

Report on the RF Testing of:

KYOCERA Corporation
Mobile Phone, Model: EB1065
FCC ID: JOYEB1065



Japan

In accordance with FCC Part15 Subpart C

Prepared for: KYOCERA Corporation
Yokohama Office 2-1-1 Kagahara, Tsuzuki-ku
Yokohama-shi, Kanagawa, Japan
Phone: +81-45-943-6253 Fax: +81-45-943-6314

Add value.
Inspire trust.

COMMERCIAL-IN-CONFIDENCE

Document Number: JPD-TR-20230-0

SIGNATURE

A handwritten signature in blue ink that reads "Hiroaki Suzuki".

NAME	JOB TITLE	RESPONSIBLE FOR	ISSUE DATE
Hiroaki Suzuki	Deputy Manager of RF Group	Approved Signatory	25 JAN 2021

Signatures in this approval box have checked this document in line with the requirements of TÜV SÜD Japan Ltd. document control rules.

EXECUTIVE SUMMARY – Result: Complied

A sample of this product was tested and the result above was confirmed in accordance with FCC Part15 Subpart C.



Certificate #3686.03

DISCLAIMER AND COPYRIGHT

The results in this report are applicable only to the equipment tested.
This report shall not be re-produced except in full without the written approval of TÜV SÜD Japan Ltd.

We assume no responsibility for damage occurred from error in the information provided by the applicant.

ACCREDITATION

This test report must not be used by the client to claim product certification, approval, or endorsement by A2LA or any agency of the U.S. Government.

TÜV SÜD Japan Ltd.
Yonezawa Testing Center
5-4149-7 Hachimanpara,
Yonezawa-shi, Yamagata,
992-1128 Japan

Phone: +81 (0) 238 28 2881
Fax: +81 (0) 238 28 2888
www.tuv-sud.jp

Contents

1	Summary of Test.....	3
1.1	Modification history of the test report	3
1.2	Standards	3
1.3	Test methods	3
1.4	Deviation from standards.....	3
1.5	List of applied test(s) of the EUT.....	3
1.6	Test information	3
1.7	Test set up.....	3
1.8	Test period.....	3
2	Equipment Under Test.....	4
2.1	EUT information	4
2.2	Modification to the EUT	5
2.3	Variation of family model(s)	5
2.4	Operating channels and frequencies	5
2.5	Description of test mode.....	6
2.6	Operating flow.....	6
3	Configuration of Equipment	7
3.1	Equipment used	7
3.2	Cable(s) used.....	7
3.3	System configuration.....	7
4	Test Result	8
4.1	DTS Bandwidth / Occupied Bandwidth (99%)	8
4.2	Maximum Conducted Output Power	13
4.3	Band Edge Compliance of RF Conducted Emissions.....	17
4.4	Spurious emissions - Conducted -	26
4.5	Spurious Emissions - Radiated -	46
4.6	Restricted Band of Operation	70
4.7	Transmitter Power Spectral Density.....	78
4.8	AC Power Line Conducted Emissions	84
5	Antenna requirement	87
6	Measurement Uncertainty.....	88
7	Laboratory Information.....	89
Appendix A. Test Equipment.....		90
Appendix B. Duty Cycle.....		92

1 Summary of Test

1.1 Modification history of the test report

Document Number	Modification History	Issue Date
JPD-TR-20230-0	First Issue	Refer to the cover page

1.2 Standards

CFR47 FCC Part 15 Subpart C

1.3 Test methods

ANSI C63.10-2013
KDB 558074 D01 15.247 Meas Guidance v05r02

1.4 Deviation from standards

None

1.5 List of applied test(s) of the EUT

Test item section	Test item	Condition	Result	Remark
15.247(a)(2)	DTS Bandwidth / Occupied Bandwidth (99%)	Conducted	PASS	-
15.247(b)(3)	Maximum conducted (average) output power	Conducted	PASS	-
15.247(d)	Band Edge Compliance of RF Conducted Emissions	Conducted	PASS	-
15.247(d) 15.205 15.209	Spurious Emissions	Conducted	PASS	-
		Radiated	PASS	-
15.247(d) 15.205 15.209	Restricted Bands of Operation	Radiated	PASS	-
15.247(e)	Transmitter Power Spectral Density	Conducted	PASS	-
15.207	AC Power Line Conducted Emissions	Conducted	PASS	-

1.6 Test information

None

1.7 Test set up

Table-top

1.8 Test period

8-December-2020 - 23-December-2020

2 Equipment Under Test

All information in this chapter was provided by the applicant.

2.1 EUT information

Applicant	KYOCERA Corporation Yokohama Office 2-1-1 Kagahara, Tsuzuki-ku Yokohama-shi, Kanagawa, Japan Phone: +81-45-943-6253 Fax: +81-45-943-6314
Equipment Under Test (EUT)	Mobile Phone
Model number	EB1065
Serial number	359787710020644, 359787710020784
Trade name	Kyocera
Number of sample(s)	2
EUT condition	Pre-Production
Power rating	Battery: DC 3.85 V
Size	(W) 80 mm x (D) 20 mm x (H) 168 mm
Environment	Indoor and Outdoor use
Terminal limitation	-20°C to 60°C
Hardware Version	DMT2
Software Version	0.070VE
Firmware Version	Not applicable
RF Specification	
Protocol	IEEE802.11b, IEEE802.11g, IEEE802.11n (HT20),
Frequency range	IEEE802.11b /11g /11n (HT20): 2412 MHz-2462 MHz
Number of RF Channels	11 Channels
Modulation type	IEEE802.11b: DSSS (DBPSK, DQPSK, CCK) IEEE802.11g / 11n (HT20): OFDM (BPSK, QPSK, 16QAM, 64QAM)
Data rate	IEEE802.11b: 1, 2, 5.5, 11Mbps IEEE802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps IEEE802.11n (HT20 LGI): 6.5, 13, 19.5, 26, 39, 52, 58.5, 65Mbps IEEE802.11n (HT20 SGI): 7.2, 14.4, 21.7, 28.9, 43.3, 57.8, 65, 72.2Mbps
Channel separation	5 MHz
Conducted power	35.4 mW (IEEE802.11b) 50.234 mW (IEEE802.11g) 91.272 mW (IEEE802.11n: HT20)
Antenna type	Internal antenna
Antenna gain	ANT3: -1.8 dBi, ANT5: -1.1 dBi

2.2 Modification to the EUT

The table below details modifications made to the EUT during the test project.

Modification State	Description of Modification	Modification fitted by	Date of Modification
Model: EB1065, Serial Number: 359787710020644, 359787710020784			
0	As supplied by the applicant	Not Applicable	Not Applicable

2.3 Variation of family model(s)

2.3.1 List of family model(s)

Not applicable

2.3.2 Reason for selection of EUT

Not applicable

2.4 Operating channels and frequencies

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

2.5 Description of test mode

The EUT had been tested under operating condition.

There are three channels have been tested as following:

Tested Channel [11b, 11g, 11n(HT20)]	Frequency [MHz]
Low	2412
Middle	2437
High	2462

The pre-test has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates.

Tested Channel	Modulation Type	Data Rate
Low, Middle, High	IEEE802.11b: DSSS	1Mbps
Low, Middle, High	IEEE802.11g: OFDM	6Mbps
Low, Middle, High	IEEE802.11n (HT20 LGI): OFDM	MCS0 (6.5Mbps)

The field strength of spurious emissions was measured at each position of all three axis X, Y and Z to compare the level, and the maximum noise.

The worst emission was found in Z-axis and the worst case recorded.

Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports.

2.6 Operating flow

- Tx mode

- i) Test program setup to the DM tool
- ii) Select a Test mode
[IEEE802.11b, IEEE802.11g, IEEE802.11n (HT20)]
Operating frequency: Channel Low: 2412MHz, Channel Middle: 2437MHz, Channel High: 2462MHz
- iii) Start test mode

- Rx mode

- i) Test program setup to the DM tool
- ii) Select a Test mode
[IEEE802.11b, IEEE802.11g, IEEE802.11n (HT20)]
Operating frequency: Channel Low: 2412MHz, Channel Middle: 2437MHz, Channel High: 2462MHz
- iii) Start test mode

3 Configuration of Equipment

Numbers assigned to equipment on the diagram in “3.3 System configuration” correspond to the list in “3.1 Equipment used” and “3.2 Cable(s) used”.

This test configuration is based on the manufacturer's instruction.

Cabling and setup(s) were taken into consideration and test data was taken under worse case condition.

3.1 Equipment used

No.	Equipment	Company	Model No.	Serial No.	FCC ID/DoC	Comment
1	Mobile Phone	KYOCERA	EB1065	359787710020644, 359787710020784	JOYEB1065	EUT
2	AC Adapter	KDDI	0301PQA	N/A	N/A	*

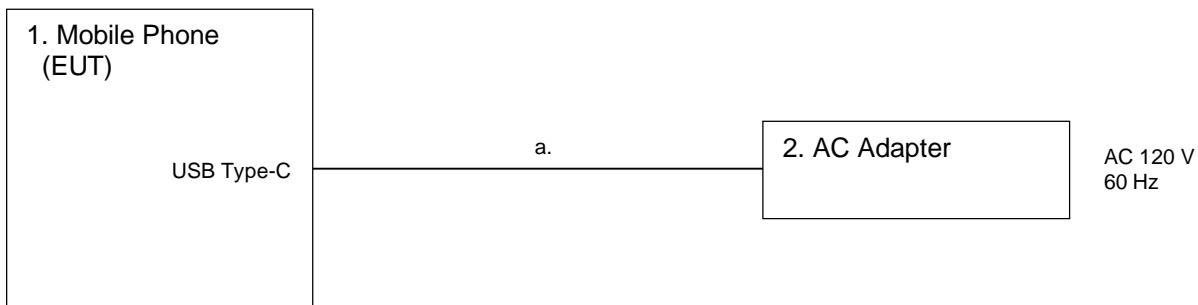
*:AC power line Conducted Emission Test.

3.2 Cable(s) used

No.	Equipment	Length[m]	Shield	Connector	Comment
a	USB cable (for AC Adapter)	1.0	Yes	Metal	*

*:AC power line Conducted Emission Test.

3.3 System configuration



4 Test Result

4.1 DTS Bandwidth / Occupied Bandwidth (99%)

4.1.1 Measurement procedure

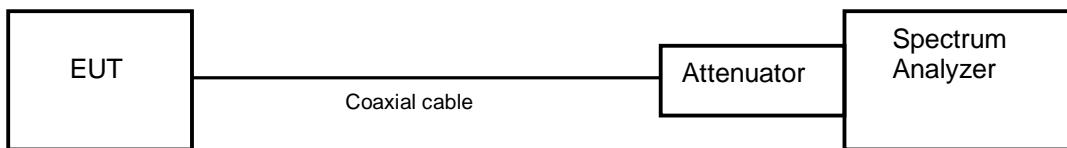
[FCC 15.247(a)(2), KDB 558074 D01 v05r02, Section 8.2]

The bandwidth at 6dB down from the highest inband spectral density is measured with a spectrum analyzer connected to the antenna terminal, while EUT is operating in transmission mode at the appropriate center frequency.

The spectrum analyzer is set to:

- a) RBW = 100kHz.
- b) VBW \geq 3 x RBW.
- c) Sweep time = auto-couple.
- d) Detector = peak.
- e) Trace mode = max hold.

- Test configuration



4.1.2 Limit

The minimum permissible 6 dB bandwidth is 500 kHz.

4.1.3 Measurement result

Date : 9-December-2020
 Temperature : 20.9 [°C]
 Humidity : 27.9 [%]
 Test place : Shielded room No.4

Test engineer : Taiki Watanabe

Date : 10-December-2020
 Temperature : 21.8 [°C]
 Humidity : 25.3 [%]
 Test place : Shielded room No.4

Test engineer : Taiki Watanabe

ANT3

Channel	DTS Bandwidth [MHz]		
	IEEE802.11b	IEEE802.11g	IEEE802.11n (HT20)
Low	9.081	16.004	17.293
Middle	8.242	15.944	15.794
High	8.092	15.165	15.734

Channel	Occupied Bandwidth (99%) [MHz]		
	IEEE802.11b	IEEE802.11g	IEEE802.11n (HT20)
Low	13.996	16.514	17.712
Middle	13.936	16.723	17.862
High	13.427	16.394	17.562

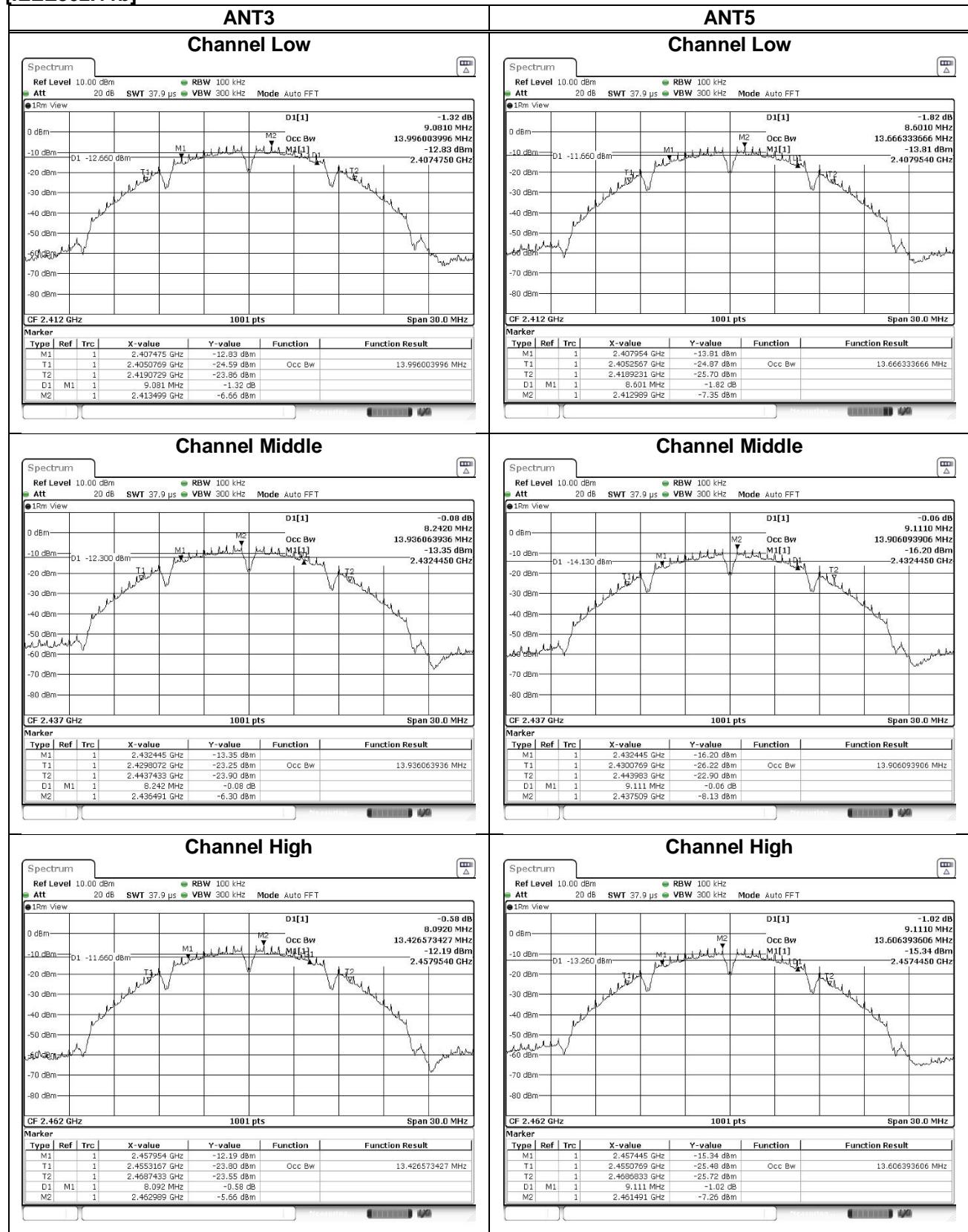
ANT5

Channel	DTS Bandwidth [MHz]		
	IEEE802.11b	IEEE802.11g	IEEE802.11n (HT20)
Low	8.601	15.554	15.165
Middle	9.111	15.704	16.304
High	9.111	15.734	15.944

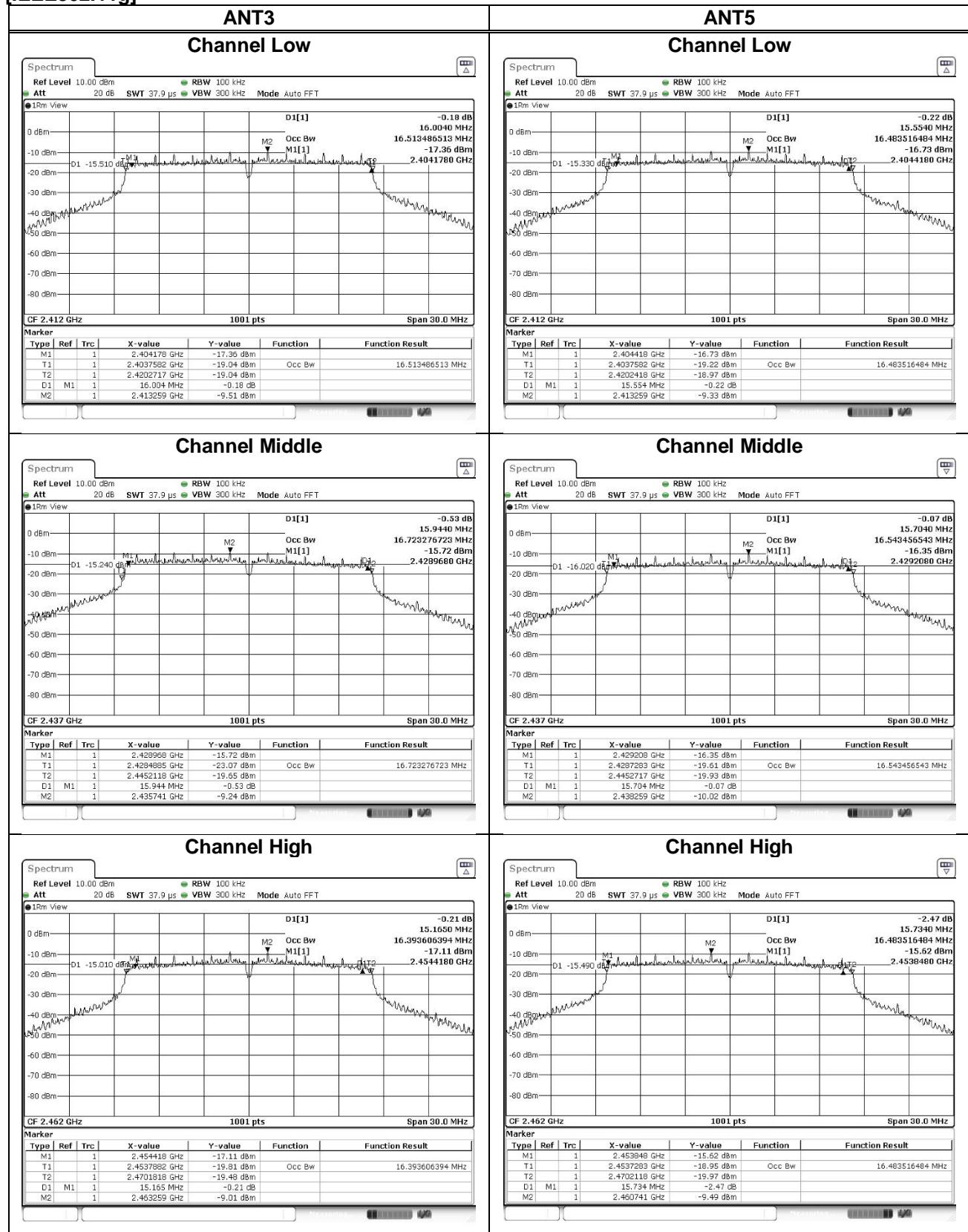
Channel	Occupied Bandwidth (99%) [MHz]		
	IEEE802.11b	IEEE802.11g	IEEE802.11n (HT20)
Low	13.666	16.484	17.652
Middle	13.906	16.544	17.742
High	13.606	16.484	17.622

4.1.4 Trace data

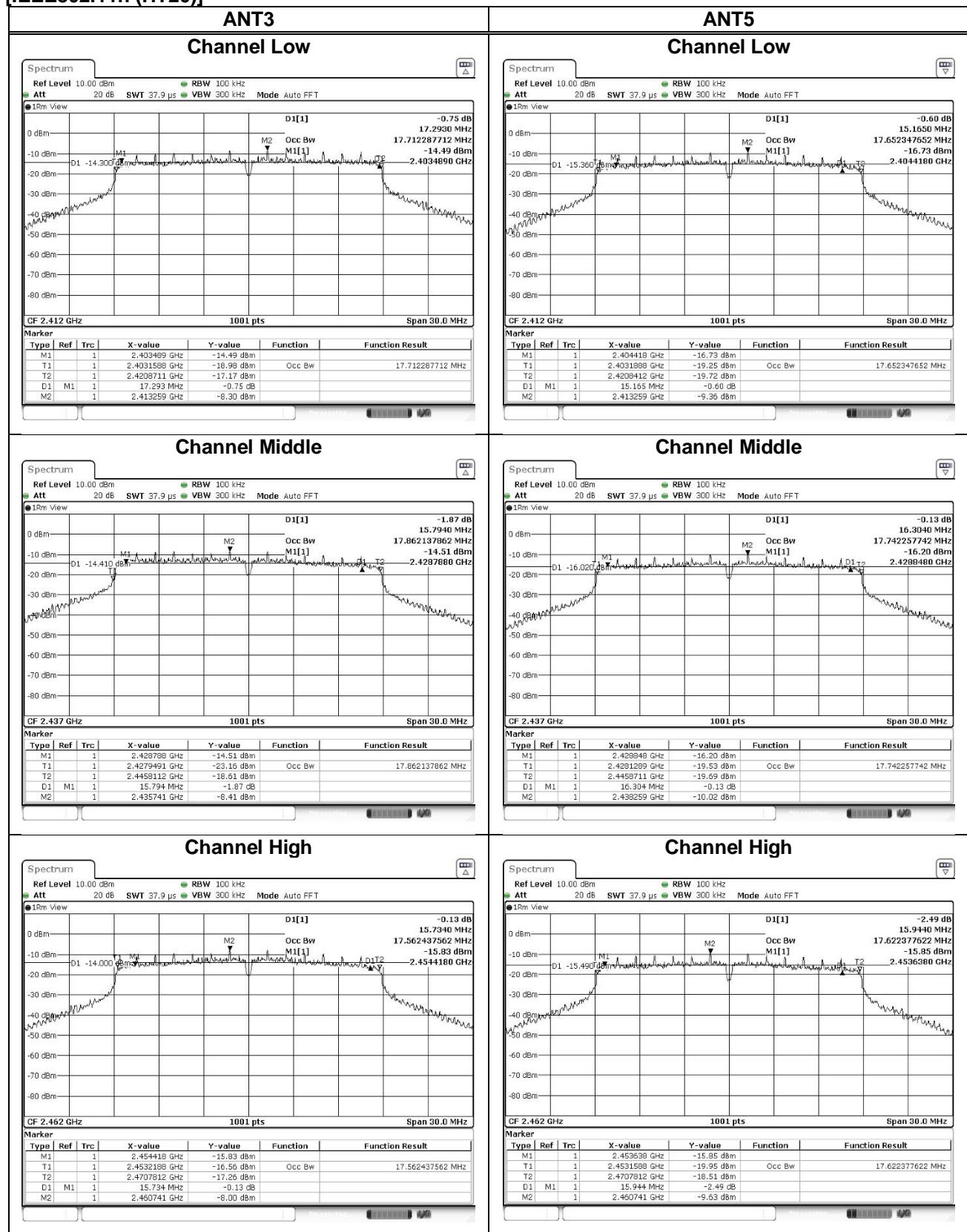
[IEEE802.11b]



[IEEE802.11g]



[IEEE802.11n (HT20)]



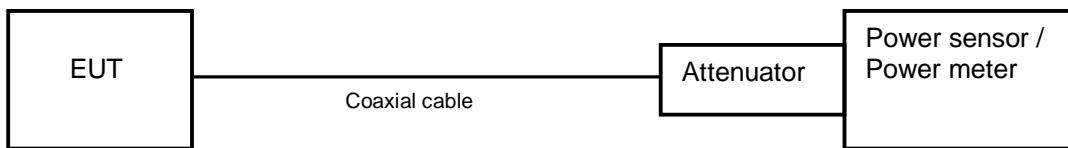
4.2 Maximum Conducted Output Power

4.2.1 Measurement procedure

[FCC 15.247(b)(3), KDB 558074 D01 v05r02, Section 8.3.1.3]

The peak power is measured with a power sensor connected to the antenna terminal, while EUT is operating in transmission mode at the appropriate center frequency.

- Test configuration



4.2.2 Limit

1 W (1000 mW) or less

4.2.3 Measurement result

Date : 10-December-2020
 Temperature : 21.8 [°C]
 Humidity : 25.3 [%]
 Test place : Shielded room No.4

Test engineer : Taiki Watanabe

[IEEE802.11b]

ANT3

Channel	Center Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Output Power (mW)	Limit (mW)	Result
Low	2412	4.49	10.63	15.12	32.509	≤1000	PASS
Middle	2437	4.79	10.63	15.42	34.834	≤1000	PASS
High	2462	4.86	10.63	15.49	35.400	≤1000	PASS

ANT5

Channel	Center Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Output Power (mW)	Limit (mW)	Result
Low	2412	4.21	10.63	14.84	30.479	≤1000	PASS
Middle	2437	3.65	10.63	14.28	26.792	≤1000	PASS
High	2462	4.15	10.63	14.78	30.061	≤1000	PASS

Calculation:

$$\text{Reading (dBm)} + \text{Factor (dB)} = \text{Level (dBm)}$$

$$10\log P = \text{Level (dBm)}$$

$$P = 10^{(\text{Maximum Peak Output Power} / 10)} \text{ (mW)}$$

ANT3+ANT5

Note: 802.11b does not support MIMO.

[IEEE802.11g]

ANT3

Channel	Center Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Output Power (mW)	Limit (mW)	Result
Low	2412	5.76	10.63	16.39	43.551	≤1000	PASS
Middle	2437	5.96	10.63	16.59	45.604	≤1000	PASS
High	2462	6.38	10.63	17.01	50.234	≤1000	PASS

ANT5

Channel	Center Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Output Power (mW)	Limit (mW)	Result
Low	2412	5.72	10.63	16.35	43.152	≤1000	PASS
Middle	2437	5.05	10.63	15.68	36.983	≤1000	PASS
High	2462	5.57	10.63	16.20	41.687	≤1000	PASS

Calculation:

$$\text{Reading (dBm)} + \text{Factor (dB)} = \text{Level (dBm)}$$

$$10\log P = \text{Level (dBm)}$$

$$P = 10^{(\text{Maximum Peak Output Power} / 10)} \text{ (mW)}$$

ANT3+ANT5

Note: 802.11g does not support MIMO.

[IEEE802.11n (HT20)]

ANT3

Channel	Center Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Output Power (mW)	Limit (mW)	Result
Low	2412	5.98	10.63	16.61	45.814	≤1000	PASS
Middle	2437	6.12	10.63	16.75	47.315	≤1000	PASS
High	2462	6.22	10.63	16.85	48.417	≤1000	PASS

ANT5

Channel	Center Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Output Power (mW)	Limit (mW)	Result
Low	2412	5.74	10.63	16.37	43.351	≤1000	PASS
Middle	2437	5.05	10.63	15.68	36.983	≤1000	PASS
High	2462	5.69	10.63	16.32	42.855	≤1000	PASS

ANT3+ANT5

Channel	Center Frequency (MHz)	Level (dBm)		Total Output Power (mW)	Limit (mW)	Result
		ANT3	ANT5			
Low	2412	16.61	16.37	89.165	≤1000	PASS
Middle	2437	16.75	15.68	84.298	≤1000	PASS
High	2462	16.85	16.32	91.272	≤1000	PASS

Calculation:

$$\text{Reading (dBm)} + \text{Factor (dB)} = \text{Level (dBm)}$$

$$10\log P = \text{Level (dBm)}$$

$$P = 10^{(\text{Maximum Peak Output Power} / 10)} \text{ (mW)}$$

4.3 Band Edge Compliance of RF Conducted Emissions

4.3.1 Measurement procedure

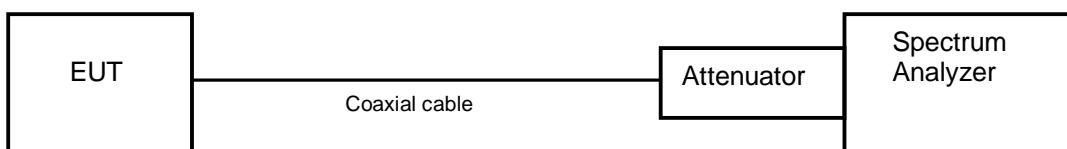
[FCC 15.247(d), KDB 558074 D01 v05r02, Section 8.5]

The Band Edge is measured with a spectrum analyzer connected to the antenna terminal, while EUT is operating in transmission mode at the appropriate center frequency.

The spectrum analyzer is set to;

- a) Span = Arbitrary setting. (Setting suitable for measurement.)
- b) RBW = 100kHz.
- c) VBW $\geq 3 \times$ RBW
- d) Sweep time = auto-couple.
- e) Detector = peak.
- f) Trace mode = max hold.

- Test configuration



4.3.2 Limit

In any 100 kHz bandwidth outside the frequency band the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.

4.3.3 Measurement result

Date : 9-December-2020
 Temperature : 20.9 [°C]
 Humidity : 27.9 [%]
 Test place : Shielded room No.4

Test engineer : Taiki Watanabe

Date : 10-December-2020
 Temperature : 21.8 [°C]
 Humidity : 25.3 [%]
 Test place : Shielded room No.4

Test engineer : Taiki Watanabe

[IEEE802.11b]

ANT3

Channel	Frequency (MHz)	RF Power Level (dBm)	Band-edge Frequency (MHz)	Band-edge Level (dBm)	Difference Level (dBm)	Limit (dBm)	Result
Low	2412.00	-7.09	2399.92	-59.52	52.43	At least 20dB below from peak of RF	PASS
High	2462.00	-6.48	2485.02	-65.80	59.32	At least 20dB below from peak of RF	PASS

ANT5

Channel	Frequency (MHz)	RF Power Level (dBm)	Band-edge Frequency (MHz)	Band-edge Level (dBm)	Difference Level (dBm)	Limit (dBm)	Result
Low	2412.00	-7.56	2399.52	-54.07	46.51	At least 20dB below from peak of RF	PASS
High	2462.00	-8.27	2489.01	-67.11	58.84	At least 20dB below from peak of RF	PASS

[IEEE802.11g]

ANT3

Channel	Frequency (MHz)	RF Power Level (dBm)	Band-edge Frequency (MHz)	Band-edge Level (dBm)	Difference Level (dBm)	Limit (dBm)	Result
Low	2412.00	-9.86	2399.76	-38.48	28.62	At least 20dB below from peak of RF	PASS
High	2462.00	-9.41	2483.82	-66.52	57.11	At least 20dB below from peak of RF	PASS

ANT5

Channel	Frequency (MHz)	RF Power Level (dBm)	Band-edge Frequency (MHz)	Band-edge Level (dBm)	Difference Level (dBm)	Limit (dBm)	Result
Low	2412.00	-9.90	2399.52	-41.01	31.11	At least 20dB below from peak of RF	PASS
High	2462.00	-10.05	2487.02	-64.78	54.73	At least 20dB below from peak of RF	PASS

[IEEE802.11n (HT20)]**ANT3**

Channel	Frequency (MHz)	RF Power Level (dBm)	Band-edge Frequency (MHz)	Band-edge Level (dBm)	Difference Level (dBm)	Limit (dBm)	Result
Low	2412.00	-8.84	2399.76	-38.15	29.31	At least 20dB below from peak of RF	PASS
High	2462.00	-8.48	2483.58	-61.41	52.93	At least 20dB below from peak of RF	PASS

ANT5

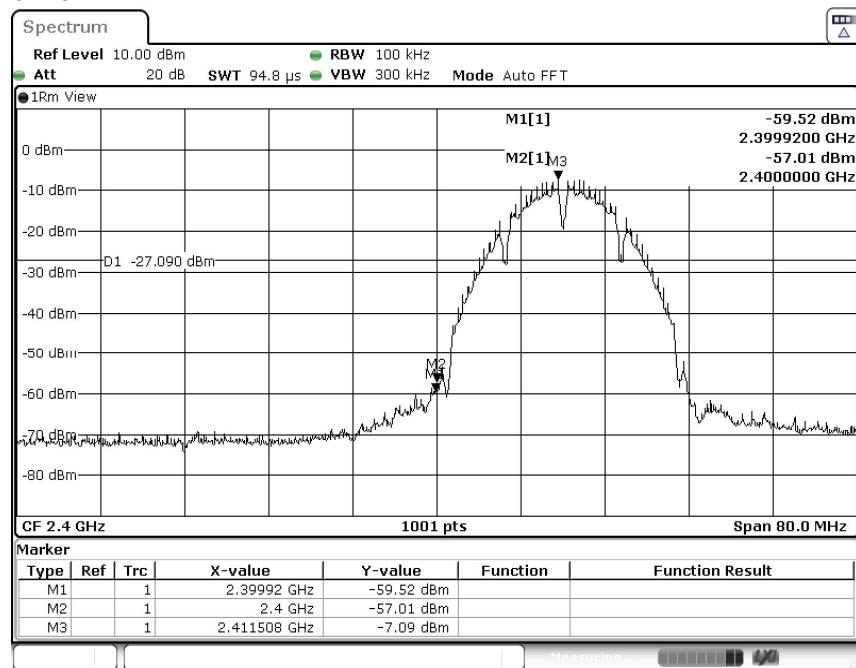
Channel	Frequency (MHz)	RF Power Level (dBm)	Band-edge Frequency (MHz)	Band-edge Level (dBm)	Difference Level (dBm)	Limit (dBm)	Result
Low	2412.00	-9.89	2399.52	-40.60	30.71	At least 20dB below from peak of RF	PASS
High	2462.00	-9.89	2484.14	-64.91	55.02	At least 20dB below from peak of RF	PASS

4.3.4 Trace data

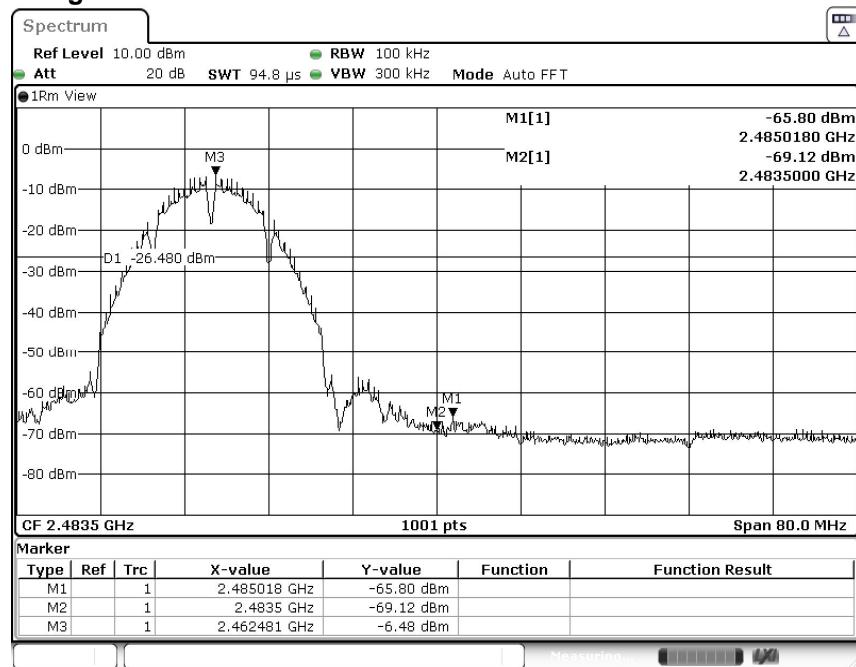
[IEEE802.11b]

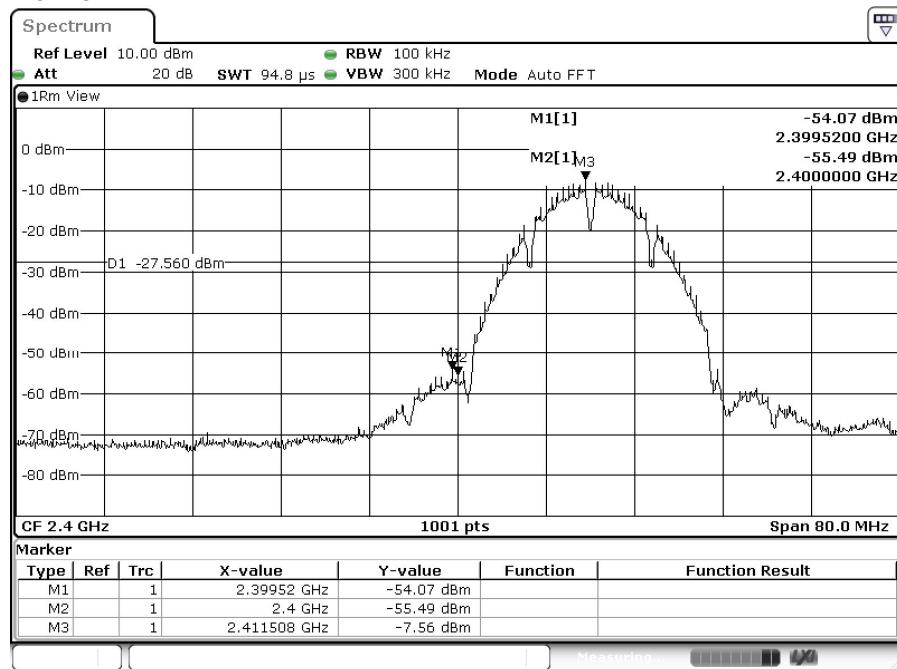
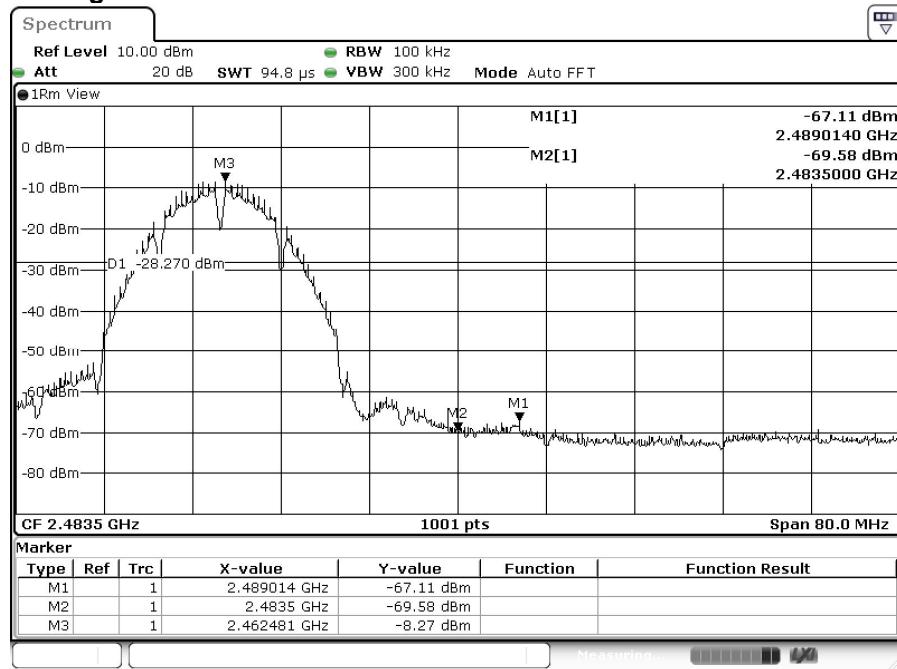
ANT3

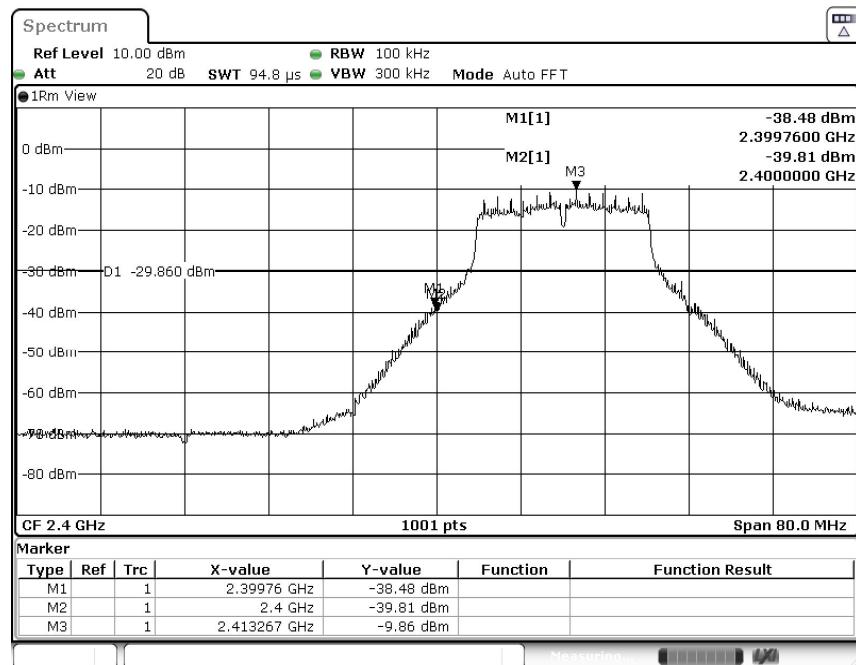
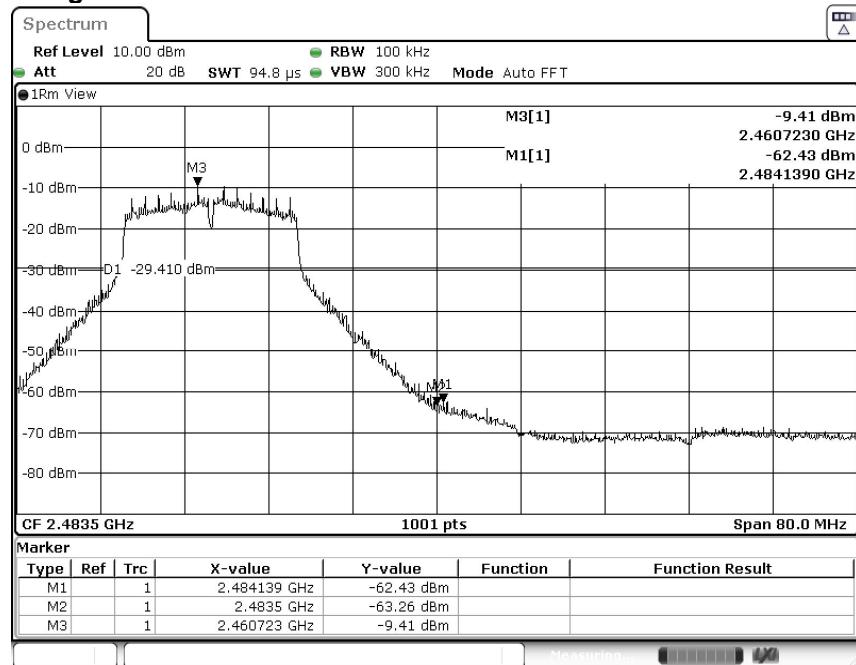
Channel Low

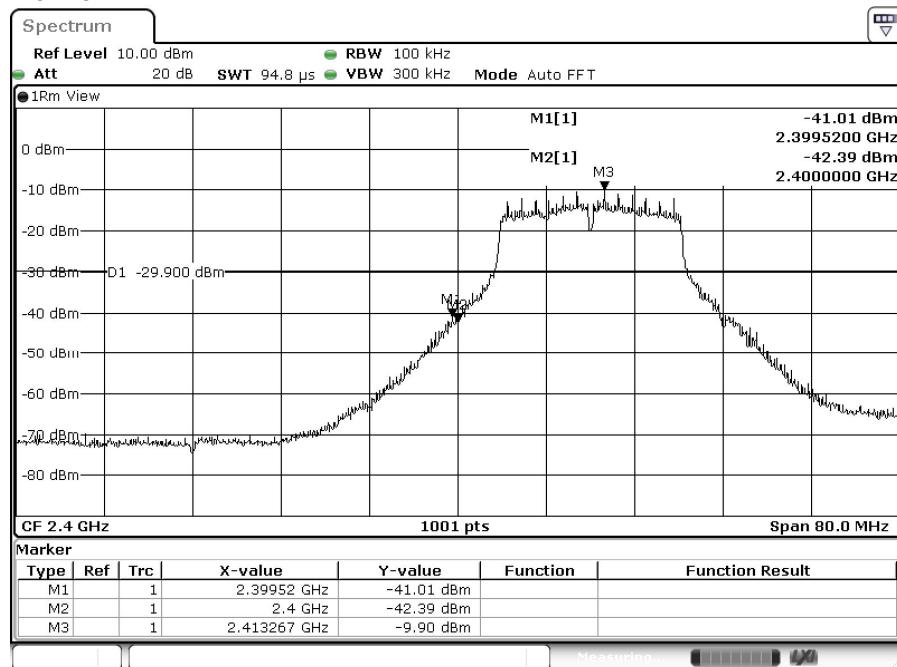
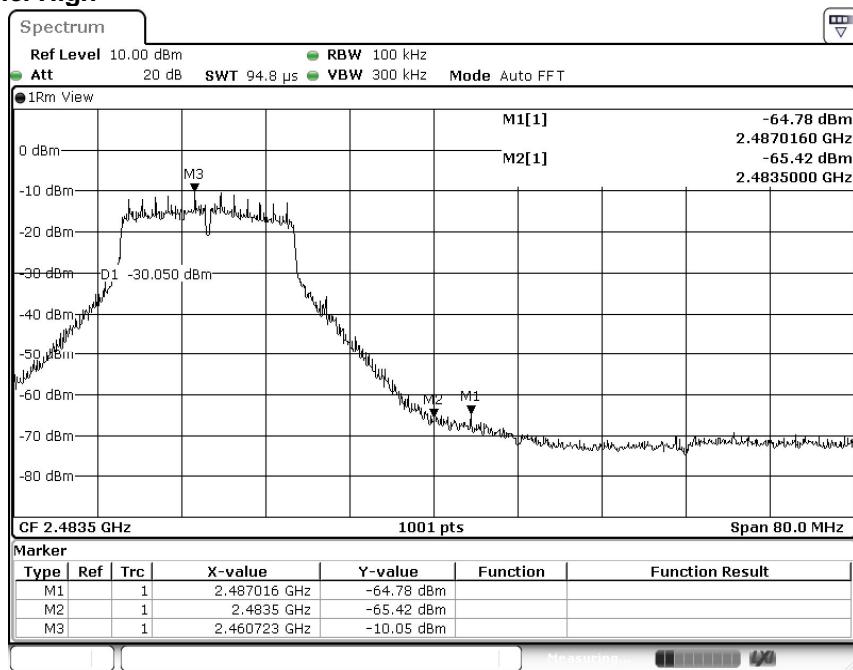


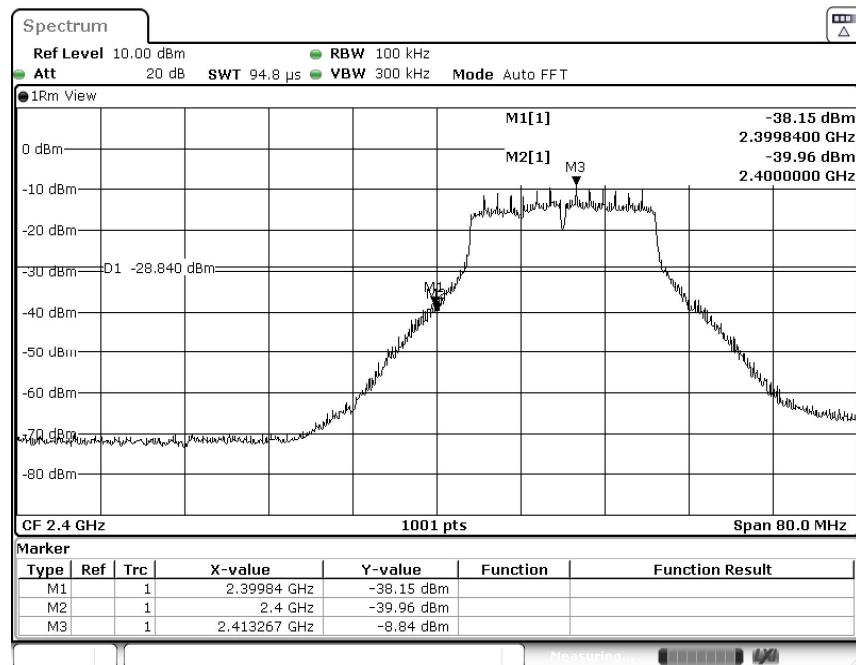
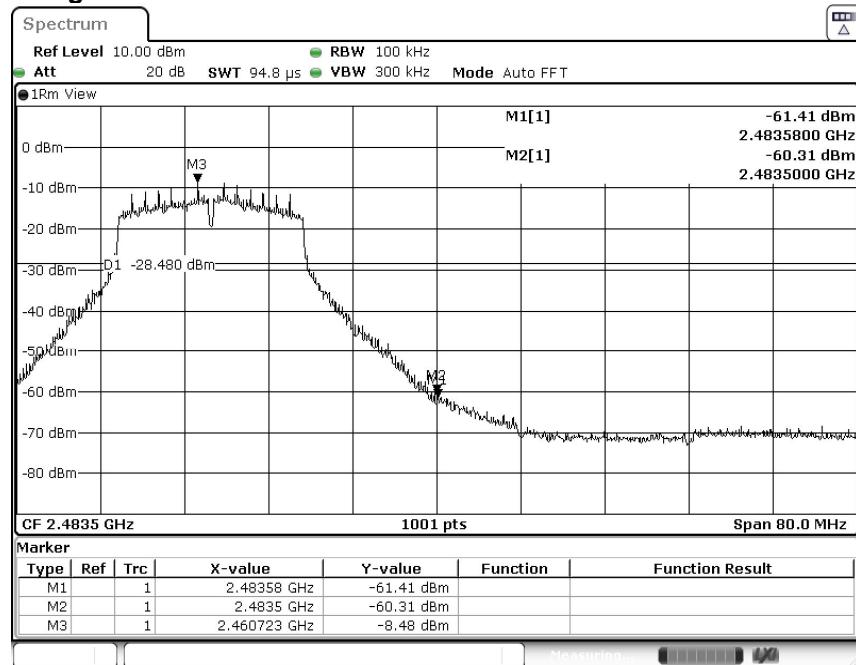
Channel High

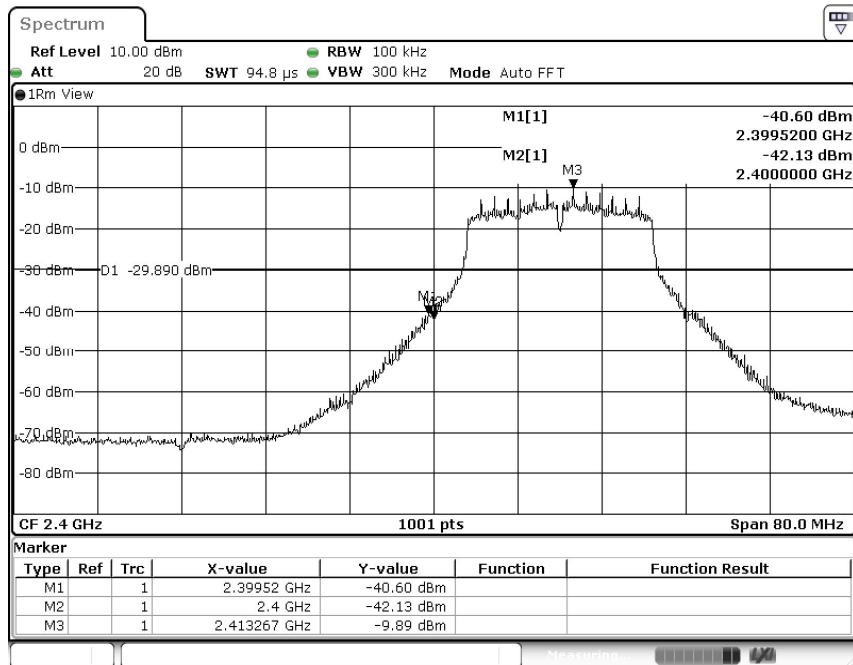
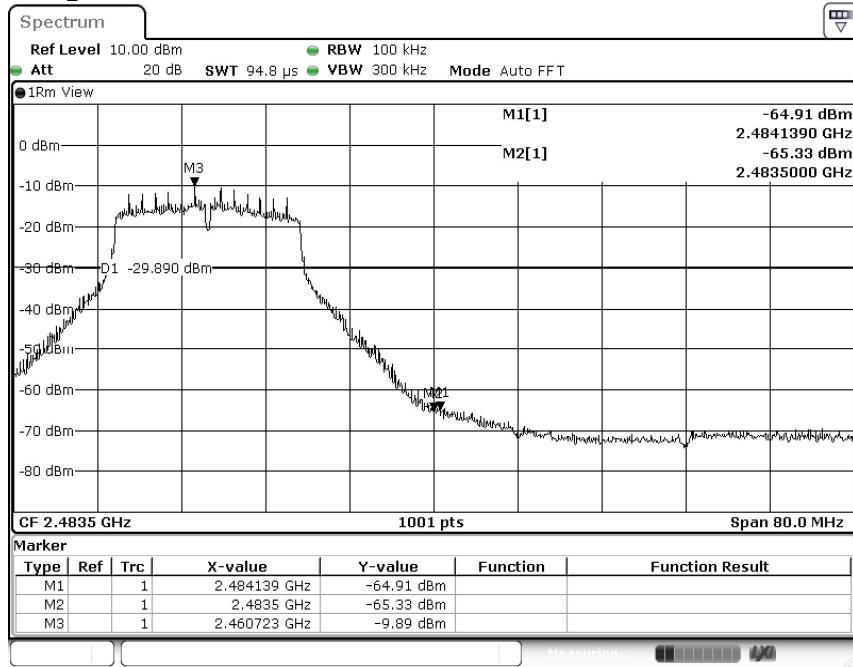


ANT5**Channel Low****Channel High**

[IEEE802.11g]**ANT3****Channel Low****Channel High**

ANT5**Channel Low****Channel High**

[IEEE802.11n (HT20)]**ANT3****Channel Low****Channel High**

ANT5**Channel Low****Channel High**

4.4 Spurious emissions - Conducted -

4.4.1 Measurement procedure

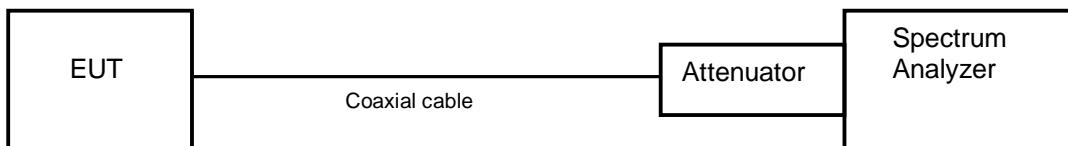
[FCC 15.247(d), KDB 558074 D01 v05r02, Section 8.5]

The spurious emissions (Conducted) are measured with a spectrum analyzer connected to the antenna terminal, while EUT is operating in transmission mode at the appropriate center frequency.

The spectrum analyzer is set to;

- a) Span = wide enough to fully capture the emission being measured.
- b) RBW = 100 kHz.
- c) VBW \geq RBW.
- d) Sweep time = auto-couple.
- e) Detector = peak.
- f) Trace mode = max hold.

- Test configuration



4.4.2 Limit

In any 100 kHz bandwidth outside the frequency band the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.

4.4.3 Measurement result

Date : 9-December-2020
 Temperature : 20.9 [°C]
 Humidity : 27.9 [%]
 Test place : Shielded room No.4

Test engineer : Taiki Watanabe

Date : 10-December-2020
 Temperature : 21.8 [°C]
 Humidity : 25.3 [%]
 Test place : Shielded room No.4

Test engineer : Taiki Watanabe

[IEEE802.11b、IEEE802.11g、IEEE802.11n (HT20)]

Channel	Frequency [MHz]	Limit [dB]	Results Chart	Result
Low	2412	At least 20dB below from peak of RF	See the trace Data	PASS
Middle	2437	At least 20dB below from peak of RF	See the trace Data	PASS
High	2462	At least 20dB below from peak of RF	See the trace Data	PASS

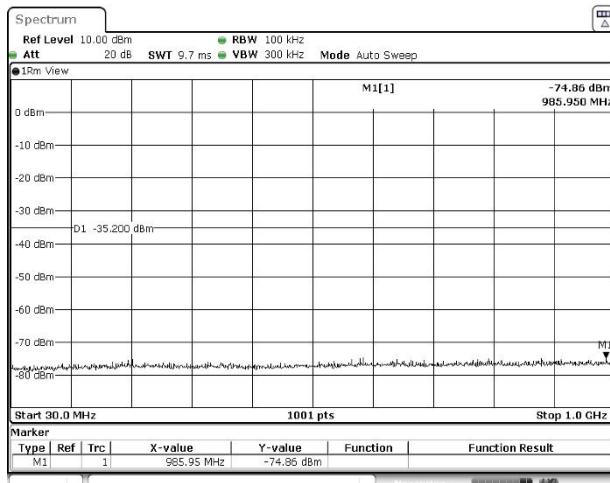
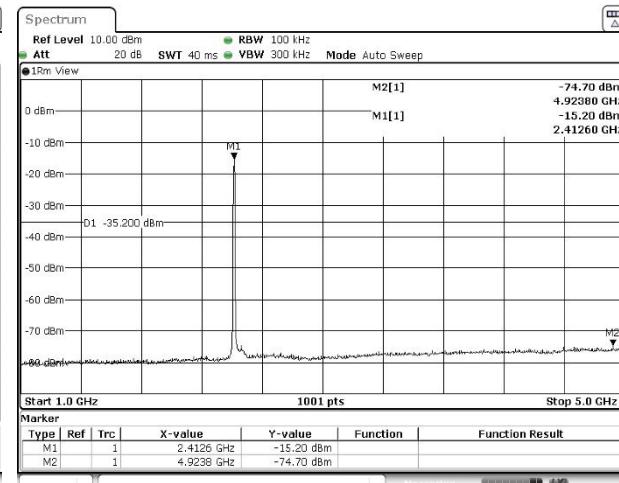
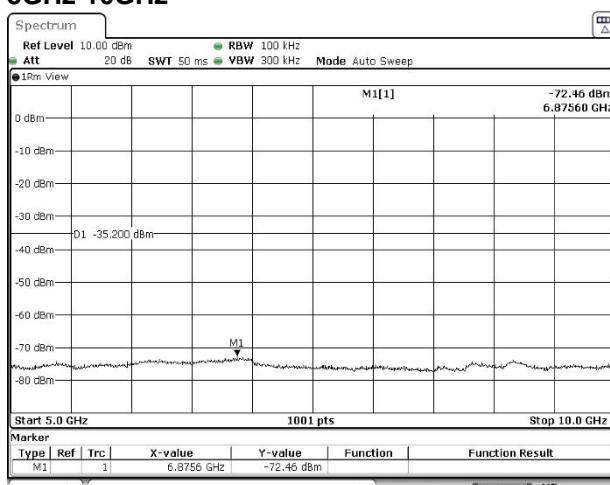
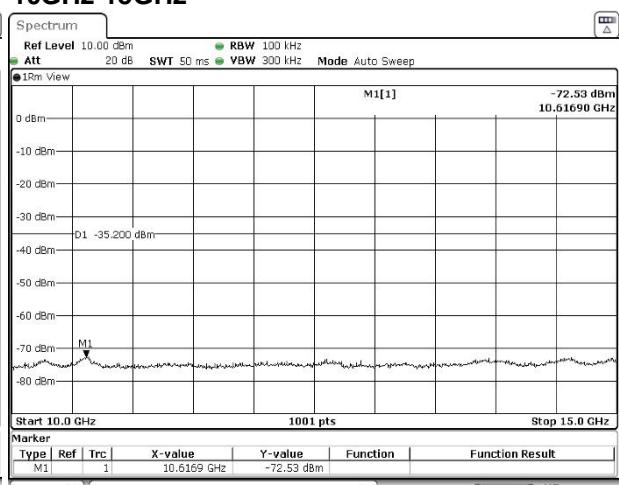
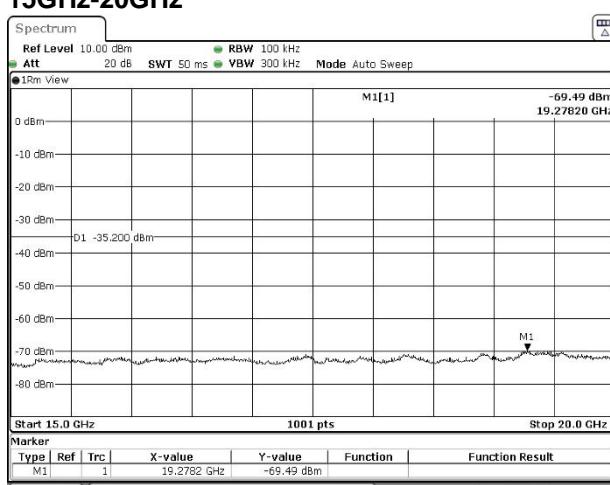
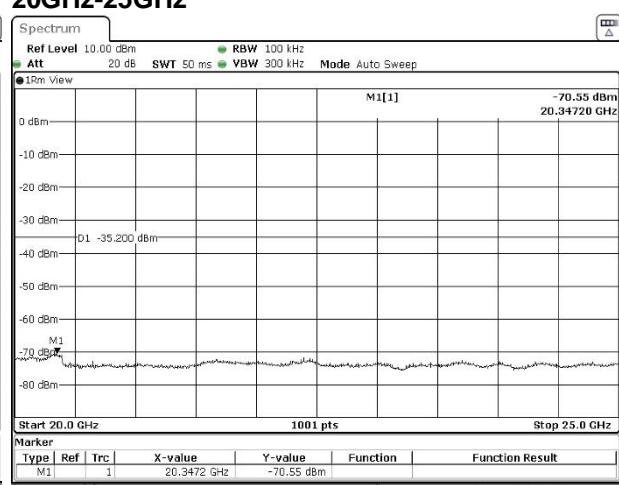
4.4.4 Trace data

[IEEE802.11b]

ANT3

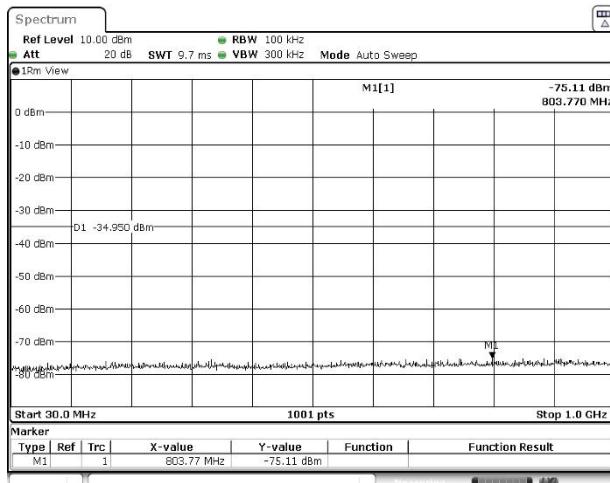
Channel Low

30MHz-1GHz

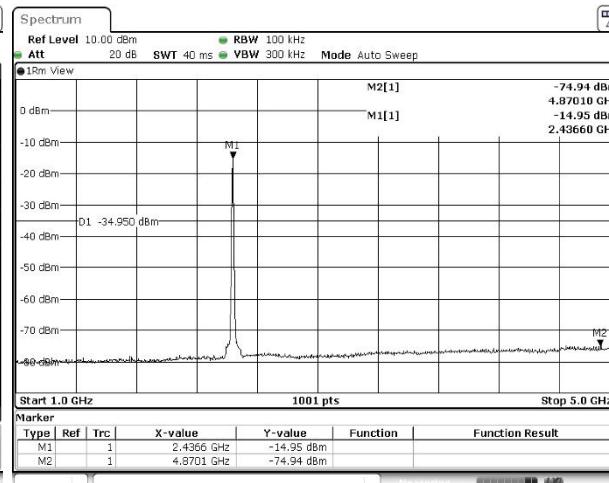
**1GHz-5GHz****5GHz-10GHz****10GHz-15GHz****15GHz-20GHz****20GHz-25GHz**

Channel Middle

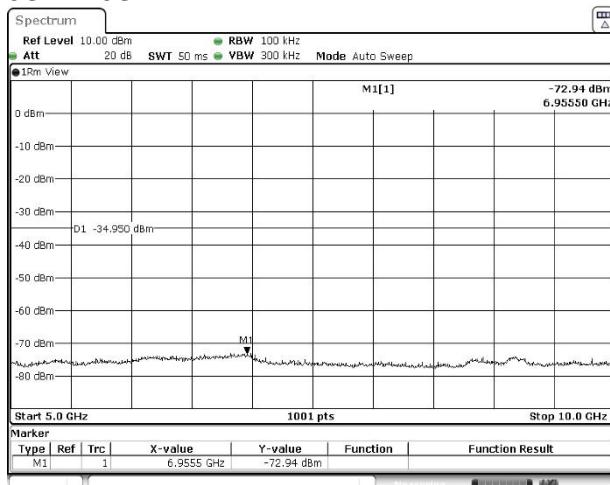
30MHz-1GHz



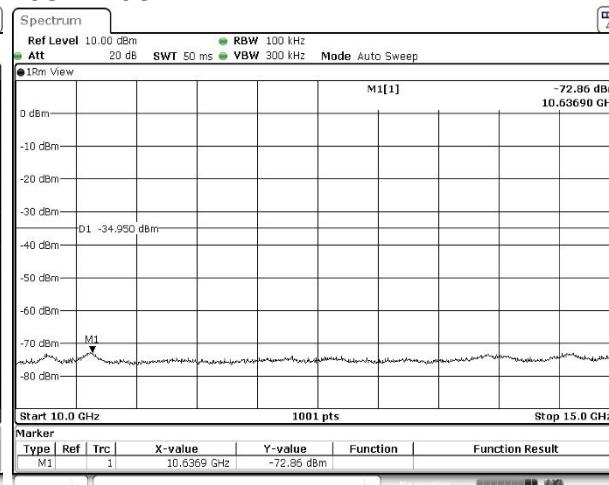
1GHz-5GHz



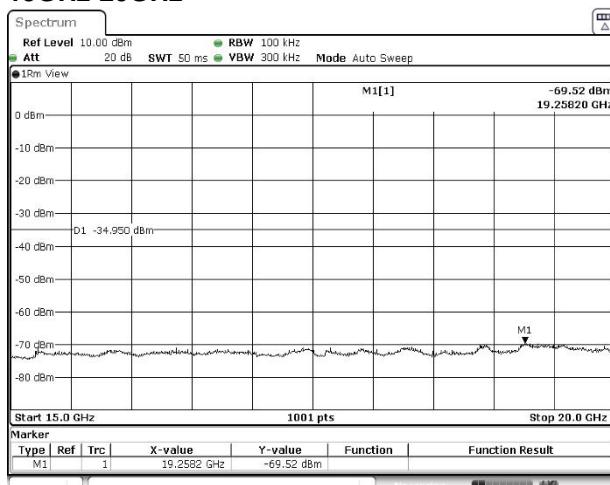
5GHz-10GHz



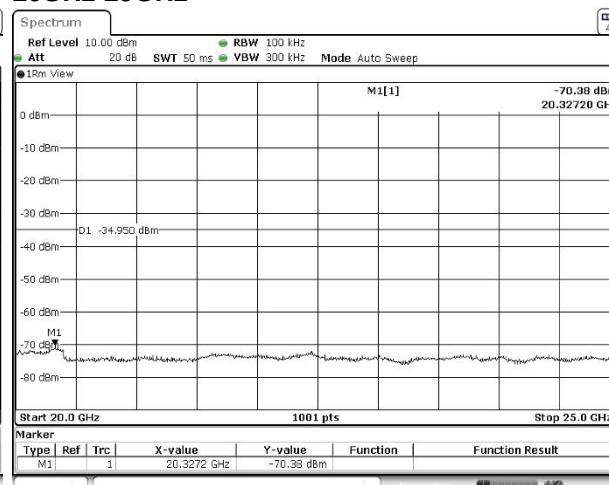
10GHz-15GHz



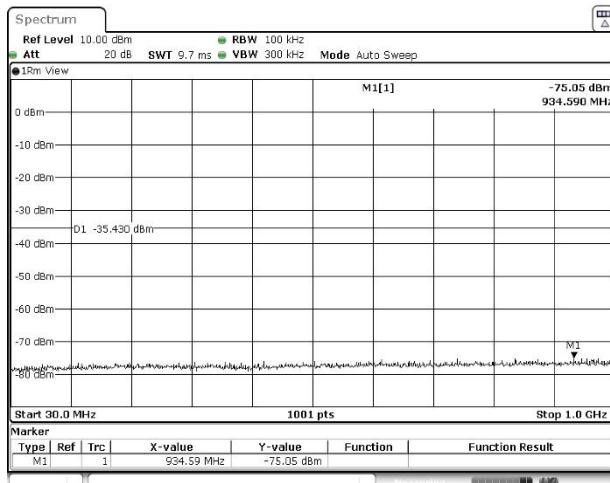
15GHz-20GHz



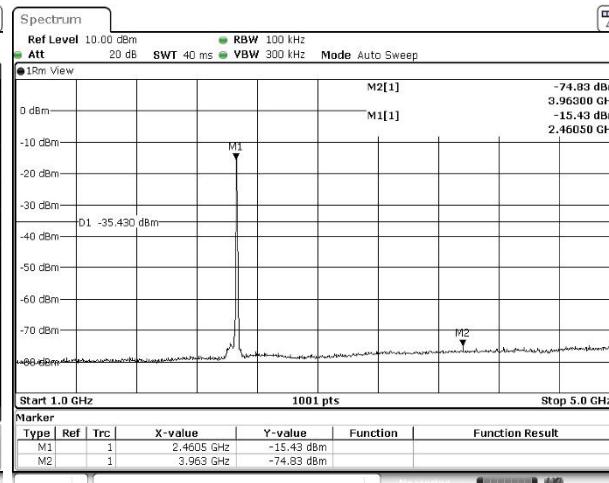
20GHz-25GHz



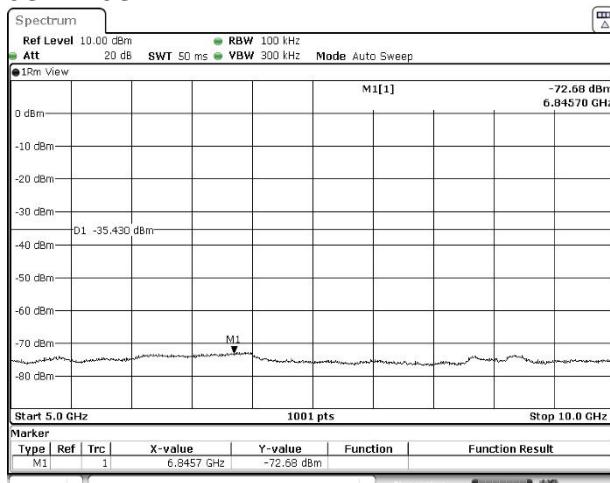
Channel High 30MHz-1GHz



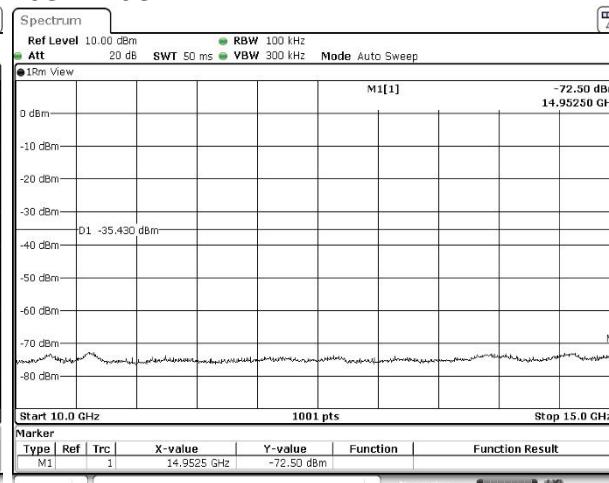
1GHz-5GHz



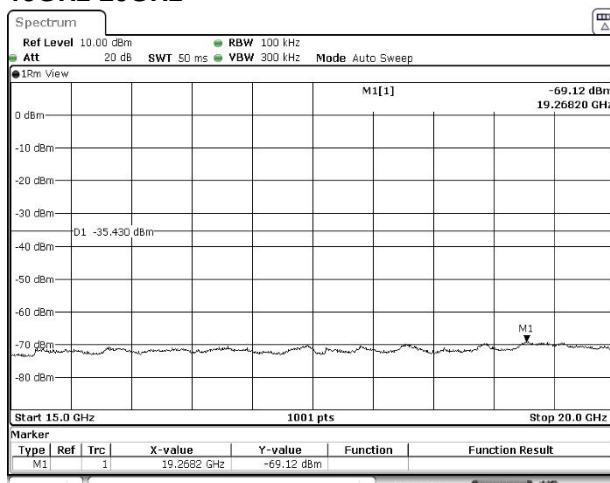
5GHz-10GHz



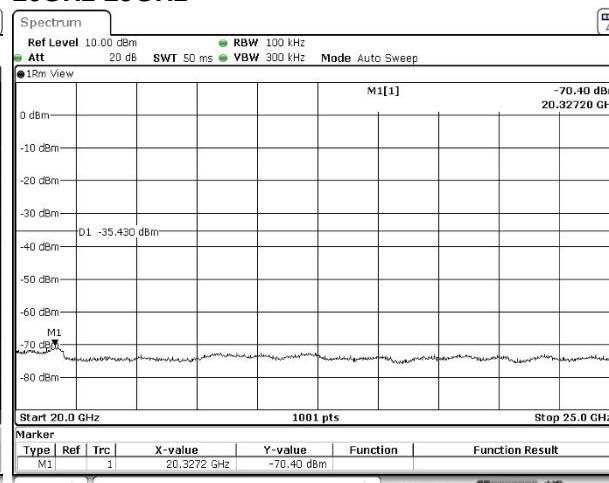
10GHz-15GHz



15GHz-20GHz



20GHz-25GHz

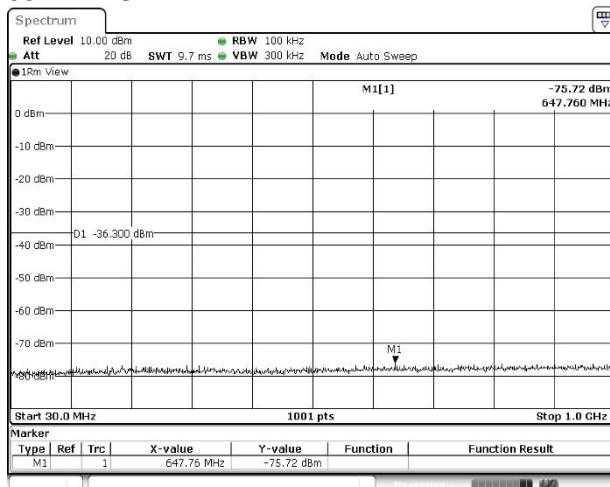


[IEEE802.11b]

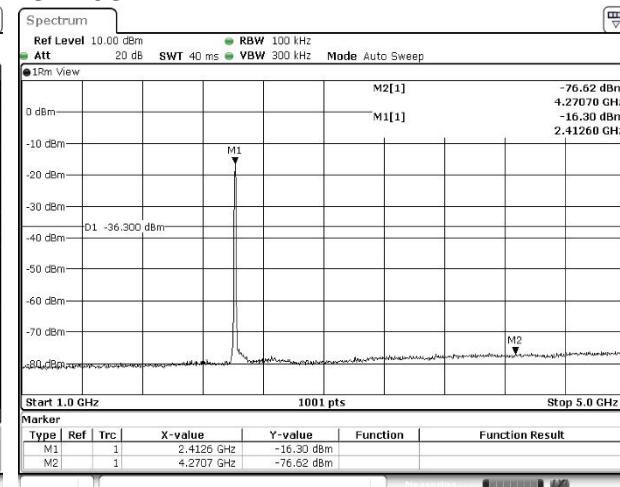
ANT5

Channel Low

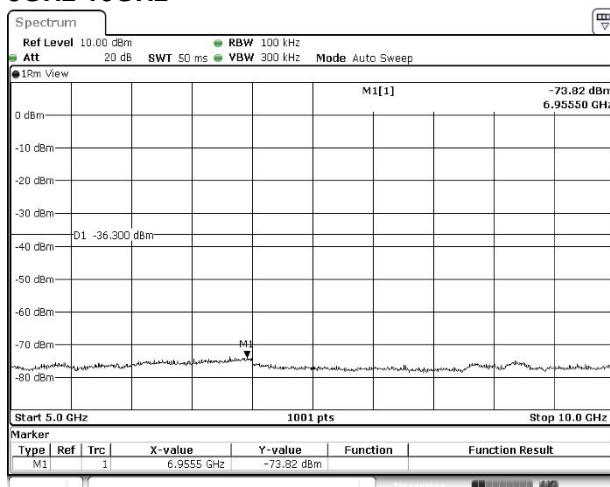
30MHz-1GHz



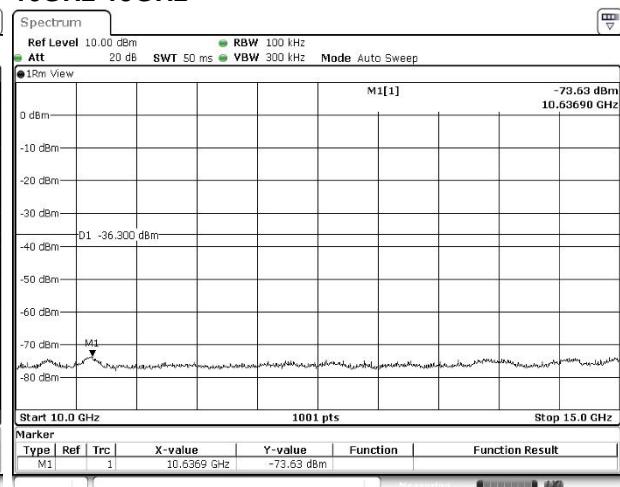
1GHz-5GHz



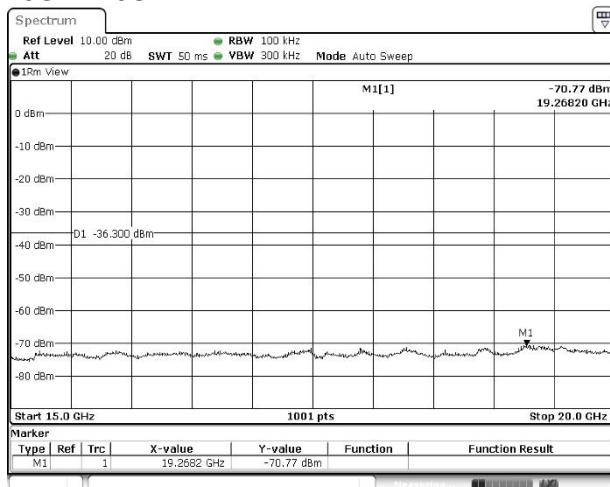
5GHz-10GHz



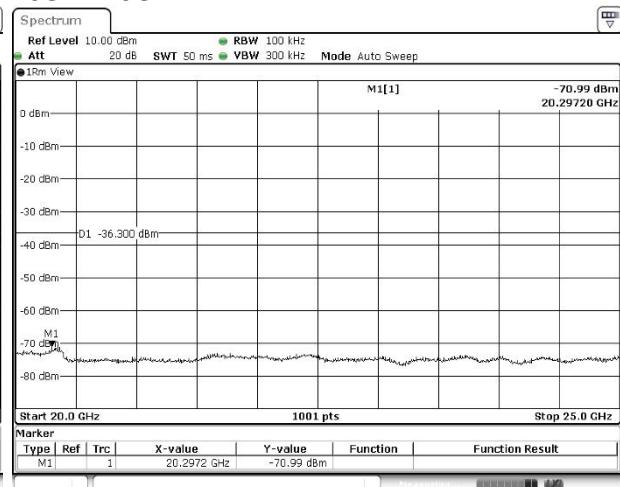
10GHz-15GHz



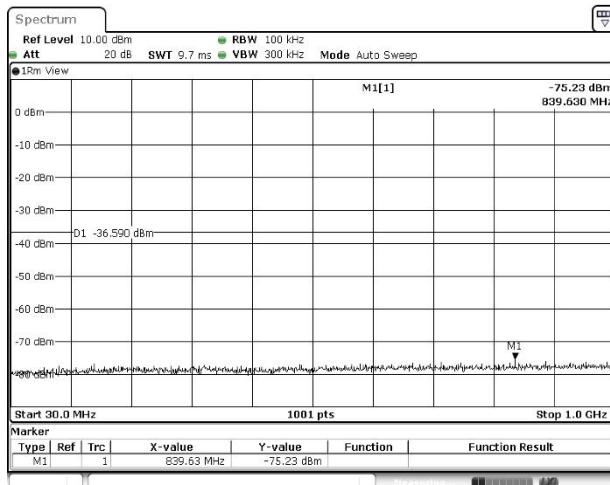
15GHz-20GHz



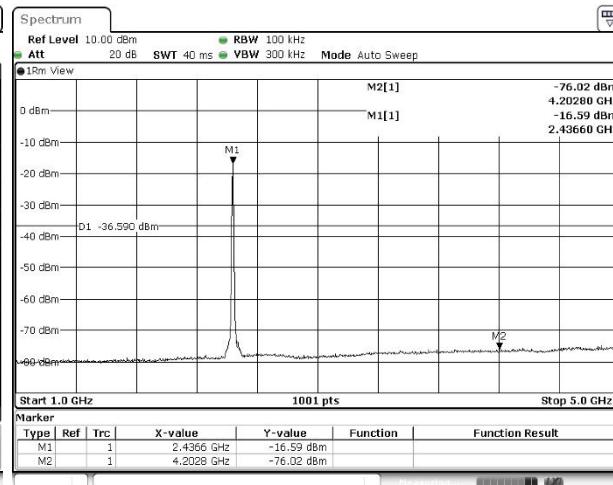
20GHz-25GHz



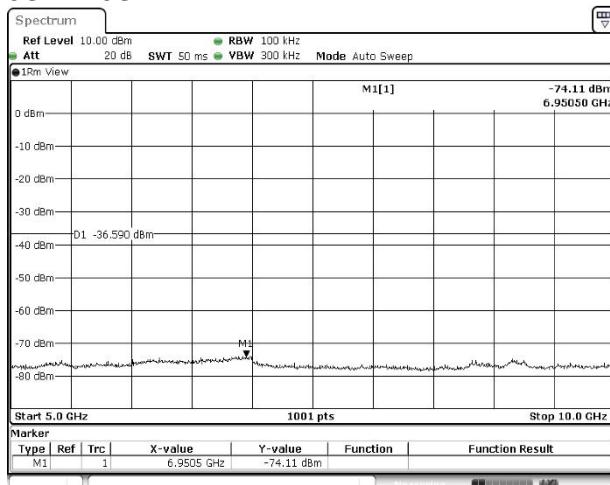
Channel Middle 30MHz-1GHz



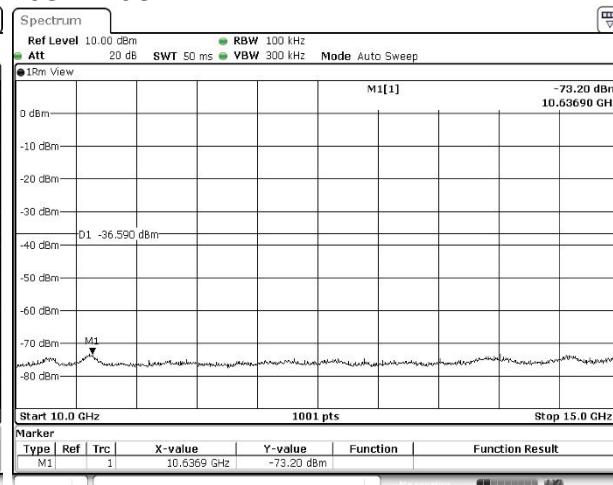
1GHz-5GHz



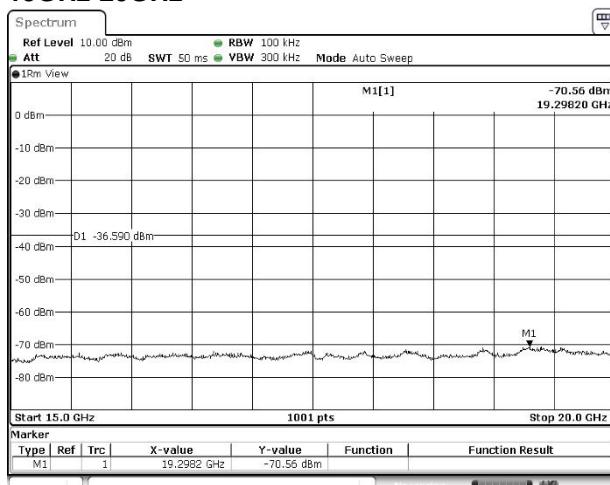
5GHz-10GHz



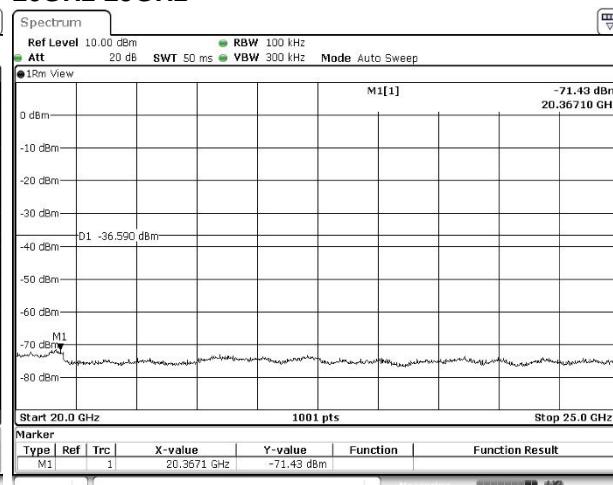
10GHz-15GHz



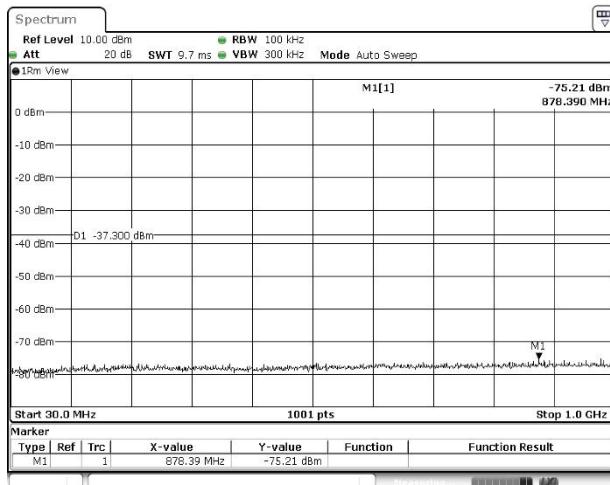
15GHz-20GHz



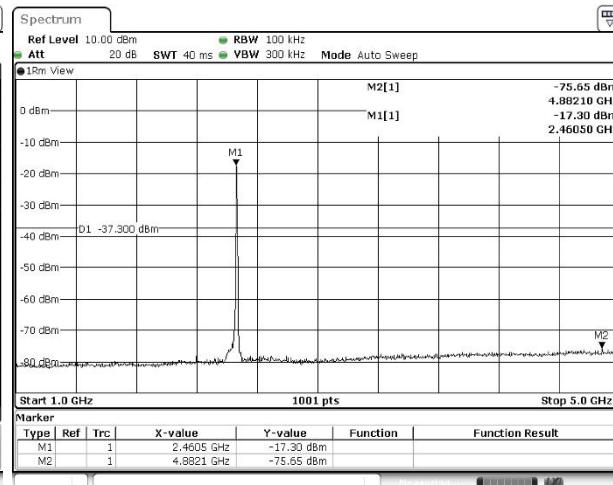
20GHz-25GHz



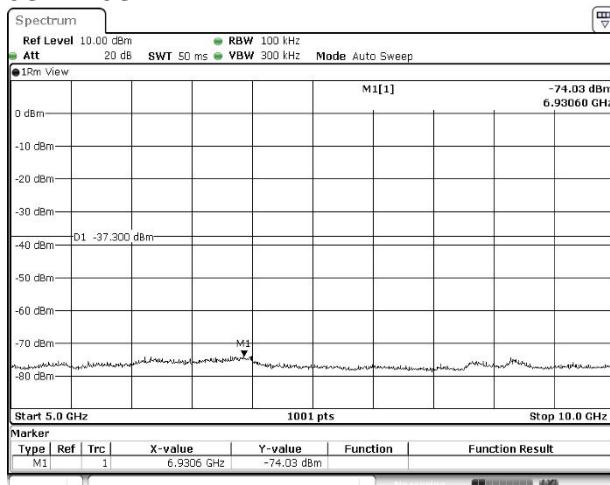
Channel High 30MHz-1GHz



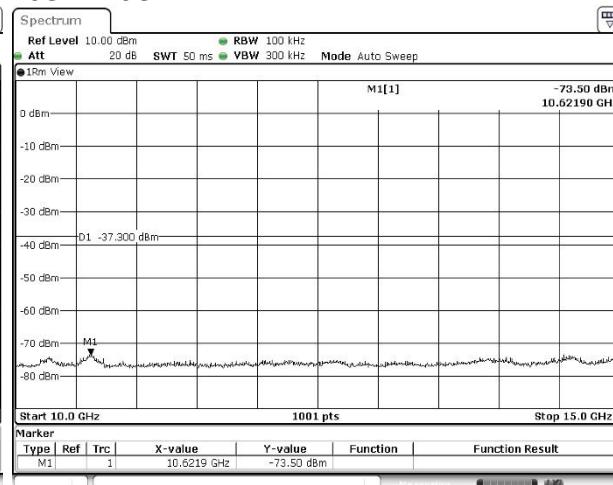
1GHz-5GHz



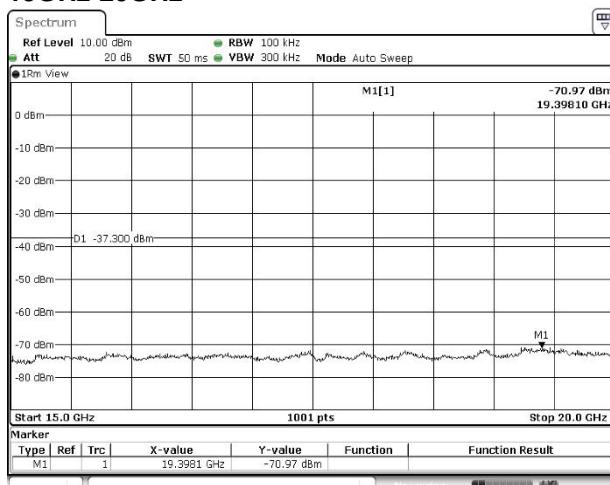
5GHz-10GHz



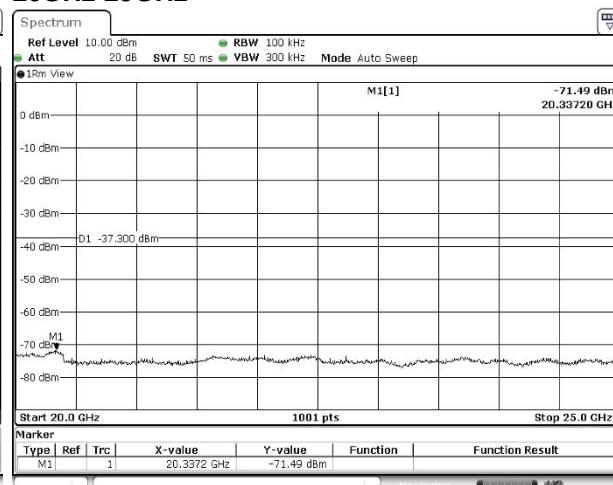
10GHz-15GHz



15GHz-20GHz



20GHz-25GHz

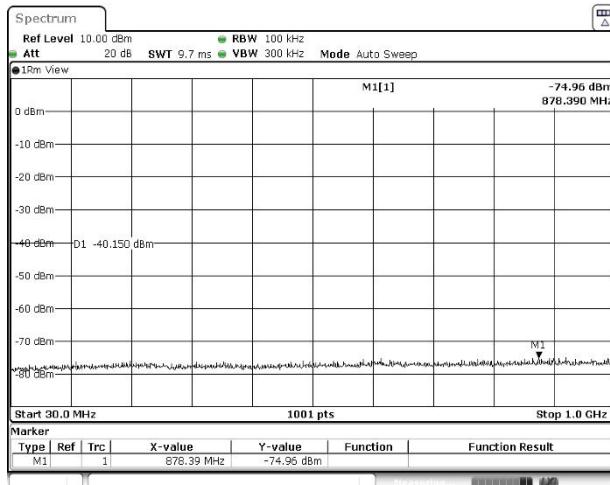


[IEEE802.11g]

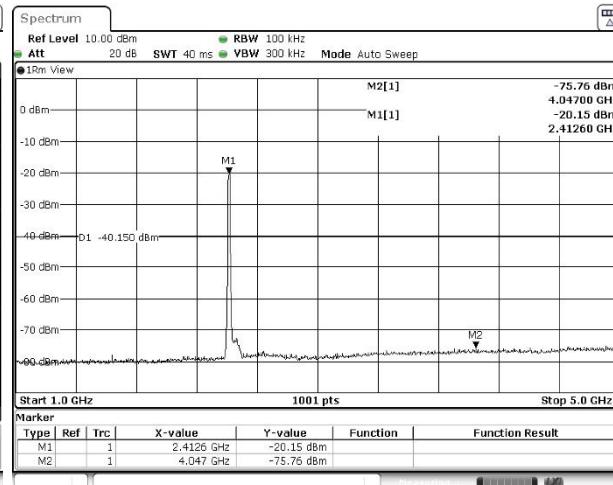
ANT3

Channel Low

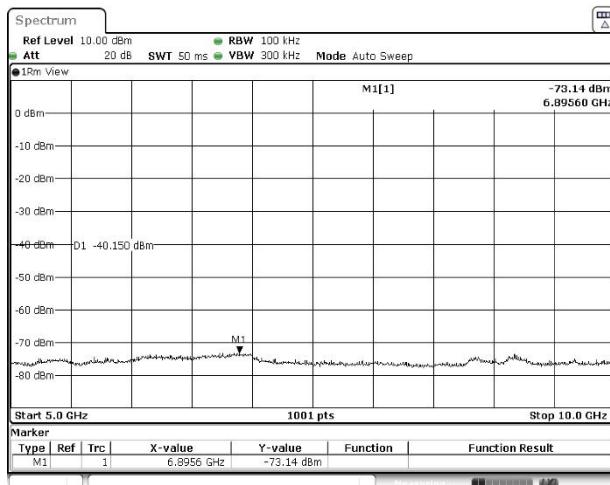
30MHz-1GHz



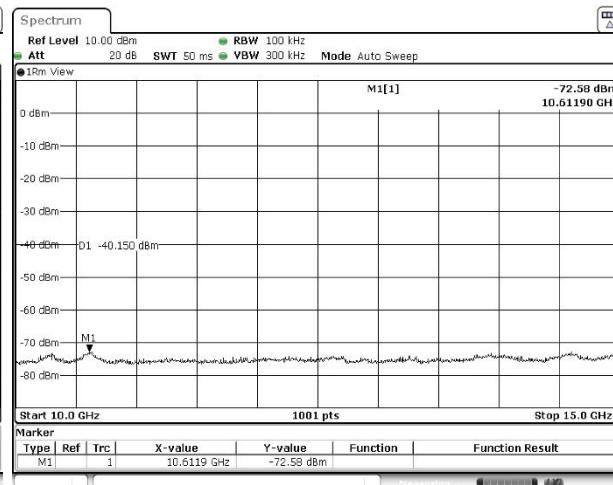
1GHz-5GHz



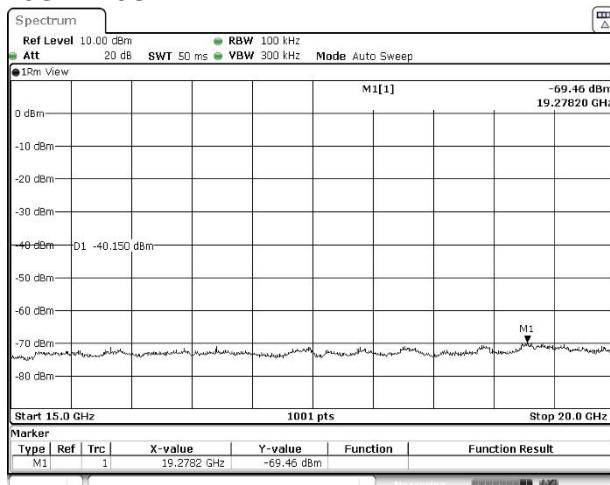
5GHz-10GHz



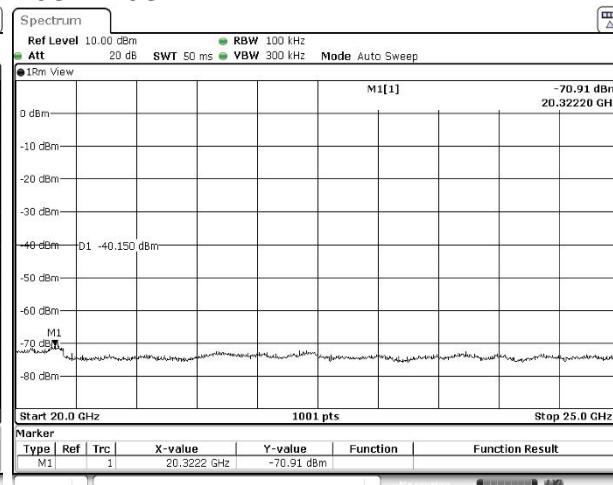
10GHz-15GHz



15GHz-20GHz

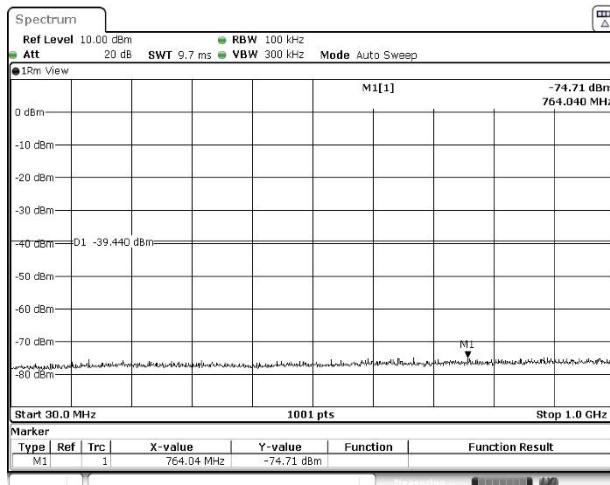


20GHz-25GHz

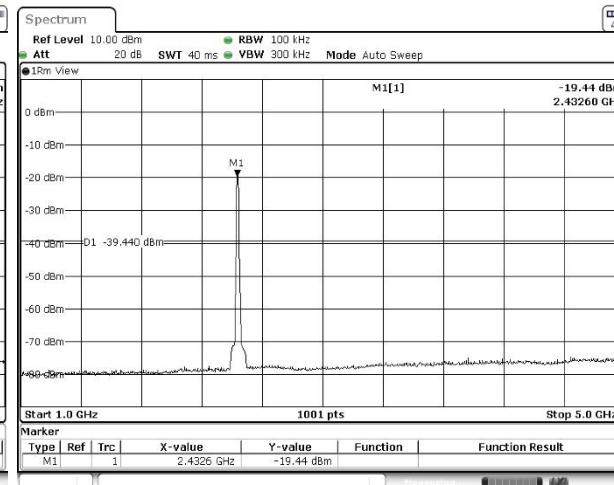


Channel Middle

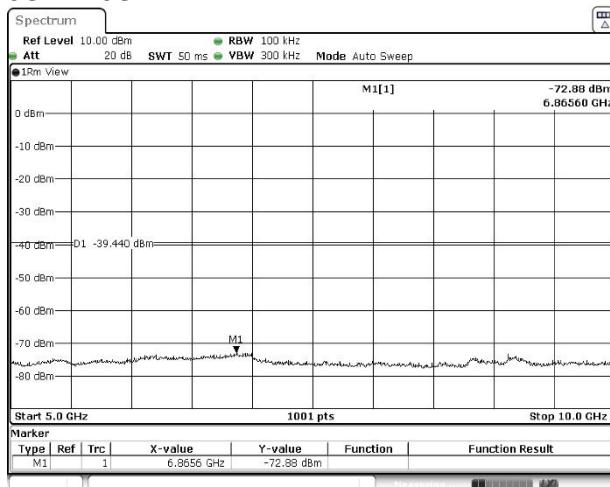
30MHz-1GHz



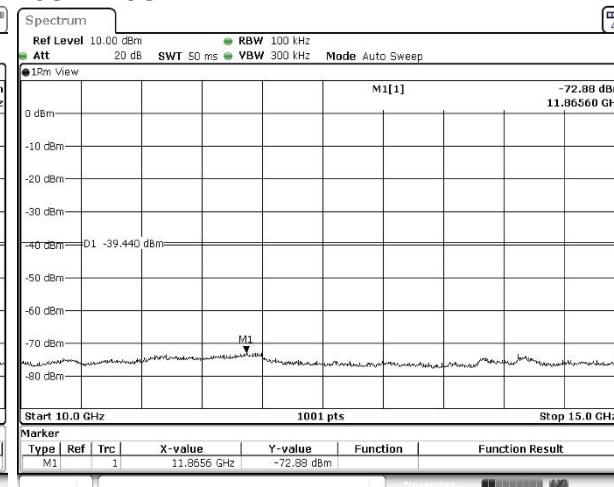
1GHz-5GHz



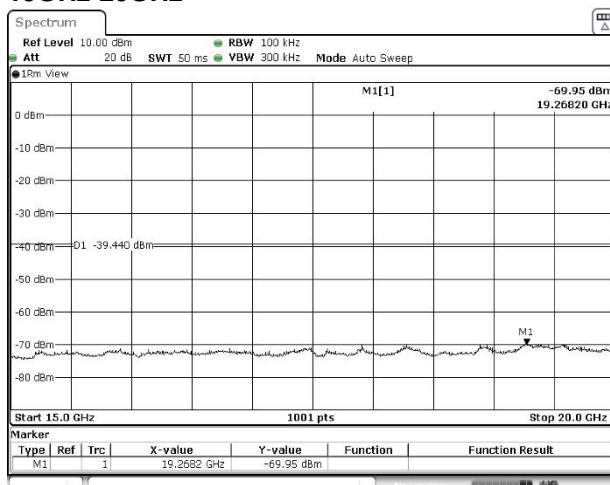
5GHz-10GHz



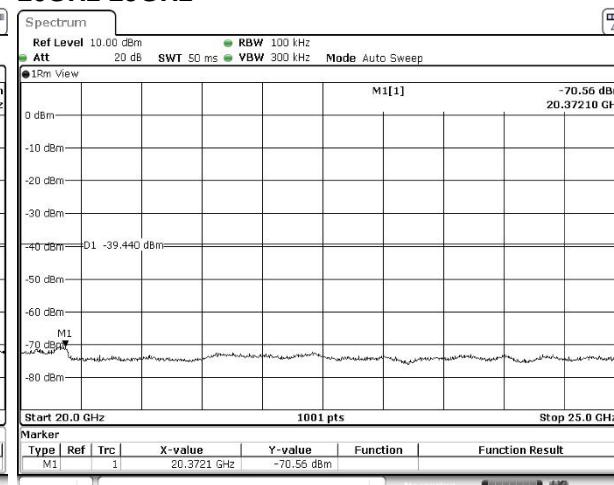
10GHz-15GHz



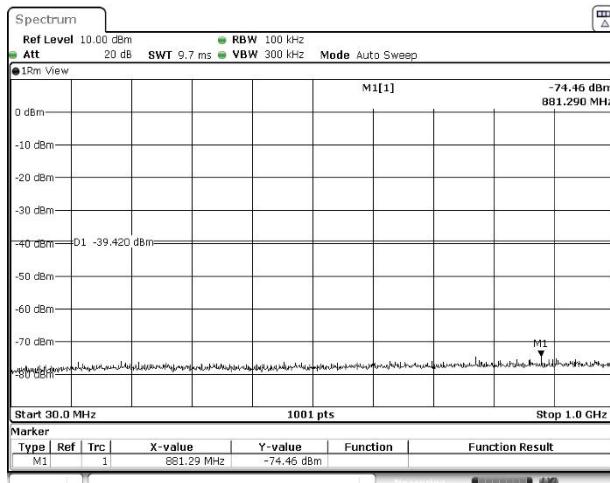
15GHz-20GHz



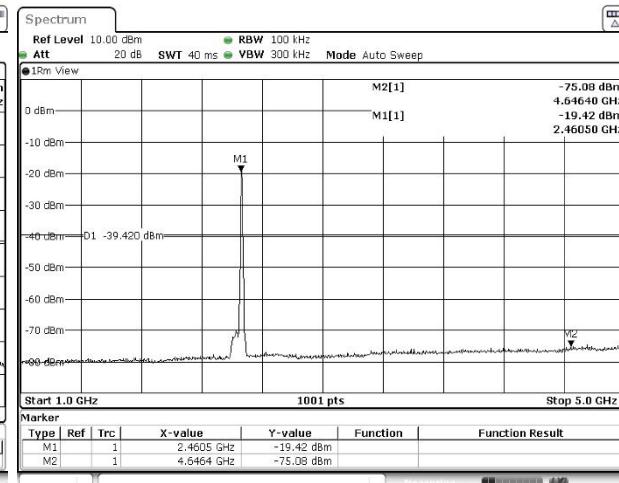
20GHz-25GHz



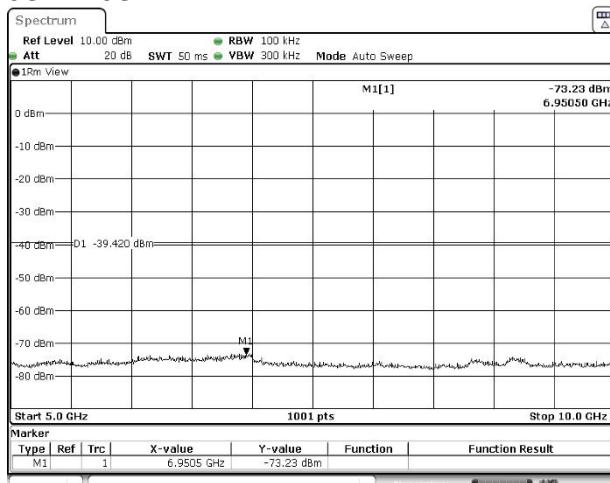
Channel High 30MHz-1GHz



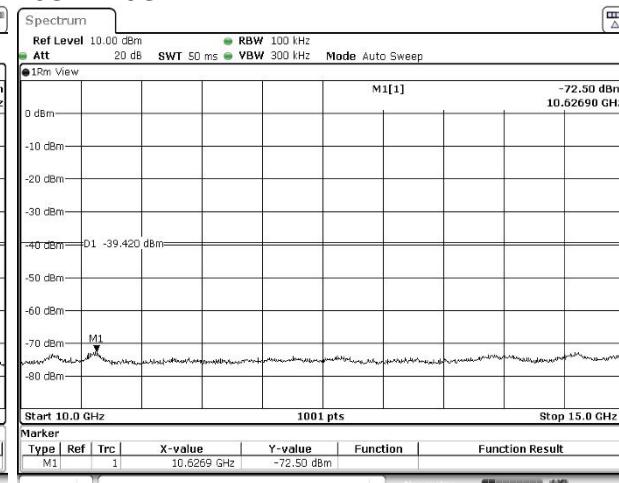
1GHz-5GHz



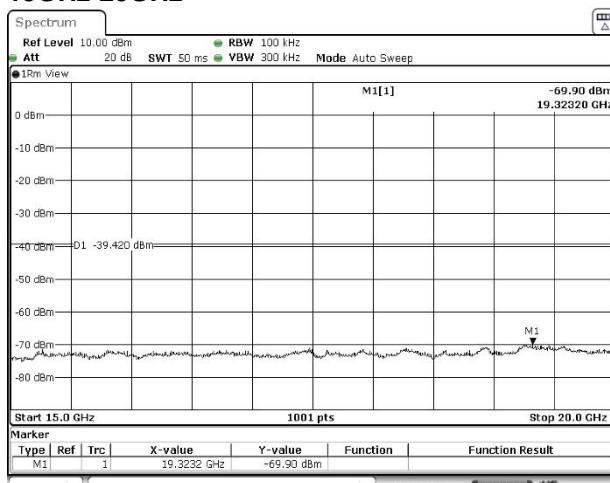
5GHz-10GHz



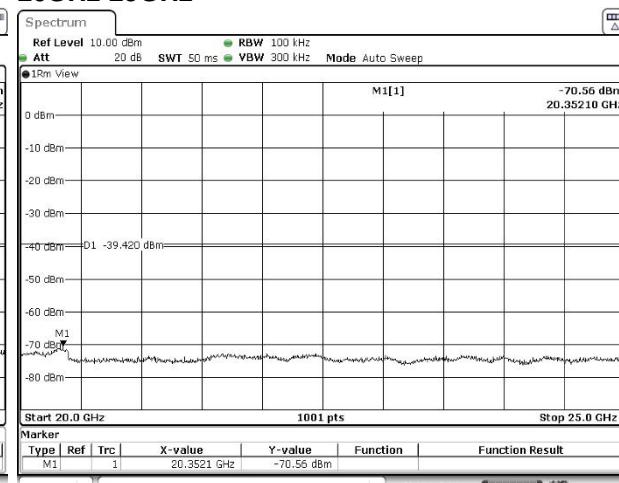
10GHz-15GHz



15GHz-20GHz



20GHz-25GHz

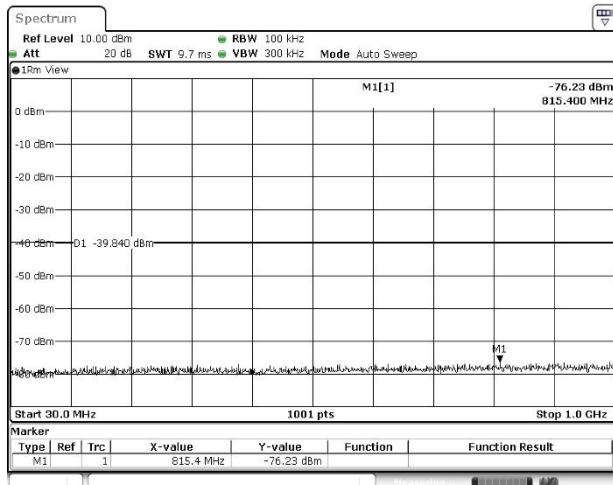


[IEEE802.11g]

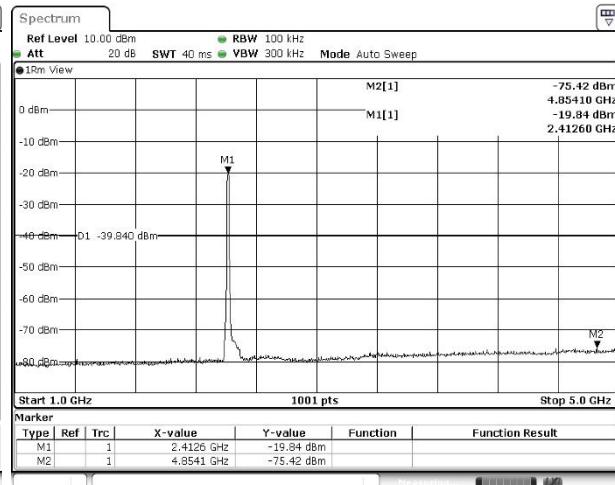
ANT5

Channel Low

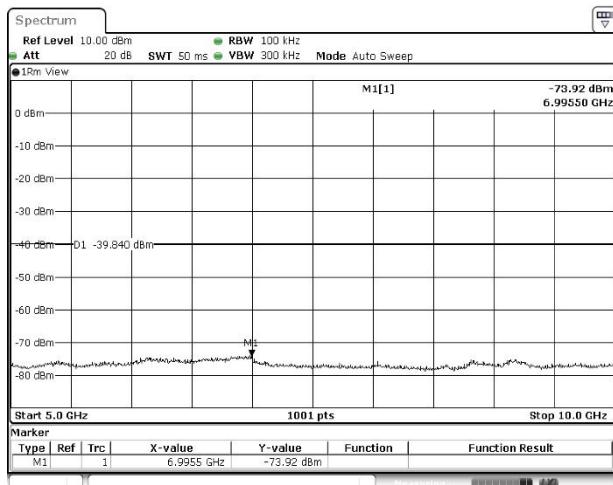
30MHz-1GHz



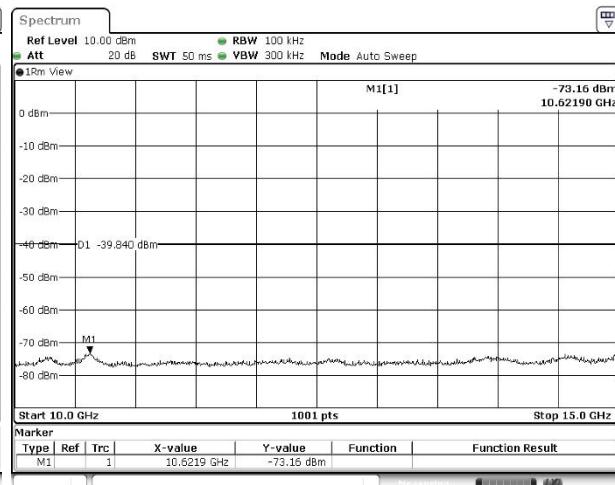
1GHz-5GHz



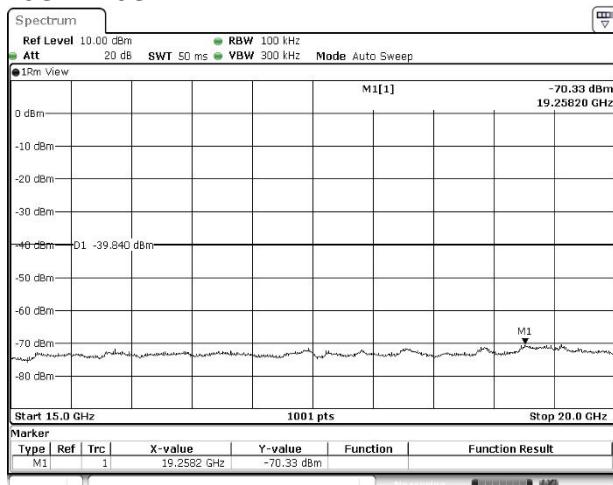
5GHz-10GHz



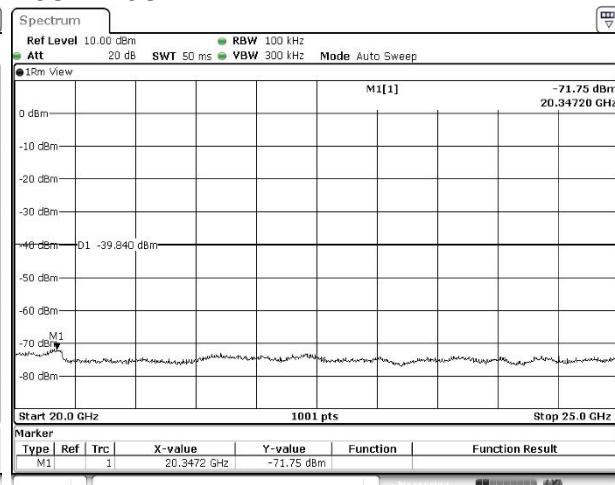
10GHz-15GHz



15GHz-20GHz

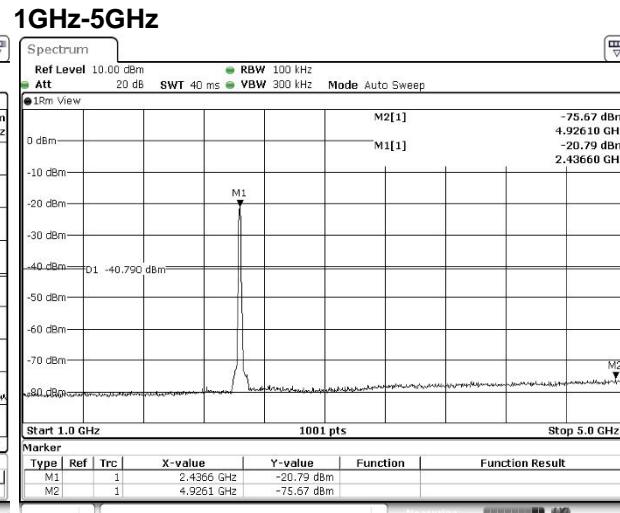
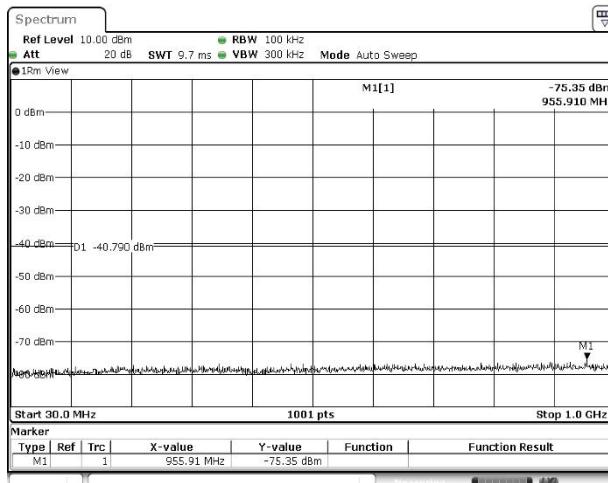


20GHz-25GHz

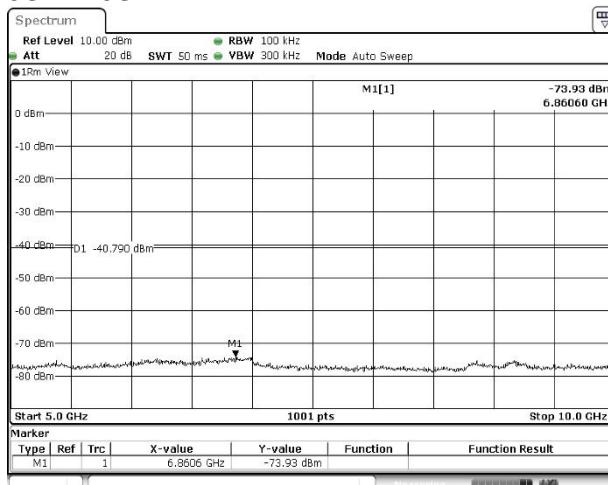


Channel Middle

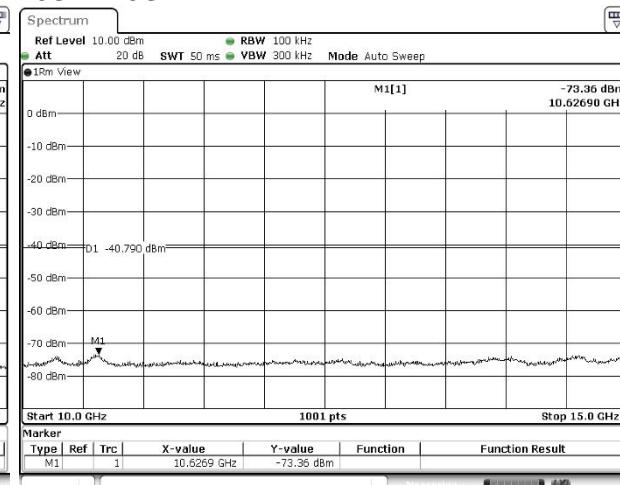
30MHz-1GHz



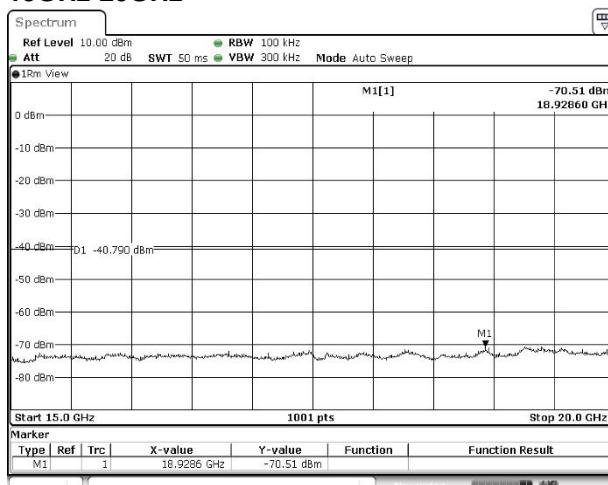
5GHz-10GHz



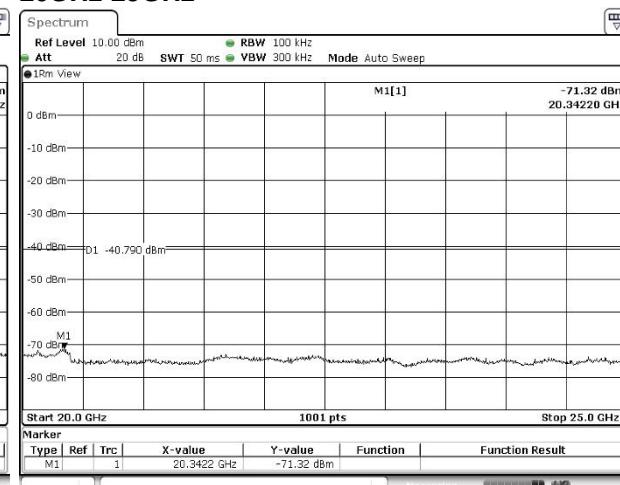
10GHz-15GHz



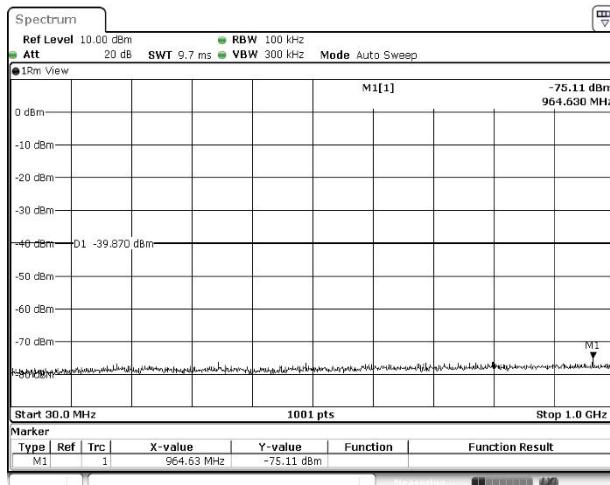
15GHz-20GHz



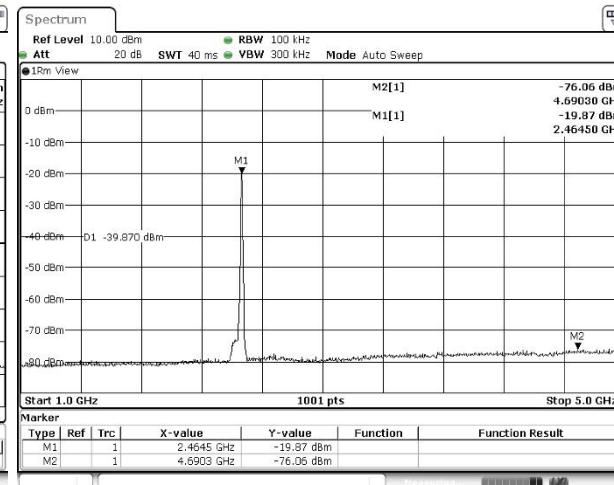
20GHz-25GHz



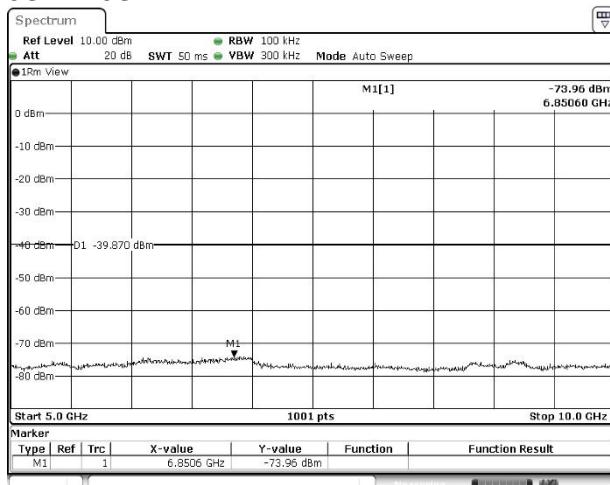
Channel High 30MHz-1GHz



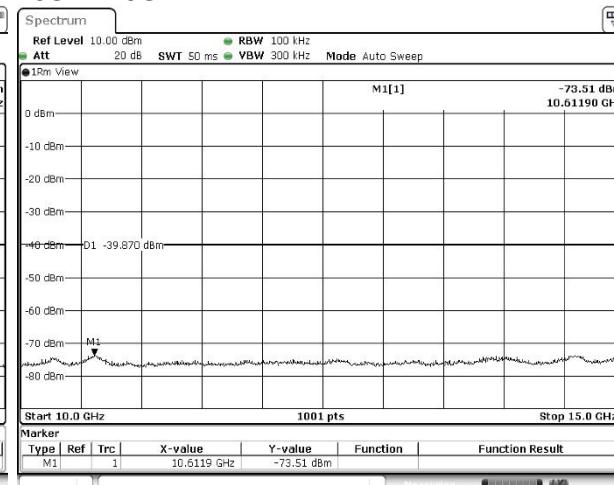
1GHz-5GHz



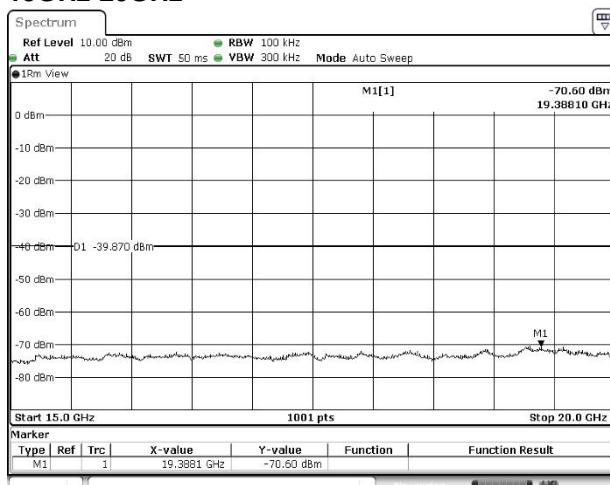
5GHz-10GHz



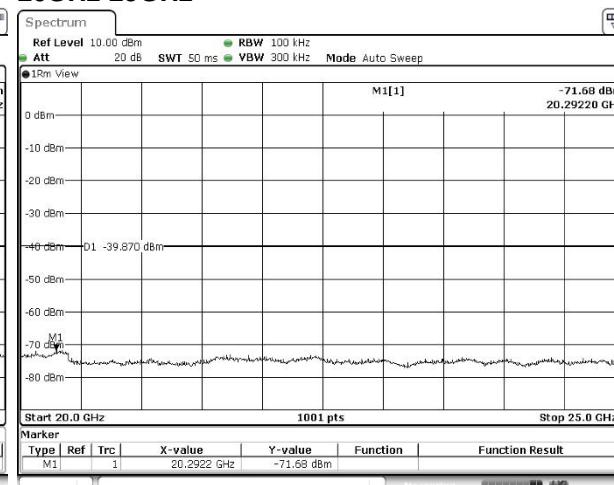
10GHz-15GHz

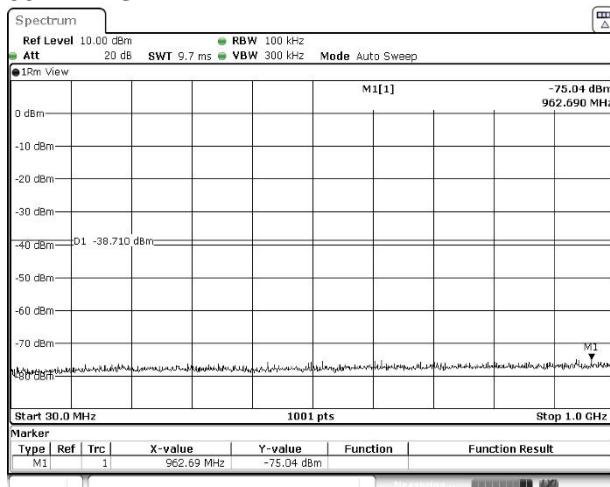
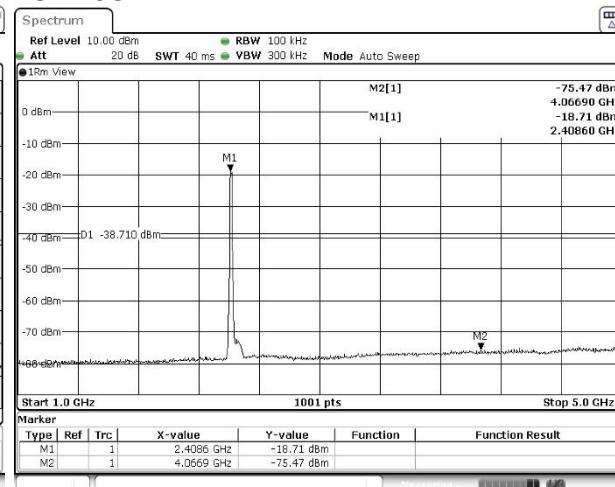
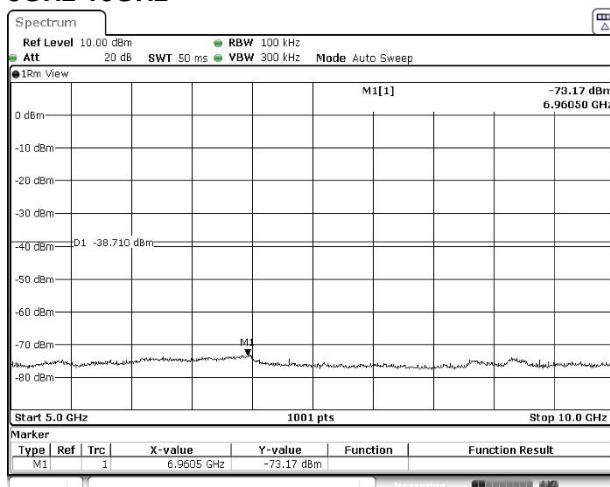
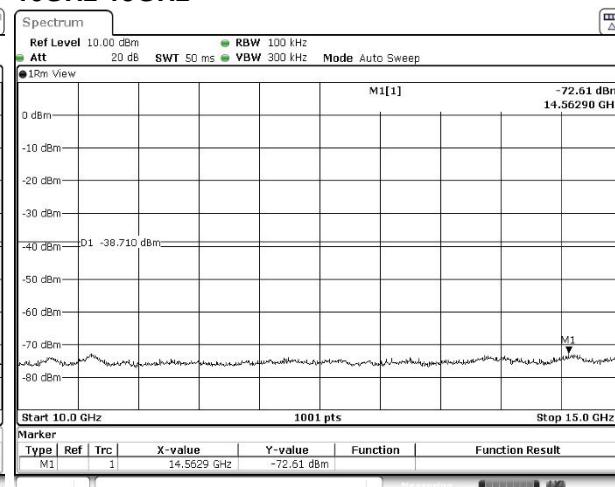
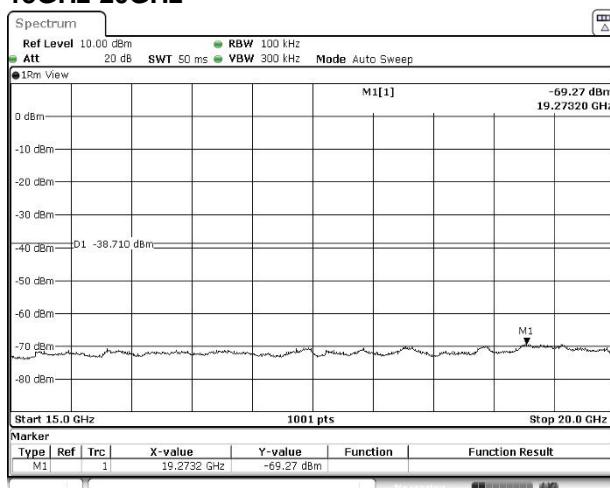
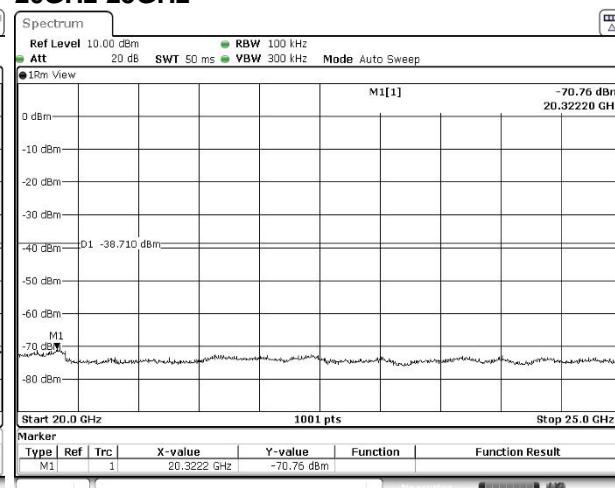


15GHz-20GHz

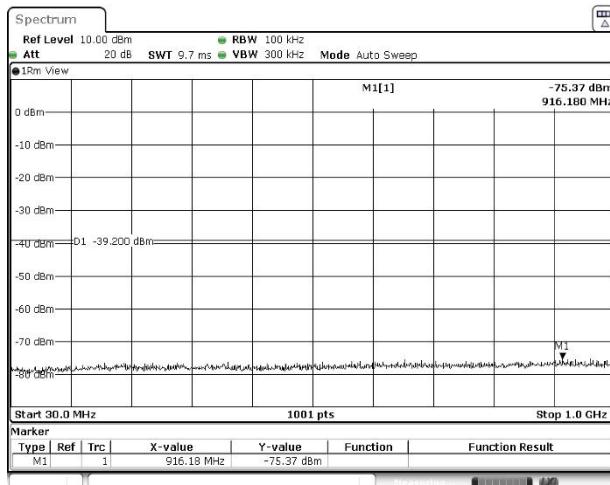


20GHz-25GHz

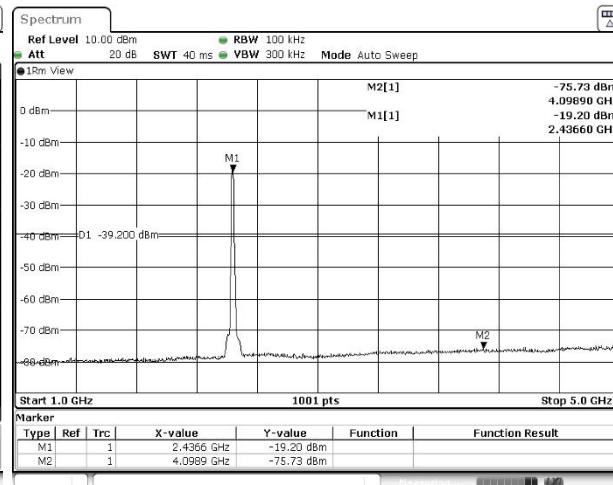


[IEEE802.11n (HT20)]**ANT3****Channel Low****30MHz-1GHz****1GHz-5GHz****5GHz-10GHz****10GHz-15GHz****15GHz-20GHz****20GHz-25GHz**

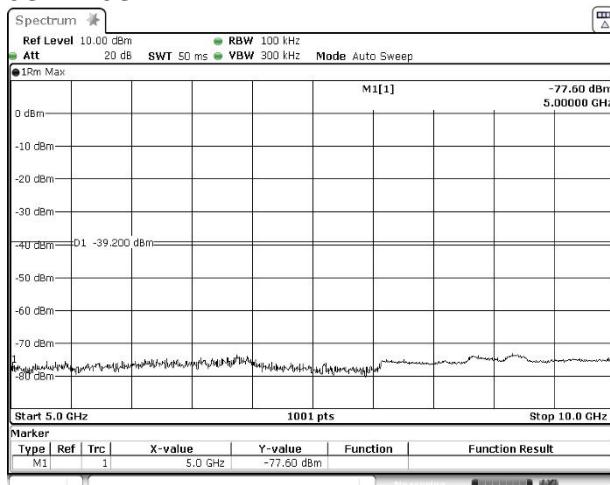
Channel Middle 30MHz-1GHz



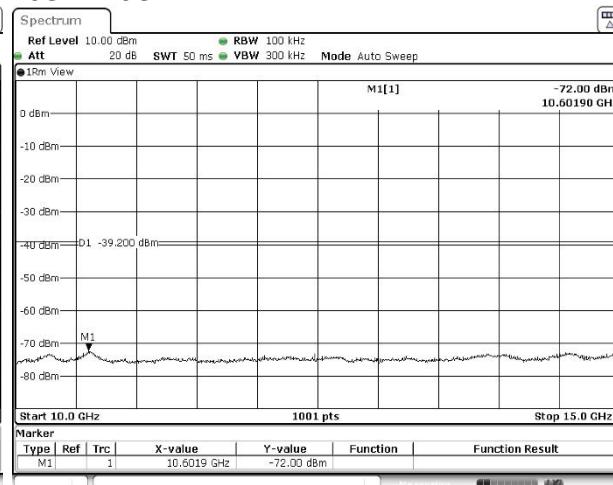
1GHz-5GHz



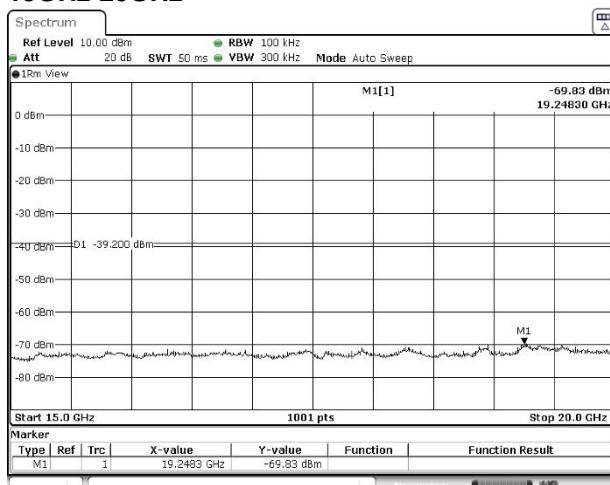
5GHz-10GHz



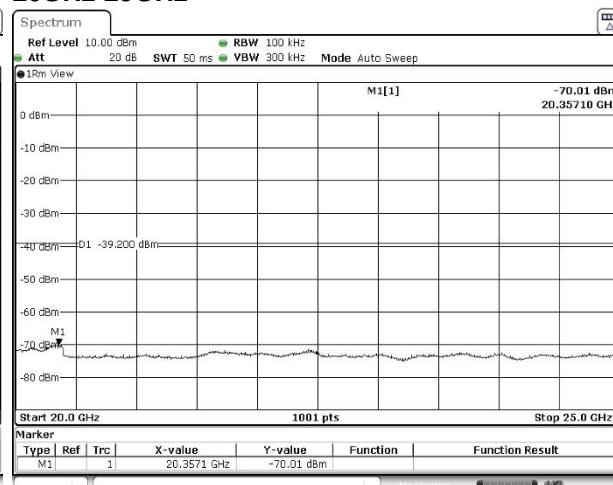
10GHz-15GHz



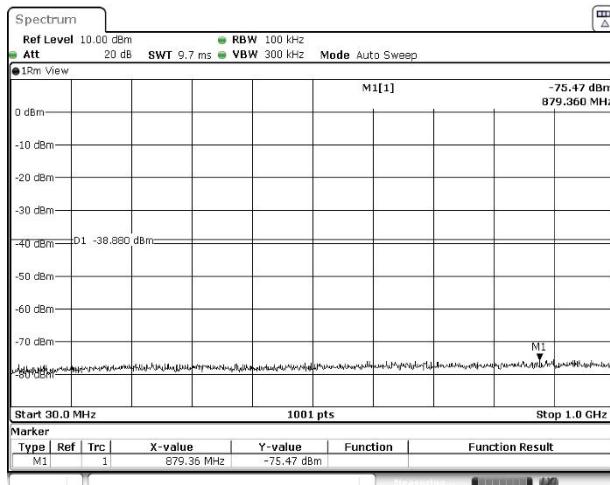
15GHz-20GHz



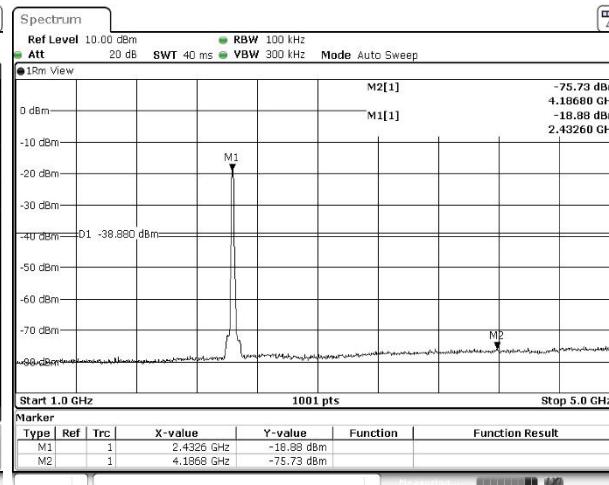
20GHz-25GHz



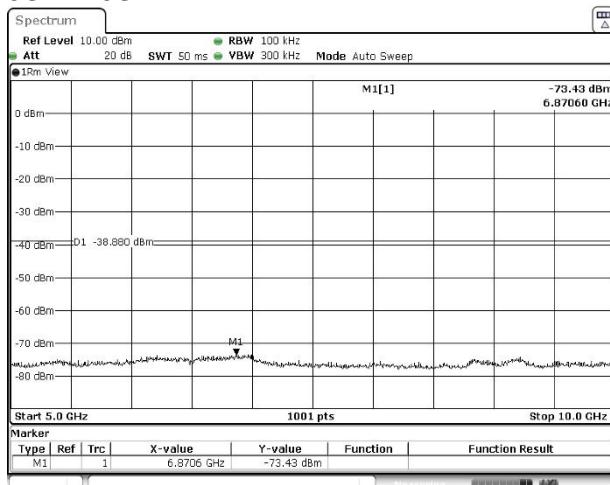
Channel High 30MHz-1GHz



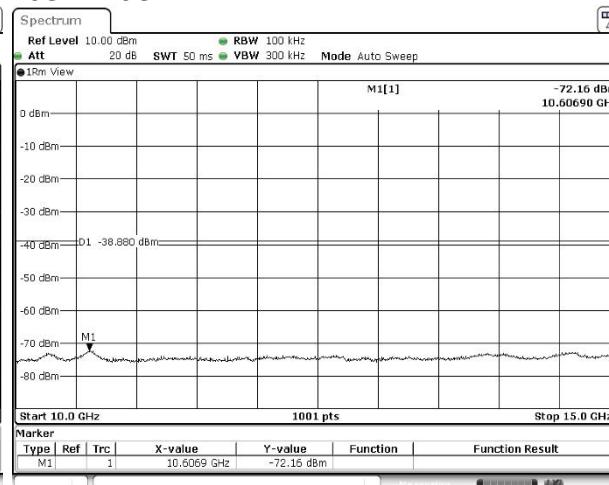
1GHz-5GHz



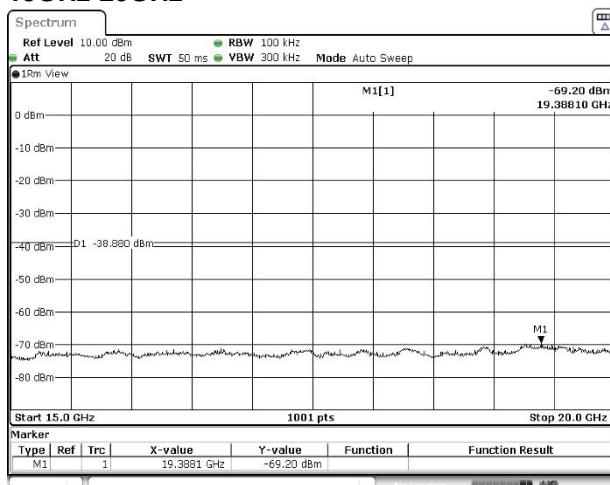
5GHz-10GHz



10GHz-15GHz



15GHz-20GHz



20GHz-25GHz

