

D Agi	ilent Spectrum Analy	zer - Swept SA	·		-			<i>,</i> ,		
(# Sto	50 Q	0000000 G	Hz A	C SENSI	E:INT	Avg Typ	ALIGNAUTO e: Log-Pwr	06:10:06 P	MNov 06, 2013	Frequency
		Input: RF	PNO: Fast Trig: Free Run IFGain:Low Atten: 30 dB		Avg Hold Ext Gain	: 14/100 : -1.42 dB	DET P N N N N N		122.00	
10 di	B/div Ref 14.	42 dBm					Mk	r1 24.96: -41.8	3 2 GHz 65 dBm	Auto Tune
Log				1					1	Center Freq
4.42				_				-		23.000000000 GHz
-5.58										
15.6			/			-				Start Freq 21.000000000 GHz
10.0	·								-21.55 dBm	and street of
-25.6										Stop Freq
-35.6						-				20.000000000000
-45.6					-			التعاليد والمرابي	Labor Astallal Astronom	CF Step
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65 C						·				Freq Offse
-03.0					-				1	0 Hz
-75.6								-		
Star	1 21.000 GHz			000.000				Stop 25	.000 GHz	
#Re	S BW 100 KHZ	2	#VBW	300 KHZ			sweep	384 ms (4	uuun pts)	
MSG	_						STAT	us		

2437MHz (21GHz-25GHz)-802.11n(40MHz) (Ant 1)

2452MHz (30MHz-1GHz) -802.11n(40MHz) (Ant 1)

🗊 Agilent Spectr	um Analyzer -	Swept SA								
	50 Q	00.001	A A	C SE	NSE:INT	Aug Tur	ALIGNAUTO	06:17:29 PM	1Nov 06, 2013	Frequency
Start Freq	30.0000	DU MHZ aput: RF P IFI	NO: Fast 😱 Gain:Low	Trig: Free Atten: 30	Run dB	Avg Typ Avg Hold Ext Gain:	: 58/100 -1.42 dB	TYP	E M WWWWWW F P N N N N N	
10 dB/div	Ref 14.42	dBm				97 MHz 12 dBm	Auto Tun			
Log				100						
4.42										Center Fred
4.42						-				515.000000 MH
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		1	c = c							Start Free
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-25.6										Stop Free
35.6			1	1.00.0	-		-			1.000000000 GH
-55.6									1	1
-45.6					_					CF Step
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-65.6	-			-		-		-		Freq Offse
			1.00							0 Hz
-75.6										
1										1.00
Start 30.0 M	1Hz		#\/B14	300 647			Sween 0	Stop 1.0	000 GHz	
	W K112		# V L. VV	000 MHZ		1	encep a	o.o ma (4)	soor proj	I
SG							STATUS			



Agilent Spectrum Analyz	er - Swept SA								
X 50 Ω		1	AC SE	NSE:INT	Aug To	ALIGNAUT	0 06:17:56 P	MNov 06, 2013	Frequency
Stop Freq 5.000	Input: RF PN IFG	0: Fast 🖵 ain:Low	Trig: Free Run Avg Type Atten: 30 dB Ext Gain:			in: -1.42 dB			1.12.12.7
10 dB/div Ref 14.4	42 dBm					M	lkr1 2.45 0.8	7 0 GHz 24 dBm	Auto Tune
Log		122				1			Center Free
4.42		≬ 1	-						3.000000000 GH
		1							
5.58			-		-				Start Fre
15.6								1	1.000000000 GH
25.6						-		-24.50 dDm	Stop Fre
25.0			· · · · ·		-	_	1		5.000000000 GH
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45.6					_	_	-		CF Ste
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65.6			12.1		eath.	and the second	and the second sec	- ffran	Freq Offse
			1						он
75.6						-			
Start 1.000 GHz						AMERICA	Stop 5	5.000 GHz	
Res BW 100 kHz	1	#VBW	300 kHz	1.0		Sweep	384 ms (4	0001 pts)	
SG						STAT	US	_	

2452MHz (1GHz-5GHz) -802.11n(40MHz) (Ant 1)

2452MHz (5GHz-9GHz) -802.11n(40MHz) (Ant 1)

🗊 Agilent Spe	ectrum Analyzer	- Swept SA								
Stop Fre	50 Ω q 9.00000	0000 GHz	1	AC SE		Avg Typ	ALIGNAUTO	D6:18:16 PM TRAC	1 2 3 4 5 6	Frequency
	Def 1/ /2	dBm	NO: Fast 🖵 Gain:Low	Atten: 30	dB	Ext Gair	а: -1.42 dВ Мк	™ 1 5.838 -50.62	5 GHz 2 dBm	Auto Tune
4.42	Rei 14.42									Center Freq 7.000000000 GHz
-5.58										Start Freq 5.000000000 GHz
-25.6									-24.50 dBm	Stop Freq 9.000000000 GHz
-45.6	GERMAN ALEMPHANIST		n an talan	(¹⁶ Ann Maler and an Ind	noutrepatedite	ark a ful the affiliance as	Kalifickátskalalogy, "I	in stal hijbenstelning, ji	y a ches ad had with	CF Step 400.000000 MHz <u>Auto</u> Man
-65.6	Press, day of the desident of	And the cost of	ion the old (1)	treatment. It	Level Western	, , , , , , , , , , , , , , , , , , ,	and the second second second second	ine heronalo nordene	all an si an air an	Freq Offset 0 Hz
-75.6 Start 5.00	0 GHz		#\/P\W	200 (1)-				Stop 9.	000 GHz	
MSG	IVU KHZ		#VBW	300 KHZ	-		status	104 IIIS (41	oo i pisj	



D Agilent S	pectrum Analyzer -	Swept SA							
XI	50 Ω		A	C SEI	NSE:INT		ALIGN AUTO	06:18:35 PMNov 06	2013 Erequeret
Stop Freq 13.000000000 GHz Input: RF PNO: Fast IFGain:Low			Trig: Free Atten: 30	Av Trig: Free Run Av Atten: 30 dB Ex		/pe: Log-Pwr Id: 17/100 in: -1.42 dB	TRACE 1 2 3 TYPE MWWW DET P N N	456 Frequency	
10 dB/div	Ref 14.42	dBm					Mkı	1 12.029 8 G -51.471 dl	iHz Auto Tune Bm
4 42				11					Center Free
									11.00000000 GH2
-5.58	11	52		$t \equiv r$	-				Start Free
-15.6									9.00000000 GH2
-25.6								~24.3	Stop Fred
-35.6									13.00000000 GH:
-45.6							● ¹		CF Step 400.000000 MH
-55.6	ang should be have a start of			n Milanda a shearach	A Hotel Martin	limites, that	alian na sana kapa na sana na sana sana sana sana sana sa		Auto Mar
-65.6		- 10 P			COCOS				Freq Offse
-75.6									
Start 9.0 #Res BM	00 GHz	-	#VBW	300 kHz			Sween	Stop 13.000 (GHz pts)
MSG				See Ritz		_	STATU	s	hred

2452MHz (9GHz-13GHz) -802.11n(40MHz) (Ant 1)

2452MHz (13GHz-17GHz) -802.11n(40MHz) (Ant 1)

🗊 Agilent Spi	ctrum Analyzer -	Swept SA										
Stop Fre	50 Ω q 17.00000	00000 GI	lz	AC SEI		Avg Typ Avg Hold	ALIGNAUTO : Log-Pwr : 17/100	06:18:57 F TRA TY	MNov 06, 2013 E 1 2 3 4 5 6 PE MWWWWW	Frequency		
	IFGain:Low Atten: 30 dB Ext Gain: -1.42 dB DETENNINN Mkr1 16.868 7 GHz 0 dB/div Ref 14.42 dBm -48.463 dBm											
4.42										Center Freq 15.000000000 GHz		
-5.58		1 Et								Start Freq 13.000000000 GHz		
-25.6									-24.50 dBm	Stop Freq 17.000000000 GHz		
-45.6	wennerdd Helline 11. diw	19 Marcal Mital Liptor	ulk leverk we dree		and and the second	an an dala da sa bi kata (r.	De Arenderezzare	. h. Jacob Heating		CF Step 400.000000 MHz <u>Auto</u> Man		
-65.6	alluniite e se site di se se site di	and the second second	i o fuo di Lori di di di di					instal last to		Freq Offset 0 Hz		
-75.6 Start 13.0	000 GHz		#\/P\A	200 647	_		Swaap 3	Stop 17	.000 GHz	1		
MSG	100 802	-	#VDVV	500 KHZ	-		STATUS	04 115 (4	000 i ptsj			



ALIGNAUTO D6:19:13 PM Nov 06, 2013 Trig: Free Run Avg Type: Log-Pwr Atten: 30 dB Ext Gain: -1.42 dB Mkr1 20.909 0 GHz -47.916 dBm	Frequency Auto Tune Center Free 19.000000000 GH:	
Trig: Free Run Avgl/bil: 20100 Trie: Free Run Avgl/bil: 20100 Atten: 30 dB Ext Gain: -1.42 dB Mkr1 20.909 0 GHz -47.916 dBm	Auto Tune Center Frec 19.00000000 GH:	
Mkr1 20.909 0 GHz -47.916 dBm	Auto Tune Center Free 19.00000000 GH:	
	Center Free 19.000000000 GH: Start Free	
	19.00000000 GH:	
	Start Free	
	- Curtine	
	17.000000000 GH	
-24.50 dBm		
	21.000000000 GH	
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an fan fan fan fan fan fan fan fan fan f		
	Freq Offse	
Stop 21.000 GHz		
300 KHZ Sweep 384 ms (40001 pts)		
/BW	A und definited into all of the second secon	

2452MHz (17GHz-21GHz) -802.11n(40MHz) (Ant 1)

2452MHz (21GHz-25GHz) -802.11n(40MHz) (Ant 1)

🗊 Agilent Spectrum Analyzer - Swept SA								
50 Q	AC	SENSE:INT	Al	IGNAUTO	06:19:42 Pf	4Nov 06, 2013	Frequency	
Stop Freq 25.000000000	GHz Tria: Eroo Bun		Avg Type: I	Avg Type: Log-Pwr TF			Frequency	
Input: RF	PNO: Fast 😱 IFGain:Low	Atten: 30 dB	Ext Gain: -1	.42 dB	DE	TPNNNNN	1212	
10 dB/div Ref 14.42 dBm				Mkr1	24.581	5 GHz 38 dBm	Auto Tune	
Log								
10							CenterFreq	
4.42							23.000000000 GHz	
-5.58								
	1 1 2 1	1					Start Free	
-15.6							21.00000000 GHz	
	1.1 1					-24 50 dBm		
-25.6			-			21,00 0011	Stop Free	
100		1 - 1 1 1 - 1				1.000	25.00000000 GH	
-35.6					1	1	the second second	
-45.6						and Bulleting	CF Step	
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-55.6	und beine Generation (Steener	and the second particular production of	demostration is a second state		10 I. I		<u>Auto</u> Man	
							Contract Contract	
-65.6							Freq Offset	
	1.1.1			(1)		1.000	0 Hz	
-75.6								
	1						100	
start 21.000 GHz #Res BW 100 kHz	#VBW	300 kHz	S	weep 3	stop 25 84 ms (4	000 GHz		
MSG		411.27229		STATUS				

6. Radiated Emission Band Edge

6.1. Test Equipment

The following test equipments are used during the test:

Radiated Emission Band Edge / CB1

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Double Ridged Guide	Schwarzback	BBHA 9120	D743	2014/02/17
Horn Antenna				
Spectrum Analyzer	Agilent	E4440A	MY46187335	2014/01/27
k Type Cable	Huber Suhner	Sucoflex 102	25623/2	2014/02/21

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

6.2. Test Setup





6.3. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

6.4. Test Procedure

The EUT was setup according to ANSI C63.4: 2009 and tested according to DTS test procedure of KDB558074 for compliance to FCC 47CFR 15.247 requirements. The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4: 2009 on radiated measurement.

6.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2012

6.6. Uncertainty

The measurement uncertainty ± 3.9 dB above 1GHz

6.7. Test Result

Radiated is defined as

Site : CB1	Time : 2013/09/10 - 10:34
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11b 2412MHz



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 - 10:38
Limit : FCC_SpartC_15.247_H_03M_AV	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11b 2412MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	30.059	12.230	42.289	-11.711	54.000	AVERAGE
2		2390.000	30.888	18.597	49.485	-4.515	54.000	AVERAGE
3	*	2411.200	31.108	69.634	100.742	46.742	54.000	AVERAGE

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 - 10:41
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11b 2412MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	30.059	22.026	52.085	-21.915	74.000	PEAK
2		2389.600	30.884	30.031	60.915	-13.085	74.000	PEAK
3		2390.000	30.888	30.048	60.936	-13.064	74.000	PEAK
4	*	2411.800	31.115	78.332	109.446	35.446	74.000	PEAK

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 - 10:45
Limit : FCC_SpartC_15.247_H_03M_AV	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11b 2412MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	30.059	12.511	42.570	-11.430	54.000	AVERAGE
2		2390.000	30.888	22.038	52.926	-1.074	54.000	AVERAGE
3	*	2412.800	31.125	73.837	104.962	50.962	54.000	AVERAGE

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 – 10:49
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11b 2462MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1	*	2462.000	31.635	74.005	105.640	31.640	74.000	PEAK
2		2483.500	31.858	28.174	60.032	-13.968	74.000	PEAK
3		2500.000	31.988	25.338	57.327	-16.673	74.000	PEAK

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 – 10:53
Limit : FCC_SpartC_15.247_H_03M_AV	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11b 2462MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1	*	2461.300	31.628	70.194	101.822	47.822	54.000	AVERAGE
2		2483.500	31.858	16.976	48.834	-5.166	54.000	AVERAGE
3		2500.000	31.988	12.747	44.736	-9.264	54.000	AVERAGE

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 – 10:58
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11b 2462MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1	*	2461.900	31.633	78.322	109.956	35.956	74.000	PEAK
2		2483.500	31.858	29.132	60.990	-13.010	74.000	PEAK
3		2500.000	31.988	26.081	58.070	-15.930	74.000	PEAK

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 - 11:03
Limit : FCC_SpartC_15.247_H_03M_AV	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11b 2462MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1	*	2461.300	31.628	74.244	105.872	51.872	54.000	AVERAGE
2		2483.500	31.858	21.014	52.872	-1.128	54.000	AVERAGE
3		2500.000	31.988	14.052	46.041	-7.959	54.000	AVERAGE

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 - 11:07
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11g 2412MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	30.059	23.730	53.789	-20.211	74.000	PEAK
2		2385.000	30.836	38.114	68.950	-5.050	74.000	PEAK
3		2390.000	30.888	39.550	70.438	-3.562	74.000	PEAK
4	*	2412.200	31.118	76.873	107.992	33.992	74.000	PEAK

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 - 11:12
Limit : FCC_SpartC_15.247_H_03M_AV	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11g 2412MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	30.059	12.125	42.184	-11.816	54.000	AVERAGE
2		2390.000	30.888	21.187	52.075	-1.925	54.000	AVERAGE
3	*	2411.000	31.106	64.905	96.011	42.011	54.000	AVERAGE

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 - 11:17
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11g 2412MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	30.059	23.285	53.344	-20.656	74.000	PEAK
2		2387.600	30.864	40.150	71.013	-2.987	74.000	PEAK
3		2390.000	30.888	40.382	71.270	-2.730	74.000	PEAK
4	*	2411.800	31.115	78.737	109.851	35.851	74.000	PEAK

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 - 11:22
Limit : FCC_SpartC_15.247_H_03M_AV	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11g 2412MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	30.059	12.097	42.156	-11.844	54.000	AVERAGE
2		2390.000	30.888	22.885	53.773	-0.227	54.000	AVERAGE
3	*	2412.800	31.125	66.275	97.400	43.400	54.000	AVERAGE

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 - 11:27
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11g 2462MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1	*	2462.000	31.635	72.482	104.117	30.117	74.000	PEAK
2		2483.500	31.858	29.290	61.148	-12.852	74.000	PEAK
3		2484.100	31.864	31.090	62.954	-11.046	74.000	PEAK
4		2500.000	31.988	24.922	56.911	-17.089	74.000	PEAK

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 - 11:31
Limit : FCC_SpartC_15.247_H_03M_AV	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11g 2462MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1	*	2461.100	31.626	60.665	92.291	38.291	54.000	AVERAGE
2		2483.500	31.858	15.733	47.591	-6.409	54.000	AVERAGE
3		2500.000	31.988	13.819	45.808	-8.192	54.000	AVERAGE

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 - 11:36
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11g 2462MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1	*	2460.800	31.622	78.142	109.765	35.765	74.000	PEAK
2		2483.500	31.858	40.388	72.246	-1.754	74.000	PEAK
3		2500.000	31.988	28.698	60.687	-13.313	74.000	PEAK

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 - 11:41
Limit : FCC_SpartC_15.247_H_03M_AV	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11g 2462MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1	*	2461.100	31.626	68.245	99.871	45.871	54.000	AVERAGE
2		2483.500	31.858	21.751	53.609	-0.391	54.000	AVERAGE
3		2500.000	31.988	18.452	50.441	-3.559	54.000	AVERAGE

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 - 09:24
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11n20MHz 2412MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	30.059	23.541	53.600	-20.400	74.000	PEAK
2		2388.200	30.869	38.370	69.240	-4.760	74.000	PEAK
3		2390.000	30.888	34.862	65.750	-8.250	74.000	PEAK
4	*	2412.600	31.123	73.135	104.258	30.258	74.000	PEAK

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 - 09:29
Limit : FCC_SpartC_15.247_H_03M_AV	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11n20MHz 2412MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	30.059	12.234	42.293	-11.707	54.000	AVERAGE
2		2390.000	30.888	18.334	49.222	-4.778	54.000	AVERAGE
3	*	2413.200	31.128	61.585	92.714	38.714	54.000	AVERAGE

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 - 09:33
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11n20MHz 2412MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	30.059	24.288	54.347	-19.653	74.000	PEAK
2		2388.000	30.868	41.308	72.176	-1.824	74.000	PEAK
3		2390.000	30.888	38.214	69.102	-4.898	74.000	PEAK
4	*	2413.800	31.135	77.272	108.407	34.407	74.000	PEAK

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 - 09:36
Limit : FCC_SpartC_15.247_H_03M_AV	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11n20MHz 2412MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
	1	2310.000	30.059	12.990	43.049	-10.951	54.000	AVERAGE
	2	2390.000	30.888	22.936	53.824	-0.176	54.000	AVERAGE
:	3 *	2413.000	31.127	67.205	98.332	44.332	54.000	AVERAGE

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 – 09:42
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11n20MHz 2462MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
	1 *	2462.800	31.644	73.456	105.099	31.099	74.000	PEAK
2	2	2483.500	31.858	33.747	65.605	-8.395	74.000	PEAK
	3	2500.000	31.988	25.821	57.810	-16.190	74.000	PEAK

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 – 09:47
Limit : FCC_SpartC_15.247_H_03M_AV	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11n20MHz 2462MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1	*	2462.800	31.644	62.064	93.707	39.707	54.000	AVERAGE
2		2483.500	31.858	15.611	47.469	-6.531	54.000	AVERAGE
3		2500.000	31.988	13.518	45.507	-8.493	54.000	AVERAGE

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 – 09:51
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11n20MHz 2462MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1	*	2461.400	31.629	81.068	112.697	38.697	74.000	PEAK
2		2483.500	31.858	40.998	72.856	-1.144	74.000	PEAK
3		2483.900	31.862	41.444	73.306	-0.694	74.000	PEAK
4		2500.000	31.988	30.595	62.584	-11.416	74.000	PEAK

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 - 09:56
Limit : FCC_SpartC_15.247_H_03M_AV	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11n20Mhz 2462MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
	*	2461.000	31.624	69.448	101.073	47.073	54.000	AVERAGE
	2	2483.500	31.858	21.387	53.245	-0.755	54.000	AVERAGE
3	3	2500.000	31.988	17.713	49.702	-4.298	54.000	AVERAGE

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 - 10:01
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11n40MHz 2422MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	30.059	24.828	54.887	-19.113	74.000	PEAK
2		2381.533	30.800	42.077	72.878	-1.122	74.000	PEAK
3		2390.000	30.888	39.389	70.277	-3.723	74.000	PEAK
4	*	2423.767	31.239	71.161	102.400	28.400	74.000	PEAK

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 - 10:06
Limit : FCC_SpartC_15.247_H_03M_AV	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11n40MHz 2422MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	30.059	11.682	41.741	-12.259	54.000	AVERAGE
2		2384.100	30.827	21.786	52.613	-1.387	54.000	AVERAGE
3		2390.000	30.888	19.671	50.559	-3.441	54.000	AVERAGE
4	*	2419.333	31.193	58.840	90.033	36.033	54.000	AVERAGE

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 - 10:11
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11n40MHz 2422MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	30.059	23.584	53.643	-20.357	74.000	PEAK
2		2382.933	30.815	42.942	73.757	-0.243	74.000	PEAK
3		2390.000	30.888	42.166	73.054	-0.946	74.000	PEAK
4	*	2423.300	31.233	75.624	106.858	32.858	74.000	PEAK

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 - 10:16
Limit : FCC_SpartC_15.247_H_03M_AV	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11n40MHz 2422MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		2310.000	30.059	11.738	41.797	-12.203	54.000	AVERAGE
2		2383.400	30.820	22.980	53.800	-0.200	54.000	AVERAGE
3		2390.000	30.888	21.889	52.777	-1.223	54.000	AVERAGE
4	*	2423.533	31.237	62.033	93.269	39.269	54.000	AVERAGE

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 - 10:21
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11n40MHz 2452MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1	*	2450.200	31.513	70.485	101.998	27.998	74.000	PEAK
2		2483.500	31.858	35.010	66.868	-7.132	74.000	PEAK
3		2493.267	31.959	36.468	68.427	-5.573	74.000	PEAK
4		2500.000	31.988	28.883	60.872	-13.128	74.000	PEAK

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 - 10:27
Limit : FCC_SpartC_15.247_H_03M_AV	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11n40MHz 2452MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1	*	2450.067	31.512	57.831	89.342	35.342	54.000	AVERAGE
2		2483.500	31.858	16.243	48.101	-5.899	54.000	AVERAGE
3		2491.000	31.936	17.379	49.315	-4.685	54.000	AVERAGE
4		2500.000	31.988	14.205	46.194	-7.806	54.000	AVERAGE

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 - 10:32
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11n40MHz 2452MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1	*	2453.133	31.543	72.951	104.494	30.494	74.000	PEAK
2		2483.500	31.858	32.320	64.178	-9.822	74.000	PEAK
3		2493.133	31.958	40.986	72.944	-1.056	74.000	PEAK
4		2500.000	31.988	30.379	62.368	-11.632	74.000	PEAK

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	Time : 2013/09/10 - 10:36
Limit : FCC_SpartC_15.247_H_03M_AV	Margin : 6
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	Power : AC120V/60Hz
EUT : Wireless N VDSL2 VoIP Combo WAN Gigabit IAD	Note : Mode1:Transmit_802.11n40MHz 2452MHz



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1	*	2453.133	31.543	61.090	92.633	38.633	54.000	AVERAGE
2		2483.500	31.858	19.934	51.792	-2.208	54.000	AVERAGE
3		2491.000	31.936	21.709	53.645	-0.355	54.000	AVERAGE
4		2500.000	31.988	17.384	49.373	-4.627	54.000	AVERAGE

- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

7. Occupied Bandwidth

7.1. Test Equipment

The following test equipments are used during the test:

Occupied Bandwidth / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A-EXA	US47140172	2014/08/05

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

7.2. Test Setup



7.3. Test Procedures

The EUT was setup according to ANSI C63.4: 2009; tested according to DTS test procedure section 8.1 of KDB558074 v03r01 for compliance to FCC 47CFR 15.247 requirements. Set RBW = 100KHz, VBW \geq 3xRBW, Sweep time=Auto, Set Peak detector.

7.4. Limits

The 6 dB bandwidth must be greater than 500 kHz.

7.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2012

7.6. Uncertainty

The measurement uncertainty is defined as ±150Hz



7.7. Test Result

Product	Wireless N VDSL2 VoIP Combo WAN Gigabit IAD					
Test Item	Occupied Bandwidth	Occupied Bandwidth				
Test Mode	Mode 1: Transmit					
Date of Test	2013/11/06	Test Site	SR7			

IEEE 802.11b								
Channel No.	Frequency (MHz)	Measurement Level (MHz)	Required Limit (MHz)	Result				
1	2412	7.60	≧0.5	Pass				
6	2437	8.08	≧0.5	Pass				
11	2462	8.09	≧0.5	Pass				

🚺 Agilent Spectrum Analyzer - Occupied BW 05:23:30 PM Nov 01, 2013 50 \$ Freq / Channel Center Freq: 2.412000000 GHz Trig: Free Run Avg|Hol Center Freq 2.412000000 GHz Radio Std: None Avg|Hold:>10/10 Ext Gain: -1.00 dB Input: RF 9 #IFGain:Low #Atten: 30 dB Radio Device: BTS Ref 30 dBm 10 dB/div _og 20 **Center Freq** 2.412000000 GHz 10 mann mana 1 s.A. ¢ Mar -10 -20 -30 NA m -40 -50 -60 CF Step 2.600000 MHz Span 26 MHz Center 2.412 GHz Auto Man #Res BW 100 kHz #VBW 300 kHz Sweep 2.533 ms **Occupied Bandwidth Total Power** 22.40 dBm 10.099 MHz **Transmit Freg Error** 12.218 kHz **OBW Power** 99.00 % x dB Bandwidth 7.603 MHz x dB -6.00 dB MSG STATUS



Channel 6





Product	Vireless N VDSL2 VoIP Combo WAN Gigabit IAD					
Test Item	Dccupied Bandwidth					
Test Mode	Mode 1: Transmit					
Date of Test	2013/11/06	Test Site	SR7			

IEEE 802.11g					
Channel No.	Frequency	Measurement Level	Required Limit	Pocult	
Channel No.	(MHz)	(MHz) (MHz)		Kesult	
1	2412	15.11	≧0.5	Pass	
6	2437	15.06	≧0.5	Pass	
11	2462	15.10	≧0.5	Pass	

M Agilent Sp	eetrum Analyzer - Occupi	ed BW	- CENCEANE					
Center F	enter Freq 2.412000000 GHz		Center Freq: 2.4120 Trig: Free Run #Atten: 30 dB	:enter Freq: 2.412000000 GHz Trig: Free Run Avg Hold:>10/10 Atten: 30 dB Ext Gain: -1.00 dB		e: BTS	Freq / Channel	
10 dB/div Log	Ref 20 dBm		_		1			
10 0	marin	American Survey Survey	mon man man	Burnhandberrahren	min		Center Free 2.412000000 GH;	
-10	1							
-30 -40 44m-l	Waynanin				JANA L	Uppy wards		
-50		-						
Center 2 #Res BW	2.412 GHz / 100 kHz		#VBW 300	kHz	Span Sweep 2.	26 MHz .533 ms	CF Step 2.600000 MHz <u>Auto</u> Man	
Occu	Occupied Bandwidth 16.286 MHz			Power 20	20.97 dBm			
Trans	Transmit Freq Error 12.794 kl		Hz OBW Power		99.00 %			
x dB I	Bandwidth	15.11 M	Hz xdB		-6.00 dB			
MSG				ST	TUS			





<u>Channel 6</u>

🗊 Agilent Sp	leetrum Analyzer -	Occupied BW								
Center F	50 Ω Freq 2.4370	00000 G	Hz	Center F	NSE:INT req: 2.43700)0000 GHz	ALIGNAUTO	05:31:01 Radio St	PMNov 01, 2013 d: None	Save
10 dB(div	Input: RF IFGain:Low #Atten: 30 dB Ext Gain: -1.00 dB Radio Device: BTS									State►
		handhar	mahan	hundhing	frontmon	hmahanh	montomat	-		Thorn
-20 ~^\/ //	ybay www							12 M	Larran Ina Jar	
-40 -50 -60										Data (Export) ▶ Trace 1
-70 Center 2 #Res BW	2.437 GHz 100 kHz	<u> </u>		#VE	300 I	(Hz		Sp: Sweep	an 26 MHz 2.533 ms	Screen Image
Occu	pied Band	width 16.4	55 MI	Hz	Total P	ower	25.43	3 dBm		
Trans	mit Freq Err	ror	-24483	Hz	OBW F	ower	99	9.00 %		
x dB B	Bandwidth		15.06 N	IHz	x dB		-6.	.00 dB		
MSG							STATUS			

🗊 Agilent Spec	trum Analyzer - Occ	upied BW							
Center Fro	50 Ω eq 2.462000 Input	RF #IFGain:1	OW #Atten	SENSE:INT Freq: 2.4620 ree Run : 30 dB	00000 GHz Avg Hold: Ext Gain:	ALIGNAUTO > 10/10 -1.00 dB	D5:31:33 Radio St Radio De	: PMNov 01, 2013 :d: None evice: BTS	Freq / Channel
10 dB/div Log	Ref 20 dB	m	1	-			r	1	
10		antonation	alman alm	in monther	Turnhurn	werder. 1			Center Freq 2.462000000 GHz
-10	prof.			V		~~~~~	N N		
-30 -40 142-1/1	property						- Vr	milyumati	
-50								-	
-70			14						CF Step
Center 2.4 #Res BW	62 GHz 100 kHz		#	/BW 300	kHz		Sp Sweep	an 26 MHz 2.533 ms	Auto Man
Occup	Occupied Bandwidth 16.300 MHz Transmit Freq Error -22433 Hz			Total F	Total Power 18.		ð dBm		
Transm				OBW Power 9		99	9.00 %		
x dB Ba	andwidth	15	.10 MHz	x dB		-6.	00 dB		
MSG						STATUS	1		

Product	Vireless N VDSL2 VoIP Combo WAN Gigabit IAD					
Test Item	Dccupied Bandwidth					
Test Mode	Mode 1: Transmit					
Date of Test	2013/11/06	Test Site	SR7			

IEEE 802.11n (20MHz) (Ant 0)								
Channel No.	Frequency	Measurement Level	Required Limit	Result				
	(MHZ) (MHZ)		(MHZ)					
1	2412	15.02	≧0.5	Pass				
6	2437	15.10	≧0.5	Pass				
11	2462	15.71	≧0.5	Pass				

D Agilent Spectru	m Analyzer - Occup	ried BW							
Center Freq	So Ω ALIGNAUTO D5:34:01 PM Nov 01, 2013 Center Freq 2.412000000 GHz Center Freq: 2.412000000 GHz Radio Std: None Input: RF //IFGain:Low #Atten: 30 dB Ext Gain: -1.00 dB Radio Device: BTS							Freq / Channel	
	June (min)	ortown through the more	tuportratal	worthurn	hnnhwin	twomburn	any		Center Freq 2.412000000 GHz
-30 -40 -50 -60	Went							MAAN DALAMA	
-70 Center 2.412 #Res BW 10	2 GHz 00 kHz		#VE	300 I	KHz		Sp Sweep	an 26 MHz 2.533 ms	CF Step 2.600000 MHz <u>Auto</u> Man
Occupie	Occupied Bandwidth 17.433 MHz Transmit Freq Error 3.941 kHz x dB Bandwidth 15.02 MHz		Ηz	Total Power IZ Hz OBW Power Hz x dB		20.0	20.02 dBm		
Transmit x dB Ban			(Hz NHz			99.00 % -6.00 dB			
MSG						STATUS	6		



<u>Channel 6</u>

D Agilent Spect	rum Analyzer -	Occupied BW								
Center Fre	eq 2.4370	00000 G put: RF #IF	Hz Gain:Low	AC SE Center F Trig: Fre #Atten: 3	NSE:INT req: 2.43700 e Run 0 dB	00000 GHz Avg Hold: Ext Gain:	ALIGNAUTO > 10/10 -1.00 dB	D5:36:5: Radio Si Radio D4	LPMNav 01, 2013 td: None evice: BTS	Freq / Channel
10 dB/div Log	Ref 20 (dBm	-		-	-	1		1	
10 0		hundre	Thursdown	Investing	malun	montam	hundrag	-		Center Freq 2.437000000 GHz
-10 -20 22 22	mand			-				W	wilnmanna	
-30										
-40 -50						-		1		
-60	-								1	
-70					-					CF Step
Center 2.4 #Res BW	37 GHz 100 kHz	_		#VE	300 K	Hz		Sp Sweep	an 26 MHz 2.533 ms	2.600000 MHz <u>Auto</u> Man
Occup	Occupied Bandwidth 17,551 MHz			Total Power 2		25.03 dBm				
Transm	it Freq En	ror	-21825	Hz	OBW P	ower	99	9.00 %		
x dB Ba	andwidth		15.10 M	ЛНz	x dB		-6.	00 dB		
MSG			_	_			STATUS	5		

D Agilent Sp	eetrum Analyzer - Occup	ied BW						
Center F	enter Freq 2.46200000 GHz Input: RF #IFGain:Low AC SENSE:INT Center Freq: 2.462000000 GHz Trig: Free Run #Atten: 30 dB Ext Gain: -1.00 dB Radio Device: BTS Action 2013 Action 2013							
10 dB/div Log 10	manArm	mtmmthy manit	mouth on jore them	at work work work	Mary	Center Freq 2.462000000 GHz		
-10 -20 -30 -40	AMAAAAA				MM	bandayy		
-60 -70 Center 2 #Res BW	2.462 GHz		#VBW 300	kHz	Span 20 Sweep 2.5	6 MHz Auto 33 ms		
Occu	Occupied Bandwidth 17.435 MHz			Power 20.	05 dBm			
Trans x dB I	Transmit Freq Error-23168x dB Bandwidth15.71 M		Hz OBW Hz x dB	Power -	99.00 % 6.00 dB			
MSG 🧼 File	<3-2462-1.png> save	ed		STA	τυς			

Product	Wireless N VDSL2 VoIP Combo WAN Gigabit IAD						
Test Item	Occupied Bandwidth						
Test Mode	Mode 1: Transmit						
Date of Test	2013/11/06	Test Site	SR7				

IEEE 802.11n (20MHz) (Ant 1)										
Channel No	Frequency	Measurement Level	Required Limit	Deput						
Channel No.	(MHz)	(MHz)	(MHz)	Result						
1	2412	15.07	≧0.5	Pass						
6	2437	15.06	≧0.5	Pass						
11	2462	16.06	≧0.5	Pass						

DAgilent Spectrum	n Analyzer - Occ	upied BW							
All 50 Ω All All Center Freq 2.412000000 GHz				SENSE:INT ALIGNAUTO Center Freq; 2.412000000 GHz Trig: Free Run Avg Hold:>10/10 #Atten: 30 dB Ext Gain: -1.00 dB			D5:34:34 Radio St Radio De	PMNov 01, 2013 d: None evice: BTS	Freq / Channel
10 dB/div Log	Ref 20 dBr	m	1	-1	1	T			
10 0 -10	proventer	walnum	montingenter	m when the	vmmm	worthing	many		Center Freq 2.412000000 GHz
-20 -30 ใญญาณาค่ะใหญ่ -40	menter						- L	Angula Contractor	
-50									
-70 Center 2.412 #Res BW 100	-70 Center 2.412 GHz #Res BW 100 kHz			#VBW 300 kHz			Sp Sweep	an 26 MHz 2.533 ms	CF Step 2.600000 MHz <u>Auto</u> Man
Occupied Bandwidth 17.466 MH			MHz	Total Power IZ Hz OBW Power IHz x dB		21.45 dBm			
Transmit Freq Error-13077x dB Bandwidth15.07 M		3077 Hz 07 MHz	99.00 % -6.00 dB						
MSG						STATU	s		



<u>Channel 6</u>

🗊 Agilent Spe	etrum Analyzer	- Occupied BW	j.								
Center Fi	enter Freq 2.437000000 GHz Input: RF #IFGain:Low Ac SENSE:INT ALIGNAUTO D5:36:26 PMNov 01, 2013 Center Freq: 2.437000000 GHz Trig: Free Run Avg Hold>10/10 #Atten: 30 dB Ext Gain: -1.00 dB Radio Device: BTS									Freq / Channel	nel
10 dB/div Log 10	Ref 20	asm manual	ulnunlunn	mahan	panhon	Immani	thrown	- martin		Center 2.43700000	r Freq 10 GHz
-10 -20 10000	nnum							turn	Annan		
-30											
-50											
-70										CF	Step
Center 2. #Res BW	437 GHz 100 kHz			#VE	300 I	kHz		Spa Sweep	an 26 MHz 2.533 ms	Auto	Man
Occup	oied Ban	dwidth 17.5	551 MH	lz	Total F	ower	26.9	2 dBm			
Transn	nit Freq E	rror	-1639	Hz	OBW F	ower	9	9.00 %			
x dB B	andwidth		15.06 M	Hz	x dB		-6	.00 dB			
MSG							STATU	s			

🗊 Agilent Sp	eetrum Analyzer - Occup	ied BW							
Center F	S0 x AC SENSE:INT ALIGNAUTO D5:39:18 PM Nov 01, 2013 Center Freq 2.462000000 GHz Center Freq: 2.462000000 GHz Radio Std: None Input: RF #IFGain:Low Trig: Free Run Avg Hold>10/10 #IFGain:Low #Atten: 30 dB Ext Gain: -1.00 dB Radio Device: BTS								
10 dB/div Log	Ref 20 dBm	-	-			1	-		
10 0	monder	Ampana	annang	the providence of the	waterouter	harry		Center Freq 2.462000000 GHz	
-10 -20 VMA	gumme					War	Lours sources		
-30									
-50						-			
-60									
Center 2 #Res BW	2.462 GHz / 100 kHz		#VBV	V 300 kHz	-	Spa Sweep	an 26 MHz 2.533 ms	CF Step 2.600000 MHz <u>Auto</u> Man	
Occu	Occupied Bandwidth 17.753 MHz Transmit Freq Error -13896 Hz			Total Power 2 2 OBW Power		21.20 dBm			
Trans						9.00 %			
x dB I	Bandwidth	16.06 N	AHz 3	x dB	-6	.00 dB			
MSG					STATU	s			

Product	Wireless N VDSL2 VoIP Combo WAN Gigabit IAD						
Test Item	Occupied Bandwidth						
Test Mode	Mode 1: Transmit						
Date of Test	2013/11/06	Test Site	SR7				

IEEE 802.11n (40MHz) (Ant 0)										
Channel No.	Frequency	Measurement Level	Required Limit	Deput						
Channel No.	(MHz)	(MHz)	(MHz)	Result						
3	2422	36.32	≧0.5	Pass						
6	2437	36.33	≧0.5	Pass						
9	2452	36.34	≧0.5	Pass						

🗊 Agilent Spectru	m Analyzer - Occup	ied BW							
Center Fred	C SE Center Fi Trig: Free #Atten: 30	SENSE:INT ALIGNAUTO Center Freq: 2.42200000 GHz Trig: Free Run Avg Hold>10/10 #Atten: 30 dB Ext Gain: -1.00 dB			05:42:06 PMNov 01, 2013 Radio Std: None Radio Device: BTS		Freq / Channel		
10 dB/div	Ref 20 dBm			1					
									Center Freq 2.422000000 GHz
-10	policestropland	adriedopers linderster	handan hinneng Ja	montralia	landrysk sedanes	and has been and a	and with a		
-30 -40							Z	M-M homen	
-60									
Center 2.422 #Res BW 10	2 GHz 10 kHz		#VE	3W 300 I	Hz		Sp Sw	an 52 MHz reep 5 ms	CF Step 5.200000 MHz <u>Auto</u> Man
Occupied Bandwidth 36.154 MH			Ηz	Total Power		16.23 dBm			
Transmit x dB Ban	Freq Error	11.495 k 36 32 M	(Hz IHz		ower	99 -6	9.00 % 00 dB		
MSG		00.02 1				STATUS			





<u>Channel 6</u>

🗊 Agilent Spec	trum Analyzer - Occup	pied BW							
Center Fr	S0 x2 AC SENSE:INT ALIGNAUTO D5:45:14 FM Nov 01, 2013 Center Freq 2.437000000 GHz Center Freq: 2.437000000 GHz Radio Std: None Input: RF #IFGain:Low #Atten: 30 dB Ext Gain: -1.00 dB Radio Device: BTS								Freq / Channel
10 dB/div Log	Ref 20 dBm		-	1	P	1		1	
10 0									Center Freq 2.437000000 GHz
-10	ral man later	mellinahrinshippiland	mountersta	punnermlau	halppopulation	enhadrodyste	closhy		
-20	1						Ì		
-40 WM MANA	nt the second						3	mar when	
-50									
-70,									CF Step
Center 2.4 #Res BW	137 GHz 100 kHz	_ <u></u>	#VI	BW 3001	KHz		Sp: Sw	an 52 MHz eep 5 ms	5.200000 MHz <u>Auto</u> Man
Occupied Bandwidth 36.166 MHz Transmit Freq Error -1637 H:			łz	Total Power IZ Hz OBW Power		ower 17.28 dBm			
			Hz			99.00 %			
x dB Ba	andwidth	36.33 N	IHz	x dB		-6.	00 dB		
MSG		-				STATUS			

Magilent Spectru	um Analyzer - Occupied	IBW							
Center Free	Sense:INT ALC Sense:INT ALC Sense:INT ALC Sense:INT ALC Sense:INT Sense:								Freq / Channel
10 dB/div	Ref 20 dBm	1 7	T	_	1	-		-	
									Center Freq 2.452000000 GHz
-10	particular theolower	ารค่องมอกเป็กจะหัวเหนือกูลใจ	or backer wing	maniferenting	wet-t-tallowedharry	alunterating	ultur y		
-30 -40 -50 warman by	New						- Y	And Many Marketon	
-60									
Center 2.45 #Res BW 10	2 GHz 00 kHz		#VB\	N 300 k	Hz		Spa Swe	un 52 MHz eep 5 ms	CF Step 5.200000 MHz <u>Auto</u> Man
Occupied Bandwidth 36.189 MHz			Iz	Total Power		13.87 dBm			
Transmit Freg Error -1911		-19116	Hz	OBW P	ower	9	9.00 %		
x dB Ban	ndwidth	36.34 M	Hz	x dB		-6	00 dB		
MSG						STATUS	5	4	

Product	Wireless N VDSL2 VoIP Combo WAN Gigabit IAD					
Test Item	Occupied Bandwidth					
Test Mode	Mode 1: Transmit					
Date of Test	2013/11/06	Test Site	SR7			

IEEE 802.11n (40MHz) (Ant 1)										
Channel No.	Frequency (MHz)	Measurement Level (MHz)	Required Limit (MHz)	Result						
3	2422	36.27	≧0.5	Pass						
6	2437	35.80	≧0.5	Pass						
9	2452	35.76	≧0.5	Pass						

🗊 Agilent Spectru	m Analyzer - Occu	pied BW																
50 Ω AC Center Freq 2.422000000 GHz Input: RF #IFGain:Low		SENSE:INT Center Freq: 2.42 Trig: Free Run #Atten: 30 dB	22000000 GHz Avg Hol Ext Gair	ALIGNAUTO d:>10/10 n: -1.00 dB	D5:41:43 Radio St Radio De	PMNov 01, 2013 d: None vice: BTS	Freq / Channel											
10 dB/div	Ref 20 dBm	i		T	T.		= -1											
			. 6	1				Center Freq 2.422000000 GHz										
-10	porte haploud	her marines have been and	and and a second by	Norman Strath	montenter	-												
-30						1	the the here											
-50																		
-70								CF Step 5 200000 MHz										
Center 2.422 #Res BW 10	2 GHZ 10 kHz		#VBW 30	0 kHz		Sp Sw	an 52 MHz reep 5 ms	Auto Man										
Occupie	Occupied Bandwidth 36.190 MH Transmit Freq Error 12.532 kl		upied Bandwidth 36.190 Mł		cupied Bandwidth 36.190 N		upled Bandwidth 36.190 Mł		d Bandwidth 36.190 MH;		ed Bandwidth 36.190 Mł		Tota Iz	l Power	17.9	2 dBm		
Transmit			Hz OBW Power		99.00 %													
x dB Ban	dwidth	36.27 M	Hz x dB		-6	.00 dB												
MSG					STATU	s												



<u>Channel 6</u>

🗊 Agilent Spec	etrum Analyzer - Occupie	ed BW								
Center Fr	50 Ω req 2.43700000 Input: RF	0 GHz Ce #IFGain:Low #At	SENSE:INT nter Freq: 2.437(g: Free Run ten: 30 dB	000000 GHz Avg Hol Ext Gain	ALIGNAUTO d:>10/10 i: -1.00 dB	D5:45:33 Radio Sto Radio De	PMNov 01, 2013 I: None vice: BTS	Freq / Channel		
10 dB/div Log 10	Ref 20 dBm		n a e al 1		1. 8			Center Freq 2.437000000 GHz		
-10 -20 -30	minuturit	low man and a straight and a straight and	M. M.	when high the had	and a second prover from the second from the	hallwiller Hays	un warsselfen flen			
-40										
-70	107.011-							CF Step 5.200000 MHz		
#Res BW	437 GHZ 100 kHz		#VBW 300	kHz		Sw	eep 5 ms	<u>Auto</u> Man		
Occup	Occupied Bandwidth 40.629 MHz		pied Bandwidth To 40.629 MHz		Bandwidth Total Power 1 40.629 MHz		18.9	18.91 dBm		
Transn	nit Freq Error	849.10 kHz	OBW	Power	9	9.00 %				
x dB B	andwidth	35.80 MHz	x dB		-6	.00 dB				
MSG					STATUS	3				

D Agilent Spectrum	Analyzer - Occup	ied BW				
Center Freq	Ω 2.4520000 Input: R	A 00 GHz #IFGain:Low	Center Freq: 2.452 Trig: Free Run #Atten: 30 dB	ALIGNAUTC 000000 GHz Avg Hold:>10/10 Ext Gain: -1.00 dB	D5:48:29 PMNov 01, 2013 Radio Std: None Radio Device: BTS	Freq / Channel
10 dB/div	Ref 20 dBm		1	T T		
						Center Fred 2.452000000 GHz
-10 -20	mhultophale	when the second second to all the second	antonihaning president	ulfactor but work when by	the tranky	
-30 -40					have a start when the	
-50 0×						
Center 2.452 #Res BW 100	GHz 0 kHz		#VBW 300	kHz	Span 52 MHz Sweep 5 ms	CF Step 5.200000 MHz <u>Auto</u> Man
Occupied	d Bandwic 3	^{lth} 6.114 M⊦	Total IZ	Power 16.0	05 dBm	
Transmit I	Freq Error	57.877 k	Hz OBW	Power 9	99.00 %	
x dB Band	lwidth	35.76 M	Hz xdB		6.00 dB	
MSG				STAT	US	

8. Power Density

8.1. Test Equipment

The following test equipment is used during the test:

Power Density / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A-EXA	US47140172	2014/08/05

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

8.2. Test Setup

IEEE 802.11 b / g / n 20M MODE



8.3. Limits

The peak power spectral density conducted from the intentional radiated to the antenna shall not be greater than +8dBm in any 3kHz band during any time interval of continuous transmission.

8.4. Test Procedures

The EUT was setup according to ANSI C63.4: 2009; tested according to DTS test procedure section 10.2 of KDB558074 v03r01 for compliance to FCC 47CFR 15.247 requirements. Set 3KHz \leq RBW \leq 100 kHz, Set VBW \geq 3xRBW, Sweep time=Auto, Set Peak detector; tested according to section E)c) of KDB662911 v02v01.

8.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2012

8.6. Uncertainty

The measurement uncertainty is defined as ±1.27dB.



8.7. Test Result

Product	Wireless N VDSL2 VoIP Combo WAN Gigabit IAD				
Test Item	Power Density				
Test Mode	Mode 1: Transmit				
Date of Test	2013/11/06	Test Site	SR7		

IEEE 802.11b					
Channal Na	Frequency	Jency Measurement Limit		Deput	
Channel No.	(MHz) (dBm) (d	(dBm)	Result		
1	2412	-7.45	≦8	Pass	
6	2437	-5.93	≦8	Pass	
11	2462	-7.71	≦8	Pass	

<u>Channel 1</u>

🗊 Agilent Spectrum Analyzer - Sw	ept SA				
Reference Level 21 (0 dBm	SENSE:INT	ALIGNAUTO Avg Type: Log-Pwr	05:25:14 PM Nov 01, 2013 TRACE 1 2 3 4 5 6	Amplitude
Inpu	t: RF PNO: Fast 😱 IFGain:Low	Trig: Free Run #Atten: 30 dB	Avg Hold: 7/100 Ext Gain: -1.00 dB	DET P N N N N	RefLevel
10 dB/div Ref 21.00 dE	3m		Mkr1	2.411 298 GHz -7.453 dBm	21.00 dBm
11.0					Attenuation [30 dB]
-9.00	- Interfer	hadau new proving proving	Westin		Scale/Div 10 dB
-19.0	AN A AND AND AND AND AND AND AND AND AND	¥			Scale Type
-39.0	/			Allah Manna	(RIASE) Geniel
-59.0					Presel Anilos 0
Center 2.41200 GHz #Res BW 3.0 kHz	#VBW	10 kHz	Sweep	Span 26.00 MHz 2.74 s (1001 pts)	More 1 of 2
MSG			STATUS		



🚺 Agilent Spectrum Analyzer - Swept SA	
Δ 50 Ω AC SENSE:INT ALIGNAUTO D5:27:17 PMNov 01, 2013 Constant From 2, 42,700,000,0 CH-2 Aver Type: Lon-Pwr TRACE (1, 2, 2, 4, 5, 6) Free	quency
Input: RF PNO: Fast Trig: Free Run Avg Hold: 10/100 Type Mutuutuu IFGain:Low #Atten: 30 dB Ext Gain: -1.00 dB DET P NNNN	3 1/2 7 1
10 dB/div Ref 21.00 dBm -5.930 dBm -5.930 dBm	Auto Tune
11.0 Ce 2.4370	enter Freq 000000 GHz
1.00 -9.00	Start Freq 000000 GHz
-19.0	Stop Freq 000000 GHz
-39.0 -49.0 Hule Marking Marking Auto 2.6	CF Step 300000 MHz Man
-59.0 Y	req Offset 0 Hz
69.0 Span 26.00 MHz Center 2.43700 GĤz Span 26.00 MHz #Res BW 3.0 kHz #VBW 10 kHz Sweep 2.74 s (1001 pts)	
MSG STATUS	

Channal 6



Product	Wireless N VDSL2 VoIP Combo WAN Gigabit IAD				
Test Item	Power Density				
Test Mode	Mode 1: Transmit				
Date of Test	2013/11/06	Test Site	SR7		

IEEE 802.11g									
Channel No.	Frequency	Measurement Limit		Deput					
Channel No.	(MHz) (dBm) (dE	(dBm)	Result						
1	2412	-10.11	≦8	Pass					
6	2437	-6.08	≦8	Pass					
11	2462	-12.23	≦8	Pass					

<u>Channel 1</u>

🗊 Agilent Spectrum Analyzer - Swept	5A							
Center Freq 2.41200000	00 GHz	c SEN] Trig: Free	se:INT	Avg Type Avg Hold	ALIGNAUTO e: Log-Pwr I: 10/100	05:29:48 TR. T	PMNov 01, 2013 ACE 1 2 3 4 5 6 YPE MWWWWWWW	Frequency
10 dB/div Ref 21.00 dBm	IFGain:Low	#Atten: 30	dB	Ext Gain:	-1.00 dB Mkr1	2.410 -10.1	726 GHz 129 dBm	Auto Tune
11.0						-		Center Freq 2.412000000 GHz
-9.00		≬ 1	****					Start Fred 2.399000000 GHz
-19.0	MANANAN		በጥብላት	MMMM	WWWWWWW	4		Stop Freq 2.425000000 GHz
-39.0			-			"Ny Ny		CF Step 2.600000 MHz <u>Auto</u> Mar
-59.0 KNH WWWWWW			-			γ	Humannak	Freq Offsel 0 Hz
-69.0 Center 2.41200 GĤz #Res BW 3.0 kHz	#VBW	10 kHz	1		Sween	Span 2.74 s	26.00 MHz (1001 pts)	
MSG					STATUS			



			<u> </u>	Jilailli					
🗊 Agilent Spectrum Analy	zer - Swept SA								
50 Ω		4	IC SEI	NSE:INT	- L	ALIGNAUTO	05:30:46 P	MNov 01, 2013	Frequency
Center Freq 2.43	37000000 G Input: RF P IF	iHZ 'NO: Fast 😱 Gain:Low	Trig: Free #Atten: 30	e Run) dB	Avg Typ Avg Hold Ext Gain	e: Log-Pwr i: 10/100 : -1.00 dB	TYI	E 1 2 3 4 5 6 E MWWWWW ET P N N N N N	riequency
10 dB/div Ref 21.	00 dBm					Mkr1	2.437 9 -6.0	36 GHz 80 dBm	Auto Tune
Log		1 1	1						Center Fred
11.0						-			2.437000000 GHz
1.00	-			÷1-					
-9.00		Mikandatte	1. AMARA	MALANA	h h a sh i s				Start Freq 2.424000000 GHz
19.0	MARANA	wwww.	Man	L. UJAW	IN ANY ANY	WAN LATIN'	M		
-29.0	N.						W.		Stop Fred 2.450000000 GHz
"mannander"	5						WW	maradas	CE Oton
-39.0 410101 100								∊∶]∦⊻я∨µ	2.600000 MHz Auto Man
-49.0				-	-				
-59.0									Freq Offsel 0 Hz
-69.0							-		
Center 2.43700 GI #Res BW 3.0 kHz	fz	#VBW	10 kHz			Sweep	Span 2 2.74 s (6.00 MHz 1001 pts)	
MSG	_					STATUS		Carlotter	
							_		

Channel 6

								er - Swept SA	ent Speetrum Analyzer	🔊 Agil
Frequency	MNov 01, 2013	05:32:09 P	ALIGNAUTO	Aug Tun	SENSE:INT		AC	2000000	50 Ω	(#I
1	E P N N N N N	TYI	-1.00 dB	Avg Hold Ext Gain:	ree Run 30 dB	Trig: Fr #Atten:	PNO: Fast 😱 Gain:Low	Input: RF	ter Freq 2.462	Cent
Auto Tune	86 GHz 49 dBm	2.455 7	Mkr1 :					00 dBm	3/div Ref 21.00	10 dB
Center Fred 2.462000000 GH:			_							11.0
Start Fred 2.449000000 GH2								● ¹		1.00 - -9.00 -
Stop Fred 2.475000000 GH:		1	"ALA MANA	*****	M	AMM	1444444444	MANNA		-19.0
CF Step 2.600000 MH Auto Mar		Wy Ny								-39.0 -
Freq Offse 0 H:	manufarmy	W							and and and bound	-59.0
	6.00 MHz 1001 pts)	Span 2 2.74 s (Sweep			10 kHz	#VBW	İz	ter 2.46200 GHz s BW 3.0 kHz	Cent #Res
			STATUS						tradition of the second	MSG

Product	Wireless N VDSL2 VoIP Combo WAN Gigabit IAD						
Test Item	Power Density						
Test Mode	Mode 1: Transmit						
Date of Test	2013/11/06	Test Site	SR7				

IEEE 802.11n(20MHz) Ant0									
Channel No.	Frequency	Measurement	Limit	Decult					
Channel No.	(MHz)	(dBm)	(dBm)	Result					
1	2412	-11.30	≦8	Pass					
6	2437	-7.01	≦8	Pass					
11	2462	-11.20	≦8	Pass					

🗊 Agilent Spect	rum Analyzer - Si	wept SA								
Center Fre	^{50 Ω} eq 2.41200	00000 G	Hz	AC SE	e Run	Avg Typ Avg Hold	ALIGNAUTO e: Log-Pwr : 22/100	05:33:44 TRA T	PMNov 01, 2013 ACE 1 2 3 4 5 6 YPE MWW/MWW	Frequency
10 dB/div	Ref 21.00 d	Bm	Gain:Low	#Atten: 3	0 dB	Ext Gain:	-1.00 dB Mkr1	2.411 : -11.3	376 GHz 304 dBm	Auto Tune
11.0									- +	Center Fred 2.412000000 GHz
-9.00				1	he Le					Start Free 2.399000000 GHz
-19.0	prvy	ANNA	WHAN MAR	MANNY	/VVAAAAA W	MUMANA	WAARAANA	h Mar		Stop Freq 2.425000000 GHz
-39.0	N							- 1 - 1 - 1	<u>.</u>	CF Step 2.600000 MHz <u>Auto</u> Mar
-59.0	M ^M								WILMIN	Freq Offset 0 Hz
Center 2.41 #Res BW 3	1200 GHz 3.0 kHz		#VBW	10 kHz			Sweep	Span 2.74 s	26.00 MHz (1001 pts)	



			<u> </u>	Jilaili					
D Agilent Spectrum	n Analyzer - Swept	SA							
Center Freq	2.4370000	00 GHz	C SET	Run	Avg Type Avg Hold:	ALIGNAUTO : Log-Pwr : 10/100	05:37:26 F TRA TY	MNov 01, 2013 E 1 2 3 4 5 6 PE MWWWWW	Frequency
e esta da	input K	IFGain:Low	#Atten: 30) dB	Ext Gain:	-1.00 dB Mkr1 :	¤ 2.435 1	54 GHz	Auto Tune
10 dB/div Re Log	ef 21.00 dBm		11				-7.0		Center Fred 2.437000000 GHz
-9.00	han Is	oAllagAllas Labo	♦ ¹	MAAAA	har a lat	AANA.			Start Free 2.424000000 GH;
-19.0		tk or i belindardek			AAAAAAA.	C. R. R. R. R. A.	AM L		Stop Free 2.450000000 GH:
-39.0	MW [*]				-		ľ¥¥4	WWWWW	CF Step 2.600000 MH <u>Auto</u> Mar
-59.0									Freq Offse 0 H
Center 2.4370 #Res BW 3.0	ÕO GHz kHz	#VBW	10 kHz			Sweep	Span 2 2.74 s (6.00 MHz 1001 pts)	
MSG						STATUS	_		

Channel 6

🗊 Agilent Spectrum Analyzer - Swep	n SA				
Center Freq 2.4620000	DOO GHz	SENSE:INT	ALIGNAUTO Avg Type: Log-Pwr AvgHold: 10/100	05:38:30 PM Nov 01, 2013 TRACE 1 2 3 4 5 6 TYPE M MANANAN	Frequency
10 dB/div Ref 21.00 dBn	n PNU: Fast (Atten: 30 dB	Ext Gain: -1.00 dB Mkr1	2.461 012 GHz -11.217 dBm	Auto Tune
11.0					Center Freq 2.462000000 GHz
9.00		∮ 1			Start Freq 2.449000000 GHz
-19.0 MMM	ANNO MANAAAAAAA	ANNOV INVIAN	nananan ang ang ang ang ang ang ang ang	Han	Stop Freq 2.475000000 GHz
-39.0				<u> </u>	CF Step 2.600000 MHz <u>Auto</u> Man
-59.0				When Million	Freq Offset 0 Hz
Center 2.46200 GHz #Res BW 3.0 KHz	#VBW 1	0 kHz	Sweep	Span 26.00 MHz 2.74 s (1001 pts)	

Product	Wireless N VDSL2 VoIP Combo WAN Gigabit IAD						
Test Item	Power Density						
Test Mode	Mode 1: Transmit						
Date of Test	2013/11/06	Test Site	SR7				

IEEE 802.11n(20MHz) Ant1									
Channal Na	Frequency	Measurement	Limit	Result					
Channel No.	(MHz)	(dBm)	(dBm)						
1	2412	-8.59	≦8	Pass					
6	2437	-4.37	≦8	Pass					
11	2462	-9.28	≦8	Pass					

<u>Channel 1</u>

D Agilent Spectrum Analyzer	Swept SA				
Center Freq 2.4120	000000 GHz	AC SENSE INT	ALIGNAUTO Avg Type: Log-Pwr Avg Hold: 10/100	05:35:09 PMNov 01, 2013 TRACE 1 2 3 4 5 6 TYPE MWWWWWWW	Frequency
	IFGain:Low	#Atten: 30 dB	Ext Gain: -1.00 dB Mkr1	2.412 598 GHz -8 593 dBm	Auto Tune
					Center Freq 2.412000000 GHz
-9.00		And Adding to			Start Freq 2.399000000 GHz
-19.0	ANDALALANANAN	And M.	MANANIMARAN	WW	Stop Freq 2.425000000 GHz
-39.0				hundre the	CF Step 2.600000 MHz <u>Auto</u> Mar
-59.0					Freq Offsel 0 Hz
Center 2.41200 GHz #Res BW 3.0 kHz	#VBV	/ 10 kHz	Sweep	Span 26.00 MHz 2.74 s (1001 pts)	



				<u> </u>	Jugun	e o				
🗊 Agilent Spectrum	n Analyzer -	Swept SA								
Center Freq	Ω 2.4370	00000 0	SHz	C SE		Avg Type Avg Hold:	ALIGNAUTO : Log-Pwr 10/100	05:36:07 TR/ T	PM Nov 01, 2013 ACE 1 2 3 4 5 6 YPE MWWWWW	Frequency
	in	puc RF	Gain:Low	#Atten: 30) dB	Ext Gain:	-1.00 dB Mkr1	2.437	962 GHz	Auto Tune
10 dB/div Re	ef 21.00 (dBm					and the second second	-4.3	372 dBm	1 -
11.0				11					· · · · · · · ·	Center Free 2.437000000 GH
9.00	MM	MANAN	MANAN	www	ANNIA) MANAMANN	1 Mary	Mn		Start Free 2.424000000 GH
29.0	,ň									Stop Free 2.450000000 GH
whith	ųγ.							W	AMANAMA	1 32.25 4
49.0										CF Stej 2.600000 MH <u>Auto</u> Ma
59.0										Freq Offse 0 H
69.0 Center 2.4370 #Res BW 3.0	00 GHz kHz		#VBW	10 kHz			Sweep	Span 2.74 s	26.00 MHz (1001 pts)	
ISG	1005			2			STATUS	1	((.)	

Channel 6

🗊 Agilent Spec	trum Analyzer -	Swept SA								
Center Fr	50 Ω eq 2.4620	00000 G	Hz	AC SE		Avg Type AvgIHold	ALIGNAUTO : Log-Pwr : 10/100	05:39:53 F TRA TY	MNov 01, 2013 E 1 2 3 4 5 6 PE MWAAAAAA	Frequency
10 dB/div	Ref 21.00 (d B m	Gain:Low	#Atten: 30) dB	Ext Gain:	-1.00 dB Mkr1	ء 2.462 5 -9.2	598 GHz 80 dBm	Auto Tune
11.0										Center Freq 2.462000000 GHz
1.00 -9.00			In	a adridda	↓1 MAnnass		1.65			Start Freq 2.449000000 GHz
-19.0	MA	ANNY WAY	WYMWA	MAARAA	/« ντγωγς	winny	MVVVVVV	NAN		Stop Freq 2.475000000 GHz
-39.0 MMM	wasan							'nγĮγγ	WWWW	CF Step 2.600000 MHz <u>Auto</u> Man
-59.0										Freq Offset 0 Hz
Center 2.4	6200 GĤz 3.0 kHz		#VBW	10 kHz			Sweep	Span 2	26.00 MHz	1
MSG							STATUS	1		

Product	Wireless N VDSL2 VoIP Combo WAN Gigabit IAD						
Test Item	Power Density						
Test Mode	Mode 1: Transmit						
Date of Test	2013/11/06	Test Site	SR7				

IEEE 802.11n(20MHz) (Worse Condition+10log(Ant N))=Ant1										
Channel No	Frequency Measurement		Limit	Desult						
Channel No.	(MHz)	(dBm) (dBm)		Result						
1	2412	-5.59	≦8	Pass						
6	2437	-1.37	≦8	Pass						
11	2462	-6.28	≦8	Pass						

Product	Wireless N VDSL2 VoIP Combo WAN Gigabit IAD						
Test Item	Power Density						
Test Mode	Mode 1: Transmit						
Date of Test	2013/11/06	Test Site	SR7				

IEEE 802.11n(40MHz) Ant0											
Channel No.	Frequency	FrequencyMeasurementLimit(MHz)(dBm)(dBm)		Desult							
	(MHz)			Result							
3	2422	-18.49	≦8	Pass							
6	2437	-16.99	≦8	Pass							
9	2452	-19.64	≦8	Pass							

<u>Channel 3</u>

🗖 Agilent Spectrum	Analyzer - Swept S	A							
Center Freq	2.42200000	0 GHz	C SE] Trig: Free	Run	Avg Type Avg Hold:	ALIGNAUTO : Log-Pwr 10/100	05:43:08 F TRAI TY	MNov 01, 2013 E 1 2 3 4 5 6 PE MWWWWWW	Frequency
10 dB/div Re	f 21.00 dBm	IFGain:Low	#Atten: 30) dB	Ext Gain:	-1.00 dB Mkr1	₀ 2.421 3 -18.5	676 GHz 06 dBm	Auto Tune
11.0			11					+	Center Free 2.422000000 GH:
9.00									Start Free 2.396000000 GH
-29.0	Manyayanah	Antonitroundation for	NAMAMAN	Milletoskyw	n an	ontwikeling	h h h h h h h h h h h h h h h h h h h		Stop Fre 2.448000000 GH
39.0 -49.0							1		CF Stej 5.200000 MH <u>Auto</u> Ma
-59.0	/						2	North Contraction	Freq Offse 0 H
Center 2.4220 #Res BW 3.0	00 GHz kHz	#VBW	10 kHz	-		Sweep	Span 5 5.48 s (2.00 MHz 1001 pts)	
ASG	-					STATUS			



Addition Sense INT ALIGNAUTO D5:44:59 PMNov 01, 2013 Frequen Senter Freq 2.437000000 GHz Trig: Free Run Avg Hold: 10/100 D5:44:59 PMNov 01, 2013 Frequen Input: RF PN0: Fast Trig: Free Run Avg Hold: 10/100 DFP NNNNN Auto 0 dB/div Ref 21.00 dBm Center Center 2.43700000 Center 100 Input: RF PN0: Fast Trig: Free Run Mkr1 2.436 116 GHz Auto 9 Center Center 2.43700000 Star 2.43700000 90 Input: RF PN0: Fast Frequen Star 2.43700000 90 Input: RF Ref 21.00 dBm Input: RF Star 2.43700000 91 Input: RF Ref 21.00 dBm Input: RF </th <th></th> <th></th> <th></th> <th></th> <th></th> <th><u>101 0</u></th> <th>Jnani</th> <th><u> </u></th> <th></th> <th></th> <th></th> <th></th> <th></th>						<u>101 0</u>	Jnani	<u> </u>					
90.2 ac SENSEINT ALIGNAUTO D5:44:59 PMov 01, 2013 Frequen enter Freq 2.437000000 GHz Input: RF PN0: Fast Trig: Free Run Avg1Ype: Log-PWr InveE [1 2 3 4 5 6 Frequen Avg1Hold: 10/100 TvPE [MwwWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW										- Swept SA	rum Analyzi	lent Spect	D Agi
Miniput: RF PNO: Fast IFGain:Low Trig: Free Run #Atten: 30 dB AvgHold: 10/100 Ext Gain: -1.00 dB Trig: Free Run AvgHold: 10/100 Ext Gain: -1.00 dB 0 dB/div Ref 21.00 dBm Center 2.43700000 100 Input: RF Input: RF 0 dB/div Ref 21.00 dBm Center 2.43700000 100 Input: RF Input: RF 100 Input: RF <	ency	Frequ	1Nov 01, 2013	05:44:59 PM		Ava Type	NSE:INT	C SE	- A	000000	50 Ω	tor Fre	
Mkr1 2.436 116 GHz -16.991 dBm Auto -16.991 dBm 0 dB/div Ref 21.00 dBm Cente 2.43700000 11.0 Image: Cente 2.43700000 Star 2.41100000 19.0 Image: Cente 2.43700000 Star 2.43100000 19.0 Image: Cente 2.43700000 Star 2.43100000 19.0 Image: Cente 2.43700000 Star 2.43100000 19.0 Image: Cente 2.43700000 Star 2.4500000	1/27			TYP	10/100 -1.00 dB	Avg Hold: Ext Gain:	e Run) dB	Trig: Free #Atten: 30	SFIZ PNO: Fast 😱 FGain:Low	Input: RF	eq 2.43	ter Fre	Sen
Og Cente 11.0 Cente 100 Star 300 Star 900 MMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMM	ito Tune	AL	16 GHz 1 dBm	2.436 1 -16.99	Mkr1 :) dBm	Ref 21.0	3/div	10 dE
11.0 2.43700000 1.00 1.00 3.00 1.00 9.00 1.00 19.0 1.00 10.00 1.00 10.00 1.00 10.00 1.00 10.00 1.00 10.00 1.00 10.00 1.00 10.00 1.00 10.00 1.00 10.00 1.00 <td>ter Fred</td> <td>Cer</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td>LUG</td>	ter Fred	Cer						1					LUG
	0000 GH	2.43700									-	-	11.0
										-	_	-	1.00
	DOOD GH	2.41100					r	-					-9.00
	op Free	S		hdr e M	MMMMMMM	n Multin Alarian	WWWW	MANNAMAN	allamathild anny	hand	, Mu		-19.0
	J000 GH	2.46300		thu			V						-29.0
5 20000	CF Step	5 20		1						-	1		-39.0
	Mai	uto	h.	<u> </u>							a ∫	J.	-49.0
	qOffse	Fre		¥,					_		mpw	1 MM MM	-59.0
39.0	ОH						_			100	-	er.	-69.0
renter 2.43700 GH2 Span 52.00 MHz Res BW 3.0 kHz #VBW 10 kHz Sweep 5.48 s (1001 pts)			2.00 MHz 1001 pts)	Span 5: 5.48 s (*	Sweep			10 kHz	#VBW	5	3700 GH .0 kHz	ter 2.43 s BW 3	Ceni #Re:
SG STATUS					STATUS							1	MSG

Channel 6

🗊 Agilent Speetri	um Analyzer - Swept !	SA							
Center Free	q 2.4520000	00 GHz	AC SE		Avg Type	ALIGNAUTO : Log-Pwr 12/100	05:50:11 F TRA	PM Nov 01, 2013 CE 1 2 3 4 5 6 PE M MANAJANA	Frequency
10 dB/div F	Ref 21.00 dBm	IFGain:Low	#Atten: 3) dB	Ext Gain:	-1.00 dB Mkr1	ء 2.454 4 -19.6	196 GHz 43 dBm	Auto Tune
11.0									Center Freq 2.452000000 GHz
1.00 -9.00									Start Freq 2.426000000 GHz
-19.0	Mundhan	hannamahan humanaka	MMMMMM	panyana	nndahlanhan	hanna	wytyley		Stop Freq 2.478000000 GHz
-39.0				V					CF Step 5.200000 MHz <u>Auto</u> Man
-59.0	p#						ľ,	han wallow	Freq Offset 0 Hz
Center 2.45: #Res BW 3.0	200 GHz 0 KHz	#VBW	10 kHz			Sweep	Span 5 5.48 s	52.00 MHz (1001 pts)	

Product	Wireless N VDSL2 VoIP Combo WAN Gigabit IAD						
Test Item	Power Density						
Test Mode	Mode 1: Transmit						
Date of Test	2013/11/06	Test Site	SR7				

IEEE 802.11n(40MHz) Ant1											
Channal Na	Frequency	Measurement	Limit	Docult							
Channel No.	(MHz)	Hz) (dBm) (dBm)		Result							
3	2422	-15.88	≦8	Pass							
6	2437	-15.71	≦8	Pass							
9	2452	-18.33	≦8	Pass							

								Swept SA	m Analyzer -	ent Spectrur	🗊 Agil
Span	TRACE 1 2 3 4 5 6	05:4	ALIGNAUTO	Avg Typ	NSE:INT	C SE	A	ЛНz	Ω 00000 N	n 52.00	# Spai
Span	DET PNNNNN	_	-1.00 dB	Ext Gain	0 dB	#Atten: 30	PNO: Fast 😱 Gain:Low	iput: RF F IF	lr		1
52.0000000 MHz	0 dB/div Ref 21.00 dBm -15.882 dBm -										10 dE
								1.00	11.0	1.00	Log
				-	-			1			11.0
		-		-	-	-				-	1.00
Full Spar		-			÷1	11					-9.00
	-		hutter t	the LL stort	. Satable		1 1. 1. 1. 1. 1. 1.		1.		-19.0
Zero Span		Allerander	Manutality	MINAMAN	1 Maanta mereka	WIN WALLAU AND	. MANANANANANA	and the second second	hippy		
					ł.						-29.0
Last Spar									1		-39.0
-	the March			-		-			1	Mal.	-49.0
	What What when	-							ŀ.	when he he	-59.0
					-	1			112		-69.0
នីឲ្យលេវ សេតុទា											
3	n 52.00 MHz s (1001 pts)	Spa p 5.48	Sweep			10 kHz	#VBW	-	00 GHz kHz	er 2.422 BW 3.0	Cent #Res
)s	STATUS						1000 C	Later and	MSG



Applient Spectrum Analyzer - Swept 51. Image: Spectrum Analyzer - Swept 51. Image: Spectrum Analyzer - Swept 51. Senter Freq 2.437000000 GHz Trig: Free Run Avg Type: Log PWr Image: Spectrum Analyzer - Swept 51. Input: RF PNO: Fast Trig: Free Run Avg Type: Log PWr Image: Spectrum Analyzer - Swept 51. Input: RF PNO: Fast Trig: Free Run Avg Type: Log PWr Image: Spectrum Analyzer - Swept 51. Ind B/div Ref 21.00 dBm Image: Spectrum Analyzer - Swept 51. Mkr1 2.435 752 GHz Auto Tune Ind B/div Ref 21.00 dBm -15.712 dBm Image: Spectrum Analyzer - Swept 52.00000 GHz Start Freq 2.437000000 GHz Ind Image: Spectrum Analyzer - Swept 52.000 MHz Image: Spectrum Analyzer - Swept 52.000 MHz Stop Freq 2.46300000 GHz Ind Image: Spectrum Analyzer - Swept 52.000 MHz Image: Spectrum Analyzer - Swept 52.00 MHz Spectrum Analyzer - Swept 52.00 MHz Ind Image: Spectrum Analyzer - Swept 52.00 MHz Spectrum Analyzer - Swept 52.00 MHz Spectrum Analyzer - Swept 54.8 s (1001 pts) Ind Image: Stratus Stratus Spectrum Analyzer - Swept 54.8 s (1001 pts) Stratus Ind Image: Stratus Image: Stratus Stratus Stratus				<u> </u>	JIIaIIII	<u>ei 0</u>				
S02 AC SENERATI ALEGANYO DS40/39 MWW 01,2012 Frequency Input RF PNO: Fast Coll Trig: Free Run FGaintLow Args Trype: Log-Pwr Avg Hold: 10/100 Ext Gain: -1.00 dB Imate I: 23 45 5 Frequency 10 dB/div Ref 21.00 dBm Center Freq -15. 712 dBm Auto Tune 10 dB/div Ref 21.00 dBm Center Freq 2.437000000 GHz Center Freq 900 100 Mkr1 2.435 752 GHz Center Freq 2.437000000 GHz 900 100 100 Start Freq 2.437000000 GHz Start Freq 900 100	D Agilent Spectrum Analy	zer - Swept SA								
Imput: RF PN0: Fast Trig: Free Run #Atten: 30 dB Avg[Hold: 10/00 Ext Gain: -1.00 dB Otel [MANNAN] 10 dB/div Ref 21.00 dBm -15.712 dBm Auto Tune -09 -15.712 dBm -15.712 dBm Center Freq 2.43700000 GHz 900 -10 -10 -10 -10 900 -10 -10 -10 -10 -10 900 -10 -10 -10 -10 -10 -10 900 -10 <t< th=""><th>Center Freg 2.4</th><th>37000000 G</th><th>Hz A</th><th>C SE</th><th>NSE:INT</th><th>Avg Type</th><th>ALIGNAUTO : Log-Pwr</th><th>05:46:36 F</th><th>MNov 01, 2013</th><th>Frequency</th></t<>	Center Freg 2.4	37000000 G	Hz A	C SE	NSE:INT	Avg Type	ALIGNAUTO : Log-Pwr	05:46:36 F	MNov 01, 2013	Frequency
Mkr1 2.435 752 GHz -15.712 dBm Auto Tune .00 dB/div Ref 21.00 dBm -15.712 dBm Center Freq 2.43700000 GHz 900		Input: RF PI	10: Fast 😱 Sain:Low	^J Trig: Free #Atten: 30	Run dB	Avg Hold: Ext Gain:	-1.00 dB	TY	PE MWWWWWW ET P N N N N N	124/27
100 Image: Context Frequency Start Frequency Sta	10 dB/div Ref 21	.00 dBm					Mkr1	2.435 7 -15.7	52 GHz 12 dBm	Auto Tune
1.00 1.00	11.0			11						Center Freq 2.437000000 GHz
2.41100000 GHz 2.41100000 GHz 2.46300000 GHz 2.46300000 GHz 4.490 4.90 4	1.00									Start Free
19.0 19.0	-9.00							5.5		2.411000000 GHz
33.0 MMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMM	-19.0	werthered and the state of the	Winippini	WARNIN	MANYANA P	allan an a	httyp and the feature	MAM		Stop Freq 2.463000000 GHz
49.0 5.200000 MHz 69.0 5.200000 MHz 69.0 69.0 </td <td>-39.0 1.4444444444444444</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Yuna</td> <td>WMMAilymalil</td> <td>CF Step</td>	-39.0 1.4444444444444444							Yuna	WMMAilymalil	CF Step
59.0	-49.0									5.200000 MHz <u>Auto</u> Mar
S80.0 Span 52.00 MHz Center 2.43700 GHz #VBW 10 kHz Sweep 5.48 s (1001 pts) Isg status status status	-69.0									Freq Offsel 0 Hz
Center 2.43700 GHz Span 52.00 MHz #Res BW 3.0 kHz #VBW 10 kHz Sweep 5.48 s (1001 pts) Isg status status	-69.0								1	
STATUS	Center 2.43700 G #Res BW 3.0 kHz	Hz	#VBW	10 kHz			Sweep	Span 5 5.48 s (2.00 MHz 1001 pts)	
	MSG						STATUS			

Channel 6

🗊 Agilent Spectrum Analyzer - Sv	wept SA				
۵۵ دور کی میں Center Freq 2.45200	0000 GHz		ALIGNAUTO Avg Type: Log-Pwr AvgHold: 10(100	05:48:12 PM Nov 01, 2013 TRACE 1 2 3 4 5 6 TYPE MUMARAMAN	Frequency
Inp	ut: RF PNO: Fast () IFGain:Low	#Atten: 30 dB	Ext Gain: -1.00 dB	2.464 480 GHz	Auto Tune
10 dB/div Ref 21.00 d	Bm			-18.346 UBII	Center Freq 2.452000000 GHz
1.00					Start Freq 2.426000000 GHz
-19.0 -29.0	wytownorwallantahted	MURINIAN MARKAN	MonumburyMunphingh	ywmith	Stop Freq 2.478000000 GHz
-39.0					CF Step 5.200000 MHz <u>Auto</u> Man
-59.0				North Welling	Freq Offset 0 Hz
Center 2.45200 GHz #Res BW 3.0 kHz	#VBW	10 kHz	Sweep	Span 52.00 MHz 5.48 s (1001 pts)	

Product	Wireless N VDSL2 VoIP Combo WAN Gigabit IAD				
Test Item	Power Density				
Test Mode	Mode 1: Transmit				
Date of Test	2013/11/06	Test Site	SR7		

IEEE 802.11n(40MHz) (Worse Condition+10log(Ant N))=Ant1							
Channel No	Frequency	Measurement	Limit	Result			
Channel No.	(MHz)	(dBm)	(dBm)				
3	2422	-12.88	≦8	Pass			
6	2437	-12.71	≦8	Pass			
9	2452	-15.33	≦8	Pass			