

Report No.: AGC00119130801FE08 Page 1 of 49

FCC Test Report

Report No.: AGC00119130801FE08

FCC ID : BRCPC7067ME

APPLICATION PURPOSE: Original Equipment

PRODUCT DESIGNATION: tablet pc

BRAND NAME : Titan/Kinwei

MODEL NAME : Please refer to page 4, Test Model and Series Model

CLIENT : Kintech Co., Ltd

DATE OF ISSUE : Sep.16, 2013

STANDARD(S) : FCC Part 15 Rules

REPORT VERSION : V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd

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Report No.: AGC00119130801FE08 Page 2 of 49

Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes		
V1.0	/	Sep.16, 2013	Valid	Original Report		

TABLE OF CONTENTS

1. VERIFICATION OF COMPLIANCE	
2.1PRODUCT DESCRIPTION	
2.2 RELATED SUBMITTAL(S)/GRANT(S)	6
2.3TEST METHODOLOGY	6
2.4 TEST FACILITY	6
2.5 SPECIAL ACCESSORIES	6
2.6 EQUIPMENT MODIFICATIONS	6
3.1 CONFIGURATION OF TESTED SYSTEM	
3.2 EQUIPMENT USED IN TESTED SYSTEM	
4. SUMMARY OF TEST RESULTS	
6.2. TEST RESULT	
7. RADIATED EMISSION	10
7.2 TEST SETUP	
7.3 LIMITS AND MEASUREMENT RESULT	
7.4 TEST RESULT	
8. BAND EDGE EMISSION	25
8.2. TEST SET-UP	
8.3. TEST RESULT	
9.1. TEST EQUIPMENT LIST AND DETAILS	
9.2. TEST PROCEDURE	
9.3. SUMMARY OF TEST RESULTS/PLOTS	30
10. CONDUCTED OUTPUT POWER	
10.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	33
10.3. LIMITS AND MEASUREMENT RESULT	
11. MAXIMUM CONDUCTED OUTPUT POWER SPECTRAL DENSIT	
11.2 TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	37

Page 4 of 49

APPENDIX A: PHOTOGRAPHS OF TEST SETUPAPPENDIX B: PHOTOGRAPHS OF EUT	
12.5 TEST RESULT OF POWER LINE	42
12.4 FINAL TEST PROCEDURE	41
12.3 PRELIMINARY PROCEDURE	41
12.2 TEST SETUP	40
12.1 LIMITS	
12. FCC LINE CONDUCTED EMISSION TEST	40
11.4 LIMITS AND MEASUREMENT RESULT	37
11.3 MEASUREMENT EQUIPMENT USED	

Page 5 of 49

1. VERIFICATION OF COMPLIANCE

1. VERII IDATION OF COMIL EIANOE						
Kintech Co., Ltd						
Bldg.22, Chentian Industrial Zone, Baomin 2nd Road, Xixiang, Bao'an District, Shenzhen, China						
Kintech Co., Ltd						
Bldg.22, Chentian Industrial Zone, Baomin 2nd Road, Xixiang, Bao'an District, Shenzhen, China						
tablet pc						
Titan/Kinwei						
PC7067ME						
PC7067B, PC7068ME, PC7068B, PC7069ME, PC7069B, PC7070ME, PC7070B, PC70XXME(xx represents 00~99), PC70XXB(XX represents 00~99), KW-PC7067K, KW-PC7067, KW-PC7068K, KW-PC7068, KW-PC7069K, KW-PC7069, KW-PC7070K, KW-PC7070, KW-PC70XXK(XX represent 00~99)						
All the same except for the model name.						
Sep.11~Sep.14, 2013						
None						
Normal						
AGCRT-US-BLE/RF (2013-03-01)						

WE HEREBY CERTIFY THAT:

The above equipment was tested by Attestation of Global Compliance (Shenzhen) Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4 (2003) and the energy emitted by the sample EUT tested as described in this report is in compliance with requirement of FCC Part 15 Rules requirement.

Wall Huang Sep.16, 2013

Checked By

Sep.16, 2013

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Solger Zhang Sep.16, 2013

Page 6 of 49

2.GENERAL INFORMATION 2.1PRODUCT DESCRIPTION

The EUT is designed as a "tablet pc". It is designed by way of utilizing the FHSS technology to achieve the system operation.

A major technical description of EUT is described as following

Operation Frequency	2.402 GHz to 2.480GHz
Bluetooth Version	V4.0
Modulation	GFSK
Number of channels	40 Channel(37 Hopping Channel,3 advertising Channel)
Antenna Designation	Integral antenna
Antenna Gain	2.0dBi
Hardware Version	HJT-T8170-11A(C2)-AA
Software Version	N/A
Power Supply	DC3.7V by Built-in Li-ion Battery

2.2 RELATED SUBMITTAL(S)/GRANT(S)

This submittal(s) (test report) is intended for **FCC ID: BRCPC7067ME** filing to comply with Section 15.247of the FCC Part 15, Subpart C Rules.

2.3TEST METHODOLOGY

All measurements contained in this report were conducted with ANSI C63.4-2003, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

The equipment under test (EUT) was configured to measure its highest possible emission level. The test modes were adapted accordingly in reference to the Operating Instructions. The EUT was tested in all three orthogonal planes and the worse case was showed.

2.4 TEST FACILITY

All measurement facilities used to collect the measurement data are located at Attestation of Global Compliance (Shenzhen) Co, Ltd

2/F., Building 2, No.1-No.4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Bao'an District, Shenzhen, Guangdong, China.

FCC register No.: 259865

2.5 SPECIAL ACCESSORIES

Refer to section 2.2.

2.6 EQUIPMENT MODIFICATIONS

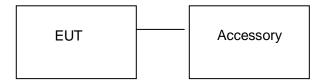
Not available for this EUT intended for grant.

Page 7 of 49

3. SYSTEM TEST CONFIGURATION

3.1 CONFIGURATION OF TESTED SYSTEM

Configure:



3.2 EQUIPMENT USED IN TESTED SYSTEM

Item	Equipment Mfr/Brand		Model/Type No.	Remark	
1	tablet pc	Titan/Kinwei	PC7067ME	EUT	
2	Adapter	N/A	KZ0502000/UL	Accessory	
3	Battery	N/A	PL3644143P	Accessory	

Page 8 of 49

4. SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
§ 15.203	Antenna Requirement	Compliant
§15.209 §15.247(d)	Radiated Emission	Compliant
§15.247(d)	Band Edges	Compliant
§15.247	6 dB Bandwidth	Compliant
§15.247(b)	Conducted Power	Compliant
§15.247(e)	Maximum Conducted Output Power SPECTRAL Density	Compliant
§15.207	Line Conduction Emission	Compliant

5. DESCRIPTION OF TEST MODES

The EUT has been operated in three modulations: GFSK independently.

NO.	TEST MODE DESCRIPTION					
1	Low channel TX					
2	Middle channel TX					
3	High channel TX					
4	Normal Operating (BT)					

Note:

^{1.} All the test modes can be supply by Built-in Li-ion battery, only the result of the worst case was recorded in the report if no any records.

^{2.} For Radiated Emission, 3axis were chosen for testing for each applicable mode.

Page 9 of 49

6. ANTENNA REQUIREMENT

6.1. STANDARD APPLICABLE

According to FCC 15.203, 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 shall be considered sufficient to comply with the provisions of this Section. 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. This requirement does not apply to carrier current devices or to devices operated under the provisions of Sections 15.211, 15.213, 15.217, 15.219, or 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with Section 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this Part are not exceeded.

6.2. TEST RESULT

This product has a permanent antenna, fulfill the requirement of this section.

Page 10 of 49

7. RADIATED EMISSION

7.1 MEASUREMENT PROCEDURE

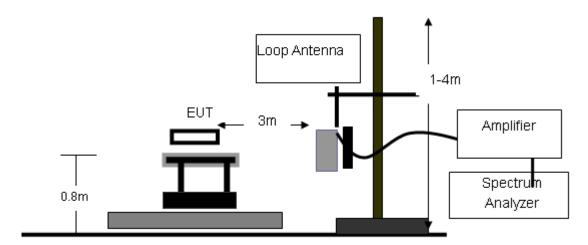
1. Configure the EUT according to ANSI C63.4. The EUT was placed on the top of the turntable 0.8 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.

- 2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
- 3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
- 4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
- 5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
- 6. For emissions above 1GHz, use 1MHz VBW and RBW for peak reading. Then 1MHz RBW and 10Hz VBW for average reading in spectrum analyzer.
- 7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
- 8.If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
- 9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- 10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High Low scan is not required in this case.

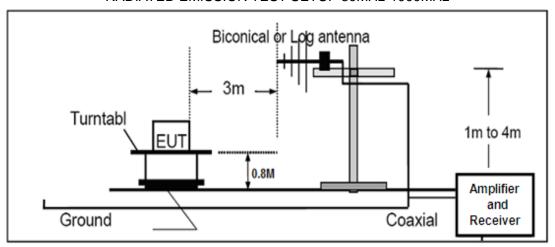
Page 11 of 49

7.2 TEST SETUP

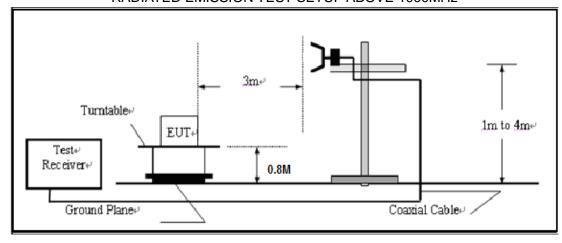
RADIATED EMISSION TEST SETUP BELOW 30MHz



RADIATED EMISSION TEST SETUP 30MHz-1000MHz



RADIATED EMISSION TEST SETUP ABOVE 1000MHz



Page 12 of 49

7.3 LIMITS AND MEASUREMENT RESULT

15.209 Limit in the below table has to be followed

Frequencies (MHz)	Field Strength (micorvolts/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

Note: All modes were tested For restricted band radiated emission,

the test records reported below are the worst result compared to other modes.

7.4 TEST RESULT

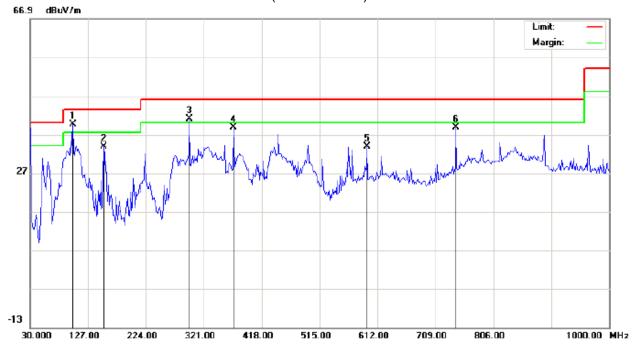
RADIATED EMISSION BELOW 30MHZ

No emission found between lowest internal used/generated frequencies to 30MHz.

Page 13 of 49

RADIATED EMISSION BELOW 1G

RADIATED EMISSION TEST- (30MHZ-1GHZ)-LOW CHANNEL-HORIZONTAL



Site: site #1 Limit: FCC Class B 3M Radiation

EUT: tablet pc

M/N: PC7067ME Mode: Low Channel TX

Note:

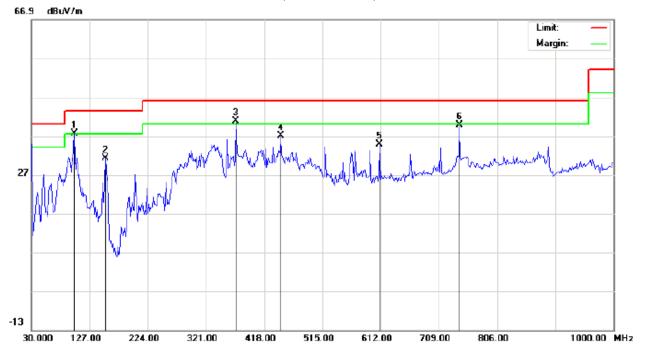
Polarization: Horizontal Temperature: 26
Power: Humidity: 60 %

Distance: 3m

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height		Comment
	-	MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB		cm	degree	
1	*	101.1333	31.50	8.16	39.66	43.50	-3.84	peak			
2		152.8667	26.93	6.97	33.90	43.50	-9.60	peak			
3	ļ	296.7500	23.40	17.63	41.03	46.00	-4.97	peak			
4		371.1166	18.90	19.98	38.88	46.00	-7.12	peak			
5		594.2166	8.93	24.82	33.75	46.00	-12.25	peak			
6		742.9500	11.48	27.32	38.80	46.00	-7.20	peak			

Page 14 of 49

RADIATED EMISSION TEST- (30MHZ-1GHZ)-LOW CHANNEL -VERTICAL



Site: site #1 Limit: FCC Class B 3M Radiation

EUT: tablet pc M/N: PC7067ME

Mode: Low Channel TX

Note:

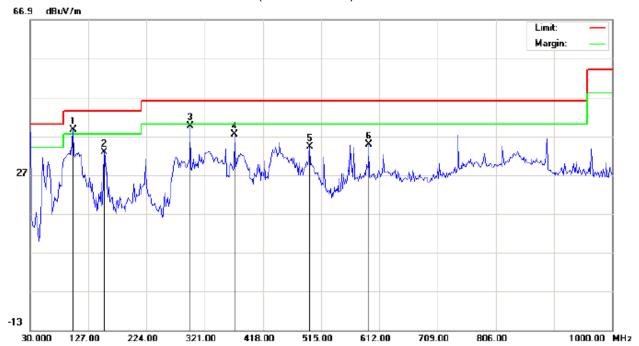
Polarization: Vertical Temperature: 26
Power: Humidity: 60 %

Distance: 3m

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB		cm	degree	
1	į	101.1333	33.39	4.20	37.59	43.50	-5.91	peak		·	
2		152.8667	24.78	6.37	31.15	43.50	-12.35	peak			
3	*	371.1166	20.80	19.98	40.78	46.00	-5.22	peak			
4		445.4832	15.38	21.59	36.97	46.00	-9.03	peak			
5		610.3832	9.27	25.46	34.73	46.00	-11.27	peak			
6		742.9500	10.76	29.02	39.78	46.00	-6.22	peak			

Page 15 of 49

RADIATED EMISSION TEST- (30MHZ-1GHZ)-MIDDLE CHANNEL-HORIZONTAL



Site: site #1 Polarization: Horizontal Temperature: 26
Limit: FCC Class B 3M Radiation Power: Humidity: 60 %

EUT: tablet pc Distance: 3m

M/N: PC7067ME

Mode: Middle Channel TX

Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB		cm	degree	
1	*	101.1333	30.50	8.16	38.66	43.50	-4.84	peak			
2		152.8667	25.93	6.97	32.90	43.50	-10.60	peak			
3		296.7500	21.90	17.63	39.53	46.00	-6.47	peak			
4		371.1166	17.40	19.98	37.38	46.00	-8.62	peak			
5		495.6000	11.87	22.36	34.23	46.00	-11.77	peak			
6		594.2166	9.93	24.82	34.75	46.00	-11.25	peak			

Page 16 of 49

RADIATED EMISSION TEST- (30MHZ-1GHZ)- MIDDLE CHANNEL -VERTICAL



Site: site #1 Polarization: Vertical Temperature: 26
Limit: FCC Class B 3M Radiation Power: Humidity: 60 %

EUT: tablet pc Distance: 3m

M/N: PC7067ME

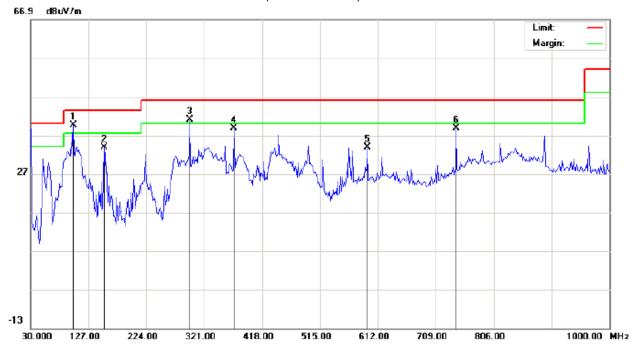
Mode: Middle Channel TX

Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB		cm	degree	
1		101.1333	31.89	4.20	36.09	43.50	-7.41	peak			
2		152.8667	23.78	6.37	30.15	43.50	-13.35	peak			
3		296.7500	16.13	17.63	33.76	46.00	-12.24	peak			
4	*	371.1166	19.30	19.98	39.28	46.00	-6.72	peak			
5		610.3832	9.27	25.46	34.73	46.00	-11.27	peak			
6		742.9500	9.76	29.02	38.78	46.00	-7.22	peak			

Page 17 of 49

RADIATED EMISSION TEST- (30MHZ-1GHZ)-HIGH CHANNEL-HORIZONTAL



Site: site #1 Polarization: Horizontal Temperature: 26
Limit: FCC Class B 3M Radiation Power: Humidity: 60 %

EUT: tablet pc Distance: 3m

M/N: PC7067ME

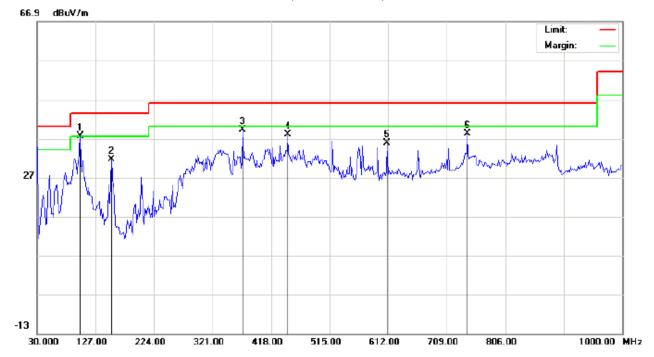
Mode: High Channel TX

Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBu∀	dB/m	dBuV/m	dBu∀/m	dB		cm	degree	
1	*	101.1333	31.50	8.16	39.66	43.50	-3.84	peak			
2		152.8667	26.93	6.97	33.90	43.50	-9.60	peak			
3	ļ	296.7500	23.40	17.63	41.03	46.00	-4.97	peak			
4		371.1166	18.90	19.98	38.88	46.00	-7.12	peak			
5		594.2166	8.93	24.82	33.75	46.00	-12.25	peak			
6		742.9500	11.48	27.32	38.80	46.00	-7.20	peak			

Page 18 of 49

RADIATED EMISSION TEST- (30MHZ-1GHZ)-HIGH CHANNEL -VERTICAL



Site: site #1 Polarization: Vertical Temperature: 26 Limit: FCC Class B 3M Radiation Power: Humidity: 60 %

EUT: tablet pc Distance: 3m

M/N: PC7067ME Mode: High Channel TX

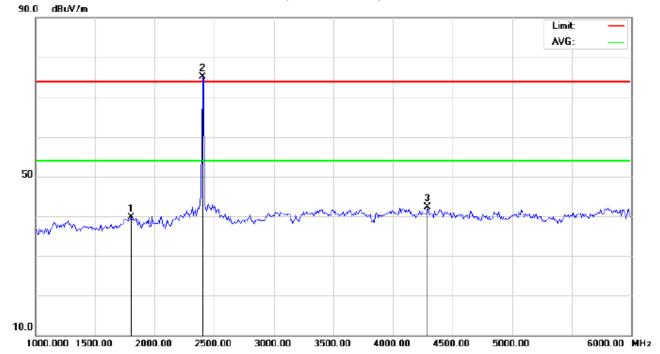
Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBu∀	dB/m	dBu√/m	dBu∀/m	dB		cm	degree	
1	*	101.1333	33.39	4.20	37.59	43.50	-5.91	peak			
2		152.8667	25.28	6.37	31.65	43.50	-11.85	peak			
3		371.1166	19.30	19.98	39.28	46.00	-6.72	peak			
4		445.4832	16.38	21.59	37.97	46.00	-8.03	peak			
5		610.3832	10.27	25.46	35.73	46.00	-10.27	peak			
6		742.9500	9.26	29.02	38.28	46.00	-7.72	peak		·	

Page 19 of 49

RADIATED EMISSION ABOVE 1GHZ

RADIATED EMISSION TEST- (ABOVE 1GHZ)-LOW CHANNEL-HORIZONTAL



Site: site #1 Polarization: Horizontal Temperature: 26
Limit: FCC Class B 3M Radiation above 1GHZ(PK) Power: Humidity: 60 %

EUT: tablet pc Distance: 3m

M/N: PC7067ME

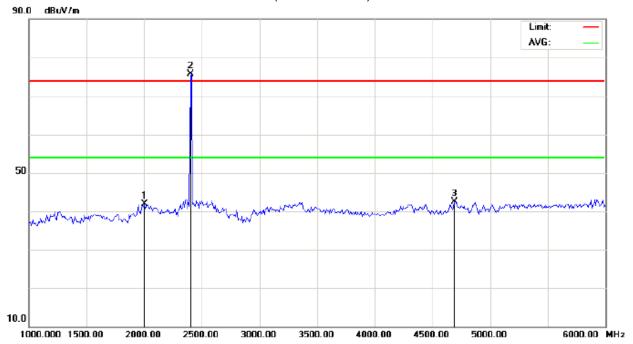
Mode: Low Channel TX

Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB		cm	degree	
1		1800.000	39.76	0.00	39.76	74.00	-34.24	peak			
2	*	2402.000	75.13	0.00	75.13	74.00	1.13	peak			
3		4291.667	42.28	0.00	42.28	74.00	-31.72	peak			

Page 20 of 49

RADIATED EMISSION TEST-(ABOVE 1GHZ)-LOW CHANNEL-VERTICAL



Site: site #1 Polarization: Vertical Temperature: 26
Limit: FCC Class B 3M Radiation above 1GHZ(PK) Power: Humidity: 60 %

EUT: tablet pc Distance: 3m

M/N: PC7067ME

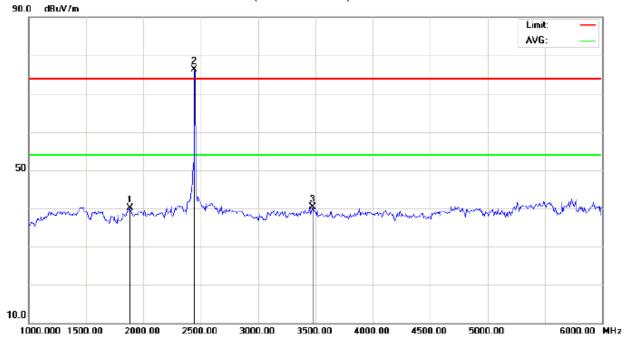
Mode: Low Channel TX

Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBu∀	dB/m	dBu\//m	dBu∀/m	dB		cm	degree	
1		2000.000	41.85	0.00	41.85	74.00	-32.15	peak			
2	*	2402.000	75.63	0.00	75.63	74.00	1.63	peak			
3		4691.667	42.41	0.00	42.41	74.00	-31.59	peak			

Page 21 of 49

RADIATED EMISSION TEST-(ABOVE 1GHZ)-MIDDLE CHANNEL-HORIZONTAL



Site: site #1 Polarization: Horizontal Temperature: 26
Limit: FCC Class B 3M Radiation above 1GHZ(PK) Power: Humidity: 60 %

EUT: tablet pc Distance: 3m

M/N: PC7067ME

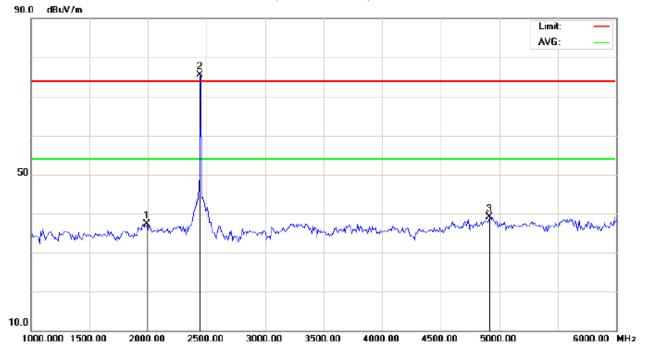
Mode: Middle Channel TX

Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBu∀	dB/m	dBu\//m	dBu∀/m	dB		cm	degree	
1		1883.333	40.18	0.00	40.18	74.00	-33.82	peak			
2	*	2442.000	76.30	0.00	76.30	74.00	2.30	peak			
3		3475.000	40.40	0.00	40.40	74.00	-33.60	peak			

Page 22 of 49

RADIATED EMISSION TEST-(ABOVE 1GHZ)-MIDDLE CHANNEL-VERTICAL



Site: site #1 Polarization: Vertical Temperature: 26
Limit: FCC Class B 3M Radiation above 1GHZ(PK) Power: Humidity: 60 %

EUT: tablet pc Distance: 3m

M/N: PC7067ME

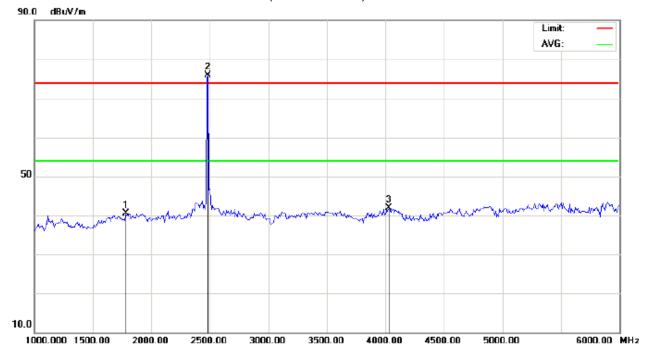
Mode: Middle Channel TX

Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB		cm	degree	
1		1991.667	37.37	0.00	37.37	74.00	-36.63	peak			
2	*	2442.000	75.58	0.00	75.58	74.00	1.58	peak			
3		4916.667	39.02	0.00	39.02	74.00	-34.98	peak			

Page 23 of 49

RADIATED EMISSION TEST-(ABOVE 1GHZ)-HIGH CHANNEL-HORIZONTAL



Site: site #1 Polarization: Horizontal Temperature: 26
Limit: FCC Class B 3M Radiation above 1GHZ(PK) Power: Humidity: 60 %

EUT: tablet pc Distance: 3m

M/N: PC7067ME

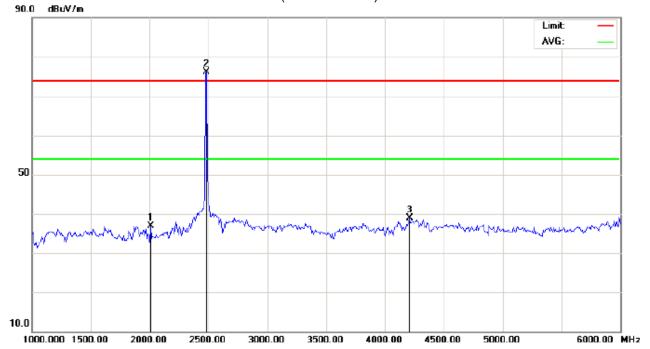
Mode: High Channel TX

Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB		cm	degree	
1		1783.333	40.54	0.00	40.54	74.00	-33.46	peak			
2	*	2480.000	75.98	0.00	75.98	74.00	1.98	peak			
3		4033.333	42.00	0.00	42.00	74.00	-32.00	peak			

Page 24 of 49

RADIATED EMISSION TEST-(ABOVE 1GHZ)-HIGH CHANNEL-VERTICAL



Site: site #1 Polarization: Vertical Temperature: 26
Limit: FCC Class B 3M Radiation above 1GHZ(PK) Power: Humidity: 60 %

EUT: tablet pc Distance: 3m

M/N: PC7067ME

Mode: High Channel TX

Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB		cm	degree	
1		2008.333	36.91	0.00	36.91	74.00	-37.09	peak			
2	*	2480.000	76.05	0.00	76.05	74.00	2.05	peak			
3		4208.333	38.91	0.00	38.91	74.00	-35.09	peak			

Page 25 of 49

8. BAND EDGE EMISSION

8.1. MEASUREMENT PROCEDURE

- 1. Set the EUT Work on the top, the bottom operation frequency individually.
- 2. Set SPA Start or Stop Frequency = Operation Frequency, RBW>=1%span, VBW>=RBW
- 3. The band edges was measured and recorded.

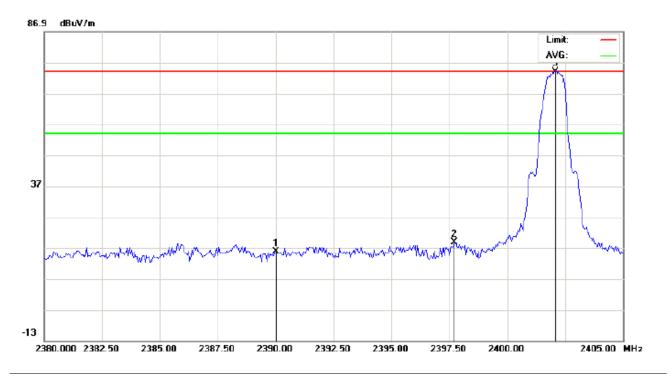
8.2. TEST SET-UP

Radiated same as 6.2

Page 26 of 49

8.3. TEST RESULT

TEST PLOT OF BAND EDGE FOR LOW CHANNEL -Horizontal



Site: site #1 Polarization: Horizontal Temperature: 26
Limit: FCC Class B 3M Radiation above 1GHZ(PK) Power: Humidity: 60 %

EUT: tablet pc Distance:

M/N: PC7067ME

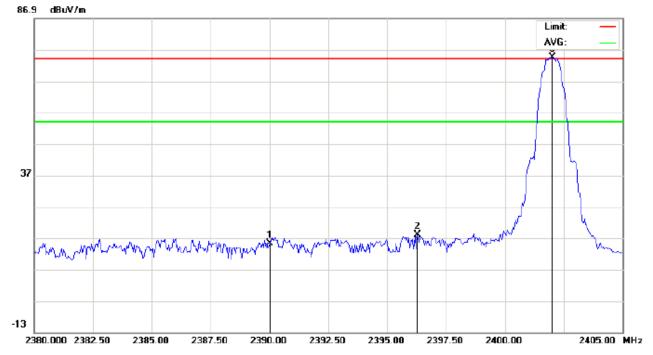
Mode: Low channel TX

Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBu∀	dB/m	dBu\//m	dBu∀/m	dB		cm	degree	
1		2390.000	25.37	-9.69	15.68	74.00	-58.32	peak			
2		2397.708	28.43	-9.68	18.75	74.00	-55.25	peak			
3	*	2402.070	83.81	-9.68	74.13	74.00	0.13	peak			

Page 27 of 49

TEST PLOT OF BAND EDGE FOR LOW CHANNEL - Vertical



Site: site #1 Polarization: Vertical Temperature: 26
Limit: FCC Class B 3M Radiation above 1GHZ(PK) Power: Humidity: 60 %

EUT: tablet pc Distance:

M/N: PC7067ME

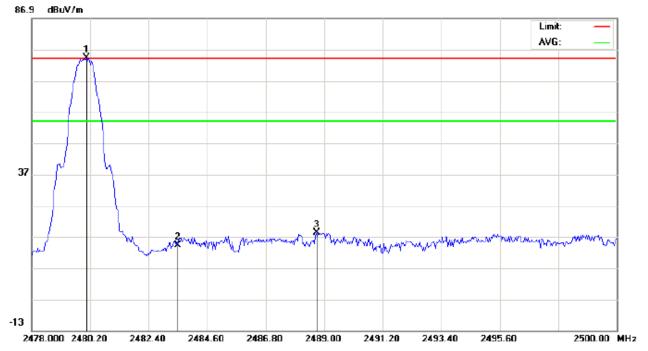
Mode: Low channel TX

Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB		cm	degree	
1		2390.000	25.01	-9.69	15.32	74.00	-58.68	peak			
2		2396.292	27.78	-9.68	18.10	74.00	-55.90	peak			
3	*	2402.000	84.23	-9.68	74.55	74.00	0.55	peak			

Page 28 of 49

TEST PLOT OF BAND EDGE FOR HIGH CHANNEL -Horizontal



Site: site #1 Polarization: Horizontal Temperature: 26
Limit: FCC Class B 3M Radiation above 1GHZ(PK) Power: Humidity: 60 %

EUT: tablet pc Distance:

M/N: PC7067ME

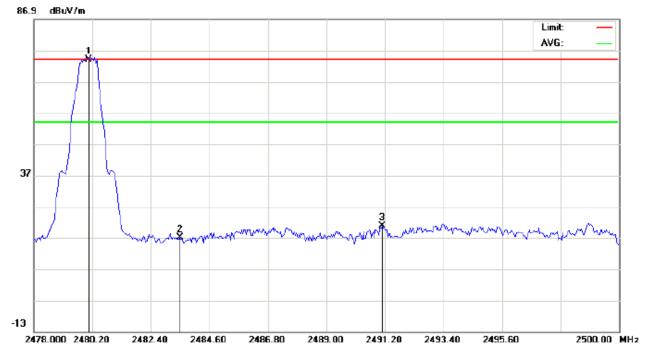
Mode: High channel TX

Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB		cm	degree	
1	*	2480.080	83.95	-9.59	74.36	74.00	0.36	peak			
2		2483.500	23.97	-9.59	14.38	74.00	-59.62	peak			
3		2488.707	27.82	-9.58	18.24	74.00	-55.76	peak			

Page 29 of 49

TEST PLOT OF BAND EDGE FOR HIGH CHANNEL -Vertical



Site: site #1 Polarization: Vertical Temperature: 26
Limit: FCC Class B 3M Radiation above 1GHZ(PK) Power: Humidity: 60 %

EUT: tablet pc Distance:

M/N: PC7067ME

Mode: High channel TX

Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB		cm	degree	
1	*	2480.060	83.68	-9.59	74.09	74.00	0.09	peak			
2		2483.500	26.68	-9.59	17.09	74.00	-56.91	peak			
3		2491.090	30.34	-9.58	20.76	74.00	-53.24	peak			

Page 30 of 49

9. 6DB BANDWIDTH

9.1. TEST EQUIPMENT LIST AND DETAILS

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
PSA SERIES SPECTRUM ANALYZER	AGILENT	E4440A	US41421290	07/17/2013	07/16/2014
RECEIVER ANTENNA	ETS	2175	57337	07/17/2013	07/16/2014

9.2. TEST PROCEDURE

- 1. The EUT was placed on a table which is 0.8m above ground plane.
- 2. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 3. Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- 3. Set SPA Centre Frequency = Operation Frequency, RBW= 100 KHz, VBW≥RBW.
- 4. Set SPA Trace 1 Max hold, then View.

9.3. SUMMARY OF TEST RESULTS/PLOTS

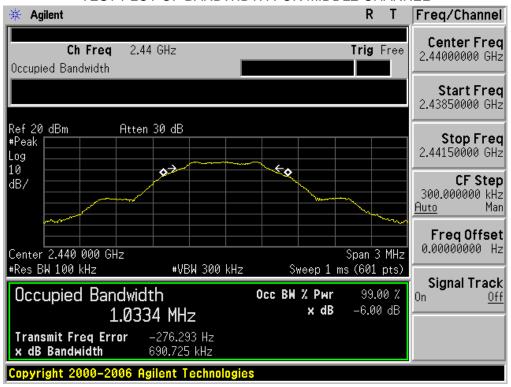
Channel	6dB Bandwidth (KHz)	Minimum Limit (KHz)	Pass/Fail
Low	696.312		Pass
Middle	690.725	500KHz	Pass
High	692.370		Pass

Page 31 of 49

TEST PLOT OF BANDWIDTH FOR LOW CHANNEL



TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL



Page 32 of 49

TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL



Page 33 of 49

10. CONDUCTED OUTPUT POWER

10.1. MEASUREMENT PROCEDURE

For peak power test:

- 1. The EUT was placed on a turn table which is 0.8m above ground plane.
- 2. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 3. Set the EUT Work on the top, middle and the bottom operation frequency individually.
- 4. Use the following spectrum analyzer settings:

Set the RBW = 1 MHz

Set the VBW ≥ 3 RBW

Set the span \geq 1.5 x DTS bandwidth

Detector = peak

Sweep time = auto couple

Trace mode = max hold

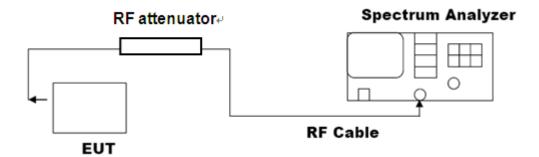
- 5. Allow the trace to stabilize. Use the instrument's band/channel power measurement function with the band limits set equal to the DTS bandwidth edges.
- 6. Record the result form the Spectrum Analyzer.

For average power test:

- 1. The EUT was placed on a table which is 0.8m above ground plane.
- 2. Connect EUT RF output port to power probe through an RF attenuator.
- 3. Connect the power probe to the PC.
- 4. Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- 5. Record the maximum power from the software.
- 6. The maximum peak power shall be less 1 Watt (30dBm).

Note: The EUT was tested according to KDB 558074 for compliance to FCC 47CFR 15.247 requirements.

10.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)



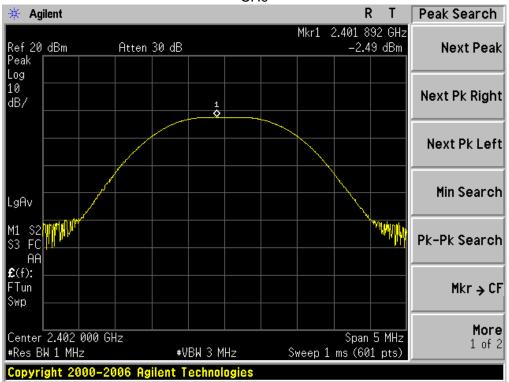
Report No.: AGC00119130801FE08 Page 34 of 49

10.3. LIMITS AND MEASUREMENT RESULT

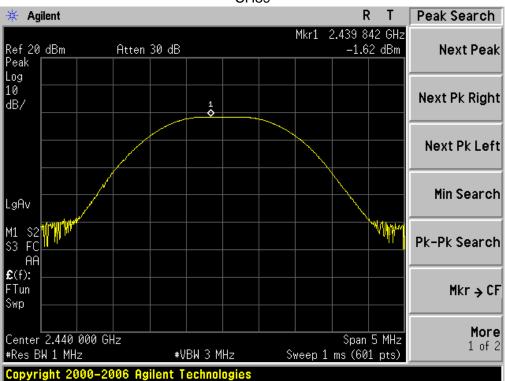
Channel	Average Power (dBm)	Peak Power (dBm)	Applicable Limits (dBm)	Pass/Fail
Low Channel	-4.34	-2.49	20	Pass
Middle Channel	-3.51	-1.62	20	Pass
High Channel	-1.63	0.28	20	Pass

Page 35 of 49



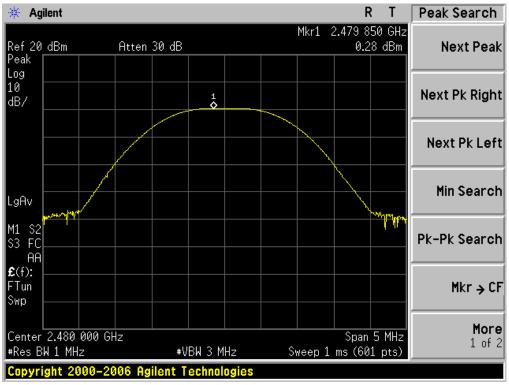


CH39



Page 36 of 49





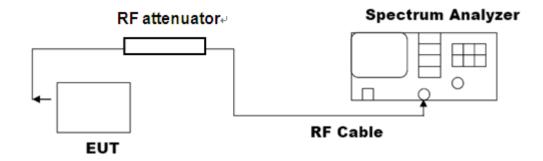
Page 37 of 49

11. MAXIMUM CONDUCTED OUTPUT POWER SPECTRAL DENSITY 11.1 MEASUREMENT PROCEDURE

- (1). The EUT was placed on a turn table which is 0.8m above ground plane.
- (2). Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- (3). Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- (4). Set SPA Trace 1 Max hold, then View.

Note: The method of PKPSD in the KDB 558074 item 10.2 was used in this testing.

11.2 TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)



11.3 MEASUREMENT EQUIPMENT USED

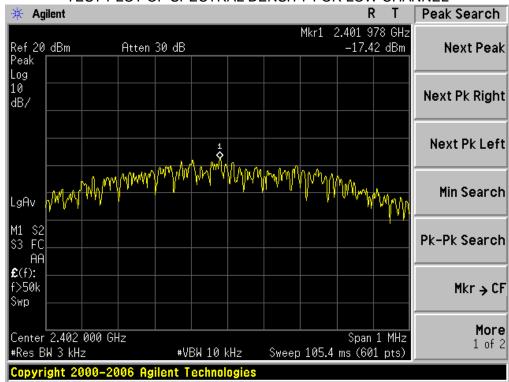
Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due	
PSA SERIES SPECTRUM ANALYZER	AGILENT	E4440A	US41421290	07/17/2013	07/16/2014	
RECEIVER ANTENNA	ETS	2175	57337	07/17/2013	07/16/2014	

11.4 LIMITS AND MEASUREMENT RESULT

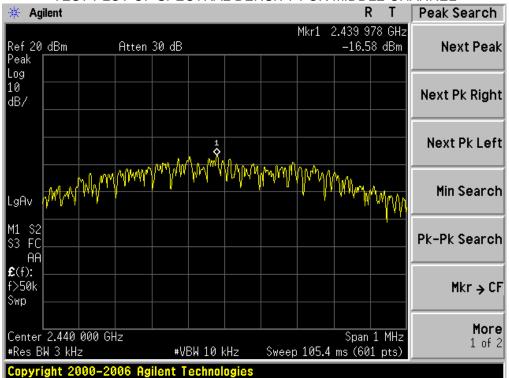
Channel No.	PSD (dBm)	Limit (dBm)	Result		
Low Channel	-32.62	8	Pass		
Middle Channel	-31.78	8	Pass		
High Channel	-29.85	8	Pass		

Page 38 of 49

TEST PLOT OF SPECTRAL DENSITY FOR LOW CHANNEL

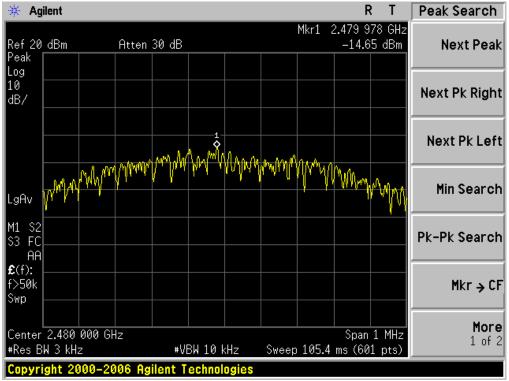


TEST PLOT OF SPECTRAL DENSITY FOR MIDDLE CHANNEL



Page 39 of 49

TEST PLOT OF SPECTRAL DENSITY FOR HIGH CHANNEL



Page 40 of 49

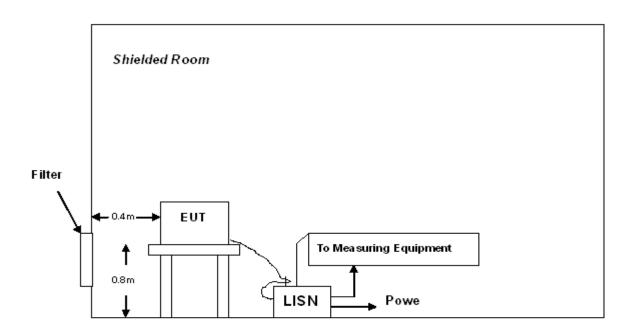
12. FCC LINE CONDUCTED EMISSION TEST

12.1 LIMITS

Fraguency	Maximum RF Line Voltage							
Frequency	Q.P.(dBuV)	Average(dBuV)						
150kHz~500kHz	66-56	56-46						
500kHz~5MHz	56	46						
5MHz~30MHz	60	50						

^{**}Note: 1. The lower limit shall apply at the transition frequency.

12.2 TEST SETUP



A: Powered through filter

^{2.} The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz

Page 41 of 49

12.3 PRELIMINARY PROCEDURE

- The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- 2) Support equipment, if needed, was placed as per ANSI C63.4.
- 3) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- 4) All support equipments received AC120V/60Hz power from a LISN, if any.
- 5) The EUT received power by laptop which received power by a LISN.
- 6) The test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- 7) Analyzer / Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.
- 8) During the above scans, the emissions were maximized by cable manipulation.
- 9) The following test mode(s) were scanned during the preliminary test. Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.

12.4 FINAL TEST PROCEDURE

- 10) EUT and support equipment was set up on the test bench as per step 2 of the preliminary test.
- 11) 2) A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less –2dB to the A.V. limit in Peak mode, then the emission signal was re-checked using Q.P and Average detector.
- 12) 3) The test data of the worst case condition(s) was reported on the Summary Data page.

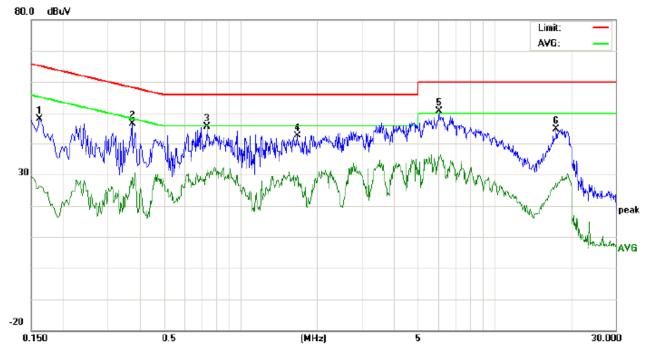
Temperature: 26

Humidity: 60 %

Page 42 of 49

12.5 TEST RESULT OF POWER LINE

Line Conducted Emission Test Line 1-L



Phase:

Power:

L1

Site: Conduction Limit: FCC Class B Conduction(QP)

EUT: tablet pc M/N: PC7067ME

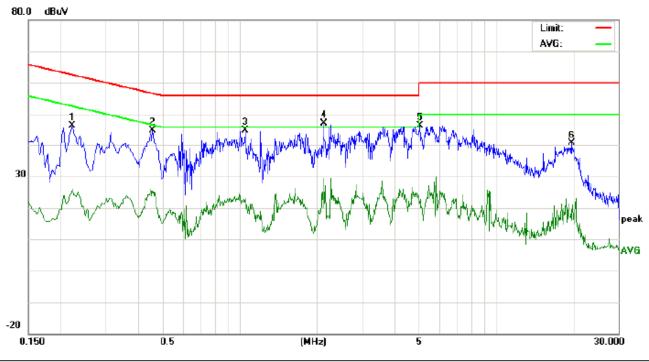
Mode: Normal Operating(BT)

Note:

No.	Freq.		ding_L (dBuV)		Correct Factor		asuren (dBuV)		ı	nit uV)		rgin IB)	P/F	Comment
	(MHz)	Peak	QP	AVG	dB	Peak	QP	AVG	QP	AVG	QP	AVG		
1	0.1620	37.98		16.12	10.17	48.15		26.29	65.36	55.36	-17.21	-29.07	Р	
2	0.3738	36.39		18.92	10.32	46.71		29.24	58.41	48.41	-11.70	-19.17	Р	
3	0.7419	35.38		20.93	10.32	45.70		31.25	56.00	46.00	-10.30	-14.75	Р	
4	1.6777	32.42		19.39	10.32	42.74		29.71	56.00	46.00	-13.26	-16.29	Р	
5	6.0696	40.27		24.96	10.28	50.55		35.24	60.00	50.00	-9.45	-14.76	Р	
6	17.4817	34.76		17.32	10.12	44.88		27.44	60.00	50.00	-15.12	-22.56	Р	

Page 43 of 49

Line Conducted Emission Test Line 1-N



Site: Conduction Phase: N Temperature: 26
Limit: FCC Class B Conduction(QP) Power: Humidity: 60 %

EUT: tablet pc M/N: PC7067ME

Mode: Normal Operating(BT)

Note:

No.	Freq.		ding_L (dBuV)		Correct Factor	1	asuren (dBuV)		ı	nit uV)	Margin (dB)		P/F	Comment
	(MHz)	Peak	QP	AVG	dB	Peak	QP	AVG	QP	AVG	QP	AVG		
1	0.2220	36.18		15.51	10.24	46.42		25.75	62.74	52.74	-16.32	-26.99	Р	
2	0.4580	34.61		14.96	10.37	44.98		25.33	56.73	46.73	-11.75	-21.40	Р	
3	1.0500	34.47		12.79	10.37	44.84		23.16	56.00	46.00	-11.16	-22.84	Р	
4	2.1299	36.77		18.98	10.27	47.04		29.25	56.00	46.00	-8.96	-16.75	Р	
5	5.0499	36.06		11.53	10.24	46.30		21.77	60.00	50.00	-13.70	-28.23	Р	
6	19.6858	30.44		9.39	10.11	40.55		19.50	60.00	50.00	-19.45	-30.50	Р	

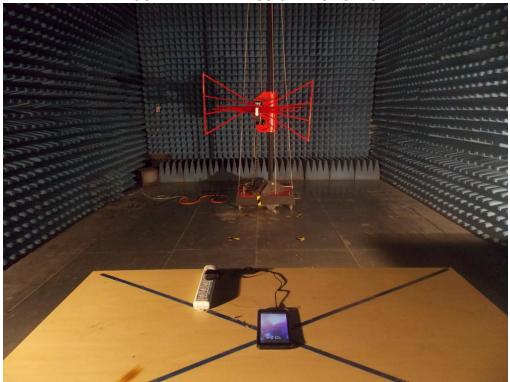
Page 44 of 49

APPENDIX A: PHOTOGRAPHS OF TEST SETUP

FCC LINE CONDUCTED EMISSION TEST SETUP



FCC RADIATED EMISSION TEST SETUP



Page 45 of 49

APPENDIX B: PHOTOGRAPHS OF EUT

TOTAL VIEW OF EUT







Report No.: AGC00119130801FE08 Page 46 of 49







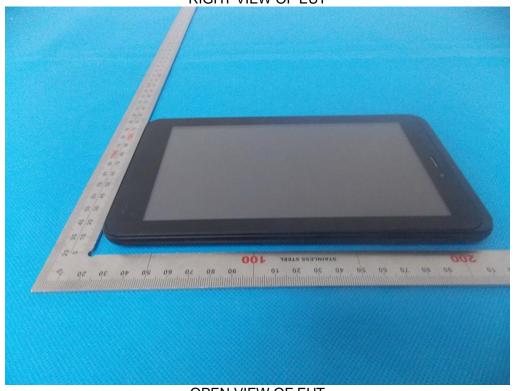
Report No.: AGC00119130801FE08 Page 47 of 49

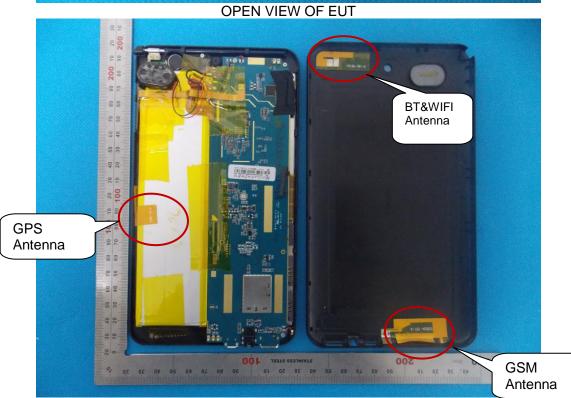




Page 48 of 49

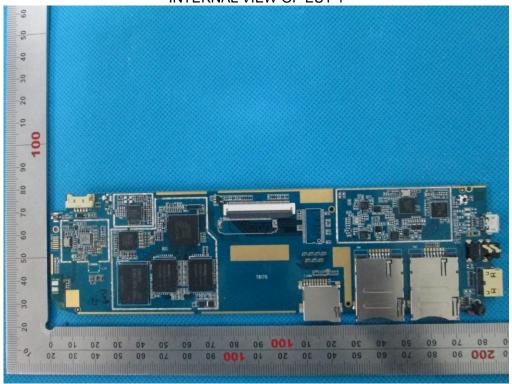






Report No.: AGC00119130801FE08 Page 49 of 49





INTERNAL VIEW OF EUT-2

----END OF REPORT----