Dynamic Frequency Selection Test Report for Elitegroup Computer Systems Co., Ltd. 7" Pocketable Pad Model No.: (1)MICA-07...... (2)TABLET TB71..... FCC ID: WL6TB71A-W Brand: (1)ADVANTECH (2)ECS

> Prepared for : Elitegroup Computer Systems Co., Ltd. No. 239, Sec. 2, Ti Ding Blvd., Taipei, Taiwan

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:	2014. 05. 29
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TABLE OF CONTENTS

Description	Page
TEST REPORT VERIFICATION	3
1.DESCRIPTION OF VERSION	4
2.SUMMARY OF MEASUREMENTS AND RESULTS	5
3.GENERAL INFORMATION	6
3.1.Description of Device (EUT)	6
3.2.Antenna Information	8
3.3.Description of Key Component Lists	9
3.4.Support Equipment	10
3.5.Test Channel	10
3.6.Description of Test Facility	10
3.7.Measurement Uncertainty	10
4. TEST EQUIPMENT	11
5.WORKING MODES AND REQUIREMENT TEST ITEM	12
5.1.Applicability of DFS Requirements Prior To Use A Channel	12
5.2.Applicability of DFS Requirements During Normal Operation	12
6.DFS DETECTION THRESHOLOS AND RADAR TEST WAVEFORMS	13
6.1.Interference Threshold Value, Master or Client Incorporating In-Service Monitoring	13
6.2.Radar Test Waveform Minimum Step	13
6.3.Short Pulse Radar Test Waveforms	13
6.4.Long Pulse Radar Test Waveforms	14
6.5.Frequency Hopping Pulse Radar Test Waveforms	16
6.6.Conducted Calibration Setup	18
6.7.Radar Waveform Calibration Procedure	18
6.8.Calibration Deviation	18
6.9.Radar Waveform Calibration Result	19
7.TEST SETUP AND TEST RESULT	20
7.1.Test Setup	20
7.2. Channel Move Time, Channel Closing Transmission Time Measurement	22
8.PHOTOGRAPHS OF MEASUREMENT	32

TEST REPORT VERIFICATION

Applicant	:	Elitegroup Computer Systems Co., Ltd.		
Manufacturer	:	Elitegroup Computer Systems Co., Ltd.		
EUT Descriptio	on :	7" Pocketable Pad		
FCC ID	:	WL6TB71A-W		
		(A) Model No.	:	(1)MICA-07 (2)TABLET TB71
		(B) Serial No.	:	N/A
		(C) Brand	:	(1)ADVANTECH (2)ECS
		(D) Power Supply	:	DC 3.7V (Battery) or DC 5V (USB)
		(E) Test Voltage	:	DC 3.7V

Measurement Standards Used:

FCC RULES AND REGULATIONS PART 15 Subpart E, Oct. 2013 (FCC CFR 47 Part 15E, §15.407)

The device described above was tested by AUDIX Technology Corporation to determine the maximum emission levels emanating from the device. The maximum emission levels were compared to the FCC Part 15 limit.

The measurement results are contained in this test report and AUDIX Technology Corporation is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliant with the requirements of FCC Part 15 standard.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of AUDIX Technology Corporation.

Date of Test: 2014. 05. 29

Date of Report: 2014. 05. 30

Producer:

(Tina Huang/Administrator)

Signatory:

1. DESCRIPTION OF VERSION

Edition No.	Date of Revision	Revision Summary	Report Number
0	2014. 05. 30	Original Report.	EM-F140303

2. SUMMARY OF MEASUREMENTS AND RESULTS

The EUT has been tested according to the applicable standards as referenced below.

Description of Test Item	Results		
Channel Availability Check Time	N/A		
Channel Move Time	PASS		
Non-Occupancy Period	N/A		
Channel Closing Transmission Time	PASS		
U-NII Detection Bandwidth	N/A		
N/A is an abbreviation for Not Applicable, sine the product is client without radar detection function			

3. GENERAL INFORMATION

5.1. Description of Device (EU	EUT	f Device (EU)	. Description	3.1.
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Product	7" Pocketable Pad
	(1)MICA-07 (2)TABLET TB71
Model Number	(The "." in the model name can be 0 to 9, A to Z, a to z, "-", "_", "\", "/" or blank, for marketing use only.)
	Above two models difference in brand and model name, others are the same. The model TB71A-W is test in this report
Serial Number	N/A
Brand Name	(1)ADVANTECH (2)ECS
Applicant	Elitegroup Computer Systems Co., Ltd. No. 239, Sec. 2, Ti Ding Blvd., Taipei, Taiwan
Manufacturer	Elitegroup Computer Systems Co., Ltd. No. 239, Sec. 2, Ti Ding Blvd., Taipei, Taiwan
FCC ID	WL6TB71A-W
Fundamental Range	 802.11b/g/n-HT20: 2412MHz ~ 2462MHz 802.11a: 5180MHz ~ 5240MHz (UNII Band I) and 5260MHz ~ 5320MHz (UNII Band II-2A) and 5500MHz ~ 5700MHz (UNII Band II-2C) and 5745MHz ~ 5825MHz (UNII Band III) UNII Band II (DFS Function, Slave/no In service monitor, no Ad-Hoc mode) 802.11n-HT20: 2412MHz ~ 2462MHz and 5180MHz ~ 5240MHz (UNII Band I) and 5260MHz ~ 5320MHz (UNII Band II-2A) and 5500MHz ~ 5700MHz (UNII Band II-2A) and 5500MHz ~ 5700MHz (UNII Band II-2C) and 5745MHz ~ 5825MHz (UNII Band II-2C) and 5745MHz ~ 5825MHz (UNII Band II) UNII Band II (DFS Function, Slave/no In service monitor, no Ad-Hoc mode) 802.11n-HT40: 5190MHz ~ 5230MHz (UNII Band I) and 5270MHz ~ 5310MHz (UNII Band I) and 5510MHz ~ 5670MHz (UNII Band II-2A) and 5510MHz ~ 5795MHz (UNII Band II-2C) and 5755MHz ~ 5795MHz (UNII Band III) UNII Band II (DFS Function, Slave/no In service monitor, no Ad-Hoc mode) Bluetooth and BLE: 2402MHz ~ 2480MHz NFC: 13.56MHz GPS: 1575.42MHz

	802.11b/g: 11 channels
	802.11a: UNII Band I: 4 channels
	UNII Band II-2A: 4 channels
	UNII Band II-2C: 8 channels
	UNII Band III: 5 channels
	802.11n-HT20: 2.4GHz: 11 channels 2.4G
	UNI Band I: 4channels
	UNII Band II-2A: 4 channels
Frequency Channel	UNII Band II-2C: 8 channels
	UNII Band III: 5 channels
	802.11n-HT40: UNII Band I: 2 channels
	UNII Band II-2A: 2 channels
	UNII Band II-2C: 3 channels
	UNII Band III: 2 channels
	Bluetooth: 79 channels
	BLE: 40 channels
	NFC: 1 Channel
	802.11b: DSSS Modulation (DBPSK/DQPSK/CCK)
	802.11g: OFDM Modulation (BPSK/QPSK/16QAM/64QAM)
	802.11a: OFDM Modulation (BPSK/QPSK/16QAM/64QAM)
Radio Technology	802.11n: OFDM Modulation (MIMO)
85	(BPSK/QPSK/16QAM/64QAM)
	Bluetooth: FHSS (GFSK, $\pi/4$ DQPSK, 8-DPSK)
	BLE: GFSK
	NFC: ASK
	802.11b: 1/2/5.5/11Mbps
Data Transfor Data	802.11a/g: 6/9/12/18/24/36/48/54Mbps
Data Mansiel Kate	802.11 m. up to 270100ps
	B1. 1/2/SIVIOPS DL E: 1Mhns
Antenna Gain	2.4GHZ: -1.35dB1 5GHz: 4.27dBj
	50112. т. <i>5</i> / u Di
Date of Receipt of	2014. 04. 21
Sample	

3.2. Antenna Information

Antonno Dort		Antonna	Peak Gain W/ Cable loss (dBi)				
Number	Manufacture	Ifacture Type Free		Frequency (MHz)		Max Gain (Peak) (dBi)	
			2400	5180	1.33	-1.53	
			2412	5190	1.92	-1.53	
		-	2417	5310	2.07	0.66	
			2422	5320	2.19	0.05	
			2427	5500	2.44	-0.19	
			2432	5510	2.59	-0.41	
WLAN/BT	INNETECH		2437	5670	2.78	-1.57	
Antenna:	(Tianjin)	PCB	2442	5700	2.83	-3.16	
E22-003-007-037	Electronics	Antenna	2447	5745	2.87	-3.55	
-8014b (Main)	Co. Ltd.		2450	5765	2.78	-2.70	
			2452	5785	2.76	-2.93	
			2457	5805	2.68	-3.46	
			2462	5825	2.47	-3.15	
			2467		2.38		
			2472		2.52		
			2500		2.17		
		РСВ	2400	5180	3.08	0.61	
			2412	5190	3.43	0.39	
			2417	5310	3.10	0.91	
			2422	5320	3.07	0.14	
			2427	5500	2.78	-0.35	
			2432	5510	2.68	-0.40	
	INNETECH		2437	5670	2.63	-0.62	
WLAN Antenna:	(Tianjin)		2442	5700	2.49	-1.25	
-8014b (AUX)	Electronics	Antenna	2447	5745	2.68	-1.02	
	Co. Ltd.		2450	5765	2.60	0.06	
			2452	5785	2.77	-0.30	
			2457	5805	2.75	-0.23	
			2462	5825	2.82	-0.09	
			2467		2.77		
			2472		2.68		
			2500		2.58		
			1565		-3.	.38	
			1575		-2.	.87	
	INNETECH	DOD	1585		-3.25		
GPS Antenna	(Hanjin) Electronics	rub Antenna	1597		-2.	42	
	Co. Ltd.		1602		-2.22		
		ľ	1606		-1.98		
			1616		-1.37		

Ite	em	Supplier	Description	Character		
System		Microsoft	Windows 8			
Main Boa	ırd	ECS	TB71A-W			
LCD Mo	dule	CPTF	CLAT070WP0D	7 inch CPT 800x1280 -10 point touch		
CPU		Intel	Intel® Atom™ Processor Bay Trail	T Z3770, 1.46GHz Burst frequency 2.39GHz (Intel, BGA1380 pin)		
GPU		Intel		HD Graphics		
Memory		Hynix	H9CCNNN8KTMLBR-N TM	LP DDR3 2GB (up to 4G)		
SSD		Sandisk	SDIN8DE4-32G	eMMC 32GB		
Battery P	ack	Sunwoda	MICA-071	3.7V / 4100 mAh /15.17Wh		
Front Car	nera	LiteON	NL89A141	sensor Sony IMX175 .8MP		
Rear Carr	nera	LiteON	13P2SF206	sensor OV2722, 2MP		
Barcode S	Scaner	Itermec	ED30	Decode Board + EA31 Imager		
Touch Pa	d	CPTF	CLAA070WP03			
WLAN+I Combo N	3T Iodule	MITSUMI	DWM-W095A	WLAN: 2.412GHz to 2.472GHz 5.18GHz to 5.85GHz BT4.0+BLE: 2.402GHz to 2.480GHz		
NFC		NXP	PN544PC	13.56MHz		
GNSS		MITSUMI	SPG-SF102	GPS: 1575.42MHz GLONASS: 1598.0625 to 1605.375 MHz		
WLAN/ BT	Main	INNETECH ELECTRONICS	e22-003-007-037-8014b	Laser Direct Structuring (LDS) Antenna on frame		
Antenna	AUX	INNETECH ELECTRONICS	e22-003-007-037-8014b	Laser Direct Structuring (LDS) Antenna on frame		
Stylus Pe	n	FO	BLACK/#8513.	CAPACITIVE TOUCH PEN		
USB Cha	rger	Chicony	W12-010N3A	I/P: 100-240V~, 50-60Hz, 0.3A O/P: 5V, 2A		
Docking		AdvanTech	MICA-071-DCRE	DC 5V		
DOCKINg		ECS	DOCKING TB71A-W	DC 5V		
Docking Power		Asian	WA-20A05FU I/P: 100-240V~, 0.6A, 5 O/P: 5V, 4A			
Adapter		Power Cord: Non-Shielded, Undetached, 1.8m, Bonded a ferrite core				
USB Cha Docking	rge Cable	Shielded, Detachable, 1.2m				
HDMI De Cable	ocking	Shielded, Detachable, 0.17m				
USB3.0 I Cable	Docking	Shielded, Detachable, 0.23m				
Remark: For a more detailed features description, please refer to the manufacturer's						

3.3. Description of Key Component Lists

Remark: For a more detailed features description, please refer to the manufacturer's specifications or the user manual.

3.4. Support Equipment

Item	Manufacturer	Model	Remark
AP	s AC Module		
AP Server	TP-LINK	DIR-868L	FCC ID: KA2IR868LA1
Wireless AC Module	Aplpha	WMC-AC01	FCC ID: RRK2012060056-1

3.5. Test Channel

Frequency Band	Channel No.	Frequency	
	20MHz		
5260-5320MHz	52	5260MHz	
(UNII Band II-2A)	40MHz		
	54	5270MHz	
		20MHz	
5500-5700MHz	100	5500MHz	
(UNII Band II-2C)	40MHz		
	102	5510MHz	

3.6. Description of Test Facility

Name of Firm	:	AUDIX Technology Corporation EMC Department No. 53-11, Dingfu, Linkou Dist., New Taipei City 244, Taiwan, R.O.C.
Test Site	:	No. 53-11, Dingfu, Linkou Dist., New Taipei City 244, Taiwan, R.O.C.
NVLAP Lab. Code	:	200077-0
TAF Accreditation No	:	1724

3.7. Measurement Uncertainty

Test Item	Uncertainty
DFS Measurement	±0.5ms
Threshold	±0.33dB

Item	Туре	Manufacturer	Model No.	Serial No.	Cal. Due Date
1.	Vector Signal Generation	R&S	SMU200A	104893	2014. 06. 26
2.	2. Spectrum Analyzer Agilent		N9030A-544	US51350140	2014. 07. 29
	Spectrum Analyzer	R&S	FSV30	101181	2015.03.03
3.	Atteuator (10dB) X2	Worken	WK0602-10	0120A02208001 S	N/A
4.	Atteuator (30dB) X2	Worken	WK0602-30	0120A02208002 S	N/A

4. TEST EQUIPMENT

5. WORKING MODES AND REQUIREMENT TEST ITEM

	Operational Mode				
Requirement	Master	Client without radar detection	Client with radar detection		
Non-Occupancy Period	\checkmark	Not required	\checkmark		
DFS Detection Threshold	\checkmark	Not required	\checkmark		
Channel Availability Check Time	\checkmark	Not required	Not required		
Uniform Spreading	\checkmark	Not required	Not required		
U-NII Detection Bandwidth	\checkmark	Not required	\checkmark		

5.1. Applicability of DFS Requirements Prior To Use A Channel

5.2. Applicability of DFS Requirements During Normal Operation

	Operational Mode				
Requirement	Master	Client without radar detection	Client with radar detection		
DFS Detection Threshold	\checkmark	Not required	\checkmark		
Channel Closing Transmission Time	\checkmark	~	\checkmark		
Channel Move Time	\checkmark	\checkmark	\checkmark		
U-NII Detection Bandwidth	\checkmark	Not required	\checkmark		

6. DFS DETECTION THRESHOLOS AND RADAR TEST

WAVEFORMS

6.1. Interference Threshold Value, Master or Client Incorporating In-Service Monitoring

Maximum Transmit Power	Value (See Notes 1 and 2)			
\geq 200 milliwatt	-64dBm			
< 200 milliwatt	-62dBm			
Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna.				
Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.				

The radar Detection Threshold, lowest antenna gain is the parameter of interference radar DFS detection threshold.

6.2. Radar Test Waveform Minimum Step

Step intervals of 0.1 microsecond for Pulse Width, 1 microsecond for PRI, 1MHz for chirp width and 1 for the number of pulses will be utilized for the random determination of specific test waveforms.

Radar Type	Pulse Width (µsec)	PRI (µsec)	Number of Pulse	Minimum Percentage of Successful Detection	Minimum number of Trials
1	1	1428	18	60%	30
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120

6.3. Short Pulse Radar Test Waveforms

A minimum of 30 unique waveforms are required for each of the short pulse radar type 2 through 4. For short pulse radar type 1, the same waveform is used a minimum of 30 times. If more than 30 waveforms are used for short pulse radar types 2 through 4, then each additional waveform must also be unique and not repeated from the previous waveforms. The aggregate is the average of the percentage of successful detections of short pulse radar types 1-4.

FCC Radar Types (1~4) System Diagram



Used R&S SMU200A (Vector SG with two ARB)

B11: Base-band Generator with ARB (16M samples) and Digital Modulation

B13: Base-band Main Module

B106: frequency range (100 kHz to 6 GHz)

For selecting the waveform parameters from within the bounds of the signal type, system was random selection using uniform distribution.

6.4. Long Pulse Radar Test Waveforms

Radar Type	Pulse Width (µsec)	Chirp Width (MHz)	PRI (µsec)	Number of Pulse Per Burst	Number of Bursts	Minimum Percentage of Successful Detection	Minimum of Trials
5	50-100	5-20	1000-2000	1-3	8-20	80%	30

The parameters for this waveform are randomly chosen. Thirty unique waveforms are required for the Long Pulse radar test signal. If more 30 waveforms are used for the Long Pulse radar test signal, then each additional waveform must also be unique and not repeated from the previous waveforms. Each waveform is defined as following:

- (1) The transmission period for the Long Pulse Radar test signal is 12 seconds.
- (2) There are a total of 8 to 20 Bursts in the 12 second period, with the number of Bursts being randomly chosen. This number is Burst_Count.
- (3) Each Burst consists of 1 to 3 pulses, with the number of pulses being randomly chosen. Each Burst within the 12 second sequence may have a different number of pulses.
- (4) The pulse width is between 50 and 100 microseconds, with the pulse width being randomly chosen. Each pulse within a Burst will have the some pulse width. Pulses in different Bursts may have different pulse widths.
- (5) Each pulse has a linear FM chirp between 5 and 20MHz, with the chirp width being randomly chosen. Each pulse within a Burst will have the same chirp width. Pulses in different Burst may have different chirp widths. The chirp is centered on the pulse. For example, with a radar frequency of 5300MHz and a 20MHz chirped signal, the chirp starts at 5290MHz and ends at 5310MHz.

- (6) If more than one pulse is present in a Burst, the time between the pulses will be between 1000 and 2000 microseconds, with the time being randomly chosen. If three pulses are present in a Burst, the time between the first and second pulses is chosen independently of the time between the second and third pulses.
- (7) The 12 second transmission period is divided into even intervals. The number of intervals is equal to Burst_Count. Each interval is of length (12000000/Burst_Count) microseconds. Each interval contains one Burst. The start time for the Burst, relative to the beginning of the interval, is between 1 and [(12000000/Burst_Count)-(Total Burst length)+(One Random PRI interval)] microseconds, with the start time being randomly chosen. The step interval for the start time is 1 microsecond. The start time for each Burst is chosen independently.

A representative example of a Long Pulse radar test waveform:

- (1) The total test signal length is 12 seconds.
- (2) 8 Bursts are randomly generated for the Burst Count.
- (3) Burst 1 has 2 randomly generated pulses.
- (4) The pulse width (for both pulses) is randomly selected to be 75 microseconds.
- (5) The PRI is randomly selected to be at 1213 microseconds.
- (6) Bursts 2 through 8 are generated using steps 3-5.
- (7) Each Burst is contained in even intervals of 1500000 microseconds. The starting location for Pulse 1. Burst 1 is randomly generated (1 to 1500000 minus the total Burst 1 length + 1 random PRI interval) at the 325001 microsecond step. Bursts 2 through 8 randomly fall in successive 1500000 microsecond intervals (i.e. Burst 2 falls in the 1500001-3000000 microsecond range).



FCC Radar Types (5) System Diagram



Used R&S SMU200A (Vector SG with two ARB) Path A/Path B Two B11: Base-band Generator with ARB (16M samples) and Digital Modulation

B13: Base-band Main Module

B106: frequency range (100 kHz to 6 GHz)

For selecting the waveform parameters from within the bounds of the signal type, system was random selection using uniform distribution.

6.5. Frequency Hopping Pulse Radar Test Waveforms

Radar Type	Pulse Width (µsec)	PRI (µsec)	Pulses Per Hop	Hopping Rate (kHz)	Hopping Sequence Length (ms)	Minimum Percentage of Successful Detection	Minimum of Trials
6	1	333	9	0.333	300	70%	30

For the Frequency Hopping Radar Type, the same Burst parameters are used for each waveform. The hopping sequence is different for each waveform and a 100-length segment is selected from the hopping sequence defined by the following algorithm:

The first frequency in a hopping sequence is selected randomly from the group of 475 integer frequencies form 5250-5274MHz. Next, the frequency that was just chosen is removed from the group and a frequency is randomly selected from the remaining 474 frequencies in the group. This process continues until all 475 frequencies are chosen for the set. For selection of random frequency, the frequencies remaining within the group are always treated as equally likely.

FCC ID: WL6TB71A-W Page 17 of 32



FCC Radar Types (6) Sys)em Diagram



Used R&S SMU200A (Vector SG with two ARB)

B11: Base-band Generator with ARB (16M samples) and Digital Modulation B13: Base-band Main Module

B106: frequency range (100 kHz to 6 GHz)

For selecting the waveform parameters from within the bounds of the signal type, system was random selection using uniform distribution.

6.6. Conducted Calibration Setup



6.7. Radar Waveform Calibration Procedure

The measured frequency is 5500MHz and 5510MHz. The radar signal was the same as transmitted channels, and injected into the antenna port of AP (master) or Client Device with Radar Detection, measured the channel closing transmission time and channel move time. The calibrated conducted detection threshold level is set to -62dBm. The tested level is lower than required level hence it provides margin to the limit.

6.8. Calibration Deviation

There is no deviation with the original standard.

6.9. Radar Waveform Calibration Result

DFS detection threshold level and the burst of pulses on the Channel frequency



40MHz

Agilent Spectrum Analyzer - Swep	e SA			
RF 50 R	DC	SENSE::NT AL	JONAUTO	
Center Freq 5.51000	0000 GHz PNO: Far IFGain:Low	Trig Delay: -1.000 ms Trig: Video #Atten: 10 dB	Avg Type: Pwr(RMS)	TYPE WA WANNA DET P A NNN N
10 dB/div Ref 0.00 dBr	m		Nois	Mkr1 41.196 Hz e -140.46 dBm/Hz
100				
-10.0				
-20.0				
-30.0				
-40.0	+ +			
-50.0		Waiting for trigger		
-60.0				190 LVL
-70.0				
Calify the ball of the local	il kat _{el} jan kati je in katela je in se		had an	والمتعالم المستعانية والمتعالمية والمتعادية والمعادية
	osto a productive de la constante de la constan	an substanting and the substant	an a	erende af the territories and the second
-90.0	++++			
Center 5.510000000 GH Res BW 1.0 MHz	iz #VE	3W 3.0 MHz	Sweep	Span 0 Hz 50.67 ms (40001 pts)
MSG			STATUS	

7. TEST SETUP AND TEST RESULT

7.1. Test Setup

7.1.1. Test Setup Diagram

Following is the test setup for generated the radar waveforms and used to monitor UNII device.



7.1.2. Test Setup Operation

System testing was performed with the designated MPEG test file that streams full motion video from the Access Point to Client in full motion video mode using the media player with the V2.61 Codec package. This file is used by IP and Frame based systems for loading the test channel during the in-service compliance testing of the U-NII device. The waveform parameters from within the bounds of the signal type are selected randomly using uniform distribution.

A spectrum analyzer is used as a monitor to verify that the EUT has vacated the Channel within the (Channel Closing Transmission Time and Channel Move Time, and does not transmit on a Channel during the Non-Occupancy Period after the detection and Channel move. It is also used to monitor EUT transmissions during the Channel Availability Check Time.

7.1.3. Test Setup for Data Traffic Plot

Test Date: 2014. 05. 29 Temperature: 25 Humidity:53%



Date: 29.MAY.2014 12:27:21



40MHz

AUDIX Technology Corporation Report No. EM-F140303

7.2. Channel Move Time, Channel Closing Transmission Time Measurement

7.2.1. Limit

Parameter	Value			
Channel Move Time	10 seconds See Note 1.			
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.			
Note 1: The instant that the Channel Move Time and the Channel Closing Transmission Time begins is as follows:				
 a. For the Short Pulse Radar Test Signals this instant is the end of the Burst. b. For the Frequency Hopping radar Test Signal, this instant is the end of the last radar Burst generated. c. For the Long Pulse Radar Test Signal this instant is the end of the 12 secor period defining the Radar Waveform. 				
Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggrega of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.				

- 7.2.2. Test Procedures
 - 7.2.2.1. When a radar Burst with a level equal to the DFS Detection Threshold + 1dB is generated on the operating channel of the U-NII device. A U-NII device operating as a Client Device will associate with the Master of channel. Stream the MPEG test file from the Master Device to the Client Device on the selected channel for entire period of the test. At time to the radar waveform generator sends a Burst of pulses for each of the radar types at Detection Threshold + 1dB.
 - 7.2.2.2. Observe the transmissions of the EUT at the end of the radar Burst on the Operating channel. Measure and record the transmissions from the EUT during the observation time [Channel Move Time]. One 10 Second plot bee reported for the short Pulse Radar type 1-4 and one for the Long Pulse Radar Type test in a 22 second plot. The plot for the Short Pulse Radar types start at the end of the radar burst. The Channel Move Time will be calculated based on the plot of the short Pulse Radar Type. The Long Pulse Radar Type plot show the device ceased transmissions within the 10 second window after detection has occurred. The plot for the Long Pulse Radar type should start at the beginning of the 12 second waveform.

7.2.3. Test Result

Applicability of DFS Requirement During Normal Operation

7.2.3.1. Channel Closing Transmission Time & Channel Move Time (PASS)

Test Date: 2014. 05. 29 Temperature: 25 Humidity:53%

Test Mode: UNII Band II-2A, 20MHz



Date: 29.MAY.2014 12:28:07

Channel move time > 10 S



Test Channel: CH 52, Test Frequency: 5260MHz

Channel Closing Transmission Time Calculated				
Sweep Time(S) sec	12			
Sweep points (P)	32001			
Number of Sweep points in 10 sec (N)	50			
Channel Closing Time (C)	18.749 ms			

Channel closing time is calculated from C=N* dwell; where dwell is the occupancy time per sweep point calculated by the formula: dwell=S/P. N is the number of sweep points indicating transmission after S1; where S1 is the radar signal detected.

dBm 0 dB • SWT 1:	RBW 1 MHz 2 s VBW 3 MHz		D1[1] -M1[1]	-44.79 d 10.000000 -23.71 dBr 1.103625
0 dB • SWT 1:	2 s • VBW 3 MHz		D1[1] -M1[1]	-44.79 d 10.000000 -23.71 dBr 1.103625
			D1[1] -M1[1]	-44.79 d 10.000000 -23.71 dBr 1.103625
		lbe beside or strong	D1[1] -M1[1]	-44.79 d 10.000000 -23.71 dBr 1.103625
		lbe besiden av	D1[1] -M1[1]	-44.79 d 10.000000 -23.71 dBr 1.103625
			-M1[1]	10.000000 -23.71 dbr 1.103625
		le to fit a street	-M1[1]	-23.71 dBr 1.103625
		Jer to day		1.103625
		Jer to fe a stress		
			Ale description for the second second	
				D1
		des las fil es el ser		
	320	001 pts		1.2 s/
nulus	Response	No	Stimulus	Response
1.827750 s	-54.070 dBm	41	4.388250 s	-54.335 dBm
1.930500 s	-54.060 dBm	42	4.490625 s	-54.144 dBm
2.032875 s	-53.911 dBm	43	4.593000 s	-53.907 dBm
2.134875 s	-54.996 dBm	44	4.695375 s	-54.134 dBm
2.237625 s	-53.883 dBm	45	4.797750 s	-54.044 dBm
2.339625 s	-53.555 dBm	46	4.900125 s	-54.633 dBm
2.442375 s	-53.514 dBm	47	5.002500 s	-54.512 dBm
2.544375 s	-54.354 dBm	48	5.104500 s	-53.196 dBm
2.647125 s	-54.313 dBm	49	5.207250 s	-54.265 dBm
2.749500 s	-53.789 dBm	50		
	ulus 1.027750 s 1.930500 s 2.032875 s 2.134875 s 2.237625 s 2.339625 s 2.442375 s 2.544375 s 2.647125 s 2.749500 s	alus Response 1.027750 s -54.070 dBm 1.930500 s -54.060 dBm 2.032875 s -53.911 dBm 2.134875 s -53.983 dBm 2.339625 s -53.883 dBm 2.339625 s -53.555 dBm 2.442375 s -53.514 dBm 2.544375 s -54.354 dBm 2.647125 s -54.313 dBm 2.749500 s -53.789 dBm	32001 pts ulus Response No 1.027750 s -54.070 dBm 41 1.930500 s -54.060 dBm 42 2.032875 s -53.911 dBm 43 2.134875 s -54.996 dBm 44 2.237625 s -53.883 dBm 45 2.339625 s -53.555 dBm 46 2.442375 s -53.514 dBm 47 2.544375 s -54.313 dBm 49 2.749500 s -53.789 dBm 50	32001 pts ulus Response No Stimulus 1.827750 s -54.070 dBm 41 4.380250 s 1.930500 s -54.060 dBm 42 4.490625 s 2.032875 s -53.911 dBm 43 4.593000 s 2.134875 s -53.983 dBm 44 4.69537 s 2.237625 s -53.883 dBm 45 4.797750 s 2.339625 s -53.514 dBm 47 5.002500 s 2.544375 s -54.354 dBm 48 5.104500 s 2.647125 s -54.313 dBm 49 5.207250 s 2.749500 s -53.789 dBm 50

Test Mode: UNII Band II-2A, 40MHz

Date: 29.MAY.2014 12:31:57



Channel move time > 10 S

Date: 29.MAY.2014 12:31:32

Test Channel: CH 54, Test Frequency: 5270MHz

Channel Closing Transmission Time Calculated				
Sweep Time(S) sec	12			
Sweep points (P)	32001			
Number of Sweep points in 10 sec (N)	50			
Channel Closing Time (C)	18.749ms			

Channel closing time is calculated from C=N* dwell; where dwell is the occupancy time per sweep point calculated by the formula: dwell=S/P. N is the number of sweep points indicating transmission after S1; where S1 is the radar signal detected.



Test Mode: UNII Band II-2C, 20MHz

Date: 29.MAY.2014 12:40:29





Date: 29.MAY.2014 12:40:09

Test Channel: CH 100, Test Frequency: 5500MHz

Channel Closing Transmission Time Calculated				
Sweep Time(S) sec	12			
Sweep points (P)	32001			
Number of Sweep points in 10 sec (N)	50			
Channel Closing Time (C)	18.749 ms			

Channel closing time is calculated from C=N* dwell; where dwell is the occupancy time per sweep point calculated by the formula: dwell=S/P. N is the number of sweep points indicating transmission after S1; where S1 is the radar signal detected.

Spectrum	*				
Ref Level	-0.50 dBm	RBW 1 MHz			
Att	10 dB 👄 SWT	12 s 👄 VBW 3 MHz			
SGL					
1Pk Clrw					
				D1[1]	-45.39
					10.0000
20 dBm 🐫				M1[1]	-23.81 d
T					1.01512
10.10.1					
40 dBm					
1111					
ebidan 👬		ŦŦĸĨŦĨŦŦŢĨŦŦĨŦŦĬġĬĬ			
		ومحموم والبالية البالية واللبا والعليان البابا			
	and the second second second second second	and an address of the second se			
-80 dBm					
80 dBm					
80 dBm	-		001 etc		
80 dBm S1 CF 5.51 GHz	2	32	001 pts		1.2
80 dBm S1 CF 5.51 GHz larker Peak	2 List Stimulus	32	001 pts	Stimulus	1.2
80 dBm S1 CF 5.51 GHz larker Peak No 16	2 List Stimulus	32 Response -56.406 dBm	001 pts	Stimulus 4.108875	1.2 :
80 dBm 51 57 5.51 GH2 arker Peak No 16 17	2 List Stimulus 1.241625 s 1.395750 s	32/ Response -56.406 dBm -57.096 dBm	001 pts	Stimulus 4.108875 4.211625	1.2 Response s -56.210 dBm s -55.575 dBm
80 dBm S1 CF 5.51 CH2 larker Peak No 16 17 10	2 List 1.241625 s 1.395750 s 1.446375 s	32 -56.406 dBm -57.096 dBm -56.106 dBm	001 pts	Stimulus 4.108875 4.211625 4.313625	1.2 Response 5 -56.210 dBm 5 -55.575 dBm 5 -56.363 dBm
80 dBm S1 CF 5.51 CH2 larker Peak No 16 17 10 19	z List 1.241625 s 1.395750 s 1.446375 s 1.651500 s	320 Response -56.406 dBm -57.096 dBm -56.106 dBm -56.806 dBm	001 pts	Stimulus 4.108875 4.211625 4.313625 4.416375	Response 5 -56.210 dBm 5 -56.363 dBm 5 -56.364 dBm 5 -56.244 dBm
80 dBm 51 SF 5.51 GH2 arker Peak No 16 17 18 19 20	z List 1.241625 s 1.395750 s 1.446375 s 1.651500 s 1.753875 s	820 -56.406 dBm -57.096 dBm -56.806 dBm -56.806 dBm -57.006 dBm	No 41 42 43 44 45	Stimulus 4.108875 4.211625 4.313625 4.416375 4.518750	Response 5 -56.210 dBm 5 -55.575 dBm 5 -56.244 dBm 5 -56.244 dBm 5 -56.105 dBm
80 dBm 51 57 5.51 GH2 arker Peak No 16 17 10 19 20 21	z List <u>Stimulus</u> 1.241625 s 1.395750 s 1.446375 s 1.651500 s 1.753875 s 1.055075 s	321 Response -56.406 dBm -56.106 dBm -56.806 dBm -57.006 dBm -56.917 dBm	001 pts 41 42 43 44 45 46	Stimulus 4.108875 4.211625 4.313625 4.416375 4.518750 4.621125	Response 5 -56.210 dBm 5 -55.575 dBm 5 -56.363 dBm 5 -56.244 dBm 5 -56.105 dBm 5 -56.619 dBm
80 dBm S1 SF 5.51 CH2 arker Peak No 16 17 18 19 20 21 22	z List Stimulus 1.241625 s 1.395750 s 1.446375 s 1.651500 s 1.753875 s 1.055975 s 1.958625 s	321 Response -56.406 dBm -56.106 dBm -56.806 dBm -56.806 dBm -56.917 dBm -56.261 dBm	001 pts No 41 42 43 44 45 46 47	Stimulus 4.108875 4.211625 4.313625 4.416375 4.518750 4.621125 4.723500	Response 5 -56.210 dBm 5 -55.575 dBm 5 -56.363 dBm 5 -56.105 dBm 5 -56.105 dBm 5 -56.105 dBm 5 -56.519 dBm 5 -56.519 dBm
80 dBm 51 CF 5.51 CH2 larker Peak No 16 17 10 19 20 21 22 23	2 List Stimulus 1.241625 s 1.395750 s 1.446375 s 1.651500 s 1.753875 s 1.055875 s 1.058675 s 1.058625 s 2.061000 s	822 822 55.406 dBm -57.096 dBm -56.106 dBm -56.806 dBm -57.006 dBm -56.917 dBm -56.261 dBm -57.004 dBm	001 pts 41 42 43 44 45 46 47 48	Stimulus 4.108875 4.211625 4.313625 4.416375 4.518750 4.621125 4.723500 4.825875	Response 5 -56.210 dBm 5 -56.575 dBm 5 -56.363 dBm 5 -56.105 dBm 5 -56.619 dBm 5 -56.593 dBm 5 -56.510 dBm
80 dBm S1 CF 5.51 CH2 larker Peak No 16 17 10 19 20 21 22 23 24	2 List Stimulus 1.241625 s 1.395750 s 1.446375 s 1.651500 s 1.753875 s 1.055075 s 1.958625 s 2.061000 s 2.163375 s	Response -56.406 dBm -57.096 dBm -56.106 dBm -56.806 dBm -56.917 dBm -56.261 dBm -57.004 dBm -57.005 dBm	No 41 41 42 43 44 45 46 47 48 49	Stimulus 4.108875 4.211625 4.313625 4.416375 4.518750 4.621125 4.723500 4.825875 4.920250	Response s -56.210 dBm s -56.363 dBm s -56.363 dBm s -56.105 dBm s -56.619 dBm s -56.593 dBm s -57.110 dBm s -56.190 dBm s -56.190 dBm s -56.190 dBm

Test Mode: UNII Band II-2C, 40MHz

Date: 29.MAY.2014 12:44:27



Channel move time > 10 S

Date: 29.MAY.2014 12:43:54

Test Channel: CH 102, Test Frequency: 5510MHz

Channel Closing Transmission Time Calculated				
Sweep Time(S) sec	12			
Sweep points (P)	32001			
Number of Sweep points in 10 sec (N)	50			
Channel Closing Time (C)	18.749ms			

Channel closing time is calculated from C=N* dwell; where dwell is the occupancy time per sweep point calculated by the formula: dwell=S/P. N is the number of sweep points indicating transmission after S1; where S1 is the radar signal detected.