FCC TEST REPORT (15.407)

REPORT NO.:	RF110607C09A
MODEL NO.:	SWW1810T /27 (refer to item 3.1 for more detail)
FCC ID:	YG7ZRF31200
RECEIVED:	Jun. 14, 2011
TESTED:	Jul. 14 ~ Jul. 19, 2011
ISSUED:	Jul. 28, 2011

APPLICANT:	Zinwell Corporation
ADDRESS:	7F., No.512, Yuanshan Rd., Zhonghe Dist., New Taipei City 235, Taiwan (R.O.C.)

ISSUED BY:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
LAB ADDRESS:	No. 47, 14th Ling, Chia Pau Tsuen, Lin Kou Hsiang, Taipei Hsien 244, Taiwan, R.O.C.
TEST LOCATION:	No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
Original release	N/A	Jul. 28, 2011

1. CERTIFICATION

PRODUCT: Wireless HD AV Connect Transmitter

MODEL: SWW1810T /27 (refer to item 3.1 for more detail)

BRAND: PHILIPS (refer to item 3.1 for more detail)

APPLICANT: Zinwell Corporation

TEST SAMPLE: ENGINEERING SAMPLE

TESTED: Jul. 14 ~ Jul. 19, 2011

STANDARDS: **FCC Part 15, Subpart E (Section 15.407)**
ANSI C63.4-2003
ANSI C63.10-2009

The above equipment (Model: SWW1810T /27, WHD200T) 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 : , **DATE:** Jul. 28, 2011
Andrea Hsia / Specialist

APPROVED BY : , **DATE:** Jul. 28, 2011
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 -15.43dB at 0.505MHz.
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 -1.0dB at 5470.00MHz.
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.
15.203	Antenna Requirement	PASS	No antenna connector is used.

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	2.93 dB
	200MHz ~1000MHz	2.95 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.

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

EUT	Wireless HD AV Connect Transmitter
MODEL NO.	SWW1810T /27, WHD200T
FCC ID	YG7ZRF31200
POWER SUPPLY	5Vdc
MODULATION TECHNOLOGY	OFDM
TRANSFER RATE	1Gbps
OPERATING FREQUENCY	5270 ~ 5310MHz & 5510 ~ 5670MHz
NUMBER OF CHANNEL	5270 ~ 5310MHz: 2 5510 ~ 5670MHz: 3
OUTPUT POWER	99.9mW for 5270 ~ 5310MHz 99.9mW for 5510 ~ 5670MHz
ANTENNA TYPE	Printed antenna with 4.0dBi gain (TX) Printed antenna with 6.2dBi gain (RX)
ANTENNA CONNECTOR	NA
I/O PORTS	Refer to user's manual
DATA CABLE	1.5m shielded HDMI cable with 2 cores (for ZINWELL) 1.5m shielded HDMI cable with 1 core (for PHILIPS) 1.45m IR cable without core
ACCESSORY DEVICES	Adapter, Remote control

NOTE:

1. This report is prepared for FCC class II permissive change. The difference compared with the original report is adding frequency band from 5.27 to 5.31GHz and 5.51 to 5.67GHz by software.
2. All models are listed as below.

ITEM	Brand	Model
1	PHILIPS	SWW1810T /27
2	ZINWELL	WHD200T

Difference	Brand: PHILIPS	Brand: ZINWELL
HDMI out (Loop through circuit)	-	√
External LED board	√	-
IR blaster cable	√	√
HDMI (Input) cable	With 1 core	With 2 cores

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

FREQUENCY BAND (MHz)	5270~5310	5510~5670
WHDI (40MHz)	√	√

4. The EUT incorporates a MIMO function. Physically, the EUT provides four completed transmitters and one receiver.

MODULATION MODE	TX FUNCTION
WHDI (40MHz)	4TX

5. The EUT was powered by the following adapter:

ADAPTER	
BRAND:	SINO-AMERICAN
MODEL:	SA110C-05S-A
INPUT:	100-240Vac, 50-60Hz, 0.3A
OUTPUT:	5Vdc, 2A, 10W
POWER LINE:	1.5m shielded cable 1 core

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

3.2 DESCRIPTION OF TEST MODES

FOR 5270 ~ 5310MHz

2 channels are provided for WHDI (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
54	5270 MHz	62	5310 MHz

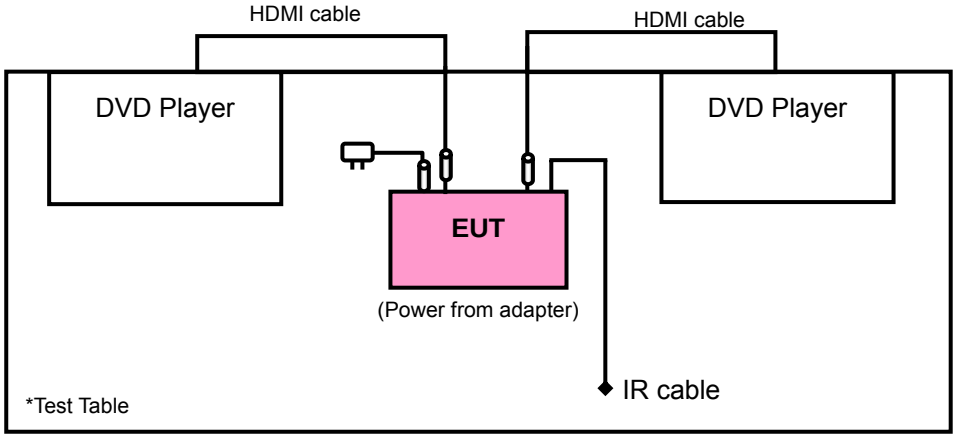
FOR 5510 ~ 5670MHz

3 channels are provided for WHDI (40MHz):

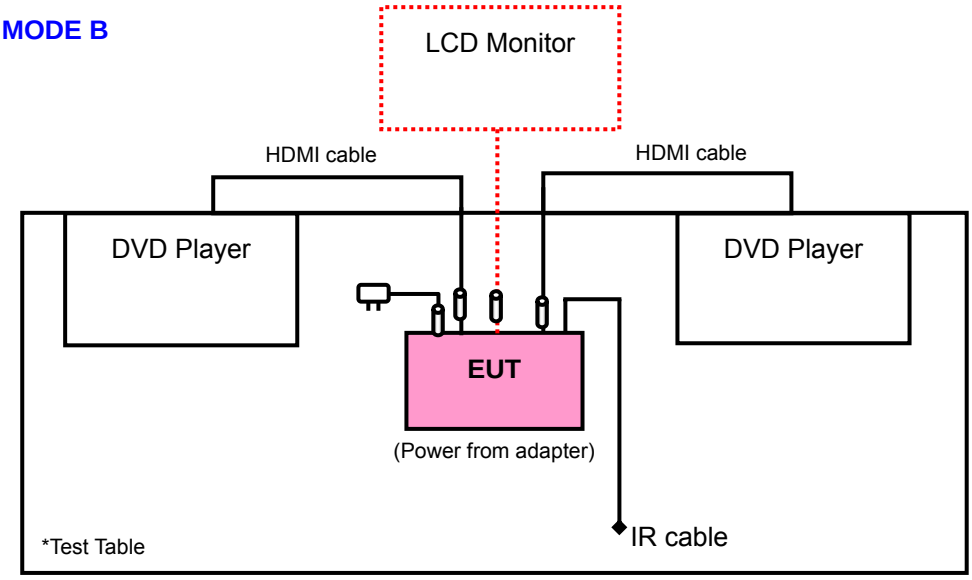
CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
102	5510 MHz	134	5670 MHz
110	5550 MHz		

3.2.1 CONFIGURATION OF SYSTEM UNDER TEST

TEST MODE A



TEST MODE B



3.2.2 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE≥1G	RE<1G	PLC	APCM	
A	√	√	√	√	EUT item 1 (Brand: PHILIPS)
B	-	√	√	-	EUT item 2 (Brand: ZINWELL)

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

NOTE: "-" means no effect.

RADIATED EMISSION TEST (ABOVE 1GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Gbps)	AXIS
A	WHDI (40MHz)	5270-5310	54 to 62	54, 62	OFDM	BPSK	1	Z
	WHDI (40MHz)	5510-5670	102 to 134	102, 110, 134	OFDM	BPSK	1	Z

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 and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Gbps)	AXIS
A & B	WHDI (40MHz)	5270-5310	54 to 62	62	OFDM	BPSK	1	Z
	WHDI (40MHz)	5510-5670	102 to 134	134	OFDM	BPSK	1	Z

POWER LINE CONDUCTED EMISSION TEST:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Gbps)
A & B	WHDI (40MHz)	5270-5310	54 to 62	62	OFDM	BPSK	1
	WHDI (40MHz)	5510-5670	102 to 134	134	OFDM	BPSK	1

BANDEDGE MEASUREMENT:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Gbps)
A	WHDI (40MHz)	5270-5310	54 to 62	54, 62	OFDM	BPSK	1
	WHDI (40MHz)	5510-5670	102 to 134	102, 110, 134	OFDM	BPSK	1

ANTENNA PORT CONDUCTED MEASUREMENT:

☒ This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Gbps)
A	WHDI (40MHz)	5270-5310	54 to 62	54, 62	OFDM	BPSK	1
	WHDI (40MHz)	5510-5670	102 to 134	102, 110, 134	OFDM	BPSK	1

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE≥1G	26deg. C, 65%RH	120Vac, 60Hz	Frank Wang
RE<1G	26deg. C, 65%RH	120Vac, 60Hz	Frank Wang
PLC	25deg. C, 65%RH	120Vac, 60Hz	Frank Wang
APCM	26deg. C, 65%RH	120Vac, 60Hz	Frank Wang

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
ANSI C63.10-2009

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

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

3.4 DESCRIPTION OF SUPPORT UNITS

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

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	DVD PLAYER	SONY	DVP-NS975V	2030314	FCC DoC Approved
2	DVD PLAYER	SONY	DVP-NS975V	2030941	FCC DoC Approved
3	MONITOR	DELL	2408FPb	CN-0G293H-74261 -874-237S-A00	FCC DoC Approved

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	1.5m shielded HDMI cable with 1 core
2	1.5m shielded HDMI cable with 1 core
3	1.5m shielded HDMI cable with 1 core

NOTE 1: All power cords of the above support units are non-shielded (1.8m).

NOTE 2: HDMI cables were supplied from client.

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 3
	PK	PK
5150 ~ 5350	-27	68.3
5470 ~ 5725	-27	68.3

NOTE: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = \frac{1000000\sqrt{30P}}{3}$$ μV/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	ESI7	838496/016	Dec. 27, 2010	Dec. 26, 2011
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100039	Feb. 23, 2011	Feb. 22, 2012
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Apr. 12, 2011	Apr. 11, 2012
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-408	Jan. 06, 2011	Jan. 05, 2012
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170243	Dec. 27, 2010	Dec. 26, 2011
Preamplifier Agilent	8449B	3008A01961	Nov. 02, 2010	Nov. 01, 2011
Preamplifier Agilent	8447D	2944A10738	Nov. 02, 2010	Nov. 01, 2011
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250792/4	Sep. 03, 2010	Sep. 02, 2011
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	283397/4	Sep. 03, 2010	Sep. 02, 2011
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	295012/4	Sep. 03, 2010	Sep. 02, 2011
Software ADT.	ADT_Radiated_ V7.6.15.9.2	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	010303	NA	NA
Antenna Tower Controller inn-co GmbH	CO2000	019303	NA	NA
Turn Table ADT.	TT100.	TT93021704	NA	NA
Turn Table Controller ADT.	SC100.	SC93021704	NA	NA
26GHz ~ 40GHz Amplifier	EM26400	07026401	Aug. 25, 2010	Aug. 24, 2011

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 4.

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 988962.

5. The IC Site Registration No. is IC7450F-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 camber. The table was rotated 360 degrees to determine the position of the highest radiation.

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

c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

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

f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

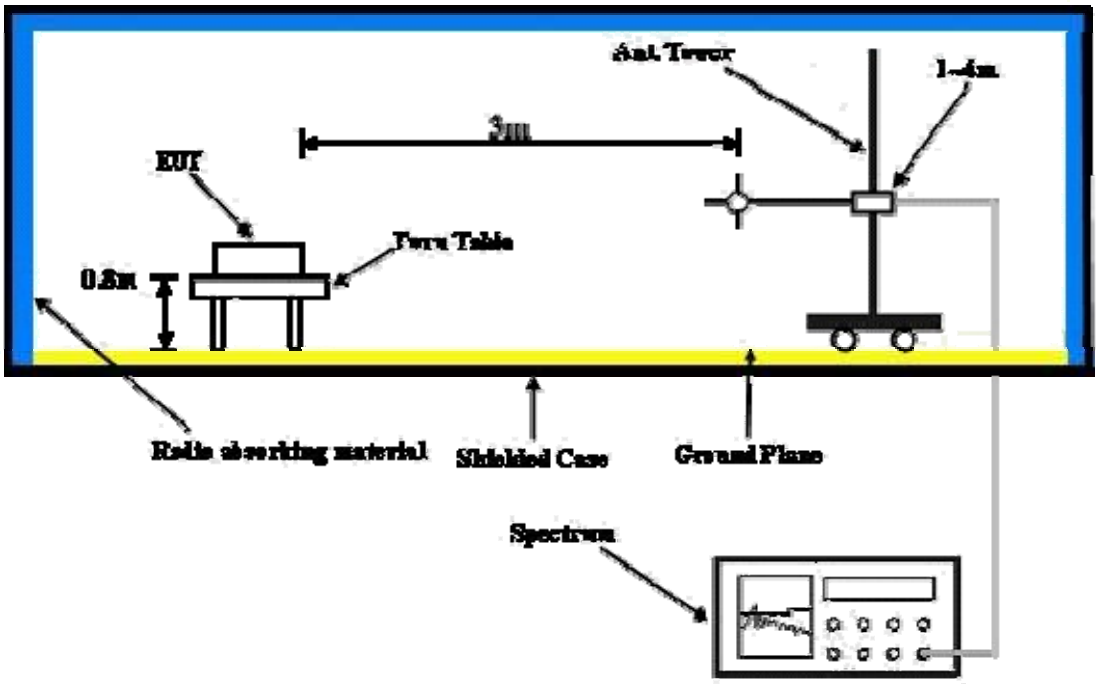
NOTE:

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

TEST MODE A

a. Placed the EUT on the testing table.

b. Prepared the DVD player on test table to act as a communication partners.

c. The communication partners ran a test program (provided by manufacturer) to enable EUT under transmission condition continuously at specific channel frequency.

TEST MODE B

a. Placed the EUT on the testing table.

b. Prepared the DVD player on test table & LCD monitor under the test table to act as a communication partners.

c. The communication partners ran a test program (provided by manufacturer) to enable EUT under transmission condition continuously at specific channel frequency.

4.1.8 TEST RESULTS

ABOVE 1GHz WORST-CASE DATA：

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	26deg. C, 65%RH	TESTED BY	Frank Wang

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	45.7 PK	74.0	-28.3	1.00 H	125	6.10	39.60
2	5150.00	32.8 AV	54.0	-21.2	1.00 H	125	-6.80	39.60
3	*5270.00	110.7 PK			1.00 H	125	71.00	39.70
4	*5270.00	96.3 AV			1.00 H	125	56.60	39.70
5	#10540.00	62.3 PK	68.3	-6.0	1.10 H	124	11.40	50.90
6	15810.00	60.5 PK	74.0	-13.5	1.30 H	263	10.00	50.50
7	15810.00	46.3 AV	54.0	-7.7	1.30 H	263	-4.20	50.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	45.2 PK	74.0	-28.8	1.02 V	173	5.60	39.60
2	5150.00	32.5 AV	54.0	-21.5	1.02 V	173	-7.10	39.60
3	*5270.00	108.5 PK			1.02 V	173	68.80	39.70
4	*5270.00	94.5 AV			1.02 V	173	54.80	39.70
5	#10540.00	60.7 PK	68.3	-7.6	1.00 V	54	9.80	50.90
6	15810.00	59.9 PK	74.0	-14.1	1.50 V	315	9.40	50.50
7	15810.00	45.9 AV	54.0	-8.1	1.50 V	315	-4.60	50.50

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 62	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH	TESTED BY	Frank Wang

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	110.1 PK			1.18 H	122	70.30	39.80
2	*5310.00	96.3 AV			1.18 H	122	56.50	39.80
3	5350.00	72.3 PK	74.0	-1.7	1.18 H	122	32.50	39.80
4	5350.00	49.0 AV	54.0	-5.0	1.18 H	122	9.20	39.80
5	10620.00	63.2 PK	74.0	-10.8	1.02 H	144	12.10	51.10
6	10620.00	52.8 AV	54.0	-1.2	1.02 H	144	1.70	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	*5310.00	109.4 PK			1.00 V	15	69.60	39.80
2	*5310.00	95.6 AV			1.00 V	15	55.80	39.80
3	5350.00	69.1 PK	74.0	-4.9	1.00 V	15	29.30	39.80
4	5350.00	47.3 AV	54.0	-6.7	1.00 V	15	7.50	39.80
5	10620.00	61.7 PK	74.0	-12.3	1.03 V	207	10.60	51.10
6	10620.00	51.6 AV	54.0	-2.4	1.03 V	207	0.50	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.

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	26deg. C, 65%RH	TESTED BY	Frank Wang

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	61.2 PK	74.0	-12.8	1.00 H	292	21.20	40.00
2	5460.00	48.1 AV	54.0	-5.9	1.00 H	292	8.10	40.00
3	**#5470.00**	**67.3 PK**	**68.3**	**-1.0**	**1.00 H**	**292**	**27.30**	**40.00**
4	*5510.00	110.5 PK			1.00 H	292	70.50	40.00
5	*5510.00	96.2 AV			1.00 H	292	56.20	40.00
6	11020.00	62.8 PK	74.0	-11.2	1.12 H	298	10.70	52.10
7	11020.00	52.9 AV	54.0	-1.1	1.12 H	298	0.80	52.10
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	5460.00	60.0 PK	74.0	-14.0	1.00 V	335	20.00	40.00
2	5460.00	46.7 AV	54.0	-7.3	1.00 V	335	6.70	40.00
3	#5470.00	65.8 PK	68.3	-2.5	1.00 V	335	25.80	40.00
4	*5510.00	108.3 PK			1.00 V	335	68.30	40.00
5	*5510.00	94.0 AV			1.00 V	335	54.00	40.00
6	11020.00	62.3 PK	74.0	-11.7	1.00 V	204	10.20	52.10
7	11020.00	52.0 AV	54.0	-2.0	1.00 V	204	-0.10	52.10

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 110	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH hPa	TESTED BY	Frank Wang

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	112.3 PK			1.15 H	120	72.20	40.10
2	*5550.00	97.5 AV			1.15 H	120	57.40	40.10
3	11100.00	62.8 PK	74.0	-11.2	1.07 H	118	10.80	52.00
4	11100.00	52.8 AV	54.0	-1.2	1.07 H	118	0.80	52.00
5	#16650.00	63.4 PK	68.3	-4.9	1.00 H	43	10.70	52.70
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	*5550.00	108.1 PK			1.00 V	75	68.00	40.10
2	*5550.00	93.8 AV			1.00 V	75	53.70	40.10
3	11100.00	61.3 PK	74.0	-12.7	1.02 V	204	9.30	52.00
4	11100.00	52.2 AV	54.0	-1.8	1.02 V	204	0.20	52.00
5	#16650.00	62.7 PK	68.3	-5.6	1.00 V	270	10.00	52.70

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 134	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH	TESTED BY	Frank Wang

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	111.3 PK			1.08 H	113	71.00	40.30
2	*5670.00	96.6 AV			1.08 H	113	56.30	40.30
3	#5725.00	62.9 PK	68.3	-5.4	1.06 H	114	22.40	40.50
4	11340.00	63.8 PK	74.0	-10.2	1.57 H	117	11.80	52.00
5	11340.00	52.9 AV	54.0	-1.1	1.57 H	117	0.90	52.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	109.5 PK			1.03 V	14	69.20	40.30
2	*5670.00	95.7 AV			1.03 V	14	55.40	40.30
3	#5725.00	61.3 PK	68.3	-7.0	1.03 V	14	20.80	40.50
4	11340.00	61.8 PK	74.0	-12.2	1.02 V	15	9.80	52.00
5	11340.00	51.6 AV	54.0	-2.4	1.02 V	15	-0.40	52.00

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：

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 62	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH	TEST MODE	A
TESTED BY	Frank Wang		

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	90.17	28.6 QP	43.5	-14.9	2.00 H	328	21.30	7.30
2	319.60	28.7 QP	46.0	-17.3	1.00 H	169	13.60	15.10
3	480.97	28.0 QP	46.0	-18.0	2.00 H	49	8.90	19.10
4	560.69	29.0 QP	46.0	-17.0	1.25 H	166	7.80	21.20
5	642.35	30.0 QP	46.0	-16.0	1.25 H	163	7.40	22.60
6	801.78	28.7 QP	46.0	-17.3	1.00 H	181	4.20	24.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	31.84	25.8 QP	40.0	-14.2	1.00 V	49	13.60	12.20
2	189.33	27.1 QP	43.5	-16.4	1.25 V	28	16.30	10.80
3	296.27	25.3 QP	46.0	-20.7	1.00 V	151	10.80	14.50
4	480.97	27.3 QP	46.0	-18.7	1.25 V	163	8.20	19.10
5	642.35	27.0 QP	46.0	-19.0	1.50 V	259	4.40	22.60
6	801.78	27.7 QP	46.0	-18.3	1.25 V	250	3.20	24.50

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 62	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH	TEST MODE	B
TESTED BY	Frank Wang		

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	88.23	28.3 QP	43.5	-15.2	2.00 H	310	20.60	7.70
2	160.17	25.7 QP	43.5	-17.8	1.50 H	262	11.20	14.50
3	319.60	28.5 QP	46.0	-17.5	1.00 H	163	13.40	15.10
4	560.69	29.0 QP	46.0	-17.0	1.50 H	148	7.80	21.20
5	642.35	29.1 QP	46.0	-16.9	1.00 H	160	6.50	22.60
6	801.78	29.0 QP	46.0	-17.0	1.00 H	184	4.50	24.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	30.00	26.0 QP	40.0	-14.0	1.00 V	124	14.00	12.00
2	162.11	25.9 QP	43.5	-17.6	1.00 V	10	11.70	14.20
3	189.33	26.2 QP	43.5	-17.3	1.50 V	43	15.40	10.80
4	480.97	26.1 QP	46.0	-19.9	1.00 V	145	7.00	19.10
5	642.35	26.4 QP	46.0	-19.6	1.50 V	259	3.80	22.60
6	801.78	27.9 QP	46.0	-18.1	1.00 V	235	3.40	24.50

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).

2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

3. The other emission levels were very low against the limit.

4. Margin value = Emission level – Limit value.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 134	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH	TEST MODE	A
TESTED BY	Frank Wang		

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	90.17	28.0 QP	43.5	-15.5	2.00 H	337	20.70	7.30
2	319.60	29.0 QP	46.0	-17.0	1.00 H	160	13.90	15.10
3	480.97	27.8 QP	46.0	-18.2	2.00 H	40	8.70	19.10
4	560.69	29.2 QP	46.0	-16.8	1.50 H	163	8.00	21.20
5	642.35	27.9 QP	46.0	-18.1	1.00 H	145	5.30	22.60
6	801.78	30.3 QP	46.0	-15.7	1.00 H	166	5.80	24.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	31.84	25.2 QP	40.0	-14.8	1.00 V	10	13.00	12.20
2	189.33	26.9 QP	43.5	-16.6	1.00 V	10	16.10	10.80
3	560.69	25.9 QP	46.0	-20.1	1.00 V	115	4.70	21.20
4	642.35	26.7 QP	46.0	-19.3	1.50 V	256	4.10	22.60
5	801.78	28.7 QP	46.0	-17.3	1.00 V	241	4.20	24.50
6	920.38	27.8 QP	46.0	-18.2	1.50 V	163	1.50	26.30

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).

2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

3. The other emission levels were very low against the limit.

4. Margin value = Emission level – Limit value.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 134	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH	TEST MODE	B
TESTED BY	Frank Wang		

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	90.17	28.2 QP	43.5	-15.3	2.00 H	352	20.90	7.30
2	319.60	28.5 QP	46.0	-17.5	1.00 H	154	13.40	15.10
3	480.97	27.1 QP	46.0	-18.9	1.50 H	37	8.00	19.10
4	560.69	29.1 QP	46.0	-16.9	1.50 H	160	7.90	21.20
5	642.35	28.5 QP	46.0	-17.5	1.00 H	157	5.90	22.60
6	801.78	29.4 QP	46.0	-16.6	1.00 H	187	4.90	24.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	31.84	25.2 QP	40.0	-14.8	1.00 V	67	13.00	12.20
2	162.11	26.6 QP	43.5	-16.9	1.00 V	301	12.40	14.20
3	319.60	25.2 QP	46.0	-20.8	1.50 V	307	10.10	15.10
4	480.97	25.7 QP	46.0	-20.3	1.00 V	304	6.60	19.10
5	642.35	26.8 QP	46.0	-19.2	1.50 V	256	4.20	22.60
6	801.78	26.3 QP	46.0	-19.7	1.00 V	274	1.80	24.50

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 (dBμV)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	60	50

NOTE: 1. The lower limit shall apply at the transition frequencies.

2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

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	100289	Nov. 23, 2010	Nov. 22, 2011
RF signal cable Woken	5D-FB	Cable-HYCO2-01	Dec. 30, 2010	Dec. 29, 2011
LISN ROHDE & SCHWARZ	ESH2-Z5	100100	Jan. 06, 2011	Jan. 05, 2012
LISN ROHDE & SCHWARZ	ESH3-Z5	100312	Jul. 07, 2011	Jul. 06, 2012
V-LISN SCHWARZBECK	NNBL 8226-2	8226-142	Jun. 30, 2011	Jun. 29, 2012
LISN ROHDE & SCHWARZ	ENV216	100072	Jun. 10, 2011	Jun. 09, 2012
Software ADT	ADT_Cond_ V7.3.7	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 2.

3. The VCCI Site Registration No. is C-2047.

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.

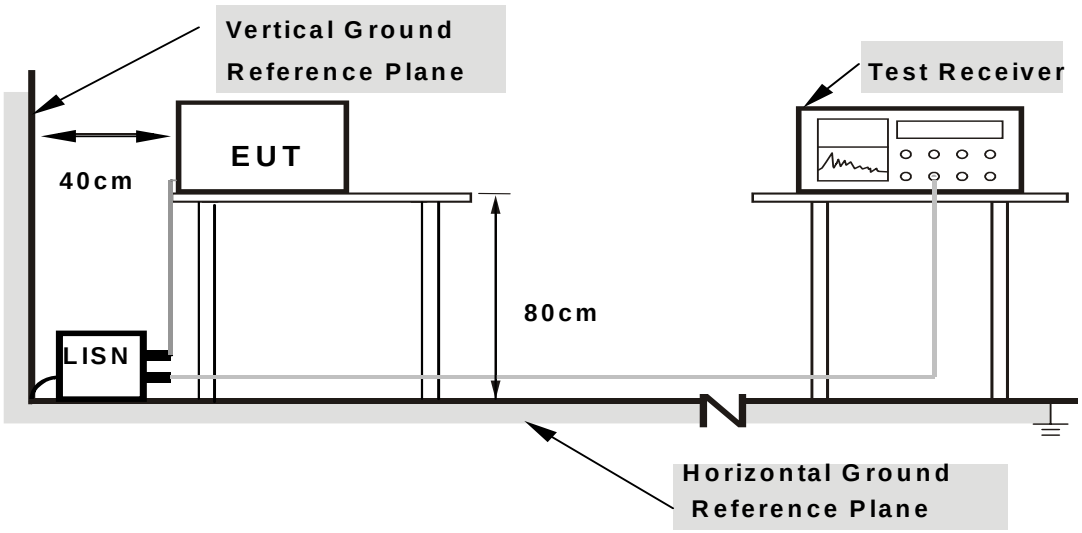
b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

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 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.

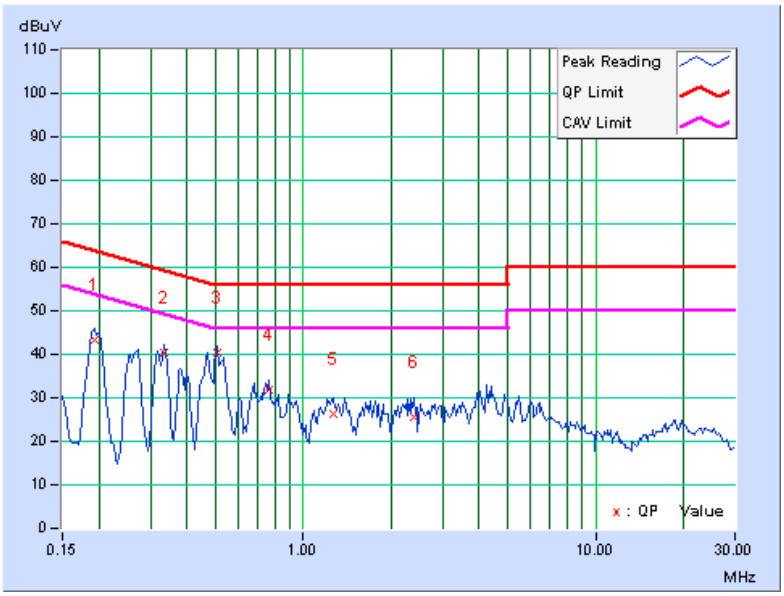
4.2.7 TEST RESULTS

CONDUCTED WORST-CASE DATA：

CHANNEL	Channel 62	PHASE	Line 1
6dB BANDWIDTH	9kHz	TEST MODE	A

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.194	0.15	43.27	-	43.42	-	63.86	53.86	-20.44	-
2	0.334	0.16	40.22	-	40.38	-	59.36	49.36	-18.98	-
3	0.505	0.17	40.30	-	40.47	-	56.00	46.00	-15.53	-
4	0.759	0.18	31.55	-	31.73	-	56.00	46.00	-24.27	-
5	1.262	0.20	26.16	-	26.36	-	56.00	46.00	-29.64	-
6	2.387	0.24	25.18	-	25.42	-	56.00	46.00	-30.58	-

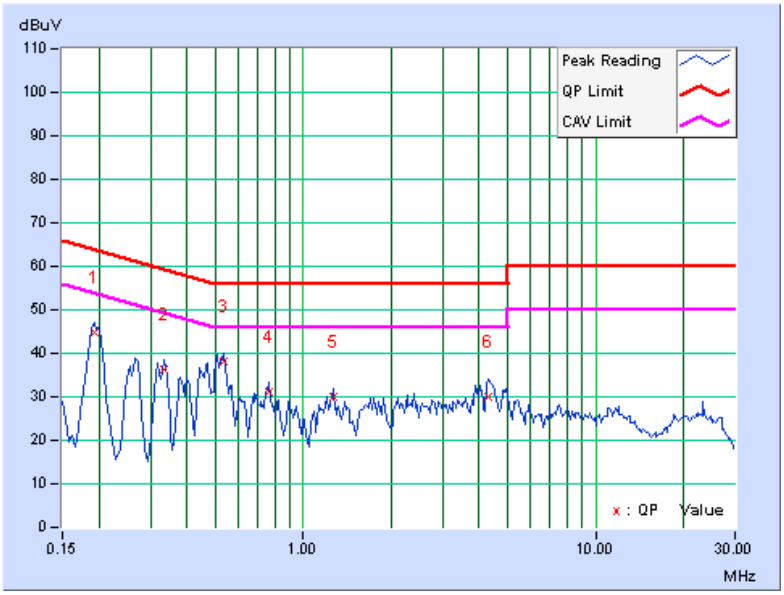
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



CHANNEL	Channel 62	PHASE	Line 2
6dB BANDWIDTH	9kHz	TEST MODE	A

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.193	0.17	44.56	-	44.73	-	63.91	53.91	-19.18	-
2	0.334	0.18	36.14	-	36.32	-	59.36	49.36	-23.04	-
3	0.537	0.19	38.04	-	38.23	-	56.00	46.00	-17.77	-
4	0.759	0.20	30.90	-	31.10	-	56.00	46.00	-24.90	-
5	1.262	0.22	29.63	-	29.85	-	56.00	46.00	-26.15	-
6	4.301	0.33	29.62	-	29.95	-	56.00	46.00	-26.05	-

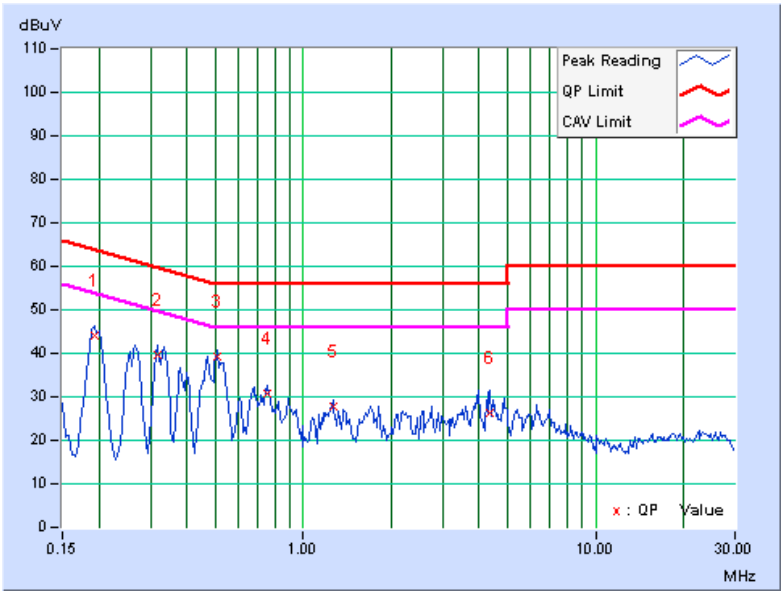
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



CHANNEL	Channel 62	**PHASE**	Line 1
6dB BANDWIDTH	9kHz	**TEST MODE**	B

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		**Factor**	**[dB (uV)]**		**[dB (uV)]**		**[dB (uV)]**		**(dB)**	
	[MHz]	**(dB)**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**
1	0.193	0.15	44.01	-	44.16	-	63.91	53.91	-19.75	-
2	0.318	0.16	39.38	-	39.54	-	59.76	49.76	-20.22	-
3	0.505	0.17	39.23	-	39.40	-	56.00	46.00	-16.60	-
4	0.755	0.18	30.60	-	30.78	-	56.00	46.00	-25.22	-
5	1.262	0.20	27.60	-	27.80	-	56.00	46.00	-28.20	-
6	4.375	0.33	26.14	-	26.47	-	56.00	46.00	-29.53	-

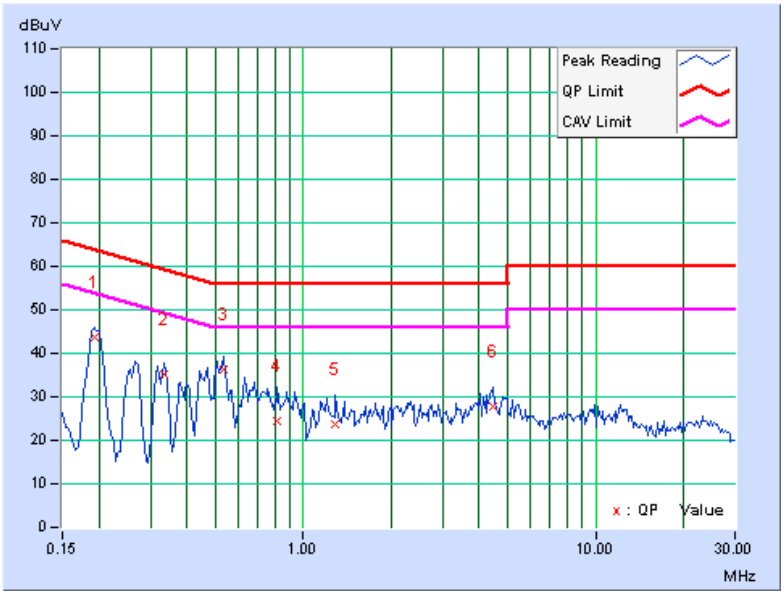
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



CHANNEL	Channel 62	**PHASE**	Line 2
6dB BANDWIDTH	9kHz	**TEST MODE**	B

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		**Factor**	**[dB (uV)]**		**[dB (uV)]**		**[dB (uV)]**		**(dB)**	
	[MHz]	**(dB)**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**
1	0.193	0.17	43.43	-	43.60	-	63.91	53.91	-20.31	-
2	0.334	0.18	35.17	-	35.35	-	59.36	49.36	-24.01	-
3	0.533	0.19	36.20	-	36.39	-	56.00	46.00	-19.61	-
4	0.818	0.20	24.31	-	24.51	-	56.00	46.00	-31.49	-
5	1.285	0.22	23.51	-	23.73	-	56.00	46.00	-32.27	-
6	4.453	0.33	27.53	-	27.86	-	56.00	46.00	-28.14	-

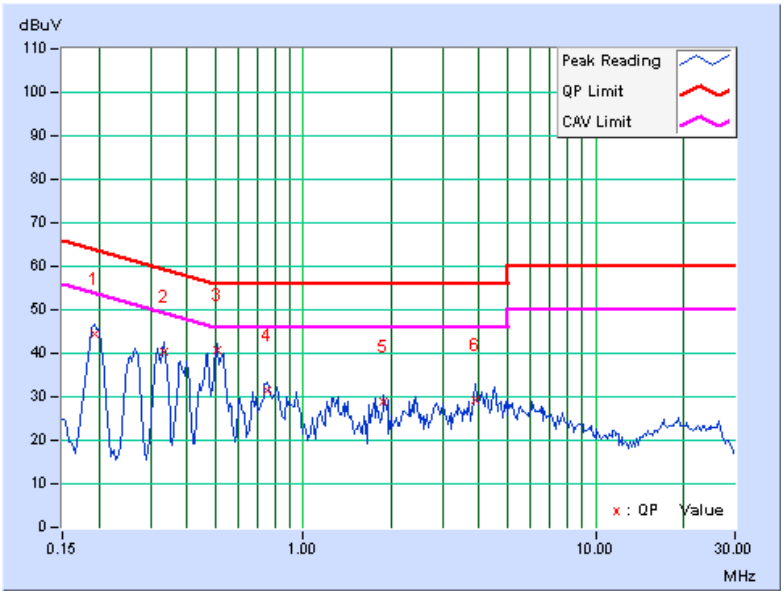
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



CHANNEL	Channel 134	PHASE	Line 1
6dB BANDWIDTH	9kHz	TEST MODE	A

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.193	0.15	44.28	-	44.43	-	63.91	53.91	-19.48	-
2	0.334	0.16	40.26	-	40.42	-	59.36	49.36	-18.94	-
3	**0.505**	**0.17**	**40.40**	**-**	**40.57**	**-**	**56.00**	**46.00**	**-15.43**	**-**
4	0.755	0.18	31.29	-	31.47	-	56.00	46.00	-24.53	-
5	1.887	0.22	28.61	-	28.83	-	56.00	46.00	-27.17	-
6	3.879	0.31	29.00	-	29.31	-	56.00	46.00	-26.69	-

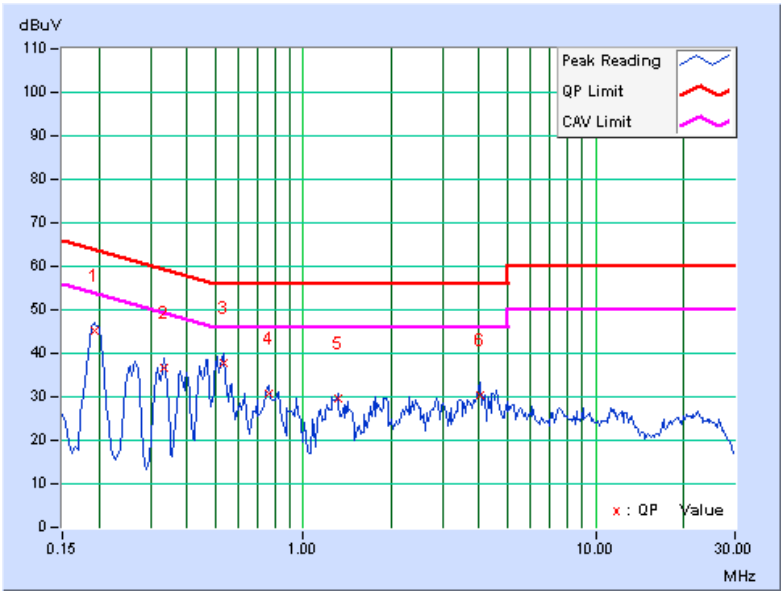
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



CHANNEL	Channel 134	**PHASE**	Line 2
6dB BANDWIDTH	9kHz	**TEST MODE**	A

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		**Factor**	**[dB (uV)]**		**[dB (uV)]**		**[dB (uV)]**		**(dB)**	
	[MHz]	**(dB)**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**	**Q.P.**	**AV.**
1	0.193	0.17	44.92	-	45.09	-	63.91	53.91	-18.82	-
2	0.334	0.18	36.56	-	36.74	-	59.36	49.36	-22.62	-
3	0.533	0.19	37.74	-	37.93	-	56.00	46.00	-18.07	-
4	0.759	0.20	30.68	-	30.88	-	56.00	46.00	-25.12	-
5	1.316	0.22	29.28	-	29.50	-	56.00	46.00	-26.50	-
6	4.008	0.32	30.16	-	30.48	-	56.00	46.00	-25.52	-

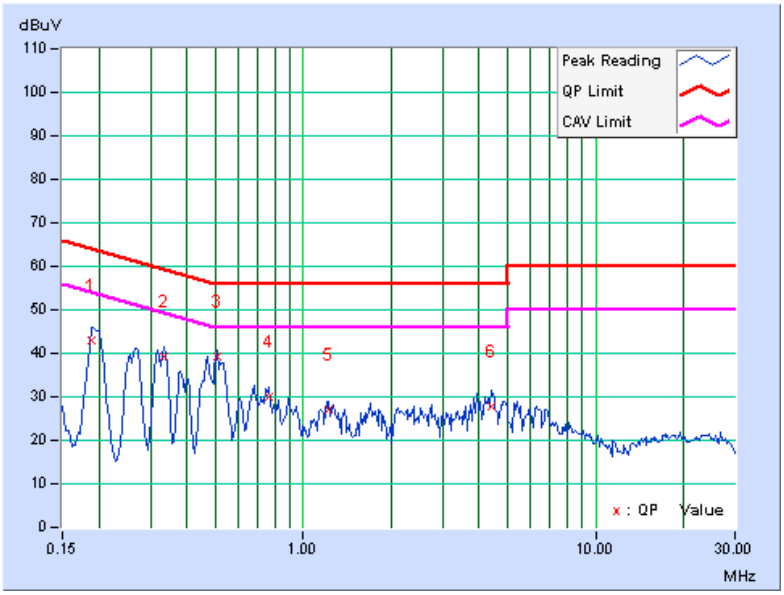
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



CHANNEL	Channel 134	PHASE	Line 1
6dB BANDWIDTH	9kHz	TEST MODE	B

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.189	0.15	42.91	-	43.06	-	64.08	54.08	-21.02	-
2	0.334	0.16	39.23	-	39.39	-	59.36	49.36	-19.97	-
3	0.505	0.17	39.11	-	39.28	-	56.00	46.00	-16.72	-
4	0.759	0.18	30.00	-	30.18	-	56.00	46.00	-25.82	-
5	1.219	0.20	26.96	-	27.16	-	56.00	46.00	-28.84	-
6	4.422	0.34	27.37	-	27.71	-	56.00	46.00	-28.29	-

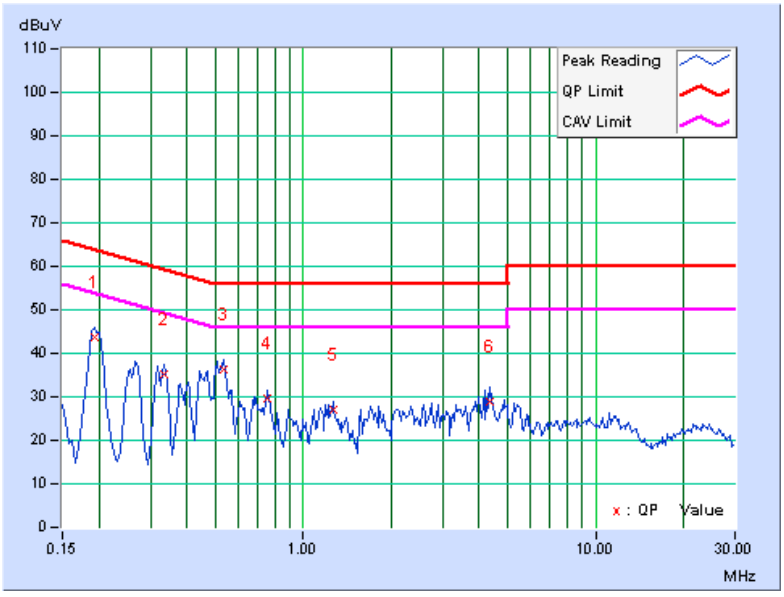
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



CHANNEL	Channel 134	PHASE	Line 2
6dB BANDWIDTH	9kHz	TEST MODE	B

	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
No		Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.193	0.17	43.49	-	43.66	-	63.91	53.91	-20.25	-
2	0.334	0.18	35.15	-	35.33	-	59.36	49.36	-24.03	-
3	0.533	0.19	36.16	-	36.35	-	56.00	46.00	-19.65	-
4	0.755	0.20	29.25	-	29.45	-	56.00	46.00	-26.55	-
5	1.262	0.22	26.95	-	27.17	-	56.00	46.00	-28.83	-
6	4.359	0.33	28.73	-	29.06	-	56.00	46.00	-26.94	-

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 MAXIMUM CONDUCTED OUTPUT POWER MEASUREMENT

4.3.1 LIMITS OF MAXIMUM CONDUCTED OUTPUT 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

FOR POWER OUTPUT MEASUREMENT

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
High Speed Peak Power Meter	ML2495A	0824011	Aug. 02, 2010	Aug. 01, 2011
Power Sensor	MA2411B	0738171	Aug. 02, 2010	Aug. 01, 2011

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.

FOR 26dB OCCUPIED BANDWIDTH

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
SPECTRUM ANALYZER R&S	FSP40	100040	Feb. 23, 2011	Feb. 22, 2012

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

4.3.3 TEST PROCEDURE

FOR POWER OUTPUT MEASUREMENT

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.

FOR 26dB OCCUPIED BANDWIDTH

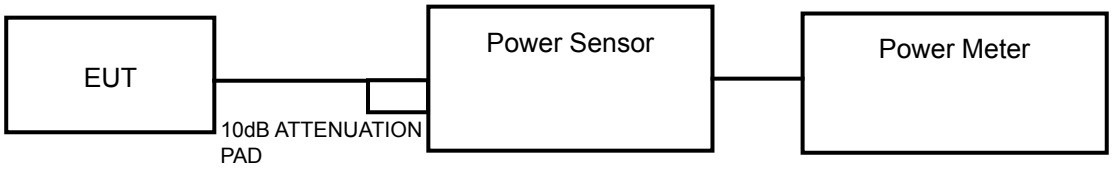
The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 300kHz RBW and 1MHz VBW. The 26dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 26dB.

4.3.4 DEVIATION FROM TEST STANDARD

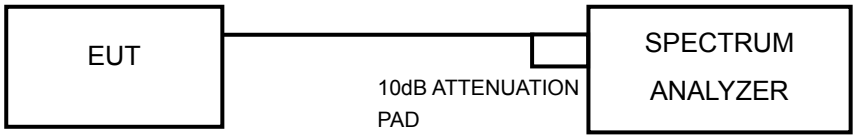
No deviation.

4.3.5 TEST SETUP

FOR POWER OUTPUT MEASUREMENT



FOR 26dB OCCUPIED BANDWIDTH



4.3.6 EUT OPERATING CONDITIONS

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

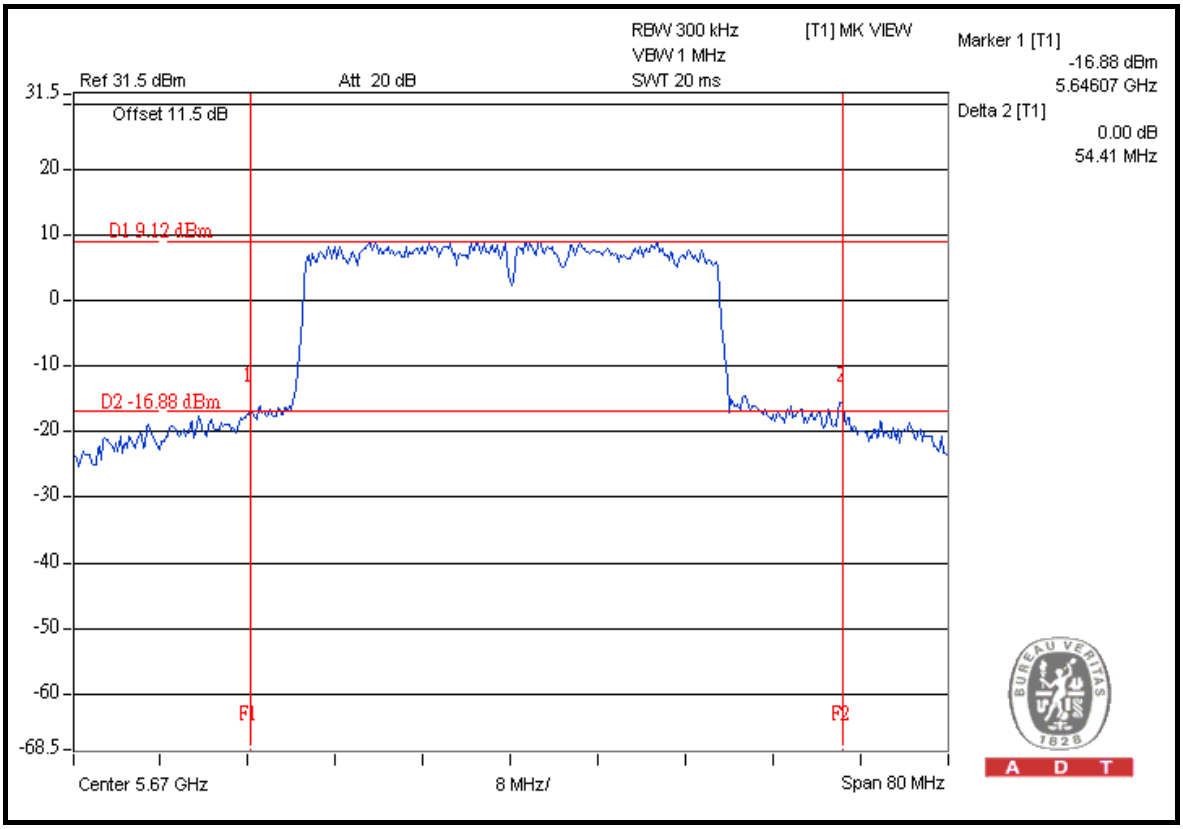
4.3.7 TEST RESULTS

CHAN.	CHAN. FREQ. (MHz)	POWER OUTPUT (dBm)				TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2	CHAIN 3				
54	5270	14.0	14.0	13.8	13.9	98.8	19.9	24	PASS
62	5310	14.0	13.8	14.1	14.0	99.9	20.0	24	PASS
102	5510	13.3	13.2	13.2	13.0	83.1	19.2	24	PASS
110	5550	13.8	13.8	14.0	14.1	98.8	19.9	24	PASS
134	5670	13.8	13.9	14.1	14.1	99.9	20.0	24	PASS

26dB OCCUPIED BANDWIDTH:

CHAN.	CHAN. FREQ. (MHz)	26dBc OCCUPIED BANDWIDTH (MHz)				PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2	CHAIN 3	
54	5270	39.69	39.76	39.72	39.83	PASS
62	5310	39.61	39.63	39.88	39.65	PASS
102	5510	39.55	39.61	39.40	39.47	PASS
110	5550	39.62	50.18	39.87	39.73	PASS
134	5670	45.17	52.70	54.41	50.46	PASS

CHAIN 2: CH 134



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
SPECTRUM ANALYZER R&S	FSP40	100040	Feb. 23, 2011	Feb. 22, 2012

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.

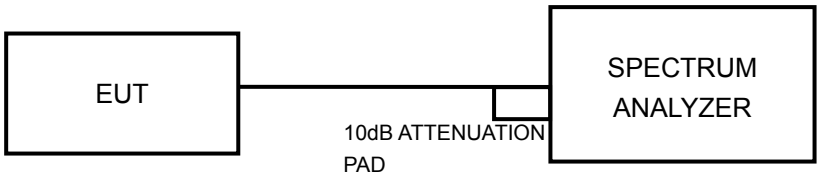
c. Using peak detector and Max-hold function for Trace 1 (RB = 1MHz, VB = 3MHz) and 2 (RB = 1MHz, VB = 300kHz).

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



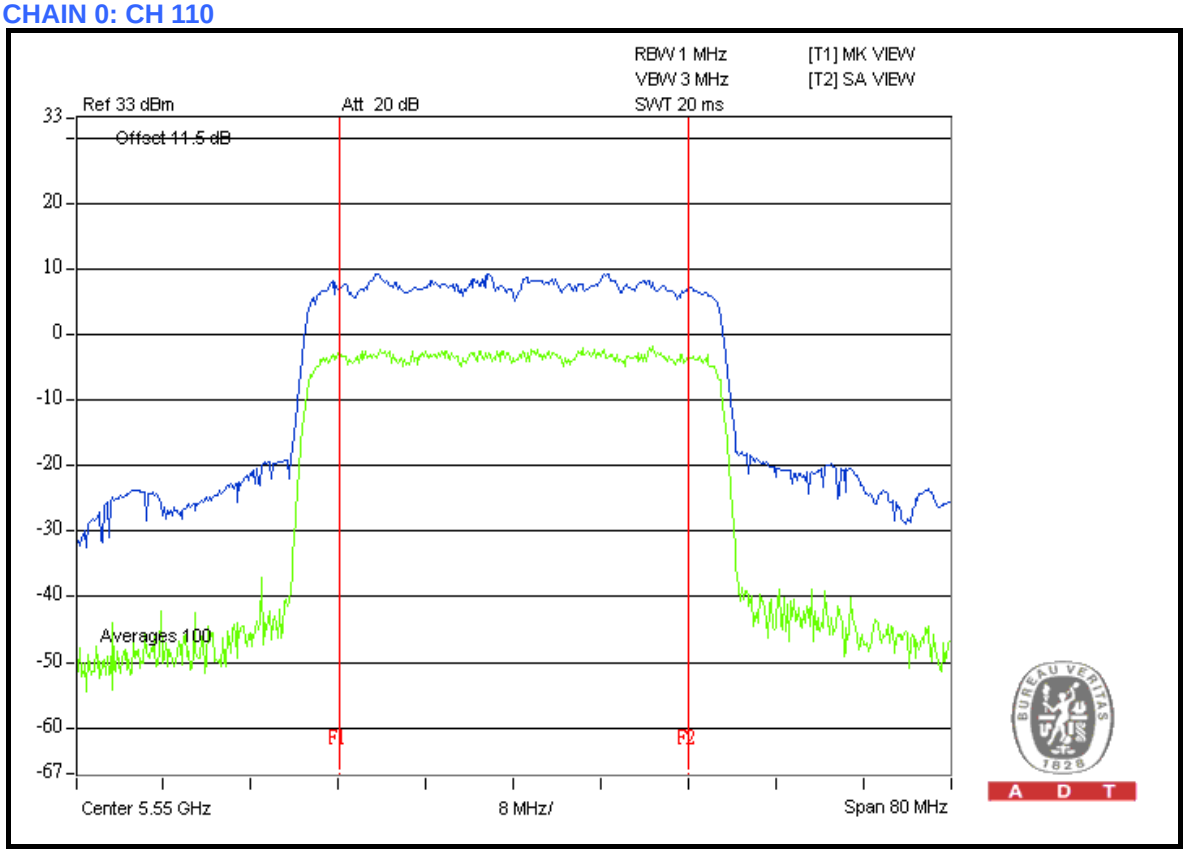
4.4.6 EUT OPERATING CONDITIONS

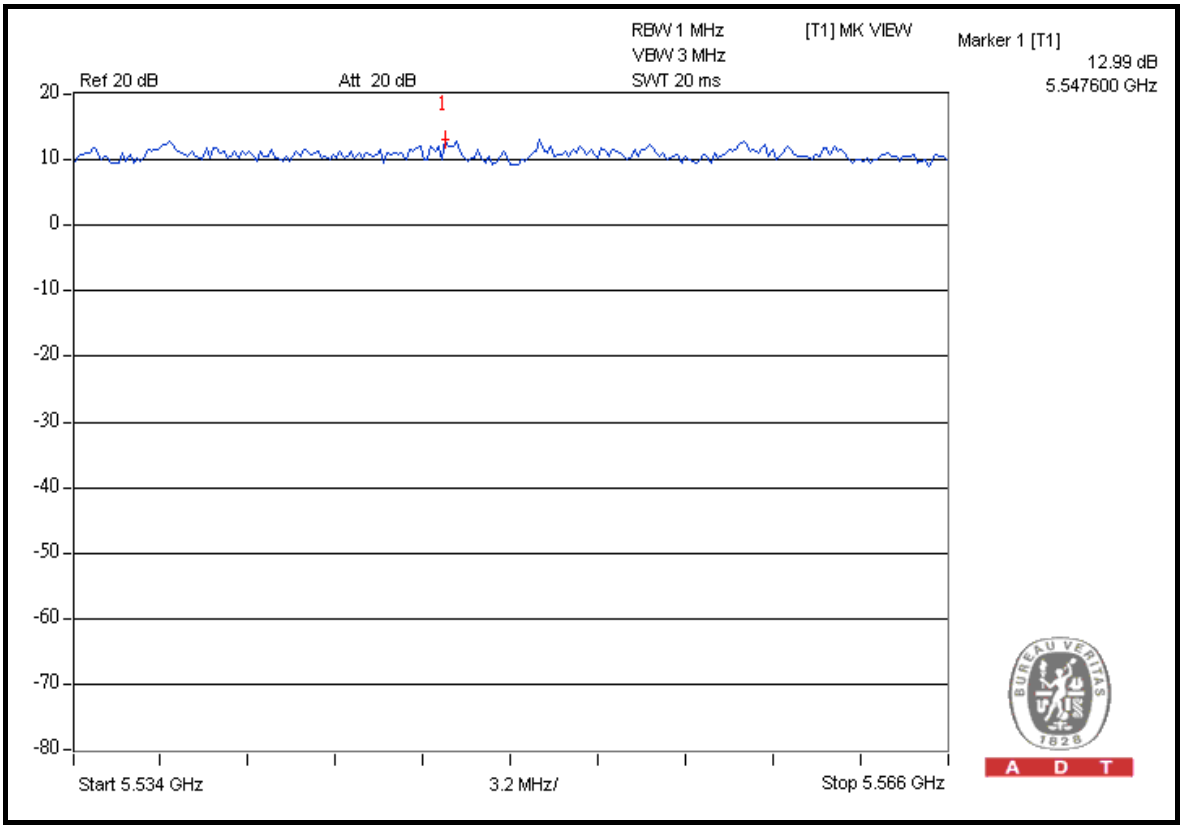
The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

4.4.7 TEST RESULTS

CHAN.	CHAN. FREQ. (MHz)	PEAK POWER EXCURSION (dB)				PEAK TO AVERAGE EXCURSION LIMIT (dB)	PASS/ FAIL
		CHAIN 0	CHAIN 1	CHAIN 2	CHAIN 3		
54	5270	12.98	12.58	12.38	12.53	13	PASS
62	5310	12.82	12.17	12.49	12.52	13	PASS
102	5510	12.91	12.71	12.54	12.01	13	PASS
110	5550	12.99	11.88	12.13	12.18	13	PASS
134	5670	12.42	12.21	12.14	12.58	13	PASS

CHAIN 0: CH 110





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
SPECTRUM ANALYZER R&S	FSP40	100040	Feb. 23, 2011	Feb. 22, 2012

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.

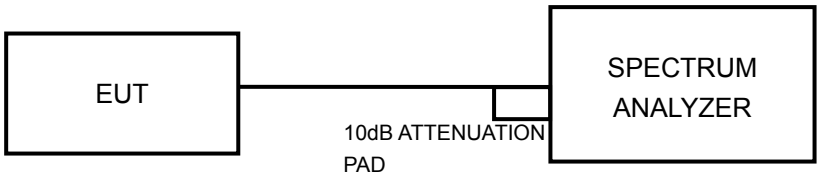
b. Set RBW = 1MHz, VBW = 3MHz. The PPSD is the highest level found across the emission in any 1MHz band.

c. Follow method 2 of KDB 662911 D01 Multiple Transmitter Output v01 to calculate total power density of 2 TX port.

4.5.4 DEVIATION FROM TEST STANDARD

No deviation.

4.5.5 TEST SETUP



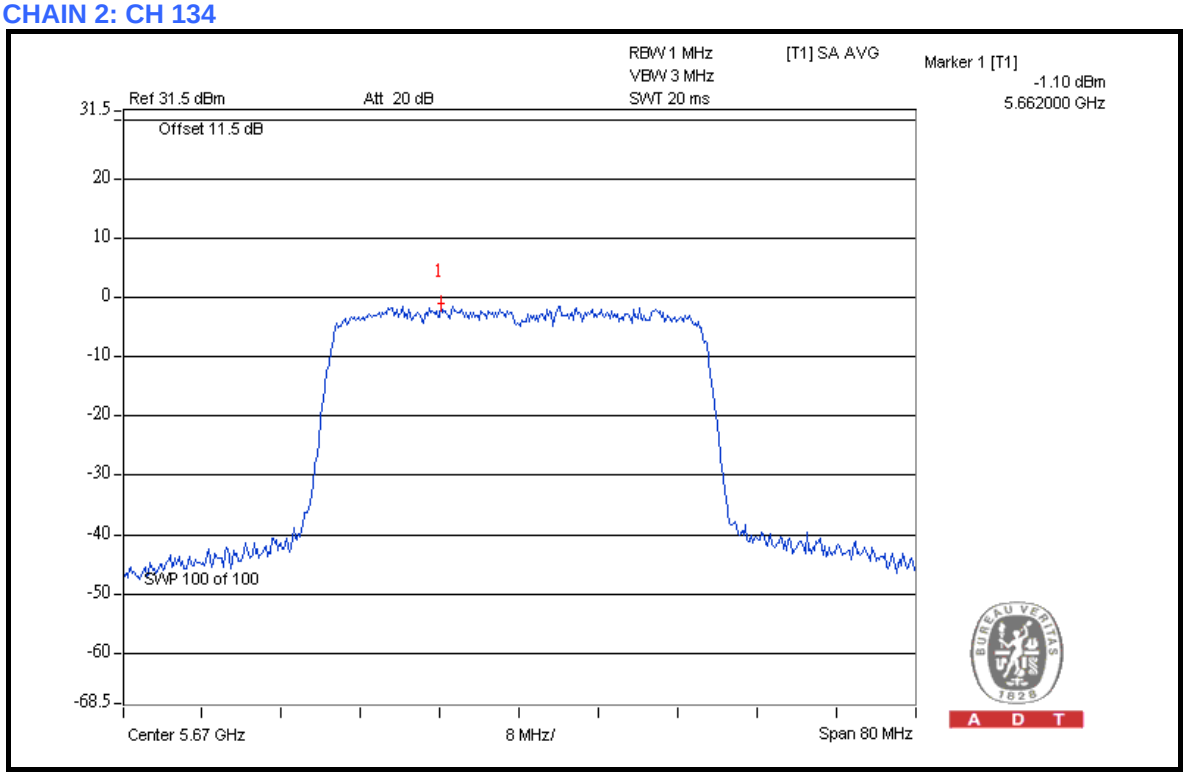
4.5.6 EUT OPERATING CONDITIONS

Same as 5.3.6.

4.5.7 TEST RESULTS

CHAIN	CHAN.	CHAN. FREQ. (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
			MEASURED	10 log (N=4) dB			
0	54	5270	-1.2	6.02	4.8	11	PASS
	62	5310	-1.4	6.02	4.6	11	PASS
	102	5510	-2.0	6.02	4.0	11	PASS
	110	5550	-1.2	6.02	4.8	11	PASS
	134	5670	-1.6	6.02	4.4	11	PASS
1	54	5270	-1.2	6.02	4.8	11	PASS
	62	5310	-1.6	6.02	4.4	11	PASS
	102	5510	-2.2	6.02	3.8	11	PASS
	110	5550	-1.6	6.02	4.4	11	PASS
	134	5670	-1.1	6.02	4.9	11	PASS
2	54	5270	-1.4	6.02	4.6	11	PASS
	62	5310	-1.3	6.02	4.7	11	PASS
	102	5510	-2.0	6.02	4.0	11	PASS
	110	5550	-1.3	6.02	4.7	11	PASS
	134	5670	-1.1	6.02	4.9	11	PASS
3	54	5270	-1.3	6.02	4.7	11	PASS
	62	5310	-1.3	6.02	4.7	11	PASS
	102	5510	-2.0	6.02	4.0	11	PASS
	110	5550	-1.2	6.02	4.8	11	PASS
	134	5670	-1.3	6.02	4.7	11	PASS

CHAIN 2: 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 the band of operation 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
SPECTRUM ANALYZER R&S	FSP40	100040	Feb. 23, 2011	Feb. 22, 2012
WIT STANDARD TEMPERATURE AND HUMIDITY CHAMBER	TH-4S-C	W981030	Jun. 15, 2011	Jun. 24, 2012

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.

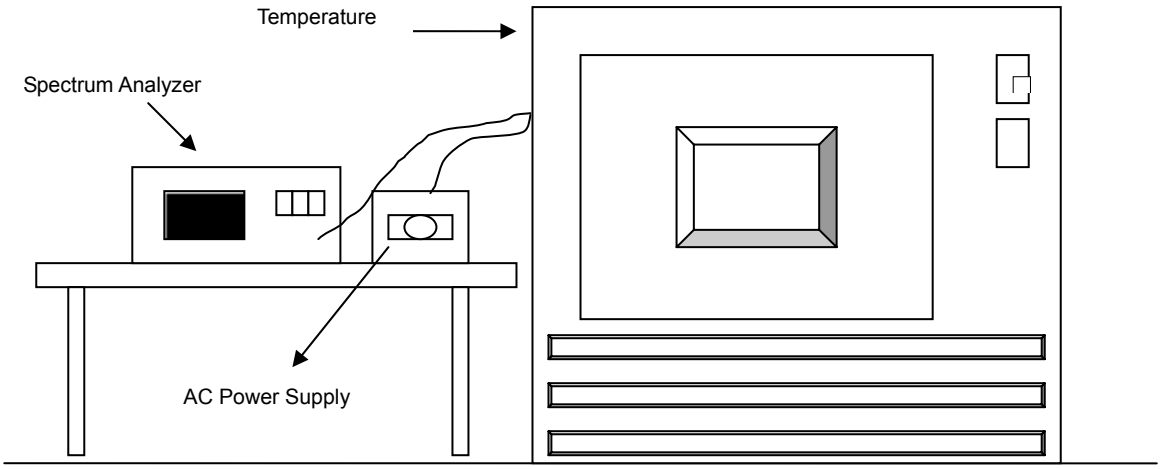
e. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.

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

FREQUEMCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5310MHz									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)
55	110.0	5310.001972	0.371	5310.002246	0.423	5310.002097	0.395	5310.002323	0.437
50	110.0	5310.002192	0.413	5310.002433	0.458	5310.002054	0.387	5310.002419	0.456
40	110.0	5310.003036	0.572	5310.003125	0.589	5310.002936	0.553	5310.003357	0.632
30	110.0	5310.043247	8.144	5310.043499	8.192	5310.043443	8.181	5310.043624	8.215
20	110.0	5310.007651	1.441	5310.007653	1.441	5310.007969	1.501	5310.007522	1.417
10	110.0	5310.003077	0.579	5310.003164	0.596	5310.002802	0.528	5310.003151	0.593
0	110.0	5310.000589	0.111	5310.000818	0.154	5310.000425	0.080	5310.000749	0.141
-10	110.0	5310.007108	1.339	5310.007171	1.350	5310.007463	1.405	5310.007330	1.380
-20	110.0	5310.025354	4.775	5310.025429	4.789	5310.025676	4.835	5310.025677	4.836

FREQUEMCY STABILITY VERSUS VOLTAGE									
OPERATING FREQUENCY: 5310MHz									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)
20	93.5	5310.043247	8.144	5310.043504	8.193	5310.043298	8.154	5310.043323	8.159
	110.0	5310.007651	1.441	5310.007653	1.441	5310.007969	1.501	5310.007522	1.417
	126.5	5310.003077	0.579	5310.003326	0.626	5310.003402	0.641	5310.003169	0.597

4.7 BAND EDGES MEASUREMENT

4.7.1 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESI7	838496/016	Dec. 27, 2010	Dec. 26, 2011
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100039	Feb. 23, 2011	Feb. 22, 2012
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Apr. 12, 2011	Apr. 11, 2012
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-408	Jan. 06, 2011	Jan. 05, 2012
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170243	Dec. 27, 2010	Dec. 26, 2011
Preamplifier Agilent	8449B	3008A01961	Nov. 02, 2010	Nov. 01, 2011
Preamplifier Agilent	8447D	2944A10738	Nov. 02, 2010	Nov. 01, 2011
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250792/4	Sep. 03, 2010	Sep. 02, 2011
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	283397/4	Sep. 03, 2010	Sep. 02, 2011
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	295012/4	Sep. 03, 2010	Sep. 02, 2011
Software ADT.	ADT_Radiated_ V7.6.15.9.2	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	010303	NA	NA
Antenna Tower Controller inn-co GmbH	CO2000	019303	NA	NA
Turn Table ADT.	TT100.	TT93021704	NA	NA
Turn Table Controller ADT.	SC100.	SC93021704	NA	NA
26GHz ~ 40GHz Amplifier	EM26400	07026401	Aug. 25, 2010	Aug. 24, 2011

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

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 1MHz and 3MHz with suitable frequency span including 100MHz bandwidth from band edge. The band edges was measured and recorded.

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 5.32GHz, 5.50 to 5.70GHz allocated band a measurement was made of the amplitude of the spurious emissions with respect to the intentional signals. The relative amplitude, in dBc, was applied to the average and peak filed strength of the intentional signal made on the OATS to calculate the field strength of the unintentional signals.

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

FOR 5270-5310MHz BAND:

RESTRICT BAND (4500 ~ 5150 MHz)

FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5270.00 (PK)	110.7	48.79	61.91	74.00
5270.00 (AV)	96.3	49.08	47.22	54.00

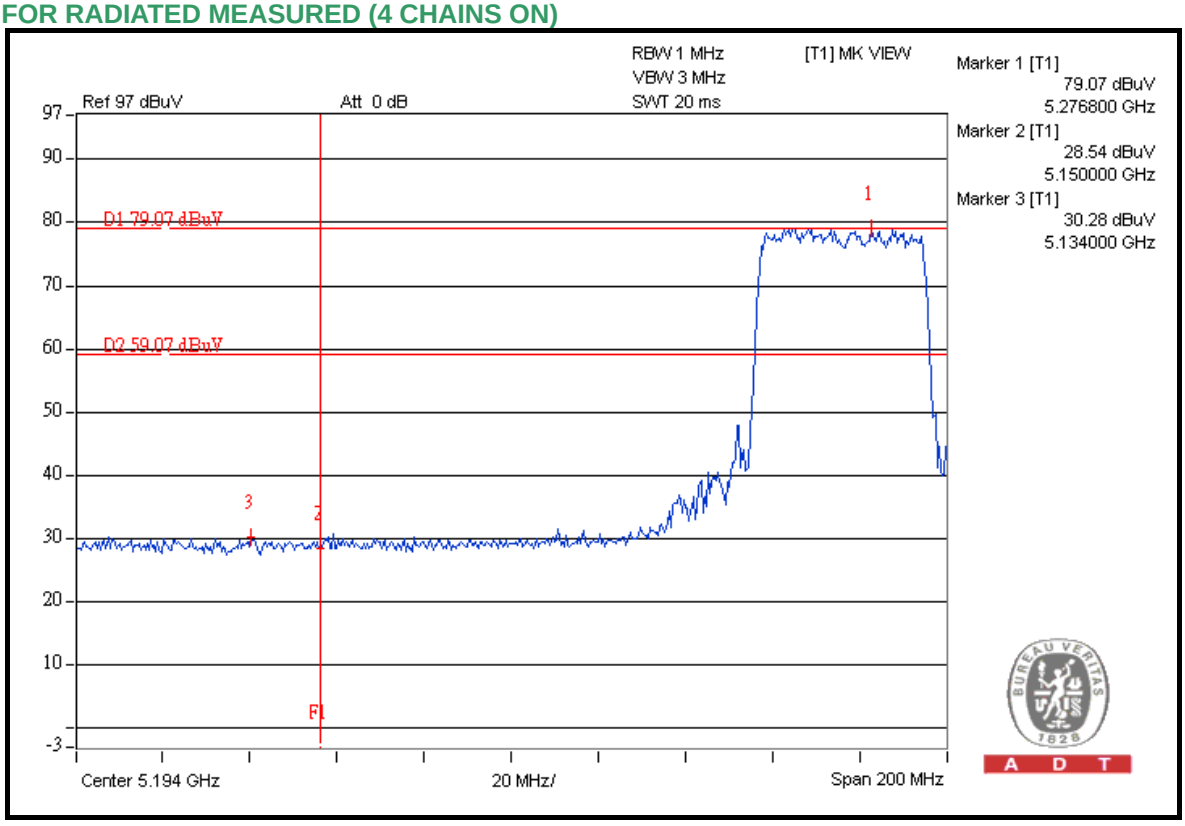
RESTRICT BAND (5350 ~ 5460 MHz)

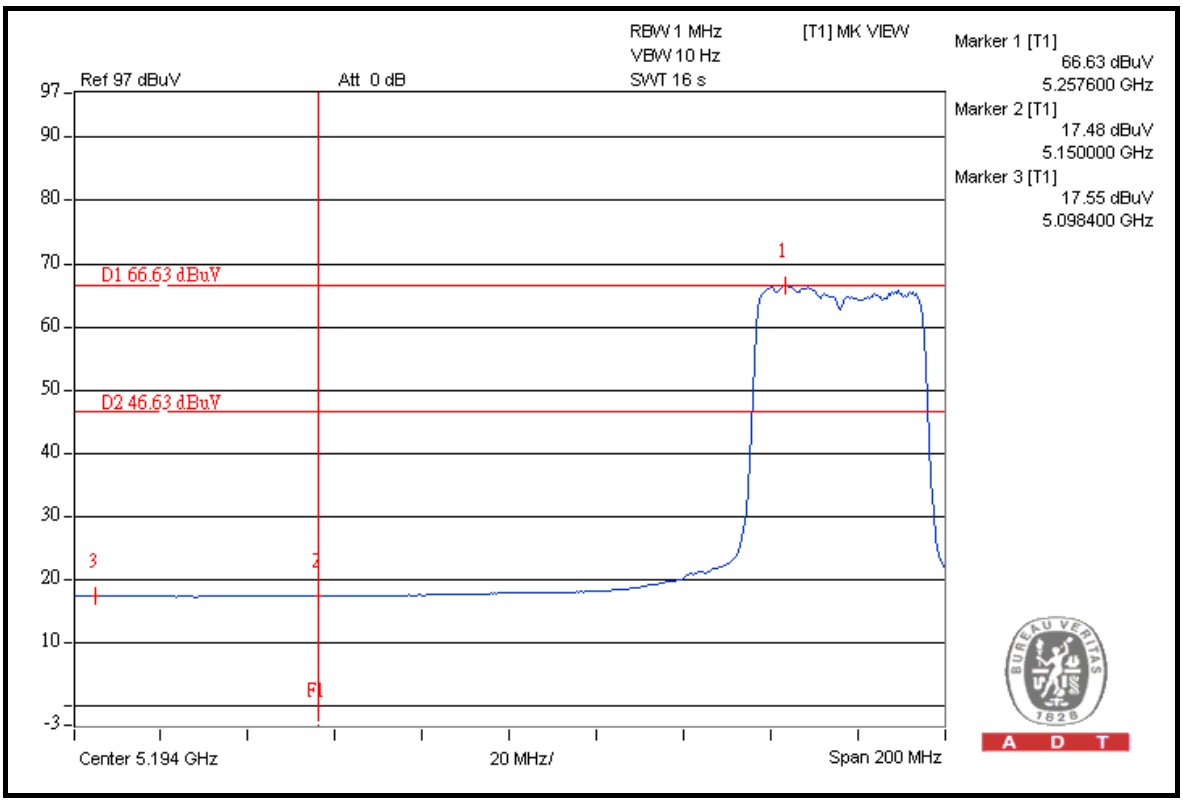
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5310.00 (PK)	110.1	51.10	59.00	74.00
5310.00 (AV)	96.3	48.04	48.26	54.00

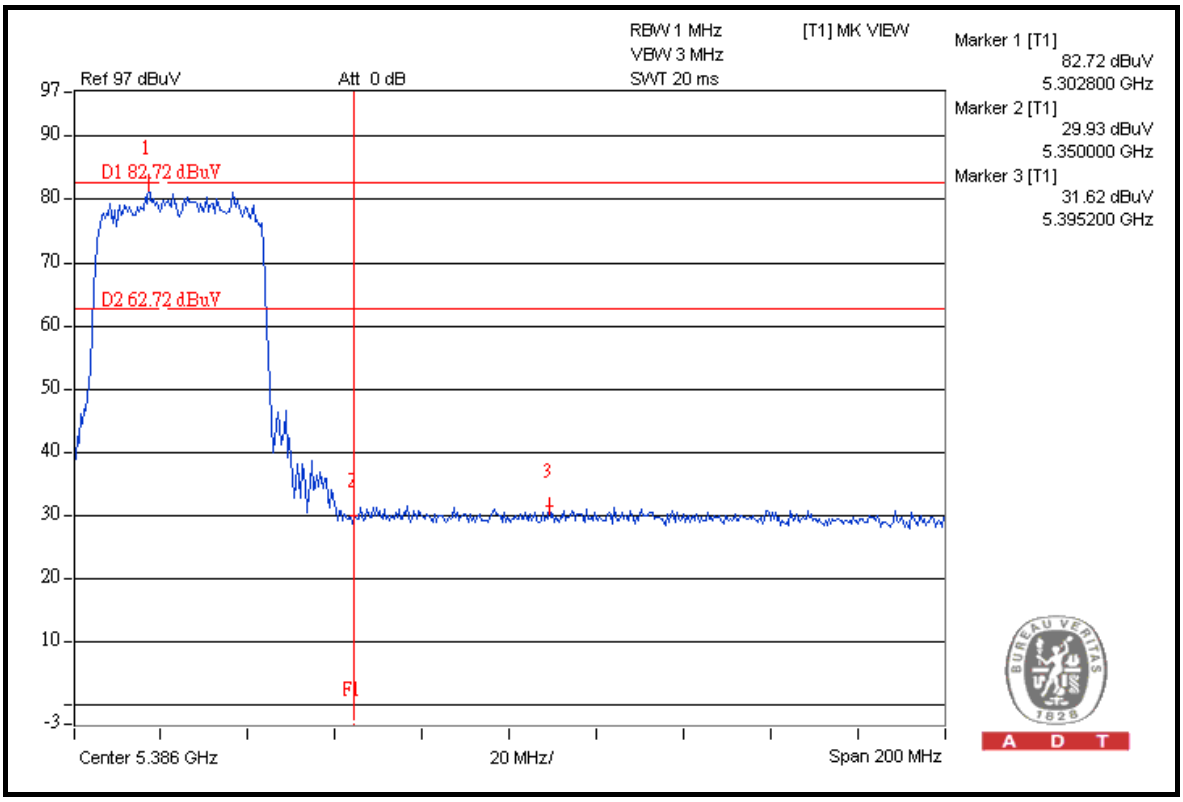
NOTE:

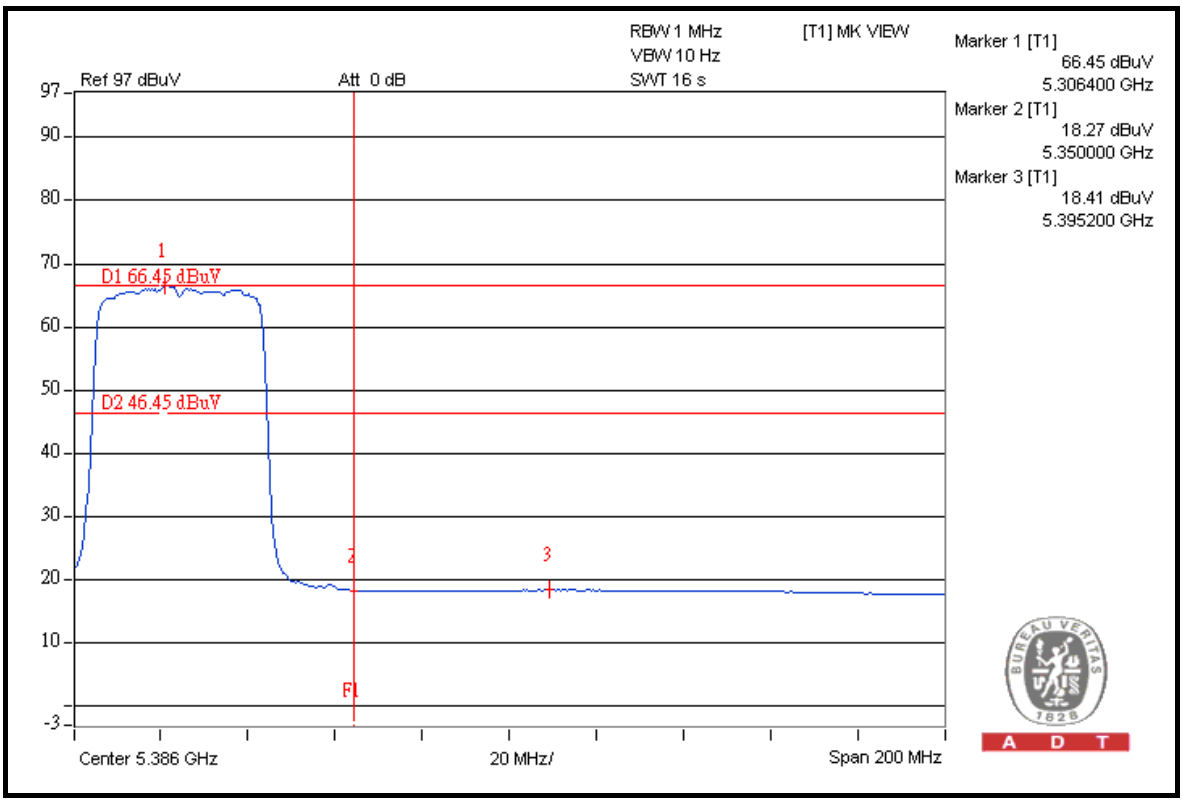
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 3 pages.
2. Maximum field strength in restrict band = Fundamental emission – Delta.

FOR RADIATED MEASURED (4 CHAINS ON)



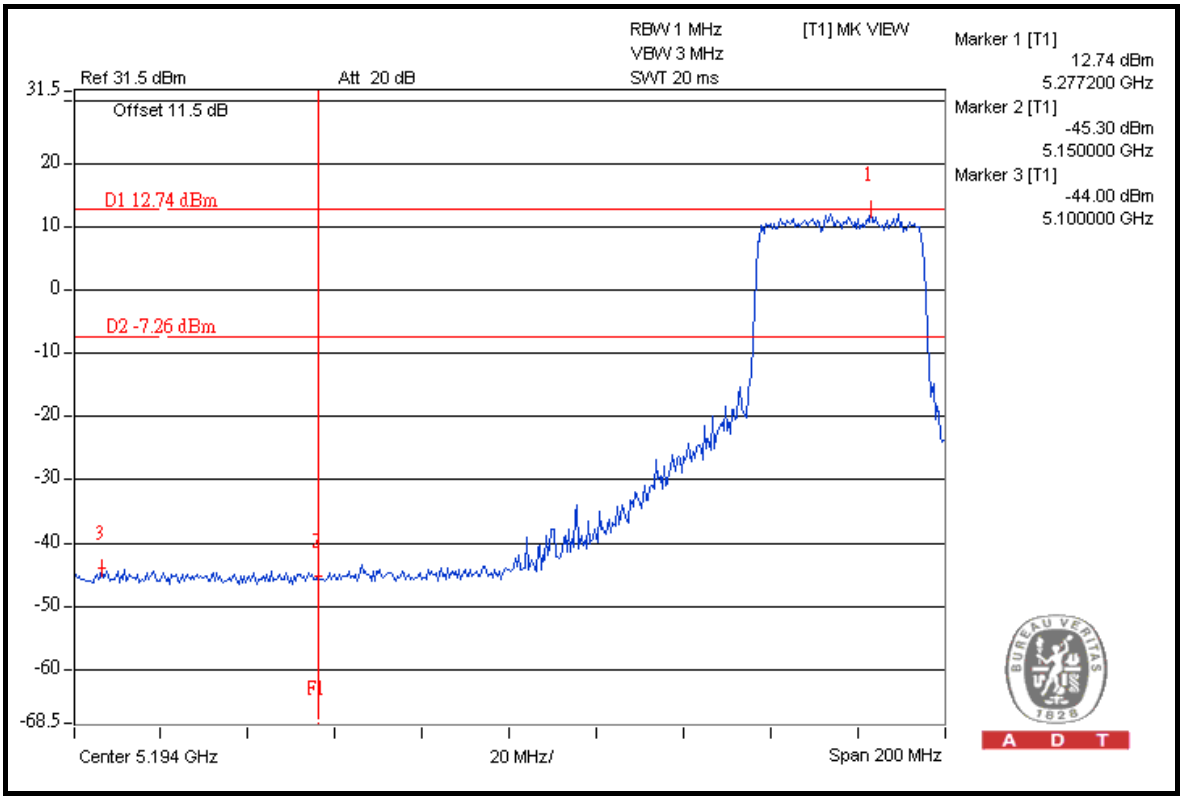


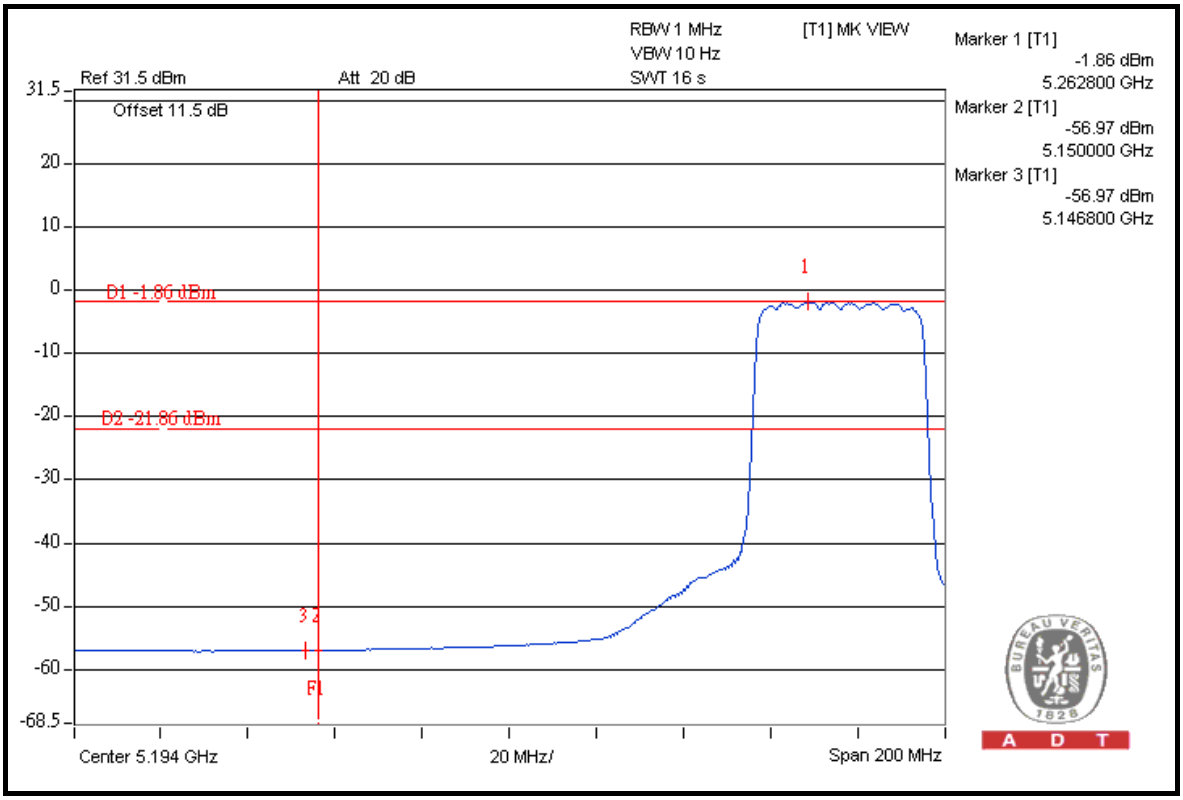

RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
82.72 dBuV
5.302800 GHz
Marker 2 [T1]
29.93 dBuV
5.350000 GHz
Marker 3 [T1]
31.62 dBuV
5.395200 GHz
D1 82.72 dBuV
D2 62.72 dBuV
Center 5.386 GHz
20 MHz/
Span 200 MHz

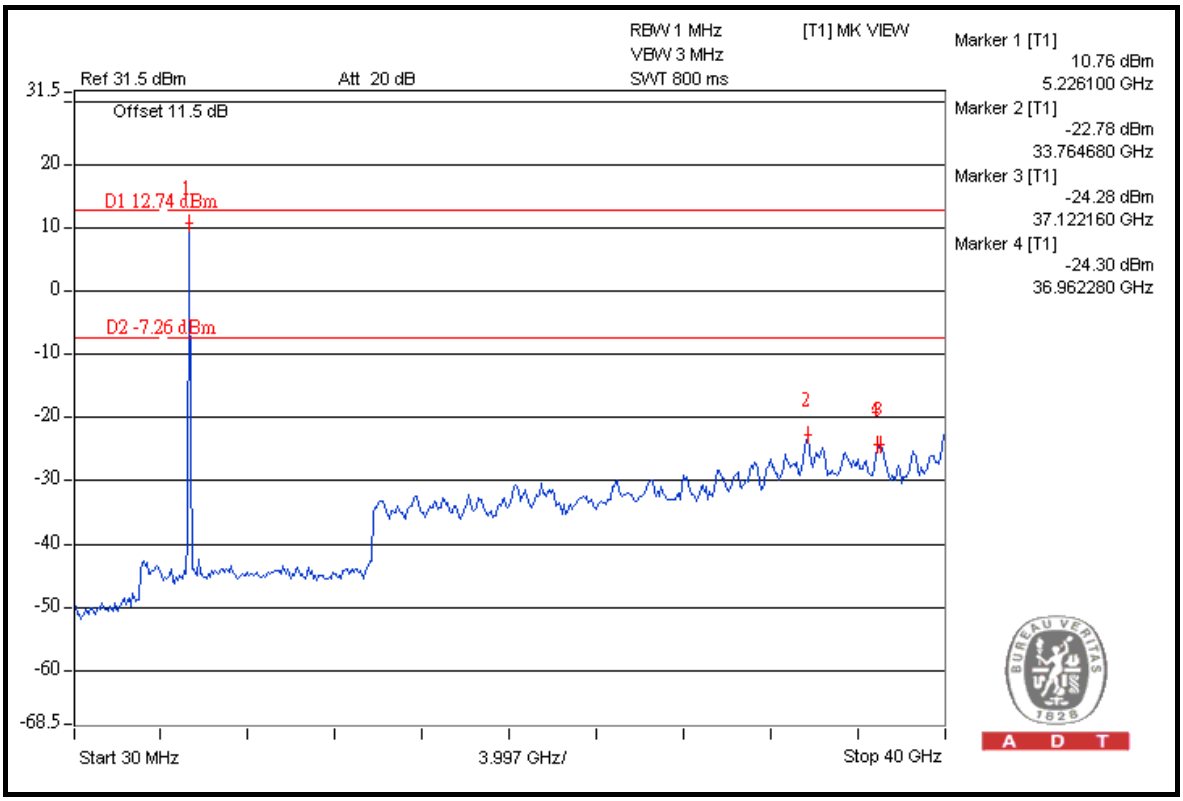

RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
66.45 dBuV
5.306400 GHz
Marker 2 [T1]
18.27 dBuV
5.350000 GHz
Marker 3 [T1]
18.41 dBuV
5.395200 GHz
D1 66.45 dBuV
D2 46.45 dBuV
Center 5.386 GHz
20 MHz/
Span 200 MHz

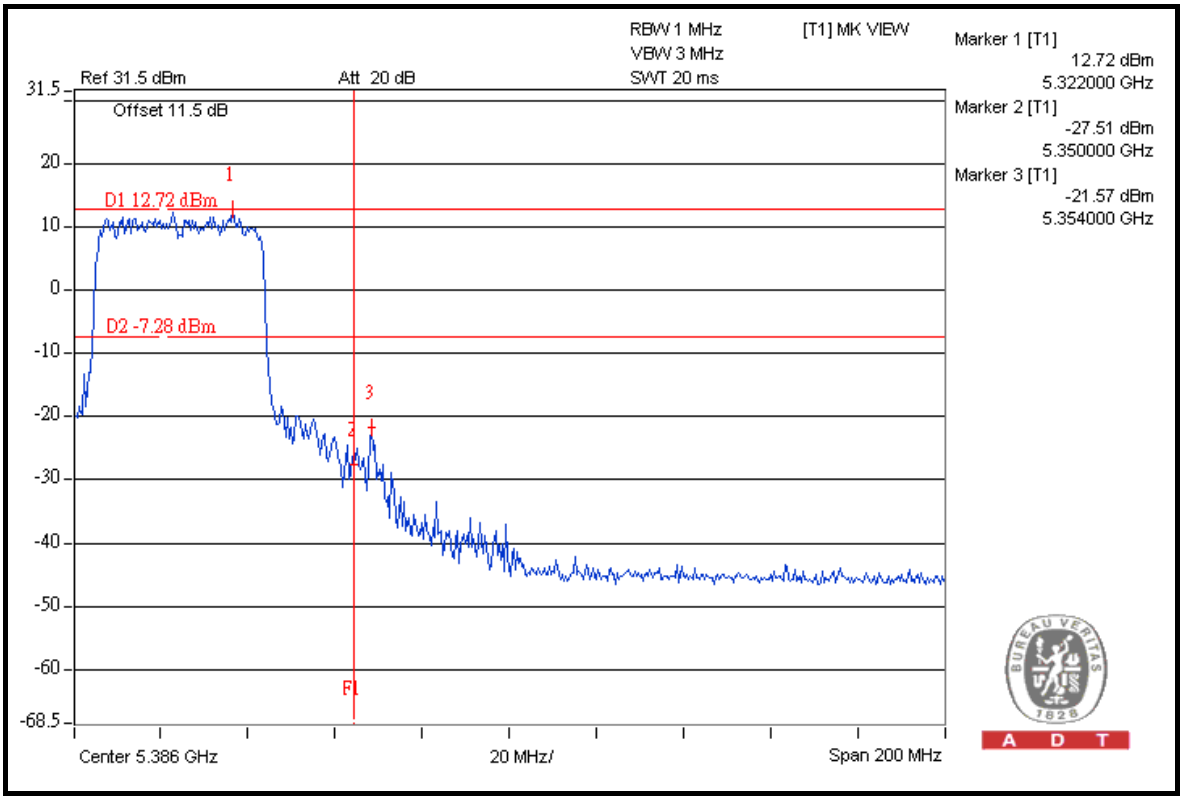
FOR CONDUCTED MEASURED

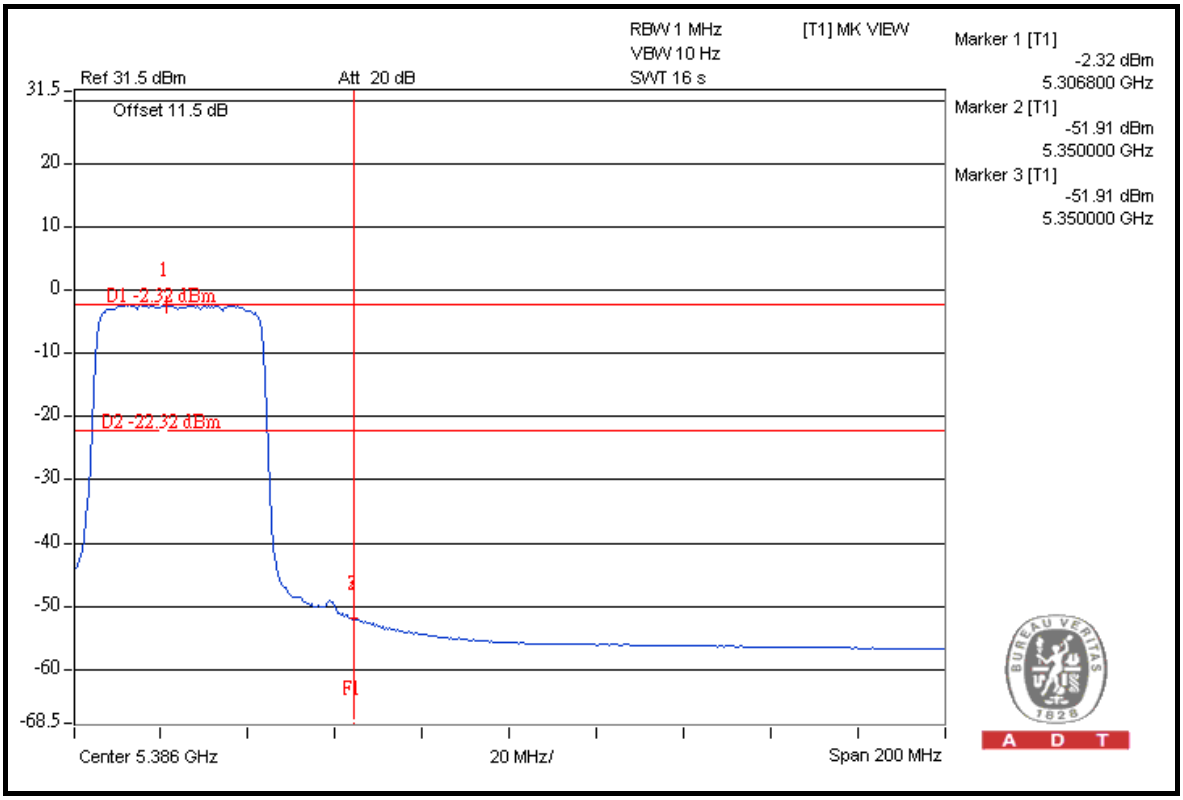
CHAIN 0

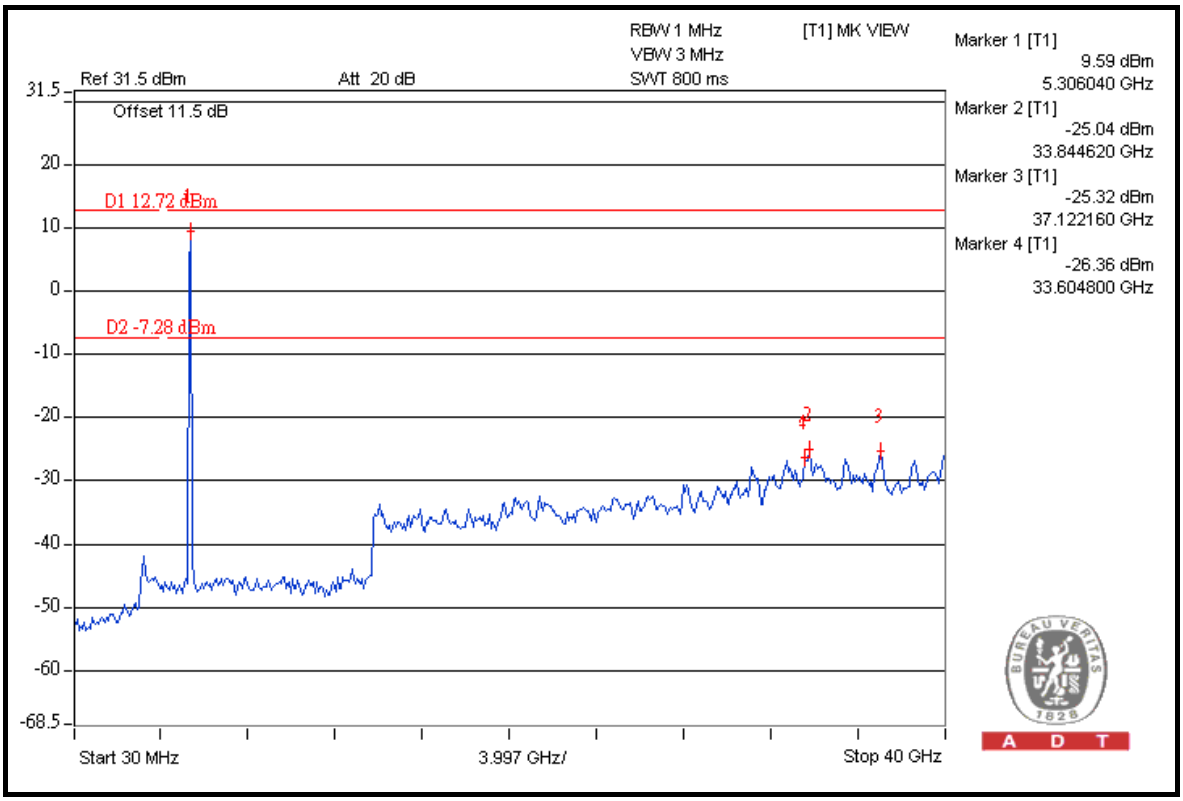




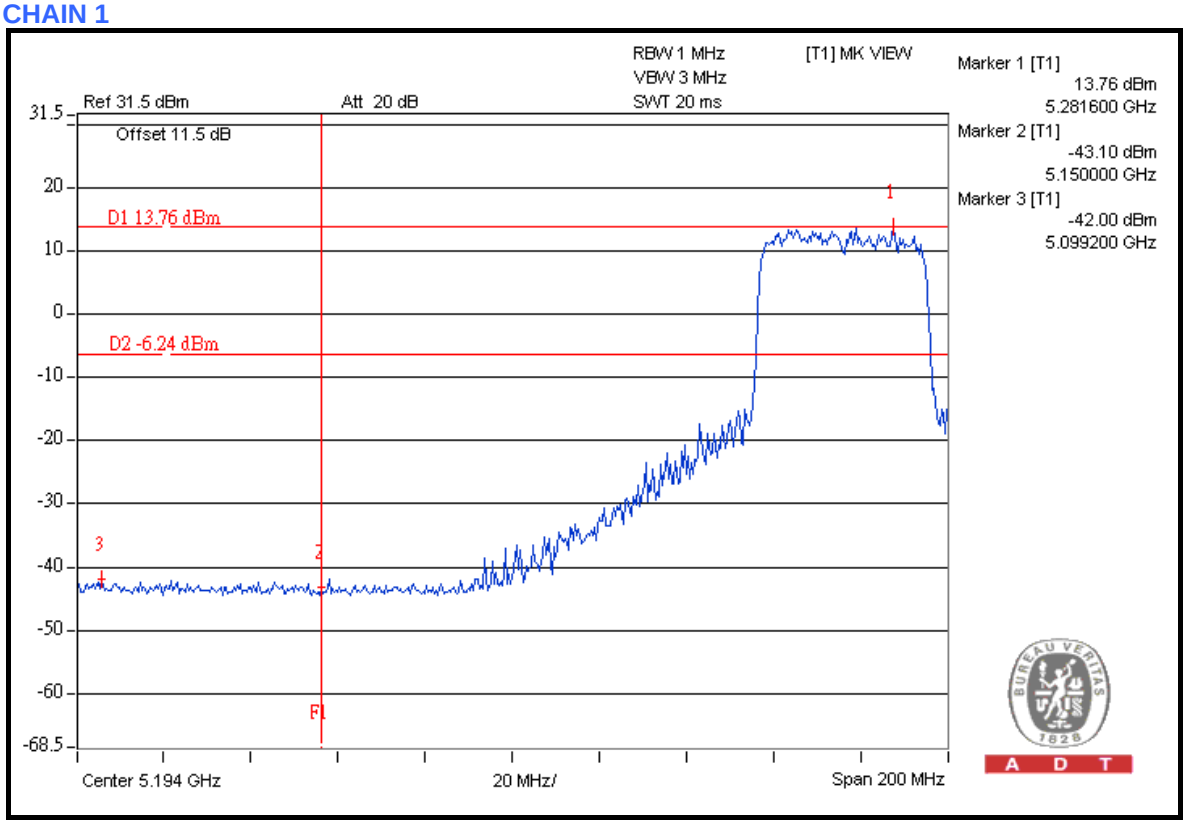

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 12.74 dBm
D2 -7.26 dBm
Marker 1 [T1]
10.76 dBm
5.226100 GHz
Marker 2 [T1]
-22.78 dBm
33.764680 GHz
Marker 3 [T1]
-24.28 dBm
37.122160 GHz
Marker 4 [T1]
-24.30 dBm
36.962280 GHz
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

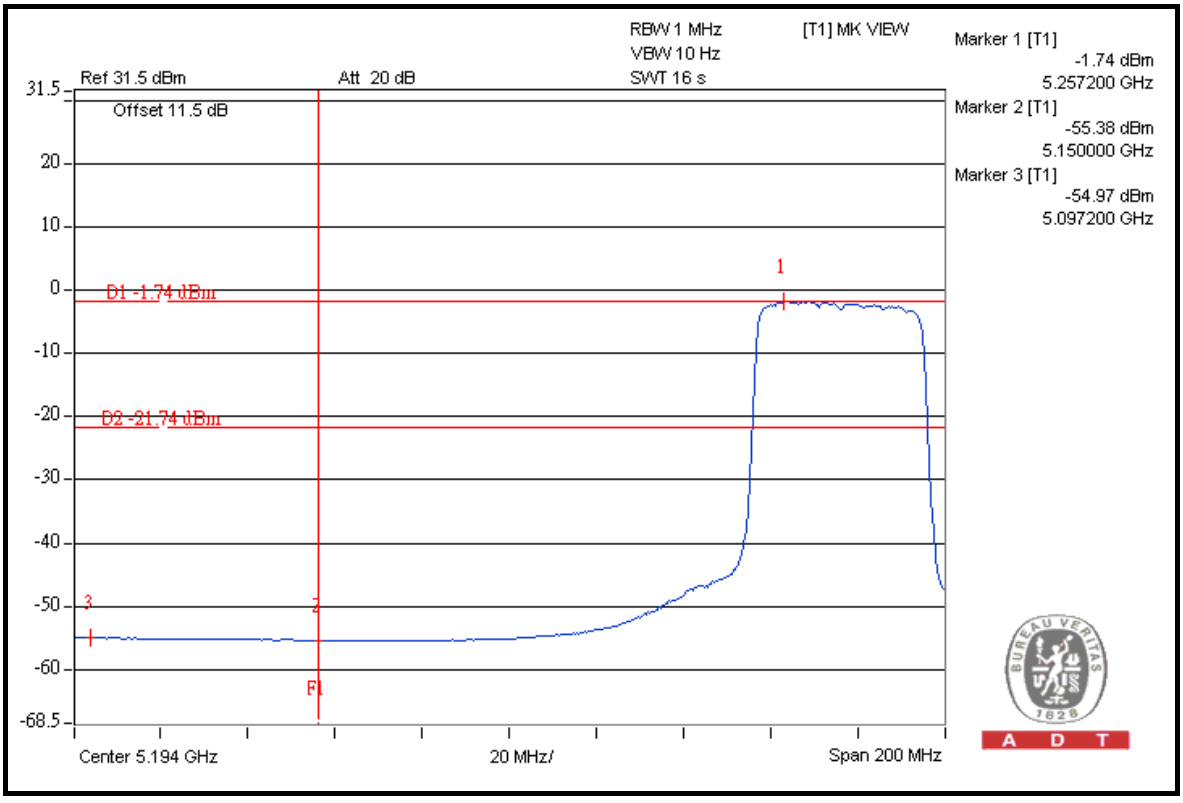

RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 12.72 dBm
D2 -7.28 dBm
Marker 1 [T1]
12.72 dBm
5.322000 GHz
Marker 2 [T1]
-27.51 dBm
5.350000 GHz
Marker 3 [T1]
-21.57 dBm
5.354000 GHz
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
Center 5.386 GHz
20 MHz/
Span 200 MHz

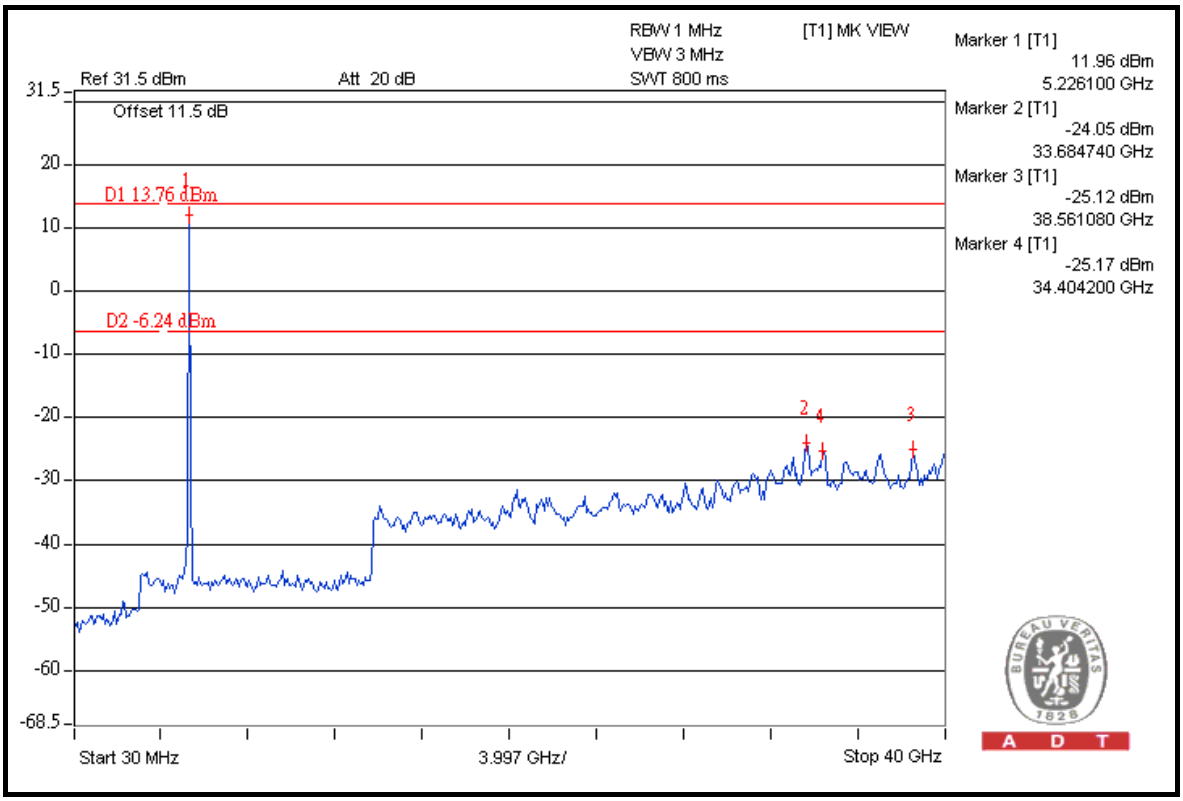

RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
D1 -2.32 dBm
D2 -22.32 dBm
Center 5.386 GHz
20 MHz/
Span 200 MHz
Marker 1 [T1]
-2.32 dBm
5.306800 GHz
Marker 2 [T1]
-51.91 dBm
5.350000 GHz
Marker 3 [T1]
-51.91 dBm
5.350000 GHz

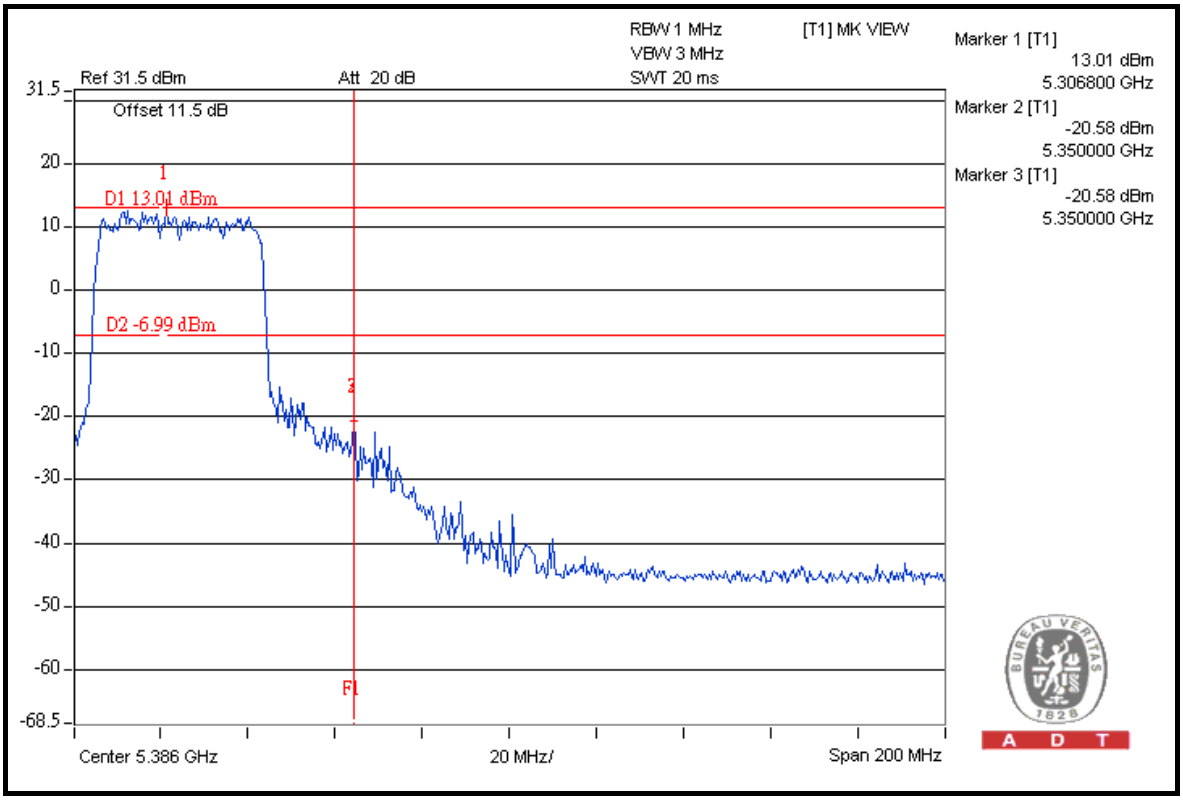

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
D1 12.72 dBm
D2 -7.28 dBm
Start 30 MHz
3.997 GHz/
Stop 40 GHz
Marker 1 [T1]
9.59 dBm
5.306040 GHz
Marker 2 [T1]
-25.04 dBm
33.844620 GHz
Marker 3 [T1]
-25.32 dBm
37.122160 GHz
Marker 4 [T1]
-26.36 dBm
33.604800 GHz

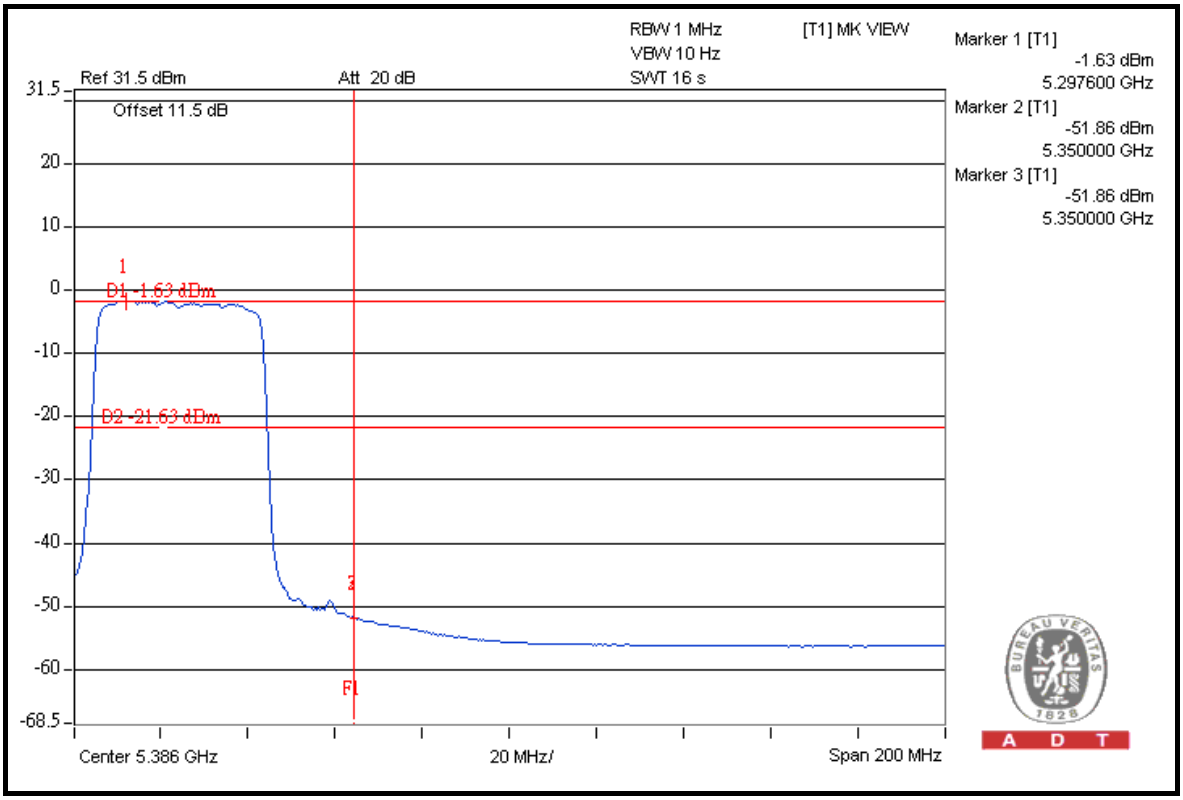
CHAIN 1

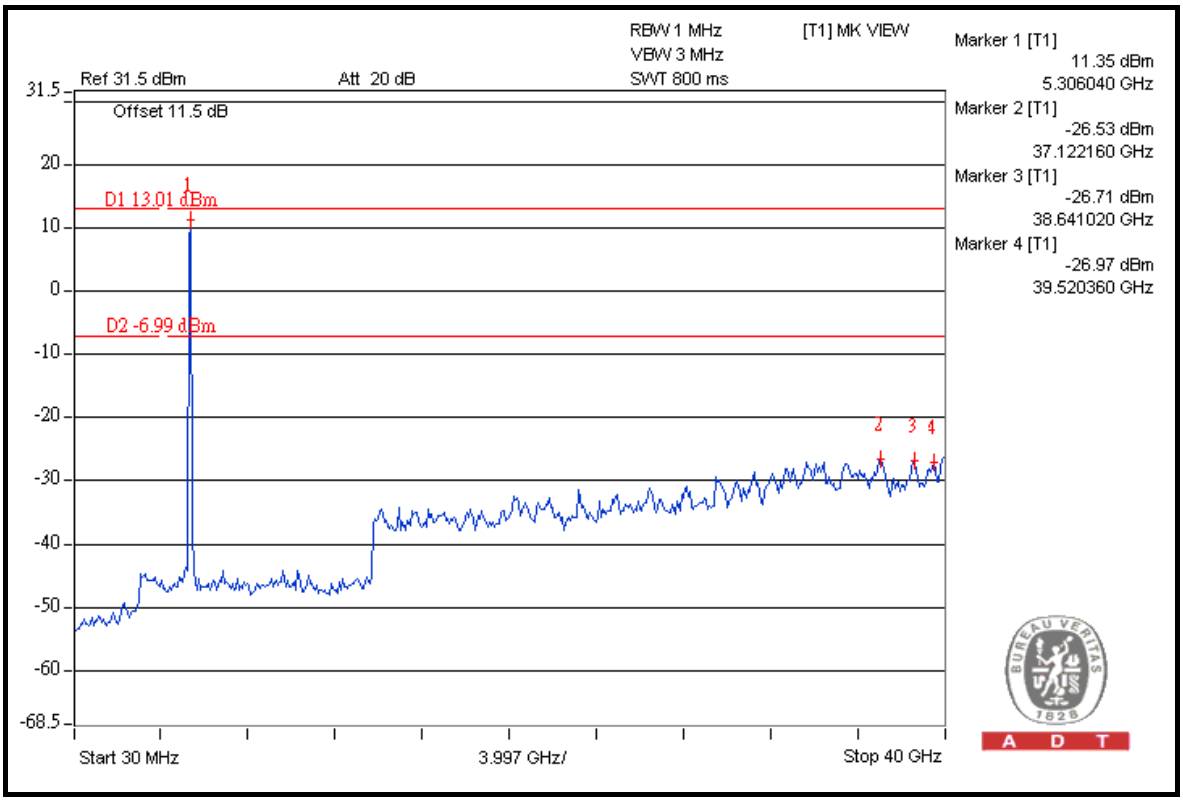

RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
13.76 dBm
5.281600 GHz
Marker 2 [T1]
-43.10 dBm
5.150000 GHz
Marker 3 [T1]
-42.00 dBm
5.099200 GHz
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 13.76 dBm
D2 -6.24 dBm
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
Center 5.194 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Marker 1 [T1]
-1.74 dBm
5.257200 GHz
Marker 2 [T1]
-55.38 dBm
5.150000 GHz
Marker 3 [T1]
-54.97 dBm
5.097200 GHz
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 -1.74 dBm
D2 -21.74 dBm
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
Center 5.194 GHz
20 MHz/
Span 200 MHz

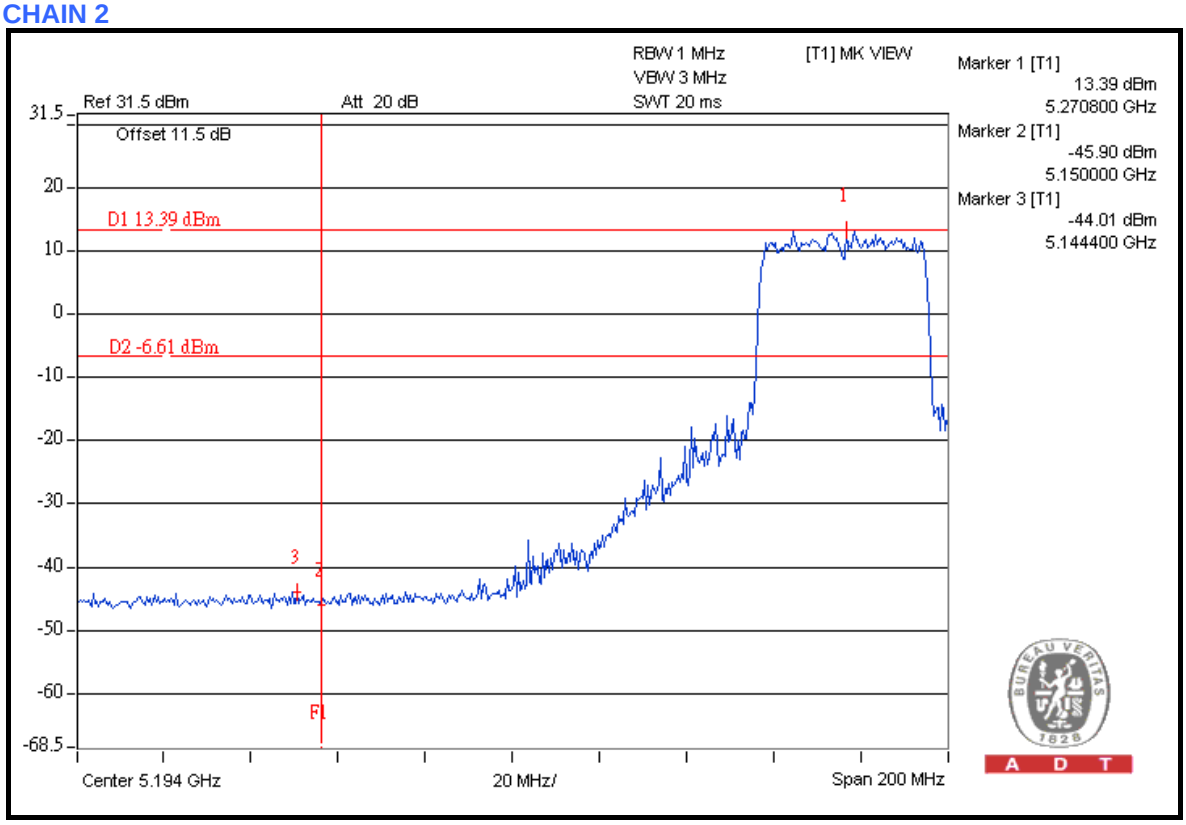

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 13.76 dBm
D2 -6.24 dBm
Marker 1 [T1]
11.96 dBm
5.226100 GHz
Marker 2 [T1]
-24.05 dBm
33.684740 GHz
Marker 3 [T1]
-25.12 dBm
38.561080 GHz
Marker 4 [T1]
-25.17 dBm
34.404200 GHz
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

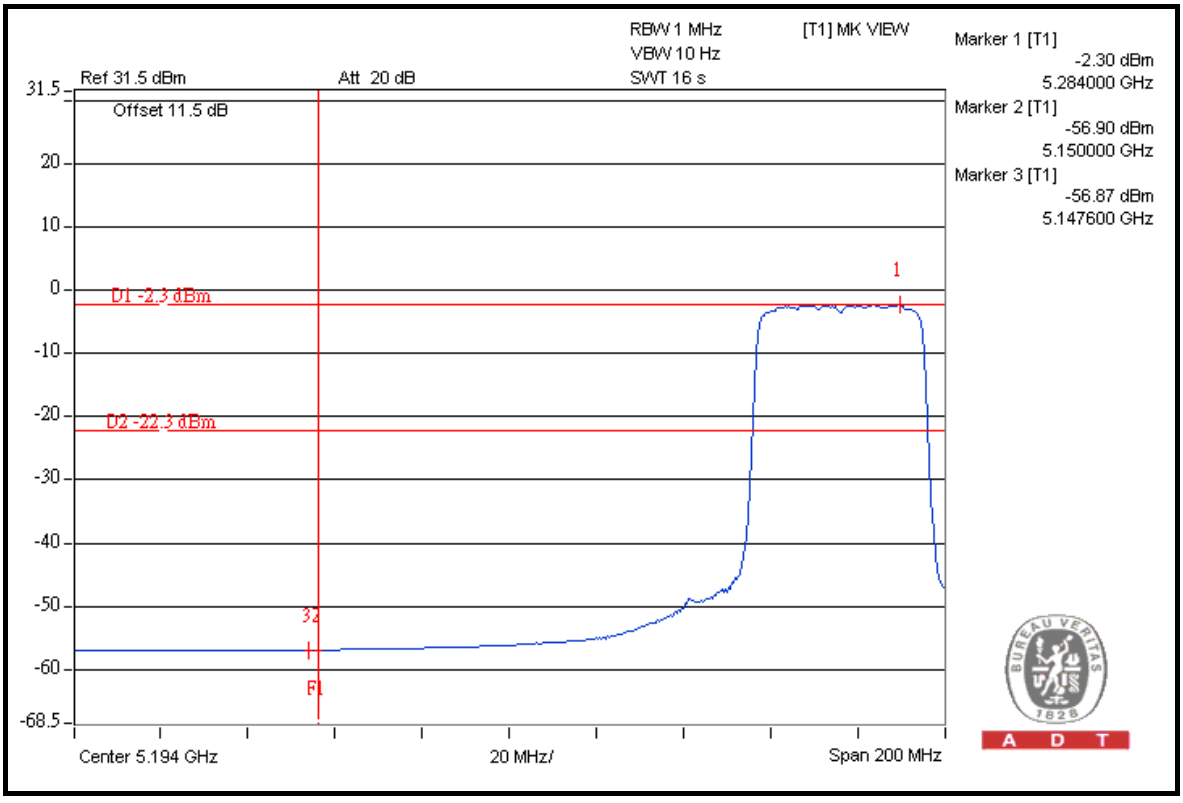

RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 13.01 dBm
D2 -6.99 dBm
Marker 1 [T1]
13.01 dBm
5.306800 GHz
Marker 2 [T1]
-20.58 dBm
5.350000 GHz
Marker 3 [T1]
-20.58 dBm
5.350000 GHz
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
Center 5.386 GHz
20 MHz/
Span 200 MHz

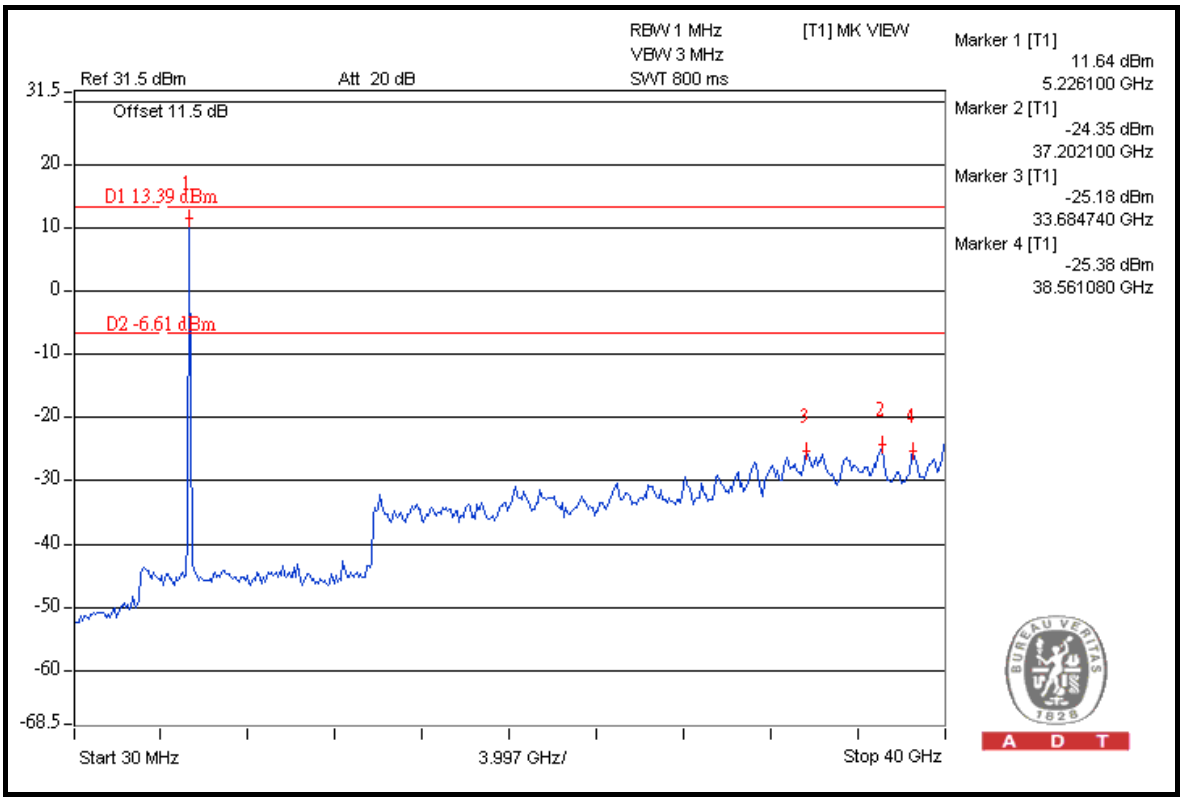

RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
D1 -1.63 dBm
D2 -21.63 dBm
Center 5.386 GHz
20 MHz/
Span 200 MHz
Marker 1 [T1]
-1.63 dBm
5.297600 GHz
Marker 2 [T1]
-51.86 dBm
5.350000 GHz
Marker 3 [T1]
-51.86 dBm
5.350000 GHz

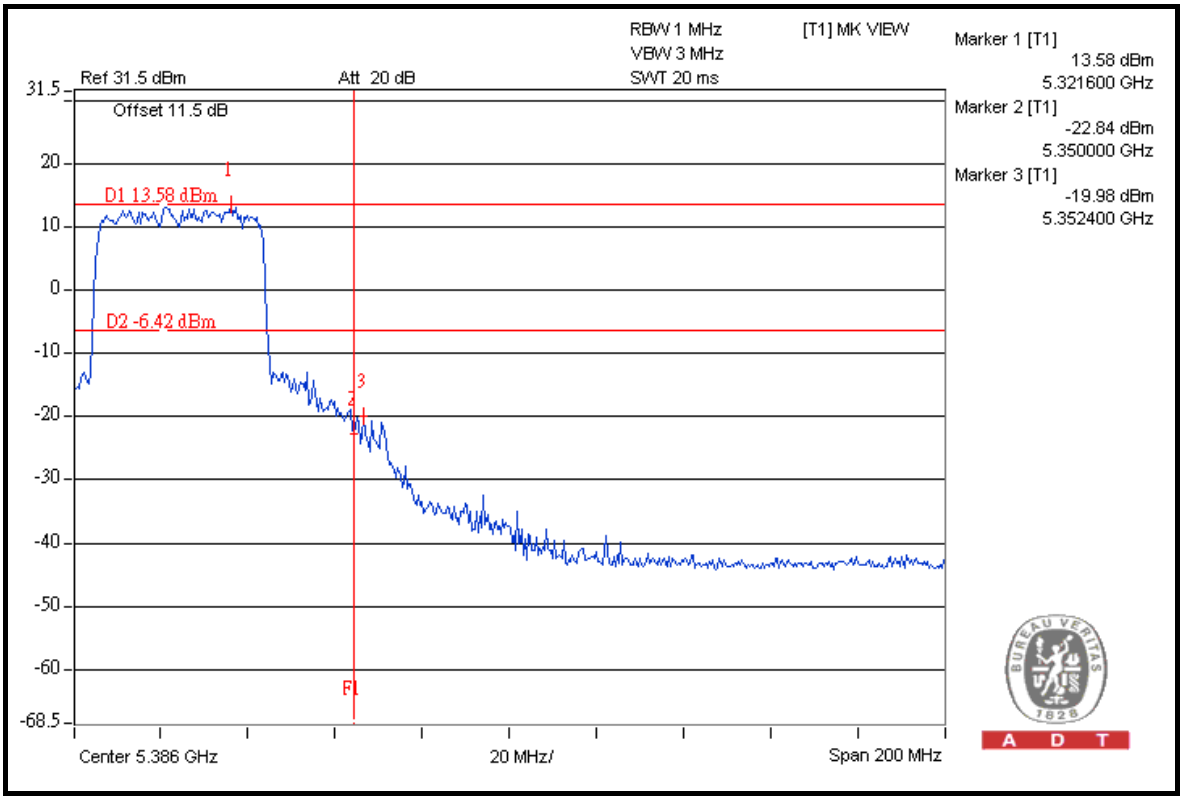

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
D1 13.01 dBm
D2 -6.99 dBm
Start 30 MHz
3.997 GHz/
Stop 40 GHz
Marker 1 [T1]
11.35 dBm
5.306040 GHz
Marker 2 [T1]
-26.53 dBm
37.122160 GHz
Marker 3 [T1]
-26.71 dBm
38.641020 GHz
Marker 4 [T1]
-26.97 dBm
39.520360 GHz

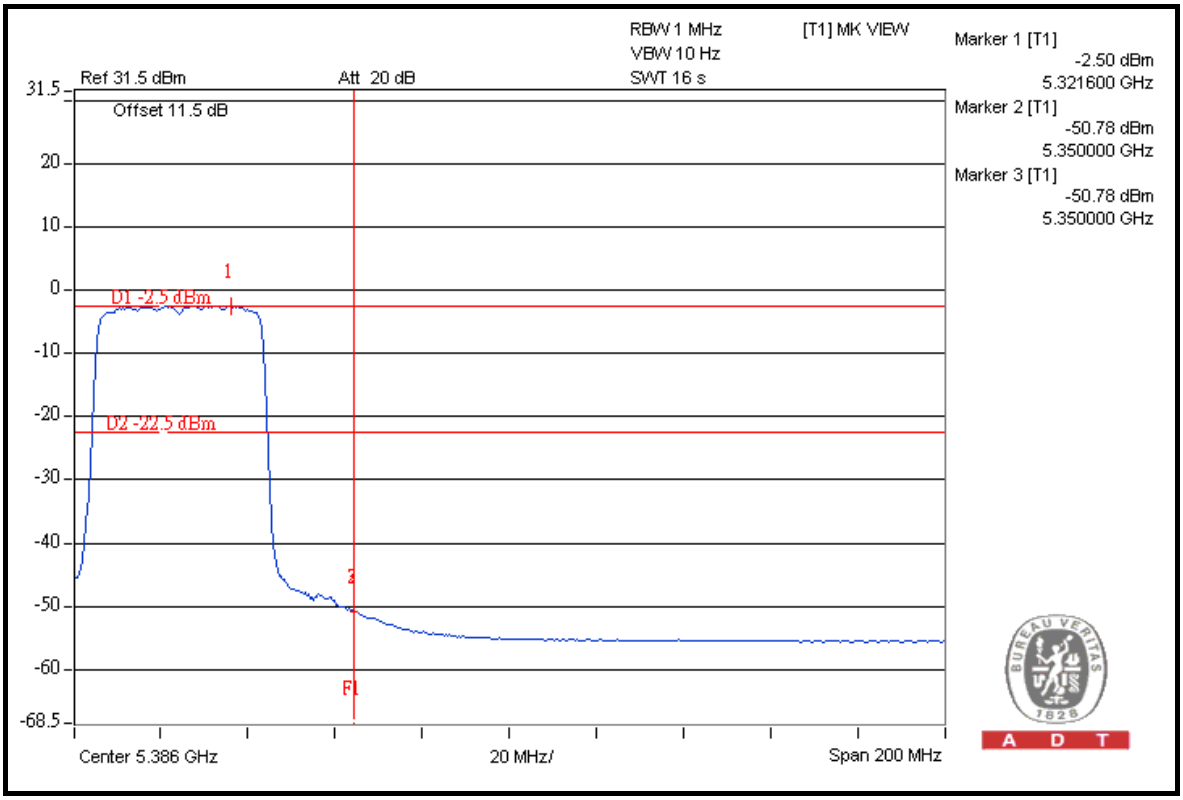
CHAIN 2

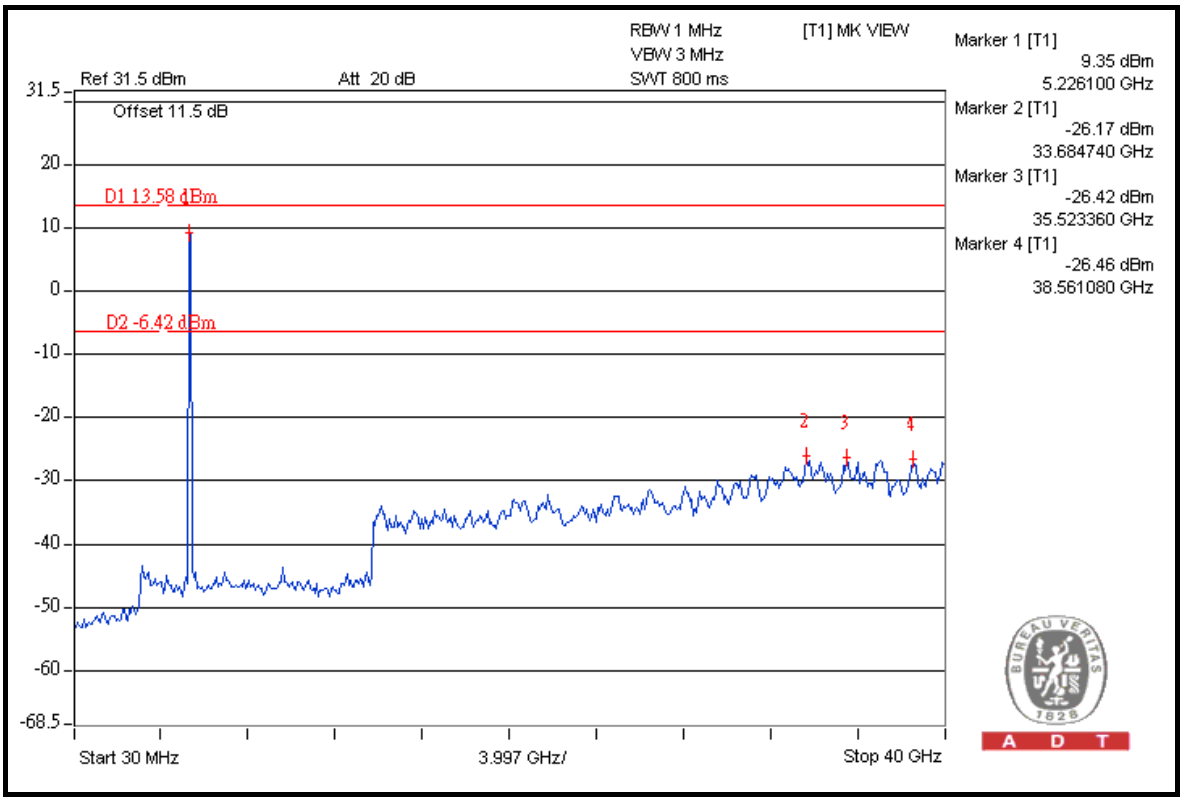

RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
13.39 dBm
5.270800 GHz
Marker 2 [T1]
-45.90 dBm
5.150000 GHz
Marker 3 [T1]
-44.01 dBm
5.144400 GHz
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 13.39 dBm
D2 -6.61 dBm
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
Center 5.194 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Marker 1 [T1]
-2.30 dBm
5.284000 GHz
Marker 2 [T1]
-56.90 dBm
5.150000 GHz
Marker 3 [T1]
-56.87 dBm
5.147600 GHz
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 -2.3 dBm
D2 -22.3 dBm
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
Center 5.194 GHz
20 MHz/
Span 200 MHz

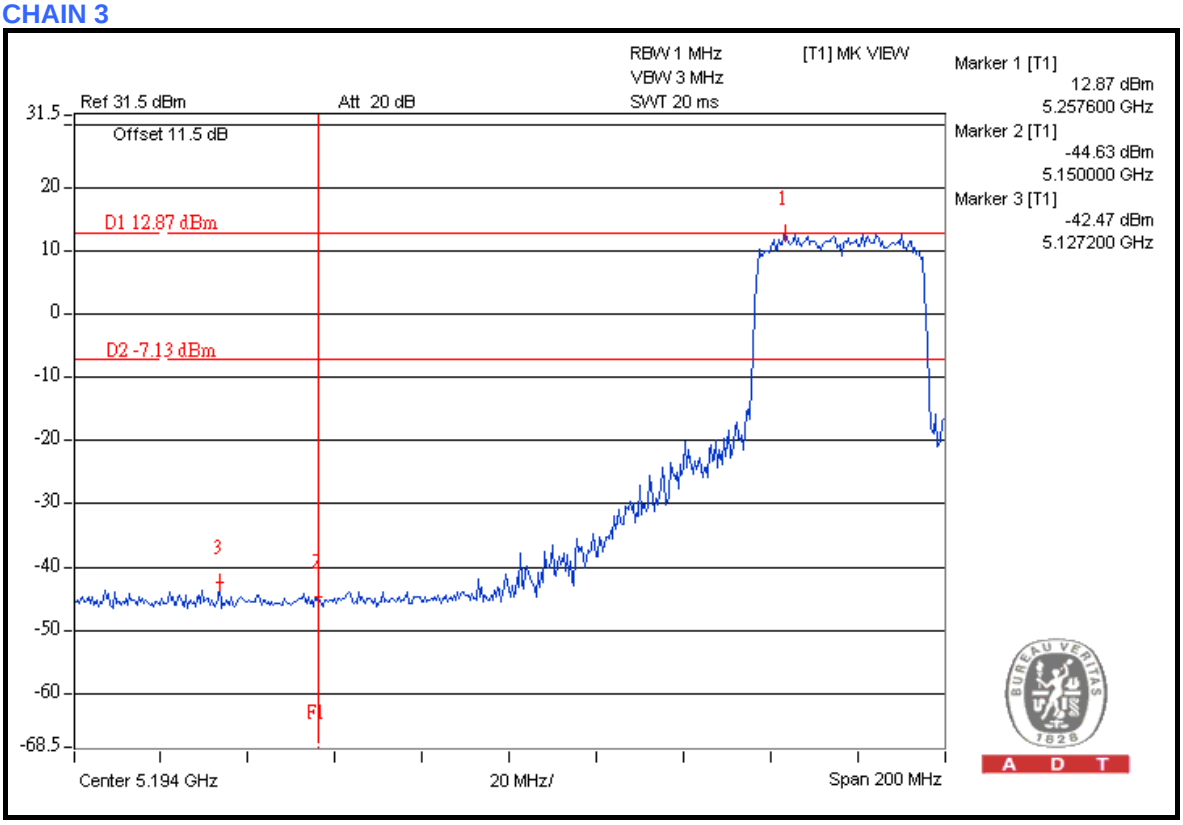

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 13.39 dBm
D2 -6.61 dBm
Marker 1 [T1]
11.64 dBm
5.226100 GHz
Marker 2 [T1]
-24.35 dBm
37.202100 GHz
Marker 3 [T1]
-25.18 dBm
33.684740 GHz
Marker 4 [T1]
-25.38 dBm
38.561080 GHz
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

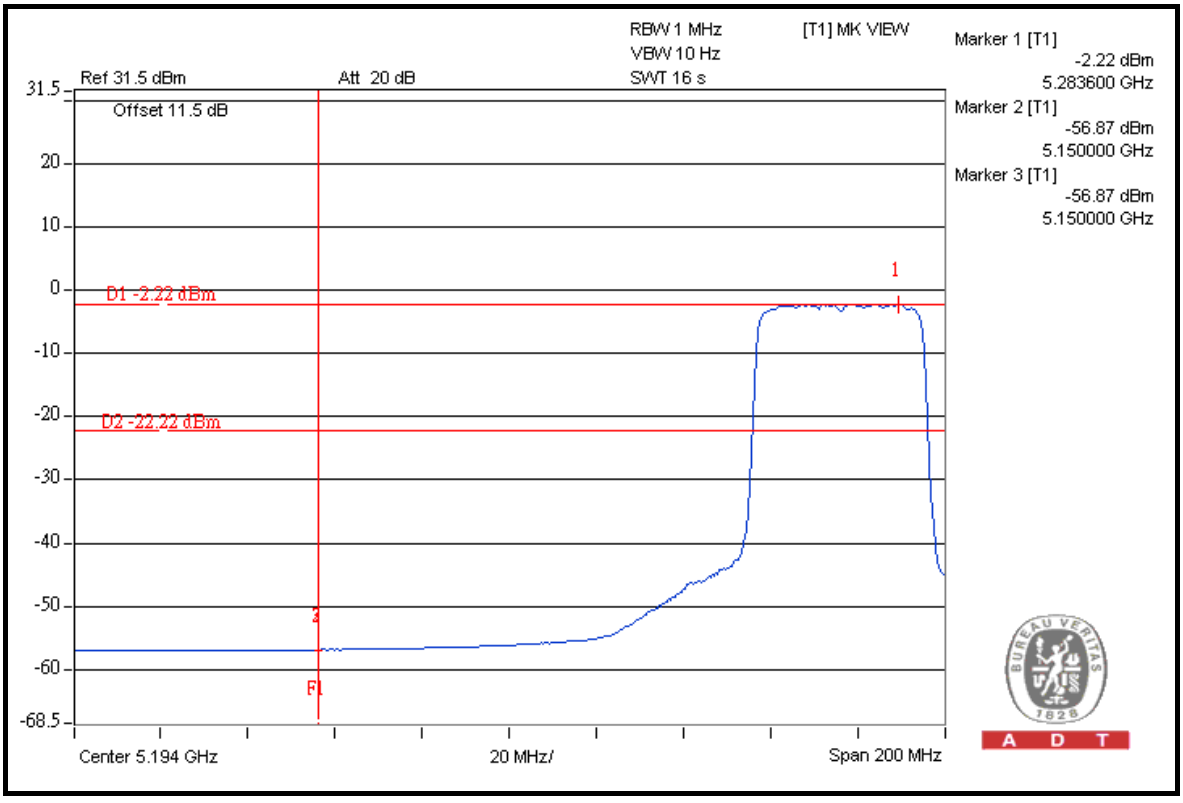

RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 13.58 dBm
D2 -6.42 dBm
Marker 1 [T1]
13.58 dBm
5.321600 GHz
Marker 2 [T1]
-22.84 dBm
5.350000 GHz
Marker 3 [T1]
-19.98 dBm
5.352400 GHz
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
Center 5.386 GHz
20 MHz/
Span 200 MHz

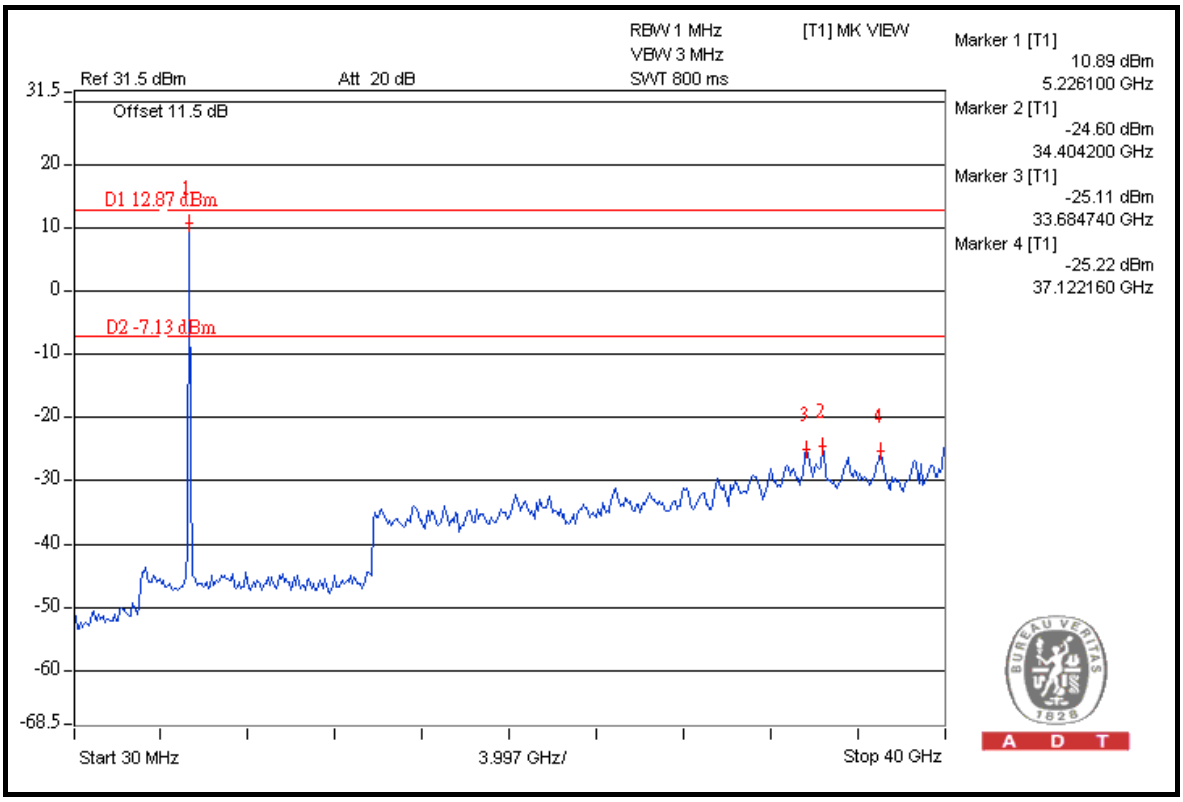

RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Marker 1 [T1]
-2.50 dBm
5.321600 GHz
Marker 2 [T1]
-50.78 dBm
5.350000 GHz
Marker 3 [T1]
-50.78 dBm
5.350000 GHz
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 -2.5 dBm
D2 -22.5 dBm
Center 5.386 GHz
20 MHz/
Span 200 MHz

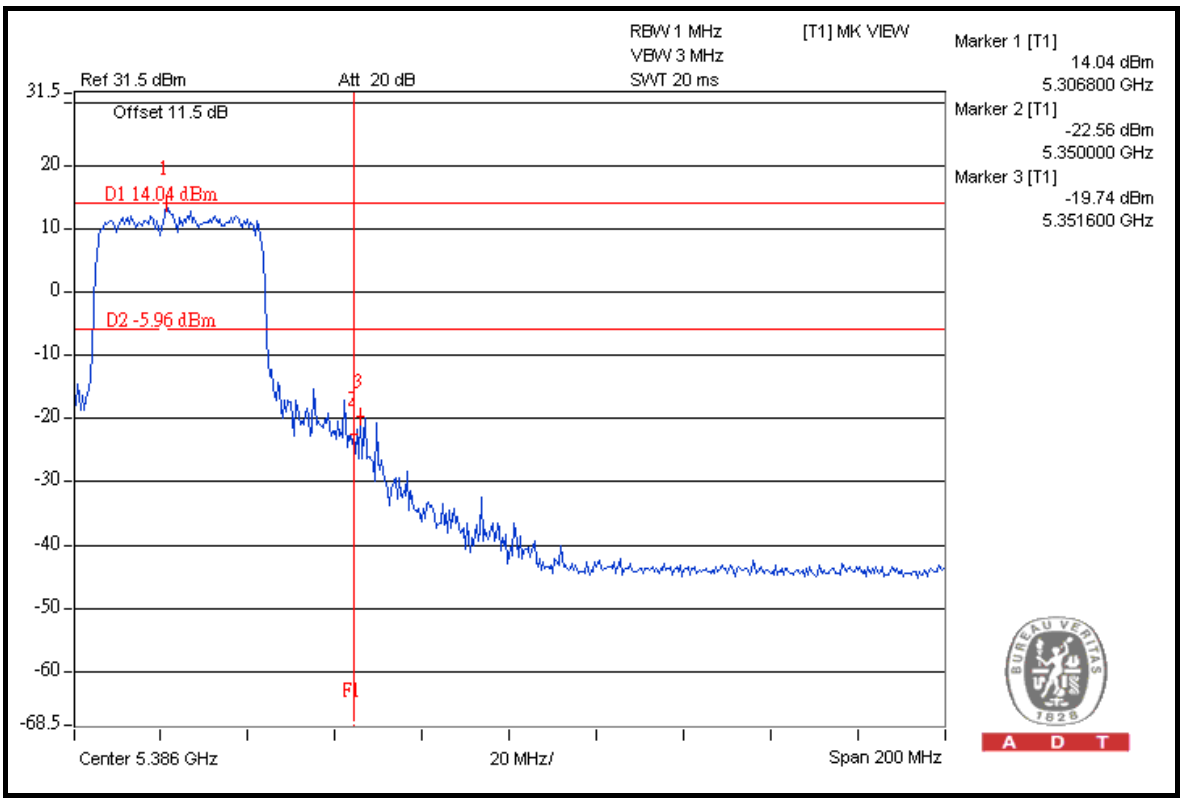

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Marker 1 [T1]
9.35 dBm
5.226100 GHz
Marker 2 [T1]
-26.17 dBm
33.684740 GHz
Marker 3 [T1]
-26.42 dBm
35.523360 GHz
Marker 4 [T1]
-26.46 dBm
38.561080 GHz
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 13.58 dBm
D2 -6.42 dBm
Start 30 MHz
3.997 GHz/
Stop 40 GHz

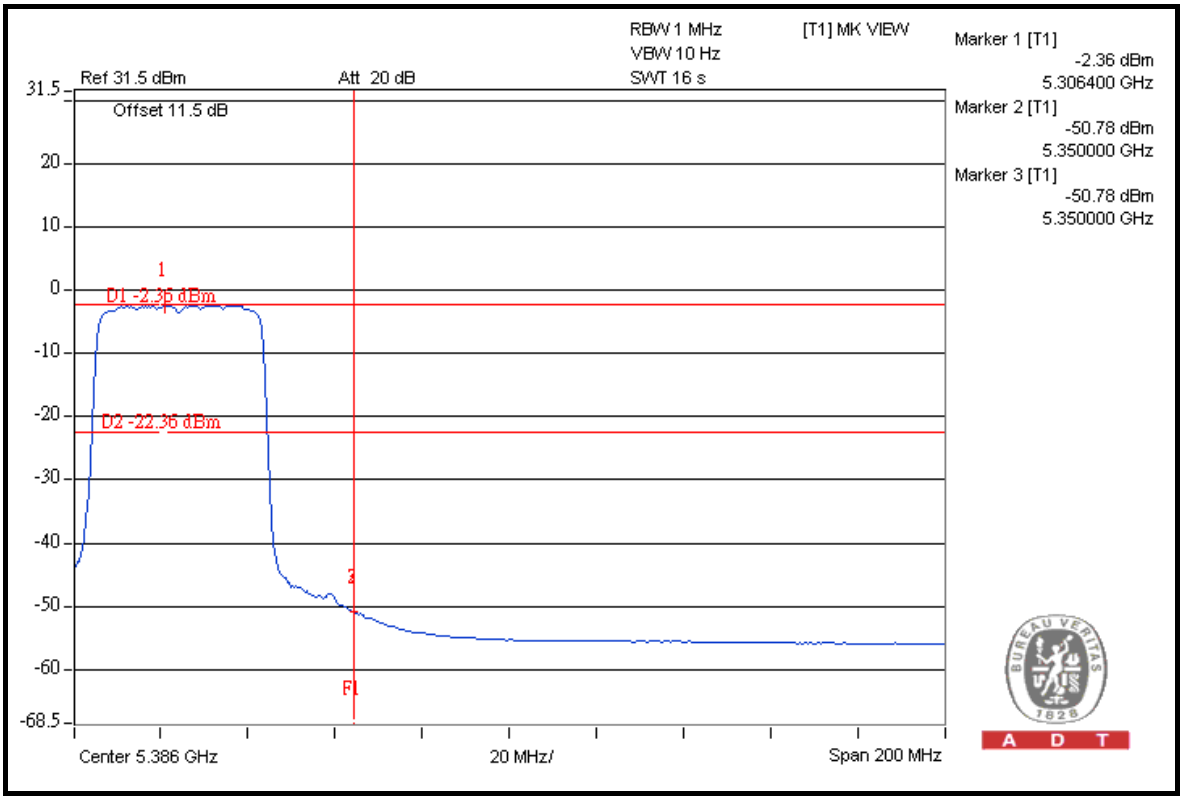
CHAIN 3

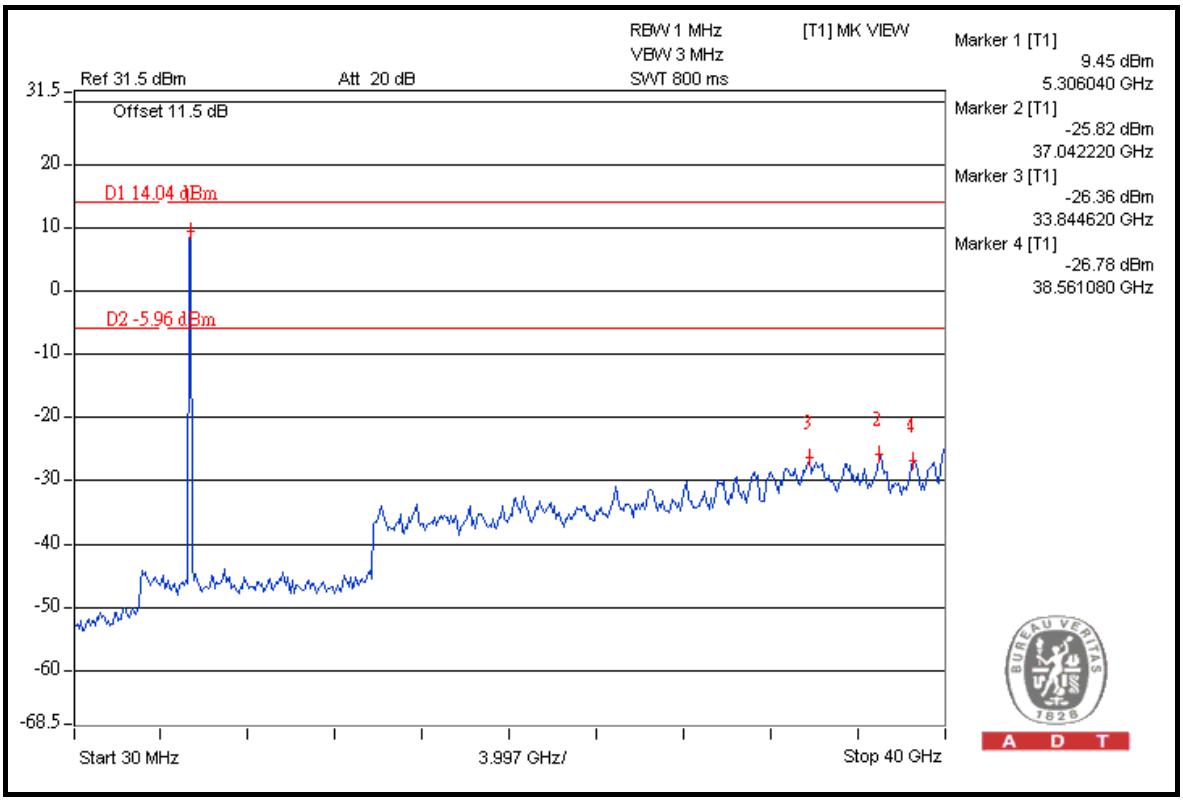

RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
12.87 dBm
5.257600 GHz
Marker 2 [T1]
-44.63 dBm
5.150000 GHz
Marker 3 [T1]
-42.47 dBm
5.127200 GHz
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 12.87 dBm
D2 -7.13 dBm
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
Center 5.194 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Marker 1 [T1]
-2.22 dBm
5.283600 GHz
Marker 2 [T1]
-56.87 dBm
5.150000 GHz
Marker 3 [T1]
-56.87 dBm
5.150000 GHz
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 -2.22 dBm
D2 -22.22 dBm
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
Center 5.194 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 12.87 dBm
D2 -7.13 dBm
Marker 1 [T1]
10.89 dBm
5.226100 GHz
Marker 2 [T1]
-24.60 dBm
34.404200 GHz
Marker 3 [T1]
-25.11 dBm
33.684740 GHz
Marker 4 [T1]
-25.22 dBm
37.122160 GHz
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz


RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 14.04 dBm
D2 -5.96 dBm
Marker 1 [T1]
14.04 dBm
5.306800 GHz
Marker 2 [T1]
-22.56 dBm
5.350000 GHz
Marker 3 [T1]
-19.74 dBm
5.351600 GHz
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
Center 5.386 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
D1 -2.36 dBm
D2 -22.36 dBm
Center 5.386 GHz
20 MHz/
Span 200 MHz
Marker 1 [T1]
-2.36 dBm
5.306400 GHz
Marker 2 [T1]
-50.78 dBm
5.350000 GHz
Marker 3 [T1]
-50.78 dBm
5.350000 GHz


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
D1 14.04 dBm
D2 -5.96 dBm
Start 30 MHz
3.997 GHz/
Stop 40 GHz
Marker 1 [T1]
9.45 dBm
5.306040 GHz
Marker 2 [T1]
-25.82 dBm
37.042220 GHz
Marker 3 [T1]
-26.36 dBm
33.844620 GHz
Marker 4 [T1]
-26.78 dBm
38.561080 GHz

FOR 5510-5670MHz BAND:

5670MHz:

RESTRICT BAND (5350 ~ 5460 MHz)

FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
5510.00 (PK)	110.5	48.41	62.09	74.00
5510.00 (AV)	96.2	47.60	48.60	54.00

FREQUENCY BAND (5460 ~ 5470 MHz)

FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH (dBuV/m)	LIMIT (dBuV/m)
5510.00 (PK)	110.5	48.42	62.08	68.30

5670MHz

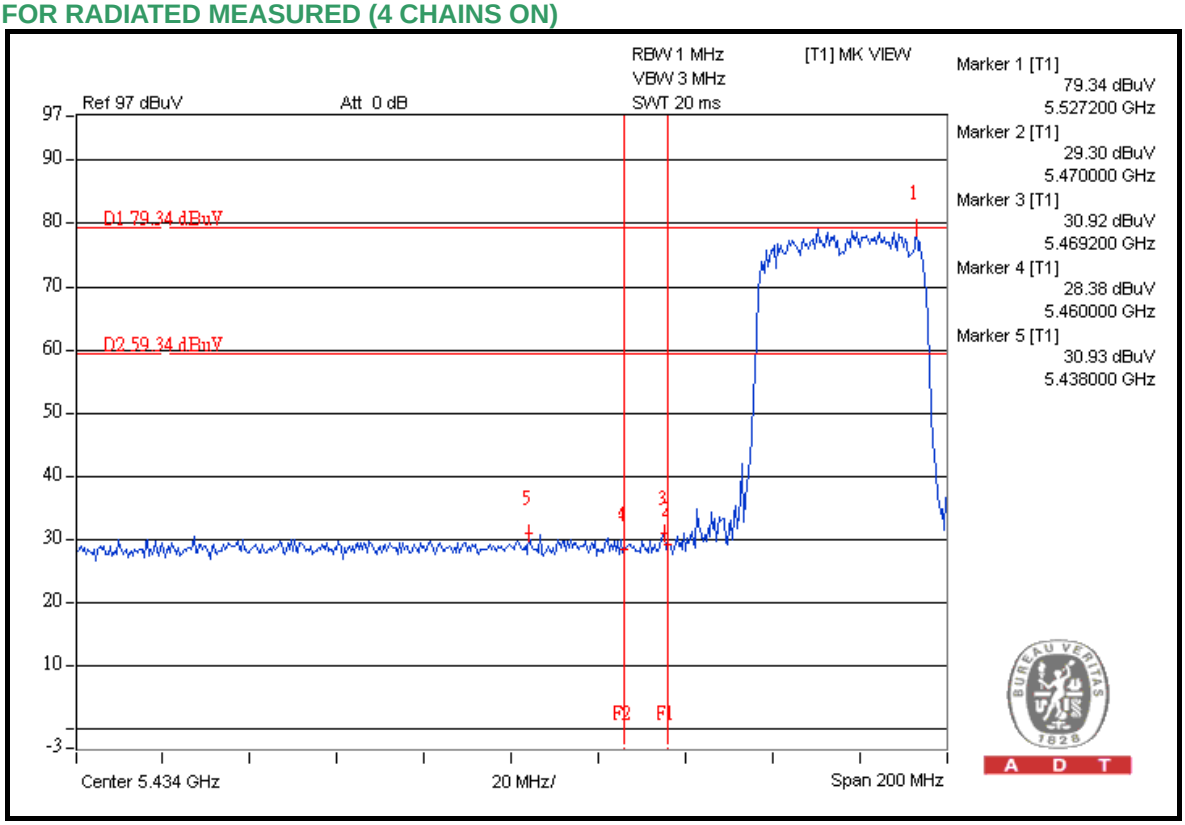
ABOVE 5725 MHz

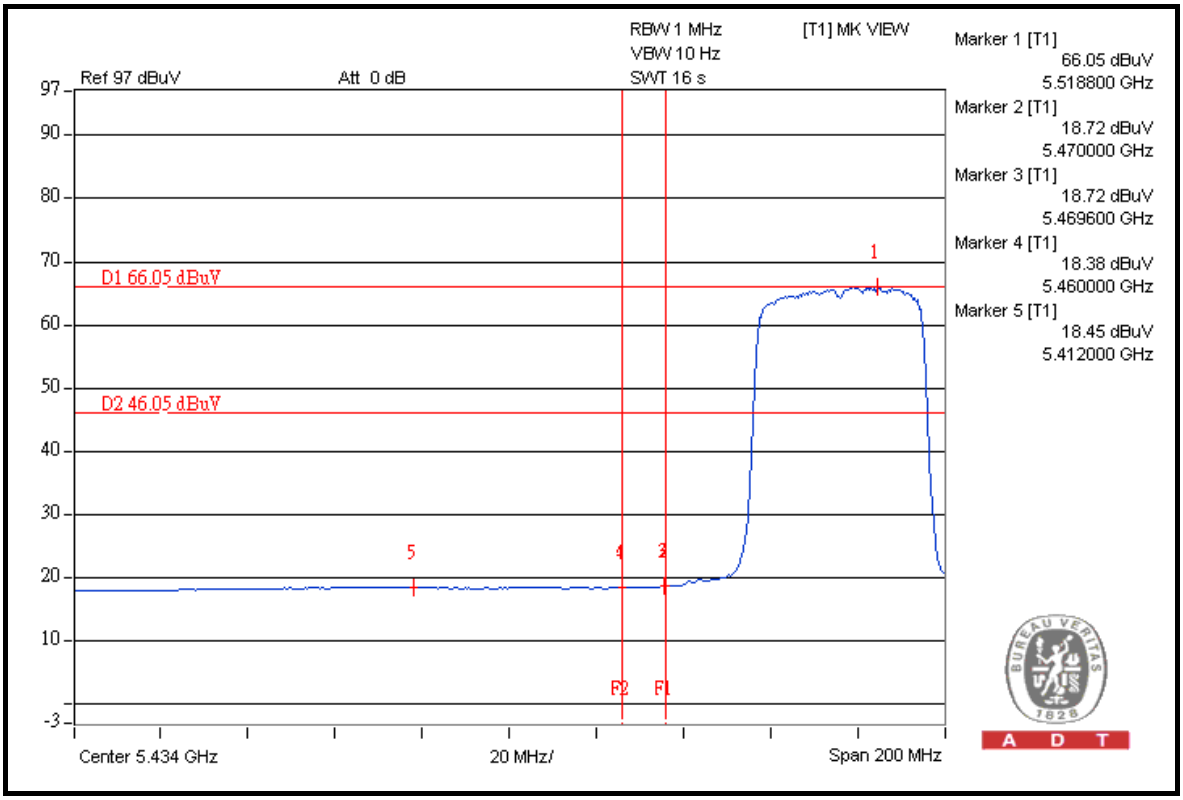
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH (dBuV/m)	LIMIT (dBuV/m)
5670.00 (PK)	111.3	47.77	63.53	68.30

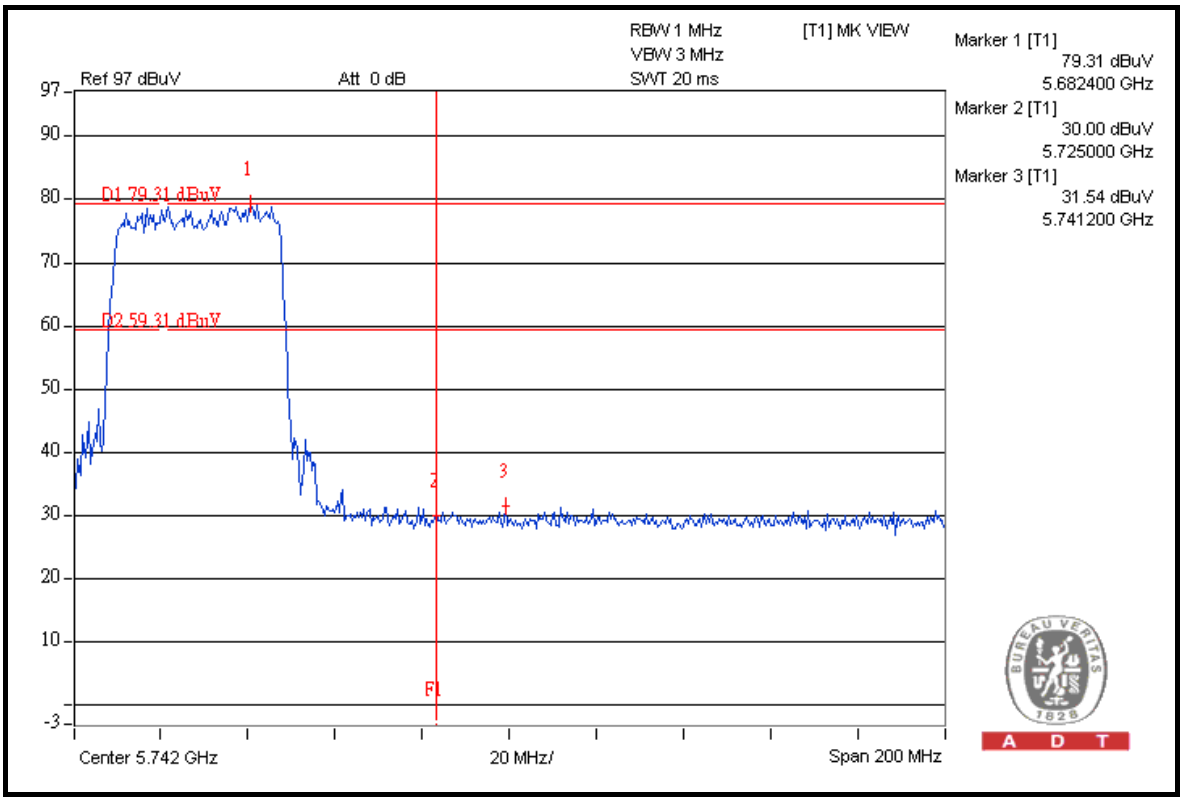
NOTE:

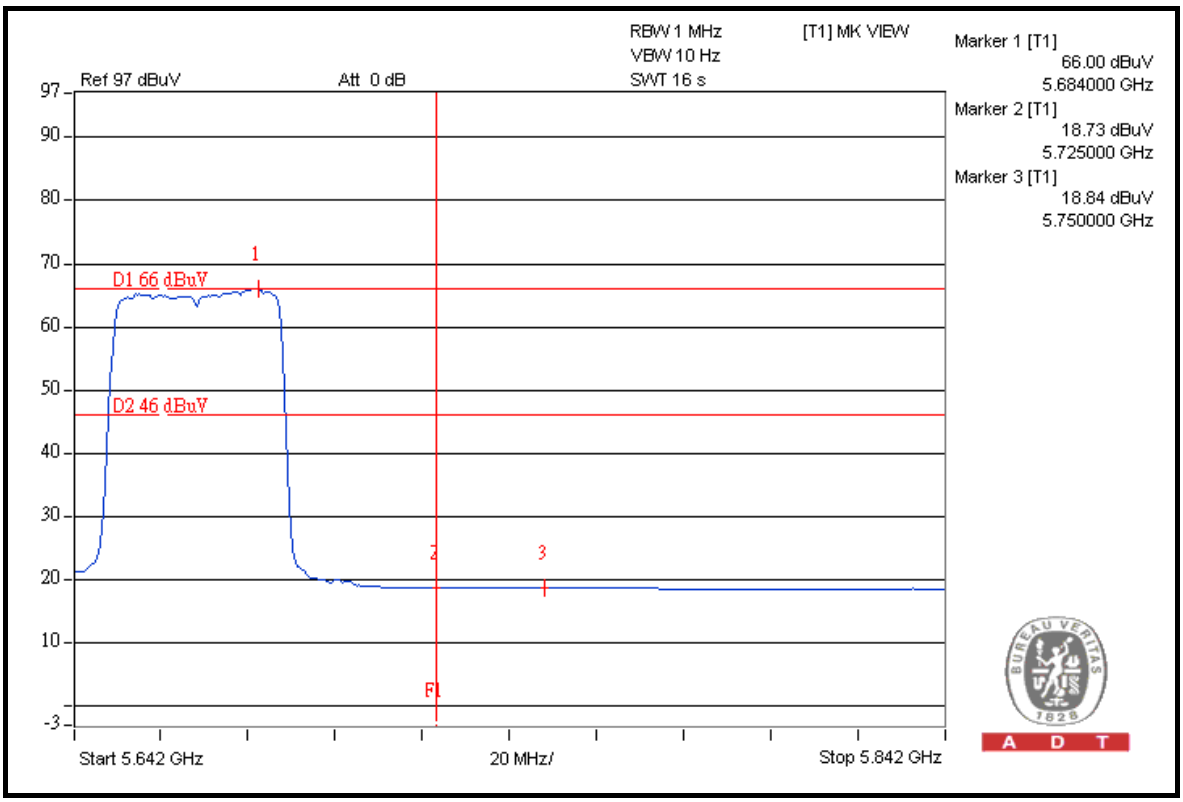
1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 3 pages.
2. Maximum field strength in restrict band = Fundamental emission – Delta.

FOR RADIATED MEASURED (4 CHAINS ON)



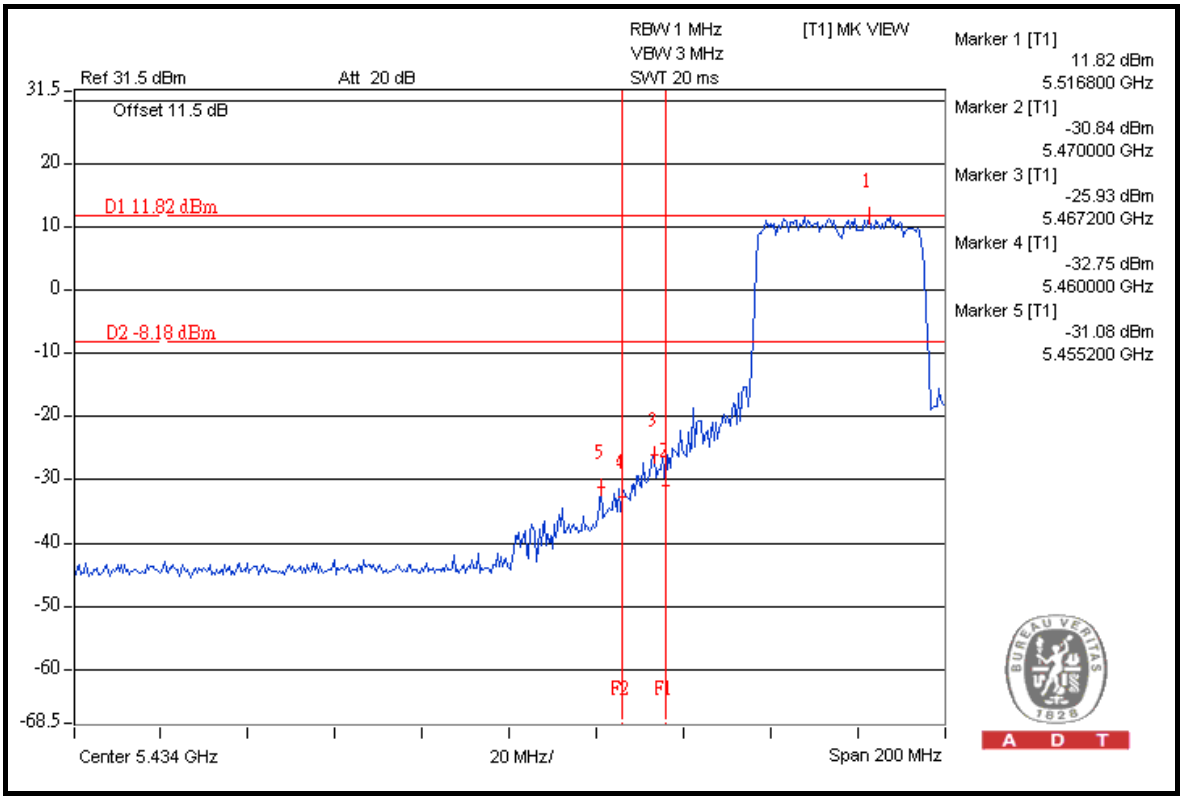


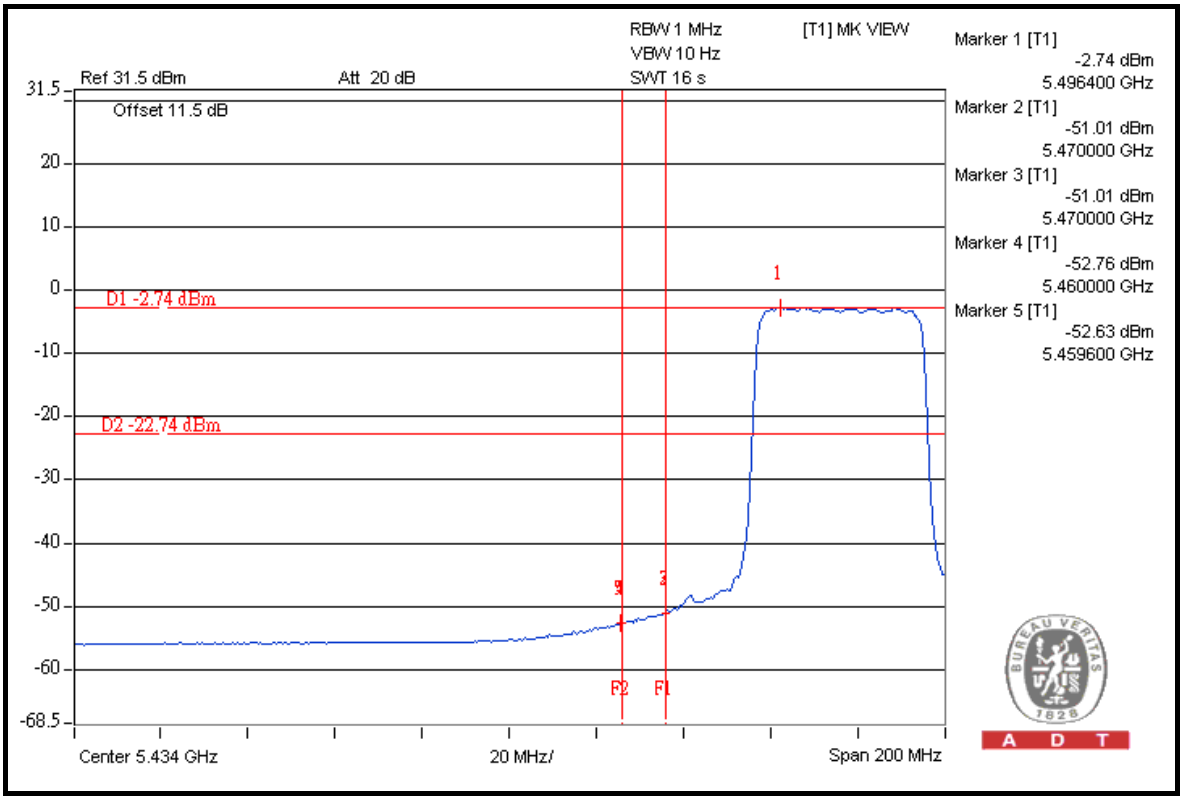

RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
79.31 dBuV
5.682400 GHz
Marker 2 [T1]
30.00 dBuV
5.725000 GHz
Marker 3 [T1]
31.54 dBuV
5.741200 GHz
D1 79.31 dBuV
D2 59.31 dBuV
Center 5.742 GHz
20 MHz/
Span 200 MHz

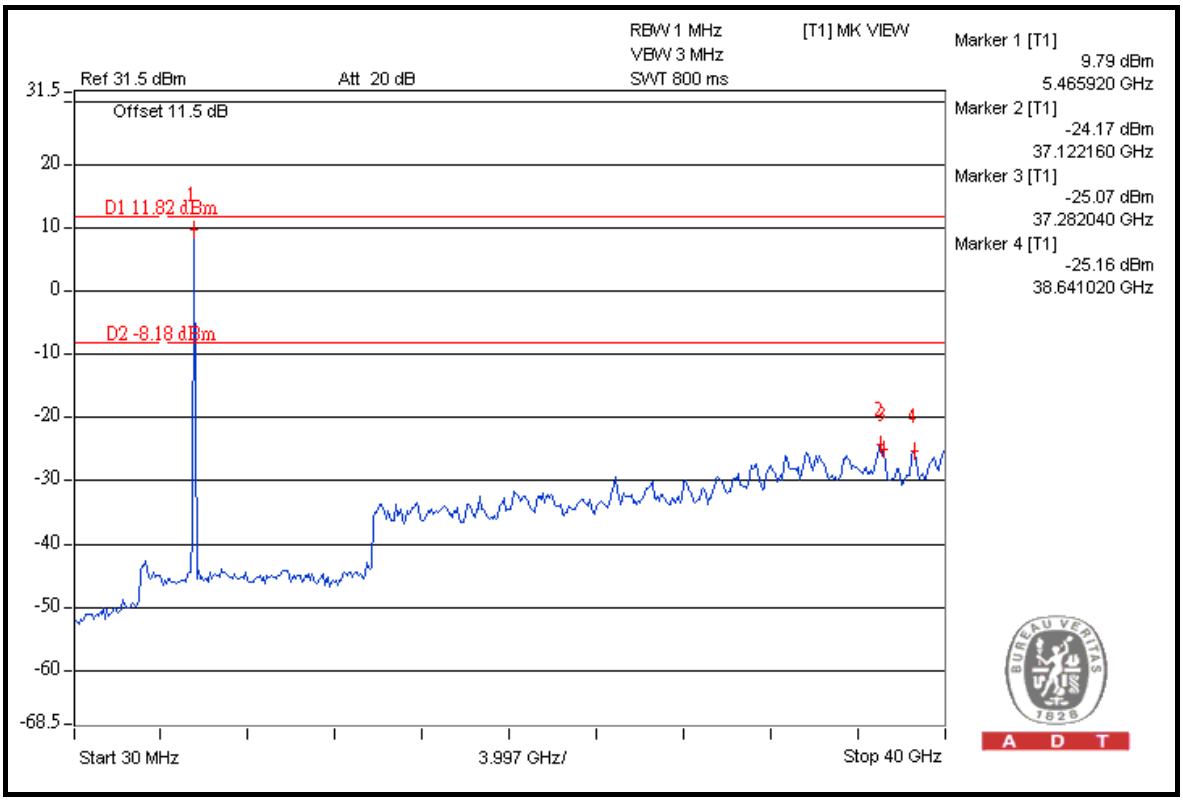

RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 97 dBuV
Att 0 dB
Marker 1 [T1]
66.00 dBuV
5.684000 GHz
Marker 2 [T1]
18.73 dBuV
5.725000 GHz
Marker 3 [T1]
18.84 dBuV
5.750000 GHz
D1 66 dBuV
D2 46 dBuV
Start 5.642 GHz
20 MHz/
Stop 5.842 GHz

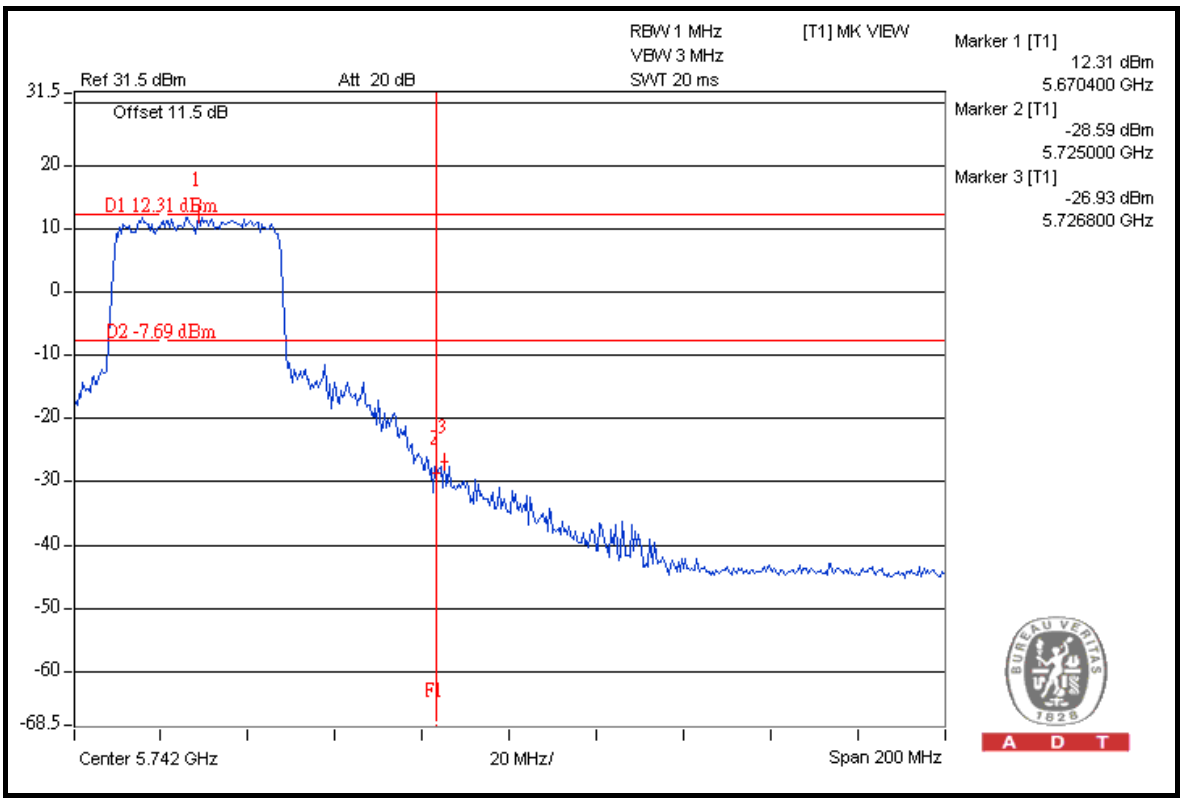
FOR CONDUCTED MEASURED

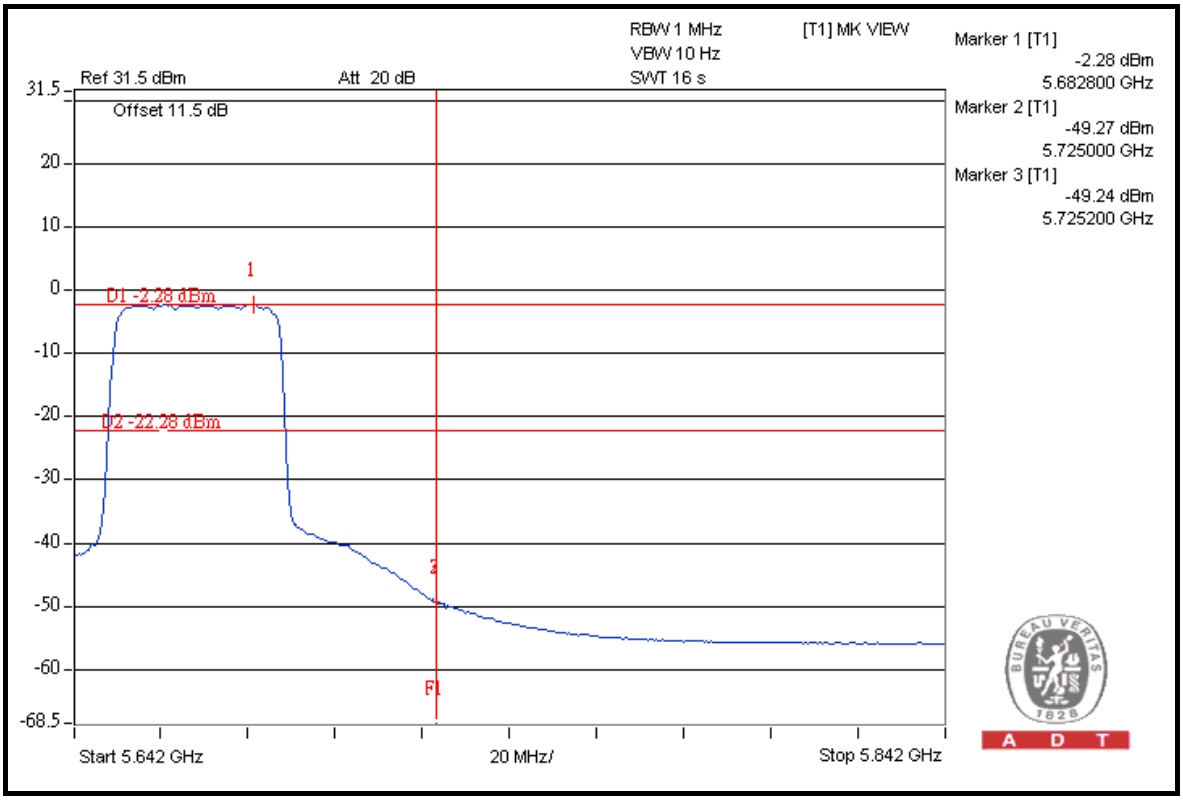
CHAIN 0

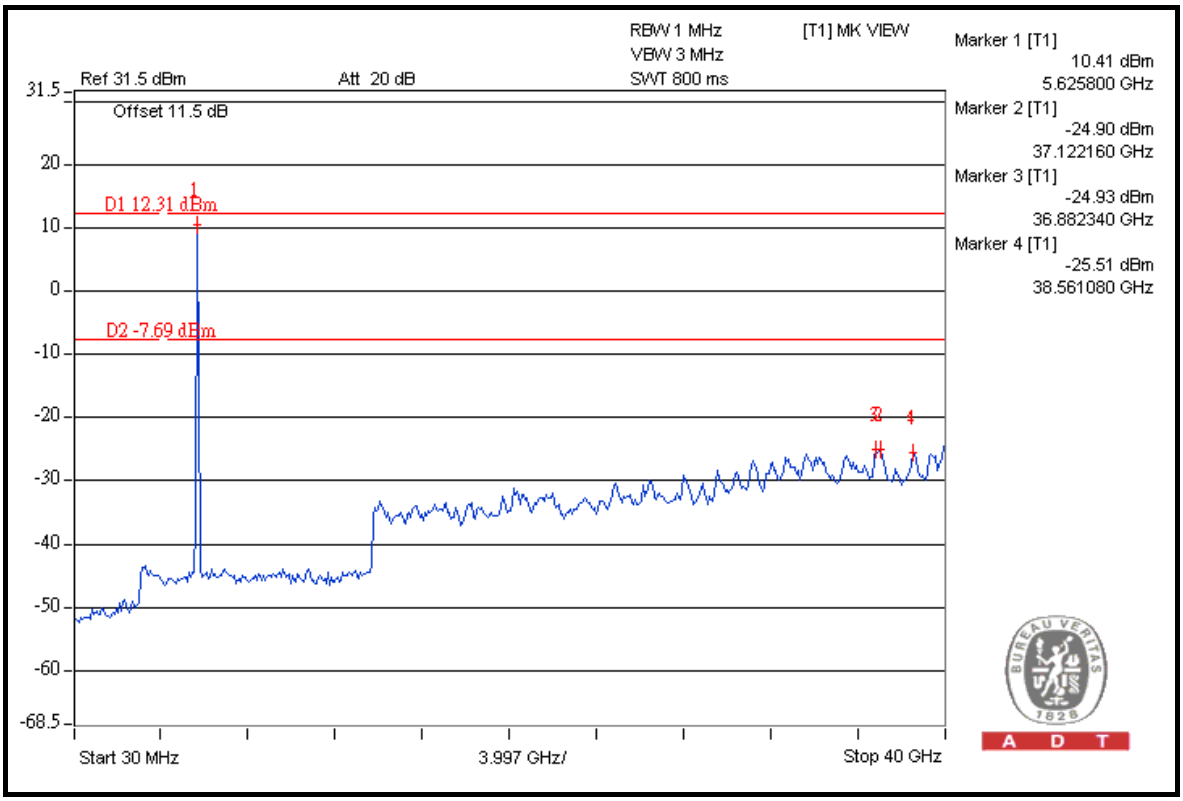




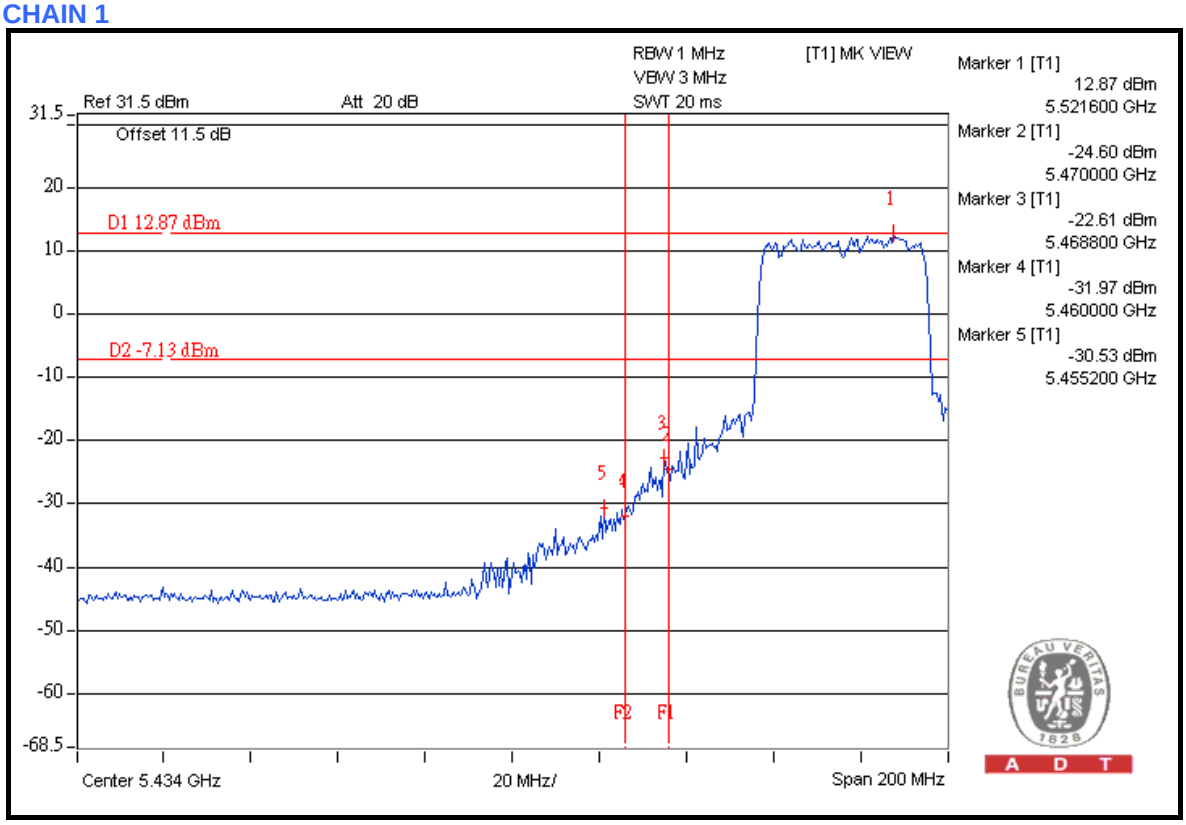

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 11.82 dBm
D2 -8.18 dBm
Marker 1 [T1]
9.79 dBm
5.465920 GHz
Marker 2 [T1]
-24.17 dBm
37.122160 GHz
Marker 3 [T1]
-25.07 dBm
37.282040 GHz
Marker 4 [T1]
-25.16 dBm
38.641020 GHz
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

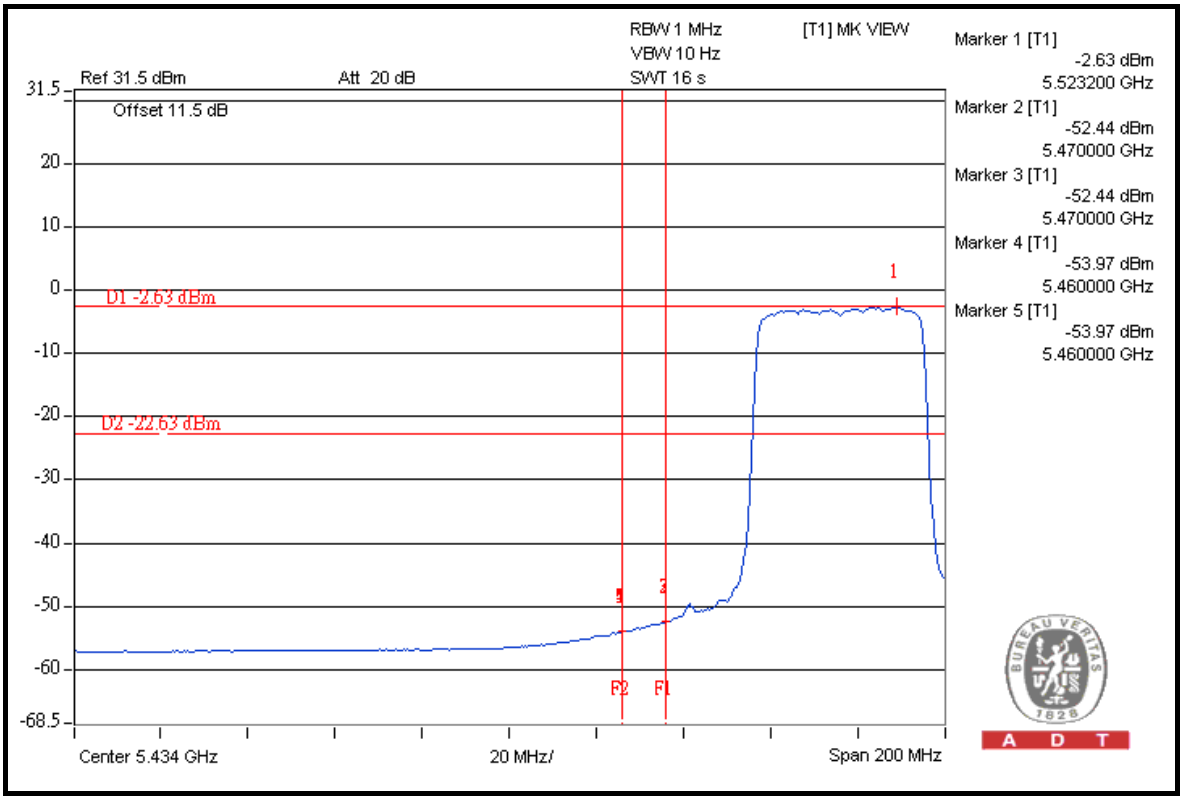

RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 12.31 dBm
D2 -7.69 dBm
Marker 1 [T1]
12.31 dBm
5.670400 GHz
Marker 2 [T1]
-28.59 dBm
5.725000 GHz
Marker 3 [T1]
-26.93 dBm
5.726800 GHz
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
Center 5.742 GHz
20 MHz/
Span 200 MHz

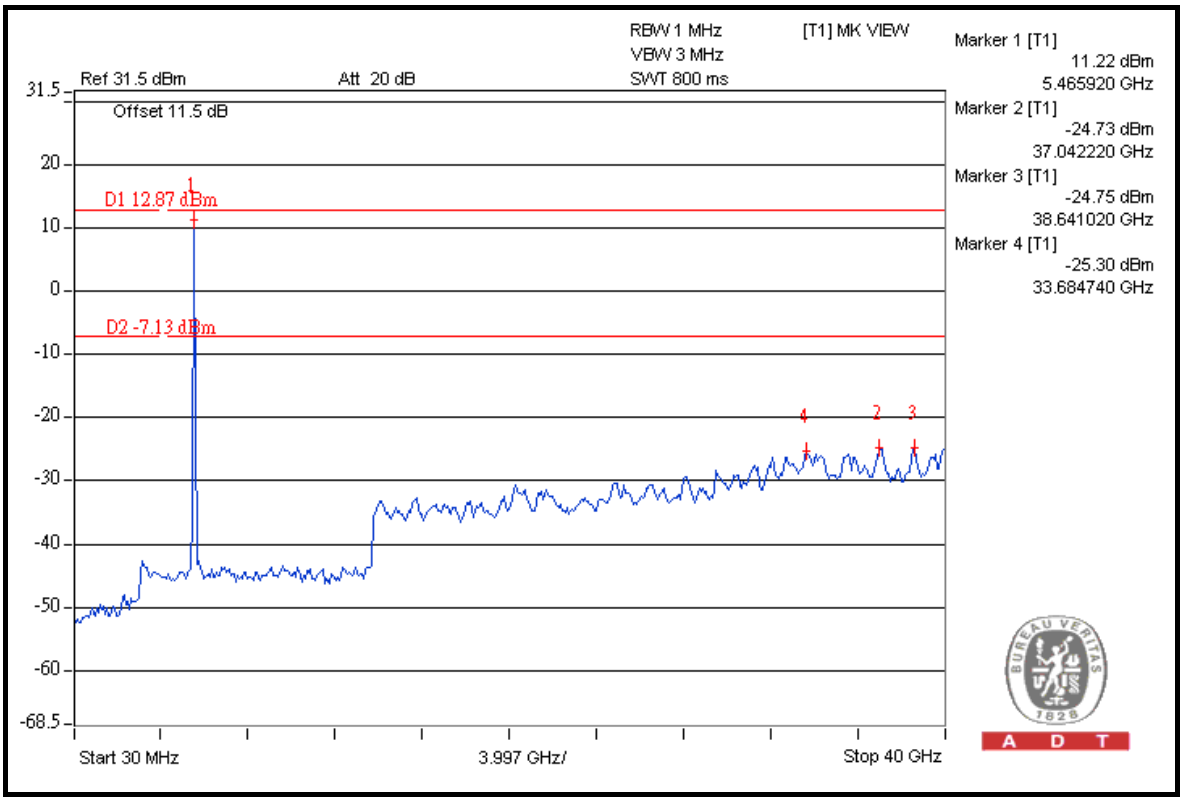

RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Marker 1 [T1]
-2.28 dBm
5.682800 GHz
Marker 2 [T1]
-49.27 dBm
5.725000 GHz
Marker 3 [T1]
-49.24 dBm
5.725200 GHz
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 -2.28 dBm
D2 -22.28 dBm
Start 5.642 GHz
20 MHz/
Stop 5.842 GHz

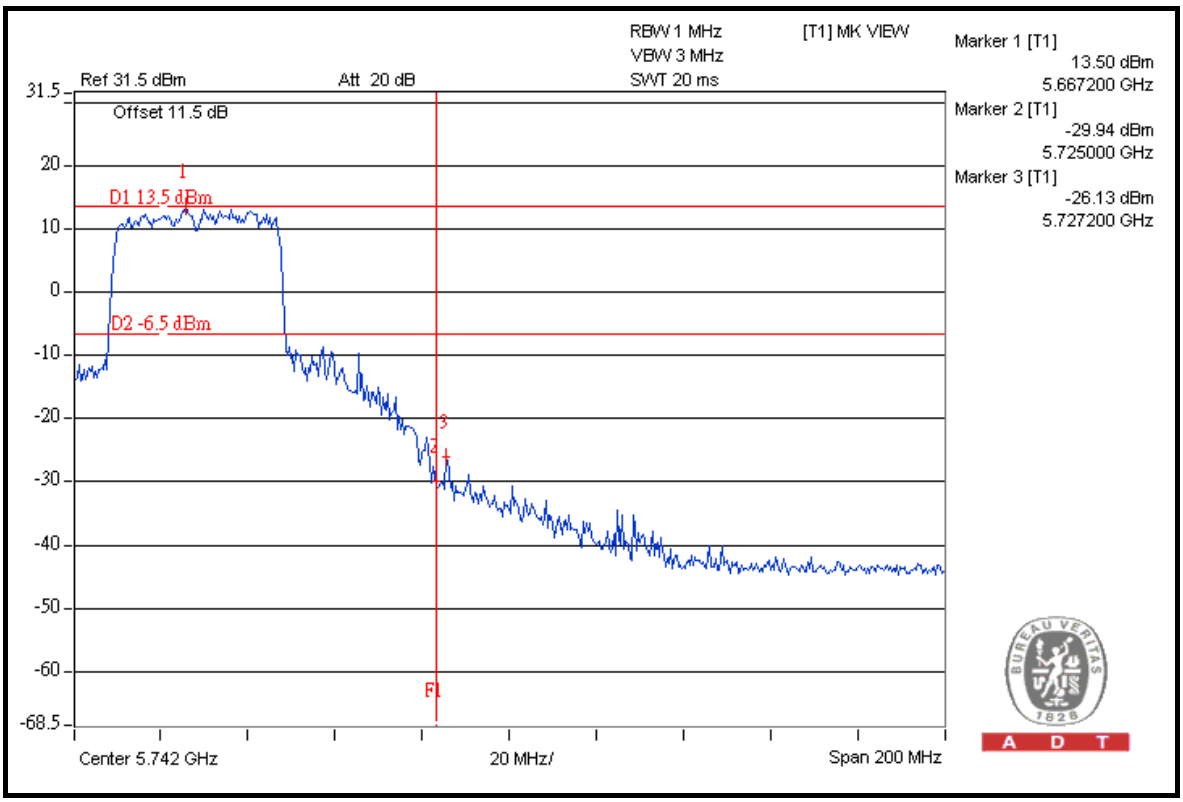

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Marker 1 [T1]
10.41 dBm
5.625800 GHz
Marker 2 [T1]
-24.90 dBm
37.122160 GHz
Marker 3 [T1]
-24.93 dBm
36.882340 GHz
Marker 4 [T1]
-25.51 dBm
38.561080 GHz
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 12.31 dBm
D2 -7.69 dBm
Start 30 MHz
3.997 GHz/
Stop 40 GHz

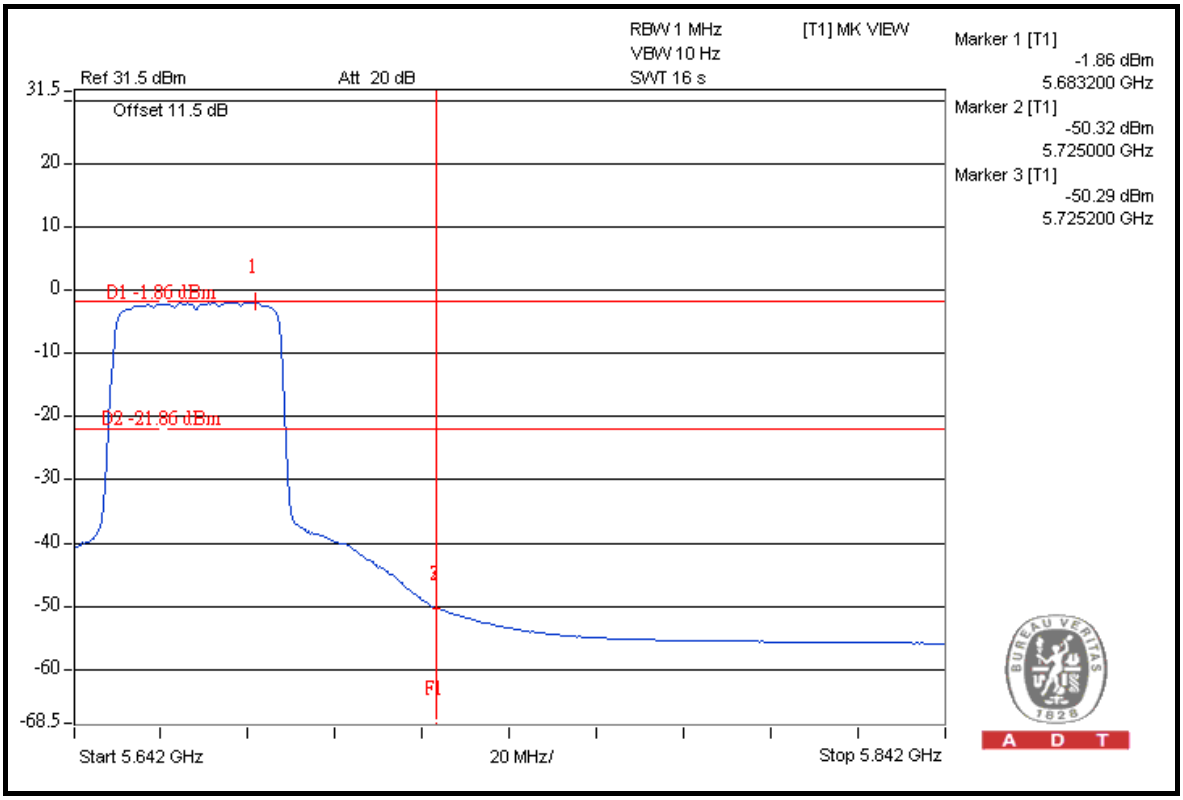
CHAIN 1

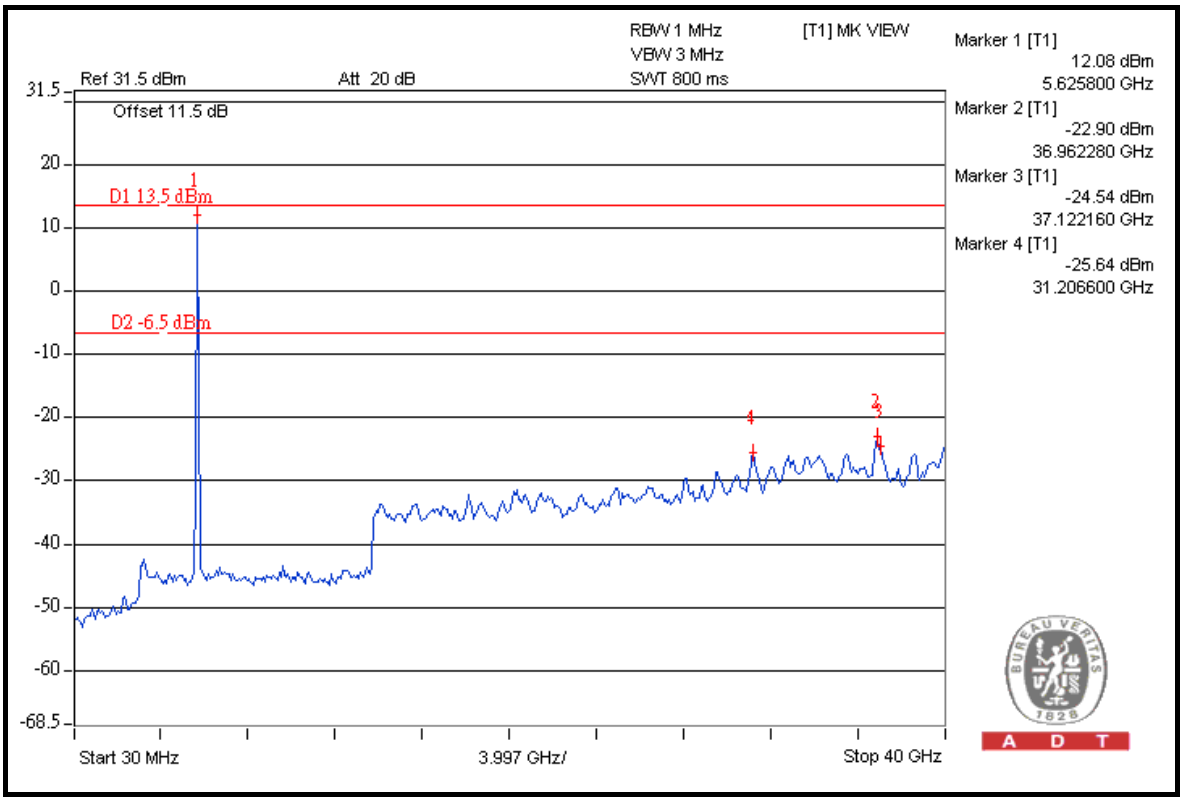

RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 12.87 dBm
D2 -7.13 dBm
Marker 1 [T1]
12.87 dBm
5.521600 GHz
Marker 2 [T1]
-24.60 dBm
5.470000 GHz
Marker 3 [T1]
-22.61 dBm
5.468800 GHz
Marker 4 [T1]
-31.97 dBm
5.460000 GHz
Marker 5 [T1]
-30.53 dBm
5.455200 GHz
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
F2
F1
Center 5.434 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 -2.63 dBm
D2 -22.63 dBm
Marker 1 [T1]
-2.63 dBm
5.523200 GHz
Marker 2 [T1]
-52.44 dBm
5.470000 GHz
Marker 3 [T1]
-52.44 dBm
5.470000 GHz
Marker 4 [T1]
-53.97 dBm
5.460000 GHz
Marker 5 [T1]
-53.97 dBm
5.460000 GHz
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
F2
F1
Center 5.434 GHz
20 MHz/
Span 200 MHz

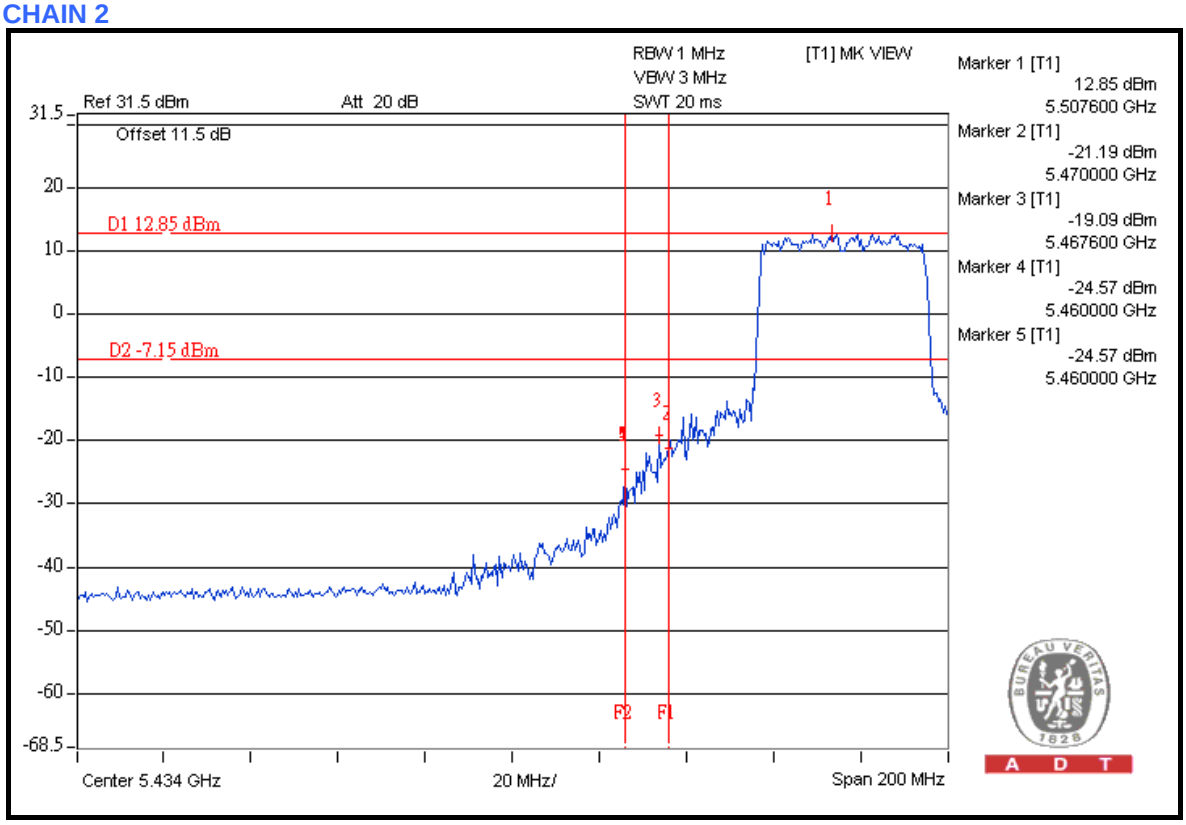

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Marker 1 [T1]
11.22 dBm
5.465920 GHz
Marker 2 [T1]
-24.73 dBm
37.042220 GHz
Marker 3 [T1]
-24.75 dBm
38.641020 GHz
Marker 4 [T1]
-25.30 dBm
33.684740 GHz
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 12.87 dBm
D2 -7.13 dBm
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

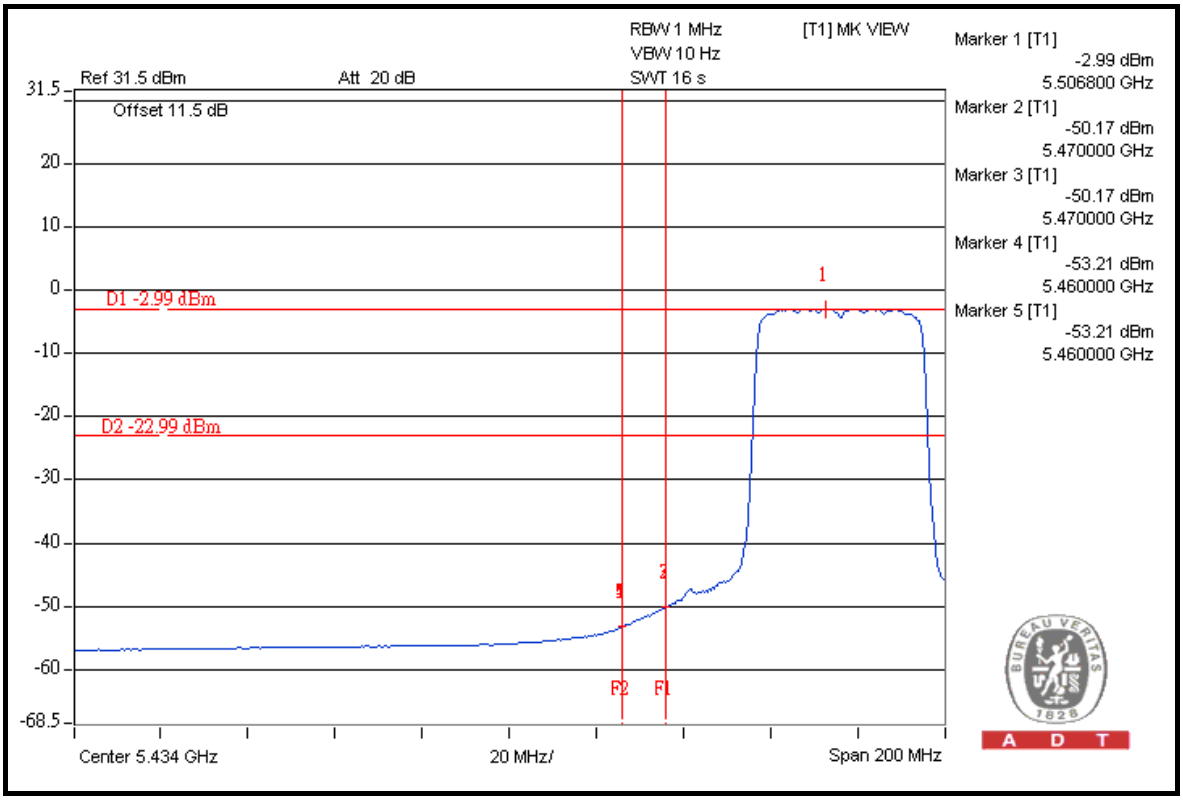

RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
13.50 dBm
5.667200 GHz
Marker 2 [T1]
-29.94 dBm
5.725000 GHz
Marker 3 [T1]
-26.13 dBm
5.727200 GHz
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 13.5 dBm
D2 -6.5 dBm
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
Center 5.742 GHz
20 MHz/
Span 200 MHz

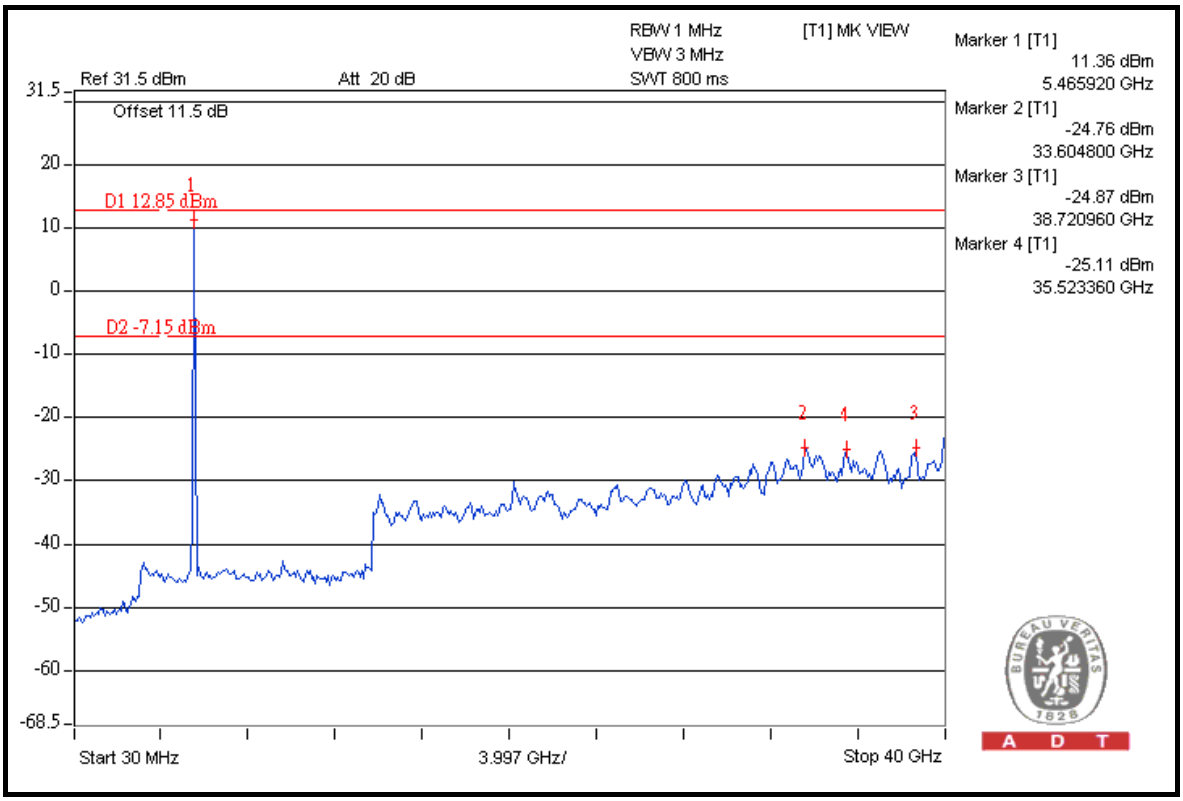

RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 -1.86 dBm
D2 -21.86 dBm
Marker 1 [T1]
-1.86 dBm
5.683200 GHz
Marker 2 [T1]
-50.32 dBm
5.725000 GHz
Marker 3 [T1]
-50.29 dBm
5.725200 GHz
Start 5.642 GHz
20 MHz/
Stop 5.842 GHz

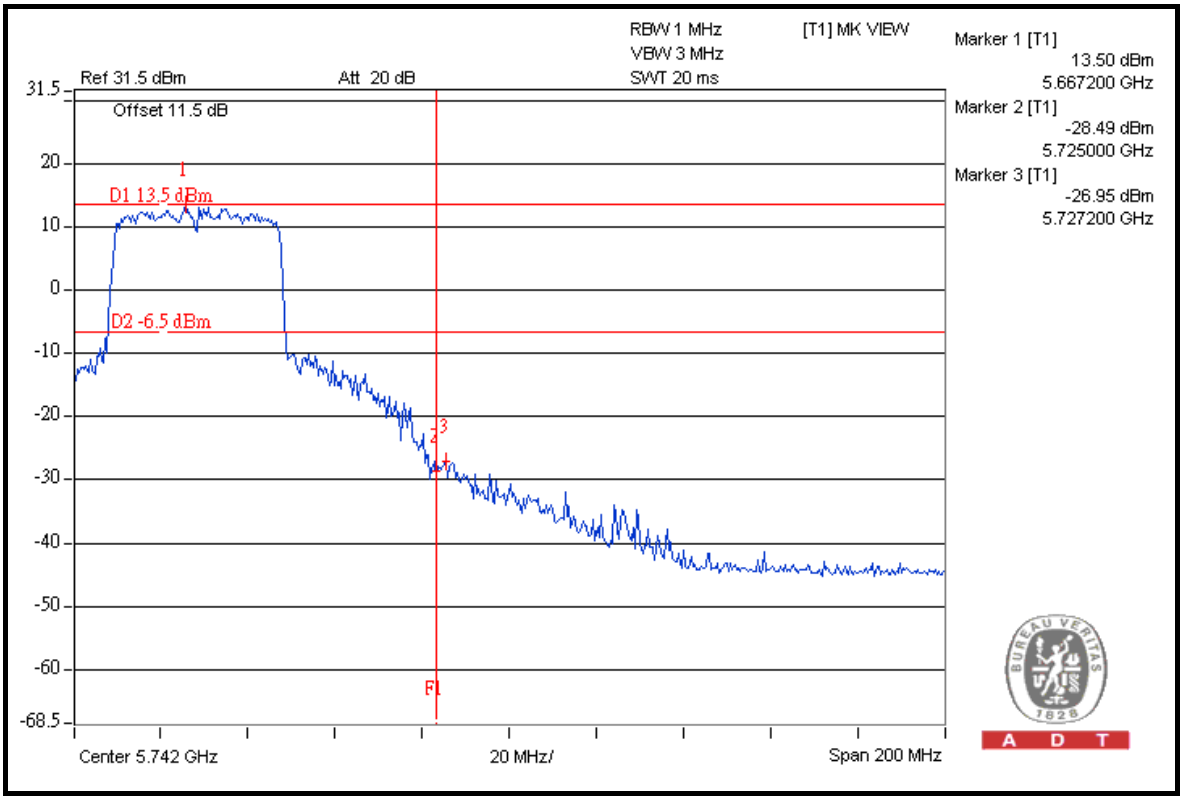

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 13.5 dBm
D2 -6.5 dBm
Marker 1 [T1]
12.08 dBm
5.625800 GHz
Marker 2 [T1]
-22.90 dBm
36.962280 GHz
Marker 3 [T1]
-24.54 dBm
37.122160 GHz
Marker 4 [T1]
-25.64 dBm
31.206600 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz

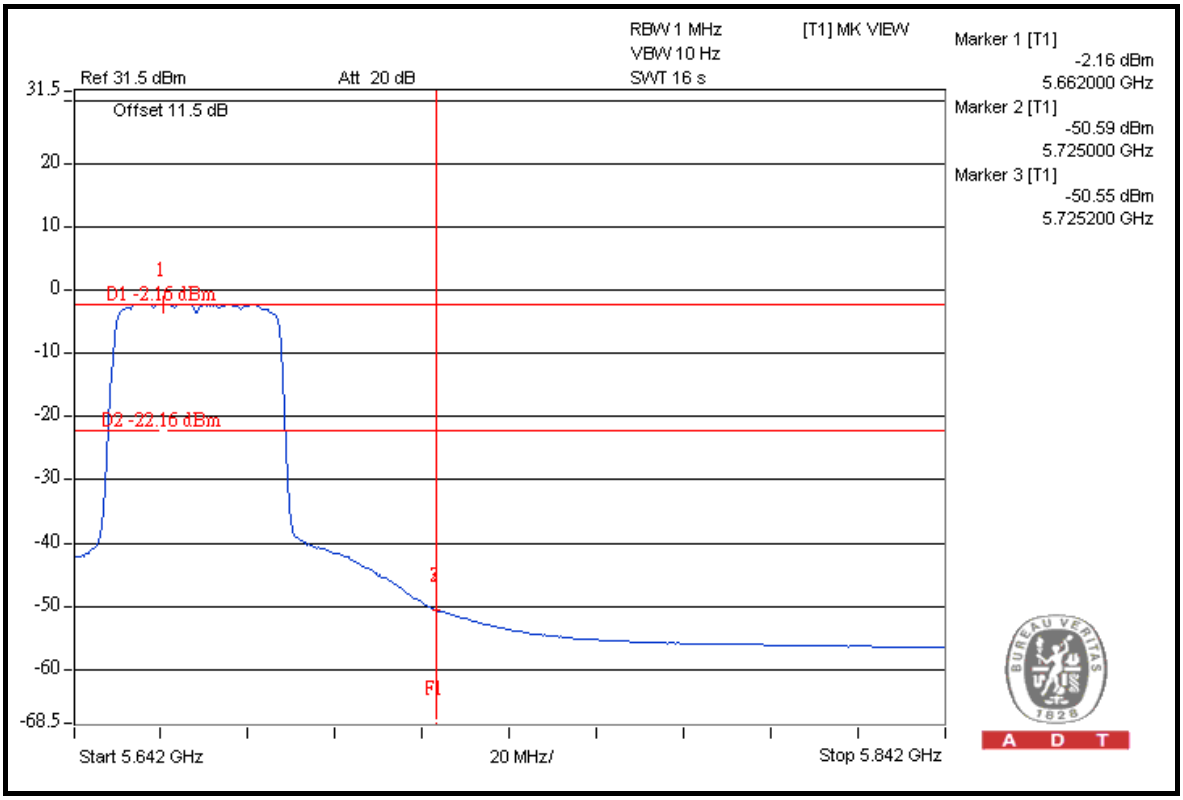
CHAIN 2

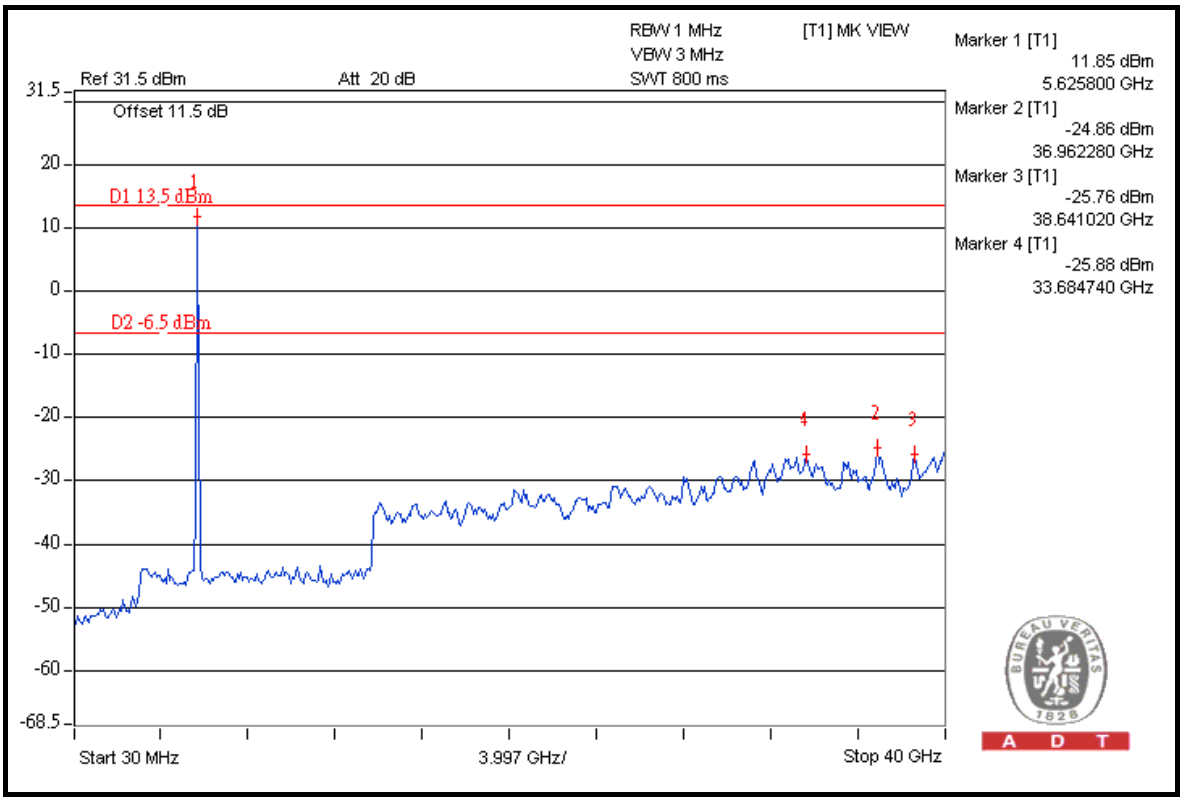

RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 12.85 dBm
D2 -7.15 dBm
Marker 1 [T1]
12.85 dBm
5.507600 GHz
Marker 2 [T1]
-21.19 dBm
5.470000 GHz
Marker 3 [T1]
-19.09 dBm
5.467600 GHz
Marker 4 [T1]
-24.57 dBm
5.460000 GHz
Marker 5 [T1]
-24.57 dBm
5.460000 GHz
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
F2
F1
Center 5.434 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 -2.99 dBm
D2 -22.99 dBm
Marker 1 [T1]
-2.99 dBm
5.506800 GHz
Marker 2 [T1]
-50.17 dBm
5.470000 GHz
Marker 3 [T1]
-50.17 dBm
5.470000 GHz
Marker 4 [T1]
-53.21 dBm
5.460000 GHz
Marker 5 [T1]
-53.21 dBm
5.460000 GHz
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
F2
F1
Center 5.434 GHz
20 MHz/
Span 200 MHz

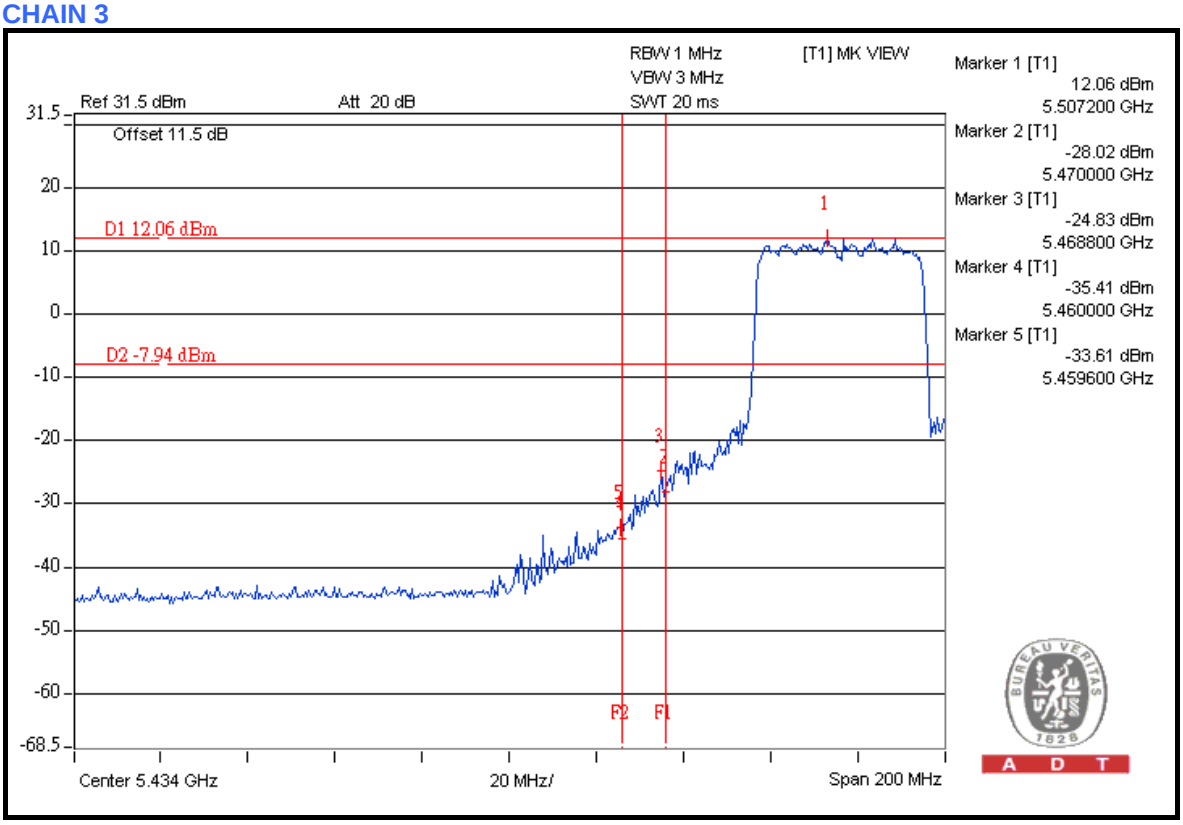

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 12.85 dBm
D2 -7.15 dBm
Marker 1 [T1]
11.36 dBm
5.465920 GHz
Marker 2 [T1]
-24.76 dBm
33.604800 GHz
Marker 3 [T1]
-24.87 dBm
38.720960 GHz
Marker 4 [T1]
-25.11 dBm
35.523360 GHz
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

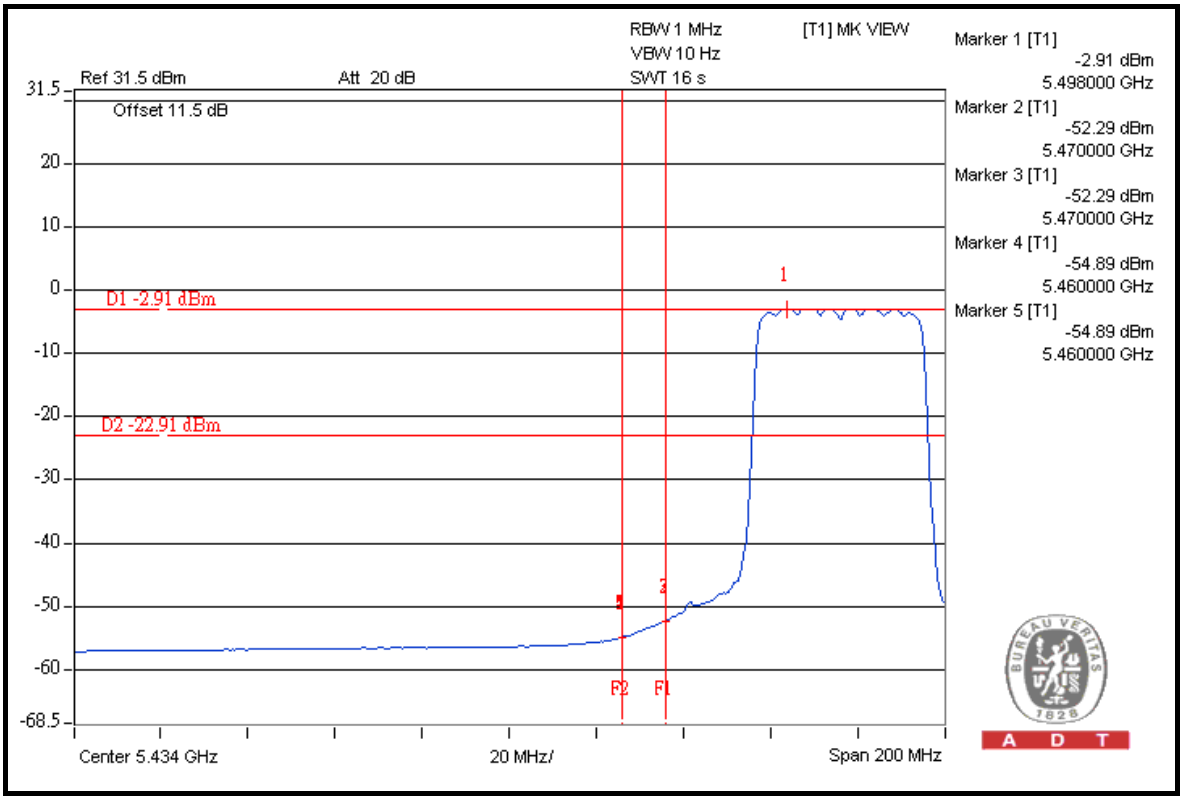

RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 13.5 dBm
D2 -6.5 dBm
Marker 1 [T1]
13.50 dBm
5.667200 GHz
Marker 2 [T1]
-28.49 dBm
5.725000 GHz
Marker 3 [T1]
-26.95 dBm
5.727200 GHz
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
Center 5.742 GHz
20 MHz/
Span 200 MHz

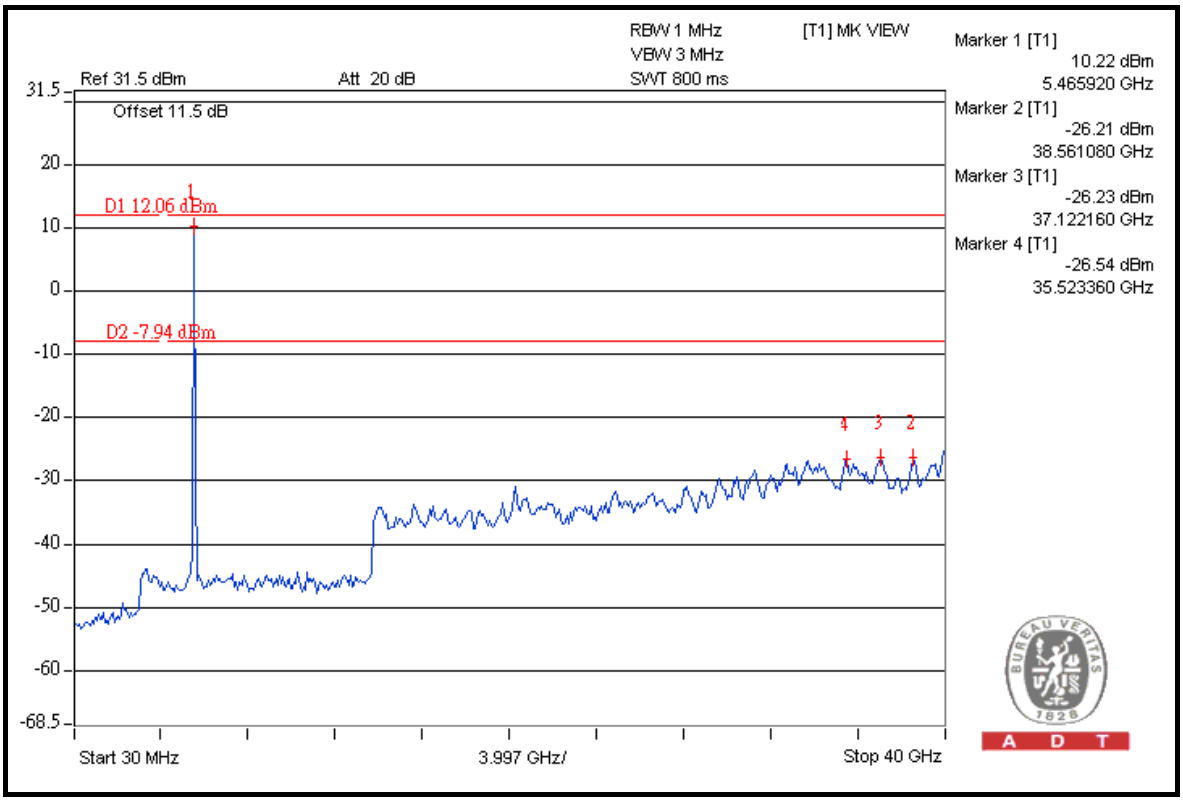

RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
D1 -2.16 dBm
D2 -22.16 dBm
Start 5.642 GHz
20 MHz/
Stop 5.842 GHz
Marker 1 [T1]
-2.16 dBm
5.662000 GHz
Marker 2 [T1]
-50.59 dBm
5.725000 GHz
Marker 3 [T1]
-50.55 dBm
5.725200 GHz

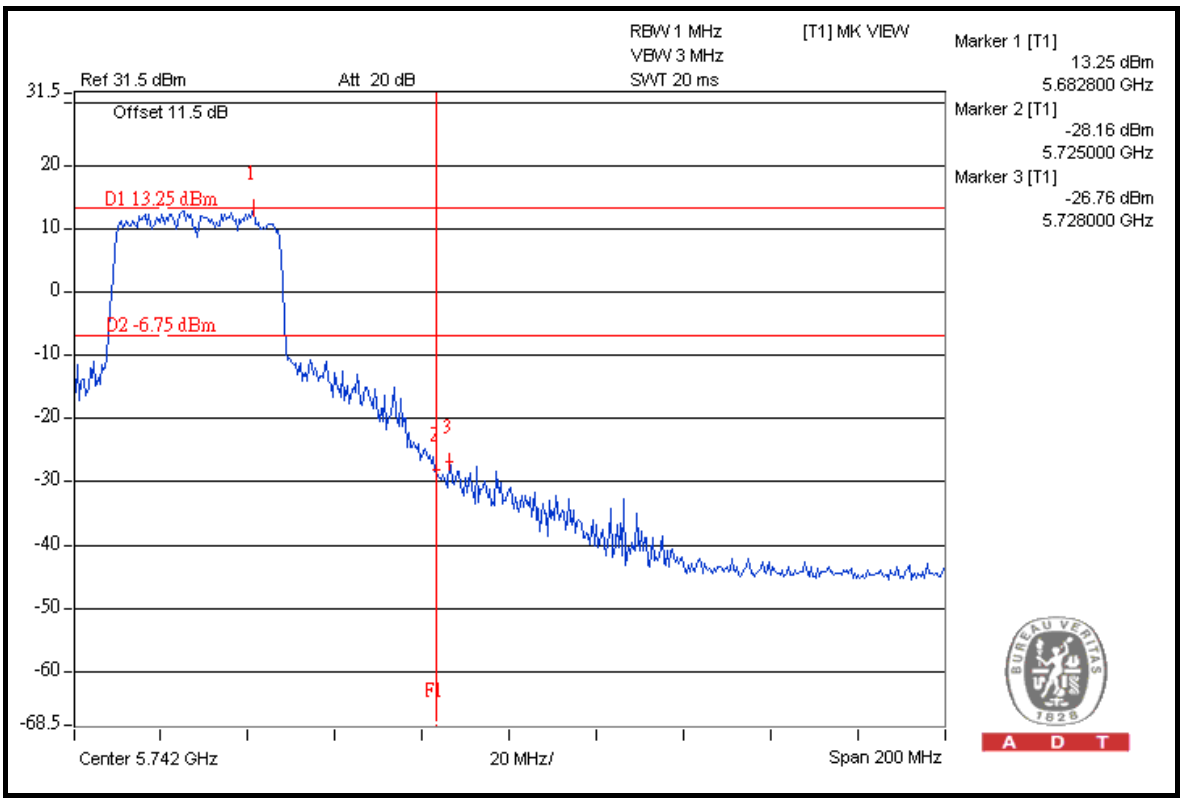

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
D1 13.5 dBm
D2 -6.5 dBm
Start 30 MHz
3.997 GHz/
Stop 40 GHz
Marker 1 [T1]
11.85 dBm
5.625800 GHz
Marker 2 [T1]
-24.86 dBm
36.962280 GHz
Marker 3 [T1]
-25.76 dBm
38.641020 GHz
Marker 4 [T1]
-25.88 dBm
33.684740 GHz

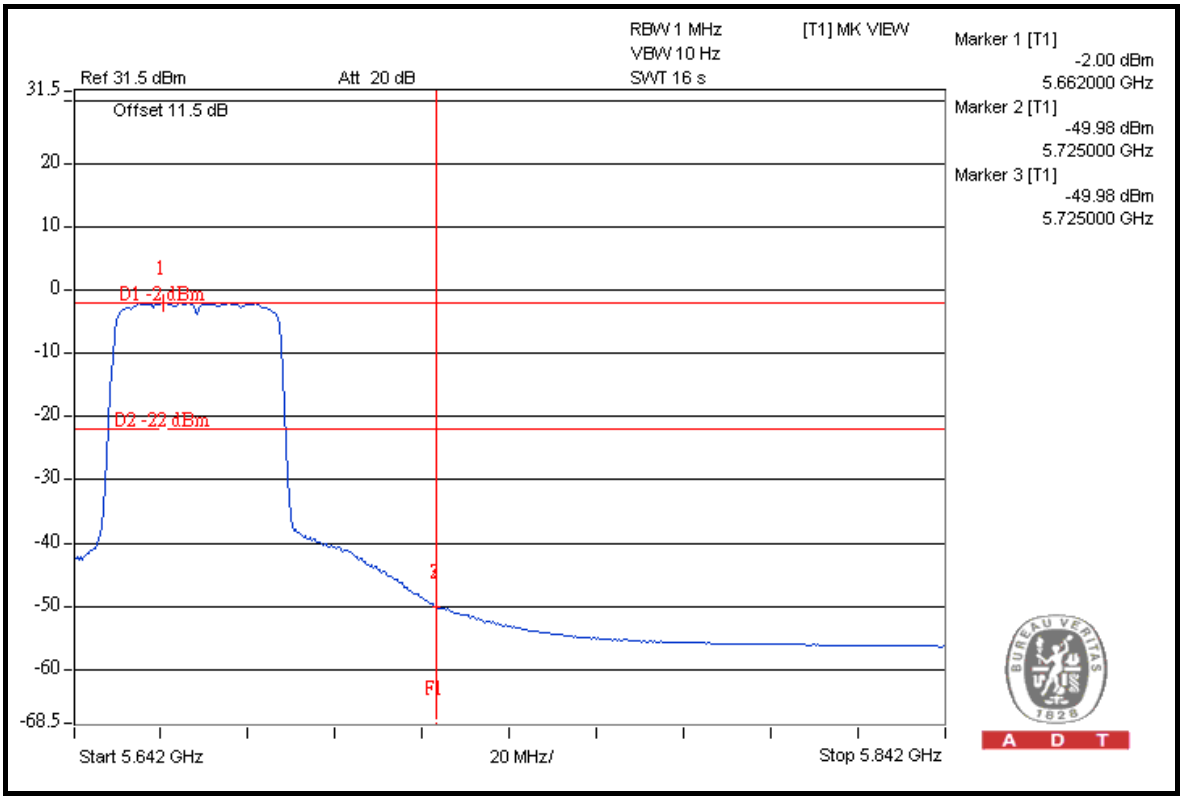
CHAIN 3

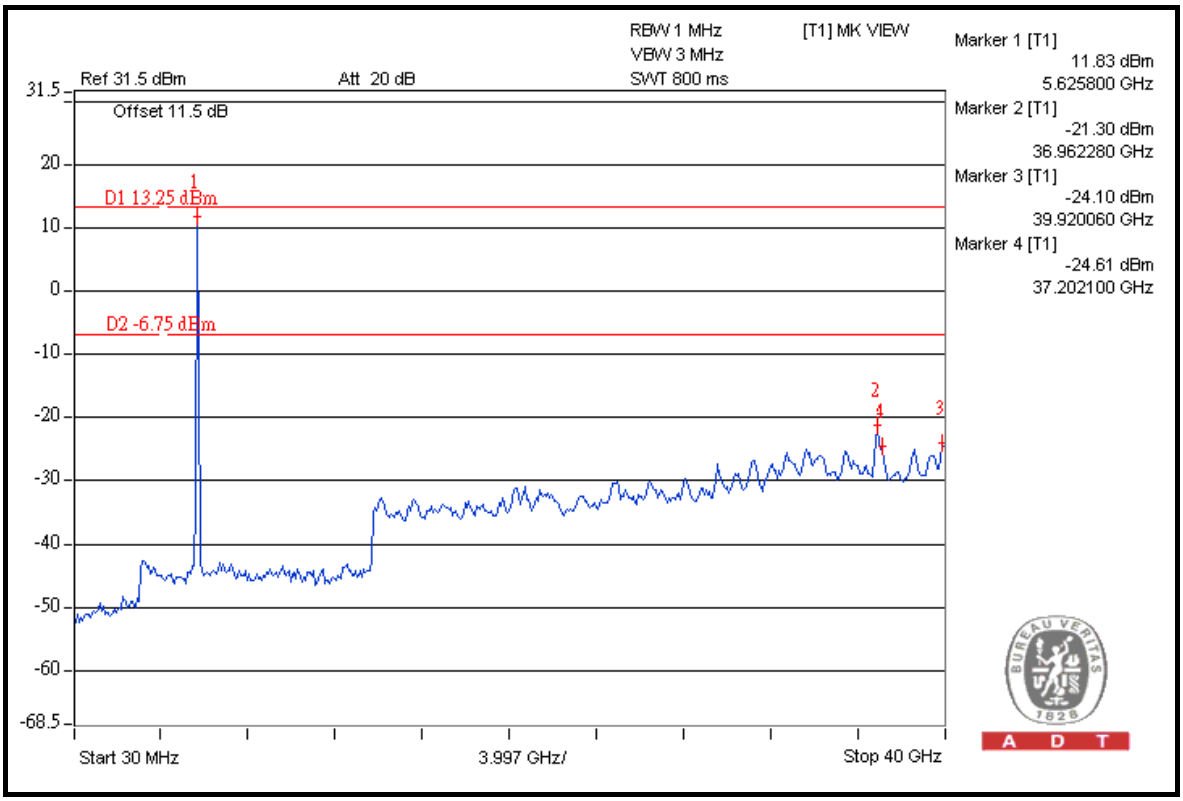

RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 12.06 dBm
D2 -7.94 dBm
Marker 1 [T1]
12.06 dBm
5.507200 GHz
Marker 2 [T1]
-28.02 dBm
5.470000 GHz
Marker 3 [T1]
-24.83 dBm
5.468800 GHz
Marker 4 [T1]
-35.41 dBm
5.460000 GHz
Marker 5 [T1]
-33.61 dBm
5.459600 GHz
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
F2
F1
Center 5.434 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 -2.91 dBm
D2 -22.91 dBm
Marker 1 [T1]
-2.91 dBm
5.498000 GHz
Marker 2 [T1]
-52.29 dBm
5.470000 GHz
Marker 3 [T1]
-52.29 dBm
5.470000 GHz
Marker 4 [T1]
-54.89 dBm
5.460000 GHz
Marker 5 [T1]
-54.89 dBm
5.460000 GHz
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
F2
F1
Center 5.434 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Marker 1 [T1]
10.22 dBm
5.465920 GHz
Marker 2 [T1]
-26.21 dBm
38.561080 GHz
Marker 3 [T1]
-26.23 dBm
37.122160 GHz
Marker 4 [T1]
-26.54 dBm
35.523360 GHz
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 12.06 dBm
D2 -7.94 dBm
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz


RBW 1 MHz
VBW 3 MHz
SWT 20 ms
[T1] MK VIEW
Marker 1 [T1]
13.25 dBm
5.682800 GHz
Marker 2 [T1]
-28.16 dBm
5.725000 GHz
Marker 3 [T1]
-26.76 dBm
5.728000 GHz
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 13.25 dBm
D2 -6.75 dBm
31.5
20
10
0
-10
-20
-30
-40
-50
-60
-68.5
Center 5.742 GHz
20 MHz/
Span 200 MHz


RBW 1 MHz
VBW 10 Hz
SWT 16 s
[T1] MK VIEW
Marker 1 [T1]
-2.00 dBm
5.662000 GHz
Marker 2 [T1]
-49.98 dBm
5.725000 GHz
Marker 3 [T1]
-49.98 dBm
5.725000 GHz
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 -2 dBm
D2 -22 dBm
Start 5.642 GHz
20 MHz/
Stop 5.842 GHz


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Marker 1 [T1]
11.83 dBm
5.625800 GHz
Marker 2 [T1]
-21.30 dBm
36.962280 GHz
Marker 3 [T1]
-24.10 dBm
39.920060 GHz
Marker 4 [T1]
-24.61 dBm
37.202100 GHz
Ref 31.5 dBm
Att 20 dB
Offset 11.5 dB
D1 13.25 dBm
D2 -6.75 dBm
Start 30 MHz
3.997 GHz/
Stop 40 GHz

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 according to ISO/IEC 17025.

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
Email: service.adt@tw.bureauveritas.com
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---