

Report No.: SZEM141000596101

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# **FCC REPORT**

Application No:SZEM1410005961CRApplicant:Kaiser Baas Pty LtdManufacturer:Kaiser Baas Pty Ltd

Factory: Sky Light Electronic (ShenZhen) Limited

Product Name: KBA 12010 R30 CAR CAMERA

Model No.(EUT): KBA12010 Trade Mark: Kaiser Baas

FCC ID: 2ACWC-KBA12010

**Standards:** 47 CFR Part 15, Subpart C (2013)

**Date of Receipt:** 2014-10-21(for original report of SZEM141000572401)

Date of Test: 2014-10-22 to 2014-11-17

(for original report of SZEM141000572401)

**Date of Issue:** 2014-11-21(for original report of SZEM141000572401)

2014-02-10(for new report of SZEM141000596101)

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		2014-11-21		Original		

Authorized for issue by:		
Tested By	(Owen Zhou) /Project Engineer	2014-11-17  Date
Prepared By	Link Liang) /Clerk	2014-11-21  Date
Checked By	Emen _ L <sub>1</sub>	2014-12-01  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	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	PASS
Band-edge for RF Conducted Emissions	47 CFR Part 15, Subpart C Section 15.247(d)	KDB558074 D01 v03r02	PASS
RF Conducted Spurious Emissions	47 CFR Part 15, Subpart C Section 15.247(d)	KDB558074 D01 v03r02	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

Remark:

Original model No. in report SZEM141000572401: MPC03G, MPC03, MPC03P, MPC03A, MPC03B, MPC03C

Only the Model MPC03G was tested, since the electrical circuit design, layout, components used and internalwiring were identical for all above models. Only different on appearance, model number and brand name.

New mode No. in report SZEM141000596101: KBA12010

This report was an additional report copied from the report SZEM141000572401, just changing the applicant, manufacturer, address of (applicant, manufacturer), product name, trade mark, FCC ID no. and model no. Since the electrical circuit design, layout, components used and internal wiring for the models in the report SZEM141000572401 was exactly the same as the model in this report, only the appearance, model number and trade mark are different.



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### 5 General Information

### 5.1 Client Information

Applicant:	Kaiser Baas Pty Ltd	
Address of Applicant:	12 Studley Road, Abbotsford 3067, Victoria, Australia	
Manufacturer: Kaiser Baas Pty Ltd		
Address of Manufacturer:	12 Studley Road, Abbotsford 3067, Victoria, Australia	
Factory:	Sky Light Electronic (ShenZhen) Limited	
Address of Factory:	Floor 1-2 No.1 Building, No.5 and 6 Building, JinBi Industrial Area, HuangTian, BaoAn, Shenzhen, China.	

### 5.2 General Description of EUT

Product Name:	KBA 12010 R30 CAR CAMERA
Model No.:	KBA12010
Trade Mark:	Kaiser Baas
Operation Frequency:	IEEE 802.11b/g/n(HT20): 2412MHz to 2462MHz
Channel Numbers:	IEEE 802.11b/g, IEEE 802.11n HT20: 11 Channels
Channel Separation:	5MHz
Type of Modulation:	IEEE for 802.11b: DSSS(CCK,DQPSK,DBPSK) IEEE for 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE for 802.11n(HT20): OFDM (64QAM, 16QAM, QPSK,BPSK)
Sample Type:	Fixed production
Test Power Grade:	15 (manufacturer declare )
Test Software of EUT:	art.exe (manufacturer declare )
Antenna Type and Gain:	Type: Integral Gain:-1.31dBi
Battery:	185mAh Li-ion polymer
EUT power supply:	DC in
Test Voltage:	DC 12V~24V
DC IN Cable:	500cm
USB Cable:	100cm



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Operation Frequency each of channel(802.11b/g/n HT20)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2412MHz	4	2427MHz	7	2442MHz	10	2457MHz
2	2417MHz	5	2432MHz	8	2447MHz	11	2462MHz
3	2422MHz	6	2437MHz	9	2452MHz		

#### 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	



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### 5.3 Test Environment and Mode

Operating Environment:	Operating Environment:				
Temperature:	25.0 °C				
Humidity:	50 % RH				
Atmospheric Pressure:	1010 mbar				
Test mode:					
TX mode:	Keep the EUT transmitting with modulation				

# 5.4 Description of Support Units

The EUT has been tested independent unit.

### 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						
Item	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	EMI Test Receiver	Agilent Technologies	N9038A	SEL0312	2015-09-16		
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	Pre-amplifier (0.1-1300MHz)	Agilent Technologies	8447D	SEL0053	2015-05-16		
8	Pre-Amplifier (0.1-26.5GHz)	Compliance Directions Systems Inc.	PAP-0126	SEL0168	2015-10-24		
9	Coaxial cable	SGS	N/A	SEL0027	2015-05-29		
10	Coaxial cable	SGS	N/A	SEL0189	2015-05-29		
11	Coaxial cable	SGS	N/A	SEL0121	2015-05-29		
12	Coaxial cable	SGS	N/A	SEL0178	2015-05-29		
13	Band filter	Amindeon	82346	SEL0094	2015-05-16		
14	Barometer	Chang Chun	DYM3	SEL0088	2015-05-16		
15	DC Power Supply	Zhao Xin	RXN-305D	SEL0117	2015-10-24		
16	Humidity/ Temperature Indicator	Shanhai Qixiang	ZJ1-2B	SEL0103	2015-10-24		
17	Signal Generator (10M-27GHz)	Rohde & Schwarz	SMR27	SEL0067	2015-05-16		
18	Signal Generator	Rohde & Schwarz	SMY01	SEL0155	2015-10-24		
19	Loop Antenna	Beijing Daze	ZN30401	SEL0203	2015-06-04		



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	RF connected test				
Item	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:

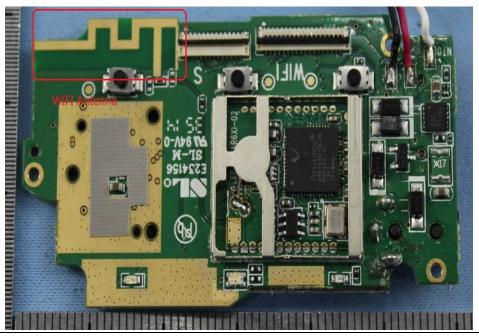
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

15.247(b) (4) requirement:

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional 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:**

The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is -1.31dBi.







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## 6.2 Conducted Peak Output Power

Test Requirement:	47 CFR Part 15C Section 15.247 (b)(3)	
Test Method:	KDB558074 D01 v03r02	
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 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).	
Limit:	30dBm	
Test Results:	Pass	



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#### **Measurement Data**

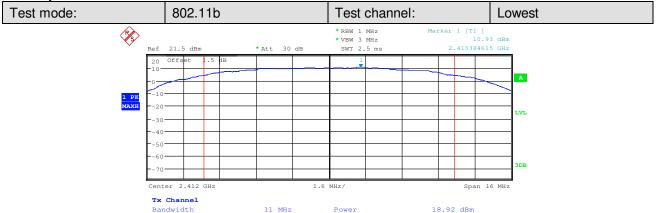
Measurement Data			
802.11b mode			
Test channel	Peak Output Power (dBm)	Limit (dBm)	Result
Lowest	18.92	30.00	Pass
Middle	19.59	30.00	Pass
Highest	19.42	30.00	Pass
	802.11g mode		
Test channel	Peak Output Power (dBm)	Limit (dBm)	Result
Lowest	18.66	30.00	Pass
Middle	19.83	30.00	Pass
Highest	19.37	30.00	Pass
	802.11n(HT20)mode		
Test channel	Peak Output Power (dBm)	Limit (dBm)	Result
Lowest	17.26	30.00	Pass
Middle	17.24	30.00	Pass
Highest	16.71	30.00	Pass

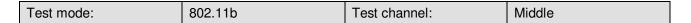


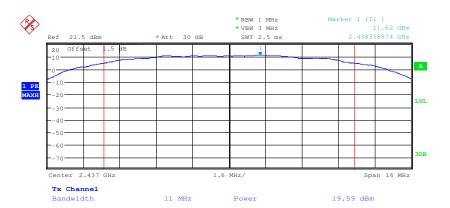
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Test plot as follows:





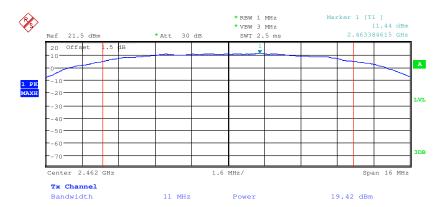




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Test mode: 802.11b Test channel: Highest

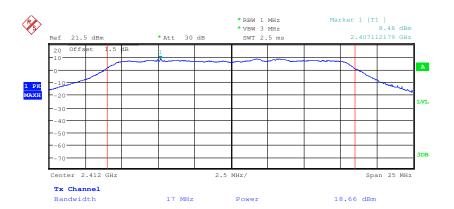




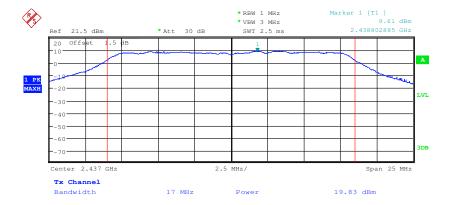
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Test mode: 802.11g Test channel: Lowest



Test mode: 802.11g Test channel: Middle

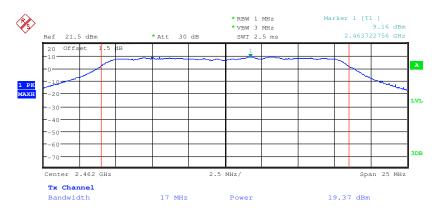


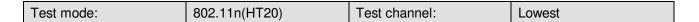


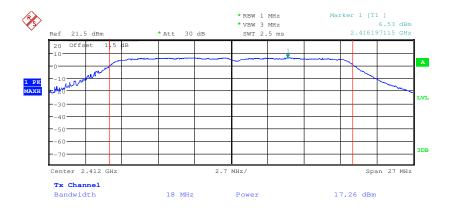
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Test mode: 802.11g Test channel: Highest





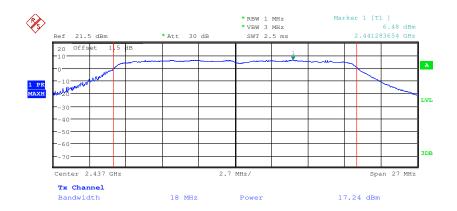




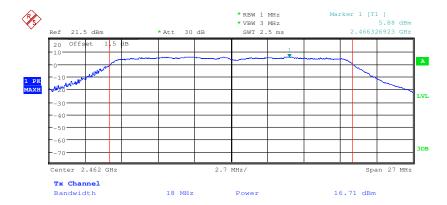
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Test mode: 802.11n(HT20) Test channel: Middle





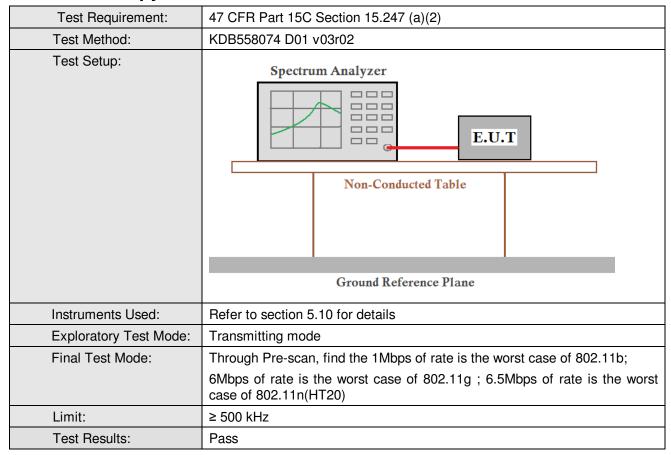




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### 6.3 6dB Occupy Bandwidth





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#### **Measurement Data**

Sarcincin Data			
	802.11b mode		
Test channel	6dB Occupy Bandwidth (MHz)	Limit (kHz)	Result
Lowest	10.048	≥500	Pass
Middle	10.000	≥500	Pass
Highest	10.048	≥500	Pass
	802.11g mode		
Test channel	6dB Occupy Bandwidth (MHz)	Limit (kHz)	Result
Lowest	16.538	≥500	Pass
Middle	16.538	≥500	Pass
Highest	16.538	≥500	Pass
	802.11n(HT20) mode		
Test channel	6dB Occupy Bandwidth (MHz)	Limit (kHz)	Result
Lowest	17.644	≥500	Pass
Middle	17.644	≥500	Pass
Highest	17.644	≥500	Pass

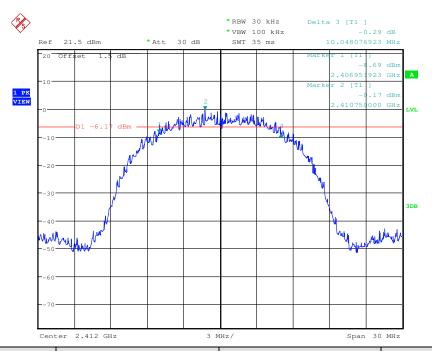


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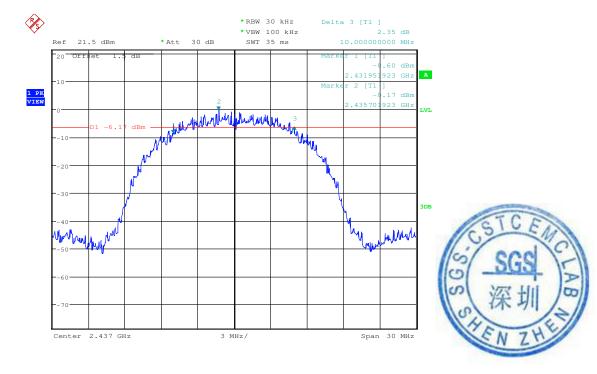
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Test plot as follows:

Test mode: 802.11b Test channel: Lowest



Test mode: 802.11b Test channel: Middle

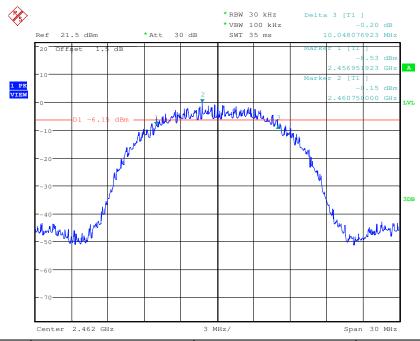




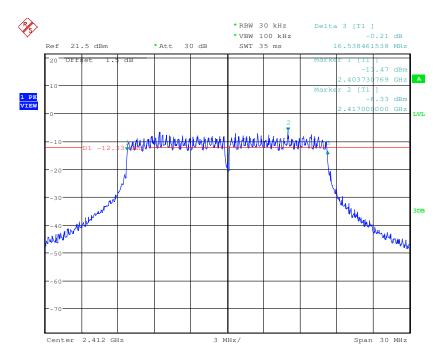
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Test mode: 802.11b Test channel: Highest



Test mode: 802.11g Test channel: Lowest

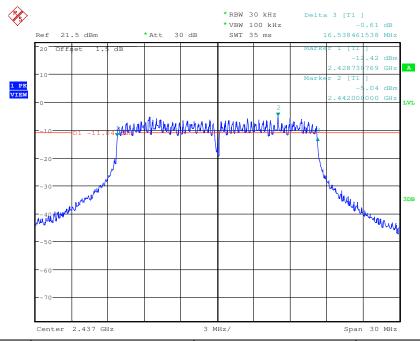




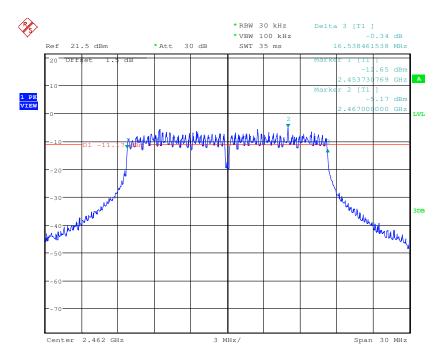
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Test mode: 802.11g Test channel: Middle





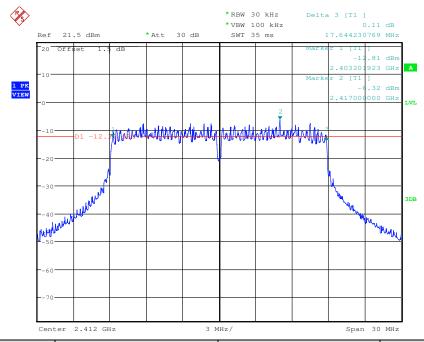




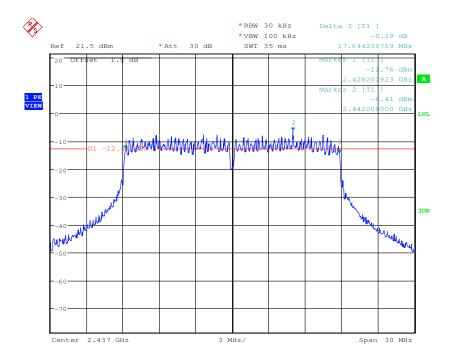
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Test mode: 802.11n(HT20) Test channel: Lowest



Test mode: 802.11n(HT20) Test channel: Middle

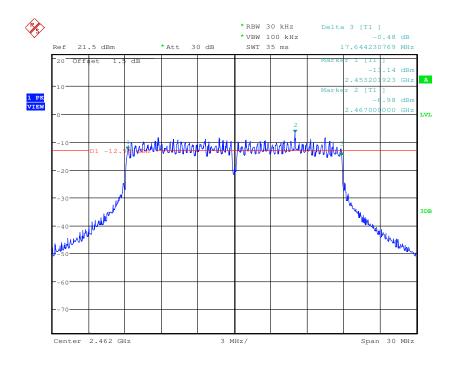




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Test mode: 802.11n(HT20) Test channel: Highest





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# 6.4 Power Spectral Density

Test Requirement:	47 CFR Part 15C Section 15.247 (e)	
Test Method:	KDB558074 D01 v03r02	
Test Setup:	Spectrum Analyzer  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 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)	
Limit:	≤8.00dBm	
Test Results:	Pass	



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#### **Measurement Data**

weasurement Data			
	802.11b mode		
Test channel	Power Spectral Density (dBm)	Limit (dBm)	Result
Lowest	-10.84	≤8.00	Pass
Middle	-10.16	≤8.00	Pass
Highest	-10.32	≤8.00	Pass
802.11g mode			
Test channel	Power Spectral Density (dBm)	Limit (dBm)	Result
Lowest	-15.94	≤8.00	Pass
Middle	-15.27	≤8.00	Pass
Highest	-15.95	≤8.00	Pass
	802.11n(HT20) mode		
Test channel	Power Spectral Density (dBm)	Limit (dBm)	Result
Lowest	-17.27	≤8.00	Pass
Middle	-16.21	≤8.00	Pass
Highest	-16.90	≤8.00	Pass

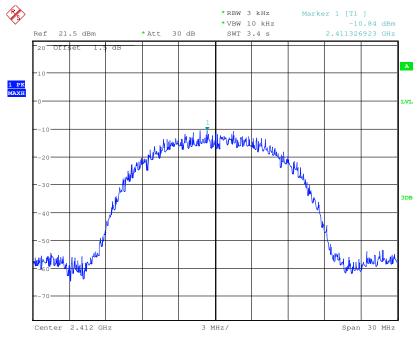


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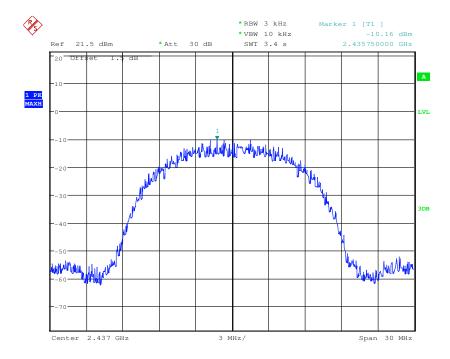
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### Test plot as follows:

Test mode: 802.11b Test channel: Lowest



Test mode: 802.11b Test channel: Middle

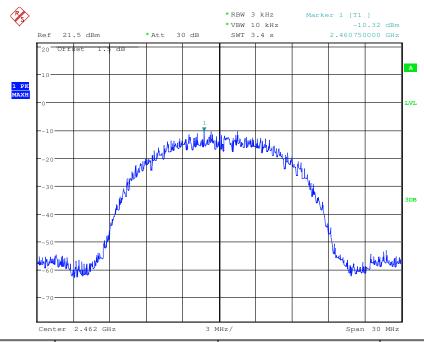




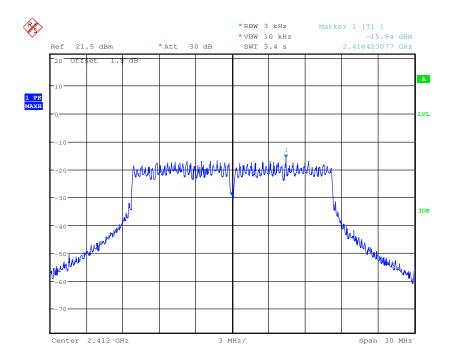
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Test mode: 802.11b Test channel: Highest



Test mode: 802.11g Test channel: Lowest

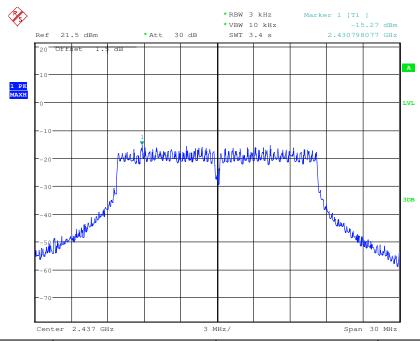




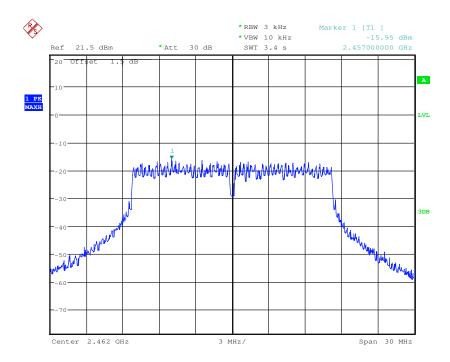
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Test mode: 802.11g Test channel: Middle





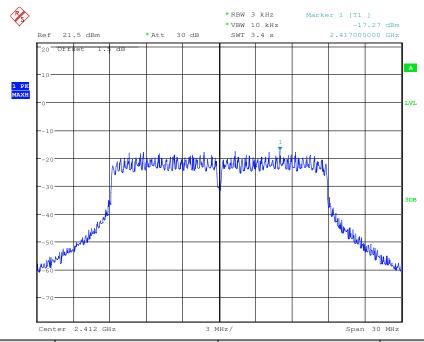




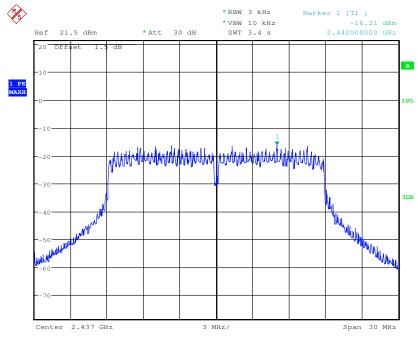
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Test mode: 802.11n(HT20) Test channel: Lowest



Test mode: 802.11n(HT20) Test channel: Middle



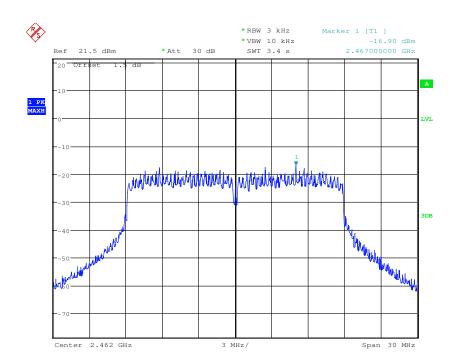




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Test mode: 802.11n(HT20) Test channel: Highest





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# 6.5 Band-edge for RF Conducted Emissions

Test Requirement:	47 CFR Part 15C Section 15.247 (d)	
•		
Test Method:	KDB558074 D01 v03r02	
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 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).	
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	

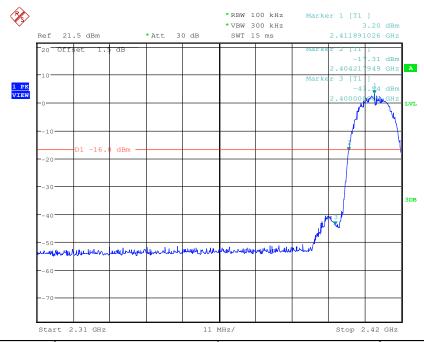


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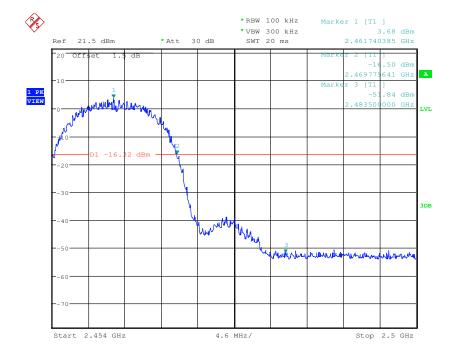
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### Test plot as follows:

Test mode: 802.11b Test channel: Lowest





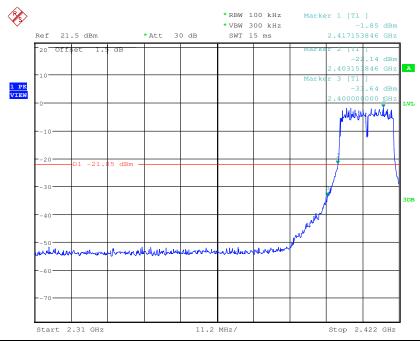




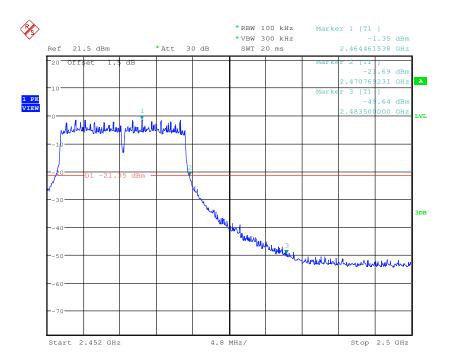
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Test mode: 802.11g Test channel: Lowest





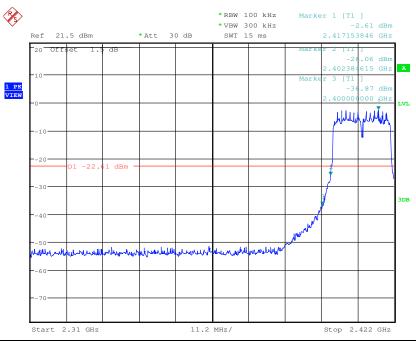




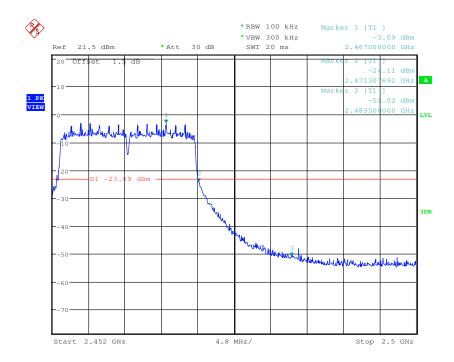
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Test mode: 802.11n(HT20) Test channel: Lowest









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# 6.6 RF Conducted Spurious Emissions

Test Requirement:	47 CFR Part 15C Section 15.247 (d)
Test Method:	KDB558074 D01 v03r02
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 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)
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

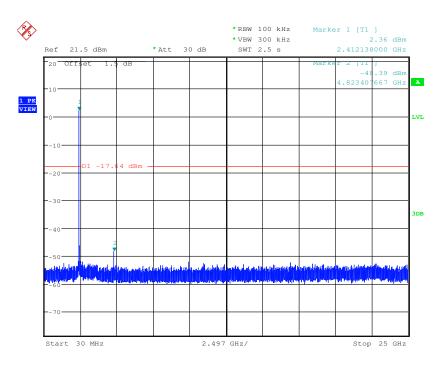


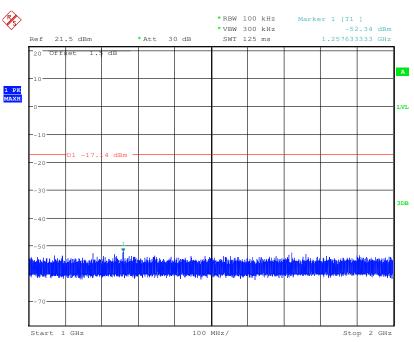
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# Test plot as follows:

Test mode: 802.11b Test channel: Lowest

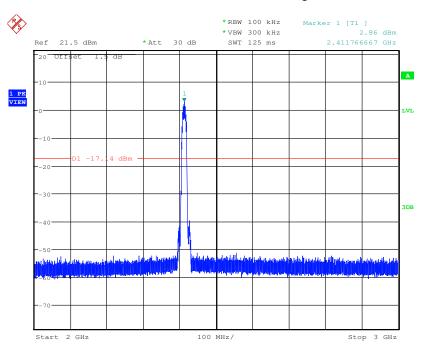


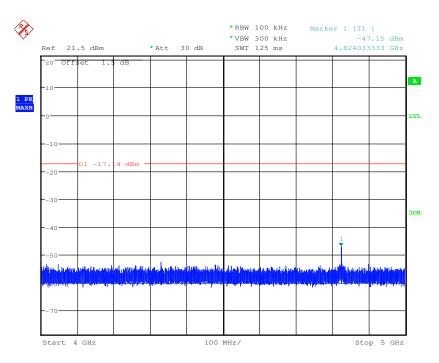




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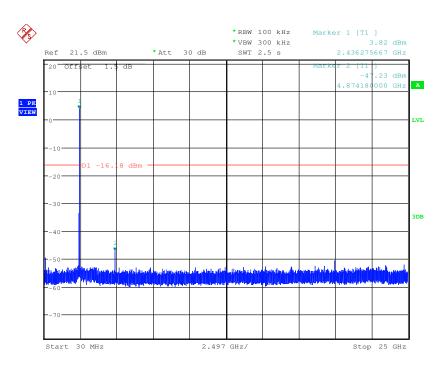


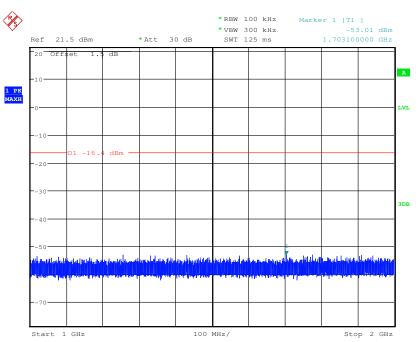


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Test mode: 802.11b Test channel: Middle



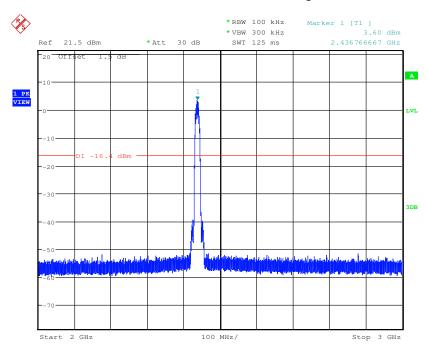


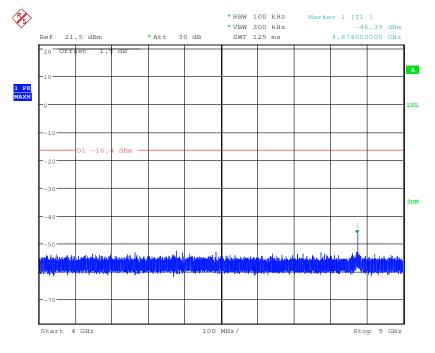
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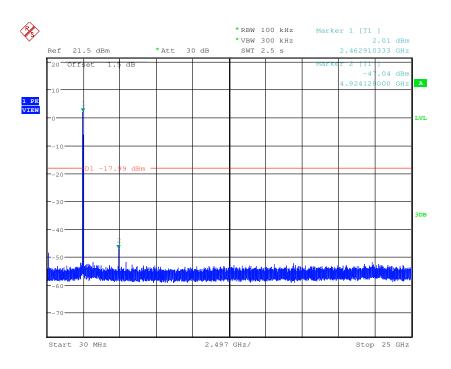


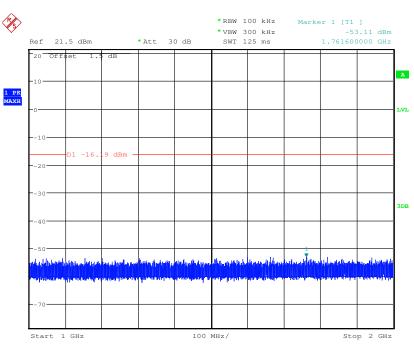


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Test mode: 802.11b Test channel: Highest

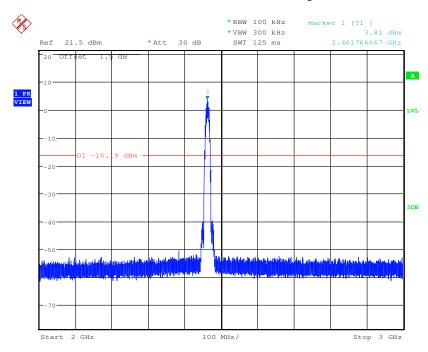


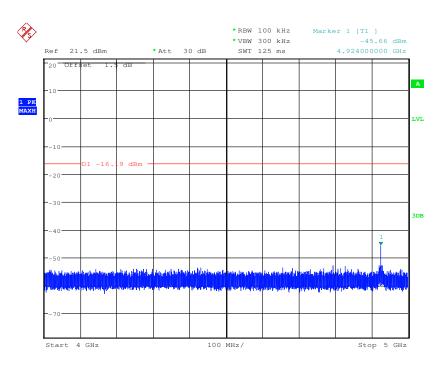




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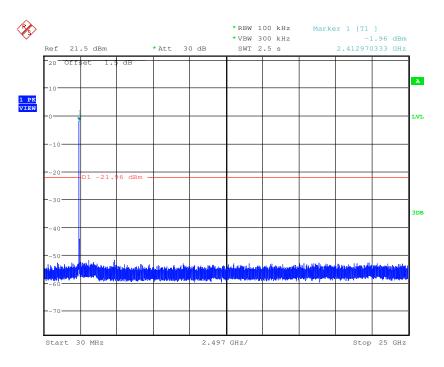


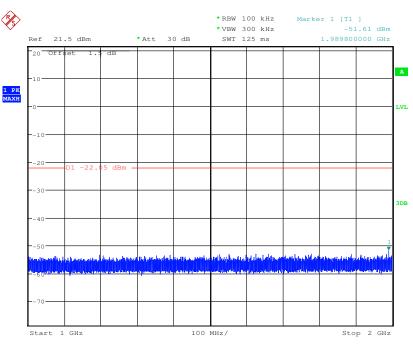


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Test mode: 802.11g Test channel: Lowest

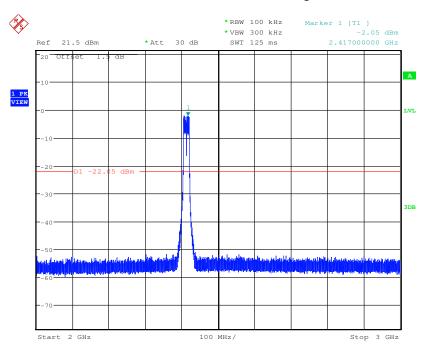


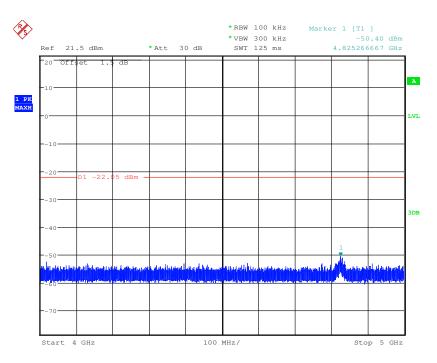




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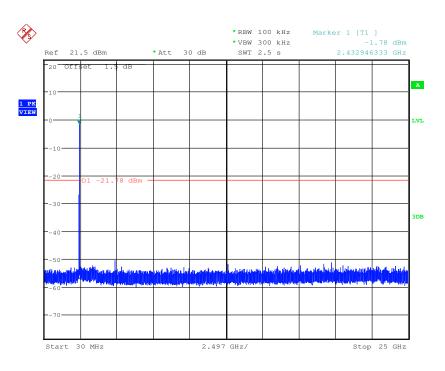


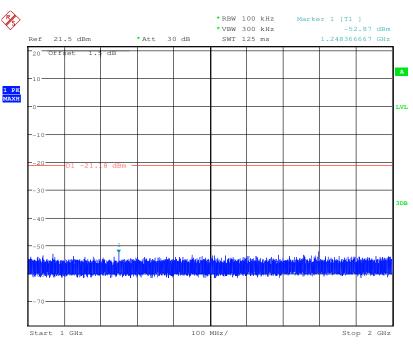


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Test mode: 802.11g Test channel: Middle

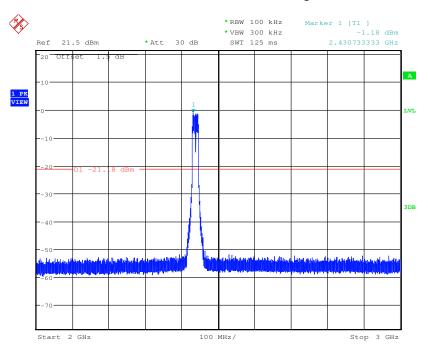


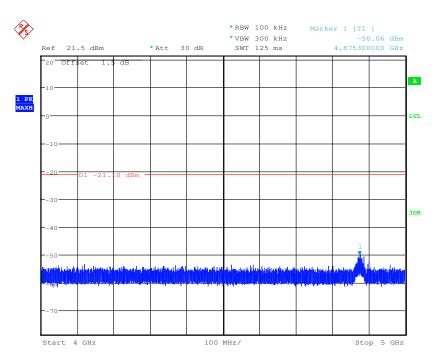




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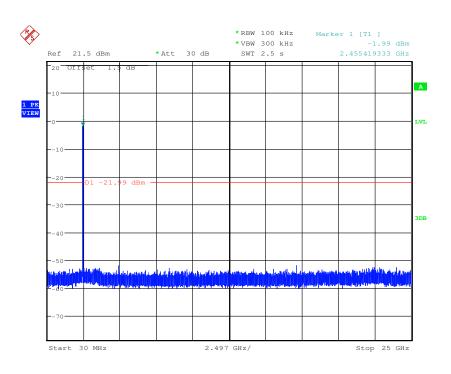


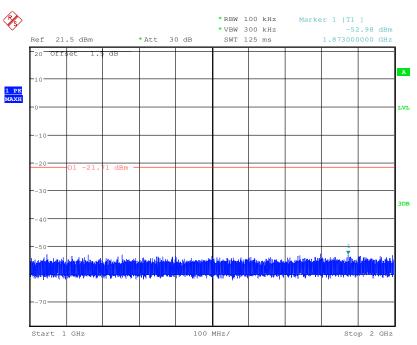


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Test mode: 802.11g Test channel: Highest

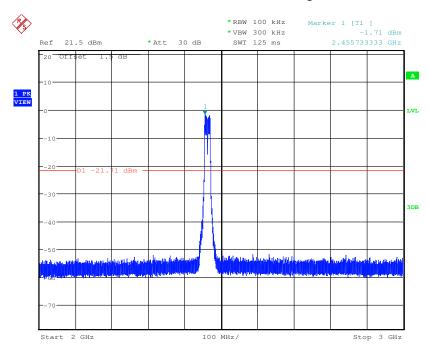


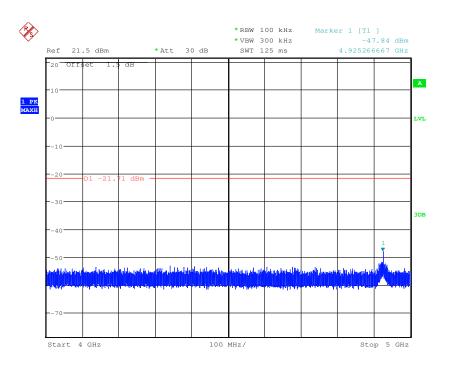




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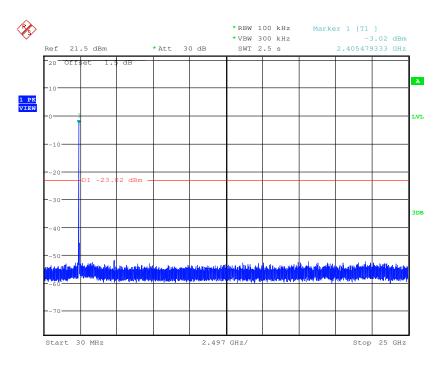


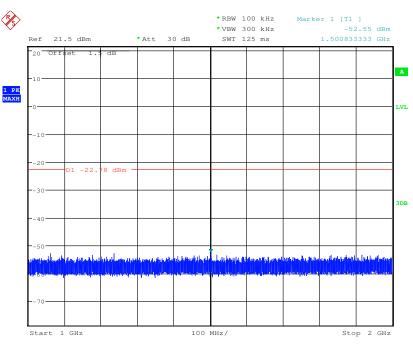


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Test mode: 802.11n(HT20) Test channel: Lowest



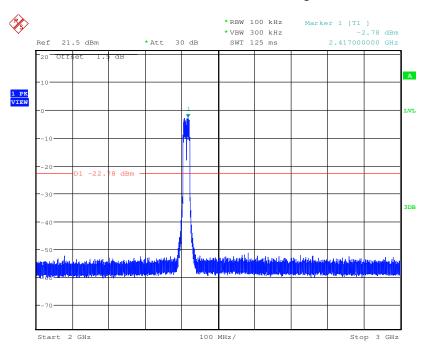


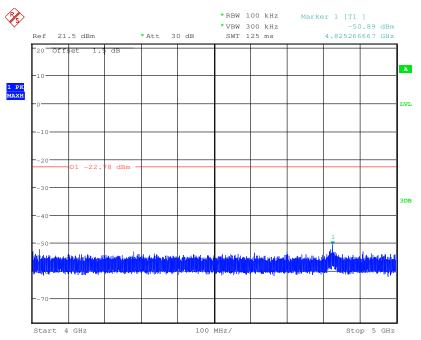
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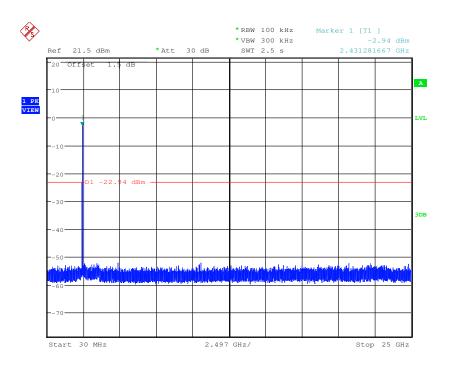


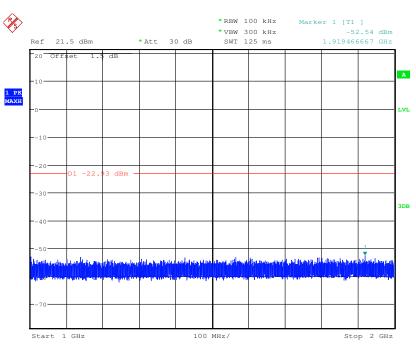


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Test mode: 802.11n(HT20) Test channel: Middle

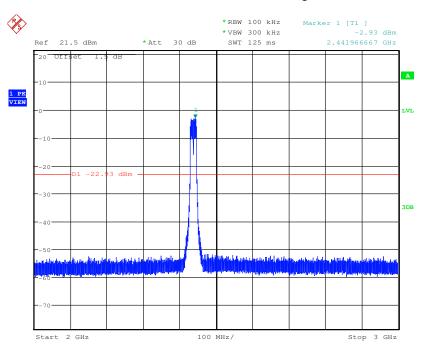


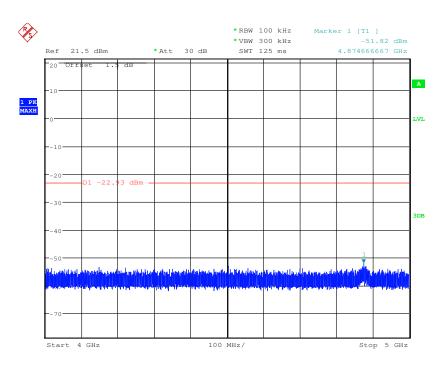




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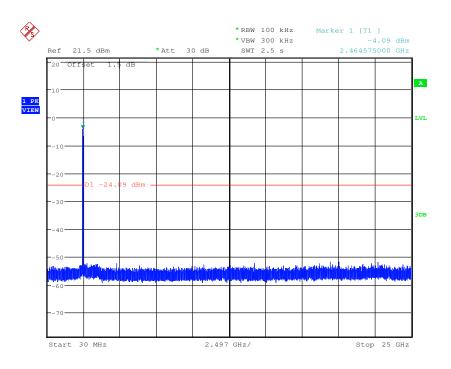


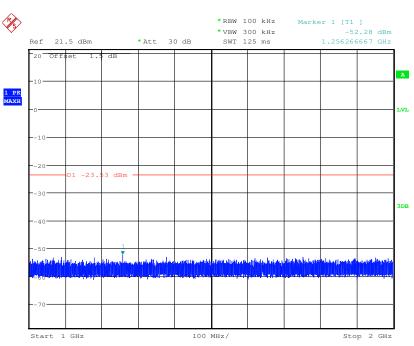


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Test mode: 802.11n(HT20) Test channel: Highest

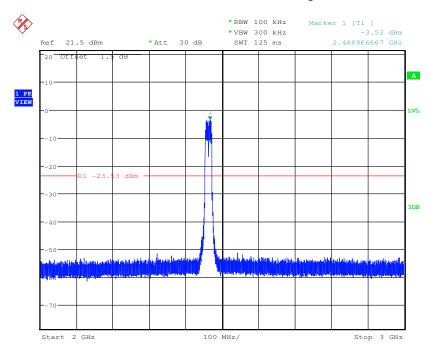


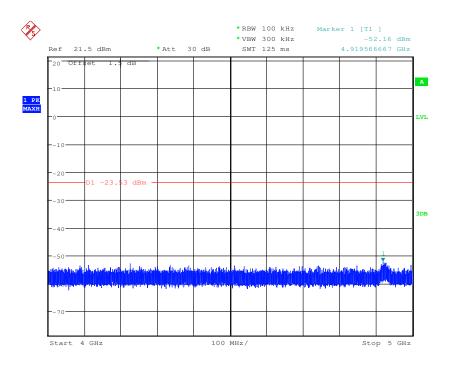




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#### Remark:

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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# 6.7 Radiated Spurious Emissions

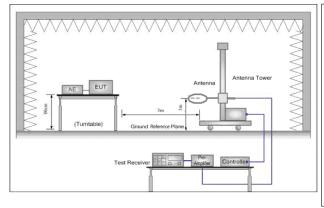
Test Requirement:	47 CFR Part 15C Section 15.209 and 15.205								
Test Method:	ANSI C63.10 2009								
Test Site:	Measurement Distance: 3m (Semi-Anechoic Chamber)								
Receiver Setup:	Frequency	Detector	RBW	VBW	Remark				
	0.009MHz-0.090MHz	Peak	10kHz	30kHz	Peak				
	0.009MHz-0.090MHz	Average	10kHz	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 IGHZ	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	-		-					
	emissions is 20dB		-	_					
	applicable to the equipment under test. This peak limit applies to the peak								
	emission level rad	iated by the device	Э.						



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# Test Setup:



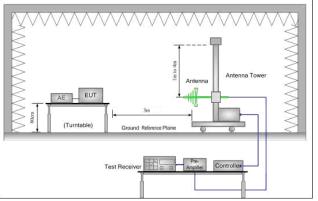


Figure 1. Below 30MHz

Figure 2. 30MHz to 1GHz

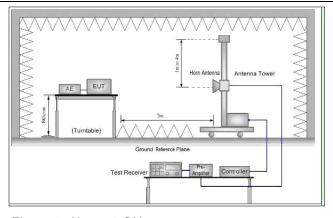


Figure 3. Above 1 GHz

#### 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(for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) 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. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average



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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 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).
	And 1Mbps of rate is the worst case of 802.11b ,802.11g,802.11n(HT20) on 30MHz~1GHz Only the worst case is recorded in the report.
Instruments Used:	Refer to section 5.10 for details
Test Results:	Pass



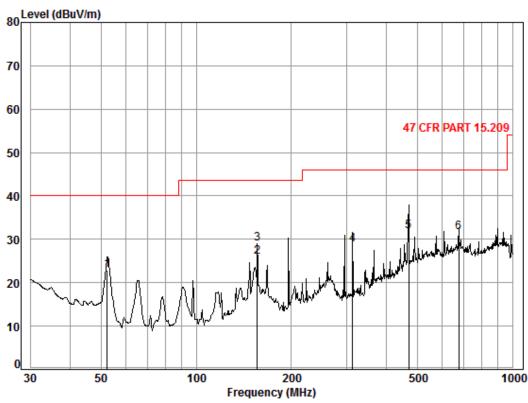
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### 6.7.1 Radiated emission below 1GHz

30MHz~1GHz (QP)		
Test mode:	Transmitting	Vertical





Condition: 47 CFR PART 15.209 3m 3142C Vertical

Job No. : 5724CR Test mode: TX mode

		Cable	Ant	Preamp	Read		Limit	0ver
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	52.39	0.80	8.34	27.28	41.09	22.95	40.00	-17.05
2	155.91	1.33	9.35	26.88	42.24	26.04	43.50	-17.46
3	155.91	1.33	9.35	26.88	45.24	29.04	43.50	-14.46
4	312.18	1.94	14.34	26.50	38.93	28.71	46.00	-17.29
5	468.88	2.49	17.58	27.54	39.32	31.85	46.00	-14.15
6	675.21	2.85	21.40	27.44	34.82	31.63	46.00	-14.37

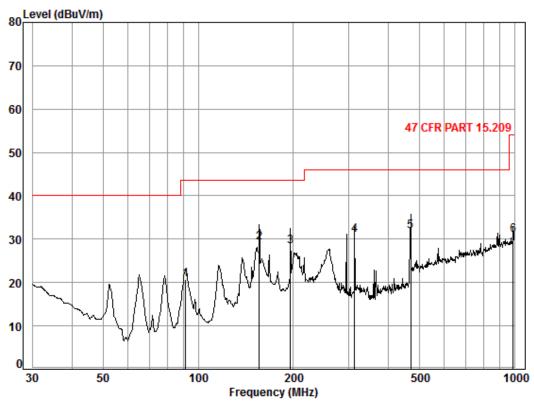


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Test mode:	Transmitting	Horizontal

Data: 53



Condition: 47 CFR PART 15.209 3m 3142C Horizontal

Job No. : 5724CR Test mode: TX mode

		Cable	Ant	Preamp	Read		Limit	0ver
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
			,			,		
1	91.17	1.11	8.75	27.21	38.14	20.79	43.50	-22.71
2	155.91	1.33	9.36	26.88	45.49	29.30	43.50	-14.20
3	195.82	1.39	10.16	26.71	43.58	28.42	43.50	-15.08
4	312.18	1.94	14.35	26.50	41.07	30.86	46.00	-15.14
5	468.88	2.49	17.58	27.54	39.23	31.76	46.00	-14.24
6	989.54	3.69	23.88	26.37	29.78	30.98	54.00	-23.02





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#### 6.7.2 Transmitter emission above 1GHz

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
3855.338	6.77	33.25	38.89	44.73	45.86	74	-28.14	Vertical
4824.000	6.46	34.72	39.24	45.95	47.89	74	-26.11	Vertical
6220.550	8.03	36.05	39.16	47.03	51.95	74	-22.05	Vertical
7236.000	8.96	35.60	39.06	45.95	51.45	74	-22.55	Vertical
9648.000	9.97	37.45	37.91	43.11	52.62	74	-21.38	Vertical
11708.900	10.48	38.41	38.57	43.50	53.82	74	-20.18	Vertical
3773.328	6.81	33.13	38.86	46.07	47.15	74	-26.85	Horizontal
4824.000	6.46	34.72	39.24	47.05	48.99	74	-25.01	Horizontal
6310.358	8.01	35.94	39.15	46.77	51.57	74	-22.43	Horizontal
7236.000	8.96	35.60	39.06	46.51	52.01	74	-21.99	Horizontal
9648.000	9.97	37.45	37.91	43.33	52.84	74	-21.16	Horizontal
12578.890	11.03	39.25	39.19	41.90	52.99	74	-21.01	Horizontal

Test mode:	8	02.11b	Test ch	annel:	Middle	Remark		Peak
Frequency (MHz)	Cable Loss (dB)	_	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarizatio n
3996.000	6.69	33.49	38.95	45.81	47.04	74	-26.96	Vertical
4874.000	6.57	34.77	39.26	47.10	49.18	74	-24.82	Vertical
6265.293	8.02	36.00	39.16	47.02	51.88	74	-22.12	Vertical
7311.000	9.06	35.52	39.06	46.25	51.77	74	-22.23	Vertical
9748.000	9.91	37.76	37.85	42.18	52.00	74	-22.00	Vertical
12179.670	10.88	38.93	38.85	42.06	53.02	74	-20.98	Vertical
3910.999	6.74	33.35	38.92	45.07	46.24	74	-27.76	Horizontal
4874.000	6.57	34.77	39.26	46.09	48.17	74	-25.83	Horizontal
6198.299	8.04	36.08	39.16	46.48	51.44	74	-22.56	Horizontal
7311.000	9.06	35.52	39.06	46.00	51.52	74	-22.48	Horizontal
9748.000	9.91	37.76	37.85	41.98	51.80	74	-22.20	Horizontal
12578.890	11.03	39.25	39.19	42.00	53.09	74	-20.91	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
3897.008	6.74	33.32	38.91	45.88	47.03	74	-26.97	Vertical
4924.000	6.68	34.82	39.28	46.30	48.52	74	-25.48	Vertical
6242.882	8.03	36.03	39.16	46.95	51.85	74	-22.15	Vertical
7386.000	9.16	35.44	39.05	46.13	51.68	74	-22.32	Vertical
9848.000	9.85	38.06	37.79	41.84	51.96	74	-22.04	Vertical
12444.380	11.28	39.21	39.07	41.88	53.30	74	-20.70	Vertical
4010.345	6.67	33.53	38.95	45.72	46.97	74	-27.03	Horizontal
4924.000	6.68	34.82	39.28	46.83	49.05	74	-24.95	Horizontal
6023.128	8.07	36.27	39.18	46.28	51.44	74	-22.56	Horizontal
7386.000	9.16	35.44	39.05	46.40	51.95	74	-22.05	Horizontal
9848.000	9.85	38.06	37.79	42.65	52.77	74	-21.23	Horizontal
12489.060	11.34	39.22	39.11	42.13	53.58	74	-20.42	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
3666.690	6.87	33.05	38.81	45.35	46.46	74	-27.54	Vertical
4824.000	6.46	34.72	39.24	46.50	48.44	74	-25.56	Vertical
5916.169	7.95	36.14	39.19	46.70	51.60	74	-22.40	Vertical
7236.000	8.96	35.60	39.06	46.24	51.74	74	-22.26	Vertical
9648.000	9.97	37.45	37.91	42.06	51.57	74	-22.43	Vertical
12444.380	11.28	39.21	39.07	41.64	53.06	74	-20.94	Vertical
3855.338	6.77	33.25	38.89	45.27	46.40	74	-27.60	Horizontal
4824.000	6.46	34.72	39.24	45.86	47.80	74	-26.20	Horizontal
6132.021	8.05	36.15	39.17	46.75	51.78	74	-22.22	Horizontal
7236.000	8.96	35.60	39.06	45.81	51.31	74	-22.69	Horizontal
9648.000	9.97	37.45	37.91	42.42	51.93	74	-22.07	Horizontal
12399.870	11.21	39.20	39.04	42.14	53.51	74	-20.49	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
3897.008	6.74	33.32	38.91	45.46	46.61	74	-27.39	Vertical
4874.000	6.57	34.77	39.26	46.45	48.53	74	-25.47	Vertical
6088.229	8.06	36.20	39.17	46.71	51.80	74	-22.20	Vertical
7311.000	9.06	35.52	39.06	46.13	51.65	74	-22.35	Vertical
9748.000	9.91	37.76	37.85	42.47	52.29	74	-21.71	Vertical
12489.060	11.34	39.22	39.11	41.79	53.24	74	-20.76	Vertical
3910.999	6.74	33.35	38.92	45.10	46.27	74	-27.73	Horizontal
4874.000	6.57	34.77	39.26	46.46	48.54	74	-25.46	Horizontal
6023.128	8.07	36.27	39.18	46.97	52.13	74	-21.87	Horizontal
7311.000	9.06	35.52	39.06	45.83	51.35	74	-22.65	Horizontal
9748.000	9.91	37.76	37.85	42.00	51.82	74	-22.18	Horizontal
12179.670	10.88	38.93	38.85	42.83	53.79	74	-20.21	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
3814.113	6.79	33.18	38.88	45.51	46.60	74	-27.40	Vertical
4924.000	6.68	34.82	39.28	46.34	48.56	74	-25.44	Vertical
5958.723	8.02	36.22	39.19	46.38	51.43	74	-22.57	Vertical
7386.000	9.16	35.44	39.05	45.97	51.52	74	-22.48	Vertical
9848.000	9.85	38.06	37.79	42.32	52.44	74	-21.56	Vertical
12223.390	10.95	38.98	38.89	42.17	53.21	74	-20.79	Vertical
3910.999	6.74	33.35	38.92	45.90	47.07	74	-26.93	Horizontal
4924.000	6.68	34.82	39.28	46.70	48.92	74	-25.08	Horizontal
6198.299	8.04	36.08	39.16	46.65	51.61	74	-22.39	Horizontal
7386.000	9.16	35.44	39.05	45.47	51.02	74	-22.98	Horizontal
9848.000	9.85	38.06	37.79	42.75	52.87	74	-21.13	Horizontal
12399.870	11.21	39.20	39.04	41.87	53.24	74	-20.76	Horizontal



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Test mode:	802	.11n(H20)	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
3800.469	6.80	33.15	38.87	46.08	47.16	74	-26.84	Vertical
4824.000	6.46	34.72	39.24	46.58	48.52	74	-25.48	Vertical
6088.229	8.06	36.20	39.17	46.89	51.98	74	-22.02	Vertical
7236.000	8.96	35.60	39.06	46.54	52.04	74	-21.96	Vertical
9648.000	9.97	37.45	37.91	42.33	51.84	74	-22.16	Vertical
12223.390	10.95	38.98	38.89	42.21	53.25	74	-20.75	Vertical
3413.093	7.13	32.79	38.70	45.77	46.99	74	-27.01	Horizontal
4824.000	6.46	34.72	39.24	46.58	48.52	74	-25.48	Horizontal
5811.109	7.79	35.93	39.20	46.84	51.36	74	-22.64	Horizontal
7236.000	8.96	35.60	39.06	46.42	51.92	74	-22.08	Horizontal
9648.000	9.97	37.45	37.91	42.49	52.00	74	-22.00	Horizontal
12179.670	10.88	38.93	38.85	42.70	53.66	74	-20.34	Horizontal

Test mode:	802	.11n(H20)	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
3614.506	6.90	33.01	38.79	45.32	46.44	74	-27.56	Vertical
4874.000	6.57	34.77	39.26	46.52	48.60	74	-25.40	Vertical
5937.408	7.98	36.18	39.19	47.55	52.52	74	-21.48	Vertical
7311.000	9.06	35.52	39.06	46.63	52.15	74	-21.85	Vertical
9748.000	9.91	37.76	37.85	42.73	52.55	74	-21.45	Vertical
12444.380	11.28	39.21	39.07	42.47	53.89	74	-20.11	Vertical
3437.643	7.09	32.82	38.71	45.34	46.54	74	-27.46	Horizontal
4874.000	6.57	34.77	39.26	46.50	48.58	74	-25.42	Horizontal
6333.012	8.01	35.91	39.15	46.71	51.48	74	-22.52	Horizontal
7311.000	9.06	35.52	39.06	46.16	51.68	74	-22.32	Horizontal
9748.000	9.91	37.76	37.85	42.44	52.26	74	-21.74	Horizontal
12489.060	11.34	39.22	39.11	41.65	53.10	74	-20.90	Horizontal



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Test mode:		802.	.11n(H20)	Test ch	annel:	Highest	Remark	:	Peak
Frequency (MHz)	Cak Lo: (df	SS	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
3910.999	6.7	74	33.35	38.92	45.60	46.77	74	-27.23	Vertical
4924.000	6.6	88	34.82	39.28	46.31	48.53	74	-25.47	Vertical
5811.109	7.7	79	35.93	39.20	47.29	51.81	74	-22.19	Vertical
7386.000	9.1	16	35.44	39.05	45.68	51.23	74	-22.77	Vertical
9848.000	9.8	35	38.06	37.79	42.86	52.98	74	-21.02	Vertical
11317.000	10.	35	38.14	38.38	43.74	53.85	74	-20.15	Vertical
3786.875	6.8	30	33.14	38.86	45.10	46.18	74	-27.82	Horizontal
4924.000	6.6	88	34.82	39.28	47.02	49.24	74	-24.76	Horizontal
6176.127	8.0	)4	36.11	39.17	46.33	51.31	74	-22.69	Horizontal
7386.000	9.1	16	35.44	39.05	45.86	51.41	74	-22.59	Horizontal
9848.000	9.8	35	38.06	37.79	42.10	52.22	74	-21.78	Horizontal
12444.380	11.	28	39.21	39.07	41.61	53.03	74	-20.97	Horizontal

#### 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.

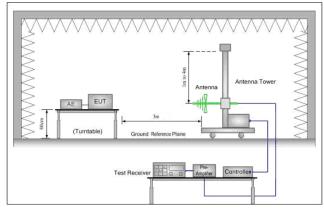


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# 6.8 Restricted bands around fundamental frequency

Test Requirement:	47 CFR Part 15C Section 15.209 and 15.205							
Test Method:	ANSI C63.10 2009							
Test Site:	Measurement Distance: 3m	(Semi-Anechoic Chambe	r)					
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					
	Abovo 1CHz	54.0	Average Value					
	Above 1GHz 74.0 Peak Value							
Test Setup:								



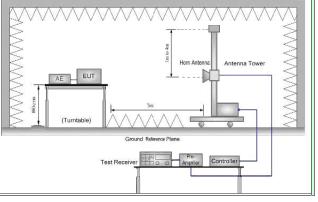


Figure 1. 30MHz to 1GHz

Figure 2. Above 1 GHz



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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
	h. Repeat above procedures until all frequencies measured was complete.
Exploratory Test 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) .Only the worst case is recorded in the report.
Instruments Used:	Refer to section 5.10 for details
Test Results:	Pass



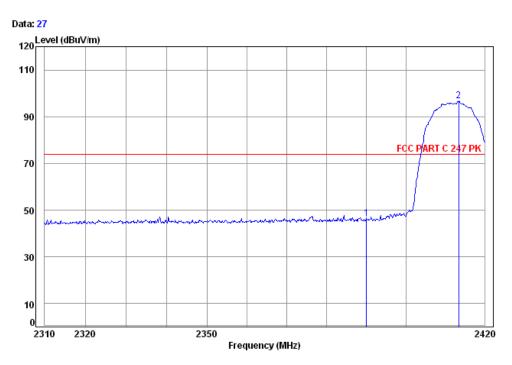
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### Test plot as follows:

802.11b

Worse case mode:	Test channel:	Lowest	Remark:	Peak	Vertical
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Site : chamber

Condition: FCC PART C 247 PK 3m Vertical

eut : 5724CR

mode : b 2412 Bandedge

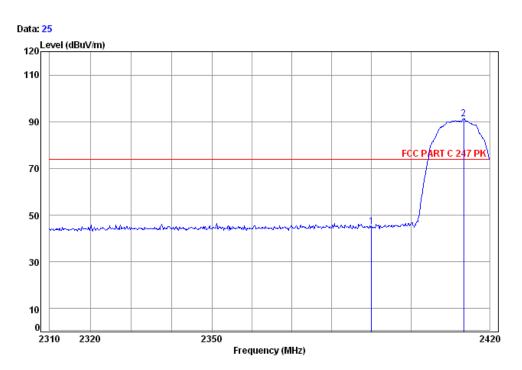
Cable Ant Preamp Read Limit 0∨er Freq Loss Factor Factor Le∨el Level Limit Line dBuV dBuV/m dBuV/m MHz dΒ dB/m dB 2390.00 4.90 32.35 38.46 47.62 46.41 74.00 -27.59 2413.37 4.93 32.41 38.46 97.83 96.71 74.00 22.71



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Worse case mode:	Test channel:	Lowest	Remark:	Peak	Horizontal
Worse case mode.	rest chamber.	LUWESI	Hemaik.	i can	Horizoniai



Site : chamber

Condition: FCC PART C 247 PK 3m Horizontal

eut : 5724CR

mode : b 2412 Bandedge

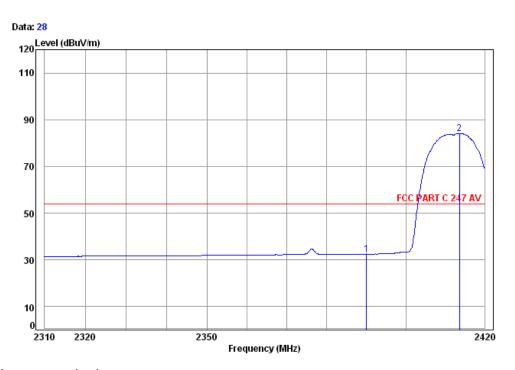
	Freq			Preamp Factor				
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 2 pp	2390.00 2413.37							



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Worse case mode:	Test channel:	Lowest	Remark:	Average	Vertical



Site : chamber

Condition: FCC PART C 247 AV 3m Vertical

eut : 5724CR

mode : b 2412 Bandedge

Ant Preamp Cable Read limit 0ver Freq Loss Factor Factor Level Level Line Limit MHz dBuV dBuV/m dBuV/m dB dB/m 1 2390.00 4.90 32.35 38.46 33.74 32.53 54.00 -21.47 4.93 32.41 38.46 85.24 84.12 54.00 30.12 2 pp 2413.59

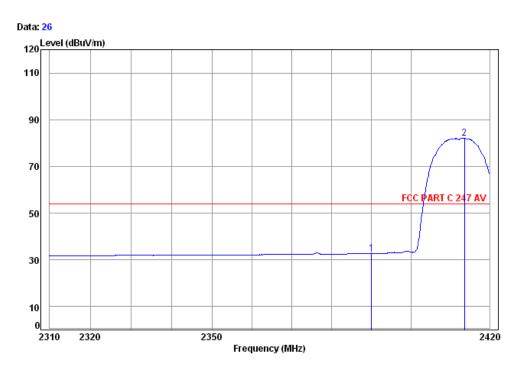




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Worse case mode:	Test channel:	Lowest	Remark:	Average	Horizontal



Site : chamber

Condition: FCC PART C 247 AV 3m Horizontal

eut : 5724CR

mode : b 2412 Bandedge

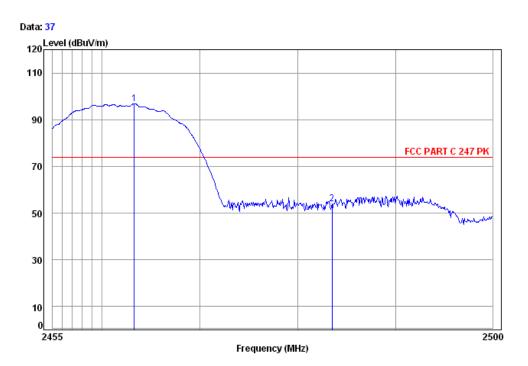
oue	. 0 2	412 Da	nueuge					
		Cable	Ant	Preamp	Read		Limit	0∨er
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	_							
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
			•			•	•	
1	2390.00	4.90	32.35	38.46	33.92	32.71	54.00	-21.29
2 pp	2413.59	4.93	32.41	38.46	83.19	82.07	54.00	28.07



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Site : chamber

Condition: FCC PART C 247 PK 3m Vertical

eut : 5724CR

mode : b 2462 Bandedge

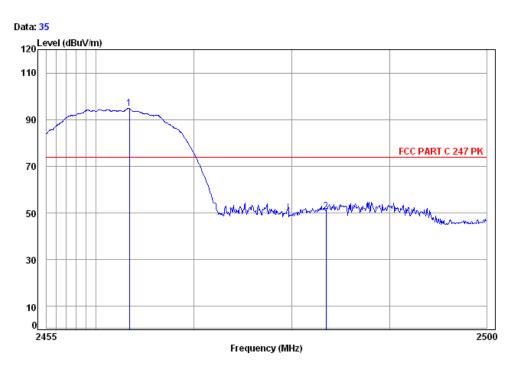
		Cable	Ant	Preamp	Read		Limit	0∨er
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
_								
	MHz	dB	dB/m	dB	dBu∀	dBuV/m	dBuV/m	dB
1 pp	2463.31	5.00	32.43	38.46	97.89	96.86	74.00	22.86
2	2483.50	5.03	32.44	38.47	54.80	53.80	74.00	-20.20



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Worse case mode:	Test channel:	Highest	Remark:	Peak	Horizontal
		3			



Site : chamber

Condition: FCC PART C 247 PK 3m Horizontal

eut : 5724CR

mode : b 2462 Bandedge

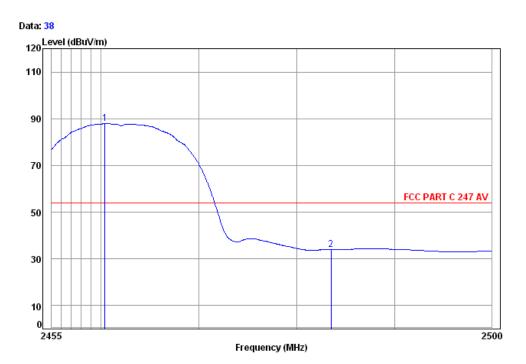
		Cable	Ant	Preamp	Read		Limit	0∨er
	Freq	Loss	Factor	Factor	Le∨el	Le∨el	Line	Limit
-	MHz		dB /m	dB		dBu\//m	dBu\//m	
	ruiz	uБ	GD/III	uВ	abav	abav/iii	abav/iii	uв
1 рр	2463.40	5.00	32.43	38.46	95.79	94.76	74.00	20.76
2	2483.50	5.03	32.44	38.47	51.67	50.67	74.00	-23.33



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Worse case mode:	Test channel:	Highest	Remark:	Average	Vertical



Site : chamber

Condition: FCC PART C 247 AV 3m Vertical

eut : 5724CR

mode : b 2462 Bandedge

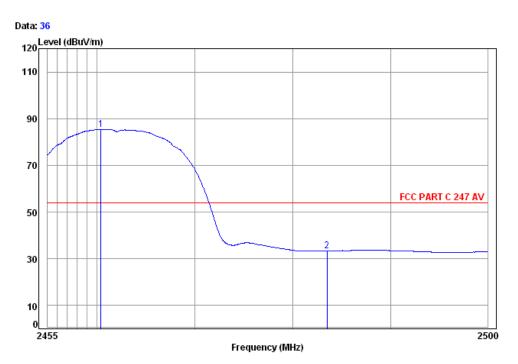
Ant Preamp 0ver Cable Read limit Freq Loss Factor Factor Level Level Line Limit MHz dBuV dBuV/m dBuV/m dB dB/m 2460.40 5.00 32.43 38.46 88.90 87.87 54.00 33.87 5.03 32.44 38.47 34.99 33.99 54.00 -20.01 2483.50



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Worse case mode:	Test channel:	Highest	Remark:	Average	Horizontal



Site : chamber

Condition: FCC PART C 247 AV 3m Horizontal

eut : 5724CR

mode : b 2462 Bandedge

Ant Preamp 0∨er Cable Read Limit Loss Factor Factor Limit Freq Level Level Line MHz dBuV dBuV/m dBuV/m dΒ dB/m 2460.40 5.00 32.43 38.46 86.37 85.34 54.00 31.34 2483.50 5.03 32.44 38.47 34.40 33.40 54.00 -20.60

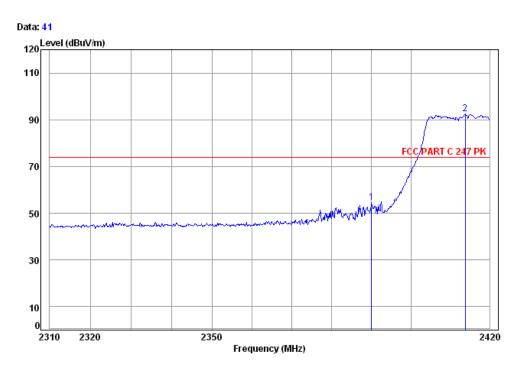


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802.11g

Worse case mode: Test channel: Lowest Remark: Peak Vertical



Site : chamber

Condition: FCC PART C 247 PK 3m Vertical

eut : 5724CR

mode : g 2412 Bandedge

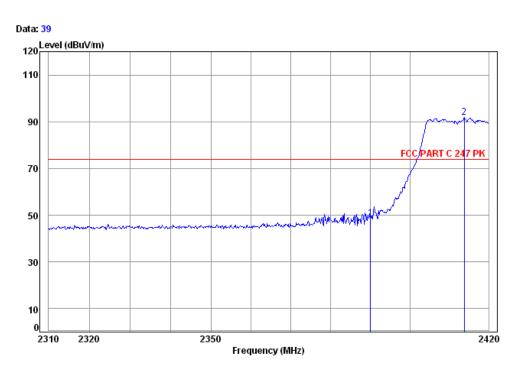
Ant Preamp Cable Read Over limit Freq Loss Factor Factor Level Level Line Limit MHz dBuV dBuV/m dBuV/m dΒ dB/m 1 2390.00 4.90 32.35 38.46 55.73 54.52 74.00 - 19.48 2413.82 4.93 32.42 38.46 93.73 92.62 74.00 18.62



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Worse case mode:	Test channel:	Lowest	Remark:	Peak	Horizontal



Site : chamber

Condition: FCC PART C 247 PK 3m Horizontal

eut : 5724CR

mode : g 2412 Bandedge

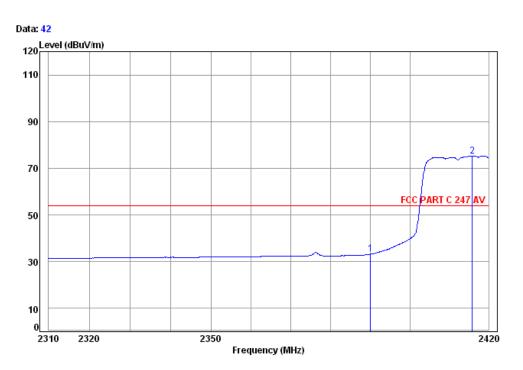
	Freq			Preamp Factor				
_	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 2 pp	2390.00 2413.82							



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Worse case mode: Test channel: Low	vest Remark: Average Vertical
------------------------------------	-------------------------------



Site : chamber

Condition: FCC PART C 247 AV 3m Vertical

eut : 5724CR

mode : g 2412 Bandedge

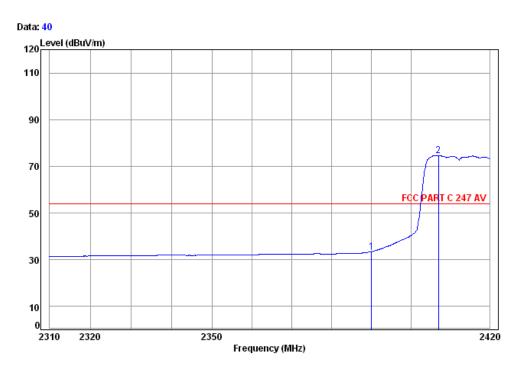
		Cable	Ant	Preamp	Read		Limit	0∨er
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	-							
_	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
			,					
1	2390.00	4.90	32.35	38.46	34.44	33.23	54.00	-20.77
2								
z pp	2415.84	4.94	22.42	20.40	/0.45	/5.55	54.00	21.55



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Worse case mode:	Test channel:	Lowest	Remark:	Average	Horizontal



Site : chamber

Condition: FCC PART C 247 AV 3m Horizontal

eut : 5724CR

mode : g 2412 Bandedge

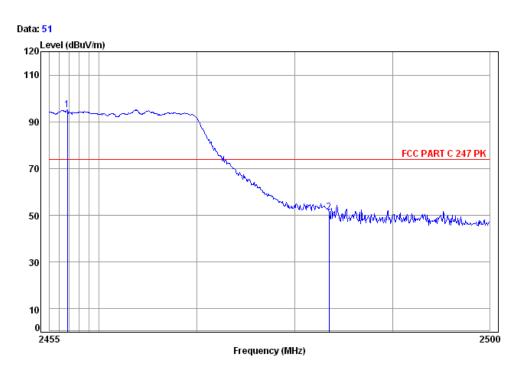
		Cable	Ant	Preamp	Read		Limit	0∨er
	Freq	Loss	Factor	Factor	Le∨el	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	2390.00	4.90	32.35	38.46	34.67	33.46	54.00	-20.54
2 pp	2406.98	4.92	32.41	38.46	75.82	74.69	54.00	20.69



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Worse case mode:	Test channel:	Highest	Remark:	Peak	Vertical



Site : chamber

Condition: FCC PART C 247 PK 3m Vertical

eut : 5724CR

mode : g 2462 Bandedge

Ant Preamp Over Cable Read Limit Freq Loss Factor Factor Level Level Line Limit MHz dΒ dBuV dBuV/m dBuV/m dB/m 2456.78 4.99 32.43 38.46 96.18 95.14 74.00 21.14 5.03 32.44 38.47 52.38 51.38 74.00 -22.62 2483.50

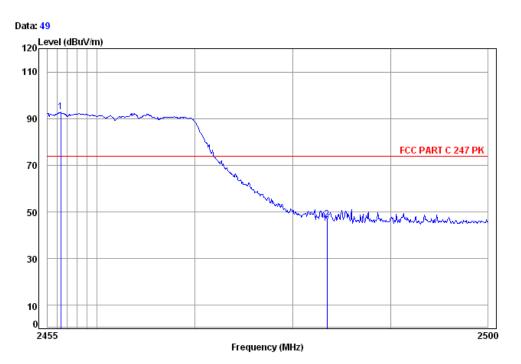




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Worse case mode:	Test channel:	Highest	Remark:	Peak	Horizontal
		9			



Site : chamber

Condition: FCC PART C 247 PK 3m Horizontal

eut : 5724CR

mode : g 2462 Bandedge

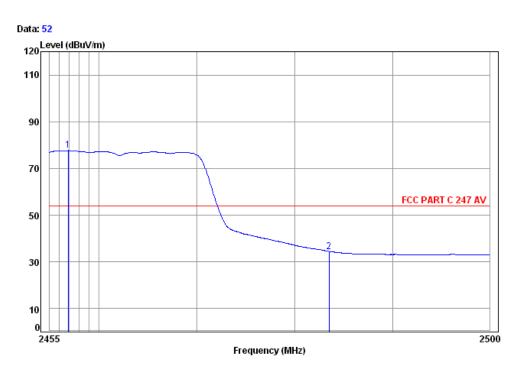
Ant Preamp Limit 0∨er Cable Read Loss Factor Factor Limit Level Level MHz dBuV dBuV/m dBuV/m dΒ dB/m 2456.34 4.99 32.43 38.46 93.78 92.74 74.00 18.74 2483.50 5.03 32.44 38.47 47.80 46.80 74.00 -27.20



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Worse case mode:   Test channel:   Highest   Remark:   Average   Vertical
---



Site : chamber

Condition: FCC PART C 247 AV 3m Vertical

eut : 5724CR

mode : g 2462 Bandedge

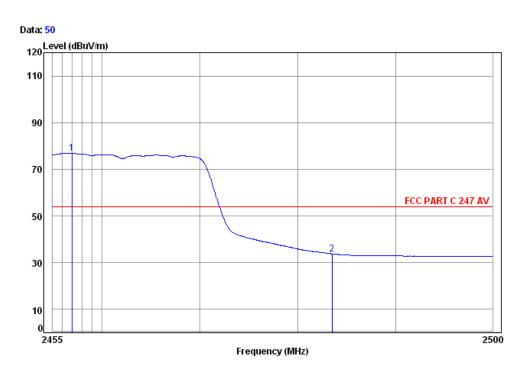
Ant Preamp Cable Read limit Over Freq Loss Factor Factor Level Level Line Limit MHz dBuV dBuV/m dBuV/m dB dB/m 2456.87 4.99 32.43 38.46 78.70 77.66 54.00 23.66 5.03 32.44 38.47 35.50 34.50 54.00 -19.50 2483.50



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Ī	Worse case mode:	Test channel:	Highest	Remark:	Average	Horizontal
- 1	WOOD CASC IIICAC.	i cot oriaririor.	riigiicat	i tomant.	rwcrago	1 IOTIZOTILAI



Site : chamber

Condition: FCC PART C 247 AV 3m Horizontal

eut : 5724CR

mode : g 2462 Bandedge

Ant Preamp 0ver Cable Read Limit Loss Factor Factor Limit Freq Level Level Line MHz dBuV dBuV/m dBuV/m dΒ dB/m 2456.96 4.99 32.43 38.46 77.86 76.82 54.00 22.82 2483.50 5.03 32.44 38.47 34.78 33.78 54.00 -20.22

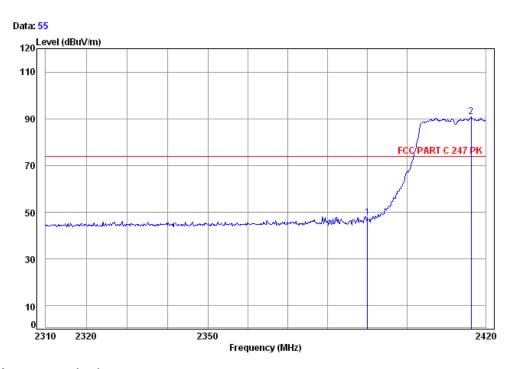


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802.11n(H20)

Worse case mode: Test channel: Lowest Remark: Peak Vertical



Site : chamber

Condition: FCC PART C 247 PK 3m Vertical

eut : 5724CR

mode : n(HT20) 2412 Bandedge

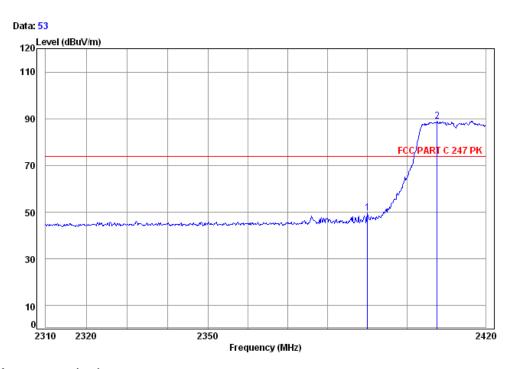
Cable Ant Preamp Read Over limit Loss Factor Factor Freq Level Level Line Limit MHz dBuV dBuV/m dBuV/m dΒ dB/m 1 2390.00 4.90 32.35 38.46 49.00 47.79 74.00 -26.21 2 pp 2416.29 4.94 32.42 38.46 91.85 90.75 74.00 16.75



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Worse case mode:	Test channel:	Lowest	Remark:	Peak	Horizontal



Site : chamber

Condition: FCC PART C 247 PK 3m Horizontal

eut : 5724CR

mode : n(HT20) 2412 Bandedge

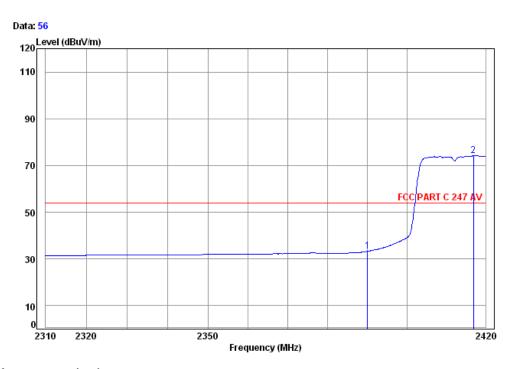
Cable Ant Preamp Read limit Over Loss Factor Factor Freq Level Level Line Limit MHz dBuV dBuV/m dBuV/m dB dB/m 1 2390.00 4.90 32.35 38.46 50.94 49.73 74.00 -24.27 4.93 32.41 38.46 90.12 89.00 74.00 15.00 2 pp 2407.65



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Worse case mode:	Test channel:	Lowest	Remark:	Average	Vertical
				, c. a.g.c	



Site : chamber

Condition: FCC PART C 247 AV 3m Vertical

eut : 5724CR

mode : n(HT20) 2412 Bandedge

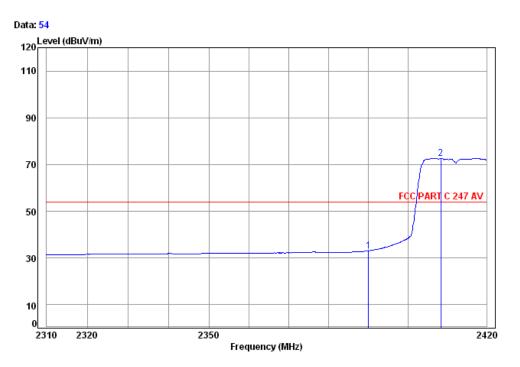
Cable Ant Preamp Read limit Over Loss Factor Factor Freq Level Level Line Limit MHz dBuV dBuV/m dBuV/m dΒ dB/m 1 2390.00 4.90 32.35 38.46 34.49 33.28 54.00 -20.72 4.94 32.42 38.46 75.25 74.15 54.00 20.15 2 pp 2416.96



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Worse case mode:	Test channel:	Lowest	Remark:	Average	Horizontal



Site : chamber

Condition: FCC PART C 247 AV 3m Horizontal

eut : 5724CR

mode : n(HT20) 2412 Bandedge

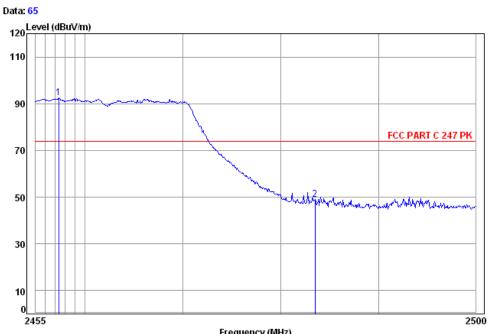
Cable Ant Preamp Over Read limit Loss Factor Factor Freq Level Level Line Limit MHz dBuV dBuV/m dBuV/m dΒ dB/m 1 2390.00 4.90 32.35 38.46 34.34 33.13 54.00 -20.87 4.93 32.41 38.46 73.79 72.67 54.00 18.67 2 pp 2408.32



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Worse case mode:	Test channel:	Highest	Remark:	Peak	Vertical



Frequency (MHz)

: chamber

Condition: FCC PART C 247 PK 3m Vertical

: 5724CR

: n(HT20) 2462 Bandedge mode

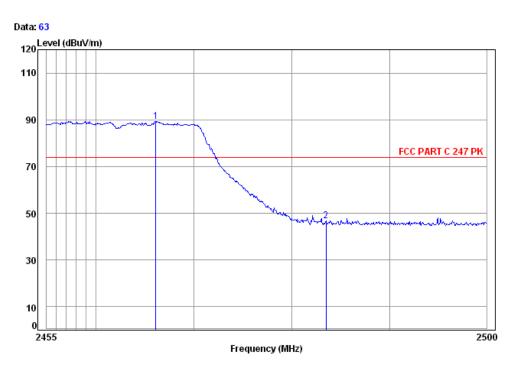
Cable Ant Preamp 0ver Read limit Loss Factor Factor Freq Level Level Line Limit MHz dBuV dBuV/m dBuV/m dB dB/m 2457.37 4.99 32.43 38.46 93.42 92.38 74.00 18.38 5.03 32.44 38.47 50.07 49.07 74.00 -24.93 2483.50



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Worse case mode:	Test channel:	Highest	Remark:	Peak	Horizontal
		9			



Site : chamber

Condition: FCC PART C 247 PK 3m Horizontal

eut : 5724CR

mode : n(HT20) 2462 Bandedge

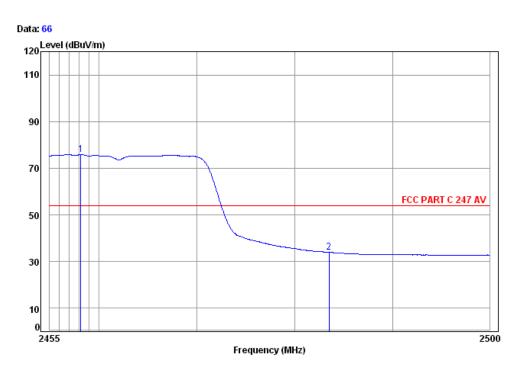
Cable Ant Preamp Over Read limit Loss Factor Factor Freq Level Level Line Limit MHz dBuV dBuV/m dBuV/m dΒ dB/m 2466.08 5.00 32.43 38.46 90.40 89.37 74.00 15.37 2483.50 5.03 32.44 38.47 47.63 46.63 74.00 -27.37



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Worse case mode:	Test channel:	Highest	Remark:	Average	Vertical



Site : chamber

Condition: FCC PART C 247 AV 3m Vertical

eut : 5724CR

mode : n(HT20) 2462 Bandedge

Cable Ant Preamp Read Limit 0ver Loss Factor Factor Level Level Line Limit MHz dBuV dBuV/m dBuV/m dΒ dB/m 2458.17 4.99 32.43 38.46 76.85 75.81 54.00 21.81 2483.50 5.03 32.44 38.47 34.93 33.93 54.00 -20.07

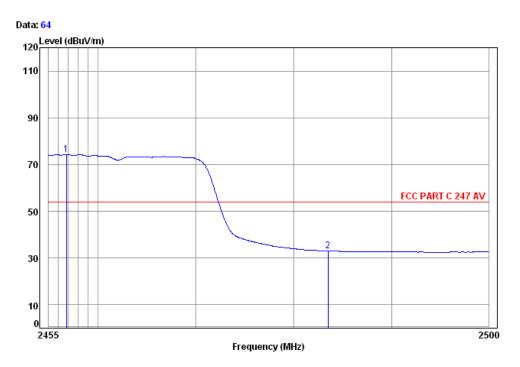




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Worse case mode:	Test channel:	Highest	Remark:	Average	Horizontal



Site : chamber

Condition: FCC PART C 247 AV 3m Horizontal

eut : 5724CR

mode : n(HT20) 2462 Bandedge

	Freq			Preamp Factor				
-	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
	2456.78 2483.50							

#### 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