



Digi International Inc

Activity Tracking Belt

FCC 15.247:2017

Report # DGII0215.1



NVLAP Lab Code: 200881-0

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CERTIFICATE OF TEST

Last Date of Test: November 7, 2017
Digi International Inc
Model: Activity Tracking Belt

Radio Equipment Testing

Standards

Specification	Method
FCC 15.247:2017	ANSI C63.10:2013

Results

Method Clause	Test Description	Applied	Results	Comments
6.2	Powerline Conducted Emissions	No	N/A	Testing contained in original test report for FCC ID: 2ADHKATWINC1500
11.6	Duty Cycle	Yes	Pass	
11.8.2	Occupied Bandwidth	Yes	Pass	
11.9.2.2.4	Output Power	Yes	Pass	
11.10.2	Power Spectral Density	Yes	Pass	
11.11	Band Edge Compliance	Yes	Pass	
11.11	Spurious Conducted Emissions	Yes	Pass	
11.12.1, 11.13.2, 6.5, 6.6	Spurious Radiated Emissions	No	N/A	Testing contained in original test report for FCC ID: 2ADHKATWINC1500

Deviations From Test Standards

None

Approved By:

Matt Nuernberg, 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		

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 – Validated by the European Commission as a Notified Body under the R&TTE Directive.

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:

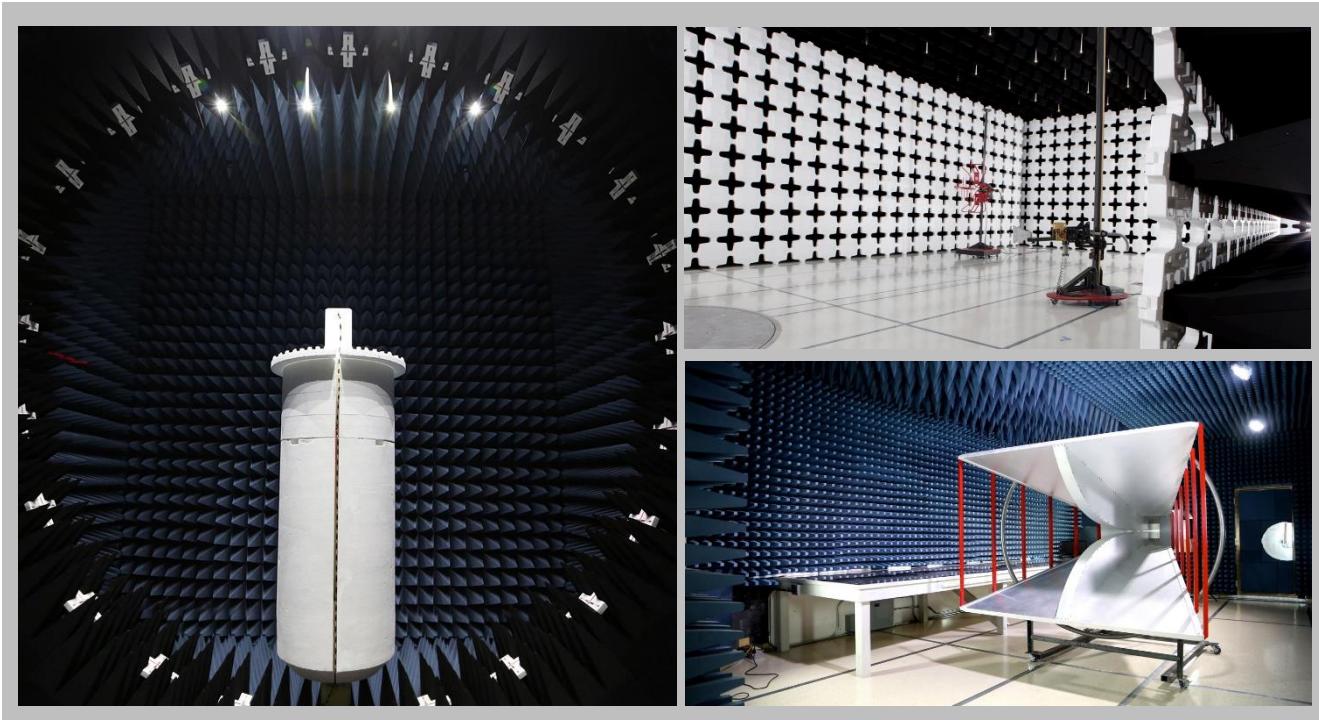
<http://portlandcustomer.element.com/ts/scope/scope.htm>

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

FACILITIES



California Labs OC01-13 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	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



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.

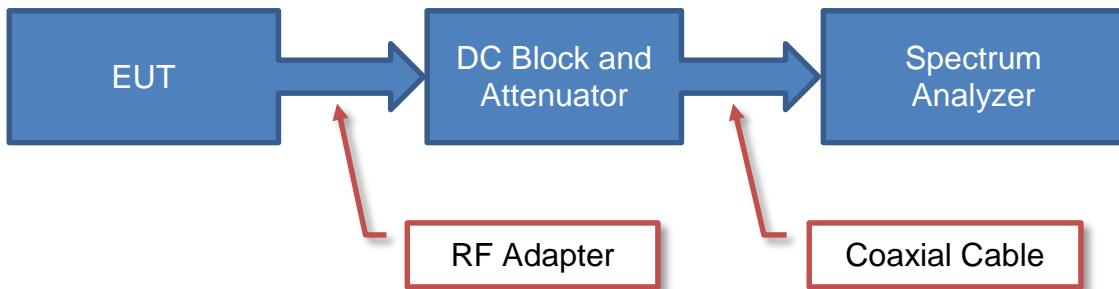
A measurement uncertainty estimation has been performed for each test per our internal quality document QM205.4.6. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty (K=2) can be found included as part of the applicable 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.

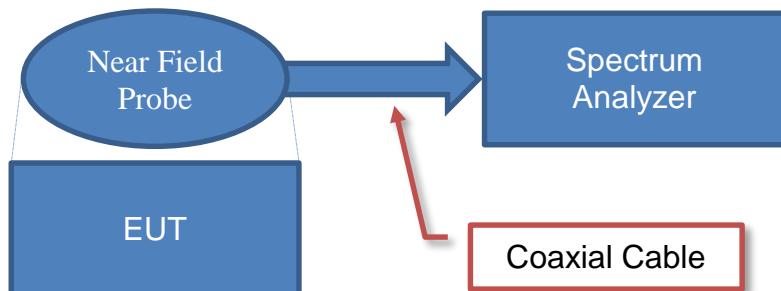
Test	+ MU	- MU
Frequency Accuracy (Hz)	0.0007%	-0.0007%
Amplitude Accuracy (dB)	1.2 dB	-1.2 dB
Conducted Power (dB)	0.3 dB	-0.3 dB
Radiated Power via Substitution (dB)	0.7 dB	-0.7 dB
Temperature (degrees C)	0.7°C	-0.7°C
Humidity (% RH)	2.5% RH	-2.5% RH
Voltage (AC)	1.0%	-1.0%
Voltage (DC)	0.7%	-0.7%
Field Strength (dB)	5.2 dB	-5.2 dB
AC Powerline Conducted Emissions (dB)	2.4 dB	-2.4 dB

Test Setup Block Diagrams

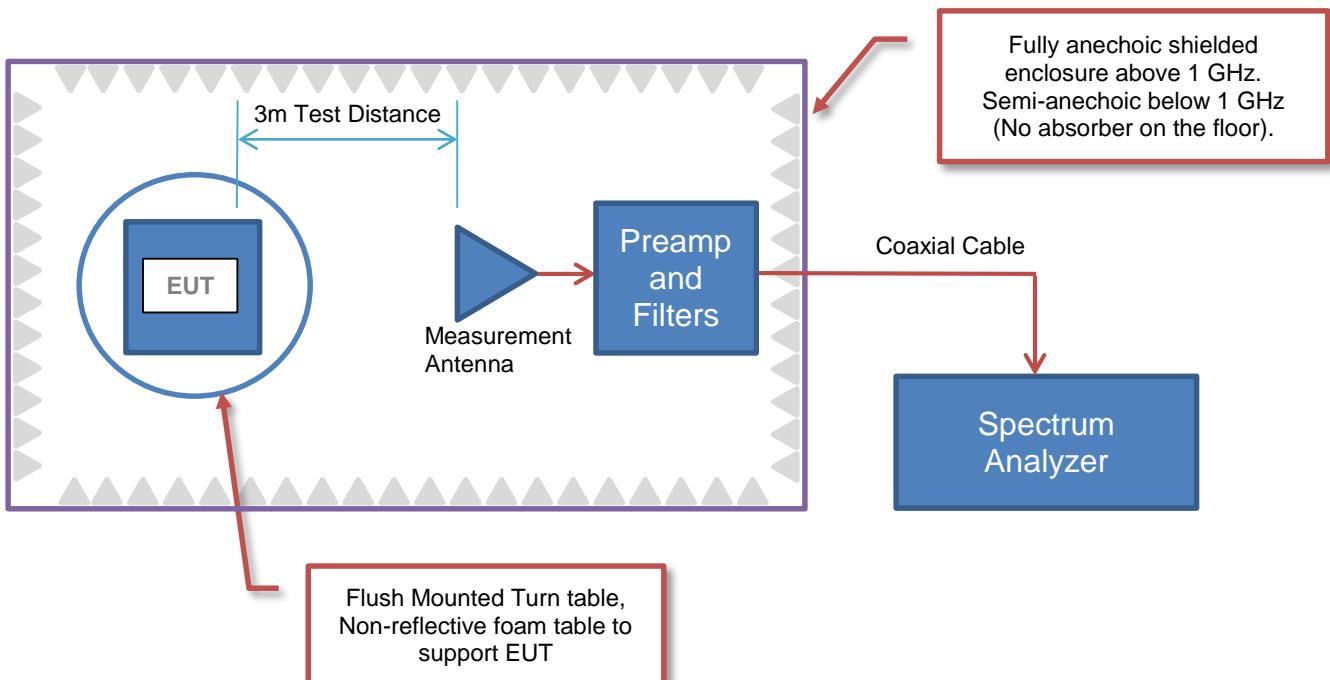
Antenna Port Conducted Measurements



Near Field Test Fixture Measurements



Spurious Radiated Emissions





PRODUCT DESCRIPTION

Client and Equipment Under Test (EUT) Information

Company Name:	Digi International Inc
Address:	11001 Bren Road E.
City, State, Zip:	Minnetonka, MN 55343
Test Requested By:	Collin LaFave
Model:	Activity Tracking Belt
First Date of Test:	November 7, 2017
Last Date of Test:	November 7, 2017
Receipt Date of Samples:	April 12, 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:

Battery powered Activity Tracking belt utilizing a low duty cycle 2.4 GHz Wi-Fi radio to send data to a network.

Testing Objective:

To demonstrate compliance of the Wi-Fi radio operating in the 2.4 GHz band to FCC 15.247 for a C2PC to FCC ID: 2AKXS-EJGKAJ3531 due to lowering the output power from the original Grant.

CONFIGURATIONS



Configuration DGII0263- 1

EUT				
Description	Manufacturer	Model/Part Number	Serial Number	
Activity Tracking Belt	Digi International Inc.	Modjoul	None	
Wifi Module	Atmel	AT-Wink 1500-MR210PB	F8F005FF1522	

Peripherals in test setup boundary				
Description	Manufacturer	Model/Part Number	Serial Number	
USB to I2C/SPI Adapter	Total Phase	Aardvark	2237-454813	
Laptop	HP	EliteBook	00669	
Power Supply (Laptop)	HP	PPP009L-E	WBGST0A3U0QU31	

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
USB Cable (USB to I2C/SPI Adapter)	No	1.8m	Yes	Laptop	USB to I2C/SPI Adapter
Ribbon Cable	No	0.25m	No	USB to I2C/SPI Adapter	Serial Leads
USB Cable (Wifi Module)	No	0.5m	No	Laptop	Wifi Module
Serial Leads	No	0.3m	No	Ribbon Cable	Wifi Module
AC Mains Cable (Laptop)	No	1.0m	No	AC Mains	Power Supply (Laptop)
DC Cable (Laptop)	No	1.8m	Yes	Laptop	Power Supply (Laptop)

MODIFICATIONS



Equipment Modifications

Item	Date	Test	Modification	Note	Disposition of EUT
1	11/7/2017	Duty Cycle	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	11/7/2017	Occupied 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.
3	11/7/2017	Output Power	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	11/7/2017	Power Spectral Density	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	11/7/2017	Band Edge Compliance	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	11/7/2017	Spurious Conducted Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was completed.

DUTY CYCLE



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
Generator - Signal	Agilent	N5183A	TIK	29-Sep-17	29-Sep-20
Cable	ESM Cable Corp.	TTBJ141 KMKM-72	MNU	11-Sep-17	11-Sep-18
Attenuator	S.M. Electronics	SA26B-20	RFW	14-Feb-17	14-Feb-18
Block - DC	Fairview Microwave	SD3379	AMI	12-Sep-17	12-Sep-18
Analyzer - Spectrum Analyzer	Agilent	E4440A	AAX	16-Mar-17	16-Mar-18

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. The Duty Cycle (x) of the single channel operation of the radio as controlled by the provided test software was measured for each of the EUT operating modes.

There is no compliance requirement to be met by this test, so therefore no Pass / Fail criteria.

The measurements were made using a zero span on the spectrum analyzer to see the pulses in the time domain. The transmit power was set to its default maximum.

The duty cycle was calculated by dividing the transmission pulse duration (T) by the total period of a single on and total off time.

If the transmit duty cycle < 98 percent, burst gating may have been used during some of the other tests in this report to only take the measurement during the burst duration.

DUTY CYCLE



TbTx 2017.10.04

XMI 2017.09.21

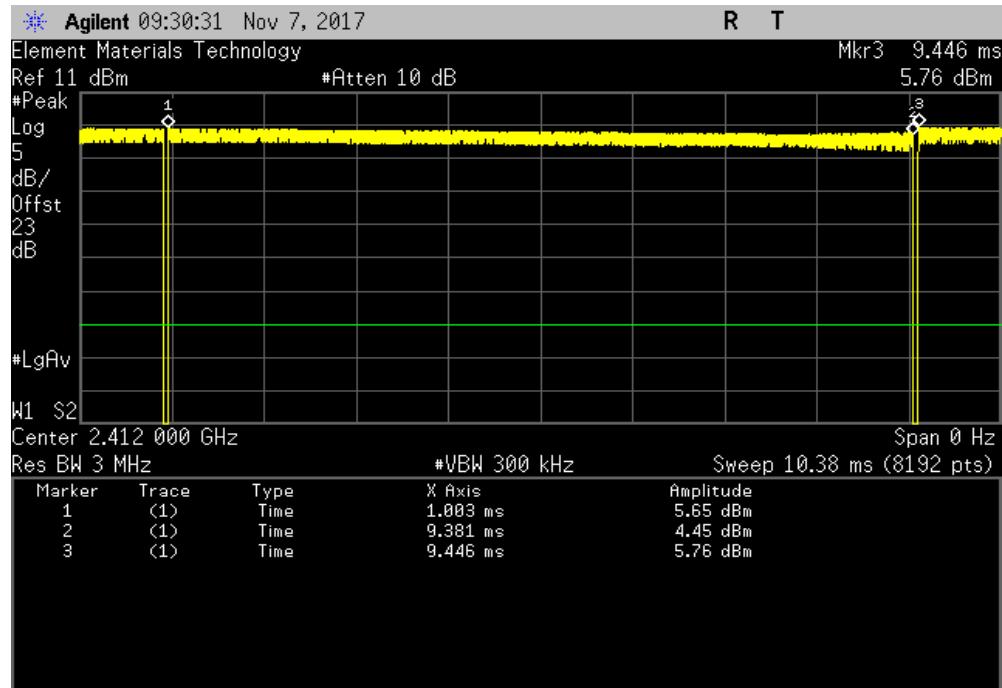
EUT:	Activity Tracking Belt		Work Order:	DGII0263				
Serial Number:	F8F005FF1522			Date:	7-Nov-17			
Customer:	Digi International Inc			Temperature:	21.9 °C			
Attendees:	Collin LaFave			Humidity:	22.7% RH			
Project:	None			Barometric Pres.:	1033 mbar			
Tested by:	Dustin Sparks	Power:	5VDC	Job Site:	MN08			
TEST SPECIFICATIONS	Test Method							
FCC 15.247:2017	ANSI C63.10:2013							
COMMENTS	EUT powered by USB connection							
DEVIATIONS FROM TEST STANDARD	None							
Configuration #	1	Signature	<i>Dustin Sparks</i>					
			Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
2400 MHz - 2483.5 MHz Band								
802.11(b) 1 Mbps								
Low Channel 1, 2412 MHz			8.379 ms	8.443 ms	1	99.2	N/A	N/A
Low Channel 1, 2412 MHz			N/A	N/A	5	N/A	N/A	N/A
Mid Channel 6, 2437 MHz			8.387 ms	8.435 ms	1	99.4	N/A	N/A
Mid Channel 6, 2437 MHz			N/A	N/A	5	N/A	N/A	N/A
High Channel 11, 2462 MHz			8.38 ms	8.442 ms	1	99.3	N/A	N/A
High Channel 11, 2462 MHz			N/A	N/A	5	N/A	N/A	N/A
802.11(b) 11 Mbps								
Low Channel 1, 2412 MHz			843.6 us	873.9 us	1	96.5	N/A	N/A
Low Channel 1, 2412 MHz			N/A	N/A	5	N/A	N/A	N/A
Mid Channel 6, 2437 MHz			843.6 us	873.9 us	1	96.5	N/A	N/A
Mid Channel 6, 2437 MHz			N/A	N/A	5	N/A	N/A	N/A
High Channel 11, 2462 MHz			843.6 us	900.8 us	1	93.7	N/A	N/A
High Channel 11, 2462 MHz			N/A	N/A	5	N/A	N/A	N/A
802.11(g) 6 Mbps								
Low Channel 1, 2412 MHz			1.393 ms	1.439 ms	1	96.8	N/A	N/A
Low Channel 1, 2412 MHz			N/A	N/A	5	N/A	N/A	N/A
Mid Channel 6, 2437 MHz			1.393 ms	1.448 ms	1	96.2	N/A	N/A
Mid Channel 6, 2437 MHz			N/A	N/A	5	N/A	N/A	N/A
High Channel 11, 2462 MHz			1.393 ms	1.457 ms	1	95.6	N/A	N/A
High Channel 11, 2462 MHz			N/A	N/A	5	N/A	N/A	N/A
802.11(g) 36 Mbps								
Low Channel 1, 2412 MHz			253.2 us	316.8 us	1	79.9	N/A	N/A
Low Channel 1, 2412 MHz			N/A	N/A	5	N/A	N/A	N/A
Mid Channel 6, 2437 MHz			253.2 us	307.8 us	1	82.3	N/A	N/A
Mid Channel 6, 2437 MHz			N/A	N/A	5	N/A	N/A	N/A
High Channel 11, 2462 MHz			253.2 us	316.8 us	1	79.9	N/A	N/A
High Channel 11, 2462 MHz			N/A	N/A	5	N/A	N/A	N/A
802.11(g) 54 Mbps								
Low Channel 1, 2412 MHz			177.3 us	213.8 us	1	82.9	N/A	N/A
Low Channel 1, 2412 MHz			N/A	N/A	5	N/A	N/A	N/A
Mid Channel 6, 2437 MHz			177.2 us	213.8 us	1	82.9	N/A	N/A
Mid Channel 6, 2437 MHz			N/A	N/A	5	N/A	N/A	N/A
High Channel 11, 2462 MHz			177.2 us	213.8 us	1	82.9	N/A	N/A
High Channel 11, 2462 MHz			N/A	N/A	5	N/A	N/A	N/A
802.11(n) MCS0								
Low Channel 1, 2412 MHz			1.301 ms	1.365 ms	1	95.4	N/A	N/A
Low Channel 1, 2412 MHz			N/A	N/A	5	N/A	N/A	N/A
Mid Channel 6, 2437 MHz			1.301 ms	1.356 ms	1	96	N/A	N/A
Mid Channel 6, 2437 MHz			N/A	N/A	5	N/A	N/A	N/A
High Channel 11, 2462 MHz			1.301 ms	1.338 ms	1	97.3	N/A	N/A
High Channel 11, 2462 MHz			N/A	N/A	5	N/A	N/A	N/A
802.11(n) MCS7								
Low Channel 1, 2412 MHz			165.1 us	219.8 us	1	75.1	N/A	N/A
Low Channel 1, 2412 MHz			N/A	N/A	5	N/A	N/A	N/A
Mid Channel 6, 2437 MHz			165.2 us	210.8 us	1	78.4	N/A	N/A
Mid Channel 6, 2437 MHz			N/A	N/A	5	N/A	N/A	N/A
High Channel 11, 2462 MHz			165.1 us	201.9 us	1	81.8	N/A	N/A
High Channel 11, 2462 MHz			N/A	N/A	5	N/A	N/A	N/A

DUTY CYCLE

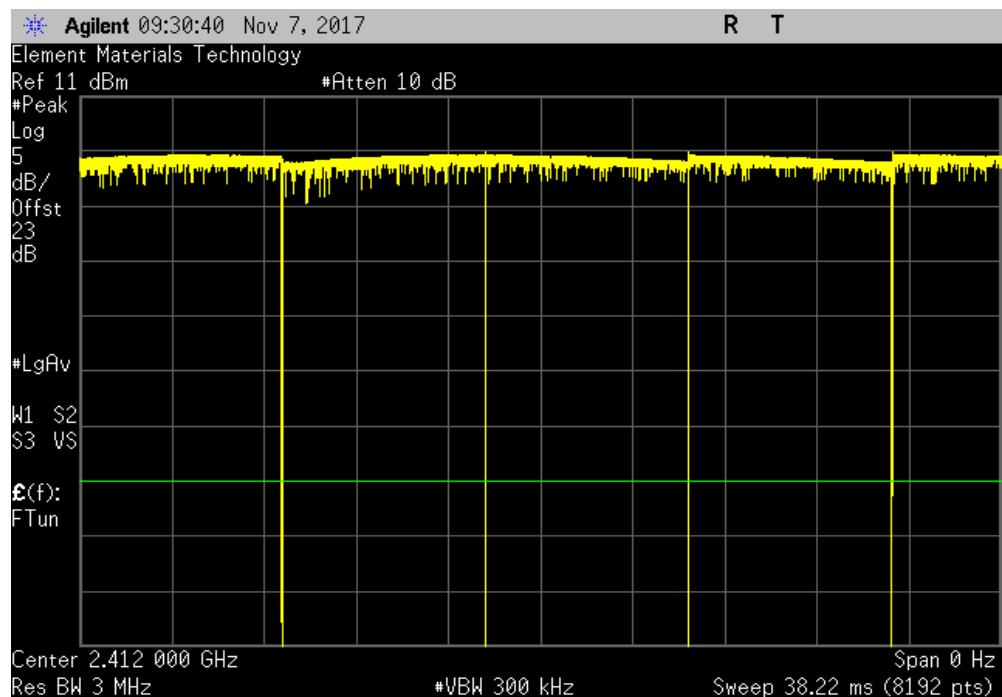


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
8.379 ms	8.443 ms	1	99.2	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
N/A	N/A	5	N/A	N/A	N/A

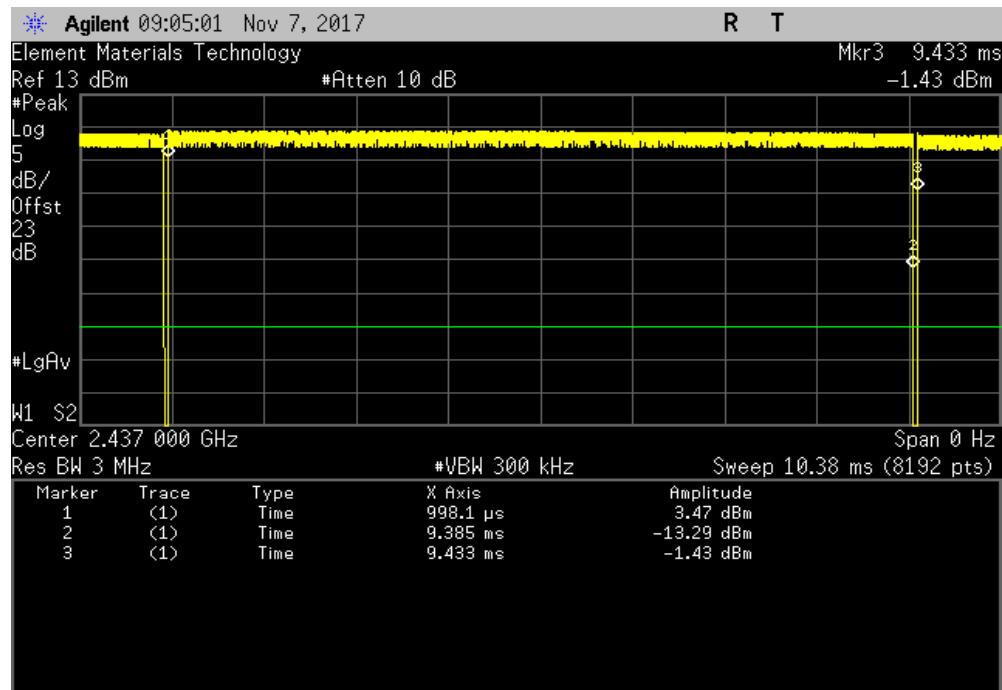


DUTY CYCLE

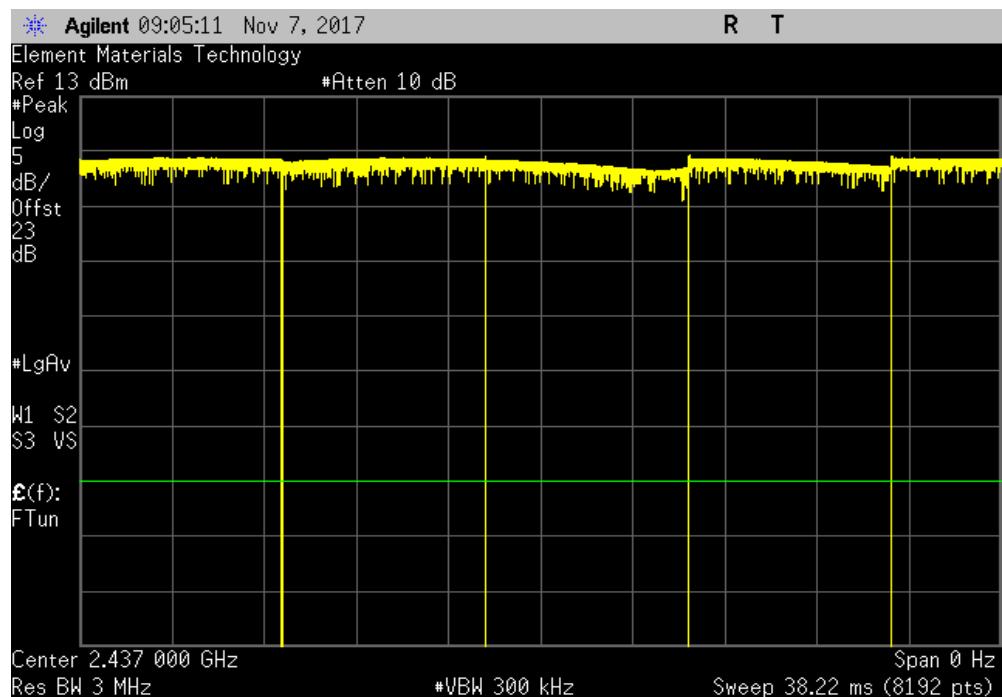


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results	
8.387 ms	8.435 ms	1	99.4	N/A	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz						
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results	
N/A	N/A	5	N/A	N/A	N/A	N/A

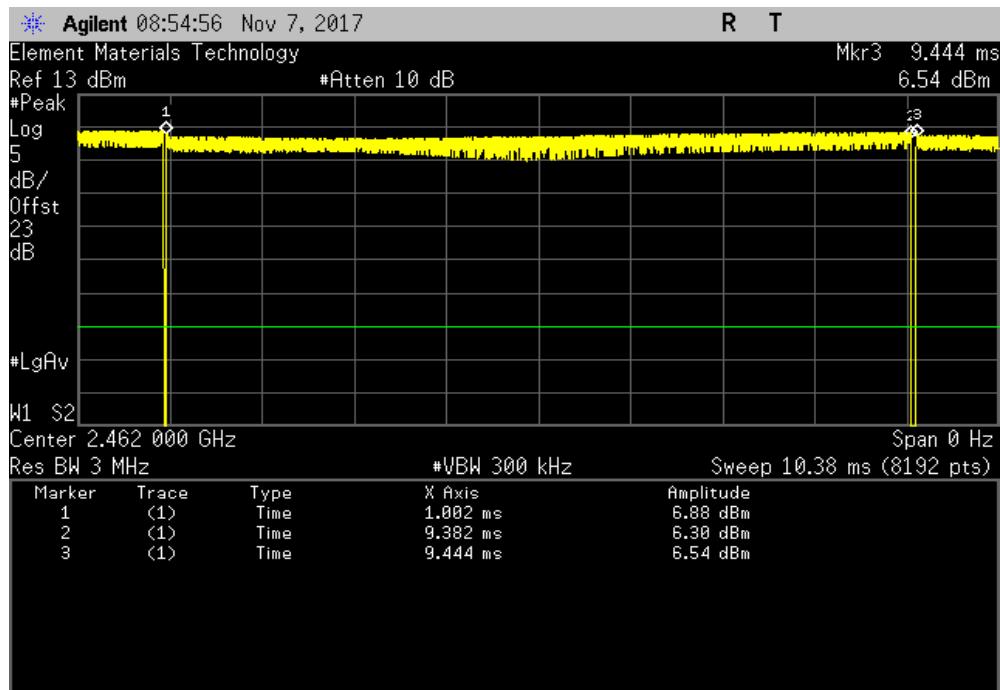


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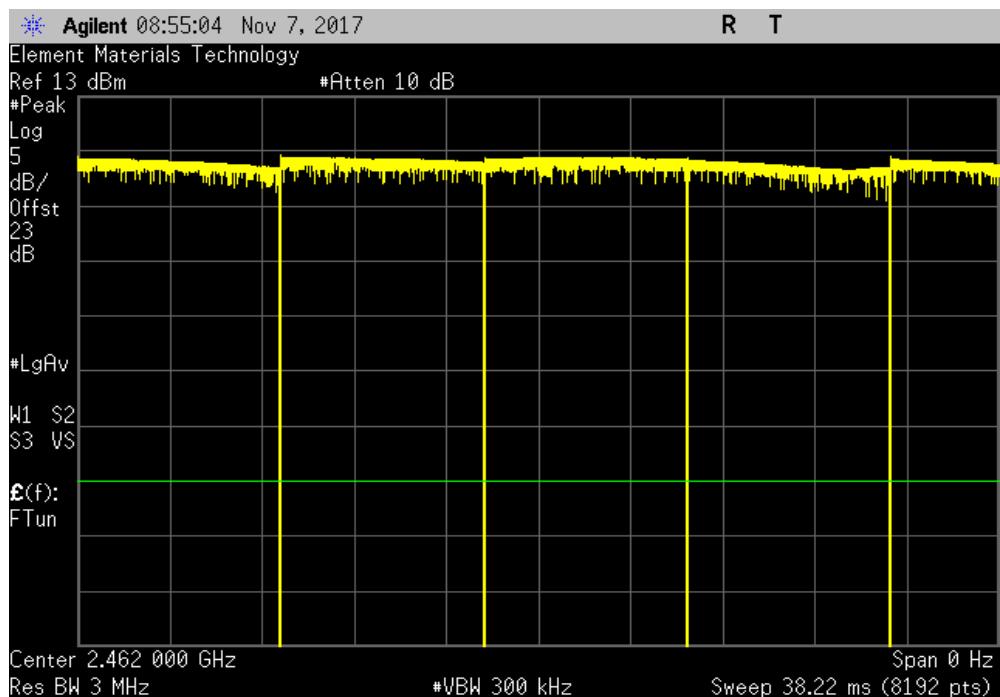


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
8.38 ms	8.442 ms	1	99.3	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
N/A	N/A	5	N/A	N/A	N/A

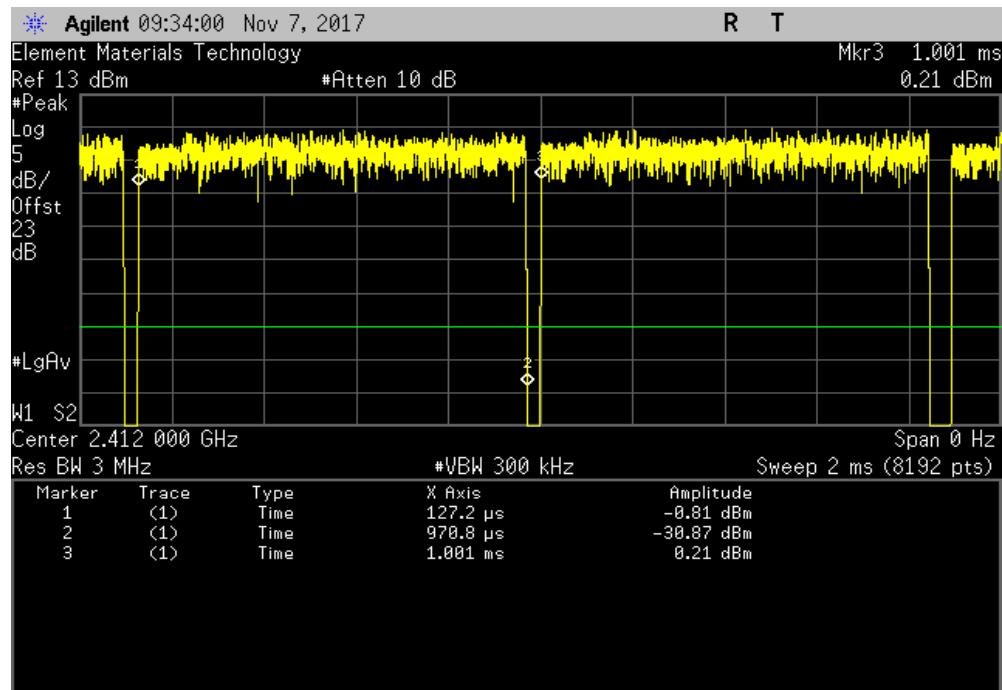


DUTY CYCLE

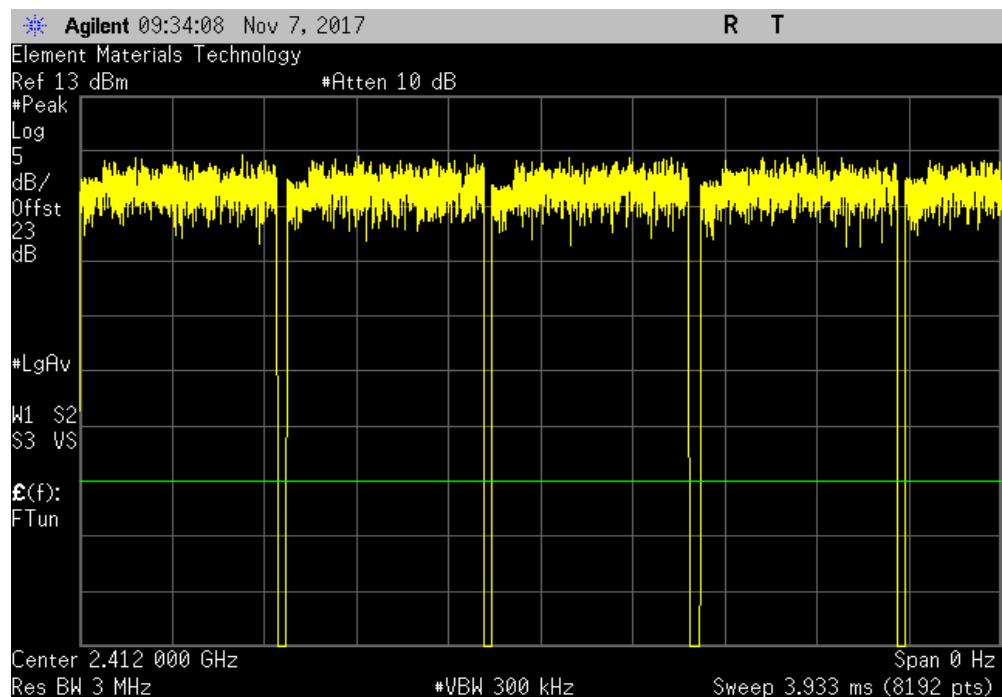


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
843.6 us	873.9 us	1	96.5	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
N/A	N/A	5	N/A	N/A	N/A

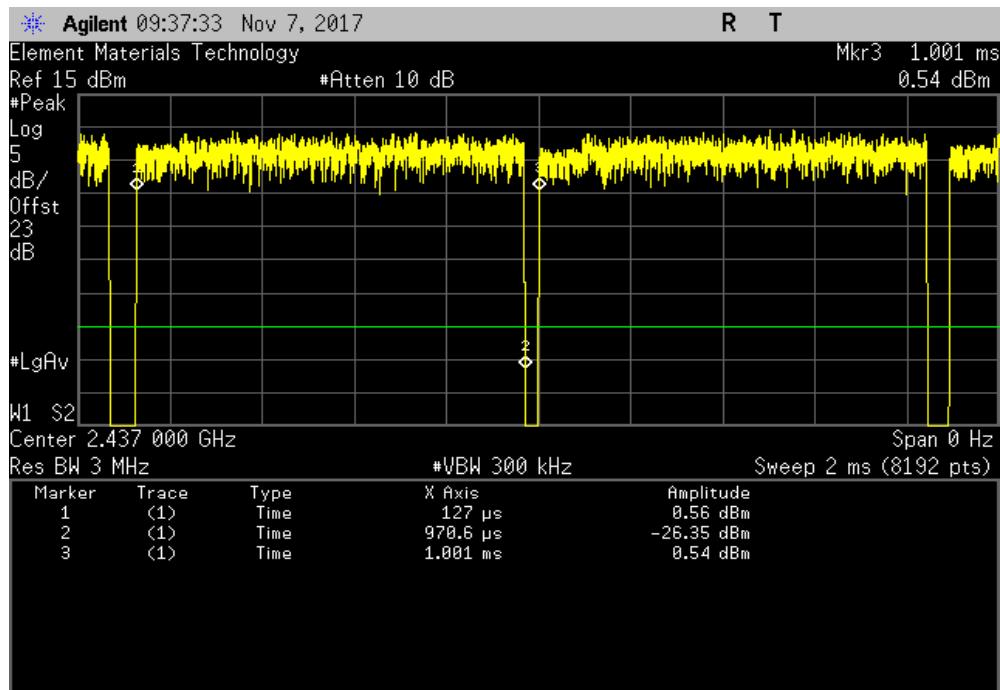


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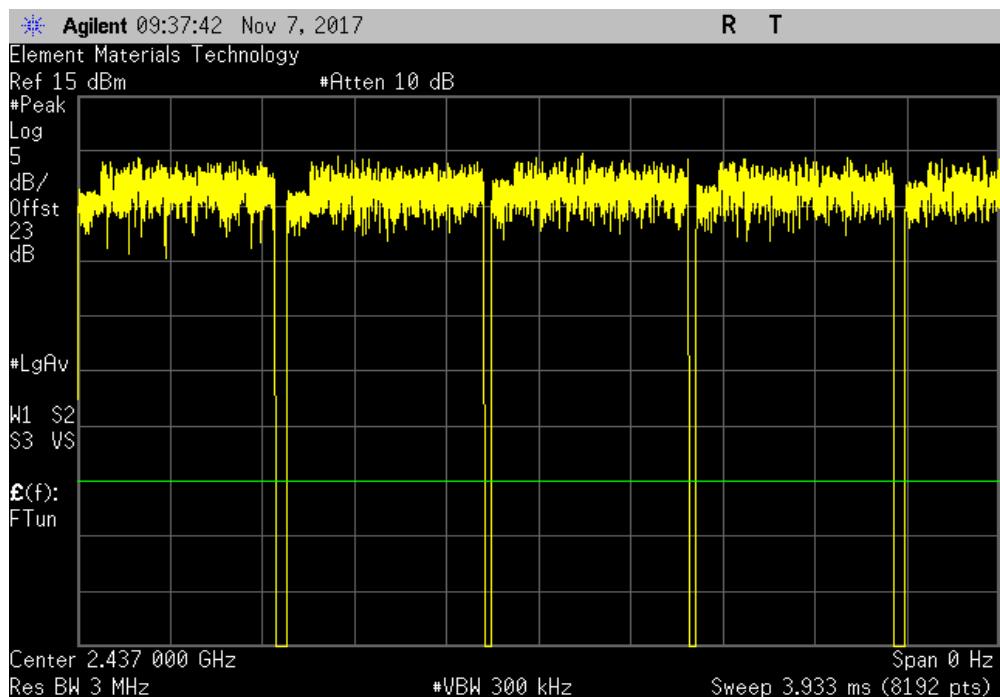


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
843.6 us	873.9 us	1	96.5	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
N/A	N/A	5	N/A	N/A	N/A

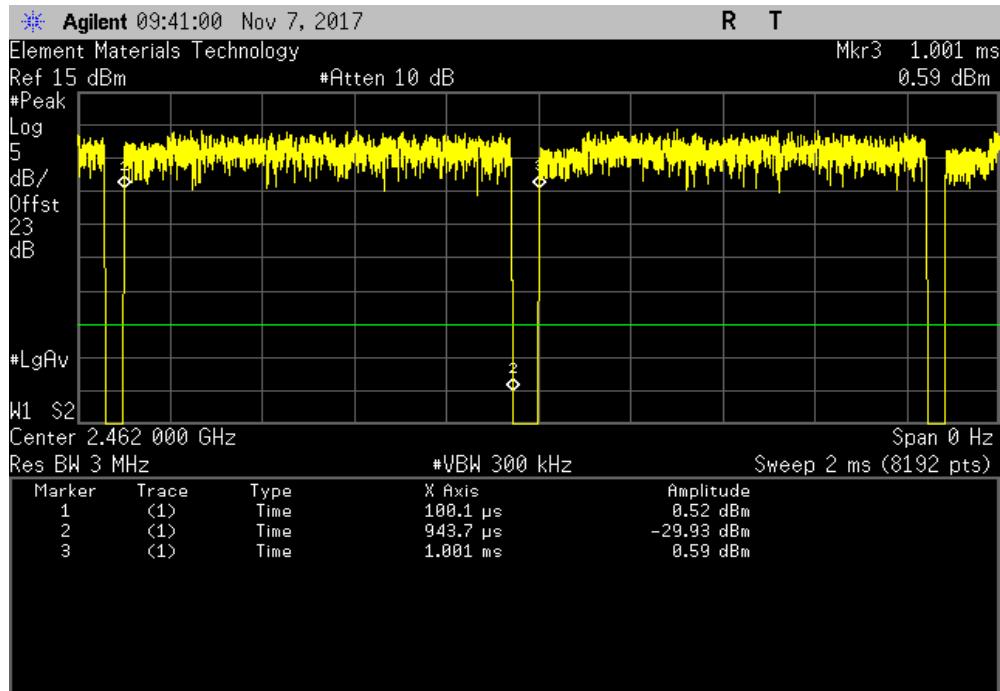


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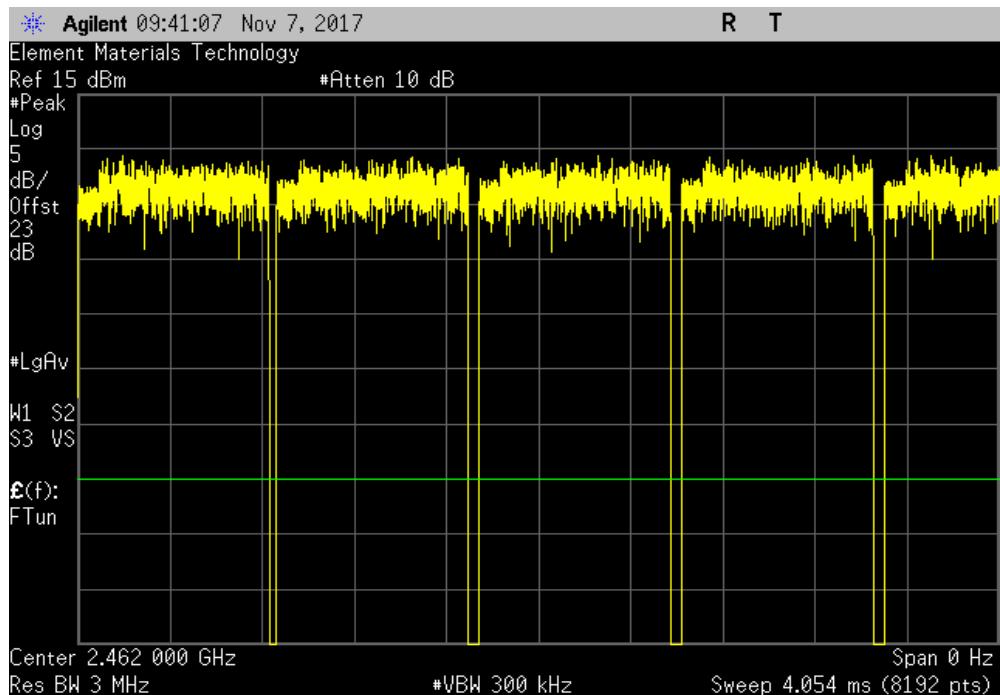


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
843.6 us	900.8 us	1	93.7	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
N/A	N/A	5	N/A	N/A	N/A

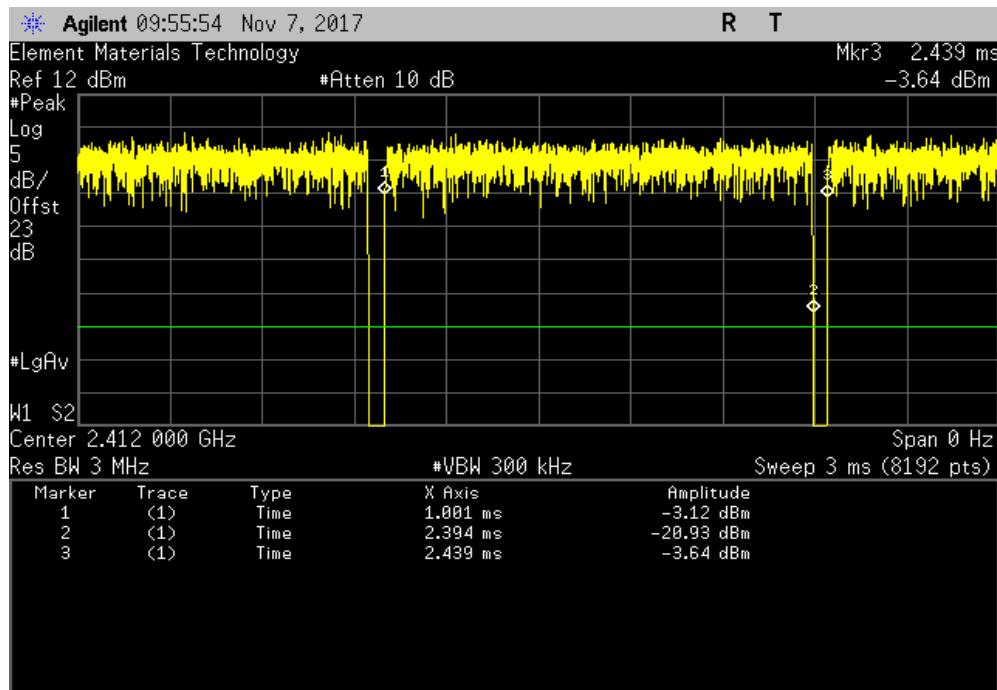


DUTY CYCLE

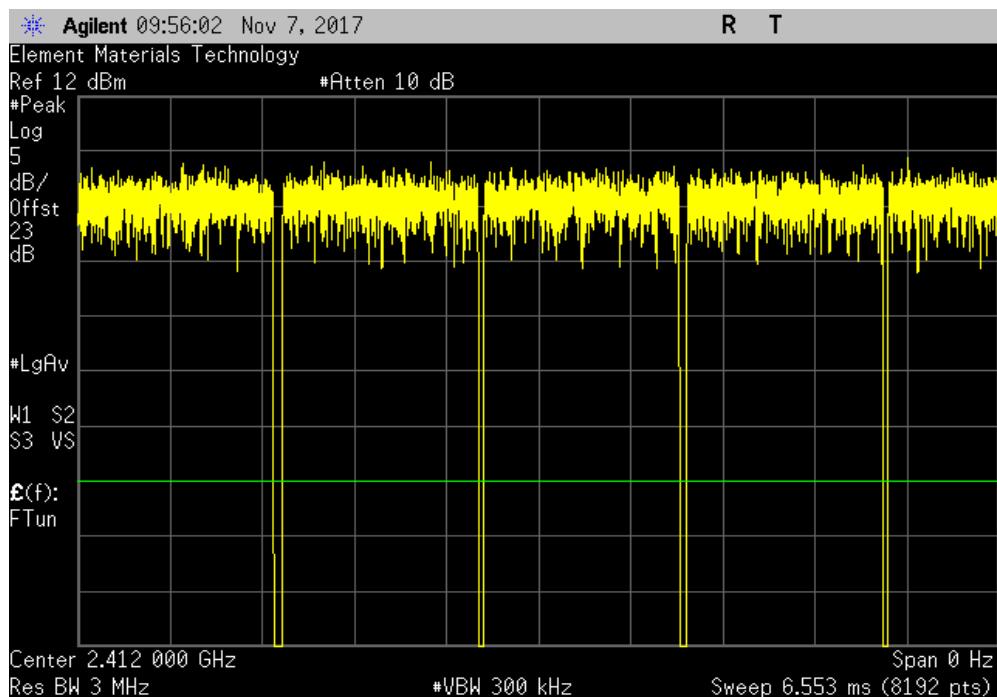


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
1.393 ms	1.439 ms	1	96.8	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
N/A	N/A	5	N/A	N/A	N/A

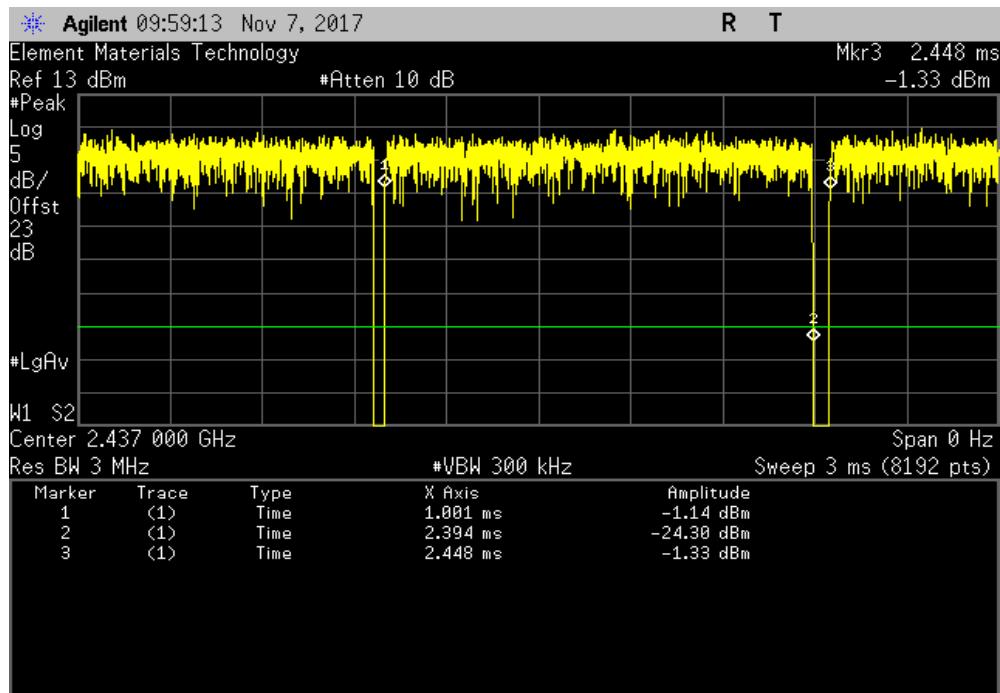


DUTY CYCLE

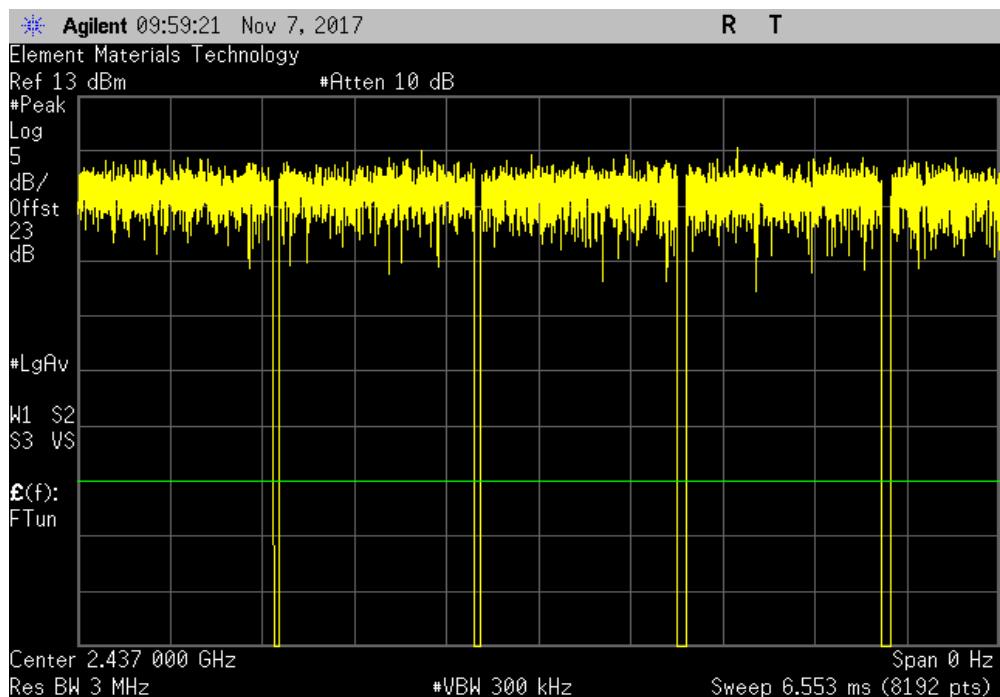


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
1.393 ms	1.448 ms	1	96.2	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
N/A	N/A	5	N/A	N/A	N/A

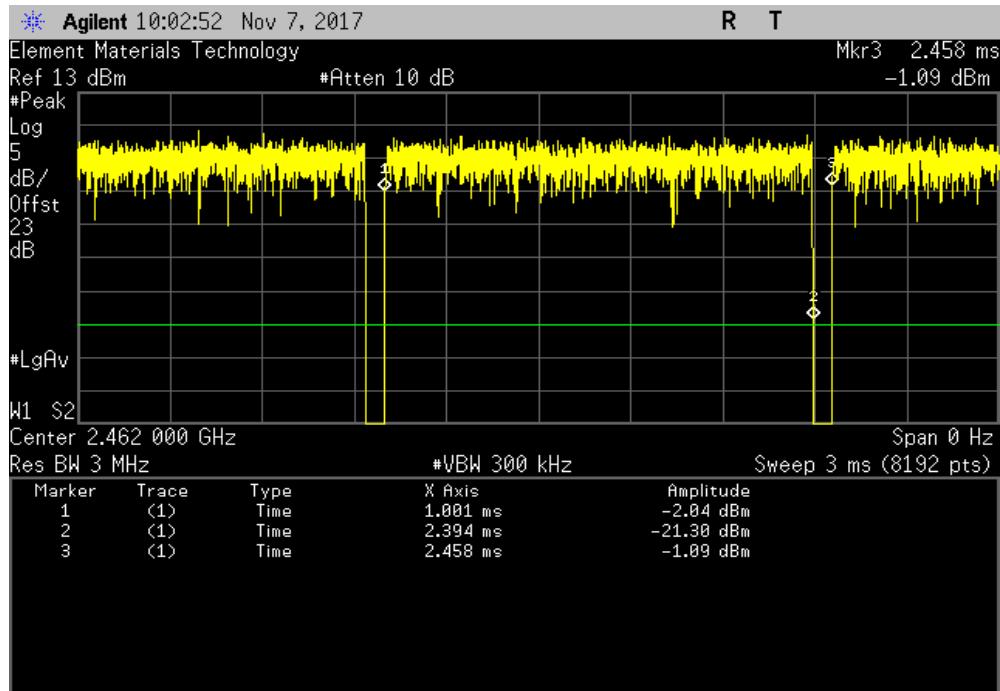


DUTY CYCLE

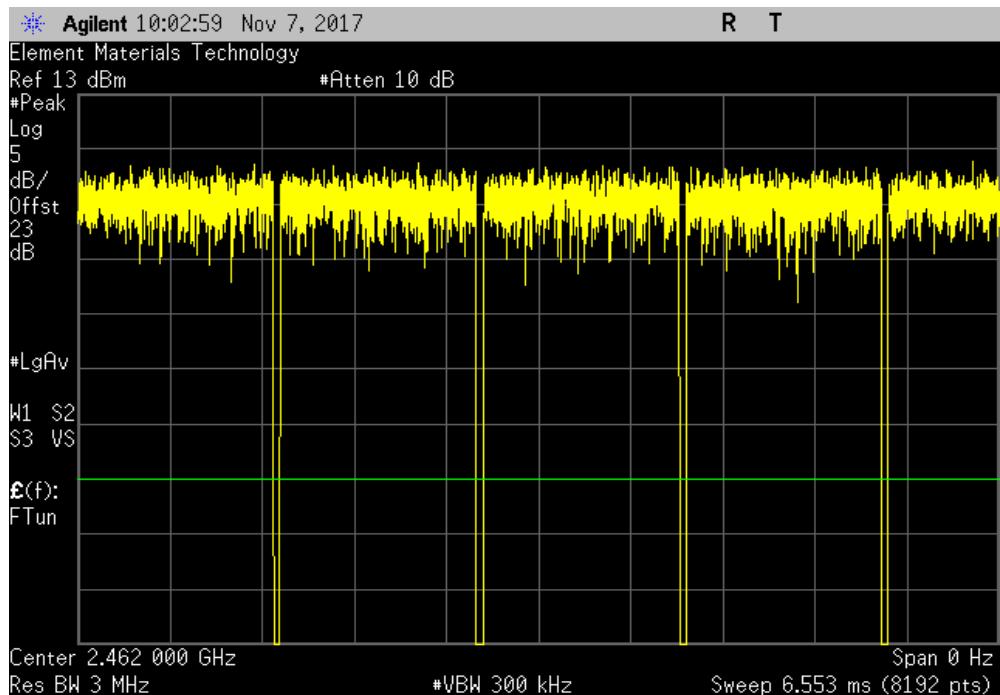


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
1.393 ms	1.457 ms	1	95.6	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
N/A	N/A	5	N/A	N/A	N/A

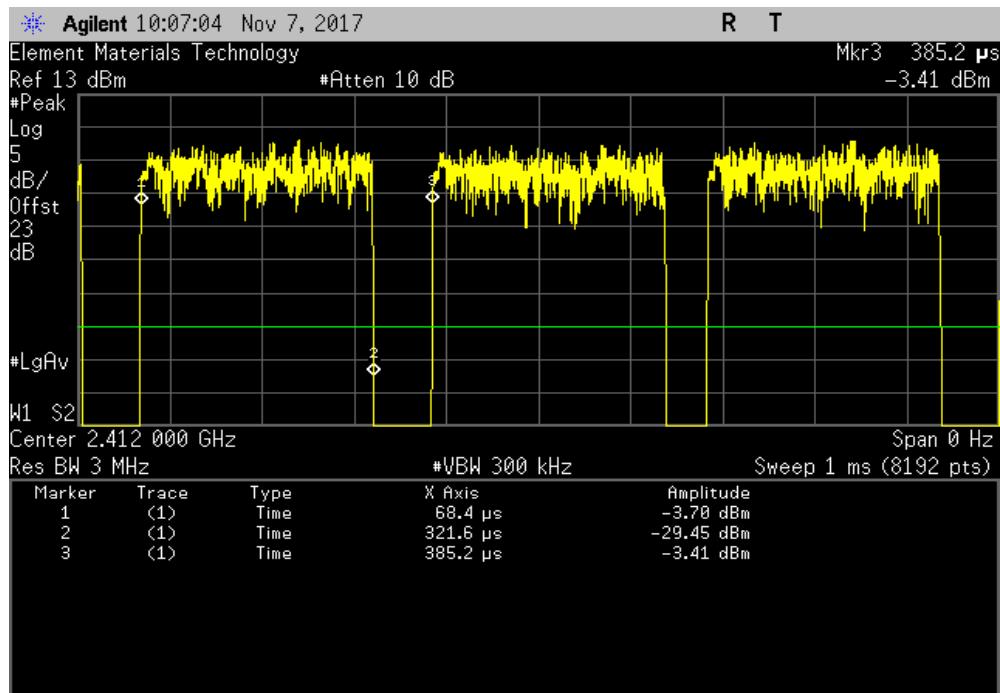


DUTY CYCLE

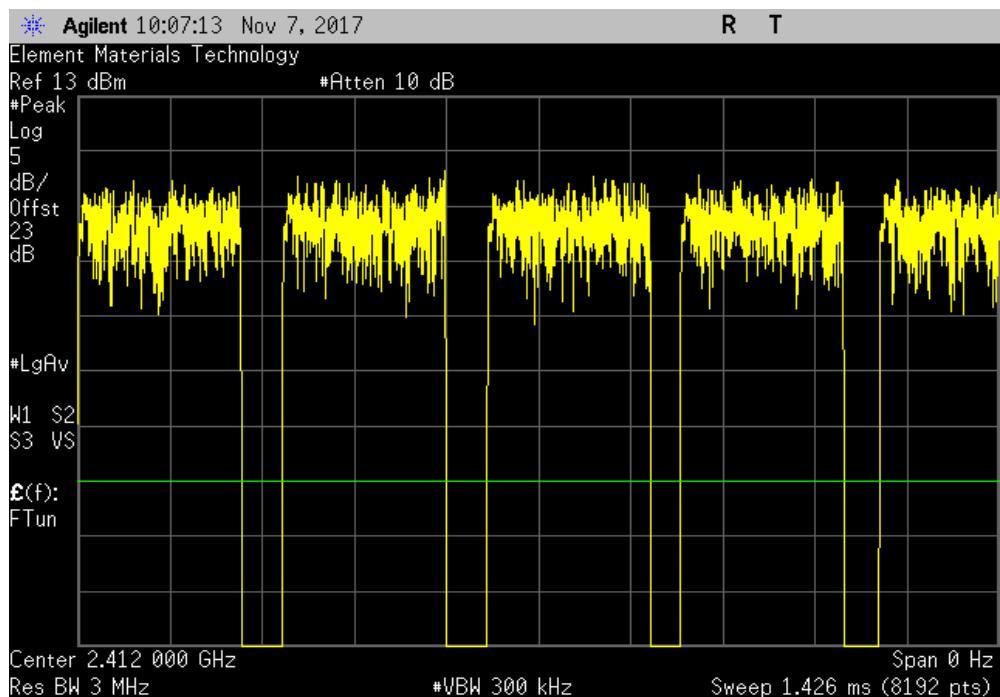


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
253.2 us	316.8 us	1	79.9	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
N/A	N/A	5	N/A	N/A	N/A

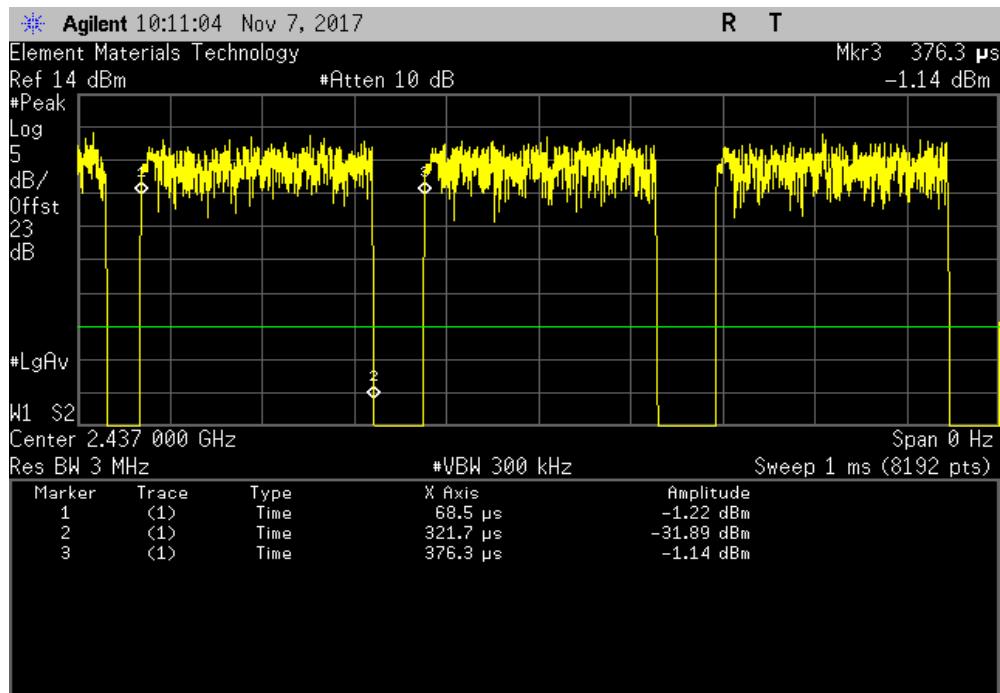


DUTY CYCLE



TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Mid Channel 6, 2437 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
253.2 us	307.8 us	1	82.3	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Mid Channel 6, 2437 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
N/A	N/A	5	N/A	N/A	N/A

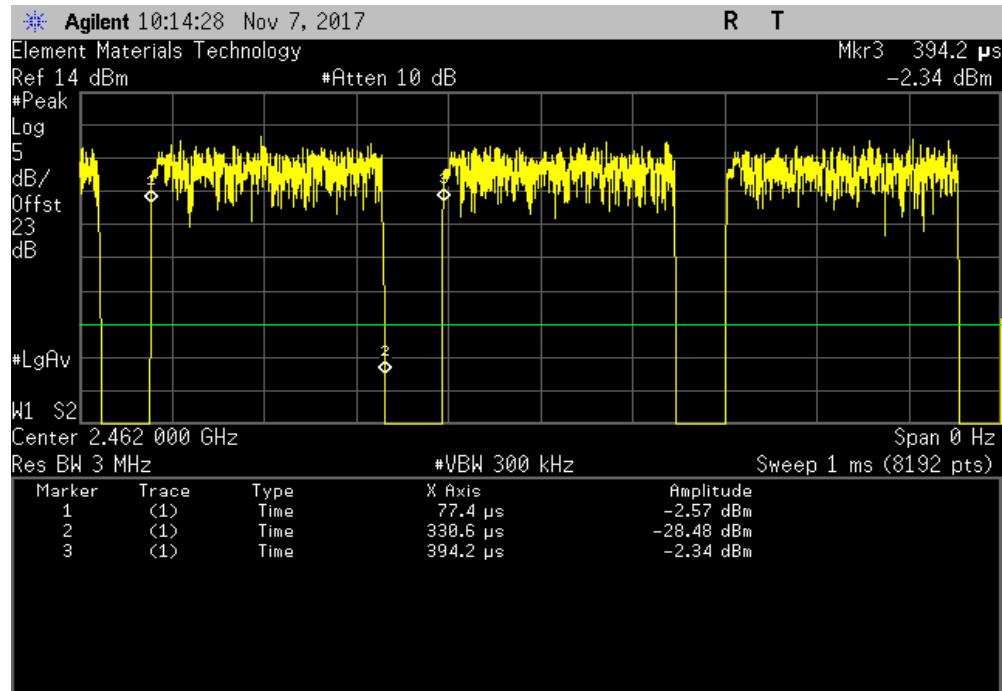


DUTY CYCLE

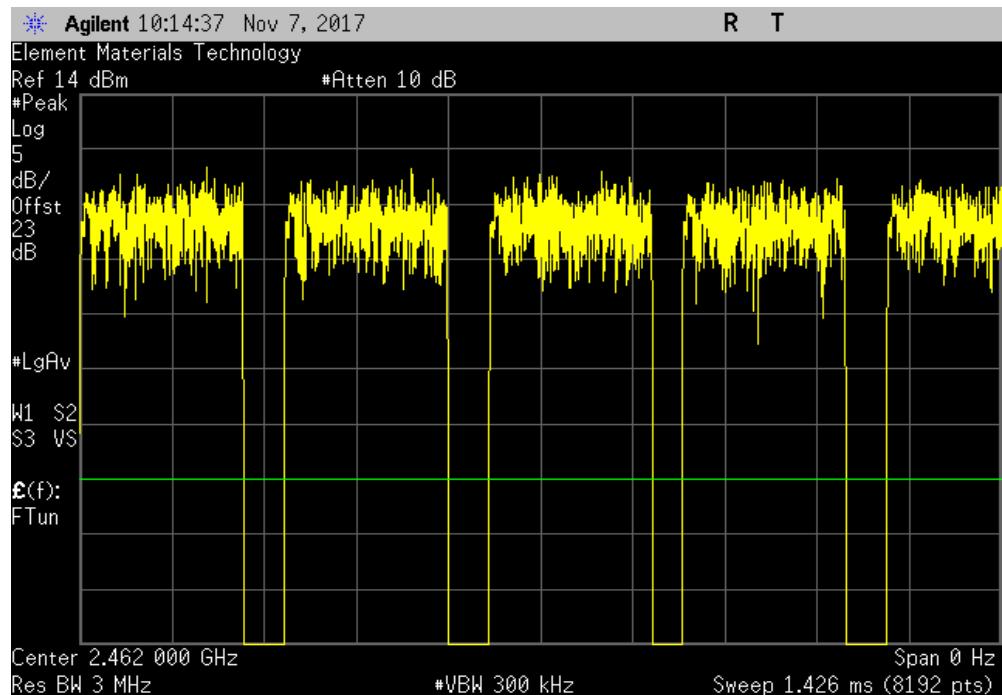


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
253.2 us	316.8 us	1	79.9	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
N/A	N/A	5	N/A	N/A	N/A

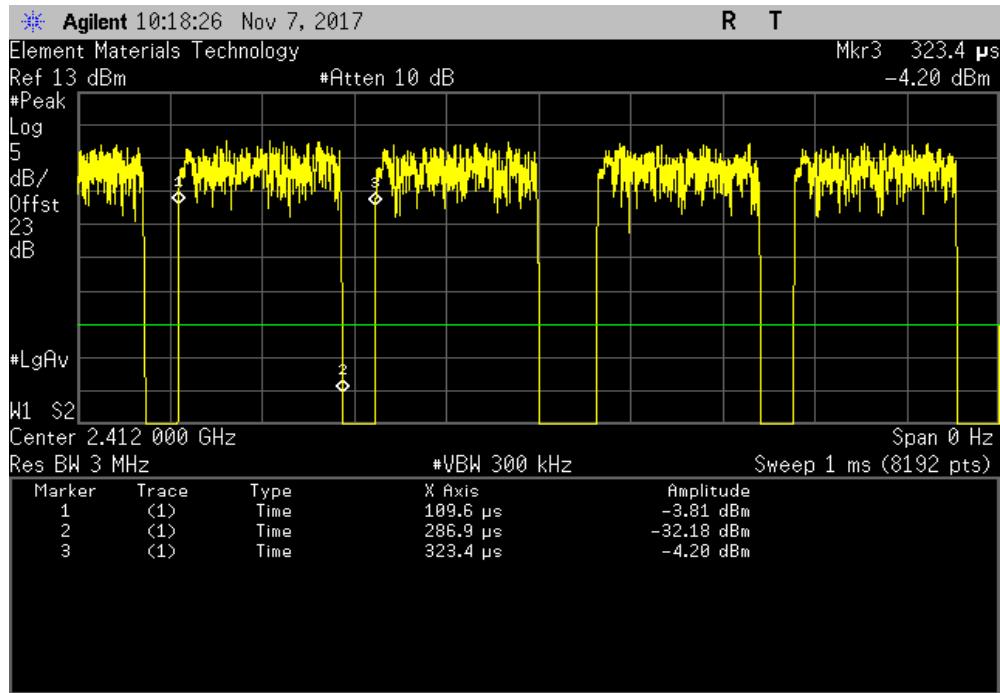


DUTY CYCLE

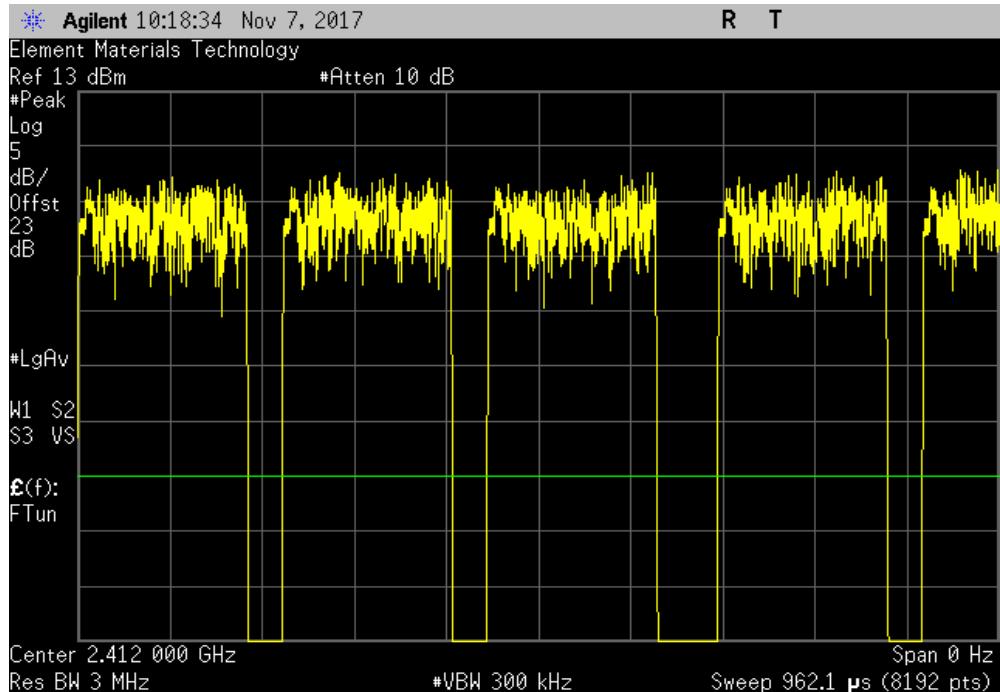


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
177.3 us	213.8 us	1	82.9	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
N/A	N/A	5	N/A	N/A	N/A

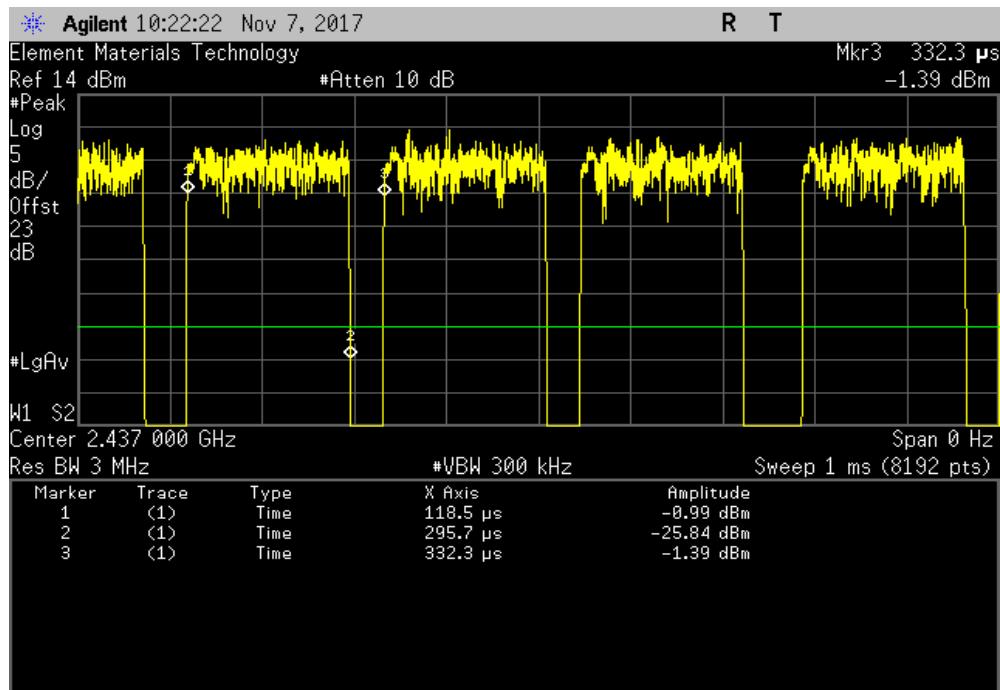


DUTY CYCLE



TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Mid Channel 6, 2437 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
177.2 us	213.8 us	1	82.9	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Mid Channel 6, 2437 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
N/A	N/A	5	N/A	N/A	N/A

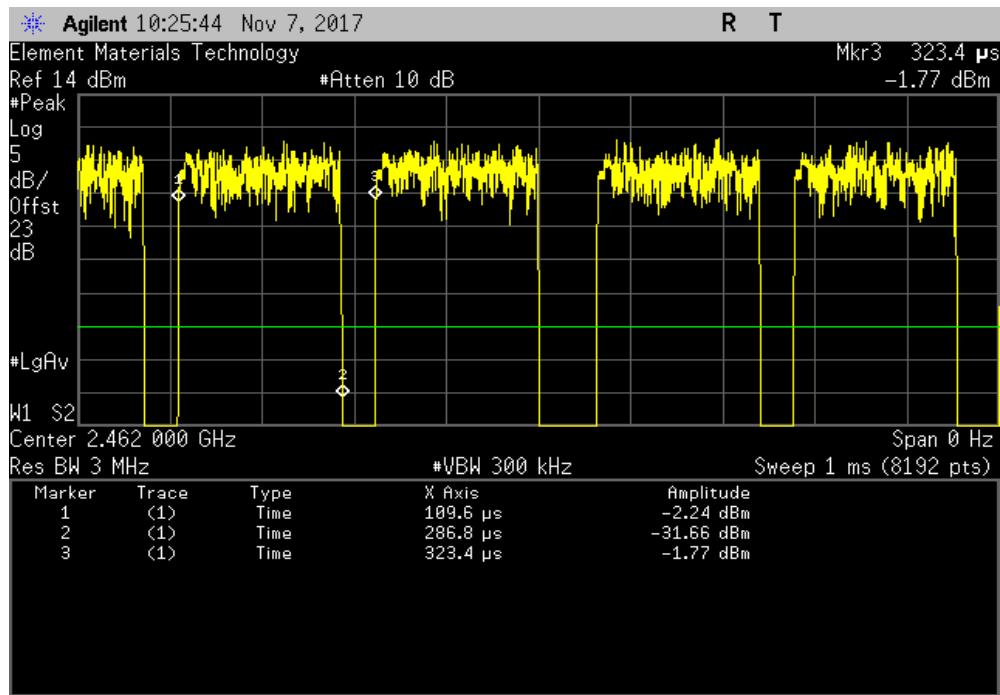


DUTY CYCLE

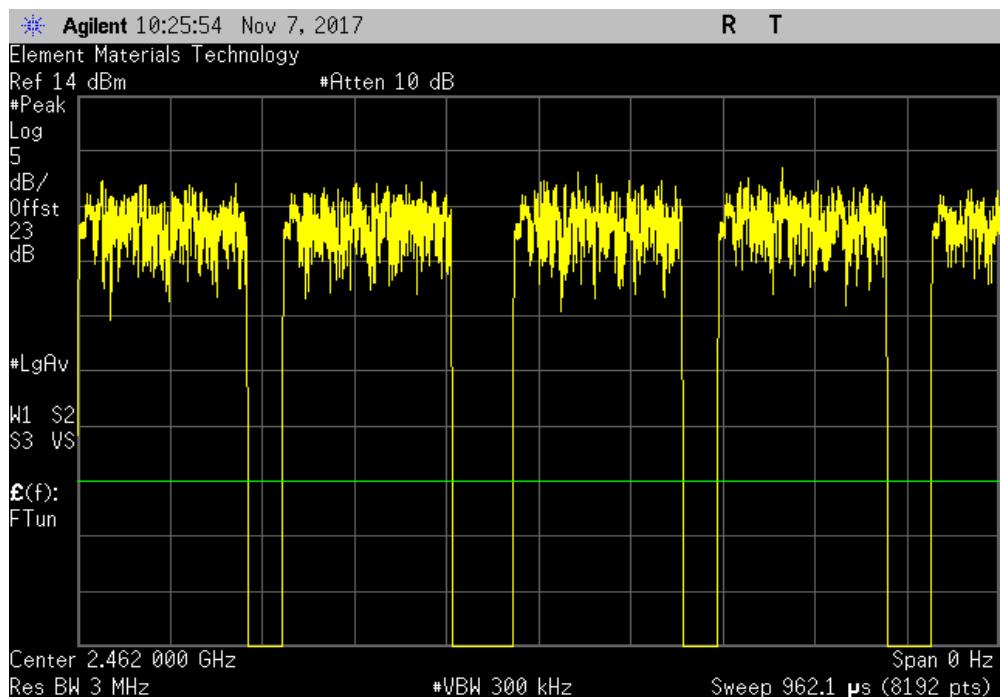


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
177.2 us	213.8 us	1	82.9	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
N/A	N/A	5	N/A	N/A	N/A

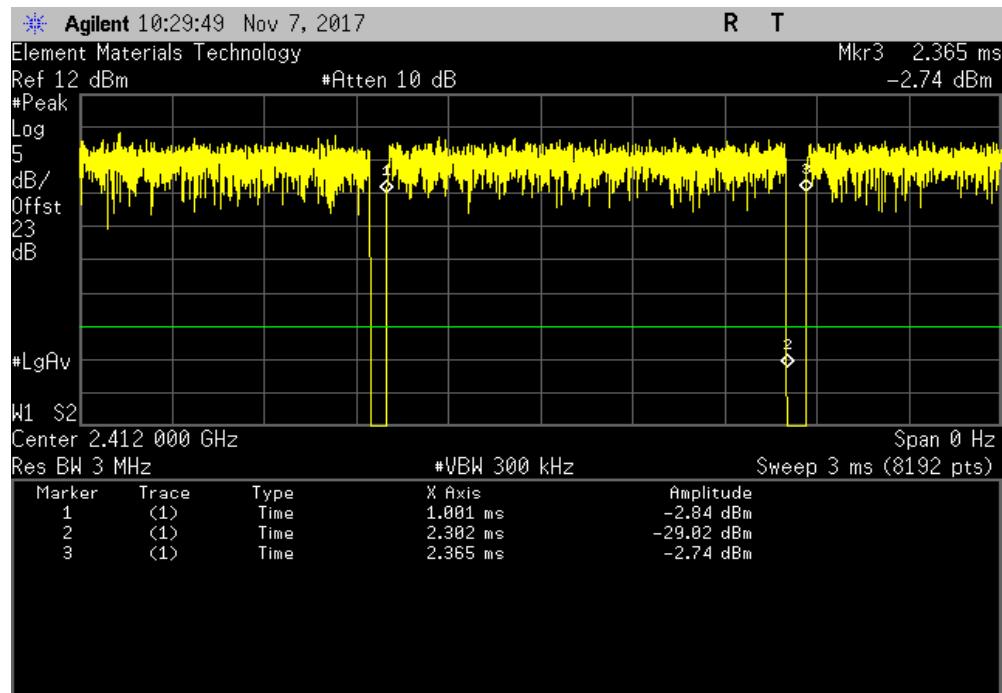


DUTY CYCLE

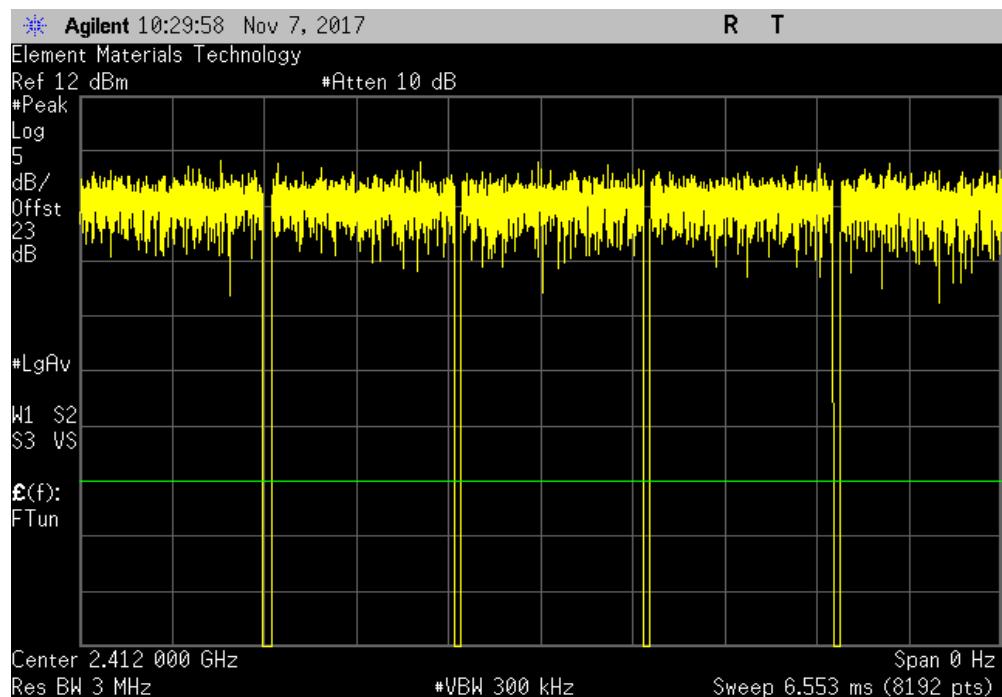


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
1.301 ms	1.365 ms	1	95.4	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
N/A	N/A	5	N/A	N/A	N/A

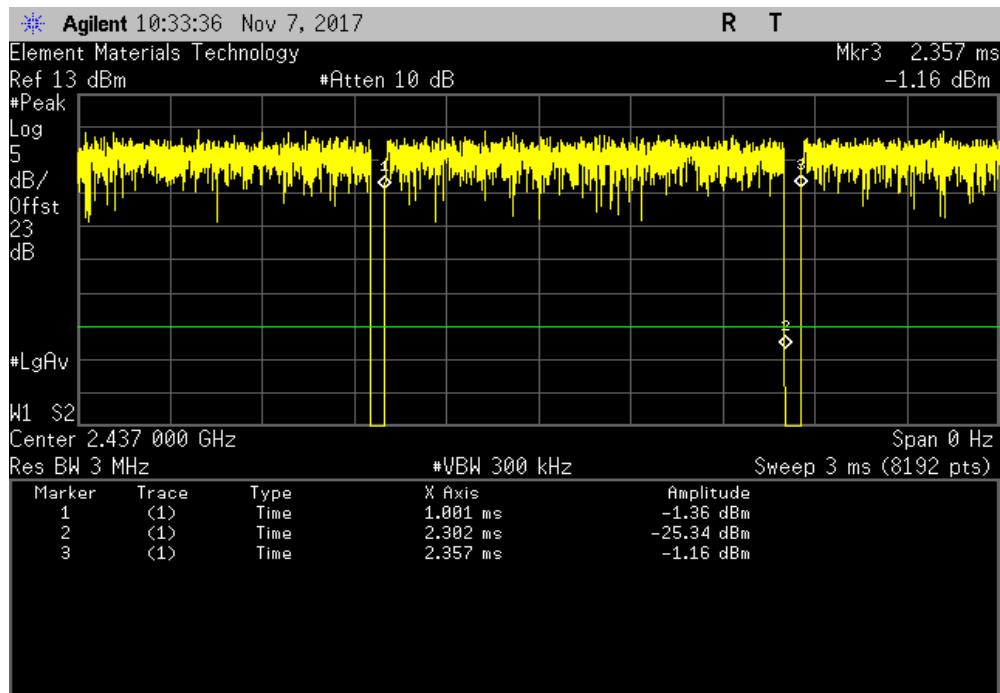


DUTY CYCLE

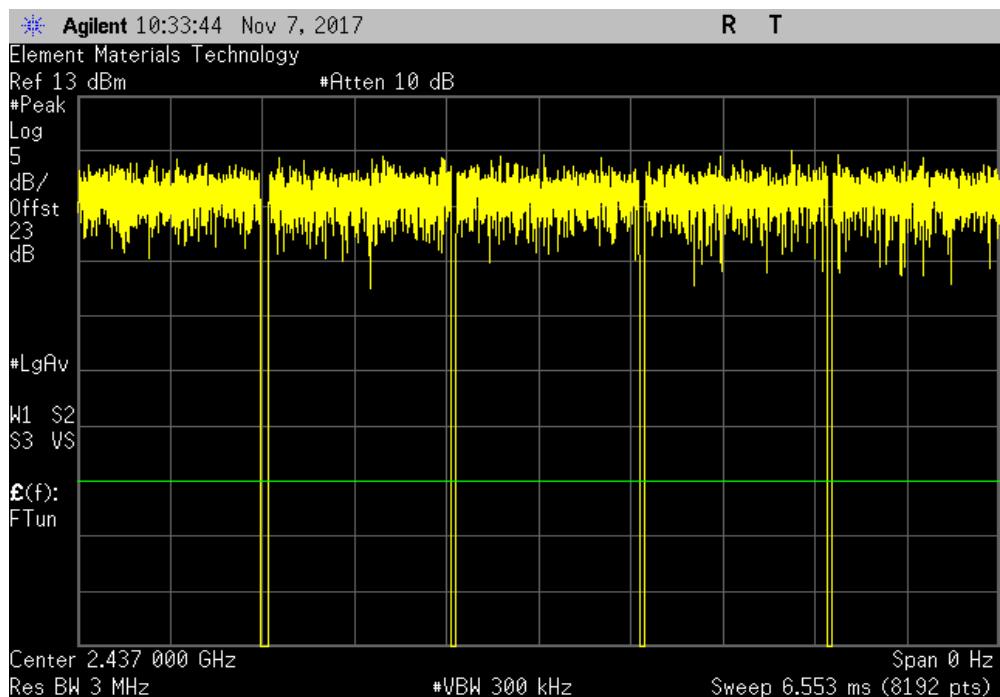


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
1.301 ms	1.356 ms	1	96	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
N/A	N/A	5	N/A	N/A	N/A

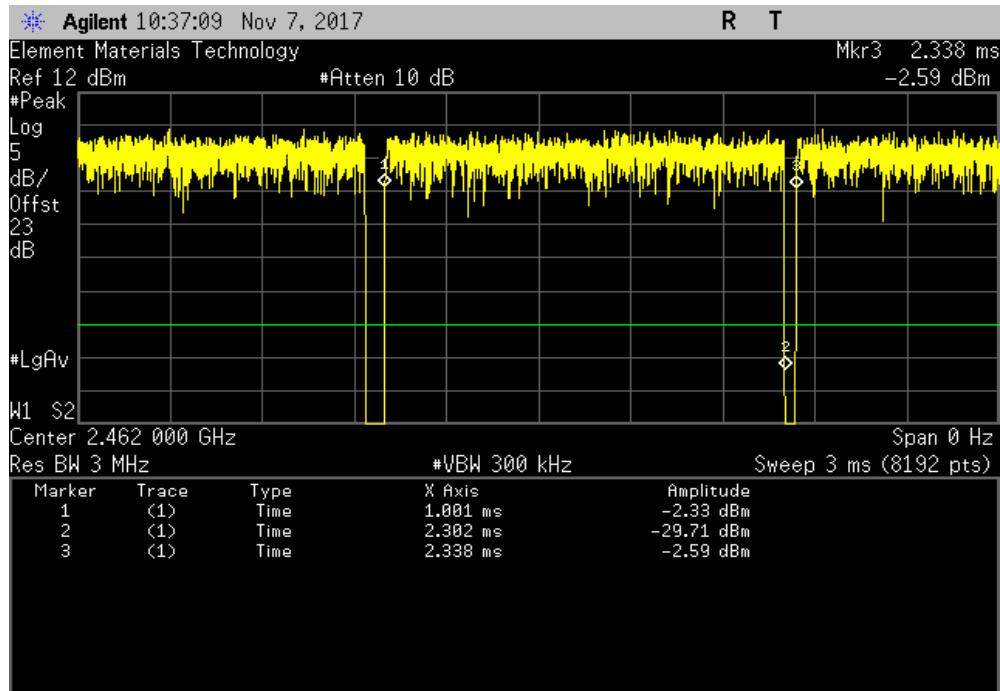


DUTY CYCLE

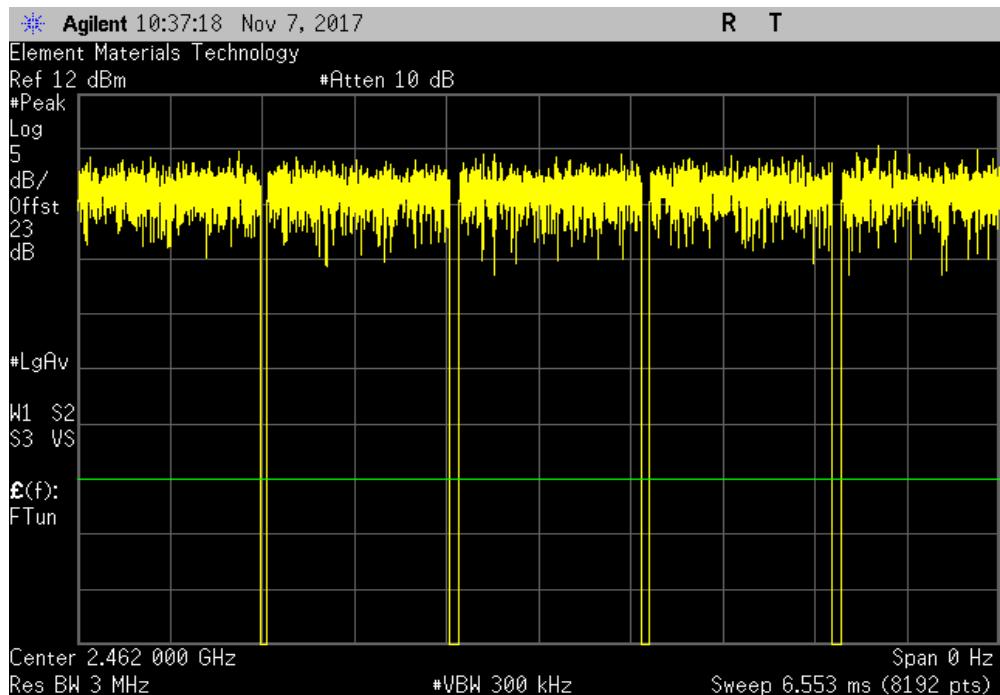


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
1.301 ms	1.338 ms	1	97.3	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
N/A	N/A	5	N/A	N/A	N/A

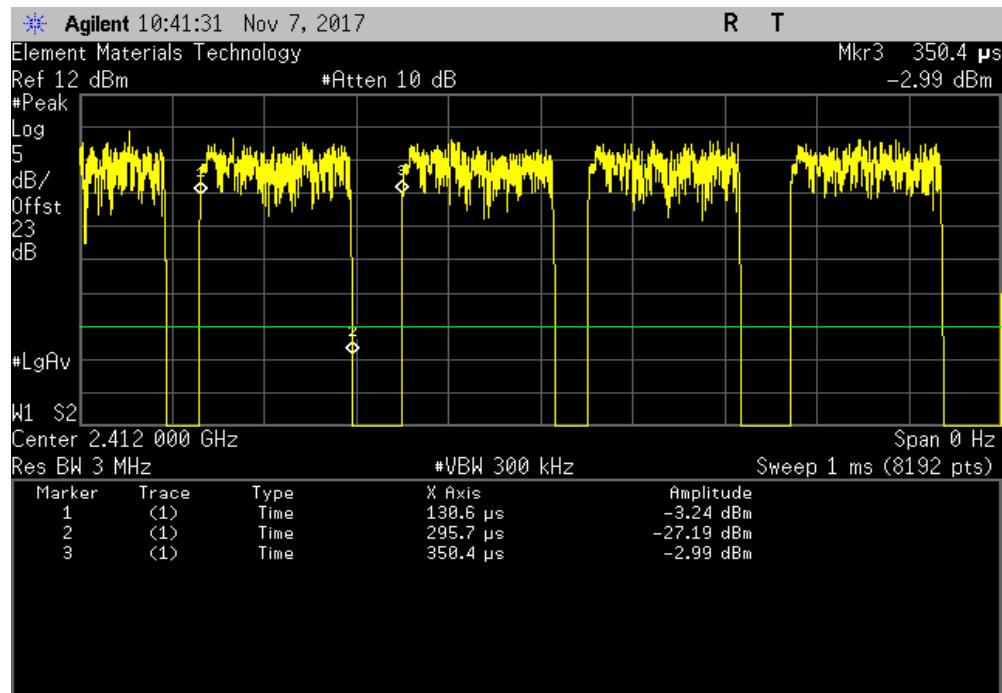


DUTY CYCLE

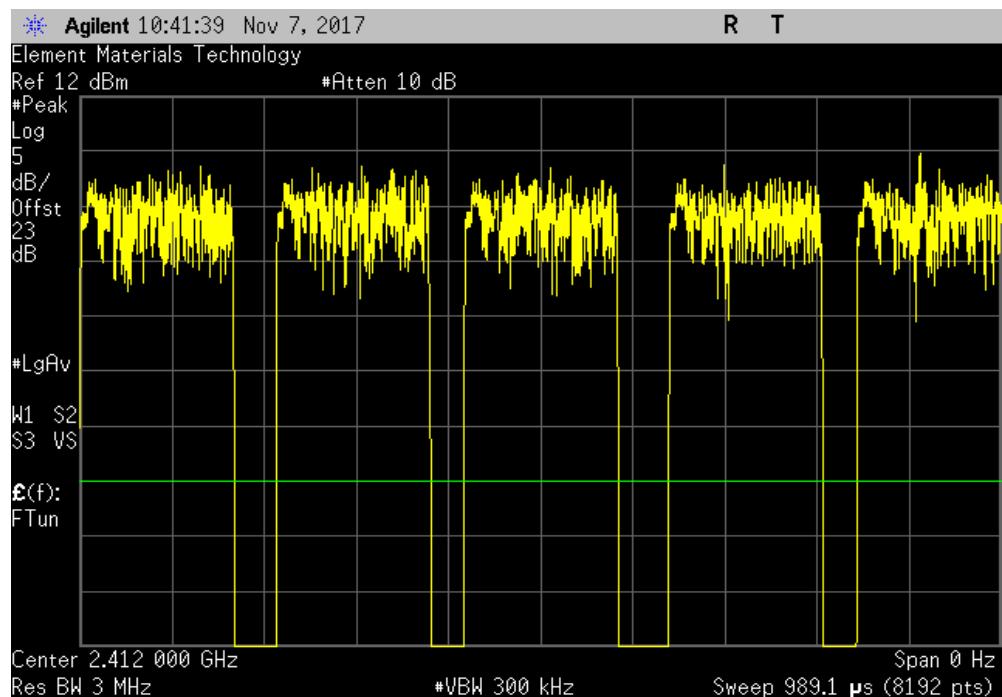


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
165.1 us	219.8 us	1	75.1	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
N/A	N/A	5	N/A	N/A	N/A

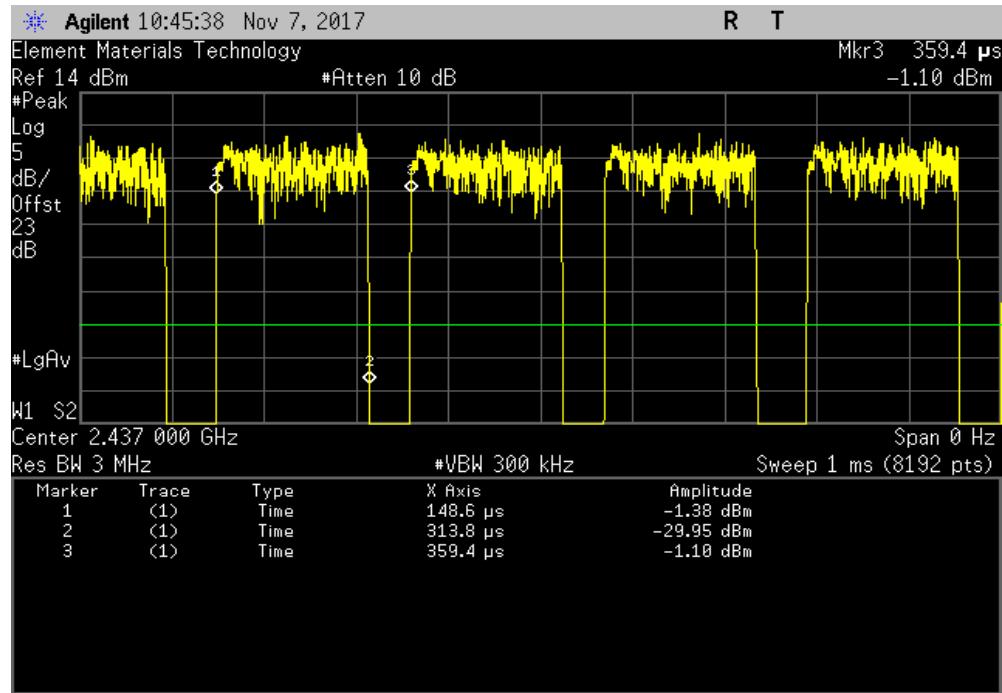


DUTY CYCLE

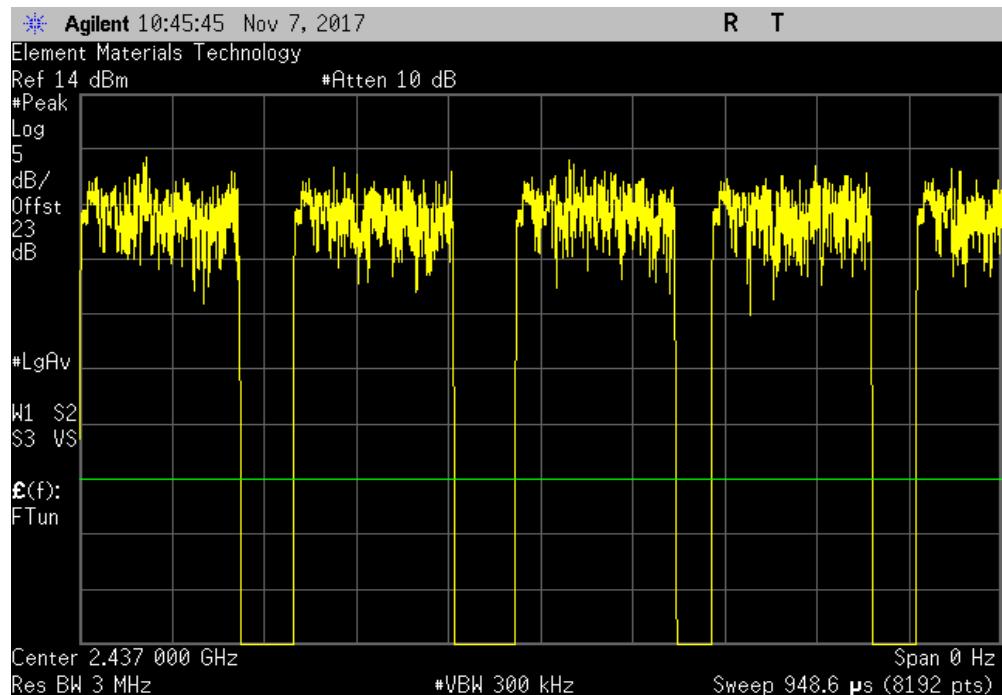


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
165.2 us	210.8 us	1	78.4	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
N/A	N/A	5	N/A	N/A	N/A

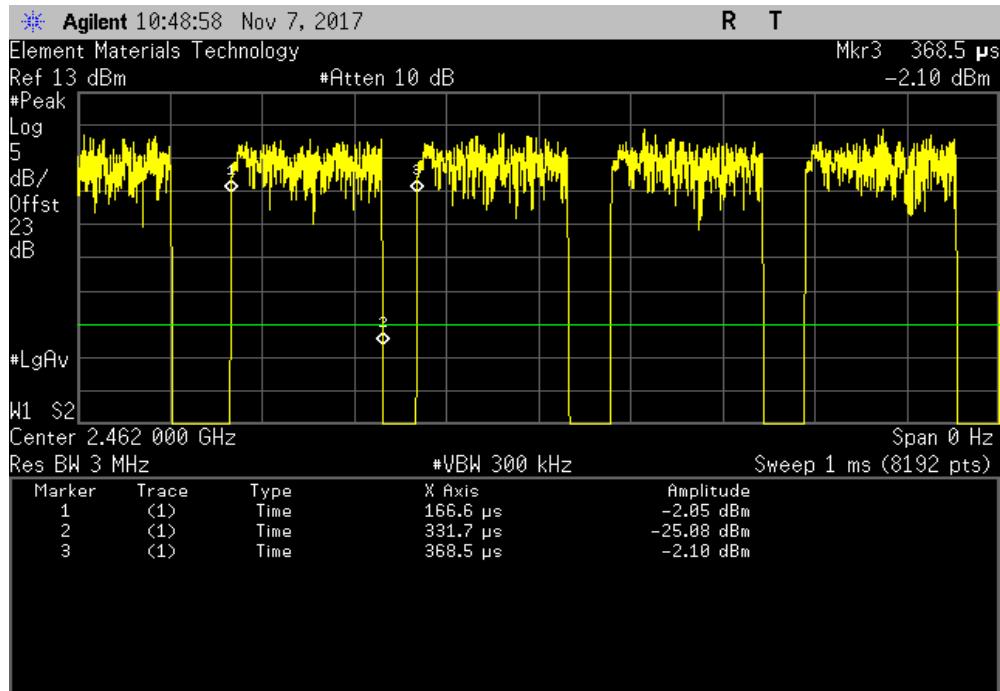


DUTY CYCLE

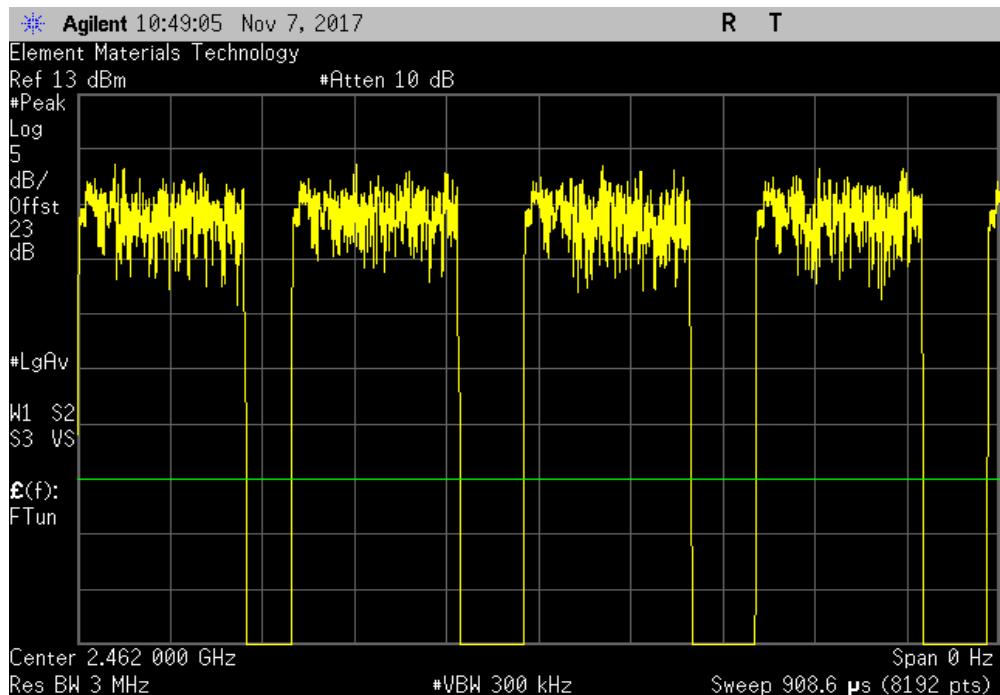


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
165.1 us	201.9 us	1	81.8	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz					
Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
N/A	N/A	5	N/A	N/A	N/A



OCCUPIED BANDWIDTH



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
Generator - Signal	Agilent	N5183A	TIK	29-Sep-17	29-Sep-20
Cable	ESM Cable Corp.	TTBJ141 KMKM-72	MNU	11-Sep-17	11-Sep-18
Attenuator	S.M. Electronics	SA26B-20	RFW	14-Feb-17	14-Feb-18
Block - DC	Fairview Microwave	SD3379	AMI	12-Sep-17	12-Sep-18
Analyzer - Spectrum Analyzer	Agilent	E4440A	AAX	16-Mar-17	16-Mar-18

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. The EUT was set to the channels and modes listed in the datasheet.

The 6dB occupied bandwidth was measured using 100 kHz resolution bandwidth and 300 kHz video bandwidth. The 99.0% occupied bandwidth was also measured at the same time which can be needed during Output Power depending on the applicable method.

OCCUPIED BANDWIDTH



TbitTx 2017.10.04

XMI 2017.08.21

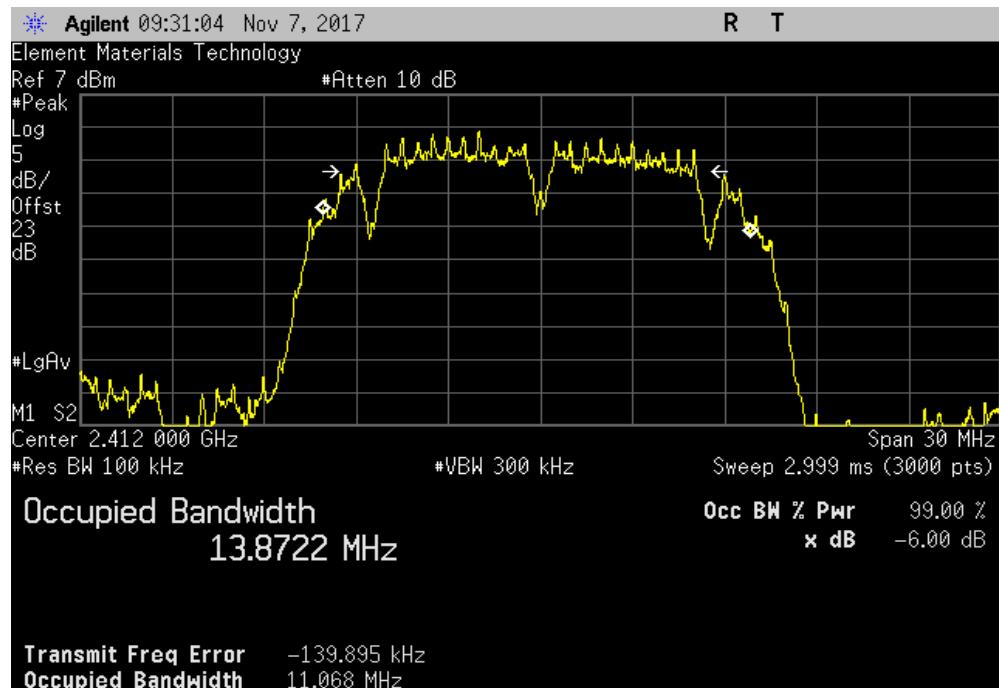
EUT:	Activity Tracking Belt		Work Order:	DGII0263	
Serial Number:	F8F005FF1522		Date:	7-Nov-17	
Customer:	Digi International Inc		Temperature:	21.8 °C	
Attendees:	Collin LaFave		Humidity:	22.7% RH	
Project:	None		Barometric Pres.:	1034 mbar	
Tested by:	Dustin Sparks	Power:	5VDC	Job Site:	MN08
TEST SPECIFICATIONS	Test Method				
FCC 15.247:2017	ANSI C63.10:2013				
COMMENTS	EUT powered by USB connection				
DEVIATIONS FROM TEST STANDARD					
None					
Configuration #	1	Signature	<i>Dustin Sparks</i>		
			Value	Limit (>)	Result
2400 MHz - 2483.5 MHz Band					
802.11(b) 1 Mbps					
Low Channel 1, 2412 MHz			11.068 MHz	500 kHz	Pass
Mid Channel 6, 2437 MHz			10.935 MHz	500 kHz	Pass
High Channel 11, 2462 MHz			11.888 MHz	500 kHz	Pass
802.11(b) 11 Mbps					
Low Channel 1, 2412 MHz			11.914 MHz	500 kHz	Pass
Mid Channel 6, 2437 MHz			11.66 MHz	500 kHz	Pass
High Channel 11, 2462 MHz			11.816 MHz	500 kHz	Pass
802.11(g) 6 Mbps					
Low Channel 1, 2412 MHz			15.527 MHz	500 kHz	Pass
Mid Channel 6, 2437 MHz			16.077 MHz	500 kHz	Pass
High Channel 11, 2462 MHz			15.623 MHz	500 kHz	Pass
802.11(g) 36 Mbps					
Low Channel 1, 2412 MHz			16.016 MHz	500 kHz	Pass
Mid Channel 6, 2437 MHz			16.224 MHz	500 kHz	Pass
High Channel 11, 2462 MHz			16.286 MHz	500 kHz	Pass
802.11(g) 54 Mbps					
Low Channel 1, 2412 MHz			16.126 MHz	500 kHz	Pass
Mid Channel 6, 2437 MHz			15.727 MHz	500 kHz	Pass
High Channel 11, 2462 MHz			15.973 MHz	500 kHz	Pass
802.11(n) MCS0					
Low Channel 1, 2412 MHz			16.036 MHz	500 kHz	Pass
Mid Channel 6, 2437 MHz			16.456 MHz	500 kHz	Pass
High Channel 11, 2462 MHz			16.072 MHz	500 kHz	Pass
802.11(n) MCS7					
Low Channel 1, 2412 MHz			16.362 MHz	500 kHz	Pass
Mid Channel 6, 2437 MHz			16.382 MHz	500 kHz	Pass
High Channel 11, 2462 MHz			16.761 MHz	500 kHz	Pass

OCCUPIED BANDWIDTH

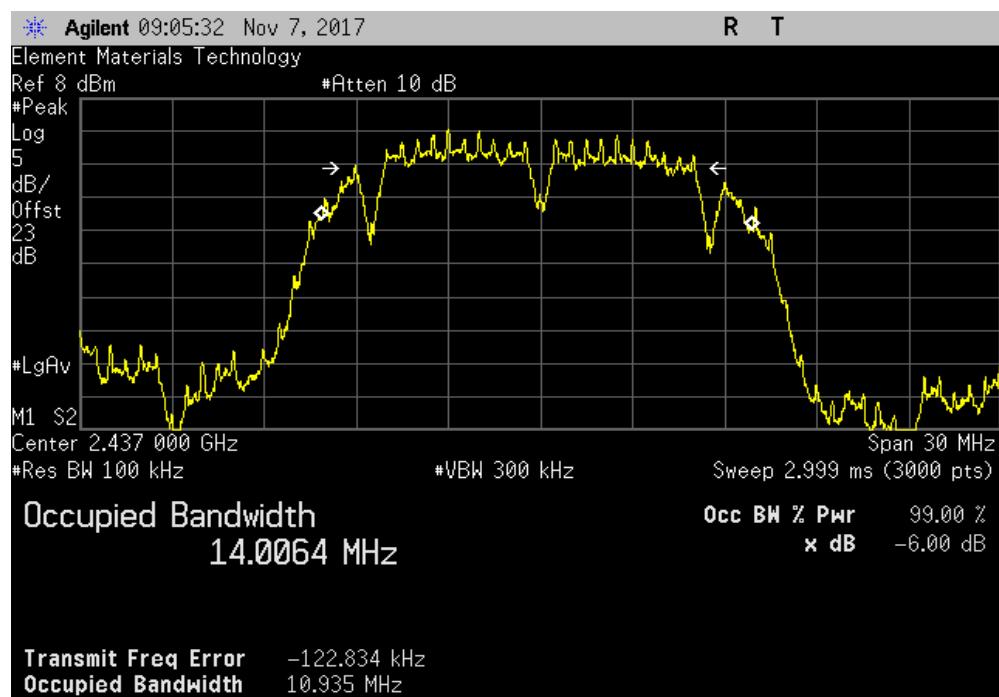


TbTx 2017.10.04 XMI 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz			Value	Limit	Result
			11.068 MHz	500 kHz	Pass



2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz			Value	Limit	Result
			10.935 MHz	500 kHz	Pass

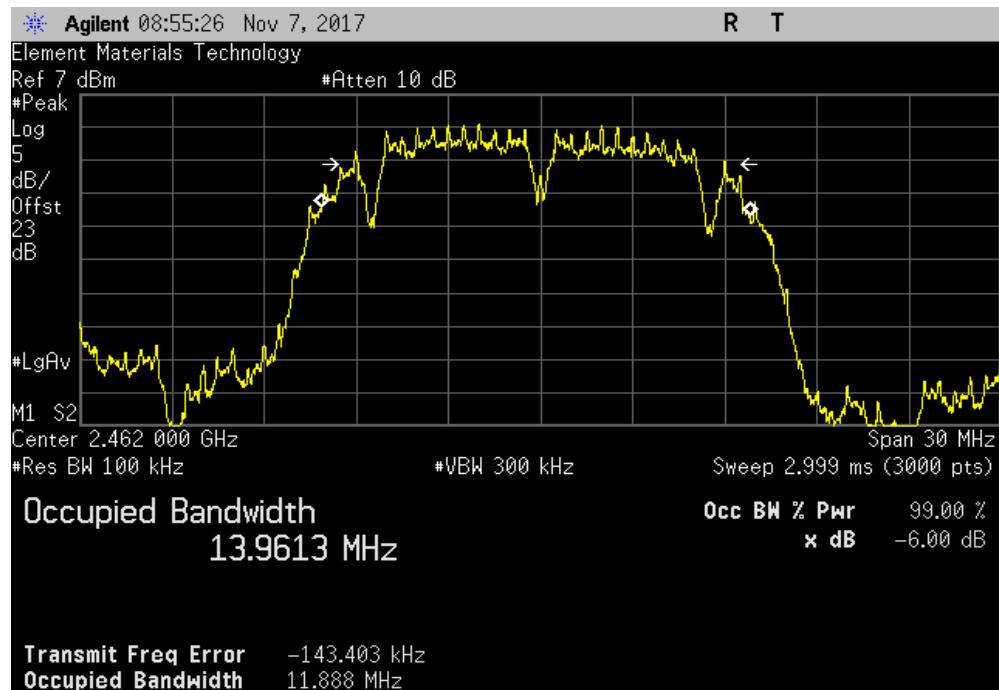


OCCUPIED BANDWIDTH

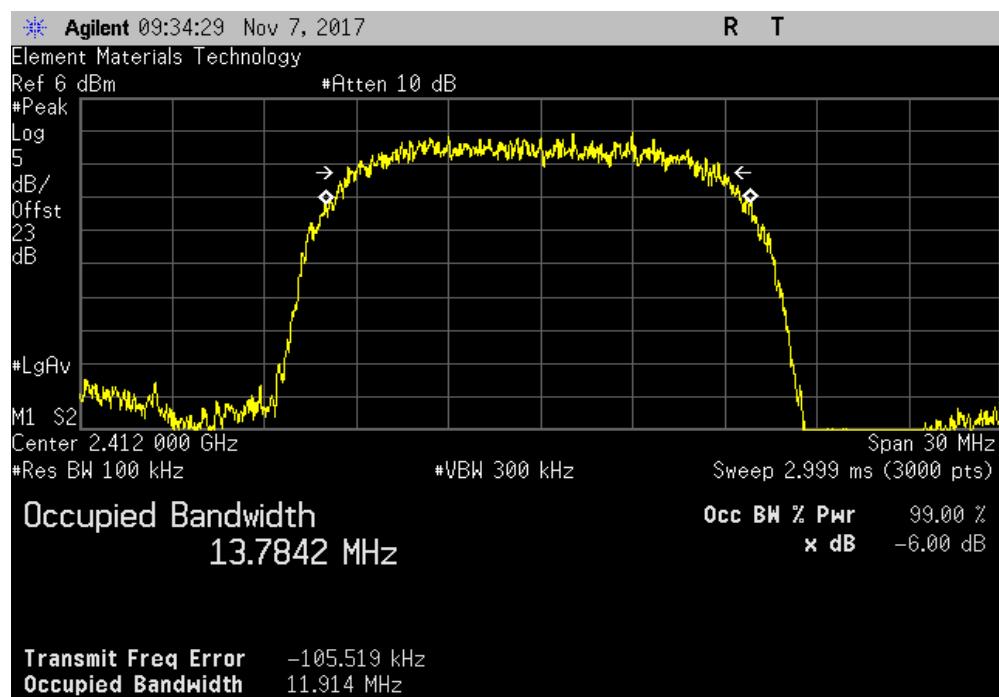


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz			Value	Limit	Result
			11.888 MHz	(>) 500 kHz	Pass



2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz			Value	Limit	Result
			11.914 MHz	(>) 500 kHz	Pass

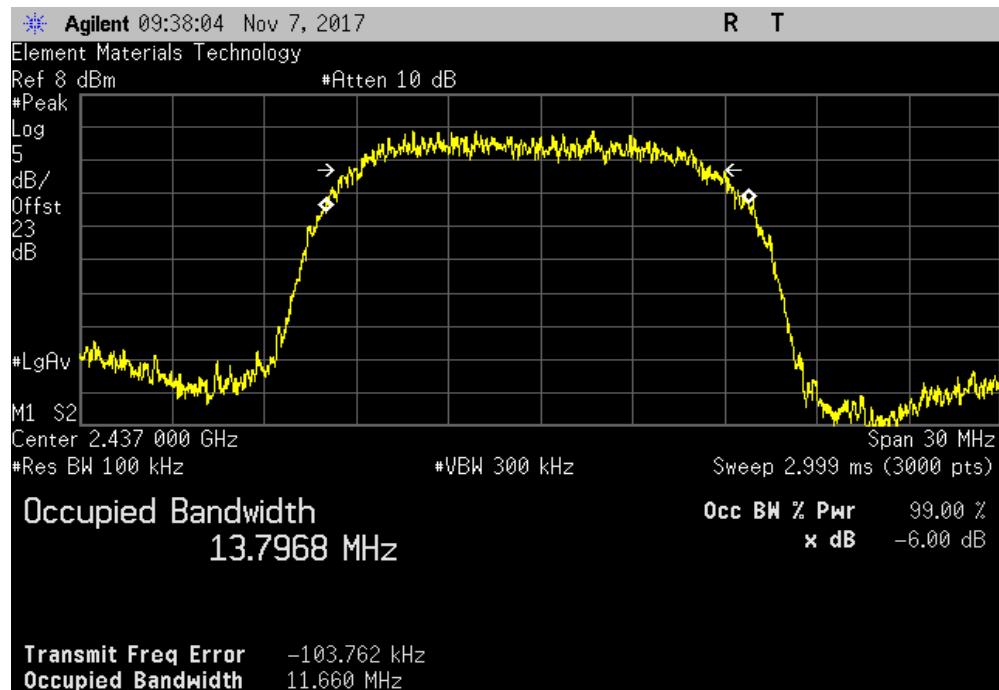




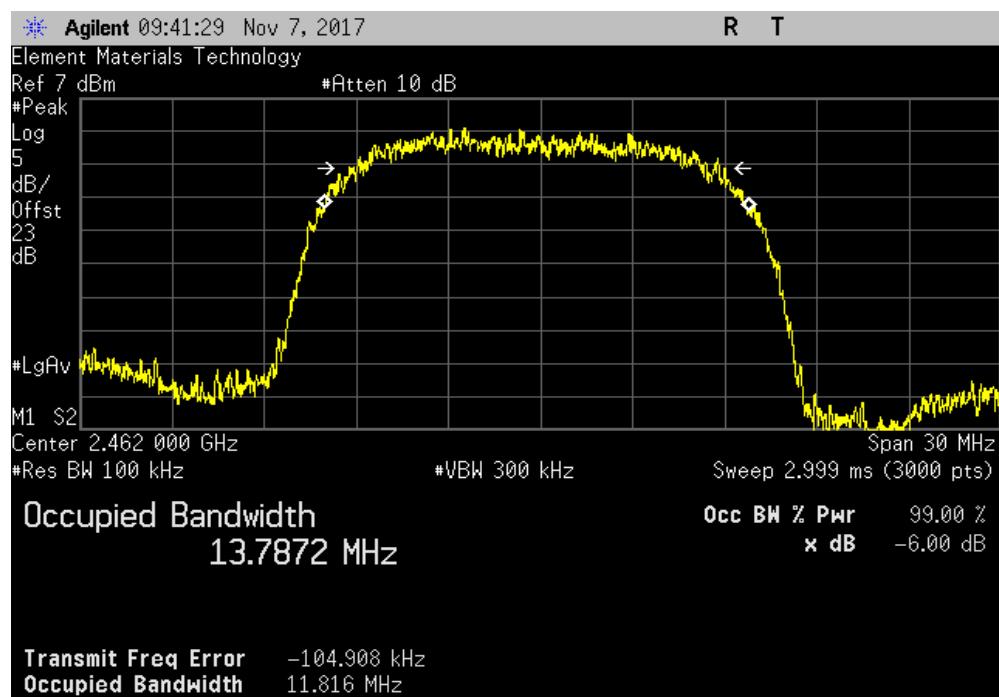
OCCUPIED BANDWIDTH

TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz			Limit	
Value	(>)	Result		
11.66 MHz	500 kHz	Pass		



2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz			Limit	
Value	(>)	Result		
11.816 MHz	500 kHz	Pass		

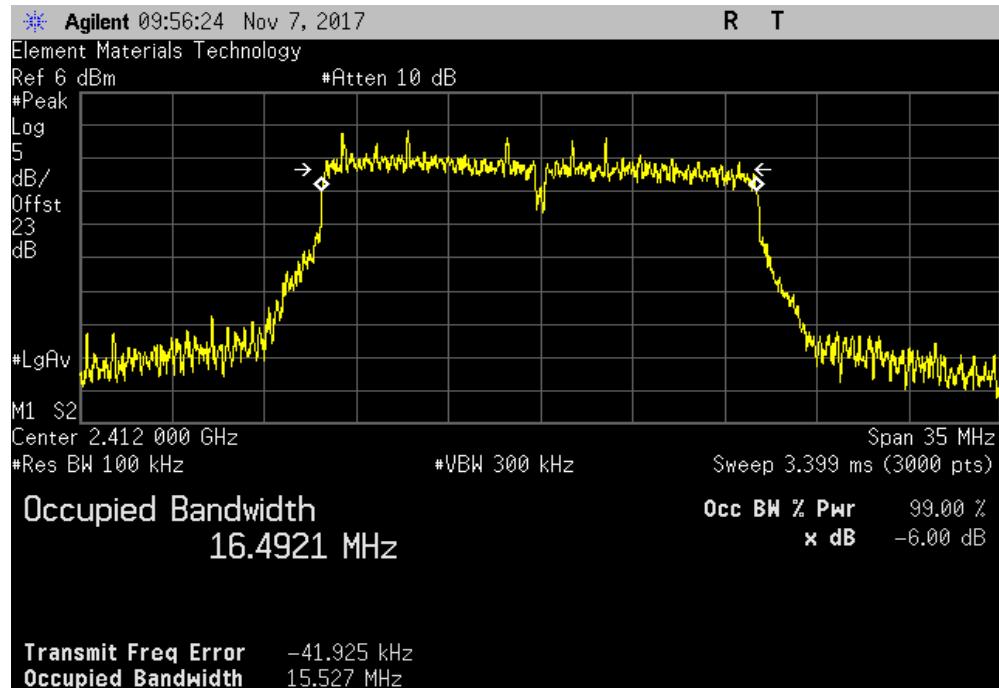


OCCUPIED BANDWIDTH

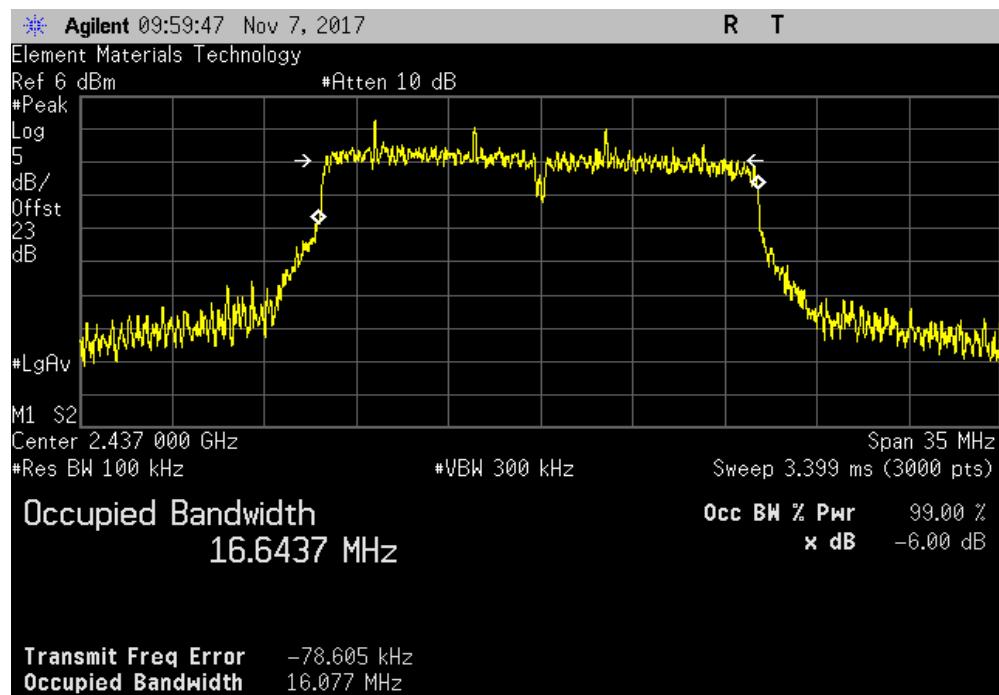


TbTx 2017.10.04 XMI 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz			Value	Limit	Result
			15.527 MHz	(>) 500 kHz	Pass



2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz			Value	Limit	Result
			16.077 MHz	(>) 500 kHz	Pass



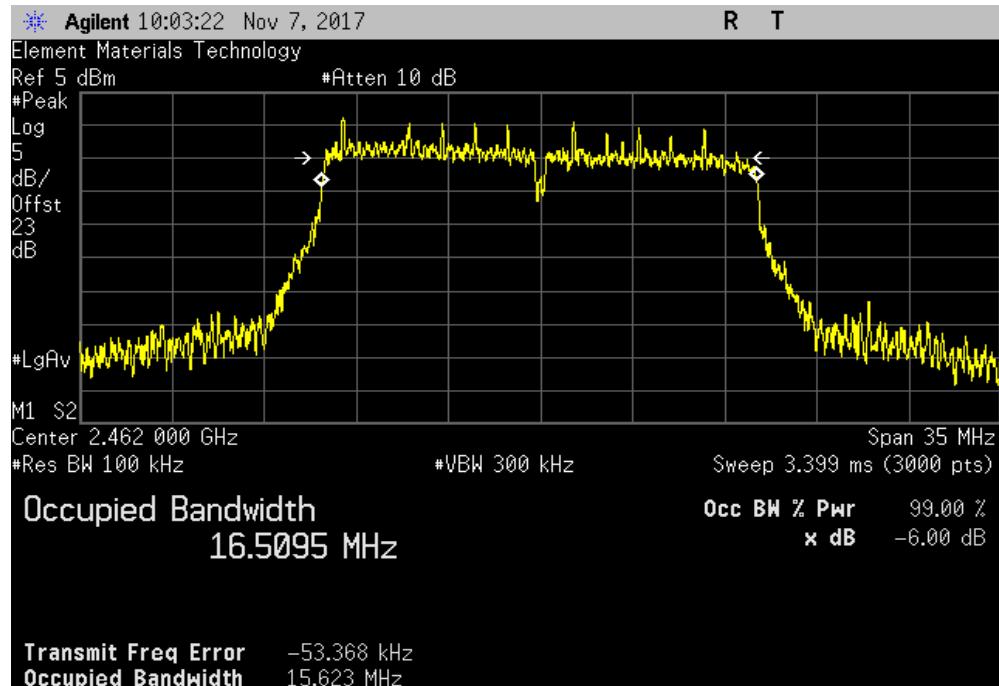
OCCUPIED BANDWIDTH



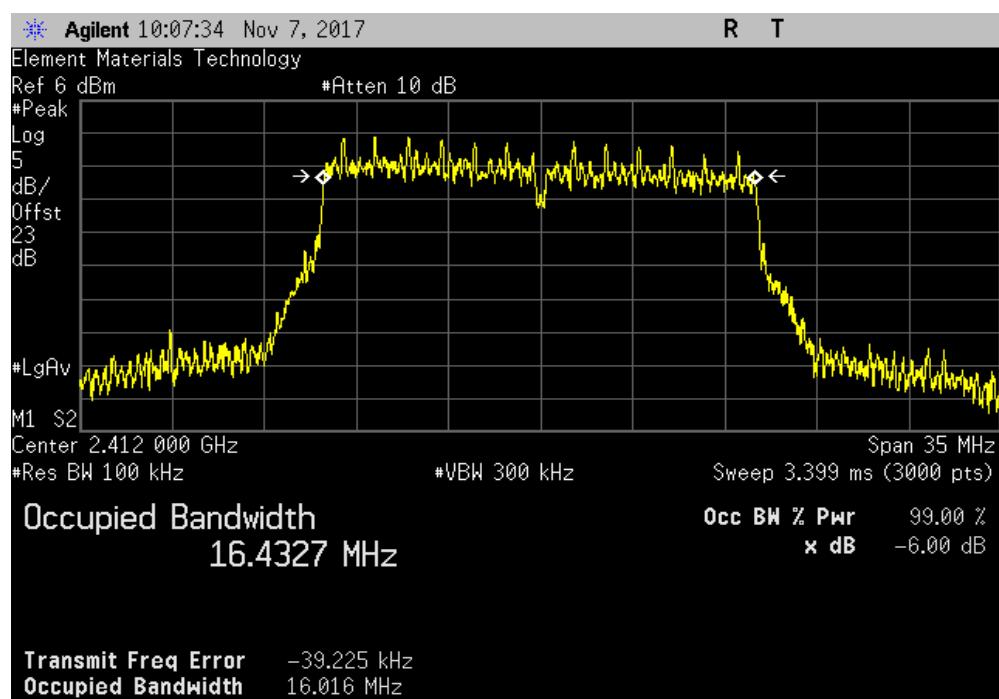
TbtTx 2017.10.04

XMit 2017.09.2

2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz						
			Limit (>)	Result		
	Value					
	15.623 MHz	500 kHz		Pass		



2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz				Limit	Result
	Value	(>)			
	16.016 MHz	500 kHz		Pass	



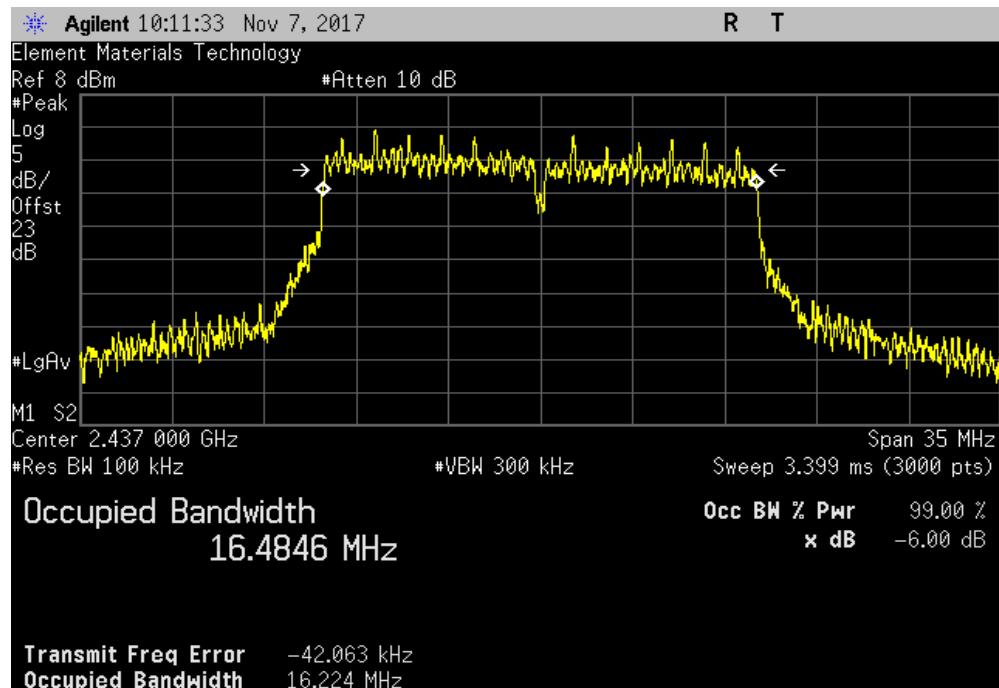
OCCUPIED BANDWIDTH



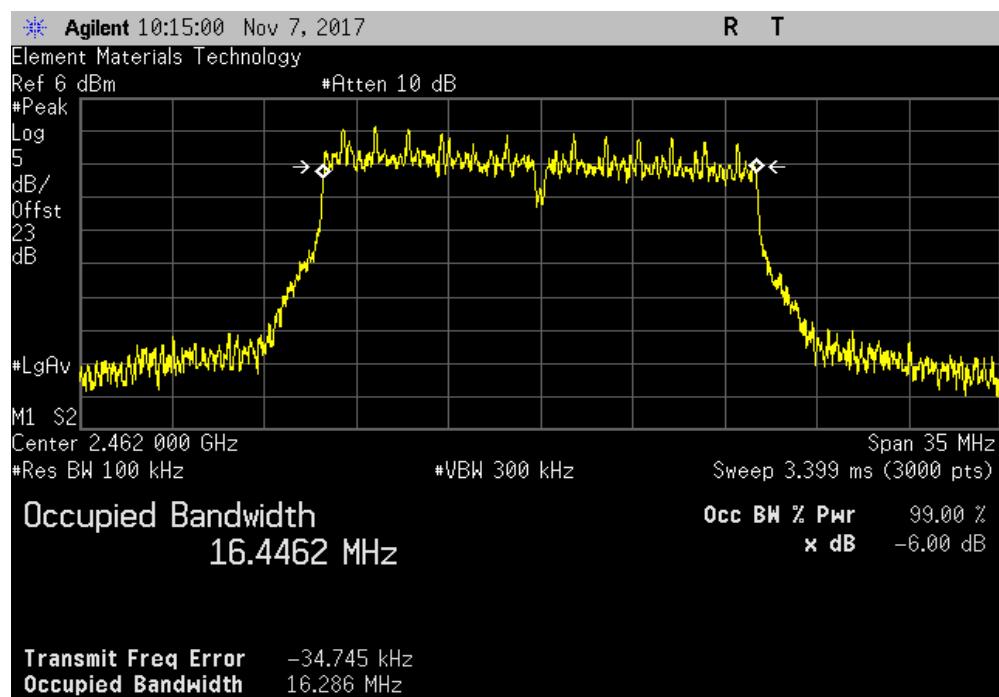
TbtTx 2017.10.04

XMit 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Mid Channel 6, 2437 MHz						
			Value	Limit (\rightarrow)	Result	
			16,224 MHz	500 kHz	Pass	



2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz						
			Limit			
			Value	(>)	Result	
			16.286 MHz	500 kHz	Pass	

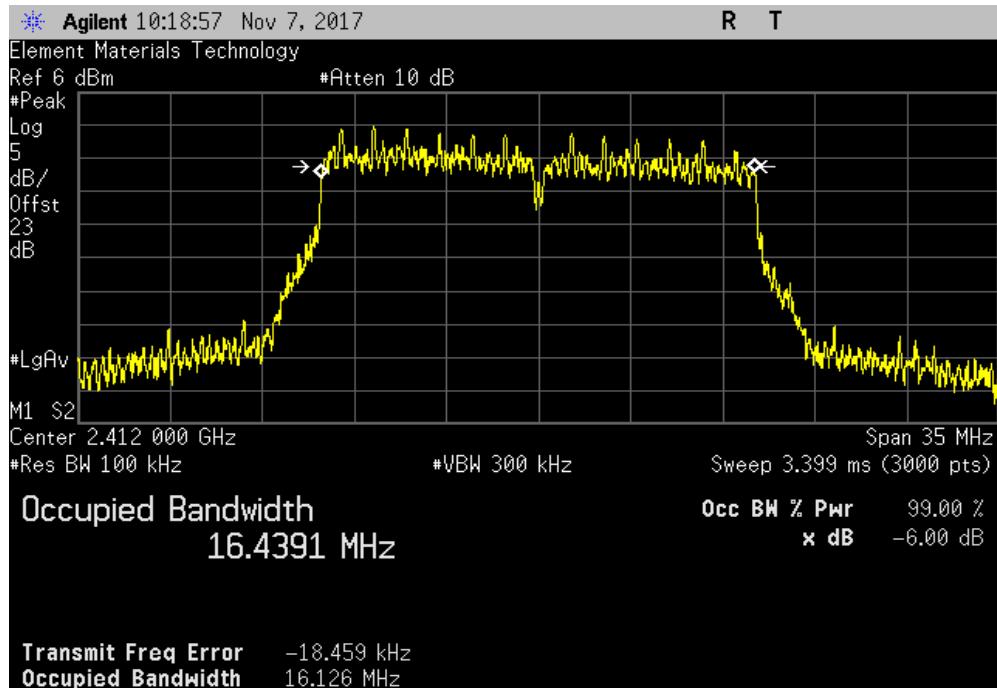


OCCUPIED BANDWIDTH

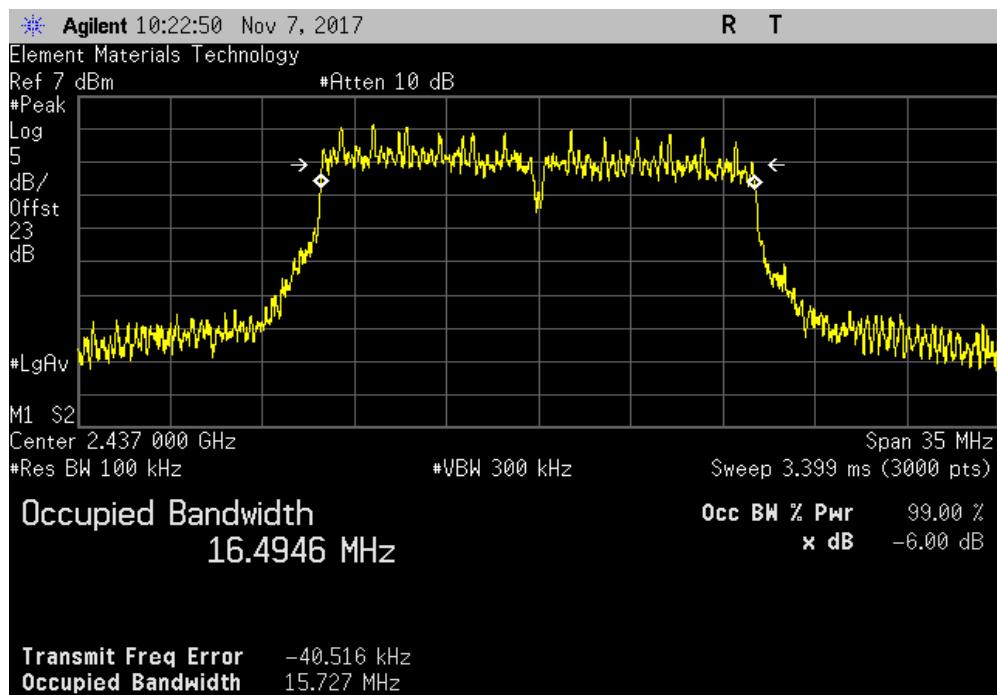


TbTx 2017.10.04 XMI 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz			Limit
Value	(>)	Result	
16.126 MHz	500 kHz	Pass	



2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Mid Channel 6, 2437 MHz			Limit
Value	(>)	Result	
15.727 MHz	500 kHz	Pass	

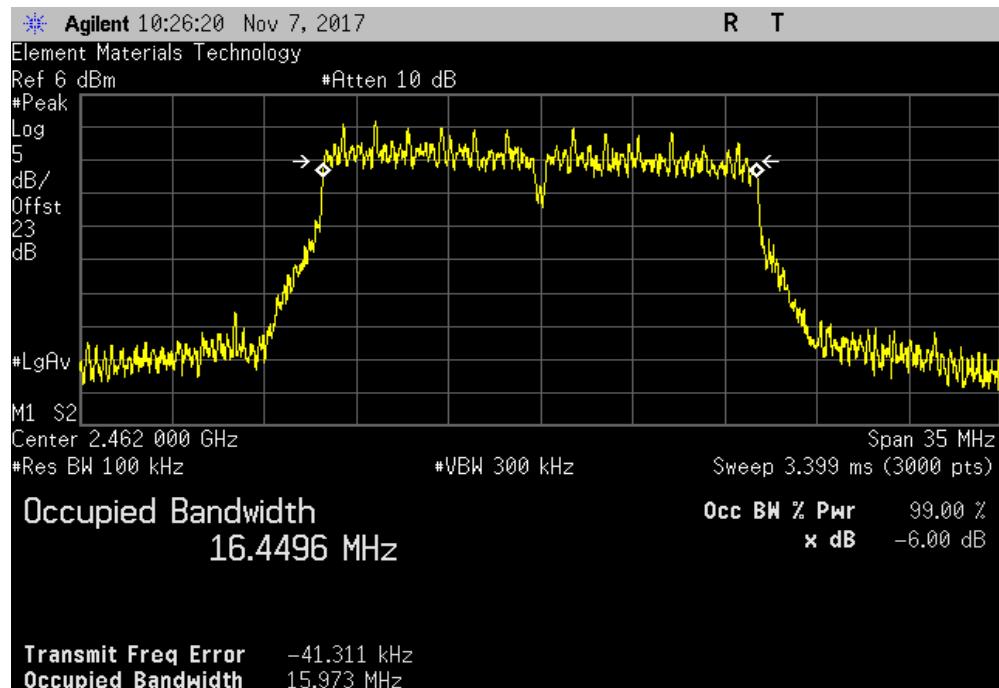


OCCUPIED BANDWIDTH

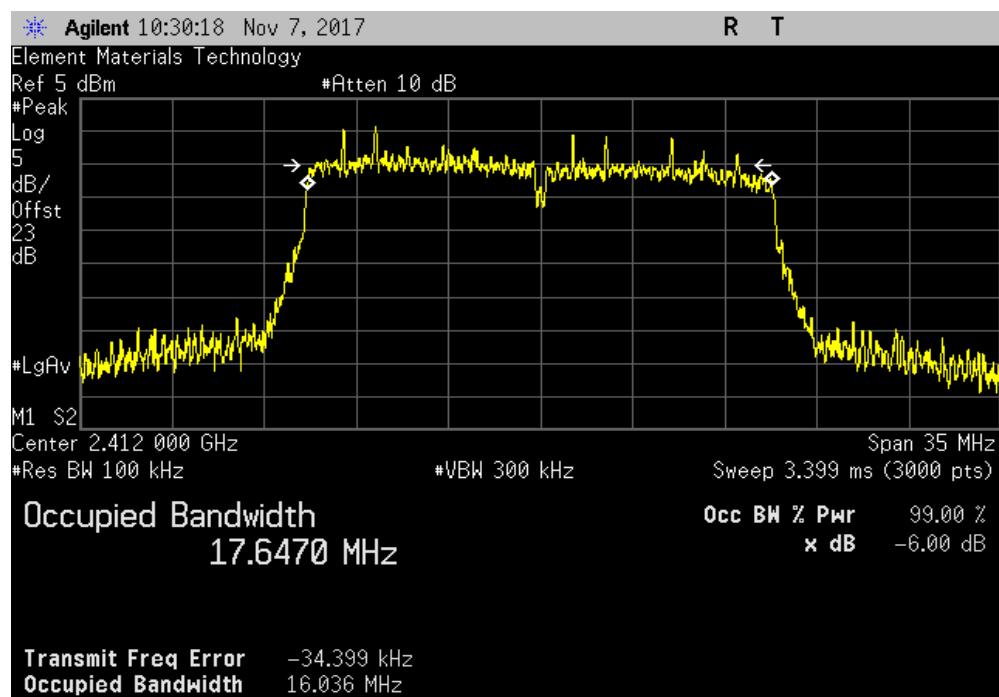


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz			Value	Limit	Result
			15.973 MHz	(>) 500 kHz	Pass



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz			Value	Limit	Result
			16.036 MHz	(>) 500 kHz	Pass



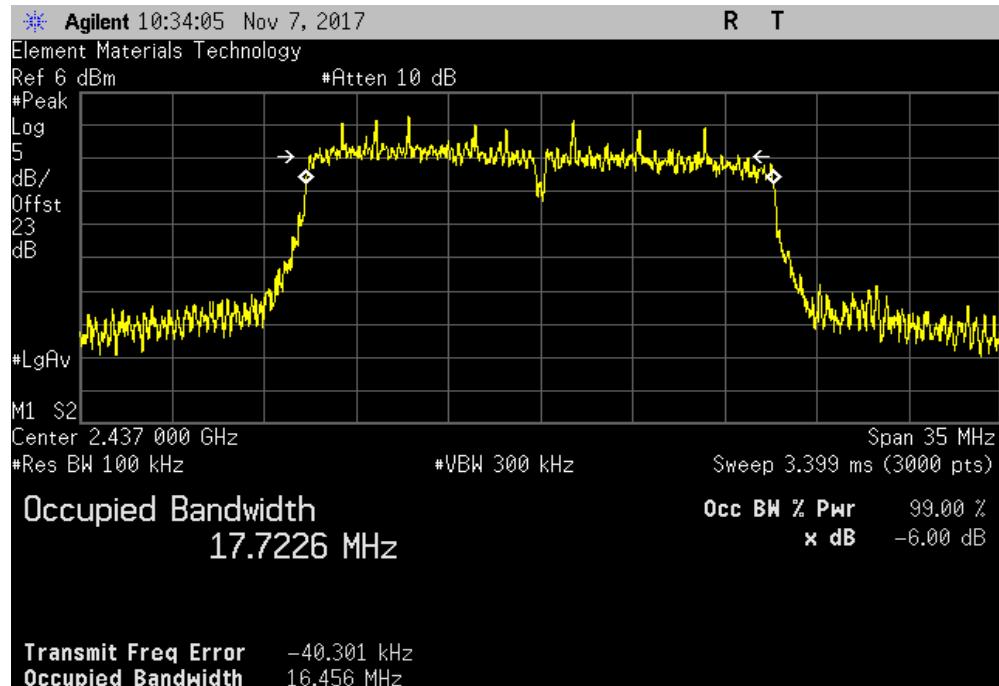
OCCUPIED BANDWIDTH



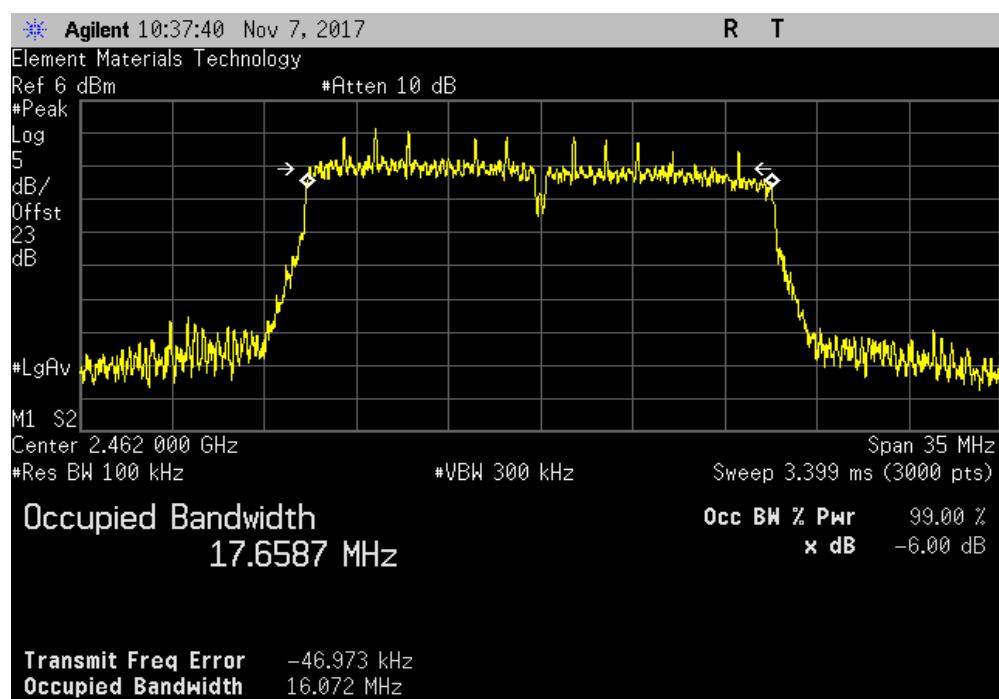
TbtTx 2017.10.04

XMit 2017.09.2

2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz						
			Limit			
			Value	(>)	Result	
			16.456 MHz	500 kHz	Pass	



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz						
			Value	Limit (>)	Result	
			16.072 MHz	500 kHz	Pass	

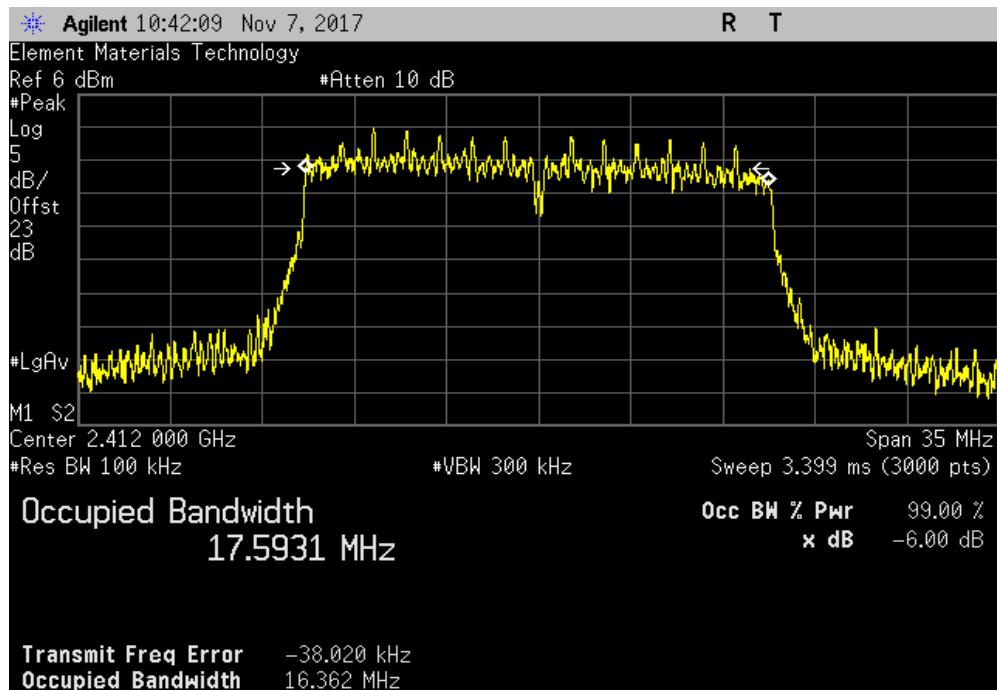


OCCUPIED BANDWIDTH

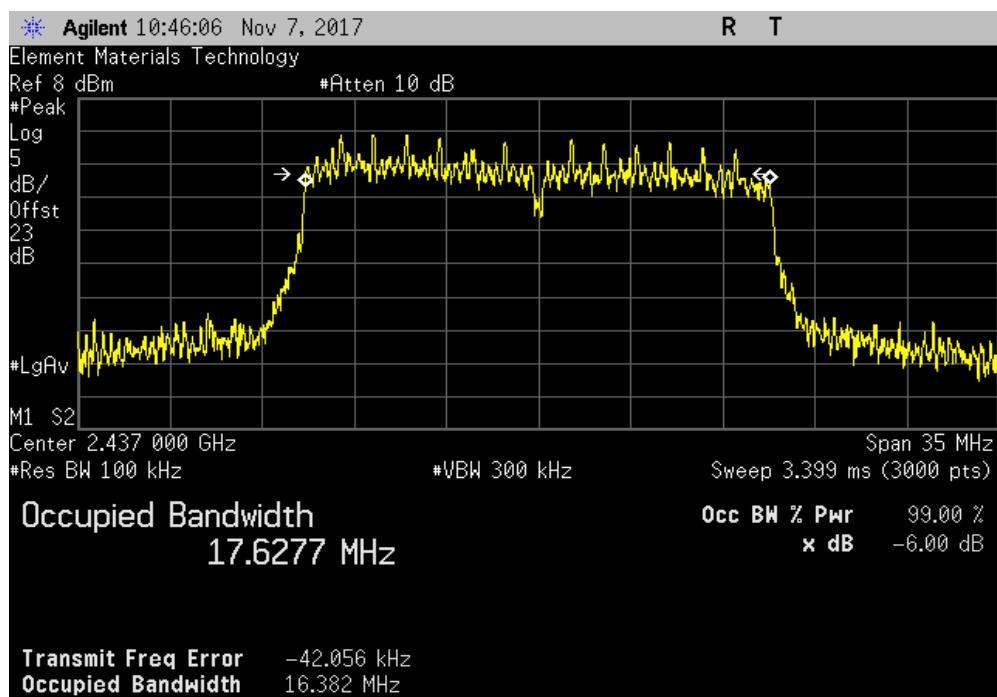


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz		
Value	Limit	Result
16.362 MHz	500 kHz	Pass



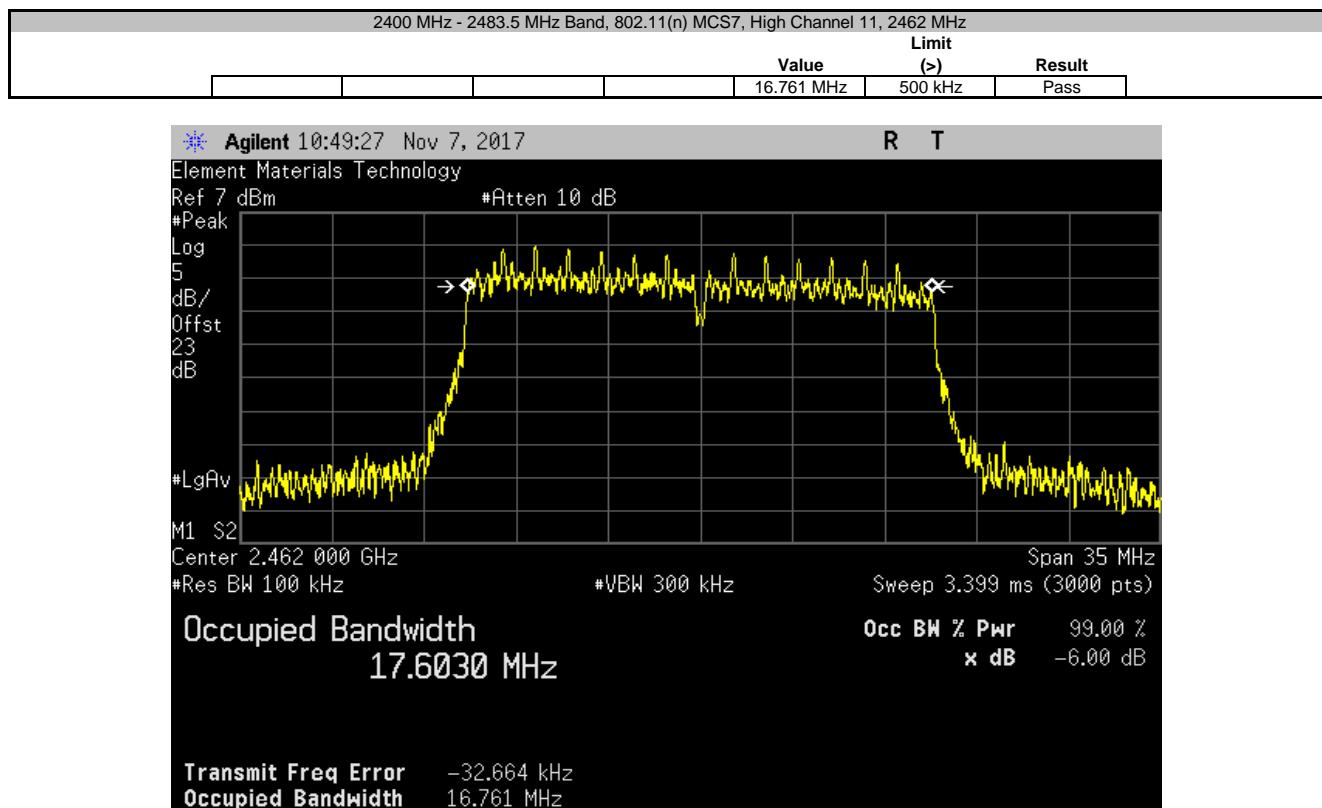
2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz		
Value	Limit	Result
16.382 MHz	500 kHz	Pass





OCCUPIED BANDWIDTH

TbTx 2017.10.04 XMII 2017.09.21



OUTPUT POWER



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
Generator - Signal	Agilent	N5183A	TIK	29-Sep-17	29-Sep-20
Cable	ESM Cable Corp.	TTBJ141 KMKM-72	MNU	11-Sep-17	11-Sep-18
Attenuator	S.M. Electronics	SA26B-20	RFW	14-Feb-17	14-Feb-18
Block - DC	Fairview Microwave	SD3379	AMI	12-Sep-17	12-Sep-18
Analyzer - Spectrum Analyzer	Agilent	E4440A	AAX	16-Mar-17	16-Mar-18

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. The fundamental emission output power (maximum average conducted output power) was measured using the channels and modes as called out on the following data sheets. The transmit power was set to its default maximum.

Prior to measuring output power; the emission bandwidth (B) and the transmission pulse duration (T) were measured. Both are required to determine the method of measuring Maximum Conducted Output Power. The transmission pulse duration (T) was measured using a zero span on the spectrum analyzer to see the pulses in the time domain.

The method AVGSA-2 in section 11.9.2.2.4 of ANSI C63.10:2013 was used to make the measurement. This method uses trace averaging across ON and OFF times of the EUT transmissions in the spectrum analyzer channel power function using an RMS detector. Following the measurement a duty cycle correction was applied by adding $[10 \log (1 / D)]$, where D is the duty cycle, to the measured power to compute the average power during the actual transmission times.

De Facto EIRP Limit: The EUT meets the de facto EIRP limit of +36 dBm.

OUTPUT POWER



TbTx 2017.10.04

XMI 2017.08.21

EUT:	Activity Tracking Belt		Work Order:	DGII0263						
Serial Number:	F8F005FF1522		Date:	7-Nov-17						
Customer:	Digi International Inc		Temperature:	21.8 °C						
Attendees:	Collin LaFave		Humidity:	22.8% RH						
Project:	None		Barometric Pres.:	1033 mbar						
Tested by:	Dustin Sparks	Power:	5VDC	Job Site:	MN08					
TEST SPECIFICATIONS	Test Method									
FCC 15.247:2017	ANSI C63.10:2013									
COMMENTS	EUT powered by USB connection									
DEVIATIONS FROM TEST STANDARD										
None										
Configuration #	1	Signature	<i>Dustin Sparks</i>							
			Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Value (dBm)	Limit (dBm)	Results			
2400 MHz - 2483.5 MHz Band										
802.11(b) 1 Mbps										
Low Channel 1, 2412 MHz	10.969	0	11	30	Pass					
Mid Channel 6, 2437 MHz	12.713	0	12.7	30	Pass					
High Channel 11, 2462 MHz	12.74	0	12.8	30	Pass					
802.11(b) 11 Mbps										
Low Channel 1, 2412 MHz	10.806	0.2	11	30	Pass					
Mid Channel 6, 2437 MHz	12.645	0.2	12.8	30	Pass					
High Channel 11, 2462 MHz	12.568	0.3	12.9	30	Pass					
802.11(g) 6 Mbps										
Low Channel 1, 2412 MHz	10.399	0.1	10.5	30	Pass					
Mid Channel 6, 2437 MHz	12.208	0.2	12.4	30	Pass					
High Channel 11, 2462 MHz	11.327	0.2	11.5	30	Pass					
802.11(g) 36 Mbps										
Low Channel 1, 2412 MHz	9.786	1	10.8	30	Pass					
Mid Channel 6, 2437 MHz	11.593	0.8	12.4	30	Pass					
High Channel 11, 2462 MHz	10.748	1	11.7	30	Pass					
802.11(g) 54 Mbps										
Low Channel 1, 2412 MHz	9.618	0.8	10.4	30	Pass					
Mid Channel 6, 2437 MHz	11.465	0.8	12.3	30	Pass					
High Channel 11, 2462 MHz	10.621	0.8	11.4	30	Pass					
802.11(n) MCS0										
Low Channel 1, 2412 MHz	10.378	0.2	10.6	30	Pass					
Mid Channel 6, 2437 MHz	12.197	0.2	12.4	30	Pass					
High Channel 11, 2462 MHz	11.346	0.1	11.5	30	Pass					
802.11(n) MCS7										
Low Channel 1, 2412 MHz	9.483	1.2	10.7	30	Pass					
Mid Channel 6, 2437 MHz	11.389	1.1	12.4	30	Pass					
High Channel 11, 2462 MHz	10.528	0.9	11.4	30	Pass					

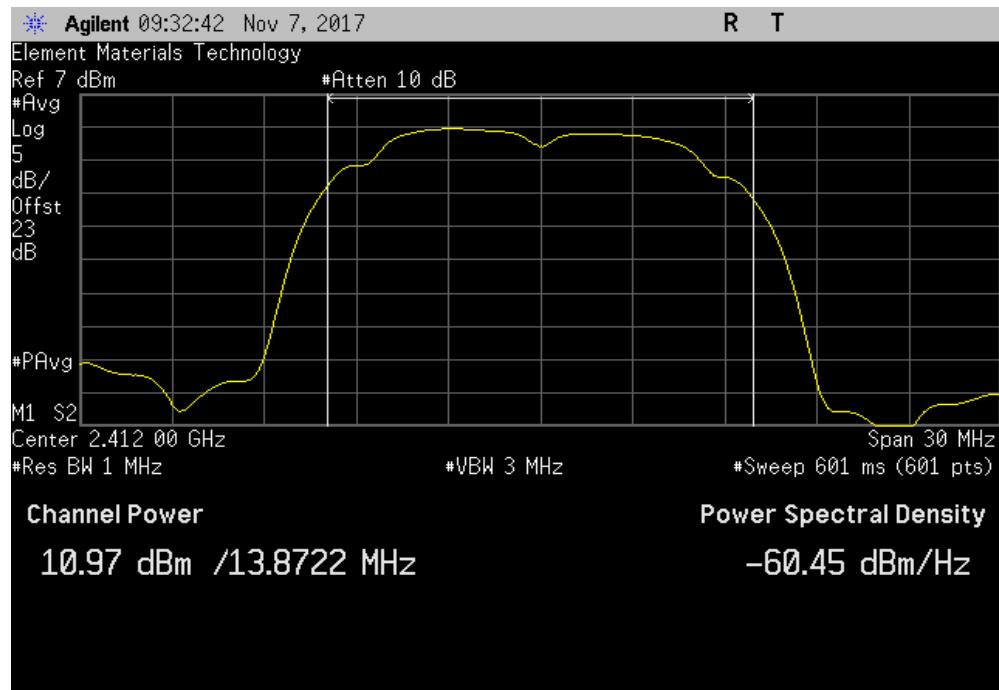
OUTPUT POWER



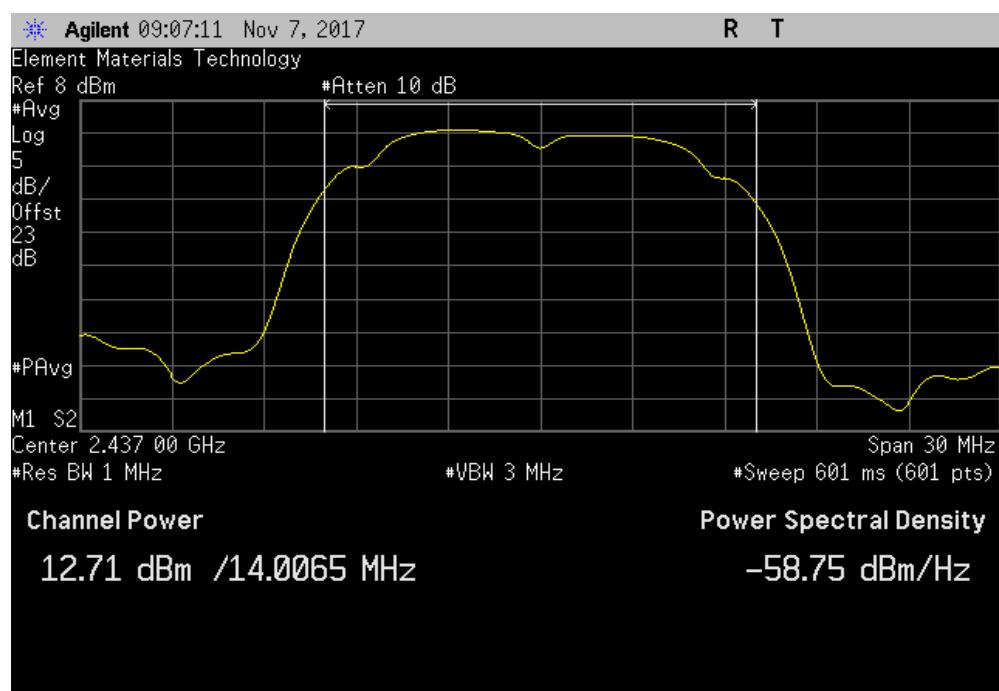
TbtTx 2017.10.04

XMit 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz					
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Value (dBm)	Limit (dBm)	Results	
10.969	0	11	30	Pass	



2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz					
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Value (dBm)	Limit (dBm)	Results	
12.713	0	12.7	30	Pass	

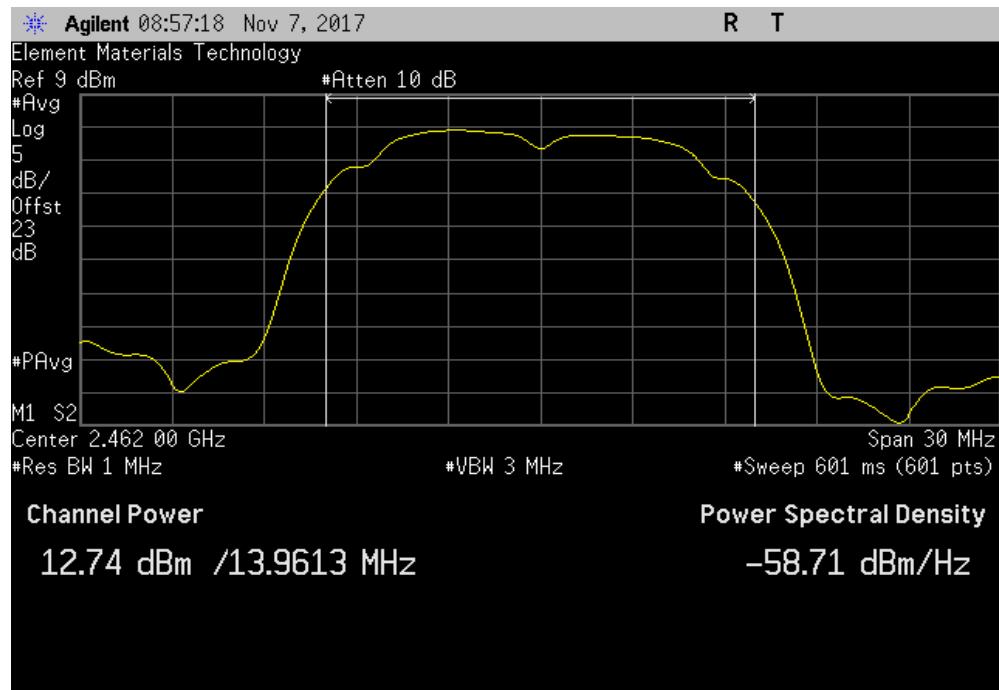




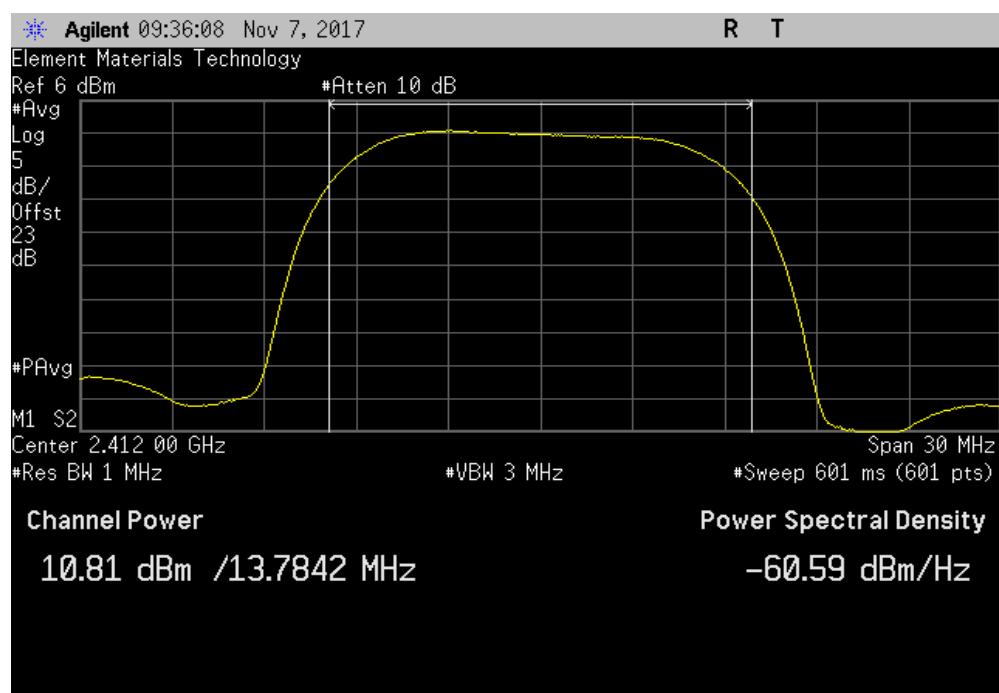
OUTPUT POWER

TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz					
Avg Cond	Duty Cycle	Value	Limit	Results	
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)		
12.74	0	12.8	30	Pass	



2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz					
Avg Cond	Duty Cycle	Value	Limit	Results	
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)		
10.806	0.2	11	30	Pass	

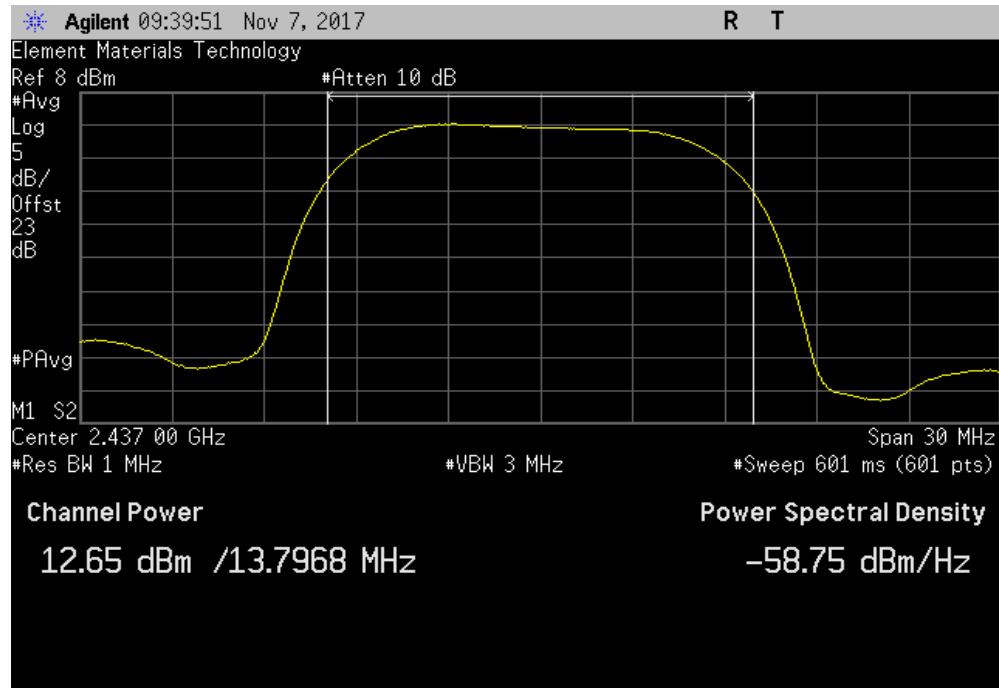




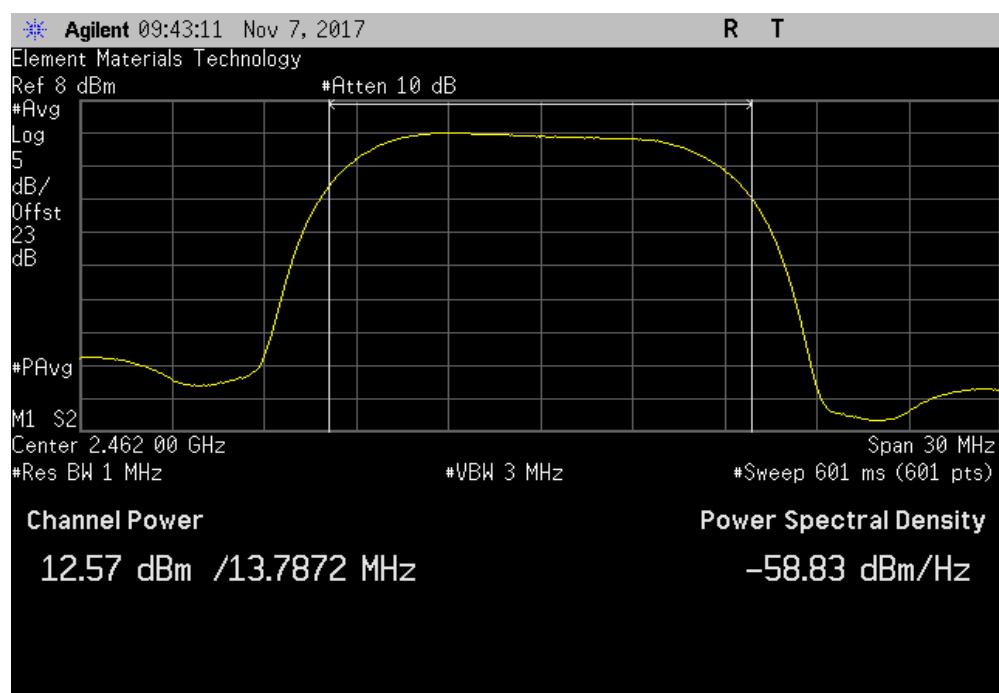
OUTPUT POWER

TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz					
Avg Cond	Duty Cycle	Value	Limit	Results	
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)		
12.645	0.2	12.8	30	Pass	



2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz					
Avg Cond	Duty Cycle	Value	Limit	Results	
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)		
12.568	0.3	12.9	30	Pass	

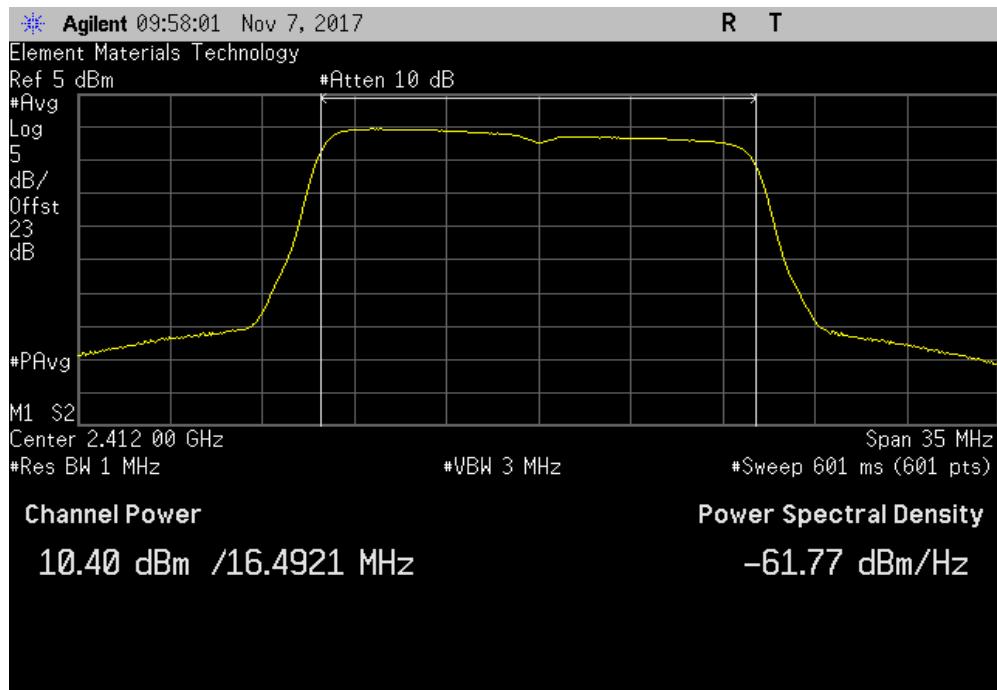


OUTPUT POWER

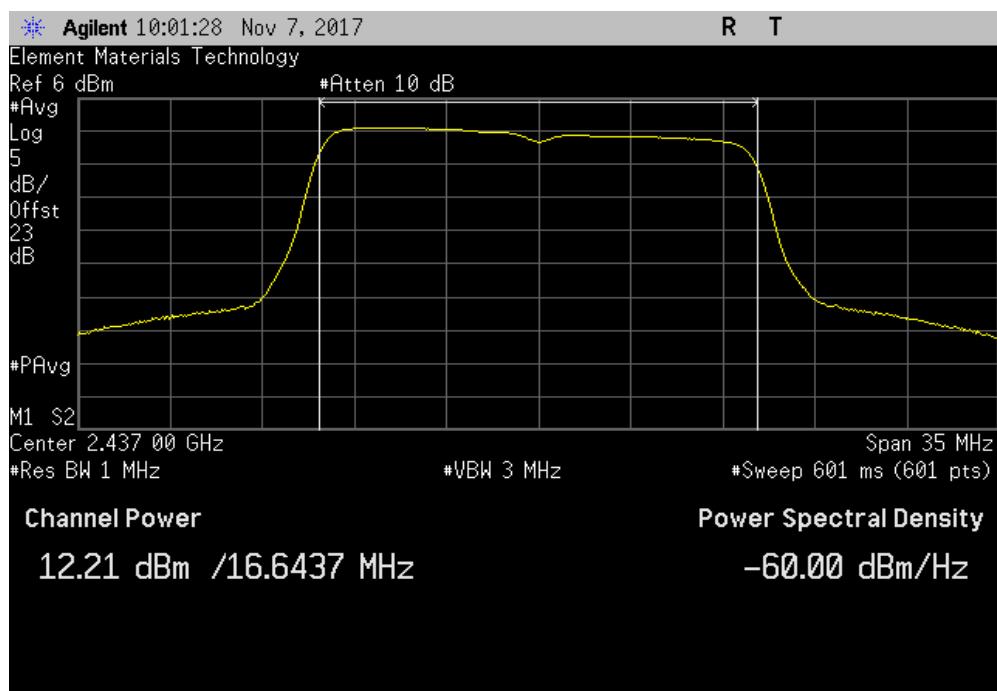


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz					
Avg Cond	Duty Cycle	Value	Limit		Results
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)		
10.399	0.1	10.5	30		Pass



2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz					
Avg Cond	Duty Cycle	Value	Limit		Results
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)		
12.208	0.2	12.4	30		Pass

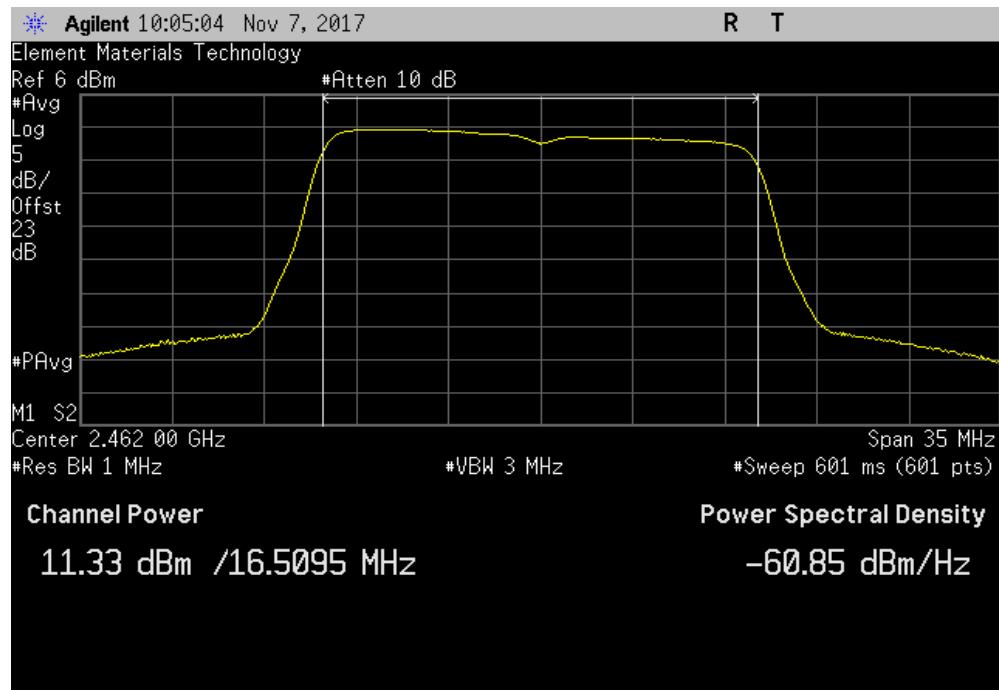


OUTPUT POWER

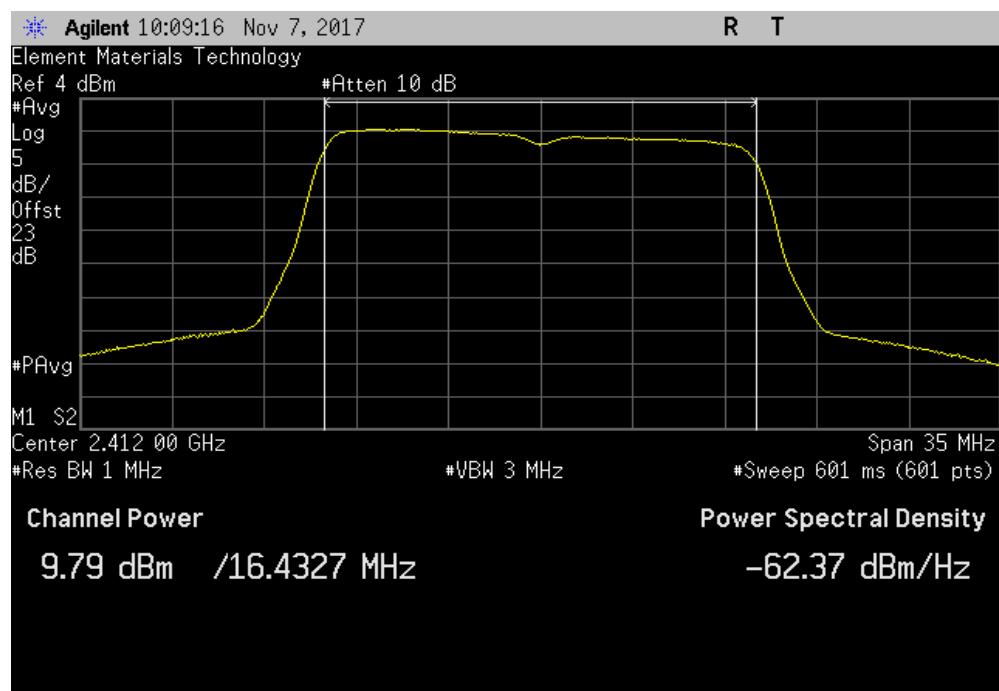


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz					
Avg Cond	Duty Cycle	Value	Limit	Results	
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)		
11.327	0.2	11.5	30	Pass	



2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz					
Avg Cond	Duty Cycle	Value	Limit	Results	
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)		
9.786	1	10.8	30	Pass	

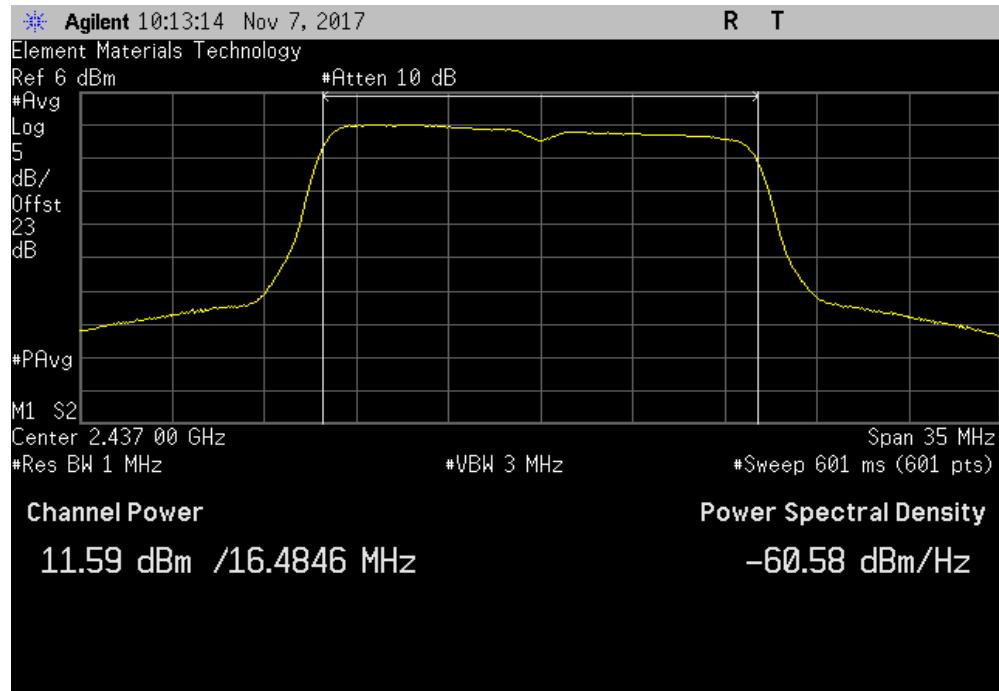


OUTPUT POWER

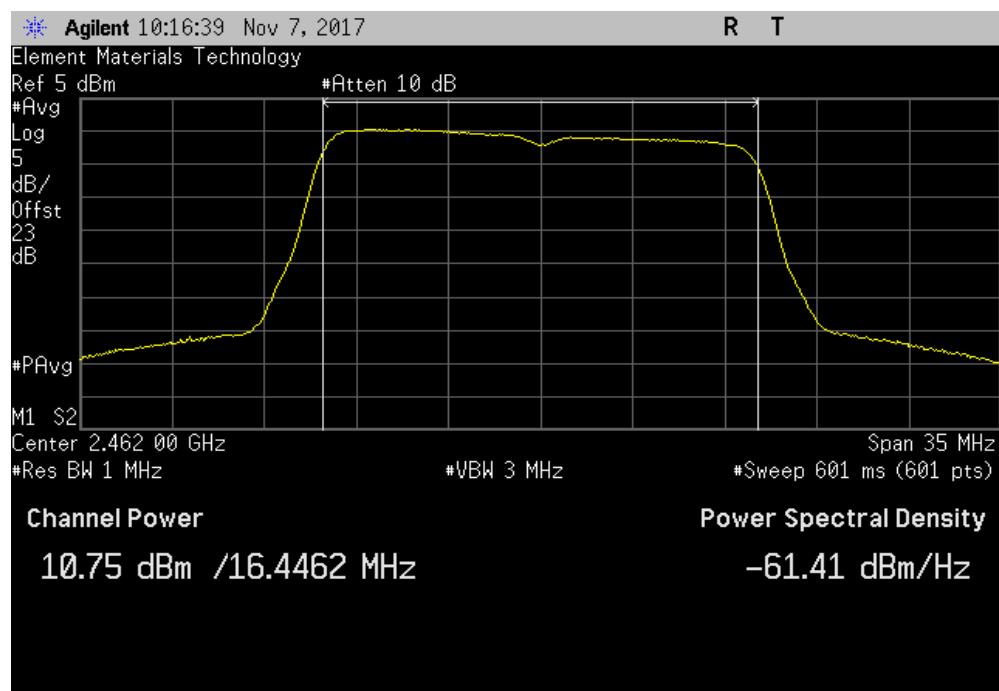


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Mid Channel 6, 2437 MHz					
Avg Cond	Duty Cycle	Value	Limit	Results	
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)		
11.593	0.8	12.4	30	Pass	



2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz					
Avg Cond	Duty Cycle	Value	Limit	Results	
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)		
10.748	1	11.7	30	Pass	

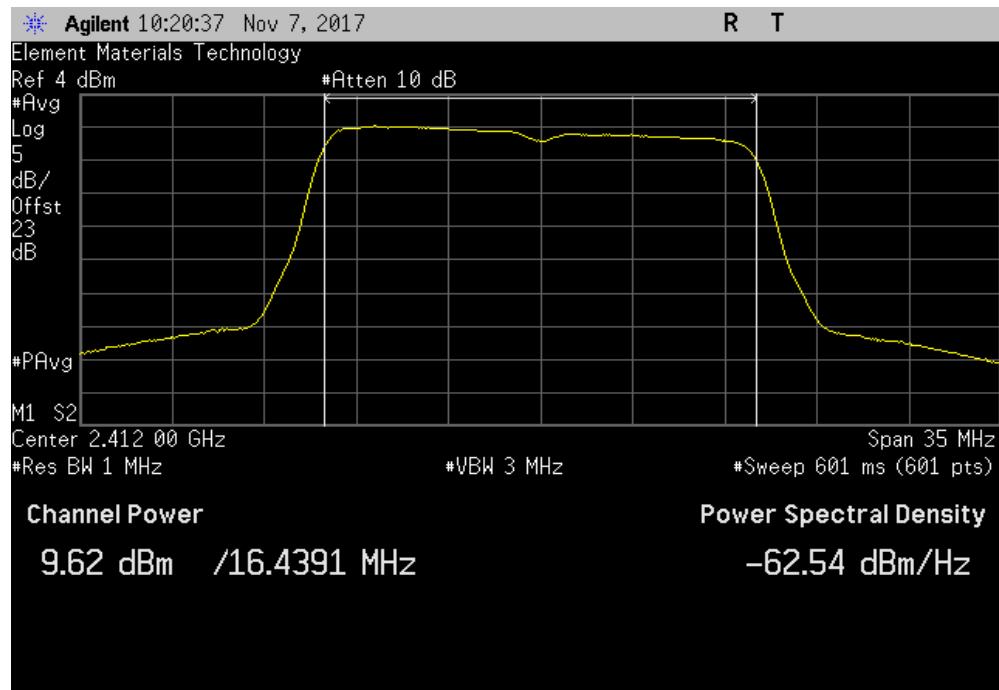


OUTPUT POWER

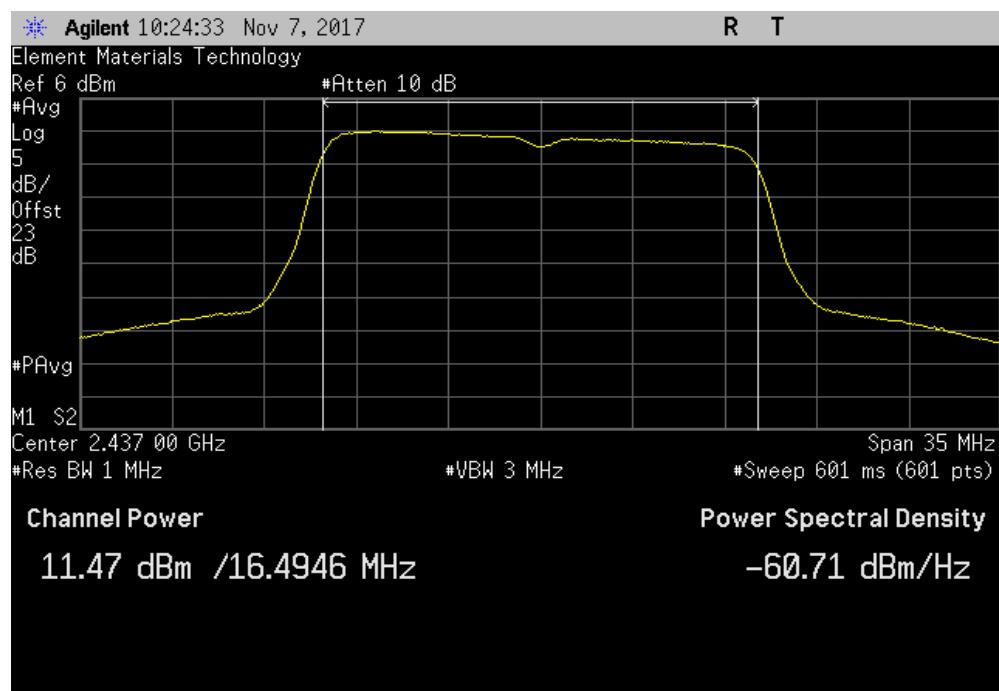


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz					
Avg Cond	Duty Cycle	Value	Limit	Results	
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)		
9.618	0.8	10.4	30	Pass	



2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Mid Channel 6, 2437 MHz					
Avg Cond	Duty Cycle	Value	Limit	Results	
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)		
11.465	0.8	12.3	30	Pass	

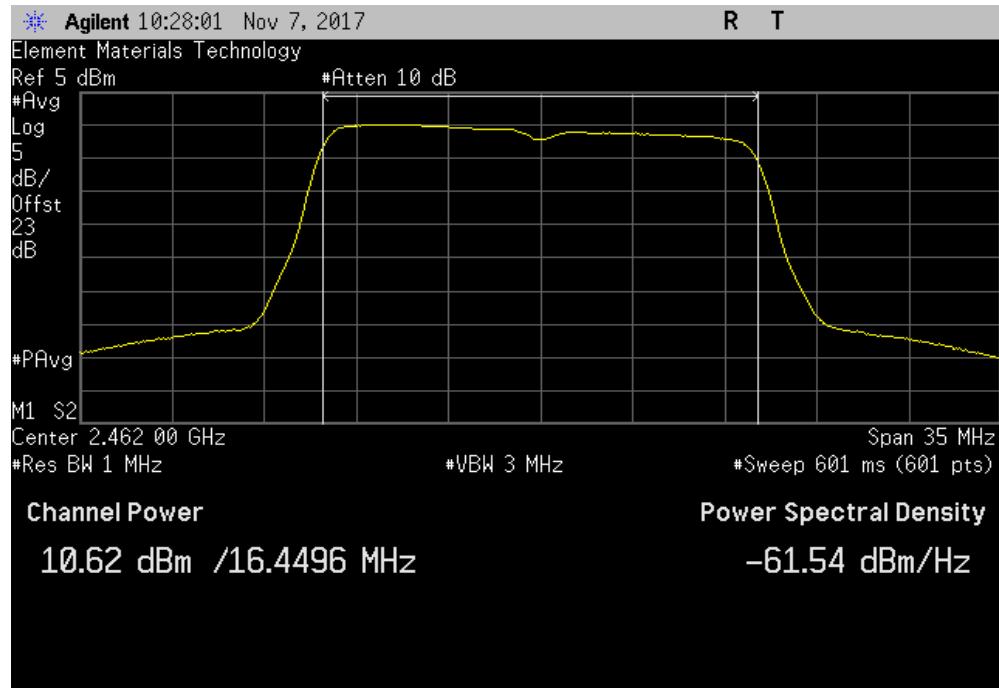




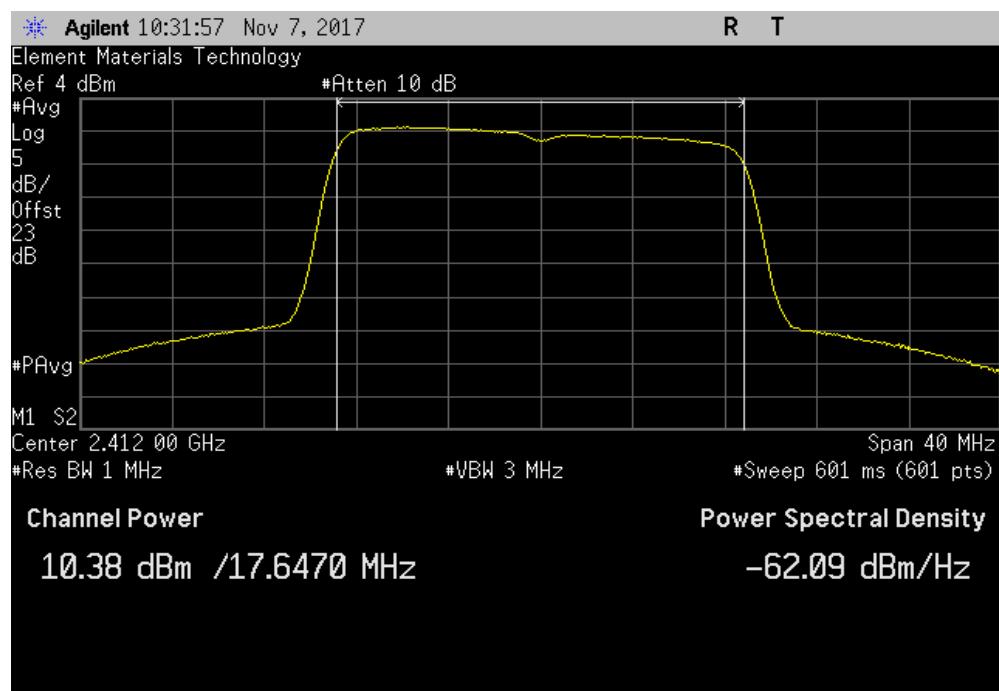
OUTPUT POWER

TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz					
Avg Cond	Duty Cycle	Value	Limit	Results	
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)		
10.621	0.8	11.4	30	Pass	



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz					
Avg Cond	Duty Cycle	Value	Limit	Results	
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)		
10.378	0.2	10.6	30	Pass	

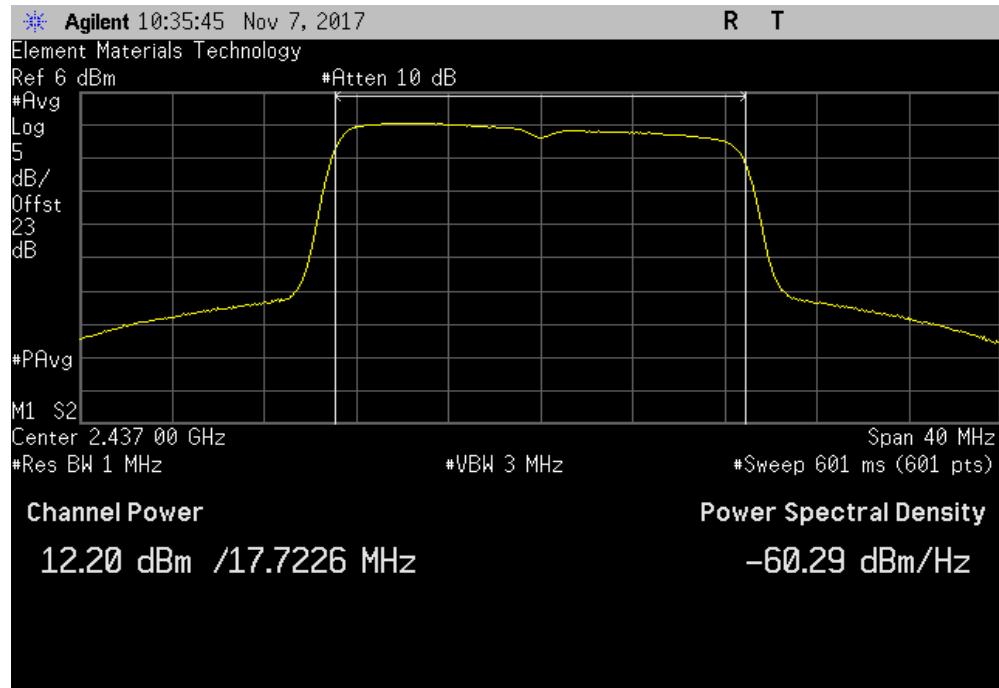




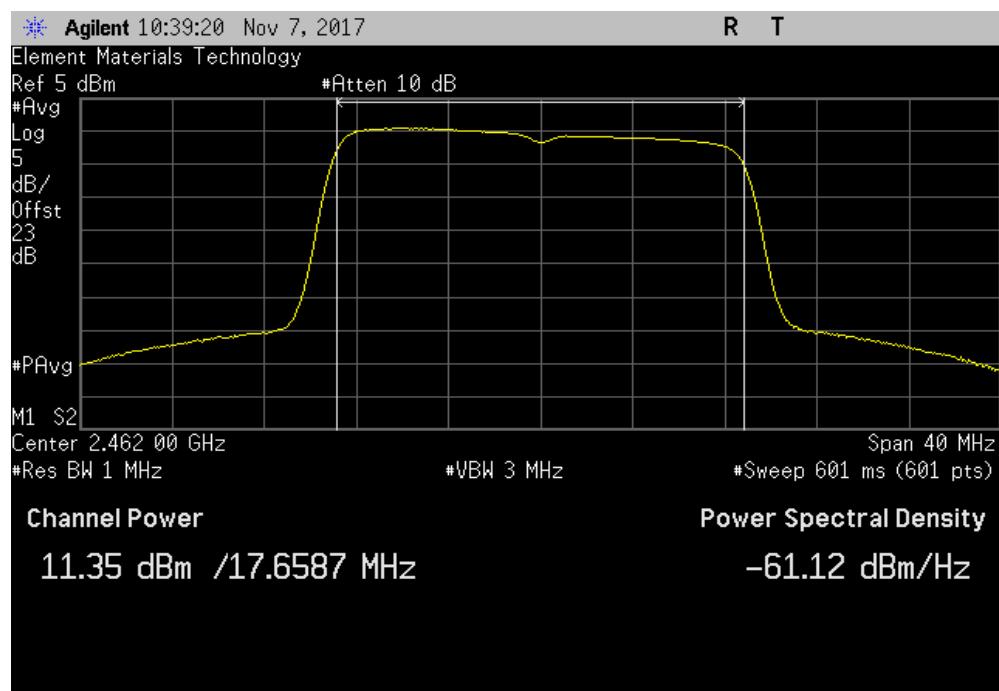
OUTPUT POWER

TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz					
Avg Cond	Duty Cycle	Value	Limit	Results	
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)		
12.197	0.2	12.4	30	Pass	



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz					
Avg Cond	Duty Cycle	Value	Limit	Results	
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)		
11.346	0.1	11.5	30	Pass	



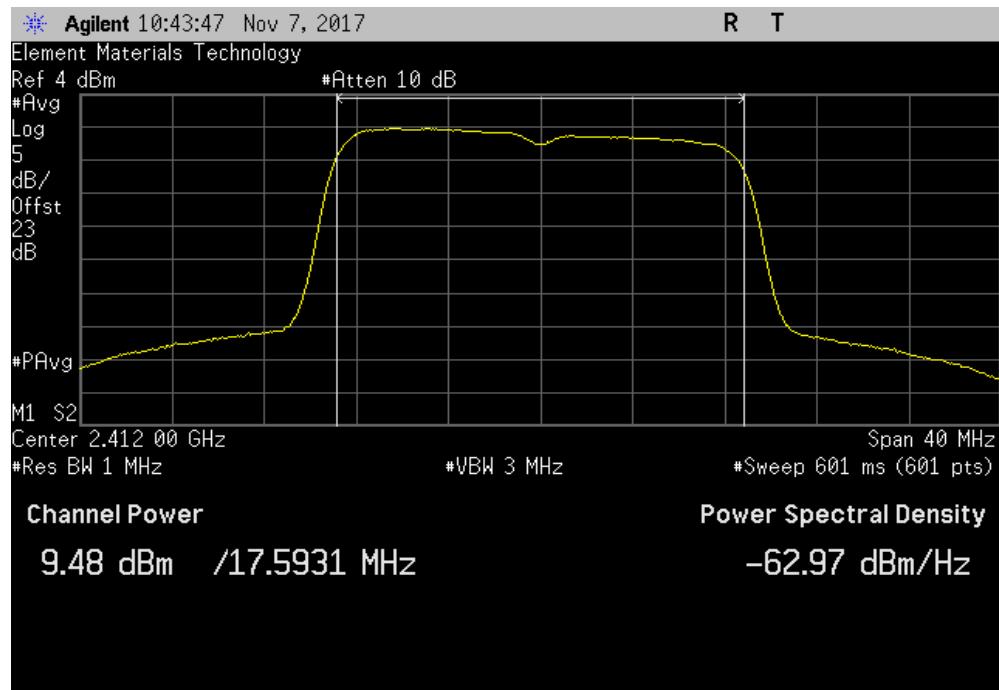
OUTPUT POWER



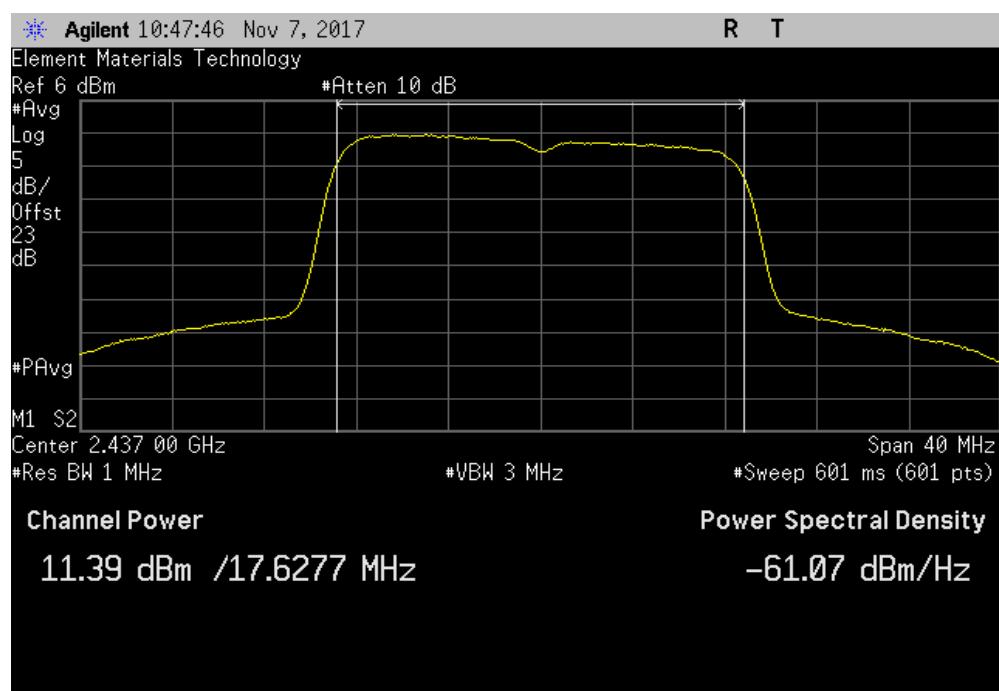
TbtTx 2017.10.04

XMit 2017.09.2

2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz					
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Value (dBm)	Limit (dBm)	Results	
9.483	1.2	10.7	30	Pass	



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz					
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Value (dBm)	Limit (dBm)	Results	
11.389	1.1	12.4	30	Pass	



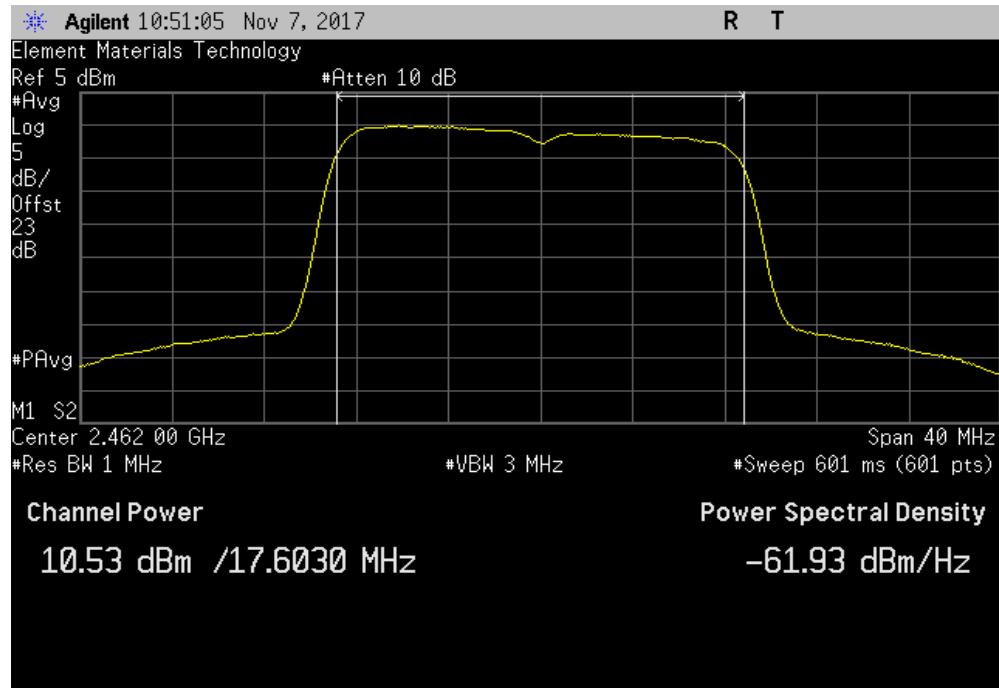
OUTPUT POWER



TbtTx 2017.10.04

XMit 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz					
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Value (dBm)	Limit (dBm)	Results	
10.528	0.9	11.4	30	Pass	



POWER SPECTRAL DENSITY



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
Generator - Signal	Agilent	N5183A	TIK	29-Sep-17	29-Sep-20
Cable	ESM Cable Corp.	TTBJ141 KMKM-72	MNU	11-Sep-17	11-Sep-18
Attenuator	S.M. Electronics	SA26B-20	RFW	14-Feb-17	14-Feb-18
Block - DC	Fairview Microwave	SD3379	AMI	12-Sep-17	12-Sep-18
Analyzer - Spectrum Analyzer	Agilent	E4440A	AAX	16-Mar-17	16-Mar-18

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. The maximum power spectral density measurements was measured using the channels and modes as called out on the following data sheets.

Per the procedure outlined in ANSI C63.10 the peak power spectral density was measured in a 3 kHz RBW.

POWER SPECTRAL DENSITY



TbTx 2017.10.04

XMI 2017.08.21

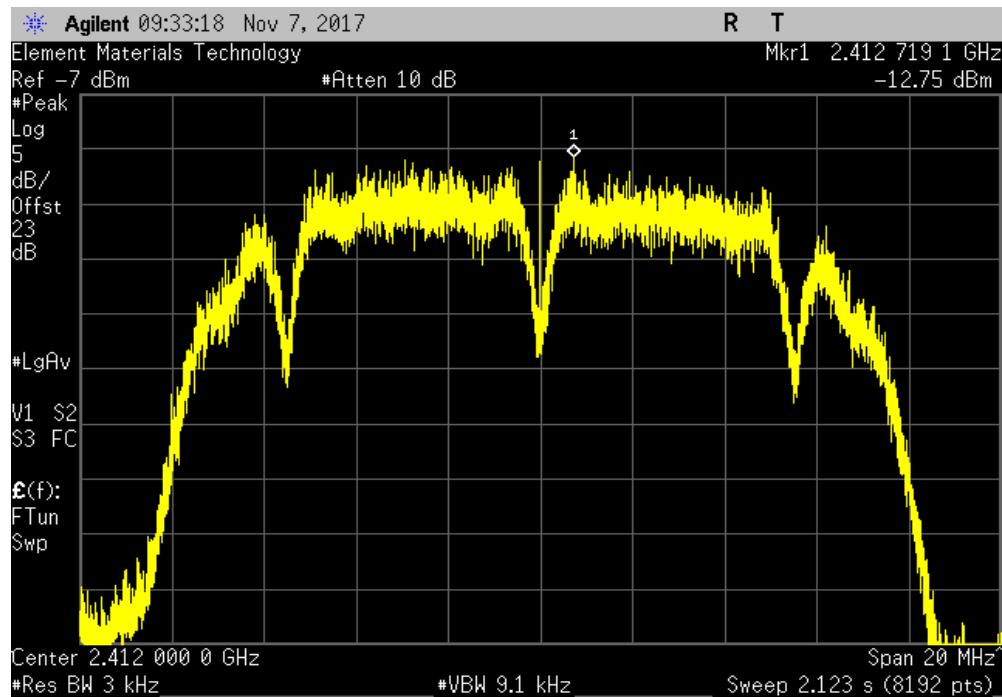
EUT:	Activity Tracking Belt		Work Order:	DGII0263	
Serial Number:	F8F005FF1522		Date:	7-Nov-17	
Customer:	Digi International Inc		Temperature:	21.9 °C	
Attendees:	Collin LaFave		Humidity:	22.7% RH	
Project:	None		Barometric Pres.:	1033 mbar	
Tested by:	Dustin Sparks	Power:	5VDC	Job Site:	MN08
TEST SPECIFICATIONS	Test Method				
FCC 15.247:2017	ANSI C63.10:2013				
COMMENTS	EUT powered by USB connection				
DEVIATIONS FROM TEST STANDARD					
None					
Configuration #	1	Signature	<i>Dustin Sparks</i>		
			Value	Limit	Results
			dBm/3kHz	< dBm/3kHz	
2400 MHz - 2483.5 MHz Band					
802.11(b) 1 Mbps					
Low Channel 1, 2412 MHz			-12.748	8	Pass
Mid Channel 6, 2437 MHz			-11.249	8	Pass
High Channel 11, 2462 MHz			-10.562	8	Pass
802.11(b) 11 Mbps					
Low Channel 1, 2412 MHz			-10.426	8	Pass
Mid Channel 6, 2437 MHz			-11.579	8	Pass
High Channel 11, 2462 MHz			-10.942	8	Pass
802.11(g) 6 Mbps					
Low Channel 1, 2412 MHz			-13.483	8	Pass
Mid Channel 6, 2437 MHz			-11.568	8	Pass
High Channel 11, 2462 MHz			-12.535	8	Pass
802.11(g) 36 Mbps					
Low Channel 1, 2412 MHz			-14.257	8	Pass
Mid Channel 6, 2437 MHz			-11.305	8	Pass
High Channel 11, 2462 MHz			-12.835	8	Pass
802.11(g) 54 Mbps					
Low Channel 1, 2412 MHz			-14.396	8	Pass
Mid Channel 6, 2437 MHz			-11.761	8	Pass
High Channel 11, 2462 MHz			-12.875	8	Pass
802.11(n) MCS0					
Low Channel 1, 2412 MHz			-12.973	8	Pass
Mid Channel 6, 2437 MHz			-12.537	8	Pass
High Channel 11, 2462 MHz			-13.307	8	Pass
802.11(n) MCS7					
Low Channel 1, 2412 MHz			-13.981	8	Pass
Mid Channel 6, 2437 MHz			-12.07	8	Pass
High Channel 11, 2462 MHz			-13.662	8	Pass

POWER SPECTRAL DENSITY

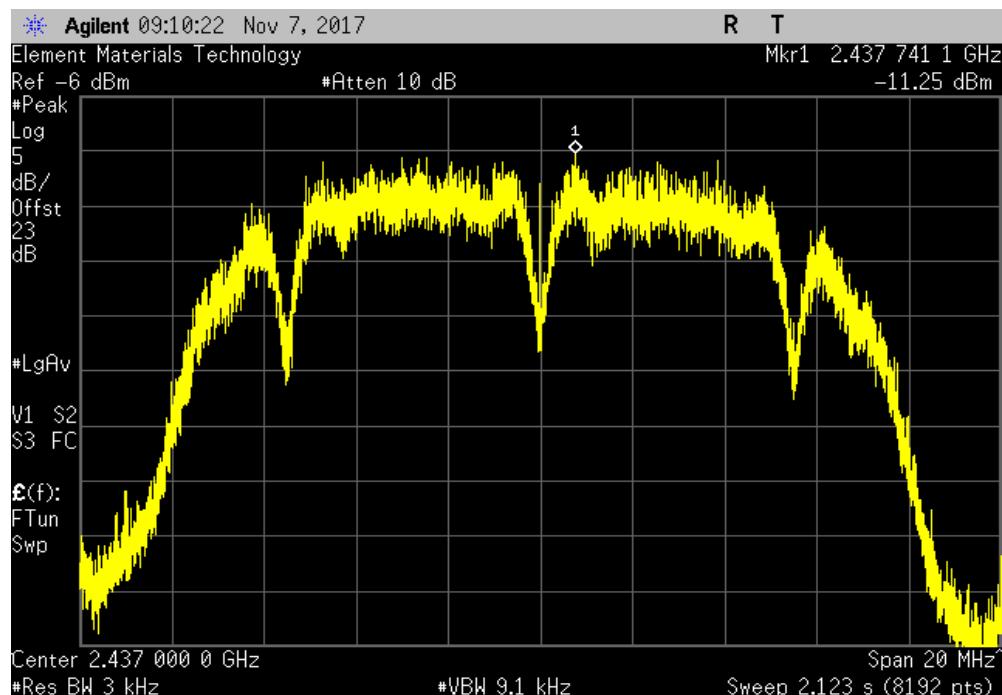


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz		
Value	Limit	Results
dBm/3kHz	< dBm/3kHz	
-12.748	8	Pass



2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz		
Value	Limit	Results
dBm/3kHz	< dBm/3kHz	
-11.249	8	Pass



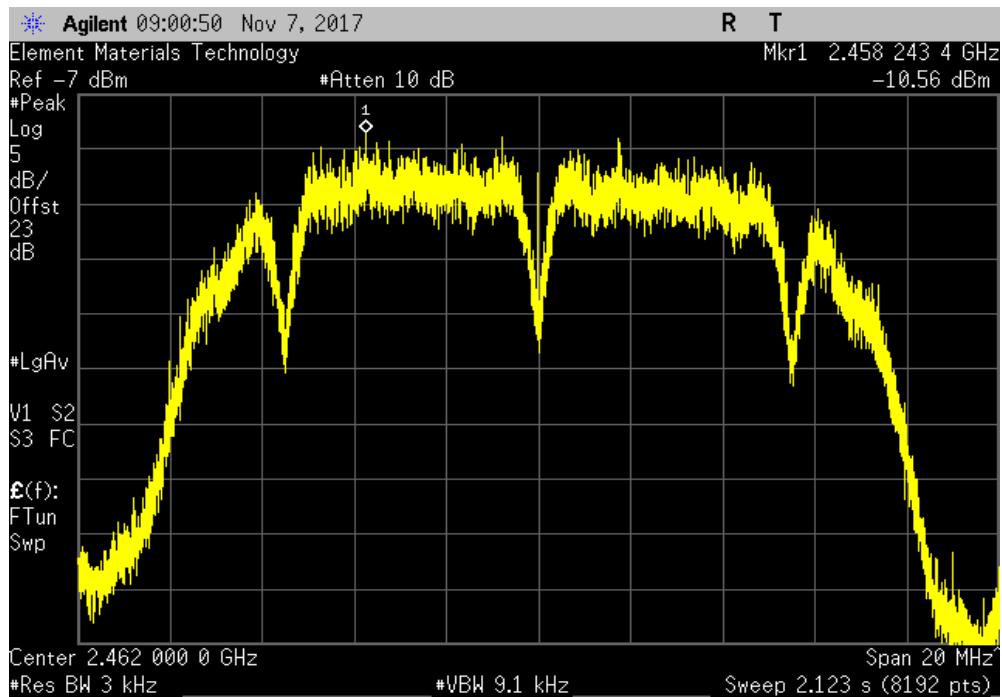
POWER SPECTRAL DENSITY



TbTx 2017.10.04 XMII 2017.09.21

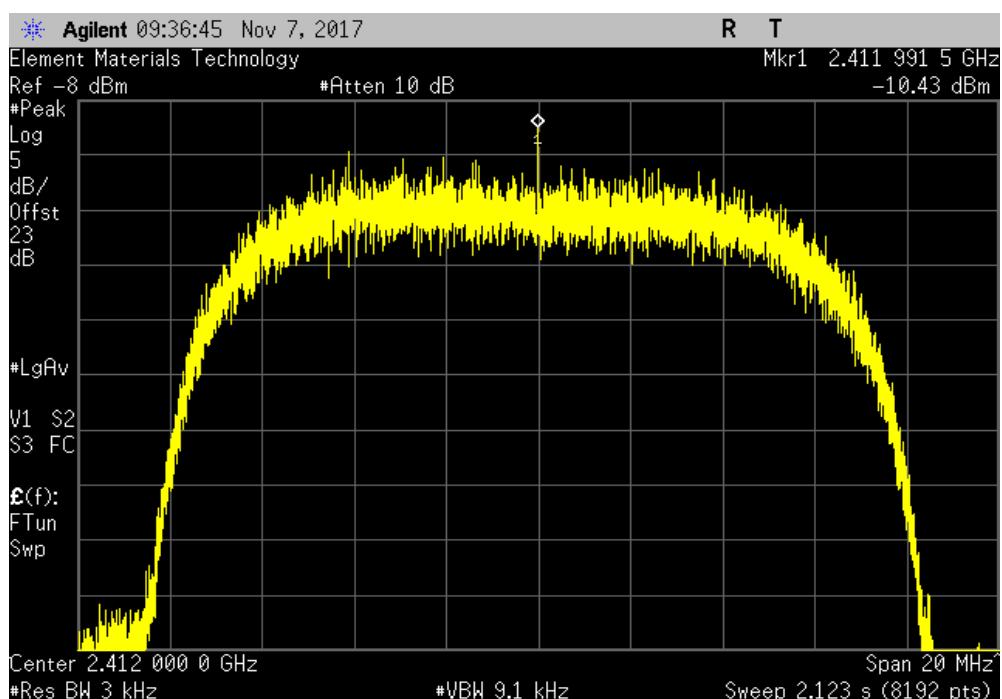
2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz

Value	Limit	Results
dBm/3kHz	< dBm/3kHz	
-10.562	8	Pass



2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz

Value	Limit	Results
dBm/3kHz	< dBm/3kHz	
-10.426	8	Pass

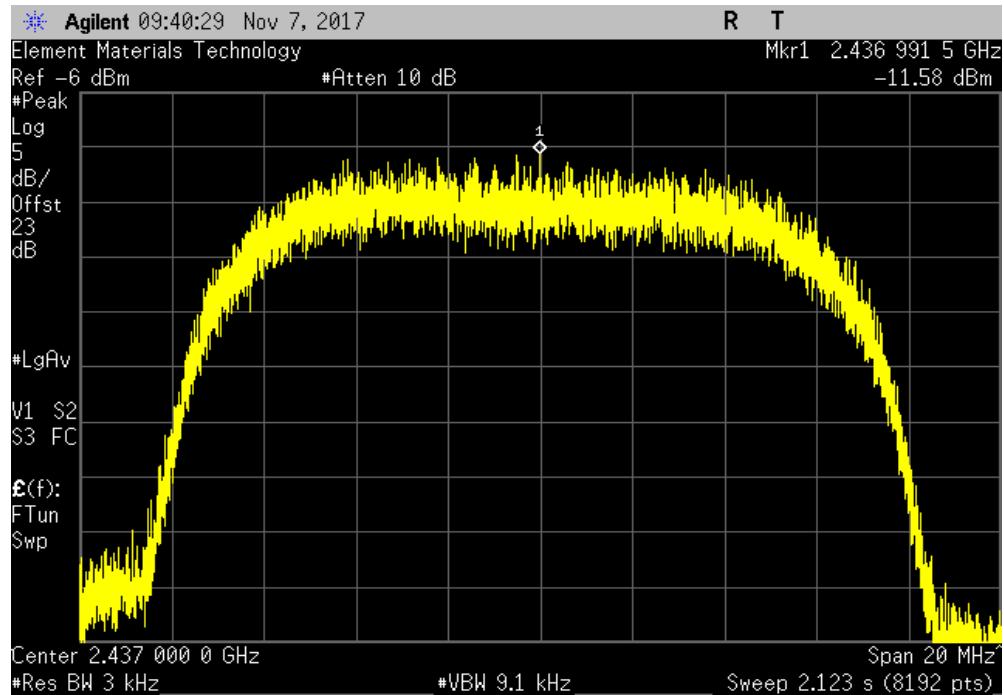


POWER SPECTRAL DENSITY

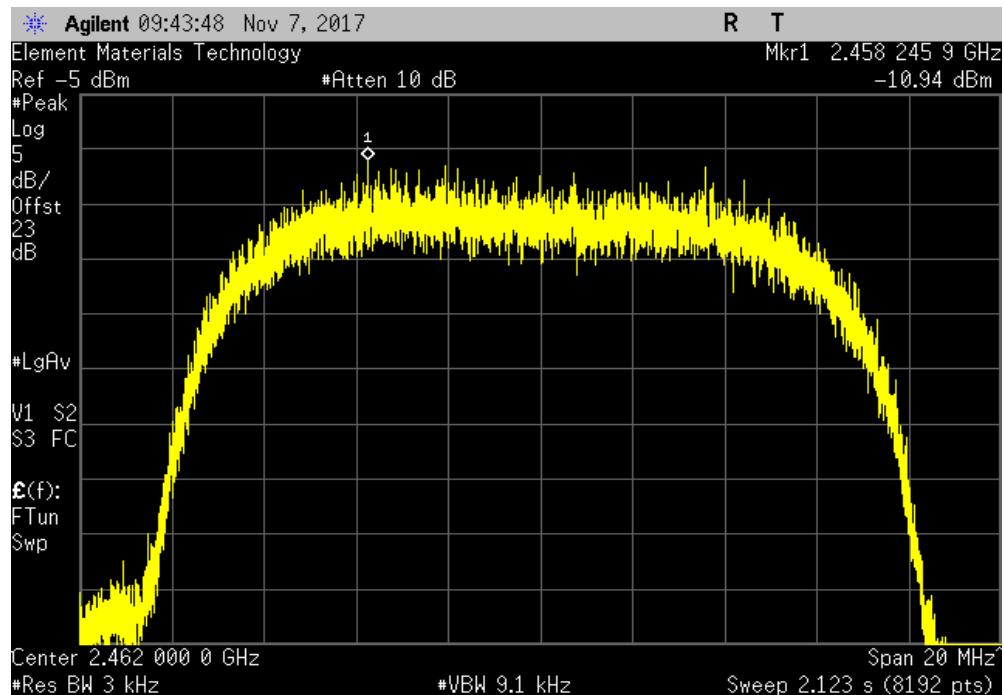


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Mid Channel 6, 2437 MHz		
Value	Limit	Results
dBm/3kHz	< dBm/3kHz	
-11.579	8	Pass



2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz		
Value	Limit	Results
dBm/3kHz	< dBm/3kHz	
-10.942	8	Pass

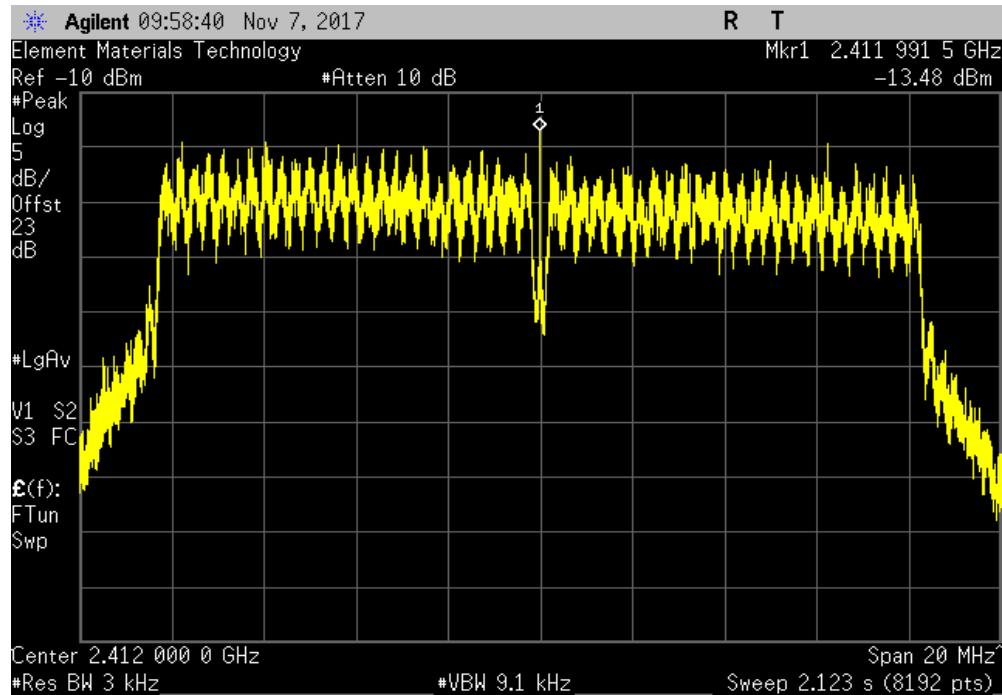


POWER SPECTRAL DENSITY

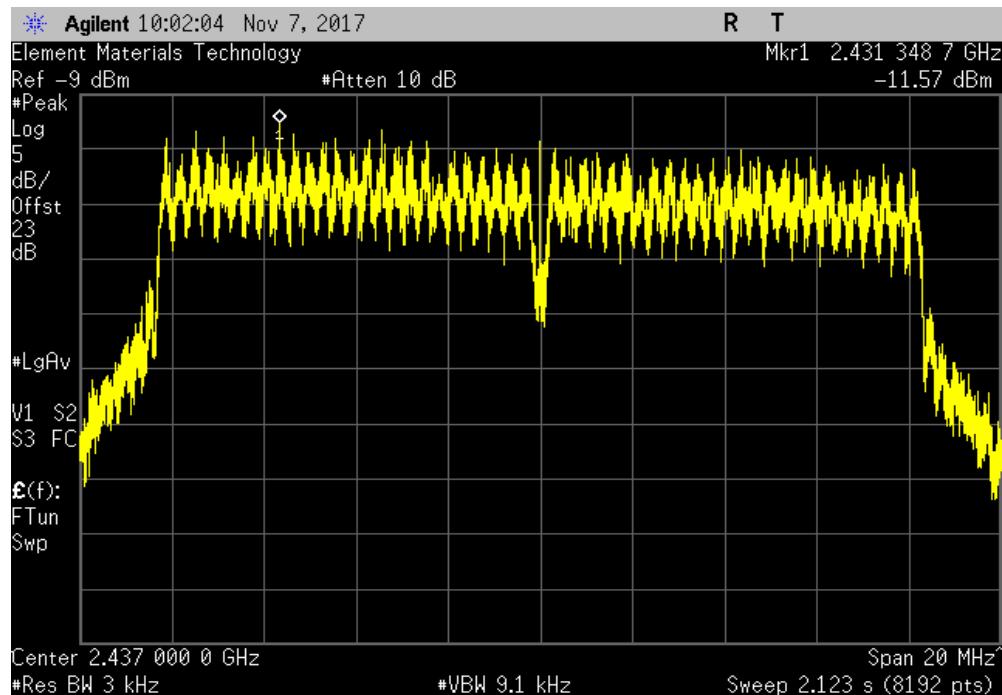


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz		
Value	Limit	Results
dBm/3kHz	< dBm/3kHz	
-13.483	8	Pass



2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Mid Channel 6, 2437 MHz		
Value	Limit	Results
dBm/3kHz	< dBm/3kHz	
-11.568	8	Pass

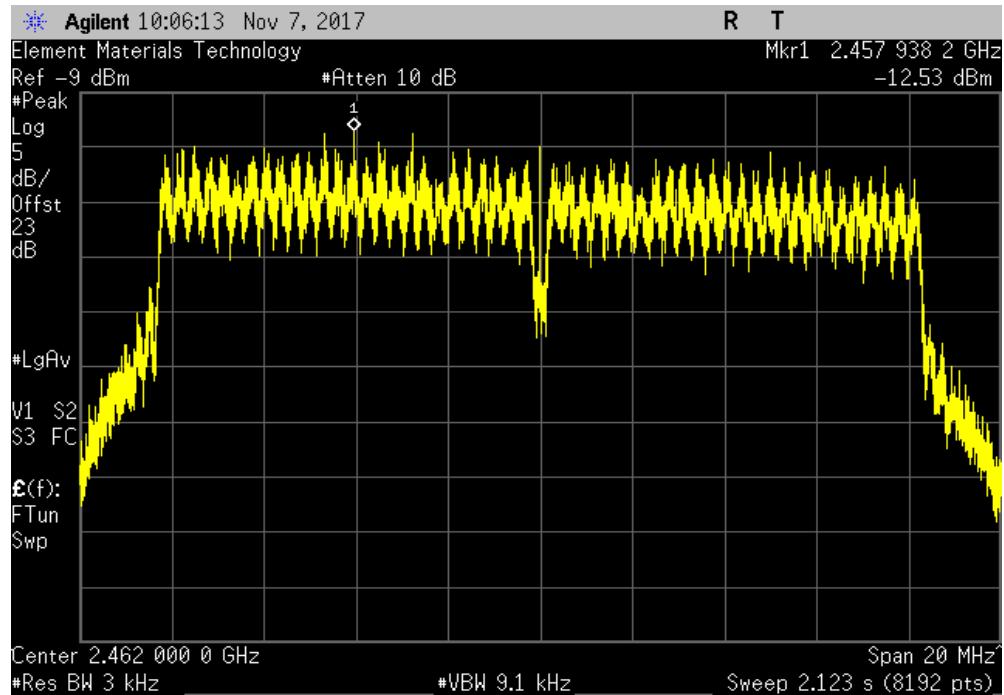


POWER SPECTRAL DENSITY

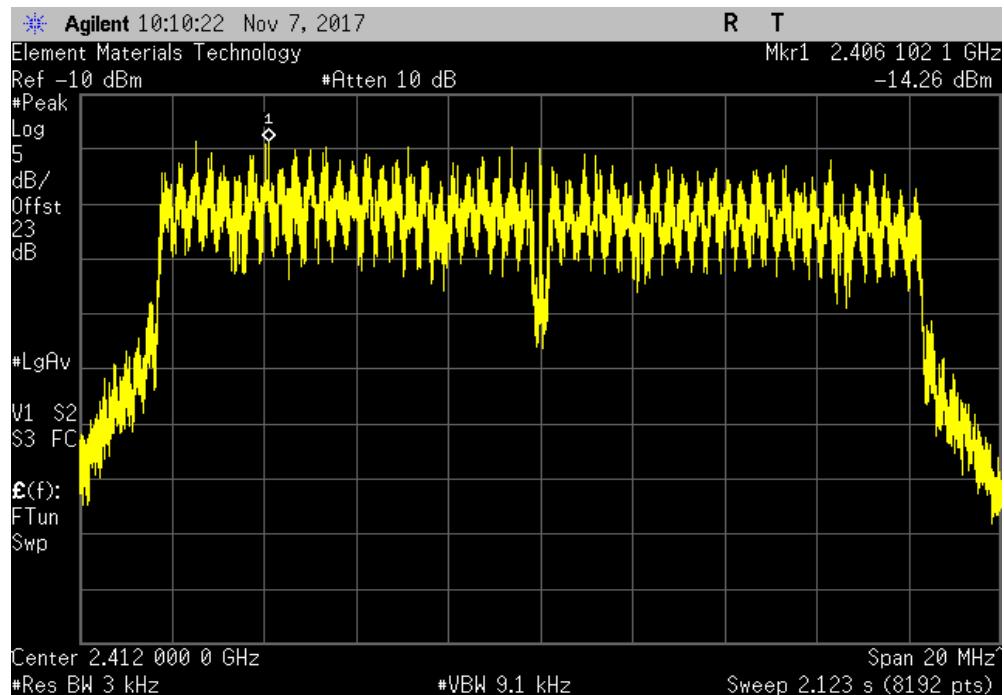


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz		
Value	Limit	Results
dBm/3kHz	< dBm/3kHz	
-12.535	8	Pass



2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz		
Value	Limit	Results
dBm/3kHz	< dBm/3kHz	
-14.257	8	Pass

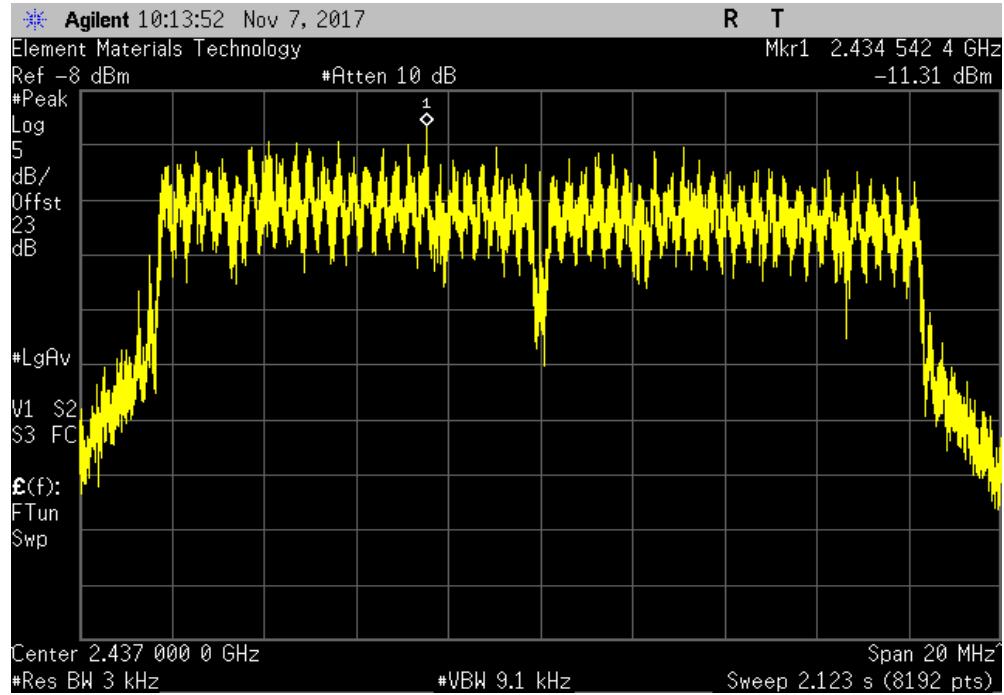


POWER SPECTRAL DENSITY

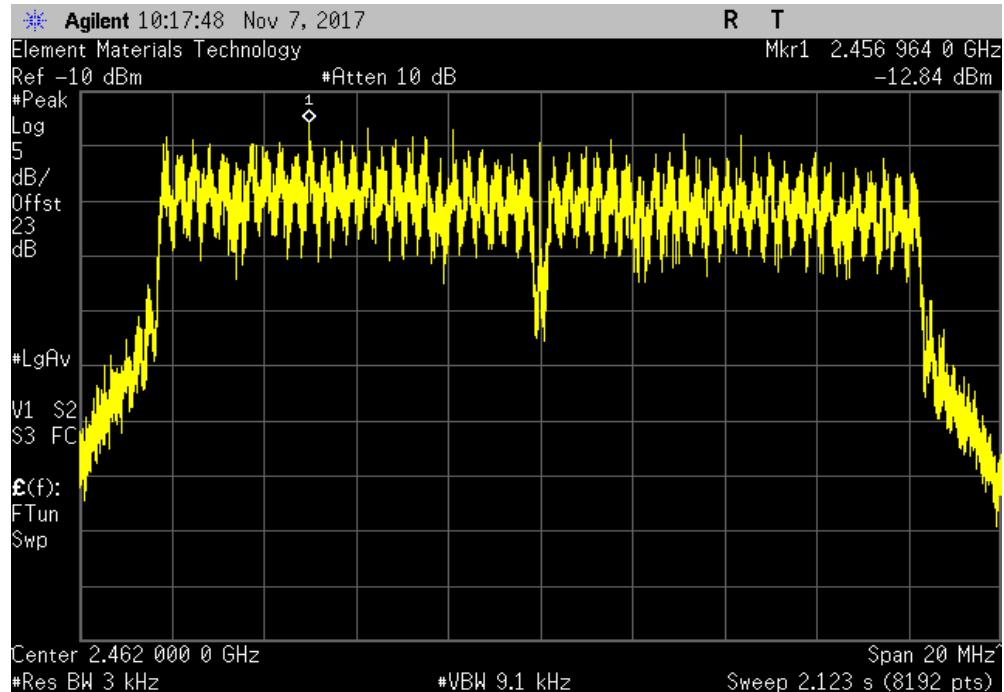


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Mid Channel 6, 2437 MHz			
	Value	Limit	
	dBm/3kHz	< dBm/3kHz	Results
	-11.305	8	Pass



2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz			
	Value	Limit	
	dBm/3kHz	< dBm/3kHz	Results
	-12.835	8	Pass

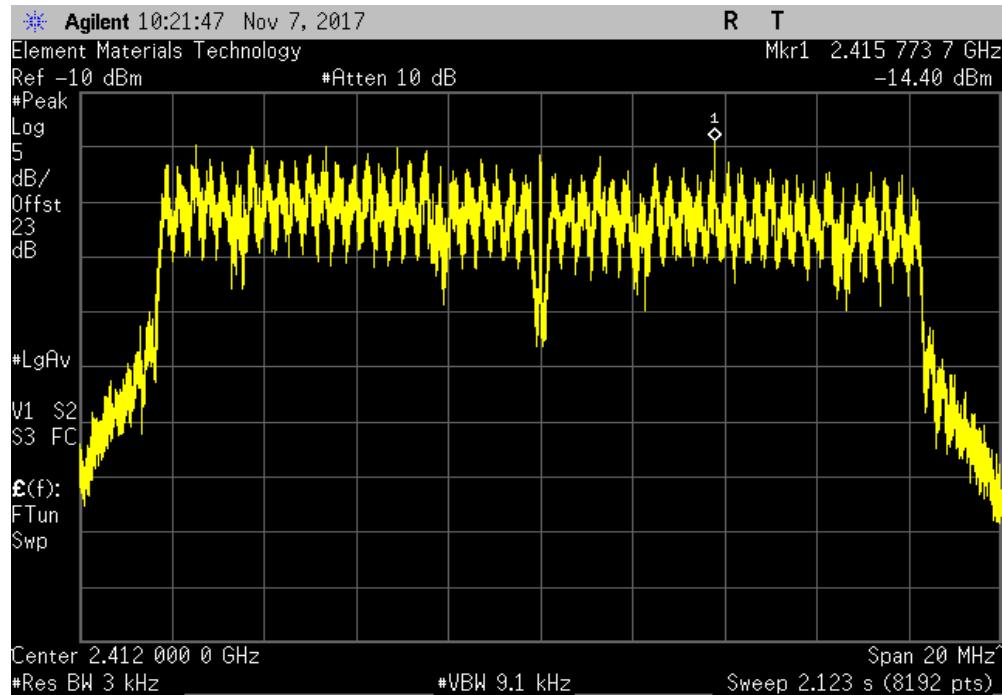


POWER SPECTRAL DENSITY

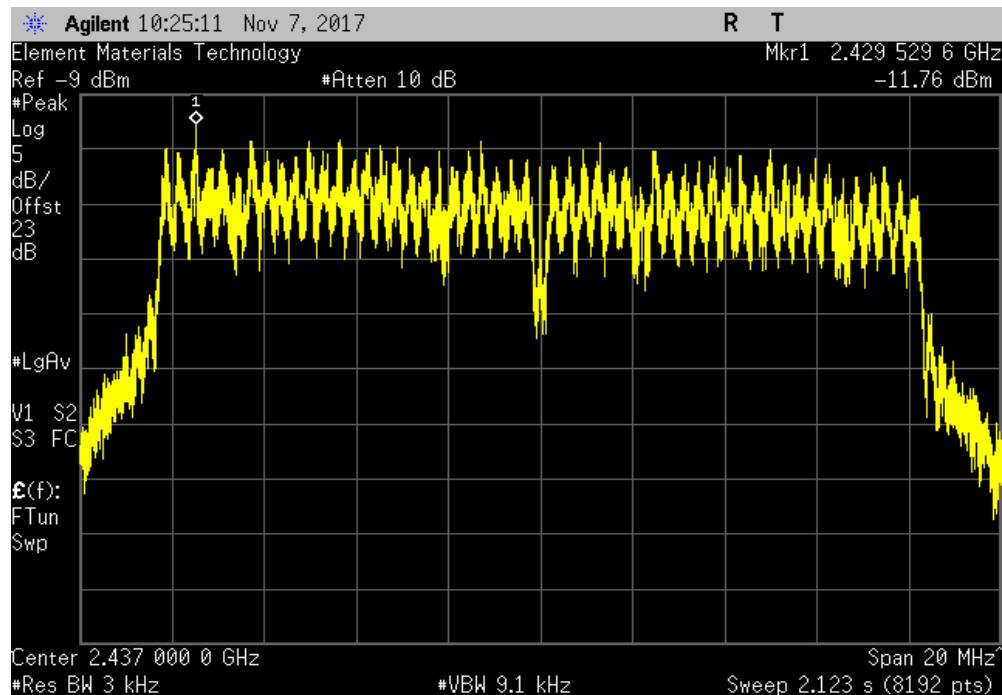


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz		
Value	Limit	
dBm/3kHz	< dBm/3kHz	Results
-14.396	8	Pass



2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Mid Channel 6, 2437 MHz		
Value	Limit	
dBm/3kHz	< dBm/3kHz	Results
-11.761	8	Pass



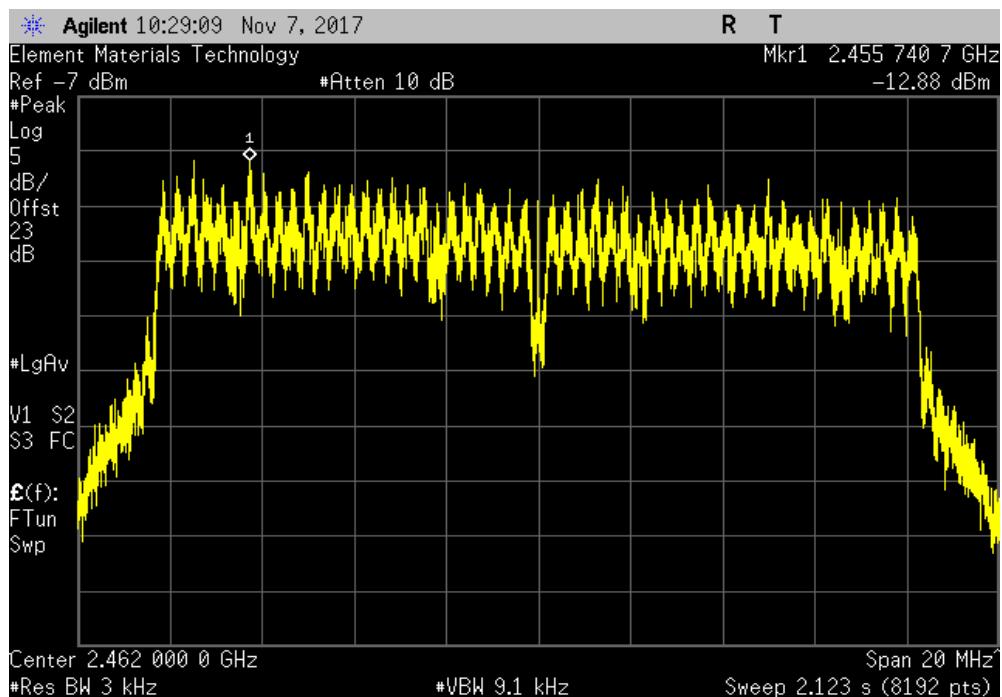
POWER SPECTRAL DENSITY



TbTx 2017.10.04 XMII 2017.09.21

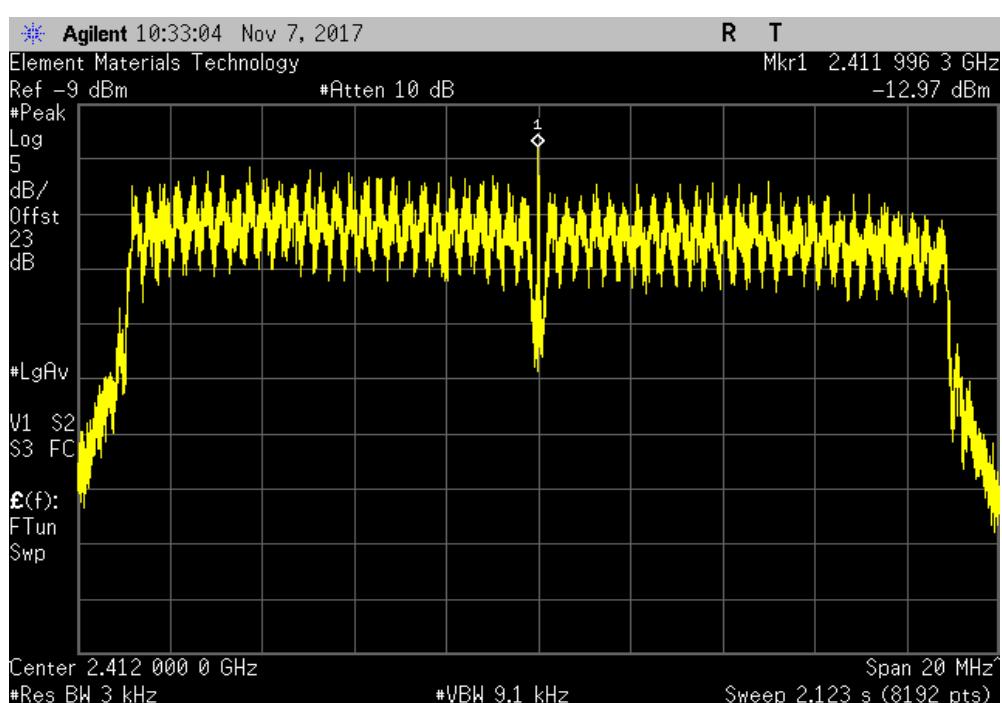
2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz

Value	Limit	Results
dBm/3kHz	< dBm/3kHz	
-12.875	8	Pass



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz

Value	Limit	Results
dBm/3kHz	< dBm/3kHz	
-12.973	8	Pass

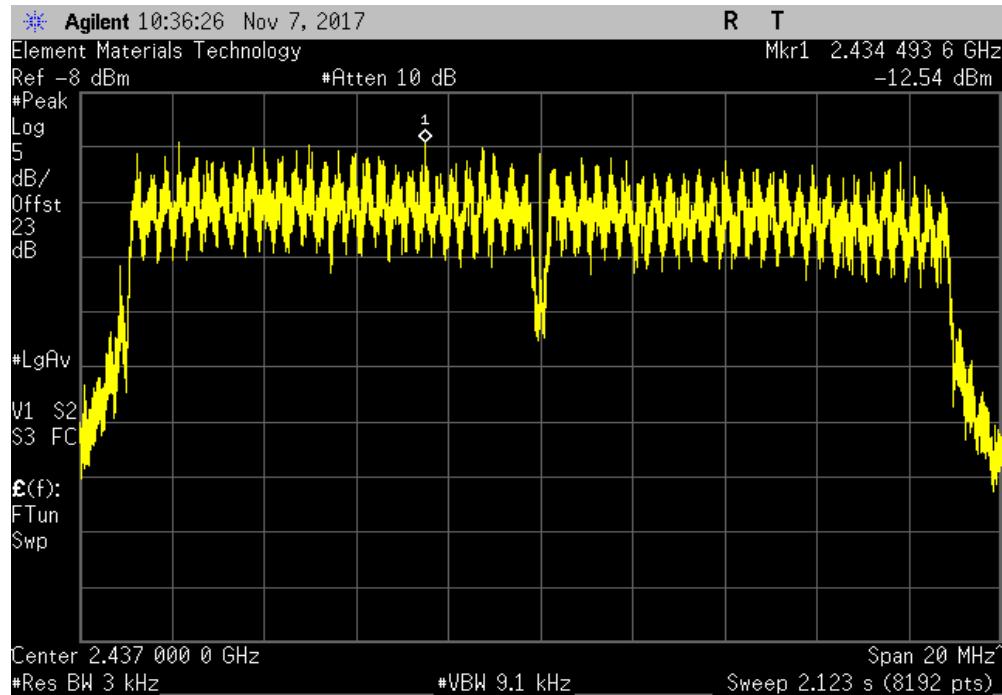


POWER SPECTRAL DENSITY

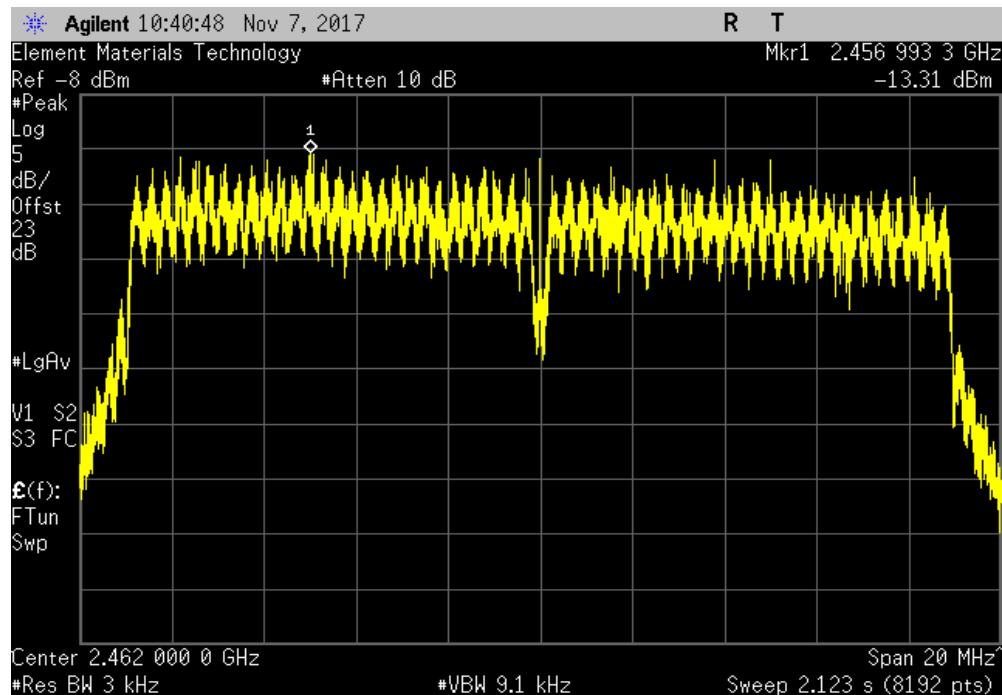


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz		
Value	Limit	Results
dBm/3kHz	< dBm/3kHz	
-12.537	8	Pass



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz		
Value	Limit	Results
dBm/3kHz	< dBm/3kHz	
-13.307	8	Pass

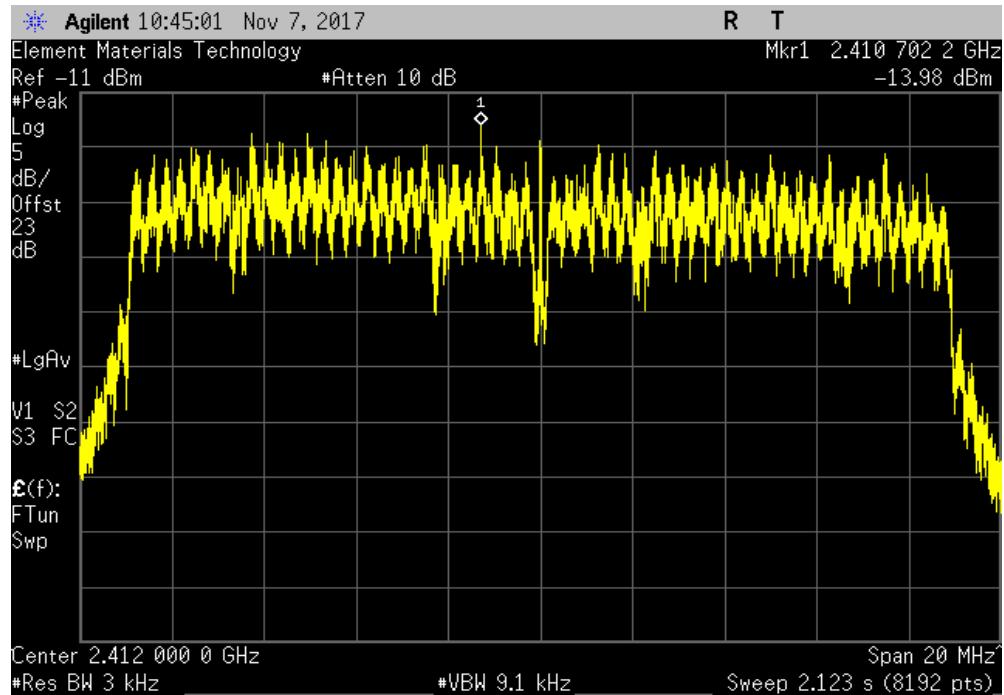


POWER SPECTRAL DENSITY

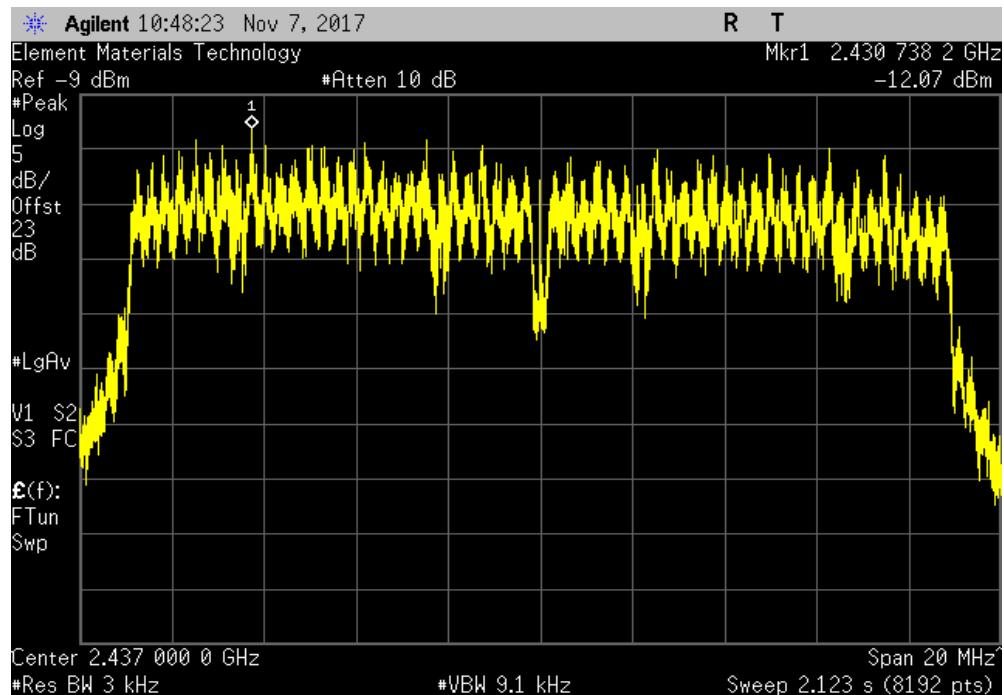


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz			
Value	Limit	Results	
dBm/3kHz	< dBm/3kHz		
-13.981	8	Pass	



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz			
Value	Limit	Results	
dBm/3kHz	< dBm/3kHz		
-12.07	8	Pass	

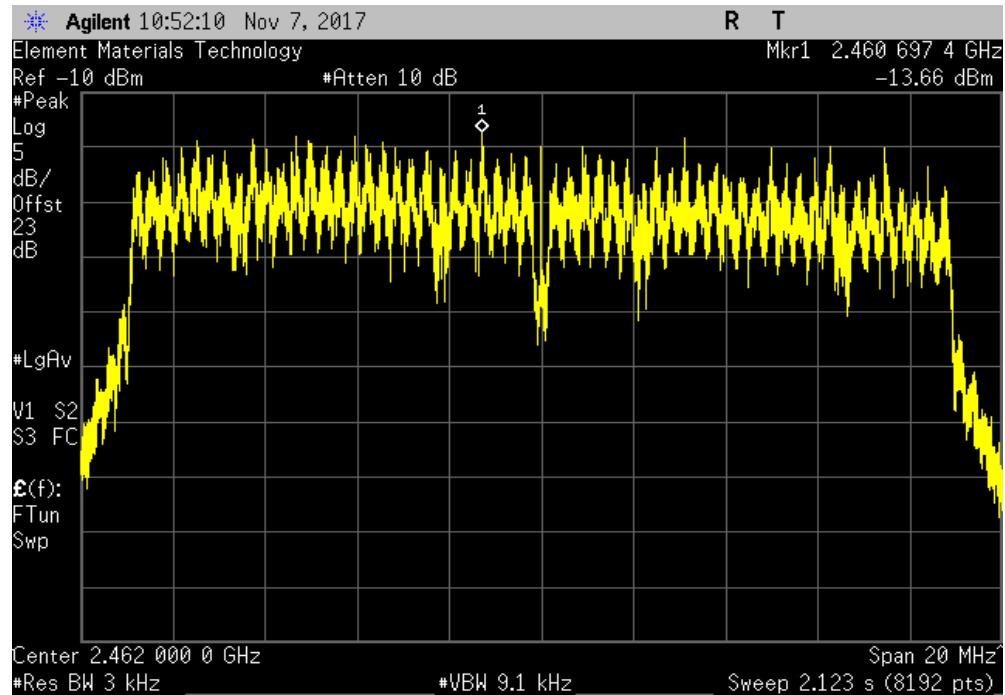


POWER SPECTRAL DENSITY



TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz		
Value	Limit	Results
dBm/3kHz	< dBm/3kHz	
-13.662	8	Pass



BAND EDGE COMPLIANCE



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
Generator - Signal	Agilent	N5183A	TIK	29-Sep-17	29-Sep-20
Cable	ESM Cable Corp.	TTBJ141 KMKM-72	MNU	11-Sep-17	11-Sep-18
Attenuator	S.M. Electronics	SA26B-20	RFW	14-Feb-17	14-Feb-18
Block - DC	Fairview Microwave	SD3379	AMI	12-Sep-17	12-Sep-18
Analyzer - Spectrum Analyzer	Agilent	E4440A	AAX	16-Mar-17	16-Mar-18

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. The spurious RF conducted emissions at the edges of the authorized bands were measured with the EUT set to low and high transmit frequencies in each available band. The channels closest to the band edges were selected. The EUT was transmitting at the data rate(s) listed in the datasheet.

The spectrum was scanned below the lower band edge and above the higher band edge.

An RMS detector was used to match the method called out for Output Power. Because the reference level was taken with an RMS detector, the attenuation requirement is -30 dBc.

BAND EDGE COMPLIANCE



Tbitx 2017.10.04

XMI 2017.08.21

EUT:	Activity Tracking Belt		Work Order:	DGII0263	
Serial Number:	F8F005FF1522		Date:	7-Nov-17	
Customer:	Digi International Inc		Temperature:	21.8 °C	
Attendees:	Collin LaFave		Humidity:	22.8% RH	
Project:	None		Barometric Pres.:	1034 mbar	
Tested by:	Dustin Sparks	Power:	5VDC	Job Site:	MN08
TEST SPECIFICATIONS	Test Method				
FCC 15.247:2017	ANSI C63.10:2013				
COMMENTS	EUT powered by USB connection				
DEVIATIONS FROM TEST STANDARD					
None					
Configuration #	1	Signature	<i>Dustin Sparks</i>	Value (dBc)	Limit ≤ (dBc)
2400 MHz - 2483.5 MHz Band				Result	
802.11(b) 1 Mbps					
Low Channel 1, 2412 MHz			-33.86	-30	Pass
High Channel 11, 2462 MHz			-57.65	-30	Pass
802.11(b) 11 Mbps					
Low Channel 1, 2412 MHz			-36.64	-30	Pass
High Channel 11, 2462 MHz			-58.53	-30	Pass
802.11(g) 6 Mbps					
Low Channel 1, 2412 MHz			-30.58	-30	Pass
High Channel 11, 2462 MHz			-42.4	-30	Pass
802.11(g) 36 Mbps					
Low Channel 1, 2412 MHz			-31.55	-30	Pass
High Channel 11, 2462 MHz			-42.97	-30	Pass
802.11(g) 54 Mbps					
Low Channel 1, 2412 MHz			-31.81	-30	Pass
High Channel 11, 2462 MHz			-42.94	-30	Pass
802.11(n) MCS0					
Low Channel 1, 2412 MHz			-30.64	-30	Pass
High Channel 11, 2462 MHz			-39.5	-30	Pass
802.11(n) MCS7					
Low Channel 1, 2412 MHz			-31.86	-30	Pass
High Channel 11, 2462 MHz			-40.98	-30	Pass

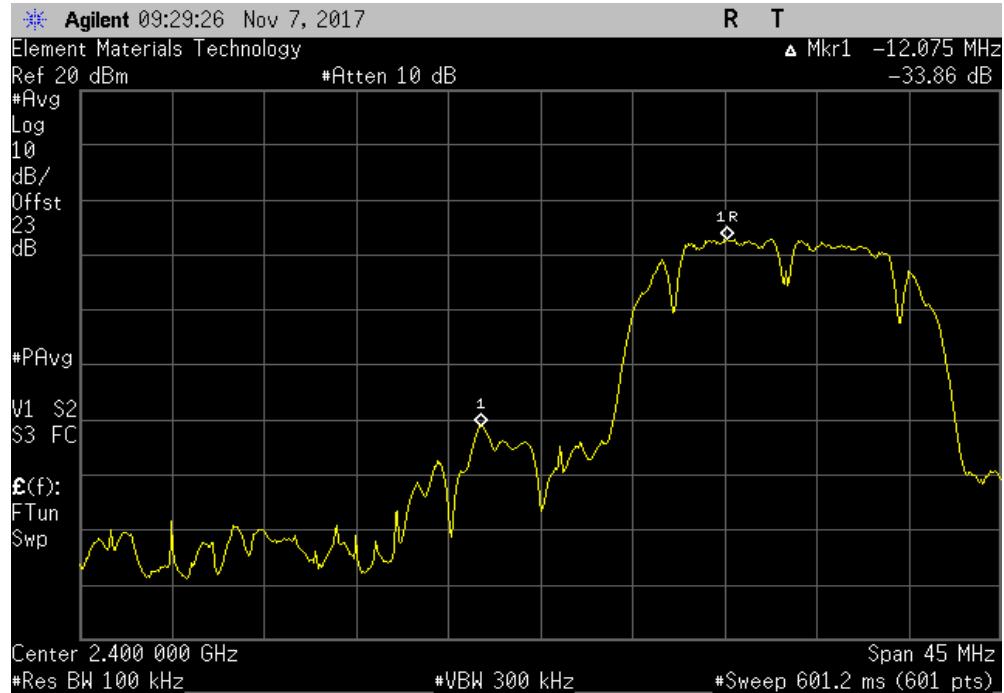
BAND EDGE COMPLIANCE



TbTx 2017.10.04 XMII 2017.09.21

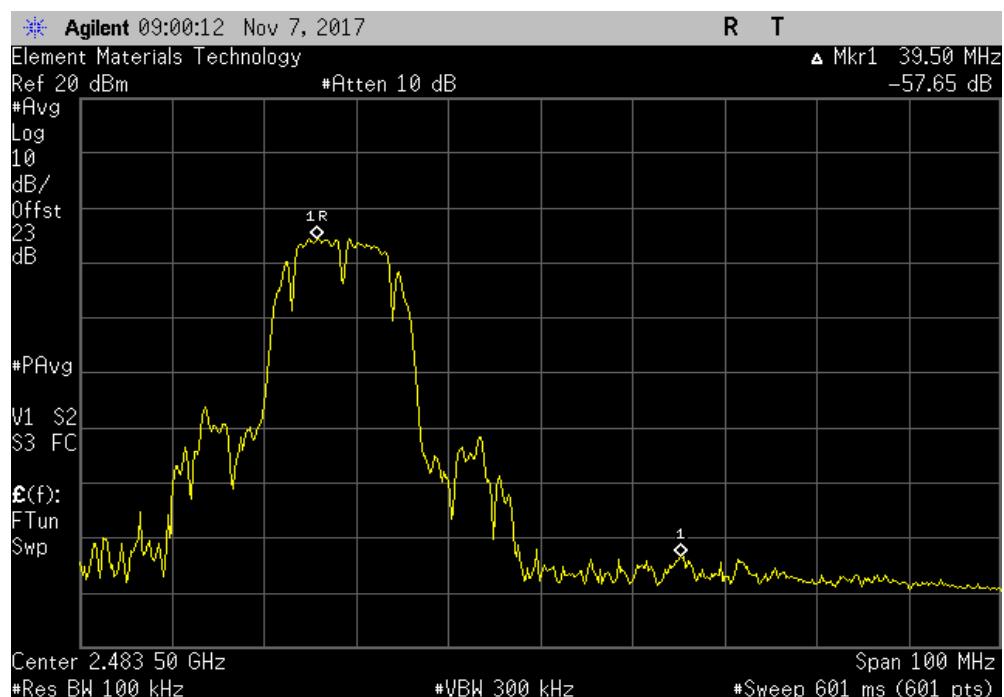
2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz

Value (dBc)	Limit ≤ (dBc)	Result
-33.86	-30	Pass



2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz

Value (dBc)	Limit ≤ (dBc)	Result
-57.65	-30	Pass



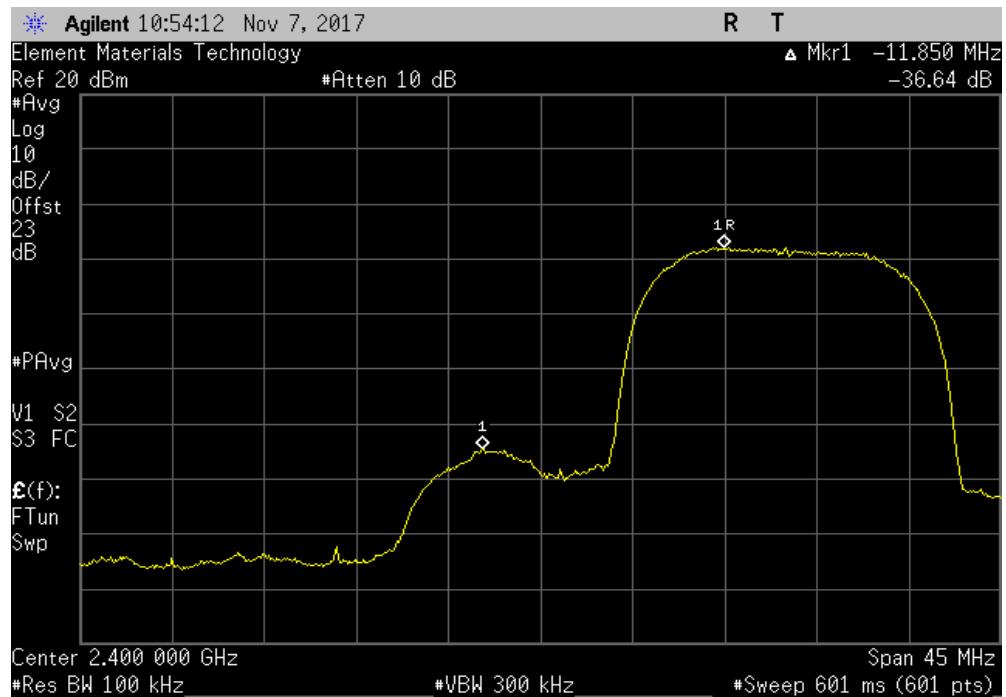
BAND EDGE COMPLIANCE



TbTx 2017.10.04 XMII 2017.09.21

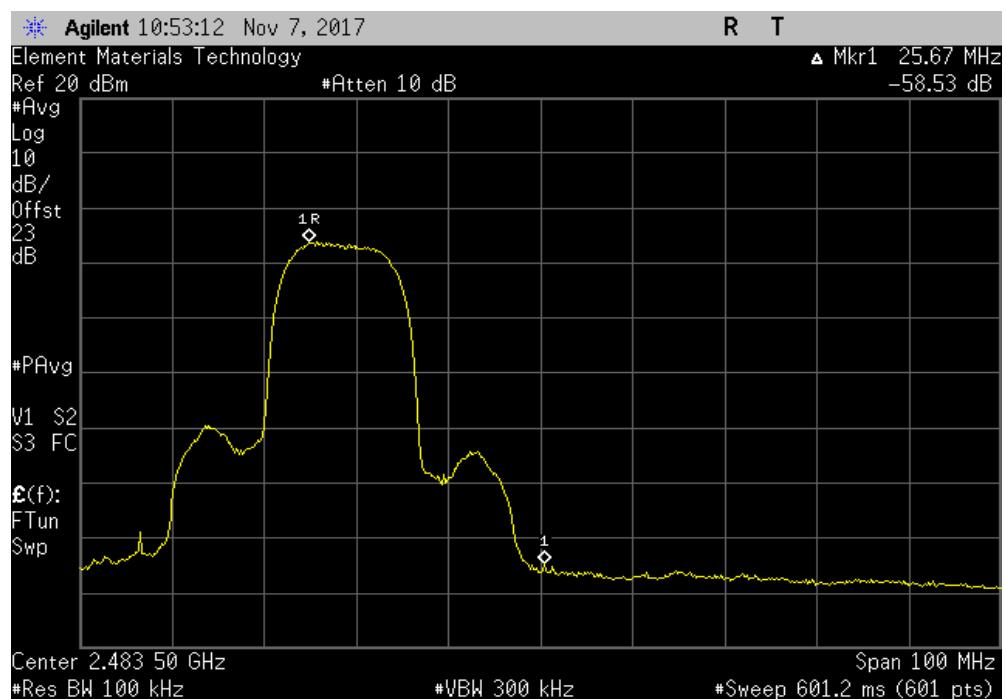
2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, Low Channel 1, 2412 MHz

Value (dBc)	Limit ≤ (dBc)	Result
-36.64	-30	Pass



2400 MHz - 2483.5 MHz Band, 802.11(b) 11 Mbps, High Channel 11, 2462 MHz

Value (dBc)	Limit ≤ (dBc)	Result
-58.53	-30	Pass

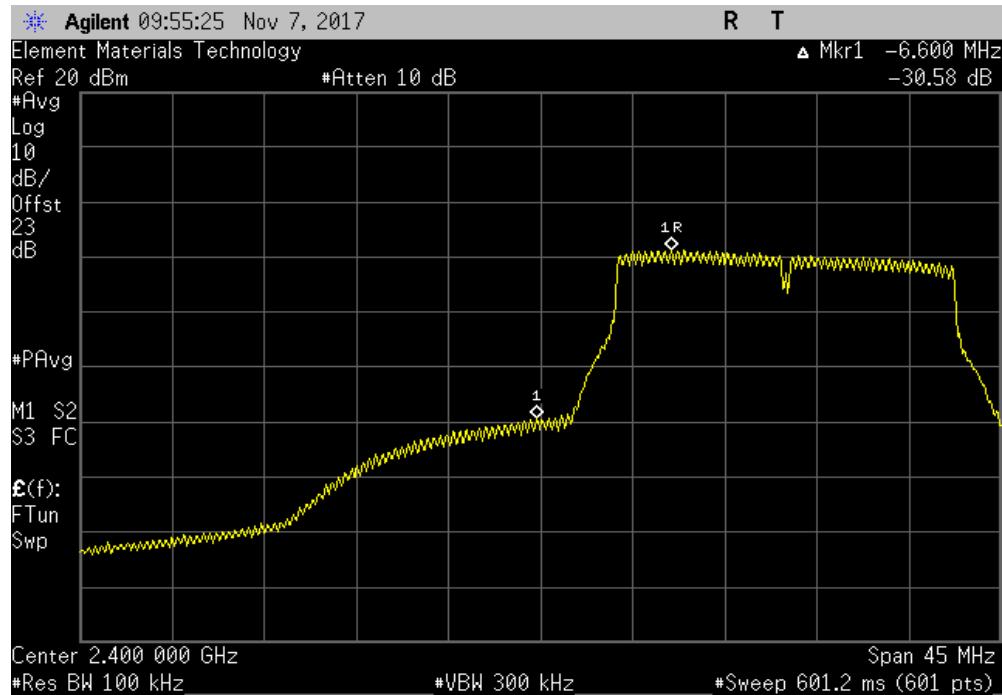


BAND EDGE COMPLIANCE

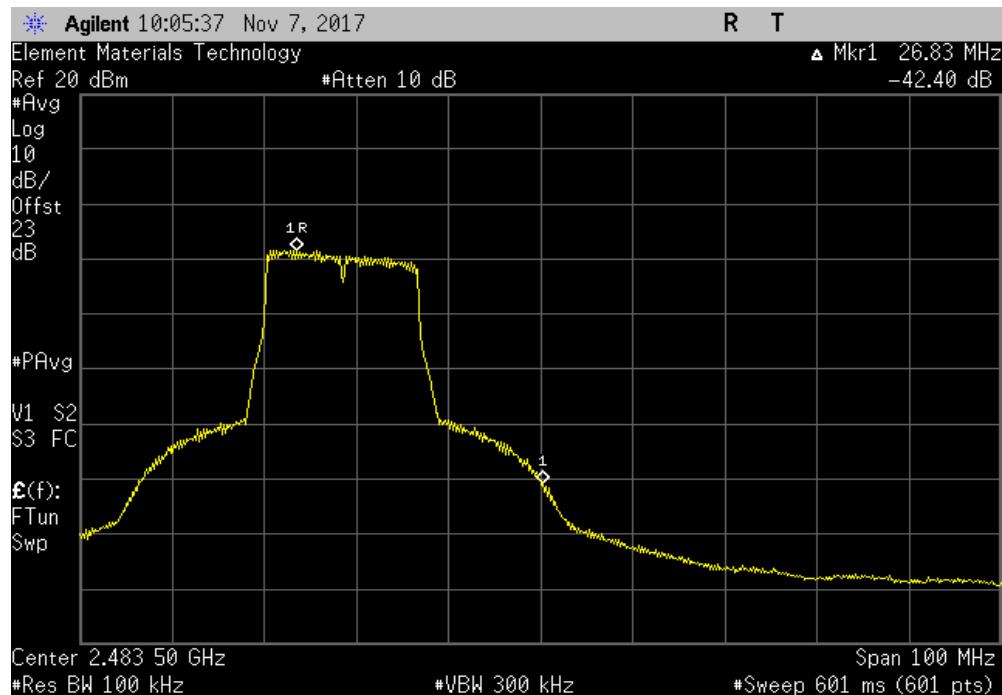


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Low Channel 1, 2412 MHz		
Value (dBc)	Limit ≤ (dBc)	Result
-30.58	-30	Pass



2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, High Channel 11, 2462 MHz		
Value (dBc)	Limit ≤ (dBc)	Result
-42.4	-30	Pass

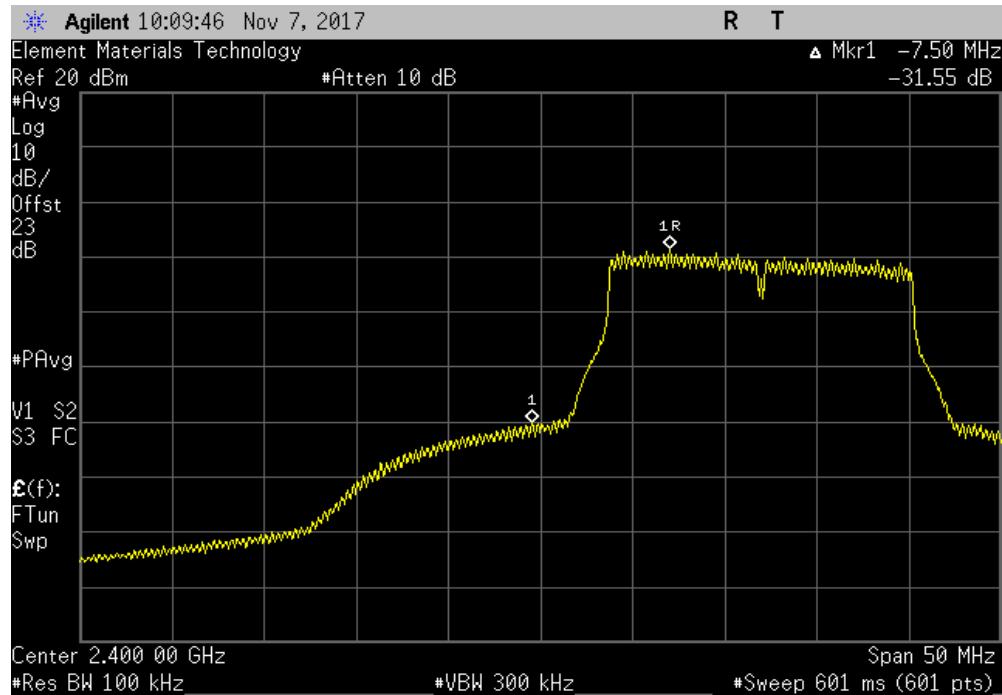


BAND EDGE COMPLIANCE

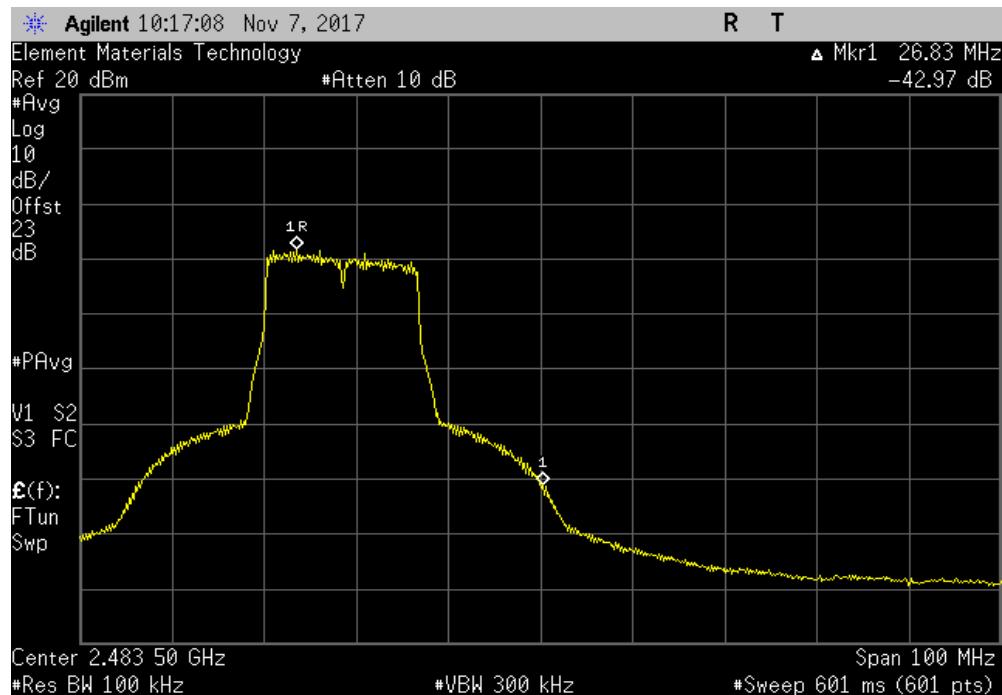


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Low Channel 1, 2412 MHz		
Value (dBc)	Limit ≤ (dBc)	Result
-31.55	-30	Pass



2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, High Channel 11, 2462 MHz		
Value (dBc)	Limit ≤ (dBc)	Result
-42.97	-30	Pass

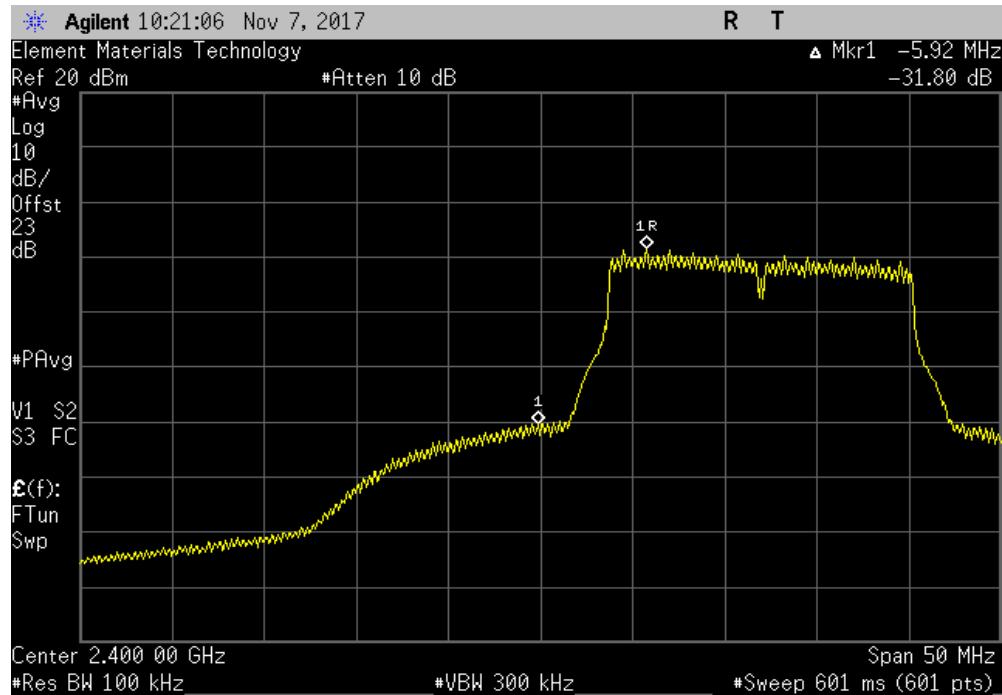


BAND EDGE COMPLIANCE

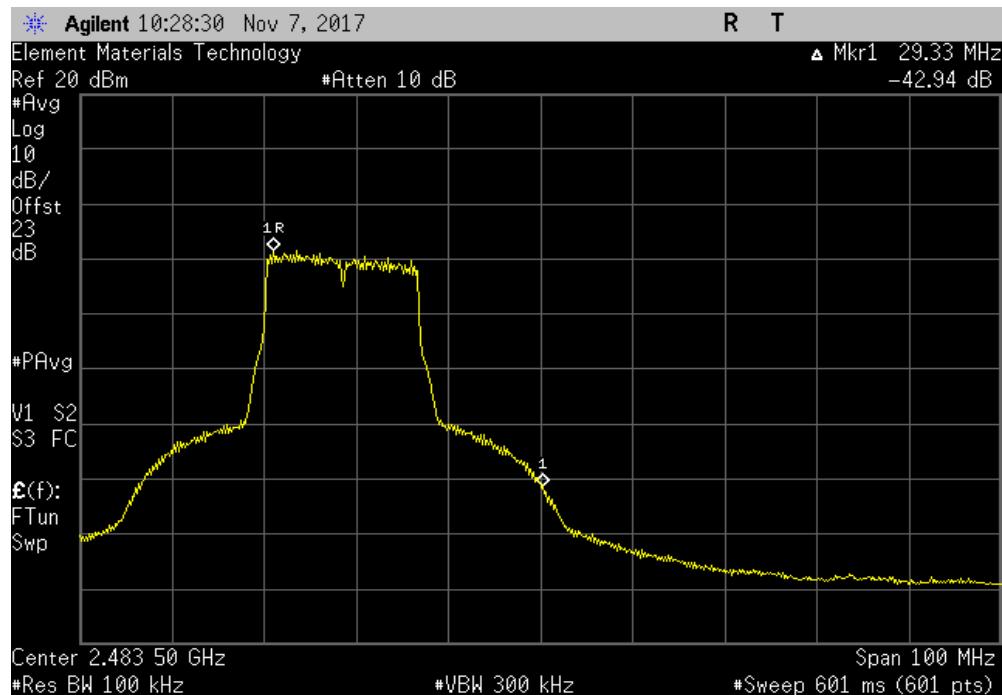


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Low Channel 1, 2412 MHz		
Value (dBc)	Limit ≤ (dBc)	Result
-31.81	-30	Pass



2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, High Channel 11, 2462 MHz		
Value (dBc)	Limit ≤ (dBc)	Result
-42.94	-30	Pass

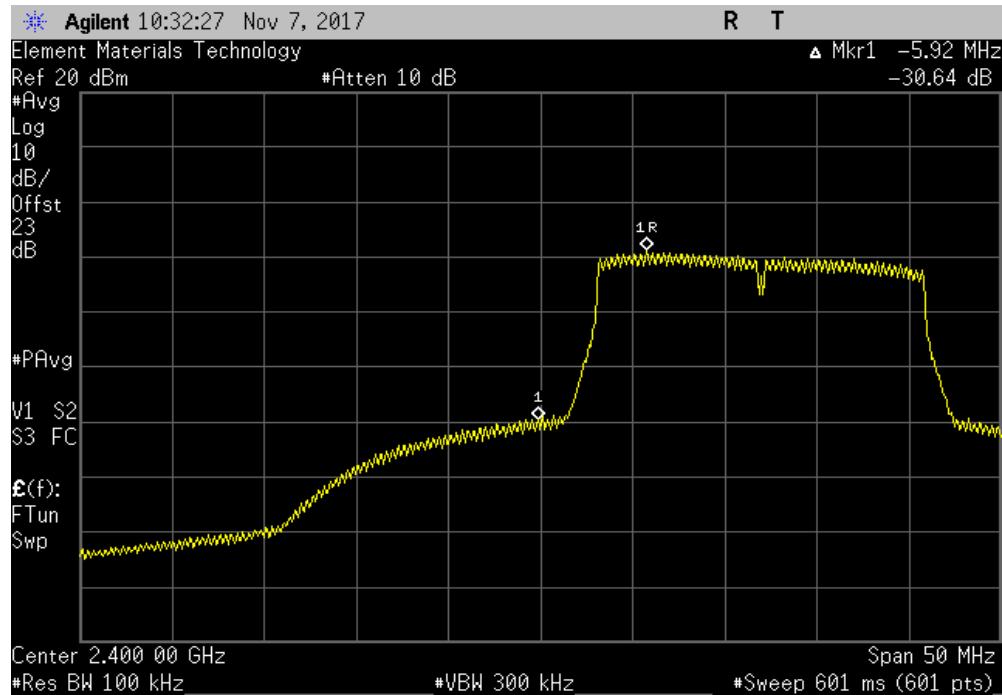


BAND EDGE COMPLIANCE

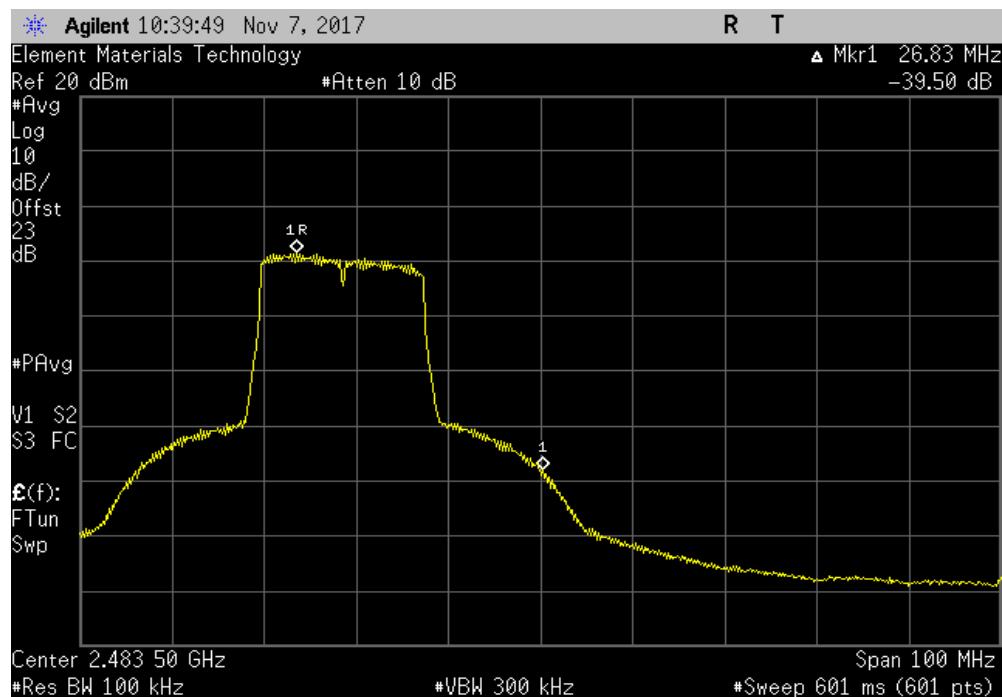


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz		
Value (dBc)	Limit ≤ (dBc)	Result
-30.64	-30	Pass



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz		
Value (dBc)	Limit ≤ (dBc)	Result
-39.5	-30	Pass



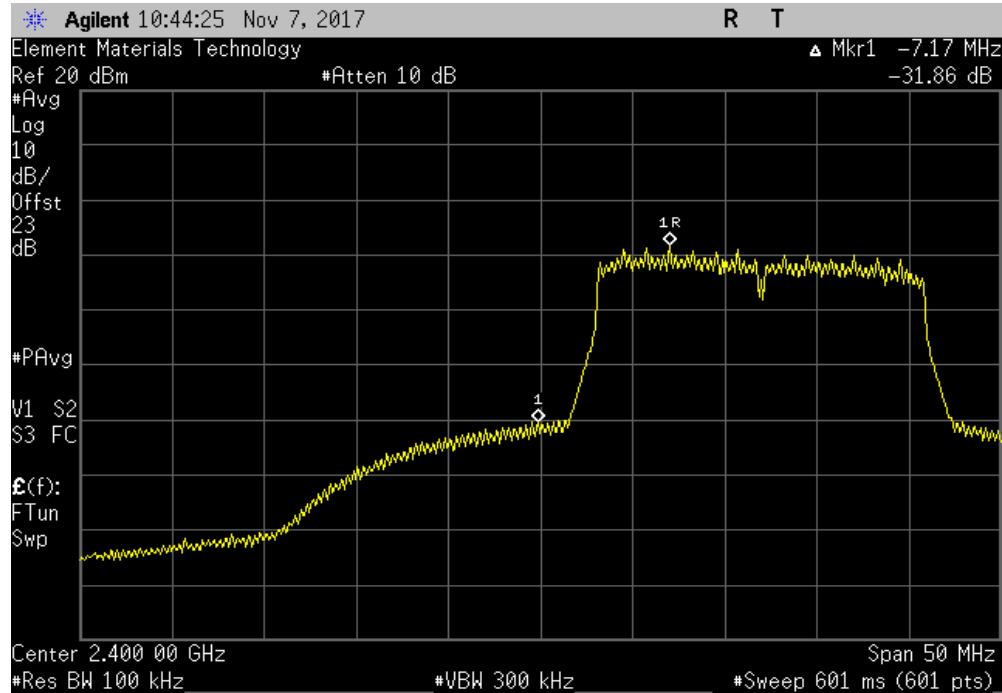
BAND EDGE COMPLIANCE



TbTx 2017.10.04 XMII 2017.09.21

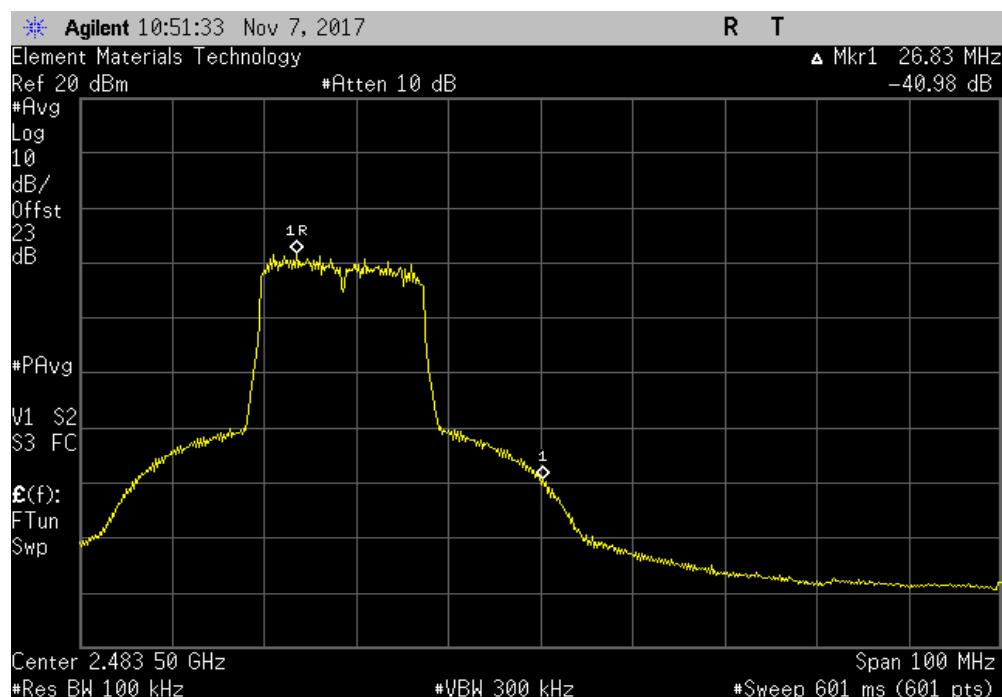
2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz

Value (dBc)	Limit ≤ (dBc)	Result
-31.86	-30	Pass



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz

Value (dBc)	Limit ≤ (dBc)	Result
-40.98	-30	Pass



SPURIOUS CONDUCTED EMISSIONS



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
Generator - Signal	Agilent	N5183A	TIK	29-Sep-17	29-Sep-20
Cable	ESM Cable Corp.	TTBJ141 KMKM-72	MNU	11-Sep-17	11-Sep-18
Attenuator	S.M. Electronics	SA26B-20	RFW	14-Feb-17	14-Feb-18
Block - DC	Fairview Microwave	SD3379	AMI	12-Sep-17	12-Sep-18
Analyzer - Spectrum Analyzer	Agilent	E4440A	AAX	16-Mar-17	16-Mar-18

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. The spurious RF conducted emissions were measured with the EUT set to low, medium and high transmit frequencies. The EUT was transmitting at the data rate(s) listed in the datasheet. For each transmit frequency, the spectrum was scanned throughout the specified frequency range.

SPURIOUS CONDUCTED EMISSIONS



TbTx 2017.10.04

XMI 2017.08.21

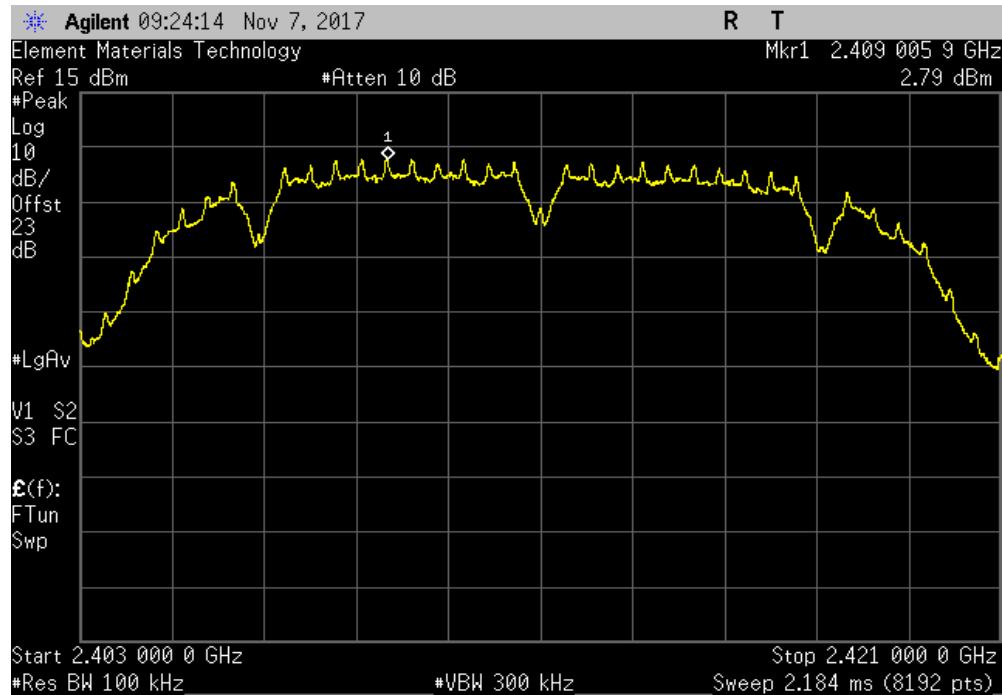
EUT:	Activity Tracking Belt		Work Order:	DGII0263	
Serial Number:	F8F005FF1522		Date:	7-Nov-17	
Customer:	Digi International Inc		Temperature:	21.9 °C	
Attendees:	Collin LaFave		Humidity:	22.7% RH	
Project:	None		Barometric Pres.:	1033 mbar	
Tested by:	Dustin Sparks	Power:	5VDC	Job Site:	MN08
TEST SPECIFICATIONS		Test Method			
FCC 15.247:2017		ANSI C63.10:2013			
COMMENTS					
EUT powered by USB connection					
DEVIATIONS FROM TEST STANDARD					
None					
Configuration #	1	Signature			
			Frequency Range	Max Value (dBc)	Limit ≤ (dBc)
2400 MHz - 2483.5 MHz Band					
802.11(b) 1 Mbps					
Low Channel 1, 2412 MHz	Fundamental	N/A	N/A	N/A	
Low Channel 1, 2412 MHz	30 MHz - 12.5 GHz	-52.82	-30	Pass	
Low Channel 1, 2412 MHz	12.5 GHz - 25 GHz	-54.17	-30	Pass	
Mid Channel 6, 2437 MHz	Fundamental	N/A	N/A	N/A	
Mid Channel 6, 2437 MHz	30 MHz - 12.5 GHz	-53.74	-30	Pass	
Mid Channel 6, 2437 MHz	12.5 GHz - 25 GHz	-54.09	-30	Pass	
High Channel 11, 2462 MHz	Fundamental	N/A	N/A	N/A	
High Channel 11, 2462 MHz	30 MHz - 12.5 GHz	-53.63	-30	Pass	
High Channel 11, 2462 MHz	12.5 GHz - 25 GHz	-54.29	-30	Pass	

SPURIOUS CONDUCTED EMISSIONS

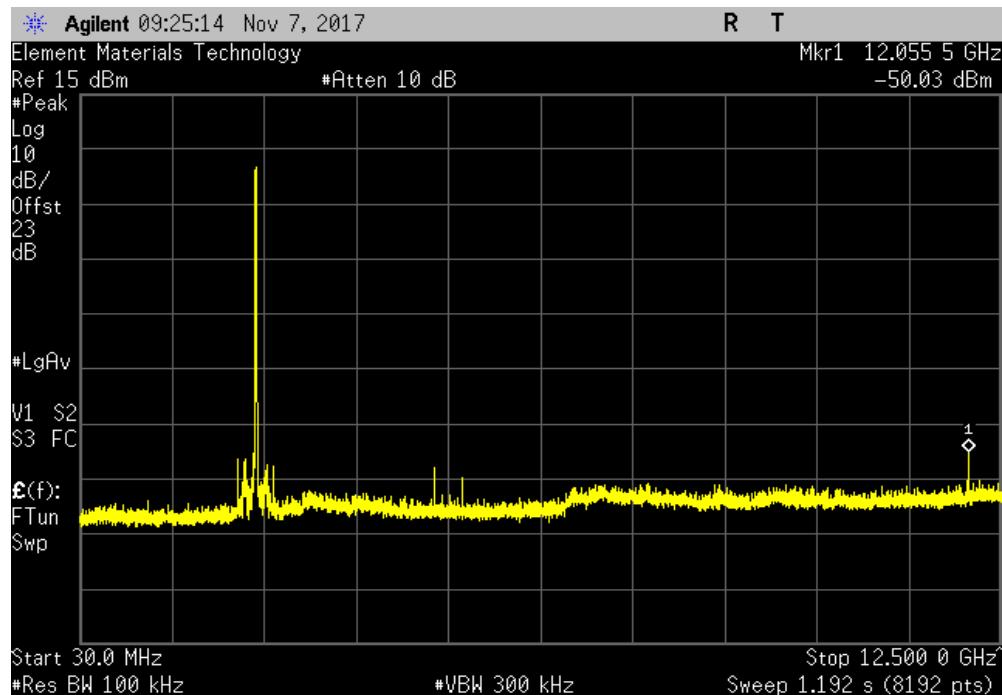


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz					
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result		
Fundamental	N/A	N/A	N/A		



2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz					
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result		
30 MHz - 12.5 GHz	-52.82	-30	Pass		

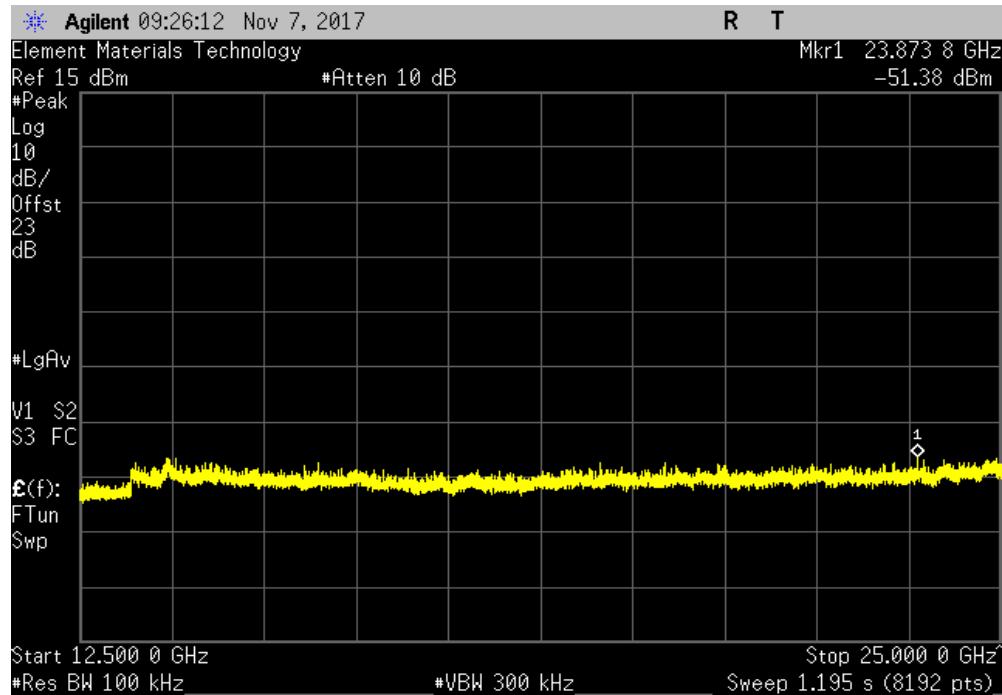


SPURIOUS CONDUCTED EMISSIONS

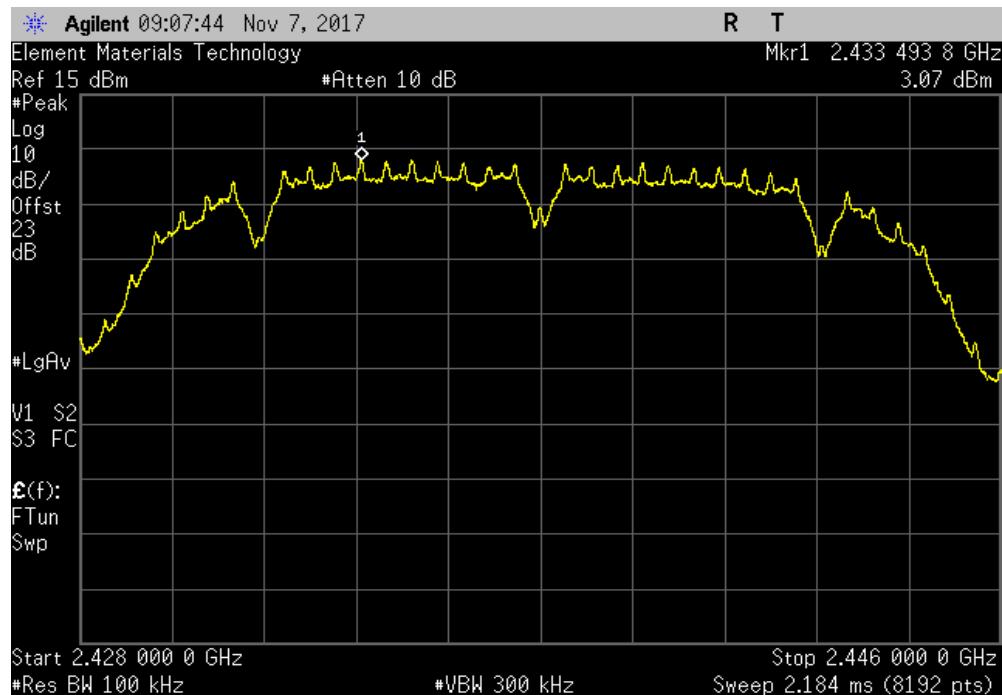


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Low Channel 1, 2412 MHz			
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result
12.5 GHz - 25 GHz	-54.17	-30	Pass



2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz			
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result
Fundamental	N/A	N/A	N/A

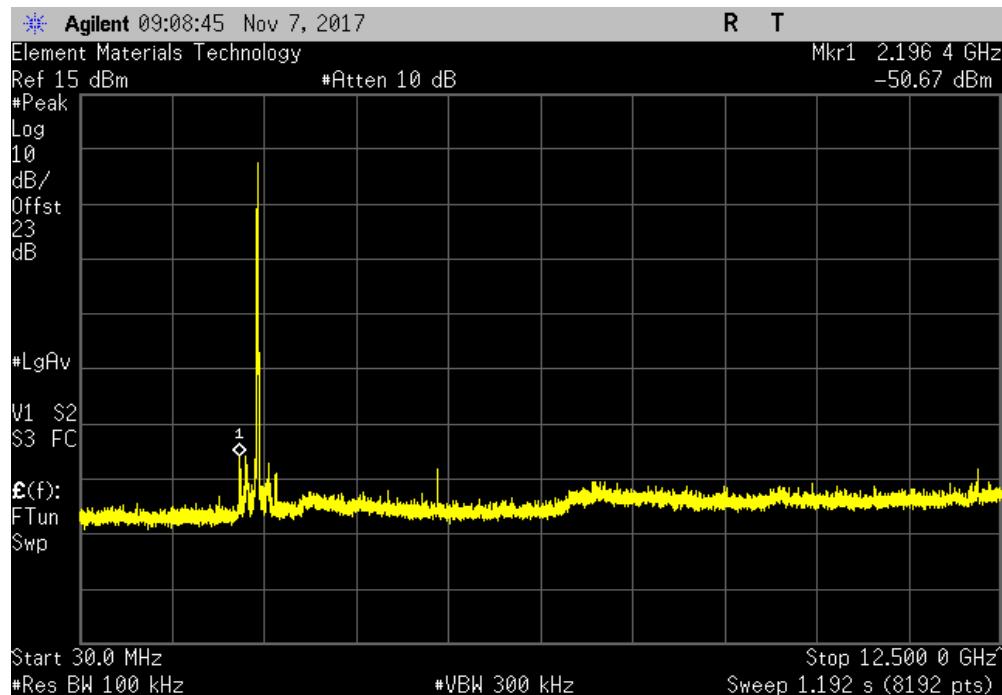


SPURIOUS CONDUCTED EMISSIONS

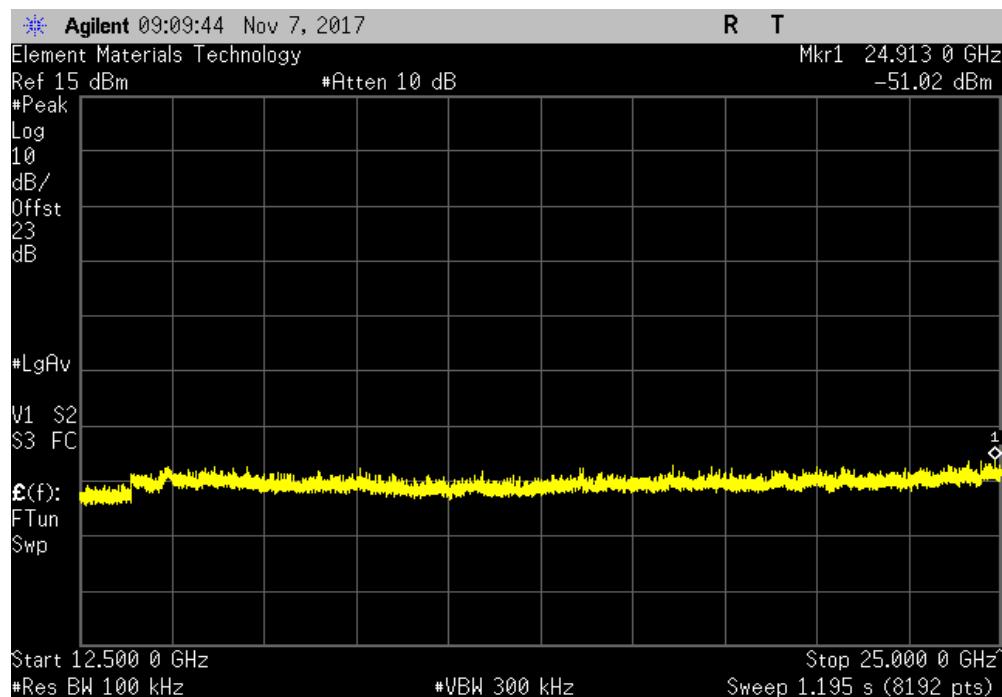


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz			
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result
30 MHz - 12.5 GHz	-53.74	-30	Pass



2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, Mid Channel 6, 2437 MHz			
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result
12.5 GHz - 25 GHz	-54.09	-30	Pass

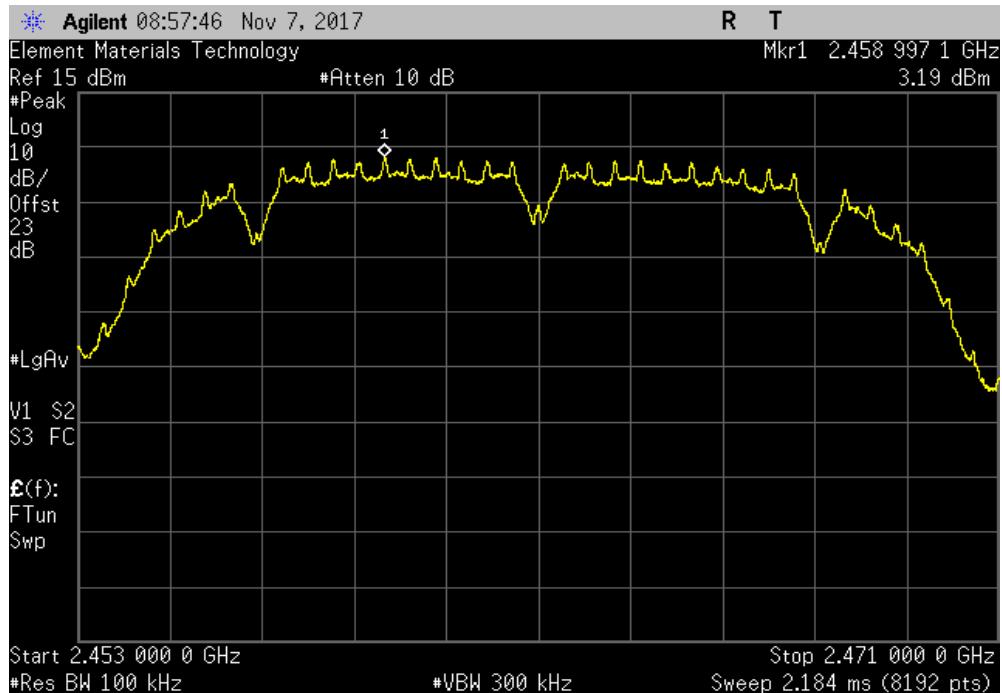


SPURIOUS CONDUCTED EMISSIONS

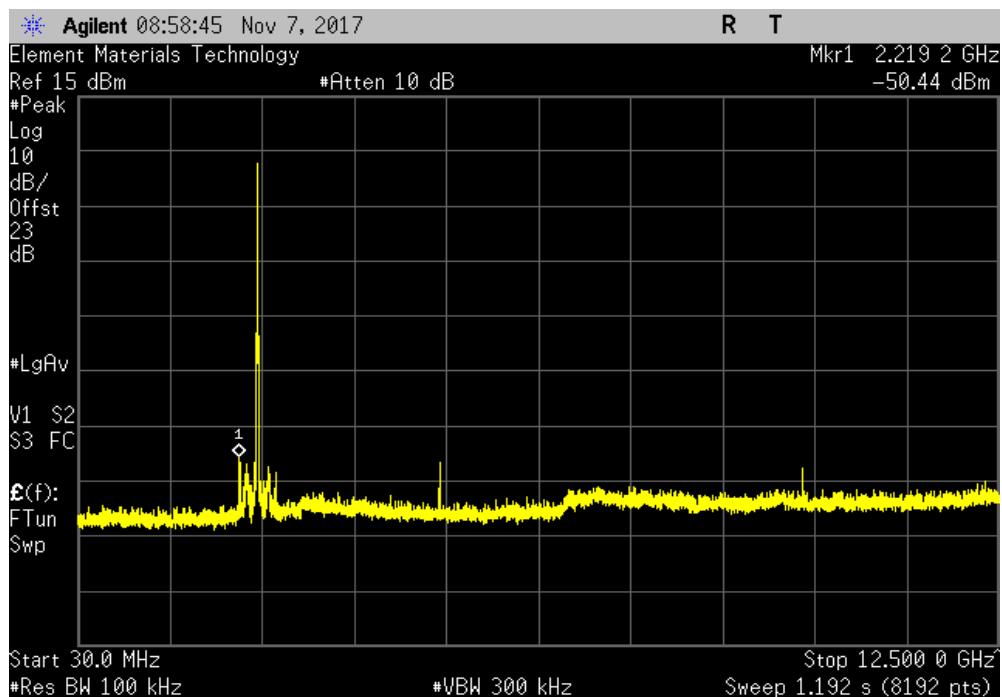


TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz		Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result
	Fundamental		N/A	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz		Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result
	30 MHz - 12.5 GHz		-53.63	-30	Pass



SPURIOUS CONDUCTED EMISSIONS



TbTx 2017.10.04 XMII 2017.09.21

2400 MHz - 2483.5 MHz Band, 802.11(b) 1 Mbps, High Channel 11, 2462 MHz			
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result
12.5 GHz - 25 GHz	-54.29	-30	Pass

