	56.00	-9.76	-
2	0.298	0.12	46.32	-	46.44	-	60.29	50.29	-13.84	-
3	0.447	0.13	40.38	-	40.51	-	56.93	46.93	-16.43	-
4	0.973	0.15	37.45	-	37.60	-	56.00	46.00	-18.40	-
5	1.646	0.16	35.55	-	35.71	-	56.00	46.00	-20.29	-
6	9.292	0.30	33.08	-	33.38	-	60.00	50.00	-26.62	-

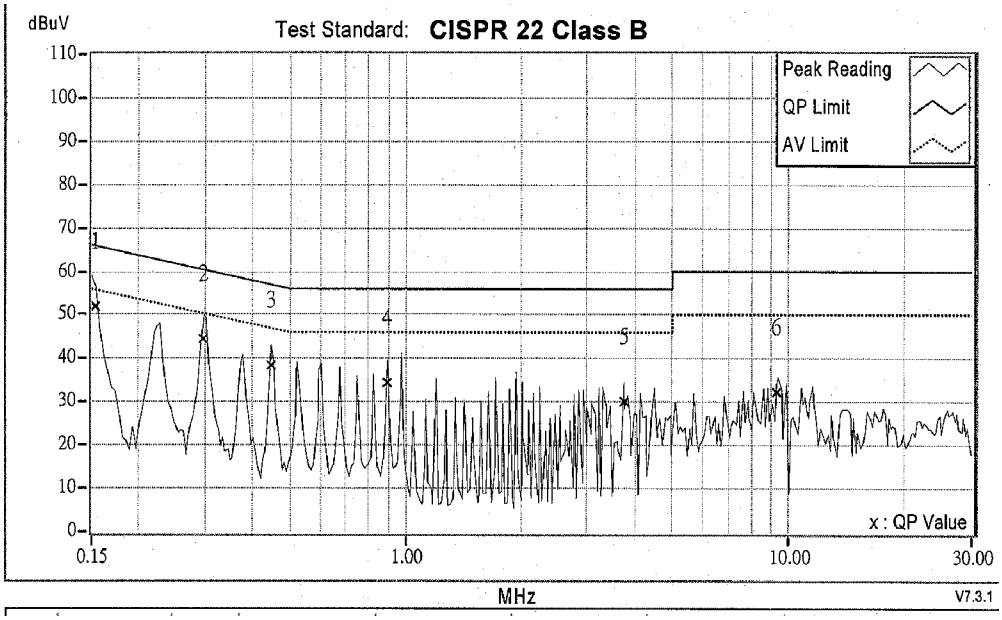
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**6dB BANDWIDTH**	9 kHz
ENVIRONMENTAL CONDITIONS	22deg. C, 60%RH, 991hPa	**PHASE**	Neutral (N)
TEST MODE	Test Mode 1	**TESTED BY**	Johan Juo

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.154	0.10	51.48	-	51.58	-	65.79	55.79	-14.20	-
2	0.298	0.11	44.40	-	44.51	-	60.29	50.29	-15.77	-
3	0.447	0.12	38.15	-	38.27	-	56.93	46.93	-18.66	-
4	0.896	0.14	34.07	-	34.21	-	56.00	46.00	-21.79	-
5	3.744	0.19	29.77	-	29.96	-	56.00	46.00	-26.04	-
6	9.292	0.28	32.07	-	32.35	-	60.00	50.00	-27.65	-

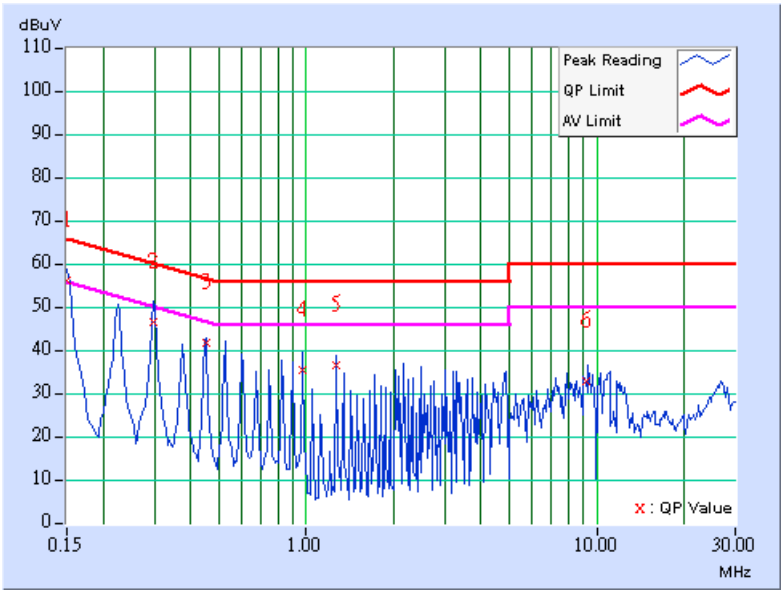
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	Wireless A+G Access Point	MODEL	WAP55AG ver. 2
INPUT POWER (SYSTEM)	120Vac, 60 Hz	6dB BANDWIDTH	9 kHz
ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH, 991hPa	PHASE	Line (L)
TEST MODE	Test Mode 2	TESTED BY	Johan Juo

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	**0.150**	**0.11**	**55.89**	**50.10**	**56.00**	**50.21**	**66.00**	**56.00**	**-10.00**	**-5.79**
2	0.298	0.12	46.45	-	46.57	-	60.29	50.29	-13.71	-
3	0.451	0.13	41.42	-	41.55	-	56.86	46.86	-15.31	-
4	0.970	0.15	35.17	-	35.32	-	56.00	46.00	-20.68	-
5	1.273	0.15	36.48	-	36.63	-	56.00	46.00	-19.37	-
6	9.215	0.30	32.53	-	32.83	-	60.00	50.00	-27.17	-

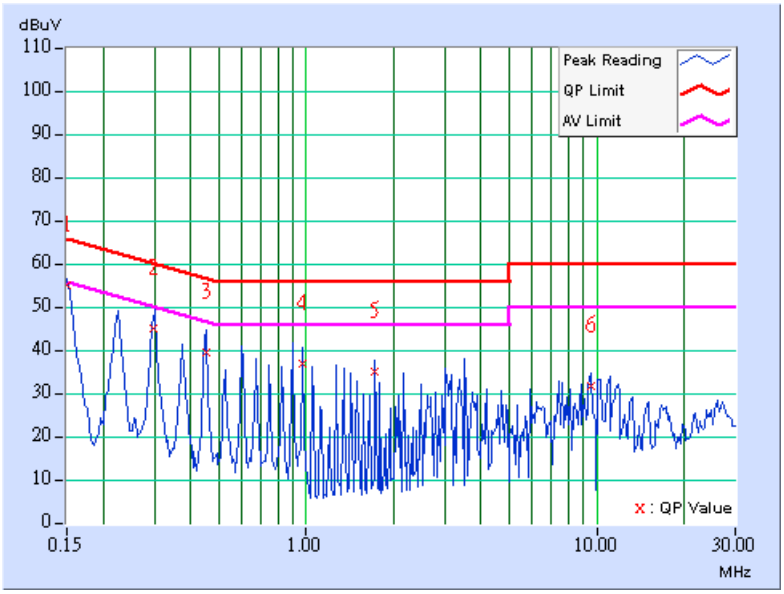
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**6dB BANDWIDTH**	9 kHz
ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH, 991hPa	**PHASE**	Neutral (N)
TEST MODE	Test Mode 2	**TESTED BY**	Johan Juo

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.150	0.10	54.95	-	55.05	-	66.00	56.00	-10.95	-
2	0.298	0.11	44.83	-	44.94	-	60.29	50.29	-15.34	-
3	0.451	0.12	39.27	-	39.39	-	56.86	46.86	-17.48	-
4	0.975	0.15	36.72	-	36.87	-	56.00	46.00	-19.13	-
5	1.721	0.16	34.96	-	35.12	-	56.00	46.00	-20.88	-
6	9.587	0.28	31.66	-	31.94	-	60.00	50.00	-28.06	-

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.



5.10 RADIATED EMISSION MEASUREMENT

5.10.1 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:

4. The lower limit shall apply at the transition frequencies.
5. Emission level (dBuV/m) = 20 log Emission level (uV/m).
6. 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.

5.10.2 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:

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

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

5.10.3 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	Dec. 15, 2004
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	Jan. 22, 2005
Preamplifier Agilent	8447D	2944A10629	Jan. 14, 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.

5.10.4 TEST PROCEDURES

g. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.

h. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

i. 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.

j. 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.

k. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

l. 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.

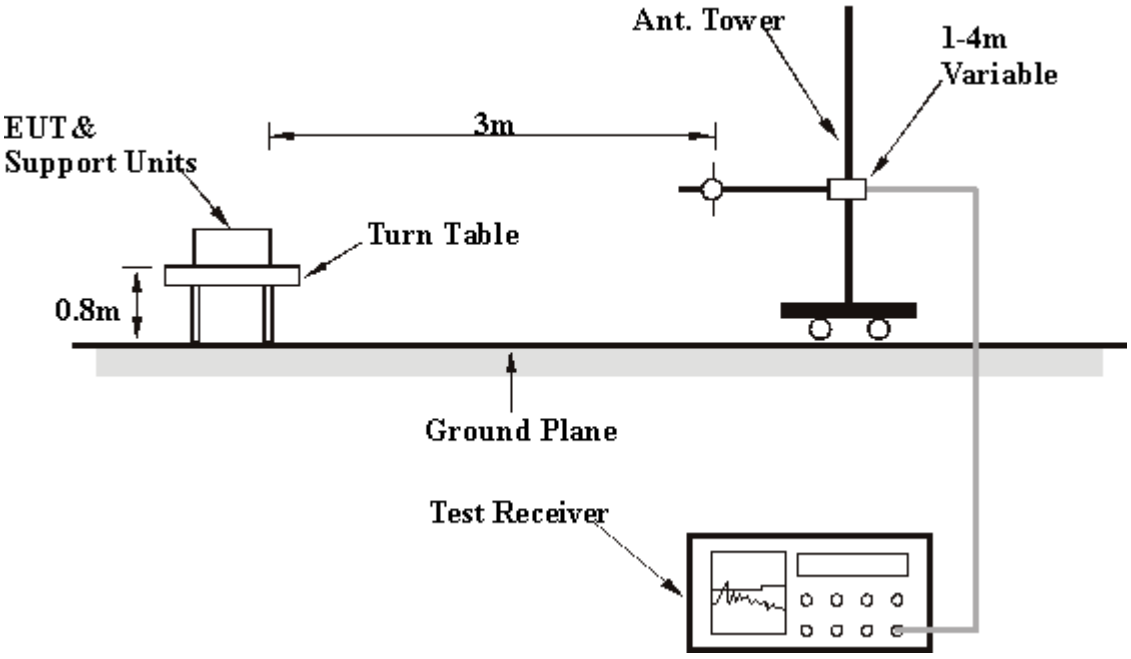
NOTE:

4. 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.
5. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection at frequency above 1GHz.
6. 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.

5.10.5 DEVIATION FROM TEST STANDARD

No deviation

5.10.6 TEST SETUP



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

5.10.7 EUT OPERATING CONDITIONS

Same as 4.1.6

5.10.8 TEST RESULTS

EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**FREQUENCY RANGE**	Below 1000MHz
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**DETECTOR FUNCTION**	Quasi-Peak
TESTED BY	Match Tsui	**TEST MODE**	Test Mode 1

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	47.49	28.39 QP	40.00	-11.61	1.00 H	238	13.39	15.00
2	109.70	40.08 QP	43.50	-3.42	1.50 H	274	28.10	11.97
3	123.31	41.64 QP	43.50	-1.86	1.50 H	259	28.38	13.26
4	218.56	37.24 QP	46.00	-8.76	1.25 H	58	25.44	11.80
5	249.66	31.86 QP	46.00	-14.14	1.00 H	283	18.64	13.22
6	329.36	35.88 QP	46.00	-10.12	1.00 H	328	20.71	15.18
7	374.07	32.99 QP	46.00	-13.01	1.00 H	289	16.81	16.18
8	440.16	31.36 QP	46.00	-14.64	1.00 H	319	13.55	17.81
9	546.30	42.82 QP	46.00	-3.18	1.53 H	197	23.20	19.62
10	550.00	44.80 QP	46.00	-1.20	1.00 H	0	25.11	19.69
11	574.29	40.22 QP	46.00	-5.78	1.50 H	196	19.88	20.33
12	603.45	39.46 QP	46.00	-6.54	1.25 H	211	18.41	21.06
13	681.20	37.30 QP	46.00	-8.70	1.25 H	160	15.24	22.07
14	751.18	39.63 QP	46.00	-6.37	1.00 H	25	16.09	23.54
15	881.42	36.39 QP	46.00	-9.61	1.75 H	130	11.63	24.77
16	990.28	35.46 QP	54.00	-18.54	1.50 H	109	9.70	25.77

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	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**FREQUENCY RANGE**	Below 1000MHz
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**DETECTOR FUNCTION**	Quasi-Peak
TESTED BY	Match Tsui	**TEST MODE**	Test Mode 1

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	47.81	36.11 QP	40.00	-3.89	1.24 V	200	21.15	14.96
2	61.10	36.58 QP	40.00	-3.42	1.25 V	115	23.00	13.59
3	109.70	38.45 QP	43.50	-5.05	1.00 V	229	26.48	11.97
4	123.31	39.44 QP	43.50	-4.06	1.00 V	244	26.18	13.26
5	249.66	31.97 QP	46.00	-14.03	1.75 V	352	18.75	13.22
6	329.36	34.63 QP	46.00	-11.37	1.50 V	265	19.46	15.18
7	374.07	31.67 QP	46.00	-14.33	1.00 V	316	15.49	16.18
8	399.34	33.05 QP	46.00	-12.95	1.25 V	40	16.32	16.74
9	479.04	33.50 QP	46.00	-12.50	1.00 V	25	15.05	18.45
10	500.42	38.47 QP	46.00	-7.53	1.00 V	277	19.73	18.74
11	545.13	42.74 QP	46.00	-3.26	1.50 V	166	23.14	19.60
12	624.83	36.78 QP	46.00	-9.22	1.50 V	196	15.44	21.34
13	751.18	34.51 QP	46.00	-11.49	1.00 V	172	10.98	23.54
14	770.62	37.70 QP	46.00	-8.30	1.50 V	280	14.05	23.65
15	881.42	33.91 QP	46.00	-12.09	1.25 V	40	9.14	24.77
16	990.28	36.32 QP	54.00	-17.68	1.00 V	61	10.55	25.77

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	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**FREQUENCY RANGE**	Below 1000MHz
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**DETECTOR FUNCTION**	Quasi-Peak
TESTED BY	Match Tsui	**TEST MODE**	Test Mode 2

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	47.49	28.84 QP	40.00	-11.16	2.00 H	22	13.84	15.00
2	109.70	42.16 QP	43.50	-1.34	1.25 H	79	30.19	11.97
3	125.00	42.39 QP	43.50	-1.11	1.75 H	246	29.01	13.38
4	218.56	42.12 QP	46.00	-3.88	1.00 H	97	30.32	11.80
5	249.66	34.95 QP	46.00	-11.05	1.00 H	289	21.74	13.22
6	329.36	35.92 QP	46.00	-10.08	1.00 H	313	20.74	15.18
7	374.07	33.36 QP	46.00	-12.64	1.00 H	274	17.18	16.18
8	399.34	30.06 QP	46.00	-15.94	1.00 H	67	13.32	16.74
9	500.42	41.71 QP	46.00	-4.29	1.75 H	277	22.97	18.74
10	550.96	44.31 QP	46.00	-1.69	1.50 H	205	24.60	19.72
11	601.50	44.27 QP	46.00	-1.73	1.50 H	193	23.24	21.03
12	681.20	38.45 QP	46.00	-7.55	1.25 H	154	16.38	22.07
13	751.18	36.23 QP	46.00	-9.77	1.00 H	28	12.69	23.54
14	881.42	33.40 QP	46.00	-12.60	1.50 H	211	8.64	24.77
15	920.30	34.04 QP	46.00	-11.96	1.50 H	190	8.72	25.33
16	990.28	35.37 QP	54.00	-18.63	1.50 H	103	9.61	25.77

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	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**FREQUENCY RANGE**	Below 1000MHz
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**DETECTOR FUNCTION**	Quasi-Peak
TESTED BY	Match Tsui	**TEST MODE**	Test Mode 2

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	45.37	38.78 QP	40.00	-1.22	1.50 V	193	23.52	15.26
2	59.16	36.58 QP	40.00	-3.42	1.50 V	7	22.79	13.79
3	109.70	38.73 QP	43.50	-4.77	1.00 V	229	26.76	11.97
4	125.25	40.47 QP	43.50	-3.03	1.00 V	235	27.08	13.39
5	218.56	34.65 QP	46.00	-11.35	1.00 V	85	22.85	11.80
6	329.36	34.56 QP	46.00	-11.44	1.50 V	52	19.39	15.18
7	399.34	32.52 QP	46.00	-13.48	1.25 V	10	15.79	16.74
8	479.04	32.94 QP	46.00	-13.06	1.00 V	37	14.49	18.45
9	500.42	39.22 QP	46.00	-6.78	1.25 V	253	20.48	18.74
10	550.96	39.33 QP	46.00	-6.67	1.00 V	274	19.61	19.72
11	601.50	43.12 QP	46.00	-2.88	1.50 V	235	22.09	21.03
12	770.62	38.68 QP	46.00	-7.32	1.50 V	280	15.03	23.65
13	881.42	32.40 QP	46.00	-13.60	1.25 V	55	7.63	24.77
14	990.28	36.28 QP	54.00	-17.72	1.00 V	61	10.51	25.77

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	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
MODE	Normal Mode	**CHANNEL**	9
FREQUENCY RANGE	1 ~ 40 GHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
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	#1120.00	47.49 PK	74.00	-26.51	1.29 H	65	20.73	26.76
1	#1120.00	44.47 AV	54.00	-9.53	1.29 H	65	17.71	26.76
2	#3830.00	40.15 PK	74.00	-33.85	1.00 H	263	3.81	36.34
2	#3830.00	35.01 AV	54.00	-18.99	1.00 H	263	-1.33	3.81
3	*5745.00	106.11 PK			1.22 H	131	65.21	40.90
3	*5745.00	95.73 AV			1.22 H	131	54.83	40.90
4	#11490.00	18.67 PK	74.00	-55.33	1.06 H	245	-28.71	47.38
4	#11490.00	46.95 AV	54.00	-7.05	1.06 H	245	-0.43	47.38

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	#1120.00	46.38 PK	74.00	-27.62	1.33 V	360	19.62	26.76
1	#1120.00	42.24 AV	54.00	-11.76	1.33 V	360	15.48	26.76
2	#3830.00	48.91 PK	74.00	-25.09	1.06 V	329	12.57	36.34
2	#3830.00	40.14 AV	54.00	-13.86	1.06 V	329	3.80	36.34
3	*5745.00	113.11 PK			1.15 V	25	72.21	40.90
3	*5745.00	103.68 AV			1.15 V	25	62.78	40.90
4	#11490.00	64.09 PK	74.00	-9.91	1.31 V	231	16.71	47.38
4	#11490.00	51.54 AV	54.00	-2.46	1.31 V	231	4.16	47.38

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.
7. The limit value is defined as per 15.247

EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
MODE	Normal Mode	**CHANNEL**	11
FREQUENCY RANGE	1 ~ 40 GHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
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	#1120.00	46.92 PK	74.00	-27.08	1.09 H	360	20.16	26.76
1	#1120.00	43.13 AV	54.00	-10.87	1.09 H	360	16.37	26.76
2	*5785.00	102.63 PK			1.05 H	123	61.58	41.05
2	*5785.00	93.50 AV			1.05 H	123	52.45	41.05
3	#11570.00	59.38 PK	74.00	-14.62	1.13 H	230	11.91	47.47
3	#11570.00	46.59 AV	54.00	-7.41	1.13 H	230	-0.88	47.47

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	#1120.00	46.47 PK	74.00	-27.53	1.00 V	331	19.71	26.76
1	#1120.00	43.27 AV	54.00	-10.73	1.00 V	331	16.51	26.76
2	#3856.00	48.66 PK	74.00	-25.34	1.00 V	167	12.23	36.43
2	#3856.00	38.21 AV	54.00	-15.79	1.00 V	167	1.78	36.43
3	*5785.00	113.52 PK			1.14 V	50	72.47	41.05
3	*5785.00	103.59 AV			1.14 V	50	62.54	41.05
4	#11570.00	66.79 PK	74.00	-7.21	1.52 V	227	19.32	47.47
4	**#11570.00**	**52.94 AV**	**54.00**	**-1.06**	**1.52 V**	**227**	**5.47**	**47.47**

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.
7. The limit value is defined as per 15.247

EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
MODE	Normal Mode	**CHANNEL**	13
FREQUENCY RANGE	1 ~ 40 GHz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	**INPUT POWER (SYSTEM)**	120Vac, 60Hz
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	#1120.00	45.89 PK	74.00	-28.11	1.05 H	360	19.13	26.76
1	#1120.00	42.98 AV	54.00	-11.02	1.05 H	360	16.22	26.76
2	*5825.00	104.19 PK			1.12 H	120	63.24	40.95
2	*5825.00	94.08 AV			1.12 H	120	53.13	40.95
3	#11650.00	58.48 PK	74.00	-15.52	1.06 H	165	10.76	47.72
3	#11650.00	46.61 AV	54.00	-7.39	1.06 H	165	-1.11	47.72

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)	Correction Factor (dB/m)
1	#1120.00	45.82 PK	74.00	-28.18	1.00 V	1	19.06	26.76
1	#1120.00	43.23 AV	54.00	-10.77	1.00 V	1	16.47	26.76
2	#3883.00	50.13 PK	74.00	-23.87	1.07 V	17	13.61	36.52
2	#3883.00	43.15 AV	54.00	-10.85	1.07 V	17	6.63	36.52
3	*5825.00	113.21 PK			1.11 V	48	72.26	40.95
3	*5825.00	103.15 AV			1.11 V	48	62.20	40.95
4	#11650.00	64.02 PK	74.00	-9.98	1.12 V	228	16.30	47.72
4	#11650.00	51.01 AV	54.00	-2.99	1.12 V	228	3.29	47.72

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.
7. The limit value is defined as per 15.247

EUT	Wireless A+G Access Point	MODEL	WAP55AG ver. 2
MODE	Turbo Mode	CHANNEL	4
FREQUENCY RANGE	1 ~40 GHz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
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)
1	#1120.00	49.53 PK	74.00	-24.47	1.35 H	100	22.77	26.76
1	#1120.00	48.11 AV	54.00	-5.56	1.35 H	100	21.35	26.76
2	*5760.00	102.48 PK			1.24 H	19	61.52	40.96
2	*5760.00	93.73 AV			1.24 H	19	52.77	40.96
3	#11520.00	58.47 PK	74.00	-15.53	1.30 H	210	11.05	47.41
3	#11520.00	47.45 AV	54.00	-6.55	1.30 H	210	0.03	47.41

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)
1	#1120.00	46.88 PK	74.00	-27.12	1.46 V	11	20.12	26.76
1	#1120.00	44.41 AV	54.00	-9.59	1.46 V	11	17.65	26.76
2	#3840.00	44.88 PK	74.00	-29.12	1.25 V	42	8.51	36.38
2	#3840.00	43.79 AV	54.00	-10.21	1.25 V	42	7.42	36.38
3	*5760.00	110.19 PK			1.39 V	268	69.23	40.96
3	*5760.00	100.97 AV			1.39 V	268	60.01	40.96
4	#11520.00	61.27 PK	74.00	-12.73	1.28 V	229	13.85	47.41
4	#11520.00	49.47 AV	54.00	-4.53	1.28 V	229	2.05	47.41

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.
7. The limit value is defined as per 15.247

EUT	Wireless A+G Access Point	MODEL	WAP55AG ver. 2
MODE	Turbo Mode	CHANNEL	5
FREQUENCY RANGE	1 ~ 40 GHz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH, 991hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
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)
1	#1120.00	48.42 PK	74.00	-25.58	1.05 H	97	21.66	26.76
1	#1120.00	43.50 AV	54.00	-10.50	1.05 H	97	16.74	26.76
2	*5800.00	101.14 PK			1.01 H	12	60.03	41.11
2	*5800.00	93.00 AV			1.01 H	12	51.89	41.11
3	#11600.00	58.57 PK	74.00	-15.43	1.09 H	167	11.07	47.50
3	#11600.00	46.88 AV	54.00	-7.12	1.09 H	167	-0.62	47.50

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)
1	#1120.00	47.03 PK	74.00	-26.97	1.48 V	13	20.27	26.76
1	#1120.00	44.09 AV	54.00	-9.91	1.48 V	13	17.33	26.76
2	#3866.00	45.18 PK	74.00	-28.82	1.23 V	38	8.72	36.46
2	#3886.00	43.18 AV	54.00	-10.82	1.23 V	38	6.72	36.46
3	*5800.00	110.66 PK			1.28 V	360	69.55	41.11
3	*5800.00	101.36 AV			1.28 V	360	60.25	41.11
4	#11600.00	63.37 PK	74.00	-10.63	1.30 V	222	15.87	47.50
4	#11600.00	50.42 AV	54.00	-3.58	1.30 V	222	2.92	47.50

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.
7. The limit value is defined as per 15.247

5.11 6dB BANDWIDTH MEASUREMENT

5.11.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

5.11.2 TEST INSTRUMENTS

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

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

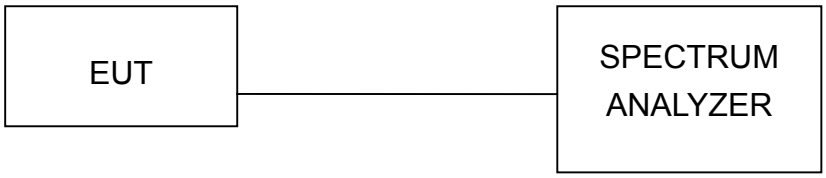
5.11.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100kHz RBW and 100kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

5.11.4 DEVIATION FROM TEST STANDARD

No deviation

5.11.5 TEST SETUP



5.11.6 EUT OPERATING CONDITIONS

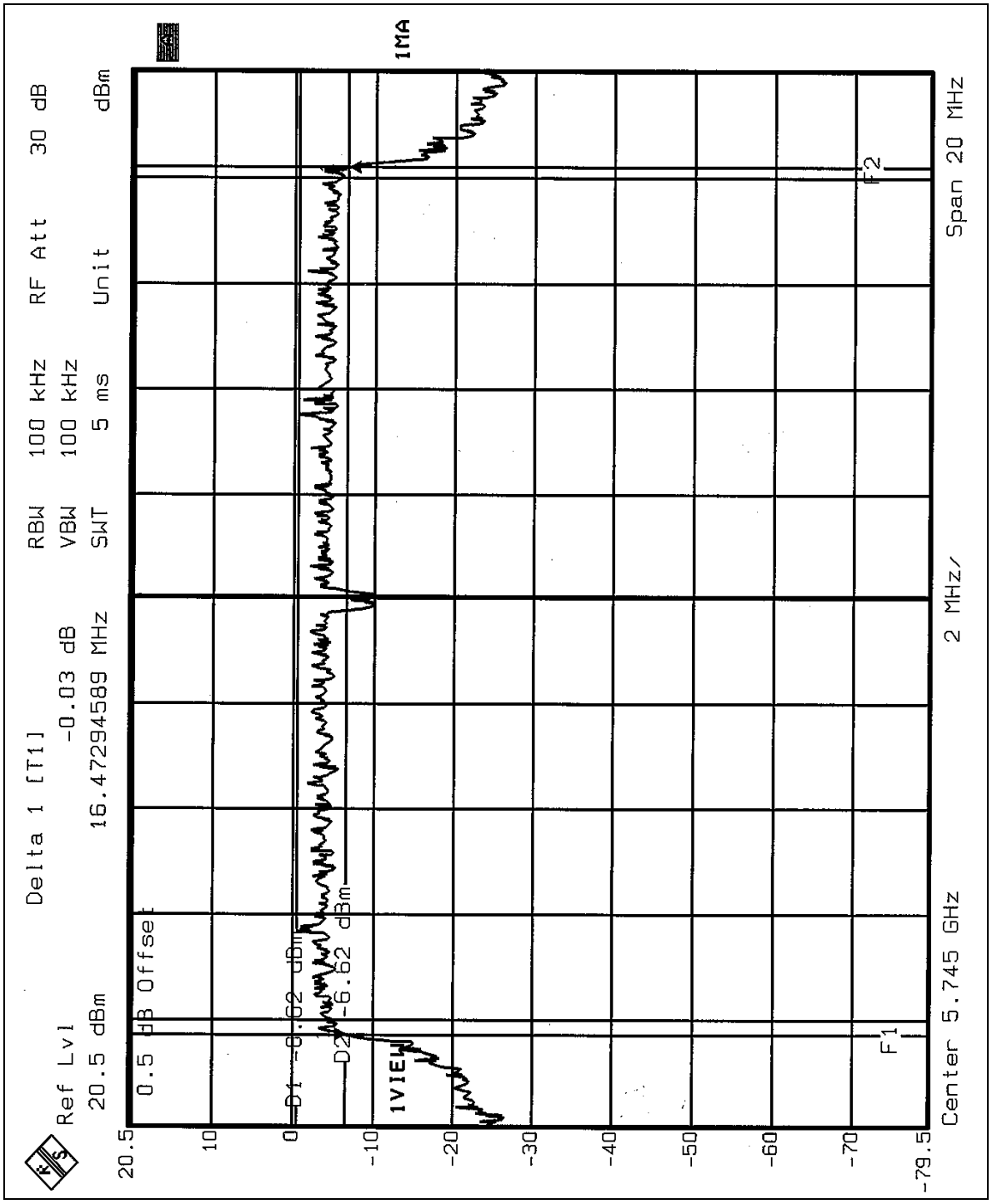
The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

5.11.7 TEST RESULTS

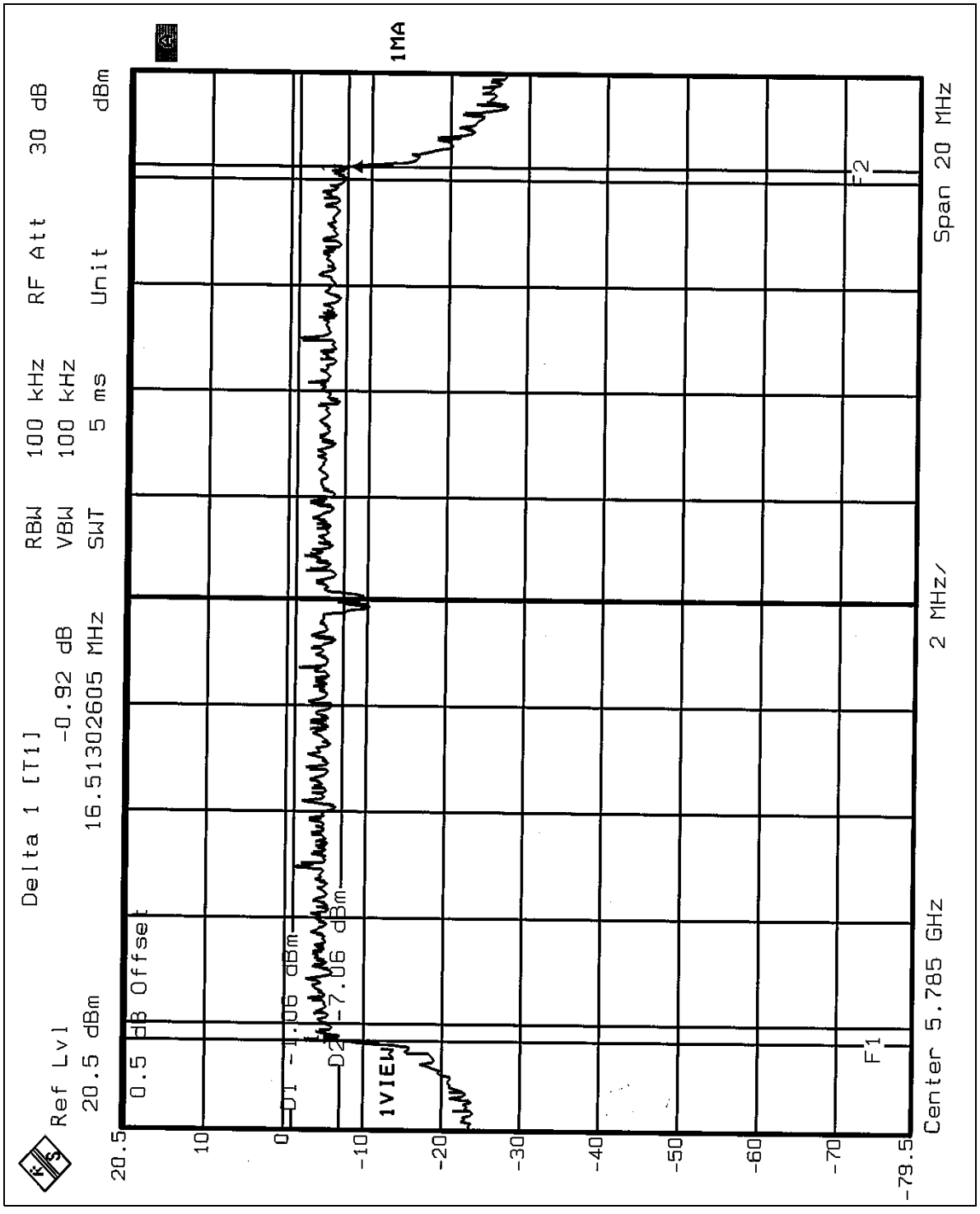
EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
MODE	Normal	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	24deg. C, 67%RH, 991 hPa	**TESTED BY**	Leo Hung

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
9	5745	16.47	0.5	PASS
11	5785	16.51	0.5	PASS
13	5825	16.51	0.5	PASS

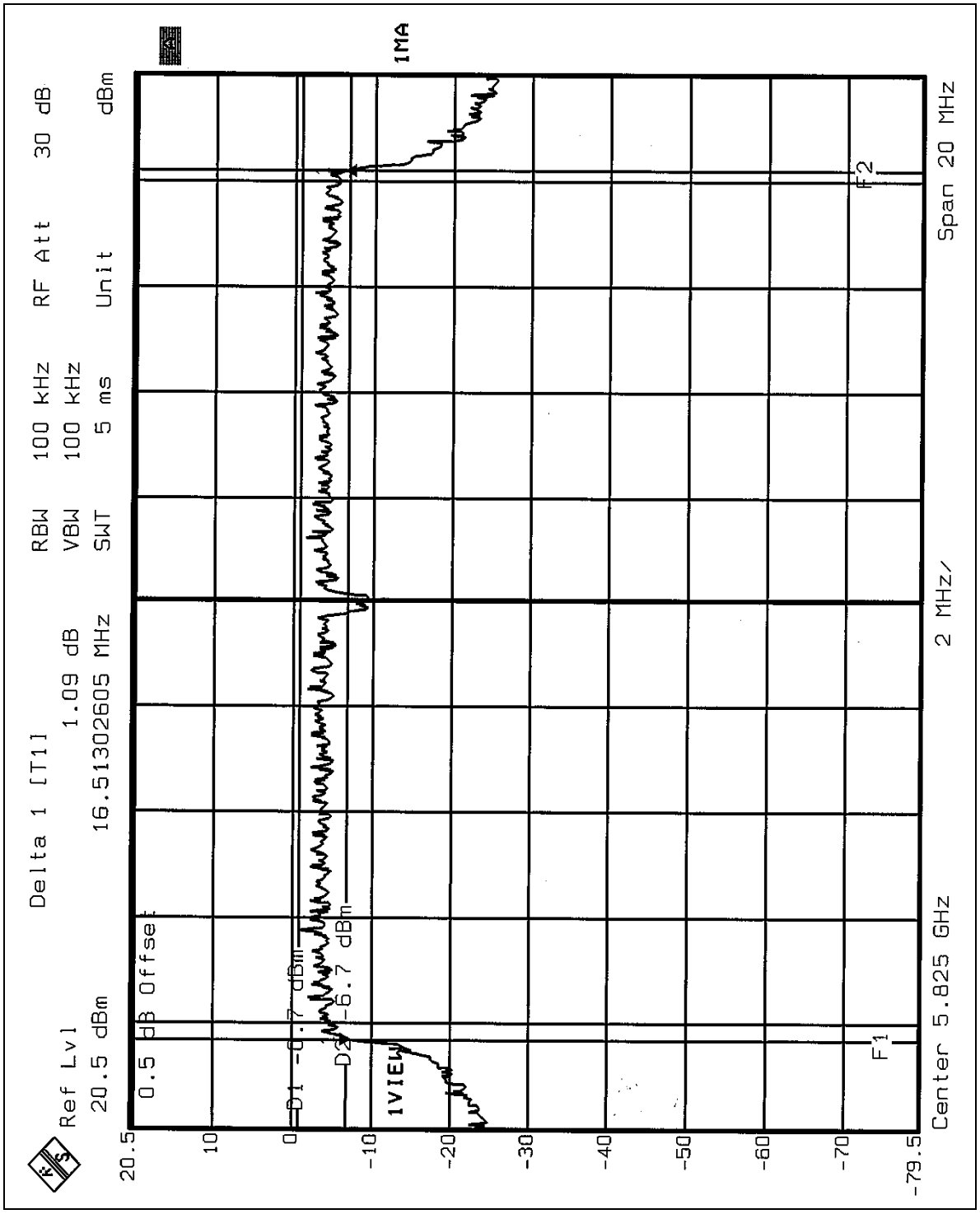
CH9


Delta 1 [T1]
-0.03 dB
16.47294589 MHz
RBW 100 kHz
VBW 100 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 -6.62 dBm
D2 -6.62 dBm
1MA
1VIEW
F1
F2
Center 5.745 GHz
2 MHz/
Span 20 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

CH11


Delta 1 [T1]
-0.92 dB
16.51302605 MHz
RBW 100 kHz
VBW 100 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 -1.06 dBm
D2 -7.06 dBm
1VIEW
1MA
F1
F2
Center 5.785 GHz
2 MHz/
Span 20 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

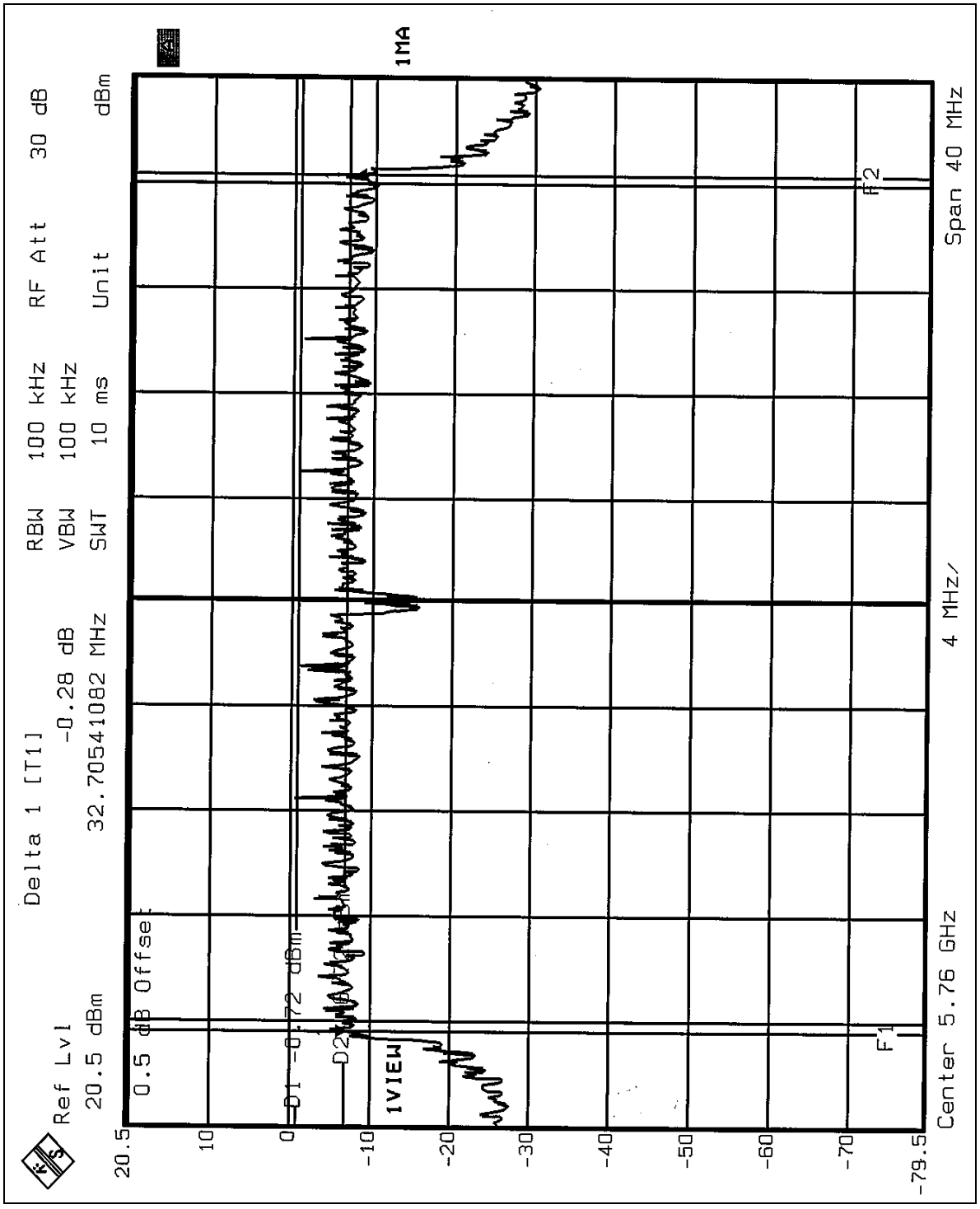
CH13


Delta 1 [T1]
1.09 dB
16.51302605 MHz
RBW 100 kHz
VBW 100 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 -0.7 dBm
D2 -6.7 dBm
1MA
1VIEW
F1
F2
Center 5.825 GHz
2 MHz/
Span 20 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

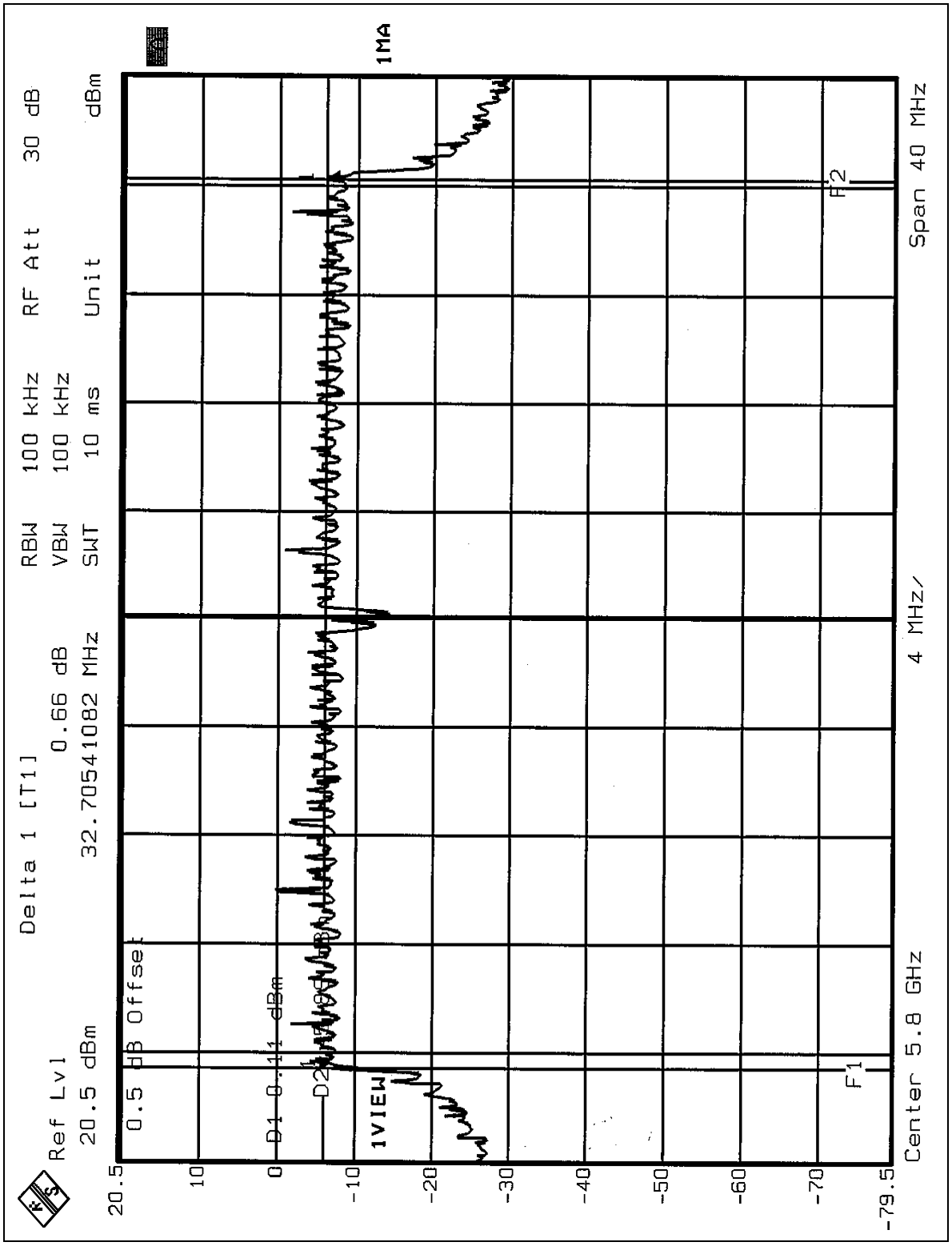
EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
MODE	Turbo	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	24deg. C, 67%RH 991 hPa	**TESTED BY**	Leo Hung

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
4	5760	32.71	0.5	PASS
5	5800	32.71	0.5	PASS

CH4


Delta 1 [T1]
-0.28 dB
32.70541082 MHz
RBW 100 kHz
VBW 100 kHz
SWT 10 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 -0.72 dBm
1VIEW
1MA
Center 5.76 GHz
4 MHz/
Span 40 MHz
F1
F2
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

CH5


Delta 1 [T1]
0.66 dB
32.70541082 MHz
RBW 100 kHz
VBW 100 kHz
SWT 10 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 0.11 dBm
1VIEW
1MA
A2
F1
Span 40 MHz
4 MHz/
Center 5.8 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

5.12 MAXIMUM PEAK OUTPUT POWER

5.12.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT

The Maximum Peak Output Power Measurement is 30dBm.

5.12.2 INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005
AGILENT SIGNAL GENERATOR	E8257C	MY43320668	Dec. 31, 2004
TEKTRONIX OSCILLOSCOPE	TDS 1012	C019167	Feb. 01, 2005
NARDA DETECTOR	4503A	FSCM99899	NA

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

5.12.3 TEST PROCEDURES

1. A detector was used on the output port of the EUT. An oscilloscope was used to read the response of the detector.
2. Replaced the EUT by the signal generator . The center frequency of the S.G was adjusted to the center frequency of the measured channel.
3. Adjusted the power to have the same reading on oscilloscope. Record the power level.

5.12.4 DEVIATION FROM TEST STANDARD

No deviation

5.12.5 TEST SETUP

5.12.6 EUT OPERATING CONDITIONS

Same as Item 5.9.6

5.12.7 TEST RESULTS

EUT	Wireless A+G Access Point	MODEL	WAP55AG ver. 2
MODE	Normal	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	24deg. C, 67%RH 991 hPa	TESTED BY	Leo Hung

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
9	5745	40.18	16.04	30	PASS
11	5785	39.90	16.01	30	PASS
13	5825	39.99	16.02	30	PASS

EUT	Wireless A+G Access Point	MODEL	WAP55AG ver. 2
MODE	Turbo	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	24deg. C, 67%RH 991 hPa	TESTED BY	Leo Hung

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
4	5760	40.18	16.04	30	PASS
5	5800	39.81	16.00	30	PASS

5.13 POWER SPECTRAL DENSITY MEASUREMENT

5.13.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

5.13.2 TEST INSTRUMENTS

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

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

5.13.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3 kHz RBW and 30 kHz VBW, set sweep time = span/3 kHz. The power spectral density was measured and recorded.
The sweep time is allowed to be longer than span/3 kHz for a full response of the mixer in the spectrum analyzer.

5.13.4 DEVIATION FROM TEST STANDARD

No deviation

5.13.5 TEST SETUP

5.13.6 EUT OPERATING CONDITION

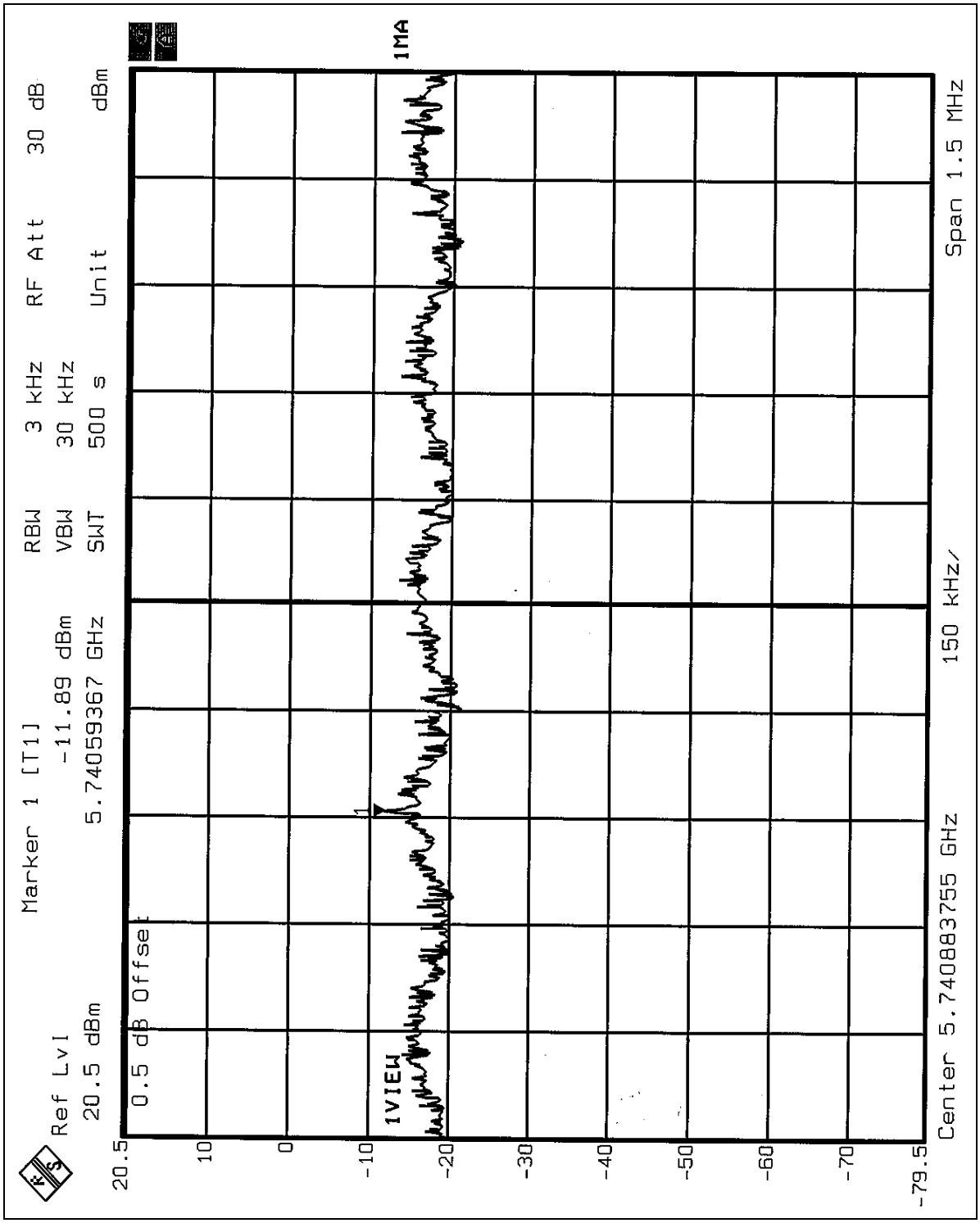
Same as Item 5.9.6

5.13.7 TEST RESULTS

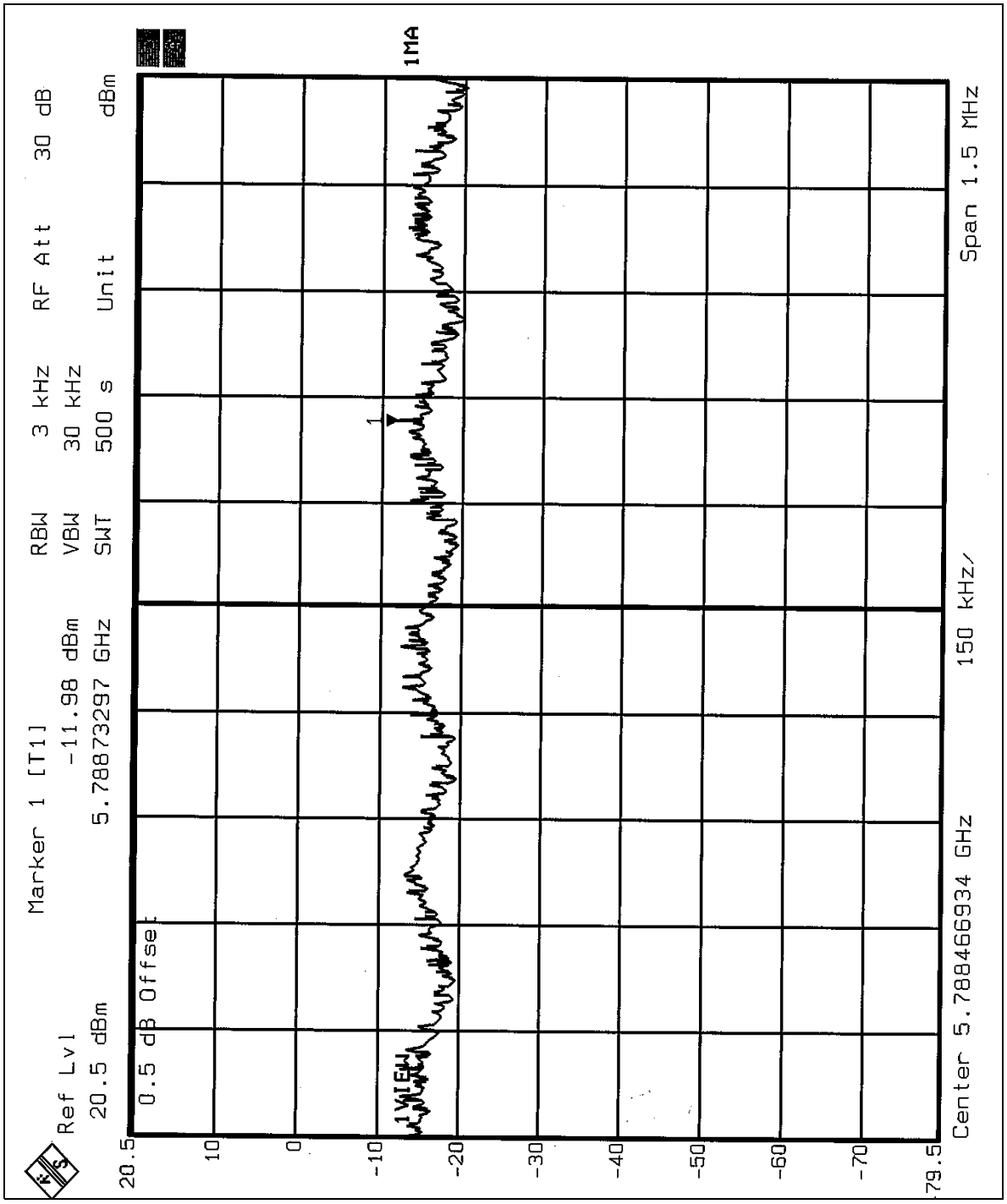
EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
MODE	Normal	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	24deg. C, 67%RH 991 hPa	**TESTED BY**	Leo Hung

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
9	5745	-11.89	8	PASS
11	5785	-11.98	8	PASS
13	5825	-11.85	8	PASS

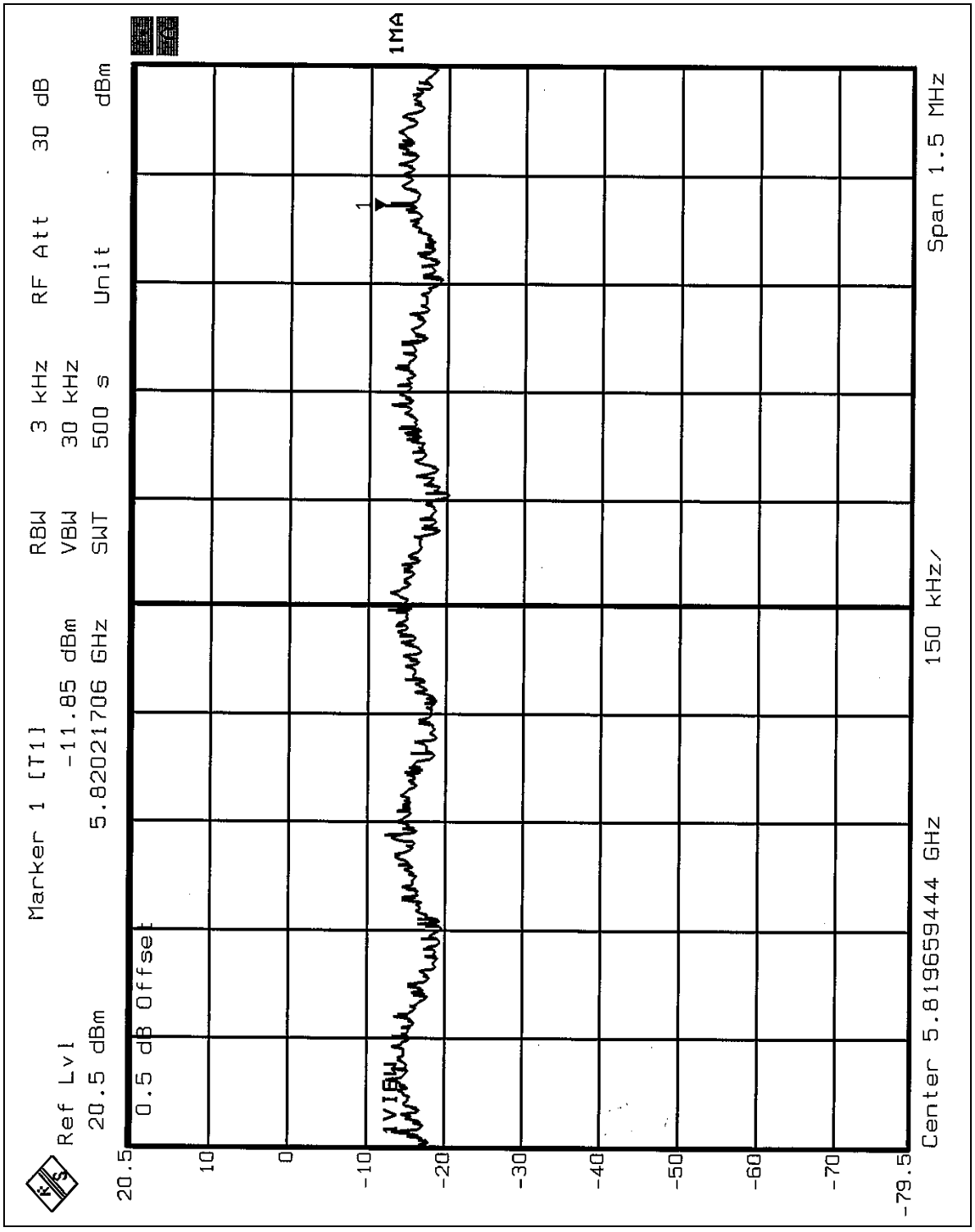
CH9


Marker 1 [T1]
-11.89 dBm
5.74059367 GHz
Ref Lvl
20.5 dBm
0.5 dB Offset
RBW 3 kHz
VBW 30 kHz
SWT 500 s
RF Att 30 dB
Unit dBm
1MA
1VIEW
Center 5.740883755 GHz
150 kHz/
Span 1.5 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

CH11


Marker 1 [T1]
-11.98 dBm
5.78873297 GHz
RBW 3 kHz
VBW 30 kHz
SWT 500 s
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
1MA
Center 5.788466934 GHz
150 kHz/
Span 1.5 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
79.5

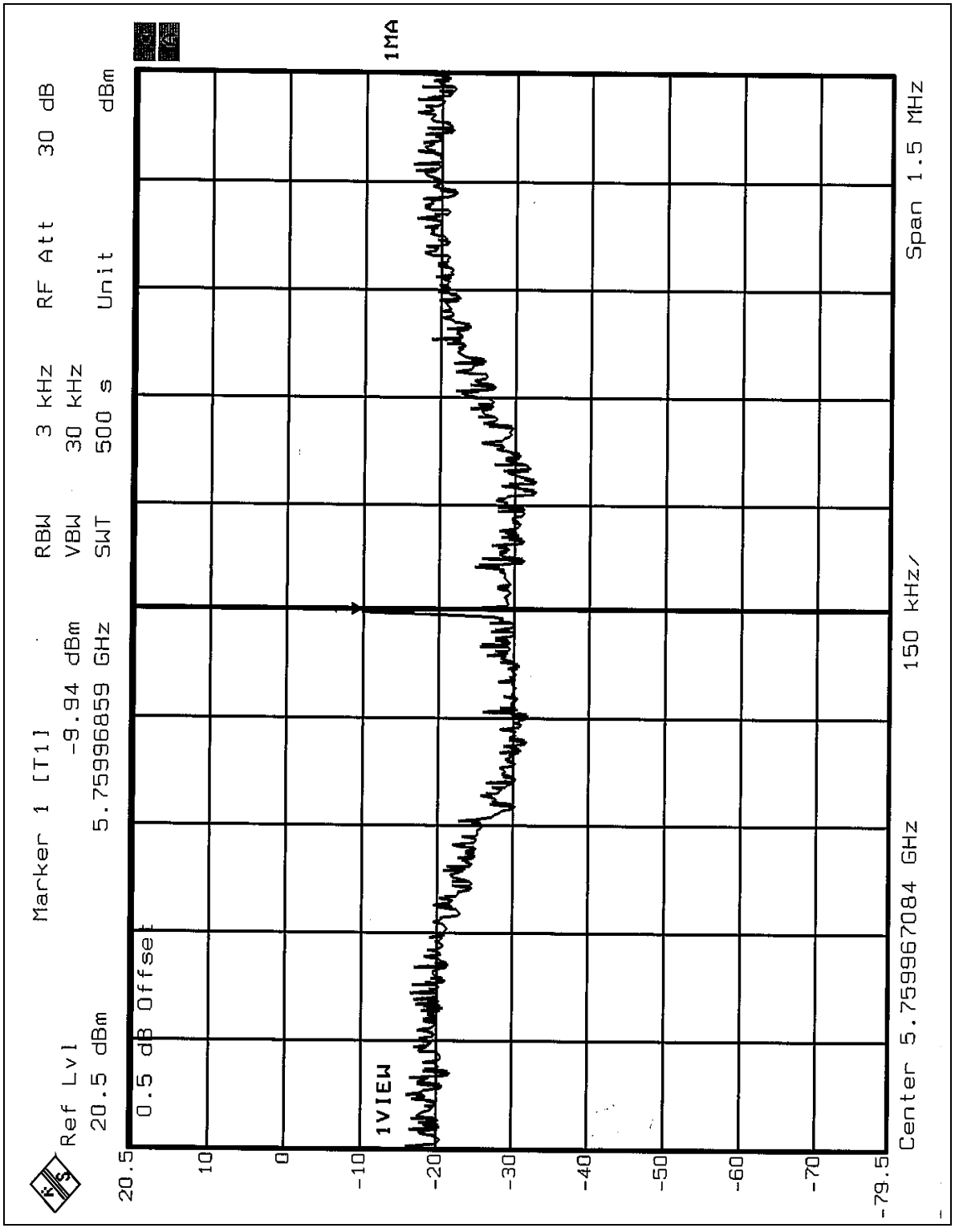
CH13


Marker 1 [T1]
-11.85 dBm
5.82021706 GHz
RBW 3 kHz
VBW 30 kHz
SWT 500 s
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
1MA
Span 1.5 MHz
150 kHz/
Center 5.819659444 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

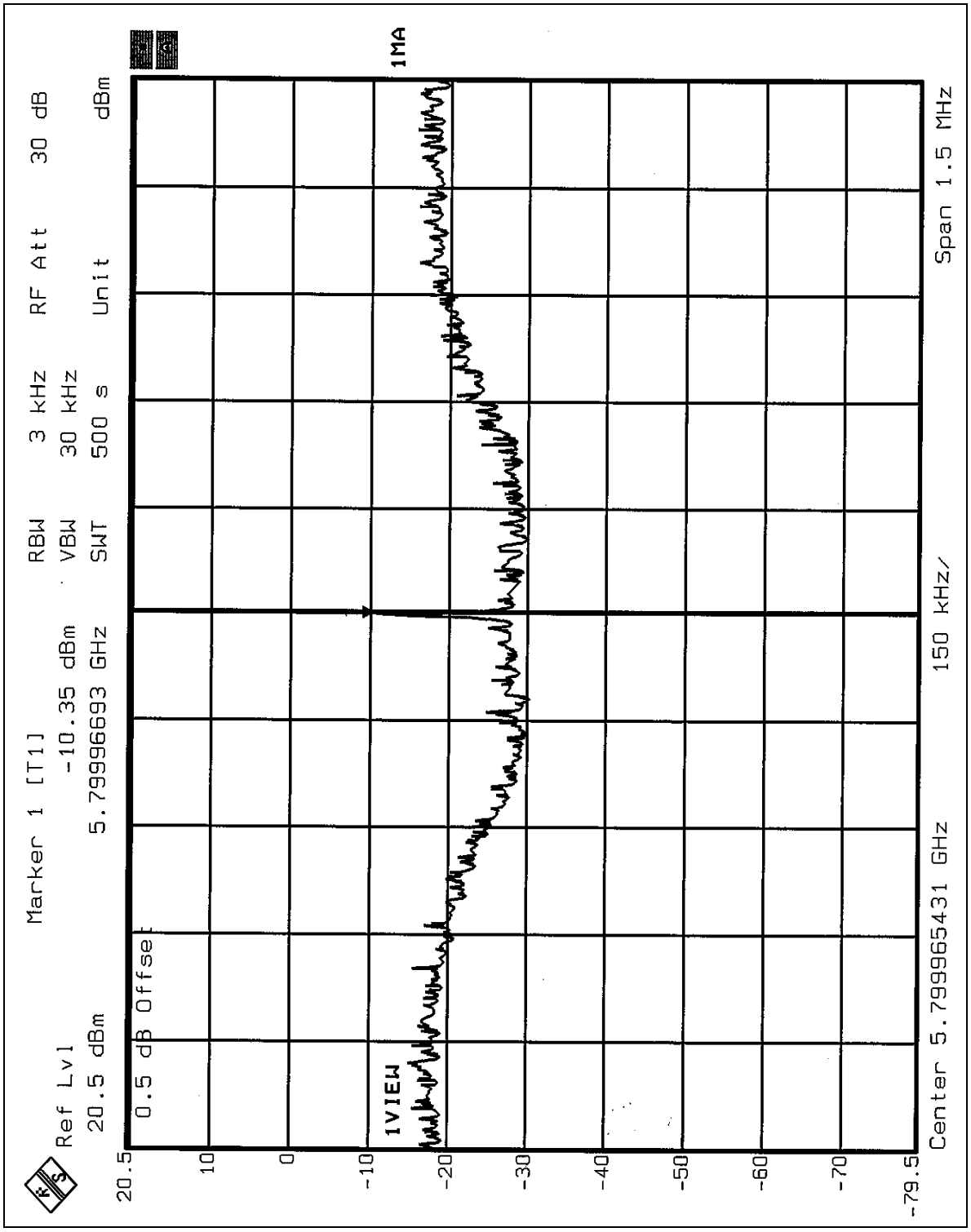
EUT	Wireless A+G Access Point	**MODEL**	WAP55AG ver. 2
MODE	Turbo	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	24deg. C, 67%RH 991 hPa	**TESTED BY**	Leo Hung

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
4	5760	-9.94	8	PASS
5	5800	-10.35	8	PASS

CH4


Marker 1 [T1]
-9.94 dBm
5.75996859 GHz
RBW 3 kHz
VBW 30 kHz
SWT 500 s
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
1VIEW
1MA
Center 5.759967084 GHz
150 kHz/
Span 1.5 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

CH5


Marker 1 [T1]
-10.35 dBm
5.79996693 GHz
RBW 3 kHz
VBW 30 kHz
SWT 500 s
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
1VIEW
1MA
Center 5.799965431 GHz
150 kHz/
Span 1.5 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

5.14 BAND EDGES MEASUREMENT

5.14.1 LIMITS OF BAND EDGES MEASUREMENT

Below –20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).

5.14.2 TEST INSTRUMENTS

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

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

5.14.3 TEST PROCEDURE

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

5.14.4 DEVIATION FROM TEST STANDARD

No deviation

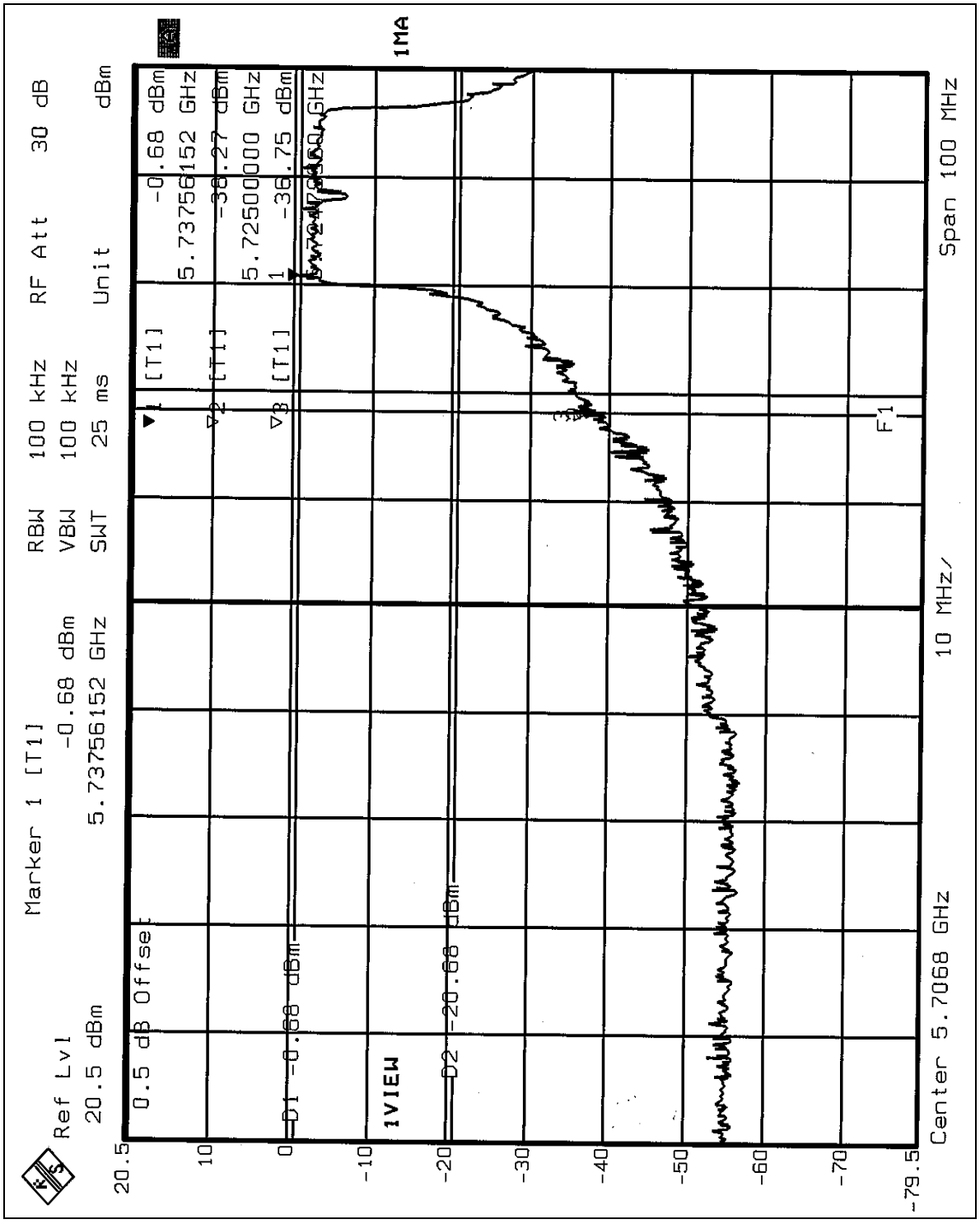
5.14.5 EUT OPERATING CONDITION

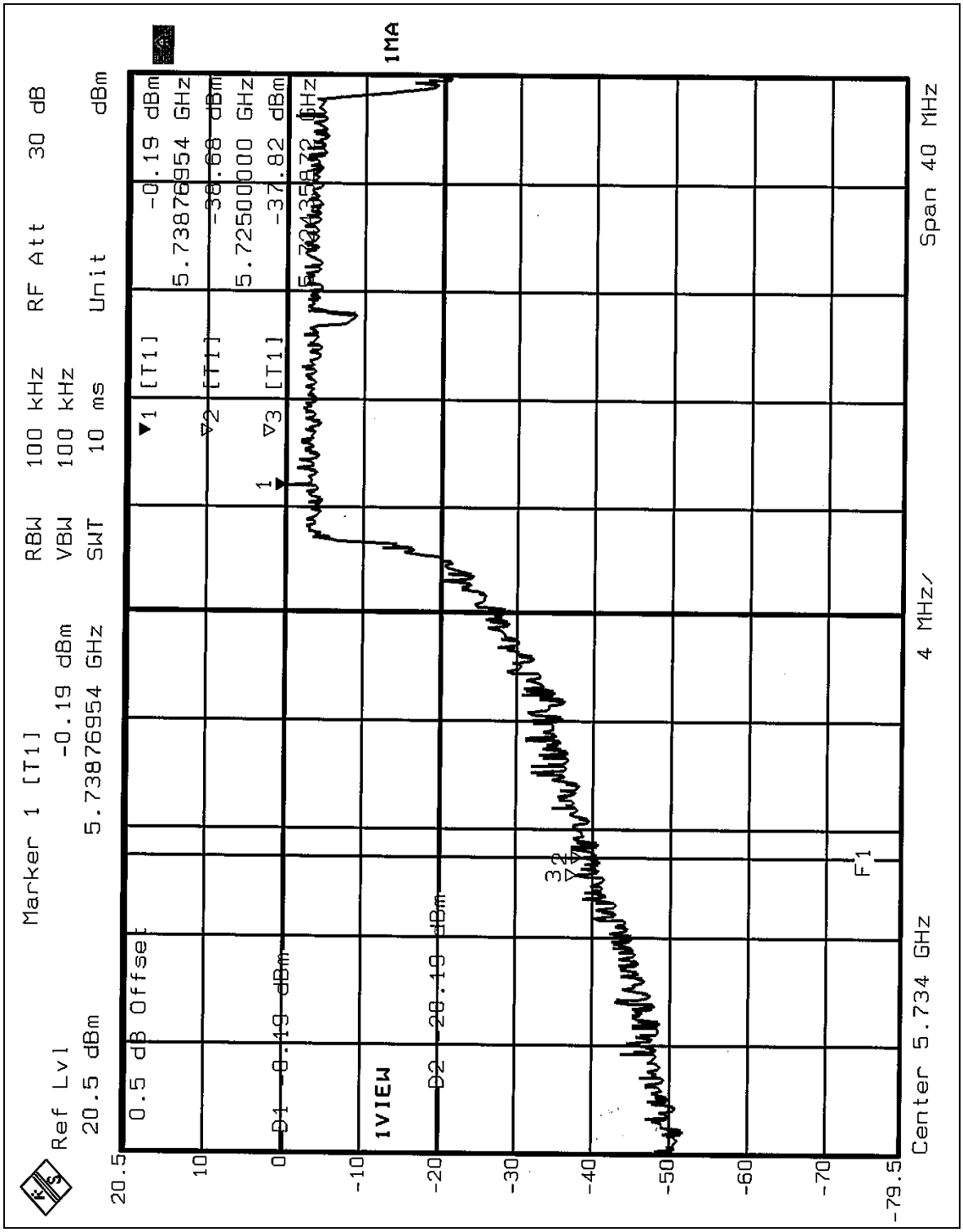
Same as Item 5.9.6

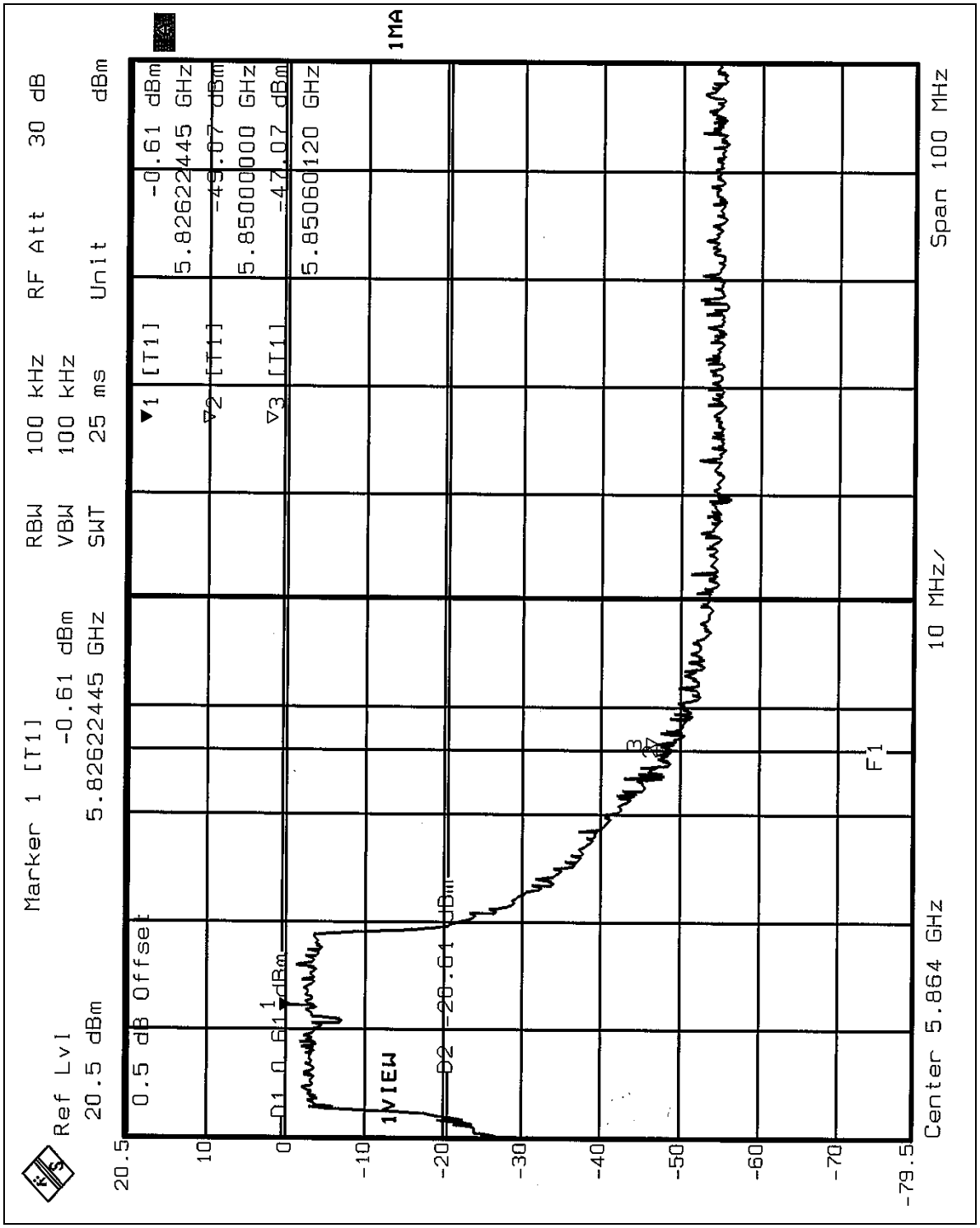
5.14.6 TEST RESULTS

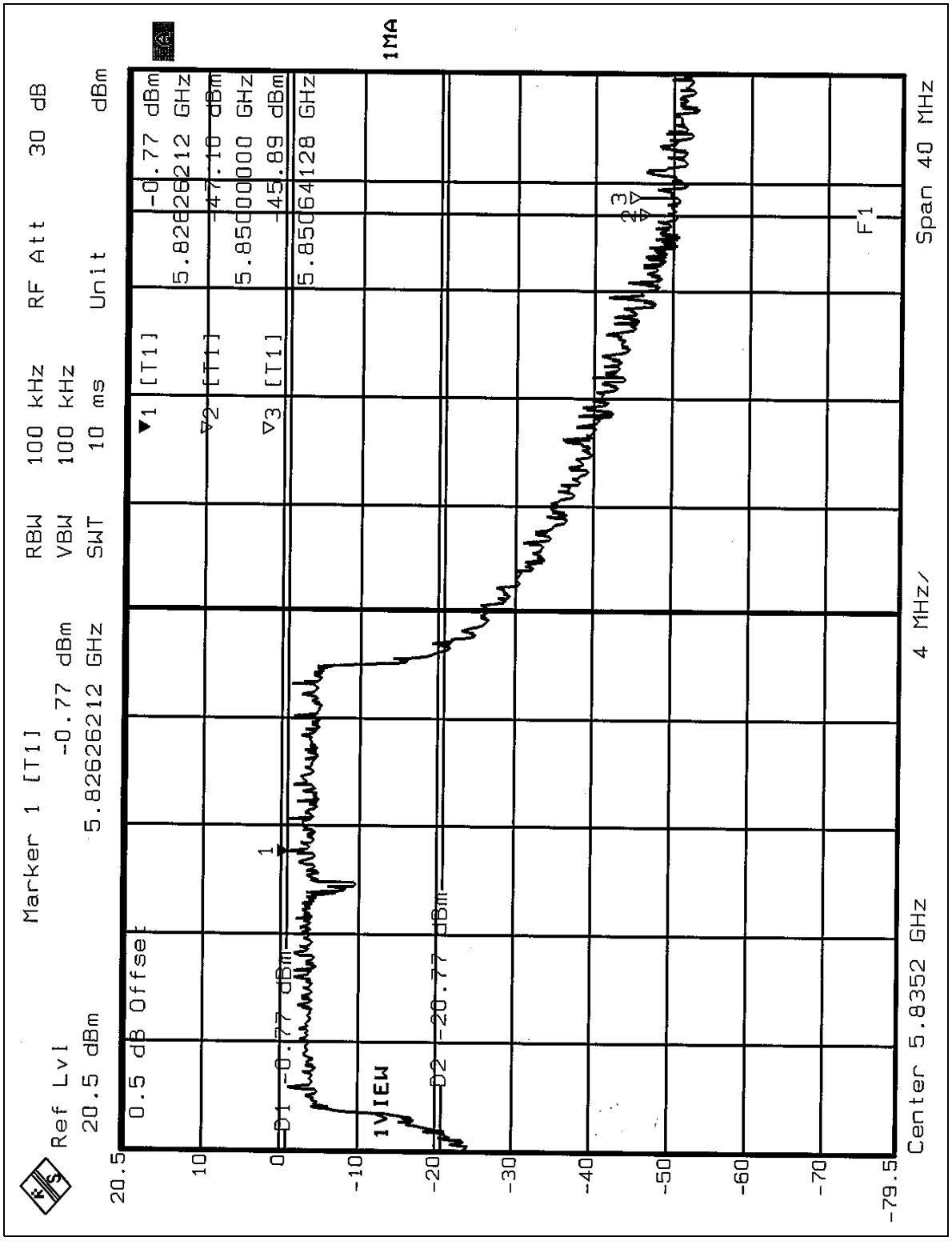
The spectrum plots are attached on the following pages. D2 line indicates the highest level, D1 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(d).

Normal Mode

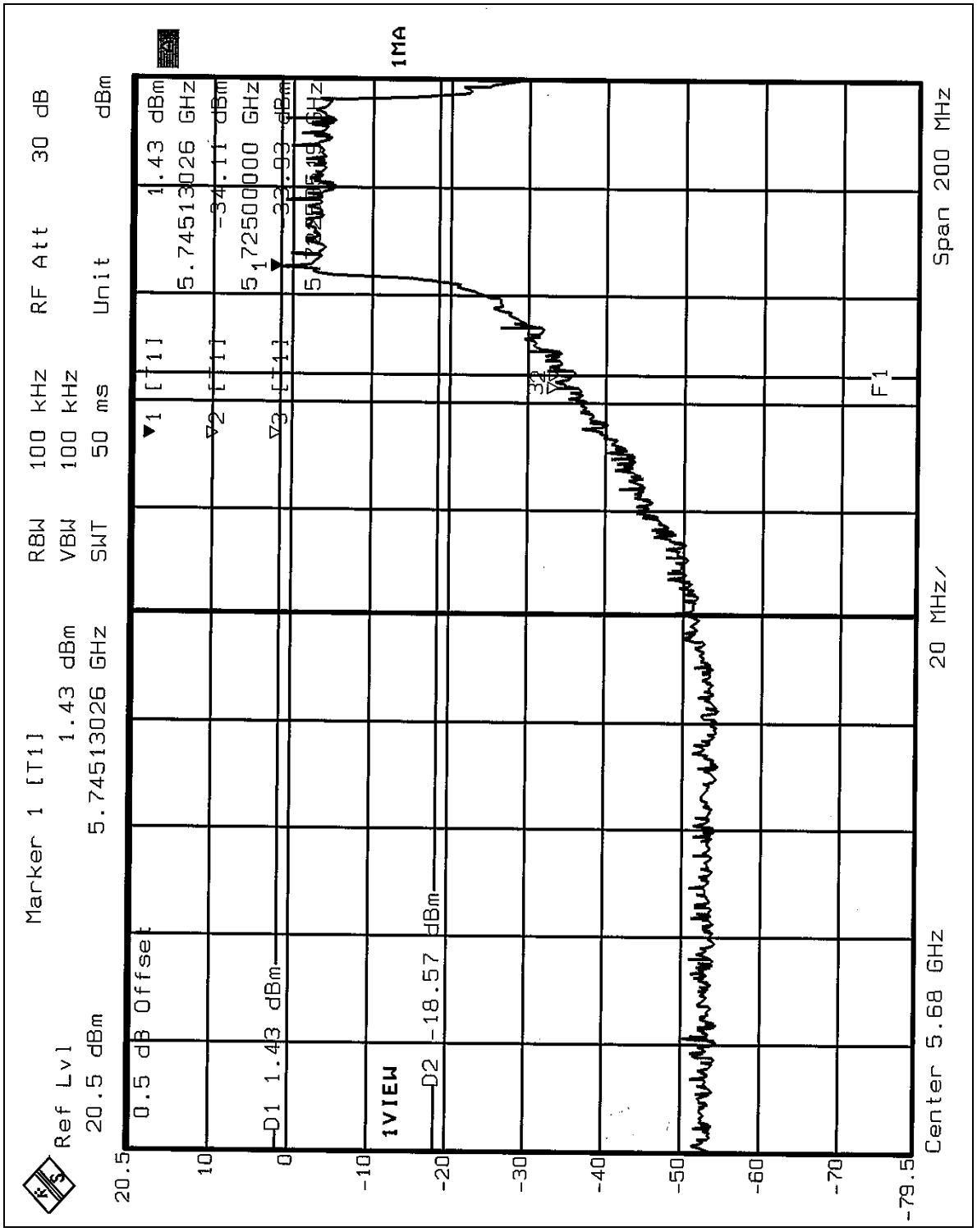

Marker 1 [T1]
-0.68 dBm
5.73756152 GHz
Ref Lvl
20.5 dBm
0.5 dB Offset
RBW 100 kHz
VBW 100 kHz
SWT 25 ms
RF Att 30 dB
Unit dBm
1MA
1VIEW
D1 -0.68 dBm
D2 -20.68 dBm
Center 5.7068 GHz
10 MHz/
Span 100 MHz
F1

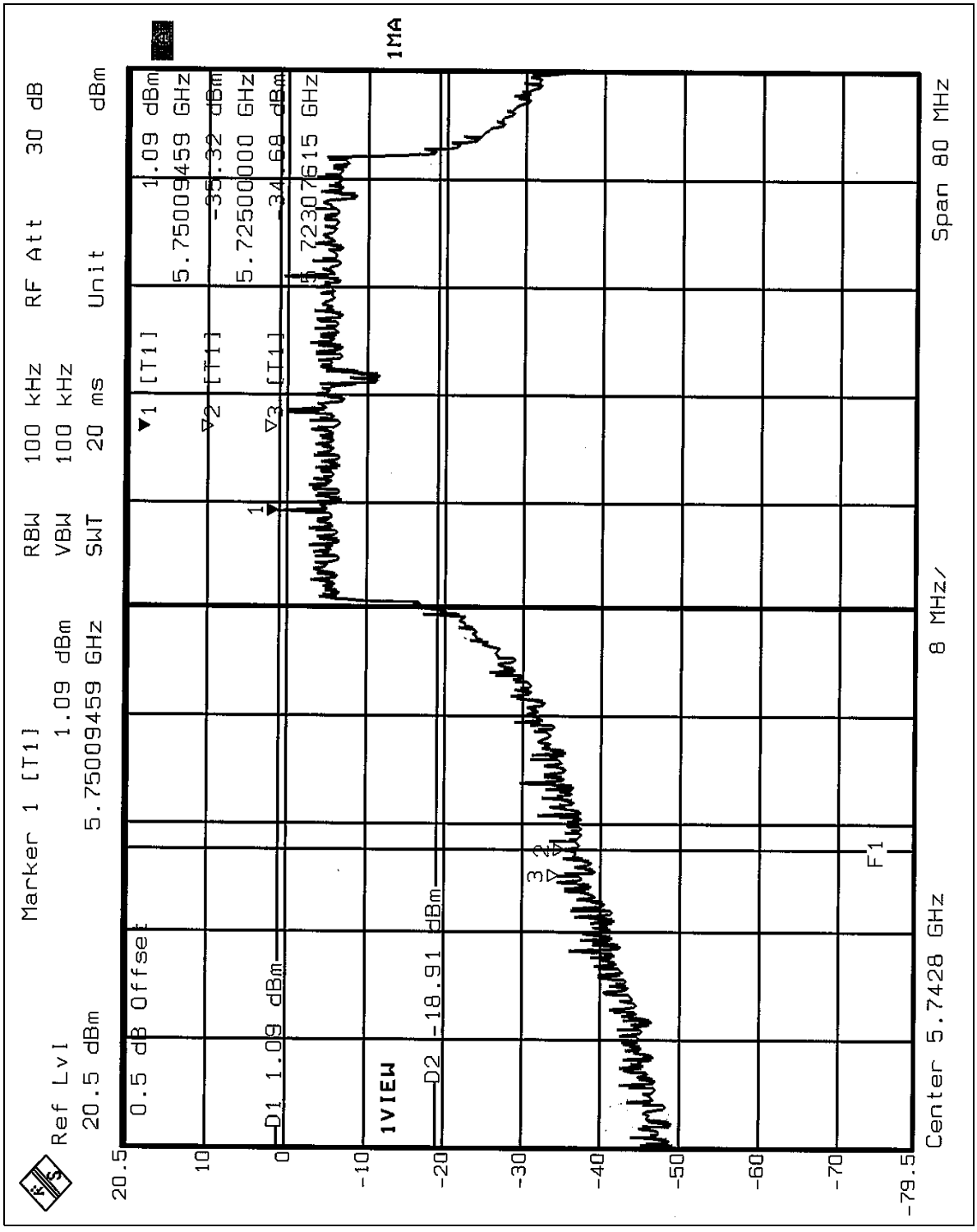

Marker 1 [T1]
-0.19 dBm
5.73876954 GHz
RBW 100 kHz
VBW 100 kHz
SWT 10 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 -0.19 dBm
D2 -20.19 dBm
1VIEW
1MA
Center 5.734 GHz
Span 40 MHz
4 MHz/
F1
1 [T1] -0.19 dBm 5.73876954 GHz
2 [T1] -38.68 dBm 5.72500000 GHz
3 [T1] -37.82 dBm 5.74358772 GHz

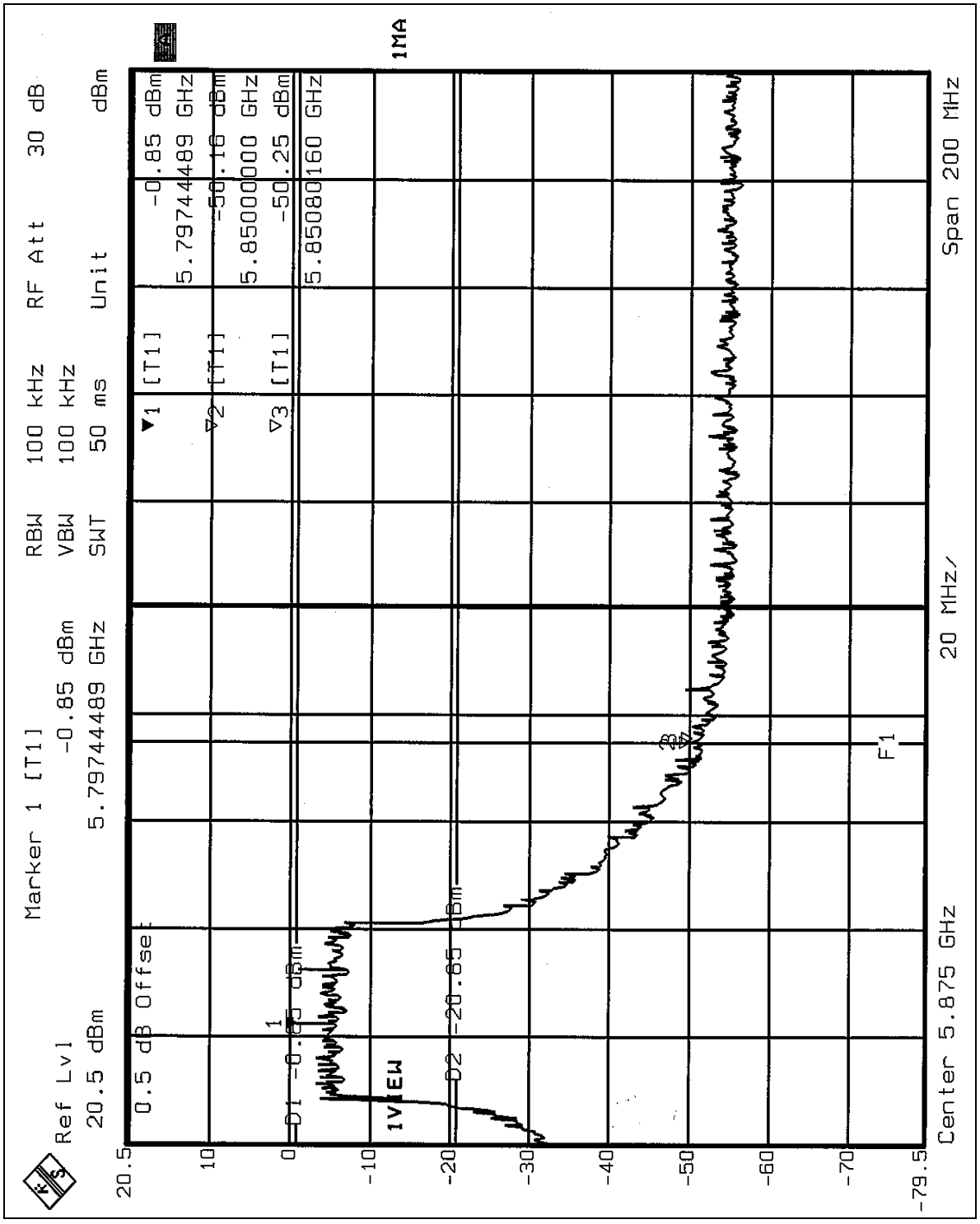

Marker 1 [T1]
-0.61 dBm
5.82622445 GHz
Ref Lvl
20.5 dBm
0.5 dB Offset
RBW 100 kHz
VBW 100 kHz
SWT 25 ms
RF Att 30 dB
Unit dBm
1MA
1VIEW
D1 -0.61 dBm
D2 -20.61 dB
Center 5.864 GHz
10 MHz/
Span 100 MHz
F1

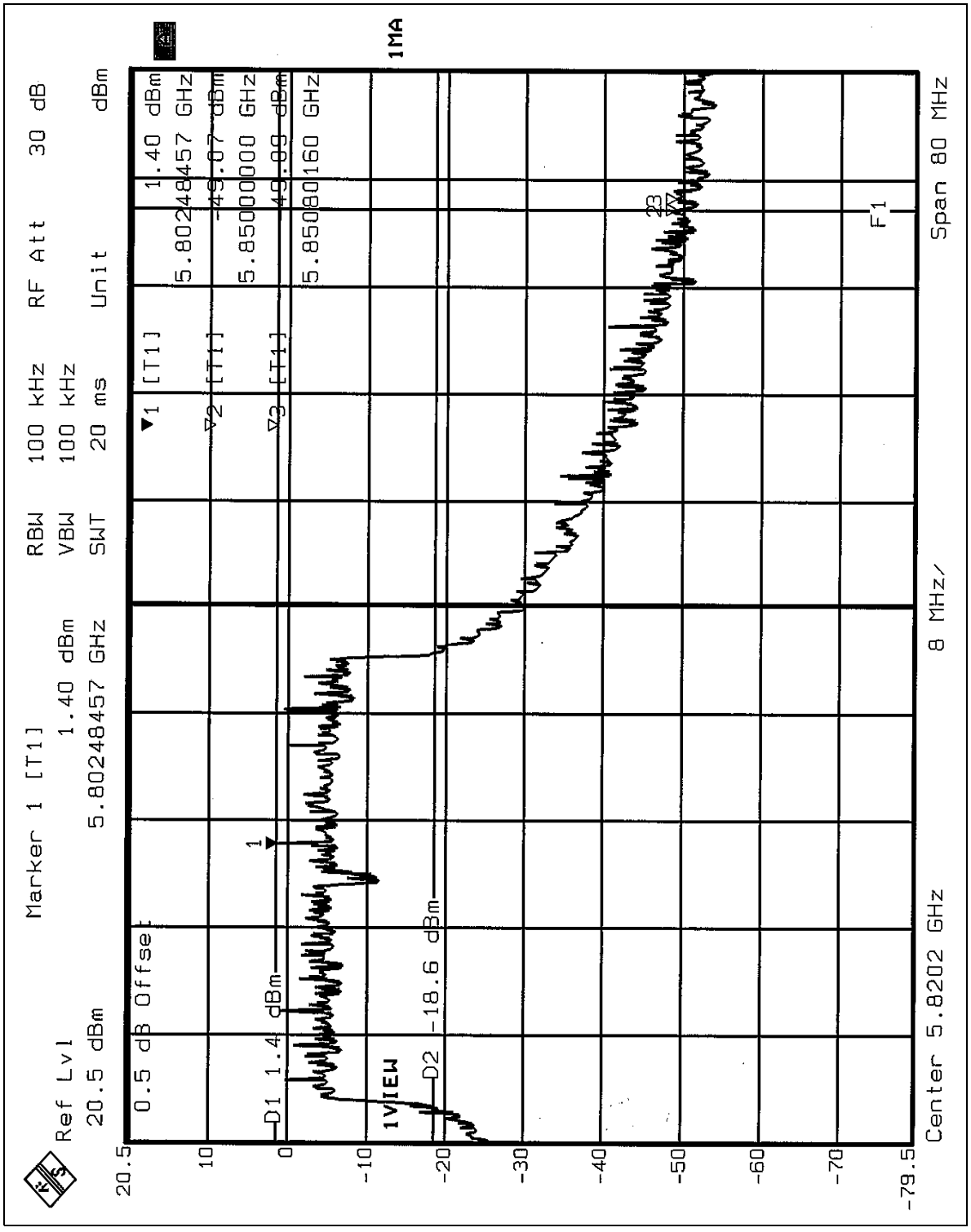

Marker 1 [T1]
-0.77 dBm
5.82626212 GHz
RBW 100 kHz
VBW 100 kHz
SWT 10 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
1MA
1VIEW
D1 -0.77 dBm
D2 -20.77 dBm
Center 5.8352 GHz
4 MHz/
Span 40 MHz

Turbo Mode


Marker 1 [T1]
1.43 dBm
5.74513026 GHz
RBW 100 kHz
VBW 100 kHz
SWT 50 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
D1 1.43 dBm
D2 -18.57 dBm
1VIEW
1MA
Center 5.68 GHz
20 MHz/
Span 200 MHz
F1


Marker 1 [T1]
1.09 dBm
5.75009459 GHz
RBW 100 kHz
VBW 100 kHz
SWT 20 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
1MA
1VIEW
D1 1.09 dBm
D2 -18.91 dBm
1 [T1] 1.09 dBm 5.75009459 GHz
2 [T1] -35.32 dBm 5.72500000 GHz
3 [T1] -34.68 dBm 5.72307615 GHz
F1
Center 5.7428 GHz
8 MHz/
Span 80 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5


Marker 1 [T1]
-0.85 dBm
5.79744489 GHz
Ref Lvl
20.5 dBm
0.5 dB Offset
RBW 100 kHz
VBW 100 kHz
SWT 50 ms
RF Att 30 dB
Unit dBm
1 [T1] -0.85 dBm 5.79744489 GHz
2 [T1] -50.16 dBm 5.85000000 GHz
3 [T1] -50.25 dBm 5.85080160 GHz
1MA
1VIEW
D1 -0.85 dBm
D2 -20.85 dBm
F1
Center 5.875 GHz
20 MHz/
Span 200 MHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5


Marker 1 [T1]
1.40 dBm
5.80248457 GHz
RBW 100 kHz
VBW 100 kHz
SWT 20 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20.5 dBm
0.5 dB Offset
1MA
1VIEW
D1 1.4 dBm
D2 -18.6 dBm
1 [T1] 1.40 dBm 5.80248457 GHz
2 [T1] -49.07 dBm 5.85000000 GHz
3 [T1] -49.03 dBm 5.85080160 GHz
Center 5.8202 GHz
8 MHz/
Span 80 MHz
F1
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5

5.15 ANTENNA REQUIREMENT

5.15.1 STANDARD APPLICABLE

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.
And according to FCC 47 CFR Section 15.247(a), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

5.15.2 ANTENNA CONNECTED CONSTRUCTION

The antenna used in this product is Dipole antenna with UFL antenna connector. The maximum Gain of the antenna is 4.0dBi.

6. PHOTOGRAPHS OF THE TEST CONFIGURATION

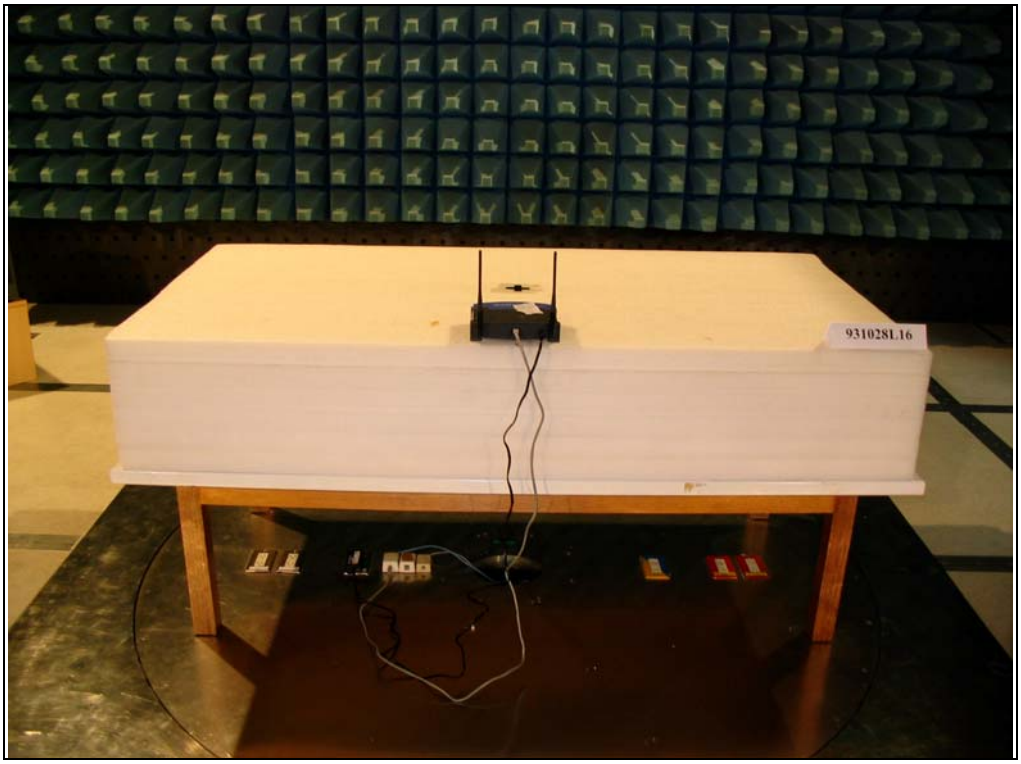
CONDUCTED EMISSION TEST

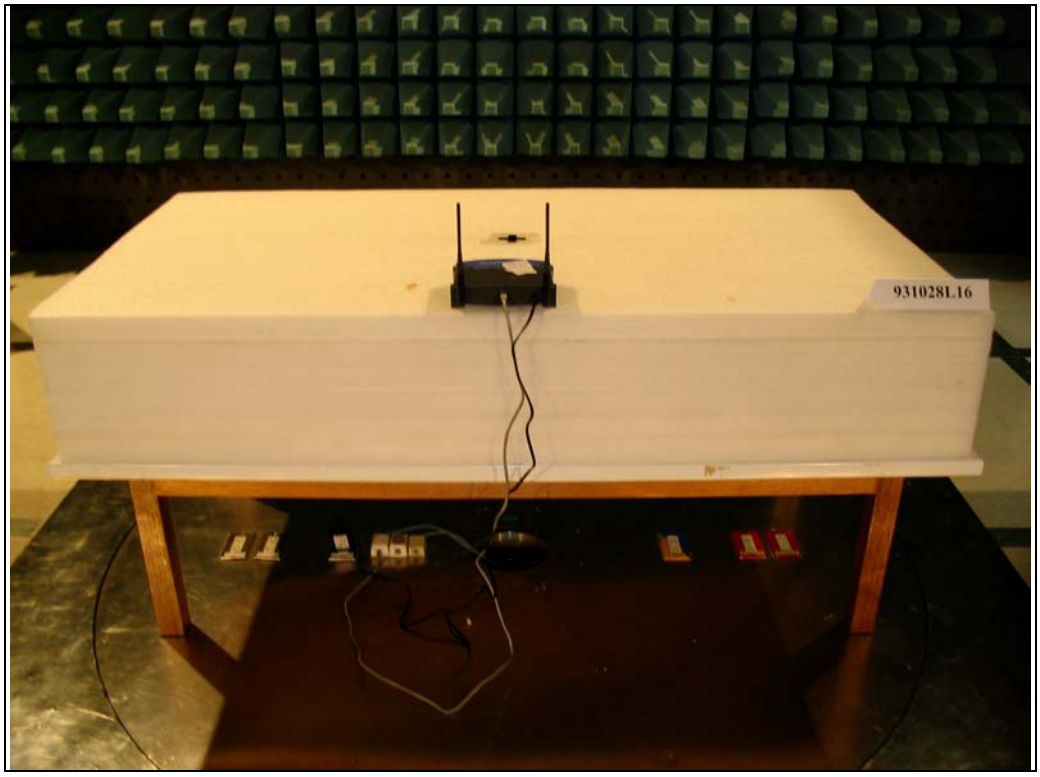
Test Mode 1

Test Mode 2

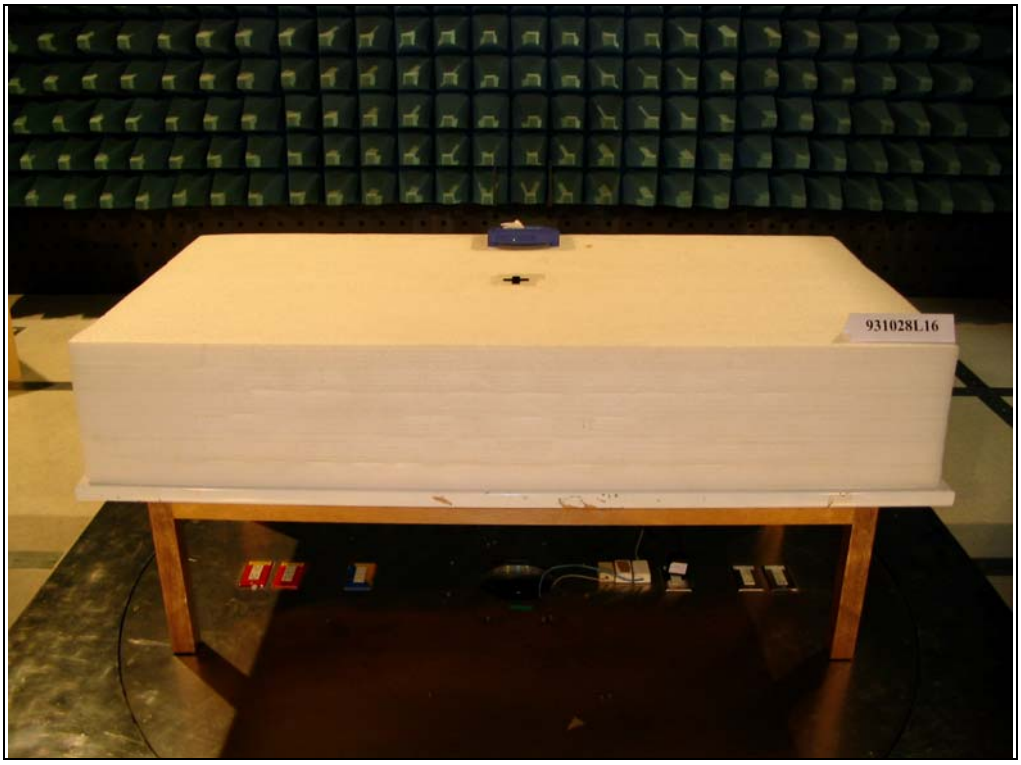
RADIATED EMISSION TEST

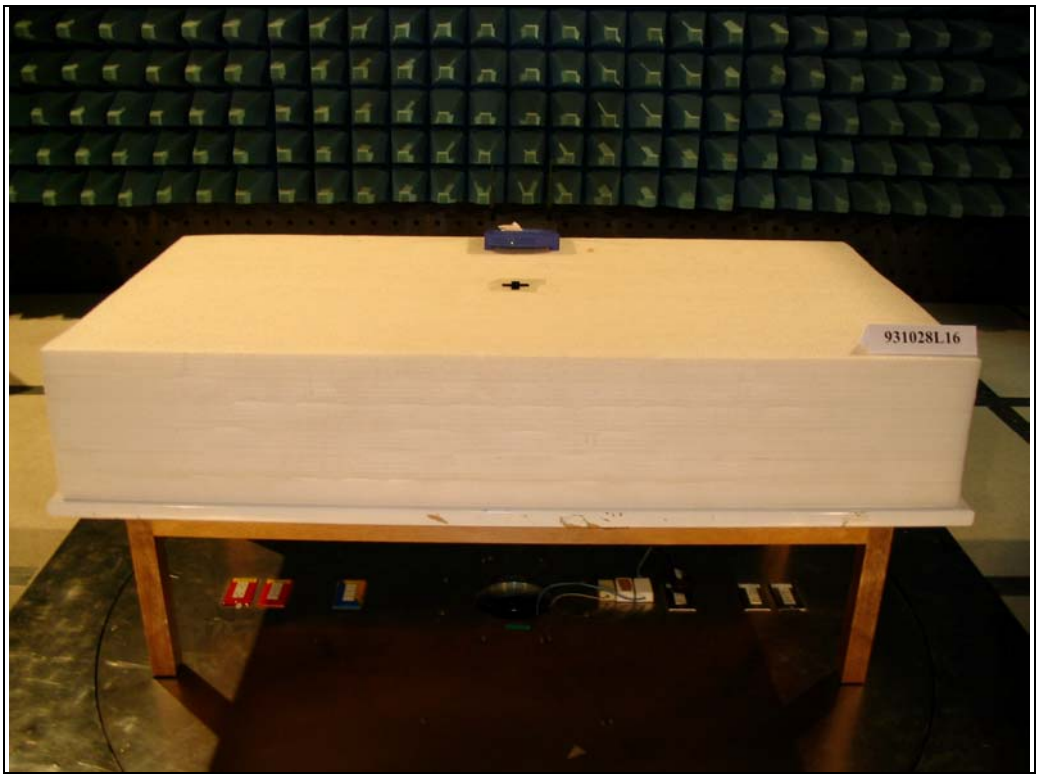
Test Mode 1





Test Mode 2





7. INFORMATION ON THE TESTING LABORATORIES

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

USA	FCC, NVLAP, UL, A2LA
Germany	TUV Rheinland
Japan	VCCI
Norway	NEMKO
Canada	INDUSTRY CANADA , CSA
R.O.C.	CNLA, BSMI, DGT
Netherlands	Telefication
Singapore	PSB , GOST-ASIA(MOU)
Russia	CERTIS(MOU)

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site: www.adt.com.tw/index.5/phtml. If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab:
Tel: 886-2-26052180
Fax: 886-2-26052943

Hsin Chu EMC/RF Lab:
Tel: 886-3-5935343
Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety Telecom Lab:
Tel: 886-3-3183232
Fax: 886-3-3185050

Linko RF Lab.
Tel: 886-3-3270910
Fax: 886-3-3270892

Web Site: www.adt.com.tw

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