



# Variant FCC RF Test Report

APPLICANT : Hewlett-Packard Co., Ltd.  
EQUIPMENT : Tablet PC  
BRAND NAME : HP  
MODEL NAME : HSTNH-B17C  
MARKETING NAME : HP SLATE 10 HD  
FCC ID : B94HHB17C  
STANDARD : FCC Part 15 Subpart C §15.247  
CLASSIFICATION : (DTS) Digital Transmission System

This is a variant report which is only valid together with the original test report. The product was received on Jul. 17, 2013 and testing was completed on Oct. 01, 2013. We, SPORTON INTERNATIONAL (KUNSHAN) INC., would like to declare that the tested sample has been evaluated in accordance with the procedures and shown to be compliant with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL (KUNSHAN) INC., the test report shall not be reproduced except in full.

Reviewed by: Joseph Lin / Supervisor

Approved by: Jones Tsai / Manager



**SPORTON INTERNATIONAL (KUNSHAN) INC.**  
**No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P.R.C.**



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### SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	15.247(d)	RSS-210 A8.5	Radiated Band Edges and Radiated Spurious Emission	15.209(a) & 15.247(d)	Pass	Under limit 8.67 dB at 2389.83 MHz



# 1 General Description

## 1.1 Applicant

Hewlett-Packard Co., Ltd.  
1501 Page Mill Road Palo Alto, CA 94304 United States

## 1.2 Manufacturer

BYD Precision Manufacture Co., Ltd.  
No.3001, Baohe Road, Baolong Industrial, Longgang, Shenzhen, 518116, P.R.China

## 1.3 Feature of Equipment Under Test

Product Feature	
Equipment	Tablet PC
Brand Name	HP
Model Name	HSTNH-B17C
Marketing Name	HP SLATE 10 HD
FCC ID	B94HHB17C
EUT supports Radios application	WLAN 802.11abgn / Bluetooth v3.0+EDR
HW Version	DVT
SW Version	W101HM_10_WIFI_V01.97_20130925
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

## 1.4 Product Specification of Equipment Under Test

Product Specification subjective to this standard	
Tx/Rx Channel Frequency Range	802.11b/g/n : 2412 MHz ~ 2462 MHz 802.11a/n: 5745~5825MHz.
Antenna Type	802.11b/g/n : Fixed Internal Antenna 802.11a/n : Fixed Internal Antenna
Type of Modulation	802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11a/g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)

## 1.5 Modification of EUT

No modifications are made to the EUT during all test items.



### 1.6 Testing Site

<b>Test Site</b>	SPORTON INTERNATIONAL (KUNSHAN) INC.	
<b>Test Site Location</b>	No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P.R.C. TEL: +86-0512-5790-0158 FAX: +86-0512-5790-0958	
<b>Test Site No.</b>	<b>Sporton Site No.</b>	<b>FCC/IC Registration No.</b>
	03CH01-KS	149928/4086E-1

**Note:** The test site complies with ANSI C63.4 2003 requirement.

### 1.7 Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ FCC Part 15 Subpart C §15.247
- ♦ FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v03r01
- ♦ ANSI C63.4-2003
- ♦ IC RSS-210 Issue 8
- ♦ IC RSS-Gen Issue 3
- ♦ NOTICE 2012-DRS0126

**Remark:**

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.



## 2 Test Configuration of Equipment Under Test

### 2.1 Carrier Frequency Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
2400-2483.5 MHz	1	2412	7	2442
	2	2417	8	2447
	3	2422	9	2452
	4	2427	10	2457
	5	2432	11	2462
	6	2437		

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5725-5850 MHz Band 4	149	5745	159	5795
	151	5755	161	5805
	153	5765	165	5825
	157	5785	-	-



## 2.2 Test Mode

Final results of test modes, data rates and test channels are shown as following table.

<2.4GHz>

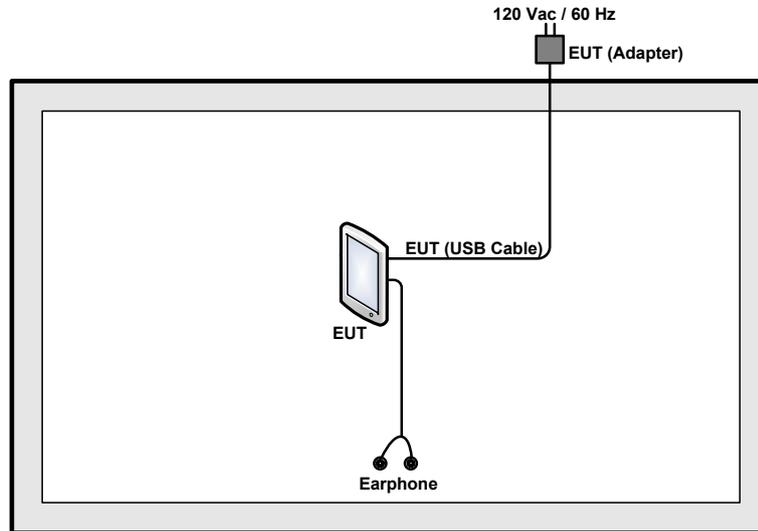
Test Cases				
Radiated TCs	Radiated Band Edge	802.11b	1 Mbps	1/11
		802.11g	6 Mbps	1/11
		802.11n HT20	MCS0	1/11
		802.11n HT40	MCS0	3/9
	Radiated Spurious Emission	802.11b	1 Mbps	1/6/11
		802.11g	6 Mbps	1/6/11
		802.11n HT20	MCS0	1/6/11
		802.11n HT40	MCS0	3/6/9

<5GHz>

Test Cases				
Radiated TCs	Radiated Spurious Emission	802.11a	6 Mbps	149/157/165
		802.11n HT20	MCS0	149/157/165
		802.11n HT40	MCS0	151/159

## 2.3 Connection Diagram of Test System

<WLAN Tx Mode>



## 2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Earphone	Lenovo	SH100	FCC DoC	N/A	Unshielded, 1.2 m

## 2.5 EUT Operation Test Setup

For WLAN function, the engineering test program was provided and enabled to make EUT continuous transmit/receive.



### 3 Test Result

#### 3.1 Radiated Band Edges and Spurious Emission Measurement

##### 3.1.1 Limit of Radiated band edge and Spurious Emission Measurement

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. If the output power of this device was measured by spectrum analyzer, the attenuation under this paragraph shall be 30 dB instead of 20 dB. In addition, radiated emissions which fall in the restricted bands must also comply with the FCC section 15.209 limits as below.

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

##### 3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.



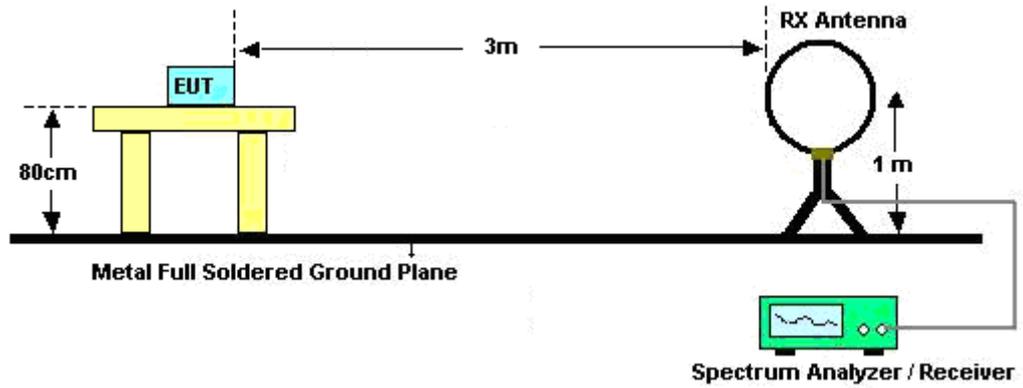
### 3.1.3 Test Procedures

1. The testing follows FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v03r01.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. The EUT was placed on a turntable with 0.8 meter above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
6. For measurement below 1GHz, If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
7. Use the following spectrum analyzer settings:
  - (1) Span shall wide enough to fully capture the emission being measured;
  - (2) Set RBW=100 kHz for  $f < 1$  GHz;  $VBW \geq RBW$ ; Sweep = auto; Detector function = peak; Trace = max hold;
  - (3) Set RBW = 1 MHz, VBW= 3MHz for  $f \geq 1$  GHz for peak measurement.  
For average measurement:
    - $VBW = 10$  Hz, when duty cycle is no less than 98 percent.
    - $VBW \geq 1/T$ , when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

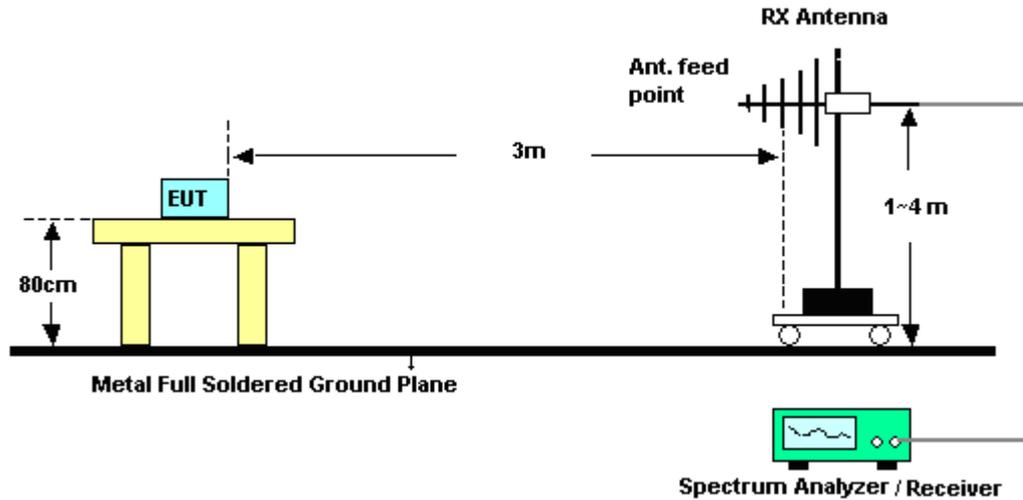
Band	Duty Cycle(%)	T( $\mu$ s)	1/T(kHz)	VBW Setting
802.11b	100.00	-	-	10Hz
802.11g	100.00	-	-	10Hz
2.4GHz 802.11n HT20	100.00	-	-	10Hz
2.4GHz 802.11n HT40	100.00	-	-	10Hz
802.11a	100.00	-	-	10Hz
5GHz 802.11n HT20	100.00	-	-	10Hz
5GHz 802.11n HT40	100.00	-	-	10Hz

### 3.1.4 Test Setup

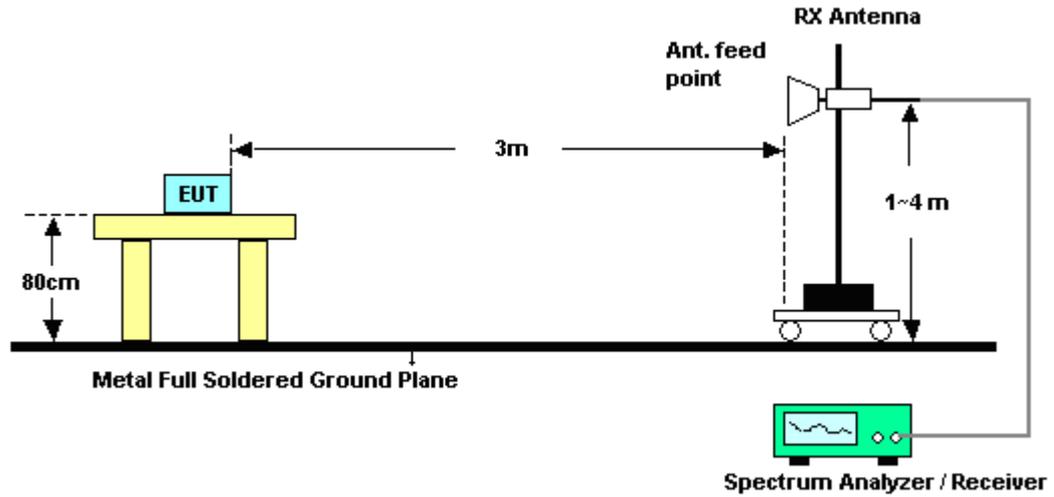
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



### 3.1.5 Test Results of Radiated Spurious Emissions (9kHz ~ 30MHz)

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.



3.1.6 Test Result of Radiated Spurious at Band Edges

Test Mode :	802.11b	Temperature :	22~23°C
Test Band :	Low	Relative Humidity :	42~43%
Test Channel :	01	Test Engineer :	Star Wei

ANTENNA POLARITY : HORIZONTAL										
Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Remark
2372.37	50.65	-23.35	74	45.36	32.83	3.16	30.7	100	178	Peak
2386.05	36.95	-17.05	54	31.6	32.86	3.17	30.68	100	178	Average

ANTENNA POLARITY : VERTICAL										
Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Remark
2386.41	52.17	-21.83	74	46.82	32.86	3.17	30.68	100	203	Peak
2386.41	38.82	-15.18	54	33.47	32.86	3.17	30.68	100	203	Average

Test Mode :	802.11g	Temperature :	22~23°C
Test Band :	Low	Relative Humidity :	42~43%
Test Channel :	01	Test Engineer :	Star Wei

ANTENNA POLARITY : HORIZONTAL										
Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Remark
2389.29	53.07	-20.93	74	47.72	32.86	3.17	30.68	130	246	Peak
2389.92	39.15	-14.85	54	33.8	32.86	3.17	30.68	130	246	Average

ANTENNA POLARITY : VERTICAL										
Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Remark
2388.93	58.32	-15.68	74	52.97	32.86	3.17	30.68	100	351	Peak
2389.92	42.05	-11.95	54	36.7	32.86	3.17	30.68	100	351	Average



Test Mode :	802.11n HT20	Temperature :	22~23°C
Test Band :	High	Relative Humidity :	42~43%
Test Channel :	11	Test Engineer :	Star Wei

ANTENNA POLARITY : HORIZONTAL										
Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Remark
2483.5	61.5	-12.5	74	55.87	33.01	3.22	30.6	103	250	Peak
2483.5	41.05	-12.95	54	35.42	33.01	3.22	30.6	103	250	Average

ANTENNA POLARITY : VERTICAL										
Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Remark
2483.62	64.16	-9.84	74	58.53	33.01	3.22	30.6	100	167	Peak
2483.5	42.97	-11.03	54	37.34	33.01	3.22	30.6	100	167	Average

Test Mode :	802.11n HT40	Temperature :	22~23°C
Test Band :	Low	Relative Humidity :	42~43%
Test Channel :	03	Test Engineer :	Star Wei

ANTENNA POLARITY : HORIZONTAL										
Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Remark
2388.93	61.72	-12.28	74	56.37	32.86	3.17	30.68	111	54	Peak
2389.83	43.55	-10.45	54	38.2	32.86	3.17	30.68	111	54	Average
2497.81	50.95	-23.05	74	45.26	33.05	3.23	30.59	100	288	Peak
2483.5	36.76	-17.24	54	31.13	33.01	3.22	30.6	100	288	Average

ANTENNA POLARITY : VERTICAL										
Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Remark
2388.48	64.48	-9.52	74	59.13	32.86	3.17	30.68	100	213	Peak
2389.83	45.33	-8.67	54	39.98	32.86	3.17	30.68	100	213	Average
2483.89	52.81	-21.19	74	47.18	33.01	3.22	30.6	100	195	Peak
2483.65	38.24	-15.76	54	32.61	33.01	3.22	30.6	100	195	Average



3.1.7 Test Result of Radiated Spurious Emission (30MHz ~ 10<sup>th</sup> Harmonic)

Note: Pre-scanned all test modes and only choose the worst case mode recorded in the test report for radiated spurious emission below 1GHz.

<b>Test Mode :</b>	802.11b	<b>Temperature :</b>	22~23°C
<b>Test Channel :</b>	01	<b>Relative Humidity :</b>	42~43%
<b>Test Engineer :</b>	Star Wei	<b>Polarization :</b>	Horizontal
<b>Remark :</b>	1. 2412 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Remark
2412	96.82	-	-	91.41	32.89	3.18	30.66	100	207	Peak
2412	91.77	-	-	86.36	32.89	3.18	30.66	100	207	Average
4824	50.29	-23.71	74	39.86	35.17	4.58	29.32	200	145	Peak

<b>Test Mode :</b>	802.11b	<b>Temperature :</b>	22~23°C
<b>Test Channel :</b>	01	<b>Relative Humidity :</b>	42~43%
<b>Test Engineer :</b>	Star Wei	<b>Polarization :</b>	Vertical
<b>Remark :</b>	1. 2412 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Remark
2412	104.2	-	-	98.79	32.89	3.18	30.66	100	185	Peak
2412	99.28	-	-	93.87	32.89	3.18	30.66	100	185	Average
4824	50.79	-23.21	74	40.36	35.17	4.58	29.32	145	63	Peak



<b>Test Mode :</b>	802.11g	<b>Temperature :</b>	22~23°C
<b>Test Channel :</b>	01	<b>Relative Humidity :</b>	42~43%
<b>Test Engineer :</b>	Star Wei	<b>Polarization :</b>	Horizontal
<b>Remark :</b>	1. 2412 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Remark
2412	100.6	-	-	95.19	32.89	3.18	30.66	132	265	Peak
2412	89.58	-	-	84.17	32.89	3.18	30.66	132	265	Average
4824	50.21	-23.79	74	39.78	35.17	4.58	29.32	100	23	Peak

<b>Test Mode :</b>	802.11g	<b>Temperature :</b>	22~23°C
<b>Test Channel :</b>	01	<b>Relative Humidity :</b>	42~43%
<b>Test Engineer :</b>	Star Wei	<b>Polarization :</b>	Vertical
<b>Remark :</b>	1. 2412 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Remark
2412	103.57	-	-	98.16	32.89	3.18	30.66	100	194	Peak
2412	92.85	-	-	87.44	32.89	3.18	30.66	100	194	Average
4824	50.35	-23.65	74	39.92	35.17	4.58	29.32	145	236	Peak



<b>Test Mode :</b>	2.4GHz 802.11n HT20	<b>Temperature :</b>	22~23°C
<b>Test Channel :</b>	11	<b>Relative Humidity :</b>	42~43%
<b>Test Engineer :</b>	Star Wei	<b>Polarization :</b>	Horizontal
<b>Remark :</b>	1. 2462 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Remark
2462	102.43	-	-	96.86	32.98	3.21	30.62	126	243	Peak
2462	91.59	-	-	86.02	32.98	3.21	30.62	126	243	Average
4924	50.78	-23.22	74	40.29	35.19	4.61	29.31	100	178	Peak
7386	49.95	-24.05	74	38.27	36.24	5.66	30.22	112	203	Peak

<b>Test Mode :</b>	2.4GHz 802.11n HT20	<b>Temperature :</b>	22~23°C
<b>Test Channel :</b>	11	<b>Relative Humidity :</b>	42~43%
<b>Test Engineer :</b>	Star Wei	<b>Polarization :</b>	Vertical
<b>Remark :</b>	1. 2462 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Remark
2462	105.22	-	-	99.65	32.98	3.21	30.62	100	166	Peak
2462	94.02	-	-	88.45	32.98	3.21	30.62	100	166	Average
4924	51	-23	74	40.51	35.19	4.61	29.31	100	0	Peak
7386	51.15	-22.85	74	39.47	36.24	5.66	30.22	145	60	Peak



<b>Test Mode :</b>	2.4GHz 802.11n HT40	<b>Temperature :</b>	22~23°C
<b>Test Channel :</b>	03	<b>Relative Humidity :</b>	42~43%
<b>Test Engineer :</b>	Star Wei	<b>Polarization :</b>	Horizontal
<b>Remark :</b>	1. 2422 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Remark
90.14	23	-20.5	43.5	46.84	8.9	0.88	33.62	-	-	Peak
148.34	34.08	-9.42	43.5	56.41	10.14	1.11	33.58	123	256	Peak
220.12	31.94	-14.06	46	54	10.1	1.36	33.52	-	-	Peak
305.48	24.61	-21.39	46	43.24	13.13	1.61	33.37	-	-	Peak
416.06	19.9	-26.1	46	35.24	16.08	1.86	33.28	-	-	Peak
598.42	24.49	-21.51	46	36.59	18.6	2.25	32.95	-	-	Peak
2422	93.82	-	-	88.36	32.92	3.19	30.65	100	318	Peak
2422	83.38	-	-	77.92	32.92	3.19	30.65	100	318	Average
4844	50.08	-23.92	74	39.63	35.18	4.59	29.32	120	225	Peak
7266	50.83	-23.17	74	39.17	36.19	5.63	30.16	100	145	Peak



<b>Test Mode :</b>	2.4GHz 802.11n HT40	<b>Temperature :</b>	22~23°C
<b>Test Channel :</b>	03	<b>Relative Humidity :</b>	42~43%
<b>Test Engineer :</b>	Star Wei	<b>Polarization :</b>	Vertical
<b>Remark :</b>	1. 2422 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Remark
43.58	30.26	-9.74	40	53.23	10.03	0.62	33.62	145	123	Peak
94.02	26.67	-16.83	43.5	49.74	9.66	0.89	33.62	-	-	Peak
146.4	24.87	-18.63	43.5	47.06	10.29	1.1	33.58	-	-	Peak
176.47	24.36	-19.14	43.5	48	8.71	1.22	33.57	-	-	Peak
231.76	28.87	-17.13	46	49.91	11.04	1.4	33.48	-	-	Peak
576.11	24.48	-21.52	46	36.72	18.55	2.19	32.98	-	-	Peak
2422	102.59	-	-	97.13	32.92	3.19	30.65	100	205	Peak
2422	92.09	-	-	86.63	32.92	3.19	30.65	100	205	Average
4844	50.39	-23.61	74	39.94	35.18	4.59	29.32	120	45	Peak
7266	49.73	-24.27	74	38.07	36.19	5.63	30.16	136	0	Peak



<b>Test Mode :</b>	802.11a	<b>Temperature :</b>	22~23°C
<b>Test Channel :</b>	149	<b>Relative Humidity :</b>	42~43%
<b>Test Engineer :</b>	Star Wei	<b>Polarization :</b>	Horizontal
<b>Remark :</b>	1. 5745 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Remark
5745	105.51	-	-	94.19	35.52	5	29.2	176	195	Peak
5745	93.58	-	-	82.26	35.52	5	29.2	176	195	Average
11490	45.72	-28.28	74	53.31	15.14	7.85	30.58	145	125	Peak

<b>Test Mode :</b>	802.11a	<b>Temperature :</b>	22~23°C
<b>Test Channel :</b>	149	<b>Relative Humidity :</b>	42~43%
<b>Test Engineer :</b>	Star Wei	<b>Polarization :</b>	Vertical
<b>Remark :</b>	1. 5745 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Remark
5745	101.31	-	-	89.99	35.52	5	29.2	110	167	Peak
5745	89.92	-	-	78.6	35.52	5	29.2	110	167	Average
11490	45.31	-28.69	74	52.9	15.14	7.85	30.58	100	255	Peak



<b>Test Mode :</b>	5GHz 802.11n HT20	<b>Temperature :</b>	22~23°C
<b>Test Channel :</b>	149	<b>Relative Humidity :</b>	42~43%
<b>Test Engineer :</b>	Star Wei	<b>Polarization :</b>	Horizontal
<b>Remark :</b>	1. 5745 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Remark
5745	104.43	-	-	93.11	35.52	5	29.2	100	177	Peak
5745	92.49	-	-	81.17	35.52	5	29.2	100	177	Average
11490	46.85	-27.15	74	54.44	15.14	7.85	30.58	120	100	Peak

<b>Test Mode :</b>	5GHz 802.11n HT20	<b>Temperature :</b>	22~23°C
<b>Test Channel :</b>	149	<b>Relative Humidity :</b>	42~43%
<b>Test Engineer :</b>	Star Wei	<b>Polarization :</b>	Vertical
<b>Remark :</b>	1. 5745 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Remark
5745	103.86	-	-	92.54	35.52	5	29.2	171	53	Peak
5745	92.66	-	-	81.34	35.52	5	29.2	171	53	Average
11490	45.79	-28.21	74	53.38	15.14	7.85	30.58	123	156	Peak



<b>Test Mode :</b>	5GHz 802.11n HT40	<b>Temperature :</b>	22~23°C
<b>Test Channel :</b>	151	<b>Relative Humidity :</b>	42~43%
<b>Test Engineer :</b>	Star Wei	<b>Polarization :</b>	Horizontal
<b>Remark :</b>	1. 5755 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Remark
5755	102	-	-	90.66	35.53	5.01	29.2	100	182	Peak
5755	91.92	-	-	80.58	35.53	5.01	29.2	100	182	Average
11511	47.06	-26.94	74	54.62	15.16	7.86	30.58	100	125	Peak

<b>Test Mode :</b>	5GHz 802.11n HT40	<b>Temperature :</b>	22~23°C
<b>Test Channel :</b>	151	<b>Relative Humidity :</b>	42~43%
<b>Test Engineer :</b>	Star Wei	<b>Polarization :</b>	Vertical
<b>Remark :</b>	1. 5755 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Remark
5755	98.84	-	-	87.5	35.53	5.01	29.2	104	218	Peak
5755	88.01	-	-	76.67	35.53	5.01	29.2	104	218	Average
11511	45.73	-28.27	74	53.29	15.16	7.86	30.58	120	155	Peak



## 4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Test Receiver	R&S	ESCI	100534	9kHz~3GHz	Nov. 08, 2012	Oct. 01, 2013	Nov. 07, 2013	Radiation (03CH01-KS)
Spectrum Analyzer	R&S	FSP30	101399	9kHz~30GHz	May 23, 2013	Oct. 01, 2013	May 22, 2014	Radiation (03CH01-KS)
Bilog Antenna	SCHAFFNER	CBL6112D	23182	25MHz~2GHz	Dec. 07, 2012	Oct. 01, 2013	Dec. 06, 2013	Radiation (03CH01-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz-30MHz	Oct. 22, 2012	Oct. 01, 2013	Oct. 21, 2013	Radiation (03CH01-KS)
Double Ridge Horn Antenna	EMCO	3117	75959	1GHz~18GHz	Dec. 07, 2012	Oct. 01, 2013	Dec. 06, 2013	Radiation (03CH01-KS)
Amplifier	com-power	PA-103A	161069	1MHz~1GHz	May 23, 2013	Oct. 01, 2013	May 22, 2014	Radiation (03CH01-KS)
Amplifier	Agilent	8449B	3008A02370	1GHz~26.5GHz	Dec. 29, 2012	Oct. 01, 2013	Dec. 28, 2013	Radiation (03CH01-KS)
Active Horn Antenna	com-power	AHA-118	701023	1GHz~18GHz	Nov. 07, 2012	Oct. 01, 2013	Nov. 06, 2013	Radiation (03CH01-KS)
SHF-EHF Horn	Schwarzbeck	BBHA 9170	BBHA170249	15GHz~40GHz	Nov. 23, 2012	Oct. 01, 2013	Nov. 22, 2013	Radiation (03CH01-KS)
Turn Table	MF	MF7802	N/A	0 ~ 360 degree	N/A	Oct. 01, 2013	N/A	Radiation (03CH01-KS)
Antenna Mast	MF	MF7802	N/A	1 m - 4 m	N/A	Oct. 01, 2013	N/A	Radiation (03CH01-KS)



## 5 Uncertainty of Evaluation

### Uncertainty of Radiated Emission Measurement (30MHz ~ 1000MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	2.54
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### Uncertainty of Radiated Emission Measurement (1GHz ~ 40GHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	4.72
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## **Appendix B. Product Equality Declaration**

# Hewlett-Packard Co., Ltd

1501 Page Mill Road Palo Alto, CA 94304 United States

Date: October 10, 2013

## Product Equality Declaration

We, Hewlett-Packard Co., Ltd declare on our sole responsibility for the product of HSTNH-B17C as below:

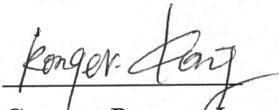
The differences between HSTNH-B17C and HSTNH-B17CM are:

1. Main Antenna and 2G/3G functions:
  - a) HSTNH-B17C has no 2G/3G Antenna and 2G/3G functions.
2. EMMC and DDR
  - a) Both HSTNH-B17C and HSTNH-B17CM have 2 kinds of EMMC and DDR (Toshiba/Hynix EMMC and Micron/Hynix DDR).
3. SAR sensor
  - a) HSTNH-B17C has no SAR sensor and SAR sensor FPC.

Except listings above, the others are all the same.

Should you have any questions or comments regarding this matter, please have my best attention.

Sincerely yours,



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