4.3 6dB BANDWIDTH MEASUREMENT

4.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

4.3.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSP	1093.4495.30	Dec. 19, 2004

NOTE:

1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

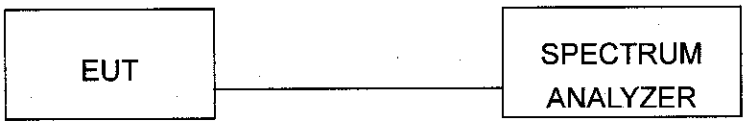
4.3.3 TEST PROCEDURE

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

4.3.4 DEVIATION FROM TEST STANDARD

No deviation

4.3.5 TEST SETUP



4.3.6 EUT OPERATING CONDITIONS

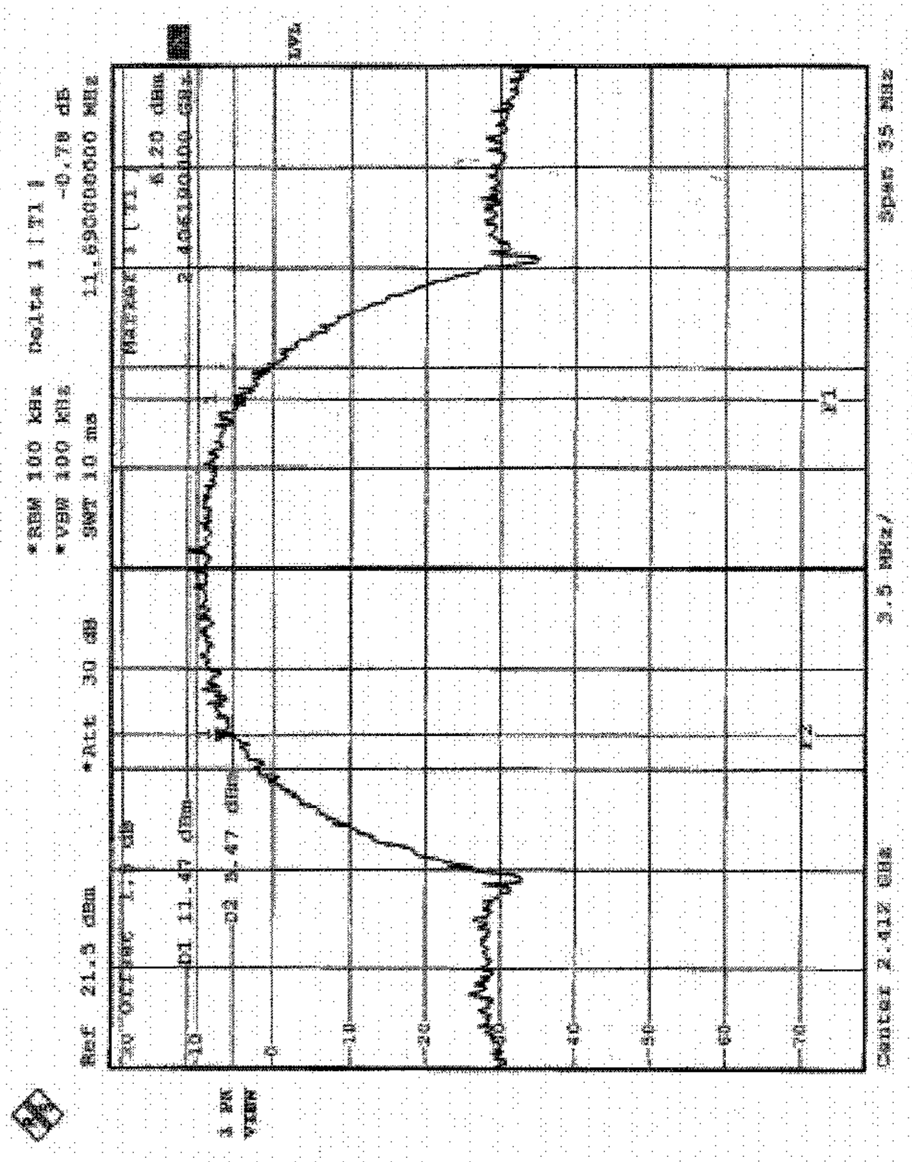
The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.3.7 TEST RESULTS -DSSS

EUT	Flanker Pro Single Radio AP	MODEL	AP-AG-AT-01
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	21deg. C, 58%RH, 972 hPa
TESTED BY	Eric Lee		

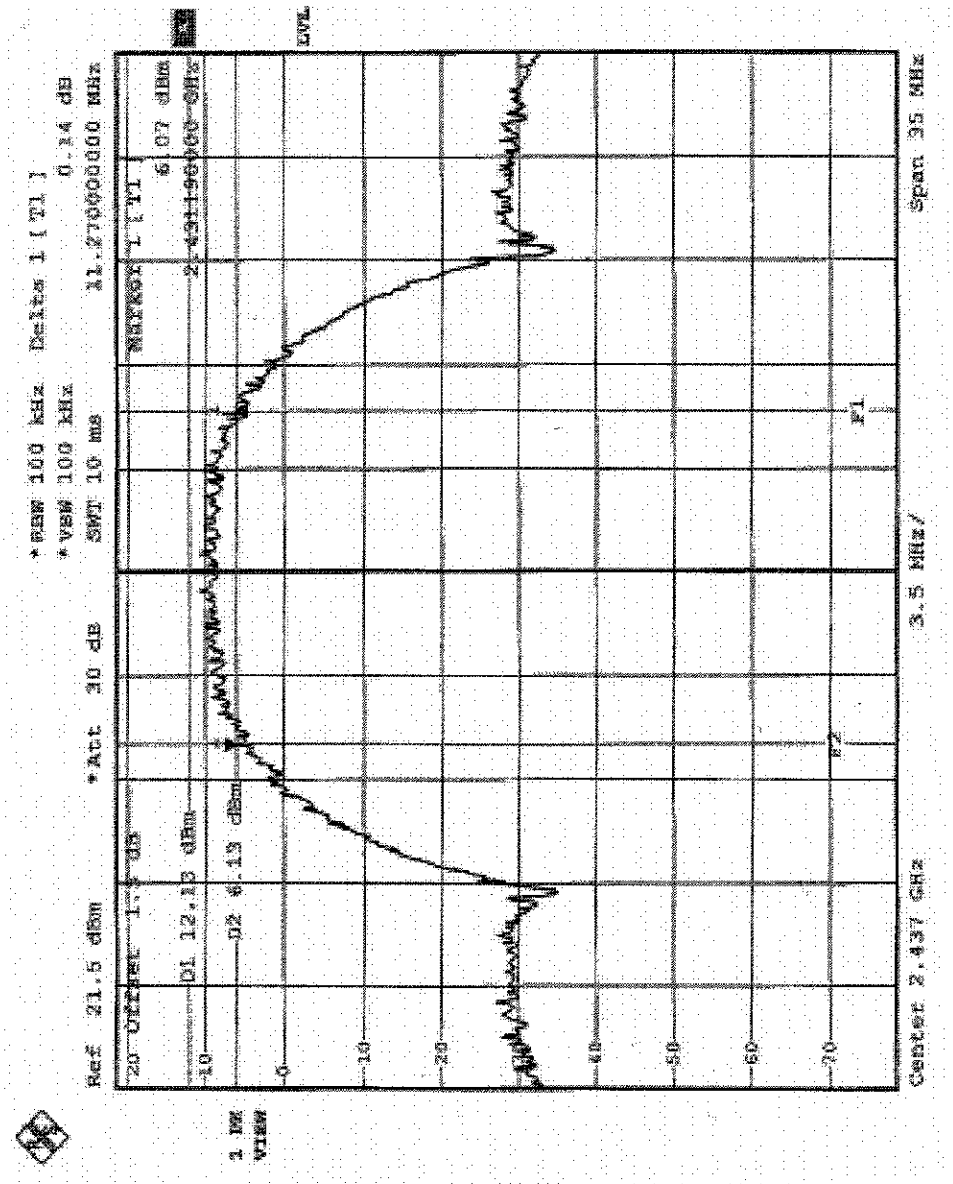
CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	11.69	0.5	PASS
6	2437	11.27	0.5	PASS
11	2462	11.20	0.5	PASS

CH1

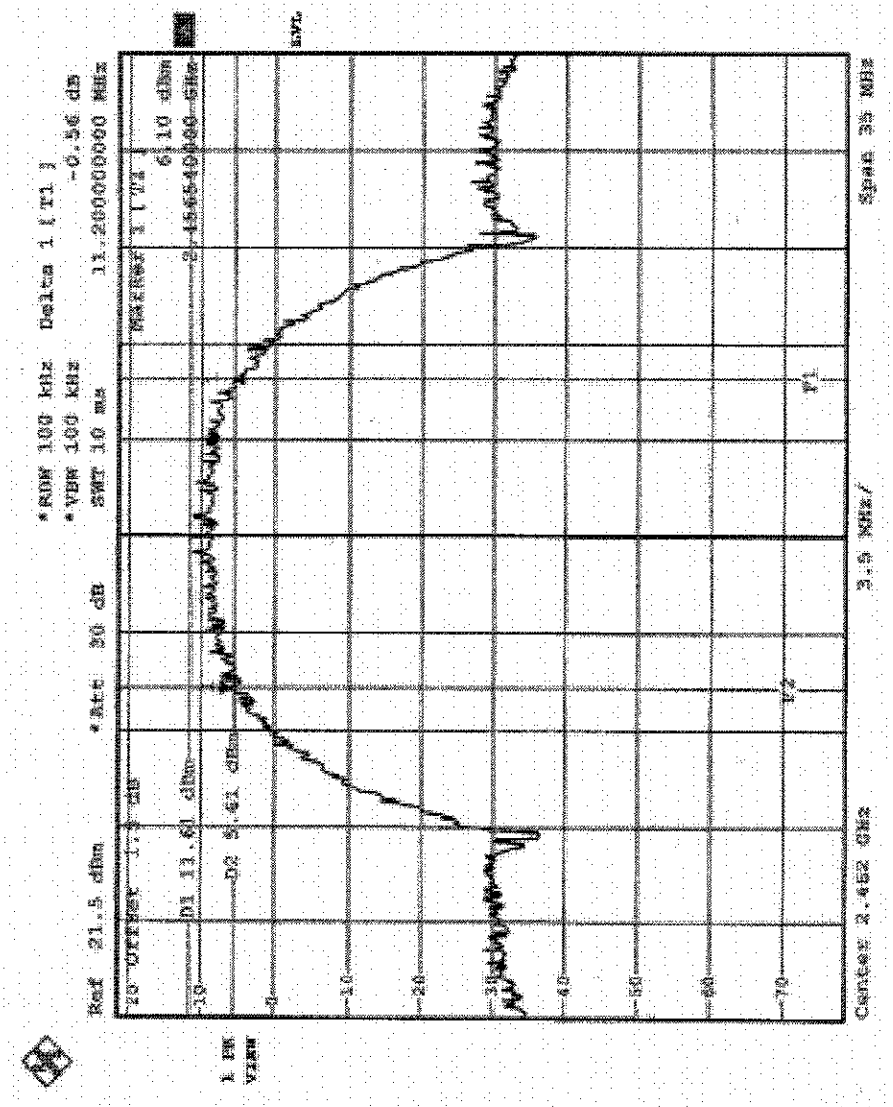


*RBW 100 kHz
*VBW 100 kHz
SWT 10 ms
Delta 1 [T1]
-0.78 dB
11.690000000 MHz
Ref 21.5 dBm
*Att 30 dB
Offset 1.7 dB
D1 11.47 dBm
D2 5.47 dBm
F1
F2
Center 2.412 GHz
3.5 MHz/
Span 35 MHz

CH6


Ref 21.5 dBm
*Att 30 dB
SWT 10 ms
*RBW 100 kHz
*VBW 100 kHz
Delta 1 [T1]
0.14 dB
11.279000000 kHz
Marker 1 [T1]
6.07 dBm
2.4311960000 GHz
Center 2.437 GHz
3.5 MHz/
Span 35 MHz
D1 12.13 dBm
D2 6.13 dBm
1 MA
VIEW

CH11

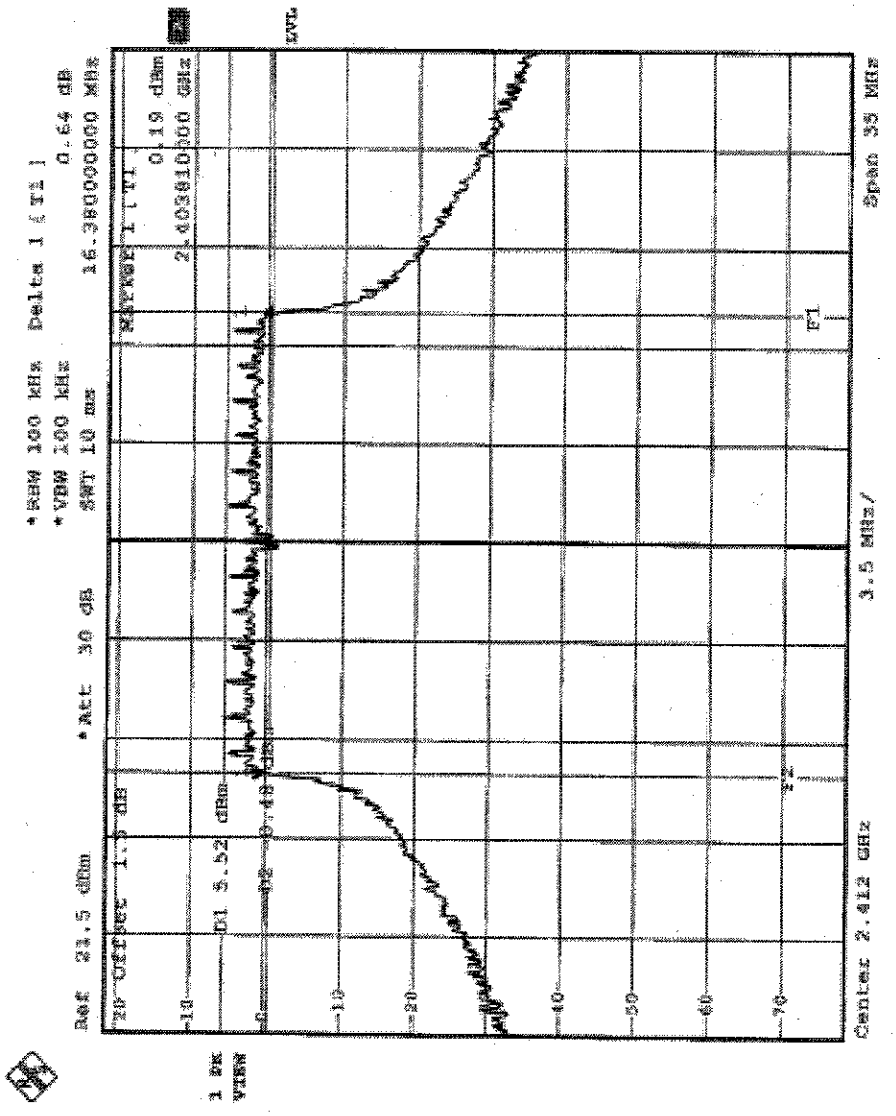

*RBW 100 kHz
*VBW 100 kHz
SWT 10 ms
Delta 1 [T1]
-0.56 dB
11.2800000000 MHz
Ref 21.5 dBm
*Att 30 dB
Offset 1.3 dB
D1 13.60 dBm
D2 8.61 dBm
Center 2.462 GHz
3.5 MHz/
Span 35 MHz

4.3.8 TEST RESULTS -OFDM

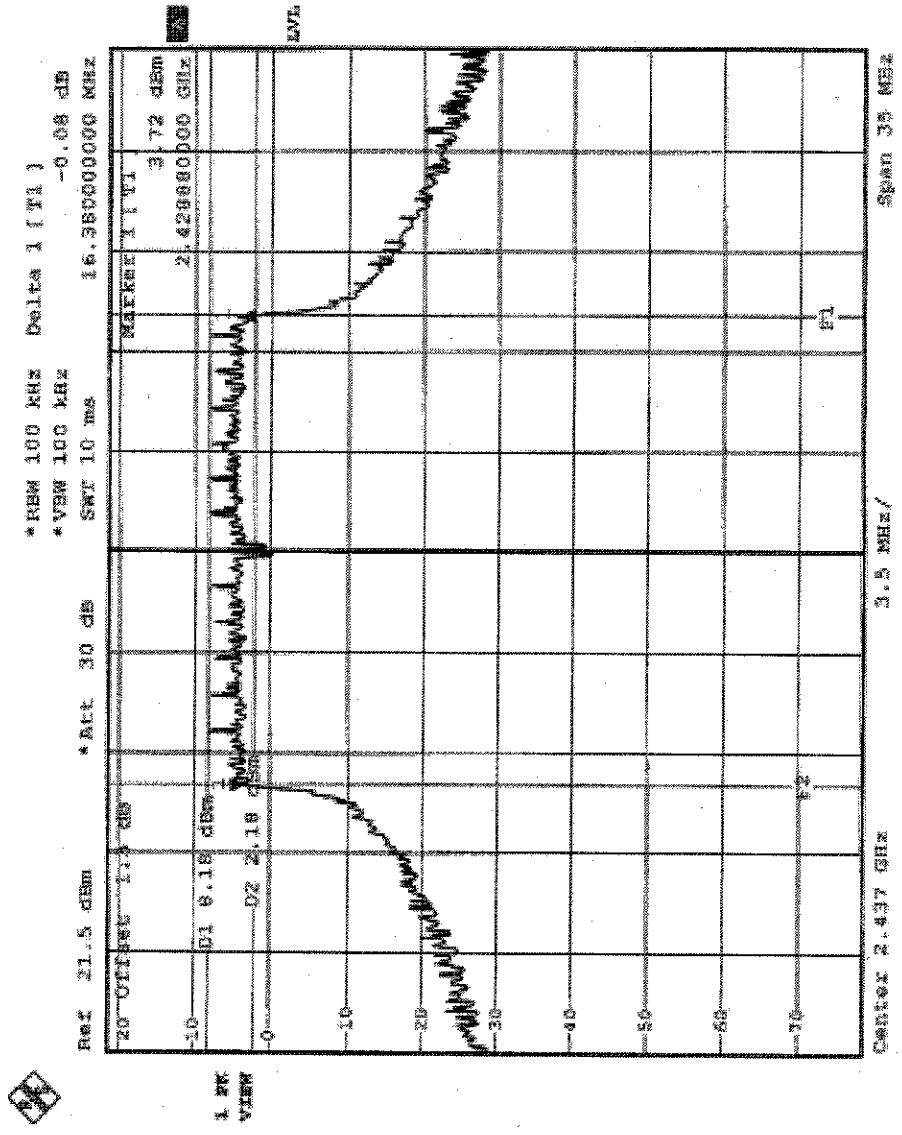
EUT	Flanker Pro Single Radio AP	MODEL	AP-AG-AT-01
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	21deg. C, 58%RH, 972 hPa
TESTED BY	Eric Lee		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	16.38	0.5	PASS
6	2437	16.38	0.5	PASS
11	2462	16.38	0.5	PASS

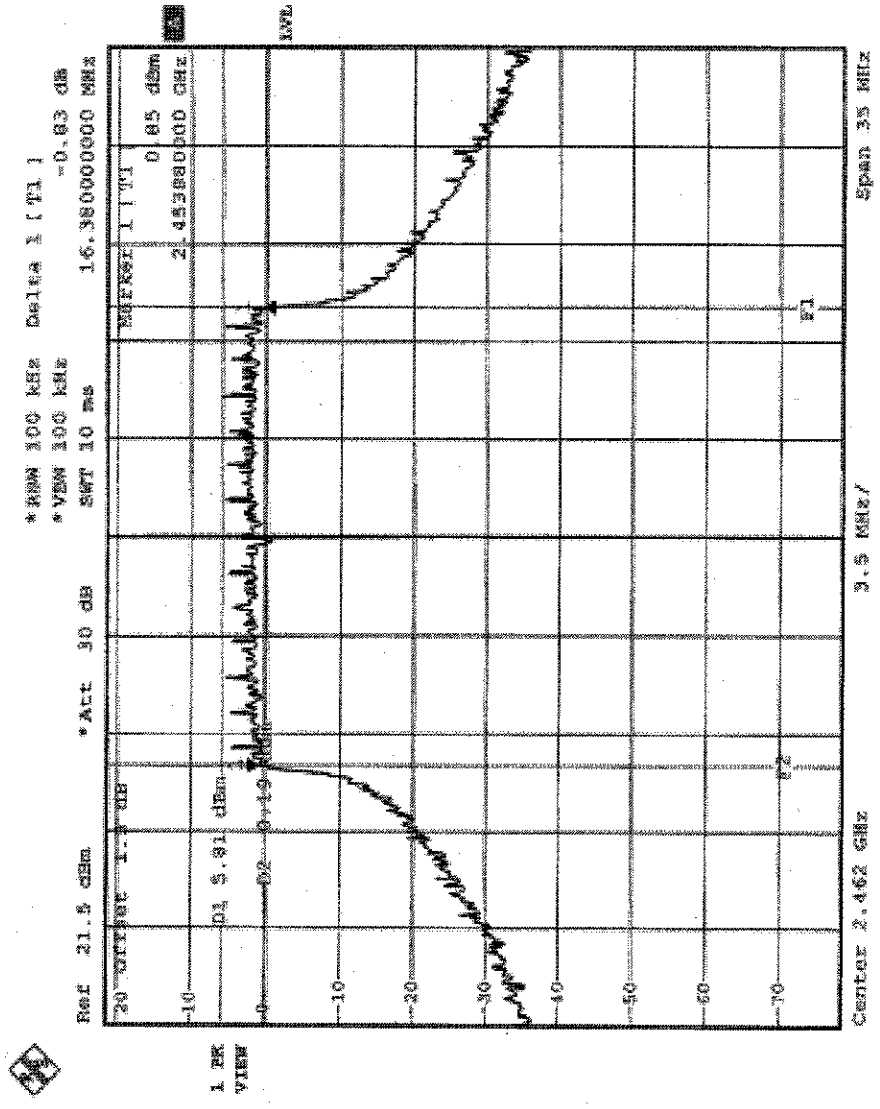
CH 1


RBW 100 kHz
VBW 100 kHz
SWT 10 ms
Delta 1 [T1]
0.64 dB
16.38000000 MHz
Marker 1 [T1]
0.19 dBm
2.40381000 GHz
Span 35 MHz
3.5 MHz/
Ref 23.5 dBm
Offset 1.5 dB
Att 30 dB
D1 5.52 dBm
D2 -0.48 dBm
Center 2.412 GHz
1 PK
VIEW

CH6


Ref 21.5 dBm
Offset 2.4 dB
* Att 30 dB
* RBW 100 kHz
* VBW 100 kHz
Swt 10 ms
Delta 1 [T1]
-0.09 dB
16.3850000000 MHz
Marker 1 [T1]
3.72 dBm
2.4288000000 GHz
D1 8.18 dBm
D2 2.18 dB
Center 2.437 GHz
3.5 MHz/
Span 35 MHz
1 PK
VIEW

CH11


Ref 21.5 dBm
Center 2.462 GHz
Span 35 MHz
3.5 MHz/
Delta 1 [T1]
-0.83 dB
16.380000000 MHz
0.85 dBm
2.453800000 GHz
SWT 10 ms
1 PK
VIEW

4.4 MAXIMUM PEAK OUTPUT POWER

4.4.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT

The Maximum Peak Output Power Measurement is 30dBm.

Note:

1. If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power from the intentional radiator shall be reduced below the stated values as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

2. Systems operating in the 2400-2483.5 MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi provided the maximum peak output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

4.4.2 INSTRUMENTS

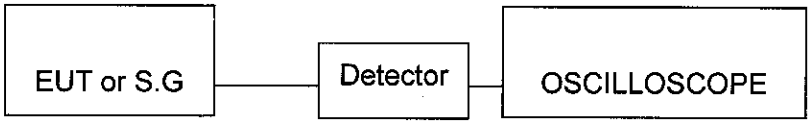
Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSP30	100019	Dec. 19, 2004
R&S SIGNAL GENERATOR	SMP04	100011	May 28, 2004
TEKTRONIX OSCILLOSCOPE	TDS 220	B048470	Mar. 05, 2004
NARDA DETECTOR	4503A	FSCM99899	NA

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

4.4.3 TEST PROCEDURES

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

4.4.4 TEST SETUP



4.4.5 EUT OPERATING CONDITIONS

Same as Item 4.3.6

4.4.6 TEST RESULTS -DSSS

EUT	Flanker Pro Single Radio AP	MODEL	AP-AG-AT-01
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	19deg. C, 64%RH, 972 hPa
TESTED BY	Eric Lee		

Antenna 1 (Gain: 2.5dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	20.30	30	PASS
6	2437	21.34	30	PASS
11	2462	21.50	30	PASS

Antenna 2 (Gain: 2.0dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	21.52	30	PASS
6	2437	21.94	30	PASS
11	2462	21.42	30	PASS

Antenna 3 (Gain: 3.0dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	20.30	30	PASS
6	2437	21.34	30	PASS
11	2462	21.50	30	PASS

Antenna 4 (Gain: 10.0dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	18.23	26	PASS
6	2437	20.90	26	PASS
11	2462	19.00	26	PASS

EUT	Flanker Pro Single Radio AP	MODEL	AP-AG-AT-01
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	19deg. C, 64%RH, 972 hPa
TESTED BY	Eric Lee		

Antenna 5 (Gain: 14.0dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	8.61	22	PASS
6	2437	13.62	22	PASS
11	2462	13.65	22	PASS

Antenna 6 (Gain: 14.0dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	12.50	22	PASS
6	2437	17.82	22	PASS
11	2462	15.74	22	PASS

Antenna 7 (Gain: 24.0dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
3	2422	8.61	24	PASS
6	2437	9.50	24	PASS
9	2452	8.54	24	PASS

4.4.7 TEST RESULTS -OFDM

EUT	Flanker Pro Single Radio AP	MODEL	AP-AG-AT-01
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	19deg. C, 64%RH, 972 hPa
TESTED BY	Eric Lee		

Antenna 1 (Gain: 2.5dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	21.09	30	PASS
6	2437	22.09	30	PASS
11	2462	21.37	30	PASS

Antenna 2 (Gain: 2.0dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	20.82	30	PASS
6	2437	23.28	30	PASS
11	2462	21.43	30	PASS

Antenna 3 (Gain: 3.0dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	21.09	30	PASS
6	2437	22.09	30	PASS
11	2462	21.37	30	PASS

Antenna 4 (Gain: 10.0dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	15.20	26	PASS
6	2437	21.00	26	PASS
11	2462	16.33	26	PASS

EUT	Flanker Pro Single Radio AP	MODEL	AP-AG-AT-01
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	19deg. C, 64%RH, 972 hPa
TESTED BY	Eric Lee		

Antenna 5 (Gain: 14.0dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	10.12	22	PASS
6	2437	18.05	22	PASS
11	2462	11.91	22	PASS

Antenna 6 (Gain: 14.0dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	12.00	22	PASS
6	2437	18.01	22	PASS
11	2462	14.72	22	PASS

Antenna 7 (Gain: 24.0dBi)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
3	2422	11.86	24	PASS
6	2437	11.57	24	PASS
9	2452	12.01	24	PASS

4.5 POWER SPECTRAL DENSITY MEASUREMENT

4.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

4.5.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSP	1093.4495.30	Dec. 19, 2004

NOTE:

1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

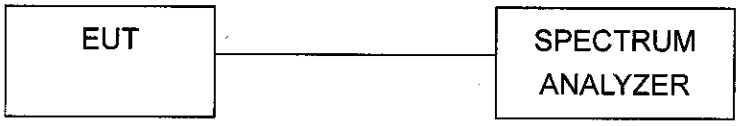
4.5.3 TEST PROCEDURE

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

4.5.4 DEVIATION FROM TEST STANDARD

No deviation

4.5.5 TEST SETUP



4.5.6 EUT OPERATING CONDITION

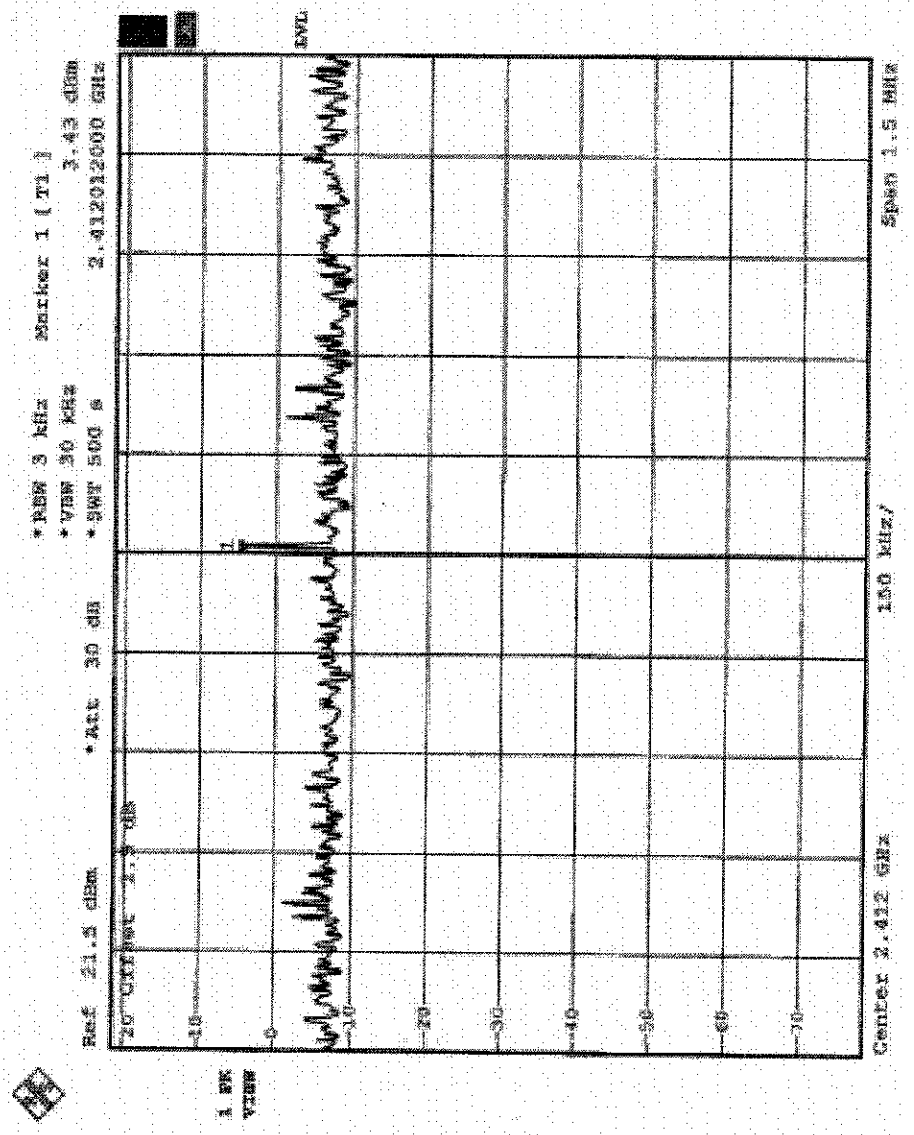
Same as Item 4.3.6

4.5.7 TEST RESULTS-DSSS

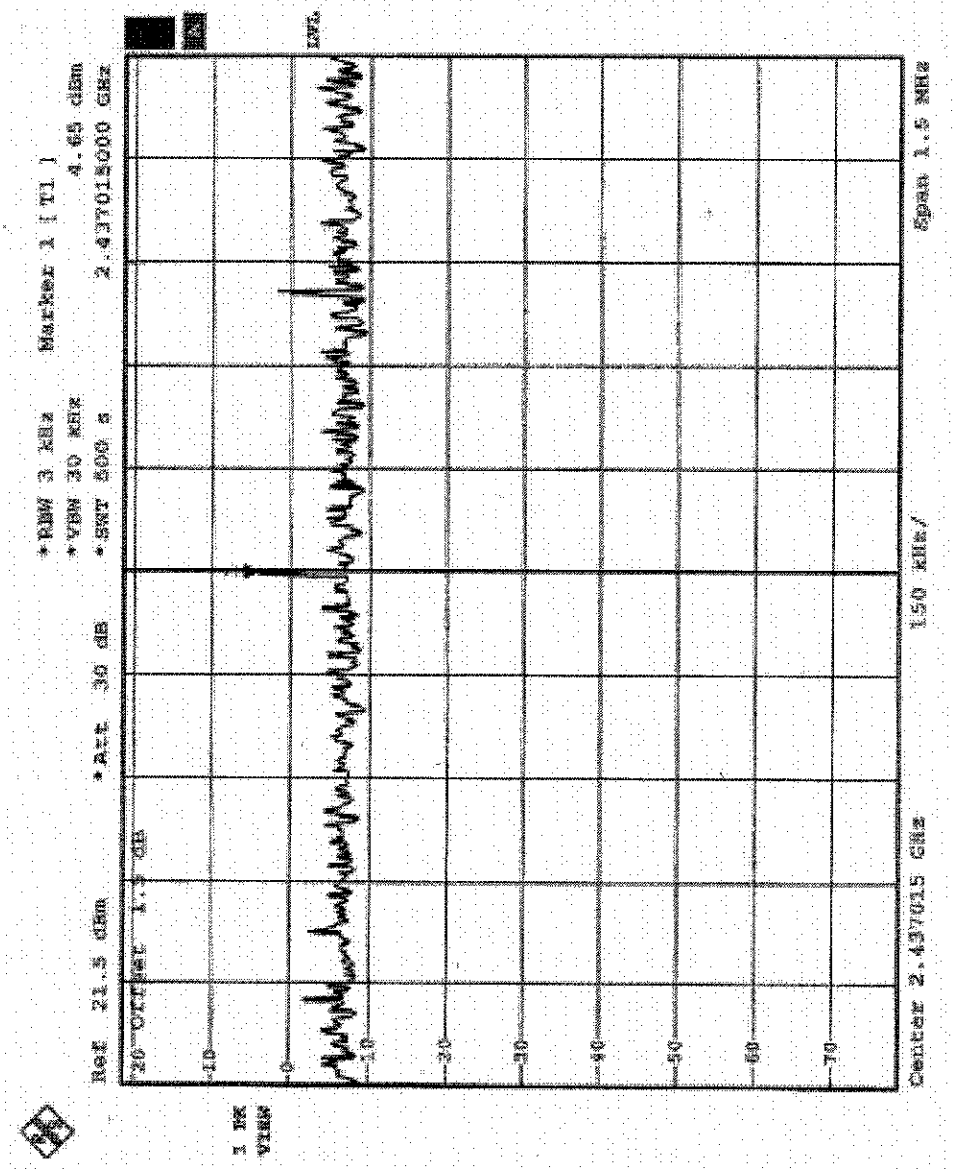
EUT	Flanker Pro Single Radio AP	MODEL	AP-AG-AT-01
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	21deg. C, 58RH, 972 hPa
TESTED BY	Eric Lee		

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	3.43	8	PASS
6	2437	4.65	8	PASS
11	2462	4.48	8	PASS

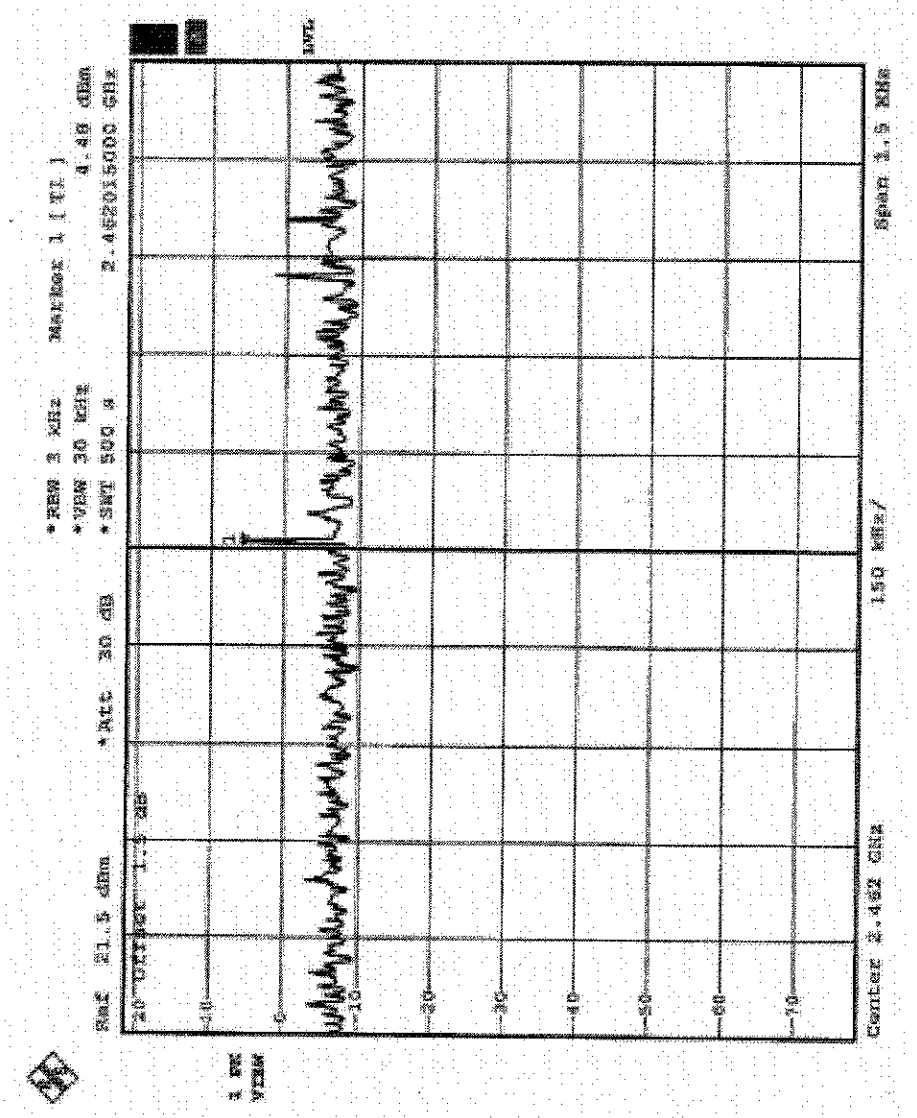
CH1


RBW 3 kHz
VBW 30 kHz
SWT 500 s
Marker 1 [T1]
3.43 dBm
2.41201200 GHz
Ref 21.5 dBm
Att 30 dB
Offset 2.7 dB
1 PK
MAXH
Center 2.412 GHz
150 kHz/
Span 1.5 MHz

CH6


Ref 21.5 dBm
Offset 1.7 dB
*Att 30 dB
*RBW 3 kHz
*VBW 30 kHz
*SWT 200 s
Marker 1 [T1]
4.65 dBm
2.437015000 GHz
Center 2.437015 GHz
150 kHz/
Span 1.5 MHz
1 PK
VIEW

CH11

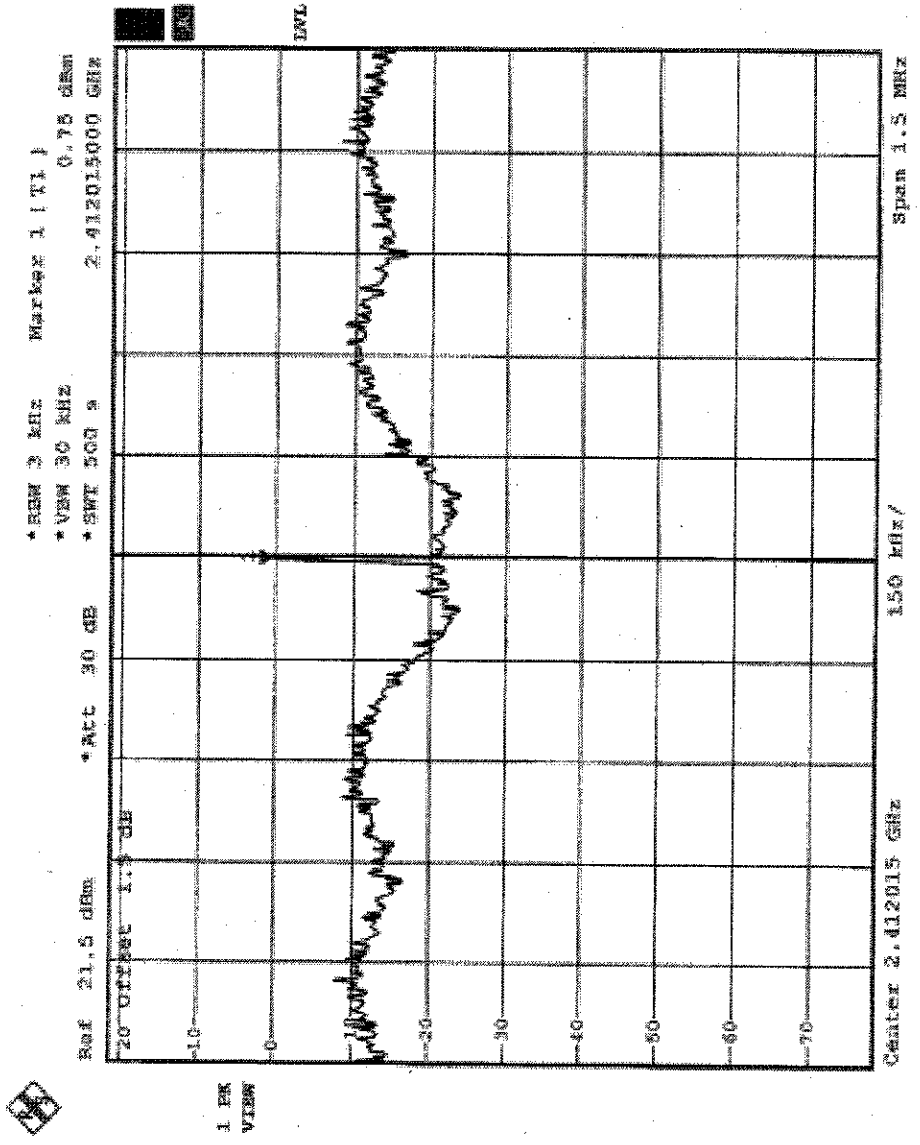

*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
4.49 dBm
2.462035000 GHz
Offset 1.5 dB
*Att 30 dB
Center 2.462 GHz
150 kHz/
Span 1.5 MHz

4.5.8 TEST RESULTS-OFDM

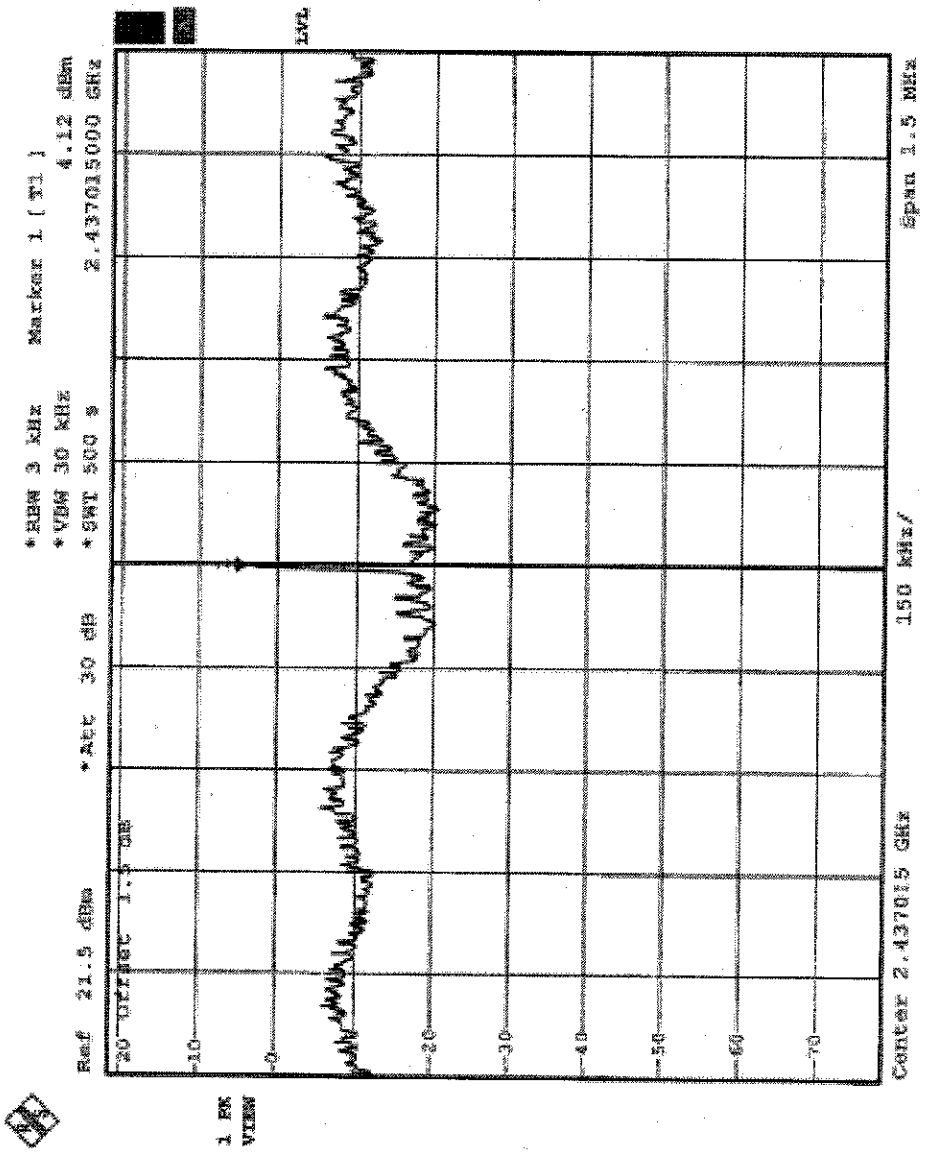
EUT	Flanker Pro Single Radio AP	MODEL	AP-AG-AT-01
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	21deg. C, 58RH, 972 hPa
TESTED BY	Eric Lee		

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	0.75	8	PASS
6	2437	4.12	8	PASS
11	2462	1.98	8	PASS

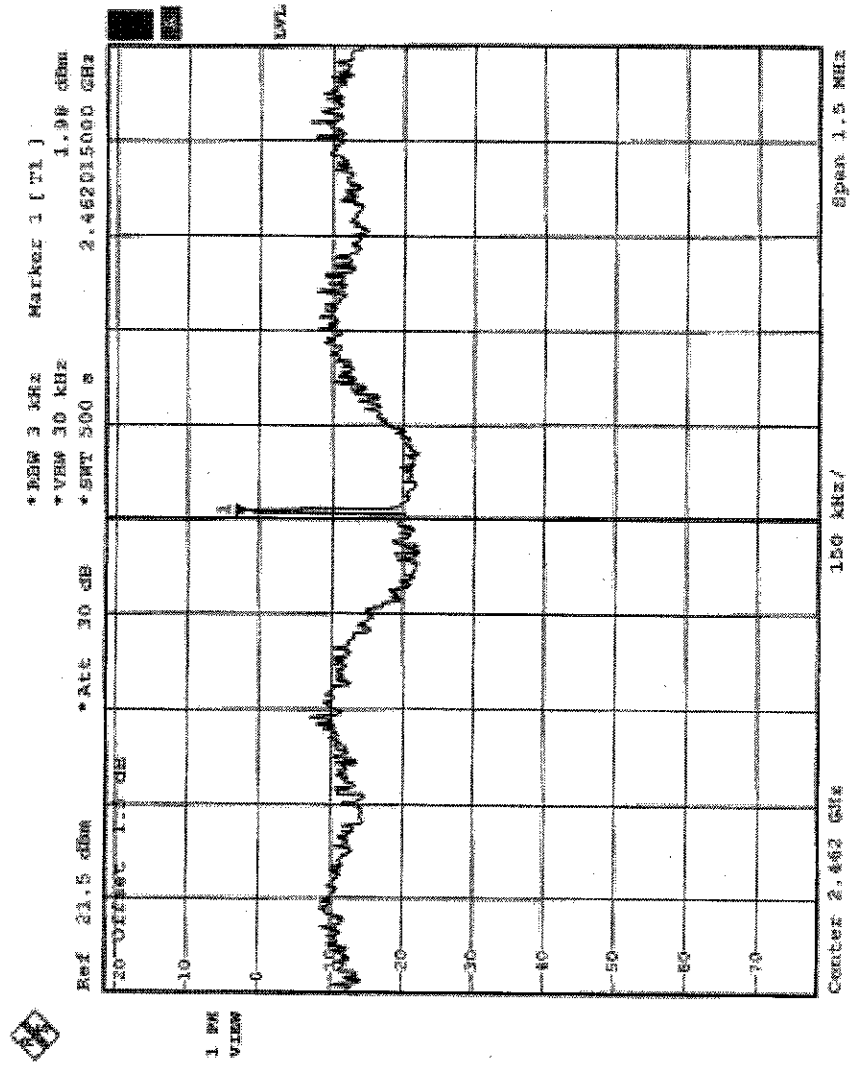
CH1


Ref 21.5 dBm
10 dB/ 1.5 dB
Att 30 dB
RBW 3 kHz
VBW 30 kHz
SWT 500 s
Marker 1 [T1]
0.75 dBm
2.412015000 GHz
Center 2.412015 GHz
150 kHz/
Span 1.5 MHz
1 PK
VIEW
CLRWR

CH6


Ref 21.5 dBm
Offset 1.5 dB
#Att 30 dB
#RBW 3 kHz
#VBW 30 kHz
#SWT 500 s
Marker 1 [T1]
4.12 dBm
2.437015000 GHz
1 PK
VIEW
Center 2.437015 GHz
150 kHz/
Span 1.5 MHz

CH11


RBW 3 kHz
VBW 30 kHz
SWT 500 s
Marker 1 [T1]
1.98 dBm
2.462015000 GHz
Ref 23.5 dBm
Offset 1.7 dB
Att 30 dB
Center 2.462 GHz
150 kHz/
Span 1.5 MHz
1 PK
VIEW

4.6 BAND EDGES MEASUREMENT

4.6.1 LIMITS OF BAND EDGES MEASUREMENT

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

4.6.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSP	1093.4495.30	Dec. 19, 2004

NOTE:

1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.6.3 TEST PROCEDURE

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

4.6.4 DEVIATION FROM TEST STANDARD

No deviation

4.6.5 EUT OPERATING CONDITION

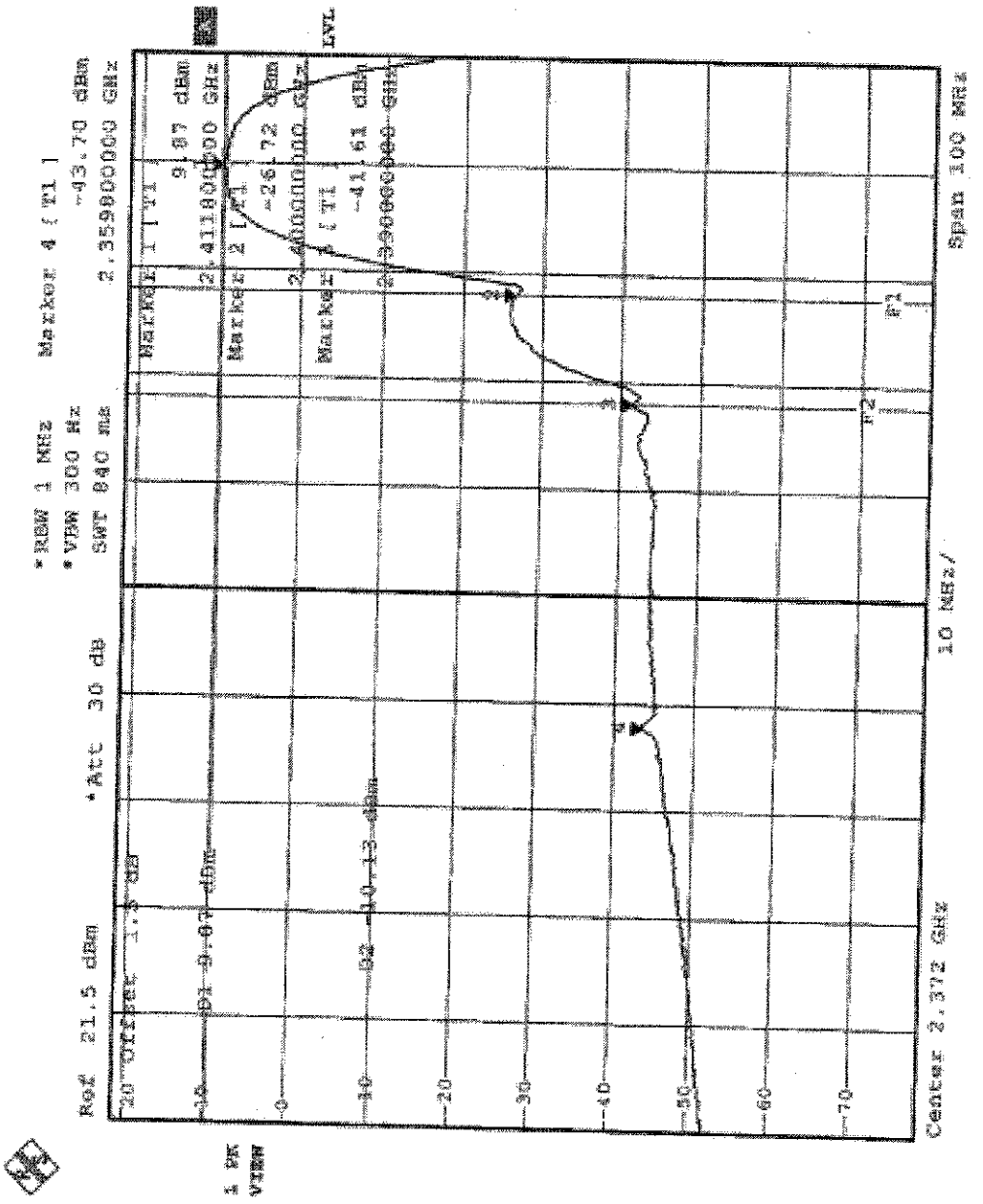
Same as Item 4.3.6

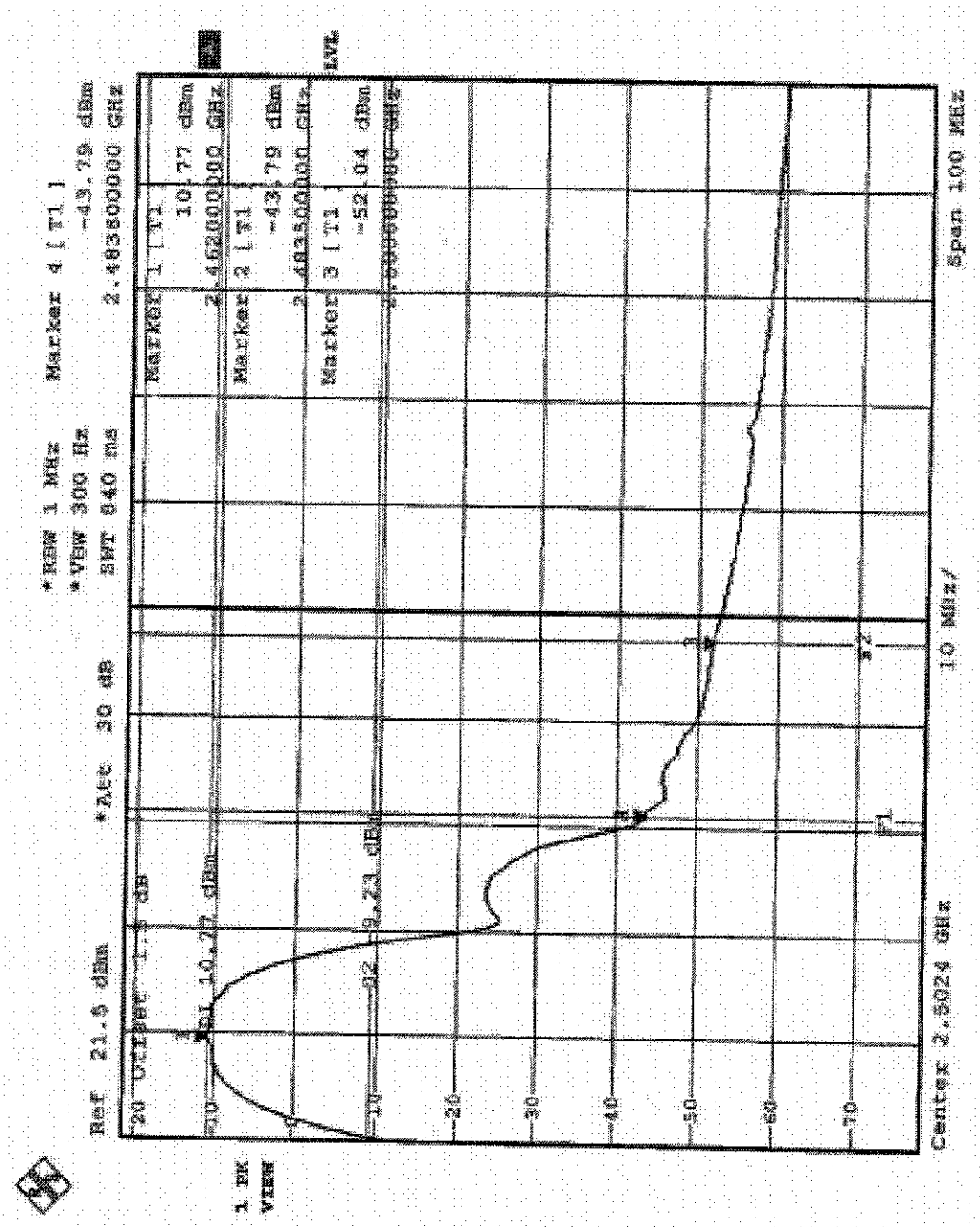
4.6.6 TEST RESULTS –DSSS (Antenna 1)

The spectrum plots are attached on the following 2 pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(C).

NOTE (1): The band edge emission plot on the following first page shows 51.48dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 103.80dBuV/m, so the maximum field strength in restrict band is 103.80-51.48=52.32dBuV/m which is under 54 dBuV/m limit.

NOTE (2): The band edge emission plot on the following second page shows 54.56 dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 105.20dBuV/m, so the maximum field strength in restrict band is 105.20-54.56=50.64dBuV/m which is under 54 dBuV/m limit.


Ref 21.5 dBm
Offset 1.3 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 Hz
SWT 840 ms
Marker 4 [T1]
-93.70 dBm
2.359800000 GHz
Center 2.372 GHz
10 MHz/
Span 100 MHz
LVL
1 PK
VIEW

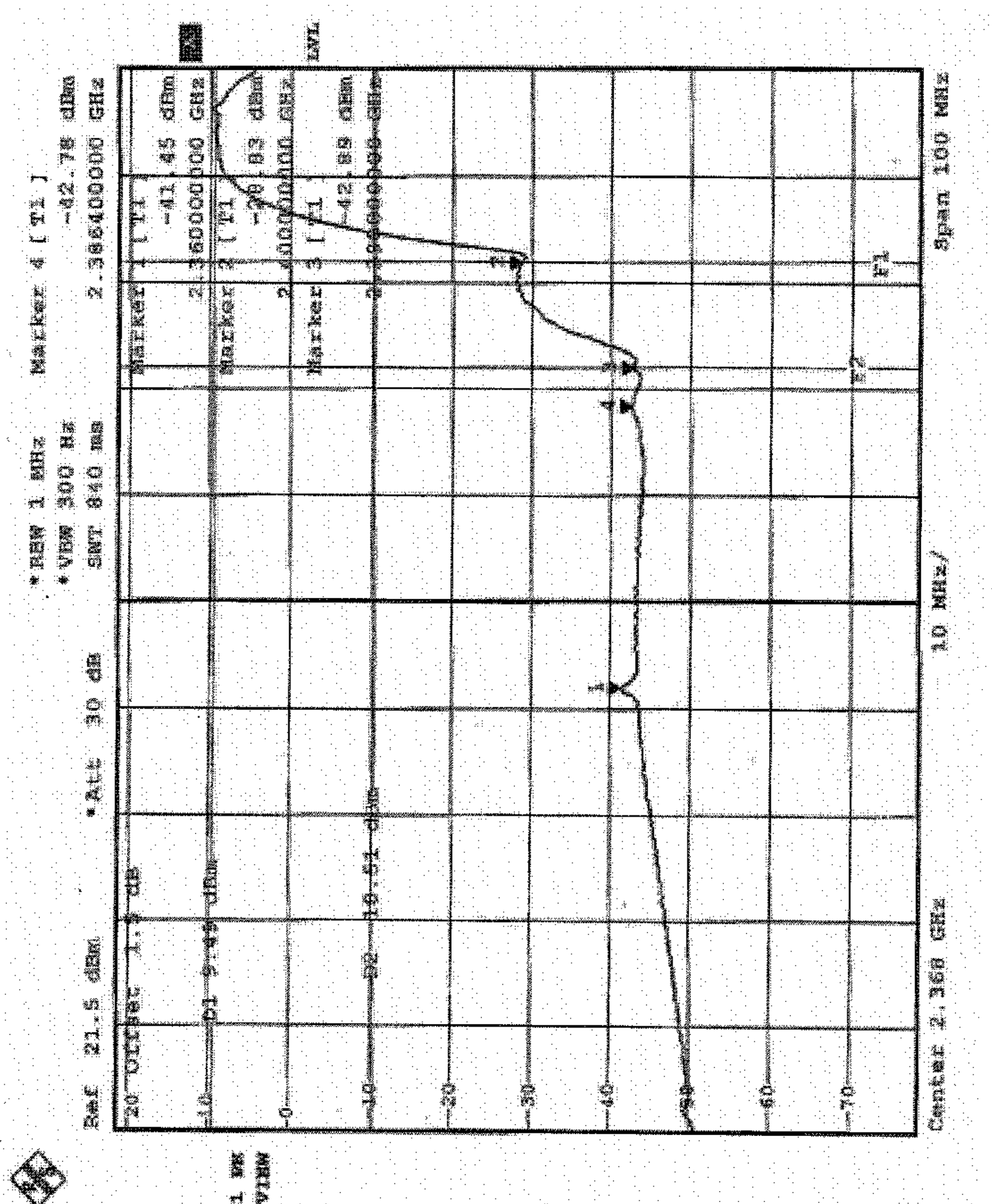

*RBW 1 MHz
*VBW 300 Hz
SWT 840 ms
Marker 4 [T1]
-43.79 dBm
2.483600000 GHz
Ref 21.5 dBm
*Att 30 dB
Offset 1.7 dB
10 dB/
Center 2.5024 GHz
10 MHz/
Span 100 MHz
Marker 1 [T1]
10.77 dBm
2.462000000 GHz
Marker 2 [T1]
-43.79 dBm
2.483500000 GHz
Marker 3 [T1]
-52.04 dBm
2.500000000 GHz
1 PK
VIEW

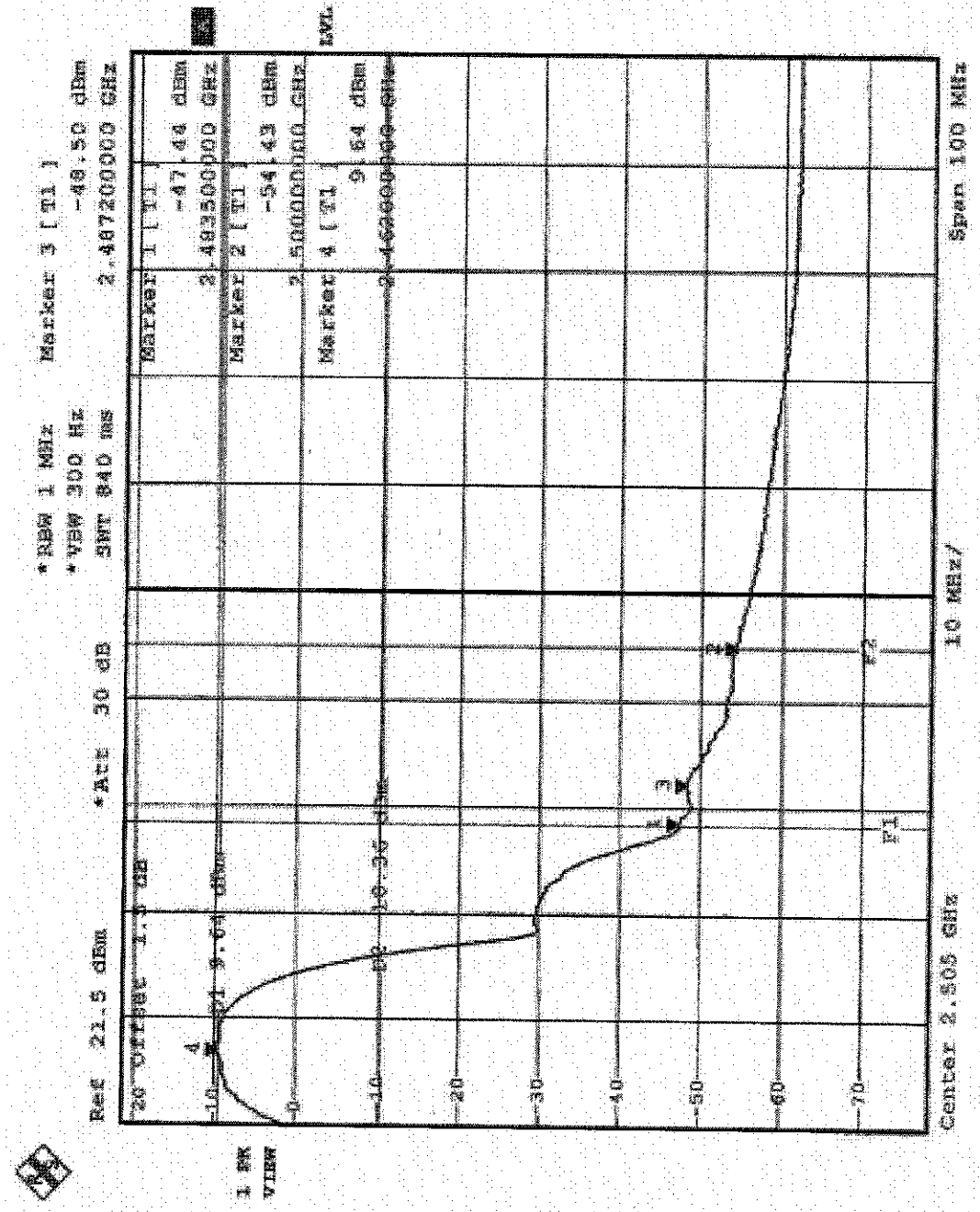
4.6.7 TEST RESULTS –DSSS (Antenna 2)

The spectrum plots are attached on the following 2 pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(C).

NOTE (1): The band edge emission plot on the following first page shows 52.38dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 103.60dBuV/m, so the maximum field strength in restrict band is 103.60-52.38=51.22dBuV/m which is under 54 dBuV/m limit.

NOTE (2): The band edge emission plot on the following second page shows 57.08 dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 105.70dBuV/m, so the maximum field strength in restrict band is 105.70-57.08=48.62dBuV/m which is under 54 dBuV/m limit.


Ref 21.5 dBm
Offset 1.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 Hz
SWT 840 ms
Marker 4 [T1]
-42.78 dBm
2.386400000 GHz
Marker 1 [T1]
-41.45 dBm
Marker 2 [T1]
Marker 3 [T1]
D1 9.45 dBm
D2 -10.51 dBm
F1
F2
LVL
1 RM
VIEW
Center 2.368 GHz
10 MHz/
Span 100 MHz

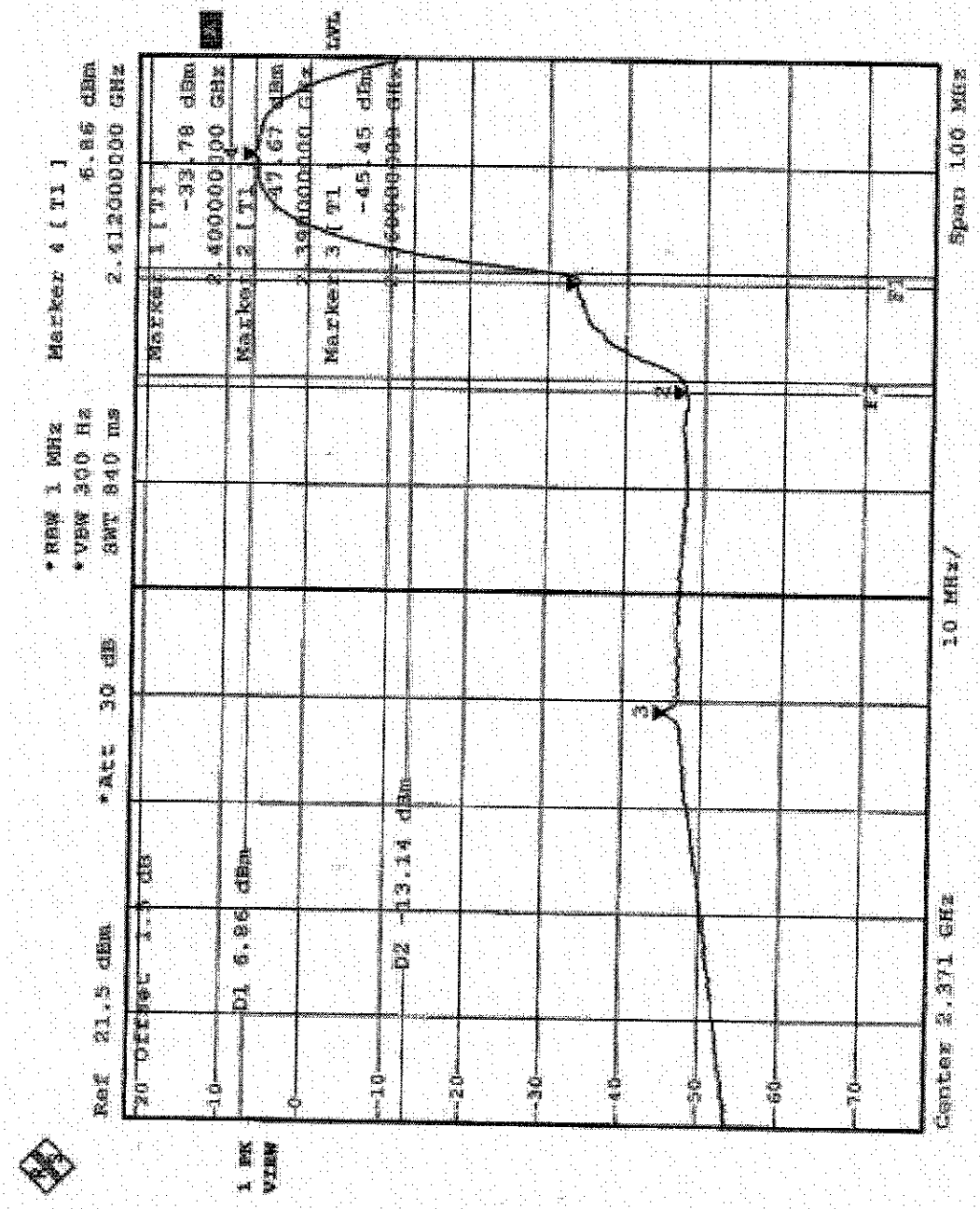

Ref 21.5 dBm
*Att 30 dB
*RBW 1 MHz
*VBW 300 Hz
SWT 840 ms
Marker 3 [T1]
-48.50 dBm
2.487200000 GHz
Marker 1 [T1]
-47.44 dBm
2.493500000 GHz
Marker 2 [T1]
-54.43 dBm
2.500000000 GHz
Marker 4 [T1]
9.64 dBm
2.492600000 GHz
Center 2.505 GHz
10 MHz/
Span 100 MHz
1 PK
VIEW

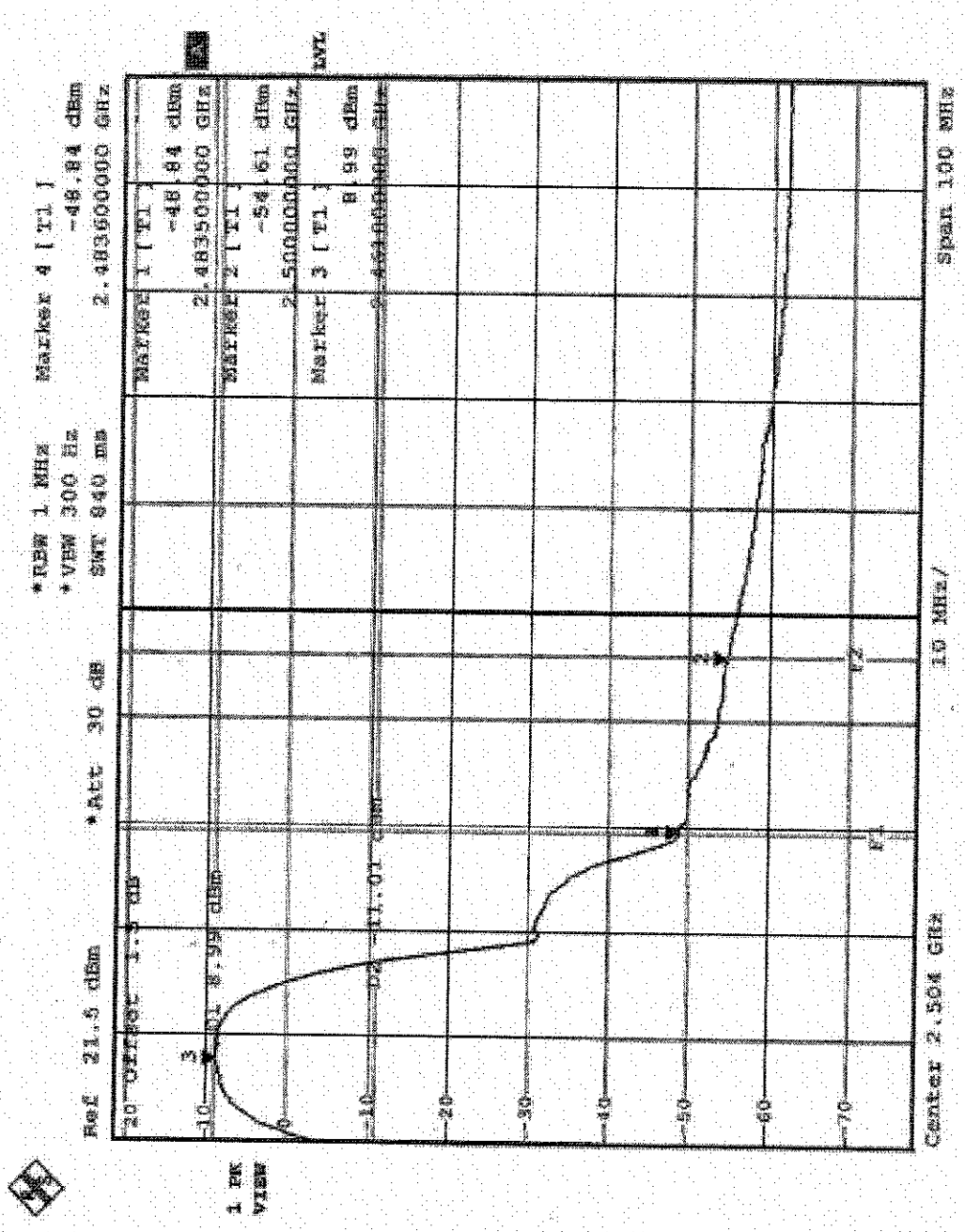
4.6.8 TEST RESULTS –DSSS (Antenna 3)

The spectrum plots are attached on the following 2 pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(C).

NOTE (1): The band edge emission plot on the following first page shows 54.53dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 100.30dBuV/m, so the maximum field strength in restrict band is 100.30-54.53=45.77dBuV/m which is under 54 dBuV/m limit.

NOTE (2): The band edge emission plot on the following second page shows 57.83 dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 102.10dBuV/m, so the maximum field strength in restrict band is 102.10-57.83=44.27dBuV/m which is under 54 dBuV/m limit.


*RBW 1 MHz
*VBW 300 Hz
SWT 840 ms
Marker 4 [T1]
6.86 dBm
2.412000000 GHz
Ref 21.5 dBm
*Att 30 dB
Offset 2.4 dB
D1 6.86 dBm
D2 -13.14 dBm
1 RM
VIEW
Marker 1 [T1]
-33.78 dBm
2.400000000 GHz
Marker 2 [T1]
-47.67 dBm
2.390000000 GHz
Marker 3 [T1]
-45.45 dBm
2.483500000 GHz
Center 2.371 GHz
10 MHz/
Span 100 MHz

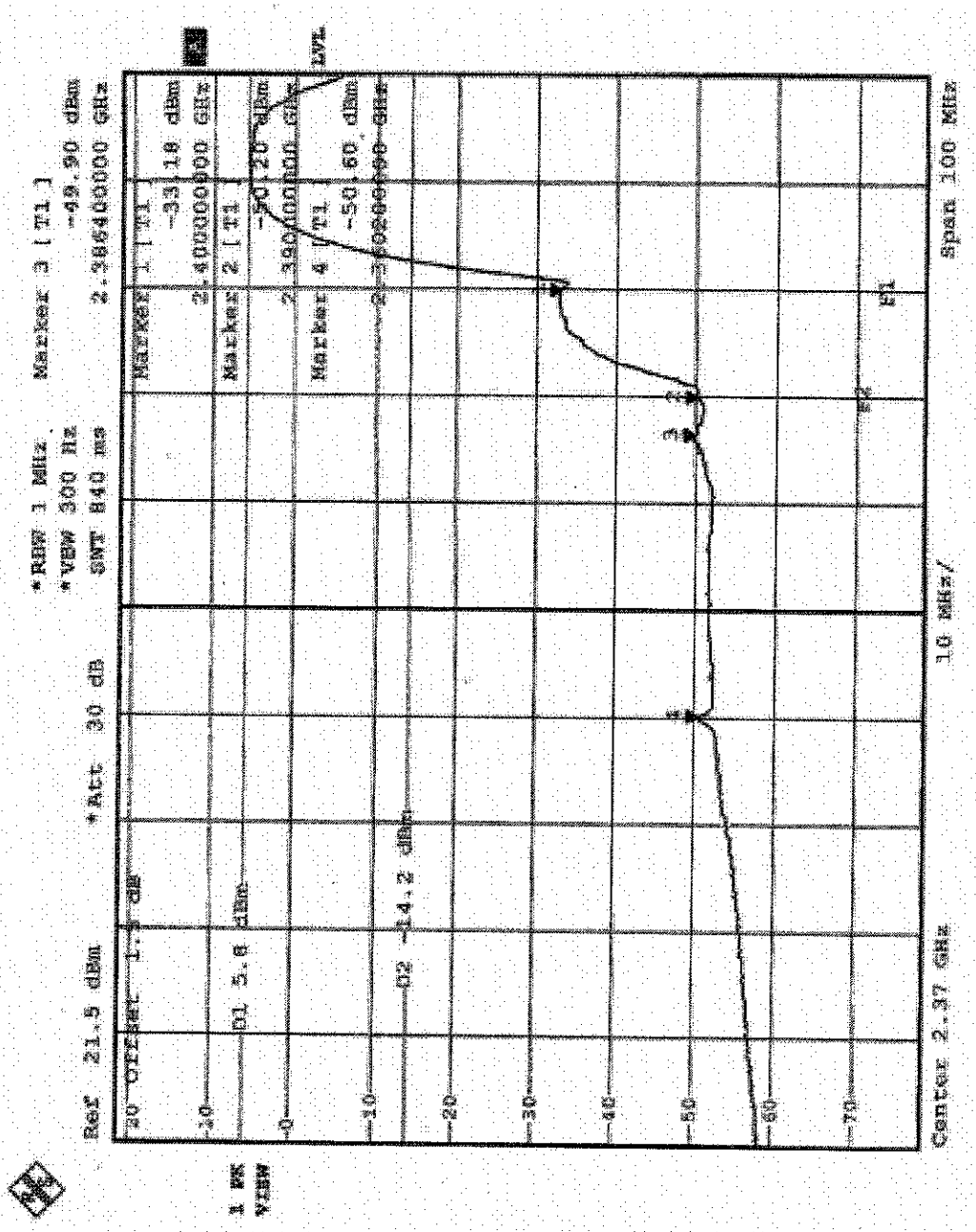

*RBW 1 MHz
*VBW 300 Hz
SWT 840 ms
Marker 4 [T1]
-48.84 dBm
2.48360000 GHz
Ref 21.5 dBm
Offset 1.5 dB
*Att 30 dB
Marker 1 [T1]
-48.84 dBm
2.48350000 GHz
Marker 2 [T1]
-54.61 dBm
2.50000000 GHz
Marker 3 [T1]
8.99 dBm
2.48360000 GHz
1 PK
VIEW
Center 2.504 GHz
10 MHz/
Span 100 MHz

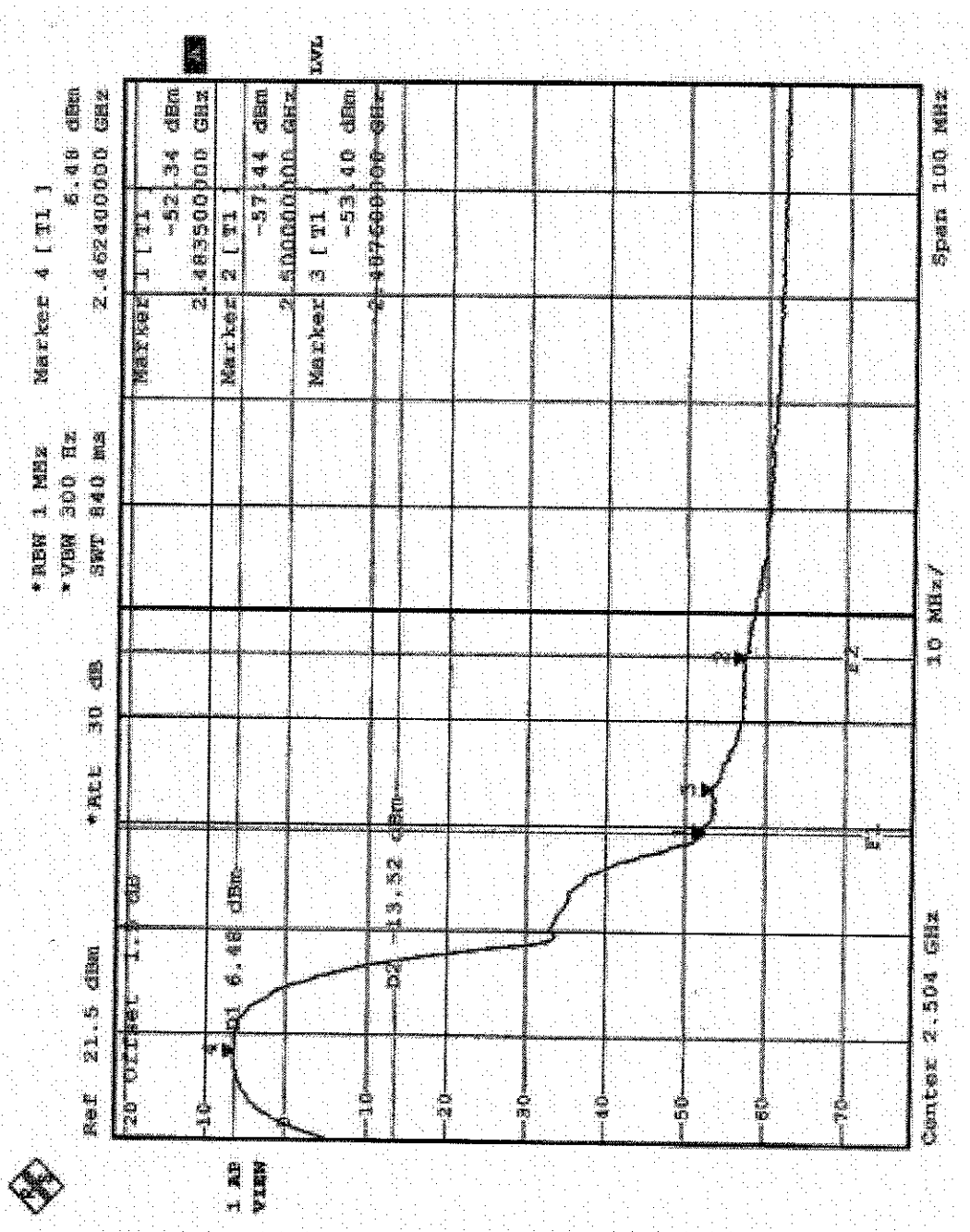
4.6.9 TEST RESULTS –DSSS (Antenna 4)

The spectrum plots are attached on the following 2 pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(C).

NOTE (1): The band edge emission plot on the following first page shows 56.00dB delta between carrier maximum power and local maximum emission in restrict band (2.3864GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 107.80dBuV/m, so the maximum field strength in restrict band is 107.80-56.00=51.80dBuV/m which is under 54 dBuV/m limit.

NOTE (2): The band edge emission plot on the following second page shows 58.82 dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 109.00dBuV/m, so the maximum field strength in restrict band is 109.00-58.82=50.20dBuV/m which is under 54 dBuV/m limit.


*RBW 3 MHz
*VBW 300 Hz
SWT 840 ms
Marker 3 [T1]
-9.90 dBm
2.38640000 GHz
Ref 21.5 dBm
*Att 30 dB
Offset 1.3 dB
Marker 1 [T1]
-33.18 dBm
2.40000000 GHz
Marker 2 [T1]
-50.20 dBm
2.39900000 GHz
Marker 4 [T1]
-50.60 dBm
2.39800000 GHz
D1 5.6 dBm
D2 -14.2 dBm
1 MK
VIEW
Center 2.37 GHz
10 MHz/
Span 100 MHz

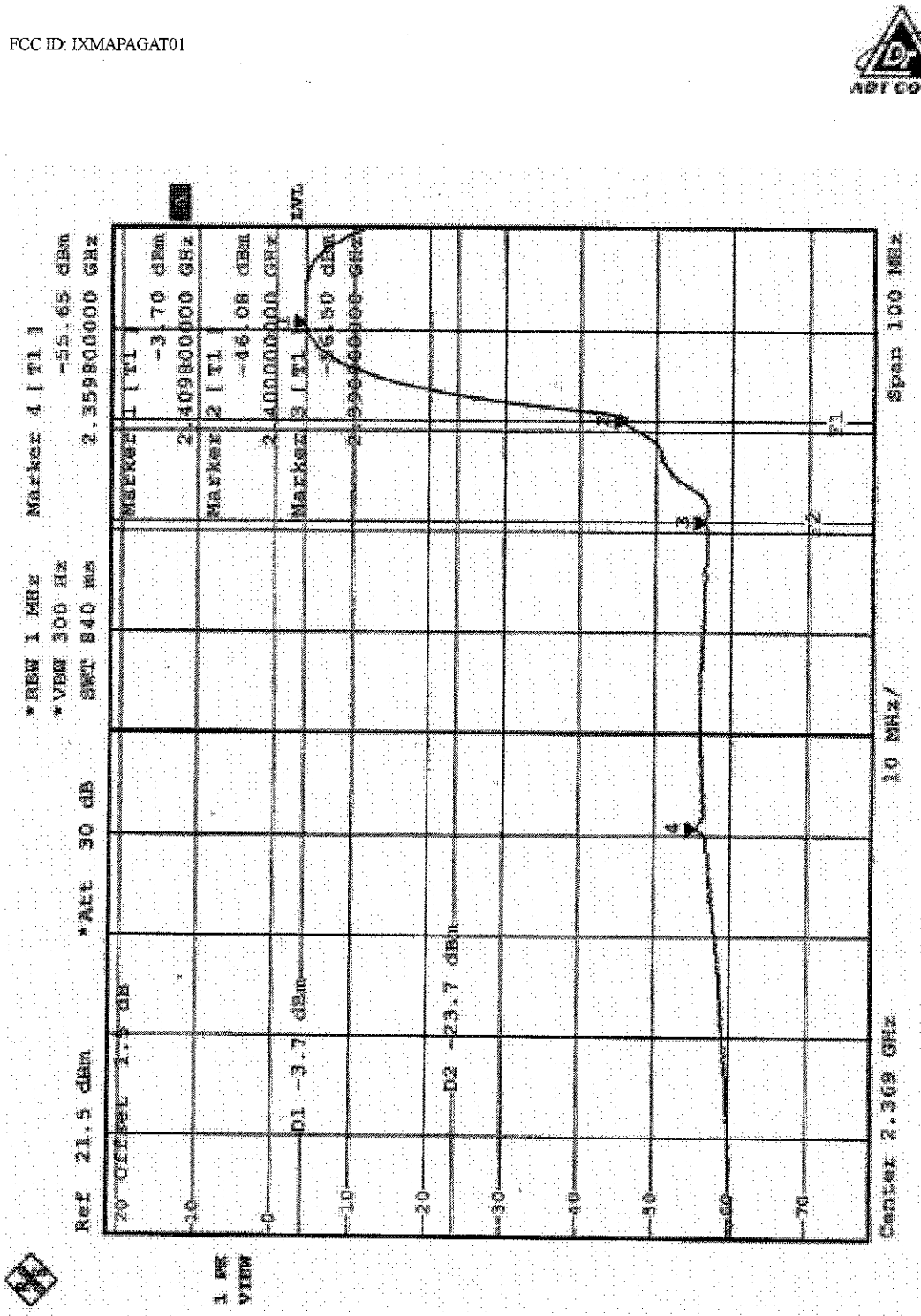

Ref 21.5 dBm
*RBW 1 MHz
*VBW 300 Hz
*Att 30 dB
SWT 840 ms
Marker 4 [T1]
6.48 dBm
2.462490000 GHz
Marker 1 [T1]
-52.34 dBm
2.483500000 GHz
Marker 2 [T1]
-57.44 dBm
2.500000000 GHz
Marker 3 [T1]
-53.40 dBm
2.487600000 GHz
1 AP
MKR
Center 2.504 GHz
10 MHz/
Span 100 MHz

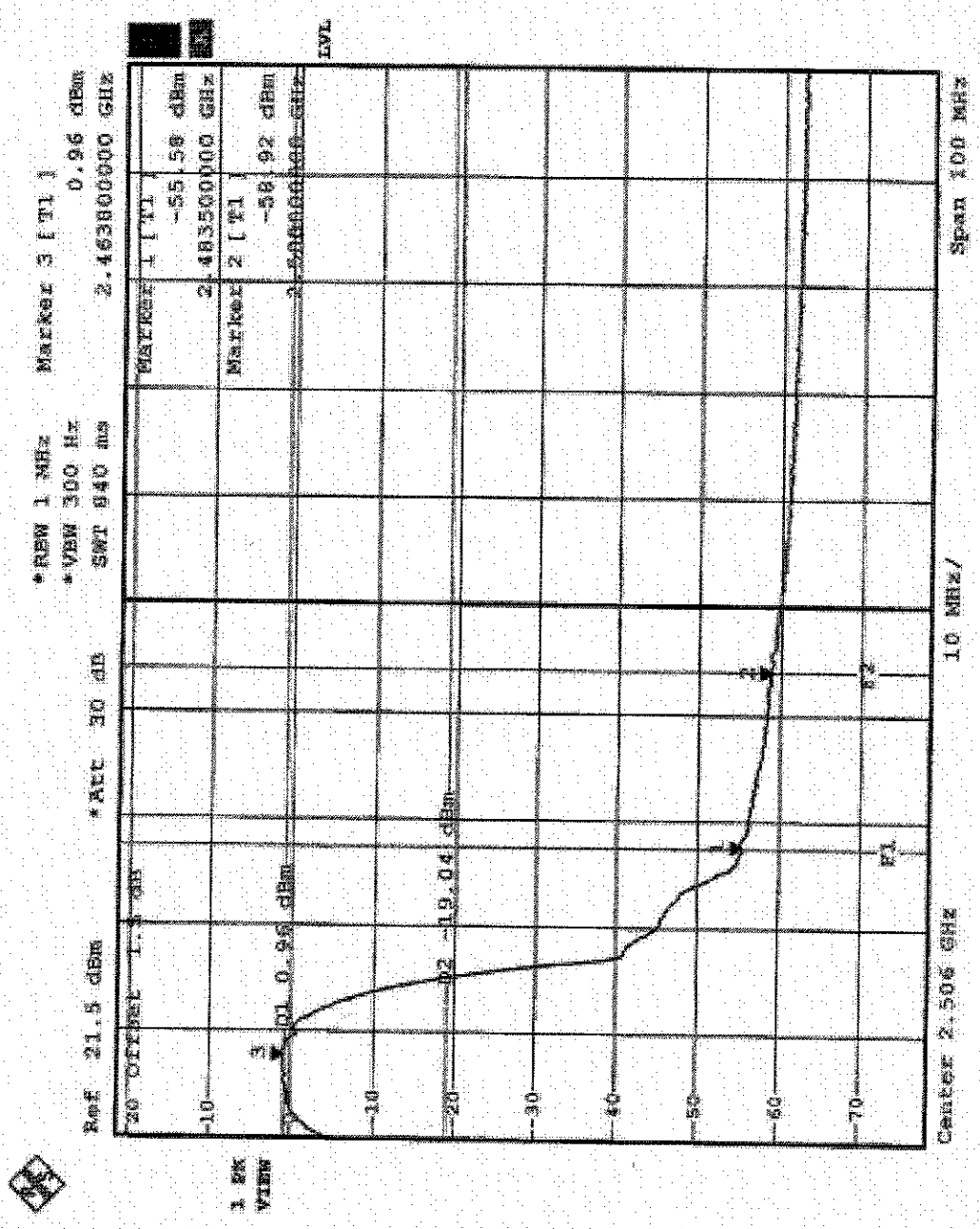
4.6.10 TEST RESULTS –DSSS (Antenna 5)

The spectrum plots are attached on the following 2 pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(C).

NOTE (1): The band edge emission plot on the following first page shows 52.80dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 104.30dBuV/m, so the maximum field strength in restrict band is 104.30-52.80=51.50dBuV/m which is under 54 dBuV/m limit.

NOTE (2): The band edge emission plot on the following second page shows 56.54 dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 109.60dBuV/m, so the maximum field strength in restrict band is 109.60-56.54=53.06dBuV/m which is under 54 dBuV/m limit.


Ref 21.5 dBm
Offset 1.5 dB
*Att 30 dB
*RBW 1 MHz
*VBW 300 Hz
SWT 840 ms
Marker 4 [T1]
-55.65 dBm
2.359800000 GHz
1 PK
VIEW
Marker 1 [T1]
-3.70 dBm
2.409800000 GHz
Marker 2 [T1]
-46.08 dBm
2.400000000 GHz
Marker 3 [T1]
-36.50 dBm
2.396000000 GHz
D1 -3.7 dBm
D2 -23.7 dBm
Center 2.369 GHz
10 MHz/
Span 100 MHz

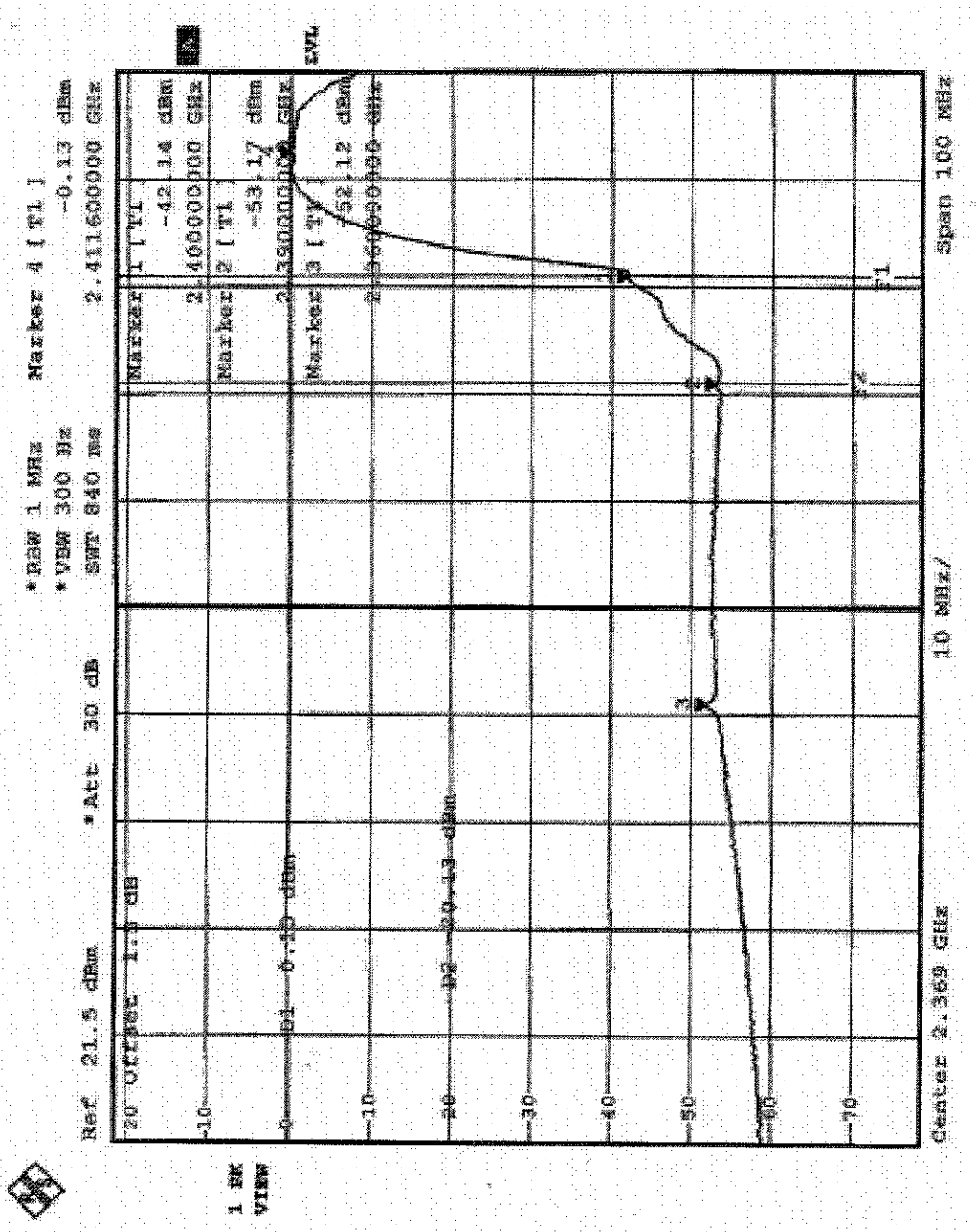

*RBW 1 MHz
*VBW 300 Hz
SWP 840 ms
Marker 3 [T1]
0.96 dBm
2.463800000 GHz
Marker 1 [T1]
-55.58 dBm
2.483500000 GHz
Marker 2 [T1]
-58.92 dBm
Ref 21.5 dBm
*Att 30 dB
Offset 1.5 dB
Center 2.506 GHz
10 MHz/
Span 100 MHz
1 RM
Write

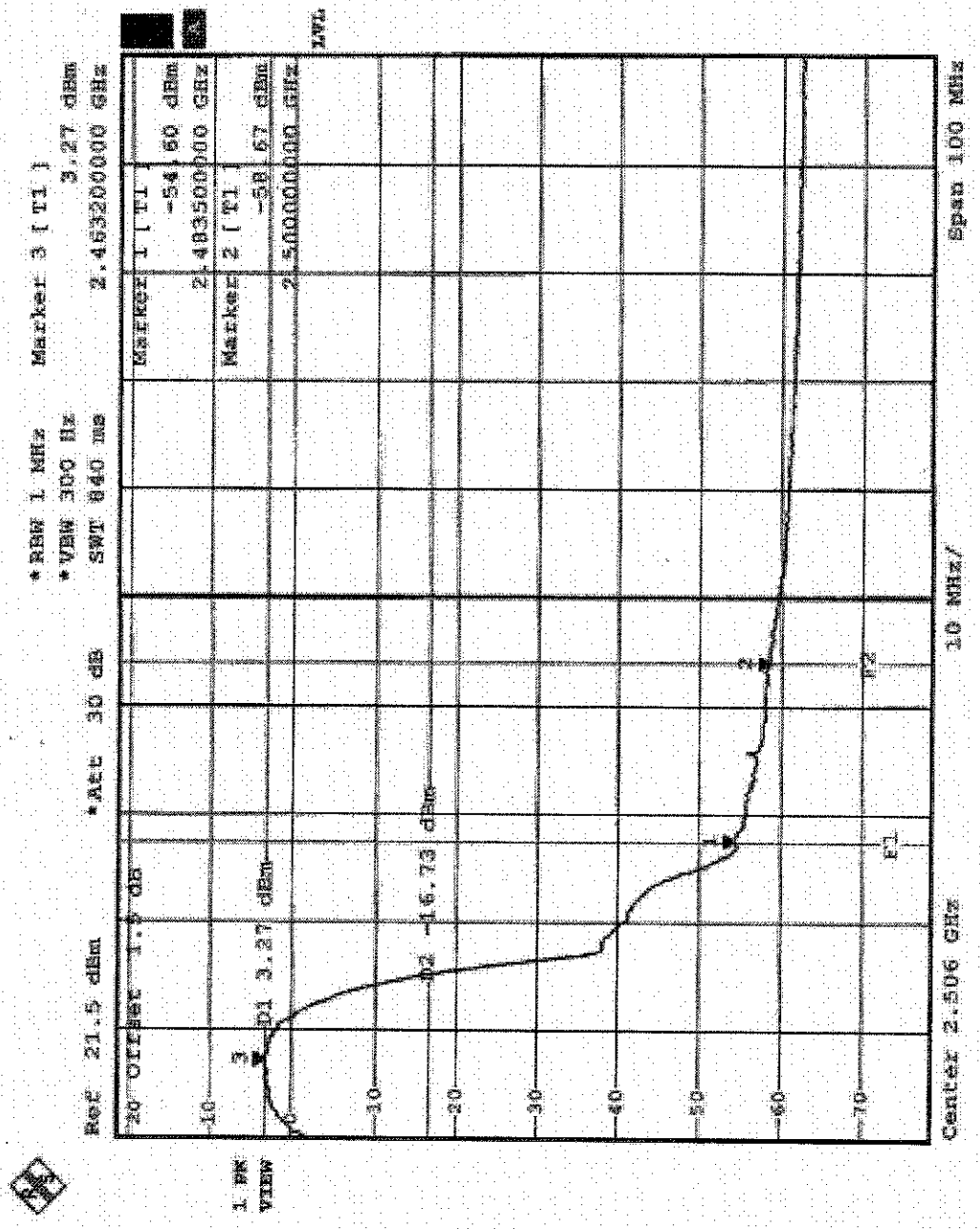
4.6.11 TEST RESULTS –DSSS (Antenna 6)

The spectrum plots are attached on the following 2 pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(C).

NOTE (1): The band edge emission plot on the following first page shows 53.04dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 105.50dBuV/m, so the maximum field strength in restrict band is 105.50-53.04=52.46dBuV/m which is under 54 dBuV/m limit.

NOTE (2): The band edge emission plot on the following second page shows 57.87 dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 108.10dBuV/m, so the maximum field strength in restrict band is 108.10-57.87=50.23dBuV/m which is under 54 dBuV/m limit.


*RBW 1 MHz
*VBW 300 Hz
SWT 840 ms
Marker 4 [T1]
-0.13 dBm
2.411600000 GHz
Ref 21.5 dBm
*Att 30 dB
Offset 1.1 dB
1 PK
VIEW
Marker 1 [T1]
-42.14 dBm
2.400000000 GHz
Marker 2 [T1]
-53.17 dBm
2.390000000 GHz
Marker 3 [T1]
-52.12 dBm
2.360000000 GHz
Center 2.369 GHz
10 MHz/
Span 100 MHz

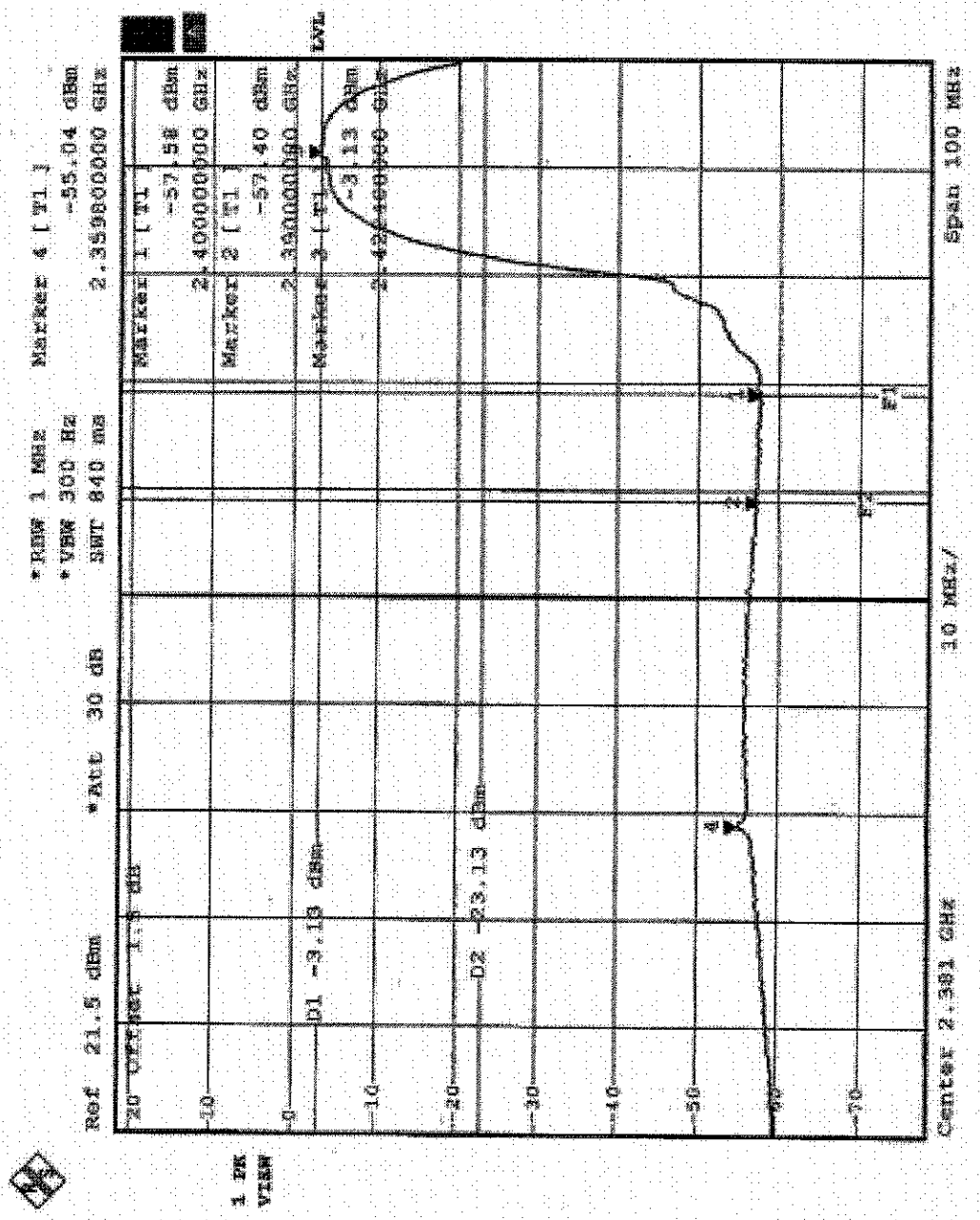

*RBW 1 MHz
*VBW 300 Hz
SWT 840 ms
Marker 3 [T1]
3.27 dBm
2.463200000 GHz
Marker 1 [T1]
-54.60 dBm
2.483500000 GHz
Marker 2 [T1]
-58.67 dBm
2.500000000 GHz
Ref 21.5 dBm
Offset 1.7 dB
*Att 30 dB
1 PK VIEW
D1 3.27 dBm
D2 -16.73 dBm
Center 2.506 GHz
10 MHz/
Span 100 MHz

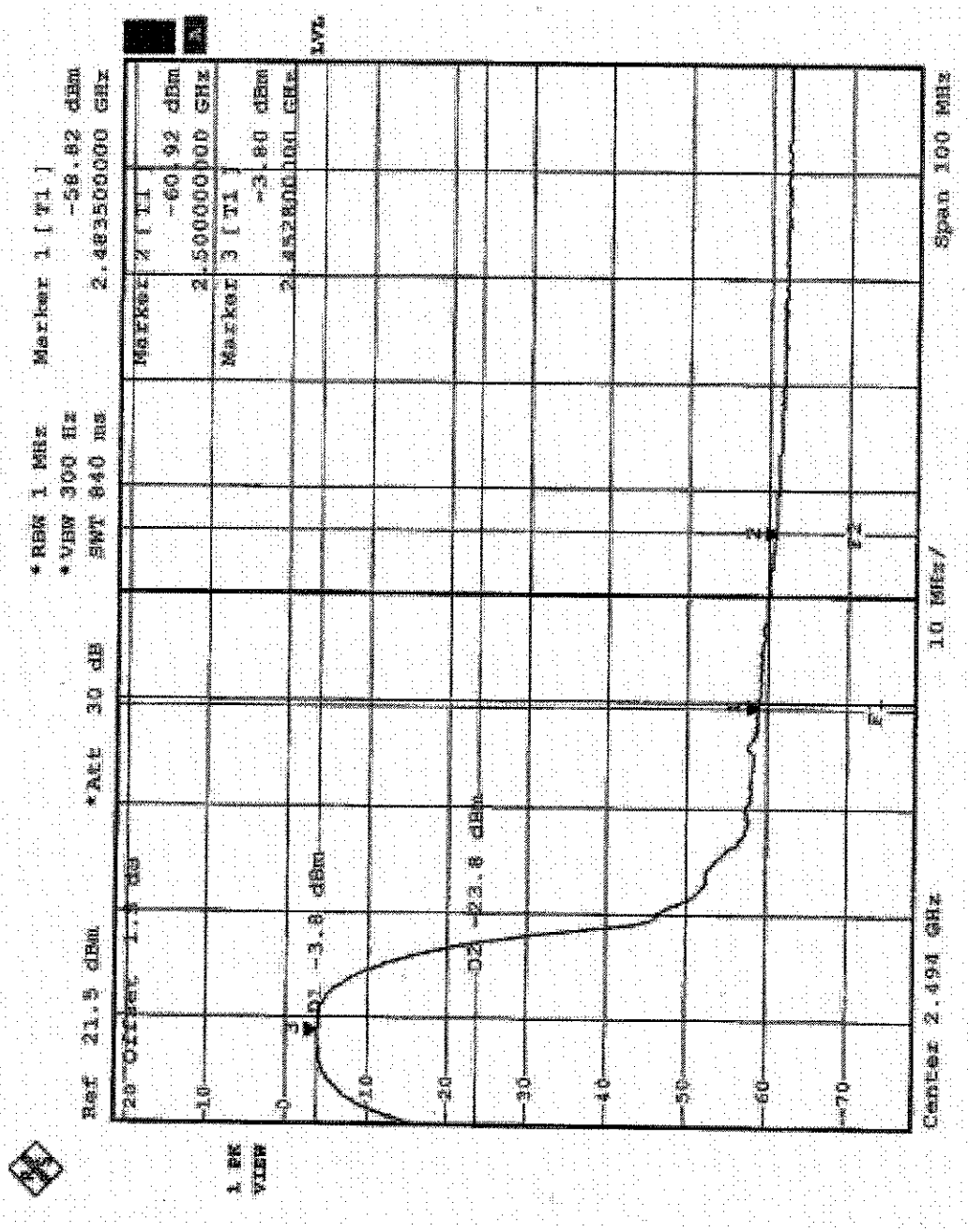
4.6.12 TEST RESULTS –DSSS (Antenna 7)

The spectrum plots are attached on the following 2 pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(C).

NOTE (1): The band edge emission plot on the following first page shows 54.27dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 107.60dBuV/m, so the maximum field strength in restrict band is 107.60-54.27=53.33dBuV/m which is under 54 dBuV/m limit.

NOTE (2): The band edge emission plot on the following second page shows 55.03 dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 108.20dBuV/m, so the maximum field strength in restrict band is 108.20-55.03=53.17dBuV/m which is under 54 dBuV/m limit.


*RBW 1 MHz
*VBW 300 Hz
SWT 840 ms
Marker 4 [T1]
-55.04 dBm
2.359800000 GHz
Ref 21.5 dBm
*Att 30 dB
Offset 1.5 dB
1 PK
VIEW
D1 -3.13 dBm
D2 -23.13 dBm
Marker 1 [T1]
-57.58 dBm
2.400000000 GHz
Marker 2 [T1]
-57.40 dBm
2.390000000 GHz
Marker 3 [T1]
-3.13 dBm
2.420400000 GHz
Center 2.381 GHz
10 MHz/
Span 100 MHz

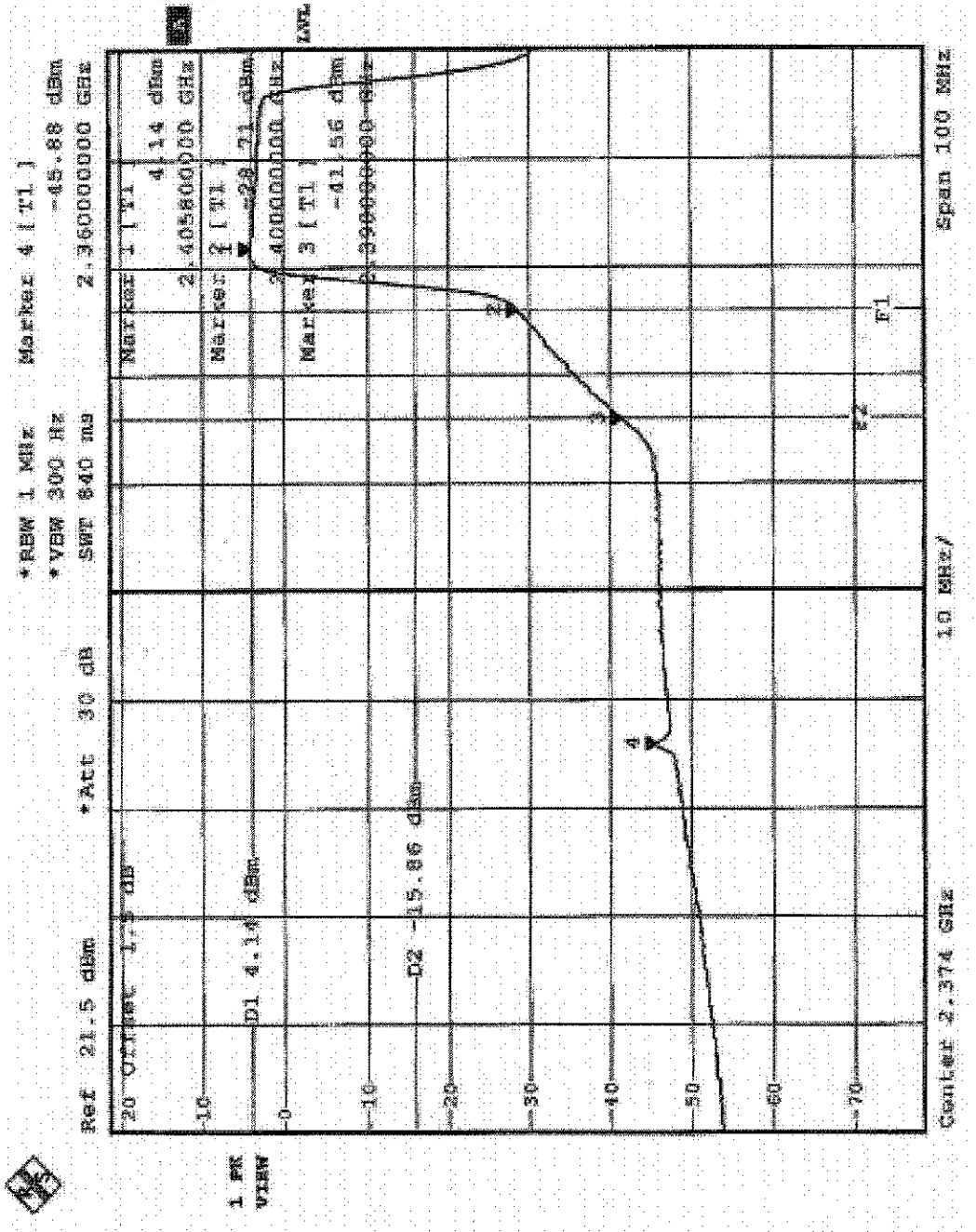

*RBW 1 MHz
*VBW 300 Hz
SWT 840 ms
Marker 1 [T1]
-58.82 dBm
2.483500000 GHz
Marker 2 [T1]
-60.92 dBm
2.500000000 GHz
Marker 3 [T1]
-3.80 dBm
2.452800000 GHz
Ref 21.9 dBm
Offset 1.1 dB
*Att 30 dB
D1 -3.8 dBm
D2 -23.8 dBm
Center 2.494 GHz
10 MHz/
Span 100 MHz
1 PK
VIEW

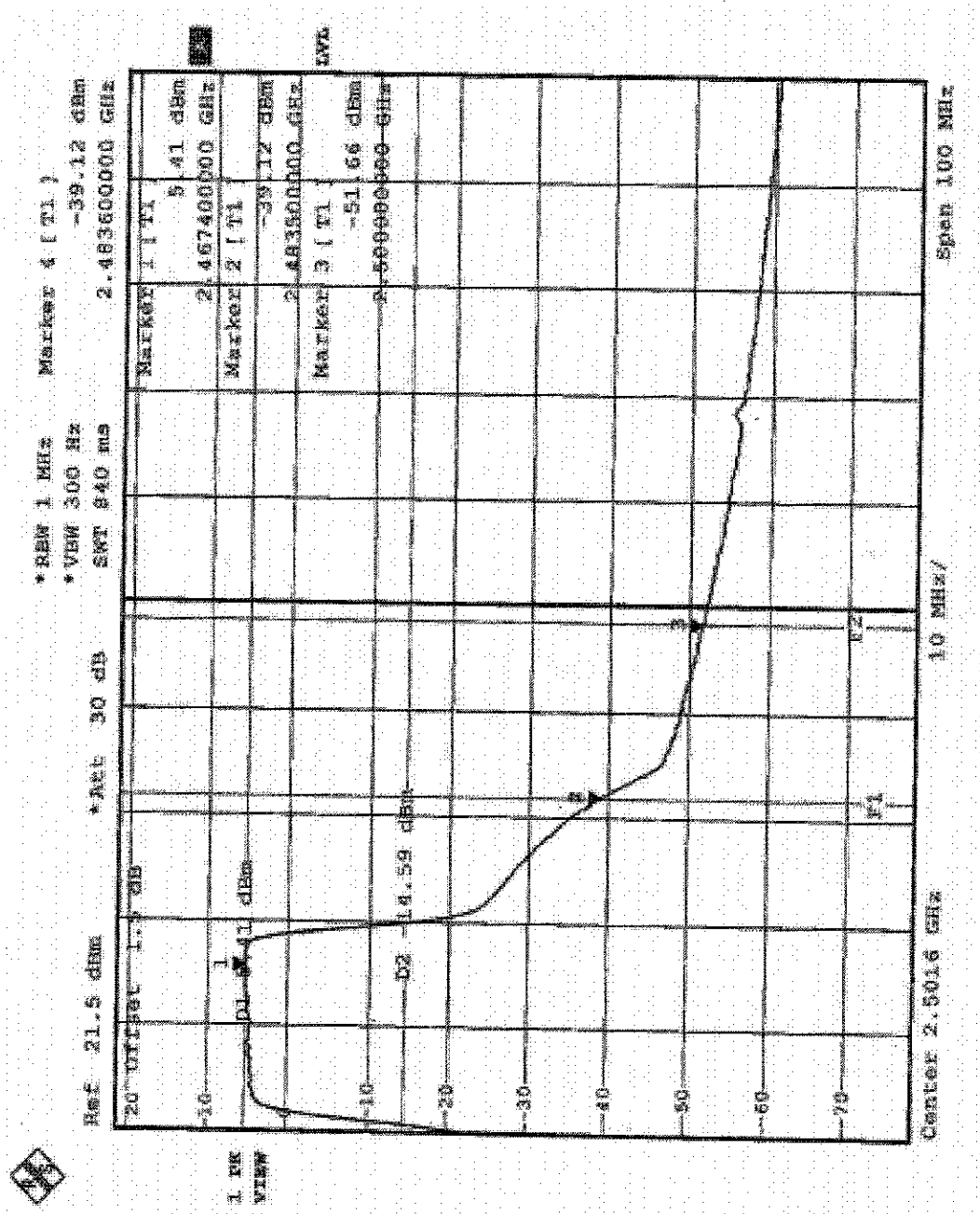
4.6.13 TEST RESULTS –OFDM (Antenna 1)

The spectrum plots are attached on the following 2 pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(C).

NOTE (1): The band edge emission plot on the following first page shows 45.70dB delta between carrier maximum power and local maximum emission in restrict band (2.390GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 98.50dBuV/m, so the maximum field strength in restrict band is 98.50-45.70=52.80dBuV/m which is under 54 dBuV/m limit.

NOTE (2): The band edge emission plot on the following second page shows 44.53 dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 98.00dBuV/m, so the maximum field strength in restrict band is 98.00-44.53=53.47 dBuV/m which is under 54 dBuV/m limit.


*RBW 1 MHz
*VBW 300 Hz
*Att 30 dB
SWT 640 ms
Marker 4 [T1]
-45.88 dBm
2.360000000 GHz
Ref 21.5 dBm
Offset 1.3 dB
D1 4.14 dBm
D2 -15.86 dBm
Marker 1 [T1]
4.14 dBm
2.405800000 GHz
Marker 2 [T1]
-28.21 dBm
Marker 3 [T1]
-41.56 dBm
Center 2.374 GHz
10 MHz/
Span 100 MHz
1 PK
VIEW

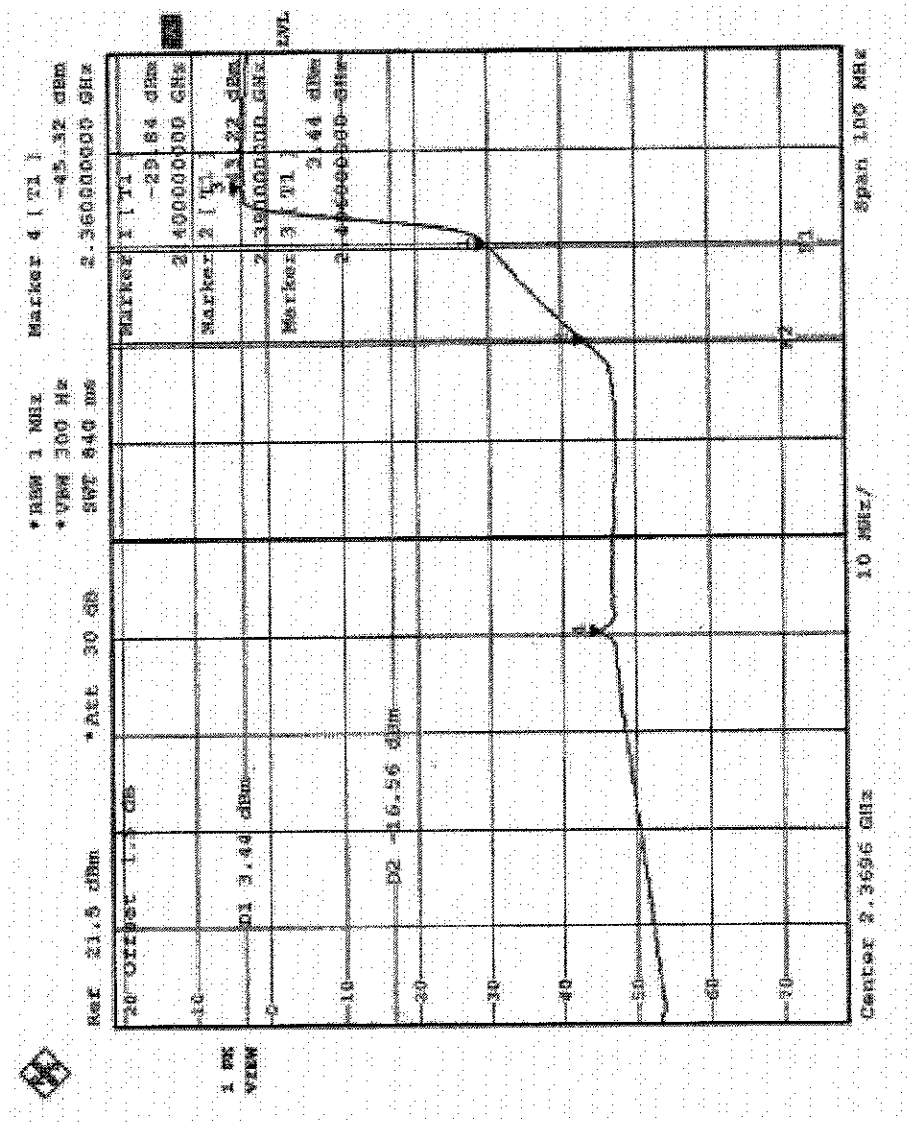

*RBW 1 MHz
*VBW 300 Hz
SWT 840 ms
Marker 4 [T1]
-39.12 dBm
2.483600000 GHz
*Att 30 dB
Ref 21.5 dBm
Offset 1.7 dB
1 RM
Clrw
Marker 1 [T1]
5.41 dBm
2.467400000 GHz
Marker 2 [T1]
-39.12 dBm
2.483600000 GHz
Marker 3 [T1]
-51.66 dBm
2.500000000 GHz
D1 11 dBm
D2 -8.59 dBm
F1
F2
Center 2.50116 GHz
10 MHz/
Span 100 MHz

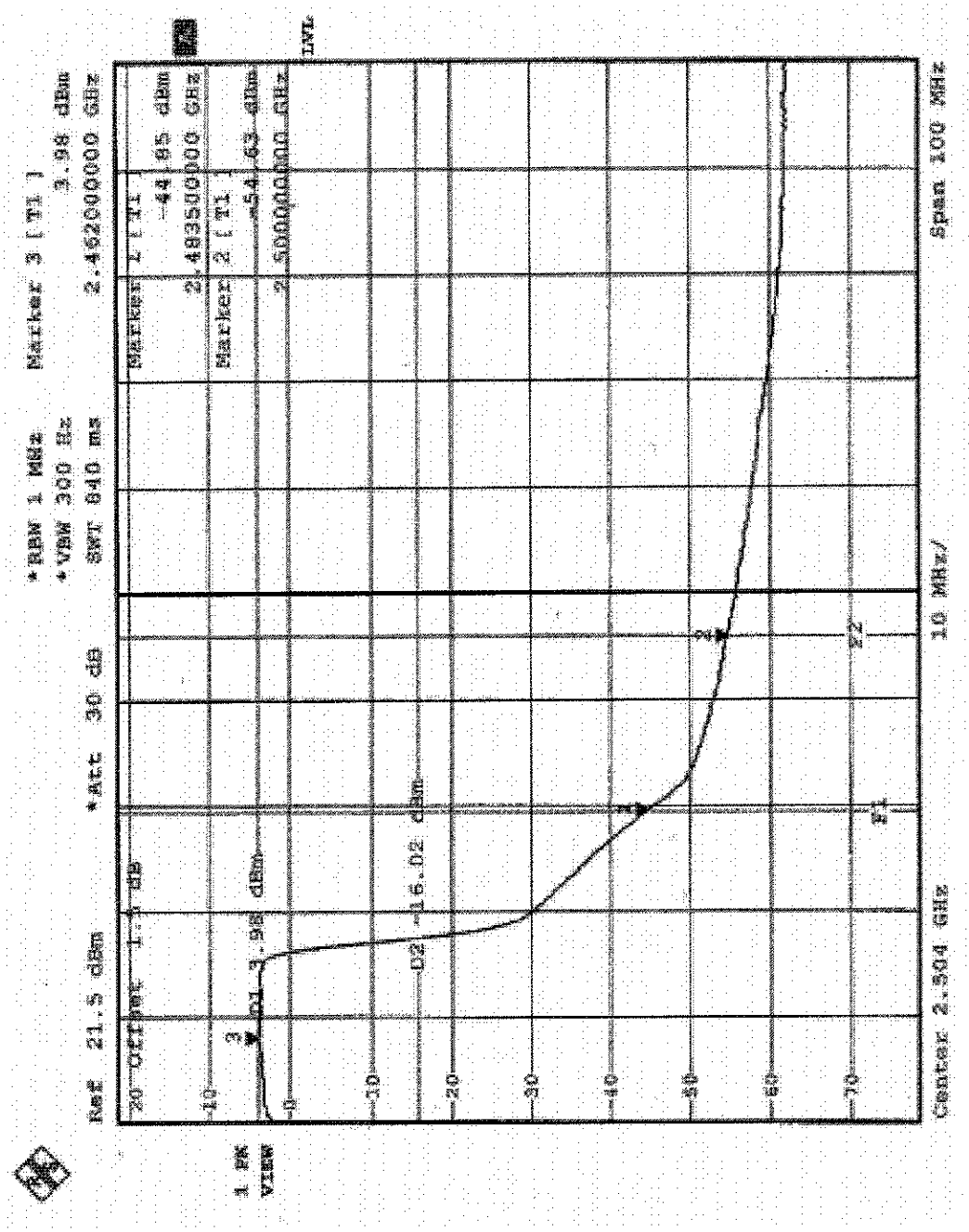
4.6.14 TEST RESULTS –OFDM (Antenna 2)

The spectrum plots are attached on the following 2 pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(C).

NOTE (1): The band edge emission plot on the following first page shows 46.66dB delta between carrier maximum power and local maximum emission in restrict band (2.390GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 98.20dBuV/m, so the maximum field strength in restrict band is 98.20-46.66=51.54dBuV/m which is under 54 dBuV/m limit.

NOTE (2): The band edge emission plot on the following second page shows 48.83 dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 100.20dBuV/m, so the maximum field strength in restrict band is 100.20-48.83=51.37 dBuV/m which is under 54 dBuV/m limit.


RBW 1 MHz
VBW 300 Hz
SWT 840 ms
Marker 4 [T1]
-45.32 dBm
2.360000000 GHz
Ref 21.5 dBm
Offset 1.7 dB
Att 30 dB
D1 3.44 dBm
D2 -16.56 dBm
Center 2.3696 GHz
10 MHz/
Span 100 MHz
Marker 1 [T1]
-29.84 dBm
2.400000000 GHz
Marker 2 [T1]
3.22 dBm
2.390000000 GHz
Marker 3 [T1]
3.44 dBm
2.400000000 GHz
MAXA
1 RM
VIEW

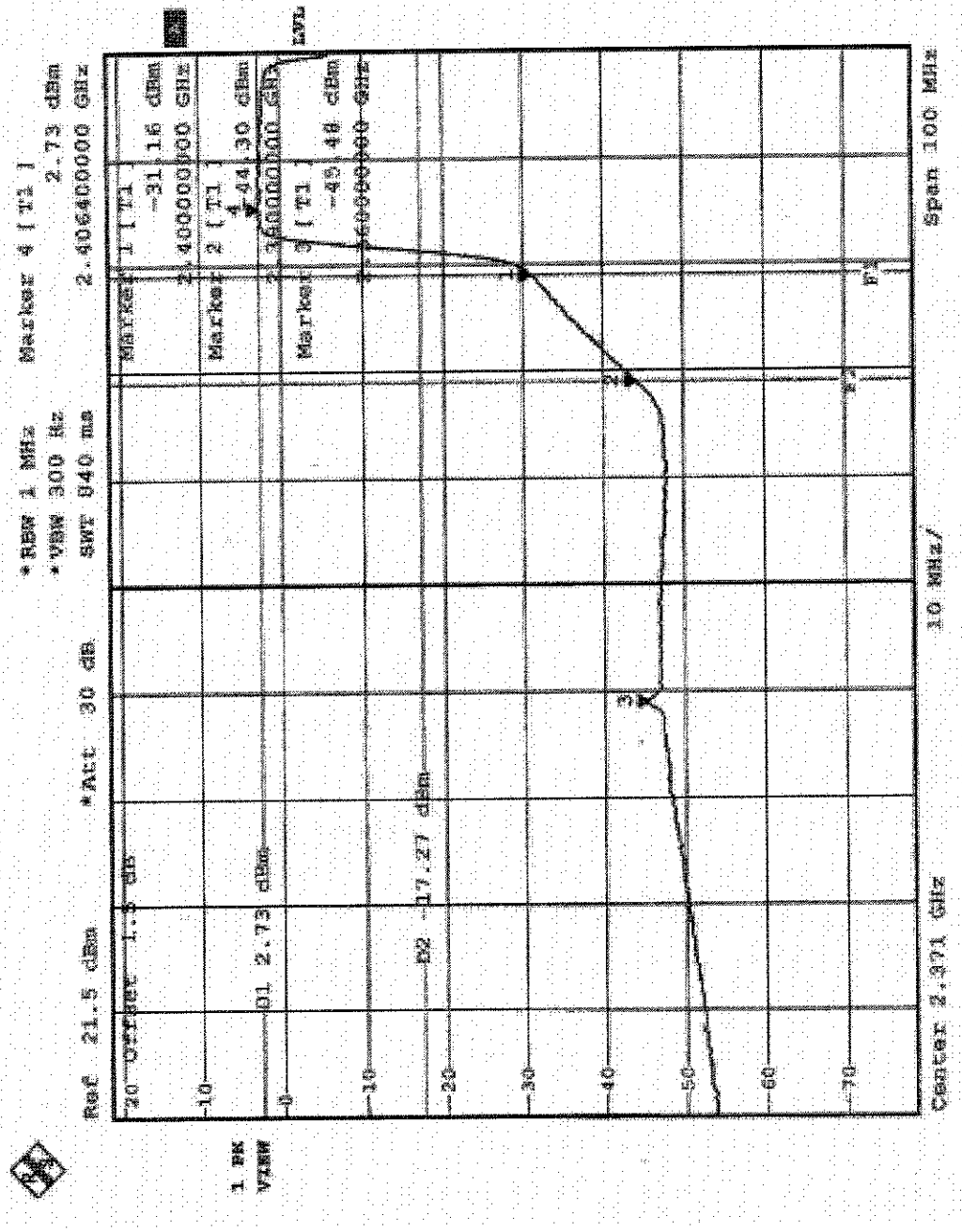

Ref 21.5 dBm
Offset 1.4 dB
*RBW 1 MHz
*VBW 300 Hz
*Att 30 dB
SWT 640 ms
Marker 3 [T1]
3.98 dBm
2.462000000 GHz
Marker 1 [T1]
-44.85 dBm
2.483500000 GHz
Marker 2 [T1]
-54.63 dBm
2.500000000 GHz
1 PK
VIEW
D1 3.98 dBm
D2 -16.02 dBm
Center 2.304 GHz
10 MHz/
Span 100 MHz

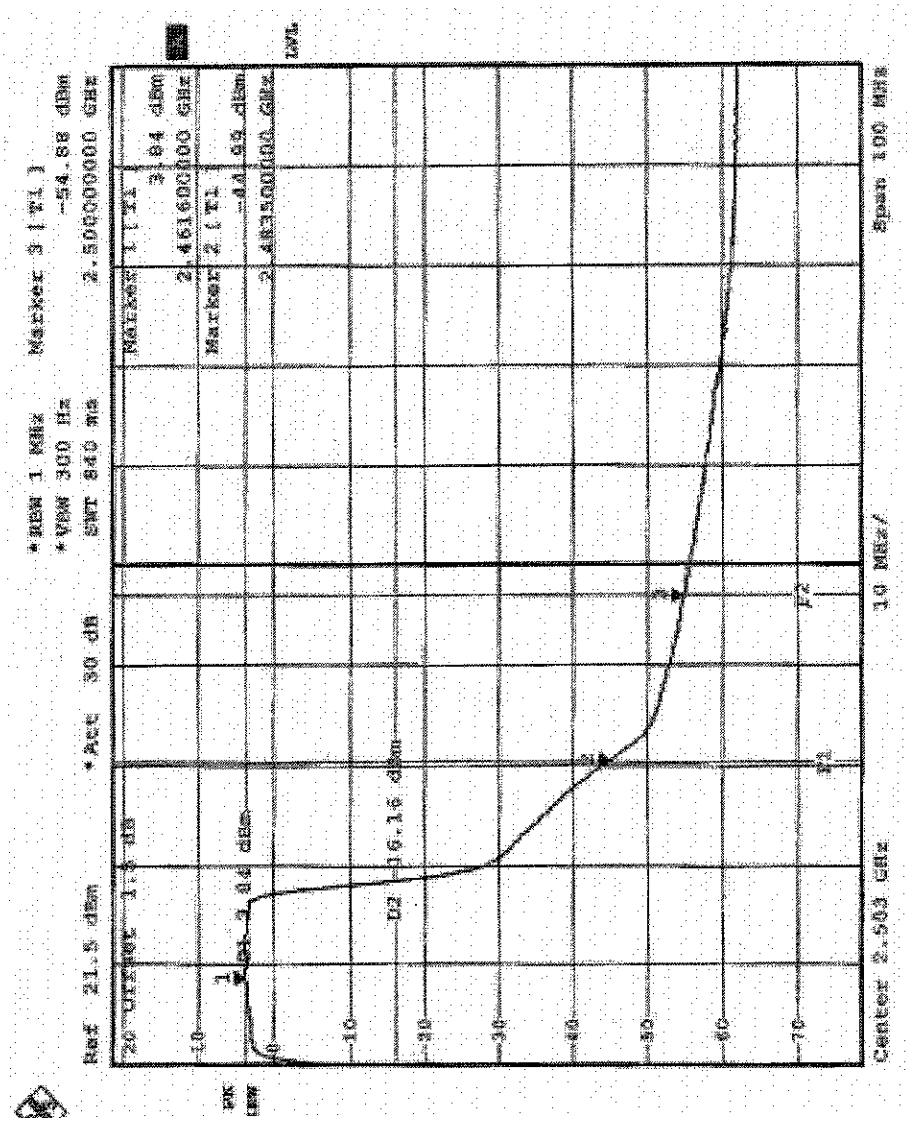
4.6.15 TEST RESULTS –OFDM (Antenna 3)

The spectrum plots are attached on the following 2 pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(C).

NOTE (1): The band edge emission plot on the following first page shows 47.03dB delta between carrier maximum power and local maximum emission in restrict band (2.390GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 98.50dBuV/m, so the maximum field strength in restrict band is 98.50-47.03=51.47dBuV/m which is under 54 dBuV/m limit.

NOTE (2): The band edge emission plot on the following second page shows 48.83 dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 98.90dBuV/m, so the maximum field strength in restrict band is 98.90-48.83=50.07 dBuV/m which is under 54 dBuV/m limit.


*RBW 1 MHz
*VBW 300 Hz
SWT 840 ms
Marker 4 [T1]
2.73 dBm
2.406400000 GHz
*Att 30 dB
Ref 21.5 dBm
Offset 1.5 dB
1 PK
VIEW
D1 2.73 dBm
D2 -17.27 dBm
Marker 1 [T1]
-31.16 dBm
2.400000000 GHz
Marker 2 [T1]
-44.30 dBm
2.360000000 GHz
Marker 3 [T1]
-45.48 dBm
2.440000000 GHz
Center 2.371 GHz
10 MHz/
Span 100 MHz

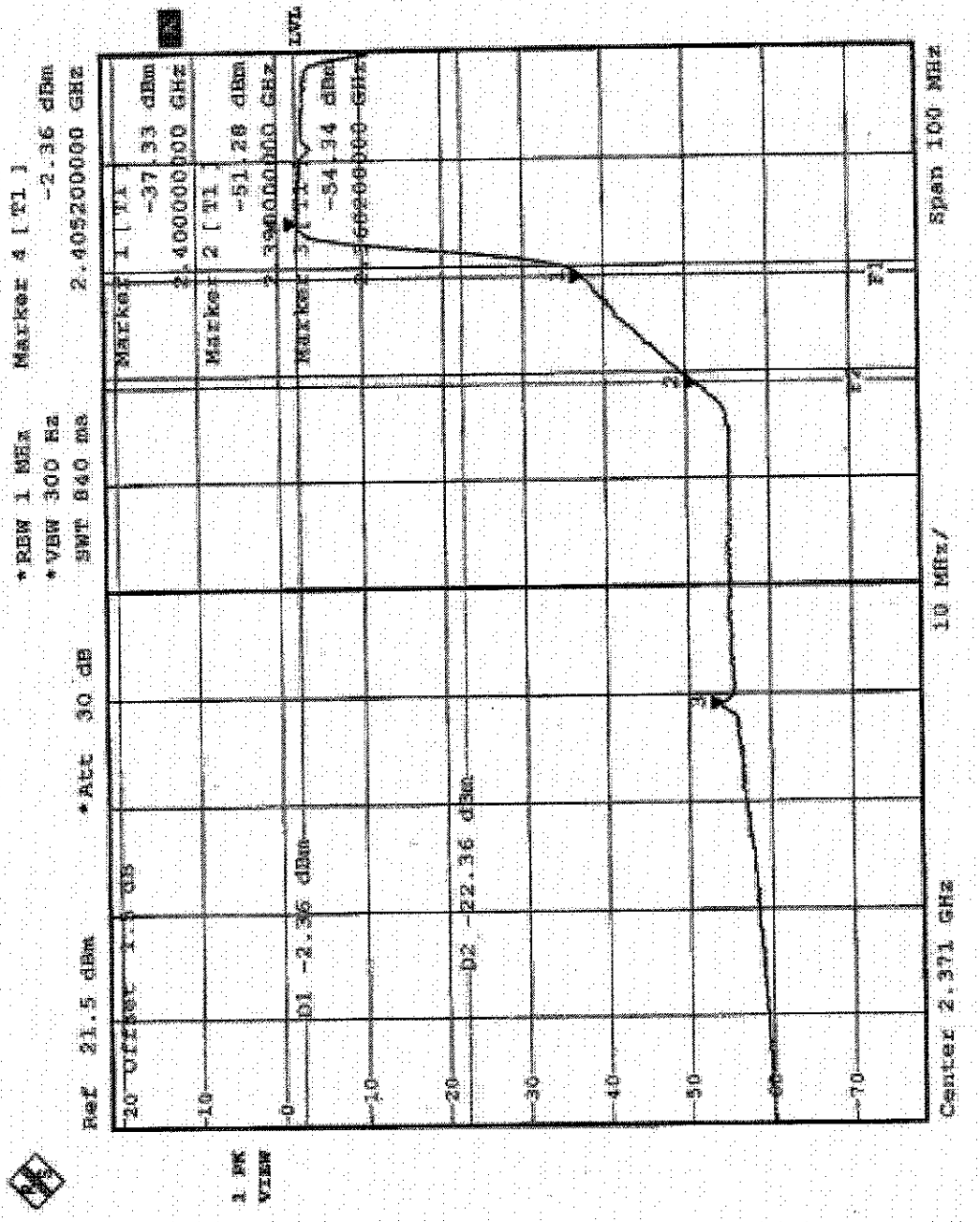

*RBW 1 MHz
*VBW 300 Hz
SWT 840 ms
Marker 3 [T1]
-54.88 dBm
2.500000000 GHz
Ref 21.5 dBm
*Att 30 dB
Offset 1.5 dB
D2 -16.16 dBm
Center 2.503 GHz
10 MHz/
Span 100 MHz

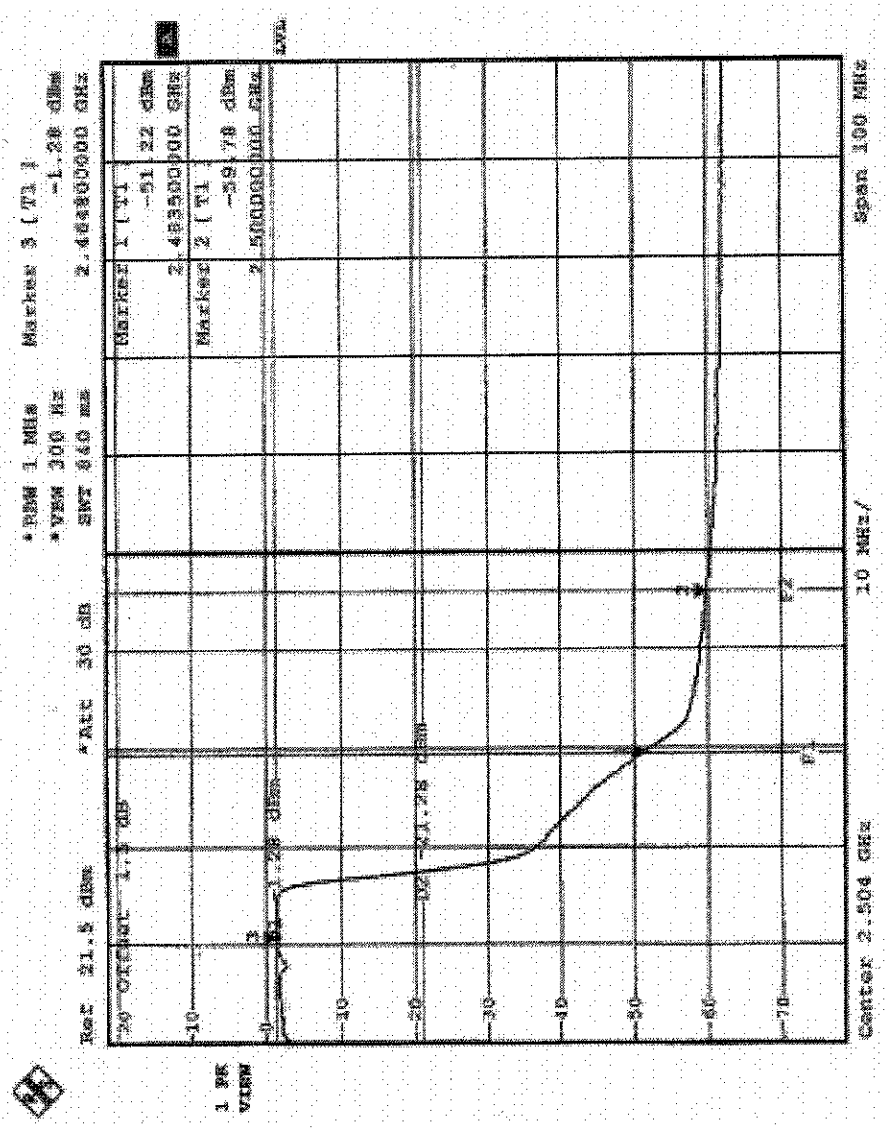
4.6.16 TEST RESULTS –OFDM (Antenna 4)

The spectrum plots are attached on the following 2 pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(C).

NOTE (1): The band edge emission plot on the following first page shows 48.92dB delta between carrier maximum power and local maximum emission in restrict band (2.390GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 100.20dBuV/m, so the maximum field strength in restrict band is 100.20-48.92=51.28dBuV/m which is under 54 dBuV/m limit.

NOTE (2): The band edge emission plot on the following second page shows 49.94 dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 101.50dBuV/m, so the maximum field strength in restrict band is 101.50-49.94=51.56 dBuV/m which is under 54 dBuV/m limit.


*RBW 1 MHz
*VBW 300 Hz
SWT 840 ms
Marker 4 [T1]
-2.36 dBm
2.405200000 GHz
*Att 30 dB
Ref 21.5 dBm
Offset 1.1 dB
D1 -2.36 dBm
D2 -22.36 dBm
Marker 1 [T1]
-37.33 dBm
2.400000000 GHz
Marker 2 [T1]
-51.28 dBm
2.390000000 GHz
Marker 3 [T1]
-54.34 dBm
2.483500000 GHz
3 PK
VIEW
Center 2.371 GHz
10 MHz/
Span 100 MHz


*RBW 1 MHz
*VBW 300 Hz
SWT 640 ms
*Att 30 dB
Ref 21.5 dBm
Offset 1.7 dB
Marker 1 [T1]
-51.22 dBm
2.483300000 GHz
Marker 2 [T1]
-39.78 dBm
2.500000000 GHz
Center 2.504 GHz
10 MHz/
Span 100 MHz