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FCC TEST REPORT

Client Name : VTIN TECHNOLOGY Co., Limited

Address Unit D, 16/F, One Capital Place, 18 Luard Road, Wan

Chai, Hong Kong

Product Name : Wireless Mouse

Date : Apr. 25, 2019

Shenzhen Anbotek Compliance Laboratory Limited



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TEST REPORT

Applicant : VTIN TECHNOLOGY Co., Limited

Manufacturer : DONGGUAN NEWMEN ELECTRONICS TECHNOLOGY CO., LTD

Product Name : Wireless Mouse

Model No. : PC120B, MS-358

Trade Mark : VICTSING

Rating(s) : Input: DC 1.5V, 12mA by "AA"*1 battery inside

Test Standard(s) : FCC Part15 Subpart C, Paragraph 15.249

Test Method(s) : ANSI C63.10: 2013

The device described above is tested by Shenzhen Anbotek Compliance Laboratory Limited to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and Shenzhen Anbotek Compliance Laboratory Limited is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with the FCC Part 15 Subpart C requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of Shenzhen Anbotek Compliance Laboratory Limited.

Date of Receipt
Date of Test

Mar. 29, 2019

Mar. 29~Apr. 18, 2019

Prepared by

(Engineer / Oliay Yang)

Reviewer

(Supervisor / Snowy Meng)

Approved & Authorized Signer

(Manager / Sally Zhang)







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1. General Information

1.1. Client Information

Applicant	: VTIN TECHNOLOGY Co., Limited	ootek A
Address	: Unit D, 16/F, One Capital Place, 18 Luard Road, Wan Chai, Hong F	Kong
Manufacturer	DONGGUAN NEWMEN ELECTRONICS TECHNOLOGY CO., LTE) Anboten
Address	NO 5, XIFA ROAD, LIN VILLAGE, TANGXIA TOWN, DONGGUAN, GUANGDONG, CHINA	otek Anbo
Factory	DONGGUAN NEWMEN ELECTRONICS TECHNOLOGY CO., LTC	Anbotek
Address	NO 5, XIFA ROAD, LIN VILLAGE, TANGXIA TOWN, DONGGUAN, GUANGDONG, CHINA	Anbotek

1.2. Description of Device (EUT)

Product Name	:	Wireless Mouse	tek Anbotek Anbotek Anbotek
Model No.	:	PC120B, MS-358 (Note: All samples are the sam for test only.)	ne except the name, so we prepare "PC120B"
Trade Mark	:	VICTSING	Anbotek Anbotek Anbotek Anb
Test Power Supply	:	DC 1.5V battery inside	tek Anbotek Anbotek Anbotek
Test Sample No.	:	1-2-1(Normal Sample), 1-2-2(E	Engineering Sample)
		Operation Frequency:	2.4GHz: 2403~2480MHz BT 4.2 BLE: 2402~2480MHz
s		Transfer Rate:	BT 4.2 BLE: 1 Mbits/s
Product	:	Number of Channel:	2.4GHz: 16 Channels BT 4.2 BLE: 40 Channels
Description		Modulation Type:	GFSK Anbotek Anbotek
		Antenna Type:	PCB Antenna
		Antenna Gain(Peak):	-1 dBiotek Anbotek Anbotek Anb

Remark: 1) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2) This report is for 2.4GHz module.





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1.3. Auxiliary Equipment Used During Test

e	N/A	otek	Anbotek	Anbore	VII.	Anbote Anbote	Anbo	otek vup

1.4. Description of Test Modes

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	ek Anbotek Anbotek CH01 tek Anbotek
Mode 2	CH09
Mode 3	abotek Anbotek Anbotek Anbotek Anbotek

For Radiated Emission								
Final Test Mode			D	escriptio	n			
Mode 1	iek b.	nbotek	Aupote.	CH01	ote ^K	Anbotek	Anbor	
Mode 2	otek	Anbotek	Anbole	CH09	hotek	Anbotek	Aupor	
Mode 3	Anba	Anbotek	Anbo	CH16	hotek	Anbotek	Anbo	

Note:

1. The engineering test program was provided and the EUT was programmed to be in continuously transmitting mode.



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1.5. List of Channels

Channel	Freq.	Channel	Freq.	Channel	Freq.	Channel	Freq.	Channel	Freq.
	(MHz)	Channel	(MHz)	Channel	(MHz)	Channel	(MHz)	Channel	(MHz)
01	2403	05	2422	09	2441	13	2463	1 Anbe	2403
02	2407	06	2426	10	2445	14	2466	otek 2 A	2407
03	2414	07	2436	11ek	2453	15	2473	nbote3	2414
04	2419	08	2439	12	2459	16	2480	nb4tek	2419



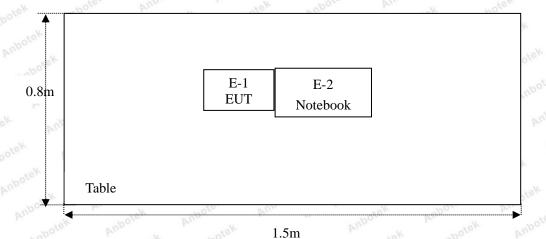
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1.6. Description of Test Setup

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1.7. Test Equipment List

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
unb1tek	L.I.S.N. Artificial Mains Network	Rohde & Schwarz	ENV216	100055	Nov. 05, 2018	1 Year
2.	EMI Test Receiver	Rohde & Schwarz	ESPI3	101604	Nov. 05, 2018	1 Year
3.	RF Switching Unit	Compliance Direction	RSU-M2	38303	Nov. 05, 2018	1 Year
4.	Spectrum Analysis	Agilent	E4407B	US39390582	Nov. 05, 2018	1 Year
5.	MAX Spectrum Analysis	Agilent	N9020A	MY51170037	Nov. 05, 2018	1 Year
6.20	Preamplifier	SKET Electronic	BK1G18G30 D	KD17503	Nov. 05, 2018	1 Year
_{ste} v7.	Double Ridged Horn Antenna	Instruments corporation	GTH-0118	351600	Nov. 20, 2018	1 Year
nb8ek	Bilog Broadband Antenna	Schwarzbeck	VULB9163	VULB 9163-289	Nov. 19, 2018	1 Year
9.	Loop Antenna	Schwarzbeck	FMZB1519B	00053	Nov. 20, 2018	1 Year
10.	Horn Antenna	A-INFO	LB-180400-K F	J211060628	Nov. 20, 2018	1 Year
11.	Pre-amplifier	SONOMA	310N	186860	Nov. 05, 2018	1 Year
12.	EMI Test Software EZ-EMC	SHURPLE	N/A	N/A Anto	N/A	N/A
13.	RF Test Control System	YIHENG	YH3000	2017430	Nov. 05, 2018	1 Year
14.	Power Sensor	DAER	RPR3006W	15I00041SN045	Nov. 05, 2018	1 Year
15.	Power Sensor	DAER	RPR3006W	15I00041SN046	Nov. 05, 2018	1 Year
16.	MXA Spectrum Analysis	Agilent	N9020A	MY51170037	Nov. 05, 2018	1 Year
17.	MXG RF Vector Signal Generator	Agilent	N5182A	MY48180656	Nov. 05, 2018	1 Year
18.	Signal Generator	Agilent	E4421B	MY41000743	Nov. 05, 2018	1 Year
19.	DC Power Supply	LW	TPR-6420D	374470	Oct. 31, 2018	1 Year
o20.	Constant Temperature Humidity Chamber	ZHONGJIAN	ZJ-KHWS80 B	N/A	Nov. 01, 2018	1 Year

Code: AB-RF-05-a

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1.8. Description of Test Facility

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

FCC-Registration No.: 184111

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registed and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No. 184111, July 31, 2017.

ISED-Registration No.: 8058A-1

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (ISED) Innovation, Science and Economic Development Canada. The acceptance letter from the ISED is maintained in our files. Registration 8058A-1, June 13, 2016.

Test Location

Shenzhen Anbotek Compliance Laboratory Limited.

1/F, Building D, Sogood Science and Technology Park, Sanwei community, Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China.518102



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2. Summary of Test Results

Standard Section	Test Item	Result
15.203	Antenna Requirement	PASS
15.207	Conducted Emission	N/A
15.249	Radiated Emission	PASS
15.215(c)	20dB Bandwidth	PASS
15.249(c)	Band Edge	PASS
Remark: "N/A" is an abbro	eviation for Not Applicable.	nbotek Anbotek

Code: AB-RF-05-a

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3. Conducted Emission Test

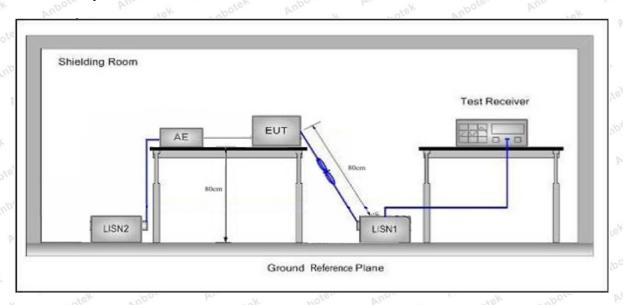
3.1. Test Standard and Limit

Test Standard	FCC Part15 Section 15.2	07 Anbote And Botek	Anbotek Anbos tek				
	Fragueney	Maximum RF Line Voltage (dBuV)					
	Frequency	Quasi-peak Level	Average Level				
Test Limit	150kHz~500kHz	66 ~ 56 *	56 ~ 46 *				
	500kHz~5MHz	Anbotek 56 Anbou	46				
	5MHz~30MHz	Anbotek 60 Anbotek	50 _M				

Remark: (1) *Decreasing linearly with logarithm of the frequency.

(2) The lower limit shall apply at the transition frequency.

3.2. Test Setup



3.3. Test Procedure

The EUT system is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to FCC ANSI C63.10-2013 on Conducted Emission Measurement.

The bandwidth of test receiver (ESCI) set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

Hotline 400-003-0500

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3.4. Test Data

The EUT is powered by DC 1.5V battery inside, so there is no need to conduct this test.

Shenzhen Anbotek Compliance Laboratory Limited

Hotline



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4. Radiated Emission and Band Edge

4.1. Test Standard and Limit

Test Standard	FCC Part15 C Section 1	5.209 and 15.205	Yu. Potek	Anbotek	Anbo. A
	Frequency (MHz)	Field strength (microvolt/meter)	Limit (dBuV/m)	Remark	Measurement distance (m)
	0.009MHz~0.490MHz	2400/F(kHz)	Anbotek An	OLE TUR	300
	0.490MHz-1.705MHz	24000/F(kHz)	Nupotek	Aupore - A	30
	1.705MHz-30MHz	30	Anbotek	Aupore rok	30
Test Limit	30MHz~88MHz	100	40.0	Quasi-peak	3 otek
	88MHz~216MHz	150	43.5	Quasi-peak	a 3 botek
	216MHz~960MHz	200	46.0	Quasi-peak	Jek 3
	960MHz~1000MHz	500	54.0	Quasi-peak	atek3
	Above 4000MH=	500	54.0	Average	3.
	Above 1000MHz	Anbotek - Anbou	74.0	Peak	Amb 3

Remark:

- (1) The lower limit shall apply at the transition frequency.
- (2) 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.

Test Standard	FCC Part15 (Section 15.249	ik anbotek	Anbote	Andhotek	Anbotek
	Frequency (MHz)	Field Strength of fundamental ((millivolts /meter)	Field Strength of Harmonics (microvolts/meter)	Limit (dBuV/m)	Remark	Measurement distance (m)
Test Limit	2400~2483.5	50 stek	Anboten Anbo	114.0	Peak	3 Am
	2400~2483.5	50	Anboten Ar	94.0	Average	Anborta 3
	2400~2483.5	hoote Annibote	500	74.0	Peak	3
	2400~2483.5	Anborratek Ann	500	54.0	Average	3

Remark:

(1) 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.

Hotline 400-003-0500



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4.2. Test Setup

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Figure 1. Below 30MHz

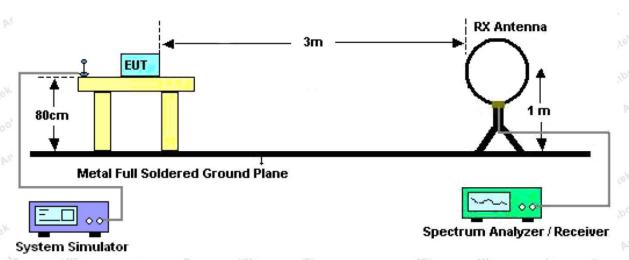


Figure 2. 30MHz to 1GHz

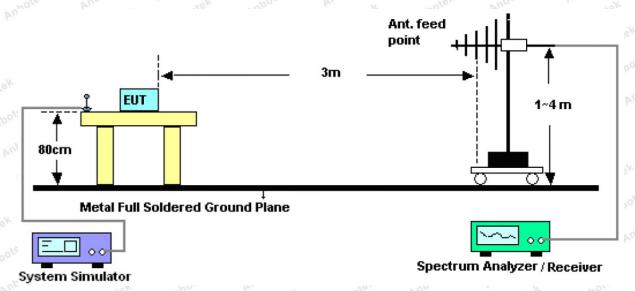
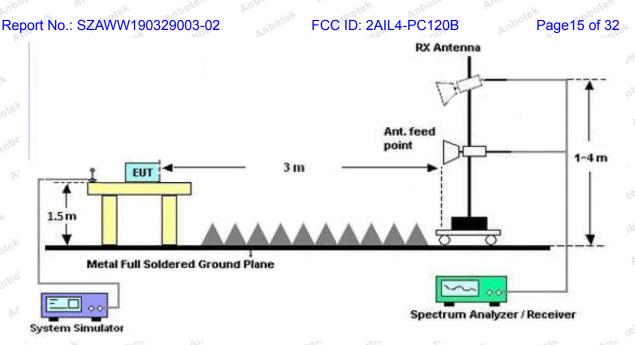


Figure 3. Above 1 GHz





4.3. Test Procedure

For below 1GHz: The EUT is placed on a turntable, which is 0.8m above the ground plane. For above 1GHz: The EUT is placed on a turntable, which is 1.5m above the ground plane.

The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna which is mounted on a antenna tower. The antenna can be moved up and down from 1 to 4 meters to find out the maximum emission level. Rotated the EUT through three orthogonal axes to determine the maximum emissions, both horizontal and vertical polarization of the antenna are set on test. The EUT is tested in 9*6*6 Chamber. The device is evaluated in xyz orientation.

For the radiated emission test above 1GHz:

Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.

For 9kHz to 150kHz, Set the spectrum analyzer as:

RBW = 200Hz, VBW =1kHz, Detector= Quasi-Peak, Trace mode= Max hold, Sweep- auto couple.

For 150kHz to 30MHz, Set the spectrum analyzer as:

RBW = 9KHz, VBW =30kHz, Detector= Quasi-Peak, Trace mode= Max hold, Sweep- auto couple.





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For 30MHz to 1000MHz, Set the spectrum analyzer as:

RBW = 100kHz, VBW =300kHz, Detector= Quasi-Peak, Trace mode= Max hold, Sweep- auto couple.

.

For above 1GHz,Set the spectrum analyzer as:

RBW =1MHz, VBW =1MHz, Detector= Peak, Trace mode= Max hold, Sweep- auto couple.

RBW =1MHz, VBW =10Hz, Detector= Average, Trace mode= Max hold, Sweep- auto couple.

4.4. Test Data

PASS

During the test, Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the X-axis is the worst case.

The test results of 9kHz-30MHz was attenuated more than 20dB below the permissible limits, so the results don't record in the report.

During the test, pre-scan all the modes, and found the Middle channel which is the worst case, only the worst case is recorded in the report



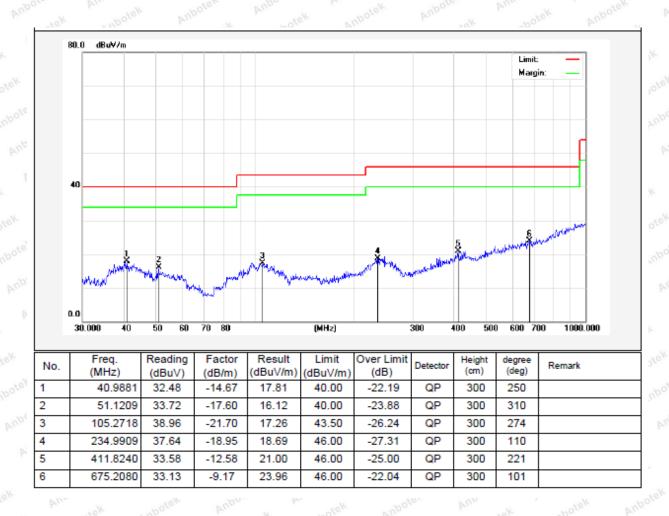
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Test Results (30~1000MHz)

SZAWW190329003 -02 Job No.: Temp.(°C)/Hum.(%RH): 23.1°C/51%RH

Standard: FCC PART 15C Power Source: DC 1.5V battery inside

Mode 2 Test Mode: Polarization: Horizontal





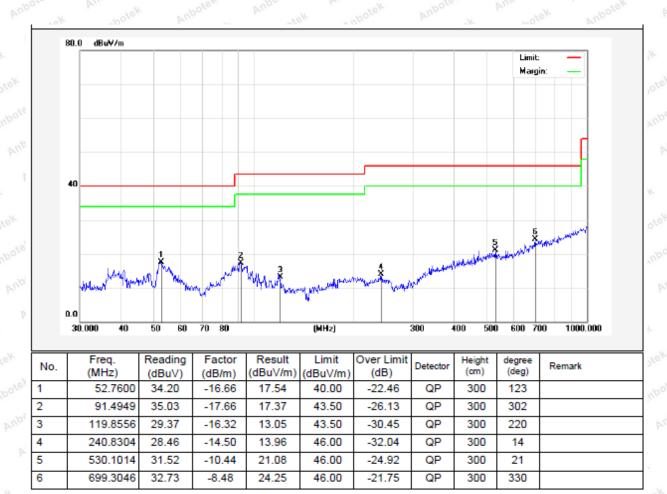
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Test Results (30~1000MHz)

SZAWW190329003 -02 Temp.($^{\circ}$)/Hum.($^{\circ}$ RH): Job No.: 23.1°C/51%RH

Standard: FCC PART 15C Power Source: DC 1.5V battery inside

Mode 2 Polarization: Test Mode: Vertical





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Test Results (1GHz-25GHz)

Test Mode:	CH01 (Low	channel)							
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Detecto r
2403.0000	95.12	31.12	2.18	35.33	93.09	114.00	-20.91	V	Peak
2403.0000	82.41	31.12	2.18	35.33	80.38	94.00	-13.62	× V	AVG
4806.0000	48.96	34.01	2.58	34.65	50.90	74.00	-23.10	V	Peak
4806.0000	40.39	34.01	2.58	34.65	42.33	54.00	-11.67	V	AVG
7209.0000	47.52	36.16	2.97	35.07	51.58	74.00	-22.42	Vub	Peak
7209.0000	38.84	36.16	2.97	35.07	42.90	54.00	-11.10	A.p.o	AVG
9612.0000	Aupoter.	And	k nbote	K AN	oore. b	in hotek	Anbotek	P _L	bor
12015.0000	Antotek	Anbo	16K "V	otek	Anboto. K	Am	Anbot	. K	Anbor
14418.0000	3 to 2	PUD	rek	nbotek	Anboten	Pun.	rek an	otek	Anbox
16821.0000	tek * Anb	otel P	Upo	abotek	Anbote	K NUM	-otek	Inpotek	Anb
2403.0000	93.16	31.12	2.18	35.33	91.13	114.00	-22.87	Hool	Peak
2403.0000	84.24	31.12	2.18	35.33	82.21	94.00	-11.79	H	AVG
4806.0000	50.93	34.01	2.58	34.65	52.87	74.00	-21.13	« H	Peak
4806.0000	39.26	34.01	2.58	34.65	41.20	54.00	-12.80	oteH	AVG
7209.0000	45.67	36.16	2.97	35.07	49.73	74.00	-24.27	Hek	Peak
7209.0000	35.05	36.16	2.97	35.07	39.11	54.00	-14.89	H ot	AVG
9612.0000	poter + A	"Orek	Anbotek	Aupon	rok bus	botek	Anbotek	Anbo	atek A
12015.0000	Anbotek	Anor	anbote	Anh	or Pr	hotek	Anbotek	Ani	or otek
14418.0000	Antroiek	Vupo	lek vup	Jek I	hole	Pur notek	Anbote		Aupo.
16821.0000	*nbotell	Anbe	stek A.	obotek	Aupore	Pun	ak Anb	otel.	Aupor

Note:

- 1. Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
 - 2. "*" means the test results were attenuated more than 20dB below the permissible limits, so the results don't record in the report.



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Test Mode:	CH09 (Midd	le channel)						
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Detecto r
2441.0000	93.72	31.12	2.20	34.51	92.53	114.00	-21.47	V	Peak
2441.0000	82.12	31.22	2.20	34.51	81.03	94.00	-12.97	V	AVG
4882.0000	49.64	34.98	2.49	34.14	52.97	74.00	-21.03	V	Peak
4882.0000	41.32	34.98	2.49	34.14	44.65	54.00	-9.35	V	AVG
7323.0000	47.37	36.01	3.01	34.56	51.83	74.00	-22.17	AnVolo	Peak
7323.0000	38.12	36.01	3.01	34.56	42.58	54.00	-11.42	N_{Po}	AVG
9764.0000	Anbolek	Aupote	r Pur	K AN	ootek p	upo.	nbotek	A	Pose
12205.0000	anbotek	Anbote	V Vu	otek	Anbotek	Aupor	A. aboti	45	Aupolen
14646.0000	*nbote	6 Anb	Ose Vu	hotek	Anbotek	Aupor	ick of	otek	Anbore
17087.0000	1	otek p	upole	Yun Potek	Anbote	Anbo	181	abotek	Anb
2441.0000	96.74	31.12	2.20	34.51	95.55	114.00	-18.45	Hook	Peak
2441.0000	82.42	31.12	2.20	34.51	81.23	94.00	-12.77	Н	AVG
4882.0000	47.38	34.98	2.49	34.14	50.71	74.00	-23.29	K H	Peak
4882.0000	40.11	34.98	2.49	34.14	43.44	54.00	-10.56	H	AVG
7323.0000	45.29	36.01	3.01	34.56	49.75	74.00	-24.25	H	Peak
7323.0000	35.21	36.01	3.01	34.56	39.67	54.00	-14.33	Yupor	AVG
9764.0000	botek * A	Upor	Abotek	Anbore	N Aup	stek k.	Anbotek	Anbot	P. A
12205.0000	Anbotek	Aupore	A botel	Ant	oter A	ibo botek	Anbotek	An'	30to
14646.0000	Ant+otek	Anbore	Vol.	stek I	mbolek	Anbo	nbote	6	Aupote.
17087.0000	*nboteh	Anbe	, K	notek	Anbolek	Vupo.	A ~/0	otek	Aupoten

Note:

- 1. Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. "*" means the test results were attenuated more than 20dB below the permissible limits, so the results don't record in the report.



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-010	VUL		Jas	NO.	po-	7/6	- Uh		
Test Mode:	CH16 (High	channel)							
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Pol.	Detecto r
2480.0000	93.79	31.65	2.23	36.07	91.60	114.00	-22.40	V	Peak
2480.0000	82.14	31.65	2.23	36.07	79.95	94.00	-14.05	V	AVG
4960.0000	47.11	35.06	2.60	34.93	49.84	74.00	-24.16	V	Peak
4960.0000	40.16	35.06	2.60	34.93	42.89	54.00	-11.11	V V	AVG
7440.0000	47.29	36.19	3.12	35.11	51.49	74.00	-22.51	An Votes	Peak
7440.0000	36.72	36.19	3.12	35.11	40.92	54.00	-13.08	Nipo	AVG
9920.0000	vupo*ek	Aupote	r Pus	K AN	ootek p	upo.	nbotek	P.	pose
12400.0000	*botek	Anbote	V Vu	otek	Anbotek	Aupor	A. aboti	3/K	Anboren
14880.0000	* nbote	F Anb	Ore. Vu.	hotek	Anbotek	Aupor	lek by	otek	Anbore
17360.0000	tek * nb	otek P	upote	Xun Potek	Anbote	Anbe	P. Br	abotek	Anb
2480.0000	95.39	31.65	2.23	36.07	93.20	114.00	-20.80	Hoot	Peak
2480.0000	82.55	31.65	2.23	36.07	80.36	94.00	-13.64	Н	AVG
4960.0000	48.25	35.06	2.60	34.93	50.98	74.00	-23.02	K H	Peak
4960.0000	39.47	35.06	2.60	34.93	42.20	54.00	-11.80	Н	AVG
7440.0000	48.46	36.19	3.12	35.11	52.66	74.00	-21.34	H	Peak
7440.0000	38.67	36.19	3.12	35.11	42.87	54.00	-11.13	^{rup} ore	AVG
9920.0000	botek * A	Upor Pak	An	Anbore	Pup.	iek p	abotek	Anbot	-K
12400.0000	Anbotek	Aupore	An botel	Ant	oler V	ipo notek	anbotek	An	Jores.
14880.0000	Ant+otek	Anbore	bus ha	stek l	hotek	Anbo.	a nbote	1	Aupole
17360.0000	*nbotek	Anbe	ek Mus	notek	Anbotek	Aupor	sk ~0	otek	Anboten

Note:

- 1. Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. "*" means the test results were attenuated more than 20dB below the permissible limits, so the results don't record in the report.



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Radiated Band Edge:

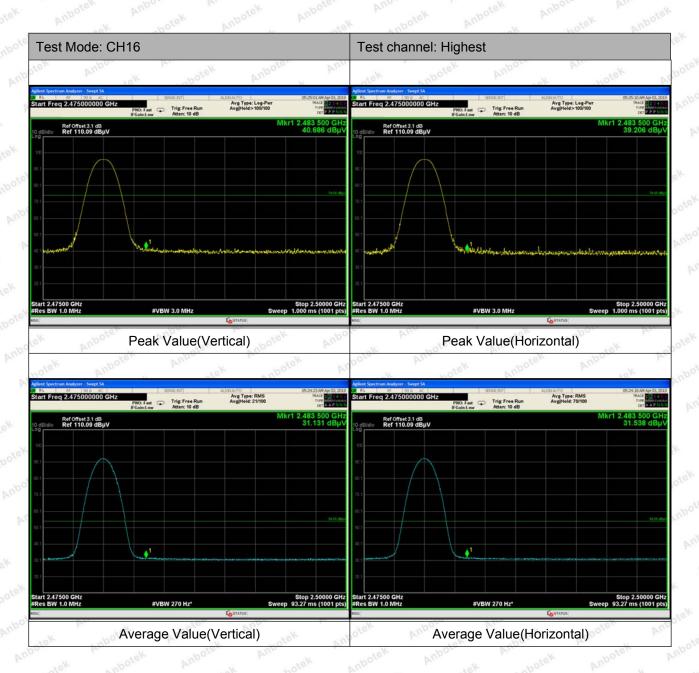


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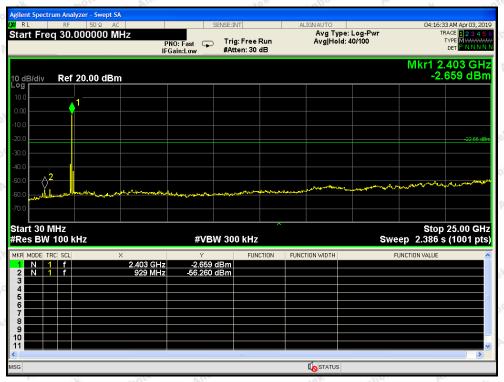
Remark:

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

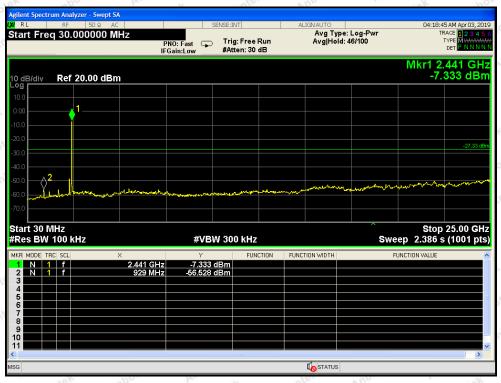


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CH: Low



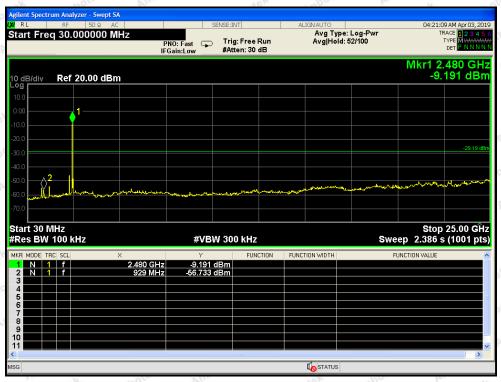
CH: Middle



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CH: High



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5. 20dB Bandwidth Test

5.1. Test Standard and Limit

Test Standard FCC Part15 C Section 15.249

5.2. Test Setup



5.3. Test Procedure

- 1. Place the EUT on the table and set it in the transmitting mode.
- 2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 3. Set the spectrum analyzer as:

RBW = 30kHz, VBW≥3*RBW =100kHz,

Detector= Average

Trace mode= Max hold.

Sweep- auto couple.

- 4. Mark the peak frequency and -20dB (upper and lower) frequency.
- 5. Repeat until all the rest channels are investigated.

5.4. Test Data

Test Item : 20dB Bandwidth Test Mode : Mode 1 Test Voltage : DC 1.5V battery inside Temperature : 22.4° C Test Result : PASS Humidity : 55° RH

Frequency (MHz)	Bandwidth (kHz)	Result
2403MHZ	1186	PASS
2441MHZ	ek Anbotek 1171-inbo tek	PASS
2480MHZ	1140 Mark	PASS



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Test Mode: Low



Test Mode: Middle

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Test Mode: High

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6. Antenna Requirement

6.1. Test Standard and Requirement

Test Standard	FCC Part15 Section 15.203
Requirement	1) 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

6.2. Antenna Connected Construction

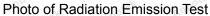
The antenna is a PCB Antenna which permanently attached, and the best case gain of the antenna is -1 dBi. It complies with the standard requirement.





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APPENDIX I -- TEST SETUP PHOTOGRAPH







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APPENDIX II -- EXTERNAL PHOTOGRAPH

Please refer to the test report SZAWW190329003-01.

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APPENDIX III -- INTERNAL PHOTOGRAPH

Please refer to the test report SZAWW190329003-01.

----- End of Report -----

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