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# **FCC REPORT**

Application No: Applicant:	SZEM1410005892CR Flyingvoice Technology Co., Ltd.
Manufacturer/ Factory:	Flyingvoice Technology Co., Ltd.
Product Name:	VoIP Wireless Router
Model No.(EUT):	G902P
Add Model No.:	APX9122P, APX9122, APX9120, APX9100, G902, G901P, G901, G900P, G900
FCC ID:	2AATVG902
Standards:	47 CFR Part 15, Subpart C (2014)
Date of Receipt:	2014-11-04
Date of Test:	2014-11-13 to 2015-01-04
Date of Issue:	2015-01-09
Test Result:	PASS *

.\* In the configuration tested, the EUT complied with the standards specified above.

#### Authorized Signature:



Jack Zhang EMC Laboratory Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. All test results in this report can be traceable to National or International Standards.



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# 2 Version

Revision Record						
Version	Chapter	Date	Modifier	Remark		
00		2015-01-09		Original		

Authorized for issue by:		
Tested By	Chris-Shong (Chris Zhong) /Project Engineer	2015-01-04
	,	
Prepared By	Sade Luo.	2015-01-09
	(Sade Luo) /Clerk	Date
Checked By	Emen-Li	2015-01-09
	(Emen Li) /Reviewer	Date



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# 3 Test Summary

Test Item	Test Requirement	Test method	Result
Antenna Requirement	47 CFR Part 15, Subpart C Section 15.203/15.247 (c)	ANSI C63.10 2009	PASS
AC Power Line Conducted Emission	47 CFR Part 15, Subpart C Section 15.207	ANSI C63.10 2009	PASS
Conducted Peak Output Power	47 CFR Part 15, Subpart C Section 15.247 (b)(3)	KDB558074 D01 v03r02 KDB662911 D01Multiple Transmitter Output v02r01	PASS
6dB Occupied Bandwidth	47 CFR Part 15, Subpart C Section 15.247 (a)(2)	KDB558074 D01 v03r02	PASS
Power Spectral Density	47 CFR Part 15, Subpart C Section 15.247 (e)	KDB558074 D01 v03r02 KDB662911 D01Multiple Transmitter Output v02r01	PASS
Band-edge for RF Conducted Emissions	47 CFR Part 15, Subpart C Section 15.247(d)	KDB558074 D01 v03r02 KDB662911 D01Multiple Transmitter Output v02r01	PASS
RF Conducted Spurious Emissions	47 CFR Part 15, Subpart C Section 15.247(d)	KDB558074 D01 v03r02 KDB662911 D01Multiple Transmitter Output v02r01	PASS
Radiated Spurious Emissions	47 CFR Part 15, Subpart C Section 15.205/15.209	ANSI C63.10 2009	PASS
Restricted bands around fundamental frequency (Radiated Emission)	47 CFR Part 15, Subpart C Section 15.205/15.209	ANSI C63.10 2009	PASS

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Remark:

- Model No.: G902P, APX9122P, APX9122, APX9120, APX9100, G902, G901P, G901, G900P, G900. Only the model G902P was tested, since the circuitry design, PCB layout, electrical components used, internal wiring and functions were identical for all above models. Only different on model No., color and decorations;
- 2) Other than AC Power Line Conducted Emission and Radiated Spurious Emissions items, through pre-scan all adapter and find the No.: SW36-12003000-W adapter which is the worst case, so only this adapter is used during those test and only this adapter test data include in this report.

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# 5 General Information

#### 5.1 Client Information

Applicant:	Flyingvoice Technology Co., Ltd.
Address of Applicant:	Room 202, Chuangxin Bldg A#, No.12 Hongda North Rd, BDA, Beijing, China
Manufacturer:	Flyingvoice Technology Co., Ltd.
Address of Manufacturer:	Room 202, Chuangxin Bldg A#, No.12 Hongda North Rd, BDA, Beijing, China
Factory:	Flyingvoice Technology Co., Ltd.
Address of Factory:	Room 202, Chuangxin Bldg A#, No.12 Hongda North Rd, BDA, Beijing, China

#### 5.2 General Description of EUT

Product Name:	VoIP Wireless F	Router		
Model No.:	G902P			
Operation Frequency:	IEEE 802.11b/g/	IEEE 802.11b/g/n(HT20): 2412MHz to 2462MHz		
	IEEE 802.11n(H	T40): 2422MHz to 2452MHz		
Channel Numbers:	IEEE 802.11b/g	, IEEE 802.11n HT20: 11 Channels		
	IEEE 802.11n H	T40: 7 Channels		
Channel Separation:	5MHz			
Type of Modulation:	IEEE for 802.11	b: DSSS(CCK,DQPSK,DBPSK)		
	IEEE for 802.11	g : OFDM(64QAM, 16QAM, QPSK, BPSK)		
	IEEE for 802.11	n(HT20 and HT40) : OFDM (64QAM, 16QAM,		
	QPSK,BPSK)			
Sample Type:	Fixed production			
Test Power Grade:	11B :15dBm 11G :16 dBm 11N(20) :15 dBm 11N(40) :15 dBm (manufacturer declare )			
Antenna Type and Gain:	Type: Integral Gain:5dBi			
Power Supply:	Adapter:	M/N : S24B12-120A200-Y4		
		Input: AC 100V-240V 50-60Hz 0.7A		
		Output: DC 12V 2A		
	Alternative	M/N : SW36-12003000-W		
	adapter:	Input: AC 100V-240V 50-60Hz 1.5A		
		Output: DC 12V 3.0A		
	Alternative	M/N : WHF-1200300T3		
	adapter:	Input: AC 100V-240V 50-60Hz 1.0A		
		Output: DC 12V 3.0A		



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DC output cable:	140cm (Unshielded) (MODEL: S24B12-120A200-Y4)
DC output cable :	144cm Unshielded with a ferrite core (MODEL: SW36-12003000-W)
DC output cable :	146cm Unshielded (MODEL: WHF-1200300T3)

Operation F	Operation Frequency each of channel(802.11b/g/n HT20)									
Channel	Fr	equency	Channel	Frequency	Channel	Fre	quency	Chan	nel	Frequency
1	24	412MHz	4	2427MHz	7	244	12MHz	10		2457MHz
2	24	417MHz	5	2432MHz	8	244	17MHz	11		2462MHz
3	24	422MHz	6	2437MHz	9	245	2452MHz			
Operation F	requ	ency each	of channe	el(802.11n HT40	)					
Channe	I	Frequency		Channel	Frequency		Chan	nel	I	Frequency
1	2422MHz 4 2437MHz		7			2452MHz				
2		2427	ИНz	5	2442MHz					
3		2432	MHz	6	2447MF	lz				

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

For 802.11b/g/n (HT20):

Channel	Frequency
The Lowest channel	2412MHz
The Middle channel	2437MHz
The Highest channel	2462MHz

For 802.11n (HT40):

Channel	Frequency
The Lowest channel	2422MHz
The Middle channel	2437MHz
The Highest channel	2452MHz



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### 5.3 Test Environment and Mode

Operating Environment:			
Temperature:	24.0 °C		
Humidity:	55 % RH		
Atmospheric Pressure:	1020 mbar		
Test mode:			
Transmitting mode:	Keep the EUT in transmitting mode with all kind of modulation and all		
	kind of data rate.		
Note: During the test, we use the PC to configure the power, modulation, data rate and channels.			

### 5.4 Description of Support Units

The EUT has been tested with associated equipment below.

Description	Manufacturer	Model No.
PC	Supply by client	DCSM
Lan cable	Supply by SGS	N/A
Mouse	IBM	MO28UO
Keyboard	IBM	KB-0225
Phone(Just used for <b>Conducted</b> <b>Emission</b> and <b>Radiated</b> <b>Spurious</b>	PHILIPS	HCD1888(11)TSD
Emissions test items )		

#### 5.5 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch E&E Lab,

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China. 518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.



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### 5.6 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

#### • CNAS (No. CNAS L2929)

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

• VCCI

The 10m Semi-anechoic chamber and Shielded Room (7.5m x 4.0m x 3.0m) of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-823, R-4188, T-1153 and C-2383 respectively.

#### • FCC – Registration No.: 556682

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No.: 556682.

#### Industry Canada (IC)

Two 3m Semi-anechoic chambers of SGS-CSTC Standards Technical Services Co., Ltd. have been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-1 & 4620C-2.

#### 5.7 Deviation from Standards

None.

#### 5.8 Abnormalities from Standard Conditions

None.

#### 5.9 Other Information Requested by the Customer

None.



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### 5.10Equipment List

	Conducted Emission						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Due date (yyyy-mm-dd)		
1	Shielding Room	ZhongYu Electron	GB-88	SEL0042	2015-06-10		
2	LISN	Rohde & Schwarz	ENV216	SEL0152	2015-10-24		
3	LISN	ETS-LINDGREN	3816/2	SEL0021	2015-05-16		
4	8 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN- T8-02	SEL0162	2015-08-30		
5	4 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN- T4-02	SEL0163	2015-08-30		
6	2 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN- T2-02	SEL0164	2015-08-30		
7	EMI Test Receiver	Rohde & Schwarz	ESCI	SEL0022	2015-05-16		
8	Coaxial Cable	SGS	N/A	SEL0025	2015-05-29		
9	DC Power Supply	Zhao Xin	RXN-305D	SEL0117	2015-10-24		
10	Humidity/ Temperature Indicator	Shanhai Qixiang	ZJ1-2B	SEL0103	2015-10-24		
11	Barometer	Chang Chun	DYM3	SEL0088	2015-05-16		



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	RE in Chamber					
ltem	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Due date (yyyy-mm-dd)	
1	3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEL0017	2015-06-10	
2	Spectrum Analyzer	Rohde & Schwarz	FSU43	SEL0270	2015-07-28	
3	EMI Test software	AUDIX	E3	SEL0050	N/A	
4	BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	3142C	SEL0015	2015-10-24	
5	Double-ridged horn (1-18GHz)	ETS-LINDGREN	3117	SEL0006	2015-10-24	
6	Horn Antenna (18-26GHz)	ETS-LINDGREN	3160	SEL0076	2015-10-24	
7	Horn Antenna(26GHz- 40GHz)	A.H.Systems, inc.	SAS-573	SEL0349	2016-03-20	
8	Pre-amplifier (0.1-1300MHz)	Agilent Technologies	8447D	SEL0053	2015-05-16	
9	Pre-Amplifier (0.1-26.5GHz)	Compliance Directions Systems Inc.	PAP-0126	SEL0168	2015-10-24	
10	Pre- amplifier(26GHz- 40GHz)	Compliance Directions Systems Inc.	PAP-2640- 50	SEL0350	2016-03-20	
11	Coaxial cable	SGS	N/A	SEL0027	2015-05-29	
12	Coaxial cable	SGS	N/A	SEL0189	2015-05-29	
13	Coaxial cable	SGS	N/A	SEL0121	2015-05-29	
14	Coaxial cable	SGS	N/A	SEL0178	2015-05-29	
15	Band filter	Amindeon	82346	SEL0094	2015-05-16	
16	Barometer	Chang Chun	DYM3	SEL0088	2015-05-16	
17	DC Power Supply	Zhao Xin	RXN-305D	SEL0117	2015-10-24	
18	Humidity/ Temperature Indicator	Shanhai Qixiang	ZJ1-2B	SEL0103	2015-10-24	
19	Signal Generator (10M-27GHz)	Rohde & Schwarz	SMR27	SEL0067	2015-05-16	
20	Signal Generator	Rohde & Schwarz	SMY01	SEL0155	2015-10-24	
21	Loop Antenna	Beijing Daze	ZN30401	SEL0203	2015-06-04	



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	RF connected test				
ltem	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Due date (yyyy-mm-dd)
1	DC Power Supply	Zhao Xin	RXN-305D	SEL0117	2015-10-24
2	Humidity/ Temperature Indicator	HYGRO	ZJ1-2B	SEL0033	2015-10-24
3	Spectrum Analyzer	Rohde & Schwarz	FSP	SEL0154	2015-10-24
4	Coaxial cable	SGS	N/A	SEL0178	2015-05-29
5	Coaxial cable	SGS	N/A	SEL0179	2015-05-29
6	Barometer	ChangChun	DYM3	SEL0088	2015-05-16
7	Signal Generator	Rohde & Schwarz	SML03	SEL0068	2015-05-16
8	Band filter	amideon	82346	SEL0094	2015-05-16
9	POWER METER	R & S	NRVS	SEL0144	2015-10-24
10	Attenuator	Beijin feihang taida	TST-2-6dB	SEL0205	2015-05-16
11	Power Divider(splitter)	Agilent Technologies	11636B	SEL0130	2015-10-24

Note: The calibration interval is one year, all the instruments are valid.

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# 6 Test results and Measurement Data

### 6.1 Antenna Requirement

Standard requirement:	47 CFR Part 15C Section 15.203 /247(c)
15.203 requirement:	
•	shall be designed to ensure that no antenna other than that furnished by the
	be used with the device. The use of a permanently attached antenna or of an
	que coupling to the intentional radiator, the manufacturer may design the unit
	a can be replaced by the user, but the use of a standard antenna jack or
electrical connector is p	
15.247(b) (4) requireme	
The conducted output p	oower limit specified in paragraph (b) of this section is based on the use of
antennas with direction	al gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this
section, if transmitting a	antennas of directional gain greater than 6 dBi are used, the conducted output
power from the intentio	nal radiator shall be reduced below the stated values in paragraphs $(b)(1)$ ,
(b)(2), and (b)(3) of this	section, as appropriate, by the amount in dB that the directional gain of the
antenna exceeds 6 dBi	
EUT Antenna:	
	Anterne
-	antenna and no consideration of replacement. The best case gain
of the antenna is 5dBi.	



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 Conducted Linis					
Test Requirement:	47 CFR Part 15C Section 15.207				
Test Method:	ANSI C63.10: 2009				
Test Frequency Range:	150kHz to 30MHz				
Limit:		(NALI-)	Limit (d	(dBuV)	
	Frequency range	(IVIEZ)	Quasi-peak	Average	
	0.15-0.5		66 to 56*	56 to 46*	
	0.5-5		56	46	
	5-30		60	50	
	* Decreases with th	e logarithn	n of the frequency.		
Test Procedure:	<ul> <li>room.</li> <li>2) The EUT was connected to a reference plane in the same multiple socket a single LISN provides of the EUT shall vertical ground reference placed on the horizon of the EUT shall vertical ground reference plane. Unit under test a mounted on top between the close the EUT and assist</li> <li>5) In order to find t equipment and a single to the close to the cl</li></ul>	onnected to bilization power cal a second ne way as outlet strip vided the r T was place e plane. orizontal gr formed wi be 0.4 m reference p The LISN nd bondec of the grou sest points sociated ech he maximuta all of the ir	bance voltage test was o AC power source thro Network) which provid bles of all other units of LISN 2, which was the LISN 1 for the unit l o was used to connect in ating of the LISN was r ced upon a non-metalling And for floor-standing round reference plane, th a vertical ground ref from the vertical ground plane was bonded to the 1 was placed 0.8 m fro d to a ground reference und reference plane. The of the LISN 1 and the quipment was at least 0 um emission, the relative inducted measurement.	bugh a LISN 1 (Line des a 50Ω/50µH + f the EUT were bonded to the gro being measured. A multiple power cable not exceeded. c table 0.8m above to arrangement, the ference plane. The re d reference plane. The shis distance was EUT. All other units 0.8 m from the LISN ve positions of	- 5Ω bund es to the EUT the the 2.

#### 6.2 Conducted Emissions



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Test Setup:	Shielding Room Test Receiver Test Receiver Test Receiver LISN2 + AC Mains Ground Reference Plane
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates at lowest, middle and highest channel.
	Transmitting mode.
Final Test Mode:	Through Pre-scan, find the 1Mbps of rate of 802.11b at lowest channel is the worst case.
	Transmitting mode.
	Only the worst case is recorded in the report.
Instruments Used:	Refer to section 5.10 for details
Test Results:	Pass

#### Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.

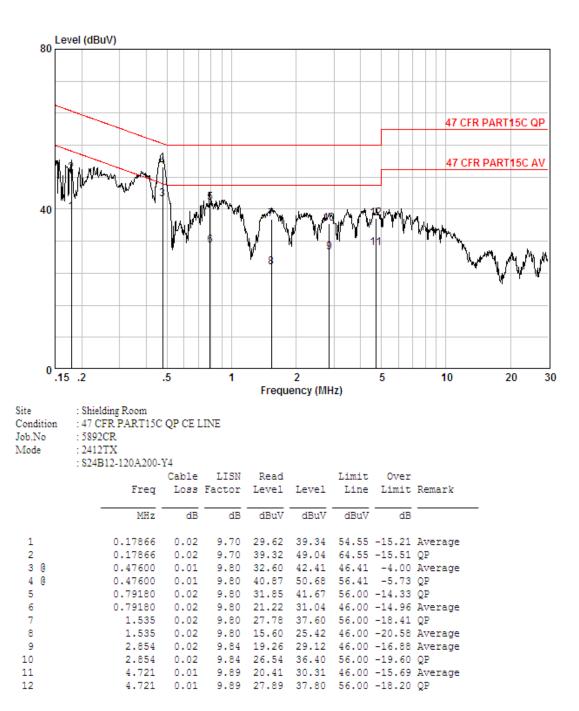
Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.



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#### S24B12-120A200-Y4:

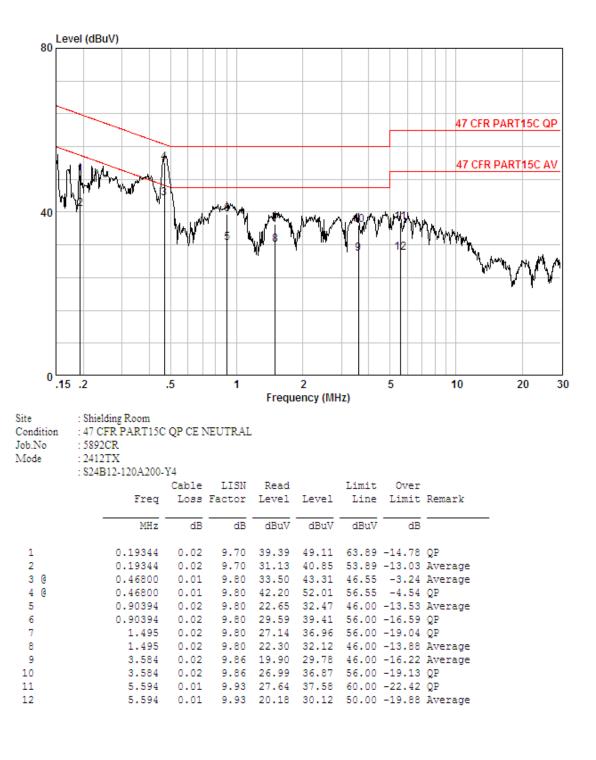
Live Line:





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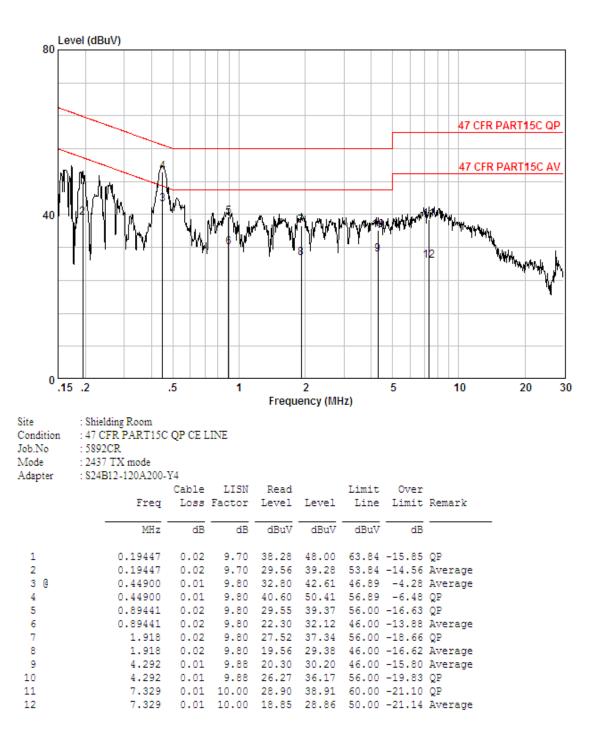
#### Neutral Line:





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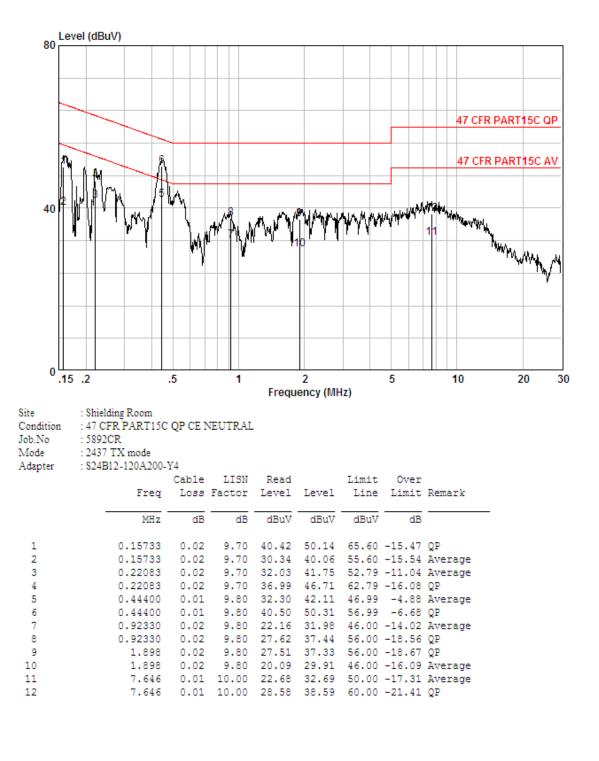
Live Line:





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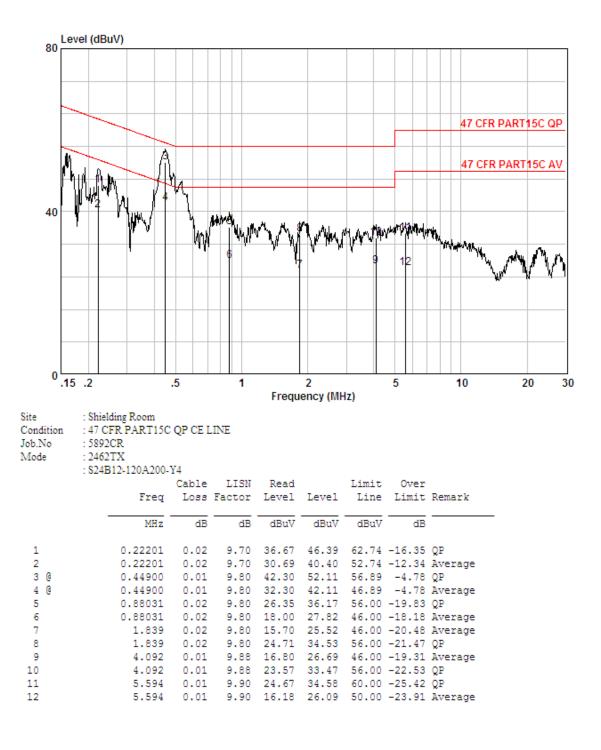
Neutral Line:





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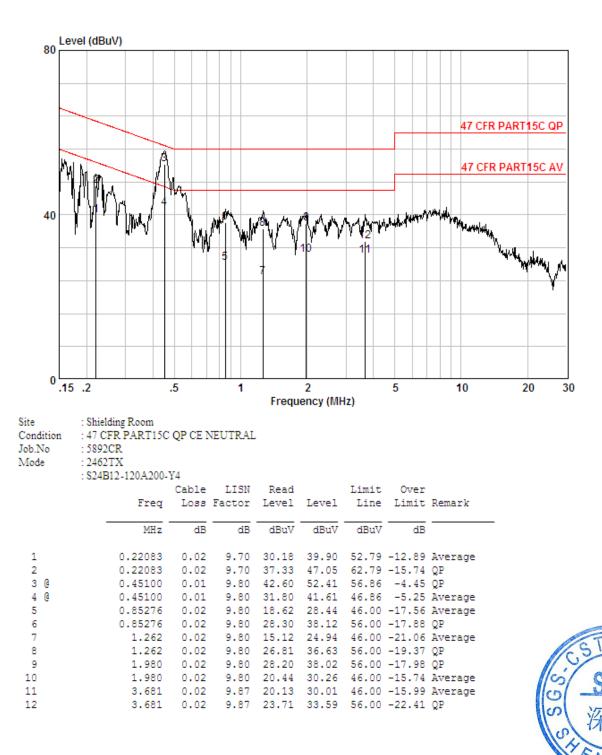
Live Line:





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Neutral Line:

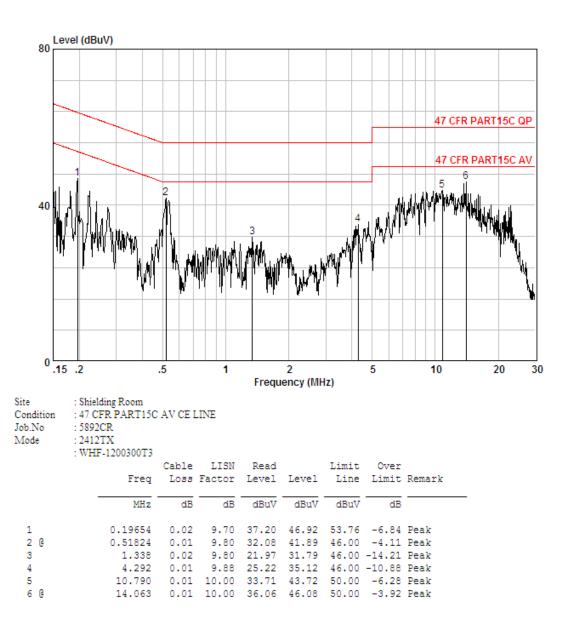




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#### WHF-1200300T3:

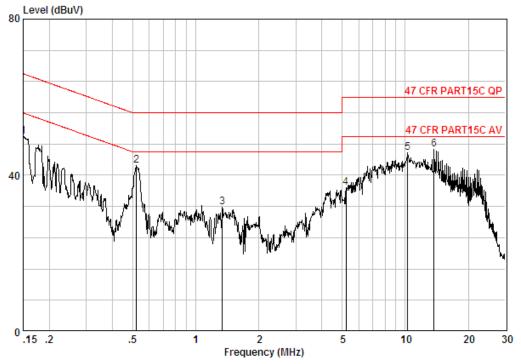
Live Line:





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#### Neutral Line:



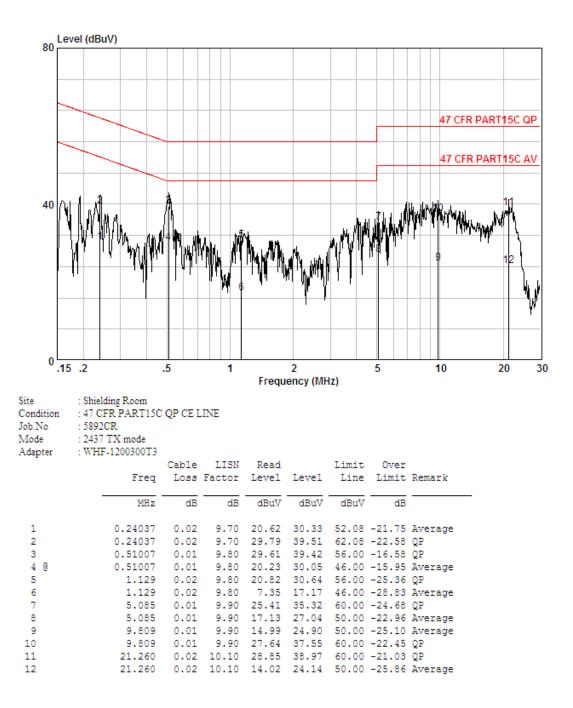
Site	: Shielding Room
Condition	: 47 CFR PART15C AV CE NEUTRAL
Job.No	: 5892CR
Mode	: 2412TX

	:WHF-1200300T3 Freq		LISN Factor					Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1 2 @ 3 4 5 @ 6 @	0.15000 0.52099 1.338 5.221 10.288 13.695	0.01 0.02 0.01 0.01	9.70 9.80 9.80 9.91 10.00 10.00	32.74 21.97 26.96 35.76	42.56 31.79 36.88 45.77	46.00 46.00 50.00 50.00	-3.44 -14.21 -13.12 -4.23	Peak Peak Peak Peak



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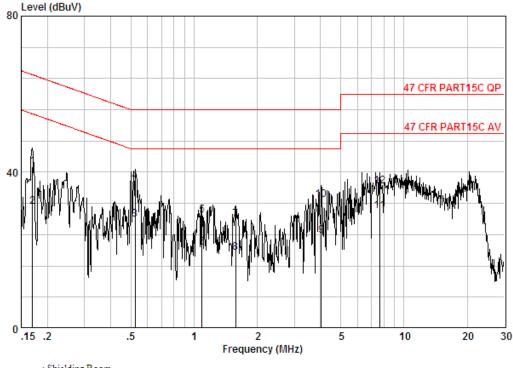
Live Line:





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#### Neutral Line:



Site	: Shielding Room
Condition	: 47 CFR PART15C QP CE NEUTRAL
Job.No	: 5892CR

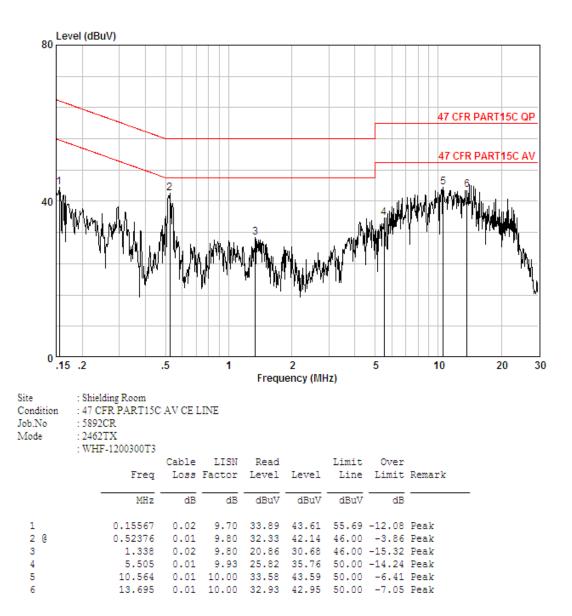
Mode : 2437 TX mode

Adapter	: WHF-1200300T3							
-		Cable	LISN	Read		Limit	Over	
	Freq	Loss	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.16944	0.02	9.70	31.66	41.38	64.99	-23.61	QP
2	0.16944	0.02	9.70	21.50	31.22	54.99	-23.77	Average
3	0.52376	0.01	9.80	18.06	27.87	46.00	-18.13	Average
4	0.52376	0.01	9.80	27.92	37.73	56.00	-18.27	QP
5	1.088	0.02	9.80	19.26	29.08	56.00	-26.92	QP
6	1.088	0.02	9.80	10.80	20.62	46.00	-25.38	Average
7	1.577	0.02	9.80	18.17	27.99	56.00	-28.01	QP
8	1.577	0.02	9.80	9.55	19.37	46.00	-26.63	Average
9	4.027	0.01	9.88	13.83	23.72	46.00	-22.28	Average
10	4.027	0.01	9.88	23.03	32.92	56.00	-23.08	QP
11	7.687	0.01	10.00	19.98	29.99	50.00	-20.01	Average
12	7.687	0.01	10.00	26.48	36.49	60.00	-23.51	QP



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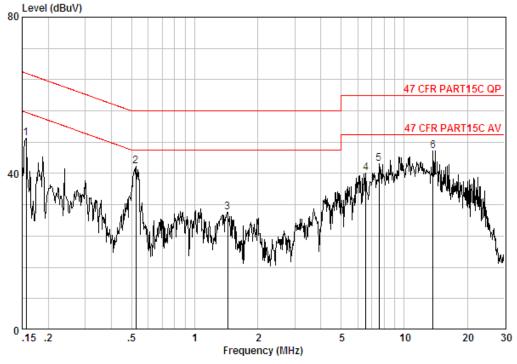
Live Line:





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#### Neutral Line:



Site	: Shielding Room
Condition	: 47 CFR PART15C AV CE NEUTRAL
Job.No	: 5892CR
Mode	· 2462.TX

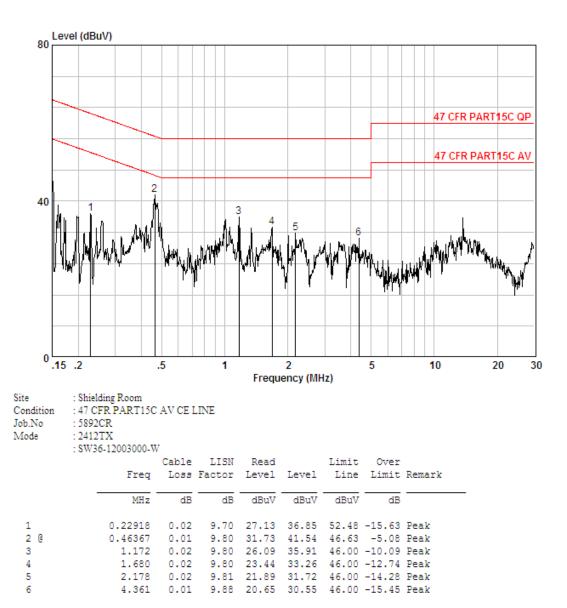
ode	: WHF-1200300T3							
		Cable	LISN	Read		Limit	Over	
	Freq	Loss	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.15649	0.02	9.70	39.37	49.09	55.65	-6.56	Peak
2 @	0.52376	0.01	9.80	32.13	41.95	46.00	-4.05	Peak
3	1.433	0.02	9.80	20.29	30.11	46.00	-15.89	Peak
4	6.557	0.01	9.98	30.07	40.06	50.00	-9.94	Peak
5	7.566	0.01	10.00	32.60	42.61	50.00	-7.39	Peak
60	13.695	0.01	10.00	35.87	45.88	50.00	-4.12	Peak



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#### SW36-12003000-W

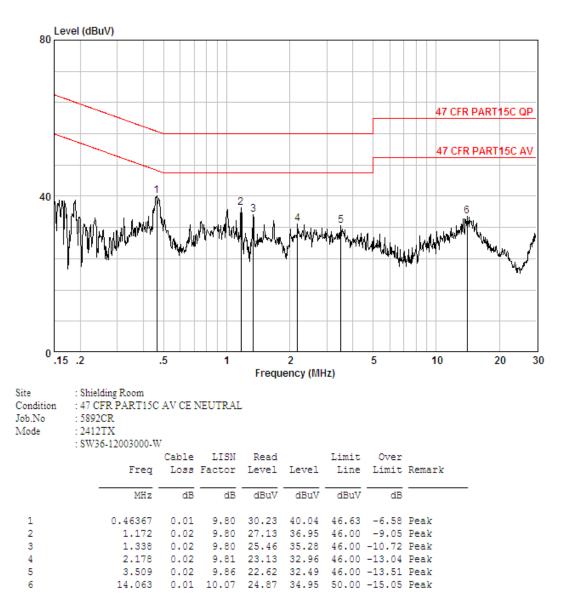
Live Line:





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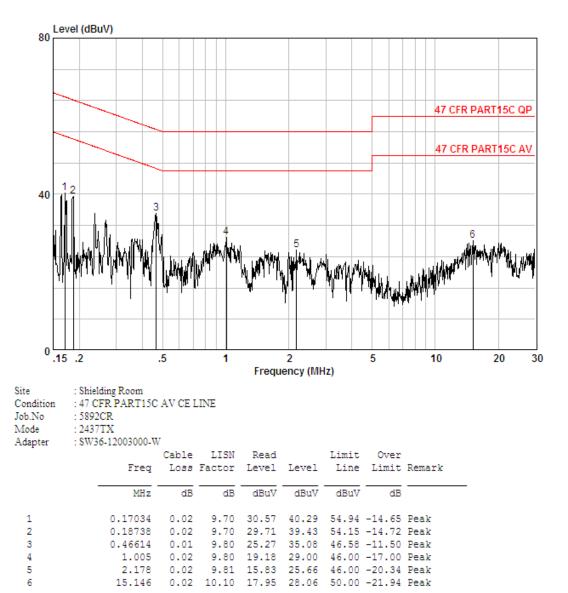
#### Neutral Line:





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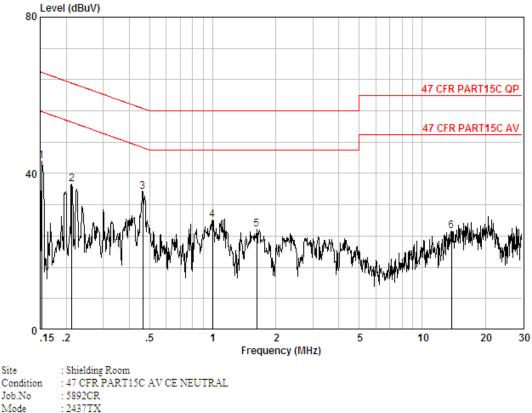
#### Live Line:





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#### Neutral Line:



200.110	
Mode	: 243
Adapter	: SW

Site

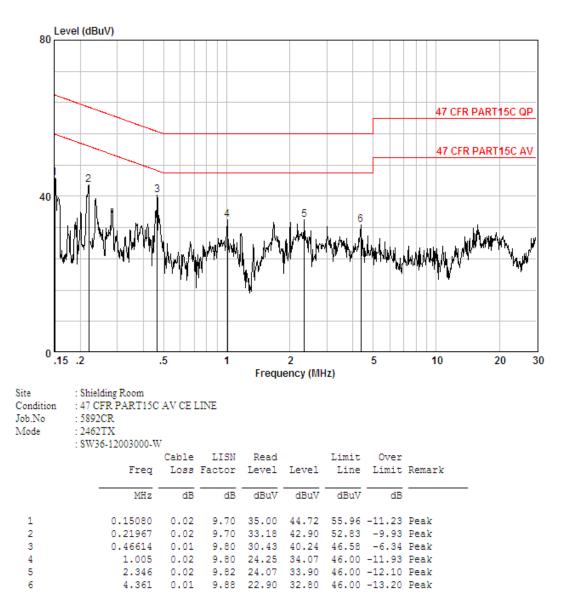
ode lapter	: SW36-12003000-W	,						
		Cable	LISN	Read		Limit	Over	
	Freq	Loss	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.15240	0.02	9.70	33.39	43.11	55.87	-12.76	Peak
2	0.21279	0.02	9.70	27.49	37.21	53.10	-15.89	Peak
3	0.46367	0.01	9.80	25.40	35.21	46.63	-11.42	Peak
1	0.99968	0.02	9.80	18.31	28.13	46.00	-17.87	Peak
5	1.619	0.02	9.80	15.82	25.64	46.00	-20.36	Peak
6	13.768	0.01	10.00	15.20	25.22	50.00	-24.78	Peak





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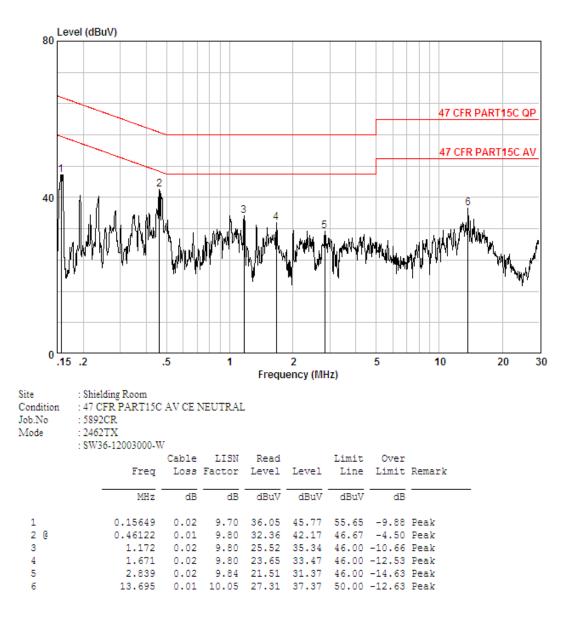
#### Live Line:





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#### Neutral Line:



#### Notes:

1. The following Quasi-Peak and Average measurements were performed on the EUT:

2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.



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#### 6.3 Conducted Peak Output Power

Test Requirement:	47 CFR Part 15C Section 15.247 (b)(3)						
Test Method:	KDB558074 D01 v03r02						
	KDB662911 D01Multiple Transmitter Output v02r01						
Test Setup:	Power Meter       E.U.T         RF Output poit       E.U.T         Non-Conducted Table       Non-Conducted Table         Ground Reference Plane       Remark:         Offset the High-Frequency cable loss 1.5dB in the spectrum analyzer.						
Test Instruments:	Refer to section 5.10 for details						
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates						
Final Test Mode:	Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b;						
	6Mbps of rate is the worst case of 802.11g ; 6.5Mbps of rate is the worst case of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40)						
Limit:	30dBm						
Test Results:	Pass						



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Mode		802.1	1b for Anten	na 1	
Data Rate	Test Channel	1Mbps	2Mbps	5.5Mbps	11Mbps
Test results	1	19.14	19.02	18.95	18.78
(dBm)	6	19.10	18.99	18.84	18.79
	11	18.85	18.78	18.72	18.65

Mode				802.1	1g for Ar	itenna 1			
Data Rate	Test Channe	6Mbps	9Mbp s	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
Test results	1	19.20	19.14	19.08	19.03	18.89	18.82	18.71	18.62
(dBm)	6	19.13	19.04	18.97	18.92	18.81	18.73	18.65	18.56
	11	18.69	18.63	18.57	18.53	18.47	18.42	18.37	18.24
Mode				802.11n (l	HT20) for	Antenna	1		
Data Rate	Test Channel	6.5Mbps	13Mbps	19.5Mbps	26Mbps	39Mbps	52Mbps	58.5Mbps	65Mbps
Test	1	17.46	17.38	17.32	17.26	17.17	17.08	17.03	16.98
results (dBm)	6	17.27	17.21	17.14	17.08	17.02	16.96	16.92	16.83
	11	16.96	16.91	16.82	16.71	16.64	16.57	16.51	16.42

Mode		802.11n (HT20) for Antenna 2										
Data Rate	Test Channel	6.5Mbps	13Mbps	19.5Mbps	26Mbps	39Mbps	52Mbps	58.5Mbps	65Mbps			
Test	1	16.81	16.73	16.62	16.54	16.48	16.42	16.31	16.24			
results (dBm)	6	16.38	16.34	16.28	16.24	16.17	16.14	16.08	16.02			
	11	16.22	16.17	16.11	16.04	16.01	15.89	15.82	15.73			

Mode		802.11n (HT20) for Antenna1+ Antenna2										
Data Rate	Test Channel	6.5Mbps	13Mbps	19.5Mbps	26Mbps	39Mbps	52Mbps	58.5Mbps	65Mbps			
Test	1	20.16	20.17	19.99	19.93	19.85	19.77	19.70	19.64			
results (dBm)	6	19.86	19.81	19.74	19.69	19.63	19.58	19.53	19.45			
	11	19.62	19.57	19.49	19.40	19.35	19.26	19.19	19.10			



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Mode		802.11n (HT40) Antenna 1										
Data Rate	Test Channel		27Mbps	40.5Mbps	54Mbps	81Mbps	108Mbps	121.5Mbps	135Mbps			
Test	3	17.28	17.24	17.18	17.13	17.09	17.06	17.02	16.96			
results (dBm)	6	17.18	17.14	17.08	17.02	16.94	16.91	16.84	16.77			
	9	16.99	16.93	16.87	16.82	16.78	16.72	16.68	16.61			

Mode		802.11n (HT40) Antenna 2										
Data Rate	Test Channel		27Mbps	40.5Mbps	54Mbps	81Mbps	108Mbps	121.5Mbps	135Mbps			
Test	3	16.48	16.43	16.37	16.32	16.25	16.18	16.11	16.04			
results (dBm)	6	16.29	16.24	16.18	16.09	16.03	15.97	15.92	15.81			
	9	16.16	16.13	16.09	16.01	15.95	15.86	15.78	15.71			

Mode	802.11n (HT40) Antenna1+ Antenna 2										
Data Rate	Test Channel		27Mbps	40.5Mbps	54Mbps	81Mbps	108Mbps	121.5Mbps	135Mbps		
Test	3	19.91	19.86	19.80	19.75	19.70	19.65	19.60	19.53		
results	6	19.77	19.86	19.80	19.75	19.70	19.65	19.60	19.53		
(dBm)	9	19.61	19.56	19.51	19.44	19.40	19.32	19.26	19.19		

Note:

 Through Pre-scan, 1Mbps of rate is the worst case of 802.11b; 6Mbps of rate is the worst case of 802.11g; 6.5Mbps of rate is the worst case of 802.11n (HT20); 13.5Mbps of rate is the worst case of 802.11n (HT40).

2) Through Pre-scan 11B and 11G, found the power of Antenna1 is larger than Antenna 2 so only the Antenna1 test data is show in this report.



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#### 802.11b mode Peak Output Power (dBm) Limit (dBm) Test channel Result Antenna 1 Antenna 2 19.14 17.26 30.00 Lowest Pass Middle 19.10 16.87 30.00 Pass Highest 18.85 16.73 30.00 Pass 802.11g mode Test channel Peak Output Power (dBm) Limit (dBm) Result Antenna 1 Antenna 2 19.20 18.52 30.00 Lowest Pass Middle 19.13 18.05 30.00 Pass Highest 18.69 17.85 30.00 Pass 802.11n(HT20)mode Peak Output Power (dBm) Test channel Limit (dBm) Result Antenna 2 Antenna 1 Total Lowest 17.46 16.81 20.16 30.00 Pass Middle 17.27 16.38 19.86 30.00 Pass 16.96 19.62 30.00 Highest 16.22 Pass 802.11n(HT40)mode Test channel Peak Output Power (dBm) Limit (dBm) Result Antenna 1 Antenna 2 Total Lowest 17.28 16.48 19.91 30.00 Pass Middle 17.18 16.29 19.77 30.00 Pass Highest 16.99 16.16 19.61 30.00 Pass

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#### Measurement Data



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#### 6.4 6dB Occupy Bandwidth

Test Requirement:	47 CFR Part 15C Section 15.247 (a)(2)	
Test Method:	KDB558074 D01 v03r02	
Test Setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane	
Instruments Used:	Refer to section 5.10 for details	
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates	
Final Test Mode:	Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b;	
	6Mbps of rate is the worst case of 802.11g ; 6.5Mbps of rate is the worst case of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40)	
Limit:	≥ 500 kHz	
Test Results:	Pass	

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#### **Measurement Data**

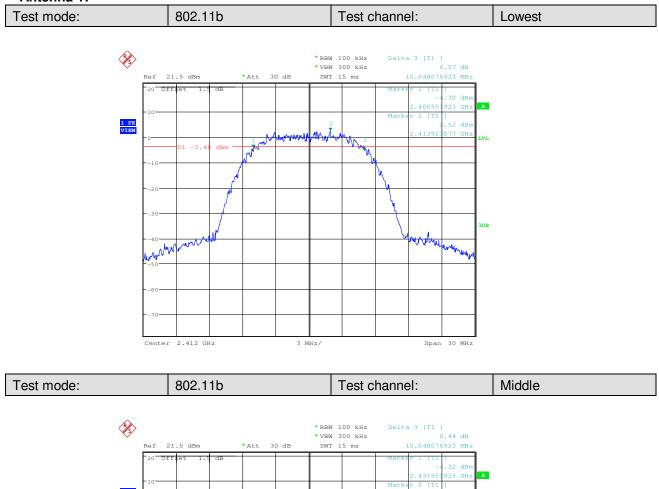
		802.11b mode	r		
Test channel	6dB Occupy Ba	andwidth (MHz)	Limit (kHz)	Result	
	Antenna 1	Antenna 2			
Lowest	10.048	10.048	≥500	Pass	
Middle	10.048	10.048	≥500	Pass	
Highest	10.048	10.048	≥500	Pass	
		802.11g mode	r		
Test channel	6dB Occupy Ba	andwidth (MHz)	Limit (kHz)	Result	
	Antenna 1	Antenna 2			
Lowest	16.538	16.538	≥500	Pass	
Middle	16.538	16.587	≥500	Pass	
Highest	16.538	16.538	≥500	Pass	
	80	02.11n(HT20) mode			
Test channel	6dB Occupy Bandwidth (MHz)		Limit (kHz)	Result	
	Antenna 1	Antenna 2			
Lowest	17.692	17.692	≥500	Pass	
Middle	17.692	17.692	≥500	Pass	
Highest	17.692	17.692	≥500	Pass	
	802.11n(HT40)mode				
Test channel	hannel 6dB Occupy Bandwidth (MHz)		Limit (kHz)	Result	
	Antenna 1	Antenna 2			
Lowest	36.538	36.619	≥500	Pass	
Middle	36.603	36.603	≥500	Pass	
Highest	36.587	36.667	≥500	Pass	

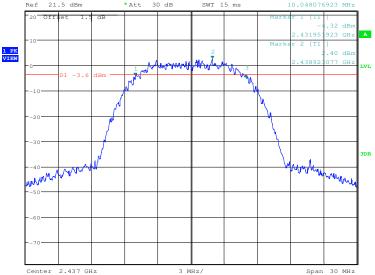


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#### Test plot as follows:

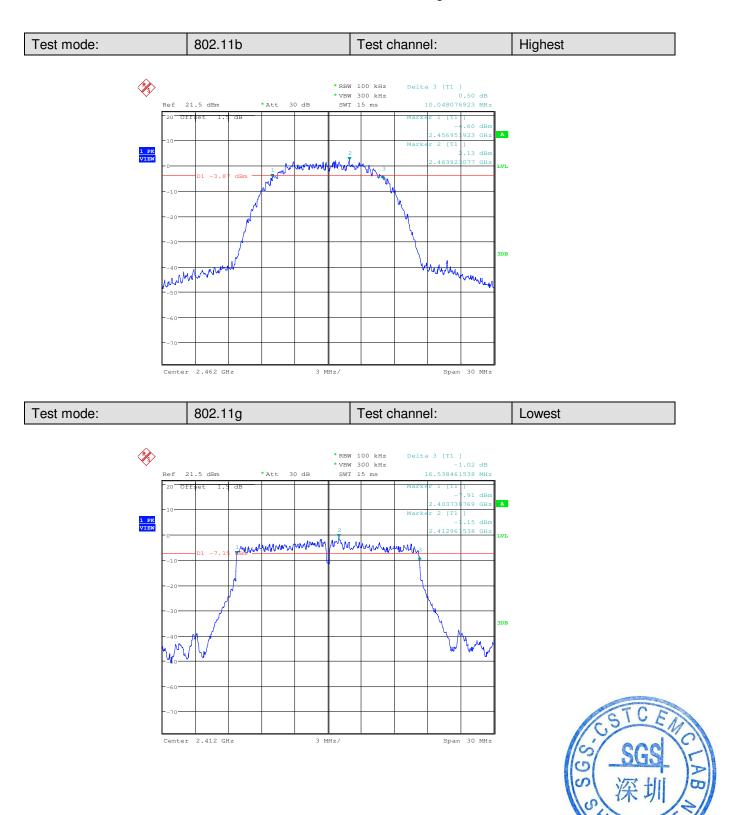
#### Antenna 1:





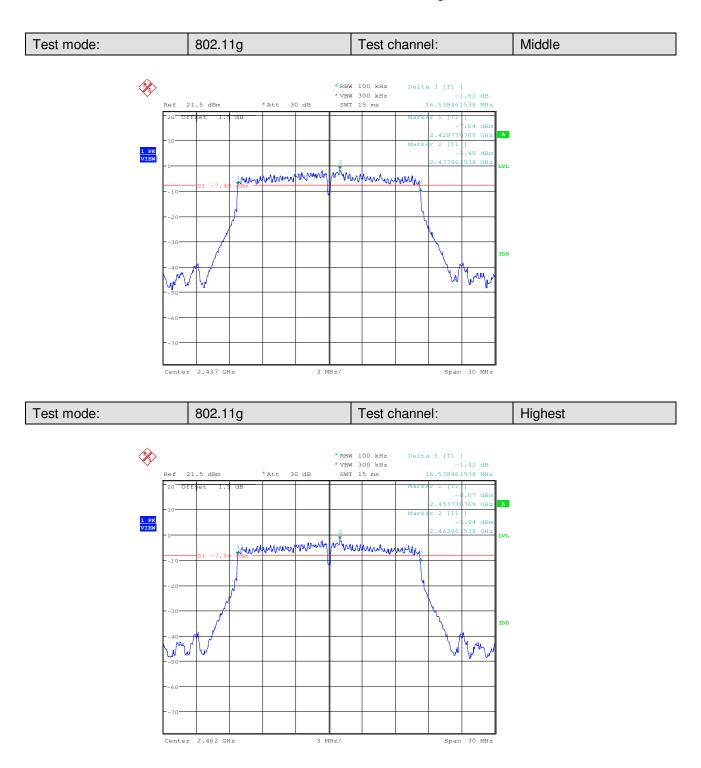


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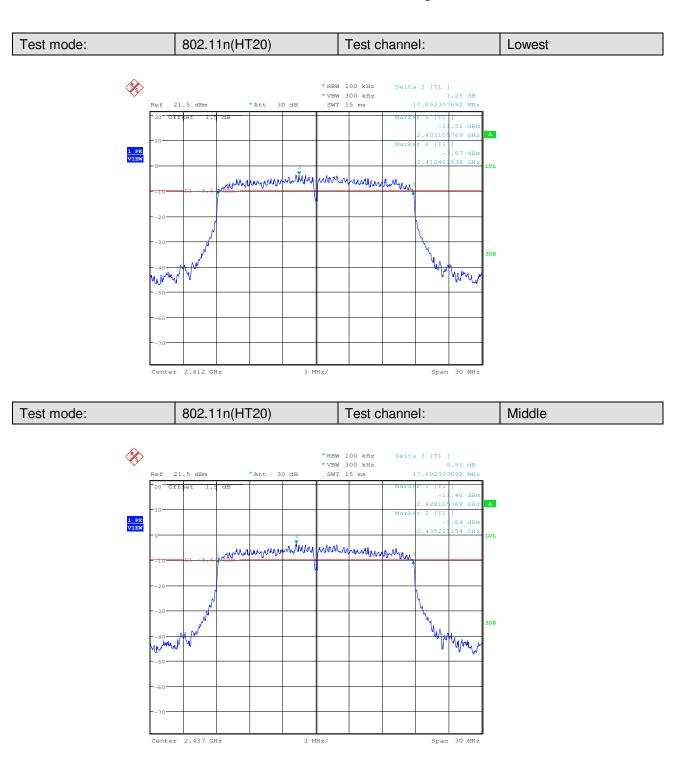


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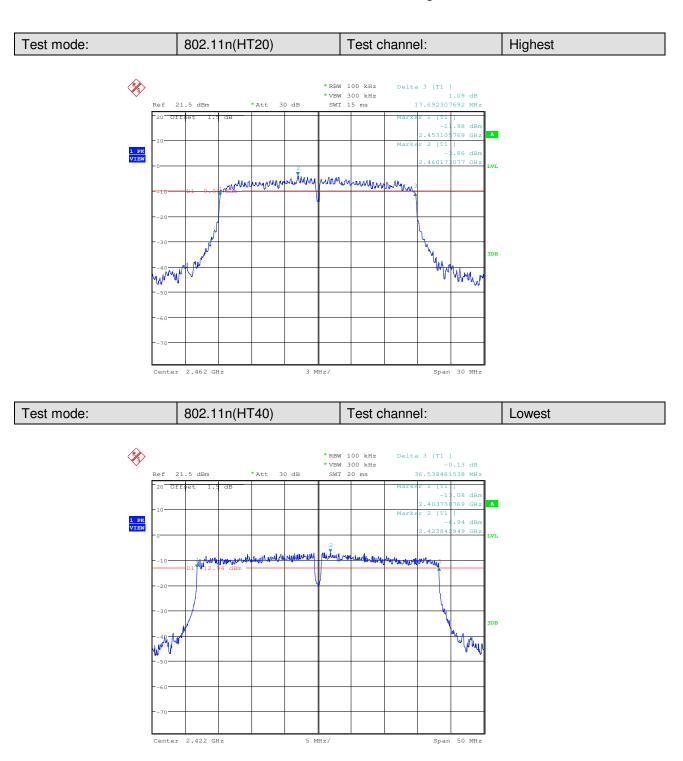


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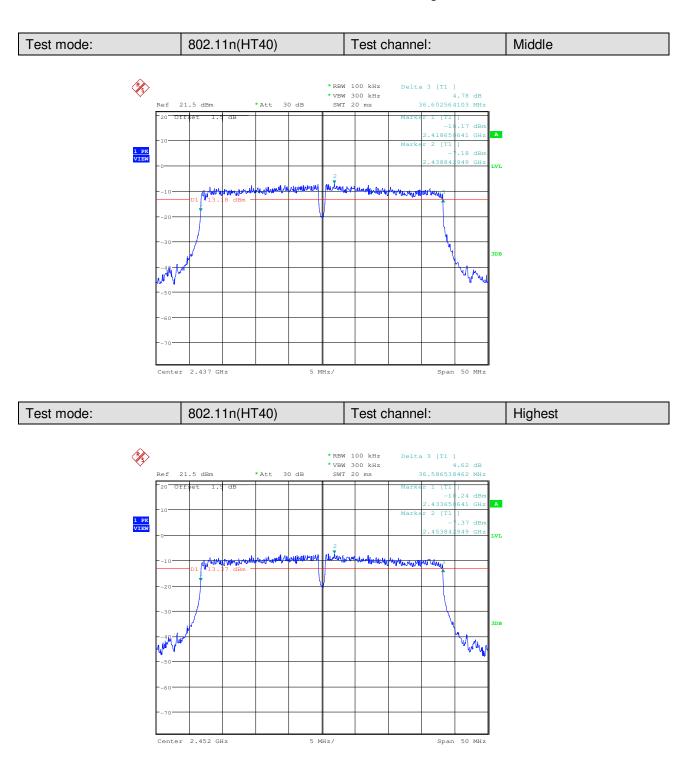


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#### 6.5 Power Spectral Density

T I D I I			
Test Requirement:	47 CFR Part 15C Section 15.247 (e)		
Test Method:	KDB558074 D01 v03r02		
	KDB662911 D01Multiple Transmitter Output v02r01		
Test Setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane Remark: Offset the High-Frequency cable loss 1.5dB in the spectrum analyzer.		
Test Instruments:	Refer to section 5.10 for details		
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates		
Final Test Mode:	Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b;		
	6Mbps of rate is the worst case of 802.11g ; 6.5Mbps of rate is the worst case of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40)		
Limit:	≤8.00dBm		
Test Results:	Pass		

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Measurement Data						
	Ĩ	8	02.11b mod	e		1
Test channel	Power Spectral D		Density (dBm)		Limit (dBm)	Result
	Antenna	a 1	Antenna 2			
Lowest	-10.81		-12.68		≤8.00	Pass
Middle	-10.86	6	-12.98		≤8.00	Pass
Highest	-11.12	2	-13.17		≤8.00	Pass
		8	02.11g mod	e		
Test channel	Power S	pectral D	ensity (dBm)		Limit (dBm)	Result
	Antenna	a 1	Antenna 2			
Lowest	-15.07	7	-15.91		≤8.00	Pass
Middle	-15.36	6	-16.07		≤8.00	Pass
Highest	-15.69	-15.69			≤8.00	Pass
		802.	11n(HT20) n	node		
Test channel	Power S	Power Spectral Density (dBm)			Limit (dBm)	Result
	Antenna 1	Antenna	a 2 Tota			
Lowest	-17.79	-18.13	3 -14.9	5	≤8.00	Pass
Middle	-18.02	-18.73	3 -15.3	55	≤8.00	Pass
Highest	-18.20	-18.74	4 -15.4	55	≤8.00	Pass
802.11n(HT40) mode						
Test channel	Power S	Power Spectral Density (dBm)		Limit (dBm)	Result	
	Antenna 1	Antenna	a 2 Tota			
Lowest	-20.30	-19.87	7 -17.0	7	≤8.00	Pass
Middle	-19.47	-20.66	6 -17.0	1	≤8.00	Pass
Highest	-20.56	-20.05	5 -17.2	9	≤8.00	Pass

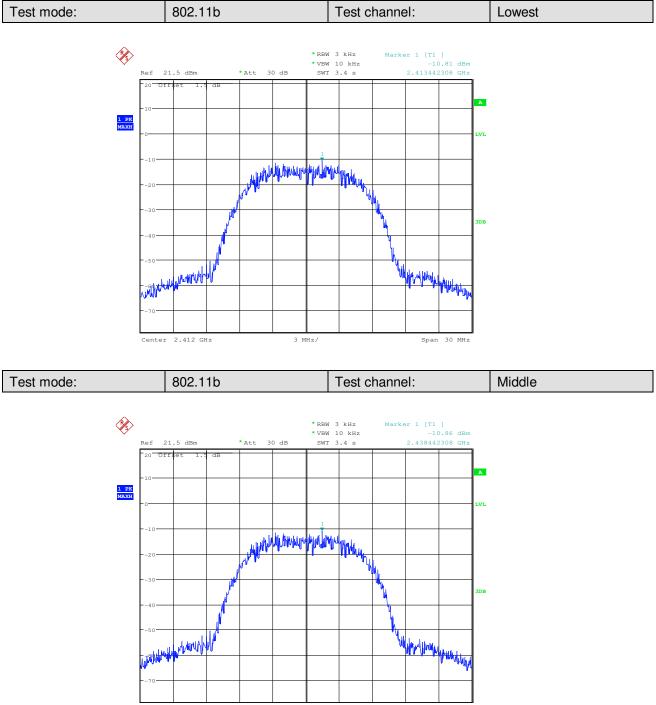
#### **Measurement Data**



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#### Test plot as follows:

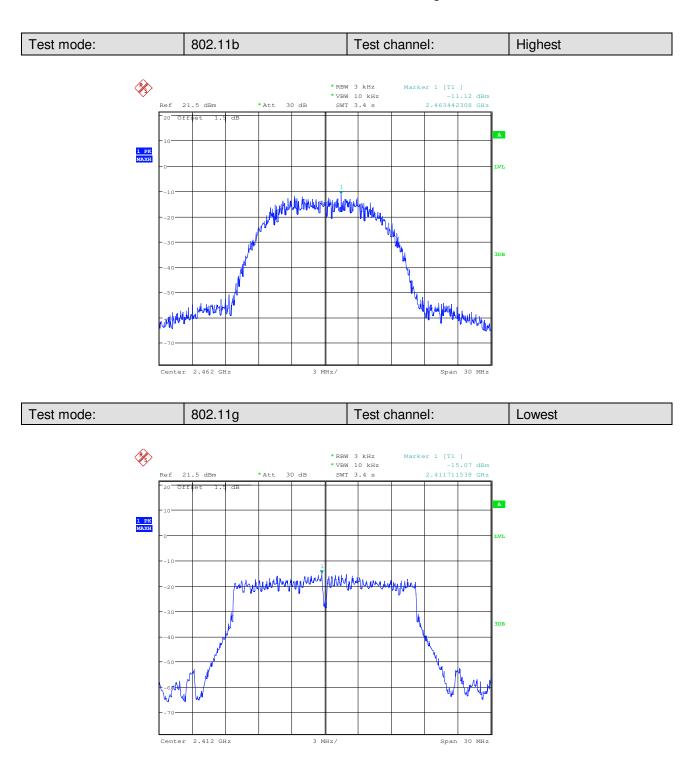
#### Antenna 1:



Center 2.437 GHz 3 MHz/ Span 30 MHz

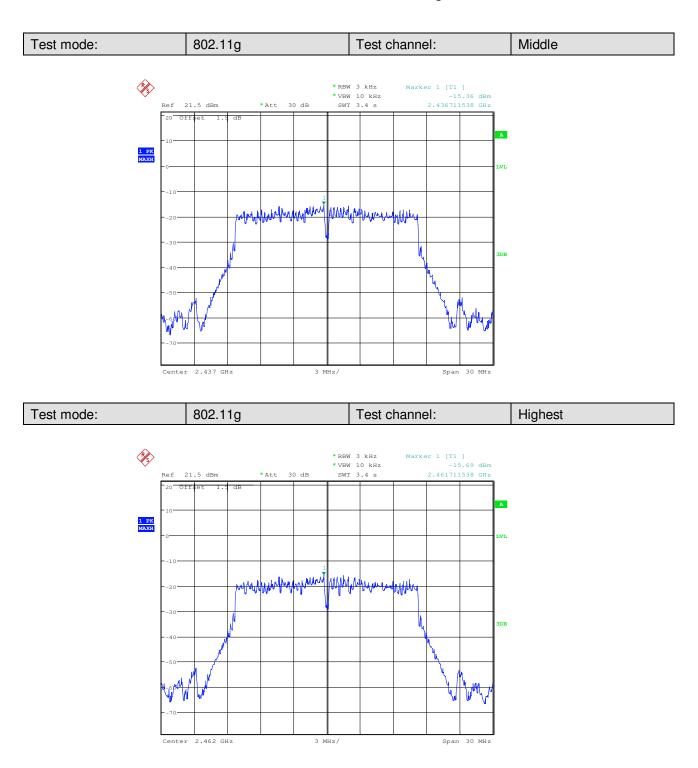


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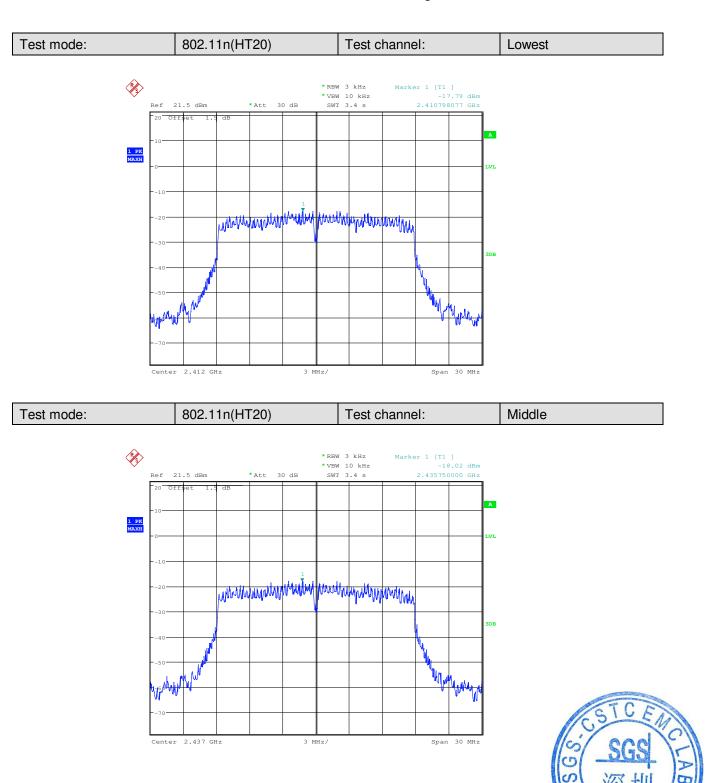


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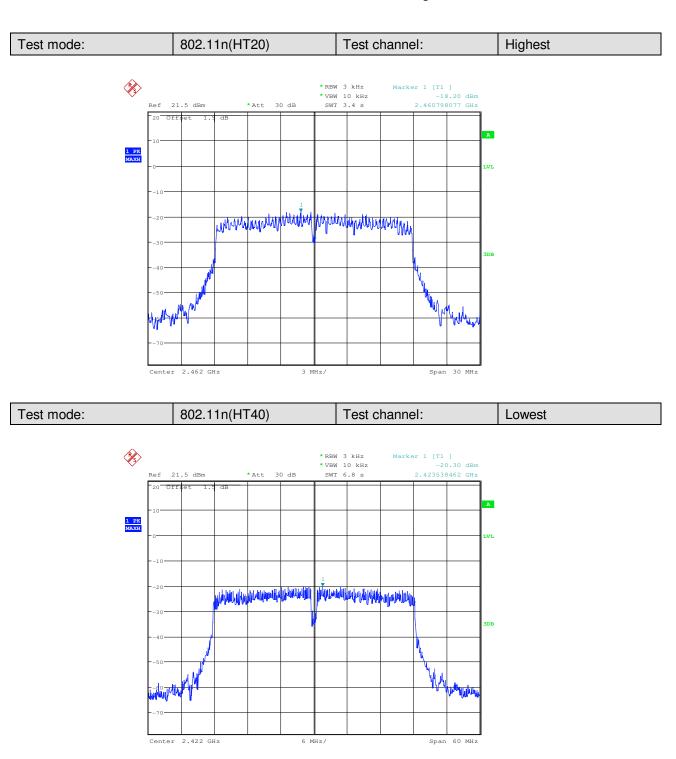


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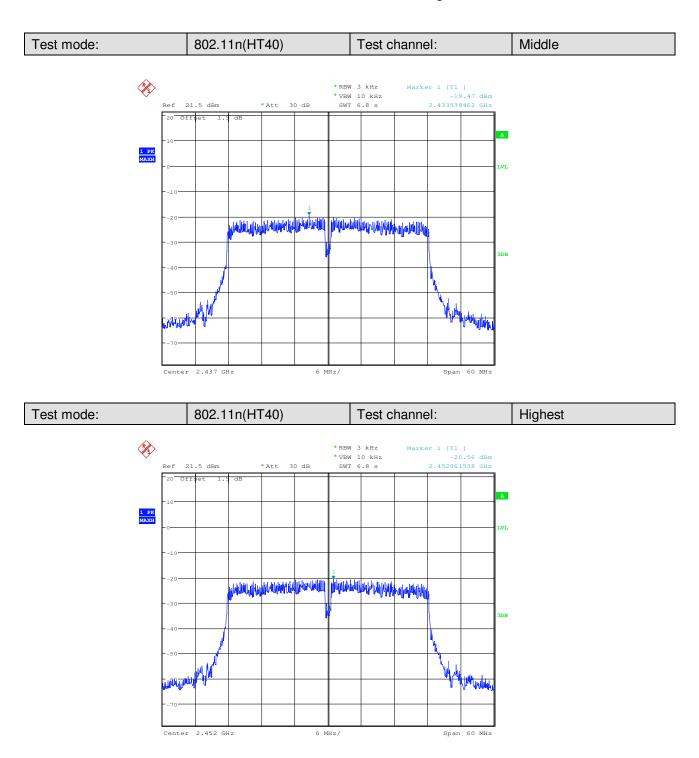


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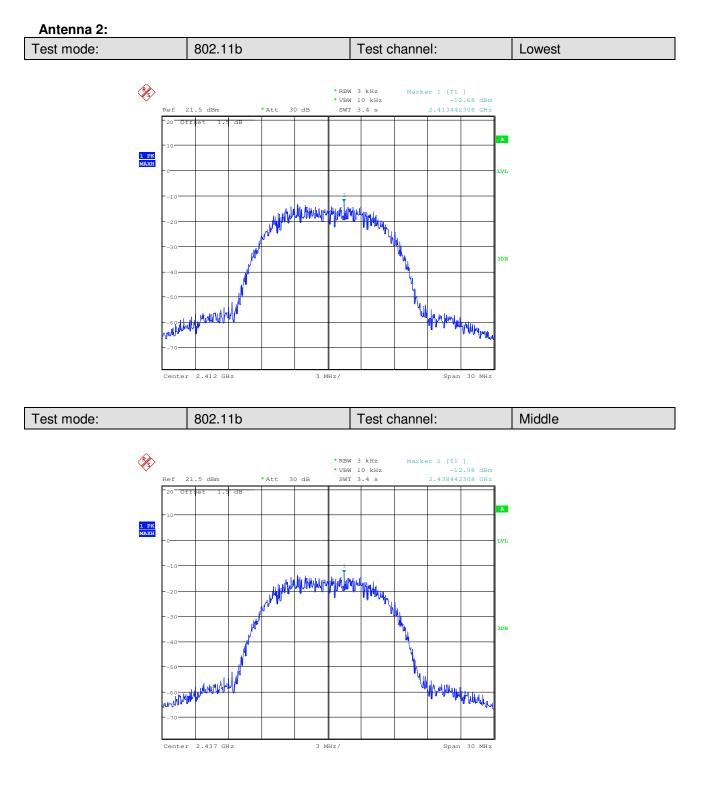


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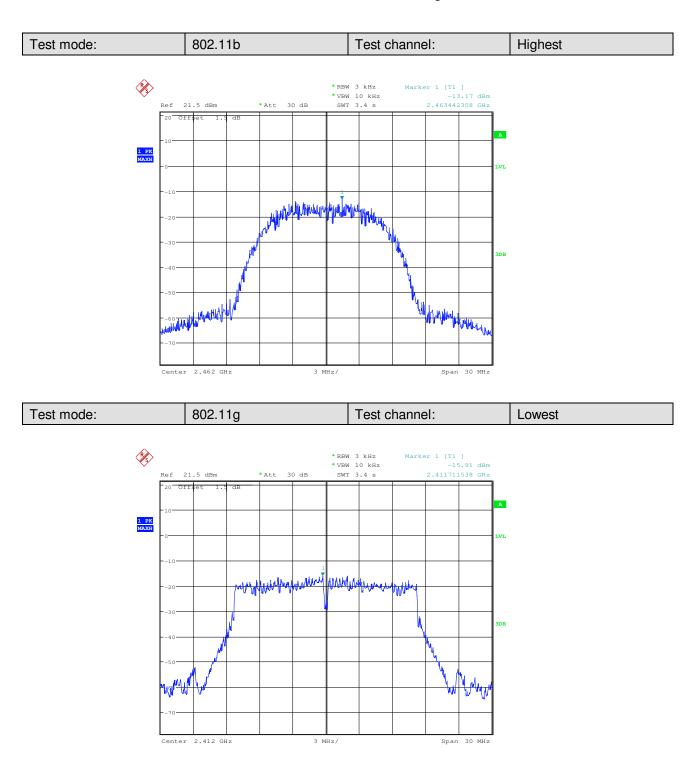


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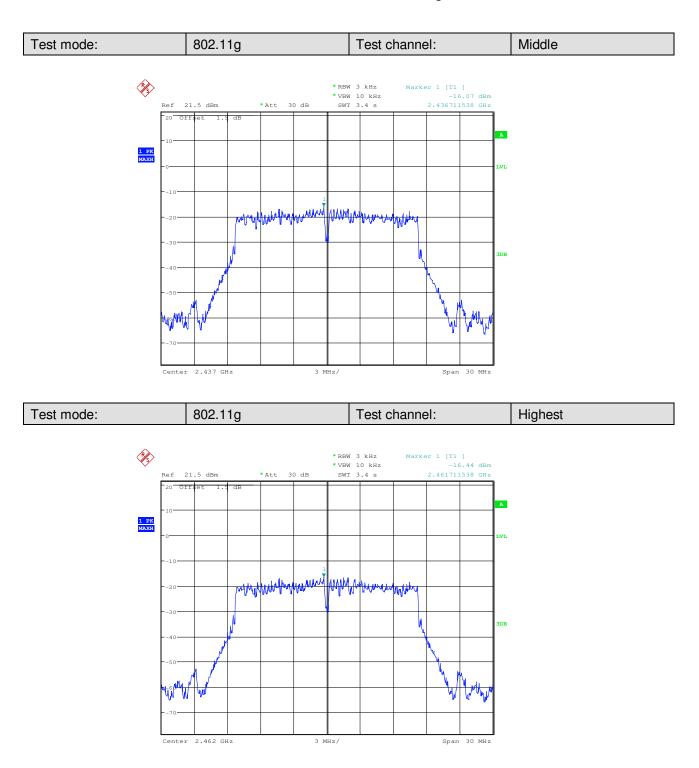


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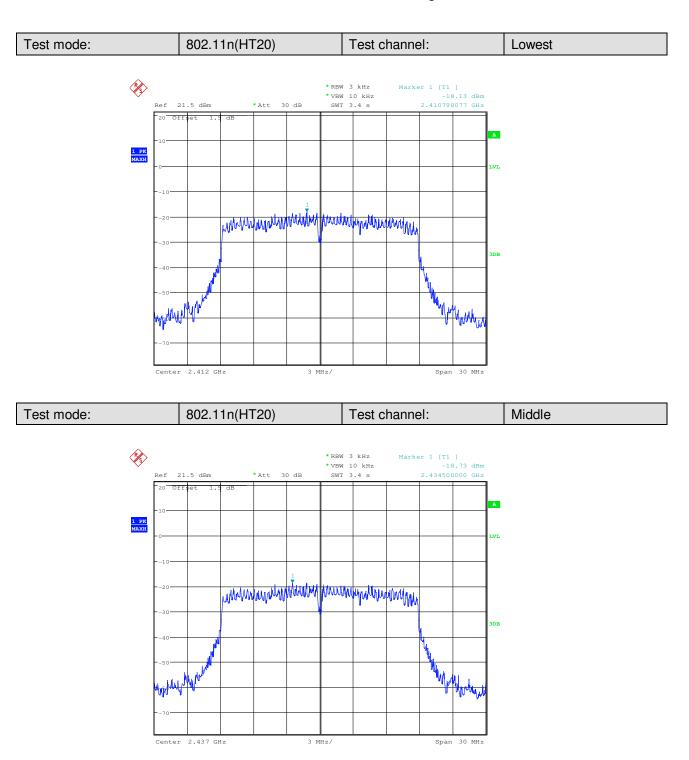


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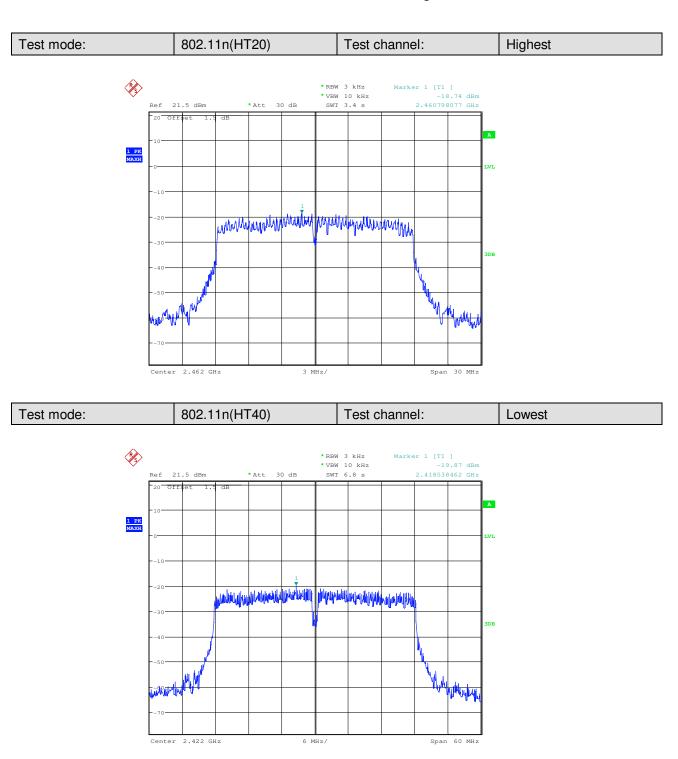


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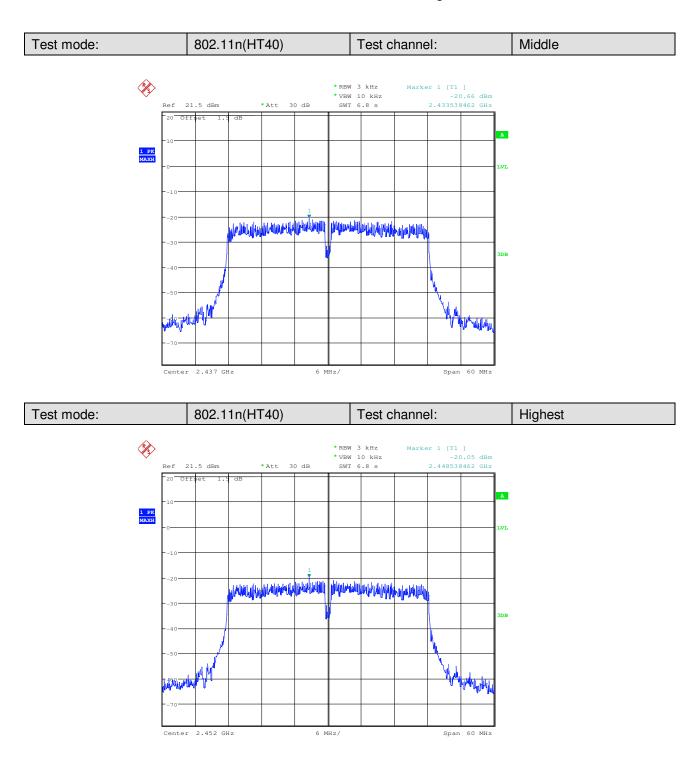


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#### 6.6 Band-edge for RF Conducted Emissions

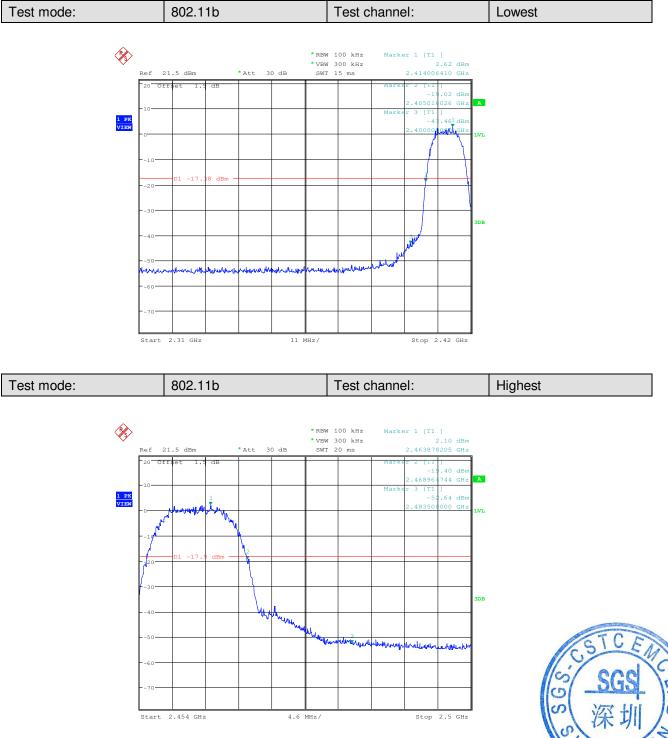
Test Requirement:	47 CFR Part 15C Section 15.247 (d)			
Test Method:	KDB558074 D01 v03r02			
	KDB662911 D01Multiple Transmitter Output v02r01			
Test Setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane Remark:			
	Offset the High-Frequency cable loss 1.5dB in the spectrum analyzer.			
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates			
Final Test Mode:	Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b; 6Mbps of rate is the worst case of 802.11g ; 6.5Mbps of rate is the worst case of 802.11n(HT20) ; 13.5Mbps of rate is the worst case of 802.11n(HT40)			
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.			
Instruments Used:	Refer to section 5.10 for details			
Test Results:	Pass			
	Noted: According to KDB662911 D01Multiple Transmitter Output v02r01, section E) 3) a)(iii), Final value = Measure value + 10 $log(N_{ANT})$ .			
	Where (N <sub>ANT</sub> ) is the number of output			



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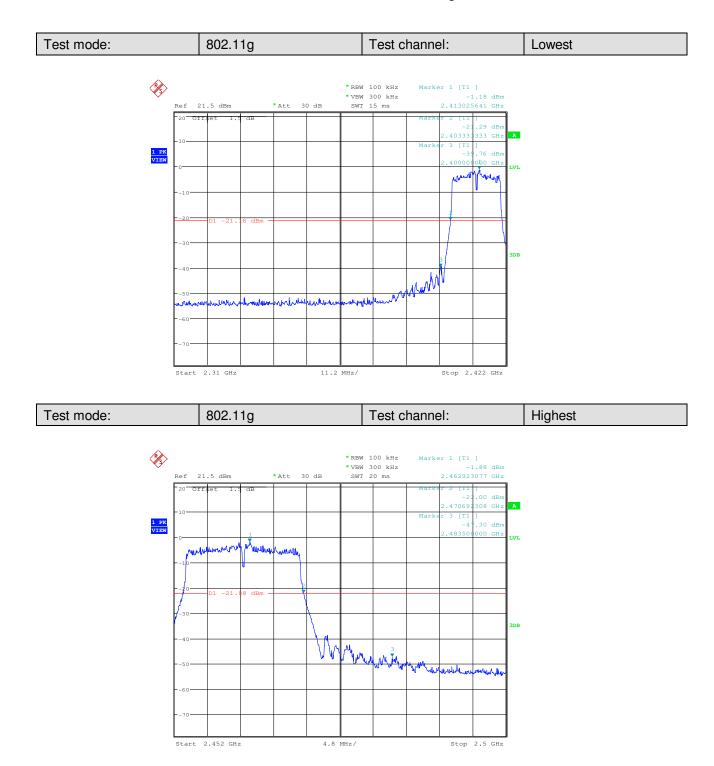
#### Test plot as follows:

#### Antenna 1:



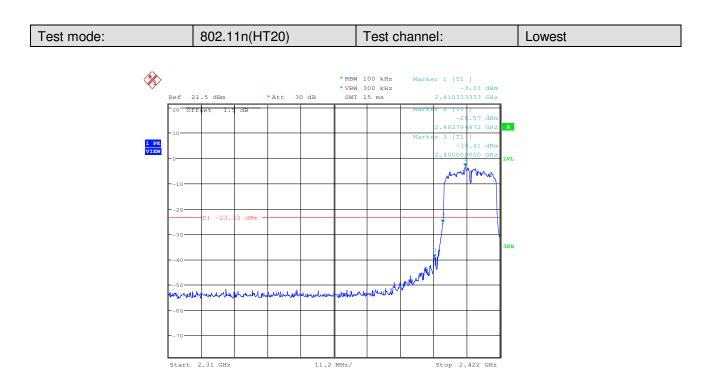


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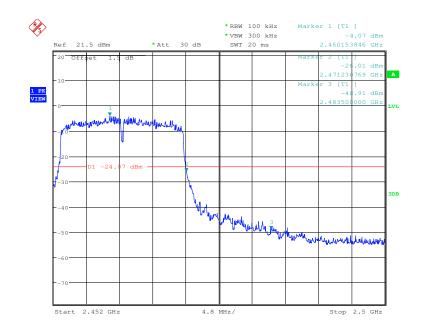




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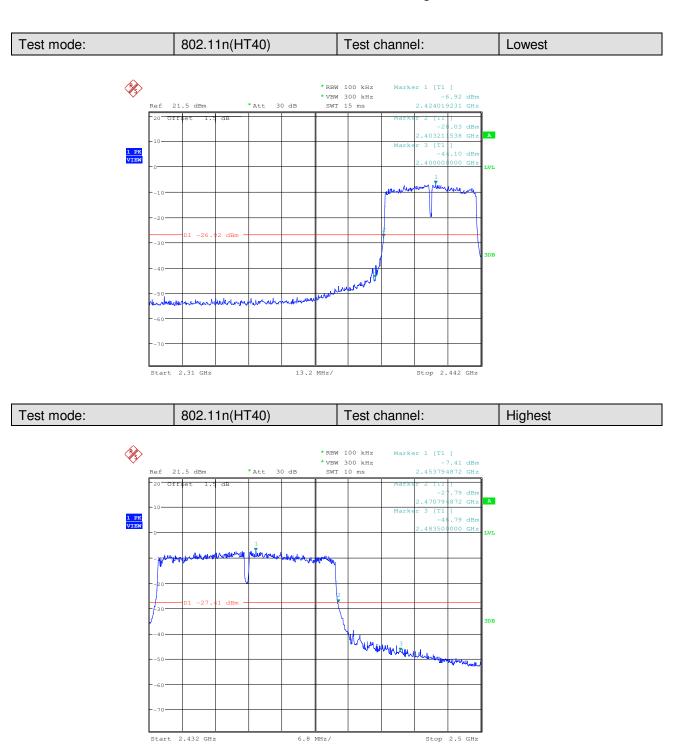


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## 6.7 RF Conducted Spurious Emissions

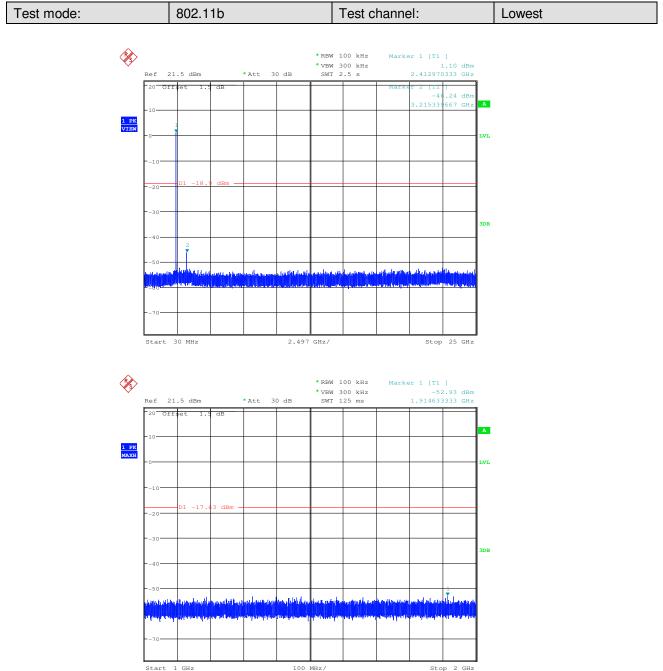
Test Requirement:	47 CFR Part 15C Section 15.247 (d)		
Test Method:	KDB558074 D01 v03r02		
	KDB662911 D01Multiple Transmitter Output v02r01		
Test Setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane Remark: Offset the High-Frequency cable loss 1.5dB in the spectrum analyzer.		
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates		
Final Test Mode:	Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b; 6Mbps of rate is the worst case of 802.11g ; 6.5Mbps of rate is the worst case of 802.11n(HT20) ; 13.5Mbps of rate is the worst case of 802.11n(HT40)		
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread		
	spectrum intentional radiator is operating, the radio frequency power that is		
	produced by the intentional radiator shall be at least 20 dB below that in the		
	100 kHz bandwidth within the band that contains the highest level of the		
	desired power, based on either an RF conducted or a radiated		
	measurement.		
Instruments Used:	Refer to section 5.10 for details		
Test Results:	Pass		
	Noted: According to KDB662911 D01Multiple Transmitter Output v02r01, section E) 3) a)(iii), Final value = Measure value + 10 log(N <sub>ANT</sub> ).		
	Where (N <sub>ANT</sub> ) is the number of output		



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#### Test plot as follows:

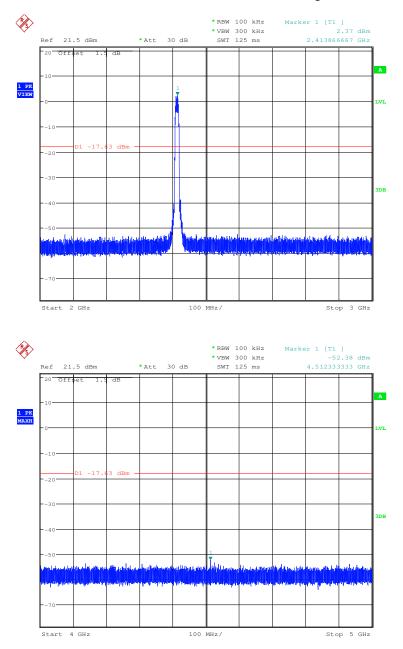
#### Antenna 1:



# SGS

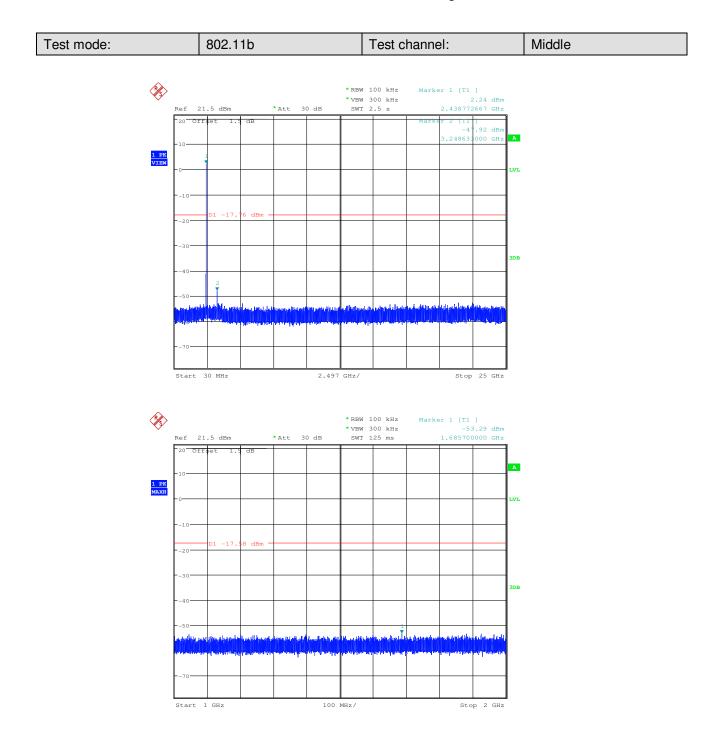
#### SGS-CSTC Standards Technical Services Ltd.

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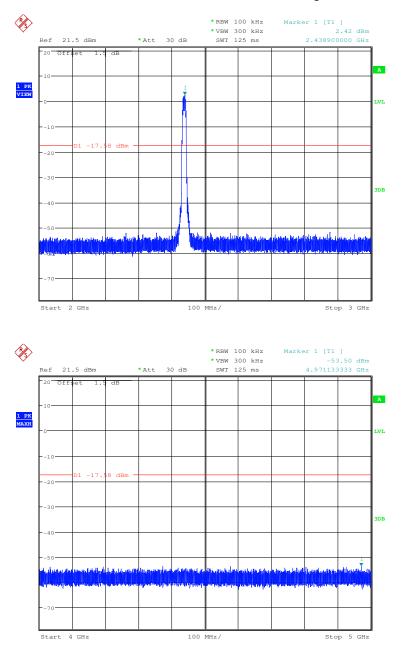
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# SGS

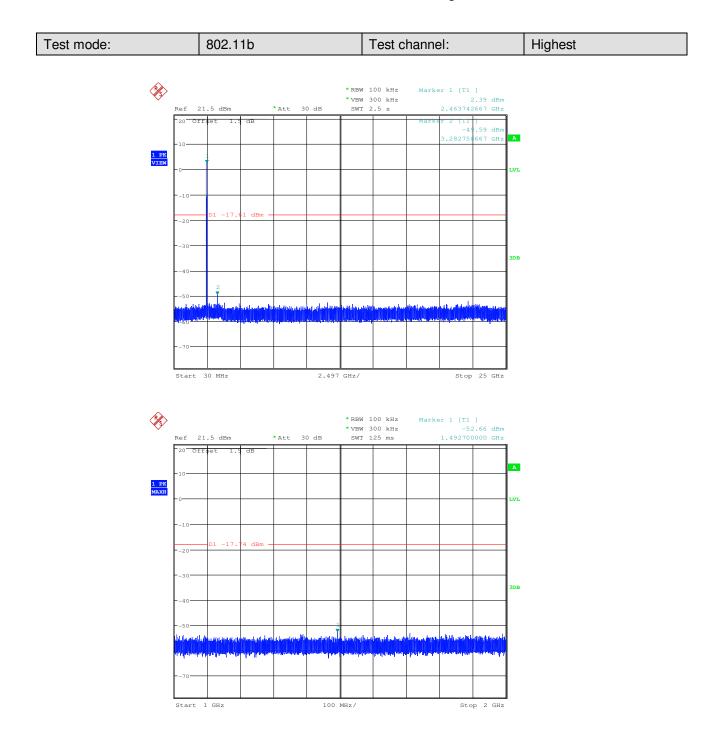
## SGS-CSTC Standards Technical Services Ltd.

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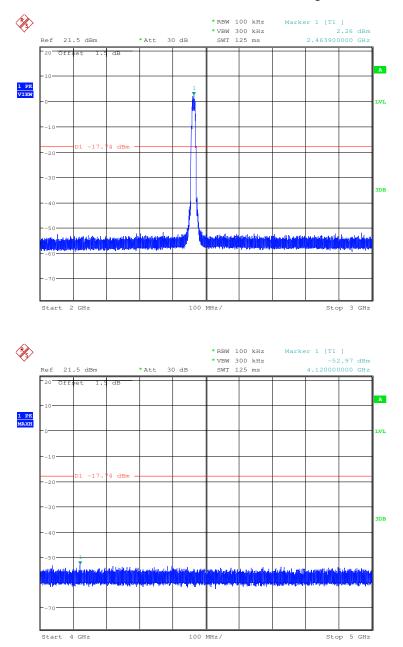


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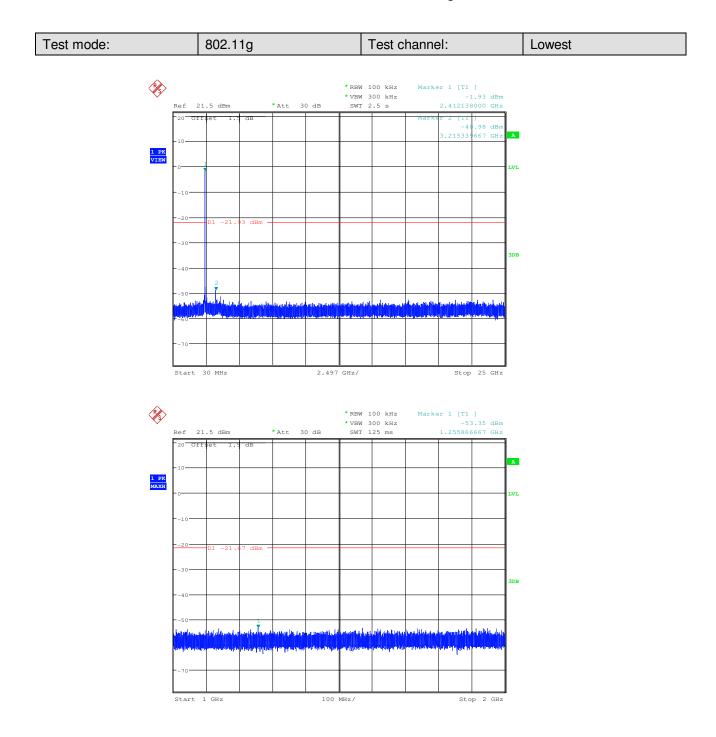
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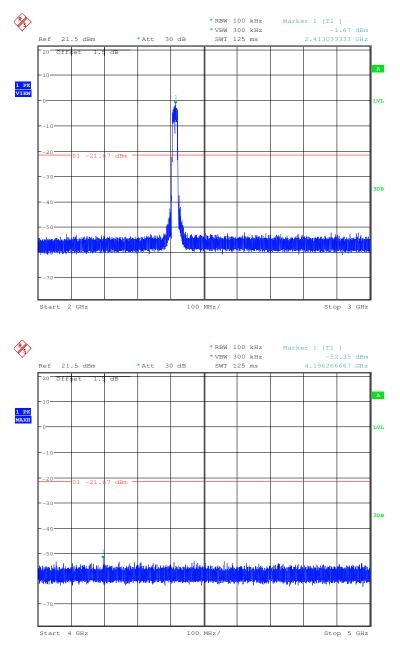


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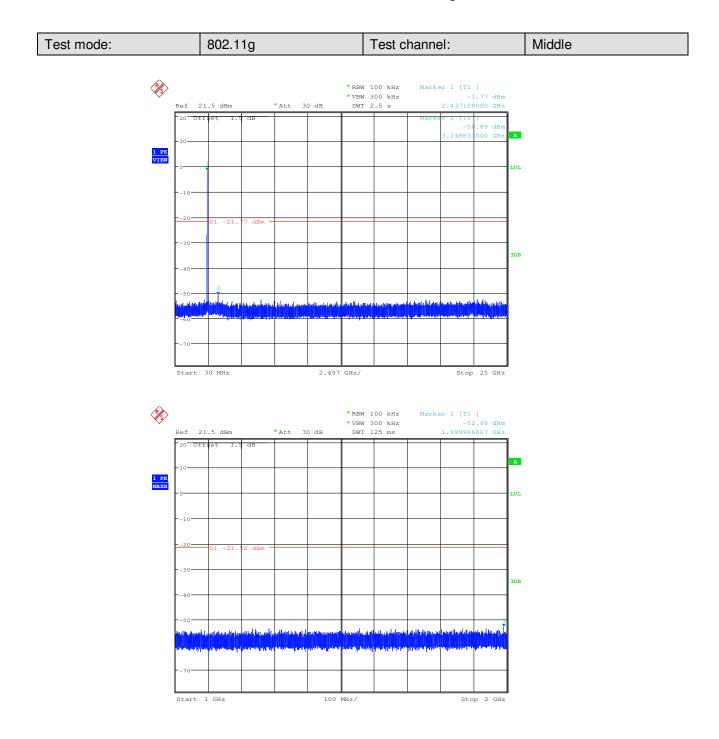
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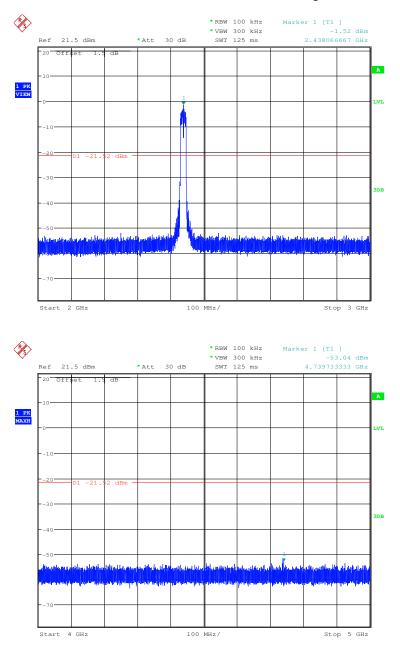


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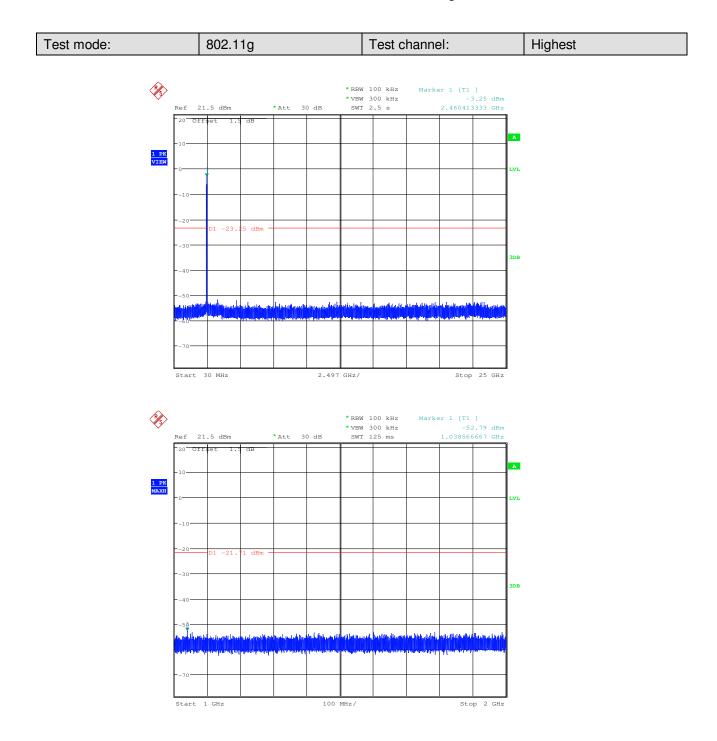
#### SGS-CSTC Standards Technical Services Ltd.

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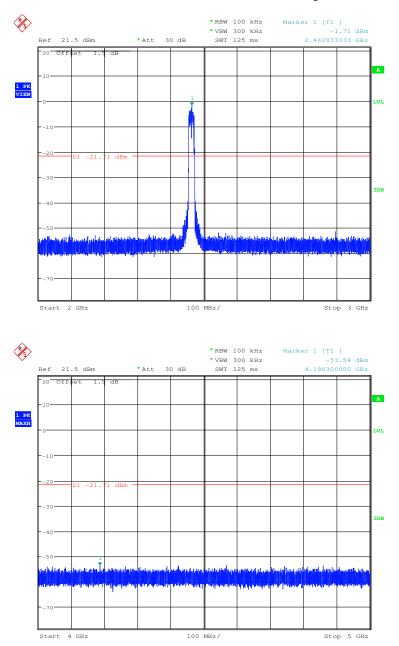


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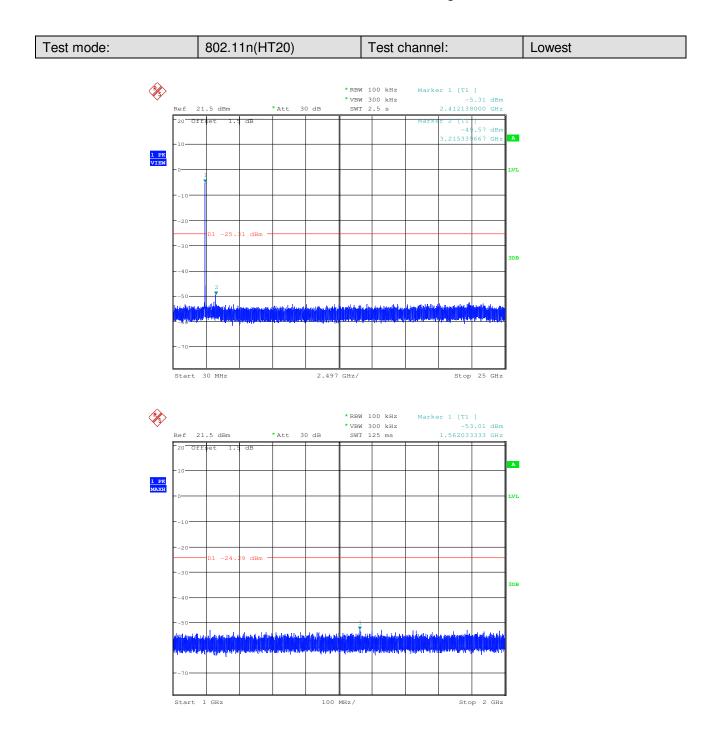
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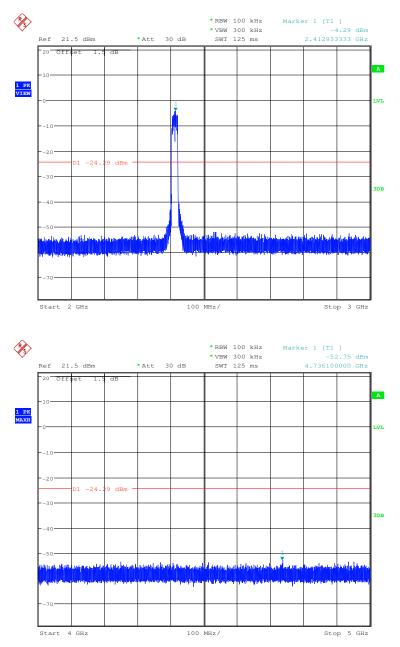


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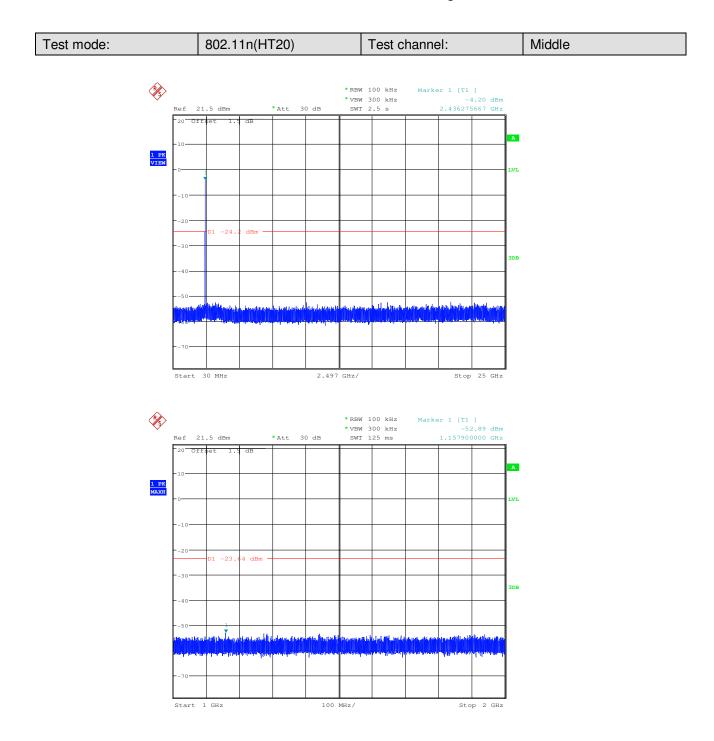
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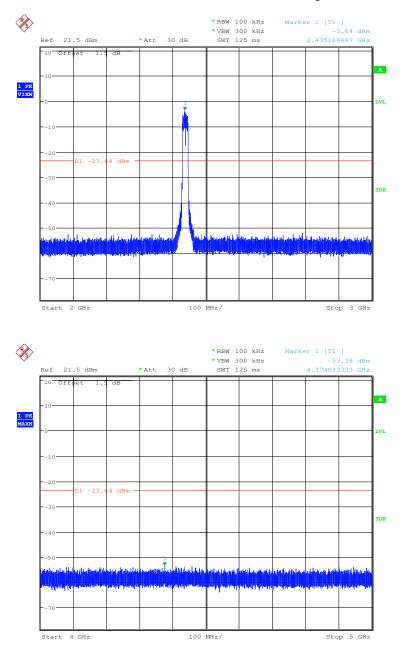


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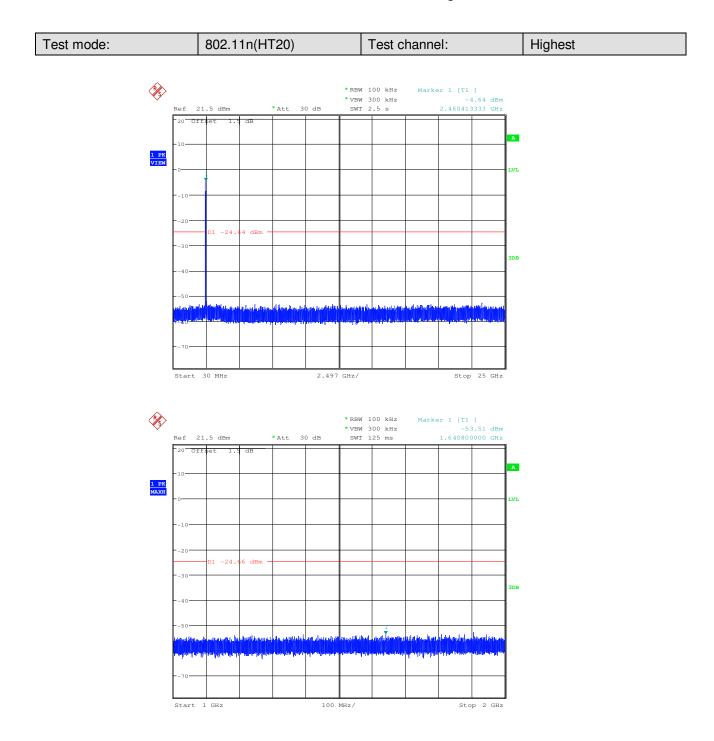
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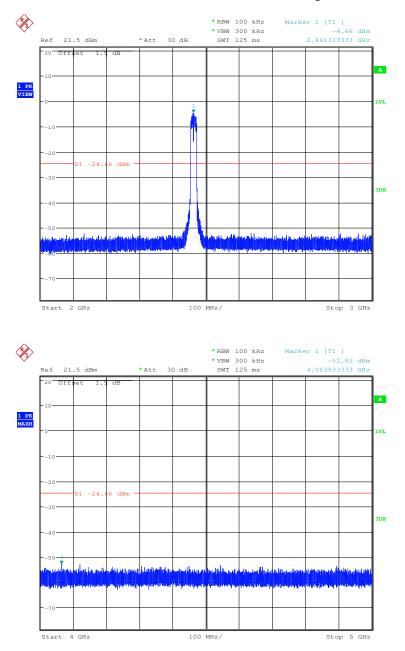


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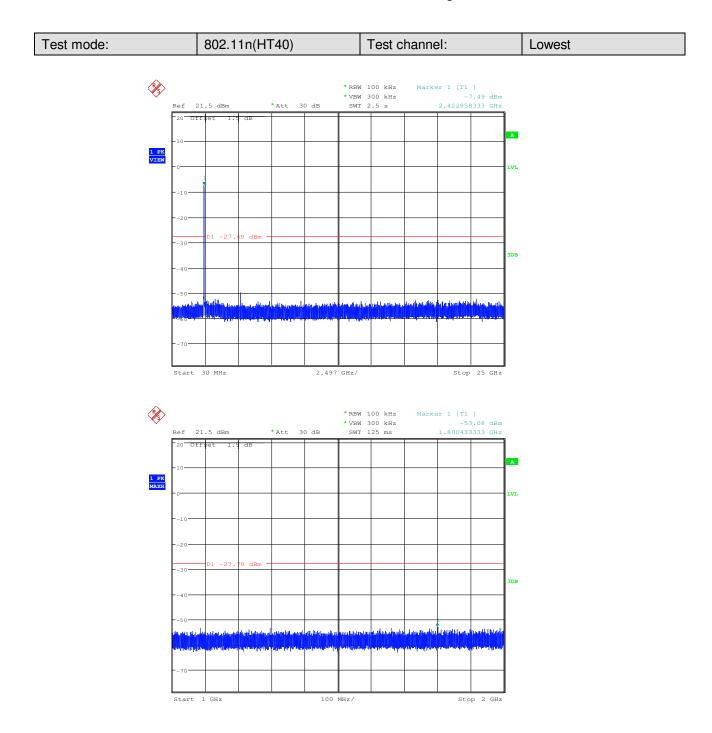
### SGS-CSTC Standards Technical Services Ltd.

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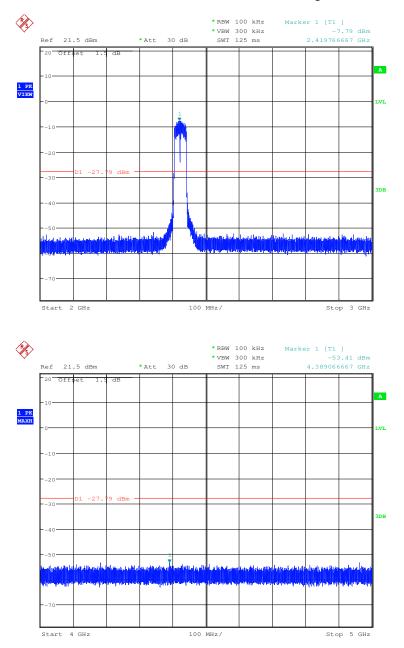


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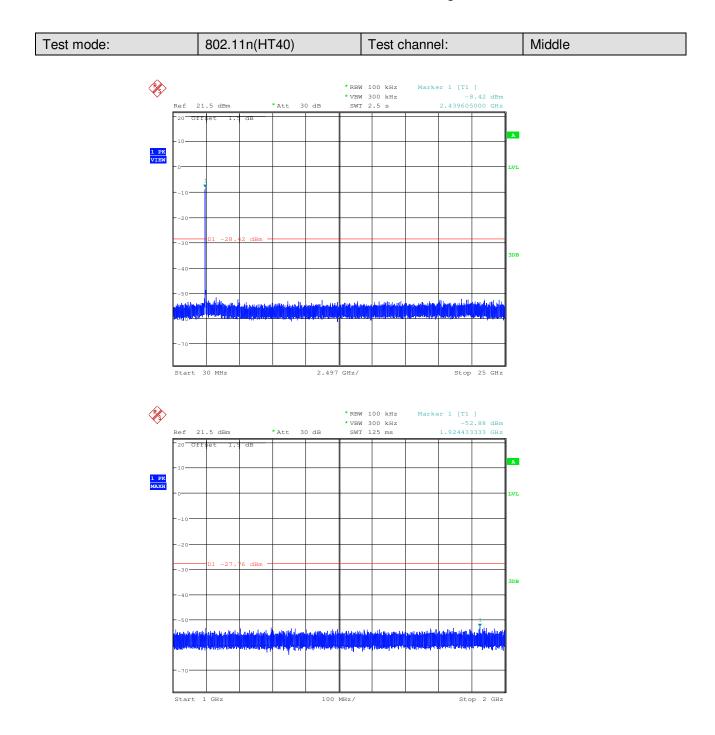
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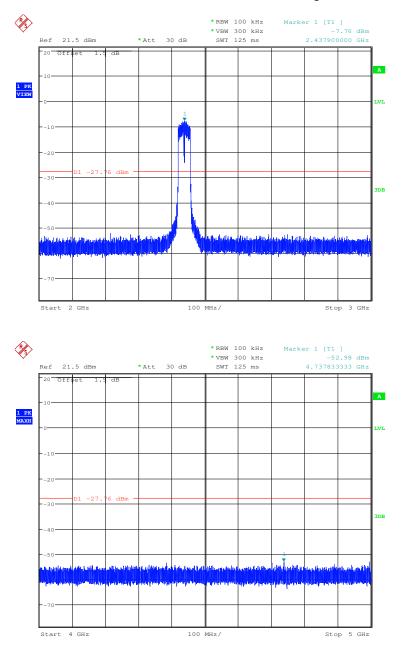


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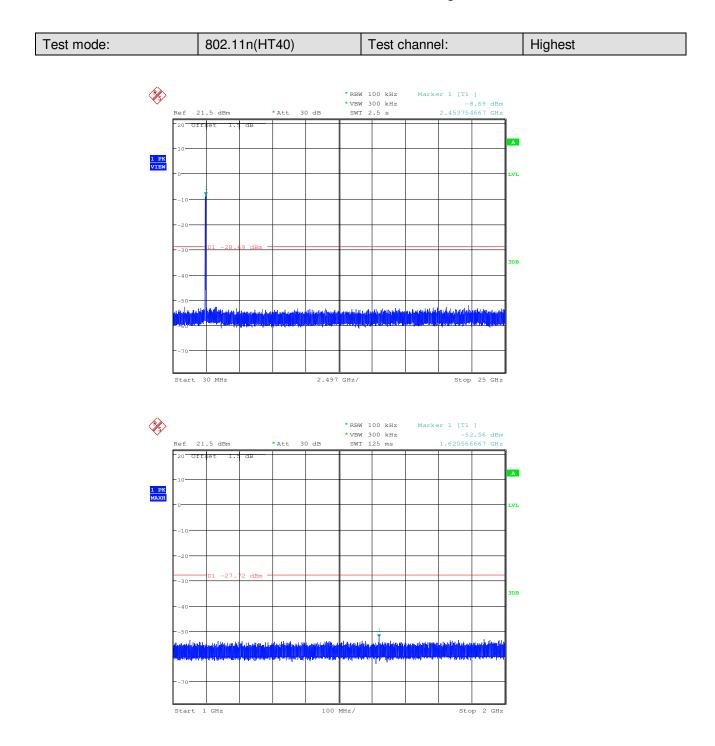
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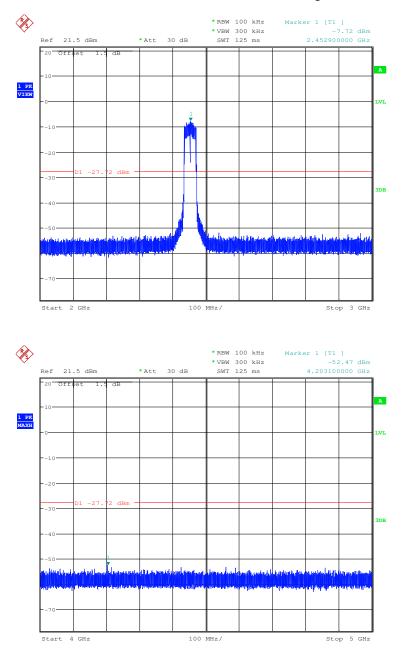


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Remark:

Pretest 9kHz to 25GHz, find the highest point when testing, so only the worst data were shown in the test report. Per FCC Part 15.33 (a) and 15.31 (o) ,The amplitude of spurious emissions from intentional radiators which are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this part.



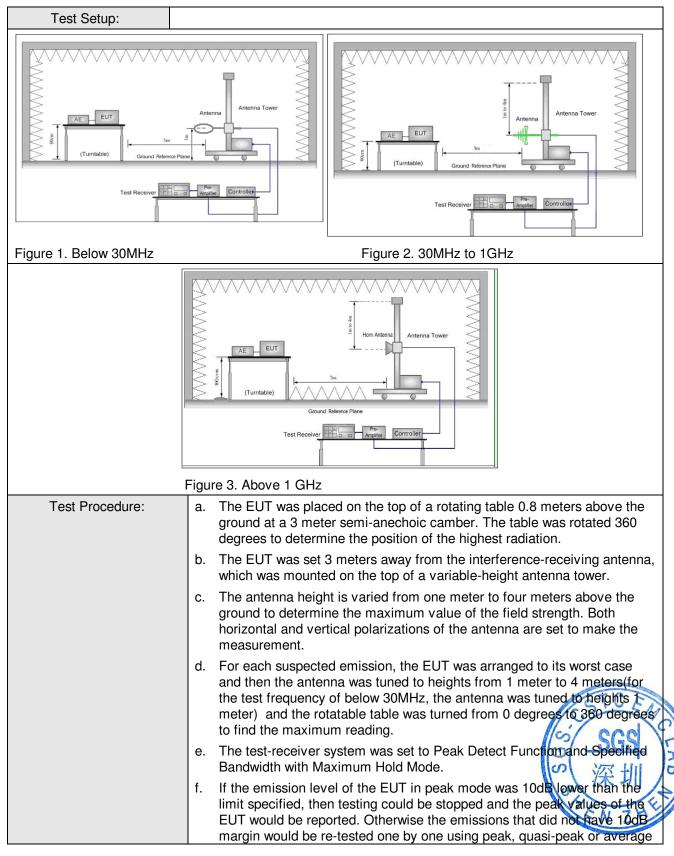
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#### 6.8 Radiated Spurious Emissions

Test Requirement:	47 CFR Part 15C Section	n 15.209 and 15.20	05					
Test Method:	ANSI C63.10 2009							
Test Site:	Measurement Distance:	3m (Semi-Anecho	ic Chamber)					
Receiver Setup:	Frequency	Detector	RBW	VBW	Remark			
	0.009MHz-0.090MHz	Peak	10kHz	30kHz	Peak			
	0.009MHz-0.090MHz	Average	10kHz	30kHz	Average			
	0.090MHz-0.110MHz	Quasi-peak	10kHz	30kHz	Quasi-peak			
	0.110MHz-0.490MHz	Peak	10kHz	30kHz	Peak			
	0.110MHz-0.490MHz	Average	10kHz	30kHz	Average			
	0.490MHz -30MHz	Quasi-peak	10kHz	30kHz	Quasi-peak			
	30MHz-1GHz	Quasi-peak	100 kHz	300kHz	Quasi-peak			
	Above 1GHz	Peak	1MHz	3MHz	Peak			
	Above ronz	Peak	1MHz	10Hz	Average			
Limit:	Frequency	Field strength (microvolt/meter)	Limit (dBuV/m)	Remark	Measurement distance (m)			
	0.009MHz-0.490MHz	2400/F(kHz)	-	-	300			
	0.490MHz-1.705MHz	24000/F(kHz)	-	-	30			
	1.705MHz-30MHz	30	-	-	30			
	30MHz-88MHz	100	40.0	Quasi-peak	3			
	88MHz-216MHz	150	43.5	Quasi-peak	3			
	216MHz-960MHz	200	46.0	Quasi-peak	3			
	960MHz-1GHz	500	54.0	Quasi-peak	3			
	Above 1GHz	500	54.0	Average	3			
	Note: 15.35(b), Unless of	therwise specified,	the limit on	peak radio fre	equency			
	emissions is 20dB			-				
applicable to the equipment under test. This peak limit applies to the peak								
	emission level rad	iated by the device	е.					



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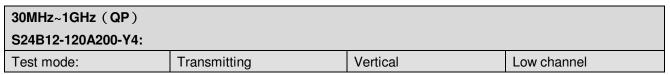
		method as specified and then reported in a data sheet.
		g. Test the EUT in the lowest channel ,the middle channel ,the Highest channel
		h. Repeat above procedures until all frequencies measured was complete.
Exploratory	Test	Transmitting with all kind of modulations, data rates.
Mode:		Transmitting mode
Final Test Mode:		Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b;
		6Mbps of rate is the worst case of 802.11g ; 6.5Mbps of rate is the worst case
		of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40)
		For below 1GHz, through Pre-scan, find the 1Mbps of rate of 802.11b at lowest channel is the worst case.
		Only the worst case is recorded in the report.
Instruments Used:		Refer to section 5.10 for details
Test Results:		Pass

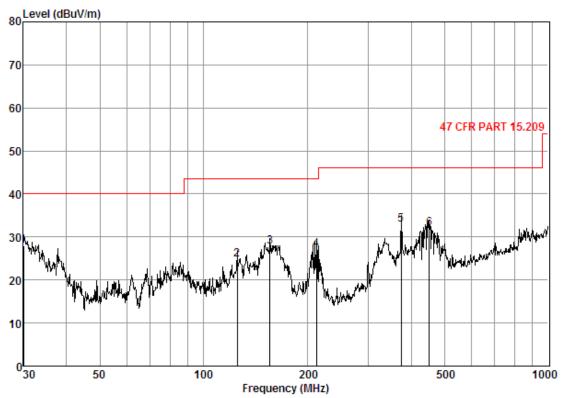
<sup>&</sup>quot;This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



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#### 6.8.1 Radiated emission below 1GHz





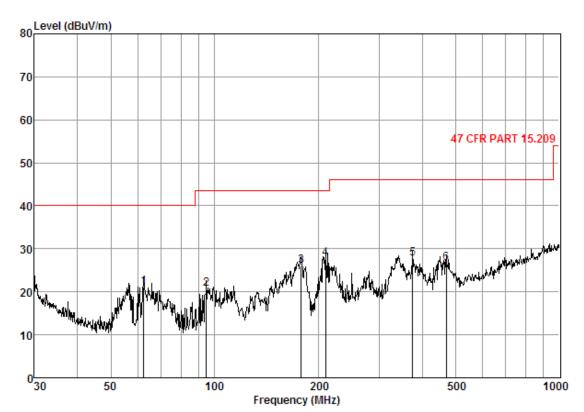
Condition: 47 CFR PART 15.209 3m 3142C VERTICAL Job No. : 5892CR Mode : 2412 TX mode : S24B12-120A200-Y4

	Freq			Preamp Read Factor Level		Level		Over Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 2 3 4 5 6	30.00 125.01 155.91 212.27 374.62 451.14	0.64 1.61 1.91 2.23 3.13 3.55	18.70 8.00 9.54 10.79 15.89 16.94	25, 58 25, 62 25, 40 24, 65 25, 42 25, 97	34.17 40.81 41.58 38.70 39.35 37.39	27.93 24.80 27.63 27.07 32.95 31.91	43.50 43.50 43.50 46.00	-12.07 -18.70 -15.87 -16.43 -13.05 -14.09



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Condition: 47 CFR PART 15.209 3m 3142C HORIZONTAL Job No. : 5892CR Mode : 2412 TX mode

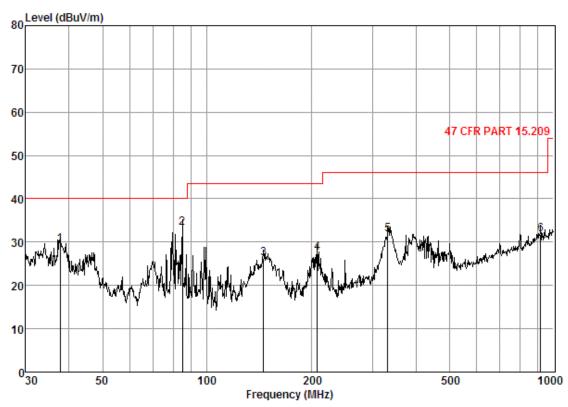
lode	:	2412 TX mode
	:	S24B12-120A200-Y4

	Freq			Preamp Read Factor Level				Over Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 2 3 4 5 6	62.21 94.76 178.13 210.05 375.94 470.52	1.09 1.41 2.02 2.22 3.14 3.64	9.83 10.68 15.92	25.31 25.03 24.90 25.58	38. 40 35. 67 39. 25 39. 63 34. 17 31. 43	21.17 20.71 26.07 27.63 27.65 26.62	43.50 43.50 43.50 46.00	-18.83 -22.79 -17.43 -15.87 -18.35 -19.38



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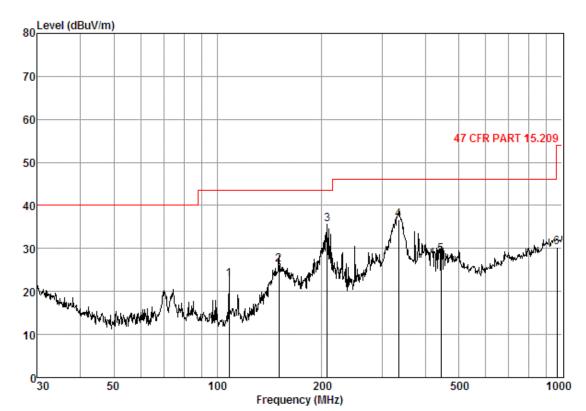
Condition:	47 CF	R PART	15.209	Зm	3142C	VERTICAL
Tob No ·	58920	R				

Job No Mode	: 2437	CR TX mod 12-120A						
				Preamp	Read		Limit	Over
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
-	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 2	37.68 85.00	0.73 1.32	14.40 8.30	25.67 25.47	39.94 49.05	29.40 33.20	40.00 40.00	-10.60 -6.80
3	145.35	1.80	8.88	24.97	40.49	26.20	43.50	-17.30
4	207.85	2.20	10.58	25.28	40.00	27.50	43.50	-16.00
5	332.52	2.94	15.01	24.67	38.50	31.78	46.00	-14.22
6	916.07	5.53	23.33	26.17	29.12	31.81	46.00	-14.19



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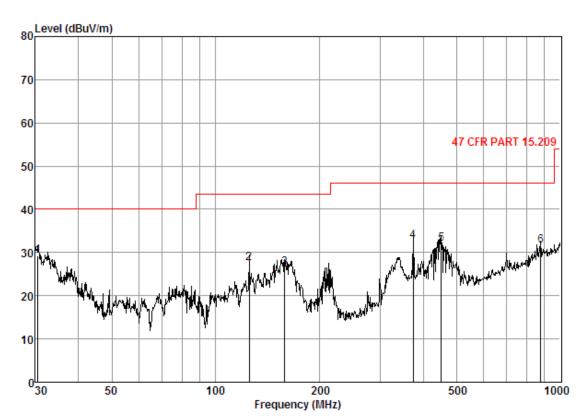
Condition:	47 CFR PART 15.209 3m 3142C HORIZONTAL
Job No. :	5892CR
Mode :	2437 TX mode

oae			200-Y4 Intenna	Preamp Factor	Read Level		Limit Line	Over Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 2 3 4 5 6	107.89 150.54 207.85 334.86 444.85 965.54	1.44 1.81 2.20 2.94 3.47 5.47	8.78 9.32 10.58 15.08 16.78 23.51	26.14 25.00 25.28 24.51 25.73 25.83	38.73 40.18 48.05 43.09 34.00 27.15	22.81 26.31 35.55 36.60 28.52 30.30	43.50 43.50 46.00 46.00	-20.69 -17.19 -7.95 -9.40 -17.48 -23.70



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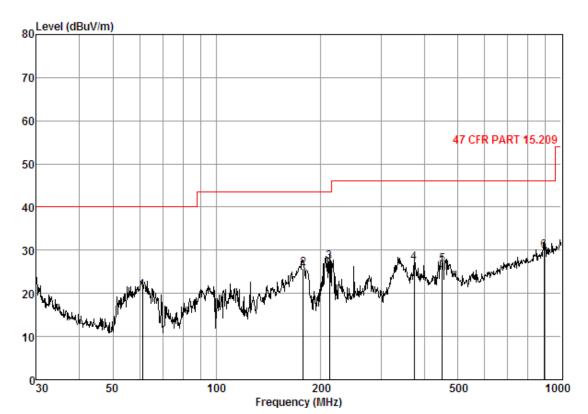
Condition: 47 CFR PART 15.209 3m 3142C VERTICAL Tob No. 5292CR

S24B12	-12082						
	CableAr	ntenna	-	Read Level	Level	Limit Line	Over Limit
MHz	dB	dB/m	dB .	dBuV	dBuV/m	dBuV/m	dB
25.01 58.67 74.62 51.14	3.55	18.40 8.00 9.65 15.89 16.94	25.63 25.62 25.54 25.42 25.97	35.90 43.44 40.34 38.95 37.44	29.32 27.43 26.38 32.55 31.96	43.50 43.50 46.00 46.00	-10.68 -16.07 -17.12 -13.45 -14.04
	Freq MHz 30.53 25.01 58.67 74.62	CableAr           Freq         Loss F           MHz         dB           30.53         0.65           25.01         1.61           58.67         1.93           74.62         3.13           51.14         3.55	CableAntenna Loss Factor           MHz         dB         dB/m           30.53         0.65         18.40           25.01         1.61         8.00           58.67         1.93         9.65           74.62         3.13         15.89           51.14         3.55         16.94	CableAntenna Preamp Loss Factor Factor           MHz         dB         dB/m         dB           30.53         0.65         18.40         25.63           25.01         1.61         8.00         25.62           58.67         1.93         9.65         25.54           74.62         3.13         15.89         25.42           51.14         3.55         16.94         25.97	CableAntenna         Preamp         Read           Freq         Loss         Factor         Factor         Level           MHz         dB         dB/m         dB         dBuV           30.53         0.65         18.40         25.63         35.90           25.01         1.61         8.00         25.62         43.44           58.67         1.93         9.65         25.54         40.34           74.62         3.13         15.89         25.42         38.95           51.14         3.55         16.94         25.97         37.44	MHz         CableAntenna         Preamp         Read           MHz         dB         dB/m         dB         Level         Level           0.53         0.65         18.40         25.63         35.90         29.32           25.01         1.61         8.00         25.62         43.44         27.43           38.67         1.93         9.65         25.54         40.34         26.38           74.62         3.13         15.89         25.42         38.95         32.55           51.14         3.55         16.94         25.97         37.44         31.96	MHz         CableAntenna         Preamp Factor         Read Level         Limit Level         Limit Line           MHz         dB         dB/m         dB         dBuV         dBuV/m         dBuV/m           0.53         0.65         18.40         25.63         35.90         29.32         40.00           25.01         1.61         8.00         25.62         43.44         27.43         43.50           58.67         1.93         9.65         25.54         40.34         26.38         43.50           74.62         3.13         15.89         25.42         38.95         32.55         46.00           51.14         3.55         16.94         25.97         37.44         31.96         46.00



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Condition:	47	CFR	PART	15.	209	Зm	3142C	HORIZONTAL
Tob No. :	589	92CR						

Mode	: 2462	TX mod 12-120A CableA		Preamp	Read		Limit	Over
	Freq			Factor			Line	Limit
_	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 2 3 4 5 6	60. 92 178. 13 212. 27 374. 62 451. 14 890. 73	1.08 2.02 2.23 3.13 3.55 5.30	7.17 9.83 10.79 15.89 16.94 23.05	25, 55 25, 03 24, 65 25, 42 25, 97 25, 30	38.04 38.90 38.92 33.43 32.22 26.86	20.74 25.72 27.29 27.03 26.74 29.91	43.50 43.50 46.00 46.00	-19.26 -17.78 -16.21 -18.97 -19.26 -16.09



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#### WHF-1200300T3:

Test mode:	Transmitting	Vertical	Low channel
80 Level (dBuV/m)			



Frequency (MHz)

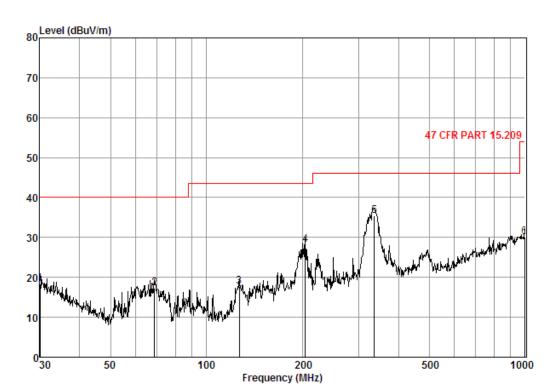
Condition:	47 CFR PART 15.209 3m 3142C VERTICAL
Job No. :	5892CR
Mode :	2412 TX mode
	WHE-1200300T3

			Antenna	Preamp Factor			Limit Line	Over Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 2 3 4 5 6	30.00 91.49 145.35 207.85 374.62 875.25	0.64 1.37 1.80 2.20 3.13 5.16		25, 58 25, 52 24, 97 25, 28 25, 42 25, 80	33.21 37.83 40.43 38.67 33.03 28.77	26.97 22.52 26.14 26.17 26.63 30.93	43.50 43.50 43.50 46.00	-13.03 -20.98 -17.36 -17.33 -19.37 -15.07



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lest mode: I ransmitting Horizontal Low channel
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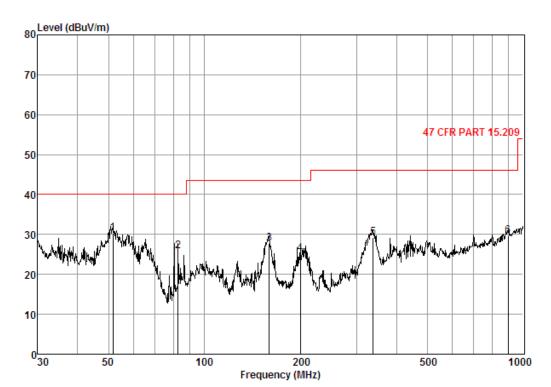
Condition: 47 CFR PART 15.209 3m 3142C HORIZONTAL Job No. : 5892CR Mode : 2412 TX mode

ode		1X mo« 1200300						
		Cable	Antenna	-	Read		Limit	Over
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	30.00	0.64	18.70	25.58	24.57	18.33	40.00	-21.67
2	68.63	1.15		25.51	34.75	17.33		-22.67
3	126.77	1.64	7.96	24.88	32.96	17.68	43.50	-25.82
4	204.24	2.22	10.40	24.75	40.29	28.16	43.50	-15.34
5	336.04	2.95	15.11	24.45	41.73	35.34	46.00	-10.66
6	996.50	5.77	24.04	25.83	26.15	30.13	54.00	-23.87



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Test mode:	Transmitting	Vertical	Middle channel



#### Condition: 47 CFR PART 15.209 3m 3142C VERTICAL Job No. : 5892CR Mode : 2437 TX mode

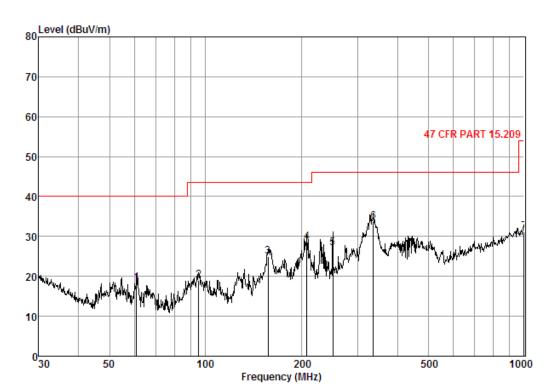
oae			)T3 Antenna	Preamp Factor	Read Level		Limit Line	Over Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 2 3 4 5 6	51.66 82.65 159.78 199.99 338.40 897.00	0.95 1.29 1.93 2.17 2.97 5.29	8.45 8.06 9.69 10.20 15.18 23.15	25.70 25.38 25.60 24.95 24.50 25.27	46.50 41.78 41.77 37.68 35.51 26.40	30.20 25.75 27.79 25.10 29.16 29.57	40.00 43.50 43.50 46.00	-9.80 -14.25 -15.71 -18.40 -16.84 -16.43





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Test mode: Transmitting Horizontal Middle channel
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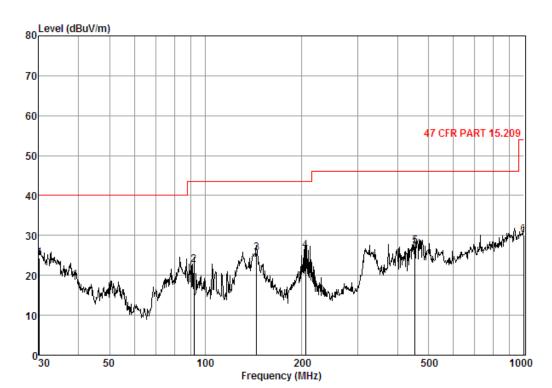
#### Condition: 47 CFR PART 15.209 3m 3142C HORIZONTAL Job No. : 5892CR Mode : 2437 TX mode

ode		1X mod 1200300						
	Freq	CableA	Intenna	Preamp Factor	Read Level		Limit Line	Over Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 2 3 4 5 6 7	60.70 95.09 157.01 207.85 251.18 336.04 1000.00	1.08 1.41 1.92 2.20 2.50 2.95 5.69	7.18 8.95 9.58 10.58 12.22 15.11 24.10	25, 55 25, 31 25, 42 25, 28 24, 82 24, 45 26, 11	35.74 33.93 38.78 41.03 37.18 40.16 27.49	18.45 18.98 24.86 28.53 27.08 33.77 31.17	43.50 43.50 43.50 46.00 46.00	-21.55 -24.52 -18.64 -14.97 -18.92 -12.23 -22.83



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Test mode:	Transmitting	Vertical	High channel
		·	



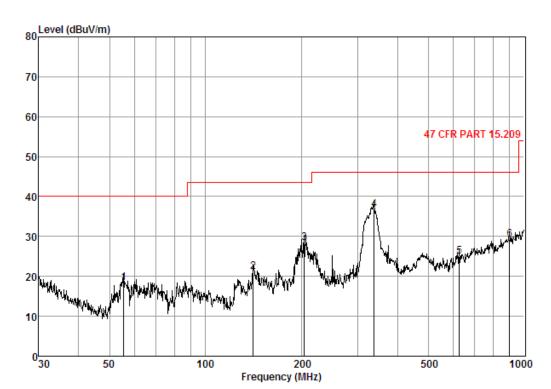
#### Condition: 47 CFR PART 15.209 3m 3142C VERTICAL Job No. : 5892CR Mode : 2462 TX mode

uae		1200300						
		CableA	Intenna	Preamp Factor	Read		Limit Line	Over Limit
	ricq	LUSS	ractor	ractor	LCVCI	LCVCI	LINC	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 2 3 4 5 6	30.11 92.14 144.84 206.40 454.31 996.50	0.64 1.38 1.80 2.19 3.54 5.77	18.64 8.86 8.84 10.51 17.04 24.04	25, 58 25, 52 25, 01 25, 10 26, 27 25, 83	30. 63 37. 90 39. 95 38. 55 33. 07 26. 17	24.33 22.62 25.58 26.15 27.38 30.15	43.50 43.50 43.50 46.00	-15.67 -20.88 -17.92 -17.35 -18.62 -23.85



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Test mode: Transmitting Horizontal High channel
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#### Condition: 47 CFR PART 15.209 3m 3142C HORIZONTAL Job No. : 5892CR Mode : 2462 TX mode

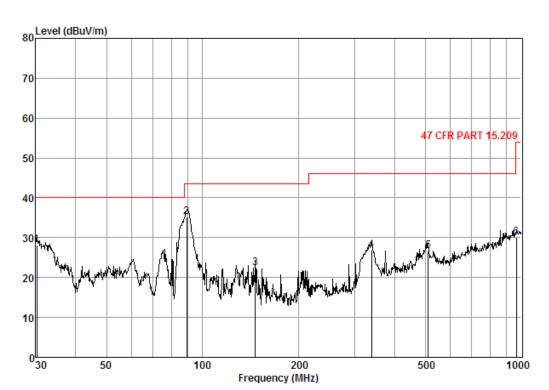
oae		1200300						
	_	CableA	ntenna	Preamp	Read		Limit	Over
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	55.41	0.99	7.89	25.75	35.25	18.38		-21.62
2	141.33	1.80	8.52			21.08		-22.42
3	204.24	2.22	10.40	24.75	40.53	28.40		-15.10
4	338.40	2.97	15.18	24.50	43.12	36.77	46.00	-9.23
5	625.08	4.31	20.30	26.77	27.12	24.96		-21.04
6	900.15	5.30	23.20	25.44	26.07	29.13	46.00	-16.87



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#### SW36-12003000-W:

Test mode:	Transmitting	Vertical	Low channel



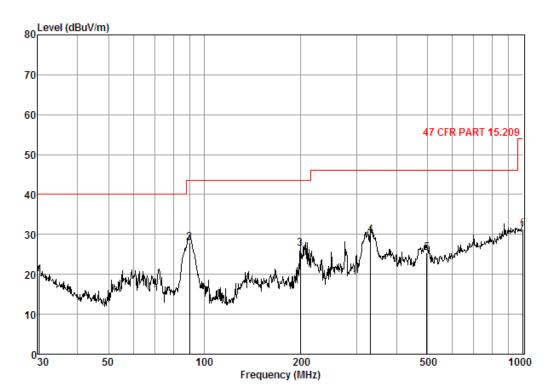
#### Condition: 47 CFR PART 15.209 3m 3142C VERTICAL Job No. : 5892CR Mode : 2412 TX mode

ode		TX mod -120030						
		Cable	Intenna	Preamp	Read		Limit	Over
	freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	30.21	0.64	18.58	25.58	34.56	28.20		-11.80
2	89.28	1.34		25.36	50.48	35.19		-8.31
3	146.37		8.97	24.95	36.51	22.33		-21.17
4 5	339.59	2.96	15.21	24.63	33.41	26.95		-19.05
	510.04	3.76	17.92	26.46	31.54	26.76		-19.24
6	965.54	5.47	23.51	25.83	26.85	30.00	54.00	-24.00



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lest mode: I ransmitting Horizontal Low channel
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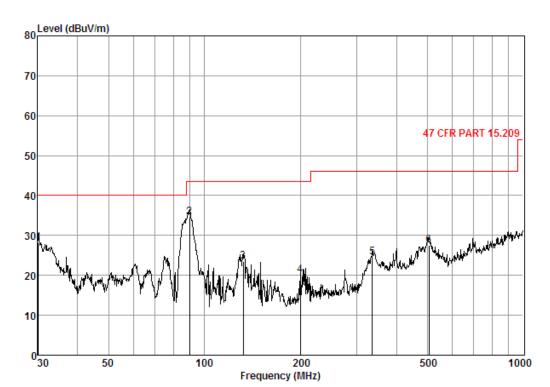
Condition: 47 CFR PART 15.209 3m 3142C HORIZONTAL Job No. : 5892CR Mode : 2412 TX mode

Jae		-120030						
	. 51100		Antenna	Preamp	Read		Limit	Over
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	30.32	0.64	18.52	25.58	26.36	19.94	40.00	-20.06
2	89.90	1.35	8.79	24.91	42.62	27.85	43.50	-15.65
3	199.99	2.17	10.20	24.95	39.08	26.50	43.50	-17.00
4	332.52	2.94	15.01	24.67	36.62	29.90	46.00	-16.10
5	497.68	3.70	17.61	26.19	30.23	25.35	46.00	-20.65
6	1000.00	5.69	24.10	26.11	27.58	31.26	54.00	-22.74



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Test mode:	Transmitting	Vertical	Middle channel
	6		



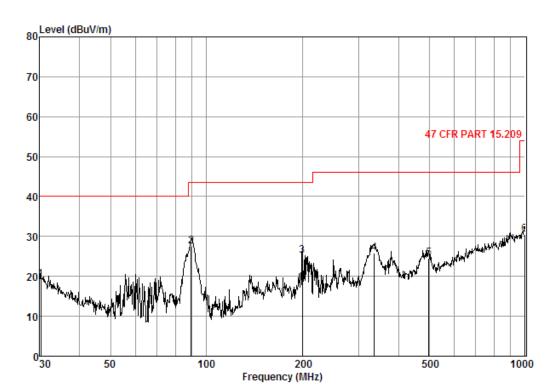
#### Condition: 47 CFR PART 15.209 3m 3142C VERTICAL Job No. : 5892CR Mode : 2437 TX mode

ode	: SW36		000-W Antenna	Preamp Factor	Read Level		Limit Line	Over Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 2 3 4 5 6	30.11 89.90 132.22 199.99 336.04 506.48	0.64 1.35 1.69 2.17 2.95 3.74	18.64 8.79 8.01 10.20 15.11 17.81	25, 58 24, 91 25, 37 24, 95 24, 45 26, 05	34.56 49.24 39.05 32.64 30.92 32.11	28.26 34.47 23.38 20.06 24.53 27.61	43.50 43.50 43.50 46.00	-11.74 -9.03 -20.12 -23.44 -21.47 -18.39



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Test mode: Transmitting Horizontal Middle channel
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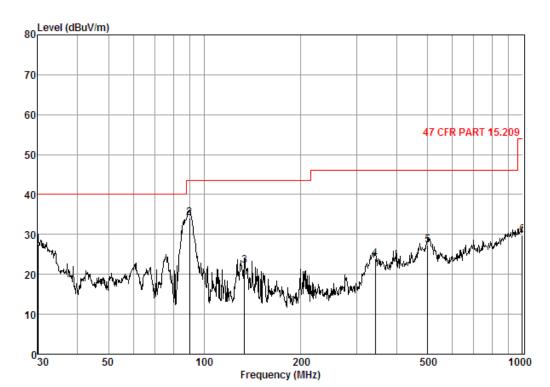
Condition: 47 CFR PART 15.209 3m 3142C HORIZONTAL Job No. : 5892CR Mode : 2437 TX mode

Jae		-120030						
			Antenna	Preamp	Read		Limit	Over
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	30.21	0.64	18.58	25.58	25.63	19.27	40.00	-20.73
2	89.59	1.34	8.76	25.36	42.83	27.57		-15.93
3	199.99	2.17	10.20	24.95	37.85	25.27	43.50	-18.23
4	336.04	2.95	15.11	24.45	32.31	25.92	46.00	-20.08
5	497.68	3.70	17.61	26.19	29.40	24.52	46.00	-21.48
6	996.50	5.77	24.04	25.83	26.49	30.47	54.00	-23.53



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	Test mode:	Transmitting	Vertical	High channel
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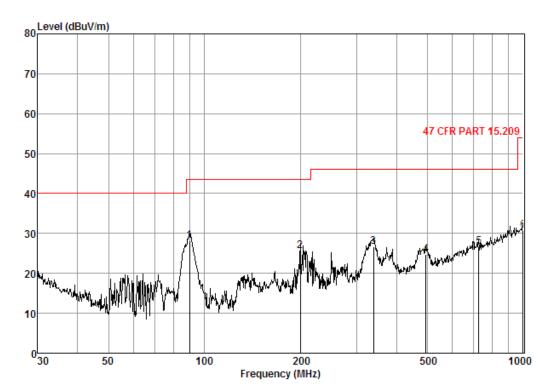
Condition: 47 CFR PART 15.209 3m 3142C VERTICAL Job No. : 5892CR Mode : 2462 TX mode

	Cable	Intenna	Preamp	Read		Limit	Over
Freq	Loss	Factor	Factor	Level	Level	Line	Limit
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
30.00	0.64	18.70	25.58	33.71	27.47	40.00	-12.53
89.90	1.35	8.79	24.91	48.86	34.09	43.50	-9.41
133.62	1.72	8.08	25.20	37.51	22.11	43.50	-21.39
343.18	2.99	15.31	24.86	30.36	23.80	46.00	-22.20
501.18	3.76	17.64	26.23	32.14	27.31	46.00	-18.69
993.01	5.77	23.99	25.61	25.76	29.91	54.00	-24.09
	: SW36 Freq MHz 30.00 89.90 133.62 343.18 501.18	: SW36-120030 Cable# Freq Loss MHz dB 30.00 0.64 89.90 1.35 133.62 1.72 343.18 2.99 501.18 3.76	: SW36-12003000-W CableAntenna Freq Loss Factor MHz dB dB/m 30.00 0.64 18.70 89.90 1.35 8.79 133.62 1.72 8.08 343.18 2.99 15.31 501.18 3.76 17.64	: SW36-12003000-W CableAntenna Preamp Freq Loss Factor Factor MHz dB dB/m dB 30.00 0.64 18.70 25.58 89.90 1.35 8.79 24.91 133.62 1.72 8.08 25.20 343.18 2.99 15.31 24.86 501.18 3.76 17.64 26.23	: SW36-12003000-W CableAntenna Preamp Freq Loss Factor Factor Level MHz dB dB/m dB dBuV 30.00 0.64 18.70 25.58 33.71 89.90 1.35 8.79 24.91 48.86 133.62 1.72 8.08 25.20 37.51 343.18 2.99 15.31 24.86 30.36 501.18 3.76 17.64 26.23 32.14	: SW36-12003000-W CableAntenna Preamp Freq Loss Factor Factor Level Level MHz dB dB/m dB dBw dBuV/m 30.00 0.64 18.70 25.58 33.71 27.47 89.90 1.35 8.79 24.91 48.86 34.09 133.62 1.72 8.08 25.20 37.51 22.11 343.18 2.99 15.31 24.86 30.36 23.80 501.18 3.76 17.64 26.23 32.14 27.31	MHz         CableAntenna         Preamp Factor         Read Level         Limit Level           MHz         dB         dB/m         dB         dBuV         dBuV/m         dBuV/m           30.00         0.64         18.70         25.58         33.71         27.47         40.00           89.90         1.35         8.79         24.91         48.86         34.09         43.50           133.62         1.72         8.08         25.20         37.51         22.11         43.50           343.18         2.99         15.31         24.86         30.36         23.80         46.00           501.18         3.76         17.64         26.23         32.14         27.31         46.00



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	Test mode:	Transmitting	Horizontal	High channel
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Condition: 47 CFR PART 15.209 3m 3142C HORIZONTAL Job No. : 5892CR Mode : 2462 TX mode

oae		-120030	00 <b>-</b> ₩	Dream	Read		Limit	Over
	Freq		Antenna Factor	Factor			Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 2	89.90 199.99	1.35 2.17	8.79 10.20	24.91 24.95	43.01 38.11	28. 24 25. 53		-15.26 -17.97
3 4	339.59 495.93	2.96 3.64	15.21 17.62	24.63 26.33	33.23 29.88	26.77 24.81		-19.23
5 6	724.26 1000.00	4.61 5.69	21.60 24.10	26.42 26.11	26.81 27.00	26.60 30.68		-19.40 -23.32



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LAB

#### 6.8.2 Transmitter emission above 1GHz

S24B12-120A200-Y4:

Test mode:	802	.11b	Test ch	annel:	Lowest	Remark	:	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarizatio n
3765.116	6.82	33.12	38.86	46.89	47.97	74	-26.03	Vertical
4824.000	6.46	34.72	39.24	48.53	50.47	74	-23.53	Vertical
5999.562	8.08	36.30	39.18	47.75	52.95	74	-21.05	Vertical
7236.000	8.96	35.60	39.06	47.72	53.22	74	-20.78	Vertical
9648.000	9.97	37.45	37.91	42.37	51.88	74	-22.12	Vertical
11622.330	10.44	38.32	38.52	43.53	53.77	74	-20.23	Vertical
3631.354	6.89	33.02	38.80	48.58	49.69	74	-24.31	Horizontal
4824.000	6.46	34.72	39.24	48.85	50.79	74	-23.21	Horizontal
5939.103	7.99	36.18	39.19	47.34	52.32	74	-21.68	Horizontal
7236.000	8.96	35.60	39.06	46.50	52.00	74	-22.00	Horizontal
9648.000	9.97	37.45	37.91	42.10	51.61	74	-22.39	Horizontal
11757.650	10.50	38.46	38.59	42.28	52.65	74	-21.35	Horizontal
Test mode:	802	.11b	Test ch	annel:	Middle	Remark	:	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarizatio n
3716.403	6.84	33.09	38.84	48.81	49.90	74	-24.10	Vertical
4874.000	6.59	34.78	39.26	50.08	52.19	74	-21.81	Vertical
5999.562	8.08	36.30	39.18	48.32	53.52	74	-20.48	Vertical
7311.000	9.08	35.50	39.06	47.72	53.24	74	-20.76	Vertical
9748.000	9.90	37.82	37.84	42.88	52.76	74	-21.24	Vertical
11672.890	10.47	38.37	38.55	43.07	53.36	74	-20.64	Vertical
3732.570	6.84	33.10	38.84	46.91	48.01	74	-25.99	Horizontal
	6.59	34.78	39.26	48.55	50.66	74	-23.34	Norizontal
4874.000					1			s/ ccc
4874.000 6034.386	8.07	36.26	39.18	47.83	52.98	74	-21.02	Horizontal
		36.26 35.50	39.18 39.06	47.83 46.64	52.98 52.16	74 74		Horizontal
6034.386	8.07							



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Test mode:	802	.11b	Test cha	annel:	Highest	Remark	:	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarizatio n
3743.387	6.83	33.11	38.85	48.15	49.24	74	-24.76	Vertical
4924.000	6.72	34.84	39.28	49.00	51.28	74	-22.72	Vertical
5982.226	8.05	36.27	39.19	47.37	52.50	74	-21.50	Vertical
7386.000	9.20	35.42	39.05	47.39	52.96	74	-21.04	Vertical
9848.000	9.83	38.18	37.77	41.75	51.99	74	-22.01	Vertical
11488.580	10.39	38.22	38.46	43.23	53.38	74	-20.62	Vertical
3641.878	6.89	33.03	38.80	48.15	49.27	74	-24.73	Horizontal
4924.000	6.72	34.84	39.28	50.16	52.44	74	-21.56	Horizontal
5982.226	8.05	36.27	39.19	48.37	53.50	74	-20.50	Horizontal
7386.000	9.20	35.42	39.05	46.77	52.34	74	-21.66	Horizontal
9848.000	9.83	38.18	37.77	42.19	52.43	74	-21.57	Horizontal
11422.280	10.37	38.17	38.43	43.58	53.69	74	-20.31	Horizontal

Test mode:	802	.11g	Test ch	annel:	Lowest	Remark		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarizatio n
3548.251	6.94	32.94	38.76	47.82	48.94	74	-25.06	Vertical
4824.000	6.46	34.72	39.24	48.87	50.81	74	-23.19	Vertical
5999.562	8.08	36.30	39.18	48.13	53.33	74	-20.67	Vertical
7236.000	8.96	35.60	39.06	44.69	50.19	74	-23.81	Vertical
9648.000	9.97	37.45	37.91	42.82	52.33	74	-21.67	Vertical
11488.580	10.39	38.22	38.46	43.00	53.15	74	-20.85	Vertical
3652.432	6.88	33.04	38.81	48.01	49.12	74	-24.88	Horizontal
4824.000	6.46	34.72	39.24	49.65	51.59	74	-22.41	Horizontal
5982.226	8.05	36.27	39.19	48.42	53.55	74	-20.45	Horizontal
7236.000	8.96	35.60	39.06	47.70	53.20	74	-20.80	Horizontal
9648.000	9.97	37.45	37.91	42.71	52.22	74	-21.78	Horizontal
11389.270	10.37	38.15	38.41	43.36	53.47	74	-20.53	Horizontal



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Test mode:	802	.11g	Test ch	annel:	Middle	Remark	:	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarizatio n
3652.432	6.88	33.04	38.81	47.71	48.82	74	-25.18	Vertical
4874.000	6.57	34.77	39.26	48.43	50.51	74	-23.49	Vertical
6069.413	8.06	36.22	39.18	46.93	52.03	74	-21.97	Vertical
7311.000	9.06	35.52	39.06	47.70	53.22	74	-20.78	Vertical
9748.000	9.91	37.76	37.85	43.33	53.15	74	-20.85	Vertical
11422.280	10.37	38.17	38.43	42.24	52.35	74	-21.65	Vertical
3631.354	6.89	33.02	38.80	48.58	49.69	74	-24.31	Horizontal
4874.000	6.57	34.77	39.26	48.75	50.83	74	-23.17	Horizontal
6016.949	8.08	36.28	39.18	47.82	53.00	74	-21.00	Horizontal
7311.000	9.06	35.52	39.06	47.66	53.18	74	-20.82	Horizontal
9748.000	9.91	37.76	37.85	42.29	52.11	74	-21.89	Horizontal
11356.360	10.36	38.14	38.40	42.97	53.07	74	-20.93	Horizontal

Test mode:	802	.11g	Test ch	annel:	Highest	ighest Remark: Peak		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
3781.495	6.81	33.14	38.86	49.76	50.85	74	-23.15	Vertical
4924.000	6.68	34.82	39.28	50.78	53.00	74	-21.00	Vertical
5990.888	8.07	36.28	39.18	48.64	53.81	74	-20.19	Vertical
7386.000	9.16	35.44	39.05	47.69	53.24	74	-20.76	Vertical
9848.000	9.85	38.06	37.79	42.64	52.76	74	-21.24	Vertical
11128.630	10.31	38.11	38.29	43.50	53.63	74	-20.37	Vertical
3589.562	6.92	32.99	38.78	48.31	49.44	74	-24.56	Horizontal
4924.000	6.68	34.82	39.28	48.50	50.72	74	-23.28	Horizontal
5964.939	8.03	36.23	39.19	47.81	52.88	74	-21.12	Horizontal
7386.000	9.16	35.44	39.05	47.21	52.76	74	-21.24	Horizontal
9848.000	9.85	38.06	37.79	42.44	52.56	74	-21.44	Horizontal
11656.010	10.46	38.36	38.54	43.38	53.66	74	-20.34	Horizontal



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Test mode:	80	2.11n(HT20)	Test ch	annel:	Lowest	Remark	:	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarizatio n
3663.017	6.87	33.05	38.81	49.13	50.24	74	-23.76	Vertical
4824.000	6.46	34.72	39.24	50.16	52.10	74	-21.90	Vertical
5973.576	8.04	36.25	39.19	48.12	53.22	74	-20.78	Vertical
7236.000	8.96	35.60	39.06	47.70	53.20	74	-20.80	Vertical
9648.000	9.97	37.45	37.91	42.82	52.33	74	-21.67	Vertical
11389.270	10.37	38.15	38.41	43.36	53.47	74	-20.53	Vertical
3599.965	6.91	33.00	38.79	48.55	49.67	74	-24.33	Horizontal
4824.000	6.46	34.72	39.24	50.50	52.44	74	-21.56	Horizontal
5947.702	8.00	36.20	39.19	48.44	53.45	74	-20.55	Horizontal
7236.000	8.96	35.60	39.06	48.34	53.84	74	-20.16	Horizontal
9648.000	9.97	37.45	37.91	43.29	52.80	74	-21.20	Horizontal
11128.630	10.31	38.11	38.29	43.65	53.78	74	-20.22	Horizontal

Test mode:	802	2.11n(HT20)	Test ch	annel:	Middle	Remark	:	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarizatio n
3903.804	6.74	33.33	38.91	48.25	49.41	74	-24.59	Vertical
4874.000	6.57	34.77	39.26	49.67	51.75	74	-22.25	Vertical
5921.940	7.96	36.15	39.19	47.99	52.91	74	-21.09	Vertical
7311.000	9.06	35.52	39.06	47.93	53.45	74	-20.55	Vertical
9748.000	9.91	37.76	37.85	42.51	52.33	74	-21.67	Vertical
11389.270	10.37	38.15	38.41	42.16	52.27	74	-21.73	Vertical
3743.387	6.83	33.11	38.85	48.15	49.24	74	-24.76	Horizontal
4874.000	6.57	34.77	39.26	49.20	51.28	74	-22.72	Horizontal
5982.226	8.05	36.27	39.19	47.37	52.50	74	-21.50	Horizontal
7311.000	9.06	35.52	39.06	47.44	52.96	74	-21.04	Horizontal
9748.000	9.91	37.76	37.85	42.17	51.99	74	-22.01	Horizontal
11488.580	10.39	38.22	38.46	43.23	53.38	74	-20.62	Horizontal



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Test mode:	802	2.11n(HT20)	Test ch	annel:	Highest	Remark	:	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
3652.432	6.88	33.04	38.81	47.71	48.82	74	-25.18	Vertical
4924.000	6.68	34.82	39.28	48.25	50.47	74	-23.53	Vertical
5939.103	7.99	36.18	39.19	49.34	54.32	74	-19.68	Vertical
7386.000	9.16	35.44	39.05	47.67	53.22	74	-20.78	Vertical
9848.000	9.85	38.06	37.79	41.44	51.56	74	-22.44	Vertical
10873.950	10.21	37.99	38.16	42.58	52.62	74	-21.38	Vertical
3892.524	6.75	33.31	38.91	47.86	49.01	74	-24.99	Horizontal
4924.000	6.68	34.82	39.28	48.61	50.83	74	-23.17	Horizontal
5930.516	7.97	36.17	39.19	47.61	52.56	74	-21.44	Horizontal
7386.000	9.16	35.44	39.05	47.63	53.18	74	-20.82	Horizontal
9848.000	9.85	38.06	37.79	41.99	52.11	74	-21.89	Horizontal
11356.360	10.36	38.14	38.40	42.97	53.07	74	-20.93	Horizontal

Test mode:	802	.11n(HT40)	Test ch	annel:	Lowest	Remark		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarizatio n
3781.495	6.81	33.14	38.86	49.76	50.85	74	-23.15	Vertical
4844.000	6.51	34.74	39.25	51.00	53.00	74	-21.00	Vertical
5828.433	7.81	35.97	39.20	48.21	52.79	74	-21.21	Vertical
7266.000	9.00	35.57	39.06	47.73	53.24	74	-20.76	Vertical
9688.000	9.94	37.57	37.88	43.13	52.76	74	-21.24	Vertical
11356.360	10.36	38.14	38.40	43.29	53.39	74	-20.61	Vertical
3770.567	6.81	33.13	38.86	47.64	48.72	74	-25.28	Horizontal
4844.000	6.51	34.74	39.25	48.67	50.67	74	-23.33	Horizontal
5964.939	8.03	36.23	39.19	47.81	52.88	74	-21.12	Horizontal
7266.000	9.00	35.57	39.06	46.65	52.16	74	-21.84	Horizontal
9688.000	9.94	37.57	37.88	42.93	52.56	74	-21.44	Horizontal
11422.280	10.37	38.17	38.43	42.67	52.78	74	-21.22	Horizontal



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Test mode:	80	2.11n(HT40)	Test ch	annel:	Middle	Remark	:	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarizatio n
3881.276	6.75	33.29	38.90	48.23	49.37	74	-24.63	Vertical
4874.000	6.57	34.77	39.26	50.02	52.10	74	-21.90	Vertical
6069.413	8.06	36.22	39.18	47.46	52.56	74	-21.44	Vertical
7311.000	9.06	35.52	39.06	46.01	51.53	74	-22.47	Vertical
9748.000	9.91	37.76	37.85	42.17	51.99	74	-22.01	Vertical
11488.580	10.39	38.22	38.46	43.23	53.38	74	-20.62	Vertical
3960.700	6.71	33.43	38.94	49.63	50.83	74	-23.17	Horizontal
4874.000	6.57	34.77	39.26	50.36	52.44	74	-21.56	Horizontal
5862.263	7.87	36.03	39.20	48.69	53.39	74	-20.61	Horizontal
7311.000	9.06	35.52	39.06	48.32	53.84	74	-20.16	Horizontal
9748.000	9.91	37.76	37.85	42.98	52.80	74	-21.20	Horizontal
11422.280	10.37	38.17	38.43	43.58	53.69	74	-20.31	Horizontal

Test mode:	802	2.11n(HT40)	Test ch	annel:	Highest	Remark	•	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
3781.495	6.81	33.14	38.86	50.81	51.90	74	-22.10	Vertical
4904.000	6.64	34.81	39.27	49.57	51.75	74	-22.25	Vertical
5939.103	7.99	36.18	39.19	48.24	53.22	74	-20.78	Vertical
7356.000	9.12	35.47	39.05	47.91	53.45	74	-20.55	Vertical
9808.000	9.88	37.94	37.81	42.32	52.33	74	-21.67	Vertical
10842.530	10.19	37.96	38.14	43.48	53.49	74	-20.51	Vertical
3663.017	6.87	33.05	38.81	49.13	50.24	74	-23.76	Horizontal
4904.000	6.64	34.81	39.27	49.95	52.13	74	-21.87	Horizontal
5973.576	8.04	36.25	39.19	47.12	52.22	74	-21.78	Horizontal
7356.000	9.12	35.47	39.05	47.66	53.20	74	-20.80	Horizontal
9808.000	9.88	37.94	37.81	42.28	52.29	74	-21.71	Horizontal
11389.270	10.37	38.15	38.41	43.36	53.47	74	-20.53	Horizontal



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#### WHF-1200300T3:

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Test mode:		.11b	Test ch		Lowest	Remark		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarizatio n
3462.037	7.04	32.85	38.72	47.92	49.09	74	-24.91	Vertical
4824.000	6.46	34.72	39.24	47.83	49.77	74	-24.23	Vertical
6043.124	8.07	36.25	39.18	48.53	53.67	74	-20.33	Vertical
7236.000	8.96	35.60	39.06	47.18	52.68	74	-21.32	Vertical
9648.000	9.97	37.45	37.91	42.31	51.82	74	-22.18	Vertical
11588.750	10.43	38.29	38.51	41.26	51.47	74	-22.53	Vertical
3527.774	6.95	32.92	38.75	47.86	48.98	74	-25.02	Horizontal
4824.000	6.46	34.72	39.24	48.74	50.68	74	-23.32	Horizontal
6087.002	8.06	36.20	39.17	46.97	52.06	74	-21.94	Horizontal
7236.000	8.96	35.60	39.06	45.95	51.45	74	-22.55	Horizontal
9648.000	9.97	37.45	37.91	40.94	50.45	74	-23.55	Horizontal
11672.890	10.47	38.37	38.55	43.10	53.39	74	-20.61	Horizontal
Test mode:	802	.11b	Test ch	annel:	Middle	Remark		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarizatio n
							· · /	
3568.847	6.93	32.97	38.77	47.29	48.42	74	-25.58	Vertical
3568.847 4874.000	6.93 6.57	32.97 34.77	38.77 39.26	47.29 48.75	48.42 50.83	74 74		Vertical Vertical
							-25.58	
4874.000	6.57	34.77	39.26	48.75	50.83	74	-25.58 -23.17	Vertical
4874.000 6095.816	6.57 8.06	34.77 36.19	39.26 39.17	48.75 47.45	50.83 52.53	74 74	-25.58 -23.17 -21.47	Vertical Vertical
4874.000 6095.816 7311.000	6.57 8.06 9.06	34.77 36.19 35.52	39.26 39.17 39.06	48.75 47.45 46.98	50.83 52.53 52.50	74 74 74	-25.58 -23.17 -21.47 -21.50	Vertical Vertical Vertical
4874.000 6095.816 7311.000 9748.000	6.57 8.06 9.06 9.91	34.77 36.19 35.52 37.76	39.26 39.17 39.06 37.85	48.75 47.45 46.98 43.13	50.83 52.53 52.50 52.95	74 74 74 74 74	-25.58 -23.17 -21.47 -21.50 -21.05	Vertical Vertical Vertical Vertical
4874.000 6095.816 7311.000 9748.000 12015.620	6.57 8.06 9.06 9.91 10.63	34.77 36.19 35.52 37.76 38.72	39.26 39.17 39.06 37.85 38.71	48.75 47.45 46.98 43.13 42.28	50.83 52.53 52.50 52.95 52.92	74 74 74 74 74 74	-25.58 -23.17 -21.47 -21.50 -21.05 -21.08	Vertical Vertical Vertical Vertical Vertical
4874.000 6095.816 7311.000 9748.000 12015.620 3737.975	6.57 8.06 9.06 9.91 10.63 6.83	34.77 36.19 35.52 37.76 38.72 33.10	39.26         39.17         39.06         37.85         38.71         38.84	48.75 47.45 46.98 43.13 42.28 47.44	50.83 52.53 52.50 52.95 52.92 48.53	74 74 74 74 74 74 74	-25.58 -23.17 -21.47 -21.50 -21.05 -21.08 -25.47	Vertical Vertical Vertical Vertical Vertical Horizontal
4874.000 6095.816 7311.000 9748.000 12015.620 3737.975 4874.000	6.57 8.06 9.06 9.91 10.63 6.83 6.57	34.77 36.19 35.52 37.76 38.72 33.10 34.77	39.26         39.17         39.06         37.85         38.71         38.84         39.26	48.75 47.45 46.98 43.13 42.28 47.44 47.54	50.83 52.53 52.50 52.95 52.92 48.53 49.62	74 74 74 74 74 74 74 74 74	-25.58 -23.17 -21.47 -21.50 -21.05 -21.08 -25.47 -24.38	Vertical Vertical Vertical Vertical Vertical Horizontal Horizontal
4874.000 6095.816 7311.000 9748.000 12015.620 3737.975 4874.000 5982.226	6.57 8.06 9.06 9.91 10.63 6.83 6.57 8.05	34.77 36.19 35.52 37.76 38.72 33.10 34.77 36.27	39.26         39.17         39.06         37.85         38.71         38.84         39.26         39.19	48.75 47.45 46.98 43.13 42.28 47.44 47.54 48.06	50.83 52.53 52.50 52.95 52.92 48.53 49.62 53.19	74 74 74 74 74 74 74 74 74 74	-25.58 -23.17 -21.47 -21.50 -21.05 -21.08 -25.47 -24.38 -20.81	Vertical Vertical Vertical Vertical Vertical Horizontal Horizontal Horizontal



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Test mode:	802	.11b	Test ch	annel:	Highest	Remark	:	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarizatio n
3743.387	6.83	33.11	38.85	46.91	48.00	74	-26.00	Vertical
4924.000	6.68	34.82	39.28	47.98	50.20	74	-23.80	Vertical
6148.967	8.05	36.14	39.17	47.89	52.91	74	-21.09	Vertical
7386.000	9.16	35.44	39.05	46.10	51.65	74	-22.35	Vertical
9848.000	9.85	38.06	37.79	42.11	52.23	74	-21.77	Vertical
11672.890	10.47	38.37	38.55	42.69	52.98	74	-21.02	Vertical
3543.121	6.94	32.94	38.76	46.47	47.59	74	-26.41	Horizontal
4924.000	6.68	34.82	39.28	48.41	50.63	74	-23.37	Horizontal
5973.576	8.04	36.25	39.19	48.61	53.71	74	-20.29	Horizontal
7386.000	9.16	35.44	39.05	46.09	51.64	74	-22.36	Horizontal
9848.000	9.85	38.06	37.79	40.28	50.40	74	-23.60	Horizontal
11389.270	10.37	38.15	38.41	41.94	52.05	74	-21.95	Horizontal

Test mode:	802	.11g	Test ch	annel:	Lowest	Remark		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarizatio n
3765.116	6.82	33.12	38.86	47.15	48.23	74	-25.77	Vertical
4824.000	6.46	34.72	39.24	48.23	50.17	74	-23.83	Vertical
5862.263	7.87	36.03	39.20	47.93	52.63	74	-21.37	Vertical
7236.000	8.96	35.60	39.06	43.67	49.17	74	-24.83	Vertical
9648.000	9.97	37.45	37.91	42.07	51.58	74	-22.42	Vertical
11639.160	10.45	38.34	38.53	42.28	52.54	74	-21.46	Vertical
3748.808	6.83	33.11	38.85	46.47	47.56	74	-26.44	Horizontal
4824.000	6.46	34.72	39.24	48.04	49.98	74	-24.02	Horizontal
6078.201	8.06	36.21	39.18	48.51	53.60	74	-20.40	Horizontal
7236.000	8.96	35.60	39.06	46.50	52.00	74	-22.00	Horizontal
9648.000	9.97	37.45	37.91	40.93	50.44	74	-23.56	Horizontal
11605.530	10.44	38.31	38.52	41.27	51.50	74	-22.50	Horizontal



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Test mode:	802	.11g	Test ch	annel:	Middle	Remark	:	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarizatio n
3631.354	6.89	33.02	38.80	48.44	49.55	74	-24.45	Vertical
4874.000	6.57	34.77	39.26	49.20	51.28	74	-22.72	Vertical
5913.378	7.95	36.13	39.19	48.85	53.74	74	-20.26	Vertical
7311.000	9.06	35.52	39.06	44.40	49.92	74	-24.08	Vertical
9748.000	9.91	37.76	37.85	41.87	51.69	74	-22.31	Vertical
11422.280	10.37	38.17	38.43	43.30	53.41	74	-20.59	Vertical
3770.567	6.81	33.13	38.86	46.41	47.49	74	-26.51	Horizontal
4874.000	6.57	34.77	39.26	48.50	50.58	74	-23.42	Horizontal
6060.637	8.07	36.23	39.18	48.00	53.12	74	-20.88	Horizontal
7311.000	9.06	35.52	39.06	45.08	50.60	74	-23.40	Horizontal
9748.000	9.91	37.76	37.85	41.83	51.65	74	-22.35	Horizontal
11455.380	10.38	38.19	38.45	41.96	52.08	74	-21.92	Horizontal

Test mode:	802	.11g	Test ch	annel:	Highest	Remark		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
3836.607	6.78	33.22	38.89	46.72	47.83	74	-26.17	Vertical
4924.000	6.68	34.82	39.28	46.65	48.87	74	-25.13	Vertical
5999.562	8.08	36.30	39.18	46.79	51.99	74	-22.01	Vertical
7386.000	9.16	35.44	39.05	43.01	48.56	74	-25.44	Vertical
9848.000	9.85	38.06	37.79	39.14	49.26	74	-24.74	Vertical
11323.540	10.35	38.14	38.38	41.26	51.37	74	-22.63	Vertical
3737.975	6.83	33.10	38.84	48.16	49.25	74	-24.75	Horizontal
4924.000	6.68	34.82	39.28	49.04	51.26	74	-22.74	Horizontal
5939.103	7.99	36.18	39.19	49.69	54.67	74	-19.33	Horizontal
7386.000	9.16	35.44	39.05	47.00	52.55	74	-21.45	Horizontal
9848.000	9.85	38.06	37.79	41.87	51.99	74	-22.01	Horizontal
11521.870	10.40	38.24	38.48	42.25	52.41	74	-21.59	Horizontal



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Test mode:	802	2.11n(HT20)	Test ch	annel:	Lowest	Remark	:	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarizatio n
3641.878	6.89	33.03	38.80	47.90	49.02	74	-24.98	Vertical
4824.000	6.46	34.72	39.24	47.52	49.46	74	-24.54	Vertical
6087.002	8.06	36.20	39.17	48.33	53.42	74	-20.58	Vertical
7236.000	8.96	35.60	39.06	43.79	49.29	74	-24.71	Vertical
9648.000	9.97	37.45	37.91	40.71	50.22	74	-23.78	Vertical
11505.210	10.39	38.23	38.47	41.86	52.01	74	-21.99	Vertical
3836.607	6.78	33.22	38.89	46.30	47.41	74	-26.59	Horizontal
4824.000	6.46	34.72	39.24	47.57	49.51	74	-24.49	Horizontal
6034.386	8.07	36.26	39.18	48.20	53.35	74	-20.65	Horizontal
7236.000	8.96	35.60	39.06	43.07	48.57	74	-25.43	Horizontal
9648.000	9.97	37.45	37.91	44.26	53.77	74	-20.23	Horizontal
11656.010	10.46	38.36	38.54	41.45	51.73	74	-22.27	Horizontal

Test mode:	802	2.11n(HT20)	Test ch	annel:	Middle	Remark	:	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarizatio n
3819.990	6.79	33.19	38.88	47.35	48.45	74	-25.55	Vertical
4874.000	6.57	34.77	39.26	48.29	50.37	74	-23.63	Vertical
6034.386	8.07	36.26	39.18	47.20	52.35	74	-21.65	Vertical
7311.000	9.06	35.52	39.06	46.27	51.79	74	-22.21	Vertical
9748.000	9.91	37.76	37.85	41.92	51.74	74	-22.26	Vertical
11422.280	10.37	38.17	38.43	43.30	53.41	74	-20.59	Vertical
3694.956	6.86	33.07	38.83	47.68	48.78	74	-25.22	Horizontal
4874.000	6.57	34.77	39.26	48.92	51.00	74	-23.00	Horizontal
6034.386	8.07	36.26	39.18	48.20	53.35	74	-20.65	Horizontal
7311.000	9.06	35.52	39.06	46.50	52.02	74	-21.98	Horizontal
9748.000	9.91	37.76	37.85	41.92	51.74	74	-22.26	Horizontal
11689.790	10.47	38.39	38.56	42.81	53.11	74	-20.89	Horizontal



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Test mode:	802	.11n(HT20)	Test ch	annel:	Highest	Remark	:	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
3568.847	6.93	32.97	38.77	46.22	47.35	74	-26.65	Vertical
4924.000	6.68	34.82	39.28	46.63	48.85	74	-25.15	Vertical
5964.939	8.03	36.23	39.19	48.02	53.09	74	-20.91	Vertical
7386.000	9.16	35.44	39.05	47.40	52.95	74	-21.05	Vertical
9848.000	9.85	38.06	37.79	41.35	51.47	74	-22.53	Vertical
11723.670	10.49	38.43	38.57	42.68	53.03	74	-20.97	Vertical
3825.521	6.78	33.20	38.88	48.23	49.33	74	-24.67	Horizontal
4924.000	6.68	34.82	39.28	48.43	50.65	74	-23.35	Horizontal
6016.949	8.08	36.28	39.18	48.20	53.38	74	-20.62	Horizontal
7386.000	9.16	35.44	39.05	47.08	52.63	74	-21.37	Horizontal
9848.000	9.85	38.06	37.79	41.57	51.69	74	-22.31	Horizontal
11422.280	10.37	38.17	38.43	43.30	53.41	74	-20.59	Horizontal

Test mode:	802	.11n(HT40)	Test ch	annel:	Lowest	Remark		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarizatio n
3589.562	6.92	32.99	38.78	47.36	48.49	74	-25.51	Vertical
4844.000	6.51	34.74	39.25	48.13	50.13	74	-23.87	Vertical
5999.562	8.08	36.30	39.18	47.79	52.99	74	-21.01	Vertical
7266.000	9.00	35.57	39.06	44.23	49.74	74	-24.26	Vertical
9688.000	9.94	37.57	37.88	41.96	51.59	74	-22.41	Vertical
11521.870	10.40	38.24	38.48	42.27	52.43	74	-21.57	Vertical
3792.453	6.80	33.14	38.87	47.96	49.03	74	-24.97	Horizontal
4844.000	6.51	34.74	39.25	49.33	51.33	74	-22.67	Horizontal
6175.716	8.04	36.11	39.17	47.34	52.32	74	-21.68	Horizontal
7266.000	9.00	35.57	39.06	47.43	52.94	74	-21.06	Horizontal
9688.000	9.94	37.57	37.88	44.06	53.69	74	-20.31	Horizontal
11000.550	10.28	38.10	38.22	41.46	51.62	74	-22.38	Horizontal



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Test mode:	802	2.11n(HT40)	Test ch	annel:	Middle	Remark	:	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarizatio n
3909.457	6.74	33.34	38.91	47.93	49.10	74	-24.90	Vertical
4874.000	6.57	34.77	39.26	49.23	51.31	74	-22.69	Vertical
5921.940	7.96	36.15	39.19	47.33	52.25	74	-21.75	Vertical
7311.000	9.06	35.52	39.06	48.26	53.78	74	-20.22	Vertical
9748.000	9.91	37.76	37.85	42.46	52.28	74	-21.72	Vertical
11639.160	10.45	38.34	38.53	42.77	53.03	74	-20.97	Vertical
3792.453	6.80	33.14	38.87	47.96	49.03	74	-24.97	Horizontal
4874.000	6.57	34.77	39.26	49.24	51.32	74	-22.68	Horizontal
6087.002	8.06	36.20	39.17	47.44	52.53	74	-21.47	Horizontal
7311.000	9.06	35.52	39.06	47.42	52.94	74	-21.06	Horizontal
9748.000	9.91	37.76	37.85	41.88	51.70	74	-22.30	Horizontal
11389.270	10.37	38.15	38.41	42.97	53.08	74	-20.92	Horizontal

Test mode:	80	2.11n(HT40)	Test ch	annel:	Highest	Remark	•	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
3770.567	6.81	33.13	38.86	48.04	49.12	74	-24.88	Vertical
4904.000	6.64	34.81	39.27	49.07	51.25	74	-22.75	Vertical
6008.249	8.08	36.29	39.18	47.94	53.13	74	-20.87	Vertical
7356.000	9.12	35.47	39.05	44.55	50.09	74	-23.91	Vertical
9808.000	9.88	37.94	37.81	42.27	52.28	74	-21.72	Vertical
11505.210	10.39	38.23	38.47	42.78	52.93	74	-21.07	Vertical
3814.467	6.79	33.18	38.88	48.30	49.39	74	-24.61	Horizontal
4904.000	6.64	34.81	39.27	48.80	50.98	74	-23.02	Horizontal
5913.378	7.95	36.13	39.19	47.95	52.84	74	-21.16	Horizontal
7356.000	9.12	35.47	39.05	48.24	53.78	74	-20.22	Horizontal
9808.000	9.88	37.94	37.81	42.11	52.12	74	-21.88	Horizontal
11488.580	10.39	38.22	38.46	43.19	53.34	74	-20.66	Horizontal



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#### SW36-12003000-W:

Test mode:	802	.11b	Test ch	annel:	Lowest	Remark		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarizatio n
3449.984	7.06	32.84	38.72	46.94	48.12	74	-25.88	Vertical
4824.000	6.46	34.72	39.24	46.22	48.16	74	-25.84	Vertical
5980.114	8.05	36.26	39.19	48.49	53.61	74	-20.39	Vertical
7236.000	8.96	35.60	39.06	46.08	51.58	74	-22.42	Vertical
9648.000	9.97	37.45	37.91	43.05	52.56	74	-21.44	Vertical
11877.950	10.56	38.58	38.64	42.02	52.52	74	-21.48	Vertical
3437.643	7.09	32.82	38.71	47.25	48.45	74	-25.55	Horizontal
4824.000	6.46	34.72	39.24	47.74	49.68	74	-24.32	Horizontal
6001.583	8.08	36.30	39.18	47.10	52.30	74	-21.70	Horizontal
7236.000	8.96	35.60	39.06	47.50	53.00	74	-21.00	Horizontal
9648.000	9.97	37.45	37.91	42.43	51.94	74	-22.06	Horizontal
11116.030	10.31	38.11	38.28	41.38	51.52	74	-22.48	Horizontal
Test mode:	802	.11b	Test ch	annel:	Middle	Remark	:	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarizatio n
3292.950	7.37	32.50	38.65	45.78	47.00	74	-27.00	Vertical
4874.000	6.57	34.77	39.26	47.01	49.09	74	-24.91	Vertical
5958.723	8.02	36.22	39.19	46.53	51.58	74	-22.42	Vertical
7311.000	9.06	35.52	39.06	47.18	52.70	74	-21.30	Vertical
9748.000	9.91	37.76	37.85	41.24	51.06	74	-22.94	Vertical
11116.030	10.31	38.11	38.28	41.38	51.52	74	-22.48	Vertical
3413.093	7.13	32.79	38.70	45.27	46.49	74	-27.51	Horizontal
4874.000	6.57	34.77	39.26	45.63	47.71	74	-26.29	Horizontal
6001.583	8.08	36.30	39.18	47.52	52.72	74	-21.28	Horizontal
7311.000	9.06	35.52	39.06	46.30	51.82	74	-22.18	Horizontal
9748.000	9.91	37.76	37.85	42.26	52.08	74	-21.92	Horizontal
	10.44	38.30	38.52	40.96	51.18	74	-22.82	Horizontal



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Test mode:	802	.11b	Test ch	annel:	Highest	Remark	:	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarizatio n
3413.093	7.13	32.79	38.70	45.27	46.49	74	-27.51	Vertical
4924.000	6.68	34.82	39.28	45.49	47.71	74	-26.29	Vertical
6001.583	8.08	36.30	39.18	47.52	52.72	74	-21.28	Vertical
7386.000	9.16	35.44	39.05	45.50	51.05	74	-22.95	Vertical
9848.000	9.85	38.06	37.79	42.31	52.43	74	-21.57	Vertical
11877.950	10.56	38.58	38.64	42.36	52.86	74	-21.14	Vertical
3388.719	7.18	32.75	38.69	46.59	47.83	74	-26.17	Horizontal
4924.000	6.68	34.82	39.28	46.55	48.77	74	-25.23	Horizontal
5980.114	8.05	36.26	39.19	46.49	51.61	74	-22.39	Horizontal
7386.000	9.16	35.44	39.05	46.48	52.03	74	-21.97	Horizontal
9848.000	9.85	38.06	37.79	42.86	52.98	74	-21.02	Horizontal
11899.250	10.57	38.60	38.65	41.99	52.51	74	-21.49	Horizontal

Test mode:	802	.11g	Test ch	annel:	Lowest	Remark		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarizatio n
3425.346	7.11	32.81	38.71	46.91	48.12	74	-25.88	Vertical
4824.000	6.46	34.72	39.24	46.44	48.38	74	-25.62	Vertical
5916.169	7.95	36.14	39.19	48.44	53.34	74	-20.66	Vertical
7236.000	8.96	35.60	39.06	47.03	52.53	74	-21.47	Vertical
9648.000	9.97	37.45	37.91	42.67	52.18	74	-21.82	Vertical
11772.010	10.51	38.47	38.59	41.33	51.72	74	-22.28	Vertical
3437.643	7.09	32.82	38.71	47.25	48.45	74	-25.55	Horizontal
4824.000	6.46	34.72	39.24	47.74	49.68	74	-24.32	Horizontal
5958.723	8.02	36.22	39.19	46.53	51.58	74	-22.42	Horizontal
7236.000	8.96	35.60	39.06	45.77	51.27	74	-22.73	Horizontal
9648.000	9.97	37.45	37.91	41.55	51.06	74	-22.94	Horizontal
11116.030	10.31	38.11	38.28	41.38	51.52	74	-22.48	Horizontal



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Test mode:	802	.11g	Test ch	annel:	Middle	Remark	:	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarizatio n
3400.884	7.16	32.78	38.70	46.76	48.00	74	-26.00	Vertical
4874.000	6.57	34.77	39.26	47.60	49.68	74	-24.32	Vertical
5852.908	7.85	36.01	39.20	48.43	53.09	74	-20.91	Vertical
7311.000	9.06	35.52	39.06	47.48	53.00	74	-21.00	Vertical
9748.000	9.91	37.76	37.85	42.17	51.99	74	-22.01	Vertical
11096.130	10.30	38.11	38.27	42.32	52.46	74	-21.54	Vertical
3462.369	7.04	32.85	38.72	45.68	46.85	74	-27.15	Horizontal
4874.000	6.57	34.77	39.26	45.63	47.71	74	-26.29	Horizontal
5895.006	7.92	36.10	39.19	46.56	51.39	74	-22.61	Horizontal
7311.000	9.06	35.52	39.06	46.14	51.66	74	-22.34	Horizontal
9748.000	9.91	37.76	37.85	41.90	51.72	74	-22.28	Horizontal
11877.950	10.56	38.58	38.64	42.36	52.86	74	-21.14	Horizontal

Test mode:	802	.11g	Test ch	annel:	Highest	Remark	•	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
3388.719	7.18	32.75	38.69	45.17	46.41	74	-27.59	Vertical
4924.000	6.68	34.82	39.28	45.95	48.17	74	-25.83	Vertical
6287.786	8.02	35.97	39.15	47.94	52.78	74	-21.22	Vertical
7386.000	9.16	35.44	39.05	44.48	50.03	74	-23.97	Vertical
9848.000	9.85	38.06	37.79	40.66	50.78	74	-23.22	Vertical
11750.940	10.50	38.45	38.58	41.87	52.24	74	-21.76	Vertical
3449.984	7.06	32.84	38.72	46.94	48.12	74	-25.88	Horizontal
4924.000	6.68	34.82	39.28	46.47	48.69	74	-25.31	Horizontal
5916.169	7.95	36.14	39.19	47.44	52.34	74	-21.66	Horizontal
7386.000	9.16	35.44	39.05	46.48	52.03	74	-21.97	Horizontal
9848.000	9.85	38.06	37.79	41.06	51.18	74	-22.82	Horizontal
11877.950	10.56	38.58	38.64	42.02	52.52	74	-21.48	Horizontal



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Test mode:	802	2.11n(HT20)	Test ch	annel:	Lowest	Remark	:	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarizatio n
3425.346	7.11	32.81	38.71	46.91	48.12	74	-25.88	Vertical
4824.000	6.46	34.72	39.24	46.22	48.16	74	-25.84	Vertical
5916.169	7.95	36.14	39.19	48.44	53.34	74	-20.66	Vertical
7236.000	8.96	35.60	39.06	46.80	52.30	74	-21.70	Vertical
9648.000	9.97	37.45	37.91	43.47	52.98	74	-21.02	Vertical
11877.950	10.56	38.58	38.64	42.02	52.52	74	-21.48	Vertical
3437.643	7.09	32.82	38.71	47.25	48.45	74	-25.55	Horizontal
4824.000	6.46	34.72	39.24	47.74	49.68	74	-24.32	Horizontal
5916.169	7.95	36.14	39.19	48.18	53.08	74	-20.92	Horizontal
7236.000	8.96	35.60	39.06	47.50	53.00	74	-21.00	Horizontal
9648.000	9.97	37.45	37.91	43.48	52.99	74	-21.01	Horizontal
11116.030	10.31	38.11	38.28	43.38	53.52	74	-20.48	Horizontal

Test mode:	80	2.11n(HT20)	Test ch	annel:	Middle	Remark		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarizatio n
3474.799	7.02	32.86	38.73	47.44	48.59	74	-25.41	Vertical
4874.000	6.57	34.77	39.26	47.35	49.43	74	-24.57	Vertical
5958.723	8.02	36.22	39.19	48.53	53.58	74	-20.42	Vertical
7311.000	9.06	35.52	39.06	46.37	51.89	74	-22.11	Vertical
9748.000	9.91	37.76	37.85	43.17	52.99	74	-21.01	Vertical
11116.030	10.31	38.11	38.28	43.38	53.52	74	-20.48	Vertical
3425.346	7.11	32.81	38.71	45.62	46.83	74	-27.17	Horizontal
4874.000	6.57	34.77	39.26	45.63	47.71	74	-26.29	Horizontal
5958.723	8.02	36.22	39.19	47.31	52.36	74	-21.64	Horizontal
7311.000	9.06	35.52	39.06	45.24	50.76	74	-23.24	Horizontal
9748.000	9.91	37.76	37.85	40.43	50.25	74	-23.75	Horizontal
11877.950	10.56	38.58	38.64	42.36	52.86	74	-21.14	Horizontal



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Test mode:	802	.11n(HT20)	Test ch	annel:	Highest	Remark	:	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
3425.346	7.11	32.81	38.71	45.62	46.83	74	-27.17	Vertical
4924.000	6.68	34.82	39.28	45.95	48.17	74	-25.83	Vertical
6001.583	8.08	36.30	39.18	47.52	52.72	74	-21.28	Vertical
7386.000	9.16	35.44	39.05	45.21	50.76	74	-23.24	Vertical
9848.000	9.85	38.06	37.79	42.31	52.43	74	-21.57	Vertical
11877.950	10.56	38.58	38.64	42.36	52.86	74	-21.14	Vertical
3449.984	7.06	32.84	38.72	46.94	48.12	74	-25.88	Horizontal
4924.000	6.68	34.82	39.28	45.94	48.16	74	-25.84	Horizontal
5916.169	7.95	36.14	39.19	48.44	53.34	74	-20.66	Horizontal
7386.000	9.16	35.44	39.05	46.50	52.05	74	-21.95	Horizontal
9848.000	9.85	38.06	37.79	42.44	52.56	74	-21.44	Horizontal
11877.950	10.56	38.58	38.64	42.02	52.52	74	-21.48	Horizontal

Test mode:	802	.11n(HT40)	Test ch	annel:	Lowest	Remark		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarizatio n
3425.346	7.11	32.81	38.71	46.91	48.12	74	-25.88	Vertical
4844.000	6.51	34.74	39.25	46.16	48.16	74	-25.84	Vertical
5916.169	7.95	36.14	39.19	48.44	53.34	74	-20.66	Vertical
7266.000	9.00	35.57	39.06	46.54	52.05	74	-21.95	Vertical
9688.000	9.94	37.57	37.88	42.93	52.56	74	-21.44	Vertical
12071.040	10.72	38.79	38.76	41.97	52.72	74	-21.28	Vertical
3400.884	7.16	32.78	38.70	46.76	48.00	74	-26.00	Horizontal
4844.000	6.51	34.74	39.25	47.40	49.40	74	-24.60	Horizontal
5948.056	8.00	36.20	39.19	47.32	52.33	74	-21.67	Horizontal
7266.000	9.00	35.57	39.06	46.76	52.27	74	-21.73	Horizontal
9688.000	9.94	37.57	37.88	43.36	52.99	74	-21.01	Horizontal
11296.740	10.35	38.13	38.37	42.81	52.92	74	-21.08	Horizontal



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Test mode:	802	2.11n(HT40)	Test ch	annel:	Middle Remark:		:	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarizatio n
3376.597	7.21	32.72	38.69	46.30	47.54	74	-26.46	Vertical
4874.000	6.57	34.77	39.26	47.60	49.68	74	-24.32	Vertical
5990.839	8.07	36.28	39.18	47.72	52.89	74	-21.11	Vertical
7311.000	9.06	35.52	39.06	46.75	52.27	74	-21.73	Vertical
9748.000	9.91	37.76	37.85	42.17	51.99	74	-22.01	Vertical
11276.520	10.34	38.13	38.36	42.21	52.32	74	-21.68	Vertical
3425.346	7.11	32.81	38.71	45.62	46.83	74	-27.17	Horizontal
4874.000	6.57	34.77	39.26	46.09	48.17	74	-25.83	Horizontal
5948.056	8.00	36.20	39.19	46.81	51.82	74	-22.18	Horizontal
7311.000	9.06	35.52	39.06	45.55	51.07	74	-22.93	Horizontal
9748.000	9.91	37.76	37.85	41.79	51.61	74	-22.39	Horizontal
11877.950	10.56	38.58	38.64	42.36	52.86	74	-21.14	Horizontal

Test mode:	80	2.11n(HT40)	Test ch	annel:	Highest	Remark		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
3425.346	7.11	32.81	38.71	45.62	46.83	74	-27.17	Vertical
4908.000	6.64	34.81	39.27	45.53	47.71	74	-26.29	Vertical
6001.583	8.08	36.30	39.18	47.52	52.72	74	-21.28	Vertical
7356.000	9.12	35.47	39.05	44.86	50.40	74	-23.60	Vertical
9808.000	9.88	37.94	37.81	41.60	51.61	74	-22.39	Vertical
12049.430	10.69	38.76	38.74	42.34	53.05	74	-20.95	Vertical
3425.346	7.11	32.81	38.71	46.91	48.12	74	-25.88	Horizontal
4904.000	6.64	34.81	39.27	47.55	49.73	74	-24.27	Horizontal
5916.169	7.95	36.14	39.19	48.44	53.34	74	-20.66	Horizontal
7356.000	9.12	35.47	39.05	46.99	52.53	74	-21.47	Horizontal
9808.000	9.88	37.94	37.81	42.55	52.56	74	-21.44	Horizontal
11793.120	10.52	38.49	38.60	41.79	52.20	74	-21.80	Horizontal





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#### Remark:

1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading + Antenna Factor + Cable Factor - Preamplifier Factor

- 2) Scan from 9kHz to 25GHz, The disturbance above 13GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
- 3) As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. So, only the peak measurements were shown in the report.

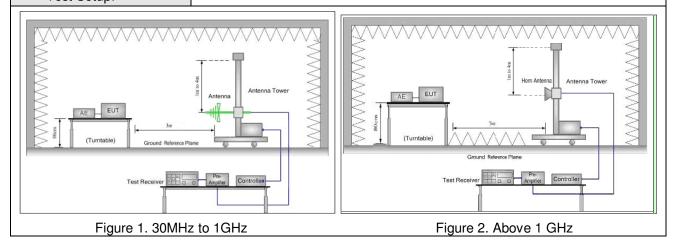
<sup>&</sup>quot;This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sgs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sgs.com/terms e-document.htm</u>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



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#### 6.9 Restricted bands around fundamental frequency

		• •					
Test Requirement:	47 CFR Part 15C Section	15.209 and 15.205					
Test Method:	ANSI C63.10 2009	ANSI C63.10 2009					
Test Site:	Measurement Distance: 3r	Measurement Distance: 3m (Semi-Anechoic Chamber)					
Limit:	Frequency	Limit (dBuV/m @3m)	Remark				
	30MHz-88MHz	40.0	Quasi-peak Value				
	88MHz-216MHz	43.5	Quasi-peak Value				
	216MHz-960MHz	46.0	Quasi-peak Value				
	960MHz-1GHz	54.0	Quasi-peak Value				
	Above 1GHz	54.0	Average Value				
		74.0	Peak Value				
Test Setup:							





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Test Procedure:	a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
	b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
	c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
	d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
	e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
	f. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel
	g. Test the EUT in the lowest channel, the Highest channel
	<ul> <li>Repeat above procedures until all frequencies measured was complete.</li> </ul>
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates.
	Transmitting mode
Final Test Mode:	Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11b;
	6Mbps of rate is the worst case of 802.11g ; 6.5Mbps of rate is the worst case of 802.11n(HT20); 13.5Mbps of rate is the worst case of 802.11n(HT40)
	Only the worst case is recorded in the report.
Instruments Used:	Refer to section 5.10 for details
Test Results:	Pass





Test plot as follows:

2 pp

2409.67

4.93

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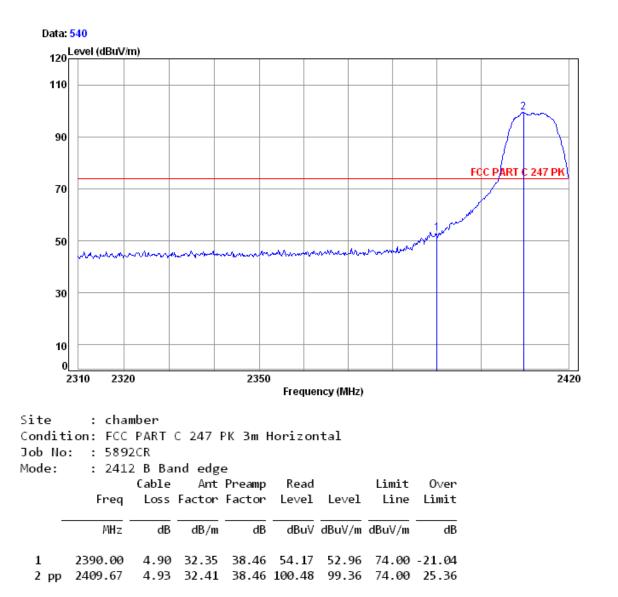
#### Worse case mode: 802.11b Test channel: Peak Vertical Lowest Remark: Data: 542 120 Level (dBuV/m) 110 90 FCC PART C 247 PK 70 month 50 30 10 0 2350 2310 2320 2420 Frequency (MHz) Site : chamber Condition: FCC PART C 247 PK 3m Vertical : 5892CR Job No: : 2412 B Band edge Mode: Read Cable Ant Preamp Limit 0ver Freq Loss Factor Factor Level Level Line Limit MHz dB dB/m dB dBuV dBuV/m dBuV/m dB 1 2390.00 4.90 32.35 38.46 66.20 64.99 74.00 -9.01

32.41 38.46 111.65 110.53 74.00 36.53



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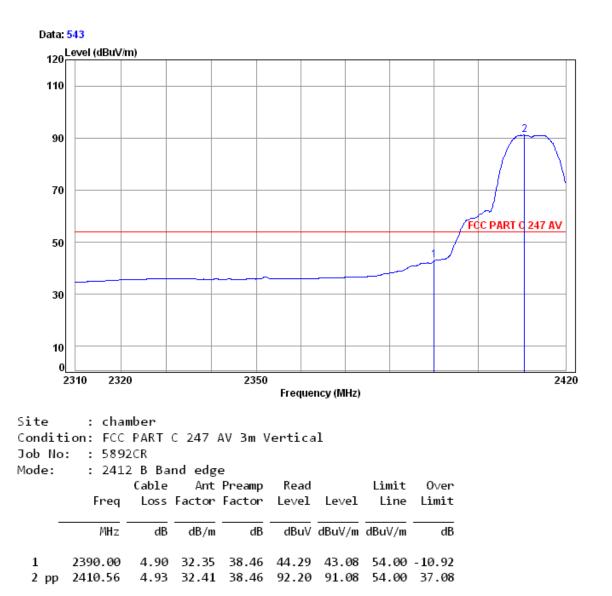
Worse case mode:	802.11b	Test channel:	Lowest	Remark:	Peak	Horizontal	
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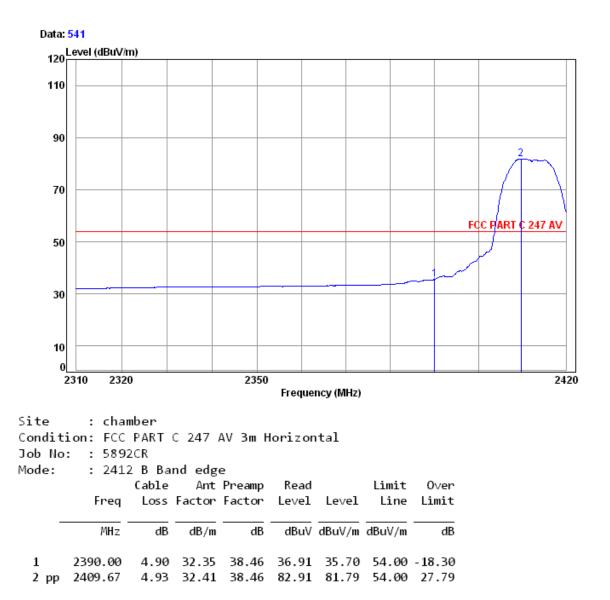
Worse	case mode:	802.11b	Test channel:	Lowest	Remark:	Average	Vertical	
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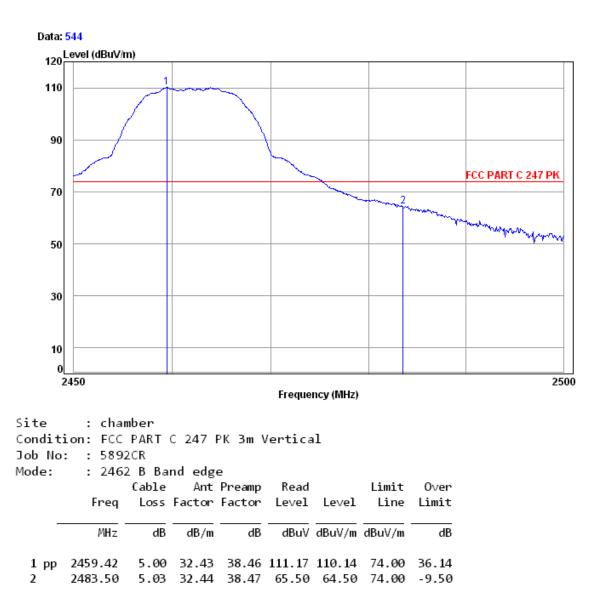
Worse case mode:	802.11b	Test channel:	Lowest	Remark:	Average	Horizontal	
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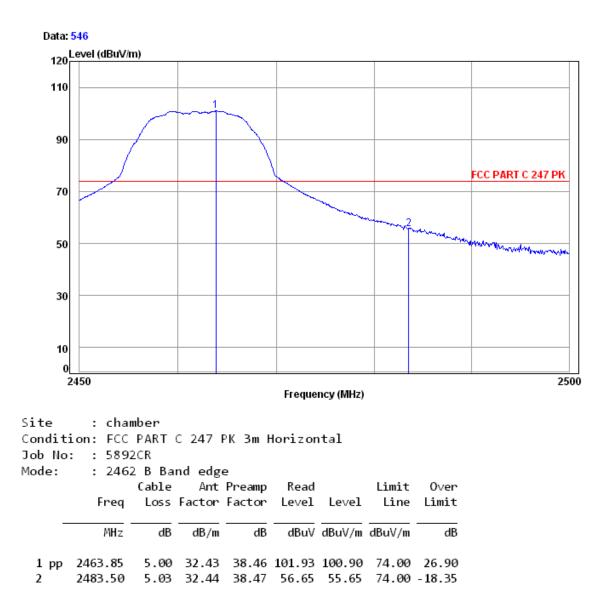
Worse case mode:	802.11b	Test channel:	Highest	Remark:	Peak	Vertical
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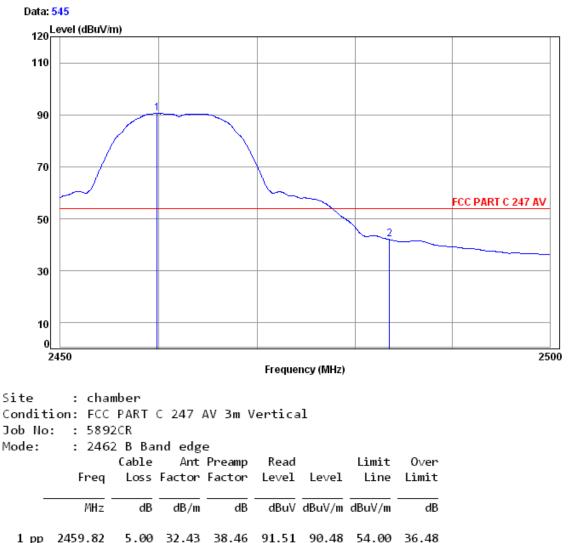
Worse case mode: 802.11b	Test channel:	Highest	Remark:	Peak	Horizontal
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Worse case mode:	802.11b	Test channel:	Highest	Remark:	Average	Vertical	
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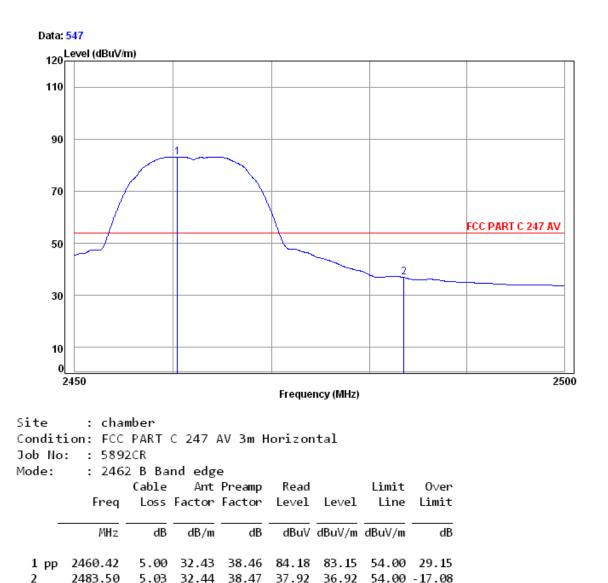


2 2483.50 5.03 32.44 38.47 43.04 42.04 54.00 -11.96



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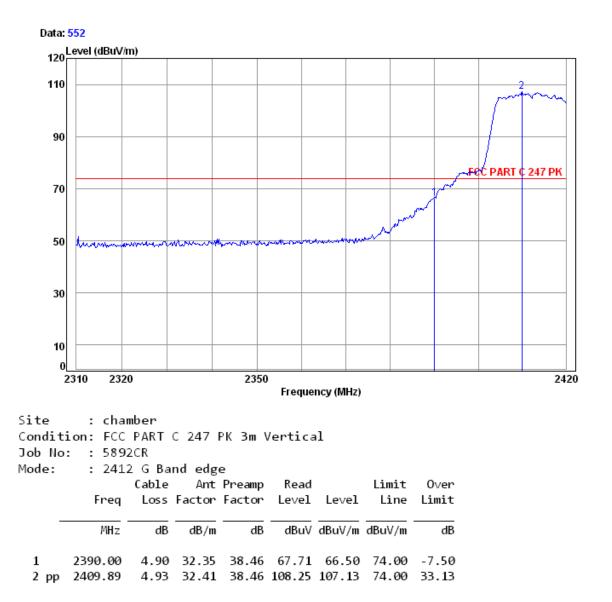
Worse case mode:	802.11b	Test channel:	Highest	Remark:	Average	Horizontal	
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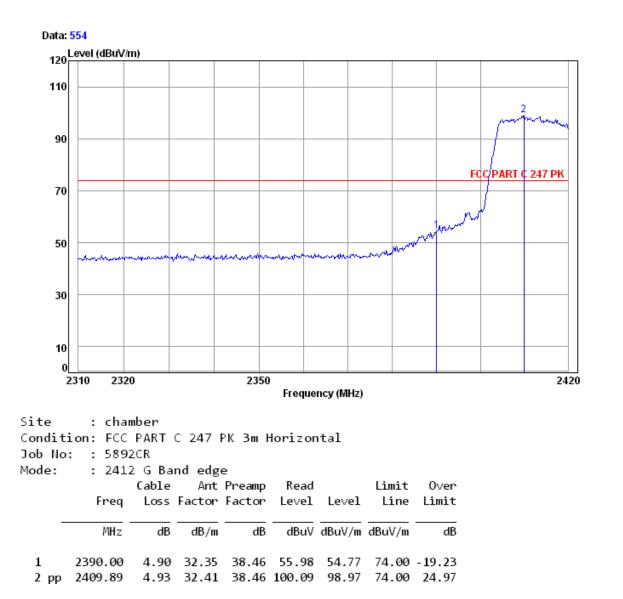
Worse case mode: 802.11g	Test channel:	Lowest	Remark:	Peak	Vertical
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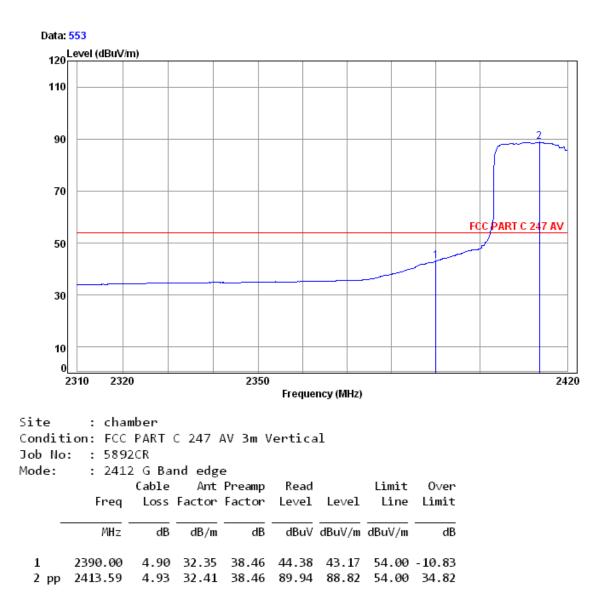
Worse case mode:	802.11g	Test channel:	Lowest	Remark:	Peak	Horizontal	
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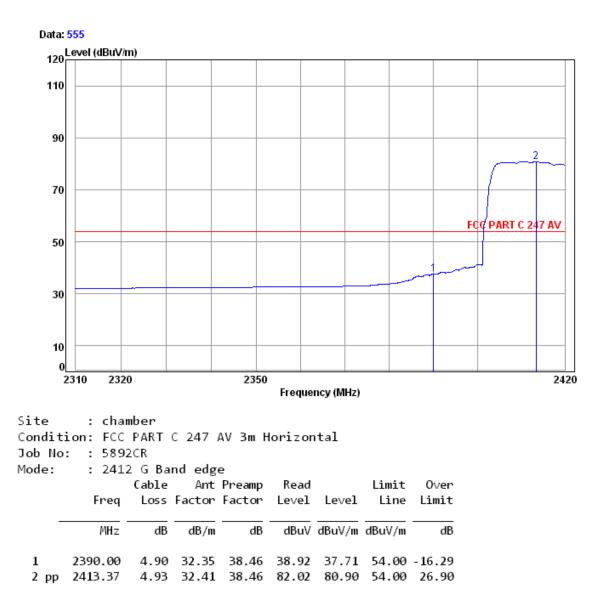
Worse case mode:	802.11g	Test channel:	Lowest	Remark:	Average	Vertical	
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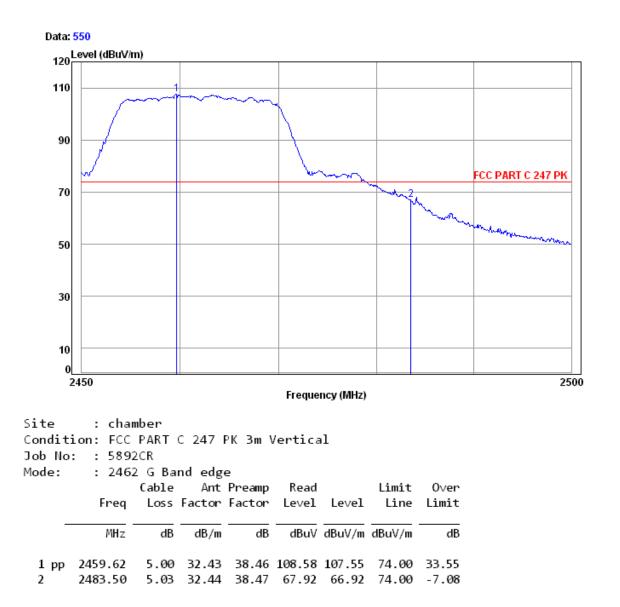
Worse case mode:	802.11g	Test channel:	Lowest	Remark:	Average	Horizontal	
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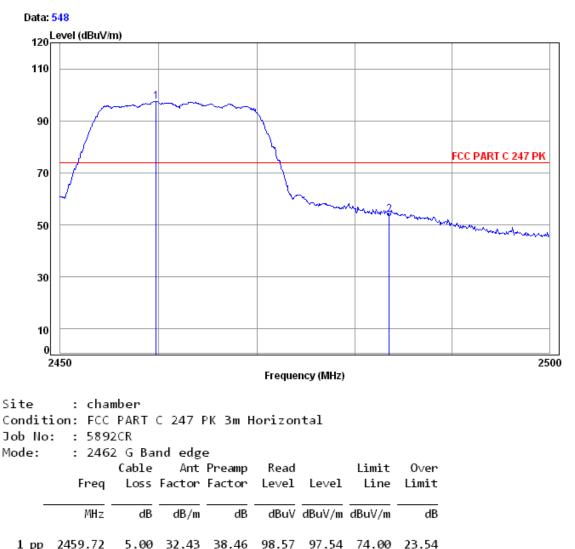
Worse case mode:	802.11g	Test channel:	Highest	Remark:	Peak	Vertical
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Worse case mode:	802.11g	Test channel:	Highest	Remark:	Peak	Horizontal
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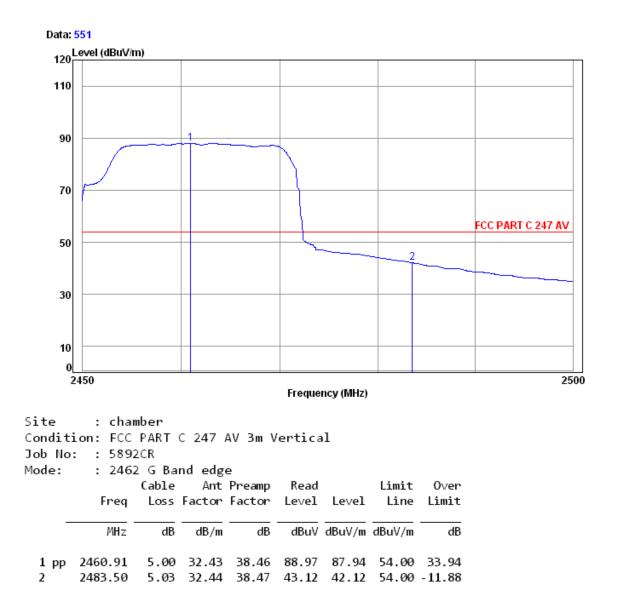


2 2483.50 5.03 32.44 38.47 55.04 54.04 74.00 -19.96



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Worse case mode:	802.11g	Test channel:	Highest	Remark:	Average	Vertical
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Worse case mode:	802.11g	Test channel:	Highest	Remark:	Average	Horizontal
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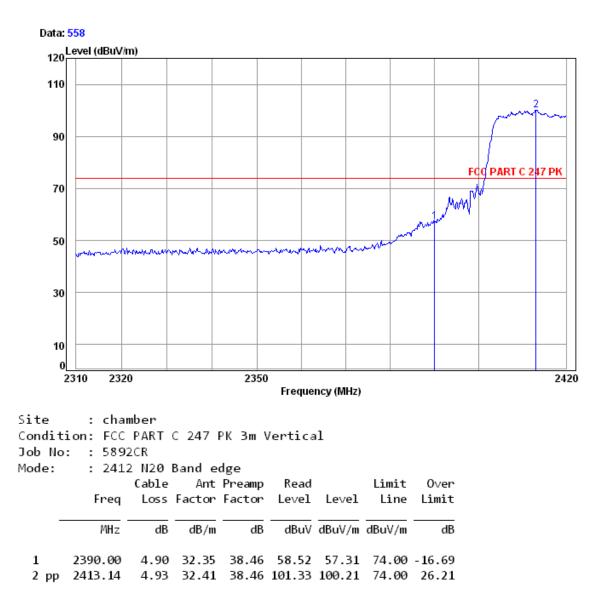


1 pp 2461.01 5.00 32.43 38.46 79.23 78.20 54.00 24.20 2 2483.50 5.03 32.44 38.47 39.47 38.47 54.00 -15.53



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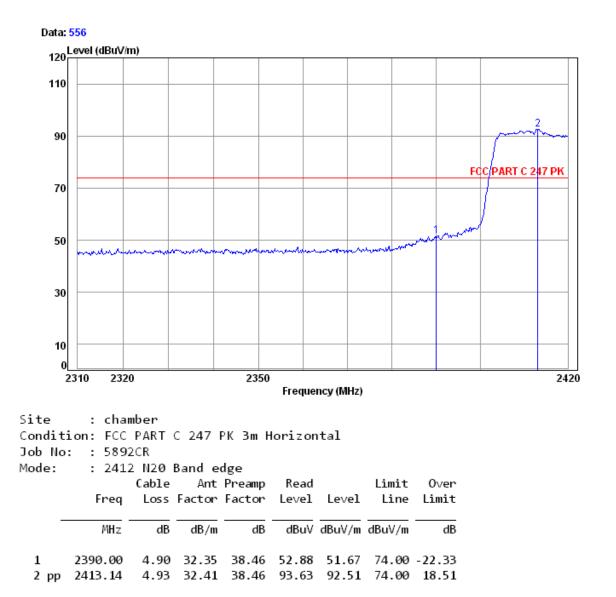
Worse case mode:	802.11n(HT20)	Test channel:	Lowest	Remark:	Peak	Vertical
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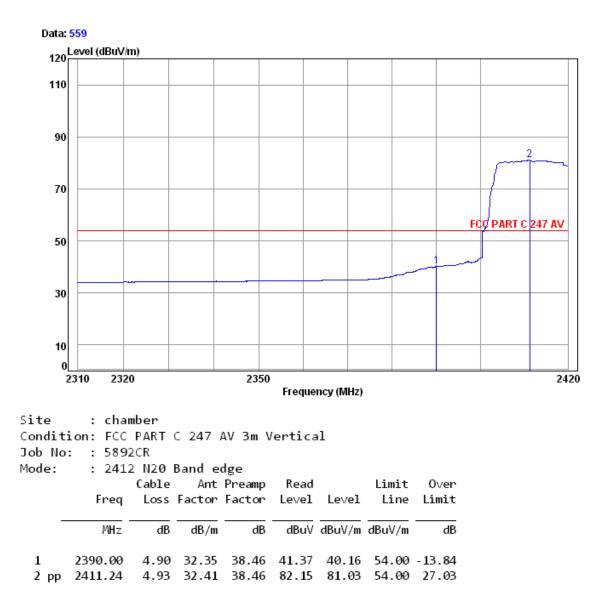
Worse case mode: 802.11r	n(HT20) Test channel:	Lowest	Remark:	Peak	Horizontal	
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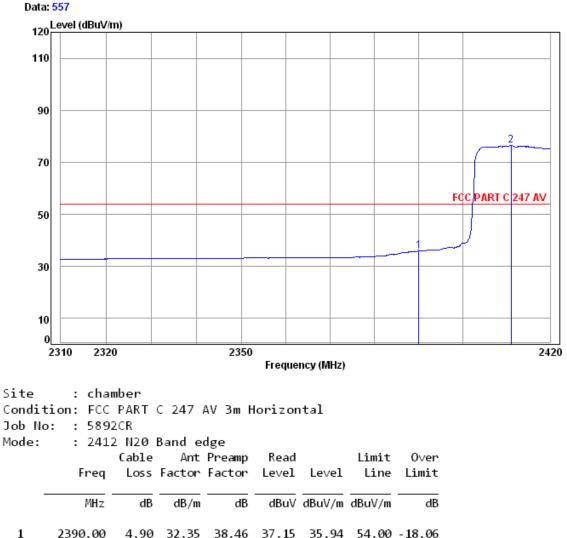
Worse case mode:	802.11n(HT20)	Test channel:	Lowest	Remark:	Average	Vertical	
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Worse case mode:	802.11n(HT20)	Test channel:	Lowest	Remark:	Average	Horizontal	
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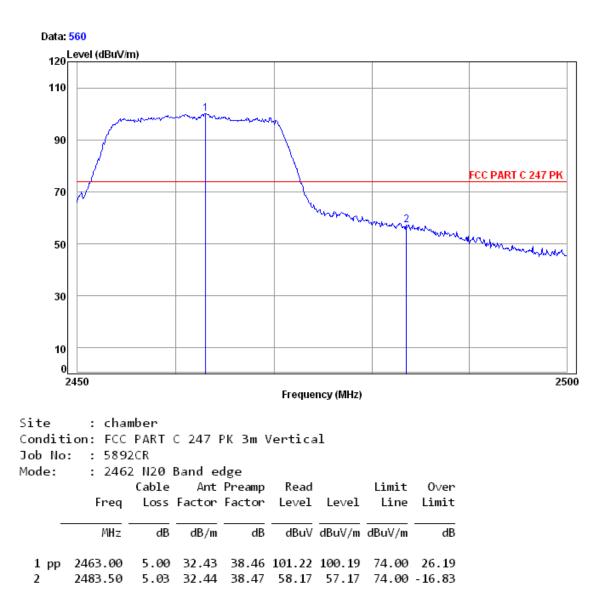
2 pp 2411.01 4.93 32.41 38.46 77.57 76.45 54.00 22.45





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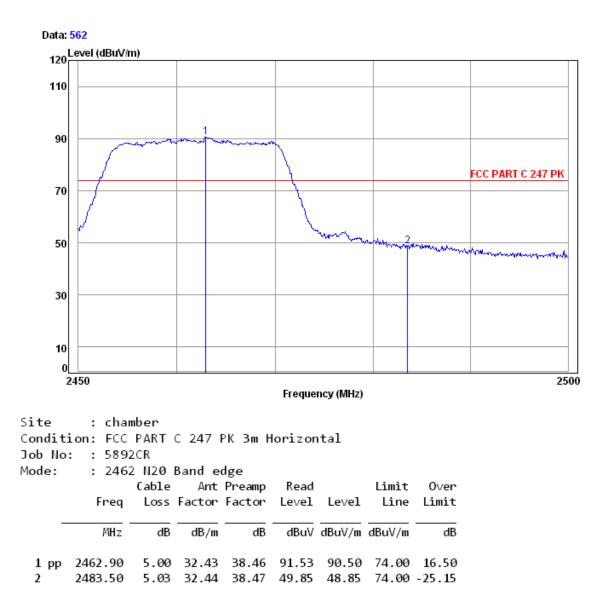
Worse case mode: 8	802.11n(HT20)	Test channel:	Highest	Remark:	Peak	Vertical
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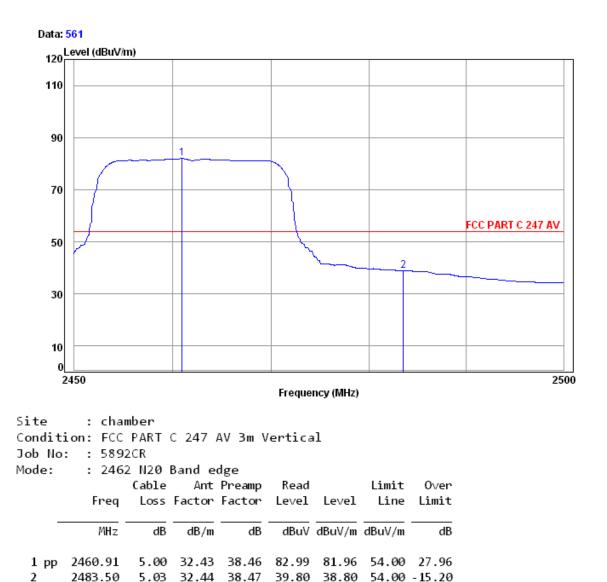
Worse case mode: 8	802.11n(HT20)	Test channel:	Highest	Remark:	Peak	Horizontal	
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Worse case mode: 802	2.11n(HT20) Test channel:	Highest	Remark:	Average	Vertical	
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2483.50

2

5.03 32.44 38.47

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Worse case mode:	802.11n(HT20)	Test channel:	Highest	Remark:	Average	Horizontal	
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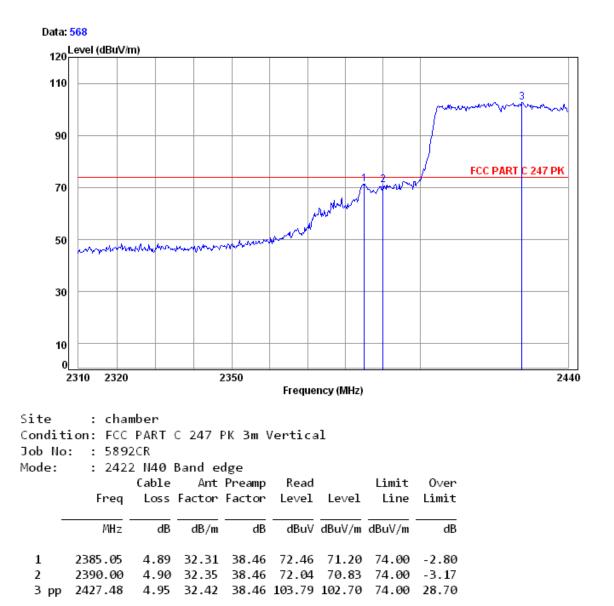
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36.28 35.28 54.00 -18.72



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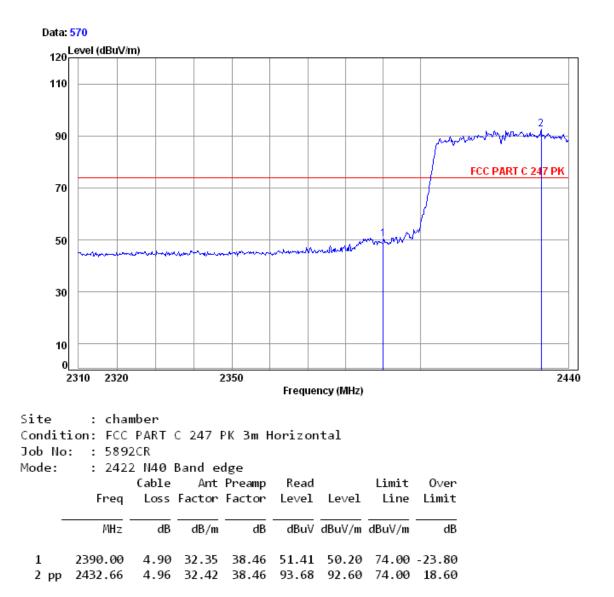
Worse case mode:	802.11n(HT40)	Test channel:	Lowest	Remark:	Peak	Vertical	
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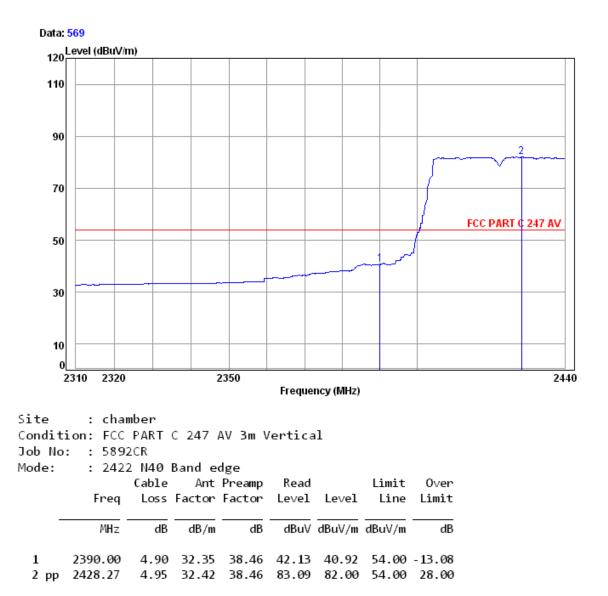
Worse case mode:	802.11n(HT40)	Test channel:	Lowest	Remark:	Peak	Horizontal
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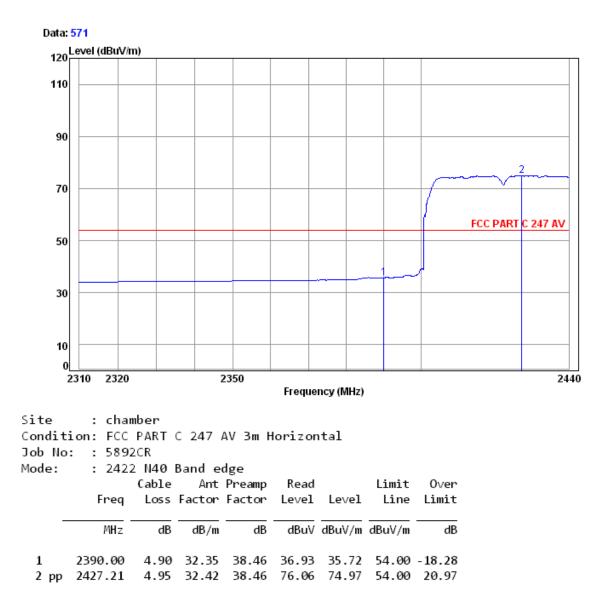
Worse case mode:	802.11n(HT40)	Test channel:	Lowest	Remark:	Average	Vertical
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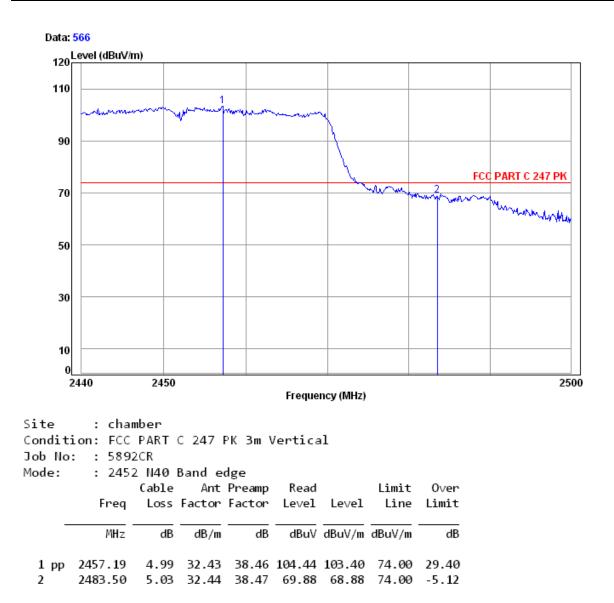
Worse case mode:	802.11n(HT40)	Test channel:	Lowest	Remark:	Average	Horizontal	l
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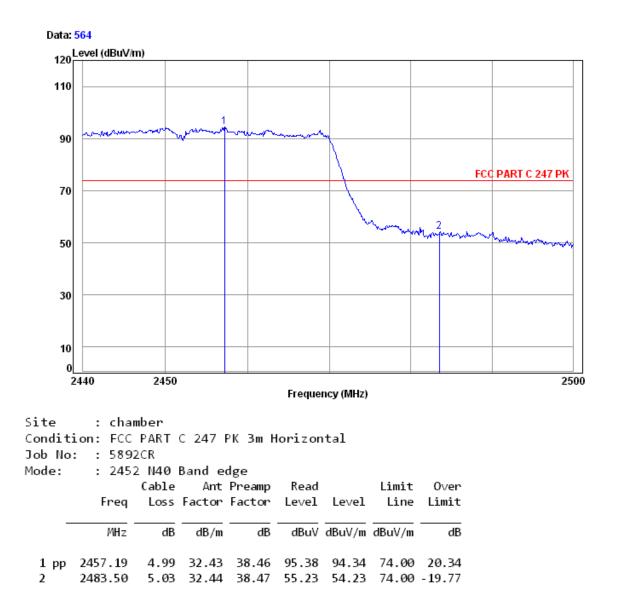
Worse case mode:	802.11n(HT40)	Test channel:	Highest	Remark:	Peak	Vertical	
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Worse case mode:	802.11n(HT40)	Test channel:	Highest	Remark:	Peak	Horizontal
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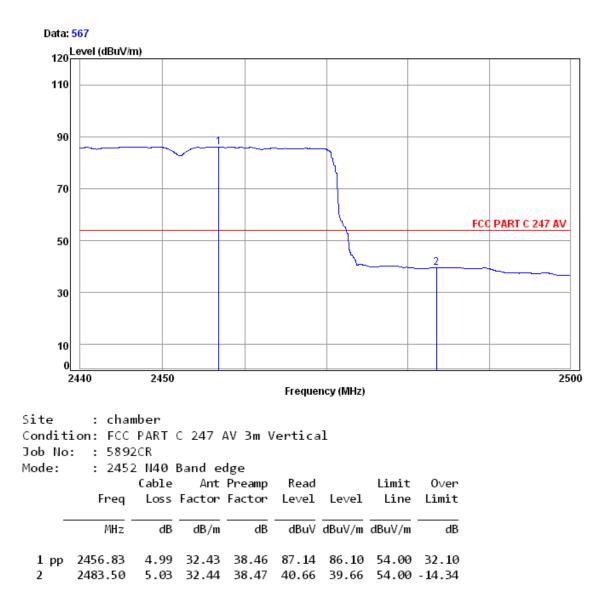


SSTC EMP SS SGS SS SGS 深圳 SS XHEN SHEN ZHE



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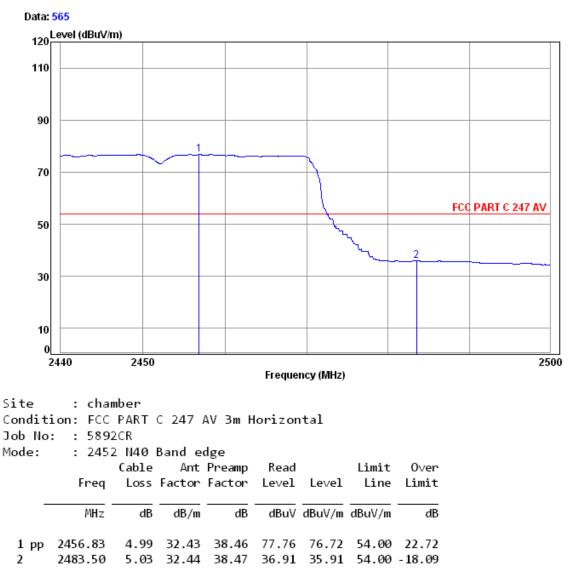
Worse case mode:	802.11n(HT40)	Test channel:	Highest	Remark:	Average	Vertical	
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Worse case mode:	802.11n(HT40)	Test channel:	Highest	Remark:	Average	Horizontal	
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Note:

The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level = Receiver Reading + Antenna Factor + Cable Factor - Preamplifier Factor



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# 7 Photographs - EUT Test Setup

Test model No.: G902P

#### 7.1 Radiated Spurious Emission

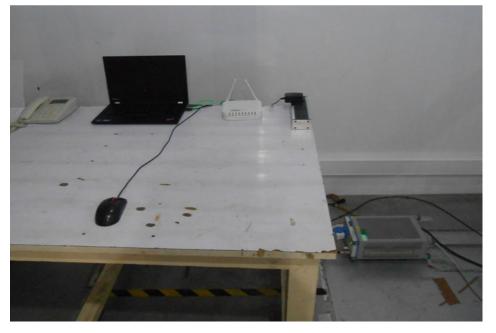






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# 7.2 Conducted Emission



# 8 Photographs - EUT Constructional Details

Please refer to the Attachment B.