



FCC TEST REPORT (15.407)

REPORT NO.: RF971031L01-1

MODEL NO.: 74-4876-04

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ISSUED: Dec. 12, 2008

APPLICANT: HON HAI Precision IND., CO., LTD.

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ISSUED BY: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

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1. CERTIFICATION

PRODUCT: 802.11 a/b/g/n MiniPCI module

MODEL: 74-4876-04

BRAND: Cisco

APPLICANT: HON HAI Precision IND., CO., LTD.

TEST SAMPLE: ENGINEERING SAMPLE

TESTED: Nov. 23 ~ Nov. 27, 2008

STANDARDS: FCC Part 15, Subpart E (Section 15.407)

ANSI C63.4-2003

The above equipment (Model: 74-4876-04) has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, 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 : Peggy Chen , **DATE:** Dec. 12, 2008
Peggy Chen / Specialist

TECHNICAL ACCEPTANCE : Long Chen , **DATE:** Dec. 12, 2008
Responsible for RF Long Chen / Senior Engineer

APPROVED BY : Gary Chang , **DATE:** Dec. 12, 2008
Gary Chang / Assistant Manager

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART E (SECTION 15.407)			
STANDARD SECTION	TEST TYPE AND LIMIT	RESULT	REMARK
15.407(b)(5)	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -25.13dB at 9.770MHz.
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 -1.17dB at 5725.00MHz.
15.407(a)(1/2/3)	Peak Transmit Power	PASS	Meet the requirement of limit.
15.407(a)(6)	Peak Power Excursion	PASS	Meet the requirement of limit.
15.407(a)(1/2/3)	Peak Power Spectral Density	PASS	Meet the requirement of limit.
15.407(g)	Frequency Stability	PASS	Meet the requirement of limit.

2.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	9kHz~30MHz	2.44 dB
Radiated emissions	30MHz ~ 200MHz	3.34 dB
	200MHz ~1000MHz	3.35 dB
	1GHz ~ 18GHz	2.26 dB
	18GHz ~ 40GHz	1.94 dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.



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3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

EUT	802.11 a/b/g/n MiniPCI module
MODEL NO.	74-4876-04
FCC ID	MCL74487604
POWER SUPPLY	5Vdc from host equipment
MODULATION TYPE	64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION TECHNOLOGY	OFDM
TRANSFER RATE	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps Draft 802.11n: up to 300.0Mbps
FREQUENCY RANGE	5.0GHz: 5180.0 ~ 5320.0MHz, 5500.0 ~ 5700.0MHz
NUMBER OF CHANNEL	5180 ~ 5320MHz: 8 for 802.11a, draft 802.11n (20MHz) 4 for draft 802.11n (40MHz) 5500 ~ 5700MHz: 8 for 802.11a, draft 802.11n (20MHz) 3 for draft 802.11n (40MHz)
OUTPUT POWER	40.507mW for 5180.0 ~ 5240.0MHz 40.741mW for 5260.0 ~ 5320.0MHz 40.461mW for 5500.0 ~ 5700.0MHz
ANTENNA TYPE	5.0GHz: Dipole antenna with 5.0dBi gain
DATA CABLE	NA
I/O PORTS	NA
ACCESSORY DEVICES	NA



NOTE:

1. The EUT is an 802.11 a/b/g/n MiniPCI module. The functions of EUT listed as below:

	TEST STANDARD	REFERENCE REPORT
WLAN 802.11b/g, draft 802.11n	FCC Part 15, Subpart C (Section 15.247)	RF971031L01
WLAN 802.11a, draft 802.11n (5745~5825 MHz)		
WLAN 802.11a, draft 802.11n (5180~ 5320MHz, 5500 ~ 5700MHz)	FCC Part 15, Subpart E (Section 15.407)	RF971031L01-1
WLAN 802.11a, draft 802.11n (5260~ 5320MHz, 5500 ~ 5700MHz) (For DFS report)	FCC Part 15, Subpart E (Section 15.407)	RF971031L01-2

2. The frequency bands used in this EUT are listed as follows:

Frequency Band (MHz)	2412~2462	5180~5320	5500 ~ 5700	5745~5825
802.11b	√	-	-	-
802.11g	√	-	-	-
802.11a	-	√	√	√
Draft 802.11n (20MHz)	√	√	√	√
Draft 802.11n (40MHz)	√	√	√	√

3. The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and three receivers.

MODULATION MODE	TX FUNCTION
802.11b	1TX
802.11g	1TX
802.11a	1TX
Draft 802.11n (20MHz)	1TX / 2TX
Draft 802.11n (40MHz)	1TX / 2TX

4. The above EUT information was declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.

3.2 DESCRIPTION OF TEST MODES

Operated in 5150 ~ 5350MHz

8 channels are provided for 802.11a, draft 802.11n (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
36	5180 MHz	52	5260 MHz
40	5200 MHz	56	5280 MHz
44	5220 MHz	60	5300 MHz
48	5240 MHz	64	5320 MHz

4 channels are provided for draft 802.11n (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	54	5270 MHz
46	5230 MHz	62	5310 MHz

Operated in 5470 ~ 5725MHz

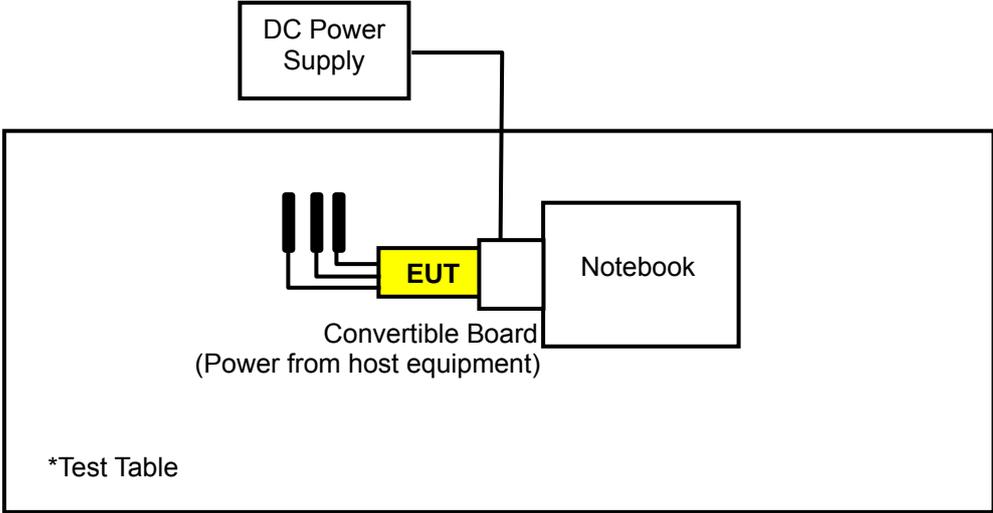
8 channels are provided for 802.11a, draft 802.11n (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
100	5500 MHz	116	5580 MHz
104	5520 MHz	132	5660 MHz
108	5540 MHz	136	5680 MHz
112	5560 MHz	140	5700 MHz

3 channels are provided for draft 802.11n (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
102	5510 MHz	134	5670 MHz
110	5550 MHz		

3.2.1 CONFIGURATION OF SYSTEM UNDER TEST





3.2.2 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE≥1G	RE<1G	PLC	APCM	
-	√	√	√	√	-

Where **RE≥1G**: Radiated Emission above 1GHz **RE<1G**: Radiated Emission below 1GHz
PLC: Power Line Conducted Emission **APCM**: Antenna Port Conducted Measurement

RADIATED EMISSION TEST (ABOVE 1GHz):

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

MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	TX FUNCTION
802.11a	5150-5350	36 to 64	36, 40, 48, 52, 60, 64	OFDM	BPSK	6.0	1TX
Draft 802.11n (20MHz)		36 to 64	36, 40, 48, 52, 60, 64	OFDM	BPSK	7.2	1TX
Draft 802.11n (20MHz)		36 to 64	36, 40, 48, 52, 60, 64	OFDM	BPSK	14.444	2TX
Draft 802.11n (40MHz)		38 to 62	38, 46, 54, 62	OFDM	BPSK	15.0	1TX
Draft 802.11n (40MHz)		38 to 62	38, 46, 54, 62	OFDM	BPSK	30.0	2TX
802.11a	5470-5725	100 to 140	100, 116, 140	OFDM	BPSK	6.0	1TX
Draft 802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	BPSK	7.2	1TX
Draft 802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	BPSK	14.444	2TX
Draft 802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	15.0	1TX
Draft 802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	30.0	2TX

RADIATED EMISSION TEST (BELOW 1GHz):

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

MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	TX FUNCTION
Draft 802.11n (20MHz)	5150-5350	36 to 64	60	OFDM	BPSK	14.444	2TX
Draft 802.11n (40MHz)	5470-5725	102 to 134	110	OFDM	BPSK	30	2TX

POWER LINE CONDUCTED EMISSION TEST:

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

MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	TX FUNCTION
Draft 802.11n (20MHz)	5150-5350	36 to 64	60	OFDM	BPSK	14.444	2TX
Draft 802.11n (40MHz)	5470-5725	102 to 134	110	OFDM	BPSK	30	2TX



BANDEDGE MEASUREMENT:

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

MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	TX FUNCTION
802.11a	5150-5350	36 to 64	36, 48, 52, 64	OFDM	BPSK	6.0	1TX
Draft 802.11n (20MHz)		36 to 64	36, 48, 52, 64	OFDM	BPSK	7.2	1TX
Draft 802.11n (20MHz)		36 to 64	36, 48, 52, 64	OFDM	BPSK	14.444	2TX
Draft 802.11n (40MHz)		38 to 62	38, 46, 54, 62	OFDM	BPSK	15.0	1TX
Draft 802.11n (40MHz)		38 to 62	38, 46, 54, 62	OFDM	BPSK	30.0	2TX
802.11a	5470-5725	100 to 140	100, 140	OFDM	BPSK	6.0	1TX
Draft 802.11n (20MHz)		100 to 140	100, 140	OFDM	BPSK	7.2	1TX
Draft 802.11n (20MHz)		100 to 140	100, 140	OFDM	BPSK	14.444	2TX
Draft 802.11n (40MHz)		102 to 134	102, 134	OFDM	BPSK	15.0	1TX
Draft 802.11n (40MHz)		102 to 134	102, 134	OFDM	BPSK	30.0	2TX

ANTENNA PORT CONDUCTED MEASUREMENT:

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

MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)	TX FUNCTION
802.11a	5150-5350	36 to 64	36, 40, 48, 52, 60, 64	OFDM	BPSK	6.0	1TX
Draft 802.11n (20MHz)		36 to 64	36, 40, 48, 52, 60, 64	OFDM	BPSK	7.2	1TX
Draft 802.11n (20MHz)		36 to 64	36, 40, 48, 52, 60, 64	OFDM	BPSK	14.444	2TX
Draft 802.11n (40MHz)		38 to 62	38, 46, 54, 62	OFDM	BPSK	15.0	1TX
Draft 802.11n (40MHz)		38 to 62	38, 46, 54, 62	OFDM	BPSK	30.0	2TX
802.11a	5470-5725	100 to 140	100, 116, 140	OFDM	BPSK	6.0	1TX
Draft 802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	BPSK	7.2	1TX
Draft 802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	BPSK	14.444	2TX
Draft 802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	15.0	1TX
Draft 802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	30.0	2TX

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart E (15.407)

ANSI C63.4-2003

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

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	HP	PC39062AA000	NA	FCC DoC Approved
2	POWER SUPPLY	TOP WARD	6306A	713585	NA

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

NOTE: 1. All power cords of the above support units are non shielded (1.8m).
 2. Item 2 was placed under testing table.

4. TEST TYPES AND RESULTS

4.1 RADIATED EMISSION MEASUREMENT

4.1.1 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.

4.1.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

Frequencies (MHz)	EIRP Limit (dBm)	Equivalent Field Strength at 3m (dBµV/m) *note 2
5150~5250	-27	68.3
5250~5350	-27	68.3
5470~5725	-27	68.3

NOTE:

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

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

4.1.3 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESIB7	100212	May 28, 2008	May 27, 2009
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100269	Aug. 08, 2008	Aug. 07, 2009
BILOG Antenna SCHWARZBECK	VULB9168	9168-156	Apr. 25, 2008	Apr. 24, 2009
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170242	Jan. 07, 2008	Jan. 06, 2009
Preamplifier Agilent	8449B	3008A01911	Sep. 10, 2008	Sep. 09, 2009
Preamplifier Agilent	8447D	2944A10634	Dec. 13, 2007	Dec. 12, 2008
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	218190/4 231241/4	May 20, 2008	May 19, 2009
RF signal cable Worken	8D-FB	Cable-HYCH9-01	Aug. 09, 2008	Aug. 08, 2009
Software	ADT_Radiated_ V7.6.15.9.2	NA	NA	NA
Antenna Tower EMCO	2070/2080	512.835.4684	NA	NA
Turn Table EMCO	2087-2.03	NA	NA	NA
Antenna Tower & Turn Table Controller EMCO	2090	NA	NA	NA
26GHz ~ 40GHz Amplifier	EM26400	07026401	Aug. 27, 2008	Aug. 26, 2009

- 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 9.
 3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
 4. The FCC Site Registration No. is 460141.
 5. The IC Site Registration No. is IC 7450F-4.

4.1.4 TEST PROCEDURES

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

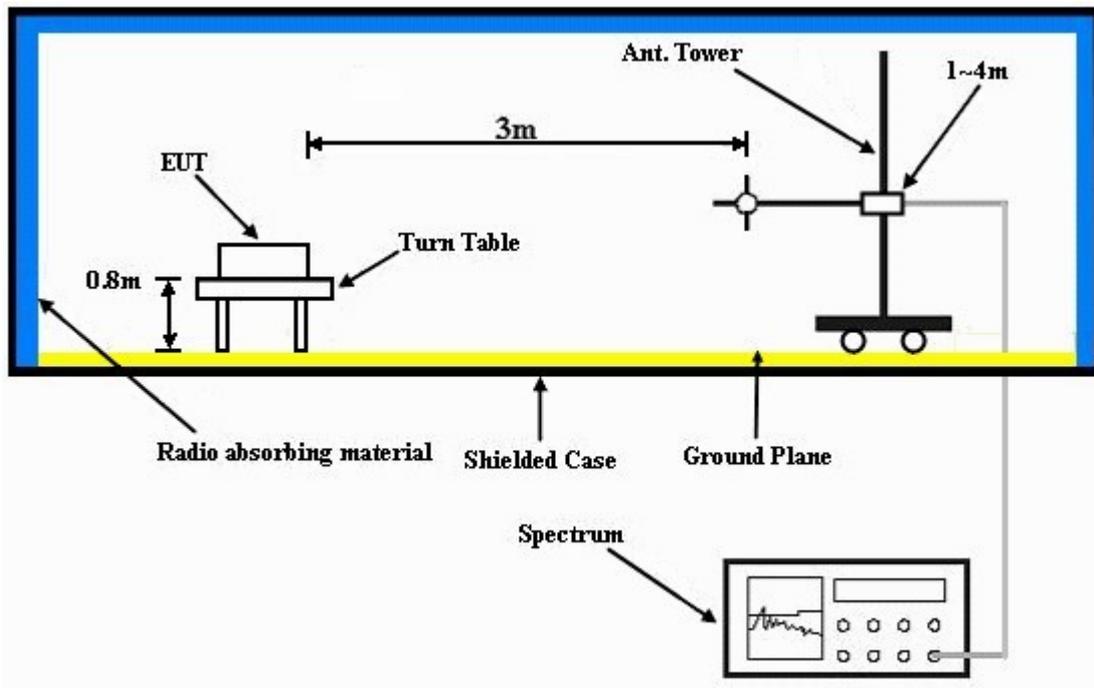
NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.5 DEVIATION FROM TEST STANDARD

No deviation

4.1.6 TEST SETUP



For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.1.7 EUT OPERATING CONDITION

- a. Plugged the EUT into the notebook system and placed on a testing table.
- b. The notebook ran a test program (provided by manufacturer) to enable all functions under transmission condition continuously at specific channel frequency.

4.1.8 TEST RESULTS

802.11a OFDM MODULATION: 1TX

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 36	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	55.10 PK	74.00	-18.90	1.00 H	41	15.35	39.75
2	5150.00	40.94 AV	54.00	-13.06	1.00 H	41	1.19	39.75
3	*5180.00	100.84 PK			1.22 H	36	61.09	39.75
4	*5180.00	90.39 AV			1.22 H	36	50.64	39.75
5	#6216.00	50.56 PK	68.30	-17.74	1.12 H	330	8.62	41.94
6	#10360.00	58.24 PK	68.30	-10.06	1.02 H	36	7.59	50.65
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	65.43 PK	74.00	-8.57	1.00 V	156	25.68	39.75
2	5150.00	50.82 AV	54.00	-3.18	1.00 V	156	11.07	39.75
3	*5180.00	110.55 PK			1.00 V	195	70.80	39.75
4	*5180.00	100.95 AV			1.00 V	195	61.20	39.75
5	#6216.00	60.40 PK	68.30	-7.90	1.09 V	183	18.46	41.94
6	#10360.00	58.82 PK	68.30	-9.48	1.06 V	261	8.17	50.65

- 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. “ * “: Fundamental frequency.
 6. “#”: The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 40	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

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	*5200.00	99.61 PK			1.00 H	51	59.86	39.75
2	*5200.00	88.82 AV			1.00 H	51	49.07	39.75
3	#6240.00	51.72 PK	68.30	-16.58	1.13 H	333	9.66	42.06
4	#10400.00	58.18 PK	68.30	-10.12	1.00 H	225	7.43	50.75
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	*5200.00	110.10 PK			1.00 V	181	70.35	39.75
2	*5200.00	99.78 AV			1.00 V	181	60.03	39.75
3	#6240.00	60.51 PK	68.30	-7.79	1.00 V	182	18.45	42.06
4	#10400.00	58.58 PK	68.30	-9.72	1.00 V	210	7.83	50.75

- 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. “ * “: Fundamental frequency.
 6. “#“: The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 48	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	100.64 PK			1.12 H	59	60.80	39.84
2	*5240.00	90.45 AV			1.12 H	59	50.61	39.84
3	#6288.00	51.82 PK	68.30	-16.48	1.00 H	201	9.52	42.30
4	#10480.00	58.89 PK	68.30	-9.41	1.00 H	22	8.01	50.88
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	110.46 PK			1.06 V	189	70.62	39.84
2	*5240.00	100.32 AV			1.06 V	189	60.48	39.84
3	#6288.00	59.40 PK	68.30	-8.90	1.13 V	209	17.10	42.30
4	#10480.00	59.37 PK	68.30	-8.93	1.02 V	203	8.49	50.88

- 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. “ * “: Fundamental frequency.
 6. “#”: The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5260.00	99.26 PK			1.05 H	52	59.37	39.89
2	*5260.00	88.97 AV			1.05 H	52	49.08	39.89
3	#6312.00	50.37 PK	68.30	-17.93	1.00 H	91	7.97	42.41
4	#10520.00	58.16 PK	68.30	-10.14	1.00 H	102	7.21	50.95
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5260.00	110.27 PK			1.00 V	52	70.38	39.89
2	*5260.00	100.22 AV			1.00 V	52	60.33	39.89
3	#6312.00	58.19 PK	68.30	-10.11	1.15 V	180	15.79	42.41
4	#10520.00	58.75 PK	68.30	-9.55	1.04 V	254	7.80	50.95

- 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. “ * “: Fundamental frequency.
 6. “#”: The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 60	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

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	*5300.00	99.06 PK			1.00 H	263	59.08	39.98
2	*5300.00	89.39 AV			1.00 H	263	49.41	39.98
3	#6360.00	52.11 PK	68.30	-16.19	1.08 H	325	9.52	42.59
4	10600.00	57.56 PK	74.00	-16.44	1.00 H	301	6.46	51.10
5	10600.00	44.56 AV	54.00	-9.44	1.00 H	301	-6.54	51.10
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	*5300.00	110.72 PK			1.02 V	186	70.74	39.98
2	*5300.00	100.24 AV			1.02 V	186	60.26	39.98
3	#6360.00	60.04 PK	68.30	-8.26	1.04 V	179	17.45	42.59
4	10600.00	59.20 PK	74.00	-14.80	1.00 V	229	8.10	51.10
5	10600.00	47.46 AV	54.00	-6.54	1.00 V	229	-3.64	51.10

- 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. “ * “: Fundamental frequency.
 6. “#”:The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

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	*5320.00	99.86 PK			1.07 H	36	59.85	40.01
2	*5320.00	89.20 AV			1.07 H	36	49.19	40.01
3	5350.00	52.30 PK	74.00	-21.70	1.15 H	37	12.25	40.05
4	5350.00	40.30 AV	54.00	-13.70	1.15 H	37	0.26	40.05
5	#6384.00	48.78 PK	68.30	-19.52	1.02 H	297	6.10	42.68
6	10640.00	58.87 PK	74.00	-15.13	1.01 H	41	7.83	51.05
7	10640.00	45.63 AV	54.00	-8.37	1.01 H	41	-5.41	51.05
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	*5320.00	110.99 PK			1.00 V	202	70.98	40.01
2	*5320.00	100.97 AV			1.00 V	202	60.96	40.01
3	5350.00	59.10 PK	74.00	-14.90	1.00 V	206	19.05	40.05
4	5350.00	45.60 AV	54.00	-8.40	1.00 V	206	5.55	40.05
5	#6384.00	56.68 PK	68.30	-11.62	1.04 V	191	14.00	42.68
6	10640.00	59.57 PK	74.00	-14.43	1.04 V	255	8.53	51.05
7	10640.00	46.37 AV	54.00	-7.63	1.04 V	255	-4.67	51.05

- 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. “ * “: Fundamental frequency.
 6. “#”:The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

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	5460.00	52.09 PK	68.30	-16.21	1.03 H	48	11.87	40.22
2	5460.00	40.11 AV	54.00	-13.89	1.03 H	48	-0.11	40.22
3	#5470.00	53.67 PK	68.30	-14.63	1.04 H	49	13.43	40.24
4	*5500.00	99.20 PK			1.06 H	33	58.90	40.30
5	*5500.00	88.51 AV			1.06 H	33	48.21	40.30
6	11000.00	58.83 PK	74.00	-15.17	1.02 H	279	7.58	51.25
7	11000.00	45.65 AV	54.00	-8.35	1.02 H	279	-5.60	51.25
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	58.98 PK	74.00	-15.02	1.00 V	292	18.76	40.22
2	5460.00	43.66 AV	54.00	-10.34	1.00 V	292	3.44	40.22
3	#5470.00	59.81 PK	68.30	-8.49	1.00 V	292	19.57	40.24
4	*5500.00	110.87 PK			1.00 V	188	70.57	40.30
5	*5500.00	100.73 AV			1.00 V	188	60.43	40.30
6	11000.00	59.06 PK	74.00	-14.94	1.00 V	302	7.81	51.25
7	11000.00	46.81 AV	54.00	-7.19	1.00 V	302	-4.44	51.25

- 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. “ * “: Fundamental frequency.
 6. “#”:The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

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	*5580.00	100.84 PK			1.00 H	203	60.33	40.51
2	*5580.00	90.73 AV			1.00 H	203	50.22	40.51
3	11160.00	59.51 PK	74.00	-14.49	1.00 H	302	7.88	51.63
4	11160.00	46.12 AV	54.00	-7.88	1.00 H	302	-5.51	51.63
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	*5580.00	110.55 PK			1.00 V	176	70.04	40.51
2	*5580.00	100.49 AV			1.00 V	176	59.98	40.51
3	11160.00	61.46 PK	74.00	-12.54	1.00 V	263	9.83	51.63
4	11160.00	47.47 AV	54.00	-6.53	1.00 V	263	-4.16	51.63

- 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. “ * “: Fundamental frequency.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 140	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

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	*5700.00	98.47 PK			1.00 H	13	57.96	40.51
2	*5700.00	89.24 AV			1.00 H	13	48.73	40.51
3	#5725.00	53.53 PK	68.30	-14.77	1.00 H	206	12.94	40.60
4	11400.00	60.65 PK	74.00	-13.35	1.02 H	62	8.76	51.89
5	11400.00	47.10 AV	54.00	-6.90	1.02 H	62	-4.79	51.89
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	*5700.00	110.78 PK			1.02 V	172	70.27	40.51
2	*5700.00	100.63 AV			1.02 V	172	60.12	40.51
3	#5725.00	65.69 PK	68.30	-2.61	1.00 V	324	25.09	40.60
4	11400.00	62.58 PK	74.00	-11.42	1.00 V	25	10.69	51.89
5	11400.00	49.84 AV	54.00	-4.16	1.00 V	25	-2.05	51.89

- 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. “ * “: Fundamental frequency.
 6. “#”: The radiated frequency is out the restricted band.



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DRAFT 802.11n (20MHz) OFDM MODULATION: 1TX

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 36	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH 998hPa	TESTED BY	Antony Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	51.44 PK	74.00	-22.56	1.00 H	249	11.69	39.75
2	5150.00	36.61 AV	54.00	-17.39	1.00 H	249	-3.14	39.75
3	*5180.00	95.29 PK			1.19 H	51	55.54	39.75
4	*5180.00	85.53 AV			1.19 H	51	45.78	39.75
5	#6216.00	49.35 PK	68.30	-18.95	1.08 H	311	7.41	41.94
6	#10360.00	58.95 PK	68.30	-9.35	1.00 H	69	8.30	50.65

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	57.22 PK	74.00	-16.78	1.02 V	229	17.47	39.75
2	5150.00	43.53 AV	54.00	-10.47	1.02 V	229	3.78	39.75
3	*5180.00	106.47 PK			1.00 V	36	66.72	39.75
4	*5180.00	96.59 AV			1.00 V	36	56.84	39.75
5	#6216.00	62.22 PK	68.30	-6.08	1.00 V	22	20.28	41.94
6	#10360.00	59.15 PK	68.30	-9.15	1.00 V	281	8.50	50.65

- 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. “ * “: Fundamental frequency.
 6. “#”: The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 40	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH 998hPa	TESTED BY	Antony Lee

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	*5200.00	97.02 PK			1.00 H	115	57.27	39.75
2	*5200.00	86.52 AV			1.00 H	115	46.77	39.75
3	#6240.00	51.23 PK	68.30	-17.07	1.08 H	302	9.17	42.06
4	#10400.00	56.88 PK	68.30	-11.42	1.00 H	102	6.13	50.75
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	*5200.00	108.58 PK			1.00 V	109	68.83	39.75
2	*5200.00	98.66 AV			1.00 V	109	58.91	39.75
3	#6240.00	62.23 PK	68.30	-6.07	1.00 V	199	20.17	42.06
4	#10400.00	57.66 PK	68.30	-10.64	1.00 V	201	6.91	50.75

- 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. “*”: Fundamental frequency.
 6. “#”: The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 48	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH 998hPa	TESTED BY	Antony Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	97.12 PK			1.04 H	42	57.28	39.84
2	*5240.00	87.26 AV			1.04 H	42	47.42	39.84
3	#6288.00	50.88 PK	68.30	-17.42	1.00 H	229	8.58	42.30
4	#10480.00	60.02 PK	68.30	-8.28	1.00 H	41	9.14	50.88
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	108.39 PK			1.01 V	96	68.55	39.84
2	*5240.00	98.52 AV			1.01 V	96	58.68	39.84
3	#6288.00	60.16 PK	68.30	-8.14	1.00 V	26	17.86	42.30
4	#10480.00	59.26 PK	68.30	-9.04	1.00 V	230	8.38	50.88

- 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. “ * “: Fundamental frequency.
 6. “#”: The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH 998hPa	TESTED BY	Antony Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5260.00	97.29 PK			1.00 H	52	57.40	39.89
2	*5260.00	87.44 AV			1.00 H	52	47.55	39.89
3	#6312.00	51.59 PK	68.30	-16.71	1.00 H	92	9.18	42.41
4	#10520.00	59.78 PK	68.30	-8.52	1.00 H	221	8.83	50.95
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5260.00	108.67 PK			1.00 V	56	68.78	39.89
2	*5260.00	98.63 AV			1.00 V	56	58.74	39.89
3	#6312.00	57.26 PK	68.30	-11.04	1.00 V	121	14.85	42.41
4	#10520.00	60.02 PK	68.30	-8.28	1.00 V	222	9.07	50.95

- 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. “ * “: Fundamental frequency.
 6. “#”: The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 60	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH 998hPa	TESTED BY	Antony Lee

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	*5300.00	97.26 PK			1.00 H	259	57.28	39.98
2	*5300.00	87.62 AV			1.00 H	259	47.64	39.98
3	#6360.00	51.89 PK	68.30	-16.41	1.05 H	326	9.30	42.59
4	10600.00	63.26 PK	74.00	-10.74	1.00 H	333	12.16	51.10
5	10600.00	43.88 AV	54.00	-10.12	1.00 H	333	-7.22	51.10
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	*5300.00	108.55 PK			1.00 V	206	68.57	39.98
2	*5300.00	98.53 AV			1.00 V	206	58.55	39.98
3	#6360.00	61.59 PK	68.30	-6.71	1.02 V	191	19.00	42.59
4	10600.00	62.19 PK	74.00	-11.81	1.00 V	233	11.09	51.10
5	10600.00	44.81 AV	54.00	-9.19	1.00 V	233	-6.29	51.10

- 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. “ * “: Fundamental frequency.
 6. “#”: The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH 998hPa	TESTED BY	Antony Lee

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	*5320.00	96.20 PK			1.00 H	211	56.19	40.01
2	*5320.00	85.67 AV			1.00 H	211	45.66	40.01
3	5350.00	48.48 PK	74.00	-25.52	1.00 H	213	8.43	40.05
4	5350.00	37.62 AV	54.00	-16.38	1.00 H	213	-2.43	40.05
5	#6384.00	46.92 PK	68.30	-21.38	1.00 H	201	4.24	42.68
6	10640.00	59.16 PK	74.00	-14.84	1.00 H	220	8.11	51.05
7	10640.00	46.92 AV	54.00	-7.08	1.00 H	220	-4.13	51.05
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	*5320.00	106.51 PK			1.00 V	310	66.50	40.01
2	*5320.00	96.88 AV			1.00 V	310	56.87	40.01
3	5350.00	53.95 PK	74.00	-20.05	1.00 V	206	13.91	40.05
4	5350.00	40.15 AV	54.00	-13.85	1.00 V	206	0.10	40.05
5	#6384.00	56.88 PK	68.30	-11.42	1.04 V	230	14.20	42.68
6	10640.00	59.26 PK	74.00	-14.74	1.00 V	200	8.21	51.05
7	10640.00	47.62 AV	54.00	-6.38	1.00 V	200	-3.43	51.05

- 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. “ * “: Fundamental frequency.
 6. “#”:The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

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	5460.00	48.92 PK	74.00	-25.08	1.10 H	48	8.70	40.22
2	5460.00	37.25 AV	54.00	-16.75	1.10 H	48	-2.97	40.22
3	#5470.00	51.33 PK	68.30	-16.97	1.10 H	52	11.09	40.24
4	*5500.00	97.36 PK			1.10 H	52	57.06	40.30
5	*5500.00	87.52 AV			1.10 H	52	47.22	40.30
6	#6600.00	51.36 PK	68.30	-16.94	1.00 H	301	7.97	43.39
7	11000.00	59.62 PK	74.00	-14.38	1.00 H	300	8.37	51.25
8	11000.00	46.92 AV	54.00	-7.08	1.00 H	300	-4.33	51.25
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	54.26 PK	74.00	-19.74	1.10 V	219	14.04	40.22
2	5460.00	40.62 AV	54.00	-13.38	1.10 V	219	0.40	40.22
3	#5470.00	57.15 PK	68.30	-11.15	1.10 V	210	16.91	40.24
4	*5500.00	108.62 PK			1.10 V	222	68.32	40.30
5	*5500.00	98.74 AV			1.10 V	222	58.44	40.30
6	#6600.00	56.02 PK	68.30	-12.28	1.02 V	136	12.63	43.39
7	11000.00	60.26 PK	74.00	-13.74	1.33 V	62	9.01	51.25
8	11000.00	47.85 AV	54.00	-6.15	1.33 V	62	-3.40	51.25

- 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. “ * “: Fundamental frequency.
 6. “#“: The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

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	*5580.00	97.79 PK			1.00 H	41	57.28	40.51
2	*5580.00	87.71 AV			1.00 H	41	47.20	40.51
3	#6696.00	51.36 PK	68.30	-16.94	1.03 H	206	7.64	43.72
4	11160.00	59.62 PK	74.00	-14.38	1.00 H	296	7.99	51.63
5	11160.00	46.11 AV	54.00	-7.89	1.00 H	296	-5.52	51.63
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	*5580.00	108.56 PK			1.06 V	188	68.05	40.51
2	*5580.00	98.71 AV			1.06 V	188	58.20	40.51
3	#6696.00	54.26 PK	68.30	-14.04	1.03 V	210	10.54	43.72
4	11160.00	59.26 PK	74.00	-14.74	1.00 V	89	7.63	51.63
5	11160.00	47.88 AV	54.00	-6.12	1.00 V	89	-3.75	51.63

- 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. “ * “: Fundamental frequency.
 6. “#”:The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 140	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

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	*5700.00	97.49 PK			1.00 H	36	56.98	40.51
2	*5700.00	87.62 AV			1.00 H	36	47.11	40.51
3	#5725.00	52.04 PK	68.30	-16.26	1.00 H	39	11.44	40.60
4	#6840.00	52.30 PK	68.30	-16.00	1.05 H	296	8.04	44.26
5	11400.00	59.62 PK	74.00	-14.38	1.08 H	344	7.73	51.89
6	11400.00	46.95 AV	54.00	-7.05	1.08 H	344	-4.94	51.89
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	*5700.00	108.42 PK			1.05 V	55	67.91	40.51
2	*5700.00	98.49 AV			1.05 V	55	57.98	40.51
3	#5725.00	64.88 PK	68.30	-3.42	1.04 V	51	24.28	40.60
4	#6840.00	51.96 PK	68.30	-16.34	1.08 V	311	7.70	44.26
5	11400.00	60.26 PK	74.00	-13.74	1.20 V	190	8.37	51.89
6	11400.00	46.78 AV	54.00	-7.22	1.20 V	190	-5.11	51.89

- 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. “ * “: Fundamental frequency.
 6. “#”:The radiated frequency is out the restricted band.

DRAFT 802.11n (20MHz) OFDM MODULATION: 2TX

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 36	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH 998hPa	TESTED BY	Antony Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	54.11 PK	74.00	-19.89	1.00 H	236	14.36	39.75
2	5150.00	39.85 AV	54.00	-14.15	1.00 H	236	0.10	39.75
3	*5180.00	96.87 PK			1.20 H	49	57.12	39.75
4	*5180.00	86.94 AV			1.20 H	49	47.19	39.75
5	#6216.00	50.46 PK	68.30	-17.84	1.11 H	302	8.52	41.94
6	#10360.00	57.95 PK	68.30	-10.35	1.01 H	54	7.30	50.65
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	60.27 PK	74.00	-13.73	1.04 V	222	20.52	39.75
2	5150.00	46.16 AV	54.00	-7.84	1.04 V	222	6.41	39.75
3	*5180.00	107.96 PK			1.00 V	41	68.21	39.75
4	*5180.00	98.53 AV			1.00 V	41	58.78	39.75
5	#6216.00	61.20 PK	68.30	-7.10	1.06 V	19	19.26	41.94
6	#10360.00	57.95 PK	68.30	-10.35	1.00 V	263	7.30	50.65

- 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. “ * “: Fundamental frequency.
 6. “#”:The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 40	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

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	*5200.00	98.75 PK			1.00 H	102	59.00	39.75
2	*5200.00	88.69 AV			1.00 H	102	48.94	39.75
3	#6240.00	50.16 PK	68.30	-18.14	1.10 H	236	8.10	42.06
4	#10400.00	56.71 PK	68.30	-11.59	1.00 H	223	5.96	50.75
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	*5200.00	109.84 PK			1.02 V	102	70.09	39.75
2	*5200.00	99.92 AV			1.02 V	102	60.17	39.75
3	#6240.00	61.63 PK	68.30	-6.67	1.00 V	183	19.57	42.06
4	#10400.00	57.07 PK	68.30	-11.23	1.00 V	206	6.32	50.75

- 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. “ * “: Fundamental frequency.
 6. “#“: The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 48	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	99.08 PK			1.06 H	39	59.24	39.84
2	*5240.00	89.35 AV			1.06 H	39	49.51	39.84
3	#6288.00	50.50 PK	68.30	-17.80	1.00 H	230	8.20	42.30
4	#10480.00	59.92 PK	68.30	-8.38	1.02 H	33	9.04	50.88
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	110.19 PK			1.02 V	88	70.35	39.84
2	*5240.00	99.74 AV			1.02 V	88	59.90	39.84
3	#6288.00	59.19 PK	68.30	-9.11	1.06 V	211	16.89	42.30
4	#10480.00	58.25 PK	68.30	-10.05	1.00 V	210	7.37	50.88

- 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. “*”: Fundamental frequency.
 6. “#”: The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5260.00	99.25 PK			1.00 H	49	59.36	39.89
2	*5260.00	89.04 AV			1.00 H	49	49.15	39.89
3	#6312.00	51.60 PK	68.30	-16.70	1.00 H	88	9.19	42.41
4	#10520.00	58.39 PK	68.30	-9.91	1.00 H	201	7.44	50.95
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5260.00	110.03 PK			1.00 V	49	70.14	39.89
2	*5260.00	99.65 AV			1.00 V	49	59.76	39.89
3	#6312.00	57.49 PK	68.30	-10.81	1.00 V	105	15.08	42.41
4	#10520.00	59.02 PK	68.30	-9.28	1.01 V	215	8.07	50.95

- 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. “ * “: Fundamental frequency.
 6. “#”: The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 60	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

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	*5300.00	98.72 PK			1.00 H	266	58.74	39.98
2	*5300.00	89.13 AV			1.00 H	266	49.15	39.98
3	#6360.00	51.78 PK	68.30	-16.52	1.07 H	311	9.19	42.59
4	10600.00	62.85 PK	74.00	-11.15	1.00 H	322	11.75	51.10
5	10600.00	43.96 AV	54.00	-10.04	1.00 H	322	-7.14	51.10
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	*5300.00	109.74 PK			1.01 V	191	69.76	39.98
2	*5300.00	99.52 AV			1.01 V	191	59.54	39.98
3	#6360.00	61.97 PK	68.30	-6.33	1.03 V	188	19.38	42.59
4	10600.00	61.43 PK	74.00	-12.57	1.00 V	231	10.33	51.10
5	10600.00	44.29 AV	54.00	-9.71	1.00 V	231	-6.81	51.10

- 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. “ * “: Fundamental frequency.
 6. “#”:The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

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	*5320.00	96.68 PK			1.00 H	203	56.67	40.01
2	*5320.00	86.84 AV			1.00 H	203	46.83	40.01
3	5350.00	51.41 PK	74.00	-22.59	1.00 H	206	11.36	40.05
4	5350.00	41.30 AV	54.00	-12.70	1.00 H	206	1.25	40.05
5	#6384.00	47.86 PK	68.30	-20.44	1.00 H	201	5.18	42.68
6	10640.00	58.47 PK	74.00	-15.53	1.00 H	201	7.43	51.05
7	10640.00	45.15 AV	54.00	-8.85	1.00 H	201	-5.89	51.05
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	*5320.00	107.77 PK			1.00 V	302	67.76	40.01
2	*5320.00	97.62 AV			1.00 V	302	57.61	40.01
3	5350.00	56.08 PK	74.00	-17.92	1.00 V	201	16.03	40.05
4	5350.00	43.92 AV	54.00	-10.08	1.00 V	201	3.87	40.05
5	#6384.00	57.86 PK	68.30	-10.44	1.05 V	201	15.18	42.68
6	10640.00	58.48 PK	74.00	-15.52	1.00 V	203	7.44	51.05
7	10640.00	46.16 AV	54.00	-7.84	1.00 V	203	-4.89	51.05

- 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. “ * “: Fundamental frequency.
 6. “#”:The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

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	5460.00	51.09 PK	74.00	-22.91	1.15 H	36	10.87	40.22
2	5460.00	40.21 AV	54.00	-13.79	1.15 H	36	-0.01	40.22
3	#5470.00	53.87 PK	68.30	-14.43	1.15 H	36	13.63	40.24
4	*5500.00	99.87 PK			1.15 H	36	59.57	40.30
5	*5500.00	89.73 AV			1.15 H	36	49.43	40.30
6	#6600.00	51.23 PK	68.30	-17.07	1.00 H	360	7.84	43.39
7	11000.00	59.09 PK	74.00	-14.91	1.00 H	300	7.84	51.25
8	11000.00	45.67 AV	54.00	-8.33	1.00 H	300	-5.58	51.25

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	57.08 PK	74.00	-16.92	1.17 V	220	16.86	40.22
2	5460.00	43.74 AV	54.00	-10.26	1.17 V	220	3.52	40.22
3	#5470.00	59.96 PK	68.30	-8.34	1.16 V	219	19.72	40.24
4	*5500.00	110.05 PK			1.17 V	220	69.75	40.30
5	*5500.00	99.84 AV			1.17 V	220	59.54	40.30
6	#6600.00	55.00 PK	68.30	-13.30	1.19 V	133	11.61	43.39
7	11000.00	59.52 PK	74.00	-14.48	1.35 V	25	8.27	51.25
8	11000.00	46.67 AV	54.00	-7.33	1.35 V	25	-4.58	51.25

- 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. “ * “: Fundamental frequency.
 6. “#“: The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

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	*5580.00	98.96 PK			1.00 H	38	58.45	40.51
2	*5580.00	88.75 AV			1.00 H	38	48.24	40.51
3	#6696.00	50.69 PK	68.30	-17.61	1.04 H	190	6.97	43.72
4	11160.00	58.88 PK	74.00	-15.12	1.00 H	300	7.25	51.63
5	11160.00	45.67 AV	54.00	-8.33	1.00 H	300	-5.96	51.63
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	*5580.00	110.11 PK			1.05 V	176	69.60	40.51
2	*5580.00	99.82 AV			1.05 V	176	59.31	40.51
3	#6696.00	53.75 PK	68.30	-14.55	1.04 V	220	10.03	43.72
4	11160.00	59.68 PK	74.00	-14.32	1.05 V	94	8.05	51.63
5	11160.00	46.20 AV	54.00	-7.80	1.05 V	94	-5.43	51.63

- 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. “ * “: Fundamental frequency.
 6. “#”:The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 140	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

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	*5700.00	98.46 PK			1.00 H	40	57.95	40.51
2	*5700.00	88.15 AV			1.00 H	40	47.64	40.51
3	#5725.00	55.74 PK	68.30	-12.55	1.00 H	40	15.15	40.60
4	#6840.00	52.20 PK	68.30	-16.10	1.10 H	300	7.94	44.26
5	11400.00	59.46 PK	74.00	-14.54	1.20 H	350	7.57	51.89
6	11400.00	46.03 AV	54.00	-7.97	1.20 H	350	-5.86	51.89
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	*5700.00	109.52 PK			1.05 V	47	69.01	40.51
2	*5700.00	99.27 AV			1.05 V	47	58.76	40.51
3	#5725.00	67.12 PK	68.30	-1.17	1.05 V	48	26.53	40.60
4	#6840.00	52.49 PK	68.30	-15.81	1.24 V	325	8.23	44.26
5	11400.00	60.41 PK	74.00	-13.59	1.20 V	188	8.52	51.89
6	11400.00	46.37 AV	54.00	-7.63	1.20 V	188	-5.52	51.89

- 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. “ * “: Fundamental frequency.
 6. “#”:The radiated frequency is out the restricted band.

DRAFT 802.11n (40MHz) OFDM MODULATION: 1TX

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 38	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	50.97 PK	74.00	-23.03	1.21 H	35	11.22	39.75
2	5150.00	38.07 AV	54.00	-15.93	1.21 H	35	-1.68	39.75
3	*5190.00	91.41 PK			1.21 H	35	51.66	39.75
4	*5190.00	80.11 AV			1.21 H	35	40.36	39.75
5	#6228.00	50.10 PK	68.30	-18.20	1.39 H	221	8.10	42.00
6	#10380.00	58.18 PK	68.30	-10.12	1.00 H	10	7.48	50.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	60.13 PK	74.00	-13.87	1.05 V	218	20.38	39.75
2	5150.00	49.02 AV	54.00	-4.98	1.05 V	218	9.27	39.75
3	*5190.00	103.31 PK			1.04 V	201	63.56	39.75
4	*5190.00	92.55 AV			1.04 V	201	52.80	39.75
5	#6228.00	59.23 PK	68.30	-9.07	1.08 V	175	17.23	42.00
6	#10380.00	58.16 PK	68.30	-10.14	1.00 V	355	7.46	50.70

- 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. “ * “: Fundamental frequency.
 6. “#”:The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 46	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

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	*5230.00	93.12 PK			1.28 H	88	53.30	39.82
2	*5230.00	82.66 AV			1.28 H	88	42.84	39.82
3	#6276.00	49.74 PK	68.30	-18.56	1.27 H	199	7.50	42.24
4	#10380.00	57.62 PK	68.30	-10.68	1.14 H	10	6.92	50.70
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	*5230.00	105.56 PK			1.02 V	203	65.74	39.82
2	*5230.00	95.35 AV			1.02 V	203	55.53	39.82
3	#6276.00	57.96 PK	68.30	-10.34	1.31 V	199	15.72	42.24
4	#10460.00	58.39 PK	68.30	-9.91	1.19 V	180	7.54	50.85

- 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. “ * “: Fundamental frequency.
 6. “#”: The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 54	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

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	*5270.00	93.67 PK			1.19 H	47	53.76	39.91
2	*5270.00	82.31 AV			1.19 H	47	42.40	39.91
3	#6324.00	50.96 PK	68.30	-17.34	1.23 H	180	8.51	42.45
4	#10540.00	58.38 PK	68.30	-9.92	1.04 H	355	7.39	50.99
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	*5270.00	105.25 PK			1.08 V	318	65.34	39.91
2	*5270.00	94.56 AV			1.08 V	318	54.65	39.91
3	#6324.00	59.17 PK	68.30	-9.13	1.09 V	199	16.72	42.45
4	#10540.00	58.32 PK	68.30	-9.98	1.06 V	299	7.34	50.99

- 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. “ * “: Fundamental frequency.
 6. “#”:The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 62	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

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	*5310.00	91.37 PK			1.00 H	120	51.38	39.99
2	*5310.00	80.55 AV			1.00 H	120	40.56	39.99
3	5350.00	46.98 PK	74.00	-27.02	1.20 H	36	6.93	40.05
4	5350.00	35.34 AV	54.00	-18.66	1.20 H	36	-4.71	40.05
5	#6372.00	49.83 PK	68.30	-18.47	1.17 H	300	7.20	42.63
6	10620.00	58.74 PK	74.00	-15.26	1.10 H	190	7.67	51.07
7	10620.00	45.06 AV	54.00	-8.94	1.10 H	190	-6.01	51.07
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	103.66 PK			1.01 V	212	63.67	39.99
2	*5310.00	93.01 AV			1.01 V	212	53.02	39.99
3	5350.00	56.14 PK	74.00	-17.86	1.11 V	211	16.09	40.05
4	5350.00	45.43 AV	54.00	-8.57	1.11 V	211	5.38	40.05
5	#6372.00	49.83 PK	68.30	-18.47	1.07 V	180	7.20	42.63
6	10620.00	58.79 PK	74.00	-15.21	1.07 V	0	7.72	51.07
7	10620.00	45.16 AV	54.00	-8.84	1.07 V	0	-5.91	51.07

- 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. “ * “: Fundamental frequency.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 102	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

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	5460.00	45.65 PK	74.00	-28.35	1.24 H	113	5.43	40.22
2	5460.00	35.17 AV	54.00	-18.83	1.24 H	113	-5.05	40.22
3	#5470.00	56.82 PK	68.30	-11.48	1.25 H	113	16.58	40.24
4	*5510.00	93.02 PK			1.24 H	113	52.69	40.33
5	*5510.00	82.42 AV			1.24 H	113	42.09	40.33
6	#6612.00	51.33 PK	68.30	-16.97	1.00 H	90	7.90	43.43
7	11020.00	59.15 PK	74.00	-14.85	1.00 H	360	7.82	51.33
8	11020.00	45.78 AV	54.00	-8.22	1.00 H	360	-5.55	51.33

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	59.04 PK	74.00	-14.96	1.09 V	214	18.82	40.22
2	5460.00	46.60 AV	54.00	-7.40	1.09 V	214	6.38	40.22
3	#5470.00	62.95 PK	68.30	-5.35	1.08 V	220	22.71	40.24
4	*5510.00	105.17 PK			1.16 V	216	64.84	40.33
5	*5510.00	95.06 AV			1.16 V	216	54.73	40.33
6	#6612.00	53.57 PK	68.30	-14.73	1.00 V	156	10.14	43.43
7	11020.00	59.55 PK	74.00	-14.45	1.00 V	280	8.22	51.33
8	11020.00	45.59 AV	54.00	-8.41	1.00 V	280	-5.74	51.33

- 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. “ * “: Fundamental frequency.
 6. “#“: The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 110	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

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	*5550.00	93.33 PK			1.25 H	117	52.90	40.43
2	*5550.00	83.60 AV			1.25 H	117	43.17	40.43
3	#6660.00	51.10 PK	68.30	-17.20	1.10 H	340	7.51	43.59
4	11100.00	58.81 PK	74.00	-15.19	1.00 H	360	7.17	51.64
5	11100.00	45.21 AV	54.00	-8.79	1.00 H	360	-6.43	51.64
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	*5550.00	105.35 PK			1.07 V	231	64.92	40.43
2	*5550.00	95.23 AV			1.07 V	231	54.80	40.43
3	#6660.00	52.82 PK	68.30	-15.48	1.07 V	188	9.23	43.59
4	11100.00	58.89 PK	74.00	-15.11	1.07 V	360	7.25	51.64
5	11100.00	45.51 AV	54.00	-8.49	1.07 V	360	-6.13	51.64

- 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. “ * ”: Fundamental frequency.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 134	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

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	*5670.00	93.67 PK			1.31 H	116	53.15	40.52
2	*5670.00	83.25 AV			1.31 H	116	42.73	40.52
3	#5725.00	44.89 PK	68.30	-23.41	1.31 H	116	4.30	40.60
4	#6804.00	51.17 PK	68.30	-17.13	1.00 H	100	7.06	44.11
5	11340.00	59.64 PK	74.00	-14.36	1.00 H	360	7.85	51.79
6	11340.00	45.84 AV	54.00	-8.16	1.00 H	360	-5.95	51.79
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	*5670.00	105.53 PK			1.10 V	321	65.00	40.52
2	*5670.00	95.00 AV			1.10 V	321	54.47	40.52
3	#5725.00	56.58 PK	68.30	-11.72	1.10 V	321	15.98	40.60
4	#6804.00	54.42 PK	68.30	-13.88	1.01 V	161	10.31	44.11
5	11340.00	58.42 PK	74.00	-15.58	1.21 V	360	6.63	51.79
6	11340.00	46.03 AV	54.00	-7.97	1.21 V	360	-5.76	51.79

- 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. “ * “: Fundamental frequency.
 6. “#“: The radiated frequency is out the restricted band.



A D T

DRAFT 802.11n (40MHz) OFDM MODULATION: 2TX

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 38	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	53.13 PK	74.00	-20.87	1.04 H	52	13.38	39.75
2	5150.00	40.21 AV	54.00	-13.79	1.04 H	52	0.46	39.75
3	*5190.00	92.78 PK			1.04 H	52	53.03	39.75
4	*5190.00	82.07 AV			1.04 H	52	42.32	39.75
5	#6228.00	52.65 PK	68.30	-15.65	1.10 H	99	10.65	42.00
6	#10380.00	58.18 PK	68.30	-10.12	1.00 H	180	7.48	50.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	65.54 PK	74.00	-8.46	1.04 V	220	25.79	39.75
2	5150.00	51.91 AV	54.00	-2.09	1.04 V	220	12.16	39.75
3	*5190.00	104.93 PK			1.04 V	214	65.18	39.75
4	*5190.00	94.12 AV			1.04 V	214	54.37	39.75
5	#6228.00	59.89 PK	68.30	-8.41	1.25 V	213	17.89	42.00
6	#10380.00	57.85 PK	68.30	-10.45	1.00 V	360	7.15	50.70

- 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. “ * “: Fundamental frequency.
 6. “#”: The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 46	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

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	*5230.00	94.98 PK			1.12 H	32	55.16	39.82
2	*5230.00	84.06 AV			1.12 H	32	44.24	39.82
3	#6272.00	53.50 PK	68.30	-14.80	1.04 H	199	11.28	42.22
4	#10460.00	58.83 PK	68.30	-9.47	1.07 H	199	7.98	50.85
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	*5230.00	107.03 PK			1.11 V	53	67.21	39.82
2	*5230.00	96.25 AV			1.11 V	53	56.43	39.82
3	#6276.00	58.82 PK	68.30	-9.48	1.25 V	211	16.58	42.24
4	#10460.00	59.26 PK	68.30	-9.04	1.00 V	180	8.41	50.85

- 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. “ * “: Fundamental frequency.
 6. “#”: The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 54	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

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	*5270.00	95.17 PK			1.09 H	41	55.26	39.91
2	*5270.00	84.09 AV			1.09 H	41	44.18	39.91
3	#6324.00	53.93 PK	68.30	-14.37	1.01 H	230	11.48	42.45
4	#10540.00	58.41 PK	68.30	-9.89	1.00 H	360	7.42	50.99
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	*5270.00	107.21 PK			1.09 V	67	67.30	39.91
2	*5270.00	96.37 AV			1.09 V	67	56.46	39.91
3	#6324.00	58.74 PK	68.30	-9.56	1.21 V	199	16.29	42.45
4	#10540.00	58.98 PK	68.30	-9.32	1.01 V	140	7.99	50.99

- 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. “ * “: Fundamental frequency.
 6. “#”: The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 62	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

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	*5310.00	92.89 PK			1.00 H	34	52.90	39.99
2	*5310.00	82.16 AV			1.00 H	34	42.17	39.99
3	5350.00	48.87 PK	74.00	-25.12	1.00 H	34	8.83	40.05
4	5350.00	37.32 AV	54.00	-16.68	1.00 H	34	-2.73	40.05
5	#6372.00	52.14 PK	68.30	-16.16	1.00 H	194	9.51	42.63
6	10620.00	58.65 PK	74.00	-15.35	1.07 H	110	7.58	51.07
7	10620.00	45.40 AV	54.00	-8.60	1.07 H	110	-5.67	51.07
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	105.02 PK			1.13 V	210	65.03	39.99
2	*5310.00	94.20 AV			1.13 V	210	54.21	39.99
3	5350.00	57.62 PK	74.00	-16.38	1.15 V	183	17.57	40.05
4	5350.00	46.86 AV	54.00	-7.14	1.15 V	183	6.81	40.05
5	#6372.00	57.05 PK	68.30	-11.25	1.04 V	164	14.42	42.63
6	10620.00	58.63 PK	74.00	-15.37	1.00 V	300	7.56	51.07
7	10620.00	45.13 AV	54.00	-8.87	1.00 V	300	-5.94	51.07

- 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. “ * “: Fundamental frequency.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 102	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

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	5460.00	50.09 PK	74.00	-23.91	1.00 H	33	9.87	40.22
2	5460.00	37.72 AV	54.00	-16.28	1.00 H	33	-2.50	40.22
3	#5470.00	57.44 PK	68.30	-10.86	1.00 H	33	17.20	40.24
4	*5510.00	94.78 PK			1.00 H	33	54.45	40.33
5	*5510.00	84.07 AV			1.00 H	33	43.74	40.33
6	#6612.00	51.18 PK	68.30	-17.12	1.17 H	29	7.75	43.43
7	11020.00	58.97 PK	74.00	-15.03	1.10 H	310	7.64	51.33
8	11020.00	44.84 AV	54.00	-9.16	1.10 H	310	-6.49	51.33

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	56.78 PK	74.00	-17.22	1.17 V	218	16.56	40.22
2	5460.00	46.90 AV	54.00	-7.10	1.17 V	218	6.68	40.22
3	#5470.00	63.12 PK	68.30	-5.18	1.17 V	218	22.88	40.24
4	*5510.00	106.89 PK			1.17 V	218	66.56	40.33
5	*5510.00	96.03 AV			1.17 V	218	55.70	40.33
6	#6612.00	54.68 PK	68.30	-13.62	1.00 V	159	11.25	43.43
7	11020.00	58.53 PK	74.00	-15.47	1.00 V	264	7.20	51.33
8	11020.00	45.34 AV	54.00	-8.66	1.00 V	264	-5.99	51.33

- 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. “ * “: Fundamental frequency.
 6. “#“: The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 110	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

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	*5550.00	95.09 PK			1.02 H	28	54.66	40.43
2	*5550.00	83.89 AV			1.02 H	28	43.46	40.43
3	#6660.00	50.83 PK	68.30	-17.47	1.00 H	192	7.24	43.59
4	11100.00	59.16 PK	74.00	-14.84	1.00 H	360	7.52	51.64
5	11100.00	45.88 AV	54.00	-8.12	1.00 H	360	-5.76	51.64
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	*5550.00	106.98 PK			1.08 V	191	66.55	40.43
2	*5550.00	96.11 AV			1.08 V	191	55.68	40.43
3	#6660.00	53.65 PK	68.30	-14.65	1.05 V	213	10.06	43.59
4	11100.00	59.21 PK	74.00	-14.79	1.05 V	360	7.57	51.64
5	11100.00	45.78 AV	54.00	-8.22	1.05 V	360	-5.86	51.64

- 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. “ * “: Fundamental frequency.
 6. “#”:The radiated frequency is out the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 134	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 67%RH 998hPa	TESTED BY	Antony Lee

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	*5670.00	95.04 PK			1.19 H	38	54.52	40.52
2	*5670.00	84.38 AV			1.19 H	38	43.85	40.52
3	#5725.00	57.25 PK	68.30	-11.05	1.19 H	38	16.66	40.60
5	#6804.00	51.65 PK	68.30	-16.65	1.11 H	120	7.54	44.11
6	11340.00	59.88 PK	74.00	-14.12	1.06 H	120	8.09	51.79
7	11340.00	46.80 AV	54.00	-7.20	1.06 H	120	-4.99	51.79
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	*5670.00	107.14 PK			1.04 V	189	66.62	40.52
2	*5670.00	96.42 AV			1.04 V	189	55.90	40.52
3	#5725.00	66.82 PK	68.30	-1.48	1.02 V	173	26.22	40.60
5	#6804.00	55.17 PK	68.30	-13.13	1.00 V	149	11.06	44.11
6	11340.00	60.83 PK	74.00	-13.17	1.02 V	0	9.04	51.79
7	11340.00	46.99 AV	54.00	-7.01	1.02 V	0	-4.80	51.79

- 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. “ * “: Fundamental frequency.
 6. “#”:The radiated frequency is out the restricted band.

BELOW 1GHz WORST-CASE DATA : DRAFT 802.11n (20MHz) OFDM MODULATION: 2TX

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 60	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH 1023hPa	TESTED BY	Antony Lee

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	97.95	35.87 QP	43.50	-7.63	2.00 H	229	26.56	9.31
2	298.21	31.75 QP	46.00	-14.25	1.25 H	310	18.11	13.64
3	397.37	36.13 QP	46.00	-9.87	2.00 H	100	20.14	16.00
4	531.53	40.84 QP	46.00	-5.16	2.00 H	73	20.64	20.20
5	663.74	41.42 QP	46.00	-4.58	1.25 H	58	18.99	22.43
6	924.27	41.84 QP	46.00	-4.16	1.25 H	79	15.54	26.29
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/m)
1	97.95	36.12 QP	43.50	-7.38	1.00 V	196	26.81	9.31
2	397.37	37.28 QP	46.00	-8.72	1.25 V	181	21.29	16.00
3	531.53	41.15 QP	46.00	-4.85	2.00 V	127	20.95	20.20
4	661.79	37.24 QP	46.00	-8.76	1.50 V	79	14.82	22.41
5	836.78	36.46 QP	46.00	-9.54	1.00 V	106	10.91	25.55
6	924.27	41.38 QP	46.00	-4.62	1.50 V	106	15.09	26.29

- 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.

BELOW 1GHz WORST-CASE DATA : DRAFT 802.11n (40MHz) OFDM MODULATION: 2TX

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 110	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	22deg. C, 68%RH 999hPa	TESTED BY	Antony Lee

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	99.89	38.35 QP	43.50	-5.15	2.00 H	286	29.02	9.33
2	232.11	38.57 QP	46.00	-7.43	1.25 H	178	26.54	12.03
3	529.58	40.19 QP	46.00	-5.81	2.00 H	79	20.05	20.14
4	667.63	41.97 QP	46.00	-4.03	1.00 H	64	19.51	22.46
5	749.29	37.48 QP	46.00	-8.52	1.00 H	73	13.55	23.93
6	836.78	37.02 QP	46.00	-8.98	1.00 H	70	11.47	25.55
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	99.89	34.99 QP	43.50	-8.51	1.00 V	208	25.66	9.33
2	331.26	33.67 QP	46.00	-12.33	1.25 V	94	19.26	14.40
3	531.53	41.29 QP	46.00	-4.71	1.25 V	118	21.09	20.20
4	665.68	36.83 QP	46.00	-9.17	2.00 V	79	14.38	22.45
5	749.29	35.34 QP	46.00	-10.66	2.00 V	136	11.41	23.93
6	924.27	41.91 QP	46.00	-4.09	1.50 V	109	15.62	26.29

- 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.

4.2 CONDUCTED EMISSION MEASUREMENT

4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dB μ V)	
	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 0.50MHz.
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.

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100291	Nov. 19, 2008	Nov. 18, 2009
RF signal cable Woken	5D-FB	Cable-HYC01-01	Jan. 04, 2008	Jan. 03, 2009
LISN ROHDE & SCHWARZ	ESH3-Z5	100312	Jun. 13, 2008	Jun. 12, 2009
LISN ROHDE & SCHWARZ	ESH2-Z5	100104	Dec. 04, 2008	Dec. 03, 2009
Software ADT	ADT_Cond_ V7.3.6	NA	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.

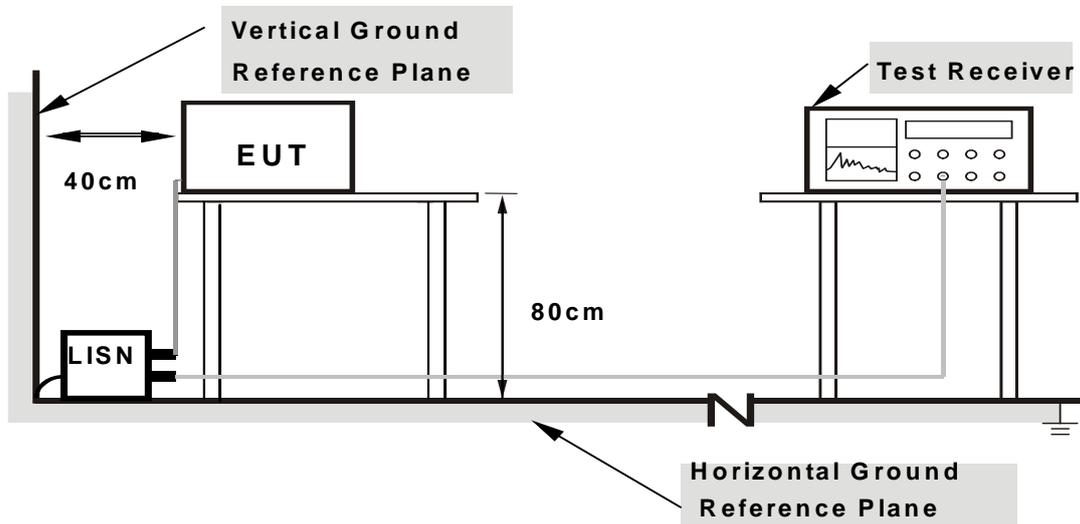
4.2.3 TEST PROCEDURES

- 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.

4.2.4 DEVIATION FROM TEST STANDARD

No deviation

4.2.5 TEST SETUP



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

For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6.

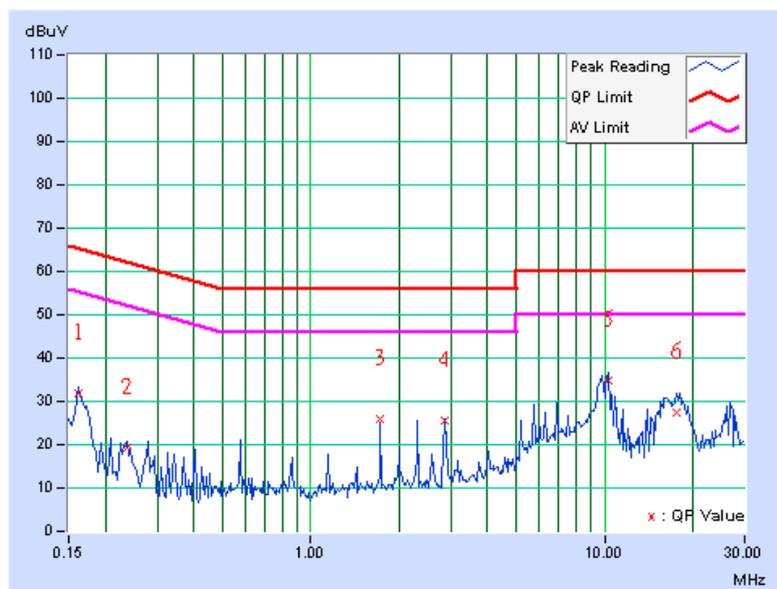
4.2.7 TEST RESULTS

CONDUCTED WORST-CASE DATA : DRAFT 802.11n (20MHz) OFDM MODULATION: 2TX

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 60	PHASE	Line 1
MODULATION TYPE	BPSK	INPUT POWER (SYSTEM)	120Vac, 60Hz
TRANSFER RATE	14.444Mbps	6dB BANDWIDTH	9kHz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 982hPa	TESTED BY	Match Tsui

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.162	0.20	30.82	-	31.02	-	65.38	55.38	-34.36	-
2	0.236	0.20	18.53	-	18.73	-	62.24	52.24	-43.51	-
3	1.723	0.20	24.88	-	25.08	-	56.00	46.00	-30.92	-
4	2.875	0.29	24.67	-	24.96	-	56.00	46.00	-31.04	-
5	10.348	0.55	33.89	-	34.44	-	60.00	50.00	-25.56	-
6	17.527	0.91	26.45	-	27.36	-	60.00	50.00	-32.64	-

- 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.



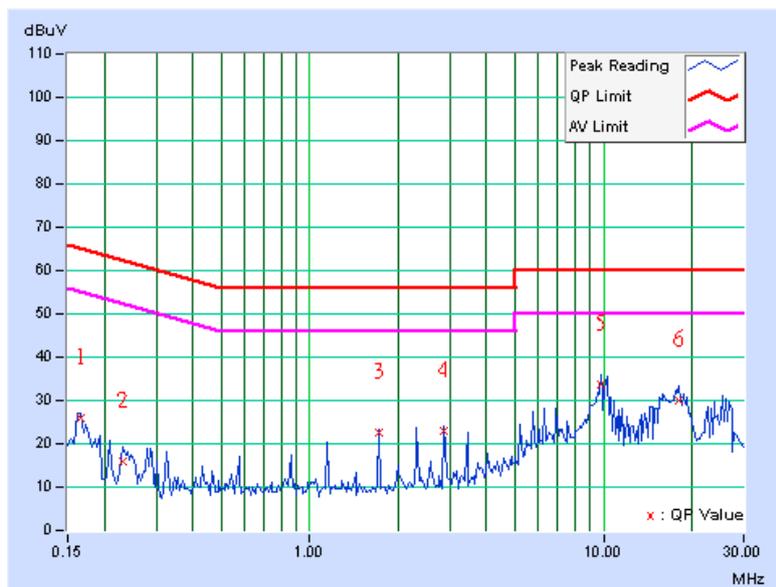


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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 60	PHASE	Line 2
MODULATION TYPE	BPSK	INPUT POWER (SYSTEM)	120Vac, 60Hz
TRANSFER RATE	14.444Mbps	6dB BANDWIDTH	9kHz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 982hPa	TESTED BY	Match Tsui

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.166	0.20	25.40	-	25.60	-	65.18
2	0.232	0.20	15.52	-	15.72	-	62.38	52.38	-46.66	-
3	1.723	0.20	22.22	-	22.42	-	56.00	46.00	-33.58	-
4	2.875	0.29	22.55	-	22.84	-	56.00	46.00	-33.16	-
5	9.770	0.53	33.28	-	33.81	-	60.00	50.00	-26.19	-
6	18.105	0.51	29.51	-	30.02	-	60.00	50.00	-29.98	-

- 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.

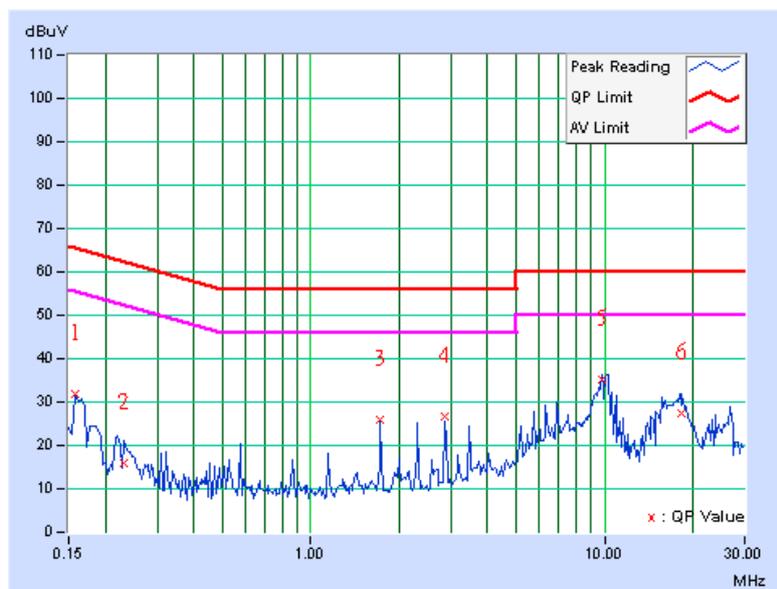


CONDUCTED WORST-CASE DATA : DRAFT 802.11n (40MHz) OFDM MODULATION: 2TX

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 110	PHASE	Line 1
MODULATION TYPE	BPSK	INPUT POWER (SYSTEM)	120Vac, 60Hz
TRANSFER RATE	30.0Mbps	6dB BANDWIDTH	9kHz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 982hPa	TESTED BY	Match Tsui

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.158	0.20	30.96	-	31.16	-	65.58
2	0.230	0.20	15.08	-	15.28	-	62.43	52.43	-47.15	-
3	1.723	0.20	24.84	-	25.04	-	56.00	46.00	-30.96	-
4	2.875	0.29	25.57	-	25.86	-	56.00	46.00	-30.14	-
5	9.770	0.53	34.34	-	34.87	-	60.00	50.00	-25.13	-
6	18.391	0.94	26.63	-	27.57	-	60.00	50.00	-32.43	-

- 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.



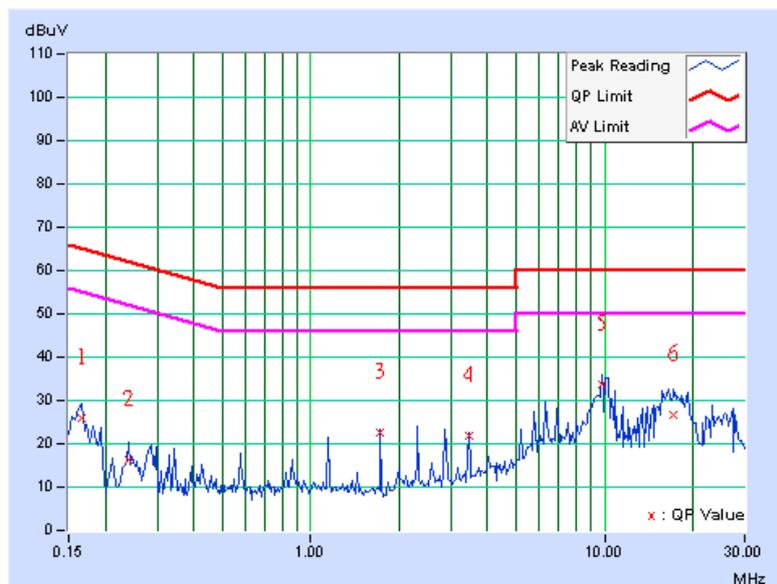


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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 110	PHASE	Line 2
MODULATION TYPE	BPSK	INPUT POWER (SYSTEM)	120Vac, 60Hz
TRANSFER RATE	30.0Mbps	6dB BANDWIDTH	9kHz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 982hPa	TESTED BY	Match Tsui

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.166	0.20	25.26	-	25.46	-	65.18	55.18	-39.72	-
2	0.240	0.20	15.86	-	16.06	-	62.10	52.10	-46.04	-
3	1.723	0.20	22.18	-	22.38	-	56.00	46.00	-33.62	-
4	3.449	0.34	21.42	-	21.76	-	56.00	46.00	-34.24	-
5	9.770	0.53	33.22	-	33.75	-	60.00	50.00	-26.25	-
6	17.238	0.50	26.12	-	26.62	-	60.00	50.00	-33.38	-

- 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.



4.3 PEAK TRANSMIT POWER MEASUREMENT

4.3.1 LIMITS OF PEAK TRANSMIT POWER MEASUREMENT

FREQUENCY BAND	LIMIT
5.150 ~ 5.250GHz	The lesser of 50mW (17dBm) or 4dBm + 10logB
5.250 ~ 5.350GHz	The lesser of 250mW (24dBm) or 11dBm + 10logB
5.470 ~ 5.725GHz	The lesser of 250mW (24dBm) or 11dBm + 10logB

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

4.3.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
High Speed Peak Power Meter	ML2495A	0824012	Aug. 04, 2008	Aug. 03, 2009
Power Sensor	MA2444B	0738138	Aug. 04, 2008	Aug. 03, 2009

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. Measurement Bandwidth of ML2495A is 65MHz greater than 26dB bandwidth of emission.

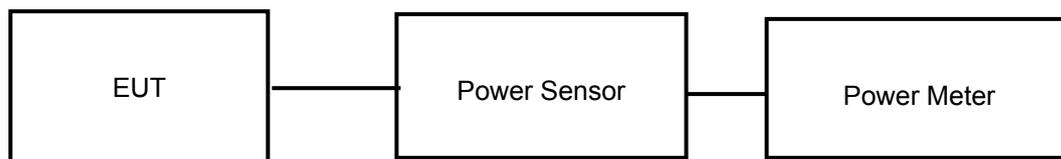
4.3.3 TEST PROCEDURES

A power sensor was used on the output port of the EUT. A power meter was used to read the response of the power sensor. Record the power level.

4.3.4 DEVIATION FROM TEST STANDARD

No deviation

4.3.5 TEST SETUP



4.3.6 EUT OPERATING CONDITIONS

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

4.3.7 TEST RESULTS

PEAK POWER OUTPUT: 802.11a OFDM MODULATION: 1TX

MODULATION TYPE	BPSK	TRANSFER RATE	6.0Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
36	5180	31.769	15.02	17	PASS
40	5200	32.063	15.06	17	PASS
48	5240	31.915	15.04	17	PASS
52	5260	32.211	15.08	24	PASS
60	5300	32.434	15.11	24	PASS
64	5320	31.842	15.03	24	PASS
100	5500	32.137	15.07	24	PASS
116	5580	32.211	15.08	24	PASS
140	5700	31.989	15.05	24	PASS

DRAFT 802.11n (20MHz) OFDM MODULATION: 1TX

MODULATION TYPE	BPSK	TRANSFER RATE	7.2Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
36	5180	12.677	11.03	17	PASS
40	5200	20.184	13.05	17	PASS
48	5240	20.230	13.06	17	PASS
52	5260	20.324	13.08	24	PASS
60	5300	20.464	13.11	24	PASS
64	5320	12.823	11.08	24	PASS
100	5500	20.230	13.06	24	PASS
116	5580	20.137	13.04	24	PASS
140	5700	20.045	13.02	24	PASS



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DRAFT 802.11n (20MHz) OFDM MODULATION: 2TX

MODULATION TYPE	BPSK	TRANSFER RATE	14.444Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 991hPa
TESTED BY	Match Tsui		

CHAN.	CHAN. FREQ. (MHz)	PEAK POWER OUTPUT (dBm)		TOTAL PEAK POWER (mW)	TOTAL PEAK POWER (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
36	5180	11.05	11.08	25.558	14.08	17	PASS
40	5200	13.04	13.06	40.367	16.06	17	PASS
48	5240	13.08	13.04	40.461	16.07	17	PASS
52	5260	13.02	13.07	40.322	16.06	24	PASS
60	5300	13.09	13.09	40.741	16.10	24	PASS
64	5320	11.01	11.02	25.266	14.03	24	PASS
100	5500	13.02	13.07	40.322	16.06	24	PASS
116	5580	13.07	13.03	40.368	16.06	24	PASS
140	5700	12.54	12.57	36.019	15.57	24	PASS

DRAFT 802.11n (40MHz) OFDM MODULATION: 1TX

MODULATION TYPE	BPSK	TRANSFER RATE	15.0Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
38	5190	12.647	11.02	17	PASS
46	5230	20.230	13.06	17	PASS
54	5270	20.324	13.08	24	PASS
62	5310	12.735	11.05	24	PASS
102	5510	20.091	13.03	24	PASS
110	5550	20.277	13.07	24	PASS
134	5670	20.137	13.04	24	PASS



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DRAFT 802.11n (40MHz) OFDM MODULATION: 2TX

MODULATION TYPE	BPSK	TRANSFER RATE	30.0Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 991hPa
TESTED BY	Match Tsui		

CHAN.	CHAN. FREQ. (MHz)	PEAK POWER OUTPUT (dBm)		TOTAL PEAK POWER (mW)	TOTAL PEAK POWER (dBm)	PEAK POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
38	5190	11.08	11.04	25.529	14.07	17	PASS
46	5230	13.05	13.08	40.507	16.08	17	PASS
54	5270	13.07	13.02	40.322	16.06	24	PASS
62	5310	11.04	11.07	25.500	14.07	24	PASS
102	5510	13.07	13.05	40.460	16.07	24	PASS
110	5550	13.04	13.08	40.461	16.07	24	PASS
134	5670	13.08	13.04	40.461	16.07	24	PASS



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26dB OCCUPIED BANDWIDTH: 802.11a OFDM MODULATION: 1TX

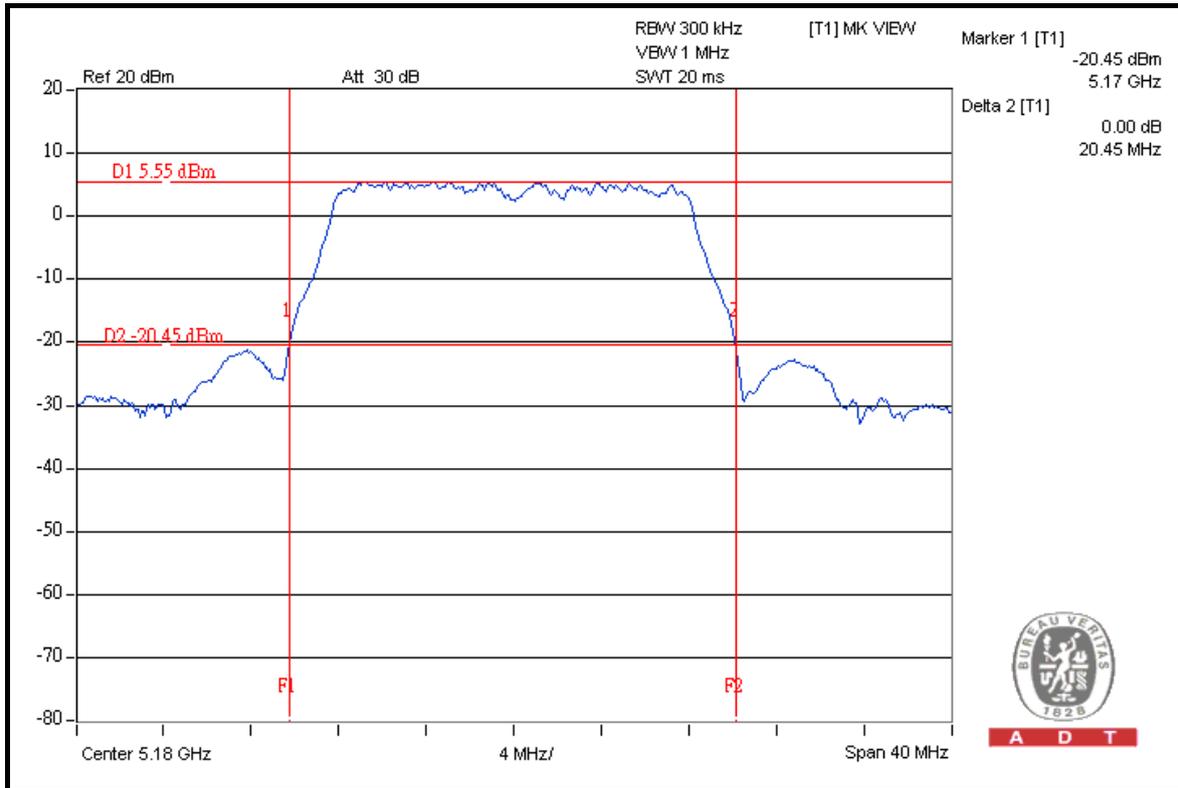
MODULATION TYPE	BPSK	TRANSFER RATE	6.0Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	26deg.C, 67%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc OCCUPIED BANDWIDTH (MHz)	PASS / FAIL
36	5180	20.45	PASS
40	5200	20.60	PASS
48	5240	20.52	PASS
52	5260	20.51	PASS
60	5300	20.53	PASS
64	5320	20.54	PASS
100	5500	20.57	PASS
116	5580	20.63	PASS
140	5700	20.44	PASS

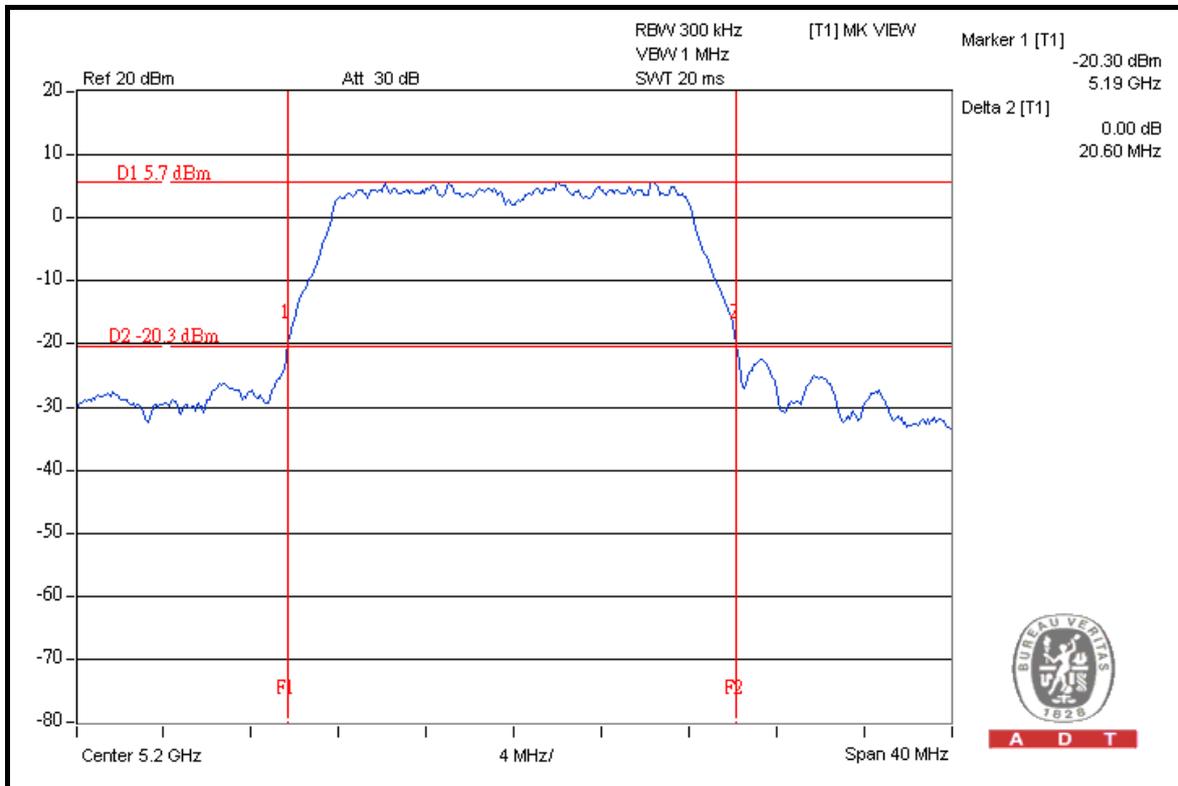


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CH 36



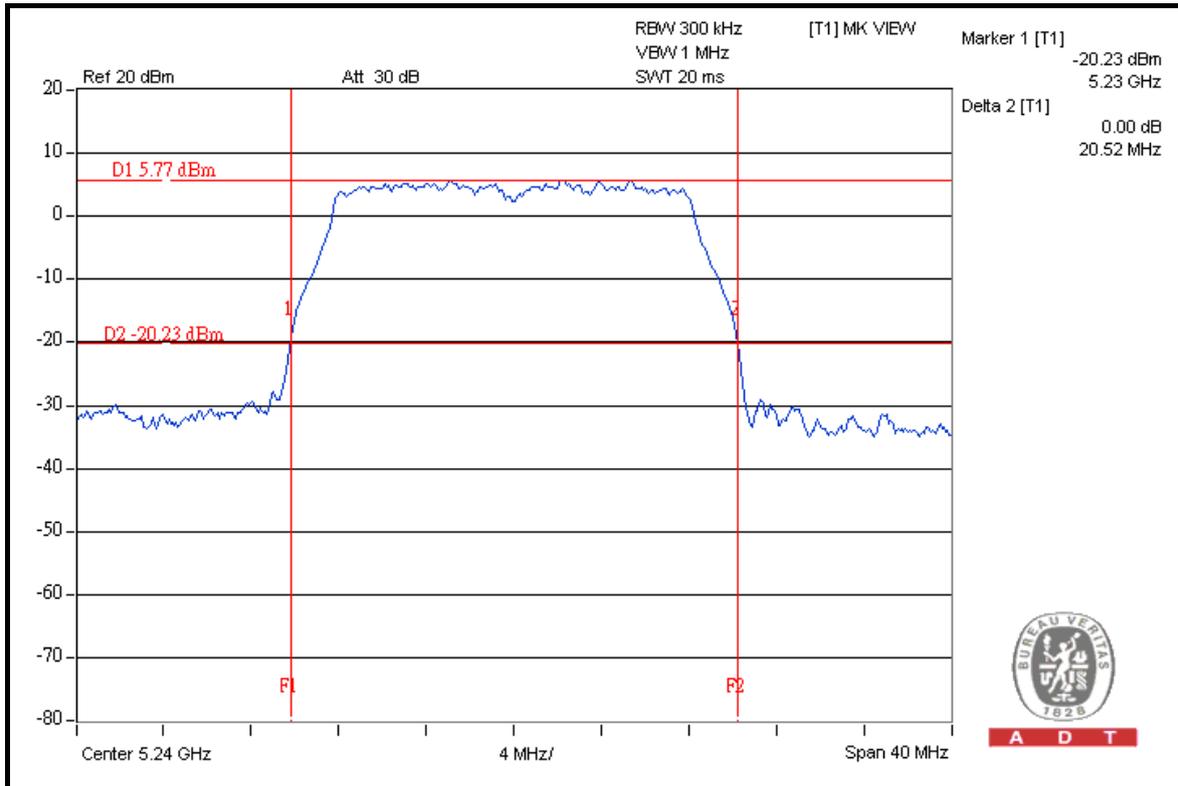
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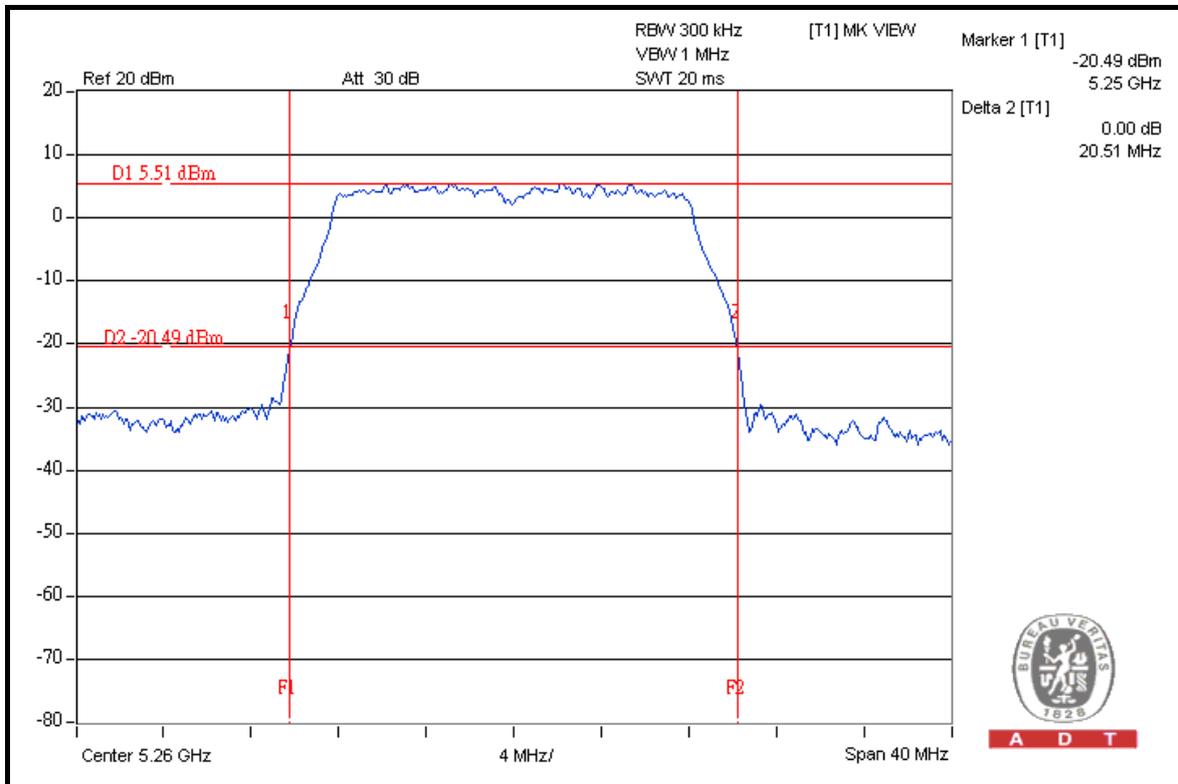


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CH 48



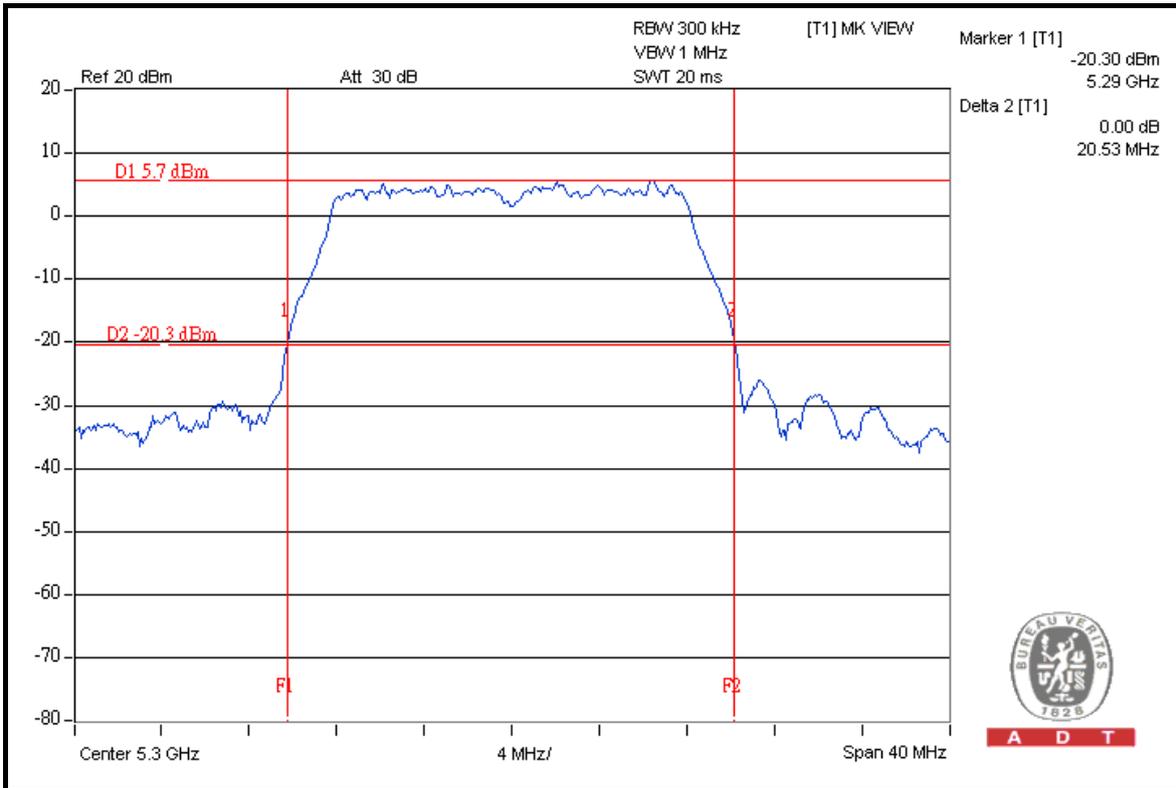
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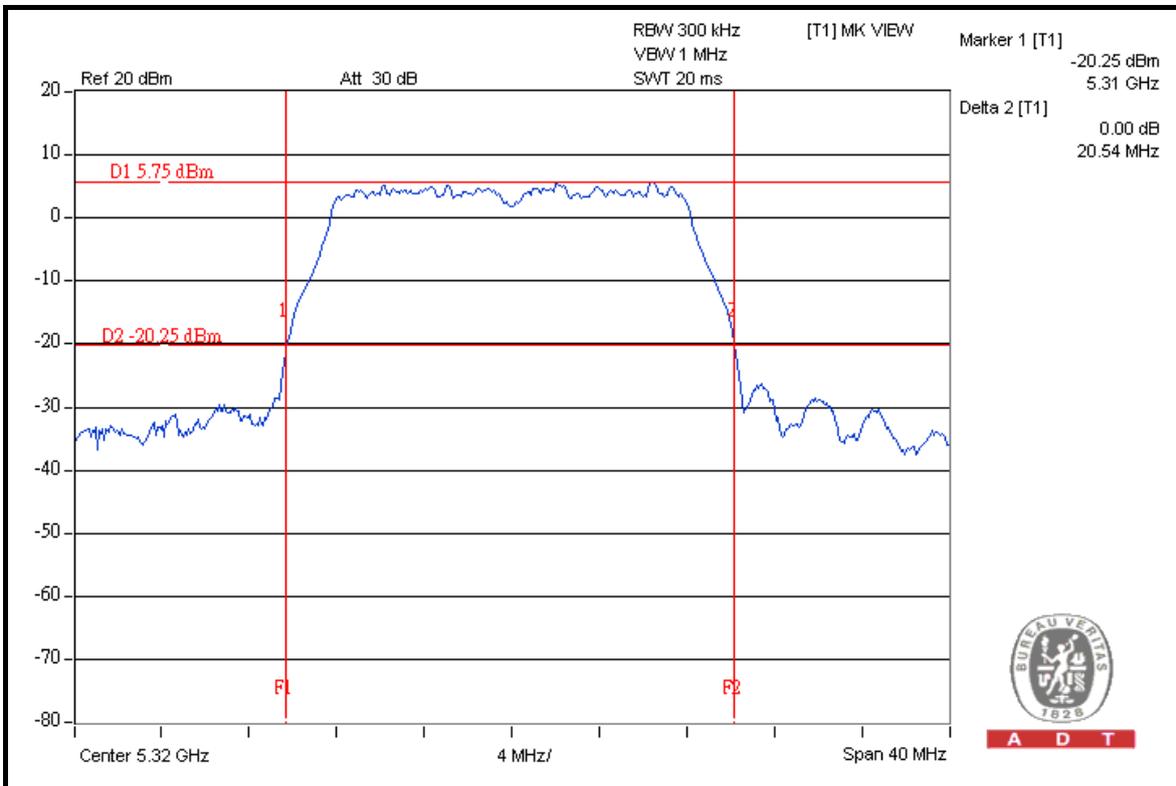


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CH 60



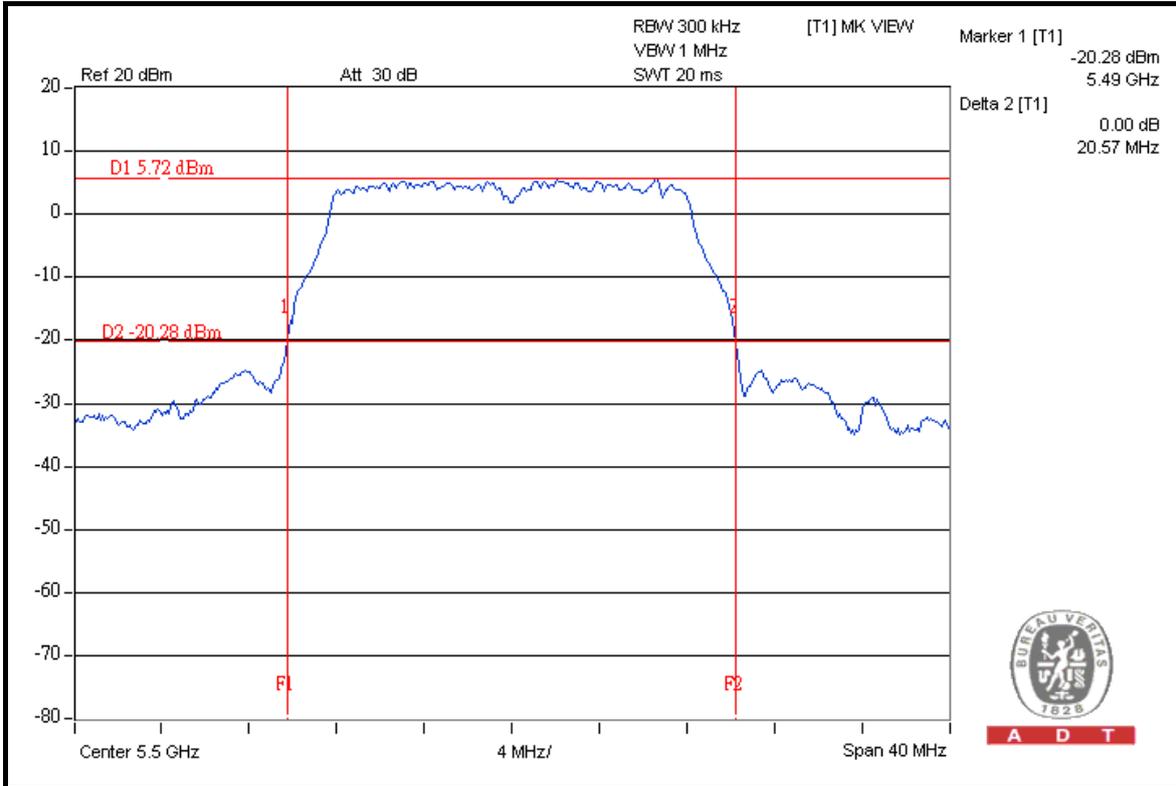
CH 64



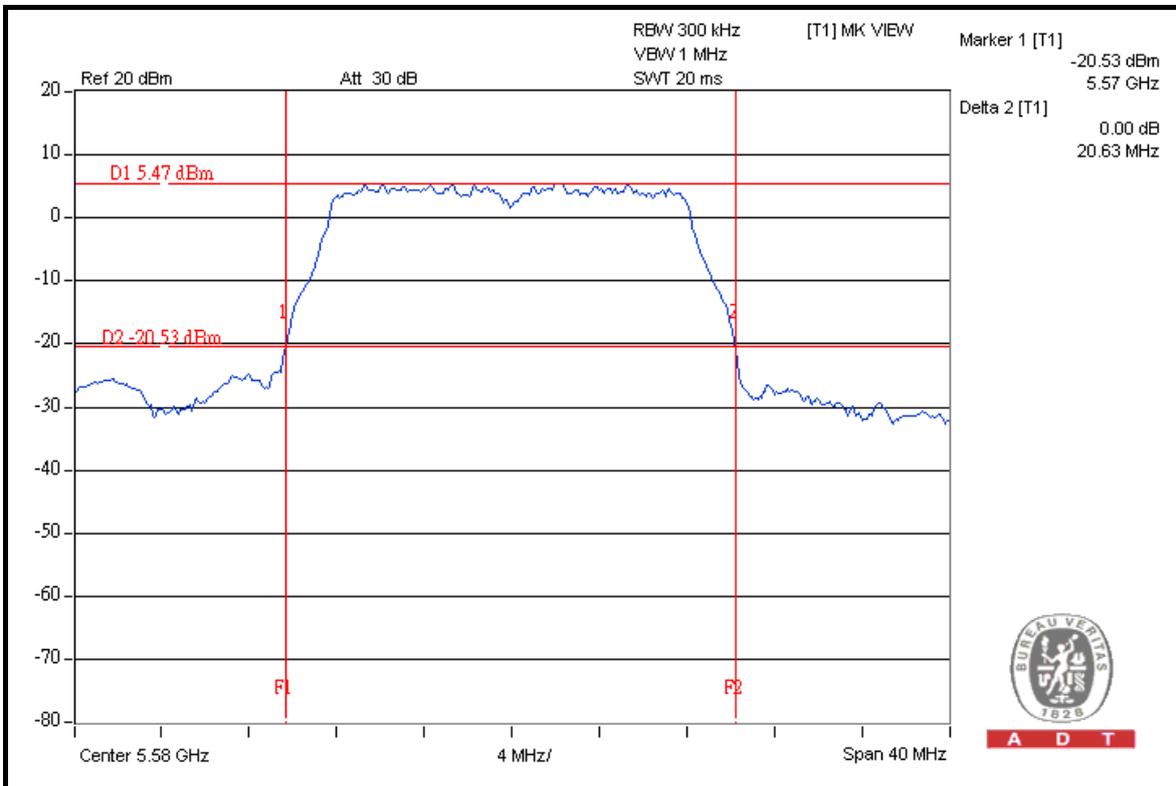


A D T

CH 100



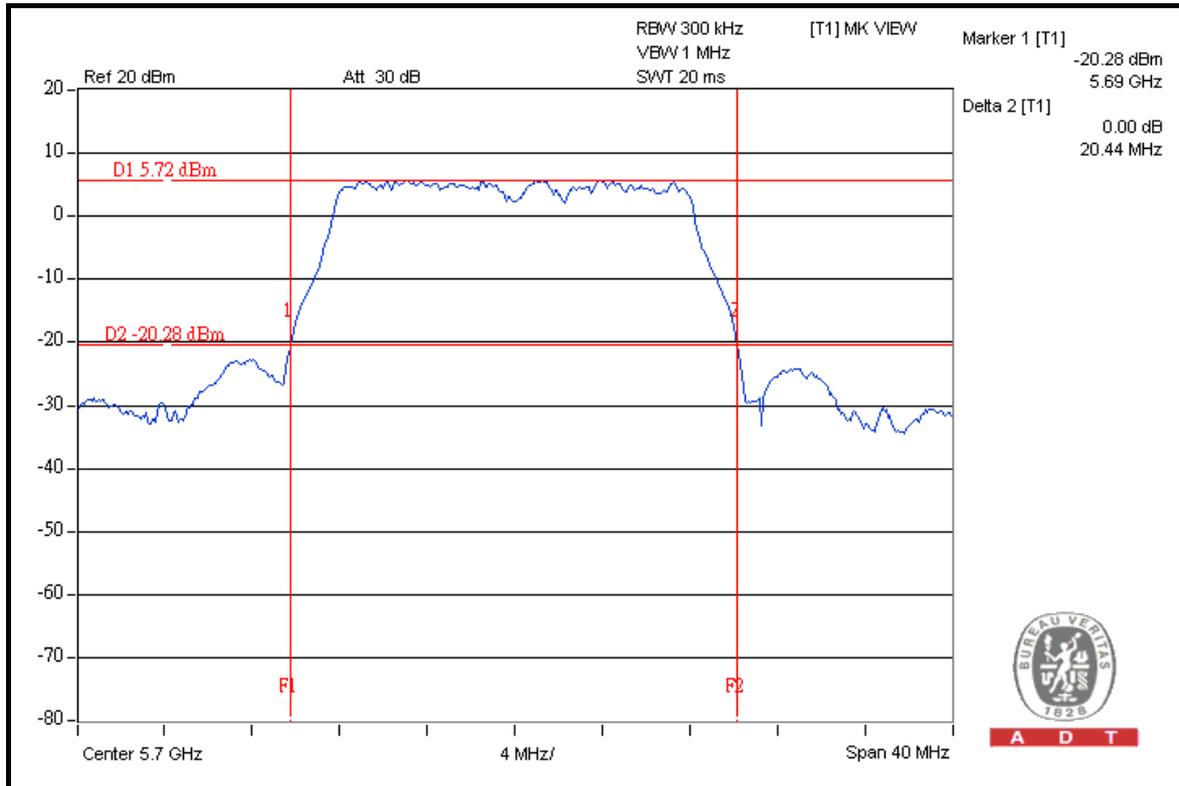
CH 116





A D T

CH 140



A D T



A D T

DRAFT 802.11n (20MHz) OFDM MODULATION: 1TX

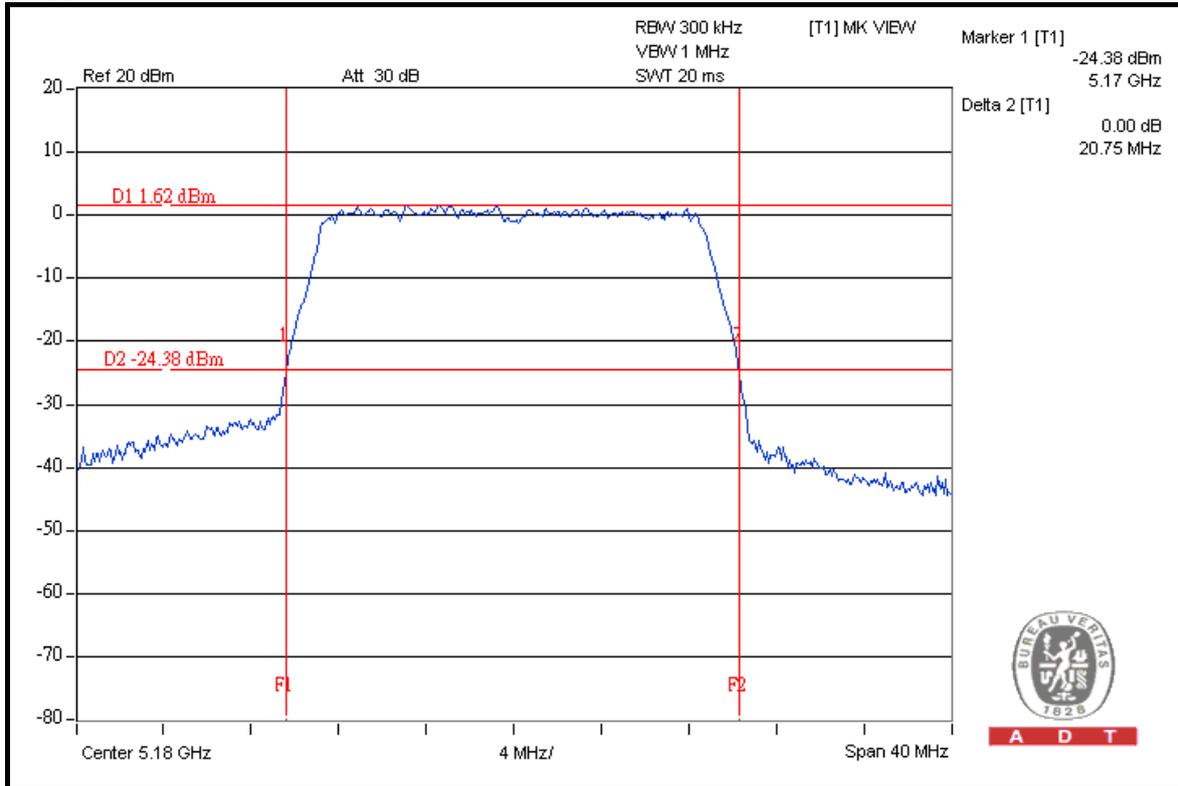
MODULATION TYPE	BPSK	TRANSFER RATE	7.2Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	26deg.C, 67%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc OCCUPIED BANDWIDTH (MHz)	PASS / FAIL
36	5180	20.75	PASS
40	5200	20.80	PASS
48	5240	20.74	PASS
52	5260	20.79	PASS
60	5300	20.82	PASS
64	5320	20.79	PASS
100	5500	20.77	PASS
116	5580	20.88	PASS
140	5700	20.79	PASS

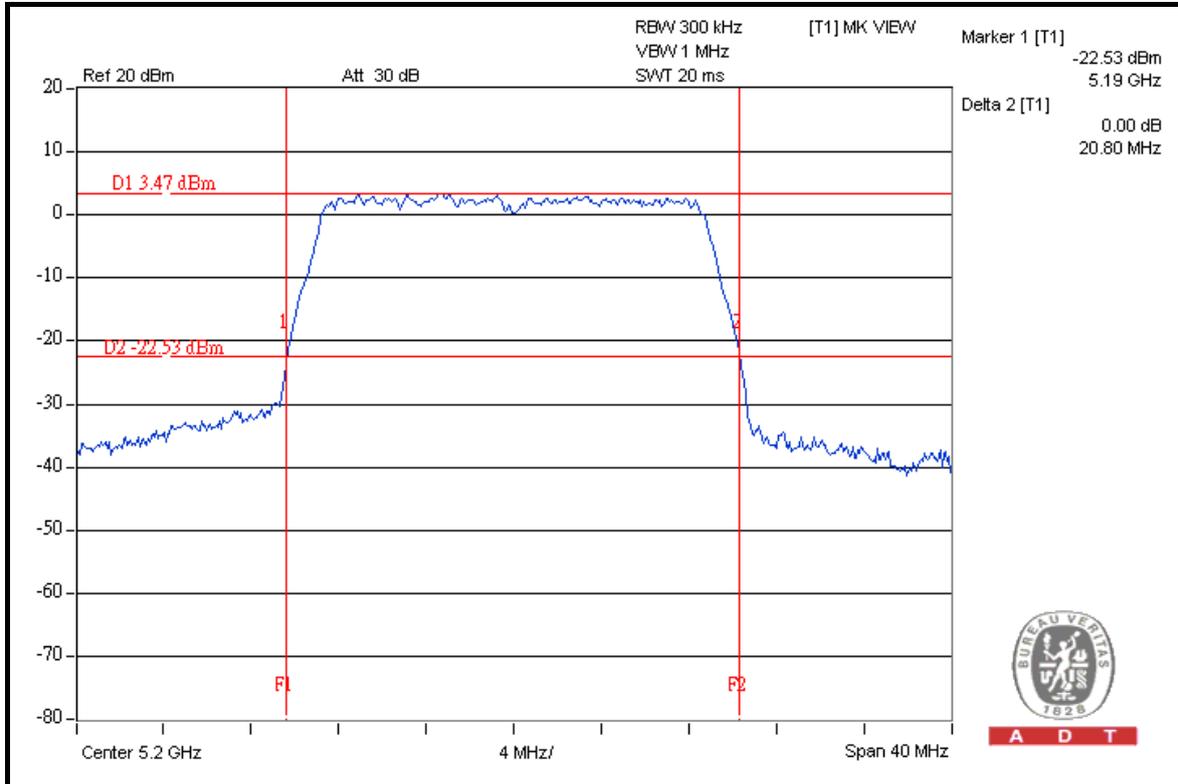


A D T

CH 36



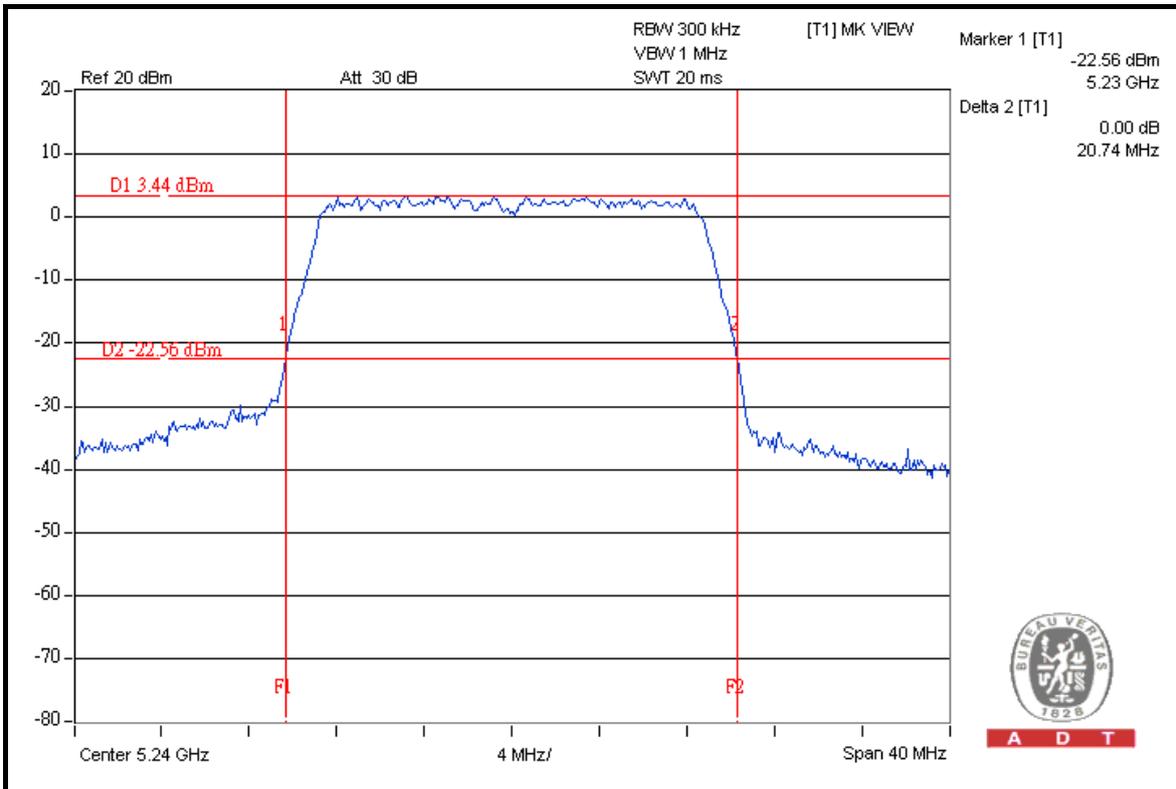
CH 40



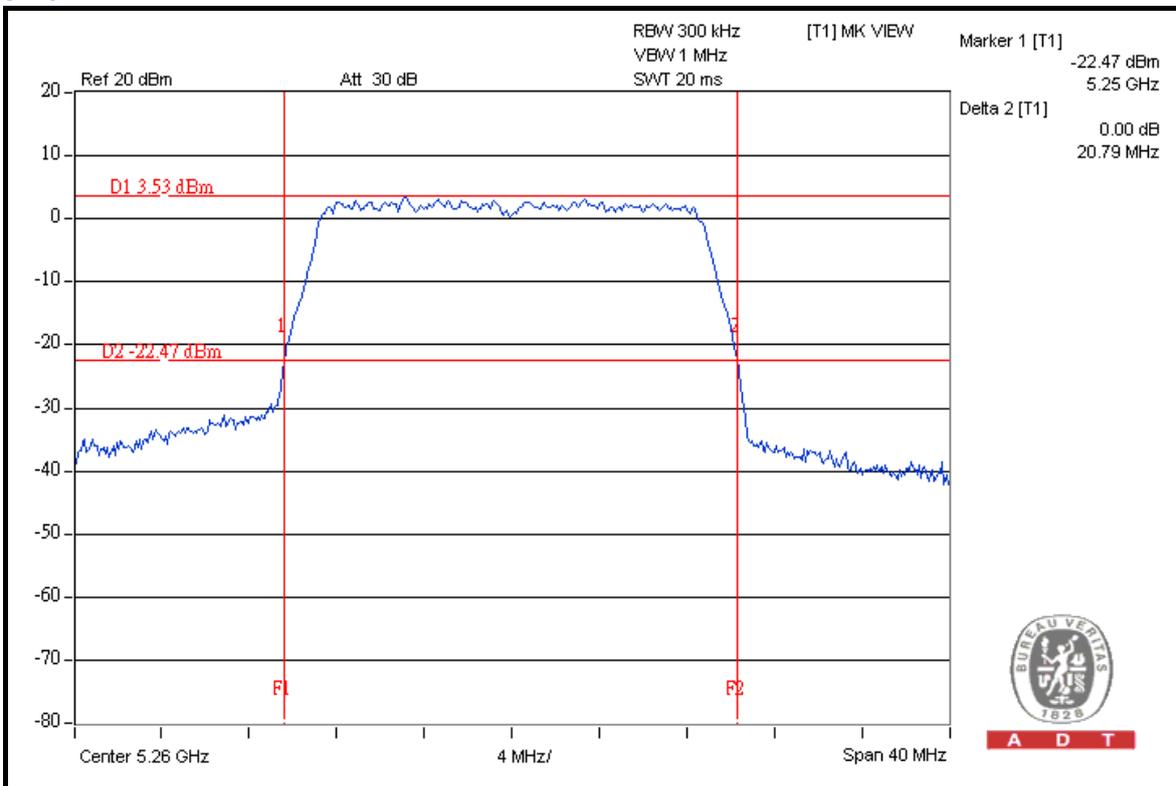


A D T

CH 48



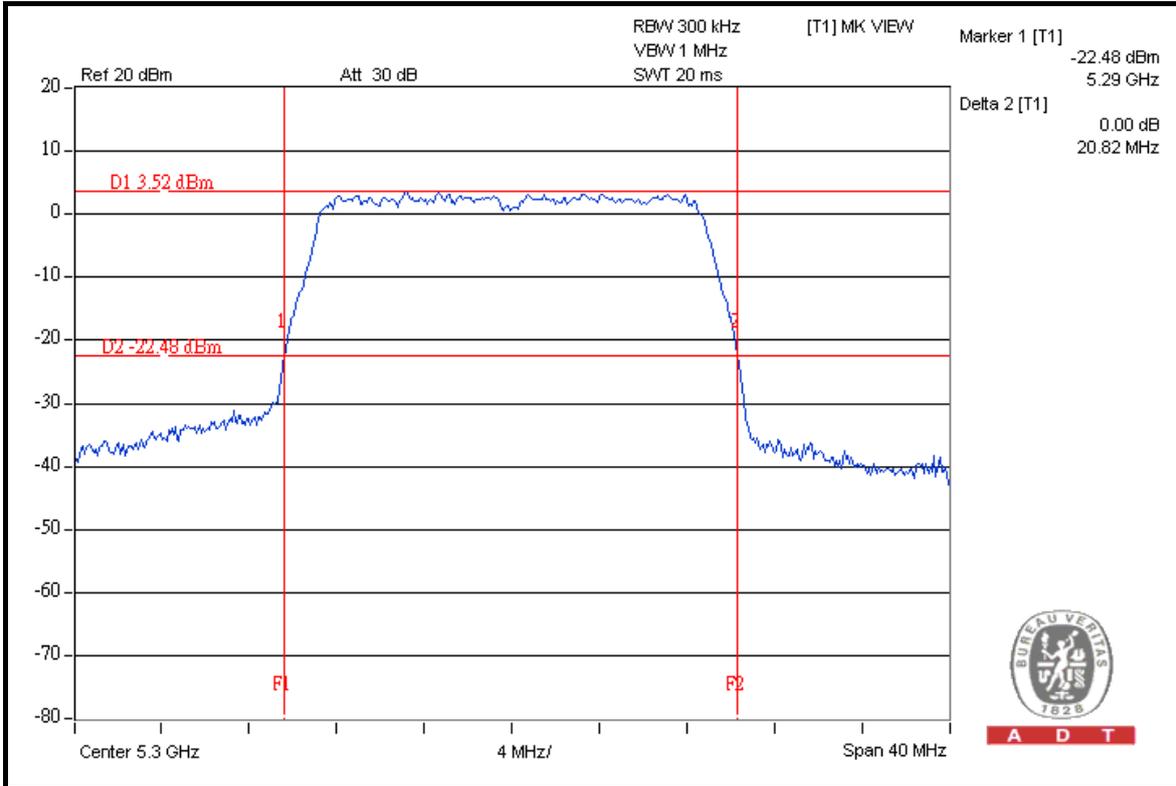
CH 52



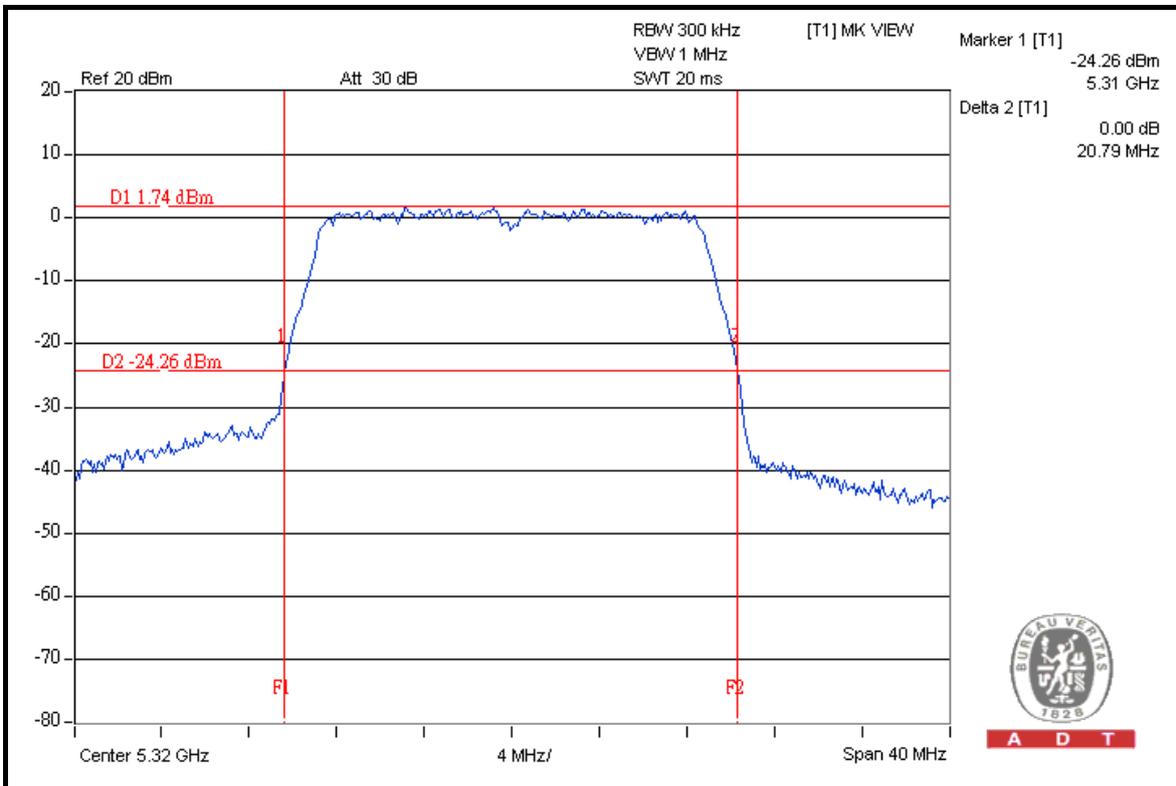


A D T

CH 60



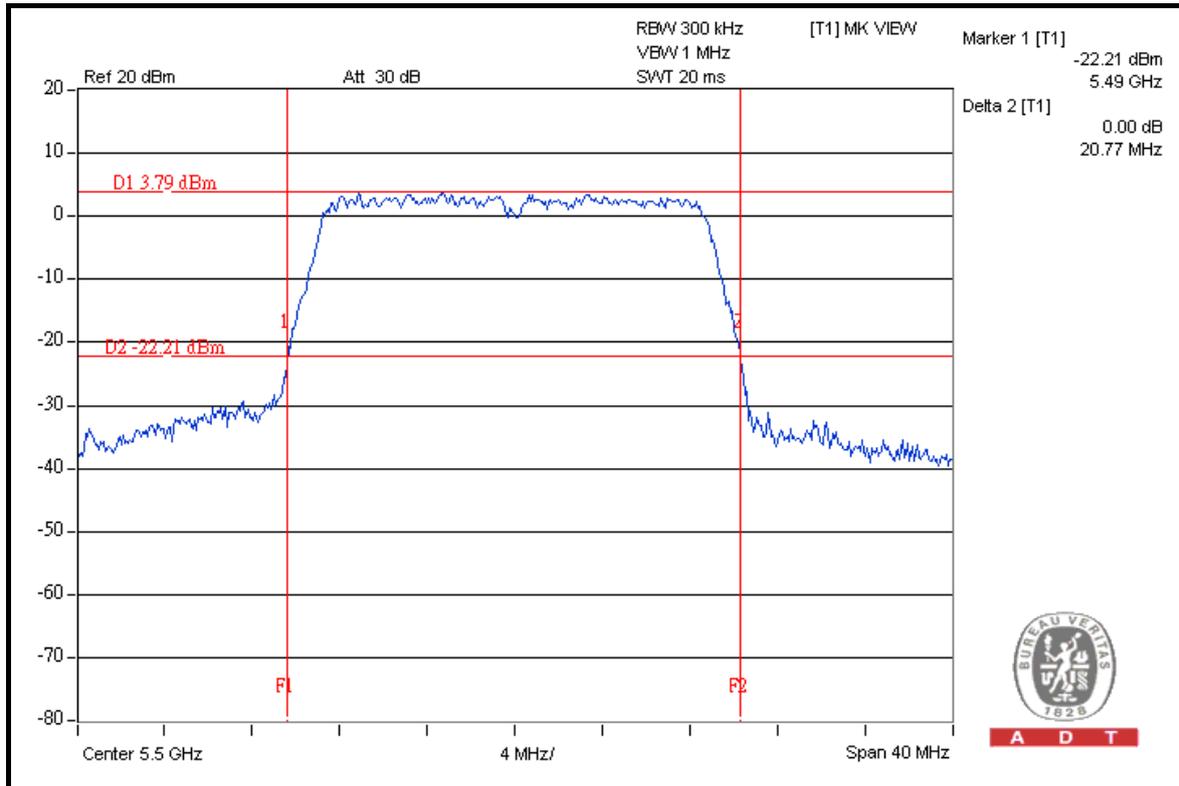
CH 64



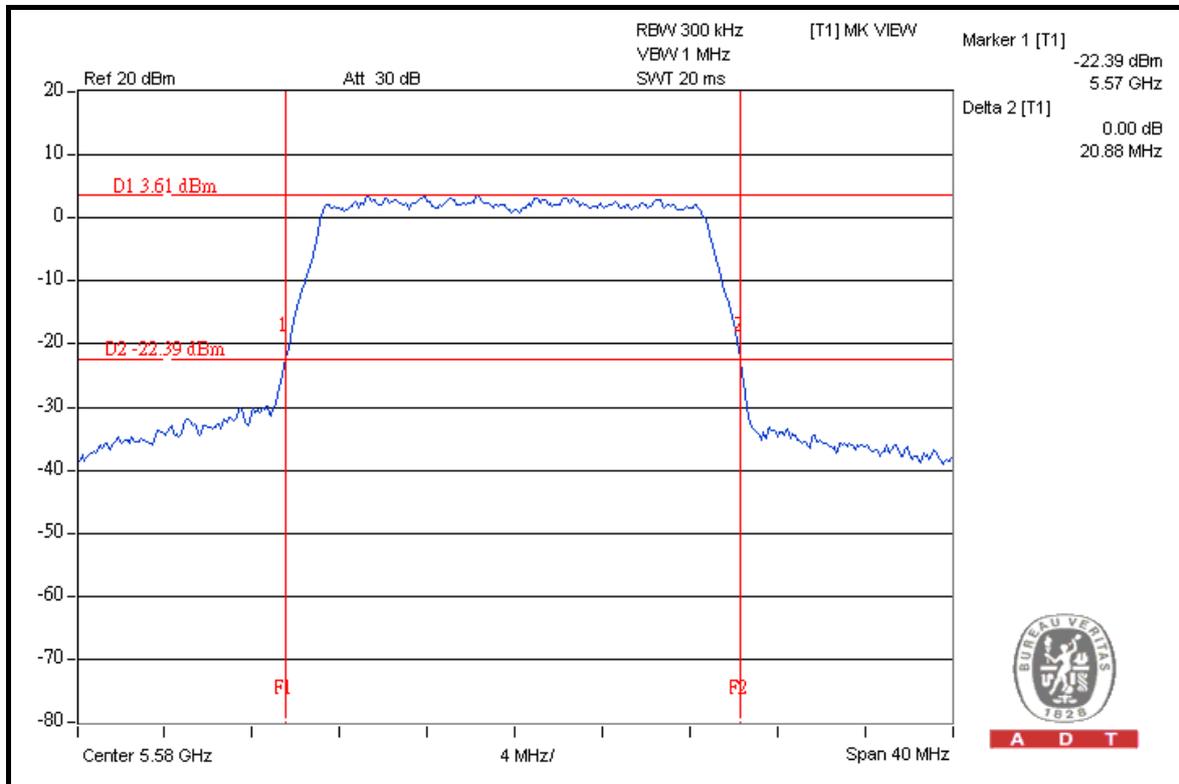


A D T

CH 100



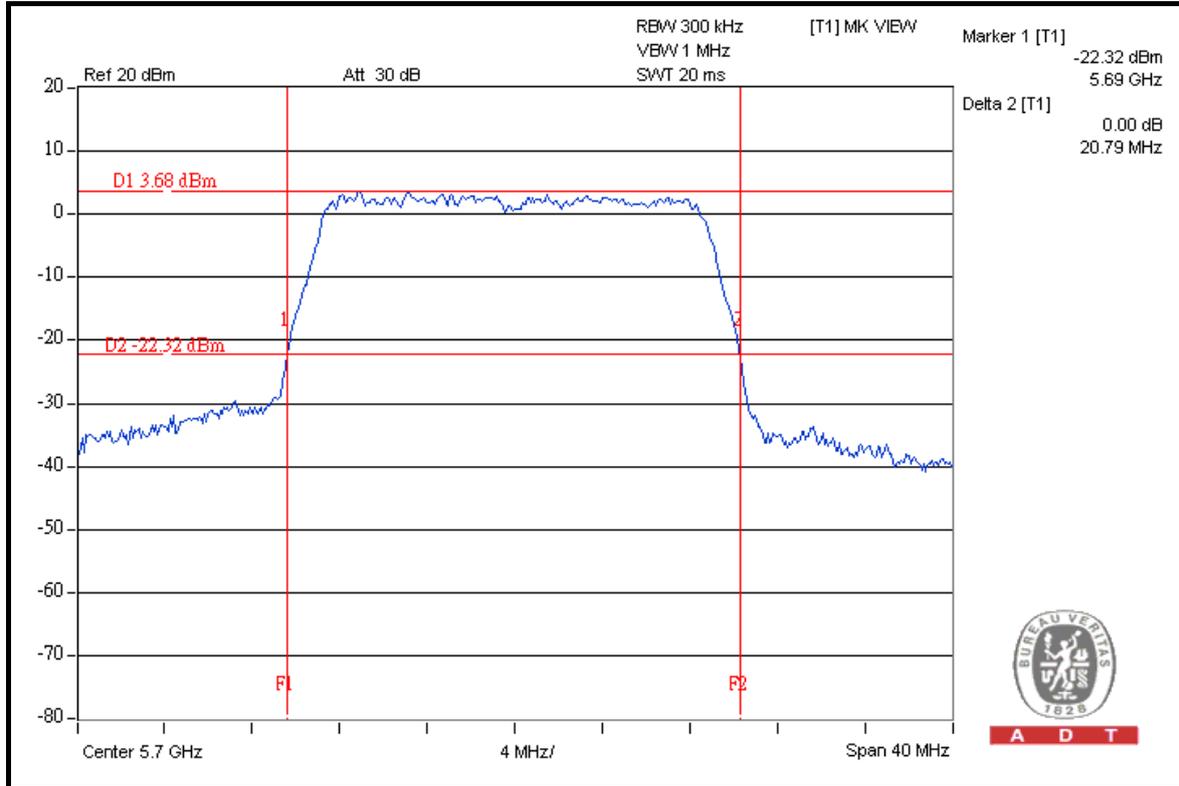
CH 116





A D T

CH 140



A D T



A D T

DRAFT 802.11n (20MHz) OFDM MODULATION: 2TX

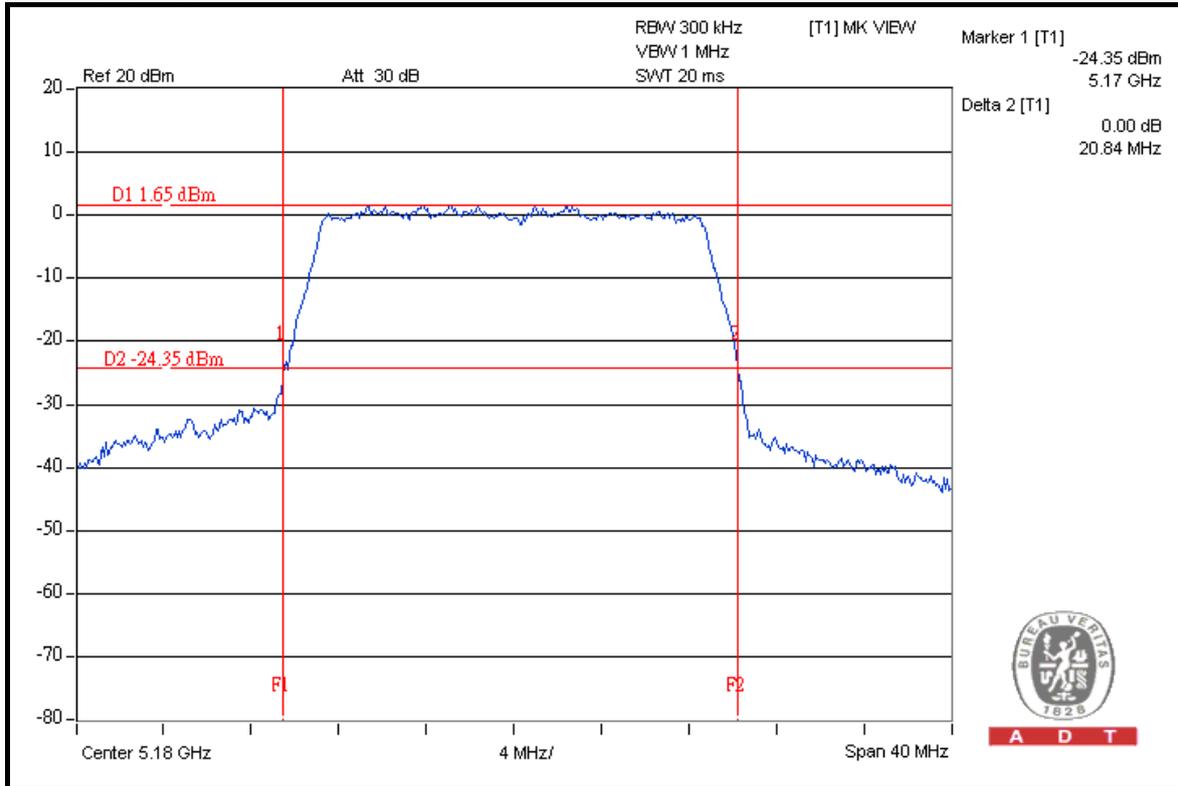
MODULATION TYPE	BPSK	TRANSFER RATE	14.444Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	26deg.C, 67%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc OCCUPIED BANDWIDTH (MHz)		PASS / FAIL
		CHAIN 0	CHAIN 1	
36	5180	20.84	20.72	PASS
40	5200	20.76	20.73	PASS
48	5240	20.71	20.54	PASS
52	5260	20.79	20.71	PASS
60	5300	20.87	20.66	PASS
64	5320	20.75	20.68	PASS
100	5500	20.74	20.70	PASS
116	5580	20.89	20.87	PASS
140	5700	20.83	20.76	PASS

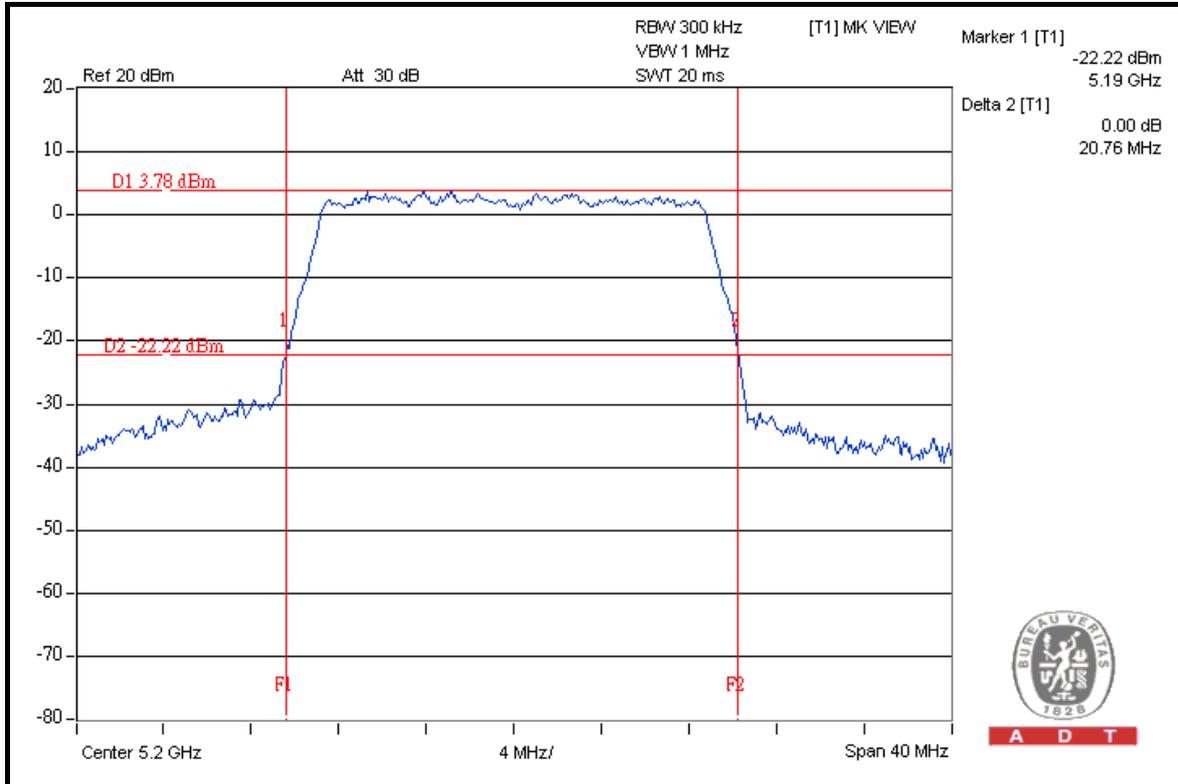


A D T

CHAIN 0: CH 36



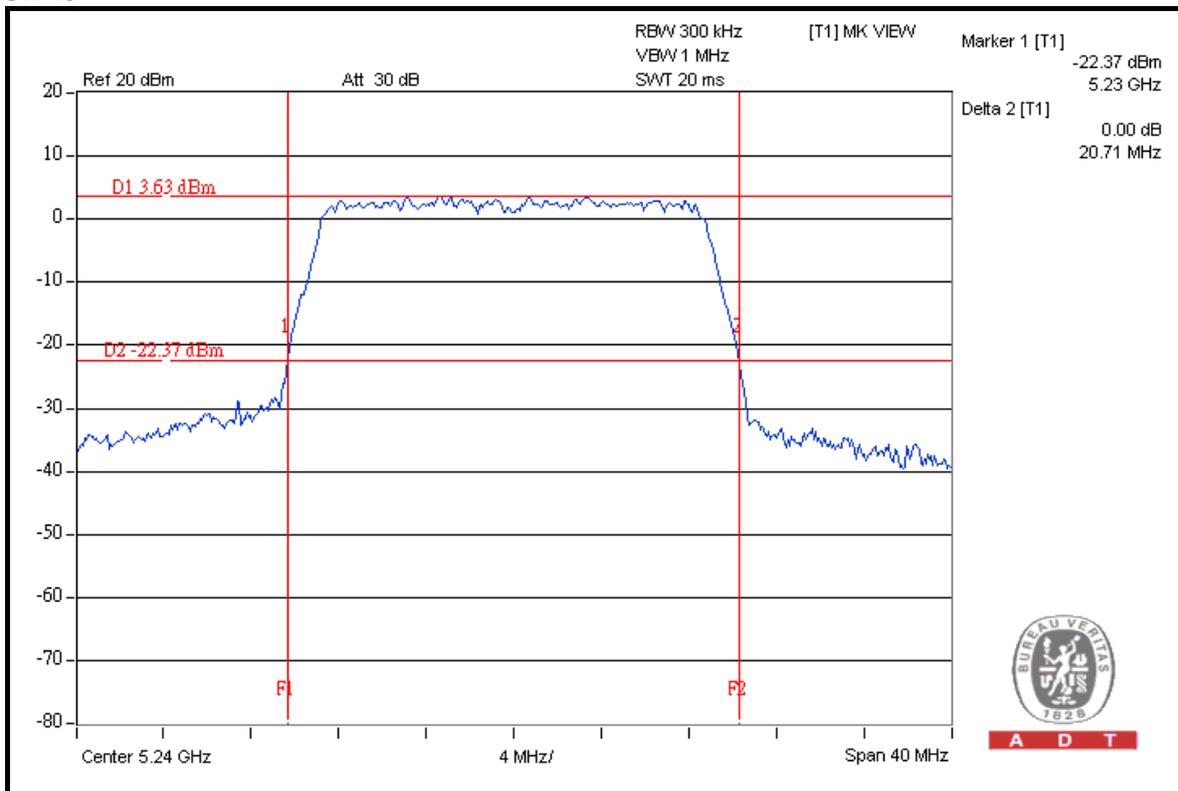
CH 40



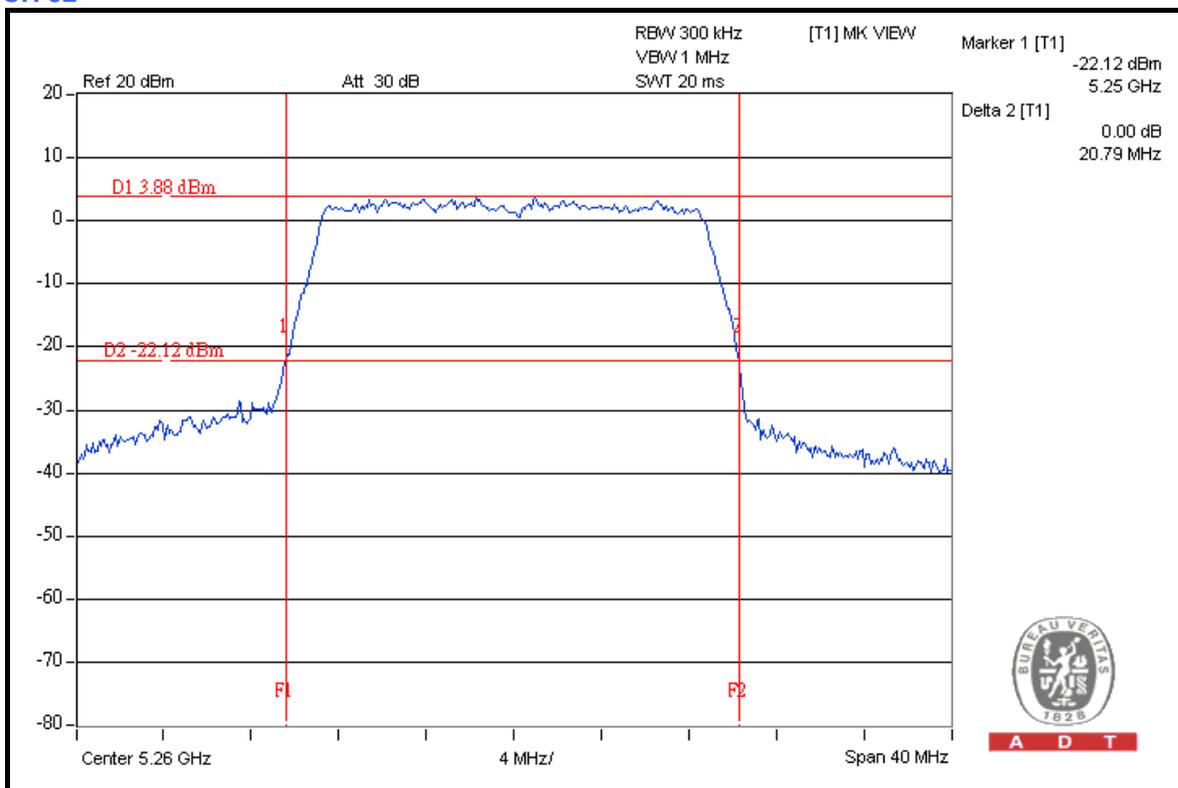


A D T

CH 48



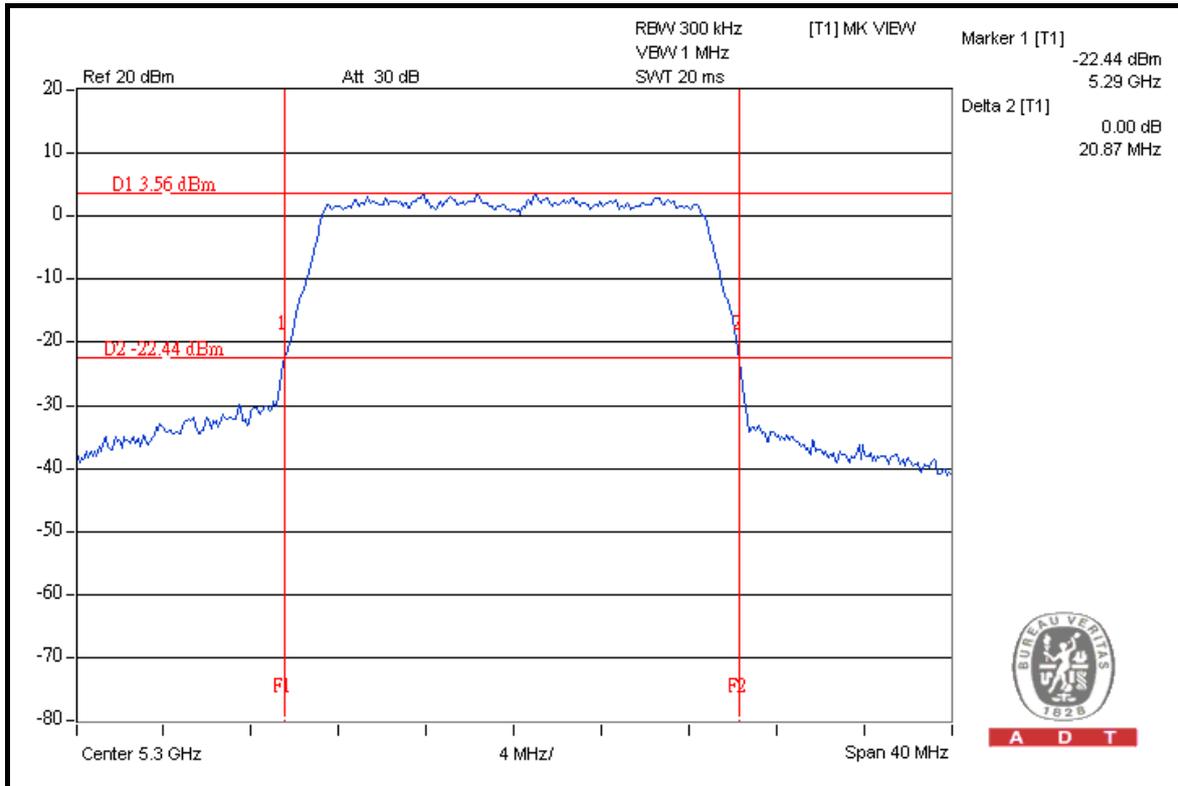
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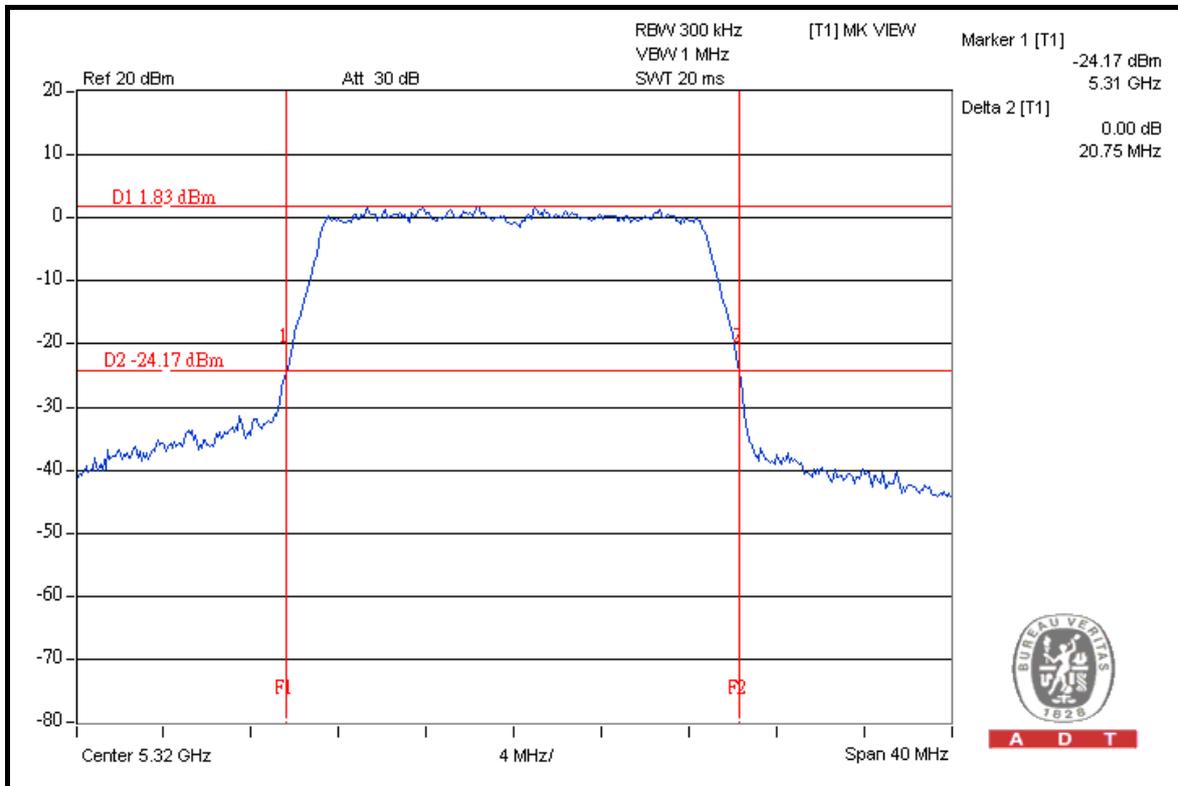


A D T

CH 60



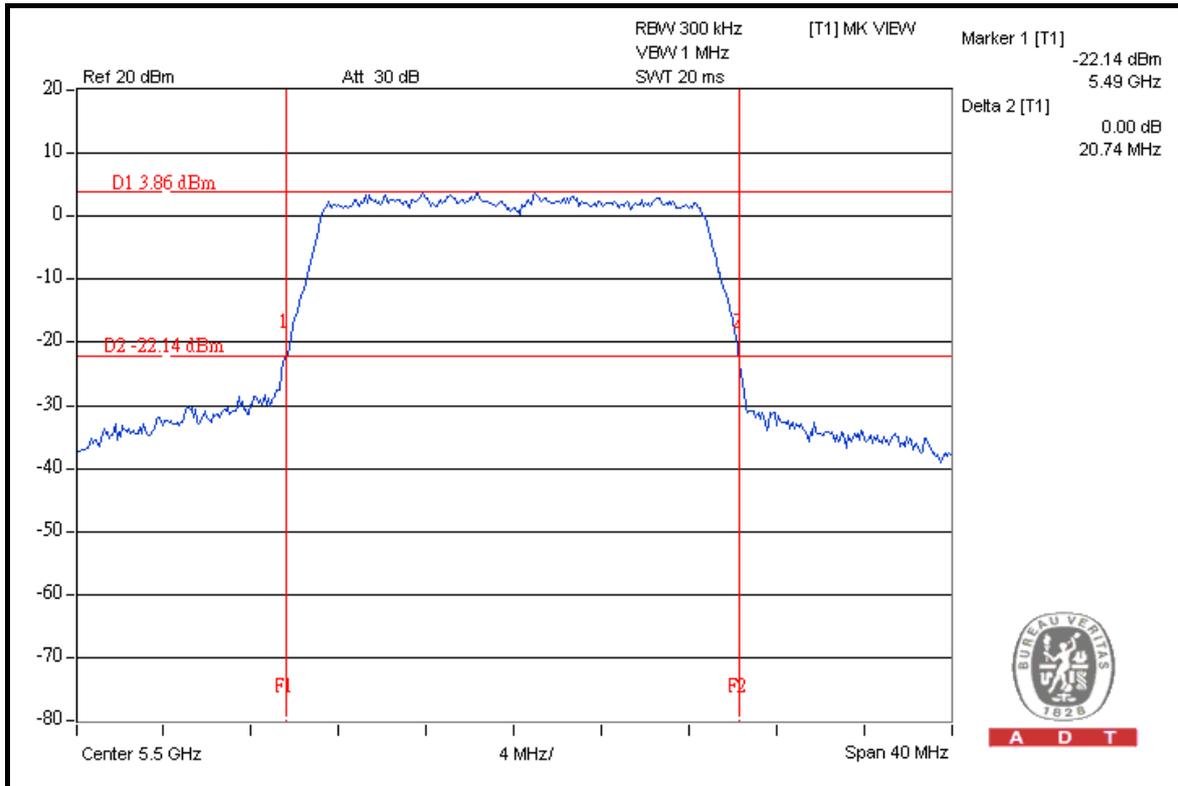
CH 64



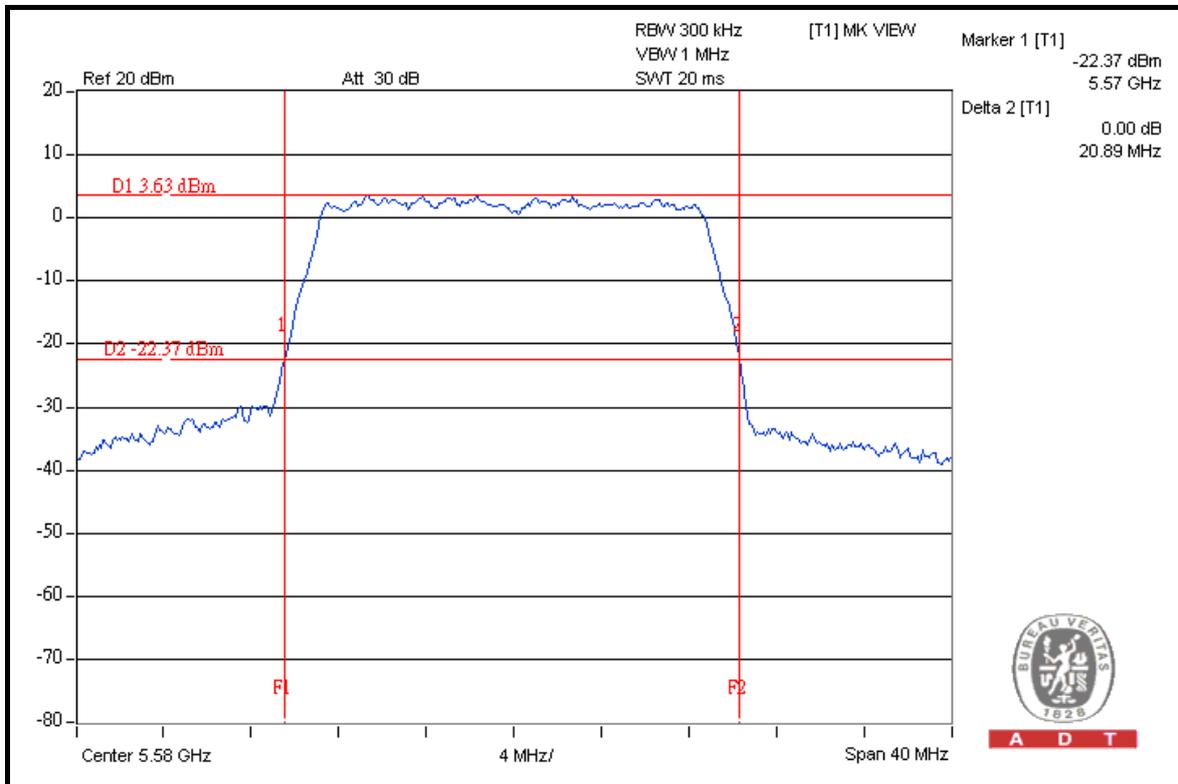


A D T

CH 100



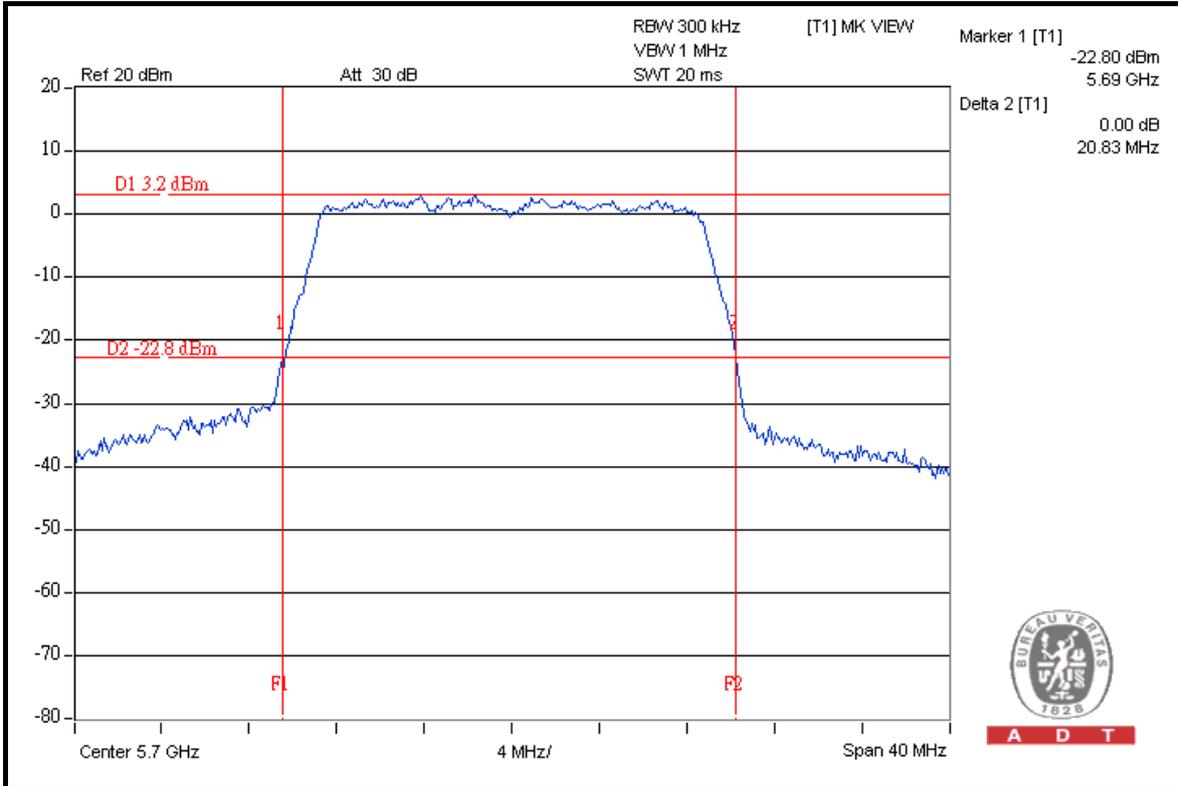
CH 116





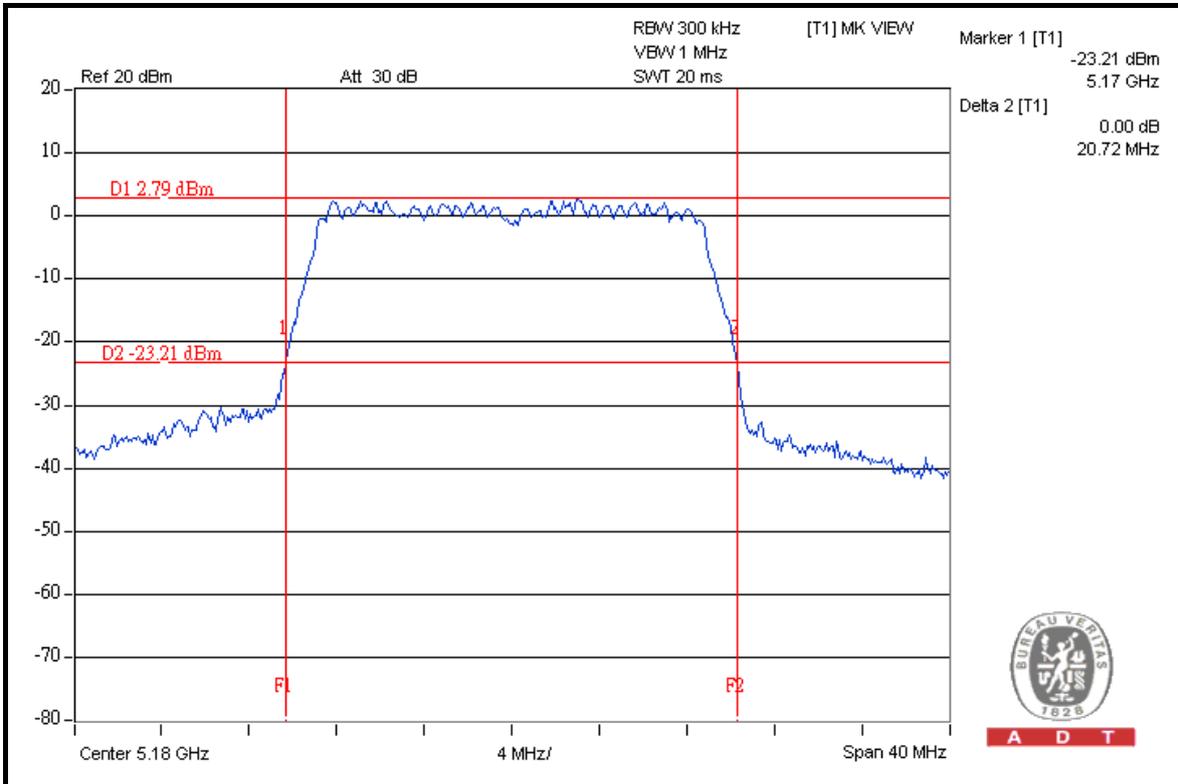
A D T

CH 140



A D T

CHAIN 1: CH 36

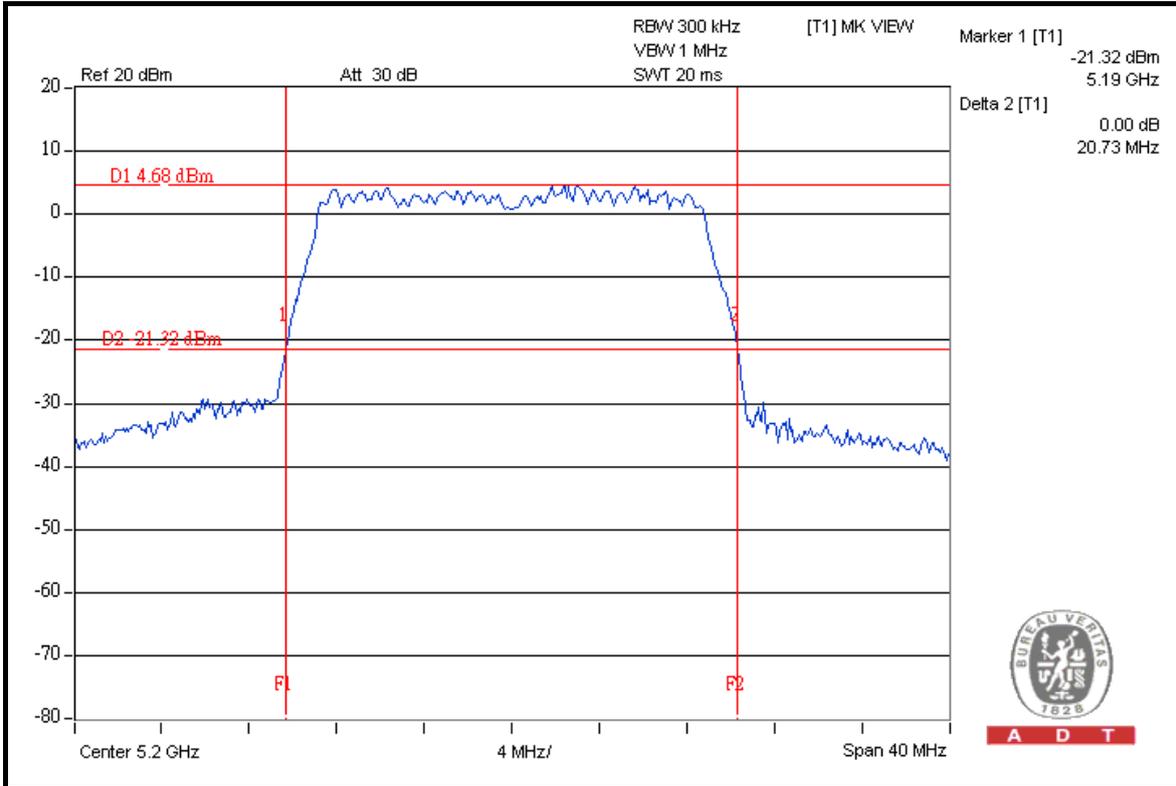


A D T

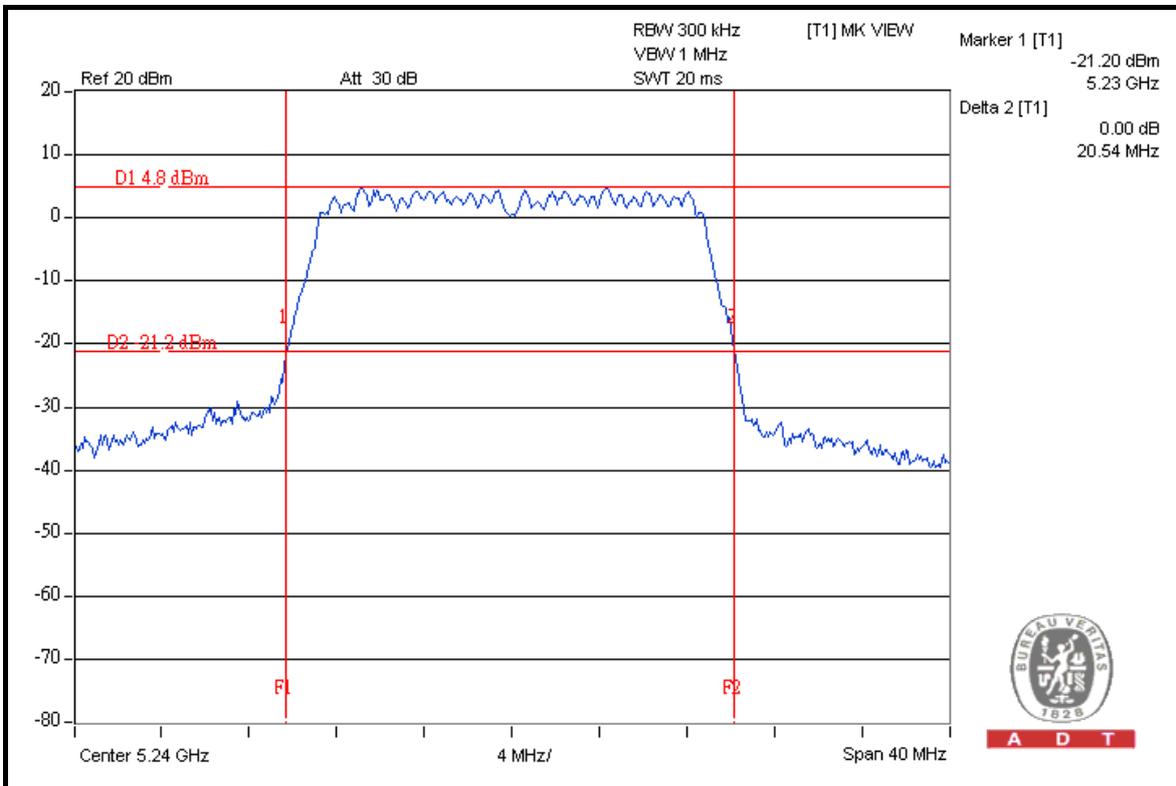


A D T

CH 40



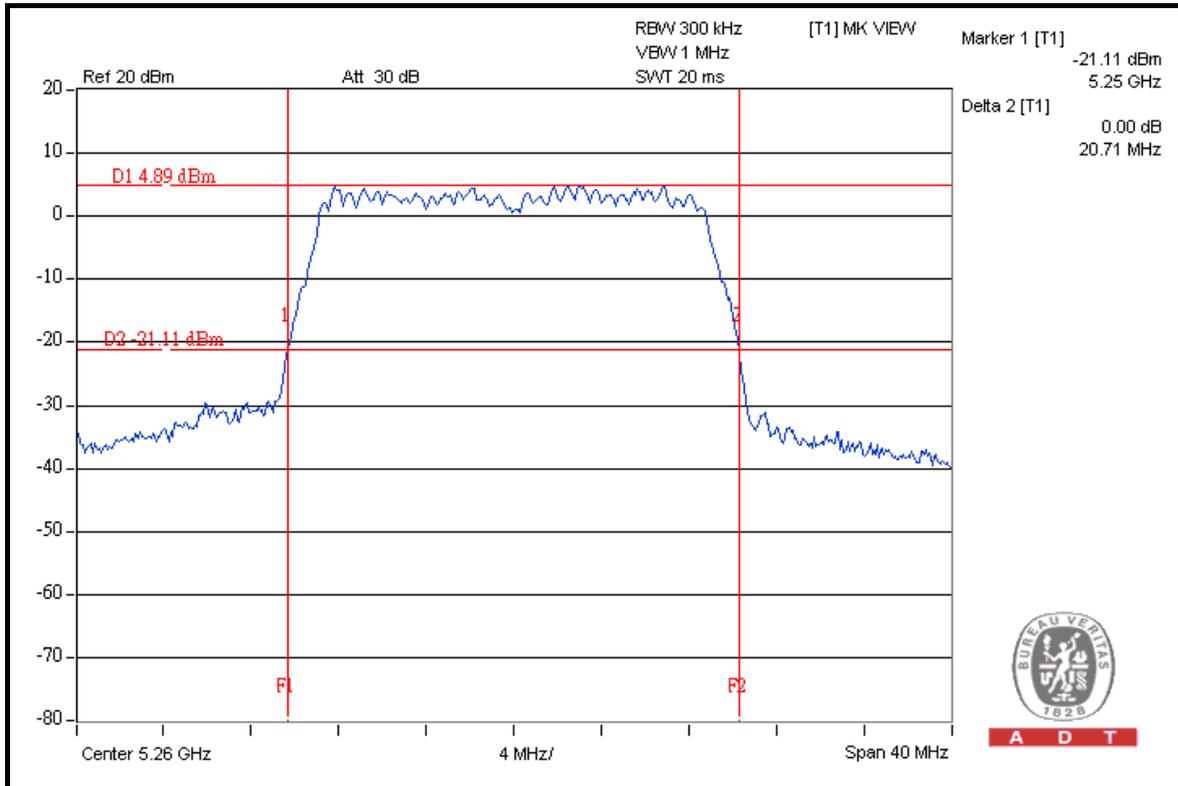
CH 48



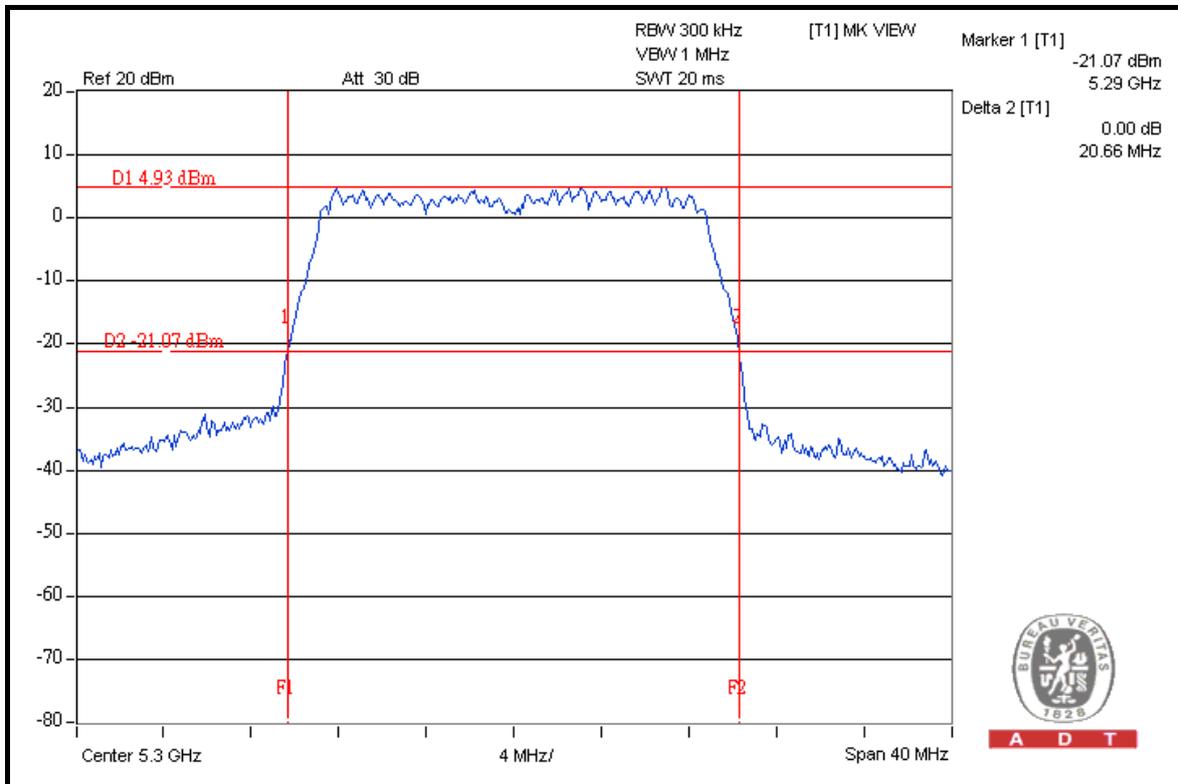


A D T

CH 52



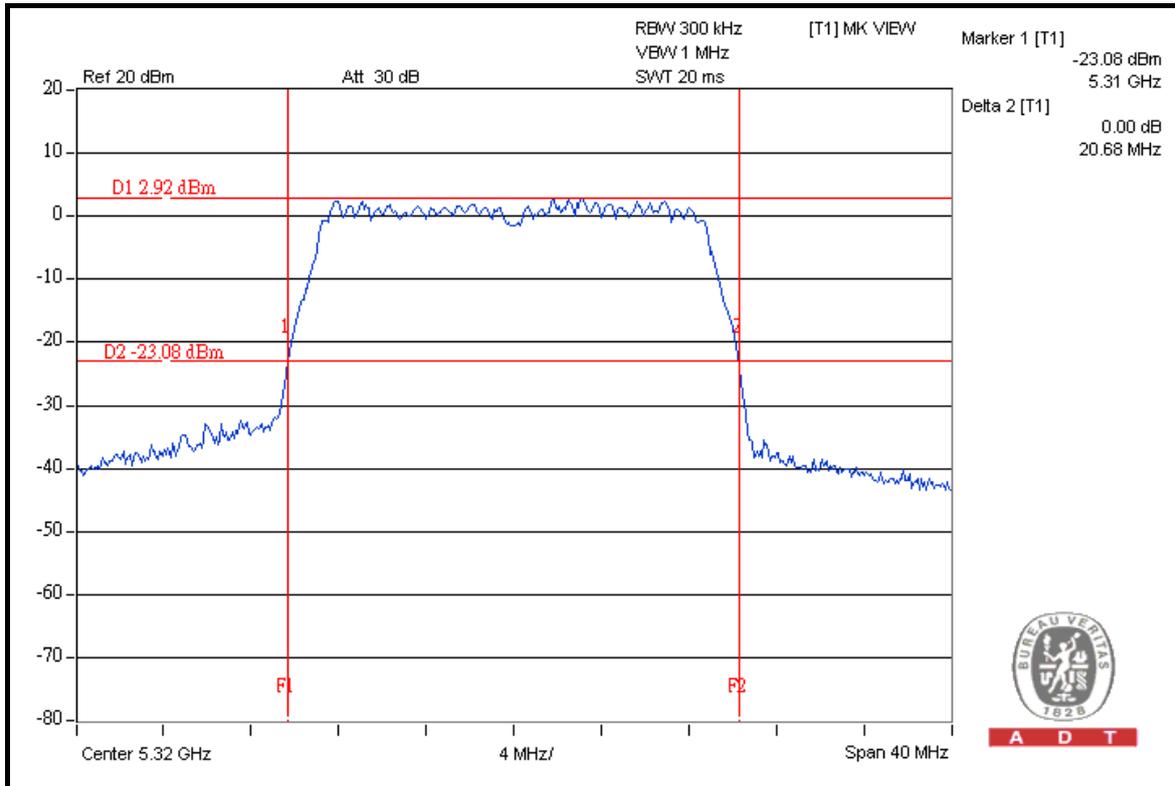
CH 60





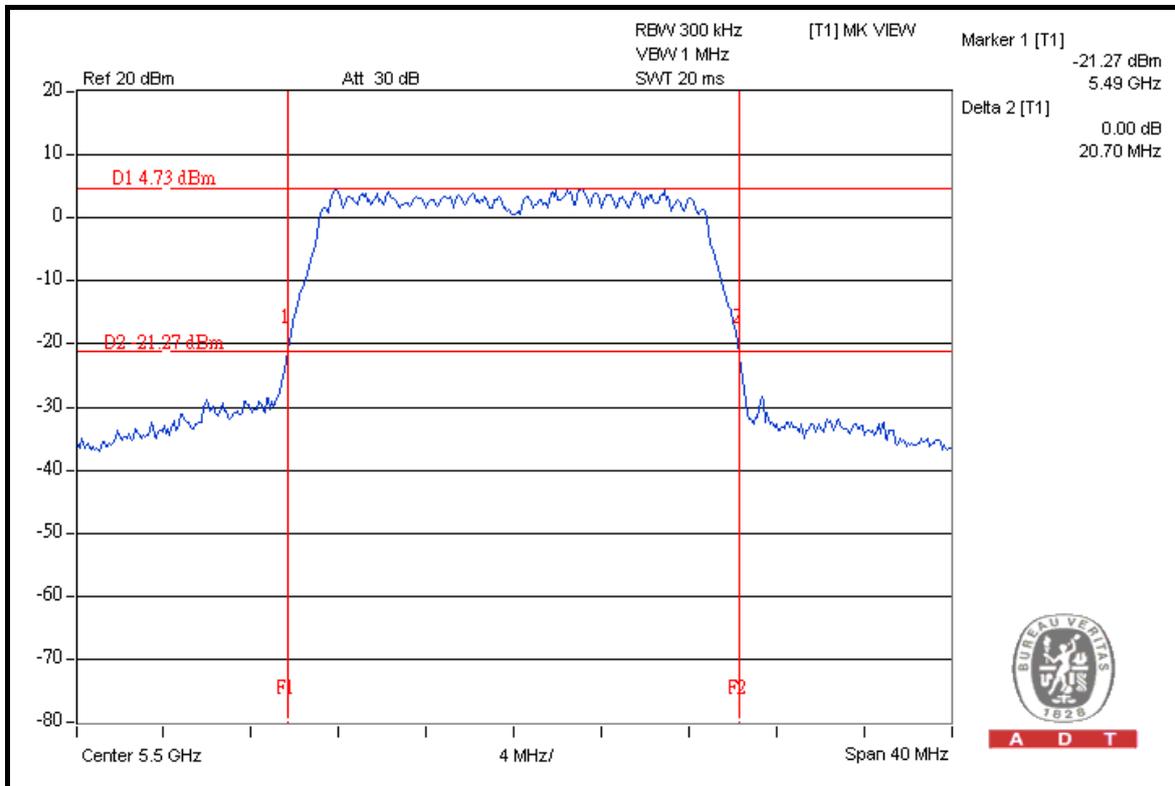
A D T

CH 64



A D T

CH 100

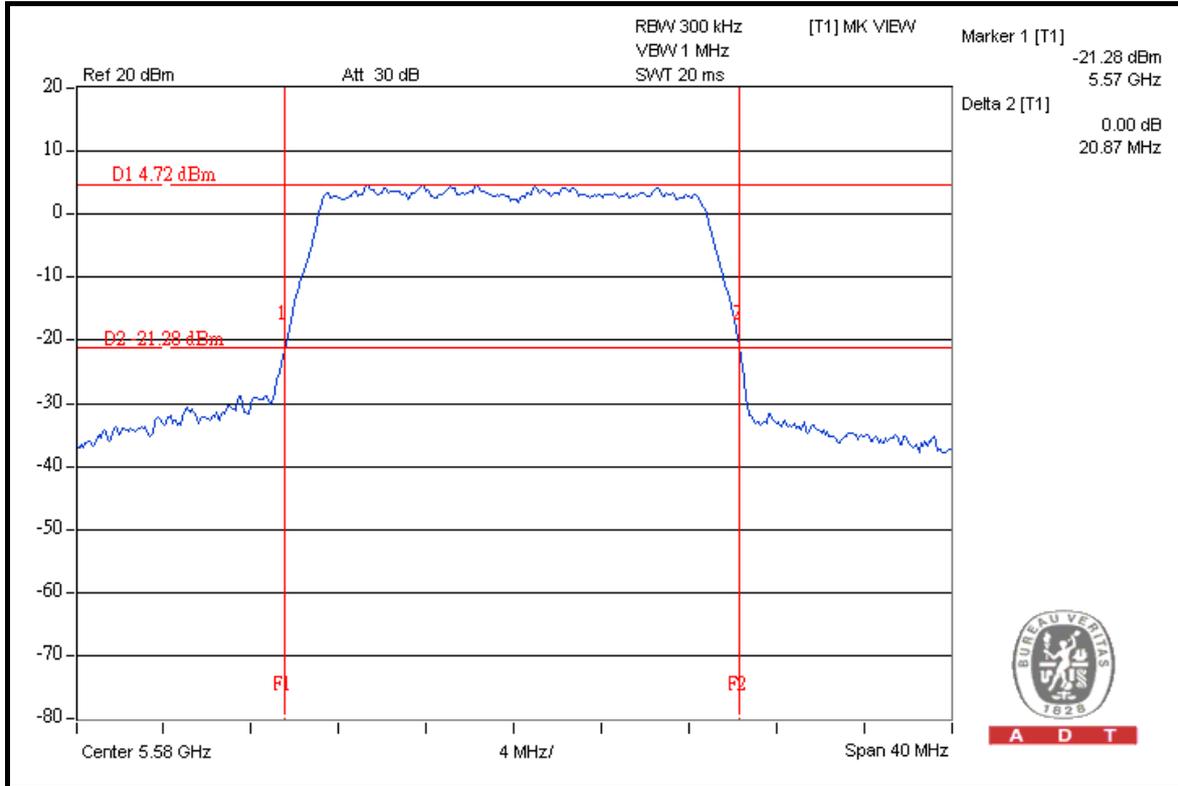


A D T

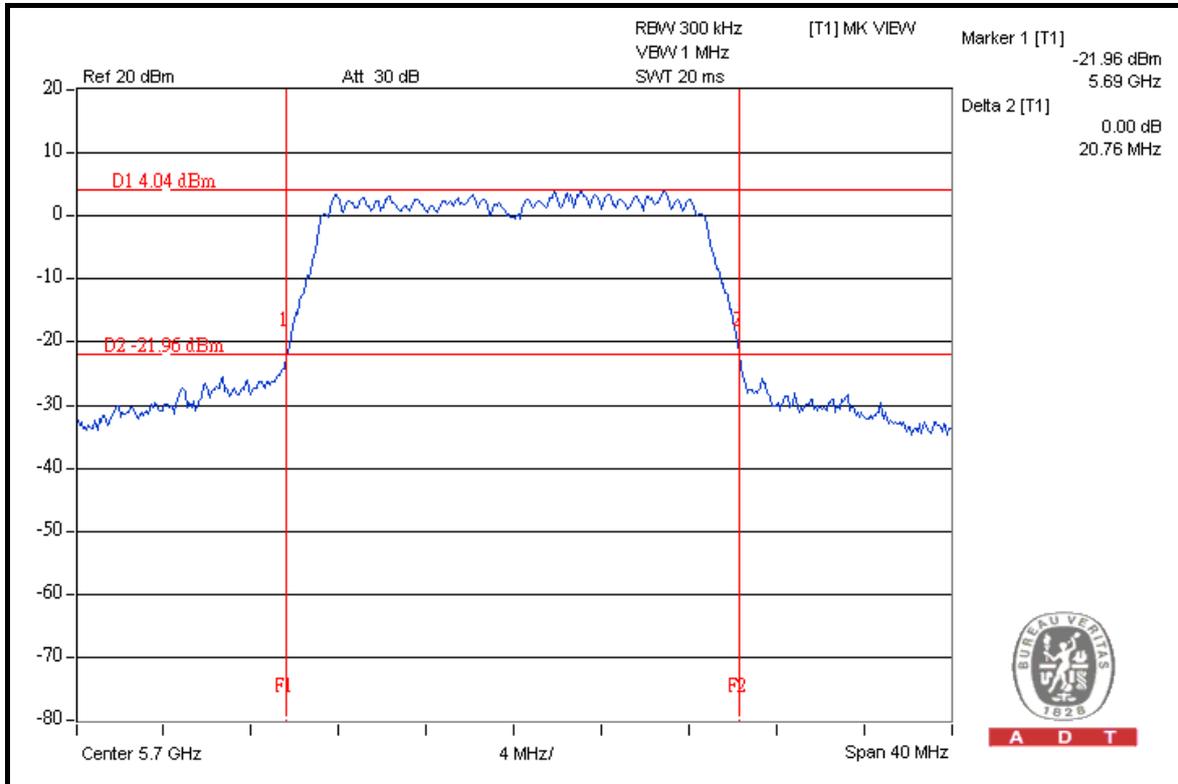


A D T

CH 116



CH 140





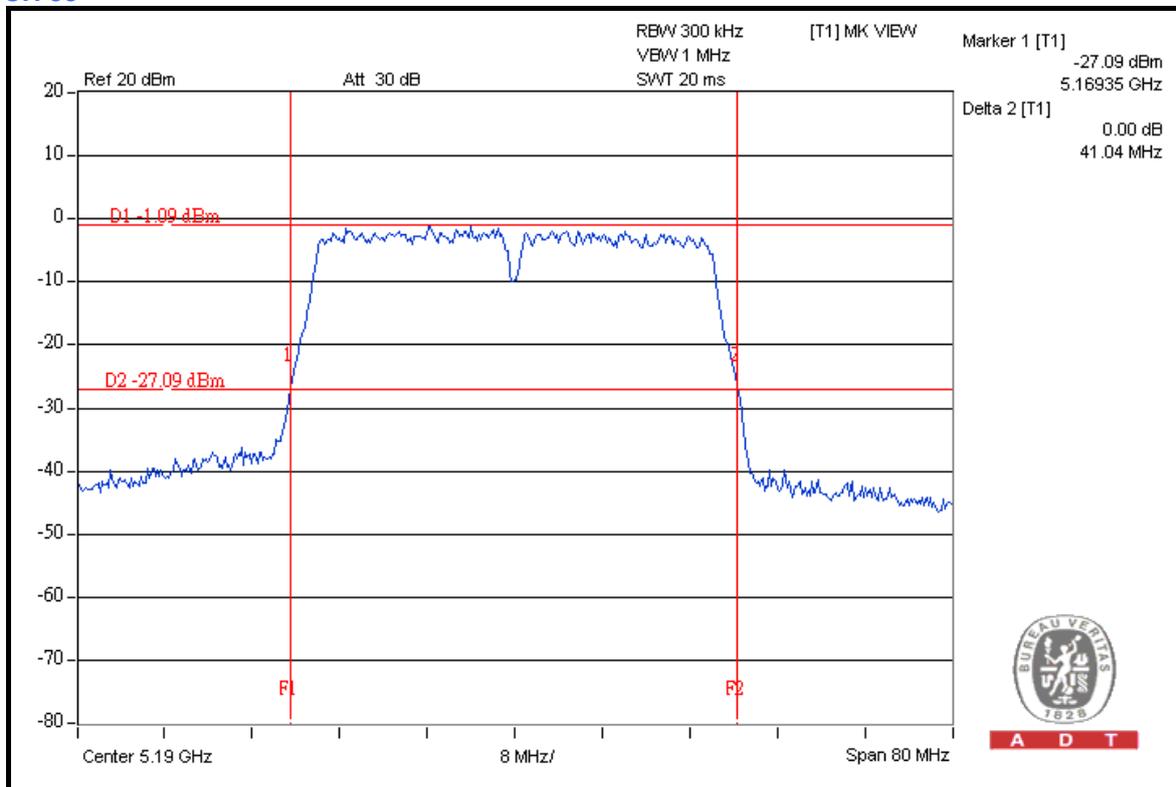
A D T

DRAFT 802.11n (40MHz) OFDM MODULATION: 1TX

MODULATION TYPE	BPSK	TRANSFER RATE	15.0Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	26deg.C, 67%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc OCCUPIED BANDWIDTH (MHz)	PASS / FAIL
38	5190	41.04	PASS
46	5230	41.16	PASS
54	5270	41.20	PASS
62	5310	40.97	PASS
102	5510	41.09	PASS
110	5550	40.98	PASS
134	5670	41.13	PASS

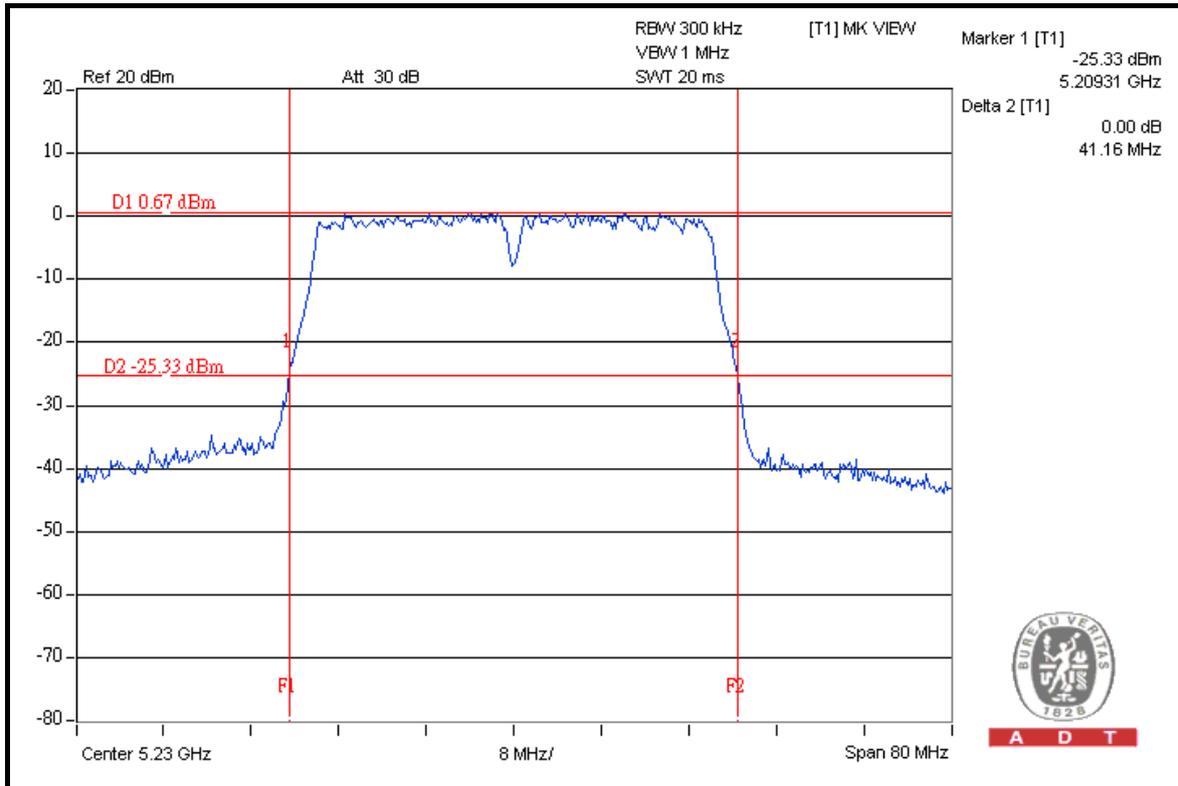
CH 38



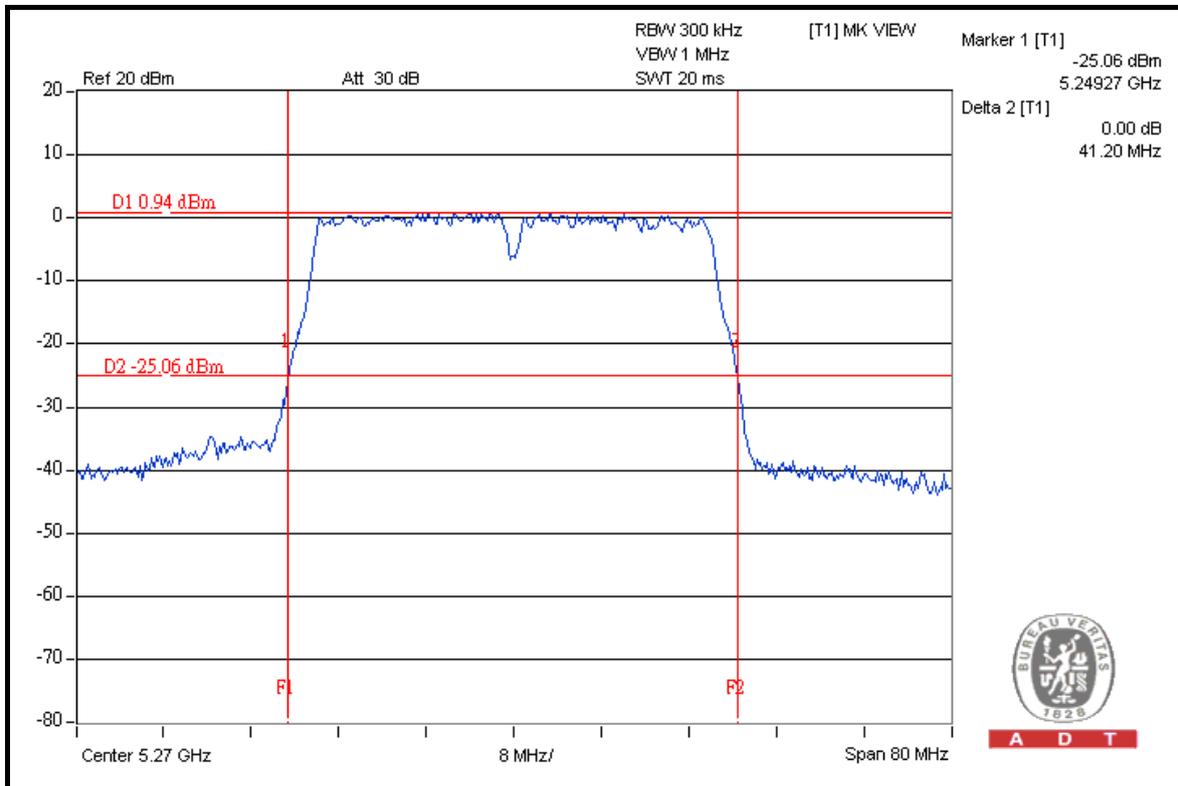


A D T

CH 46



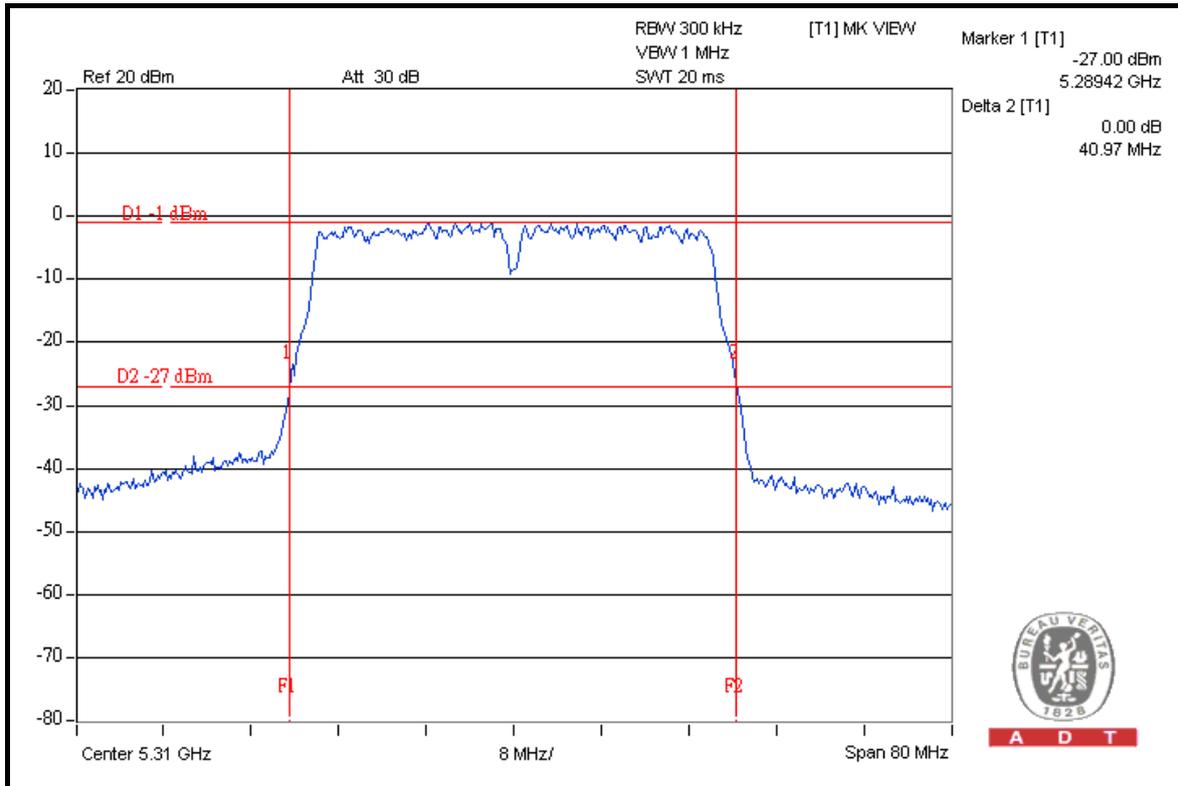
CH 54



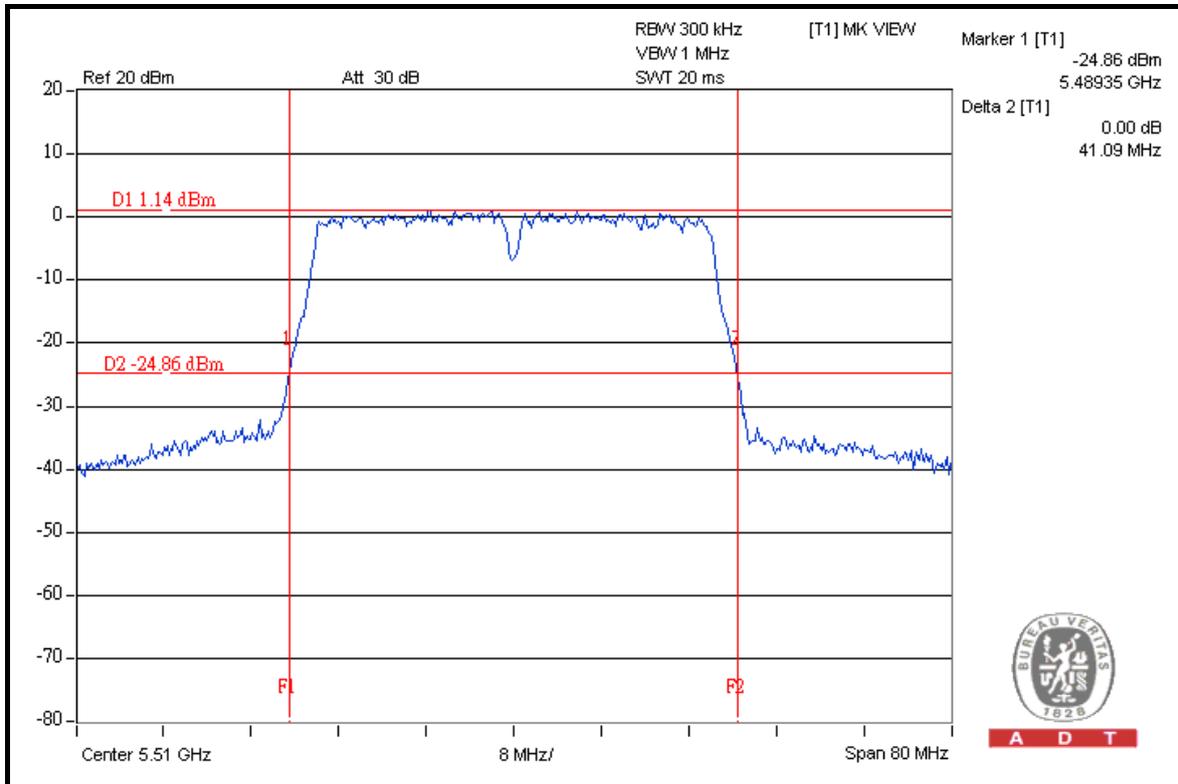


A D T

CH 62



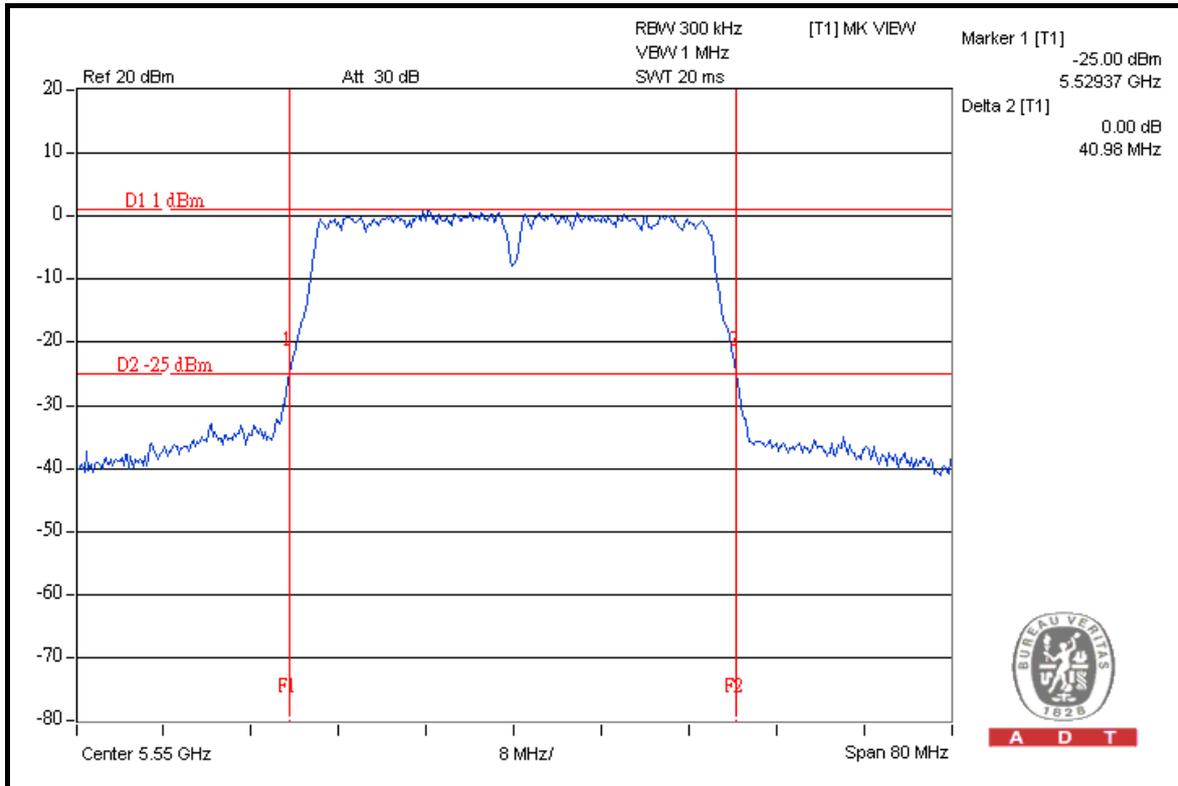
CH 102





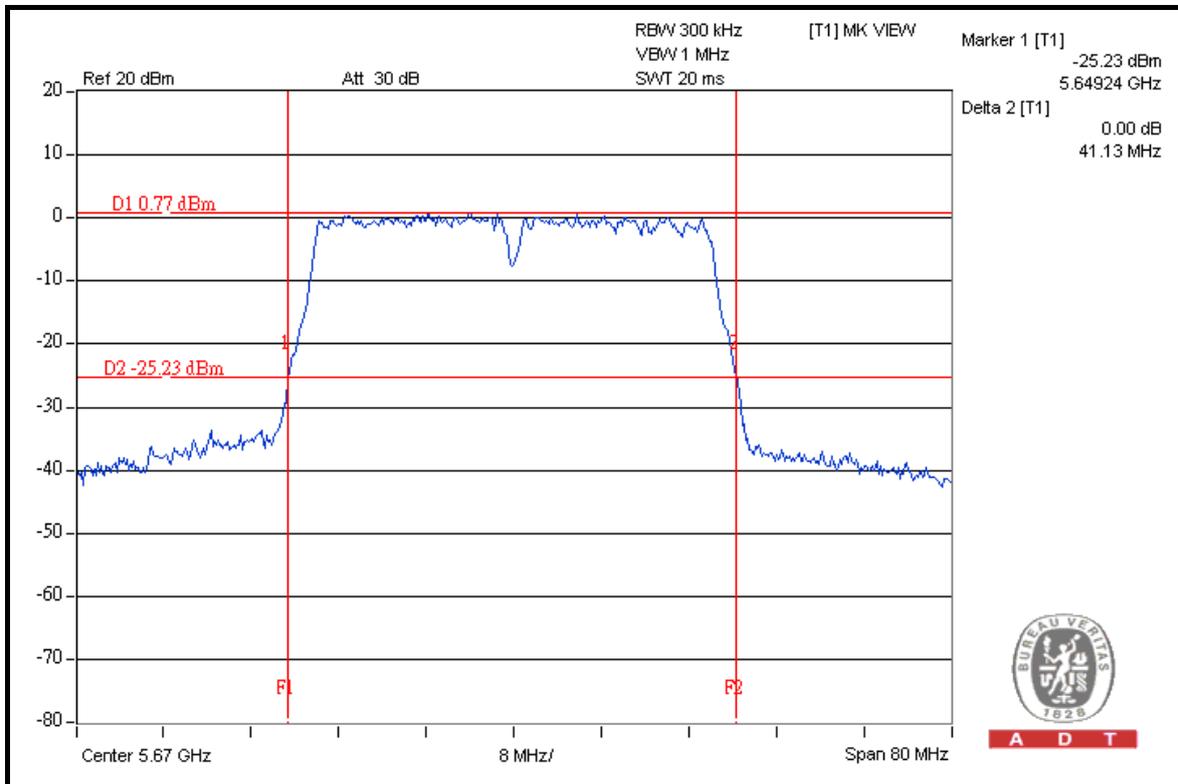
A D T

CH 110



A D T

CH 134



A D T



A D T

DRAFT 802.11n (40MHz) OFDM MODULATION: 2TX

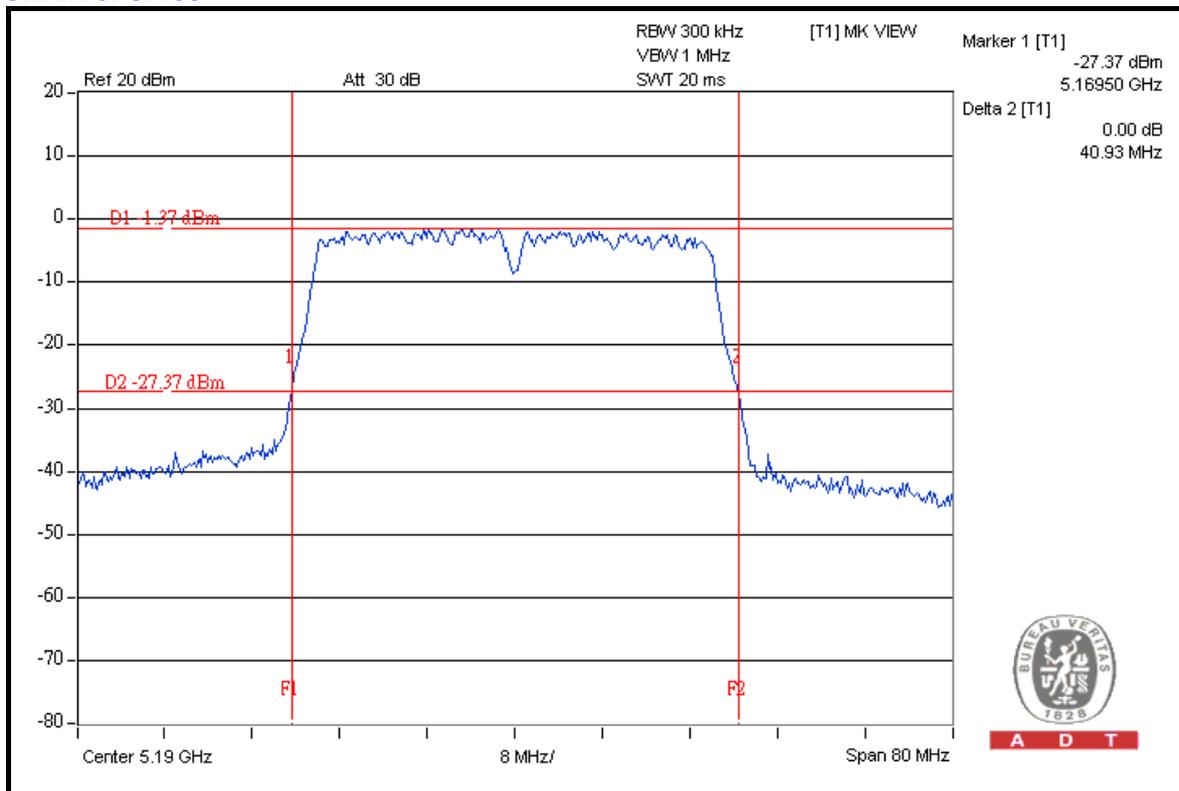
MODULATION TYPE	BPSK	TRANSFER RATE	30.0Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	26deg.C, 67%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc OCCUPIED BANDWIDTH (MHz)		PASS / FAIL
		CHAIN 0	CHAIN 1	
38	5190	40.93	40.79	PASS
46	5230	40.91	40.82	PASS
54	5270	41.00	41.04	PASS
62	5310	40.84	40.68	PASS
102	5510	40.88	40.98	PASS
110	5550	40.74	41.14	PASS
134	5670	40.81	41.14	PASS

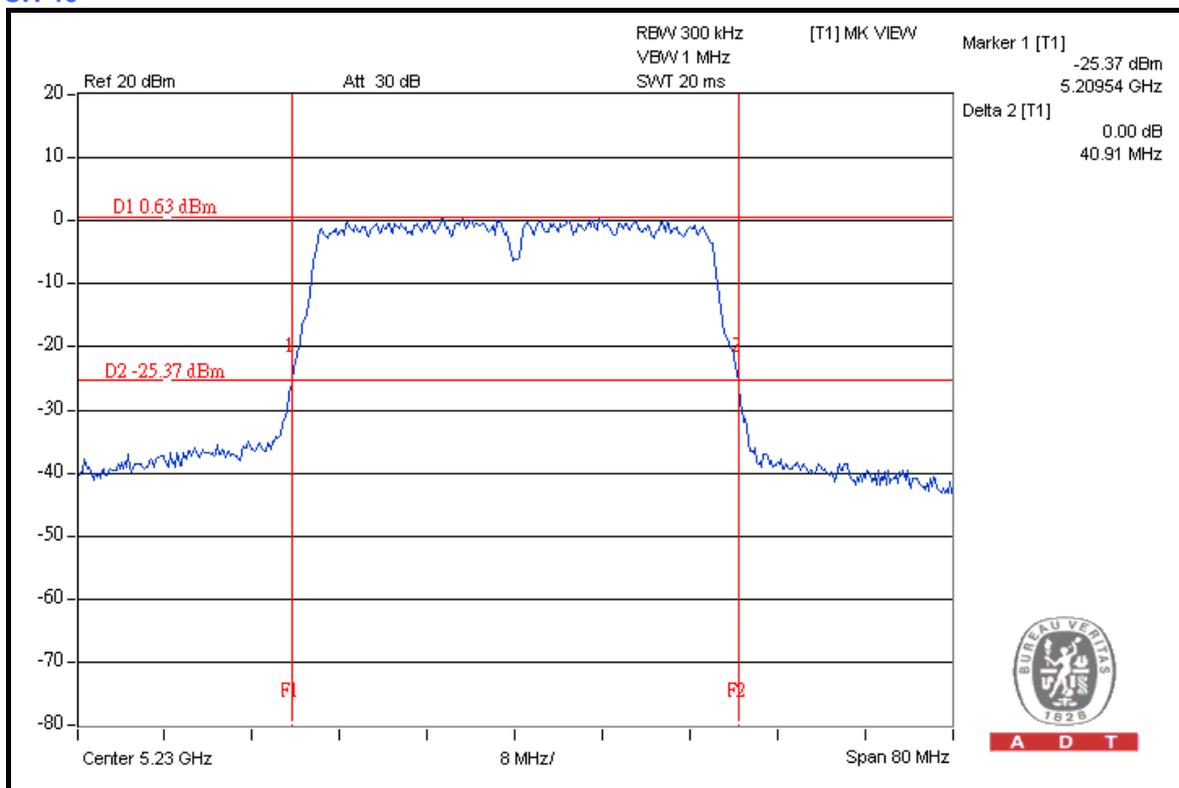


A D T

CHAIN 0: CH 38



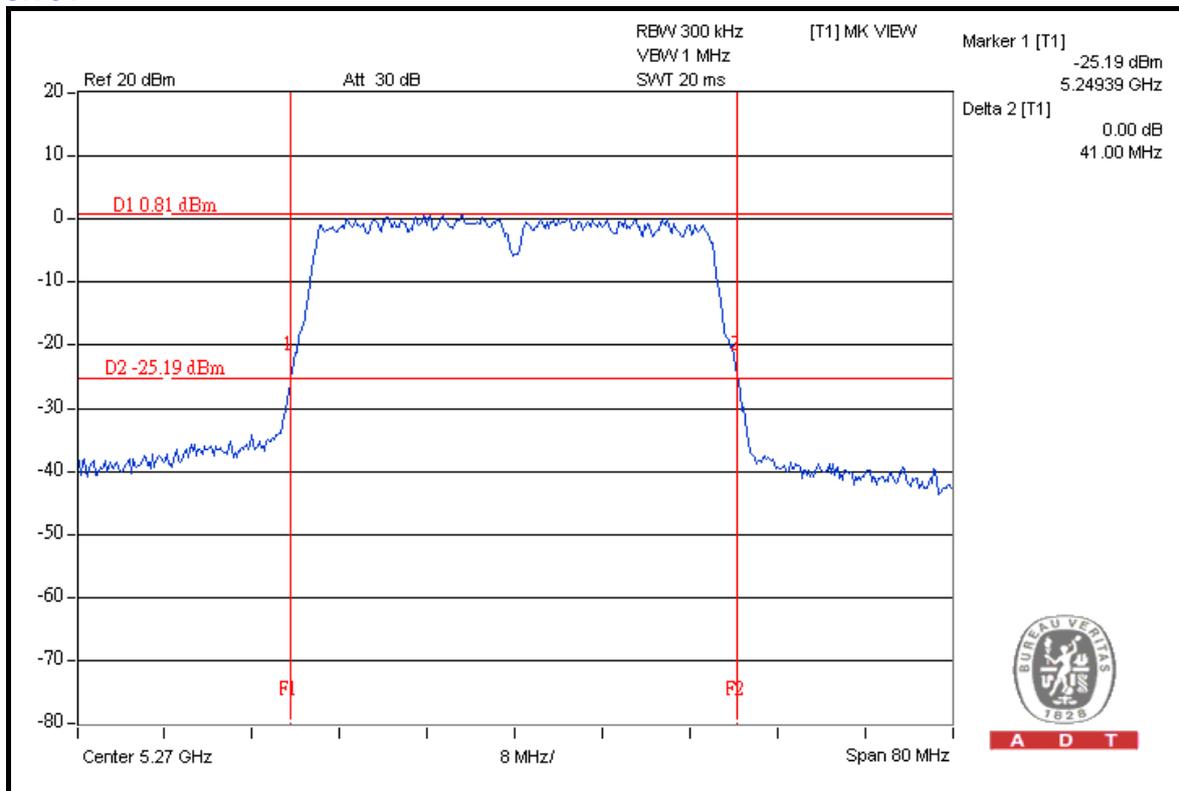
CH 46





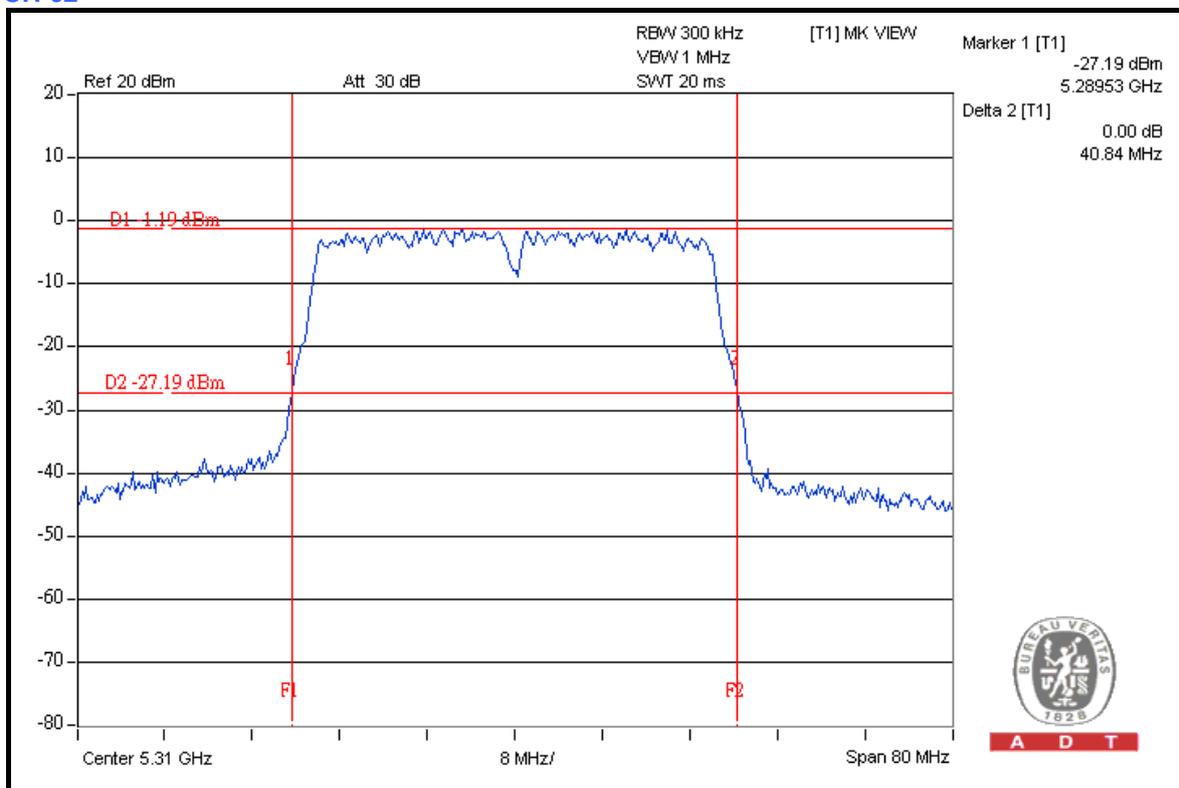
A D T

CH 54



A D T

CH 62

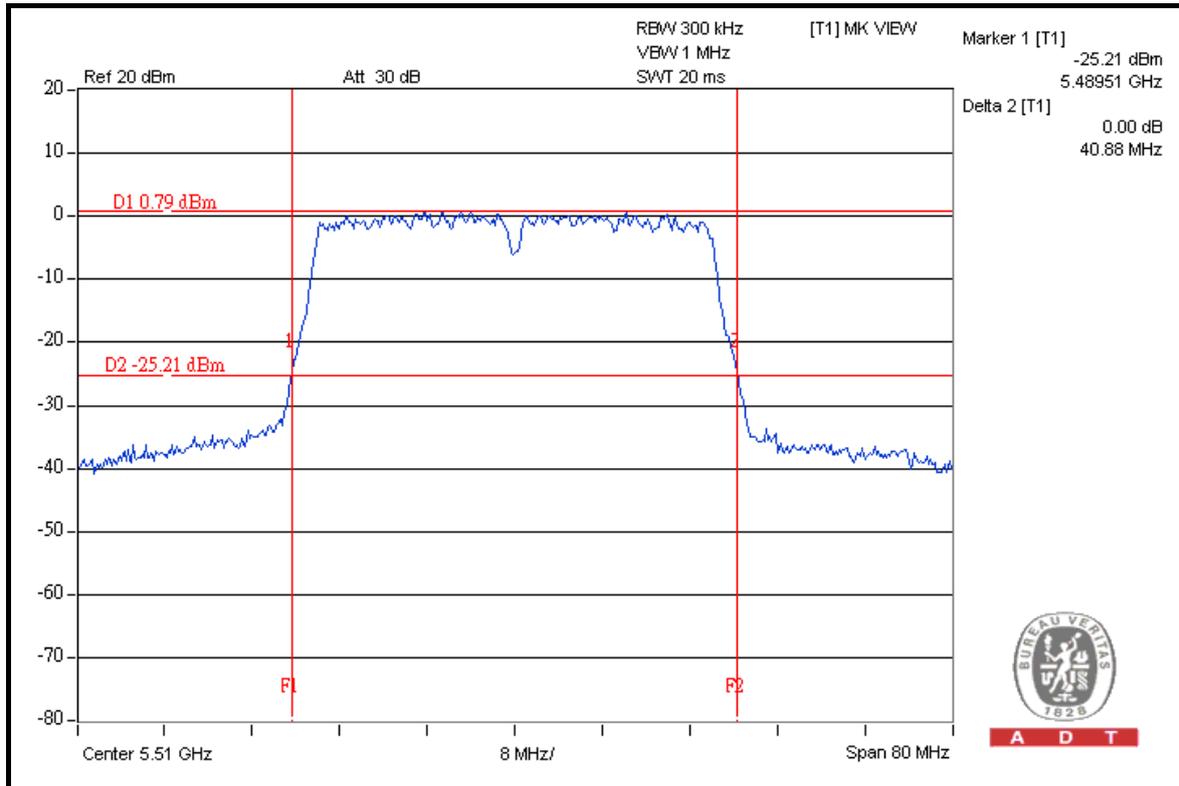


A D T

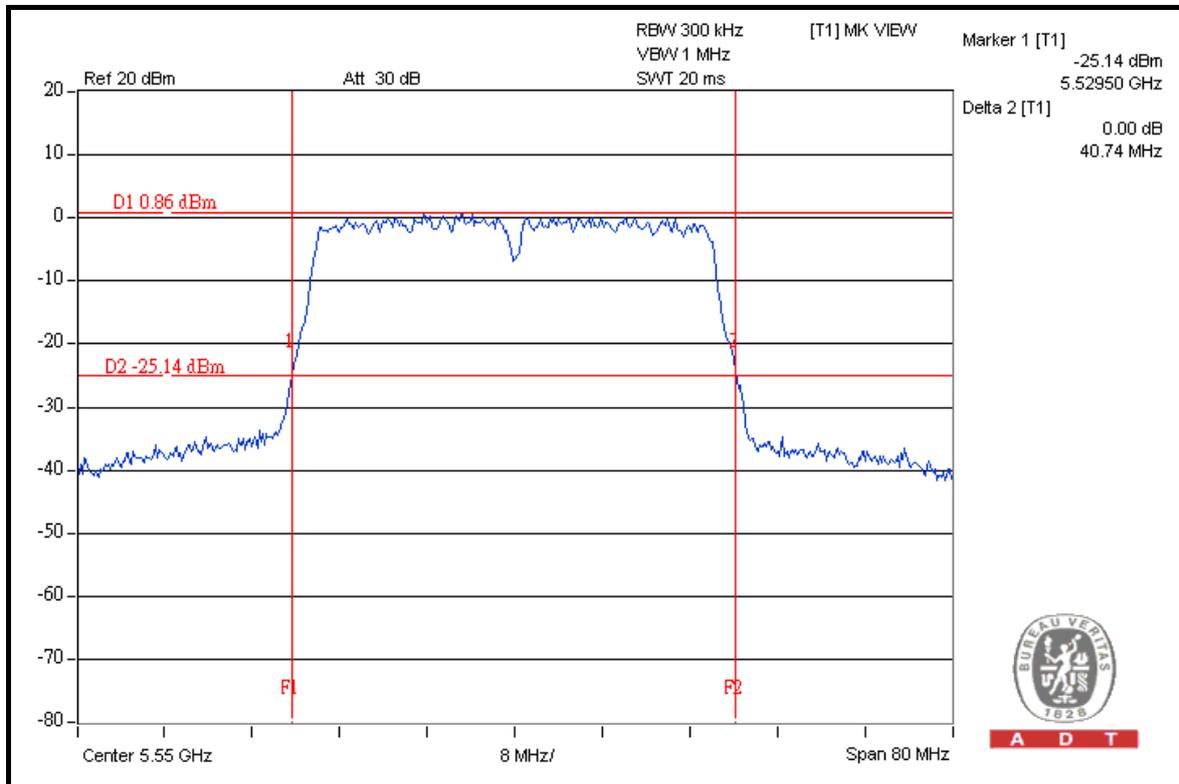


A D T

CH 102



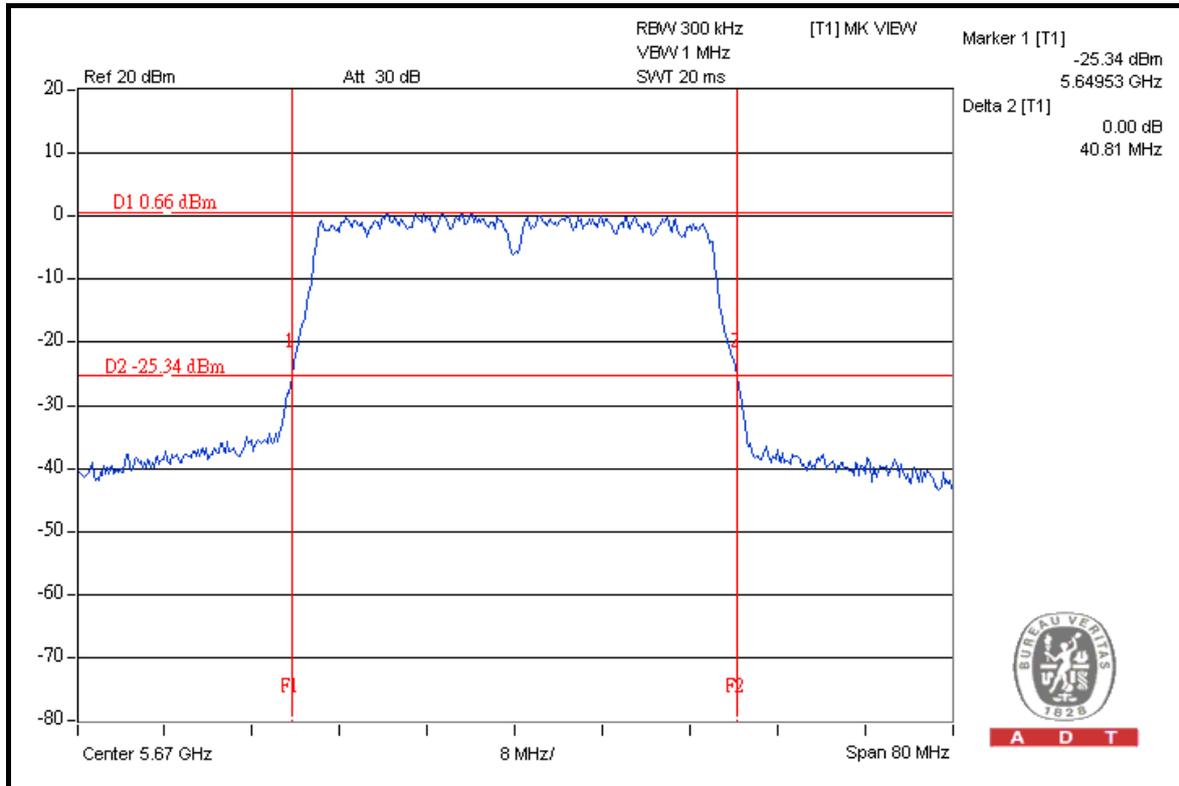
CH 110



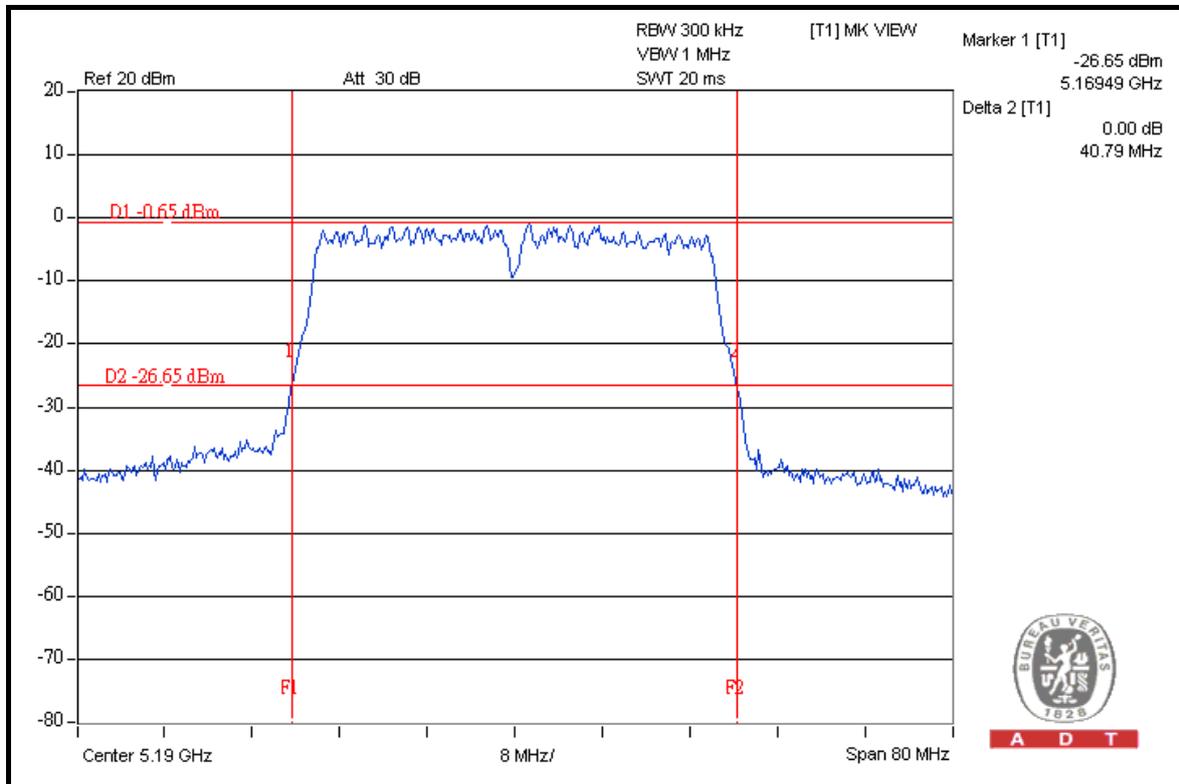


A D T

CH 134



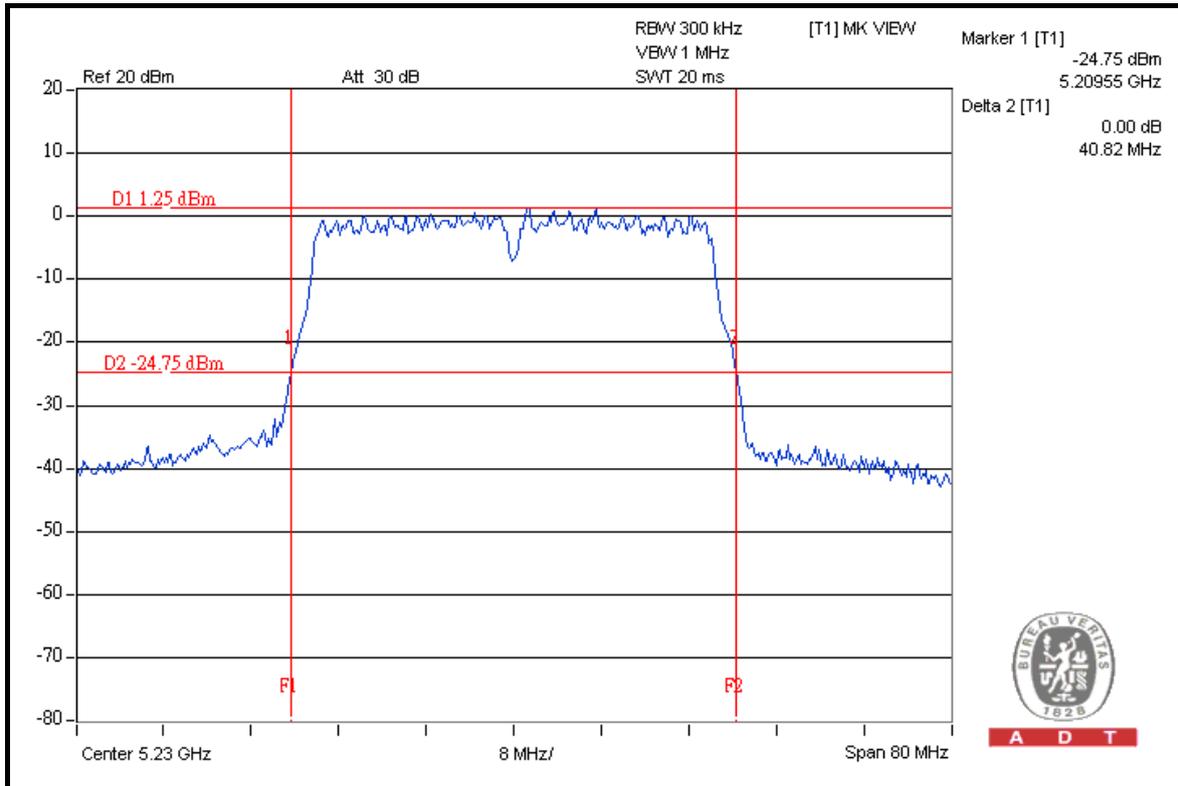
CHAIN 1: CH 38



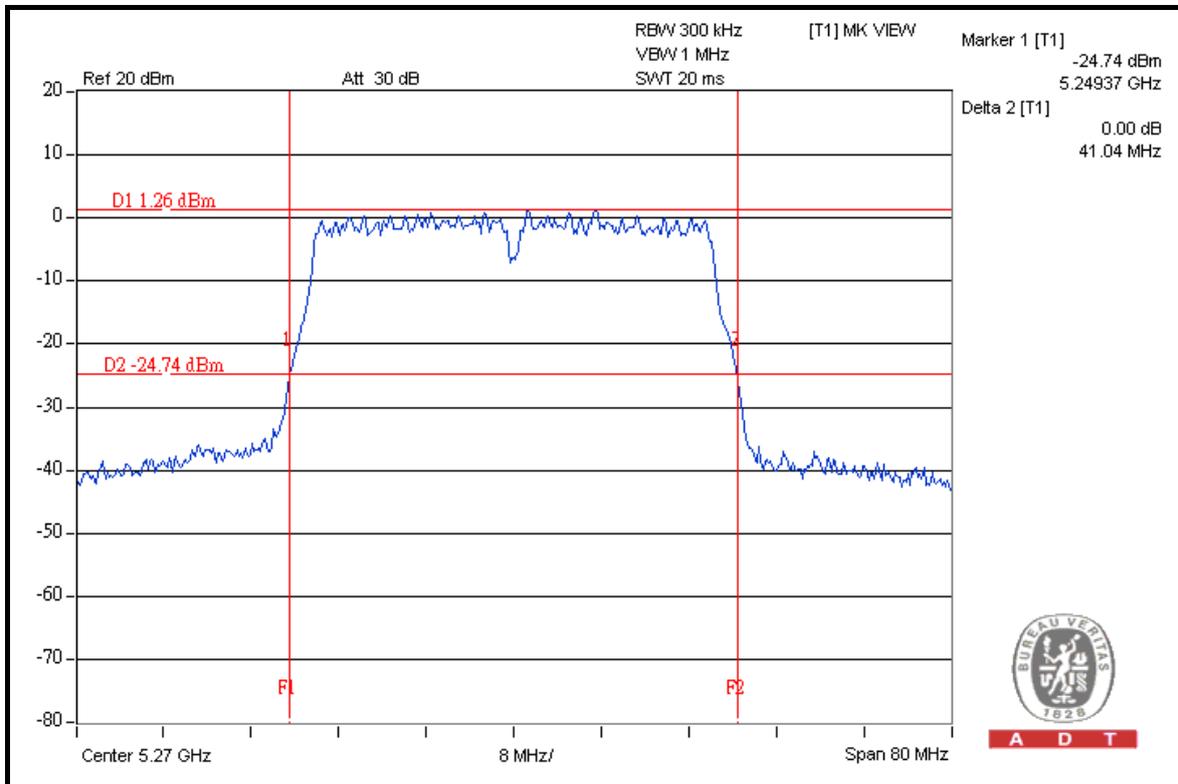


A D T

CH 46



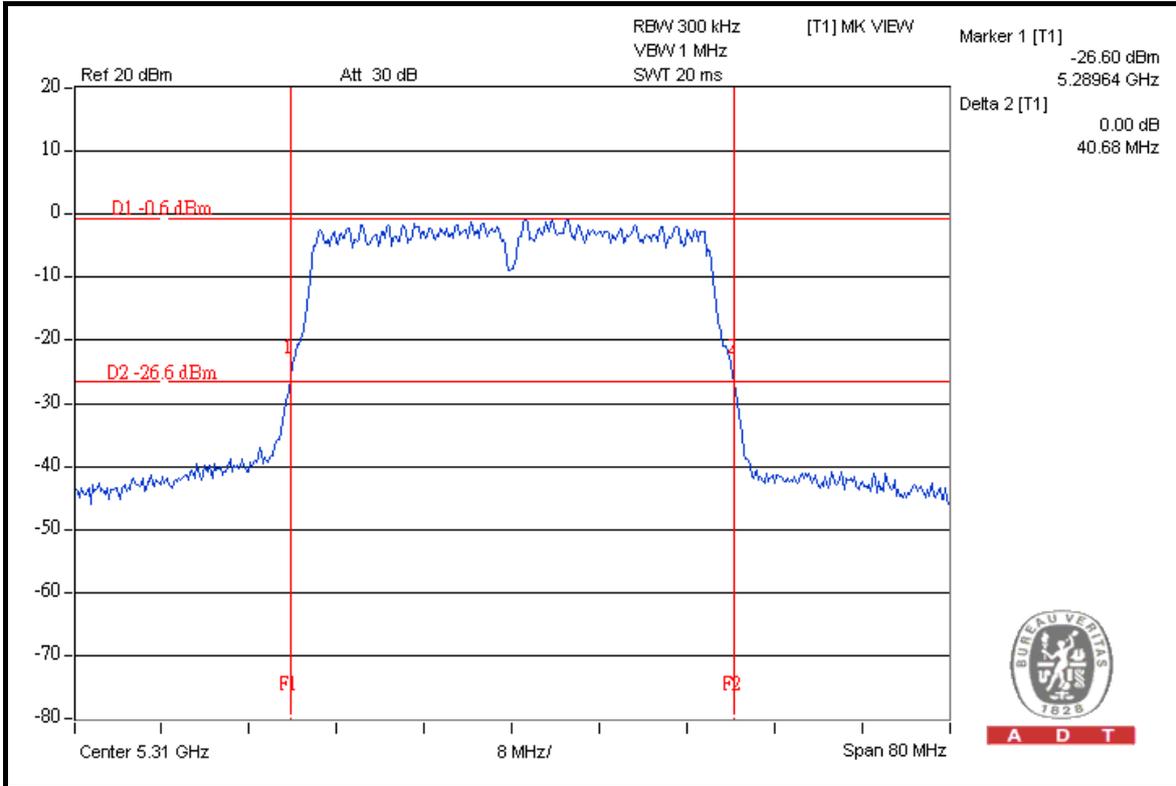
CH 54



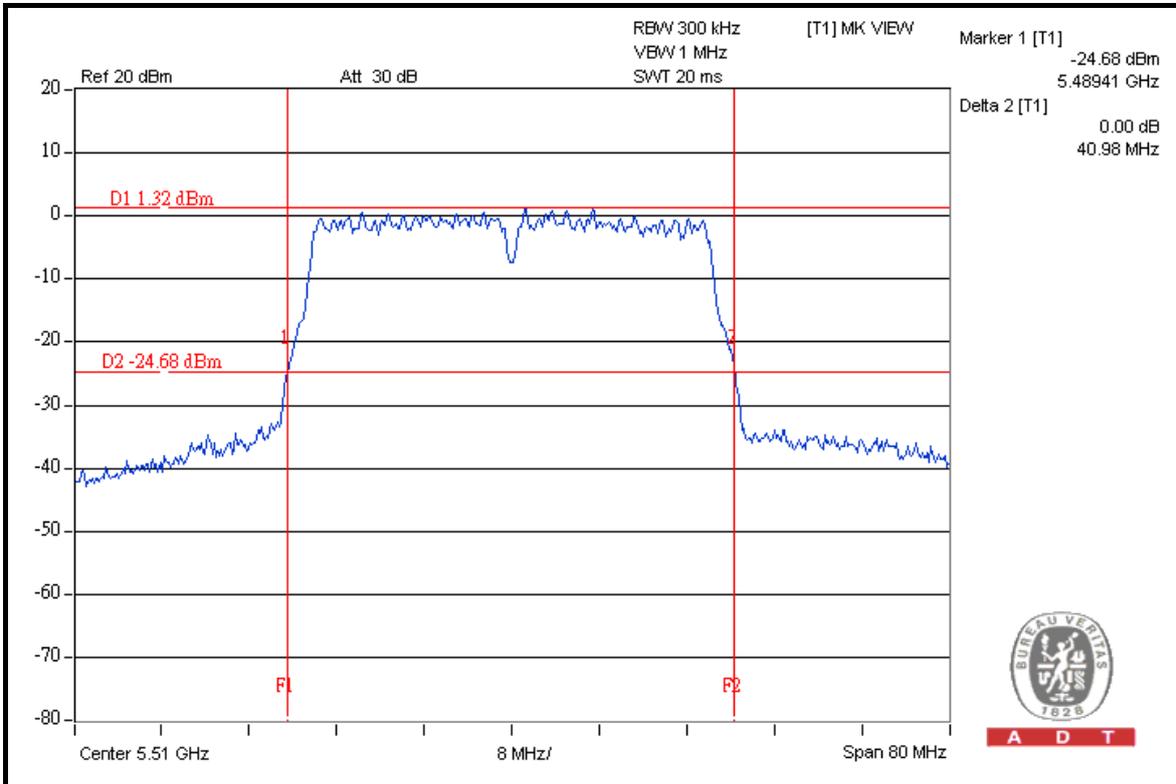


A D T

CH 62



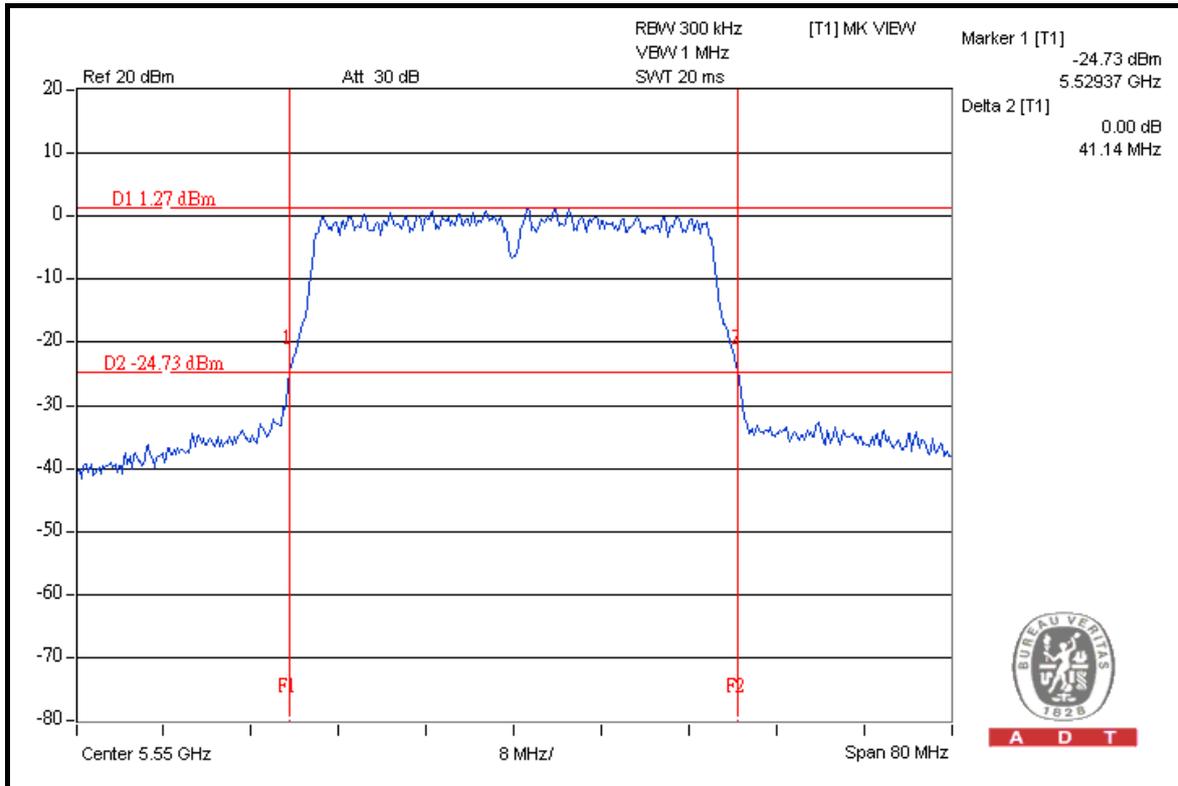
CH 102





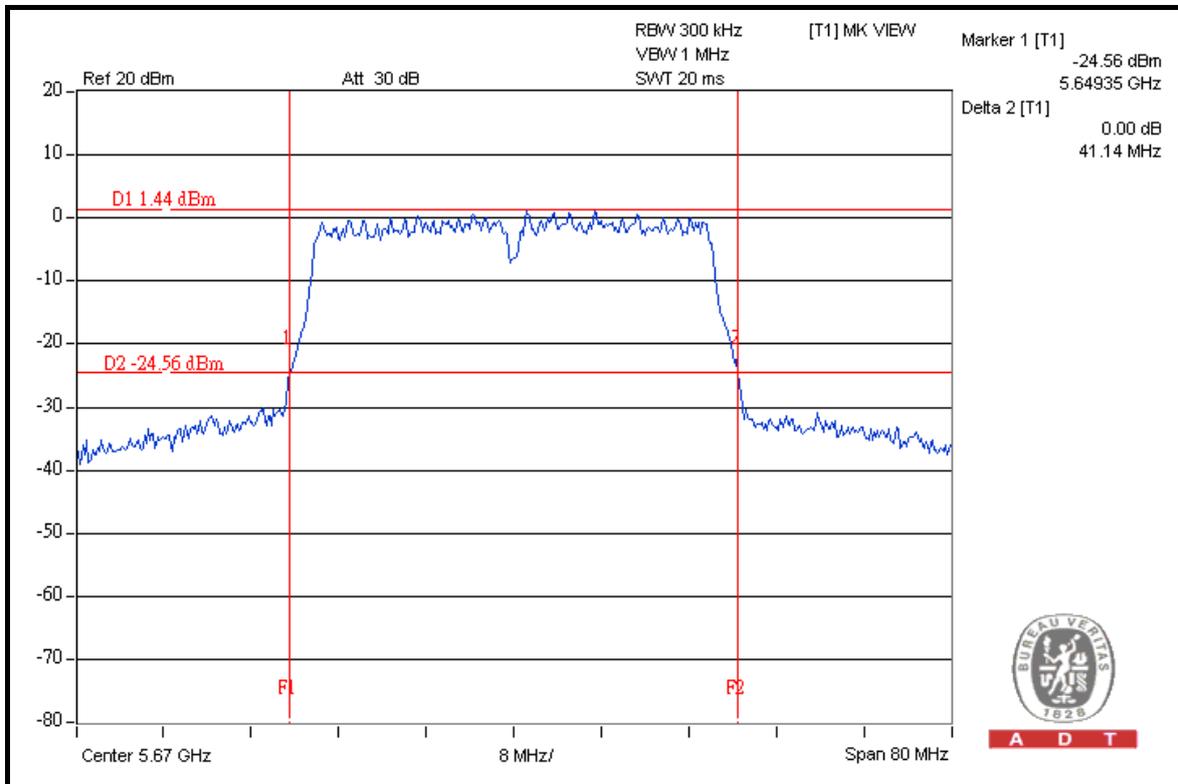
A D T

CH 110



A D T

CH 134



A D T

4.4 PEAK POWER EXCURSION MEASUREMENT

4.4.1 LIMITS OF PEAK POWER EXCURSION MEASUREMENT

FREQUENCY BAND	LIMIT
5.150 ~ 5.250GHz	13dB
5.250 ~ 5.350GHz	13dB
5.470 ~ 5.725GHz	13dB

4.4.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
R&S SPECTRUM ANALYZER	FSP40	100041	Apr. 22, 2008	Apr. 21, 2009

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

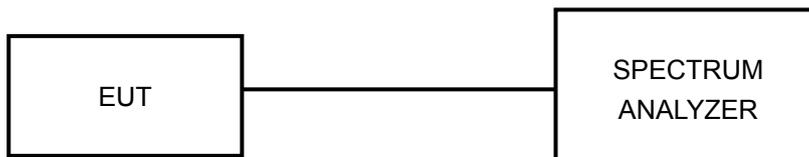
4.4.3 TEST PROCEDURE

- a. The transmitter output was connected to the spectrum analyzer.
- b. Set the spectrum bandwidth span to view the entire spectrum.
- c. Using peak detector and Max-hold function for Trace 1 (RB = 1MHz, VB = 3MHz) and 2 (RB = 1MHz, VB = 300 kHz).
- d. The differences between Trace1 and Trace 2 in any 1MHz band at f1 to f2 range were recorded and showed to another trace.

4.4.4 DEVIATION FROM TEST STANDARD

No deviation

4.4.5 TEST SETUP



4.4.6 EUT OPERATING CONDITIONS

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



A D T

4.4.7 TEST RESULTS

802.11a OFDM MODULATION: 1TX

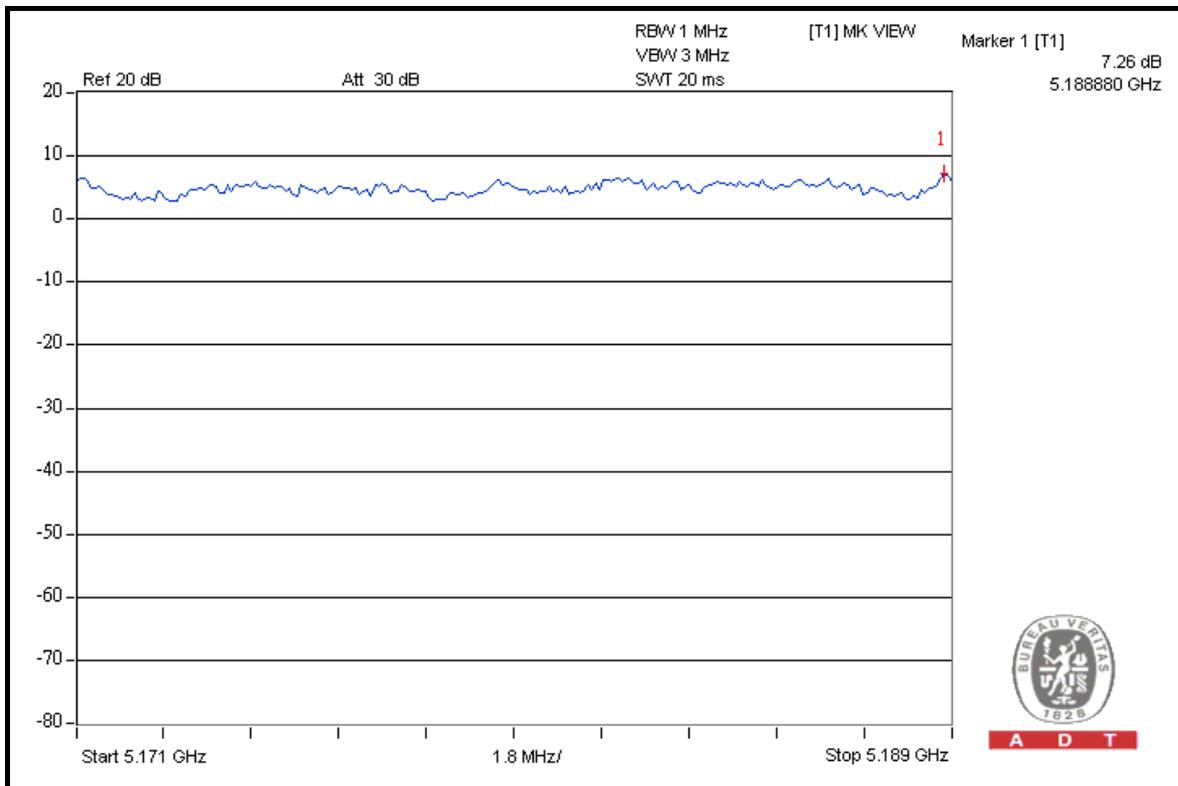
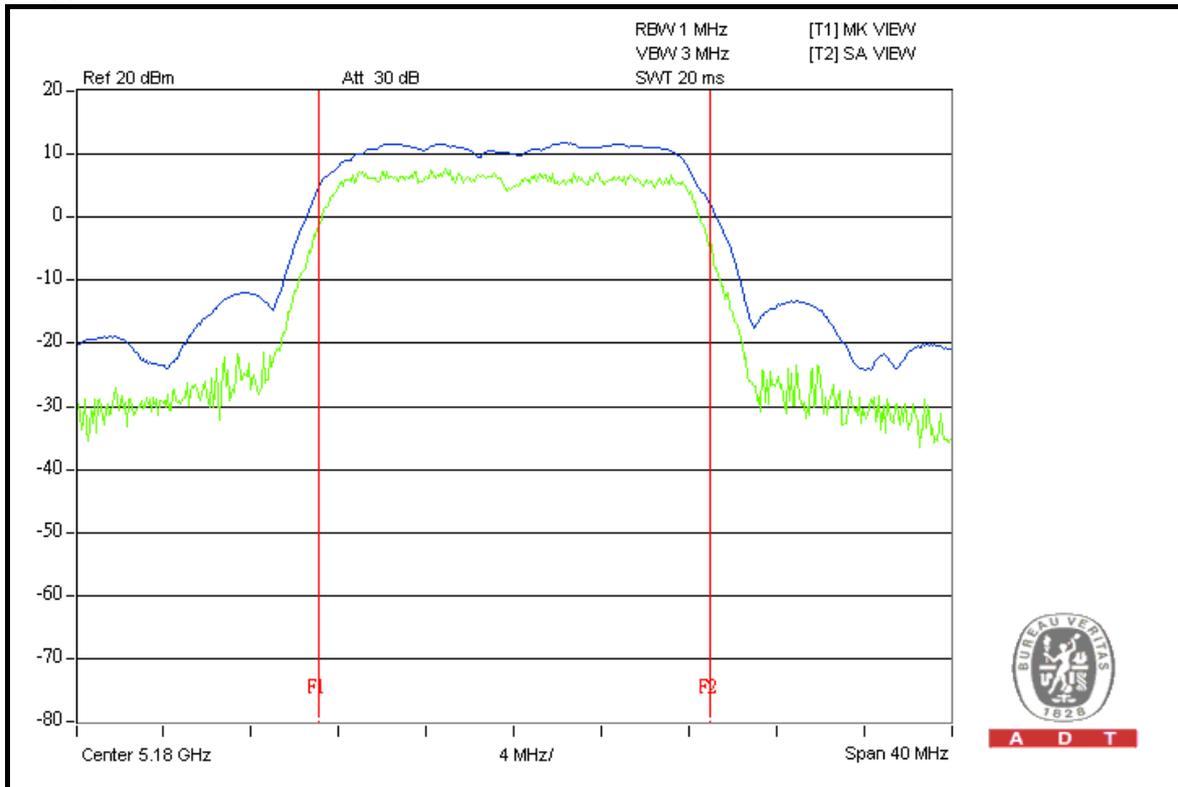
MODULATION TYPE	BPSK	TRANSFER RATE	6.0Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)	PEAK TO AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
36	5180	7.26	13	PASS
40	5200	7.17	13	PASS
48	5240	8.61	13	PASS
52	5260	8.44	13	PASS
60	5300	7.58	13	PASS
64	5320	8.34	13	PASS
100	5500	7.80	13	PASS
116	5580	7.08	13	PASS
140	5700	6.92	13	PASS



A D T

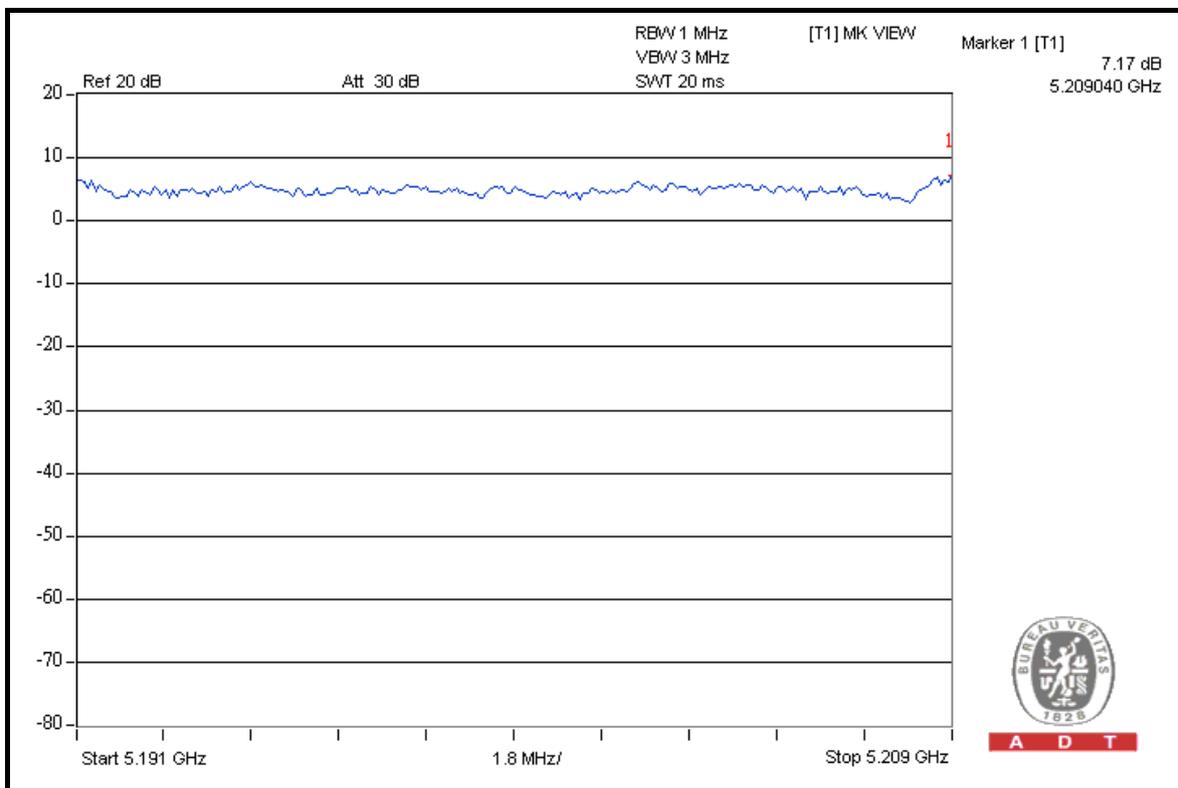
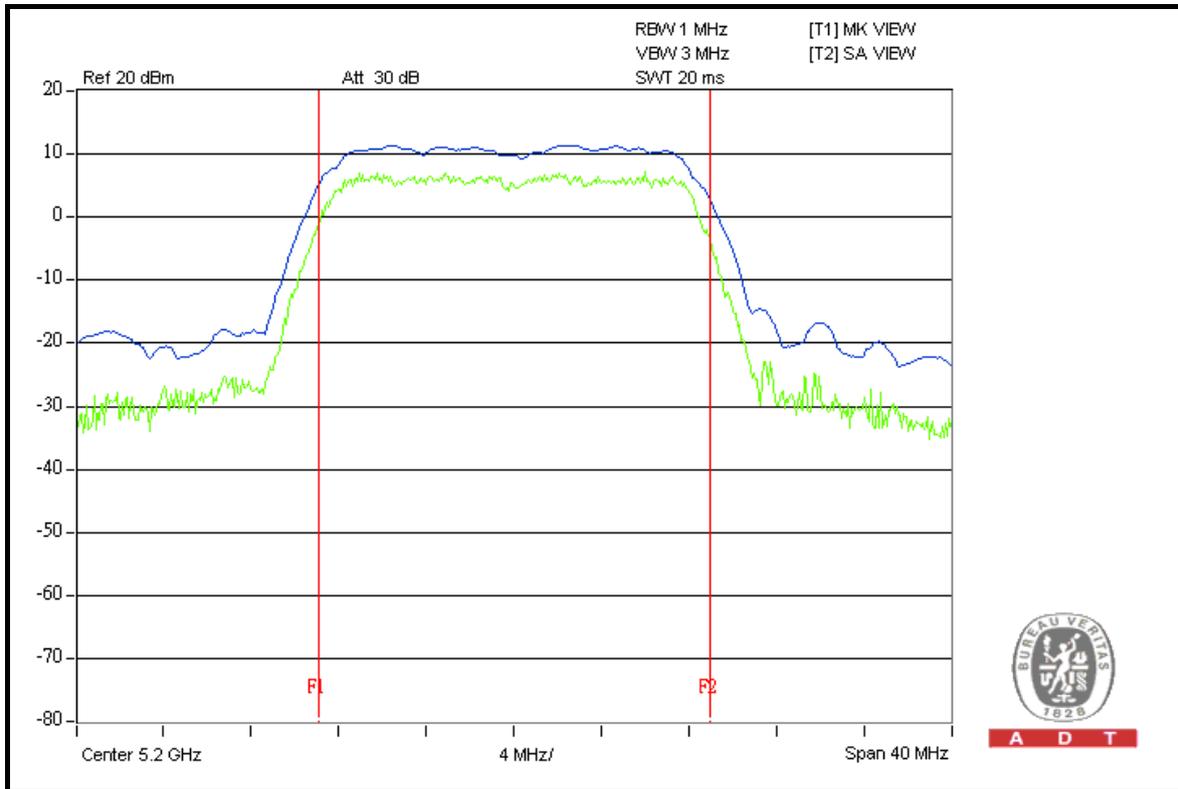
CH 36





A D T

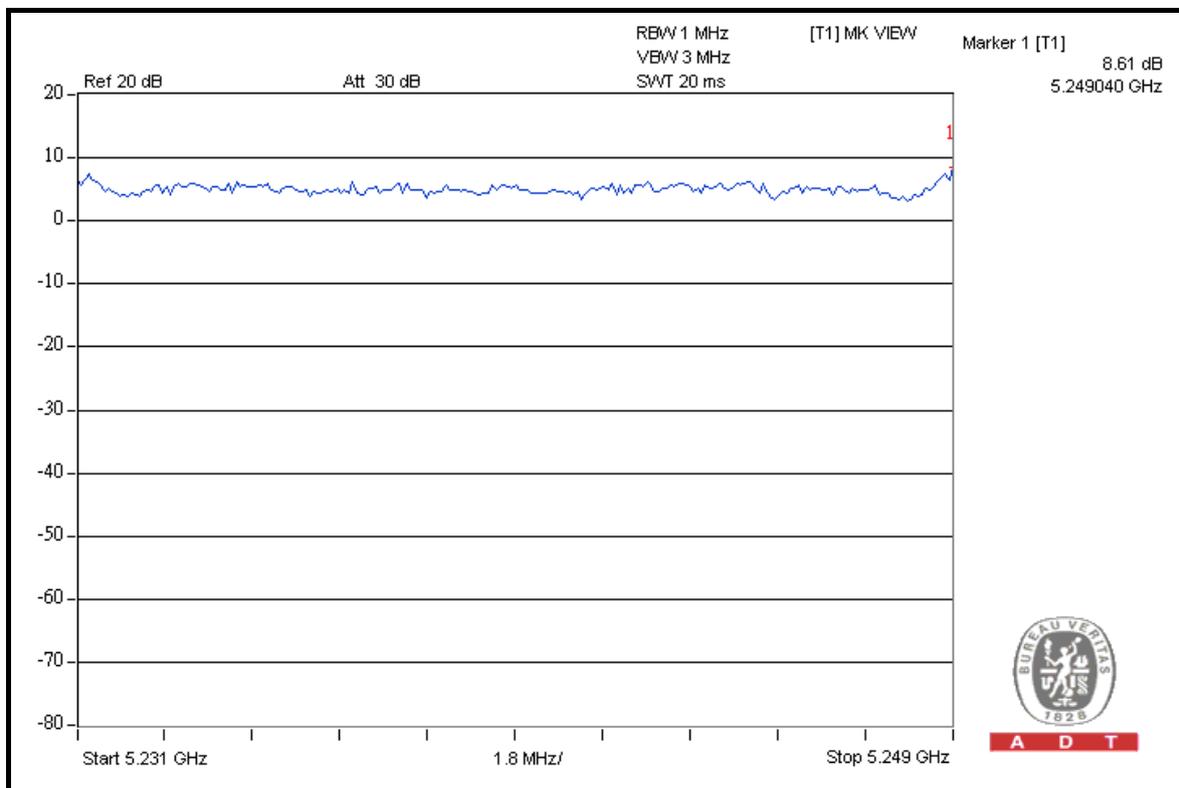
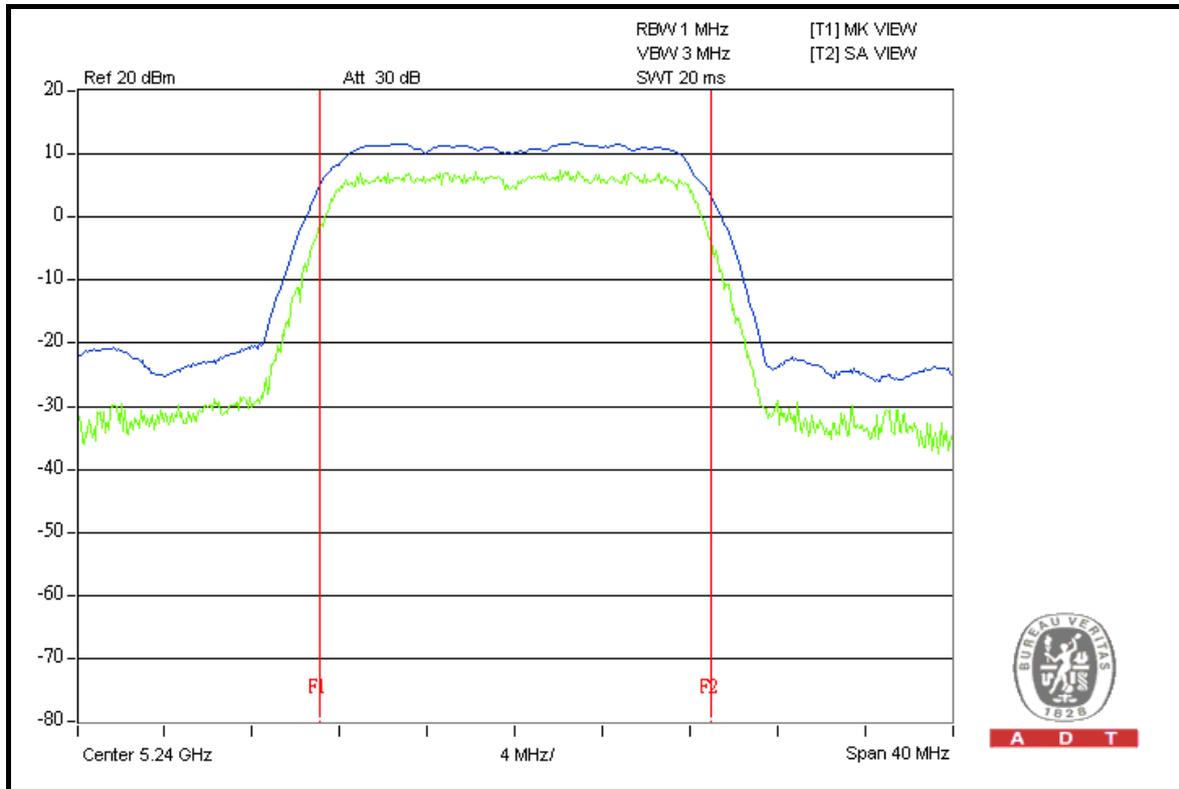
CH 40





A D T

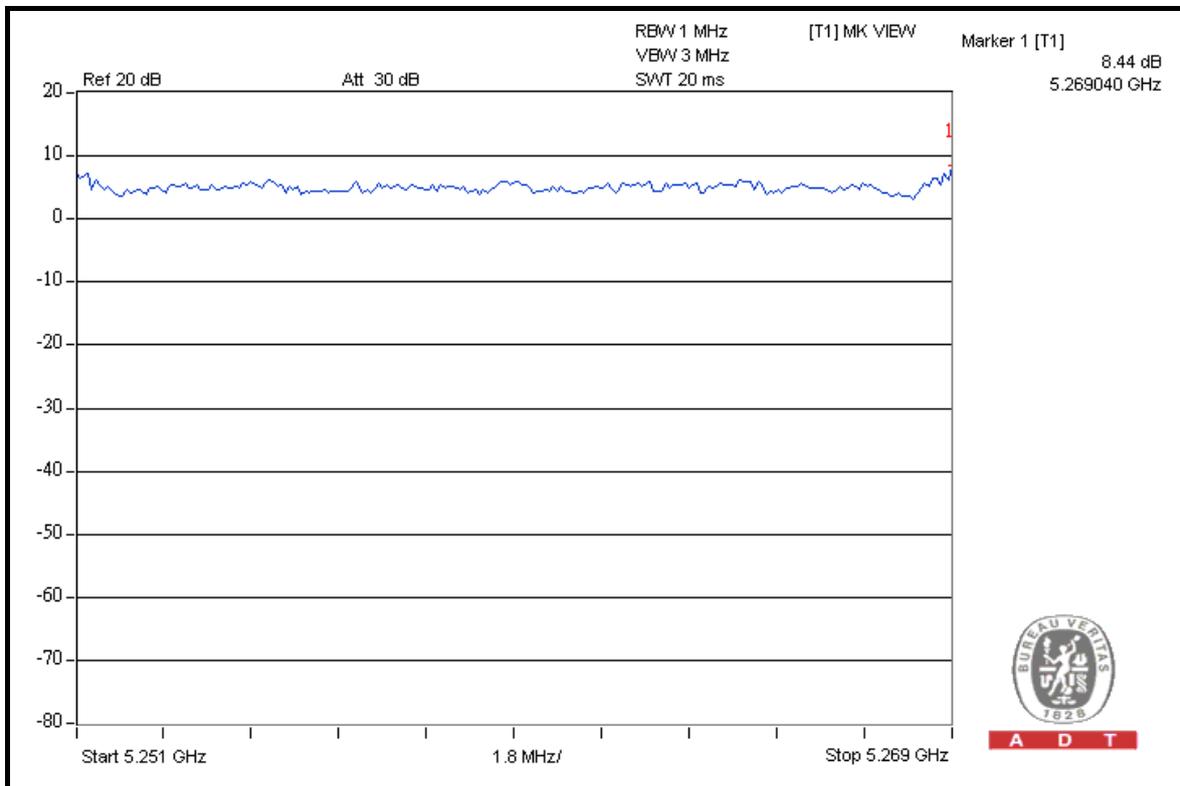
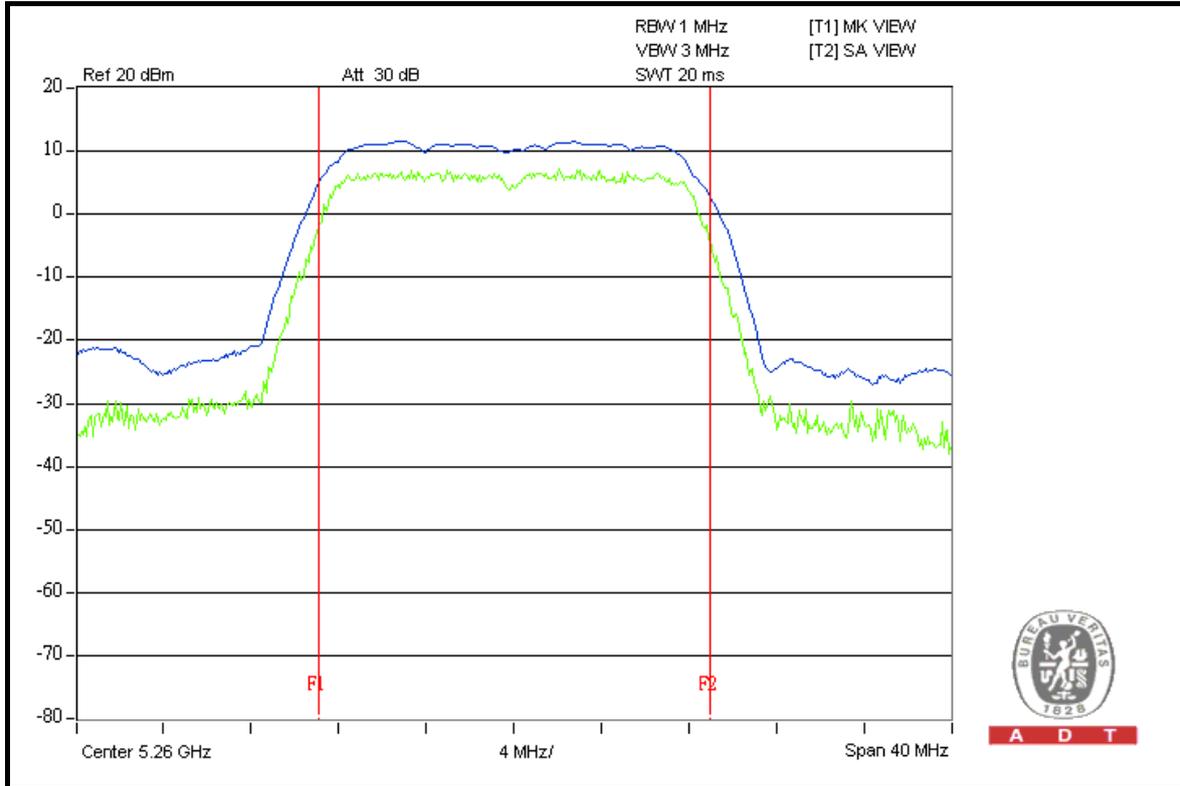
CH 48





A D T

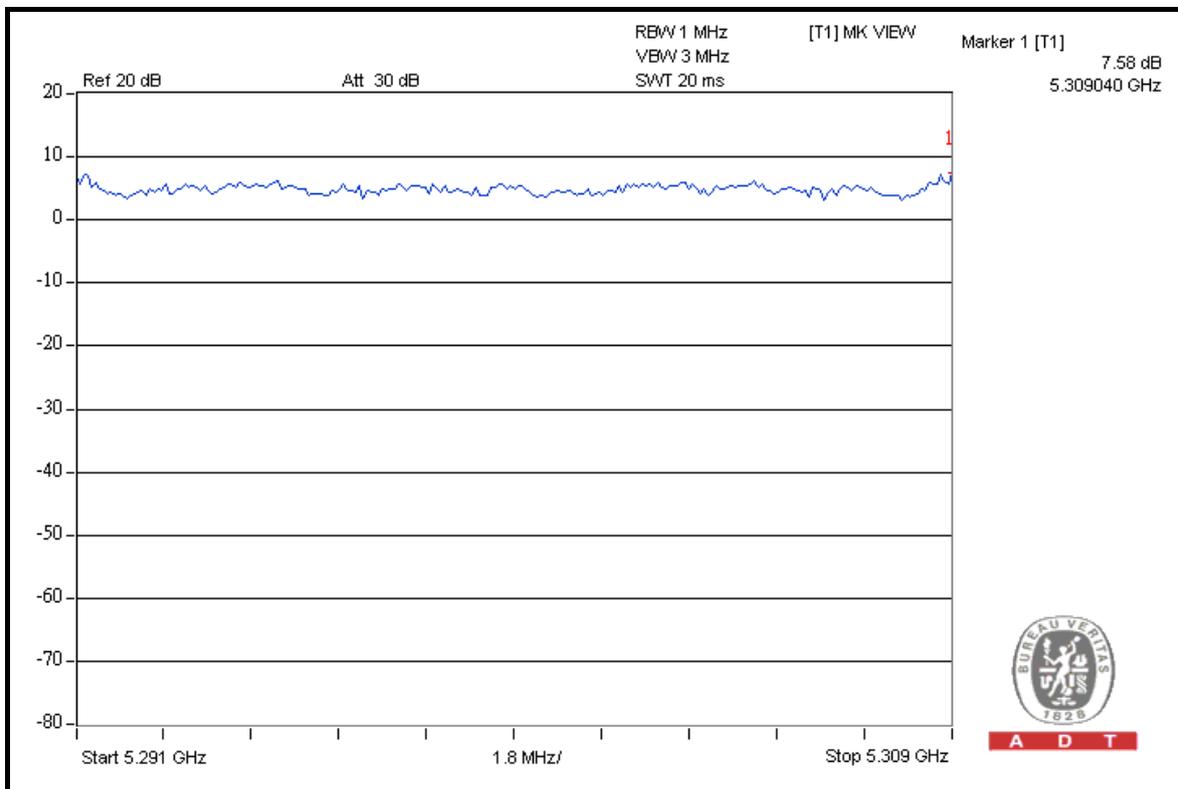
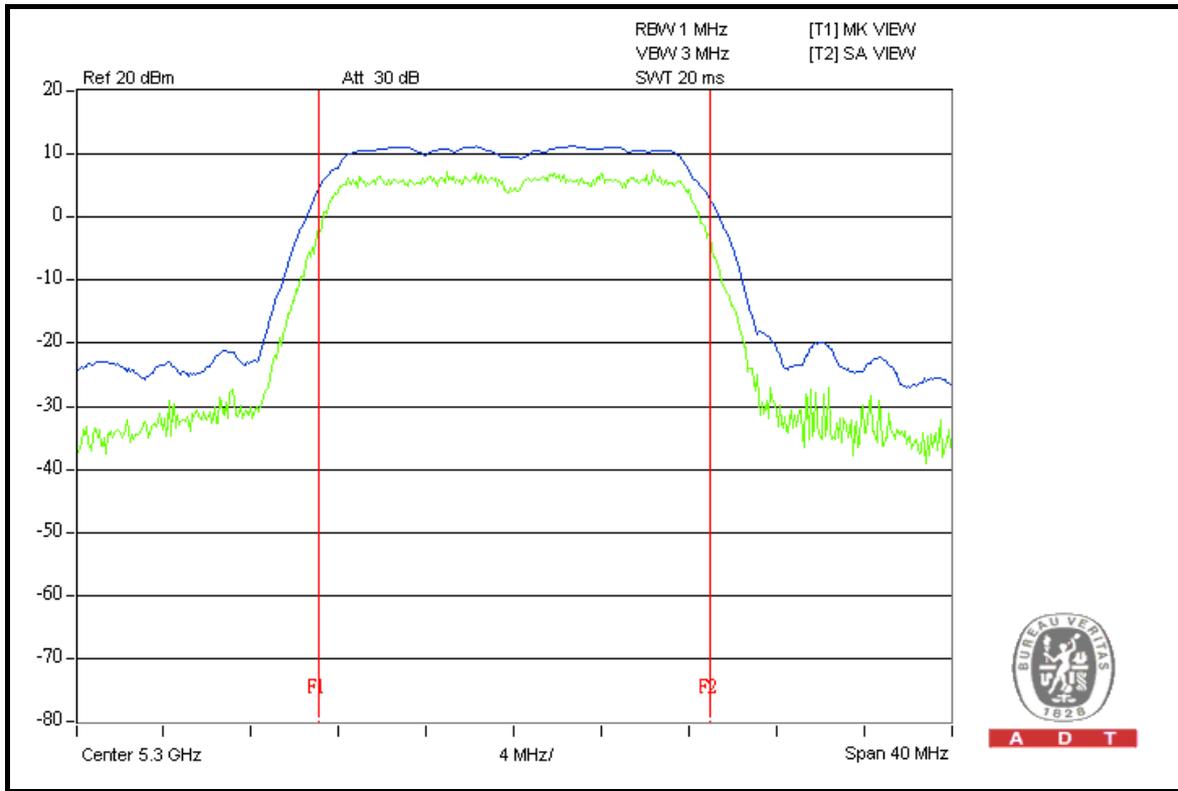
CH 52





A D T

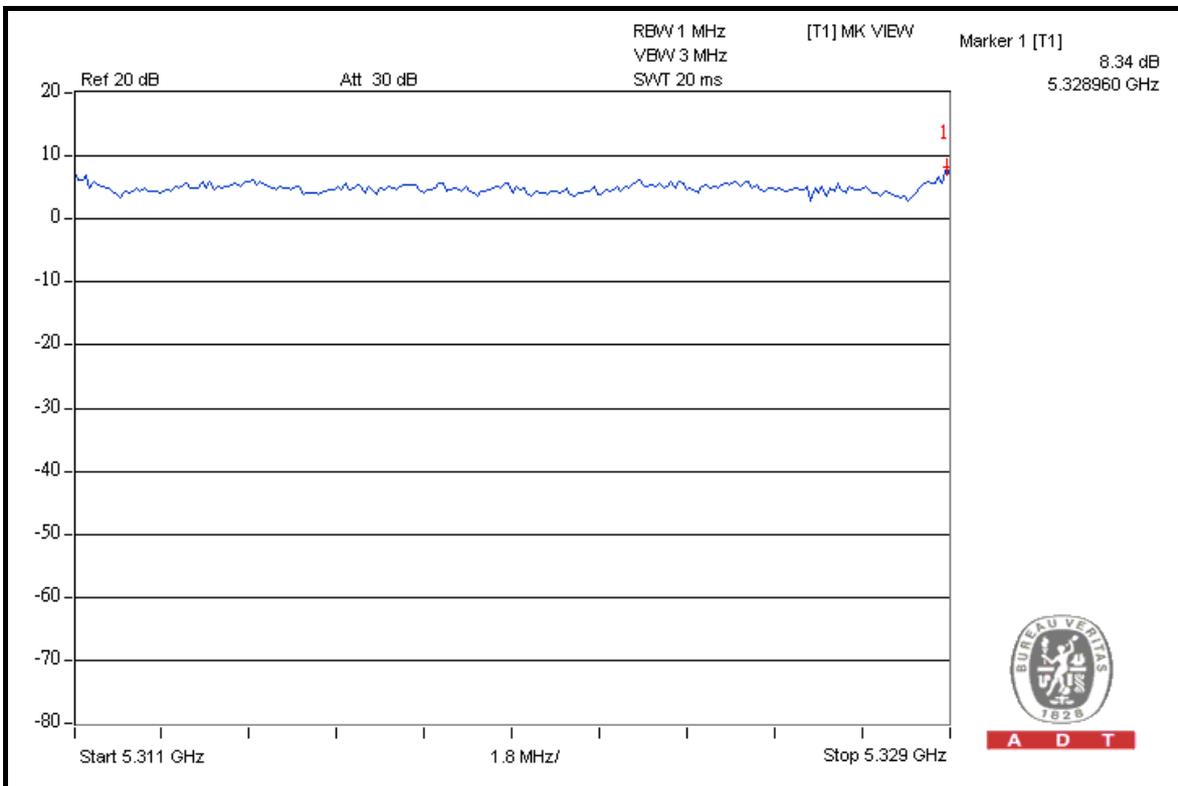
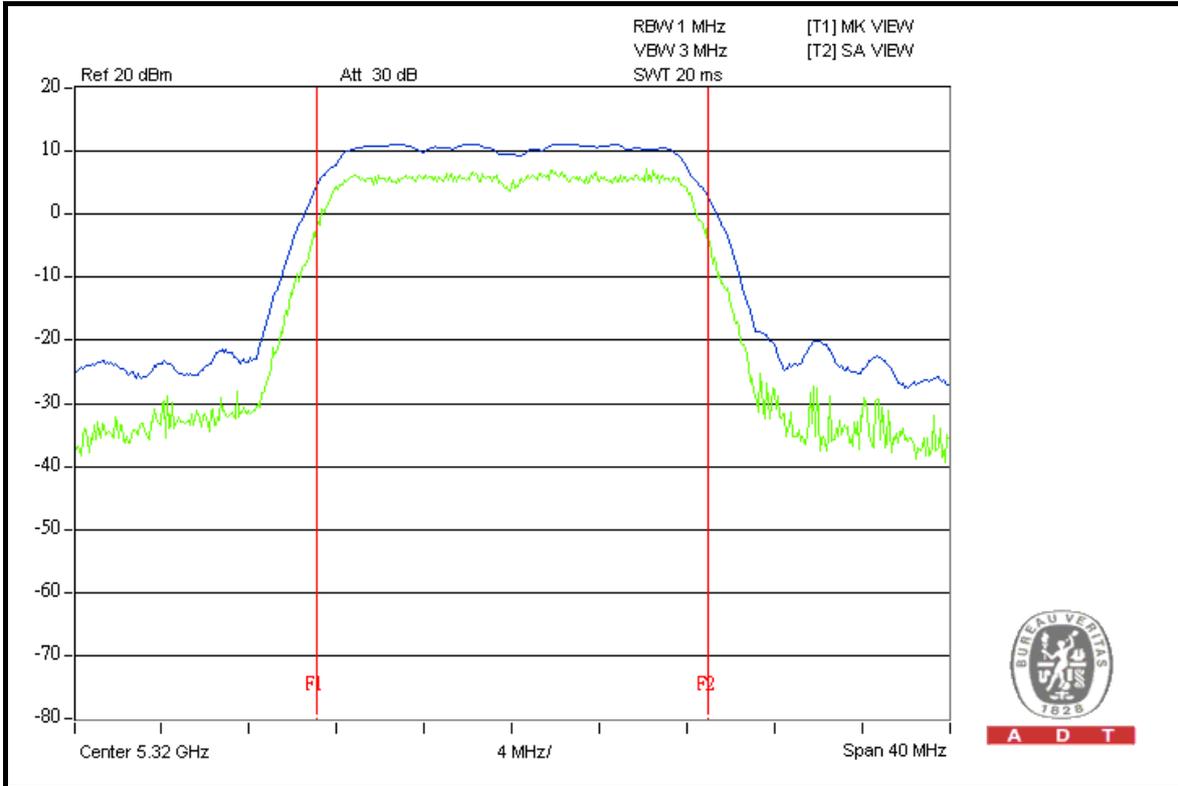
CH 60





A D T

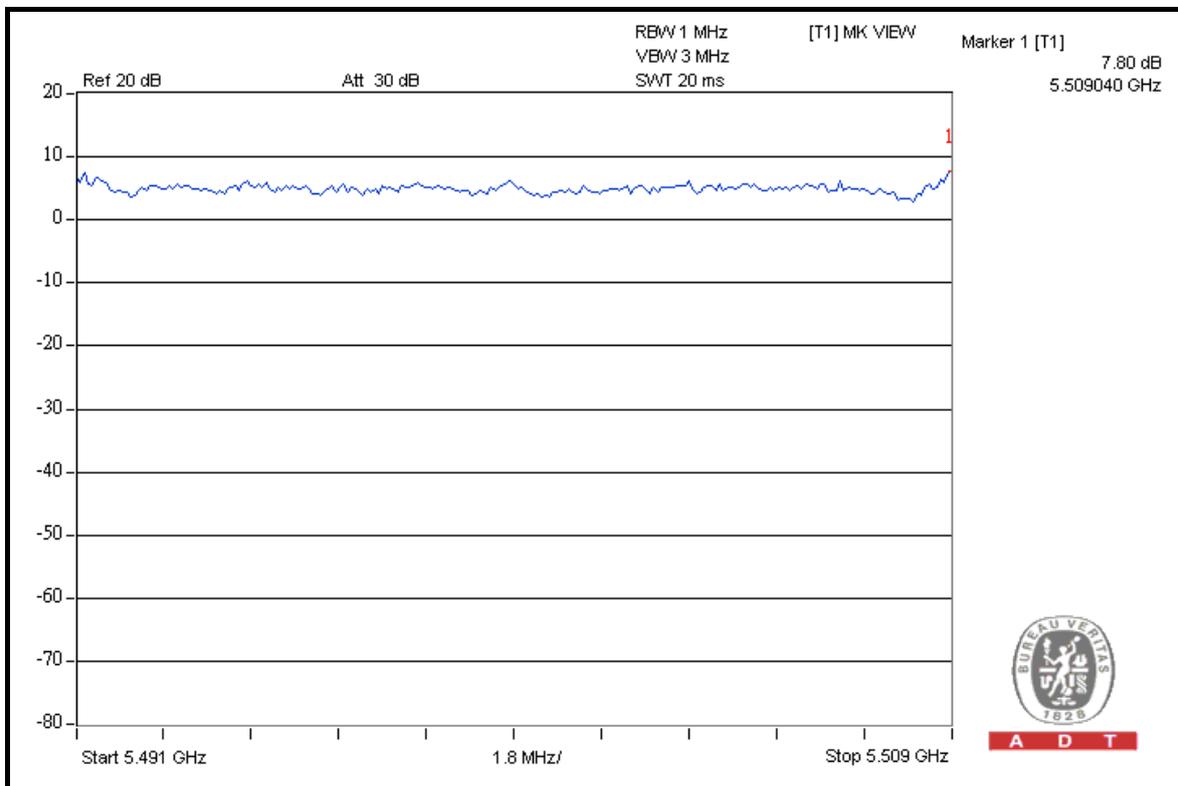
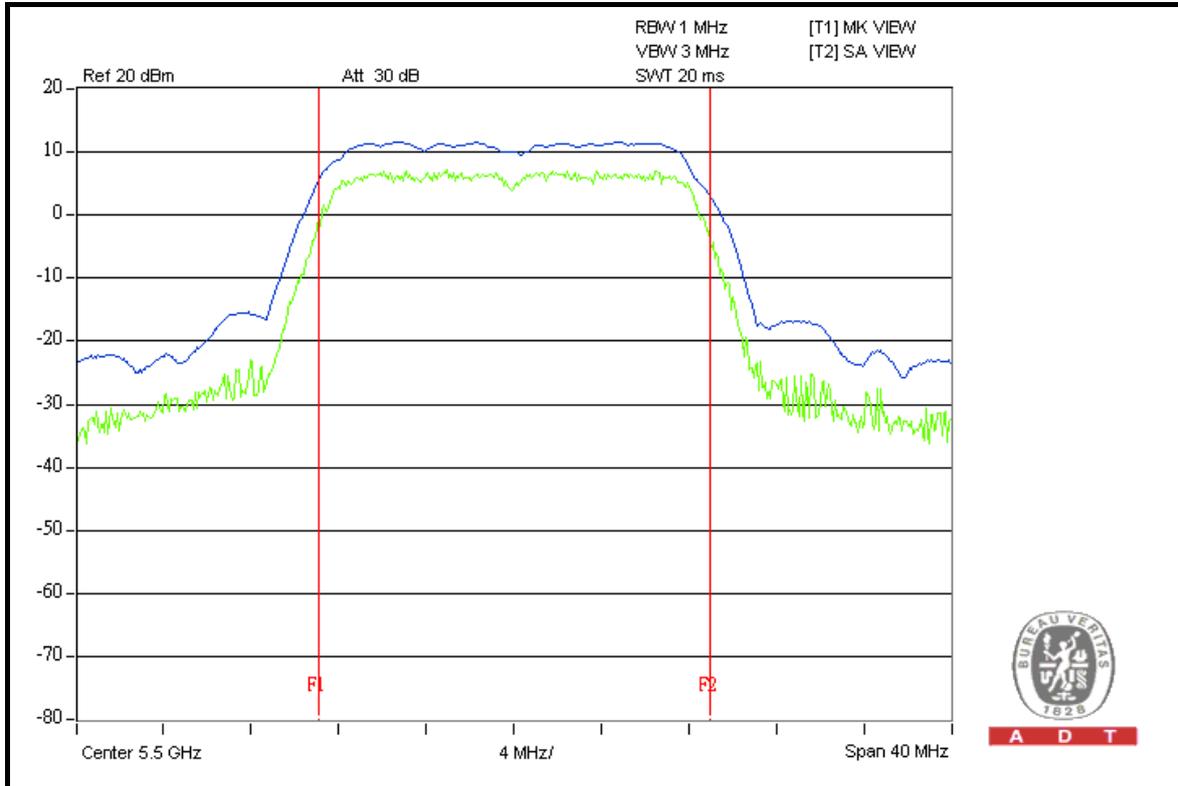
CH 64





A D T

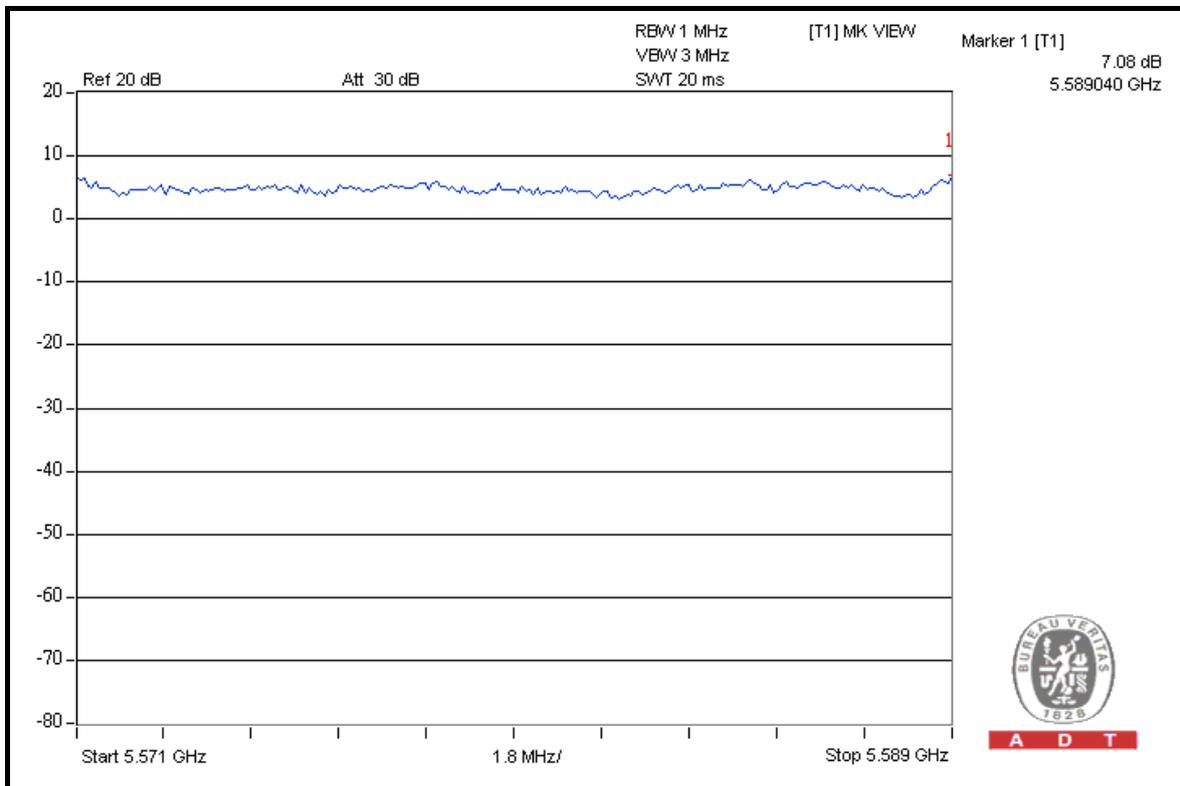
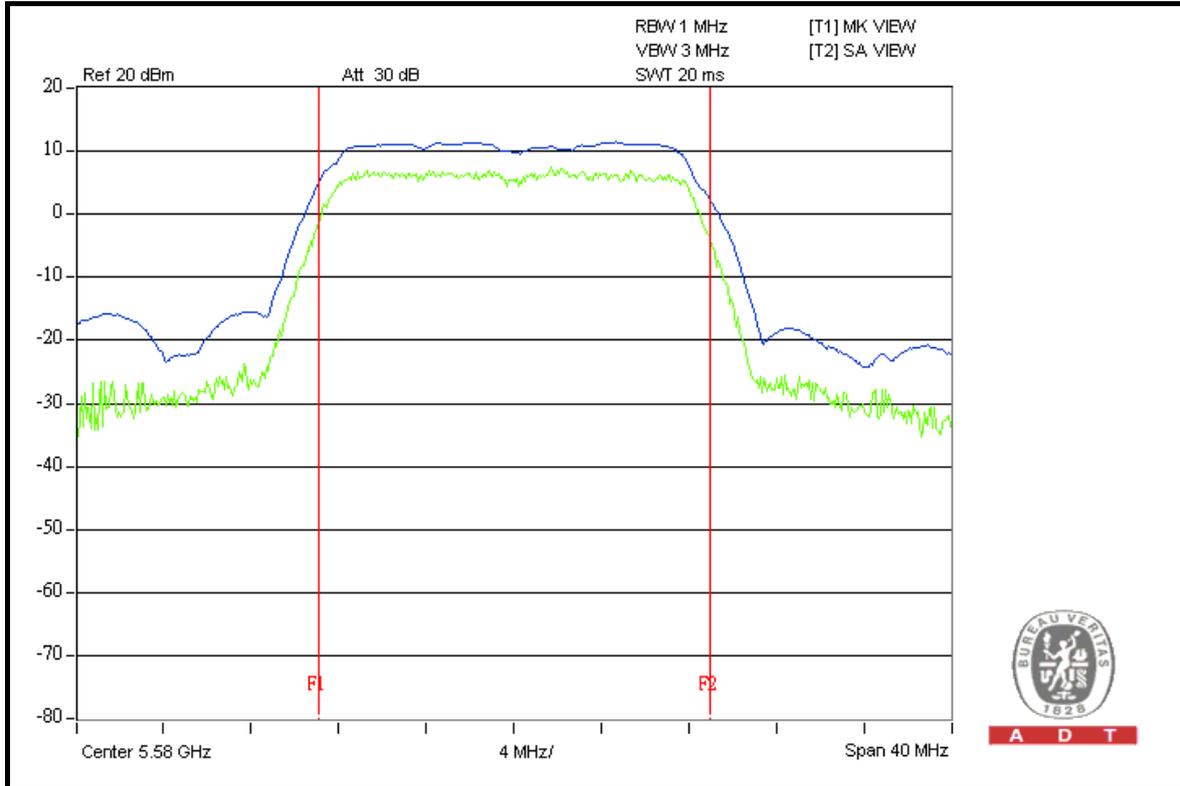
CH 100





A D T

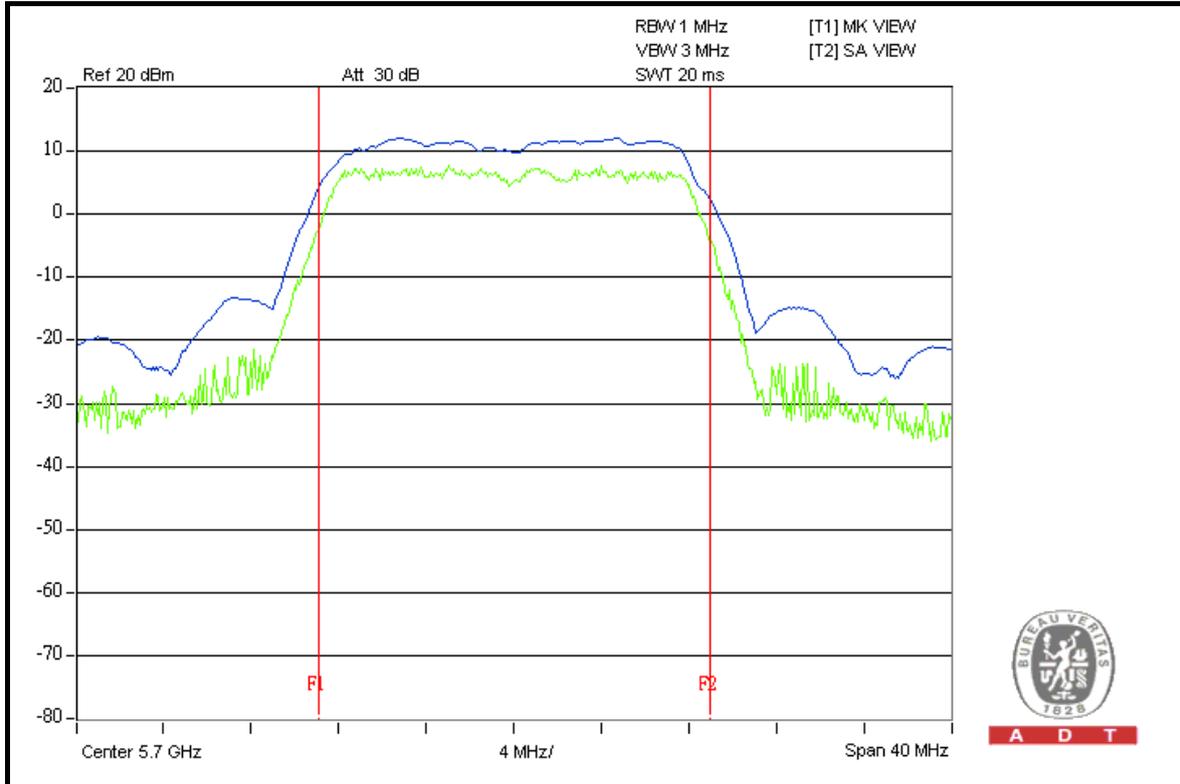
CH 116



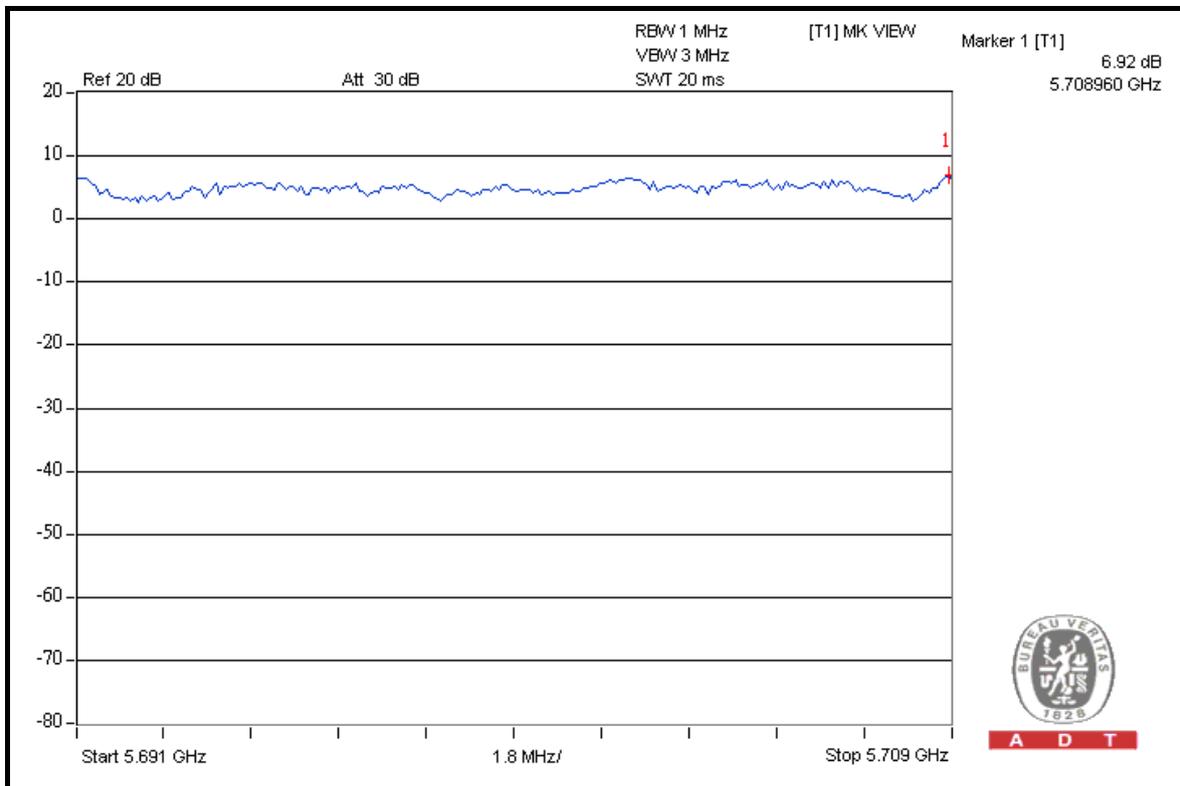


A D T

CH 140



A D T



A D T



A D T

DRAFT 802.11n (20MHz) OFDM MODULATION: 1TX

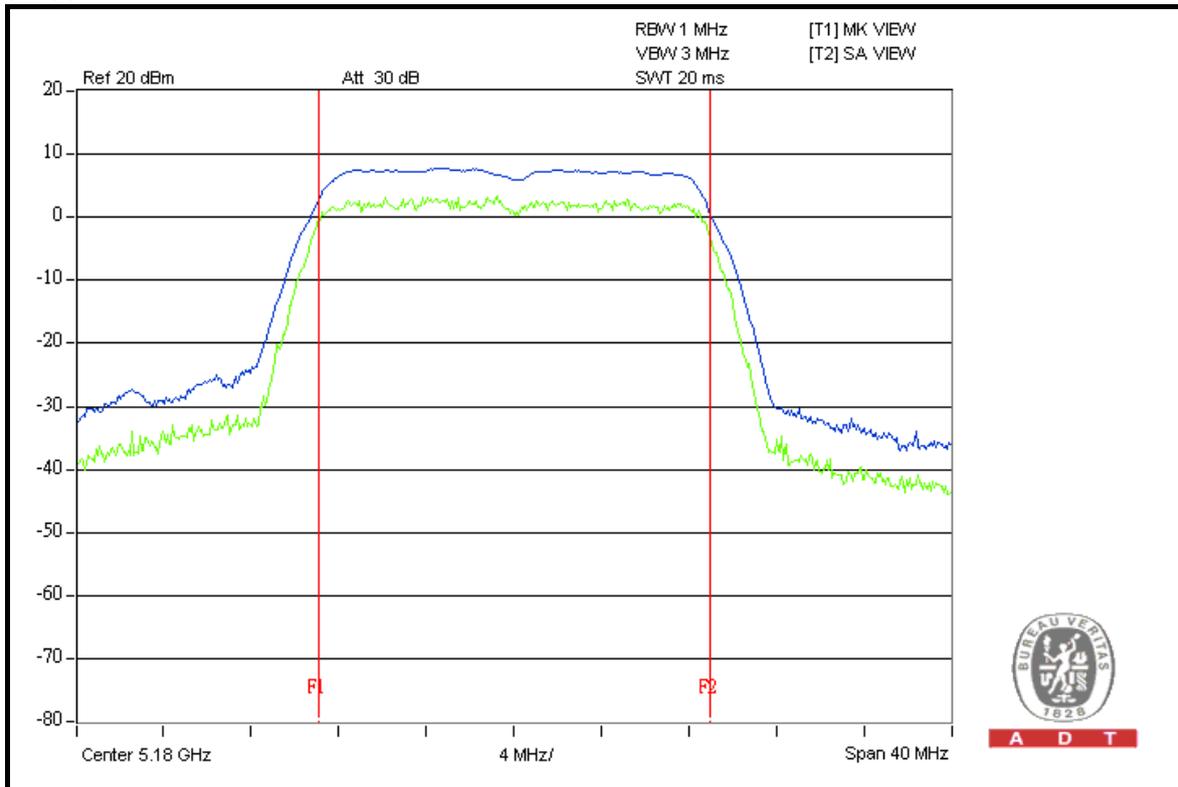
MODULATION TYPE	BPSK	TRANSFER RATE	7.2Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)	PEAK TO AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
36	5180	6.55	13	PASS
40	5200	6.49	13	PASS
48	5240	6.55	13	PASS
52	5260	6.35	13	PASS
60	5300	6.43	13	PASS
64	5320	6.45	13	PASS
100	5500	6.58	13	PASS
116	5580	6.67	13	PASS
140	5700	6.53	13	PASS

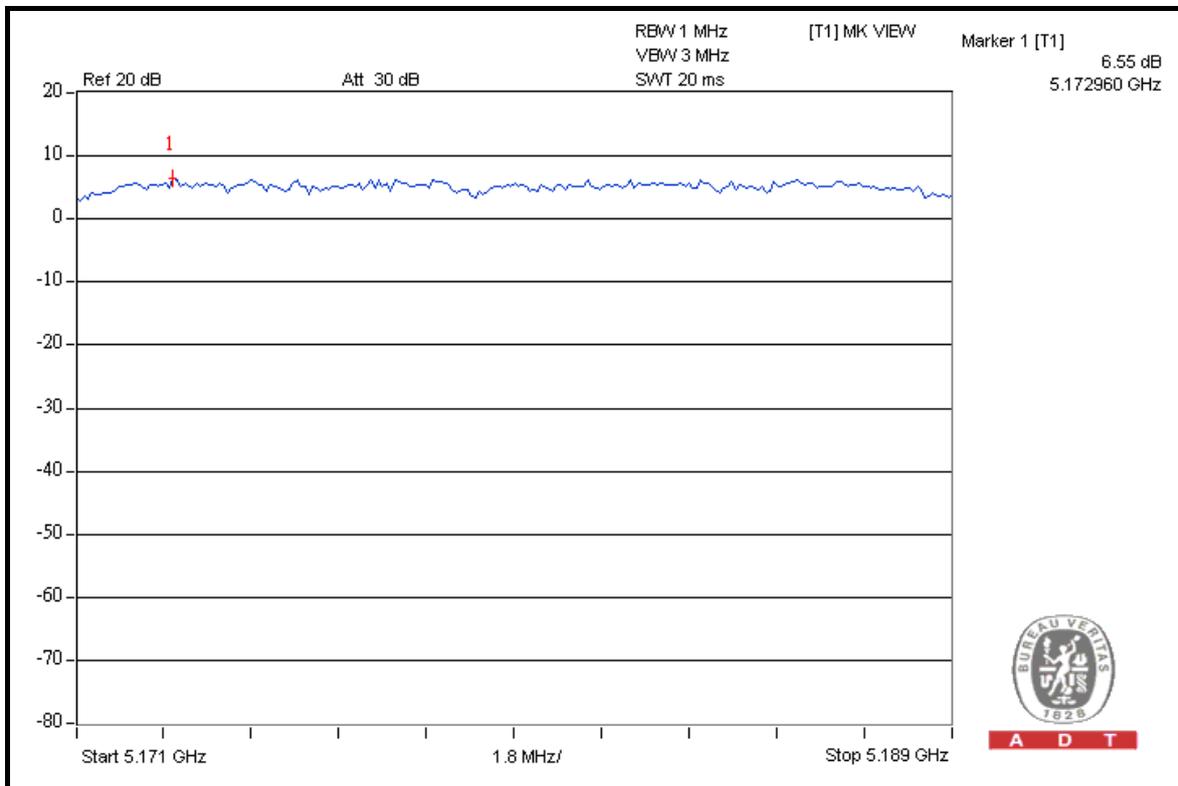


A D T

CH 36



A D T

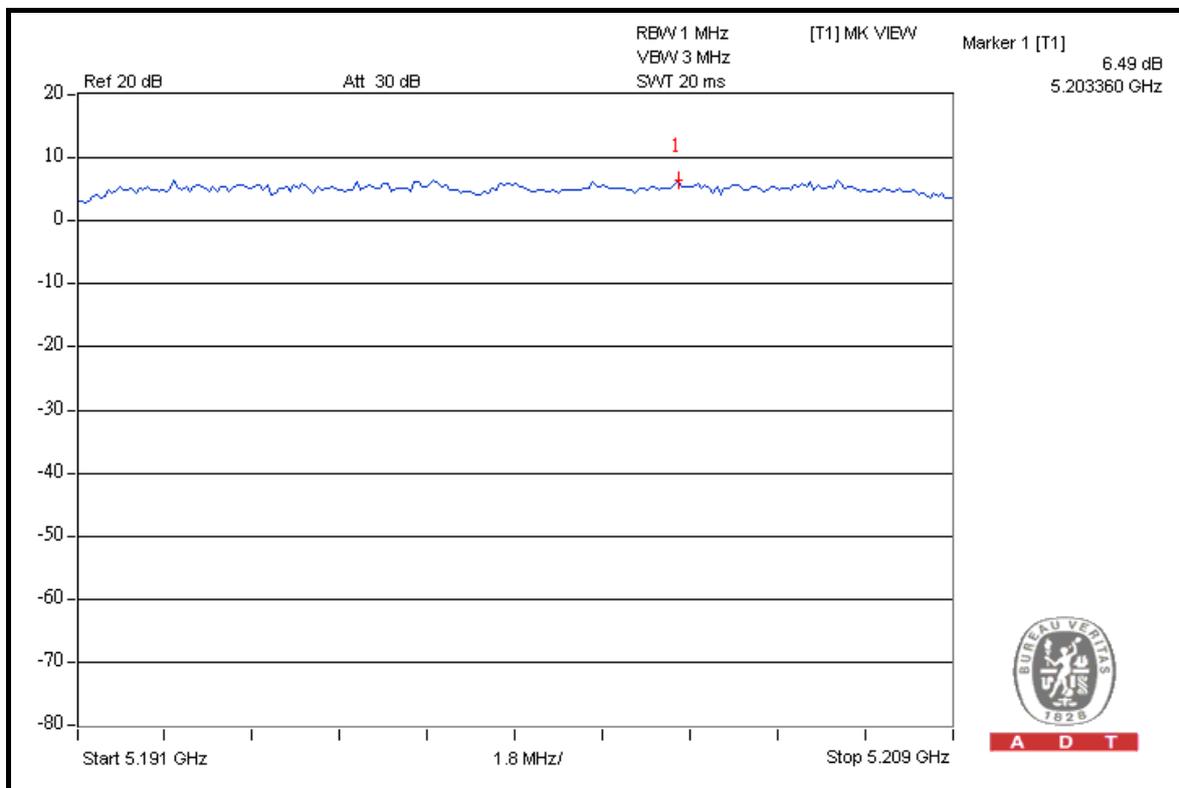
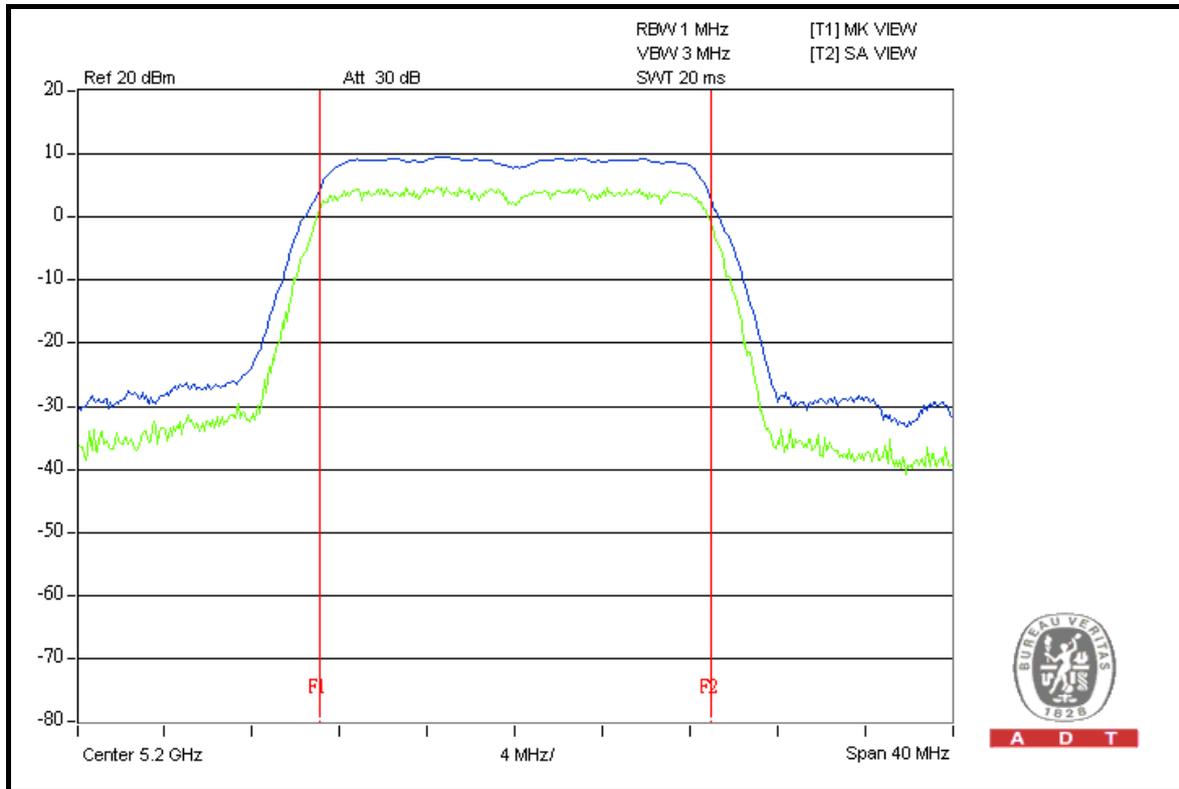


A D T



A D T

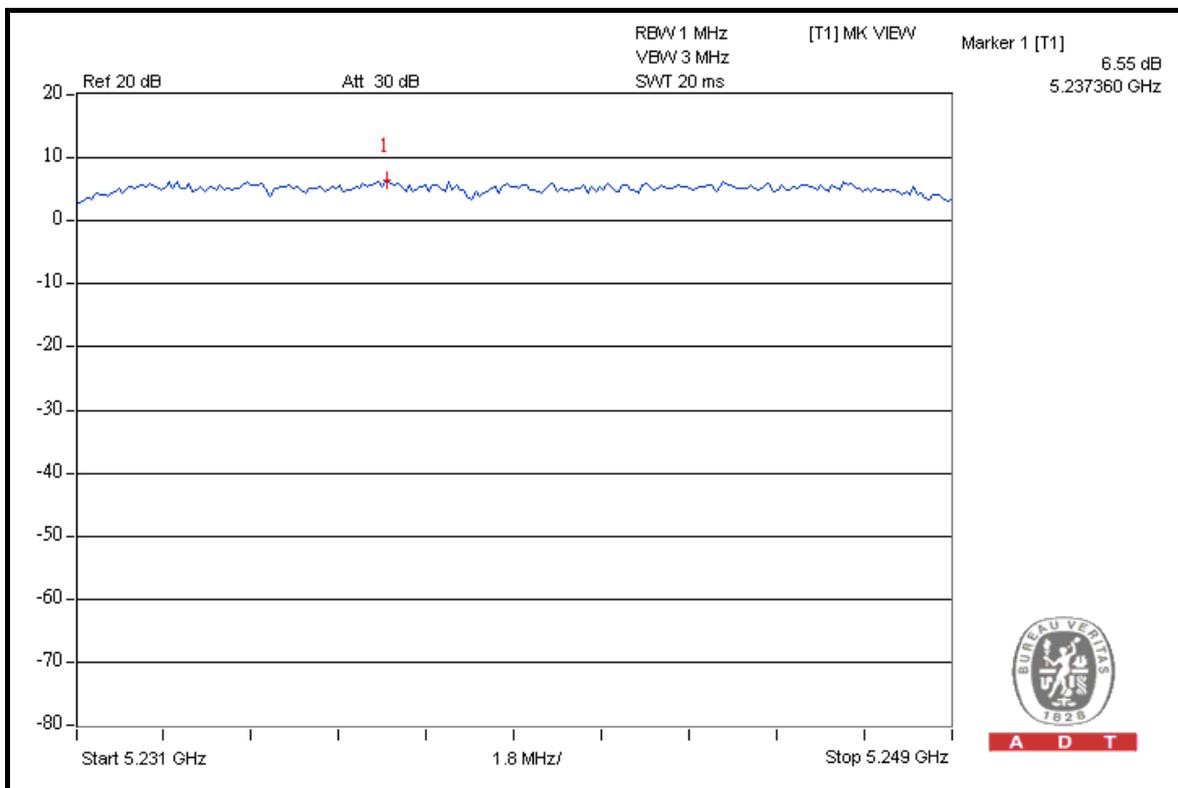
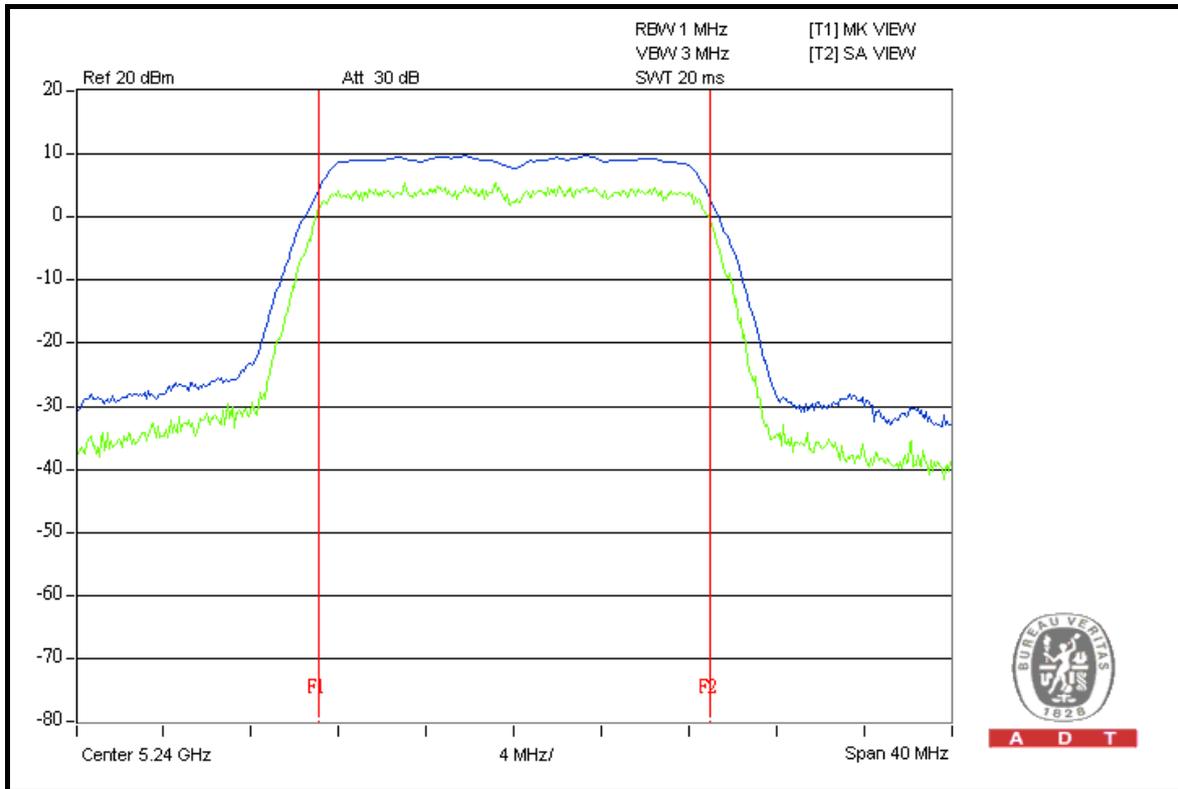
CH 40





A D T

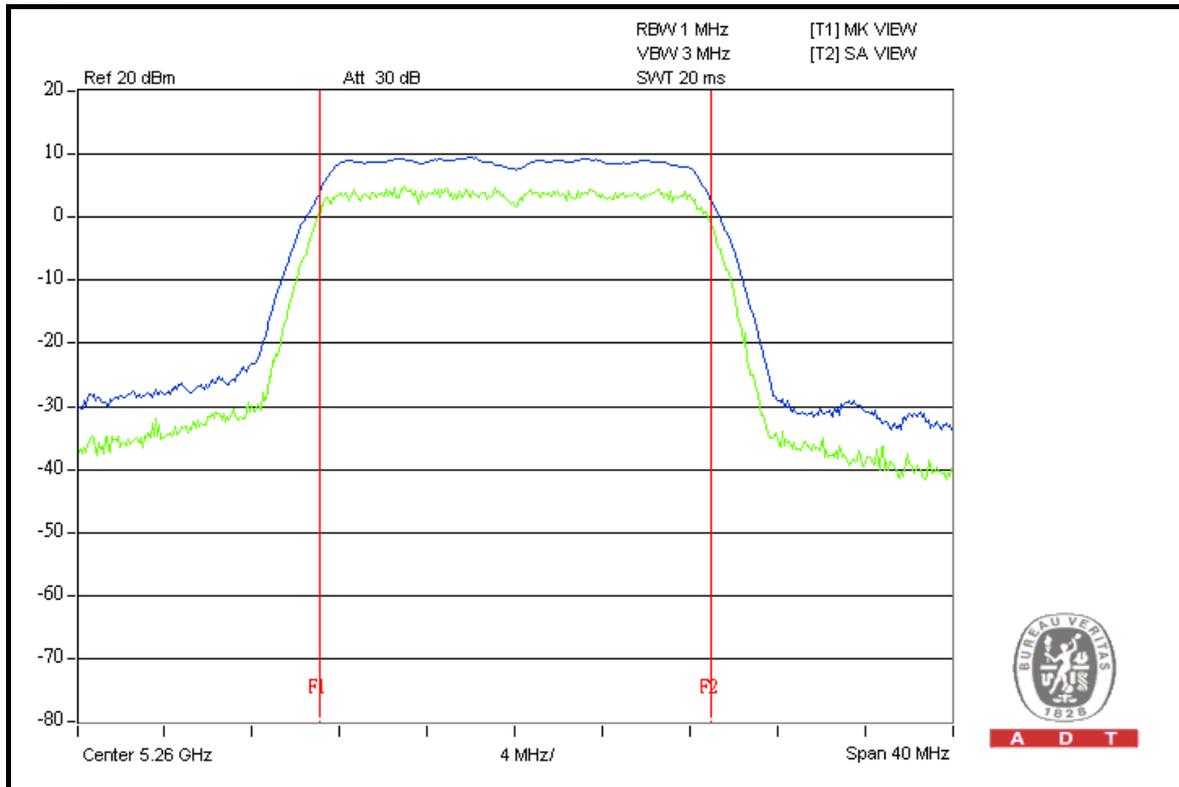
CH 48



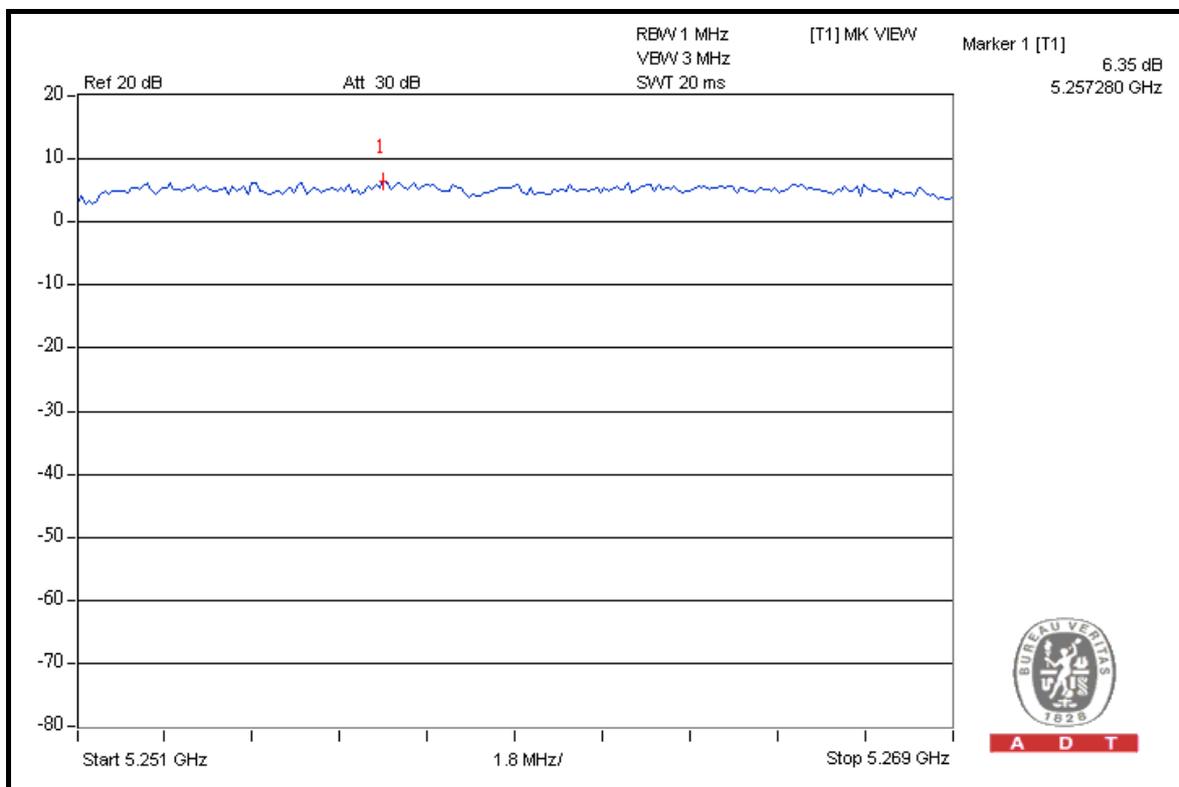


A D T

CH 52



A D T

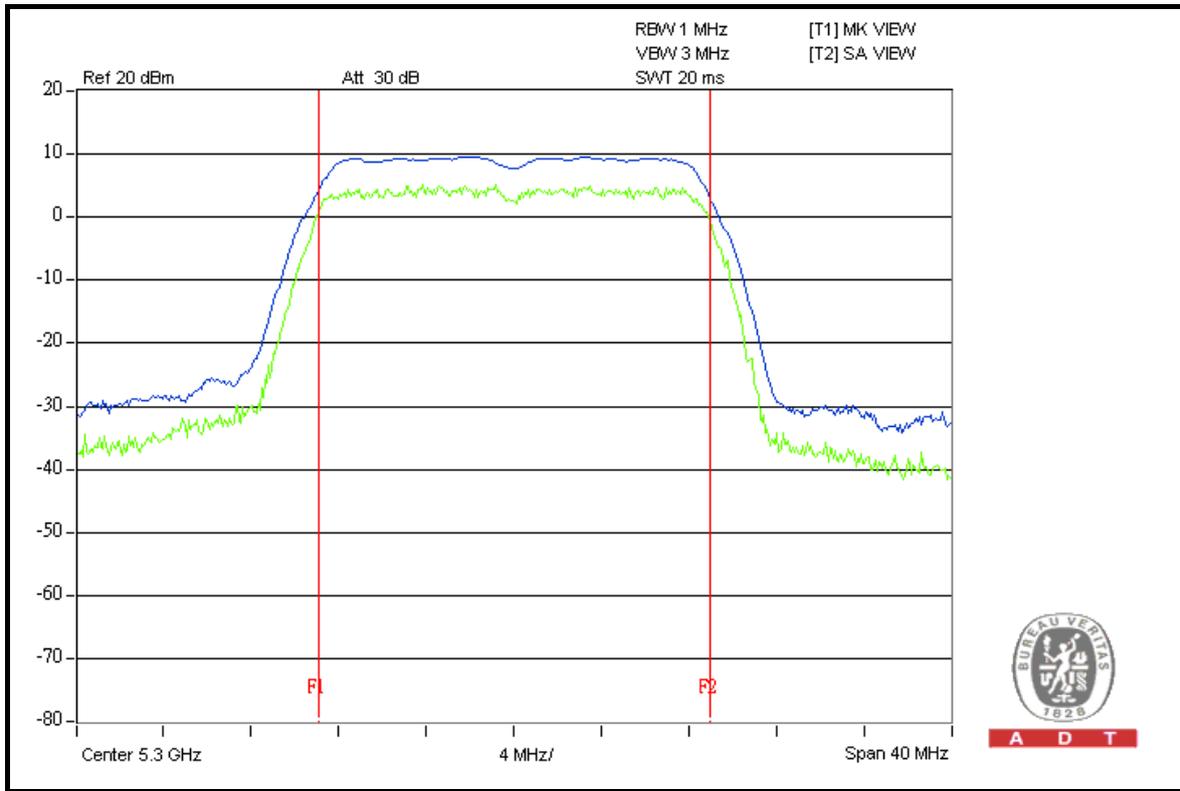


A D T

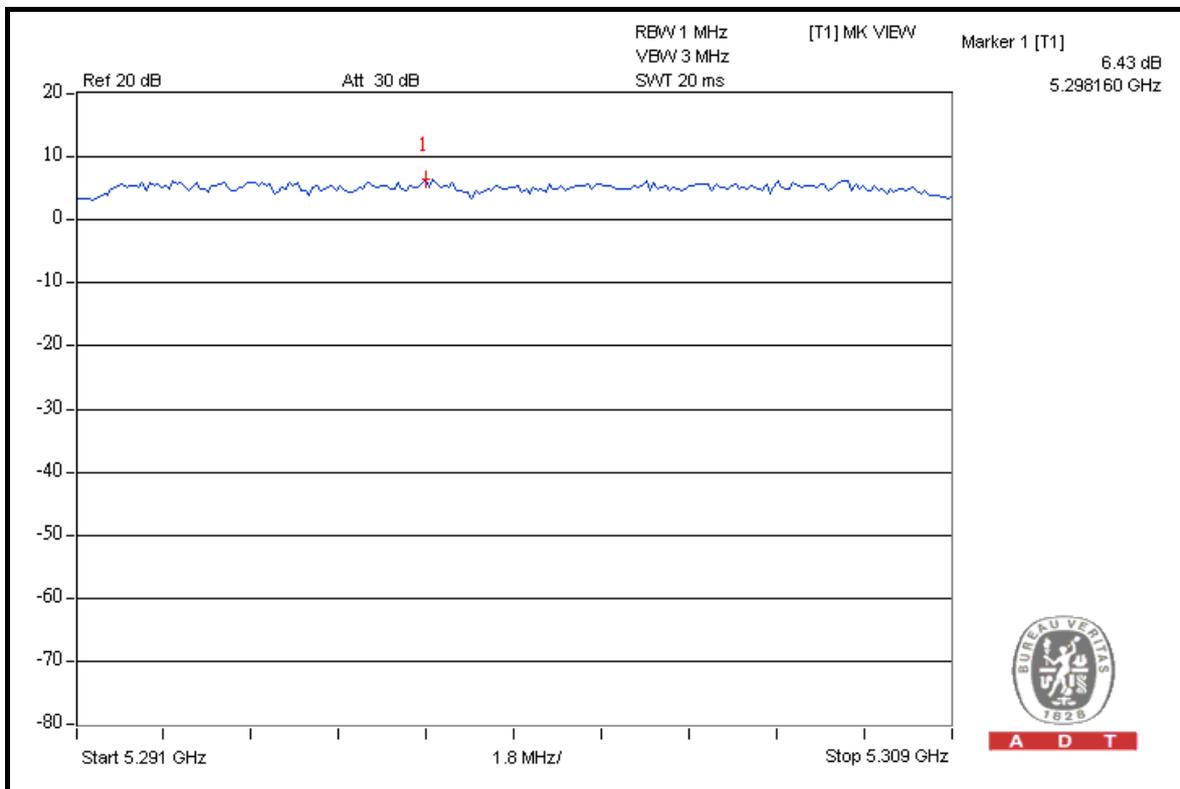


A D T

CH 60



A D T

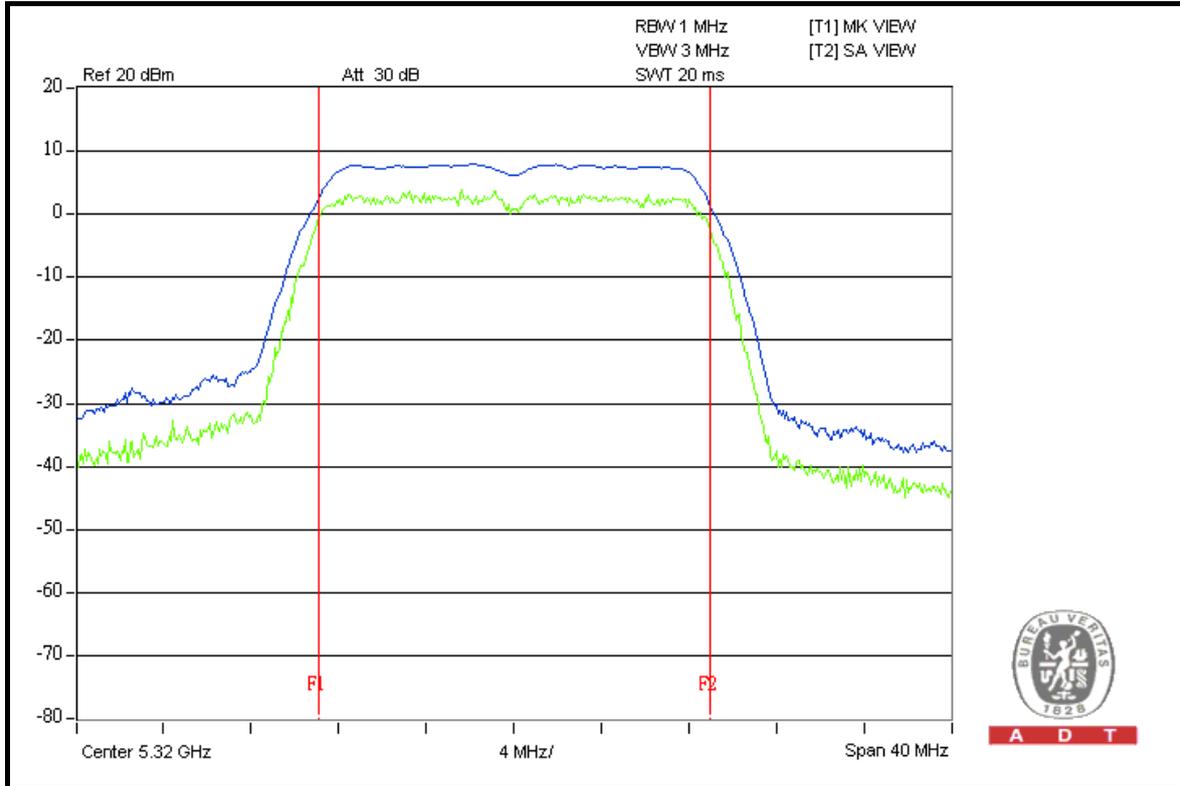


A D T

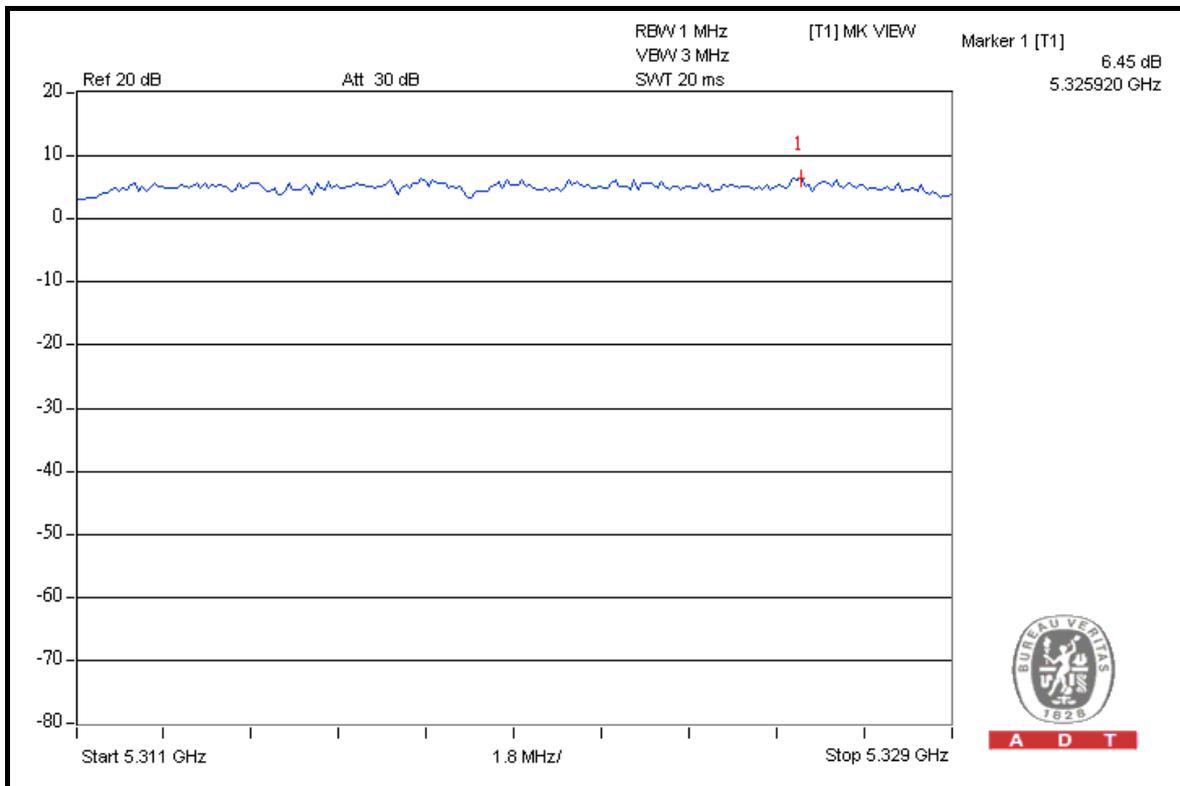


A D T

CH 64



A D T

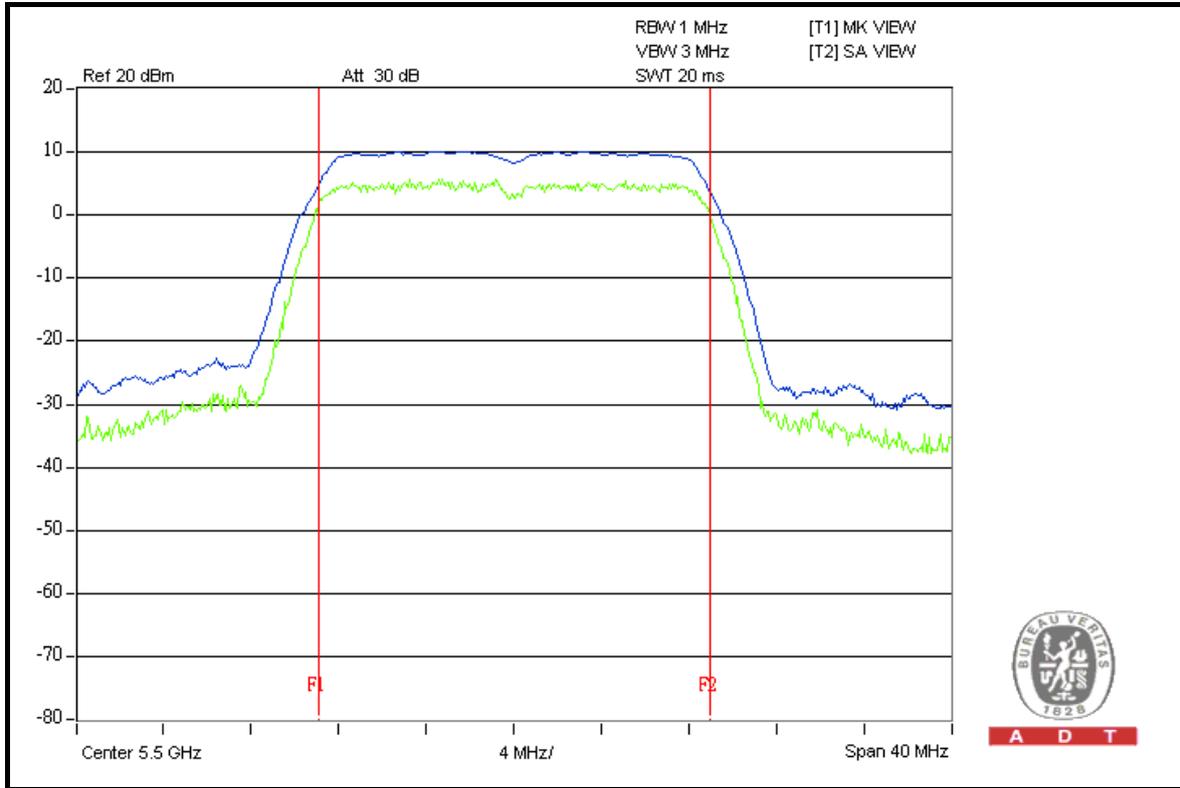


A D T

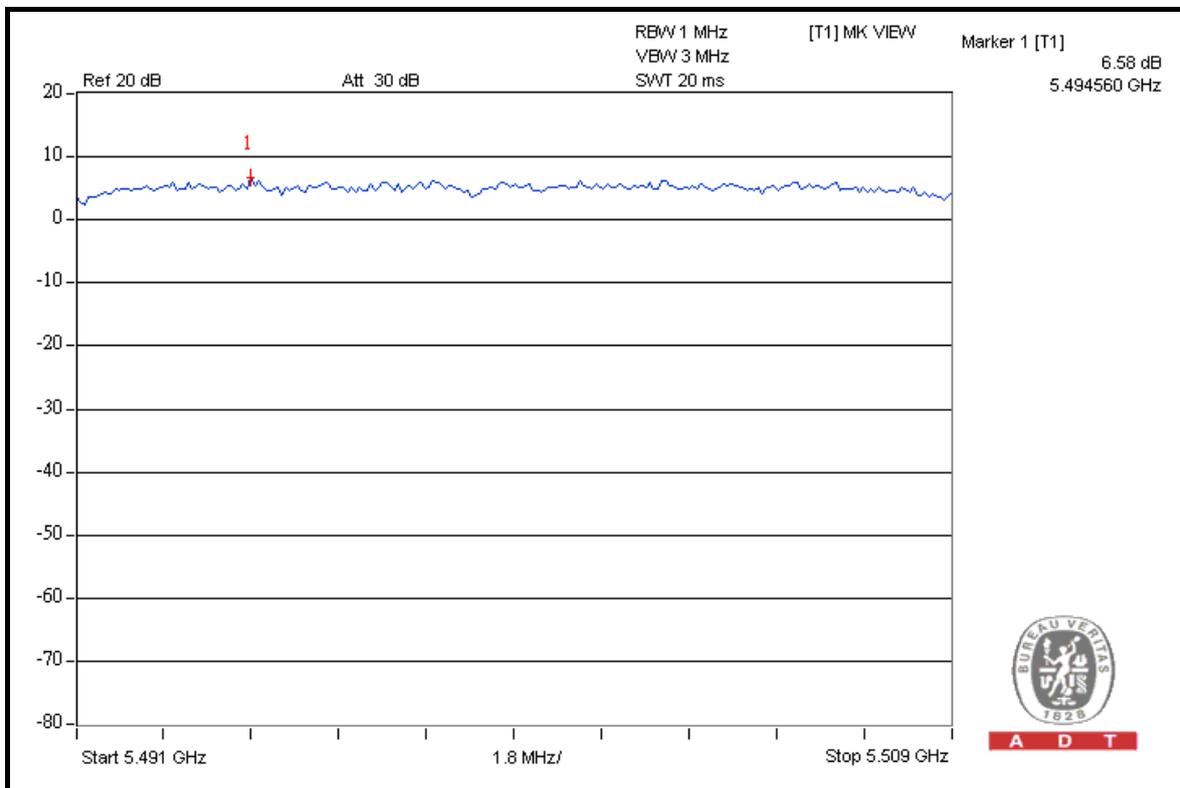


A D T

CH 100



A D T

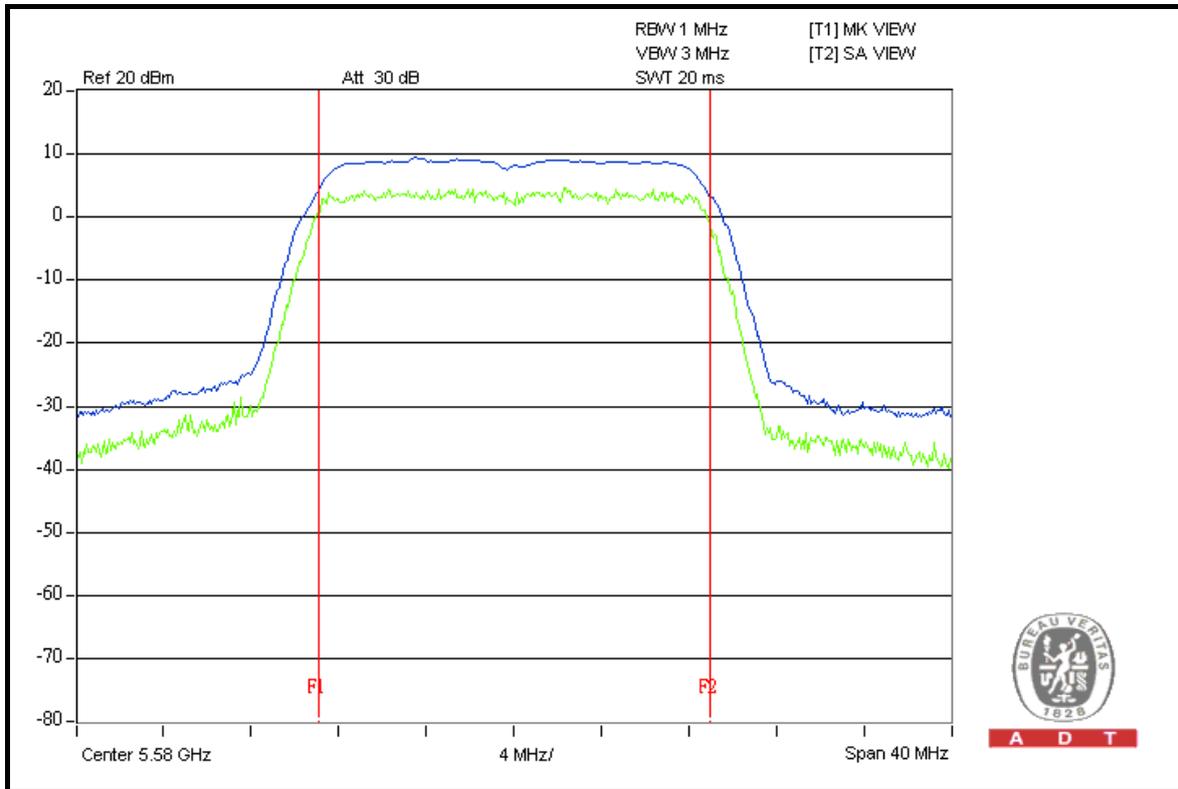


A D T

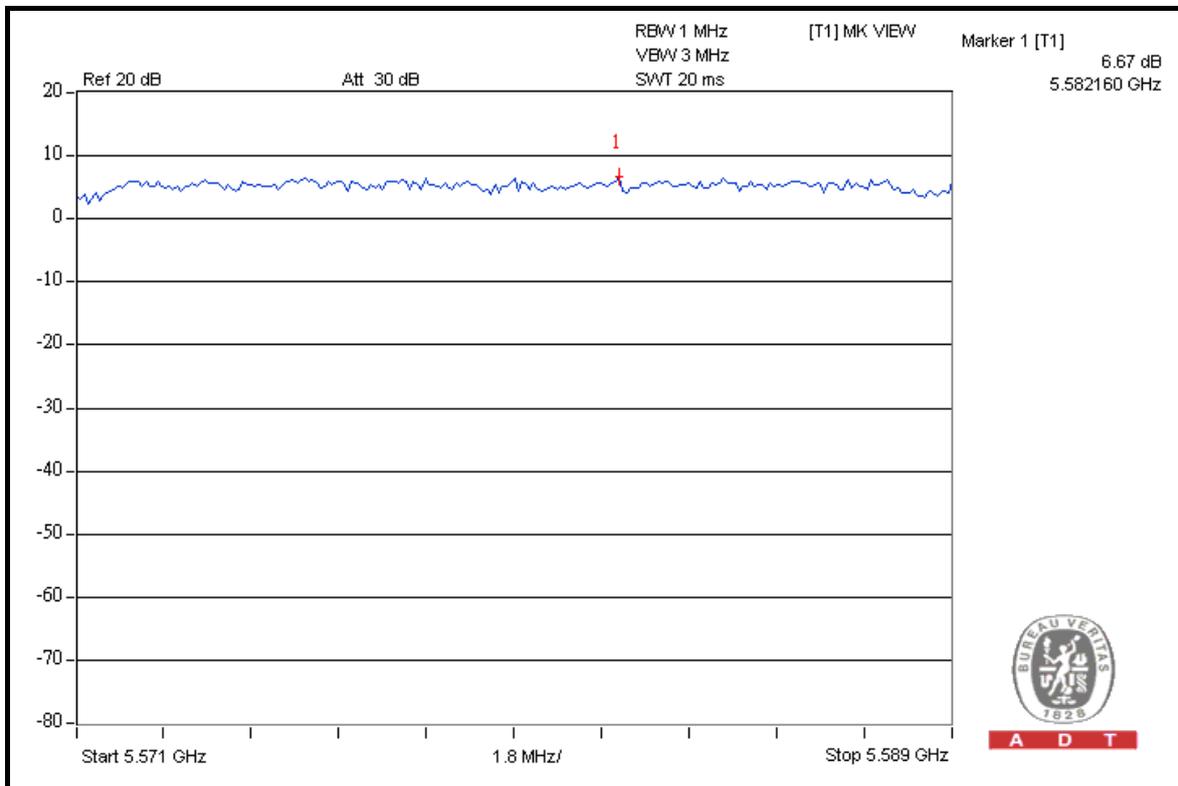


A D T

CH 116



A D T

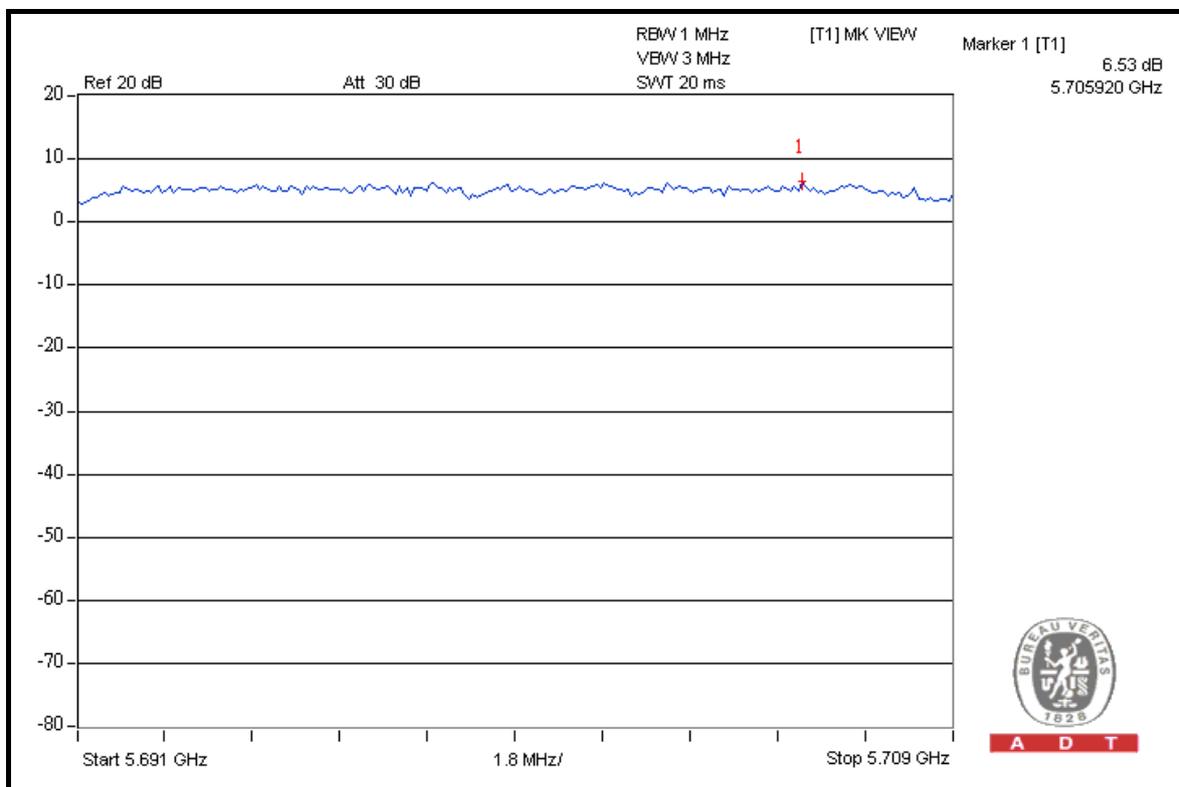
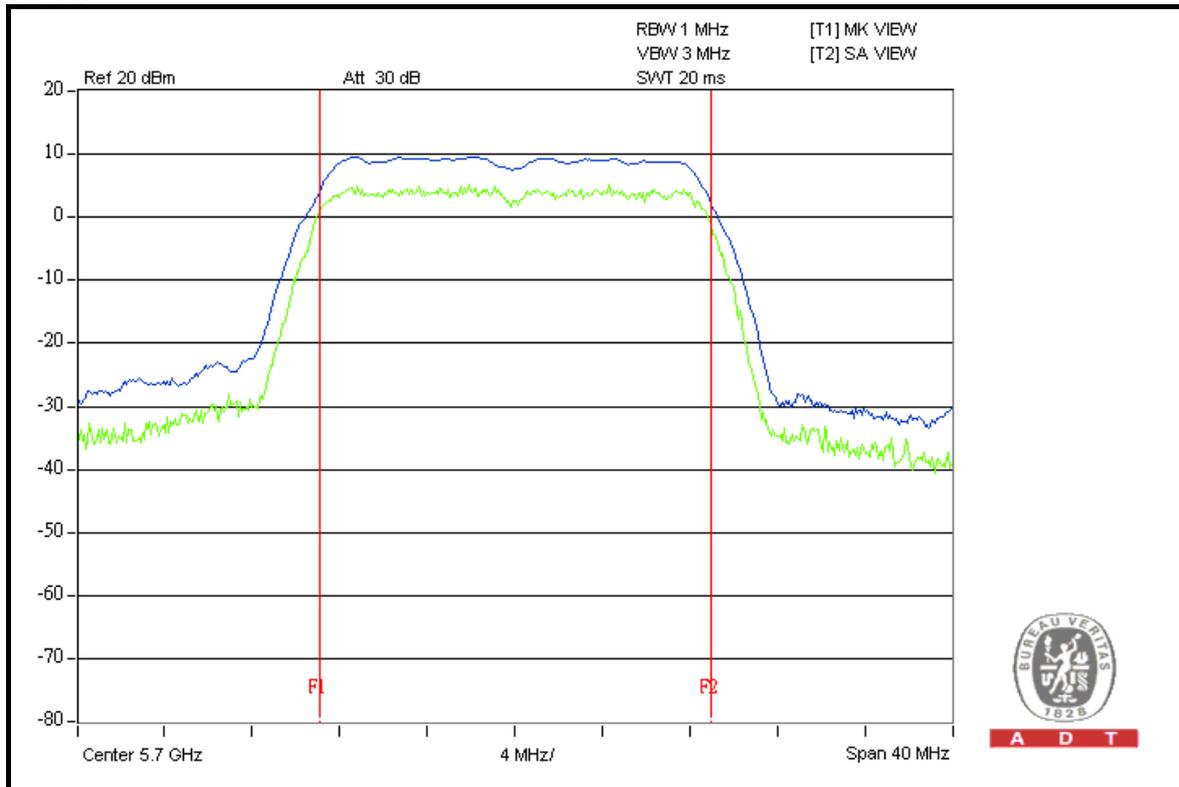


A D T



A D T

CH 140





A D T

DRAFT 802.11n (20MHz) OFDM MODULATION: 2TX

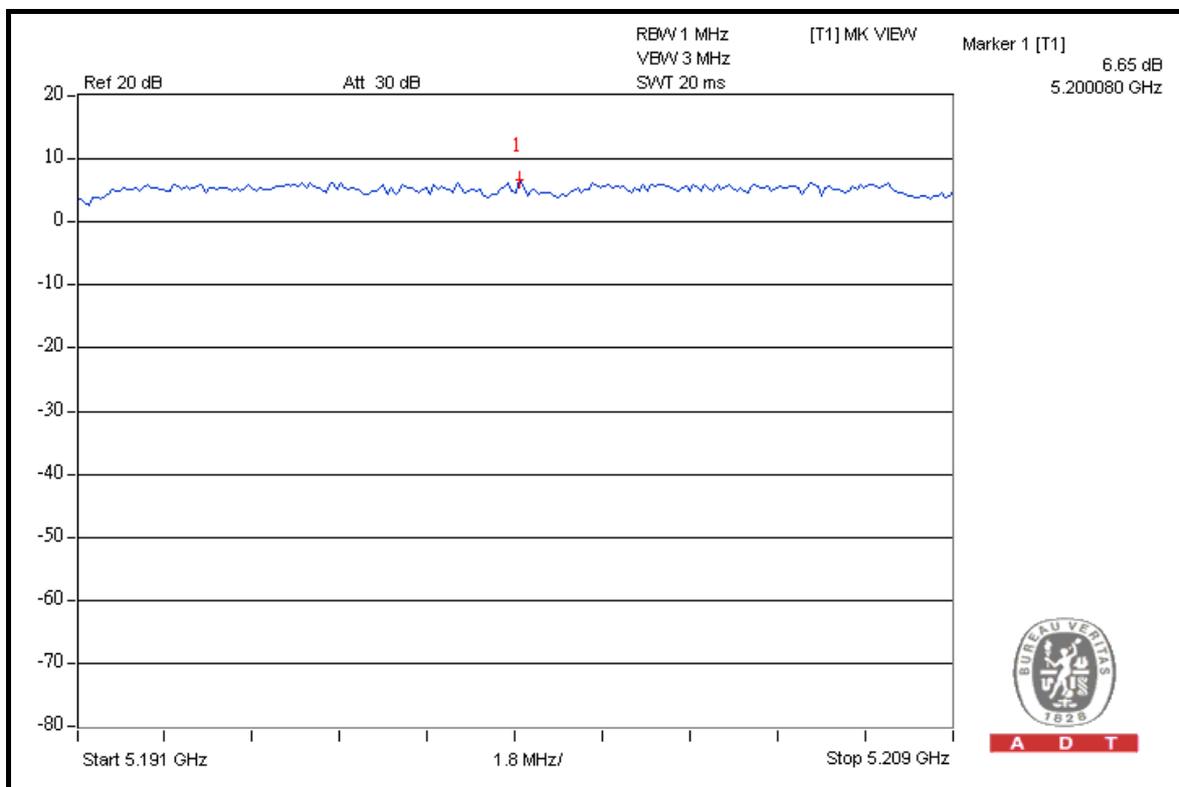
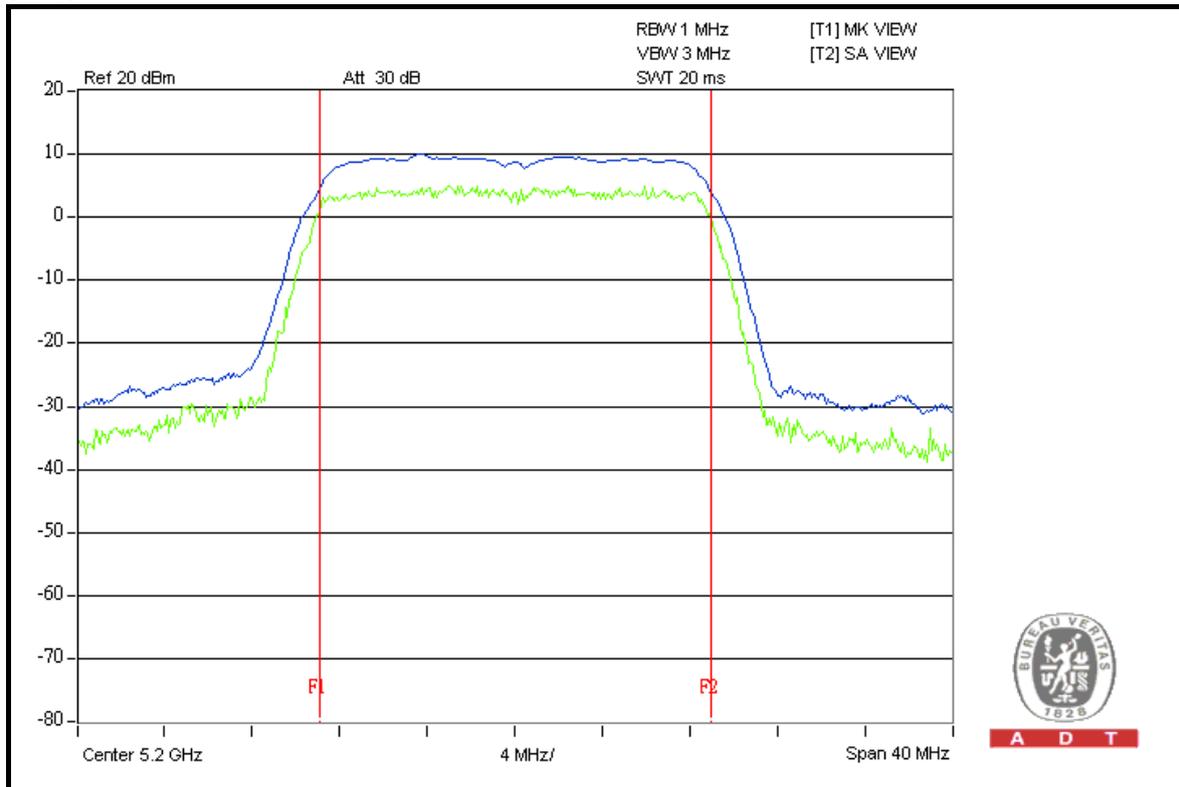
MODULATION TYPE	BPSK	TRANSFER RATE	14.444Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)		PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
		CHAIN 0	CHAIN 1		
36	5180	7.00	6.98	13	PASS
40	5200	6.65	6.63	13	PASS
48	5240	6.54	8.97	13	PASS
52	5260	7.02	6.85	13	PASS
60	5300	6.53	6.86	13	PASS
64	5320	6.52	6.69	13	PASS
100	5500	6.93	6.63	13	PASS
116	5580	6.44	6.60	13	PASS
140	5700	6.87	6.68	13	PASS



A D T

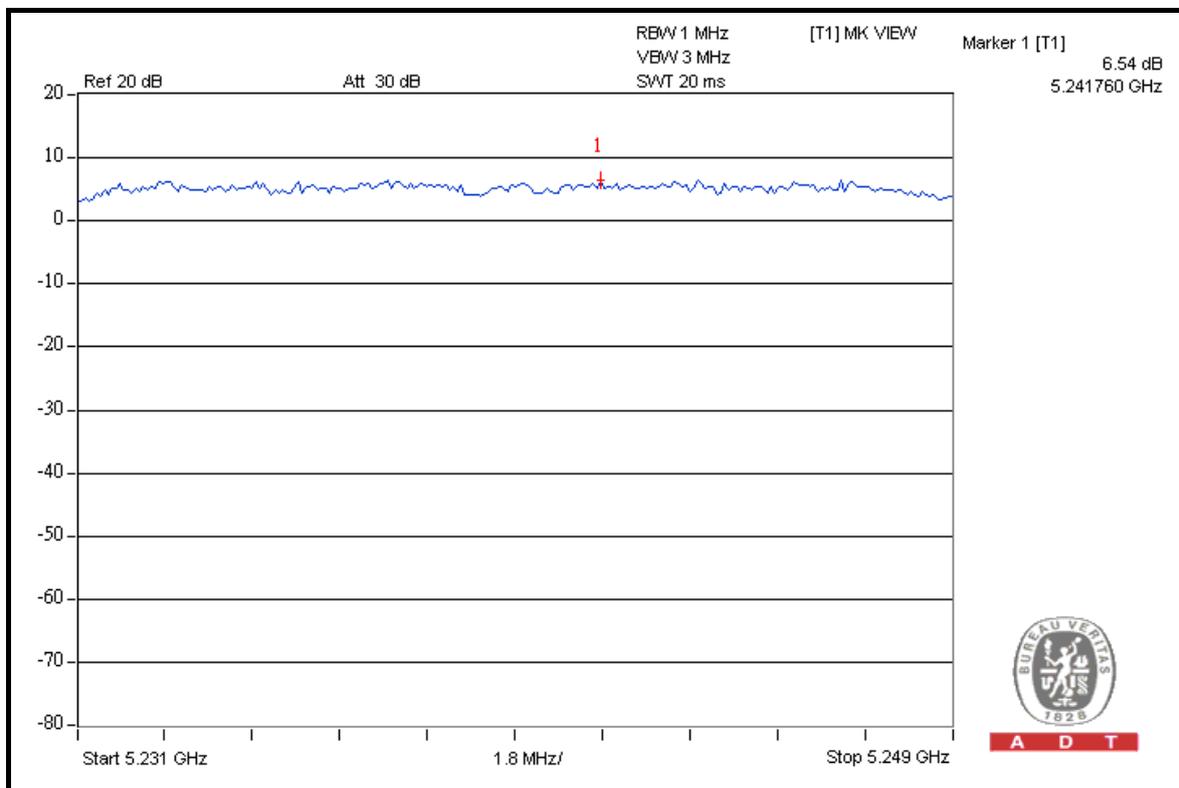
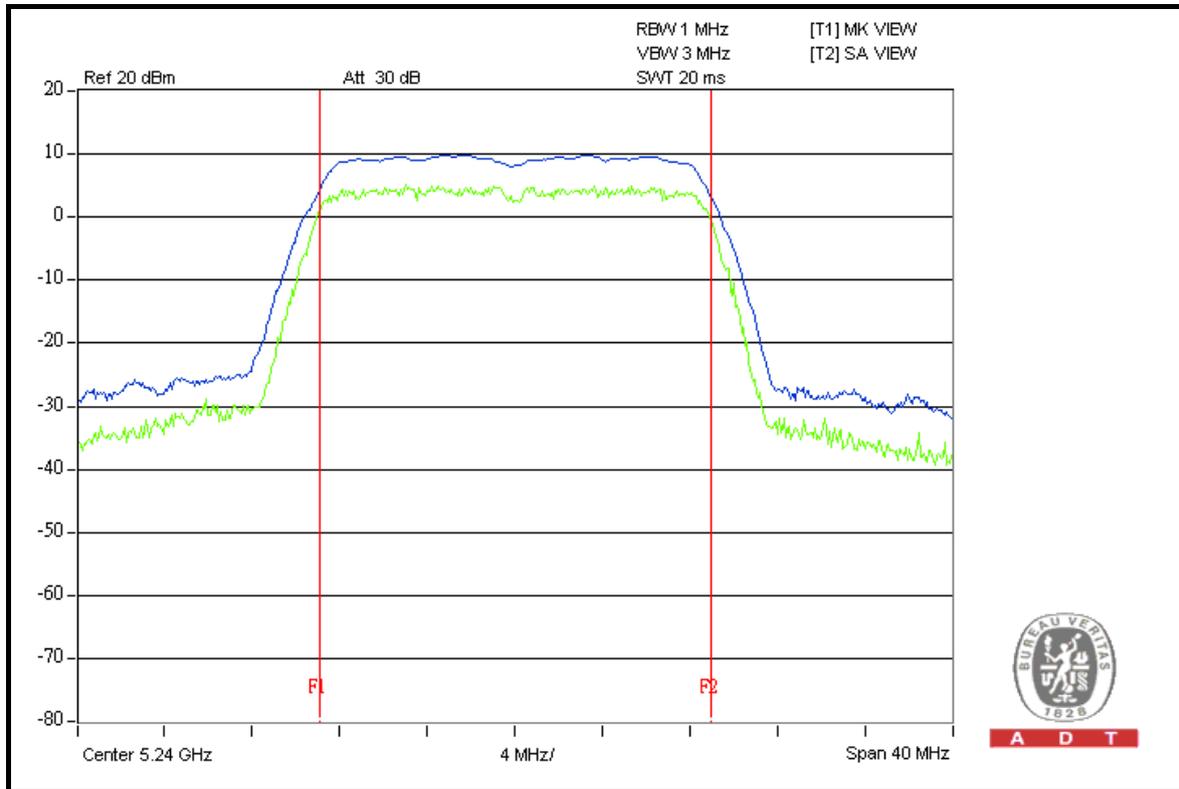
CH 40





A D T

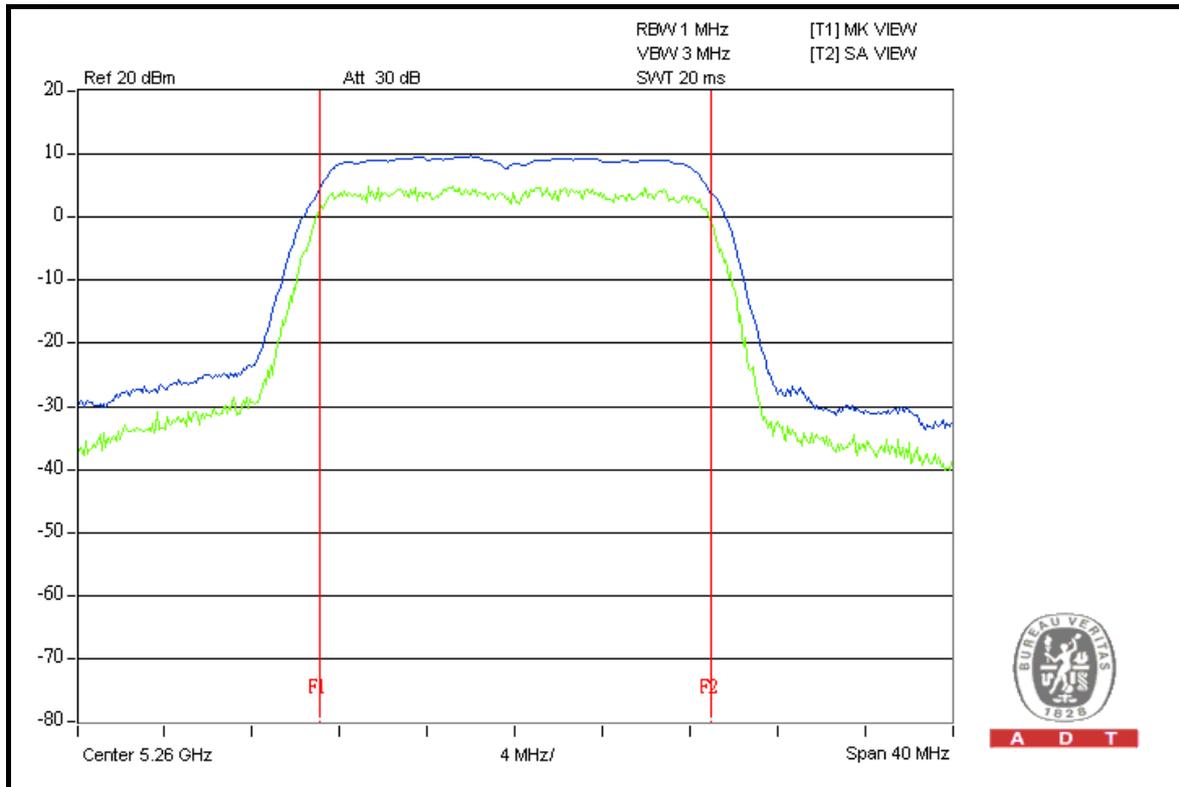
CH 48



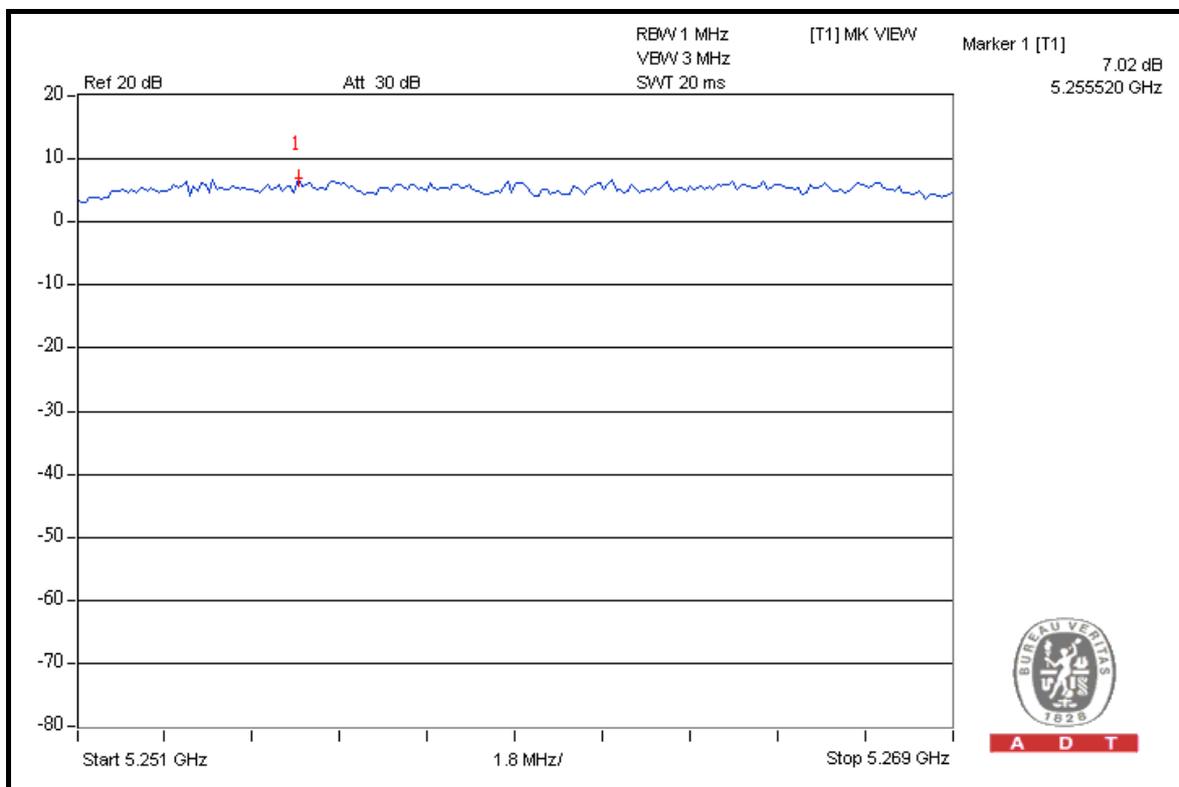


A D T

CH 52



A D T

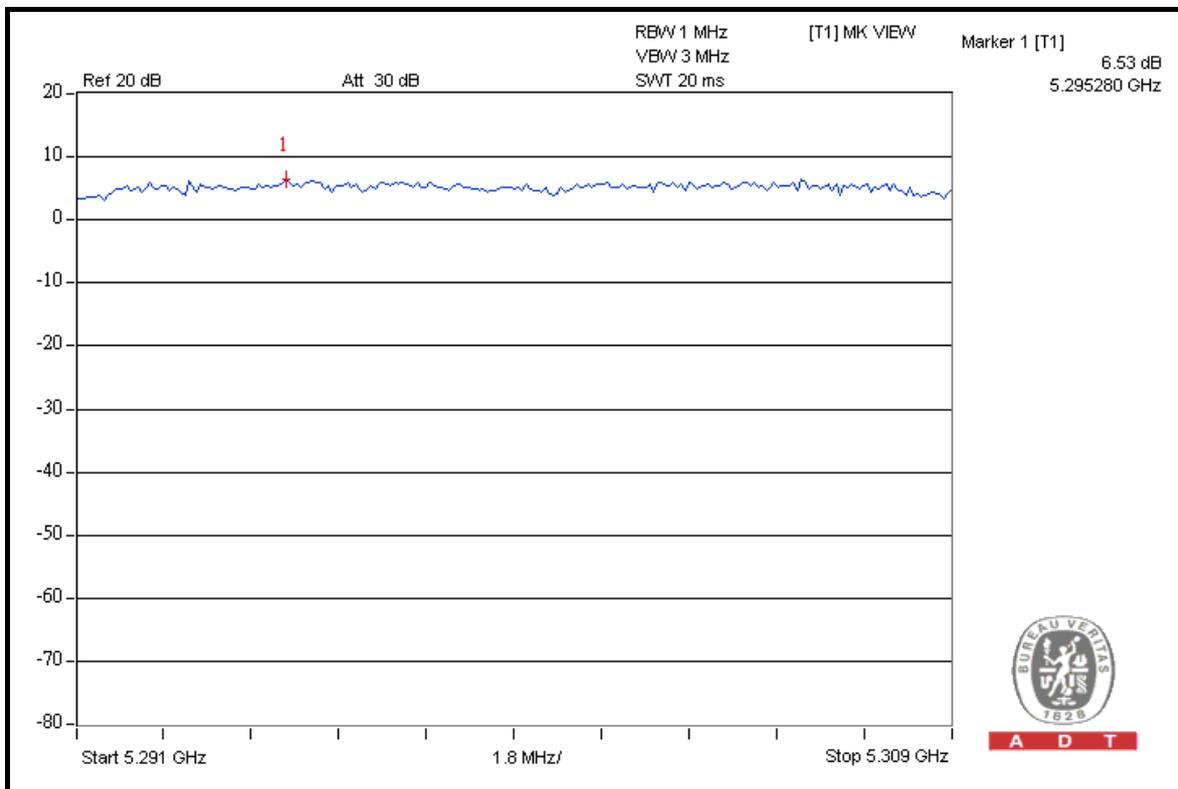
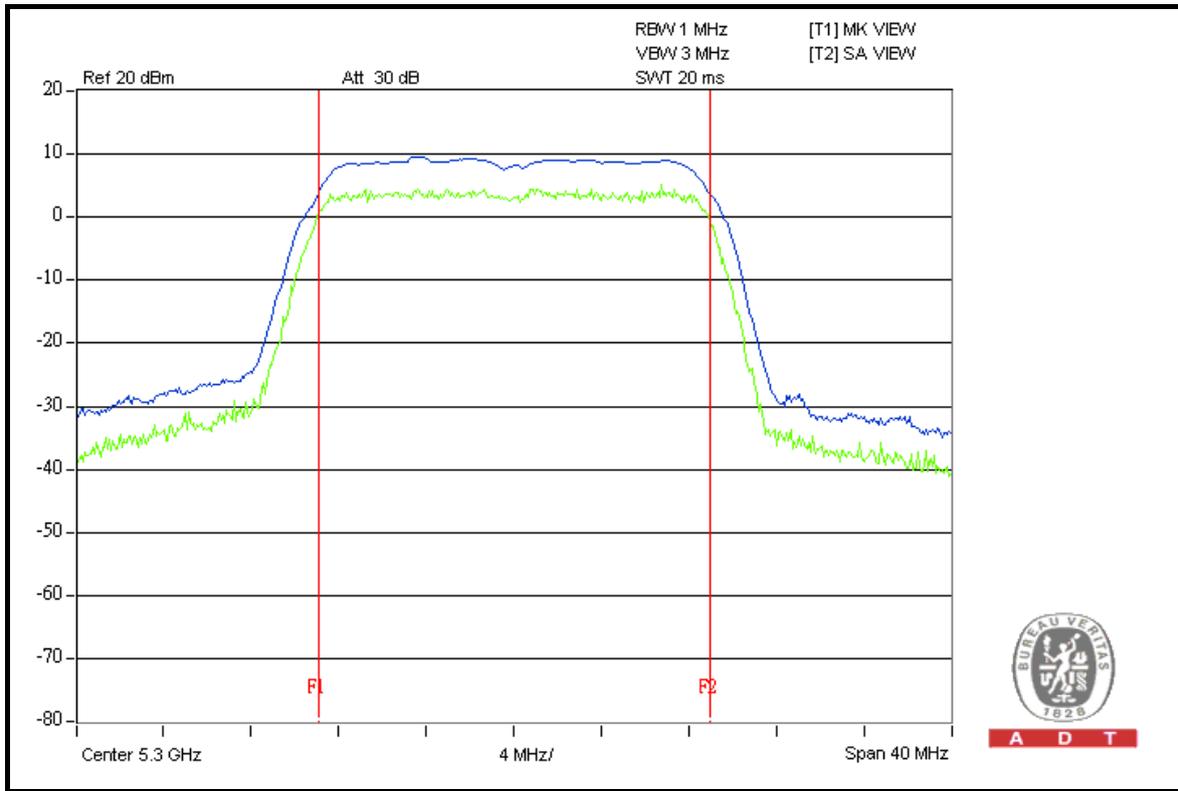


A D T



A D T

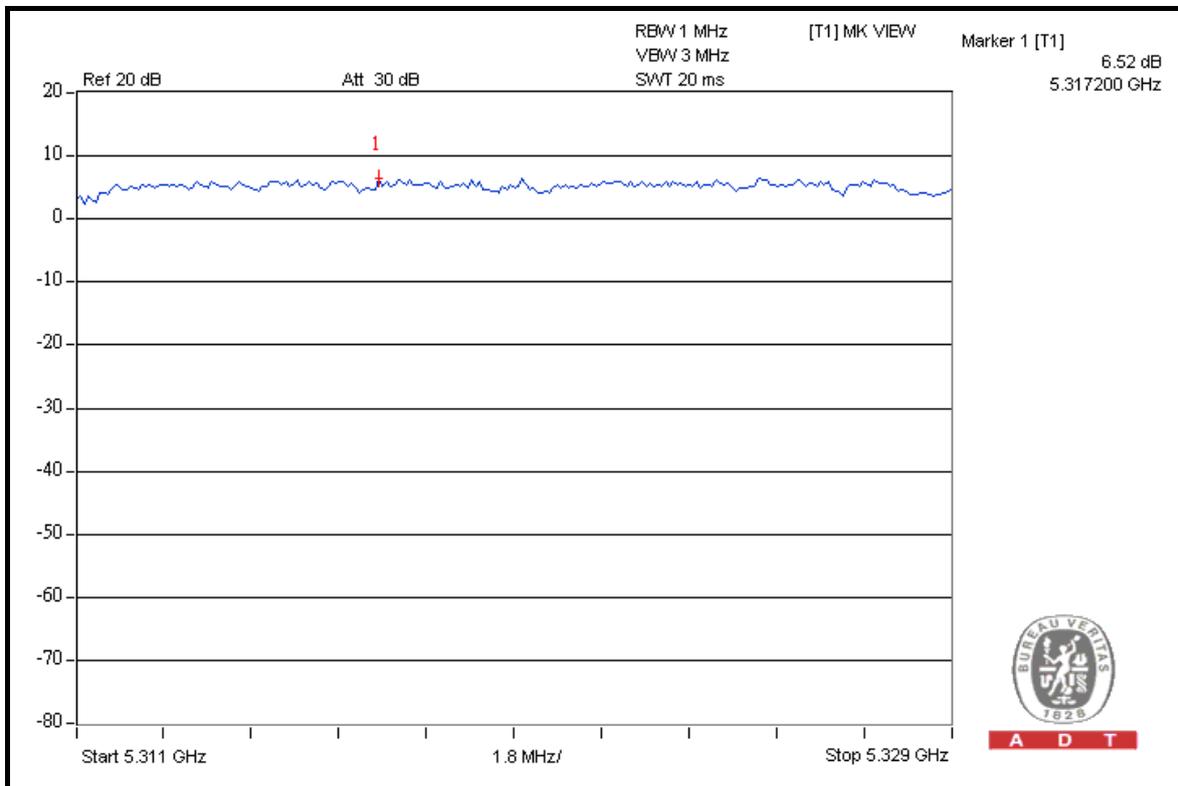
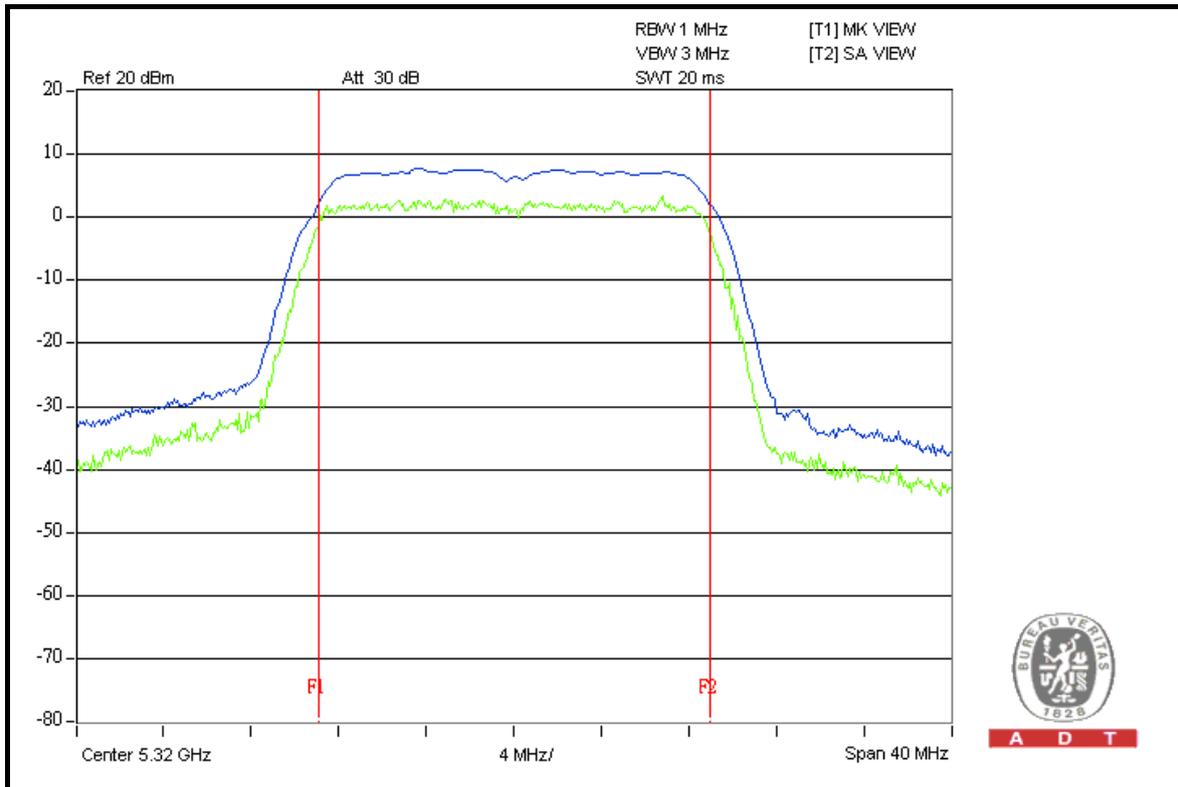
CH 60





A D T

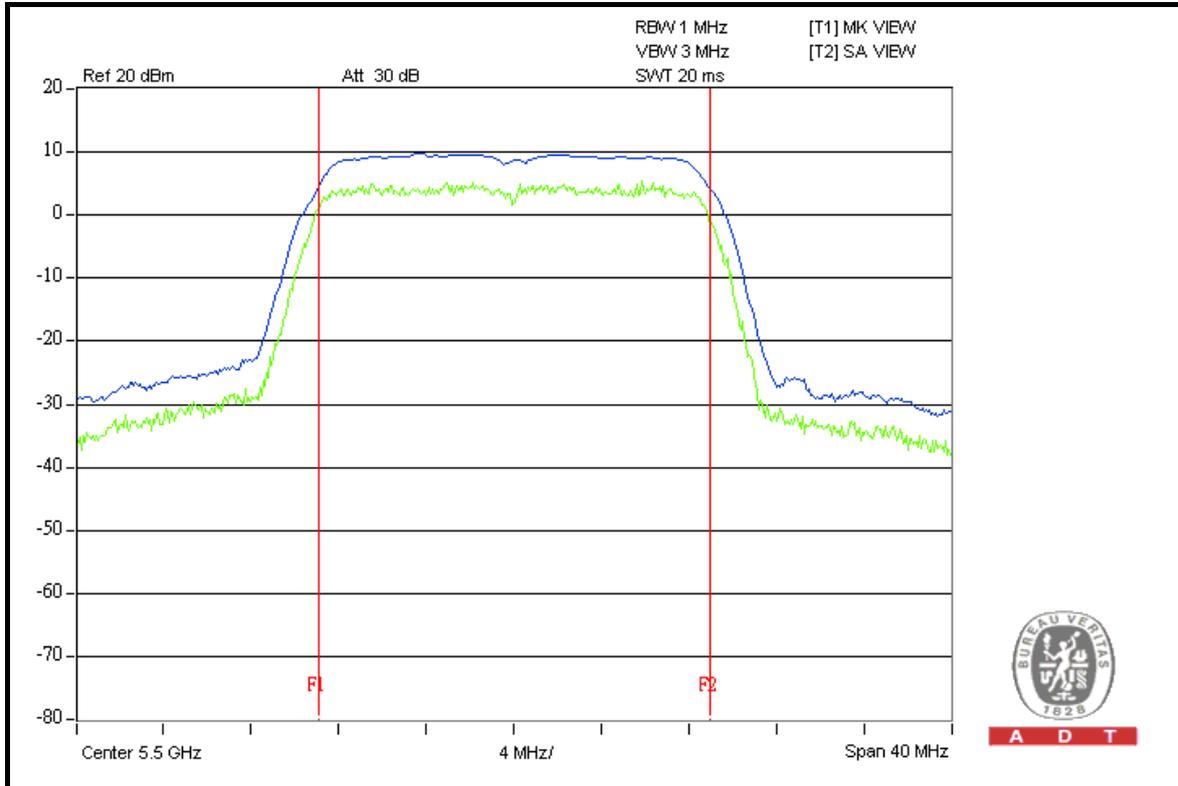
CH 64



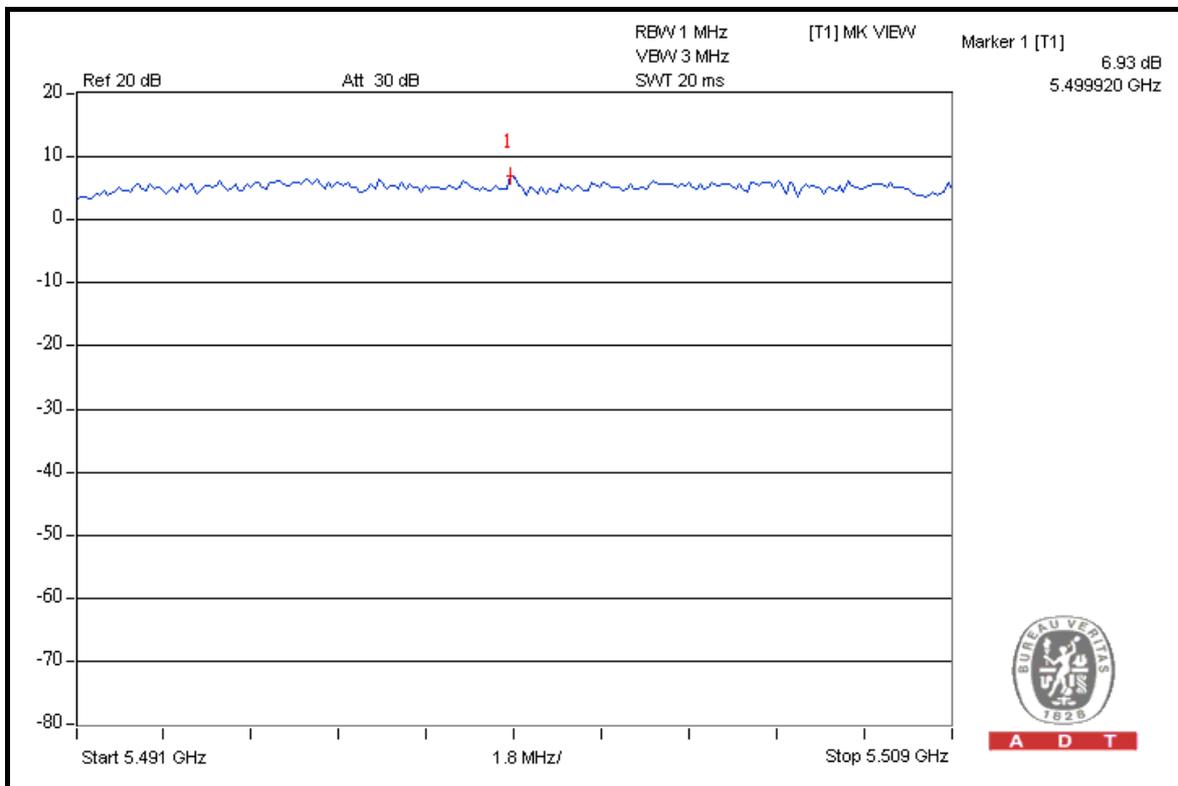


A D T

CH 100



A D T

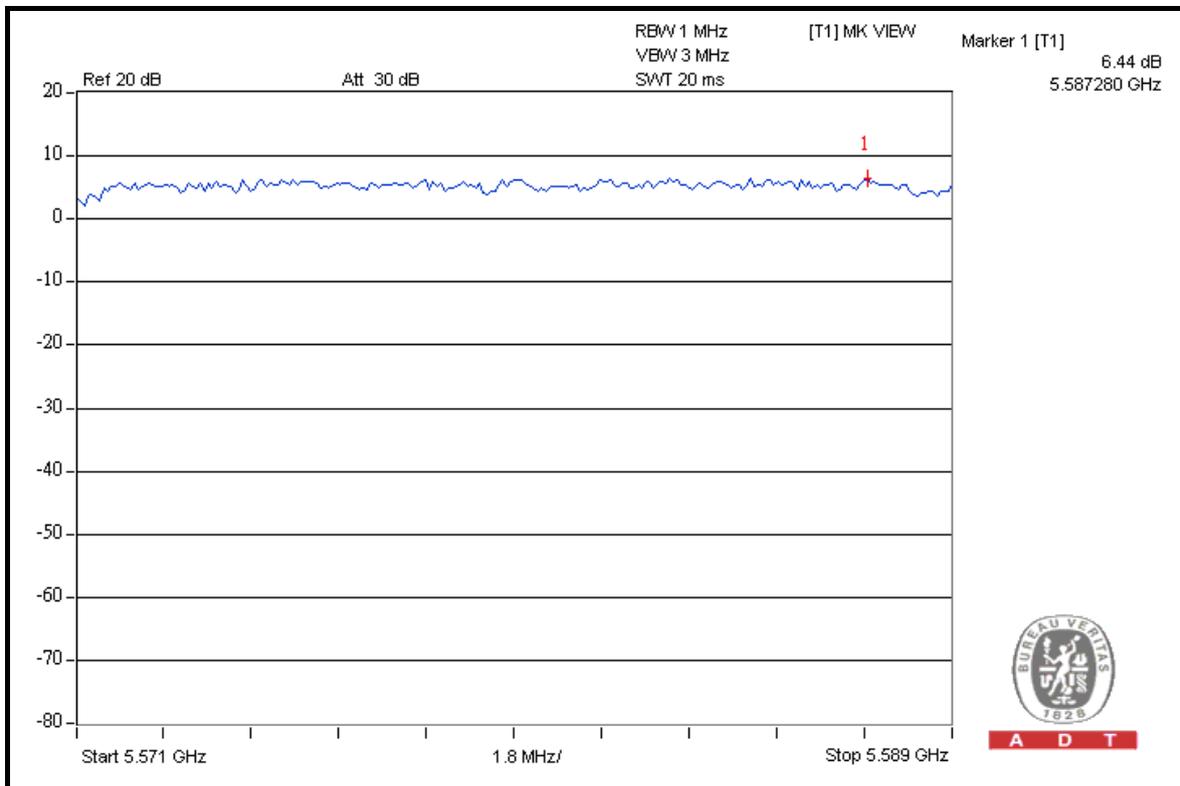
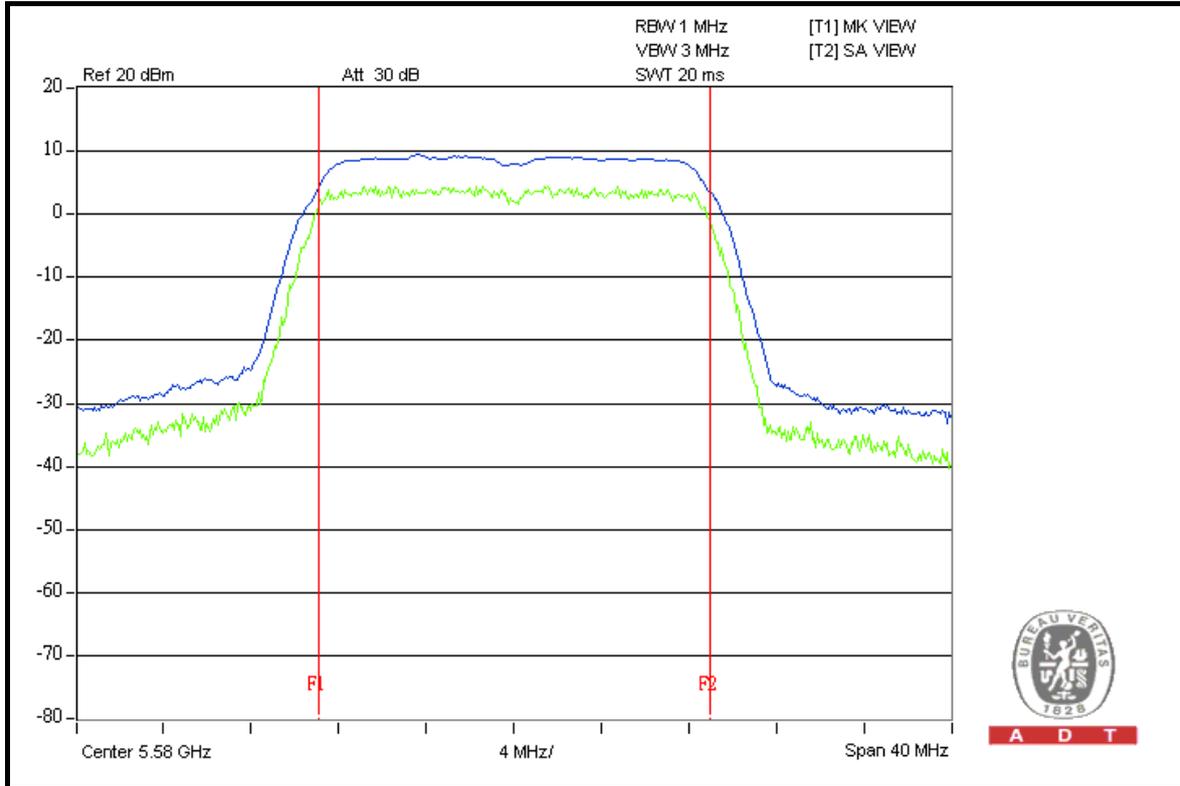


A D T



A D T

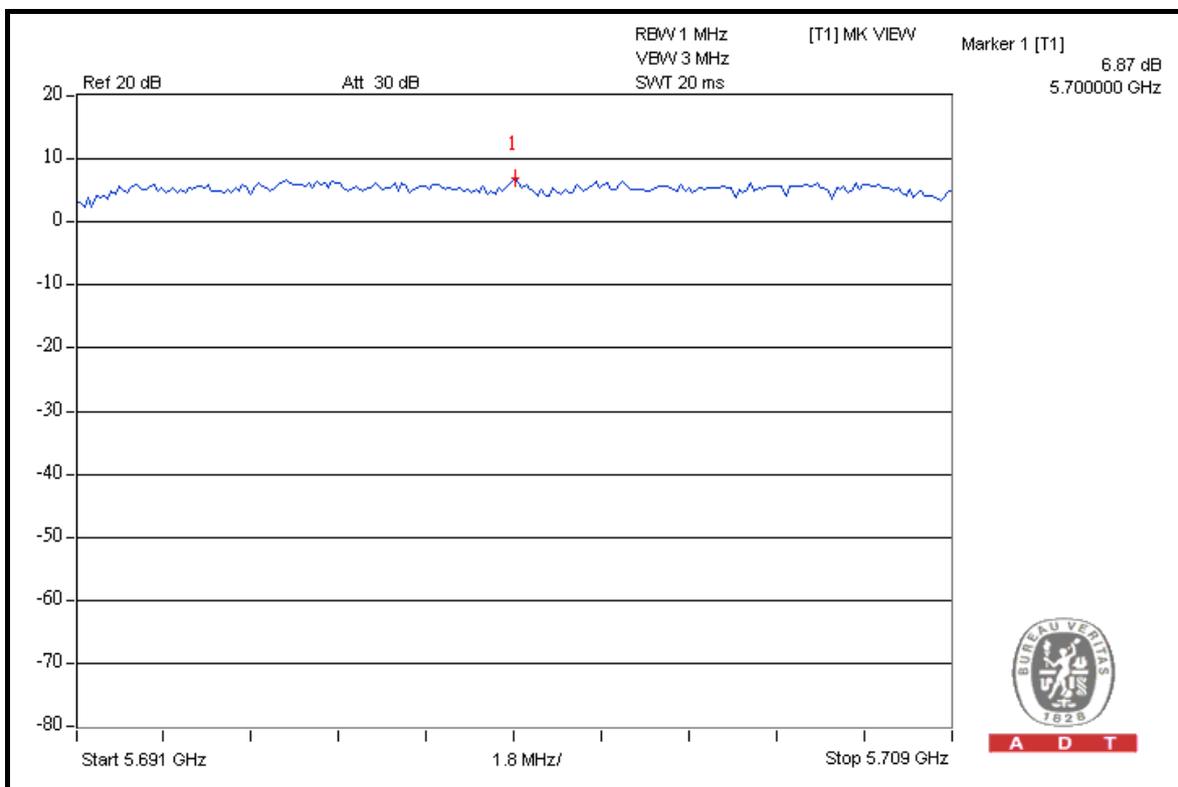
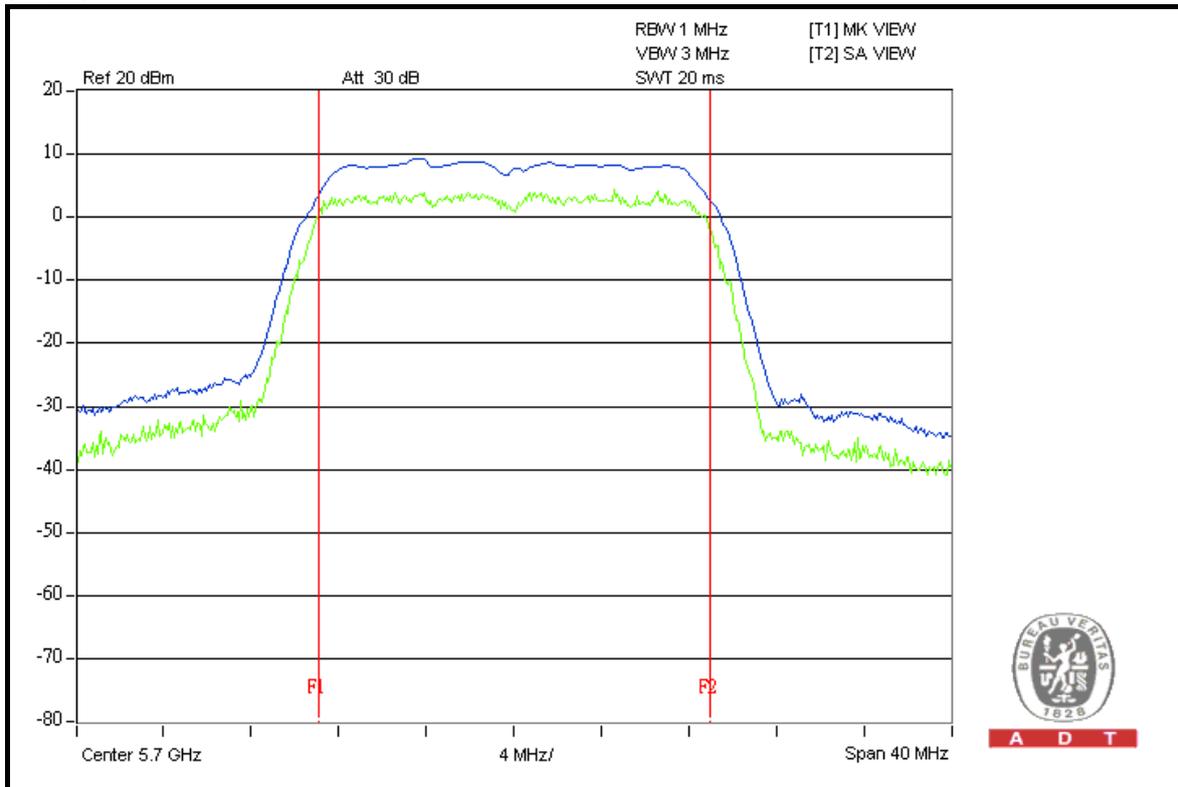
CH 116





A D T

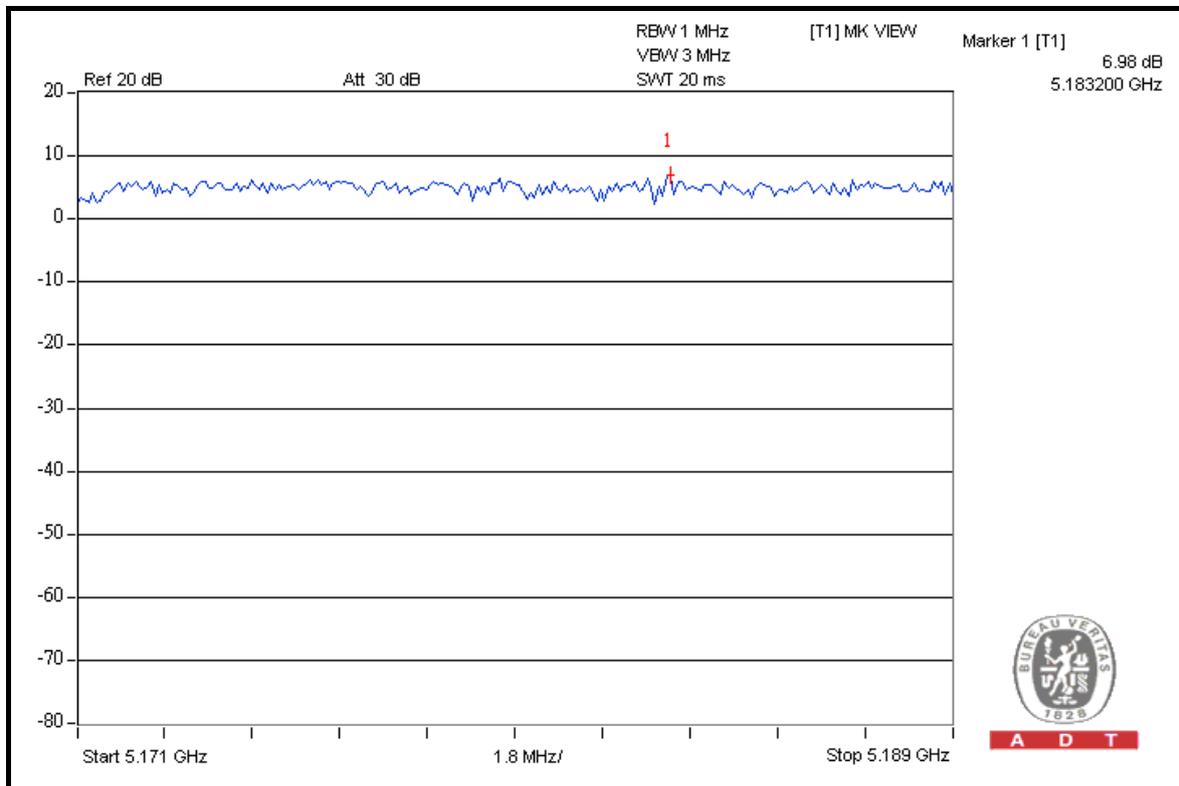
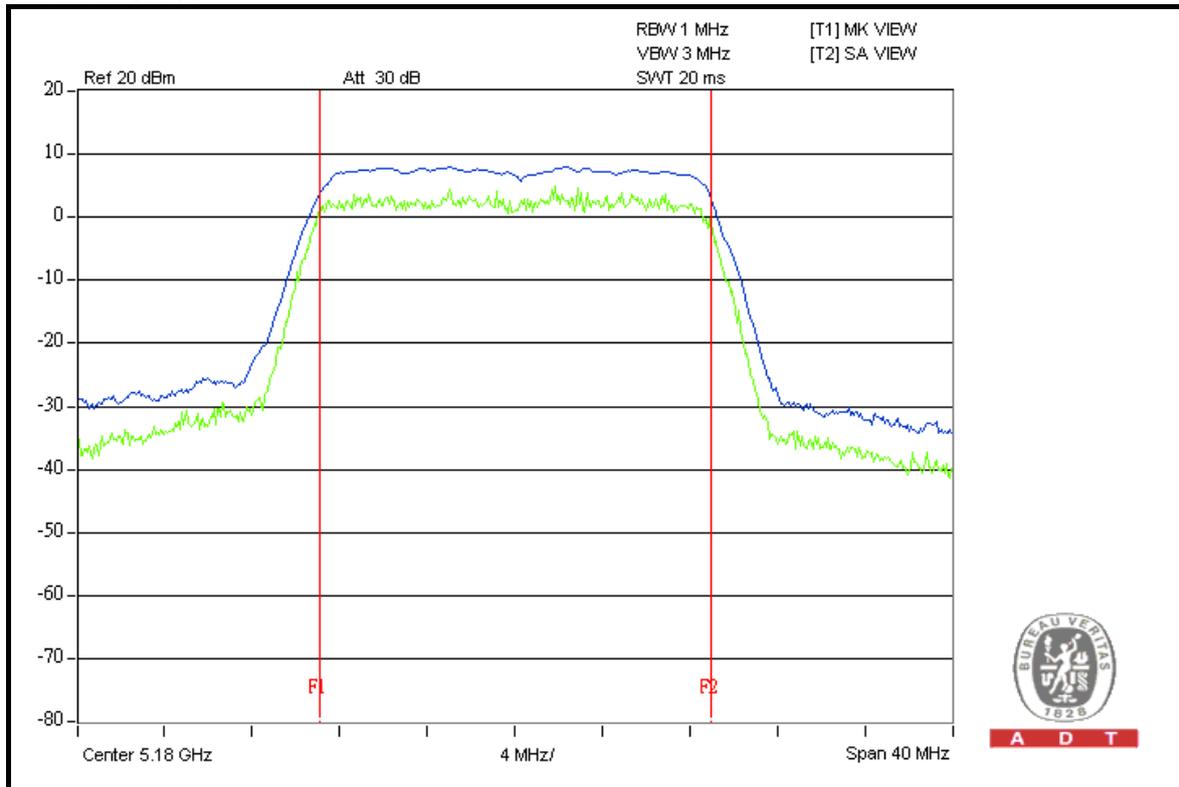
CH 140





A D T

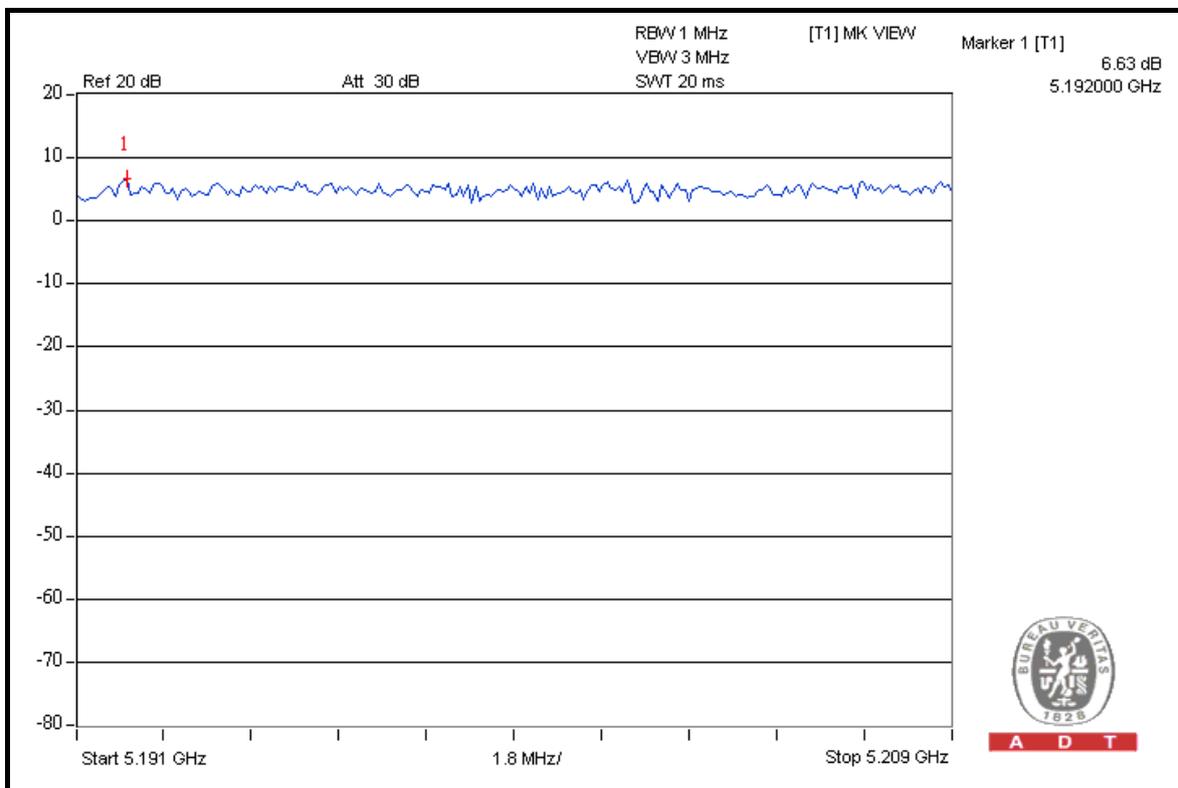
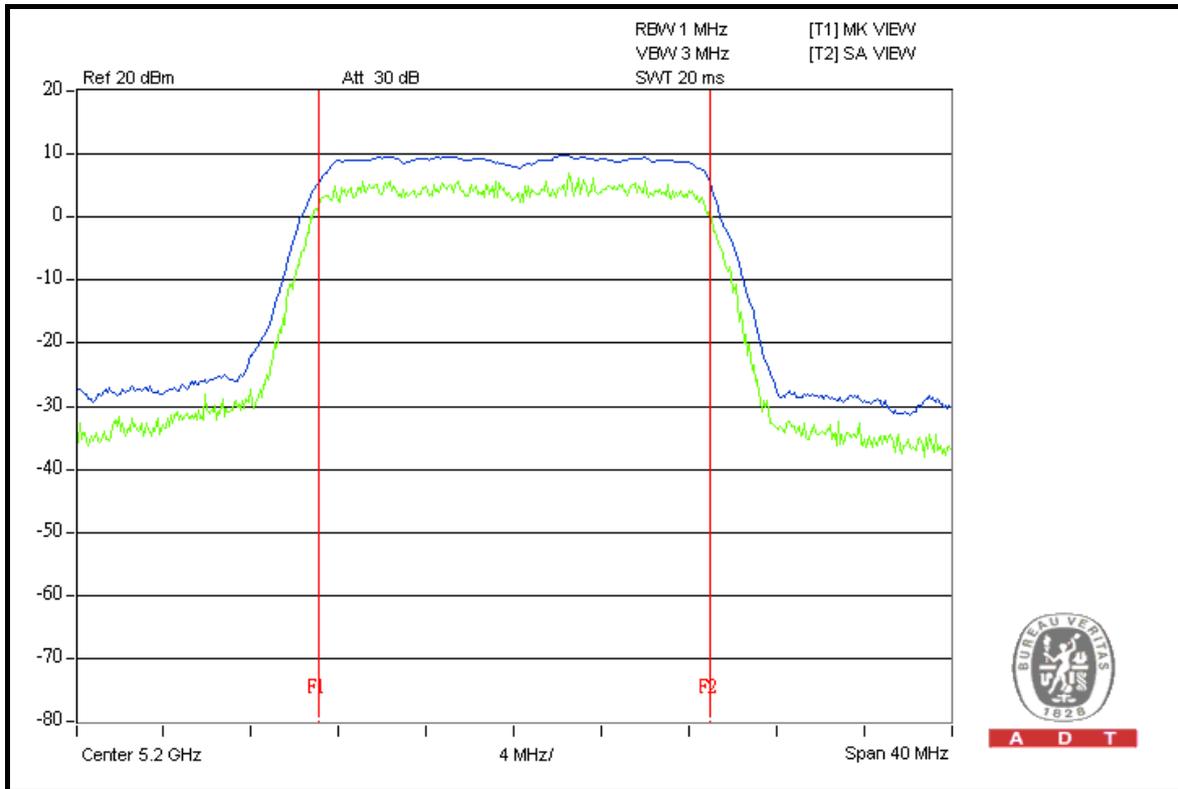
CHAIN 1: CH 36





A D T

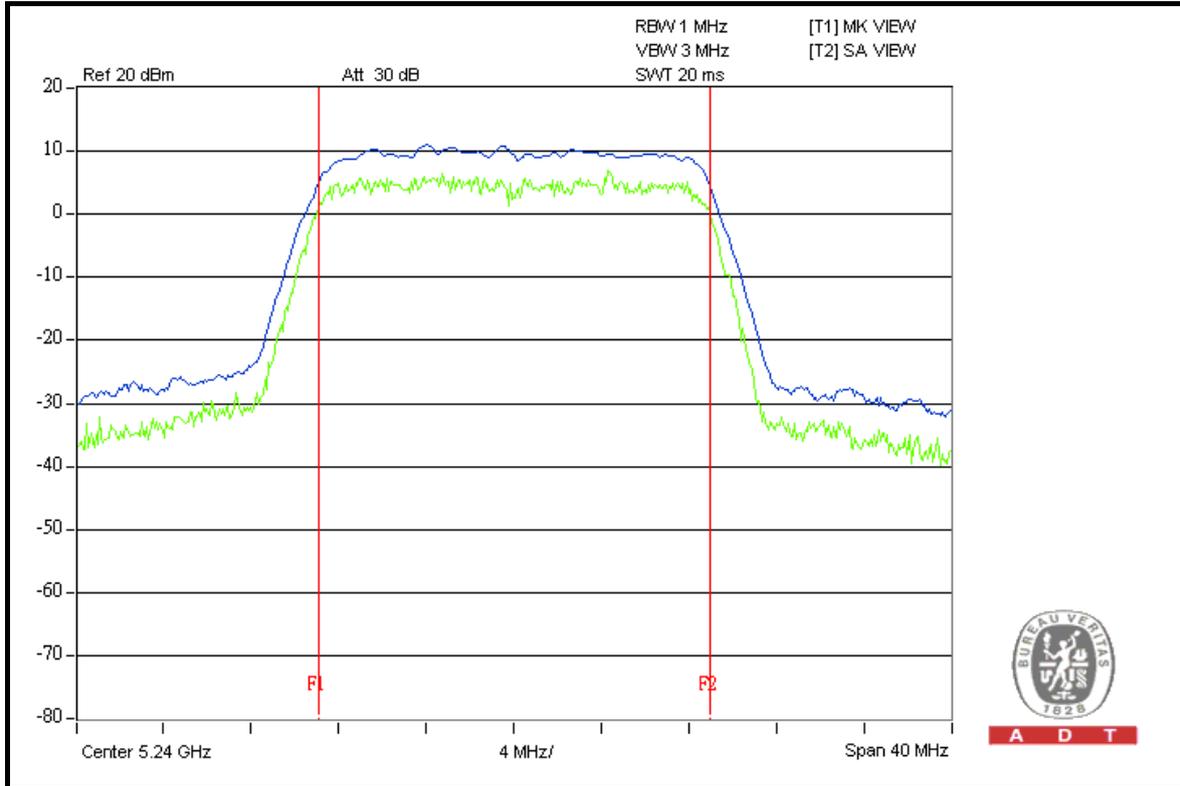
CH 40



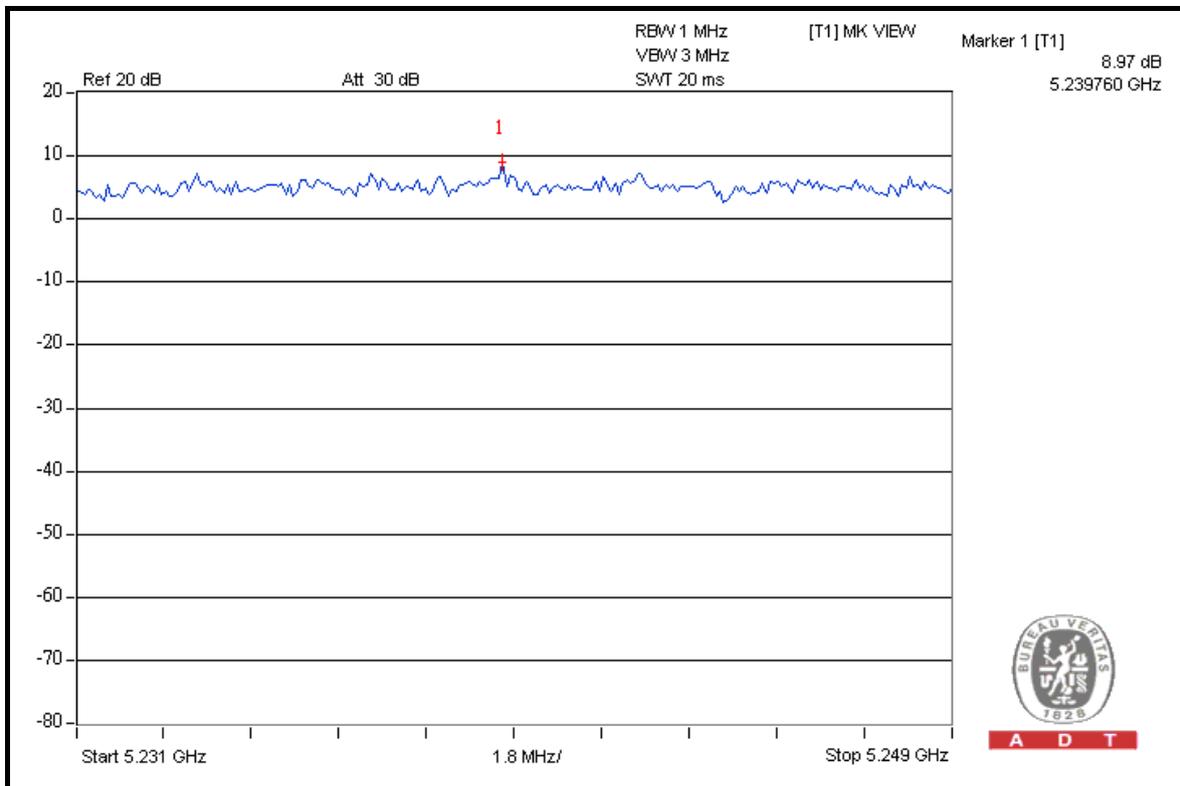


A D T

CH 48



A D T

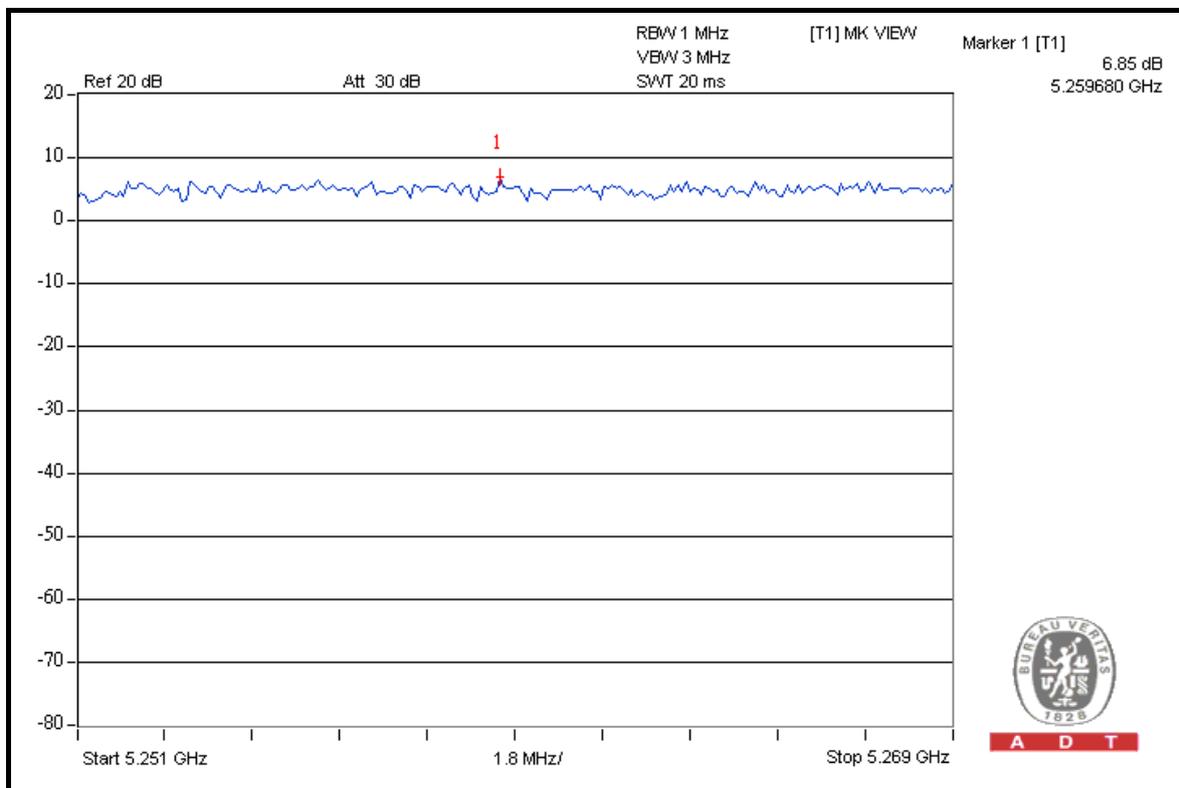
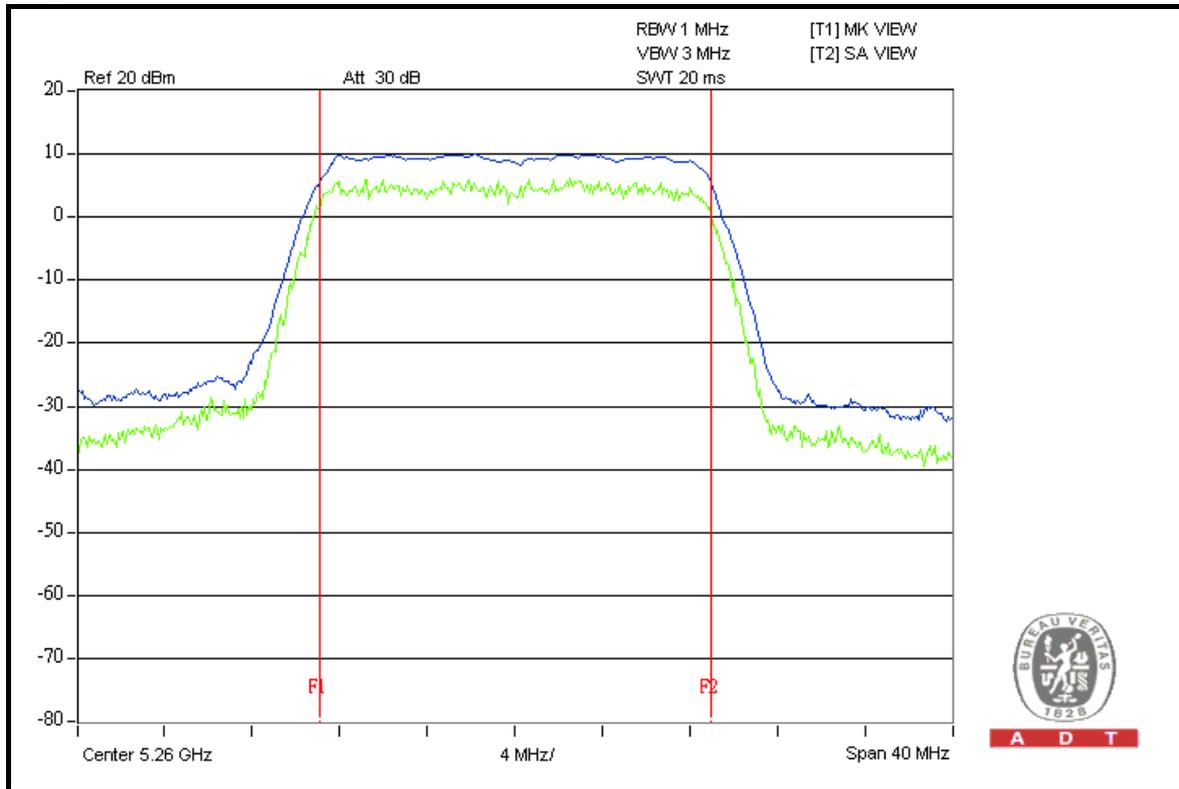


A D T



A D T

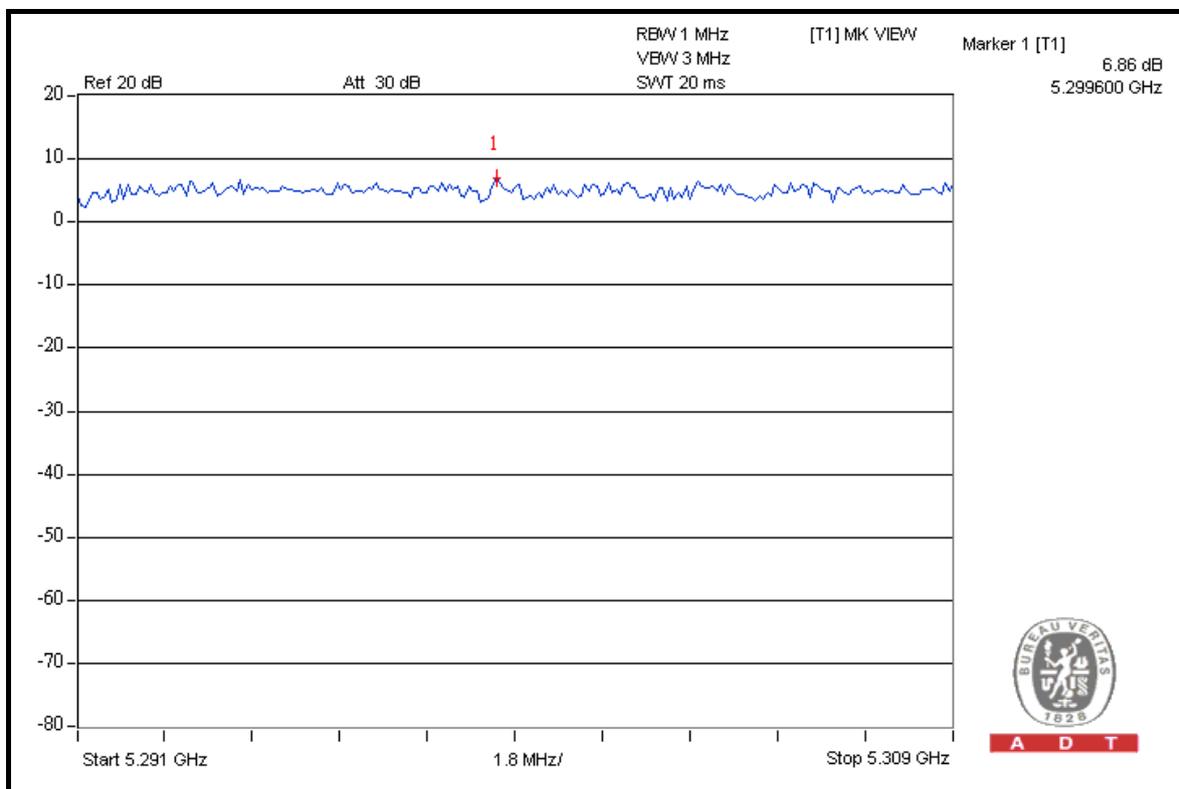
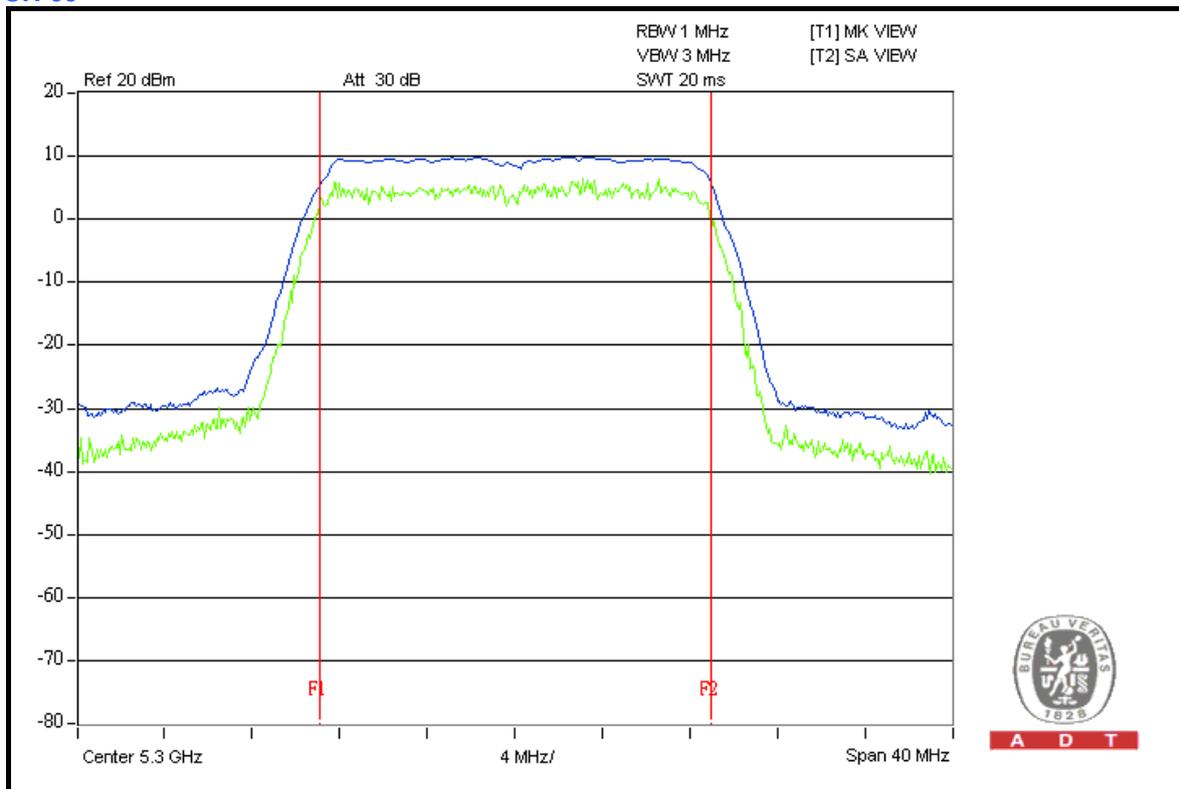
CH 52





A D T

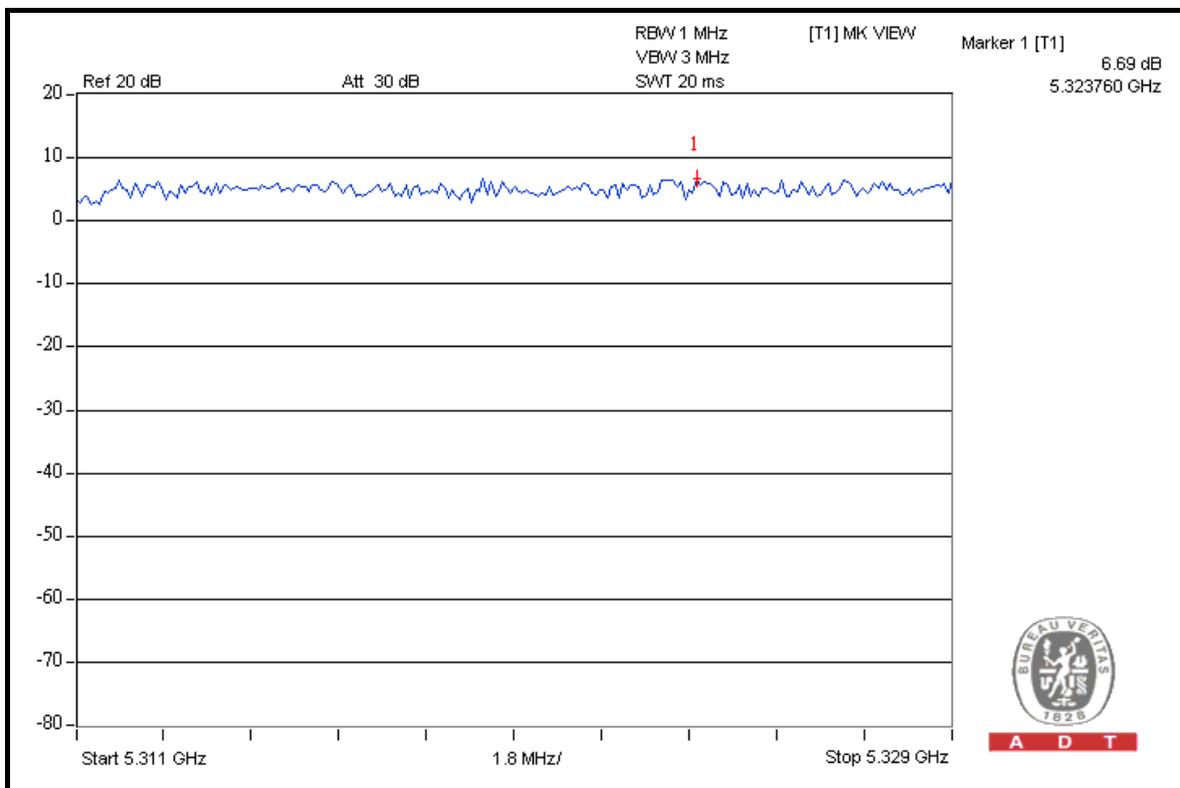
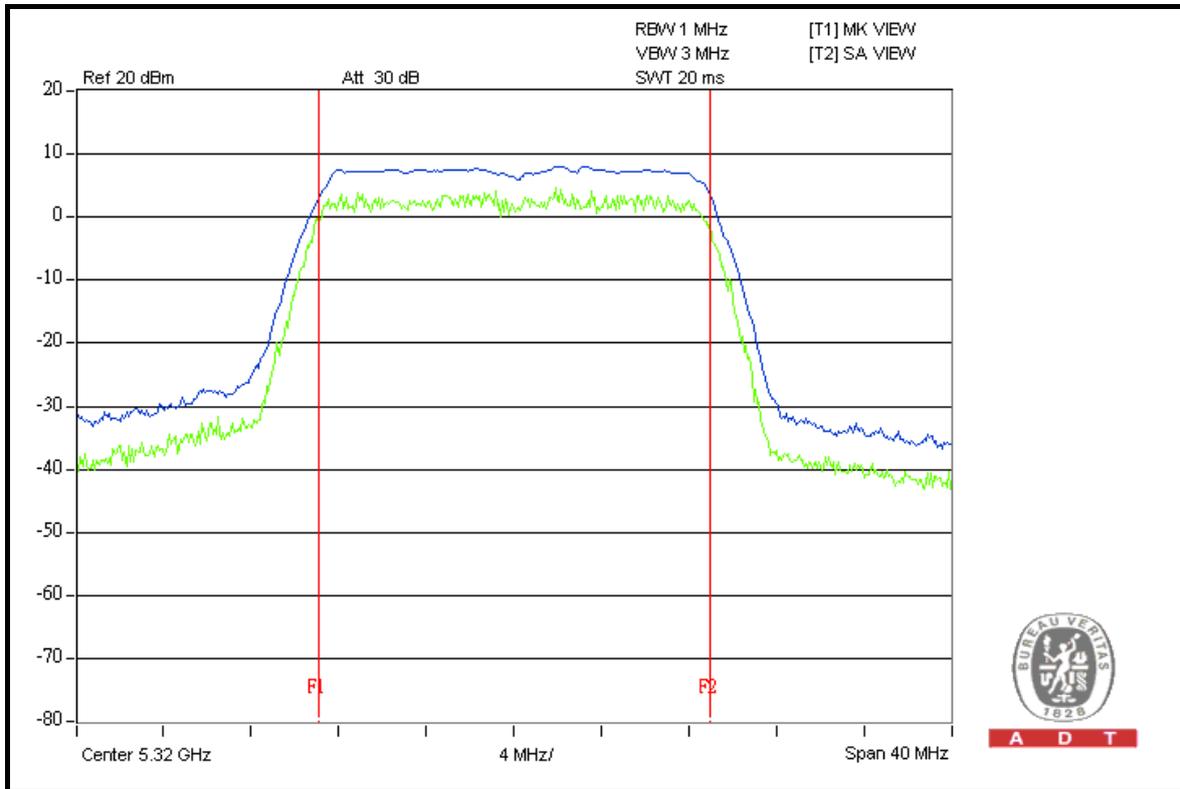
CH 60





A D T

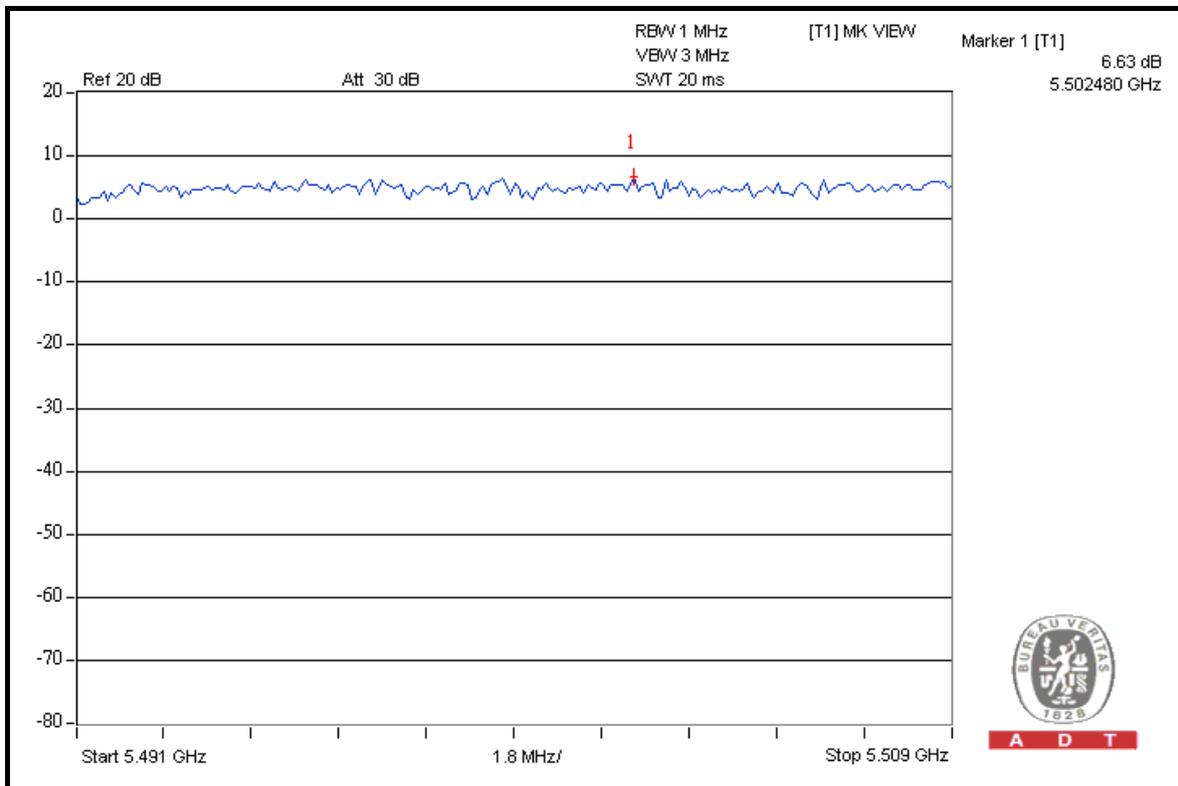
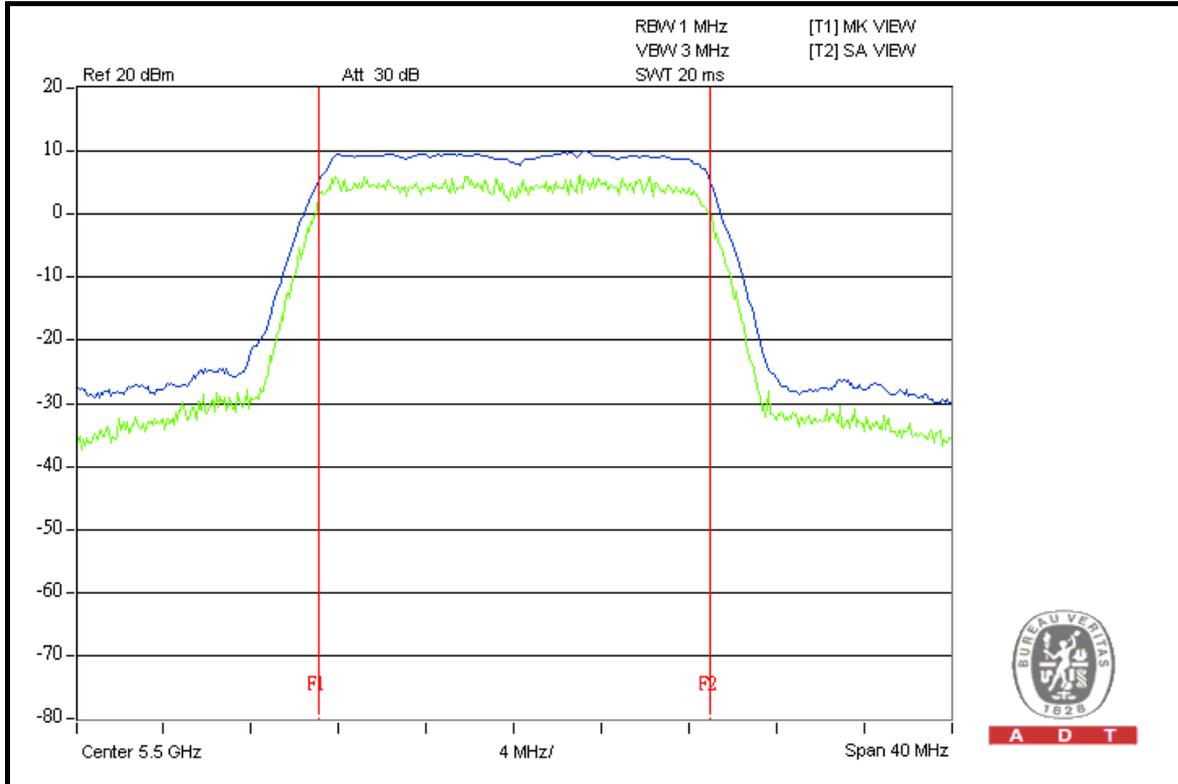
CH 64





A D T

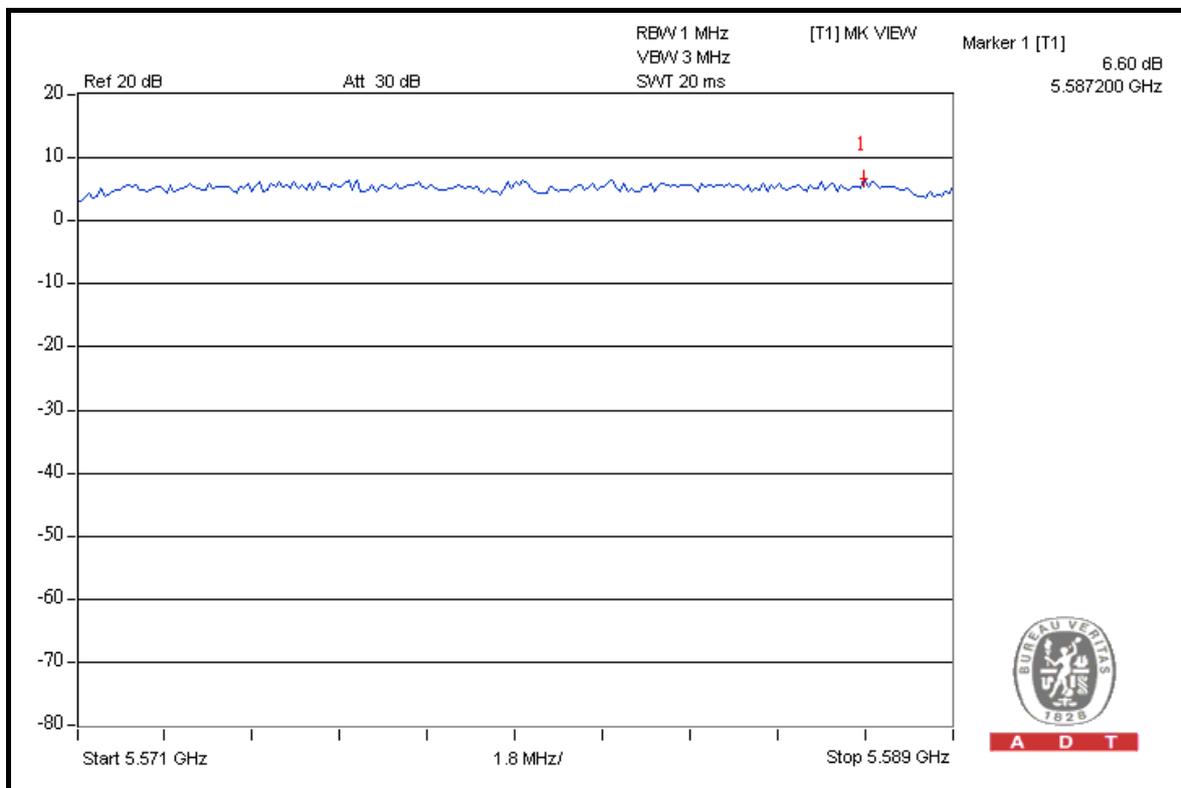
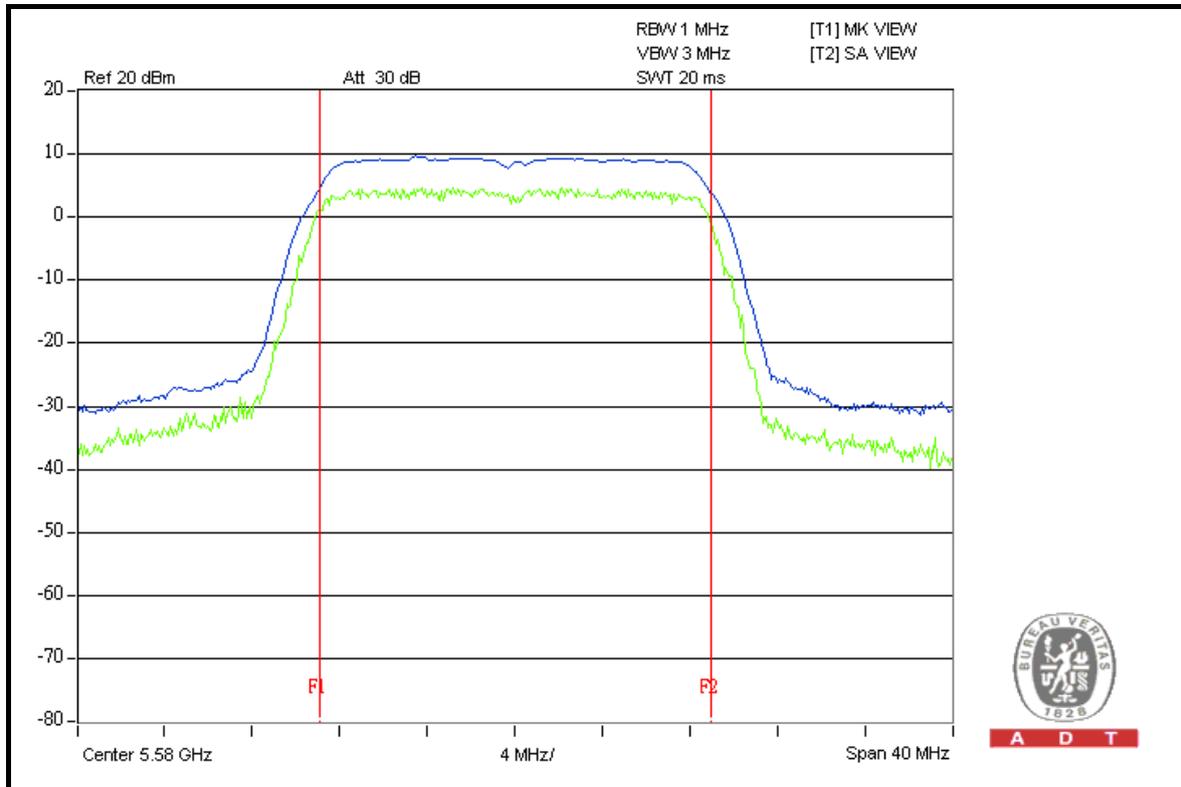
CH 100





A D T

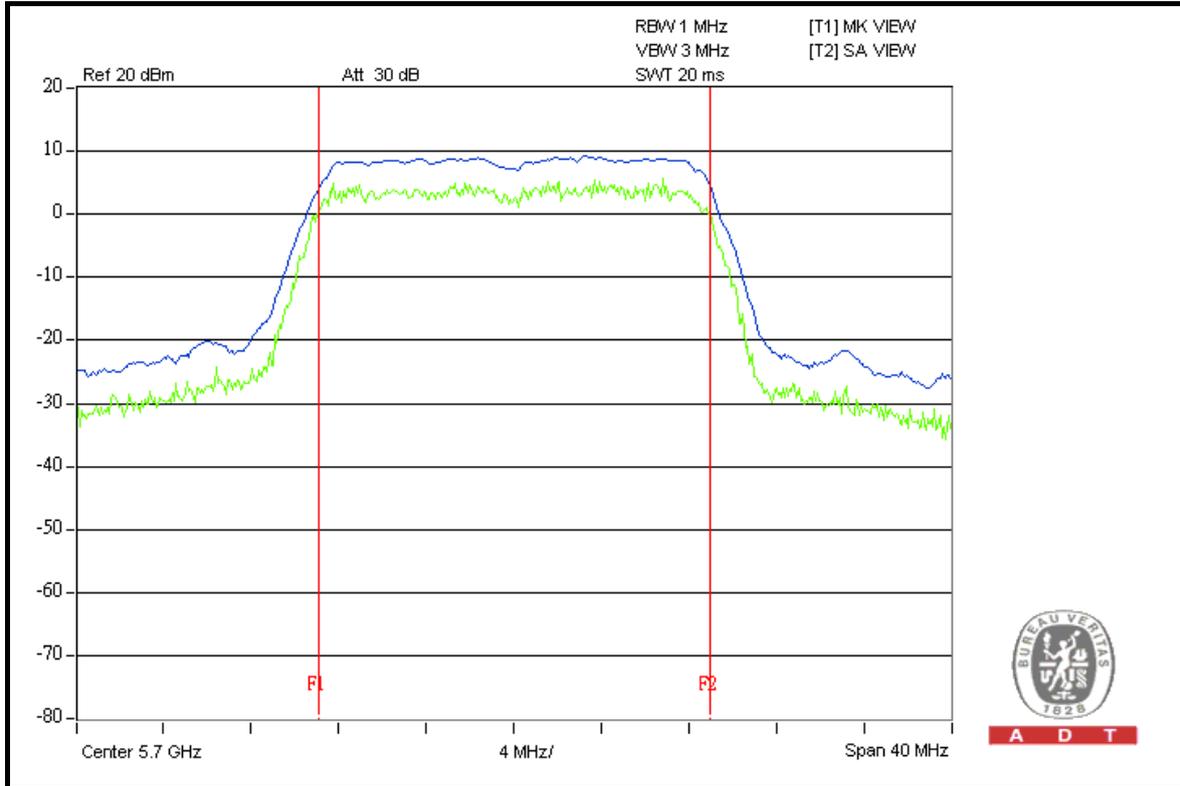
CH 116



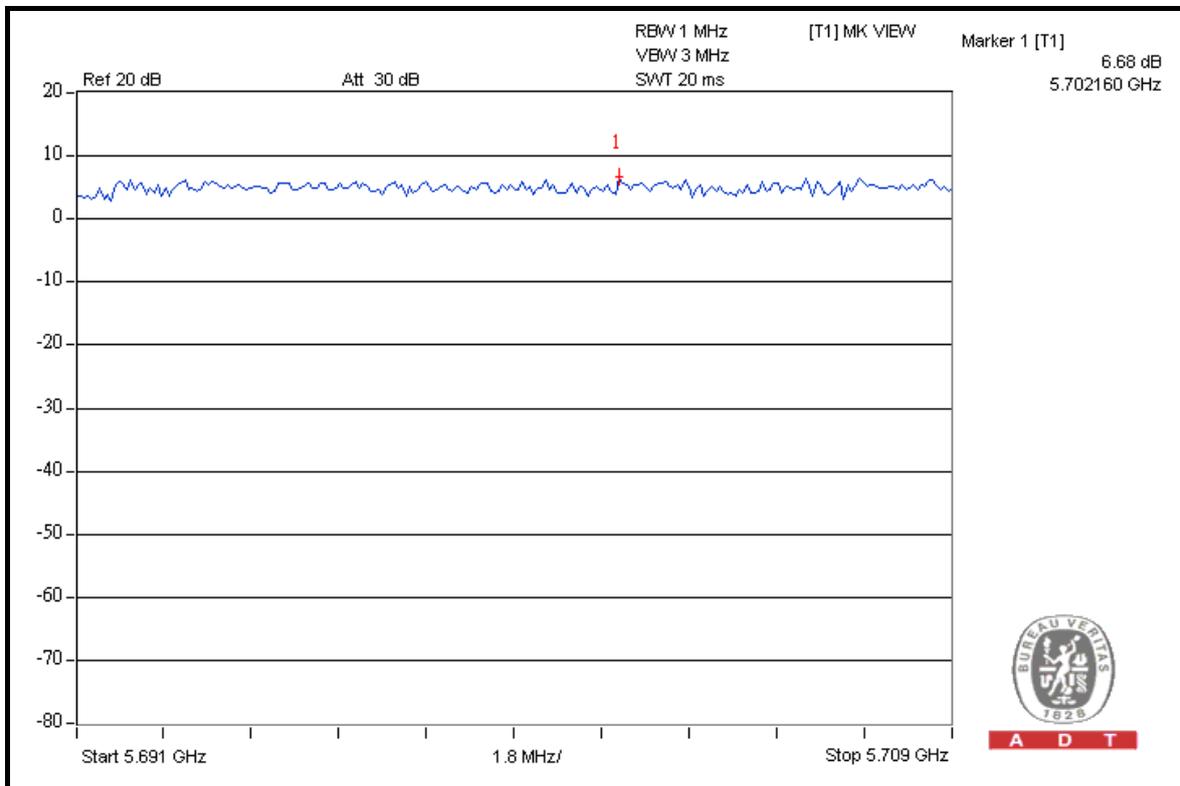


A D T

CH 140



A D T



A D T



A D T

DRAFT 802.11n (40MHz) OFDM MODULATION: 1TX

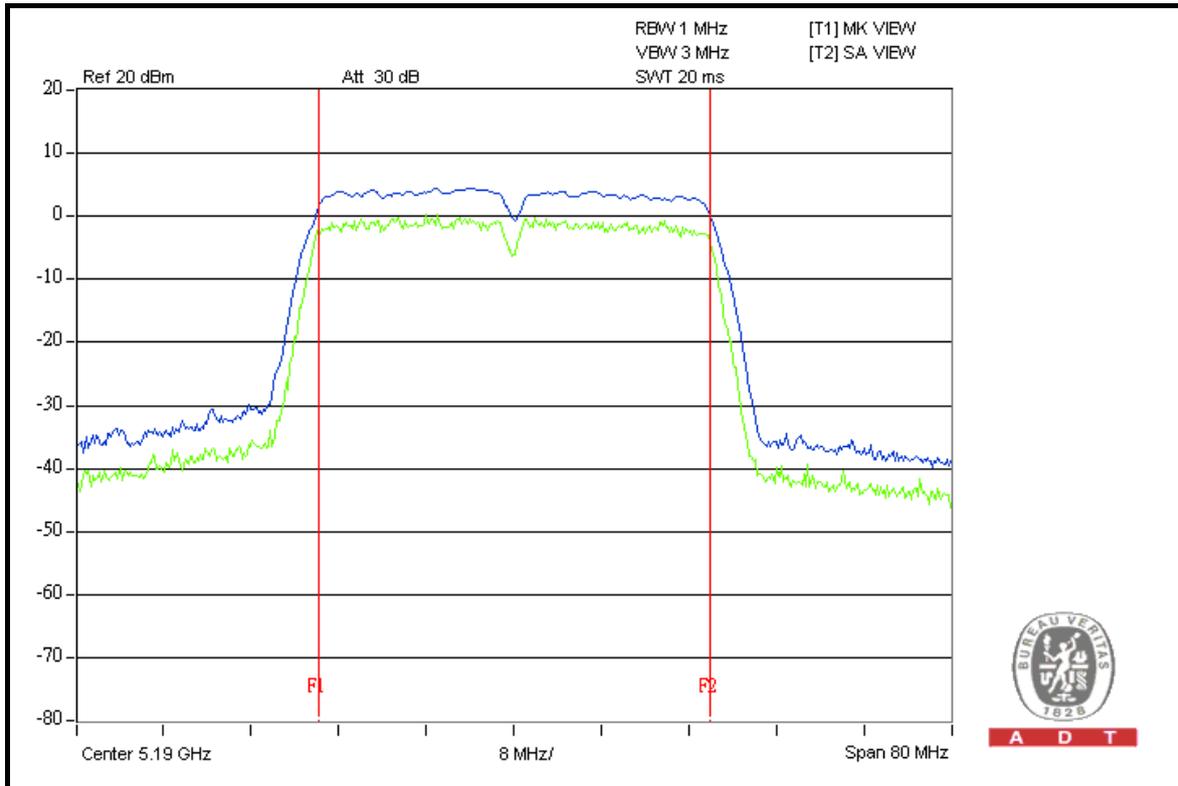
MODULATION TYPE	BPSK	TRANSFER RATE	15.0Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)	PEAK TO AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
38	5190	6.36	13	PASS
46	5230	6.54	13	PASS
54	5270	6.28	13	PASS
62	5310	6.73	13	PASS
102	5510	6.24	13	PASS
110	5550	6.31	13	PASS
134	5670	7.29	13	PASS

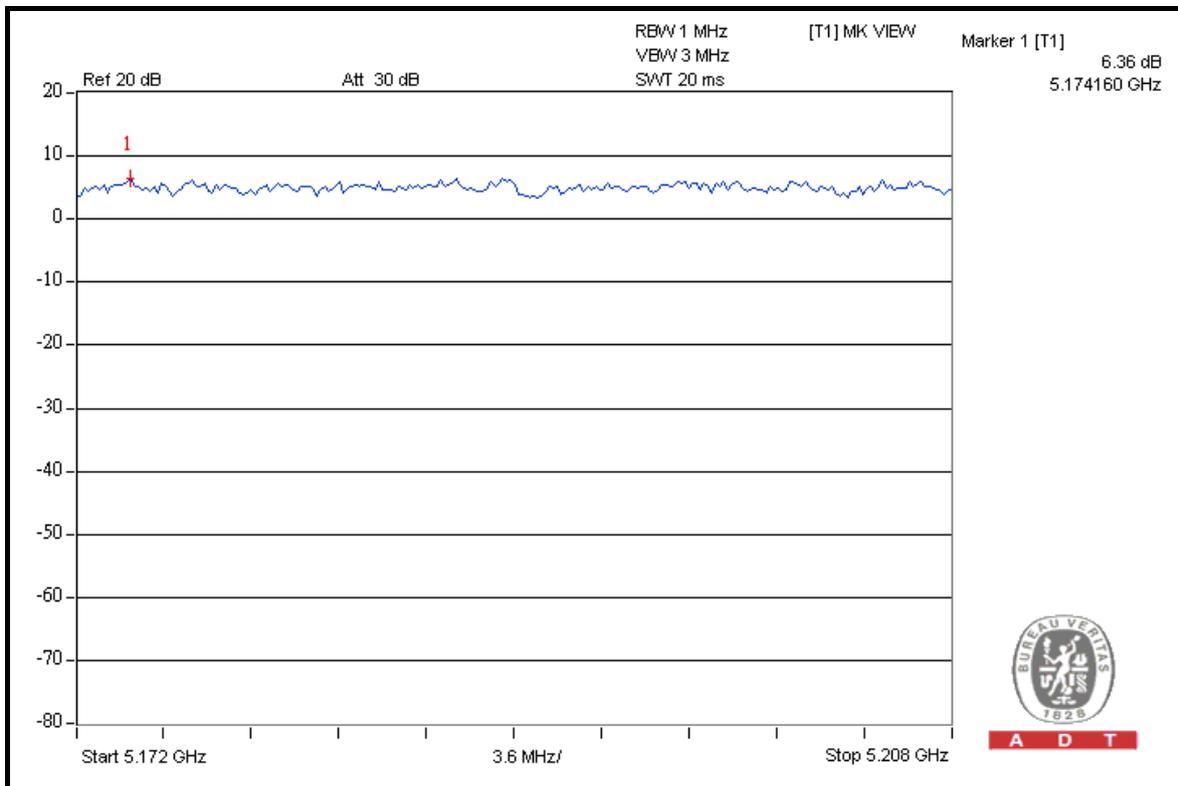


A D T

CH 38



A D T

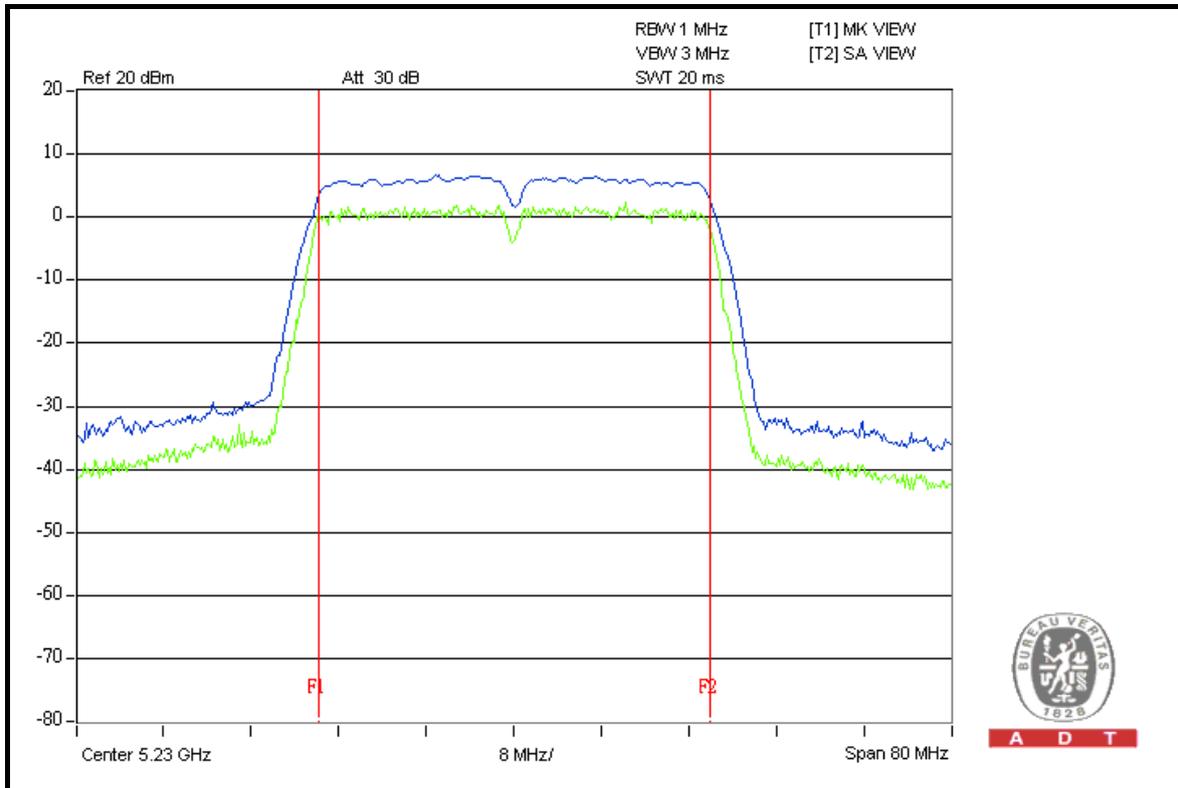


A D T

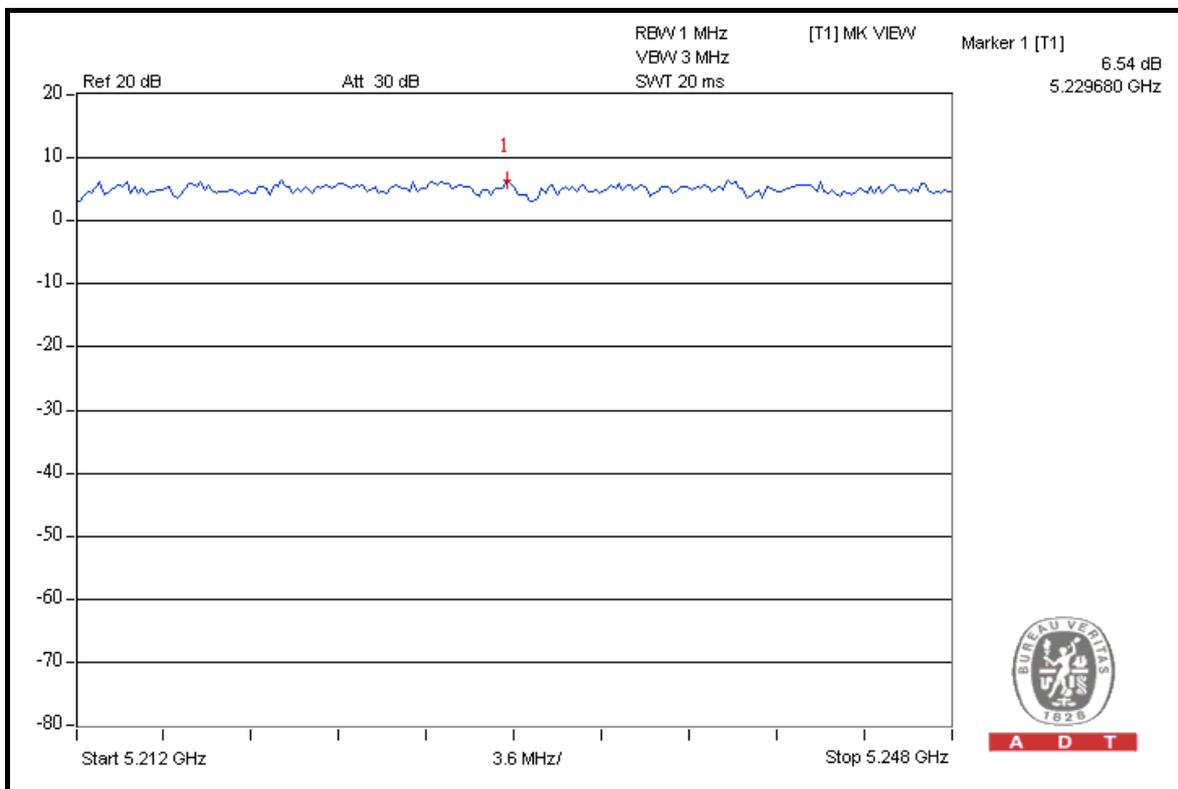


A D T

CH 46



A D T

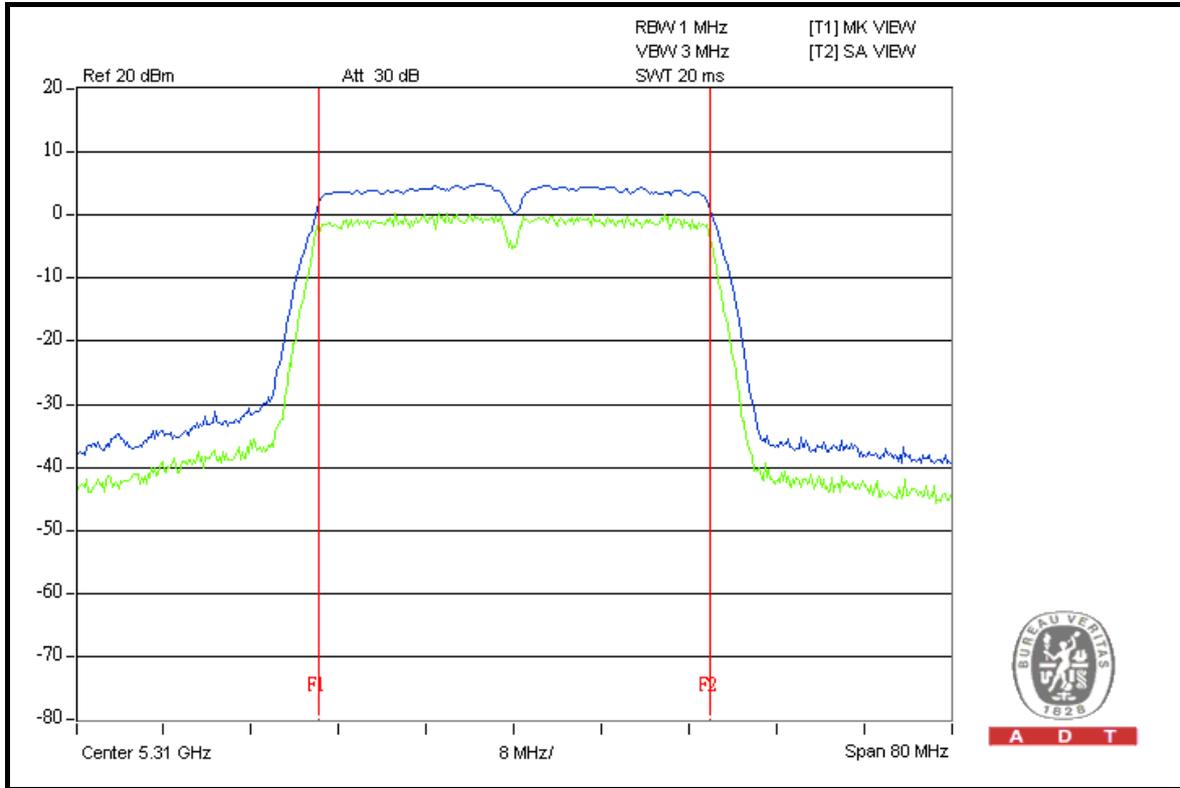


A D T

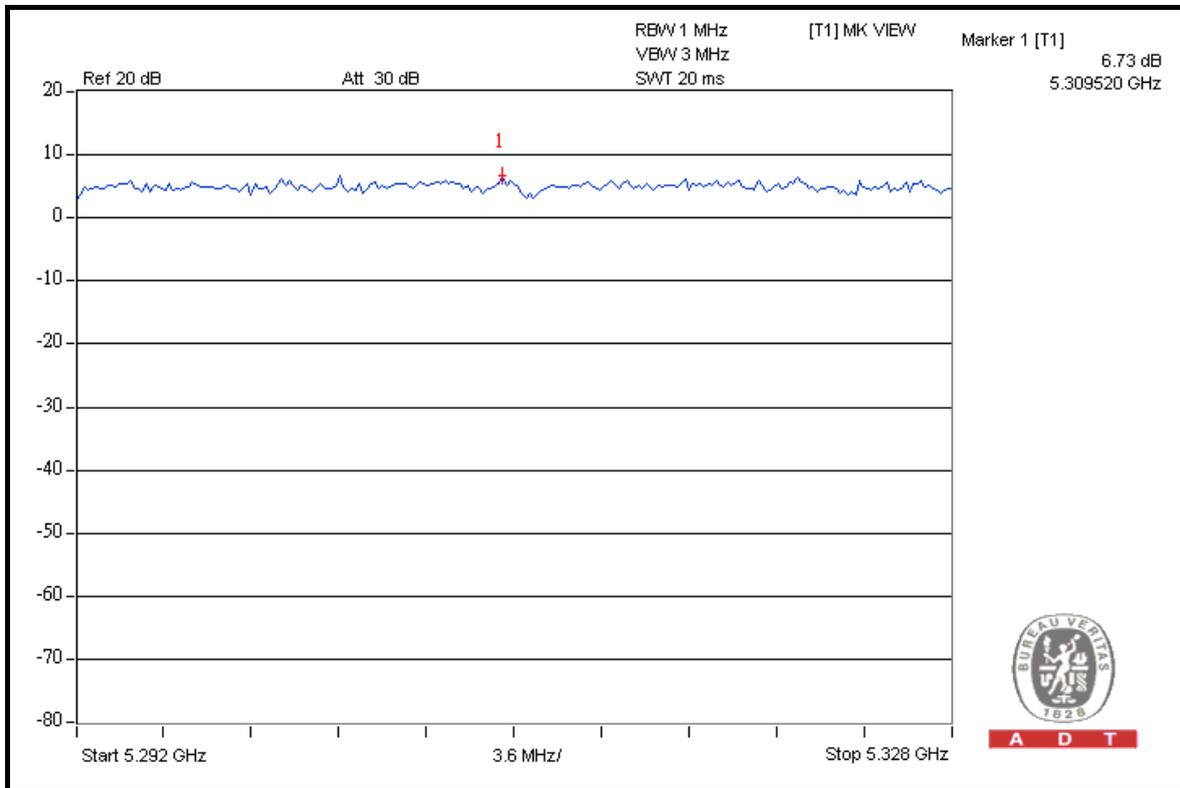


A D T

CH 62



A D T

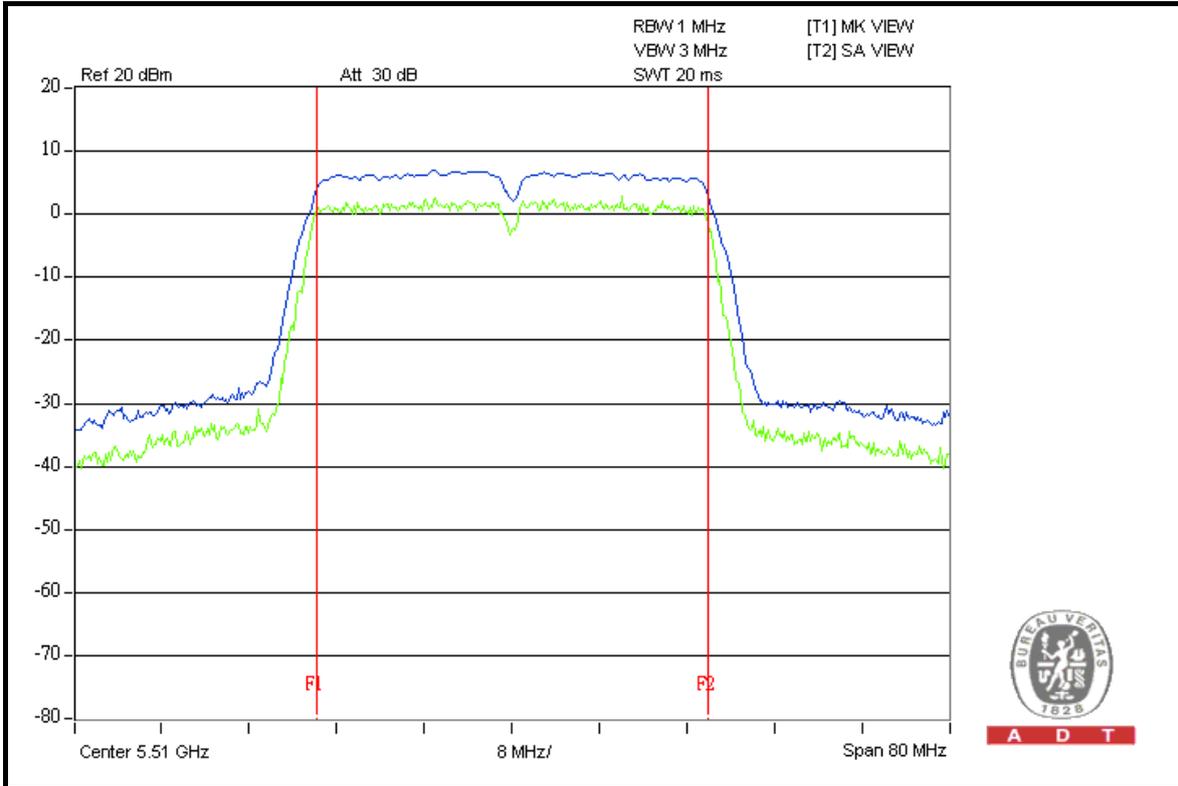


A D T

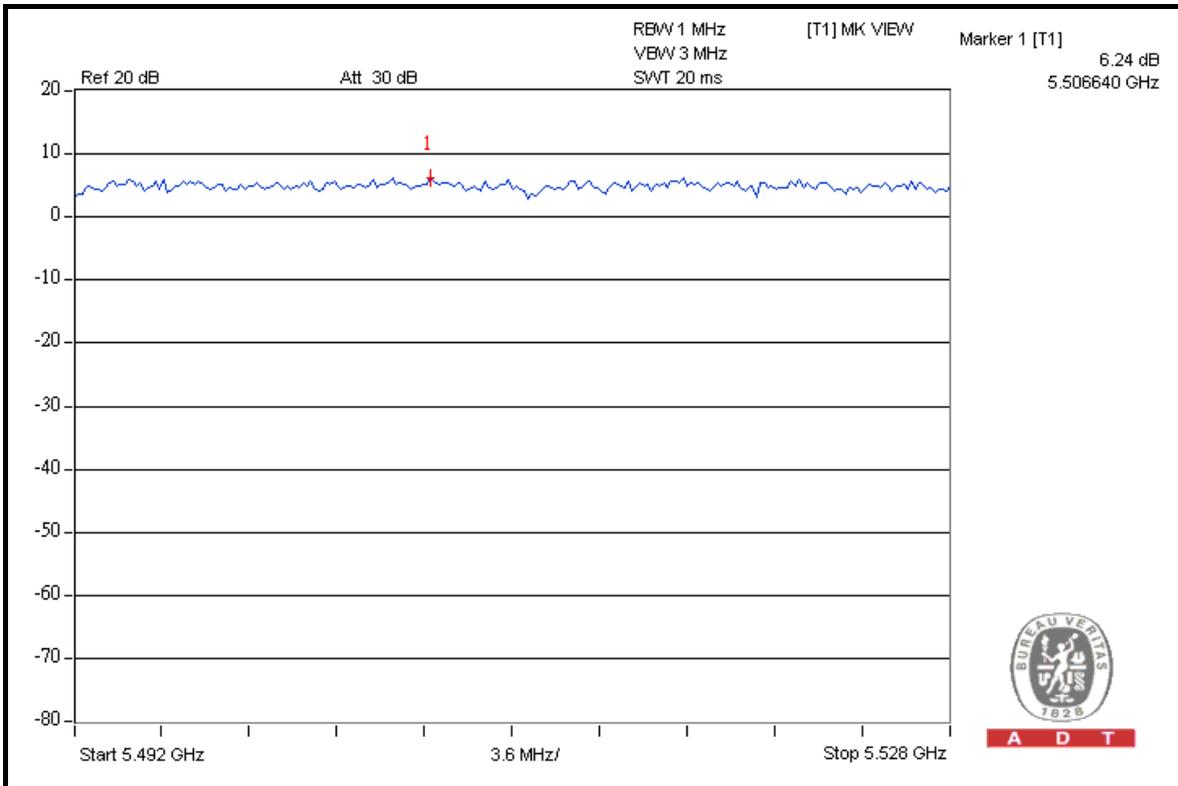


A D T

CH 102



A D T

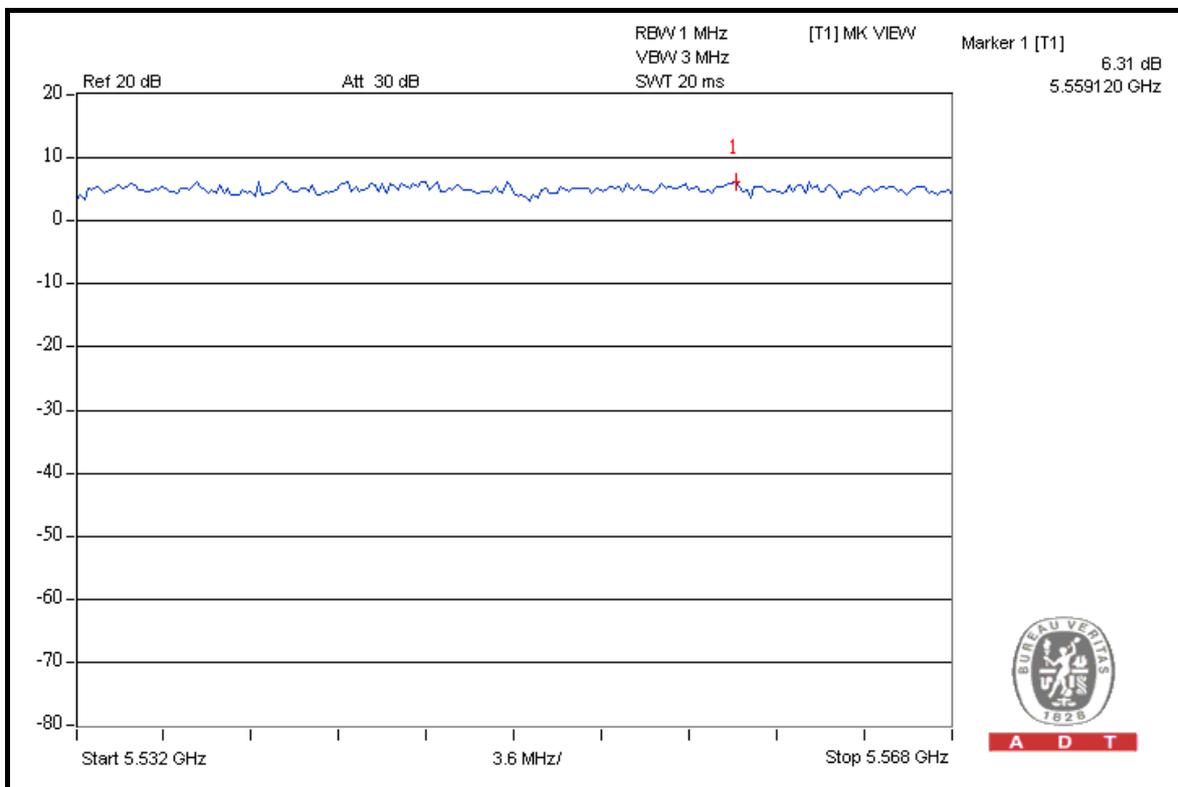
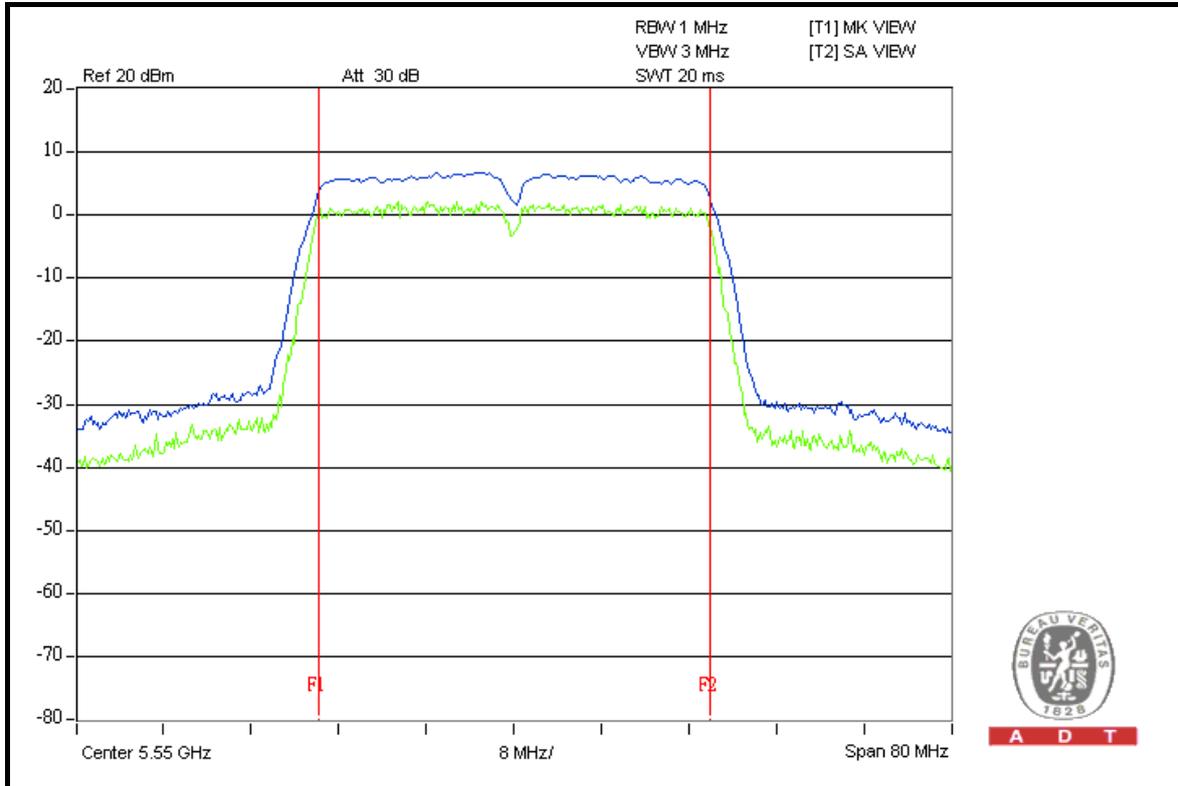


A D T



A D T

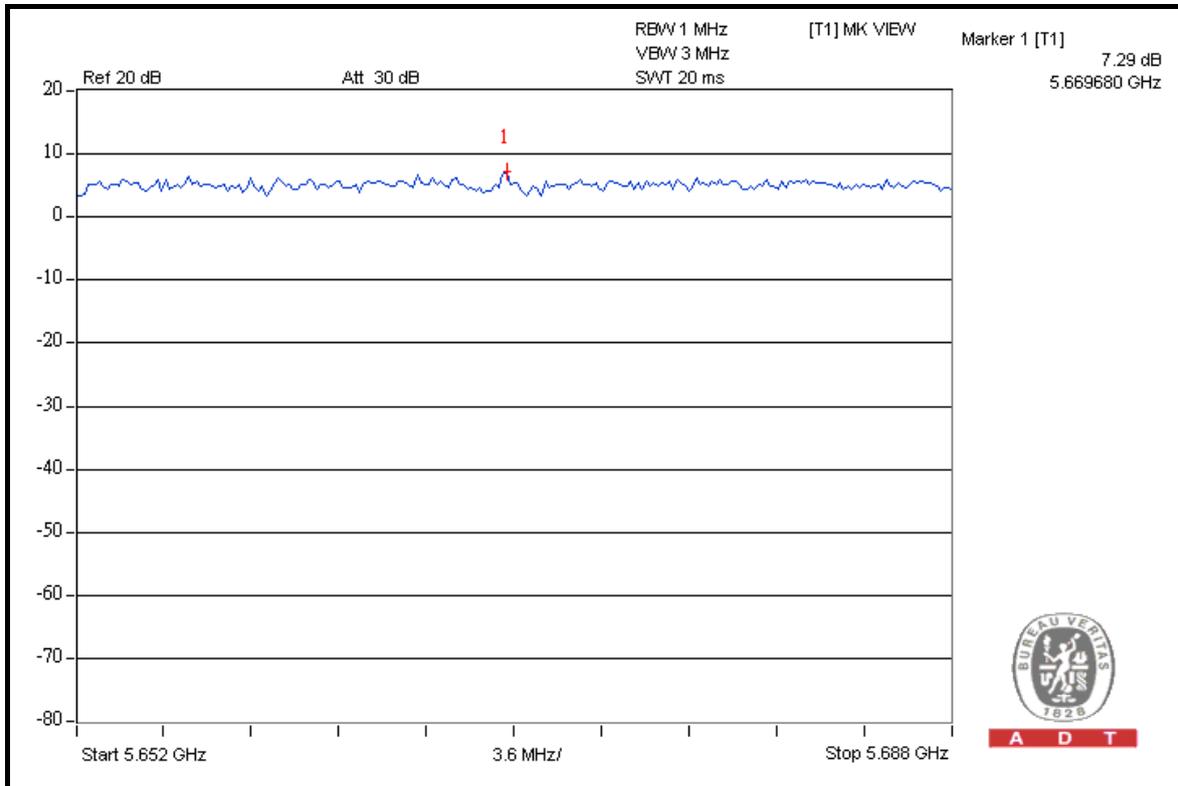
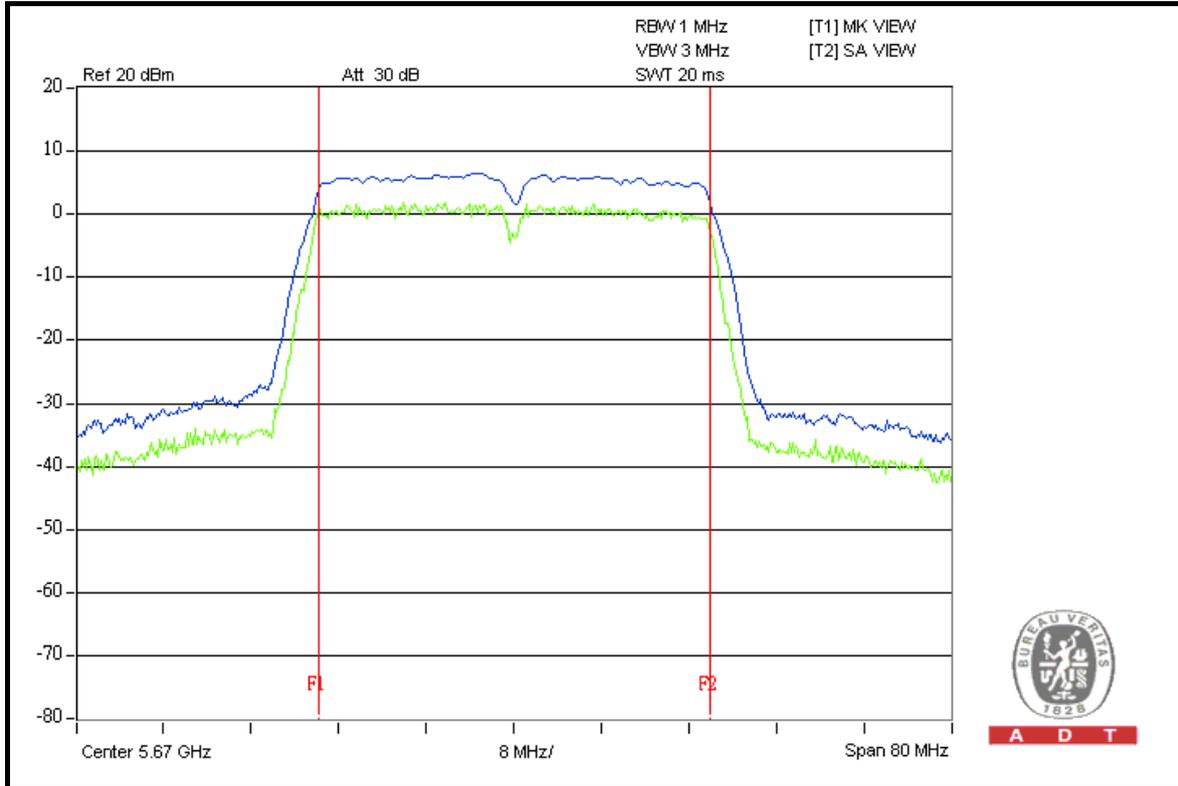
CH 110





A D T

CH 134





A D T

DRAFT 802.11n (40MHz) OFDM MODULATION: 2TX

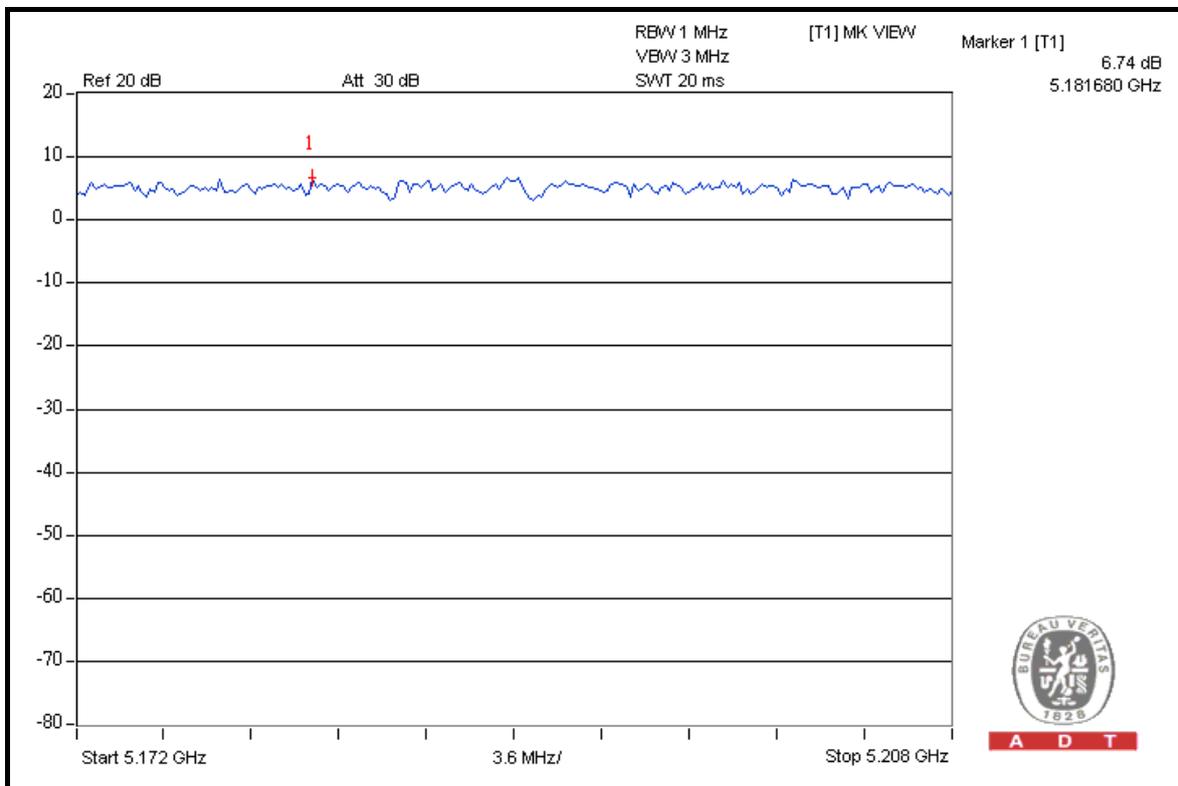
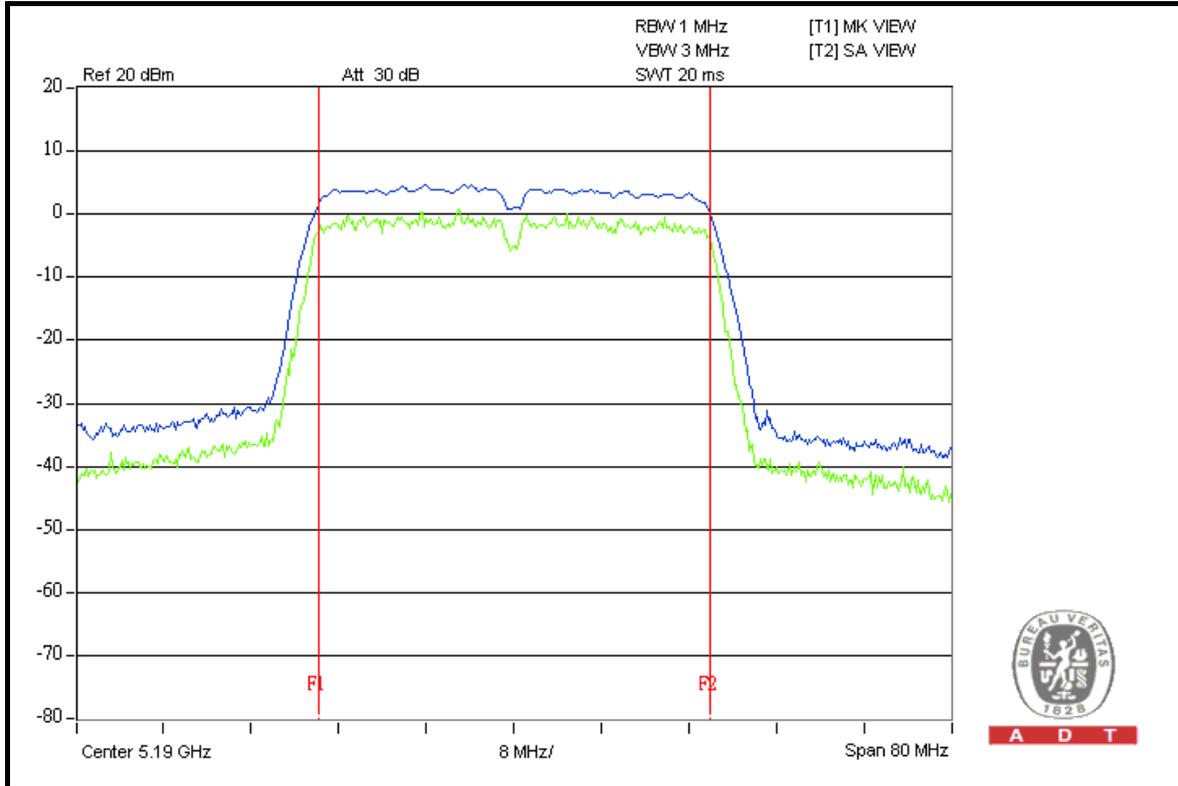
MODULATION TYPE	BPSK	TRANSFER RATE	30.0Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)		PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
		CHAIN 0	CHAIN 1		
38	5190	6.74	7.51	13	PASS
46	5230	7.19	7.15	13	PASS
54	5270	7.29	7.47	13	PASS
62	5310	7.19	7.50	13	PASS
102	5510	7.38	7.06	13	PASS
110	5550	6.50	7.57	13	PASS
134	5670	6.75	7.50	13	PASS



A D T

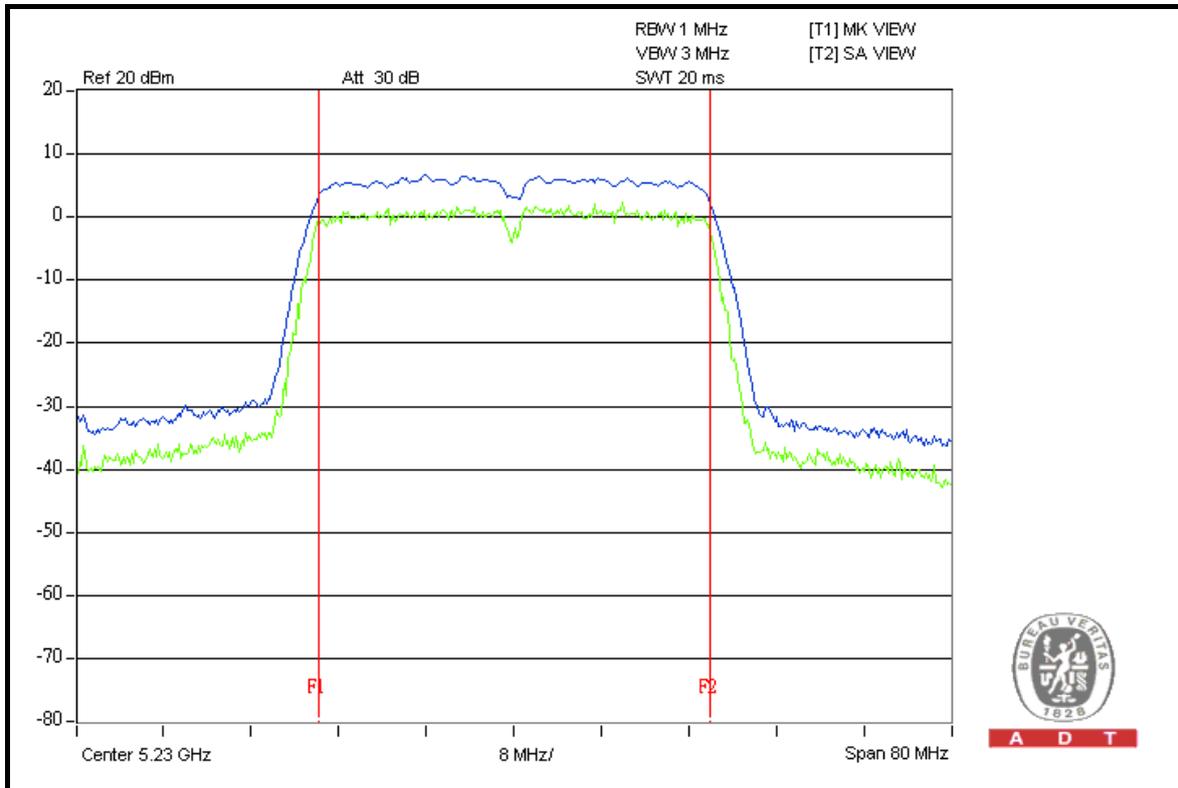
CHAIN 0: CH 38



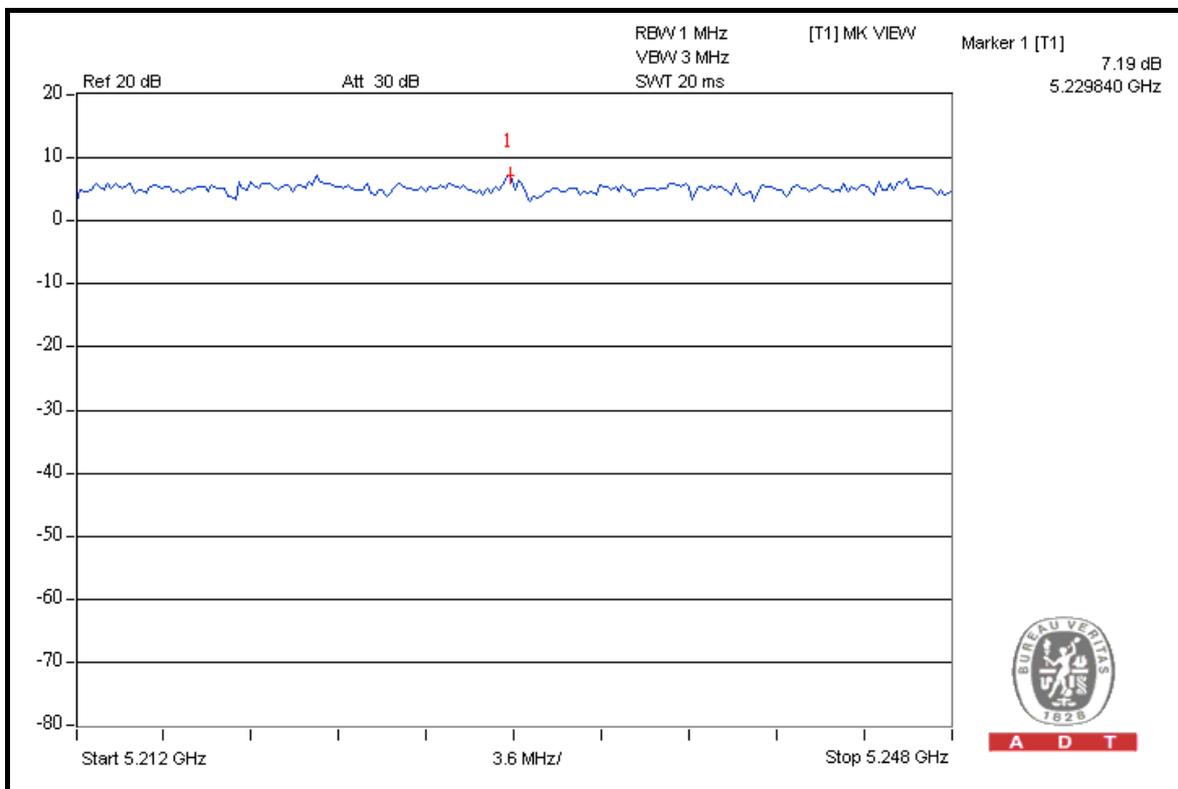


A D T

CH 46



A D T

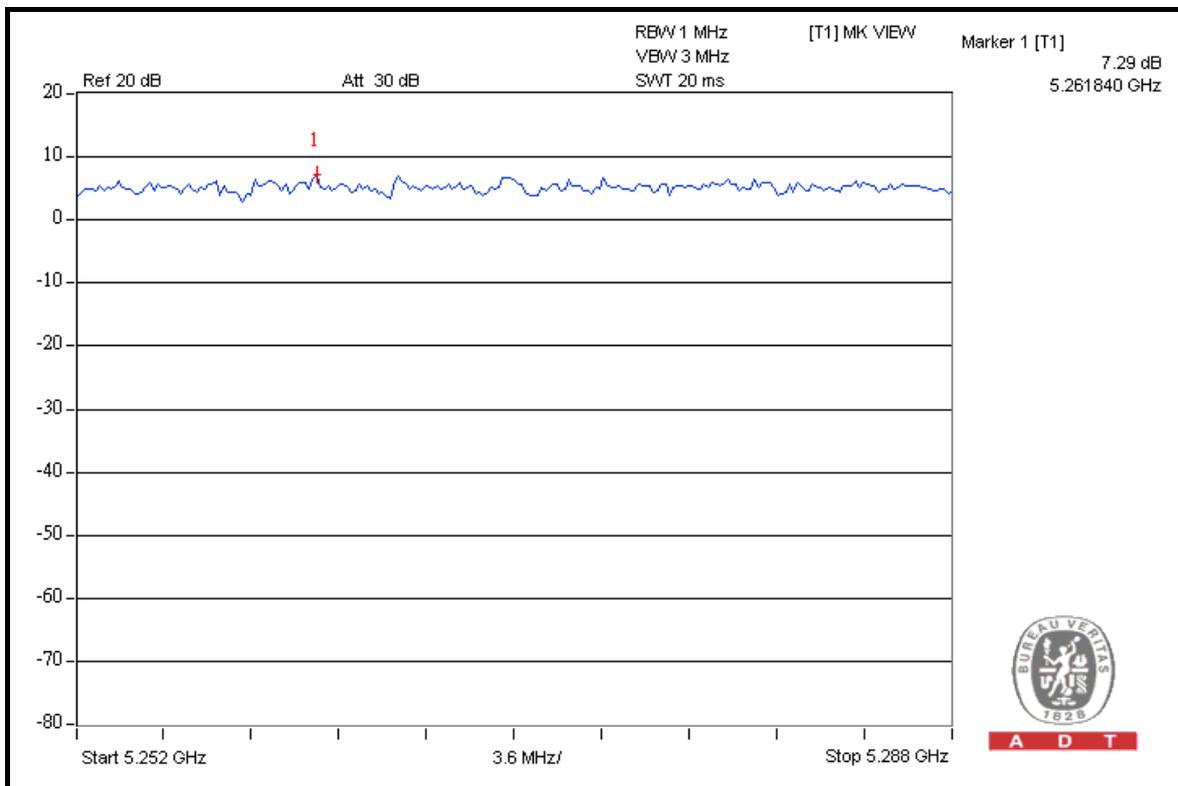
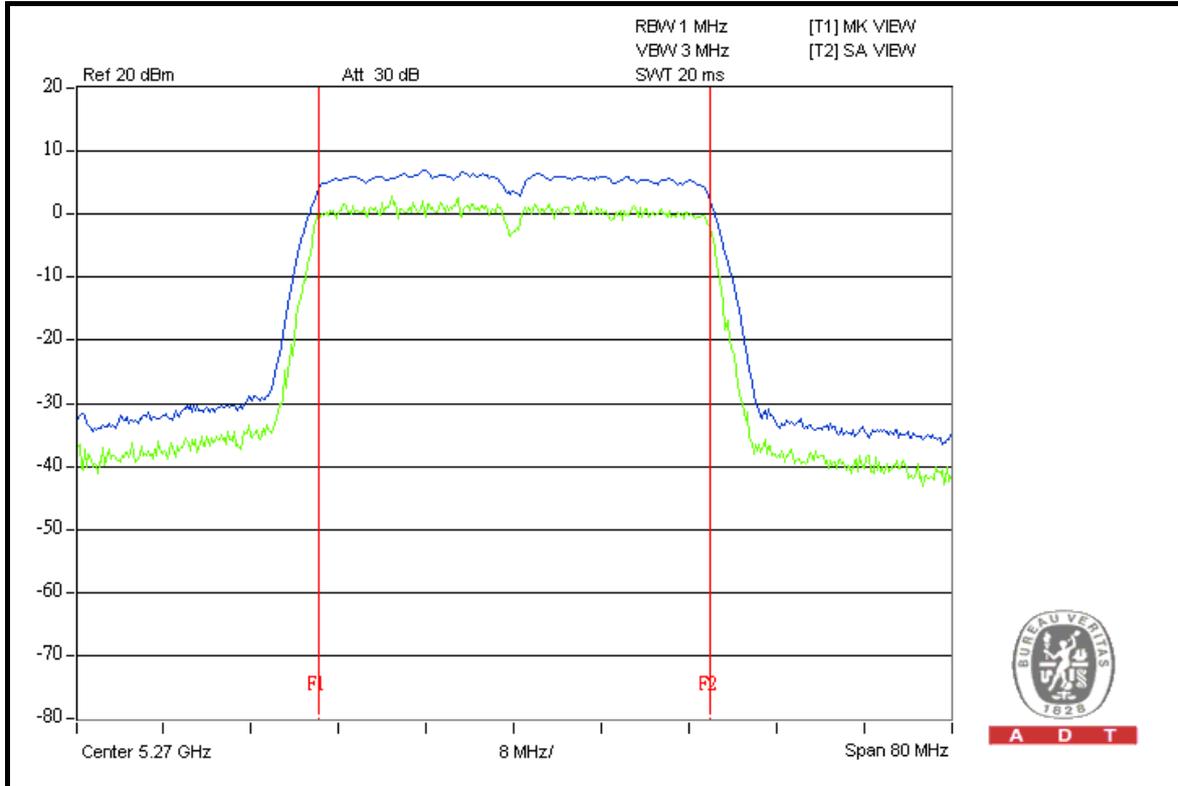


A D T



A D T

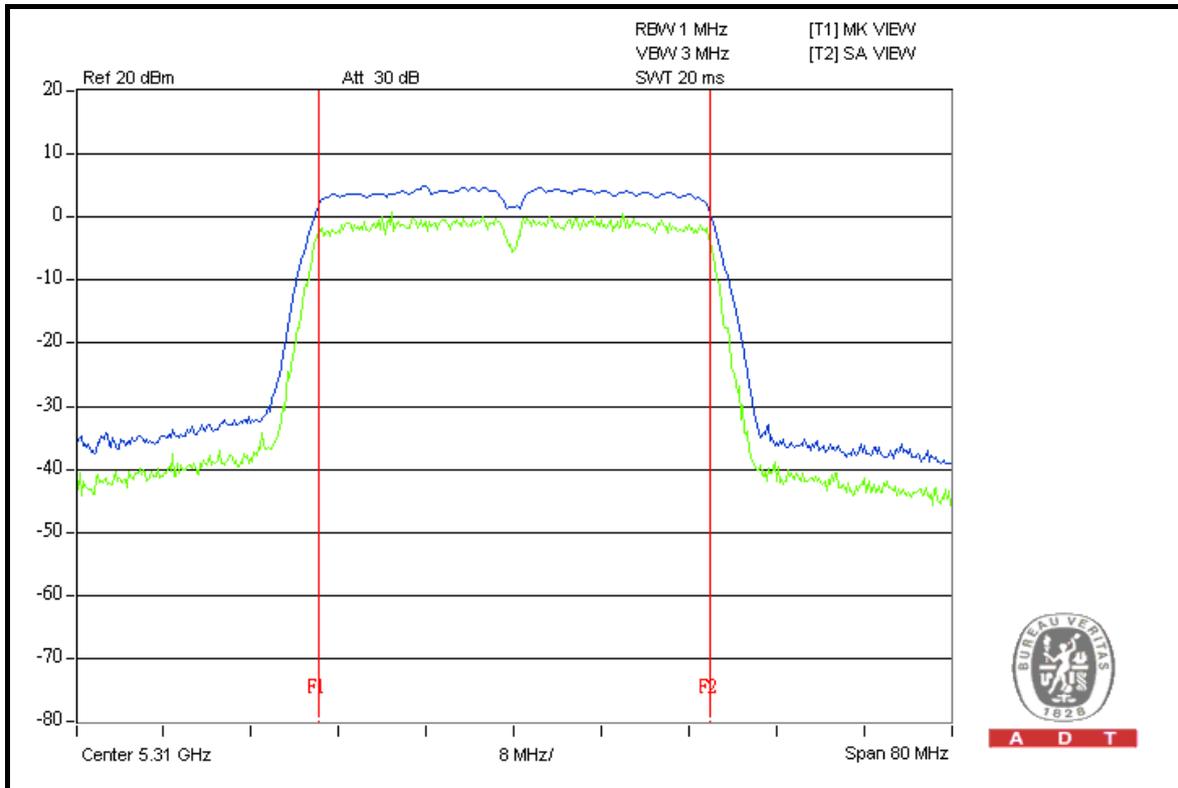
CH 54



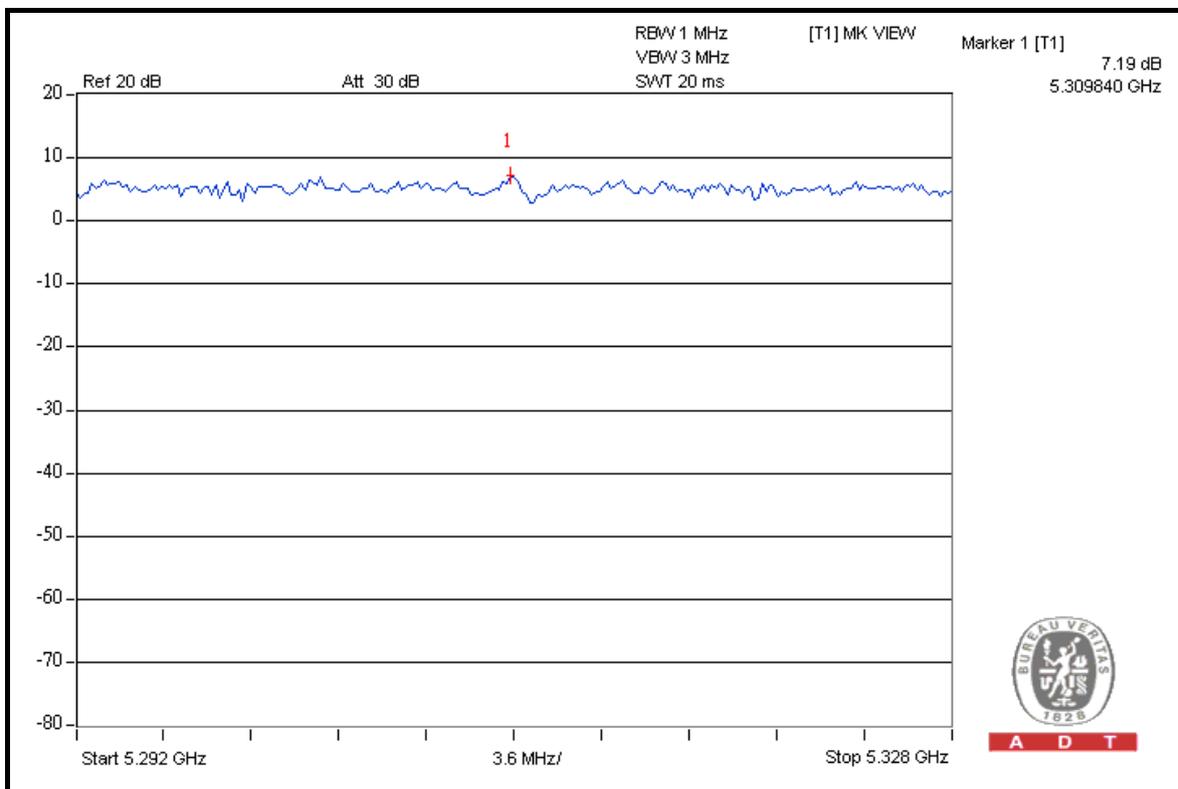


A D T

CH 62



A D T

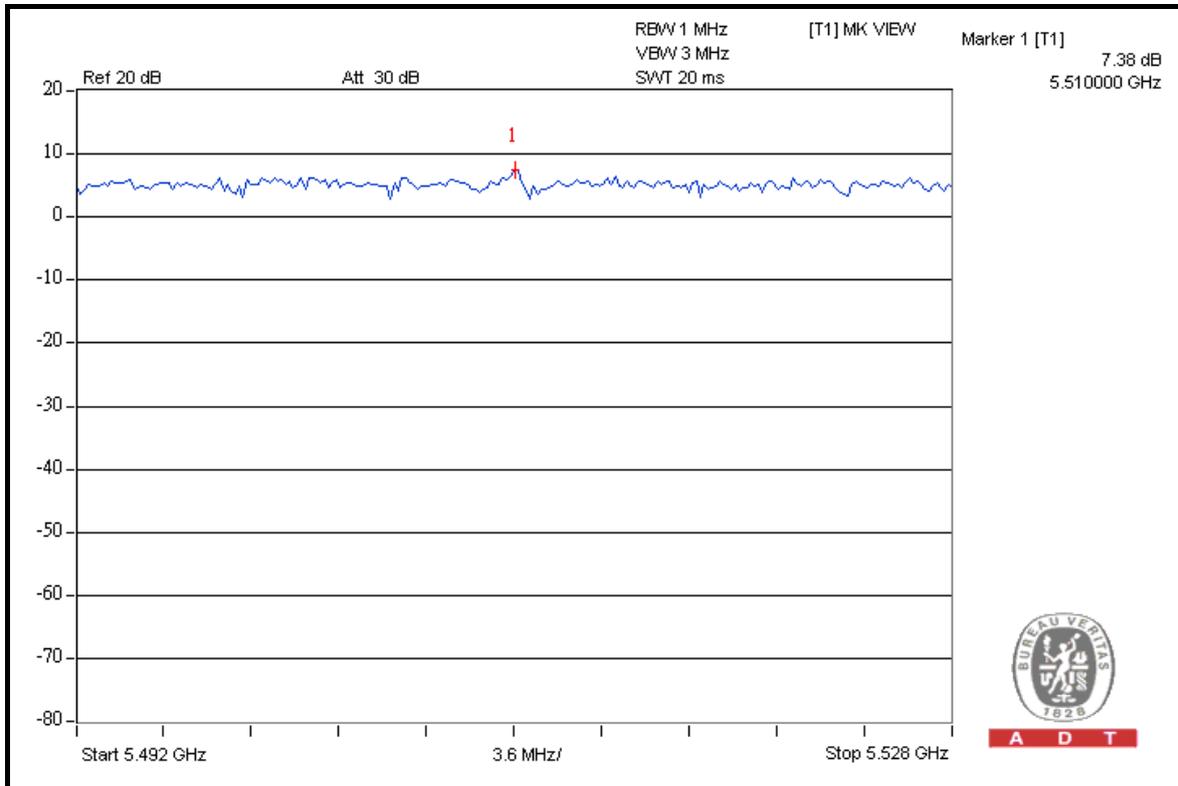
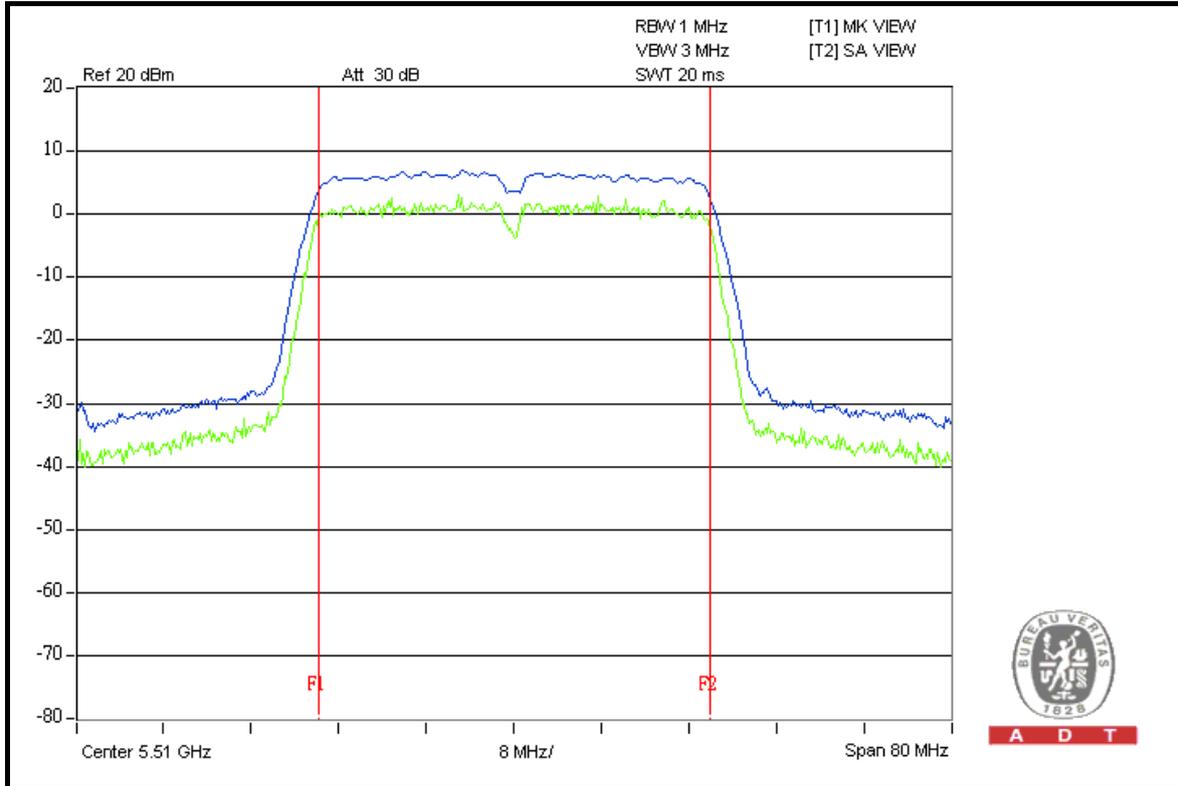


A D T



A D T

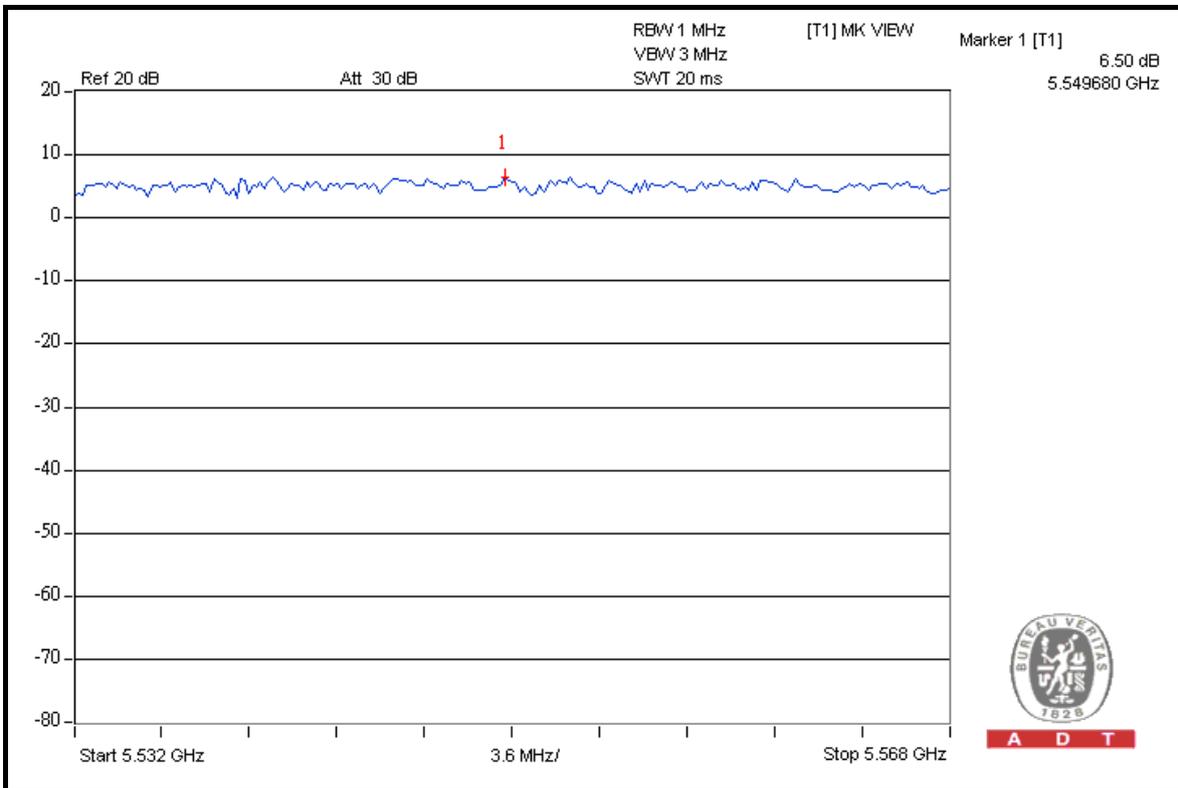
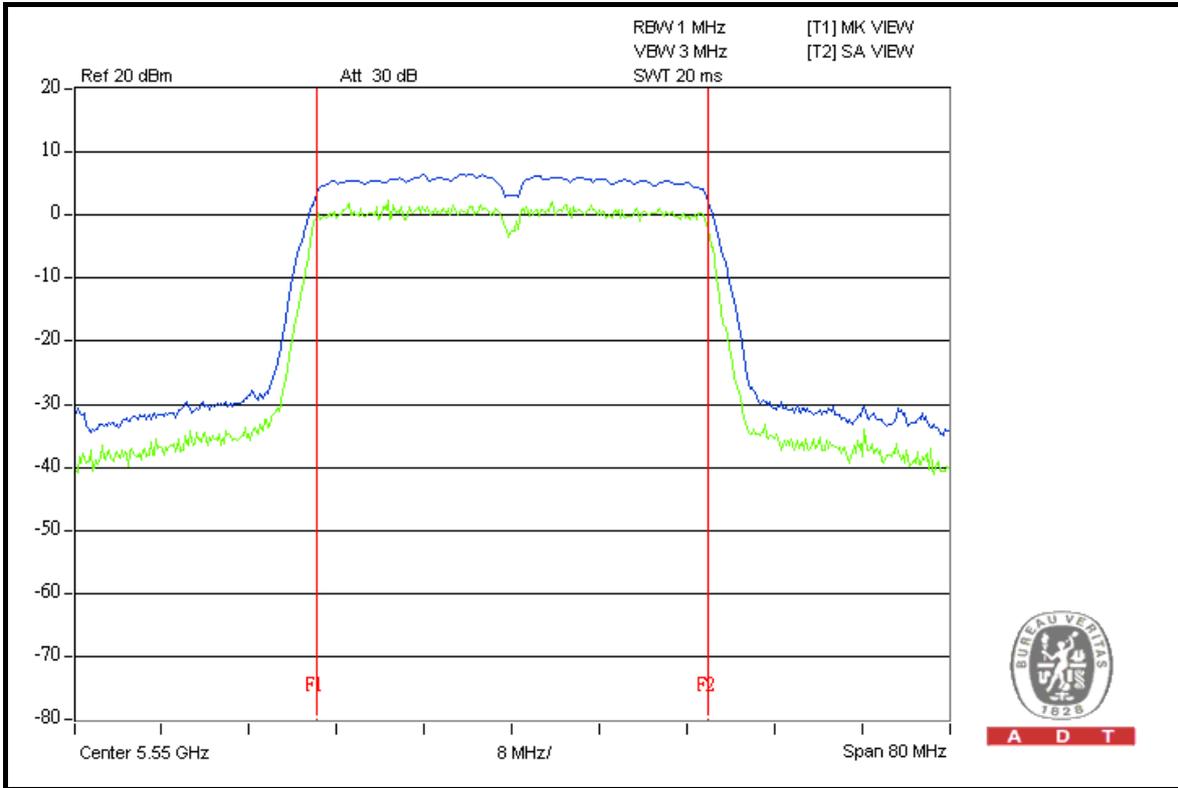
CH 102





A D T

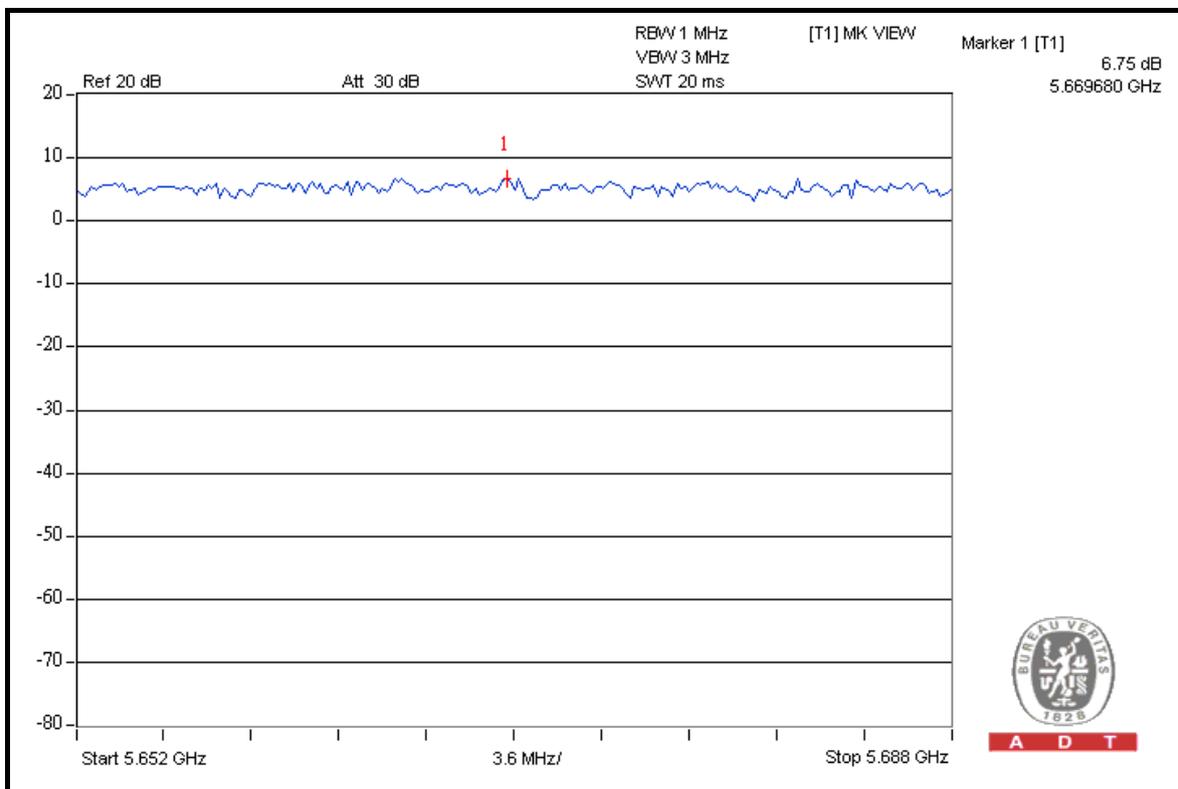
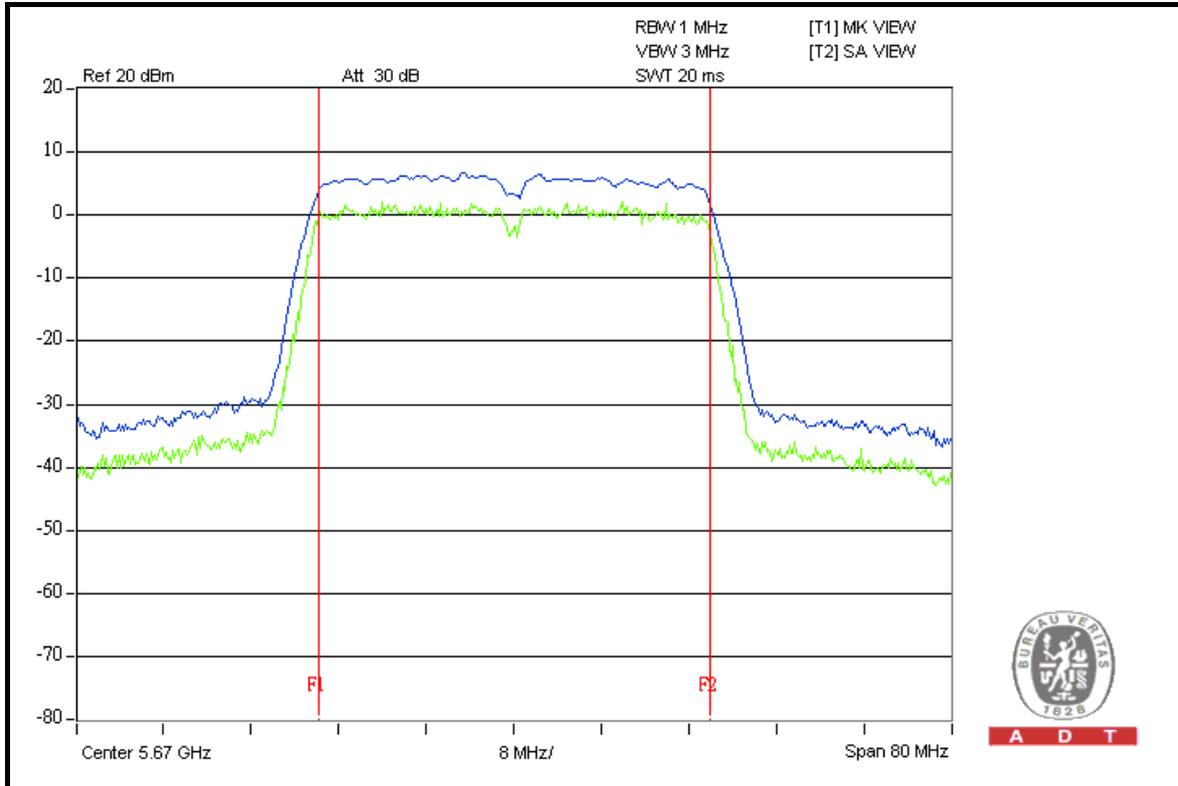
CH 110





A D T

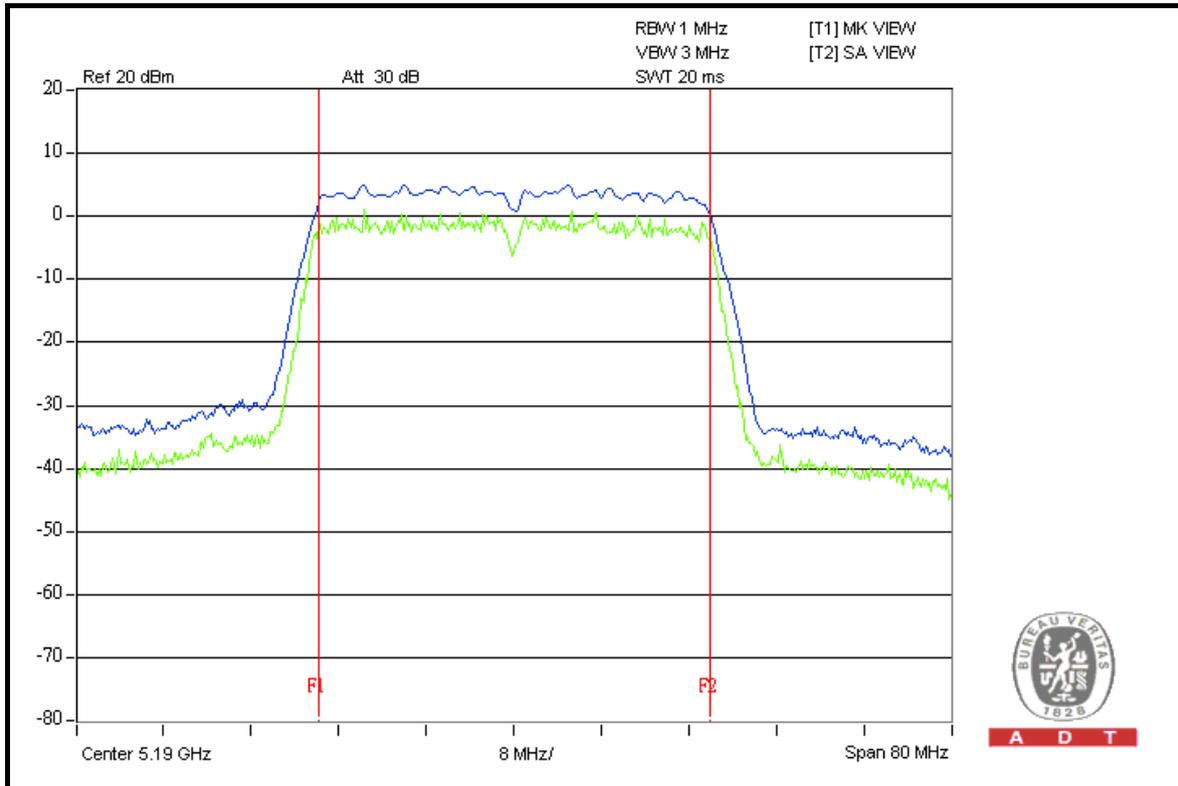
CH 134



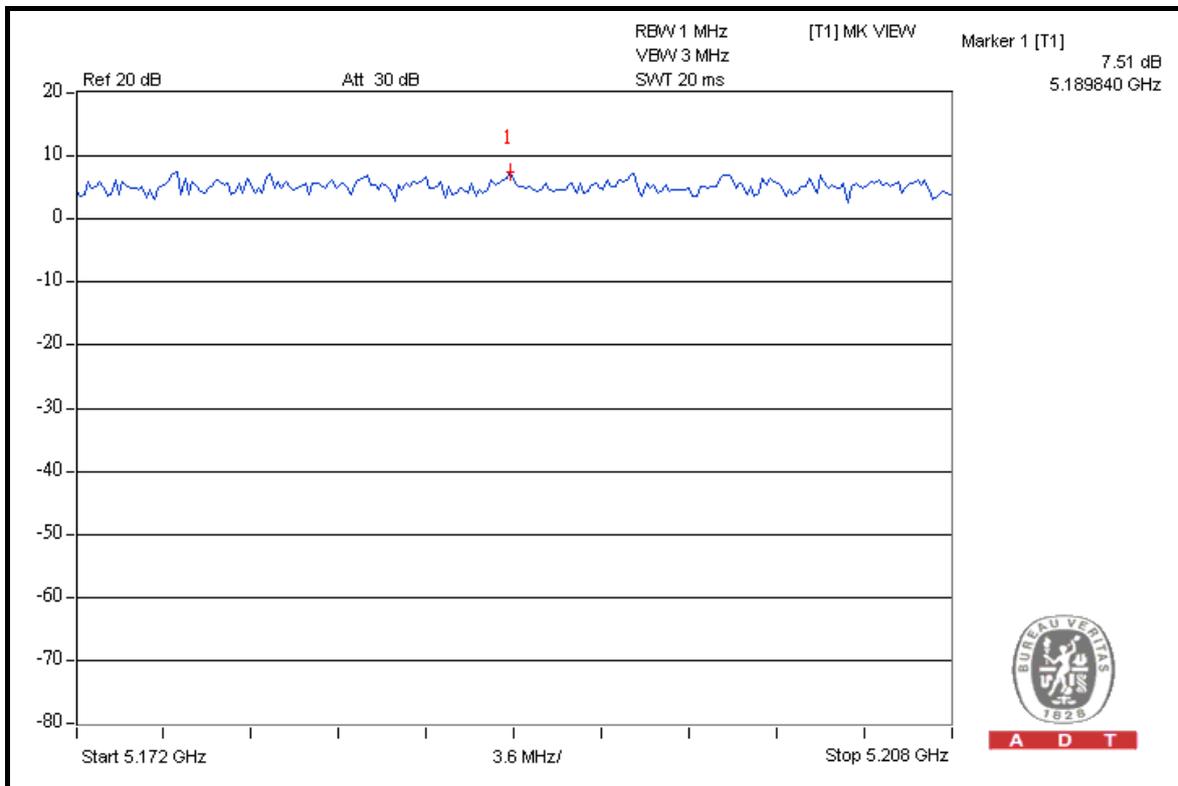


A D T

CHAIN 1: CH 38



A D T

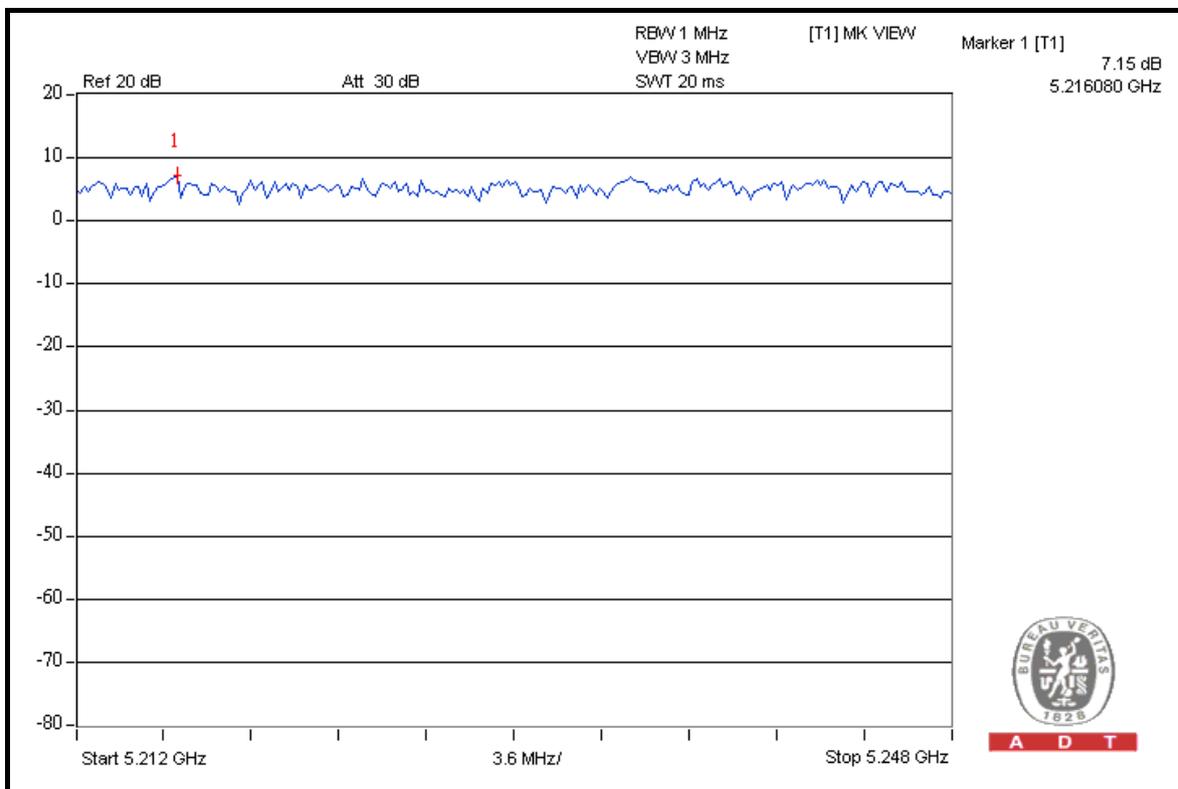
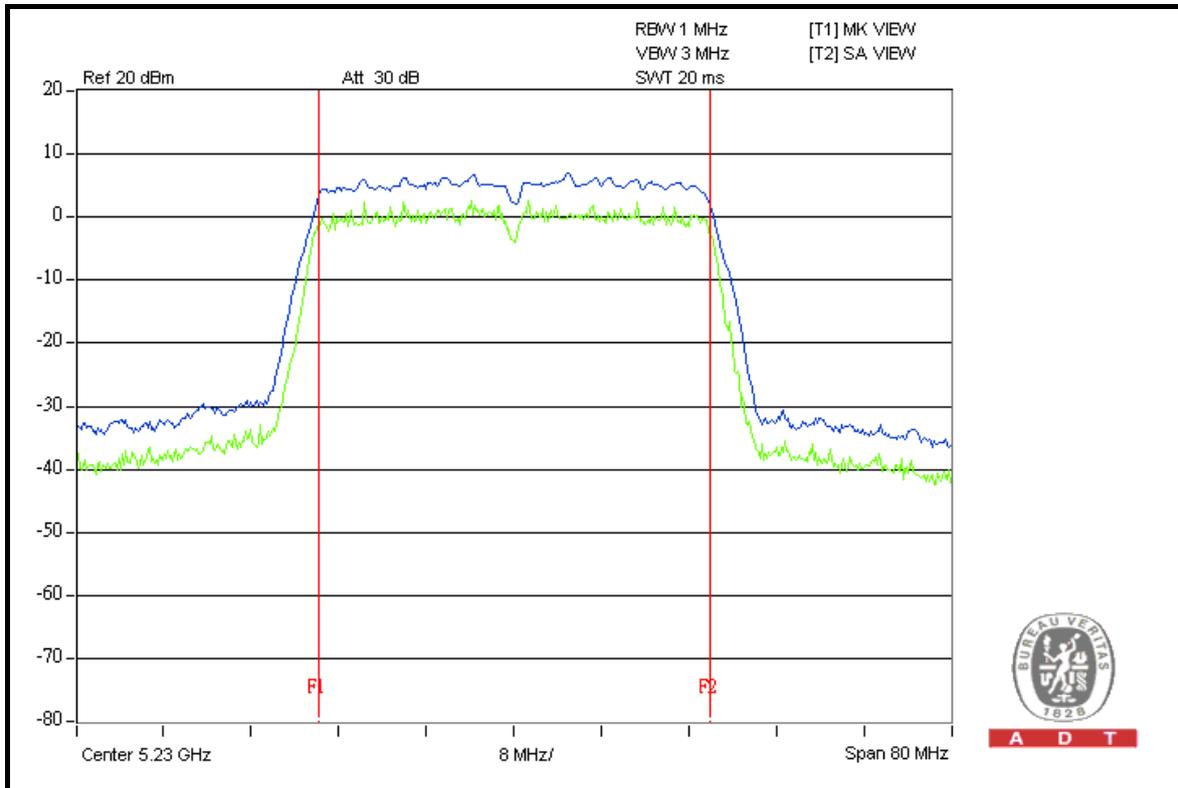


A D T



A D T

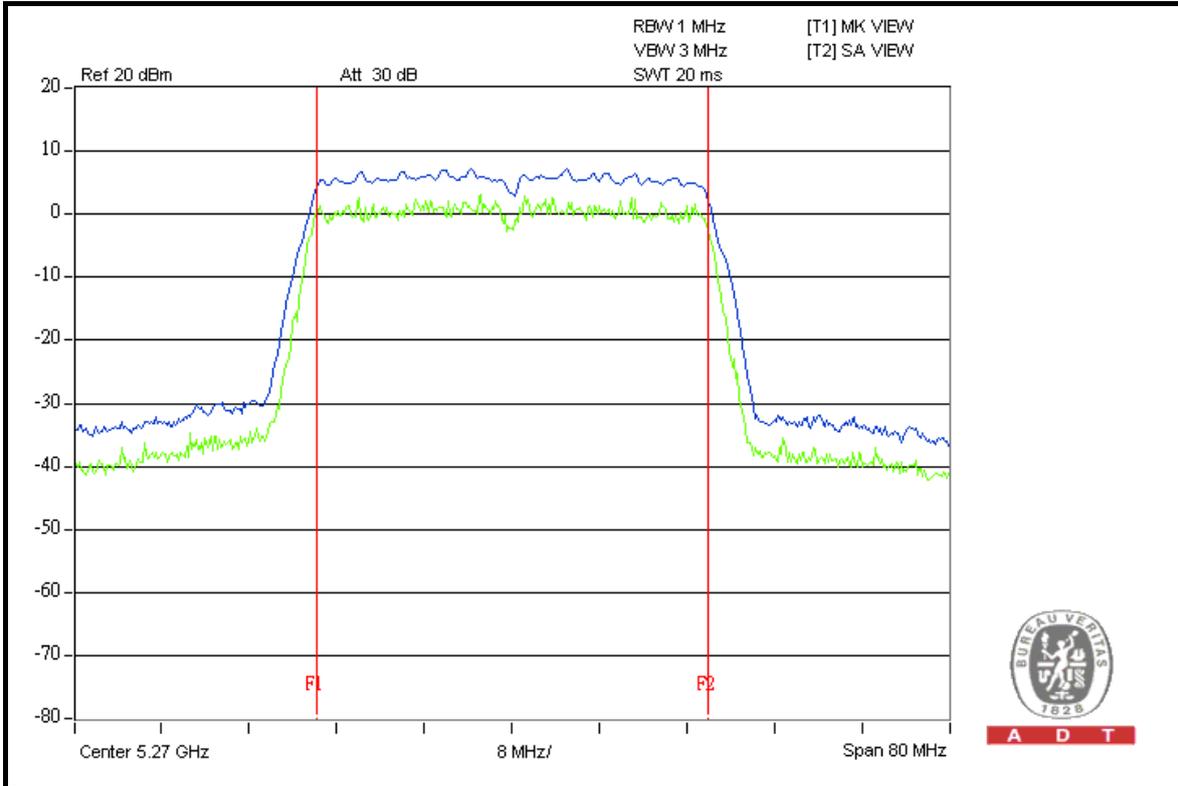
CH 46



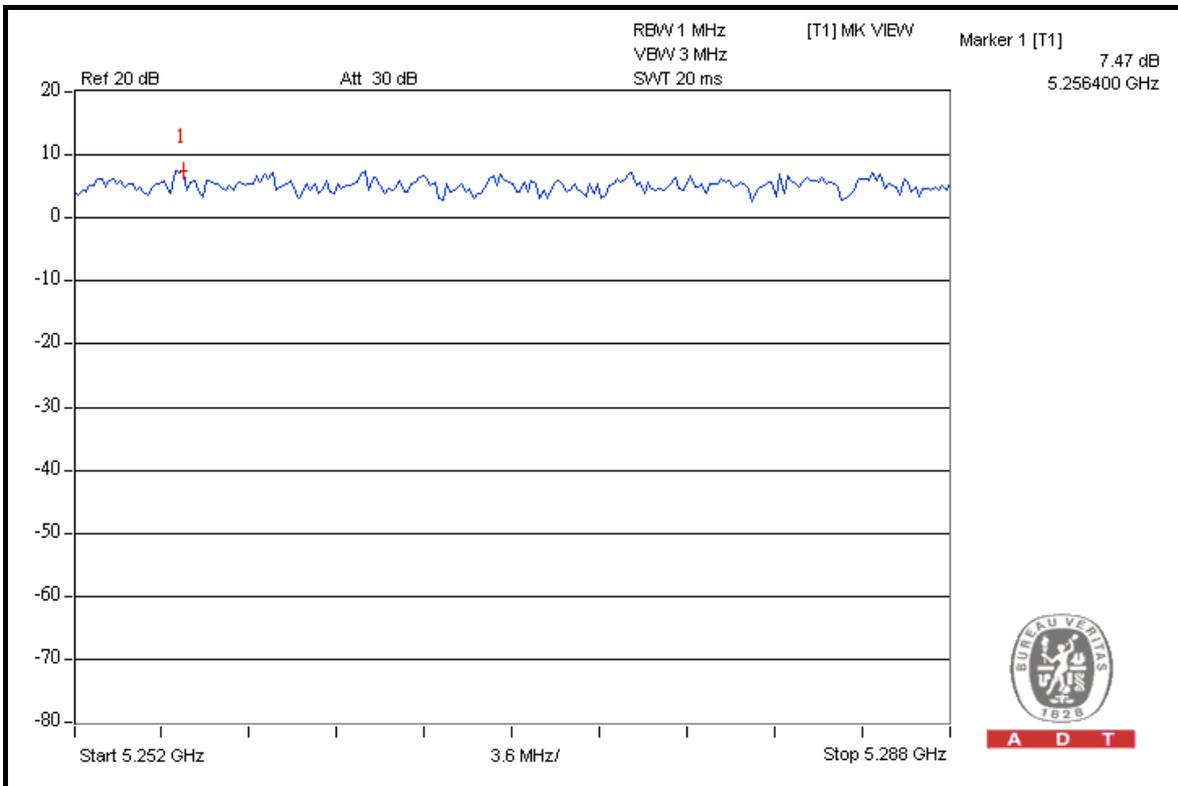


A D T

CH 54



A D T

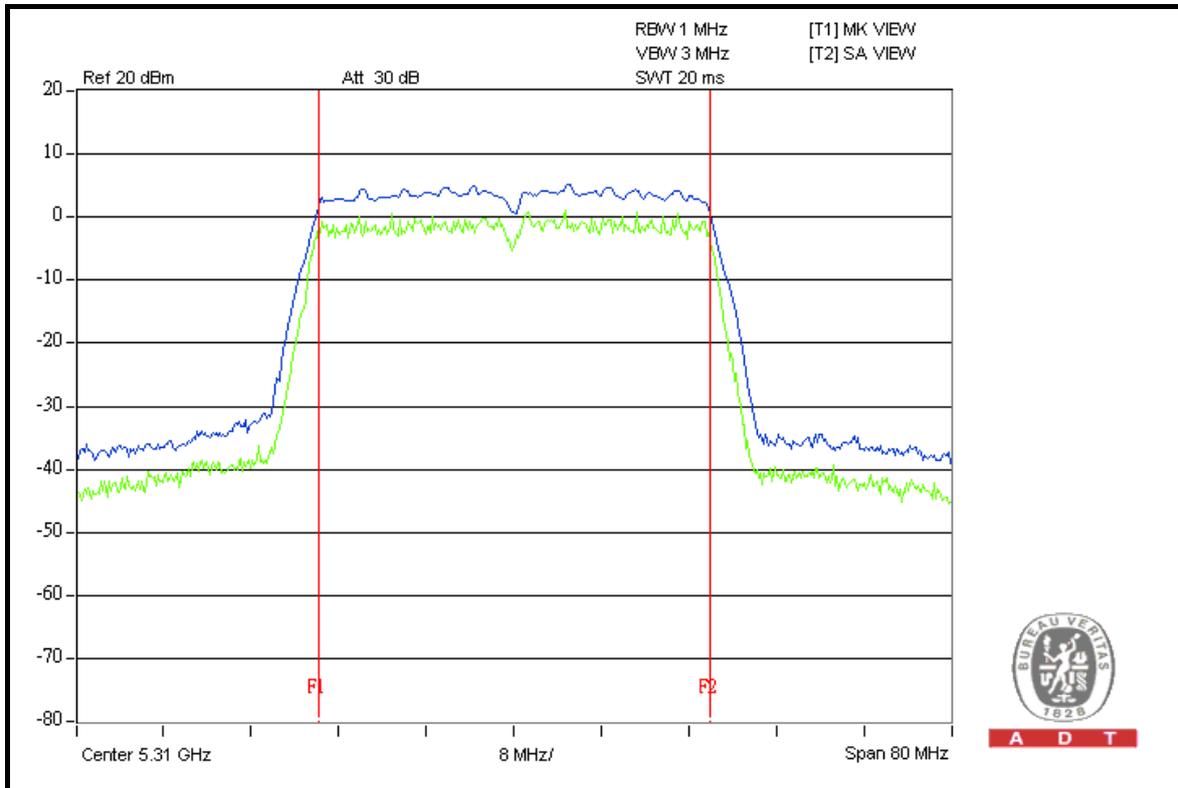


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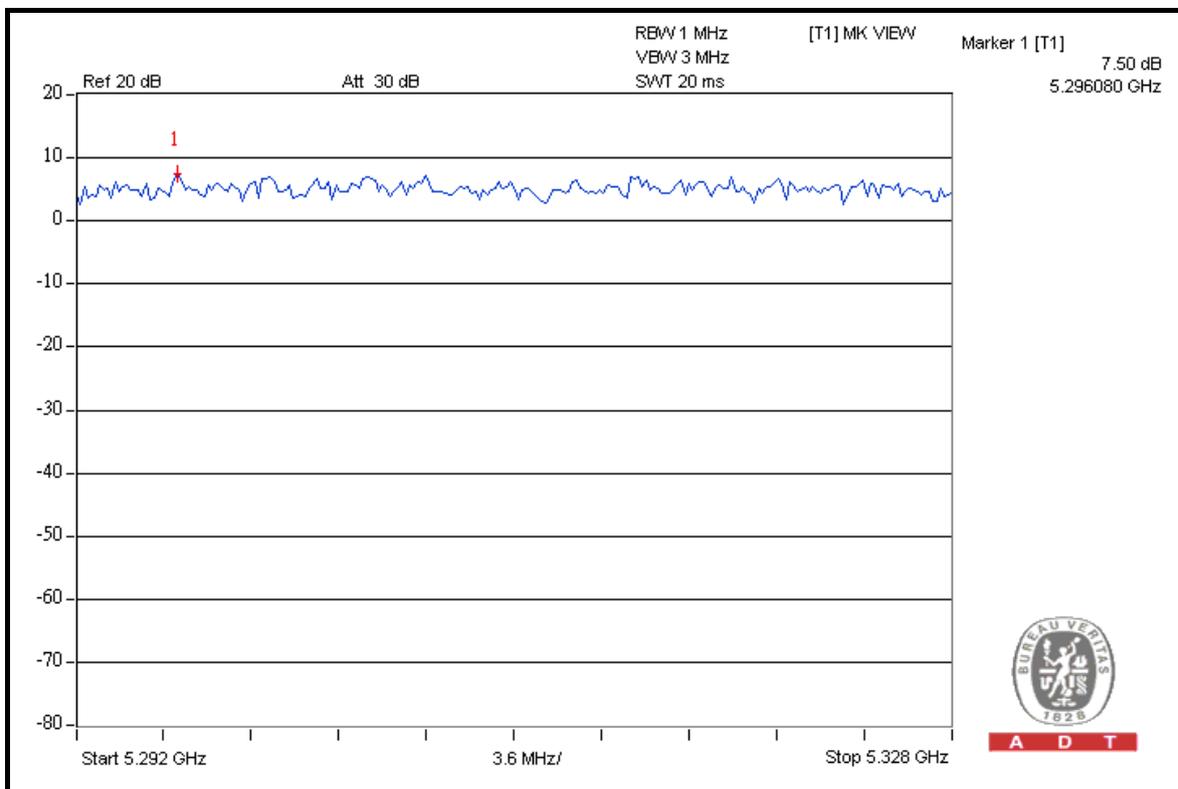


A D T

CH 62



A D T

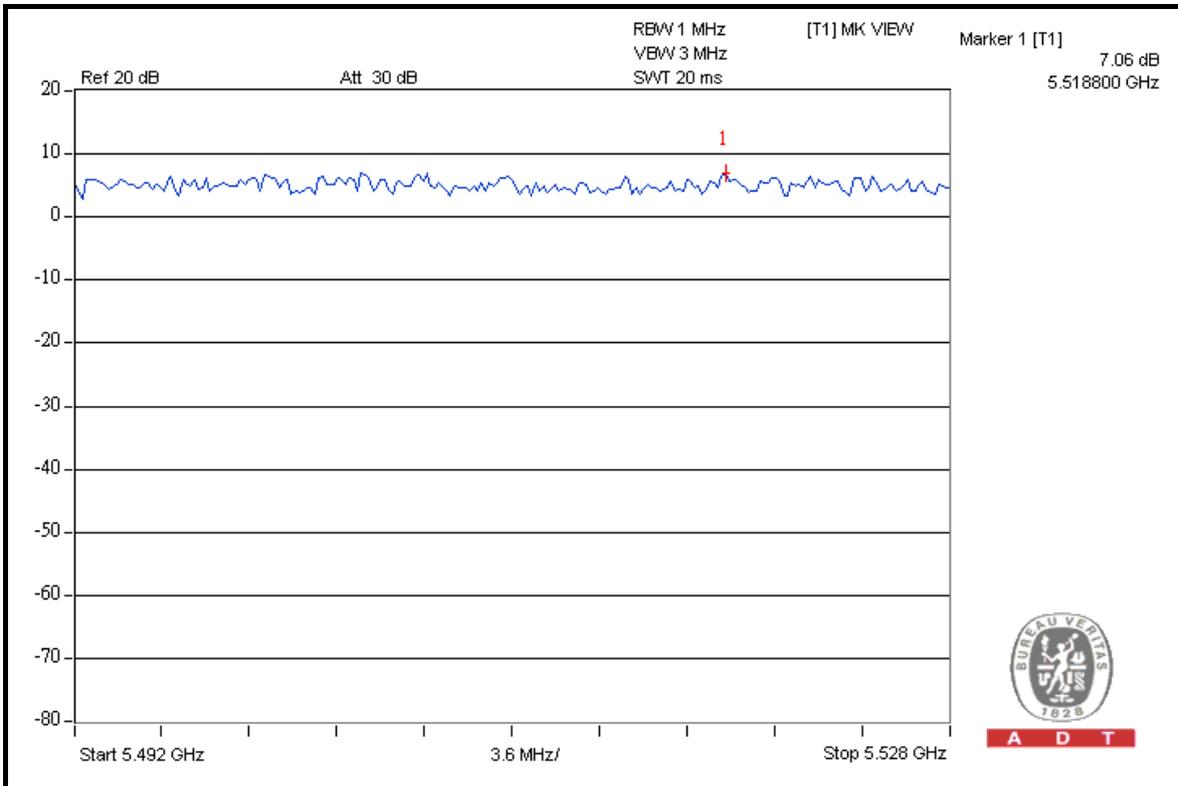
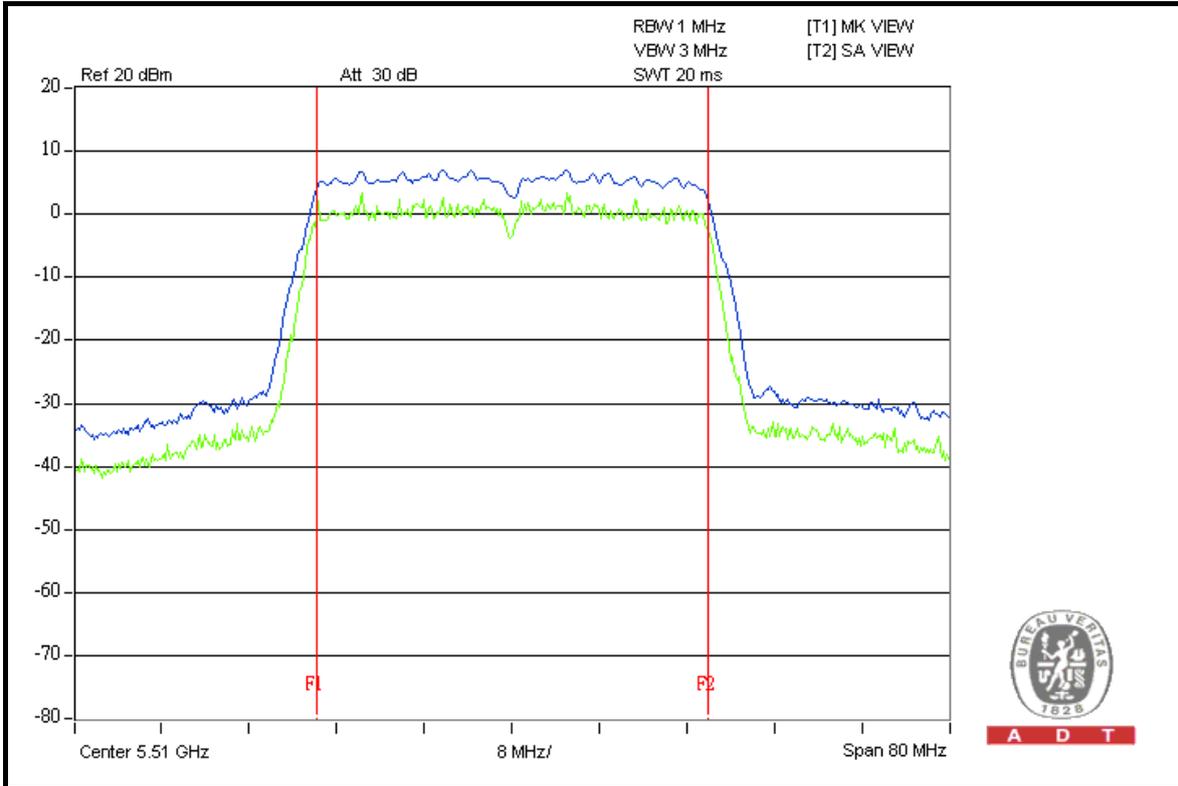


A D T



A D T

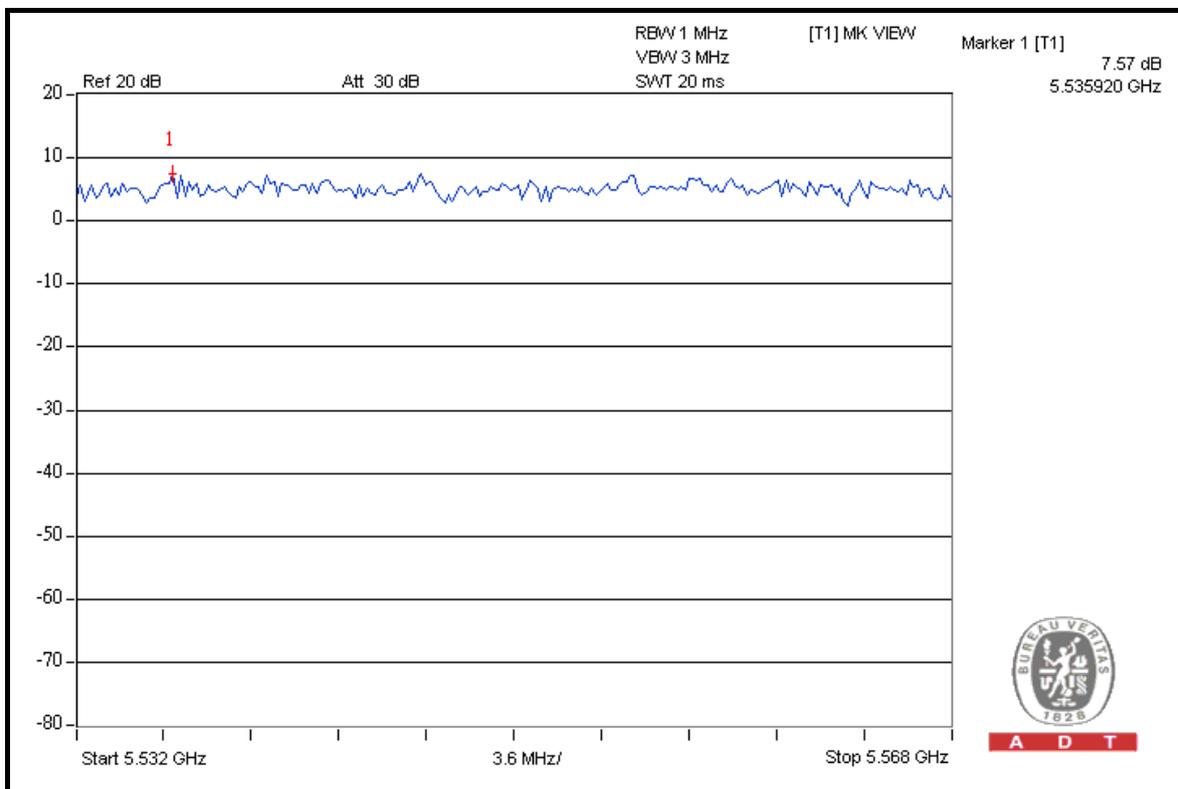
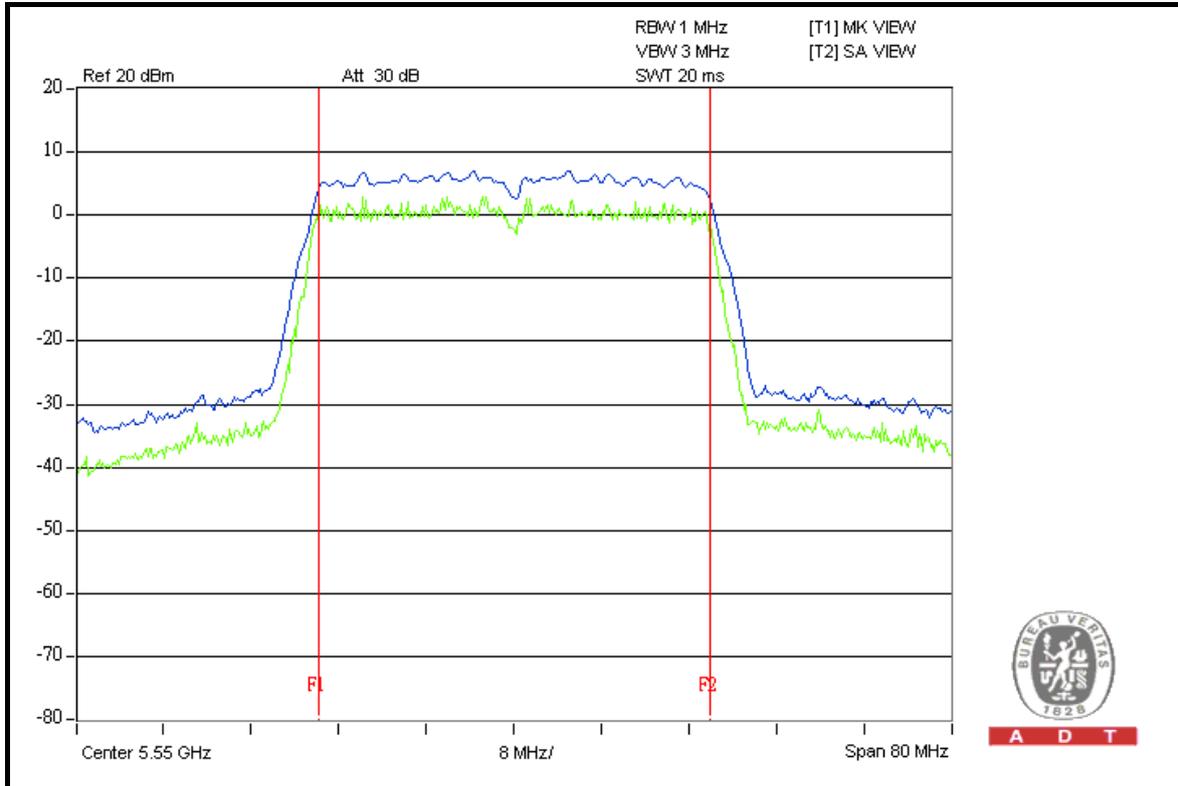
CH 102





A D T

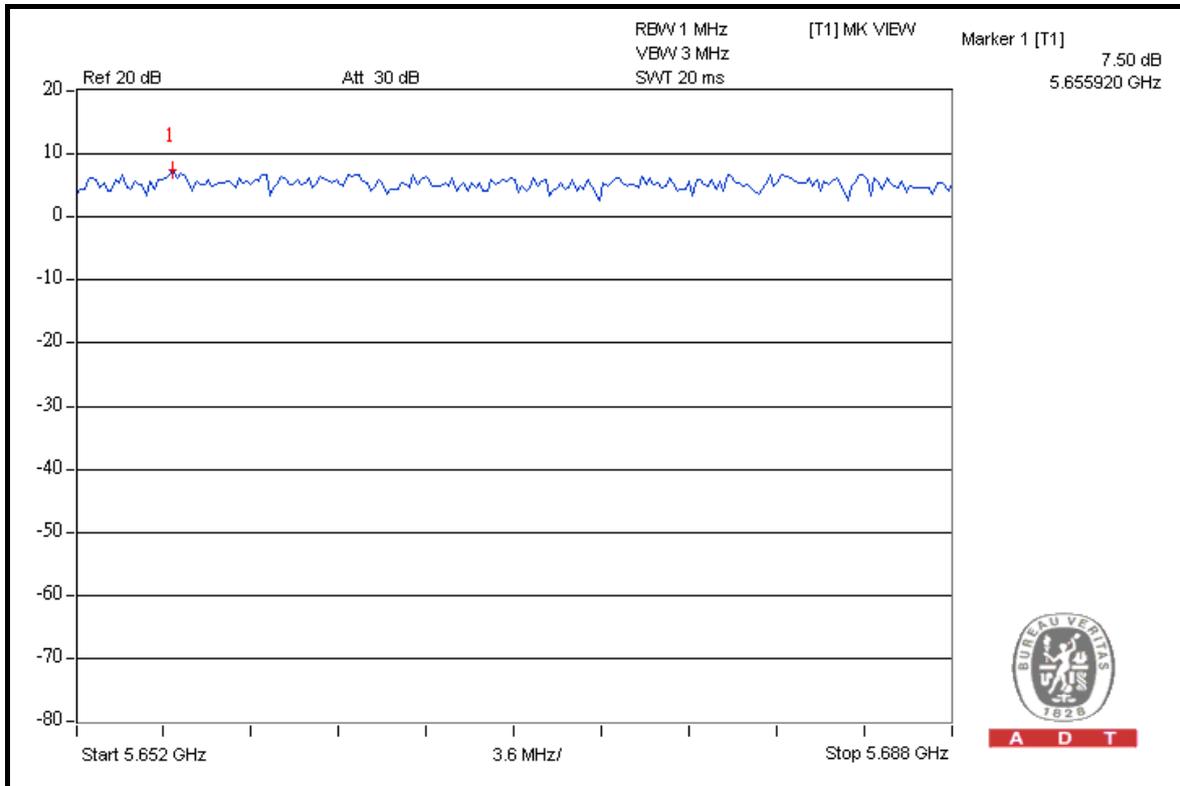
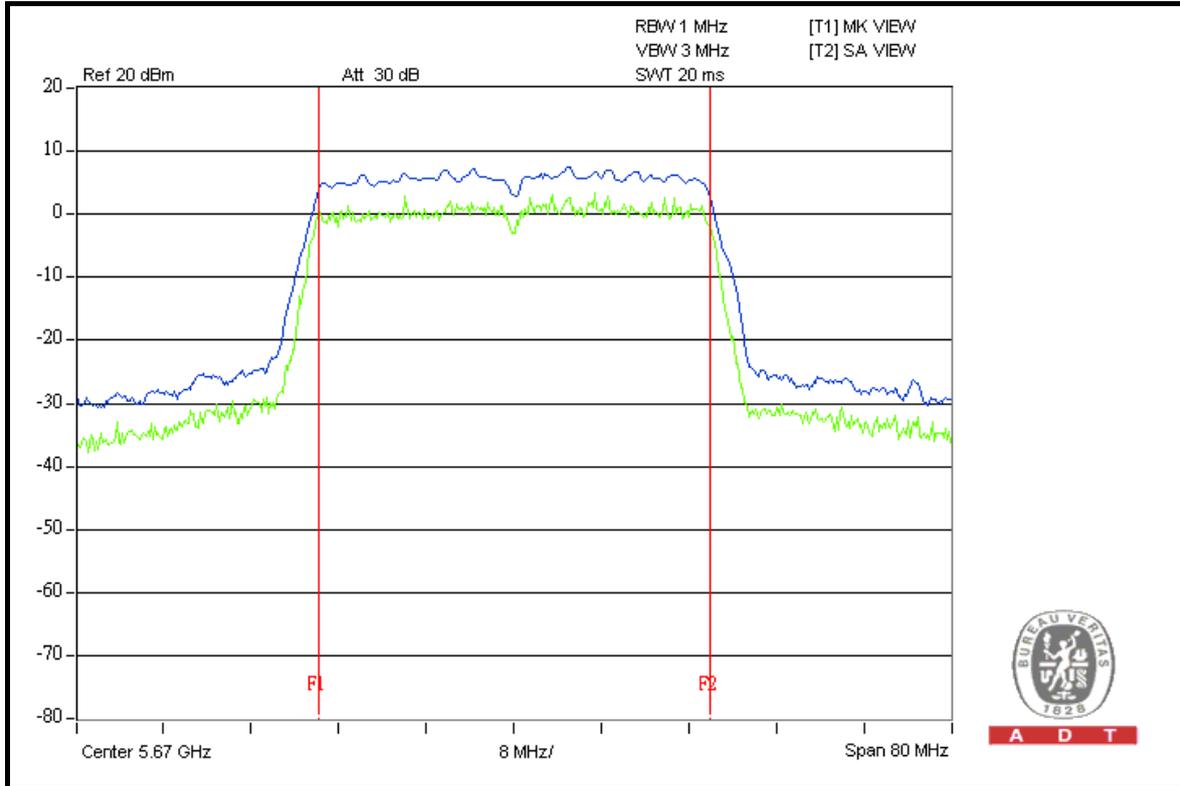
CH 110





A D T

CH 134



4.5 PEAK POWER SPECTRAL DENSITY MEASUREMENT

4.5.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

FREQUENCY BAND	LIMIT
5.150 ~ 5.250GHz	4dBm
5.250 ~ 5.350GHz	11dBm
5.470 ~ 5.725GHz	11dBm

4.5.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
R&S SPECTRUM ANALYZER	FSP40	100041	Apr. 22, 2008	Apr. 21, 2009

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

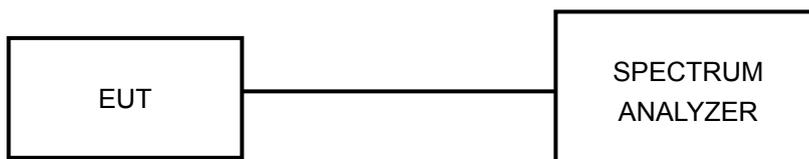
4.5.3 TEST PROCEDURES

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

4.5.4 DEVIATION FROM TEST STANDARD

No deviation

4.5.5 TEST SETUP



4.5.6 EUT OPERATING CONDITIONS

Same as 5.3.6



A D T

4.5.7 TEST RESULTS

802.11a OFDM MODULATION: 1TX

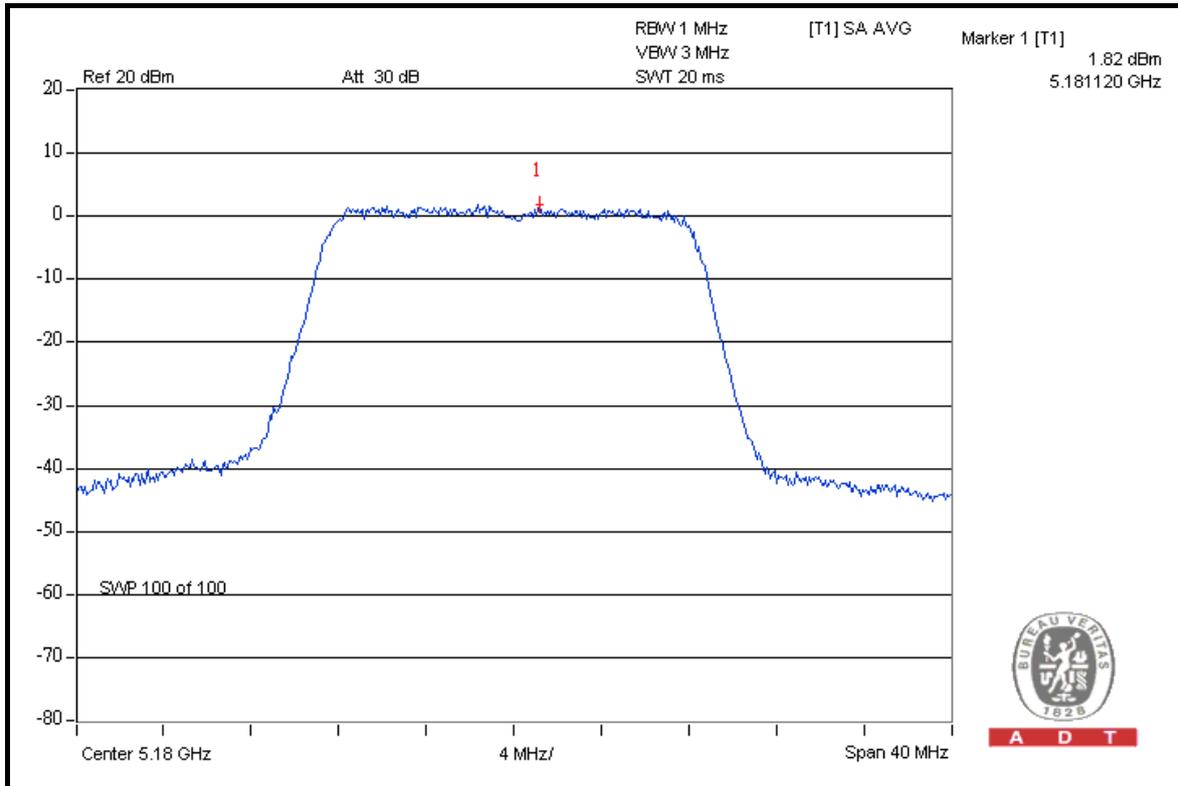
MODULATION TYPE	BPSK	TRANSFER RATE	6.0Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
36	5180	1.82	4	PASS
40	5200	1.85	4	PASS
48	5240	1.70	4	PASS
52	5260	1.70	11	PASS
60	5300	1.75	11	PASS
64	5320	1.83	11	PASS
100	5500	1.77	11	PASS
116	5580	1.74	11	PASS
140	5700	1.88	11	PASS

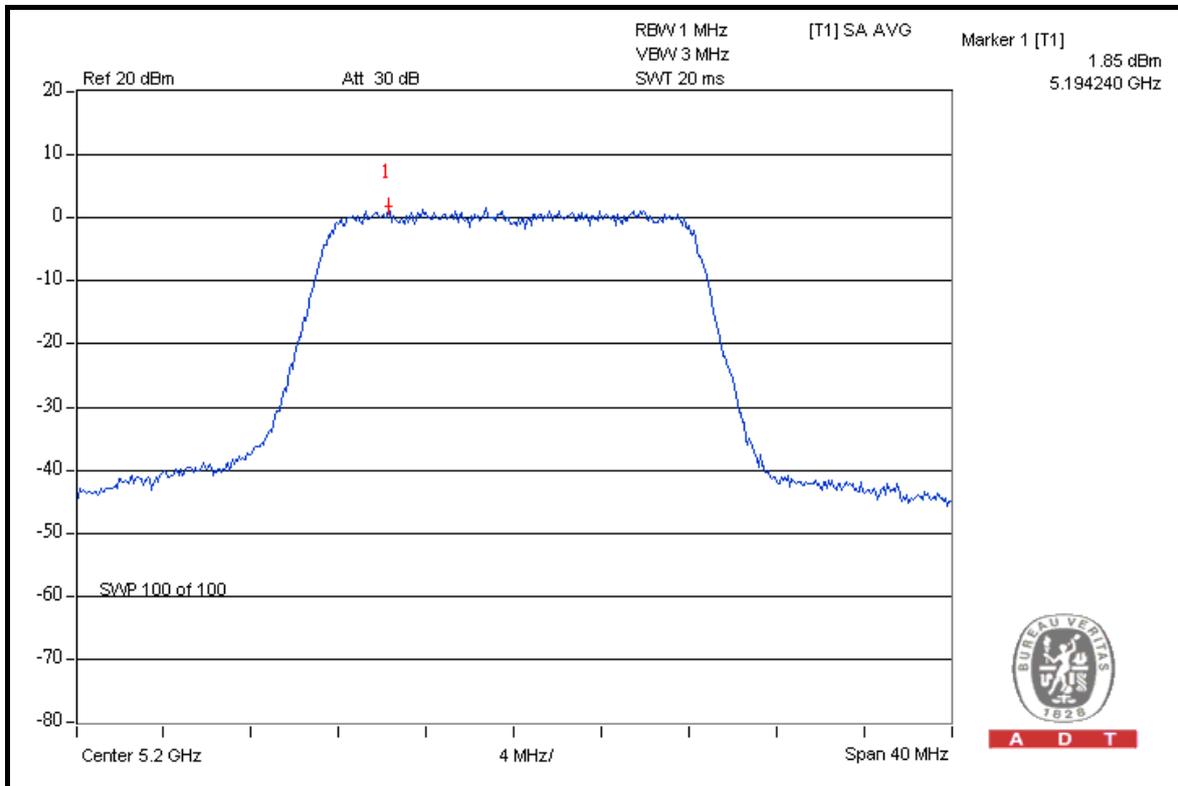


A D T

CH 36



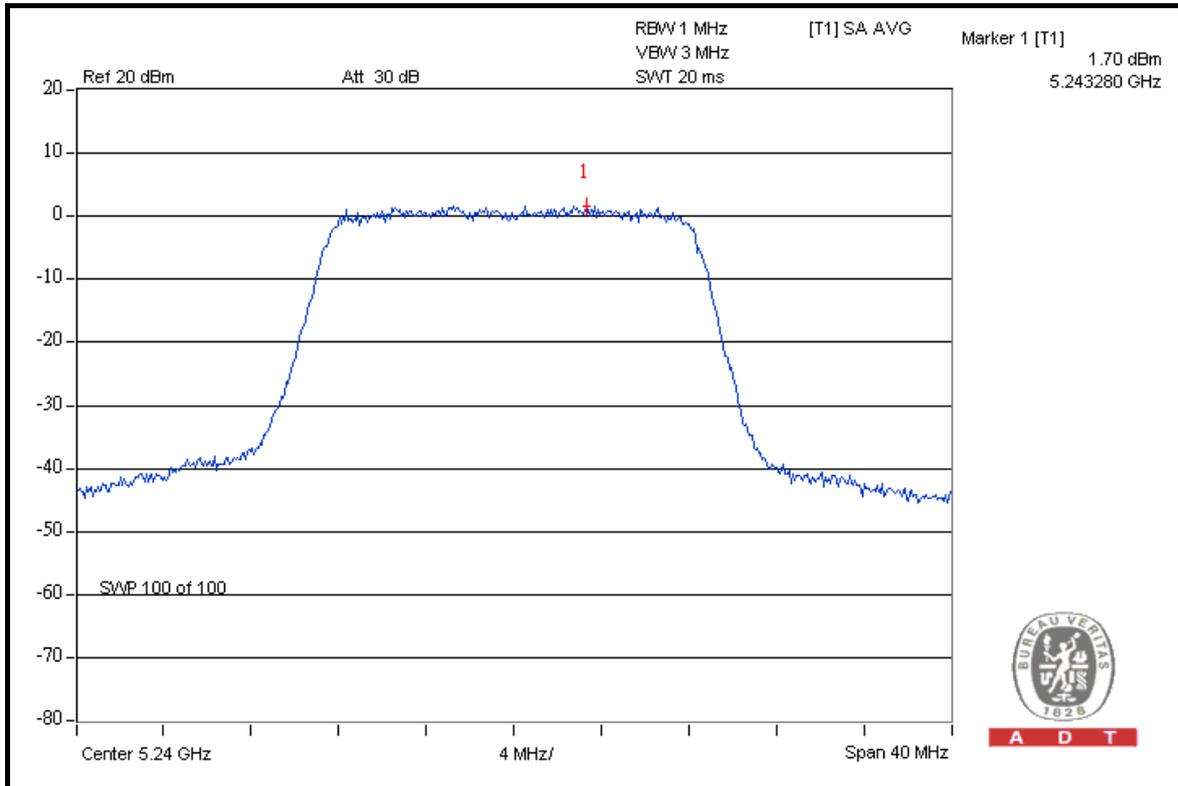
CH 40



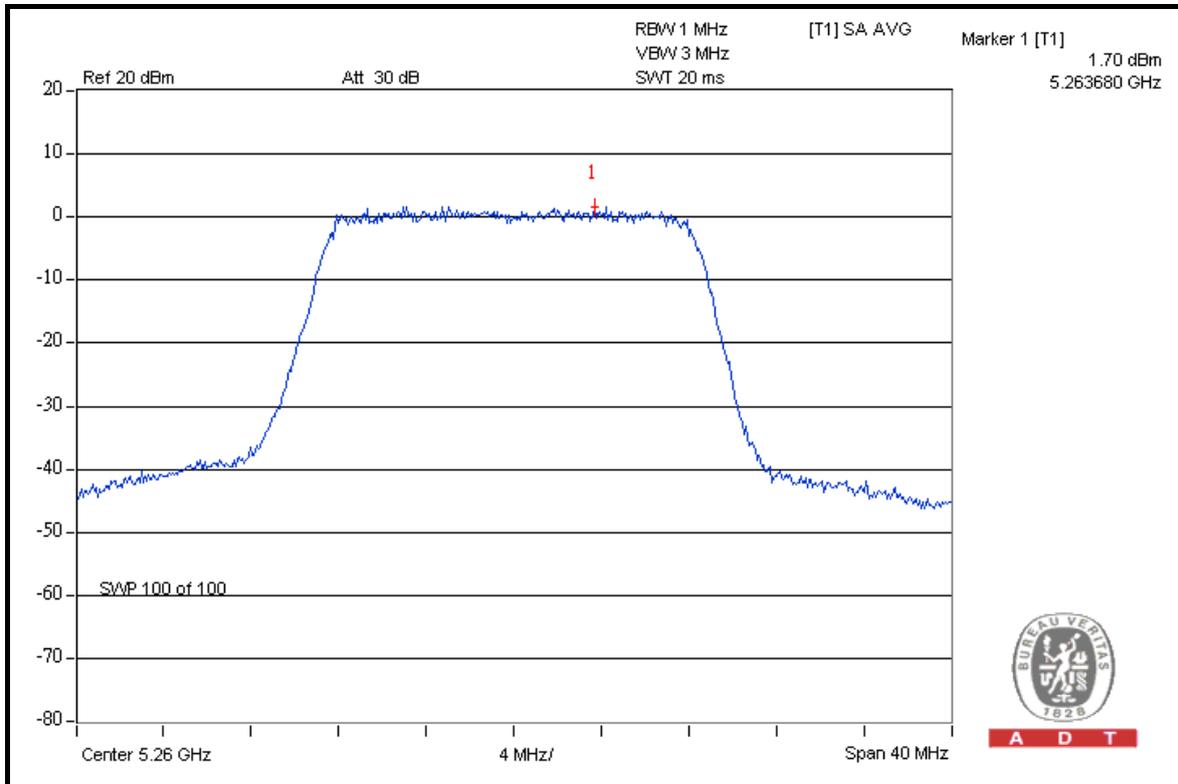


A D T

CH 48



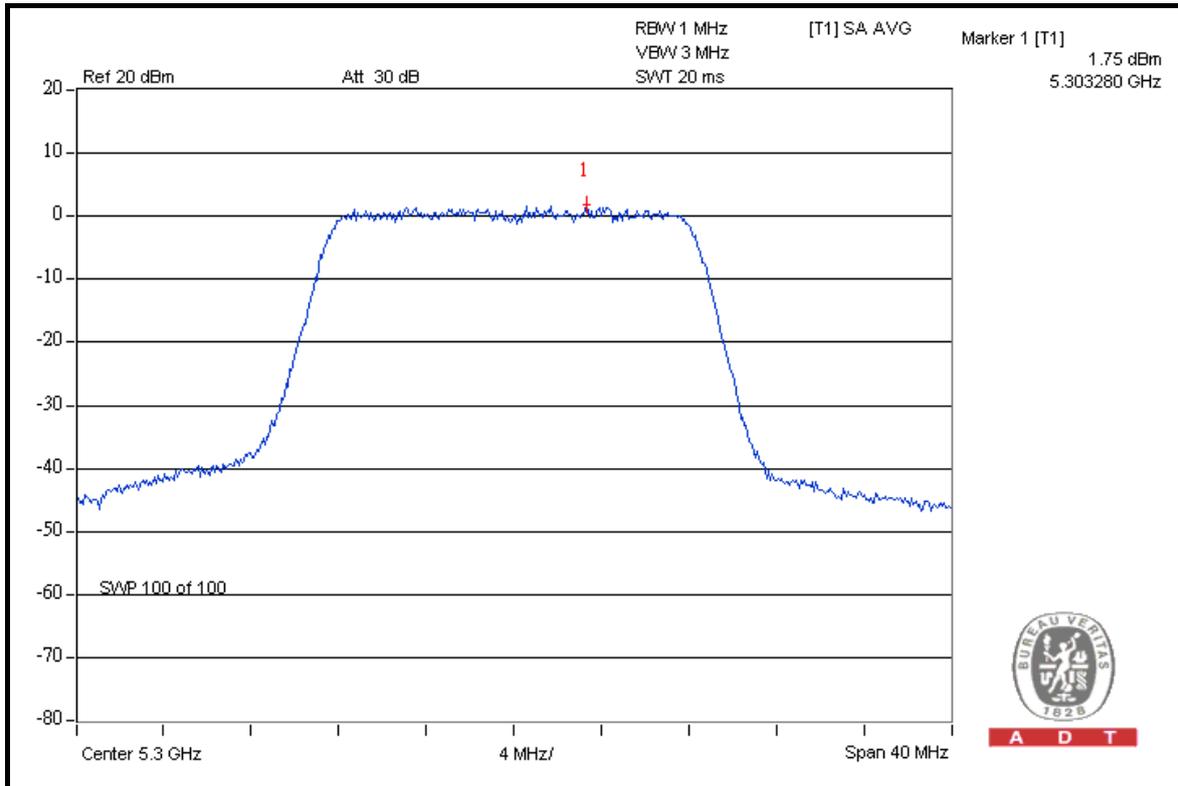
CH 52



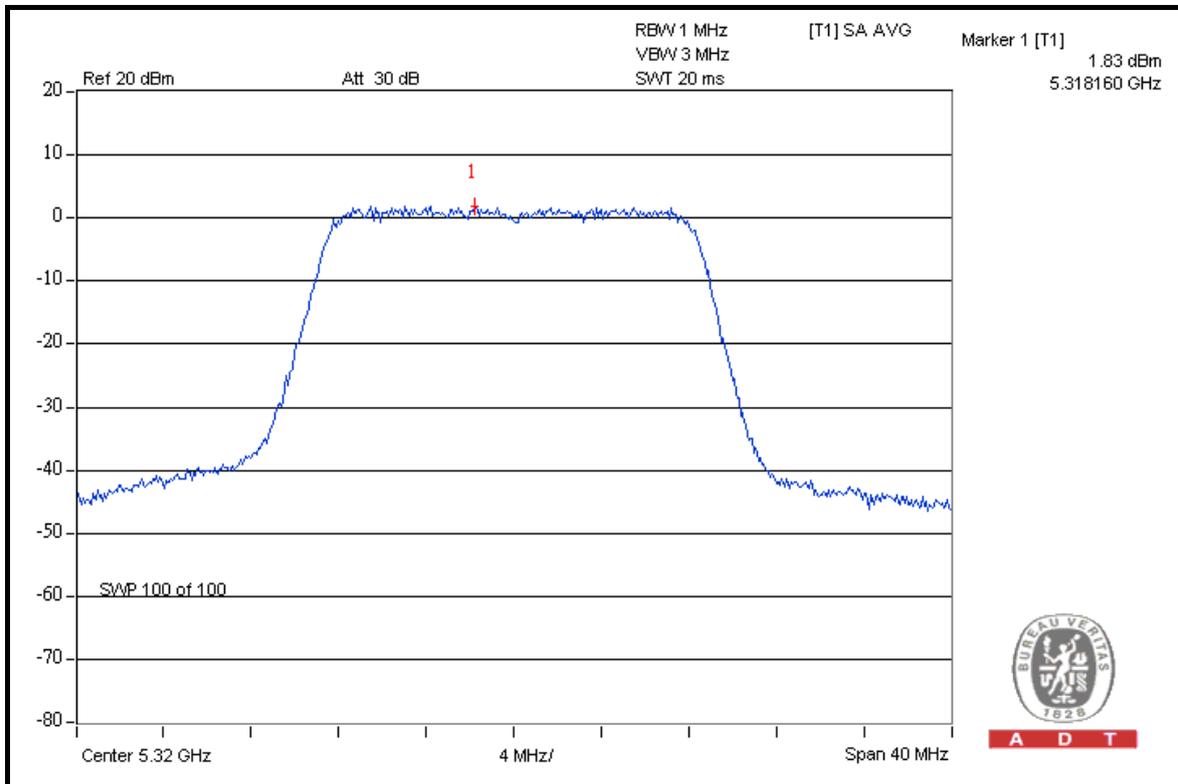


A D T

CH 60



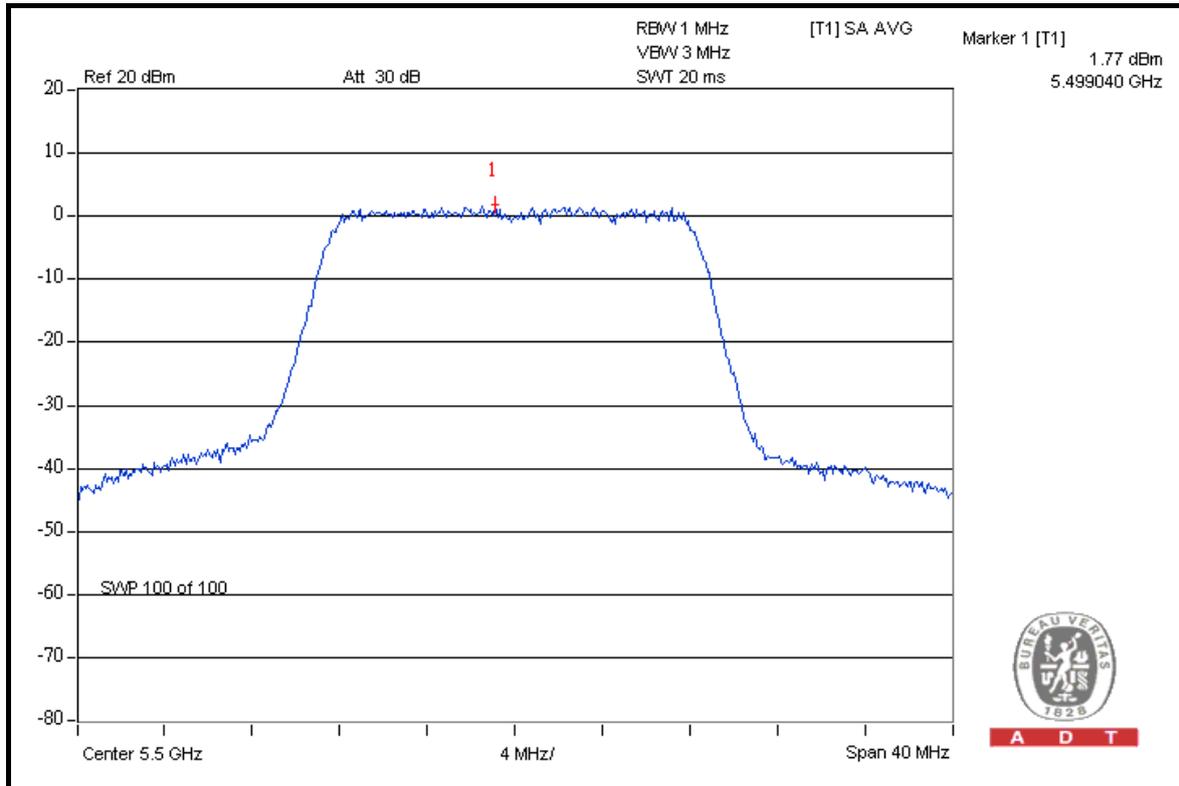
CH 64





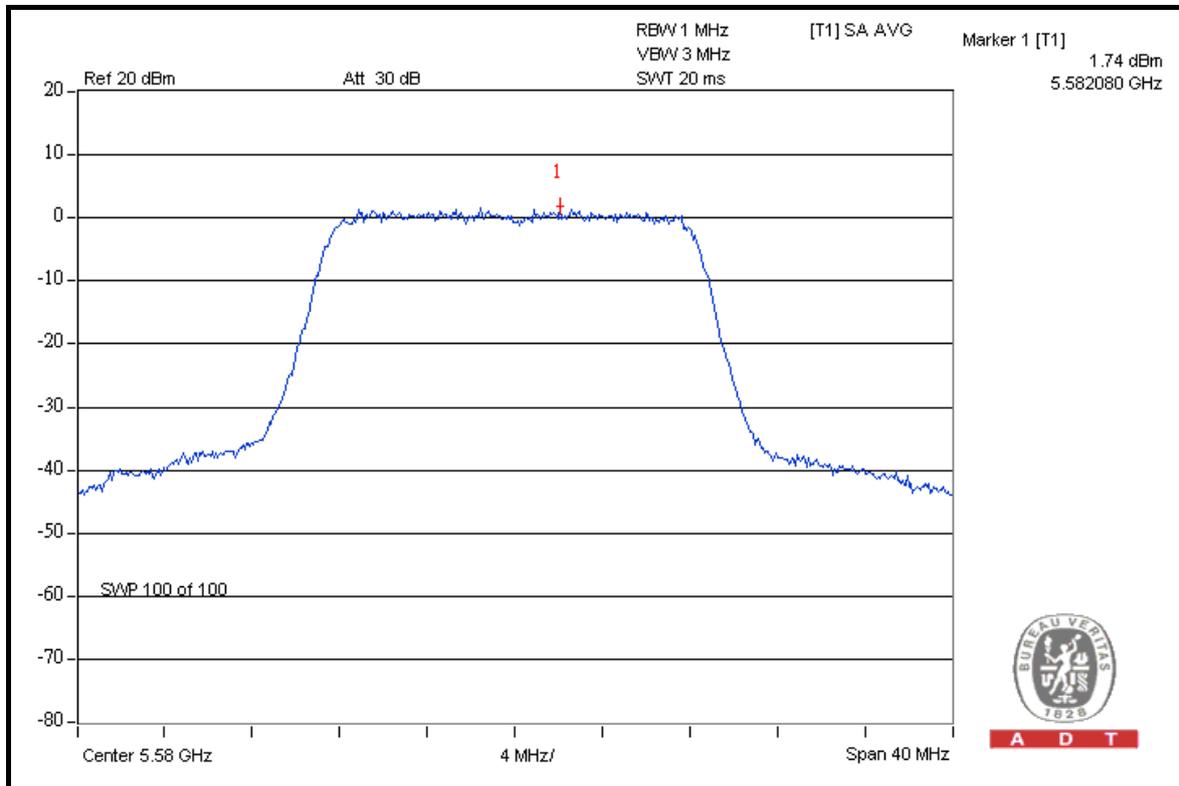
A D T

CH 100



A D T

CH 116

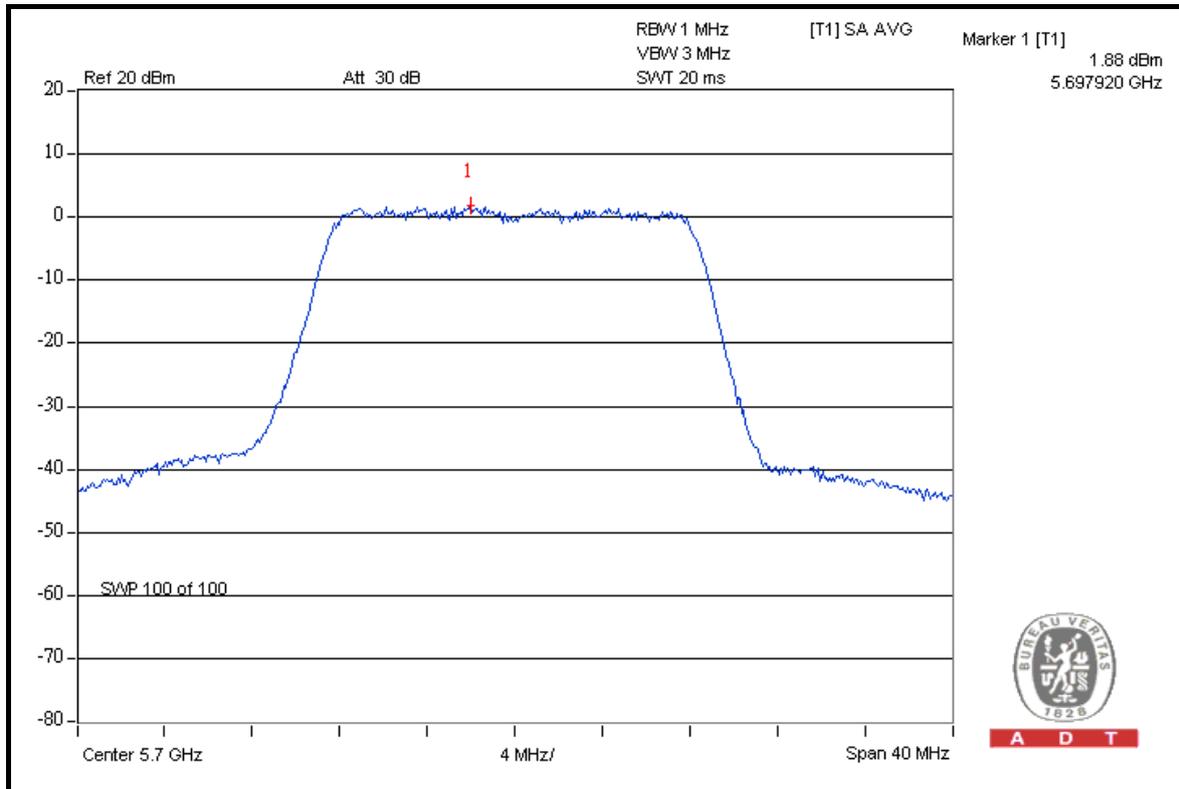


A D T



A D T

CH 140





A D T

DRAFT 802.11n (20MHz) OFDM MODULATION: 1TX

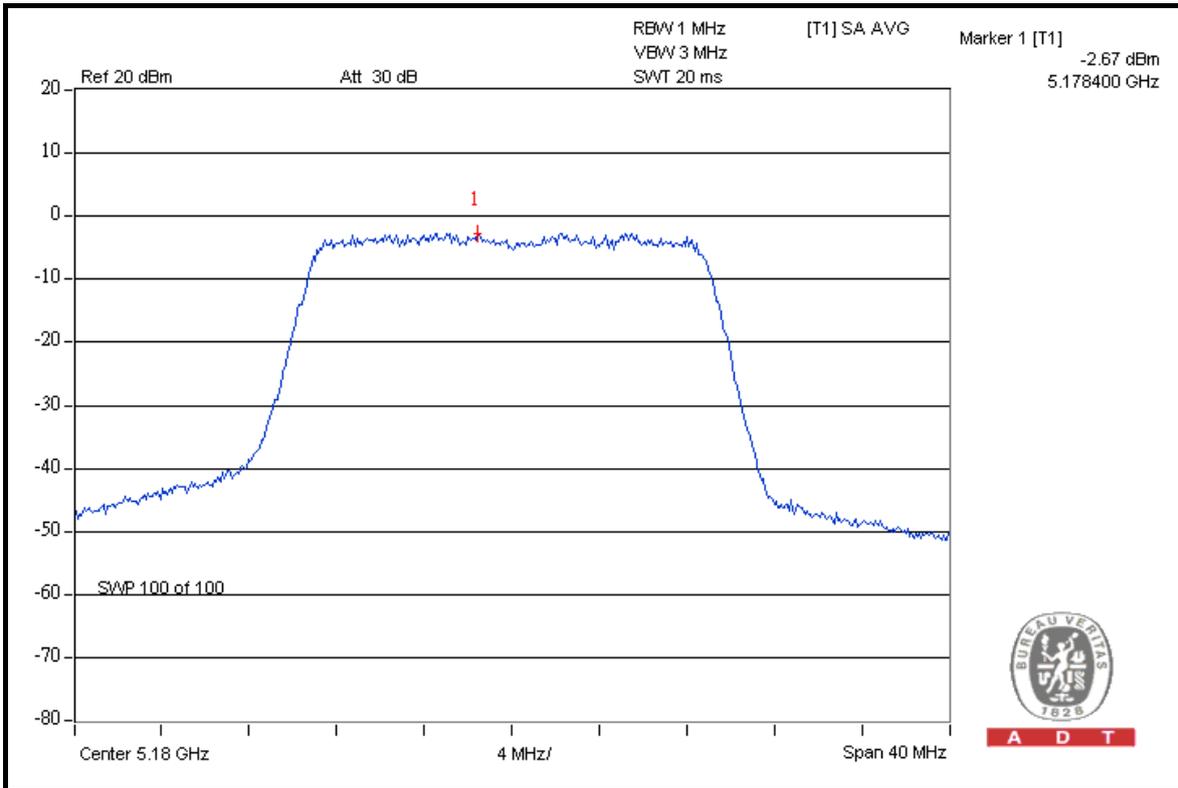
MODULATION TYPE	BPSK	TRANSFER RATE	7.2Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 64%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
36	5180	-2.67	4	PASS
40	5200	-0.76	4	PASS
48	5240	-0.52	4	PASS
52	5260	-0.47	11	PASS
60	5300	-0.69	11	PASS
64	5320	-2.47	11	PASS
100	5500	-0.42	11	PASS
116	5580	-0.40	11	PASS
140	5700	-0.68	11	PASS

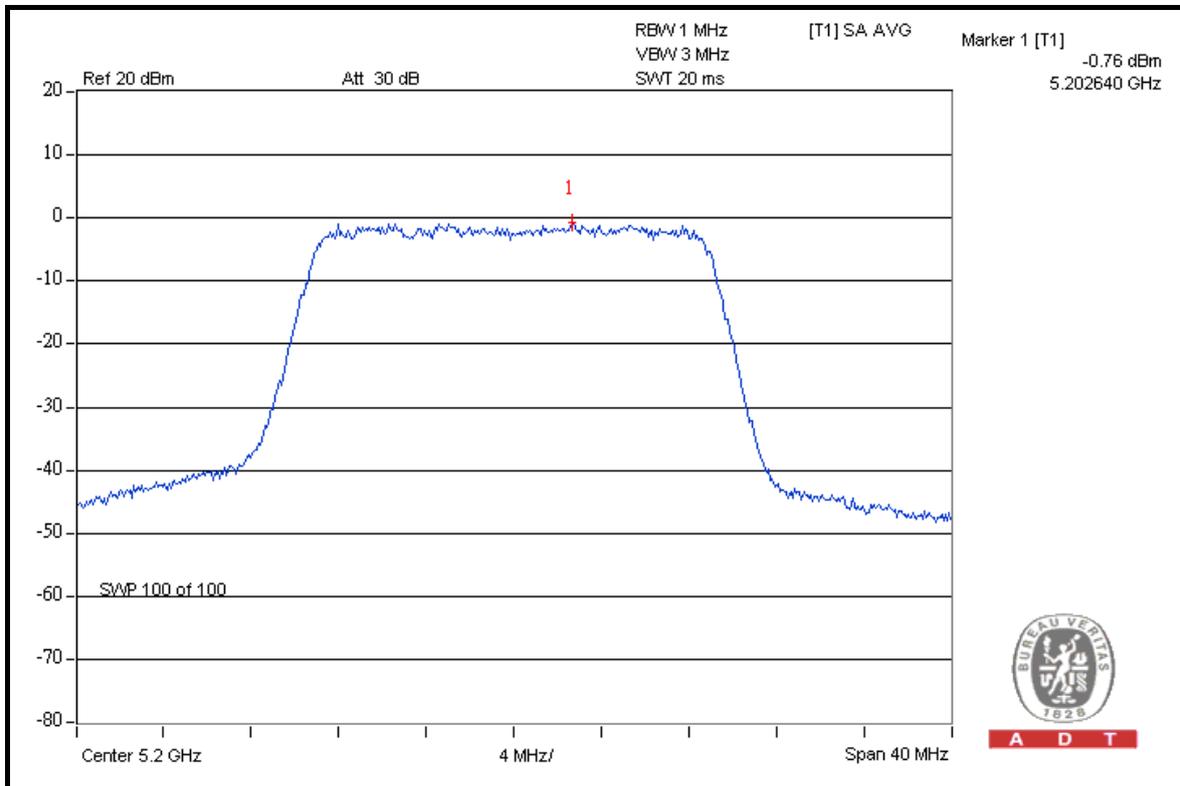


A D T

CH 36



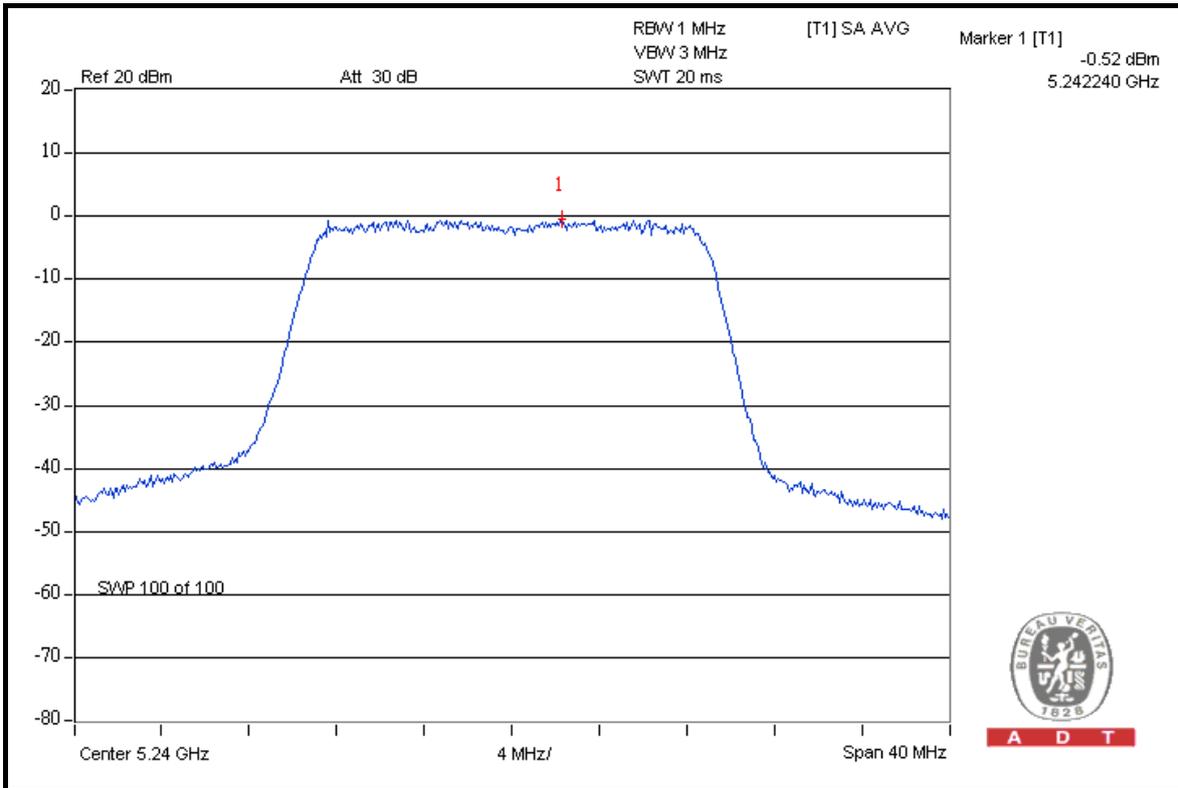
CH 40



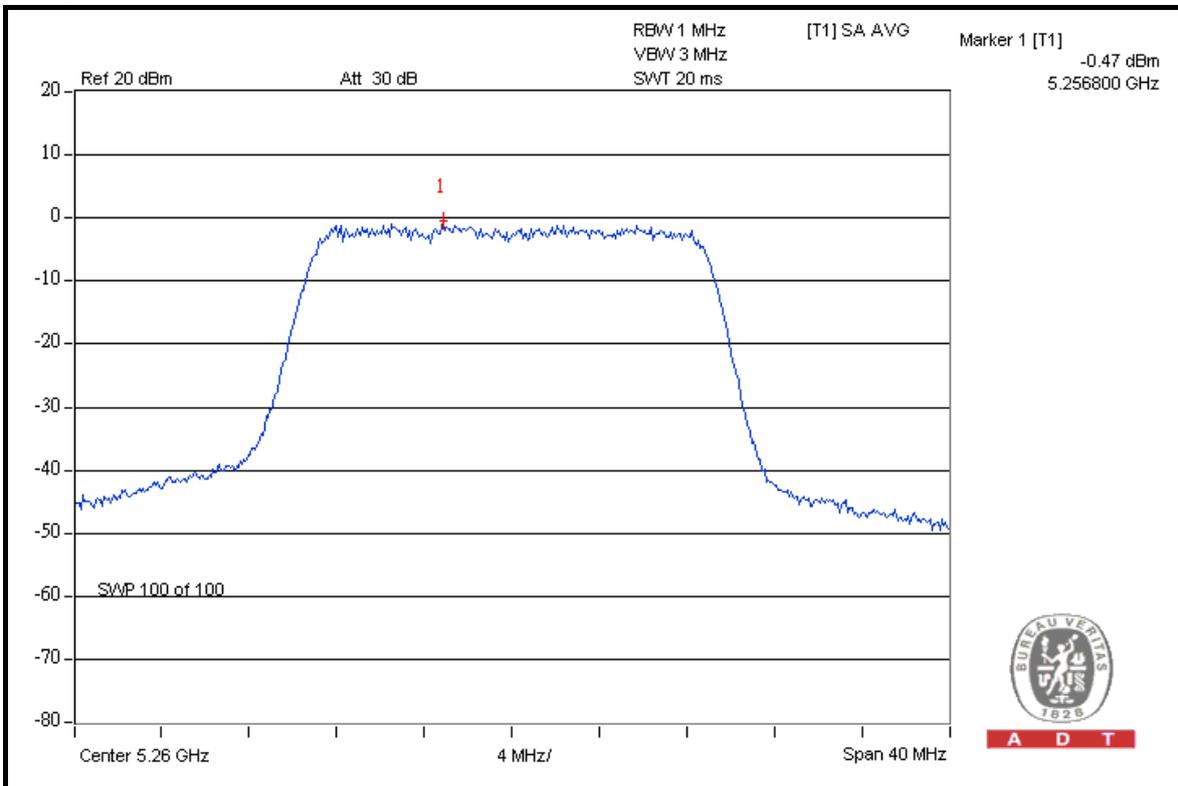


A D T

CH 48



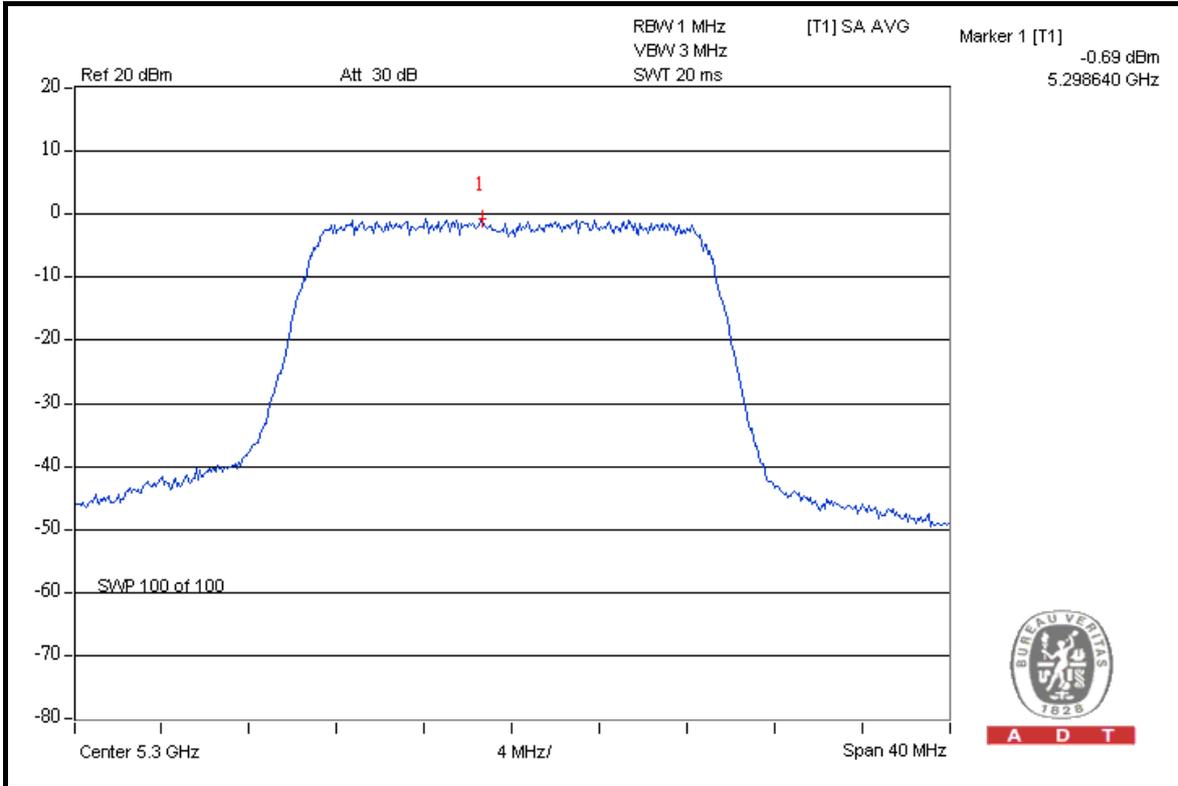
CH 52



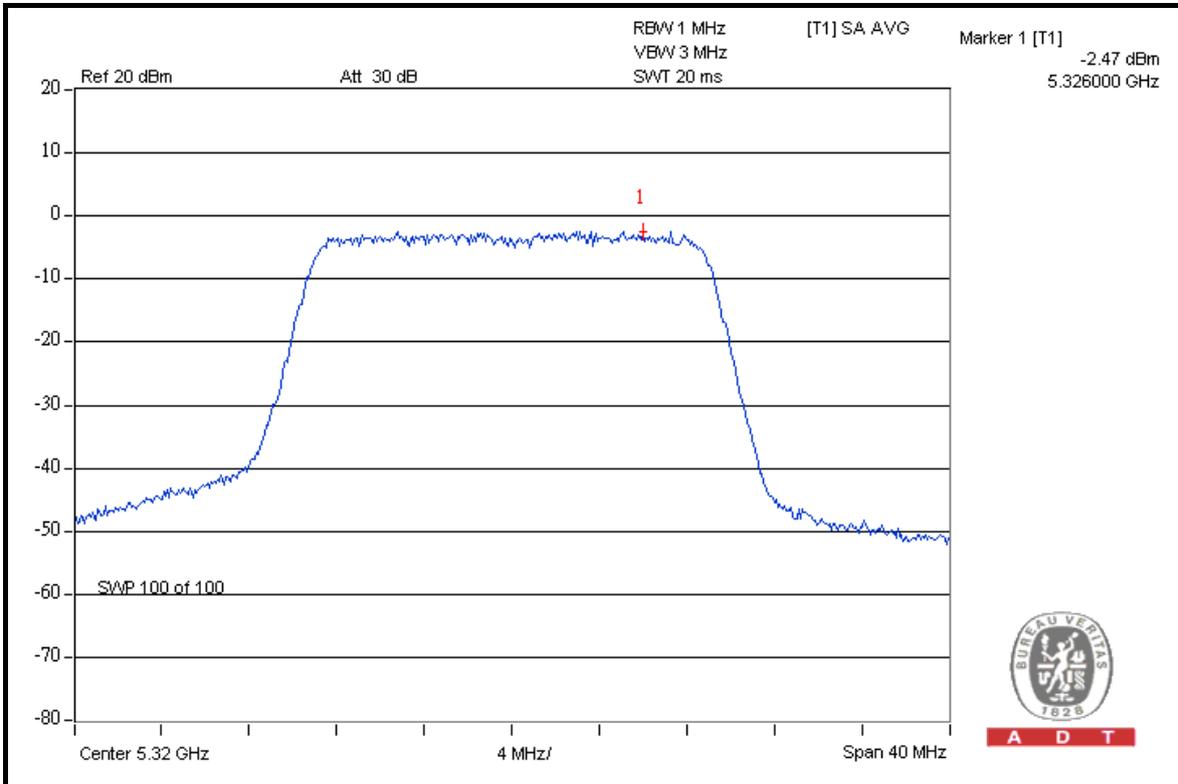


A D T

CH 60



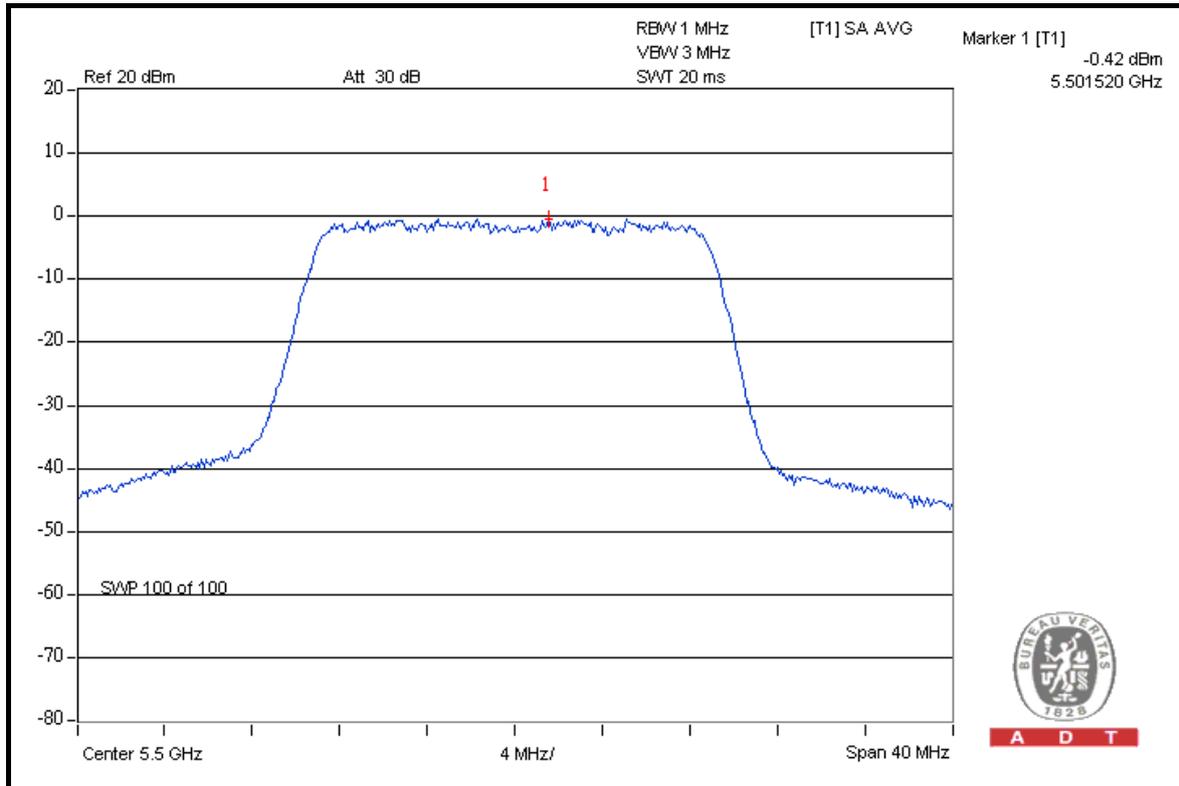
CH 64



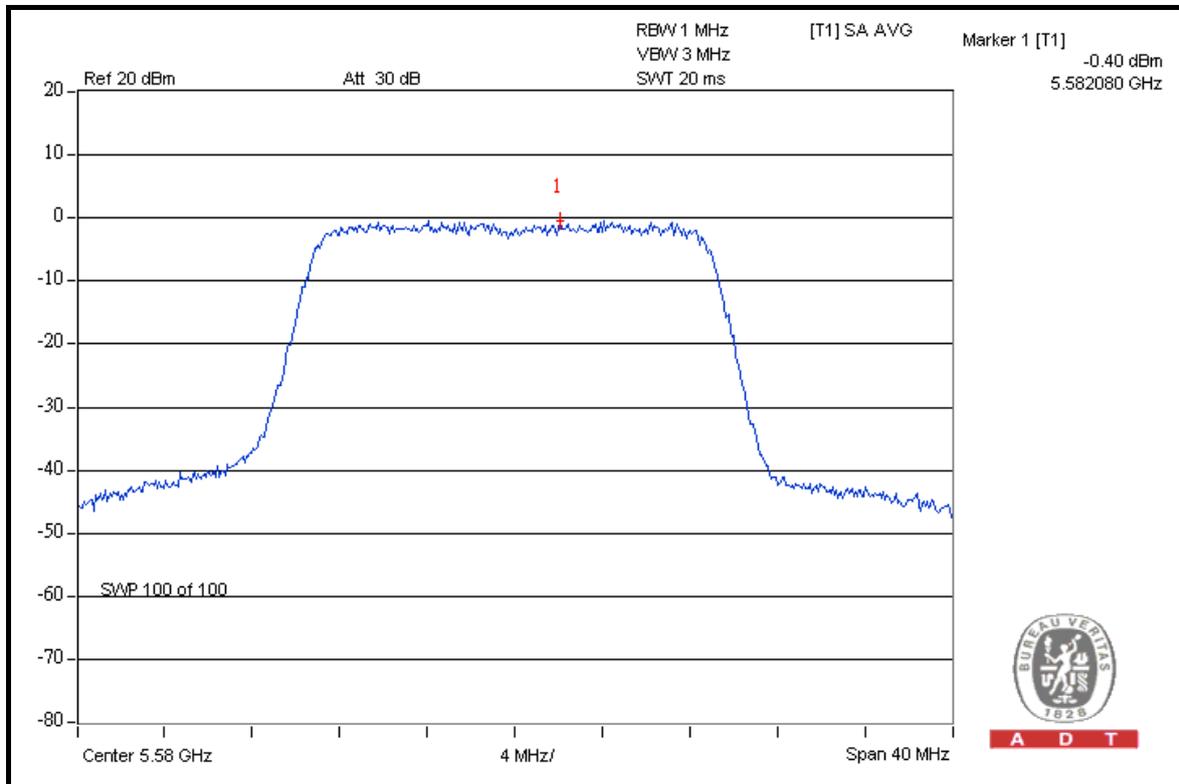


A D T

CH 100



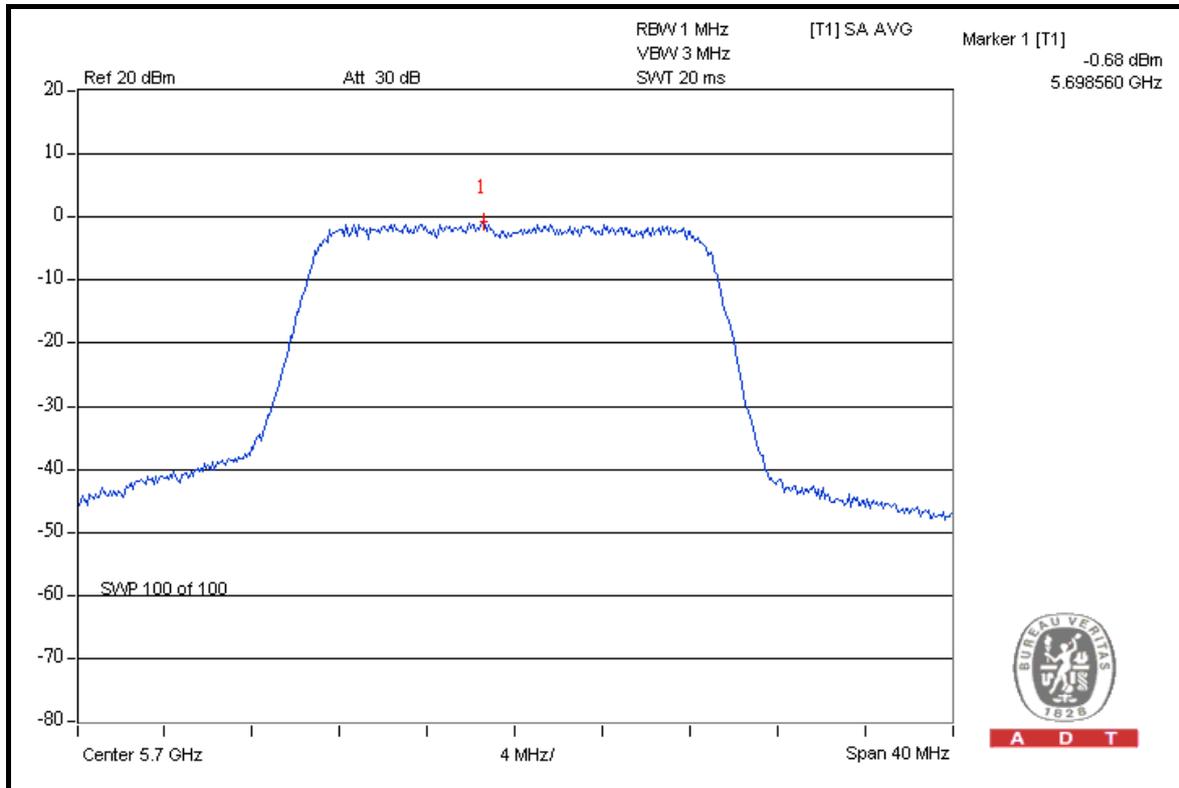
CH 116





A D T

CH 140



A D T



A D T

DRAFT 802.11n (20MHz) OFDM MODULATION: 2TX

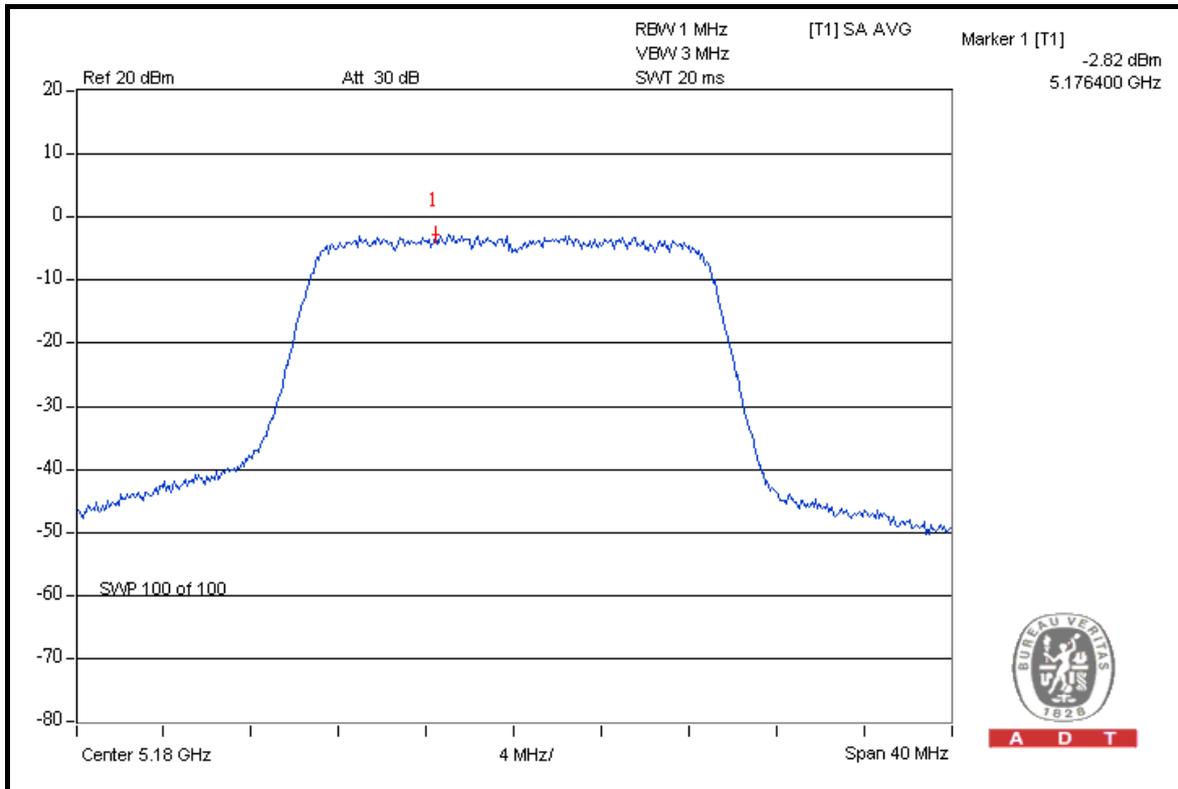
MODULATION TYPE	BPSK	TRANSFER RATE	14.444Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 991hPa
TESTED BY	Match Tsui		

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)		TOTAL POWER DENSITY (mW)	TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
36	5180	-2.82	-2.76	1.052	0.22	4	PASS
40	5200	-0.63	-0.61	1.734	2.39	4	PASS
48	5240	-0.62	-0.53	1.752	2.44	4	PASS
52	5260	-0.62	-0.71	1.716	2.35	11	PASS
60	5300	-0.87	-0.56	1.697	2.30	11	PASS
64	5320	-2.59	-2.70	1.088	0.37	11	PASS
100	5500	-0.65	-0.63	1.726	2.37	11	PASS
116	5580	-0.84	-0.73	1.669	2.23	11	PASS
140	5700	-1.16	-1.46	1.480	1.70	11	PASS



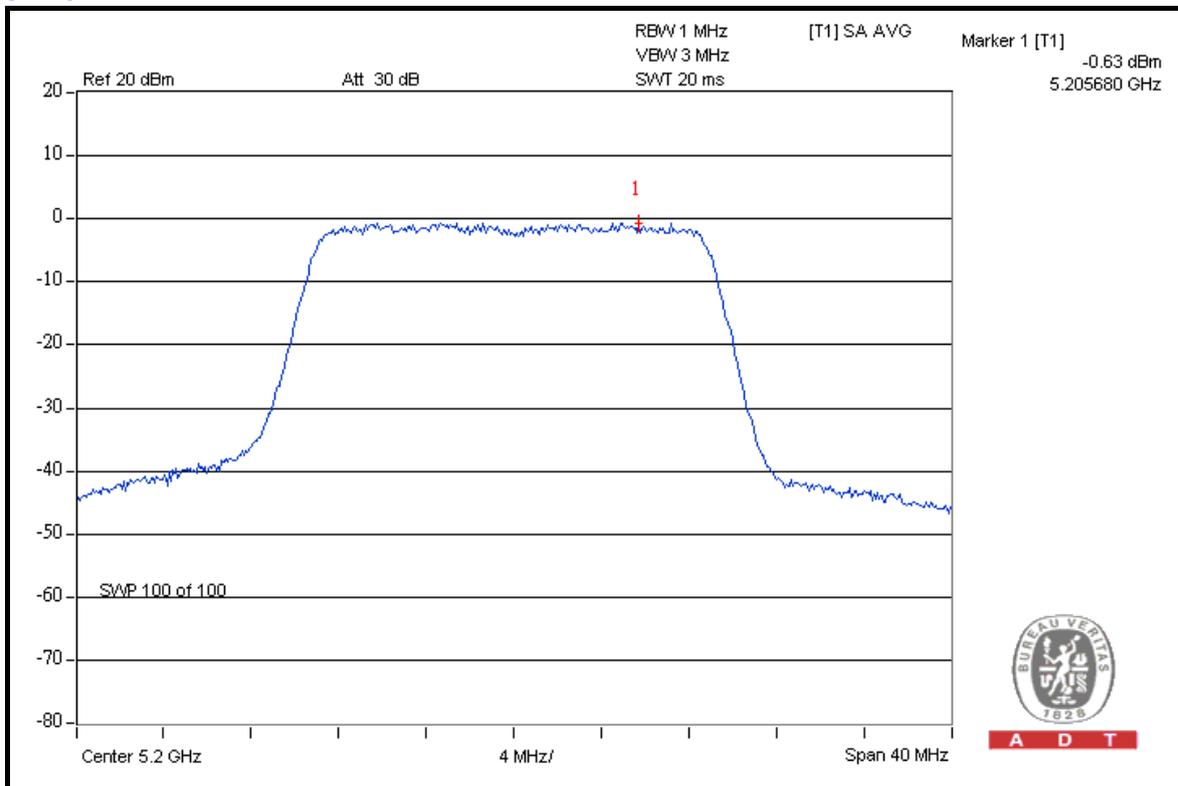
A D T

CHAIN 0: CH 36



A D T

CH 40

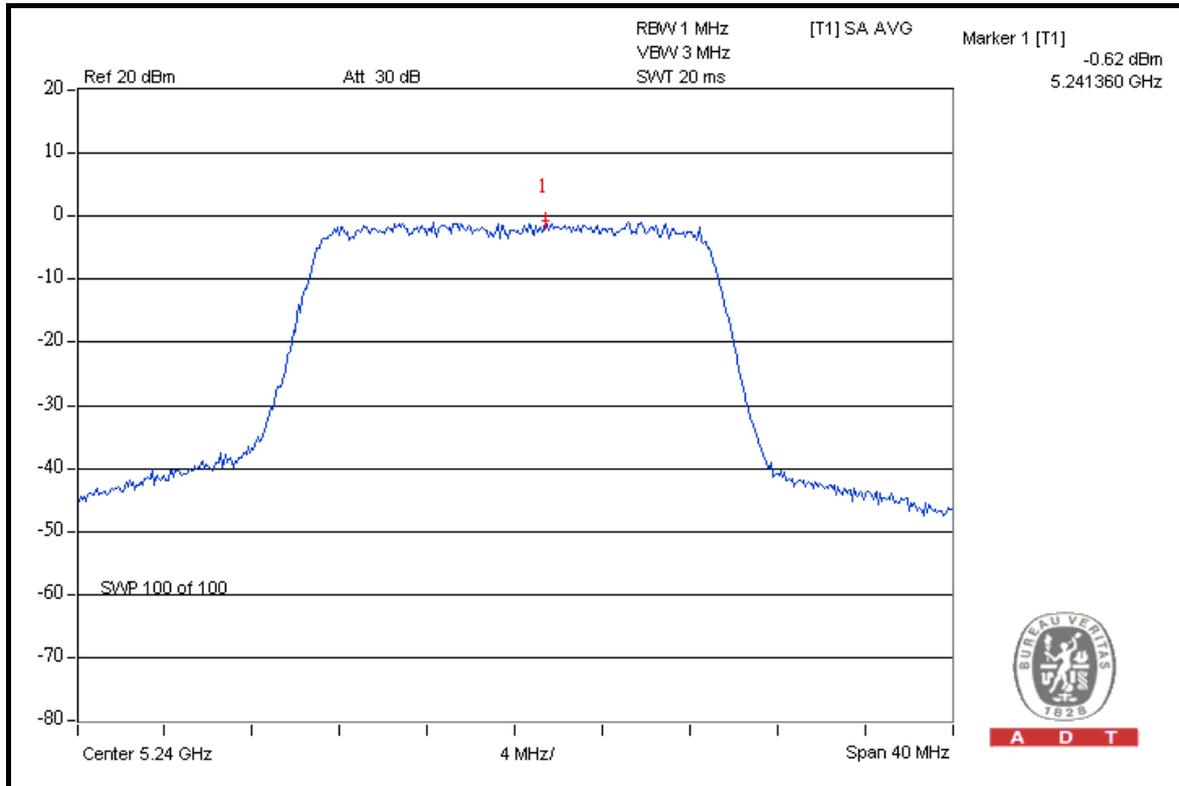


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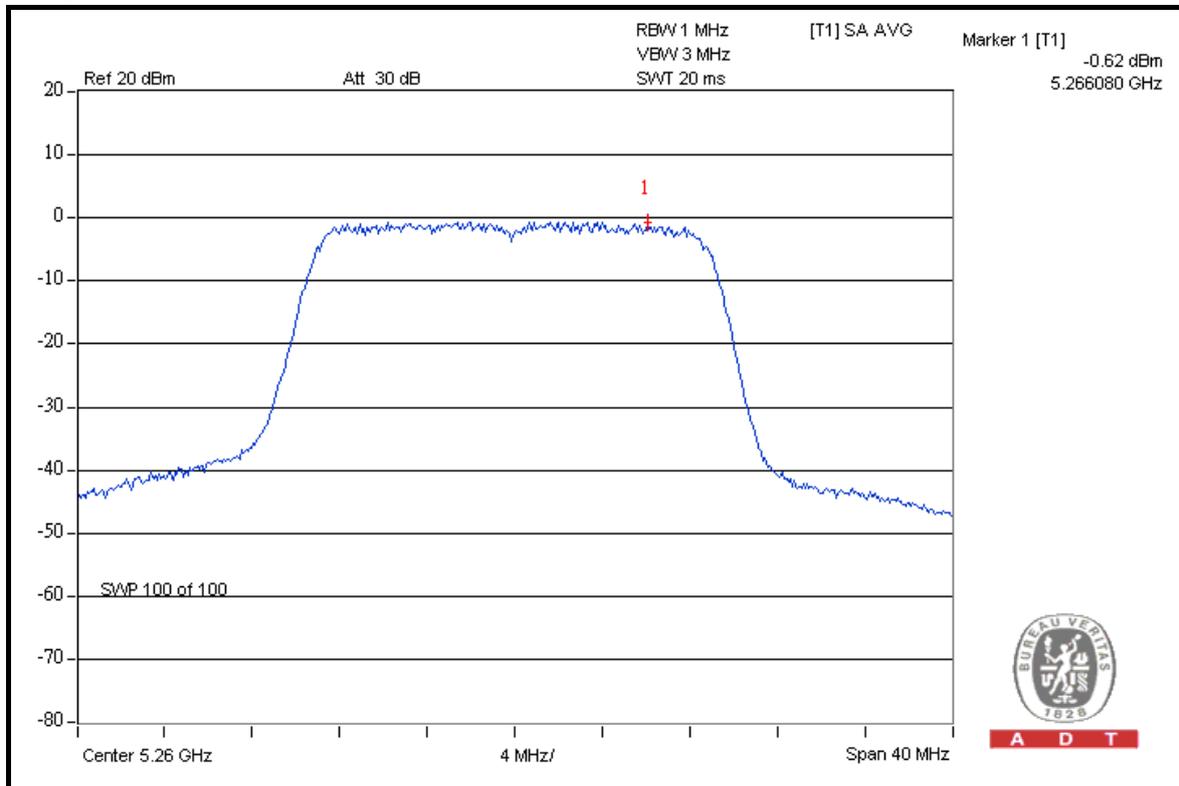
A D T

CH 48



A D T

CH 52

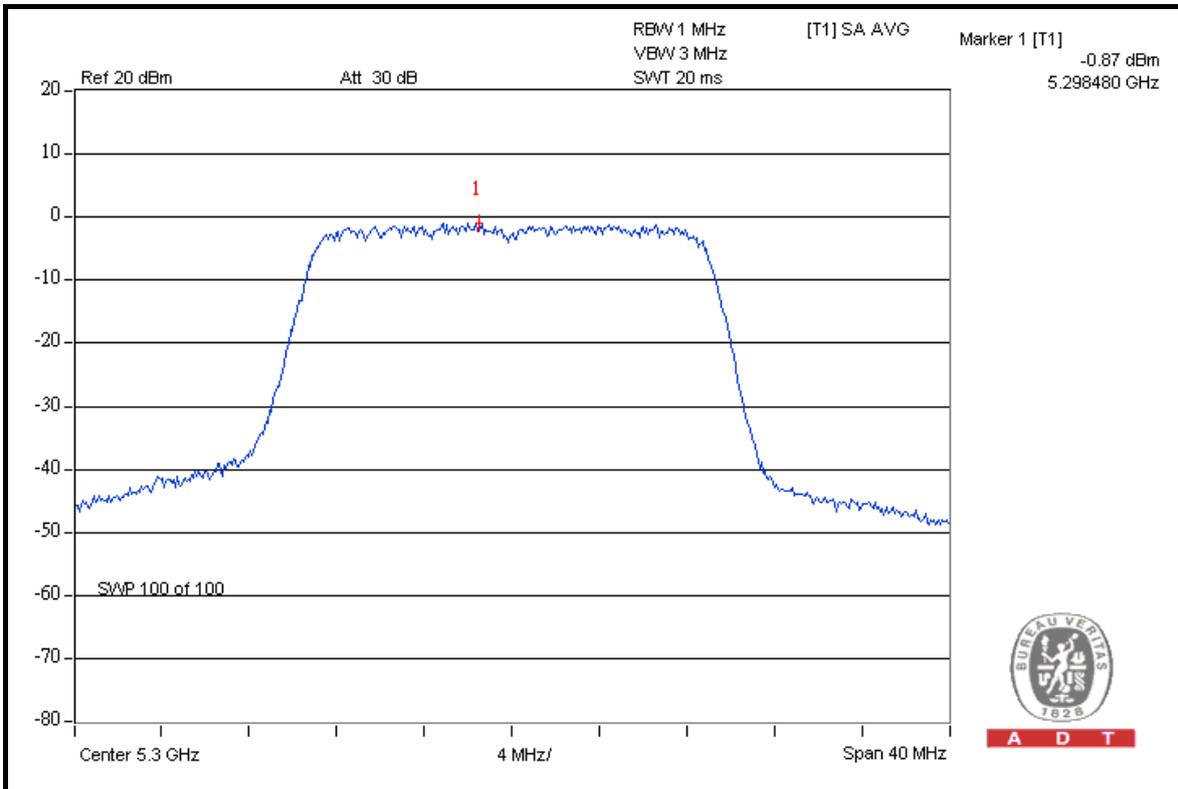


A D T



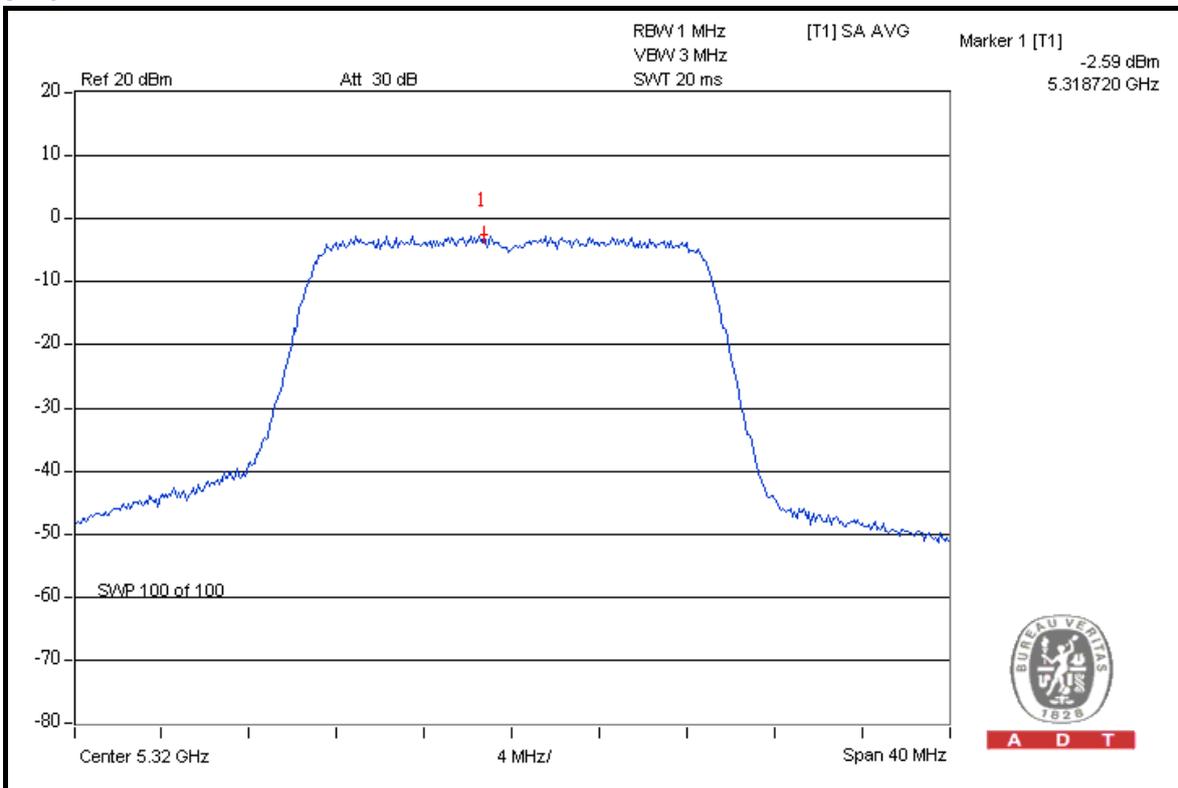
A D T

CH 60



A D T

CH 64

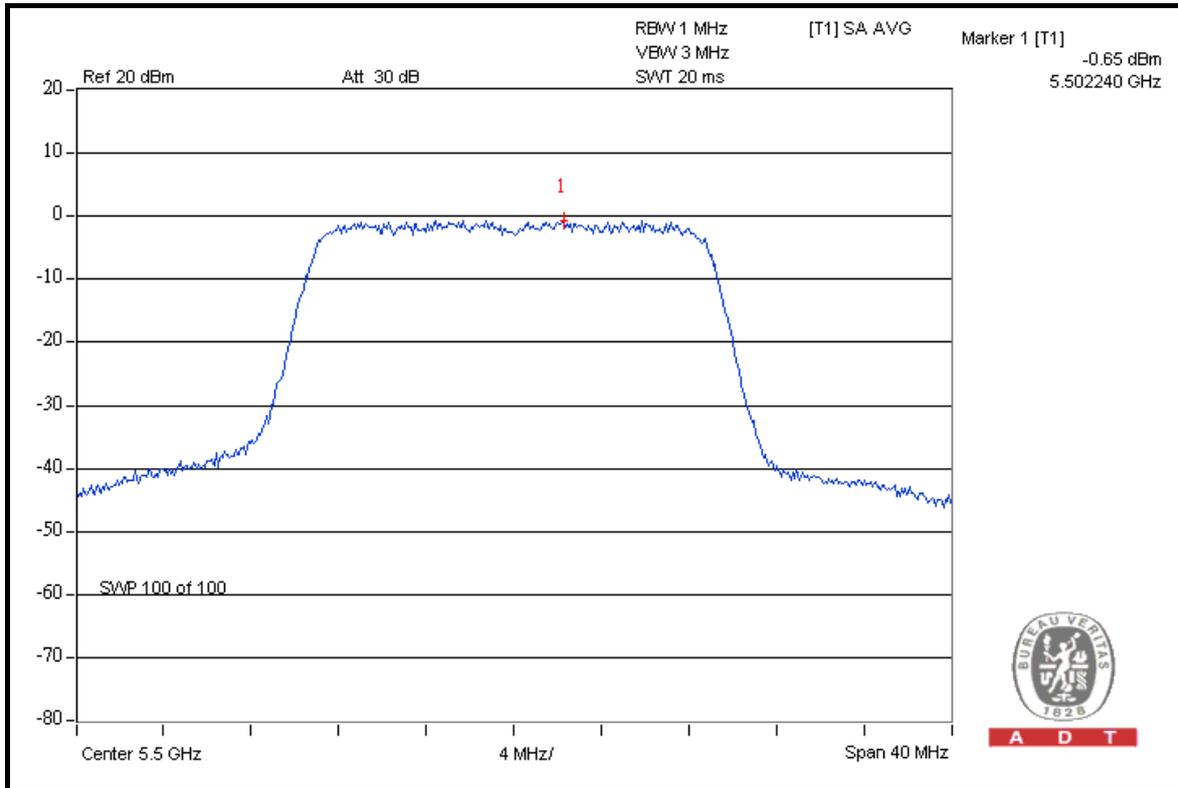


A D T



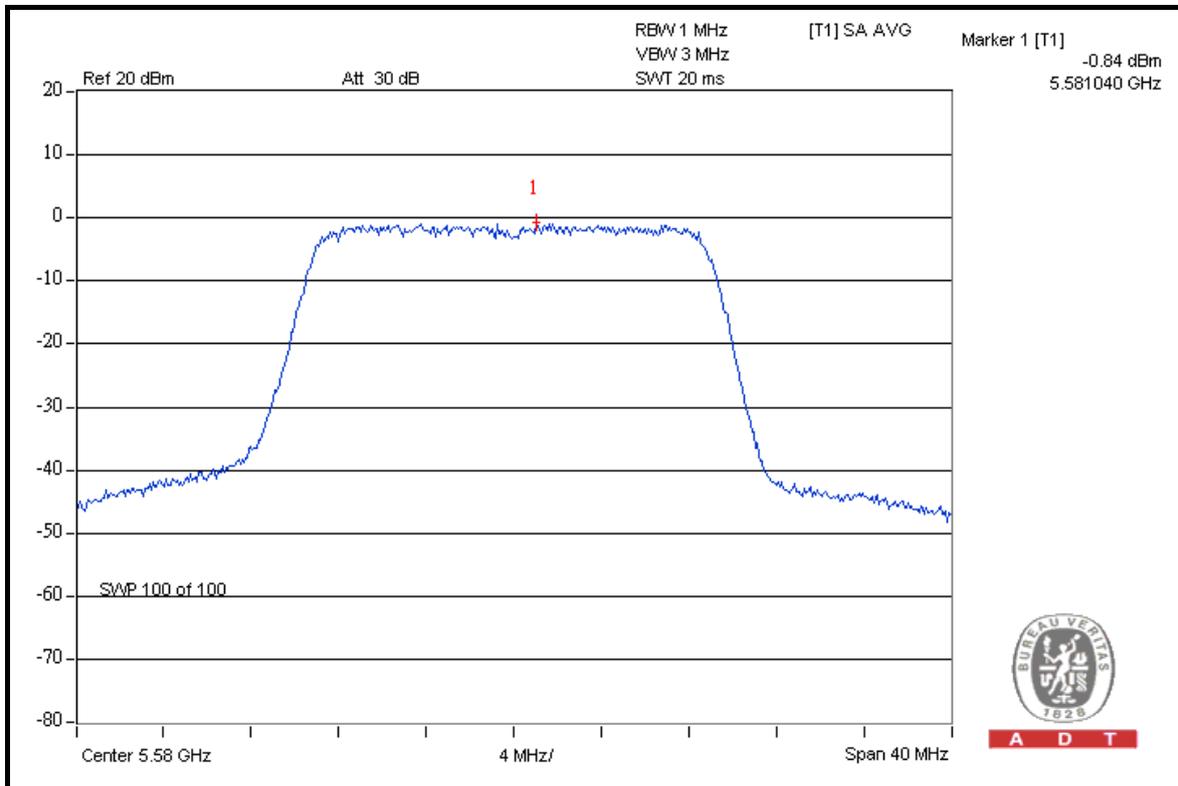
A D T

CH 100



A D T

CH 116

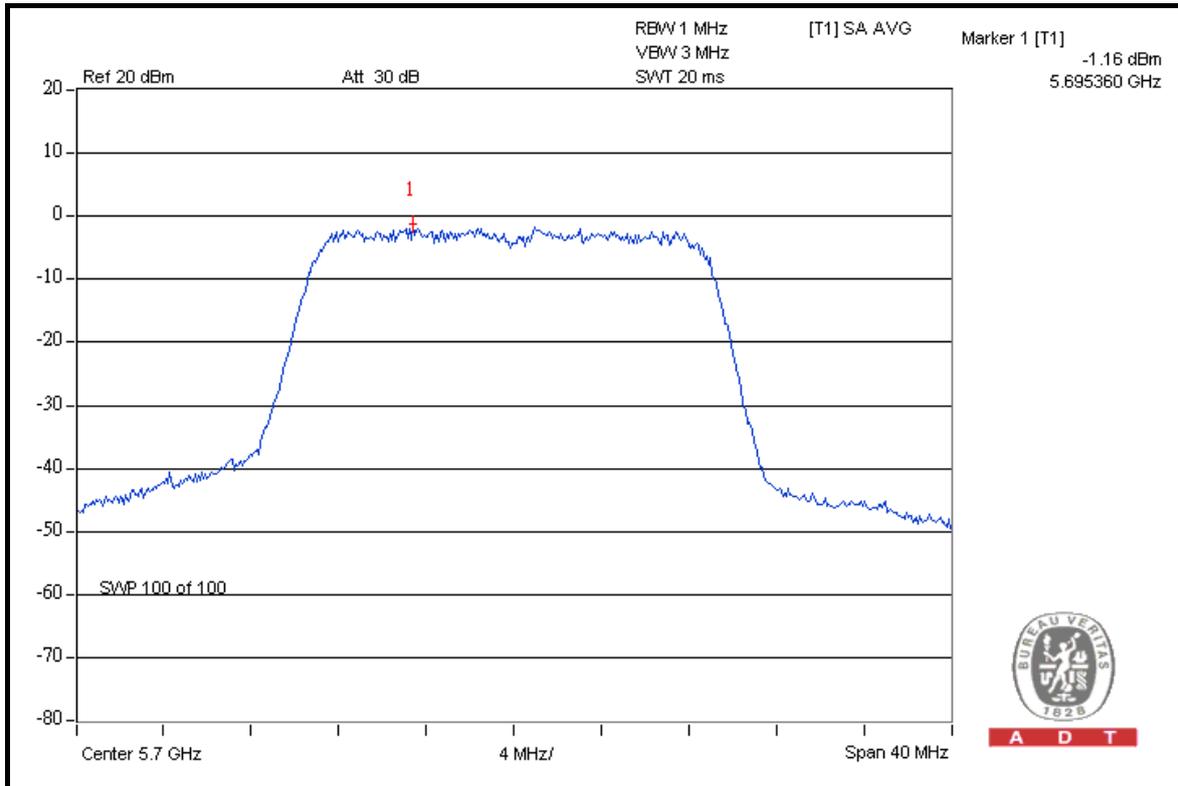


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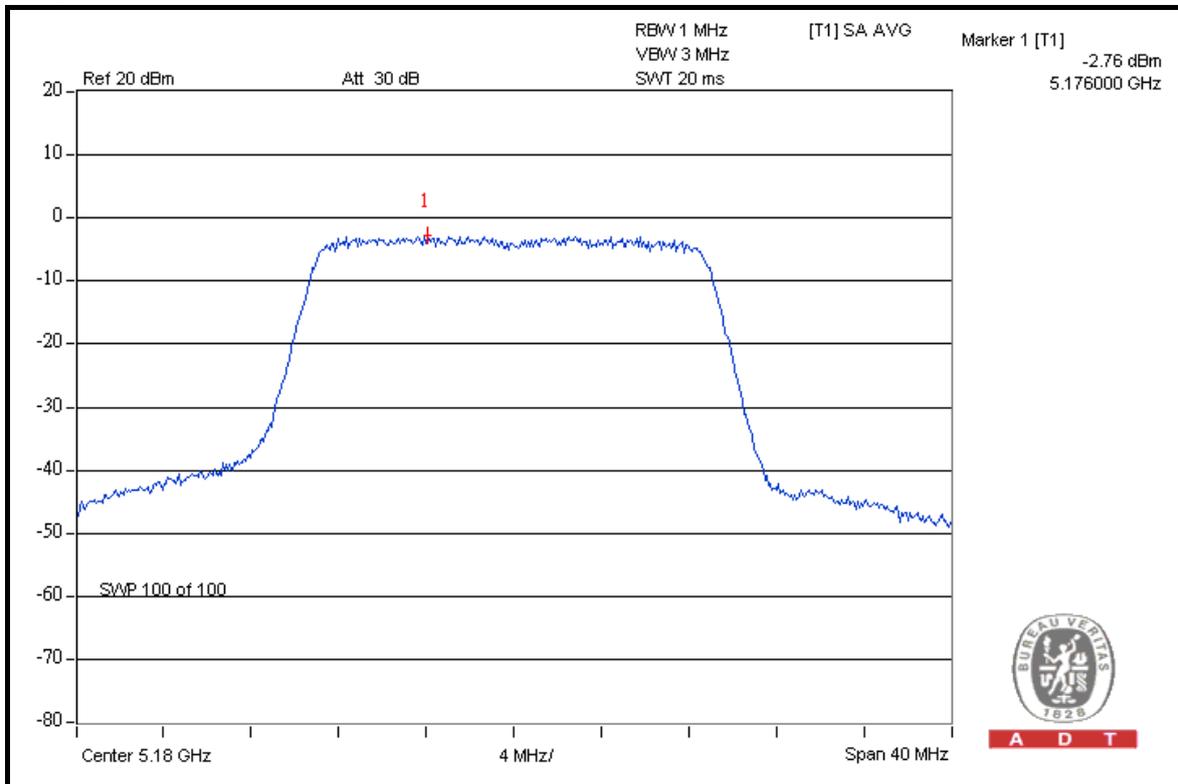


A D T

CH 140



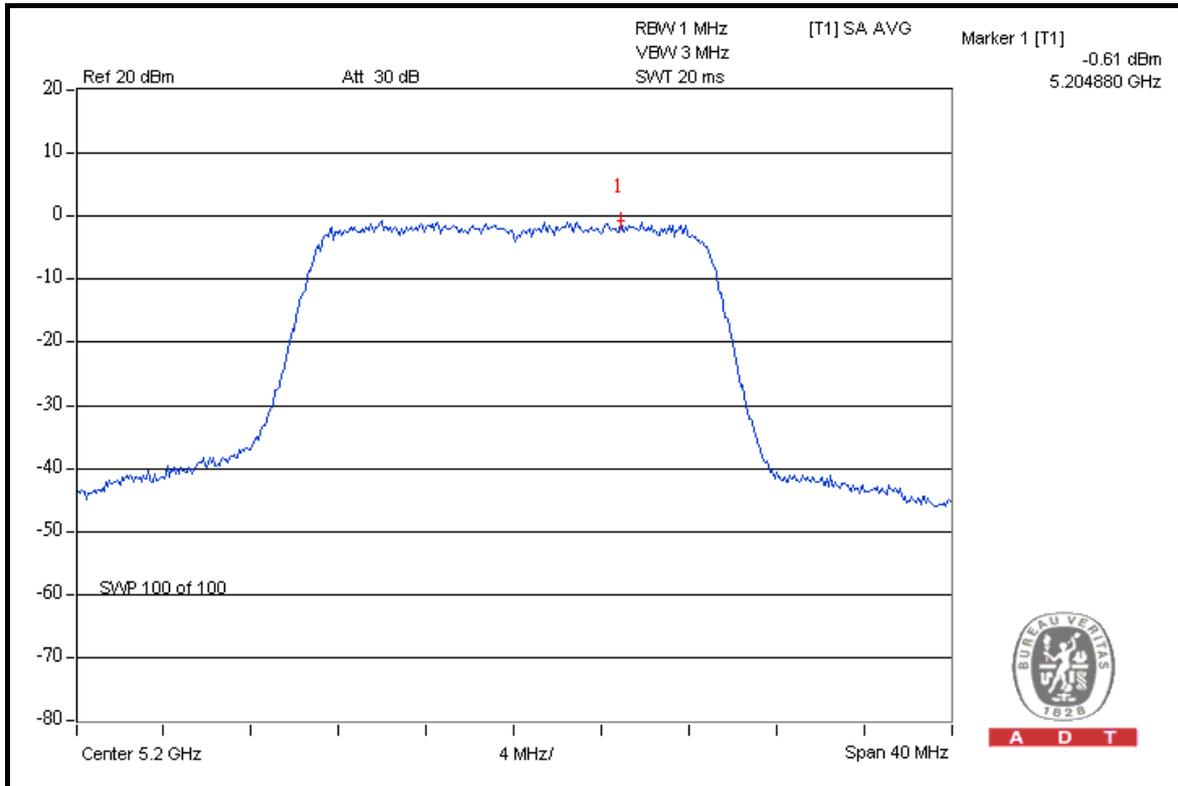
CHAIN 1: CH 36





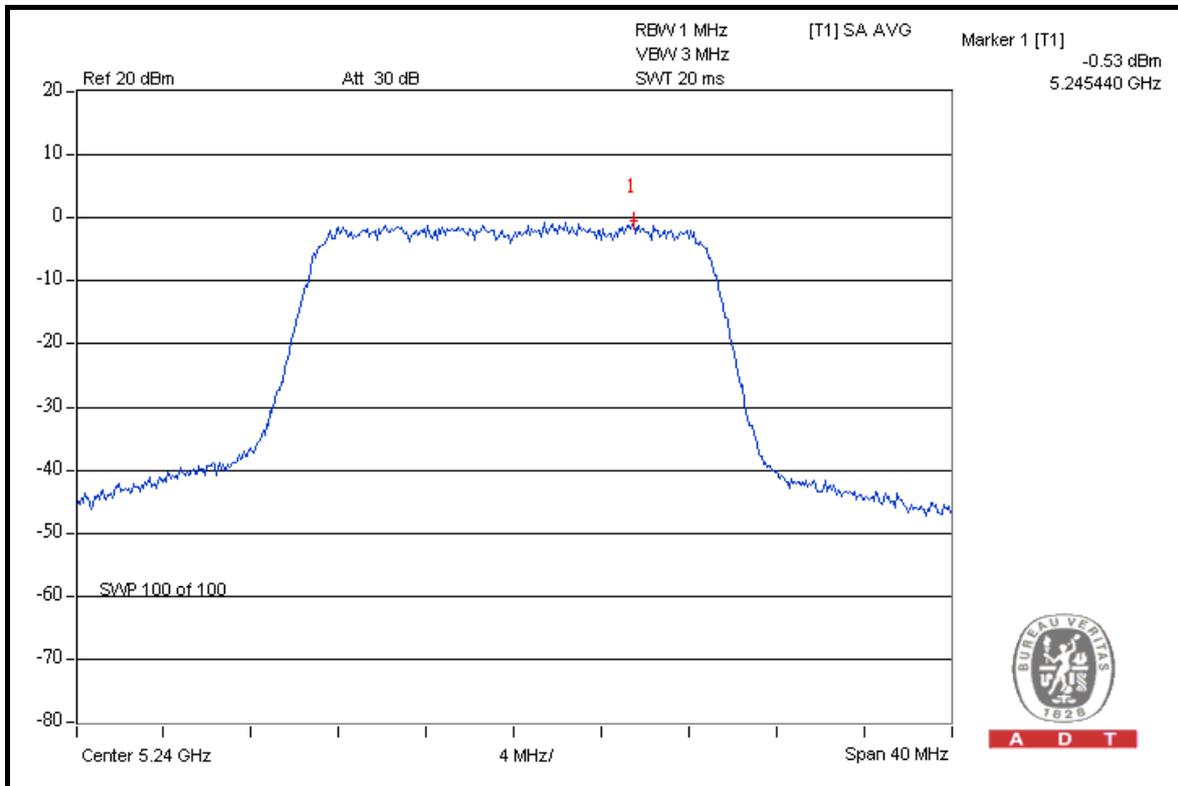
A D T

CH 40



A D T

CH 48

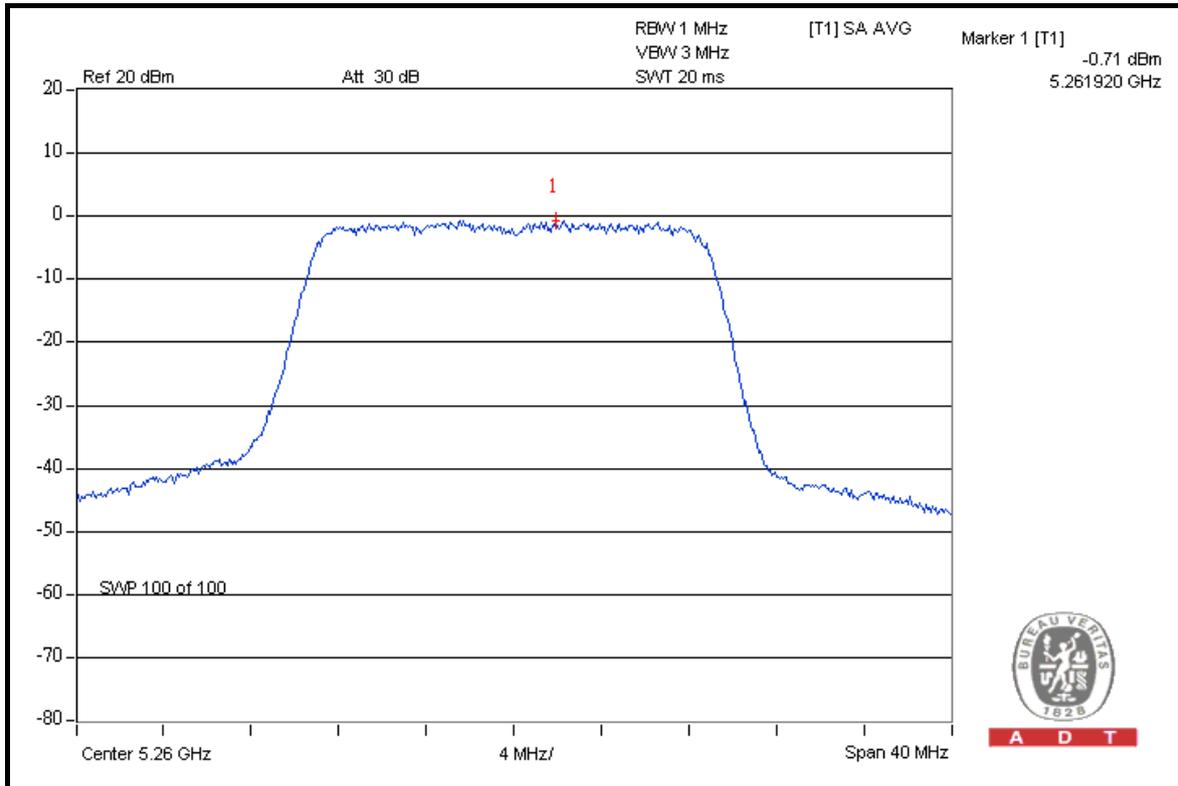


A D T

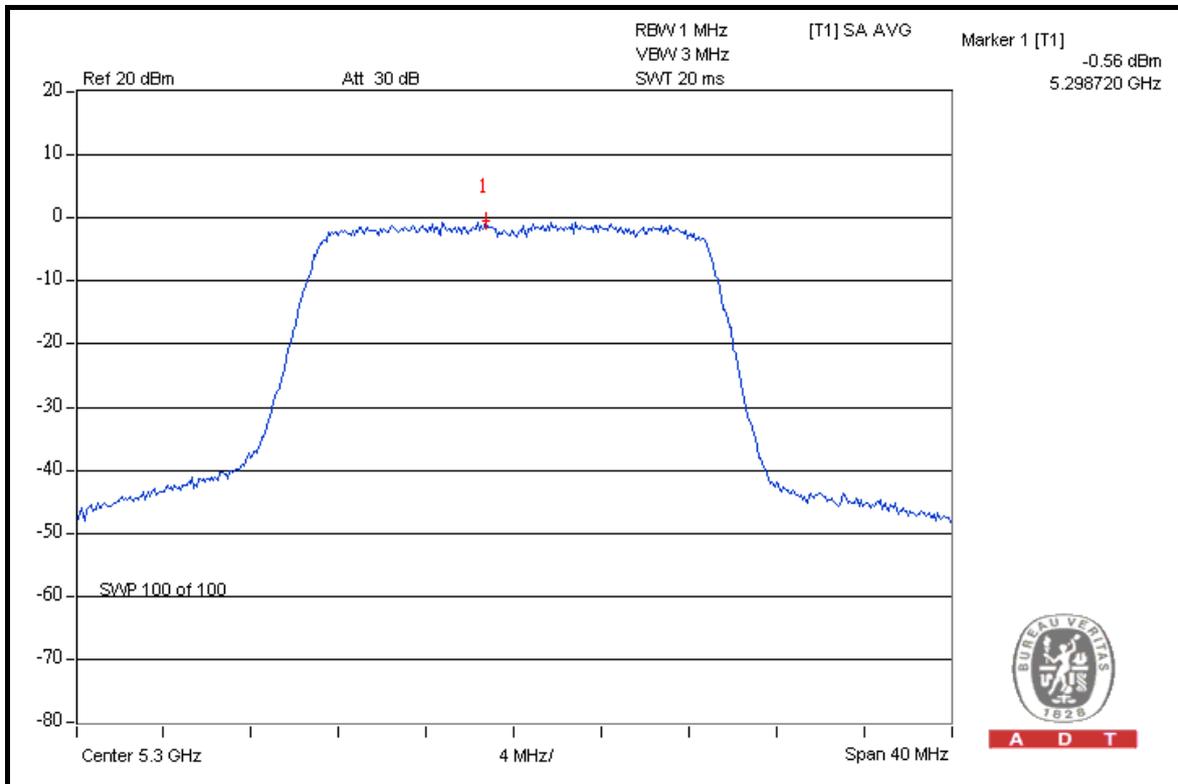


A D T

CH 52



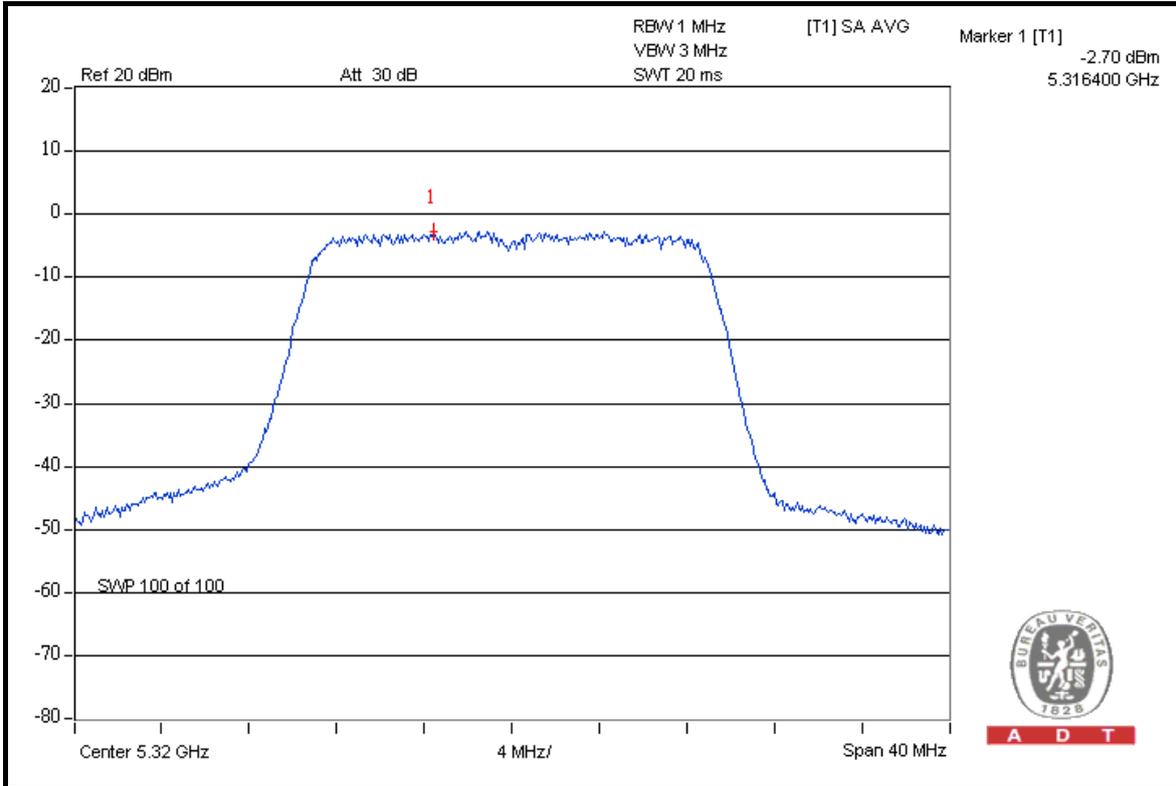
CH 60





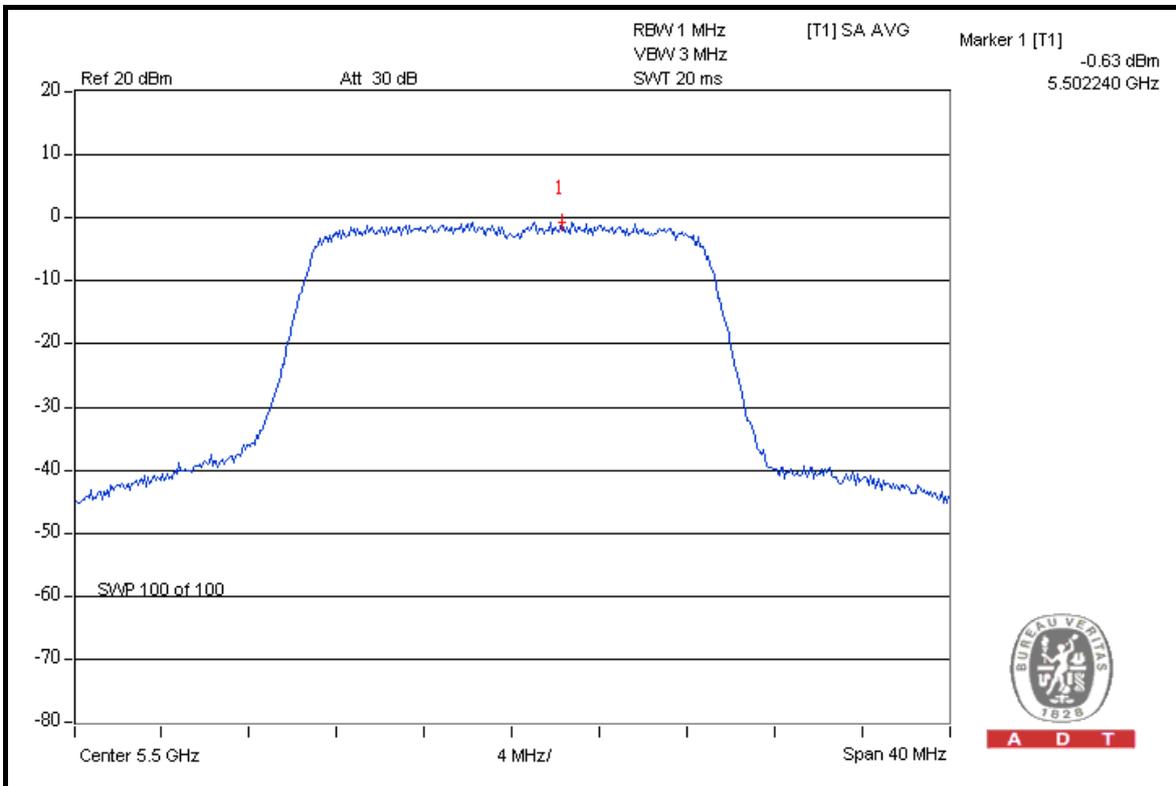
A D T

CH 64



A D T

CH 100

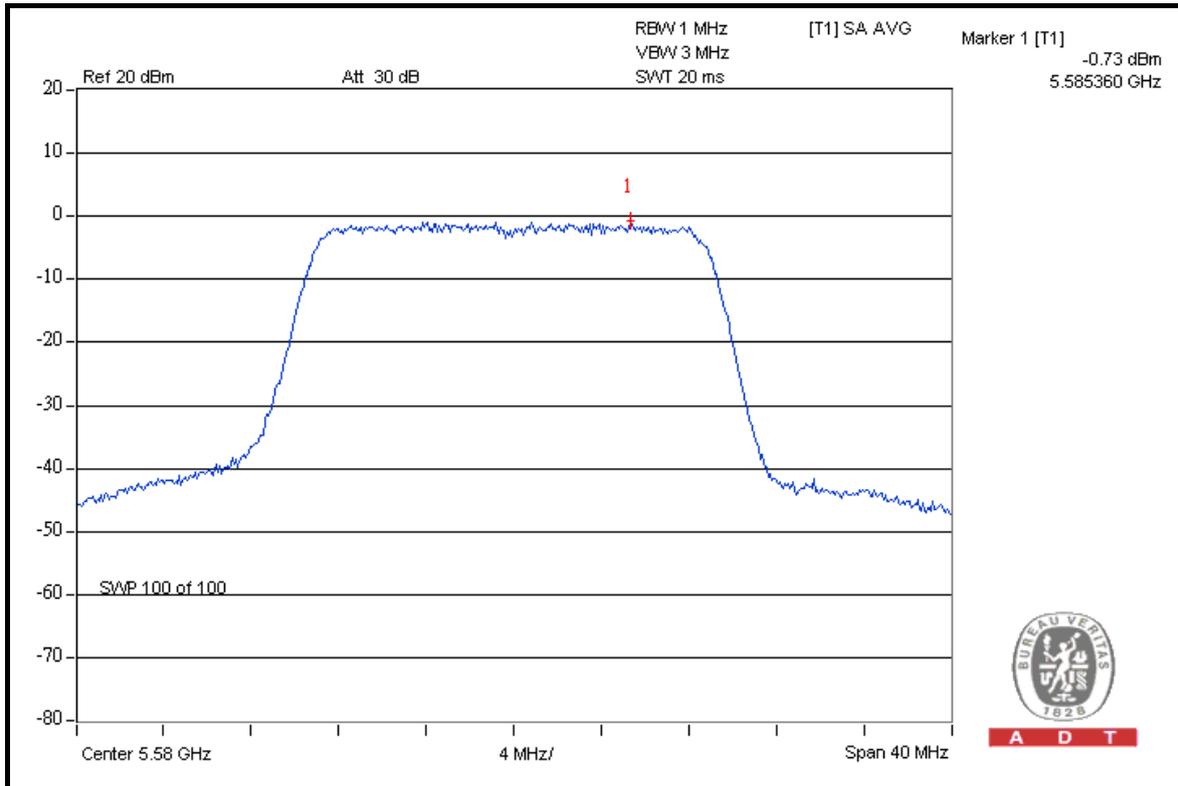


A D T

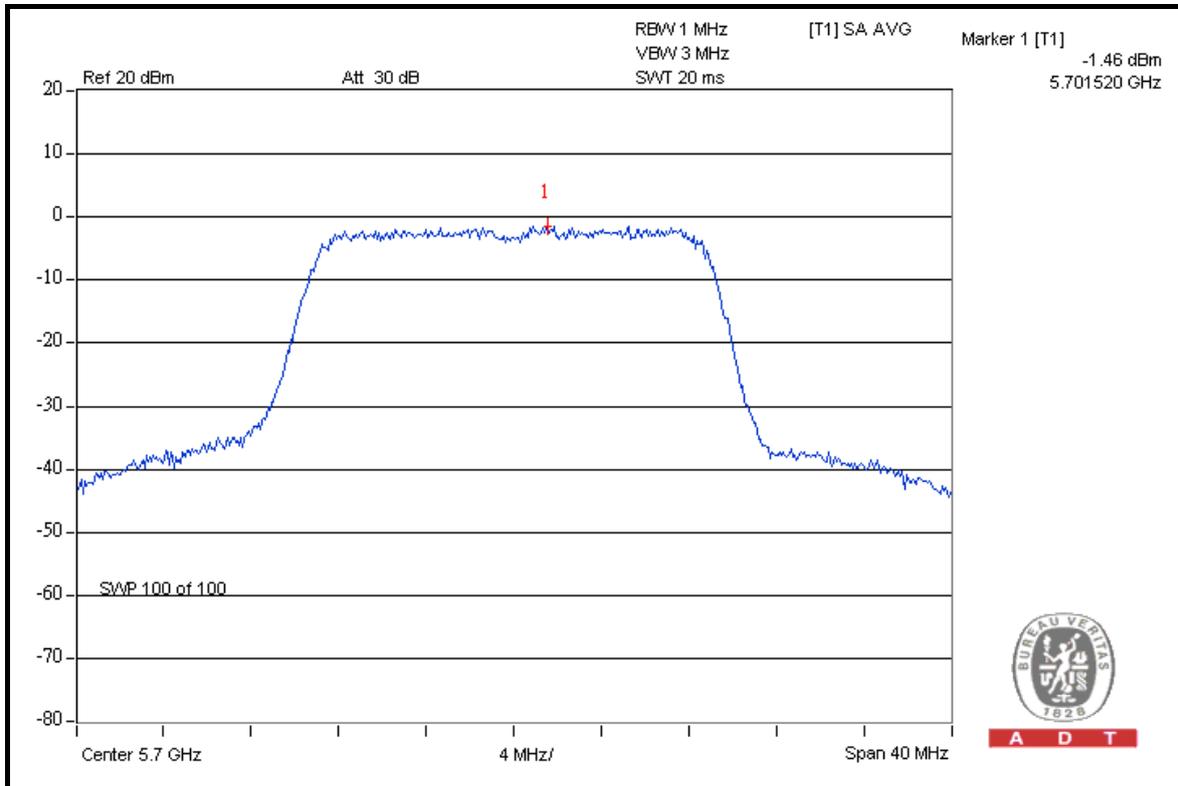


A D T

CH 116



CH 140





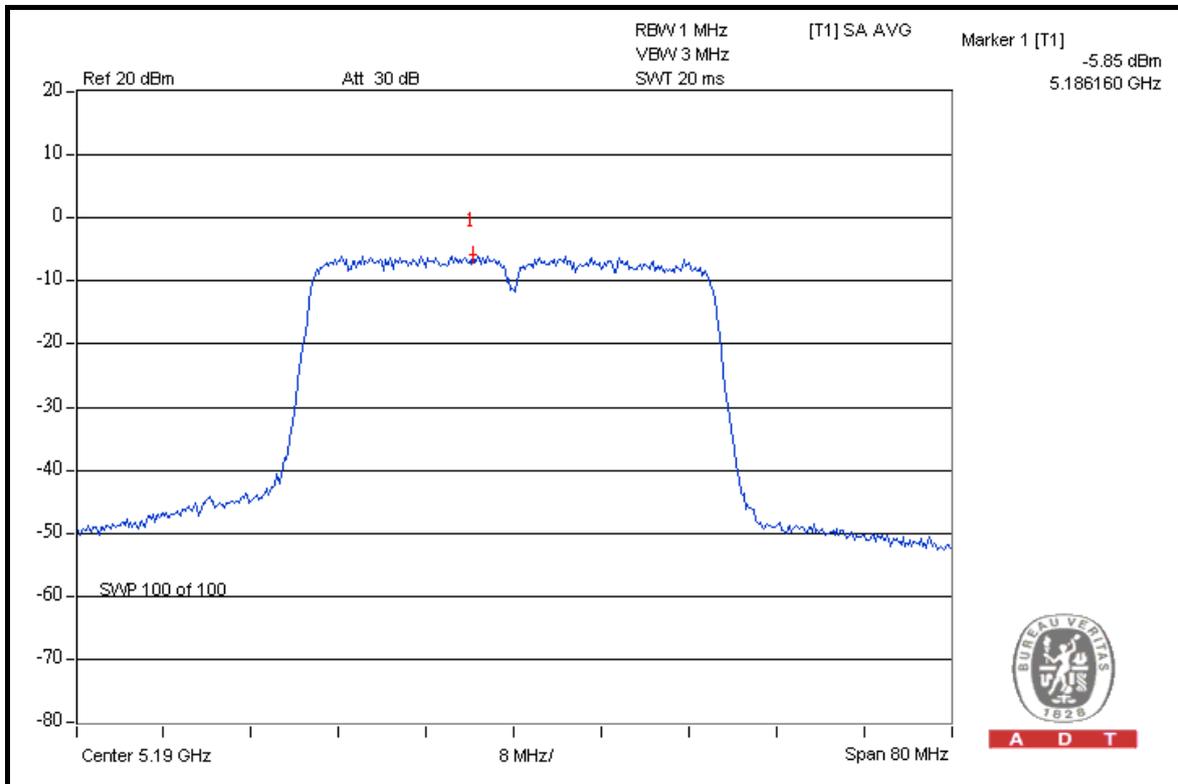
A D T

DRAFT 802.11n (40MHz) OFDM MODULATION: 1TX

MODULATION TYPE	BPSK	TRANSFER RATE	15.0Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	25deg.C, 65%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
38	5190	-5.85	4	PASS
46	5230	-3.61	4	PASS
54	5270	-3.70	11	PASS
62	5310	-5.71	11	PASS
102	5510	-3.68	11	PASS
110	5550	-3.61	11	PASS
134	5670	-3.67	11	PASS

CH 38

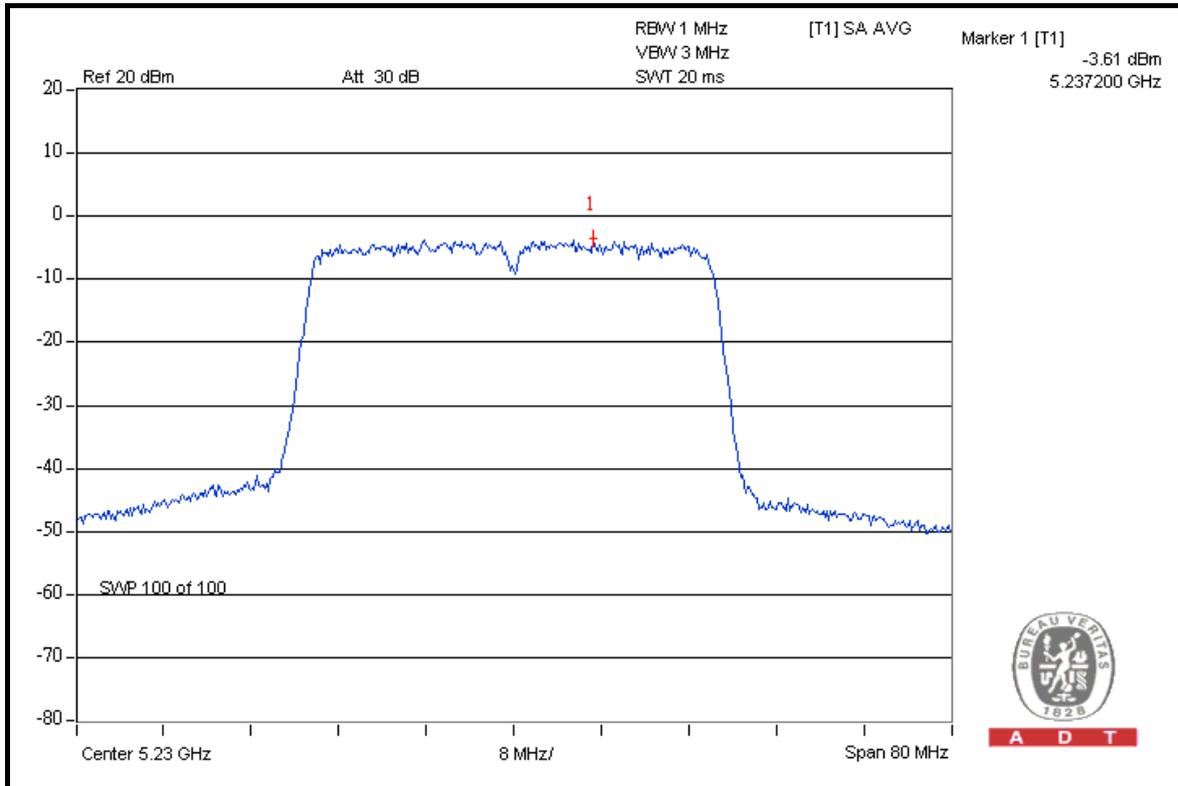


A D T

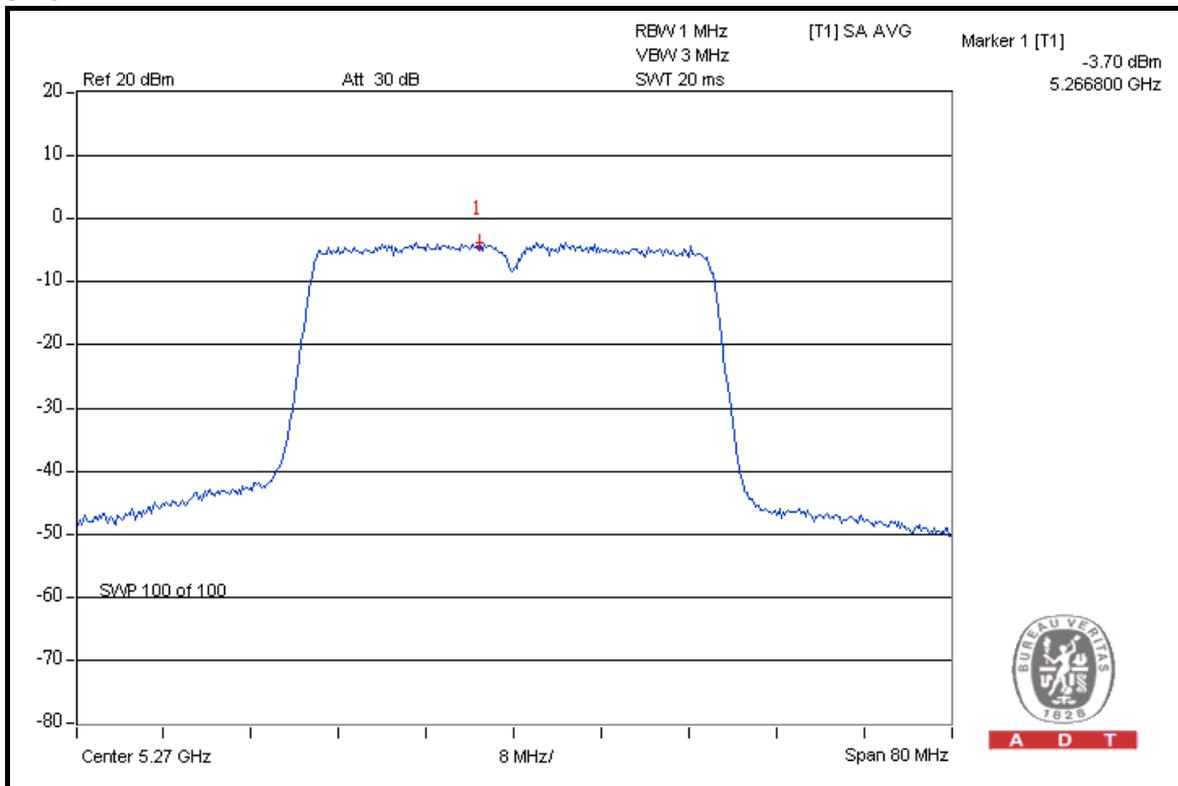


A D T

CH 46



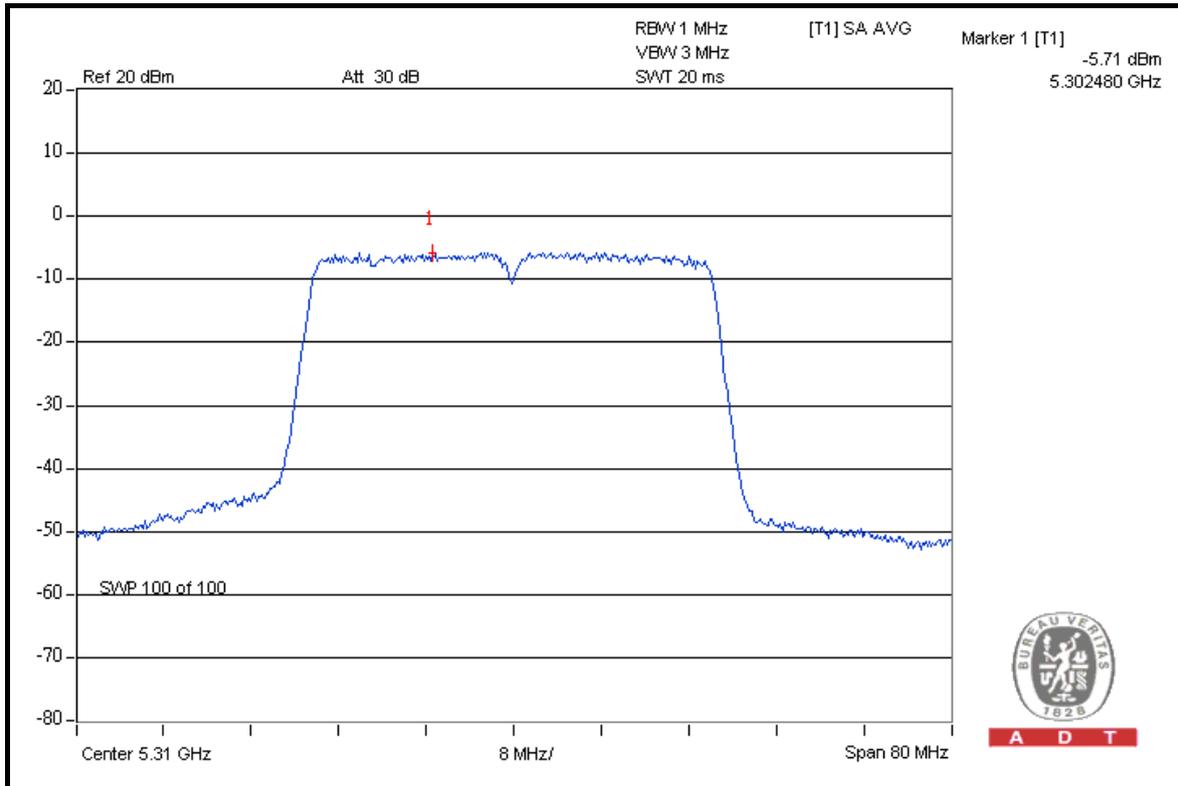
CH 54



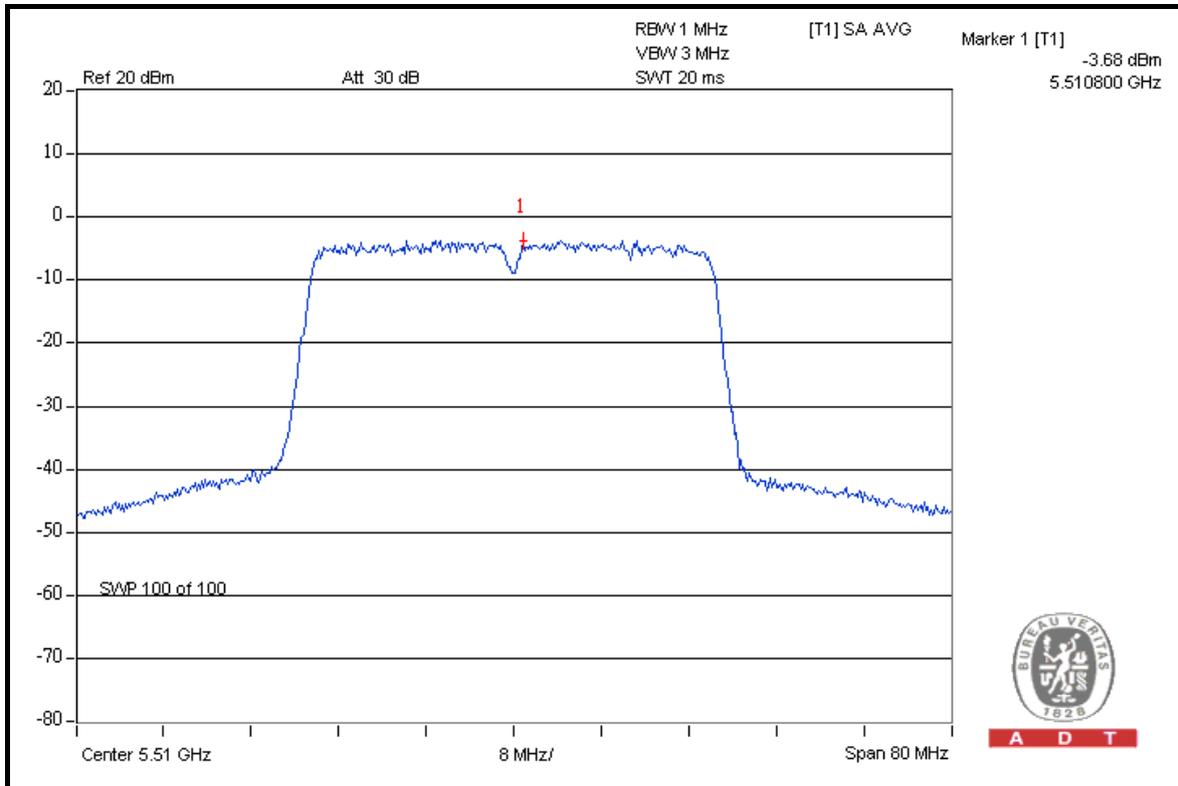


A D T

CH 62



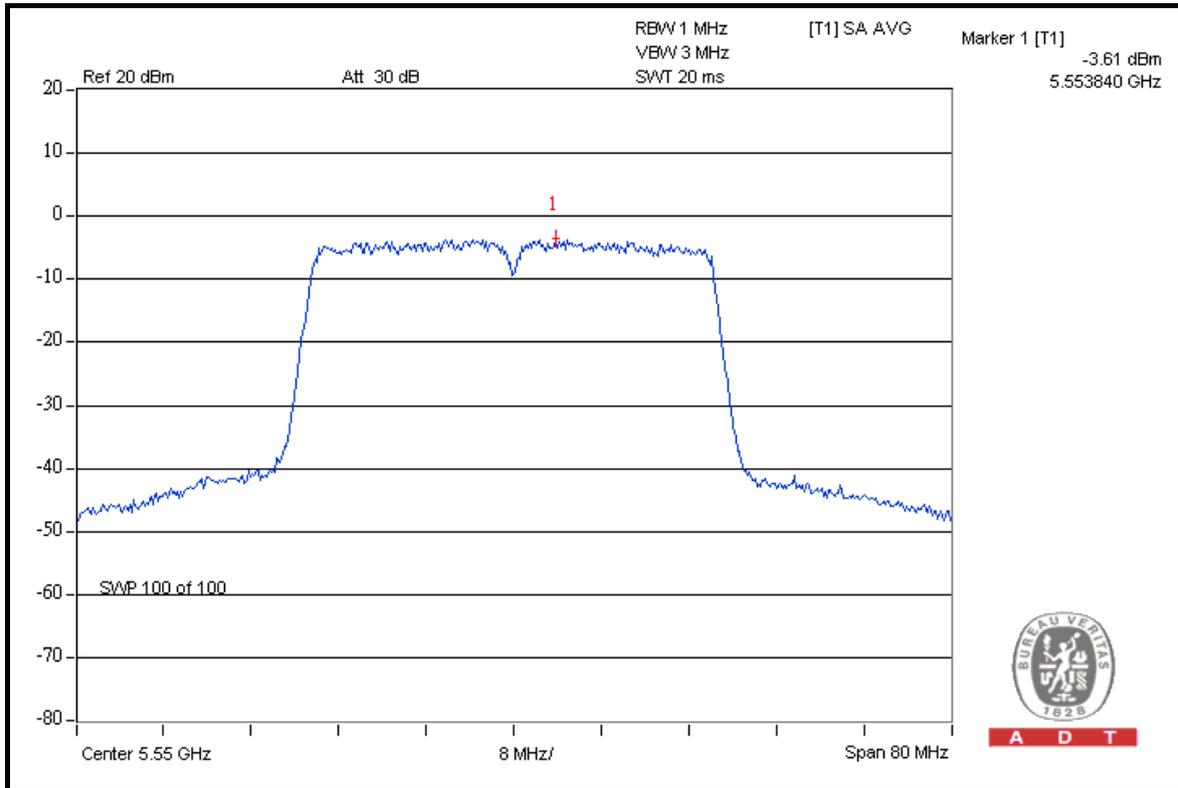
CH 102





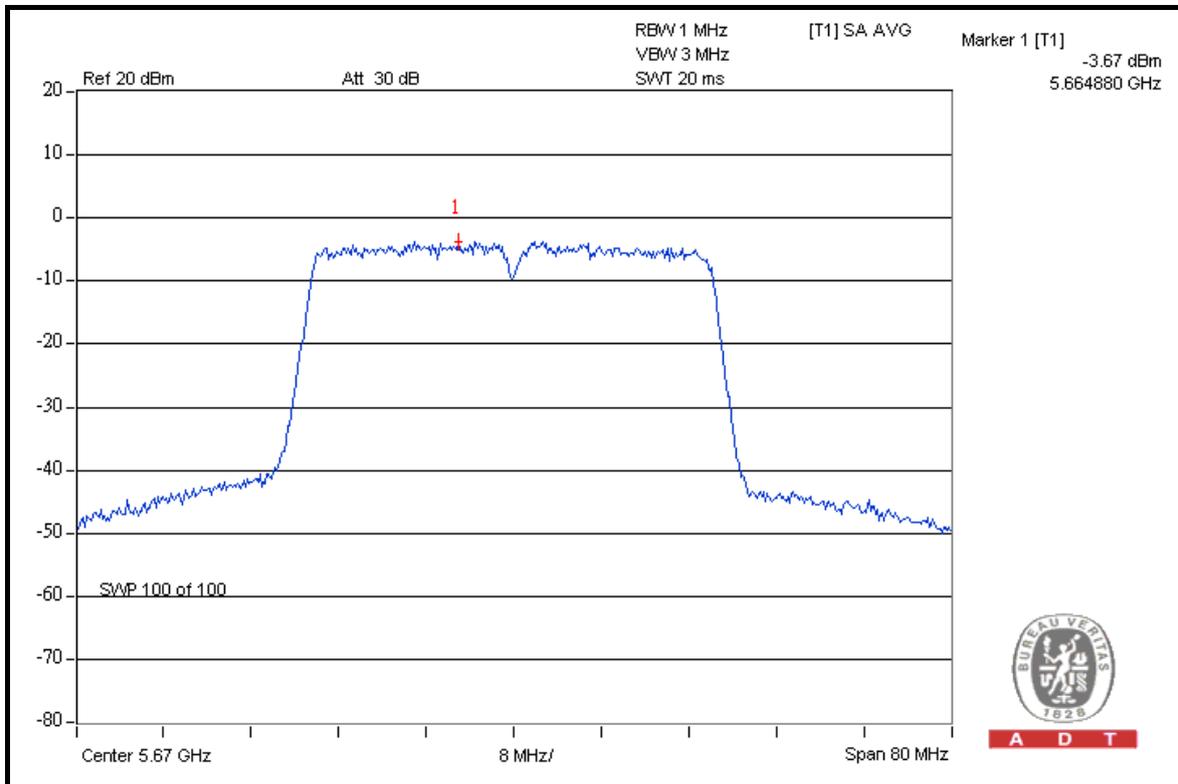
A D T

CH 110



A D T

CH 134



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DRAFT 802.11n (40MHz) OFDM MODULATION: 2TX

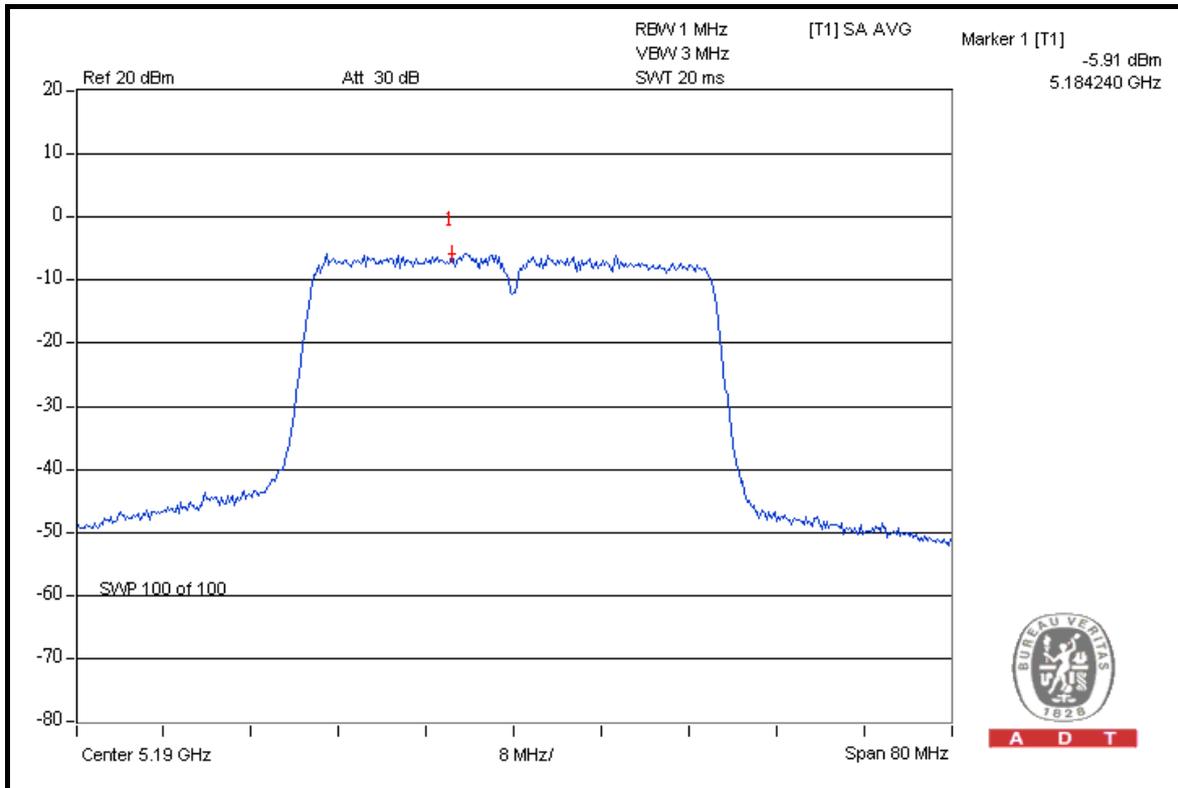
MODULATION TYPE	BPSK	TRANSFER RATE	30.0Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 64%RH, 991hPa
TESTED BY	Match Tsui		

CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)		TOTAL POWER DENSITY (mW)	TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
38	5190	-5.91	-5.73	0.524	-2.81	4	PASS
46	5230	-3.76	-3.56	0.861	-0.65	4	PASS
54	5270	-3.72	-3.93	0.829	-0.81	11	PASS
62	5310	-5.75	-5.93	0.521	-2.83	11	PASS
102	5510	-3.73	-3.75	0.845	-0.73	11	PASS
110	5550	-4.02	-3.81	0.812	-0.90	11	PASS
134	5670	-3.67	-3.69	0.857	-0.67	11	PASS

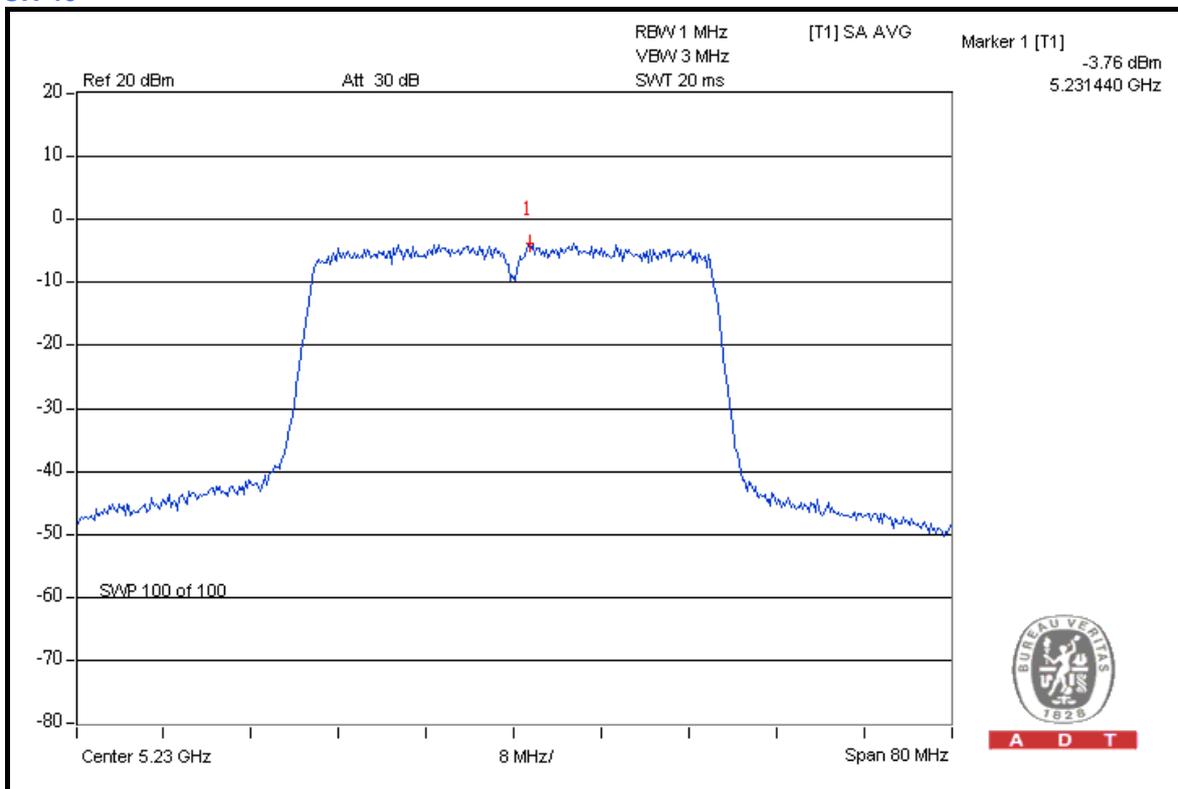


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CHAIN 0: CH 38



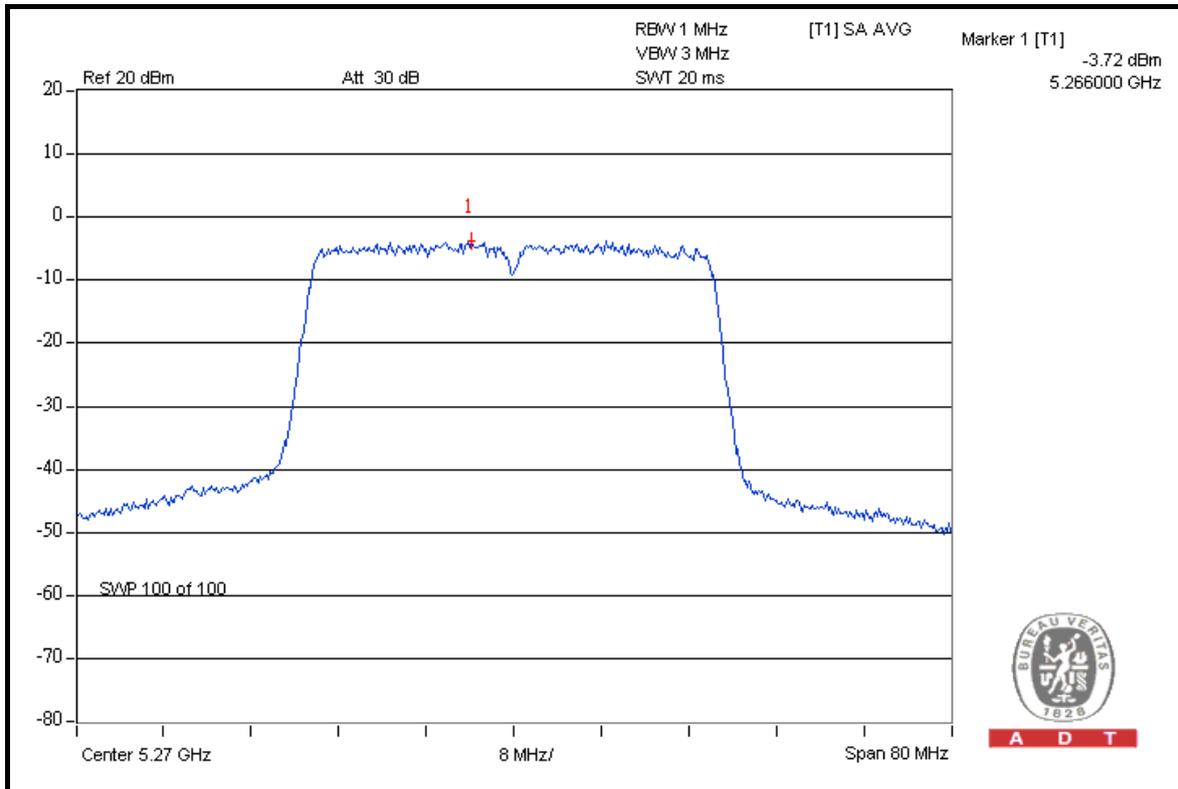
CH 46





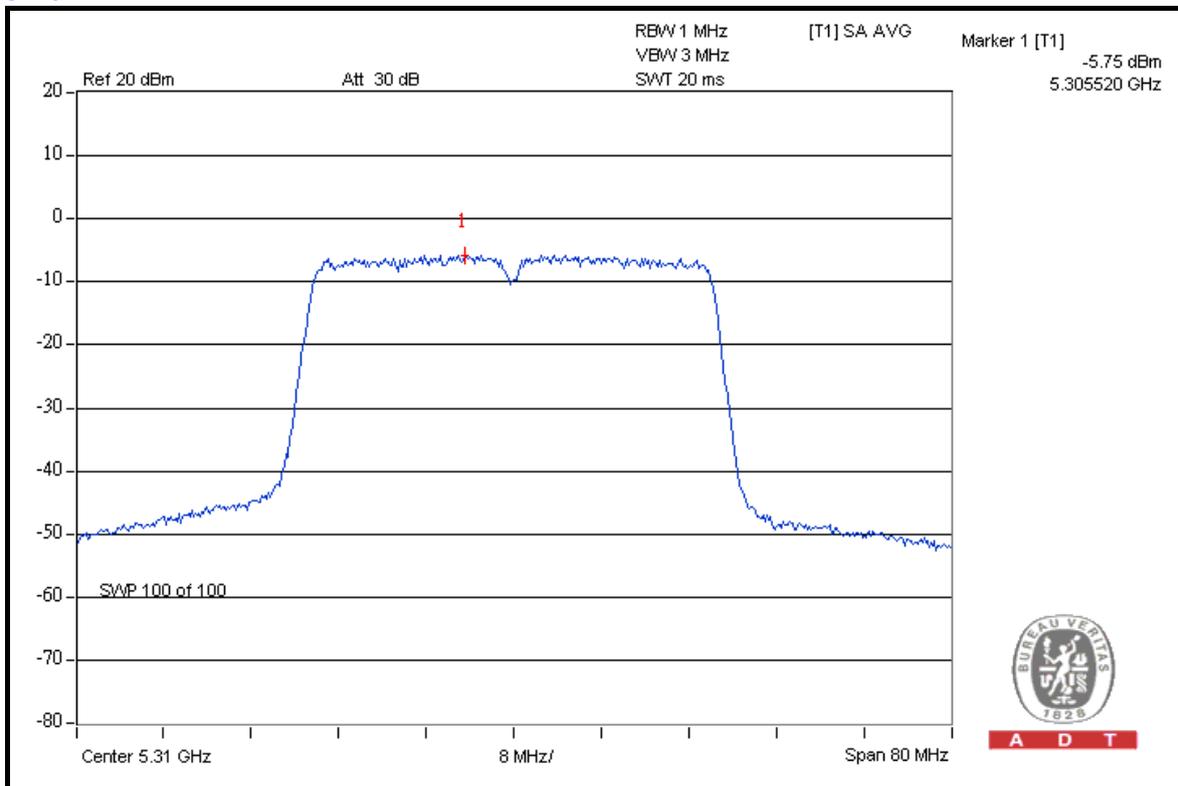
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CH 54



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CH 62

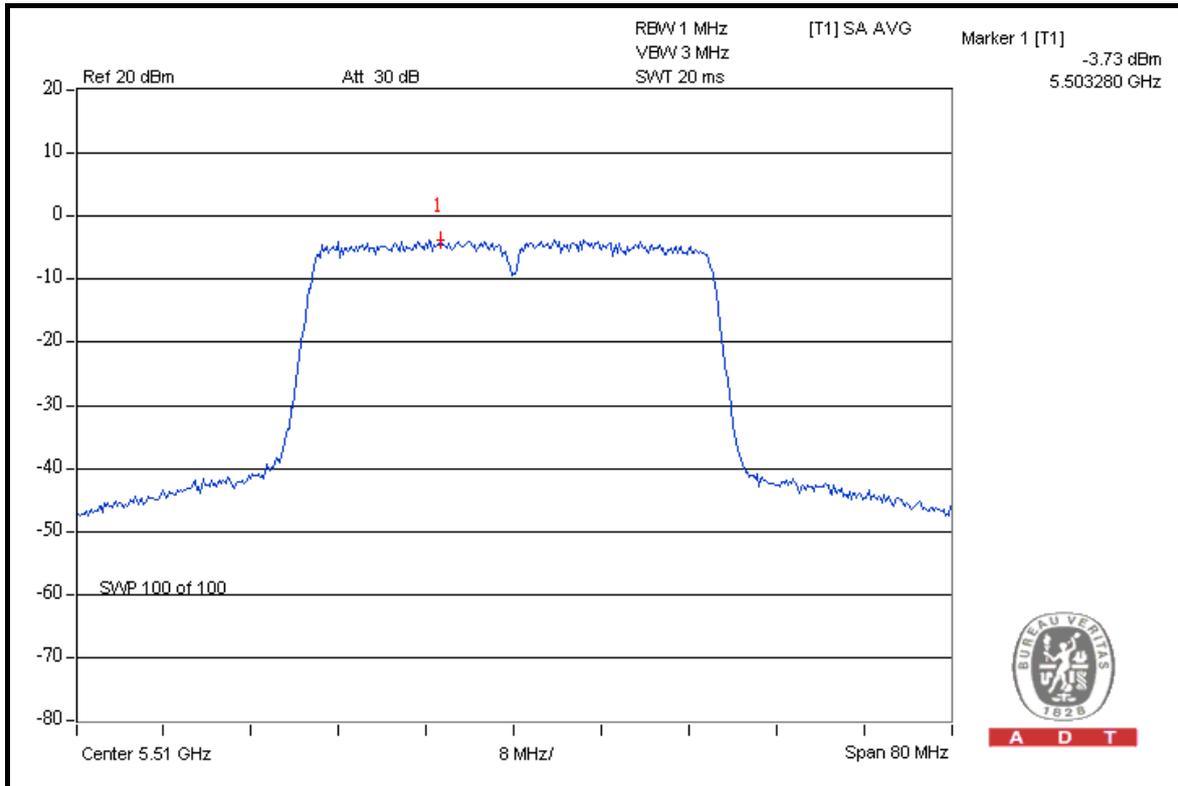


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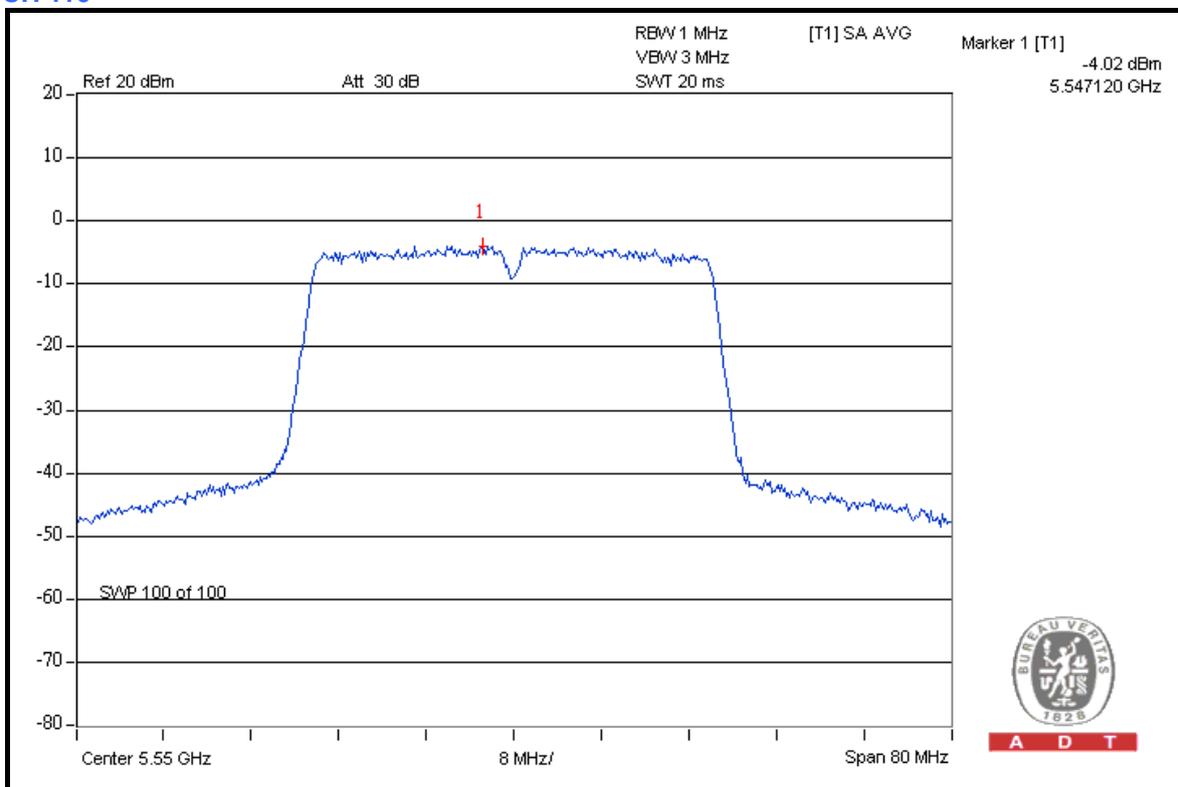
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CH 102



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CH 110

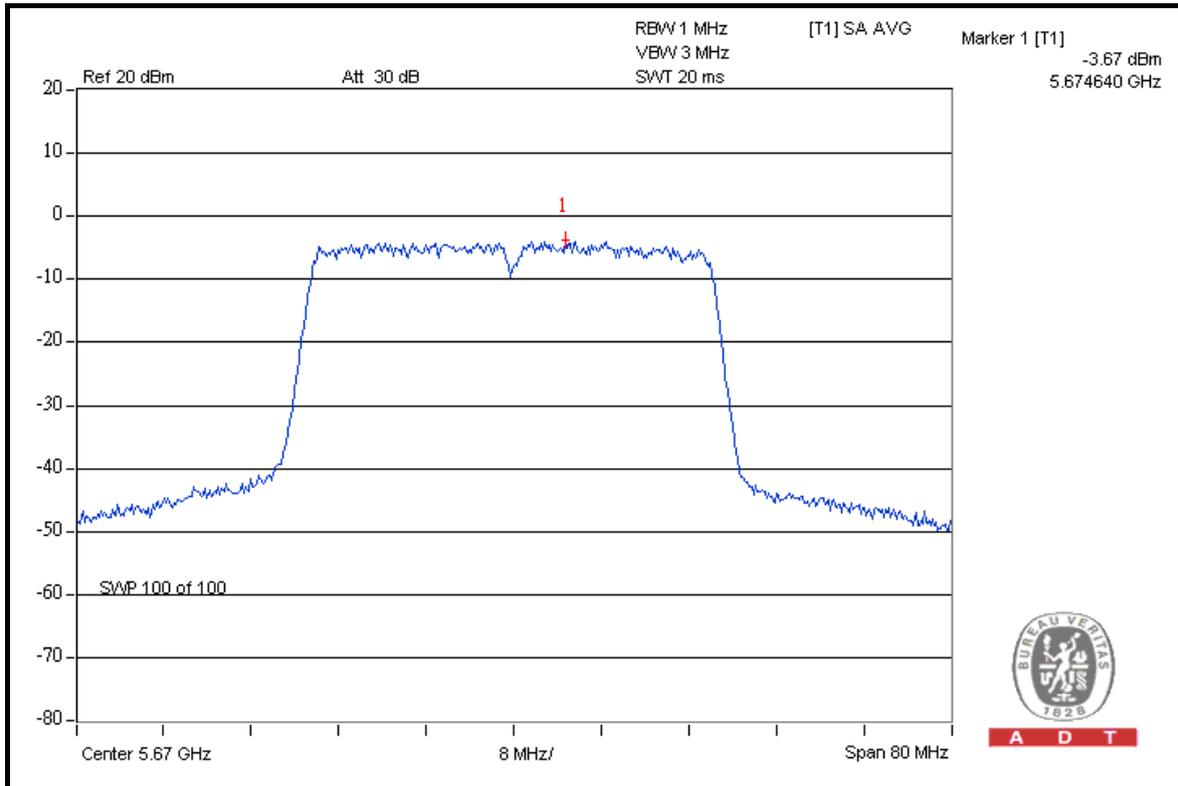


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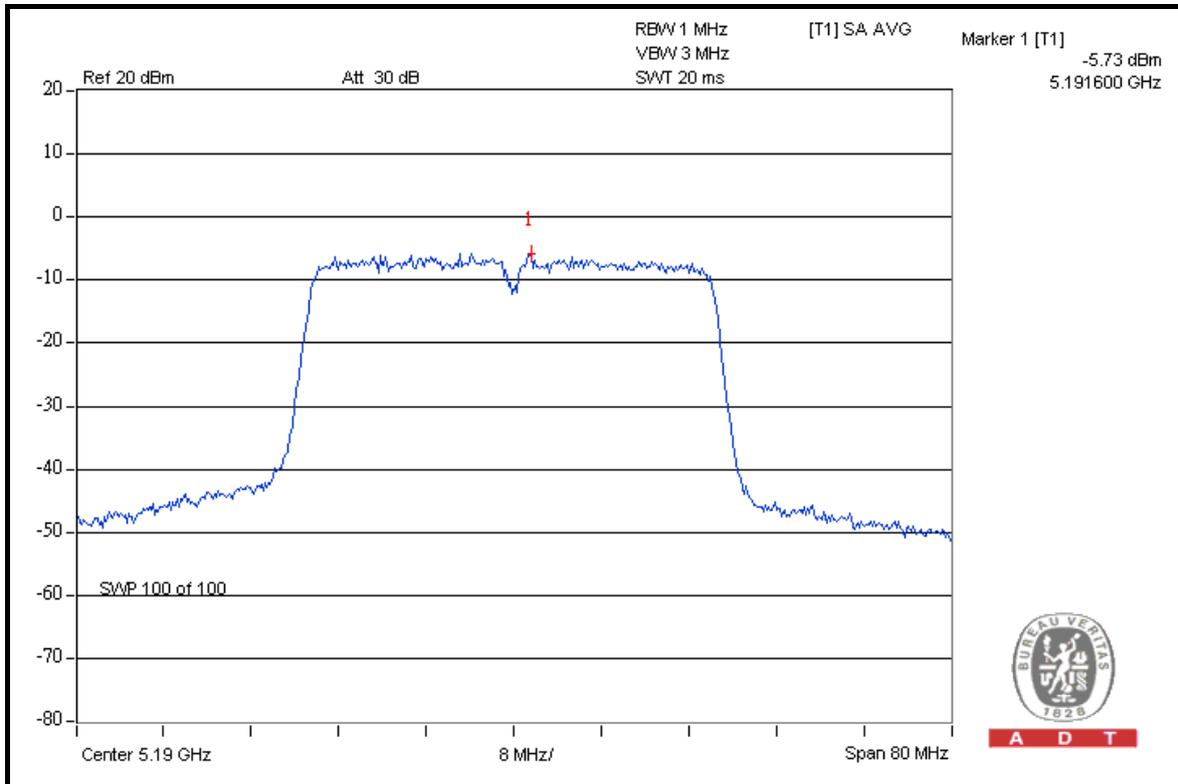


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CH 134



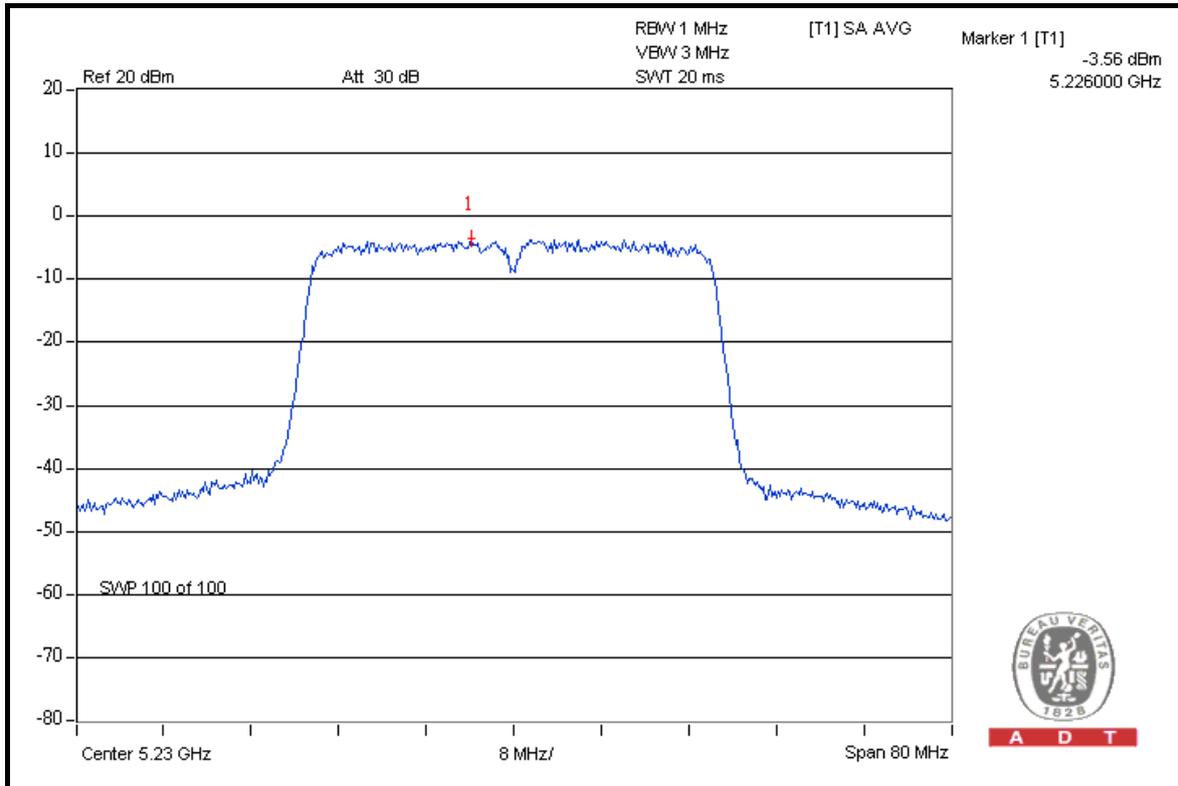
CHAIN 1: CH 38



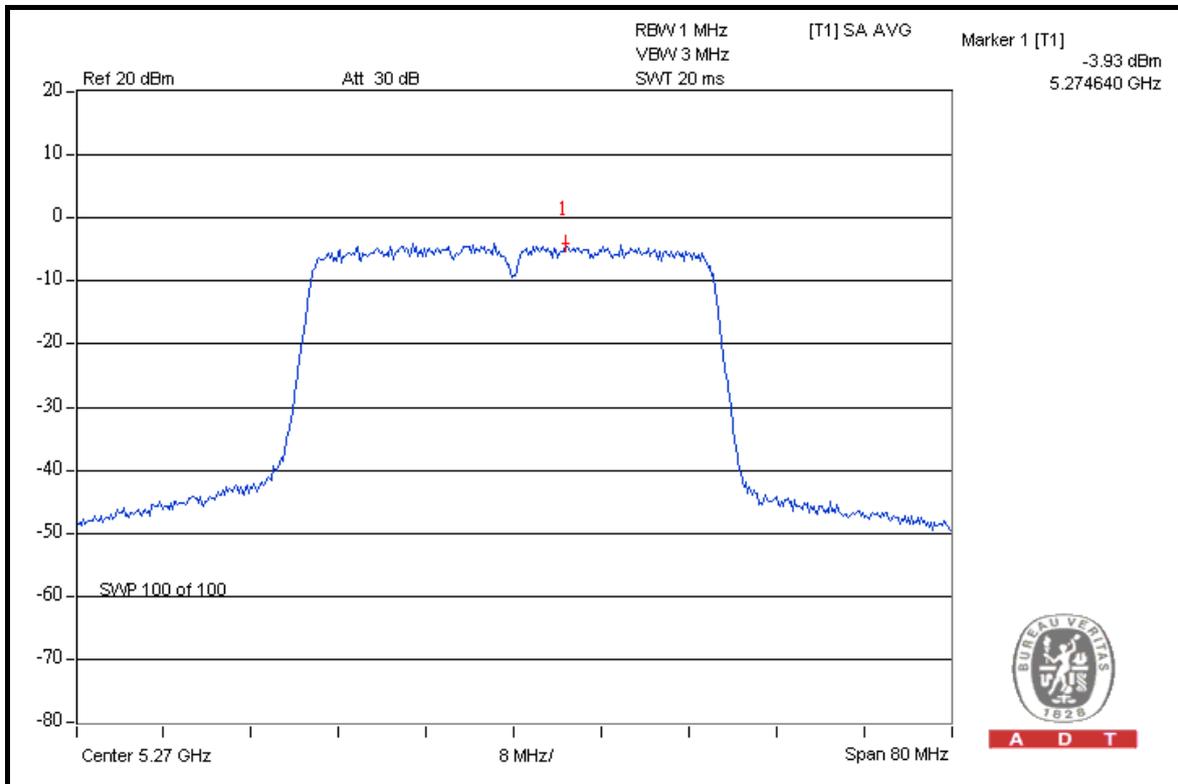


A D T

CH 46



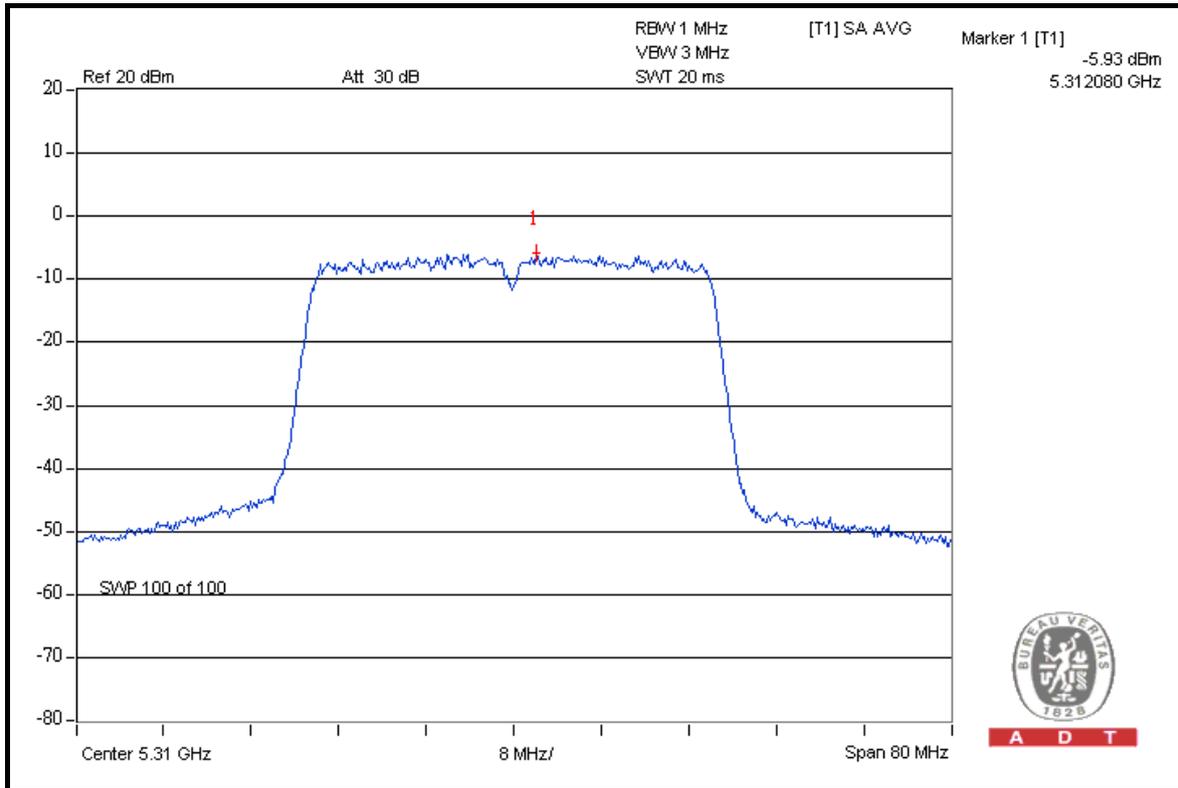
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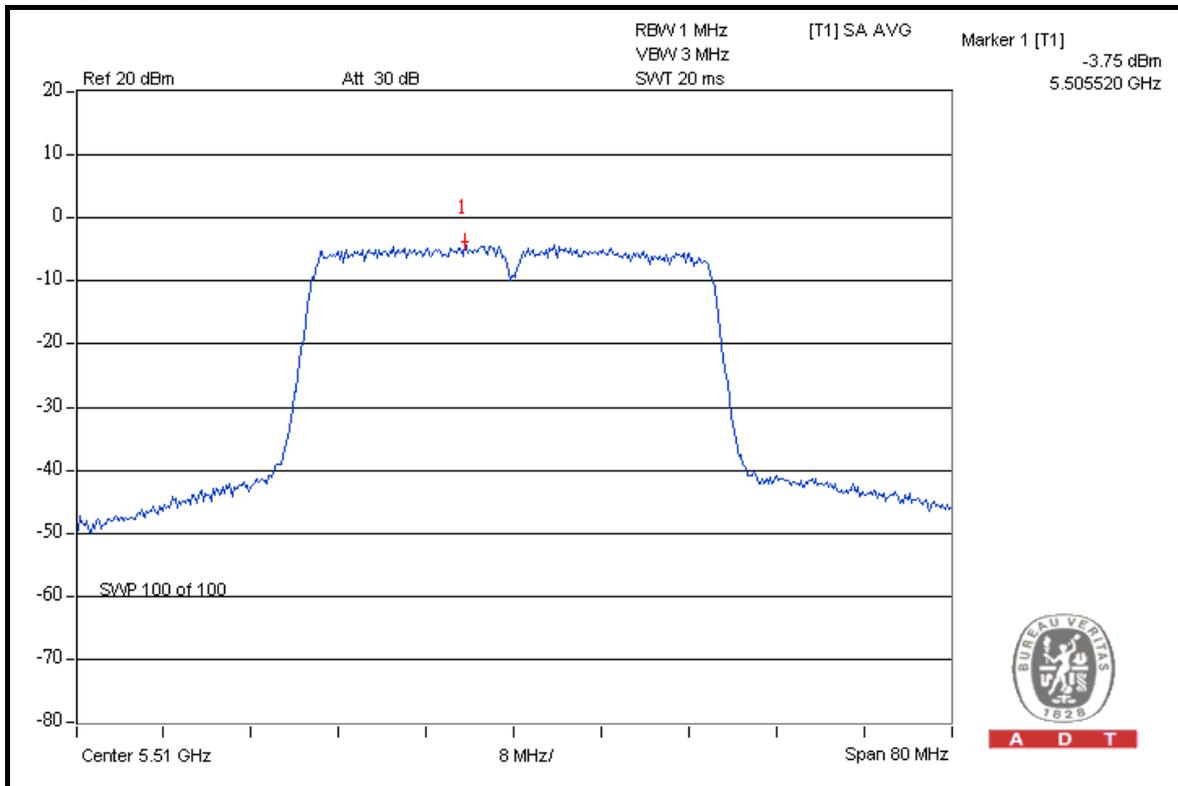


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CH 62



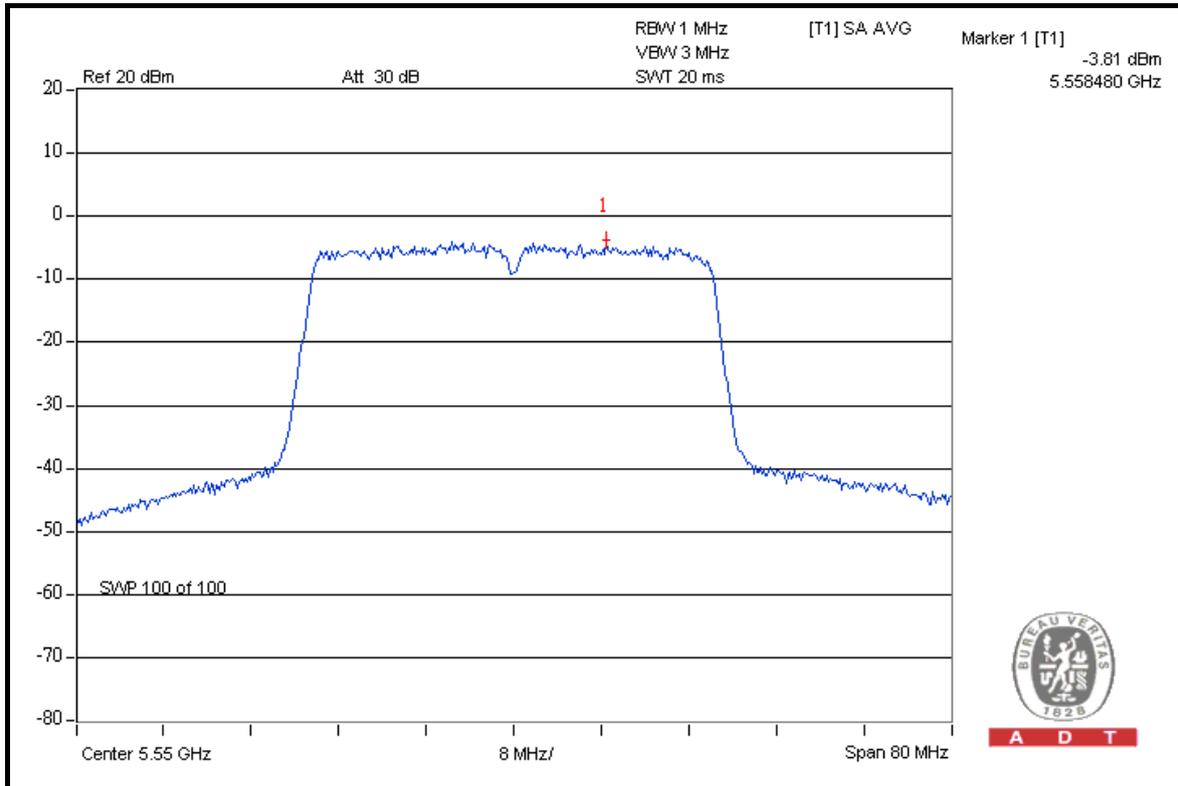
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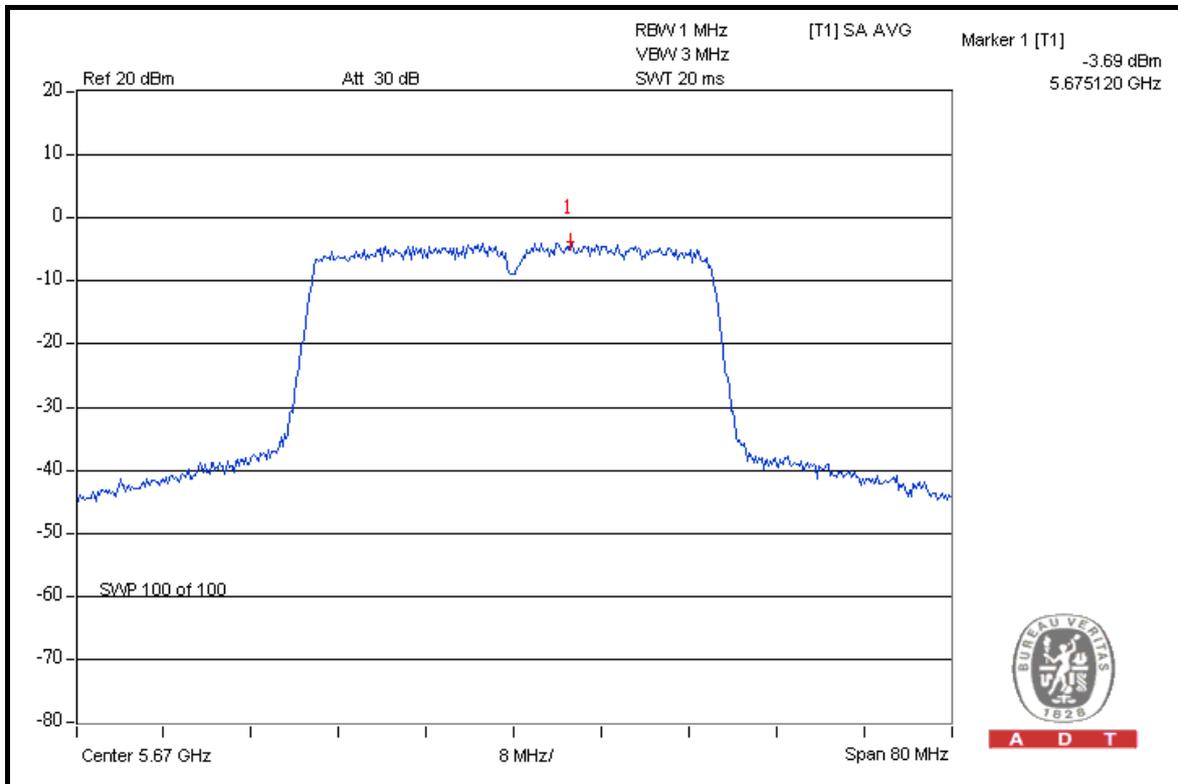


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CH 110



CH 134



4.6 FREQUENCY STABILITY

4.6.1 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.

4.6.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
R&S SPECTRUM ANALYZER	FSP40	100041	Apr. 22, 2008	Apr. 21, 2009
WIT STANDARD TEMPERATURE AND HUMIDITY CHAMBER	TH-4S-C	W981030	Jun. 26, 2008	Jun. 25, 2009

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

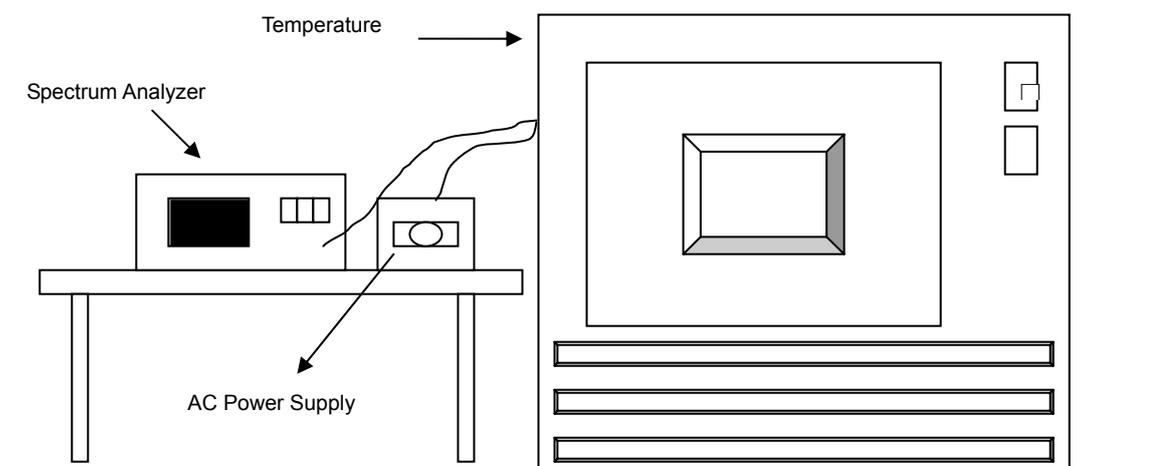
4.6.3 TEST PROCEDURE

- a. The EUT was placed inside the environmental test chamber and powered by nominal DC voltage.
- b. Turn the EUT on and couple its output to a spectrum analyzer.
- c. Turn the EUT off and set the chamber to the highest temperature specified.
- d. 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.
- e. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
- f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

4.6.4 DEVIATION FROM TEST STANDARD

No deviation

4.6.5 TEST SETUP



4.6.6 EUT OPERATING CONDITION

Same as Item 4.1.6

4.6.7 TEST RESULTS

OPERATING FREQUENCY: 5320MHz						LIMIT: ± 0.01%			
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		(MHz)	(%)	(MHz)	(%)	(MHz)	(%)	(MHz)	(%)
50	5.75	5319.998963	-0.0000195	5319.999067	-0.0000175	5319.999167	-0.0000157	5319.999321	-0.0000128
	5.00	5319.983550	-0.0003092	5319.983859	-0.0003034	5319.983686	-0.0003067	5319.983772	-0.0003050
	4.25	5319.986830	-0.0002476	5319.987107	-0.0002423	5319.986873	-0.0002467	5319.986894	-0.0002464
40	5.75	5319.979161	-0.0003917	5319.979014	-0.0003945	5319.978721	-0.0004000	5319.978790	-0.0003987
	5.00	5319.985052	-0.0002810	5319.985333	-0.0002757	5319.985304	-0.0002762	5319.985294	-0.0002764
	4.25	5319.996772	-0.0000607	5319.997005	-0.0000563	5319.996992	-0.0000565	5319.997008	-0.0000562
30	5.75	5319.979826	-0.0003792	5319.979871	-0.0003784	5319.980043	-0.0003751	5319.980089	-0.0003743
	5.00	5319.986193	-0.0002595	5319.986145	-0.0002604	5319.986151	-0.0002603	5319.986200	-0.0002594
	4.25	5320.004263	0.0000801	5320.004267	0.0000802	5320.004328	0.0000814	5320.004036	0.0000759
20	5.75	5319.986965	-0.0002450	5319.986976	-0.0002448	5319.986964	-0.0002450	5319.986676	-0.0002505
	5.00	5319.987158	-0.0002414	5319.987206	-0.0002405	5319.987212	-0.0002404	5319.987230	-0.0002400
	4.25	5320.011358	0.0002135	5320.011572	0.0002175	5320.011481	0.0002158	5320.011465	0.0002155
10	5.75	5319.994494	-0.0001035	5319.994618	-0.0001012	5319.994760	-0.0000985	5319.994756	-0.0000986
	5.00	5320.002349	0.0000442	5320.002524	0.0000474	5320.002630	0.0000494	5320.002799	0.0000526
	4.25	5320.018196	0.0003420	5320.018021	0.0003387	5320.018084	0.0003399	5320.018042	0.0003391
0	5.75	5319.997662	-0.0000439	5319.997472	-0.0000475	5319.997561	-0.0000458	5319.997596	-0.0000452
	5.00	5320.010074	0.0001894	5320.010017	0.0001883	5320.009788	0.0001840	5320.009883	0.0001858
	4.25	5320.024159	0.0004541	5320.024230	0.0004555	5320.024243	0.0004557	5320.024267	0.0004561
-10	5.75	5320.010083	0.0001895	5320.009971	0.0001874	5320.009785	0.0001839	5320.009955	0.0001871
	5.00	5320.016661	0.0003132	5320.016454	0.0003093	5320.016206	0.0003046	5320.016147	0.0003035
	4.25	5320.030976	0.0005823	5320.030861	0.0005801	5320.030592	0.0005750	5320.030623	0.0005756
-20	5.75	5320.015345	0.0002884	5320.015434	0.0002901	5320.015314	0.0002879	5320.015483	0.0002910
	5.00	5320.020288	0.0003814	5320.020293	0.0003814	5320.020518	0.0003857	5320.020371	0.0003829
	4.25	5320.035069	0.0006592	5320.035104	0.0006598	5320.035292	0.0006634	5320.035261	0.0006628
-30	5.75	5320.020842	0.0003918	5320.020716	0.0003894	5320.020819	0.0003913	5320.020656	0.0003883
	5.00	5320.034735	0.0006529	5320.034839	0.0006549	5320.034840	0.0006549	5320.034824	0.0006546
	4.25	5320.037730	0.0007092	5320.037424	0.0007035	5320.037316	0.0007014	5320.037506	0.0007050



4.7 BAND EDGES MEASUREMENT

4.7.1 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
FOR CONDUCTED MEASUREMENT:				
R&S SPECTRUM ANALYZER	FSP40	100041	Apr. 22, 2008	Apr. 21, 2009
FOR RADIATED MEASUREMENT:				
Test Receiver ROHDE & SCHWARZ	ESIB7	100212	May 28, 2008	May 27, 2009
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100269	Aug. 08, 2008	Aug. 07, 2009
BILOG Antenna SCHWARZBECK	VULB9168	9168-156	Apr. 25, 2008	Apr. 24, 2009
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170242	Jan. 07, 2008	Jan. 06, 2009
Preamplifier Agilent	8449B	3008A01911	Sep. 10, 2008	Sep. 09, 2009
Preamplifier Agilent	8447D	2944A10634	Dec. 13, 2007	Dec. 12, 2008
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	218190/4 231241/4	May 20, 2008	May 19, 2009
RF signal cable Worken	8D-FB	Cable-HYCH9-01	Aug. 09, 2008	Aug. 08, 2009
Software	ADT_Radiated_ V7.6.15.9.2	NA	NA	NA
Antenna Tower EMCO	2070/2080	512.835.4684	NA	NA
Turn Table EMCO	2087-2.03	NA	NA	NA
Antenna Tower & Turn Table Controller EMCO	2090	NA	NA	NA
26GHz ~ 40GHz Amplifier	EM26400	07026401	Aug. 27, 2008	Aug. 26, 2009
Turn Table Controller ADT.	SC100.	SC93021703	NA	NA

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

4.7.2 TEST PROCEDURE

FOR CONDUCTED MEASUREMENT:

The transmitter output was connected to the spectrum analyzer via a low loss cable. Set both RBW and VBW of spectrum analyzer to 1MHz and 3MHz with suitable frequency span including 100MHz bandwidth from band edge. The band edges was measured and recorded.

The spectrum plots (Peak RBW = 1MHz, VBW = 3MHz) are attached on the following pages.

FOR RADIATED MEASUREMENT:

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. Set both RBW and VBW of spectrum analyzer to 100kHz and 300kHz with suitable frequency span including 100MHz bandwidth from band edge. The band edges was measured and recorded.

The spectrum plots (Peak RBW = 1MHz, VBW = 3MHz) are attached on the following pages.

NOTE: The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz for Average detection (AV) at frequency above 1GHz.

4.7.3 EUT OPERATING CONDITION

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

4.7.4 TEST RESULTS

For signals in the restricted bands above and below the 5.15 to 5.35GHz and 5.47 to 5.725GHz 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 field strength of the intentional signal made on the OATS to calculate the field strength of the unintentional signals.

The spectrum plots (Peak RBW = 1MHz, VBW = 3MHz) are attached on the following pages.

FOR 5150-5350MHz BAND: 802.11a OFDM MODULATION: 1TX

Channel 36 (5180MHz)

The band edge emission plot on the next page shows 45.60dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 36 is 110.55dBuV/m (Peak), so the maximum field strength in restrict band is $110.55 - 45.60 = 64.95$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on the next page shows 51.08dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 36 is 100.95dBuV/m (Average), so the maximum field strength in restrict band is $100.95 - 51.08 = 49.87$ dBuV/m which is under 54dBuV/m limit.

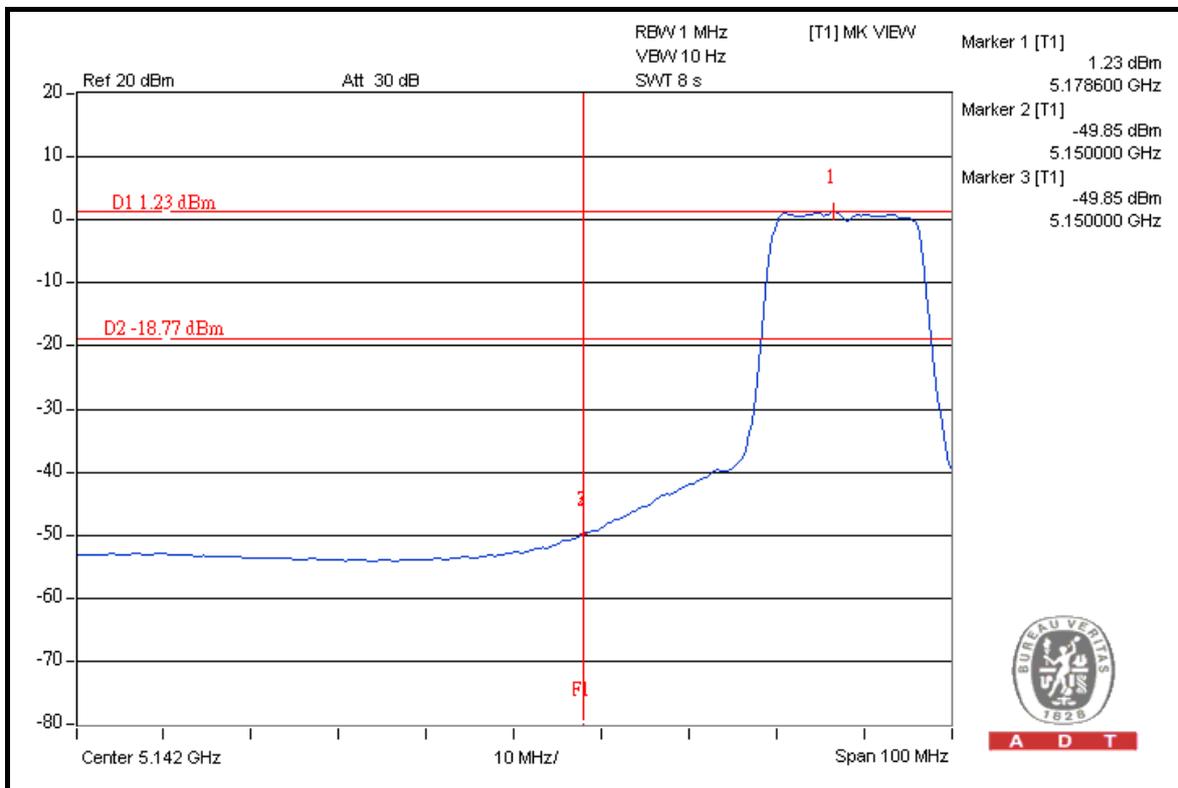
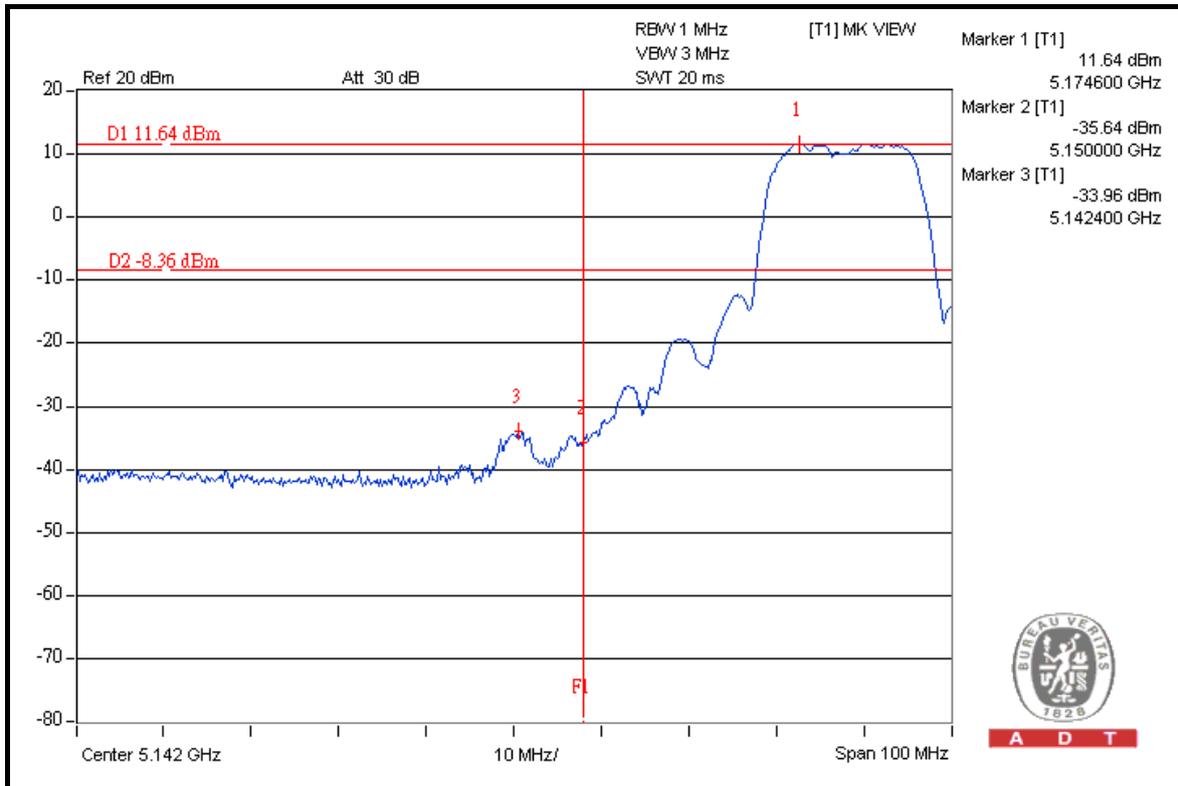
Channel 64 (5320MHz)

The band edge emission plot on the next second page shows 48.92dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 64 is 110.99dBuV/m (Peak), so the maximum field strength in restrict band is $110.99 - 48.92 = 62.07$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on the next third page shows 48.35dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 64 is 100.97dBuV/m (Average), so the maximum field strength in restrict band is $100.97 - 48.35 = 52.62$ dBuV/m which is under 54dBuV/m limit.

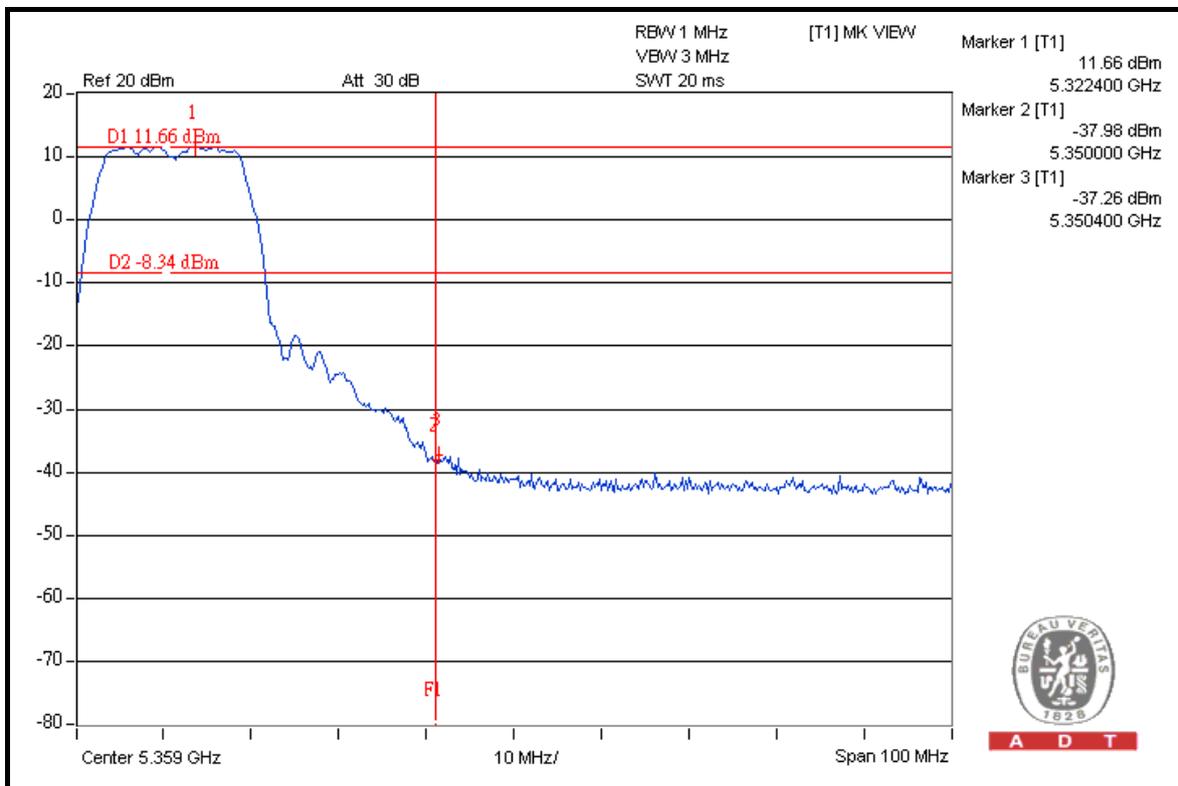
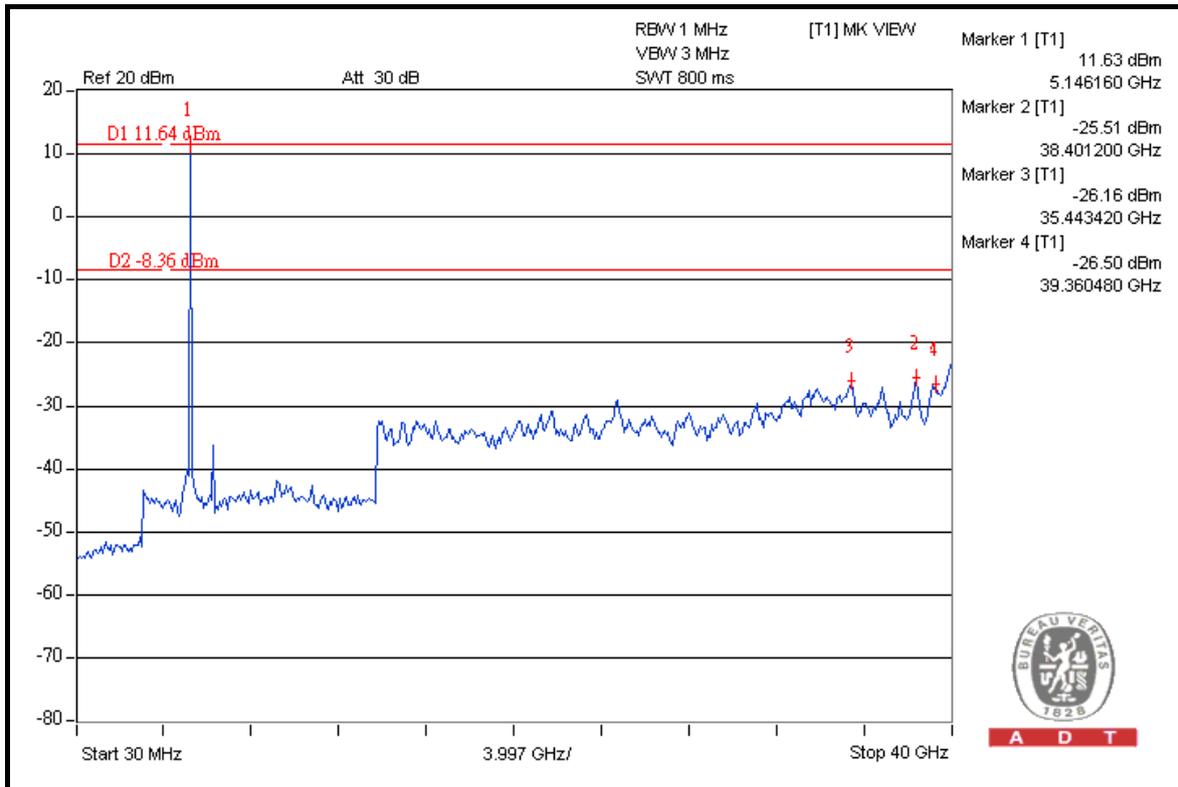


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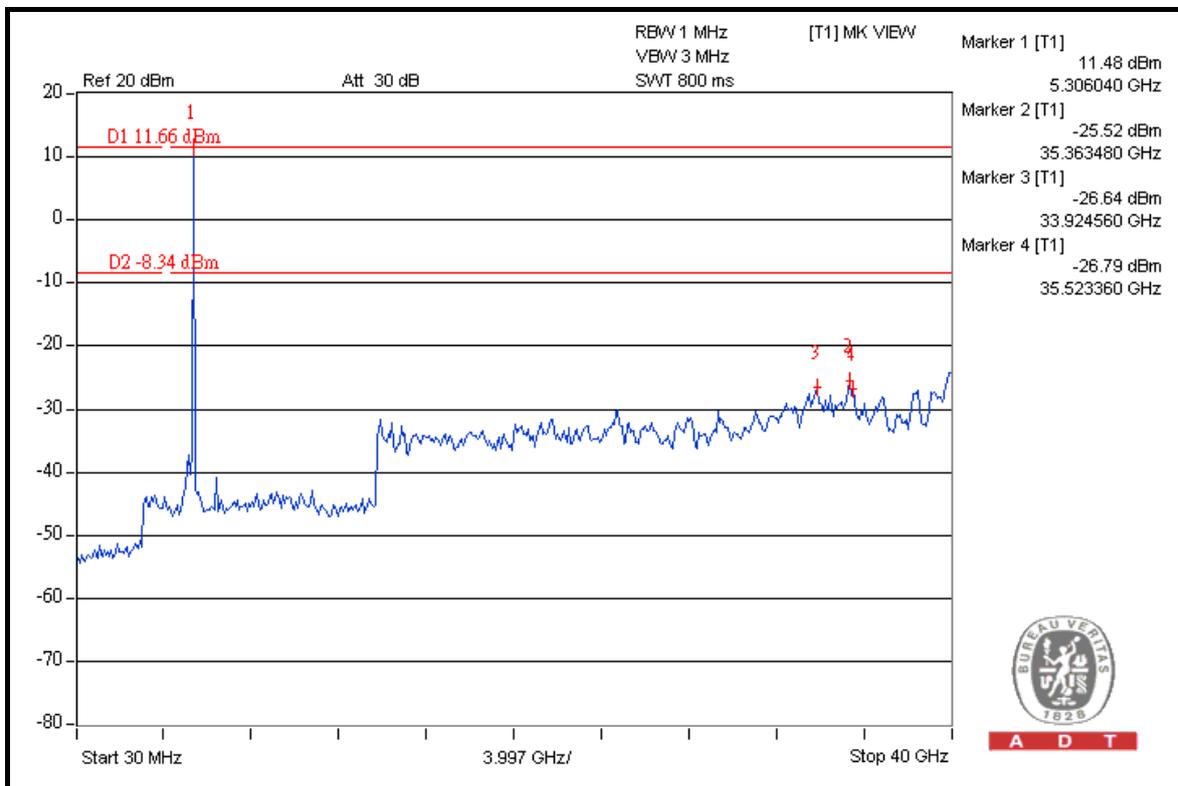
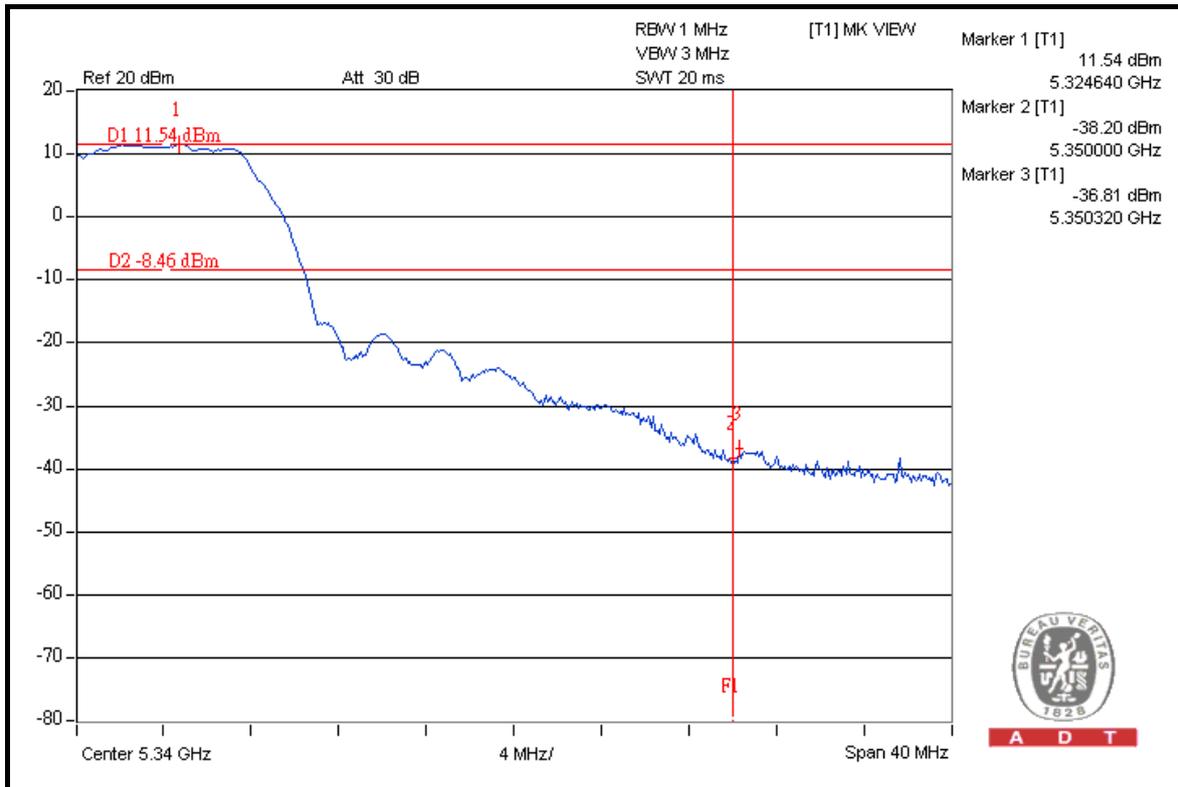


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FOR 5470-5725MHz BAND: 802.11a OFDM MODULATION: 1TX

Channel 100 (5500MHz)

The band edge emission plot (5.460GHz) on the next page shows 51.83dBc between carrier maximum power and local maximum emission out of band emission. The emission of carrier strength list in the test result of channel 100 is 110.87dBuV/m (Peak), so the maximum field strength out of band emission is $110.87 - 51.83 = 59.04$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot (5.460GHz) on the next page shows 54.66dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 100 is 100.73dBuV/m (Average), so the maximum field strength in restrict band is $100.73 - 54.66 = 46.07$ dBuV/m which is under 54dBuV/m limit.

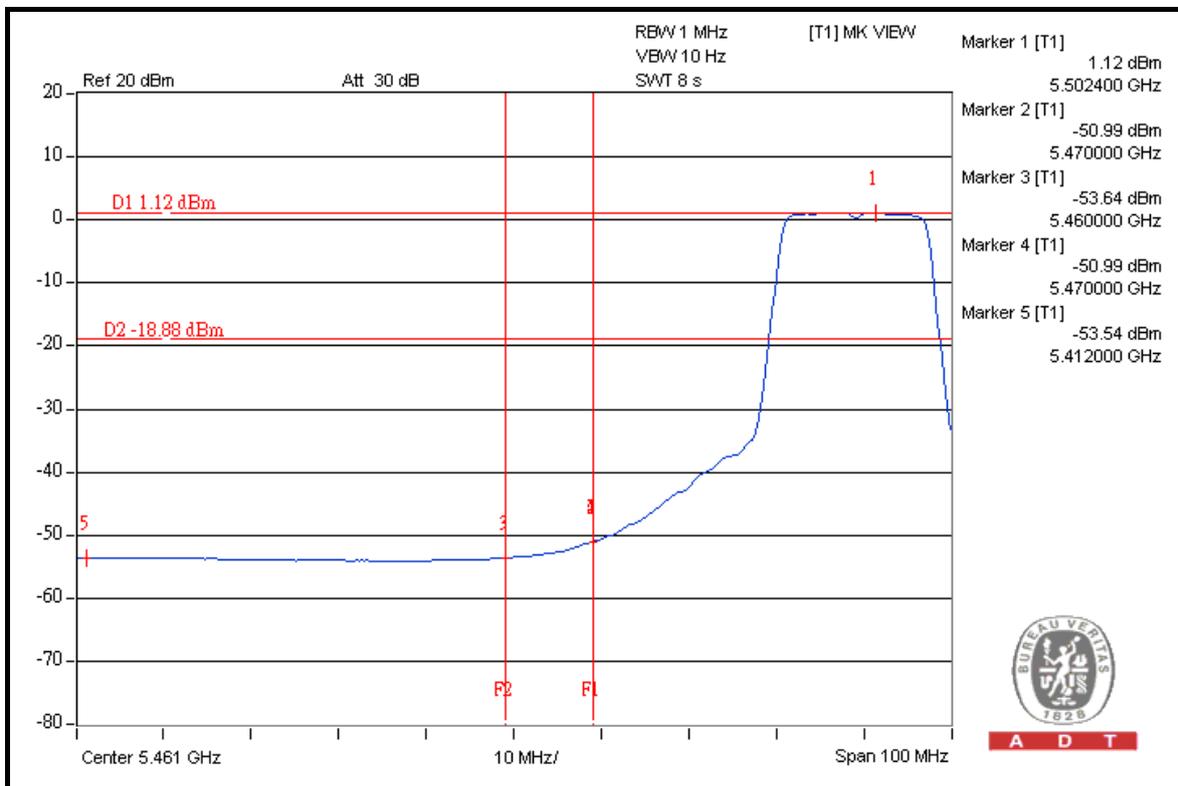
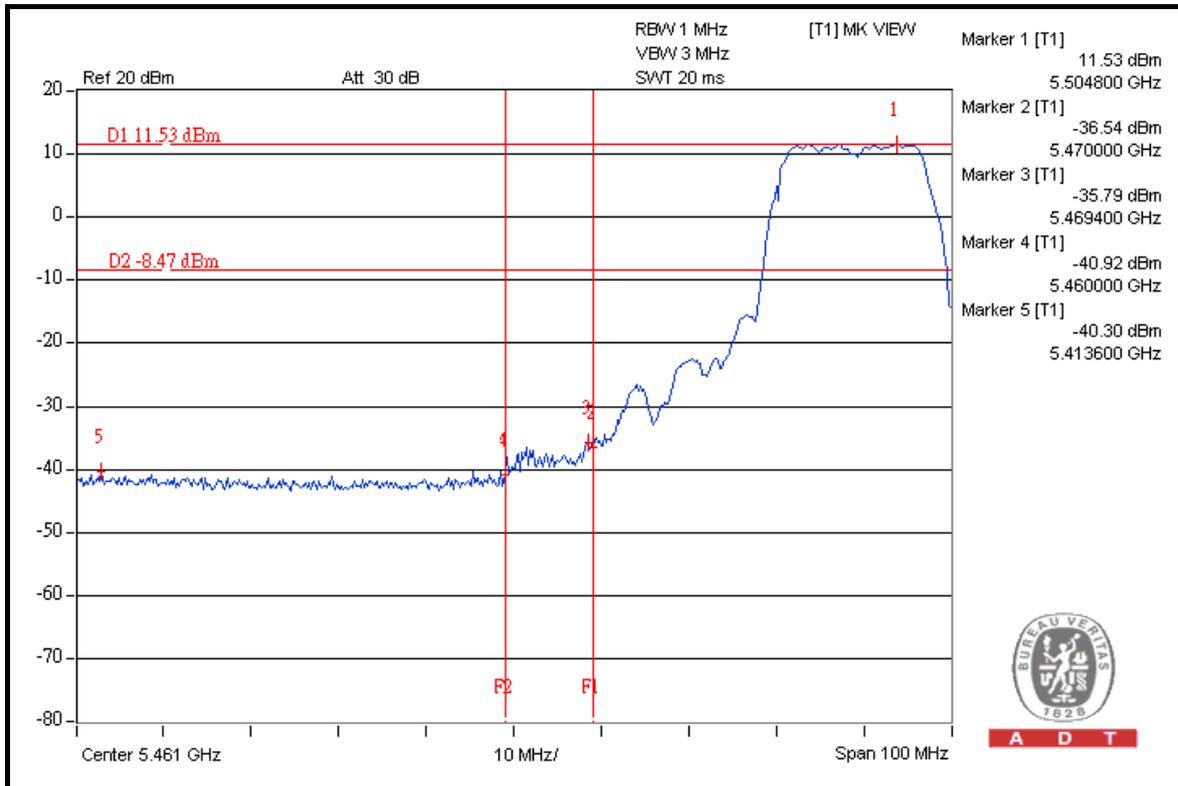
The band edge emission plot (5.470GHz) on the next page shows 47.32dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 100 is 110.87dBuV/m (Peak), so the maximum field strength in restrict band is $110.87 - 47.32 = 63.55$ dBuV/m which is under 68.3dBuV/m limit.

Channel 140 (5700MHz)

The band edge emission plot on the next second page shows 43.65dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 140 is 110.78dBuV/m (Peak), so the maximum field strength in restrict band is $110.78 - 43.65 = 67.13$ dBuV/m which is under 68.3dBuV/m limit.

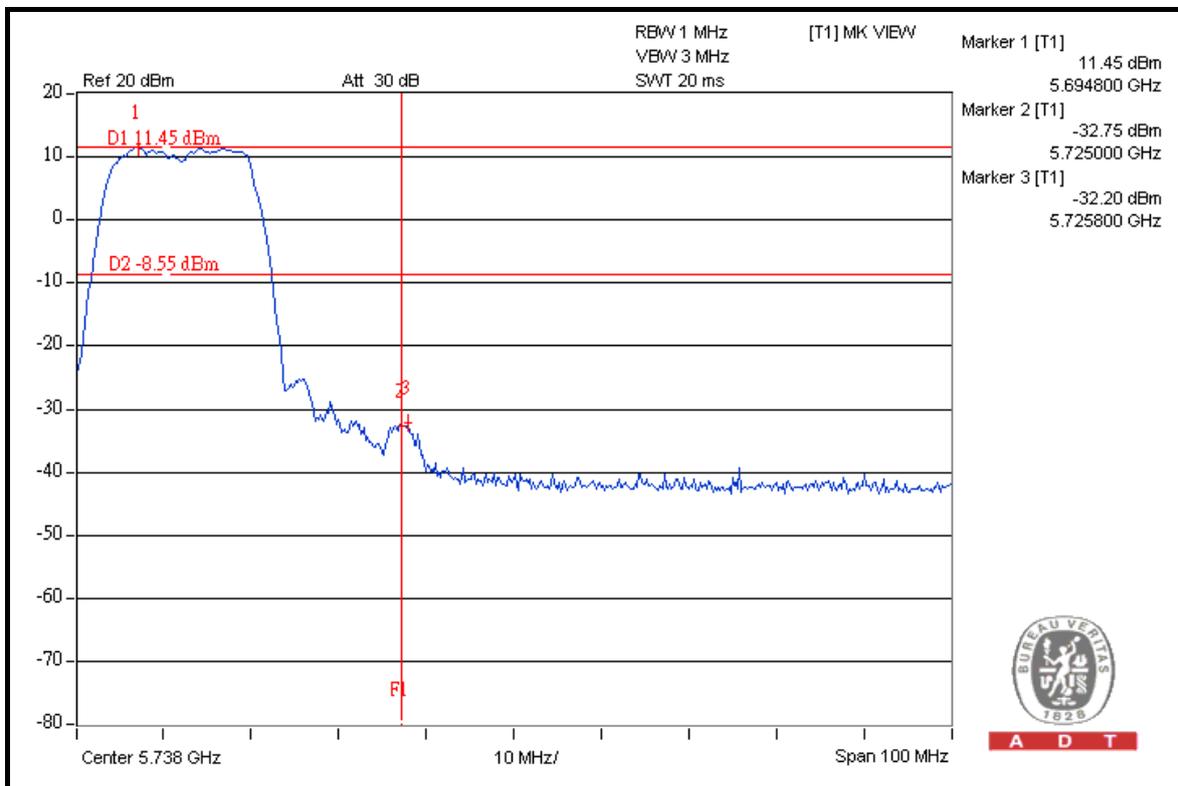
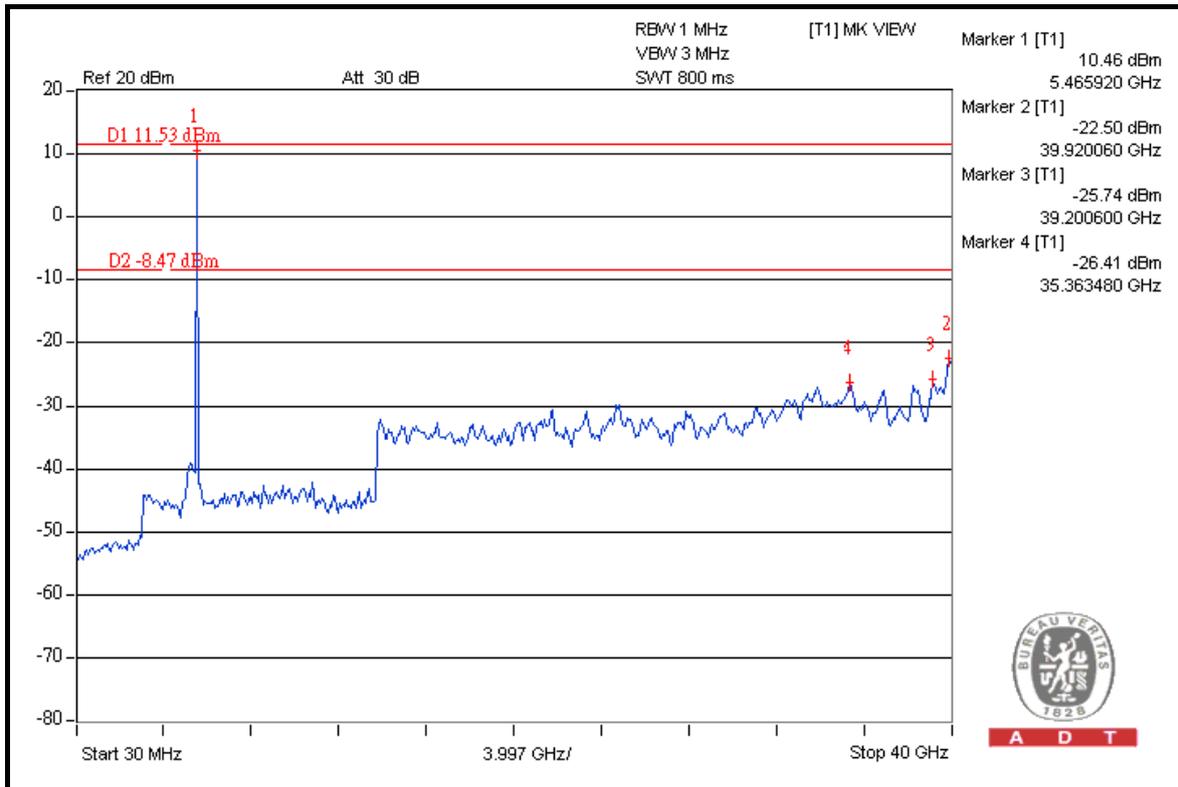


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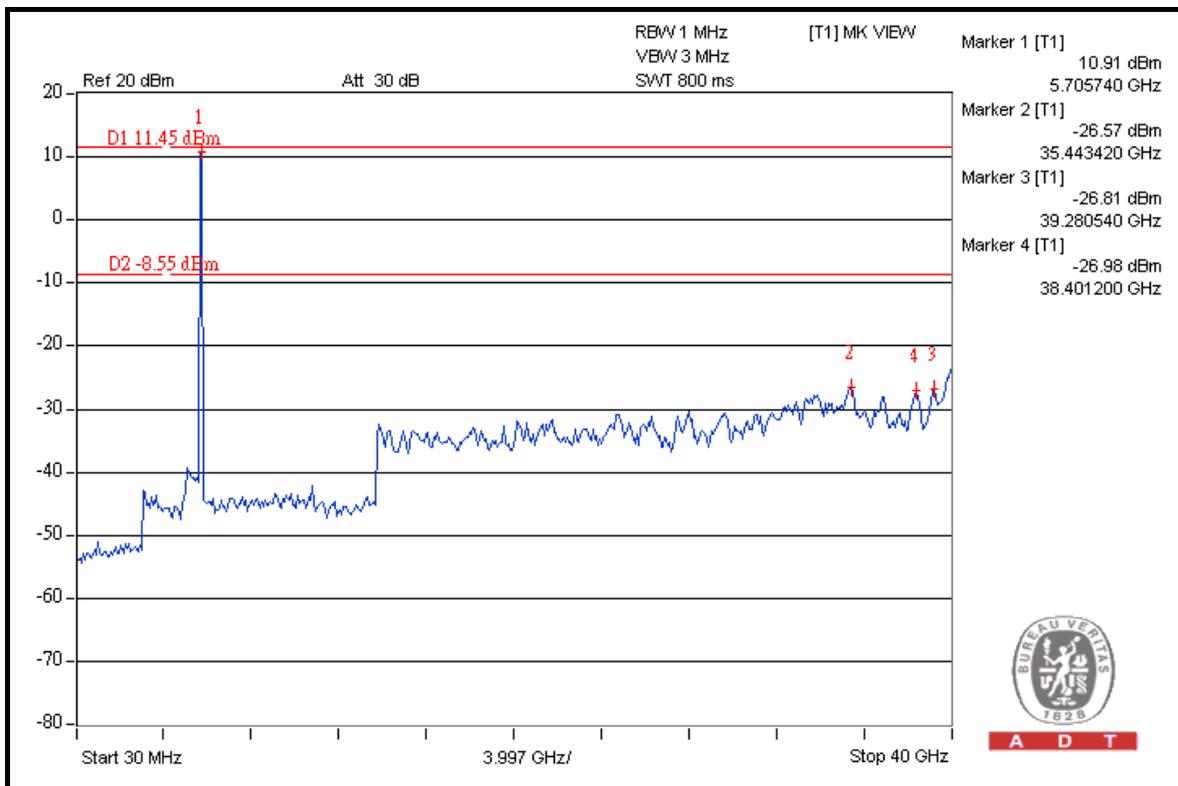
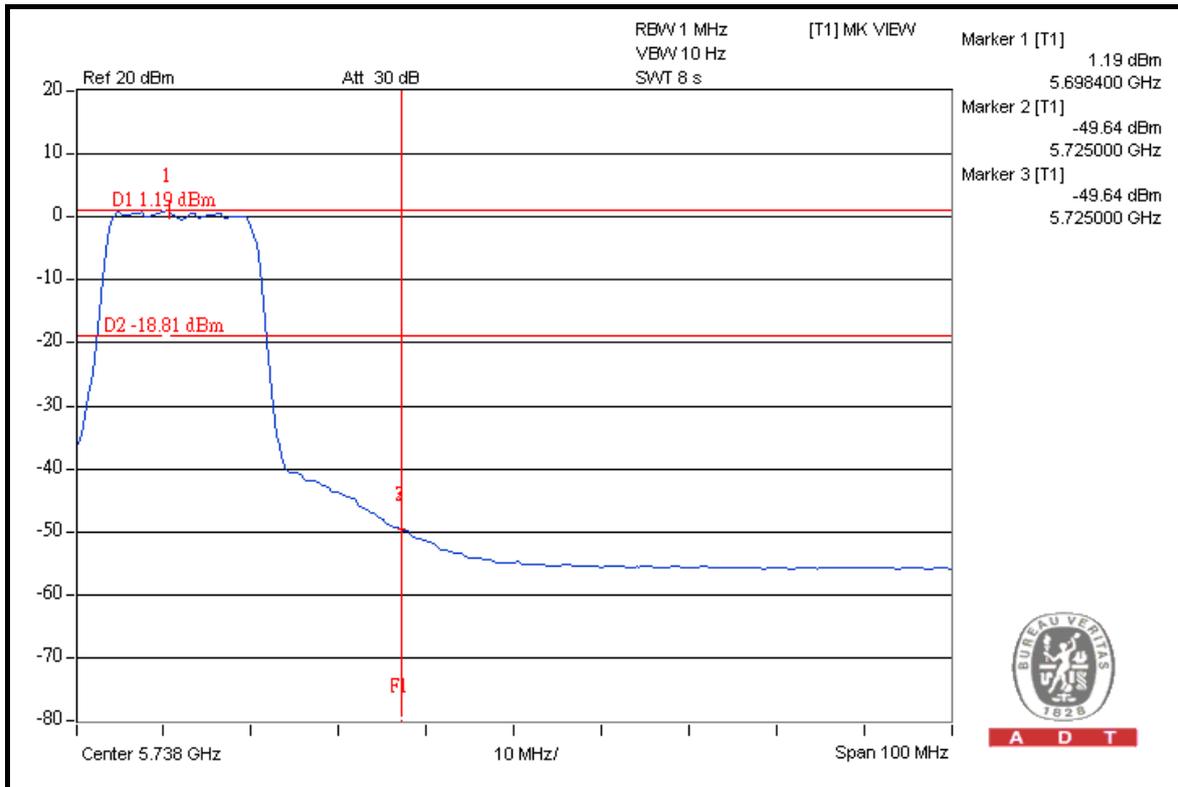


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FOR 5150-5350MHz BAND: DRAFT 802.11n (20MHz) OFDM MODULATION: 1TX

Channel 36 (5180MHz)

The band edge emission plot on the next page shows 46.66dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 36 is 106.47dBuV/m (Peak), so the maximum field strength in restrict band is $106.47 - 46.66 = 59.81$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on the next page shows 49.91dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 36 is 96.59dBuV/m (Average), so the maximum field strength in restrict band is $96.59 - 49.91 = 46.68$ dBuV/m which is under 54dBuV/m limit.

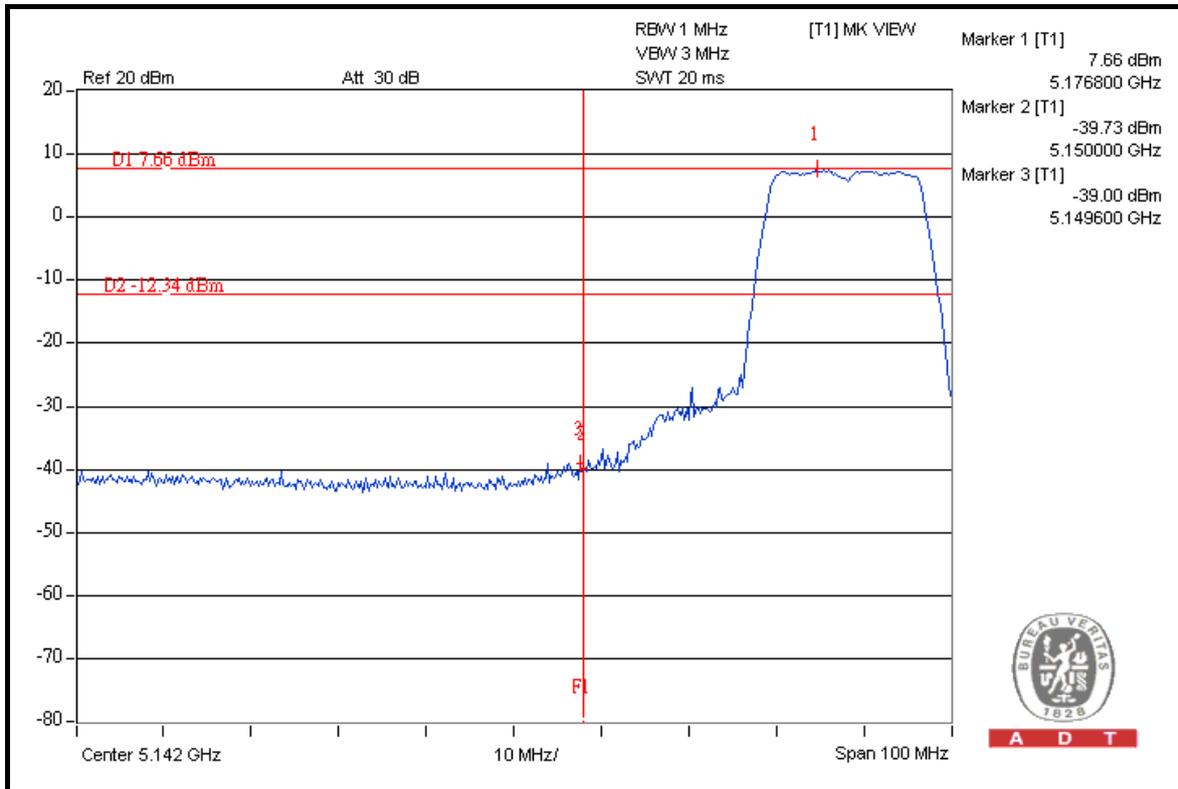
Channel 64 (5320MHz)

The band edge emission plot on the next second page shows 48.31dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 64 is 106.51dBuV/m (Peak), so the maximum field strength in restrict band is $106.51 - 48.31 = 58.20$ dBuV/m which is under 74dBuV/m limit.

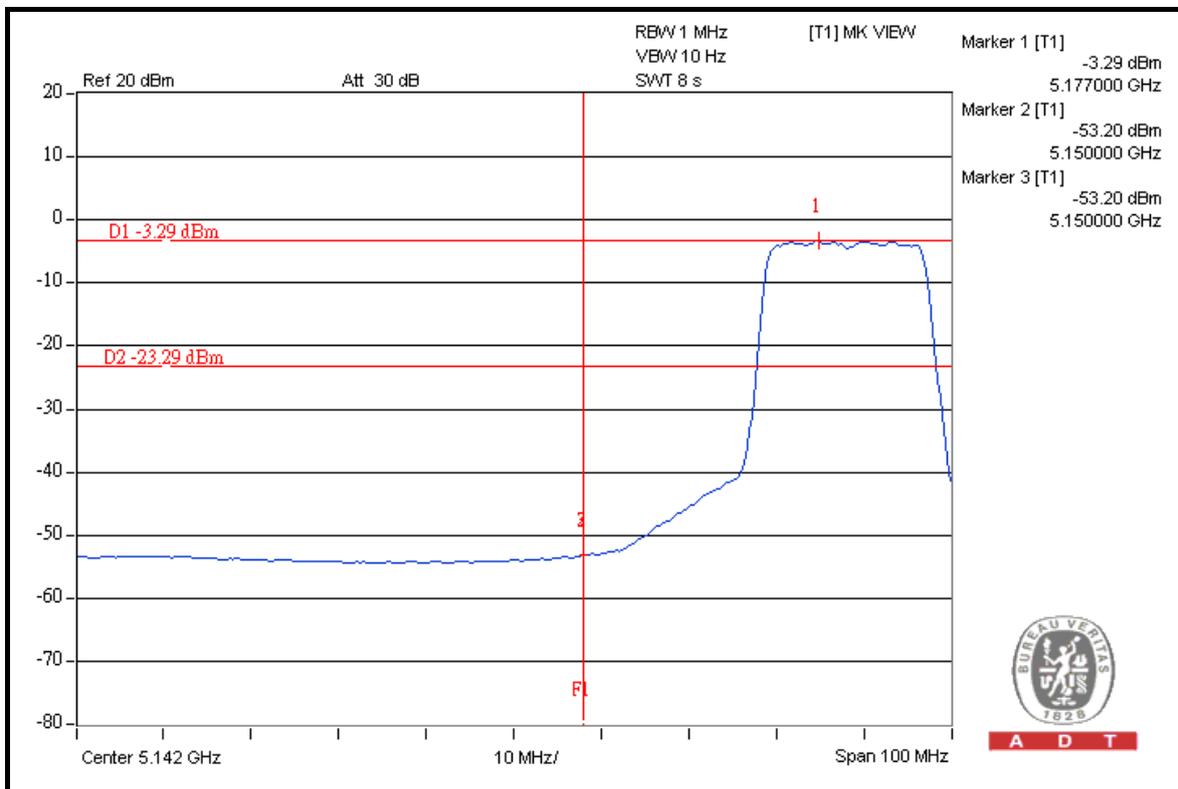
The band edge emission plot on the next third page shows 51.13dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 64 is 96.88dBuV/m (Average), so the maximum field strength in restrict band is $96.88 - 51.13 = 45.75$ dBuV/m which is under 54dBuV/m limit.



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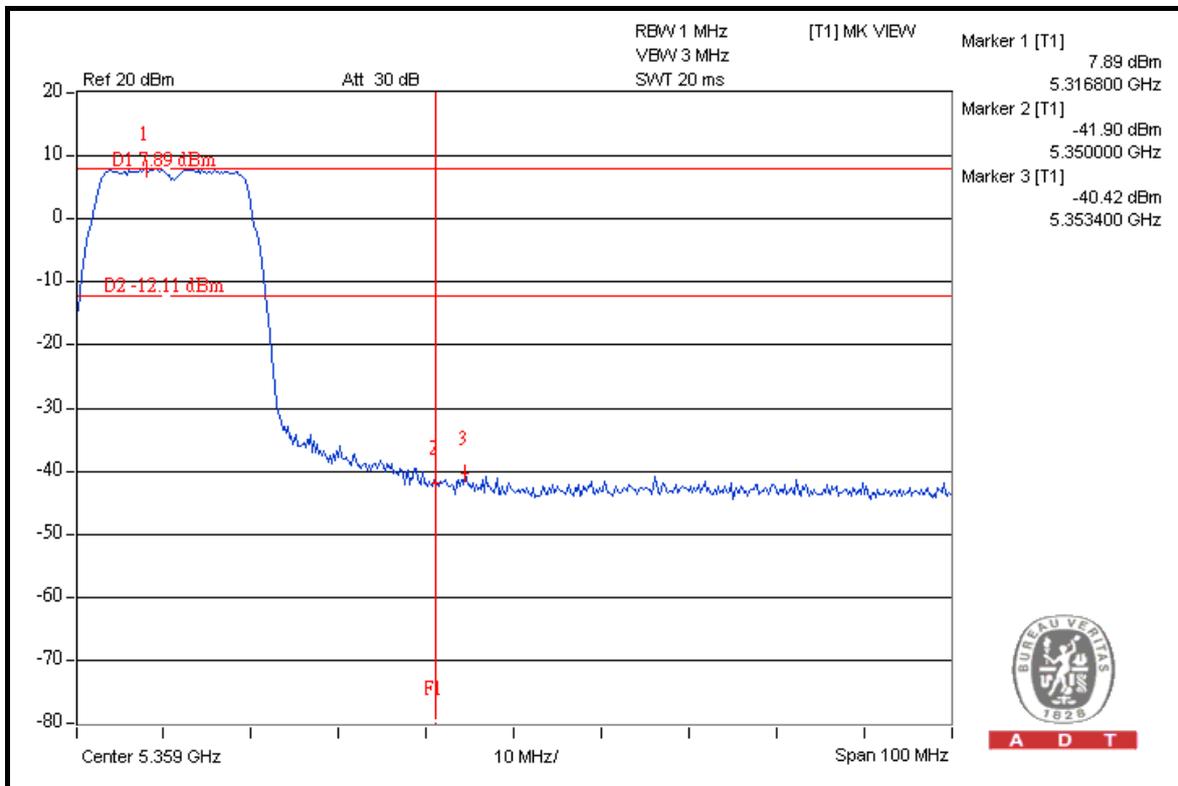
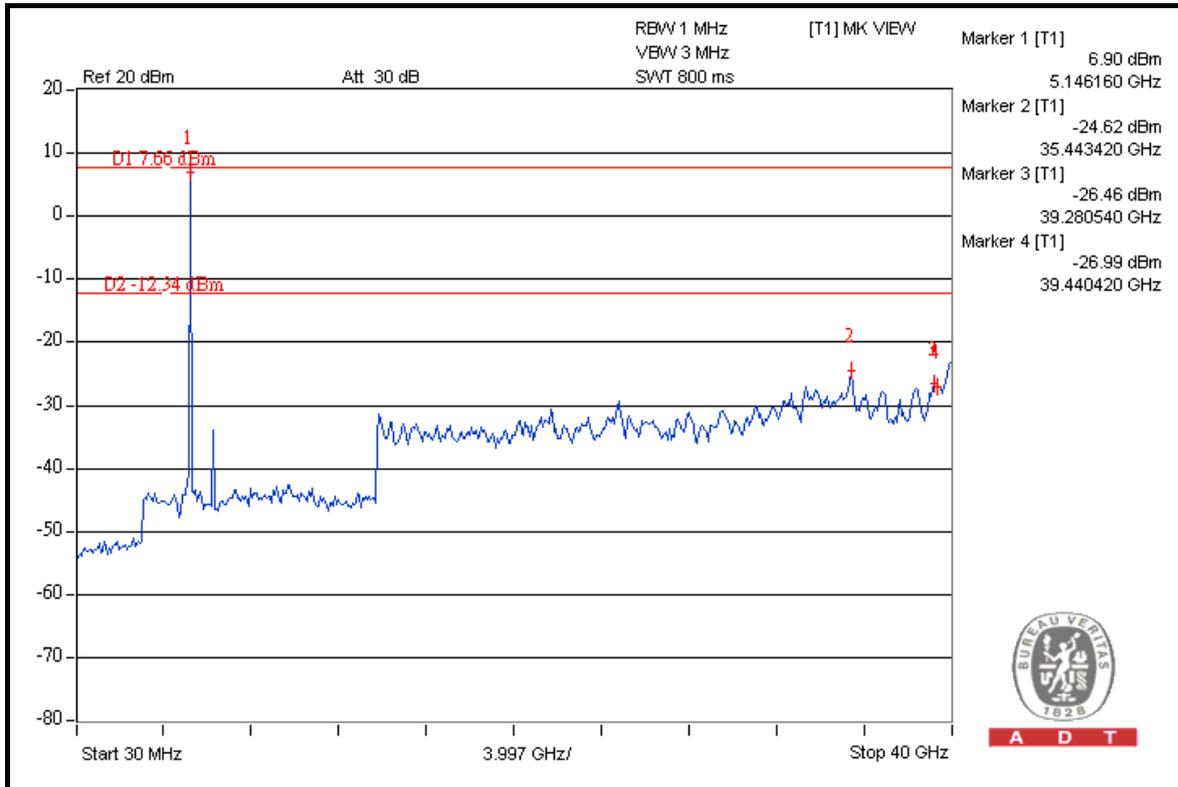
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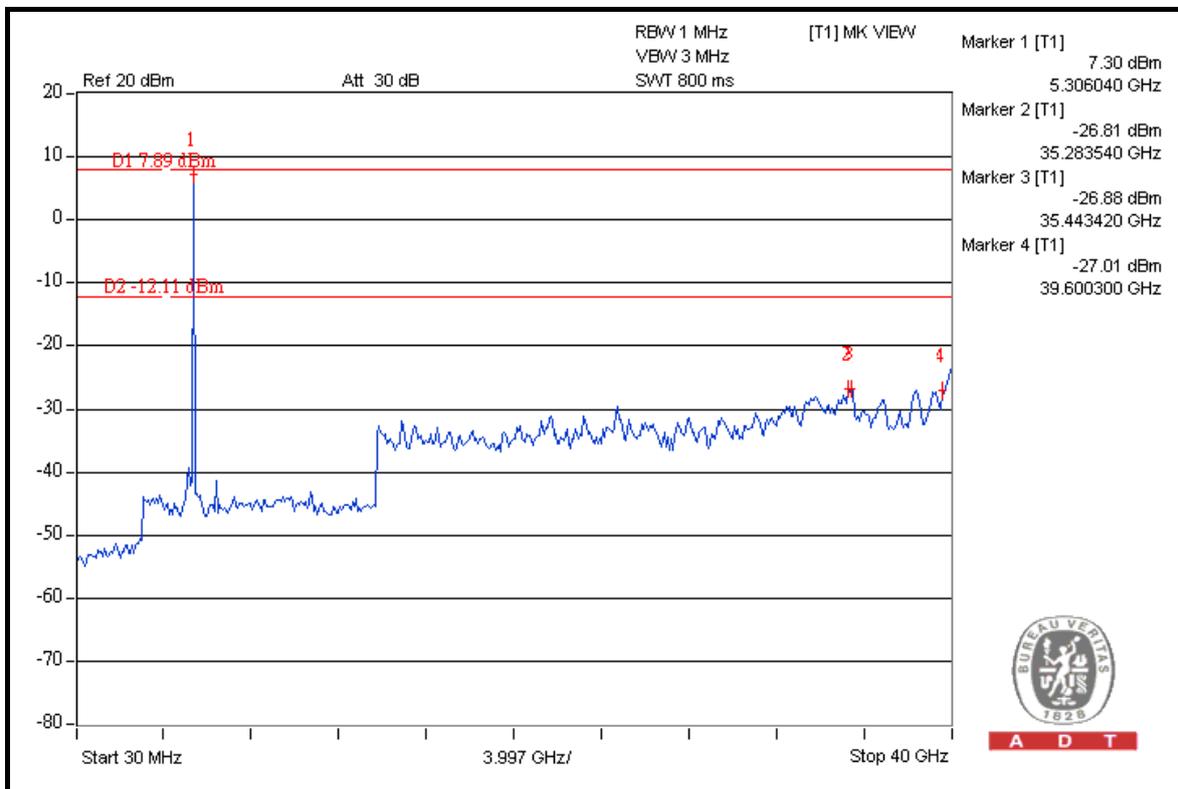
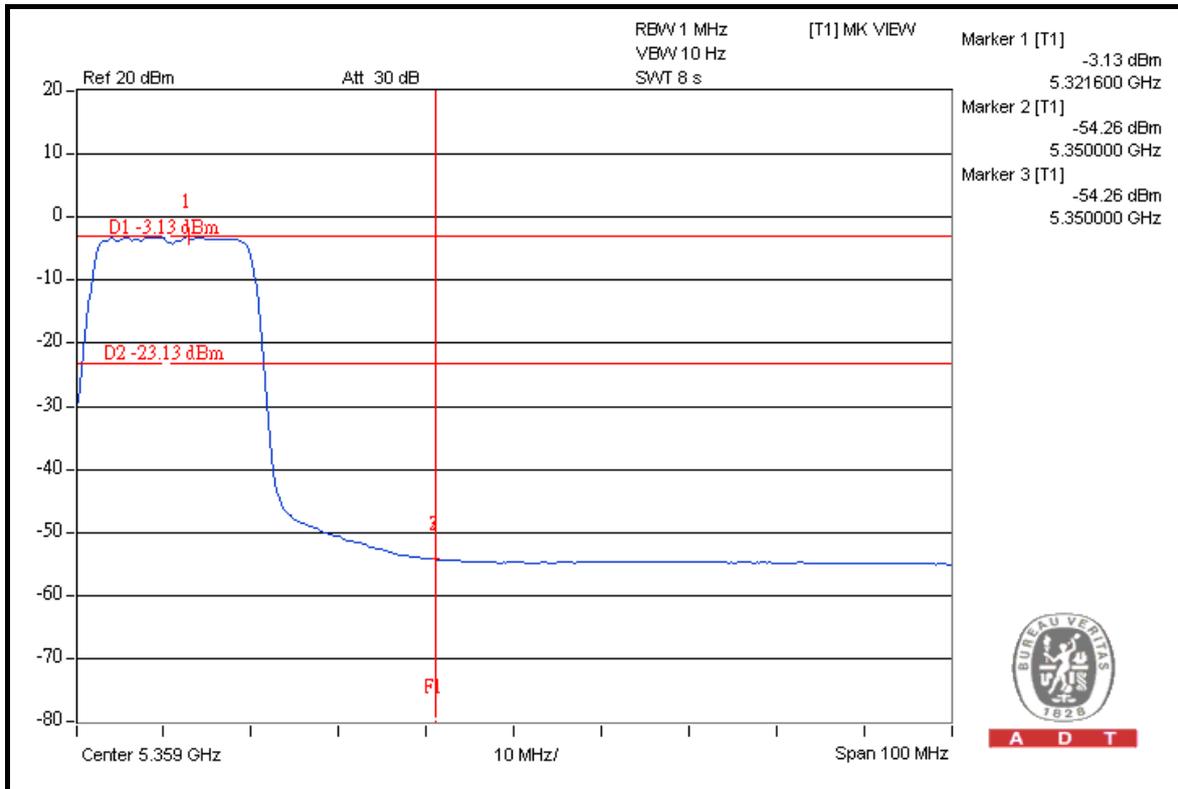


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FOR 5470-5725MHz BAND: DRAFT 802.11n (20MHz) OFDM MODULATION: 1TX

Channel 100 (5500MHz)

The band edge emission plot (5.460GHz) on the next page shows 50.62dBc between carrier maximum power and local maximum emission out of band emission. The emission of carrier strength list in the test result of channel 100 is 108.62dBuV/m (Peak), so the maximum field strength out of band emission is $108.62 - 50.62 = 58.00$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot (5.460GHz) on the next page shows 53.38dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 100 is 98.74dBuV/m (Average), so the maximum field strength in restrict band is $98.74 - 53.38 = 45.36$ dBuV/m which is under 54dBuV/m limit.

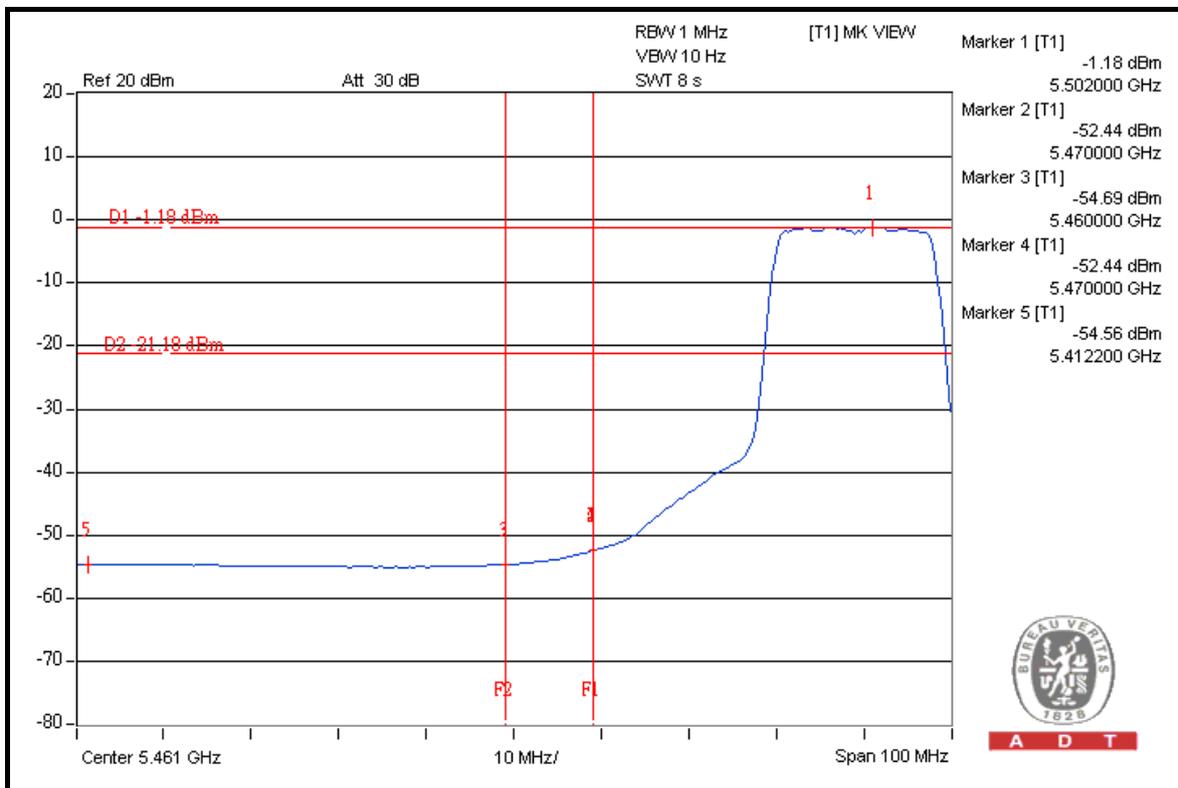
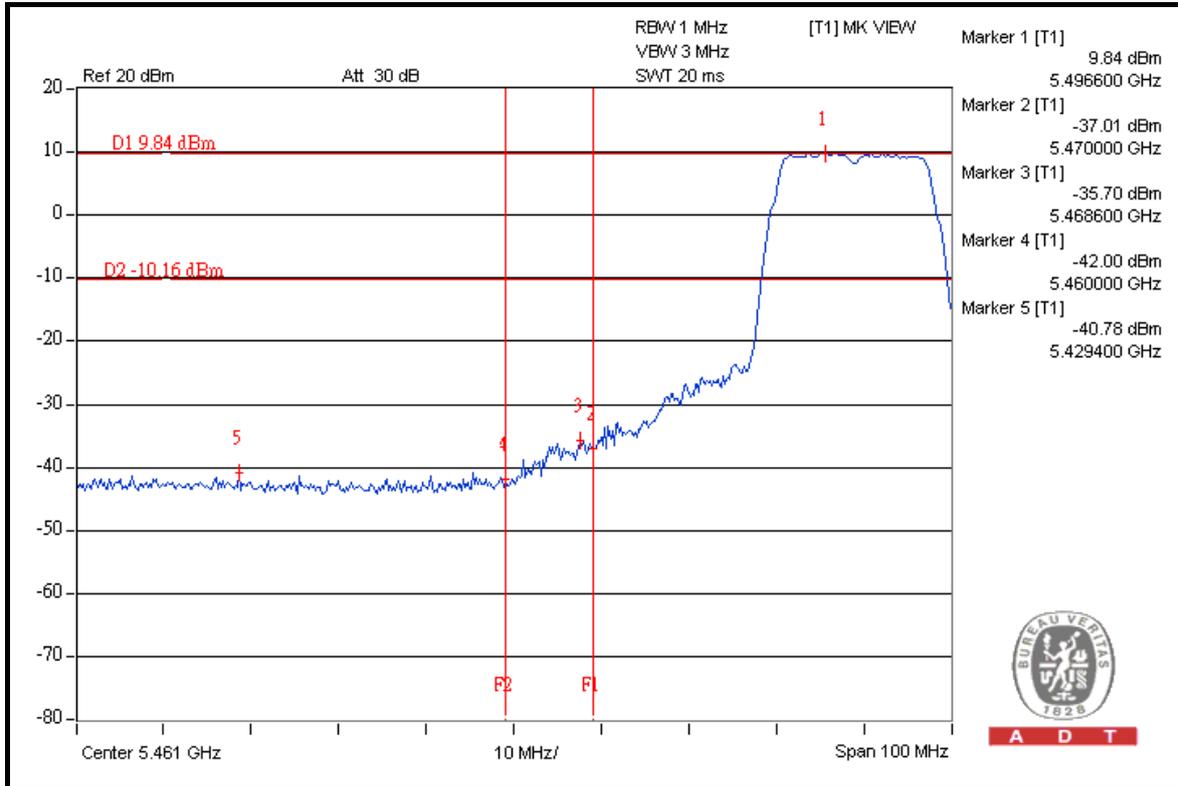
The band edge emission plot (5.470GHz) on the next page shows 45.54dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 100 is 108.62dBuV/m (Peak), so the maximum field strength in restrict band is $108.62 - 45.54 = 63.08$ dBuV/m which is under 68.3dBuV/m limit.

Channel 140 (5700MHz)

The band edge emission plot on the next second page shows 44.05dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 140 is 108.42dBuV/m (Peak), so the maximum field strength in restrict band is $108.42 - 44.05 = 64.37$ dBuV/m which is under 68.3dBuV/m limit.

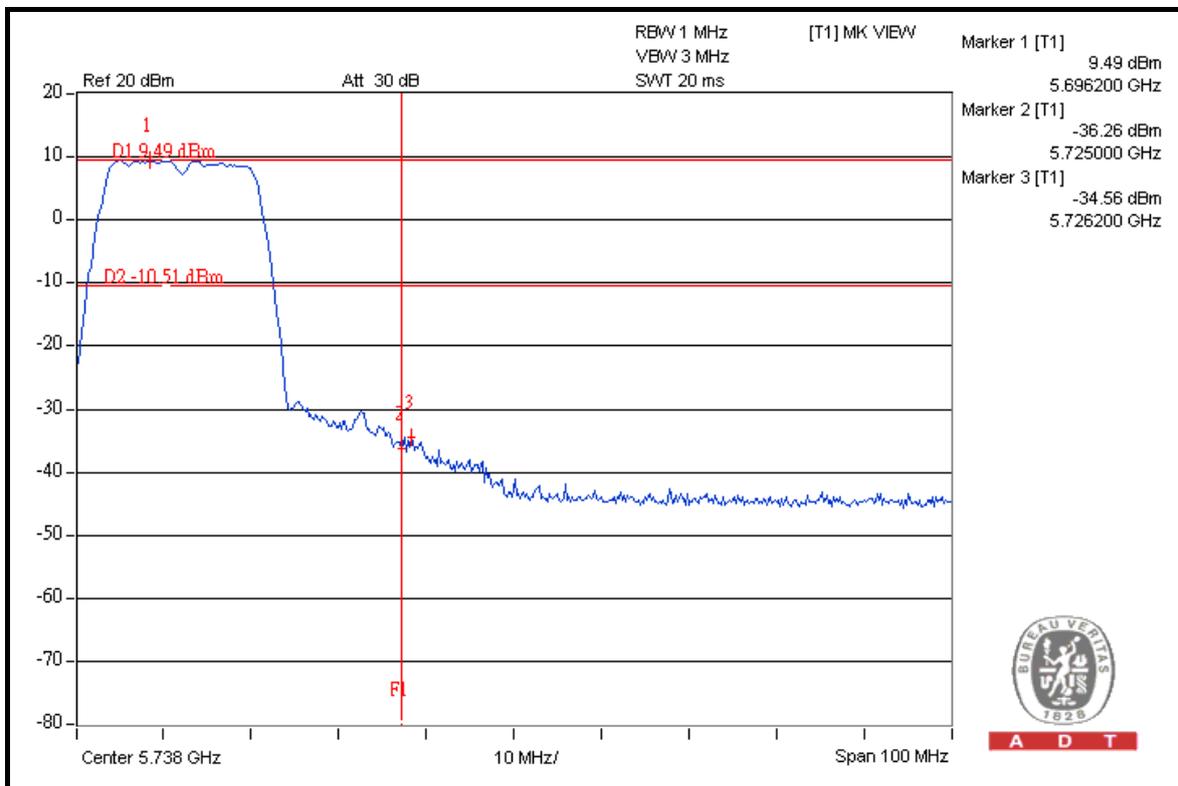
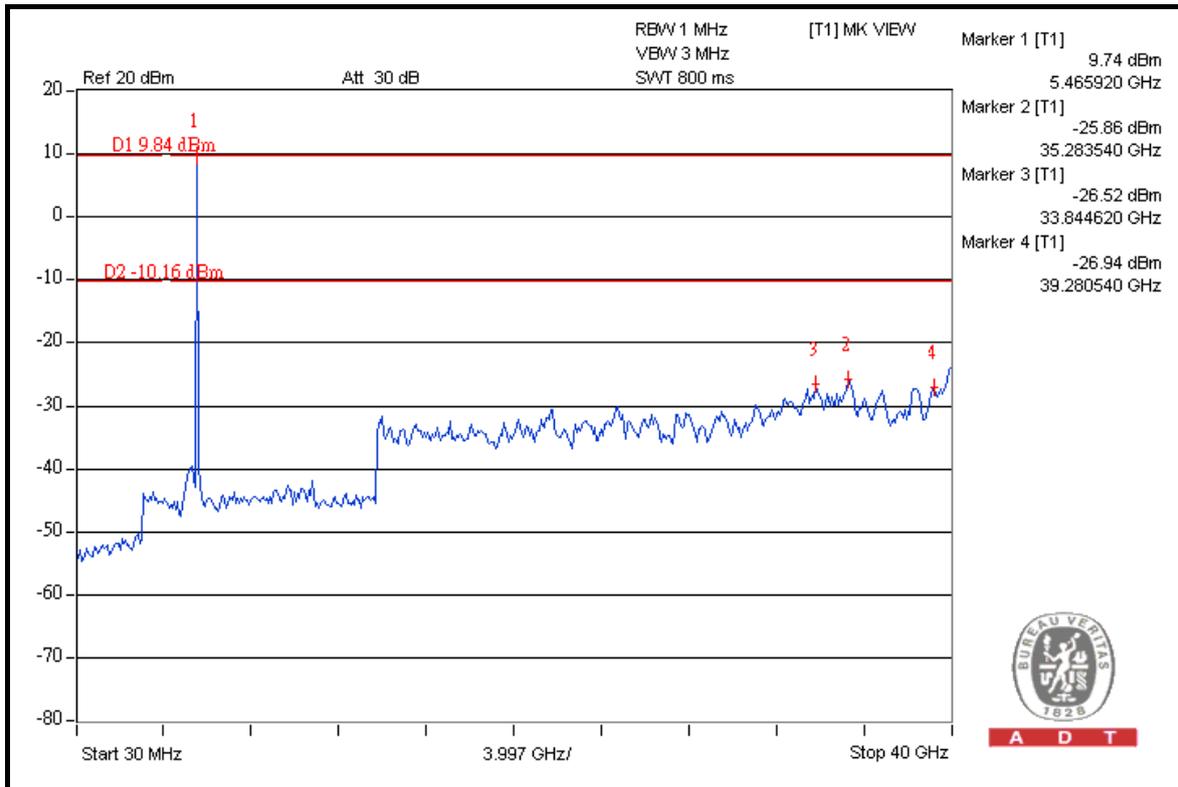


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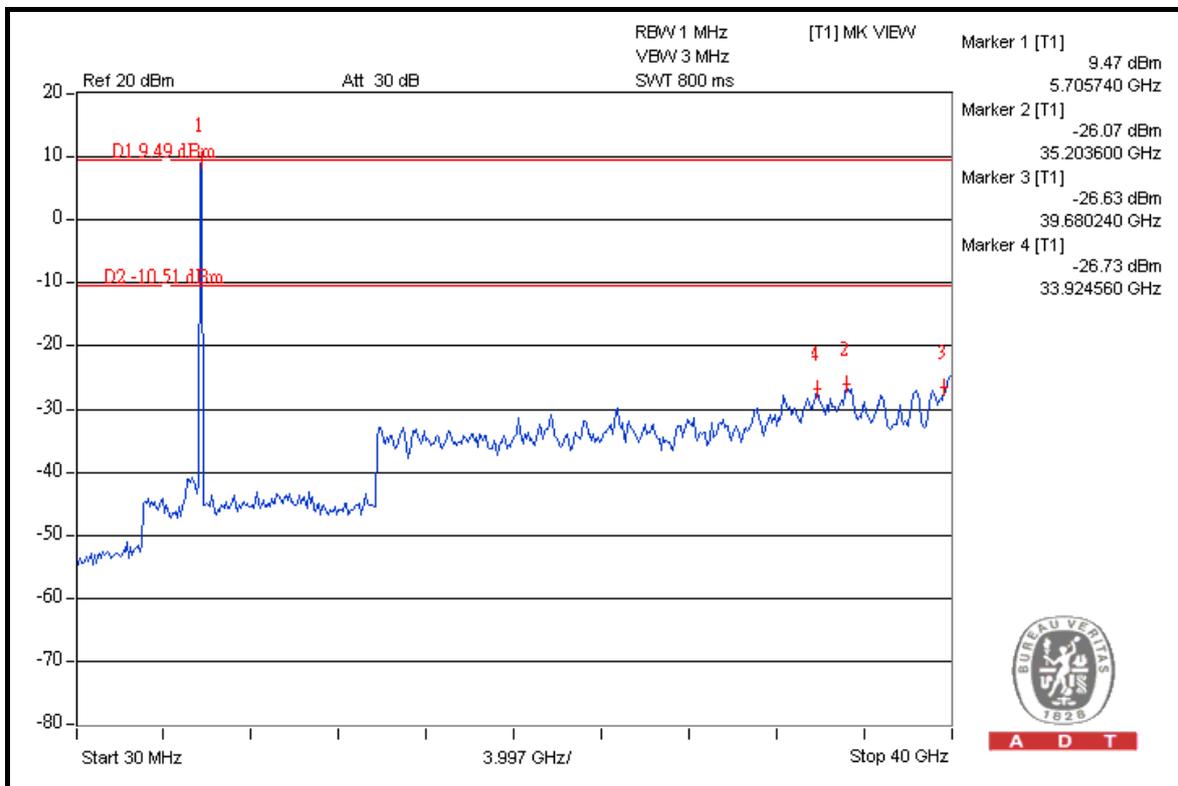
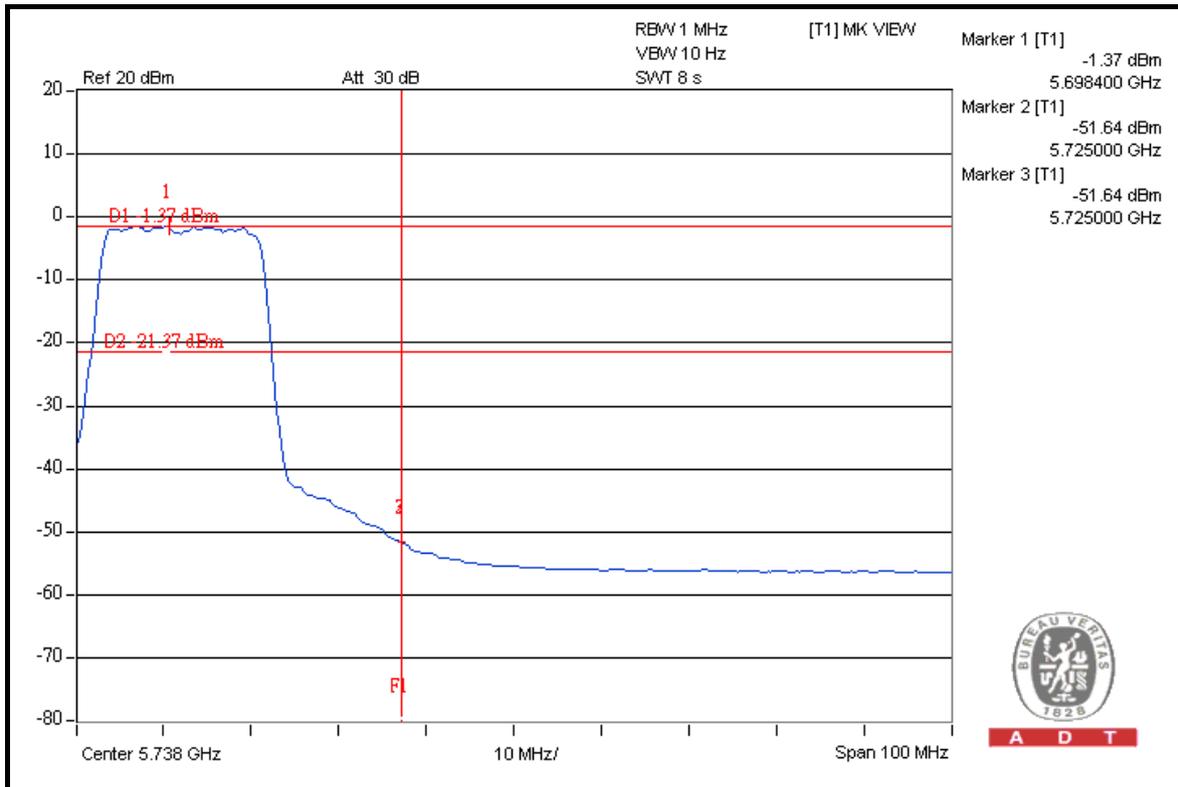


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FOR 5150-5350MHz BAND: DRAFT 802.11n (20MHz) OFDM MODULATION: 2TX

Channel 36 (5180MHz)

The band edge emission plot on the next page shows 43.85dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 36 is 107.96dBuV/m (Peak), so the maximum field strength in restrict band is $107.96 - 43.85 = 64.11$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on the next page shows 45.96dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 36 is 98.53dBuV/m (Average), so the maximum field strength in restrict band is $98.53 - 45.96 = 52.57$ dBuV/m which is under 54dBuV/m limit.

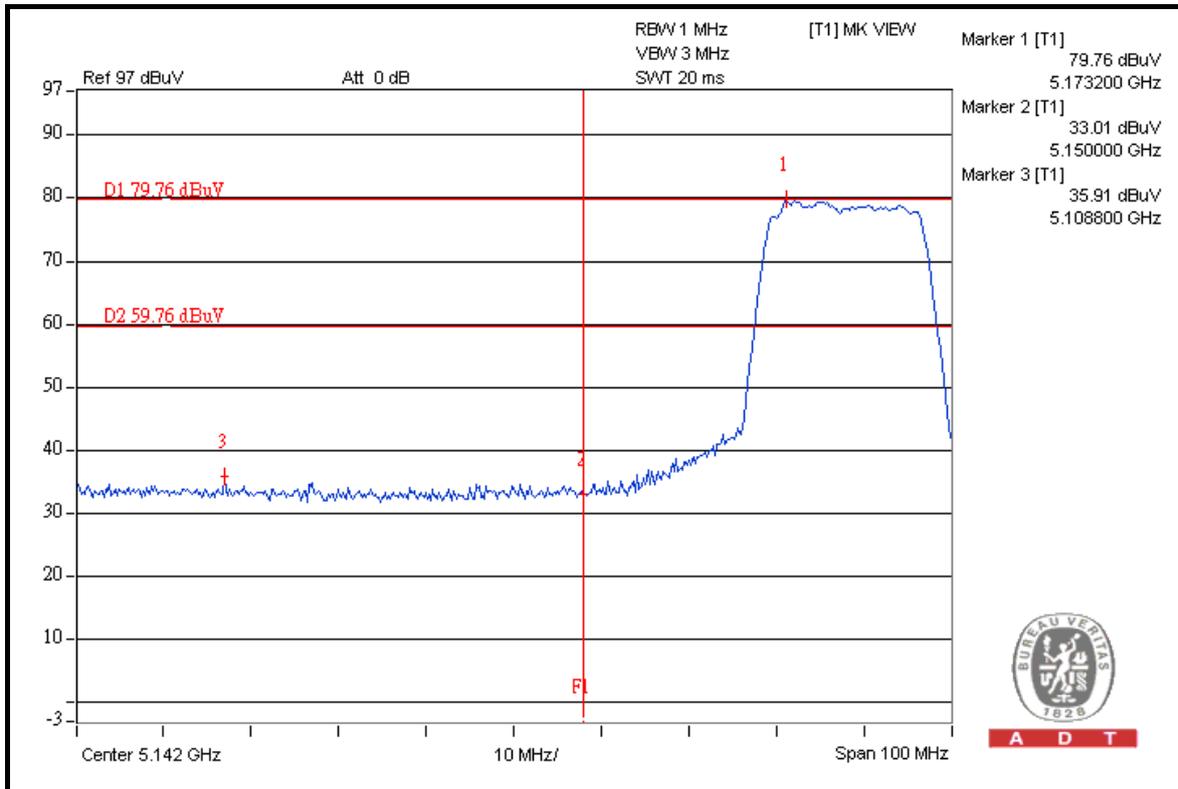
Channel 64 (5320MHz)

The band edge emission plot on the next second page shows 44.40dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 64 is 107.77dBuV/m (Peak), so the maximum field strength in restrict band is $107.77 - 44.40 = 63.37$ dBuV/m which is under 74dBuV/m limit.

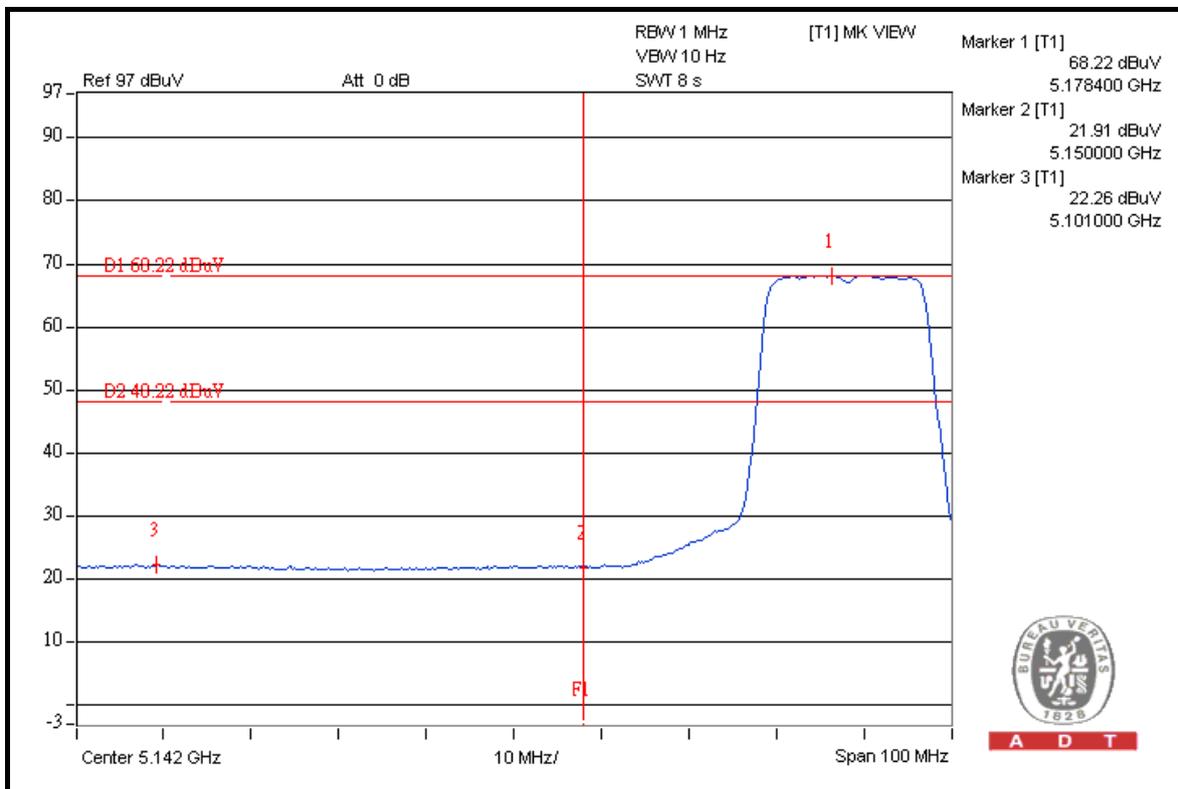
The band edge emission plot on the next third page shows 45.86dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 64 is 97.62dBuV/m (Average), so the maximum field strength in restrict band is $97.62 - 45.86 = 51.76$ dBuV/m which is under 54dBuV/m limit.



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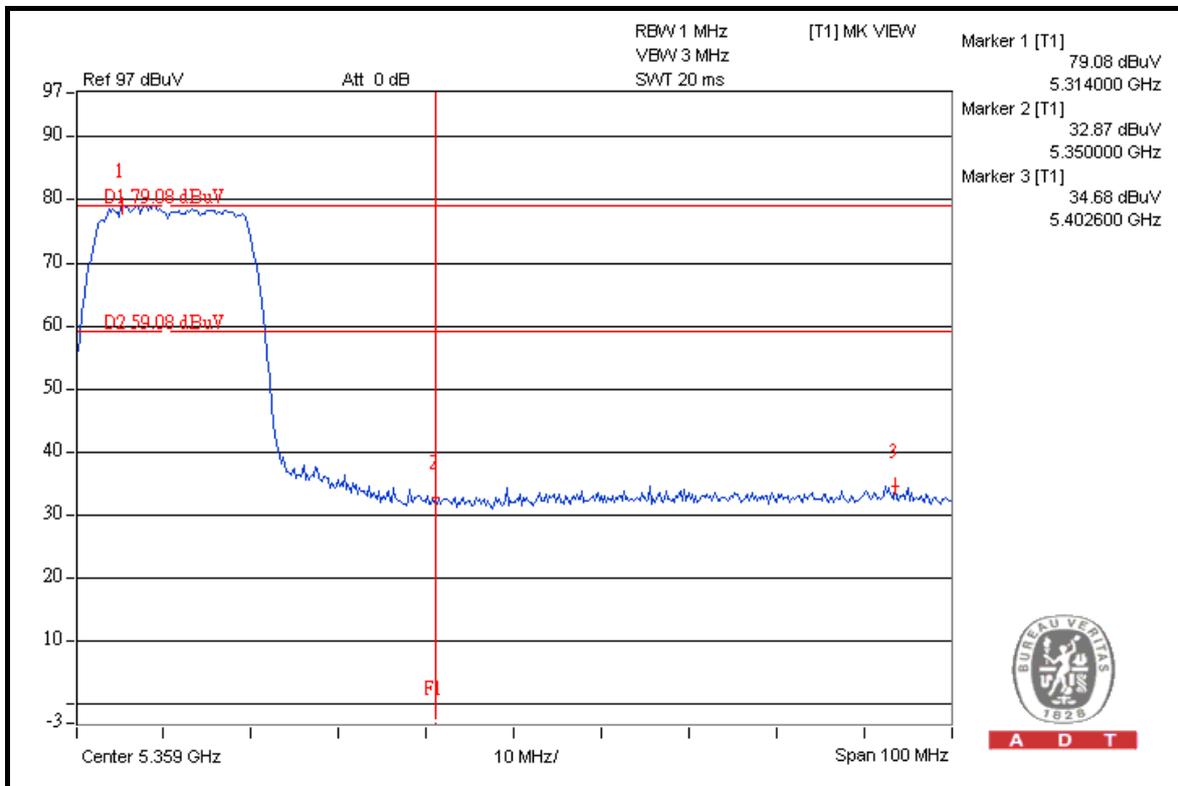
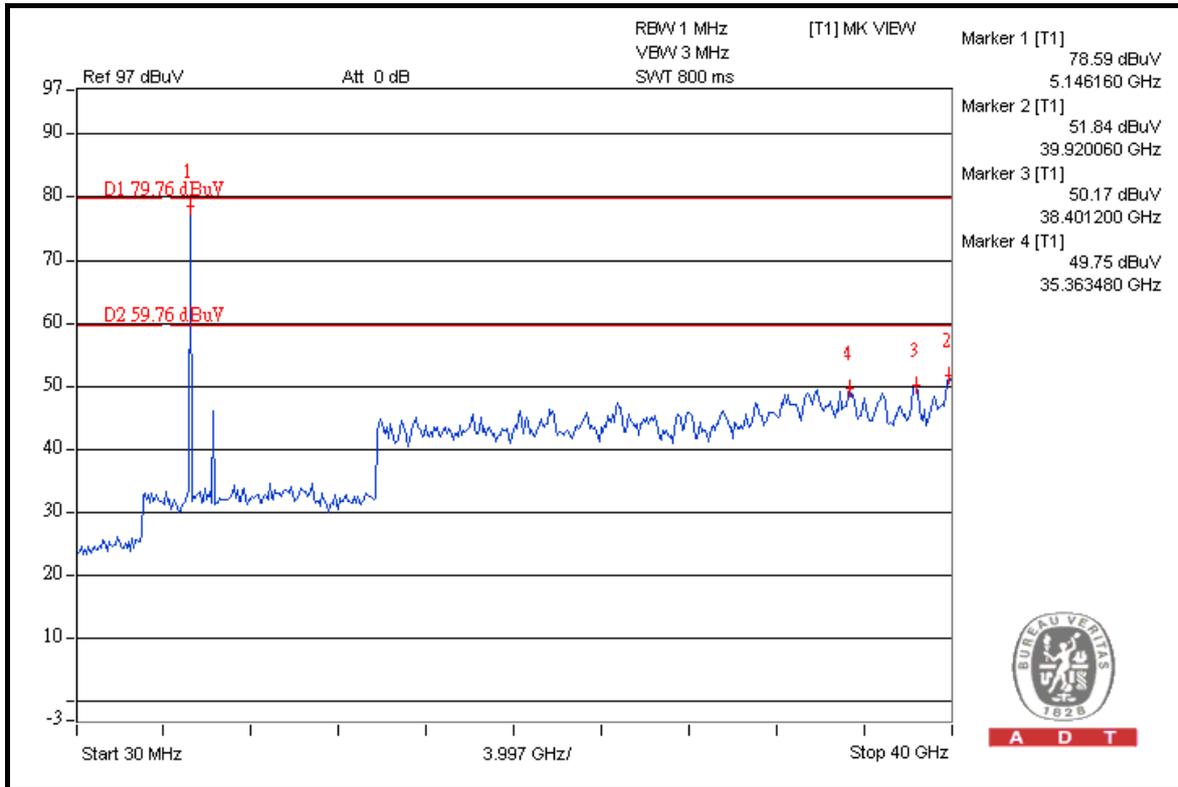
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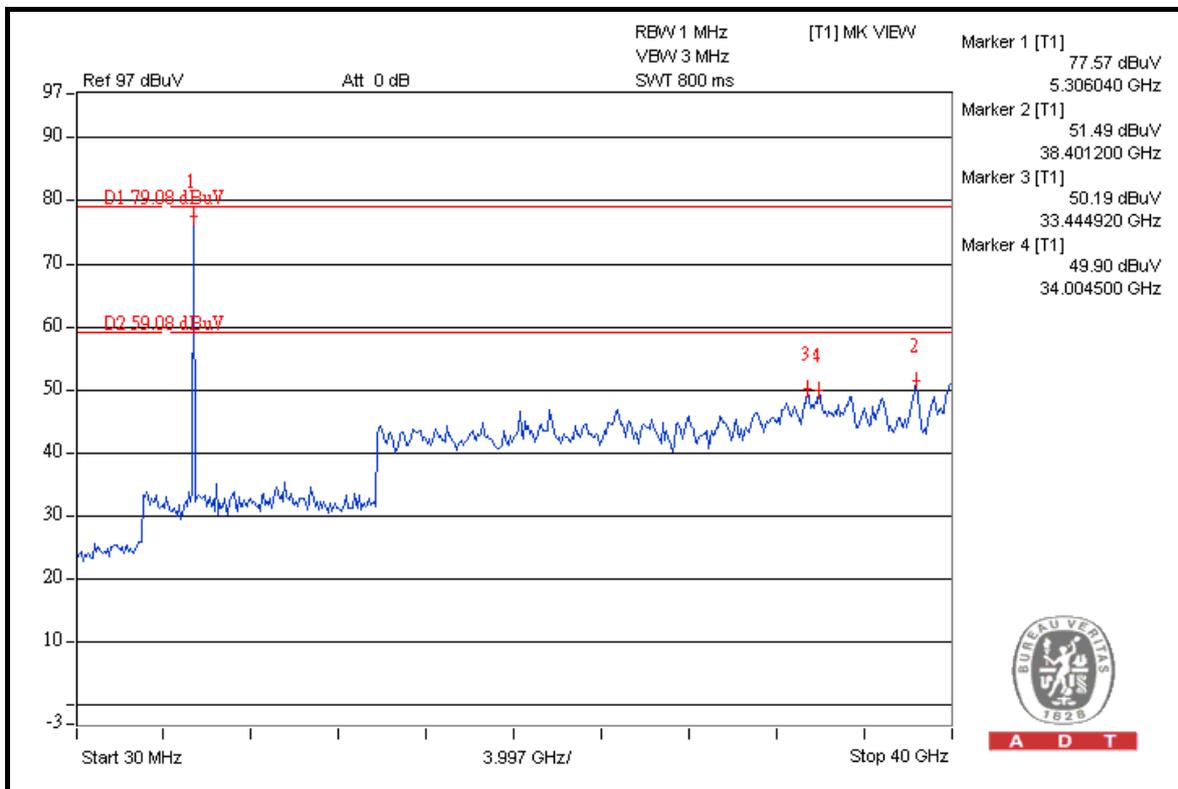
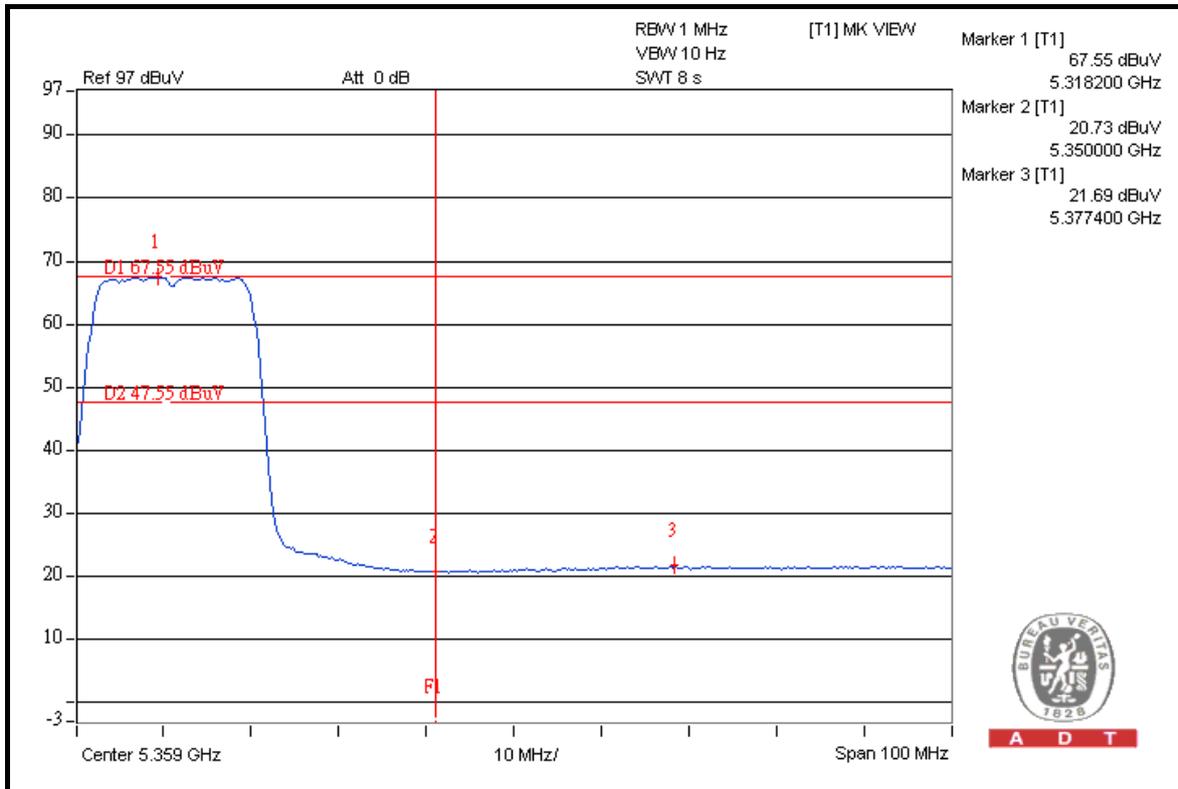


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FOR 5470-5725MHz BAND: DRAFT 802.11n (20MHz) OFDM MODULATION: 2TX

Channel 100 (5500MHz)

The band edge emission plot (5.460GHz) on the next page shows 45.73dBc between carrier maximum power and local maximum emission out of band emission. The emission of carrier strength list in the test result of channel 100 is 110.05dBuV/m (Peak), so the maximum field strength out of band emission is $110.05 - 45.73 = 64.32$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot (5.460GHz) on the next page shows 47.05dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 100 is 99.84dBuV/m (Average), so the maximum field strength in restrict band is $99.84 - 47.05 = 52.79$ dBuV/m which is under 54dBuV/m limit.

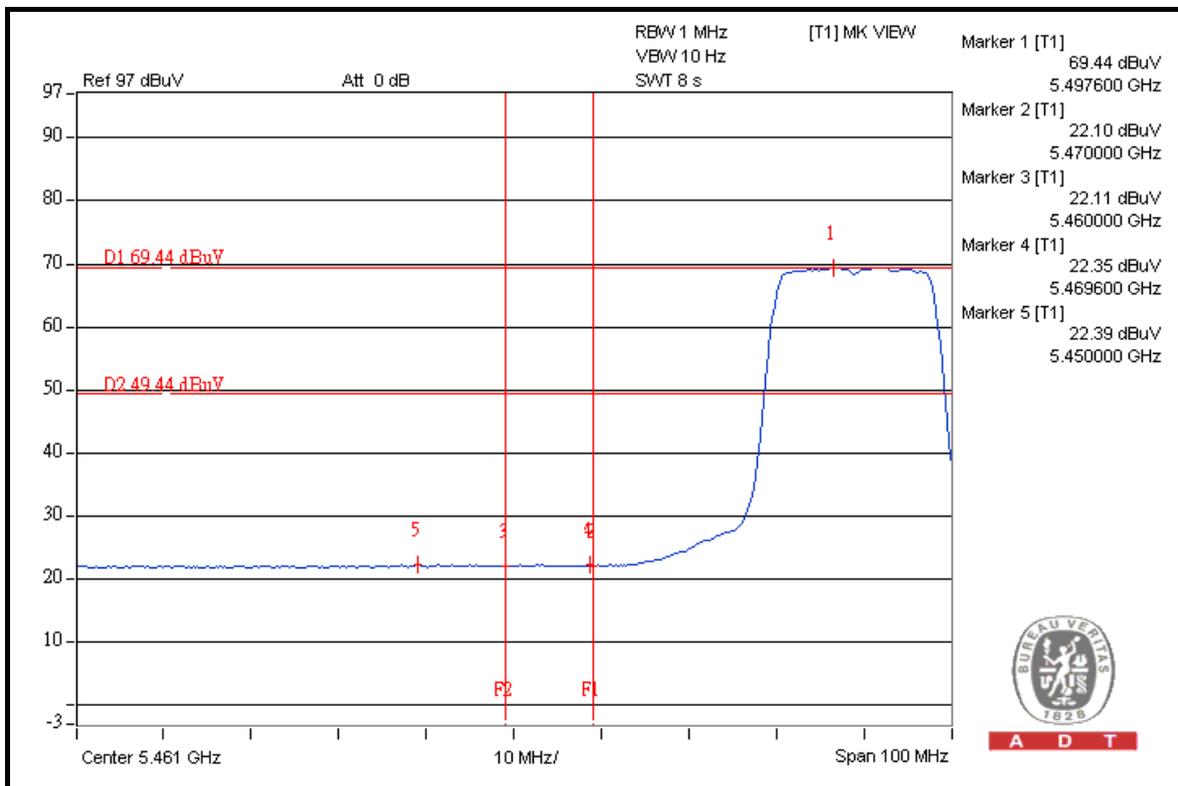
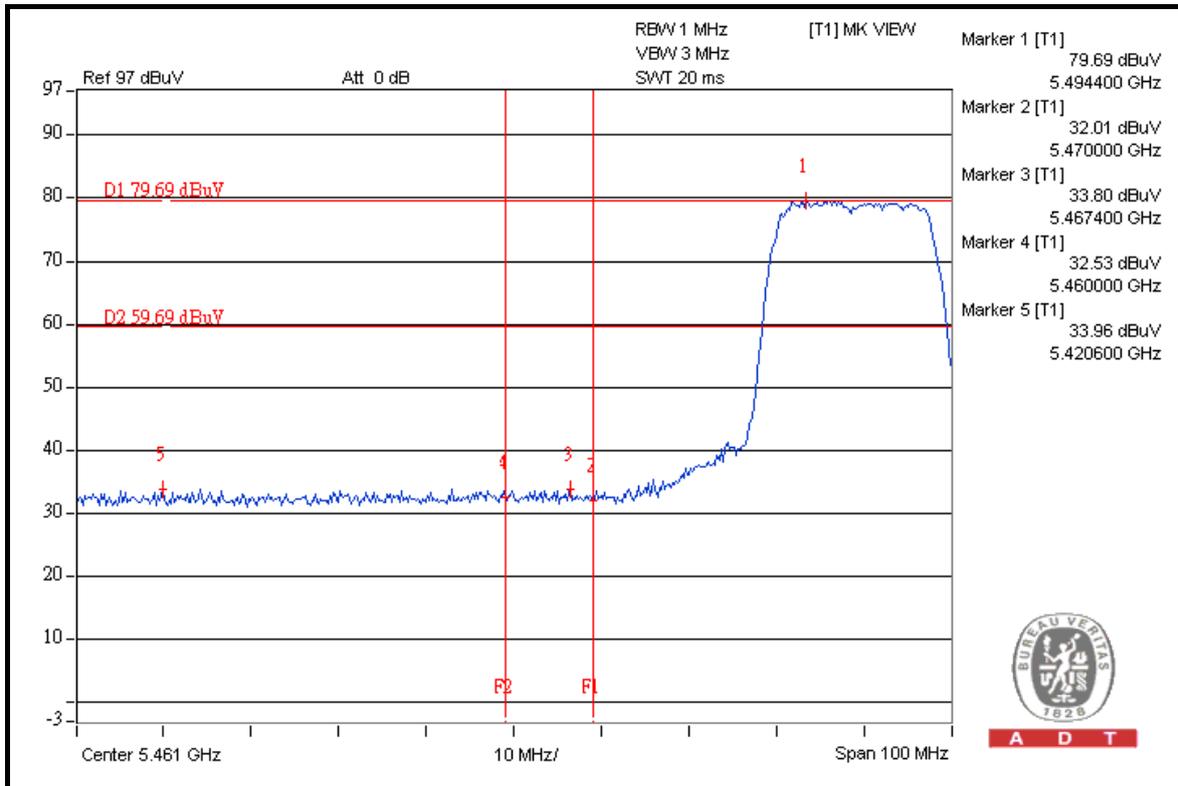
The band edge emission plot (5.470GHz) on the next page shows 45.73dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 100 is 110.05dBuV/m (Peak), so the maximum field strength in restrict band is $110.05 - 45.73 = 64.32$ dBuV/m which is under 68.3dBuV/m limit.

Channel 140 (5700MHz)

The band edge emission plot on the next second page shows 44.83dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 140 is 109.52dBuV/m (Peak), so the maximum field strength in restrict band is $109.52 - 44.83 = 64.69$ dBuV/m which is under 68.3dBuV/m limit.

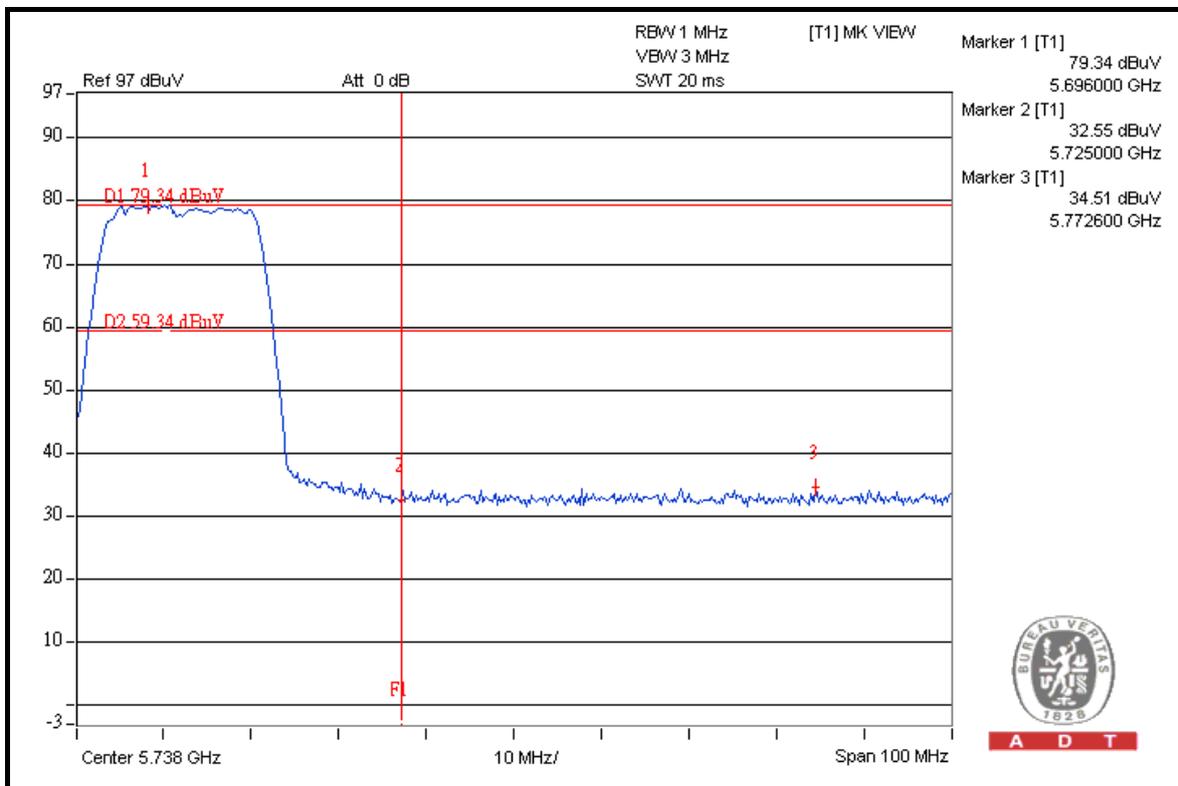
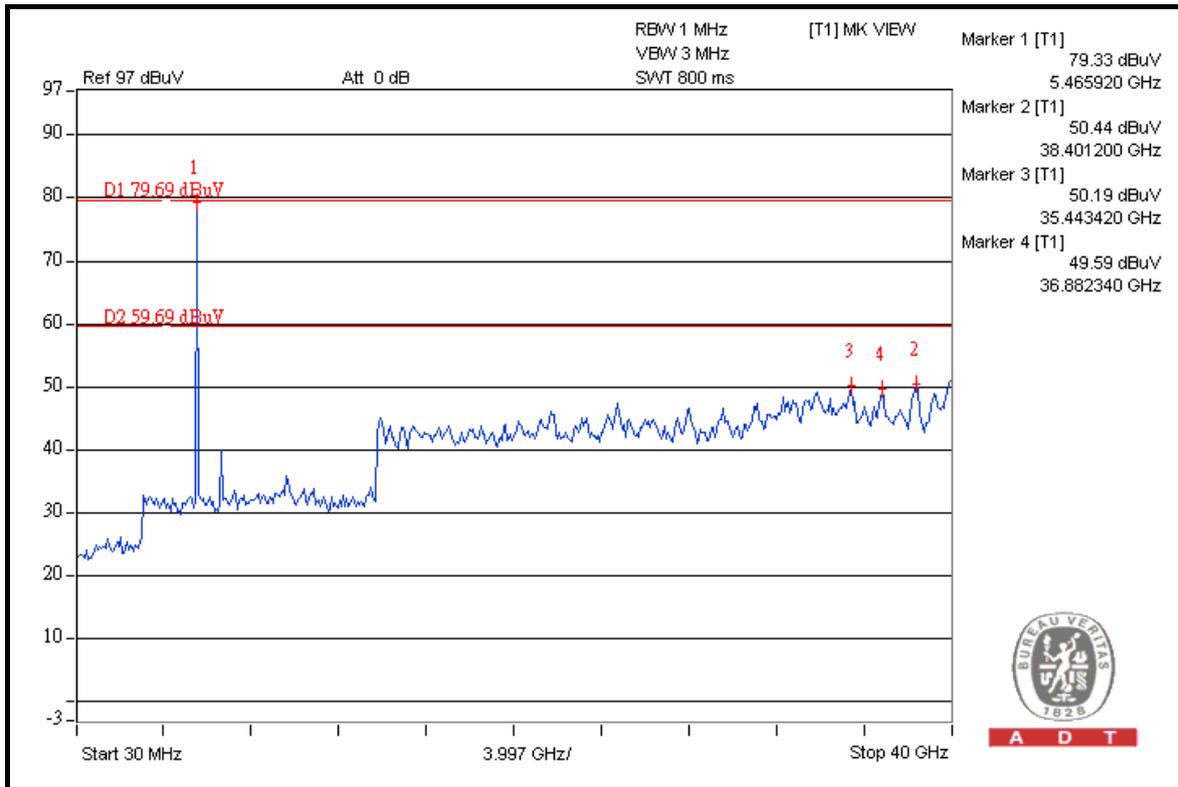


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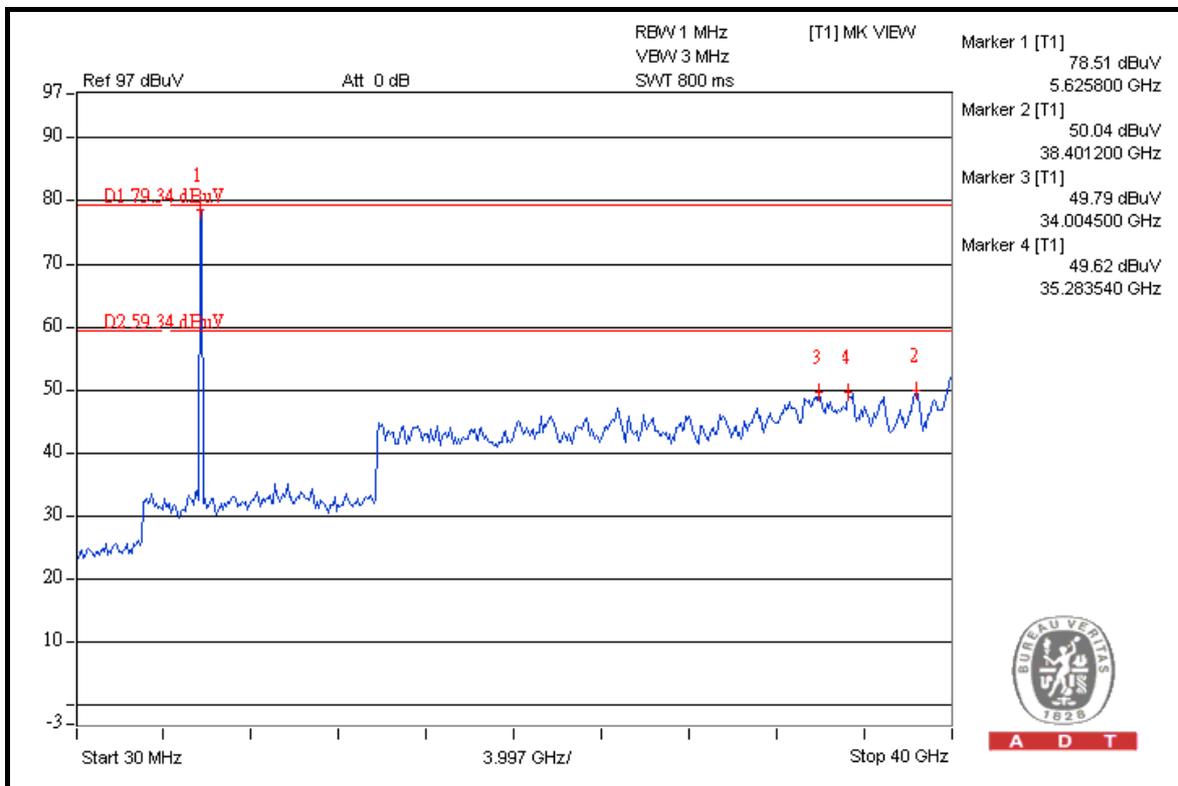
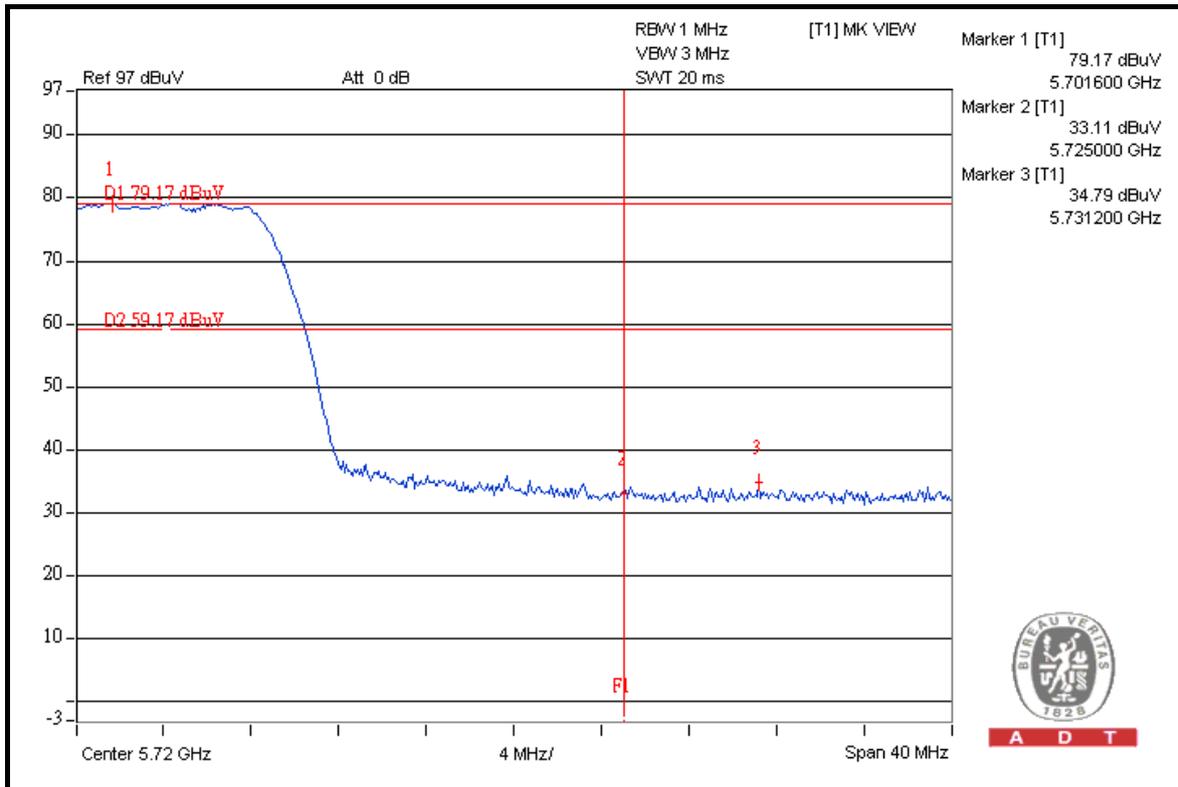


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FOR 5150-5350MHz BAND: DRAFT 802.11n (40MHz) OFDM MODULATION: 1TX

Channel 38 (5190MHz)

The band edge emission plot on the next page shows 41.34dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 38 is 103.31dBuV/m (Peak), so the maximum field strength in restrict band is $103.31 - 41.34 = 61.97$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on the next page shows 43.16dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 38 is 92.55dBuV/m (Average), so the maximum field strength in restrict band is $92.55 - 43.16 = 49.39$ dBuV/m which is under 54dBuV/m limit.

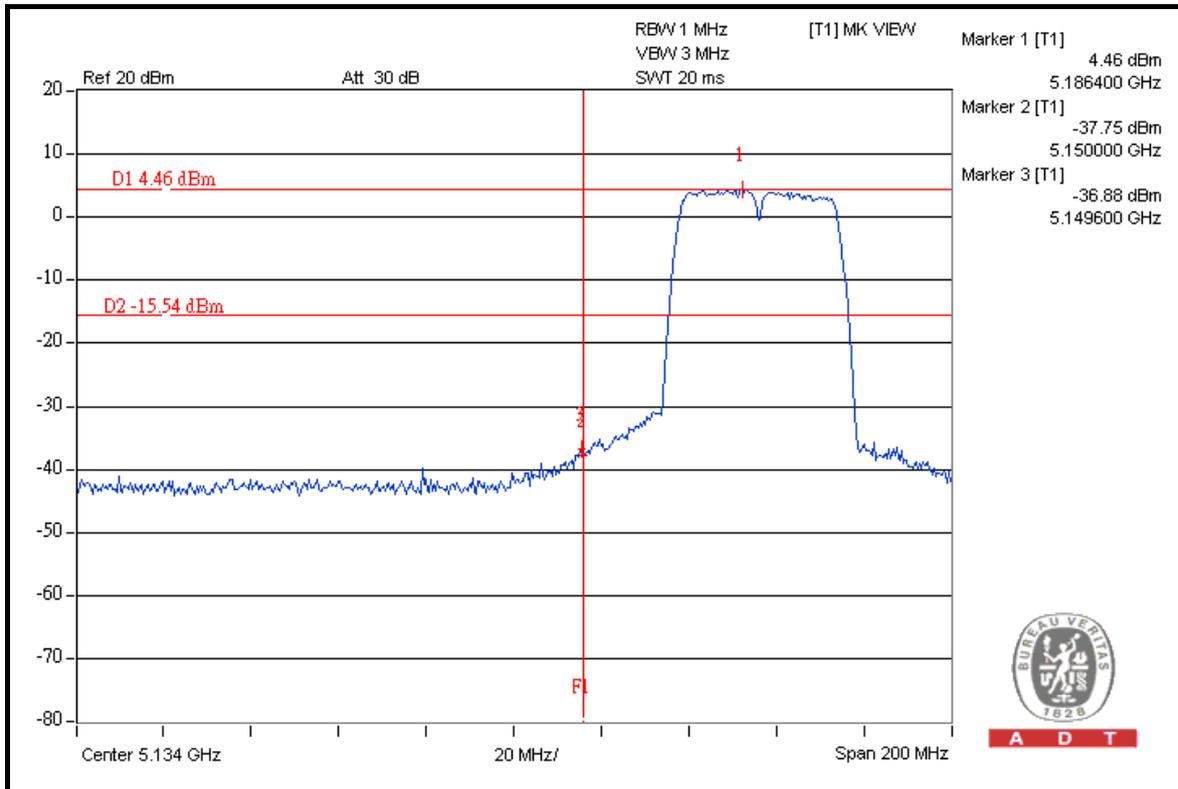
Channel 62 (5310MHz)

The band edge emission plot on the next second page shows 44.84dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 62 is 103.66dBuV/m (Peak), so the maximum field strength in restrict band is $103.66 - 44.84 = 58.82$ dBuV/m which is under 74dBuV/m limit.

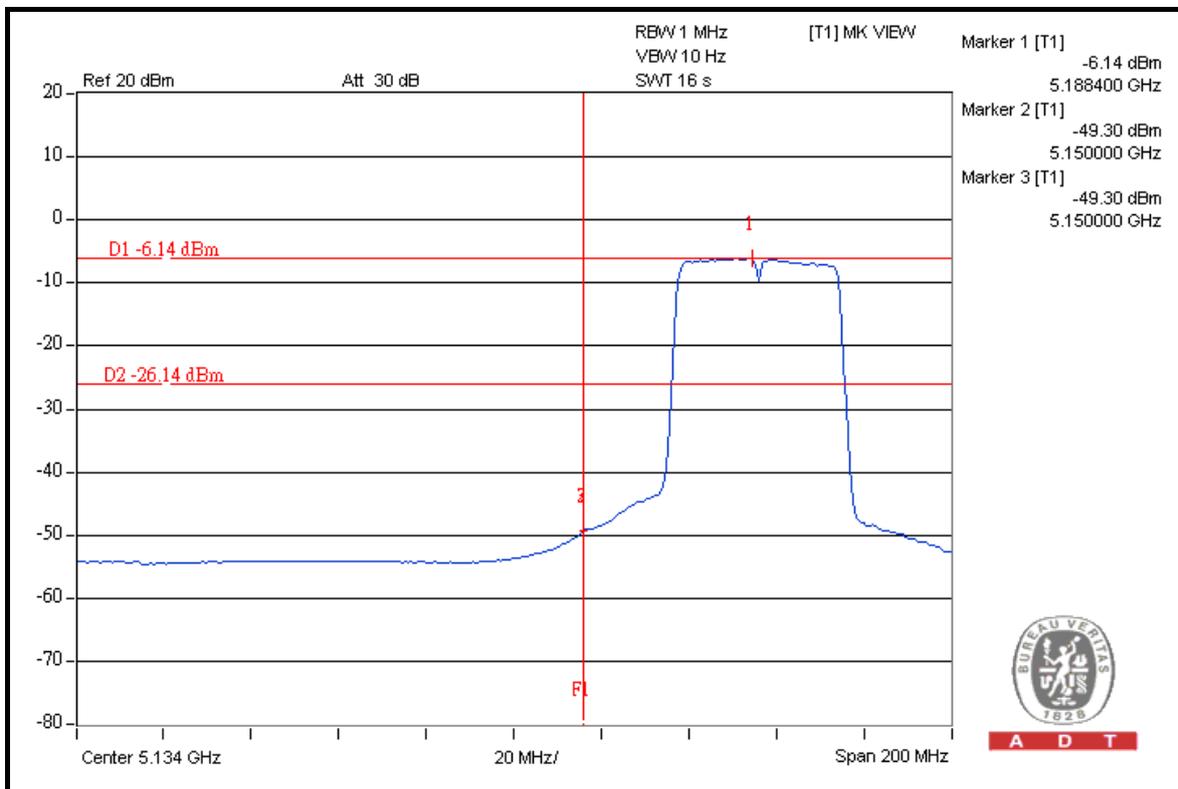
The band edge emission plot on the next third page shows 45.83dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 62 is 93.01dBuV/m (Average), so the maximum field strength in restrict band is $93.01 - 45.83 = 47.18$ dBuV/m which is under 54dBuV/m limit.



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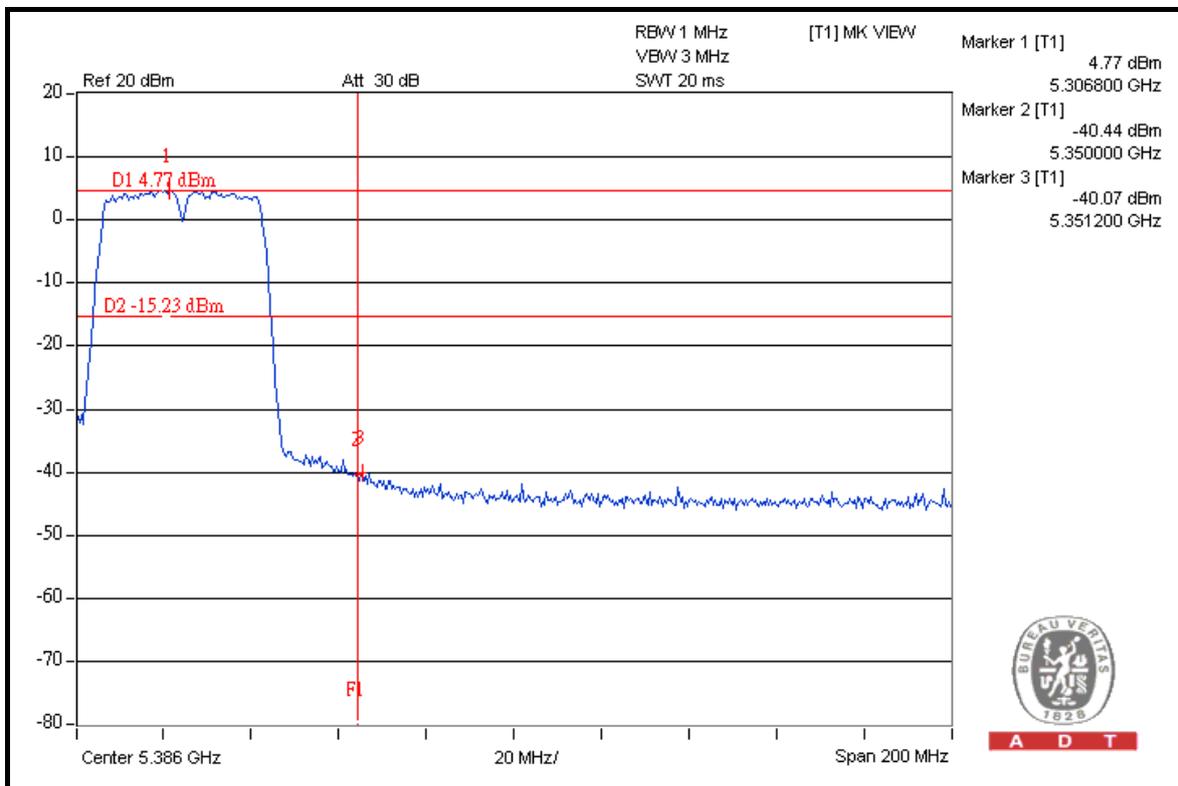
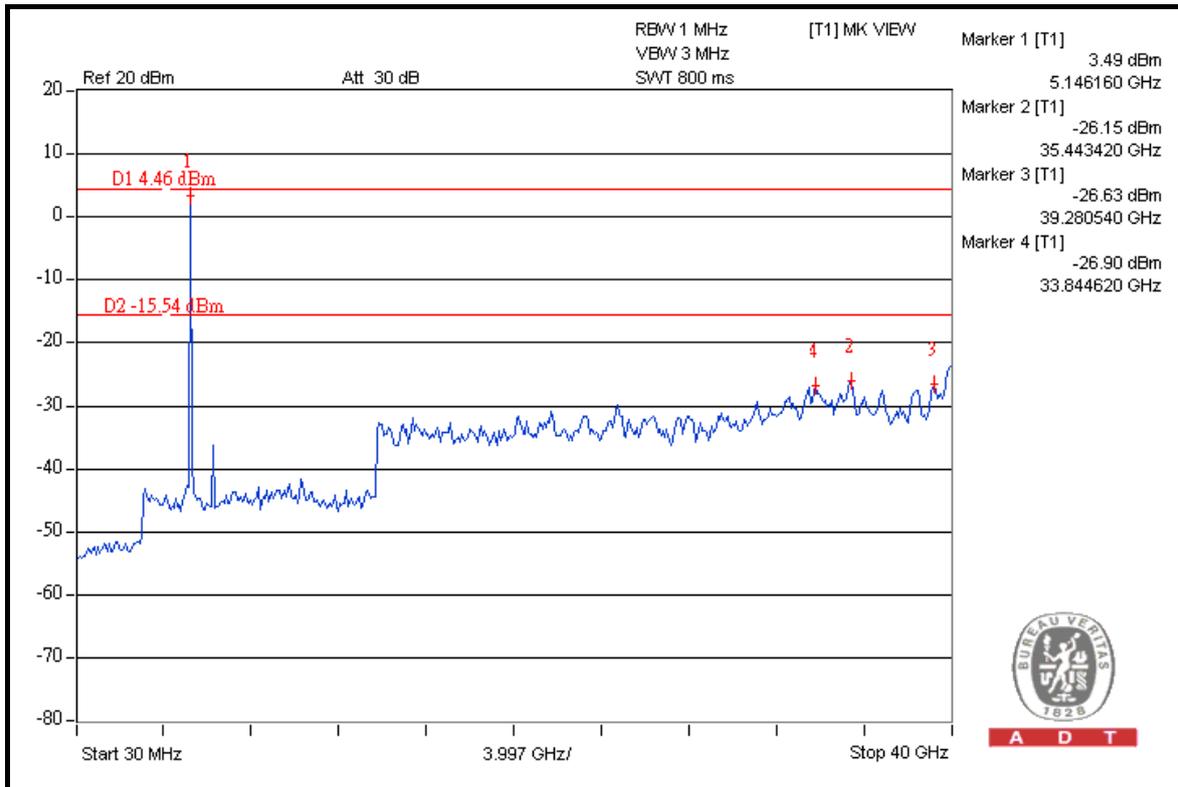
A D T



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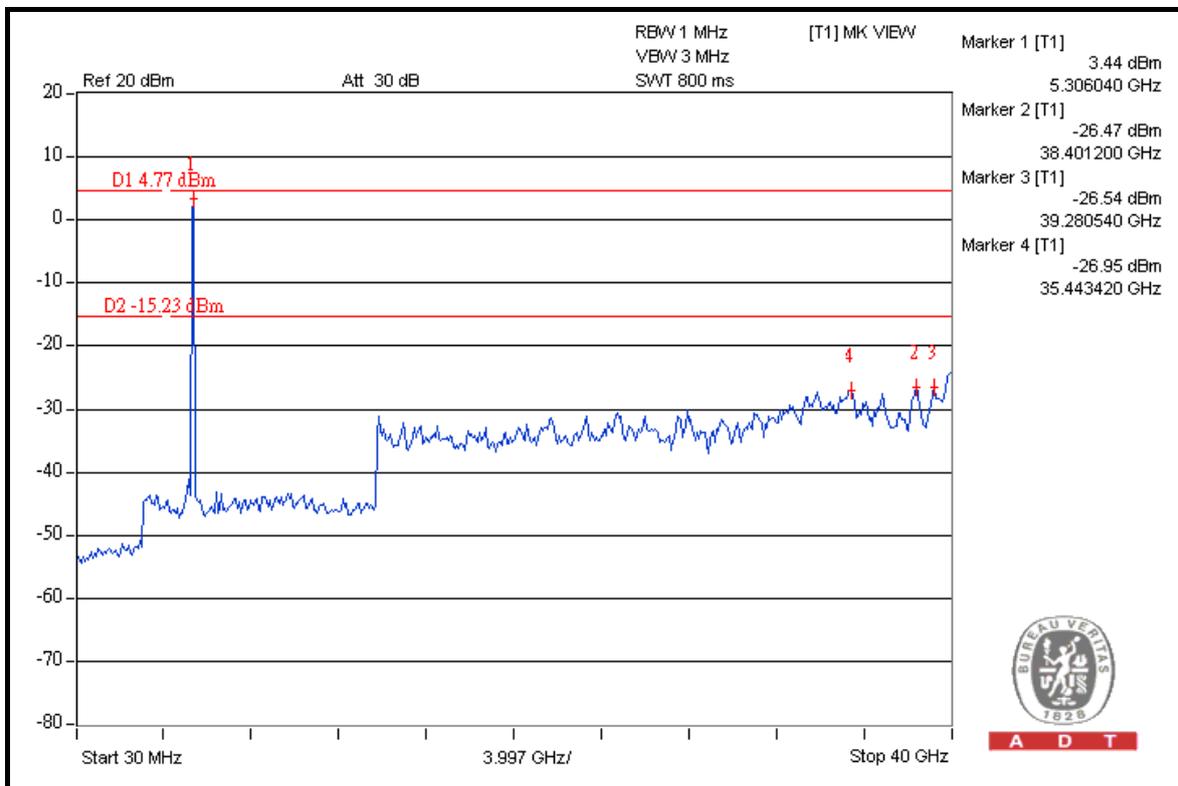
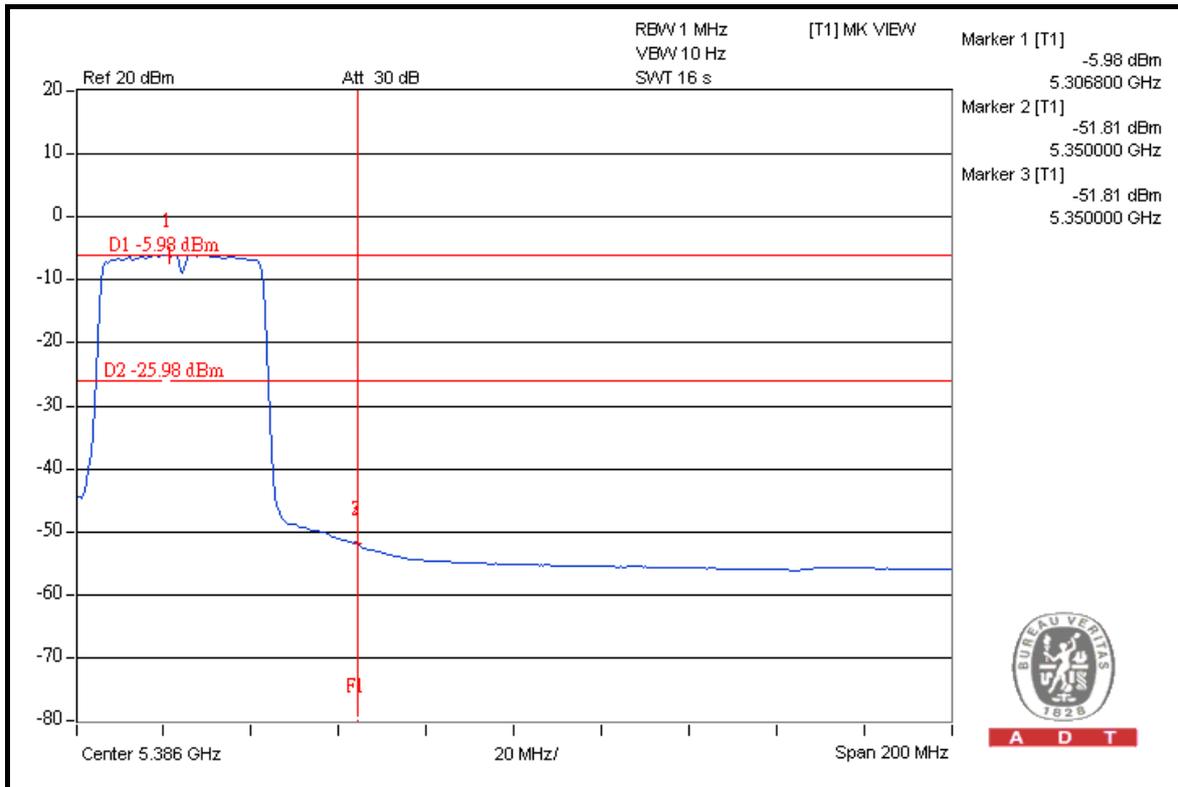


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FOR 5470-5725MHz BAND: DRAFT 802.11n (40MHz) OFDM MODULATION: 1TX

Channel 102 (5510MHz)

The band edge emission plot (5.460GHz) on the next page shows 43.90dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 102 is 105.17dBuV/m (Peak), so the maximum field strength in restrict band is $105.17 - 43.90 = 61.27$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot (5.460GHz) on the next page shows 47.06dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 102 is 95.06dBuV/m (Average), so the maximum field strength in restrict band is $95.06 - 47.06 = 48.00$ dBuV/m which is under 54dBuV/m limit.

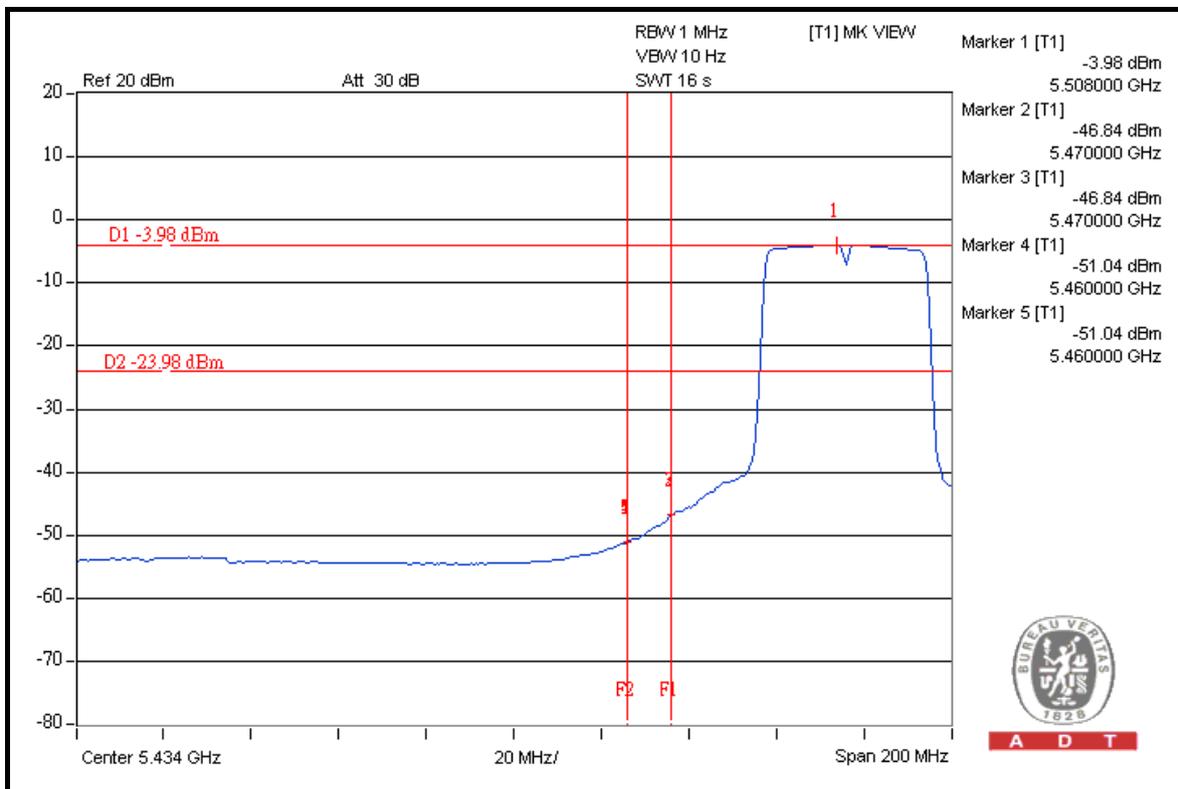
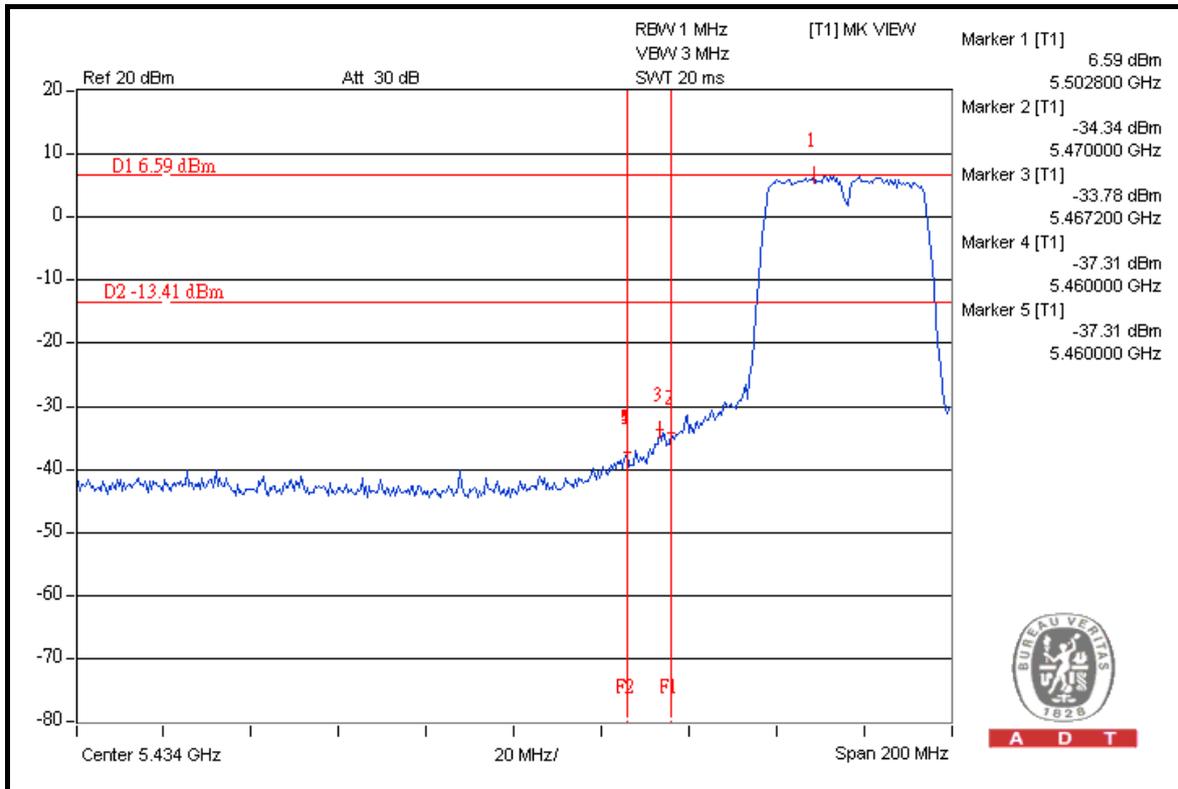
The band edge emission plot (5.470GHz) on the next page shows 40.37dBc between carrier maximum power and local maximum emission out of band emission. The emission of carrier strength list in the test result of channel 102 is 105.17dBuV/m (Peak), so the maximum field strength out of band emission is $105.17 - 40.37 = 64.80$ dBuV/m which is under 68.3dBuV/m limit.

Channel 134 (5670MHz)

The band edge emission plot on the next second page shows 46.88dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 134 is 105.53dBuV/m (Peak), so the maximum field strength in restrict band is $105.53 - 46.88 = 58.65$ dBuV/m which is under 68.3dBuV/m limit.

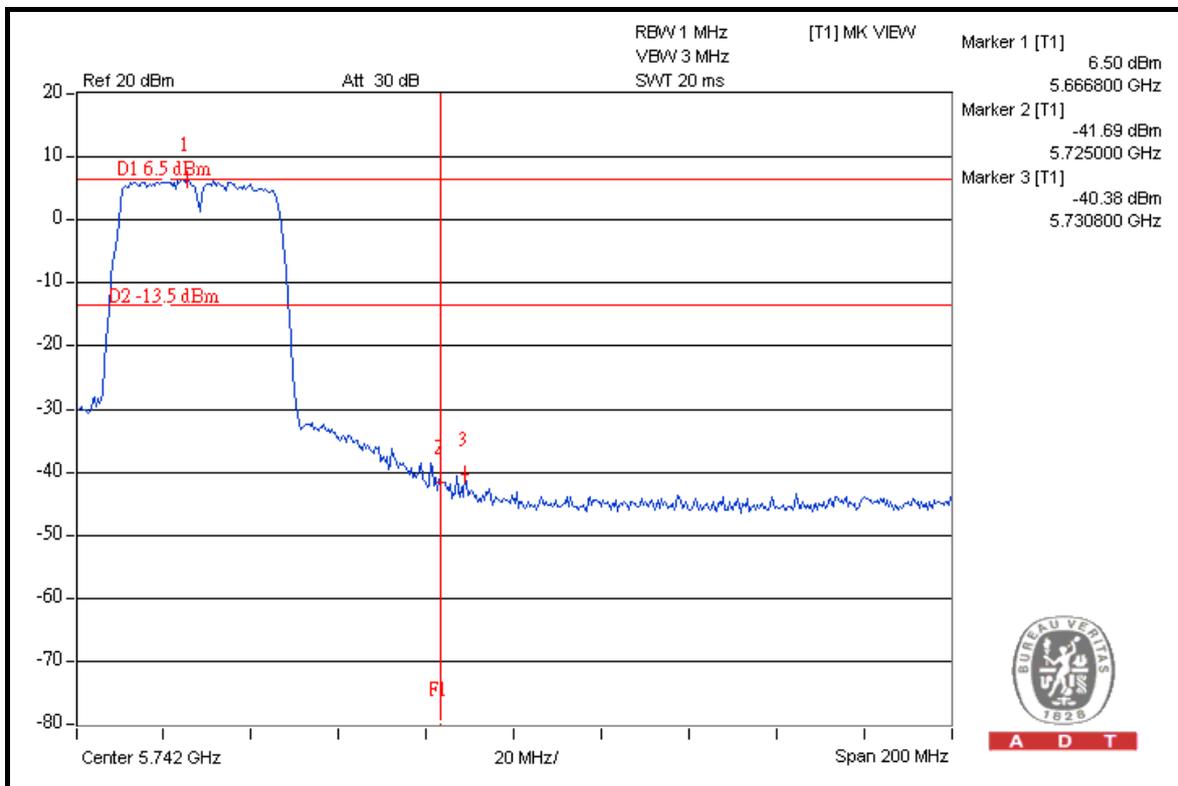
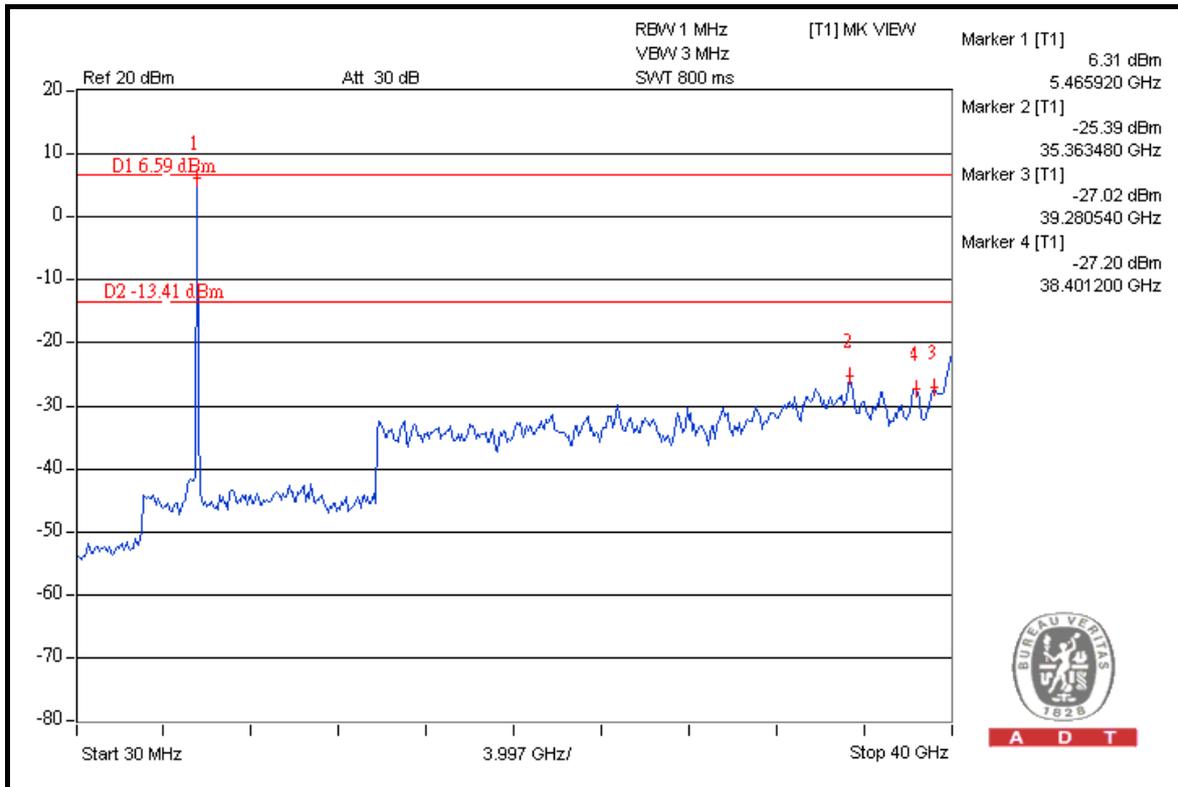


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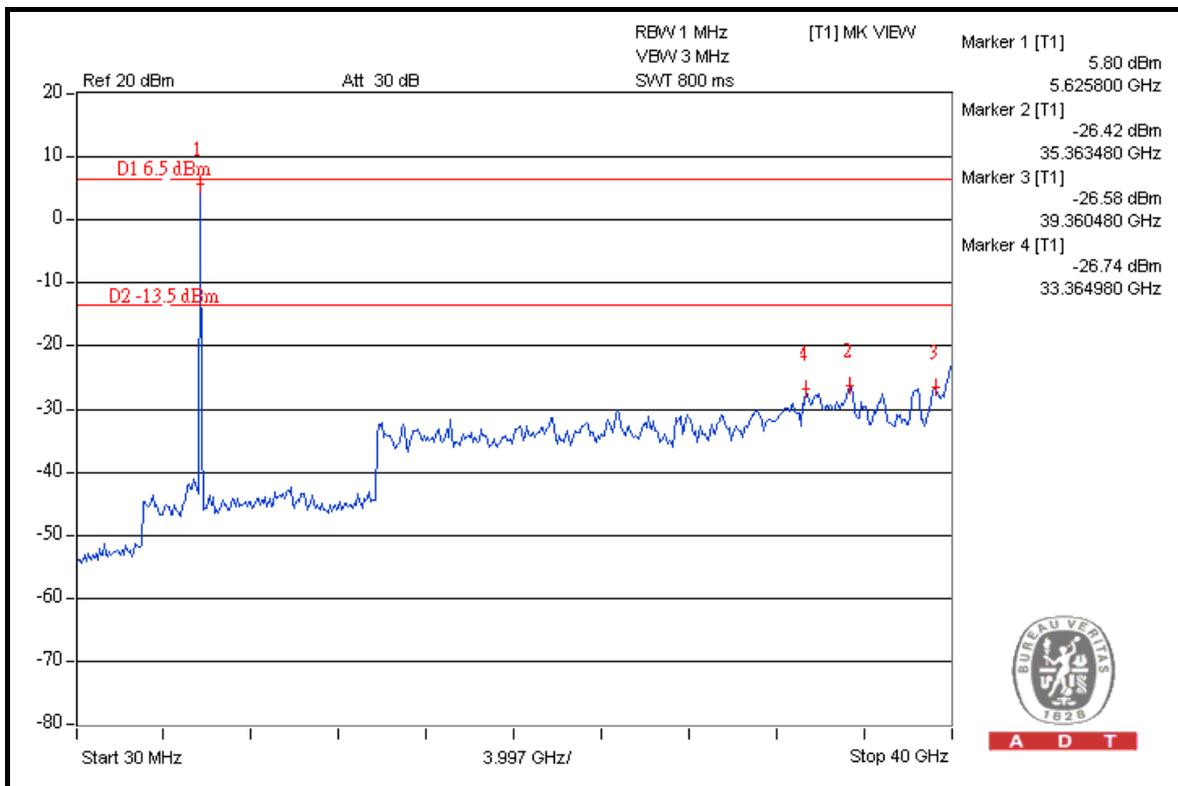
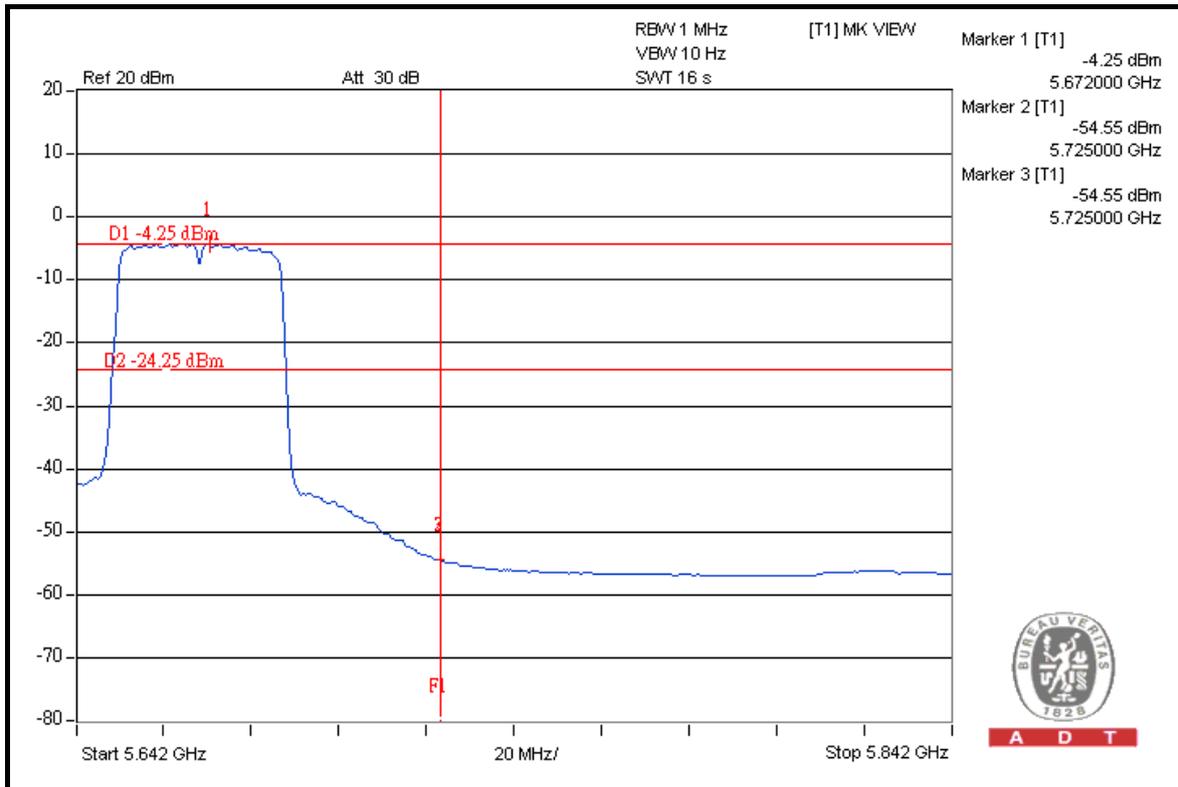


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FOR 5150-5350MHz BAND: DRAFT 802.11n (40MHz) OFDM MODULATION: 2TX

Channel 38 (5190MHz)

The band edge emission plot on the next page shows 40.48dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 38 is 104.93dBuV/m (Peak), so the maximum field strength in restrict band is $104.93 - 40.48 = 64.45$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on the next page shows 41.75dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 38 is 94.12dBuV/m (Average), so the maximum field strength in restrict band is $94.12 - 41.75 = 52.37$ dBuV/m which is under 54dBuV/m limit.

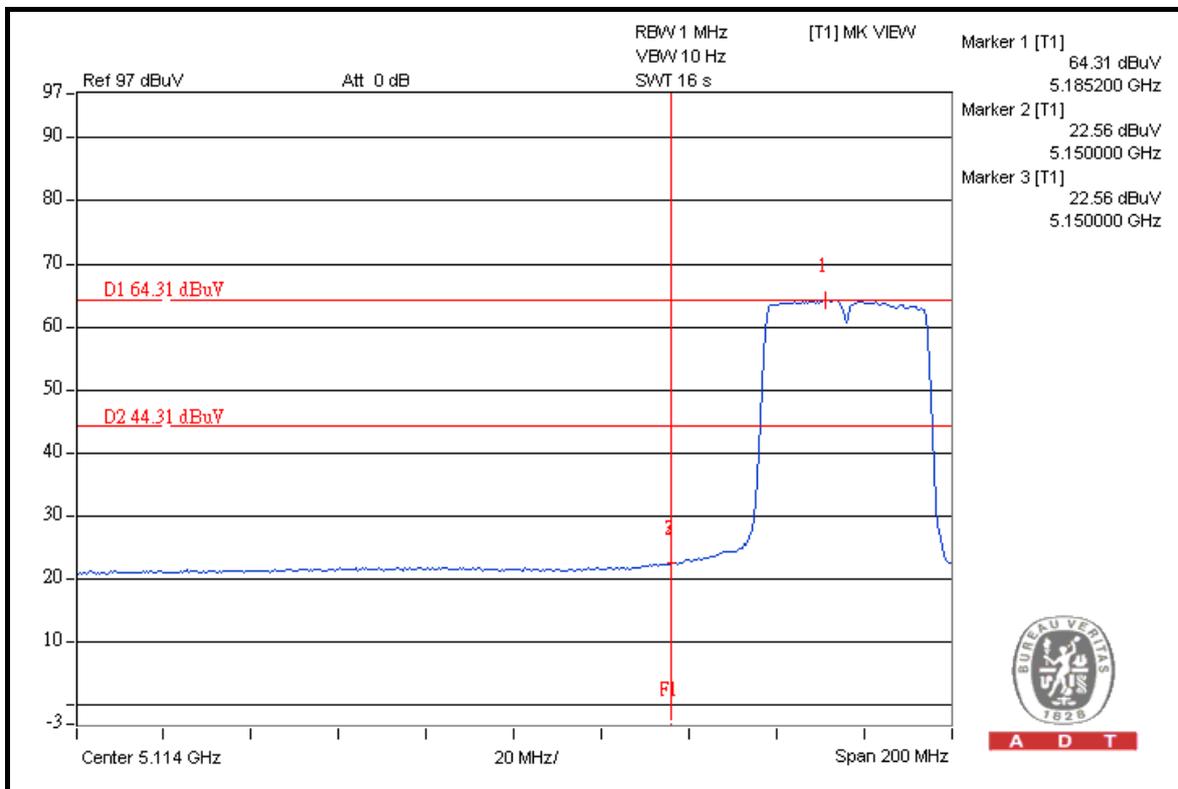
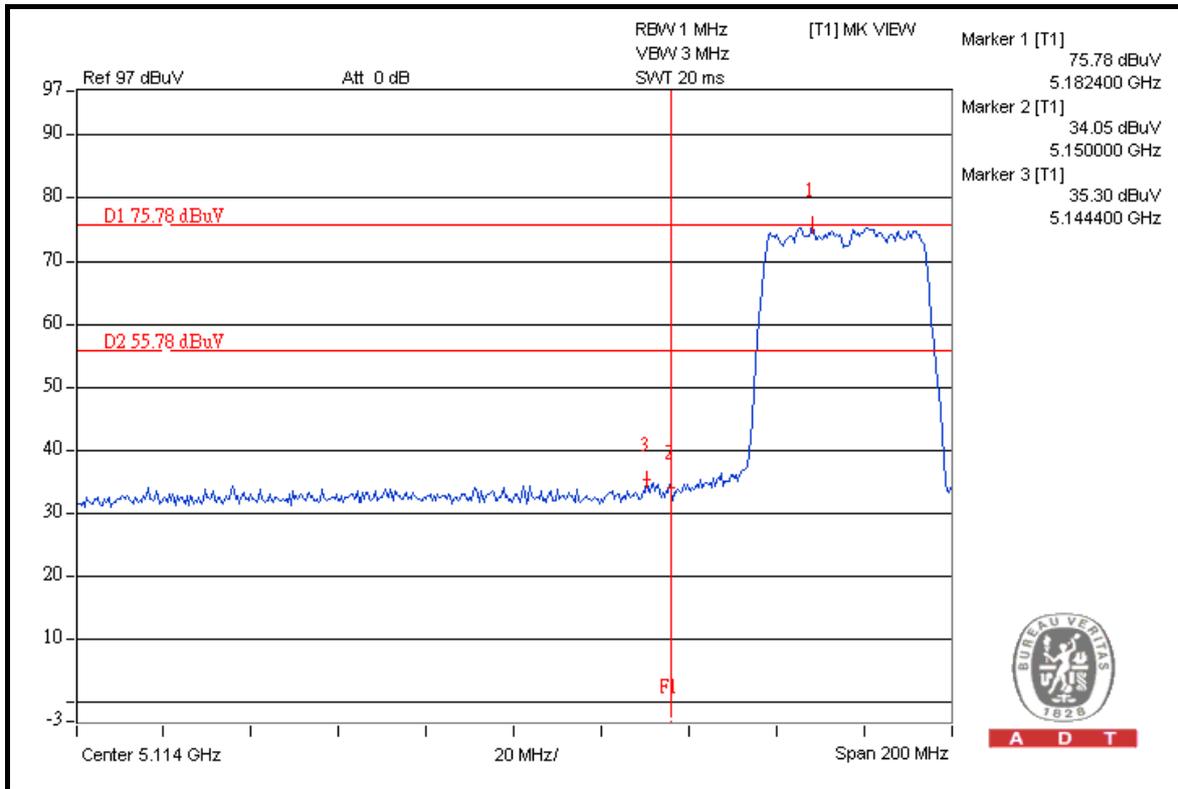
Channel 62 (5310MHz)

The band edge emission plot on the next second page shows 40.06dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 62 is 105.02dBuV/m (Peak), so the maximum field strength in restrict band is $105.02 - 40.06 = 64.96$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot on the next third page shows 41.73dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 62 is 94.20dBuV/m (Average), so the maximum field strength in restrict band is $94.20 - 41.73 = 52.47$ dBuV/m which is under 54dBuV/m limit.

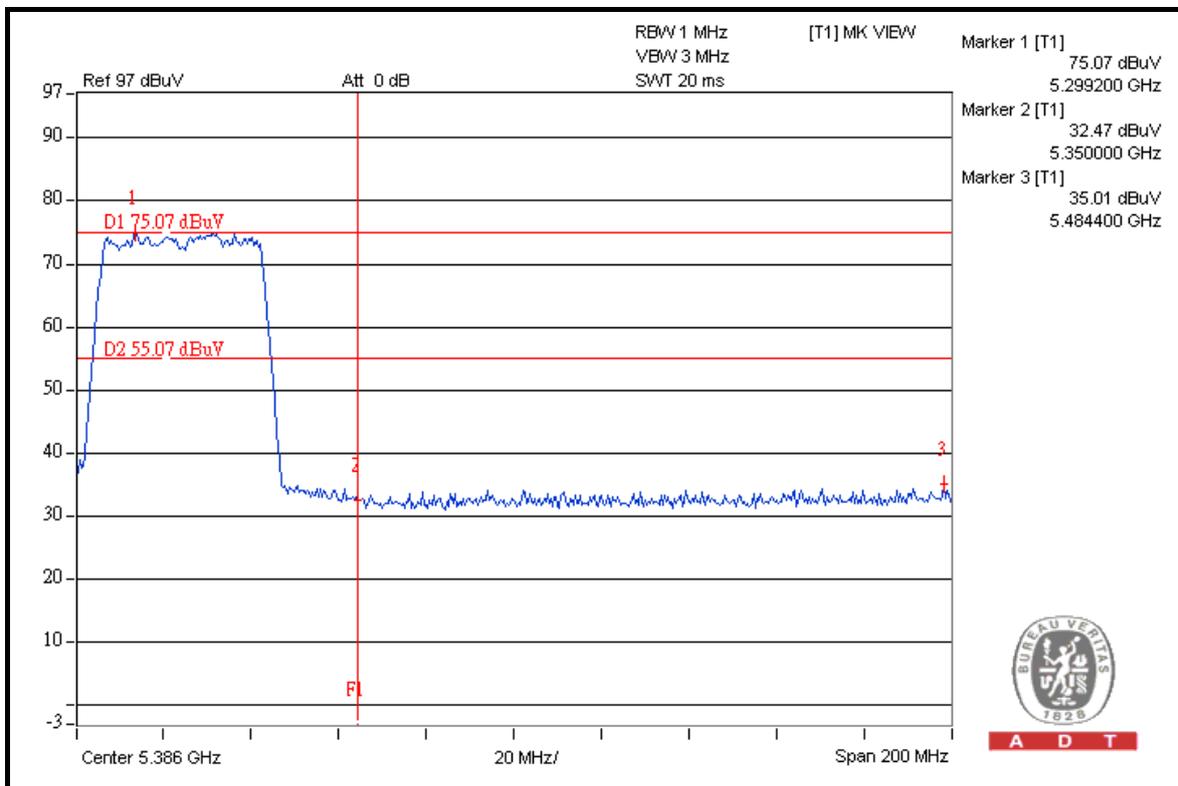
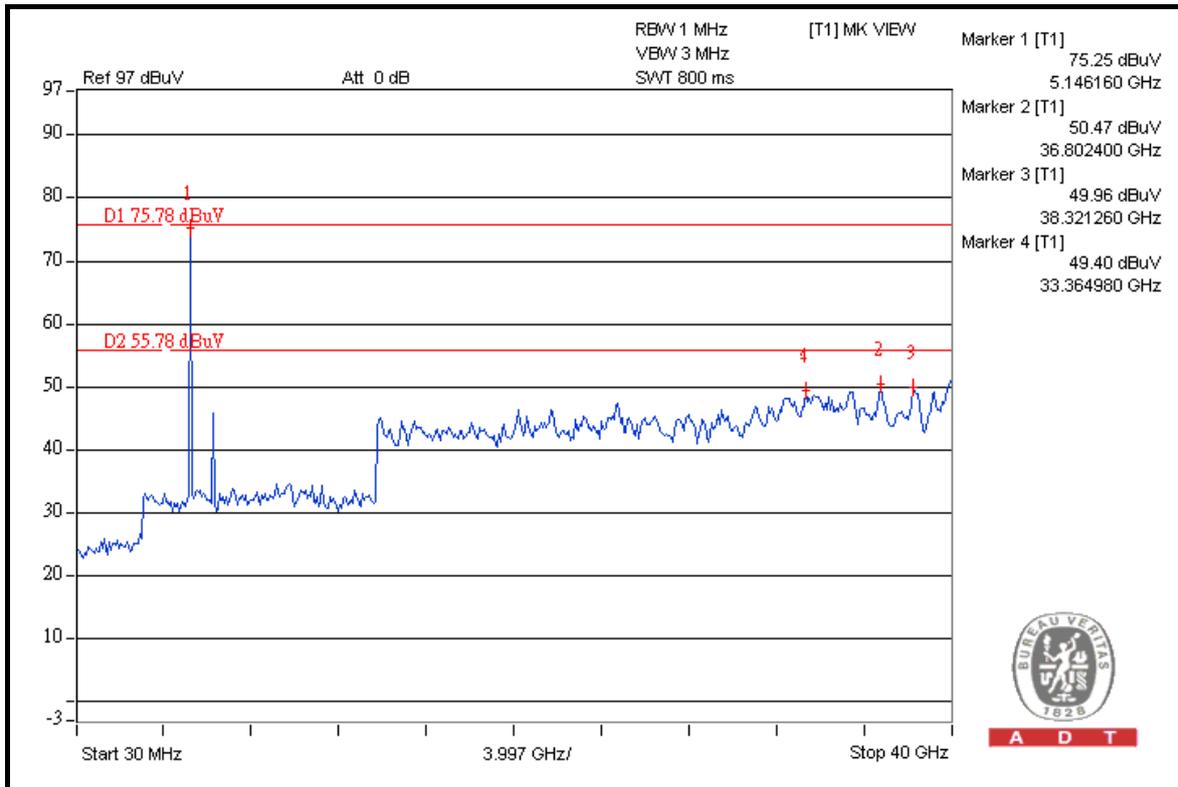


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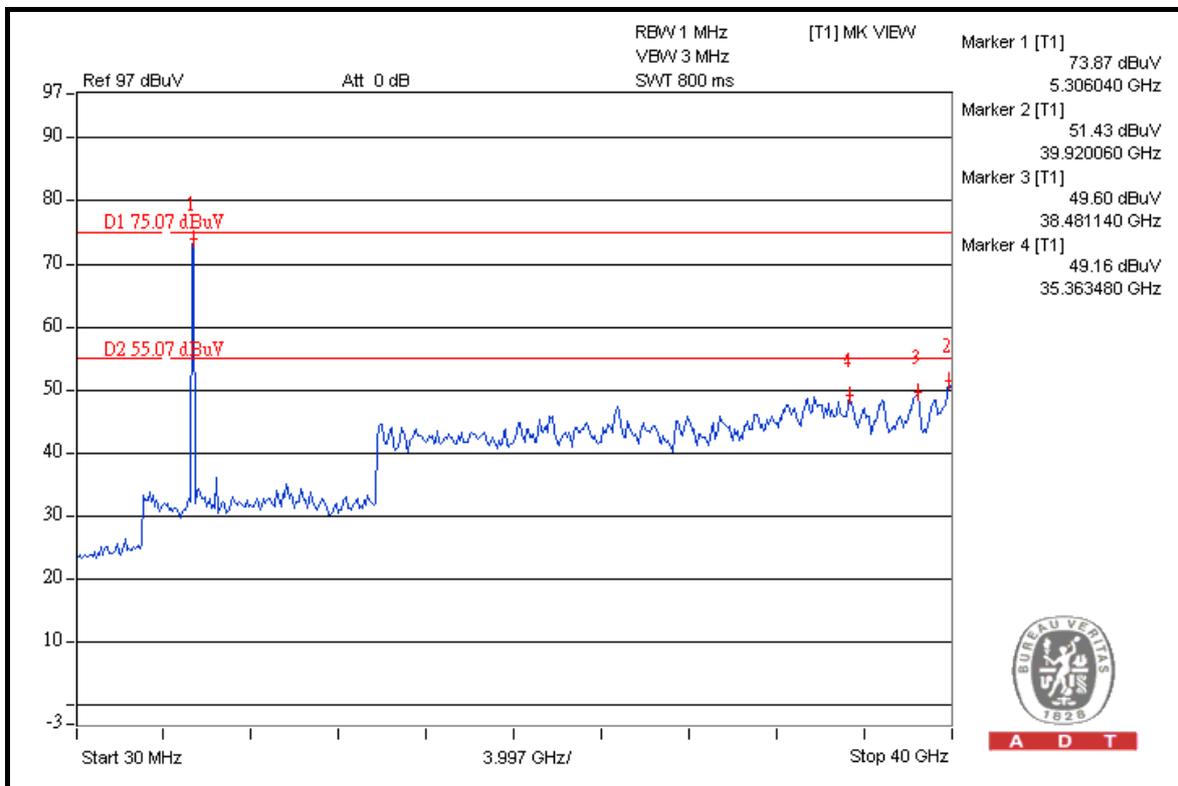
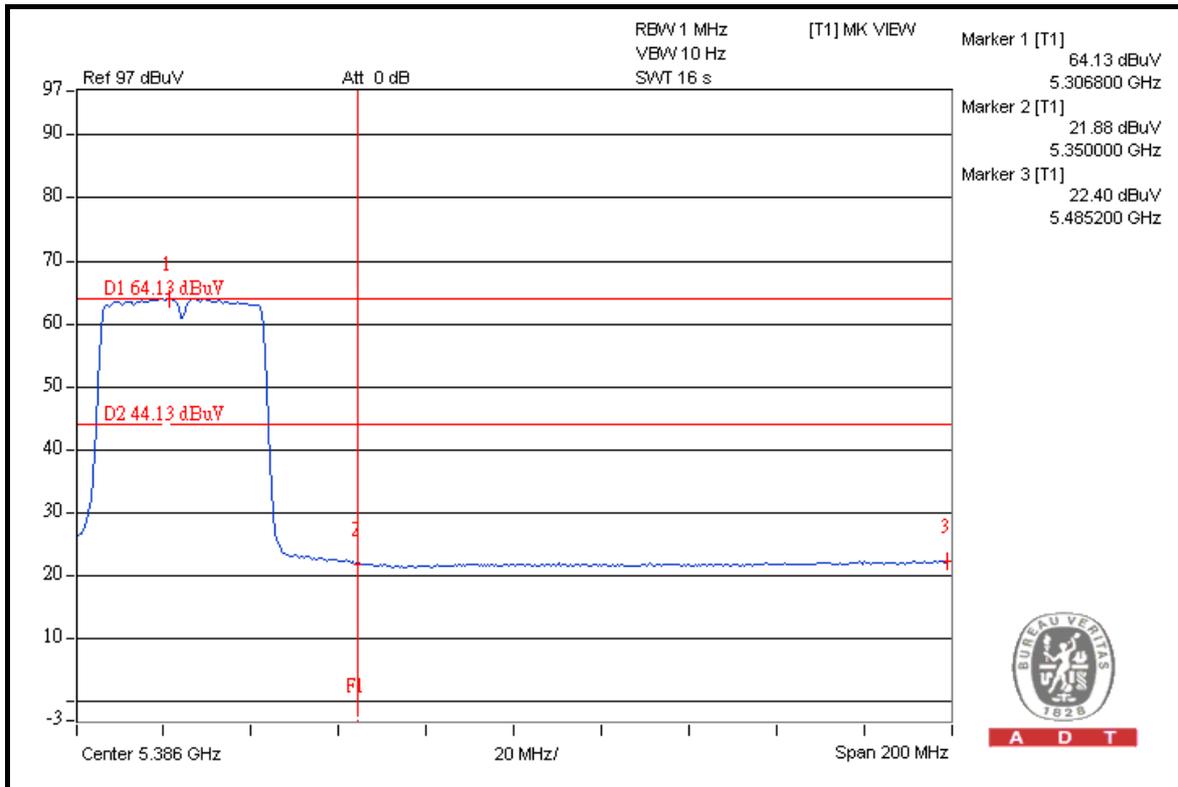


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FOR 5470-5725MHz BAND: DRAFT 802.11n (40MHz) OFDM MODULATION: 2TX

Channel 102 (5510MHz)

The band edge emission plot (5.460GHz) on the next page shows 42.73dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 102 is 106.89dBuV/m (Peak), so the maximum field strength in restrict band is $106.89 - 42.73 = 64.16$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot (5.460GHz) on the next page shows 44.18dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 102 is 96.03dBuV/m (Average), so the maximum field strength in restrict band is $96.03 - 44.18 = 51.85$ dBuV/m which is under 54dBuV/m limit.

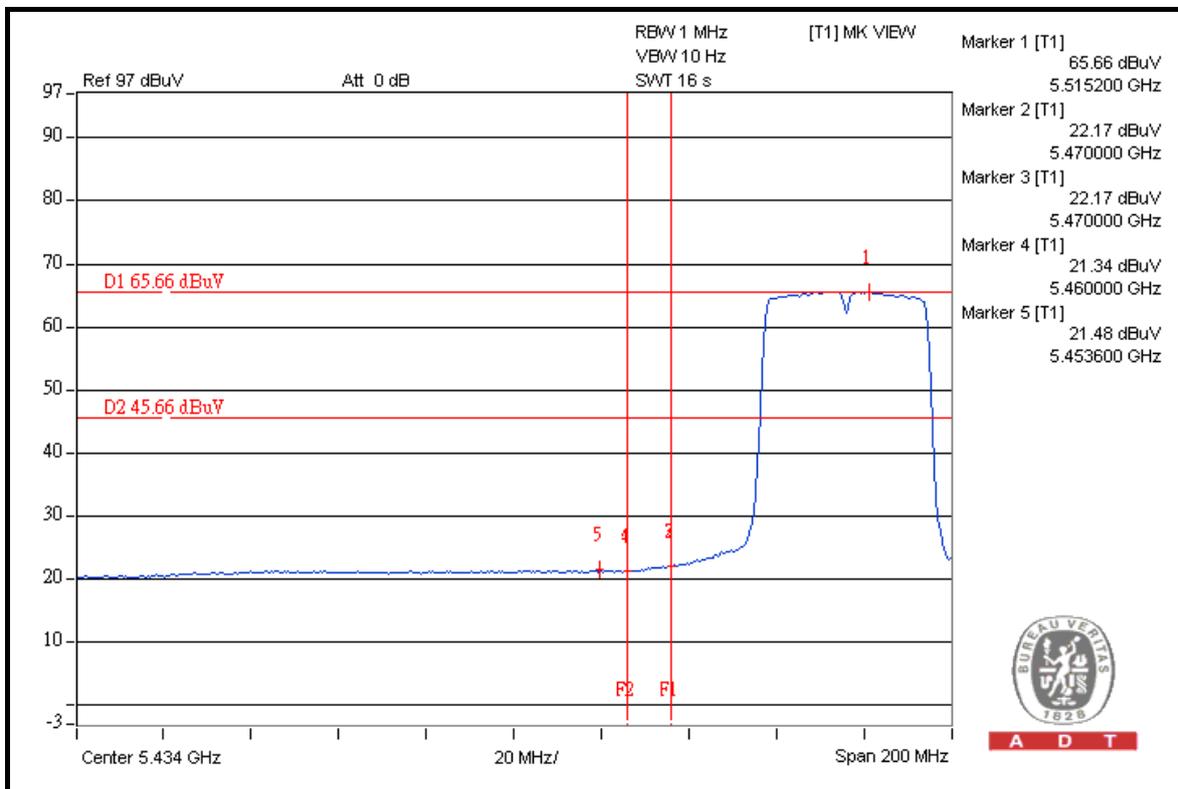
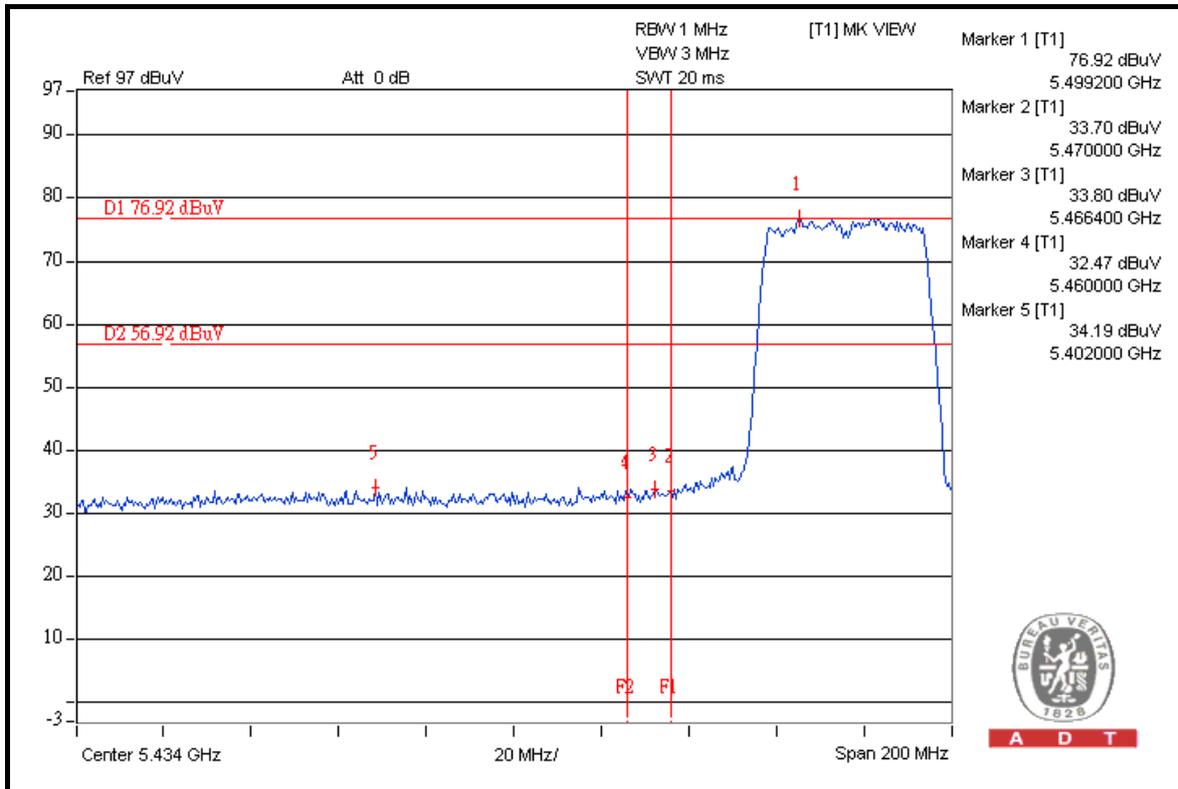
The band edge emission plot (5.470GHz) on the next page shows 43.12dBc between carrier maximum power and local maximum emission out of band emission. The emission of carrier strength list in the test result of channel 102 is 106.89dBuV/m (Peak), so the maximum field strength out of band emission is $106.89 - 43.12 = 63.77$ dBuV/m which is under 68.3dBuV/m limit.

Channel 134 (5670MHz)

The band edge emission plot on the next second page shows 42.62dBc between carrier maximum power and local maximum emission in restrict band. The emission of carrier strength list in the test result of channel 134 is 107.14dBuV/m (Peak), so the maximum field strength in restrict band is $107.14 - 42.62 = 64.52$ dBuV/m which is under 68.3dBuV/m limit.

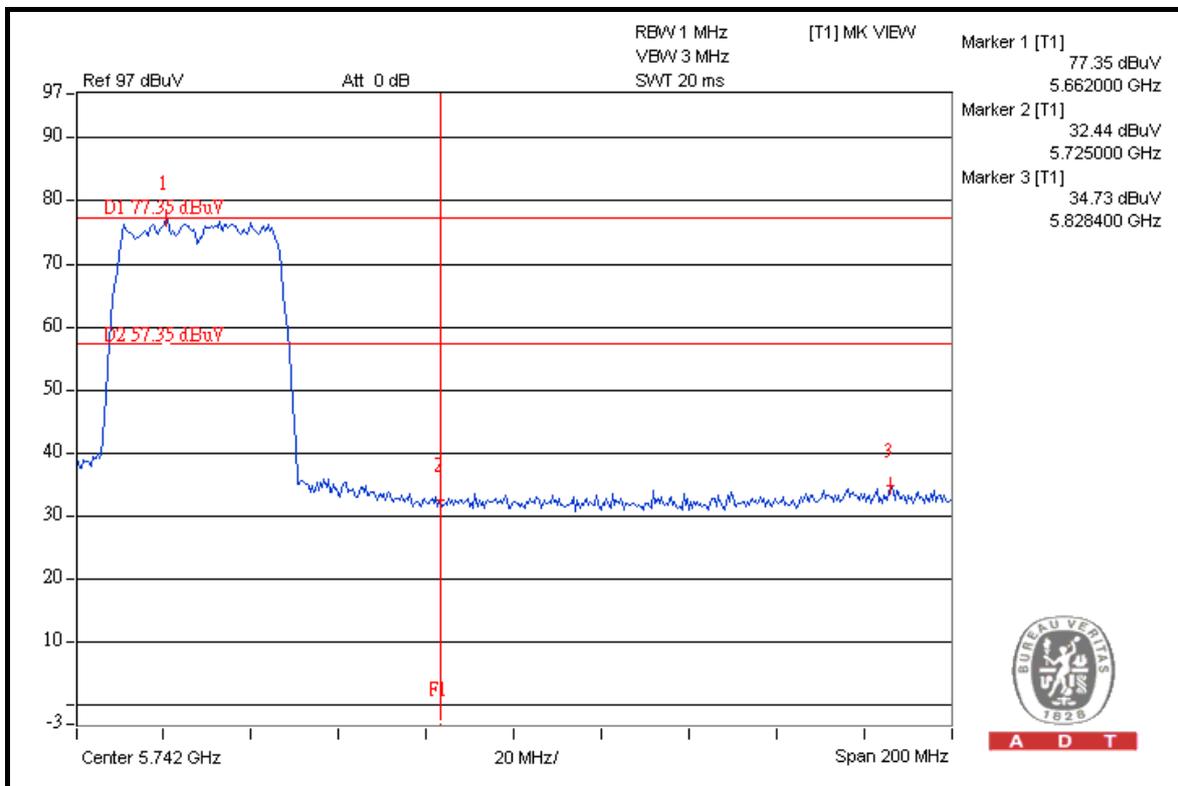
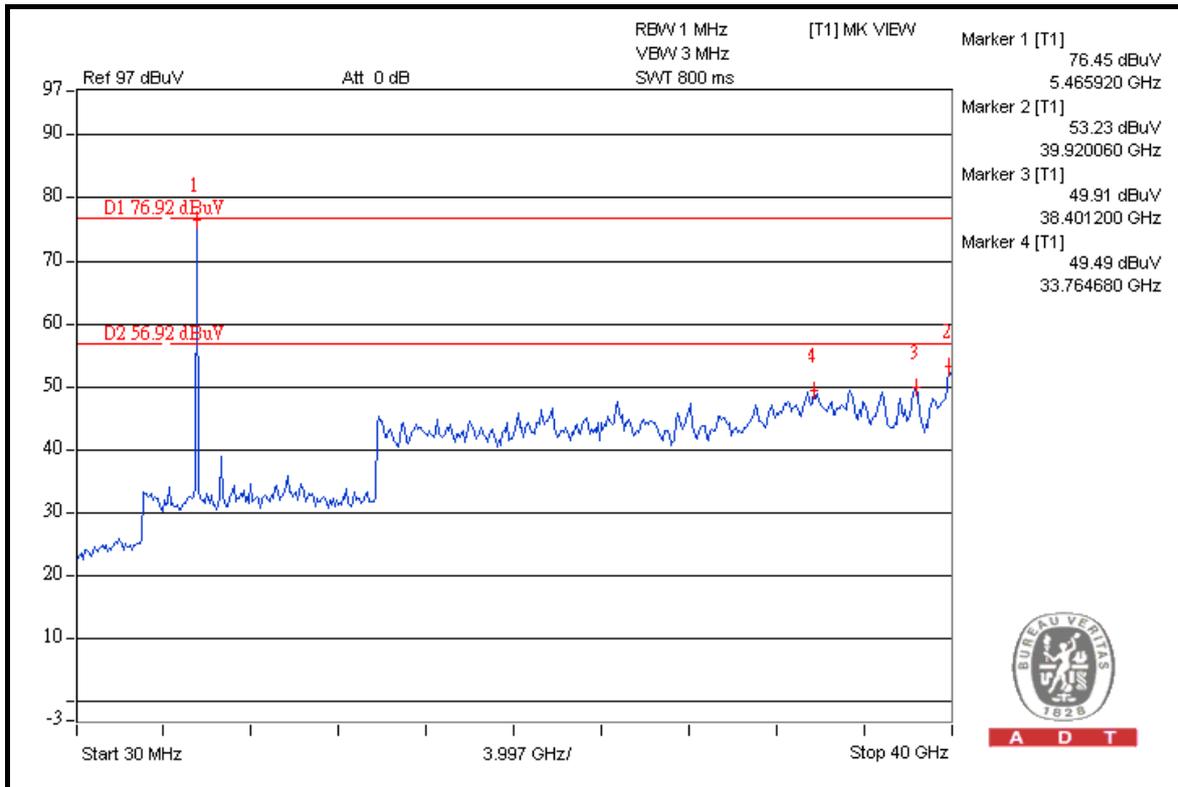


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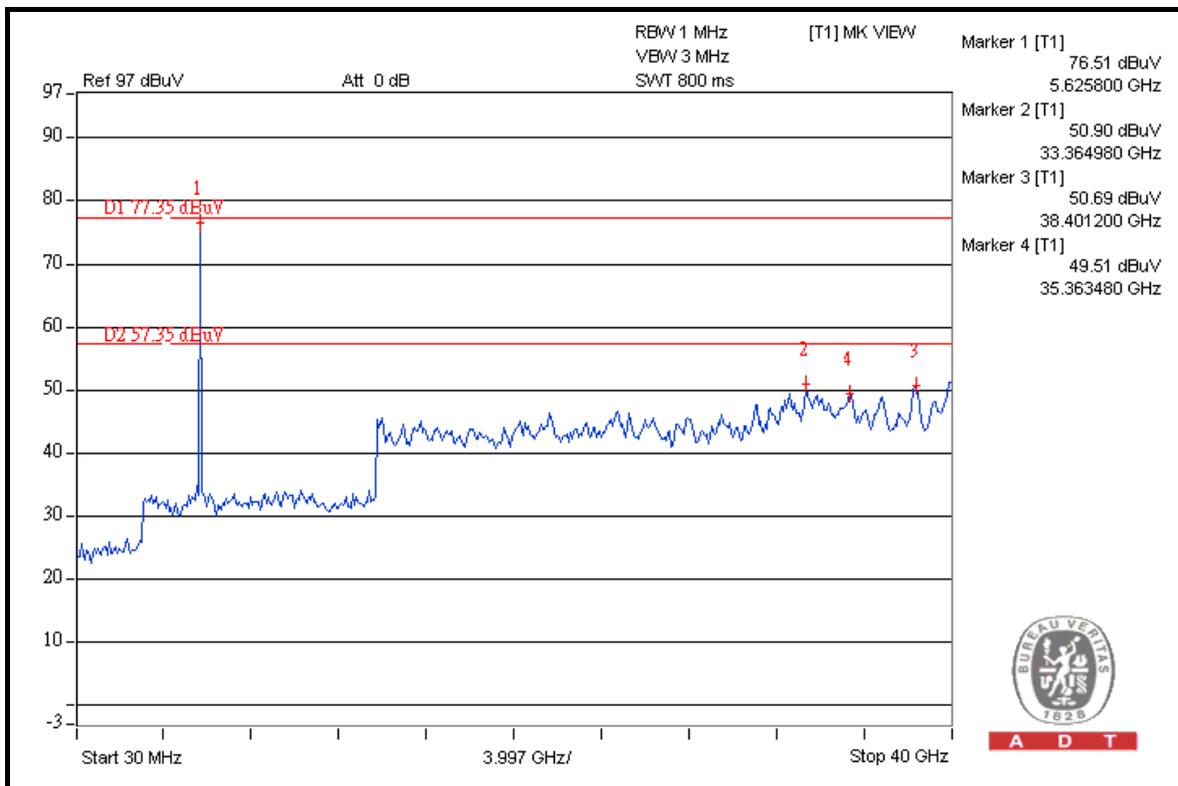
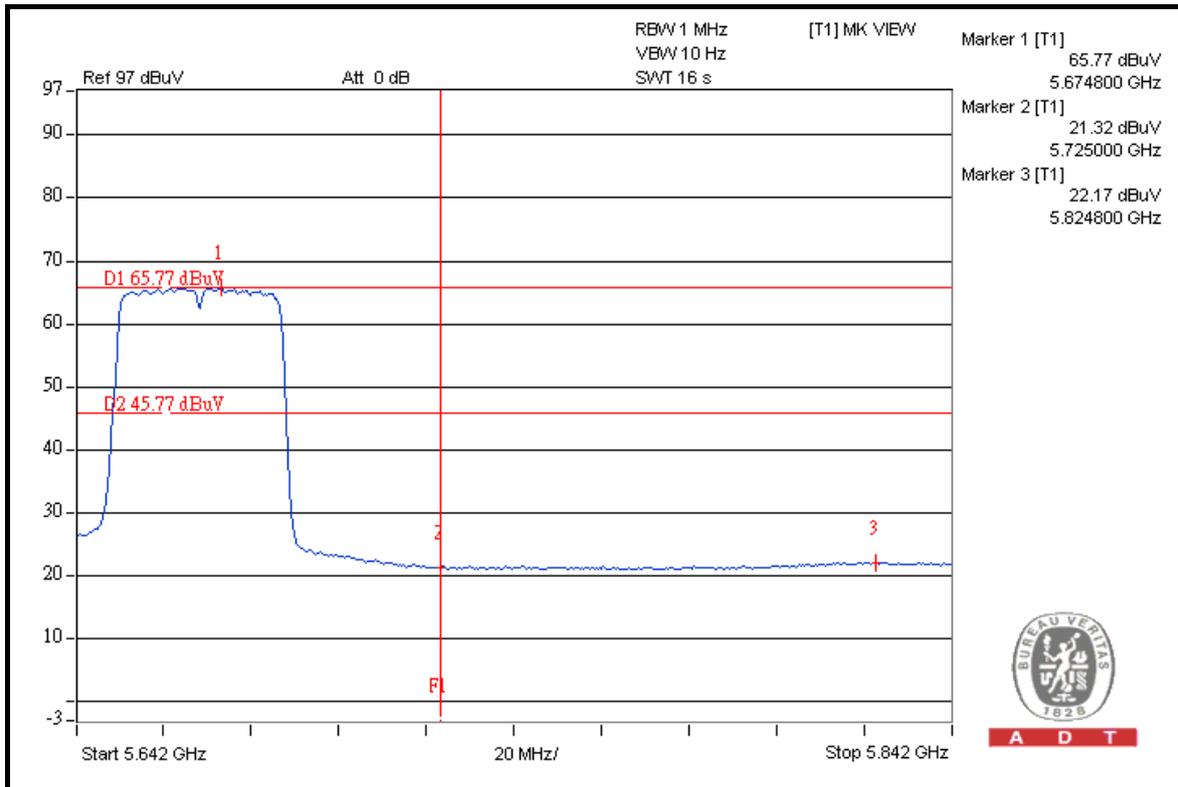


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4.8 ANTENNA REQUIREMENT

4.8.1 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.

4.8.2 ANTENNA CONNECTED CONSTRUCTION

The antenna used in this product is dipole antenna with RP-TNC connector. The maximum Gain of the antenna is 5dBi.

5. PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).



6. INFORMATION ON THE TESTING LABORATORIES

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, 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
Germany	TUV Rheinland
Japan	VCCI
Norway	NEMKO
Canada	INDUSTRY CANADA , CSA
R.O.C.	TAF, BSMI, NCC
Netherlands	Telefication
Singapore	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: 886-2-26051924

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

Web Site: www.adt.com.tw

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

7. APPENDIX A - MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.

---END---