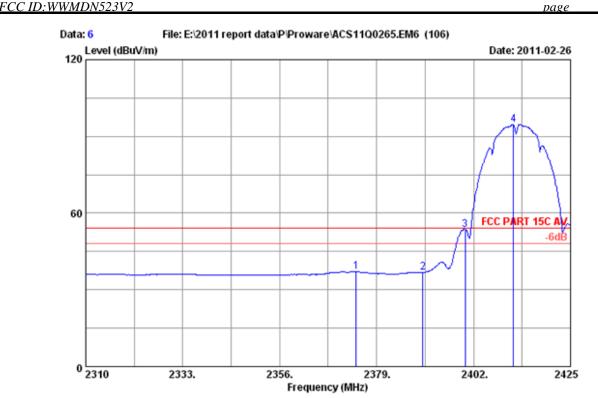
6-98





Site no. : RF Chamber Data no. : 6

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV

Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 300M Mini Wireless N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

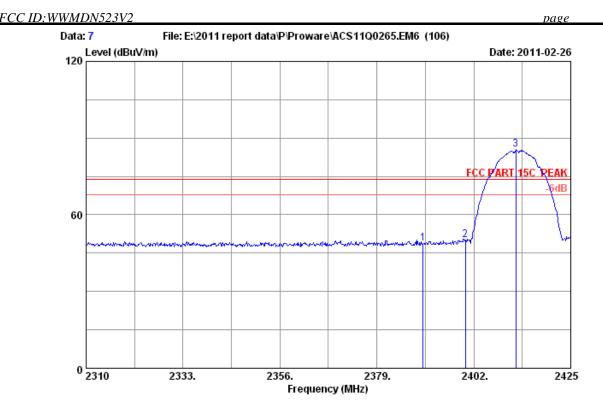
Test mode : 11b CH1 2412MHz Tx Mode

M/N : PW-DN523

	Freq.	Ant. Factor (dB/m)		Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m	Margin) (dB)	Remark
2 3	2374.170 2390.000 2400.000 2411.430	29.44	7.39 7.43	36.62 36.62	36.45 53.25	37.11 36.66 53.50 94.70	54.00 54.00 54.00 54.00	16.89 17.34 0.50 -40.70	Average Average Average Average

- 1. Emission Level= Antenna Factor + Cable Loss Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

6-99



Site no. : RF Chamber Data no. : 7

Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Paul Tian

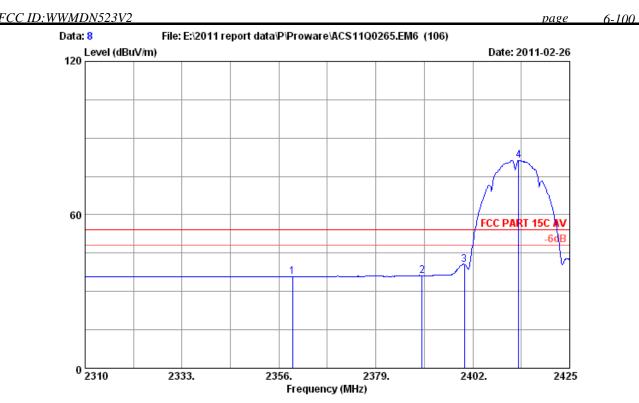
EUT : 300M Mini Wireless N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : 11b CH1 2412MHz Tx Mode

M/N : PW-DN523

	Ant Freq. Fact (MHz) (dB/		Factor	_		Limit	_	Remark	
2	2390.000 29. 2400.000 29. 2412.000 29.	44 7.43	36.62	50.03	48.77 50.28 85.45		25.23 23.72 -11.45	Peak Peak Peak	

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 8

Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

Env. / Ins. : 23 *C/54% Engineer : Paul Tian

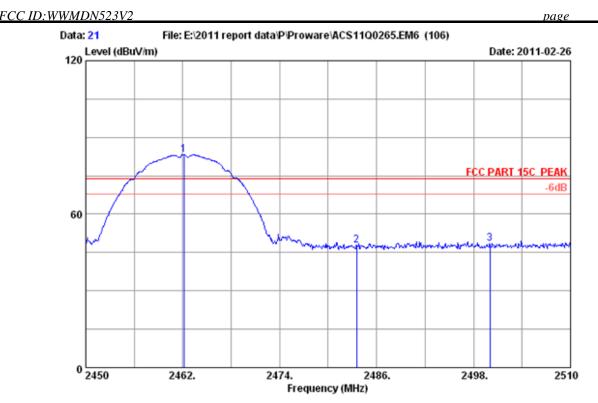
EUT : 300M Mini Wireless N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : 11b CH1 2412MHz Tx Mode

M/N : PW-DN523

	req. MHz)	Ant. Factor (dB/m)		Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m	Margin) (dB)	Remark
2 239i 3 240i	0.000	29.42 29.44 29.44 29.45	7.39 7.43	36.62 36.62	36.04 40.35	35.82 36.25 40.60 81.34	54.00	18.18 17.75 13.40 -27.34	Average Average Average Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 21
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Paul Tian

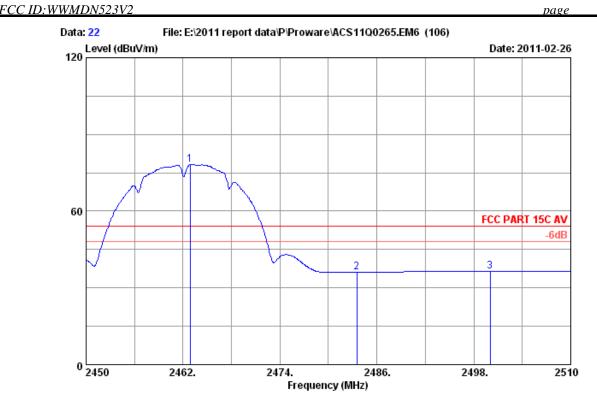
EUT : 300M Mini Wireless N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : 11b CH11 2462MHz Tx Mode

M/N : PW-DN523

		Ant.	Cable	Amp.		Emission			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m	(dB)	
1	2462.120	29.48	7.54	36.61	82.94	83.35	74.00	-9.35	Peak
2	2483.500	29.49	7.58	36.60	47.49	47.96	74.00	26.04	Peak
3	2500.000	29.50	7.62	36.60	47.81	48.33	74.00	25.67	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



 Site no.
 : RF Chamber
 Data no. : 22

 Dis. / Ant. : 3m 3115(0911)
 Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

Env. / Ins. : 23*C/54% Engineer : Paul Tian

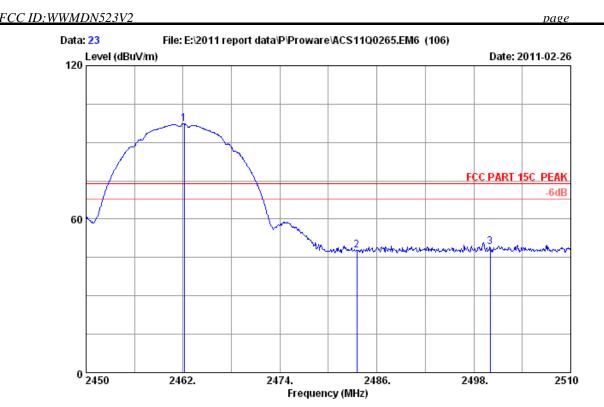
EUT : 300M Mini Wireless N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : 11b CH11 2462MHz Tx Mode

M/N : PW-DN523

•	Ant. Factor (dB/m)			Reading (dBuV)	Level (dBuV/m)	_	Remark
1 2462.900 2 2483.500 3 2500.000	29.49	7.58	36.60	35.74	78.23 36.21 36.40	 -24.23 17.79 17.60	Average Average Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 23

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 300M Mini Wireless N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

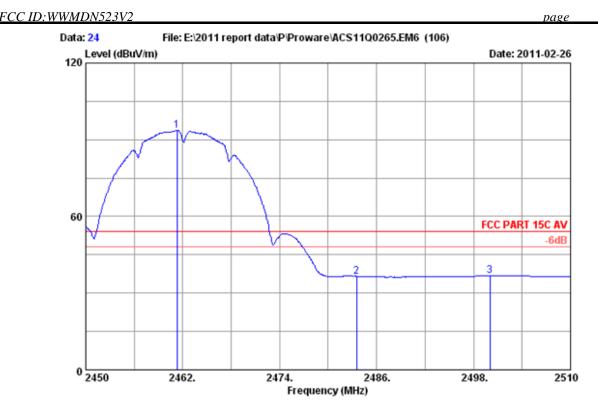
Test mode : 11b CH11 2462MHz Tx Mode

M/N : PW-DN523

Freq. Factor los	_	Level Limits Margin (dBuV/m) (dBuV/m) (dB)	Remark
1 2462.120 29.48 7.5 2 2483.500 29.49 7.5	36.60 47.34	97.27 74.00 -23.27 47.81 74.00 26.19	Peak Peak
3 2500.000 29.50 7.6	2 36.60 48.60	49.12 74.00 24.88	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

6-104



Site no. : RF Chamber Data no. : 24

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV

Env. / Ins. : 23*C/54% Engineer : Paul Tian

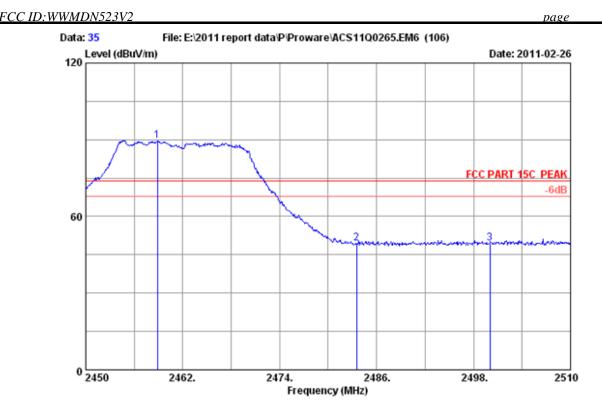
EUT : 300M Mini Wireless N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : 11b CH11 2462MHz Tx Mode

M/N : PW-DN523

	-		Cable loss (dB)		Reading (dBuV)	Emission Level (dBuV/m)	Limit	s Margin m) (dB)	Remark
	2464 200								
1	2461.280	29.48	7.54	36.61	93.27	93.68	54.00	-39.68	Average
2	2483.500	29.49	7.58	36.60	36.13	36.60	54.00	17.40	Average
3	2500.000	29.50	7.62	36.60	36.21	36.73	54.00	17.27	Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 35
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Paul Tian

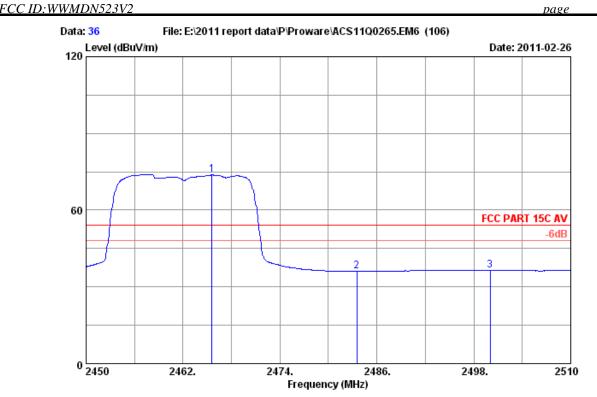
EUT : 300M Mini Wireless N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : 11g CH11 2462MHz Tx Mode

M/N : PW-DN523

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

6-106



Site no. : RF Chamber Data no. : 36
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

Env. / Ins. : 23*C/54% Engineer : Paul Tian

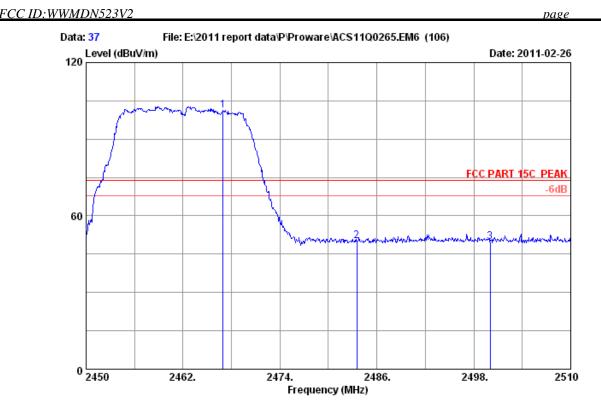
EUT : 300M Mini Wireless N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : 11g CH11 2462MHz Tx Mode

M/N : PW-DN523

		Ant.	Cable	Amp.		Emission			
	Freq.	Factor	loss	Factor	Reading	Level	Limit	s Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/	m) (dB)	
1	2465.600	29.48	7.54	36.61	73.32	73.73	54.00	-19.73	Average
2	2483.500	29.49	7.58	36.60	35.71	36.18	54.00	17.82	Average
3	2500.000	29.50	7.62	36.60	35.80	36.32	54.00	17.68	Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 37

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 300M Mini Wireless N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

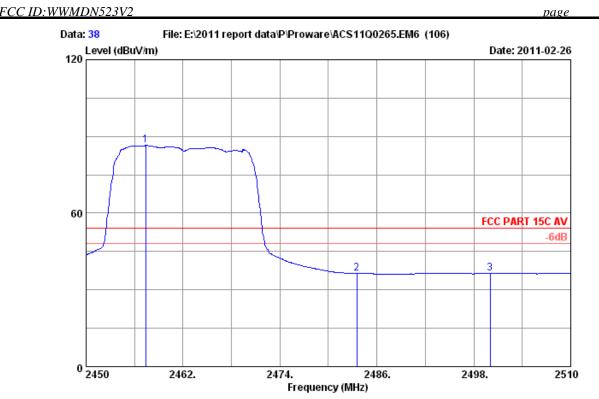
Test mode : 11g CH11 2462MHz Tx Mode

M/N : PW-DN523

-			Factor	Reading	Level (dBuV/m)	Limit	_	Remark	
1 2466.98 2 2483.50 3 2500.00	0 29.49	7.58	36.60	49.54	101.28 50.01 49.82	74.00	-27.28 23.99 24.18	Peak Peak Peak	

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

6-108



Site no. : RF Chamber Data no. : 38

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV

Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 300M Mini Wireless N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

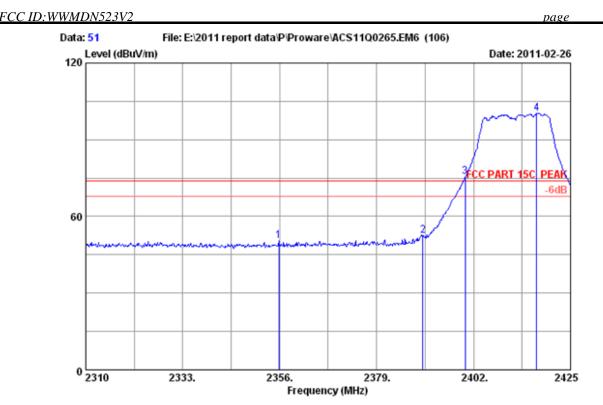
Test mode : 11g CH11 2462MHz Tx Mode

M/N : PW-DN523

	•	Factor (dB/m)			Reading (dBuV)	Level (dBuV/m)	Limits Ma (dBuV/m) (_	Remark
_	2457.380 2483.500					86.43 36.40	54.00 -32 54.00 17	.43 7.60	Average Average
3	2500.000	29.50	7.62	36.60	35.89	36.41	54.00 17	7.59	Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

6-109



Site no. : RF Chamber Data no. : 51

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Paul Tian

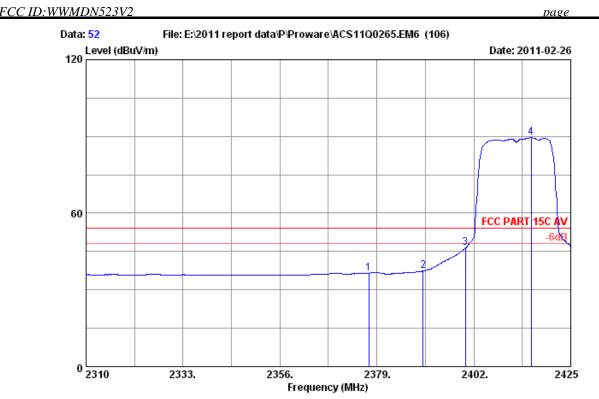
EUT : 300M Mini Wireless N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : 11g CH1 2412MHz Tx Mode

M/N : PW-DN523

	Ant. Factor (dB/m)	loss	Factor	Reading (dBuV)	Level (dBuV/m)		Margin) (dB)	Remark
1 2355.770 2 2390.000 3 2400.000 4 2416.950	29.44	7.39 7.43	36.62 36.62	52.34 75.33	50.44 52.55 75.58 100.28	74.00 74.00 74.00 74.00	23.56 21.45 -1.58 -26.28	Peak Peak Peak Peak

- 1. Emission Level= Antenna Factor + Cable Loss Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 52

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV

Env. / Ins. : 23*C/54% Engineer : Paul Tian

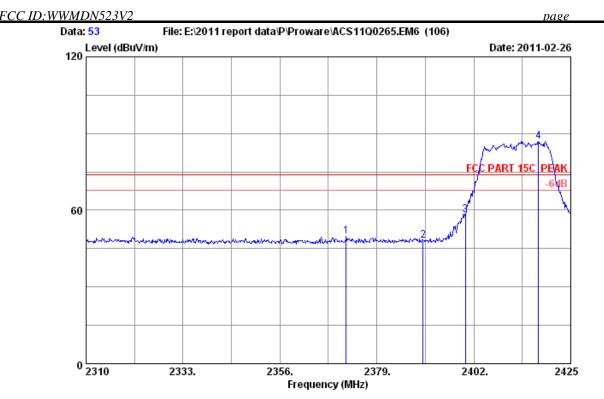
EUT : 300M Mini Wireless N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : 11g CH1 2412MHz Tx Mode

M/N : PW-DN523

	Freq.	Factor		Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)		s Margin n) (dB)	Remark
1	2377.045	5 29.43	7.35	36.62	36.43	36.59	54.00	17.41	Average
2	2390.000	29.44	7.39	36.62	37.13	37.34	54.00	16.66	Average
3	2400.000	29.44	7.43	36.62	46.22	46.47	54.00	7.53	Average
4	2415.570	29.45	7.43	36.61	89.22	89.49	54.00	-35.49	Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



: RF Chamber Data no. : 53 Site no. Dis. / Ant. : 3m 3115 (0911) Ant. pol. : VERTICAL : FCC PART 15C PEAK

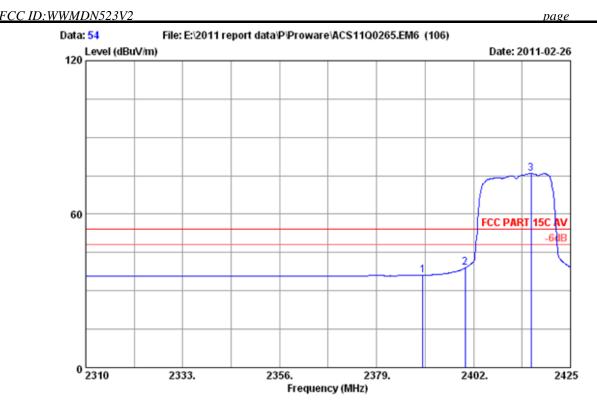
Env. / Ins. : 23*C/54% Engineer : Paul Tian : 300M Mini Wireless N USB Adapter : DC 5V From PC input AC 120V/60Hz Power

Test mode : 11g CH1 2412MHz Tx Mode

: PW-DN523

	-	Factor	loss		Reading (dBuV)			_	Remark	
1	2371.755	5 29.43	7.35	36.62	49.72	49.88	74.00	24.12	Peak	
2	2390.000	29.44	7.39	36.62	48.09	48.30	74.00	25.70	Peak	
3	2400.000	29.44	7.43	36.62	57.77	58.02	74.00	15.98	Peak	
4	2417.295	5 29.45	7.43	36.61	86.73	87.00	74.00	-13.00	Peak	

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 54
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

Env. / Ins. : 23*C/54% Engineer : Paul Tian

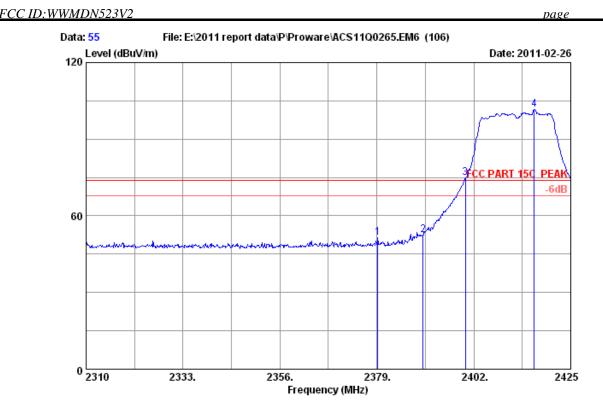
EUT : 300M Mini Wireless N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : 11g CH1 2412MHz Tx Mode

M/N : PW-DN523

	-		Cable loss (dB)	•	Reading (dBuV)	Emission Level (dBuV/m)	Limit	s Margin m) (dB)	Remark
1	2390.000	29.44	7.39	36.62	36.01	36.22	54.00	17.78	Average
2	2400.000	29.44	7.43	36.62	38.77	39.02	54.00	14.98	Average
3	2415.570	29.45	7.43	36.61	75.65	75.92	54.00	-21.92	Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 55

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

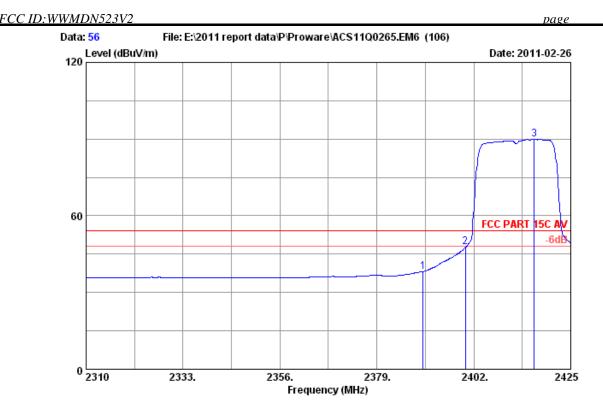
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 300M Mini Wireless N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : 11nHT20 CH1 2412MHz Tx Mode

M/N : PW-DN523

		nt. Cable tor loss 3/m) (dB)	Factor	Reading	Emission Level (dBuV/m)		_	Remark
1	2379.230 29	.43 7.39	36.62	51.31	51.51	74.00	22.49	Peak
2	2390.000 29	.44 7.39	36.62	52.36	52.57	74.00	21.43	Peak
3	2400.000 29	0.44 7.43	36.62	74.72	74.97	74.00	-0.97	Peak
4	2416.375 29	.45 7.43	36.61	101.23	101.50	74.00 -	-27.50	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 56

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV

Env. / Ins. : 23 *C/54% Engineer : Paul Tian

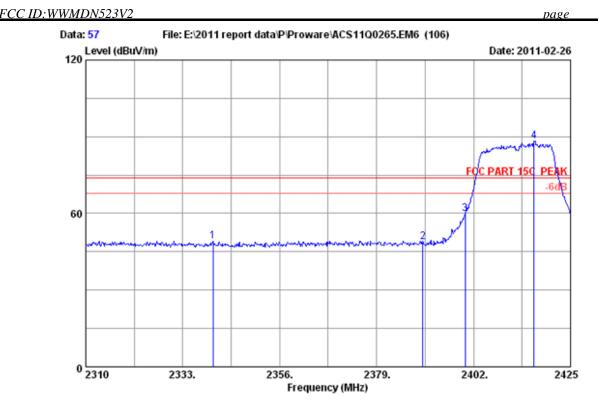
EUT : 300M Mini Wireless N USB Adapter
Power : DC 5V From PC input AC 120V/60Hz
Test mode : 11nHT20 CH1 2412MHz Tx Mode

M/N : PW-DN523

	Ant. Freq. Factor (MHz) (dB/m)	Cable Amp. loss Factor (dB) (dB)	Reading (dBuV)	Emission Level (dBuV/m)		_	Remark
2	2390.000 29.44 2400.000 29.44 2416.375 29.45	7.43 36.62	47.53	38.22 47.78 89.86	54.00 54.00 54.00	15.78 6.22 -35.86	Average Average Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





Site no. : RF Chamber Data no.: 57 Ant. pol. : VERTICAL Dis. / Ant. : 3m 3115 (0911)

Limit : FCC PART 15C PEAK

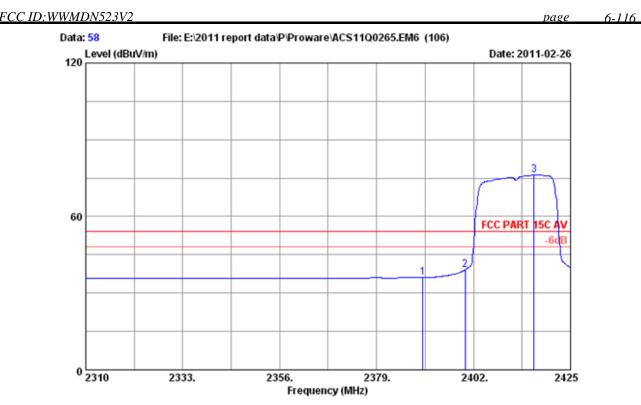
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 300M Mini Wireless N USB Adapter : DC 5V From PC input AC 120V/60Hz Test mode : 11nHT20 CH1 2412MHz Tx Mode

M/N : PW-DN523

-	Ant. Factor (dB/m)	loss	Factor	Reading (dBuV)			Margin (dB)	Remark
1 2340.130 2 2390.000 3 2400.000 4 2416.375	29.44	7.39 7.43	36.62 36.62	48.61 59.46	49.13 48.82 59.71 88.22	74.00 74.00 74.00 74.00	24.87 25.18 14.29 -14.22	Peak Peak Peak Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 58
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

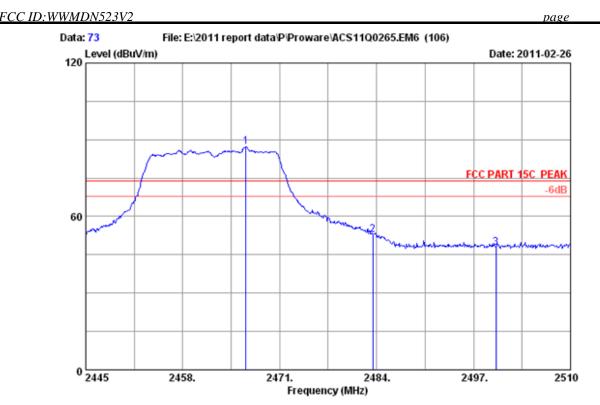
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 300M Mini Wireless N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : 11nHT20 CH1 2412MHz Tx Mode

M/N : PW-DN523

		Cable Amp. loss Factor (dB) (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits	s Margin m) (dB)	Remark
2	2390.000 29.44 2400.000 29.44 2416.375 29.45	7.43 36.62	38.97	36.19 39.22 76.17	54.00 54.00 54.00	17.81 14.78 -22.17	Average Average Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 73
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Paul Tian

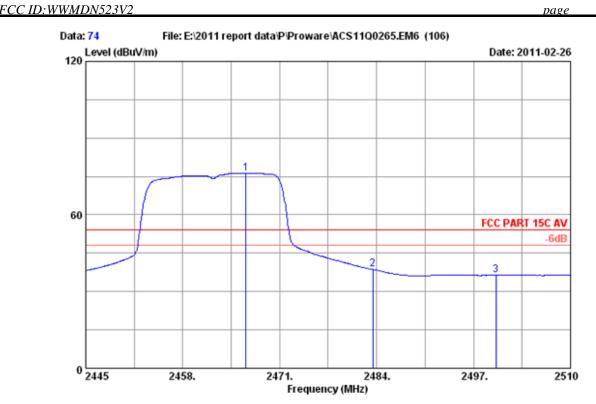
EUT : 300M Mini Wireless N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : 11nHT20 CH11 2462MHz Tx Mode

M/N : PW-DN523

		Ant.	Cable	Amp.		Emission			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m) (dB)	
1	2466.450	29.48	7.54	36.60	86.76	87.18	74.00	-13.18	Peak
2	2483.500	29.49	7.58	36.60	52.34	52.81	74.00	21.19	Peak
3	2500.000	29.50	7.62	36.60	47.39	47.91	74.00	26.09	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





Site no. : RF Chamber Data no. : 74

Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

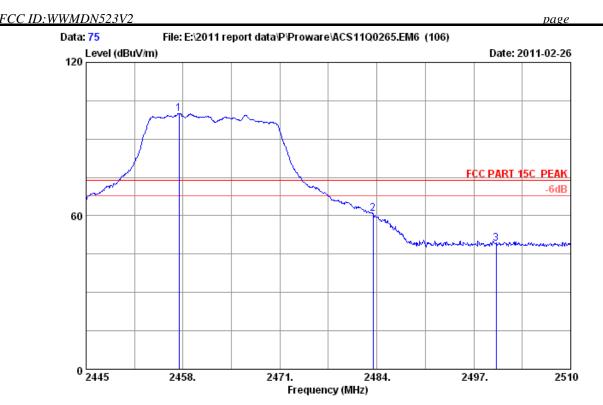
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 300M Mini Wireless N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : 11nHT20 CH11 2462MHz Tx Mode

M/N : PW-DN523

	Freq.	Factor			Reading (dBuV)	Emission Level (dBuV/m)	Limit	s Margin m) (dB)	Remark
1	2466.450	29.48	7.54	36.60	75.94	76.36	54.00	-22.36	Average
2	2483.500	29.49	7.58	36.60	38.18	38.65	54.00	15.35	Average
3	2500.000	29.50	7.62	36.60	35.86	36.38	54.00	17.62	Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 75

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Paul Tian

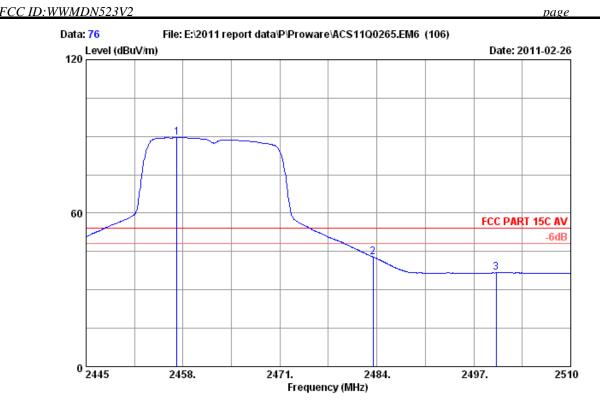
EUT : 300M Mini Wireless N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : 11nHT20 CH11 2462MHz Tx Mode

M/N : PW-DN523

1 2457.480 29.48 7.50 36.61 99.64 100.01 74.00 -26.01 Peak 2 2483.500 29.49 7.58 36.60 60.34 60.81 74.00 13.19 Peak 3 2500.000 29.50 7.62 36.60 48.69 49.21 74.00 24.79 Peak		•		loss	Factor	_	Emission Level (dBuV/m)	Limit	_	Remark	
	2	2483.500	29.49	7.58	36.60	60.34	60.81	74.00	13.19	Peak	

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

6-120



Site no. : RF Chamber Data no. : 76

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV

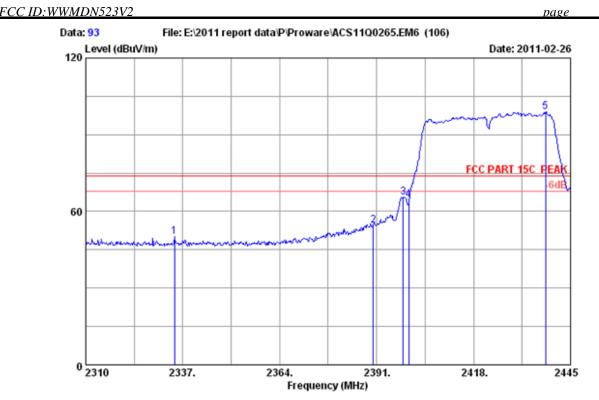
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 300M Mini Wireless N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : 11nHT20 CH11 2462MHz Tx Mode

M/N : PW-DN523

1 2457.155 29.48 7.50 36.61 89.18 89.55 54.00 -35.55 Avera	
2 2483.500 29.49 7.58 36.60 42.40 42.87 54.00 11.13 Avers 3 2500.000 29.50 7.62 36.60 36.10 36.62 54.00 17.38 Avers	age

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 93

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

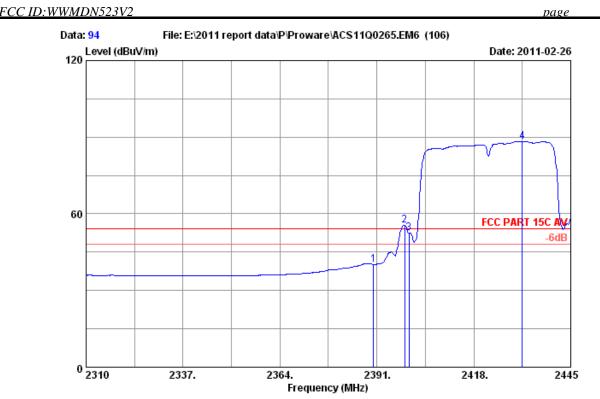
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 300M Mini Wireless N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : 11nHT40 CH3 2422MHz Tx Mode

M/N : PW-DN523

	-	Ant. Factor (dB/m)			Reading (dBuV)	Emission Level (dBuV/m)		Margin	Remark
1	2334.705	29.41	7.27	36.63	50.07	50.12	74.00	23.88	Peak
2	2390.000	29.44	7.39	36.62	54.29	54.50	74.00	19.50	Peak
3	2398.425	5 29.44	7.39	36.62	65.37	65.58	74.00	8.42	Peak
4	2400.000	29.44	7.43	36.62	64.18	64.43	74.00	9.57	Peak
5	2437.980	29.47	7.46	36.61	98.59	98.91	74.00	-24.91	Peak

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 94

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV

Env. / Ins. : 23*C/54% Engineer : Paul Tian

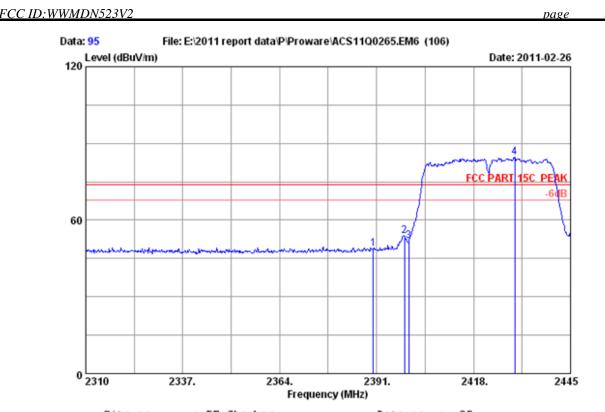
EUT : 300M Mini Wireless N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : 11nHT40 CH3 2422MHz Tx Mode

M/N : PW-DN523

	Freq. (MHz)	Ant. Factor (dB/m)		Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)		Margin) (dB)	Remark
_	2390.000					40.22	54.00	13.78	Average
2	2398.695	29.44	7.39	36.62	55.43	55.64	54.00	-1.64	Average
3	2400.000	29.44	7.43	36.62	52.09	52.34	54.00	1.66	Average
4	2431.500	29.46	7.46	36.61	87.97	88.28	54.00	-34.28	Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.





Site no. : RF Chamber Data no. : 95
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

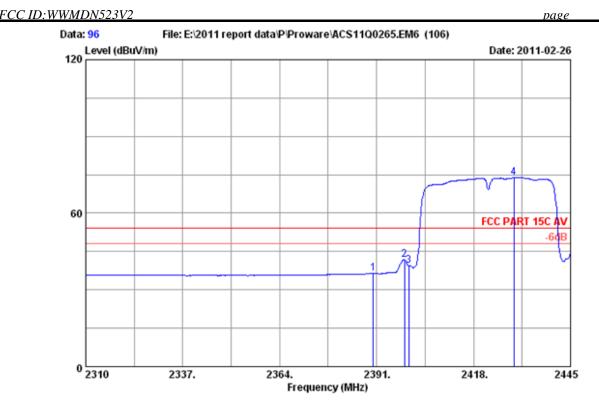
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 300M Mini Wireless N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : 11nHT40 CH3 2422MHz Tx Mode

M/N : PW-DN523

-	Ant. . Factor) (dB/m)	loss		Reading (dBuV)			Margin	Remark
1 2390.0 2 2398.6 3 2400.0 4 2429.4	95 29.44 00 29.44	7.39 7.43	36.62 36.62	53.75 51.49	48.82 53.96 51.74 84.56	74.00 74.00 74.00 74.00	25.18 20.04 22.26 -10.56	Peak Peak Peak Peak

- 1. Emission Level= Antenna Factor + Cable Loss Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 96
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

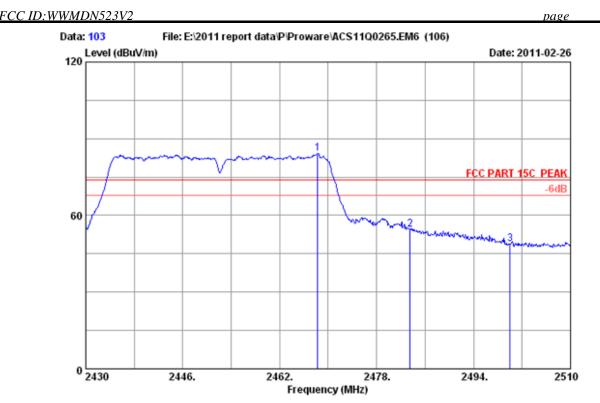
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 300M Mini Wireless N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : 11nHT40 CH3 2422MHz Tx Mode

M/N : PW-DN523

	Ant. Factor (dB/m)		Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)		s Margin m) (dB)	Remark
1 2390.00 2 2398.69 3 2400.00 4 2429.20	5 29.44 D 29.44	7.39 7.43		41.47 39.19	36.27 41.68 39.44 73.81	54.00 54.00 54.00 54.00	17.73 12.32 14.56 -19.81	Average Average Average Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 103
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Paul Tian

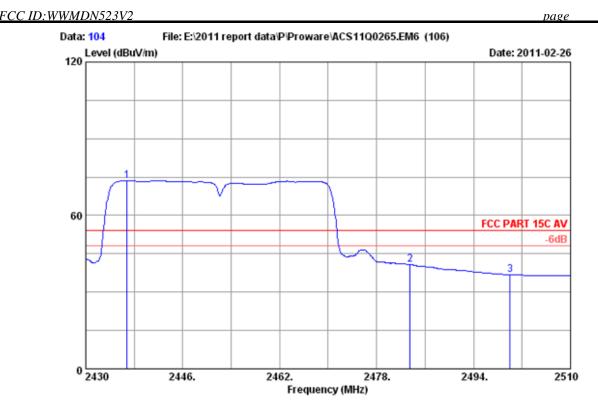
EUT : 300M Mini Wireless N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : 11nHT40 CH9 2452MHz Tx Mode

M/N : PW-DN523

						Emission Level (dBuV/m)	Limit	s Margin m) (dB)	Remark	
1	2468.240	29.48	7.54	36.60	83.72	84.14	74.00	-10.14	Peak	
2	2483.500	29.49	7.58	36.60	53.99	54.46	74.00	19.54	Peak	
3	2500.000	29.50	7.62	36.60	48.16	48.68	74.00	25.32	Peak	

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.

6-126



Site no. : RF Chamber Data no. : 104
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

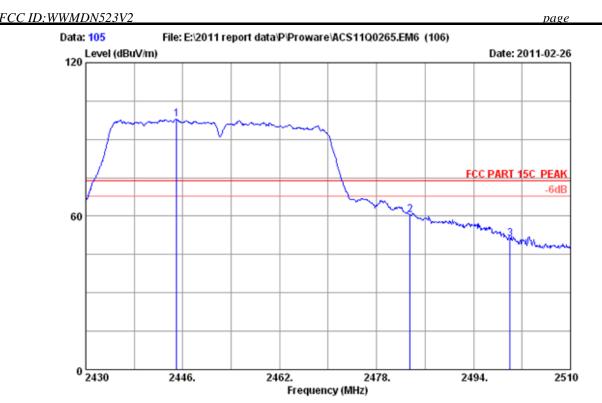
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 300M Mini Wireless N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : 11nHT40 CH9 2452MHz Tx Mode

M/N : PW-DN523

	-		Cable loss (dB)		Reading (dBuV)	Emission Level (dBuV/m)	Limit	s Margin m) (dB)	Remark	
1	2436.800	29.47	7.46	36.61	73.29	73.61	54.00	-19.61	Average	
2	2483.500	29.49	7.58	36.60	40.28	40.75	54.00	13.25	Average	
3	2500.000	29.50	7.62	36.60	36.30	36.82	54.00	17.18	Average	

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 105

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

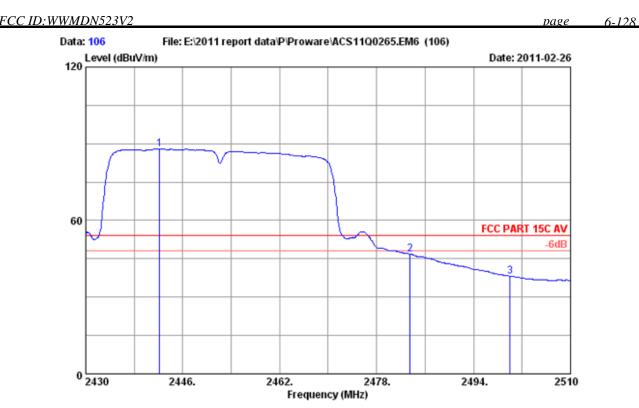
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 300M Mini Wireless N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : 11nHT40 CH9 2452MHz Tx Mode

M/N : PW-DN523

		Ant.	Cable	Amp.		Emission				
	Freq.	Factor	loss	Factor	Reading	Level	Limit	s Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/	m) (dB)		
1	2444.96	0 29.47	7.50	36.61	97.45	97.81	74.00	-23.81	Peak	
2	2483.50	0 29.49	7.58	36.60	60.07	60.54	74.00	13.46	Peak	
3	2500.000	0 29.50	7.62	36.60	50.53	51.05	74.00	22.95	Peak	

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 106

Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV

Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 300M Mini Wireless N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : 11nHT40 CH9 2452MHz Tx Mode

M/N : PW-DN523

		actor lo	ble Amp. ss Factor B) (dB)		Emission Level (dBuV/m)		Margin (dB)	Remark
2	2483.500 2	29.49 7.	50 36.61 58 36.60 62 36.60	46.34	46.81	54.00	-33.90 7.19 15.78	Average Average Average

- 1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- 2. The emission levels that are 20dB below the official limit are not reported.



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7. 6dB Bandwidth Test

7.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08,10	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	May.08,10	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,10	1Year

7.2.Limit

For direct sequence systems, the minimum 6dB bandwidth shall be at least 500kHz

7.3.Test Procedure

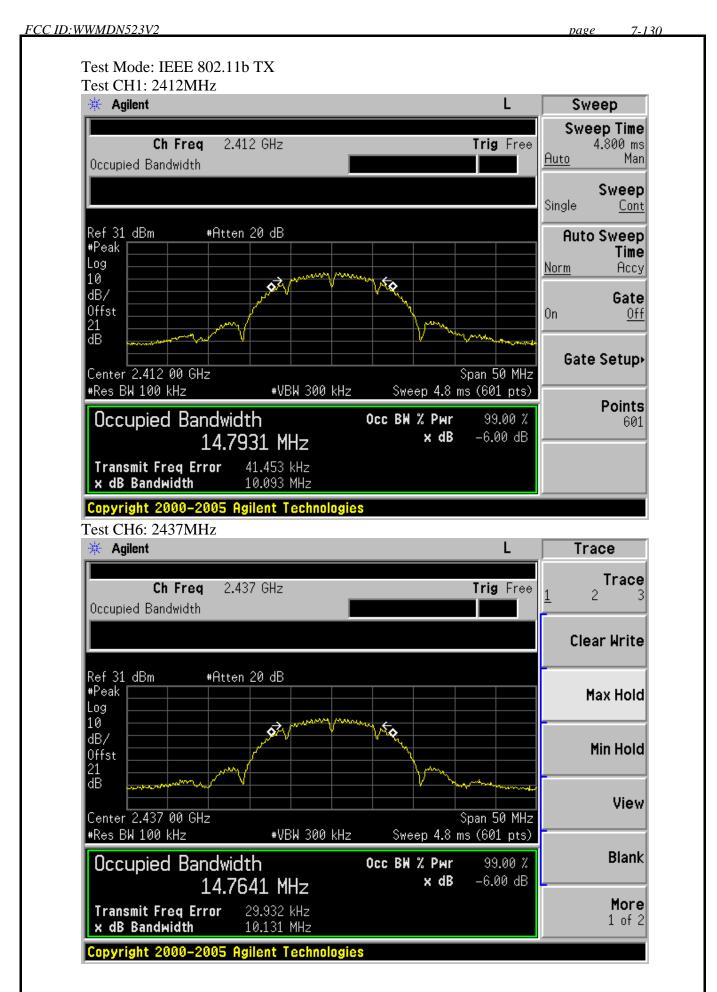
The transmitter output was connected to a spectrum analyzer, The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100kHz RBW and 300 kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

7.4.Test Results

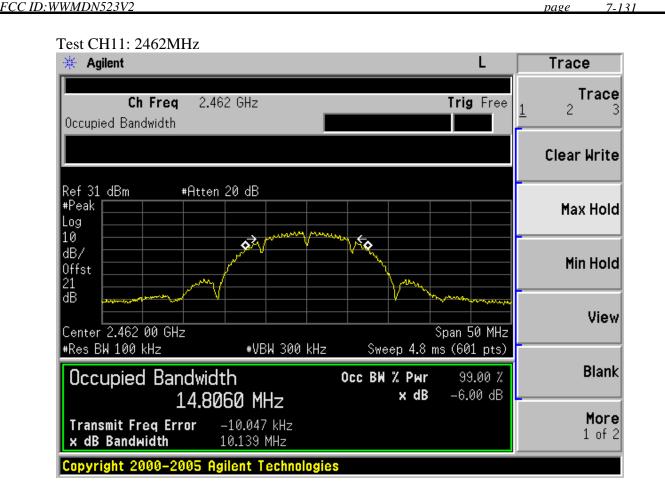
EUT:300M Mini Wireless N USB Adapter							
M/N:PW-DN523							
Test date:2011-02-27	Pressure: 100.6 kpa	Humidity: 45%					
Tested by: Paul Tian	Test site: RF Site	Temperature : 25 °C					

Cable le	oss: 1dB	Attenuator loss: 20 dB	Antenna Gain: 0 dBi
Test Mode	СН	6dB bandwidth (MHz)	Limit (KHz)
	CH1	10.093	>500
11b	CH6	10.131	>500
	CH11	10.139	>500
	CH1	16.573	>500
11g	CH6	16.606	>500
	CH11	16.607	>500
11	CH1	17.828	>500
11n HT20	CH6	17.836	>500
11120	CH11	17.834	>500
11	CH1	36.459	>500
11n HT40	CH4	36.478	>500
11140	CH7	36.482	>500
Conclusion: PA	ASS		

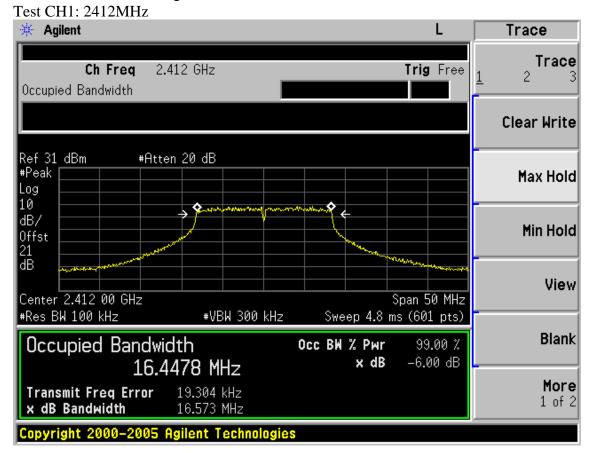




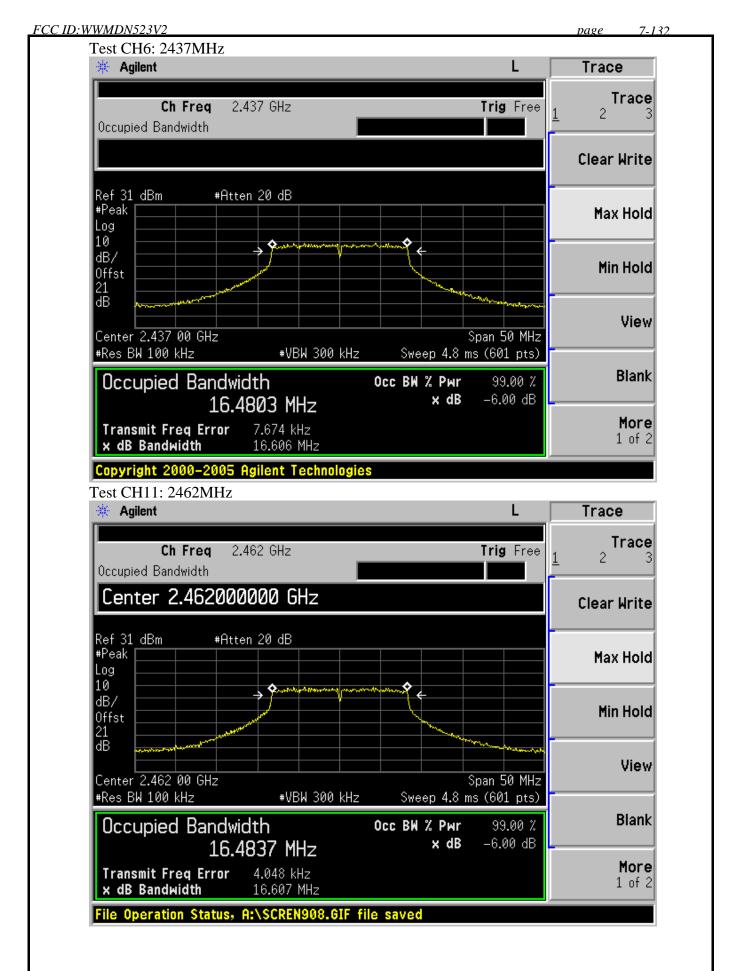




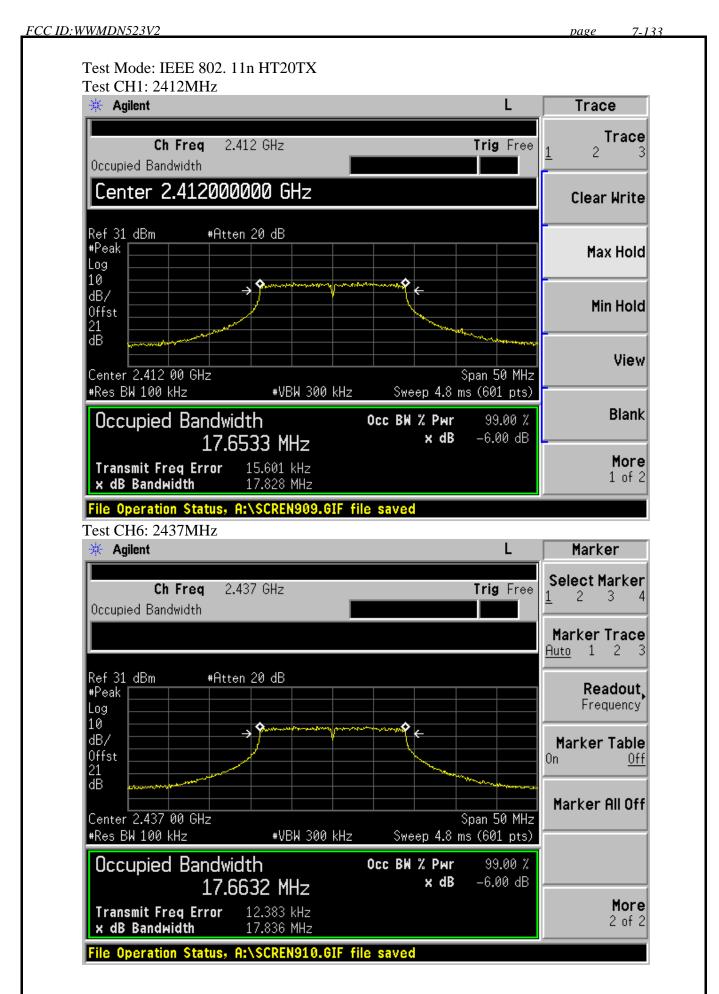




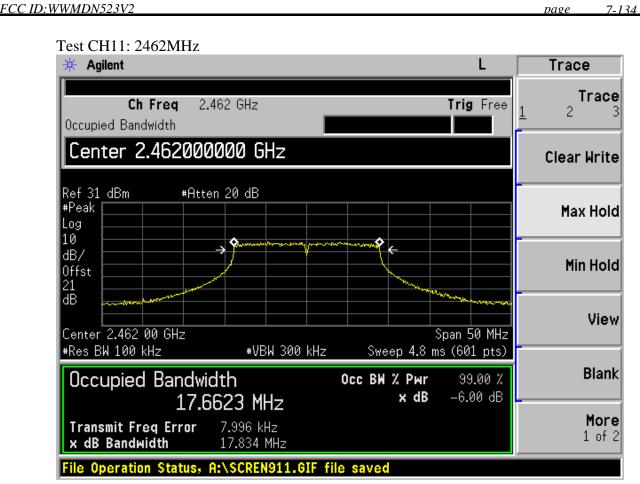






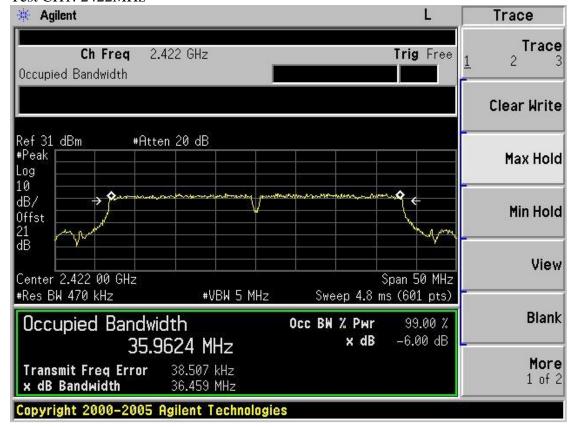




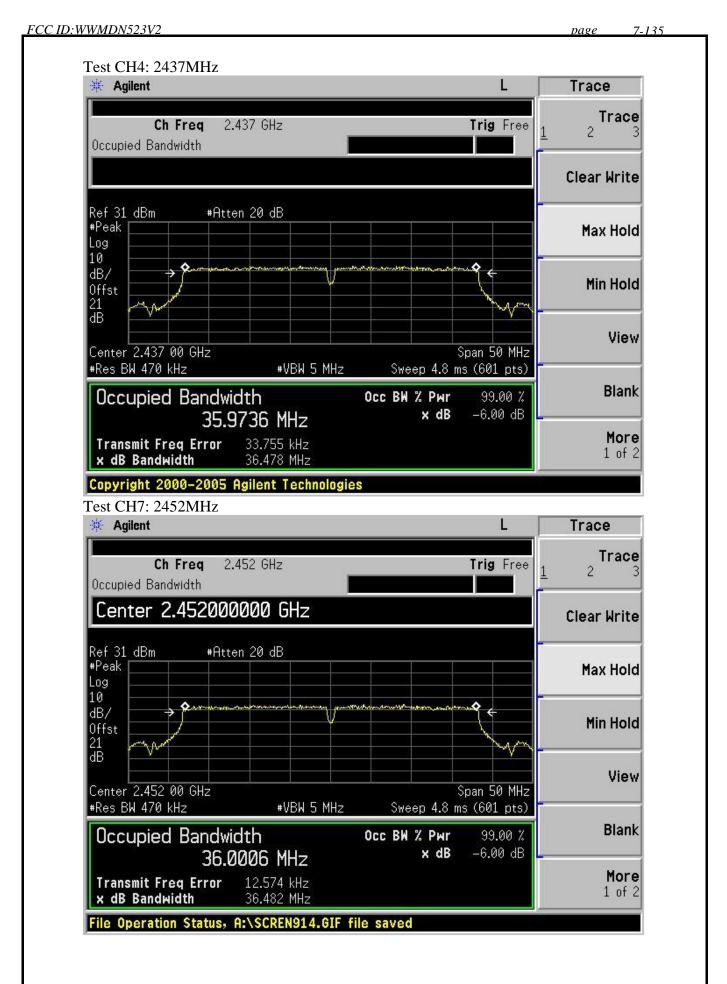


Test Mode: IEEE 802. 11n HT40TX

Test CH1: 2422MHz









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8. OUTPUT POWER TEST

8.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Power meter	Anritsu	ML2487A	6K00002472	May.08,10	1Year
2.	Power sensor	Anritsu	MA2491A	0033005	May.08,10	1Year
3	Attenuator	Agilent	8491B	MY39262165	May.08,10	1 Year
4	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 10	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,10	1Year

8.2.Limit (FCC Part 15C 15.247 b (3))

For systems using digital modulation in the 2400—2483.5MHz, The Peak out put Power shall not exceed 1W(30dBm)

8.3.Test Procedure

- 1, Connected the EUT's antenna port to measure device by 20dB attenuator.
- 2, For IEEE 802.11b/g and IEEE802.11n HT20 mode, use a PK power meter which's bandwidth is 20MHz and above 6dB bandwidth of signal to measure out each test modes' PK output power.
- 3, For IEEE802.11n HT40 mode, because the signal's bandwidth is about 40MHz and above 20MHz bandwidth of power sensor ML2491A. So Bandwidth correction method according to ANSI C63.10 clause 6.10.2.1 part (c) was used:
 - 1) Set the RBW=3MHz and VBW =8MHz
 - 2) Turn averaging off
 - 3) Set sweep to automatic
 - 4) Set the span just large enough to capture the emission
 - 5) Use a peak detector on max hold
 - 6) Record the measured power
 - 7) Calculate Output power of EUT use the formula:

Peak output power = measured power+ 10log[(6dB bandwidth of emission)/(analyzer RBW)]

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.



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8.4.Test Results

Cable le	oss: 1dB	Attenuator loss: 20 dB	Antenna Gain: 0 dBi
Test Mode	СН	Peak output Power (dBm)	Limit (dBm)
	CH1	19.41	30
11b	CH6	19.10	30
	CH11	19.06	30
	CH1	24.68	30
11g	CH6	24.55	30
	CH11	24.58	30
11	CH1	25.31	30
11n HT20	CH6	25.33	30
11120	CH11	25.42	30

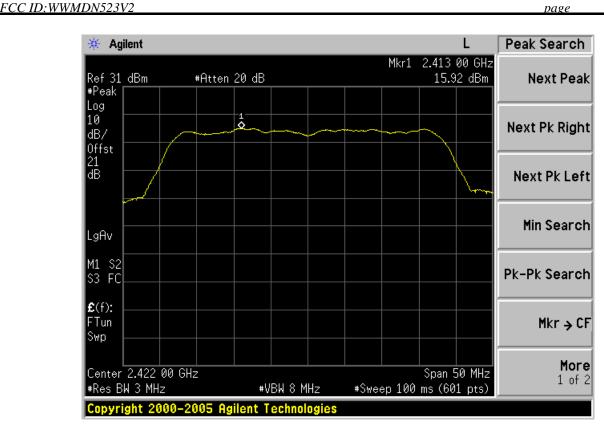
		Resu	lt	Limit
Mode	СН	Measured power(dBm)/3MHz	PK Output power (dBm)	(dBm)
	CH1	15.92	26.77	30
11n HT40	CH4	15.63	26.48	30
11140	CH7	15.85	26.70	30

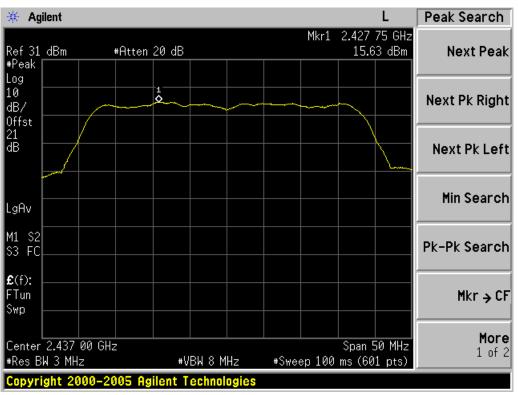
6dB Bandwidth for 11n HT40: 36.5MHz

BW correction factor = 10log[(36.5MHz)/(3MHz)] = 10.85dB

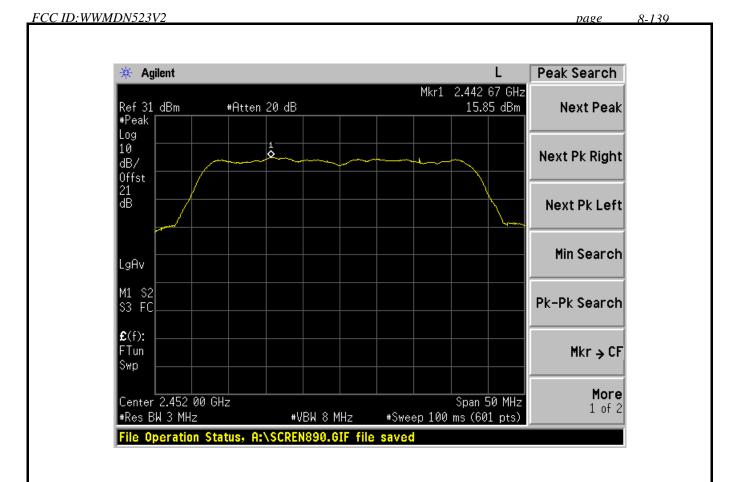
Conclusion: PASS













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9. POWER SPECTRAL DENSITY TEST

9.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 10	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	May.08, 10	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08, 10	1Year

9.2.Limit

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmission.

9.3.Test Procedure

- 1, Connected the EUT's antenna port to spectrum analyzer device by 20dB attenuator.
- 2, Follow the test procedure as described in ANSI C.10: 2009 Clause 6.11.2.3 to measure out each test modes and chain's power density with 3KHz.



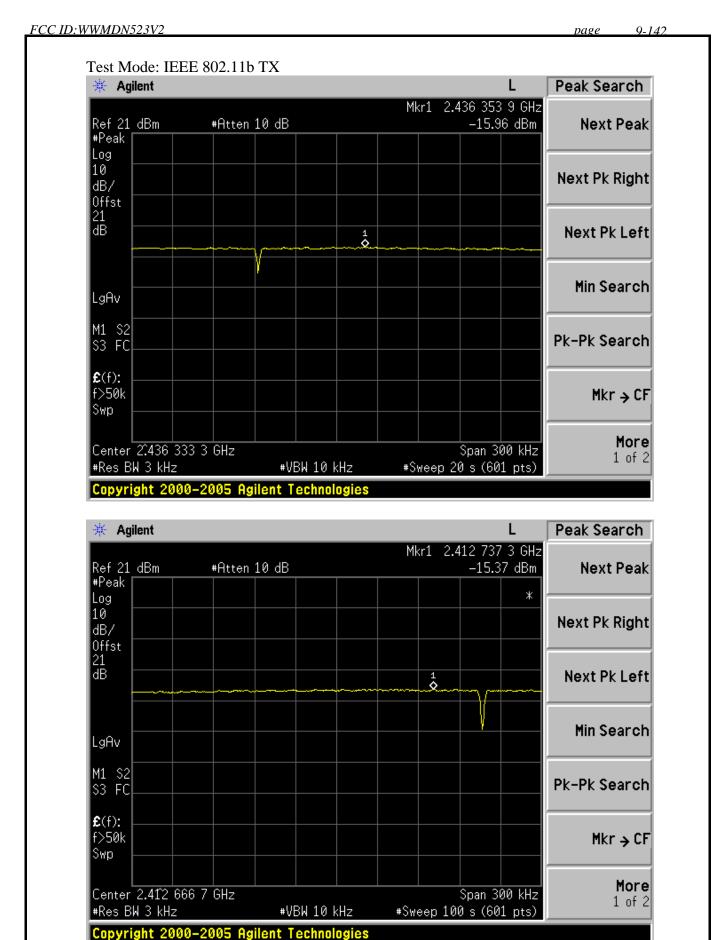
FCC ID: WWMDN523V2 page 9-141

9.4.Test Results

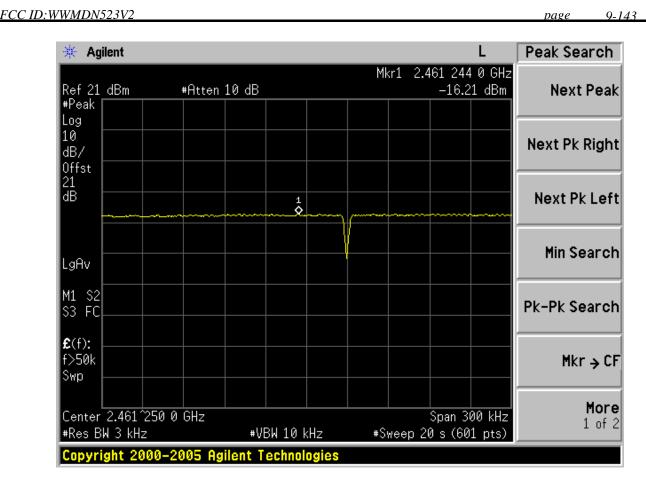
EUT:300M Mini Wireless N US	SB Adapter		
M/N:PW-DN523			
Test date:2011-02-27	Pressure:	100.6 kpa	Humidity: 45 %
Tested by: Paul Tian	Test site:	RF Site	Temperature : 25°C

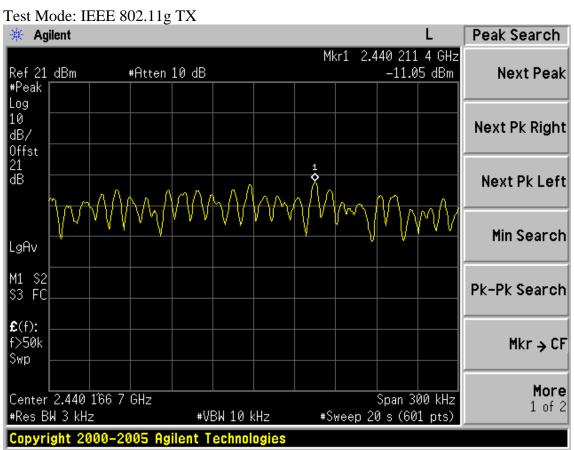
Cable loss: 1 dE	3	Attenuator loss: 20 dB	Antenna Gain: 0 dBi
Test Mode	СН	Power density (dBm/3KHz)	Limit (dBm/3KHz)
	CH1	-15.37	8
11b	CH6	-15.96	8
	CH11	-16.21	8
	CH1	-12.11	8
11g	CH6	-11.05	8
	CH11	-12.33	8
11	CH1	-10.70	8
11n HT20	CH6	-10.74	8
11120	CH11	-11.42	8
11	CH1	-12.21	8
11n HT40	CH4	-12.08	8
11140	CH7	-12.32	8
Conclusion: PA	ASS		



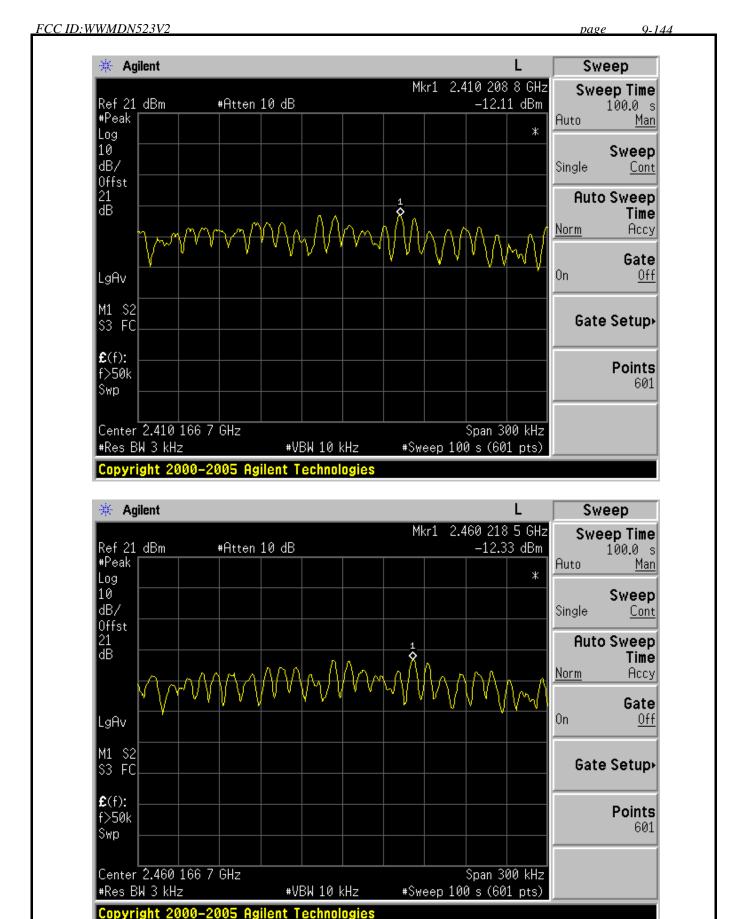










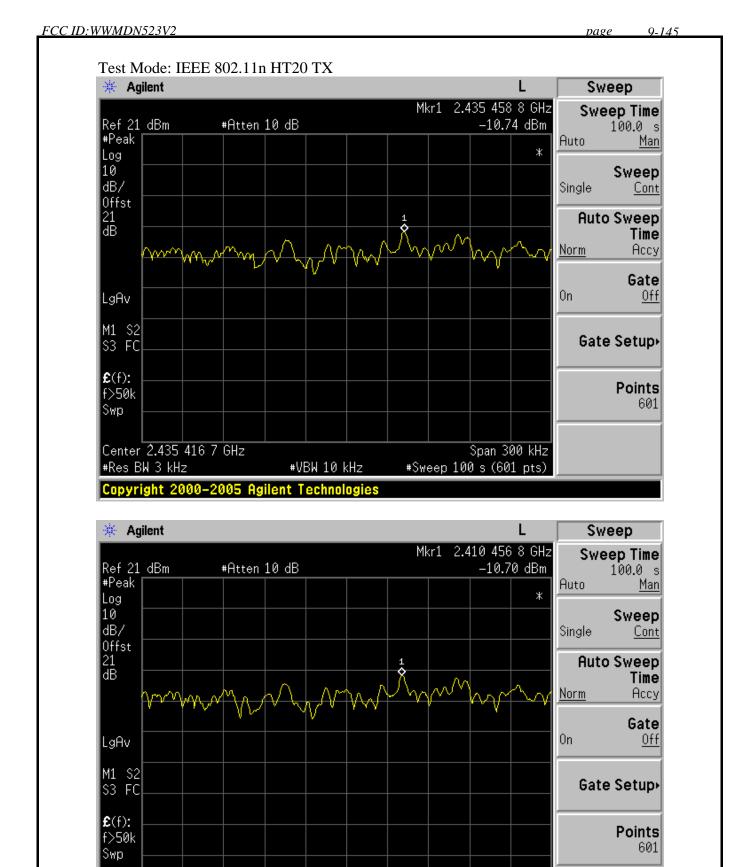




Center 2:410 416 7 GHz

Copyright 2000-2005 Agilent Technologies

#Res BW 3 kHz

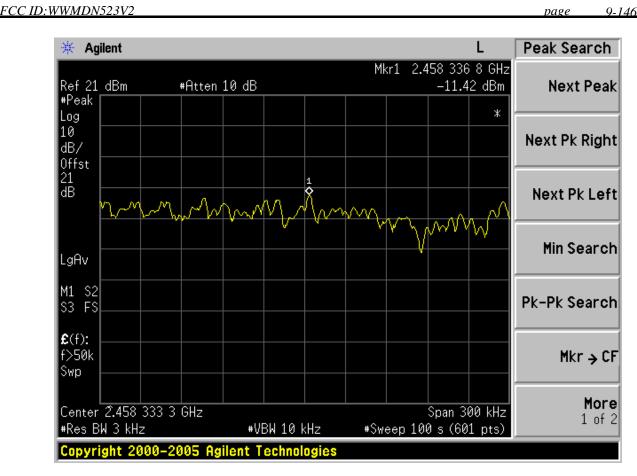


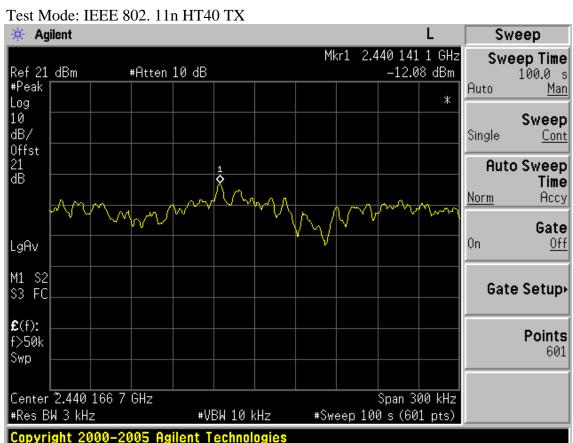
#VBW 10 kHz

Span 300 kHz

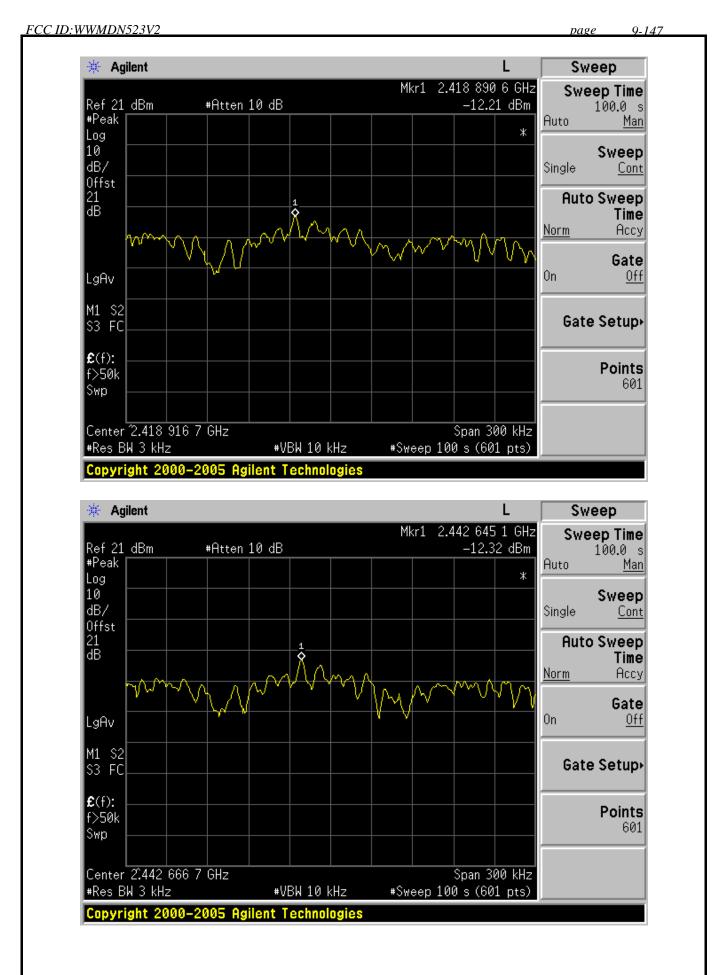
#Sweep 100 s (601 pts)













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10. ANTENNA REQUIREMENT

10.1. 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.

10.2. ANTENNA CONNECTED CONSTRUCTION

The antennas used for this product are integrated patch MIMO 1TX2R and that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is 0dBi.



[NONE]
[NONE]