

Global United Technology Services Co., Ltd.

Report No.: GTS201610000218E02

FCC Report (WIFI)

Applicant: SHENZHEN XENON INDUSTRIAL LTD

7/F BLOCK C9 FUYUAN INDUSTRIAL PARK ZHOUSHI Address of Applicant:

ROAD XIXIANG BAOAN DISTRICT SHENZHEN CHINA

Equipment Under Test (EUT)

Product Name: WiFi DoorBell

Model No.: SM-D9X, SM-D8X

Trade Mark: Xenon

FCC ID: 2AJ5F-SM-D9X

Applicable standards: FCC CFR Title 47 Part 15.247:2015

Date of sample receipt: November 05, 2016

Date of Test: November 05-09, 2016

November 09, 2016 Date of report issued:

Test Result: PASS *

Authorized Signature:

Robinson Lo

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 GTS product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in

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^{*} In the configuration tested, the EUT complied with the standards specified above.



2 Version

Version No.	Date	Description
00	November 09, 2016	Original

Prepared By:	(got. Ora	Date:	November 09, 2016		
	Project Engineer				
	1				

Check By:

Reviewer

Date: November 09, 2016



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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
Channel 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

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

Remark: Test according to ANSI C63.4:2014 and ANSI C63.10:2013.

Measurement Uncertainty

Test Item	Frequency Range	Measurement Uncertainty	Notes
Radiated Emission	9kHz ~ 30MHz	± 4.34dB	(1)
Radiated Emission	30MHz ~ 1000MHz	± 4.24dB	(1)
Radiated Emission	1GHz ~ 26.5GHz	± 4.68dB	(1)
AC Power Line Conducted Emission	0.15MHz ~ 30MHz	± 3.45dB	(1)



5 General Information

5.1 Client Information

Applicant:	SHENZHEN XENON INDUSTRIAL LTD
Address of Applicant:	7/F BLOCK C9 FUYUAN INDUSTRIAL PARK ZHOUSHI ROAD XIXIANG BAOAN DISTRICT SHENZHEN CHINA
Manufacturer:	SHENZHEN XENON INDUSTRIAL LTD
Address of Manufacturer:	7/F BLOCK C9 FUYUAN INDUSTRIAL PARK ZHOUSHI ROAD XIXIANG BAOAN DISTRICT SHENZHEN CHINA

5.2 General Description of EUT

Product Name:	WiFi DoorBell
Model No.:	SM-D9X, SM-D8X
Test Model No. :	SM-D9X
	identical in the same PCB layout, interior structure and electrical the model name for commercial purpose.
Operation Frequency:	802.11b/802.11g/802.11n(HT20): 2412MHz~2462MHz
	802.11n(HT40): 2422MHz~2452MHz
Channel numbers:	802.11b/802.11g /802.11n(HT20): 11
	802.11n(HT40): 7
Channel separation:	5MHz
Modulation technology:	802.11b: Direct Sequence Spread Spectrum (DSSS)
	802.11g/802.11n(H20)/802.11n(H40):
	Orthogonal Frequency Division Multiplexing (OFDM)
Antenna Type:	FPCB antenna
Antenna gain:	1.0dBi
Power supply:	DC 12V



Operation Frequency each of channel							
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:

Test channel	Frequency (MHz)		
rest chamier	802.11b/802.11g/802.11n(HT20)	802.11n(HT40)	
Lowest channel	2412MHz	2422MHz	
Middle channel	2437MHz	2437MHz	
Highest channel	2462MHz	2452MHz	

5.3 Test mode

Transmitting mode	Keep the EUT in continuously transmitting mode
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Remark: During the test, the dutycycle >98%, the test voltage was tuned from 85% to 115% of the nominal rated supply voltage, and found that the worst case was under the nominal rated supply condition. So the report just shows that condition's data.

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	802.11b	802.11g	802.11n(HT20)	802.11n(HT40)
Data rate	1Mbps	6Mbps	6.5Mbps	13Mbps

5.4 Description of Support Units

None.



5.5 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 fuly described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in files. Registration 600491, June 22, 2016.

• Industry Canada (IC) —Registration No.: 9079A-2

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-2, August 15, 2016.

5.6 Test Location

All tests were performed at:

Global United Technology Services Co., Ltd.

Address: No. 301-309, 3/F., Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102

Tel: 0755-27798480 Fax: 0755-27798960



6 Test Instruments list

Rad	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	July 03 2015	July 02 2020		
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A		
3	Spectrum Analyzer	Agilent	E4440A	GTS533	June 29 2016	June 28 2017		
4	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	June 29 2016	June 28 2017		
5	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	June 29 2016	June 28 2017		
6	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	9120D-829	GTS208	June 29 2016	June 28 2017		
7	Horn Antenna	ETS-LINDGREN	3160	GTS217	June 29 2016	June 28 2017		
8	EMI Test Software	AUDIX	E3	N/A	N/A	N/A		
9	Coaxial Cable	GTS	N/A	GTS213	June 29 2016	June 28 2017		
10	Coaxial Cable	GTS	N/A	GTS211	June 29 2016	June 28 2017		
11	Coaxial cable	GTS	N/A	GTS210	June 29 2016	June 28 2017		
12	Coaxial Cable	GTS	N/A	GTS212	June 29 2016	June 28 2017		
13	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	June 29 2016	June 28 2017		
14	Amplifier(2GHz-20GHz)	HP	8349B	GTS206	June 29 2016	June 28 2017		
15	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June 29 2016	June 28 2017		
16	Band filter	Amindeon	82346	GTS219	June 29 2016	June 28 2017		
17	Power Meter	Anritsu	ML2495A	GTS540	June 29 2016	June 28 2017		
18	Power Sensor	Anritsu	MA2411B	GTS541	June 29 2016	June 28 2017		

Cond	ducted 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)	GTS264	May.16 2014	May.15 2019
2	EMI Test Receiver	Rohde & Schwarz	ESCS30	GTS223	June 29 2016	June 28 2017
3	10dB Pulse Limite	Rohde & Schwarz	N/A	GTS224	June 29 2016	June 28 2017
4	Coaxial Switch	ANRITSU CORP	MP59B	GTS225	June 29 2016	June 28 2017
5	LISN	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	GTS226	June 29 2016	June 28 2017
6	Coaxial Cable	GTS	N/A	GTS227	June 29 2016	June 28 2017
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A

Gen	General used equipment:									
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)				
1	Barometer	ChangChun	DYM3	GTS257	June 29 2016	June 28 2017				



7 Test results and Measurement Data

7.1 Antenna requirement

Standard requirement: FCC Part15 C Section 15.203 /247(c)

15.203 requirement:

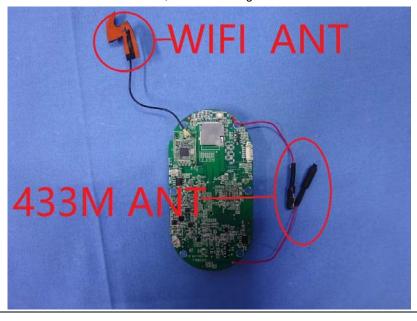
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit 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 is FPCB antenna, the best case gain of the antenna is 1.0dBi.





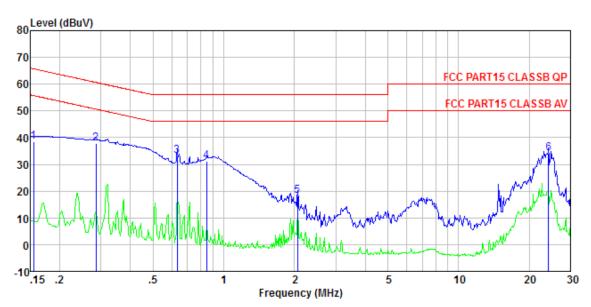
7.2 Conducted Emissions

Test Requirement:	FCC Part15 C Section 15.207	,				
Test Method:	ANSI C63.10:2013					
Test Frequency Range:	150KHz to 30MHz					
Class / Severity:	Class B					
Receiver setup:	RBW=9KHz, VBW=30KHz, Sv	weep time=auto				
Limit:	Frequency range (MHz)	Limit (c	lBuV)			
		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	•				
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 procedure:	 The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 500hm/50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 500hm/50uH coupling impedance with 500hm termination. (Please refer 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 C63.10:2013 on conducted measurement. 					
Test Instruments:	Refer to section 6.0 for details					
Test mode:	Refer to section 5.3 for details					
Test results:	Pass		_			



Measurement data

Line:



Site : Shielded room

: FCC PART15 CLASSB QP LISN-2016 LINE Condition

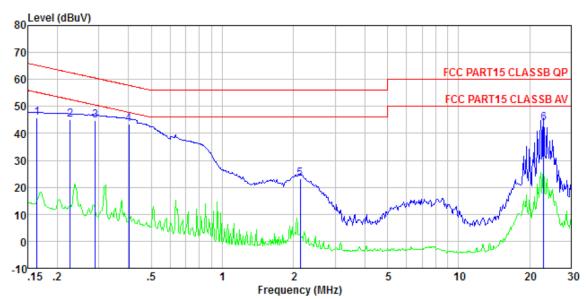
Job No. : 0218 Test mode : WiFi mode

Test Engineer: Chen

	Freq		LISN Factor				Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBu₹	dB	
1 2 3 4 5	0. 286 0. 634 0. 844	32. 90 30. 89	0.44 0.30	0.13 0.13	37. 71 33. 33 31. 28	60.63 56.00 56.00	-22. 92 -22. 67 -24. 72	QP QP QP
6	24.142	33.48	0.37	0.23	34.08	60.00	-25.92	QP



Neutral:



Site : Shielded room

Condition : FCC PART15 CLASSB QP LISN-2016 NEUTRAL

Job No. : 0218
Test mode : WiFi mode
Test Engineer: Chen

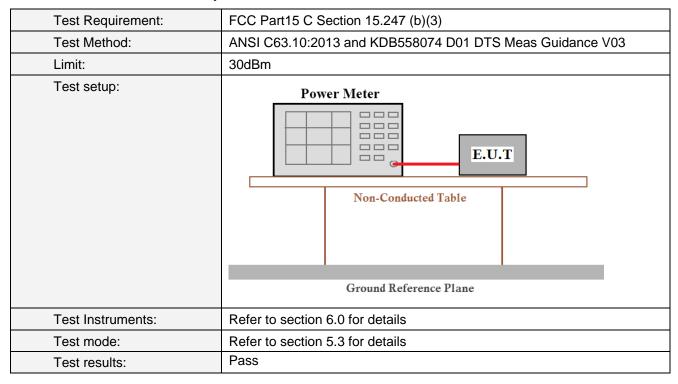
CDI	pugineer.							
		Read	LISN	Cable		Limit	Over	
	Fred		Factor			Line	Limit	Remark
	rieq	Level	ractor	LUSS	LCVCI	Line	LIMI	Iteliiai k
	\mathtt{MHz}	dBuV	d₿	d₿	dBuV	dBuV	d₿	
1	0.164	4E 10	0 41	0.10	4E 71	CE OF	10 E4	OD
1	0.164	45.18	0.41		45.71			
2	0. 227	44.68	0.42	0.12	45. 22	62.57	-17.35	QP
3	0.289	44.32			44.84			-
4	0.402	42.91	0.39	0.11	43.41	57.81	-14.40	QP
5	2.133	22.87	0.20	0.15	23 22	56.00	-32 78	ΩP
								-
6	22, 896	43, 24	0. 34	0. 23	43, 81	60. 00	-16.19	ΩP

Notes:

- 1. An initial pre-scan was performed on the line and neutral lines with peak detector.
- 2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
- 3. Final Level =Receiver Read level + LISN Factor + Cable Loss
- 4. If the average limit is met when using a quasi-peak detector receiver, the EUT shall be deemed to meet both limits and measurement with the average detector receiver is unnecessary.



7.3 Conducted Peak Output Power



Measurement Data

Test CH		Peak Outp	Limit(dBm)	Result		
1631 011	802.11b	802.11g	802.11n(HT20)	802.11n(HT40)	Limit(abin)	Nesuit
Lowest	13.63	10.32	10.49	7.89		Pass
Middle	12.39	10.76	11.50	7.66	30.00	
Highest	13.36	8.46	9.15	7.01		

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7.4 Channel Bandwidth

Test Requirement:	FCC Part15 C Section 15.247 (a)(2)		
Test Method:	ANSI C63.10:2013 and KDB558074 D01 DTS Meas Guidance V03		
Limit:	>500KHz		
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane		
Test Instruments:	Refer to section 6.0 for details		
Test mode:	Refer to section 5.3 for details		
Test results:	Pass		

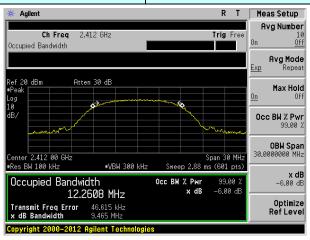
Measurement Data

Test CH		Channel E	Limit(KHz)	Result		
1631 011	802.11b	802.11g	802.11n(HT20)	802.11n(HT40)	Lillint(IXI IZ)	Nesult
Lowest	9.465	14.232	15.953	35.825		Pass
Middle	9.575	15.486	16.364	35.734	>500	
Highest	9.660	14.829	15.966	35.778		

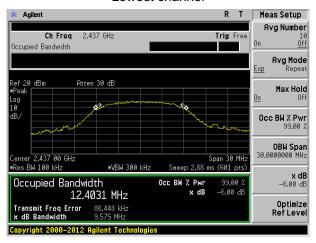
Test plot as follows:



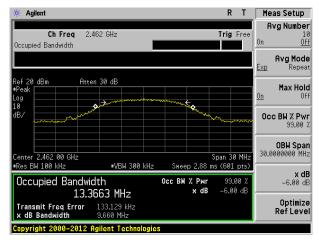
Test mode: 802.11b



Lowest channel



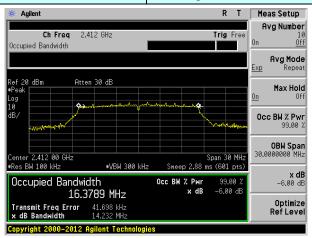
Middle channel



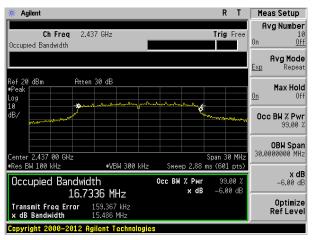
Highest channel



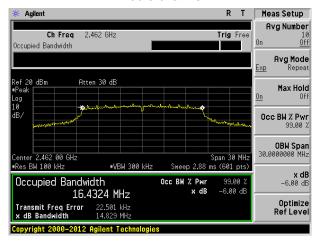
Test mode: 802.11g



Lowest channel



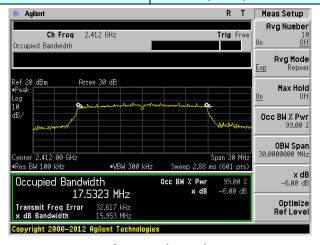
Middle channel



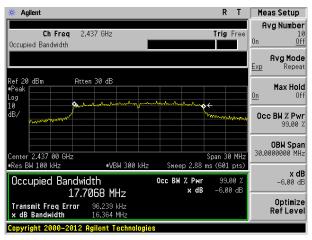
Highest channel



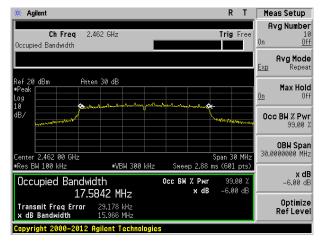
Test mode: 802.11n(HT20)



Lowest channel



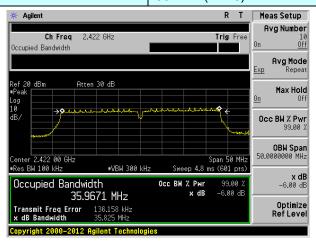
Middle channel



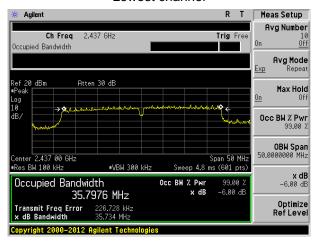
Highest channel



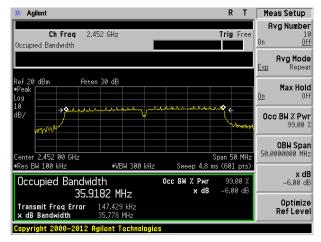
Test mode: 802.11n(HT40)



Lowest channel



Middle channel



Highest channel



7.5 Power Spectral Density

Test Requirement:	FCC Part15 C Section 15.247 (e)		
Test Method:	ANSI C63.10:2013 and KDB558074 D01 DTS Meas Guidance V03		
Limit:	8dBm/3KHz		
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane		
Test Instruments:	Refer to section 6.0 for details		
Test mode:	Refer to section 5.3 for details		
Test results:	Pass		

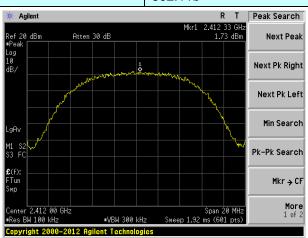
Measurement Data

Test CH		Power Spe	Limit	Result		
Test CIT	802.11b	802.11g	802.11n(HT20)	802.11n(HT40)	(dBm/3kHz)	Nesuit
Lowest	1.73	-3.01	-2.83	-8.07		Pass
Middle	0.23	-2.68	-1.94	-5.78	8.00	
Highest	1.70	-4.73	-3.93	-9.61		

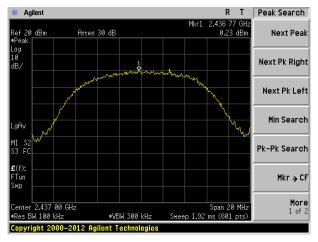


Test plot as follows:

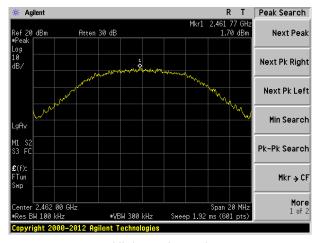
Test mode: 802.11b



Lowest channel



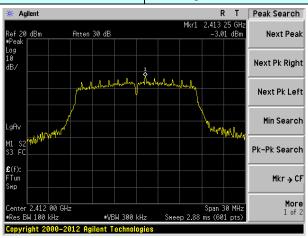
Middle channel



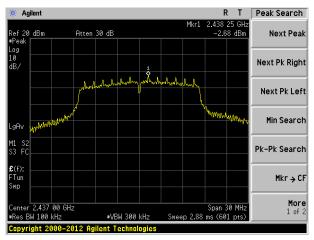
Highest channel



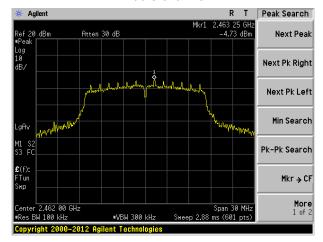
Test mode: 802.11g



Lowest channel



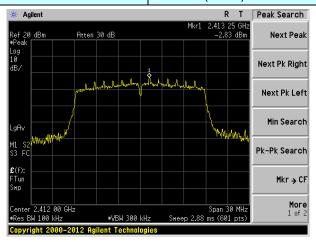
Middle channel



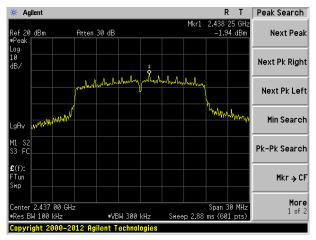
Highest channel



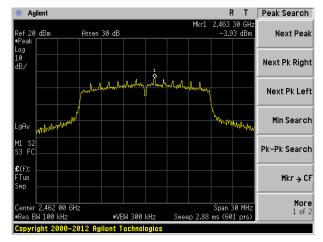
Test mode: 802.11n(HT20)



Lowest channel



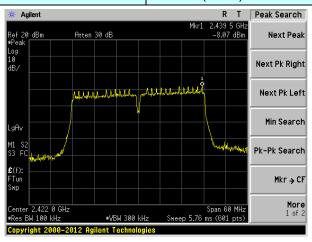
Middle channel



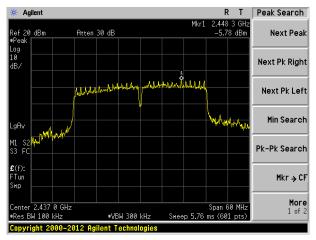
Highest channel



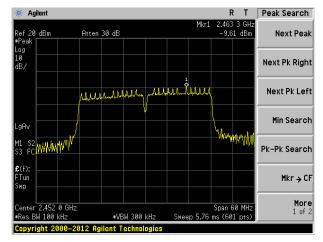
Test mode: 802.11n(HT40)



Lowest channel



Middle channel



Highest channel



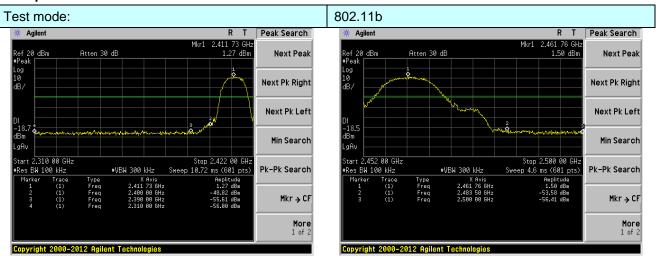
7.6 Band edges

7.6.1 Conducted Emission Method

Took Dogwing month	FCC Double C Continue 45 047 (d)				
Test Requirement:	FCC Part15 C Section 15.247 (d)				
Test Method:	ANSI C63.10:2013 and KDB558074 D01 DTS Meas Guidance V03				
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 6.0 for details				
Test mode:	Refer to section 5.3 for details				
Test results:	Pass				

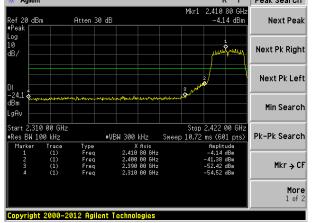


Test plot as follows:



Lowest channel

Highest channel

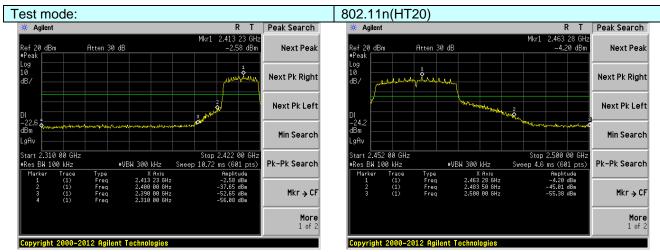


Lowest channel



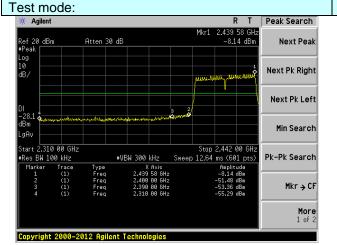
Highest channel



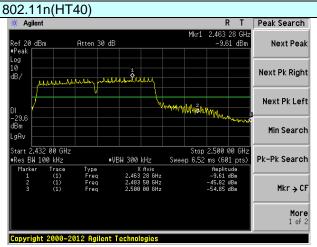


Lowest channel

Highest channel



Lowest channel



Highest channel



7.6.2 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209 and 15.205							
Test Method:	ANSI C63.10:2013							
Test Frequency Range:		All of the restrict bands were tested, only the worst band's (2310MHz to 2500MHz) data was showed.						
Test site:	Measurement D							
Receiver setup:	Frequency	Detector	RBW	VBW	Value			
. 10001101 00144		Peak	1MHz	3MHz	Peak			
	Above 1GHz	RMS	1MHz	3MHz	AV			
Limit:	Freque	ency	Limit (dBuV/		Value			
	Above 1	GHz	54.0 74.0		AV Peak			
Test setup:	EUT Turn Table	Antenna Tower Horn Antenna Spectrum Analyzer						
Test Procedure:	the ground a determine the 2. The EUT was antenna, whi tower. 3. The antenna ground to de horizontal an measuremer. 4. For each sus and then the and the rota the maximun. 5. The test-rece Specified Ba. 6. If the emission the limit specified ba. 6. If the emission the limit specified ba. 7. The radiation and found the f	 The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 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. 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 rota table was turned from 0 degrees to 360 degrees to find the maximum reading. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 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, quasipeak or average method as specified and then reported in a data 						
T414		node is recorde		ort.				
Test Instruments:	Refer to section							
Test mode:	Refer to section	5.3 for details	5					
Test results:	Pass							

Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960



Lowest

Measurement data:

Test mode:

Remark: The pre-test were performed on lowest, middle and highest frequencies, only the worst case's (lowest and highest frequencies) data was showed.

802.11b

Test channel:

. oot modo.		002	. ~	. 0	ot onamion	_	-000.	
Peak value		•		•				
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
2390.00	51.28	27.59	5.38	34.01	50.24	74.00	-23.76	Horizontal
2400.00	60.17	27.58	5.39	34.01	59.13	74.00	-14.87	Horizontal
2390.00	52.94	27.59	5.38	34.01	51.90	74.00	-22.10	Vertical
2400.00	61.87	27.58	5.39	34.01	60.83	74.00	-13.17	Vertical
AV value:								
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
2390.00	38.15	27.59	5.38	34.01	37.11	54.00	-16.89	Horizontal
2400.00	46.40	27.58	5.39	34.01	45.36	54.00	-8.64	Horizontal
2390.00	39.94	27.59	5.38	34.01	38.90	54.00	-15.10	Vertical
2400.00	47.50	27.58	5.39	34.01	46.46	54.00	-7.54	Vertical
Test mode:			802.11b		Test channel:		Highest	
Peak value		_			_			
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
2483.50	51.78	27.53	5.47	33.92	50.86	74.00	-23.14	Horizontal
2500.00	47.72	27.55	5.49	29.93	50.83	74.00	-23.17	Horizontal
2483.50	53.96	27.53	5.47	33.92	53.04	74.00	-20.96	Vertical
2500.00	50.16	27.55	5.49	29.93	53.27	74.00	-20.73	Vertical
AV value:								-
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
2483.50	38.46	27.53	5.47	33.92	37.54	54.00	-16.46	Horizontal
2500.00	34.63	27.55	5.49	29.93	37.74	54.00	-16.26	Horizontal
2483.50	40.37	27.53	5.47	33.92	39.45	54.00	-14.55	Vertical

2500.00 Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

5.49

2. The emission levels of other frequencies are very lower than the limit and not show in test report.

29.93

39.61

54.00

36.50

27.55

Project No.: GTS201610000218

-14.39

Vertical



Test mode:

802.11g

Report No.: GTS201610000218E02

Lowest

rest mode.		002.1	19	10.	ot onamici.	-	OWCOL	
Peak value:	!							
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
2390.00	50.76	27.59	5.38	34.01	49.72	74.00	-24.28	Horizontal
2400.00	59.47	27.58	5.39	34.01	58.43	74.00	-15.57	Horizontal
2390.00	52.38	27.59	5.38	34.01	51.34	74.00	-22.66	Vertical
2400.00	61.03	27.58	5.39	34.01	59.99	74.00	-14.01	Vertical
AV value:								
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
2390.00	37.78	27.59	5.38	34.01	36.74	54.00	-17.26	Horizontal
2400.00	45.97	27.58	5.39	34.01	44.93	54.00	-9.07	Horizontal
2390.00	39.52	27.59	5.38	34.01	38.48	54.00	-15.52	Vertical
2400.00	47.03	27.58	5.39	34.01	45.99	54.00	-8.01	Vertical
Test mode:		802.1	1g	Te	st channel:	ŀ	Highest	
Peak value:	:				_			
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
2483.50	51.03	27.53	5.47	33.92	50.11	74.00	-23.89	Horizontal
2500.00	47.14	27.55	5.49	29.93	50.25	74.00	-23.75	Horizontal
2483.50	53.11	27.53	5.47	33.92	52.19	74.00	-21.81	Vertical
2500.00	49.49	27.55	5.49	29.93	52.60	74.00	-21.40	Vertical
AV value:						,		
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
2483.50	38.01	27.53	5.47	33.92	37.09	54.00	-16.91	Horizontal
2500.00	34.28	27.55	5.49	29.93	37.39	54.00	-16.61	Horizontal
2483.50	39.87	27.53	5.47	33.92	38.95	54.00	-15.05	Vertical
2500.00	36.12	27.55	5.49	29.93	39.23	54.00	-14.77	Vertical
Remark:								

Test channel:

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No. 301-309, 3/F., Jinyuan Business Building, No.2, Laodong Industrial Zone, Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102 Telephone: +86 (0) 755 2779 8480 Fax: +86 (0) 755 2779 8960

Final Level = Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

The emission levels of other frequencies are very lower than the limit and not show in test report.



Test mode:

Report No.: GTS201610000218E02

Lowest

rest mode.		002.1	111(11120)	100	or orial into.	-	LOWCSL	
Peak value:								
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
2390.00	50.91	27.59	5.38	34.01	49.87	74.00	-24.13	Horizontal
2400.00	59.67	27.58	5.39	34.01	58.63	74.00	-15.37	Horizontal
2390.00	52.54	27.59	5.38	34.01	51.50	74.00	-22.50	Vertical
2400.00	61.27	27.58	5.39	34.01	60.23	74.00	-13.77	Vertical
AV value:								
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
2390.00	37.88	27.59	5.38	34.01	36.84	54.00	-17.16	Horizontal
2400.00	46.10	27.58	5.39	34.01	45.06	54.00	-8.94	Horizontal
2390.00	39.64	27.59	5.38	34.01	38.60	54.00	-15.40	Vertical
2400.00	47.17	27.58	5.39	34.01	46.13	54.00	-7.87	Vertical
Test mode:		802.11n(HT20)		Test channel:		Highest		
Peak value:	!							
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
2483.50	51.25	27.53	5.47	33.92	50.33	74.00	-23.67	Horizontal
2500.00	47.31	27.55	5.49	29.93	50.42	74.00	-23.58	Horizontal
2483.50	53.36	27.53	5.47	33.92	52.44	74.00	-21.56	Vertical
2500.00	49.68	27.55	5.49	29.93	52.79	74.00	-21.21	Vertical
AV value:		_			_			
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
2483.50	38.14	27.53	5.47	33.92	37.22	54.00	-16.78	Horizontal
2500.00	34.38	27.55	5.49	29.93	37.49	54.00	-16.51	Horizontal
2483.50	40.02	27.53	5.47	33.92	39.10	54.00	-14.90	Vertical
2500.00	36.23	27.55	5.49	29.93	39.34	54.00	-14.66	Vertical
Domork:								

Test channel:

802.11n(HT20)

Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.



Test mode:

Report No.: GTS201610000218E02

Lowest

(MHz) (dBuV) (dB/m) (dB) (dB) (dB) (dBuV/m) (dBuV/m) (dB) 2390.00 50.29 27.59 5.38 34.01 49.25 74.00 -24.75 Horizontal H):							
2400.00 58.85 27.58 5.39 34.01 57.81 74.00 -16.19 Horizontal		Level	Factor	Loss	Factor			Limit	Polarization
2390.00 51.88 27.59 5.38 34.01 50.84 74.00 -23.16 Vertical 2400.00 60.28 27.58 5.39 34.01 59.24 74.00 -14.76 Vertical AV value: Frequency (MHz) Read Level (dBuV) Antenna Factor (dB) Preamp Factor (dB) Level (dBuV/m) Limit Line (dBuV/m) Over Limit (dB) Polarization 2390.00 37.44 27.59 5.38 34.01 36.40 54.00 -17.60 Horizonta 2400.00 45.59 27.58 5.39 34.01 38.11 54.00 -9.45 Horizonta 2390.00 39.15 27.59 5.38 34.01 38.11 54.00 -15.89 Vertical 2400.00 46.61 27.58 5.39 34.01 45.57 54.00 -8.43 Vertical Test mode: 802.11n(HT40) Test channel: Highest	2390.00	50.29	27.59	5.38	34.01	49.25	74.00	-24.75	Horizontal
2400.00 60.28 27.58 5.39 34.01 59.24 74.00 -14.76 Vertical AV value: Frequency (MHz) Read Level (dBuV) Antenna Factor (dB) Cable Loss (dB) Preamp Factor (dB) Level (dBuV/m) Limit Line (dBuV/m) Over Limit (dB) Polarization 2390.00 37.44 27.59 5.38 34.01 36.40 54.00 -17.60 Horizonta 2400.00 45.59 27.58 5.39 34.01 44.55 54.00 -9.45 Horizonta 2390.00 39.15 27.59 5.38 34.01 38.11 54.00 -15.89 Vertical 2400.00 46.61 27.58 5.39 34.01 45.57 54.00 -8.43 Vertical Test mode: 802.11n(HT40) Test channel: Highest	2400.00	58.85	27.58	5.39	34.01	57.81	74.00	-16.19	Horizontal
AV value: Read Level (dBuV) Antenna Factor (dB/m) Cable Loss (dB) Preamp Factor (dBuV/m) Level (dBuV/m) Limit Line (dBuV/m) Over Limit (dB) Polarization (dB) 2390.00 37.44 27.59 5.38 34.01 36.40 54.00 -17.60 Horizonta 2400.00 45.59 27.58 5.39 34.01 44.55 54.00 -9.45 Horizonta 2390.00 39.15 27.59 5.38 34.01 38.11 54.00 -15.89 Vertical 2400.00 46.61 27.58 5.39 34.01 45.57 54.00 -8.43 Vertical Test mode: 802.11n(HT40) Test channel: Highest	2390.00	51.88	27.59	5.38	34.01	50.84	74.00	-23.16	Vertical
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 2390.00 37.44 27.59 5.38 34.01 36.40 54.00 -17.60 Horizonta 2400.00 45.59 27.58 5.39 34.01 44.55 54.00 -9.45 Horizonta 2390.00 39.15 27.59 5.38 34.01 38.11 54.00 -15.89 Vertical 2400.00 46.61 27.58 5.39 34.01 45.57 54.00 -8.43 Vertical Test mode: 802.11n(HT40) Test channel: Highest	2400.00	60.28	27.58	5.39	34.01	59.24	74.00	-14.76	Vertical
Frequency (MHz)	AV value:								
2400.00 45.59 27.58 5.39 34.01 44.55 54.00 -9.45 Horizontal Horizontal Highest 2390.00 39.15 27.59 5.38 34.01 38.11 54.00 -15.89 Vertical Vertical Vertical Vertical Highest Test mode: 802.11n(HT40) Test channel: Highest		Level	Factor	Loss	Factor			Limit	Polarization
2390.00 39.15 27.59 5.38 34.01 38.11 54.00 -15.89 Vertical 2400.00 46.61 27.58 5.39 34.01 45.57 54.00 -8.43 Vertical Test mode: 802.11n(HT40) Test channel: Highest	2390.00	37.44	27.59	5.38	34.01	36.40	54.00	-17.60	Horizontal
2400.00 46.61 27.58 5.39 34.01 45.57 54.00 -8.43 Vertical Test mode: 802.11n(HT40) Test channel: Highest	2400.00	45.59	27.58	5.39	34.01	44.55	54.00	-9.45	Horizontal
Test mode: 802.11n(HT40) Test channel: Highest	2390.00	39.15	27.59	5.38	34.01	38.11	54.00	-15.89	Vertical
, ,	2400.00	46.61	27.58	5.39	34.01	45.57	54.00	-8.43	Vertical
, ,									
Peak value:	Test mode:		802.1	1n(HT40)	Те	st channel:	F	Highest	
	Peak value):	_			_	,		
Frequency (MHz) Read Level Factor (dBuV) Read Level Factor (dB/m) Read Level Factor (dB/m) Read Level Factor (dB) Frequency (MHz) Read Level Factor (dBuV/m) Read Level (dBuV/m) Factor (dBuV/m) Read Level (dBuV/m) Factor (dBuV/m) Read Level (dBuV/m) Factor (dBuV/m) Folarization		Level	Factor	Loss	Factor			Limit	Polarization
2483.50 50.36 27.53 5.47 33.92 49.44 74.00 -24.56 Horizonta	2483.50	50.36	27.53	5.47	33.92	49.44	74.00	-24.56	Horizontal
2500.00 46.63 27.55 5.49 29.93 49.74 74.00 -24.26 Horizonta	2500.00	46.63	27.55	5.49	29.93	49.74	74.00	-24.26	Horizontal
2483.50 52.34 27.53 5.47 33.92 51.42 74.00 -22.58 Vertical	2483.50	52.34	27.53	5.47	33.92	51.42	74.00	-22.58	Vertical
2500.00 48.88 27.55 5.49 29.93 51.99 74.00 -22.01 Vertical	2500.00	48.88	27.55	5.49	29.93	51.99	74.00	-22.01	Vertical
AV value:	AV value:	<u> </u>	_			_	,		
Frequency (MHz) Read Level (dBuV) (dB/m) Cable Factor (dBuV/m) Level (dBuV/m) Cable Factor (dBuV/m) Factor (dBuV/m) Cable Factor (dB		Level	Factor	Loss	Factor			Limit	Polarization
2483.50 37.60 27.53 5.47 33.92 36.68 54.00 -17.32 Horizonta	(1011 12)	37.60	27.53	5.47	33.92	36.68	54.00	-17.32	Horizontal
2500.00 33.96 27.55 5.49 29.93 37.07 54.00 -16.93 Horizonta	, ,		<u> </u>	5 40	20.02	27.07	54.00	-16 93	Horizontal
2483.50 39.43 27.53 5.47 33.92 38.51 54.00 -15.49 Vertical	2483.50	33.96	27.55	5.49	29.93	37.07	04.00	10.00	
2500.00 35.79 27.55 5.49 29.93 38.90 54.00 -15.10 Vertical	2483.50 2500.00								Vertical

Test channel:

802.11n(HT40)

Remark:

^{1.} Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

^{2.} The emission levels of other frequencies are very lower than the limit and not show in test report.



7.7 Spurious Emission

7.7.1 Conducted Emission Method

Test Requirement:	FCC Part15 C Section 15.247 (d)				
Test Method:	ANSI C63.10:2013 and KDB558074 D01 DTS Meas Guidance V03				
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 6.0 for details				
Test mode:	Refer to section 5.3 for details				
Test results:	Pass				

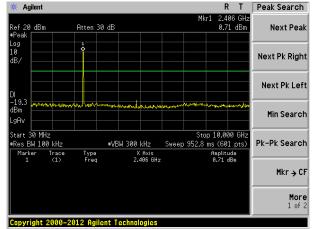


Test plot as follows:

Test mode:

802.11b



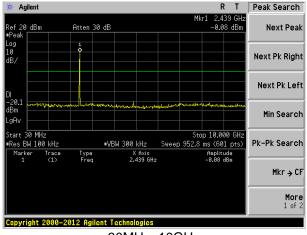


30MHz~10GHz

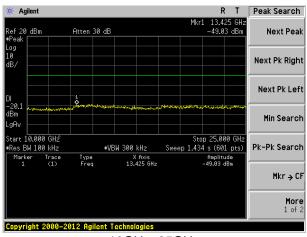
R T Peak Search Agilent Atten 30 dB Next Peak Next Pk Right Next Pk Left Min Search Start 10.000 GHz •Res BW 100 kHz Stop 25.000 GHz Sweep 1.434 s (601 pts) Pk-Pk Search Mkr → CF More 1 of 2 Copyright 2000-2012 Agilent Technologies

10GHz~25GHz

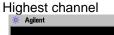
Middle channel

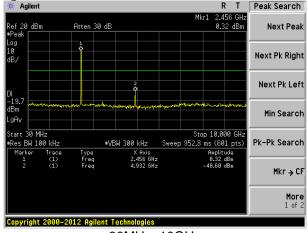


30MHz~10GHz

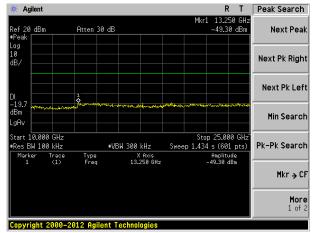


10GHz~25GHz





30MHz~10GHz



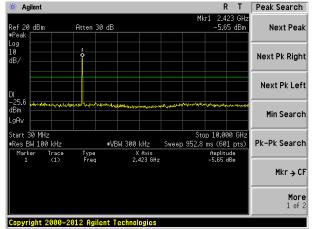
10GHz~25GHz



Test mode:

802.11g

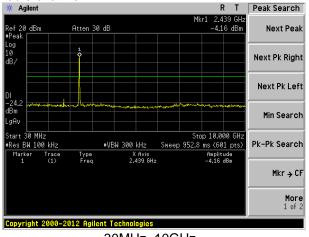
Lowest channel



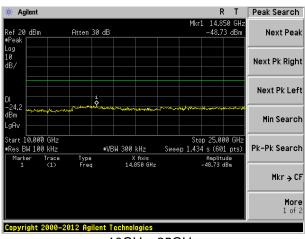
30MHz~10GHz

10GHz~25GHz

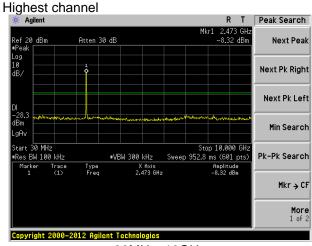
Middle channel



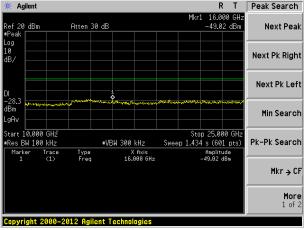
30MHz~10GHz



10GHz~25GHz



30MHz~10GHz



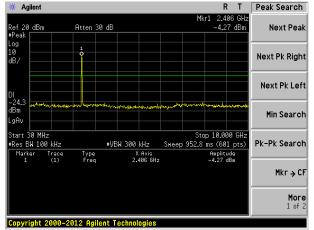
10GHz~25GHz



Test mode:

802.11n(HT20)

Lowest channel



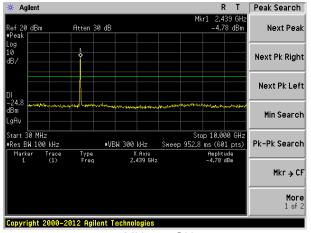
30MHz~10GHz

R T Peak Search 🗰 Agilent Next Peak Atten 30 dB Next Pk Right Next Pk Left Min Search Start 10.000 GHz ■Res BW 100 kHz Stop 25.000 GH: Sweep 1.434 s (601 pts) Pk-Pk Search #VBW 300 kHz Type Freq Amplitude -48.92 dBm X Axis 14.575 GHz Mkr → CF More 1 of 2

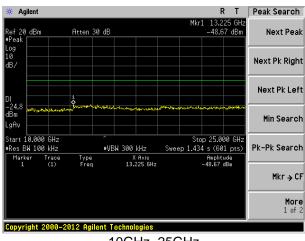
10GHz~25GHz

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Middle channel

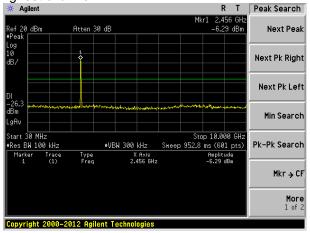


30MHz~10GHz

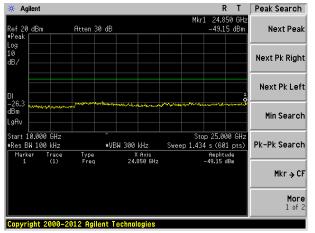


10GHz~25GHz





30MHz~10GHz



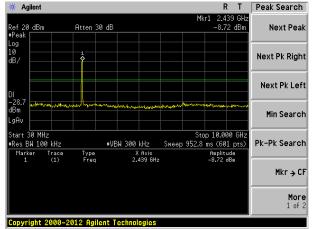
10GHz~25GHz



Test mode:

802.11n(HT40)

Lowest channel

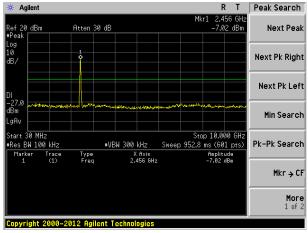


30MHz~10GHz

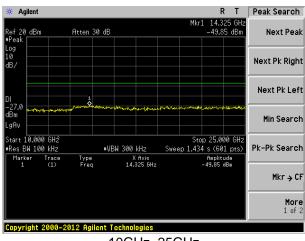
R T Peak Search 19.375 GH: -49.62 dBm Atten 30 dB Next Peak Next Pk Right Next Pk Left Min Search Stop 25.000 GH Sweep 1.434 s (601 pts) ■Res BW 100 kHz #VBW 300 kHz Pk-Pk Search X Axis 19.375 GHz Amplitude -49.62 dBm Mkr → CF More 1 of 2 Copyright 2000-2012 Agilent Technologies

10GHz~25GHz

Middle channel

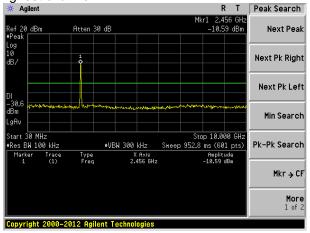


30MHz~10GHz

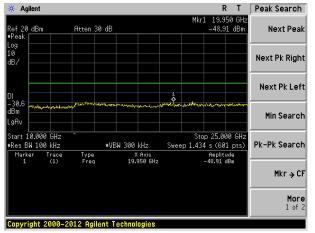


10GHz~25GHz





30MHz~10GHz



10GHz~25GHz



7.7.2 Radiated Emission Method

FCC Part15 C Se	ection 15.209	9								
ANSI C63.10:2013										
Measurement Dis	stance: 3m									
Frequency Detector RBW VBW Value										
30MHz-1GHz Quasi-peak 120KHz 300KHz Quasi-peak										
Peak 1MHz 3MHz Peak										
Above 1GHz	RMS	1MHz	3MHz	AV						
Frequen	су	Limit (dBuV/	m @3m)	Value						
30MHz-88	MHz	40.0	0	Quasi-peak						
88MHz-216	6MHz	43.5	0	Quasi-peak						
216MHz-96	0MHz	46.0	0	Quasi-peak						
960MHz-1	GHz	54.0	0	Quasi-peak						
Above 10	24-7	54.0	0	AV						
Above ic)	74.0	0	Peak						
Above 1GHz	EUT-	< 1m ım Table⊬	1 4m >√	ñer-						
	ANSI C63.10:200 30MHz to 25GHz Measurement Dis Frequency 30MHz-1GHz Above 1GHz Frequency 30MHz-88 88MHz-216 216MHz-96 960MHz-1 Above 1C	ANSI C63.10:2013 30MHz to 25GHz Measurement Distance: 3m Frequency Detector 30MHz-1GHz Quasi-peal Above 1GHz Peak RMS Frequency 30MHz-88MHz 88MHz-216MHz 216MHz-960MHz 960MHz-1GHz Above 1GHz Below 1GHz	Measurement Distance: 3m Frequency Detector RBW 30MHz-1GHz Quasi-peak 120KHz Above 1GHz Peak 1MHz RMS 1MHz Frequency Limit (dBuV/ 30MHz-88MHz 40.0 88MHz-216MHz 43.5 216MHz-960MHz 46.0 960MHz-1GHz 54.0 Above 1GHz 54.0 Below 1GHz Below 1GHz Receiver- Receiver-	ANSI C63.10:2013 30MHz to 25GHz Measurement Distance: 3m Frequency Detector RBW VBW 30MHz-1GHz Quasi-peak 120KHz 300KHz Above 1GHz Peak 1MHz 3MHz RMS 1MHz 3MHz Frequency Limit (dBuV/m @3m) 30MHz-88MHz 40.00 88MHz-216MHz 43.50 216MHz-960MHz 46.00 960MHz-1GHz 54.00 Above 1GHz 54.00 Below 1GHz Below 1GHz Tum Table Receiver Preamplif						



	Turn Table* < 1m 4m > v Receiver* Preamplifier*
Test Procedure:	The EUT was placed on the top of a rotating table(0.8 meters below 1G and 1.5 meters above 1G) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.
	The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
	3. 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.
	4. 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 rota table was turned from 0 degrees to 360 degrees to find the maximum reading.
	The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
	6. 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, quasipeak or average method as specified and then reported in a data sheet.
	7. The radiation measurements are performed in X, Y, Z axis positioning. And found the Y axis positioning which it is worse case, only the test worst case mode is recorded in the report.
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.3 for details
Test results:	Pass

Remark:

Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis which it is worse case.



Measurement Data

■ Below 1GHz

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
59.44	41.66	14.73	0.86	29.93	27.32	40.00	-12.68	Vertical
115.32	36.22	13.31	1.32	29.60	21.25	43.50	-22.25	Vertical
150.01	46.86	10.26	1.57	29.41	29.28	43.50	-14.22	Vertical
221.39	42.01	13.25	1.97	29.40	27.83	46.00	-18.17	Vertical
336.04	43.94	15.99	2.55	29.80	32.68	46.00	-13.32	Vertical
515.44	44.59	18.89	3.37	29.30	37.55	46.00	-8.45	Vertical
59.23	41.61	14.74	0.85	29.93	27.27	40.00	-12.73	Horizontal
114.92	43.59	13.31	1.32	29.60	28.62	43.50	-14.88	Horizontal
152.66	50.35	10.39	1.59	29.39	32.94	43.50	-10.56	Horizontal
219.85	50.66	13.17	1.96	29.39	36.40	46.00	-9.60	Horizontal
504.71	43.06	18.68	3.33	29.30	35.77	46.00	-10.23	Horizontal
651.94	42.66	20.65	3.92	29.25	37.98	46.00	-8.02	Horizontal



■ Above 1GHz

Test mode:		802.11b		Test channel:			est	
Peak value:								
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
4824.00	40.55	31.79	8.62	32.10	48.86	74.00	-25.14	Vertical
7236.00	34.38	36.19	11.68	31.97	50.28	74.00	-23.72	Vertical
9648.00	32.83	38.07	14.16	31.56	53.50	74.00	-20.50	Vertical
12060.00	*					74.00		Vertical
14472.00	*					74.00		Vertical
16884.00	*					74.00		Vertical
4824.00	39.18	31.79	8.62	32.10	47.49	74.00	-26.51	Horizontal
7236.00	34.11	36.19	11.68	31.97	50.01	74.00	-23.99	Horizontal
9648.00	32.40	38.07	14.16	31.56	53.07	74.00	-20.93	Horizontal
12060.00	*					74.00		Horizontal
14472.00	*					74.00		Horizontal
16884.00	*					74.00		Horizontal
AV value:								
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
4824.00	29.61	31.79	8.62	32.10	37.92	54.00	-16.08	Vertical
7236.00	23.24	36.19	11.68	31.97	39.14	54.00	-14.86	Vertical
9648.00	23.17	38.07	14.16	31.56	43.84	54.00	-10.16	Vertical
12060.00	*					54.00		Vertical
14472.00	*					54.00		Vertical
16884.00	*					54.00		Vertical
4824.00	28.70	31.79	8.62	32.10	37.01	54.00	-16.99	Horizontal
7236.00	22.69	36.19	11.68	31.97	38.59	54.00	-15.41	Horizontal
9648.00	22.14	38.07	14.16	31.56	42.81	54.00	-11.19	Horizontal
12060.00	*					54.00		Horizontal
14472.00	*					54.00		Horizontal
16884.00	*					54.00		Horizontal

Remark:

^{1.} Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

^{2. &}quot;*", means this data is the too weak instrument of signal is unable to test.



Test mode:		802.11b		Test	channel:	Midd	le	
Peak value:						<u> </u>		
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
4874.00	39.56	31.85	8.66	32.12	47.95	74.00	-26.05	Vertical
7311.00	34.42	36.37	11.71	31.91	50.59	74.00	-23.41	Vertical
9748.00	33.83	38.27	14.25	31.56	54.79	74.00	-19.21	Vertical
12185.00	*					74.00		Vertical
14622.00	*					74.00		Vertical
17059.00	*					74.00		Vertical
4874.00	40.01	31.85	8.66	32.12	48.40	74.00	-25.60	Horizontal
7311.00	33.05	36.37	11.71	31.91	49.22	74.00	-24.78	Horizontal
9748.00	33.71	38.27	14.25	31.56	54.67	74.00	-19.33	Horizontal
12185.00	*					74.00		Horizontal
14622.00	*					74.00		Horizontal
17059.00	*					74.00		Horizontal
AV value:		•					•	
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
4874.00	30.40	31.85	8.66	32.12	38.79	54.00	-15.21	Vertical
7311.00	22.73	36.37	11.71	31.91	38.90	54.00	-15.10	Vertical
9748.00	23.08	38.27	14.25	31.56	44.04	54.00	-9.96	Vertical
12185.00	*					54.00		Vertical
14622.00	*					54.00		Vertical
17059.00	*					54.00		Vertical
4874.00	30.11	31.85	8.66	32.12	38.50	54.00	-15.50	Horizontal
7311.00	22.13	36.37	11.71	31.91	38.30	54.00	-15.70	Horizontal
9748.00	23.42	38.27	14.25	31.56	44.38	54.00	-9.62	Horizontal
12185.00	*					54.00		Horizontal
14622.00	*					54.00		Horizontal
17059.00	*	_				54.00		Horizontal

Remark:

^{1.} Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

^{2. &}quot;*", means this data is the too weak instrument of signal is unable to test.



Test mode:		802.11b		Te	est cha	nnel:	Hig	hest	
Peak value:									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Pream Facto (dB)	r	Level dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924.00	45.24	31.90	8.70	32.15		53.69	74.00	-20.31	Vertical
7386.00	35.20	36.49	11.76	31.83	,	51.62	74.00	-22.38	Vertical
9848.00	37.19	38.62	14.31	31.77	,	58.35	74.00	-15.65	Vertical
12310.00	*						74.00		Vertical
14772.00	*						74.00		Vertical
17234.00	*						74.00		Vertical
4924.00	44.49	31.90	8.70	32.15		52.94	74.00	-21.06	Horizontal
7386.00	34.07	36.49	11.76	31.83	,	50.49	74.00	-23.51	Horizontal
9848.00	33.35	38.62	14.31	31.77	•	54.51	74.00	-19.49	Horizontal
12310.00	*						74.00		Horizontal
14772.00	*						74.00		Horizontal
17234.00	*						74.00		Horizontal
AV value:									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Pream Facto (dB)	r	Level BuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924.00	36.13	31.90	8.70	32.15		44.58	54.00	-9.42	Vertical
7386.00	25.10	36.49	11.76	31.83	,	41.52	54.00	-12.48	Vertical
9848.00	25.69	38.62	14.31	31.77	•	46.85	54.00	-7.15	Vertical
12310.00	*						54.00		Vertical
14772.00	*						54.00		Vertical
17234.00	*						54.00		Vertical
4924.00	34.84	31.90	8.70	32.15		43.29	54.00	-10.71	Horizontal
7386.00	23.45	36.49	11.76	31.83		39.87	54.00	-14.13	Horizontal
9848.00	22.60	38.62	14.31	31.77		43.76	54.00	-10.24	Horizontal
12310.00	*						54.00		Horizontal
14772.00	*						54.00		Horizontal
17234.00	*						54.00		Horizontal

Remark:

^{1.} Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

^{2. &}quot;*", means this data is the too weak instrument of signal is unable to test.



Test mode:		802.11g		Test	channel:	lowes	st	
Peak value:								
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
4824.00	40.55	31.79	8.62	32.10	48.86	74.00	-25.14	Vertical
7236.00	34.38	36.19	11.68	31.97	50.28	74.00	-23.72	Vertical
9648.00	32.83	38.07	14.16	31.56	53.50	74.00	-20.50	Vertical
12060.00	*					74.00		Vertical
14472.00	*					74.00		Vertical
16884.00	*					74.00		Vertical
4824.00	39.18	31.79	8.62	32.10	47.49	74.00	-26.51	Horizontal
7236.00	34.11	36.19	11.68	31.97	50.01	74.00	-23.99	Horizontal
9648.00	32.40	38.07	14.16	31.56	53.07	74.00	-20.93	Horizontal
12060.00	*					74.00		Horizontal
14472.00	*					74.00		Horizontal
16884.00	*					74.00		Horizontal
AV value:								
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
4824.00	29.61	31.79	8.62	32.10	37.92	54.00	-16.08	Vertical
7236.00	23.24	36.19	11.68	31.97	39.14	54.00	-14.86	Vertical
9648.00	23.17	38.07	14.16	31.56	43.84	54.00	-10.16	Vertical
12060.00	*					54.00		Vertical
14472.00	*					54.00		Vertical
16884.00	*					54.00		Vertica
4824.00	28.70	31.79	8.62	32.10	37.01	54.00	-16.99	Horizontal
7236.00	22.69	36.19	11.68	31.97	38.59	54.00	-15.41	Horizontal
9648.00	22.14	38.07	14.16	31.56	42.81	54.00	-11.19	Horizontal
12060.00	*	_				54.00		Horizontal
14472.00	*					54.00		Horizontal
16884.00	*	_				54.00		Horizontal

Remark:

^{1.} Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

^{2. &}quot;*", means this data is the too weak instrument of signal is unable to test.



Test mode:		802.11g			Test	channel:	Mid	dle	
Peak value:									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Prea Fac (dl	tor	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874.00	39.56	31.85	8.66	32.	12	47.95	74.00	-26.05	Vertical
7311.00	34.42	36.37	11.71	31.	91	50.59	74.00	-23.41	Vertical
9748.00	33.83	38.27	14.25	31.	56	54.79	74.00	-19.21	Vertical
12185.00	*						74.00		Vertical
14622.00	*						74.00		Vertical
17059.00	*						74.00		Vertical
4874.00	40.01	31.85	8.66	32.	12	48.40	74.00	-25.60	Horizontal
7311.00	33.05	36.37	11.71	31.	91	49.22	74.00	-24.78	Horizontal
9748.00	33.71	38.27	14.25	31.	56	54.67	74.00	-19.33	Horizontal
12185.00	*						74.00		Horizontal
14622.00	*						74.00		Horizontal
17059.00	*						74.00		Horizontal
AV value:									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Prea Fac (dl	tor	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874.00	30.40	31.85	8.66	32.	12	38.79	54.00	-15.21	Vertical
7311.00	22.73	36.37	11.71	31.	91	38.90	54.00	-15.10	Vertical
9748.00	23.08	38.27	14.25	31.	56	44.04	54.00	-9.96	Vertical
12185.00	*						54.00		Vertical
14622.00	*						54.00		Vertical
17059.00	*						54.00		Vertical
4874.00	30.11	31.85	8.66	32.	12	38.50	54.00	-15.50	Horizontal
7311.00	22.13	36.37	11.71	31.	91	38.30	54.00	-15.70	Horizontal
9748.00	23.42	38.27	14.25	31.	56	44.38	54.00	-9.62	Horizontal
12185.00	*						54.00		Horizontal
14622.00	*						54.00		Horizontal
17059.00	*						54.00		Horizontal

Remark:

^{1.} Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

^{2. &}quot;*", means this data is the too weak instrument of signal is unable to test.



Test mode:		802.11g		Test	channel:	High	est	
Peak value:				<u> </u>		<u> </u>		
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
4924.00	45.24	31.90	8.70	32.15	53.69	74.00	-20.31	Vertical
7386.00	35.20	36.49	11.76	31.83	51.62	74.00	-22.38	Vertical
9848.00	37.19	38.62	14.31	31.77	58.35	74.00	-15.65	Vertical
12310.00	*					74.00		Vertical
14772.00	*					74.00		Vertical
17234.00	*					74.00		Vertical
4924.00	44.49	31.90	8.70	32.15	52.94	74.00	-21.06	Horizontal
7386.00	34.07	36.49	11.76	31.83	50.49	74.00	-23.51	Horizontal
9848.00	33.35	38.62	14.31	31.77	54.51	74.00	-19.49	Horizontal
12310.00	*					74.00		Horizontal
14772.00	*					74.00		Horizontal
17234.00	*					74.00		Horizontal
AV value:								
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
4924.00	36.13	31.90	8.70	32.15	44.58	54.00	-9.42	Vertical
7386.00	25.10	36.49	11.76	31.83	41.52	54.00	-12.48	Vertical
9848.00	25.69	38.62	14.31	31.77	46.85	54.00	-7.15	Vertical
12310.00	*					54.00		Vertical
14772.00	*					54.00		Vertical
17234.00	*					54.00		Vertical
4924.00	34.84	31.90	8.70	32.15	43.29	54.00	-10.71	Horizontal
7386.00	23.45	36.49	11.76	31.83	39.87	54.00	-14.13	Horizontal
9848.00	22.60	38.62	14.31	31.77	43.76	54.00	-10.24	Horizontal
12310.00	*					54.00		Horizontal
14772.00	*					54.00		Horizontal
17234.00	*			-		54.00		Horizontal

Remark:

Xixiang Road, Baoan District, Shenzhen, Guangdong, China 518102

^{1.} Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

^{2. &}quot;*", means this data is the too weak instrument of signal is unable to test.



Test mode:		802.11n(H	T20)	Т	est c	channel:	Lowe	est	
Peak value:									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Pream Facto (dB)	or or	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4824.00	40.55	31.79	8.62	32.10	0	48.86	74.00	-25.14	Vertical
7236.00	34.38	36.19	11.68	31.97	7	50.28	74.00	-23.72	Vertical
9648.00	32.83	38.07	14.16	31.56	6	53.50	74.00	-20.50	Vertical
12060.00	*						74.00		Vertical
14472.00	*						74.00		Vertical
16884.00	*						74.00		Vertical
4824.00	39.18	31.79	8.62	32.10	0	47.49	74.00	-26.51	Horizontal
7236.00	34.11	36.19	11.68	31.97	7	50.01	74.00	-23.99	Horizontal
9648.00	32.40	38.07	14.16	31.56	6	53.07	74.00	-20.93	Horizontal
12060.00	*						74.00		Horizontal
14472.00	*						74.00		Horizontal
16884.00	*						74.00		Horizontal
AV value:				T					
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Pream Facto (dB)	or	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4824.00	29.61	31.79	8.62	32.10	0	37.92	54.00	-16.08	Vertical
7236.00	23.24	36.19	11.68	31.97	7	39.14	54.00	-14.86	Vertical
9648.00	23.17	38.07	14.16	31.56	6	43.84	54.00	-10.16	Vertical
12060.00	*						54.00		Vertical
14472.00	*						54.00		Vertical
16884.00	*						54.00		Vertical
4824.00	28.70	31.79	8.62	32.10	0	37.01	54.00	-16.99	Horizontal
7236.00	22.69	36.19	11.68	31.97	7	38.59	54.00	-15.41	Horizontal
9648.00	22.14	38.07	14.16	31.56	6	42.81	54.00	-11.19	Horizontal
12060.00	*						54.00		Horizontal
14472.00	*						54.00		Horizontal
16884.00	*						54.00		Horizontal

Remark:

^{1.} Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

^{2. &}quot;*", means this data is the too weak instrument of signal is unable to test.



Test mode:		802.11n(H	T20)	Te	est c	hannel:	Midd	le	
Peak value:									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Pream Facto (dB)		Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874.00	39.56	31.85	8.66	32.12	2	47.95	74.00	-26.05	Vertical
7311.00	34.42	36.37	11.71	31.91		50.59	74.00	-23.41	Vertical
9748.00	33.83	38.27	14.25	31.56	3	54.79	74.00	-19.21	Vertical
12185.00	*						74.00		Vertical
14622.00	*						74.00		Vertical
17059.00	*						74.00		Vertical
4874.00	40.01	31.85	8.66	32.12	2	48.40	74.00	-25.60	Horizontal
7311.00	33.05	36.37	11.71	31.91		49.22	74.00	-24.78	Horizontal
9748.00	33.71	38.27	14.25	31.56	ò	54.67	74.00	-19.33	Horizontal
12185.00	*						74.00		Horizontal
14622.00	*						74.00		Horizontal
17059.00	*						74.00		Horizontal
AV value:									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Pream Facto (dB)		Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874.00	30.40	31.85	8.66	32.12	2	38.79	54.00	-15.21	Vertical
7311.00	22.73	36.37	11.71	31.91		38.90	54.00	-15.10	Vertical
9748.00	23.08	38.27	14.25	31.56	3	44.04	54.00	-9.96	Vertical
12185.00	*						54.00		Vertical
14622.00	*						54.00		Vertical
17059.00	*						54.00		Vertical
4874.00	30.11	31.85	8.66	32.12	2	38.50	54.00	-15.50	Horizontal
7311.00	22.13	36.37	11.71	31.91		38.30	54.00	-15.70	Horizontal
9748.00	23.42	38.27	14.25	31.56	3	44.38	54.00	-9.62	Horizontal
12185.00	*						54.00		Horizontal
14622.00	*						54.00		Horizontal
17059.00	*						54.00		Horizontal

Remark:

^{1.} Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

^{2. &}quot;*", means this data is the too weak instrument of signal is unable to test.



Test mode:		802.11n(H	T20)	Test		channel:		Highe	est	
Peak value:										
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Prea Fac (dl	tor	Level (dBuV/m)	Limit (dBu\		Over Limit (dB)	polarization
4924.00	45.24	31.90	8.70	32.	15	53.69	74.0	00	-20.31	Vertical
7386.00	35.20	36.49	11.76	31.	83	51.62	74.0	00	-22.38	Vertical
9848.00	37.19	38.62	14.31	31.	77	58.35	74.0	00	-15.65	Vertical
12310.00	*						74.0	00		Vertical
14772.00	*						74.0	00		Vertical
17234.00	*						74.0	00		Vertical
4924.00	44.49	31.90	8.70	32.	15	52.94	74.0	00	-21.06	Horizontal
7386.00	34.07	36.49	11.76	31.	83	50.49	74.0	00	-23.51	Horizontal
9848.00	33.35	38.62	14.31	31.	77	54.51	74.0	00	-19.49	Horizontal
12310.00	*						74.0	00		Horizontal
14772.00	*						74.0	00		Horizontal
17234.00	*						74.0	00		Horizontal
AV value:				ı					T	
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Prea Fac (dl	tor	Level (dBuV/m)	Limit (dBu\		Over Limit (dB)	polarization
4924.00	36.13	31.90	8.70	32.	15	44.58	54.0	00	-9.42	Vertical
7386.00	25.10	36.49	11.76	31.	83	41.52	54.0	00	-12.48	Vertical
9848.00	25.69	38.62	14.31	31.	77	46.85	54.0	00	-7.15	Vertical
12310.00	*						54.0	00		Vertical
14772.00	*						54.0	00		Vertical
17234.00	*						54.0	00		Vertical
4924.00	34.84	31.90	8.70	32.	15	43.29	54.0	00	-10.71	Horizontal
7386.00	23.45	36.49	11.76	31.	83	39.87	54.0	00	-14.13	Horizontal
9848.00	22.60	38.62	14.31	31.	77	43.76	54.0	00	-10.24	Horizontal
12310.00	*						54.0	00		Horizontal
14772.00	*						54.0	00		Horizontal
17234.00	*						54.0	00		Horizontal

Remark:

¹ Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

^{2 &}quot;*", means this data is the too weak instrument of signal is unable to test.



802.11n(HT40)

Test mode:

Report No.: GTS201610000218E02

Lowest

Peak value: Read Level (dBuV) Antenna Factor (dB/m) Cable Loss (dB) Preamp Factor (dBuV/m) Level (dBuV/m) Limit Line (dBuV/m) Over Limit (dB) polar (dBuV/m) 4844.00 40.55 31.81 8.63 32.11 48.88 74.00 -25.12 Verify 7266.00 34.38 36.28 11.69 31.94 50.41 74.00 -23.59 Verify 9688.00 32.83 38.13 14.21 31.52 53.65 74.00 -20.35 Verify 12060.00 * 74.00 Verify 74.00 Verify 4844.00 39.18 31.81 8.63 32.11 47.51 74.00 -26.49 Hor 7266.00 34.11 36.28 11.69 31.94 50.14 74.00 -26.49 Hor 9688.00 32.40 38.13 14.21 31.52 53.22 74.00 -20.78 Hor 12060.00 * 74.00 -20.78 Hor 74.00 -20.78 Hor
Frequency (MHz)
7266.00 34.38 36.28 11.69 31.94 50.41 74.00 -23.59 Ve 9688.00 32.83 38.13 14.21 31.52 53.65 74.00 -20.35 Ve 12060.00 * 74.00 Ve 74.00 Ve 16884.00 * 74.00 Ve 74.00 Ve 4844.00 39.18 31.81 8.63 32.11 47.51 74.00 -26.49 Hor 7266.00 34.11 36.28 11.69 31.94 50.14 74.00 -23.86 Hor 9688.00 32.40 38.13 14.21 31.52 53.22 74.00 -20.78 Hor 12060.00 * 74.00 Hor 74.00 Hor
9688.00 32.83 38.13 14.21 31.52 53.65 74.00 -20.35 Ve 12060.00 * 74.00 Ve 14472.00 * 74.00 Ve 16884.00 * 74.00 Ve 4844.00 39.18 31.81 8.63 32.11 47.51 74.00 -26.49 Hor 7266.00 34.11 36.28 11.69 31.94 50.14 74.00 -23.86 Hor 9688.00 32.40 38.13 14.21 31.52 53.22 74.00 -20.78 Hor 12060.00 * 74.00 Hor 74.00 Hor
12060.00 * 74.00 Ve 14472.00 * 74.00 Ve 16884.00 * 74.00 Ve 4844.00 39.18 31.81 8.63 32.11 47.51 74.00 -26.49 Hor 7266.00 34.11 36.28 11.69 31.94 50.14 74.00 -23.86 Hor 9688.00 32.40 38.13 14.21 31.52 53.22 74.00 -20.78 Hor 12060.00 * 74.00 Hor 14472.00 * 74.00 Hor
14472.00 * 74.00 Ve 16884.00 * 74.00 Ve 4844.00 39.18 31.81 8.63 32.11 47.51 74.00 -26.49 Hor 7266.00 34.11 36.28 11.69 31.94 50.14 74.00 -23.86 Hor 9688.00 32.40 38.13 14.21 31.52 53.22 74.00 -20.78 Hor 12060.00 * 74.00 Hor 14472.00 * 74.00 Hor
16884.00 * 74.00 Ve 4844.00 39.18 31.81 8.63 32.11 47.51 74.00 -26.49 Hor 7266.00 34.11 36.28 11.69 31.94 50.14 74.00 -23.86 Hor 9688.00 32.40 38.13 14.21 31.52 53.22 74.00 -20.78 Hor 12060.00 * 74.00 Hor 14472.00 * 74.00 Hor
4844.00 39.18 31.81 8.63 32.11 47.51 74.00 -26.49 Hor 7266.00 34.11 36.28 11.69 31.94 50.14 74.00 -23.86 Hor 9688.00 32.40 38.13 14.21 31.52 53.22 74.00 -20.78 Hor 12060.00 * 74.00 Hor 14472.00 * 74.00 Hor
7266.00 34.11 36.28 11.69 31.94 50.14 74.00 -23.86 Hor 9688.00 32.40 38.13 14.21 31.52 53.22 74.00 -20.78 Hor 12060.00 * 74.00 Hor 14472.00 * 74.00 Hor
9688.00 32.40 38.13 14.21 31.52 53.22 74.00 -20.78 Hor 12060.00 * 74.00 Hor 14472.00 *
12060.00 * 74.00 Hor 14472.00 * 74.00 Hor
14472.00 * 74.00 Hor
14472.00
16884 00 * 74 00 Hor
1000 1100 1 1100
AV value:
Frequency (MHz) Read Level Factor (dBuV) Read Level (dBuW) Read Level (dBm) Factor (dB) Read Level (dBuV/m) Read Level (dBuV/m) Factor (dBuV/m) Factor (dBuV/m)
4844.00 29.61 31.81 8.63 32.11 37.94 54.00 -16.06 Ve
7266.00 23.24 36.28 11.69 31.94 39.27 54.00 -14.73 Ve
9688.00 23.17 38.13 14.21 31.52 43.99 54.00 -10.01 Ve
9688.00 23.17 38.13 14.21 31.52 43.99 54.00 -10.01 Ve
12060.00 * 54.00 Ve
12060.00 * 54.00 Ve 14472.00 * 54.00 Ve
12060.00 * 14472.00 * 16884.00 * 54.00 Ve 54.00 Ve
12060.00 * 14472.00 * 16884.00 * 4844.00 28.70 31.81 8.63 32.11 37.03 54.00 -16.97 Hor
12060.00 * 14472.00 * 16884.00 * 4844.00 28.70 31.81 8.63 32.11 37.03 54.00 -16.97 Hor 7266.00 22.69 36.28 11.69 31.94 38.72 54.00 -15.28 Hor
12060.00 * 54.00 Ve 14472.00 * 54.00 Ve 16884.00 * 54.00 Ve 4844.00 28.70 31.81 8.63 32.11 37.03 54.00 -16.97 Hor 7266.00 22.69 36.28 11.69 31.94 38.72 54.00 -15.28 Hor 9688.00 22.14 38.13 14.21 31.52 42.96 54.00 -11.04 Hor

Test channel:

Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. "*", means this data is the too weak instrument of signal is unable to test.



Test mode:		802.11n(H	IT40)	Test	channel:	Midd	le	
Peak value:								
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
4874.00	39.56	31.85	8.66	32.12	47.95	74.00	-26.05	Vertical
7311.00	34.42	36.37	11.71	31.91	50.59	74.00	-23.41	Vertical
9748.00	33.83	38.27	14.25	31.56	54.79	74.00	-19.21	Vertical
12185.00	*					74.00		Vertical
14622.00	*					74.00		Vertical
17059.00	*					74.00		Vertical
4874.00	40.01	31.85	8.66	32.12	48.40	74.00	-25.60	Horizontal
7311.00	33.05	36.37	11.71	31.91	49.22	74.00	-24.78	Horizontal
9748.00	33.71	38.27	14.25	31.56	54.67	74.00	-19.33	Horizontal
12185.00	*					74.00		Horizontal
14622.00	*					74.00		Horizontal
17059.00	*					74.00		Horizontal
AV value:								
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
4874.00	30.40	31.85	8.66	32.12	38.79	54.00	-15.21	Vertical
7311.00	22.73	36.37	11.71	31.91	38.90	54.00	-15.10	Vertical
9748.00	23.08	38.27	14.25	31.56	44.04	54.00	-9.96	Vertical
12185.00	*					54.00		Vertical
14622.00	*					54.00		Vertical
17059.00	*					54.00		Vertical
4874.00	30.11	31.85	8.66	32.12	38.50	54.00	-15.50	Horizontal
7311.00	22.13	36.37	11.71	31.91	38.30	54.00	-15.70	Horizontal
9748.00	23.42	38.27	14.25	31.56	44.38	54.00	-9.62	Horizontal
12185.00	*					54.00		Horizontal
14622.00	*					54.00		Horizontal
17059.00	*			-		54.00		Horizontal

Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. "*", means this data is the too weak instrument of signal is unable to test.



Test mode:		802.11n(H	T40)	Test c		channel:	High		est	
Peak value:										
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
4904.00	45.24	31.88	8.68	32.13		53.67	74.00		-20.33	Vertical
7356.00	35.20	36.45	11.75	31.86		51.54	74.00		-22.46	Vertical
9808.00	37.19	38.43	14.29	31.68		58.23	74.00		-15.77	Vertical
12310.00	*						74.00			Vertical
14772.00	*						74.00			Vertical
17234.00	*						74.00			Vertical
4904.00	44.49	31.88	8.68	32.13		52.92	74.00		-21.08	Horizontal
7356.00	34.07	36.45	11.75	31.86		50.41	74.00		-23.59	Horizontal
9808.00	33.35	38.43	14.29	31.6	86	54.39	74.0	00	-19.61	Horizontal
12310.00	*						74.0	00		Horizontal
14772.00	*						74.0	00		Horizontal
17234.00	*						74.0	00		Horizontal
AV value:				ı						
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Prea Fac (dE	tor	Level (dBuV/m)	Limit (dBu\		Over Limit (dB)	polarization
4904.00	36.13	31.88	8.68	32.	13	44.56	54.0	00	-9.44	Vertical
7356.00	25.10	36.45	11.75	31.8	36	41.44	54.0	00	-12.56	Vertical
9808.00	25.69	38.43	14.29	31.6	86	46.73	54.0	00	-7.27	Vertical
12310.00	*						54.0	00		Vertical
14772.00	*						54.0	00		Vertical
17234.00	*						54.0	00		Vertical
4904.00	34.84	31.88	8.68	32.1	13	43.27	54.0	00	-10.73	Horizontal
7356.00	23.45	36.45	11.75	31.8	36	39.79	54.0	00	-14.21	Horizontal
9808.00	22.60	38.43	14.29	31.6	86	43.64	54.0	00	-10.36	Horizontal
12310.00	*						54.0	00		Horizontal
14772.00	*						54.0	00		Horizontal
17234.00	*						54.0	00		Horizontal

Remark:

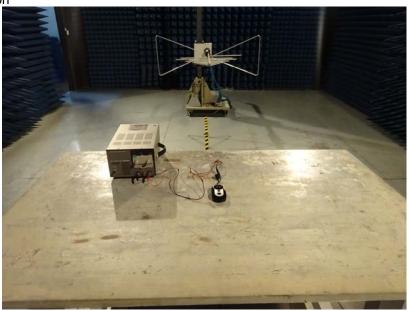
¹ Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

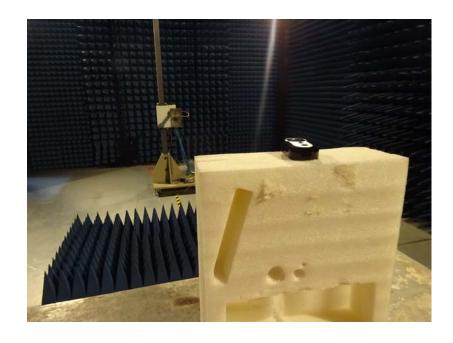
^{2 &}quot;*", means this data is the too weak instrument of signal is unable to test.



8 Test Setup Photo

Radiated Emission







Conducted Emission



9 EUT Constructional Details

Reference to the test report No.: GTS201610000218E01

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