IC: 9095A-WD650BDN

FCC PART 15C and RSS-210 TEST REPORT FOR CERTIFICATION On Behalf of

Audio Partnership PLC

150Mbps Wireless Lite N USB Adapter

Model No.: WD650-BD-N

FCC ID: YKB751BD001

IC: 9095A-WD650BDN

Prepared for: Audio Partnership PLC

Gallery Court, Hankey Place, London, SE1 4BB U.K.

Prepared By: Audix Technology (Shenzhen) Co., Ltd.

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Report Number : ACS-F11071

Date of Test : Feb.21~Mar.28, 2011

Date of Report : Apr.25, 2011



IC: 9095A-WD650BDN

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IC: 9095A-WD650BDN

TEST REPORT CERTIFICATION

Applicant : Audio Partnership PLC

Manufacturer : Audio Partnership PLC

EUT Description : 150Mbps Wireless Lite N USB Adapter

FCC ID : YKB751BD001

IC : 9095A-WD650BDN

(A) MODEL NO. : WD650-BD-N

(B) SERIAL NO. : N/A

(C) POWER SUPPLY: DC 5V From PC

(D) TEST VOLTAGE: DC 5V From PC Input AC 120V/60Hz

Tested for comply with:

FCC Rules and Regulations Part 15 Subpart C:2008, ANSI C63.10:2009

RSS-210, ISSUE 8, December 2010 RSS-Gen, ISSUE 3, December 2010

The device described above is tested by AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. to confirm comply with all the FCC Part 15 Subpart C and RSS-210,RSS-GEN requirements.

The test results are contained in this test report and AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. is assumed full responsibility for the accuracy and completeness of these tests. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC and IC requirements.

This Report is made under FCC Part 2.1075. No modifications were required during testing to bring this product into compliance.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

Date of Test :	Feb.21 [~] Mar.28, 2011	Report of date:	Apr.25, 2011
Prepared by :	flore Ye	Reviewer by :	Sofun Solution
	Blove Ye / Assistant		Sunny Lu Senior Assistant
		Audix Techn	R圳)有限公司 nology (Shenzhen) Co., Ltd. 報告專用章
Approved & Au	thorized Signer :	Stamp only for E	MC Dept. Report
		Ken Lu	Manager



FCC ID:YKB751BD001 IC:YKB751BD001 bake

1. SUMMARY OF STANDARDS AND RESULTS

1.1.Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

EMISSION				
Description of Test Item	Standard	Results		
	FCC Part 15: 15.207			
Power Line Conducted Emission	ANSI C63.10: 2009	PASS		
	RSS-210 ISSUE 8			
	FCC Part 15: 15.209			
Radiated Emission	ANSI C63.10: 2009	PASS		
	RSS-210 ISSUE 8			
	FCC Part 15: 15.247			
Band Edge Compliance	ANSI C63.10: 2009	PASS		
	RSS-210 ISSUE 8			
	FCC Part 15: 15.247			
Conducted spurious emissions	ANSI C63.10: 2009	PASS		
	RSS-210 ISSUE 8			
	FCC Part 15: 15.247			
6dB Bandwidth	ANSI C63.10: 2009	PASS		
	RSS-210 ISSUE 8			
	FCC Part 15: 15.247			
Peak Output Power	ANSI C63.10: 2009	PASS		
	RSS-210 ISSUE 8			
	FCC Part 15: 15.247			
Power Spectral Density	ANSI C63.10: 2009	PASS		
	RSS-210 ISSUE 8			
99% bandwidth	RSS-210 ISSUE 8	PASS		
	FCC Part 15: 15.203			
Antenna requirement	RSS-210 ISSUE 8	PASS		



2. GENERAL INFORMATION

2.1.Description of Device (EUT)

Product Name : 150Mbps Wireless Lite N USB Adapter

Model Number : WD650-BD-N

FCC ID : YKB751BD001

IC : 9095A-WD650BDN

Operation Frequency : IEEE 802.11b: 2412MHz—2462MHz

IEEE 802.11g: 2412MHz—2462MHz

IEEE 802.11n HT20: 2412MHz—2462MHz IEEE 802.11n HT40: 2422MHz—2452MHz

Channel Number : IEEE 802.11b/g, IEEE 802.11n HT20: 11 Channels

IEEE 802.11n HT40: 7Channels

Modulation Technology: IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK)

IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20, HT40: OFDM (64QAM, 16QAM,

QPSK,BPSK)

Antenna Assembly

Gain

Integrated PCB antenna, 1TX2R 2.12dBi (maximum)

Applicant : Audio Partnership PLC

Gallery Court, Hankey Place, London, SE1 4BB U.K.

Manufacturer : Audio Partnership PLC

Gallery Court, Hankey Place, London, SE1 4BB U.K.

Date of Test : Feb.21~Mar.28, 2011

Date of Receipt : Feb.20, 2011

Sample Type : Prototype production



2.2.Test Information

A special test software was used to control EUT work in Continuous TX mode(100% duty cycle), and select test channel, wireless mode and data rate.

Tested mode, channel, and data rate information					
Mode	data rate	Channel	Frequency		
	(Mpbs)(see Note)		(MHz)		
IEEE 802.11b	11	Low:CH1	2412		
	11	Middle: CH6	2437		
	11	High: CH11	2462		
IEEE 802.11g	54	Low:CH1	2412		
	54	Middle: CH6	2437		
	54	High: CH11	2462		
IEEE 802.11n HT20	65	Low:CH1	2412		
	65	Middle: CH6	2437		
	65	High: CH11	2462		
IEEE 802.11n HT40	162	Low:CH1	2422		
	162	Middle: CH4	2437		
	162	High: CH7	2452		

Note: According exploratory test, EUT will have maximum output power in those data rate, so those data rate were used for all test.



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2.3.Data VS Power

Mode	Data rate (Mbps)	СН	AV Power (dBm)	PK Power (dBm)
	1	CH1	16.95	18.40
11b	2	CH1	16.90	18.42
110	5.5	CH1	16.89	18.47
	11	CH1	16.88	18.49
	6	CH1	15.42	23.49
	9	CH1	15.39	23.51
	12	CH1	15.38	23.53
110	18	CH1	15.34	23.55
11g	24	CH1	15.35	23.57
	36	CH1	15.30	23.59
	48	CH1	15.29	23.60
	54	CH1	15.27	23.62
	6.5	CH1	14.99	23.67
	13	CH1	14.95	23.65
	19.5	CH1	14.96	23.69
11n	26	CH1	14.92	23.71
HT20	39	CH1	14.94	23.74
	52	CH1	14.91	23.76
	58.5	CH1	14.92	23.74
	65	CH1	14.89	23.80
	13.5	CH1	8.76	16.10
	27	CH1	8.72	16.14
	40.5	CH1	8.70	16.18
	54	CH1	8.69	16.17
11n	81	CH1	8.67	16.13
HT40	108	CH1	8.64	16.19
	121.5	CH1	8.60	16.09
	135	CH1	8.55	16.20
	162	CH1	8.53	16.21



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Mode	Data rate (Mbps)	СН	AV Power (dBm)	PK Power (dBm)
	1	СН6	17.56	18.79
11b	2	СН6	17.52	18.82
110	5.5	CH6	17.49	18.84
	11	CH6	17.45	18.86
	6	CH6	17.68	24.89
	9	CH6	17.69	24.87
	12	CH6	17.59	24.96
11~	18	CH6	17.62	24.98
11g	24	CH6	17.54	25.00
	36	CH6	17.53	24.97
	48	CH6	17.50	25.01
	54	CH6	17.49	25.04
	6.5	CH6	17.64	25.06
	13	CH6	17.60	25.10
	19.5	CH6	17.56	25.14
11n	26	CH6	17.54	25.18
HT20	39	CH6	17.50	25.20
	52	CH6	17.52	25.19
	58.5	CH6	17.46	25.24
	65	CH6	17.41	25.26
	13.5	CH4	13.59	21.20
	27	CH4	13.54	21.26
	40.5	CH4	13.49	21.29
	54	CH4	13.45	21.27
11n	81	CH4	13.39	21.34
HT40	108	CH4	13.34	21.39
	121.5	CH4	13.30	21.30
	135	CH4	13.46	21.23
	162	CH4	13.37	21.38



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		<u> </u>		
Mode	Data rate CH		AV Power	PK Power
Mode	(Mbps)	СП	(dBm)	(dBm)
	1	CH11	17.95	19.15
1.11	2	CH11	17.92	19.18
11b	5.5	CH11	17.86	19.21
	11	CH11	17.82	19.24
	6	CH11	17.21	24.59
	9	CH11	17.19	24.46
	12	CH11	17.20	24.62
1.1	18	CH11	17.15	24.63
11g	24	CH11	17.13	24.74
	36	CH11	17.10	24.68
	48	CH11	17.06	24.73
	54	CH11	16.99	24.78
	6.5	CH11	16.68	24.26
	13	CH11	16.64	24.30
	19.5	CH11	16.61	24.35
11n	26	CH11	16.59	24.39
HT20	39	CH11	16.54	24.42
	52	CH11	16.50	24.40
	58.5	CH11	16.48	24.43
	65	CH11	16.44	24.49
	13.5	CH7	9.89	17.58
	27	CH7	9.85	17.62
	40.5	CH7	9.81	17.65
	54	CH7	9.78	17.60
11n	81	CH7	9.80	17.69
HT40	108	CH7	9.73	17.75
	121.5	CH7	9.70	17.79
	135	CH7	9.68	17.84
	162	CH7	9.74	17.73

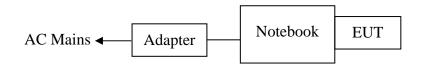
2.4. Tested Supporting System Details

No.	Description	ACS No.	Manufacturer	Model	Serial Number	Approved type	
1	Notebook	-	DELL	PP09S	N/A	☑FCC DoC ☑BSMI ID: R41108	
1		Power Cord: Unshielded, Detachabled, 1.8m Power Adapter: Manufacturer: DELL, M/N: LA65NS1-00 Cable: Unshielded, Detachabled, 4.0m(Bond one ferrite core)					



FCC ID:YKB751BD001 IC:YKB751BD001 2age

2.5. Block diagram of connection between the EUT and simulators



(EUT: 150Mbps Wireless Lite N USB Adapter)

2.6. Test Facility

Site Description

Name of Firm : Audix Technology (Shenzhen) Co., Ltd.

No. 6, Ke Feng Rd., 52 Block, Shenzhen

Science & Industrial Park, Nantou, Shenzhen, Guangdong, China

3m Anechoic Chamber : Mar.31, 2009 File on Federal

Communication Commission Registration Number: 90454

3m & 10m Anechoic Chamber : Dec. 30, 2009 File on Federal

Communication Commission Registration Number: 794232

EMC Lab. : Certificated by Industry Canada

Registration Number: IC 5183A-1

Jul. 03, 2009

: Accredited by DATech, German

Registration Number: DAT-P-091/99-01

Feb. 02, 2009

Accredited by NVLAP, USA

NVLAP Code: 200372-0

Mar.31, 2012



2.7. Measurement Uncertainty (95% confidence levels, k=2)

Test Item	Uncertainty
Uncertainty for Conduction emission test in No. 1 Conduction	3.22 dB(150kHz to 30MHz)
Uncertainty for Radiation Emission test	4.20 dB (Polarize: V)
in 3m chamber	4.66 dB (Polarize: H)
Uncertainty for Radiated Spurious	2.70 dB(Bilog antenna 30M~1000MHz)
Emission test in RF chamber	2.27 dB(Horn antenna 1000M~12750MHz)
Uncertainty for Conduction Spurious emission test	2.12 dB
Uncertainty for Output power test	0.97 dB
Uncertainty for Power density test	2.21 dB
Uncertainty for Frequency range test	$1x10^{-9}$
Uncertainty for Bandwidth test	$1x10^{-9}$
Uncertainty for DC power test	0.038 %
Uncertainty for test site temperature and	0.3℃
humidity	2%

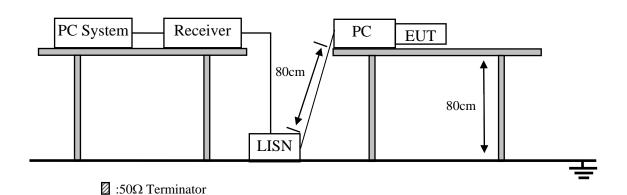


3. POWER LINE CONDUCTED EMISSION TEST

3.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESHS10	838693/001	Nov.05, 10	1 Year
2.	L.I.S.N.#1	Rohde & Schwarz	ESH2-Z5	834066/011	Nov.05, 10	1 Year
3.	Terminator	Hubersuhner	50Ω	No. 1	May.08, 10	1 Year
4.	Terminator	Hubersuhner	50Ω	No. 2	May.08, 10	1 Year
5.	RF Cable	Fujikura	3D-2W	LISN Cable 1#	May.08, 10	1Year
6.	Coaxial Switch	Anritsu	MP59B	M55367	May.08, 10	1 Year
7.	Passive Probe	Rohde & Schwarz	ESH2-Z3	299.7810.52	May.08, 10	1 Year
8.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100341	May.08, 10	1 Year
9.	Oscilloscope	Tektronix	TDS3052B	B026036	May.08, 10	1 Year

3.2.Block Diagram of Test Setup



3.3. Power Line Conducted Emission Test Limits

	Maximum RF Line Voltage			
Frequency	Quasi-Peak Level	Average Level		
	$dB(\mu V)$	$dB(\mu V)$		
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*		
500kHz ~ 5MHz	56	46		
5MHz ~ 30MHz	60	50		

Notes: 1. * Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.



3.4. Configuration of EUT on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

3.4.1.150Mbps Wireless Lite N USB Adapter (EUT)

Model Number : WD650-BD-N

Serial Number : N/A

3.4.2. Support Equipment: As Tested Supporting System Details, in Section 2.3.

3.5. Operating Condition of EUT

- 3.5.1. Setup the EUT and simulator as shown as Section 2.4.
- 3.5.2. Turned on the power of all equipment.
- 3.5.3.PC run test software to control EUT work in Tx mode.

3.6. Test Procedure

The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power Via Notebook connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). This provides a 50 ohm coupling impedance for the EUT (Please refer the block diagram of the test setup and photographs). The AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10: 2009 on Conducted Emission Test.

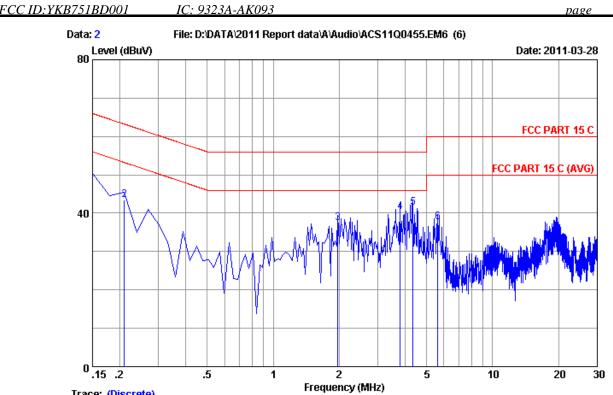
The bandwidth of test receiver (R & S ESHS10) is set at 10kHz.

The frequency range from 150kHz to 30MHz is checked.

3.7. Power Line Conducted Emission Test Results

PASS. (All emissions not reported below are too low against the prescribed limits.)





Trace: (Discrete)

Site no :1#conduction Data No

Dis./Ant. :** 2011 ESH2-Z5 LINE

:FCC PART 15 C Limit

:29.5*C/55% Engineer :Leo-Li

EUT :150Mbps Wireless Lite N USB Adapter Power Rating :DC 5V From PC Input AC 120V/60Hz

Test Mode :Tx Mode

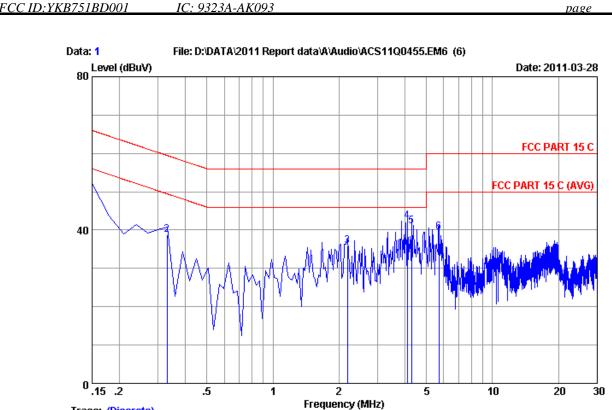
M/N:WD650-BD-N

		LISN	Cable		Emissio	n		
No	Freq	Factor	Loss	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dB)	
1	0.15000	0.17	9.88	38.35	48.40	66.00	17.60	QP
2	0.20970	0.17	9.88	33.43	43.48	63.22	19.74	QP
3	1.971	0.31	9.90	27.32	37.53	56.00	18.47	QP
4	3.792	0.35	9.94	29.98	40.27	56.00	15.73	QP
5	4.329	0.36	9.94	31.04	41.34	56.00	14.66	QP
6	5.613	0.40	9.94	27.33	37.67	60.00	22.33	QP
3 4 5	0.20970 1.971 3.792 4.329	0.17 0.31 0.35 0.36	9.88 9.90 9.94 9.94	33.43 27.32 29.98 31.04	43.48 37.53 40.27 41.34	63.22 56.00 56.00 56.00	19.74 18.47 15.73 14.66	QP QP QP QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit) +Reading.

> 2. If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.





Trace: (Discrete)

Site no :1#conduction Data No

:** 2011 ESH2-Z5 NEUTRAL Dis./Ant.

:FCC PART 15 C Limit

Env./Ins. :29.5*C/55% Engineer :Leo-Li

:150Mbps Wireless Lite N USB Adapter Power Rating :DC 5V From PC Input AC 120V/60Hz

Test Mode :Tx Mode

M/N:WD650-BD-N

		LISN	Cable		Emissio	n		
No	Freq	Factor	Loss	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dB)	
1	0.15000	0.21	9.88	40.09	50.18	66.00	15.82	QP
2	0.32910	0.22	9.88	28.74	38.84	59.47	20.63	QP
3	2.180	0.27	9.91	25.71	35.89	56.00	20.11	QP
4	4.090	0.31	9.94	32.08	42.33	56.00	13.67	QP
5	4.269	0.32	9.94	30.72	40.98	56.00	15.02	QP
6	5.702	0.35	9.95	29.15	39.45	60.00	20.55	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit)

2. If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



4. RADIATED EMISSION TEST

4.1.Test Equipment

Frequency rang: 30~1000MHz

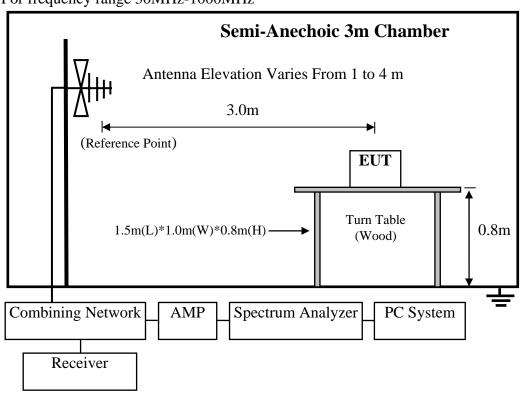
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	3#Chamber	AUDIX	N/A	N/A	Dec.05,10	1 Year
2	EMI Spectrum	Agilent	E4407B	MY41440292	May.08, 10	1 Year
3	Test Receiver	Rohde & Schwarz	ESVS10	834468/011	May.08, 10	1 Year
4	Amplifier	HP	8447D	2648A04738	May.08, 10	1 Year
5	Bilog Antenna	Schaffner	CBL6111C	2598	Oct.26, 10	1 Year
6	RF Cable	MIYAZAKI	8D-FB	3# Chamber No.1	May.08, 10	1 Year
7	Coaxial Switch	Anritsu	MP59B	M73989	May.08, 10	1 Year

Frequency rang: above 1000MHz

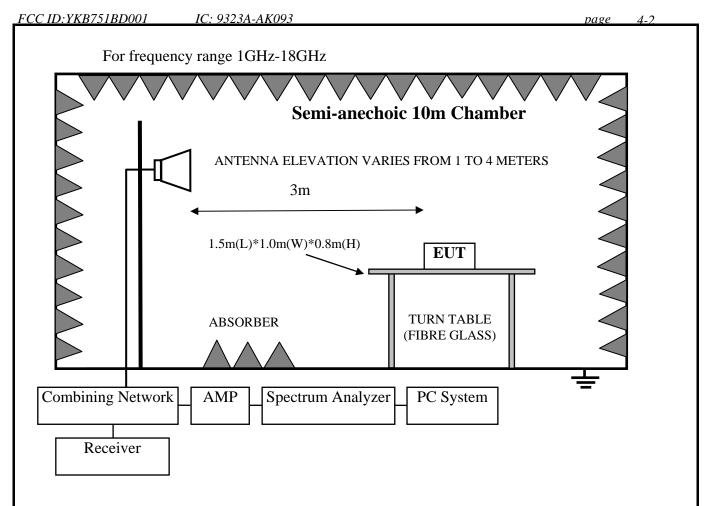
	<u>, </u>					
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 10	1 Year
2	Horn Antenna	EMCO	3115	9607-4877	Nov.25, 09	1.5 Year
3	Horn Antenna	EMCO	3116	00060089	Nov.25, 09	1.5 Year
4	Amplifier	Agilent	8449B	3008A00863	May.08, 10	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	May.08, 10	1 Year
6	RF Cable	Hubersuhner	SUCOFLEX102	29091/2	May.08, 10	1 Year

4.2.Block Diagram of Test Setup

For frequency range 30MHz-1000MHz







4.3. Radiated Emission Limit

4.3.1.15.209 limits

FREQUENCY	DISTANCE	FIELD STREN	NGTHS LIMIT	
MHz	Meters	μV/m	$dB(\mu V)/m$	
30 ~ 88	3	100	40.0	
88 ~ 216	3	150	43.5	
216 ~ 960	3	200	46.0	
960 ~ 1000	3	500	54.0	
Above 1000	3	74.0 dB(μV)/m (Peak)		
		$54.0 \text{ dB}(\mu\text{V})/\text{m} \text{ (Average)}$		

Remark : (1) Emission level $dB\mu V = 20 \log Emission level \mu V/m$

- (2) The smaller limit shall apply at the cross point between two frequency bands.
- (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.



4.3.2.15.205 Restricted bands of operation

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

4.4.EUT Configuration on Test

The configurations of EUT are listed in Section 3.5.

4.5. Operating Condition of EUT

Same as Conducted Emission test that is listed in Section 3.6. except the test set up replaced by Section 4.2.

4.6. Test Procedure

EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it working in test mode, then test it. EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna are set on test.

The bandwidth of the EMI test receiver (R&S ESVS10) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

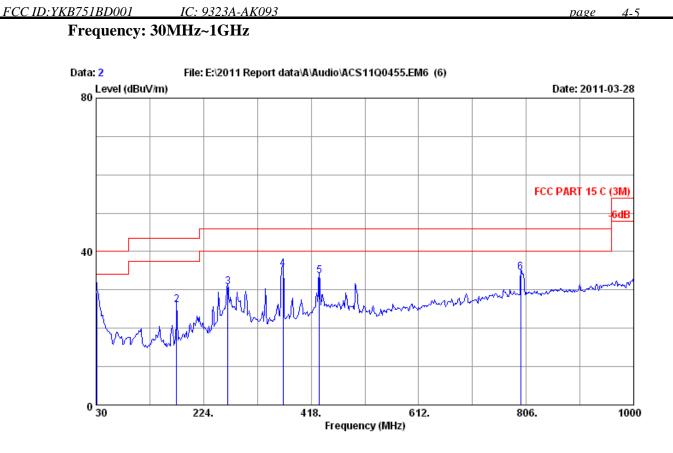
The bandwidth of the Spectrum's VBW is set at 3MHz and RBW is set at 1MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure above 1GHz

The frequency range from 30MHz to 10th harmonic (25GHz) are checked. and no any emissions were found from 18GHz to 25 GHz, So the radiated emissions from 18GHz to 25GHz were not record.



FCC ID:YKB75	1BD001	page	4-4
4.7	7.Radiated Emission Test Results		
	PASS.		
	All the emissions from 30MHz to 25 GHz were comply with 15.209 limits		
	Note: For emissions above 1GHz, if peak level comply with average average level is deemed to comply with average limit.	limit,	then the





Site no. : 3m Chamber Data no. : 2

Dis. / Ant. : 3m 2010 CBL6111C Ant. pol. : HORIZONTAL

Limit : FCC PART 15 C (3M)

Env. / Ins. : 24*C/56% Engineer : Sunny-lu

EUT : 150Mbps Wireless Lite N USB Adapter Power rating : DC 5V From PC input AC 120V/60Hz

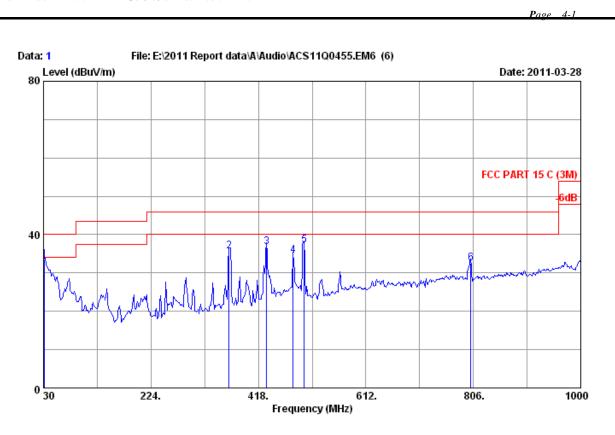
Test Mode : Tx Mode WD650-BD-N

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	31.940	18.88	0.63	9.76	29.27	40.00	10.73	QP
2	175.500	9.65	1.44	15.01	26.10	43.50	17.40	QP
3	267.650	13.50	2.28	14.96	30.74	46.00	15.26	QP
4	367.560	15.53	2.77	17.14	35.44	46.00	10.56	QP
5	432.550	17.42	3.12	13.02	33.56	46.00	12.44	QP
6	796.300	22.04	4.88	7.61	34.53	46.00	11.47	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.

2. The emission levels that are 20dB below the official limit are not reported.





EUT : 150Mbps Wireless Lite N USB Adapter Power rating : DC 5V From PC input AC 120V/60Hz

Test Mode : Tx Mode WD650-BD-N

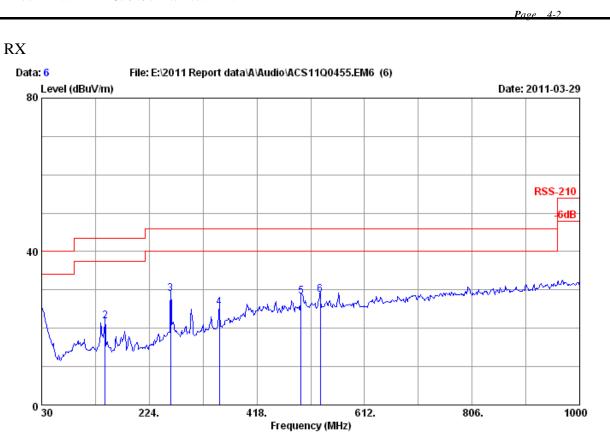
_	No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
	1	31.940	18.88	0.63	13.83	33.34	40.00	6.66	QP	
	2	364.650	15.55	2.76	17.27	35.58	46.00	10.42	QP	
	3	432.550	17.42	3.12	16.28	36.82	46.00	9.18	QP	
	4	481.050	18.11	3.43	12.92	34.46	46.00	11.54	QP	
	5	500.450	18.30	3.55	15.46	37.31	46.00	8.69	QP	
	6	801.150	22.00	4.90	5.73	32.63	46.00	13.37	QP	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.

The emission levels that are 20dB below the official limit are not reported.



FCC ID:YKB751BD001 IC: 9095A-WD650BDN



Site no. : 3m Chamber Data no. : 6

Dis. / Ant. : 3m 2010 CBL6111C Ant. pol. : HORIZONTAL

Limit : RSS-210 Env. / Ins. : 24*C/56% Engineer : Sunny-lu

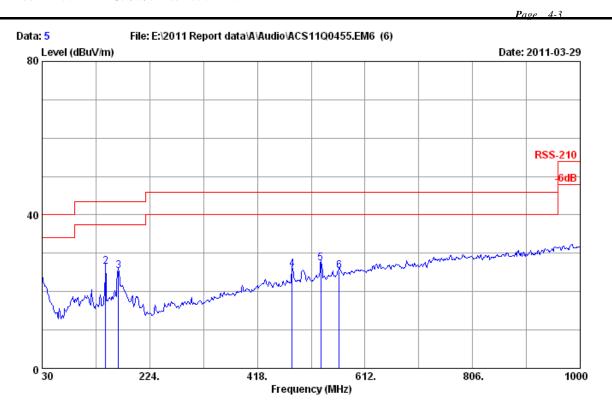
: 150Mbps Wireless Lite N USB Adapter Power rating: DC 5V From PC input AC 120V/60Hz

Test Mode : Rx Mode WD650-BD-N

_	No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
	1	30.000	20.00	0.61	3.81	24.42	40.00	15.58	QP	
	2	144.460	11.92	1.14	8.81	21.87	43.50	21.63	QP	
	3	262.800	13.80	2.25	12.84	28.89	46.00	17.11	QP	
	4	350.100	15.10	2.70	7.62	25.42	46.00	20.58	QP	
	5	497.540	18.27	3.53	6.50	28.30	46.00	17.70	QP	
	6	532.460	18.27	3.73	6.74	28.74	46.00	17.26	QP	

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.

2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 5

Dis. / Ant. : 3m 2010 CBL6111C Ant. pol. : VERTICAL

Limit : RSS-210

Env. / Ins. : 24*C/56% Engineer : Sunny-lu

EUT : 150Mbps Wireless Lite N USB Adapter Power rating : DC 5V From PC input AC 120V/60Hz

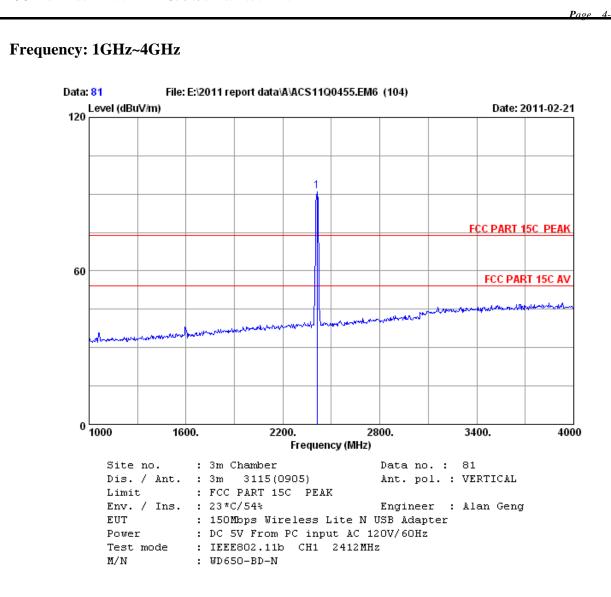
Test Mode : Rx Mode WD650-BD-N

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.000	20.00	0.61	2.49	23.10	40.00	16.90	QP
2	144.460	11.92	1.14	13.39	26.45	43.50	17.05	QP
3	167.740	10.40	1.34	13.60	25.34	43.50	18.16	QP
4	481.050	18.11	3.43	4.24	25.78	46.00	20.22	QP
5	532.460	18.27	3.73	5.40	27.40	46.00	18.60	QP
6	565.440	19.61	3.92	1.99	25.52	46.00	20.48	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.

2. The emission levels that are 20dB below the official limit are not reported.

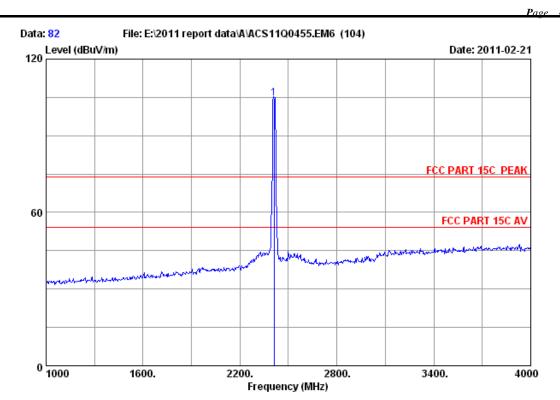




		Ant.	Cable	Amp.		Emission			
	-				_		Limits Margin (dBuV/m) (dB)	Remark	
1	2412.000	28.48	8.60	35.95	90.19	91.32	74.00 -17.32	Peak	

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

FCC ID:YKB751BD001 IC: 9095A-WD650BDN



Site no. : 3m Chamber Data no.: 82

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Alan Geng

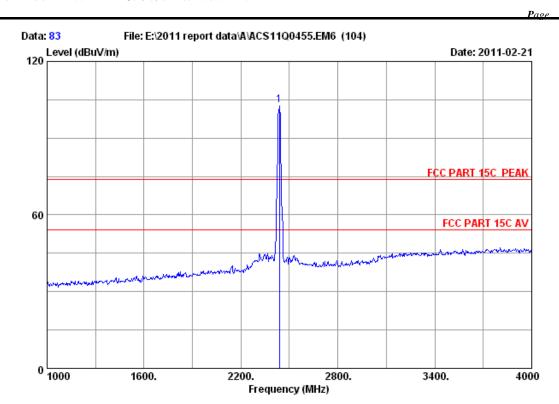
: 150Mbps Wireless Lite N USB Adapter EUT : DC 5V From PC input AC 120V/60Hz Power

Test mode : IEEE802.11b CH1 2412MHz

M/N: WD650-BD-N

		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	2412.000	28.48	8.60	35.95	103.49	104.62	74.00 -30.62	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. : 3m Chamber Data no. : 83

Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Alan Geng

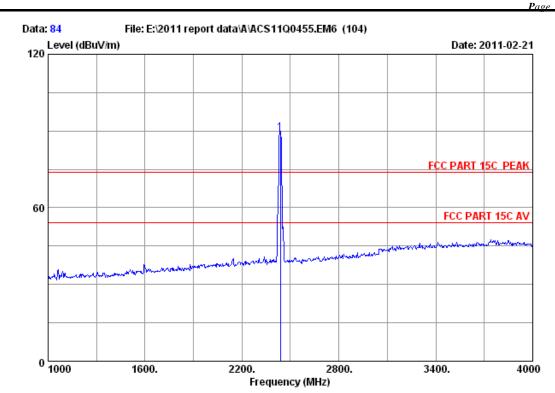
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11b CH6 2437MHz

M/N : WD650-BD-N

		Ant.	Cable	Amp.		Emission			
	-				_		Limits Margin (dBuV/m) (dB)	Remark	
									-
1	2437.000	0.00	8.77	0.00	94.23	103.00	74.00 -29.00	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. : 3m Chamber Data no. : 84
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Alan Geng

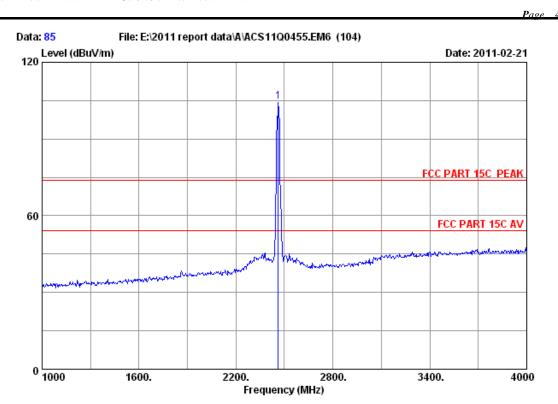
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11b CH6 2437MHz

M/N : WD650-BD-N

		Ant.	Cable	Amp.		Emission			
	-				_		Limits Margin (dBuV/m) (dB)	Remark	
1	2437.000	0.00	8.77	0.00	80.47	89.24	74.00 -15.24	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. : 3m Chamber Data no. : 85

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Alan Geng

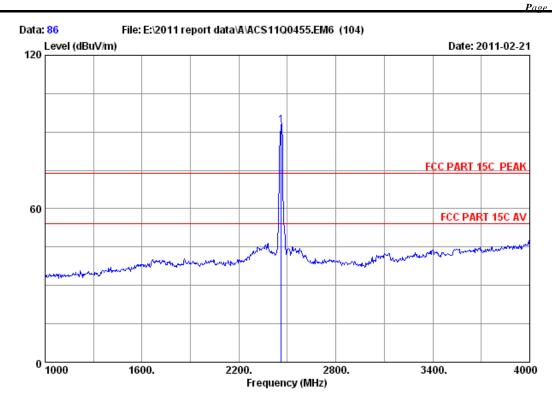
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11b CH11 2462MHz

M/N : WD650-BD-N

	Ant.	cable	Amp.		Emission			
Freq.	Factor	loss	Factor	Reading	Level	Limits Margin	Remark	
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m) (dB)		
2462.000	28.55	8.76	36.02	103.36	104.65	74.00 -30.65	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. : 3m Chamber Data no. : 86
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Alan Geng

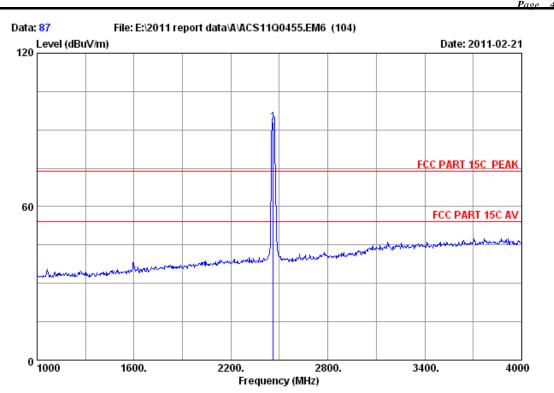
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11b CH11 2462MHz

M/N : WD650-BD-N

		Ant.	Cable	Amp.		Emission			
	-	Factor (dB/m)			_		Limits Margin (dBuV/m) (dB)	Remark	
1	2462.000	 D 28.55	8.76	36.02	91.18	92.47	74.00 -18.47	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. : 3m Chamber Data no. : 87
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 * C/54% Engineer : Alan Geng

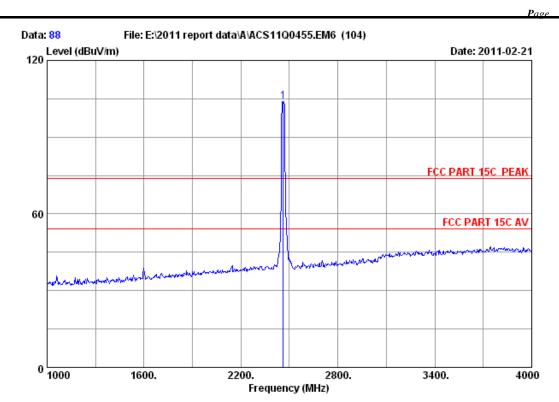
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11g CH11 2462MHz

M/N : WD650-BD-N

	Ant.	Cable	Amp.		Emission			
Freq.	Factor	loss	Factor	Reading	Level	Limits Margin	Remark	
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m) (dB)		
2462.000		0 76	26 02	01 50		74.00 -18.88	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.



Site no. : 3m Chamber Data no. : 88

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Alan Geng

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC SV From PC input AC 120V/60Hz

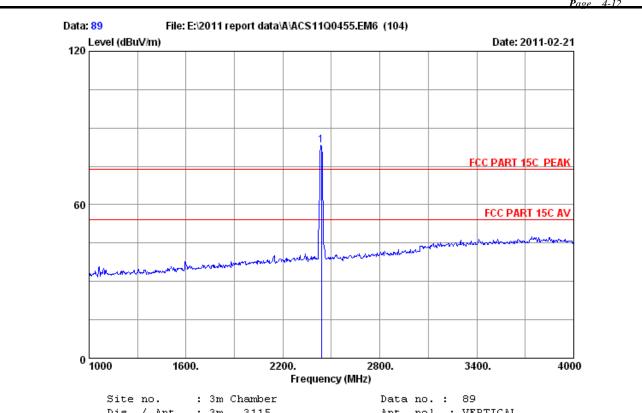
Test mode : IEEE802.11g CH11 2462MHz

M/N : WD650-BD-N

		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	2462.000	28.55	8.76	36.02	102.66	103.95	74.00 -29.95	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.

FCC ID:YKB751BD001 IC: 9095A-WD650BDN



Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL

: FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Alan Geng

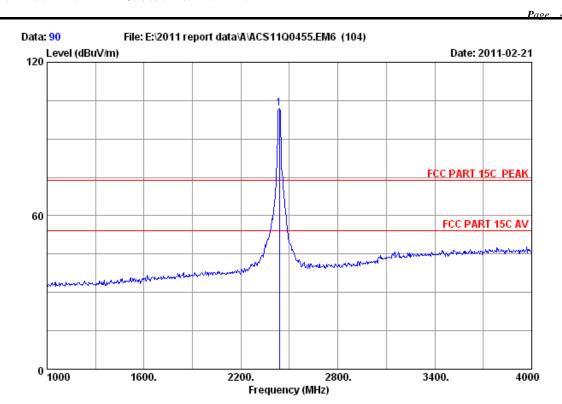
: 150Mbps Wireless Lite N USB Adapter : DC 5V From PC input AC 120V/60Hz Power

: IEEE802.11g CH6 2437MHz Test mode

: WD650-BD-N

		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	2437.000	0.00	8.77	0.00	74.47	83.24	74.00	-9.24	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. : 3m Chamber Data no. : 90

Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Alan Geng

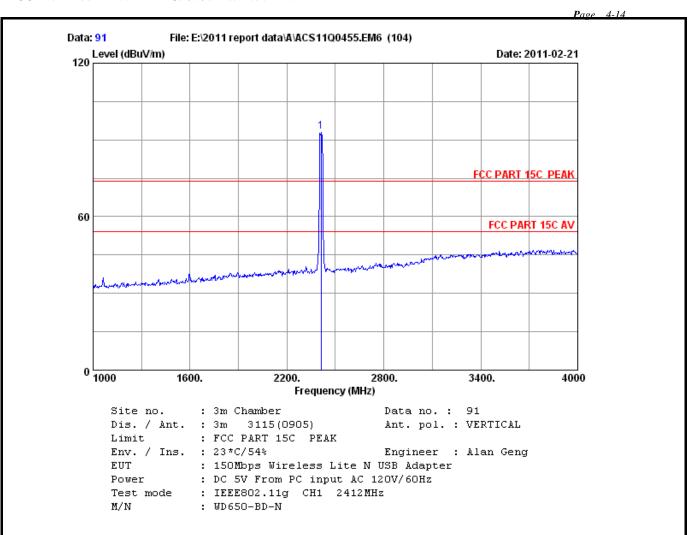
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11g CH6 2437MHz

M/N : WD650-BD-N

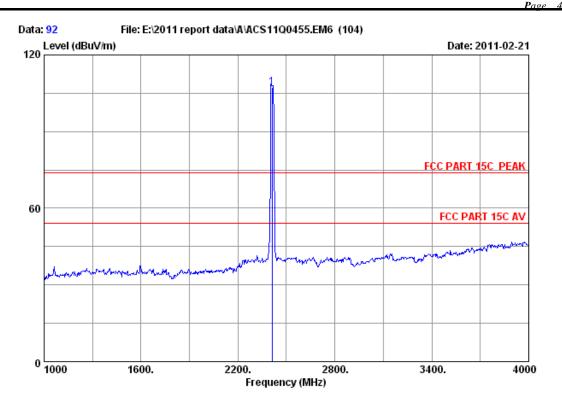
Ant. Cable Amp. Emission	
Freq. Factor loss Factor Reading Level	Limits Margin Remark
(MHz) (dB/m) (dB) (dB) (dBuV) (dBuV/m)	(dBuV/m) (dB)
1 2437.000 0.00 8.77 0.00 93.16 101.93	74.00 -27.93 Peak

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



	Ant.	Cable	Amp.		Emission		
	•			_		Limits Margin (dBuV/m) (dB)	Remark
1	2412.000 28.48	8.60	35.95	91.99	93.12	74.00 -19.12	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. : 3m Chamber Data no. : 92

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Alan Geng

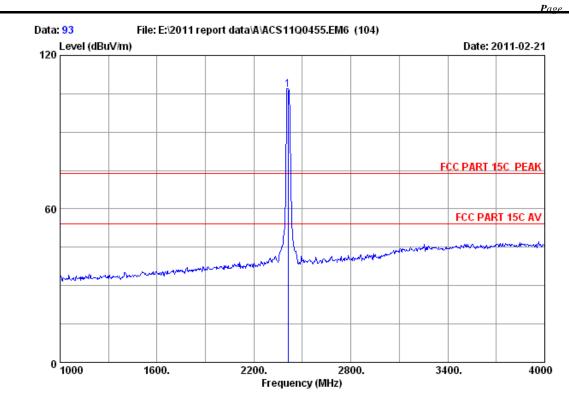
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11g CH1 2412MHz

M/N : WD650-BD-N

	Ant.	Cable	Amp.		Emission		
Freq.	Factor	loss	Factor	Reading	Level	Limits Margin	Remark
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m) (dB)	
2412.000	28.48	8.60	35.95	106.29	107.42	74.00 -33.42	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. : 3m Chamber Data no. : 93

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

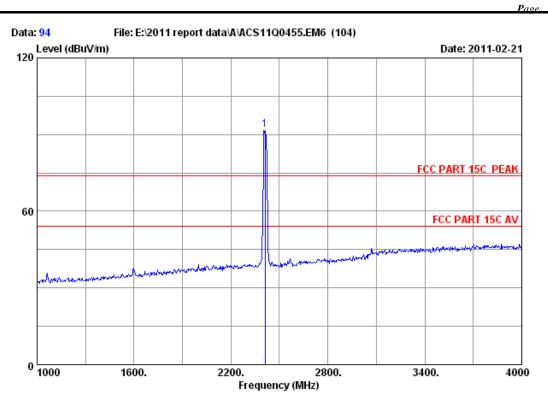
Env. / Ins. : 23 *C/54% Engineer : Alan Geng

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11nHT20 CH1 2412MHz

M/N : WD650-BD-N

		Ant.	Cable	Amp.		Emission		
	-				_		Limits Margin (dBuV/m) (dB)	Remark
1	2412.000	D 28.48	8.60	35.95	105.40	106.53	74.00 -32.53	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. : 3m Chamber Data no. : 94
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Alan Geng

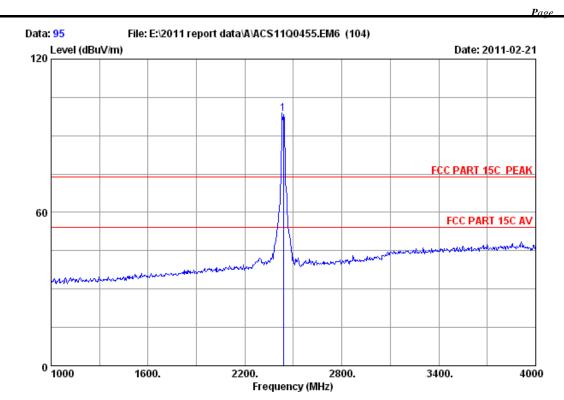
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11nHT20 CH1 2412MHz

M/N : WD650-BD-N

	Ant.	Cable	Amp.		Emission		
Freq.	Factor	loss	Factor	Reading	Level	Limits Margin	Remark
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m) (dB)	
2412.000	28.48	8.60	35.95	90.78	91.91	74.00 -17.91	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.

FCC ID:YKB751BD001 IC: 9095A-WD650BDN



Site no. : 3m Chamber Data no.: 95

Dis. / Ant. : 3m 3115 Ant. pol. : HORIZONTAL

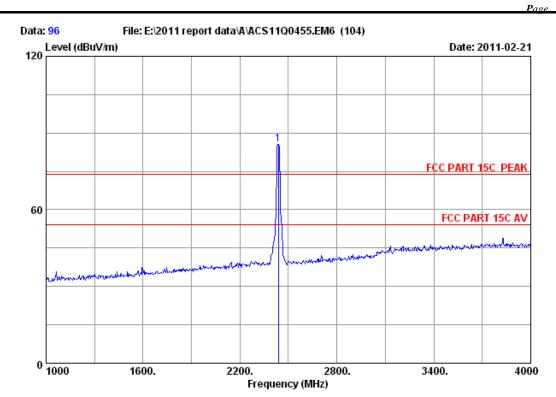
Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Alan Geng

: 150Mbps Wireless Lite N USB Adapter EUT : DC 5V From PC input AC 120V/60Hz Power Test mode : IEEE802. 11n HT20 CH6 2437MHz

M/N: WD650-BD-N

		Ant.	Cable	Amp.		Emission			
	-				_		Limits Margin (dBuV/m) (dB)	Remark	
1	2437.000	0.00	8.77	0.00	89.98	98.75	74.00 -24.75	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. : 3m Chamber Data no. : 96
Dis. / Ant. : 3m 3115 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

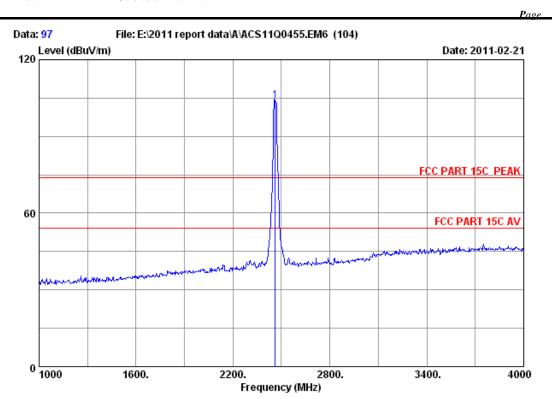
Env. / Ins. : 23 *C/54% Engineer : Alan Geng

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802. 11nHT20 CH6 2437MHz

M/N : WD650-BD-N

		Ant.	Cable	Amp.		Emission			
	-				Reading (dBuV)		Limits Margin (dBuV/m) (dB)	Remark	
1	2437.000	 D 0.00	8.77	0.00	76.84	85.61	74.00 -11.61	 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. : 3m Chamber Data no. : 97

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

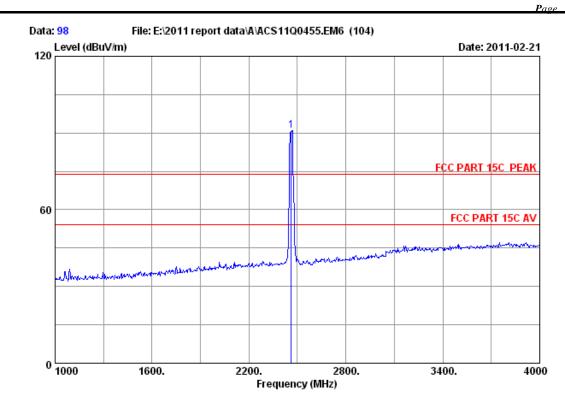
Env. / Ins. : 23*C/54% Engineer : Alan Geng

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802. 11nHT20 CH11 2462MHz

M/N : WD650-BD-N

		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	2462.000	28.55	8.76	36.02	102.53	103.82	74.00 -29.82	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. : 3m Chamber Data no. : 98
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

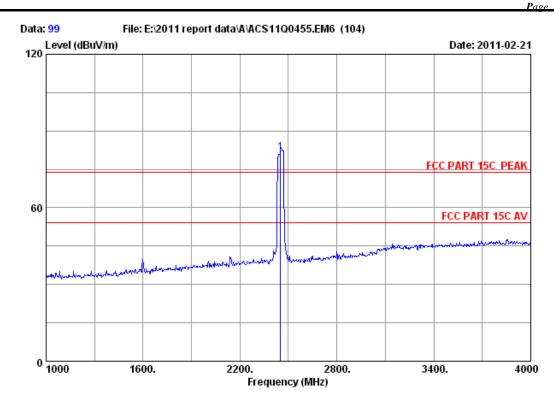
Env. / Ins. : 23 *C/54% Engineer : Alan Geng

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802. 11nHT20 CH11 2462MHz

M/N : WD650-BD-N

	Ant.	Cable	Amp.		Emission			
-	Factor (dB/m)			Reading (dBuV)		Limits Margin (dBuV/m) (dB)	Remark	
2462.000	28.55	8.76	36.02	89.58	90.87	74.00 -16.87	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. : 3m Chamber Data no. : 99
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

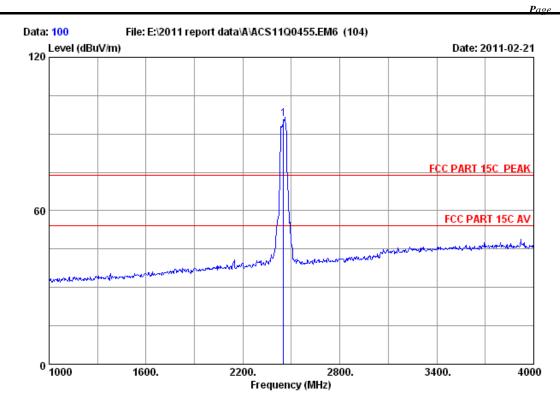
Env. / Ins. : 23 *C/54% Engineer : Alan Geng

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802. 11nHT40 CH7 2452MHz

M/N : WD650-BD-N

	Ant.	Cable	Amp.		Emission				
-				_	Level (dBuV/m)		_	Remark	
2452.000	 0 28.53	8.48	36.06	80.55	81.50	74.00	-7.50	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. : 3m Chamber Data no. : 100

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Alan Geng

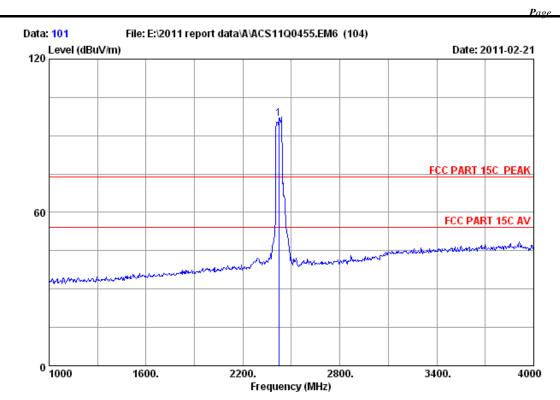
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802. 11nHT40 CH7 2452MHz

M/N : WD650-BD-N

	Ant.	Cable	Amp.		Emission			
-				Reading (dBuV)		Limits Margin (dBuV/m) (dB)	Remark	
2452.000	28.53	8.48	36.06	95.11	96.06	74.00 -22.06	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.

FCC ID:YKB751BD001 IC: 9095A-WD650BDN



Site no. : 3m Chamber Data no. : 101

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : HORIZONTAL

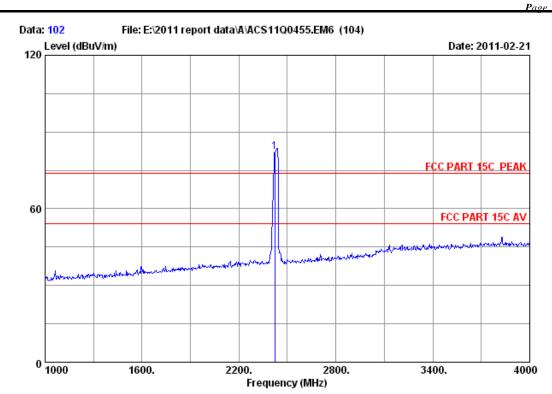
Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Alan Geng

: 150Mbps Wireless Lite N USB Adapter EUT Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802. 11nHT40 CH1 2422MHz

M/N: WD650-BD-N

		Ant.	Cable	Amp.		Emission			
	-				_		Limits Margin (dBuV/m) (dB)	Remark	
1	2422.000	28.50	8.60	36.01	95.67	96.76	74.00 -22.76	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. : 3m Chamber Data no. : 102
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

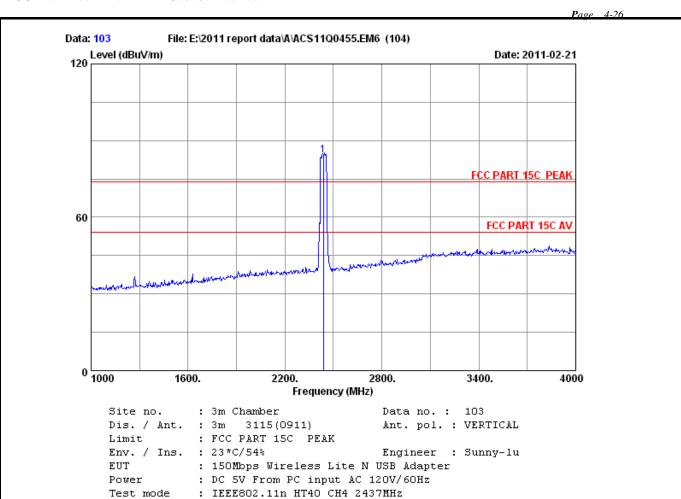
Env. / Ins. : 23 *C/54% Engineer : Alan Geng

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802. 11nHT40 CH1 2422MHz

M/N : WD650-BD-N

		Ant.	Cable	Amp.		Emission			
	-				_		Limits Margin (dBuV/m) (dB)	Remark	
1	2422.000	0.00	8.77	36.01	109.60	82.36	74.00 -8.36	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.



	-	Factor		Factor	_		Limits Margin (dBuV/m) (dB)	Remark	
L	2437.000	 D 29.47	7.46	36.61	 83.77	84.09	74.00 -10.09	Peak	

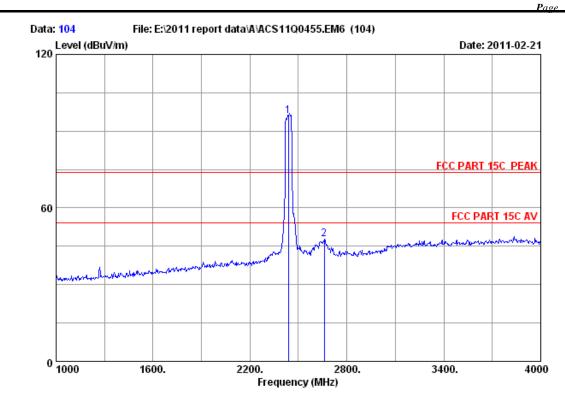
Remarks:

M/N

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.

: WD650-BD-N

2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 104

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Sunny-lu

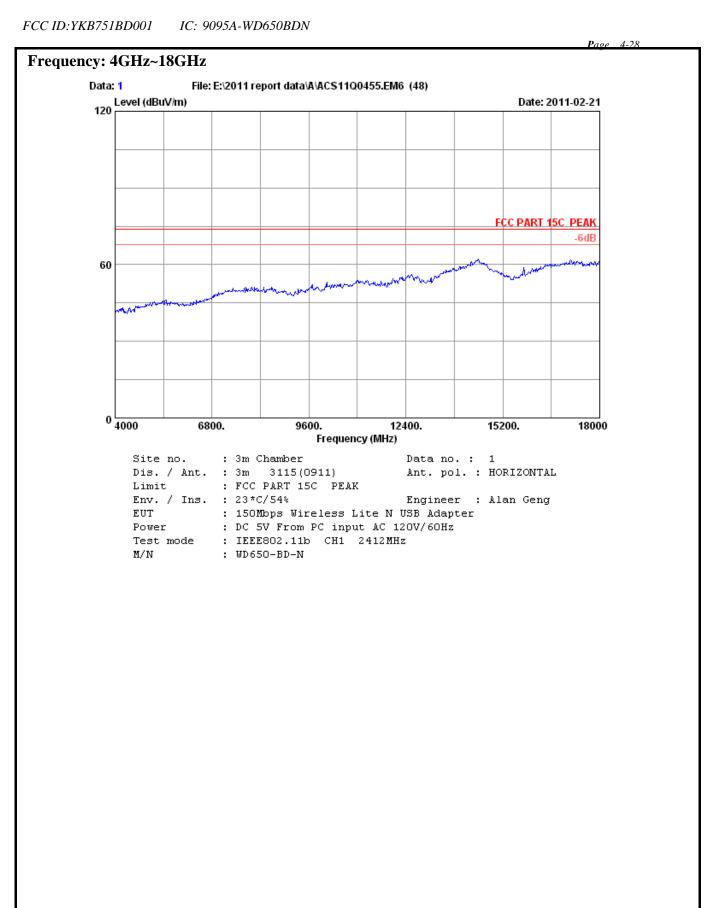
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11n HT40 CH4 2437MHz

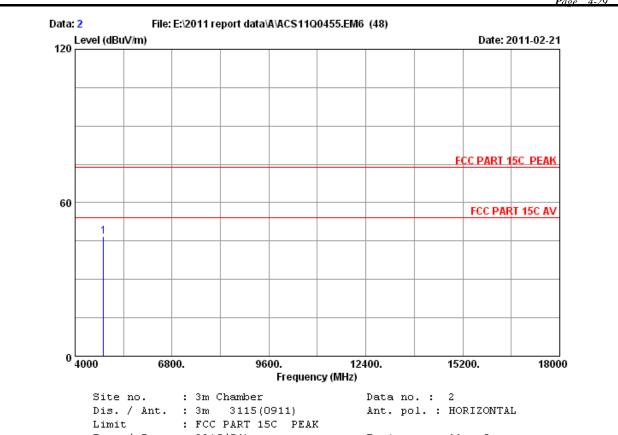
M/N : WD650-BD-N

	Freq. Fact		Factor	_		Limits Marg	•	
							·	
1	2437.000 29	.47 7.46	36.61	95.61	95.93	74.00 -21.9	93 Peak	
2	2659.000 30	.33 7.92	36.57	46.15	47.83	74.00 26.1	.7 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.







Env. / Ins. : 23*C/54% Engineer : Alan Geng

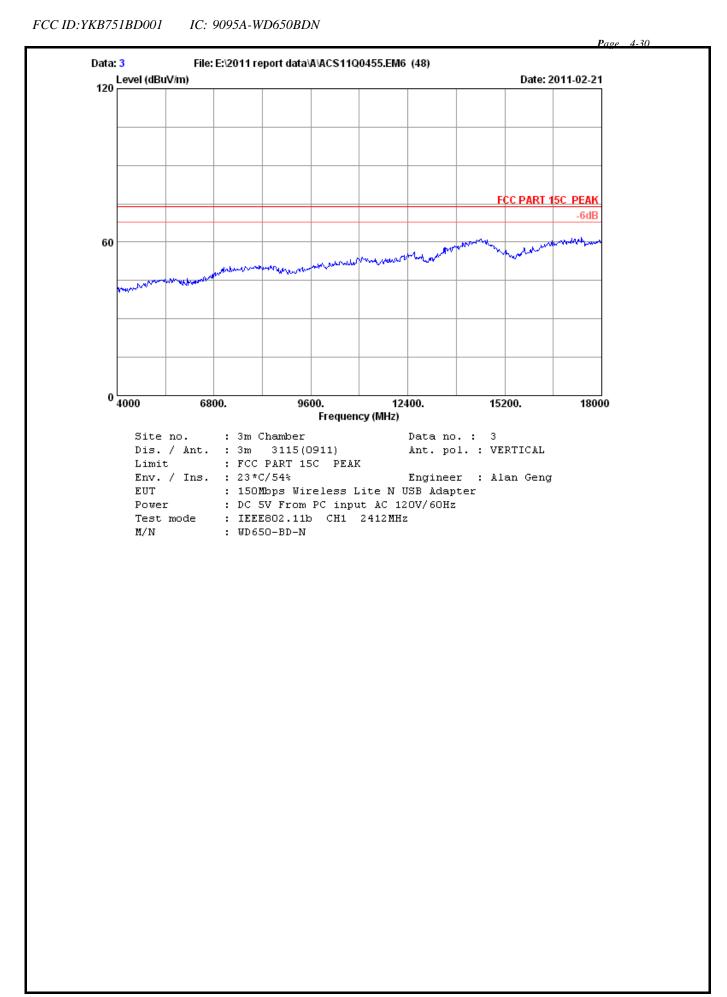
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

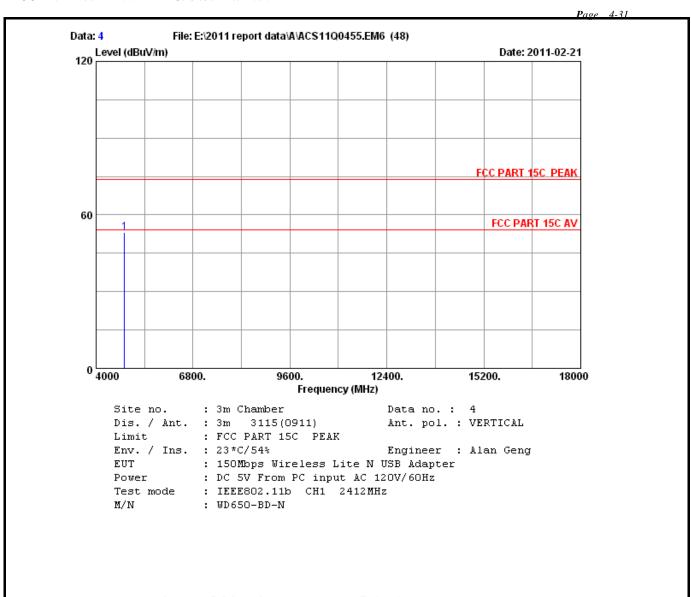
Test mode : IEEE802.11b CH1 2412MHz

M/N : WD650-BD-N

	-	Factor		Factor	_	Emission Level (dBuV/m)		_	Remark	
1	4824.000	34.32	10.64	35.08	37.02	46.90	74.00	27.10	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.

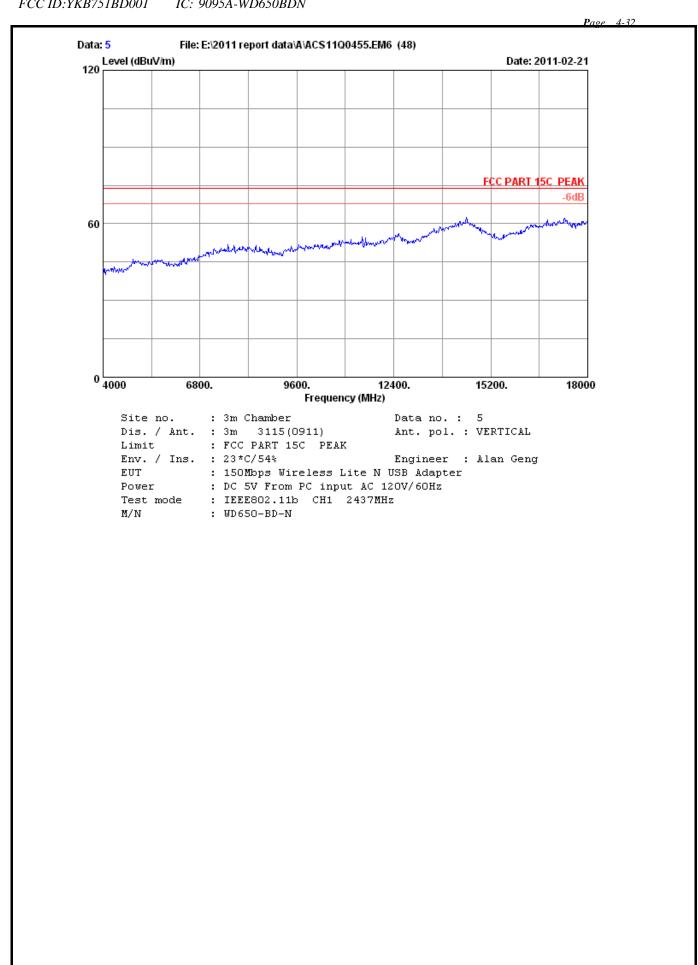


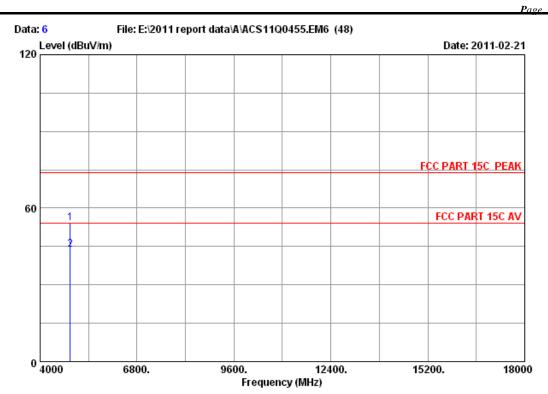


		Ant.	Cable	Amp.		Emission				
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		
										_
1	4824.000	34.32	10.64	35.08	43.25	53.13	74.00	20.87	Peak	

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

FCC ID:YKB751BD001 IC: 9095A-WD650BDN





Site no. : 3m Chamber Data no. : 6

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Alan Geng

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

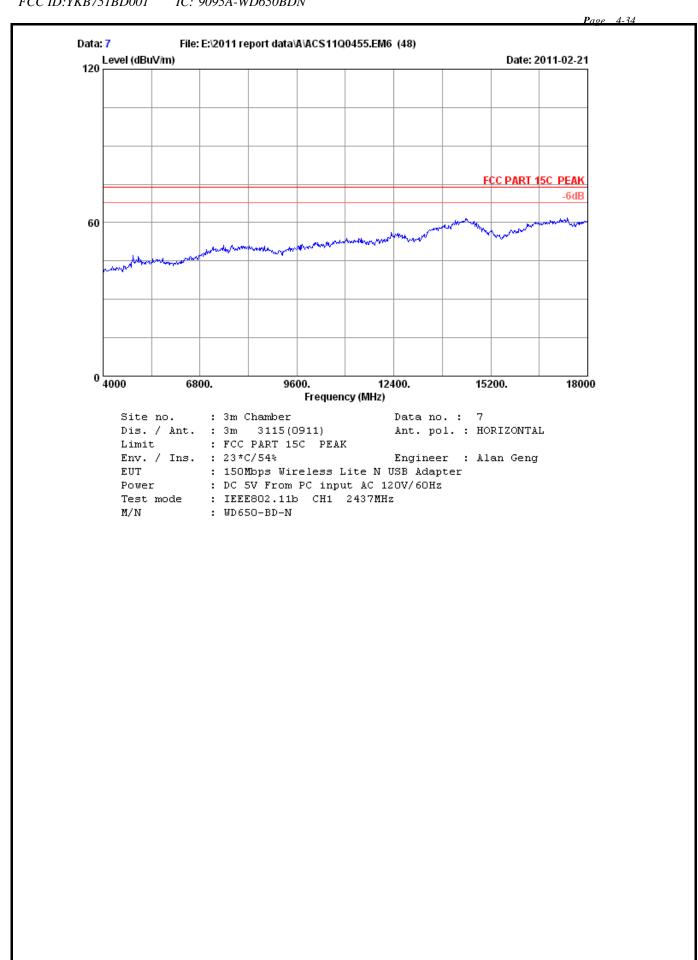
Test mode : IEEE802.11b CH1 2437MHz

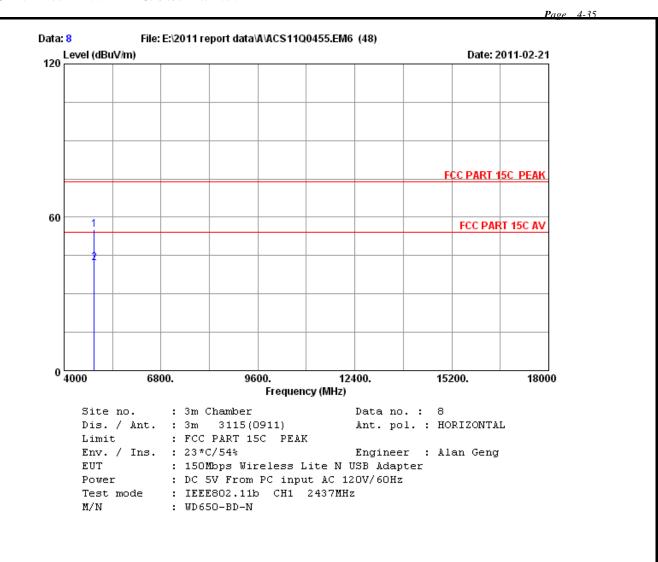
M/N : WD650-BD-N

-	Factor	loss	_	Emission Level (dBuV/m)		_	Remark
4874.000 4874.000			 	54.12 43.73	74.00 54.00		Peak 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.

FCC ID:YKB751BD001 IC: 9095A-WD650BDN

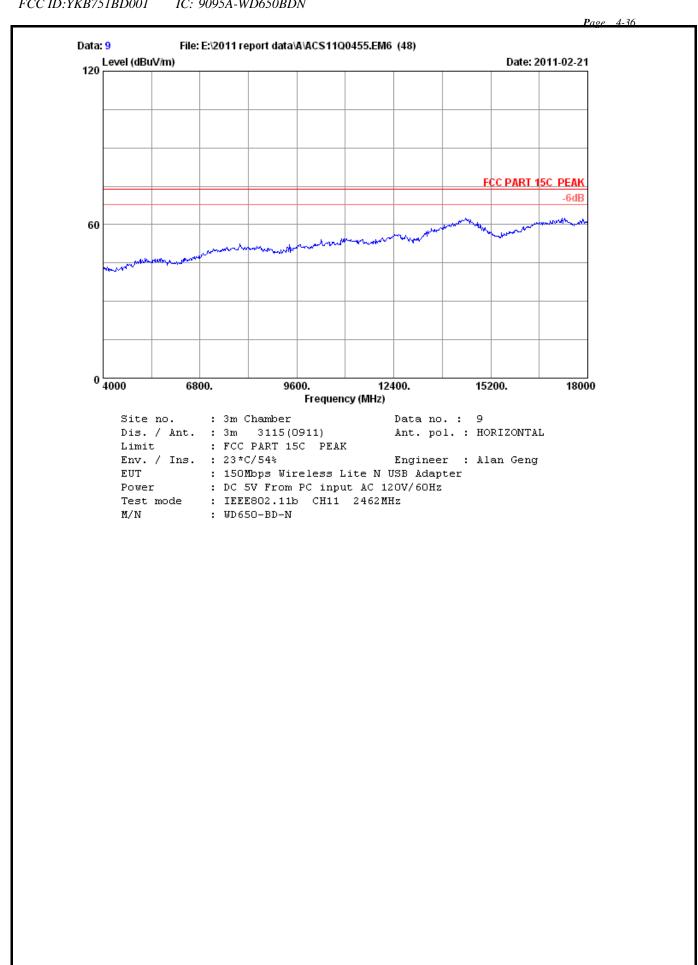




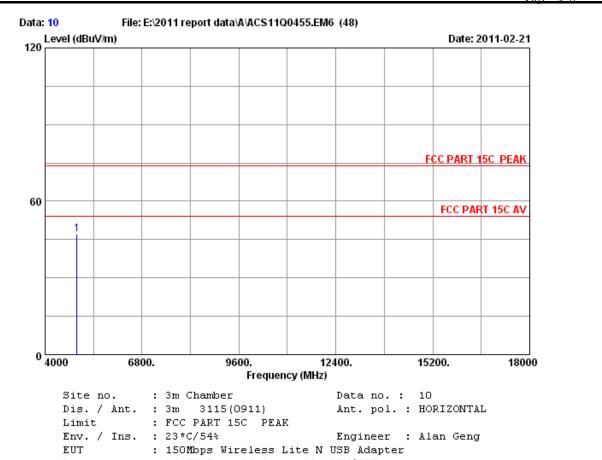
-	Factor	Factor	_	Emission Level (dBuV/m)		_	Remark
4874.000 4874.000			45.00 32.20	55.07 42.27	74.00 54.00		Peak Average

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

FCC ID:YKB751BD001 IC: 9095A-WD650BDN



FCC ID:YKB751BD001 IC: 9095A-WD650BDN



Power : DC 5V From PC input AC 120V/60Hz

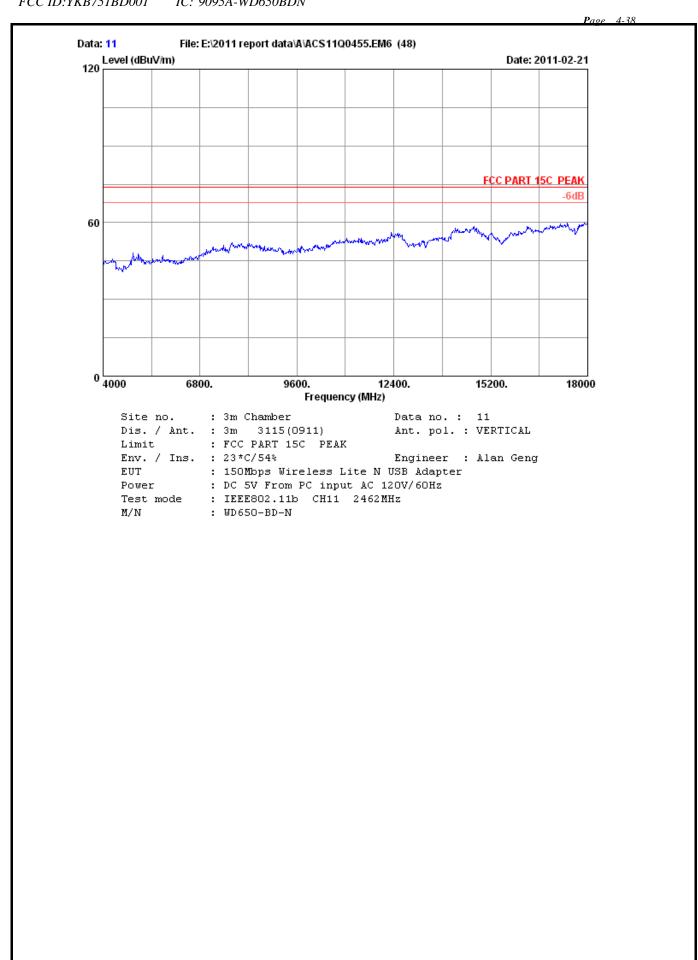
Test mode : IEEE802.11b CH11 2462MHz

: WD650-BD-N M/N

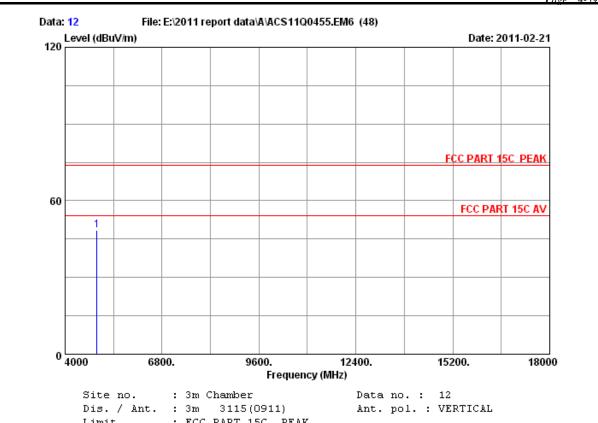
		Ant.	Cable	Amp.		Emission				
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		
1	4924.000	34.49	10.76	34.98	37.02	47.29	74.00	26.71	Peak	

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

FCC ID:YKB751BD001 IC: 9095A-WD650BDN



FCC ID:YKB751BD001 IC: 9095A-WD650BDN



: FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Alan Geng

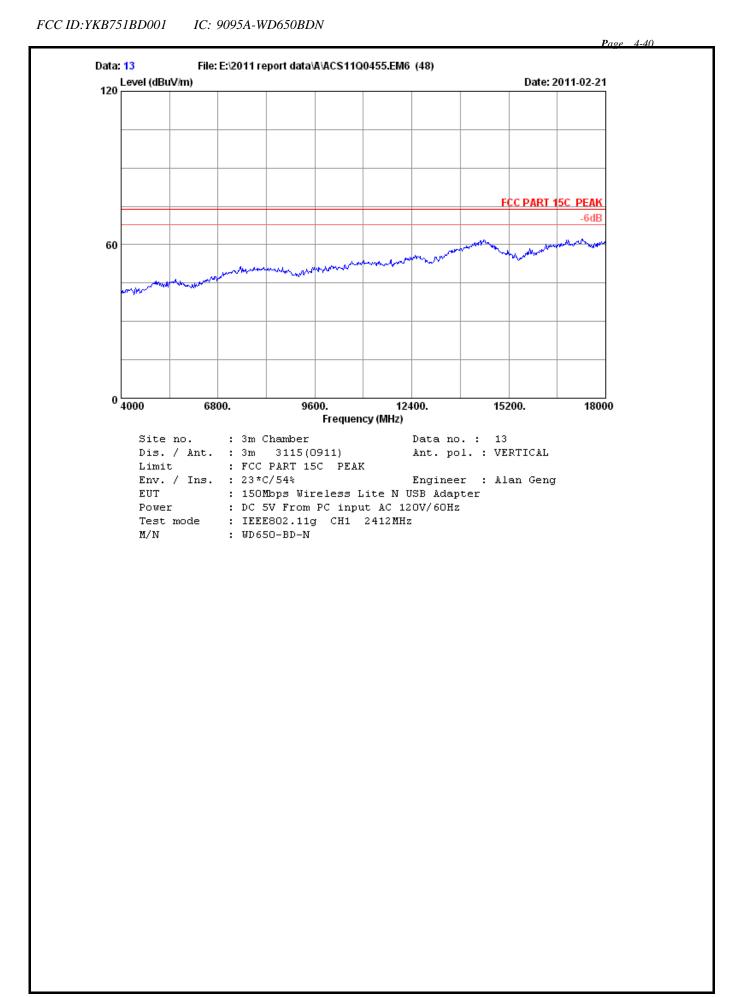
: 150Mbps Wireless Lite N USB Adapter : DC 5V From PC input AC 120V/60Hz Power

Test mode : IEEE802.11b CH11 2462MHz

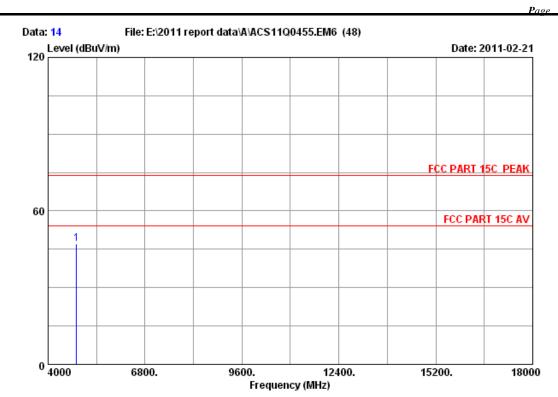
: WD650-BD-N

	-	Factor		Factor	_	Emission Level (dBuV/m)		_	Remark	
1	4924.000	34.49	10.76	34.98	38.32	48.59	74.00	25.41	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.



FCC ID:YKB751BD001 IC: 9095A-WD650BDN



Site no. : 3m Chamber Data no.: 14 Dis. / Ant. : 3m 3115 (0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Alan Geng

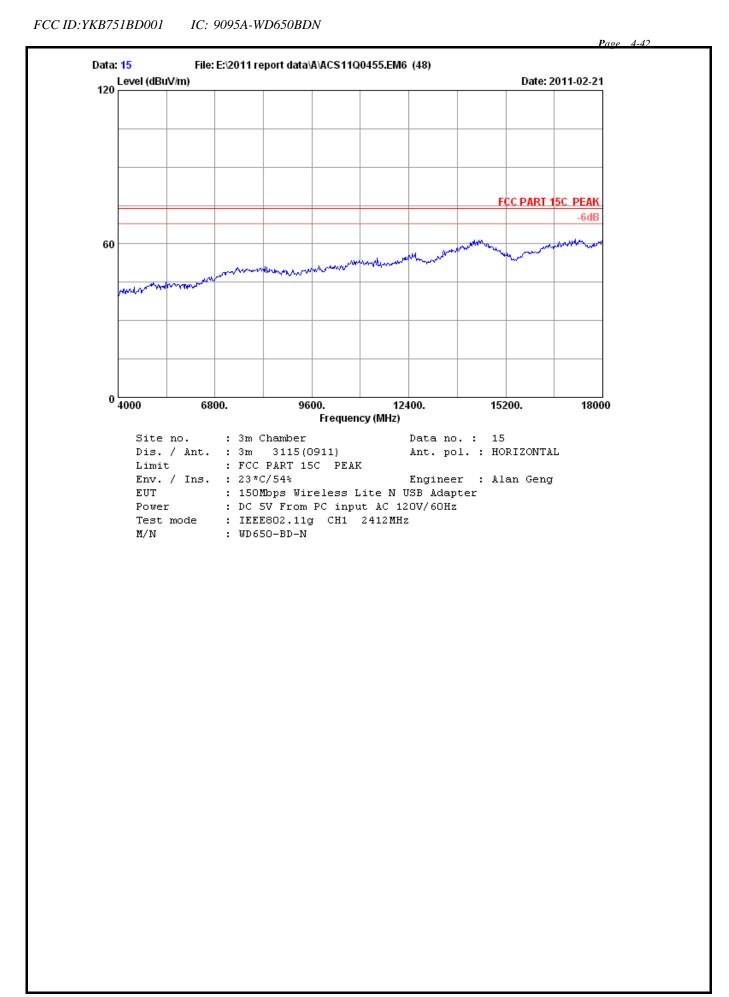
: 150Mbps Wireless Lite N USB Adapter : DC 5V From PC input AC 120V/60Hz Power

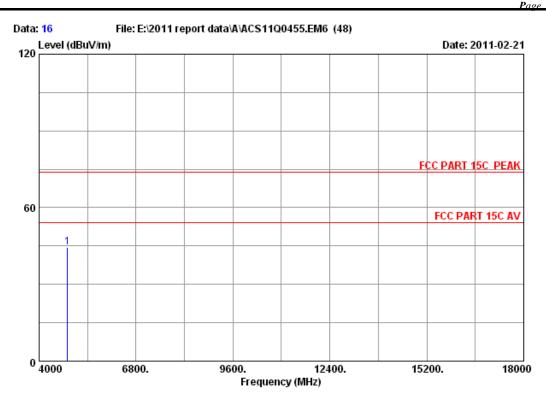
Test mode : IEEE802.11g CH1 2412MHz

: WD650-BD-N

	-	Factor		Factor	_	Emission Level (dBuV/m)		_	Remark	
1	4824.000	34.32	10.64	35.08	37.17	47.05	74.00	26.95	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. : 3m Chamber Data no. : 16

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Alan Geng

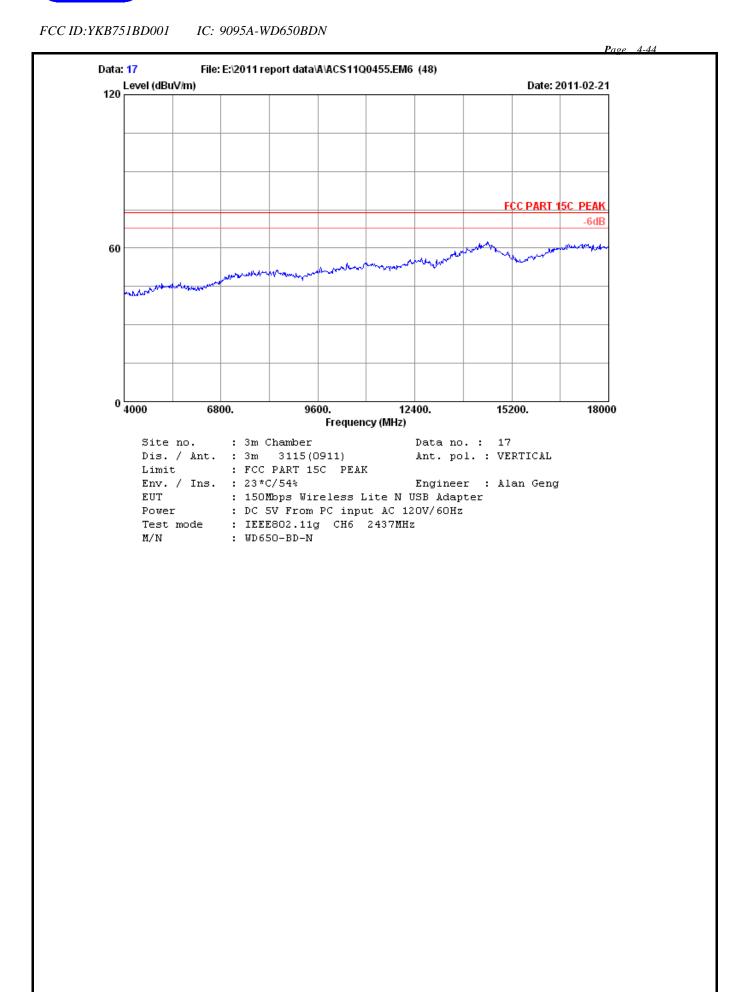
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

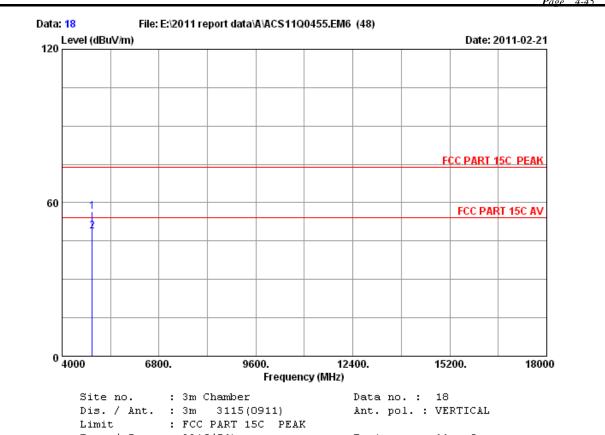
Test mode : IEEE802.11g CH1 2412MHz

M/N : WD650-BD-N

		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	4824.000	34.32	10.64	35.08	34.54	44.42	74.00	29.58	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.





Env. / Ins. : 23 *C/54% Engineer : Alan Geng

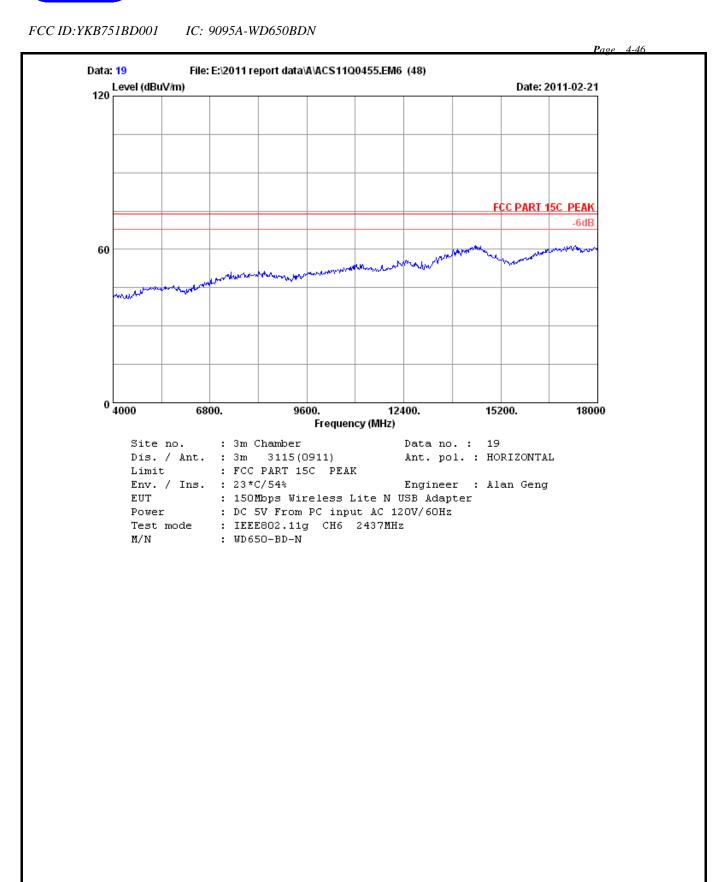
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

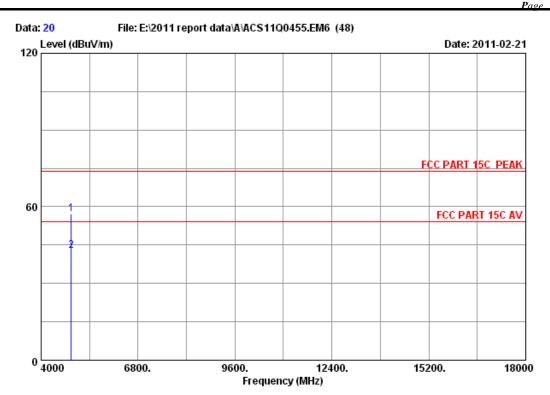
Test mode : IEEE802.11g CH6 2437MHz

M/N : WD650-BD-N

	-	Factor	Factor	_	Level (dBuV/m)		_	Remark
_	4874.000 4874.000		 	46.38 38.68	56.45 48.75	74.00 54.00		Peak 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. : 3m Chamber Data no. : 20

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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Alan Geng

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

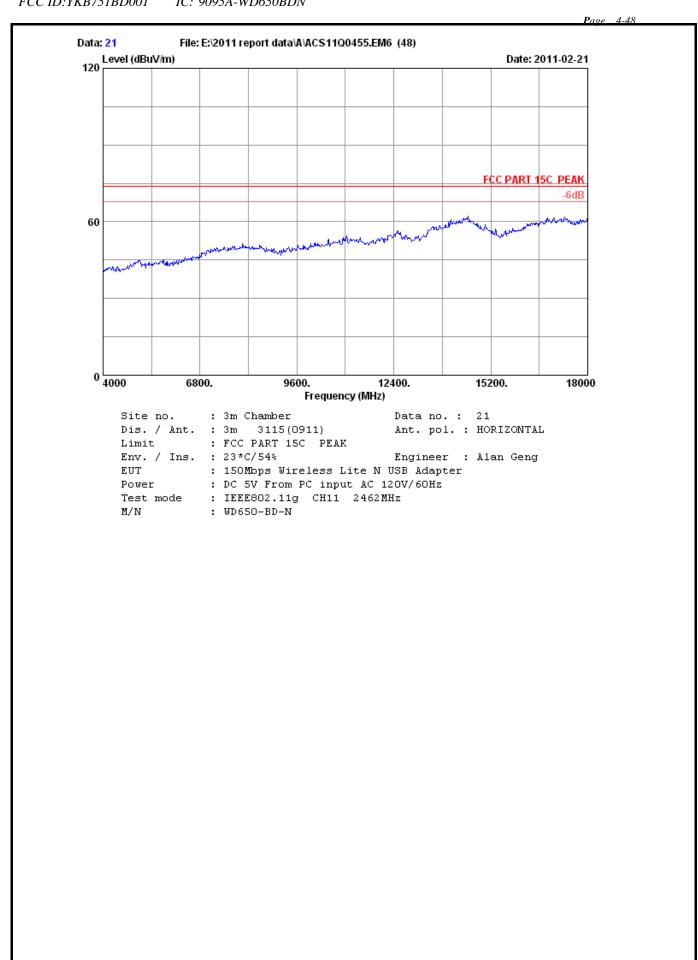
Test mode : IEEE802.11g CH6 2437MHz

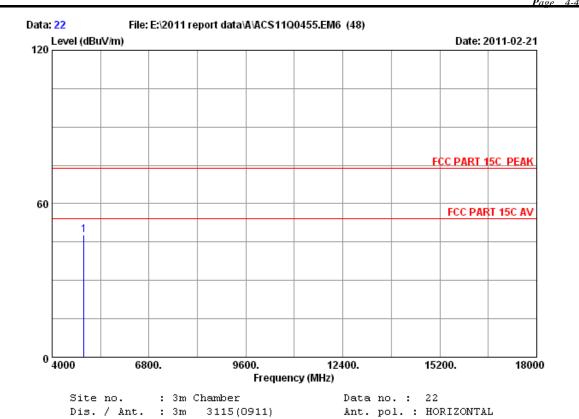
M/N : WD650-BD-N

		Anc.	capie	Amp.		rmission			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4874.000	34.41	10.69	35.03	46.94	57.01	74.00	16.99	Peak
2	4874.000	34.41	10.69	35.03	32.56	42.63	54.00	11.37	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.

FCC ID:YKB751BD001 IC: 9095A-WD650BDN





Limit : FCC PART 15C PEAK

Env. / Ins. : 23 *C/54% Engineer : Alan Geng

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

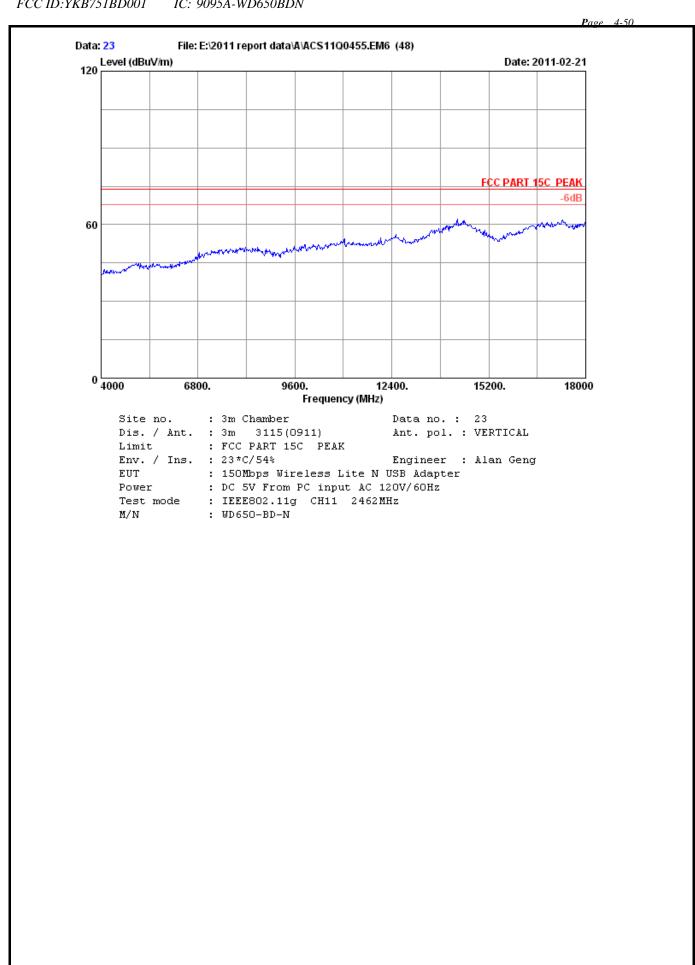
Test mode : IEEE802.11g CH11 2462MHz

M/N : WD650-BD-N

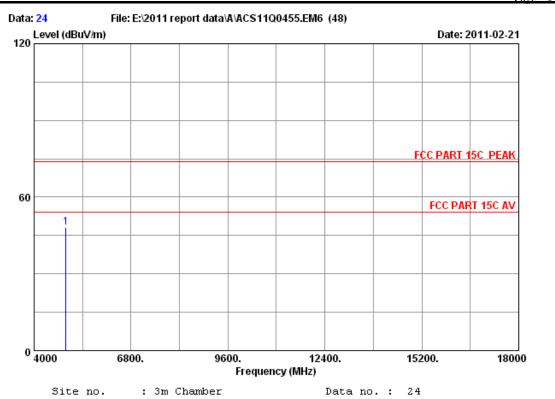
		Ant.	Cable	Amp.		Emission				
	-				_	Level		_	Remark	
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		
1	4924.000	 D 34.49	10.76	34.98	37.61	47.88	74.00	26.12	Peak	

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

FCC ID:YKB751BD001 IC: 9095A-WD650BDN



FCC ID:YKB751BD001 IC: 9095A-WD650BDN



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

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Alan Geng

: 150Mbps Wireless Lite N USB Adapter : DC 5V From PC input AC 120V/60Hz

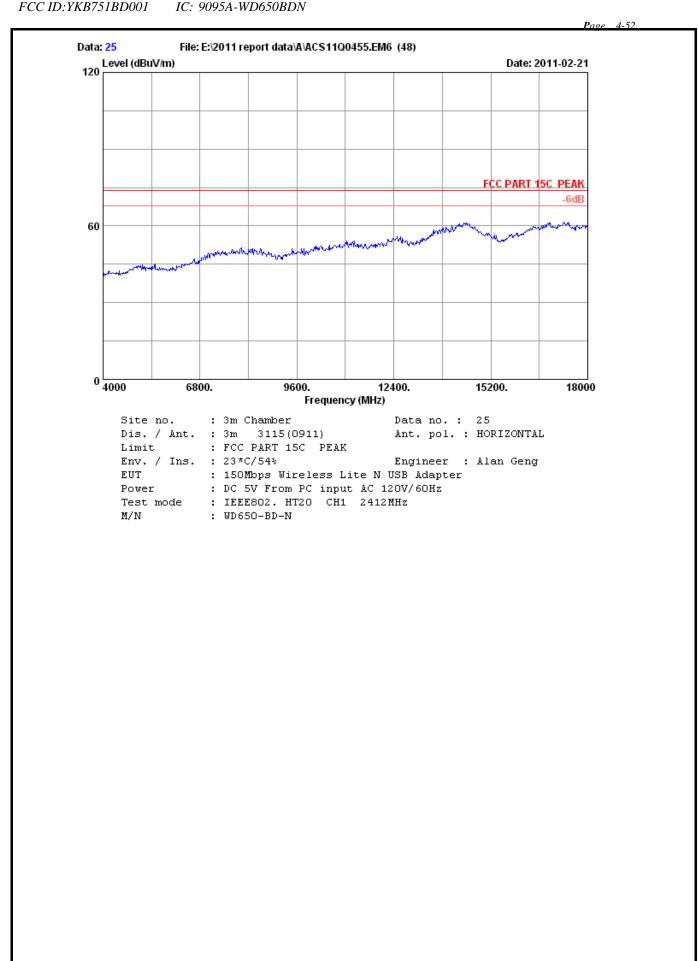
Test mode : IEEE802.11g CH11 2462MHz

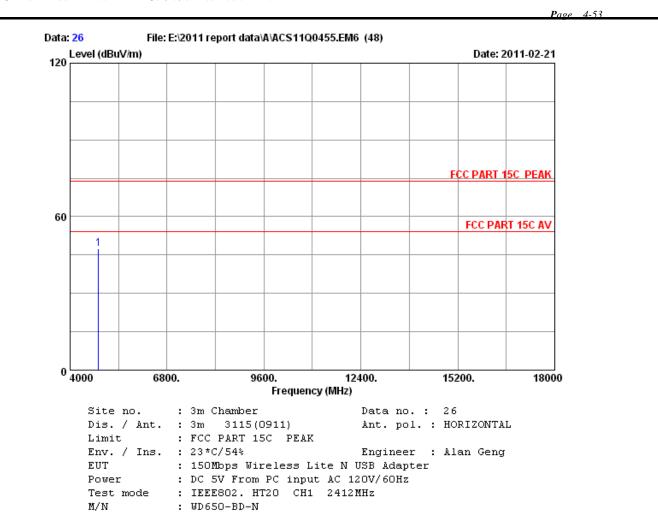
M/N : WD650-BD-N

		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	4924.000	34.49	10.76	34.98	37.80	48.07	74.00	25.93	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.

FCC ID:YKB751BD001 IC: 9095A-WD650BDN

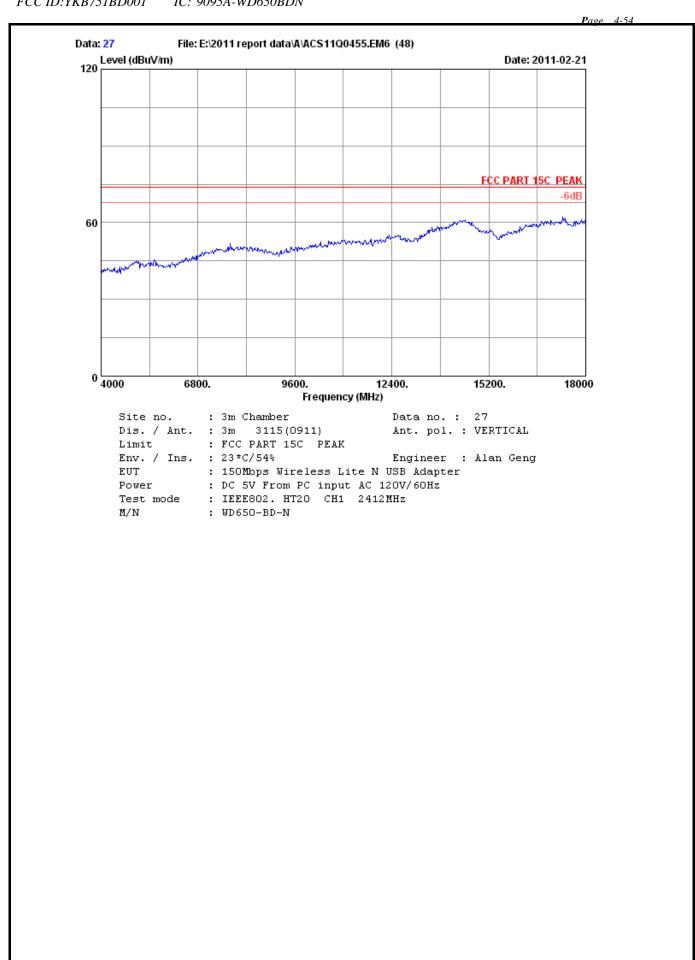


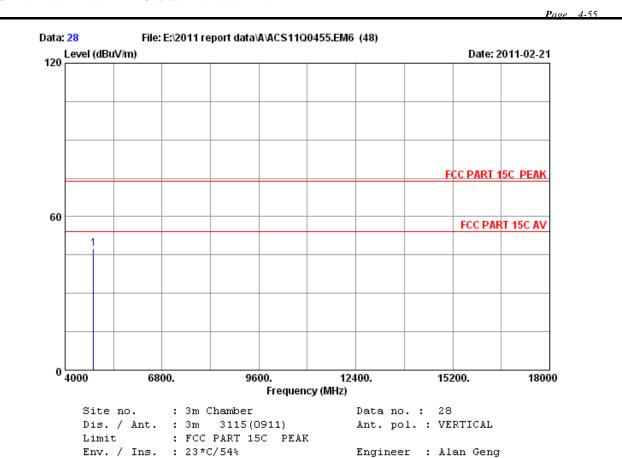


		Ant.	Cable	Amp.		Emission			
	-				_	Level		_	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	4824.000	34.32	10.64	35.08	37.56	47.44	74.00	26.56	Peak

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

FCC ID:YKB751BD001 IC: 9095A-WD650BDN





EUT : 150 Mbps Wireless Lite N USB Adapter
Power : DC 5V From PC input AC 120V/60Hz

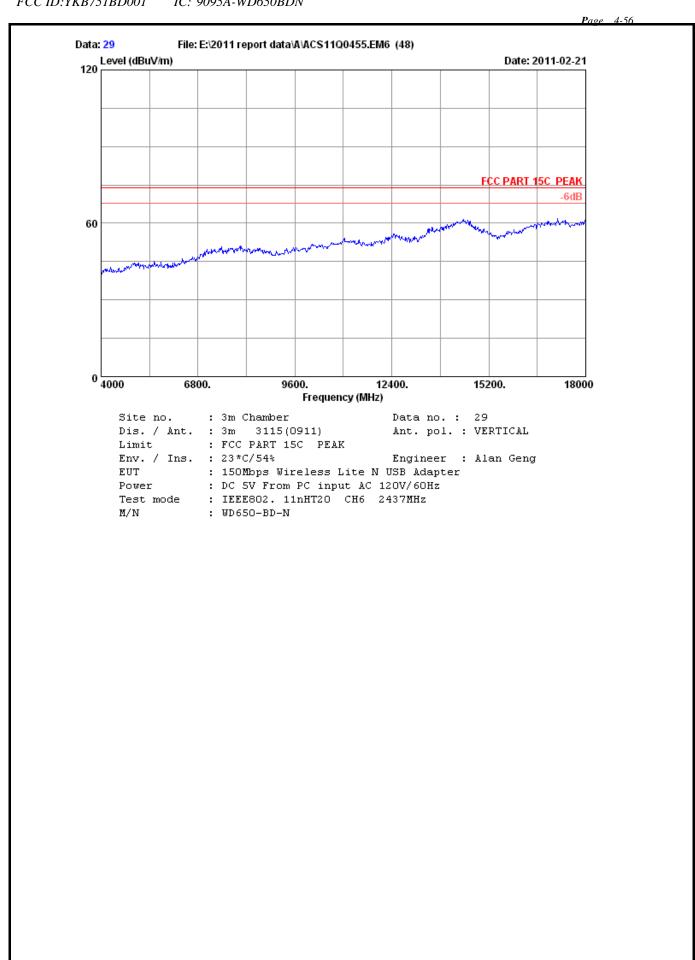
Test mode : IEEE802. HT20 CH1 2412MHz

M/N : WD650-BD-N

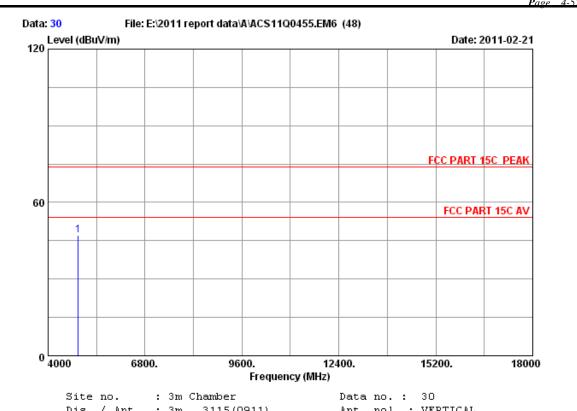
	Ant.	Cable	Amp.		Emission			
Freq.	Factor	loss	Factor	Reading	Level	Limits Ma	argin	Remark
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
4824.000	34.32	10.64	35.08	37.64	47.52	74.00 26	6.48	Peak

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

FCC ID:YKB751BD001 IC: 9095A-WD650BDN



FCC ID:YKB751BD001 IC: 9095A-WD650BDN



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

Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Alan Geng

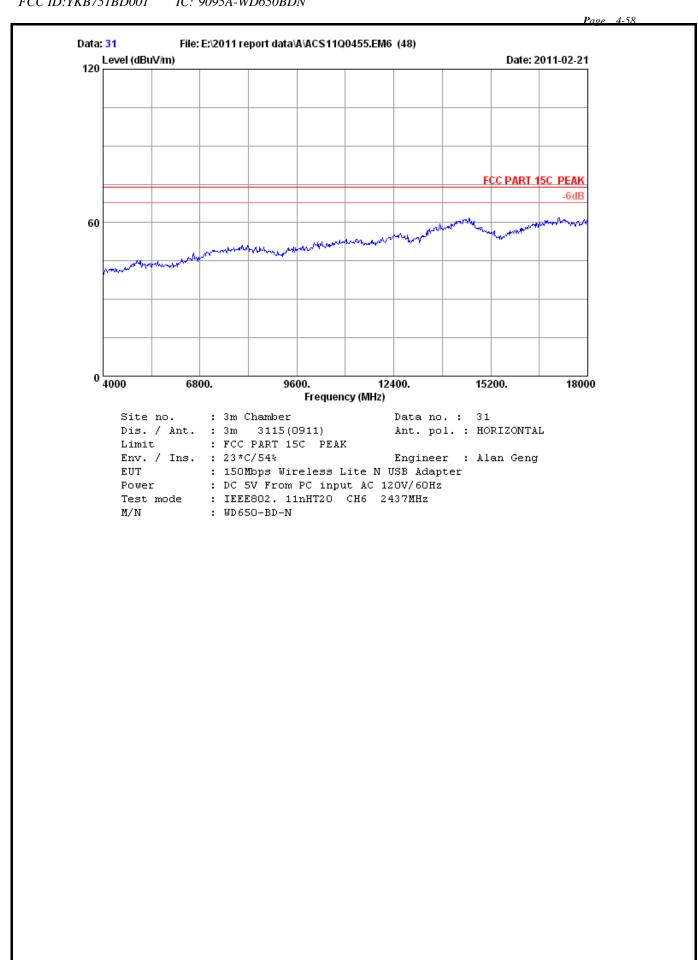
: 150Mbps Wireless Lite N USB Adapter EUT : DC 5V From PC input AC 120V/60Hz Power Test mode : IEEE802. 11nHT20 CH6 2437MHz

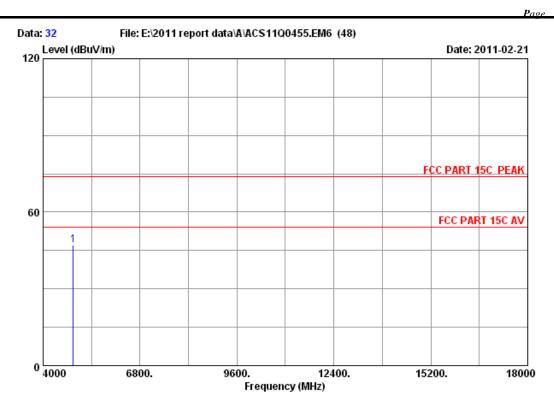
M/N: WD650-BD-N

		Ant.	Cable	Amp.		Emission				
	-				_	Level (dBuV/m)		_	Remark	
1	4874.000	34.41	10.69	35.03	37.01	47.08	74.00	26.92	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.

FCC ID:YKB751BD001 IC: 9095A-WD650BDN





Site no. : 3m Chamber Data no. : 32

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

Limit : FCC PART 15C PEAK

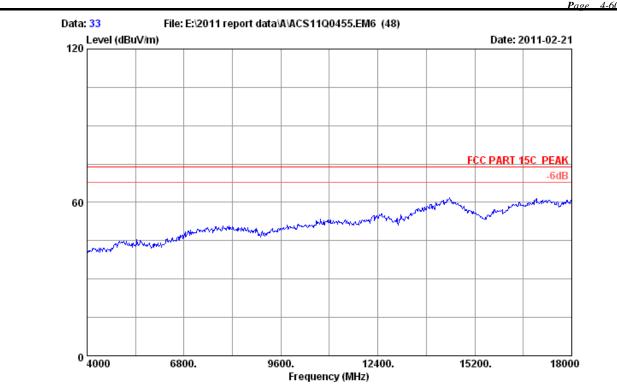
Env. / Ins. : 23*C/54% Engineer : Alan Geng

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802. 11nHT20 CH6 2437MHz

M/N : WD650-BD-N

		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	4874.000	34.41	10.69	35.03	37.19	47.26	74.00	26.74	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.



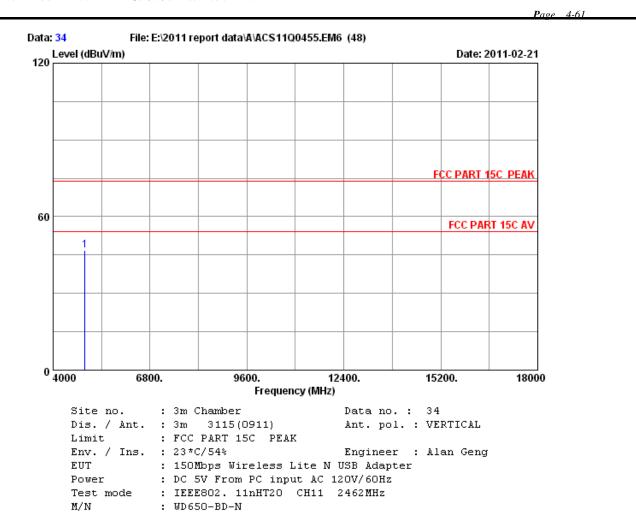
Site no. : 3m Chamber Data no. : 33
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Alan Geng

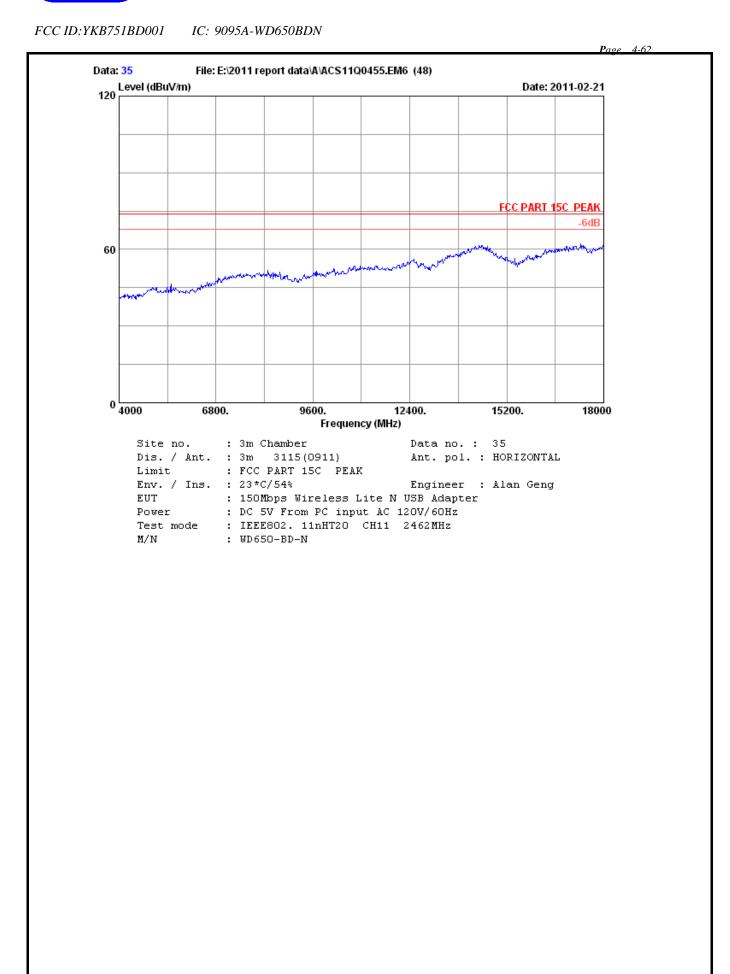
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802. 11nHT20 CH11 2462MHz

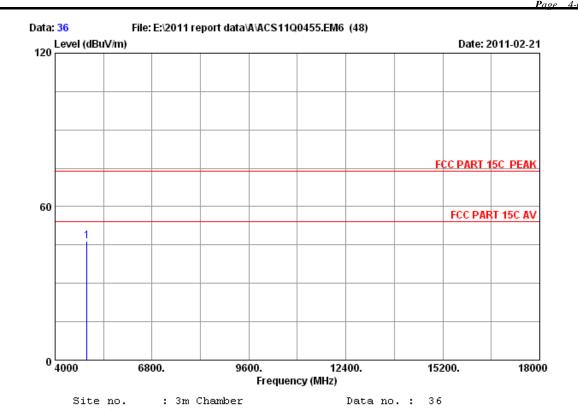
M/N : WD650-BD-N



	Ant.	Cable	Amp.		Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		
4924.000	34.49	10.76	34.98	36.42	46.69	74.00	27.31	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.





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

Limit : FCC PART 15C PEAK

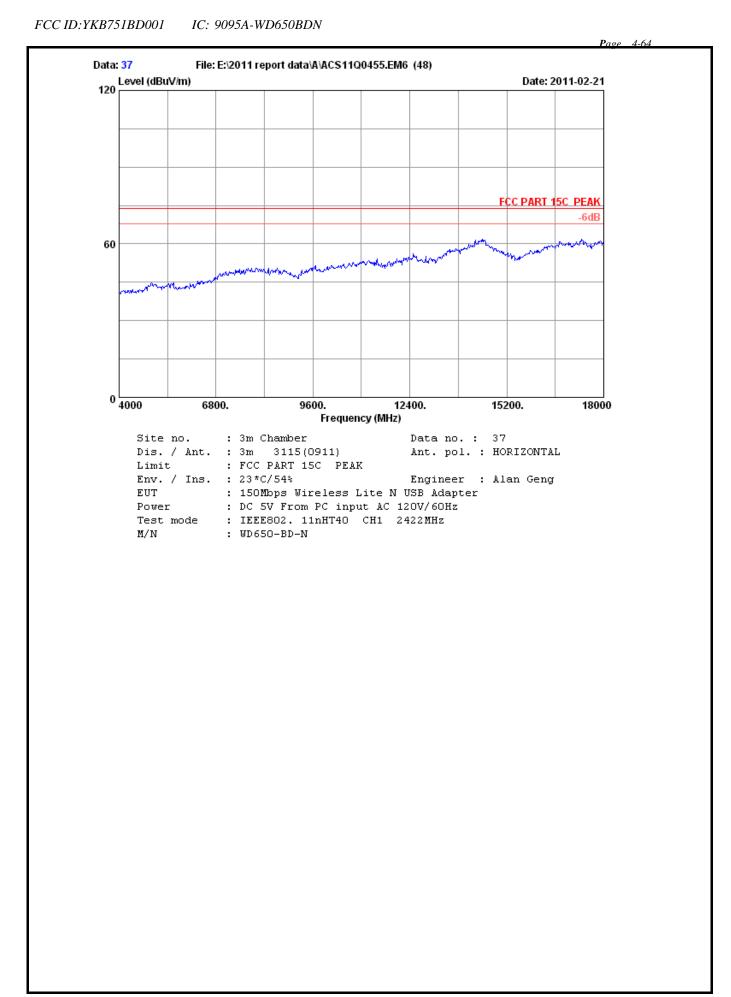
Env. / Ins. : 23*C/54% Engineer : Alan Geng

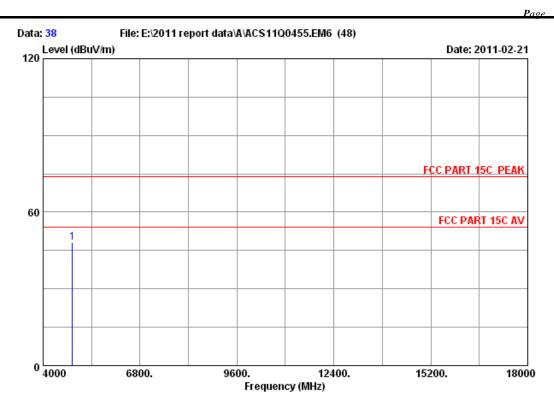
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802. 11nHT20 CH11 2462MHz

M/N : WD650-BD-N

	Ant.	Cable	Amp.		Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		
									_
4924.000	34.49	10.76	34.98	36.18	46.45	74.00	27.55	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. : 3m Chamber Data no. : 38

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

Limit : FCC PART 15C PEAK

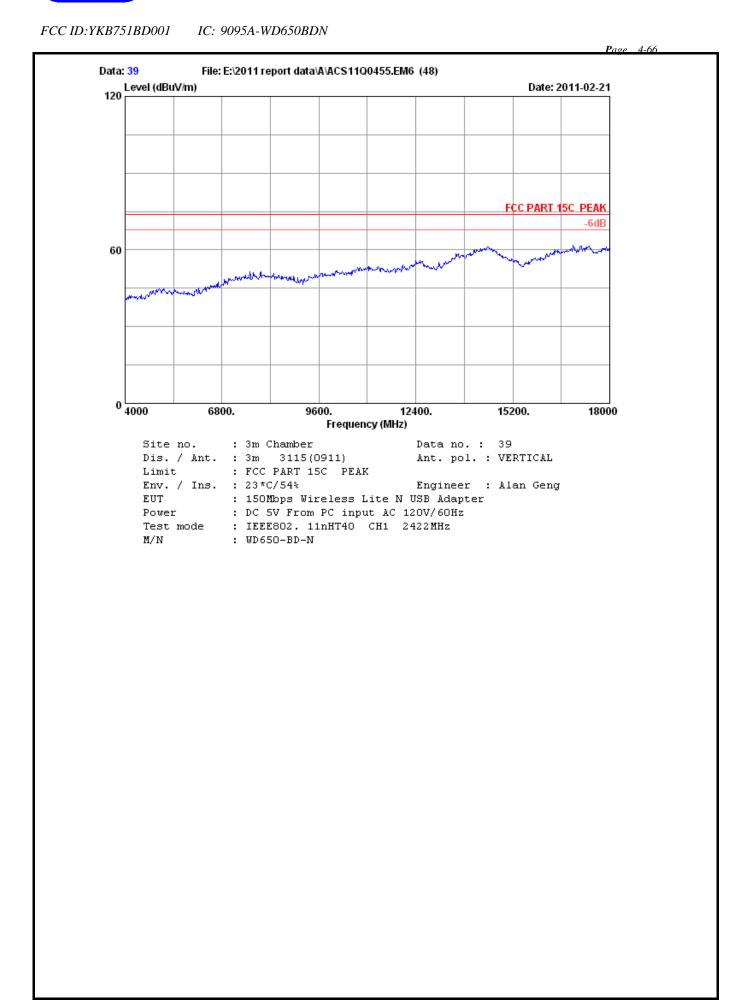
Env. / Ins. : 23*C/54% Engineer : Alan Geng

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802. 11nHT40 CH1 2422MHz

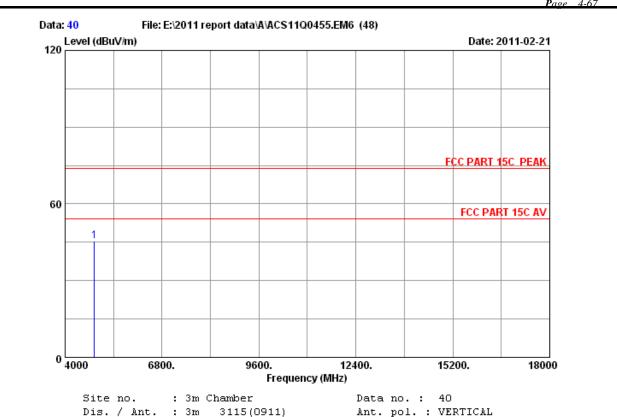
M/N : WD650-BD-N

		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	4844.000	34.35	10.67	35.05	38.10	48.07	74.00	25.93	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.



FCC ID:YKB751BD001 IC: 9095A-WD650BDN



3115 (0911) Ant. pol. : VERTICAL

: FCC PART 15C PEAK Limit

Env. / Ins. : 23*C/54% Engineer : Alan Geng

: 150Mbps Wireless Lite N USB Adapter : DC 5V From PC input AC 120V/60Hz Power Test mode : IEEE802. 11nHT40 CH1 2422MHz

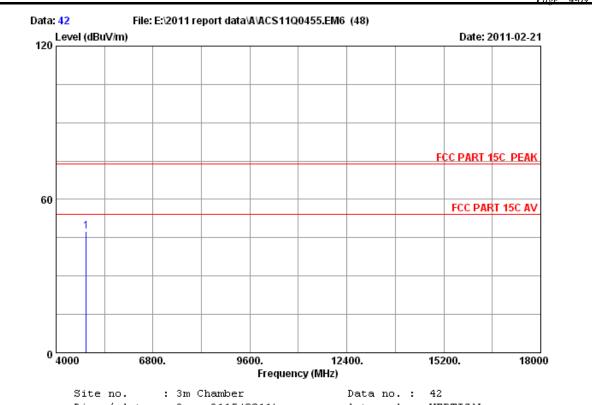
: WD650-BD-N

		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	4844.000	34.35	10.67	35.05	35.47	45.44	74.00	28.56	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.



FCC ID:YKB751BD001 IC: 9095A-WD650BDN



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

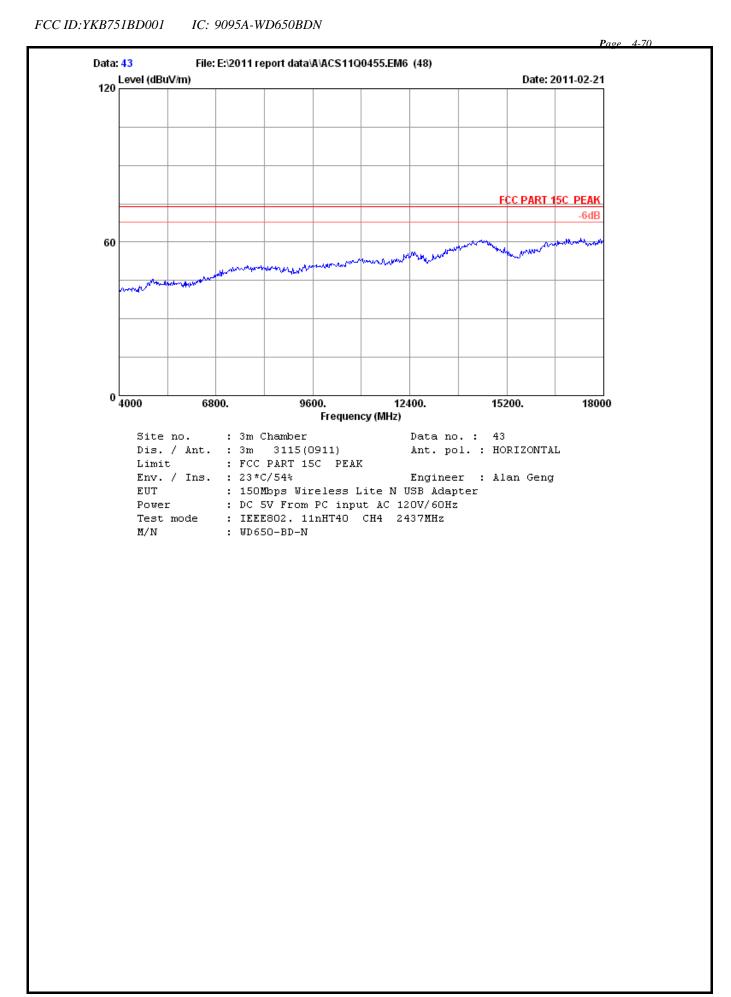
Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Alan Geng

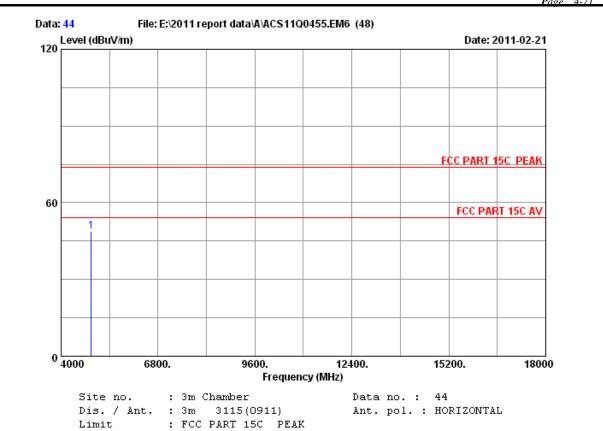
: 150Mbps Wireless Lite N USB Adapter EUT : DC 5V From PC input AC 120V/60Hz Power Test mode : IEEE802. 11nHT40 CH4 2437MHz

M/N: WD650-BD-N

	-	Factor		Factor	_	Emission Level (dBuV/m)		_	Remark	
1	4874.000	34.41	10.69	35.03	37.50	47.57	74.00	26.43	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.





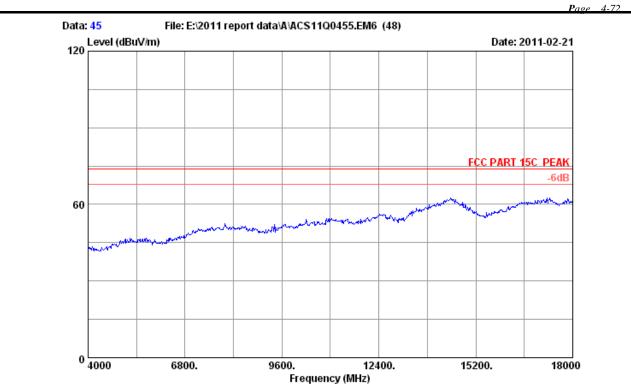
Env. / Ins. : 23 *C/54% Engineer : Alan Geng

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802. 11nHT40 CH4 2437MHz

M/N : WD650-BD-N

	Ant.	Cable	Amp.		Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		
4874.00	0 34.41	10.69	35.03	38.67	48.74	74.00	25.26	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. : 3m Chamber Data no. : 45

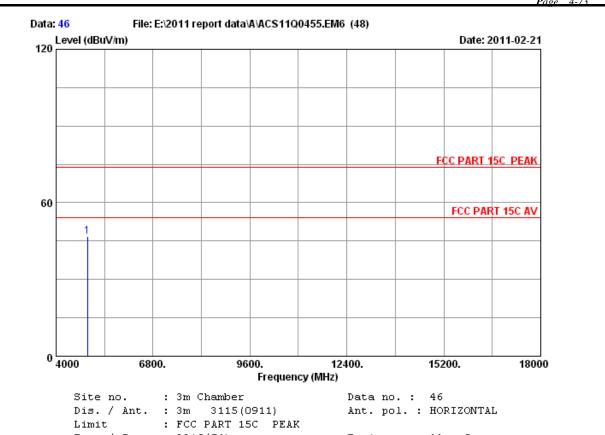
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 23*C/54% Engineer : Alan Geng

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802. 11nHT40 CH7 2452MHz

M/N : WD650-BD-N



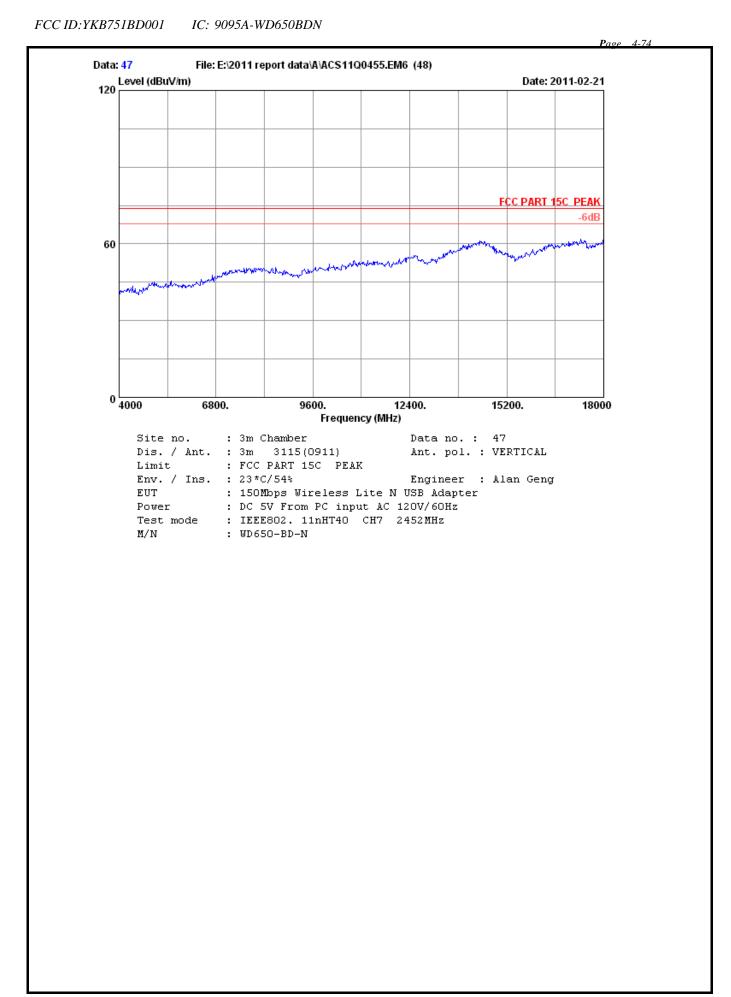
Env. / Ins. : 23 *C/54% Engineer : Alan Geng

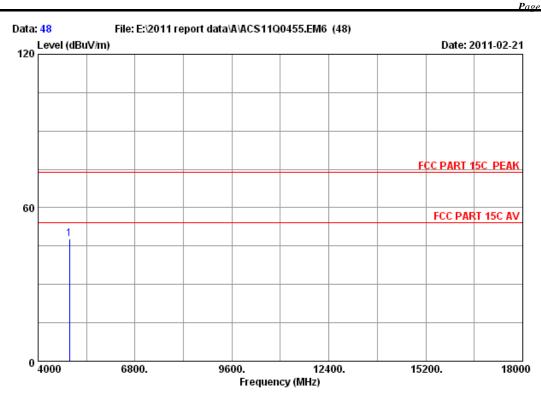
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802. 11nHT40 CH7 2452MHz

M/N : WD650-BD-N

		Ant.	Cable	Amp.		Emission				
	•				Reading (dBuV)	Level (dBuV/m)		_	Remark	
L	4904.000	34.46	10.74	35.00	36.63	46.83	74.00	27.17	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. : 3m Chamber Data no. : 48
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

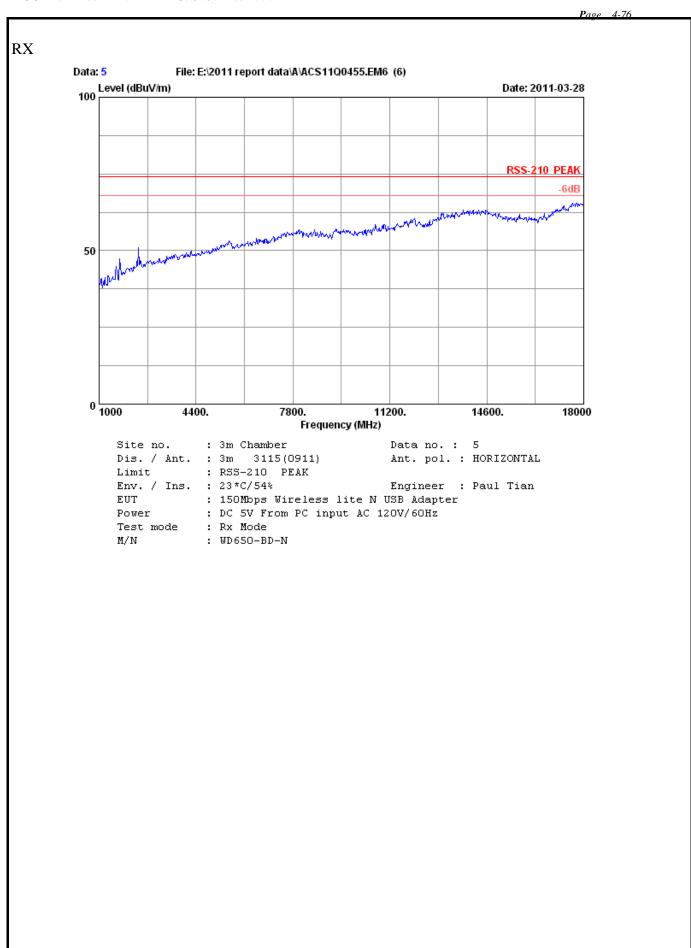
Env. / Ins. : 23 *C/54% Engineer : Alan Geng

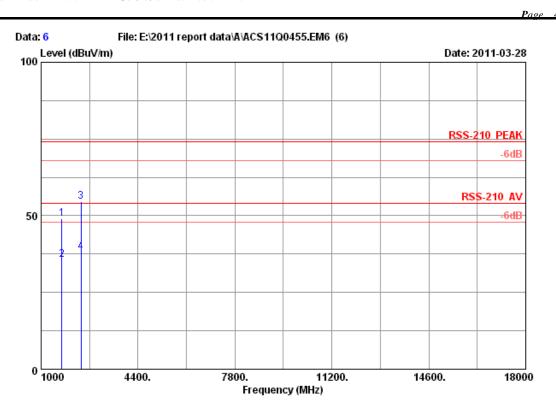
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802. 11nHT40 CH7 2452MHz

M/N : WD650-BD-N

		Ant.	Cable	Amp.		Emission				
	-	Factor (dB/m)			_	Level (dBuV/m)		_	Remark	
1	4904.000	34.46	10.74	35.00	37.63	47.83	74.00	26.17	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. : 3m Chamber Data no. : 6

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

Limit : RSS-210 PEAK

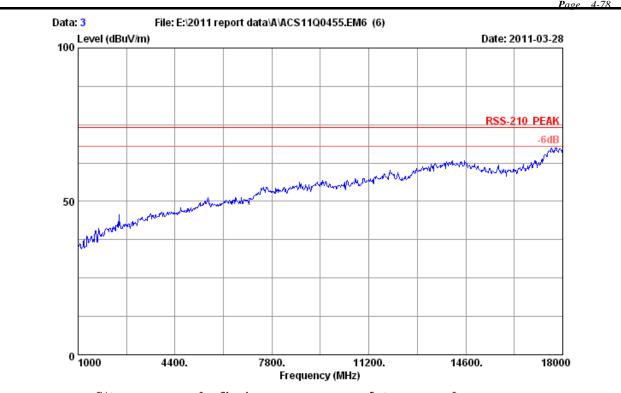
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 150Mbps Wireless lite N USB Adapter
Power : DC 5V From PC input AC 120V/60Hz

Test mode : Rx Mode M/N : WD650-BD-N

	•		loss	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)		Margin) (dB)	Remark	
2	1731.000 1731.000 2400.000	27.71	6.14 7.43	36.86 36.62	51.96 38.59 54.28	48.95 35.58 54.53	54.00 74.00	18.42 19.47	Peak Average Peak	
4	2400.000	29.44	7.43	36.62	37.84	38.09	54.00	15.91	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. : 3m Chamber Data no. : 3

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

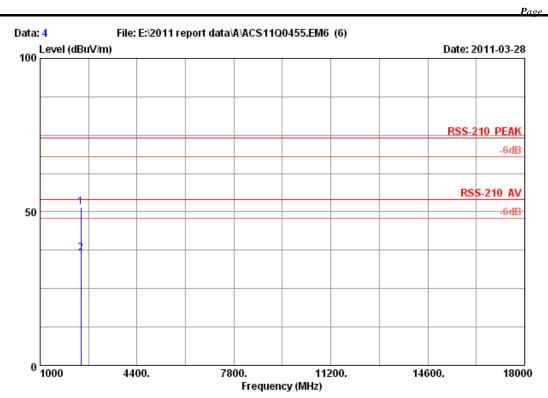
Limit : RSS-210 PEAK

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

EUT : 150Mbps Wireless lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : Rx Mode M/N : WD650-BD-N

FCC ID:YKB751BD001 IC: 9095A-WD650BDN



Site no. : 3m Chamber Data no.: 4

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

Limit : RSS-210 PEAK Env. / Ins. : 23*C/54% Engineer : Paul Tian

: 150Mbps Wireless lite N USB Adapter : DC 5V From PC input AC 120V/60Hz Power

Test mode : Rx Mode M/N : WD650-BD-N

	-	loss	Factor	_	Emission Level (dBuV/m)		_	Remark
_	2428.000	 			51.66 36.55	74.00 54.00		Peak 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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5. CONDUCTED SPURIOUS EMISSIONS

5.1.Test Equipment

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

5.2.Limit

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

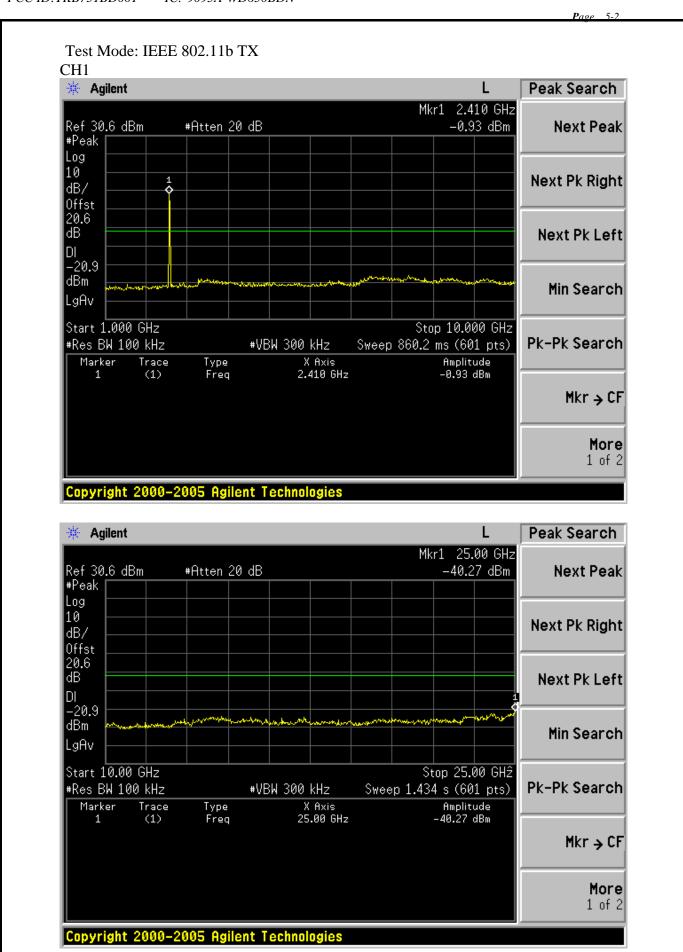
5.3.Test Procedure

The transmitter output was connected to a spectrum analyzer, The resolution bandwidth is set to 100 kHz, The video bandwidth is set to 300 kHz and measure all the emissions detected.

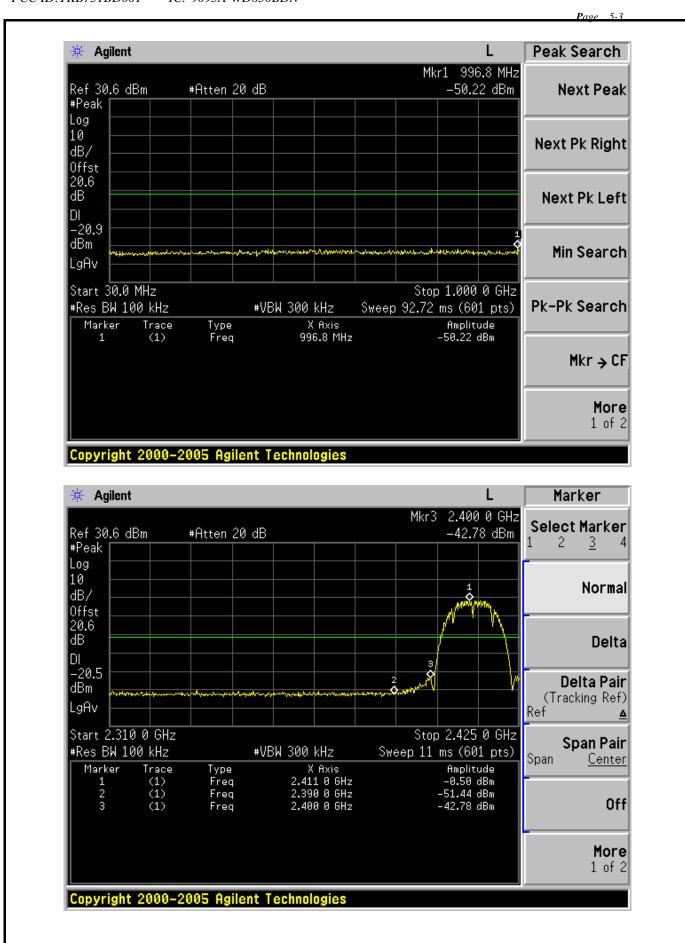
5.4. Test result

PASS (The testing data was attached in the next pages.)

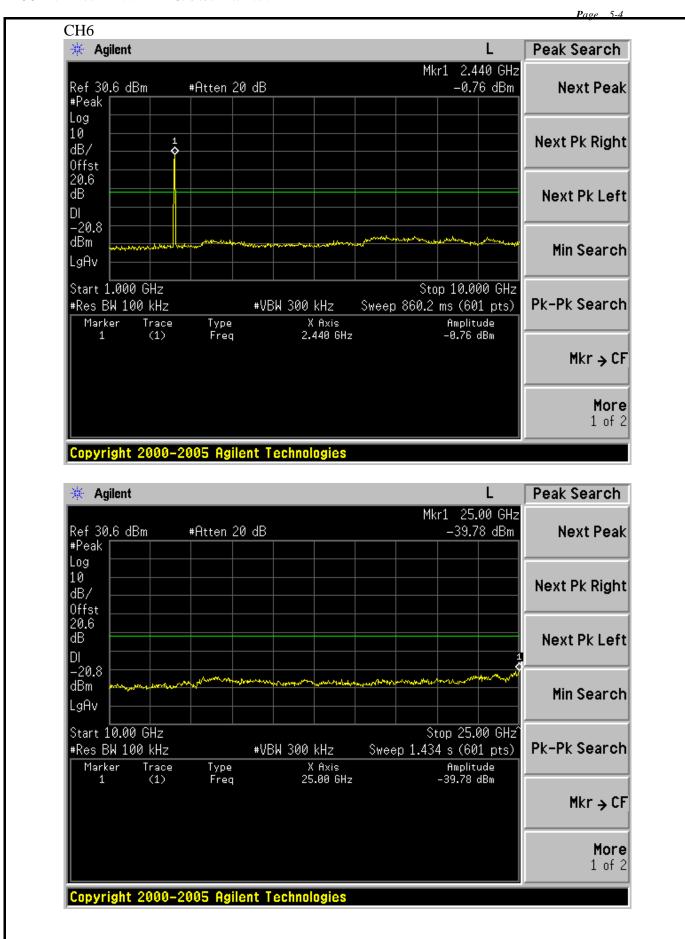




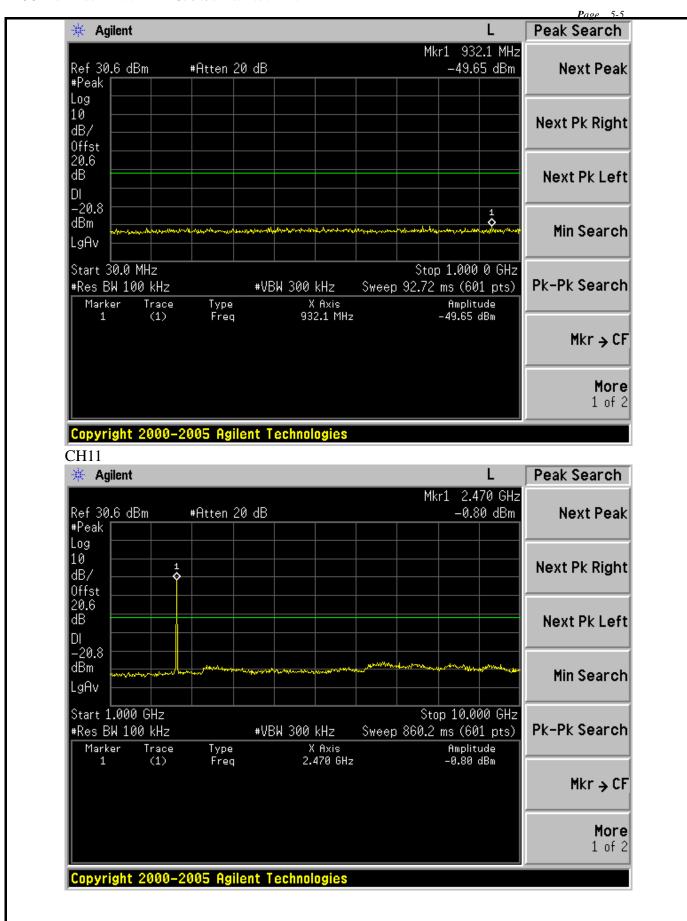




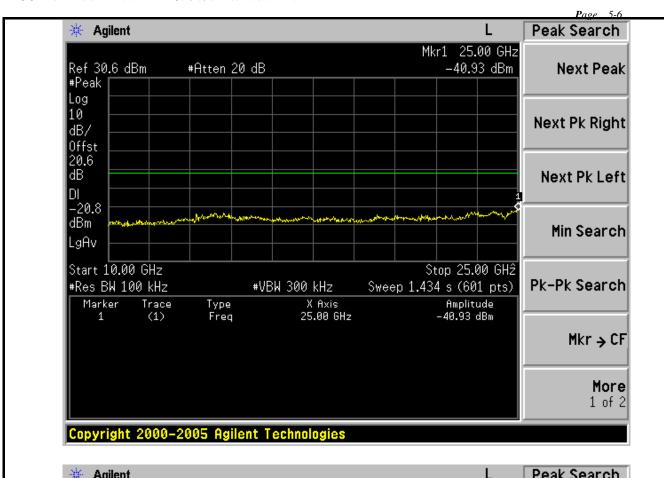


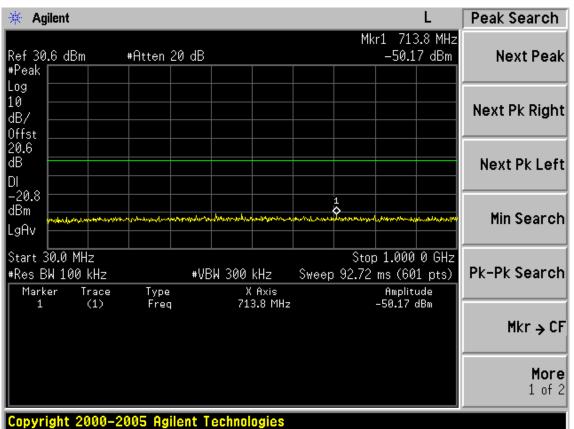




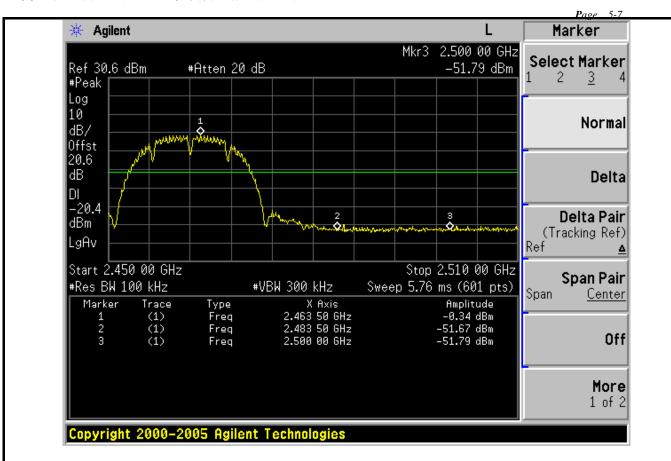






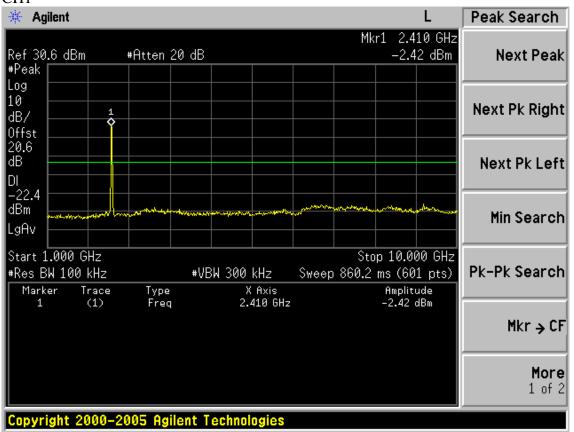




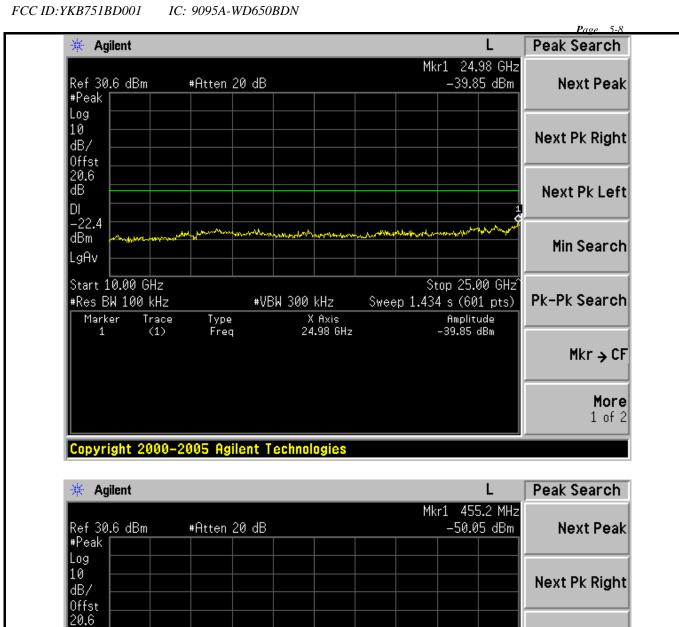


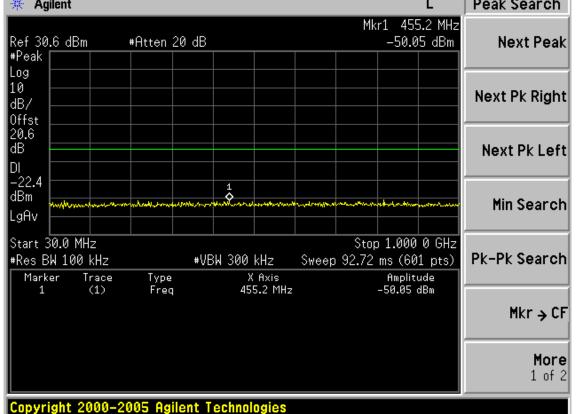
Test Mode: IEEE 802.11g TX



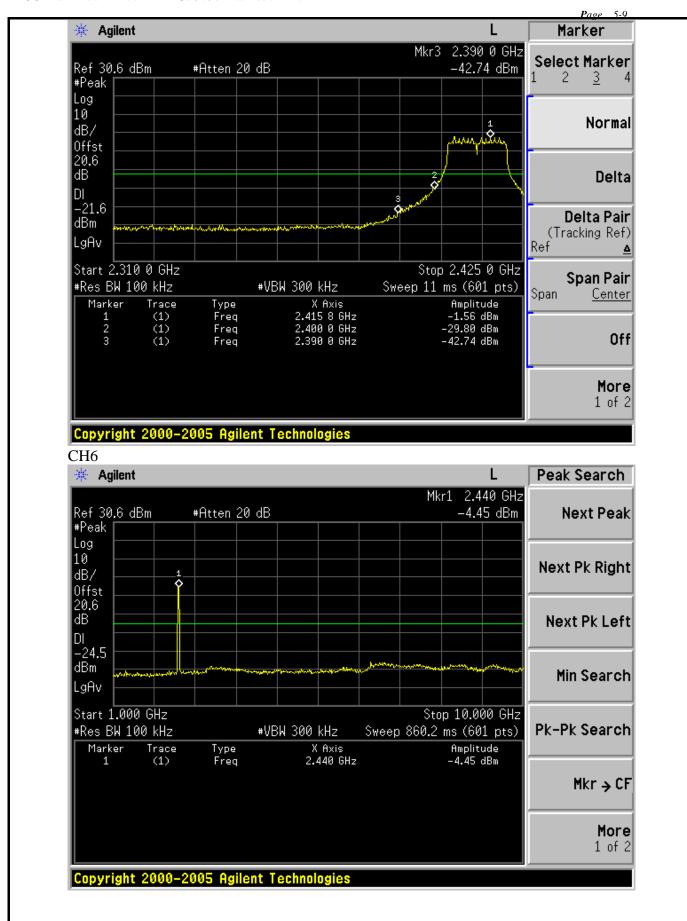




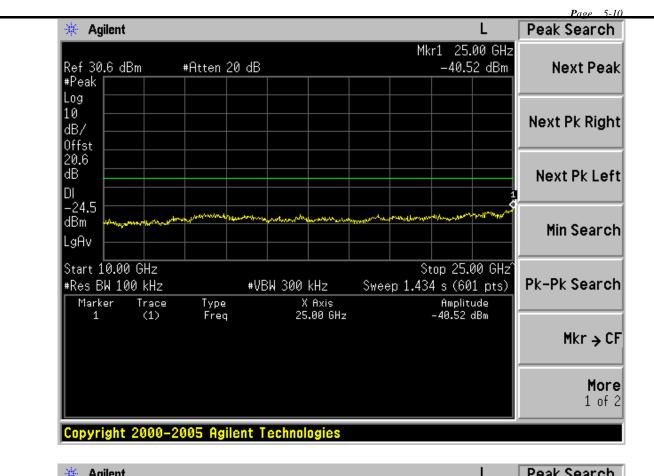


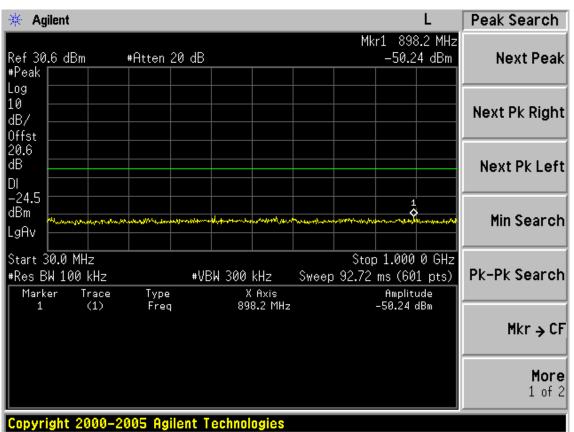




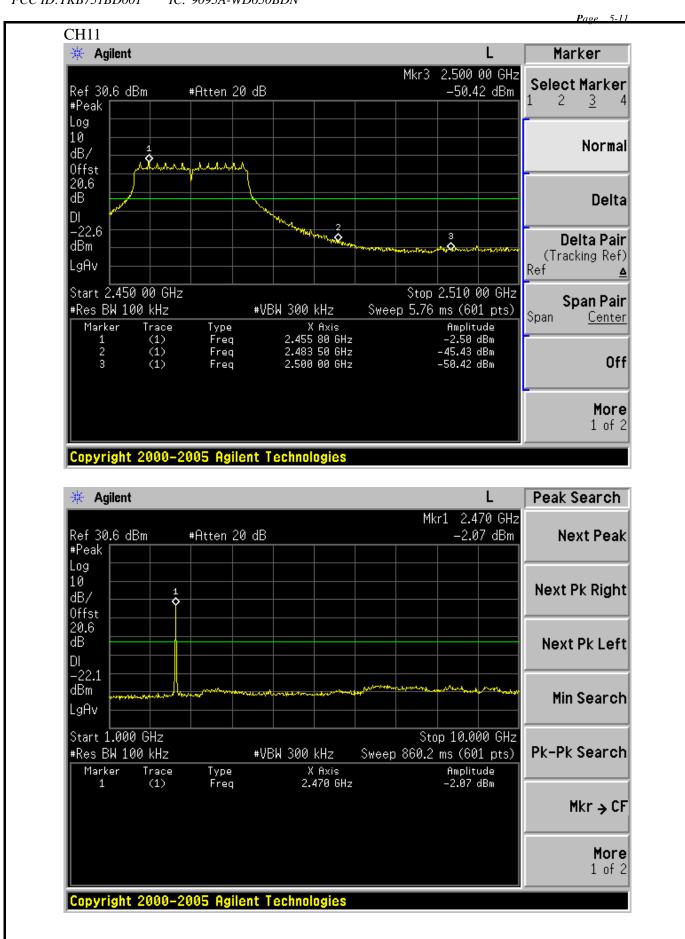




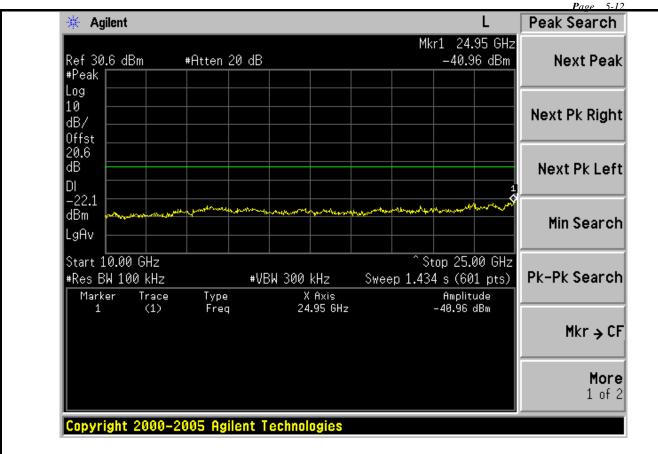


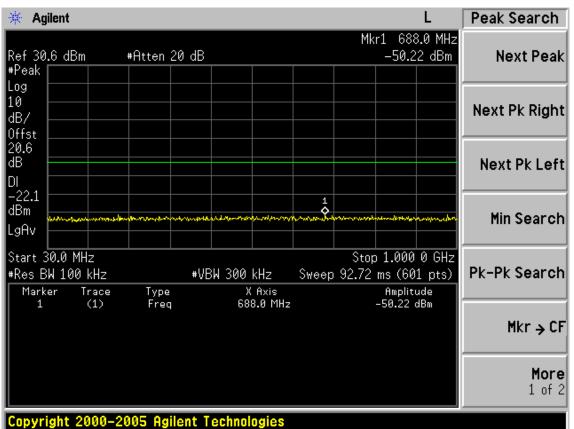




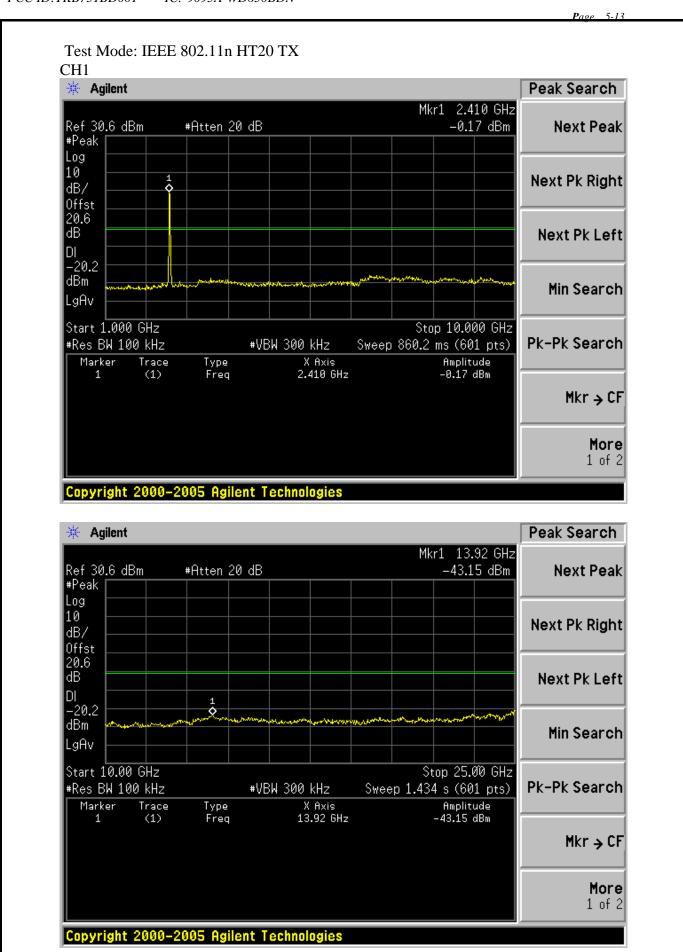




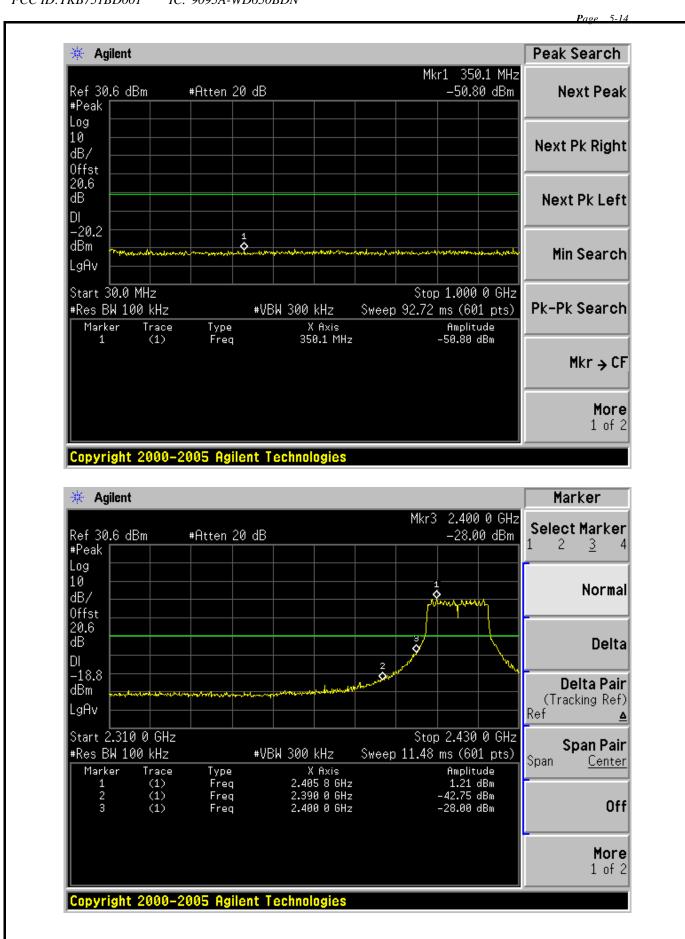




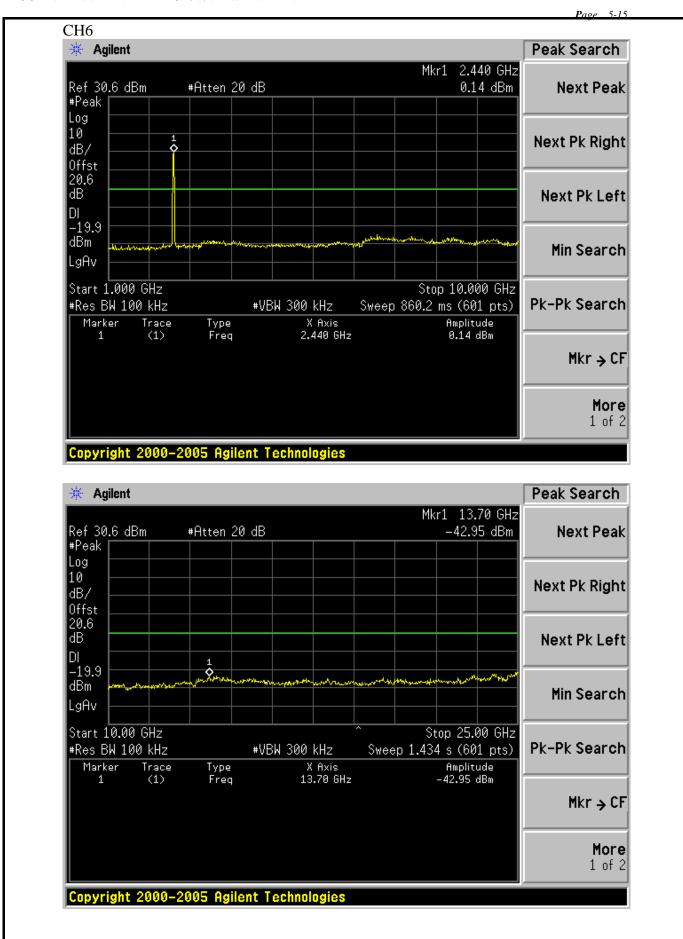




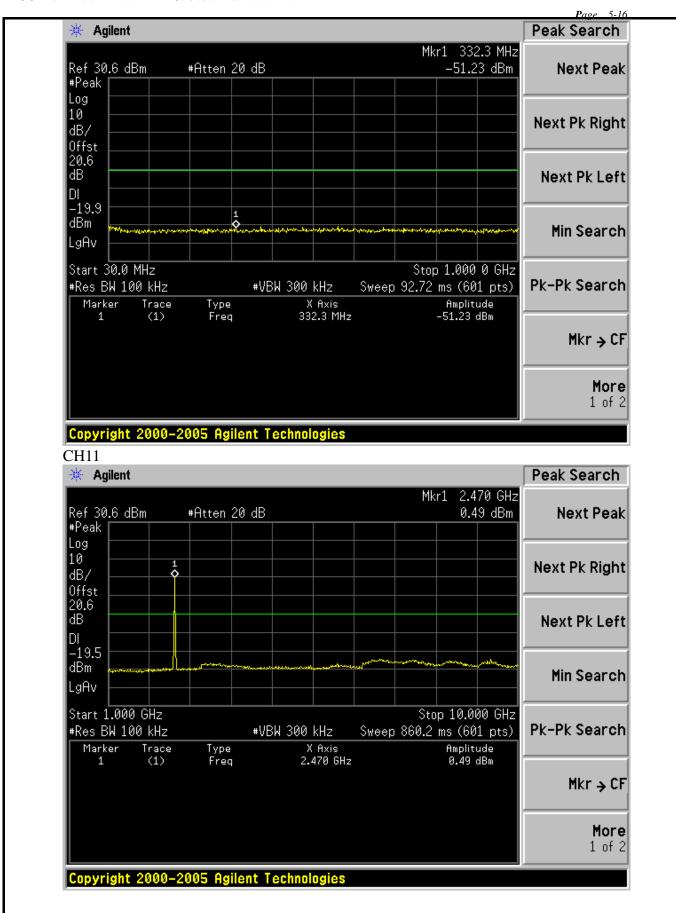




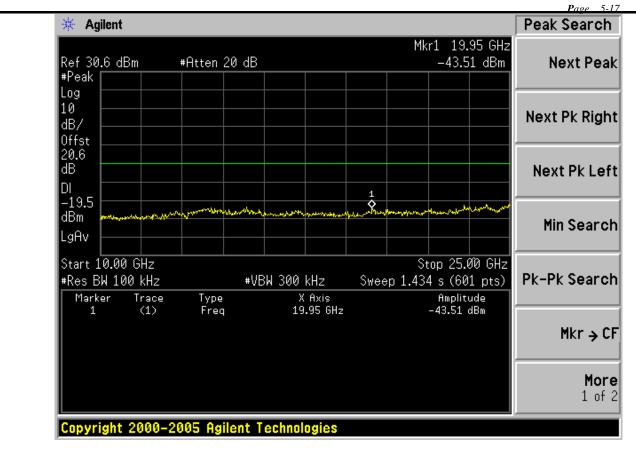


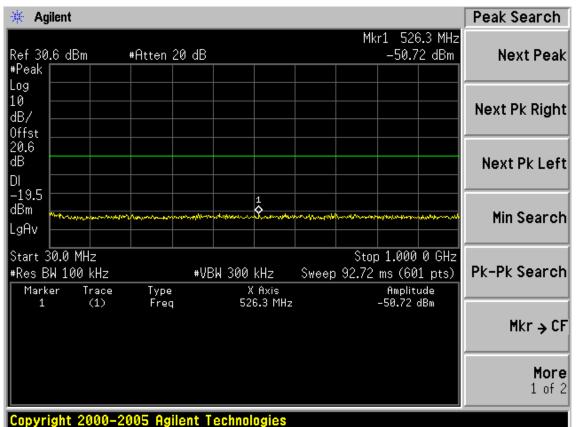




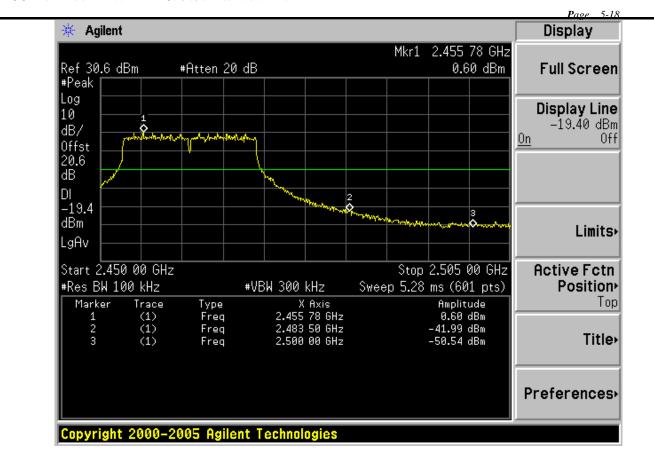




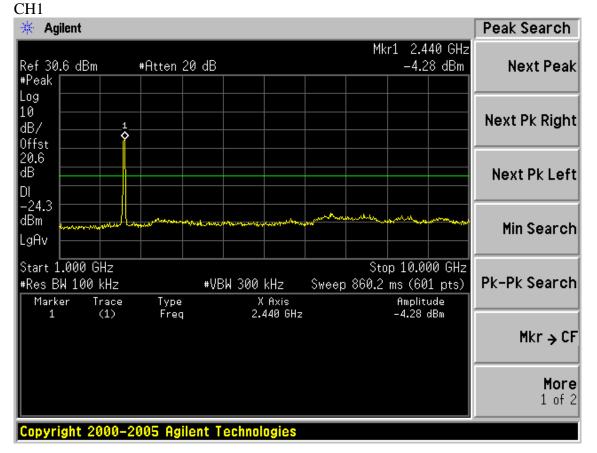




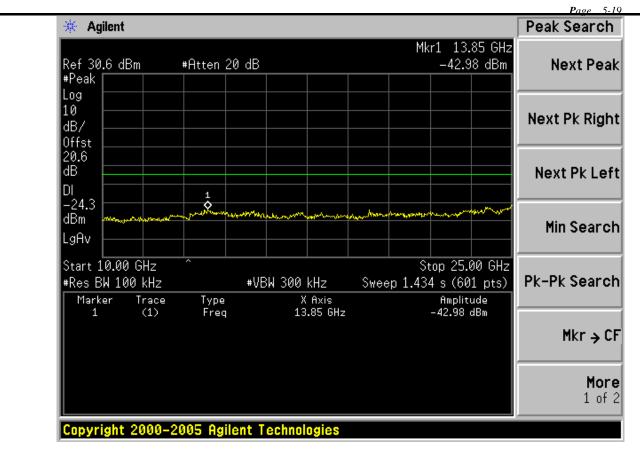


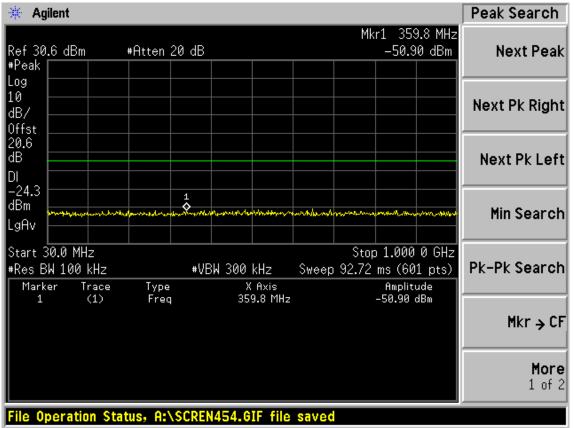


Test Mode: IEEE 802.11n HT40 TX

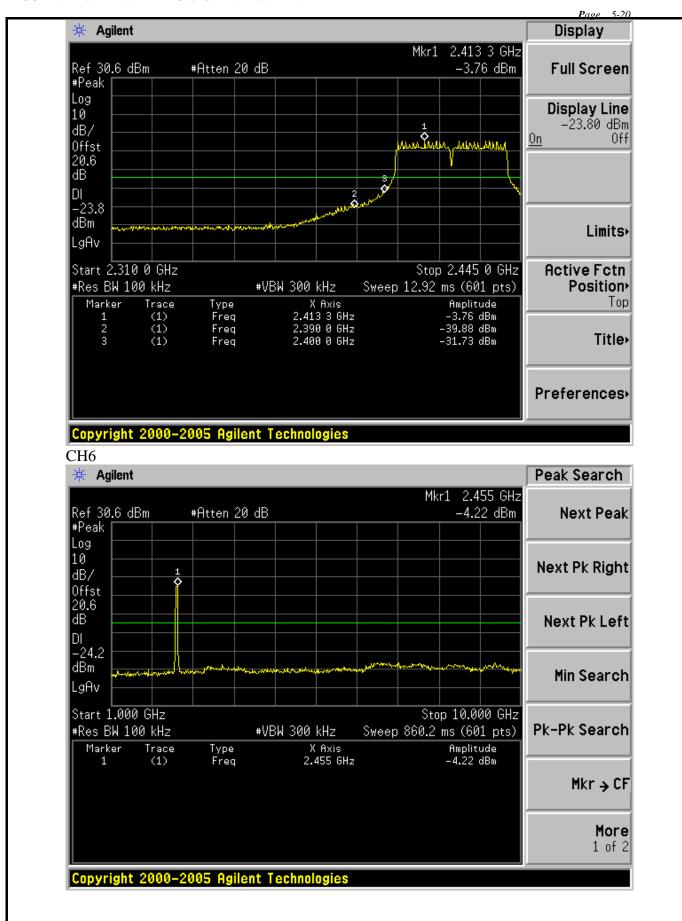




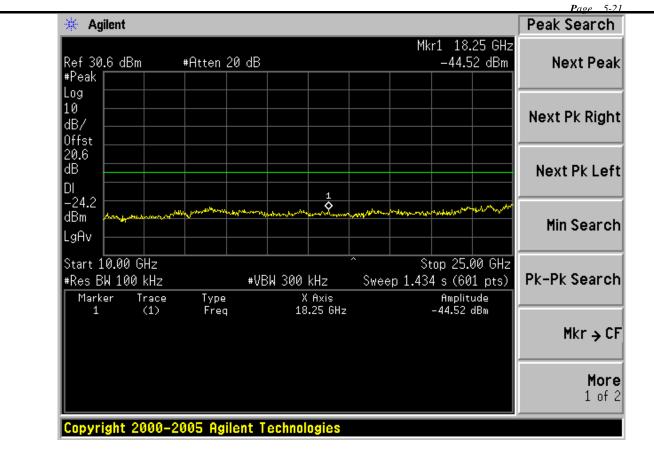


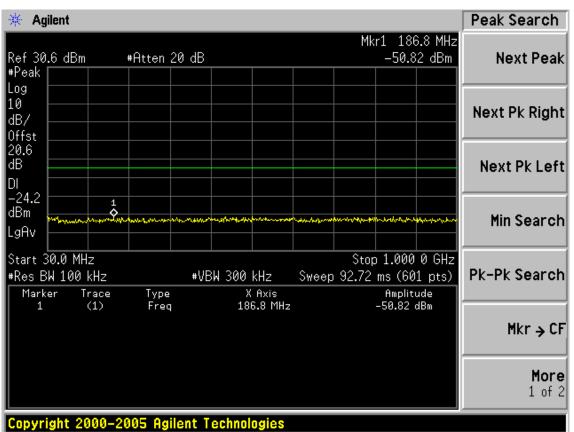




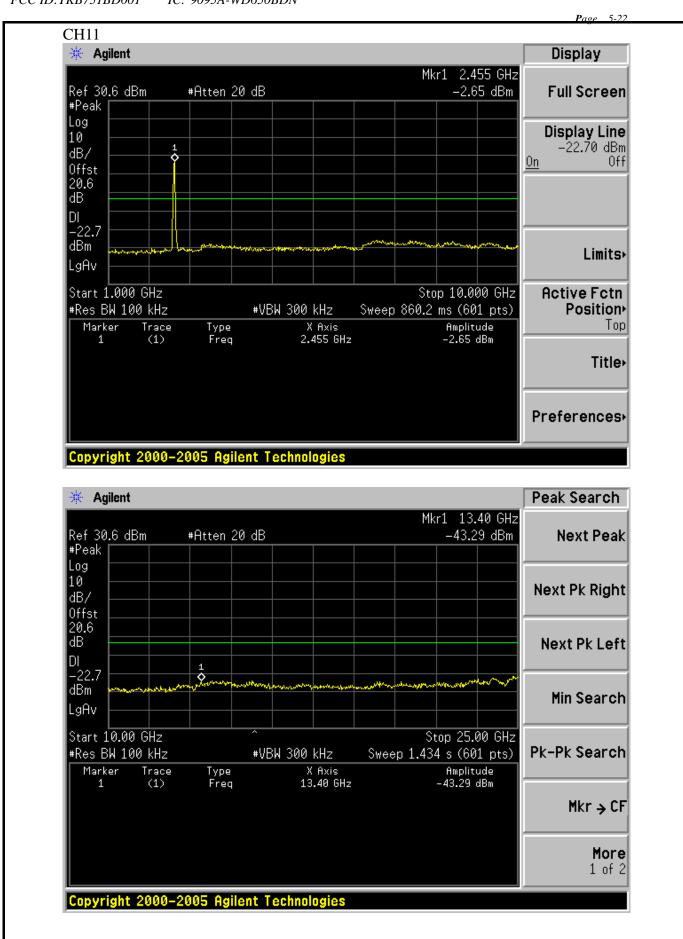




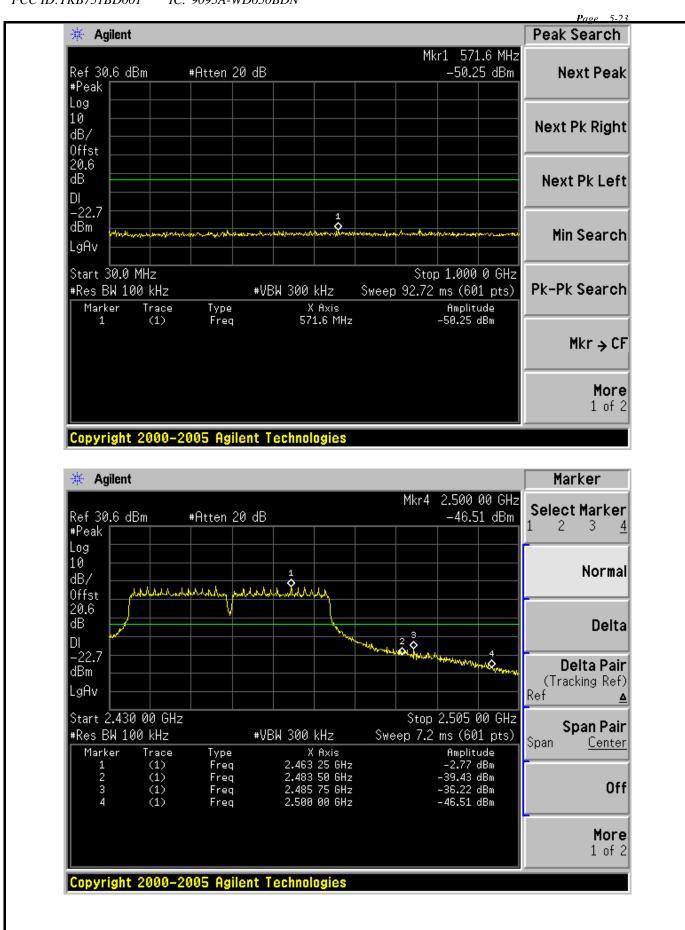














Page 6

6. BAND EDGE COMPLIANCE TEST

6.1.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.	Horn Antenna	EMCO	3115	9607-4877	Nov.25, 09	1.5 Year
3.	Amplifier	Agilent	8449B	3008A02495	May.08, 10	1 Year
4.	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	May.08,10	1 Year
5.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,10	1 Year
6.	RF Cable	Hubersuhner	SUCOFLEX102	28610/2	May.08,10	1 Year

6.2.Limit

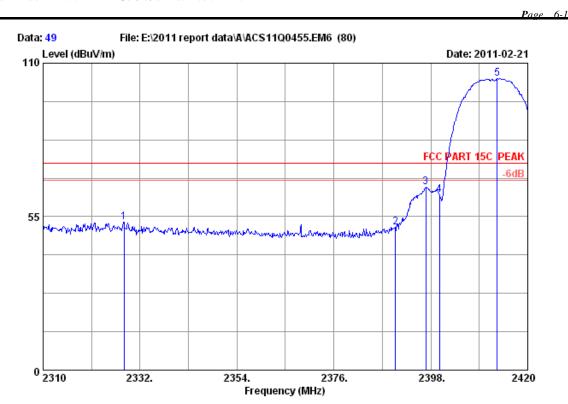
All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

6.3. Test Produce

- 1. The EUT is placed on a turntable, which is 0.8m above the ground plane and worked at highest radiated power.
- 2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
- 3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
- 4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
- (a) PEAK: RBW=1MHz; VBW=3MHz; Sweep=AUTO
- (b) AVERAGE: RBW=1MHz; VBW=10Hz; Sweep=AUTO

6.4. Test Results

Pass (The testing data was attached in the next pages.)



Site no. : 3m Chamber Data no. : 49

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

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

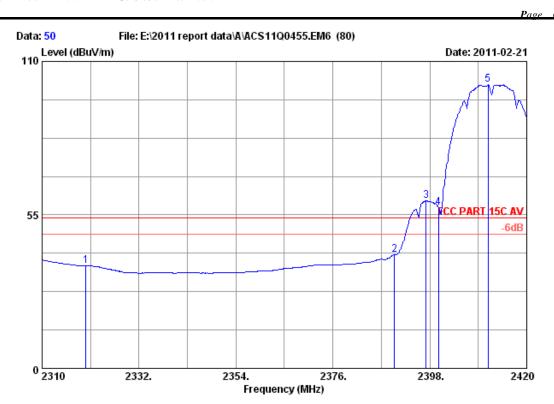
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11b CH1 2412MHz

M/N : WD650-BD-N

	-	Ant. Factor (dB/m)	loss		Reading	Emission Level (dBuV/m)		_	Remark	
1	2328.370	28.36	7.61	36.06	53.07	52.98	74.00	21.02	Peak	
2	2390.000	28.46	7.66	36.09	51.06	51.09	74.00	22.91	Peak	
3	2396.900	28.46	7.66	36.09	65.43	65.46	74.00	8.54	Peak	
4	2400.000	28.46	7.66	36.09	62.79	62.82	74.00	11.18	Peak	
5	2413.070	28.48	7.66	35.95	104.32	104.51	74.00	-30.51	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. : 3m Chamber Data no. : 50

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV

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

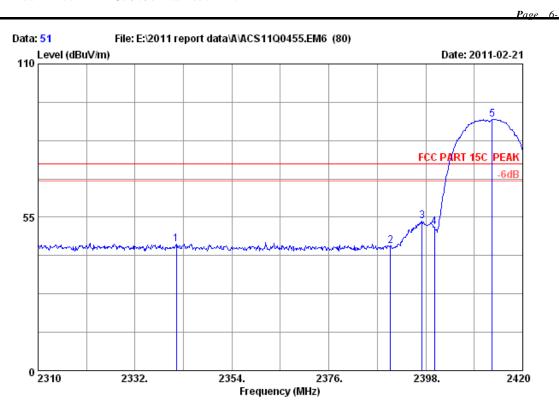
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11b CH1 2412MHz

M/N : WD650-BD-N

	Freq. Fa	actor .	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	_	Remark
1	2319.900 2	28.36	7.55	36.06	37.07	36.92	54.00	17.08	Average
2	2390.000 2	28.46 '	7.66	36.09	40.65	40.68	54.00	13.32	Average
3	2397.120 2	28.46	7.66	36.09	60.05	60.08	54.00	-6.08	Average
4	2400.000 2	28.46	7.66	36.09	57.71	57.74	54.00	-3.74	Average
5	2411.200 2	28.48	7.66	35.95	101.42	101.61	54.00 -	47.61	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. : 3m Chamber Data no. : 51
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

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

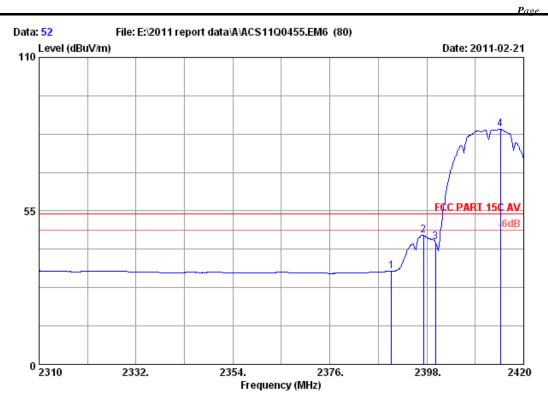
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11b CH1 2412MHz

M/N : WD650-BD-N

	-			Factor	Reading (dBuV)	Emission Level (dBuV/m)		Margin) (dB)	Remark
1	2341.350	28.38	7.61	35.99	45.42	45.42	74.00	28.58	Peak
2	2390.000	28.46	7.66	36.09	44.84	44.87	74.00	29.13	Peak
3	2397.120	28.46	7.66	36.09	53.64	53.67	74.00	20.33	Peak
4	2400.000	28.46	7.66	36.09	51.51	51.54	74.00	22.46	Peak
5	2413.070	28.48	7.66	35.95	90.00	90.19	74.00	-16.19	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.



Site no. : 3m Chamber Data no. : 52
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

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

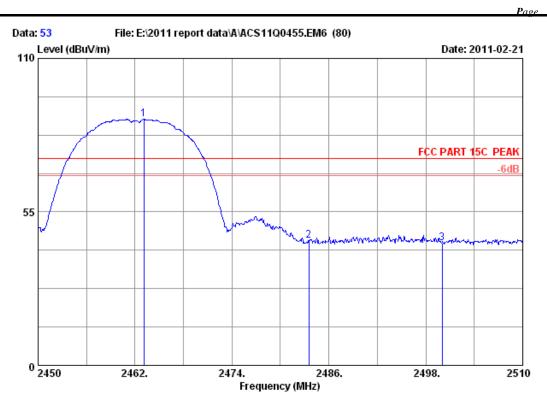
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11b CH1 2412MHz

M/N : WD650-BD-N

	Freq. (MHz)	Ant. Factor (dB/m)		Amp. Factor (dB)	Reading (dBuV)	Level (dBuV/m)			Remark
1	2390.000	28.46	7.66	36.09	33.41	33.44	54.00	20.56	Average
2	2397.230	28.46	7.66	36.09	46.23	46.26	54.00	7.74	Average
3	2400.000	28.46	7.66	36.09	43.73	43.76	54.00	10.24	Average
4	2414.720	28.48	7.66	35.95	84.15	84.34	54.00	-30.34	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. : 3m Chamber Data no. : 53
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

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

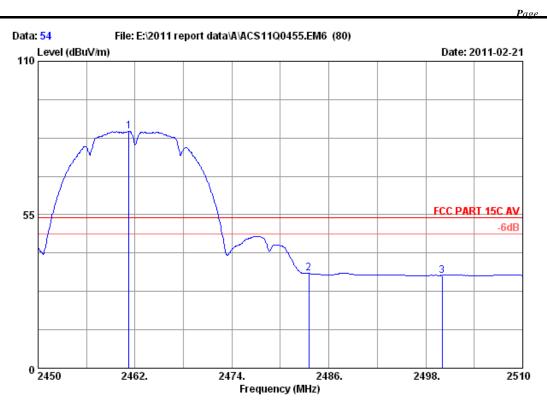
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11b CH11 2462MHz

M/N : WD650-BD-N

		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	2463.080	28.55	7.72	36.02	87.92	88.17	74.00 -14.17	Peak
2	2483.500	28.58	7.77	35.97	44.37	44.75	74.00 29.25	Peak
3	2500.000	28.60	7.77	36.00	43.53	43.90	74.00 30.10	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. : 3m Chamber Data no. : 54
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

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

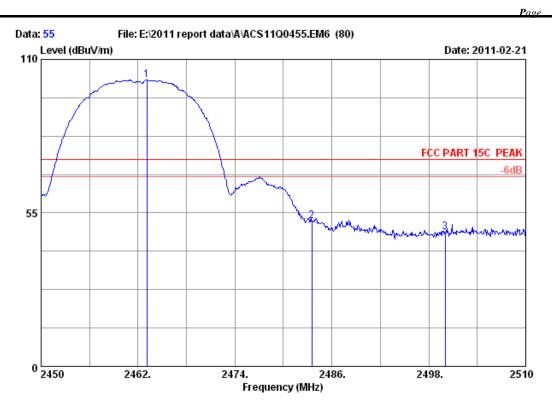
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11b CH11 2462MHz

M/N : WD650-BD-N

	Freq.	Ant. Factor (dB/m)	Cable loss (dB)	•	Reading (dBuV)	Emission Level (dBuV/m)	Limits Margin (dBuV/m) (dB)	Remark
1 2 3	2461.220 2483.500 2500.000	28.58	7.77	36.02 35.97 36.00	84.60 33.52 32.87	84.85 33.90 33.24	54.00 -30.85 54.00 20.10 54.00 20.76	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. : 3m Chamber Data no. : 55

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

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

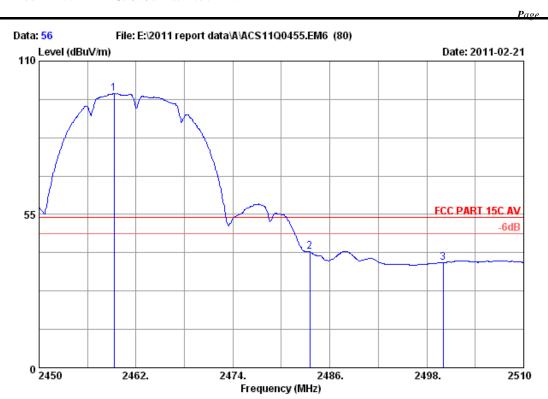
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11b CH11 2462MHz

M/N : WD650-BD-N

	Freq. Factor	Cable Amp. loss Factor (dB) (dB)	Reading		Limits Margin (dBuV/m) (dB)	Remark
2	2463.080 28.55 2483.500 28.58 2500.000 28.60	7.77 35.97	102.35 51.69 47.62	102.60 52.07 47.99	74.00 -28.60 74.00 21.93 74.00 26.01	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. : 3m Chamber Data no. : 56

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV

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

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

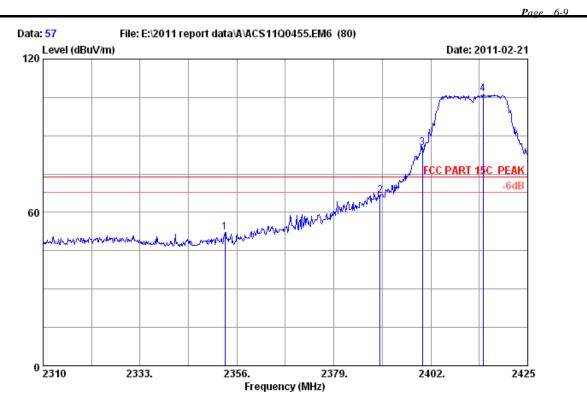
Test mode : IEEE802.11b CH11 2462MHz

M/N : WD650-BD-N

		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	2459.300	28.55	7.72	36.02	98.10	98.35	54.00 -44.35	Average
2	2483.500	28.58	7.77	35.97	41.33	41.71	54.00 12.29	Average
3	2500.000	28.60	7.77	36.00	37.34	37.71	54.00 16.29	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.

FCC ID:YKB751BD001 IC: 9095A-WD650BDN



: 3m Chamber Site no. Data no.: 57

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK Env. / Ins. : 23*C/54% Engineer : Paul Tian

: 150Mbps Wireless Lite N USB Adapter EUT : DC 5V From PC input AC 120V/60Hz Power

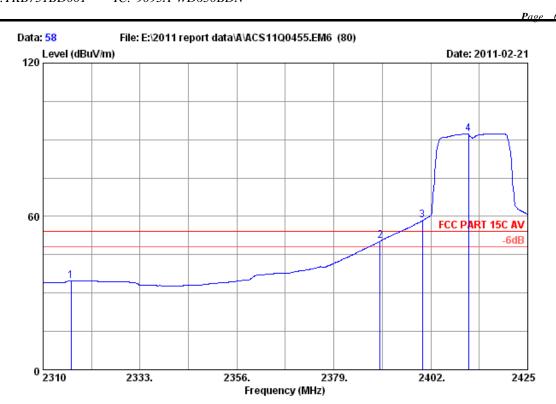
Test mode : IEEE802.11g CH1 2412MHz

M/N : WD650-BD-N

	-		loss	Factor	Reading (dBuV)		Limits Margin (dBuV/m) (dB)	Remark
1	2353.125	5 28.41	7.61	35.91	52.18	52.29	74.00 21.71	Peak
2	2390.000	28.46	7.66	36.09	66.58	66.61	74.00 7.39	Peak
3	2400.000	28.46	7.66	36.09	85.17	85.20	74.00 -11.20	Peak
4	2414.420	28.48	7.66	35.95	106.14	106.33	74.00 -32.33	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.

FCC ID:YKB751BD001 IC: 9095A-WD650BDN



: 3m Chamber Site no. Data no.: 58

Dis. / Ant. : 3m 3115 (0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV Env. / Ins. : 23*C/54% Engineer : Paul Tian

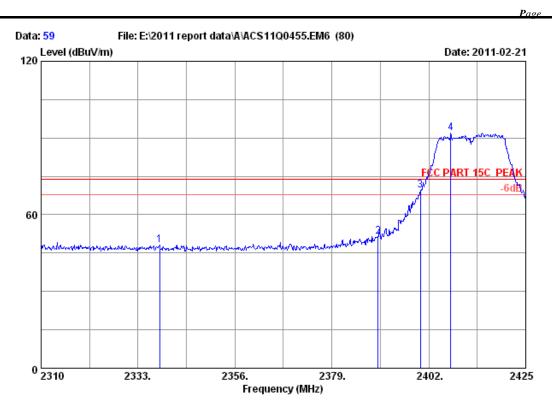
: 150Mbps Wireless Lite N USB Adapter EUT : DC 5V From PC input AC 120V/60Hz Power

Test mode : IEEE802.11g CH1 2412MHz

M/N: WD650-BD-N

	Freq. Fa			Reading (dBuV)			_	Remark
1	2316.670 2	8.33 7.	55 35.86	34.87	34.89	54.00	19.11	Average
2	2390.000 2	8.46 7.	66 36.09	50.45	50.48	54.00	3.52	Average
3	2400.000 2	8.46 7.	66 36.09	58.39	58.42	54.00	-4.42	Average
4	2410.970 2	28.48 7.	66 35.95	92.20	92.39	54.00 -	-38.39	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. : 3m Chamber Data no. : 59
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

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

EUT : 150Mbps Wireless Lite N USB Adapter
Power : DC 5V From PC input AC 120V/60Hz

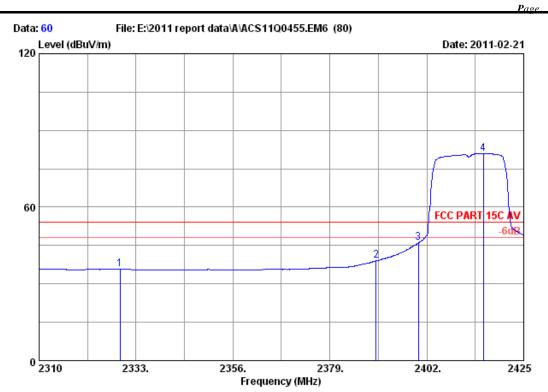
Test mode : IEEE802.11g CH1 2412MHz

M/N : WD650-BD-N

	-		loss					_	Remark
1	2338.175	28.38	7.61	35.99	47.99	47.99	74.00	26.01	Peak
2	2390.000	28.46	7.66	36.09	51.49	51.52	74.00	22.48	Peak
3	2400.000	28.46	7.66	36.09	69.33	69.36	74.00	4.64	Peak
4	2407.175	28.48	7.66	35.95	91.80	91.99	74.00 -	17.99	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.

FCC ID:YKB751BD001 IC: 9095A-WD650BDN



Site no. : 3m Chamber Data no.: 60 Ant. pol. : VERTICAL Dis. / Ant. : 3m 3115(0905)

Limit : FCC PART 15C AV Env. / Ins. : 23*C/54% Engineer : Paul Tian

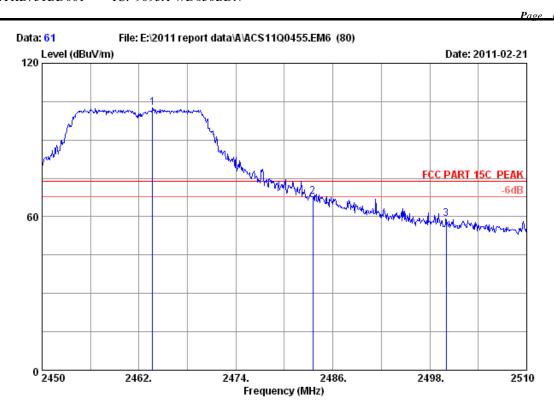
: 150Mbps Wireless Lite N USB Adapter EHT : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11g CH1 2412MHz

M/N : WD650-BD-N

	An Freq. Fac (MHz) (dB			Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m	Margin) (dB)	Remark
1	2329.205 28	.36 7.61	36.06	35.85	35.76	54.00	18.24	Average
2	2390.000 28	.46 7.66	36.09	38.93	38.96	54.00	15.04	Average
3	2400.000 28	.46 7.66	36.09	46.03	46.06	54.00	7.94	Average
4	2415.455 28	.48 7.66	35.95	80.75	80.94	54.00	-26.94	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. : 3m Chamber Data no. : 61

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

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

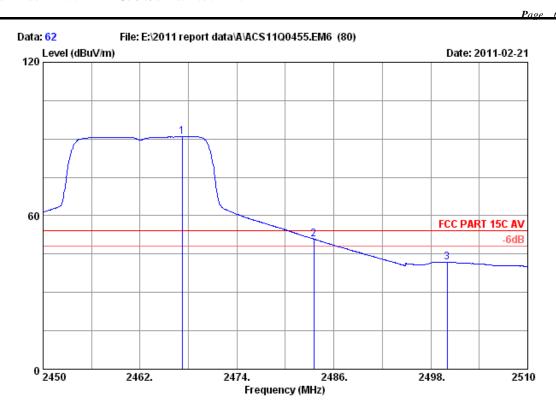
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11g CH11 2462MHz

M/N : WD650-BD-N

	•	Factor	loss		Reading (dBuV)		Limits Margin (dBuV/m) (dB)	Remark
2	2463.680 2483.500 2500.000	28.58	7.77	35.97	102.40 67.34 58.79	102.65 67.72 59.16	74.00 -28.65 74.00 6.28 74.00 14.84	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. : 3m Chamber Data no. : 62

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV

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

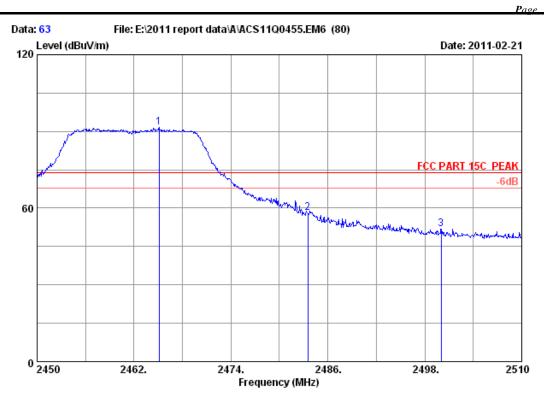
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11g CH11 2462MHz

M/N : WD650-BD-N

	Freq.		Cable loss (dB)	•	Reading (dBuV)	Emission Level (dBuV/m)	Limits Margin (dBuV/m) (dB)	Remark
1 2 3	2467.220 2483.500 2500.000	28.58	7.77	36.02 35.97 36.00	90.62 50.55 41.39	90.87 50.93 41.76	54.00 -36.87 54.00 3.07 54.00 12.24	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. : 3m Chamber Data no. : 63
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

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

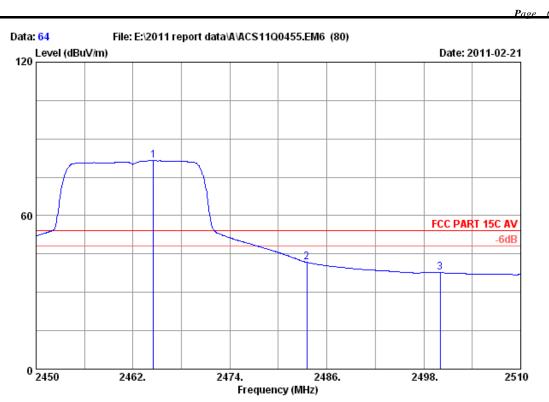
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11g CH11 2462MHz

M/N : WD650-BD-N

			uble Amp.		Emission			
	Freq. Fa	ctor lo	ss Factor	Reading	Level	Limits 1	Margin F	Remark
	(MHz) (d	lB/m) (d	lB) (dB)	(dBuV)	(dBuV/m) ((dBuV/m)	(dB)	
1	2465.120 2	8.55 7.	72 36.02	91.33	91.58	74.00 -1	L7.58	Peak
2	2483.500 2	8.58 7.	77 35.97	57.74	58.12	74.00	L5.88	Peak
3	2500.000 2	8.60 7.	77 36.00	51.52	51.89	74.00 2	22.11	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. : 3m Chamber Data no. : 64
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

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

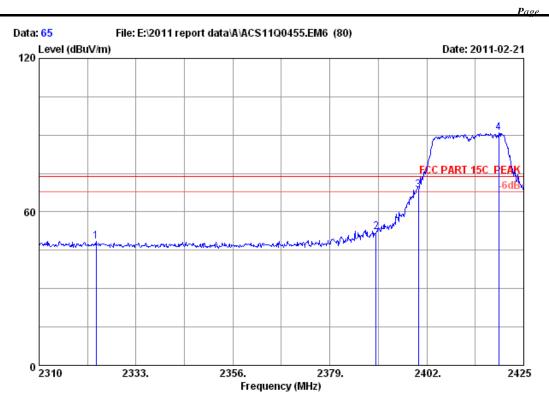
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11g CH11 2462MHz

M/N : WD650-BD-N

		Cable loss (dB)	•	Reading (dBuV)	Emission Level (dBuV/m)	Limits Margin (dBuV/m) (dB)	Remark
2	2464.520 28.55 2483.500 28.58 2500.000 28.60	7.77	36.02 35.97 36.00	81.20 41.34 37.30	81.45 41.72 37.67	54.00 -27.45 54.00 12.28 54.00 16.33	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. : 3m Chamber Data no. : 65
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

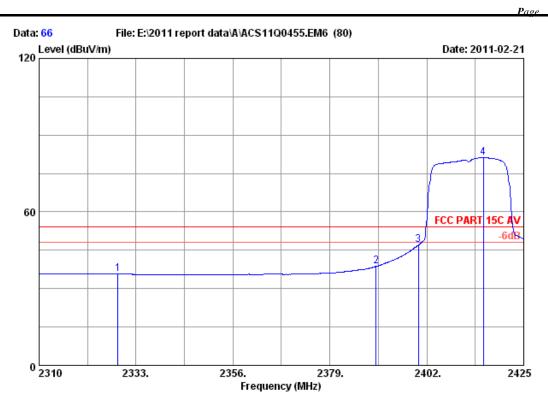
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 150Mbps Wireless Lite N USB Adapter
Power : DC 5V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT20 CH1 2412MHz

M/N : WD650-BD-N

	-					Lmission Level (dBuV/m)	Limits (dBuV/m)	_	Remark
1	2323.570	28.36	7.55	36.06	48.75	48.60	74.00	25.40	Peak
2	2390.000	28.46	7.66	36.09	52.06	52.09	74.00	21.91	Peak
3	2400.000	28.46	7.66	36.09	68.61	68.64	74.00	5.36	Peak
4	2419.020	28.48	7.66	35.95	90.60	90.79	74.00 -	16.79	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. : 3m Chamber Data no. : 66
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

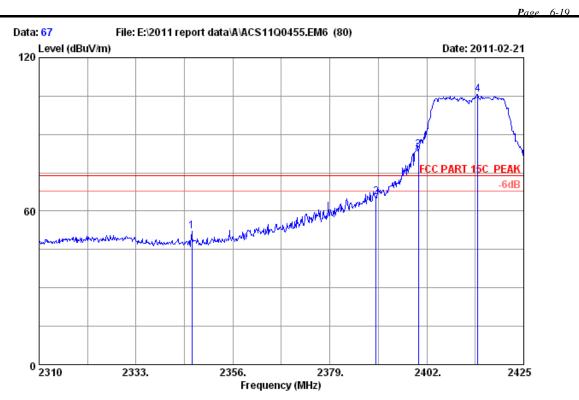
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11n HT20 CH1 2412MHz

M/N : WD650-BD-N

Freq. Factor (MHz) (dB/m)			Reading (dBuV)	Level	Limits Margin (dBuV/m) (dB)	Remark
2328.745 28.36	7.61	36.06	35.77	35.68	54.00 18.32	Average
2390.000 28.46	7.66	36.09	38.69	38.72	54.00 15.28	Average
2400.000 28.46	7.66	36.09	47.13	47.16	54.00 6.84	Average
2415.455 28.48	7.66	35.95	81.05	81.24	54.00 -27.24	Average
	(MHz) (dB/m) 	Freq. Factor loss (MHz) (dB/m) (dB) 	Freq. Factor loss Factor	Freq. Factor loss Factor Reading (MHz) (dB/m) (dB) (dB) (dBuV) 2328.745 28.36 7.61 36.06 35.77 2390.000 28.46 7.66 36.09 38.69 2400.000 28.46 7.66 36.09 47.13	Freq. Factor loss Factor Reading Level (MHz) (dB/m) (dB) (dB) (dBuV) (dBuV/m) 2328.745 28.36 7.61 36.06 35.77 35.68 2390.000 28.46 7.66 36.09 38.69 38.72 2400.000 28.46 7.66 36.09 47.13 47.16	Freq. Factor loss Factor Reading Level Limits Margin (MHz) (dB/m) (dB) (dB) (dBuV) (dBuV/m) (dBuV/m) (dB) 2328.745 28.36 7.61 36.06 35.77 35.68 54.00 18.32 2390.000 28.46 7.66 36.09 38.69 38.72 54.00 15.28 2400.000 28.46 7.66 36.09 47.13 47.16 54.00 6.84

- 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. : 3m Chamber Data no. : 67

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

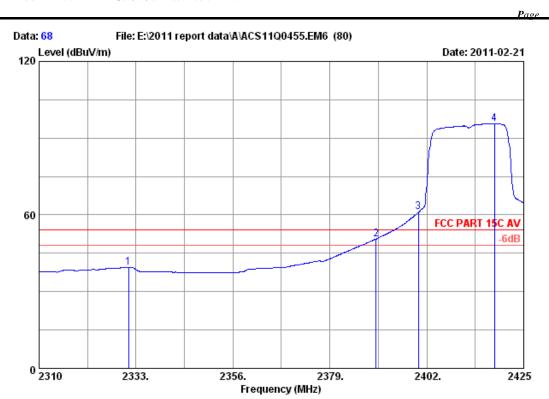
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11n HT20 CH1 2412MHz

M/N : WD650-BD-N

Freq. (MHz)	Factor			Reading (dBuV)		Limits Ma	_	Remark
1 2346.22 2 2390.00 3 2400.00 4 2414.07	0 28.46 0 28.46	7.66 7.66	36.09 36.09	52.19 65.33 83.72 105.41	52.19 65.36 83.75 105.60			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. : 3m Chamber Data no. : 68

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV

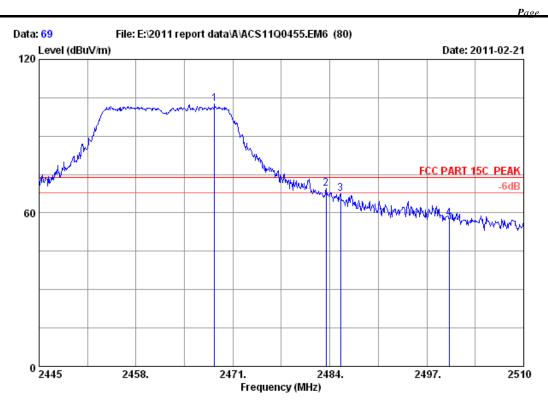
Env. / Ins. : 23 * C/54% Engineer : Paul Tian

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11n HT20 CH1 2412MHz

M/N : WD650-BD-N

	Freq. (MHz)	Factor (dB/m)		Amp. Factor (dB)	Reading (dBuV)	Level (dBuV/m)			Remark
1	2331.275	28.36	7.61	36.06	39.49	39.40	54.00	14.60	Average
2	2390.000	28.46	7.66	36.09	50.59	50.62	54.00	3.38	Average
3	2400.000	28.46	7.66	36.09	61.10	61.13	54.00	-7.13	Average
4	2418.100	28.48	7.66	35.95	95.39	95.58	54.00	-41.58	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. : 3m Chamber Data no. : 69

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

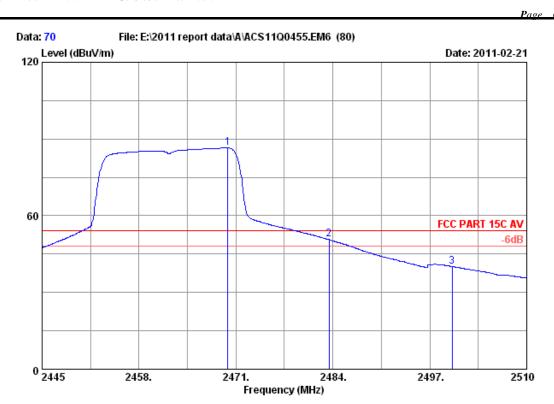
Env. / Ins. : 23 * C/54% Engineer : Paul Tian

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11n HT20 CH11 2462MHz

M/N : WD650-BD-N

		loss		Reading (dBuV)		Limits Margin (dBuV/m) (dB)	Remark
1	2468.530 28.55	7.72	36.02	102.27	102.52	74.00 -28.52	Peak
2	2483.500 28.58	7.77	35.97	69.20	69.58	74.00 4.42	Peak
3	2485.430 28.58	7.77	35.97	66.99	67.37	74.00 6.63	Peak
4	2500.000 28.60	7.77	36.00	57.37	57.74	74.00 16.26	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. : 3m Chamber Data no. : 70

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV

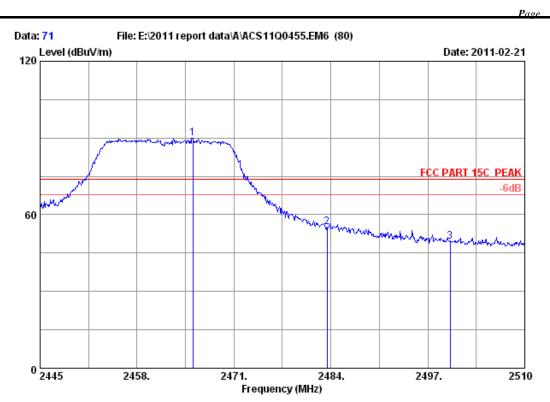
Env. / Ins. : 23 *C/54% Engineer : Paul Tian

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11n HT20 CH11 2462MHz

M/N : WD650-BD-N

	Ant. Freq. Factor (MHz) (dB/m)	Cable Amp. loss Facto (dB) (dB)	Emission Level (dBuV/m)	Limits Margin (dBuV/m) (dB)	Remark
1 2 3	2469.895 28.55 2483.500 28.58 2500.000 28.60	7.77 35.97	 86.48 50.71 40.13	54.00 -32.48 54.00 3.29 54.00 13.87	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. : 3m Chamber Data no. : 71
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

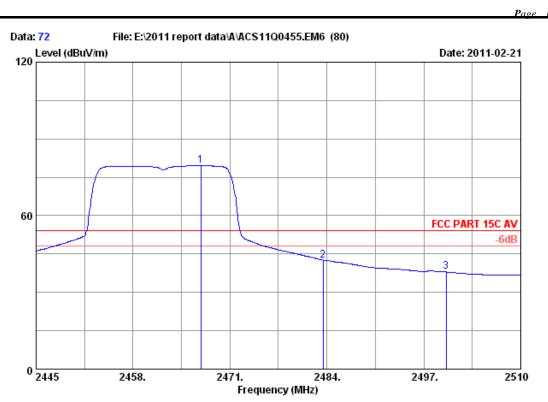
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11n HT20 CH11 2462MHz

M/N : WD650-BD-N

		Cable Amp loss Facto (dB) (dB)			Limits Margin (dBuV/m) (dB)	Remark
2	2465.475 28.55 2483.500 28.58 2500.000 28.60	7.77 35.9	7 54.86	89.97 55.24 49.56	74.00 -15.97 74.00 18.76 74.00 24.44	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. : 3m Chamber Data no. : 72

Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

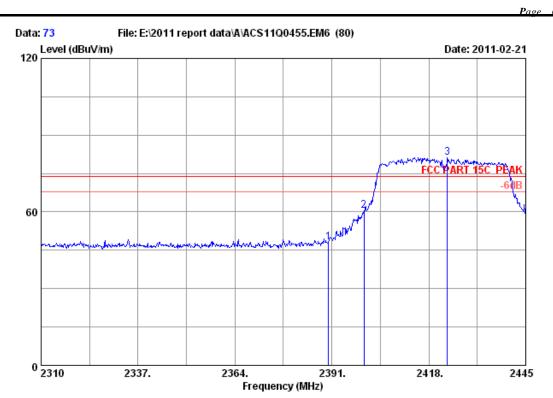
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11n HT20 CH11 2462MHz

M/N : WD650-BD-N

	Ant. Freq. Factor (MHz) (dB/m)	Cable loss (dB)	•	Reading (dBuV)	Emission Level (dBuV/m)	Limits Margin (dBuV/m) (dB)	Remark
2	2467.100 28.55 2483.500 28.58 2500.000 28.60	7.77	36.02 35.97 36.00	79.28 42.21 37.57	79.53 42.59 37.94	54.00 -25.53 54.00 11.41 54.00 16.06	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. : 3m Chamber Data no. : 73
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

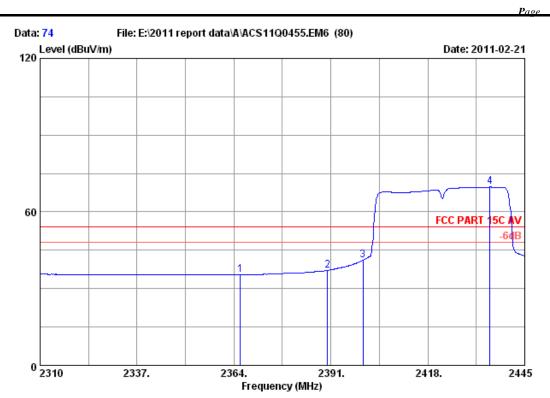
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11n HT40 CH1 2422MHz

M/N : WD650-BD-N

		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	2390.000	28.46	7.66	36.09	48.08	48.11	74.00	25.89	Peak
2	2400.000	28.46	7.66	36.09	60.60	60.63	74.00	13.37	Peak
3	2423.130	28.50	7.66	36.01	81.11	81.26	74.00	-7.26	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. : 3m Chamber Data no. : 74
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

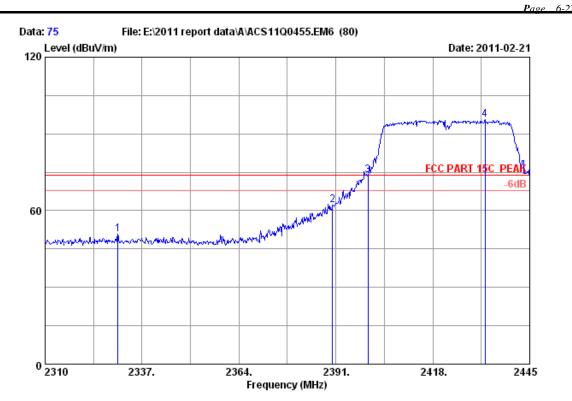
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 150Mbps Wireless Lite N USB Adapter
Power : DC 5V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH1 2422MHz

M/N : WD650-BD-N

	Freq. F (MHz) (Cable loss (dB)		Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	_	Remark
1	2365.755	28.41	7.61	35.91	35.43	35.54	54.00	18.46	Average
2	2390.000	28.46	7.66	36.09	37.09	37.12	54.00	16.88	Average
3	2400.000	28.46	7.66	36.09	41.14	41.17	54.00	12.83	Average
4	2435.280	28.50	7.72	36.01	69.54	69.75	54.00 -	15.75	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. : 3m Chamber Data no. : 75

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

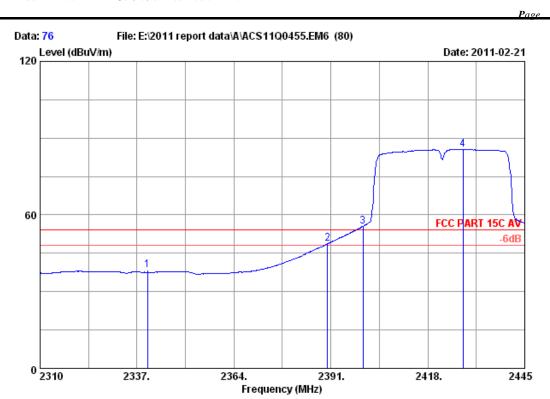
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 150Mbps Wireless Lite N USB Adapter
Power : DC 5V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH1 2422MHz

M/N : WD650-BD-N

	-				Reading (dBuV)		Limits Marg (dBuV/m) (dB		
1	2330.250	28.36	7.61	36.06	50.85	50.76	74.00 23.2	4 Peak	
2	2390.000	28.46	7.66	36.09	62.03	62.06	74.00 11.9	4 Peak	
3	2400.000	28.46	7.66	36.09	73.99	74.02	74.00 -0.0	2 Peak	
4	2432.580	28.50	7.72	36.01	95.45	95.66	74.00 -21.6	6 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. : 3m Chamber Data no. : 76

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV

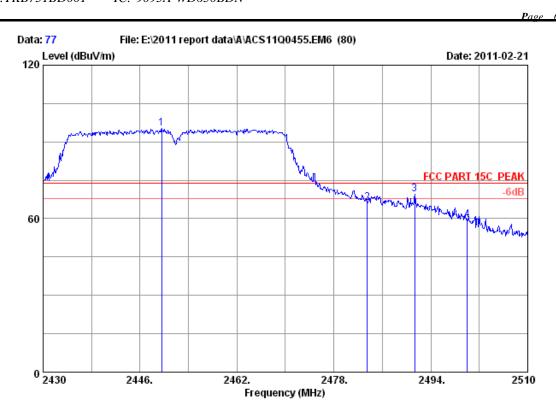
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11n HT40 CH1 2422MHz

M/N : WD650-BD-N

	Freq. (MHz)	Factor (dB/m)	Cable loss (dB)		Reading (dBuV)	Level (dBuV/m)			Remark
1	2339.970	28.38	7.61	35.99	38.29	38.29	54.00	15.71	Average
2	2390.000	28.46	7.66	36.09	48.62	48.65	54.00	5.35	Average
3	2400.000	28.46	7.66	36.09	55.57	55.60	54.00	-1.60	Average
4	2427.855	28.50	7.72	36.01	85.29	85.50	54.00	-31.50	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. : 3m Chamber Data no. : 77

Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

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

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11n HT40 CH7 2452MHz

M/N : WD650-BD-N

	-		loss				Limits Margin (dBuV/m) (dB)	Remark
1	2449.600	28.53	7.72	36.06	94.92	95.11	74.00 -21.11	Peak
2	2483.500	28.58	7.77	35.97	65.85	66.23	74.00 7.77	Peak
3	2491.360	28.60	7.77	36.00	69.22	69.59	74.00 4.41	Peak
4	2500.000	28.60	7.77	36.00	59.26	59.63	74.00 14.37	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.

FCC ID:YKB751BD001 IC: 9095A-WD650BDN



Data no. : 78

Site no. : 3m Chamber Dis. / Ant. : 3m 3115(0905) Ant. pol. : HORIZONTAL

: FCC PART 15C AV Limit

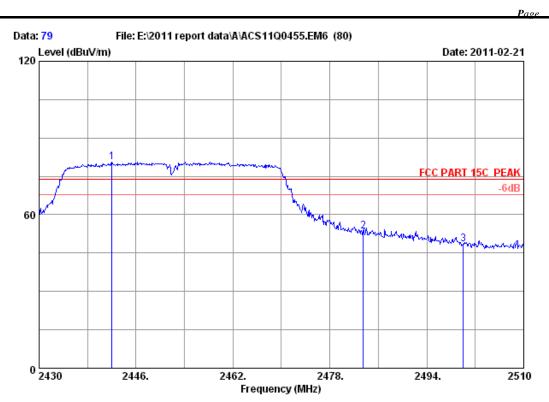
Env. / Ins. : 23*C/54% Engineer : Paul Tian

: 150Mbps Wireless Lite N USB Adapter EUT Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11n HT40 CH7 2452MHz

: WD650-BD-N M/N

Freq.	Factor	loss (dB)	•	Reading (dBuV)		Limits Margin (dBuV/m) (dB)	Remark
1 2458.16 2 2483.50 3 2500.00		7.77		78.83 50.08 40.59	79.08 50.46 40.96	54.00 -25.08 54.00 3.54 54.00 13.04	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. : 3m Chamber Data no. : 79
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

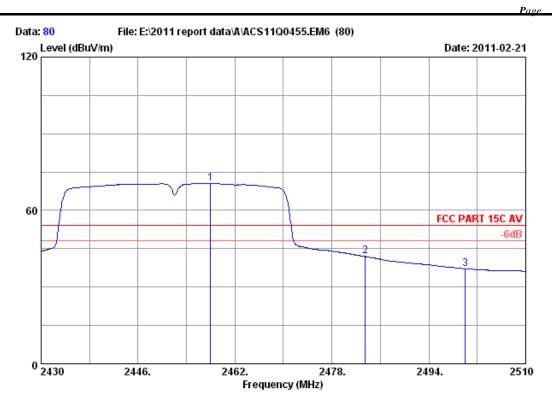
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11n HT40 CH7 2452MHz

M/N : WD650-BD-N

	Freq. F (MHz) (Factor	Reading (dBuV)			Margin (dB)	Remark
2	2442.000 2483.500 2500.000	28.58	7.77		80.36 53.24 48.09	80.55 53.62 48.46	74.00 74.00 74.00	20.38	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. : 3m Chamber Data no. : 80
Dis. / Ant. : 3m 3115(0905) Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

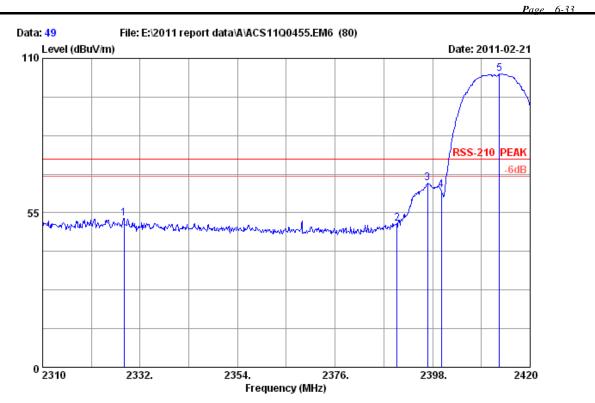
Env. / Ins. : $23 \, {^{*}\text{C}}/54 {^{*}}$ Engineer : Paul Tian

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11n HT40 CH7 2452MHz

M/N : WD650-BD-N

	-	Ant. Factor (dB/m)		Factor	Reading (dBuV)		Limits Margin (dBuV/m) (dB)	Remark
2	2458.000 2483.500 2500.000	28.58	7.77	35.97	70.27 41.60 36.82	70.52 41.98 37.19	54.00 -16.52 54.00 12.02 54.00 16.81	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. : 3m Chamber Data no. : 49

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

Limit : RSS-210 PEAK

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

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

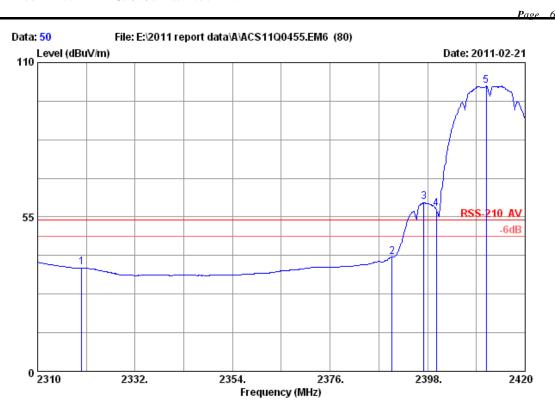
Test mode : IEEE802.11b CH1 2412MHz

M/N : WD650-BD-N

	Freq. (MHz)	Ant. Factor (dB/m)		Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2328.370	29.40	7.27	36.63	53.08	53.12	74.00	20.88	Peak
2	2390.000	29.44	7.39	36.62	51.05	51.26	74.00	22.74	Peak
3	2396.900	29.44	7.39	36.62	65.43	65.64	74.00	8.36	Peak
4	2400.000	29.44	7.43	36.62	62.78	63.03	74.00	10.97	Peak
5	2413.070	29.45	7.43	36.62	104.31	104.57	74.00 -	-30.57	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.

FCC ID:YKB751BD001 IC: 9095A-WD650BDN



Site no. : 3m Chamber Dis. / Ant. : 3m 3115(0 Data no.: 50

3115 (0911) Ant. pol. : HORIZONTAL

Limit : RSS-210 AV

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

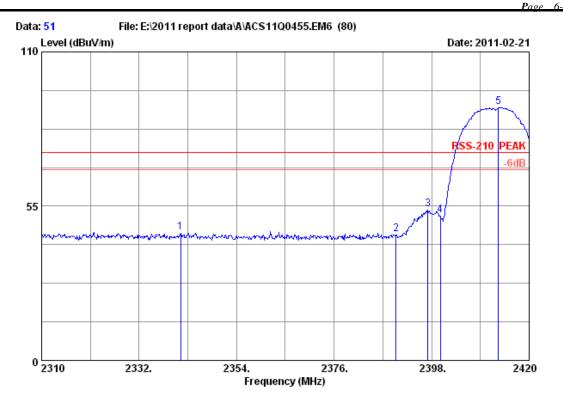
: 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11b CH1 2412MHz

M/N: WD650-BD-N

	Freq. (MHz)	Ant. Factor (dB/m)		Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits Mar (dBuV/m) (d	-
1	2319.900	29.40	7.27	36.63	37.06	37.10	54.00 16.	90 Average
2	2390.000	29.44	7.39	36.62	40.65	40.86	54.00 13.	14 Average
3	2397.120	29.44	7.39	36.62	60.04	60.25	54.00 -6.	25 Average
4	2400.000	29.44	7.43	36.62	57.70	57.95	54.00 -3.	95 Average
5	2411.200	29.45	7.43	36.62	101.41	101.67	54.00 -47.	67 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. : 3m Chamber Data no. : 51
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : RSS-210 PEAK

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

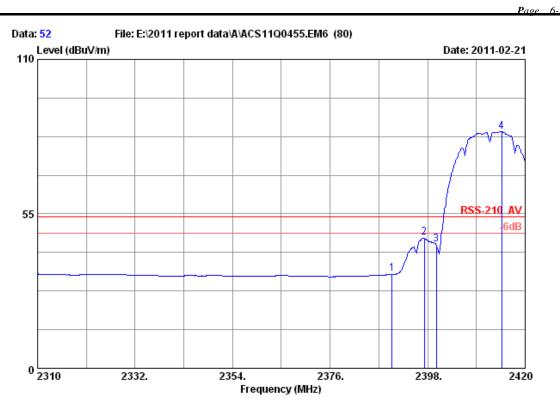
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11b CH1 2412MHz

M/N : WD650-BD-N

	-	Factor	loss	Factor	_	Lmission Level (dBuV/m)		_	Remark	
1	2341.350	29.41	7.31	36.63	45.42	45.51	74.00	28.49	Peak	
2	2390.000	29.44	7.39	36.62	44.83	45.04	74.00	28.96	Peak	
3	2397.120	29.44	7.39	36.62	53.63	53.84	74.00	20.16	Peak	
4	2400.000	29.44	7.43	36.62	51.50	51.75	74.00	22.25	Peak	
5	2413.070	29.45	7.43	36.62	89.99	90.25	74.00	-16.25	Peak	
J	2413.070	, 45.43	7.43	30.02	09.99	30.23	74.00	-10.25	reak	

- 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. : 3m Chamber Data no. : 52
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : RSS-210 AV

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

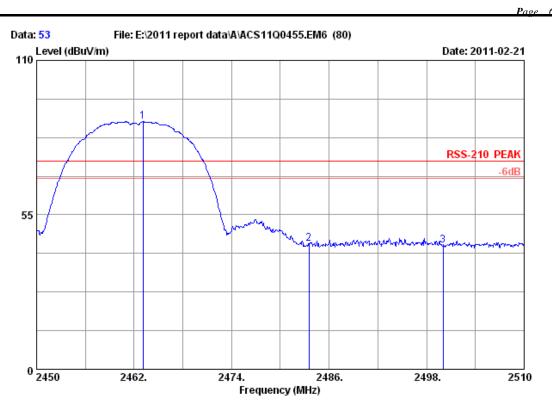
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11b CH1 2412MHz

M/N : WD650-BD-N

	Freq. (MHz)	Factor	Cable loss (dB)	-	Reading (dBuV)	Emission Level (dBuV/m)	Limits M	_	Remark
1	2390.000	29.44	7.39	36.62	33.40	33.61	54.00 2	0.39	Average
2	2397.230	29.44	7.39	36.62	46.23	46.44	54.00	7.56	Average
3	2400.000	29.44	7.43	36.62	43.72	43.97	54.00	10.03	Average
4	2414.720	29.45	7.43	36.62	84.14	84.40	54.00 -3	0.40	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. : 3m Chamber Data no. : 53
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : RSS-210 PEAK

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

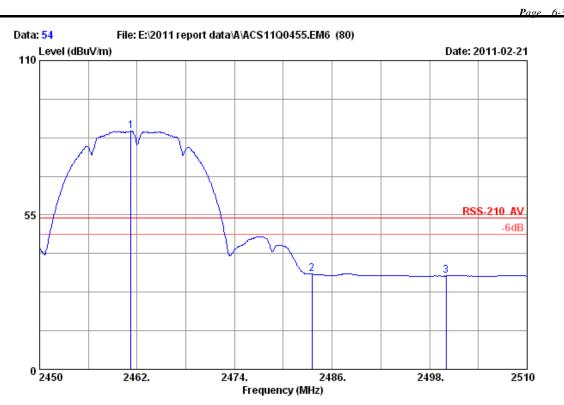
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11b CH11 2462MHz

M/N : WD650-BD-N

	-			Factor	Reading (dBuV)		Limits Margin (dBuV/m) (dB)	Remark
2	2463.080 2483.500 2500.000	29.49	7.58	36.60	87.91 44.36 43.51	88.32 44.83 44.03	74.00 -14.32 74.00 29.17 74.00 29.97	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. : 3m Chamber Data no. : 54
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : RSS-210 AV

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

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

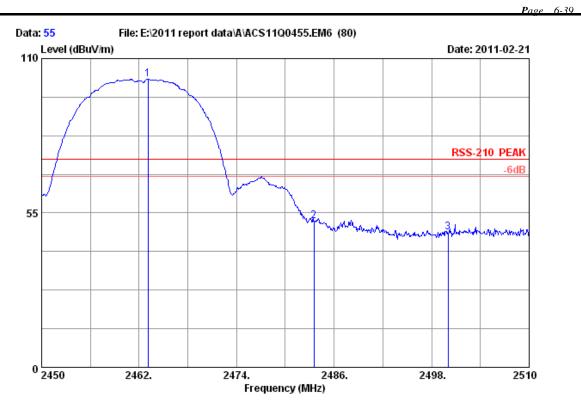
Test mode : IEEE802.11b CH11 2462MHz

M/N : WD650-BD-N

	-			Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits Margin (dBuV/m) (dB)	Remark
2	2461.220 2483.500 2500.000	29.49	7.58	36.60	84.60 33.52 32.86	85.01 33.99 33.38	54.00 -31.01 54.00 20.01 54.00 20.62	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.

FCC ID:YKB751BD001 IC: 9095A-WD650BDN



Site no. : 3m Chamber Dis. / Ant. : 3m 3115(0 Data no.: 55

3115 (0911) Ant. pol. : HORIZONTAL

Limit : RSS-210 PEAK

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

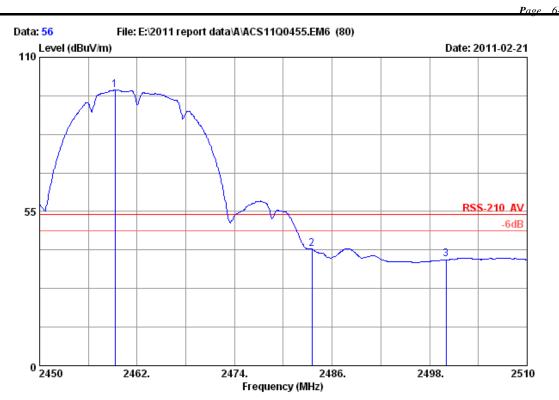
: 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11b CH11 2462MHz

: WD650-BD-N

	-	Factor	loss		Reading (dBuV)		Limits Margin (dBuV/m) (dB)	Remark
2	2463.080 2483.500 2500.000	29.49	7.58	36.60	102.35 51.69 47.60	102.76 52.16 48.12	74.00 -28.76 74.00 21.84 74.00 25.88	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. : 3m Chamber Data no. : 56

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

Limit : RSS-210 AV

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

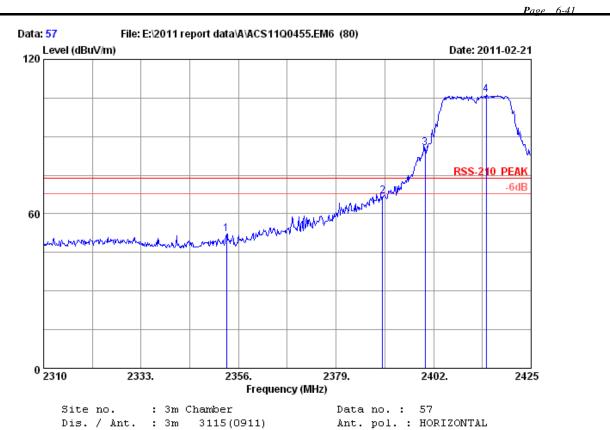
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11b CH11 2462MHz

M/N : WD650-BD-N

-		Cable loss (dB)	Factor	Reading (dBuV)	Emission Level (dBuV/m)	Limits Margin (dBuV/m) (dB)	Remark
1 2459.300 2 2483.500 3 2500.000	29.49	7.58	36.60	98.09 41.33 37.33	98.50 41.80 37.85	54.00 -44.50 54.00 12.20 54.00 16.15	lverage lverage lverage

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



Limit : RSS-210 PEAK

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

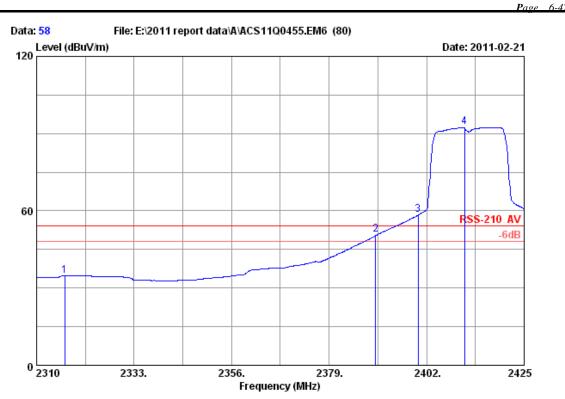
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11g CH1 2412MHz

M/N : WD650-BD-N

	-	Factor	loss				Limits Margin (dBuV/m) (dB)	Remark
1	2353.125	5 29.42	7.31	36.63	52.19	52.29	74.00 21.71	Peak
2	2390.000	29.44	7.39	36.62	66.57	66.78	74.00 7.22	Peak
3	2400.000	29.44	7.43	36.62	85.16	85.41	74.00 -11.41	Peak
4	2414.420	29.45	7.43	36.62	106.14	106.40	74.00 -32.40	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. : 3m Chamber Data no. : 58

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

Limit : RSS-210 AV

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

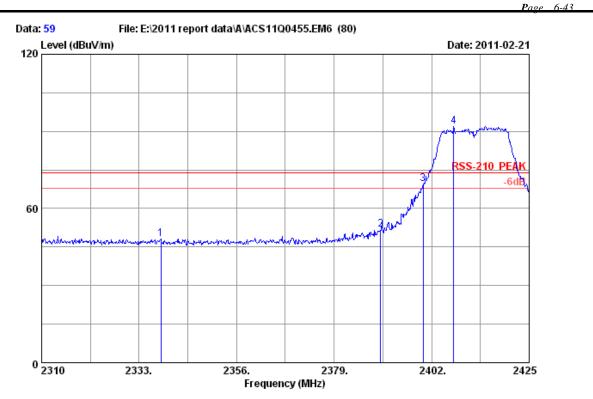
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11g CH1 2412MHz

M/N : WD650-BD-N

	Freq. (MHz)	Factor	Cable loss (dB)	-	Reading (dBuV)	Emission Level (dBuV/m)		Margin) (dB)	Remark
1	2316.670	29.39	7.24	36.63	34.85	34.85	54.00	19.15	Average
2	2390.000	29.44	7.39	36.62	50.45	50.66	54.00	3.34	Average
3	2400.000	29.44	7.43	36.62	58.39	58.64	54.00	-4.64	Average
4	2410.970	29.45	7.43	36.62	92.19	92.45	54.00 -	-38.45	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. : 3m Chamber Data no. : 59
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : RSS-210 PEAK

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

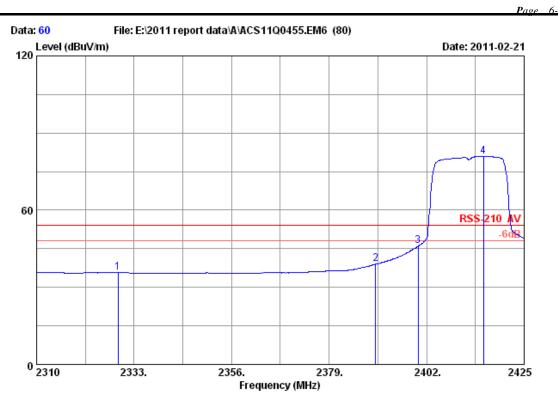
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11g CH1 2412MHz

M/N : WD650-BD-N

	-		Cable loss (dB)	•	Reading (dBuV)	Emission Level (dBuV/m)		Margin) (dB)	Remark	
1	2338.179	5 29.41	7.27	36.63	47.99	48.04	74.00	25.96	Peak	
2	2390.000	29.44	7.39	36.62	51.48	51.69	74.00	22.31	Peak	
3	2400.000	29.44	7.43	36.62	69.33	69.58	74.00	4.42	Peak	
4	2407.175	5 29.45	7.43	36.62	91.79	92.05	74.00	-18.05	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. : 3m Chamber Data no. : 60
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : RSS-210 AV

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

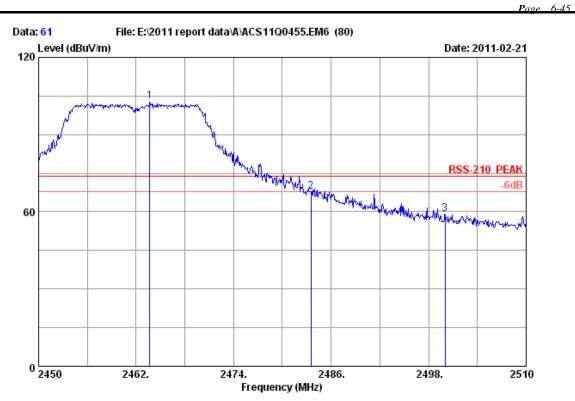
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11g CH1 2412MHz

M/N : WD650-BD-N

	Freq. (MHz)	Ant. Factor (dB/m)		Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2329.205	5 29.40	7.27	36.63	35.86	35.90	54.00	18.10	Average
2	2390.000	29.44	7.39	36.62	38.93	39.14	54.00	14.86	Average
3	2400.000	29.44	7.43	36.62	46.02	46.27	54.00	7.73	Average
4	2415.455	5 29.45	7.43	36.61	80.74	81.01	54.00 -	-27.01	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. : 3m Chamber Data no. : 61

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

Limit : RSS-210 PEAK

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

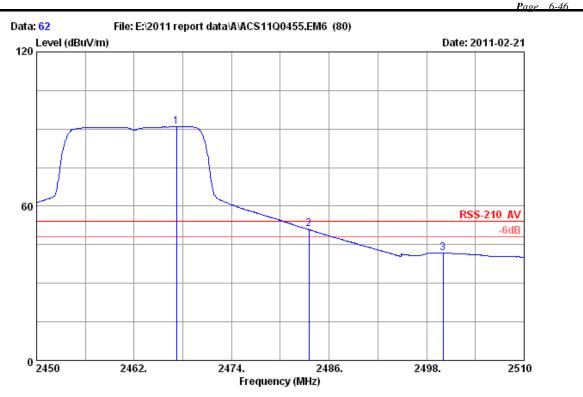
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11g CH11 2462MHz

M/N : WD650-BD-N

	-	Factor	loss		Reading		Limits Margin (dBuV/m) (dB)	Remark
2 2	2483.500	29.48 29.49 29.50	7.58	36.60	67.33	102.80 67.80 59.30	74.00 -28.80 74.00 6.20 74.00 14.70	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. : 3m Chamber Data no. : 62

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

Limit : RSS-210 AV

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

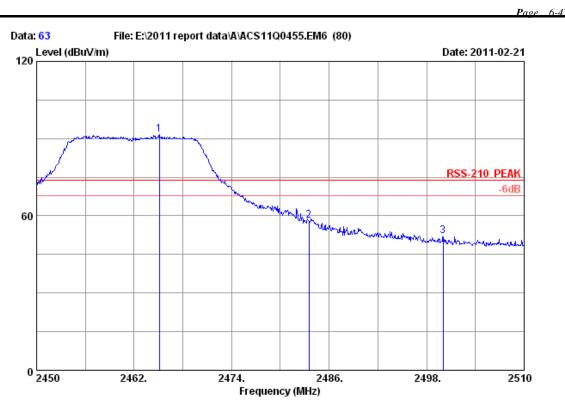
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11g CH11 2462MHz

M/N : WD650-BD-N

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	•	Reading (dBuV)	Emission Level (dBuV/m)	Limits Margin (dBuV/m) (dB)	Remark
1	2467.220	29.48	7.54	36.60	90.60	91.02	54.00 -37.02	Average
2	2483.500	29.49	7.58	36.60	50.54	51.01	54.00 2.99	Average
3	2500.000	29.50	7.62	36.60	41.38	41.90	54.00 12.10	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. : 3m Chamber Data no. : 63
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : RSS-210 PEAK

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

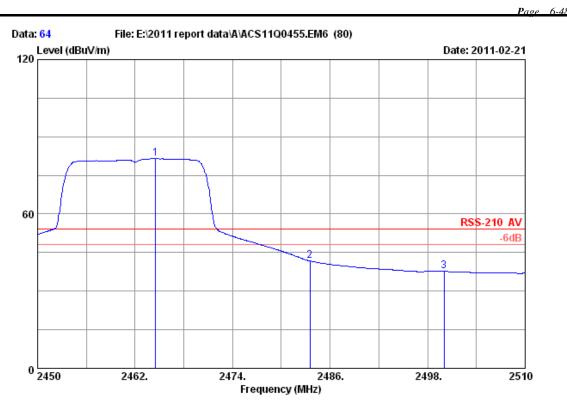
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11g CH11 2462MHz

M/N : WD650-BD-N

	Freq. Fac	t. Cable tor loss /m) (dB)	Factor	Reading (dBuV)		Limits Margin (dBuV/m) (dB)	Remark
2 248	33.500 29	.48 7.54 .49 7.58 .50 7.62	36.60	91.32 57.74 51.51	91.73 58.21 52.03	74.00 -17.73 74.00 15.79 74.00 21.97	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. : 3m Chamber Data no. : 64
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : RSS-210 AV

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

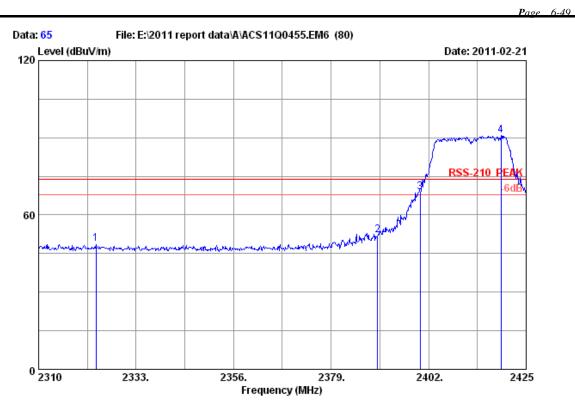
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz

Test mode : IEEE802.11g CH11 2462MHz

M/N : WD650-BD-N

					Reading (dBuV)		Limits Margin (dBuV/m) (dB)	Remark
2 2	2483.500	29.48 29.49 29.50	7.58	36.60	81.19 41.34 37.29	81.60 41.81 37.81	54.00 -27.60 54.00 12.19 54.00 16.19	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. : 3m Chamber Data no. : 65
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : RSS-210 PEAK

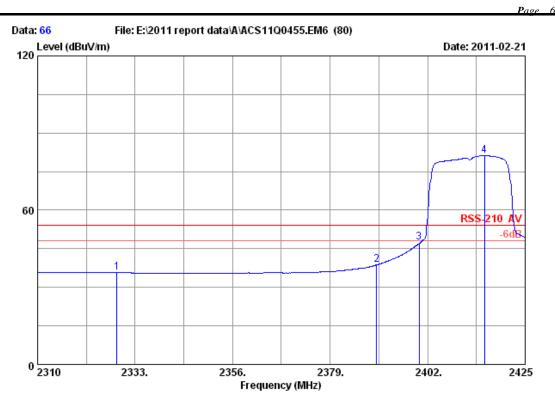
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11n HT20 CH1 2412MHz

M/N : WD650-BD-N

	-	Ant. Factor (dB/m)	loss	Factor	Reading (dBuV)			Margin (dB)	Remark
1	2323.570	29.40	7.27	36.63	48.75	48.79	74.00	25.21	Peak
2	2390.000	29.44	7.39	36.62	52.06	52.27	74.00	21.73	Peak
3	2400.000	29.44	7.43	36.62	68.60	68.85	74.00	5.15	Peak
4	2419.020	29.45	7.46	36.61	90.59	90.89	74.00 -	-16.89	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. : 3m Chamber Data no. : 66
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : RSS-210 AV

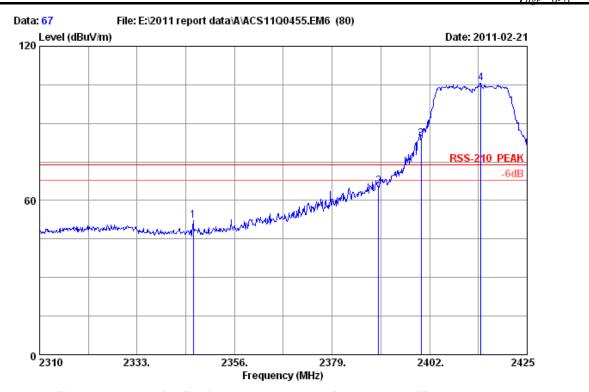
Env. / Ins. : 23 *C/54% Engineer : Paul Tian

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11n HT20 CH1 2412MHz

M/N : WD650-BD-N

	Freq. (MHz)	Factor	Cable loss (dB)	•	Reading (dBuV)	Emission Level (dBuV/m)		Margin (dB)	Remark
1	2328.745	5 29.40	7.27	36.63	35.77	35.81	54.00	18.19	Average
2	2390.000	29.44	7.39	36.62	38.68	38.89	54.00	15.11	Average
3	2400.000	29.44	7.43	36.62	47.12	47.37	54.00	6.63	Average
4	2415.455	5 29.45	7.43	36.61	81.04	81.31	54.00	-27.31	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. : 3m Chamber Data no. : 67

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

Limit : RSS-210 PEAK

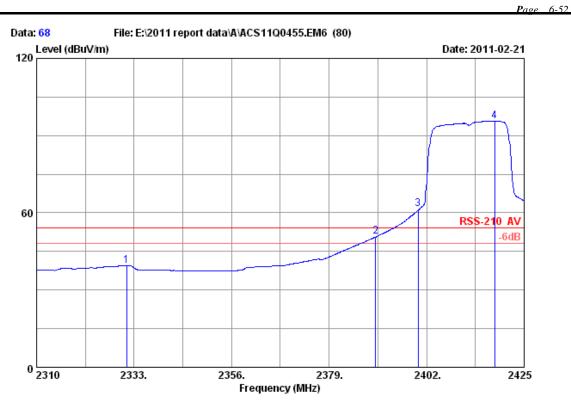
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11n HT20 CH1 2412MHz

M/N : WD650-BD-N

	-	Factor	loss		Reading (dBuV)			Margin) (dB)	Remark
1	2346.225	5 29.41	7.31	36.63	52.19	52.28	74.00	21.72	Peak
2	2390.000	29.44	7.39	36.62	65.33	65.54	74.00	8.46	Peak
3	2400.000	29.44	7.43	36.62	83.71	83.96	74.00	-9.96	Peak
4	2414.075	5 29.45	7.43	36.62	105.40	105.66	74.00	-31.66	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. : 3m Chamber Data no. : 68

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

Limit : RSS-210 AV

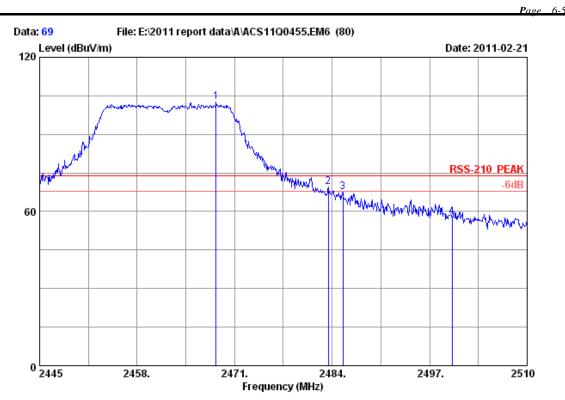
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11n HT20 CH1 2412MHz

M/N : WD650-BD-N

(MHz) (dB	/m) (dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/n	n) (dB)		
1 2331.275 29 2 2390.000 29 3 2400.000 29 4 2418.100 29	.44 7.39 .44 7.43	36.62 36.62	39.49 50.59 61.10 95.38	39.53 50.80 61.35 95.65		14.47 3.20 -7.35 -41.65	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. : 3m Chamber Data no. : 69

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

Limit : RSS-210 PEAK

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

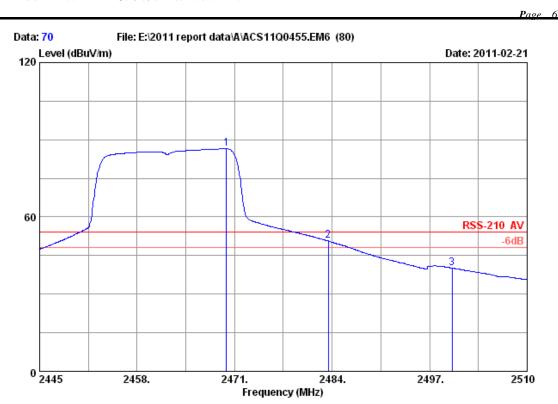
EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11n HT20 CH11 2462MHz

M/N : WD650-BD-N

	-	Ant. Factor (dB/m)	loss	Factor	Reading (dBuV)		Limits I	_	Remark
1	2468.530	29.48	7.54	36.60	102.26	102.68	74.00 -2	28.68	Peak
2	2483.500	29.49	7.58	36.60	69.19	69.66	74.00	4.34	Peak
3	2485.430	29.49	7.58	36.60	66.99	67.46	74.00	6.54	Peak
4	2500.000	29.50	7.62	36.60	57.36	57.88	74.00	16.12	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.

FCC ID:YKB751BD001 IC: 9095A-WD650BDN



Site no. : 3m Chamber Dis. / Ant. : 3m 3115(0 Data no. : 70

3115 (0911) Ant. pol. : HORIZONTAL

Limit : RSS-210 AV

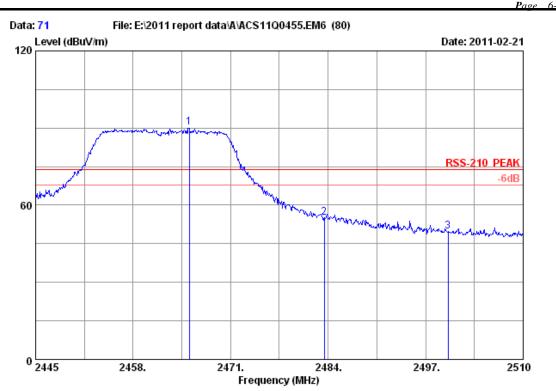
Env. / Ins. : 23*C/54% Engineer : Paul Tian

: 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11n HT20 CH11 2462MHz

: WD650-BD-N

		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	2469.895	5 29.48	7.54	36.60	86.22	86.64	54.00 -32.64	Average
2	2483.500	29.49	7.58	36.60	50.33	50.80	54.00 3.20	Average
3	2500.000	29.50	7.62	36.60	39.75	40.27	54.00 13.73	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. : 3m Chamber Data no. : 71
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : RSS-210 PEAK

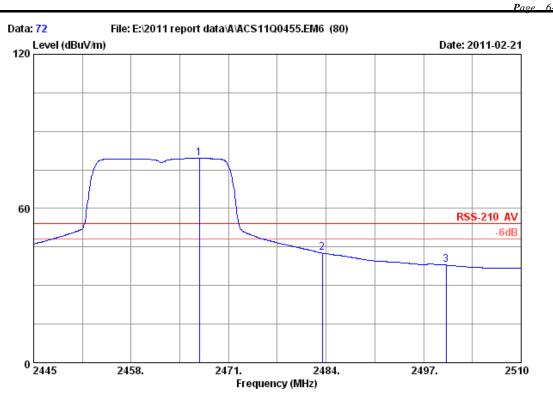
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11n HT20 CH11 2462MHz

M/N : WD650-BD-N

•	(dB/m) ((dB) (d		ing Level /) (dBuV/m)		-	Kemar K
1 2465.475 2 2483.500 3 2500.000	29.49 7	.58 36	.60 54.	35 55.32	74.00 - 74.00 74.00	18.68	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. : 3m Chamber Data no. : 72
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : RSS-210 AV

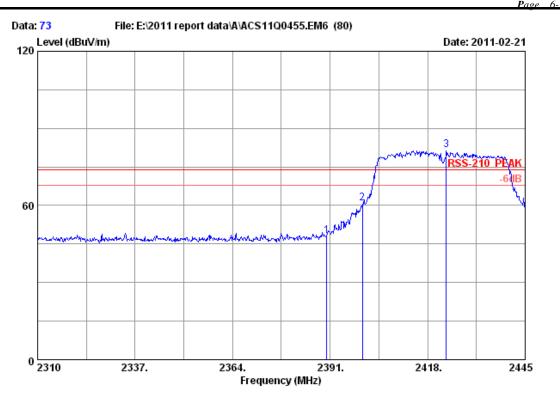
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11n HT20 CH11 2462MHz

M/N : WD650-BD-N

		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	2467.100	29.48	7.54	36.60	79.27	79.69	54.00 -25.69	Average
2	2483.500	29.49	7.58	36.60	42.20	42.67	54.00 11.33	Average
3	2500.000	29.50	7.62	36.60	37.56	38.08	54.00 15.92	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. : 3m Chamber Data no. : 73
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : RSS-210 PEAK

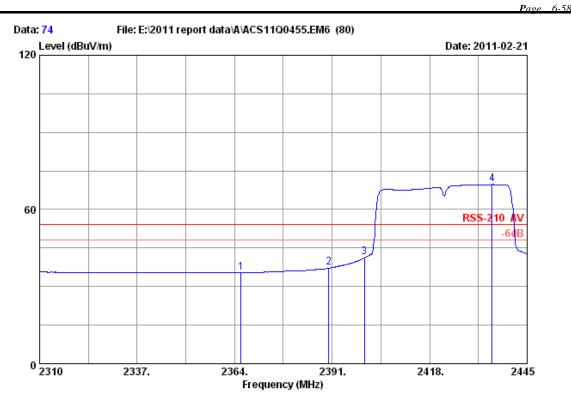
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11n HT40 CH1 2422MHz

M/N : WD650-BD-N

-	Factor	loss		Reading	Emission Level (dBuV/m)		_	Remark	
1 2390.00 2 2400.00 3 2423.13	0 29.44	7.43	36.62	48.08 60.60 81.10	48.29 60.85 81.41	74.00 74.00 74.00	13.15	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. : 3m Chamber Data no. : 74
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : RSS-210 AV

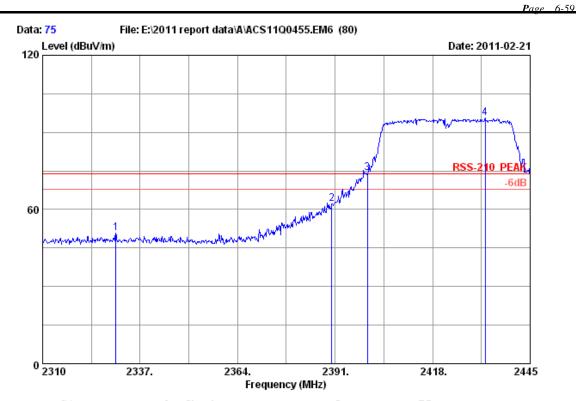
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 150Mbps Wireless Lite N USB Adapter
Power : DC 5V From PC input AC 120V/60Hz
Test mode : IEEE802.11n HT40 CH1 2422MHz

M/N : WD650-BD-N

		Ant. Factor (dB/m)		Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	_	Remark
1	2365.755	5 29.42	7.35	36.62	35.43	35.58	54.00	18.42	Average
2	2390.000	29.44	7.39	36.62	37.08	37.29	54.00	16.71	Average
3	2400.000	29.44	7.43	36.62	41.13	41.38	54.00	12.62	Average
4	2435.280	29.46	7.46	36.61	69.53	69.84	54.00 -	15.84	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. : 3m Chamber Data no. : 75

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

Limit : RSS-210 PEAK

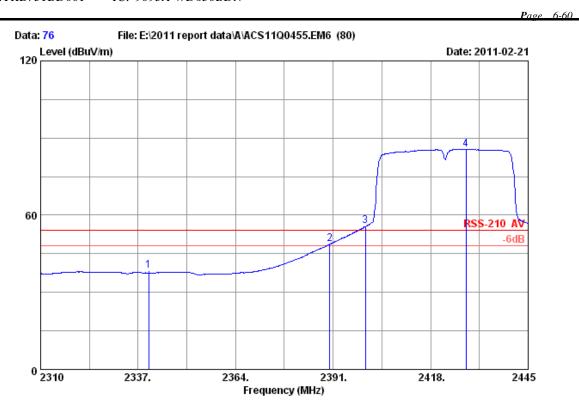
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11n HT40 CH1 2422MHz

M/N : WD650-BD-N

	Freq. (MHz)	Factor	Cable loss (dB)	•	Reading (dBuV)	Emission Level (dBuV/m)	Limits Margin (dBuV/m) (dB)	Remark
1	2330.250	29.40	7.27	36.63	50.85	50.89	74.00 23.11	Peak
2	2390.000	29.44	7.39	36.62	62.02	62.23	74.00 11.77	Peak
3	2400.000	29.44	7.43	36.62	73.98	74.23	74.00 -0.23	Peak
4	2432.580	29.46	7.46	36.61	95.44	95.75	74.00 -21.75	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. : 3m Chamber Data no. : 76

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

Limit : RSS-210 AV

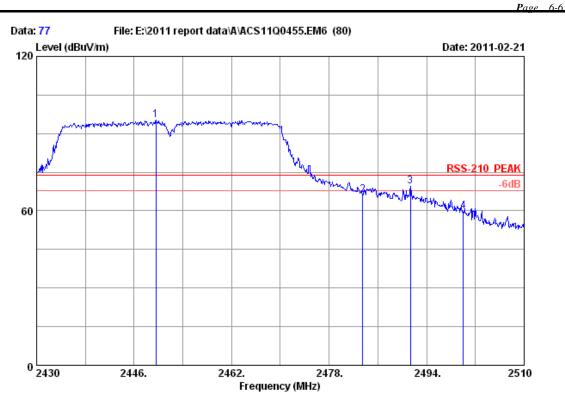
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11n HT40 CH1 2422MHz

M/N : WD650-BD-N

	Freq. (MHz)	Ant. Factor (dB/m)		Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m	Margin	Remark
1	2339.970	29.41	7.31	36.63	38.28	38.37	54.00	15.63	Average
2	2390.000	29.44	7.39	36.62	48.61	48.82	54.00	5.18	Average
3	2400.000	29.44	7.43	36.62	55.57	55.82	54.00	-1.82	Average
4	2427.855	5 29.46	7.46	36.61	85.28	85.59	54.00	-31.59	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.



Site no. : 3m Chamber Data no. : 77

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

Limit : RSS-210 PEAK

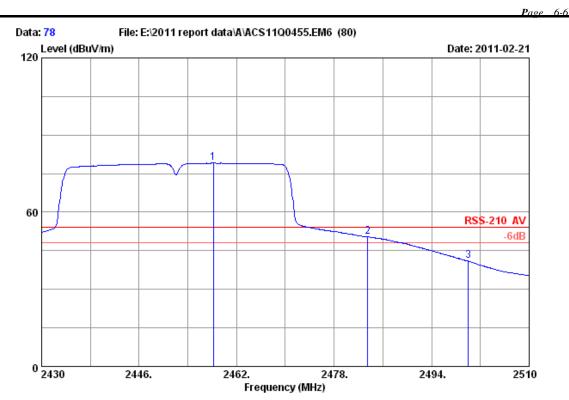
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11n HT40 CH7 2452MHz

M/N : WD650-BD-N

	-	Factor			Reading (dBuV)		Limits Ma	_	Remark	_
2	2449.600 2483.500 2491.360	29.49	7.58	36.60	94.92 65.85 69.20	95.28 66.32 69.68		28 68 32	Peak Peak Peak	
4	2500.000	29.50	7.62	36.60	59.24	59.76	74.00 14	.24	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. : 3m Chamber Data no. : 78

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

Limit : RSS-210 AV

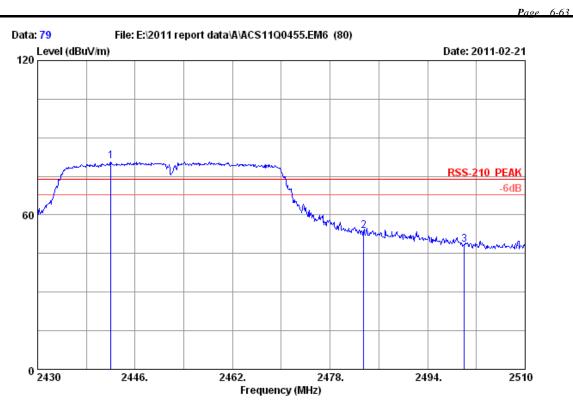
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11n HT40 CH7 2452MHz

M/N : WD650-BD-N

	j	Ant. (Cable	Amp.		Emission			
	Freq. Fa	actor 1	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz) (c	dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	2458.160 2	29.48	7.50	36.61	78.83	79.20	54.00 -	25.20	Average
2	2483.500 2	29.49	7.58	36.60	50.07	50.54	54.00	3.46	Average
3	2500.000 2	29.50	7.62	36.60	40.58	41.10	54.00	12.90	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. : 3m Chamber Data no. : 79
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : RSS-210 PEAK

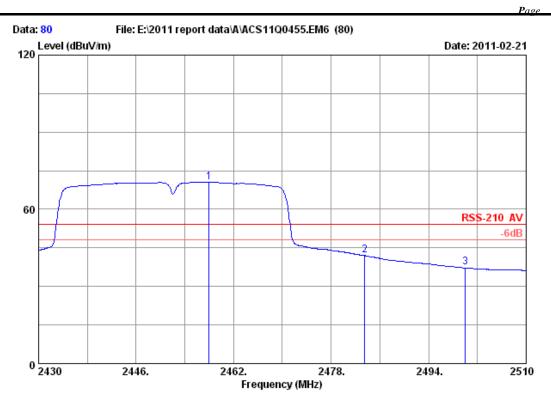
Env. / Ins. : 23*C/54% Engineer : Paul Tian

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11n HT40 CH7 2452MHz

M/N : WD650-BD-N

	Ant.	Cable	Amp.		Emission			
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m) (dB)	
2442.000	29.47	7.50	36.61	80.37	80.73	74.00	-6.73	Peak
2483.500	29.49	7.58	36.60	53.24	53.71	74.00	20.29	Peak
2500.000	29.50	7.62	36.60	48.07	48.59	74.00	25.41	Peak
	(MHz) 2442.000 2483.500	Freq. Factor (MHz) (dB/m) 	Freq. Factor loss (MHz) (dB/m) (dB) 	<u>-</u>	Freq. Factor loss Factor Reading (MHz) (dB/m) (dB) (dB) (dBuV) 2442.000 29.47 7.50 36.61 80.37 2483.500 29.49 7.58 36.60 53.24	Freq. Factor loss Factor Reading Level (MHz) (dB/m) (dB) (dB) (dBuV) (dBuV/m)	Freq. Factor loss Factor Reading Level Limits (MHz) (dB/m) (dB) (dB) (dBuV) (dBuV/m) (dBuV/m) 2442.000 29.47 7.50 36.61 80.37 80.73 74.00 2483.500 29.49 7.58 36.60 53.24 53.71 74.00	Freq. Factor loss Factor Reading Level Limits Margin (MHz) (dB/m) (dB) (dB) (dBuV) (dBuV/m) (dBuV/m) (dB) 2442.000 29.47 7.50 36.61 80.37 80.73 74.00 -6.73 2483.500 29.49 7.58 36.60 53.24 53.71 74.00 20.29

- 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. : 3m Chamber Data no. : 80
Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL

Limit : RSS-210 AV

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

EUT : 150Mbps Wireless Lite N USB Adapter Power : DC 5V From PC input AC 120V/60Hz Test mode : IEEE802.11n HT40 CH7 2452MHz

M/N : WD650-BD-N

	Ant Freq. Fact (MHz) (dB/		•	Reading (dBuV)		Limits Margin (dBuV/m) (dB)	Remark	
2	2458.000 29. 2483.500 29. 2500.000 29.	49 7.58	36.60	70.27 41.60 36.81	70.64 42.07 37.33	54.00 -16.64 54.00 11.93 54.00 16.67	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 and 99% 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 except for 11n HT40(RBW=470MHz VBW=5MHz). The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB. The 99% bandwidth is tested use the occupied bandwidth function of spectrum analyzer.

7.4.Test Results

EUT: 150Mbps Wireless Lite N I	USB Adapter	
M/N: WD650-BD-N		
Test date:2011-03-28	Pressure: 100.6 kpa	Humidity: 60 %
Tested by: Sunny-lu	Test site: RF site	Temperature : 25 °C

Mode	СН	6dB bandwidth (MHz)	Limit (KHz)
	CH1	12.626	500
11b	СН6	12.133	500
	CH11	12.086	500
	CH1	16.448	500
11g	CH6	16.435	500
	CH11	16.471	500
	CH1	17.695	500
11n HT20	CH6	17.655	500
	CH11	17.730	500
	CH1	36.408	500
11n HT40	CH4	36.376	500
	CH7	36.415	500
Conclusion: PA	SS		



Temperature: 25

 $^{\circ}$ C

Tested by: Sunny-lu

Conclusion: PASS

EUT: 150Mbps Wireless Lite N USB Adapter

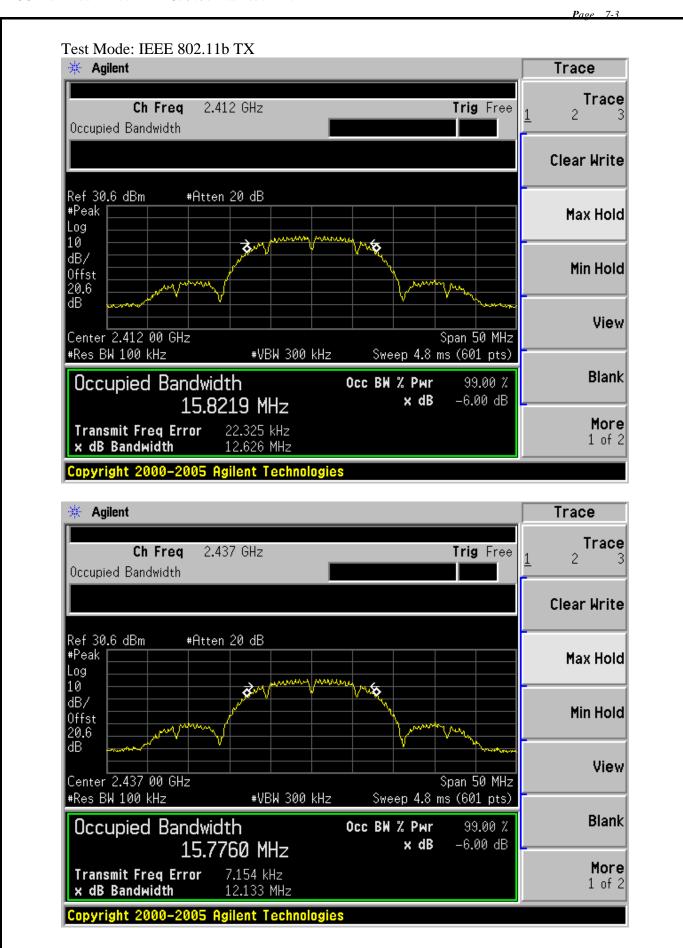
M/N: WD650-BD-N

Test date:2011-03-28 Pressure: 100.6 kpa Humidity: 60 %

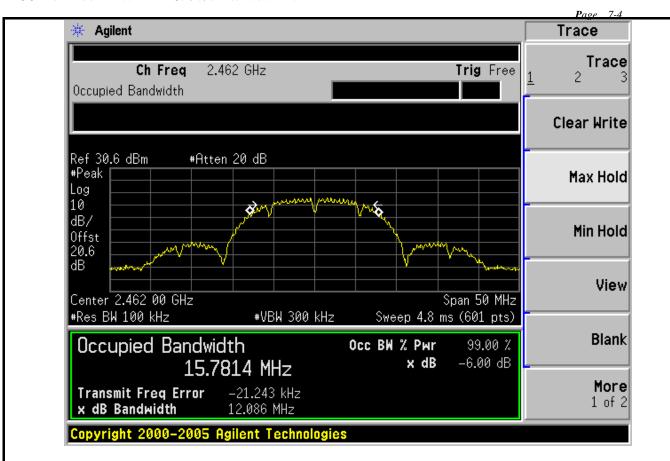
Test site: RF site

Mode	СН	99% bandwidth (MHz)	Limit (KHz)
	CH1	15.8219	500
11b	CH6	15.7760	500
	CH11	15.7814	500
	CH1	16.6143	500
11g	CH6	16.5979	500
	CH11	16.6235	500
	CH1	17.8111	500
11n HT20	CH6	17.7926	500
	CH11	17.8016	500
	CH1	36.2191	500
11n HT40	CH4	36.2021	500
	CH7	36.1942	500

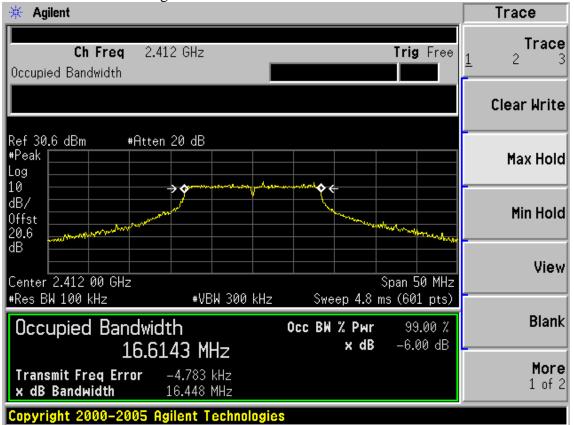




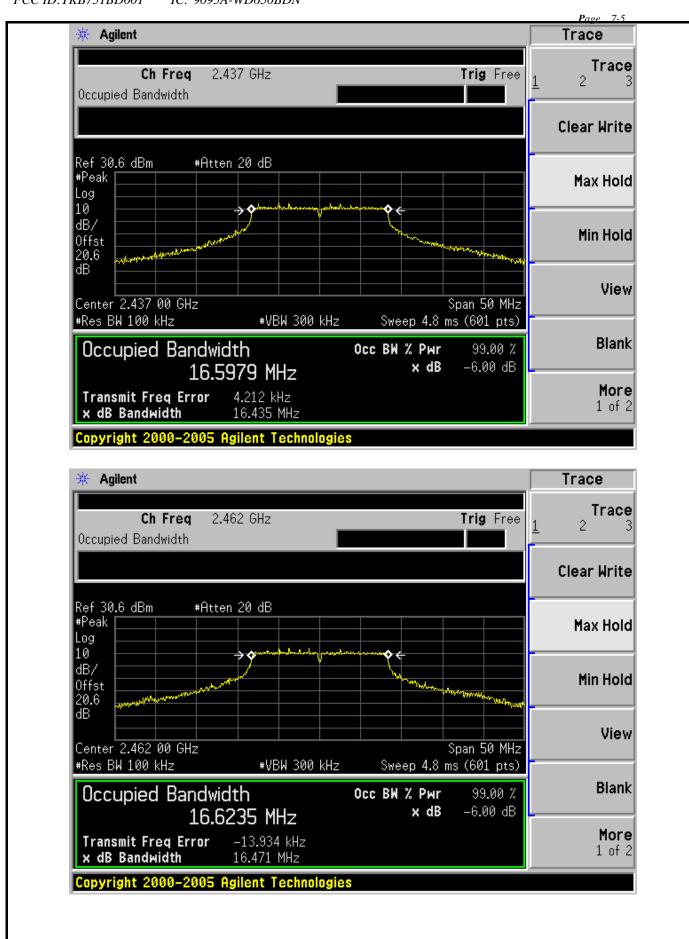




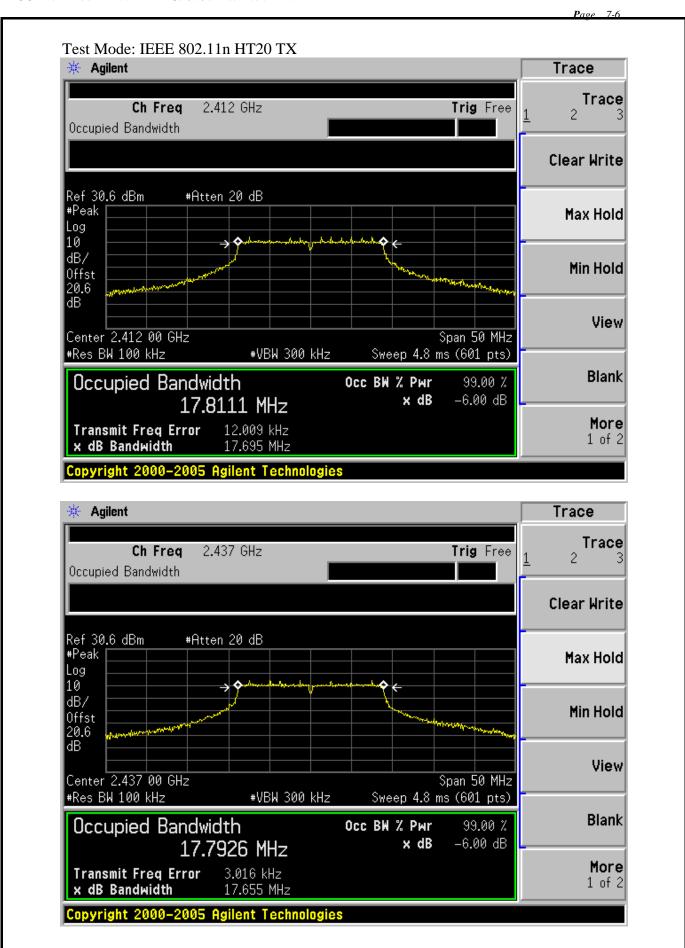




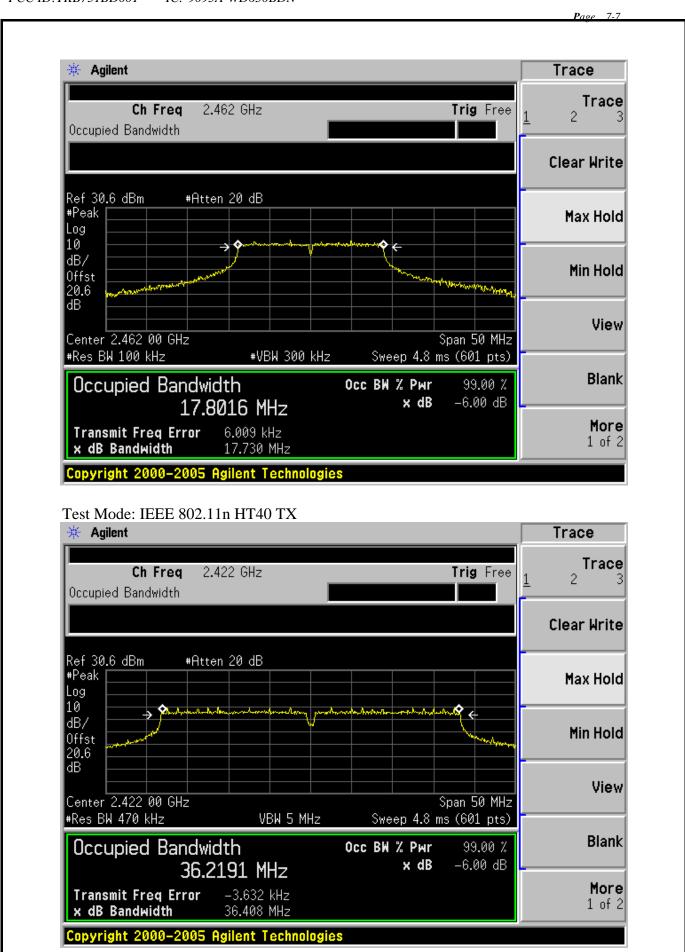


















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8. OUTPUT POWER TEST

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	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 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.



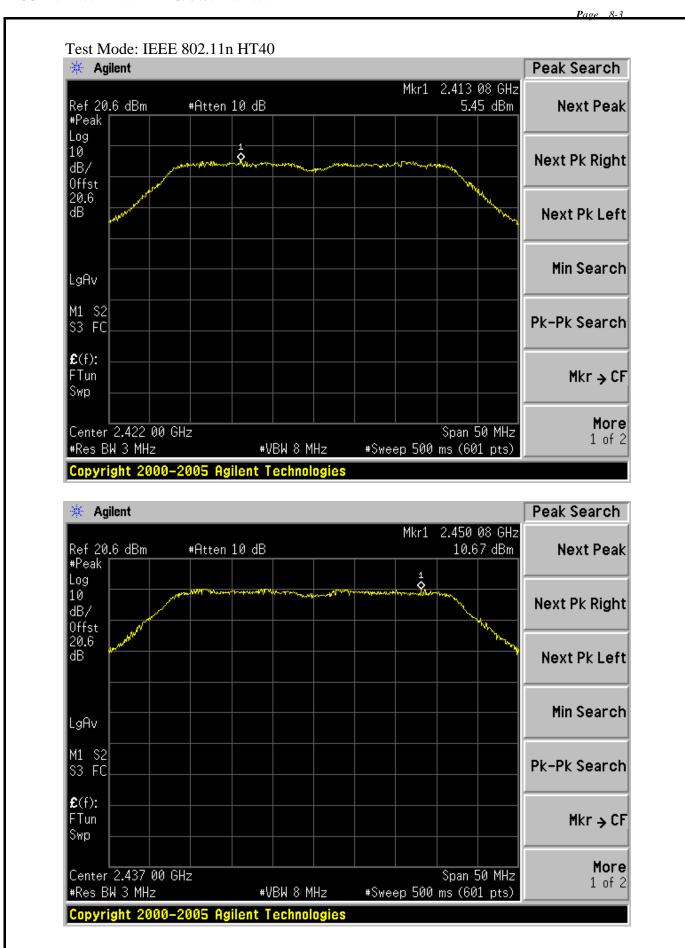
FCC ID:YKB751BD001 IC: 9095A-WD650BDN

8.4.Test Results

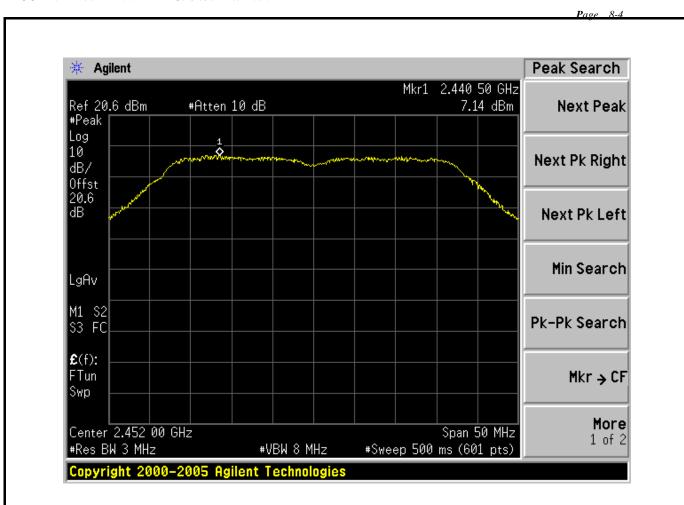
EUT: 150Mbps Wireless Lite N USB Adapter						
M/N: WD650-BD-N	M/N: WD650-BD-N					
Test date:2011-3-28	Pressure: 100.6 kpa	Humidity: 60 %				
Tested by:Sunny-lu	Test site: RF Site	Temperature : 25 °C				

Cable loss: 0	0.6dB	Attenuator lo	oss: 20 dB	Antenna	a Gain: 2.12 dBi	
Test Mode	СН	Peak output Power (dBm)			Limit (dBm)	
	CH1	18.49			30	
11b	CH6	18.86			30	
	CH11	19.24			30	
	CH1	23.62			30	
11g	CH6	25.04			30	
	CH11	24.78			30	
11	CH1	23.80			30	
11n HT20	CH6	25.26			30	
П120	CH11	24.49			30	
Test Mode	СН	Measured power(dBm)/3MHz	BW Correction factor	Output power (dBm)	Limit(dBm)	
11n	CH1	5.45	10.81	16.26	30	
HT40	CH4	10.67	10.82	21.49	30	
11140	CH7	7.14	10.82	17.96	30	
CH1 BW Corre	ction factor=10log(3	6.2191MHz/31	MHz)=10.81			
CH4 BW Corre	ction factor=10log(3	6.2021MHz/31	MHz)=10.82			
CH7 BW Corre	ction factor=10log(3	6.1942MHz/31	MHz)=10.82			
Conclusion: P.	ASS					











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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.



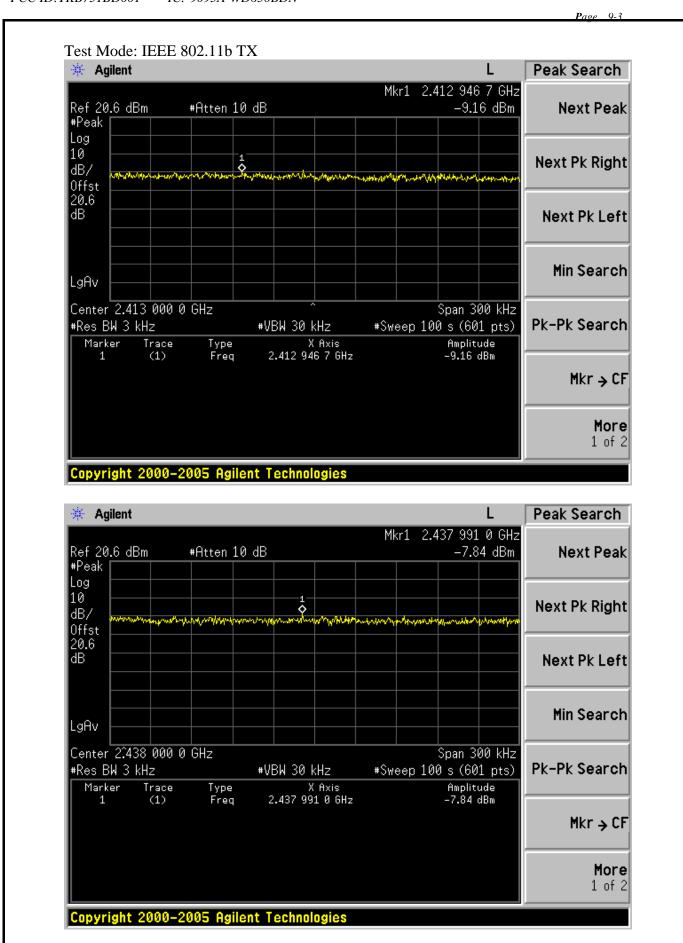
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9.4.Test Results

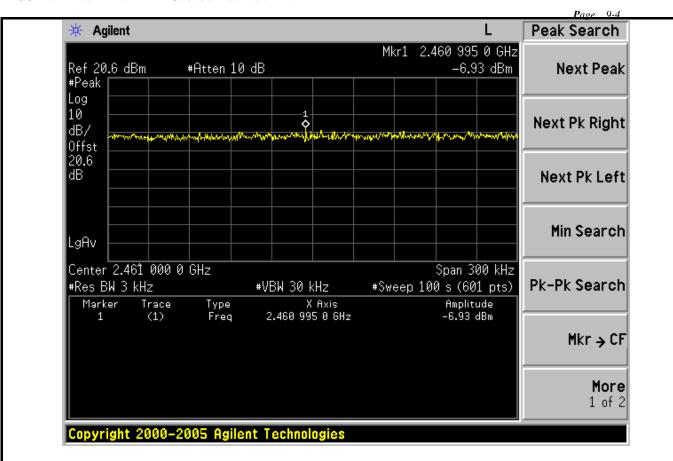
EUT: 150Mbps Wireless Lite N USB Adapter					
M/N: WD650-BD-N	M/N: WD650-BD-N				
Test date:2011-03-28	Pressure: 100.6 kpa	Humidity: 60 %			
Tested by:Sunny-lu	Test site: RF Site	Temperature : 25 °C			

Cable loss: 0.6 dB		Attenuator loss: 20 dB	Antenna Gain: 2.12 dBi		
Test Mode CH		Power density (dBm/3KHz)	Limit (dBm/3KHz)		
	CH1	-9.16	8		
11b	CH6	-7.84	8		
	CH11	-6.93	8		
	CH1	-11.11	8		
11g	CH6	-10.15	8		
	CH11	-9.90	8		
1.1	CH1	-11.37	8		
11n HT20	CH6	-10.07	8		
11120	CH11	-10.30	8		
11n	CH1	-21.8	8		
HT40	CH4	-17.4	8		
11140	CH7	-21.2	8		
Conclusion: PASS					

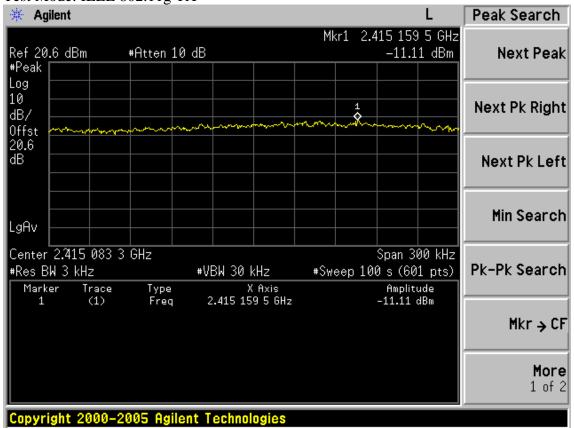




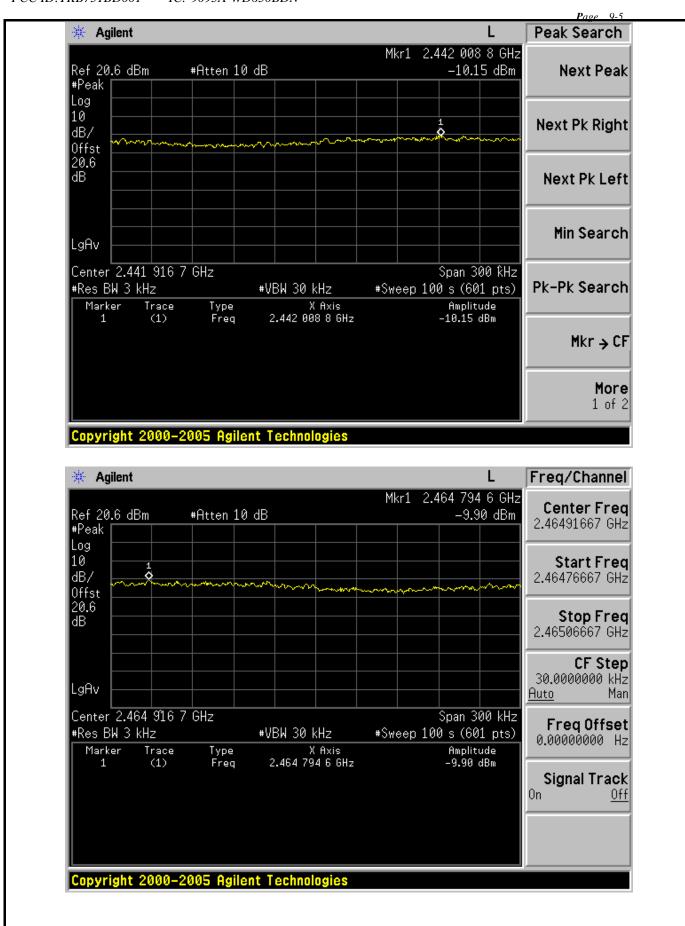




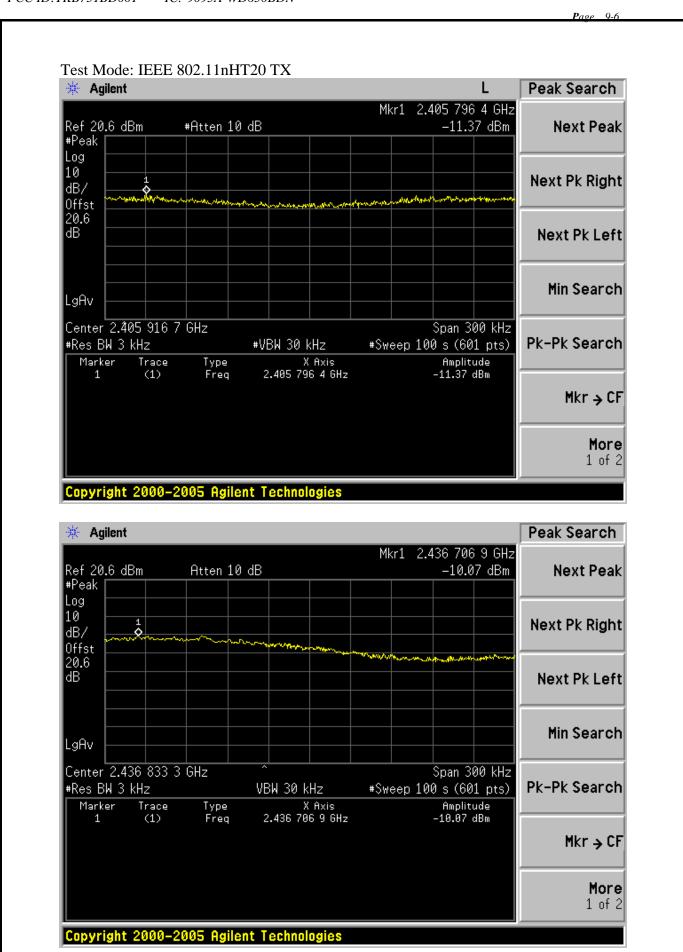




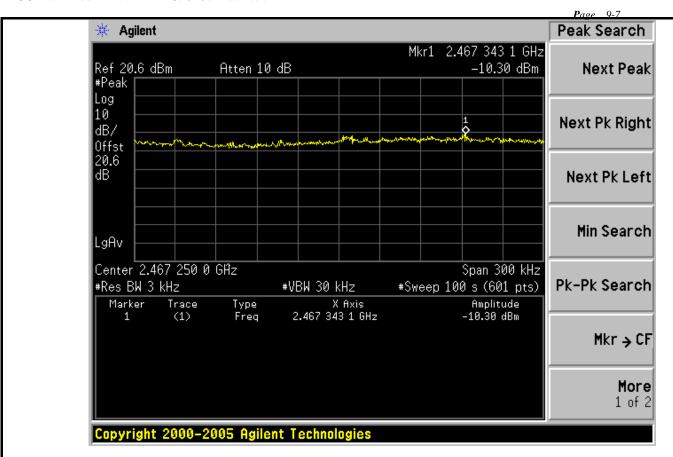


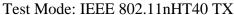


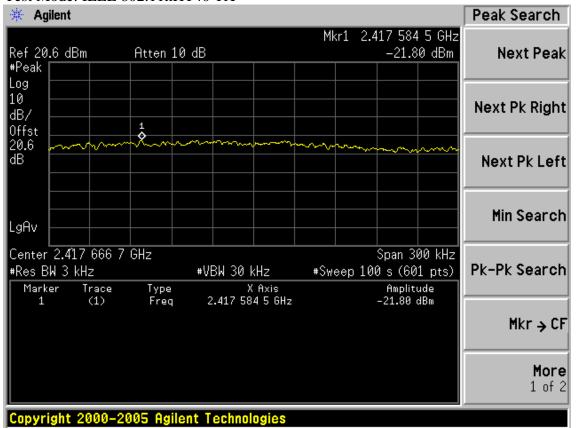




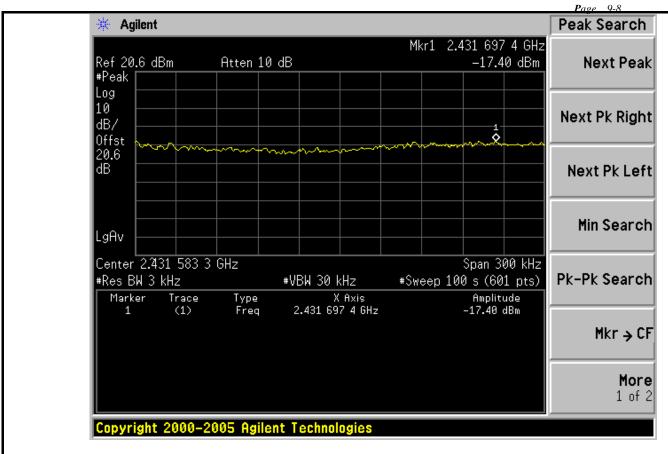


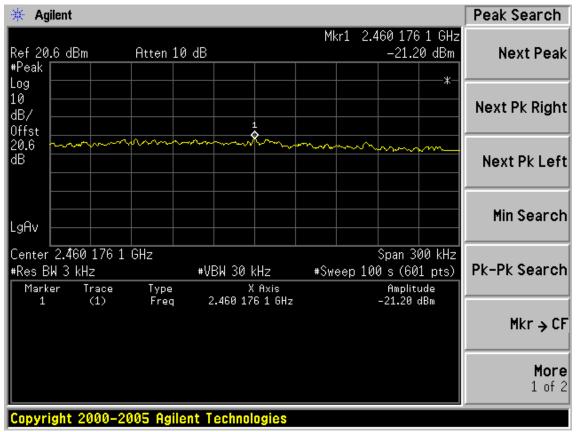














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10. ANTENNA REQUIREMENT

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 is integrated PCB antenna 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 only 2.12dBi.



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	P age 11-1
11.DEVIATION TO TEST SPECIFICATIONS	
[NONE]	