



Axonics Modulation Technologies, Inc.

Patient Remote (PR) - 2301

EN 301 839 V2.1.1:2016

EN 302 537 V2.1.1:2016

FCC Part 95I:2017

RSS-243:2010

MedRadio, MICS, and MEDS

Report # AXON0099.4 Rev. 2



NVLAP[®]
TESTING

NVLAP Lab Code: 200629-0



This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government of the United States of America. This Report shall not be reproduced, except in full without written approval of the laboratory.

EAR-Controlled Data - This document contains technical data whose export and reexport/retransfer is subject to control by the U.S. Department of Commerce under the Export Administration Act and the Export Administration Regulations. The Department of Commerce's prior written approval may be required for the export or re-export/retransfer of such technical data to any foreign person, foreign entity or foreign organization whether in the United States or abroad.

More: <https://www.bis.doc.gov/index.php/forms-documents/regulations-docs/14-commerce-country-chart/fileT>



CERTIFICATE OF TEST

Last Date of Test: November 13, 2017
Axonics Modulation Technologies, Inc.
Model: Patient Remote (PR) - 2301

Radio Equipment Testing

Standards - MICS

Specification	Method
EN 301 839 V2.1.1:2016	
FCC Part 95i:2017	
RSS-243:2010	EN 301 839 V2.1.1:2016

Results - MICS

Method Clause	Test Description	Applied	Results	Comments
5.3.7.1.3	LBT Threshold Power Level	Yes	Pass	
5.3.7.1.4	Monitoring System Bandwidth	Yes	Pass	
5.3.7.1.5.1.1	Monitoring System Scan Cycle Time	Yes	Pass	
5.3.7.1.5.1.2	Minimum Channel Monitoring Period	Yes	Pass	
5.3.7.1.6	Channel Access Based On Ambient Levels	Yes	Pass	
5.3.7.1.7	Discontinuation Of A MICS Session	Yes	Pass	
5.3.7.1.8	Use Of Pre-Scanned Alternative Channels	Yes	Pass	

Deviations From Test Standards

None

Approved By:

A handwritten signature in blue ink that reads 'Rod Munro'.

Rod Munro, Operations Manager

Product compliance is the responsibility of the client; therefore, the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test. This report reflects only those tests from the referenced standards shown in the certificate of test. It does not include inspection or verification of labels, identification, marking or user information.



CERTIFICATE OF TEST

Last Date of Test: November 13, 2017
Axonics Modulation Technologies, Inc.
Model: Patient Remote (PR) - 2301

Radio Equipment Testing

Standards - MEDS

Specification	Method
EN 302 537 V2.1.1:2016	
FCC Part 95I:2017	
RSS-243:2010	EN 302 537 V2.1.1:2016

Results - MEDS

Method Clause	Test Description	Applied	Results	Comments
5.3.8.1.1	LBT Threshold Power Level	Yes	Pass	
5.3.8.1.2	Monitoring System Bandwidth	Yes	Pass	
5.3.8.1.3.1.1	Monitoring System Scan Cycle Time	Yes	Pass	
5.3.8.1.3.1.2	Minimum Channel Monitoring Period	Yes	Pass	
5.3.8.1.4	Channel Access Based On Ambient Levels	Yes	Pass	
5.3.8.1.5	Discontinuation Of A MEDS Session	Yes	Pass	
5.3.8.1.6	Use Of Pre-Scanned Alternative Channels	Yes	Pass	

Deviations From Test Standards

None

Approved By:

A handwritten signature in blue ink that reads 'Rod Munro'.

Rod Munro, Operations Manager

Product compliance is the responsibility of the client; therefore, the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test. This report reflects only those tests from the referenced standards shown in the certificate of test. It does not include inspection or verification of labels, identification, marking or user information.

REVISION HISTORY



Revision Number	Description	Date	Page Number
00	None		
01	Removed photos from all data sheets and placed in in a separate Photos Only report.	10-4-2018	The following pages were omitted from the previous version of this report. 19, 20, 25, 26, 309, 40, 48, 49, 62, 63, 71, 72, 86, 87, 95, 96, 101, 102, 106, 107, 111, 112, 116, 117, 123, 124, 129, 130
	Updated Test Plan to Rev C.	10-6-2018	104-135
02	Removed Test Plan	2019-05-17	The following pages were omitted from the previous version of this report. 104-135

ACCREDITATIONS AND AUTHORIZATIONS



United States

FCC - Designated by the FCC as a Telecommunications Certification Body (TCB). Certification chambers, Open Area Test Sites, and conducted measurement facilities are listed with the FCC.

A2LA - Accredited by A2LA to ISO / IEC 17065 as a product certifier. This allows Element to certify transmitters to FCC and IC specifications.

NVLAP - Each laboratory is accredited by NVLAP to ISO 17025

Canada

ISED - Recognized by Innovation, Science and Economic Development Canada as a Certification Body (CB). Certification chambers and Open Area Test Sites are filed with ISED.

European Union

European Commission – Within Element, we have a EU Notified Body validated for the EMCD and RED Directives.

Australia/New Zealand

ACMA - Recognized by ACMA as a CAB for the acceptance of test data.

Korea

MSIP / RRA - Recognized by KCC's RRA as a CAB for the acceptance of test data.

Japan

VCCI - Associate Member of the VCCI. Conducted and radiated measurement facilities are registered.

Taiwan

BSMI – Recognized by BSMI as a CAB for the acceptance of test data.

NCC - Recognized by NCC as a CAB for the acceptance of test data.

Singapore

IDA – Recognized by IDA as a CAB for the acceptance of test data.

Israel

MOC – Recognized by MOC as a CAB for the acceptance of test data.

Hong Kong

OFCA – Recognized by OFCA as a CAB for the acceptance of test data.

Vietnam

MIC – Recognized by MIC as a CAB for the acceptance of test data.

SCOPE

For details on the Scopes of our Accreditations, please visit:

<http://portlandcustomer.element.com/ts/scope/scope.htm>

<http://gsi.nist.gov/global/docs/cabs/designations.html>

MEASUREMENT UNCERTAINTY



Measurement Uncertainty

When a measurement is made, the result will be different from the true or theoretically correct value. The difference is the result of tolerances in the measurement system that cannot be completely eliminated. To the extent that technology allows us, it has been our aim to minimize this error. Measurement uncertainty is a statistical expression of measurement error qualified by a probability distribution.

A measurement uncertainty estimation has been performed for each test per our internal quality document QM205.4.6. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty (K=2) can be found included as part of the applicable test description page. Our measurement data meets or exceeds the measurement uncertainty requirements of the applicable specification; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for estimating measurement uncertainty are based upon ETSI TR 100 028 (or CISPR 16-4-2 as applicable), and are available upon request.

The following table represents the Measurement Uncertainty (MU) budgets for each of the tests that may be contained in this report.

<u>Test</u>	<u>+ MU</u>	<u>- MU</u>
Frequency Accuracy (Hz)	0.0007%	-0.0007%
Amplitude Accuracy (dB)	1.2 dB	-1.2 dB
Conducted Power (dB)	0.3 dB	-0.3 dB
Radiated Power via Substitution (dB)	0.7 dB	-0.7 dB
Temperature (degrees C)	0.7°C	-0.7°C
Humidity (% RH)	2.5% RH	-2.5% RH
Voltage (AC)	1.0%	-1.0%
Voltage (DC)	0.7%	-0.7%
Field Strength (dB)	0	0
AC Powerline Conducted Emissions (dB)	0	0

FACILITIES



California Labs OC01-17 41 Tesla Irvine, CA 92618 (949) 861-8918	Minnesota Labs MN01-08, MN10 9349 W Broadway Ave. Brooklyn Park, MN 55445 (612)-638-5136	New York Labs NY01-04 4939 Jordan Rd. Elbridge, NY 13060 (315) 554-8214	Oregon Labs EV01-12 22975 NW Evergreen Pkwy Hillsboro, OR 97124 (503) 844-4066	Texas Labs TX01-09 3801 E Plano Pkwy Plano, TX 75074 (469) 304-5255	Washington Labs NC01-05 19201 120 th Ave NE Bothell, WA 98011 (425)984-6600
---	---	--	---	--	---

NVLAP

NVLAP Lab Code: 200676-0 NVLAP Lab Code: 200881-0 NVLAP Lab Code: 200761-0 NVLAP Lab Code: 200630-0 NVLAP Lab Code: 201049-0 NVLAP Lab Code: 200629-0

Innovation, Science and Economic Development Canada

2834B-1, 2834B-3	2834E-1, 2834E-3	N/A	2834D-1, 2834D-2	2834G-1	2834F-1
------------------	------------------	-----	------------------	---------	---------

BSMI

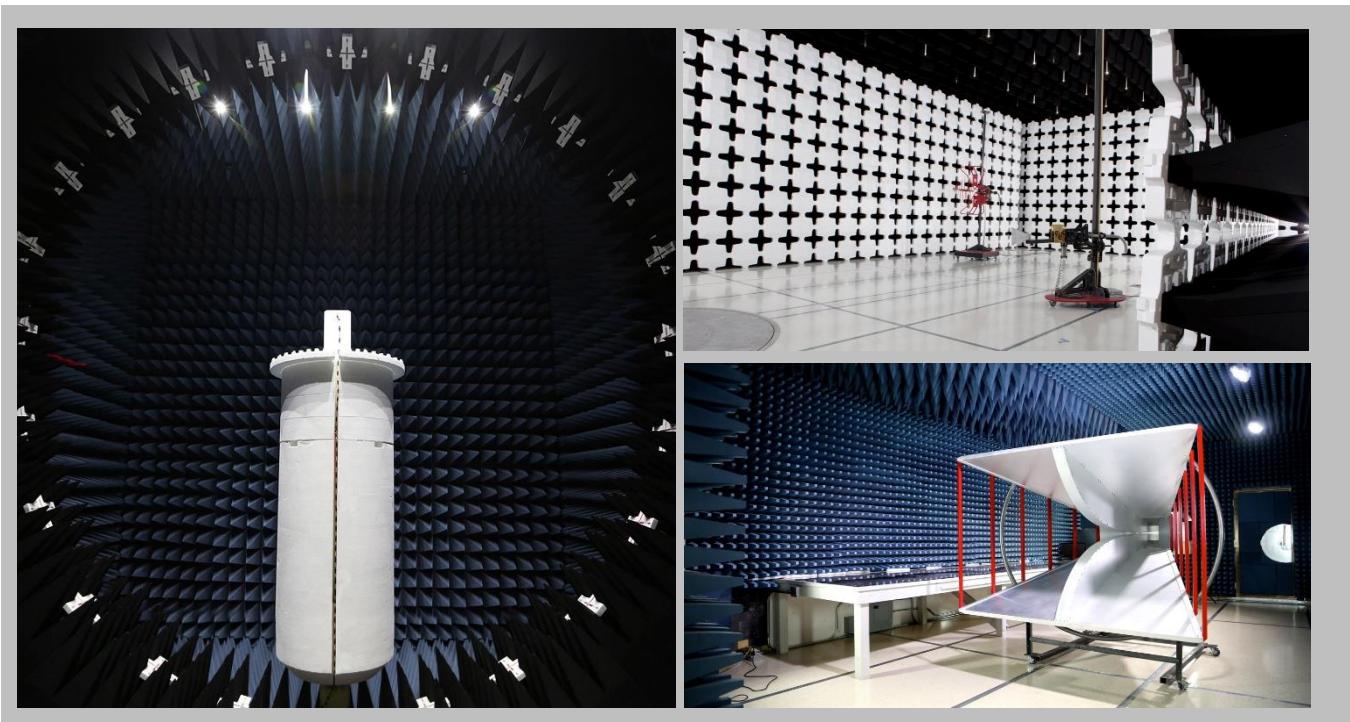
SL2-IN-E-1154R	SL2-IN-E-1152R	N/A	SL2-IN-E-1017	SL2-IN-E-1158R	SL2-IN-E-1153R
----------------	----------------	-----	---------------	----------------	----------------

VCCI

A-0029	A-0109	N/A	A-0108	A-0201	A-0110
--------	--------	-----	--------	--------	--------

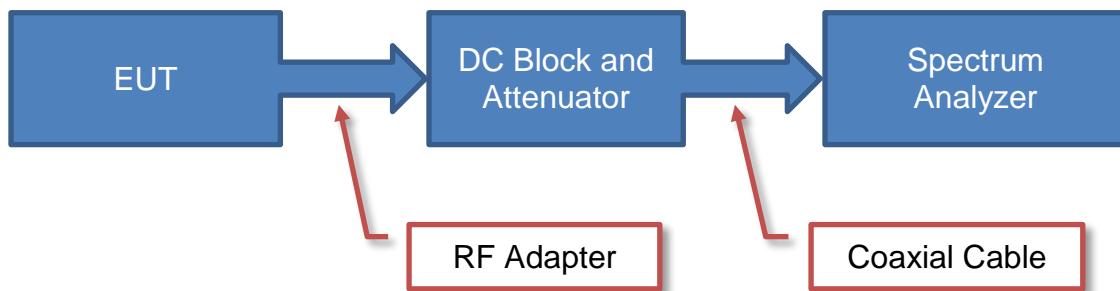
Recognized Phase I CAB for ACMA, BSMI, IDA, KCC/RRA, MIC, MOC, NCC, OFCA

US0158	US0175	N/A	US0017	US0191	US0157
--------	--------	-----	--------	--------	--------

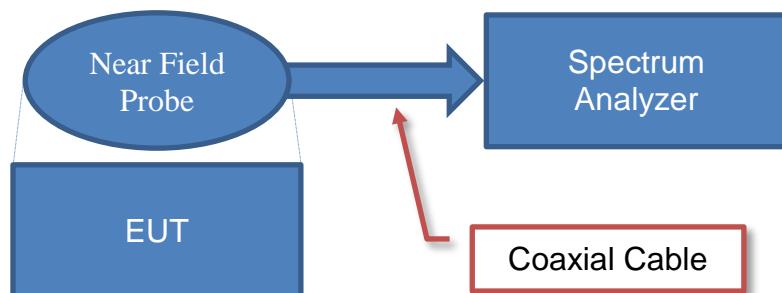


Test Setup Block Diagrams

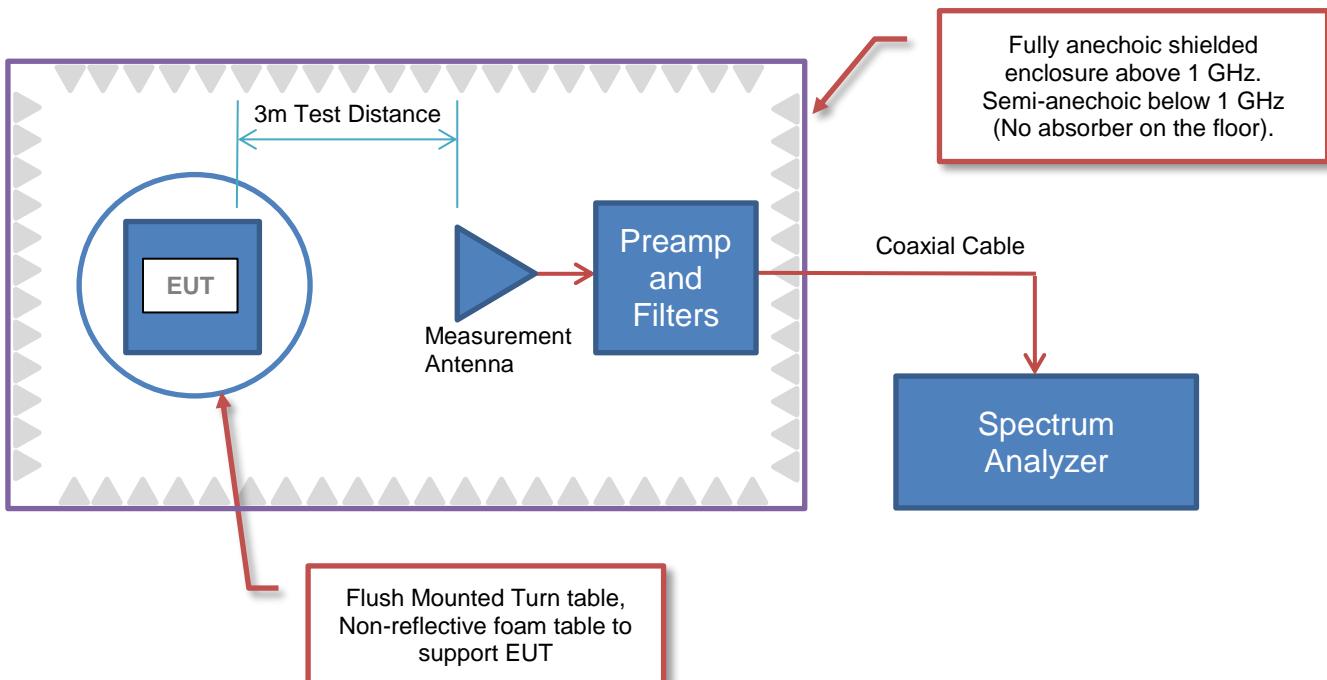
Antenna Port Conducted Measurements



Near Field Test Fixture Measurements



Spurious Radiated Emissions



PRODUCT DESCRIPTION



Client and Equipment Under Test (EUT) Information

Company Name:	Axonics Modulation Technologies, Inc.
Address:	7575 Irvine Center Drive Suite 200
City, State, Zip:	Irvine, CA 92618
Test Requested By:	Franklin Portillo
Model:	Patient Remote (PR) - 2301
First Date of Test:	November 8, 2017
Last Date of Test:	November 13, 2017
Receipt Date of Samples:	November 2, 2017
Equipment Design Stage:	Production
Equipment Condition:	No Damage
Purchase Authorization:	Verified

Information Provided by the Party Requesting the Test

Functional Description of the EUT:

Patient Remote Control (PR): a battery-operated device the size of a key fob that uses radio-frequency (RF) signals to communicate with IPG/EPG. The PR allows the patient to adjust stimulation level, to check the status of the IPG/EPG battery charge level, to check the stimulation level in the IPG/EPG, and to turn the stimulation on or off.

Testing Objective:

Seeing authorization for the spectrum access (LBT) function of the MedRadio transmitter to FCC Part 95I, RSS-243, EN 301 839 and EN 302 537.

CONFIGURATIONS



Configuration AXON0099- 4

Software/Firmware Running during test	
Description	Version
IPGLink	1.0.1.104

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Patient Remote	Axonics Modulation Technologies, Inc.	2301	AP1BA70018

Peripherals in test setup boundary			
Description	Manufacturer	Model/Part Number	Serial Number
USB Dongle	Bluegiga	BLED112	None
Laptop	Dell	Precision M3800	None
DC Power Supply (1)	Kikusui	PWC0620	1930492
DC Power Supply (2)	Astron	VS-35M	None
IPG Bring-Up Test Fixture	Axonics Modulation Technologies, Inc.	120-0441-001 REV B	AT1B000002
Direct Connect IPG	Axonics Modulation Technologies, Inc.	1101	4021344505

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
DC Power	No	0.7m	No	DC Power Supply (1)	Patient Remote
AC Power	No	1.8m	No	AC Mains	DC Power Supply (1)
AC Power	No	1.8m	No	AC Mains	DC Power Supply (2)
DC Power	No	1.4m	No	DC Power Supply (2)	IPG Bring-Up Test Fixture

CONFIGURATIONS



Configuration AXON0099- 5

Software/Firmware Running during test	
Description	Version
IPGLink	1.0.1.104

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Patient Remote	Axonics Modulation Technologies, Inc.	2301	AP1BA70018

Peripherals in test setup boundary				
Description	Manufacturer	Model/Part Number	Serial Number	
USB Dongle	Bluegiga	BLED112	None	
Laptop	Dell	Precision M3800	None	
DC Power Supply (1)	Kikusui	PWC0620	1930492	
DC Power Supply (2)	Astron	VS-35M	None	
Direct Connect EPG	Axonics	1601	AE3R970032	
IPG Bring-Up Test Fixture	Axonics	120-0441-001 REV B	AT1B000004	

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
DC Power	No	0.7m	No	DC Power Supply (1)	Patient Remote
AC Power	No	1.8m	No	AC Mains	DC Power Supply (1)
AC Power	No	1.8m	No	AC Mains	DC Power Supply (2)
DC Power	No	1.4m	No	DC Power Supply (2)	IPG Bring-Up Test Fixture

MODIFICATIONS



Equipment Modifications

Item	Date	Test	Modification	Note	Disposition of EUT
1	11/8/2017	Monitoring System Bandwidth	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
2	11/13/2017	Channel Access based on Ambient Levels	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
3	11/13/2017	Discontinuation of a Mics Session	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
4	11/13/2017	LBT Threshold Power Level	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
5	11/13/2017	Minimum Channel Monitoring Period	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
6	11/13/2017	Monitoring System Scan Cycle Time	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
7	11/13/2017	Use of Pre-Scanned Alternative Channels	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was completed.

MONITORING SYSTEM BANDWIDTH (MEDS)



XMIT 2017.09.21

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Power Divider/Combiner	Fairview Microwave	MP8455-2	PDA	NCR	NCR
Directional Coupler	Fairview Microwave	MC2047-10	RHE	NCR	NCR
Power Divider/Combiner	Fairview Microwave	MP0208-2	IAZ	NCR	NCR
Meter - Multimeter	Fluke	111	MMM	18-Feb-16	18-Feb-19
Generator - Signal	Agilent	E4422B	TGR	8-Aug-17	8-Aug-20
Generator - Signal	Keysight	N5182B	TFY	16-Apr-15	16-Apr-18
Analyzer - Spectrum Analyzer	Agilent	E4446A	AAT	2-Jun-17	2-Jun-18

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer.

A signal generator was set to multitone operation to cause equal interference across the entire band. The amplitude of the multitone signals (out of operation region) were set to the LBT threshold of $10 \cdot \text{LOG}(\text{Bandwidth}) - 150 + \text{Antenna Gain} + 3 \text{ dB}$.

The spectrum analyzer was set to measure the transmit bands of 401-402 and 405-406 MHz. The multitone signal of the intended frequency (F_c) was set to a level above the LBT threshold, and lowered by 1 dB increments until the EUT chooses the intended frequency (F_c) to start a session on.

The blocking frequency at F_c was then lowered to $F_c - \text{Bandwidth} / 2$. The amplitude was then raised until the EUT chooses a channel other than F_c . This was repeated with the blocking frequency raised to $F_c + \text{Bandwidth} / 2$.

The signal generator amplitude at F_c was measured at each point.

MONITORING SYSTEM BANDWIDTH (MEDS)



XMI 2017.08.21

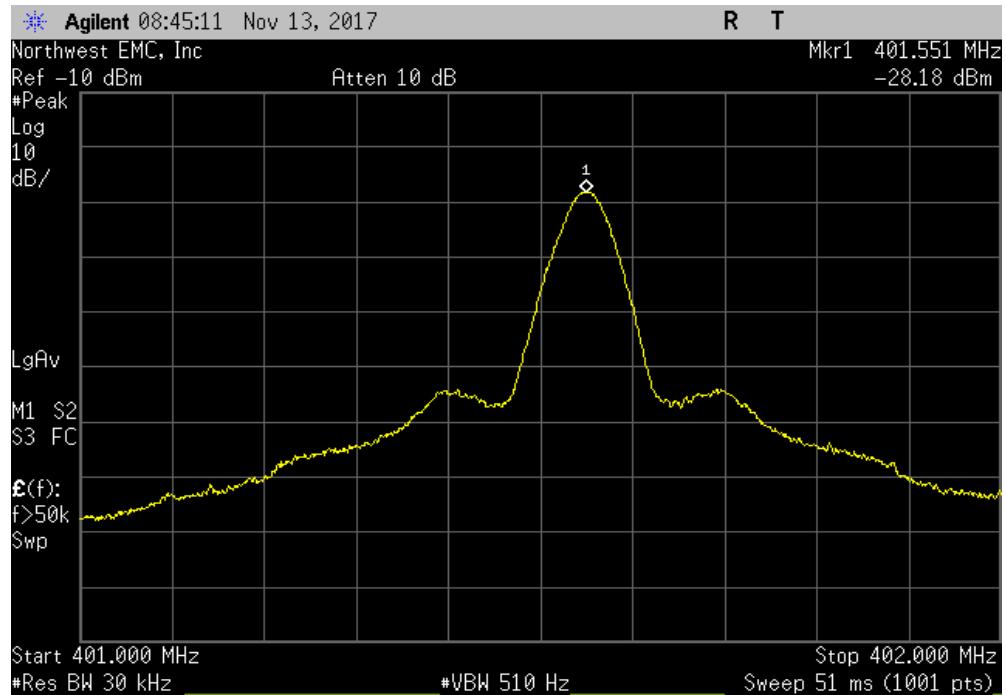
EUT:	Patient Remote (PR) - 2301		Work Order:	AXON0099	
Serial Number:	AP1BA70018		Date:	13-Nov-17	
Customer:	Axonics Modulation Technologies, Inc.		Temperature:	22 °C	
Attendees:	Flavio Ono		Humidity:	38% RH	
Project:	None		Barometric Pres.:	1009 mbar	
Tested by:	Richard Meliroth	Power:	2.8 VDC	Job Site:	NC04
TEST SPECIFICATIONS			Test Method		
EN 302 537 V2.1.1:2016			EN 302 537 V2.1.1:2016		
COMMENTS					
EUT Emission Bandwidth = 81500 Hz, Antenna Gain = 2.0dBi. Communications established between EUT and companion device, initiating LBT communications protocol via peripheral laptop software.					
DEVIATIONS FROM TEST STANDARD					
None					
Configuration #	5	Signature			
			Measured Value (dBm)	Delta Value (dB)	Limit (dB)
401-402 MHz Band					Result
Mid Channel (Fc), 401.55 MHz					
CW Signal on Fc = (Pa)			-95.89	N/A	N/A
CW Signal on Fc - EBW/2 = (Pb)			-94.89	N/A	N/A
CW Signal on Fc + EBW/2 = (Pc)			-94.89	N/A	N/A
405-406 MHz Band					
Mid Channel (Fc), 405.55 MHz					
CW Signal on Fc = (Pa)			-96.89	N/A	N/A
CW Signal on Fc - EBW/2 = (Pb)			-95.89	N/A	N/A
CW Signal on Fc + EBW/2 = (Pc)			-94.89	N/A	N/A
Calculation:					
Mid Channel (Fc), 401.55 MHz					
(Pa) - (Pb) = D1			N/A	1	< 20
(Pa) - (Pc) = D2			N/A	1	< 20
Mid Channel (Fc), 405.55 MHz					
(Pa) - (Pb) = D1			N/A	1	< 20
(Pa) - (Pc) = D2			N/A	2	< 20
					Pass
					Pass

MONITORING SYSTEM BANDWIDTH (MEDS)

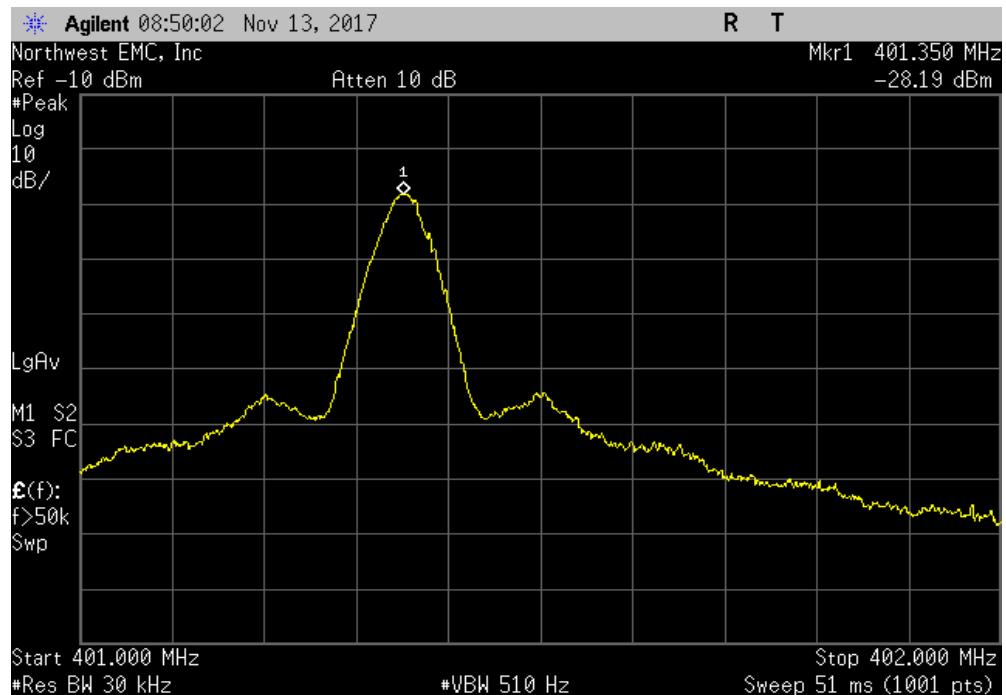


XMI 2017.09.21

401-402 MHz Band, Mid Channel (Fc), 401.55 MHz, CW Signal on Fc = (Pa)					
	Measured Value (dBm)	Delta Value (dB)	Limit (dB)	Result	
	-95.89	N/A	N/A	N/A	



401-402 MHz Band, Mid Channel (Fc), 401.55 MHz, CW Signal on Fc - EBW/2 = (Pb)					
	Measured Value (dBm)	Delta Value (dB)	Limit (dB)	Result	
	-94.89	N/A	N/A	N/A	

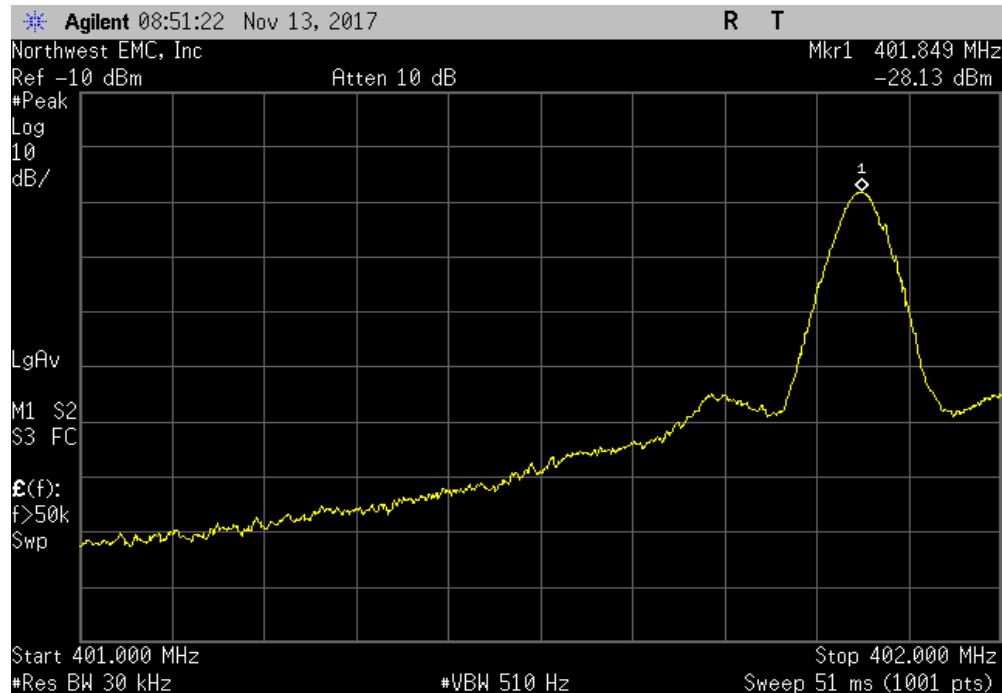


MONITORING SYSTEM BANDWIDTH (MEDS)

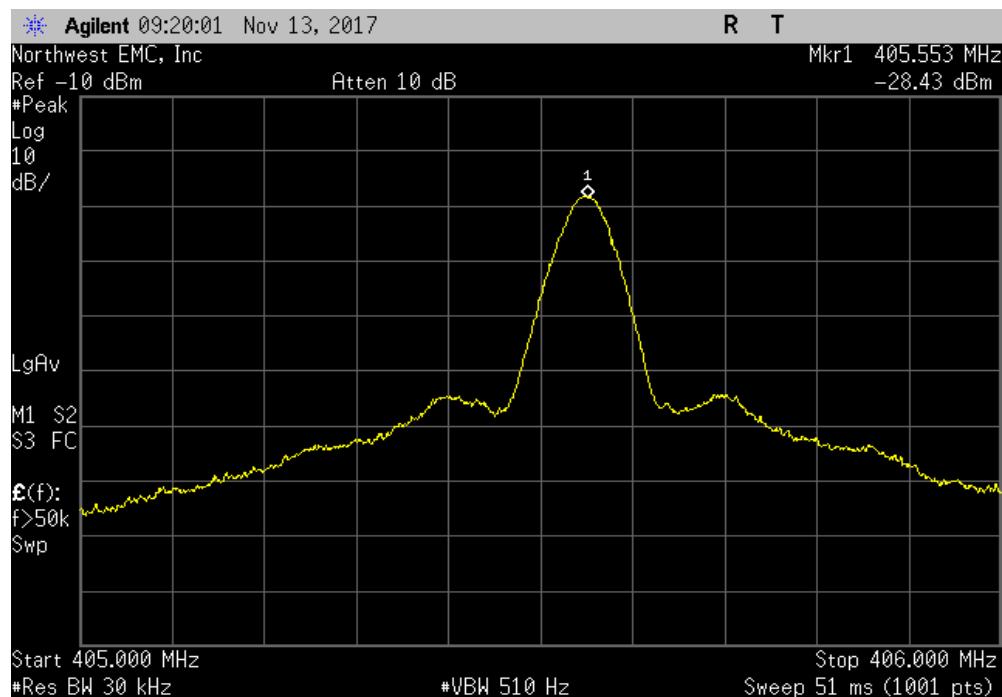


XMI 2017.09.21

401-402 MHz Band, Mid Channel (Fc), 401.55 MHz, CW Signal on Fc + EBW/2 = (Pc)					
	Measured Value (dBm)	Delta Value (dB)	Limit (dB)	Result	
	-94.89	N/A	N/A	N/A	



405-406 MHz Band, Mid Channel (Fc), 405.55 MHz, CW Signal on Fc = (Pa)					
	Measured Value (dBm)	Delta Value (dB)	Limit (dB)	Result	
	-96.89	N/A	N/A	N/A	

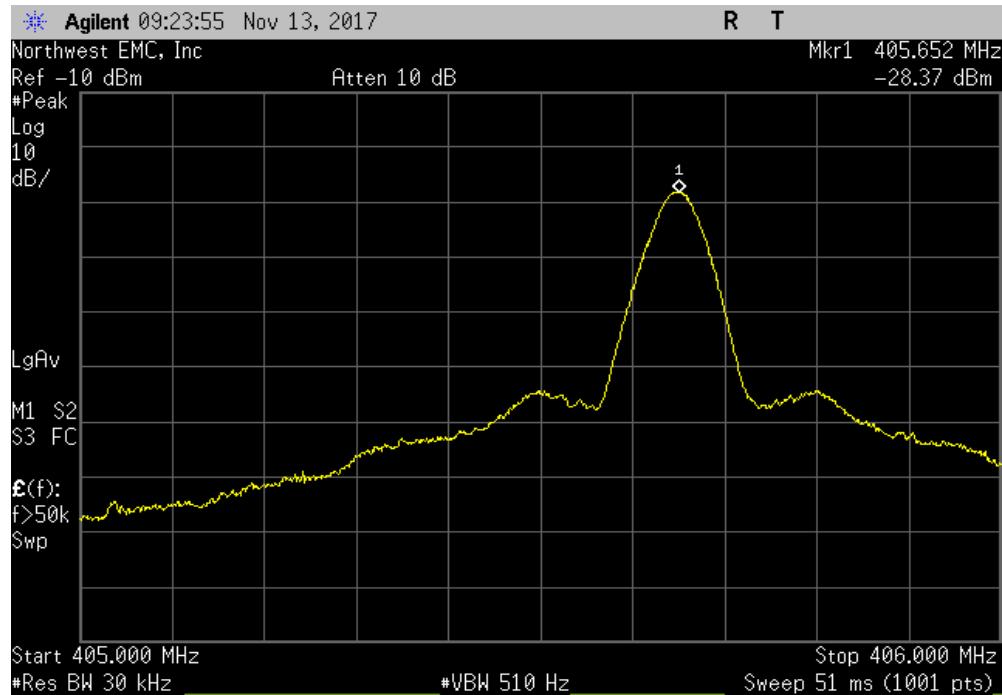


MONITORING SYSTEM BANDWIDTH (MEDS)

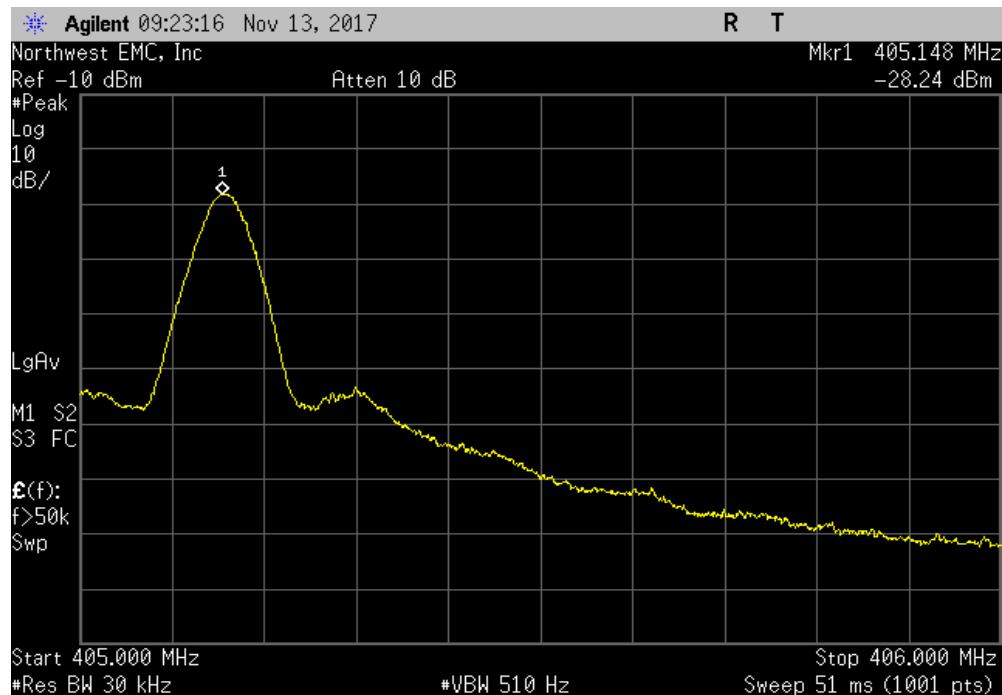


XMI 2017.09.21

405-406 MHz Band, Mid Channel (Fc), 405.55 MHz, CW Signal on Fc - EBW/2 = (Pb)					
	Measured Value (dBm)	Delta Value (dB)	Limit (dB)	Result	
	-95.89	N/A	N/A	N/A	



405-406 MHz Band, Mid Channel (Fc), 405.55 MHz, CW Signal on Fc + EBW/2 = (Pc)					
	Measured Value (dBm)	Delta Value (dB)	Limit (dB)	Result	
	-94.89	N/A	N/A	N/A	





XMIT 2017.09.21

MONITORING SYSTEM BANDWIDTH (MEDS)

Calculation: Mid Channel (Fc), 401.55 MHz, (Pa) - (Pb) = D1					
	Measured Value (dBm)	Delta Value (dB)	Limit (dB)	Result	
	N/A	1	< 20	Pass	

Calculation: Mid Channel (Fc), 401.55 MHz, (Pa) - (Pc) = D2					
	Measured Value (dBm)	Delta Value (dB)	Limit (dB)	Result	
	N/A	1	< 20	Pass	

Calculation: Mid Channel (Fc), 405.55 MHz, (Pa) - (Pb) = D1					
	Measured Value (dBm)	Delta Value (dB)	Limit (dB)	Result	
	N/A	1	< 20	Pass	

Calculation: Mid Channel (Fc), 405.55 MHz, (Pa) - (Pc) = D2					
	Measured Value (dBm)	Delta Value (dB)	Limit (dB)	Result	
	N/A	2	< 20	Pass	

MONITORING SYSTEM BANDWIDTH (MICS)



XMIT 2017.09.21

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Power Divider/Combiner	Fairview Microwave	MP8455-2	PDA	NCR	NCR
Directional Coupler	Fairview Microwave	MC2047-10	RHE	NCR	NCR
Power Divider/Combiner	Fairview Microwave	MP0208-2	IAZ	NCR	NCR
Meter - Multimeter	Fluke	111	MMM	18-Feb-16	18-Feb-19
Generator - Signal	Agilent	E4422B	TGR	8-Aug-17	8-Aug-20
Generator - Signal	Keysight	N5182B	TFY	16-Apr-15	16-Apr-18
Analyzer - Spectrum Analyzer	Agilent	E4446A	AAT	2-Jun-17	2-Jun-18

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer.

A signal generator was set to multitone operation to cause equal interference across the entire band. The amplitude of the multitone signals (out of operation region) were set to the LBT threshold of $10 \cdot \log(\text{Bandwidth}) - 150 + \text{Antenna Gain} + 3$ dB.

The spectrum analyzer was set to measure the transmit band of 402-405 MHz. The multitone signal of the intended frequency (F_c) was set to a level above the LBT threshold, and lowered by 1 dB increments until the EUT chooses the intended frequency (F_c) to start a session on.

The blocking frequency at F_c was then lowered to $F_c - \text{Bandwidth} / 2$. The amplitude was then raised until the EUT chooses a channel other than F_c . This was repeated with the blocking frequency raised to $F_c + \text{Bandwidth} / 2$.

The signal generator amplitude at F_c was measured at each point.

MONITORING SYSTEM BANDWIDTH (MICS)



XMI 2017.08.21

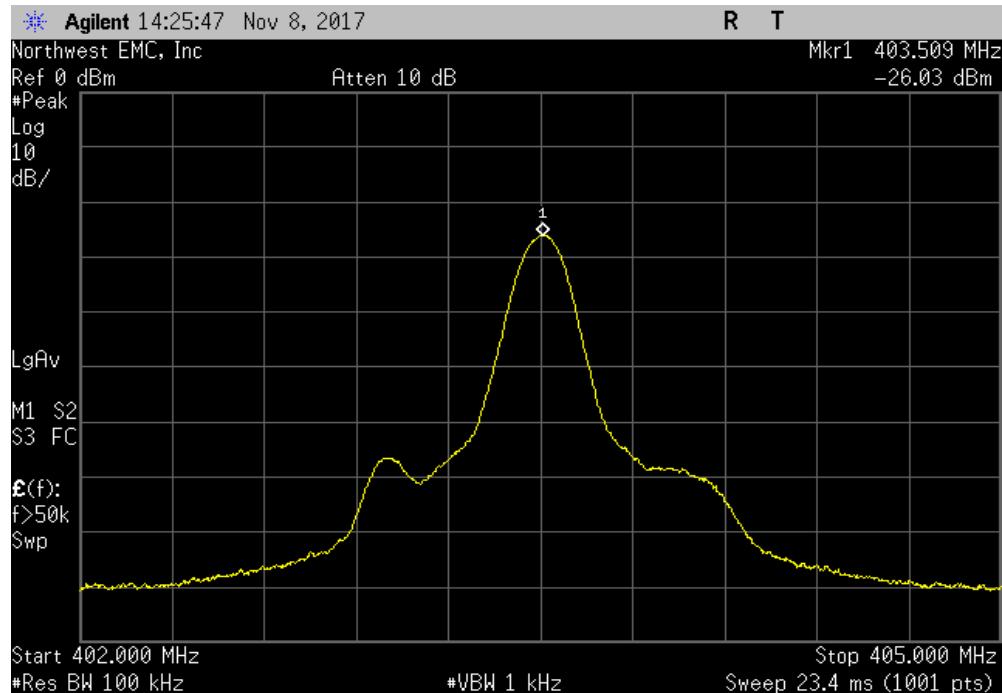
EUT:	Patient Remote (PR) - 2301		Work Order:	AXON0099	
Serial Number:	AP1BA70018		Date:	8-Nov-17	
Customer:	Axonics Modulation Technologies, Inc.		Temperature:	22 °C	
Attendees:	Flavio Ono		Humidity:	26% RH	
Project:	None		Barometric Pres.:	1011 mbars	
Tested by:	Richard Meliroth	Power:	2.8 VDC	Job Site:	NC04
TEST SPECIFICATIONS			Test Method		
EN 301 839 V2.1.1:2016			EN 301 839 V2.1.1:2016		
COMMENTS					
EUT Emission Bandwidth = 160802 Hz, Antenna Gain = 2.0dBi. Communications established between EUT and companion device, initiating LBT communications protocol via peripheral laptop software.					
DEVIATIONS FROM TEST STANDARD					
None					
Configuration #	4	Signature		Measured Value (dBm)	Delta Value (dB)
				N/A	N/A
				-93.93	N/A
				-92.93	N/A
				-92.93	N/A
				N/A	1
				N/A	< 20
				1	< 20
					Pass
					Pass
Mid Channel (Fc), 403.5 MHz					
CW Signal on Fc = (Pa)					
CW Signal on Fc - EBW/2 = (Pb)					
CW Signal on Fc + EBW/2 = (Pc)					
Calculation: (Pa) - (Pb) = D1					
Calculation: (Pa) - (Pc) = D2					

MONITORING SYSTEM BANDWIDTH (MICS)

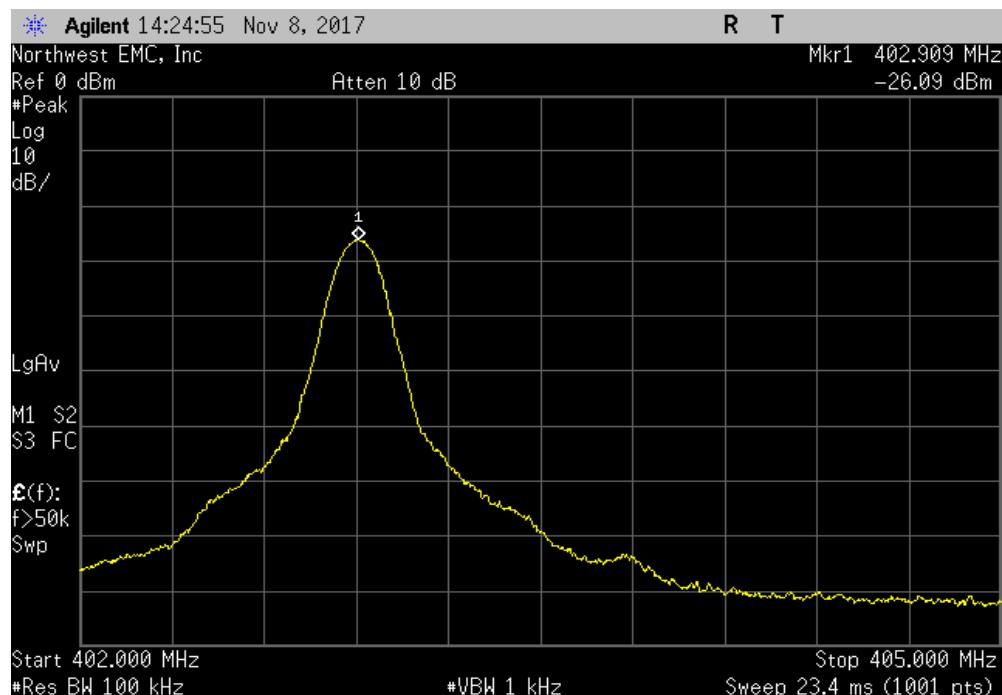


XMI 2017.09.21

Mid Channel (Fc), 403.5 MHz, CW Signal on Fc = (Pa)			
Measured Value (dBm)	Delta Value (dB)	Limit (dB)	Result
-93.93	N/A	N/A	N/A



Mid Channel (Fc), 403.5 MHz, CW Signal on Fc - EBW/2 = (Pb)			
Measured Value (dBm)	Delta Value (dB)	Limit (dB)	Result
-92.93	N/A	N/A	N/A



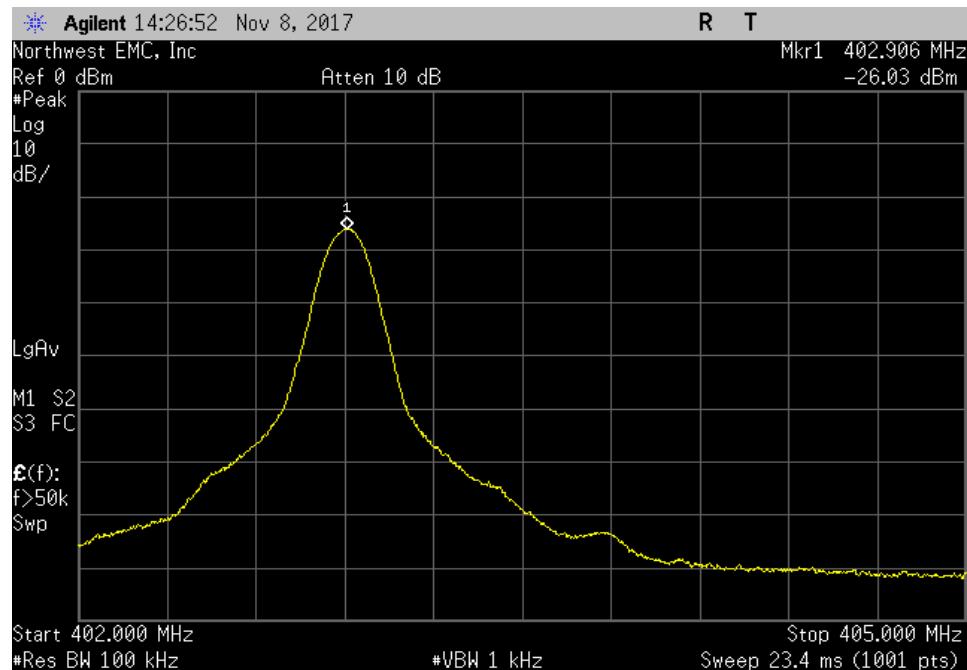
MONITORING SYSTEM BANDWIDTH (MICS)



XMi 2017.09.21

Mid Channel (Fc), 403.5 MHz, CW Signal on Fc + EBW/2 = (Pc)

	Measured Value (dBm)	Delta Value (dB)	Limit (dB)	Result
	-92.93	N/A	N/A	N/A



Calculation: (Pa) - (Pb) = D1

	Measured Value (dBm)	Delta Value (dB)	Limit (dB)	Result
	N/A	1	< 20	Pass
Calculation: (Pa) - (Pc) = D2				
	Measured Value (dBm)	Delta Value (dB)	Limit (dB)	Result
	N/A	1	< 20	Pass

MONITORING SYSTEM SCAN CYCLE TIME (MEDS)



XMIT 2017.09.21

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Power Divider/Combiner	Fairview Microwave	MP8455-2	PDA	NCR	NCR
Directional Coupler	Fairview Microwave	MC2047-10	RHE	NCR	NCR
Power Divider/Combiner	Fairview Microwave	MP0208-2	IAZ	NCR	NCR
Meter - Multimeter	Fluke	111	MMM	18-Feb-16	18-Feb-19
Generator - Signal	Agilent	E4422B	TGR	8-Aug-17	8-Aug-20
Generator - Signal	Keysight	N5182B	TFY	16-Apr-15	16-Apr-18
Analyzer - Spectrum Analyzer	Agilent	E4446A	AAT	2-Jun-17	2-Jun-18

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer.

A signal generator was set to multitone operation to cause equal interference across the entire band. The spectrum analyzer was set to zero span with a sweep time equal to 10 seconds.

The CW signal on the intended frequency (Fc) was removed. At the same time, the EUT was set to seek a session with the implantable device. The delay between Fc becoming available and the EUT establishing a session was measured.

MONITORING SYSTEM SCAN CYCLE TIME (MEDS)



XMI 2017.08.21

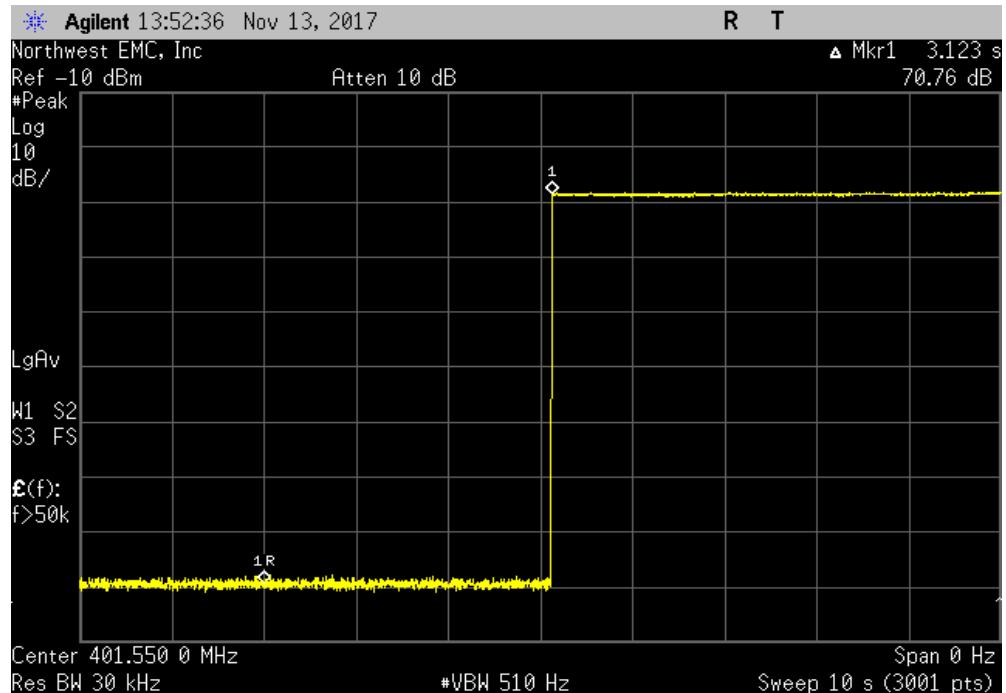
EUT:	Patient Remote (PR) - 2301		Work Order:	AXON0099	
Serial Number:	AP1BA70018		Date:	13-Nov-17	
Customer:	Axonics Modulation Technologies, Inc.		Temperature:	22 °C	
Attendees:	Flavio Ono		Humidity:	38% RH	
Project:	None		Barometric Pres.:	1009 mbar	
Tested by:	Richard Meliroth	Power:	2.8 VDC	Job Site:	NC04
TEST SPECIFICATIONS			Test Method		
EN 302 537 V2.1.1:2016			EN 302 537 V2.1.1:2016		
COMMENTS					
EUT Emission Bandwidth = 81500 Hz, Antenna Gain = 2.0dBi. Communications established between EUT and companion device, initiating LBT communications protocol via peripheral laptop software.					
DEVIATIONS FROM TEST STANDARD					
None					
Configuration #	5	Signature		Value (Seconds)	Limit (Seconds)
Result					
401-402 MHz Band					
Mid Channel (Fc), 401.55 MHz					
Scan Cycle Time, Sample 1	3.123	≤ 5	Pass		
Scan Cycle Time, Sample 2	2.863	≤ 5	Pass		
Scan Cycle Time, Sample 3	3.033	≤ 5	Pass		
Scan Cycle Time, Sample 4	3.177	≤ 5	Pass		
Scan Cycle Time, Sample 5	3.14	≤ 5	Pass		
Scan Cycle Time, Sample 6	3.287	≤ 5	Pass		
Scan Cycle Time, Sample 7	2.867	≤ 5	Pass		
Scan Cycle Time, Sample 8	3.227	≤ 5	Pass		
Scan Cycle Time, Sample 9	3.083	≤ 5	Pass		
Scan Cycle Time, Sample 10	3.077	≤ 5	Pass		
405-406 MHz Band					
Mid Channel (Fc), 405.55 MHz					
Scan Cycle Time, Sample 1	2.96	≤ 5	Pass		
Scan Cycle Time, Sample 2	2.753	≤ 5	Pass		
Scan Cycle Time, Sample 3	3.333	≤ 5	Pass		
Scan Cycle Time, Sample 4	3.453	≤ 5	Pass		
Scan Cycle Time, Sample 5	3.373	≤ 5	Pass		
Scan Cycle Time, Sample 6	3.213	≤ 5	Pass		
Scan Cycle Time, Sample 7	3.223	≤ 5	Pass		
Scan Cycle Time, Sample 8	3.067	≤ 5	Pass		
Scan Cycle Time, Sample 9	2.98	≤ 5	Pass		
Scan Cycle Time, Sample 10	3.293	≤ 5	Pass		

MONITORING SYSTEM SCAN CYCLE TIME (MEDS)

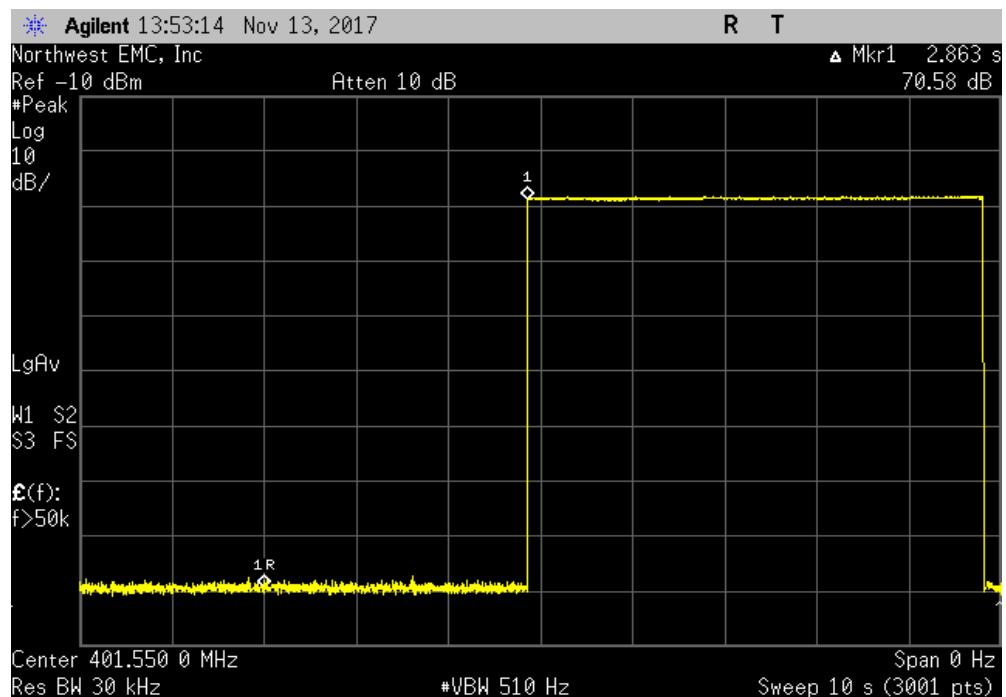


XMI 2017.09.21

401-402 MHz Band, Mid Channel (Fc), 401.55 MHz, Scan Cycle Time, Sample 1			
Value (Seconds)	Limit (Seconds)	Result	
3.123	≤ 5	Pass	



401-402 MHz Band, Mid Channel (Fc), 401.55 MHz, Scan Cycle Time, Sample 2			
Value (Seconds)	Limit (Seconds)	Result	
2.863	≤ 5	Pass	

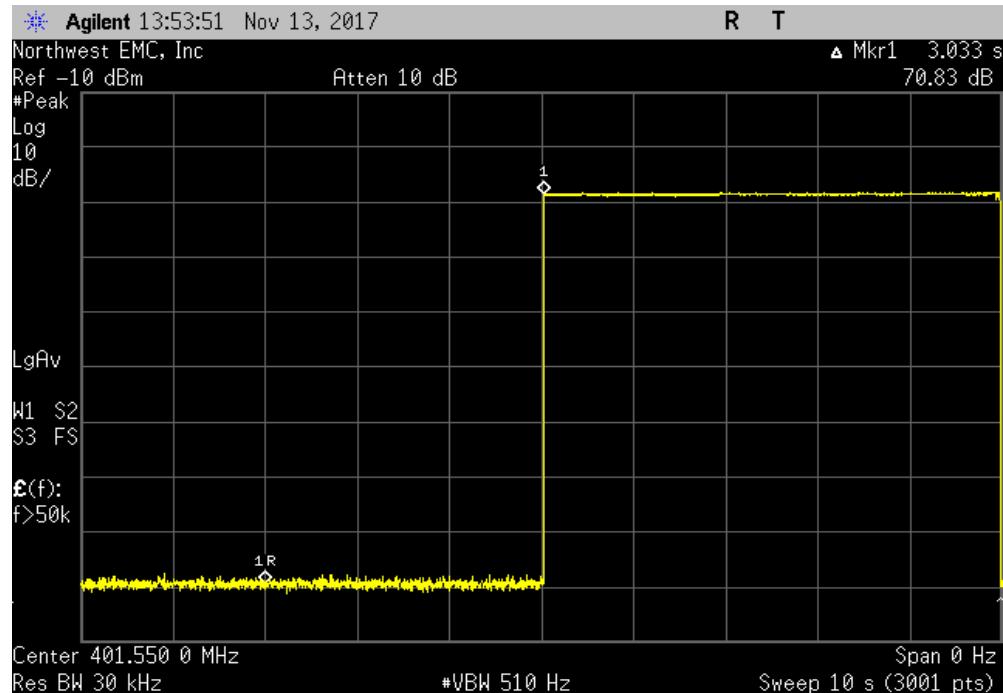


MONITORING SYSTEM SCAN CYCLE TIME (MEDS)

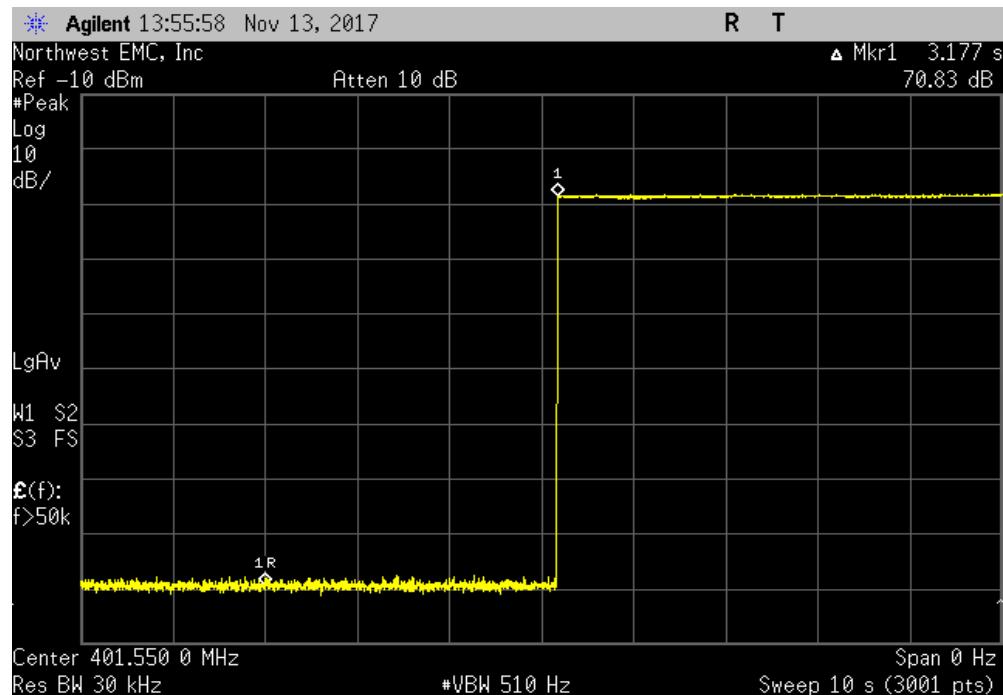


XMI 2017.09.21

401-402 MHz Band, Mid Channel (Fc), 401.55 MHz, Scan Cycle Time, Sample 3			
	Value (Seconds)	Limit (Seconds)	Result
	3.033	≤ 5	Pass



401-402 MHz Band, Mid Channel (Fc), 401.55 MHz, Scan Cycle Time, Sample 4			
	Value (Seconds)	Limit (Seconds)	Result
	3.177	≤ 5	Pass

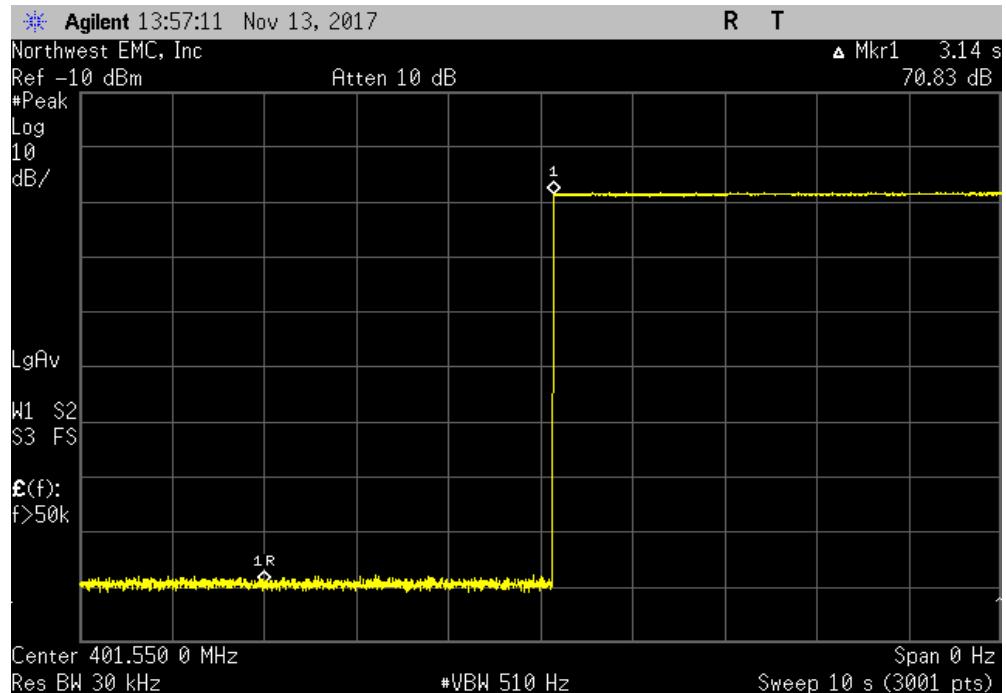


MONITORING SYSTEM SCAN CYCLE TIME (MEDS)

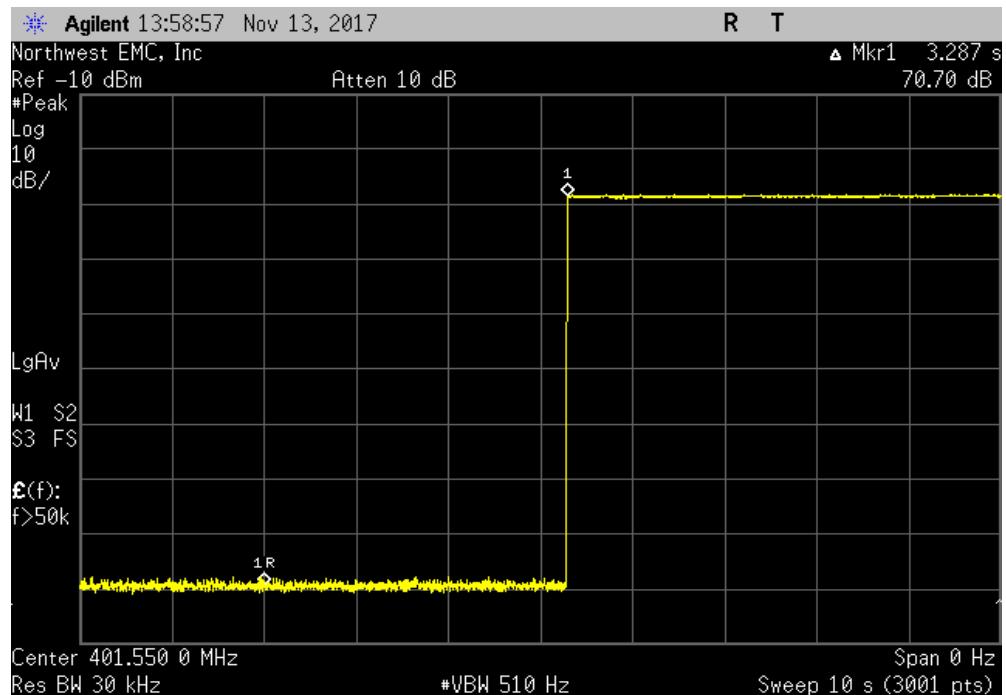


XMI 2017.09.21

401-402 MHz Band, Mid Channel (Fc), 401.55 MHz, Scan Cycle Time, Sample 5			
	Value (Seconds)	Limit (Seconds)	Result
	3.14	≤ 5	Pass



401-402 MHz Band, Mid Channel (Fc), 401.55 MHz, Scan Cycle Time, Sample 6			
	Value (Seconds)	Limit (Seconds)	Result
	3.287	≤ 5	Pass

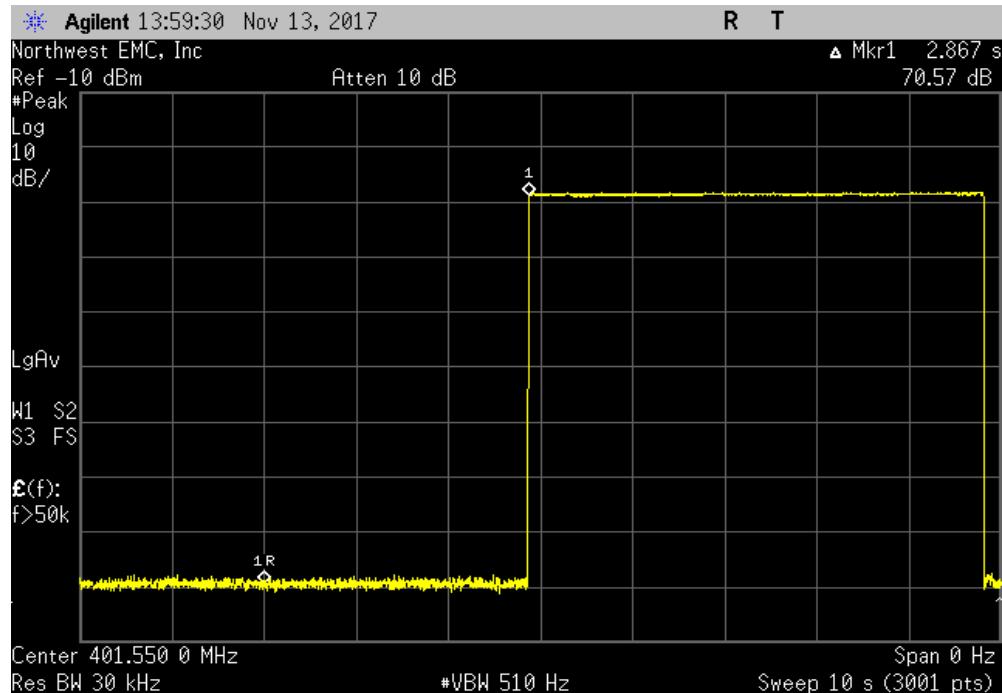


MONITORING SYSTEM SCAN CYCLE TIME (MEDS)

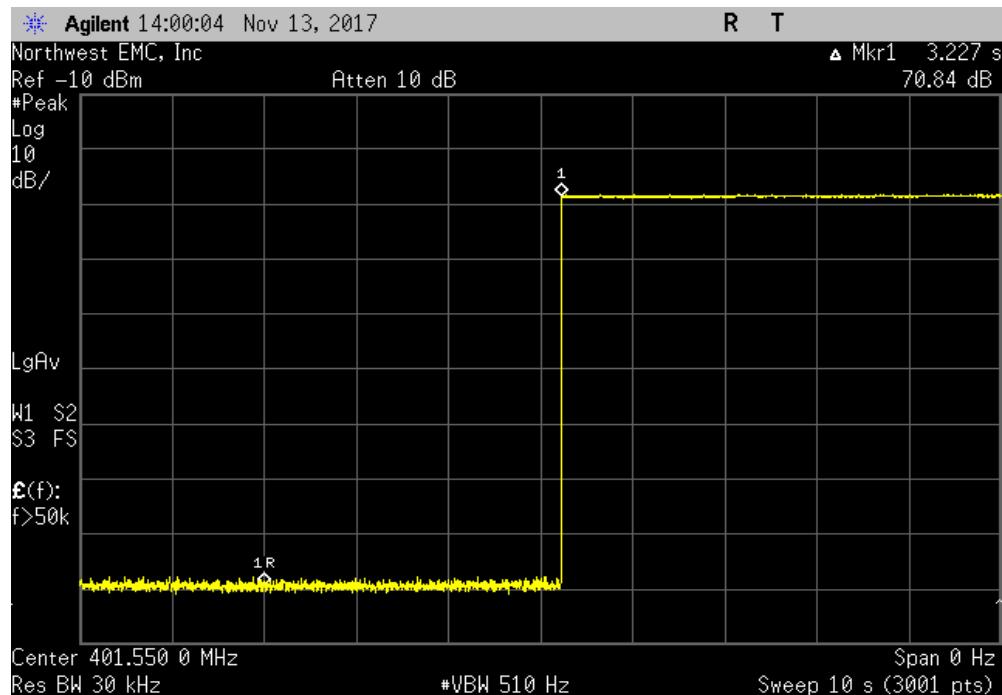


XMI 2017.09.21

401-402 MHz Band, Mid Channel (Fc), 401.55 MHz, Scan Cycle Time, Sample 7			
	Value (Seconds)	Limit (Seconds)	Result
	2.867	≤ 5	Pass



401-402 MHz Band, Mid Channel (Fc), 401.55 MHz, Scan Cycle Time, Sample 8			
	Value (Seconds)	Limit (Seconds)	Result
	3.227	≤ 5	Pass

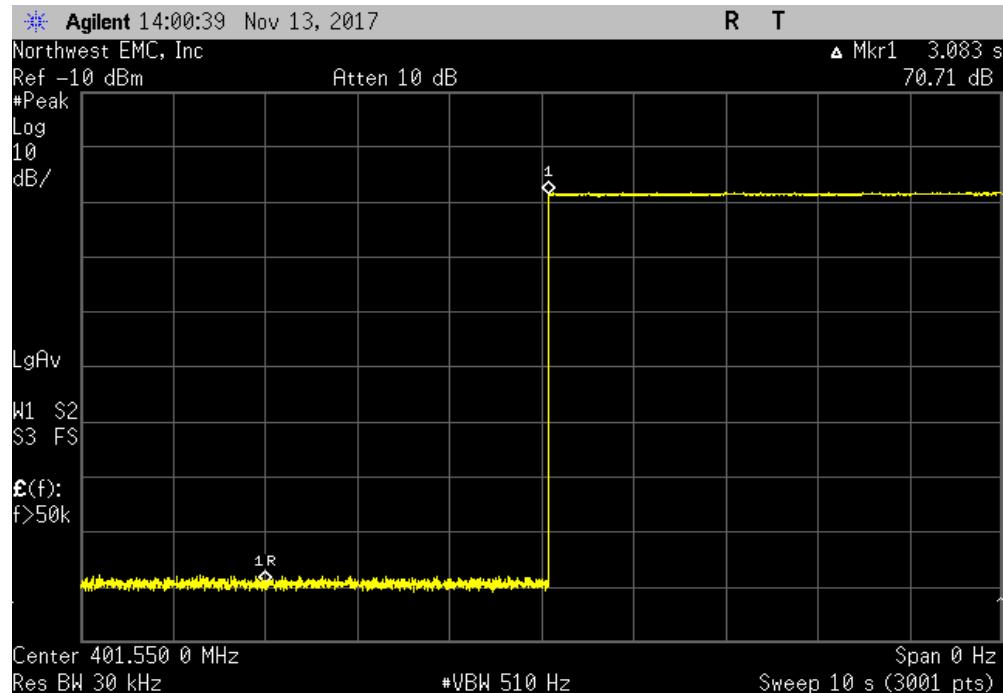


MONITORING SYSTEM SCAN CYCLE TIME (MEDS)

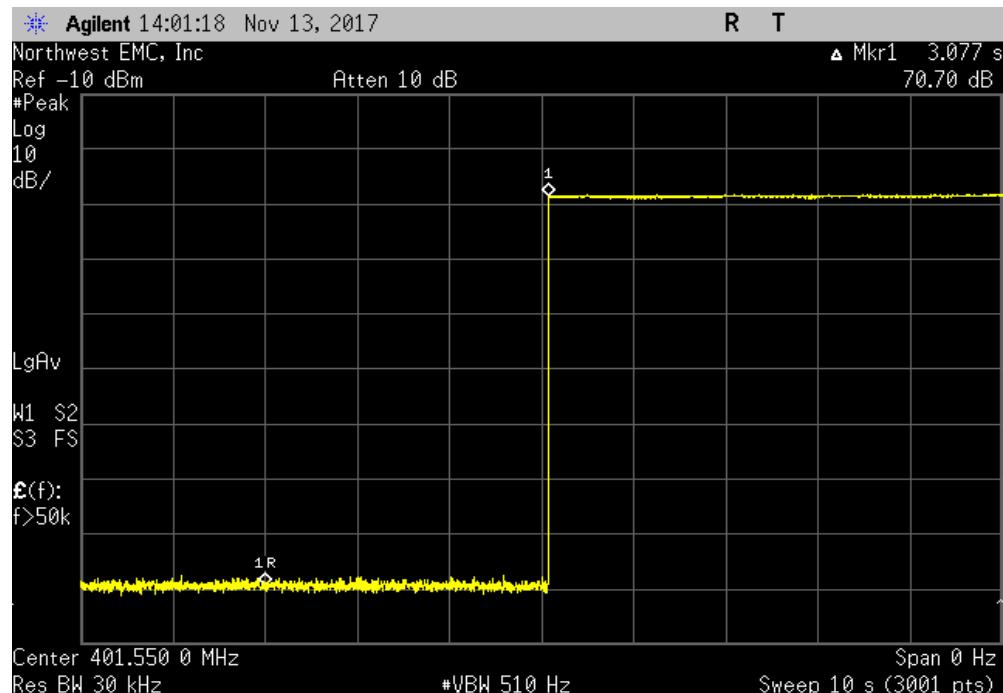


XMI 2017.09.21

401-402 MHz Band, Mid Channel (Fc), 401.55 MHz, Scan Cycle Time, Sample 9			
Value (Seconds)	Limit (Seconds)	Result	
3.083	≤ 5	Pass	



401-402 MHz Band, Mid Channel (Fc), 401.55 MHz, Scan Cycle Time, Sample 10			
Value (Seconds)	Limit (Seconds)	Result	
3.077	≤ 5	Pass	

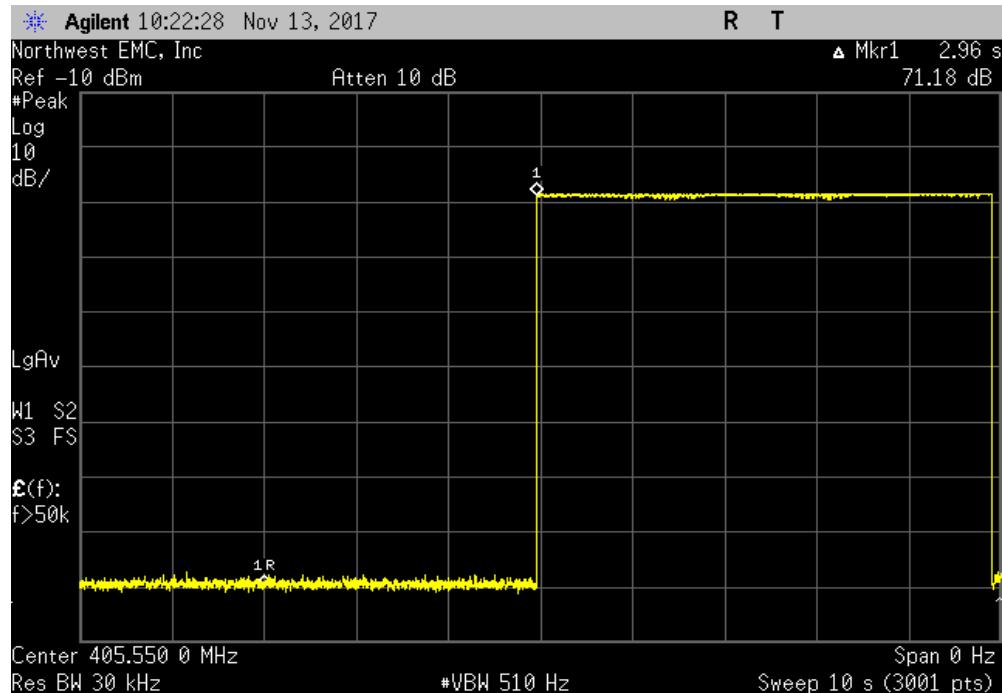


MONITORING SYSTEM SCAN CYCLE TIME (MEDS)

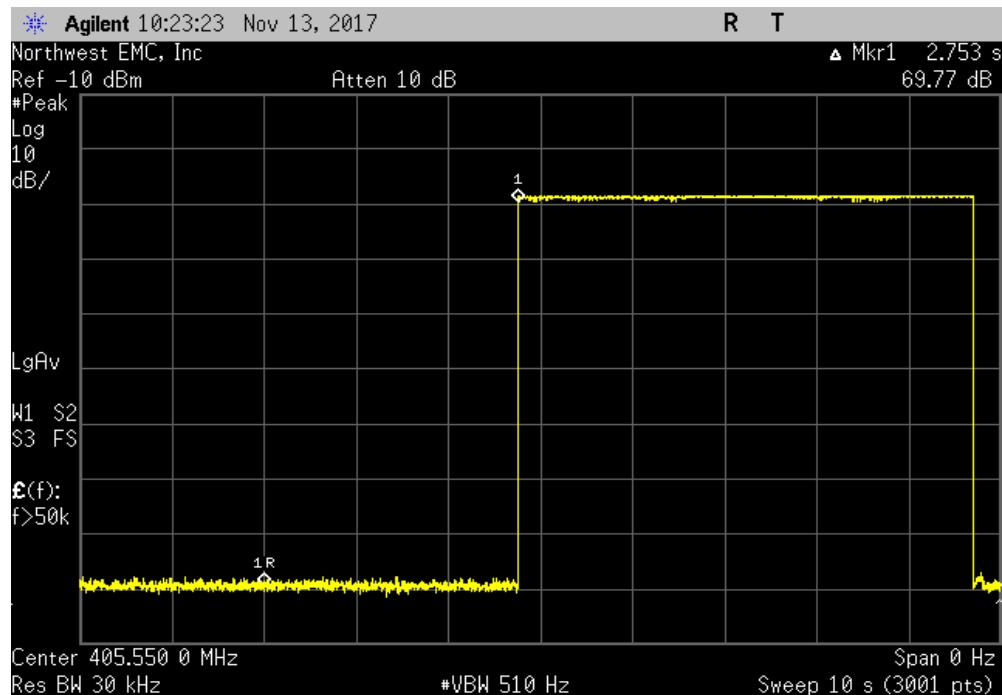


XMI 2017.09.21

405-406 MHz Band, Mid Channel (Fc), 405.55 MHz, Scan Cycle Time, Sample 1			
	Value (Seconds)	Limit (Seconds)	Result
	2.96	≤ 5	Pass



405-406 MHz Band, Mid Channel (Fc), 405.55 MHz, Scan Cycle Time, Sample 2			
	Value (Seconds)	Limit (Seconds)	Result
	2.753	≤ 5	Pass

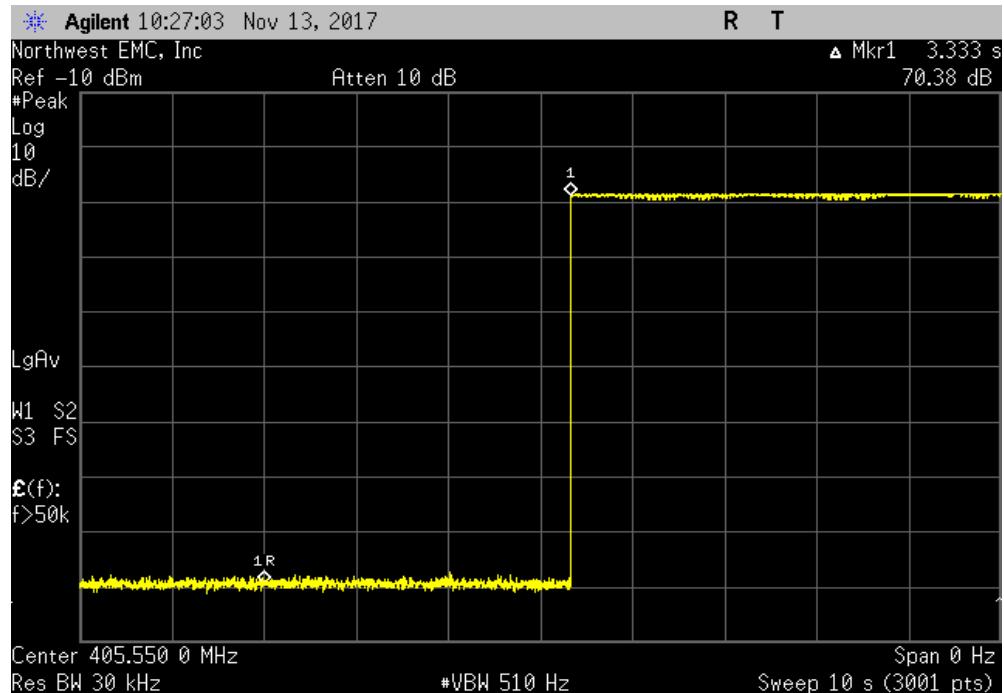


MONITORING SYSTEM SCAN CYCLE TIME (MEDS)

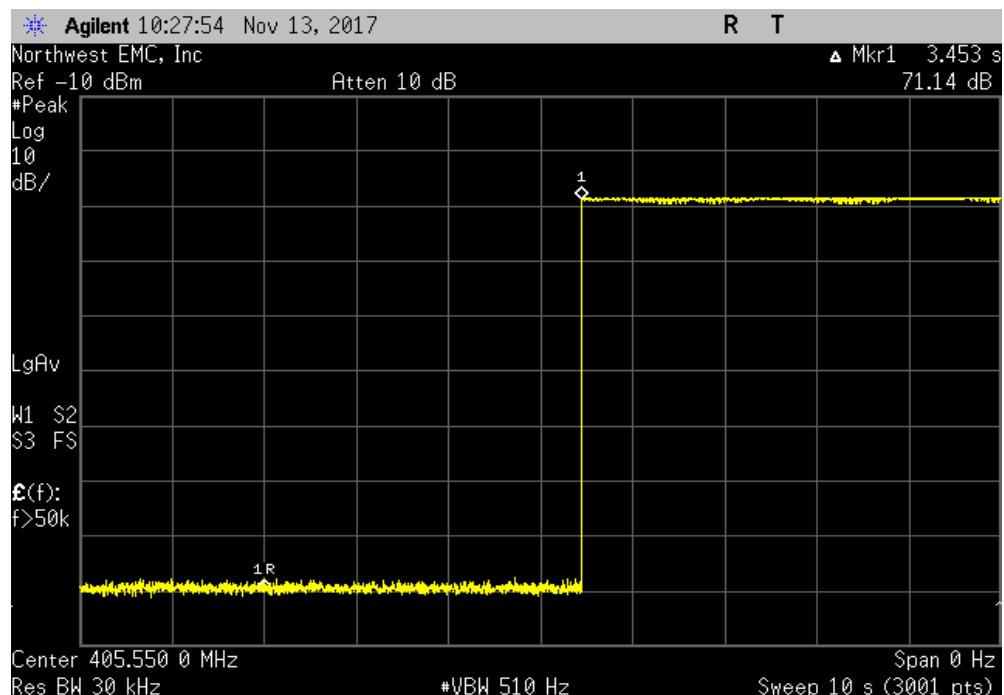


XMI 2017.09.21

405-406 MHz Band, Mid Channel (Fc), 405.55 MHz, Scan Cycle Time, Sample 3			
Value (Seconds)	Limit (Seconds)	Result	
3.333	≤ 5	Pass	



405-406 MHz Band, Mid Channel (Fc), 405.55 MHz, Scan Cycle Time, Sample 4			
Value (Seconds)	Limit (Seconds)	Result	
3.453	≤ 5	Pass	

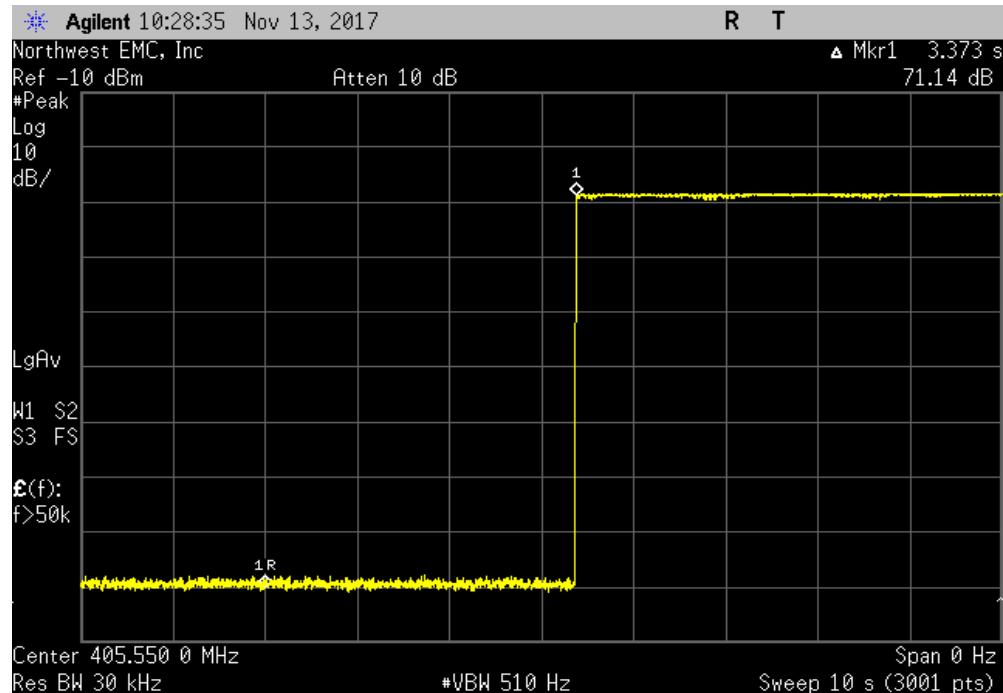


MONITORING SYSTEM SCAN CYCLE TIME (MEDS)

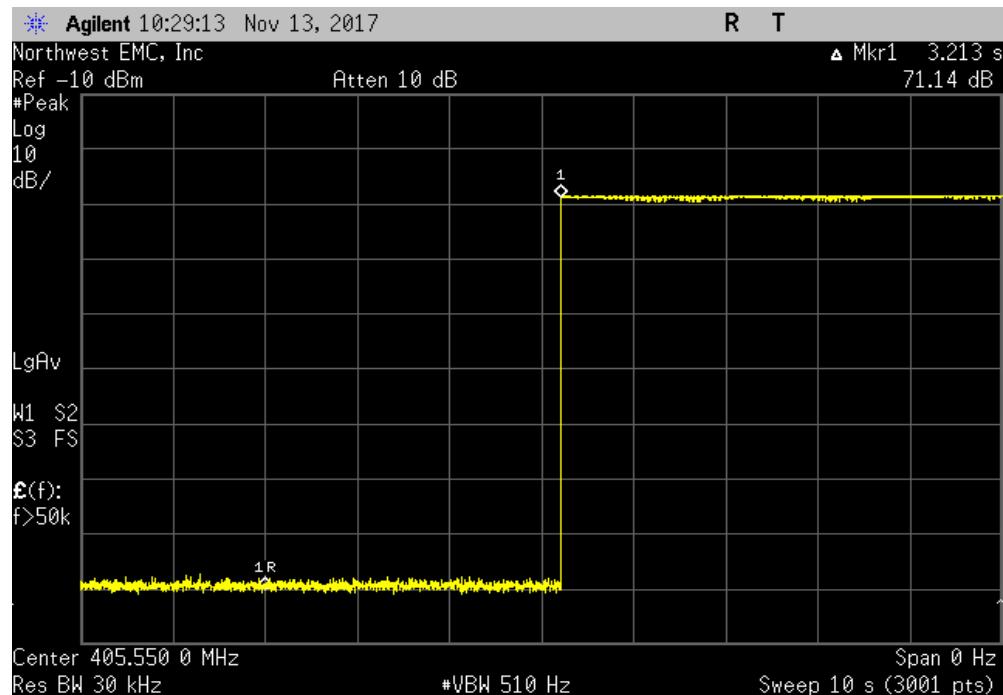


XMI 2017.09.21

405-406 MHz Band, Mid Channel (Fc), 405.55 MHz, Scan Cycle Time, Sample 5			
	Value (Seconds)	Limit (Seconds)	Result
	3.373	≤ 5	Pass



405-406 MHz Band, Mid Channel (Fc), 405.55 MHz, Scan Cycle Time, Sample 6			
	Value (Seconds)	Limit (Seconds)	Result
	3.213	≤ 5	Pass

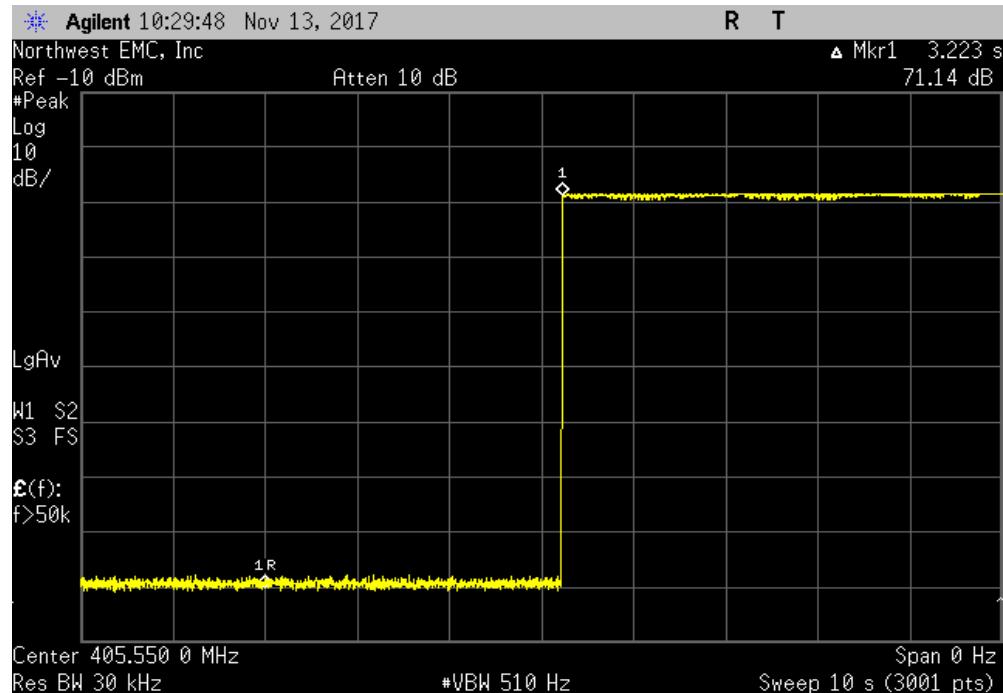


MONITORING SYSTEM SCAN CYCLE TIME (MEDS)

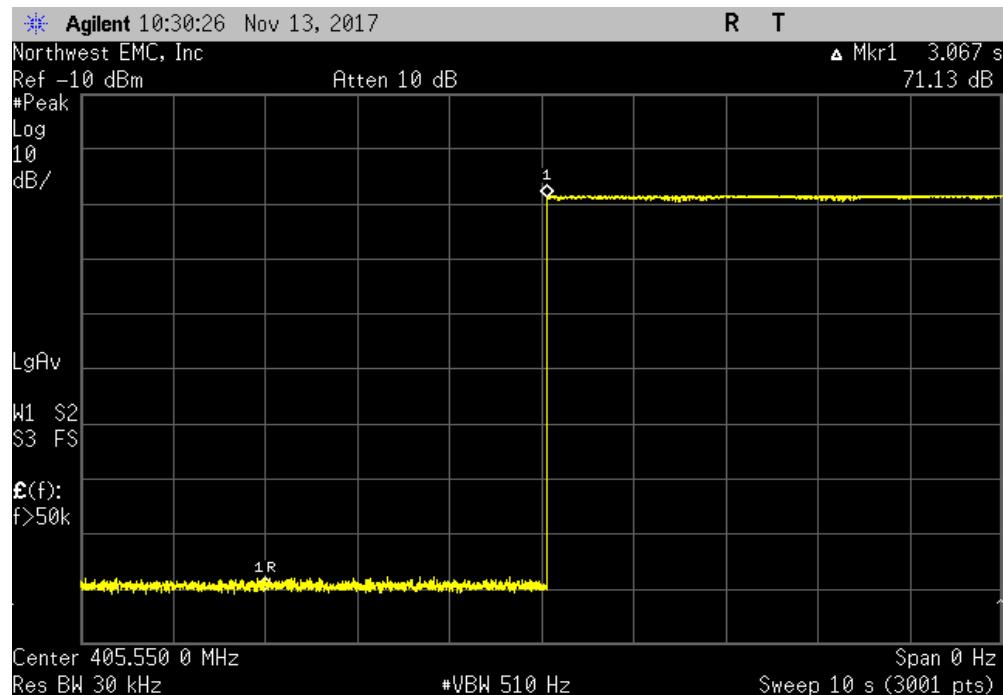


XMI 2017.09.21

405-406 MHz Band, Mid Channel (Fc), 405.55 MHz, Scan Cycle Time, Sample 7			
	Value (Seconds)	Limit (Seconds)	Result
	3.223	≤ 5	Pass



405-406 MHz Band, Mid Channel (Fc), 405.55 MHz, Scan Cycle Time, Sample 8			
	Value (Seconds)	Limit (Seconds)	Result
	3.067	≤ 5	Pass

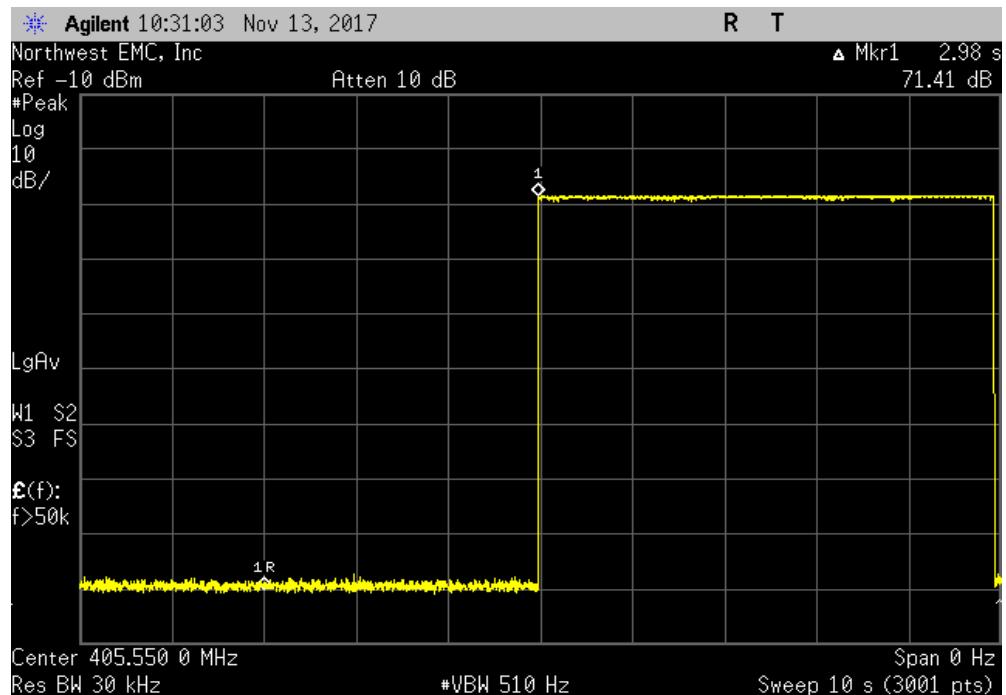


MONITORING SYSTEM SCAN CYCLE TIME (MEDS)

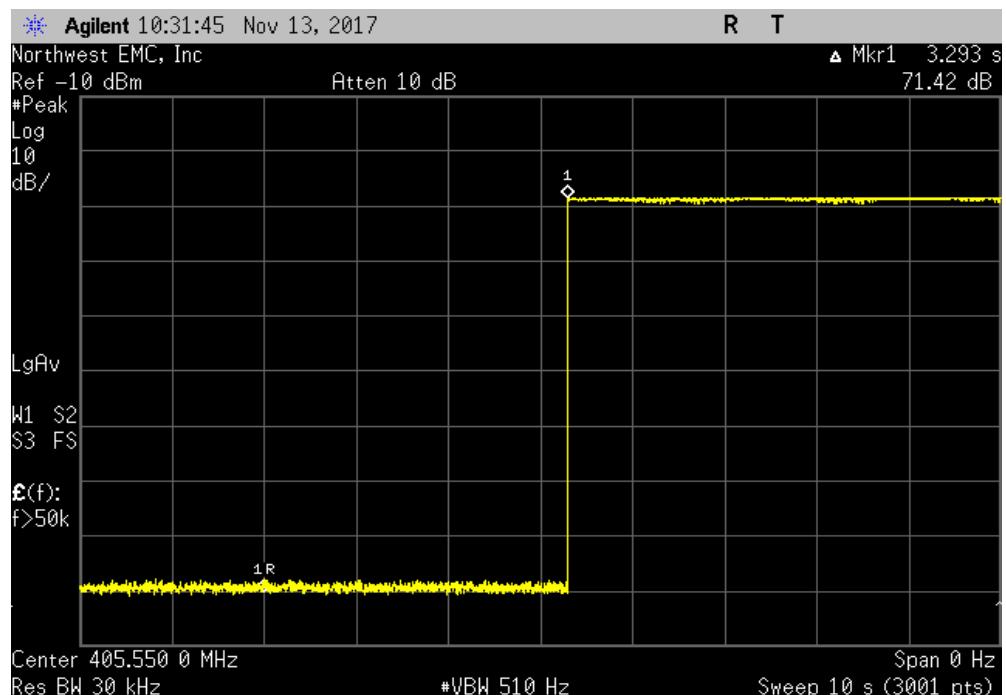


XMI 2017.09.21

405-406 MHz Band, Mid Channel (Fc), 405.55 MHz, Scan Cycle Time, Sample 9			
	Value (Seconds)	Limit (Seconds)	Result
	2.98	≤ 5	Pass



405-406 MHz Band, Mid Channel (Fc), 405.55 MHz, Scan Cycle Time, Sample 10			
	Value (Seconds)	Limit (Seconds)	Result
	3.293	≤ 5	Pass



MONITORING SYSTEM SCAN CYCLE TIME (MICS)



XMIT 2017.09.21

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Power Divider/Combiner	Fairview Microwave	MP8455-2	PDA	NCR	NCR
Directional Coupler	Fairview Microwave	MC2047-10	RHE	NCR	NCR
Power Divider/Combiner	Fairview Microwave	MP0208-2	IAZ	NCR	NCR
Meter - Multimeter	Fluke	111	MMM	18-Feb-16	18-Feb-19
Generator - Signal	Agilent	E4422B	TGR	8-Aug-17	8-Aug-20
Generator - Signal	Keysight	N5182B	TFY	16-Apr-15	16-Apr-18
Analyzer - Spectrum Analyzer	Agilent	E4446A	AAT	2-Jun-17	2-Jun-18

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer.

A signal generator was set to multitone operation to cause equal interference across the entire band. The spectrum analyzer was set to zero span with a sweep time equal to 10 seconds.

The CW signal on the intended frequency (Fc) was removed. At the same time, the EUT was set to seek a session with the implantable device. The delay between Fc becoming available and the EUT establishing a session was measured.

MONITORING SYSTEM SCAN CYCLE TIME (MICS)



XMI 2017.08.21

EUT:	Patient Remote (PR) - 2301		Work Order:	AXON0099																																									
Serial Number:	AP1BA70018		Date:	8-Nov-17																																									
Customer:	Axonics Modulation Technologies, Inc.		Temperature:	22 °C																																									
Attendees:	Flavio Ono		Humidity:	26% RH																																									
Project:	None		Barometric Pres.:	1011 mbar																																									
Tested by:	Richard Meliroth	Power:	2.8 VDC	Job Site:	NC04																																								
TEST SPECIFICATIONS			Test Method																																										
EN 301 839 V2.1.1:2016			EN 301 839 V2.1.1:2016																																										
COMMENTS																																													
EUT Emission Bandwidth = 160802 Hz, Antenna Gain = 2.0dBi. Communications established between EUT and companion device, initiating LBT communications protocol via peripheral laptop software.																																													
DEVIATIONS FROM TEST STANDARD																																													
None																																													
Configuration #	4	Signature		Value (Seconds)	Limit (Seconds)																																								
Result																																													
Mid Channel (Fc), 403.5 MHz																																													
<table> <tbody> <tr> <td>Scan Cycle Time, Sample 1</td> <td>2.573</td> <td>≤ 5</td> <td>Pass</td> </tr> <tr> <td>Scan Cycle Time, Sample 2</td> <td>2.353</td> <td>≤ 5</td> <td>Pass</td> </tr> <tr> <td>Scan Cycle Time, Sample 3</td> <td>2.5</td> <td>≤ 5</td> <td>Pass</td> </tr> <tr> <td>Scan Cycle Time, Sample 4</td> <td>2.407</td> <td>≤ 5</td> <td>Pass</td> </tr> <tr> <td>Scan Cycle Time, Sample 5</td> <td>2.517</td> <td>≤ 5</td> <td>Pass</td> </tr> <tr> <td>Scan Cycle Time, Sample 6</td> <td>2.463</td> <td>≤ 5</td> <td>Pass</td> </tr> <tr> <td>Scan Cycle Time, Sample 7</td> <td>2.41</td> <td>≤ 5</td> <td>Pass</td> </tr> <tr> <td>Scan Cycle Time, Sample 8</td> <td>2.69</td> <td>≤ 5</td> <td>Pass</td> </tr> <tr> <td>Scan Cycle Time, Sample 9</td> <td>2.213</td> <td>≤ 5</td> <td>Pass</td> </tr> <tr> <td>Scan Cycle Time, Sample 10</td> <td>2.293</td> <td>≤ 5</td> <td>Pass</td> </tr> </tbody> </table>						Scan Cycle Time, Sample 1	2.573	≤ 5	Pass	Scan Cycle Time, Sample 2	2.353	≤ 5	Pass	Scan Cycle Time, Sample 3	2.5	≤ 5	Pass	Scan Cycle Time, Sample 4	2.407	≤ 5	Pass	Scan Cycle Time, Sample 5	2.517	≤ 5	Pass	Scan Cycle Time, Sample 6	2.463	≤ 5	Pass	Scan Cycle Time, Sample 7	2.41	≤ 5	Pass	Scan Cycle Time, Sample 8	2.69	≤ 5	Pass	Scan Cycle Time, Sample 9	2.213	≤ 5	Pass	Scan Cycle Time, Sample 10	2.293	≤ 5	Pass
Scan Cycle Time, Sample 1	2.573	≤ 5	Pass																																										
Scan Cycle Time, Sample 2	2.353	≤ 5	Pass																																										
Scan Cycle Time, Sample 3	2.5	≤ 5	Pass																																										
Scan Cycle Time, Sample 4	2.407	≤ 5	Pass																																										
Scan Cycle Time, Sample 5	2.517	≤ 5	Pass																																										
Scan Cycle Time, Sample 6	2.463	≤ 5	Pass																																										
Scan Cycle Time, Sample 7	2.41	≤ 5	Pass																																										
Scan Cycle Time, Sample 8	2.69	≤ 5	Pass																																										
Scan Cycle Time, Sample 9	2.213	≤ 5	Pass																																										
Scan Cycle Time, Sample 10	2.293	≤ 5	Pass																																										

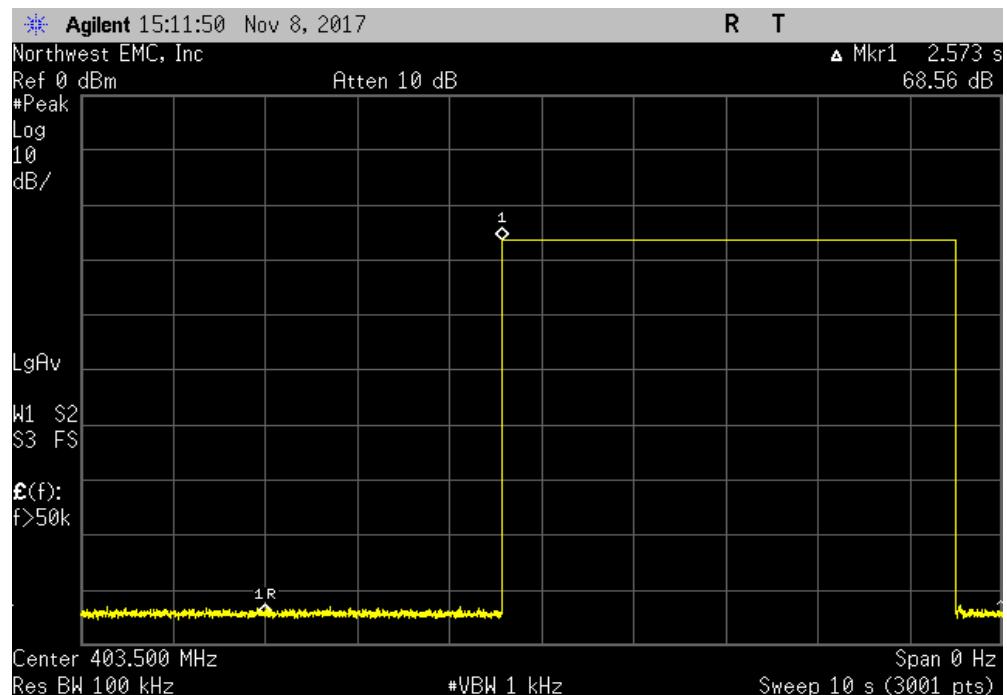
MONITORING SYSTEM SCAN CYCLE TIME (MICS)



XMIT 2017.09.21

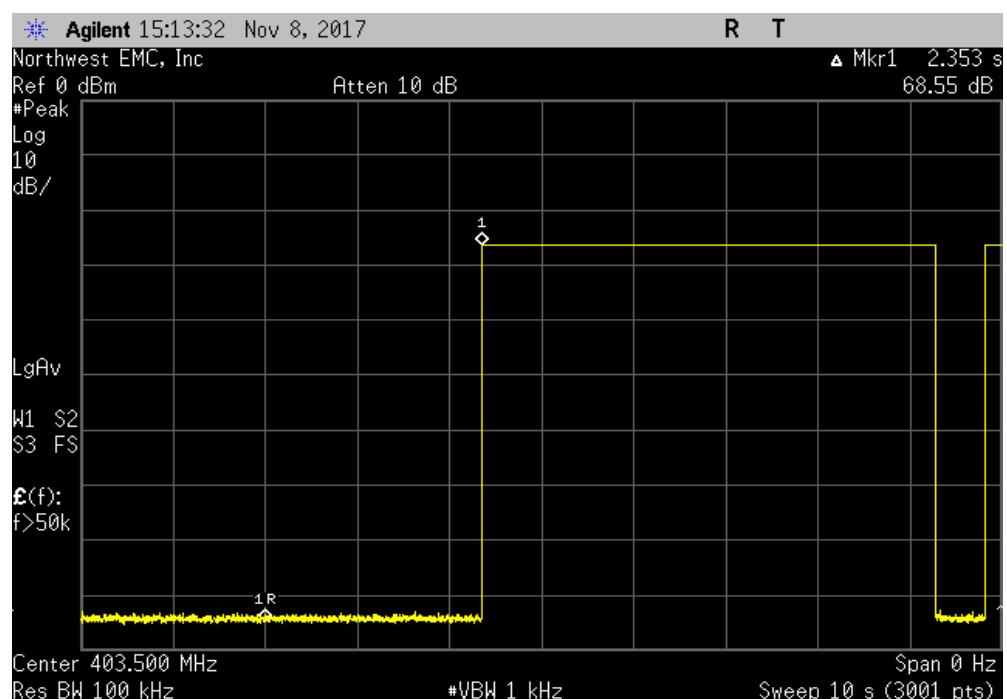
Mid Channel (Fc), 403.5 MHz, Scan Cycle Time, Sample 1

Value (Seconds)	Limit (Seconds)	Result
2.573	≤ 5	Pass



Mid Channel (Fc), 403.5 MHz, Scan Cycle Time, Sample 2

Value (Seconds)	Limit (Seconds)	Result
2.353	≤ 5	Pass

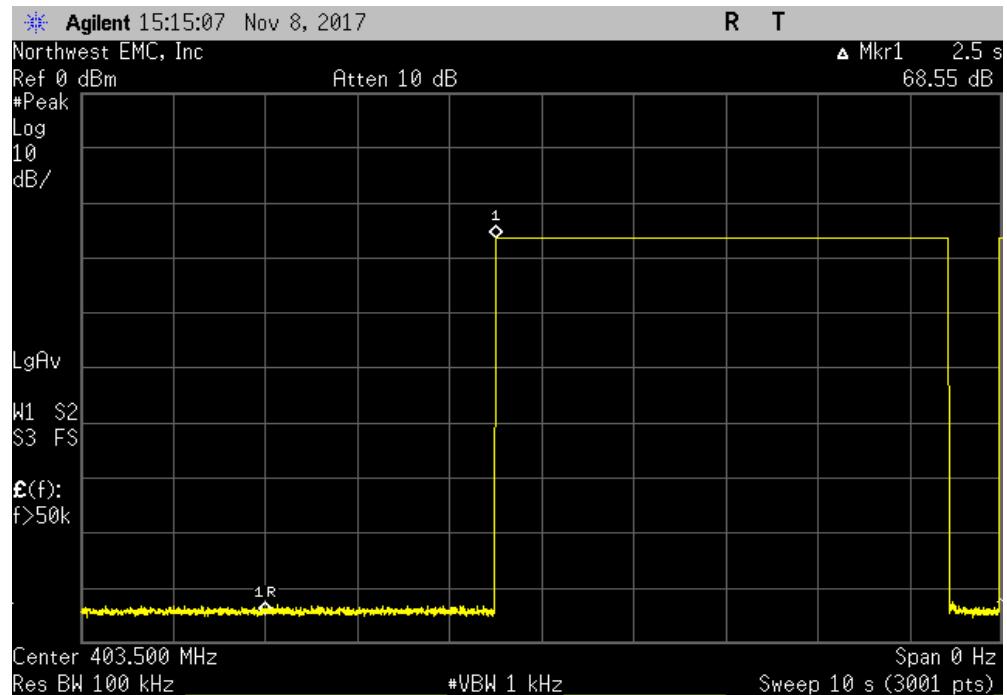


MONITORING SYSTEM SCAN CYCLE TIME (MICS)

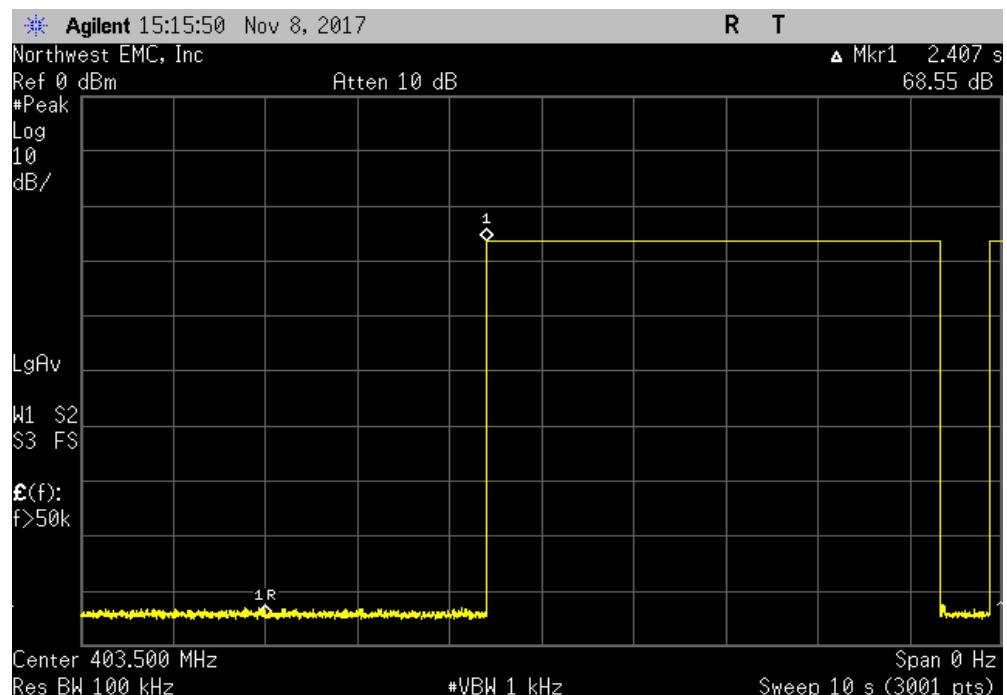


XMI 2017.09.21

Mid Channel (Fc), 403.5 MHz, Scan Cycle Time, Sample 3			
	Value (Seconds)	Limit (Seconds)	Result
	2.5	≤ 5	Pass



Mid Channel (Fc), 403.5 MHz, Scan Cycle Time, Sample 4			
	Value (Seconds)	Limit (Seconds)	Result
	2.407	≤ 5	Pass

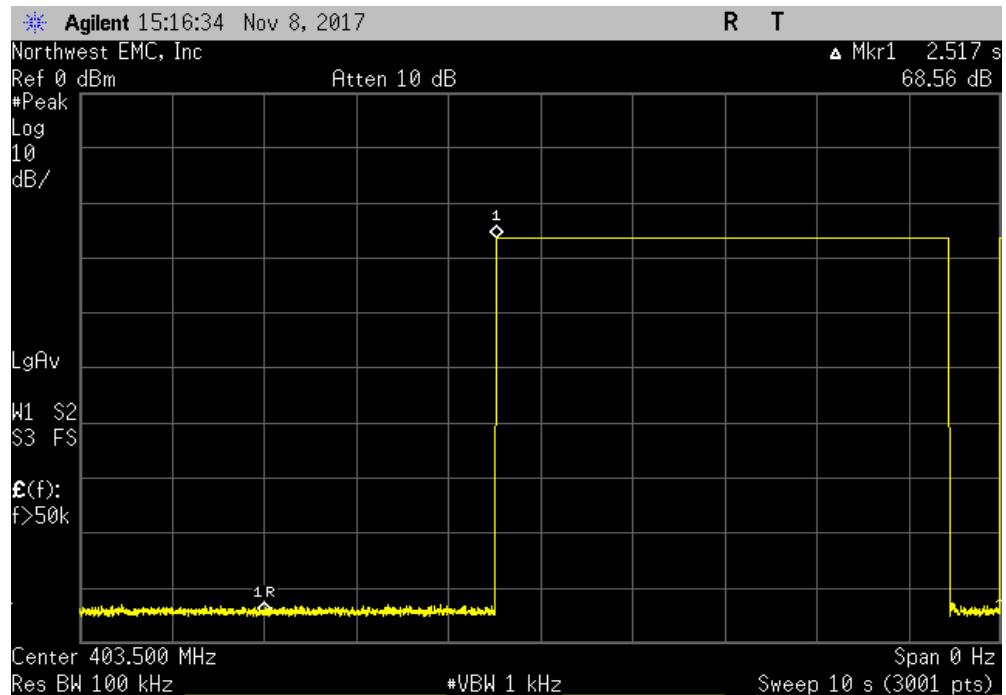


MONITORING SYSTEM SCAN CYCLE TIME (MICS)

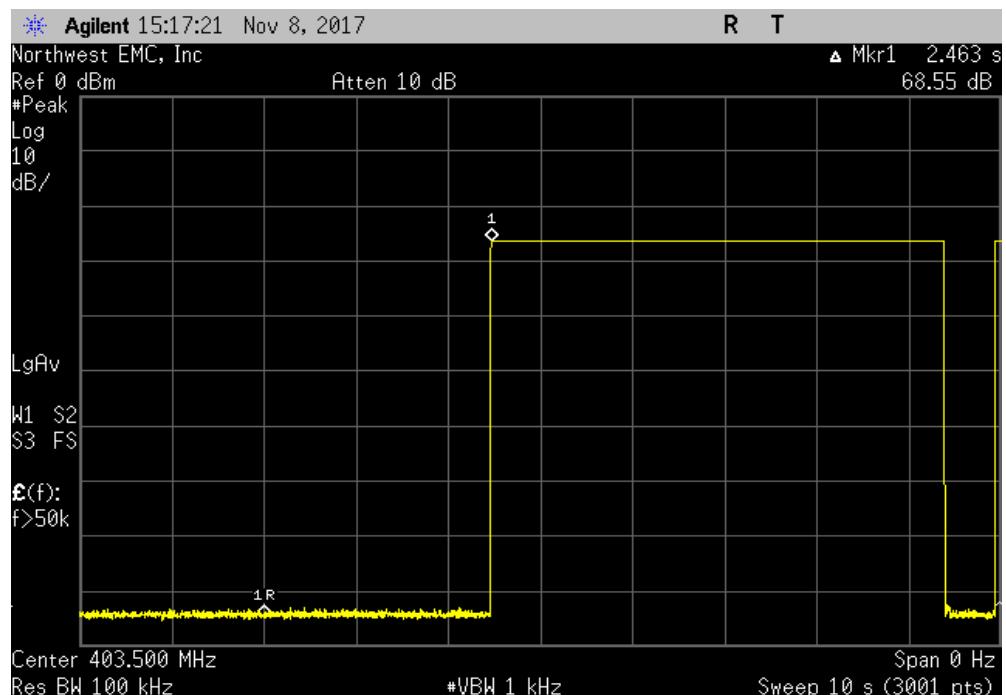


XMI 2017.09.21

Mid Channel (Fc), 403.5 MHz, Scan Cycle Time, Sample 5			
	Value (Seconds)	Limit (Seconds)	Result
	2.517	≤ 5	Pass



Mid Channel (Fc), 403.5 MHz, Scan Cycle Time, Sample 6			
	Value (Seconds)	Limit (Seconds)	Result
	2.463	≤ 5	Pass



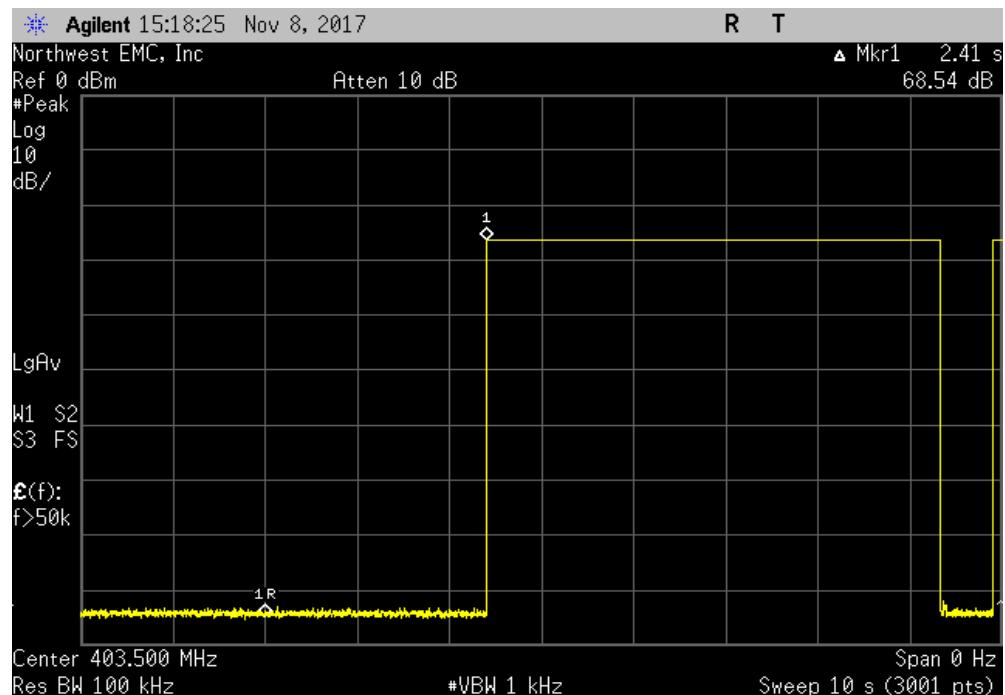
MONITORING SYSTEM SCAN CYCLE TIME (MICS)



XMI 2017.09.21

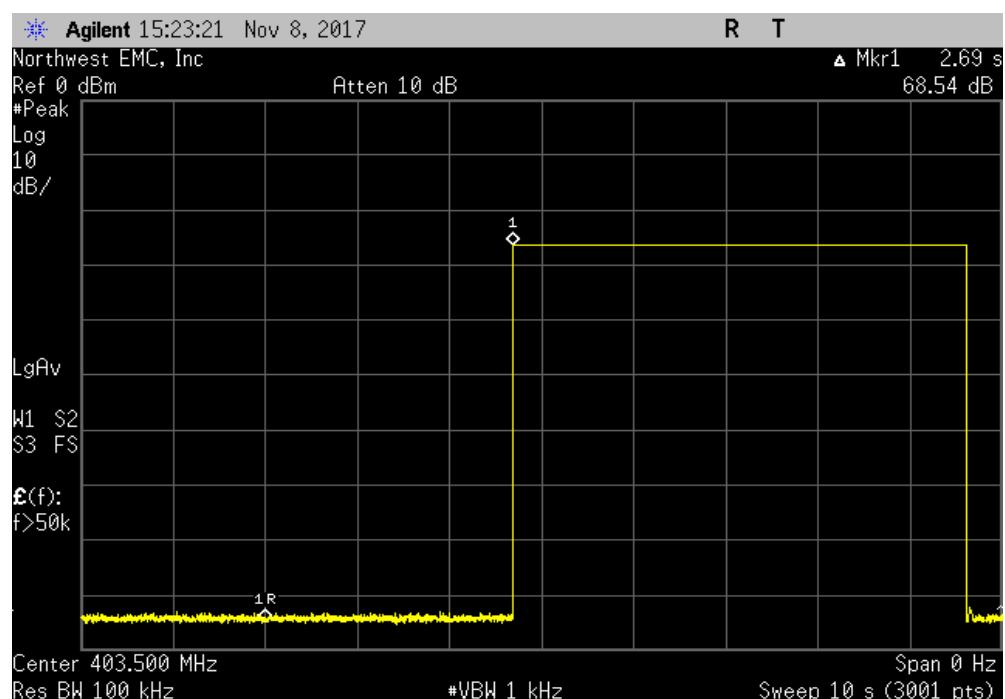
Mid Channel (Fc), 403.5 MHz, Scan Cycle Time, Sample 7

Value (Seconds)	Limit (Seconds)	Result
2.41	≤ 5	Pass



Mid Channel (Fc), 403.5 MHz, Scan Cycle Time, Sample 8

Value (Seconds)	Limit (Seconds)	Result
2.69	≤ 5	Pass



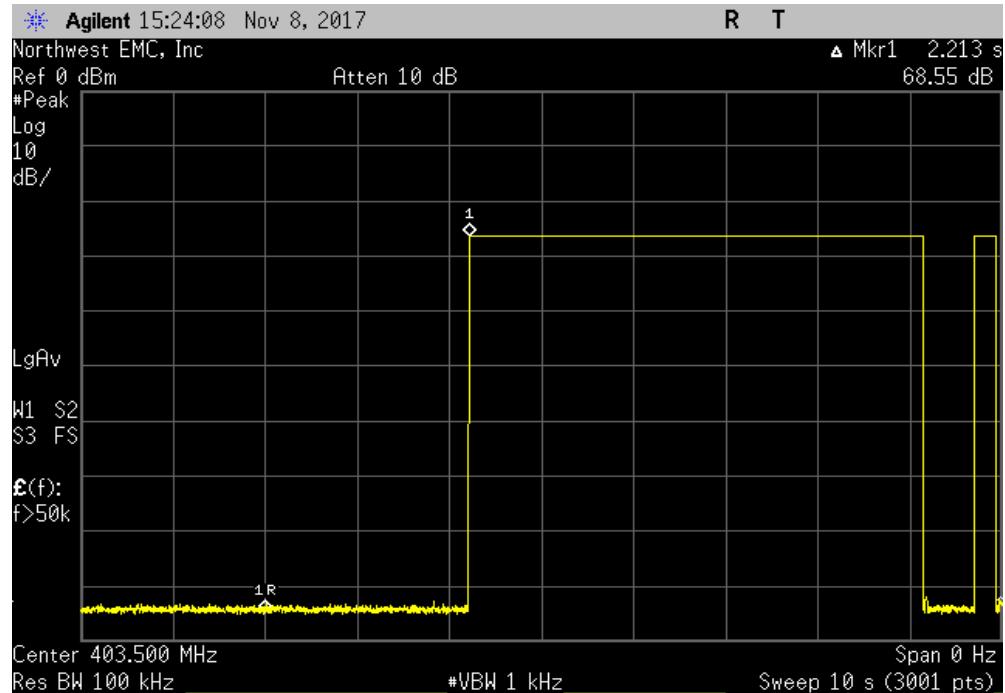
MONITORING SYSTEM SCAN CYCLE TIME (MICS)



XMI 2017.09.21

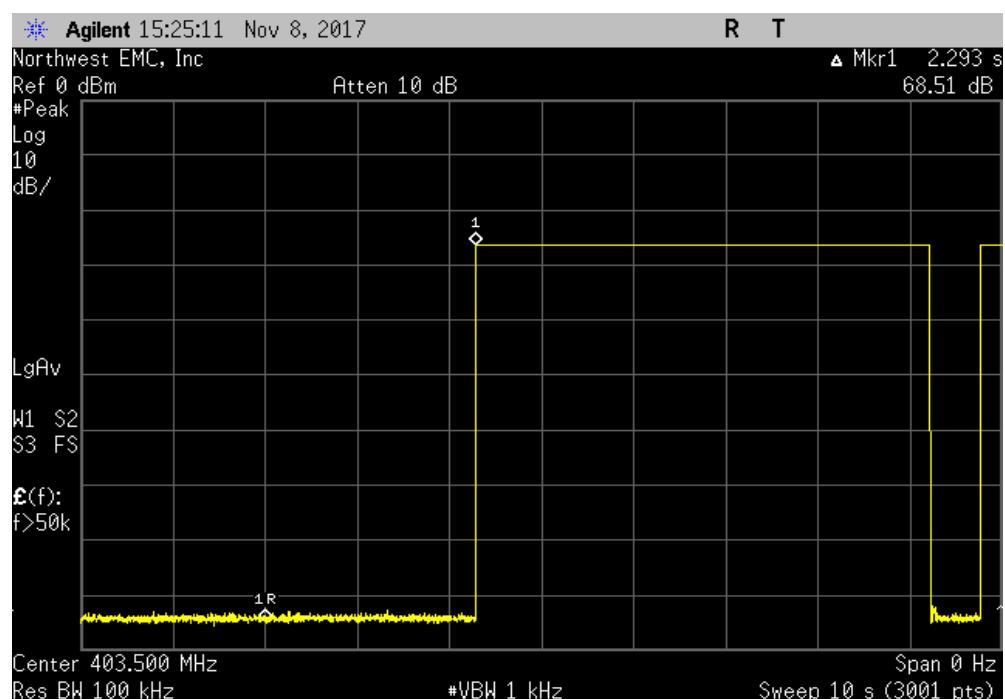
Mid Channel (Fc), 403.5 MHz, Scan Cycle Time, Sample 9

Value (Seconds)	Limit (Seconds)	Result
2.213	≤ 5	Pass



Mid Channel (Fc), 403.5 MHz, Scan Cycle Time, Sample 10

Value (Seconds)	Limit (Seconds)	Result
2.293	≤ 5	Pass



MINIMUM CHANNEL MONITORING PERIOD (MEDS)



XMIT 2017.09.21

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Power Divider/Combiner	Fairview Microwave	MP8455-2	PDA	NCR	NCR
Directional Coupler	Fairview Microwave	MC2047-10	RHE	NCR	NCR
Power Divider/Combiner	Fairview Microwave	MP0208-2	IAZ	NCR	NCR
Meter - Multimeter	Fluke	111	MMM	18-Feb-16	18-Feb-19
Generator - Signal	Agilent	E4422B	TGR	8-Aug-17	8-Aug-20
Generator - Signal	Keysight	N5182B	TFY	16-Apr-15	16-Apr-18
Analyzer - Spectrum Analyzer	Agilent	E4446A	AAT	2-Jun-17	2-Jun-18

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer.

A signal generator was set to multitone operation to cause equal interference across the entire band, except one channel (Fc) was left available. The multitone operation (out of operation region) was also set to Pulse modulation with a Period of 10 mS, and a Pulse Width of 0.3 mS. The spectrum analyzer was set to measure the transmit bands of 401-402 and 405-406 MHz.

The EUT was set to seek a session with the implantable device. The EUT was verified to connect on the available channel with multiple screen captures.

MINIMUM CHANNEL MONITORING PERIOD (MEDS)



XMI 2017.08.21

EUT:	Patient Remote (PR) - 2301		Work Order:	AXON0099	
Serial Number:	AP1BA70018		Date:	13-Nov-17	
Customer:	Axonics Modulation Technologies, Inc.		Temperature:	22 °C	
Attendees:	Flavio Ono		Humidity:	38% RH	
Project:	None		Barometric Pres.:	1009 mbar	
Tested by:	Richard Meliroth	Power:	2.8 VDC	Job Site:	NC04
TEST SPECIFICATIONS			Test Method		
EN 302 537 V2.1.1:2016			EN 302 537 V2.1.1:2016		
COMMENTS					
EUT Emission Bandwidth = 81500 Hz, Antenna Gain = 2.0dBi. Communications established between EUT and companion device, initiating LBT communications protocol via peripheral laptop software.					
DEVIATIONS FROM TEST STANDARD					
None					
Configuration #	5	Signature	Does EUT Initiate Communications on Fc? (Y/N)		
401-402 MHz Band			Result		
Mid Channel (Fc), 401.55 MHz					
Monitoring Period Sample 1			Yes	Pass	
Monitoring Period Sample 2			Yes	Pass	
Monitoring Period Sample 3			Yes	Pass	
Monitoring Period Sample 4			Yes	Pass	
Monitoring Period Sample 5			Yes	Pass	
Monitoring Period Sample 6			Yes	Pass	
Monitoring Period Sample 7			Yes	Pass	
Monitoring Period Sample 8			Yes	Pass	
Monitoring Period Sample 9			Yes	Pass	
Monitoring Period Sample 10			Yes	Pass	
405-406 MHz Band					
Mid Channel (Fc), 405.55 MHz					
Monitoring Period Sample 1			Yes	Pass	
Monitoring Period Sample 2			Yes	Pass	
Monitoring Period Sample 3			Yes	Pass	
Monitoring Period Sample 4			Yes	Pass	
Monitoring Period Sample 5			Yes	Pass	
Monitoring Period Sample 6			Yes	Pass	
Monitoring Period Sample 7			Yes	Pass	
Monitoring Period Sample 8			Yes	Pass	
Monitoring Period Sample 9			Yes	Pass	
Monitoring Period Sample 10			Yes	Pass	

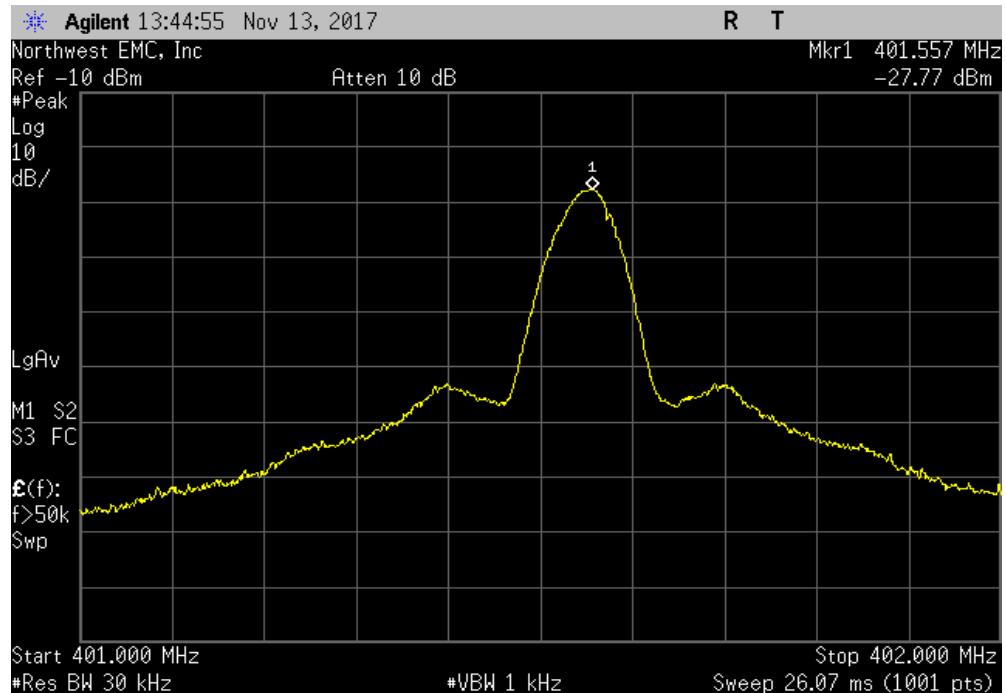
MINIMUM CHANNEL MONITORING PERIOD (MEDS)



XMI 2017.09.21

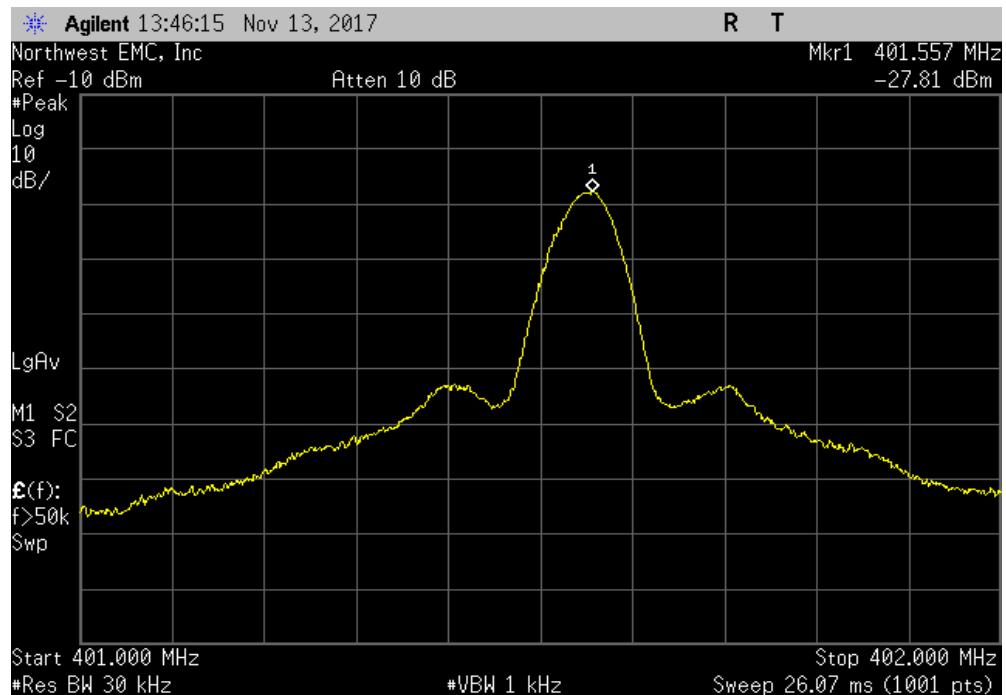
401-402 MHz Band, Mid Channel (Fc), 401.55 MHz, Monitoring Period Sample 1

Does EUT Initiate Communications on Fc? (Y/N)		Result
Yes		Pass



401-402 MHz Band, Mid Channel (Fc), 401.55 MHz, Monitoring Period Sample 2

Does EUT Initiate Communications on Fc? (Y/N)		Result
Yes		Pass

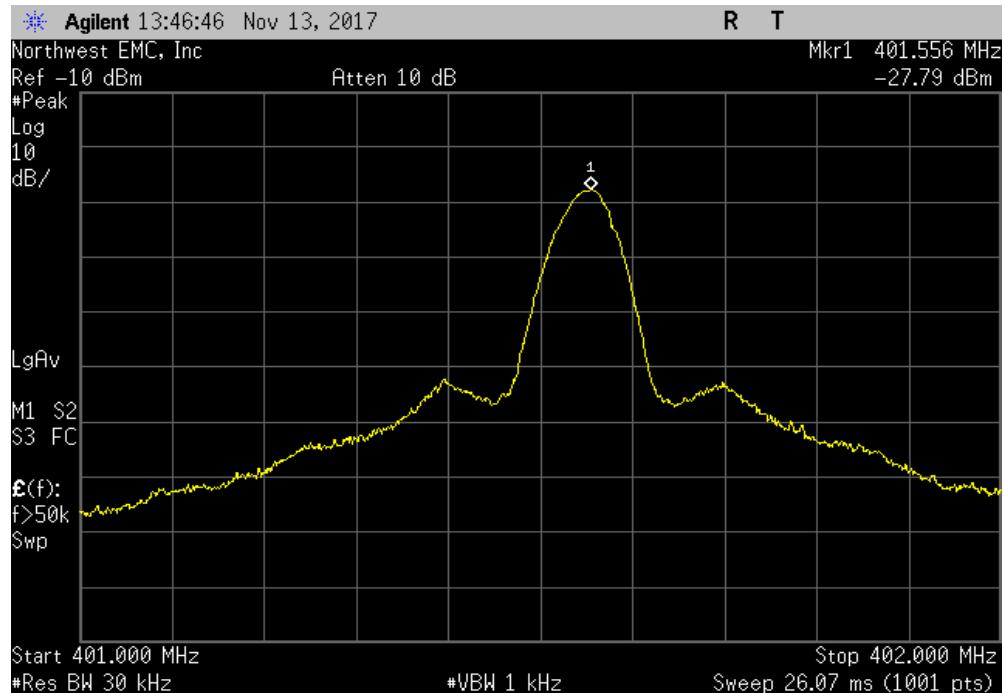


MINIMUM CHANNEL MONITORING PERIOD (MEDS)

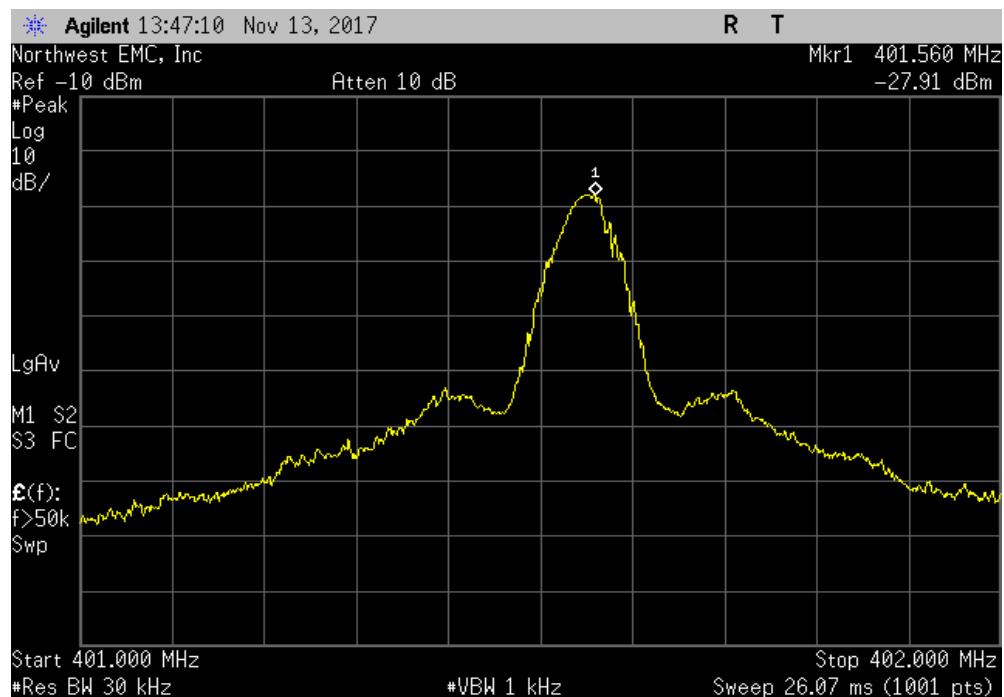


XMT 2017.09.21

401-402 MHz Band, Mid Channel (Fc), 401.55 MHz, Monitoring Period Sample 3		
Does EUT Initiate Communications on Fc? (Y/N)		Result
Yes	Pass	



401-402 MHz Band, Mid Channel (Fc), 401.55 MHz, Monitoring Period Sample 4		
Does EUT Initiate Communications on Fc? (Y/N)		Result
Yes	Pass	



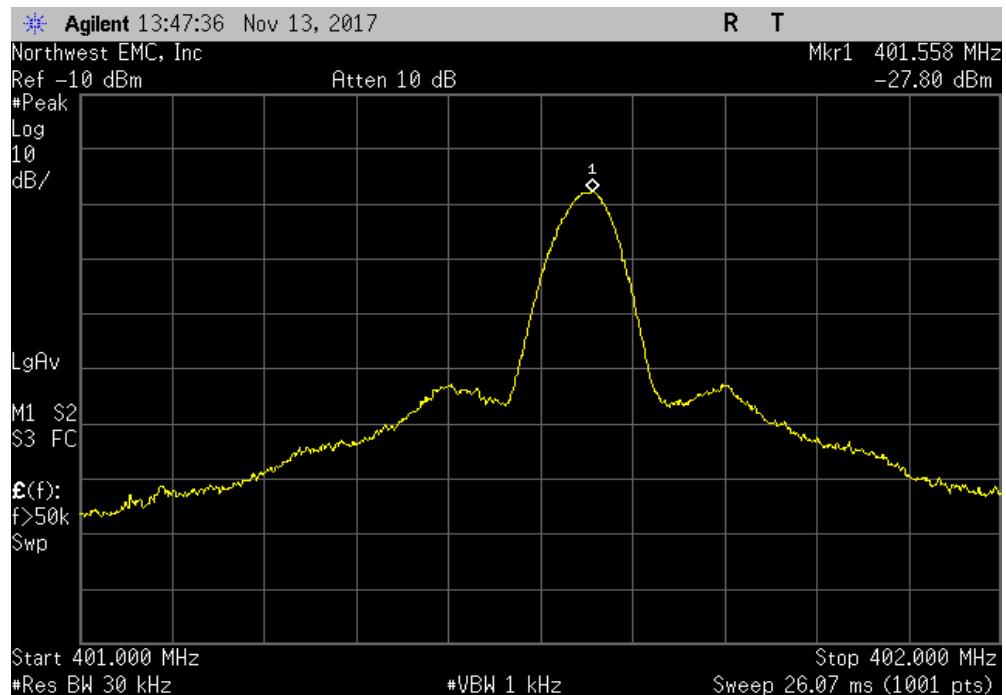
MINIMUM CHANNEL MONITORING PERIOD (MEDS)



XMT 2017.09.21

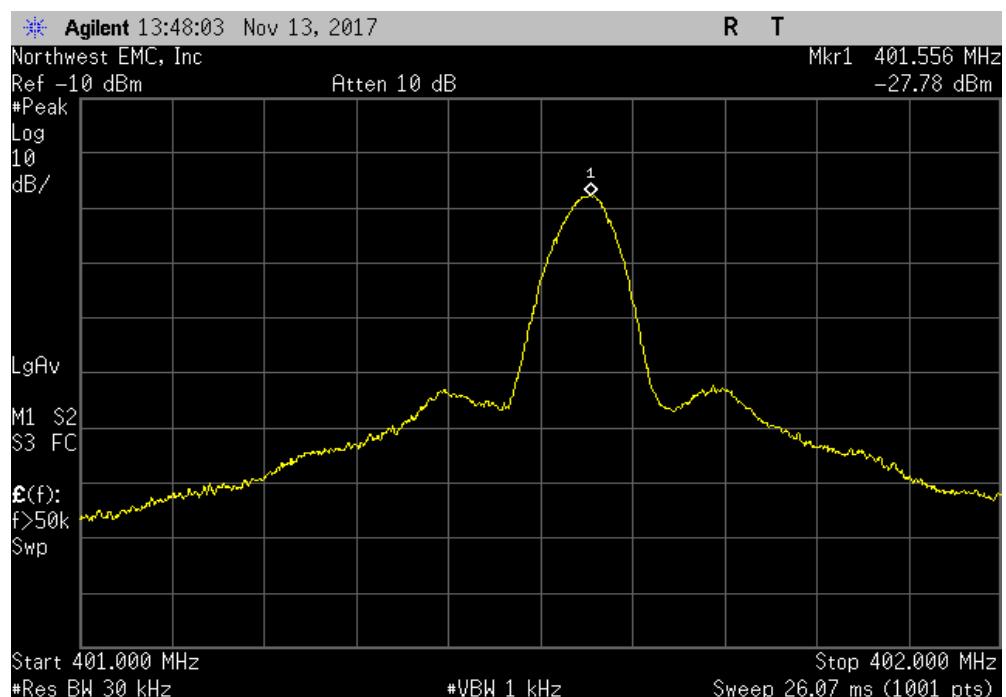
401-402 MHz Band, Mid Channel (Fc), 401.55 MHz, Monitoring Period Sample 5

Does EUT Initiate Communications on Fc? (Y/N)		Result
Yes	Pass	



401-402 MHz Band, Mid Channel (Fc), 401.55 MHz, Monitoring Period Sample 6

Does EUT Initiate Communications on Fc? (Y/N)		Result
Yes	Pass	



MINIMUM CHANNEL MONITORING PERIOD (MEDS)

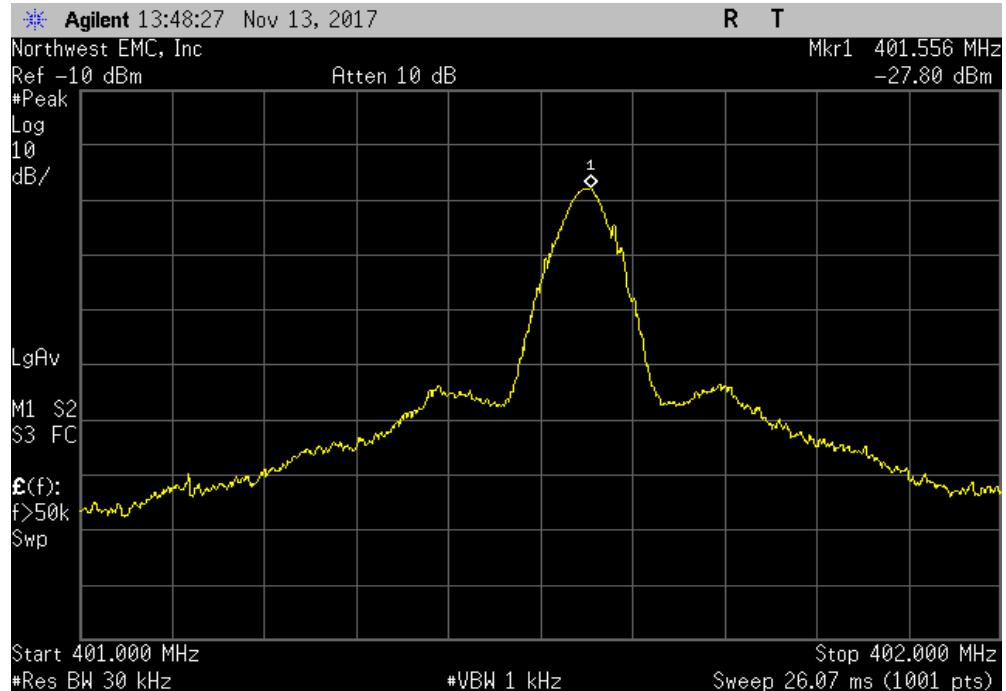


XMIT 2017.09.21

401-402 MHz Band, Mid Channel (Fc), 401.55 MHz, Monitoring Period Sample 7

Does EUT Initiate
Communications on Fc? (Y/N) Result

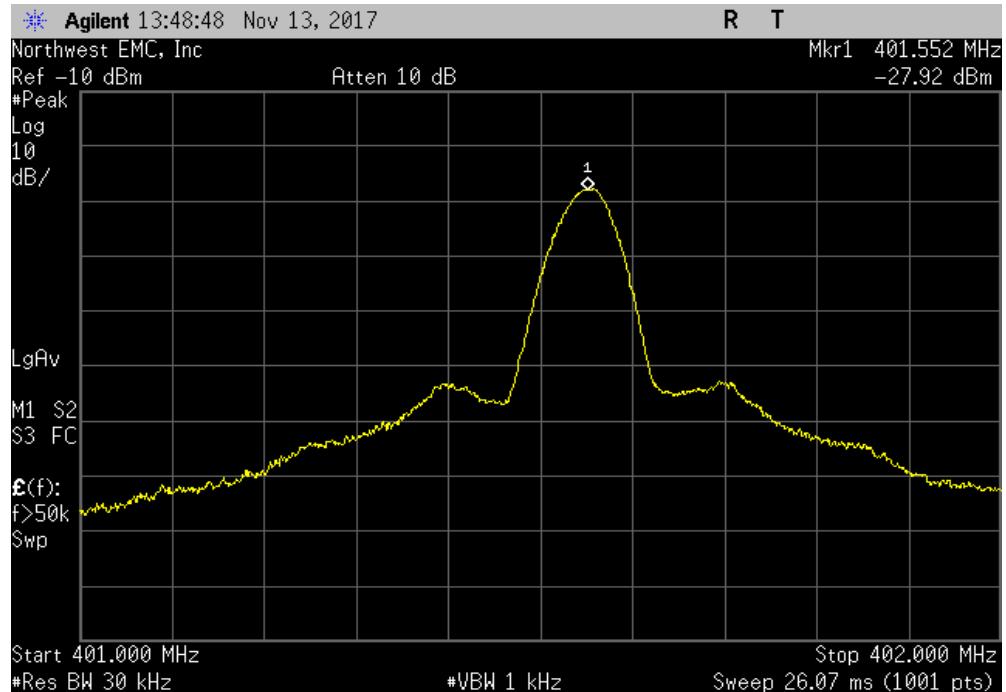
Yes Pass



401-402 MHz Band, Mid Channel (Fc), 401.55 MHz, Monitoring Period Sample 8

Does EUT Initiate
Communications on Fc? (Y/N) Result

Yes Pass

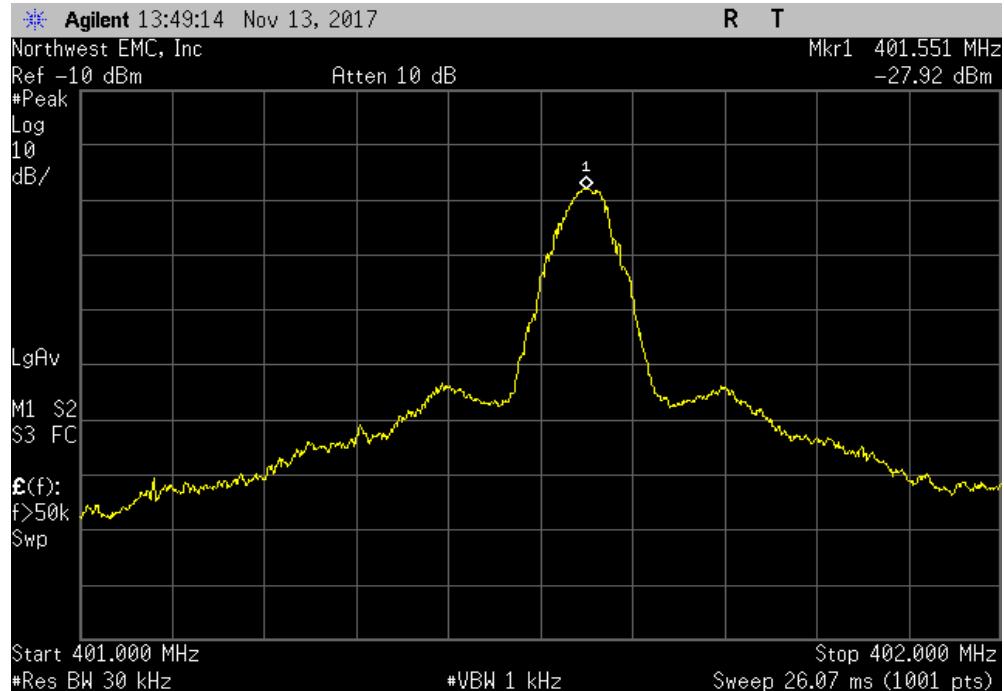


MINIMUM CHANNEL MONITORING PERIOD (MEDS)



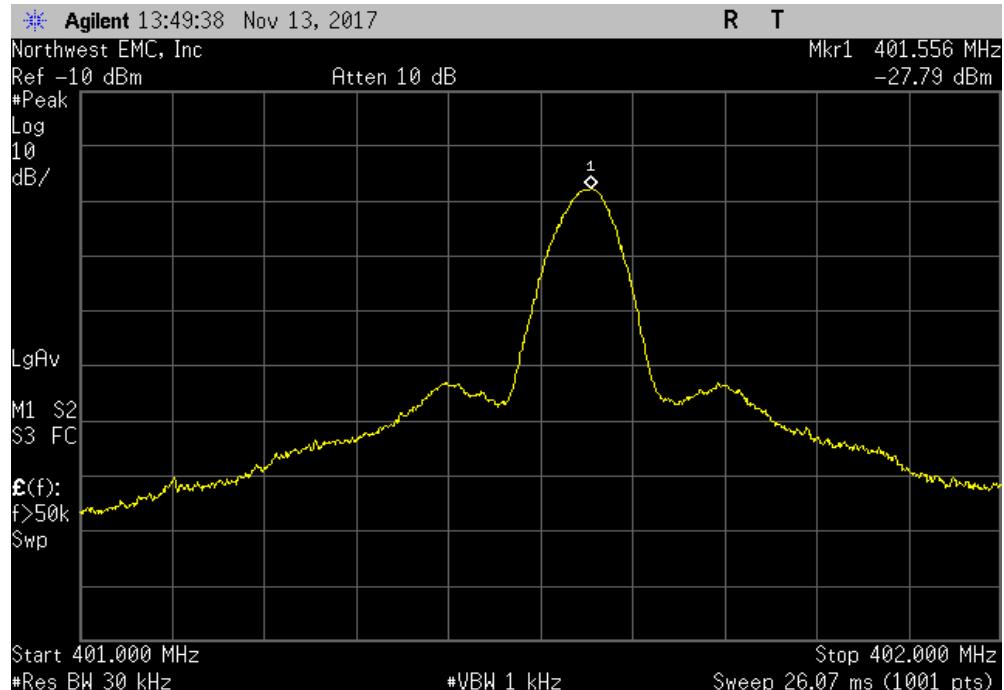
401-402 MHz Band, Mid Channel (Fc), 401.55 MHz, Monitoring Period Sample 9

Does EUT Initiate
Communications on Fc? (Y/N) Yes Pass



401-402 MHz Band, Mid Channel (Fc), 401.55 MHz, Monitoring Period Sample 10

Does EUT Initiate
Communications on Fc? (Y/N) Yes Pass



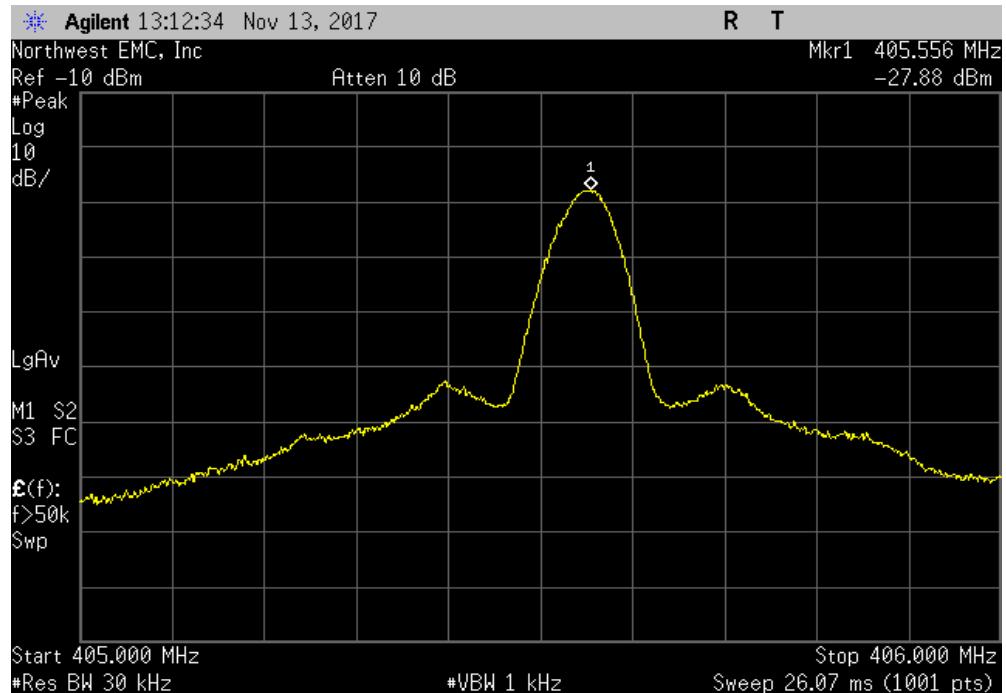
MINIMUM CHANNEL MONITORING PERIOD (MEDS)



XMI 2017.09.21

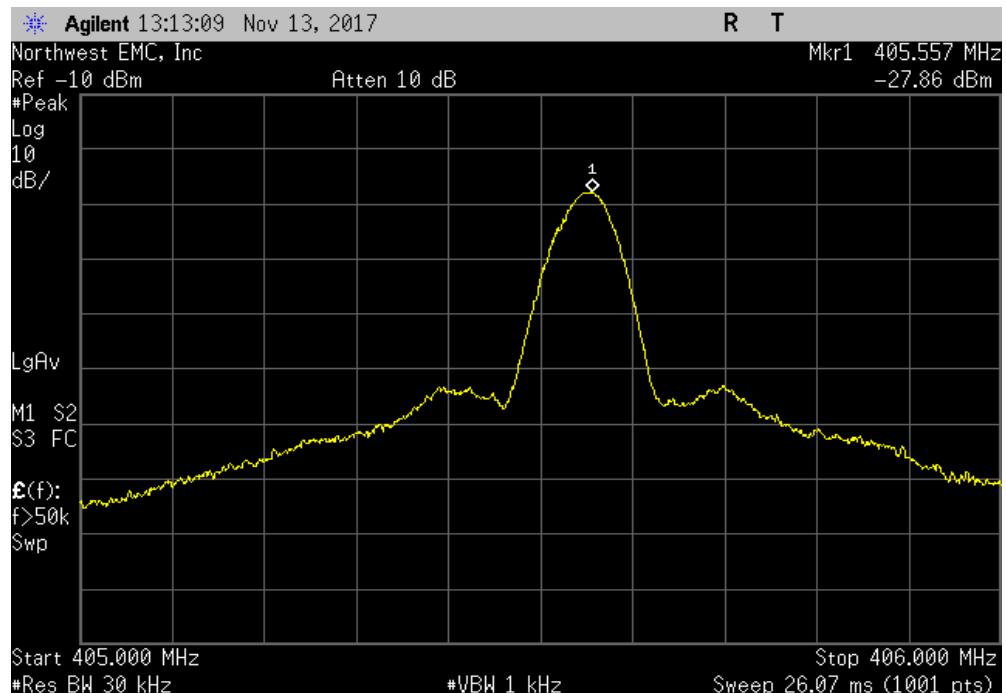
405-406 MHz Band, Mid Channel (Fc), 405.55 MHz, Monitoring Period Sample 1

Does EUT Initiate Communications on Fc? (Y/N)		Result
Yes	Pass	



405-406 MHz Band, Mid Channel (Fc), 405.55 MHz, Monitoring Period Sample 2

Does EUT Initiate Communications on Fc? (Y/N)		Result
Yes	Pass	

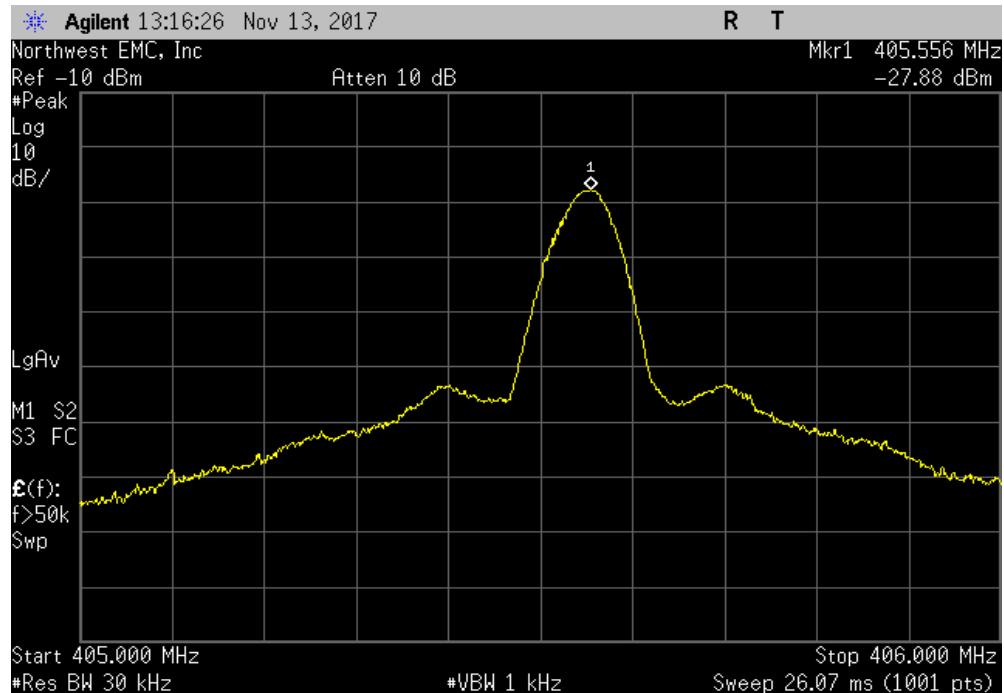


MINIMUM CHANNEL MONITORING PERIOD (MEDS)

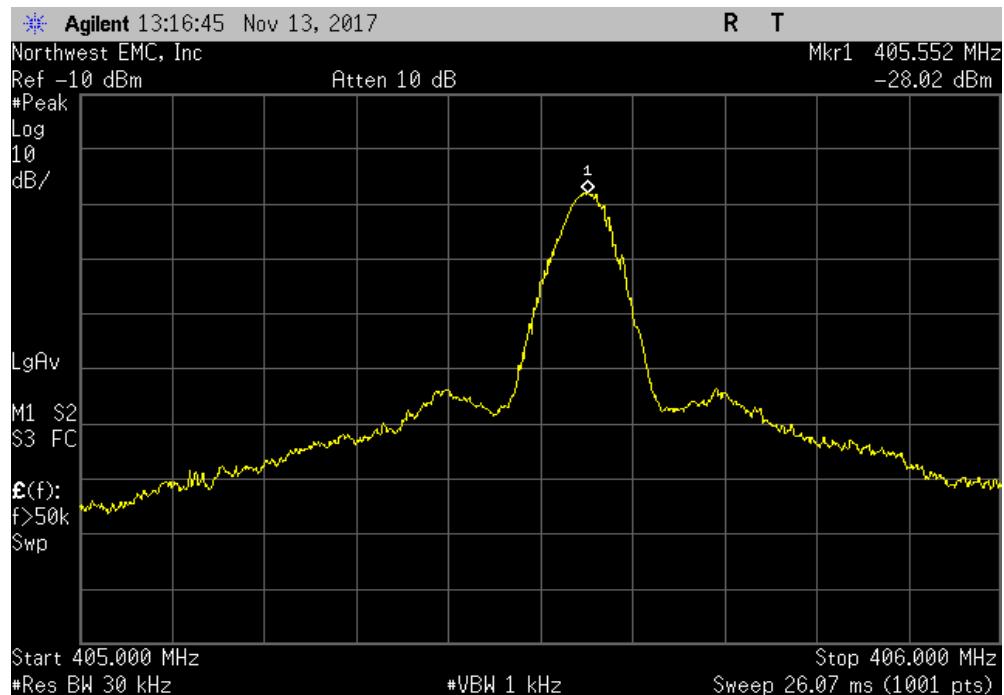


XMT 2017.09.21

405-406 MHz Band, Mid Channel (Fc), 405.55 MHz, Monitoring Period Sample 3		
Does EUT Initiate Communications on Fc? (Y/N)		Result
Yes	Pass	



405-406 MHz Band, Mid Channel (Fc), 405.55 MHz, Monitoring Period Sample 4		
Does EUT Initiate Communications on Fc? (Y/N)		Result
Yes	Pass	

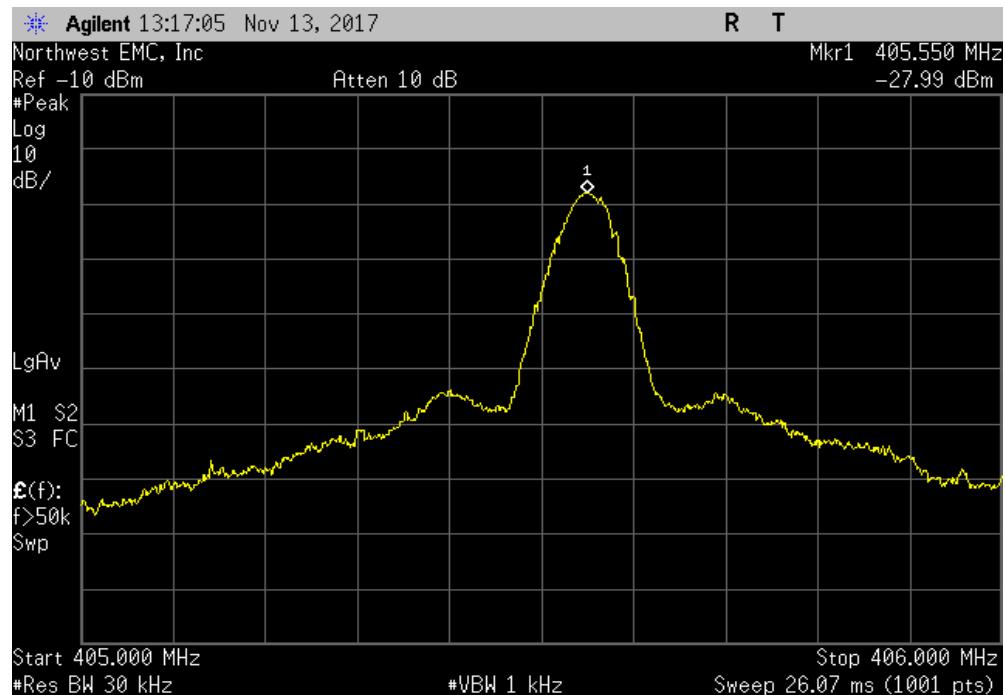


MINIMUM CHANNEL MONITORING PERIOD (MEDS)



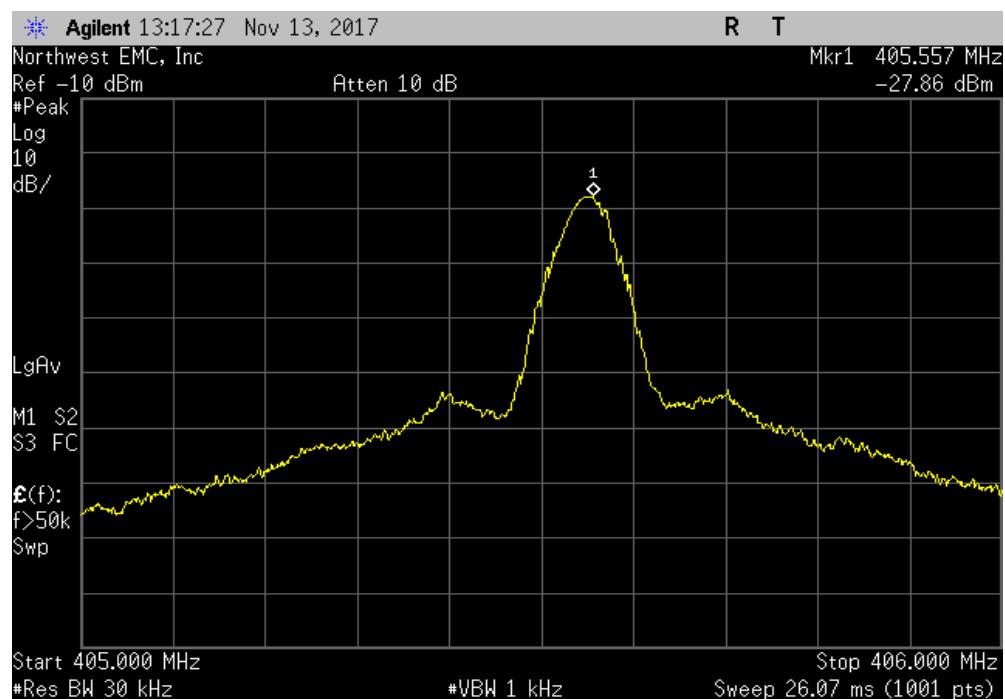
405-406 MHz Band, Mid Channel (Fc), 405.55 MHz, Monitoring Period Sample 5

Does EUT Initiate
Communications on Fc? (Y/N) Yes Pass



405-406 MHz Band, Mid Channel (Fc), 405.55 MHz, Monitoring Period Sample 6

Does EUT Initiate
Communications on Fc? (Y/N) Yes Pass



MINIMUM CHANNEL MONITORING PERIOD (MEDS)

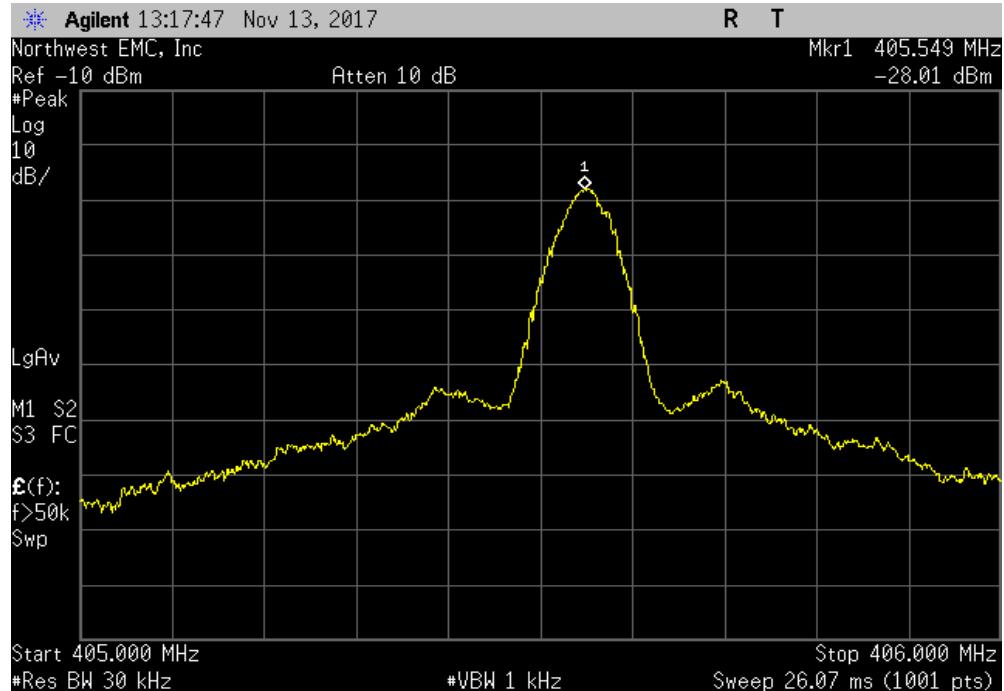


XMI 2017.09.21

405-406 MHz Band, Mid Channel (Fc), 405.55 MHz, Monitoring Period Sample 7

Does EUT Initiate
Communications on Fc? (Y/N) Result

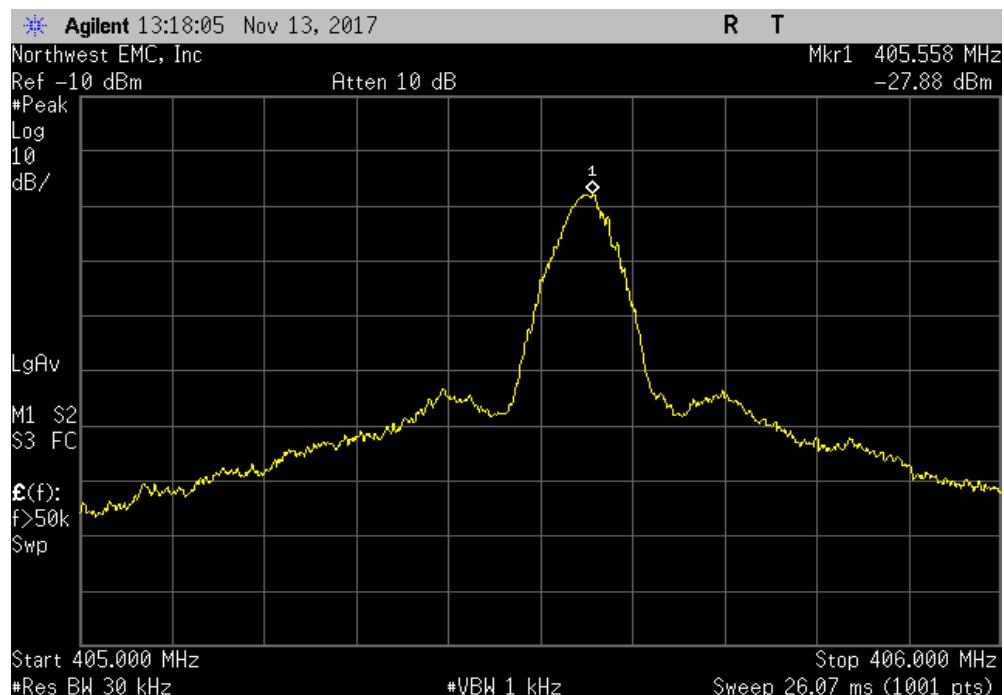
Yes Pass



405-406 MHz Band, Mid Channel (Fc), 405.55 MHz, Monitoring Period Sample 8

Does EUT Initiate
Communications on Fc? (Y/N) Result

Yes Pass



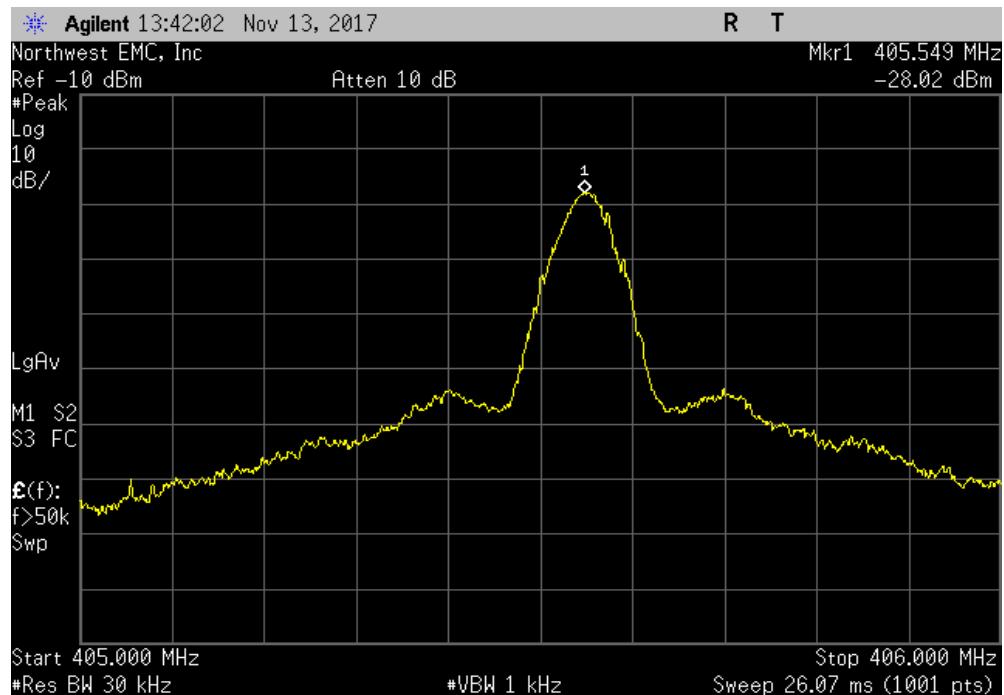
MINIMUM CHANNEL MONITORING PERIOD (MEDS)



XMI 2017.09.21

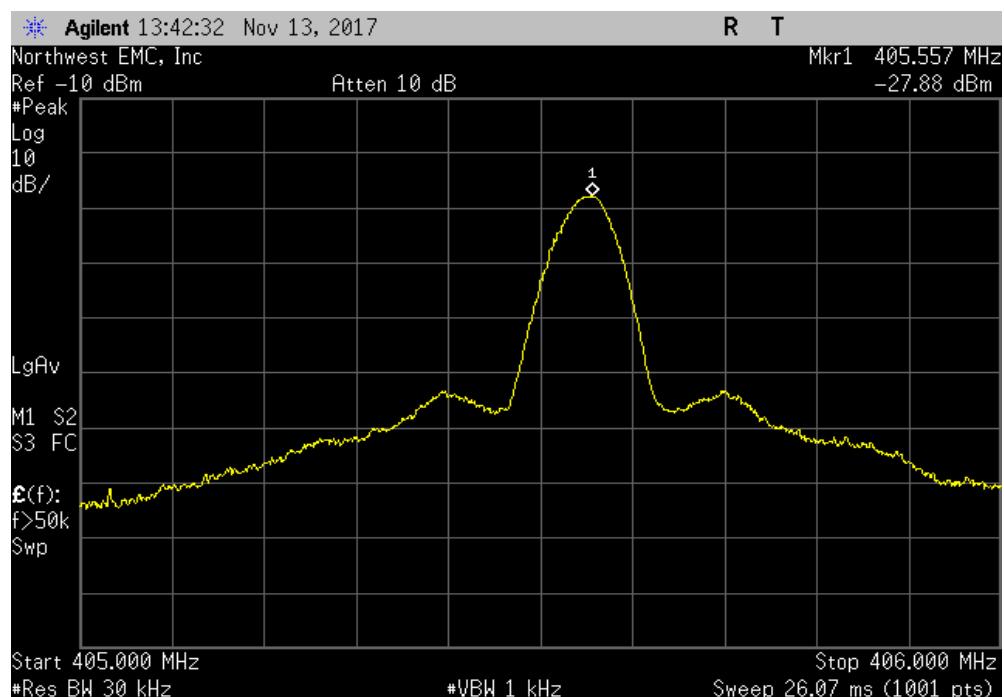
405-406 MHz Band, Mid Channel (Fc), 405.55 MHz, Monitoring Period Sample 9

Does EUT Initiate Communications on Fc? (Y/N)		Result
Yes		Pass



405-406 MHz Band, Mid Channel (Fc), 405.55 MHz, Monitoring Period Sample 10

Does EUT Initiate Communications on Fc? (Y/N)		Result
Yes		Pass



MINIMUM CHANNEL MONITORING PERIOD (MICS)



XMIT 2017.09.21

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Power Divider/Combiner	Fairview Microwave	MP8455-2	PDA	NCR	NCR
Directional Coupler	Fairview Microwave	MC2047-10	RHE	NCR	NCR
Power Divider/Combiner	Fairview Microwave	MP0208-2	IAZ	NCR	NCR
Meter - Multimeter	Fluke	111	MMM	18-Feb-16	18-Feb-19
Generator - Signal	Agilent	E4422B	TGR	8-Aug-17	8-Aug-20
Generator - Signal	Keysight	N5182B	TFY	16-Apr-15	16-Apr-18
Analyzer - Spectrum Analyzer	Agilent	E4446A	AAT	2-Jun-17	2-Jun-18

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer.

A signal generator was set to multitone operation to cause equal interference across the entire band, except one channel (Fc) was left available. The multitone operation (out of operation region) was also set to Pulse modulation with a Period of 10 mS, and a Pulse Width of 0.1 mS.

The EUT was set to seek a session with the implantable device. The spectrum analyzer was set to measure the transmit band of 402-405 MHz and verify that the EUT was communicating on the available channel (Fc).

MINIMUM CHANNEL MONITORING PERIOD (MICS)



XMI 2017.08.21

EUT:	Patient Remote (PR) - 2301		Work Order:	AXON0099																															
Serial Number:	AP1BA70018		Date:	8-Nov-17																															
Customer:	Axonics Modulation Technologies, Inc.		Temperature:	22 °C																															
Attendees:	Flavio Ono		Humidity:	26% RH																															
Project:	None		Barometric Pres.:	1011 mbar																															
Tested by:	Richard Mellroth	Power:	2.8 VDC	Job Site:	NC04																														
TEST SPECIFICATIONS			Test Method																																
EN 301 839 V2.1.1:2016			EN 301 839 V2.1.1:2016																																
COMMENTS																																			
EUT Emission Bandwidth = 160802 Hz, Antenna Gain = 2.0dBi. Communications established between EUT and companion device, initiating LBT communications protocol via peripheral laptop software.																																			
DEVIATIONS FROM TEST STANDARD																																			
None																																			
Configuration #	4	Signature	Does EUT Initiate Communications on Fc? (Y/N) Result																																
Mid Channel (Fc), 403.5 MHz																																			
<table border="1"> <tr> <td>Monitoring Period Sample 1</td> <td>Yes</td> <td>Pass</td> </tr> <tr> <td>Monitoring Period Sample 2</td> <td>Yes</td> <td>Pass</td> </tr> <tr> <td>Monitoring Period Sample 3</td> <td>Yes</td> <td>Pass</td> </tr> <tr> <td>Monitoring Period Sample 4</td> <td>Yes</td> <td>Pass</td> </tr> <tr> <td>Monitoring Period Sample 5</td> <td>Yes</td> <td>Pass</td> </tr> <tr> <td>Monitoring Period Sample 6</td> <td>Yes</td> <td>Pass</td> </tr> <tr> <td>Monitoring Period Sample 7</td> <td>Yes</td> <td>Pass</td> </tr> <tr> <td>Monitoring Period Sample 8</td> <td>Yes</td> <td>Pass</td> </tr> <tr> <td>Monitoring Period Sample 9</td> <td>Yes</td> <td>Pass</td> </tr> <tr> <td>Monitoring Period Sample 10</td> <td>Yes</td> <td>Pass</td> </tr> </table>						Monitoring Period Sample 1	Yes	Pass	Monitoring Period Sample 2	Yes	Pass	Monitoring Period Sample 3	Yes	Pass	Monitoring Period Sample 4	Yes	Pass	Monitoring Period Sample 5	Yes	Pass	Monitoring Period Sample 6	Yes	Pass	Monitoring Period Sample 7	Yes	Pass	Monitoring Period Sample 8	Yes	Pass	Monitoring Period Sample 9	Yes	Pass	Monitoring Period Sample 10	Yes	Pass
Monitoring Period Sample 1	Yes	Pass																																	
Monitoring Period Sample 2	Yes	Pass																																	
Monitoring Period Sample 3	Yes	Pass																																	
Monitoring Period Sample 4	Yes	Pass																																	
Monitoring Period Sample 5	Yes	Pass																																	
Monitoring Period Sample 6	Yes	Pass																																	
Monitoring Period Sample 7	Yes	Pass																																	
Monitoring Period Sample 8	Yes	Pass																																	
Monitoring Period Sample 9	Yes	Pass																																	
Monitoring Period Sample 10	Yes	Pass																																	

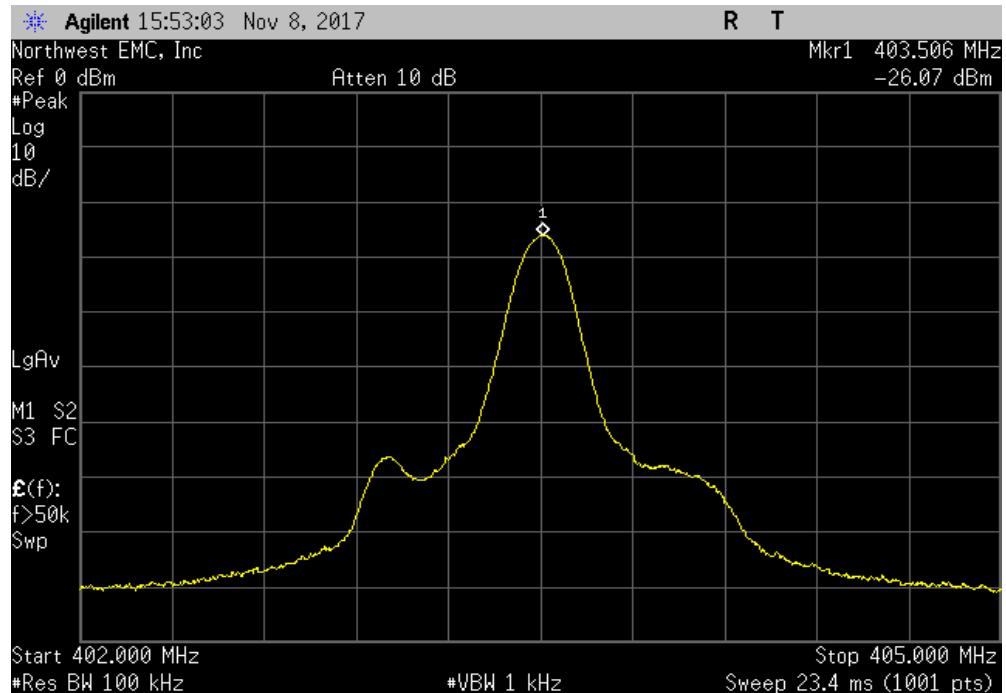
MINIMUM CHANNEL MONITORING PERIOD (MICS)



XMI 2017.09.21

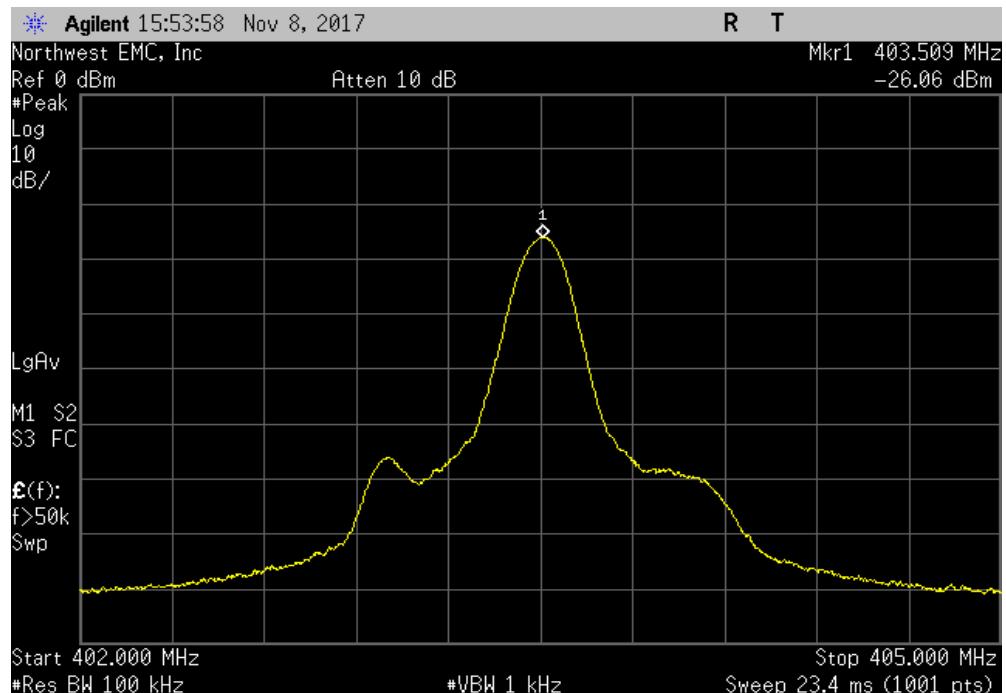
Mid Channel (Fc), 403.5 MHz, Monitoring Period Sample 1

Does EUT Initiate		Result
Communications on Fc? (Y/N)	Yes	
Yes	Pass	



Mid Channel (Fc), 403.5 MHz, Monitoring Period Sample 2

Does EUT Initiate		Result
Communications on Fc? (Y/N)	Yes	
Yes	Pass	

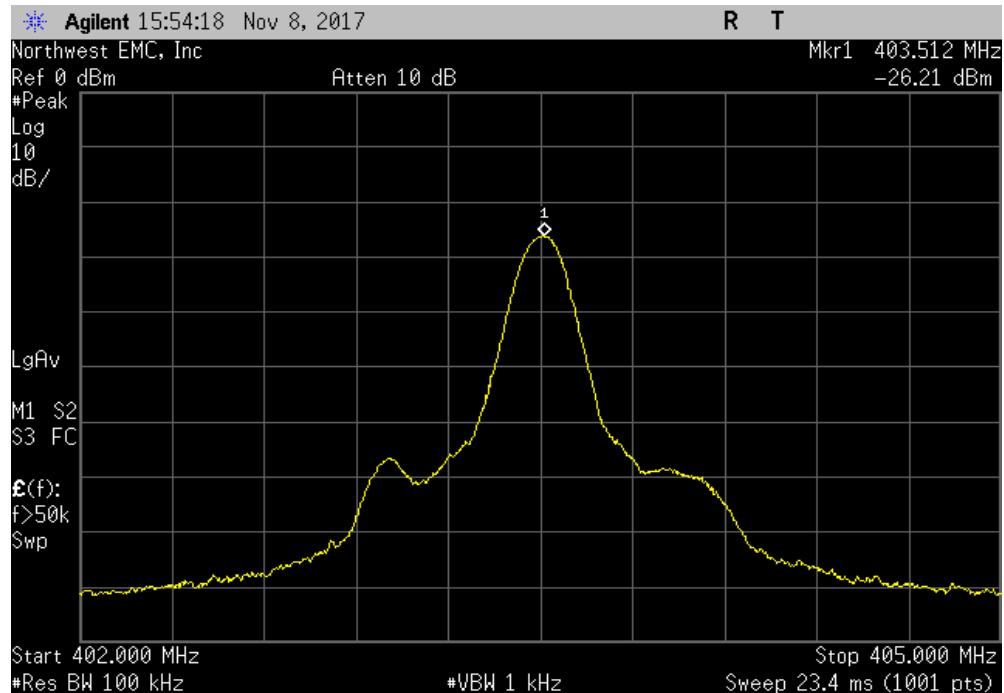


MINIMUM CHANNEL MONITORING PERIOD (MICS)

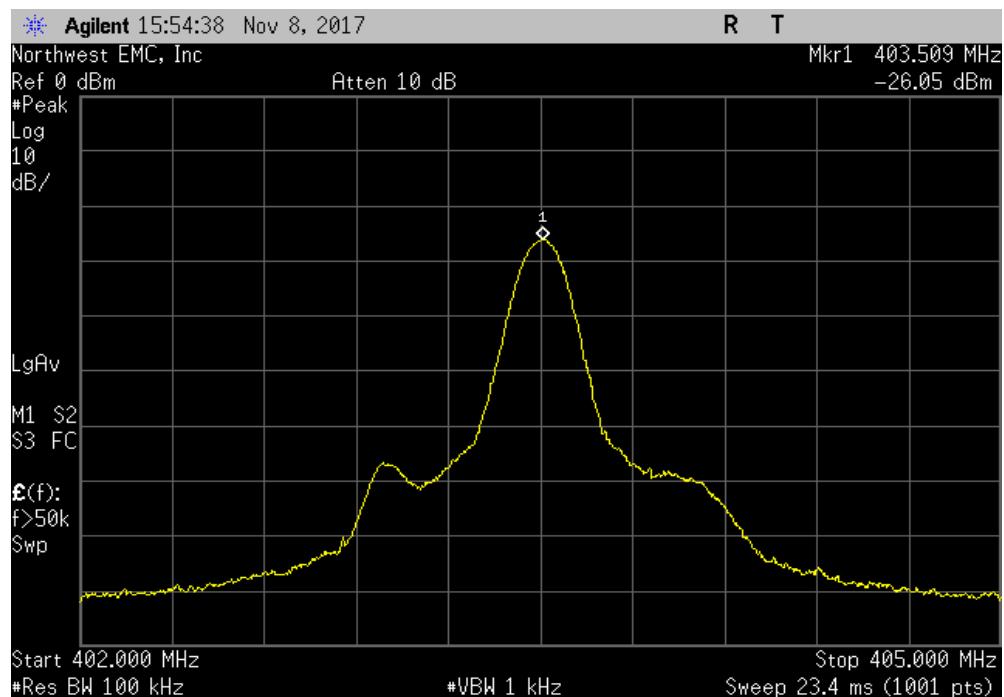


XMI 2017.09.21

Mid Channel (Fc), 403.5 MHz, Monitoring Period Sample 3		Does EUT Initiate Communications on Fc? (Y/N)	Result
Yes	Pass		



Mid Channel (Fc), 403.5 MHz, Monitoring Period Sample 4		Does EUT Initiate Communications on Fc? (Y/N)	Result
Yes	Pass		



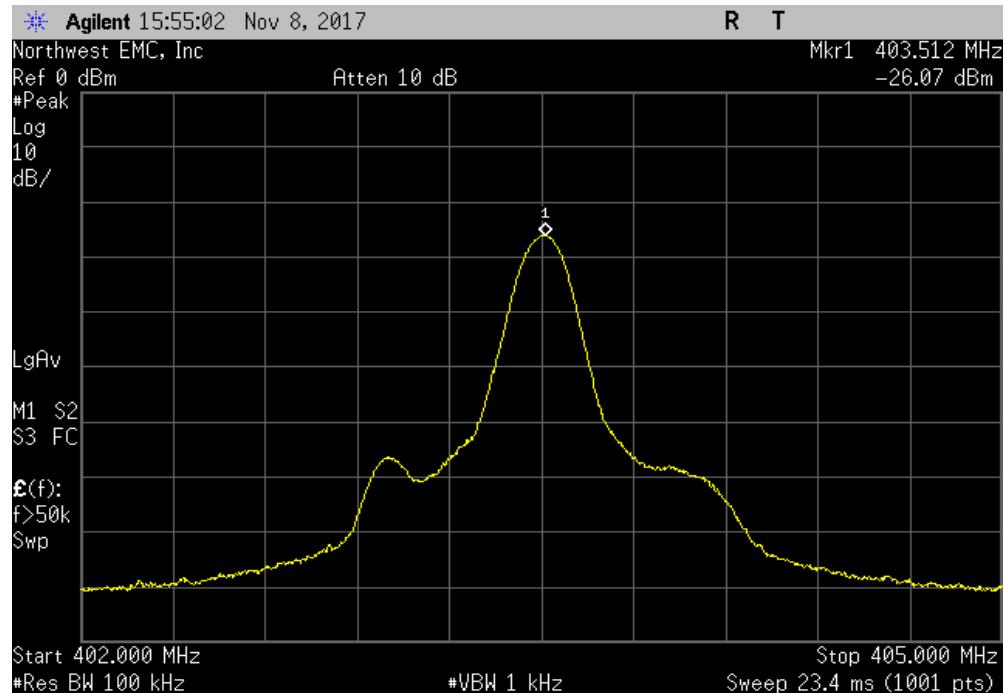
MINIMUM CHANNEL MONITORING PERIOD (MICS)



XMI 2017.09.21

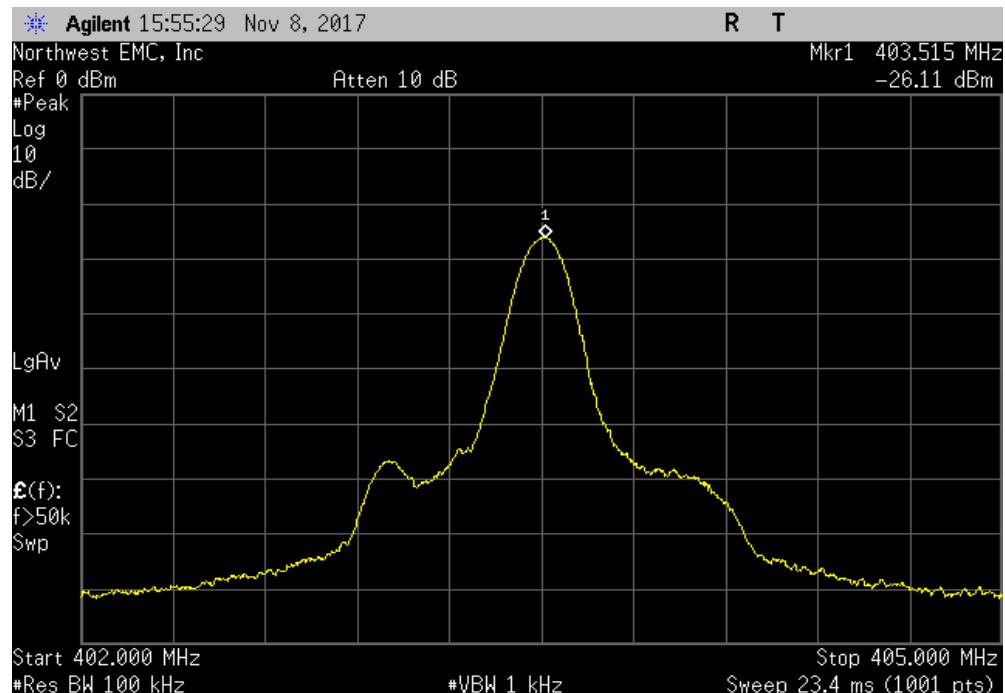
Mid Channel (Fc), 403.5 MHz, Monitoring Period Sample 5

Does EUT Initiate Communications on Fc? (Y/N)		Result
Yes		Pass



Mid Channel (Fc), 403.5 MHz, Monitoring Period Sample 6

Does EUT Initiate Communications on Fc? (Y/N)		Result
Yes		Pass



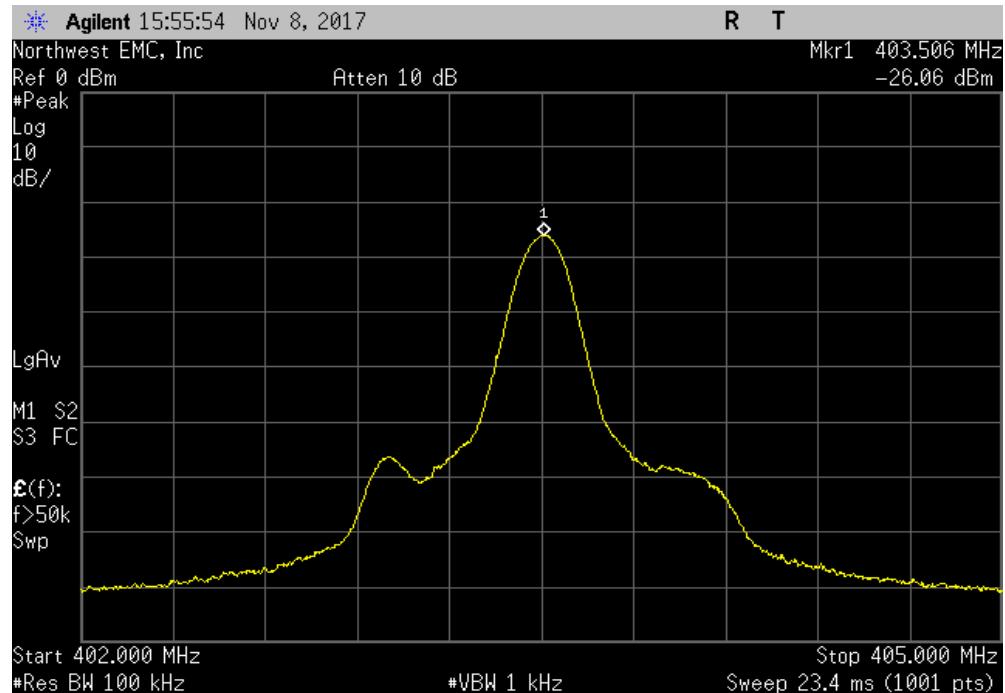
MINIMUM CHANNEL MONITORING PERIOD (MICS)



XMI 2017.09.21

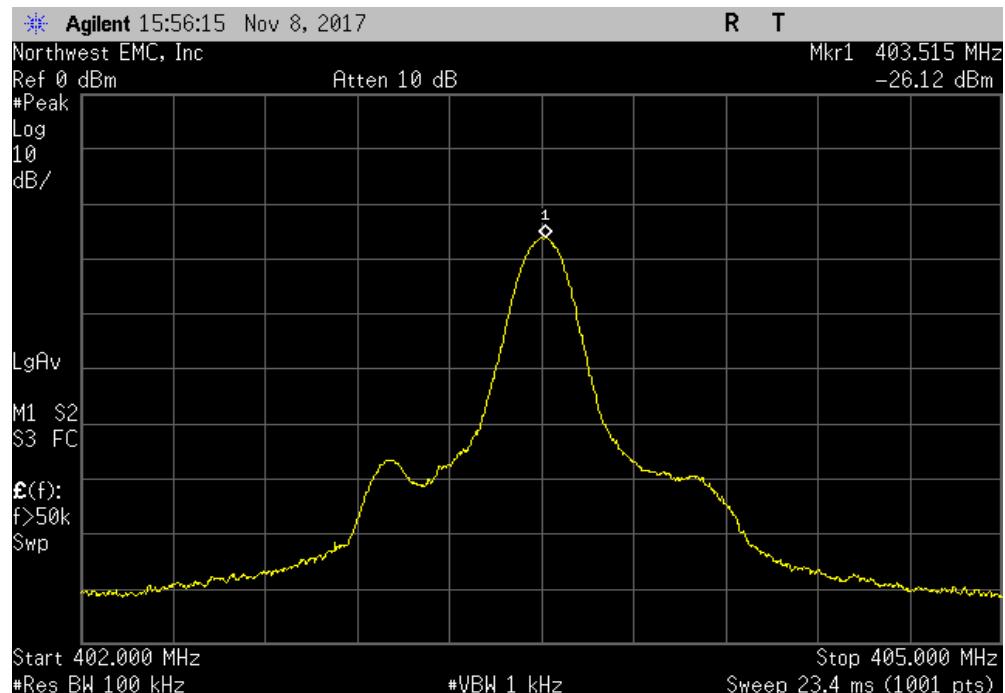
Mid Channel (Fc), 403.5 MHz, Monitoring Period Sample 7

Does EUT Initiate Communications on Fc? (Y/N)		Result
Yes		Pass



Mid Channel (Fc), 403.5 MHz, Monitoring Period Sample 8

Does EUT Initiate Communications on Fc? (Y/N)		Result
Yes		Pass



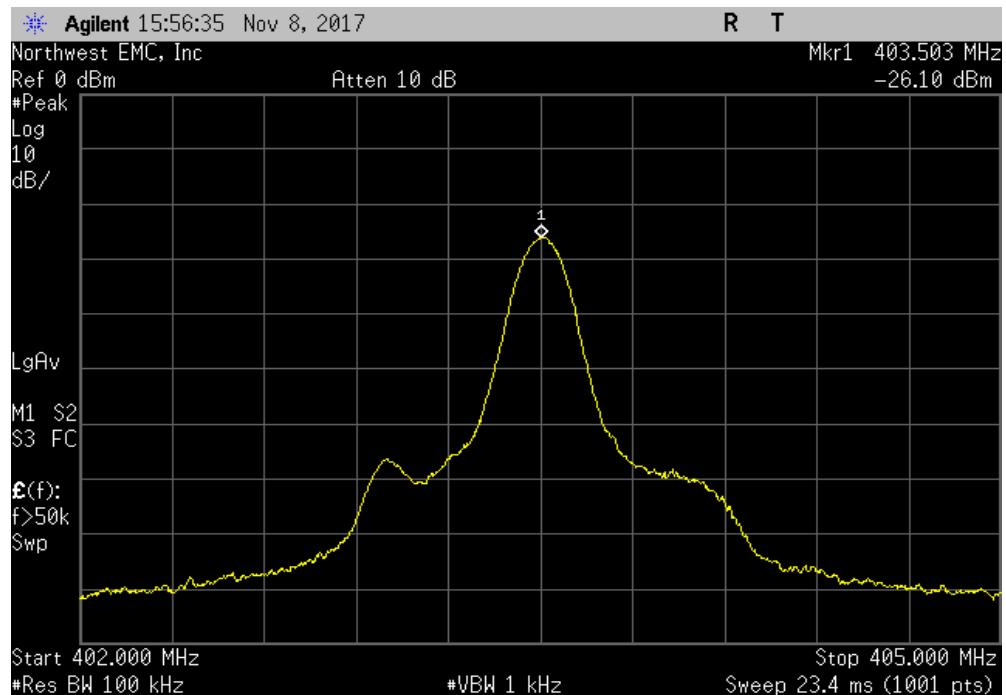
MINIMUM CHANNEL MONITORING PERIOD (MICS)



XMT 2017.09.21

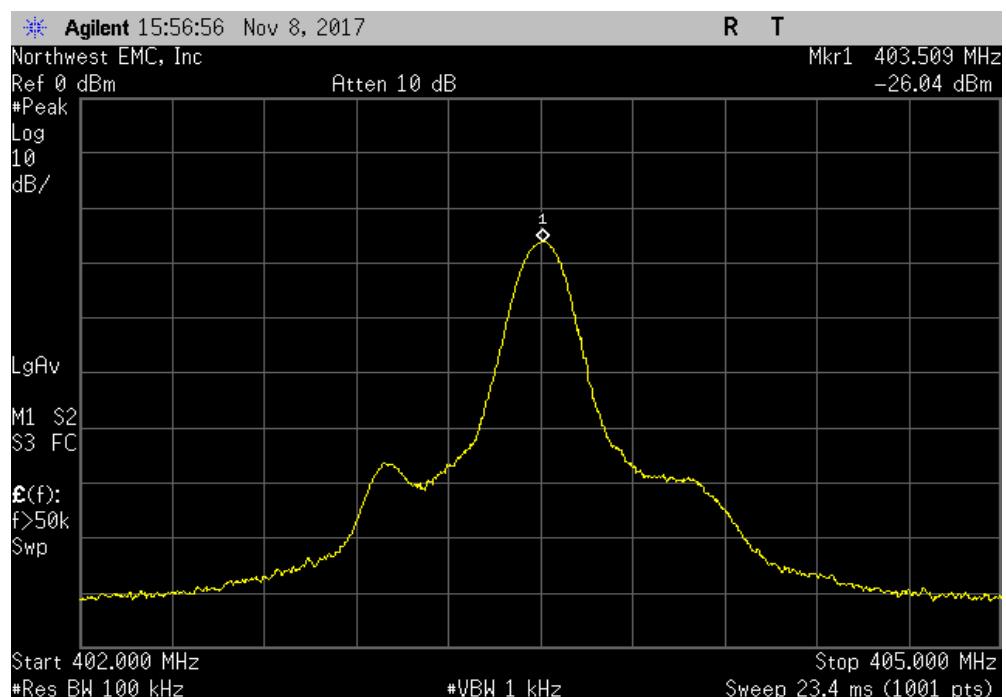
Mid Channel (Fc), 403.5 MHz, Monitoring Period Sample 9

Does EUT Initiate Communications on Fc? (Y/N)		Result
Yes		Pass



Mid Channel (Fc), 403.5 MHz, Monitoring Period Sample 10

Does EUT Initiate Communications on Fc? (Y/N)		Result
Yes		Pass



LBT THRESHOLD POWER LEVEL (MEDS)



XMit 2017.09.21

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Power Divider/Combiner	Fairview Microwave	MP8455-2	PDA	NCR	NCR
Directional Coupler	Fairview Microwave	MC2047-10	RHE	NCR	NCR
Power Divider/Combiner	Fairview Microwave	MP0208-2	IAZ	NCR	NCR
Meter - Multimeter	Fluke	111	MMM	18-Feb-16	18-Feb-19
Generator - Signal	Agilent	E4422B	TGR	8-Aug-17	8-Aug-20
Generator - Signal	Keysight	N5182B	TFY	16-Apr-15	16-Apr-18
Analyzer - Spectrum Analyzer	Agilent	E4446A	AAT	2-Jun-17	2-Jun-18

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer.

A signal generator was set to multitone operation to cause equal interference across the entire band. The amplitude of the multitone signals (out of operation region) were set to the LBT threshold of $10 \cdot \log(\text{Bandwidth}) - 150 + \text{Antenna Gain} + 3$ dB.

The spectrum analyzer was set to measure the transmit bands of 401-402 and 405-406 MHz. The multitone signal of the intended frequency (F_c) was set to the LBT threshold - 6 dB, and raised by 1 dB increments until the EUT chose a different channel to start a session. Screen captures were provided to show the EUT behavior at the different LBT threshold levels.

The signal generator amplitude at F_c was then measured and recorded with the spectrum analyzer.

LBT THRESHOLD POWER LEVEL (MEDS)



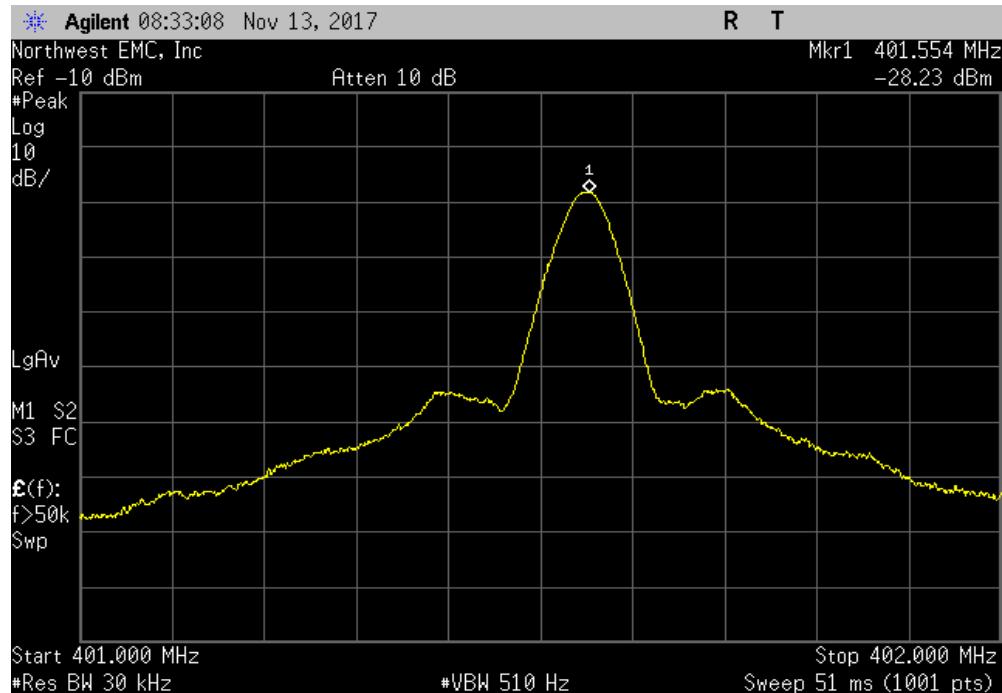
EUT:	Patient Remote (PR) - 2301		Work Order:	AXON0099	
Serial Number:	AP1BA70018		Date:	13-Nov-17	
Customer:	Axonics Modulation Technologies, Inc.		Temperature:	22 °C	
Attendees:	Flavio Ono		Humidity:	38% RH	
Project:	None		Barometric Pres.:	1009 mbar	
Tested by:	Richard Meliroth	Power:	2.8 VDC	Job Site:	NC04
TEST SPECIFICATIONS			Test Method		
EN 302 537 V2.1.1:2016			EN 302 537 V2.1.1:2016		
COMMENTS					
EUT Emission Bandwidth = 81500 Hz, Antenna Gain = 2.0dBi. Communications established between EUT and companion device, initiating LBT communications protocol via peripheral laptop software.					
DEVIATIONS FROM TEST STANDARD					
None					
Configuration #	5	Signature			
			CW -4dB Power Level	Limit (s)	Result
401 - 402 MHz Band					
Mid Channel, 401.55 MHz					
LBT Threshold -6dB			N/A	N/A	N/A
LBT Threshold -5dB			N/A	N/A	N/A
LBT Threshold -4dB			N/A	N/A	N/A
LBT Threshold -3dB			N/A	N/A	N/A
LBT Threshold -2dB			N/A	N/A	N/A
LBT Threshold -1dB			N/A	N/A	N/A
LBT Threshold 0dB			N/A	N/A	N/A
LBT Threshold +1dB			N/A	N/A	N/A
LBT Threshold +2dB			N/A	N/A	N/A
LBT Threshold +3dB			N/A	N/A	N/A
LBT Threshold +4dB			-98.89 dBm	-98.88 dBm	Pass
405 - 406 MHz Band					
Mid Channel, 405.55 MHz					
LBT Threshold -6dB			N/A	N/A	N/A
LBT Threshold -5dB			N/A	N/A	N/A
LBT Threshold -4dB			N/A	N/A	N/A
LBT Threshold -3dB			N/A	N/A	N/A
LBT Threshold -2dB			N/A	N/A	N/A
LBT Threshold -1dB			N/A	N/A	N/A
LBT Threshold 0dB			N/A	N/A	N/A
LBT Threshold +1dB			N/A	N/A	N/A
LBT Threshold +2dB			N/A	N/A	N/A
LBT Threshold +3dB			-99.89 dBm	-98.88 dBm	Pass

LBT THRESHOLD POWER LEVEL (MEDS)

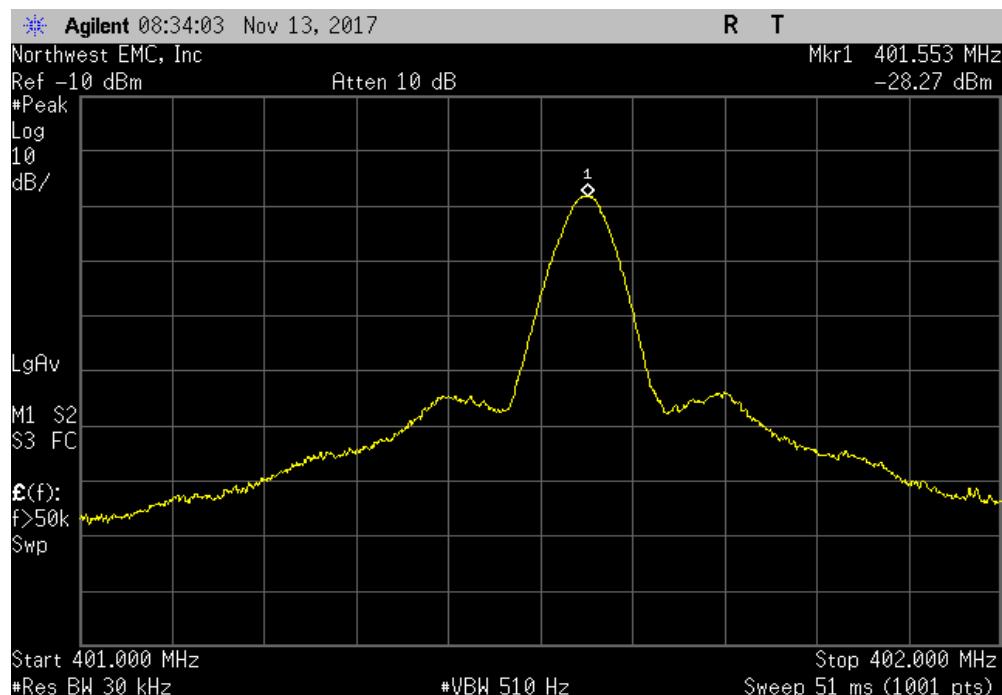


XMI 2017.09.21

401 - 402 MHz Band, Mid Channel, 401.55 MHz, LBT Threshold -6dB		
CW -4dB Power Level	Limit (≤)	Result
N/A	N/A	N/A



401 - 402 MHz Band, Mid Channel, 401.55 MHz, LBT Threshold -5dB		
CW -4dB Power Level	Limit (≤)	Result
N/A	N/A	N/A

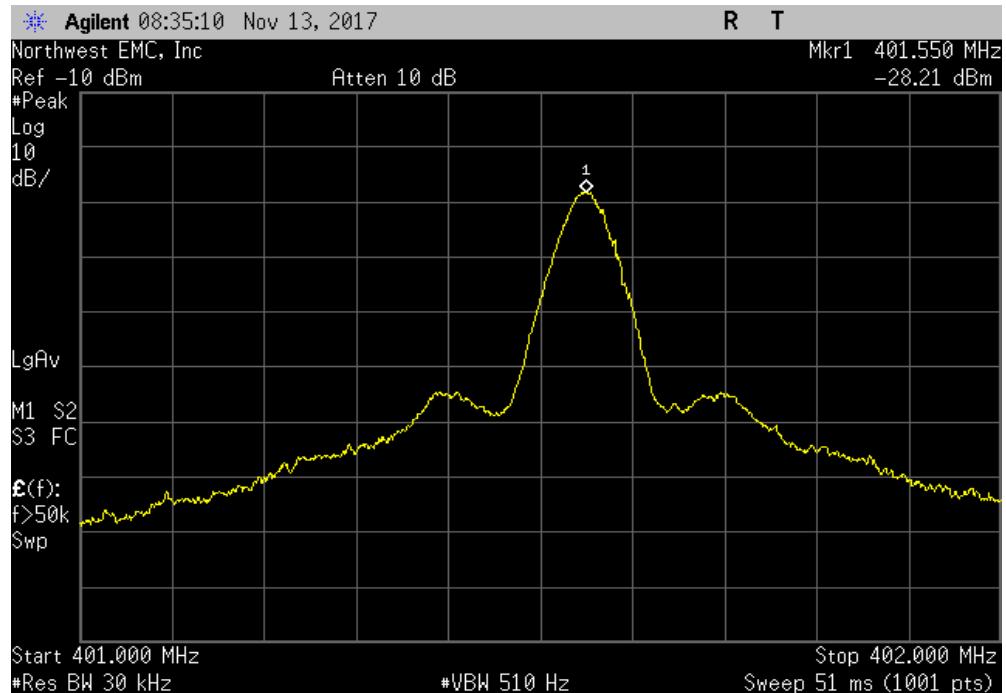


LBT THRESHOLD POWER LEVEL (MEDS)

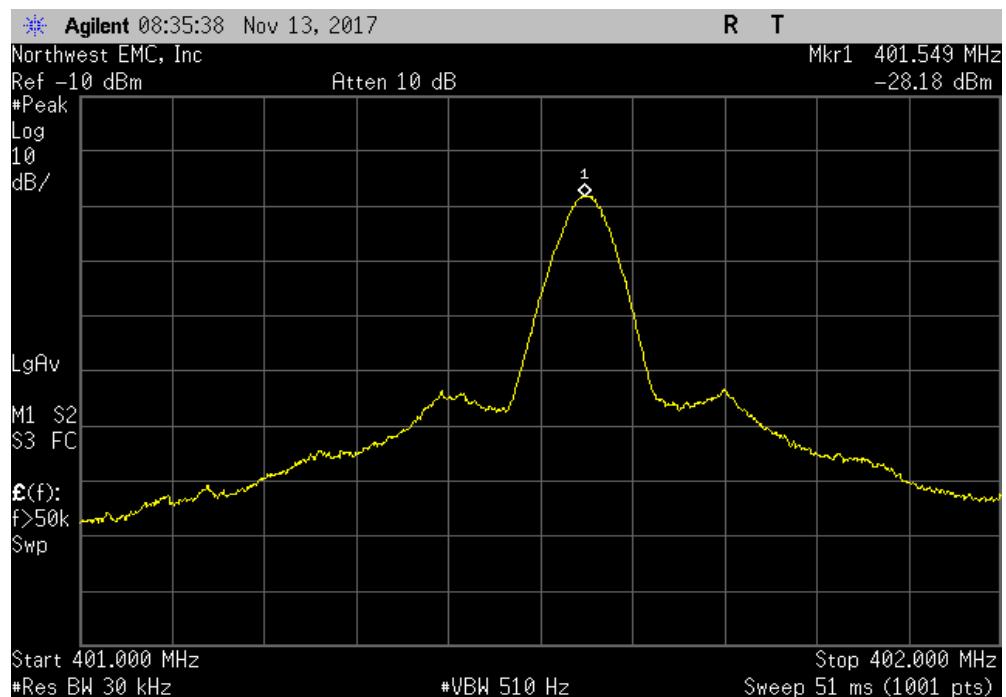


XMI 2017.09.21

401 - 402 MHz Band, Mid Channel, 401.55 MHz, LBT Threshold -4dB		
CW -4dB Power Level	Limit (≤)	Result
N/A	N/A	N/A



401 - 402 MHz Band, Mid Channel, 401.55 MHz, LBT Threshold -3dB		
CW -4dB Power Level	Limit (≤)	Result
N/A	N/A	N/A

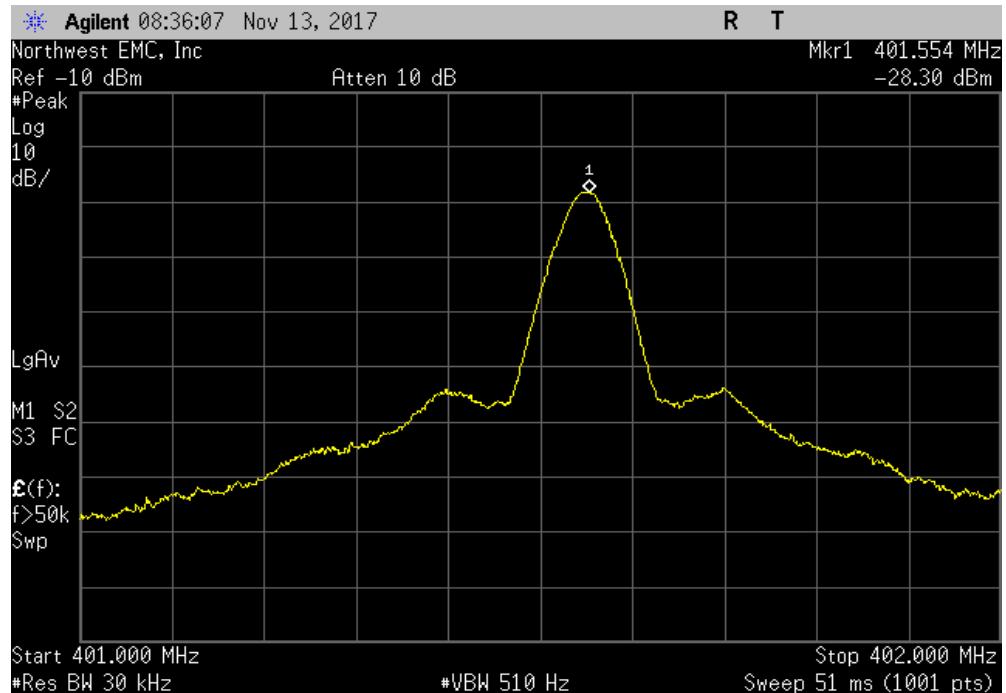


LBT THRESHOLD POWER LEVEL (MEDS)

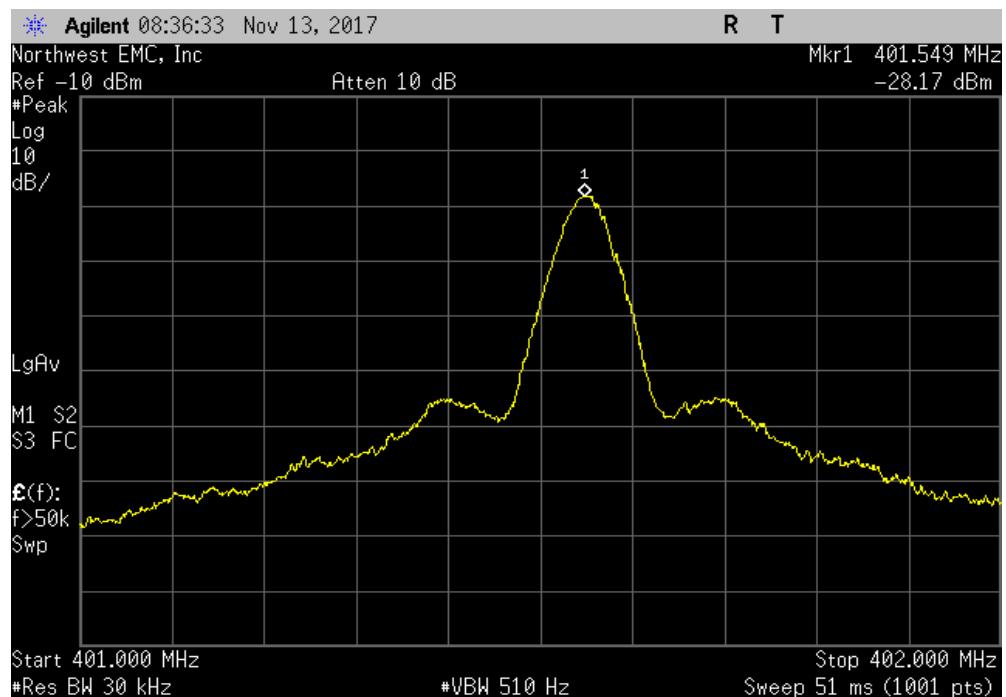


XMI 2017.09.21

401 - 402 MHz Band, Mid Channel, 401.55 MHz, LBT Threshold -2dB		
CW -4dB Power Level	Limit (≤)	Result
N/A	N/A	N/A



401 - 402 MHz Band, Mid Channel, 401.55 MHz, LBT Threshold -1dB		
CW -4dB Power Level	Limit (≤)	Result
N/A	N/A	N/A

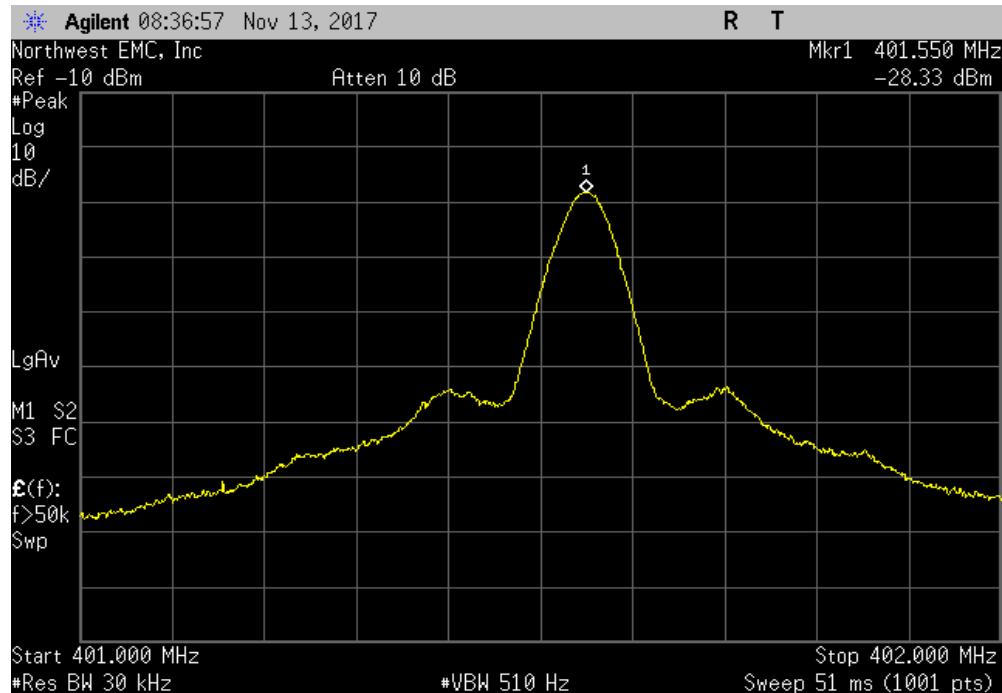


LBT THRESHOLD POWER LEVEL (MEDS)

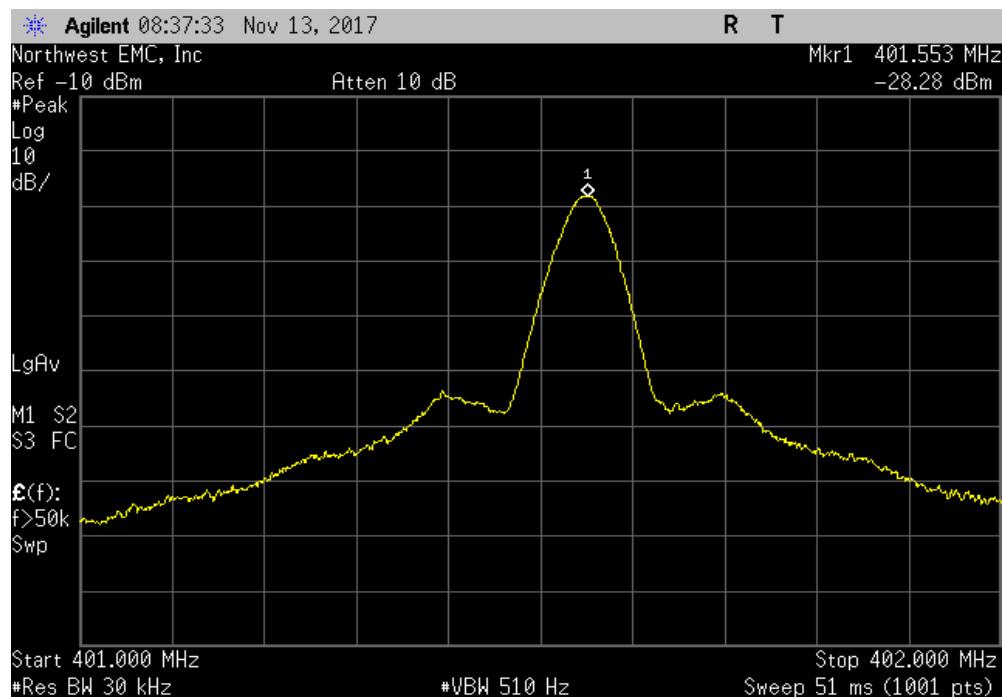


XMI 2017.09.21

401 - 402 MHz Band, Mid Channel, 401.55 MHz, LBT Threshold 0dB		
CW -4dB Power Level	Limit (≤)	Result
N/A	N/A	N/A



401 - 402 MHz Band, Mid Channel, 401.55 MHz, LBT Threshold +1dB		
CW -4dB Power Level	Limit (≤)	Result
N/A	N/A	N/A

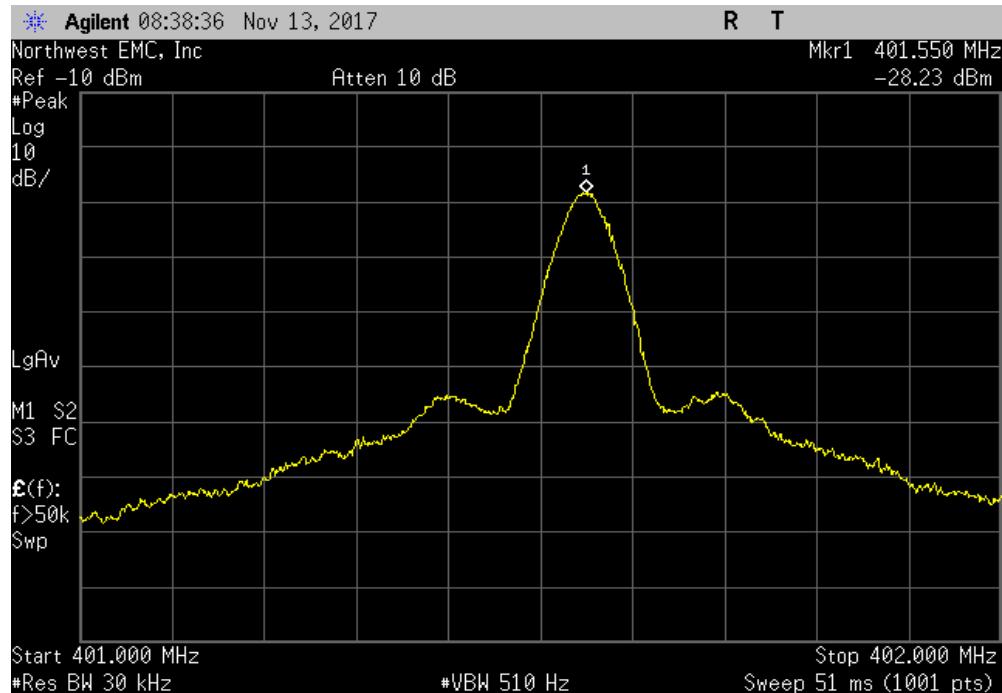


LBT THRESHOLD POWER LEVEL (MEDS)

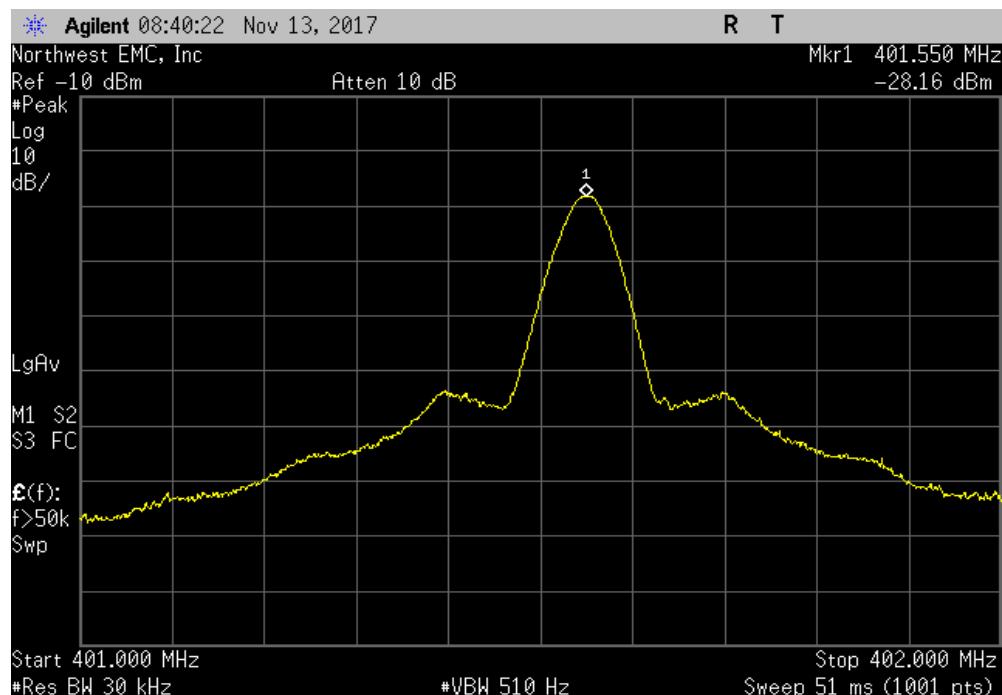


XMI 2017.09.21

401 - 402 MHz Band, Mid Channel, 401.55 MHz, LBT Threshold +2dB		
CW -4dB Power Level	Limit (≤)	Result
N/A	N/A	N/A



401 - 402 MHz Band, Mid Channel, 401.55 MHz, LBT Threshold +3dB		
CW -4dB Power Level	Limit (≤)	Result
N/A	N/A	N/A

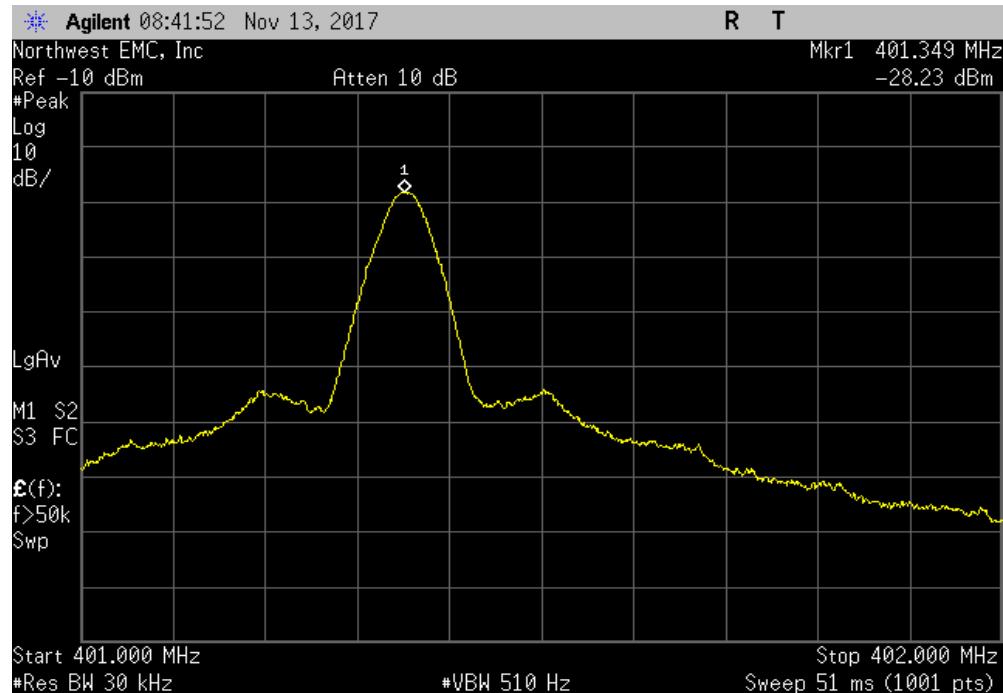


LBT THRESHOLD POWER LEVEL (MEDS)

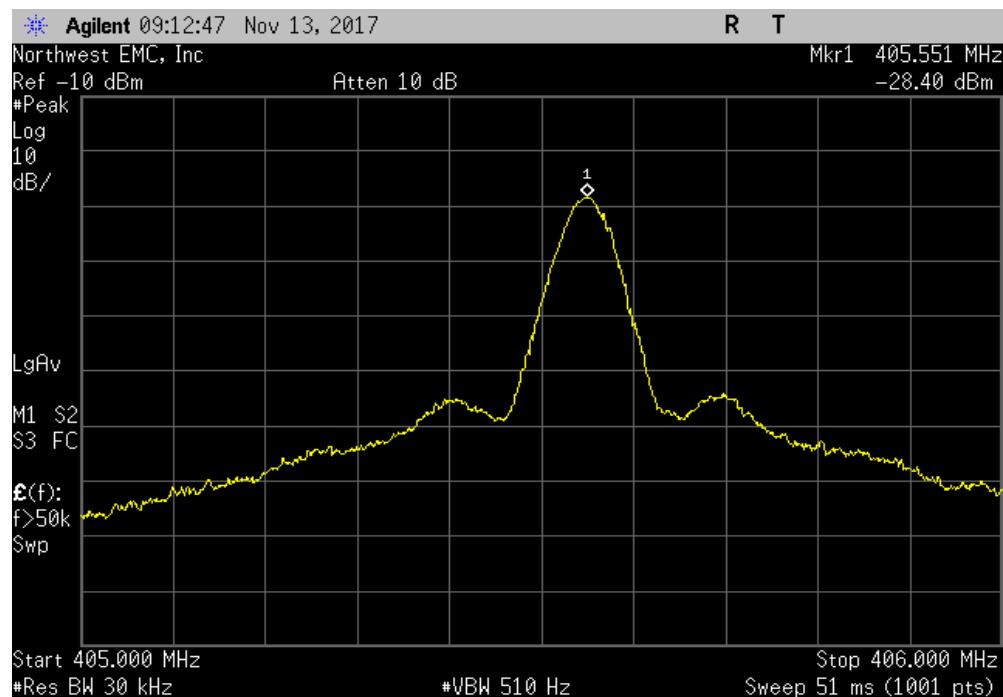


XMI 2017.09.21

401 - 402 MHz Band, Mid Channel, 401.55 MHz, LBT Threshold +4dB			
CW -4dB Power Level	Limit (≤)	Result	
-98.89 dBm	-98.88 dBm	Pass	



405 - 406 MHz Band, Mid Channel, 405.55 MHz, LBT Threshold -6dB			
CW -4dB Power Level	Limit (≤)	Result	
N/A	N/A	N/A	N/A

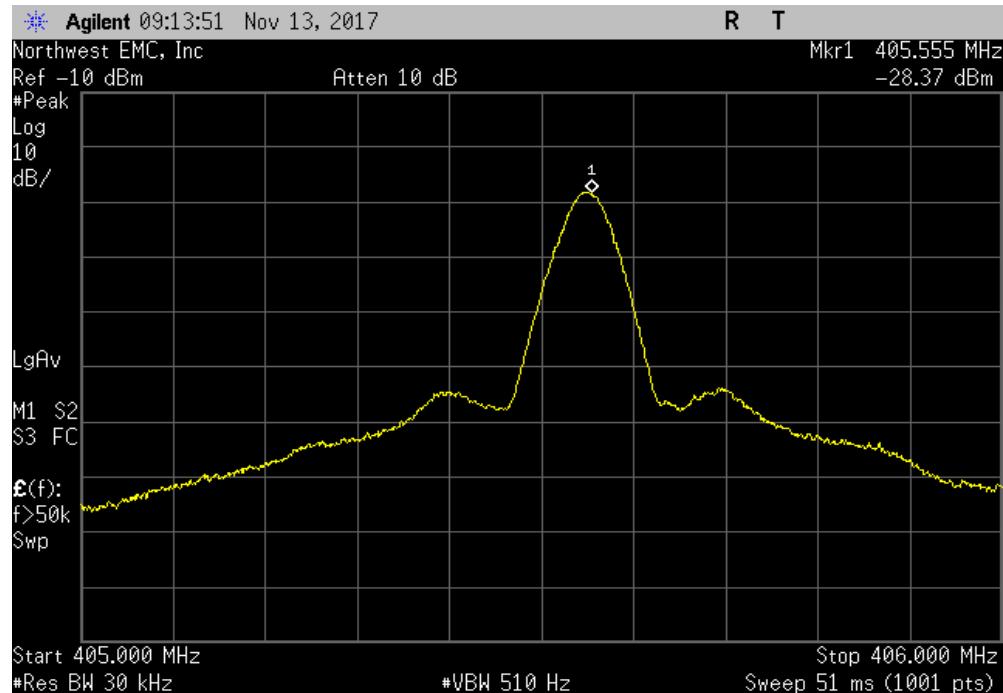


LBT THRESHOLD POWER LEVEL (MEDS)

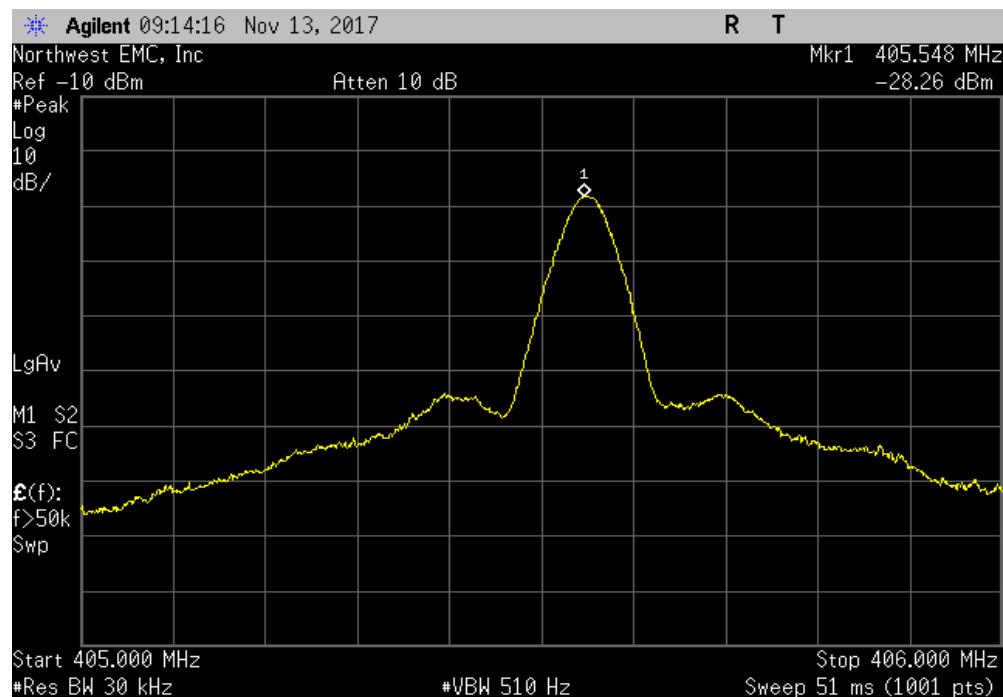


XMI 2017.09.21

405 - 406 MHz Band, Mid Channel, 405.55 MHz, LBT Threshold -5dB		
CW -4dB Power Level	Limit (≤)	Result
N/A	N/A	N/A



405 - 406 MHz Band, Mid Channel, 405.55 MHz, LBT Threshold -4dB		
CW -4dB Power Level	Limit (≤)	Result
N/A	N/A	N/A

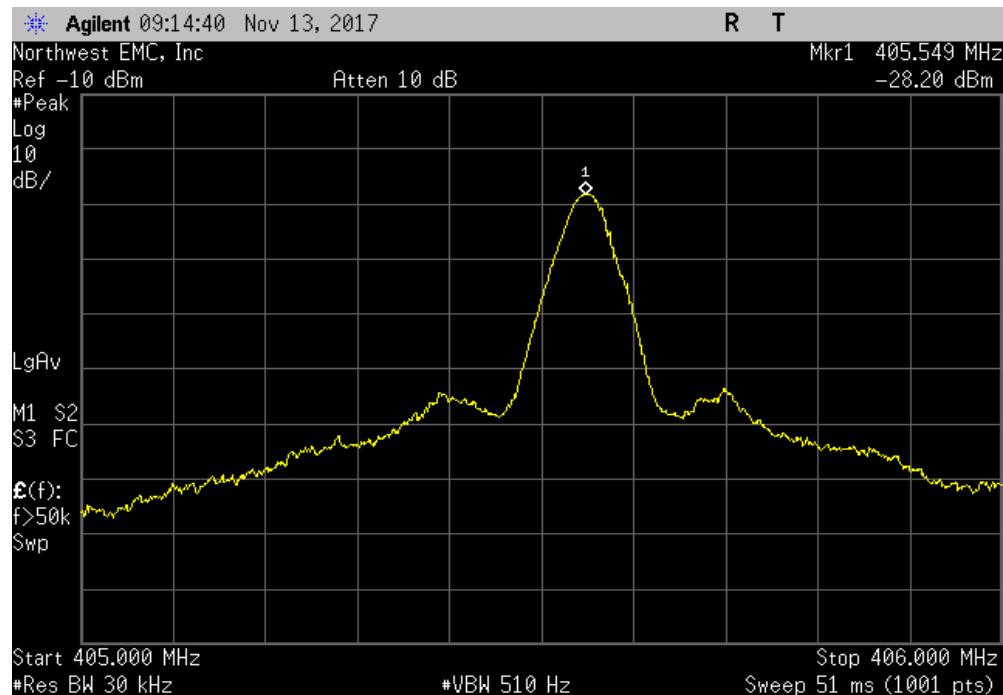


LBT THRESHOLD POWER LEVEL (MEDS)

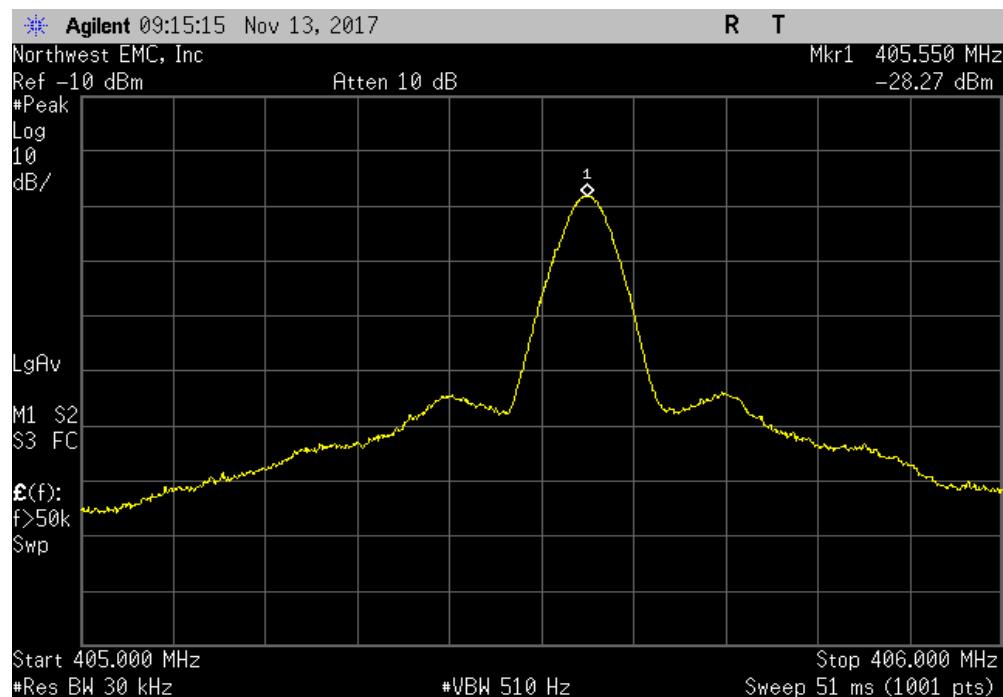


XMI 2017.09.21

405 - 406 MHz Band, Mid Channel, 405.55 MHz, LBT Threshold -3dB		
CW -4dB Power Level	Limit (≤)	Result
N/A	N/A	N/A



405 - 406 MHz Band, Mid Channel, 405.55 MHz, LBT Threshold -2dB		
CW -4dB Power Level	Limit (≤)	Result
N/A	N/A	N/A

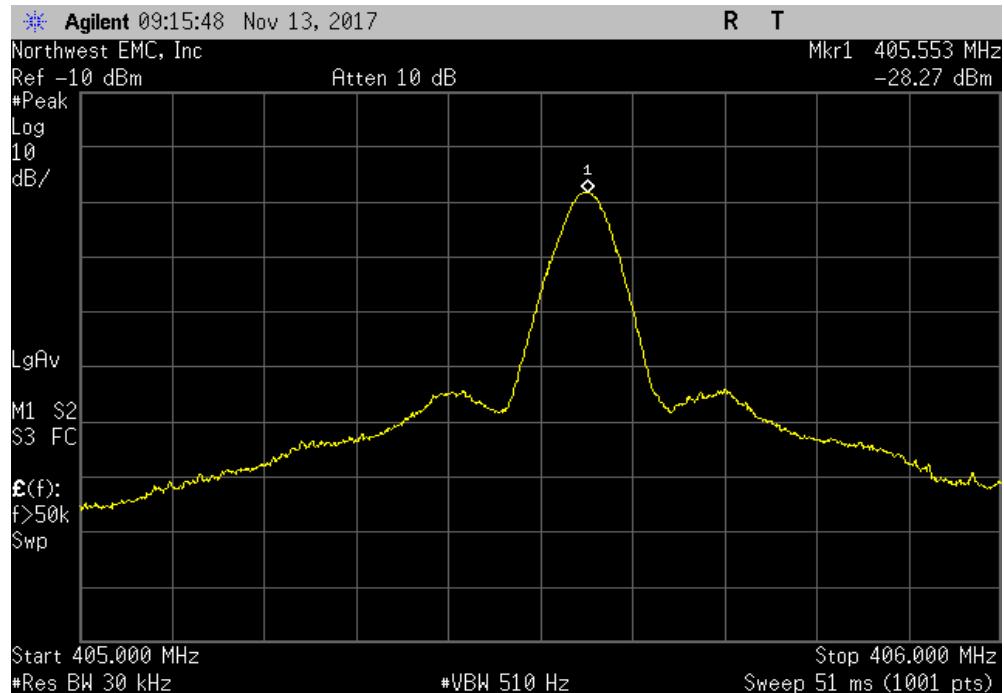


LBT THRESHOLD POWER LEVEL (MEDS)

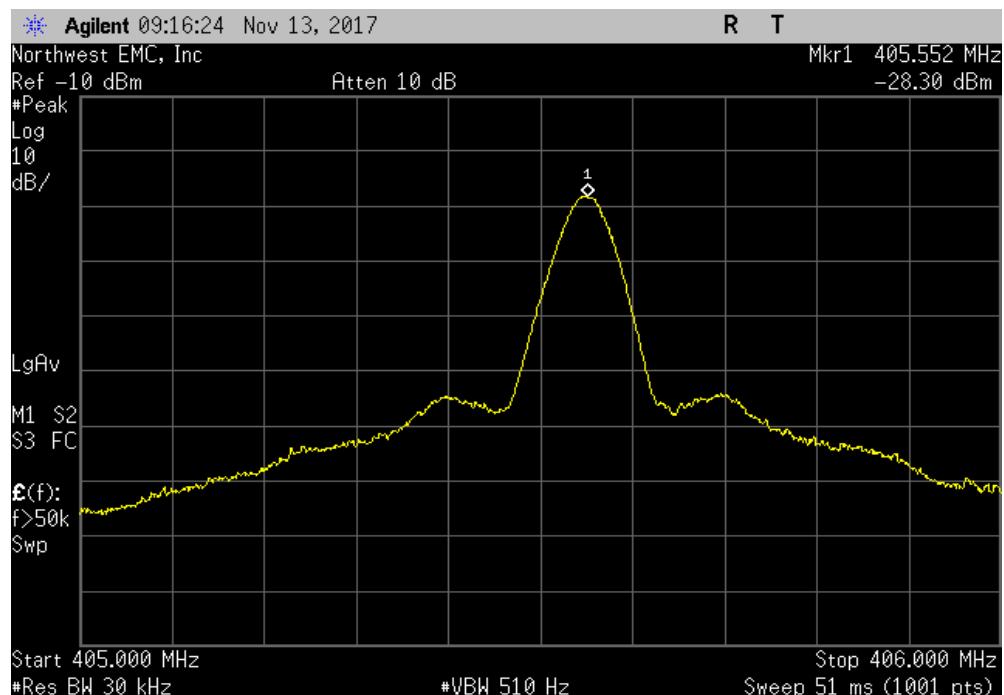


XMI 2017.09.21

405 - 406 MHz Band, Mid Channel, 405.55 MHz, LBT Threshold -1dB		
CW -4dB Power Level	Limit (≤)	Result
N/A	N/A	N/A



405 - 406 MHz Band, Mid Channel, 405.55 MHz, LBT Threshold 0dB		
CW -4dB Power Level	Limit (≤)	Result
N/A	N/A	N/A

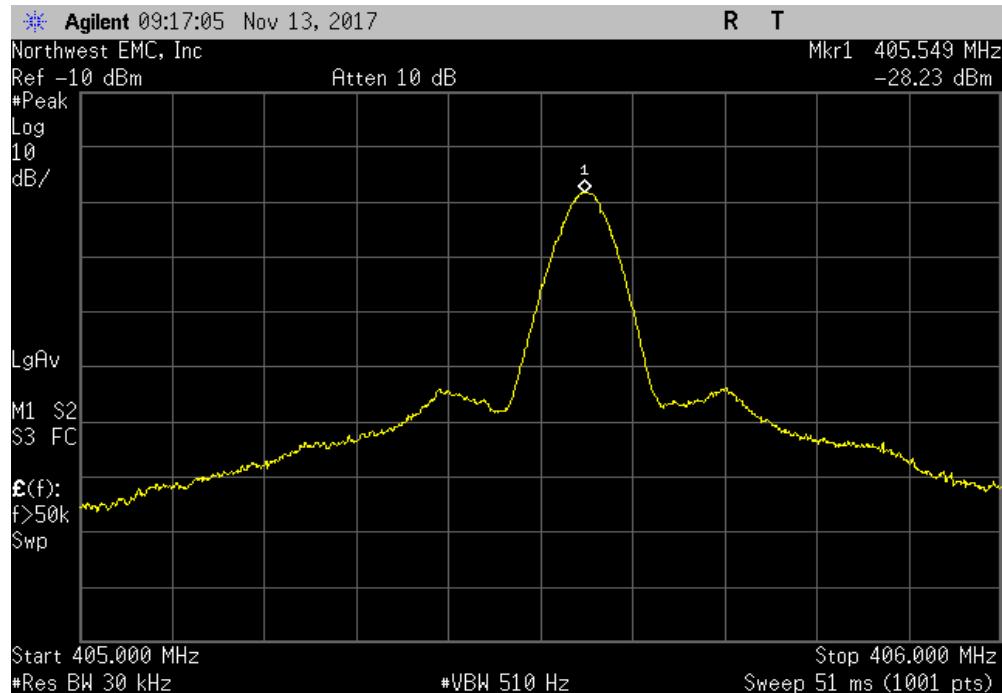


LBT THRESHOLD POWER LEVEL (MEDS)

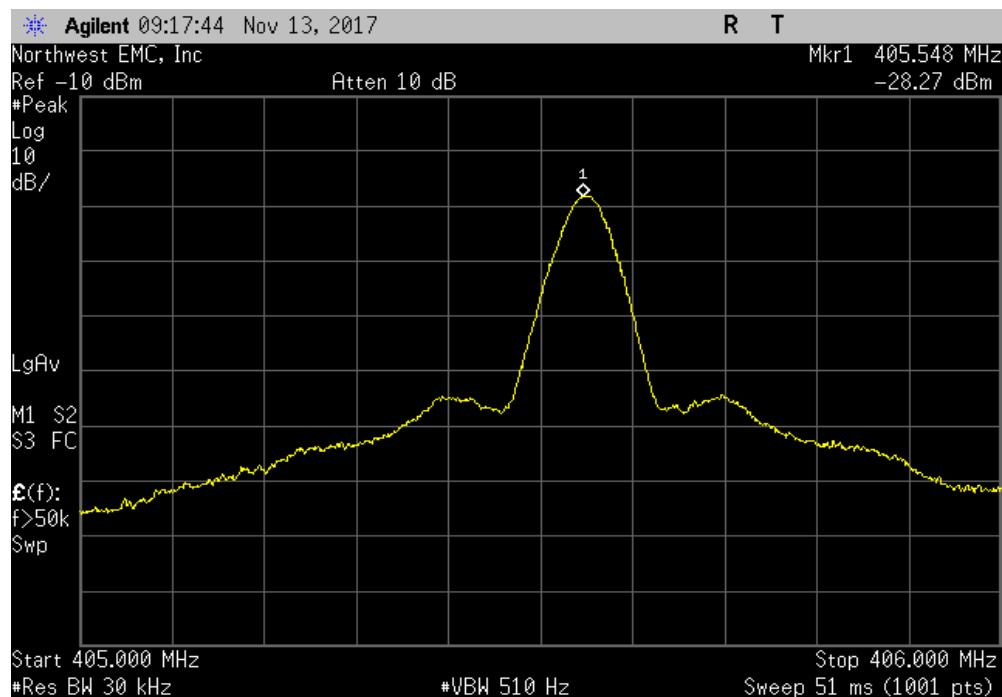


XMI 2017.09.21

405 - 406 MHz Band, Mid Channel, 405.55 MHz, LBT Threshold +1dB		
CW -4dB Power Level	Limit (≤)	Result
N/A	N/A	N/A



405 - 406 MHz Band, Mid Channel, 405.55 MHz, LBT Threshold +2dB		
CW -4dB Power Level	Limit (≤)	Result
N/A	N/A	N/A



LBT THRESHOLD POWER LEVEL (MEDS)



XMI 2017.09.21

405 - 406 MHz Band, Mid Channel, 405.55 MHz, LBT Threshold +3dB			
CW -4dB Power Level	Limit (≤)	Result	
-99.89 dBm	-98.88 dBm	Pass	



LBT THRESHOLD POWER LEVEL (MICS)



XMIT 2017.09.21

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Power Divider/Combiner	Fairview Microwave	MP8455-2	PDA	NCR	NCR
Directional Coupler	Fairview Microwave	MC2047-10	RHE	NCR	NCR
Power Divider/Combiner	Fairview Microwave	MP0208-2	IAZ	NCR	NCR
Meter - Multimeter	Fluke	111	MMM	18-Feb-16	18-Feb-19
Generator - Signal	Agilent	E4422B	TGR	8-Aug-17	8-Aug-20
Generator - Signal	Keysight	N5182B	TFY	16-Apr-15	16-Apr-18
Analyzer - Spectrum Analyzer	Agilent	E4446A	AAT	2-Jun-17	2-Jun-18

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer.

A signal generator was set to multitone operation to cause equal interference across the entire band. The amplitude of the multitone signals (out of operation region) were set to the LBT threshold of $10^*LOG(Bandwidth) - 150 + \text{Antenna Gain} + 3$ dB.

The spectrum analyzer was set to monitor the EUT communications channel in the transmit band of 402-405 MHz. The multitone signal of the intended frequency (Fc) was set to the LBT threshold - 6 dB, and raised by 1 dB increments until the EUT chose a different channel to start a session. Screen captures were provided to show the EUT behavior at the different LBT threshold levels.

The signal generator amplitude at Fc was then measured and recorded with the spectrum analyzer.

LBT THRESHOLD POWER LEVEL (MICS)



XMI 2017.08.21

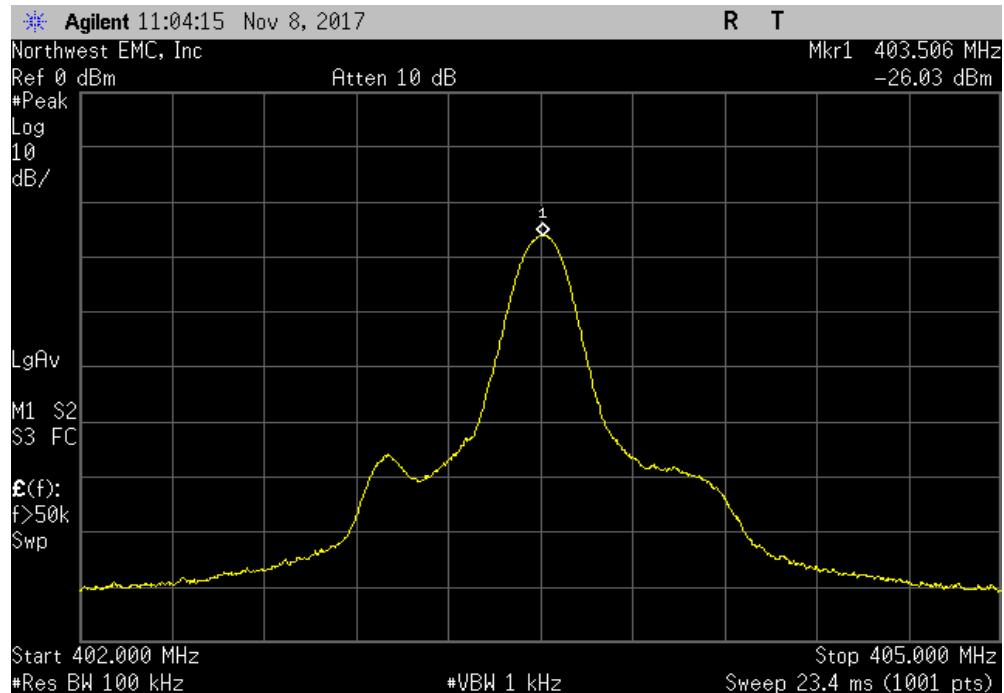
EUT:	Patient Remote (PR) - 2301	Work Order:	AXON0099	
Serial Number:	AP1BA70018	Date:	8-Nov-17	
Customer:	Axonics Modulation Technologies, Inc.	Temperature:	22 °C	
Attendees:	Flavio Ono	Humidity:	26% RH	
Project:	None	Barometric Pres.:	1012 mbar	
Tested by:	Richard Meliroth	Power:	2.8 VDC	
TEST SPECIFICATIONS		Test Method	NC04	
EN 301 839 V2.1.1:2016		EN 301 839 V2.1.1:2016		
COMMENTS				
EUT Emission Bandwidth = 160802 Hz, Antenna Gain = 2.0dBi. Communications established between EUT and companion device, initiating LBT communications protocol via peripheral laptop software.				
DEVIATIONS FROM TEST STANDARD				
None				
Configuration #	4	Signature		
		CW -4dB Power Level	Limit (s)	Result
Mid Channel, 403.5 MHz				
LBT Threshold -6dB		N/A	N/A	N/A
LBT Threshold -5dB		N/A	N/A	N/A
LBT Threshold -4dB		N/A	N/A	N/A
LBT Threshold -3dB		N/A	N/A	N/A
LBT Threshold -2dB		N/A	N/A	N/A
LBT Threshold -1dB		N/A	N/A	N/A
LBT Threshold 0dB		N/A	N/A	N/A
LBT Threshold +1dB		N/A	N/A	N/A
LBT Threshold +2dB		N/A	N/A	N/A
LBT Threshold +3dB		-96.93 dBm	-95.9371 dBm	Pass

LBT THRESHOLD POWER LEVEL (MICS)

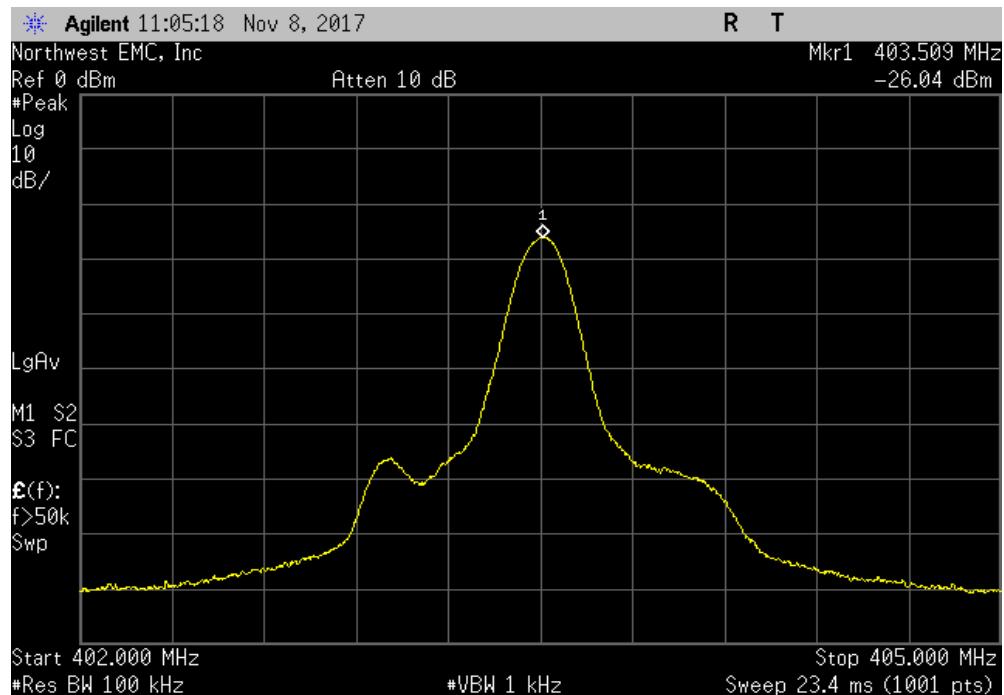


XMIT 2017.09.21

Mid Channel, 403.5 MHz, LBT Threshold -6dB			CW -4dB	Limit (≤)	Result
	Power Level		N/A	N/A	N/A



Mid Channel, 403.5 MHz, LBT Threshold -5dB			CW -4dB	Limit (≤)	Result
	Power Level		N/A	N/A	N/A

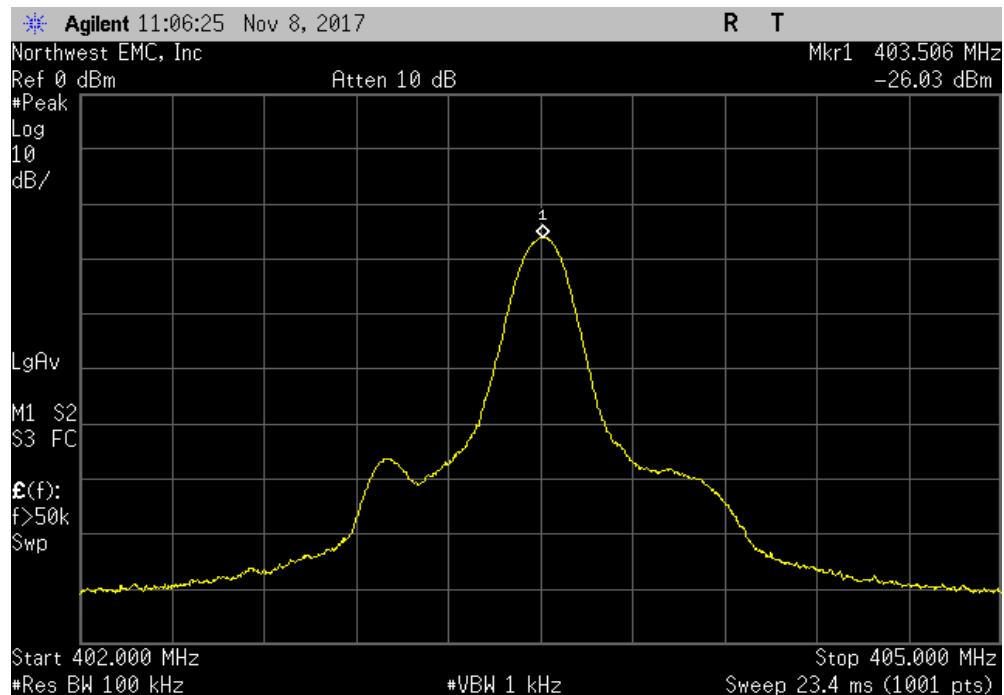


LBT THRESHOLD POWER LEVEL (MICS)

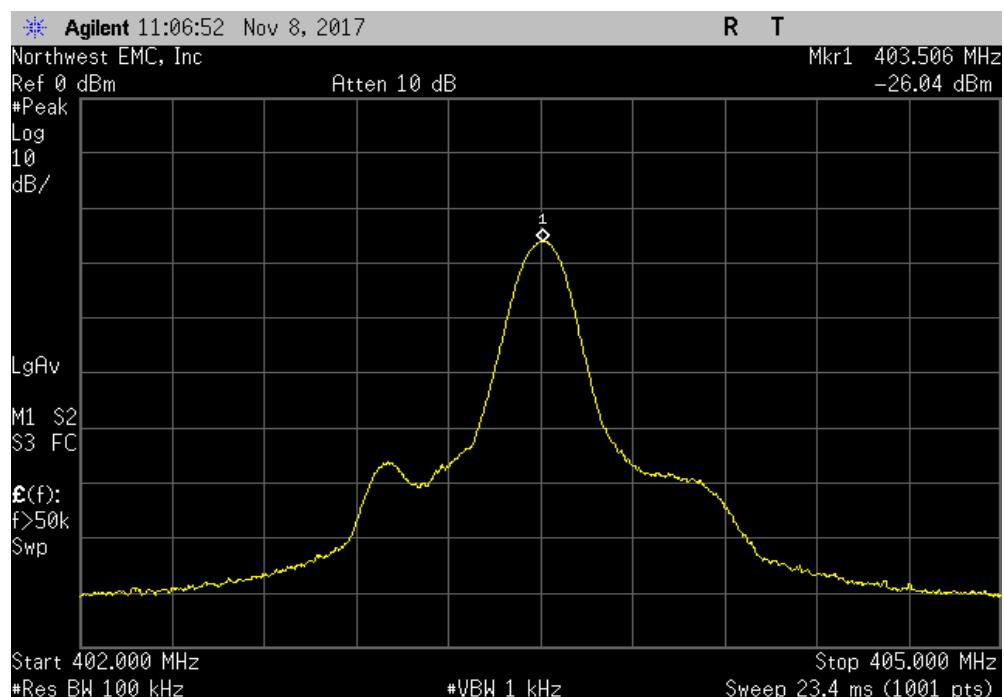


XMI 2017.09.21

Mid Channel, 403.5 MHz, LBT Threshold -4dB		
CW -4dB Power Level	Limit (≤)	Result
N/A	N/A	N/A



Mid Channel, 403.5 MHz, LBT Threshold -3dB		
CW -4dB Power Level	Limit (≤)	Result
N/A	N/A	N/A

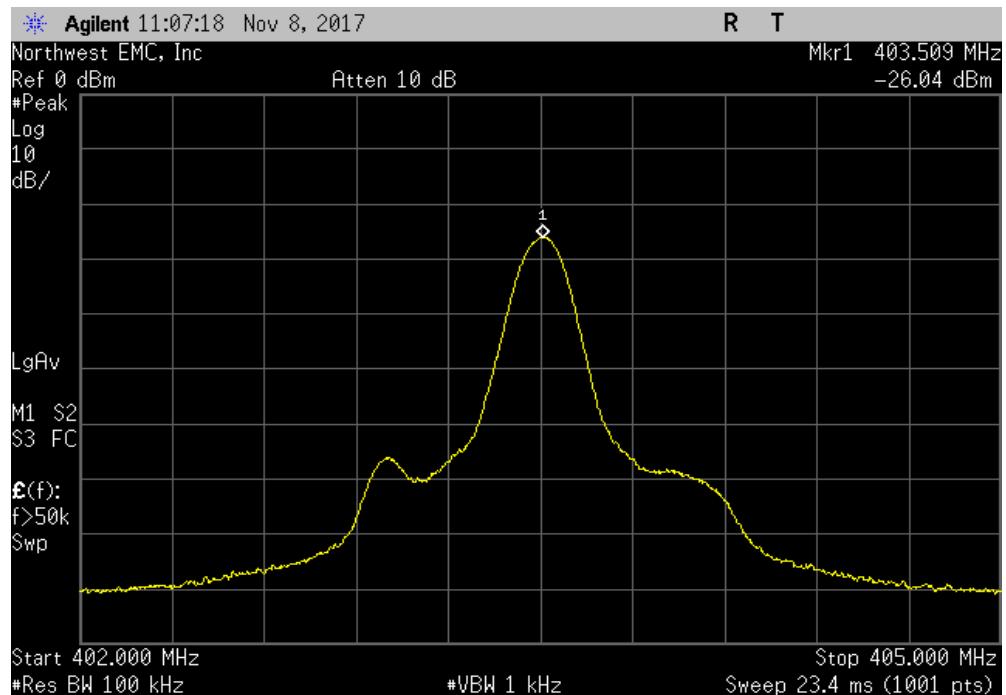


LBT THRESHOLD POWER LEVEL (MICS)

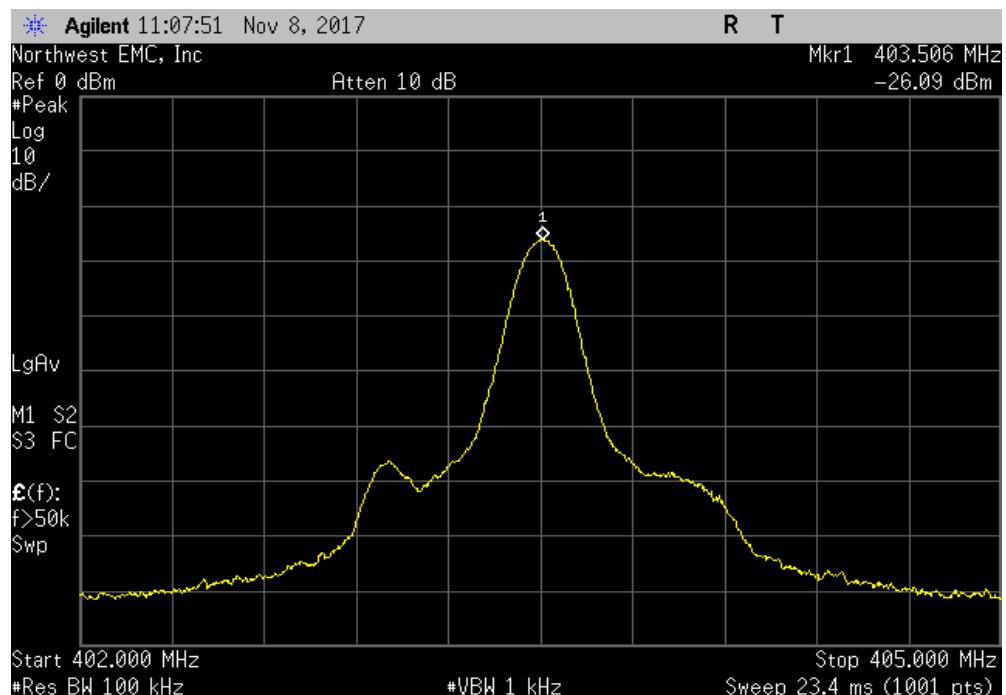


XMI 2017.09.21

Mid Channel, 403.5 MHz, LBT Threshold -2dB		
CW -4dB Power Level	Limit (≤)	Result
N/A	N/A	N/A



Mid Channel, 403.5 MHz, LBT Threshold -1dB		
CW -4dB Power Level	Limit (≤)	Result
N/A	N/A	N/A

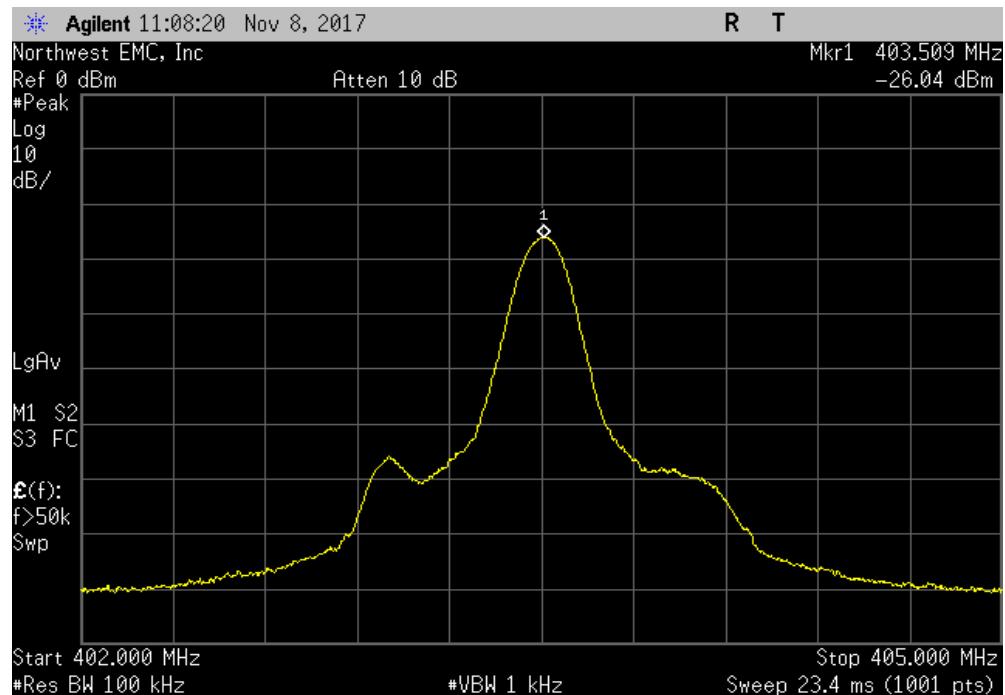


LBT THRESHOLD POWER LEVEL (MICS)

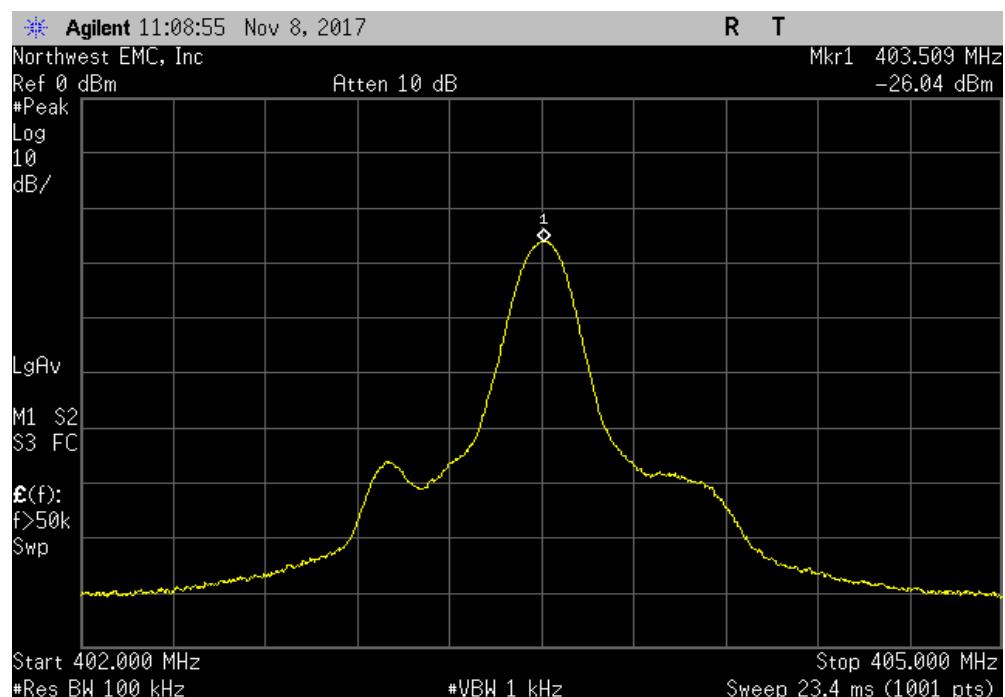


XMI 2017.09.21

Mid Channel, 403.5 MHz, LBT Threshold 0dB		
CW -4dB Power Level	Limit (≤)	Result
N/A	N/A	N/A



Mid Channel, 403.5 MHz, LBT Threshold +1dB		
CW -4dB Power Level	Limit (≤)	Result
N/A	N/A	N/A

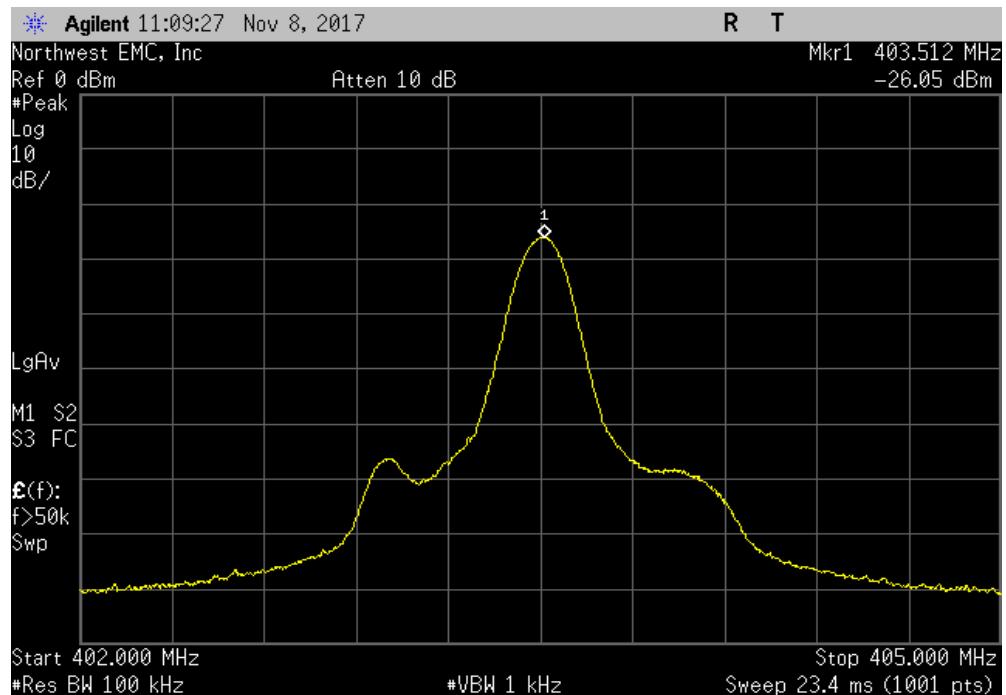


LBT THRESHOLD POWER LEVEL (MICS)

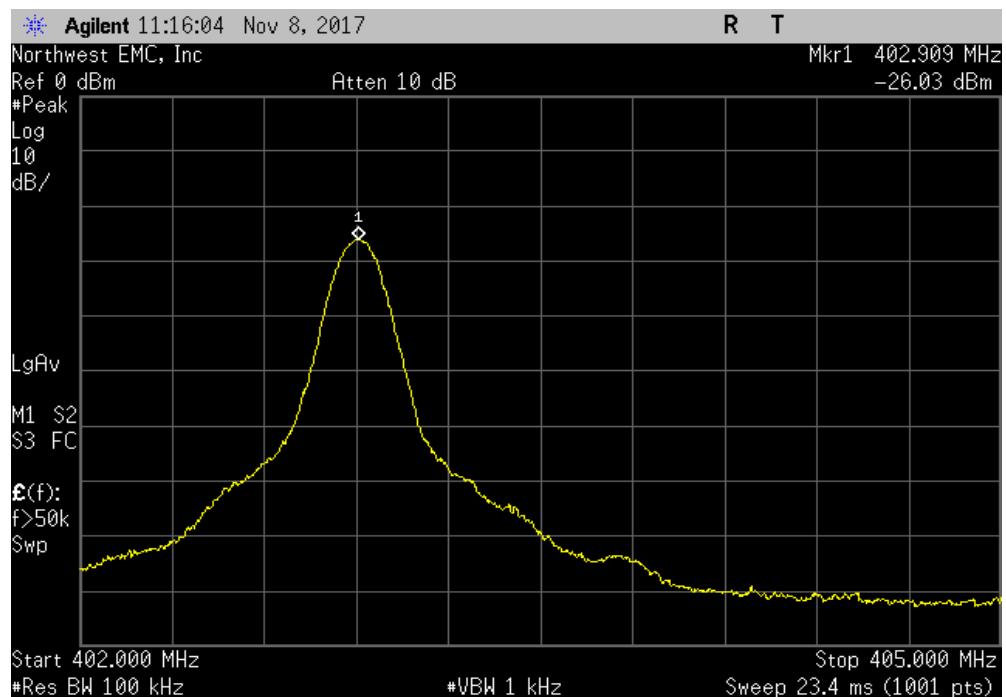


XMI 2017.09.21

Mid Channel, 403.5 MHz, LBT Threshold +2dB		
CW -4dB	Limit (≤)	Result
N/A	N/A	N/A



Mid Channel, 403.5 MHz, LBT Threshold +3dB		
CW -4dB	Limit (≤)	Result
-96.93 dBm	-95.9371 dBm	Pass



CHANNEL ACCESS BASED ON AMBIENT LEVELS (MEDS)



XMIT 2017.09.21

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Power Divider/Combiner	Fairview Microwave	MP8455-2	PDA	NCR	NCR
Directional Coupler	Fairview Microwave	MC2047-10	RHE	NCR	NCR
Power Divider/Combiner	Fairview Microwave	MP0208-2	IAZ	NCR	NCR
Meter - Multimeter	Fluke	111	MMM	18-Feb-16	18-Feb-19
Generator - Signal	Agilent	E4422B	TGR	8-Aug-17	8-Aug-20
Generator - Signal	Keysight	N5182B	TFY	16-Apr-15	16-Apr-18
Analyzer - Spectrum Analyzer	Agilent	E4446A	AAT	2-Jun-17	2-Jun-18

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer.

A signal generator was set to multitone operation to cause equal interference across the entire band. The amplitude of the multitone signals (out of operation region) were set to the LBT threshold of $10 \cdot \log(\text{Bandwidth}) - 150 + \text{Antenna Gain} + 10$ dB.

The intended frequency (F_c) was set to the LBT threshold - 3 dB. A least interfered channel (LIC) was set to the LBT threshold + 3 dB. The EUT was verified to transmit on F_c . The amplitude of F_c was then raised to the LBT threshold + 6 dB. The EUT was verified to transmit on LIC.

The spectrum analyzer was set to measure the transmit bands of 401-402 and 405-406 MHz. Screen captures were provided to show the EUT behavior at the different LBT threshold levels.

CHANNEL ACCESS BASED ON AMBIENT LEVELS (MEDS)



XMIT 2017.08.21

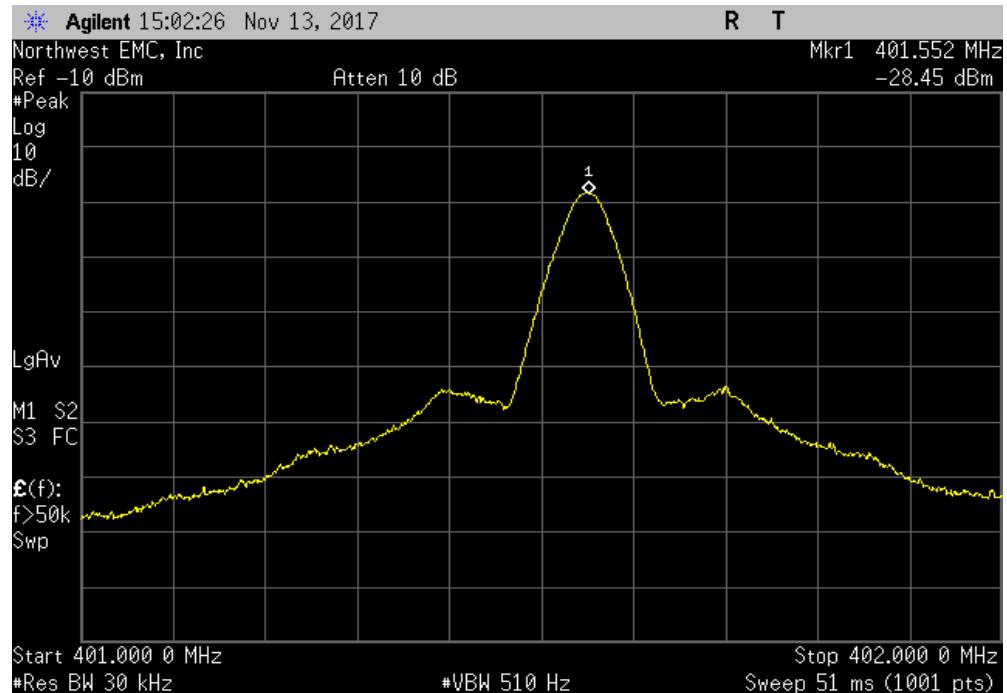
EUT:	Patient Remote (PR) - 2301		Work Order:	AXON0099	
Serial Number:	AP1BA70018		Date:	13-Nov-17	
Customer:	Axonics Modulation Technologies, Inc.		Temperature:	22 °C	
Attendees:	Flavio Ono		Humidity:	38% RH	
Project:	None		Barometric Pres.:	1009 mbar	
Tested by:	Richard Meliroth	Power:	2.8 VDC	Job Site:	NC04
TEST SPECIFICATIONS			Test Method		
EN 302 537 V2.1.1:2016			EN 302 537 V2.1.1:2016		
COMMENTS					
EUT Emission Bandwidth = 81500 Hz, Antenna Gain = 2.0dBi. Communications established between EUT and companion device, initiating LBT communications protocol via peripheral laptop software. Least Interfered Channel (LIC) = 401.25 MHz (401-402 MHz Band), 405.25 MHz (405-406 MHz Band)					
DEVIATIONS FROM TEST STANDARD					
None					
Configuration #	5	Signature			
			Does EUT Transmit on Fc? (Y/N)	Does EUT Transmit on LIC? (Y/N)	Result
401-402 MHz Band			Mid Channel (Fc), 401.55 MHz Fc LBT Threshold -3dB Fc LBT Threshold +6dB	Yes No	No Yes
405-406 MHz Band			Mid Channel (Fc), 405.55 MHz Fc LBT Threshold -3dB Fc LBT Threshold +6dB	Yes No	No Yes

CHANNEL ACCESS BASED ON AMBIENT LEVELS (MEDS)

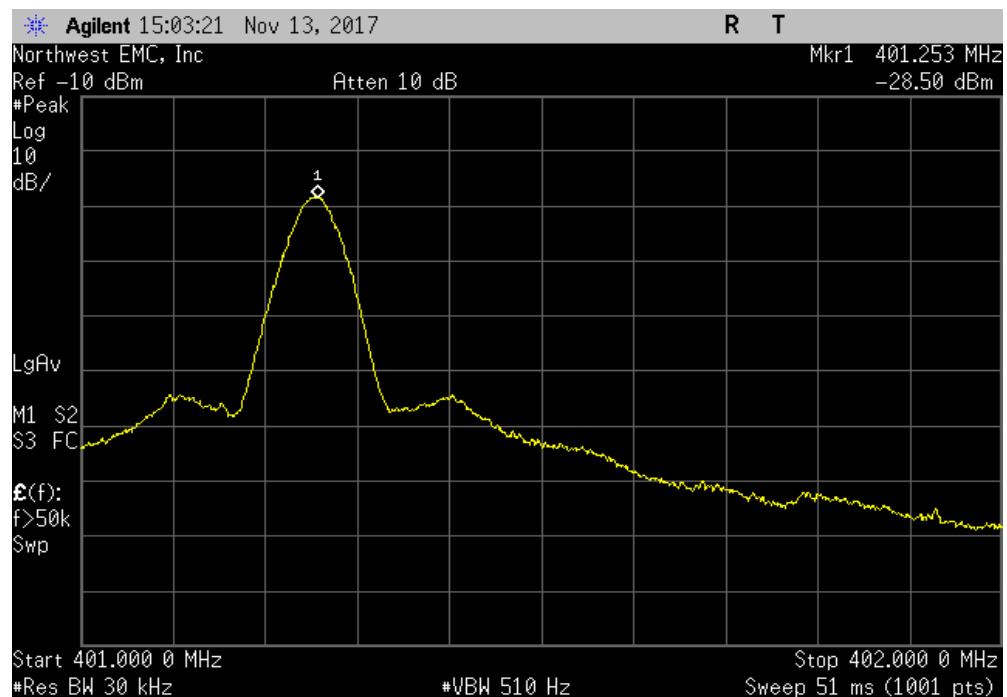


XMI 2017.09.21

401-402 MHz Band, Mid Channel (Fc), 401.55 MHz, Fc LBT Threshold -3dB				
Does EUT Transmit on Fc? (Y/N)	Does EUT Transmit on LIC? (Y/N)	Result		
Yes	No		Pass	



401-402 MHz Band, Mid Channel (Fc), 401.55 MHz, Fc LBT Threshold +6dB				
Does EUT Transmit on Fc? (Y/N)	Does EUT Transmit on LIC? (Y/N)	Result		
No	Yes		Pass	

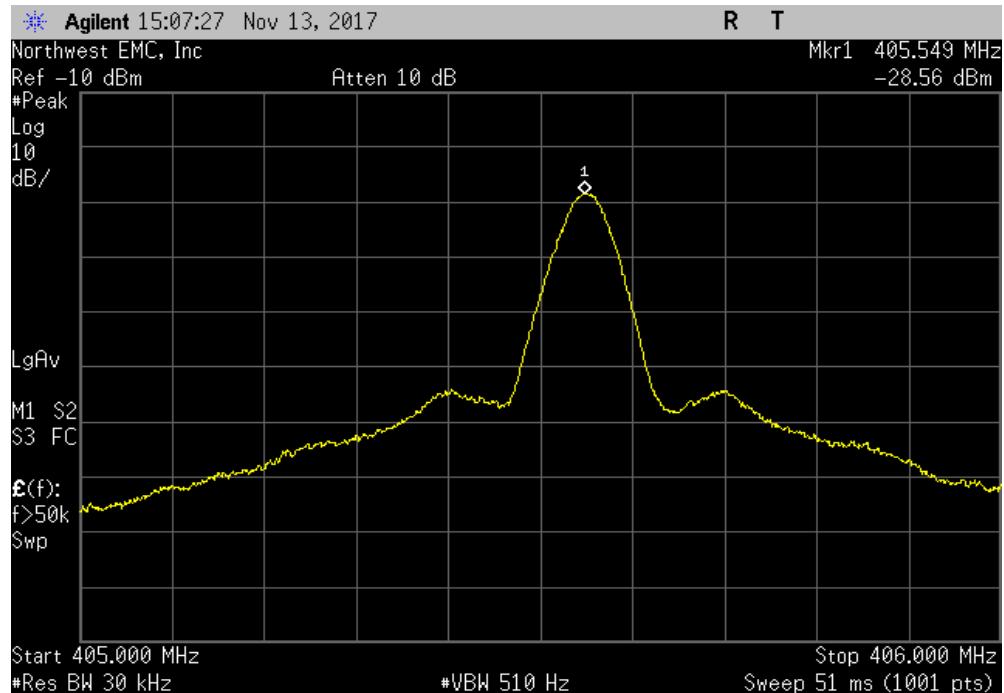


CHANNEL ACCESS BASED ON AMBIENT LEVELS (MEDS)

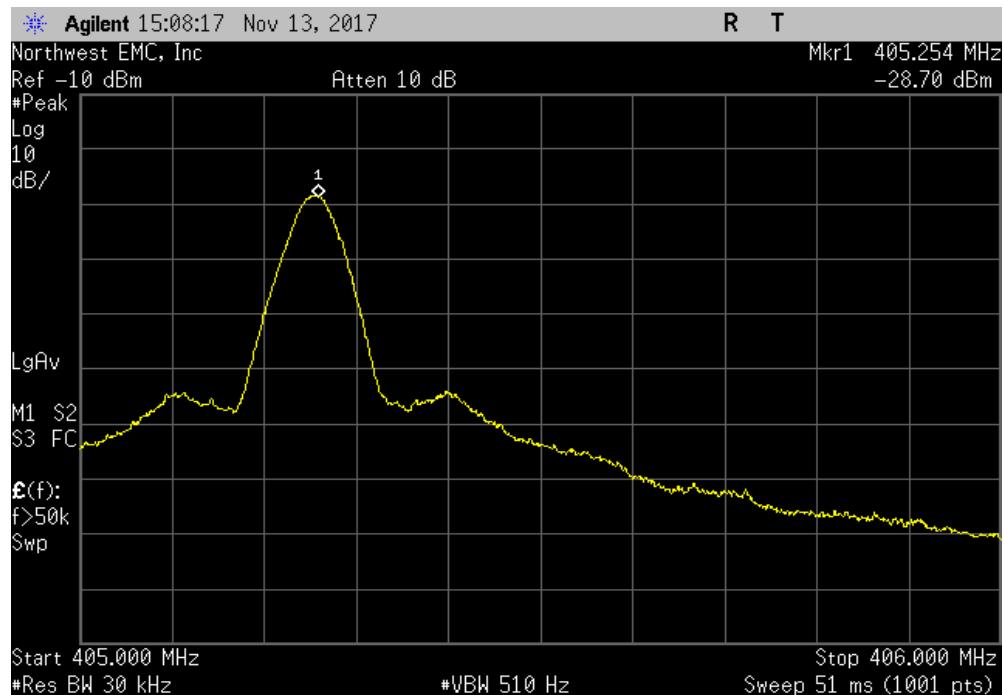


XMI 2017.09.21

405-406 MHz Band, Mid Channel (Fc), 405.55 MHz, Fc LBT Threshold -3dB		
Does EUT Transmit on Fc? (Y/N)	Does EUT Transmit on LIC? (Y/N)	Result
Yes	No	Pass



405-406 MHz Band, Mid Channel (Fc), 405.55 MHz, Fc LBT Threshold +6dB		
Does EUT Transmit on Fc? (Y/N)	Does EUT Transmit on LIC? (Y/N)	Result
No	Yes	Pass



CHANNEL ACCESS BASED ON AMBIENT LEVELS (MICS)



XMIT 2017.09.21

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Power Divider/Combiner	Fairview Microwave	MP8455-2	PDA	NCR	NCR
Directional Coupler	Fairview Microwave	MC2047-10	RHE	NCR	NCR
Power Divider/Combiner	Fairview Microwave	MP0208-2	IAZ	NCR	NCR
Meter - Multimeter	Fluke	111	MMM	18-Feb-16	18-Feb-19
Generator - Signal	Agilent	E4422B	TGR	8-Aug-17	8-Aug-20
Generator - Signal	Keysight	N5182B	TFY	16-Apr-15	16-Apr-18
Analyzer - Spectrum Analyzer	Agilent	E4446A	AAT	2-Jun-17	2-Jun-18

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer.

A signal generator was set to multitone operation to cause equal interference across the entire band. The amplitude of the multitone signals (out of operation region) were set to the LBT threshold of $10 \cdot \log(\text{Bandwidth}) - 150 + \text{Antenna Gain} + 10$ dB.

The intended frequency (F_c) was set to the LBT threshold - 3 dB. A least interfered channel (LIC) was set to the LBT threshold + 3 dB. The EUT was verified to transmit on F_c . The amplitude of F_c was then raised to the LBT threshold + 6 dB. The EUT was verified to transmit on LIC.

The spectrum analyzer was set to measure the transmit band of 402-405 MHz. Screen captures were provided to show the EUT behavior at the different LBT threshold levels.

CHANNEL ACCESS BASED ON AMBIENT LEVELS (MICS)



XMI 2017.08.21

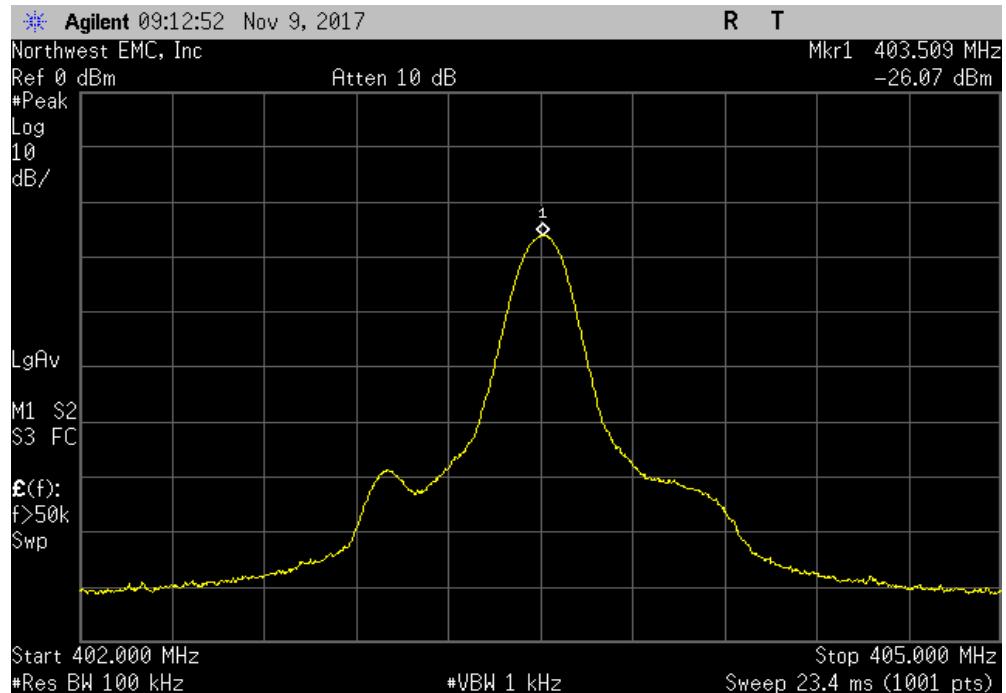
EUT:	Patient Remote (PR) - 2301		Work Order:	AXON0099	
Serial Number:	AP1BA70018		Date:	9-Nov-17	
Customer:	Axonics Modulation Technologies, Inc.		Temperature:	23 °C	
Attendees:	Flavio Ono		Humidity:	35% RH	
Project:	None		Barometric Pres.:	1008 mbar	
Tested by:	Richard Meliroth	Power:	2.8 VDC	Job Site:	NC04
TEST SPECIFICATIONS			Test Method		
EN 301 839 V2.1.1:2016			EN 301 839 V2.1.1:2016		
COMMENTS					
EUT Emission Bandwidth = 160802 Hz, Antenna Gain = 2.0dBi. Communications established between EUT and companion device, initiating LBT communications protocol via peripheral laptop software. Least Interfered Channel (LIC) = 402.6 MHz.					
DEVIATIONS FROM TEST STANDARD					
None					
Configuration #	4	Signature		Does EUT Transmit on Fc? (Y/N)	Does EUT Transmit on LIC? (Y/N)
Mid Channel (Fc), 403.5 MHz			Yes	No	Result
Fc LBT Threshold -3dB			Yes	No	Pass
Fc LBT Threshold +6dB			No	Yes	Pass

CHANNEL ACCESS BASED ON AMBIENT LEVELS (MICS)

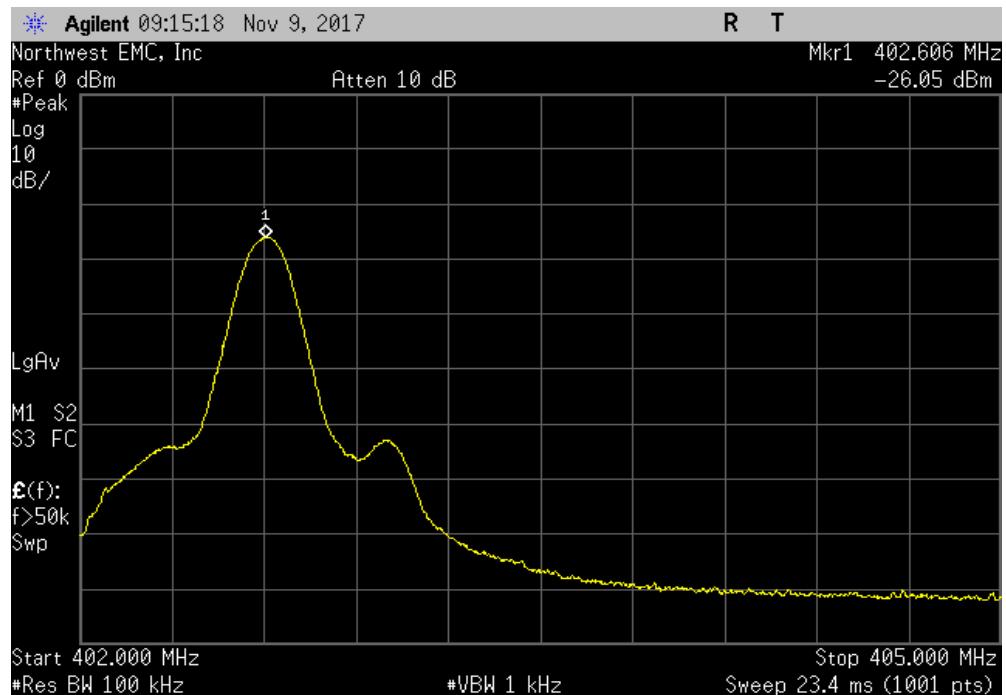


XMI 2017.09.21

Mid Channel (Fc), 403.5 MHz, Fc LBT Threshold -3dB			Result	
Does EUT Transmit on Fc? (Y/N)	Does EUT Transmit on LIC? (Y/N)			Result
Yes	No			Pass



Mid Channel (Fc), 403.5 MHz, Fc LBT Threshold +6dB			Result	
Does EUT Transmit on Fc? (Y/N)	Does EUT Transmit on LIC? (Y/N)			Result
No	Yes			Pass



DISCONTINUATION OF A MEDS SESSION (MEDS)



XMIT 2017.09.21

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Power Divider/Combiner	Fairview Microwave	MP8455-2	PDA	NCR	NCR
Directional Coupler	Fairview Microwave	MC2047-10	RHE	NCR	NCR
Power Divider/Combiner	Fairview Microwave	MP0208-2	IAZ	NCR	NCR
Meter - Multimeter	Fluke	111	MMM	18-Feb-16	18-Feb-19
Generator - Signal	Agilent	E4422B	TGR	8-Aug-17	8-Aug-20
Generator - Signal	Keysight	N5182B	TFY	16-Apr-15	16-Apr-18
Analyzer - Spectrum Analyzer	Agilent	E4446A	AAT	2-Jun-17	2-Jun-18

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer.

A signal generator was set to multitone operation to cause equal interference across the entire band. The amplitude of the multitone signals (out of operation region) were set to the LBT threshold of $10 \cdot \log(\text{Bandwidth}) - 150 + \text{Antenna Gain} + 10$ dB.

The intended frequency (F_c) was set to the LBT threshold + 6 dB. A least interfered channel (LIC) was set to the LBT threshold + 3 dB. The spectrum analyzer was set to measure the time between the removal of the MEDS Implant AMI / reduction of the signal level on (F_c) to when the EUT does not transmit on the initial LIC.

DISCONTINUATION OF A MEDS SESSION (MEDS)



XMI 2017.08.21

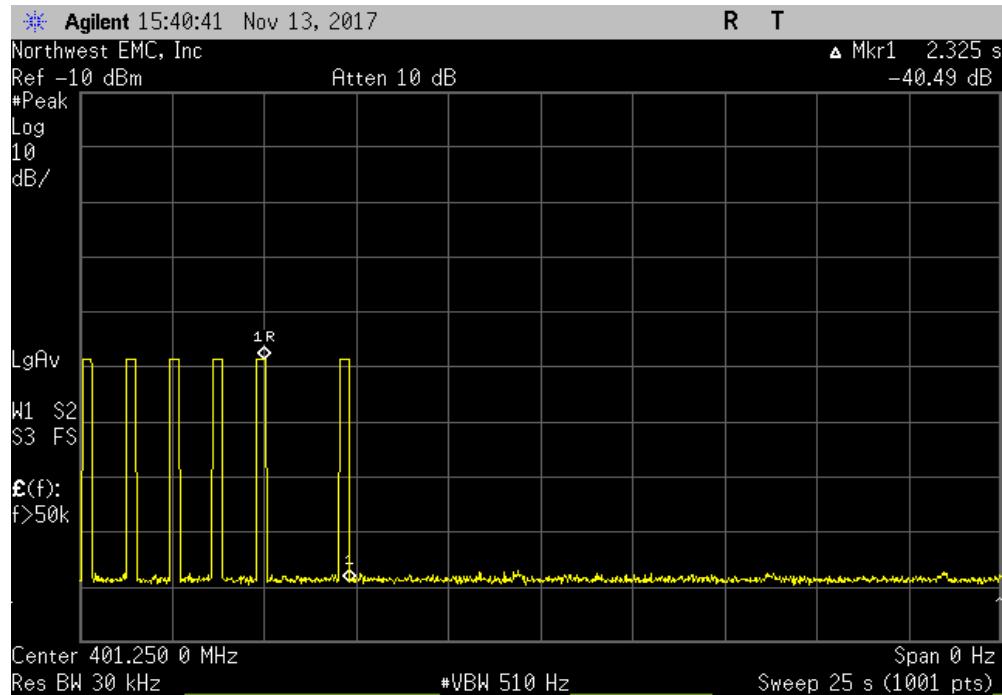
EUT:	Patient Remote (PR) - 2301		Work Order:	AXON0099	
Serial Number:	AP1BA70018		Date:	13-Nov-17	
Customer:	Axonics Modulation Technologies, Inc.		Temperature:	22 °C	
Attendees:	Flavio Ono		Humidity:	38% RH	
Project:	None		Barometric Pres.:	1009 mbar	
Tested by:	Richard Meliroth	Power:	2.8 VDC	Job Site:	NC04
TEST SPECIFICATIONS			Test Method		
EN 302 537 V2.1.1:2016			EN 302 537 V2.1.1:2016		
COMMENTS					
<p>EUT Emission Bandwidth = 81500 Hz, Antenna Gain = 2.0dBi. A continuous communications session was established between the EUT and companion device. The screen caps show a communication period of 5 seconds on the initial LIC, immediately followed by a reduction of the CW signal to the Threshold Level minus 3dB and powering off of the companion device. The companion device remained inactive for a period of 10 seconds, after which communications were re-established and verified to be on a channel other than the initial LIC.</p>					
DEVIATIONS FROM TEST STANDARD					
None					
Configuration #	5	Signature		Value (Seconds)	Limit (Seconds)
401-402 MHz Band			2.325	≤ 5	Pass
405-406 MHz Band	LIC 25 Second Sweep, 401.25 MHz		2.625	≤ 5	Pass
	LIC 25 Second Sweep, 405.25 MHz				

DISCONTINUATION OF A MEDS SESSION (MEDS)

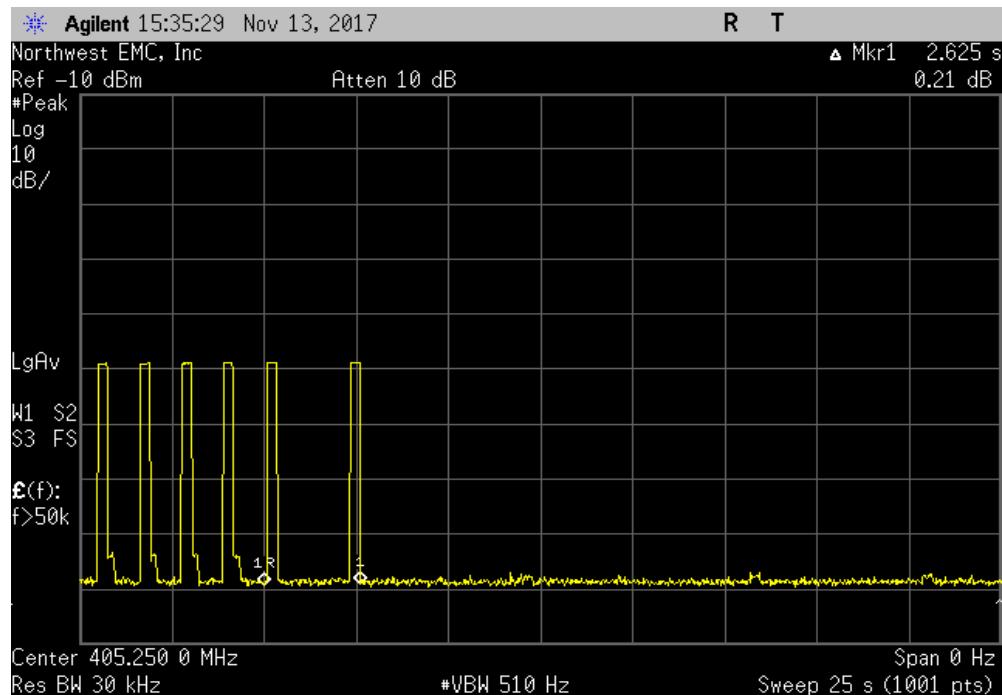


XMIT 2017.09.21

401-402 MHz Band, LIC 25 Second Sweep, 401.25 MHz			
	Value (Seconds)	Limit (Seconds)	Result
	2.325	≤ 5	Pass



405-406 MHz Band, LIC 25 Second Sweep, 405.25 MHz			
	Value (Seconds)	Limit (Seconds)	Result
	2.625	≤ 5	Pass



DISCONTINUATION OF A MICS SESSION (MICS)



XMIT 2017.09.21

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Power Divider/Combiner	Fairview Microwave	MP8455-2	PDA	NCR	NCR
Directional Coupler	Fairview Microwave	MC2047-10	RHE	NCR	NCR
Power Divider/Combiner	Fairview Microwave	MP0208-2	IAZ	NCR	NCR
Meter - Multimeter	Fluke	111	MMM	18-Feb-16	18-Feb-19
Generator - Signal	Agilent	E4422B	TGR	8-Aug-17	8-Aug-20
Generator - Signal	Keysight	N5182B	TFY	16-Apr-15	16-Apr-18
Analyzer - Spectrum Analyzer	Agilent	E4446A	AAT	2-Jun-17	2-Jun-18

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer.

A signal generator was set to multitone operation to cause equal interference across the entire band. The amplitude of the multitone signals (out of operation region) were set to the LBT threshold of $10 \cdot \log(\text{Bandwidth}) - 150 + \text{Antenna Gain} + 10$ dB.

The intended frequency (F_c) was set to the LBT threshold + 6 dB. A least interfered channel (LIC) was set to the LBT threshold + 3 dB. The spectrum analyzer was set to measure the time between the removal of the MICS Implant AMI / reduction of the signal level on (F_c) to when the EUT ceases to transmit on the initial LIC.

DISCONTINUATION OF A MICS SESSION (MICS)



XMI 2017.08.21

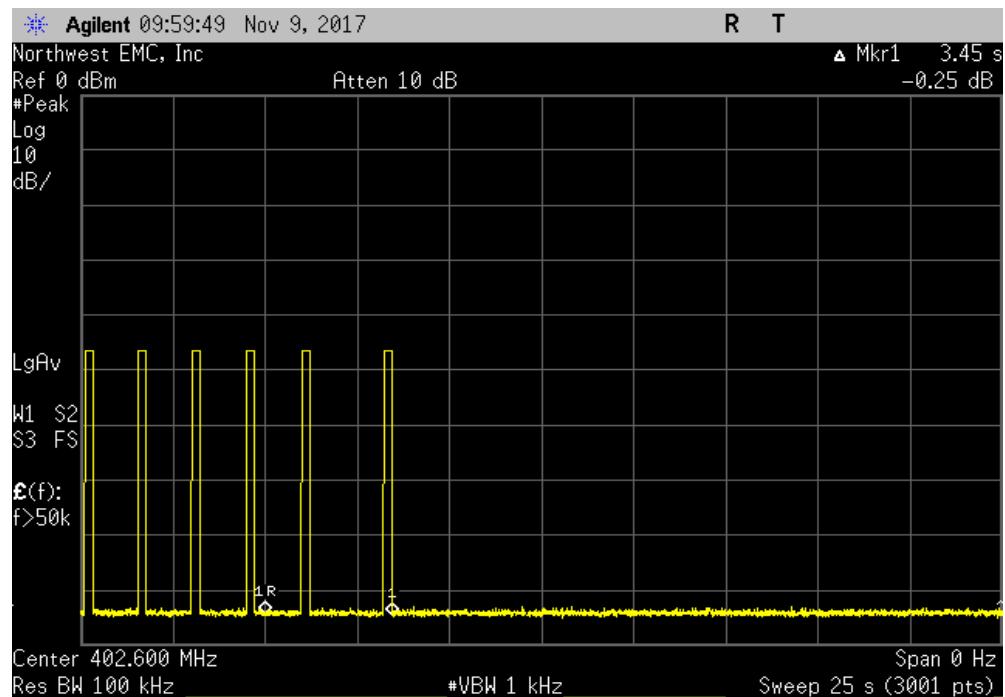
EUT:	Patient Remote (PR) - 2301	Work Order:	AXON0099	
Serial Number:	AP1BA70018	Date:	9-Nov-17	
Customer:	Axonics Modulation Technologies, Inc.	Temperature:	23 °C	
Attendees:	Flavio Ono	Humidity:	35% RH	
Project:	None	Barometric Pres.:	1008 mbar	
Tested by:	Richard Meliroth	Job Site:	NC04	
TEST SPECIFICATIONS		Test Method		
EN 301 839 V2.1.1:2016		EN 301 839 V2.1.1:2016		
COMMENTS	<p>EUT Emission Bandwidth = 160802 Hz, Antenna Gain = 2.0dBi. A continuous communications session was established between the EUT and companion device. The screen cap shows a communication period of 5 seconds on the initial LIC, immediately followed by a reduction of the CW signal to the Threshold Level minus 3dB and powering off of the companion device. The companion device remained inactive for a period of 10 seconds, after which communications were re-established and verified to be on a channel other than the initial LIC.</p>			
DEVIATIONS FROM TEST STANDARD				
None				
Configuration #	4	Signature		
LIC 25 Second Sweep, 402.6 MHz		Value (Seconds)	Limit (Seconds)	Result
		3.45	≤ 5	Pass

DISCONTINUATION OF A MICS SESSION (MICS)



XMIT 2017.09.21

LIC 25 Second Sweep, 402.6 MHz				Value (Seconds)	Limit (Seconds)	Result
				3.45	≤ 5	Pass



USE OF PRE-SCANNED ALTERNATIVE CHANNELS (MEDS)



XMIT 2017.09.21

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Power Divider/Combiner	Fairview Microwave	MP8455-2	PDA	NCR	NCR
Directional Coupler	Fairview Microwave	MC2047-10	RHE	NCR	NCR
Power Divider/Combiner	Fairview Microwave	MP0208-2	IAZ	NCR	NCR
Meter - Multimeter	Fluke	111	MMM	18-Feb-16	18-Feb-19
Generator - Signal	Agilent	E4422B	TGR	8-Aug-17	8-Aug-20
Generator - Signal	Keysight	N5182B	TFY	16-Apr-15	16-Apr-18
Analyzer - Spectrum Analyzer	Agilent	E4446A	AAT	2-Jun-17	2-Jun-18

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer.

A signal generator was set to multitone operation to cause equal interference across the entire band. The amplitude of the multitone signals (out of operation region) were set to the LBT threshold of $10 \cdot \log(\text{Bandwidth}) - 150 + \text{Antenna Gain} + 10$ dB.

The intended frequency (F_c) was set to the LBT threshold - 3 dB. A least interfered channel (LIC) was set to the LBT threshold + 3 dB. The EUT was verified to transmit on F_c . While the session was still active a second least interfered channel (LIC2) was set to the LBT threshold - 2 dB. The amplitude of F_c was then raised to the LBT threshold + 6 dB.

The spectrum analyzer was set to measure the transmit bands of 401-402 and 405-406 MHz. Screen captures were provided to show the EUT behavior at the different LBT threshold levels. The EUT was verified to transmit on F_c which shows that the EUT does not use pre-scanned alternate channels.

USE OF PRE-SCANNED ALTERNATIVE CHANNELS (MEDS)



XMI 2017.08.21

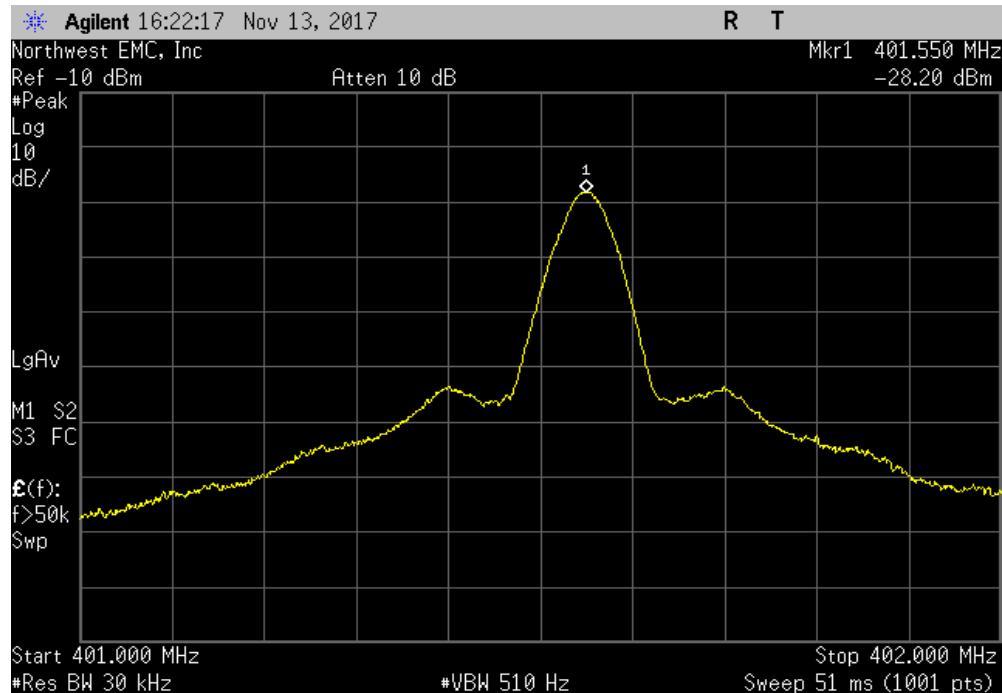
EUT:	Patient Remote (PR) - 2301		Work Order:	AXON0099	
Serial Number:	AP1BA70018		Date:	13-Nov-17	
Customer:	Axonics Modulation Technologies, Inc.		Temperature:	22 °C	
Attendees:	Flavio Ono		Humidity:	38% RH	
Project:	None		Barometric Pres.:	1009 mbar	
Tested by:	Richard Meliroth	Power:	2.8 VDC	Job Site:	NC04
TEST SPECIFICATIONS			Test Method		
EN 302 537 V2.1.1:2016			EN 302 537 V2.1.1:2016		
COMMENTS					
EUT Emission Bandwidth = 81500 Hz, Antenna Gain = 2.0dBi. A continuous communications session was established between the EUT and companion device on Fc.					
DEVIATIONS FROM TEST STANDARD					
None					
Configuration #	5	Signature	Transmit on LIC1?	Transmit on LIC2?	Transmit on Fc?
401-402 MHz Band					
Mid Channel (Fc), 401.55 MHz					
Initial Setting, Fc at Threshold -3dB			No	No	Yes
LIC2 Available at Threshold -2dB			No	No	Yes
Final Setting, LIC2 Available, Fc at Threshold +6dB			No	No	Yes
405-406 MHz Band					
Mid Channel (Fc), 405.55 MHz					
Initial Setting, Fc at Threshold -3dB			No	No	Yes
LIC2 Available at Threshold -2dB			No	No	Yes
Final Setting, LIC2 Available, Fc at Threshold +6dB			No	No	Yes

USE OF PRE-SCANNED ALTERNATIVE CHANNELS (MEDS)

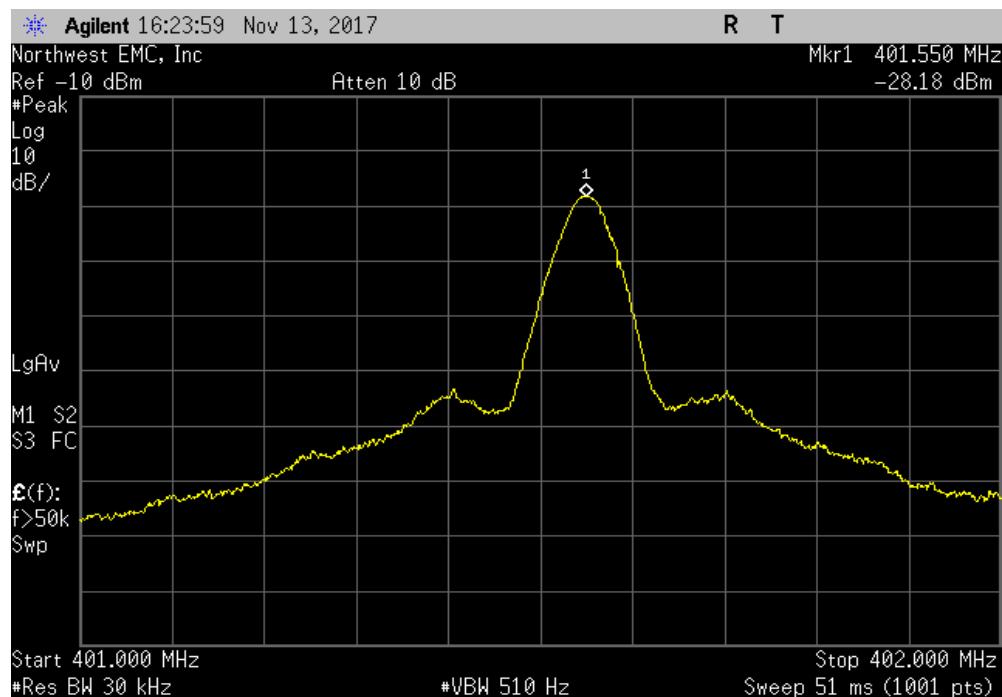


XMI 2017.09.21

401-402 MHz Band, Mid Channel (Fc), 401.55 MHz, Initial Setting, Fc at Threshold -3dB			
Transmit on LIC1?	Transmit on LIC2?	Transmit on Fc?	Result
No	No	Yes	N/A



401-402 MHz Band, Mid Channel (Fc), 401.55 MHz, LIC2 Available at Threshold -2dB			
Transmit on LIC1?	Transmit on LIC2?	Transmit on Fc?	Result
No	No	Yes	N/A

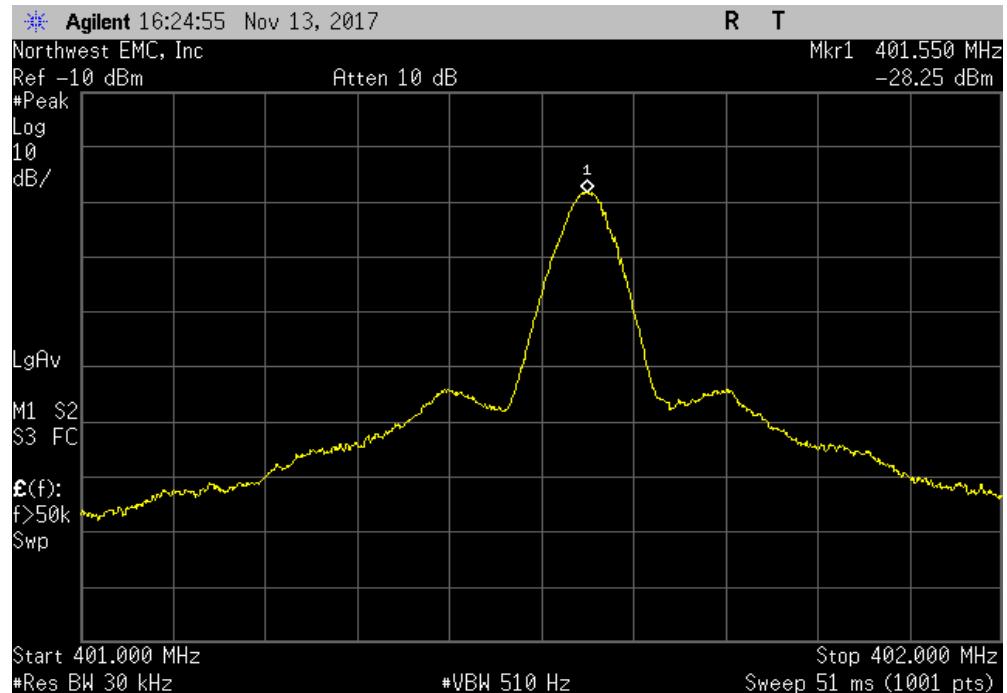


USE OF PRE-SCANNED ALTERNATIVE CHANNELS (MEDS)

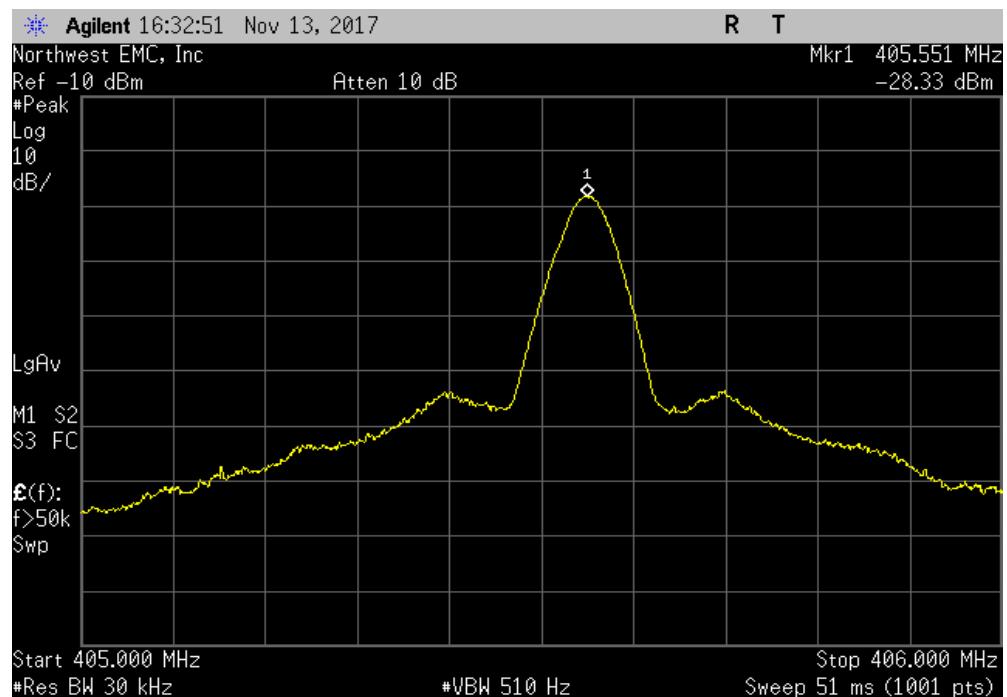


XMI 2017.09.21

401-402 MHz Band, Mid Channel (Fc), 401.55 MHz, Final Setting, LIC2 Available, Fc at Threshold +6dB			
Transmit on LIC1?	Transmit on LIC2?	Transmit on Fc?	Result
No	No	Yes	N/A



405-406 MHz Band, Mid Channel (Fc), 405.55 MHz, Initial Setting, Fc at Threshold -3dB			
Transmit on LIC1?	Transmit on LIC2?	Transmit on Fc?	Result
No	No	Yes	N/A

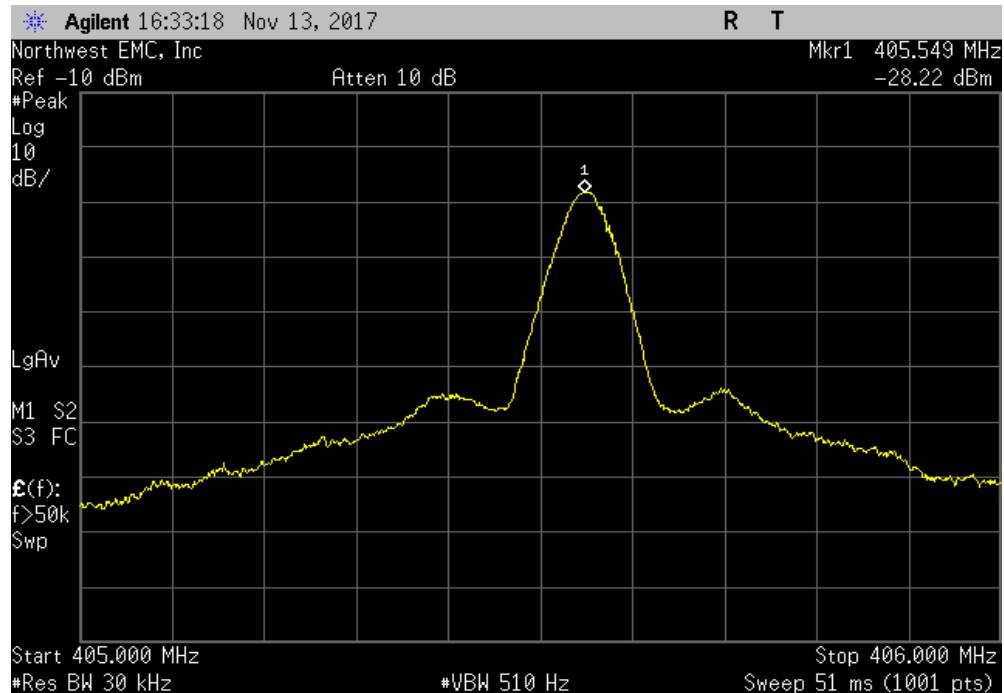


USE OF PRE-SCANNED ALTERNATIVE CHANNELS (MEDS)

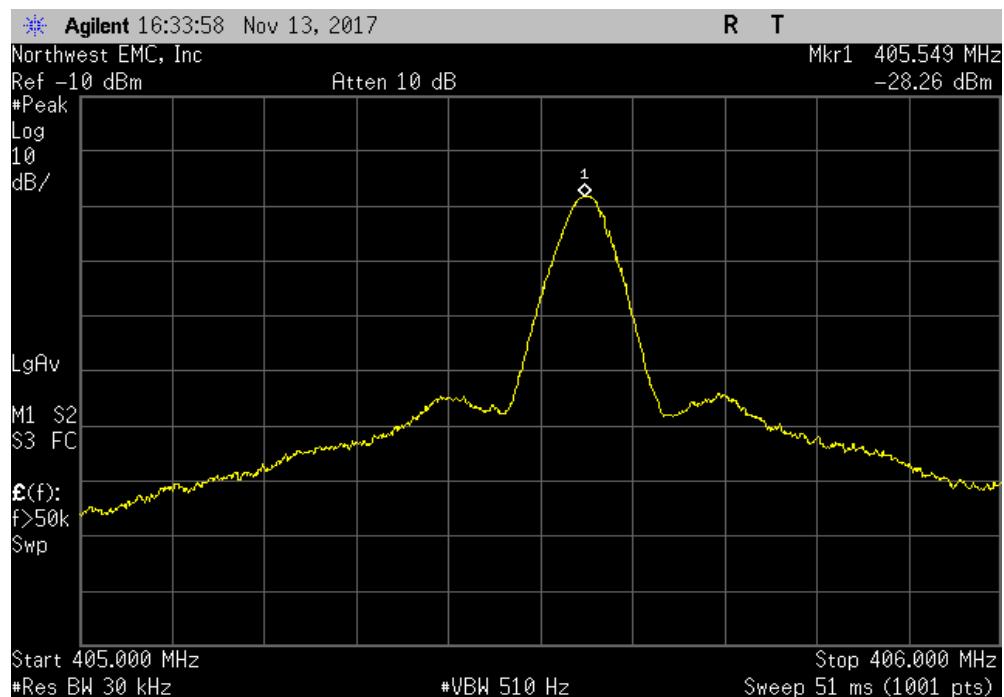


XMI 2017.09.21

405-406 MHz Band, Mid Channel (Fc), 405.55 MHz, LIC2 Available at Threshold -2dB			
	Transmit on LIC1?	Transmit on LIC2?	Transmit on Fc?
	No	No	Yes
			N/A



405-406 MHz Band, Mid Channel (Fc), 405.55 MHz, Final Setting, LIC2 Available, Fc at Threshold +6dB			
	Transmit on LIC1?	Transmit on LIC2?	Transmit on Fc?
	No	No	Yes
			N/A



USE OF PRE-SCANNED ALTERNATIVE CHANNELS (MICS)



XMIT 2017.09.21

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Power Divider/Combiner	Fairview Microwave	MP8455-2	PDA	NCR	NCR
Directional Coupler	Fairview Microwave	MC2047-10	RHE	NCR	NCR
Power Divider/Combiner	Fairview Microwave	MP0208-2	IAZ	NCR	NCR
Meter - Multimeter	Fluke	111	MMM	18-Feb-16	18-Feb-19
Generator - Signal	Agilent	E4422B	TGR	8-Aug-17	8-Aug-20
Generator - Signal	Keysight	N5182B	TFY	16-Apr-15	16-Apr-18
Analyzer - Spectrum Analyzer	Agilent	E4446A	AAT	2-Jun-17	2-Jun-18

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer.

A signal generator was set to multitone operation to cause equal interference across the entire band. The amplitude of the multitone signals (out of operation region) were set to the LBT threshold of $10 \cdot \log(\text{Bandwidth}) - 150 + \text{Antenna Gain} + 10$ dB.

The intended frequency (Fc) was set to the LBT threshold - 3 dB. A least interfered channel (LIC) was set to the LBT threshold + 3 dB. The EUT was verified to transmit on Fc. While the session was still active a second least interfered channel (LIC2) was set to the LBT threshold - 2 dB. The amplitude of Fc was then raised to the LBT threshold + 6 dB.

The spectrum analyzer was set to measure the transmit band of 402-405 MHz. Screen captures were provided to show the EUT behavior at the different LBT threshold levels. The EUT was verified to transmit on Fc which shows that the EUT does not use pre-scanned alternate channels.

USE OF PRE-SCANNED ALTERNATIVE CHANNELS (MICS)



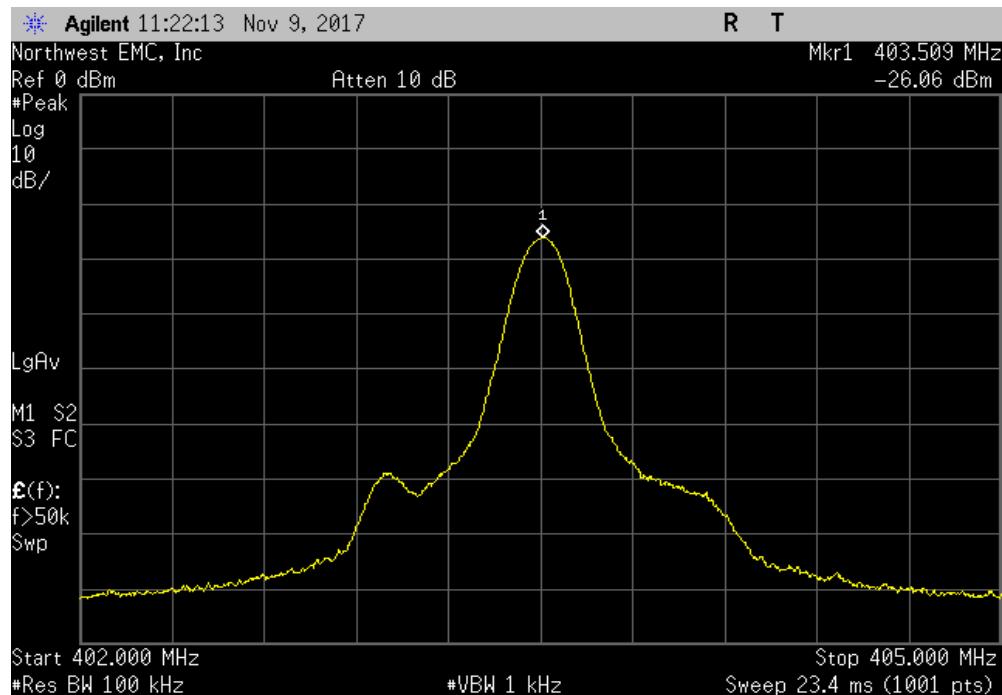
EUT:	Patient Remote (PR) - 2301		Work Order:	AXON0099	
Serial Number:	AP1BA70018		Date:	9-Nov-17	
Customer:	Axonics Modulation Technologies, Inc.		Temperature:	23 °C	
Attendees:	Flavio Ono		Humidity:	35% RH	
Project:	None		Barometric Pres.:	1008 mbar	
Tested by:	Richard Meliroth	Power:	2.8 VDC	Job Site:	NC04
TEST SPECIFICATIONS			Test Method		
EN 301 839 V2.1.1:2016			EN 301 839 V2.1.1:2016		
COMMENTS					
EUT Emission Bandwidth = 160802 Hz, Antenna Gain = 2.0dBi. A continuous communications session was established between the EUT and companion device on Fc.					
DEVIATIONS FROM TEST STANDARD					
None					
Configuration #	4	Signature		Transmit on LIC1?	Transmit on LIC2?
				Transmit on Fc?	Result
Mid Channel (Fc), 403.5 MHz					
Initial Setting, Fc at Threshold -3dB			No	No	Yes
LIC2 Available at Threshold -2dB			No	No	Yes
Final Setting, LIC2 Available, Fc at Threshold +6dB			No	No	Yes
					N/A
					N/A
					N/A

USE OF PRE-SCANNED ALTERNATIVE CHANNELS (MICS)

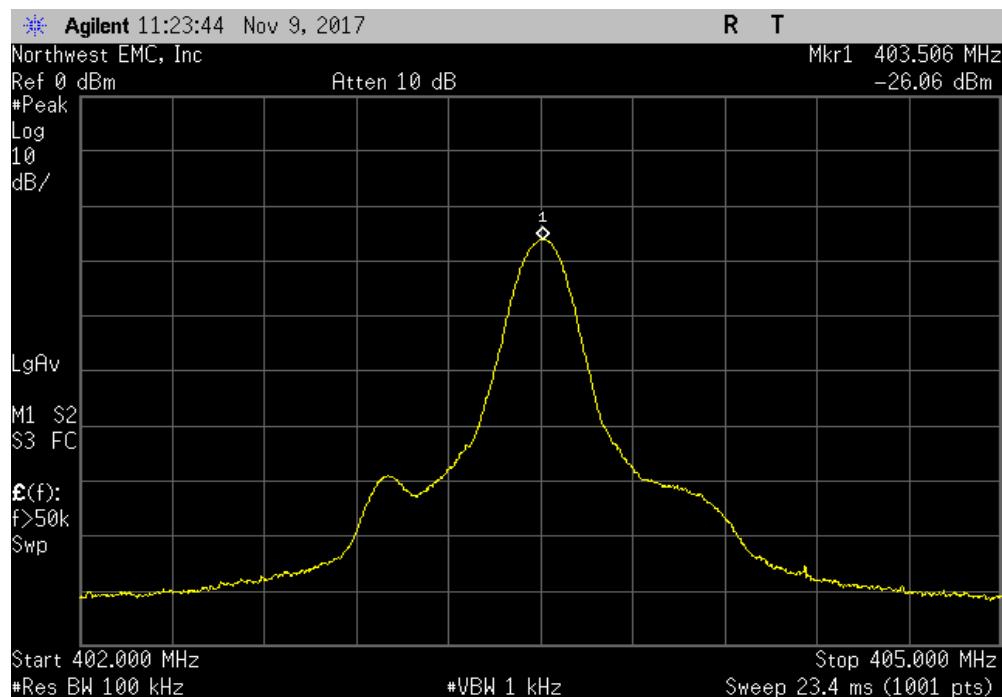


XMI 2017.09.21

Mid Channel (Fc), 403.5 MHz, Initial Setting, Fc at Threshold -3dB				Result	
	Transmit on LIC1?	Transmit on LIC2?	Transmit on Fc?	Result	
	No	No	Yes	N/A	



Mid Channel (Fc), 403.5 MHz, LIC2 Available at Threshold -2dB				Result	
	Transmit on LIC1?	Transmit on LIC2?	Transmit on Fc?	Result	
	No	No	Yes	N/A	



USE OF PRE-SCANNED ALTERNATIVE CHANNELS (MICS)



XMI 2017.09.21

Mid Channel (Fc), 403.5 MHz, Final Setting, LIC2 Available, Fc at Threshold +6dB				Result
Transmit on LIC1?	Transmit on LIC2?	Transmit on Fc?	Result	
No	No	Yes	N/A	

