

4.6 BAND EDGES MEASUREMENT

4.6.1 LIMITS OF BAND EDGES MEASUREMENT

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

4.6.2 TEST INSTRUMENTS

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

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

4.6.3 TEST PROCEDURE

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

The spectrum plots (Peak RBW=VBW=100kHz; Average RBW=1MHz, VBW=10Hz) are attached on the following pages.

4.6.4 DEVIATION FROM TEST STANDARD

No deviation.

4.6.5 EUT OPERATING CONDITION

Same as Item 4.3.6.

4.6.6 TEST RESULTS

The spectrum plots are attached on the following 18 images. D2 line indicates the highest level, and D1 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(d).

DSSS technique

The band edge emission plot of DSSS technique on following 1st image shows 55.38dB between carrier maximum power and local maximum emission in restrict band (2.3601GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 115.80dBuV/m (Peak), so the maximum field strength in restrict band is $115.80 - 55.38 = 60.42$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of DSSS technique on following 2nd image shows 57.24dB between carrier maximum power and local maximum emission in restrict band (2.3870GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 107.49dBuV/m (Average), so the maximum field strength in restrict band is $107.49 - 57.24 = 50.25$ dBuV/m which is under 54dBuV/m limit.

The band edge emission plot of DSSS technique on following 4st image shows 50.92dB between carrier maximum power and local maximum emission in restrict band (2.4855GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 117.14dBuV/m (Peak), so the maximum field strength in restrict band is $117.14 - 50.92 = 66.22$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of DSSS technique on following 5nd image shows 56.70dB between carrier maximum power and local maximum emission in restrict band (2.4873GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 108.14dBuV/m (Average), so the maximum field strength in restrict band is $108.14 - 56.70 = 51.44$ dBuV/m which is under 54dBuV/m limit.

OFDM technique (Normal mode)

The band edge emission plot of OFDM technique with Normal mode on following 7th image shows 48.97dB delta between carrier maximum power and local maximum emission in restrict band (2.3898GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 111.24dBuV/m (Peak), so the maximum field strength in restrict band is $111.24 - 48.97 = 62.27$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of OFDM technique with Normal mode on following 8th image shows 48.87dB 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 4.2.7 is 101.30dBuV/m (Average), so the maximum field strength in restrict band is $101.30 - 48.87 = 52.43$ dBuV/m which is under 54dBuV/m limit.

The band edge emission plot of OFDM technique with Normal mode on following 10th image shows 50.73dB delta between carrier maximum power and local maximum emission in restrict band (2.4837GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 114.28dBuV/m (Peak), so the maximum field strength in restrict band is $114.28 - 50.73 = 63.55$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of OFDM technique with Normal mode on following 11th image shows 51.28dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 103.59dBuV/m (Average), so the maximum field strength in restrict band is $103.59 - 51.28 = 52.31$ dBuV/m which is under 54dBuV/m limit.

OFDM technique (Turbo mode)

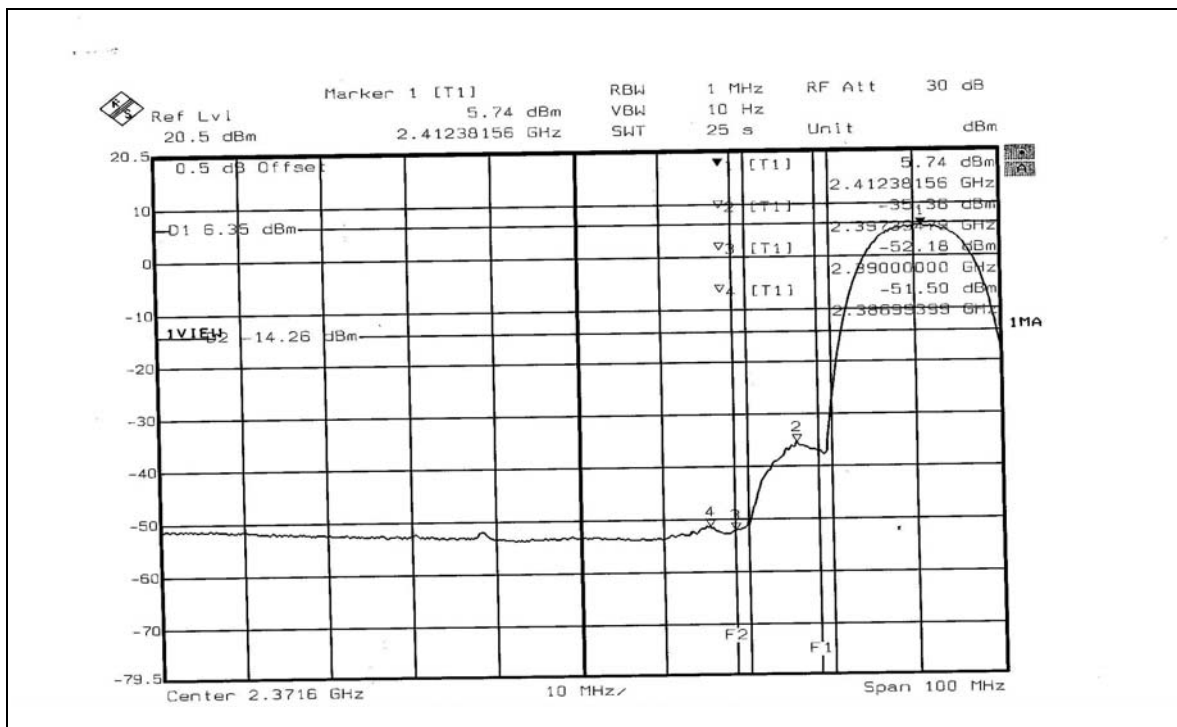
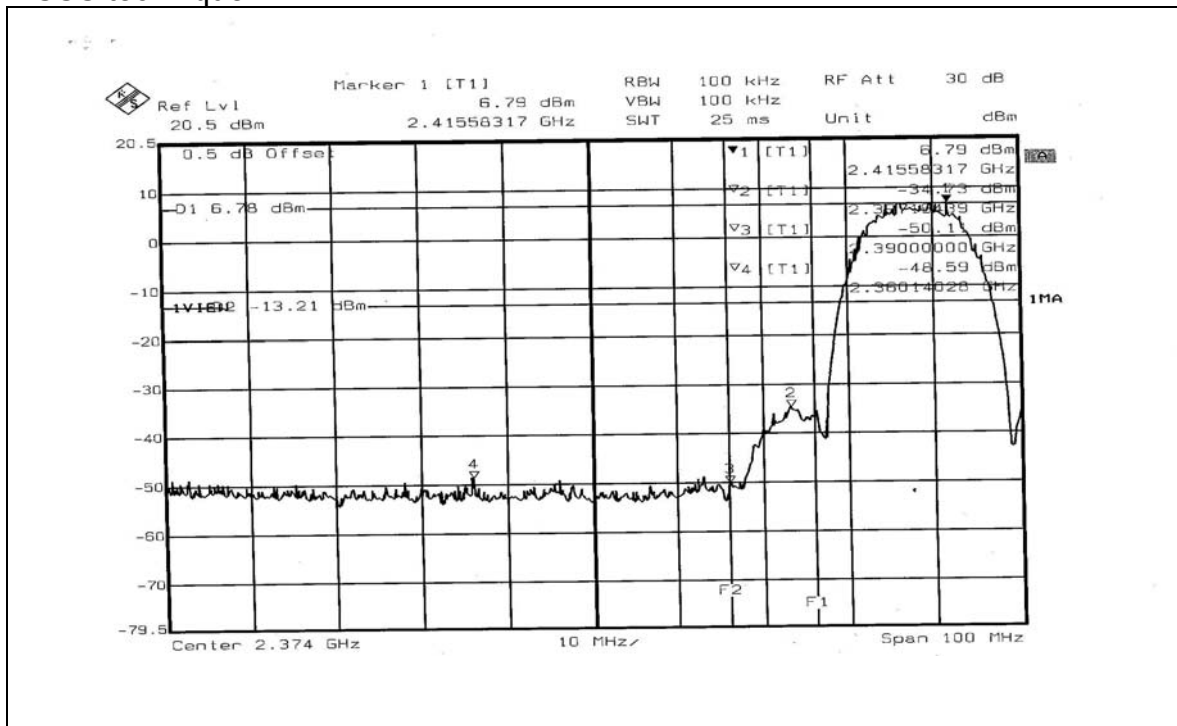
The band edge emission plot of OFDM technique with Turbo mode on following 13th image shows 48.94dB delta between carrier maximum power and local maximum emission in restrict band (2.3599GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 110.14dBuV/m (Peak), so the maximum field strength in restrict band is $110.14 - 48.94 = 61.20$ dBuV/m which is under 74dBuV/m limit.

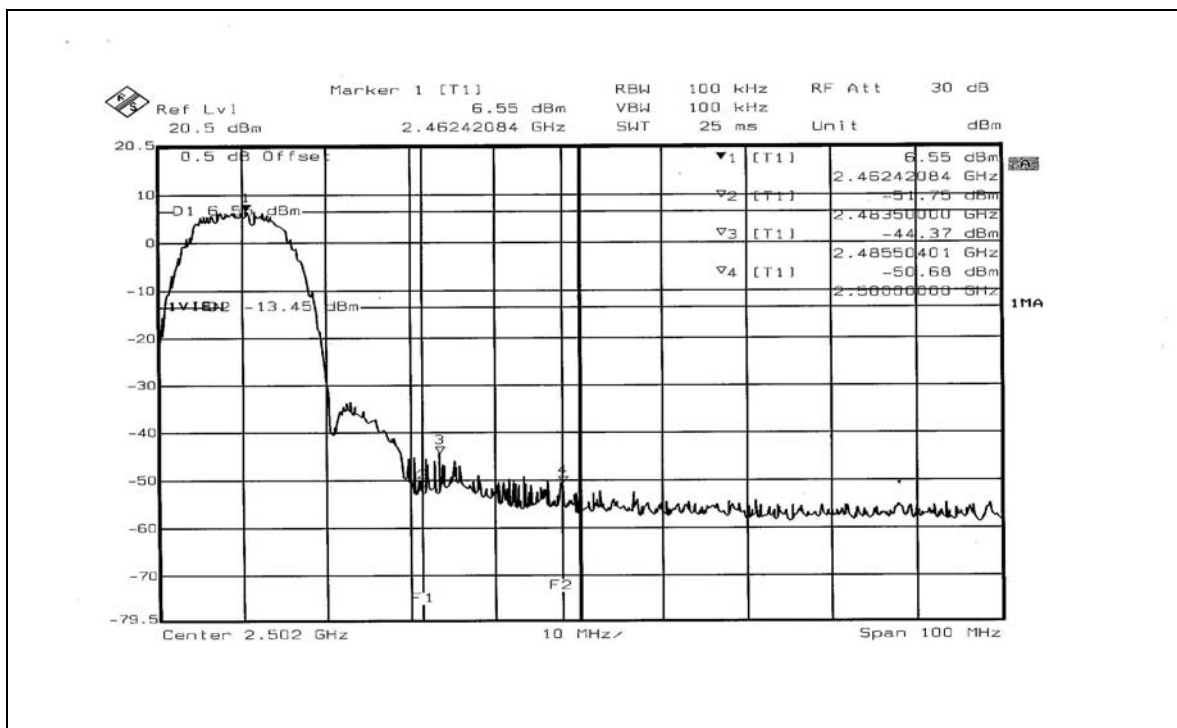
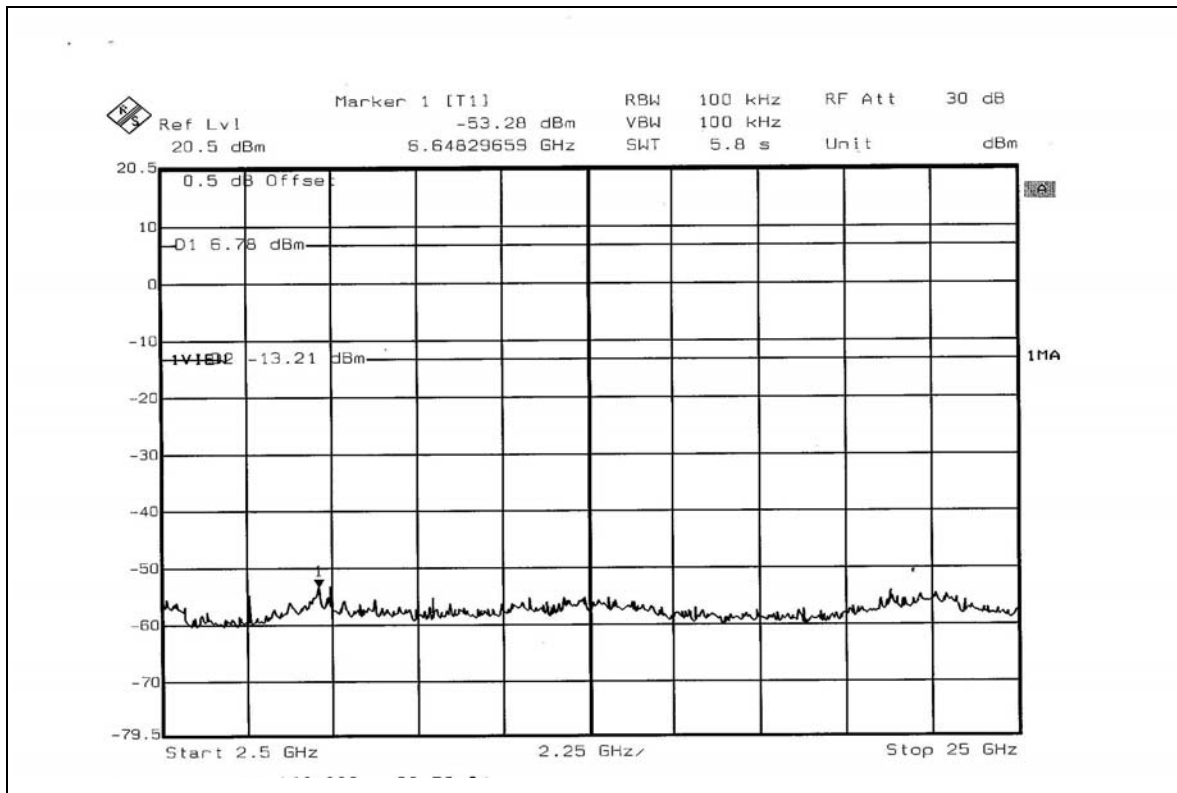
The band edge emission plot of OFDM technique with Turbo mode on following 14th image shows 47.41dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 99.20dBuV/m (Average), so the maximum field strength in restrict band is $99.20 - 47.41 = 51.79$ dBuV/m which is under 54dBuV/m limit.

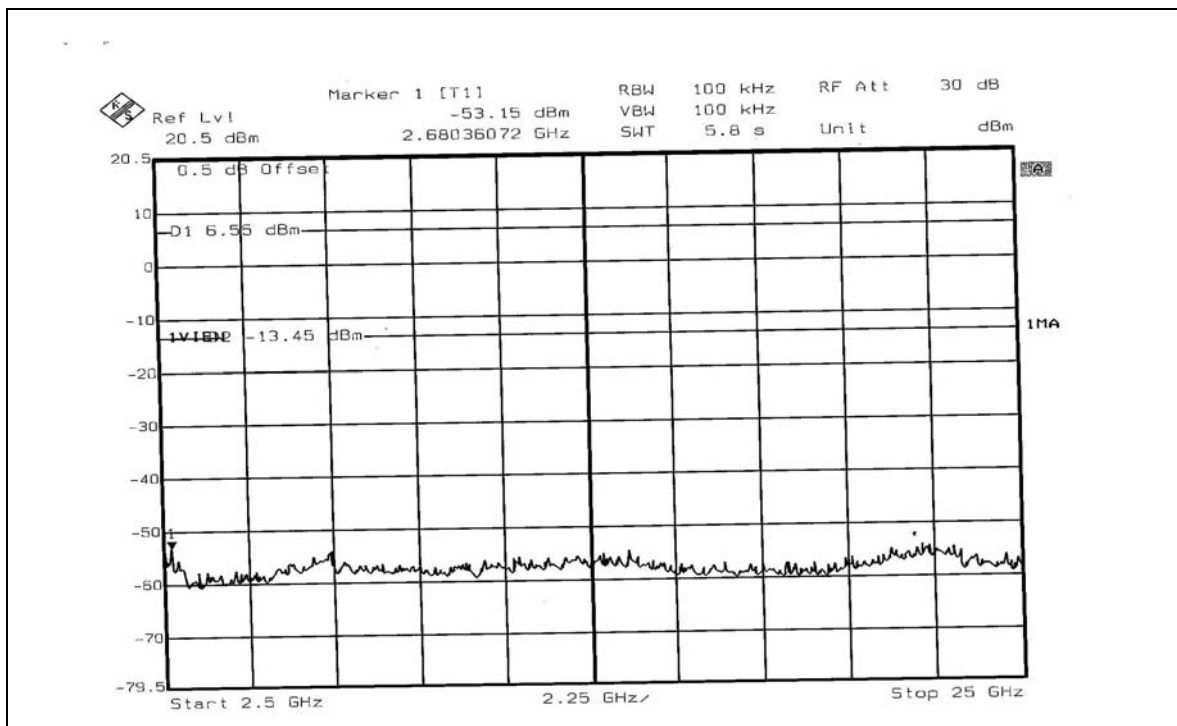
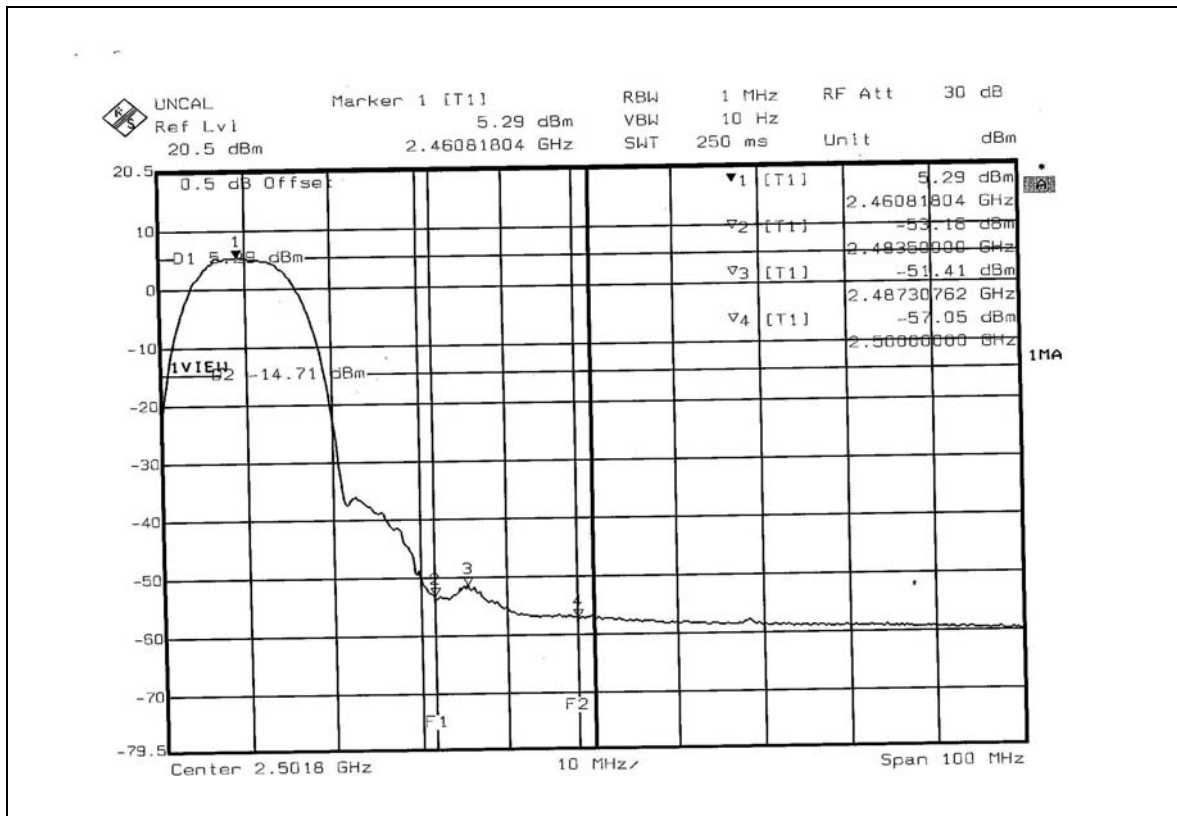
The band edge emission plot of OFDM technique with Turbo mode on following 16th image shows 55.35dB delta between carrier maximum power and local maximum emission in restrict band (2.4847GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.7 is 110.14dBuV/m (Peak), so the maximum field strength in restrict band is $110.14 - 55.35 = 54.79$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of OFDM technique with Turbo mode on following 17th image shows 54.04dB 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 6 at the item 4.2.7 is 99.20dBuV/m (Average), so the maximum field strength in restrict band is $99.20 - 54.04 = 45.16$ dBuV/m which is under 54dBuV/m limit.

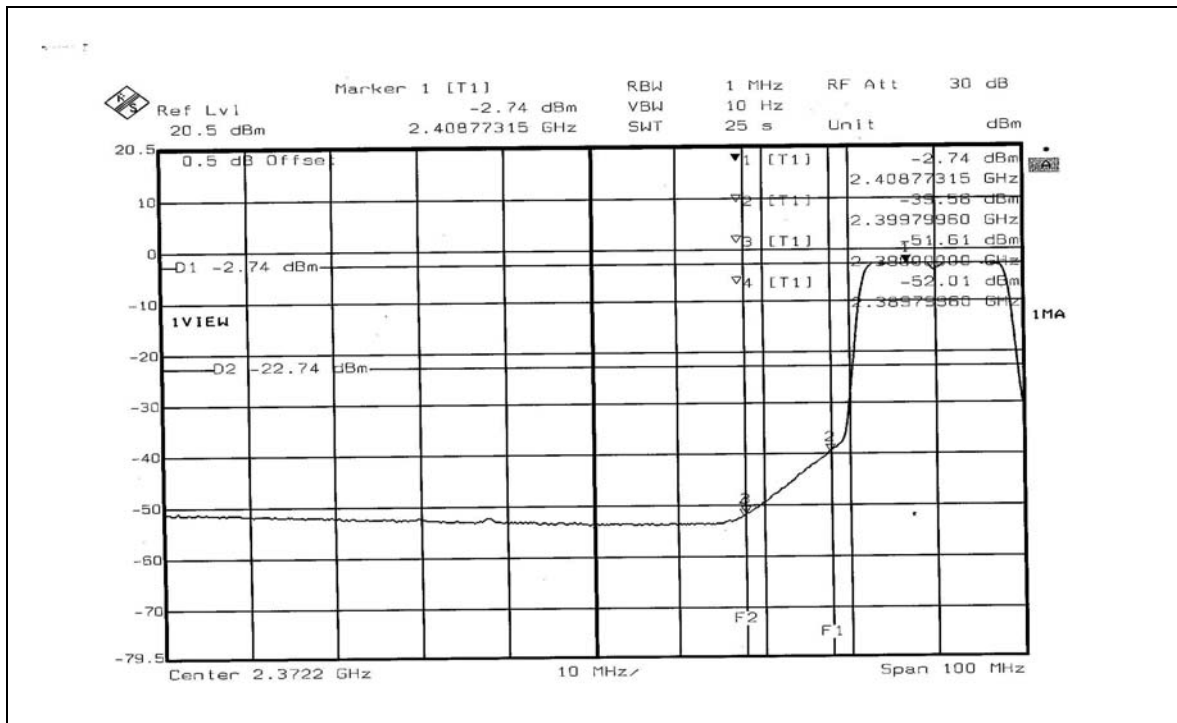
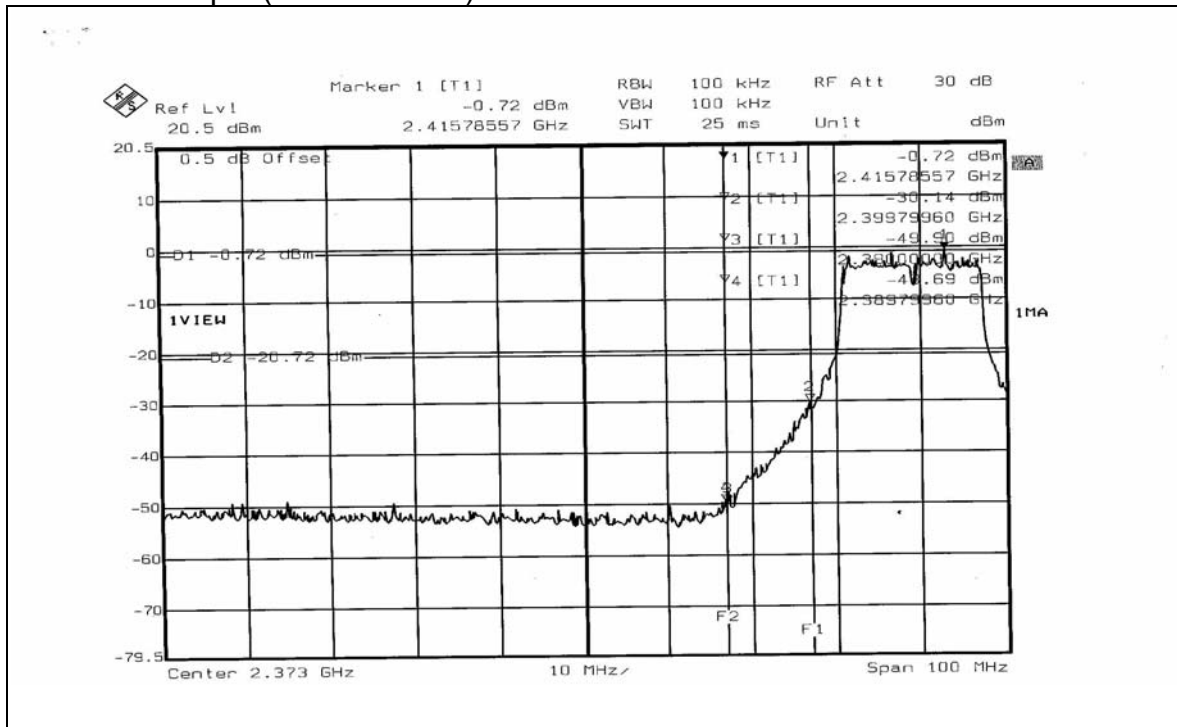
DSSS technique

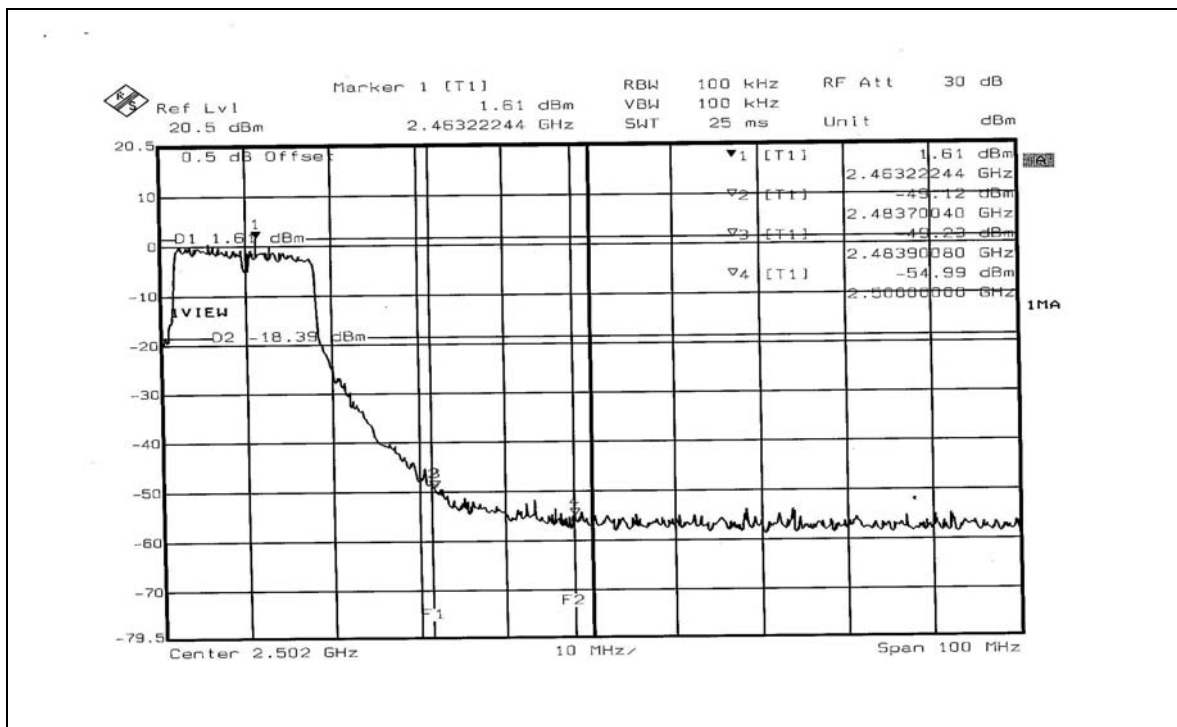
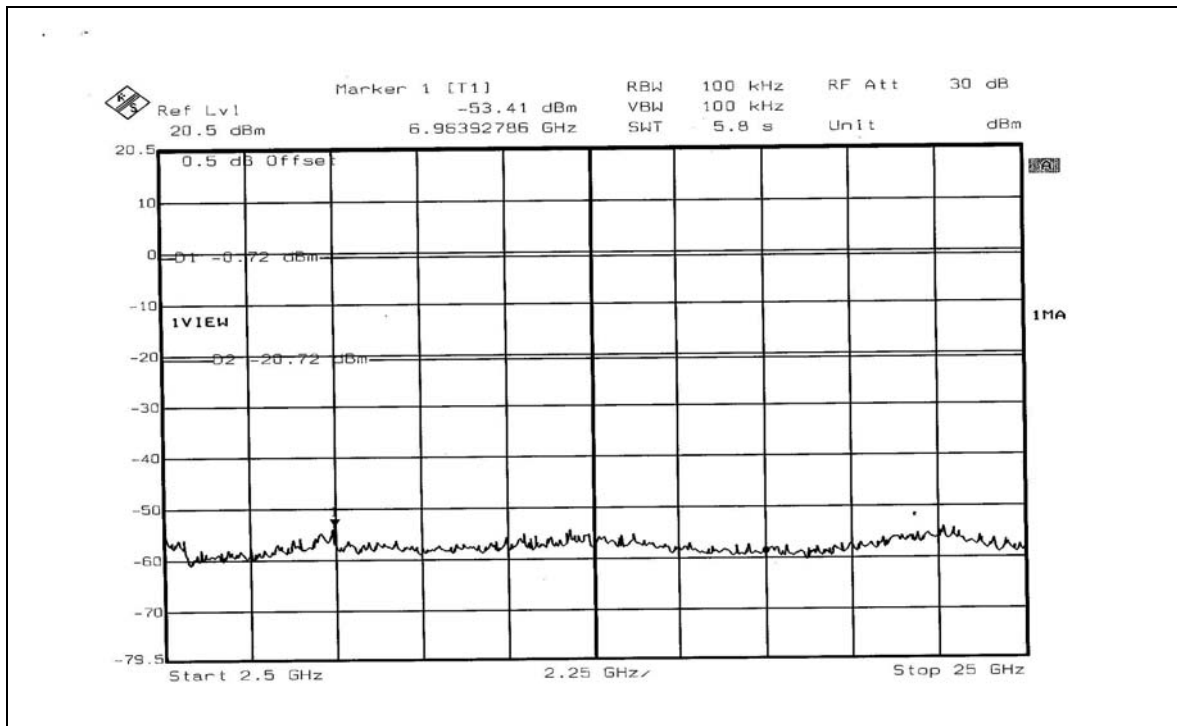


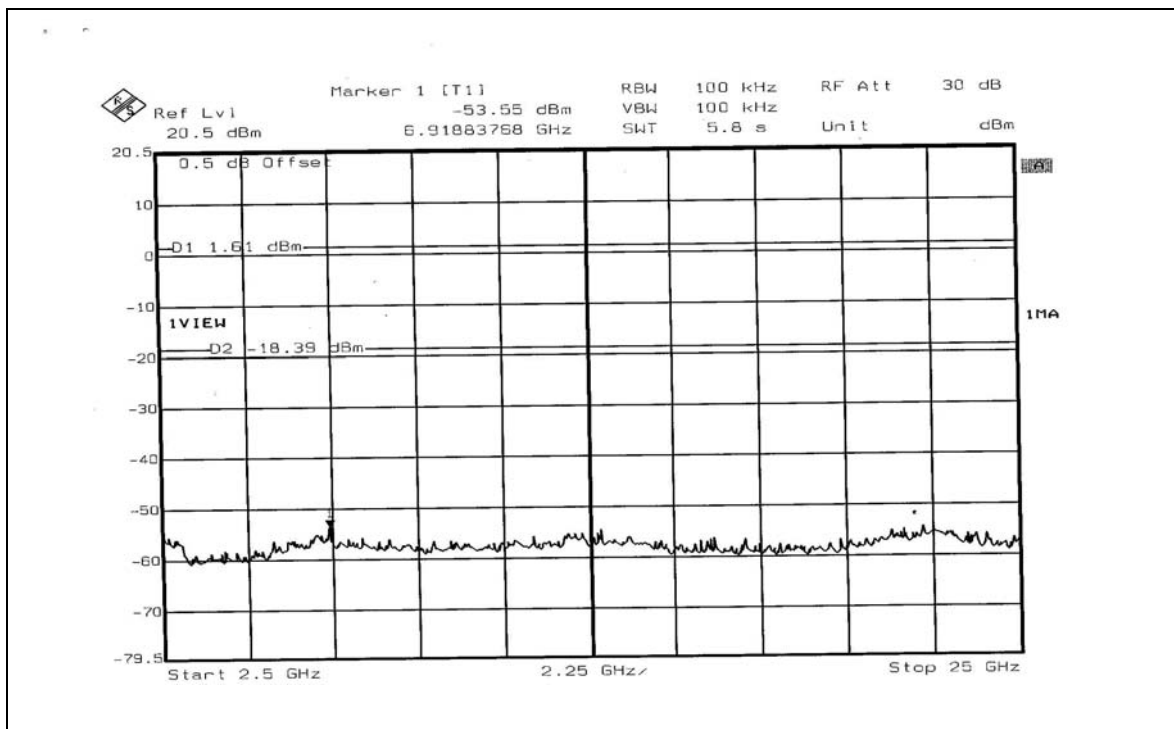




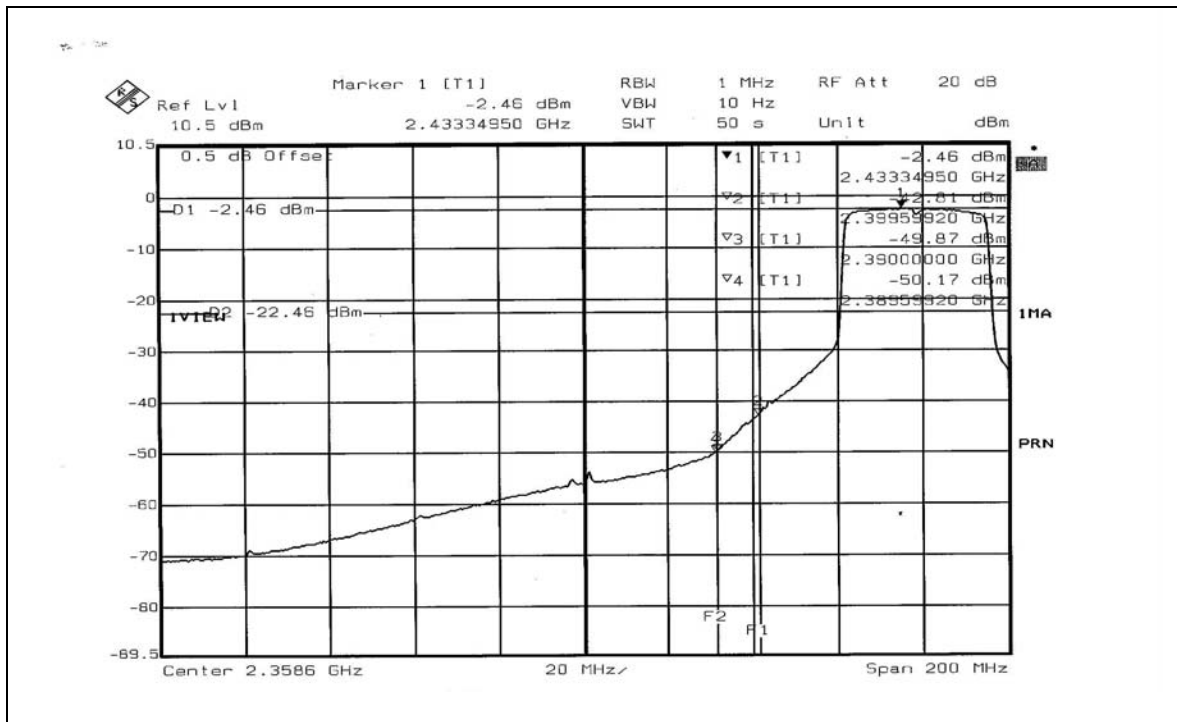
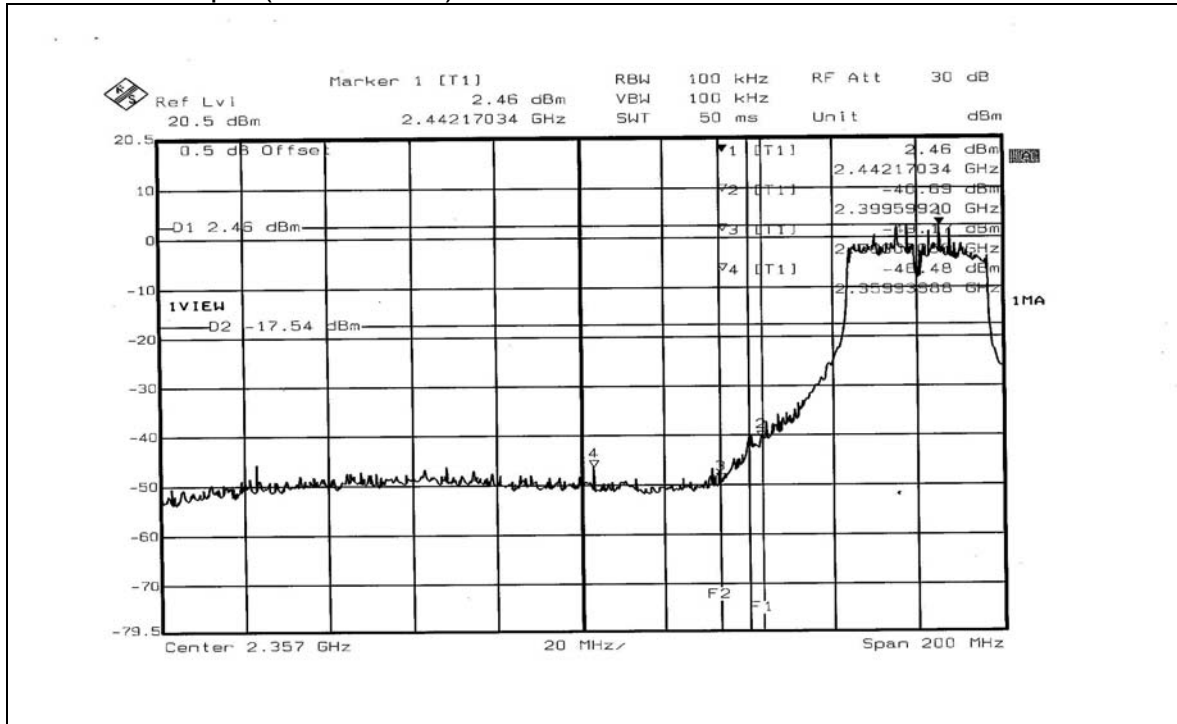
OFDM technique (Normal mode)

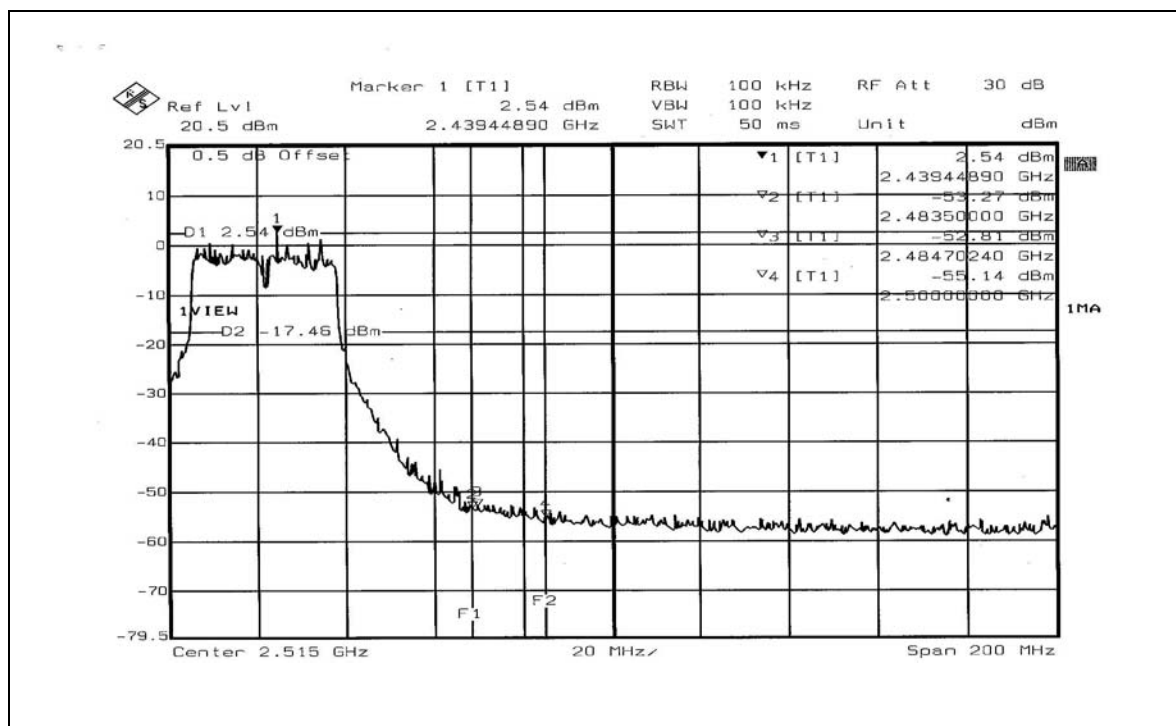
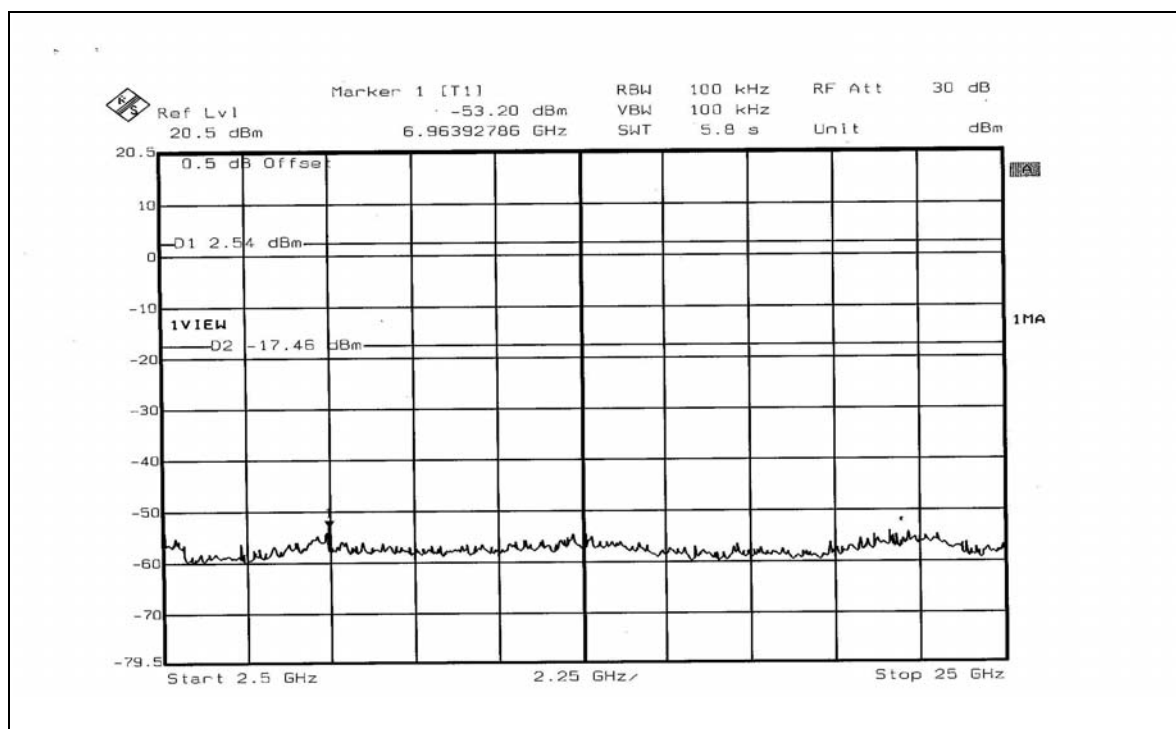


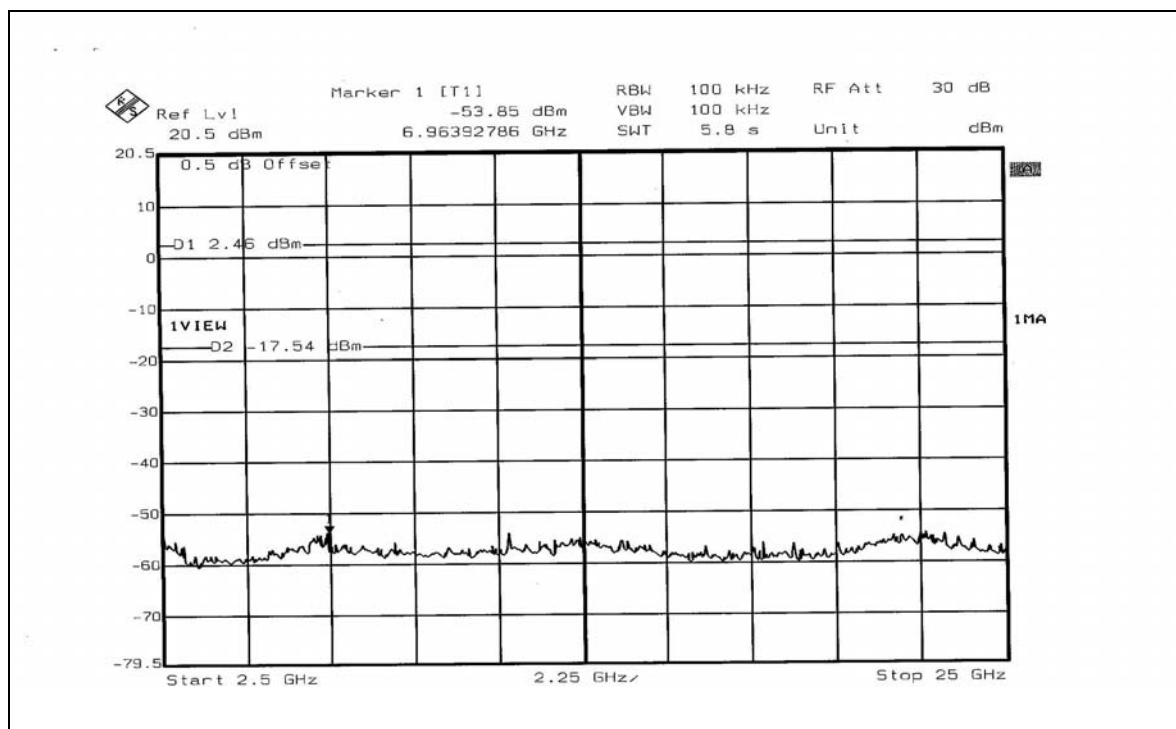
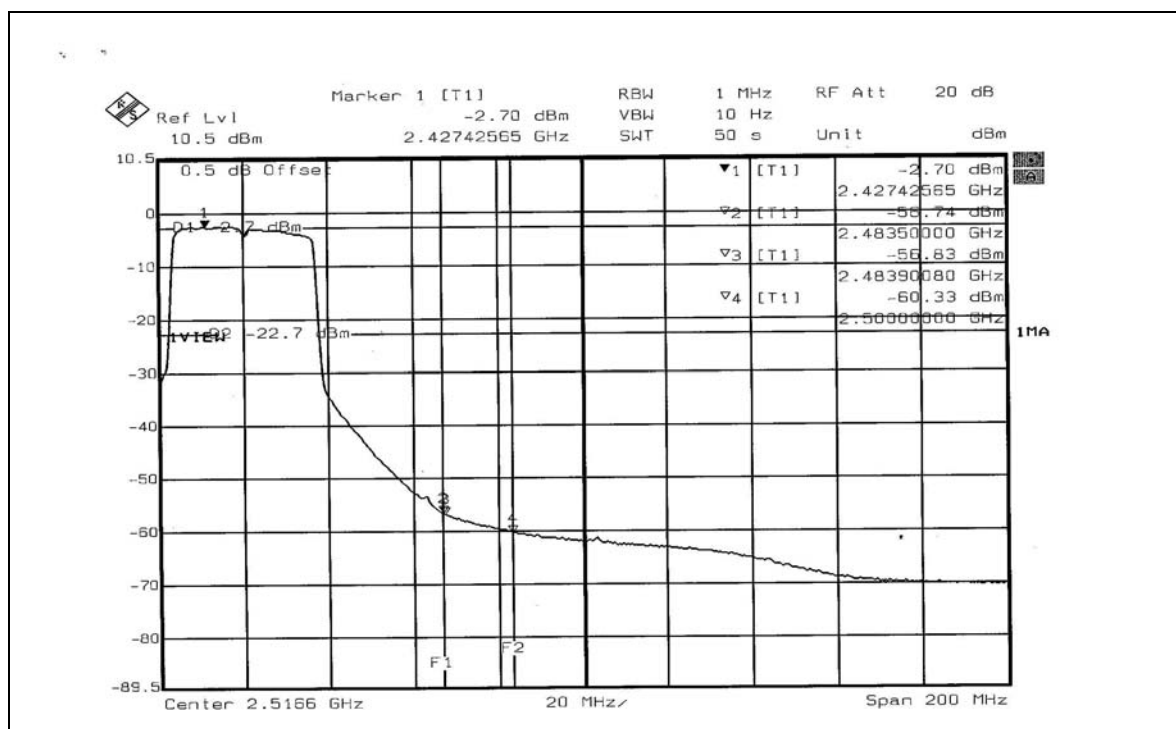




OFDM technique (Turbo mode)









4.7 ANTENNA REQUIREMENT

4.7.1 STANDARD APPLICABLE

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

4.7.2 ANTENNA CONNECTED CONSTRUCTION

The antenna used in this product is dipole antenna with UFL connector. The maximum Gain of the antenna is 2dBi.

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

FOR FREQUENCY 5.15~5.35GHZ

5.1 CONDUCTED EMISSION MEASUREMENT

5.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

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

5.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESCS30	100288	Nov. 06, 2005
RF signal cable Woken	5D-FB	Cable-HyC02-01	Mar. 07, 2005
LISN ROHDE & SCHWARZ	ESH2-Z5	100100	Mar. 10, 2005
LISN ROHDE & SCHWARZ	ESH3-Z5	100311	Mar. 04, 2005
Software ADT	ADT_Cond_V3	NA	NA

- NOTE:**
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 2. The test was performed in HwaYa Shielded Room 2.
 3. The VCCI Site Registration No. is C-2047.

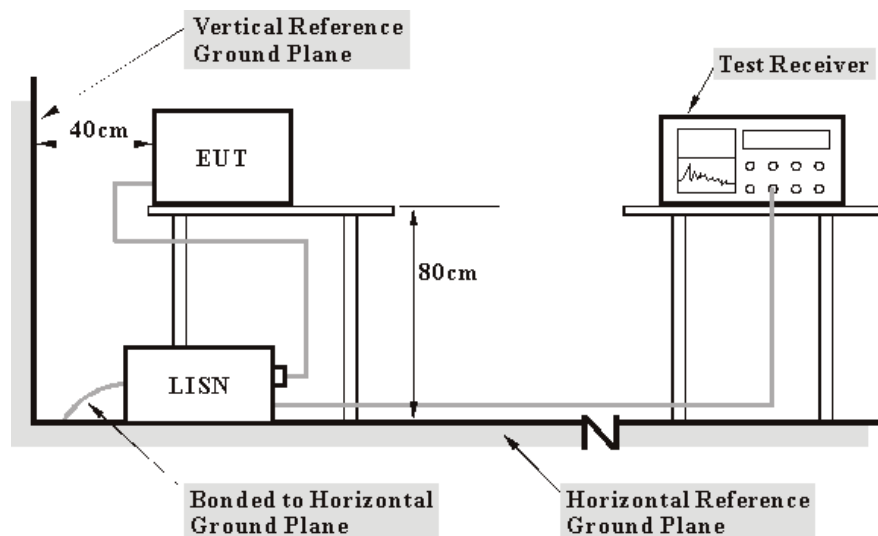
5.1.3 TEST PROCEDURES

- 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.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

5.1.4 DEVIATION FROM TEST STANDARD

No deviation

5.1.5 TEST SETUP



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

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

5.1.6 EUT OPERATING CONDITIONS

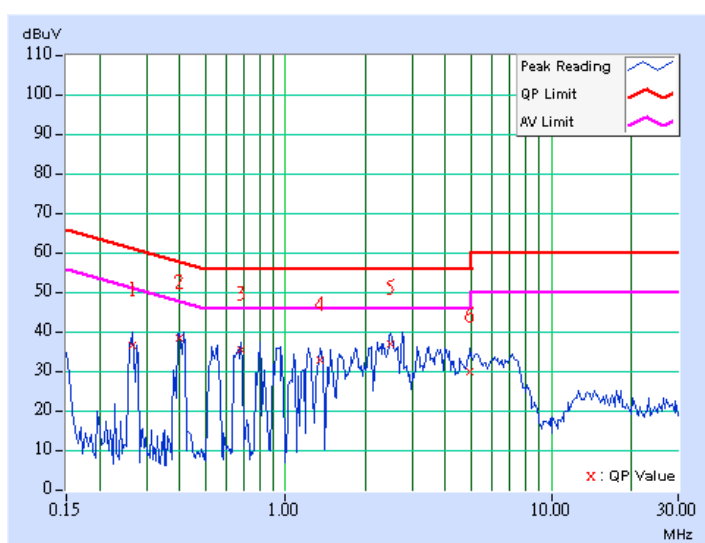
Same as 4.1.6.

5.1.7 TEST RESULTS

EUT	Dual-Band Wireless A+G Router	MODEL	F6D3230-4
INPUT POWER (SYSTEM)	120Vac, 60 Hz	6dB BANDWIDTH	9 kHz
ENVIRONMENTAL CONDITIONS	24 deg. C, 64% RH, 991 hPa	PHASE	Line (L)
TESTED BY	Leo Hung		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.267	0.10	36.39	-	36.49	-	61.20	51.20	-24.71	-
2	0.400	0.11	38.11	-	38.22	-	57.85	47.85	-19.63	-
3	0.681	0.18	35.02	-	35.20	-	56.00	46.00	-20.80	-
4	1.352	0.25	32.78	-	33.03	-	56.00	46.00	-22.97	-
5	2.488	0.27	36.72	-	36.99	-	56.00	46.00	-19.01	-
6	4.953	0.35	29.49	-	29.84	-	56.00	46.00	-26.16	-

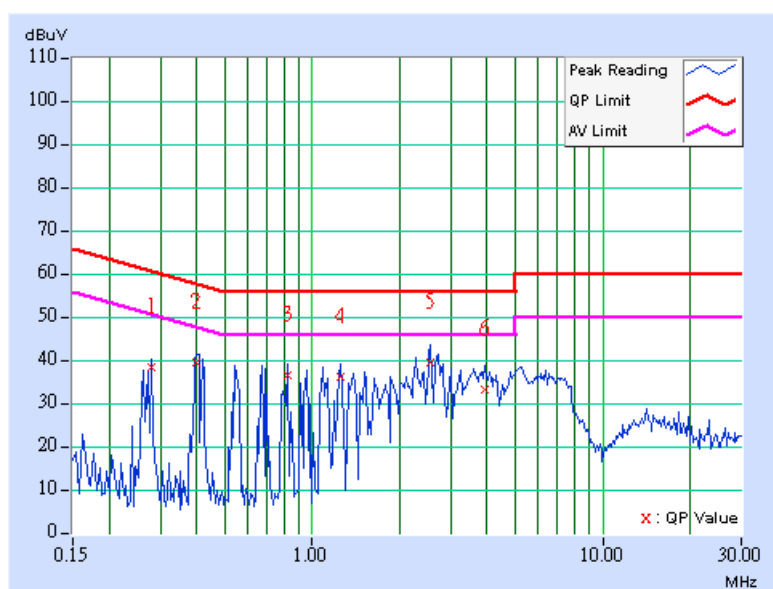
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value =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



EUT	Dual-Band Wireless A+G Router	MODEL	F6D3230-4
INPUT POWER (SYSTEM)	120Vac, 60 Hz	6dB BANDWIDTH	9 kHz
ENVIRONMENTAL CONDITIONS	24 deg. C, 64% RH, 991 hPa	PHASE	Neutral (N)
TESTED BY	Leo Hung		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.279	0.11	38.34	-	38.45	-	60.85	50.85	-22.40	-
2	0.400	0.11	39.24	-	39.35	-	57.85	47.85	-18.50	-
3	0.822	0.20	36.54	-	36.74	-	56.00	46.00	-19.26	-
4	1.254	0.24	36.00	-	36.24	-	56.00	46.00	-19.76	-
5	2.555	0.26	39.49	-	39.75	-	56.00	46.00	-16.25	-
6	3.910	0.30	33.13	-	33.43	-	56.00	46.00	-22.57	-

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



5.2 RADIATED EMISSION MEASUREMENT

5.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

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

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

NOTE:

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

5.2.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

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

NOTE:

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

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



5.2.3 TEST INSTRUMENTS

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

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

5.2.4 TEST PROCEDURES

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

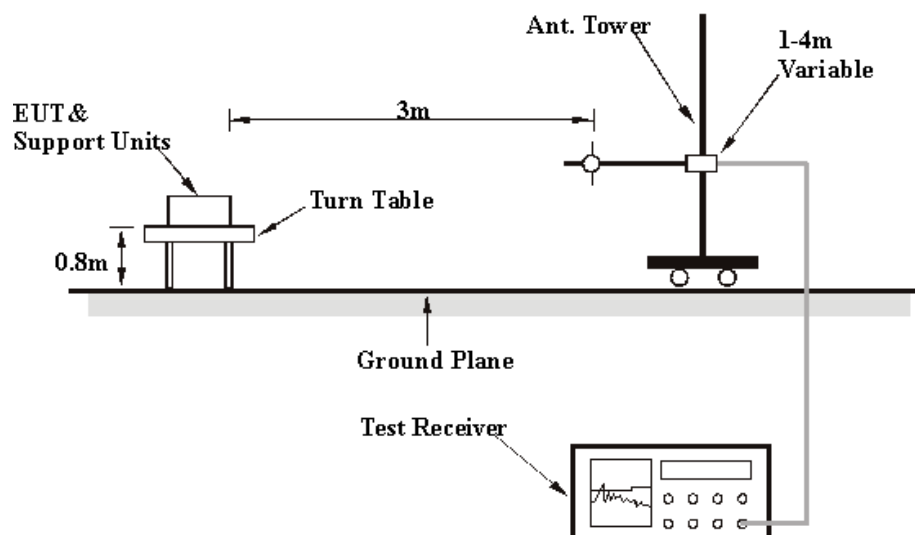
NOTE:

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

5.2.5 DEVIATION FROM TEST STANDARD

No deviation.

5.2.6 TEST SETUP



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

5.2.7 EUT OPERATING CONDITIONS

Same as 4.1.6.

5.2.8 TEST RESULTS

EUT	Dual-Band Wireless A+G Router	MODEL	F6D3230-4
CHANNEL	Channel 5	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	22 deg. C, 60% RH, 991 hPa	TESTED BY	Match Tsui

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	59.16	27.99 QP	40.00	-12.01	2.00 H	214	14.20	13.79
2	105.81	30.05 QP	43.50	-13.45	1.50 H	55	18.48	11.58
3	146.63	33.92 QP	43.50	-9.58	2.00 H	268	19.35	14.58
4	199.12	29.91 QP	43.50	-13.59	1.50 H	40	18.45	11.46
5	249.66	43.21 QP	46.00	-2.79	1.00 H	10	30.00	13.22
6	300.20	28.11 QP	46.00	-17.89	1.00 H	7	13.61	14.50
7	348.80	31.47 QP	46.00	-14.53	1.00 H	13	15.84	15.62
8	399.34	32.92 QP	46.00	-13.08	1.00 H	10	16.18	16.74
9	479.04	33.45 QP	46.00	-12.55	1.50 H	19	15.00	18.45
10	550.96	31.00 QP	46.00	-15.00	2.00 H	19	11.29	19.72
11	599.56	36.48 QP	46.00	-9.52	1.00 H	178	15.48	21.00
12	650.10	28.83 QP	46.00	-17.17	2.00 H	10	7.15	21.68
13	681.20	31.19 QP	46.00	-14.81	2.00 H	13	9.12	22.07
14	751.18	33.06 QP	46.00	-12.94	1.00 H	37	9.52	23.54
15	799.78	31.28 QP	46.00	-14.72	1.00 H	166	7.46	23.82
16	875.59	31.45 QP	46.00	-14.55	1.50 H	52	6.79	24.66

- 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	Dual-Band Wireless A+G Router	MODEL	F6D3230-4
CHANNEL	Channel 5	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	22 deg. C, 60% RH, 991 hPa	TESTED BY	Match Tsui

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	48.12	38.56 QP	40.00	-1.44	1.00 V	223	23.63	14.93
2	86.37	33.87 QP	40.00	-6.13	1.00 V	316	23.76	10.12
3	146.63	37.73 QP	43.50	-5.77	1.00 V	325	23.15	14.58
4	199.12	32.05 QP	43.50	-11.45	1.00 V	331	20.60	11.46
5	249.66	44.64 QP	46.00	-1.36	1.00 V	319	31.42	13.22
6	329.36	33.75 QP	46.00	-12.25	1.50 V	286	18.57	15.18
7	399.34	31.09 QP	46.00	-14.91	1.00 V	229	14.36	16.74
8	440.16	29.07 QP	46.00	-16.93	1.00 V	46	11.26	17.81
9	500.42	30.02 QP	46.00	-15.98	1.50 V	310	11.28	18.74
10	550.96	35.08 QP	46.00	-10.92	1.00 V	94	15.36	19.72
11	599.56	36.38 QP	46.00	-9.62	1.00 V	82	15.38	21.00
12	650.10	30.79 QP	46.00	-15.21	1.00 V	286	9.11	21.68
13	681.20	32.12 QP	46.00	-13.88	1.00 V	259	10.06	22.07
14	751.18	33.94 QP	46.00	-12.06	1.00 V	16	10.40	23.54
15	875.59	33.12 QP	46.00	-12.88	1.00 V	304	8.46	24.66
16	990.28	37.97 QP	54.00	-16.03	1.00 V	280	12.20	25.77

REMARKS:

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

EUT	Dual-Band Wireless A+G Router	MODEL	F6D3230-4
MODE	Normal Mode	CHANNEL	1
FREQUENCY RANGE	1 ~ 40 GHz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60% RH, 991 hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3453.00	48.25 PK	68.30	-20.05	1.11 H	20	12.67	35.58
2	#5150.00	51.21 PK	74.00	-22.79	1.00 H	280	12.11	39.10
2	#5150.00	40.52 AV	54.00	-13.48	1.00 H	280	1.42	39.10
3	*5180.00	101.78 PK			1.00 H	280	62.61	39.17
3	*5180.00	90.59 AV			1.00 H	280	51.42	39.17
4	10360.00	59.47 PK	68.30	-8.83	1.02 H	240	14.18	45.29
5	#15540.00	64.26 PK	74.00	-9.74	1.01 H	300	15.72	48.54
5	#15540.00	52.18 AV	54.00	-1.82	1.01 H	300	3.64	48.54

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3453.00	56.14 PK	68.30	-12.16	1.10 V	125	20.56	35.58
2	#5150.00	63.25 PK	74.00	-10.75	1.14 V	260	24.15	39.10
2	#5150.00	52.39 AV	54.00	-1.61	1.14 V	260	13.29	39.10
3	*5180.00	114.20 PK			1.14 V	260	75.03	39.17
3	*5180.00	102.10 AV			1.14 V	260	62.93	39.17
4	10360.00	66.51 PK	68.30	-1.79	1.11 V	360	21.22	45.29
5	#15540.00	64.25 PK	74.00	-9.75	1.21 V	111	15.71	48.54
5	#15540.00	52.31 AV	54.00	-1.69	1.21 V	111	3.77	48.54

NOTE:

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

EUT	Dual-Band Wireless A+G Router	MODEL	F6D3230-4
MODE	Normal Mode	CHANNEL	4
FREQUENCY RANGE	1 ~ 40 GHz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60% RH, 991 hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#1320.00	44.25 PK	74.00	-29.75	1.01 H	125	16.82	27.43
1	#1320.00	36.59 AV	54.00	-17.41	1.01 H	125	9.16	27.43
2	3493.00	51.60 PK	68.30	-16.70	1.00 H	254	15.90	35.70
3	*5240.00	103.49 PK			1.41 H	120	64.31	39.18
3	*5240.00	94.58 AV			1.41 H	120	55.40	39.18
4	10480.00	59.31 PK	68.30	-8.99	1.02 H	40	13.23	46.08

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#1320.00	44.90 PK	74.00	-29.10	1.00 V	120	17.47	27.43
1	#1320.00	37.89 AV	54.00	-16.11	1.00 V	120	10.46	27.43
2	3493.00	54.69 PK	68.30	-13.61	1.02 V	244	18.99	35.70
3	*5240.00	114.38 PK			1.24 V	206	75.20	39.18
3	*5240.00	103.65 AV			1.24 V	206	64.47	39.18
4	10480.00	63.58 PK	68.30	-4.72	1.22 V	321	17.50	46.08

NOTE:

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

EUT	Dual-Band Wireless A+G Router	MODEL	F6D3230-4
MODE	Normal Mode	CHANNEL	5
FREQUENCY RANGE	1 ~ 40 GHz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60% RH, 991 hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#1320.00	43.49 PK	74.00	-30.51	1.04 H	125	16.06	27.43
1	#1320.00	38.60 AV	54.00	-15.40	1.04 H	125	11.17	27.43
2	#3506.00	51.69 PK	74.00	-22.31	1.11 H	257	15.96	35.73
2	#3506.00	42.71 AV	54.00	-11.29	1.11 H	257	6.98	35.73
3	*5260.00	103.14 PK			1.12 H	274	63.98	39.16
3	*5260.00	93.56 AV			1.12 H	274	54.40	39.16
4	10520.00	59.68 PK	68.30	-8.62	1.11 H	341	13.52	46.16

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#1320.00	44.50 PK	74.00	-29.50	1.20 V	189	17.07	27.43
1	#1320.00	35.68 AV	54.00	-18.32	1.20 V	189	8.25	27.43
2	#3506.00	55.69 PK	74.00	-18.31	1.11 V	188	19.96	35.73
2	#3506.00	50.89 AV	54.00	-3.11	1.11 V	188	15.16	35.73
3	*5260.00	116.54 PK			1.01 V	111	77.38	39.16
3	*5260.00	106.28 AV			1.01 V	111	67.12	39.16
4	10520.00	63.28 PK	68.30	-5.02	1.03 V	300	17.12	46.16

NOTE:

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

EUT	Dual-Band Wireless A+G Router	MODEL	F6D3230-4
MODE	Normal Mode	CHANNEL	8
FREQUENCY RANGE	1 ~ 40 GHz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60% RH, 991 hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#3547.00	52.31 PK	74.00	-21.69	1.10 H	12	16.46	35.85
1	#3547.00	43.57 AV	54.00	-10.43	1.10 H	12	7.72	35.85
2	*5320.00	102.42 PK			1.01 H	243	63.27	39.15
2	*5320.00	91.23 AV			1.01 H	243	52.08	39.15
3	#5350.00	49.82 PK	74.00	-24.18	1.01 H	243	10.62	39.20
3	#5350.00	38.16 AV	54.00	-15.84	1.01 H	243	-1.04	39.20
4	#10640.00	59.62 PK	74.00	-14.38	1.00 H	45	13.39	46.23
4	#10640.00	47.25 AV	54.00	-6.75	1.00 H	45	1.02	46.23
5	#15960.00	64.26 PK	74.00	-9.74	1.00 H	135	19.30	44.96
5	#15960.00	51.28 AV	54.00	-2.72	1.00 H	135	6.32	44.96

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#3547.00	55.71 PK	74.00	-18.29	1.05 V	258	19.86	35.85
1	#3547.00	49.68 AV	54.00	-4.32	1.05 V	258	13.83	35.85
2	*5320.00	114.24 PK			1.10 V	321	75.09	39.15
2	*5320.00	103.51 AV			1.10 V	321	64.36	39.15
3	#5350.00	61.27 PK	74.00	-12.73	1.10 V	321	22.07	39.20
3	#5350.00	50.28 AV	54.00	-3.72	1.10 V	321	11.08	39.20
4	#10640.00	63.45 PK	74.00	-10.55	1.02 V	147	17.22	46.23
4	#10640.00	49.59 AV	54.00	-4.41	1.02 V	147	3.36	46.23
5	#15960.00	65.12 PK	74.00	-8.88	1.10 V	253	20.16	44.96
5	#15960.00	52.36 AV	54.00	-1.64	1.10 V	253	7.40	44.96

NOTE:

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

EUT	Dual-Band Wireless A+G Router	MODEL	F6D3230-4
MODE	Turbo Mode	CHANNEL	1
FREQUENCY RANGE	1 ~ 40 GHz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60% RH, 991 hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#1320.00	44.62 PK	74.00	-29.38	1.24 H	260	17.19	27.43
1	#1320.00	37.51 AV	54.00	-16.49	1.24 H	260	10.08	27.43
2	3473.00	51.28 PK	68.30	-17.02	1.11 H	248	15.64	35.64
3	#5150.00	53.26 PK	74.00	-20.74	1.01 H	45	14.16	39.10
3	#5150.00	42.89 AV	54.00	-11.11	1.01 H	45	3.79	39.10
4	*5210.00	101.14 PK			1.01 H	45	61.93	39.21
4	*5210.00	91.27 AV			1.01 H	45	52.06	39.21
5	10420.00	59.64 PK	68.30	-8.66	1.21 H	147	13.87	45.77

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#1320.00	47.25 PK	74.00	-26.75	1.00 V	107	19.82	27.43
1	#1320.00	36.24 AV	54.00	-17.76	1.00 V	107	8.81	27.43
2	3473.00	55.63 PK	68.30	-12.67	1.04 V	231	19.99	35.64
3	#5150.00	63.24 PK	74.00	-10.76	1.05 V	321	24.14	39.10
3	#5150.00	52.98 AV	54.00	-1.02	1.05 V	321	13.88	39.10
4	*5210.00	111.46 PK			1.10 V	267	72.25	39.21
4	*5210.00	101.08 AV			1.10 V	267	61.87	39.21
5	10420.00	63.18 PK	68.30	-5.12	1.09 V	45	17.41	45.77

NOTE:

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

EUT	Dual-Band Wireless A+G Router	MODEL	F6D3230-4
MODE	Turbo Mode	CHANNEL	2
FREQUENCY RANGE	1 ~ 40 GHz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60% RH, 991 hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#1320.00	45.21 PK	74.00	-28.79	1.21 H	147	17.78	27.43
1	#1320.00	35.67 AV	54.00	-18.33	1.21 H	147	8.24	27.43
2	#3500.00	51.26 PK	74.00	-22.74	1.12 H	49	15.54	35.72
2	#3500.00	43.51 AV	54.00	-10.49	1.12 H	49	7.79	35.72
3	*5250.00	102.43 PK			1.21 H	45	63.26	39.17
3	*5250.00	92.64 AV			1.21 H	45	53.47	39.17
4	10500.00	59.44 PK	68.30	-8.86	1.11 H	251	13.25	46.19

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#1320.00	48.21 PK	74.00	-25.79	1.00 V	246	20.78	27.43
1	#1320.00	37.48 AV	54.00	-16.52	1.00 V	246	10.05	27.43
2	#3500.00	56.38 PK	74.00	-17.62	1.02 V	154	20.66	35.72
2	#3500.00	52.48 AV	54.00	-1.52	1.02 V	154	16.76	35.72
3	*5250.00	113.41 PK			1.00 V	187	74.24	39.17
3	*5250.00	103.61 AV			1.00 V	187	64.44	39.17
4	10500.00	62.34 PK	68.30	-5.96	1.21 V	241	16.15	46.19

NOTE:

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

EUT	Dual-Band Wireless A+G Router	MODEL	F6D3230-4
MODE	Turbo Mode	CHANNEL	3
FREQUENCY RANGE	1 ~ 40 GHz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 60% RH, 991 hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#1100.00	44.21 PK	74.00	-29.79	1.24 H	144	17.51	26.70
1	#1100.00	40.63 AV	54.00	-13.37	1.24 H	144	13.93	26.70
2	#3526.00	52.41 PK	74.00	-21.59	1.10 H	158	16.62	35.79
2	#3526.00	43.25 AV	54.00	-10.75	1.10 H	158	7.46	35.79
3	*5290.00	101.24 PK			1.21 H	141	62.11	39.13
3	*5290.00	91.56 AV			1.21 H	141	52.43	39.13
4	#5350.00	46.47 PK	74.00	-27.53	1.21 H	141	7.27	39.20
4	#5350.00	36.54 AV	54.00	-17.46	1.21 H	141	-2.66	39.20
5	10580.00	59.64 PK	68.30	-8.66	1.21 H	230	13.57	46.07

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#1100.00	50.12 PK	74.00	-23.88	1.00 V	45	23.42	26.70
1	#1100.00	45.26 AV	54.00	-8.74	1.00 V	45	18.56	26.70
2	#3526.00	54.27 PK	74.00	-19.73	1.01 V	240	18.48	35.79
2	#3526.00	49.35 AV	54.00	-4.65	1.01 V	240	13.56	35.79
3	*5290.00	112.13 PK			1.12 V	321	73.00	39.13
3	*5290.00	101.88 AV			1.12 V	321	62.75	39.13
4	#5350.00	57.10 PK	74.00	-16.90	1.12 V	321	17.90	39.20
4	#5350.00	47.22 AV	54.00	-6.78	1.12 V	321	8.02	39.20
5	10580.00	62.31 PK	68.30	-5.99	1.20 V	154	16.24	46.07

NOTE:

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

5.3 PEAK TRANSMIT POWER MEASUREMENT

5.3.1 LIMITS OF PEAK TRANSMIT POWER MEASUREMENT

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

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

5.3.2 TEST INSTRUMENTS

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

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

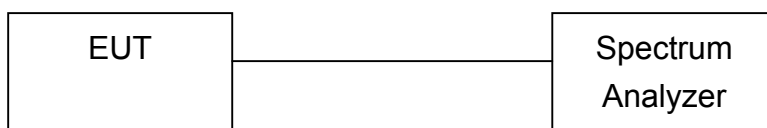
5.3.3 TEST PROCEDURE

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

5.3.4 DEVIATION FROM TEST STANDARD

No deviation

5.3.5 TEST SETUP



5.3.6 EUT OPERATING CONDITIONS

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

5.3.7 TEST RESULTS

EUT	Dual-Band Wireless A+G Router	MODEL	F6D3230-4
MODE	Normal	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	24 deg. C, 64% RH, 991 hPa	TESTED BY	Leo Hung

Channel	Channel Frequency (MHz)	Peak Power Output (mW)	Peak Power Output (dBm)	Peak Power Limit (dBm)	26dBc Occupied Bandwidth (MHz)	Pass/Fail
1	5180	20.091	13.03	17.00	24.48	PASS
4	5240	20.464	13.11	17.00	24.55	PASS
5	5260	20.091	13.03	24.00	25.32	PASS
8	5320	20.230	13.06	24.00	25.32	PASS

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

Ref Lvl 20.5 dBm
 Marker 1 [T1] 3.10 dBm
 RBW 1 MHz
 VBW 300 kHz
 SWT 5 ms
 RF Att 30 dB
 Unit dBm

0.5 dB Offset
 1VIEW
 CH Freq 5.18332665 GHz
 CH BW 25.00000000 MHz
 CH PWR 13.03 dBm

Center 5.18 GHz
 4 MHz/
 Span 40 MHz

Ref Lvl 20.5 dBm

Marker 1 [T1] 3.02 dBm 5.24348697 GHz

RBW 1 MHz VBW 300 kHz SWT 5 ms RF Att 30 dB Unit dBm

0.5 dB Offset

1VIEW

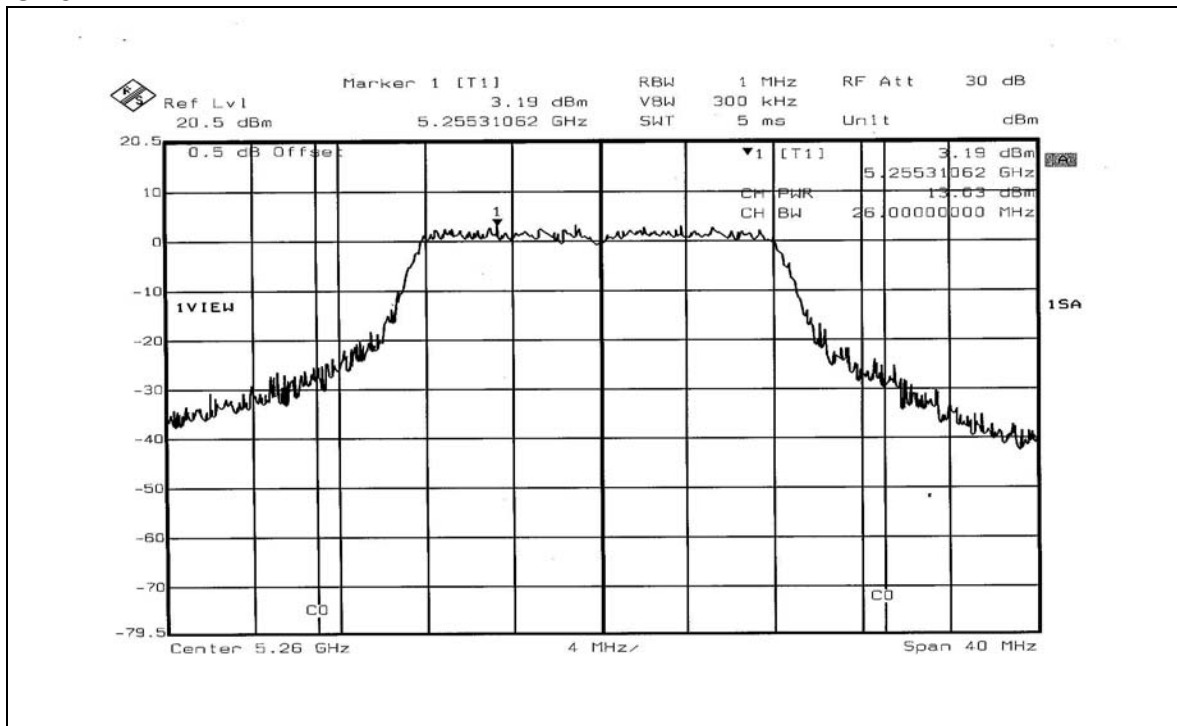
CH FHR 13.11 dBm

CH BW 25.00000000 MHz

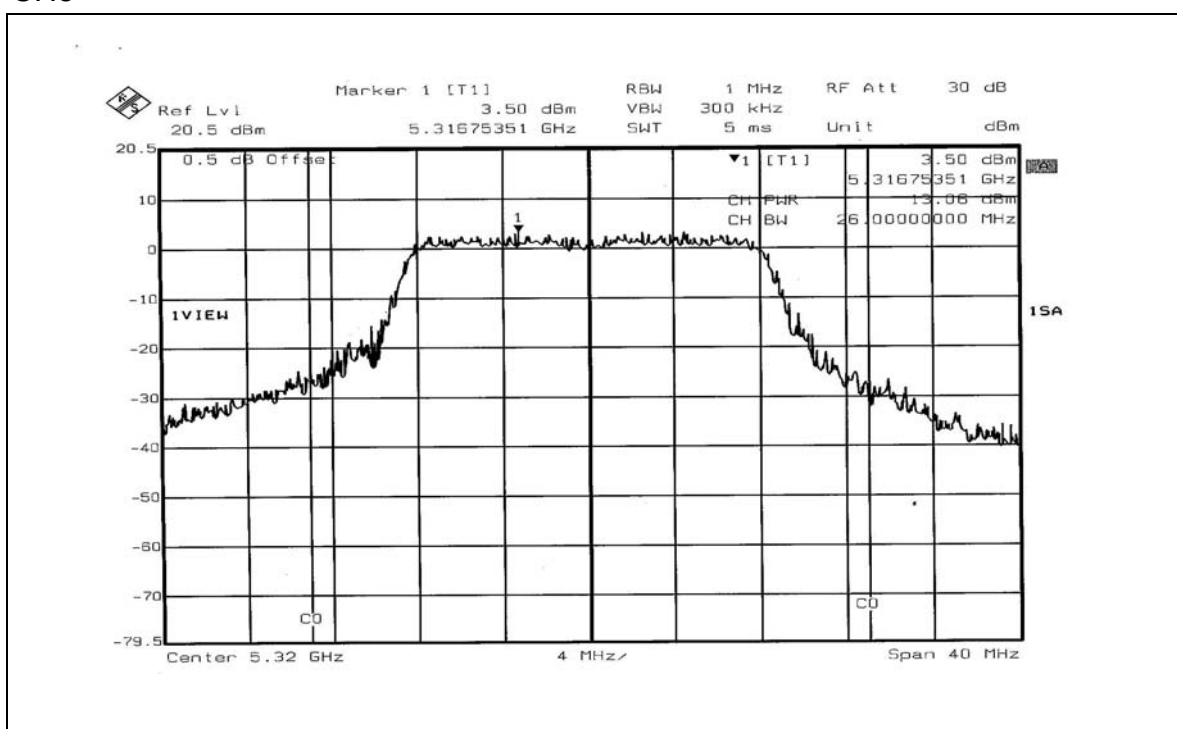
1SA

Center 5.24 GHz 4 MHz Span 40 MHz

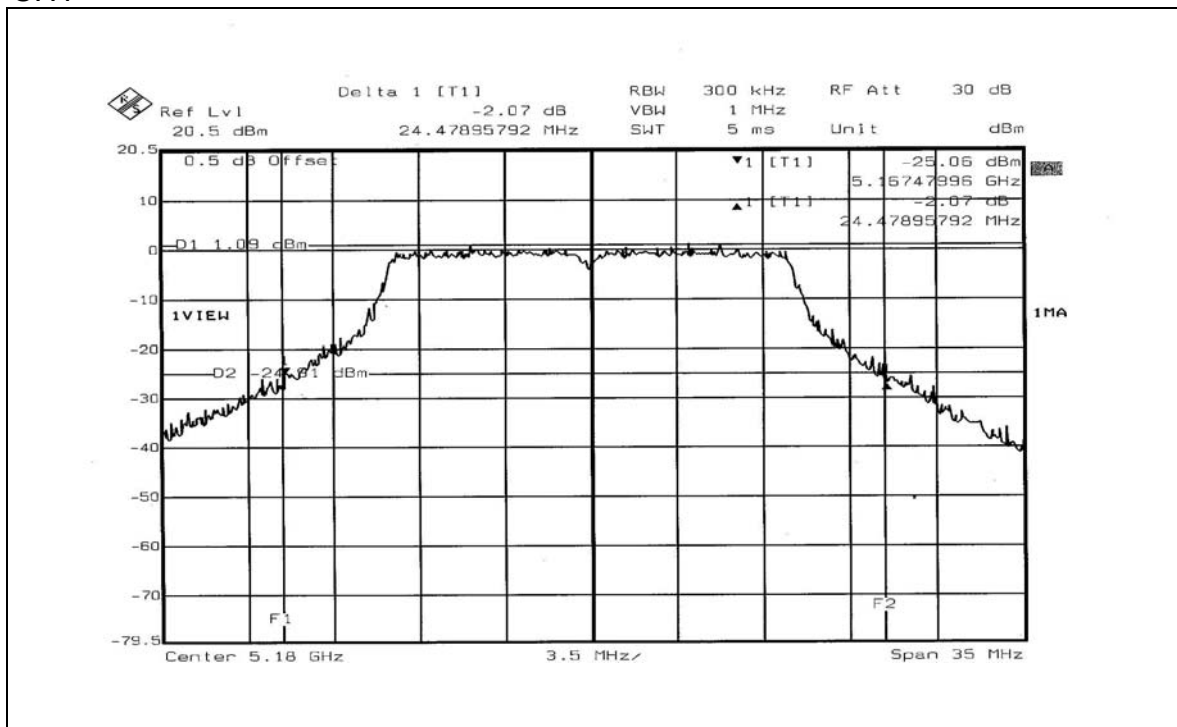
CH5



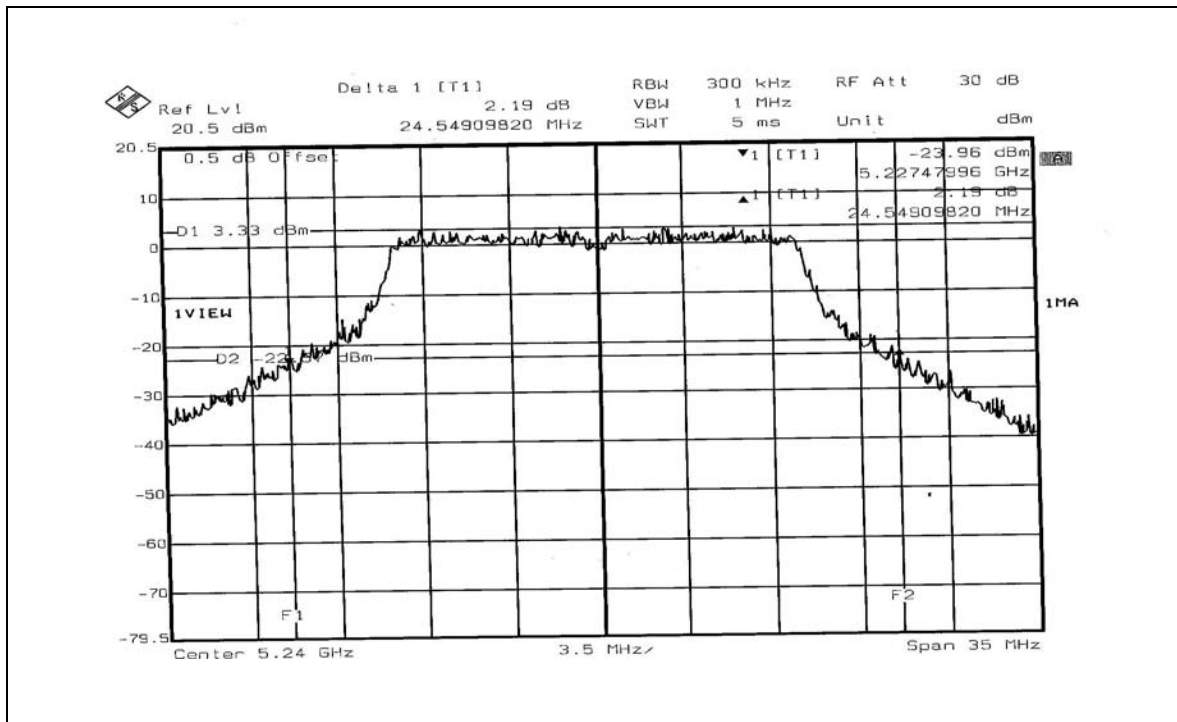
CH8



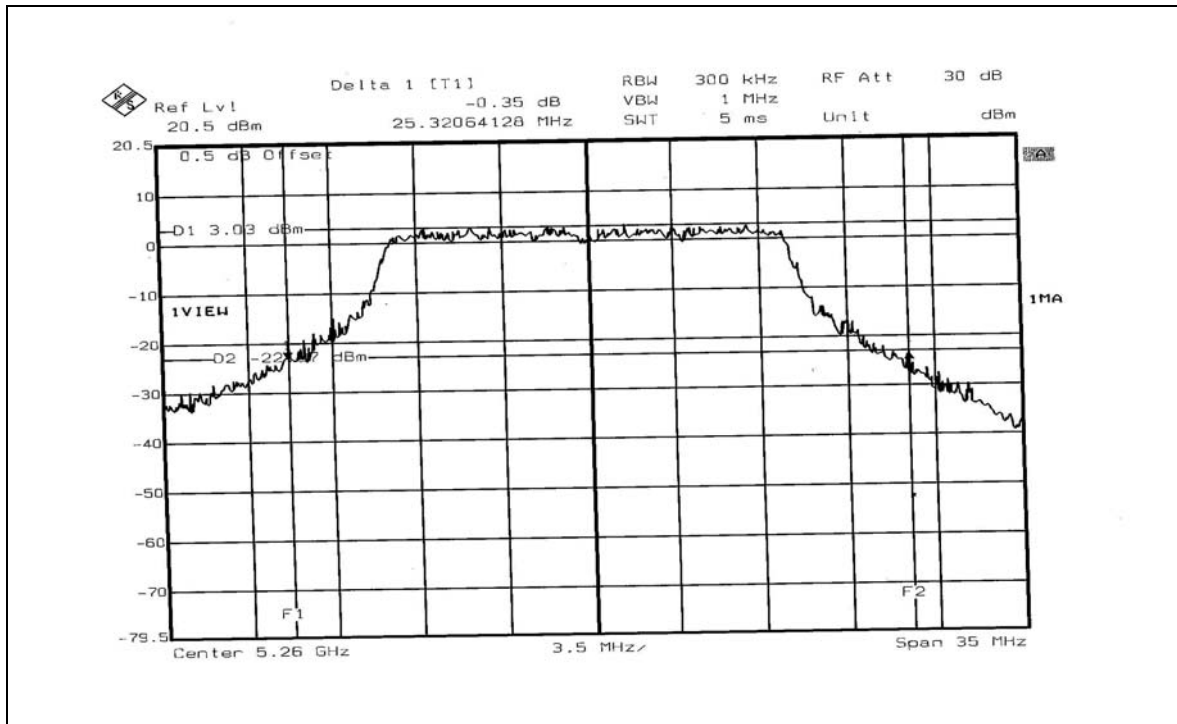
26dB Occupied Bandwidth: CH1



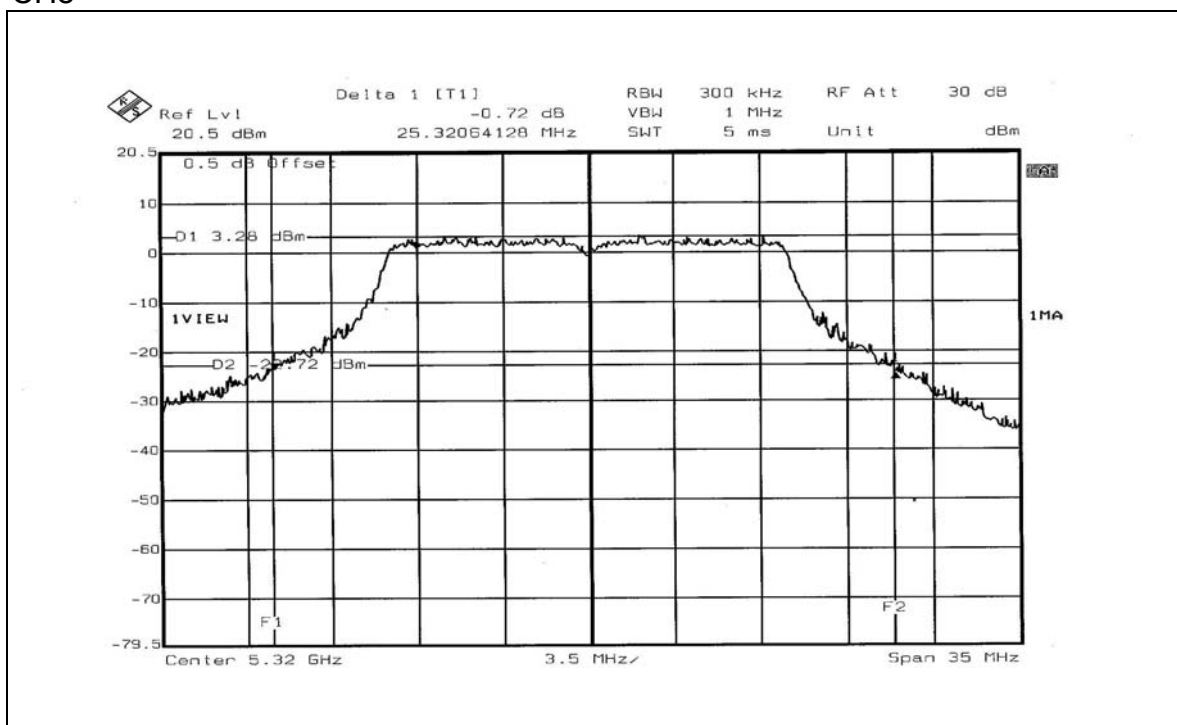
CH4



CH5



CH8



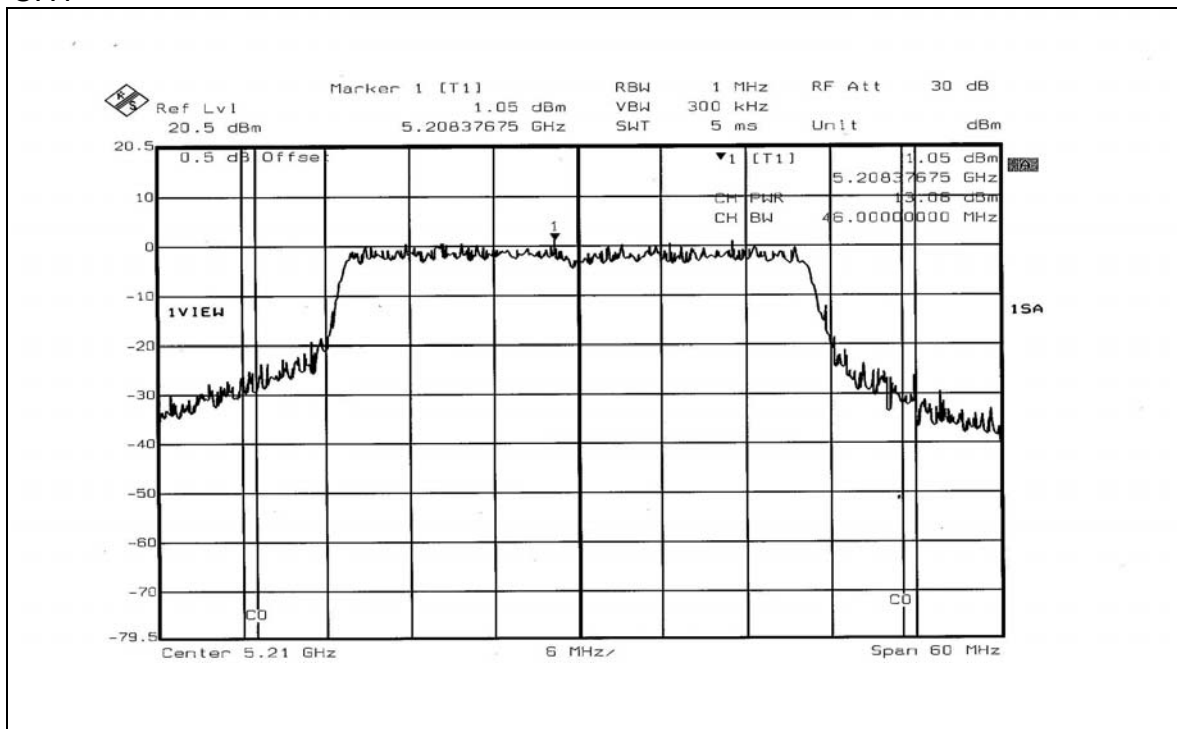


EUT	Dual-Band Wireless A+G Router	MODEL	F6D3230-4
MODE	Turbo	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	24 deg. C, 64% RH, 991 hPa	TESTED BY	Leo Hung

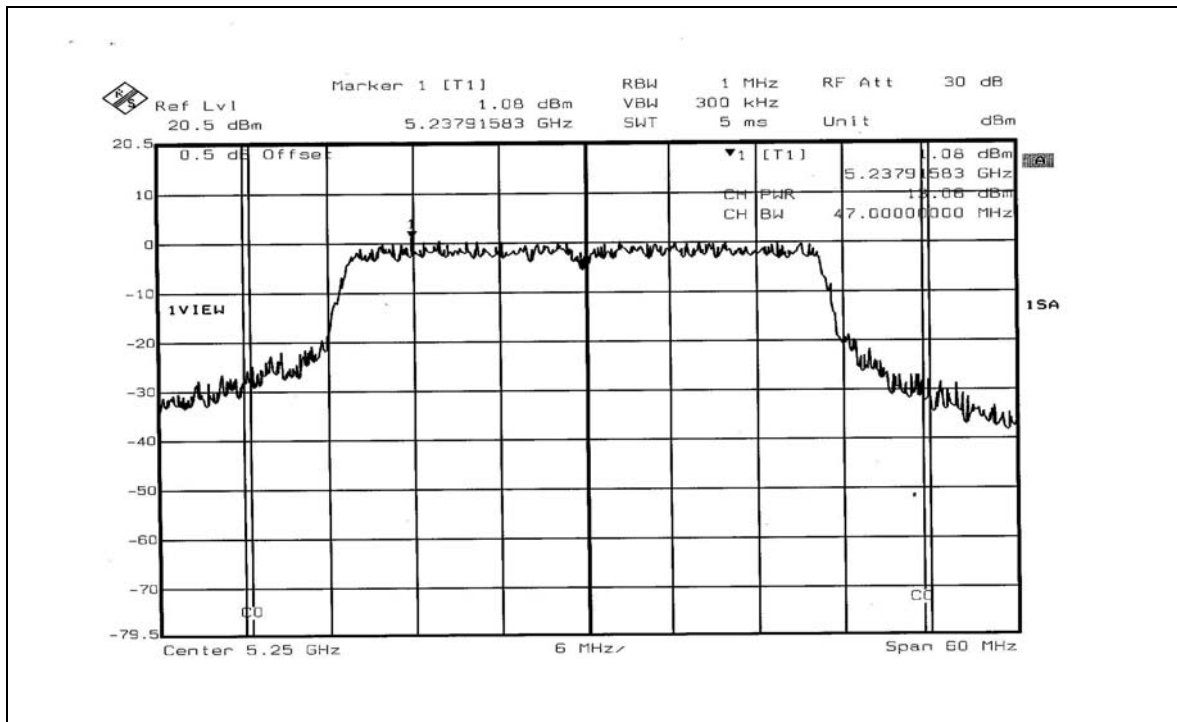
Channel	Channel Frequency (MHz)	Peak Power Output (dBm)	Peak Power Output (dBm)	Peak Power Limit (dBm)	26dBc Occupied Bandwidth (MHz)	Pass/Fail
1	5210	20.230	13.06	17.00	45.33	PASS
2	5250	20.230	13.06	17.00	46.41	PASS
3	5290	20.230	13.06	24.00	47.49	PASS

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

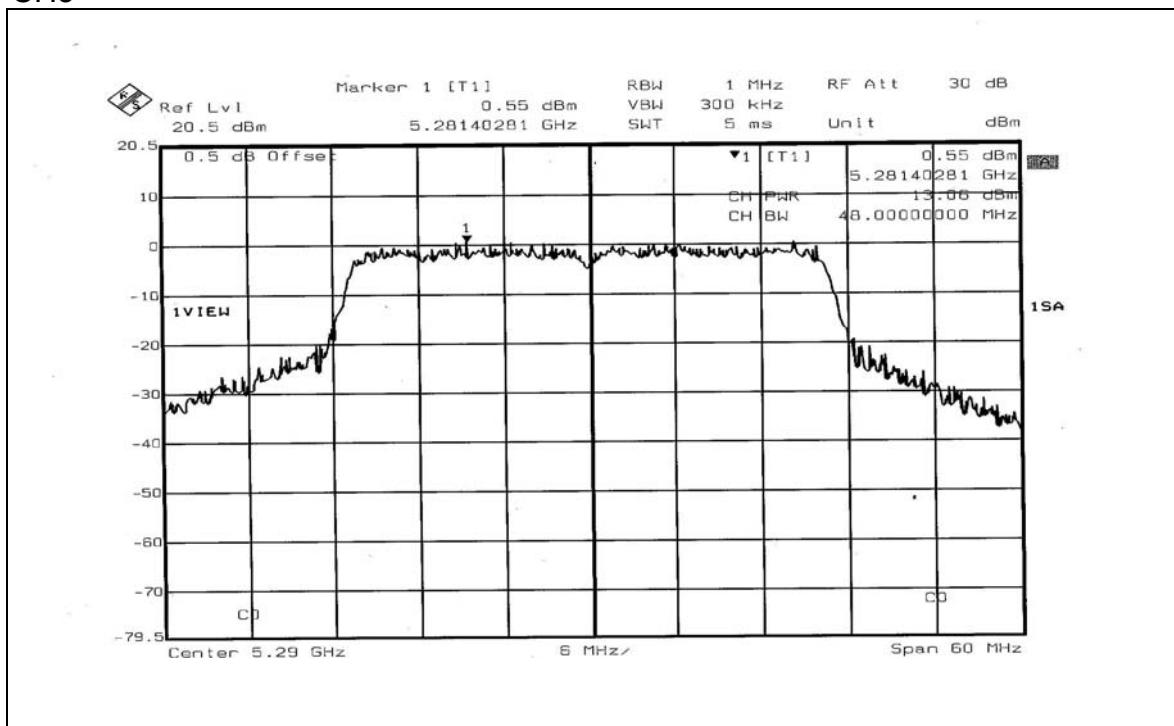
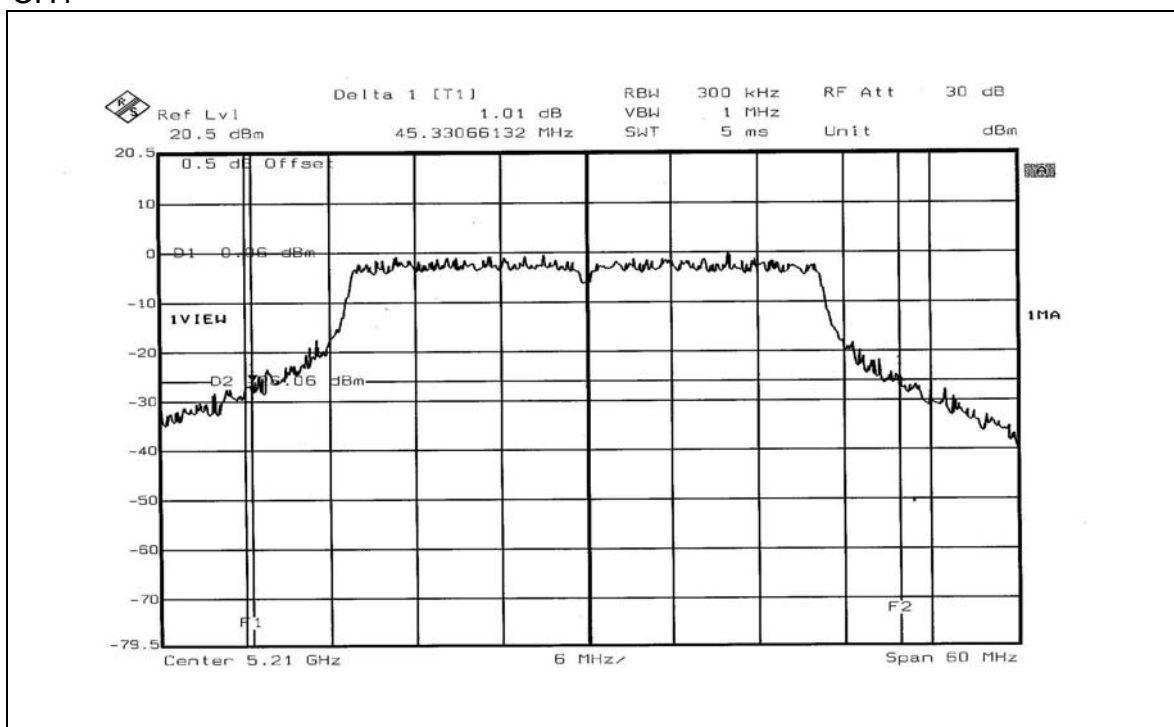
Peak Power Output: CH1



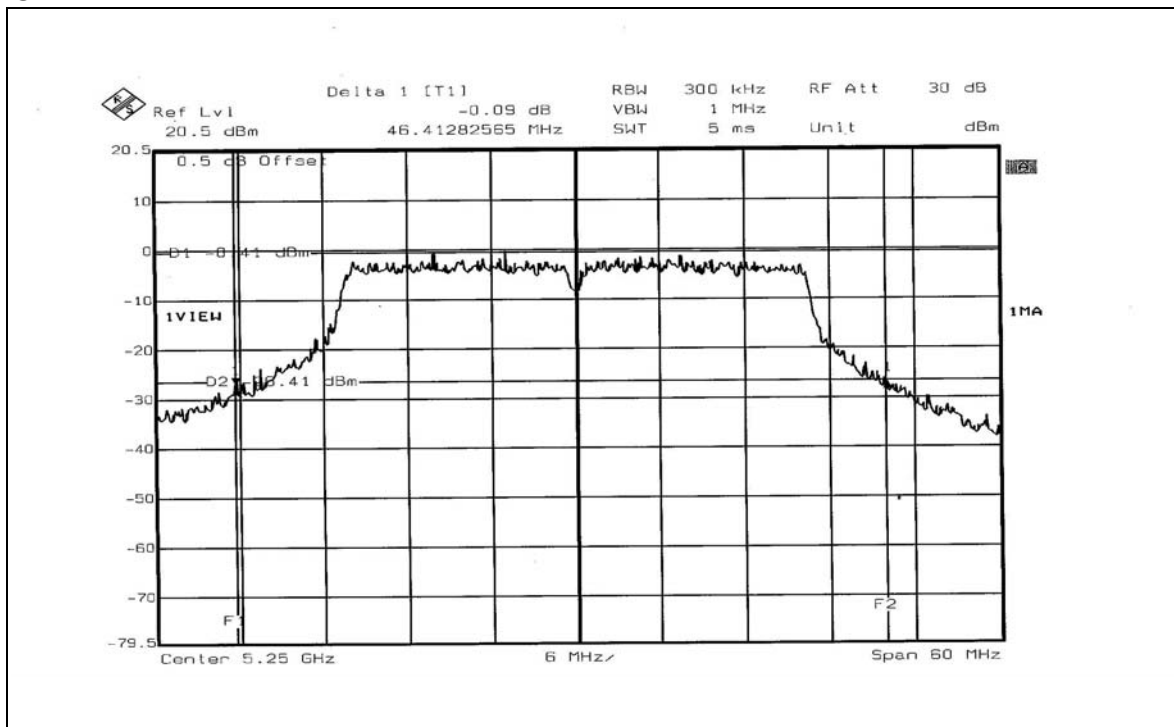
CH2



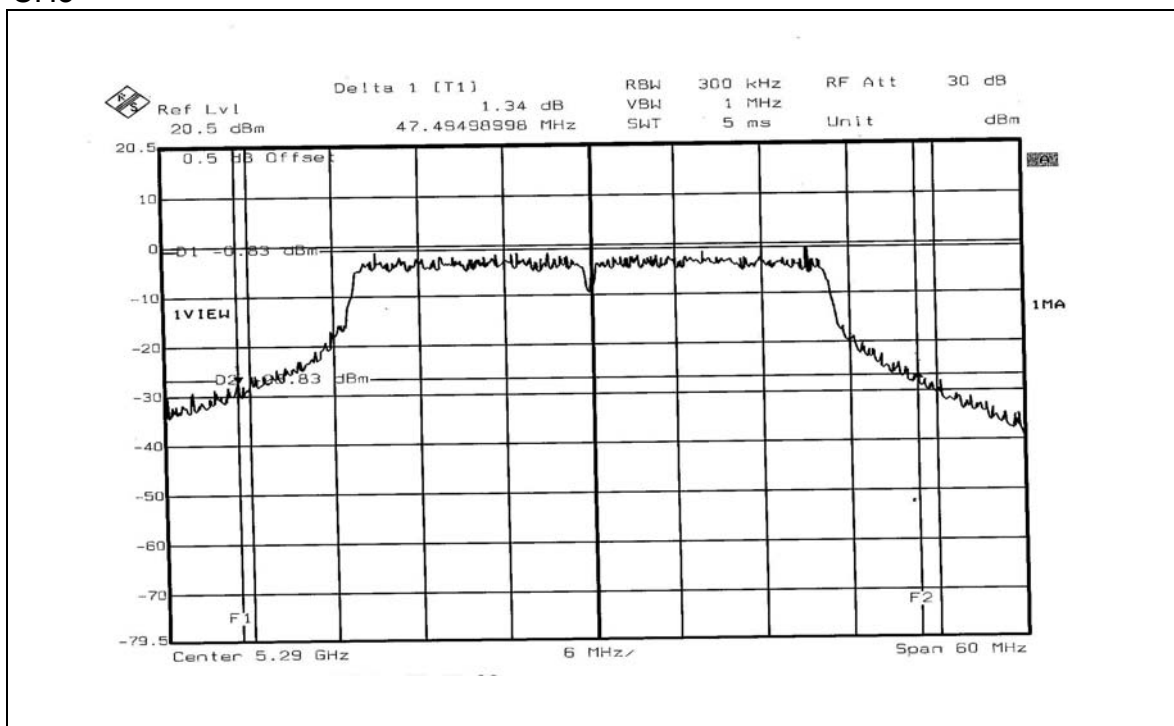
CH3

26dB Occupied Bandwidth:
CH1

CH2



CH3



5.4 PEAK POWER EXCURSION MEASUREMENT

5.4.1 LIMITS OF PEAK POWER EXCURSION MEASUREMENT

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

5.4.2 TEST INSTRUMENTS

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

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

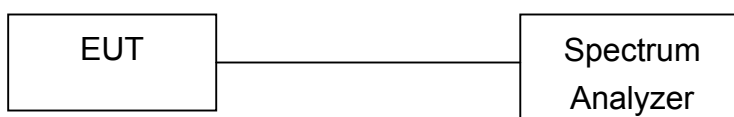
5.4.3 TEST PROCEDURE

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

5.4.4 DEVIATION FROM TEST STANDARD

No deviation

5.4.5 TEST SETUP



5.4.6 EUT OPERATING CONDITIONS

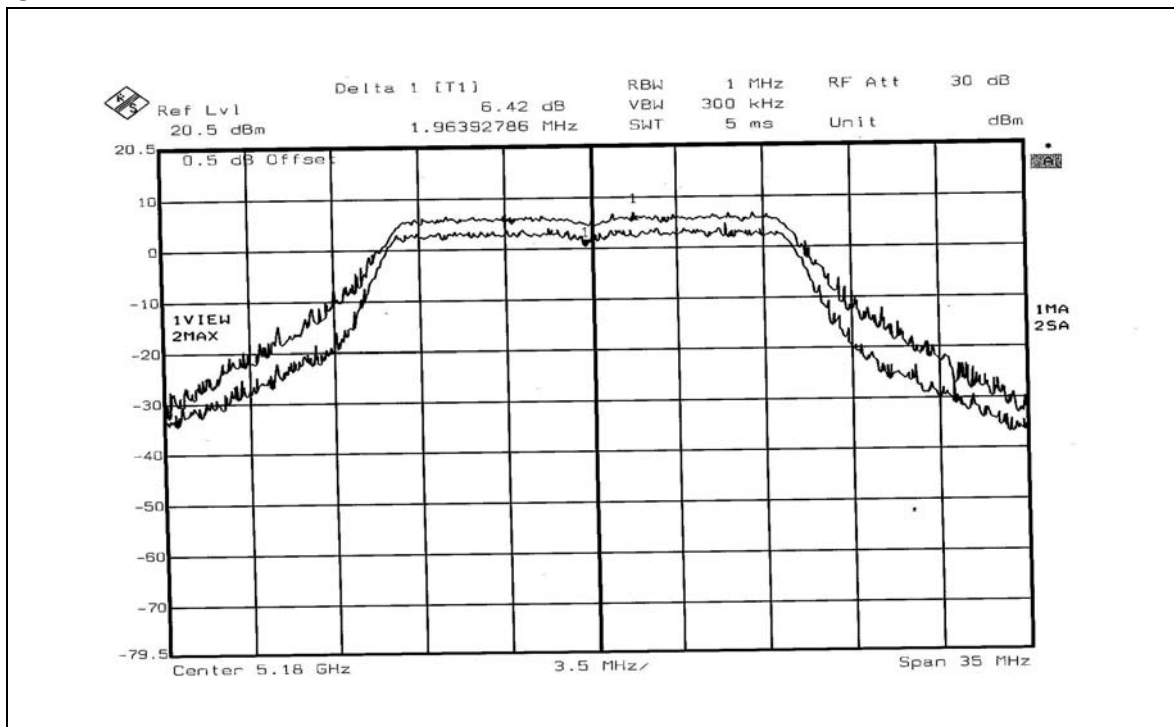
The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

5.4.7 TEST RESULTS

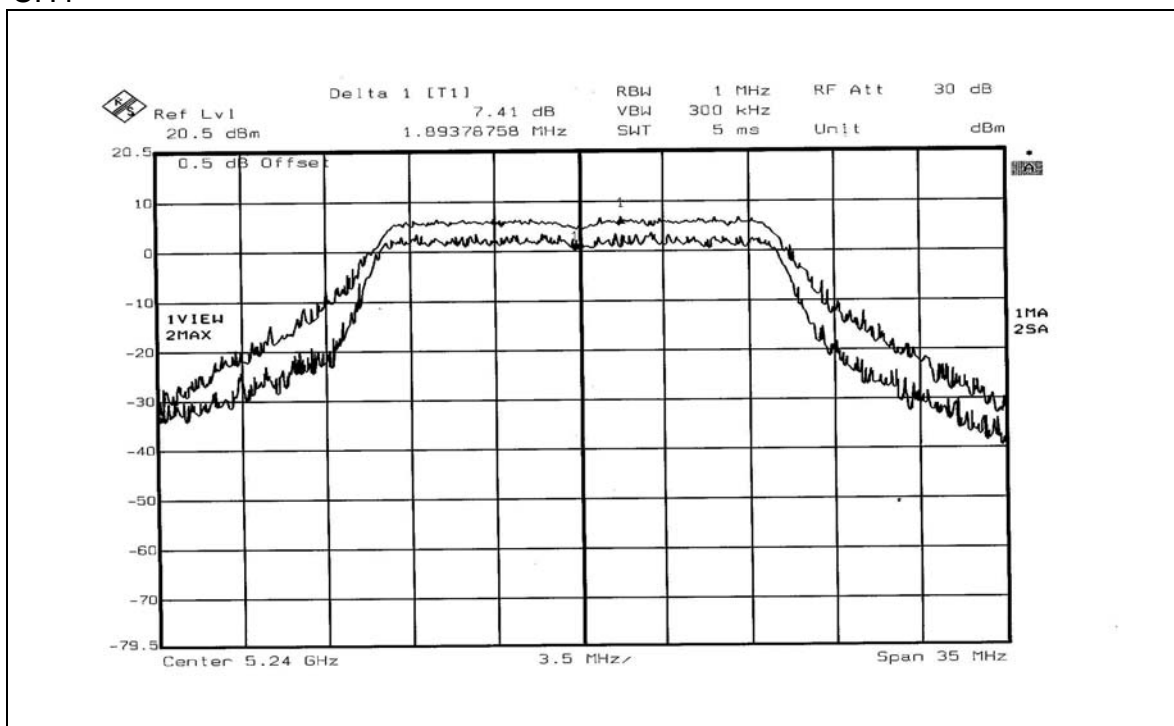
EUT	Dual-Band Wireless A+G Router	MODEL	F6D3230-4
MODE	Normal	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	24 deg. C, 64% RH, 991 hPa	TESTED BY	Leo Hung

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)	PEAK TO AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
1	5180	6.42	13	PASS
4	5240	7.41	13	PASS
5	5260	7.57	13	PASS
8	5320	6.32	13	PASS

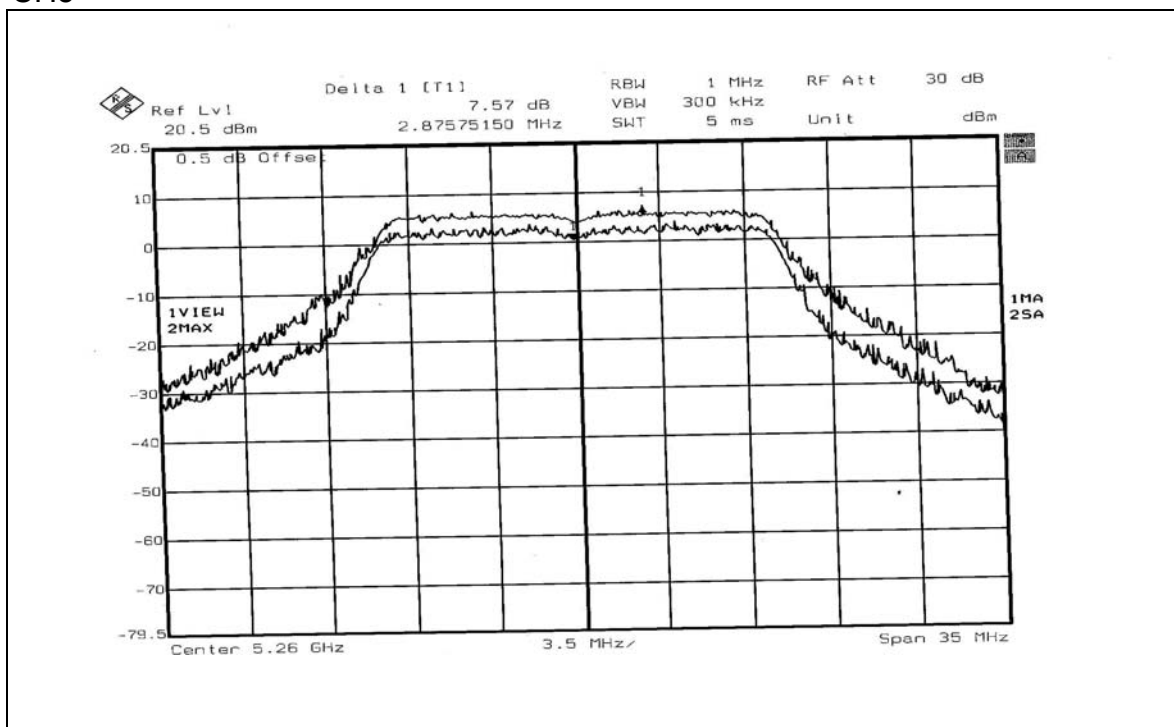
CH1



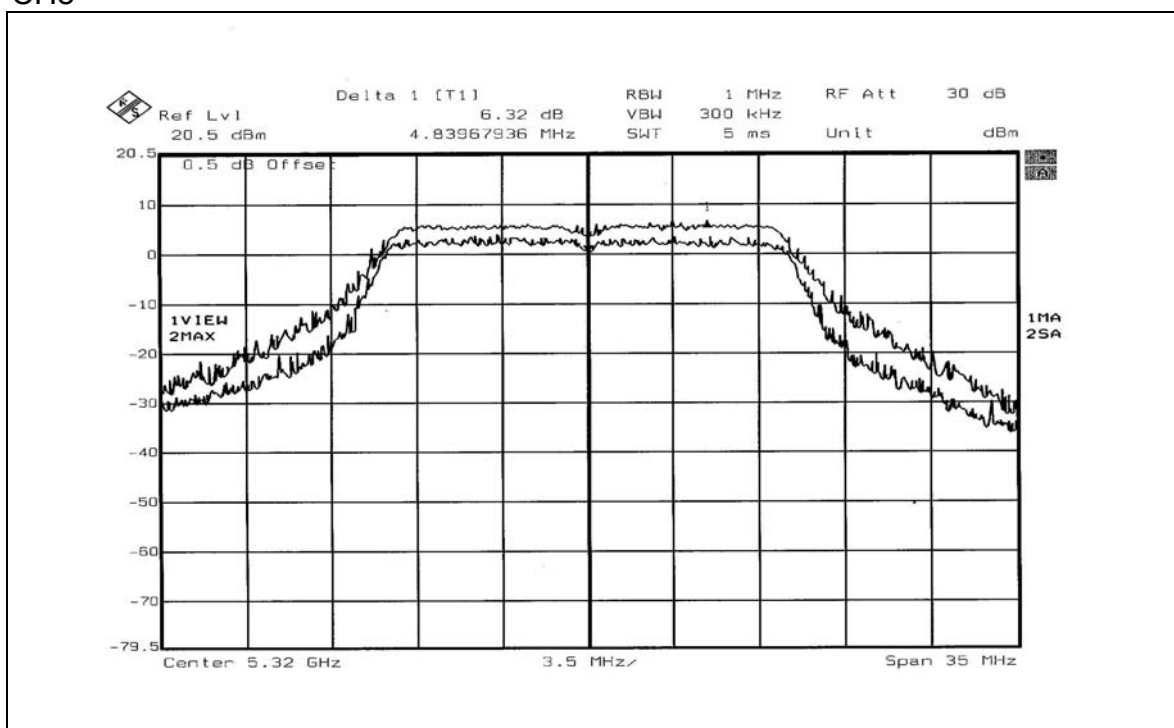
CH4



CH5



CH8

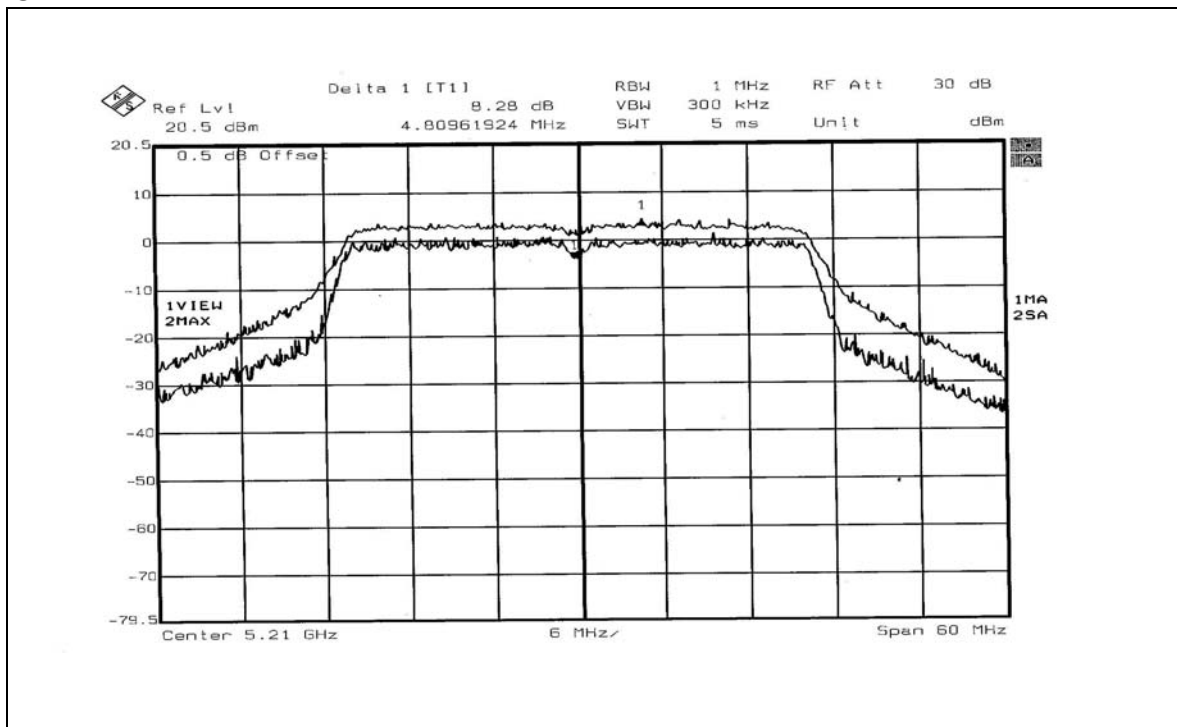




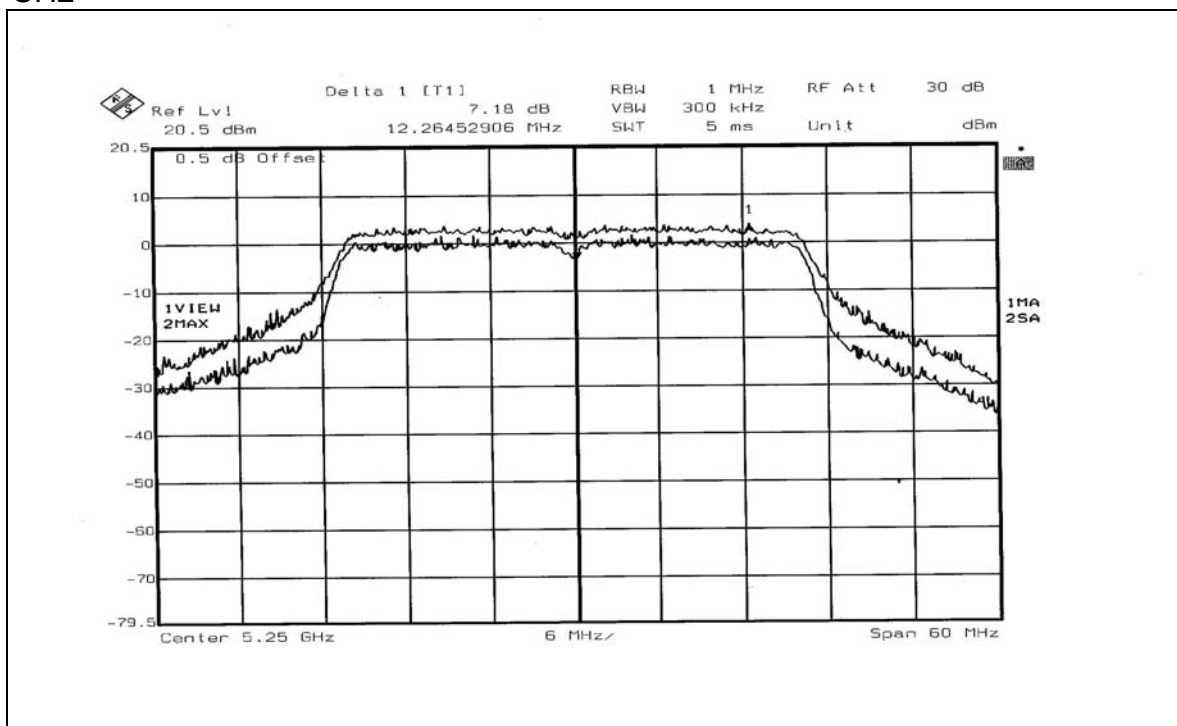
EUT	Dual-Band Wireless A+G Router	MODEL	F6D3230-4
MODE	Turbo	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	24 deg. C, 64% RH, 991 hPa	TESTED BY	Leo Hung

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER EXCURSION (dB)	PEAK TO AVERAGE EXCURSION LIMIT (dB)	PASS/FAIL
1	5210	8.28	13	PASS
2	5250	7.18	13	PASS
3	5290	8.79	13	PASS

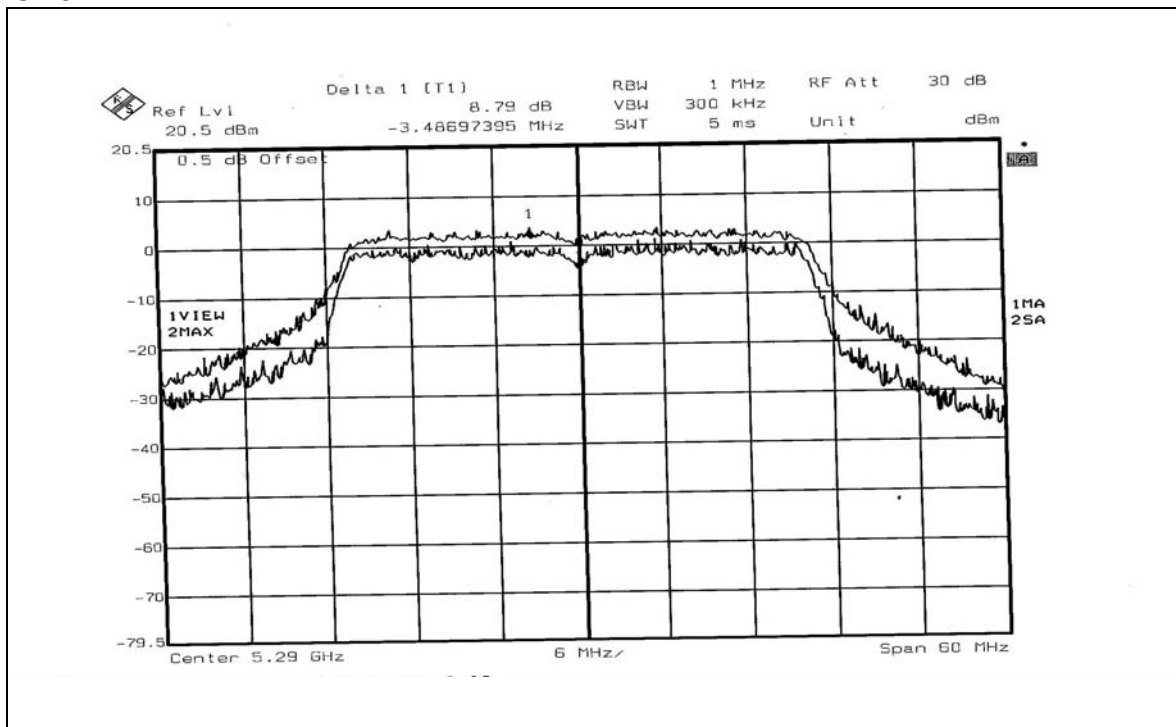
CH1



CH2



CH3



5.5 PEAK POWER SPECTRAL DENSITY MEASUREMENT

5.5.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

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

5.5.2 TEST INSTRUMENTS

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

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

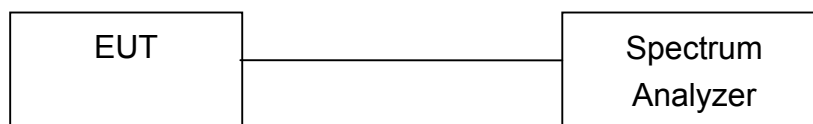
5.5.3 TEST PROCEDURES

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

5.5.4 DEVIATION FROM TEST STANDARD

No deviation

5.5.5 TEST SETUP



5.5.6 EUT OPERATING CONDITIONS

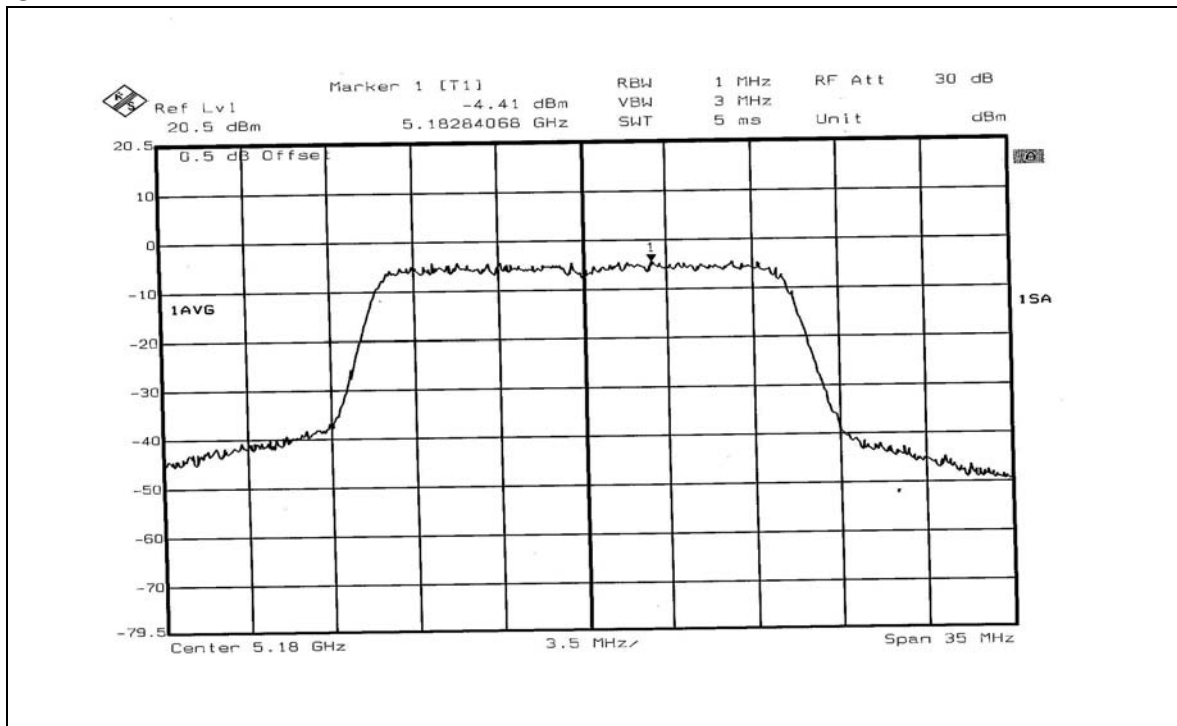
Same as 5.3.6

5.5.7 TEST RESULTS

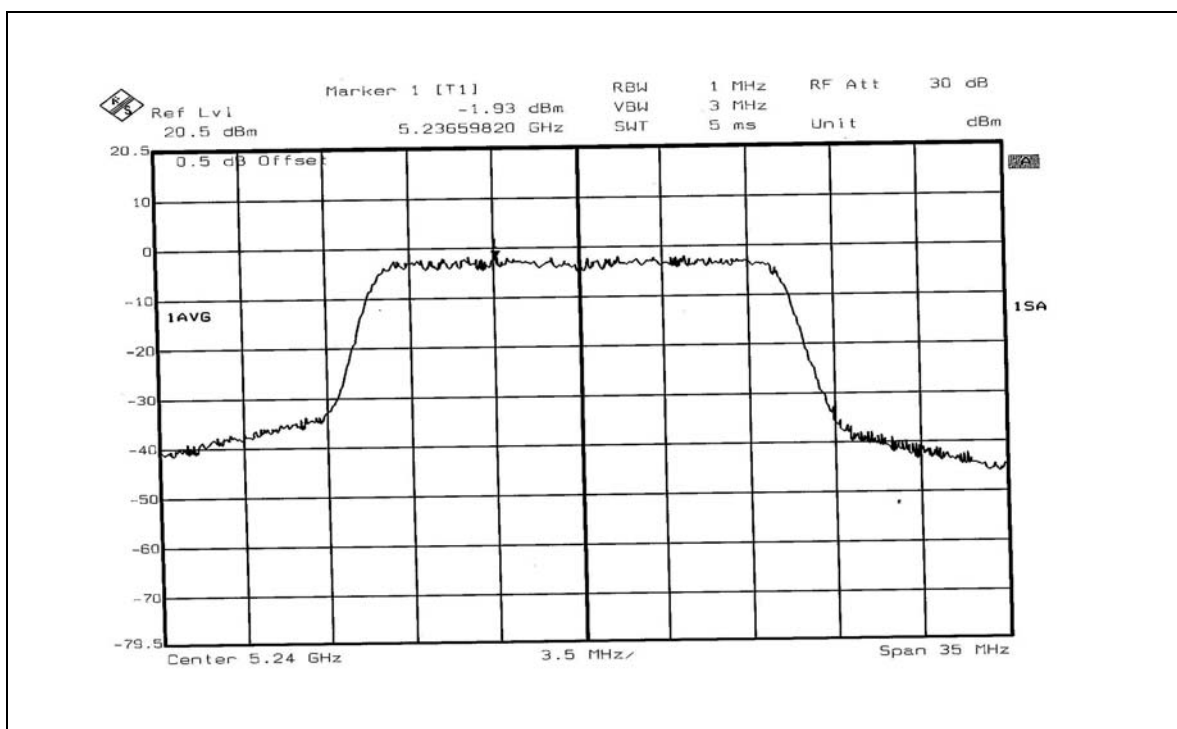
EUT	Dual-Band Wireless A+G Router	MODEL	F6D3230-4
MODE	Normal	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	24 deg. C, 64% RH, 991 hPa	TESTED BY	Leo Hung

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	5180	-4.41	4	PASS
4	5240	-1.93	4	PASS
5	5260	-2.43	11	PASS
8	5320	-1.65	11	PASS

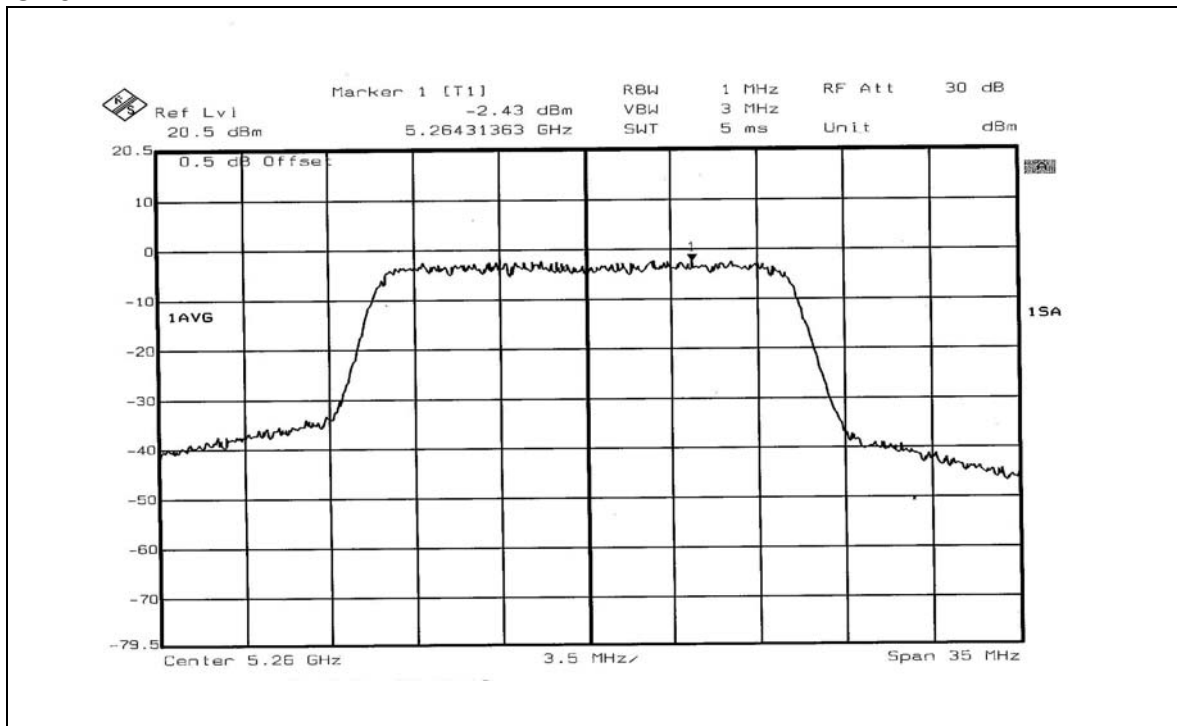
CH1



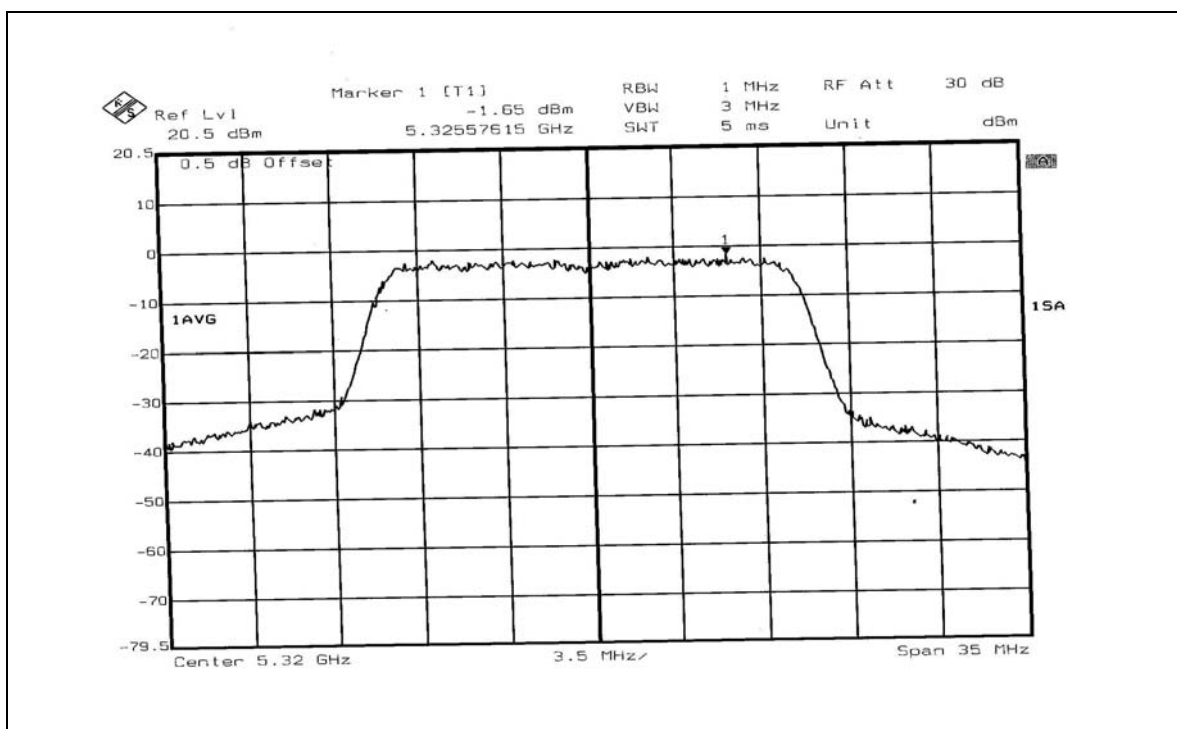
CH4



CH5



CH8

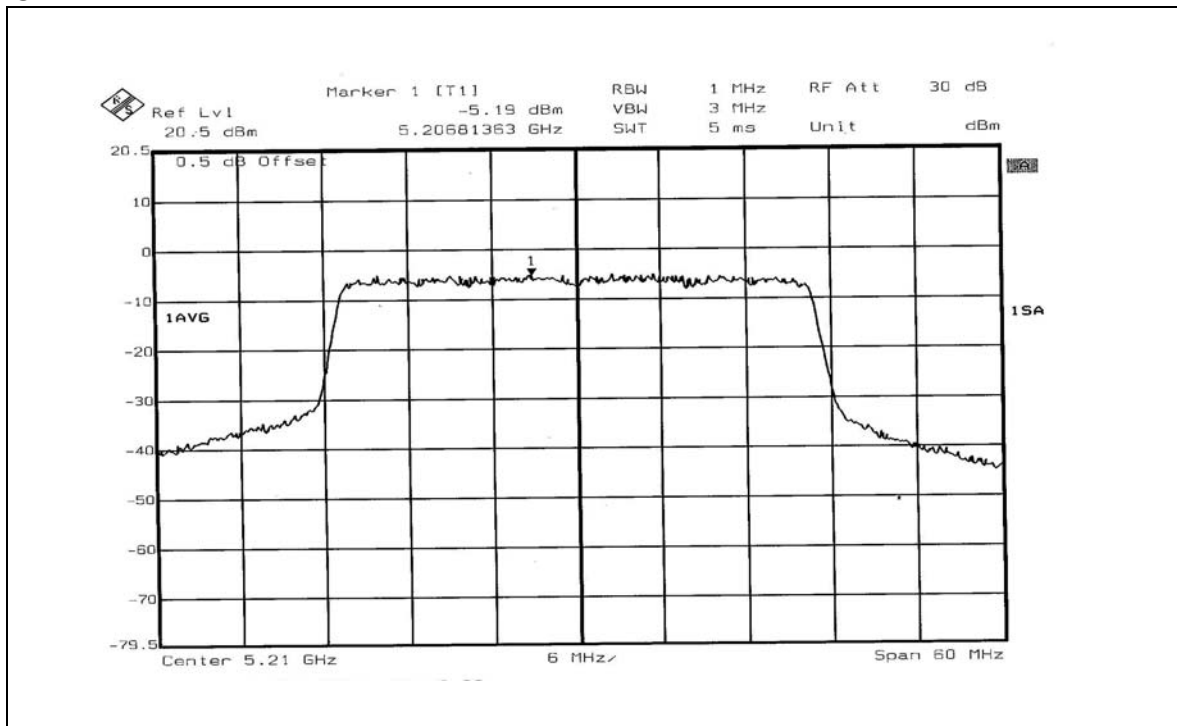




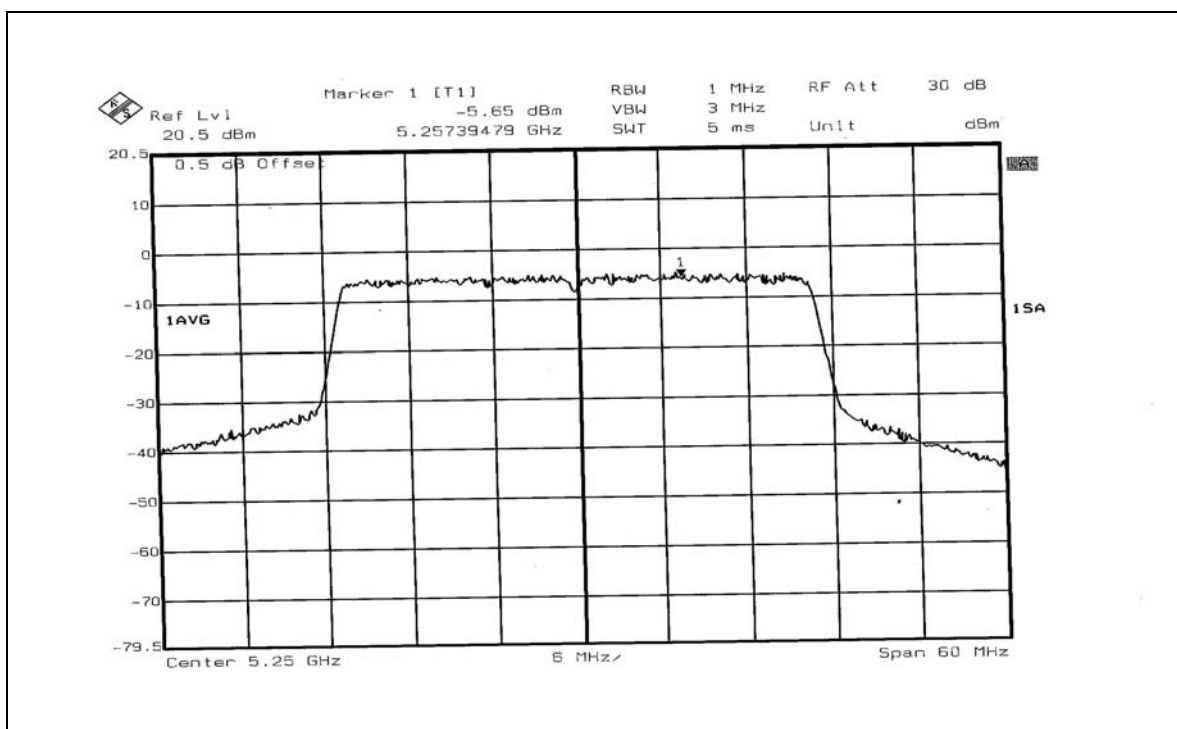
EUT	Dual-Band Wireless A+G Router	MODEL	F6D3230-4
MODE	Turbo	INPUT POWER (SYSTEM)	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	24 deg. C, 64% RH, 991 hPa	TESTED BY	Leo Hung

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1 MHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	5210	-5.19	4	PASS
2	5250	-5.65	4	PASS
3	5290	-5.57	11	PASS

CH1



CH2



CH3

