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Report No.: FCC11-RTE080802

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# **FCC REPORT**

Applicant: Archos SA

Address of Applicant: 12 Rue Ampere Igny France 91430

**Equipment Under Test (EUT)** 

Product Name: A80S Internet Tablet

Model No.: 9080

Trade mark: Archos

FCC ID: SOV9080

Applicable standards: FCC CFR Title 47 Part 15 Subpart C Section 15.247:2010

Date of sample receipt: 02 Aug., 2011

**Date of Test:** 02-05 Aug., 2011

Date of report issued: 08 Aug., 2011

Test Result: PASS \*

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

Authorized Signature:

Kavin Yu Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the EBO product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. 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 EBO International Electrical Approvals or testing done by EBO International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by EBO International Electrical Approvals in writing.

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### 2 Version

Version No.	Date	Description
00	2011-08-08	Original

Prepared By:	collar. He	Date:	2011-08-08	
	Project Engineer	<del>_</del>		
Check By:	Hans. Hu	Date:	2011-08-08	
	Reviewer			



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## 4 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	15.203/15.247 (c)	PASS
AC Power Line Conducted Emission	15.207	PASS
Conducted Peak Output Power	15.247 (b)(3)	PASS
6dB Occupied Bandwidth	15.247 (a)(2)	PASS
Power Spectral Density	15.247 (e)	PASS
Band Edge	15.247(d)	PASS
Spurious Emission	15.205/15.209	PASS

Remark:

• Pass: The EUT complies with the essential requirements in the standard.



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### 5 General Information

### 5.1 Client Information

Applicant:	Archos SA
Address of Applicant:	12 Rue Ampere Igny France 91430
Manufacturer:	Archos SA
Address of Manufacturer:	12 Rue Ampere Igny France 91430
Factory:	Excelsior Electronics
Address of Factory:	Sam Tuen Management Zone, Houjie, Dongguan Guangdong PRC

### 5.2 General Description of E.U.T.

Product Name:	A80S Internet Tablet
Model No.:	9080
Operation Frequency:	2412MHz~2462MHz (802.11b/802.11g/802.11n(H20))
Channel numbers:	11 for 802.11b/802.11g/802.11(H20)
Channel separation:	5MHz
Modulation technology: (IEEE 802.11b)	Direct Sequence Spread Spectrum (DSSS)
Modulation technology: (IEEE 802.11g/802.11n)	Orthogonal Frequency Division Multiplexing(OFDM)
Data speed (IEEE 802.11b):	1Mbps, 2Mbps, 5.5Mbps, 11Mbps
Data speed (IEEE 802.11g):	6Mbps, 9Mbps, 12Mbps, 18Mbps, 24Mbps, 36Mbps, 48Mbps,54Mbps
Data speed (IEEE 802.11n):	Up to 150Mbps
Antenna Type:	Integral
Antenna gain:	2dBi (declare by Applicant)
Power supply:	Model:MD-ADP-0516UN001
	Input: AC 100-240V 0.3A 50/60Hz
	Output: DC 5.0V 1.5A



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Operation Frequency each of channel							
Channel	Channel	Frequency					
1	2412MHz	5	2432MHz	9	2452MHz		
2	2417MHz	6	2437MHz	10	2457MHz		
3	2422MHz	7	2442MHz	11	2462MHz		
4	2427MHz	8	2447MHz				

#### 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:

#### 802.11b/802.11g/802.11n(H20)

Channel	Frequency
The lowest channel	2412MHz
The middle channel	2442MHz
The Highest channel	2462MHz



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### 5.3 Test environment and mode

Operating Environment:	Operating Environment:				
Temperature:	24.0 °C				
Humidity:	54 % RH				
Atmospheric Pressure:	1010 mbar				
Test mode:					
Transmitting mode	Keep the EUT in transmitting continuously mode.				

We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

#### Per-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.

Mode	Data rate
802.11b	1Mbps
802.11g	6Mbps
802.11n(H20)	6.5Mbps

#### **Final Test Mode:**

According to ANSI C63.4 standards, the test results are both the "worst case" and "worst setup" 1Mbps for 802.11b, 6Mbps for 802.11g, 6.5Mbps for 802.11n(H20)

### 5.4 Test Facility

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

#### ● FCC —Registration No.: 600491

Global United Technology 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 files. Registration 600491, July 20, 2010.

### ● Industry Canada (IC)

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 9079A-1.

### 5.5 Test Location

All tests were performed at:

Global United Technology Services Co., Ltd.

Address: 2nd Floor, Block No.2, Laodong Industrial Zone, Xixiang Road Baoan District, Shenzhen,

China

Tel: 0755-27798480 Fax: 0755-27798960



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### 5.6 Test Instruments list

Radi	Radiated Emission:							
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)		
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	Mar. 30 2011	Mar. 29 2012		
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A		
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	Sept. 10 2010	Sept. 09 2011		
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	Feb. 26 2011	Feb. 25 2012		
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	9120D-829	GTS208	Aug. 03 2011	Aug. 02 2012		
6	Horn Antenna	ETS-LINDGREN	3160	GTS217	Aug. 03 2011	Aug. 02 2012		
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A		
8	Coaxial Cable	GTS	N/A	GTS213	Apr. 01 2011	Mar. 31 2012		
9	Coaxial Cable	GTS	N/A	GTS211	Apr. 01 2011	Mar. 31 2012		
9	Coaxial cable	GTS	N/A	GTS210	Apr. 01 2011	Mar. 31 2012		
11	Coaxial Cable	GTS	N/A	GTS212	Apr. 01 2011	Mar. 31 2012		
12	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	Aug. 03 2011	Aug. 02 2012		
13	Amplifier(2GHz-20GHz)	HP	8349B	GTS206	Aug. 03 2011	Aug. 02 2012		
14	Pre-amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	Aug. 03 2011	Aug. 02 2012		
15	Band filter	Amindeon	82346	GTS219	Aug. 03 2011	Aug. 02 2012		

Cond	Conducted Emission:							
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)		
1	Shielding Room	ZhongYu Electron	7.0(L)x3.0(W)x3.0(H)	GTS252	Apr. 10 2011	Apr. 09 2012		
2	EMI Test Receiver	Rohde & Schwarz	ESCS30	GTS223	Sept. 14 2010	Sept. 13 2011		
3	10dB Pulse Limit	Rohde & Schwarz	N/A	GTS224	Sept. 14 2010	Sept. 13 2011		
4	LISN	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	GTS226	Apr. 14 2011	Apr. 13 2012		
5	Coaxial Cable	GTS	N/A	GTS227	Apr. 01 2011	Mar. 31 2012		
6	EMI Test Software	AUDIX	E3	N/A	N/A	N/A		



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### 6 Test results and Measurement Data

### 6.1 Antenna requirement:

Standard requirement: F

FCC Part15 C 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(c) (1)(i) requirement:

(i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

E.U.T Antenna:

The antenna port is an integral antenna inside EUT, the best case gain of the antenna is 2.0dBi.





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### 6.2 Conducted Emissions

Test Requirement:	FCC Part15 C Section 15.207						
Test Method:	ANSI C63.4: 2003						
Test Frequency Range:	150KHz to 30MHz						
Class / Severity:	Class B						
Receiver setup:	RBW=9KHz, VBW=30KHz						
Limit:	Limit (dBuV)						
	Trequency range (IVII 12)	Frequency range (MHz)  Quasi-peak  Average					
	0.15-0.5	66 to 56*	56 to 46*				
	0.5-5	56	46				
	5-30	60	50				
	* Decreases with the logarithm	n of the frequency.					
Test procedure	The E.U.T and simulators are connected to the main power through a line impedance stabilization network(L.I.S.N.). The provide a 50ohm/50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs). Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2003 on conducted measurement.						
Test setup:	Reference Plane						
	AUX Equipment  Test table/Insulation plane  Remark: E.U.T: Equipment Under Test LISN: Line Impedence Stabilization Network Test table height=0.8m						
Test Instruments:	Refer to section 5.6 for details						
Test mode:	Refer to section 5.3 for details						
Test results:	Pass						

#### **Measurement Data**

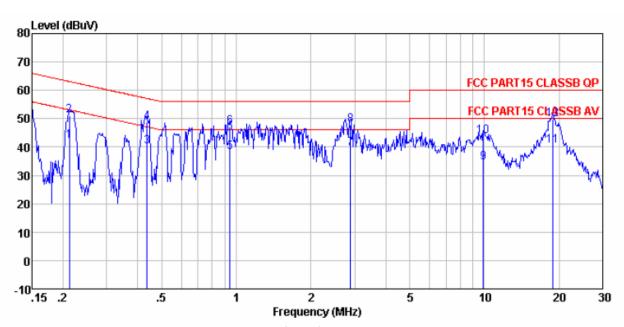
An initial pre-scan was performed on the live and neutral lines with peak detector. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.



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Line:



Condition : FCC PART15 CLASSB QP LISN(2011) LINE

Job No. : 507IT Test Engineer: Collin

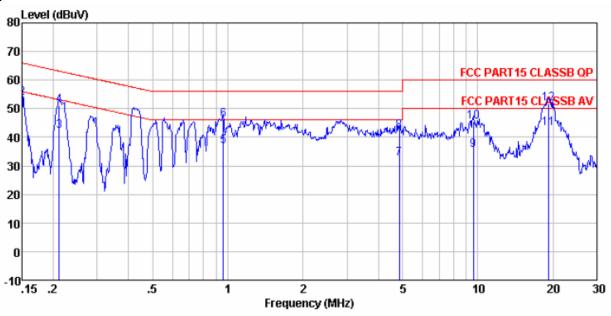
	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
,	MHz	dBuV	dB	d₿	dBuV	dBuV	dB	
1	0.213 0.213	41.28 50.24	0.65 0.65	0.10 0.10	42.03 50.99	53.10 63.10	-11.07 -12.11	Average
2	0.437	39.61	0.57	0.10	40.28	47.11	-6.83	Average
4 5 6 7	0. 437 0. 943	48.19 37.66	0.57 0.48	0.10 0.10	48. 86 38. 24	57.11 46.00	-8. 25 -7. 76	QP Average
6 7	0. 943 2. 884	46.53 38.91	0.48 0.36	0.10 0.10	47.11 39.37	56.00 46.00	-8.89 -6.63	QP Average
8 9	2. 884 9. 913	47. 43 34. 19	0.36 0.22	0.10	47.89 34.61	56.00 50.00	-8.11	
10	9.913	43.45	0.22	0.20	43.87	60.00	-16.13	QP
11 12	18. 920 18. 920	40.18 49.36	0.15 0.15	0. 21 0. 21	40. 54 49. 72	50.00 60.00	-9. 46 -10. 28	Average QP



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#### Neutral:



Condition : FCC PART15 CLASSB QP LISN(2011) NEUTRAL

Job No. : 507IT Test Engineer: Collin

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
,	MHz	dBuV	dB	d₿	dBuV	dBuV	dB	
1	0.150	43.18	0.69	0.10	43.97	56.00	-12.03	Average
2 3	0.150	52.93	0.69	0.10	53.72	66.00	<b>-12.28</b>	QP
3	0.212	41.55	0.65	0.10	42.30	53.14	-10.84	Average
4	0.212	50.40	0.65	0.10	51.15	63.14	-11.99	QP
4 5 6 7	0.958	36.27	0.48	0.10	36.85	46.00	-9.15	Average
6	0.958	45.62	0.48	0.10	46.20	56.00	-9.80	QP
	4.848	32.19	0.30	0.10	32.59	46.00	-13.41	Average
8	4.848	41.77	0.30	0.10	42.17	56.00	-13.83	QP
9	9.603	35.18	0.23	0.20	35.61	50.00	-14.39	Average
10	9.603	44.97	0.23	0.20	45.40	60.00	-14.60	QP
11	19.224	42.89	0.15	0.21	43.25	50.00	-6.75	Average
12	19.224	51.25	0.15	0.21	51.61	60.00	-8.39	

#### Notes:

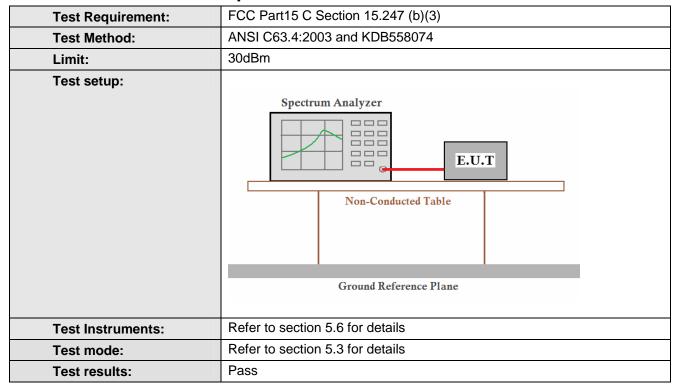
- 1. The following Quasi-Peak and Average measurements were performed on the EUT:
- 2. Final Test Level = Receiver Reading + LISN Factor + Cable Loss.



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### 6.3 Conducted Peak Output Power





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#### **Measurement Data**

Measurement Data							
802.11b mode							
Test channel	Peak Output Power (dBm)	Limit (dBm)	Result				
Lowest	11.32	30.00	Pass				
Middle	11.19	30.00	Pass				
Highest	11.25	30.00	Pass				
	802.11g mo	de					
Test channel	Peak Output Power (dBm)	Limit (dBm)	Result				
Lowest	10.79	30.00	Pass				
Middle	10.89	30.00	Pass				
Highest	10.35	30.00	Pass				
802.11n-H20 mode							
Test channel	Peak Output Power (dBm)	Limit (dBm)	Result				
Lowest	9.70	30.00	Pass				
Middle	9.25	30.00	Pass				
Highest	9.17	30.00	Pass				

### Test plot as follows:

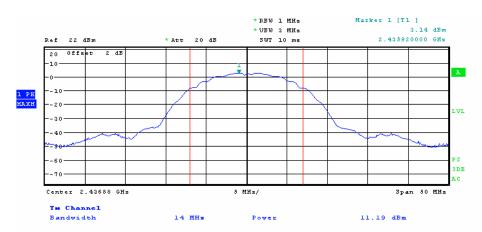


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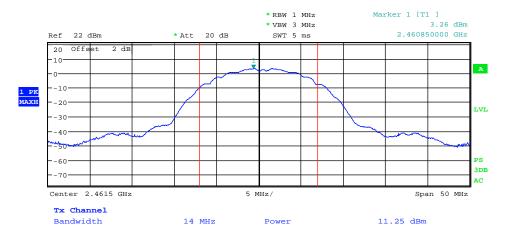
Test mode: 802.11b Test channel: Lowest



Test mode: 802.11b Test channel: Middle



Test mode: 802.11b Test channel: Highest





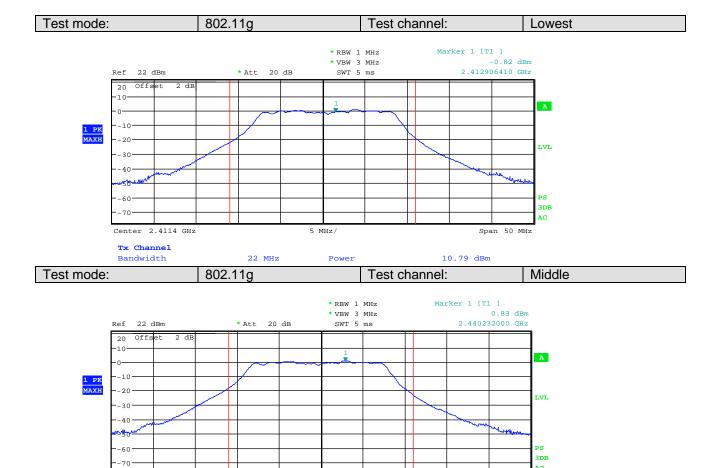
Center 2.437332 GHz

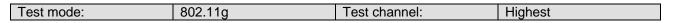
Tx Channel

Bandwidth

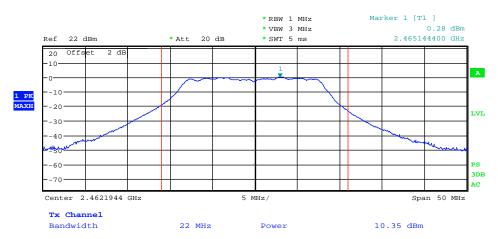
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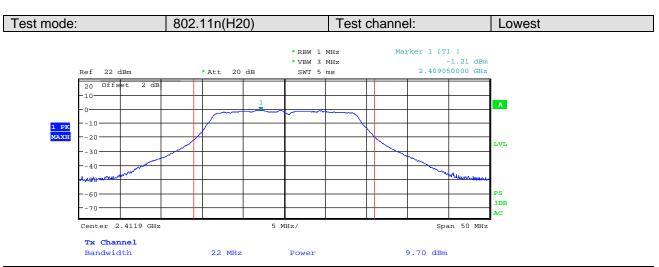


Power





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Test mode: 802.11n(H20) Test channel: Middle



Test mode: 802.11n(H20) Test channel: Highest

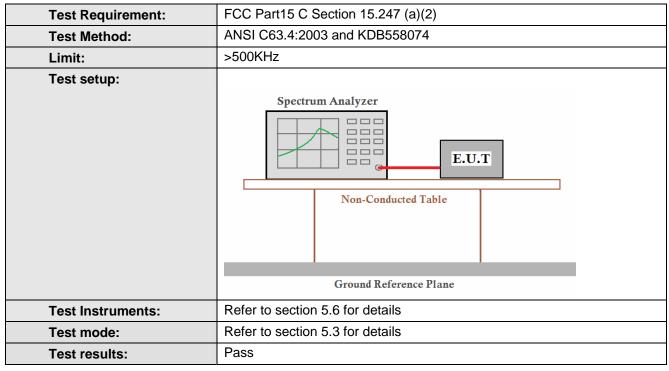




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### 6.4 6dB Occupy Bandwidth





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#### **Measurement Data**

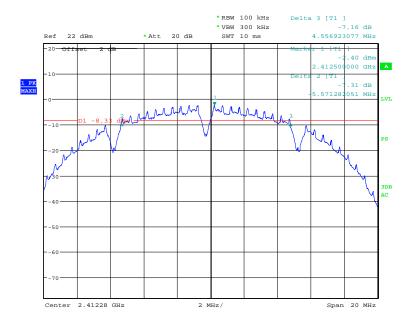
802.11b mode								
Test channel	6dB Occupy Bandwidth (MHz)	Limit (KHz)	Result					
Lowest	10.128	>500	Pass					
Middle	10.128	>500	Pass					
Highest	10.096	>500	Pass					
	802.11g mode							
Test channel	6dB Occupy Bandwidth (MHz)	Limit (KHz)	Result					
Lowest	16.550	>500	Pass					
Middle	16.570	>500	Pass					
Highest	16.506	>500	Pass					
	802.11n-H20 mode							
Test channel	6dB Occupy Bandwidth (MHz)	Limit (KHz)	Result					
Lowest	17.757	>500	Pass					
Middle	17.809	>500	Pass					
Highest	17.821	>500	Pass					

### Test plot as follows:

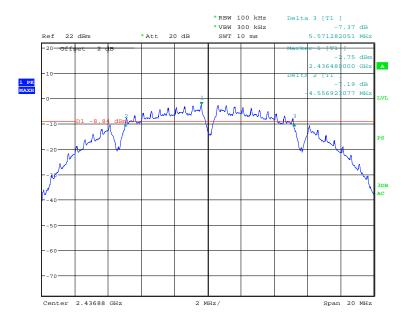


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Test mode: 802.11b Test channel: Lowest



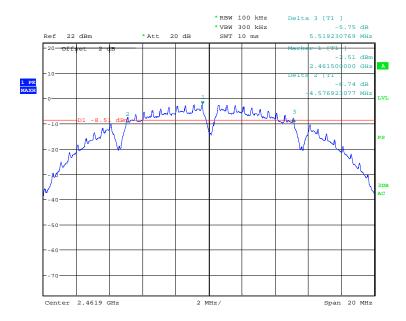
Test mode: 802.11b Test channel: Middle



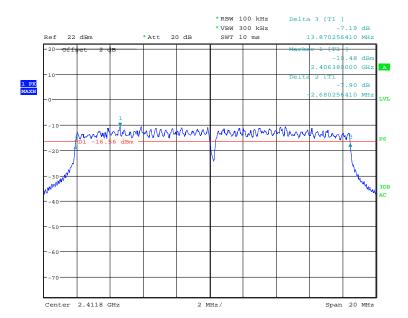


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Test mode: 802.11b Test channel: Highest



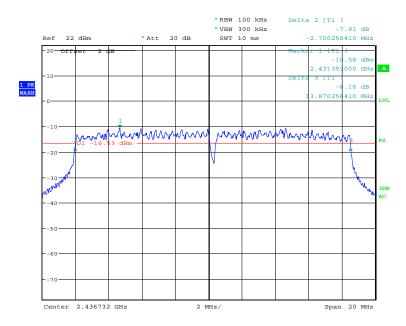
Test mode: 802.11g Test channel: Lowest



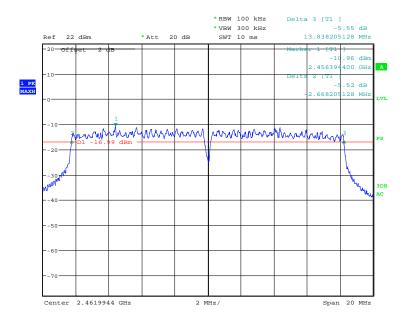


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Test mode: 802.11g Test channel: Middle



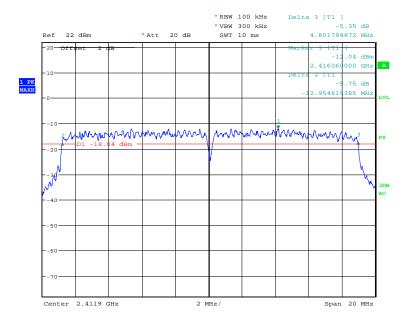




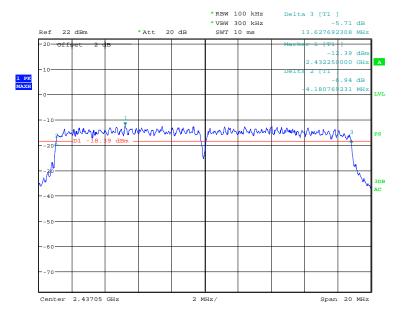


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Test mode: 802.11n-H20 Test channel: Lowest



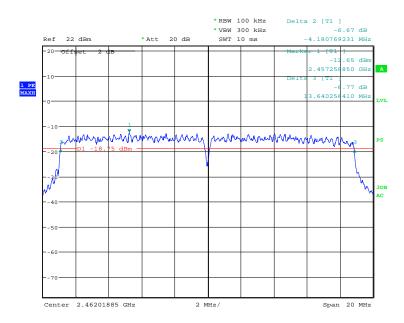
Test mode: 802.11n-H20 Test channel: Middle





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Test mode: 802.11n-H20 Test channel: Highest

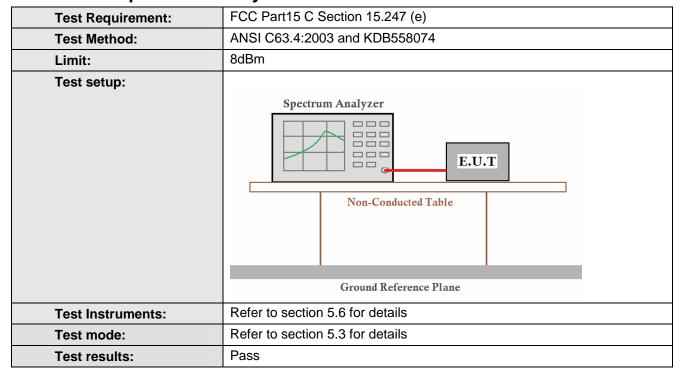




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### 6.5 Power Spectral Density





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#### **Measurement Data**

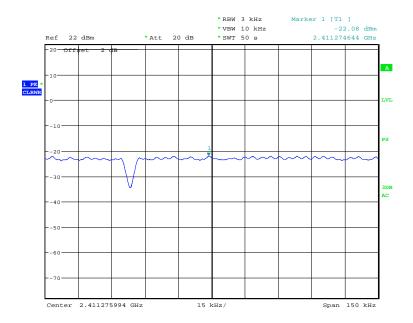
Wedsurement Data							
802.11b mode							
Test channel	Power Spectral Density (dBm)	Limit (dBm)	Result				
Lowest	-22.08	8.00	Pass				
Middle	-22.55	8.00	Pass				
Highest	-21.98	8.00	Pass				
	802.11g mode						
Test channel	Power Spectral Density (dBm)	Limit (dBm)	Result				
Lowest	-26.09	8.00	Pass				
Middle	-25.16	8.00	Pass				
Highest	-25.29	8.00	Pass				
802.11n-H20 mode							
Test channel	Power Spectral Density (dBm)	Limit (dBm)	Result				
Lowest	-26.09	8.00	Pass				
Middle	-26.20	8.00	Pass				
Highest	-26.81	8.00	Pass				

Test plot as follows:

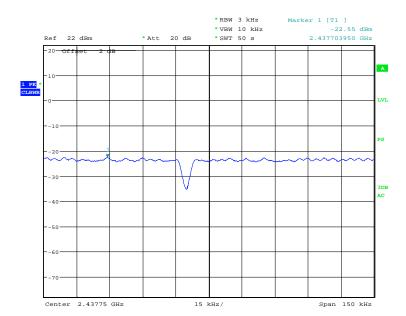


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Test mode: 802.11b Test channel: Lowest



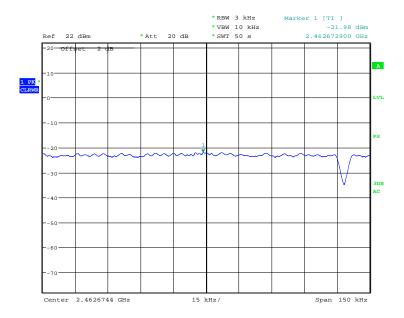
Test mode: 802.11b Test channel: Middle



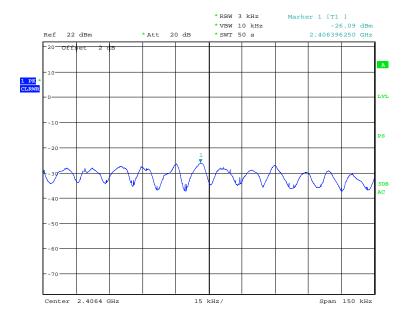


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Test mode: 802.11b Test channel: Highest



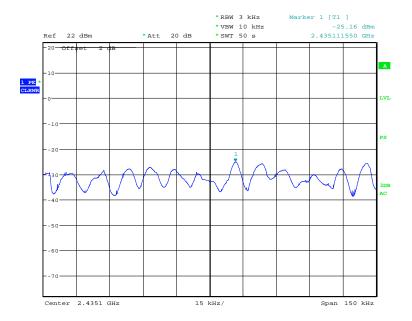
Test mode: 802.11g Test channel: Lowest



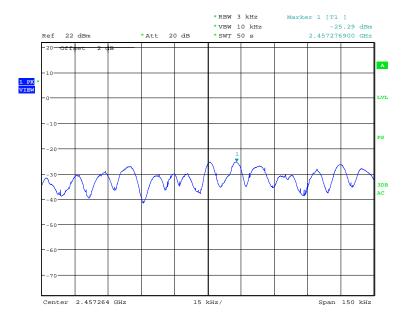


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Test mode: 802.11g Test channel: Middle



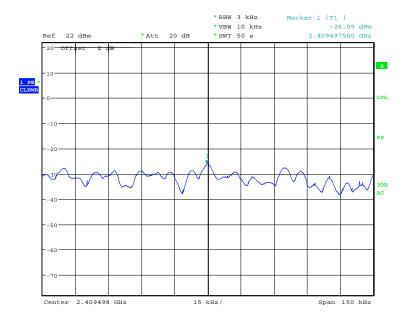
Test mode: 802.11g Test channel: Highest



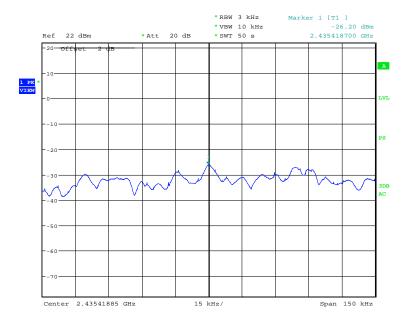


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Test mode: 802.11n-H20 Test channel: Lowest



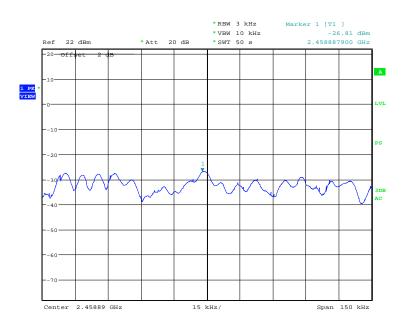
Test mode: 802.11n-H20 Test channel: Middle





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Test mode: 802.11n-H20 Test channel: Highest





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## 6.6 Band Edge

### 6.6.1 Conducted Emission Method

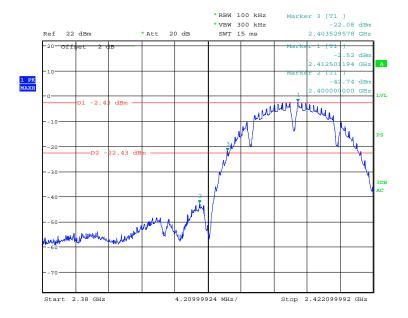
Test Requirement:	FCC Part15 C Section 15.247 (d)			
Test Method:	ANSI C63.4:2003 and KDB558074			
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be 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.			
Test setup:	Spectrum Analyzer  E.U.T  Non-Conducted Table  Ground Reference Plane			
Test Instruments:	Refer to section 5.6 for details			
Test mode:	Refer to section 5.3 for details			
Test results:	Pass			

Test plot as follows:

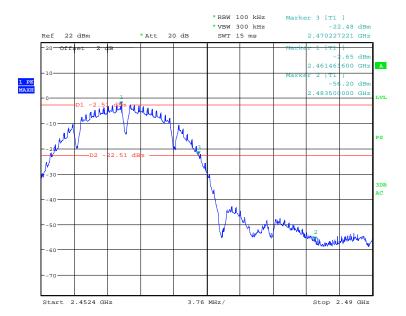


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Test mode: 802.11b Test channel: Lowest



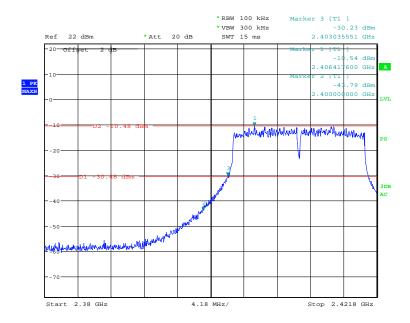
Test mode: 802.11b Test channel: Highest



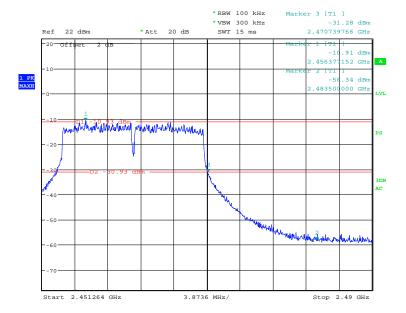


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Test mode: 802.11g Test channel: Lowest



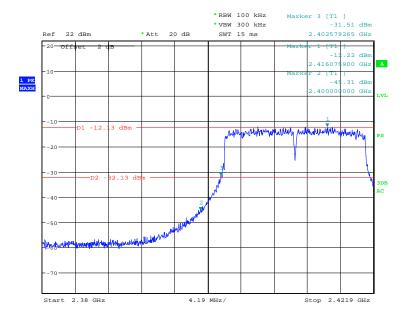
Test mode: 802.11g Test channel: Highest



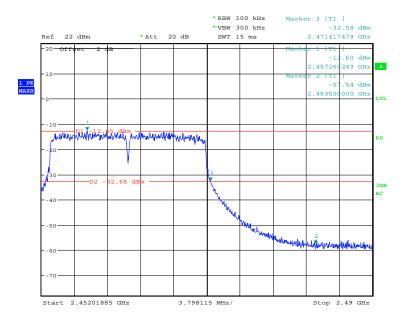


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Test mode: 802.11n (H20) Test channel: Lowest



Test mode: 802.11n (H20) Test channel: Highest





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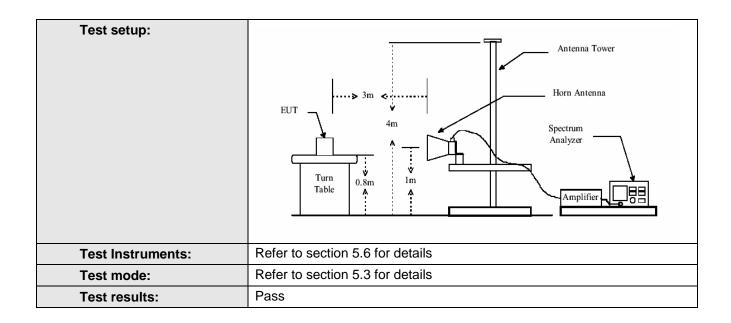
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### 6.6.2 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209 and 15.205					
Test Method:	ANSI C63.4: 2003					
Test Frequency Range:	2.3GHz to 2.5G	Hz				
Test site:	Measurement D	istance: 3m (S	Semi-Anecho	ic Chambei	r)	
Receiver setup:						
	Frequency	Detector	RBW	VBW	Remark	
	Above 1GHz	Peak	1MHz	3MHz	Peak Value	
	Above IGIIZ	Peak	1MHz	10Hz	Average Value	
Limit:						
	Freque	ncy	Limit (dBuV	/m @3m)	Remark	
	Above 1	CU-	54.0	)	Average Value	
	Above i	GIIZ	74.0	)	Peak Value	
Test Procedure:	the ground a rotated 360 radiation. b. The EUT was antenna, who tower. c. The antenna ground to do horizontal a the measured. For each sucase and the meters and degrees to form the emission of the EUT whave 10dB in the limit specified Bare of the EUT whave 10dB in the limit specified Bare of the EUT whave 10dB in the limit specified Bare of the EUT whave 10dB in the limit specified Bare of the EUT whave 10dB in the limit specified Bare of the EUT whave 10dB in the limit specified Bare of the EUT whave 10dB in the limit specified Bare of the EUT whave 10dB in the limit specified Bare of the EUT whave 10dB in the limit specified Bare of the EUT whave 10dB in the limit specified Bare of the EUT was antennated by the EUT was antennated by the limit specified Bare of the EUT was antennated by the limit specified Bare of the EUT was antennated by	at a 3 meter so degrees to de degrees to de degrees to de de degrees to de degrees to de degrees to degree de degrees de degree de degre	emi-anechoice termine the particle on the total ted from one the from one ted from the end of the total ted from the EUT as was turned to the was turned to the was set to Period Maximum Hotal ted from the end of the end of the from the end of	camber. Toosition of the interference of a varial meter to foue of the fiethe antennation heights field mode.  A mode was a set he emissione by one	he highest ence-receiving able-height antenna ur meters above the ald strength. Both a are set to make ged to its worst rom 1 meter to 4 egrees to 360	



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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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### Measurement data:

Test mode:	802.1	1h	Test chann	ام	Lowe	et	Remark:		Peal	(
TOST MOGO.	0.0					31	TCHIAIR.			N.
Frequency	Read	Antenna	Cable	Cable Preamp		Level	Limit Line	_	ver	
	Level	Factor	Loss			(dBuV/m)		Li	mit	polarization
(MHz)	(dBuV)	(dB/m)	(dB)	Factor (dB)		(ubuv/III)	(dBuV/m)	(0	dB)	-
2390.00	49.37	27.59	3.33	30	.10	50.19	74.00	-23	3.81	Vertical
2400.00	53.43	27.58	3.37	30	.10	54.28	74.00	-19	9.72	Vertical
2390.00	50.62	27.59	3.33	30	.10	51.44	74.00	-22	2.56	Horizontal
2400.00	54.59	27.58	3.37	30	.10	55.44	74.00	-18	3.56	Horizontal

Test mode:	802.1	1b	Test channel:		Lowest		Remark:	Ave	erage
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)		amp or (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2390.00	33.01	27.59	3.33	30	.10	33.83	54.00	-20.17	Vertical
2400.00	36.42	27.58	3.37	30	.10	37.27	54.00	-16.73	Vertical
2390.00	34.26	27.59	3.33	30	.10	35.08	54.00	-18.92	Horizontal
2400.00	37.58	27.58	3.37	30	.10	38.43	54.00	-15.57	Horizontal

Test mode:	802.1	1b	Test channel:		Highest		Remark: F		Peal	<
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)		amp or (dB)	Level (dBuV/m)	Limit Line (dBuV/m)		rer nit B)	polarization
2483.50	49.91	27.53	3.49	29.93		51.00	74.00	-23	.00	Vertical
2500.00	53.71	27.55	3.52	30	.70	54.08	74.00	-19	.92	Vertical
2483.50	51.21	27.53	3.49	29	.93	52.30	74.00	-21	.70	Horizontal
2500.00	54.97	27.55	3.52	30	.70	55.34	74.00	-18	.66	Horizontal

Test mode:	802.	11b	Test chann	Test channel: Hi		est	Remark:		Average	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)		amp or (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	L	ver imit dB)	polarization
2483.50	36.77	27.53	3.49	29	.93	37.86	54.00	-10	6.14	Vertical
2500.00	32.10	27.55	3.52	30	.70	32.47	54.00	-2	1.53	Vertical
2483.50	38.07	27.53	3.49	29.93		39.16	54.00	-14.84		Horizontal
2500.00	33.36	27.55	3.52	30	.70	33.73	54.00	-20	0.27	Horizontal



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Test mode:	802.1	1g	Test channel:		Lowest		Remark:		Peal	k
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)		amp or (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Li	ver mit fB)	polarization
2390.00	47.82	27.59	3.33	30	.10	48.64	74.00	-25	5.36	Vertical
2400.00	51.81	27.58	3.37	30	.10	52.66	74.00	-21	1.34	Vertical
2390.00	49.26	27.59	3.33	30	.10	50.08	74.00	-23	3.92	Horizontal
2400.00	53.19	27.58	3.37	30	.10	54.04	74.00	-19	9.96	Horizontal

Test mode:	802.1	1g	Test channel:		Lowest		Remark:	Ave	erage
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)		amp or (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2390.00	33.08	27.59	3.33	30	.10	33.90	54.00	-20.10	Vertical
2400.00	36.90	27.58	3.37	30	.10	37.75	54.00	-16.25	Vertical
2390.00	34.96	27.59	3.33	30	.10	35.78	54.00	-18.22	Horizontal
2400.00	38.81	27.58	3.37	30	.10	39.66	54.00	-14.34	Horizontal

Test mode:	802.1	1g	Test channel:		Highest		Remark:		Peal	k
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)		amp or (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Li	ver mit dB)	polarization
2483.50	48.65	27.53	3.49	29	.93	49.74	74.00	-24	4.26	Vertical
2500.00	52.50	27.55	3.52	30	.70	52.87	74.00	-2	1.13	Vertical
2483.50	50.15	27.53	3.49	29	.93	51.24	74.00	-22	2.76	Horizontal
2500.00	53.86	27.55	3.52	30	.70	54.23	74.00	-19	9.77	Horizontal

Test mode:	802.1	1g	Test chann	Test channel:		est	Remark:		Average	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)		amp or (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Li	ver imit dB)	polarization
2483.50	38.19	27.53	3.49	29	.93	39.28	54.00	-14	4.72	Vertical
2500.00	33.83	27.55	3.52	30	.70	34.20	54.00	-19	9.80	Vertical
2483.50	38.40	27.53	3.49	29	.93	39.49	54.00	-14	4.51	Horizontal
2500.00	34.07	27.55	3.52	30	.70	34.44	54.00	-19	9.56	Horizontal



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Test mode:	802.1	1n(H20)	Test channel:		Lowest		Remark:		Peal	k
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)		amp or (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Li	ver mit dB)	polarization
2390.00	48.96	27.59	3.33	30	.10	49.78	74.00	-24	4.22	Vertical
2400.00	54.26	27.58	3.37	30	.10	55.11	74.00	-18	3.89	Vertical
2390.00	49.42	27.59	3.33	30	.10	50.24	74.00	-23	3.76	Horizontal
2400.00	53.43	27.58	3.37	30	.10	54.28	74.00	-19	9.72	Horizontal

Test mode:	802.1	1n(H20)	Test channel:		Lowest		Remark:	Ave	rage
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Prea Factor		Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2390.00	35.29	27.59	3.33	30.	.10	36.11	54.00	-17.89	Vertical
2400.00	39.13	27.58	3.37	30.	.10	39.98	54.00	-14.02	Vertical
2390.00	34.75	27.59	3.33	30.	.10	35.57	54.00	-18.43	Horizontal
2400.00	38.57	27.58	3.37	30.	.10	39.42	54.00	-14.58	Horizontal

Test mode:	802.1	1n(H20)	Test channel:		Highest		Remark:		Peal	K
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)		amp or (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Lir	ver mit B)	polarization
2483.50	52.48	27.53	3.49	29	.93	53.57	74.00	-20	.43	Vertical
2500.00	47.99	27.55	3.52	30	.70	48.36	74.00	-25	.64	Vertical
2483.50	52.06	27.53	3.49	29	.93	53.15	74.00	-20	.85	Horizontal
2500.00	47.25	27.55	3.52	30	.70	47.62	74.00	-26	3.38	Horizontal

Test mode:	802.1	1n(H20)	Test channel: H		Highest		Remark:		Average	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)		Level (dBuV/m)	Limit Line (dBuV/m)	Li	ver imit dB)	polarization
2483.50	38.47	27.53	3.49	29	.93	39.56	54.00	-14	4.44	Vertical
2500.00	35.24	27.55	3.52	30	.70	35.61	54.00	-18	8.39	Vertical
2483.50	37.42	27.53	3.49	29	.93	38.51	54.00	-15.49		Horizontal
2500.00	34.98	27.55	3.52	30	.70	35.35	54.00	-18	8.65	Horizontal



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# 6.7 Spurious Emission

### 6.7.1 Conducted Emission Method

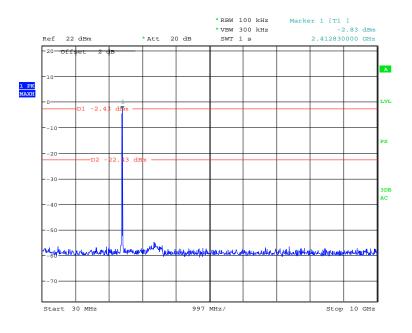
Test Requirement:	FCC Part15 C Section 15.247 (d)						
Test Method:	ANSI C63.4:2003 and KDB558074						
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall 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.						
Test setup:	Spectrum Analyzer  E.U.T  Non-Conducted Table  Ground Reference Plane						
Test Instruments:	Refer to section 5.6 for details						
Test mode:	Refer to section 5.3 for details						
Test results:	Pass						

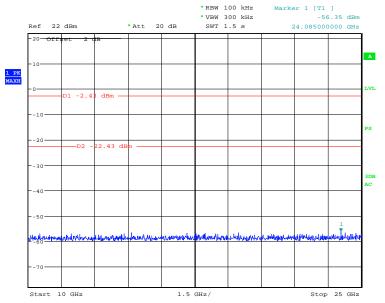
### Test plot as follows:



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Test mode: 802.11b Test channel: Lowest

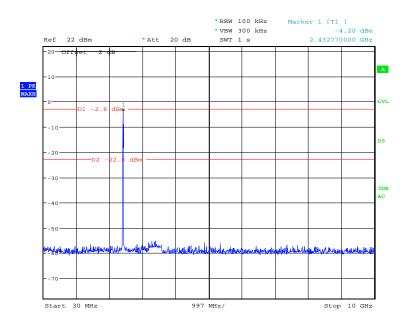


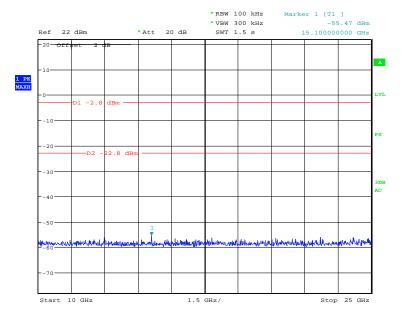




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Test mode: 802.11b Test channel: Middle

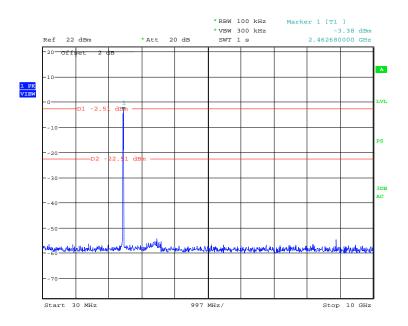


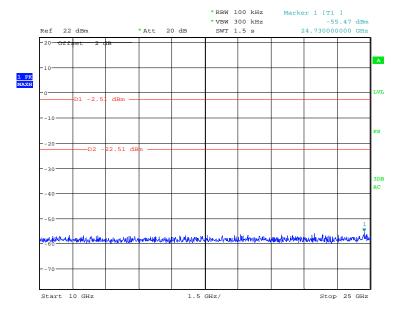




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Test mode: 802.11b Test channel: Highest

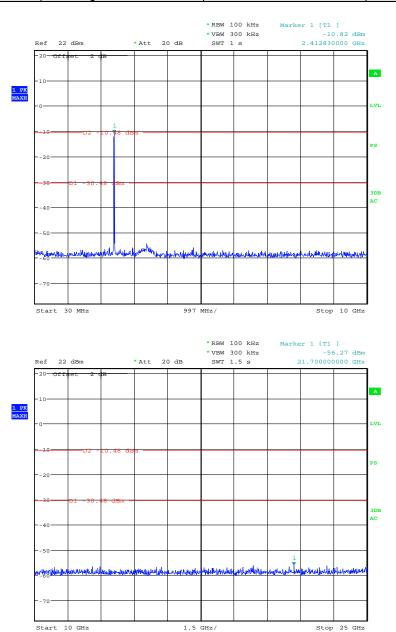






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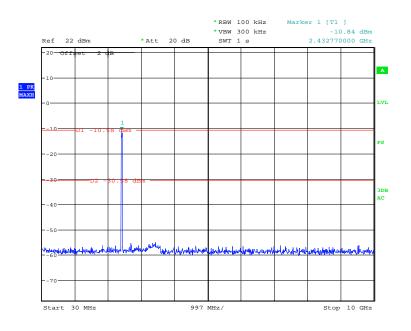
Test mode: 802.11g Test channel: Lowest

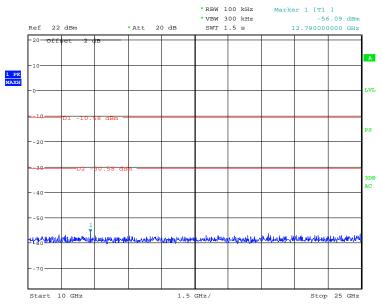




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Test mode: 802.11g Test channel: Middle

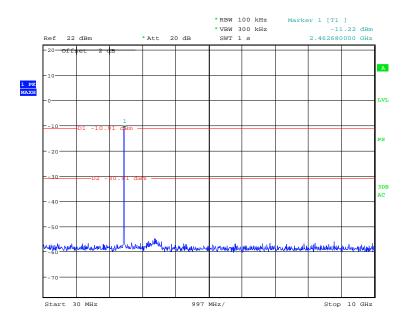


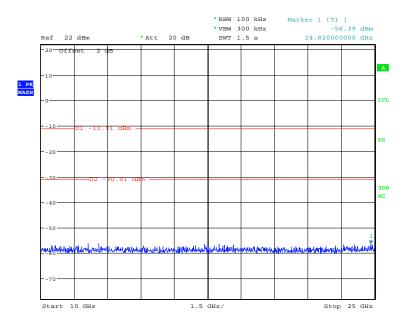




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Test mode: 802.11g Test channel: Highest

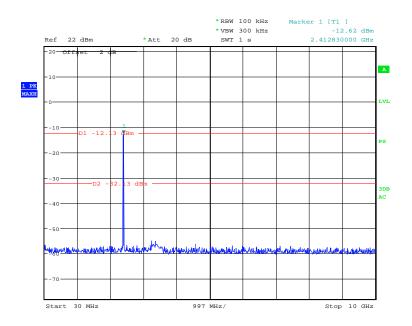


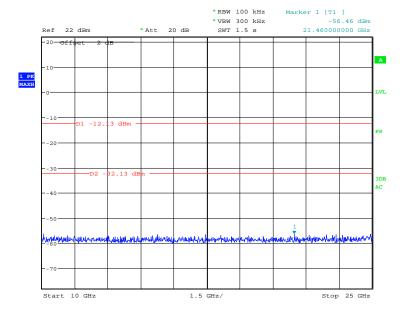




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Test mode: 802.11n(H20) Test channel: Lowest

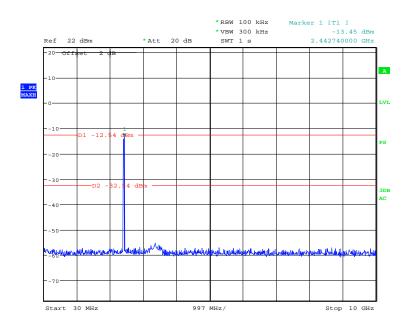


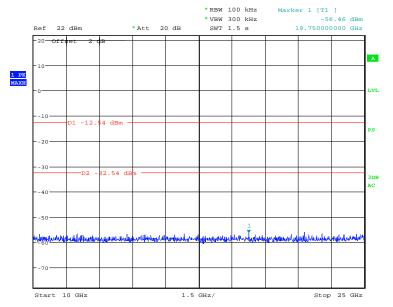




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Test mode: 802.11n(H20) Test channel: Middle

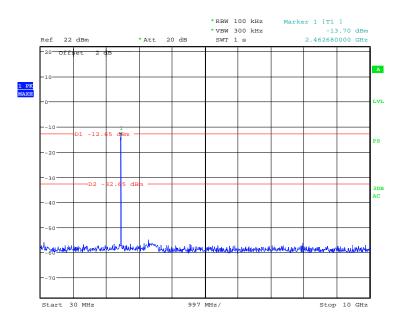


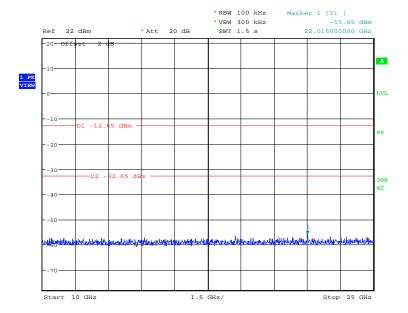




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Test mode: 802.11n(H20) Test channel: Highest







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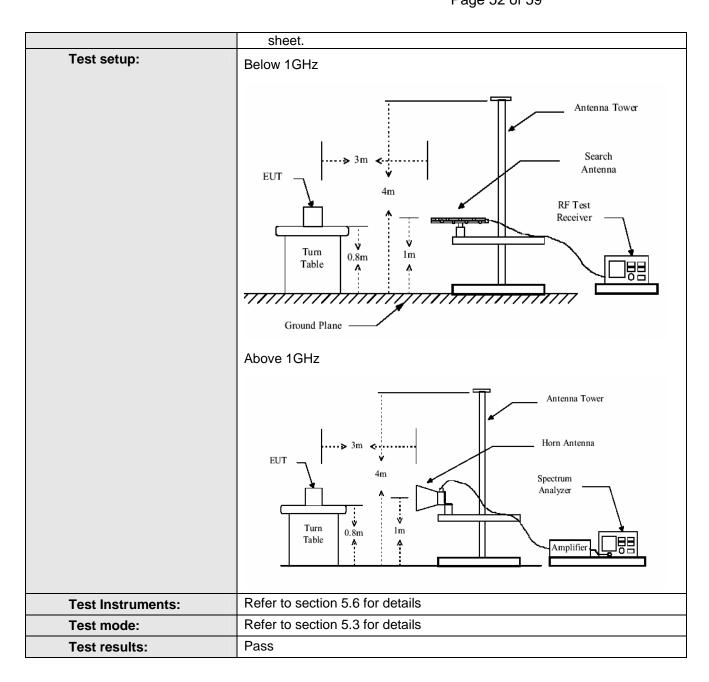
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### 6.7.2 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209 and 15.205									
Test Method:	ANSI C63.4:200	03								
Test Frequency Range:	30MHz to 25GH	·lz								
Test site:	Measurement D	Distance: 3m (	Semi-Anecho	ic Chambe	r)					
Receiver setup:										
	Frequency	Detector	RBW	VBW	Remark					
	30MHz- 1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak Value					
	Above 1GHz	Peak	1MHz	3MHz	Peak Value					
	Above IGIIZ	Peak	1MHz	10Hz	Average Value					
Limit:										
	Frequency Limit (dBuV/m @3m) Remark									
	30MHz-8	88MHz	40.0	)	Quasi-peak Value					
	88MHz-2	16MHz	43.5	5	Quasi-peak Value					
	216MHz-9	60MHz	46.0	)	Quasi-peak Value					
	960MHz-	-1GHz	54.0	)	Quasi-peak Value					
	Above 1	1GHz	54.0	)	Average Value					
	Above	10112	74.0	)	Peak Value					
Test Procedure:	the ground rotated 360 radiation. h. The EUT wantenna, whatower. i. The antenna ground to dan horizontal at the measure in the measure in the measure in the measure in the meters and degrees to be in the limit specified Barrell. If the emission the EUT have 10dB	at a 3 meter so degrees to degrees to degrees to de as set 3 meter hich was mour a height is varietermine the rand vertical poement. Uspected emission the antennation the rotable tafind the maximal ceiver system andwidth with sion level of the ecified, then the would be reported to degree to deg	remi-anechoice termine the parts away from the don the to ried from one maximum valuatizations of the sion, the EUT in a was turned ble was turned ble was turned was set to Period Maximum Hole EUT in peal esting could be orted. Otherwij be re-tested of the sing could be re-teste	c camber. To cosition of the interferon of a variante of the fiethe antennation heights field Mode.  It was arrante heights field Mode.  It was a company to height of the mode was a stopped a see the emissione by one	he highest ence-receiving able-height antenna ur meters above the ald strength. Both a are set to make ged to its worst rom 1 meter to 4 egrees to 360					



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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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### Below 1GHz

Test in WIFI mode.

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
30.85	47.96	14.37	0.60	32.27	30.66	40.00	-9.34	Vertical
53.13	43.63	15.84	0.68	31.99	28.16	40.00	-11.84	Vertical
122.40	45.14	10.30	1.34	31.83	24.95	43.50	-18.55	Vertical
313.28	42.34	12.71	2.10	32.30	24.85	46.00	-21.15	Vertical
399.03	44.28	14.20	2.26	32.32	28.42	46.00	-17.58	Vertical
684.75	40.40	19.98	2.89	31.64	31.63	46.00	-14.37	Vertical
30.64	37.59	15.88	0.60	32.27	21.80	40.00	-18.20	Horizontal
64.43	42.28	10.66	0.76	31.93	21.77	40.00	-18.23	Horizontal
122.40	44.96	10.52	1.34	31.83	24.99	43.50	-18.51	Horizontal
213.02	44.47	10.82	1.83	32.27	24.85	43.50	-18.65	Horizontal
302.48	49.78	13.09	2.08	32.30	32.65	46.00	-13.35	Horizontal
455.91	45.31	19.45	2.34	31.92	35.18	46.00	-10.82	Horizontal



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### Above 1GHz

Test mode:	802.1	1b	Test chann	el:	el: Lowest		Remark:		Peal	k
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)		Level (dBuV/m)	Limit Line (dBuV/m)	Li	ver mit dB)	polarization
4824	41.57	31.79	5.34	24.	.07	54.63	74.00	-19	9.37	Vertical
7236	32.67	36.19	6.88	26.	44	49.30	74.00	-24	1.70	Vertical
9648	31.14	38.07	8.96	25.	36	52.81	74.00	-2	1.19	Vertical
12060	29.76	39.05	10.35	25.	15	54.01	74.00	-19	9.99	Vertical
14472							74.00			Vertical
16884							74.00			Vertical
4824	42.91	31.79	5.34	24.	.07	55.97	74.00	-18	3.03	Horizontal
7236	34.06	36.19	6.88	26.	44	50.69	74.00	-23	3.31	Horizontal
9648	32.58	38.07	8.96	25.	36	54.25	74.00	-19	9.75	Horizontal
12060	31.25	39.05	10.35	25.	.15	55.50	74.00	-18	3.50	Horizontal
14472							74.00			Horizontal
16884					•		74.00			Horizontal

Test mode:	802.1	1b	Test chann	el: Lowest		Remark:		Aver	age	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Prea Factor		Level (dBuV/m)	Limit Line (dBuV/m)	L	ver imit dB)	polarization
4824	22.82	31.79	5.34	24.	07	35.88	54.00	-18	8.12	Vertical
7236	17.70	36.19	6.88	26.	44	34.33	54.00	-1	9.67	Vertical
9648	15.65	38.07	8.96	25.	36	37.32	54.00	-10	88.6	Vertical
12060	14.44	39.05	10.35	25.	15	38.69	54.00	-1:	5.31	Vertical
14472							54.00			Vertical
16884							54.00			Vertical
4824	24.13	31.79	5.34	24.	07	37.19	54.00	-10	6.81	Horizontal
7236	19.06	36.19	6.88	26.	44	35.69	54.00	-18	8.31	Horizontal
9648	17.06	38.07	8.96	25.	36	38.73	54.00	-1:	5.27	Horizontal
12060	15.90	39.05	10.35	25.	15	40.15	54.00	-13	3.85	Horizontal
14472						•	54.00			Horizontal
16884					·	•	54.00			Horizontal

Test mode:	802.1	1b	Test chann	el: Midd	el: Middle		Pea	k
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874	41.86	31.85	5.40	24.01	55.10	74.00	-18.90	Vertical
7311	30.36	36.37	6.90	26.58	47.05	74.00	-26.95	Vertical
9688	29.67	38.13	8.98	25.34	51.44	74.00	-22.56	Vertical
12185	27.68	38.92	10.38	25.04	51.94	74.00	-22.06	Vertical
14682						74.00		Vertical
17179						74.00		Vertical
4874	43.70	31.85	5.40	24.01	56.94	74.00	-17.06	Horizontal
7311	32.29	36.37	6.90	26.58	48.98	74.00	-25.02	Horizontal
9688	31.69	38.13	8.98	25.34	53.46	74.00	-20.54	Horizontal
12185	29.79	38.92	10.38	25.04	54.05	74.00	-19.95	Horizontal
14682						74.00		Horizontal
17179						74.00		Horizontal

### Remark

<sup>&</sup>quot;---" means that the emission level is too low to be measured



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Test mode:	802.1	1b	Test chann	el: Middle		Remark:	Ave	rage
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874	24.24	31.85	5.40	24.01	37.48	54.00	-16.52	Vertical
7311	17.41	36.37	6.90	26.58	34.10	54.00	-19.90	Vertical
9688	13.64	38.13	8.98	25.34	35.41	54.00	-18.59	Vertical
12185	14.81	38.92	10.38	25.04	39.07	54.00	-14.93	Vertical
14682						54.00		Vertical
17179						54.00		Vertical
4874	25.98	31.85	5.40	24.01	39.22	54.00	-14.78	Horizontal
7311	19.19	36.37	6.90	26.58	35.88	54.00	-18.12	Horizontal
9688	15.46	38.13	8.98	25.34	37.23	54.00	-16.77	Horizontal
12185	16.67	38.92	10.38	25.04	40.93	54.00	-13.07	Horizontal
14682						54.00		Horizontal
17179						54.00		Horizontal

Test mode:	802.1	1b	Test chann	el: H	lighe	est	Remark:		Peal	<
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Pream Factor (		Level (dBuV/m)	Limit Line (dBuV/m)	Lii	ver mit IB)	polarization
4924	39.67	31.89	5.46	23.96	6	53.06	74.00	-20	).94	Vertical
7386	31.91	36.49	6.93	26.79	9	48.54	74.00	-25	5.46	Vertical
9848	28.88	38.24	9.05	25.30	0	50.87	74.00	-23	3.13	Vertical
12310	27.40	38.83	10.41	24.90	0	51.74	74.00	-22	2.26	Vertical
14772							74.00			Vertical
17234							74.00			Vertical
4924	41.41	31.89	5.46	23.96	6	54.80	74.00	-19	9.20	Horizontal
7386	33.76	36.49	6.93	26.79	9	50.39	74.00	-23	3.61	Horizontal
9848	30.84	38.24	9.05	25.30	0	52.83	74.00	-21	.17	Horizontal
12310	29.47	38.83	10.41	24.90	0	53.81	74.00	-20	).19	Horizontal
14772							74.00			Horizontal
17234					Ť		74.00			Horizontal

Test mode:	802.1	1b	Test chann	el: High	est	Remark:	Aver	age
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924	23.01	31.89	5.46	23.96	36.40	54.00	-17.60	Vertical
7386	17.95	36.49	6.93	26.79	34.58	54.00	-19.42	Vertical
9848	19.12	38.24	9.05	25.30	41.11	54.00	-12.89	Vertical
12310	15.71	38.83	10.41	24.90	40.05	54.00	-13.95	Vertical
14772						54.00		Vertical
17234						54.00		Vertical
4924	24.67	31.89	5.46	23.96	38.06	54.00	-15.94	Horizontal
7386	19.64	36.49	6.93	26.79	36.27	54.00	-17.73	Horizontal
9848	20.84	38.24	9.05	25.30	42.83	54.00	-11.17	Horizontal
12310	17.46	38.83	10.41	24.90	41.80	54.00	-12.20	Horizontal
14772						54.00		Horizontal
17234						54.00		Horizontal

### Remark

<sup>&</sup>quot;---" means that the emission level is too low to be measured



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Test mode:	802.1	1g	Test chann	el: Lowest		Remark:		Peal	K	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dE		Level (dBuV/m)	Limit Line (dBuV/m)	Li	ver imit dB)	polarization
4824	37.63	31.79	5.34	24	.07	50.69	74.00	-2	3.31	Vertical
7236	33.32	36.19	6.88	26	5.44	49.95	74.00	-24	4.05	Vertical
9648	29.86	38.07	8.96	25	5.36	51.53	74.00	-2	2.47	Vertical
12060	28.55	39.05	10.35	25	5.15	52.80	74.00	-2	1.20	Vertical
14472							74.00			Vertical
16884							74.00			Vertical
4824	37.74	31.79	5.34	24	.07	50.80	74.00	-23	3.20	Horizontal
7236	32.58	36.19	6.88	26	5.44	49.21	74.00	-2	4.79	Horizontal
9648	31.06	38.07	8.96	25	5.36	52.73	74.00	-2	1.27	Horizontal
12060	29.69	39.05	10.35	25.15		53.94	74.00	-20	0.06	Horizontal
14472					•		74.00			Horizontal
16884					•		74.00			Horizontal

Test mode:	802.1	1g	Test chann	el:	el: Lowest		Remark:		Aver	age
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)		amp or (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	L	over imit dB)	polarization
4824	24.33	31.79	5.34	24	.07	37.39	54.00	-1	6.61	Vertical
7236	20.59	36.19	6.88	26	.44	37.22	54.00	-1	6.78	Vertical
9648	16.18	38.07	8.96	25	.36	37.85	54.00	-1	6.15	Vertical
12060	15.12	39.05	10.35	25	.15	39.37	54.00	-1	4.63	Vertical
14472							54.00			Vertical
16884							54.00			Vertical
4824	25.64	31.79	5.34	24	.07	38.70	54.00	-1	5.30	Horizontal
7236	21.95	36.19	6.88	26	.44	38.58	54.00	-1	5.42	Horizontal
9648	17.59	38.07	8.96	25	.36	39.26	54.00	-1	4.74	Horizontal
12060	16.58	39.05	10.35	25	.15	40.83	54.00	-1	3.17	Horizontal
14472						•	54.00		•	Horizontal
16884							54.00			Horizontal

Test mode:	802.1	1g	Test chann	nel: Middle		Remark:	Pea	k
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874	36.54	31.85	5.40	24.01	49.78	74.00	-24.22	Vertical
7311	30.45	36.37	6.90	26.58	47.14	74.00	-26.86	Vertical
9688	26.79	38.13	8.98	25.34	48.56	74.00	-25.44	Vertical
12185	27.83	38.92	10.38	25.04	52.09	74.00	-21.91	Vertical
14472						74.00		Vertical
16884						74.00		Vertical
4874	38.37	31.85	5.40	24.01	51.61	74.00	-22.39	Horizontal
7311	31.68	36.37	6.90	26.58	48.37	74.00	-25.63	Horizontal
9688	27.03	38.13	8.98	25.34	48.80	74.00	-25.20	Horizontal
12185	28.08	38.92	10.38	25.04	52.34	74.00	-21.66	Horizontal
14472						74.00		Horizontal
16884						74.00		Horizontal

### Remark

<sup>&</sup>quot;---" means that the emission level is too low to be measured



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Test mode:	802.1	1g	Test chann	el: Midd	lle	Remark: Aver		age
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874	22.85	31.85	5.40	24.01	36.09	54.00	-17.91	Vertical
7311	20.16	36.37	6.90	26.58	36.85	54.00	-17.15	Vertical
9688	15.61	38.13	8.98	25.34	37.38	54.00	-16.62	Vertical
12185	14.58	38.92	10.38	25.04	38.84	54.00	-15.16	Vertical
14472						54.00		Vertical
16884						54.00		Vertical
4874	24.59	31.85	5.40	24.01	37.83	54.00	-16.17	Horizontal
7311	21.94	36.37	6.90	26.58	38.63	54.00	-15.37	Horizontal
9688	17.43	38.13	8.98	25.34	39.20	54.00	-14.80	Horizontal
12185	16.44	38.92	10.38	25.04	40.70	54.00	-13.30	Horizontal
14472						54.00		Horizontal
16884						54.00		Horizontal

Test mode:	802.1	1g	Test chann	el: Highest		Remark:	Pea	k
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (d		Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924	37.12	31.89	5.46	23.96	50.51	74.00	-23.49	Vertical
7386	33.47	36.49	6.93	26.79	50.10	74.00	-23.90	Vertical
9848	30.84	38.24	9.05	25.30	52.83	74.00	-21.17	Vertical
12310	28.27	38.83	10.41	24.90	52.61	74.00	-21.39	Vertical
14772						74.00		Vertical
17234						74.00		Vertical
4924	39.54	31.89	5.46	23.96	52.93	74.00	-21.07	Horizontal
7386	33.55	36.49	6.93	26.79	50.18	74.00	-23.82	Horizontal
9848	30.84	38.24	9.05	25.30	52.83	74.00	-21.17	Horizontal
12310	28.21	38.83	10.41	24.90	52.55	74.00	-21.45	Horizontal
14772						74.00		Horizontal
17234						74.00		Horizontal

Test mode:	802.1	1g	Test chann	nel: Highest		Remark:	Remark: Aver	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924	22.22	31.89	5.46	23.96	35.61	54.00	-18.39	Vertical
7386	20.78	36.49	6.93	26.79	37.41	54.00	-16.59	Vertical
9848	17.44	38.24	9.05	25.30	39.43	54.00	-14.57	Vertical
12310	16.10	38.83	10.41	24.90	40.44	54.00	-13.56	Vertical
14772						54.00		Vertical
17234						54.00		Vertical
4924	23.88	31.89	5.46	23.96	37.27	54.00	-16.73	Horizontal
7386	22.47	36.49	6.93	26.79	39.10	54.00	-14.90	Horizontal
9848	19.16	38.24	9.05	25.30	41.15	54.00	-12.85	Horizontal
12310	17.85	38.83	10.41	24.90	42.19	54.00	-11.81	Horizontal
14772						54.00		Horizontal
17234						54.00		Horizontal

### Remark

<sup>&</sup>quot;---" means that the emission level is too low to be measured



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Test mode:	802.1	1n(H20)	Test chann	el: Lo	owes	st	Remark: Peak		ak
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)		Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4824	35.40	31.79	5.34	24.07	•	48.46	74.00	-25.54	Vertical
7236	31.62	36.19	6.88	26.44		48.25	74.00	-25.75	Vertical
9648	30.13	38.07	8.96	25.36		51.80	74.00	-22.20	Vertical
12060	28.79	39.05	10.35	25.15	,	53.04	74.00	-20.96	Vertical
14472							74.00		Vertical
16884							74.00		Vertical
4824	36.71	31.79	5.34	24.07		49.77	74.00	-24.23	Horizontal
7236	32.98	36.19	6.88	26.44		49.61	74.00	-24.39	Horizontal
9648	31.54	38.07	8.96	25.36	;	53.21	74.00	-20.79	Horizontal
12060	30.25	39.05	10.35	25.15		54.50	74.00	-19.50	Horizontal
14472							74.00		Horizontal
16884							74.00		Horizontal

Test mode:	802.1	1n(H20)	Test chann	el: l	el: Lowest		Remark: Aver		Aver	age
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)		Level (dBuV/m)	Limit Line (dBuV/m)	Ove Lim (dE	nit	polarization
4824	24.26	31.79	5.34	24.0	7	37.32	54.00	-16.	68	Vertical
7236	22.82	36.19	6.88	26.4	4	39.45	54.00	-14.	55	Vertical
9648	18.67	38.07	8.96	25.36		40.34	54.00	-13.	66	Vertical
12060	16.13	39.05	10.35	25.15		40.38	54.00	-13.	62	Vertical
14472							54.00			Vertical
16884							54.00			Vertical
4824	25.57	31.79	5.34	24.0	7	38.63	54.00	-15.	37	Horizontal
7236	24.18	36.19	6.88	26.4	4	40.81	54.00	-13.	19	Horizontal
9648	20.08	38.07	8.96	25.3	6	41.75	54.00	-12.	25	Horizontal
12060	17.59	39.05	10.35	25.15		41.84	54.00	-12.	16	Horizontal
14472					•	•	54.00			Horizontal
16884					•	•	54.00			Horizontal

Test mode:	802.1	1n(H20)	Test chann	el: l	Middle	Remark:		Peak	eak	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Prear Facto (dB	or Level		Ov Lim (dE	nit	polarization	
4874	35.68	31.85	5.40	24.0	1 48.92	74.00	-25.	80	Vertical	
7311	30.06	36.37	6.90	26.5	8 46.75	74.00	-27.	25	Vertical	
9688	26.02	38.13	8.98	25.3	4 47.79	74.00	-26.	21	Vertical	
12185	26.11	38.92	10.38	25.0	4 50.37	74.00	-23.	63	Vertical	
14472						74.00			Vertical	
16884						74.00			Vertical	
4874	37.42	31.85	5.40	24.0	1 50.66	74.00	-23.	34	Horizontal	
7311	31.84	36.37	6.90	26.5	8 48.53	74.00	-25.	47	Horizontal	
9688	27.84	38.13	8.98	25.3	4 49.61	74.00	-24.	39	Horizontal	
12185	27.97	38.92	10.38	25.0	4 52.23	74.00	-21.	77	Horizontal	
14472						74.00			Horizontal	
16884						74.00			Horizontal	

### Remark

<sup>&</sup>quot;---" means that the emission level is too low to be measured



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Test mode:	802.1	1n(H20)	Test chann	el: N	el: Middle		Remark:	Remark: Aver	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)		Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874	23.15	31.85	5.40	24.0	1	36.39	54.00	-17.61	Vertical
7311	21.94	36.37	6.90	26.58	8	38.63	54.00	-15.37	Vertical
9688	17.87	38.13	8.98	25.34		39.64	54.00	-14.36	Vertical
12185	16.09	38.92	10.38	25.04	4	40.35	54.00	-13.65	Vertical
14472							54.00		Vertical
16884							54.00		Vertical
4874	24.89	31.85	5.40	24.0	1	38.13	54.00	-15.87	Horizontal
7311	23.72	36.37	6.90	26.58	8	40.41	54.00	-13.59	Horizontal
9688	19.69	38.13	8.98	25.34	4	41.46	54.00	-12.54	Horizontal
12185	17.95	38.92	10.38	25.04		42.21	54.00	-11.79	Horizontal
14472						•	54.00		Horizontal
16884						•	54.00		Horizontal

Test mode:	802.1	1n(H20)	Test chann	el: H	el: Highest		Remark: Peak		<	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Prear Factor		Level (dBuV/m)	Limit Line (dBuV/m)	Li	ver mit dB)	polarization
4924	35.25	31.89	5.46	23.9	6	48.64	74.00	-2	5.36	Vertical
7386	31.77	36.49	6.93	26.7	9	48.40	74.00	-2	5.60	Vertical
9848	29.12	38.24	9.05	25.30		51.11	74.00	-22	2.89	Vertical
12310	26.61	38.83	10.41	24.9	0	50.95	74.00	-23	3.05	Vertical
14772							74.00			Vertical
17234							74.00			Vertical
4924	36.91	31.89	5.46	23.9	6	50.30	74.00	-23	3.70	Horizontal
7386	33.46	36.49	6.93	26.7	9	50.09	74.00	-23	3.91	Horizontal
9848	30.84	38.24	9.05	25.3	0	52.83	74.00	-2	1.17	Horizontal
12310	28.36	38.83	10.41	24.9	0	52.70	74.00	-2	1.30	Horizontal
14772							74.00			Horizontal
17234						•	74.00		·	Horizontal

Test mode:	802.1	1n(H20)	Test chann	el: Highest		Remark:	Aver	age
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924	23.29	31.89	5.46	23.96	36.68	54.00	-17.32	Vertical
7386	20.89	36.49	6.93	26.79	37.52	54.00	-16.48	Vertical
9848	17.86	38.24	9.05	25.30	39.85	74.00	-34.15	Vertical
12310	16.84	38.83	10.41	24.90	41.18	54.00	-12.82	Vertical
14772						54.00		Vertical
17234						54.00		Vertical
4924	24.95	31.89	5.46	23.96	38.34	54.00	-15.66	Horizontal
7386	22.58	36.49	6.93	26.79	39.21	54.00	-14.79	Horizontal
9848	19.58	38.24	9.05	25.30	41.57	54.00	-12.43	Horizontal
12310	18.59	38.83	10.41	24.90	42.93	54.00	-11.07	Horizontal
14772						54.00		Horizontal
17234						54.00		Horizontal

### Remark

<sup>&</sup>quot;---" means that the emission level is too low to be measured