

Shenzhen Zhongjian Nanfang Testing Co., Ltd.

Report No: CCISE170200501

FCC REPORT

(BLE)

Applicant: Ingram Micro Mexico, S.A. DE C.V.

Address of Applicant: Laguna de Terminos 249, Anahuac Miguel Hidalgo, Mexico

11320

Equipment Under Test (EUT)

Product Name: WIFI Tablet

Model No.: W101, H100

Trade mark: L1BRE

FCC ID: 2AK7BW101

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

Date of sample receipt: 08 Feb., 2017

Date of Test: 08 Feb., to 07 Mar., 2017

Date of report issued: 07 Mar., 2017

Test Result: PASS *

Authorized Signature:



Bruce Zhang Laboratory Manager

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

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

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



Project No.: CCISE1702005



2 Version

Version No.	Date	Description
00	07 Mar., 2017	Original

Tested by: Zora Lee Date: 07 Mar., 2017

Test Engineer

Reviewed by: O7 Mar., 2017

Project Engineer

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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	N/A
Conducted Peak Output Power	15.247 (b)(3)	Pass
6dB Emission 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.

N/A: Not Applicable for Non-adaptive equipment.



5 General Information

5.1 Client Information

Applicant:	Ingram Micro Mexico, S.A. DE C.V.
Address of Applicant:	Laguna de Terminos 249, Anahuac Miguel Hidalgo, Mexico 11320
Manufacturer/Factory:	Ingram Micro Mexico, S.A. DE C.V.
Address of Manufacturer/Factory:	Laguna de Terminos 249, Anahuac Miguel Hidalgo, Mexico 11320

5.2 General Description of E.U.T.

Product Name:	WIFI Tablet
Model No.:	W101, H100
Operation Frequency:	2402-2480 MHz
Channel numbers:	40
Channel separation:	2 MHz
Modulation technology:	GFSK
Data speed :	1Mbps
Antenna Type:	Internal Antenna
Antenna gain:	1.71 dBi
Power supply:	Rechargeable Li-ion Battery DC3.7V-3000mAh
Remark:	The No.: W101, H100 were identical inside, the electrical circuit design, layout, components used and internal wiring, with only difference being model name.



Operation	Operation Frequency each of channel						
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
0	2402MHz	10	2422MHz	20	2442MHz	30	2462MHz
1	2404MHz	11	2424MHz	21	2444MHz	31	2464MHz
2	2406MHz	12	2426MHz	22	2446MHz	32	2466MHz
3	2408MHz	13	2428MHz	23	2448MHz	33	2468MHz
4	2410MHz	14	2430MHz	24	2450MHz	34	2470MHz
5	2412MHz	15	2432MHz	25	2452MHz	35	2472MHz
6	2414MHz	16	2434MHz	26	2454MHz	36	2474MHz
7	2416MHz	17	2436MHz	27	2456MHz	37	2476MHz
8	2418MHz	18	2438MHz	28	2458MHz	38	2478MHz
9	2420MHz	19	2440MHz	29	2460MHz	39	2480MHz

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:

Channel	Frequency
The lowest channel	2402MHz
The middle channel	2442MHz
The Highest channel	2480MHz



Report No: CCISE170200501

5.3 Test environment and mode

Operating Environment:				
Temperature:	24.0 °C			
Humidity:	54 % RH			
Atmospheric Pressure:	1010 mbar			
Test mode:				
Operation mode	Keep the EUT in continuous transmitting with modulation			

The sample was placed 0.8m(below 1GHz)/1.5m(above 1GHz) above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages. Duty cycle setting during the transmission is 100% with maximum power setting for all modulations.

5.4 Measurement Uncertainty

Items	Expanded Uncertainty (Confidence of 95%)
Conducted Emission (9kHz ~ 30MHz)	2.14 dB (k=2)
Radiated Emission (9kHz ~ 30MHz)	4.24 dB (k=2)
Radiated Emission (30MHz ~ 1000MHz)	4.35 dB (k=2)
Radiated Emission (1GHz ~ 18GHz)	4.44 dB (k=2)
Radiated Emission (18GHz ~ 26.5GHz)	4.56 dB (k=2)

5.5 Laboratory Facility

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

• FCC - Registration No.: 817957

Shenzhen Zhongjian Nanfang Testing Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in out files. Registration 817957, February 27, 2012.

• IC - Registration No.: 10106A-1

The 3m Semi-anechoic chamber of Shenzhen Zhongjian Nanfang Testing Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

• CNAS - Registration No.: CNAS L6048

Shenzhen Zhongjian Nanfang Testing Co., Ltd. is accredited to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L6048.

5.6 Laboratory Location

Shenzhen Zhongjian Nanfang Testing Co., Ltd.

Address: No. B-C, 1/F., Building 2, Laodong No.2 Industrial Park, Xixiang Road,

Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755-23118282 Fax: +86-755-23116366

Shenzhen Zhongjian Nanfang Testing Co., Ltd.
No. B-C, 1/F., Building 2, Laodong No.2 Industrial Park, Xixiang Road,
Bao'an District, Shenzhen, Guangdong, China
Telephone: +86 (0) 755 23118282 Fax: +86 (0) 755 23116366



5.7 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 SAC	SAEMC	9(L)*6(W)* 6(H)	CCIS0001	08-23-2014	08-22-2017
2	BiConiLog Antenna	SCHWARZBECK	VULB9163	CCIS0005	03-25-2016	03-25-2017
3	Horn Antenna	SCHWARZBECK	BBHA9120D	CCIS0006	03-25-2016	03-25-2017
4	Pre-amplifier (10kHz-1.3GHz)	HP	8447D	CCIS0003	04-01-2016	03-31-2017
5	Pre-amplifier (1GHz-18GHz)	Compliance Direction Systems Inc.	PAP-1G18	CCIS0011	04-01-2016	03-31-2017
6	Pre-amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	04-01-2016	03-31-2017
7	Horn Antenna	ETS-LINDGREN	3160	GTS217	04-01-2016	03-31-2017
8	Spectrum analyzer 9k-30GHz	Rohde & Schwarz	FSP30	CCIS0023	03-28-2016	03-28-2017
9	EMI Test Receiver	Rohde & Schwarz	ESRP7	CCIS0167	03-28-2016	03-28-2017
10	Loop antenna	Laplace instrument	RF300	EMC0701	04-01-2016	03-31-2017
11	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
12	Coaxial Cable	N/A	N/A	CCIS0018	04-01-2016	03-31-2017
13	Coaxial Cable	N/A	N/A	CCIS0020	04-01-2016	03-31-2017

Con	Conducted Emission:					
Hamilton Tarak Familian and		Manufacturer	Madal Na	Inventory	Cal. Date	Cal. Due date
Item	Test Equipment	Manufacturer	Model No.	No.	(mm-dd-yy)	(mm-dd-yy)
1	Shielding Room	ZhongShuo Electron	11.0(L)x4.0(W)x3.0(H)	CCIS0061	08-23-2014	08-22-2017
2	EMI Test Receiver	Rohde & Schwarz	ESCI	CCIS0002	03-24-2016	03-24-2017
3	LISN	CHASE	MN2050D	CCIS0074	03-26-2016	03-26-2017
4	Coaxial Cable	CCIS	N/A	CCIS0086	04-01-2016	03-31-2017
5	EMI Test Software	AUDIX	E3	N/A	N/A	N/A



6 Test results and Measurement Data

6.1 Antenna requirement:

Standard requirement: FCC Part 15 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 BLE antenna is an internal antenna which cannot replace by end-user, the best case gain of the antenna is 1.71 dBi.





6.2 Conducted Peak Output Power

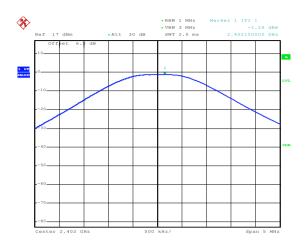
Test Requirement:	FCC Part 15 C Section 15.247 (b)(3)	
Test Method:	ANSI C63.10:2013 and KDB558074v03r05 section 9.1.1	
Limit:	30dBm	
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane	
Test Instruments:	Refer to section 5.7 for details	
Test mode:	Refer to section 5.3 for details	
Test results:	Passed	

Measurement Data:

Test CH	Peak Conducted Output Power (dBm)	Limit(dBm)	Result
Lowest	-1.26		
Middle	-1.44	30.00	Pass
Highest	-2.41		



Test plot as follows:



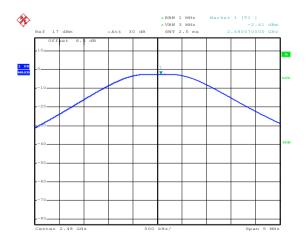
Date: 5.FEB.2017 02:06:11

Lowest channel



Date: 5.FEB.2017 02:07:38

Middle channel



Date: 5.FEB.2017 02:08:50

Highest channel



6.3 Occupy Bandwidth

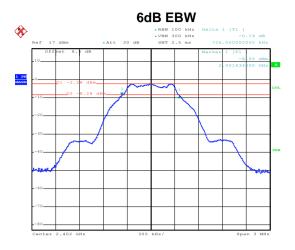
Test Requirement:	FCC Part 15 C Section 15.247 (a)(2)
Test Method:	ANSI C63.10:2013 and KDB558074v03r05 section 8.1
Limit:	>500kHz
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane
Test Instruments:	Refer to section 5.7 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

Measurement Data:

Test CH	6dB Emission Bandwidth (MHz)	Limit(kHz)	Result	
Lowest	0.726			
Middle	0.708	>500	Pass	
Highest	0.726			
Test CH	99% Occupy Bandwidth (MHz)	Limit(kHz)	Result	
Lowest	1.032			
Middle	1.026	N/A	N/A	
Highest	1.032			

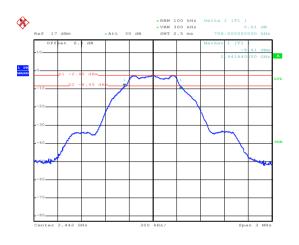


Test plot as follows:



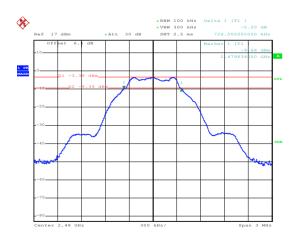
Date: 5.FEB.2017 02:16:22

Lowest channel



Date: 5.FEB.2017 02:17:30

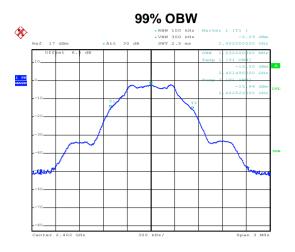
Middle channel



Date: 5.FEB.2017 02:19:09

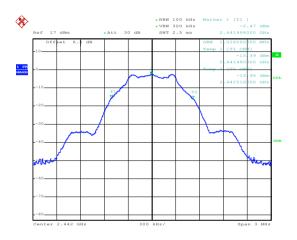
Highest channel





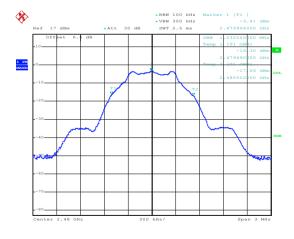
Date: 5.FEB.2017 02:21:51

Lowest channel



Date: 5.FEB.2017 02:21:05

Middle channel



Date: 5.FEB.2017 02:20:35

Highest channel



6.4 Power Spectral Density

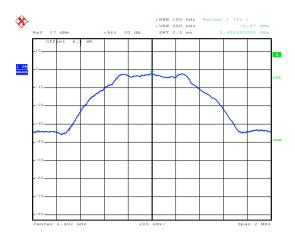
Test Requirement:	FCC Part 15 C Section 15.247 (e)
Test Method:	ANSI C63.10:2013 and KDB558074v03r05 section 10.2
Limit:	8 dBm
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane
Test Instruments:	Refer to section 5.7 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

Measurement Data:

Test CH	Power Spectral Density (dBm)	Limit(dBm)	Result
Lowest	-2.27		
Middle	-2.42	8.00	Pass
Highest	-3.39		

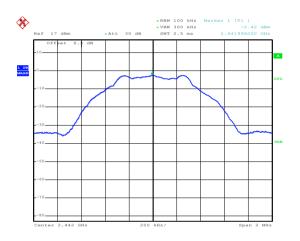


Test plots as follow:



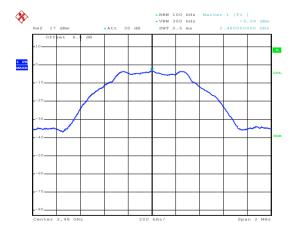
Date: 5.FEB.2017 02:10:57

Lowest channel



Date: 5.FEB.2017 02:10:29

Middle channel



Date: 5.FEB.2017 02:09:43

Highest channel



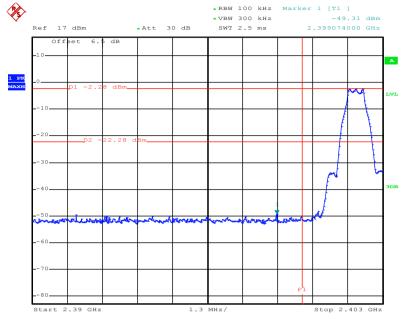
6.5 Band Edge

6.5.1 Conducted Emission Method

T . D						
Test Requirement:	FCC Part 15 C Section 15.247 (d)					
Test Method:	ANSI C63.10:2013 and KDB558074v03r05 section 13					
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					
	Spectrum Analyzer E.U.T Non-Conducted Table					
	Ground Reference Plane					
Test Instruments:	Refer to section 5.7 for details					
Test mode:	Refer to section 5.3 for details					
Test results:	Passed					

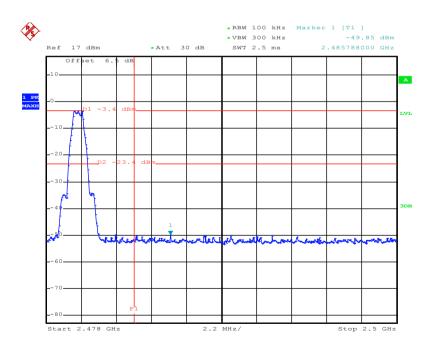


Test plots as follow:



Date: 5.FEB.2017 02:13:12

Lowest channel



Date: 5.FEB.2017 02:14:39

Highest channel



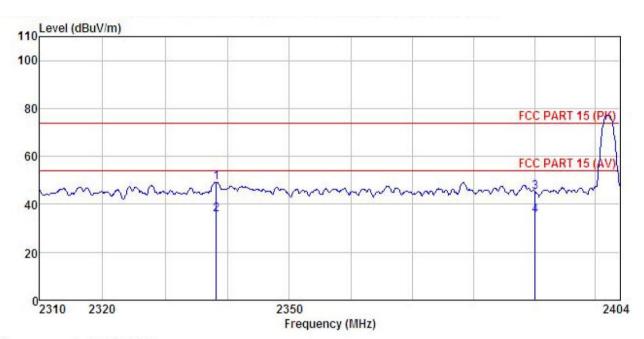
6.5.2 Radiated Emission Method

Test Requirement:	FCC Part 15 C Section 15.209 and 15.205					
Test Method:	ANSI C63.10: 2013 and KDB 558074v03r05 section 12.1					
Test Frequency Range:	2.3GHz to 2.50	GHz				
Test site:	Measurement	Distance: 3n	n			
Receiver setup:	Frequency	Detector	RBW	VI	BW	Remark
'	Above 1GHz	Peak	1MHz		ИНz	Peak Value
		RMS	1MHz		ИHz	Average Value
Limit:	Frequen	icy I	Limit (dBuV/m @3	Bm)		Remark
	Above 10	GHz -	54.00			verage Value
Test Procedure:	1. 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. 2. 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. 5. 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 10 dB 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 10 dB margin would be re-tested one by one using peak, quasipeak or average method as specified and then reported in a data					
Test setup:	sheet.	AE EUT (Turntable)	Ground Reference Plane Test Receiver		Antenna Tow	wer
Test Instruments:	Refer to section	n 5.7 for det	ails			
Test mode:	Refer to section					
Test results:	Passed					



Test channel: Lowest

Horizontal:



: 3m chamber Site

: FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL Condition

EUT : WIFI Tablet Model : W101

Test mode : BLE-L mode Power Rating : DC 12V

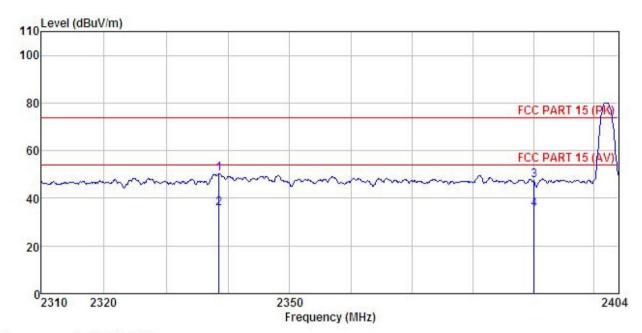
Environment : Temp:25.5°C Huni:55% 101KPa Test Engineer: Zora

REMARK

	200		Antenna Factor				Limit Line		Remark
	MHz	dBu₹	<u>dB</u> /m	<u>dB</u>	<u>d</u> B	$\overline{dBuV/m}$	dBuV/m	<u>dB</u>	
1	2338.180	20.97	23.67	4.64	0.00	49.28	74.00	-24.72	Peak
2	2338.180	7.42	23.67	4.64	0.00	35.73	54.00	-18.27	Average
3	2390.000	16.80	23.68	4.69				-28.83	
4	2390.000	7.01	23.68	4.69	0.00	35.38	54.00	-18.62	Average



Vertical:



Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL : WIFI Tablet Condition

EUT : W101 Model

Test mode : BLE-L mode Power Rating : DC 12V

Environment : Temp: 25.5°C Huni: 55% 101KPa

Test Engineer: Zora REMARK :

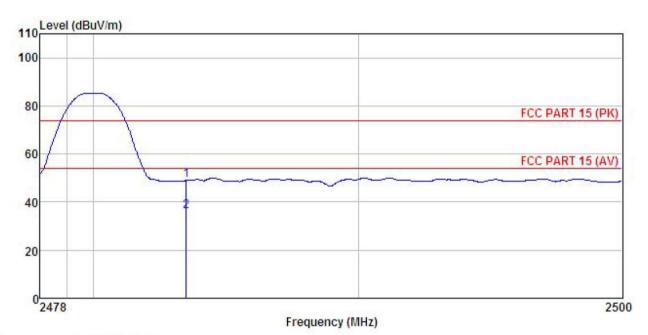
			Antenna Factor						Remark
-	MHz	dBu∇	<u>dB</u> /m	ā <u>ā</u>	<u>d</u> B	dBuV/m	dBuV/m	<u>d</u> B	
1 2			23.67						Peak Average
3	2390.000	18.96	23.68	4.69	0.00	47.33	74.00	-26.67	





Test channel: Highest

Horizontal:



Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL : WILL Tablet Condition

EUT Model : W101

Test mode : BLE-H mode
Power Rating : DC 12V
Environment : Temp:25.5°C Huni:55% 101KPa

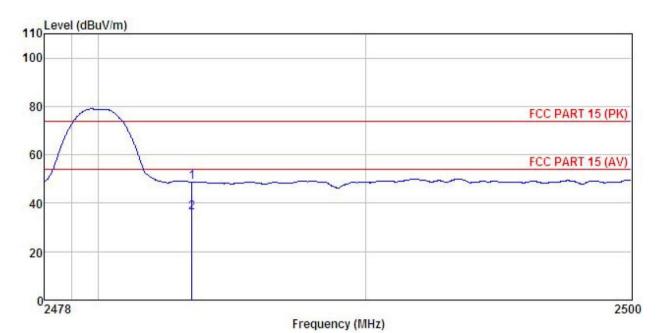
Test Engineer: Zora

REMARK

Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
MHz	dBu∜	<u>dB</u> /m	d <u>B</u>	<u>dB</u>	$\overline{dBuV/m}$	dBuV/m	<u>dB</u>	
2483.500 2483.500								



Vertical:



Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL : WIFI Tablet Condition

EUT

: W101 Model Test mode : BLE-H mode Power Rating : DC 12V

Environment : Temp:25.5°C Huni:55% 101KPa Test Engineer: Zora REMARK :

	09400		Antenna Factor					
-	MHz	dBu₹	dB/π	 <u>ab</u>	$\overline{dBuV/m}$	$\overline{dBuV/m}$	<u>dB</u>	 -
	2483.500 2483.500							



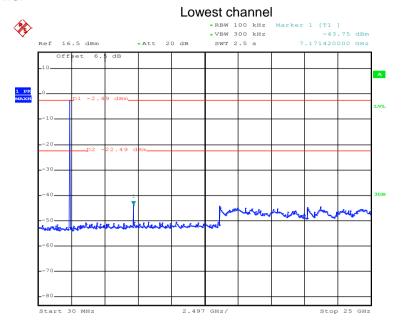
6.6 Spurious Emission

6.6.1 Conducted Emission Method

Test Requirement:	FCC Part 15 C Section 15.247 (d)						
Test Method:	ANSI C63.10:2013 and KDB558074v03r05 section 11						
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.						
Test setup:							
	Spectrum Analyzer E.U.T Non-Conducted Table						
	Ground Reference Plane						
Test Instruments:	Refer to section 5.7 for details						
Test mode:	Refer to section 5.3 for details						
Test results:	Passed						

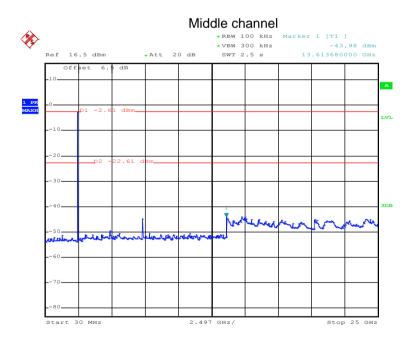


Test plot as follows:



Date: 5.FEB.2017 01:46:26

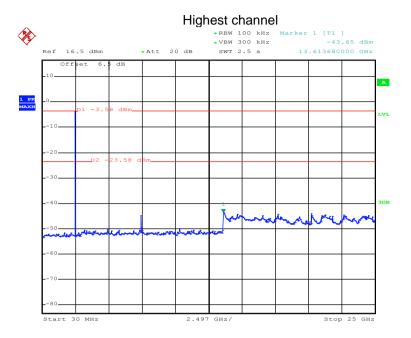
30MHz~25GHz



Date: 5.FEB.2017 01:48:15

30MHz~25GHz





Date: 5.FEB.2017 01:53:27

30MHz~25GHz



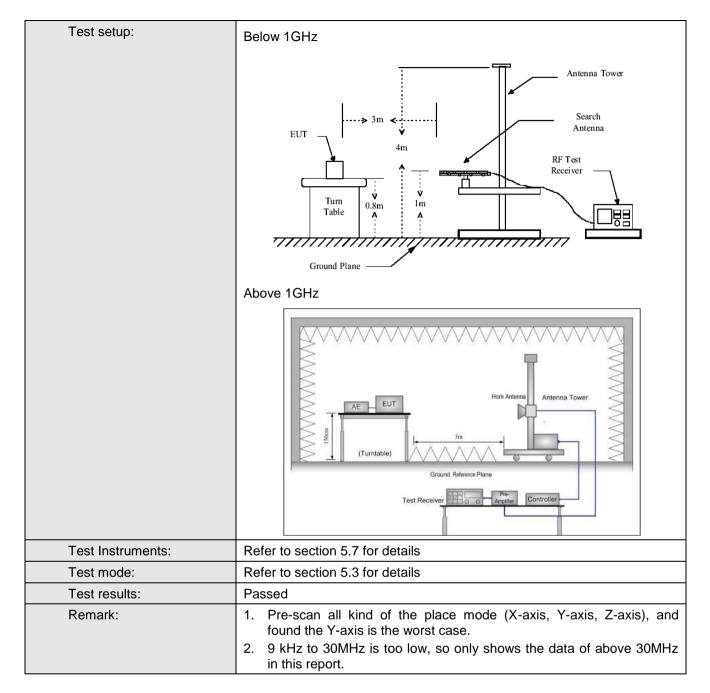


6.6.2 Radiated Emission Method

Test Requirement:	FCC Part 15 C Section 15.209 and 15.205								
Test Method:	ANSI C63.10:2013								
Test Frequency Range:	9KHz to 25GHz								
Test site:	Measurement Distance: 3m								
Receiver setup:	Frequency	Detecto	or	RBW	VB	W	Remark		
·	30MHz-1GHz	Quasi-pe	eak	120KHz	300	KHz	Quasi-peak Value		
	Above 1GHz	Peak		1MHz	3MHz		Peak Value		
	Above 1GHZ	RMS		1MHz	3M	Hz	Average Value		
Limit:	Frequency	y	Lin	nit (dBuV/m @	3m)		Remark		
	30MHz-88M	Hz		40.0		Q	uasi-peak Value		
	88MHz-216N	ИHz		43.5		Q	uasi-peak Value		
	216MHz-960I	MHz		46.0		Q	uasi-peak Value		
	960MHz-1G	Hz		54.0		Quasi-peak Value			
	Above 1GF	17		54.0		Average Value			
				74.0		Peak Value			
Test Procedure:	Above 1(iHz								



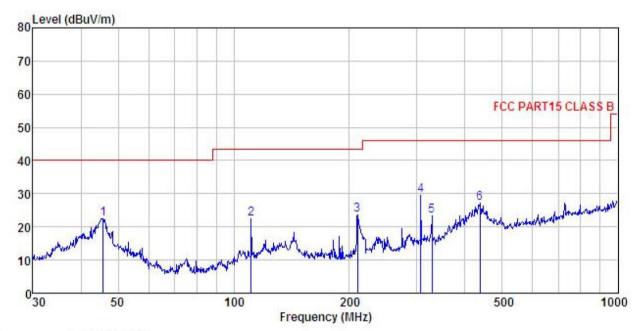






Below 1GHz:

Horizontal:



Site

: 3m chamber : FCC PART15 CLASS B 3m VULB9163(30M3G) HORIZONTAL Condition

EUT WIFI Tablet W101 Model Test mode : BLE mode

Power Rating: DC 12V Environment: Temp:25.5°C Huni:55% 101KPa Test Engineer: Zora

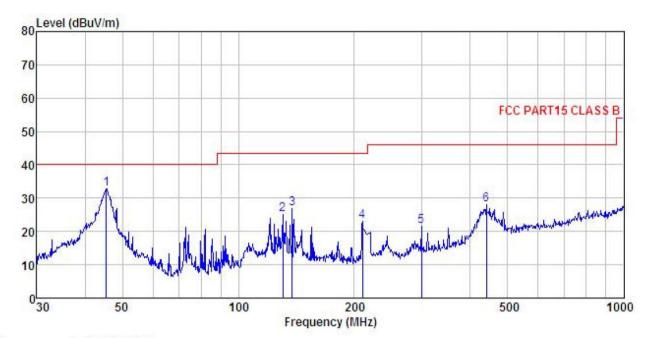
REMARK

	Freq		Antenna Factor		Preamp Factor		Limit Line	Over Limit		
	MHz	dBu∀	<u>dB</u> /m	d <u>B</u>	<u>d</u> B	dBuV/m	dBuV/m	<u>d</u> B		
1	45.695	33.79	17.28	1.29	29.85	22.51	40.00	-17.49	QP	
2 3	110.957	39.39	10.46	2.07	29.45	22.47	43.50	-21.03	QP	
3	210.048	38.97	10.70	2.86	28.77	23.76	43.50	-19.74	QP	
4 5	306.754	42.07	12.91	2.96	28.47	29.47	46.00	-16.53	QP	
5	327.887	35.42	13.51	3.03	28.51	23.45	46.00	-22.55	QP	
	437.120	36.77	16.13	3.17	28.85	27.22	46.00	-18.78	QP	





Vertical:



Site

: 3m chamber : FCC PART15 CLASS B 3m VULB9163(30M3G) VERTICAL : WIFI Tablet Condition

EUT

Model Test mode : BLE mode Power Rating : DC 12V

Environment : Temp:25.5°C Huni:55% 101KPa Test Engineer: Zora REMARK :

CHICATUR.									
			Antenna Factor				Limit Line		Remark
_	MHz	dBu∇	<u>dB</u> /m	<u>d</u> B	<u>dB</u>	dBuV/m	dBuV/m	<u>dB</u>	
1	45.375	43.96	17.32	1.29	29.86	32.71	40.00	-7.29	QP
1 2 3 4 5	130.379	39.87	12.26	2.29	29.33	25.09	43.50	-18.41	QP
3	137.903	42.00	11.84	2.37	29.28	26.93	43.50	-16.57	QP
4	210.048	38.09	10.70	2.86	28.77	22.88	43.50	-20.62	QP
5	298.268	34.35	12.64	2.93	28.45	21.47	46.00	-24.53	QP
6	440.196	37.68	16.14	3.18	28.85	28.15	46.00	-17.85	QP



Above 1GHz

Test channel:		Lowest		Le	vel:	Peak		
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
4804.00	50.82	35.99	6.80	41.81	51.80	74.00	-22.20	Vertical
4804.00	49.78	35.99	6.80	41.81	50.76	74.00	-23.24	Horizontal
Т	Test channel:		Lowest		Level:		Average	
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
4804.00	39.15	35.99	6.80	41.81	40.13	54.00	-13.87	Vertical
4804.00	38.70	35.99	6.80	41.81	39.68	54.00	-14.32	Horizontal

Test channel:			Middle		Le	vel:	Peak		
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	
4884.00	48.10	36.38	6.86	41.84	49.50	74.00	-24.50	Vertical	
4884.00	48.36	36.38	6.86	41.84	49.76	74.00	-24.24	Horizontal	
Т	Test channel:		Middle		Level:		Average		
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	
4884.00	38.07	36.38	6.86	41.84	39.47	54.00	-14.53	Vertical	
4884.00	38.12	36.38	6.86	41.84	39.52	54.00	-14.48	Horizontal	

Test channel:			Highest		Le	vel:	Peak		
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	
4960.00	47.37	36.71	6.91	41.87	49.12	74.00	-24.88	Vertical	
4960.00	48.66	36.71	6.91	41.87	50.41	74.00	-23.59	Horizontal	
Т	Test channel:		Highest		Level:		Average		
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	
4960.00	37.82	36.71	6.91	41.87	39.57	54.00	-14.43	Vertical	
4960.00	37.79	36.71	6.91	41.87	39.54	54.00	-14.46	Horizontal	

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.