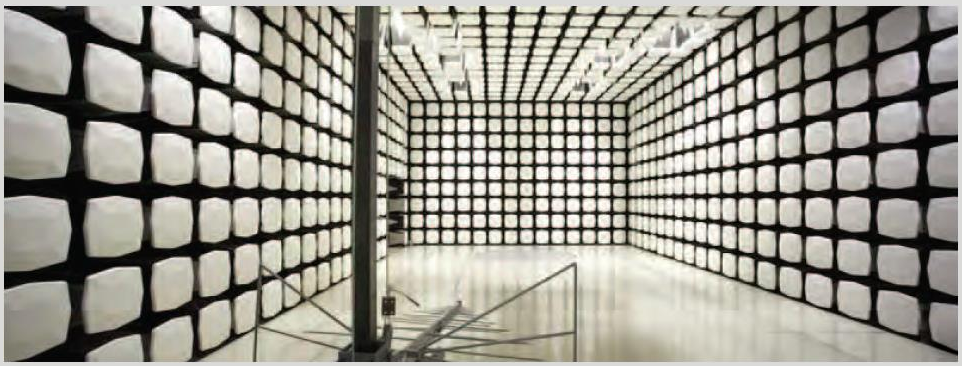
WatchGuard Video

VISTA XLT

FCC 15.247:2018

2.4GHz Band Single Channel DTS Radio

Report # WTVD0014.1



NVLAP LAB CODE: 201049-0

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CERTIFICATE OF TEST

Last Date of Test: November 9, 2018
WatchGuard Video
Model: VISTA XLT

Radio Equipment Testing

Standards

Specification	Method
FCC 15.247:2018	ANSI C63.10:2013, KDB 558074

Results

Method Clause	Test Description	Applied	Results	Comments
6.2	Powerline Conducted Emissions	No	N/A	Not required for a battery powered EUT.
11.12.1, 11.13.2, 6.5, 6.6	Spurious Radiated Emissions	Yes	Pass	
11.6	Duty Cycle	Yes	Pass	
11.8.2	Occupied Bandwidth	Yes	Pass	
11.9.2.2.4	Output Power	Yes	Pass	
11.9.2.2.4	Equivalent Isotropic Radiated 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	

Deviations From Test Standards

None

Approved By:

Jeremiah Darden, 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. As indicated in the Statement of Work sent with the quotation, Element's standard process is to always use the latest published version of the test methods even when earlier versions are cited in the test specification. Issuance of a purchase order was de facto acceptance of this approach. Otherwise, the client would have advised Element in writing of the specific version of the test methods they wanted applied to the subject testing.

REVISION HISTORY

Revision Number	Description	Date (yyyy-mm-dd)	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 – 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

MSIT / 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

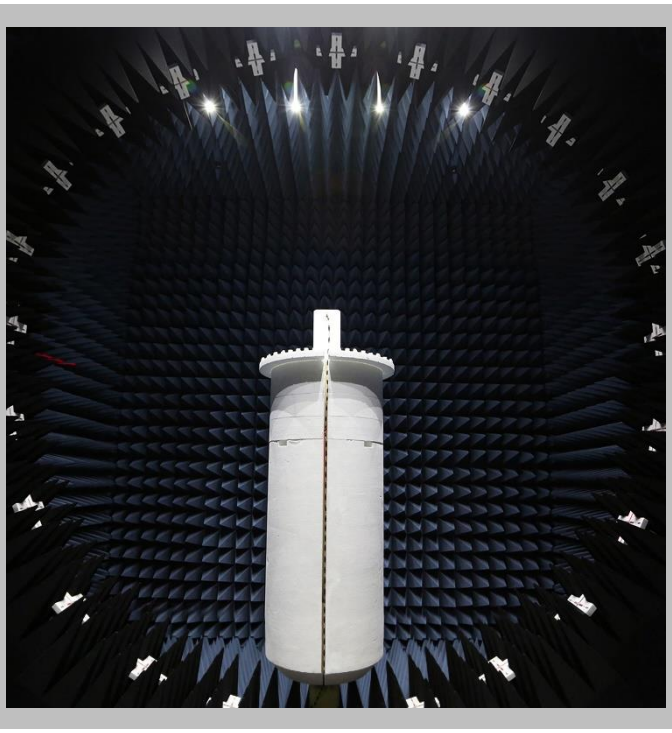
MIC – Recognized by MIC as a CAB for the acceptance of test data.

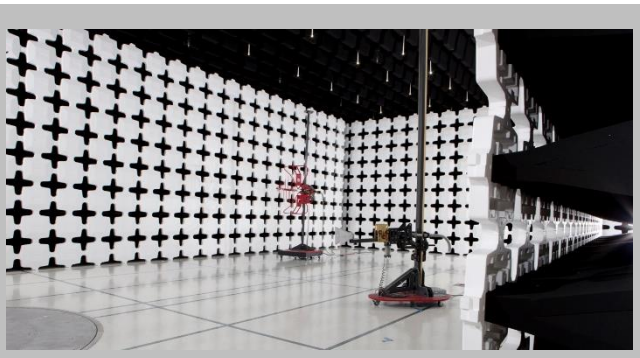
SCOPE

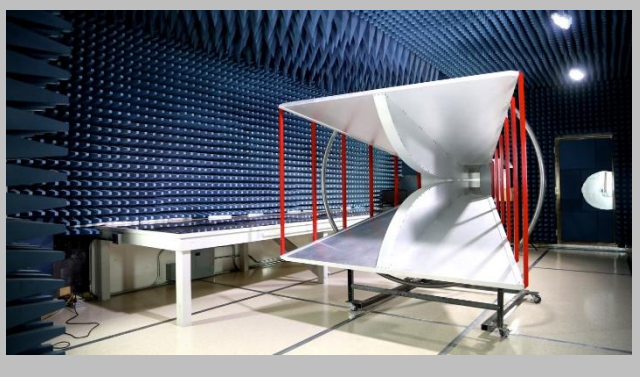
For details on the Scopes of our Accreditations, please visit:
https://www.nwemc.com/emc-testing-accreditations

FACILITIES

California	Minnesota	New York	Oregon	Texas	Washington
Labs OC01-17 41 Tesla Irvine, CA 92618 (949) 861-8918	Labs MN01-10 9349 W Broadway Ave. Brooklyn Park, MN 55445 (612)-638-5136	Labs NY01-04 4939 Jordan Rd. Elbridge, NY 13060 (315) 554-8214	Labs EV01-12 6775 NE Evergreen Pkwy #400 Hillsboro, OR 97124 (503) 844-4066	Labs TX01-09 3801 E Plano Pkwy Plano, TX 75074 (469) 304-5255	Labs NC01-05 19201 120th 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







MEASUREMENT UNCERTAINTY

element
TMU.2015.07.10

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.

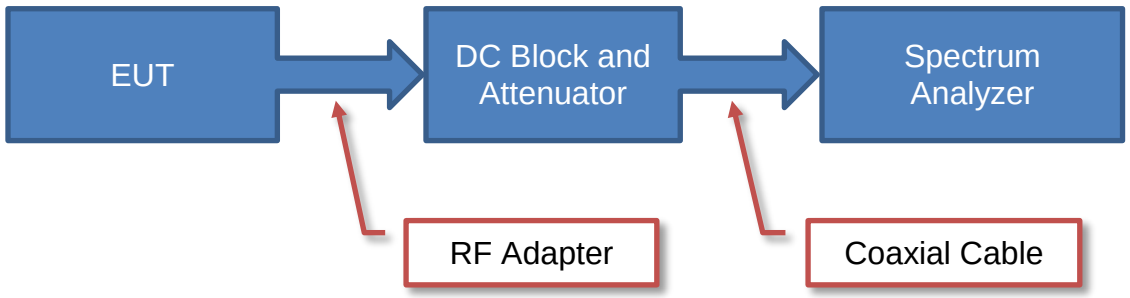
A measurement uncertainty estimation has been performed for each test per our internal quality document QM205.4.6. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty (K=2) can be found included as part of the applicable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

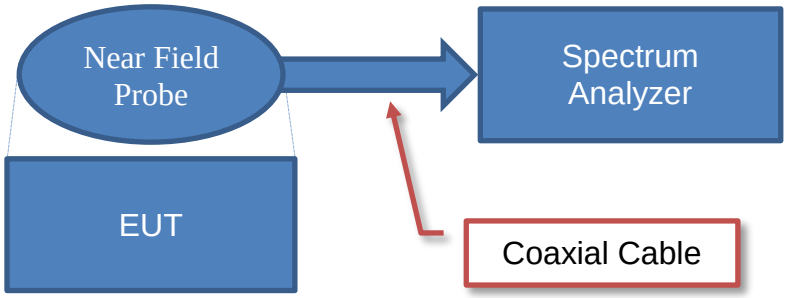
Test	+ MU	- MU
Frequency Accuracy (Hz)	0.0007%	-0.0007%
Amplitude Accuracy (dB)	1.2 dB	-1.2 dB
Conducted Power (dB)	0.3 dB	-0.3 dB
Radiated Power via Substitution (dB)	0.7 dB	-0.7 dB
Temperature (degrees C)	0.7°C	-0.7°C
Humidity (% RH)	2.5% RH	-2.5% RH
Voltage (AC)	1.0%	-1.0%
Voltage (DC)	0.7%	-0.7%
Field Strength (dB)	5.1 dB	-5.1 dB
AC Powerline Conducted Emissions (dB)	2.4 dB	-2.4 dB

Test Setup Block Diagrams

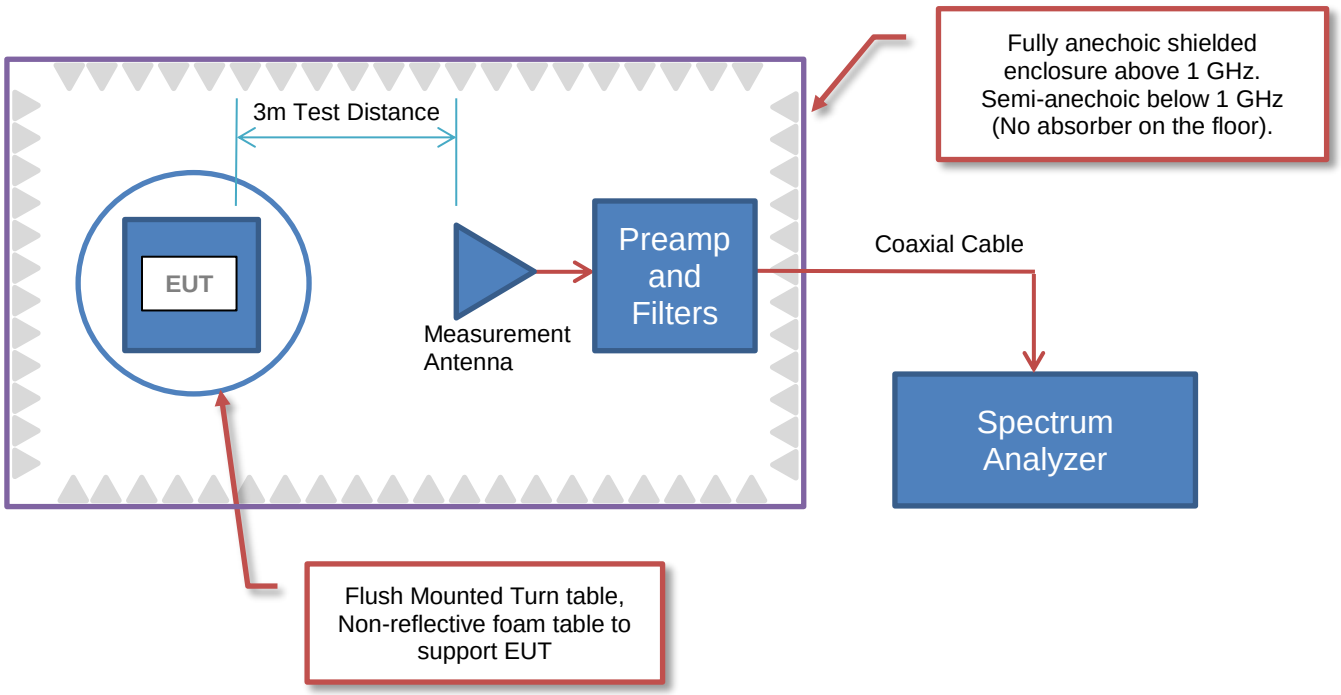
Antenna Port Conducted Measurements



Near Field Test Fixture Measurements



Spurious Radiated Emissions



PRODUCT DESCRIPTION

Client and Equipment Under Test (EUT) Information

Company Name:	WatchGuard Video
Address:	415 East Exchange Parkway
City, State, Zip:	Allen, TX 75002
Test Requested By:	Navaid Karimi
Model:	Vista XLT
First Date of Test:	November 8, 2018
Last Date of Test:	November 9, 2018
Receipt Date of Samples:	November 8, 2018
Equipment Design Stage:	Prototype
Equipment Condition:	No Damage
Purchase Authorization:	Verified

Information Provided by the Party Requesting the Test

Functional Description of the EUT:
Body cam for law enforcement with single channel wireless link (Same as VISTA but with belt clip and cabled camera)

Testing Objective:
To demonstrate compliance of the single channel DTS radio under FCC 15.247 for operation in the 2.4 GHz band.

POWER SETTINGS

The EUT was tested using the power settings provided by the manufacturer:

SETTINGS FOR ALL TESTS IN THIS REPORT

Modulation Types	Channel Bandwidths	Channel	Position	Frequency (MHz)	Power Setting
6 Mbps	20	6	Single Channel	2437	20000 (Max)
36 Mbps	20	6	Single Channel	2437	20000 (Max)
54 Mbps	20	6	Single Channel	2437	20000 (Max)
MCS0	20	6	Single Channel	2437	20000 (Max)
MCS4	20	6	Single Channel	2437	20000 (Max)
MCS7	20	6	Single Channel	2437	20000 (Max)

CONFIGURATIONS

Configuration WTVD0014- 1

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Body Camera with WiFi Link (Body Sensor)	WatchGuard Video	VISTA XLT	VXL1-001324 XBC1-001149

Configuration WTVD0014- 2

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Body Camera with WiFi Link (Direct Connect)	WatchGuard Video	VISTA XLT	VXL1-000683 XBC1-001149

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Laptop Computer	Dell	Latitude 7480	27904748150
Command Console Board	WatchGuard Video	WGA00341	0615413600
Charging Base	WatchGuard Video	WGA00537	VHB1-05863
AC/DC Power Supply (Base)	Unknown	M120100A0	None

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
DC Power (Base)	No	1.5m	No	AC/DC Power Supply (Base)	Charging Base
USB to RS-232	Yes	0.5m	No	Laptop Computer	Command Console Board

MODIFICATIONS

Equipment Modifications

Item	Date	Test	Modification	Note	Disposition of EUT
1	2018-11-08	Spurious Radiated Emissions	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	2018-11-09	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.
3	2018-11-09	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.
4	2018-11-09	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.
5	2018-11-09	Equivalent Isotropic Radiated 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.
6	2018-11-09	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.
7	2018-11-09	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.
8	2018-11-09	Spurious Conducted Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was completed.

SPURIOUS RADIATED EMISSIONS

PSA-ESCI 2018.07.27

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. The test data represents the configuration / operating mode/ model that produced the highest emission levels as compared to the specification limit.

MODES OF OPERATION

Continuously Transmitting at Single Channel 6, 2437 MHz

POWER SETTINGS INVESTIGATED

Battery

CONFIGURATIONS INVESTIGATED

WTVD0014 - 1

FREQUENCY RANGE INVESTIGATED

Start Frequency	30 MHz	Stop Frequency	26500 MHz

SAMPLE CALCULATIONS

Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Attenuator	Weinschel Corp	4H-20	AWB	16-Mar-2018	12 mo
Filter - High Pass	Micro-Tronics	HPM50111	HGC	16-Mar-2018	12 mo
Filter - Low Pass	Micro-Tronics	LPM50004	HHV	3-Aug-2018	12 mo
Amplifier - Pre-Amplifier	Miteq	JSDWK42-18004000-60-5P	PAM	10-Oct-2018	12 mo
Antenna - Double Ridge	A.H. Systems, Inc.	SAS-574	AXW	21-Aug-2018	24 mo
Cable	Northwest EMC	18-40GHz	TXE	10-Oct-2018	12 mo
Amplifier - Pre-Amplifier	Miteq	AMF-6F-12001800-30-10P	PAL	9-Oct-2018	12 mo
Antenna - Standard Gain	ETS Lindgren	3160-08	AJG	NCR	0 mo
Amplifier - Pre-Amplifier	Miteq	AMF-6F-08001200-30-10P	PAK	9-Oct-2018	12 mo
Antenna - Standard Gain	ETS Lindgren	3160-07	AJF	NCR	0 mo
Cable	Northwest EMC	8-18GHz	TXD	31-May-2018	12 mo
Amplifier - Pre-Amplifier	Miteq	AMF-3D-00100800-32-13P	PAJ	31-May-2018	12 mo
Antenna - Double Ridge	ETS Lindgren	3115	AJL	11-Oct-2018	24 mo
Cable	Northwest EMC	1-8.2 GHz	TXC	31-May-2018	12 mo
Amplifier - Pre-Amplifier	Miteq	AM-1551	AVK	31-May-2018	12 mo
Antenna - Biconilog	ETS Lindgren	3143B	AYF	10-May-2018	24 mo
Cable	Northwest EMC	RE 9kHz - 1GHz	TXB	22-Aug-2018	12 mo
Analyzer - Spectrum Analyzer	Agilent	N9010A	AFL	15-Mar-2018	12 mo

TEST DESCRIPTION

The highest gain antenna of each type to be used with the EUT was tested. The EUT was configured for the required transmit frequencies and the modes as showed in the data sheets.

For each configuration, the spectrum was scanned throughout the specified range as part of the exploratory investigation of the emissions. These “pre-scans” are not included in the report. Final measurements on individual emissions were then made and included in this test report.

The individual emissions from the EUT were maximized by rotating the EUT on a turntable, adjusting the position of the EUT and EUT antenna in three orthogonal axis if required, and adjusting the measurement antenna height and polarization (per ANSI C63.10). A preamp and high pass filter (and notch filter) were used for this test in order to provide sufficient measurement sensitivity.

Measurements were made with the required detectors and annotated on the data for each individual point using the following annotation:

QP = Quasi-Peak Detector
PK = Peak Detector
AV = RMS Detector

Measurements were made to satisfy the specific requirements of the test specification for out of band emissions as well as the restricted band requirements.

If there are no detectable emissions above the noise floor, the data included may show noise floor measurements for reference only.

Measurements at the edges of the allowable band may be presented in an alternative method as provided for in the ANSI C63.10 Marker-Delta method. This method involves performing an in-band fundamental measurement followed by a screen capture of the fundamental and out-of-band emission using reduced measurement instrumentation bandwidths. The amplitude delta measured on this screen capture is applied to the fundamental emission value to show the out-of-band emission level as applied to the limit.

Where the radio test software does not provide for a duty cycle at continuous transmit conditions (> 98%) and the RMS (power average) measurements were made across the on and off times of the EUT transmissions, a duty cycle correction is added to the measurements using the formula of 10*LOG(dc).

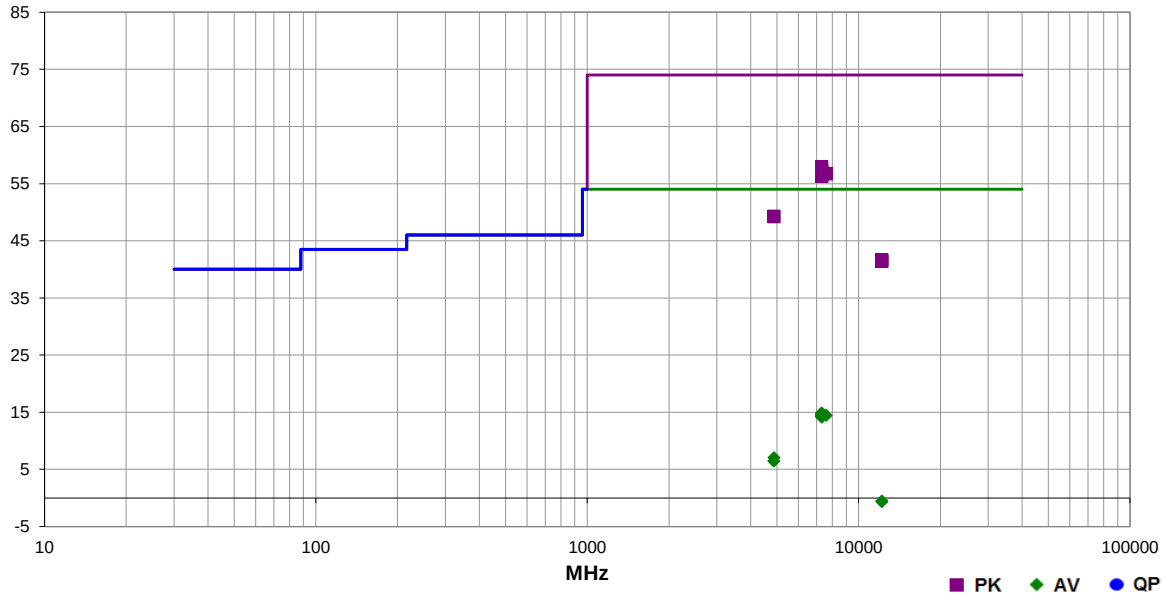
SPURIOUS RADIATED EMISSIONS

EmiR5 2018.09.26 PSA-ESCI 2018.07.27

Work Order:	WTVD0014	**Date:**	8-Nov-2018		
Project:	None	**Temperature:**	23.1 °C		
Job Site:	TX02	**Humidity:**	45.6% RH		
Serial Number:	VXL1-001324 XBC1-001149	**Barometric Pres.:**	1021 mbar	**Tested by:**	Jonathan Kiefer
EUT:	VISTA XLT				
Configuration:	1				
Customer:	WatchGuard Video				
Attendees:	Navaid Karimi				
EUT Power:	Battery				
Operating Mode:	Continuously Transmitting at Single Channel 6, 2437 MHz				
Deviations:	None				
Comments:	See comments below for EUT orientation and data rate information. EUT uses integral chip antenna with 2.2 dBi gain. EUT Duty Cycle < 98%, therefore upwardly corrected to 100% using 10*LOG(1/DC). Worst-case upward correction factor: 10*LOG(1/0.336) = 4.74 dB. Then downwardly corrected based on duty cycle in final use (1.7%), using 20*LOG(DC). Applied overall worst-case DCCF of -30.7 dB to average detector measurements.				

Test Specifications	**Test Method**
FCC 15.247:2018	ANSI C63.10:2013

Run #	16	**Test Distance (m)**	3	**Antenna Height(s)**	1 to 4(m)	**Results**	Pass



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Duty Cycle Correction Factor (dB)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
7311.610	43.1	14.9	1.2	196.9	0.0	0.0	Horz	PK	0.0	58.0	74.0	-16.0	EUT Horz, 6 Mbps
7311.805	42.4	14.9	1.2	164.0	0.0	0.0	Vert	PK	0.0	57.3	74.0	-16.7	EUT Vert, 6 Mbps
7309.830	42.2	14.9	1.2	159.9	0.0	0.0	Horz	PK	0.0	57.1	74.0	-16.9	EUT Horz, MCS7 72.2 Mbps
7309.905	42.0	14.9	1.2	337.0	0.0	0.0	Horz	PK	0.0	56.9	74.0	-17.1	EUT On Side, 6 Mbps
7309.595	42.0	14.9	1.2	171.9	0.0	0.0	Vert	PK	0.0	56.9	74.0	-17.1	EUT On Side, 6 Mbps
7310.330	41.8	14.9	1.2	295.0	0.0	0.0	Vert	PK	0.0	56.7	74.0	-17.3	EUT Horz, 6 Mbps
7312.265	41.8	14.9	1.2	298.9	0.0	0.0	Horz	PK	0.0	56.7	74.0	-17.3	EUT Vert, 6 Mbps
7593.755	41.5	15.2	1.2	196.9	0.0	0.0	Vert	PK	0.0	56.7	74.0	-17.3	EUT Horz, 6 Mbps
7312.400	41.6	14.9	1.2	19.0	0.0	0.0	Horz	PK	0.0	56.5	74.0	-17.5	EUT Horz, MCS0 7.2 Mbps
7312.145	41.6	14.9	1.2	288.0	0.0	0.0	Horz	PK	0.0	56.5	74.0	-17.5	EUT Horz, MCS4 43.3 Mbps
7312.240	41.5	14.9	1.2	105.9	0.0	0.0	Horz	PK	0.0	56.4	74.0	-17.6	EUT Horz, 54 Mbps
7310.950	41.4	14.9	1.2	136.9	0.0	0.0	Horz	PK	0.0	56.3	74.0	-17.7	EUT Horz, 36 Mbps
4873.525	42.3	7.0	1.2	3.0	0.0	0.0	Vert	PK	0.0	49.3	74.0	-24.7	EUT Horz, 6 Mbps
4872.990	42.2	7.0	1.2	190.9	0.0	0.0	Horz	PK	0.0	49.2	74.0	-24.8	EUT Horz, 6 Mbps
12185.590	42.3	-0.6	1.2	198.0	0.0	0.0	Vert	PK	0.0	41.7	74.0	-32.3	EUT Horz, 6 Mbps
12183.640	42.0	-0.6	1.2	165.9	0.0	0.0	Horz	PK	0.0	41.4	74.0	-32.6	EUT Horz, 6 Mbps
7312.110	30.6	14.9	1.2	196.9	-30.7	0.0	Horz	AV	0.0	14.9	54.0	-39.2	EUT Horz, 6 Mbps
7311.780	30.5	14.9	1.2	298.9	-30.7	0.0	Horz	AV	0.0	14.8	54.0	-39.3	EUT Vert, 6 Mbps
7312.040	30.5	14.9	1.2	337.0	-30.7	0.0	Horz	AV	0.0	14.8	54.0	-39.3	EUT On Side, 6 Mbps
7312.125	30.4	14.9	1.2	295.0	-30.7	0.0	Vert	AV	0.0	14.7	54.0	-39.4	EUT Horz, 6 Mbps
7312.000	30.3	14.9	1.2	164.0	-30.7	0.0	Vert	AV	0.0	14.6	54.0	-39.5	EUT Vert, 6 Mbps
7310.850	30.3	14.9	1.2	171.9	-30.7	0.0	Vert	AV	0.0	14.6	54.0	-39.5	EUT On Side, 6 Mbps
7595.550	29.9	15.2	1.2	196.9	-30.7	0.0	Vert	AV	0.0	14.5	54.0	-39.6	EUT Horz, 6 Mbps
7311.010	30.1	14.9	1.2	136.9	-30.7	0.0	Horz	AV	0.0	14.4	54.0	-39.7	EUT Horz, 36 Mbps

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Duty Cycle Correction Factor (dB)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
7312.230	30.1	14.9	1.2	159.9	-30.7	0.0	Horz	AV	0.0	14.4	54.0	-39.7	EUT Horz, MCS7 72.2 Mbps
7312.460	30.0	14.9	1.2	19.0	-30.7	0.0	Horz	AV	0.0	14.3	54.0	-39.8	EUT Horz, MCS0 7.2 Mbps
7311.970	30.0	14.9	1.2	288.0	-30.7	0.0	Horz	AV	0.0	14.3	54.0	-39.8	EUT Horz, MCS4 43.3 Mbps
7312.475	29.9	14.9	1.2	105.9	-30.7	0.0	Horz	AV	0.0	14.2	54.0	-39.9	EUT Horz, 54 Mbps
4873.930	30.7	7.0	1.2	3.0	-30.7	0.0	Vert	AV	0.0	7.1	54.0	-47.0	EUT Horz, 6 Mbps
4873.265	30.1	7.0	1.2	190.9	-30.7	0.0	Horz	AV	0.0	6.5	54.0	-47.6	EUT Horz, 6 Mbps
12185.850	30.7	-0.6	1.2	198.0	-30.7	0.0	Vert	AV	0.0	-0.5	54.0	-54.6	EUT Horz, 6 Mbps
12186.190	30.6	-0.6	1.2	165.9	-30.7	0.0	Horz	AV	0.0	-0.6	54.0	-54.7	EUT Horz, 6 Mbps

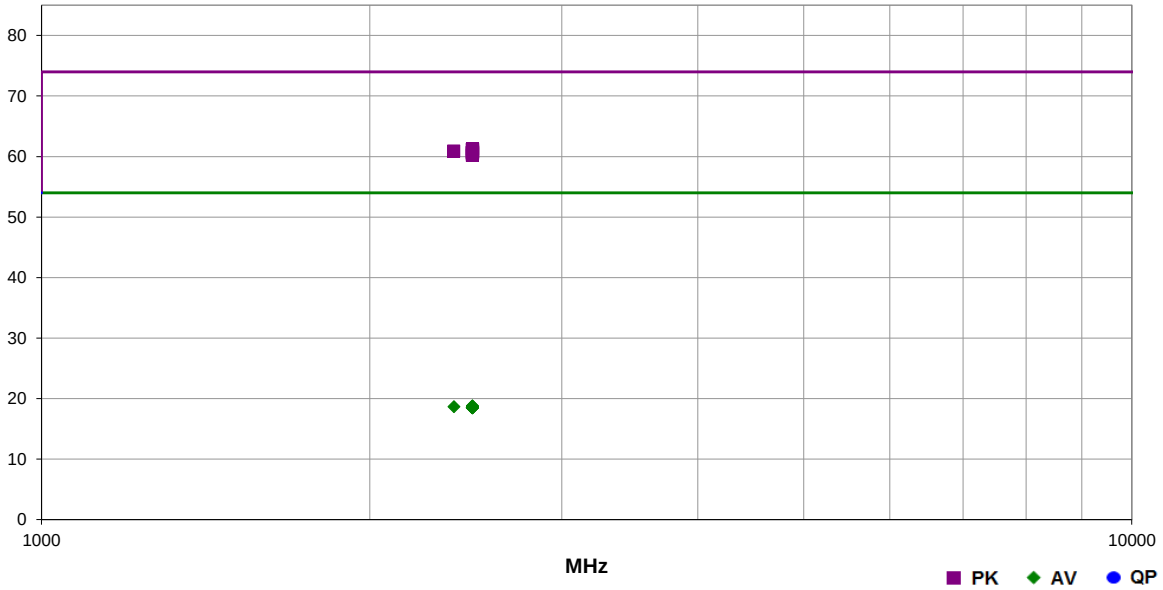
SPURIOUS RADIATED EMISSIONS

EmiR5 2018.09.26 PSA-ESCI 2018.07.27

Work Order:	WTVD0014	**Date:**	8-Nov-2018		
Project:	None	**Temperature:**	23.1 °C		
Job Site:	TX02	**Humidity:**	45.6% RH		
Serial Number:	VXL1-001324 XBC1-001149	**Barometric Pres.:**	1021 mbar	**Tested by:**	Jonathan Kiefer
EUT:	VISTA XLT				
Configuration:	1				
Customer:	WatchGuard Video				
Attendees:	Navaid Karimi				
EUT Power:	Battery				
Operating Mode:	Continuously Transmitting at Single Channel 6, 2437 MHz				
Deviations:	None				
Comments:	Band Edge measurements. See comments below for EUT orientation and data rate information. EUT uses integral chip antenna with 2.2 dBi gain. EUT Duty Cycle < 98%, therefore upwardly corrected to 100% using 10*LOG(1/DC). Worst-case upward correction factor: 10*LOG(1/0.336) = 4.74 dB. Then downwardly corrected based on duty cycle in final use (1.7%), using 20*LOG(DC). Applied overall worst-case DCCF of -30.7 dB to average detector measurements.				

Test Specifications	**Test Method**
FCC 15.247:2018	ANSI C63.10:2013

Run #	19	**Test Distance (m)**	3	**Antenna Height(s)**	1 to 4(m)	**Results**	Pass



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Duty Cycle Correction Factor (dB)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
2484.850	44.7	-3.4	1.2	300.0	0.0	20.0	Horz	PK	0.0	61.3	74.0	-12.7	EUT Horz, 54 Mbps
2484.790	44.6	-3.4	1.2	63.0	0.0	20.0	Vert	PK	0.0	61.2	74.0	-12.8	EUT Horz, 6 Mbps
2484.180	44.6	-3.4	4.0	266.0	0.0	20.0	Horz	PK	0.0	61.2	74.0	-12.8	EUT Horz, MCS0 7.2 Mbps
2484.770	44.5	-3.4	1.2	159.9	0.0	20.0	Horz	PK	0.0	61.1	74.0	-12.9	EUT Horz, 36 Mbps
2388.103	44.7	-3.8	1.2	142.9	0.0	20.0	Horz	PK	0.0	60.9	74.0	-13.1	EUT Horz, 6 Mbps
2485.403	44.2	-3.4	3.1	156.0	0.0	20.0	Vert	PK	0.0	60.8	74.0	-13.2	EUT Vert, 6 Mbps
2484.243	44.1	-3.4	1.2	85.0	0.0	20.0	Horz	PK	0.0	60.7	74.0	-13.3	EUT Vert, 6 Mbps
2484.177	44.1	-3.4	1.2	153.9	0.0	20.0	Horz	PK	0.0	60.7	74.0	-13.3	EUT Horz, MCS4 43.3 Mbps
2484.527	44.0	-3.4	1.2	43.0	0.0	20.0	Horz	PK	0.0	60.6	74.0	-13.4	EUT Horz, MCS7 72.2 Mbps
2484.230	43.9	-3.4	1.2	292.9	0.0	20.0	Horz	PK	0.0	60.5	74.0	-13.5	EUT Horz, 6 Mbps
2484.453	43.9	-3.4	1.2	283.0	0.0	20.0	Vert	PK	0.0	60.5	74.0	-13.5	EUT On Side, 6 Mbps
2484.317	43.6	-3.4	1.2	55.0	0.0	20.0	Horz	PK	0.0	60.2	74.0	-13.8	EUT On Side, 6 Mbps
2484.833	32.8	-3.4	1.2	292.9	-30.7	20.0	Horz	AV	0.0	18.8	54.0	-35.3	EUT Horz, 6 Mbps
2484.750	32.8	-3.4	1.2	300.0	-30.7	20.0	Horz	AV	0.0	18.8	54.0	-35.3	EUT Horz, 54 Mbps
2389.553	33.1	-3.8	1.2	142.9	-30.7	20.0	Horz	AV	0.0	18.7	54.0	-35.4	EUT Horz, 6 Mbps
2484.897	32.6	-3.4	1.2	63.0	-30.7	20.0	Vert	AV	0.0	18.6	54.0	-35.5	EUT Horz, 6 Mbps
2485.203	32.6	-3.4	1.2	85.0	-30.7	20.0	Horz	AV	0.0	18.6	54.0	-35.5	EUT Vert, 6 Mbps
2485.440	32.6	-3.4	1.2	159.9	-30.7	20.0	Horz	AV	0.0	18.6	54.0	-35.5	EUT Horz, 36 Mbps
2483.987	32.6	-3.4	1.2	43.0	-30.7	20.0	Horz	AV	0.0	18.6	54.0	-35.5	EUT Horz, MCS7 72.2 Mbps
2485.033	32.5	-3.4	3.1	156.0	-30.7	20.0	Vert	AV	0.0	18.5	54.0	-35.6	EUT Vert, 6 Mbps
2483.717	32.5	-3.4	1.2	55.0	-30.7	20.0	Horz	AV	0.0	18.5	54.0	-35.6	EUT On Side, 6 Mbps
2484.317	32.5	-3.4	1.2	283.0	-30.7	20.0	Vert	AV	0.0	18.5	54.0	-35.6	EUT On Side, 6 Mbps
2485.337	32.5	-3.4	4.0	266.0	-30.7	20.0	Horz	AV	0.0	18.5	54.0	-35.6	EUT Horz, MCS0 7.2 Mbps
2484.397	32.5	-3.4	1.2	153.9	-30.7	20.0	Horz	AV	0.0	18.5	54.0	-35.6	EUT Horz, MCS4 43.3 Mbps

DUTY CYCLE

XMit 2017.12.13

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
Attenuator	Fairview Microwave	SA4018-20	TYW	29-Mar-18	29-Mar-19
Block - DC	Fairview Microwave	SD3379	AMM	29-Mar-18	29-Mar-19
Cable	Micro-Coax	UFD150A-1-0720-200200	TXG	10-Oct-18	10-Oct-19
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFM	19-Mar-18	19-Mar-19

TEST DESCRIPTION

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

DUTY CYCLE

element

TbtTx 2018.09.13 XMit 2017.12.13

EUT:	VISTA XLT			**Work Order:**	WTVD0014
Serial Number:	VXL1-000683 XBC1-001149			**Date:**	9-Nov-18
Customer:	WatchGuard Video			**Temperature:**	22.7 °C
Attendees:	Navaid Karimi			**Humidity:**	34.5% RH
Project:	None			**Barometric Pres.:**	1024 mbar
Tested by:	Jonathan Kiefer	**Power:**	Battery	**Job Site:**	TX09

TEST SPECIFICATIONS	Test Method
FCC 15.247:2018	ANSI C63.10:2013

COMMENTS

Ref Offset of 21.12 dB (20 dB Attenuator + DC Block + Cable). Integral antenna with antenna gain of 2.2 dBi.

DEVIATIONS FROM TEST STANDARD

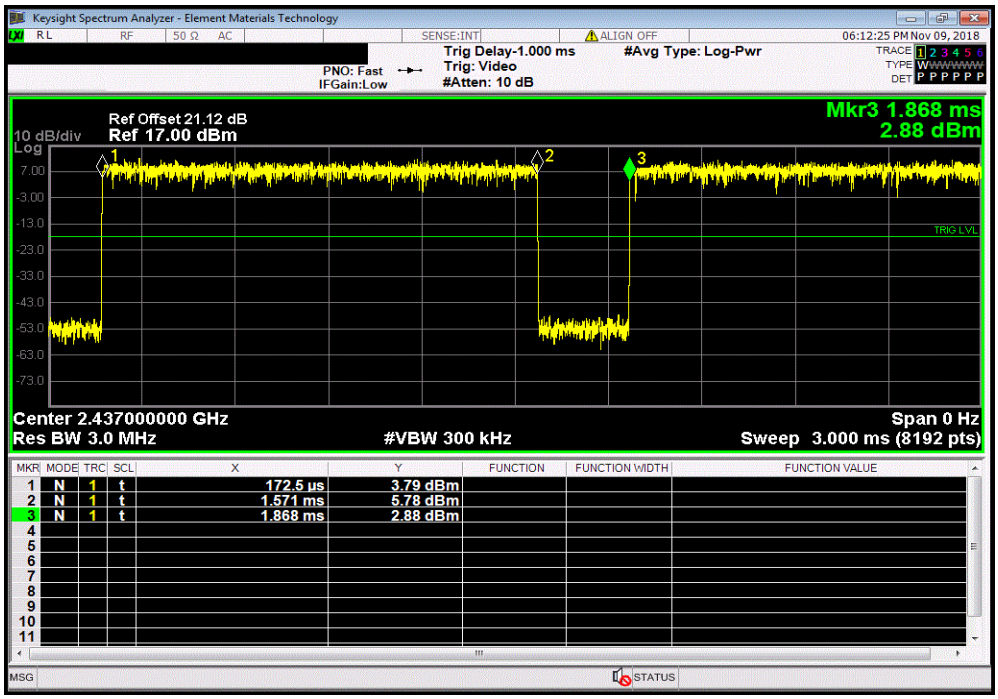
None

Configuration #	2	Signature	Jonathan Kiefer

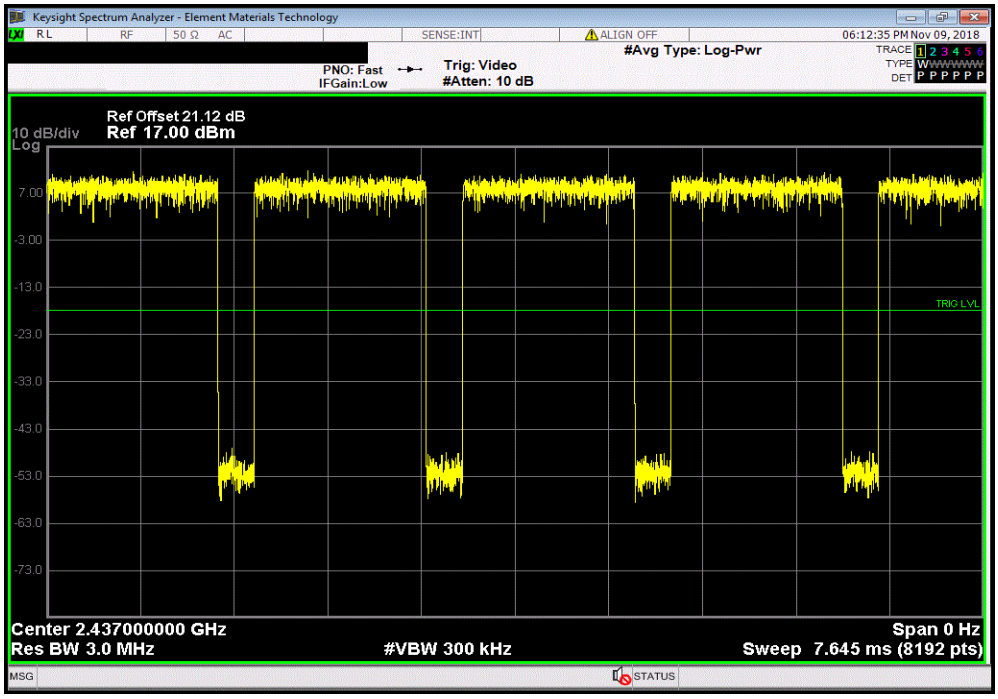
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
2400 MHz - 2483.5 MHz Band						
802.11(g) 6 Mbps						
Single Channel 6, 2437 MHz	1.399 ms	1.695 ms	1	82.5	N/A	N/A
Single Channel 6, 2437 MHz	N/A	N/A	5	N/A	N/A	N/A
802.11(g) 36 Mbps						
Single Channel 6, 2437 MHz	250.8 us	547.1 us	1	45.8	N/A	N/A
Single Channel 6, 2437 MHz	N/A	N/A	5	N/A	N/A	N/A
802.11(g) 54 Mbps						
Single Channel 6, 2437 MHz	174.5 us	480 us	1	36.4	N/A	N/A
Single Channel 6, 2437 MHz	N/A	N/A	5	N/A	N/A	N/A
802.11(n) MCS0						
Single Channel 6, 2437 MHz	1.18 ms	1.485 ms	1	79.4	N/A	N/A
Single Channel 6, 2437 MHz	N/A	N/A	5	N/A	N/A	N/A
802.11(n) MCS4						
Single Channel 6, 2437 MHz	225.8 us	522 us	1	43.3	N/A	N/A
Single Channel 6, 2437 MHz	N/A	N/A	5	N/A	N/A	N/A
802.11(n) MCS7						
Single Channel 6, 2437 MHz	149.9 us	446.4 us	1	33.6	N/A	N/A
Single Channel 6, 2437 MHz	N/A	N/A	5	N/A	N/A	N/A

DUTY CYCLE

2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Single Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	1.399 ms	1.695 ms	1	82.5	N/A	N/A

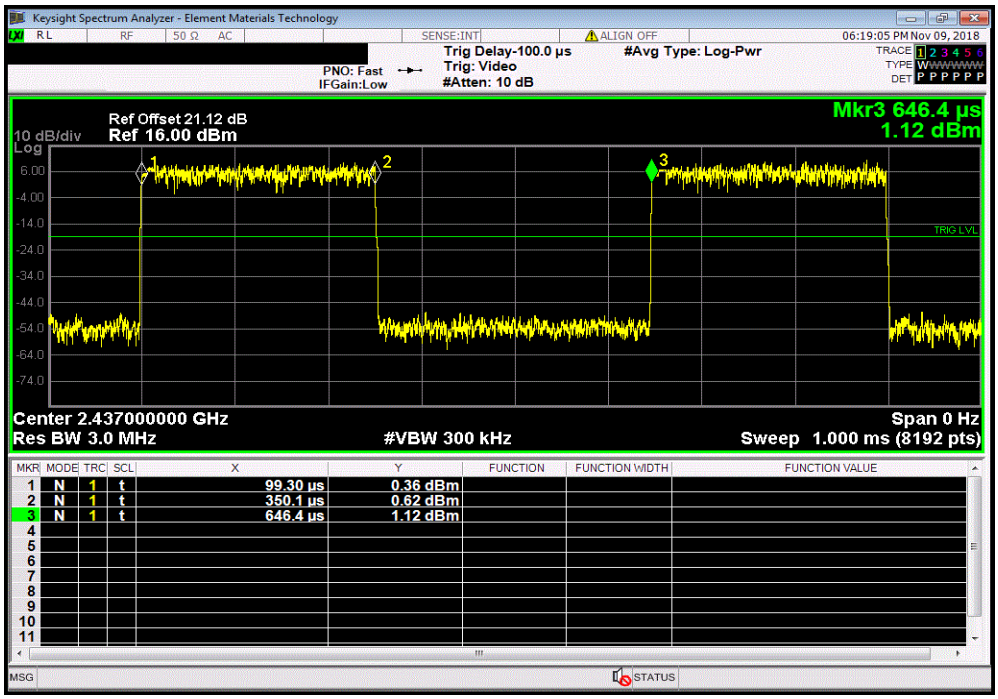


2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Single Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A



DUTY CYCLE

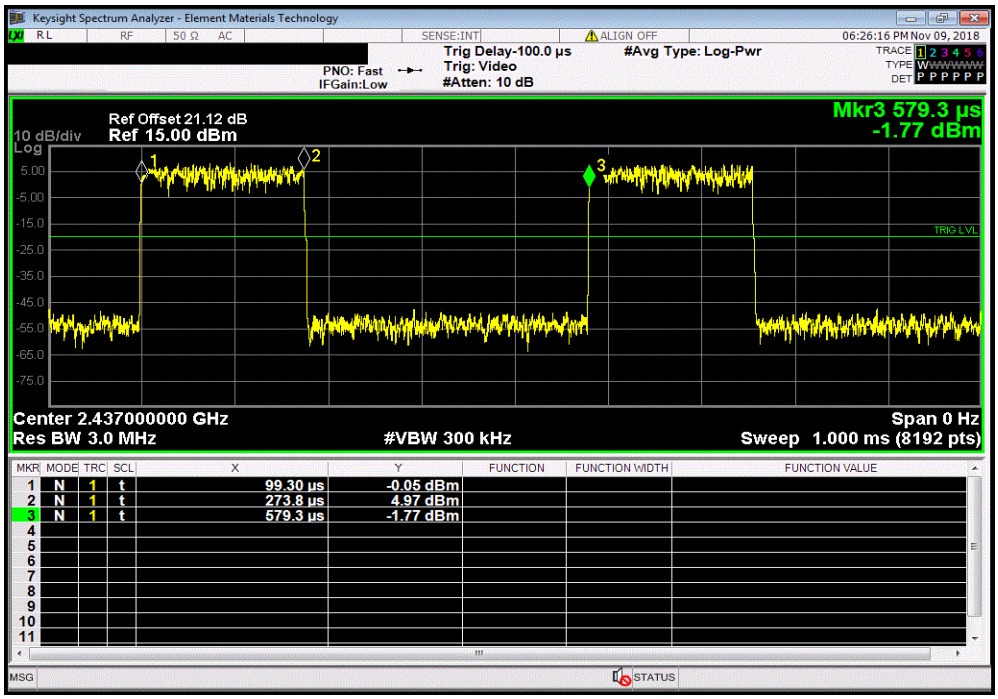
2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Single Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	250.8 us	547.1 us	1	45.8	N/A	N/A



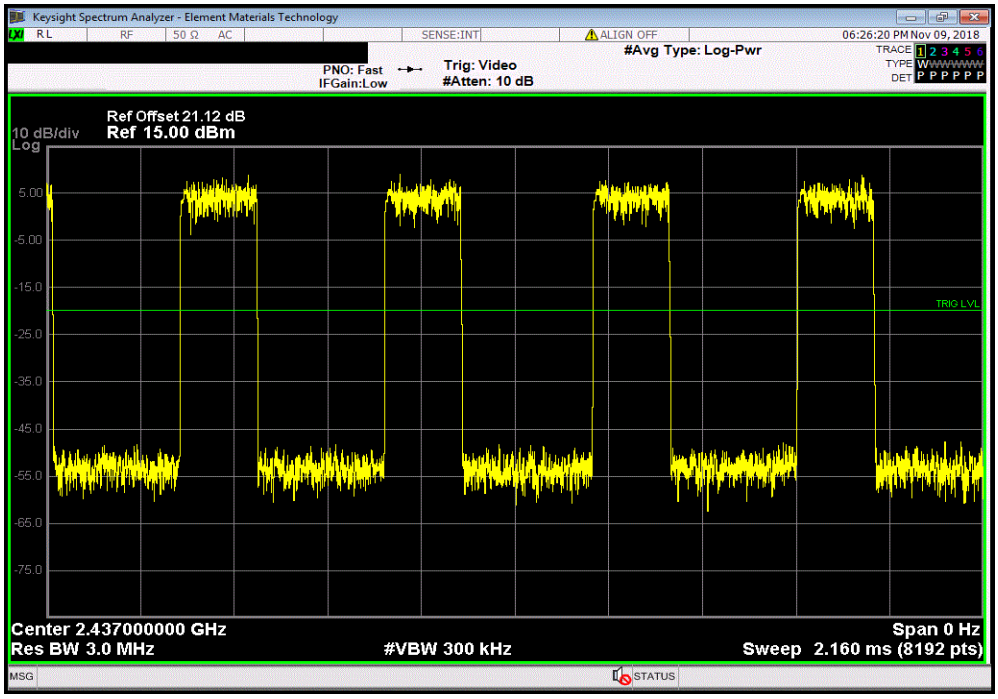
2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Single Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A

DUTY CYCLE

2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Single Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	174.5 us	480 us	1	36.4	N/A	N/A

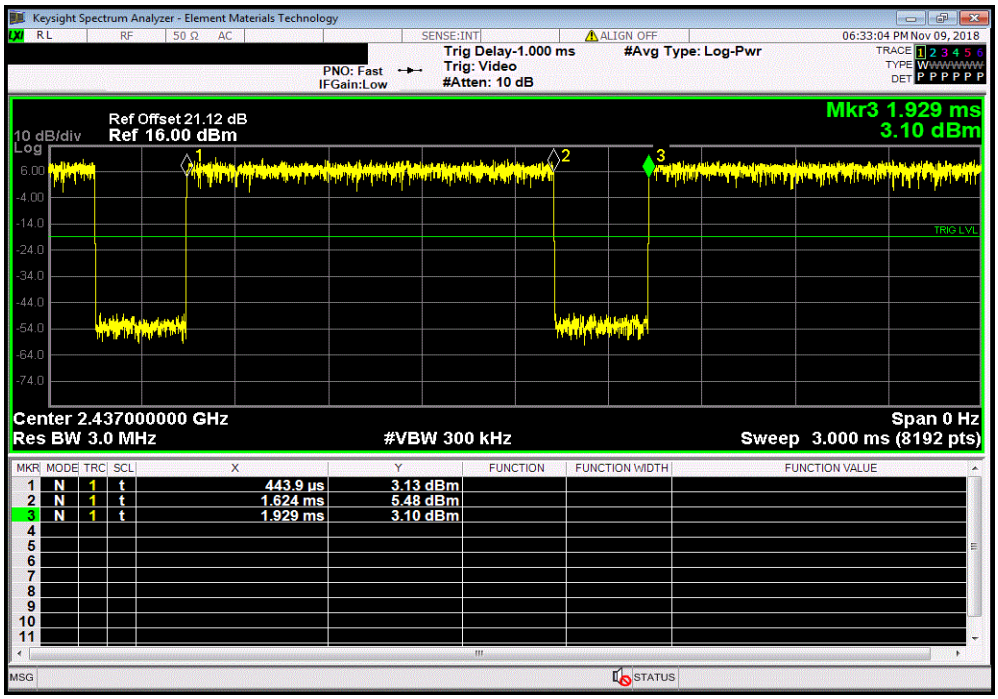


2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Single Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A

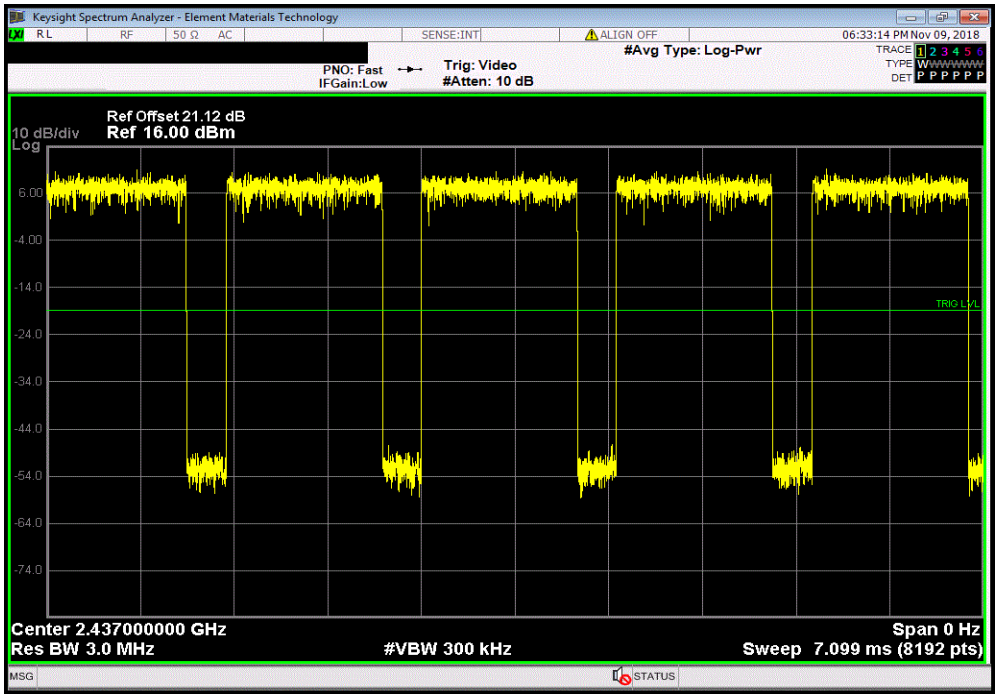


DUTY CYCLE

2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Single Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	1.18 ms	1.485 ms	1	79.4	N/A	N/A

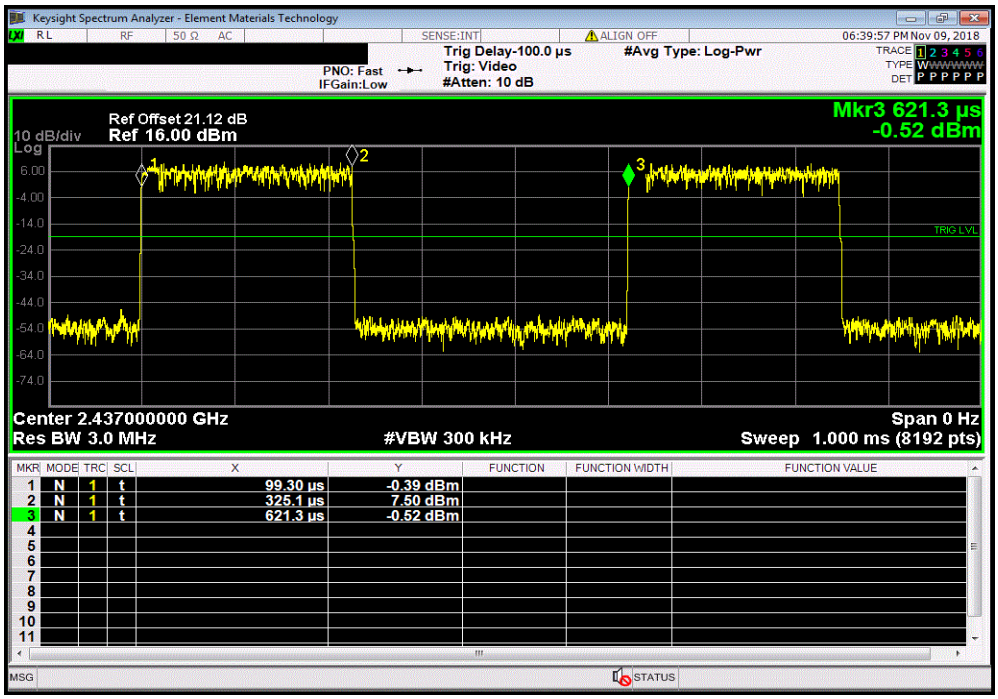


2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Single Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A

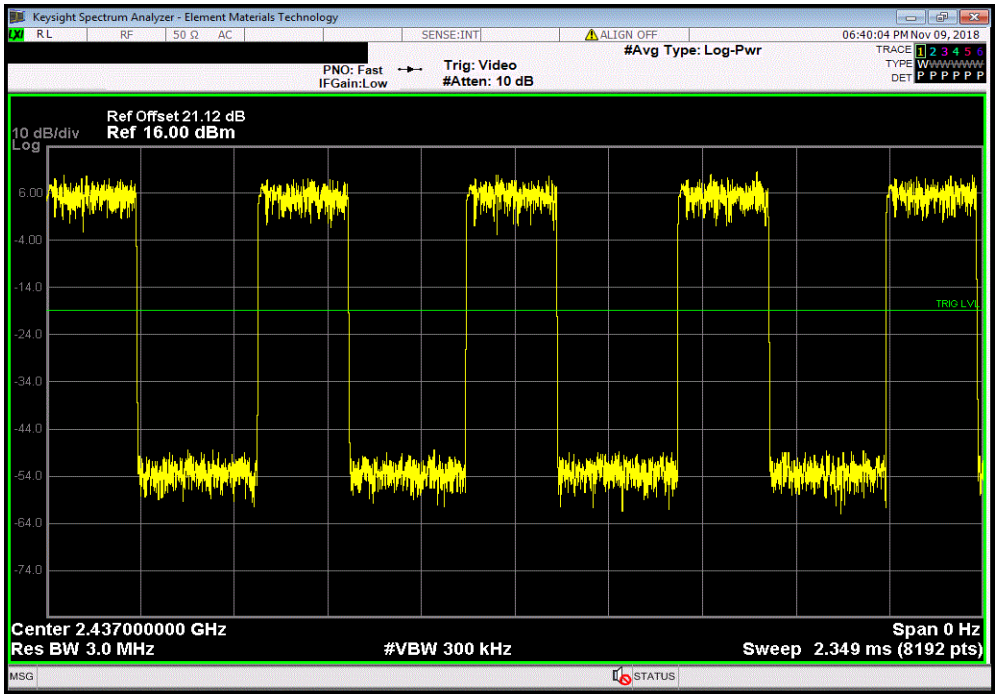


DUTY CYCLE

2400 MHz - 2483.5 MHz Band, 802.11(n) MCS4, Single Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	225.8 us	522 us	1	43.3	N/A	N/A

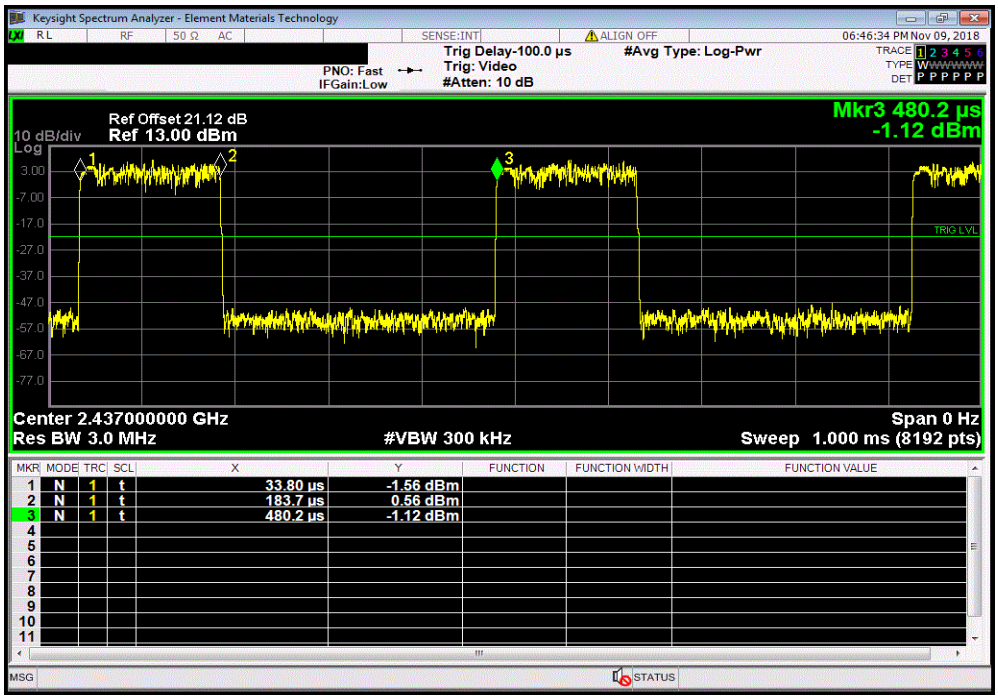


2400 MHz - 2483.5 MHz Band, 802.11(n) MCS4, Single Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	N/A	N/A	5	N/A	N/A	N/A

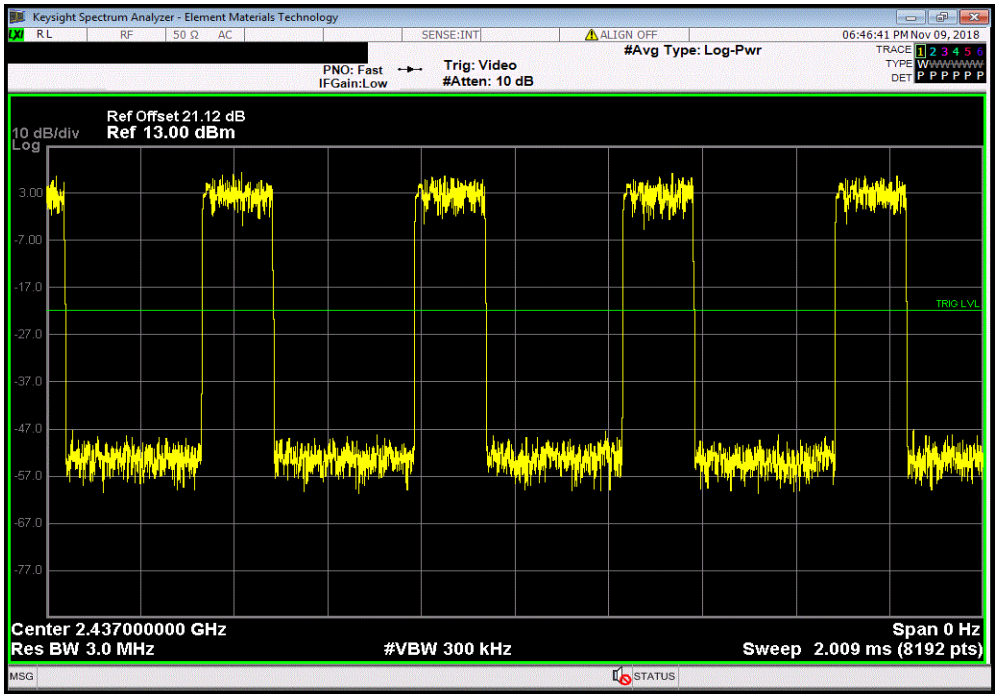


DUTY CYCLE

2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Single Channel 6, 2437 MHz						
	Pulse Width	Period	Number of Pulses	Value (%)	Limit (%)	Results
	149.9 us	446.4 us	1	33.6	N/A	N/A



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



OCCUPIED BANDWIDTH

XMit 2017.12.13

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
Attenuator	Fairview Microwave	SA4018-20	TYW	29-Mar-18	29-Mar-19
Block - DC	Fairview Microwave	SD3379	AMM	29-Mar-18	29-Mar-19
Cable	Micro-Coax	UFD150A-1-0720-200200	TXG	10-Oct-18	10-Oct-19
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFM	19-Mar-18	19-Mar-19

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

element

TbtTx 2018.09.13 XMit 2017.12.13

EUT:	VISTA XLT			**Work Order:**	WTVD0014
Serial Number:	VXL1-000683 XBC1-001149			**Date:**	9-Nov-18
Customer:	WatchGuard Video			**Temperature:**	22.7 °C
Attendees:	Navaid Karimi			**Humidity:**	34.5% RH
Project:	None			**Barometric Pres.:**	1024 mbar
Tested by:	Jonathan Kiefer	**Power:**	Battery	**Job Site:**	TX09

TEST SPECIFICATIONS	Test Method
FCC 15.247:2018	ANSI C63.10:2013

COMMENTS

Ref Offset of 21.12 dB (20 dB Attenuator + DC Block + Cable). Integral antenna with antenna gain of 2.2 dBi.

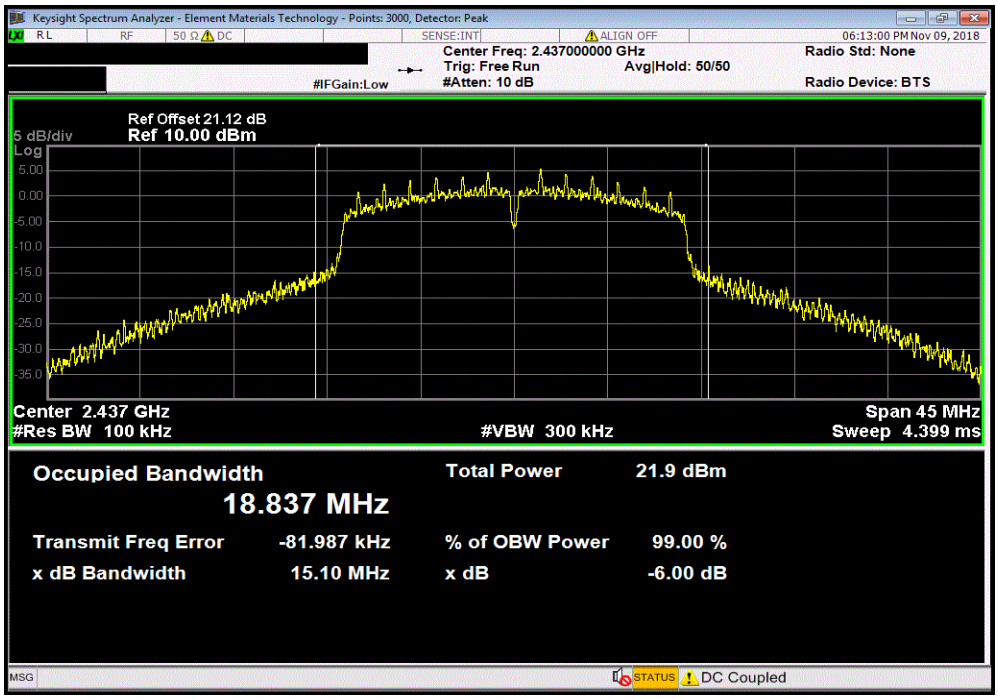
DEVIATIONS FROM TEST STANDARD

None

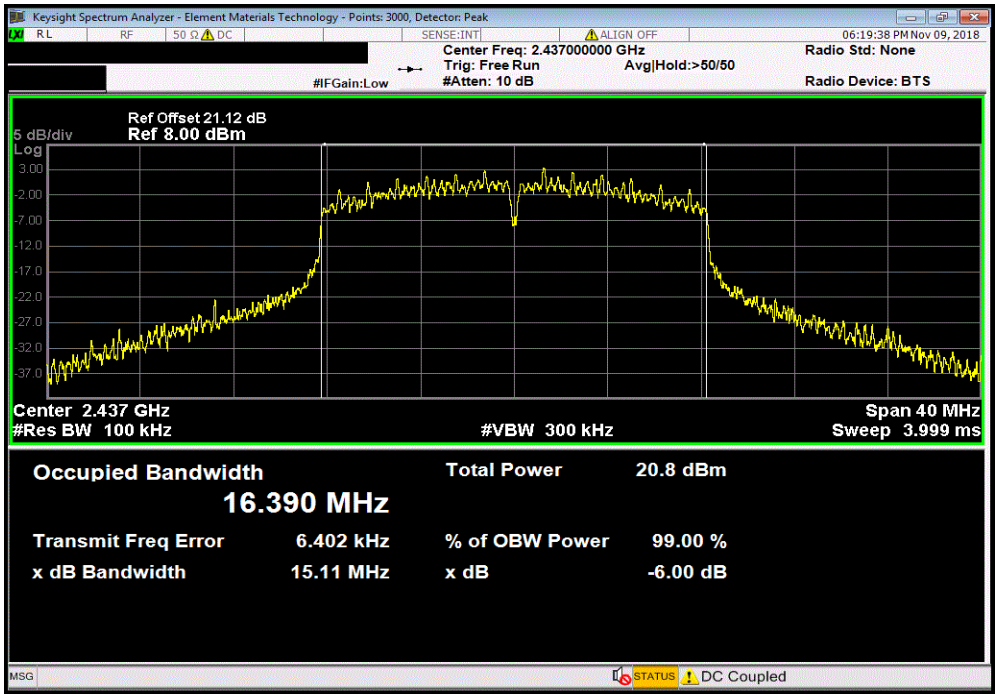
Configuration #	2	Signature Jonathan Kiefer

	Value	Limit (>)	Result
2400 MHz - 2483.5 MHz Band			
802.11(g) 6 Mbps			
Single Channel 6, 2437 MHz	15.102 MHz	500 kHz	Pass
802.11(g) 36 Mbps			
Single Channel 6, 2437 MHz	15.107 MHz	500 kHz	Pass
802.11(g) 54 Mbps			
Single Channel 6, 2437 MHz	15.111 MHz	500 kHz	Pass
802.11(n) MCS0			
Single Channel 6, 2437 MHz	15.107 MHz	500 kHz	Pass
802.11(n) MCS4			
Single Channel 6, 2437 MHz	15.107 MHz	500 kHz	Pass
802.11(n) MCS7			
Single Channel 6, 2437 MHz	15.111 MHz	500 kHz	Pass

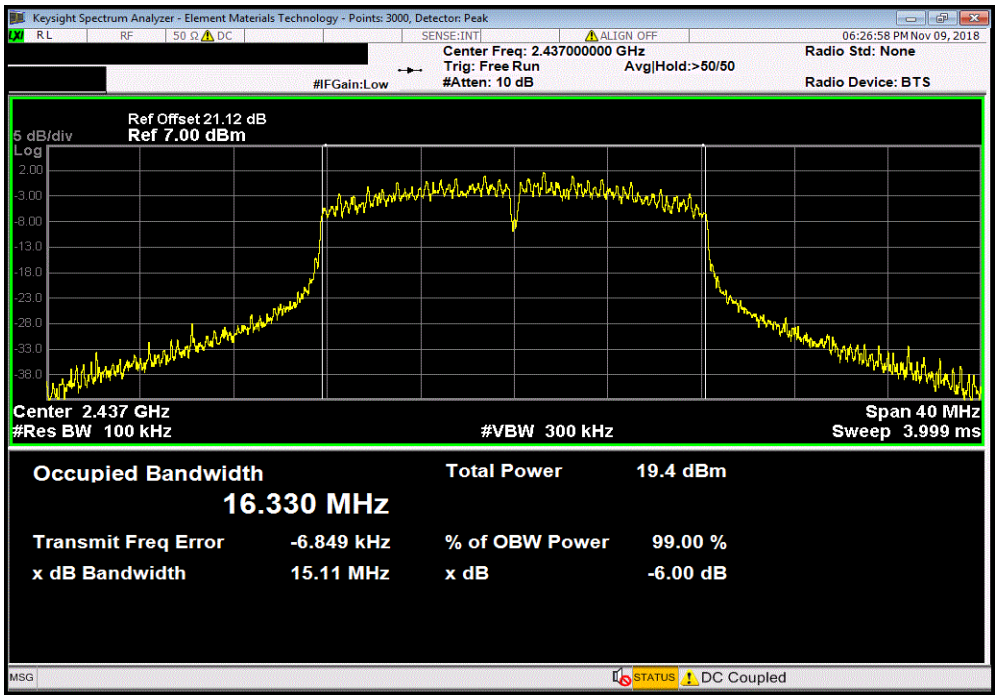
2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Single Channel 6, 2437 MHz						
				Value	Limit (>)	Result
				15.102 MHz	500 kHz	Pass



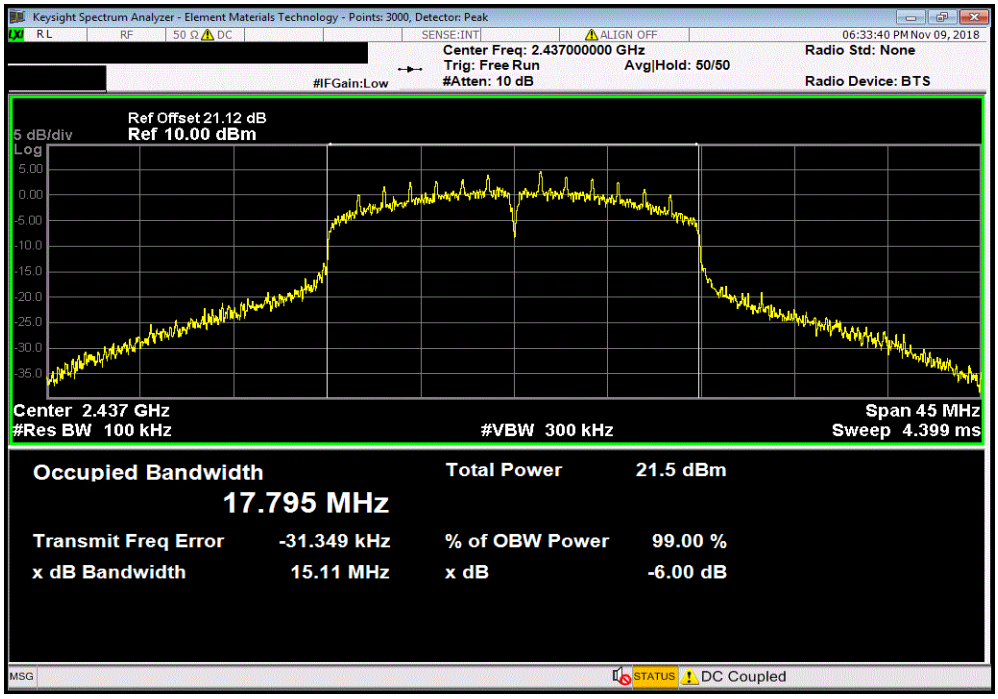
2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Single Channel 6, 2437 MHz						
				Value	Limit (>)	Result
				15.107 MHz	500 kHz	Pass



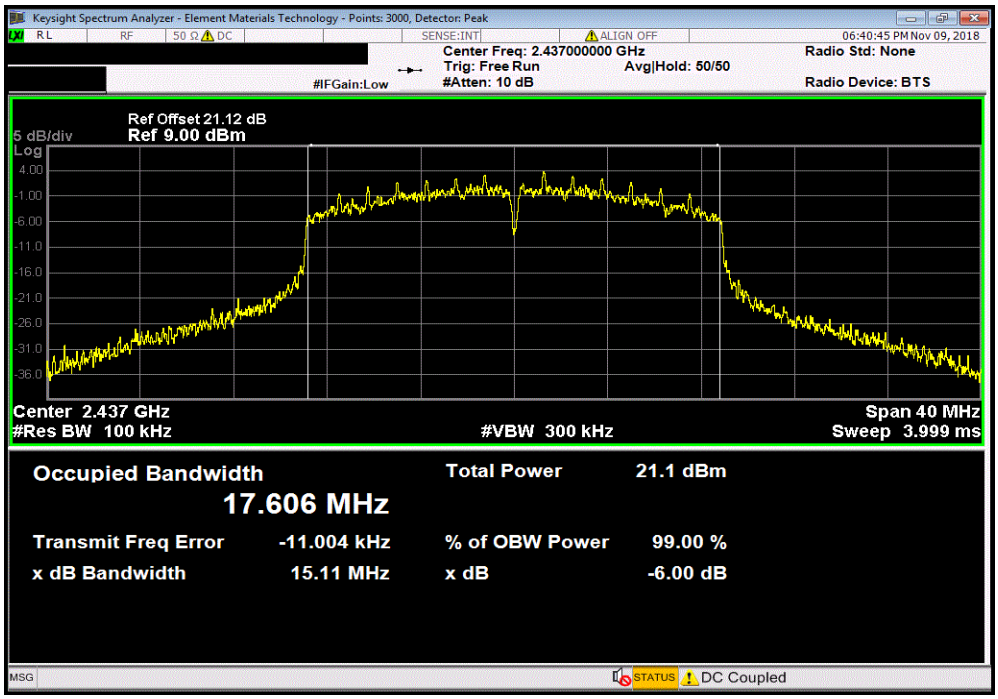
2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Single Channel 6, 2437 MHz						
				Value	Limit (>)	Result
				15.111 MHz	500 kHz	Pass



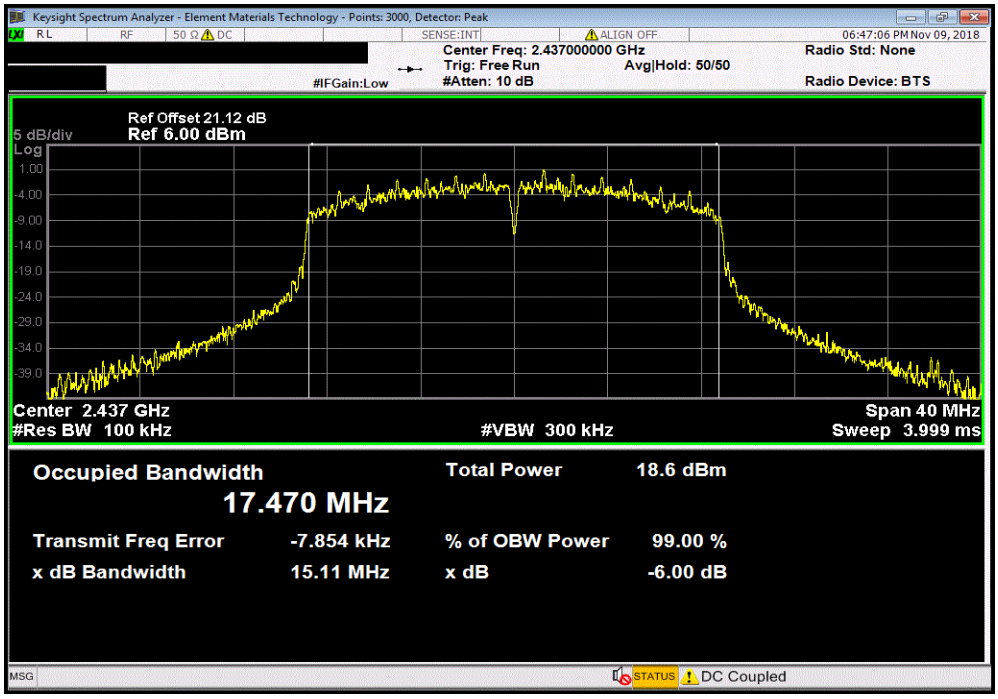
2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Single Channel 6, 2437 MHz						
				Value	Limit (>)	Result
				15.107 MHz	500 kHz	Pass



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS4, Single Channel 6, 2437 MHz						
				Value	Limit (>)	Result
				15.107 MHz	500 kHz	Pass



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



OUTPUT POWER

XMit 2017.12.13

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
Attenuator	Fairview Microwave	SA4018-20	TYW	29-Mar-18	29-Mar-19
Block - DC	Fairview Microwave	SD3379	AMM	29-Mar-18	29-Mar-19
Cable	Micro-Coax	UFD150A-1-0720-200200	TXG	10-Oct-18	10-Oct-19
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFM	19-Mar-18	19-Mar-19

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.

OUTPUT POWER

element

TbtTx 2018.09.13 XMit 2017.12.13

EUT:	VISTA XLT			**Work Order:**	WTVD0014
Serial Number:	VXL1-000683 XBC1-001149			**Date:**	9-Nov-18
Customer:	WatchGuard Video			**Temperature:**	22.7 °C
Attendees:	Navaid Karimi			**Humidity:**	34.5% RH
Project:	None			**Barometric Pres.:**	1024 mbar
Tested by:	Jonathan Kiefer	**Power:**	Battery	**Job Site:**	TX09

TEST SPECIFICATIONS	Test Method
FCC 15.247:2018	ANSI C63.10:2013

COMMENTS

Integral antenna with antenna gain of 2.2 dBi.

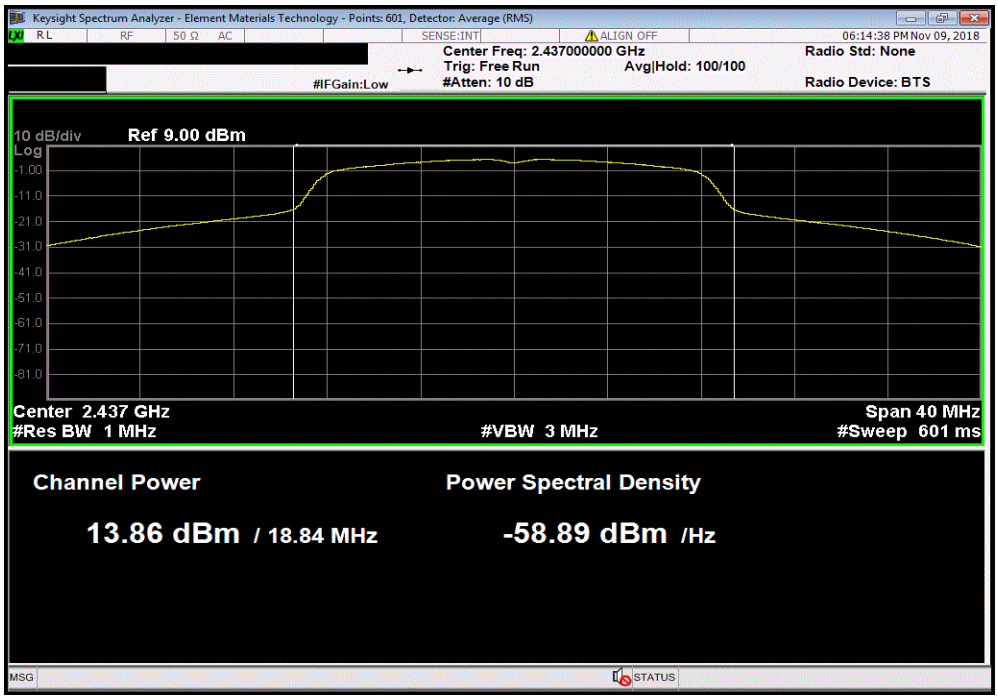
DEVIATIONS FROM TEST STANDARD

None

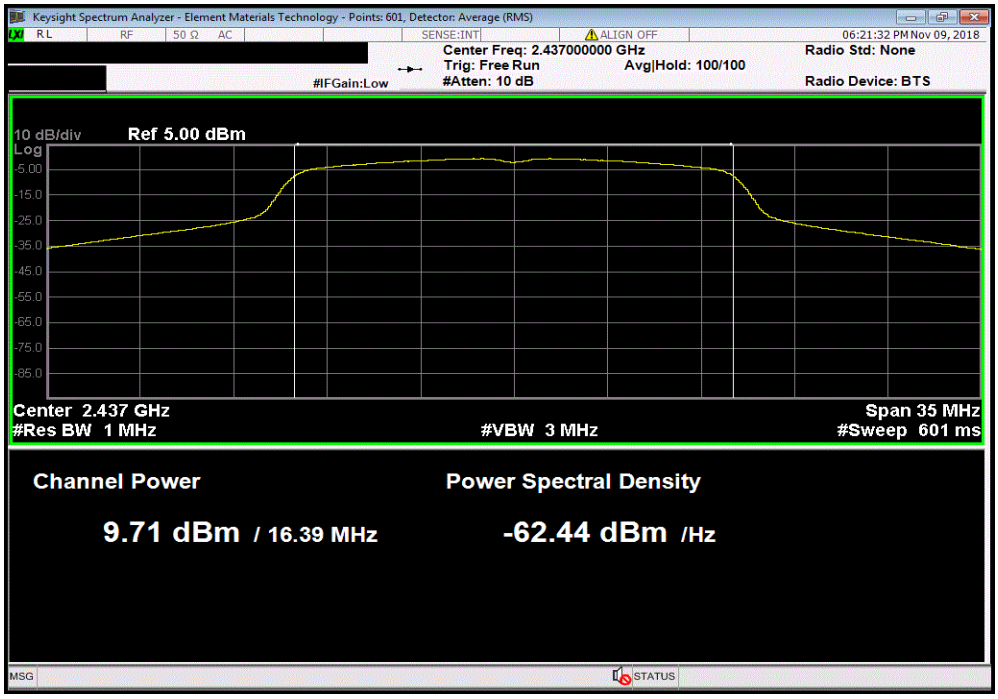
Configuration #	2	*Signature* Jonathan Kiefer

	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result
2400 MHz - 2483.5 MHz Band					
802.11(g) 6 Mbps					
Single Channel 6, 2437 MHz	13.856	0.8	14.7	30	Pass
802.11(g) 36 Mbps					
Single Channel 6, 2437 MHz	9.708	3.4	13.1	30	Pass
802.11(g) 54 Mbps					
Single Channel 6, 2437 MHz	7.354	4.4	11.7	30	Pass
802.11(n) MCS0					
Single Channel 6, 2437 MHz	12.915	1	13.9	30	Pass
802.11(n) MCS4					
Single Channel 6, 2437 MHz	9.677	3.6	13.3	30	Pass
802.11(n) MCS7					
Single Channel 6, 2437 MHz	6.032	4.7	10.8	30	Pass

2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Single Channel 6, 2437 MHz						
		Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result
		13.856	0.8	14.7	30	Pass

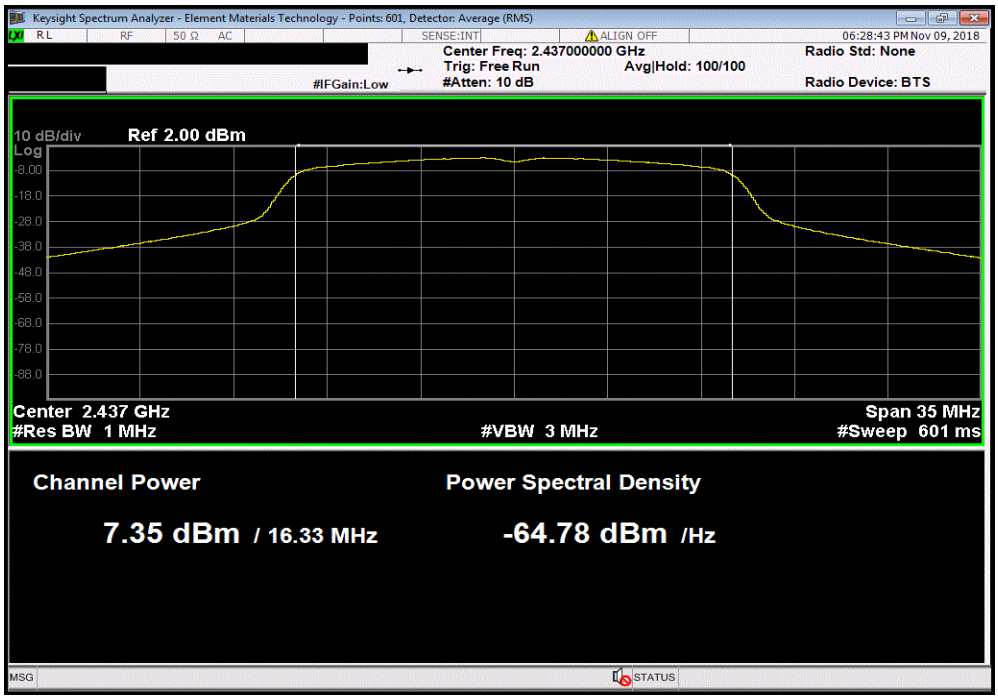


2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Single Channel 6, 2437 MHz						
		Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result
		9.708	3.4	13.1	30	Pass

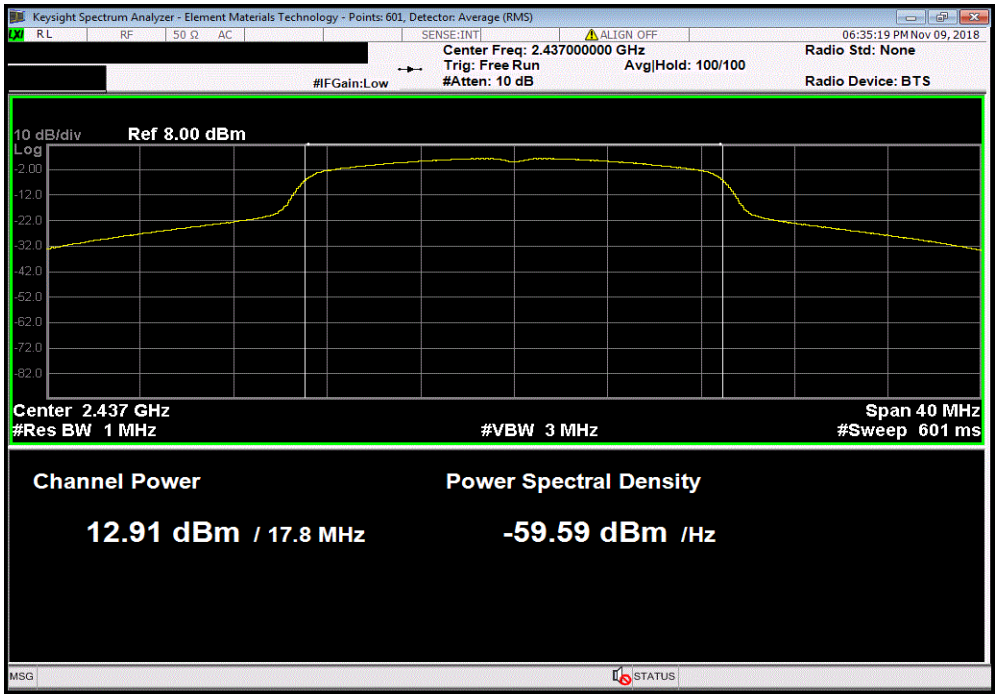


OUTPUT POWER

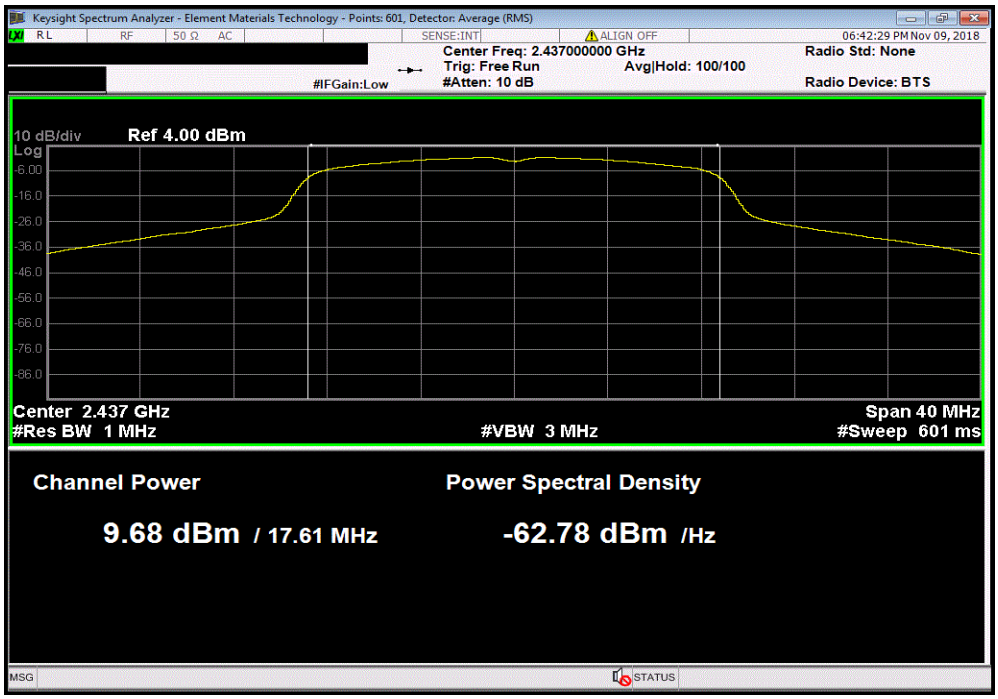
2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Single Channel 6, 2437 MHz						
		Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result
		7.354	4.4	11.7	30	Pass



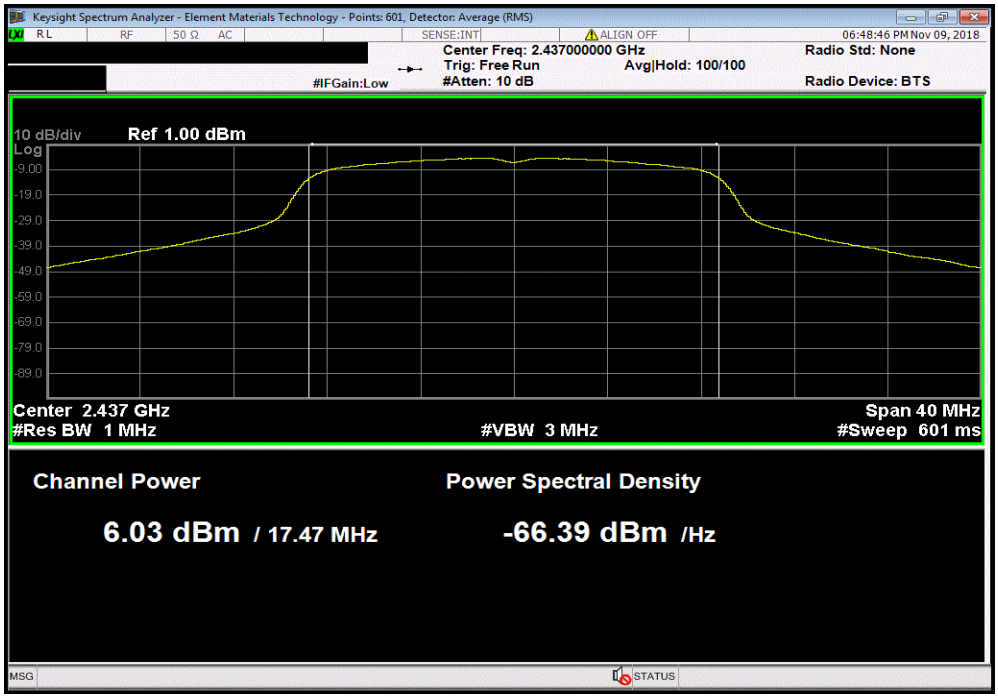
2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Single Channel 6, 2437 MHz						
		Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result
		12.915	1	13.9	30	Pass



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS4, Single Channel 6, 2437 MHz						
		Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result
		9.677	3.6	13.3	30	Pass



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Single Channel 6, 2437 MHz						
		Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result
		6.032	4.7	10.8	30	Pass



EQUIVALENT ISOTROPIC RADIATED POWER (EIRP)

XMit 2017.12.13

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
Attenuator	Fairview Microwave	SA4018-20	TYW	29-Mar-18	29-Mar-19
Block - DC	Fairview Microwave	SD3379	AMM	29-Mar-18	29-Mar-19
Cable	Micro-Coax	UFD150A-1-0720-200200	TXG	10-Oct-18	10-Oct-19
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFM	19-Mar-18	19-Mar-19

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.

EQUIVALENT ISOTROPIC RADIATED POWER (EIRP)

element

TbtTx 2018.09.13 XMit 2017.12.13

EUT:	VISTA XLT			**Work Order:**	WTVD0014
Serial Number:	VXL1-000683 XBC1-001149			**Date:**	9-Nov-18
Customer:	WatchGuard Video			**Temperature:**	22.7 °C
Attendees:	Navaid Karimi			**Humidity:**	34.5% RH
Project:	None			**Barometric Pres.:**	1024 mbar
Tested by:	Jonathan Kiefer	**Power:**	Battery	**Job Site:**	TX09

TEST SPECIFICATIONS	**Test Method**
FCC 15.247:2018	ANSI C63.10:2013

COMMENTS

Integral antenna with antenna gain of 2.2 dBi.

DEVIATIONS FROM TEST STANDARD

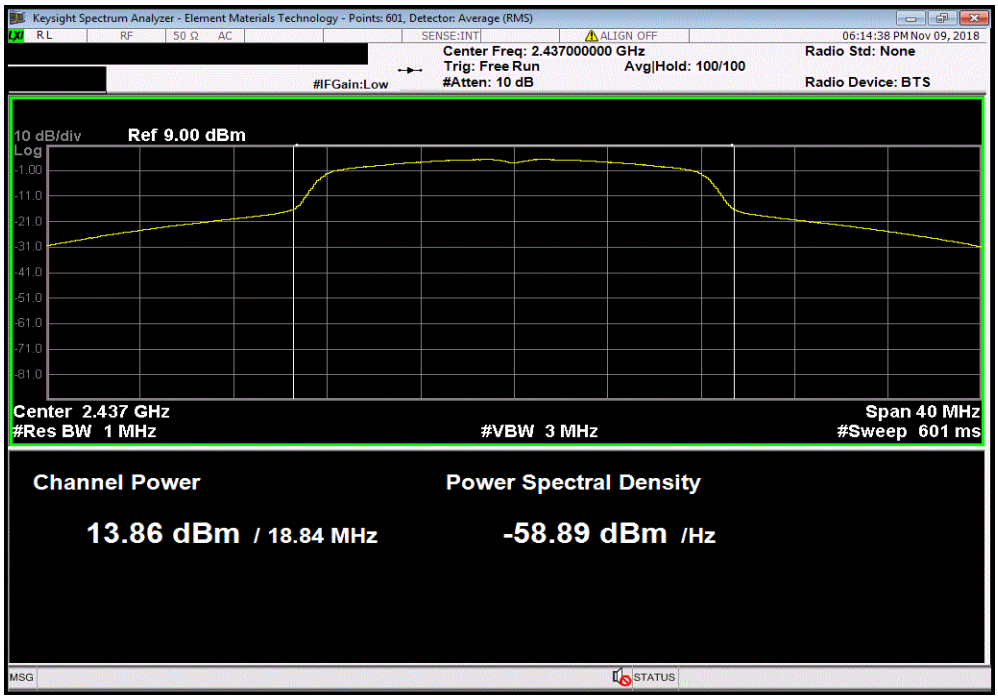
None

Configuration #	2	*Signature* Jonathan Kiefer

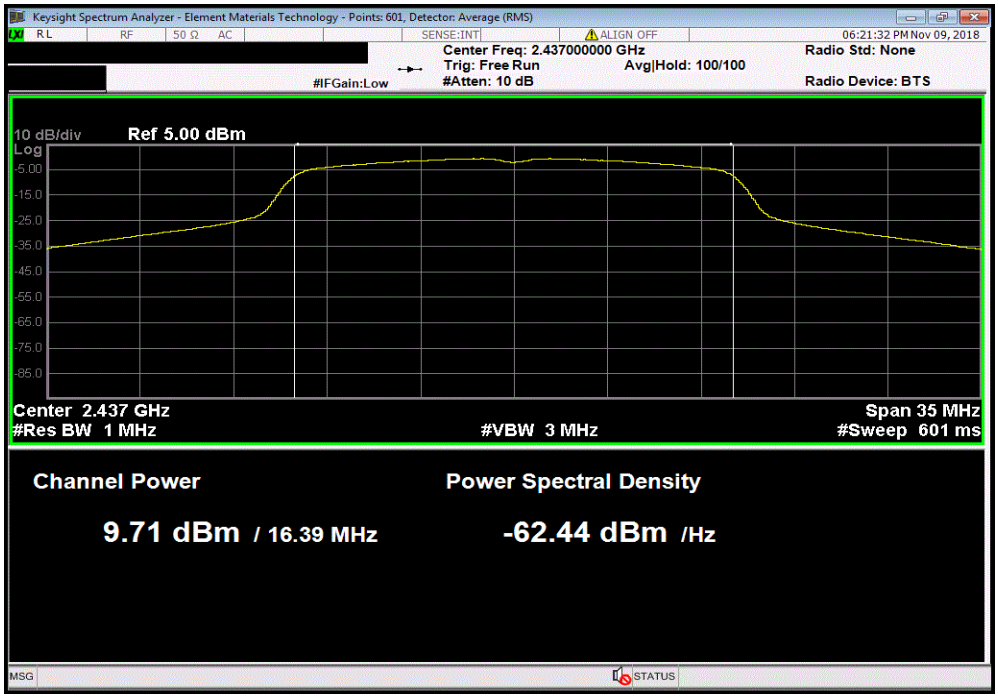
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
2400 MHz - 2483.5 MHz Band							
802.11(g) 6 Mbps							
Single Channel 6, 2437 MHz	13.856	0.8	14.7	2.2	16.9	36	Pass
802.11(g) 36 Mbps							
Single Channel 6, 2437 MHz	9.708	3.4	13.1	2.2	15.3	36	Pass
802.11(g) 54 Mbps							
Single Channel 6, 2437 MHz	7.354	4.4	11.7	2.2	13.9	36	Pass
802.11(n) MCS0							
Single Channel 6, 2437 MHz	12.915	1	13.9	2.2	16.1	36	Pass
802.11(n) MCS4							
Single Channel 6, 2437 MHz	9.677	3.6	13.3	2.2	15.5	36	Pass
802.11(n) MCS7							
Single Channel 6, 2437 MHz	6.032	4.7	10.8	2.2	13	36	Pass

EQUIVALENT ISOTROPIC RADIATED POWER (EIRP)

2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Single Channel 6, 2437 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
13.856	0.8	14.7	2.2	16.9	36	Pass

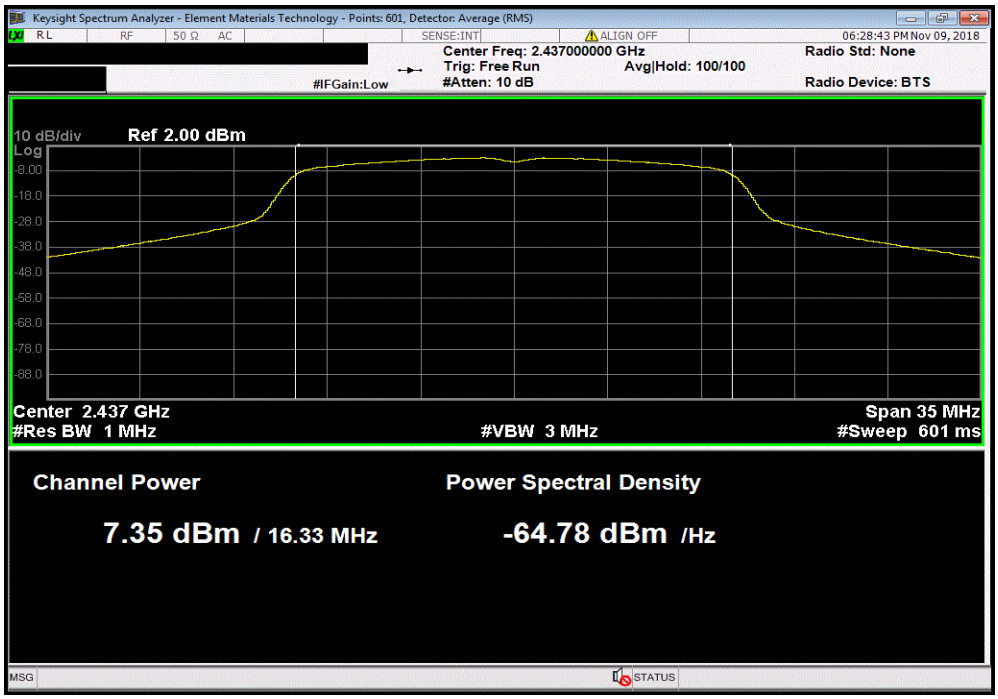


2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Single Channel 6, 2437 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
9.708	3.4	13.1	2.2	15.3	36	Pass

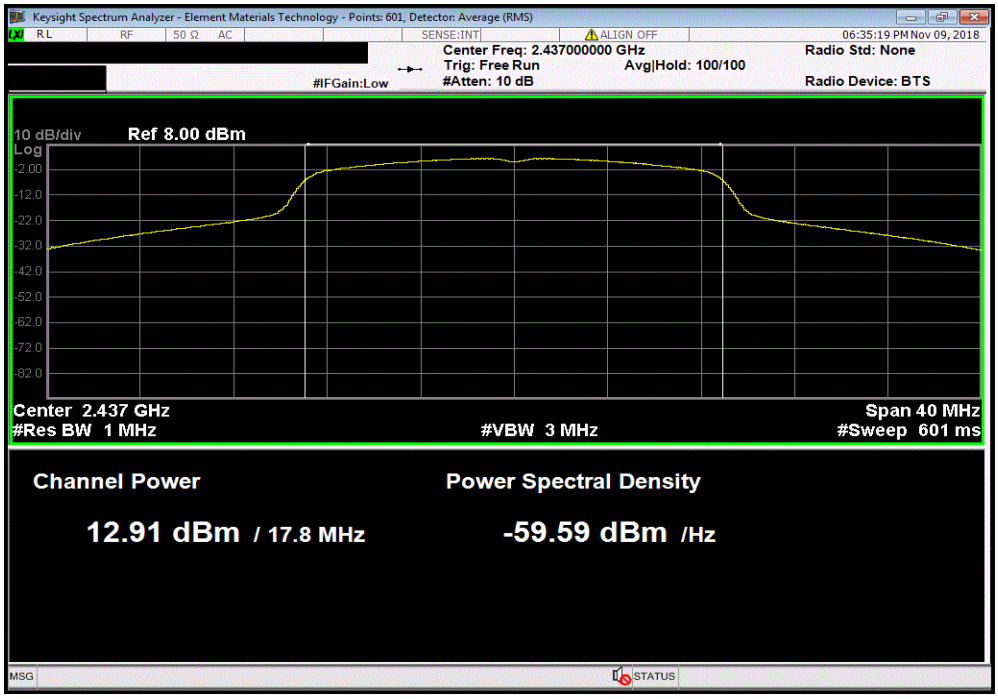


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP)

2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Single Channel 6, 2437 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
7.354	4.4	11.7	2.2	13.9	36	Pass



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Single Channel 6, 2437 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
12.915	1	13.9	2.2	16.1	36	Pass

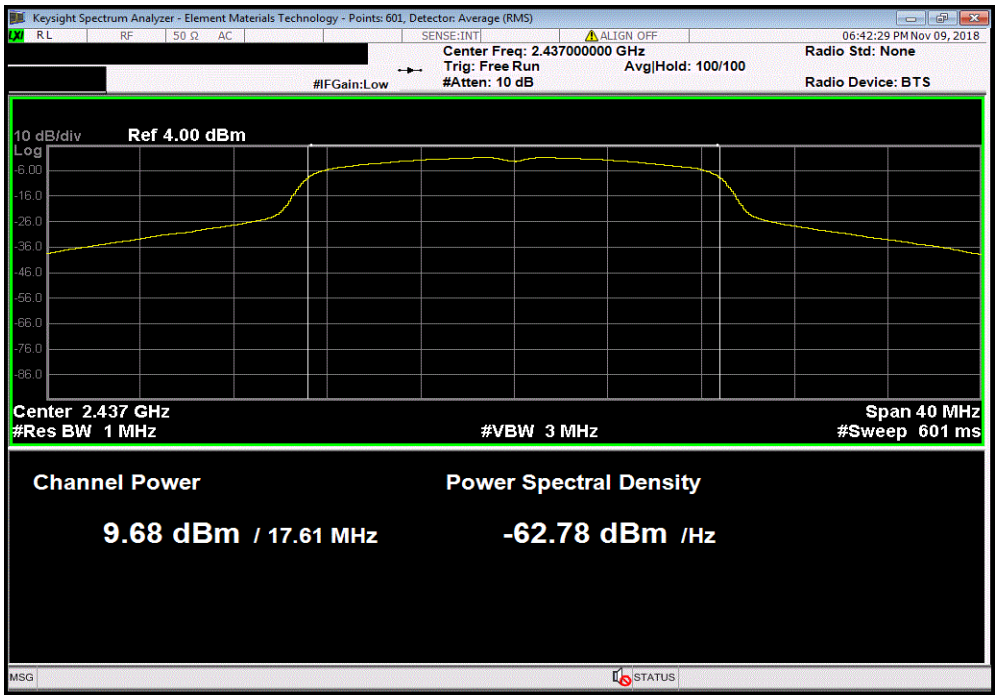


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP)

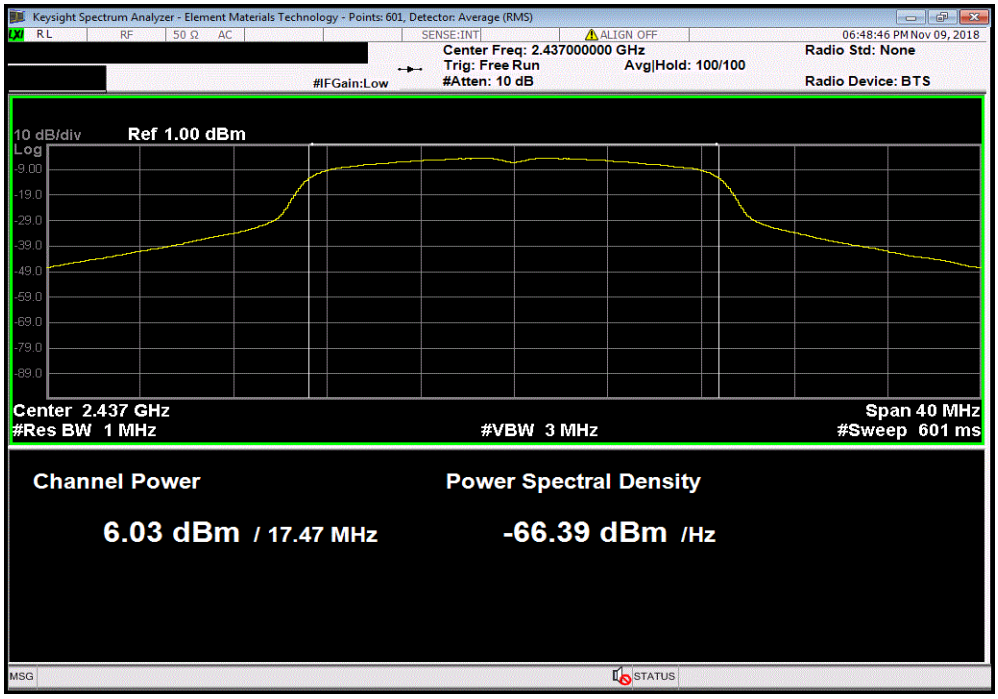
element

TbtTx 2018.09.13 XMit 2017.12.13

2400 MHz - 2483.5 MHz Band, 802.11(n) MCS4, Single Channel 6, 2437 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
9.677	3.6	13.3	2.2	15.5	36	Pass



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Single Channel 6, 2437 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
6.032	4.7	10.8	2.2	13	36	Pass



POWER SPECTRAL DENSITY

XMit 2017.12.13

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
Attenuator	Fairview Microwave	SA4018-20	TYW	29-Mar-18	29-Mar-19
Block - DC	Fairview Microwave	SD3379	AMM	29-Mar-18	29-Mar-19
Cable	Micro-Coax	UFD150A-1-0720-200200	TXG	10-Oct-18	10-Oct-19
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFM	19-Mar-18	19-Mar-19

TEST DESCRIPTION

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

The method AVGPSD-1 in section 11.10.3 of ANSI C63.10:2013 was used to make the measurement. This method uses trace averaging and RMS detection across the full power of the burst. This method is allowed as the same method has been used to determine the conducted output power.

POWER SPECTRAL DENSITY

element

TbtTx 2018.09.13 XMit 2017.12.13

EUT:	VISTA XLT			**Work Order:**	WTVD0014
Serial Number:	VXL1-000683 XBC1-001149			**Date:**	9-Nov-18
Customer:	WatchGuard Video			**Temperature:**	22.7 °C
Attendees:	Navaid Karimi			**Humidity:**	34.5% RH
Project:	None			**Barometric Pres.:**	1026 mbar
Tested by:	Jonathan Kiefer	**Power:**	Battery	**Job Site:**	TX09

TEST SPECIFICATIONS	Test Method
FCC 15.247:2018	ANSI C63.10:2013

COMMENTS

Ref Offset of 21.12 dB (20 dB Attenuator + DC Block + Cable). Integral antenna with antenna gain of 2.2 dBi.

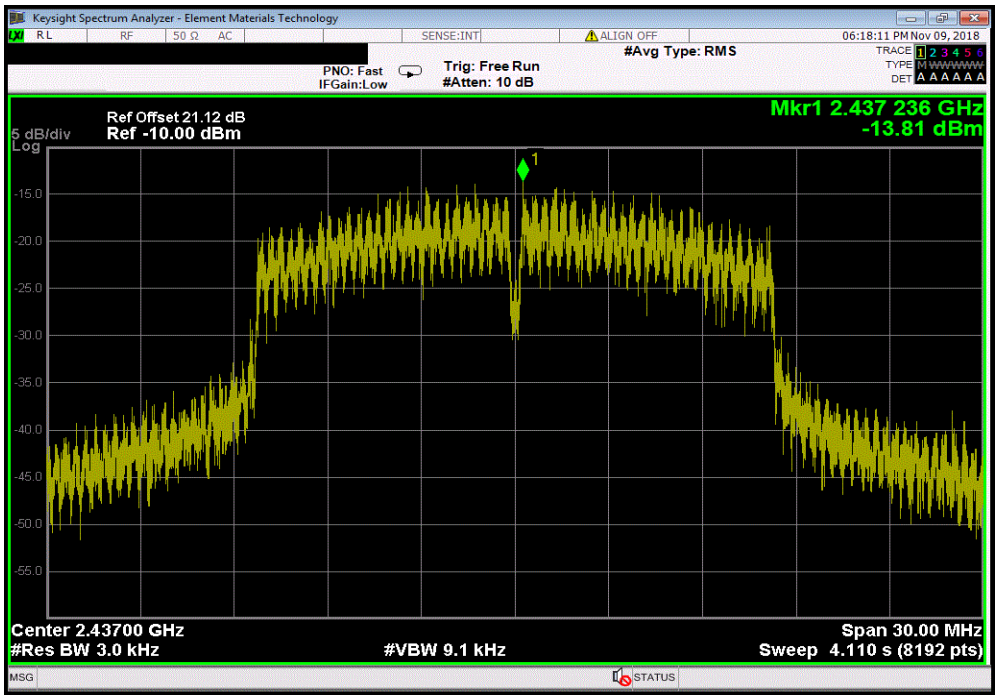
DEVIATIONS FROM TEST STANDARD

None

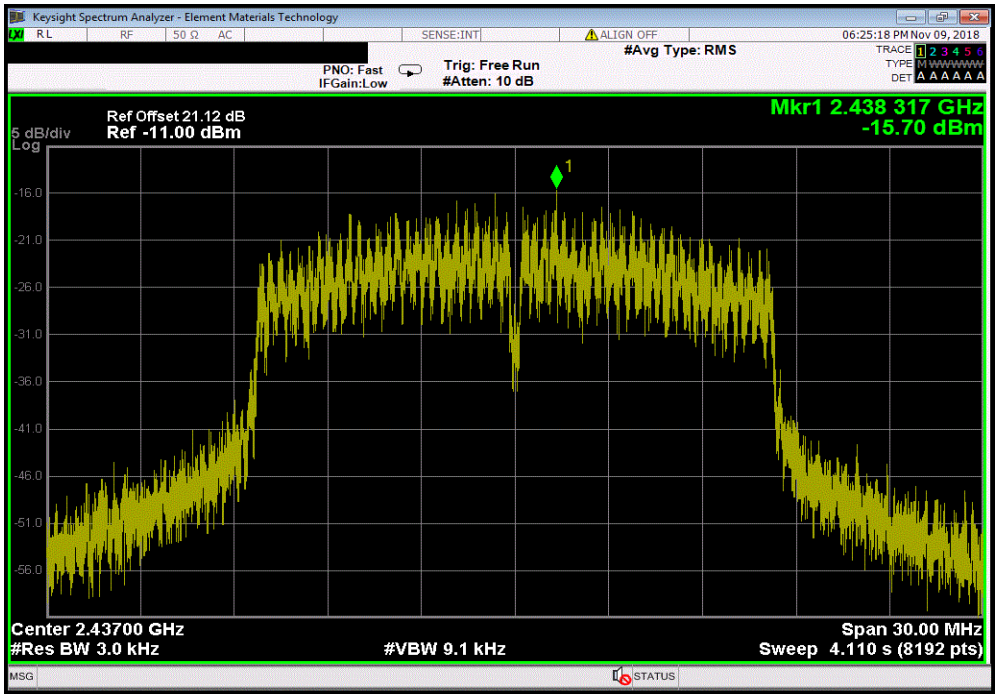
Configuration #	2	Signature Jonathan Kiefer

	Value dBm/3kHz	Limit < dBm/3kHz	Results
2400 MHz - 2483.5 MHz Band			
802.11(g) 6 Mbps			
Single Channel 6, 2437 MHz	-13.805	8	Pass
802.11(g) 36 Mbps			
Single Channel 6, 2437 MHz	-15.7	8	Pass
802.11(g) 54 Mbps			
Single Channel 6, 2437 MHz	-18.975	8	Pass
802.11(n) MCS0			
Single Channel 6, 2437 MHz	-15.091	8	Pass
802.11(n) MCS4			
Single Channel 6, 2437 MHz	-17.073	8	Pass
802.11(n) MCS7			
Single Channel 6, 2437 MHz	-19.792	8	Pass

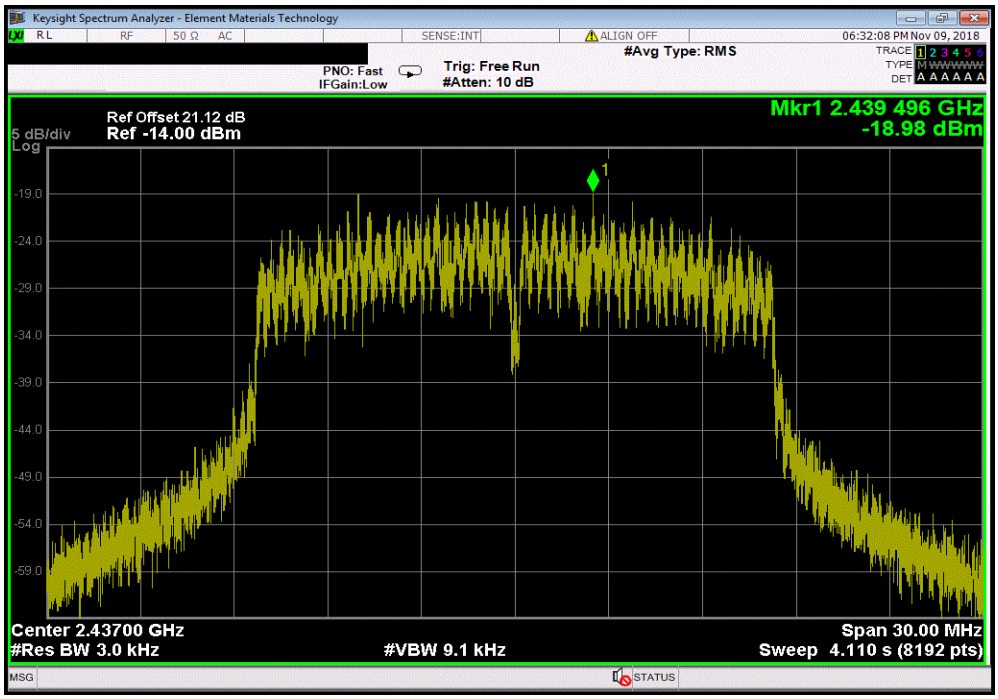
2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Single Channel 6, 2437 MHz						
				Value dBm/3kHz	Limit < dBm/3kHz	Results
				-13.805	8	Pass



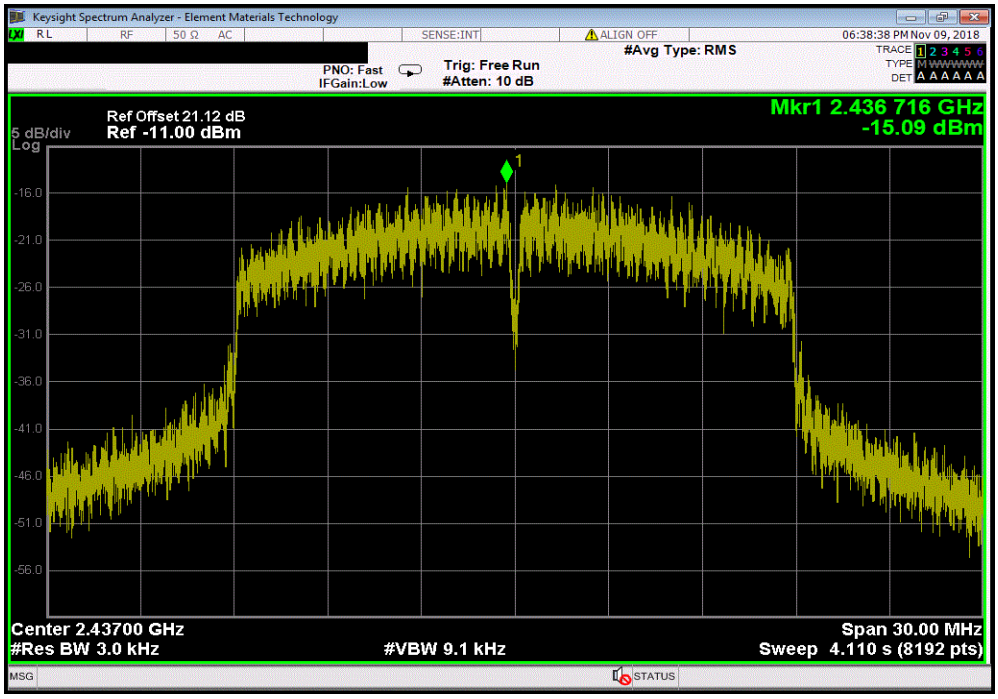
2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Single Channel 6, 2437 MHz						
				Value dBm/3kHz	Limit < dBm/3kHz	Results
				-15.7	8	Pass



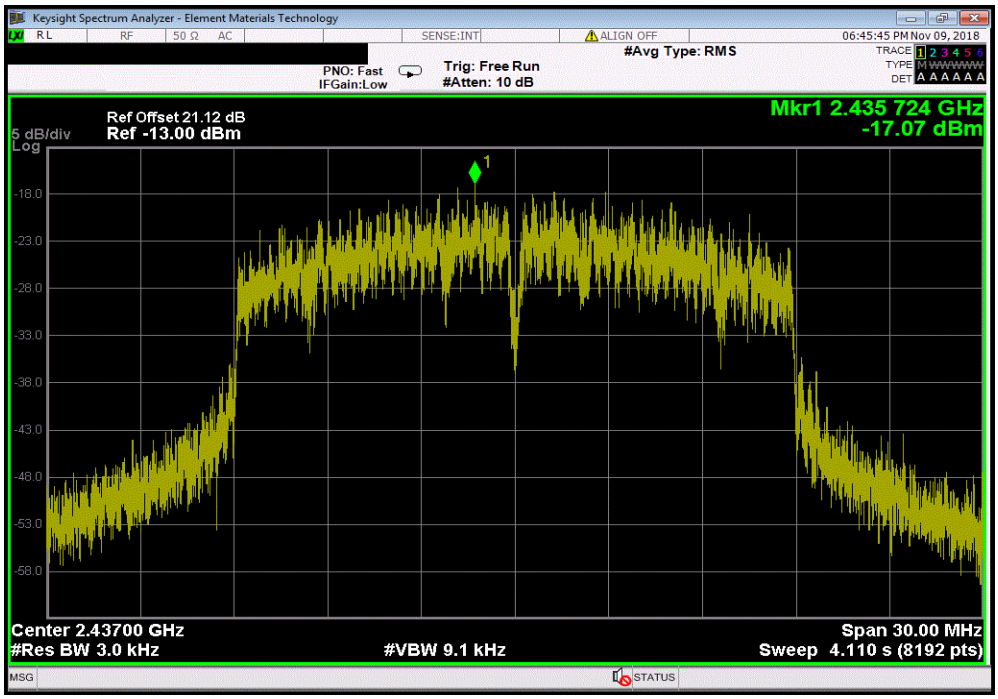
2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Single Channel 6, 2437 MHz						
				Value dBm/3kHz	Limit < dBm/3kHz	Results
				-18.975	8	Pass



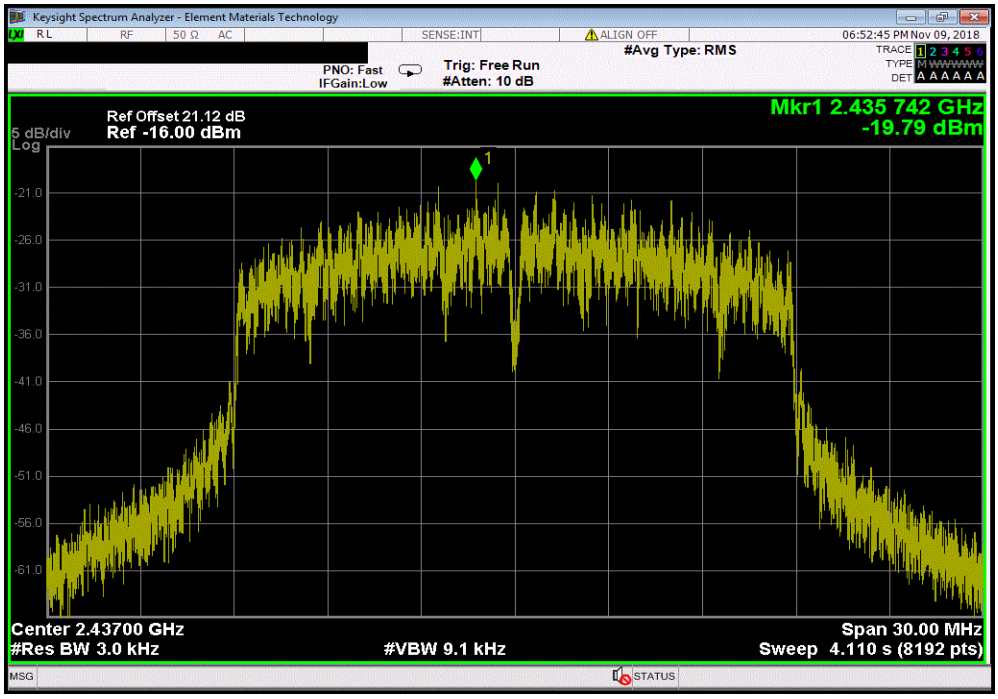
2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Single Channel 6, 2437 MHz						
				Value dBm/3kHz	Limit < dBm/3kHz	Results
				-15.091	8	Pass



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS4, Single Channel 6, 2437 MHz						
				Value dBm/3kHz	Limit < dBm/3kHz	Results
				-17.073	8	Pass



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Single Channel 6, 2437 MHz						
				Value dBm/3kHz	Limit < dBm/3kHz	Results
				-19.792	8	Pass



BAND EDGE COMPLIANCE

XMit 2017.12.13

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
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFM	19-Mar-18	19-Mar-19
Cable	Micro-Coax	UFD150A-1-0720-200200	TXG	10-Oct-18	10-Oct-19
Block - DC	Fairview Microwave	SD3379	AMM	29-Mar-18	29-Mar-19
Attenuator	Fairview Microwave	SA4018-20	TYW	29-Mar-18	29-Mar-19

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 its single channel of operation. 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

element

XMit 2017.12.13

EUT:	VISTA XLT			**Work Order:**	WTVD0014
Serial Number:	VXL1-000683 XBC1-001149			**Date:**	9-Nov-18
Customer:	WatchGuard Video			**Temperature:**	22.7 °C
Attendees:	Navaid Karimi			**Humidity:**	34.5% RH
Project:	None			**Barometric Pres.:**	1024 mbar
Tested by:	Jonathan Kiefer	**Power:**	Battery	**Job Site:**	TX09

TEST SPECIFICATIONS	Test Method
FCC 15.247:2018	ANSI C63.10:2013

COMMENTS

Ref Offset of 21.12 dB (20 dB Attenuator + DC Block + Cable). Integral antenna with antenna gain of 2.2 dBi.

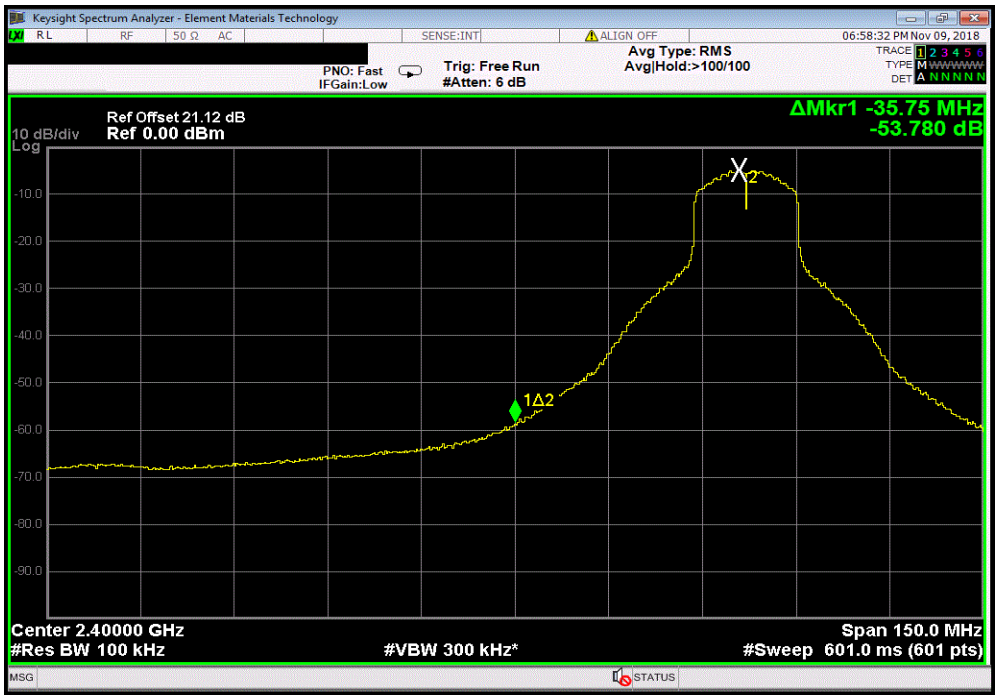
DEVIATIONS FROM TEST STANDARD

None

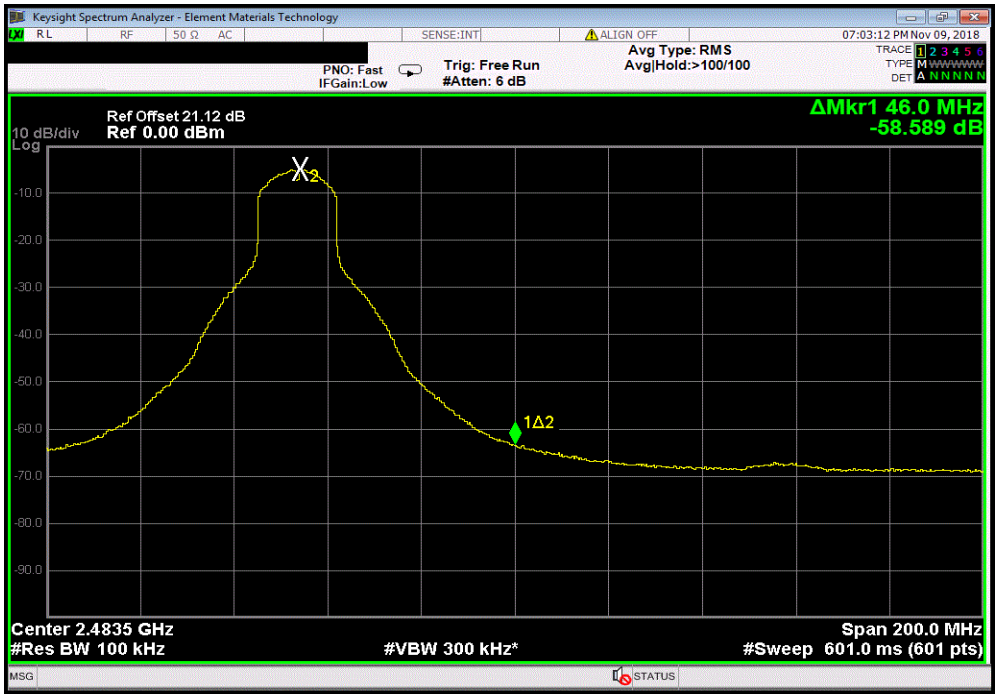
Configuration #	2	Signature Jonathan Kiefer

	Value (dBc)	Limit ≤ (dBc)	Result
2400 MHz - 2483.5 MHz Band			
802.11(g) 6 Mbps			
Single Channel 6, 2437 MHz (2400 MHz Band Edge)	-53.78	-30	Pass
Single Channel 6, 2437 MHz (2483.5 MHz Band Edge)	-58.589	-30	Pass
802.11(g) 36 Mbps			
Single Channel 6, 2437 MHz (2400 MHz Band Edge)	-56.18	-30	Pass
Single Channel 6, 2437 MHz (2483.5 MHz Band Edge)	-58.127	-30	Pass
802.11(g) 54 Mbps			
Single Channel 6, 2437 MHz (2400 MHz Band Edge)	-54.917	-30	Pass
Single Channel 6, 2437 MHz (2483.5 MHz Band Edge)	-56.477	-30	Pass
802.11(n) MCS0			
Single Channel 6, 2437 MHz (2400 MHz Band Edge)	-55.193	-30	Pass
Single Channel 6, 2437 MHz (2483.5 MHz Band Edge)	-59.011	-30	Pass
802.11(n) MCS4			
Single Channel 6, 2437 MHz (2400 MHz Band Edge)	-55.957	-30	Pass
Single Channel 6, 2437 MHz (2483.5 MHz Band Edge)	-58.709	-30	Pass
802.11(n) MCS7			
Single Channel 6, 2437 MHz (2400 MHz Band Edge)	-54.903	-30	Pass
Single Channel 6, 2437 MHz (2483.5 MHz Band Edge)	-55.542	-30	Pass

2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Single Channel 6, 2437 MHz (2400 MHz Band Edge)						
				Value (dBc)	Limit ≤ (dBc)	Result
				-53.78	-30	Pass



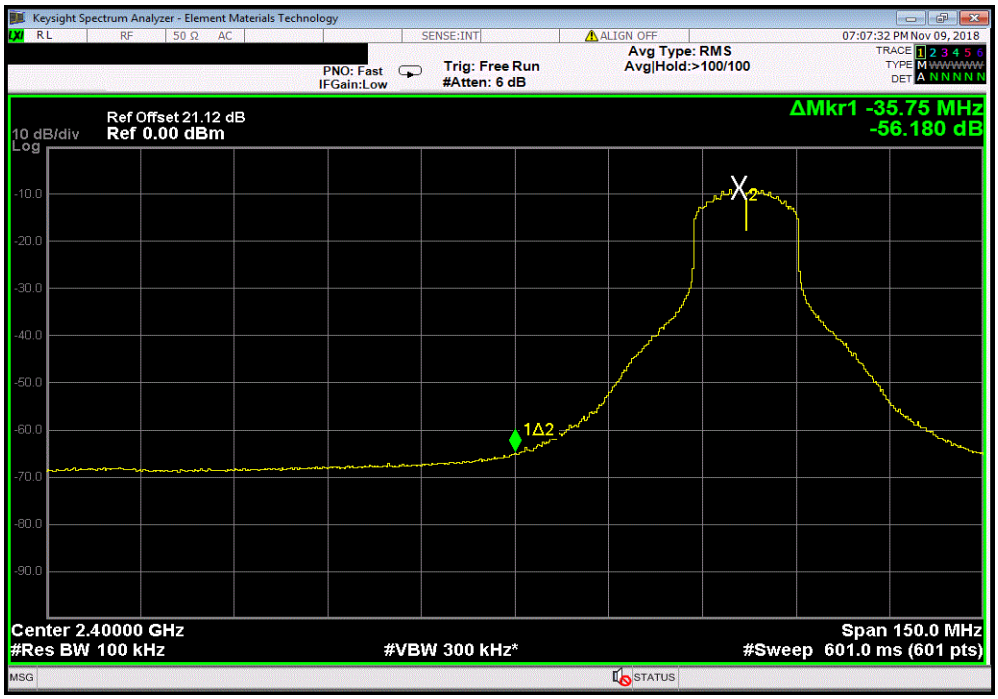
2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Single Channel 6, 2437 MHz (2483.5 MHz Band Edge)						
				Value (dBc)	Limit ≤ (dBc)	Result
				-58.589	-30	Pass



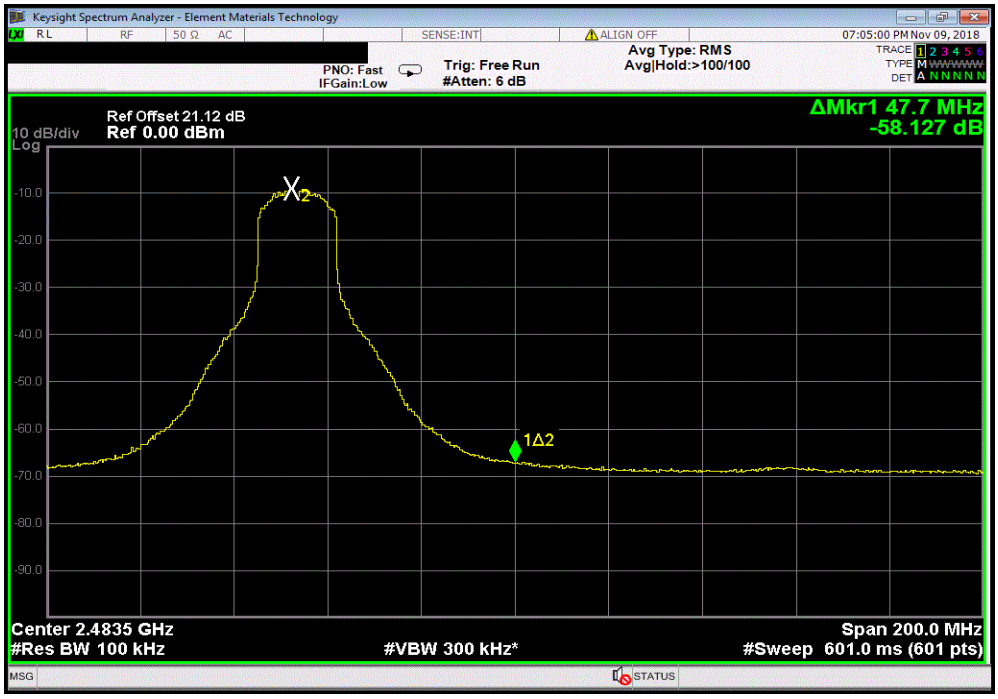
BAND EDGE COMPLIANCE

XMit 2017.12.13

2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Single Channel 6, 2437 MHz (2400 MHz Band Edge)						
				Value (dBc)	Limit ≤ (dBc)	Result
				-56.18	-30	Pass



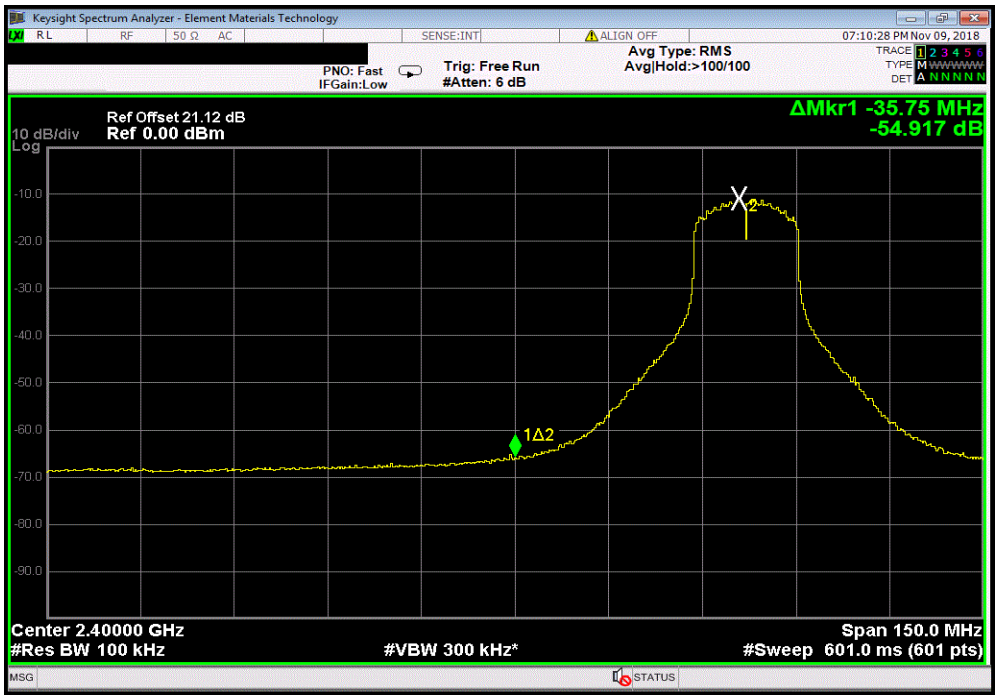
2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Single Channel 6, 2437 MHz (2483.5 MHz Band Edge)						
				Value (dBc)	Limit ≤ (dBc)	Result
				-58.127	-30	Pass



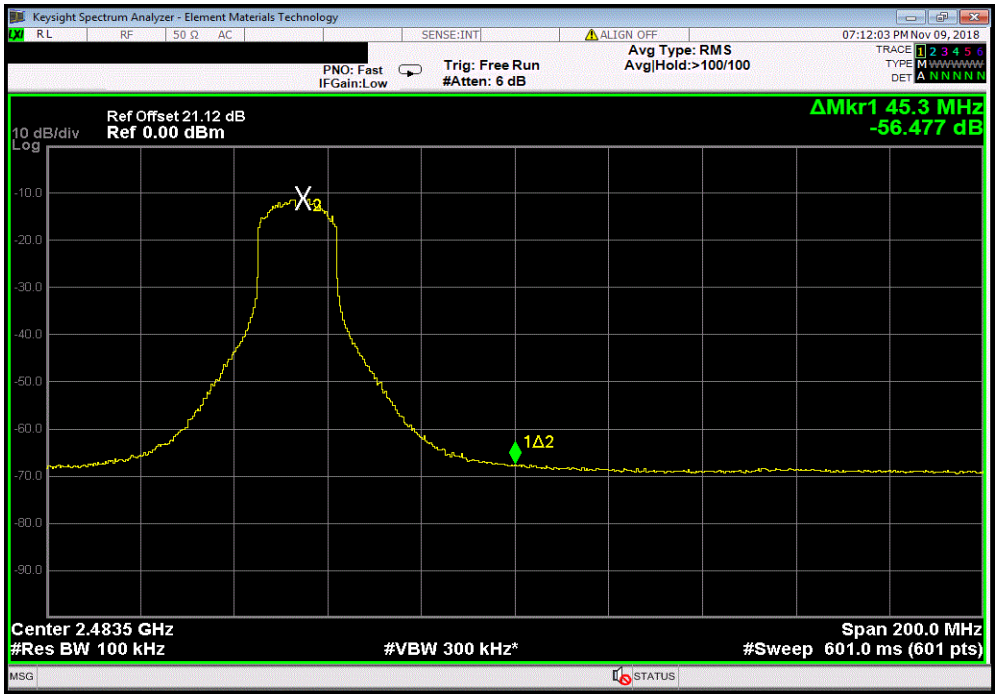
BAND EDGE COMPLIANCE

XMit 2017.12.13

2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Single Channel 6, 2437 MHz (2400 MHz Band Edge)						
				Value (dBc)	Limit ≤ (dBc)	Result
				-54.917	-30	Pass



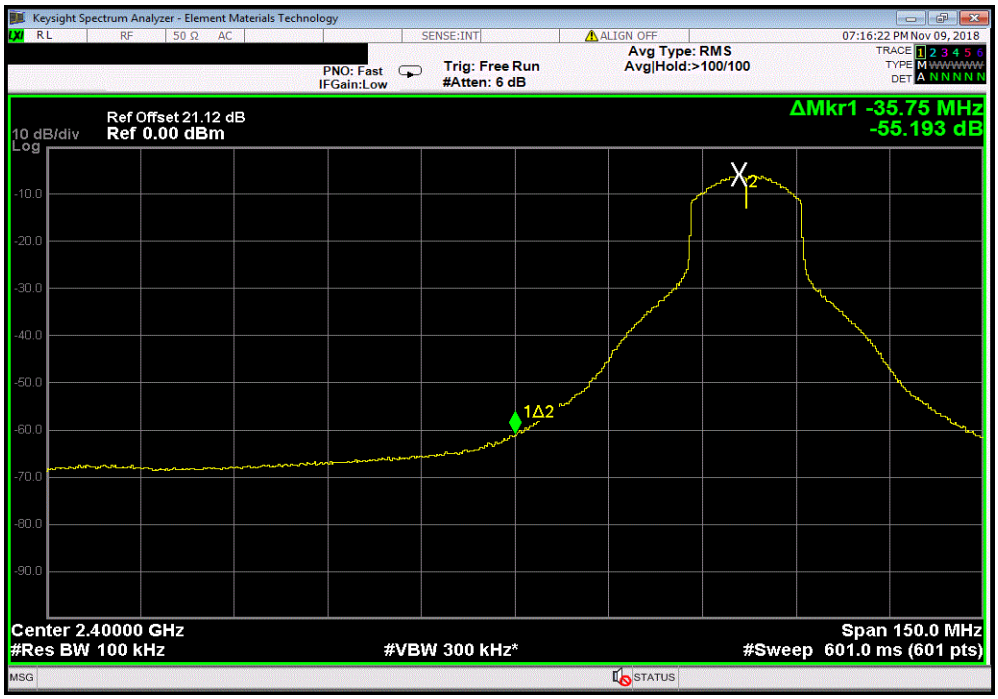
2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Single Channel 6, 2437 MHz (2483.5 MHz Band Edge)						
				Value (dBc)	Limit ≤ (dBc)	Result
				-56.477	-30	Pass



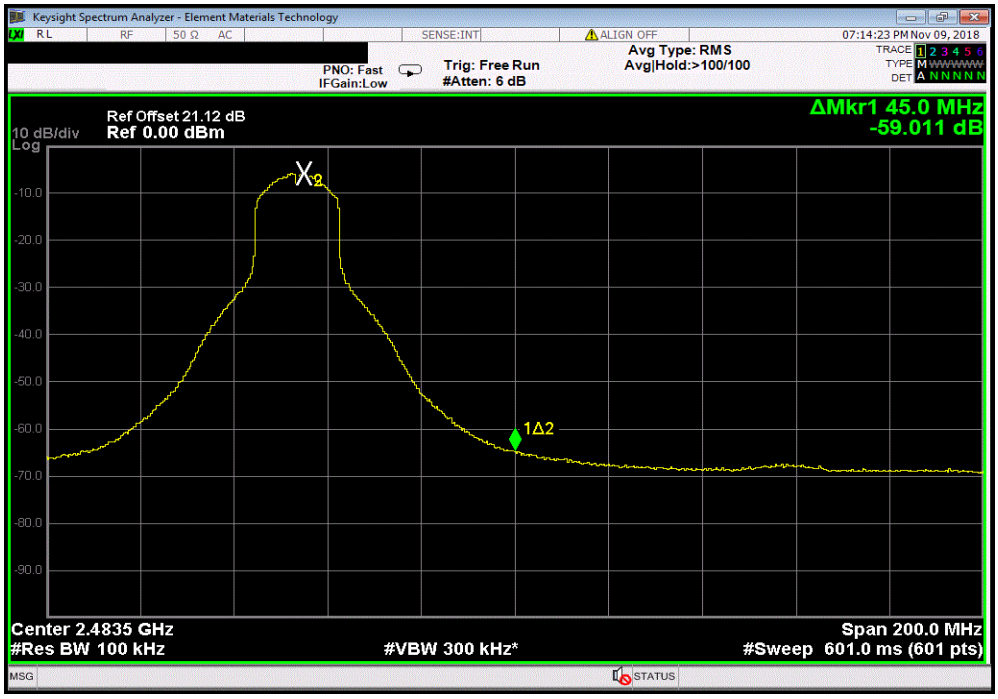
BAND EDGE COMPLIANCE

XMit 2017.12.13

2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Single Channel 6, 2437 MHz (2400 MHz Band Edge)						
				Value (dBc)	Limit ≤ (dBc)	Result
				-55.193	-30	Pass



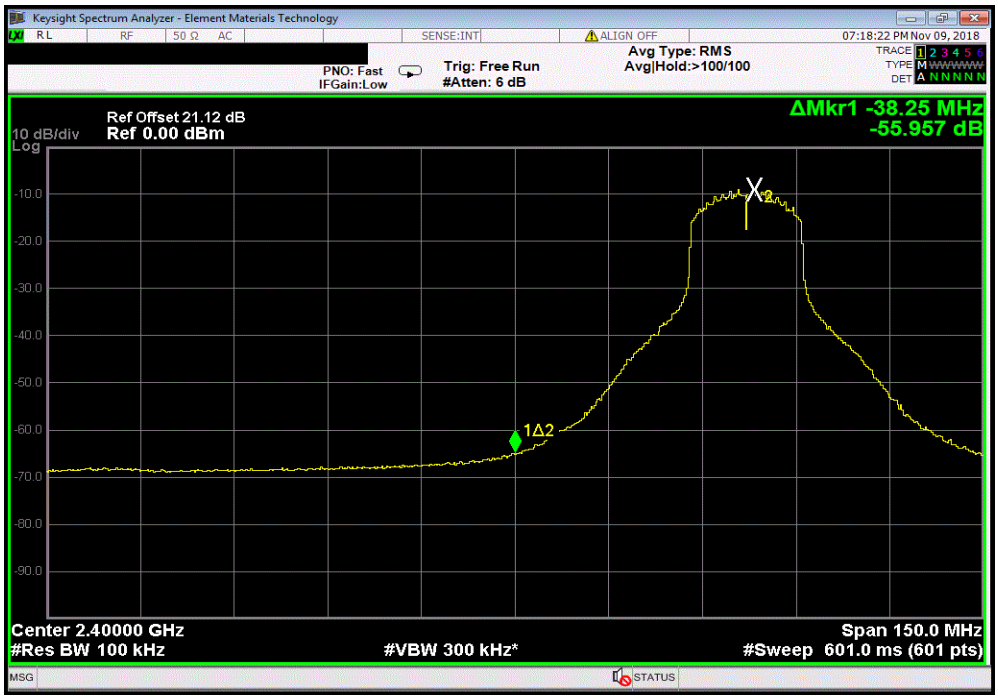
2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Single Channel 6, 2437 MHz (2483.5 MHz Band Edge)						
				Value (dBc)	Limit ≤ (dBc)	Result
				-59.011	-30	Pass



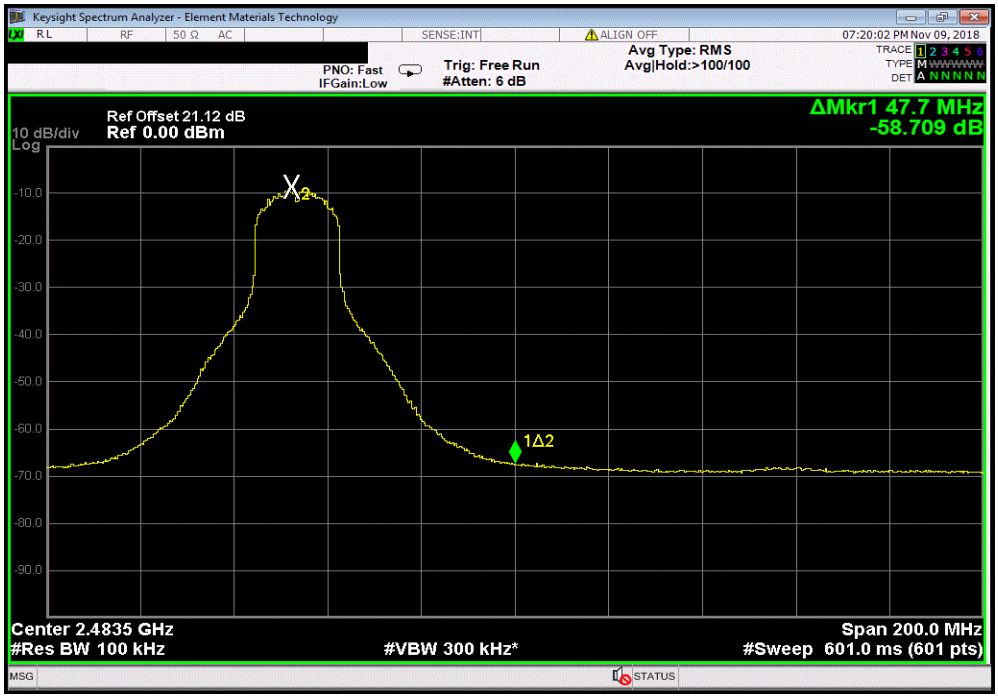
BAND EDGE COMPLIANCE

XMit 2017.12.13

2400 MHz - 2483.5 MHz Band, 802.11(n) MCS4, Single Channel 6, 2437 MHz (2400 MHz Band Edge)						
				Value (dBc)	Limit ≤ (dBc)	Result
				-55.957	-30	Pass



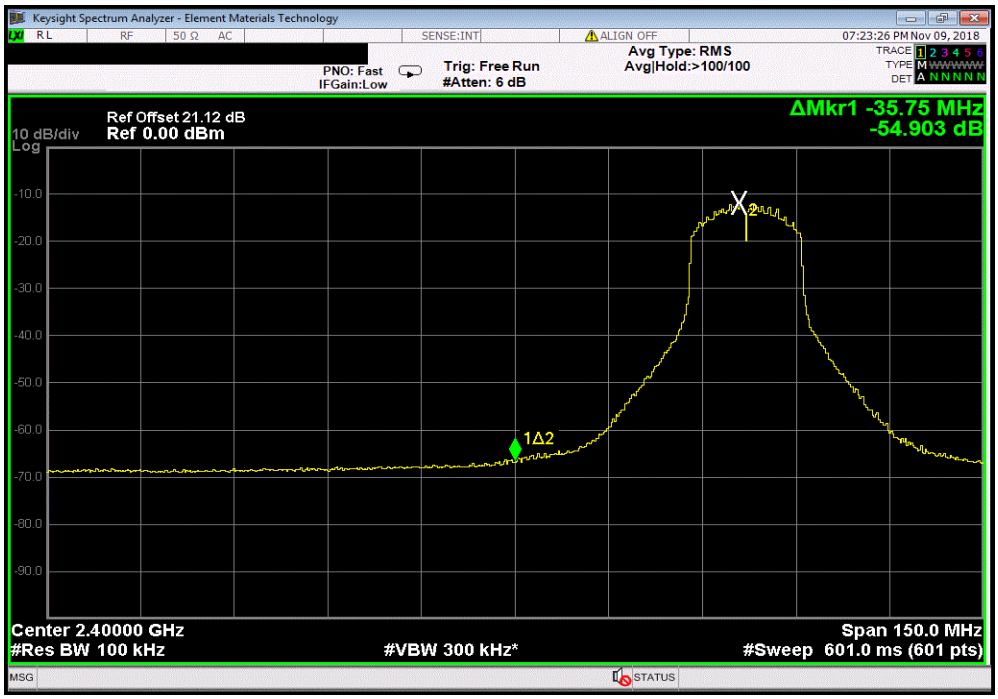
2400 MHz - 2483.5 MHz Band, 802.11(n) MCS4, Single Channel 6, 2437 MHz (2483.5 MHz Band Edge)						
				Value (dBc)	Limit ≤ (dBc)	Result
				-58.709	-30	Pass



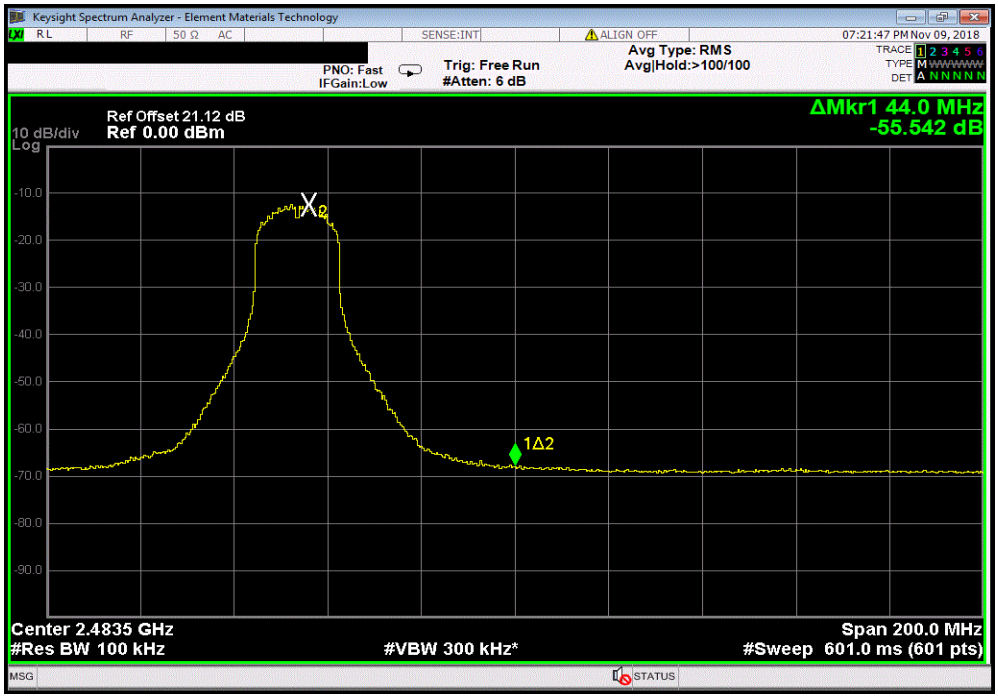
BAND EDGE COMPLIANCE

XMit 2017.12.13

2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Single Channel 6, 2437 MHz (2400 MHz Band Edge)						
				Value (dBc)	Limit ≤ (dBc)	Result
				-54.903	-30	Pass



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Single Channel 6, 2437 MHz (2483.5 MHz Band Edge)						
				Value (dBc)	Limit ≤ (dBc)	Result
				-55.542	-30	Pass



SPURIOUS CONDUCTED EMISSIONS

XMit 2017.12.13

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
Attenuator	Fairview Microwave	SA4018-20	TYW	29-Mar-18	29-Mar-19
Block - DC	Fairview Microwave	SD3379	AMM	29-Mar-18	29-Mar-19
Cable	Micro-Coax	UFD150A-1-0720-200200	TXG	10-Oct-18	10-Oct-19
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFM	19-Mar-18	19-Mar-19

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 its single channel of operation. 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

element

TbtTx 2018.09.13 XMit 2017.12.13

EUT:	**VISTA XLT**			**Work Order:**	**WTVD0014**
Serial Number:	**VXL1-000683 XBC1-001149**			**Date:**	**9-Nov-18**
Customer:	**WatchGuard Video**			**Temperature:**	**22.7 °C**
Attendees:	**Navaid Karimi**			**Humidity:**	**34.5% RH**
Project:	**None**			**Barometric Pres.:**	**1026 mbar**
Tested by:	**Jonathan Kiefer**	**Power:**	**Battery**	**Job Site:**	**TX09**

TEST SPECIFICATIONS	**Test Method**
FCC 15.247:2018	ANSI C63.10:2013

COMMENTS

Ref Offset of 21.12 dB (20 dB Attenuator + DC Block + Cable). Integral antenna with antenna gain of 2.2 dBi.

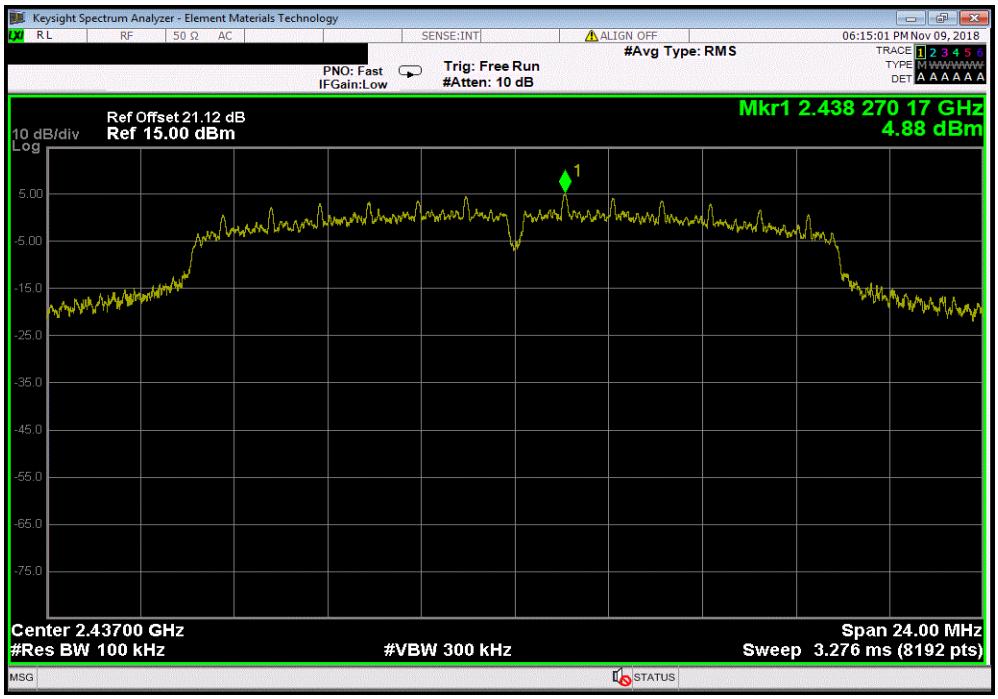
DEVIATIONS FROM TEST STANDARD

None

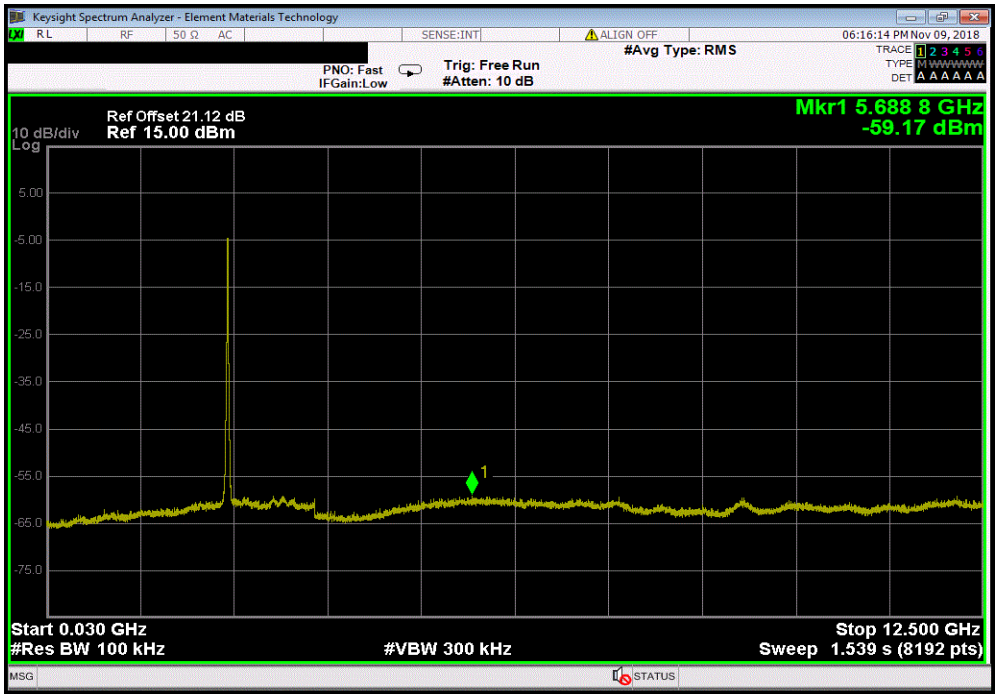
Configuration #	**2**	*Signature* Jonathan Kiefer

	Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
2400 MHz - 2483.5 MHz Band					
802.11(g) 6 Mbps					
Single Channel 6, 2437 MHz	Fundamental	2438.27	N/A	N/A	N/A
Single Channel 6, 2437 MHz	30 MHz - 12.5 GHz	5688.77	-64.05	-30	Pass
Single Channel 6, 2437 MHz	12.5 GHz - 25 GHz	24964.9	-53.19	-30	Pass
802.11(g) 36 Mbps					
Single Channel 6, 2437 MHz	Fundamental	2438.27	N/A	N/A	N/A
Single Channel 6, 2437 MHz	30 MHz - 12.5 GHz	2545.01	-61.92	-30	Pass
Single Channel 6, 2437 MHz	12.5 GHz - 25 GHz	24845.87	-51.23	-30	Pass
802.11(g) 54 Mbps					
Single Channel 6, 2437 MHz	Fundamental	2438.27	N/A	N/A	N/A
Single Channel 6, 2437 MHz	30 MHz - 12.5 GHz	3211.82	-60.31	-30	Pass
Single Channel 6, 2437 MHz	12.5 GHz - 25 GHz	24964.9	-49.74	-30	Pass
802.11(n) MCS0					
Single Channel 6, 2437 MHz	Fundamental	2438.27	N/A	N/A	N/A
Single Channel 6, 2437 MHz	30 MHz - 12.5 GHz	3230.09	-63.33	-30	Pass
Single Channel 6, 2437 MHz	12.5 GHz - 25 GHz	24855.02	-52.54	-30	Pass
802.11(n) MCS4					
Single Channel 6, 2437 MHz	Fundamental	2438.27	N/A	N/A	N/A
Single Channel 6, 2437 MHz	30 MHz - 12.5 GHz	3170.72	-62.04	-30	Pass
Single Channel 6, 2437 MHz	12.5 GHz - 25 GHz	24995.42	-51.41	-30	Pass
802.11(n) MCS7					
Single Channel 6, 2437 MHz	Fundamental	2438.27	N/A	N/A	N/A
Single Channel 6, 2437 MHz	30 MHz - 12.5 GHz	5713.13	-59.71	-30	Pass
Single Channel 6, 2437 MHz	12.5 GHz - 25 GHz	24835.19	-48.84	-30	Pass

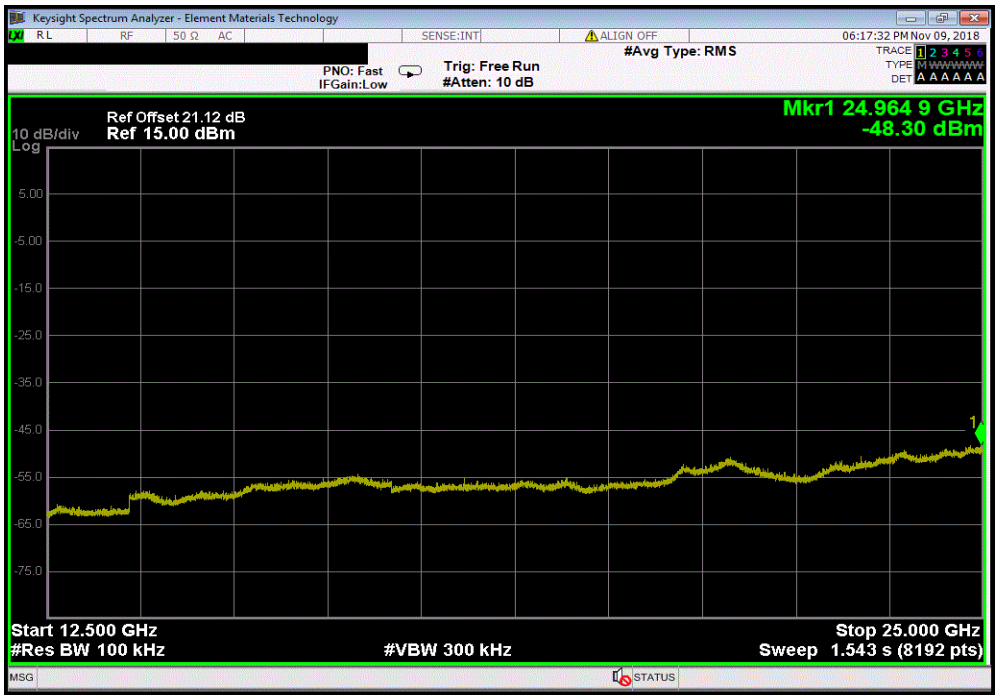
2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Single Channel 6, 2437 MHz					
Frequency Range		Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
	Fundamental	2438.27	N/A	N/A	N/A



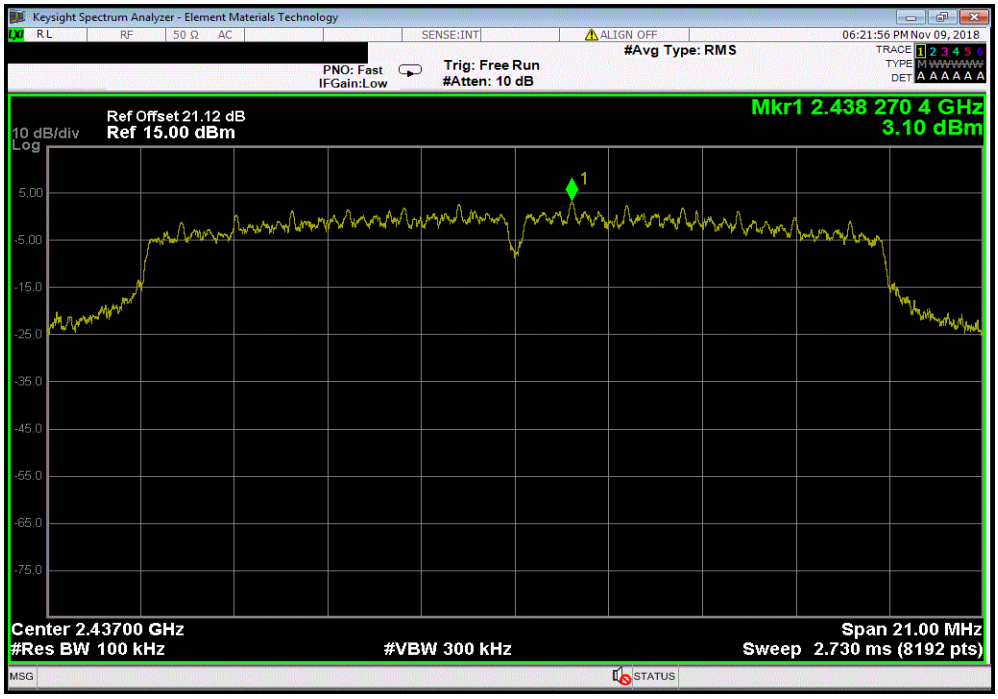
2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Single Channel 6, 2437 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
30 MHz - 12.5 GHz	5688.77	-64.05	-30	Pass



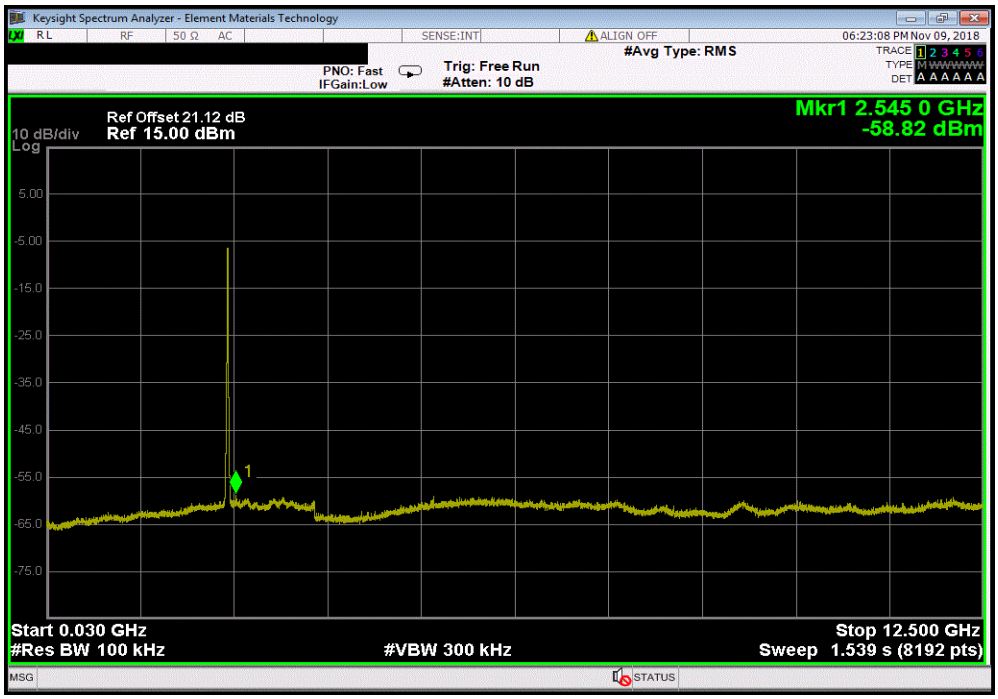
2400 MHz - 2483.5 MHz Band, 802.11(g) 6 Mbps, Single Channel 6, 2437 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
12.5 GHz - 25 GHz	24964.9	-53.19	-30	Pass



2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Single Channel 6, 2437 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
Fundamental	2438.27	N/A	N/A	N/A

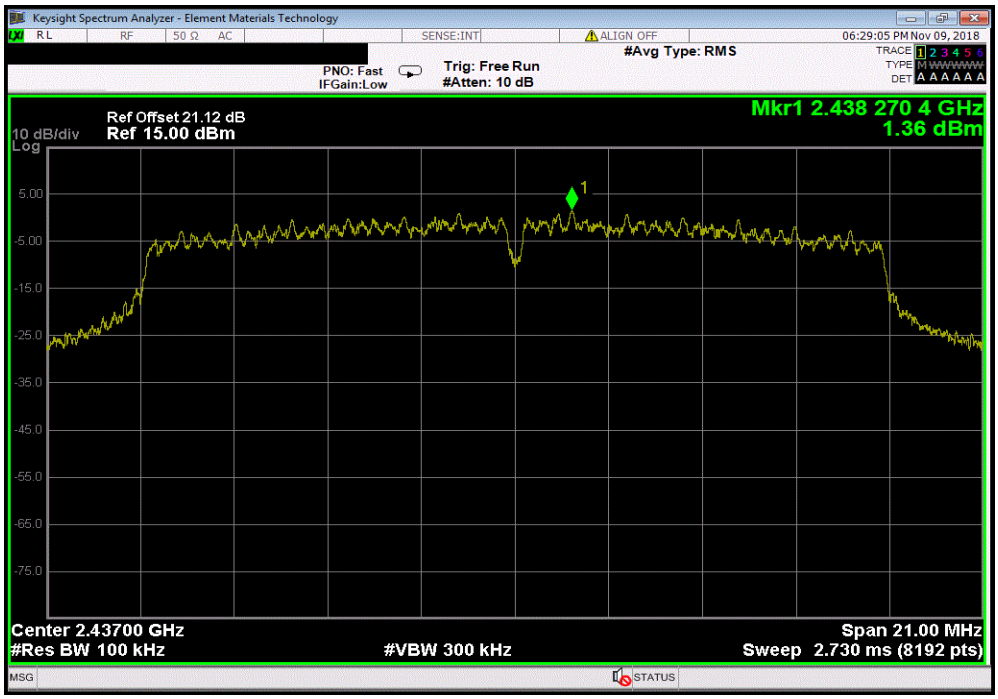


2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Single Channel 6, 2437 MHz				
Frequency Range	**Measured Freq (MHz)**	**Max Value (dBc)**	**Limit ≤ (dBc)**	**Result**
30 MHz - 12.5 GHz	2545.01	-61.92	-30	Pass

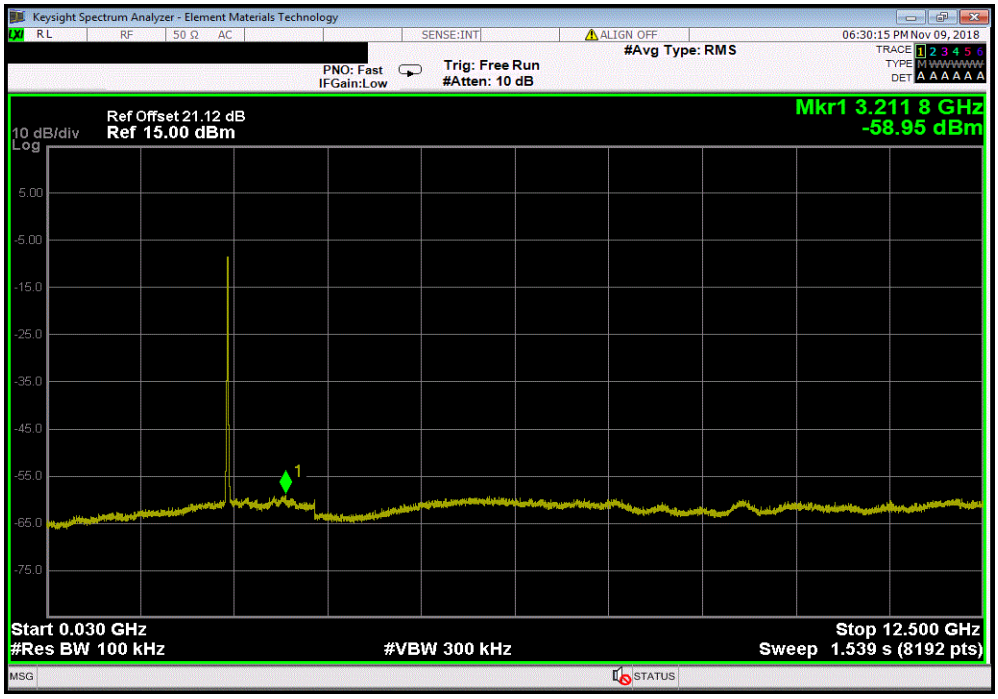


2400 MHz - 2483.5 MHz Band, 802.11(g) 36 Mbps, Single Channel 6, 2437 MHz				
Frequency Range	**Measured Freq (MHz)**	**Max Value (dBc)**	**Limit ≤ (dBc)**	**Result**
12.5 GHz - 25 GHz	24845.87	-51.23	-30	Pass

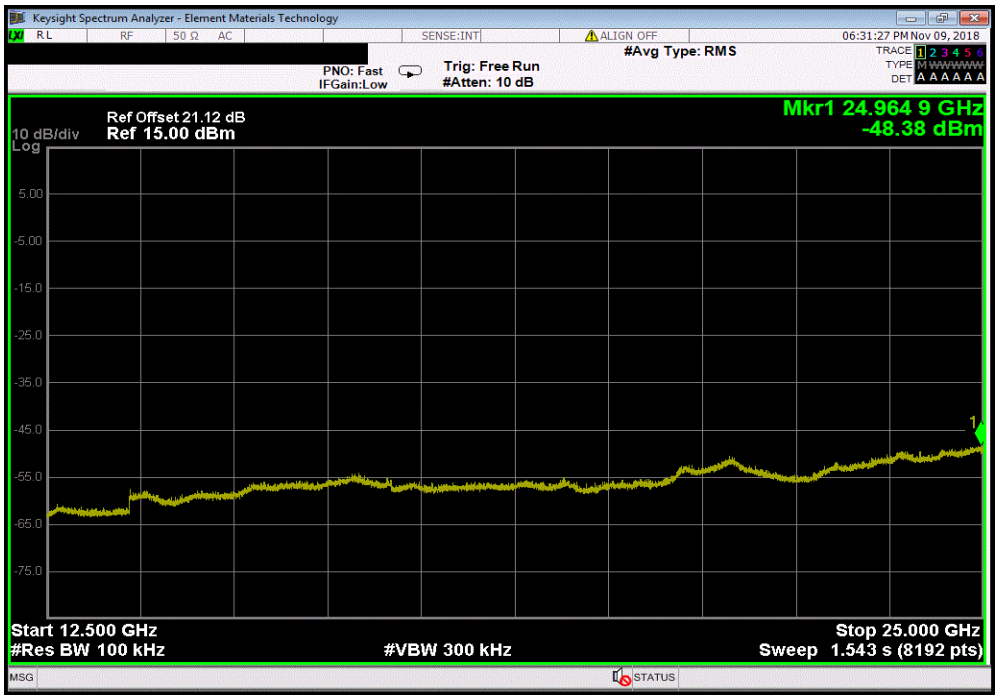
2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Single Channel 6, 2437 MHz					
Frequency Range		Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
	Fundamental	2438.27	N/A	N/A	N/A



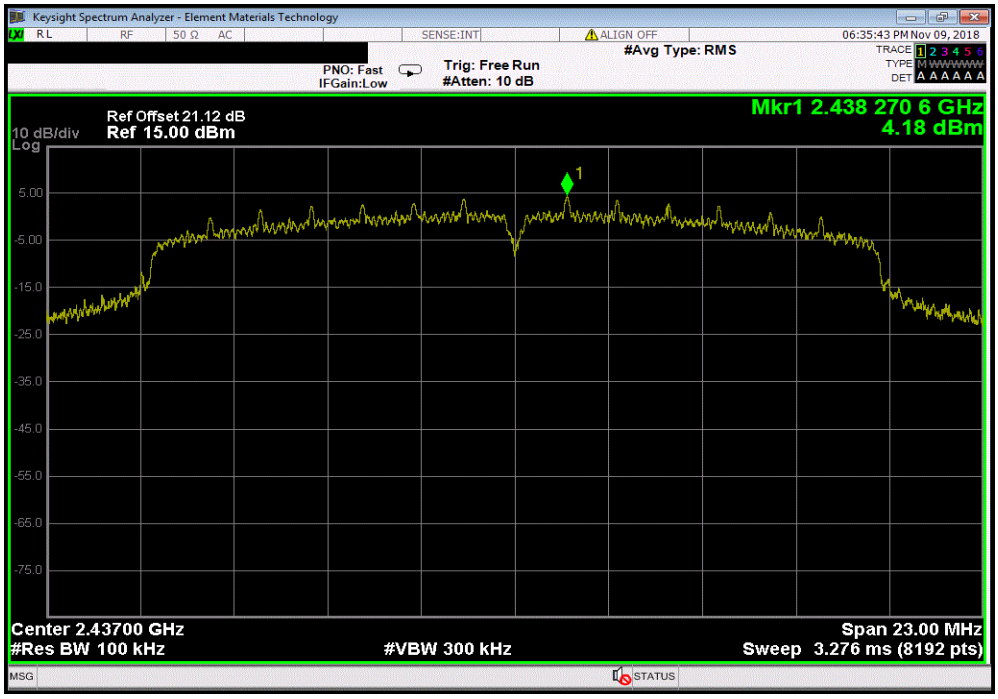
2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Single Channel 6, 2437 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
30 MHz - 12.5 GHz	3211.82	-60.31	-30	Pass



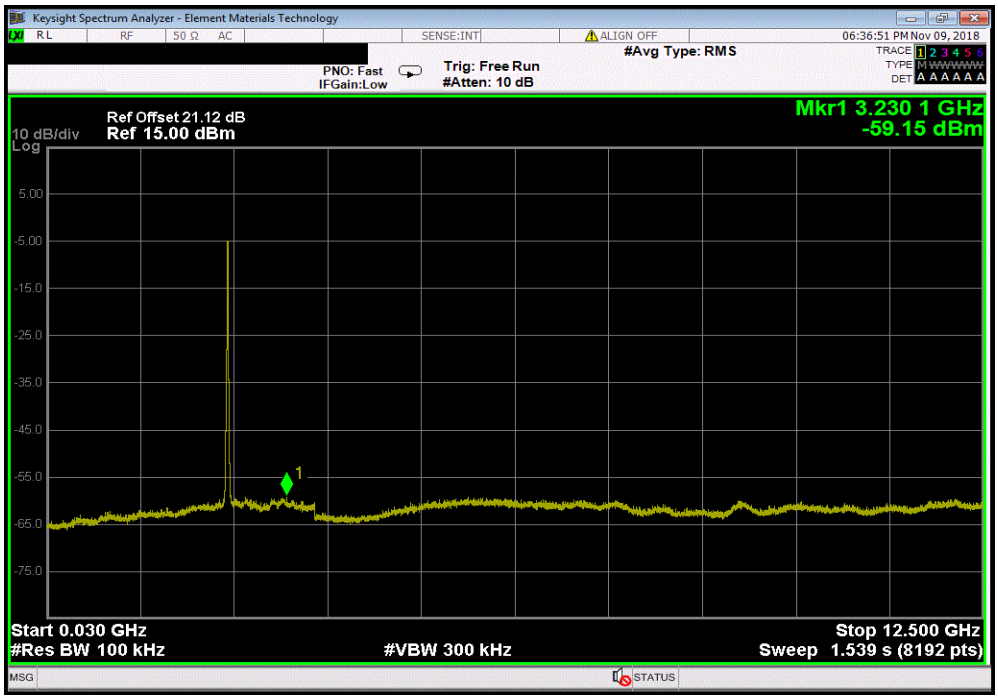
2400 MHz - 2483.5 MHz Band, 802.11(g) 54 Mbps, Single Channel 6, 2437 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
12.5 GHz - 25 GHz	24964.9	-49.74	-30	Pass



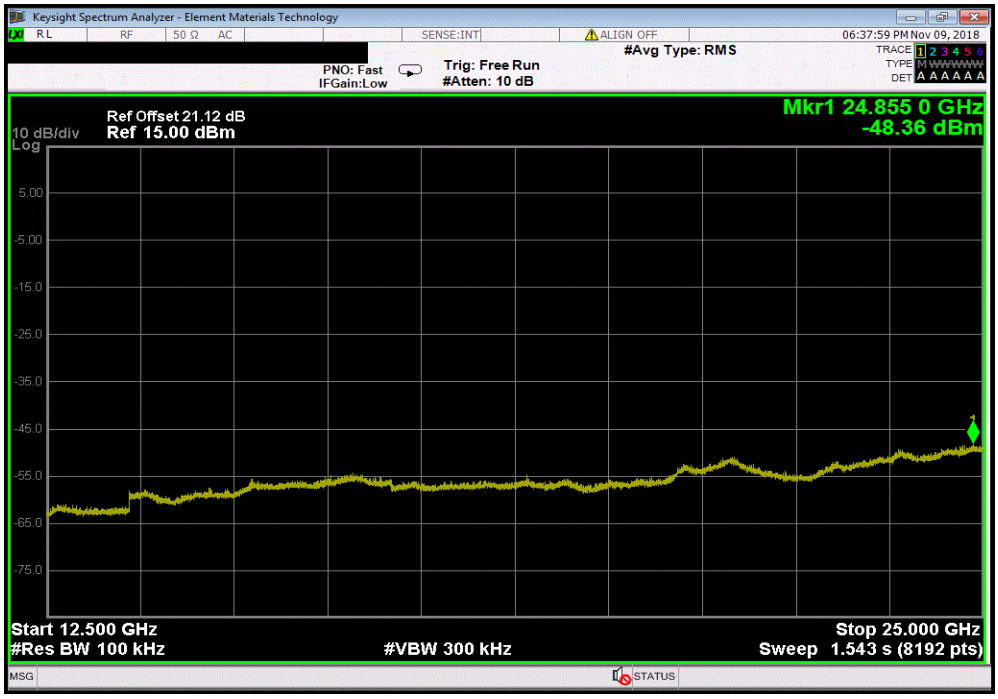
2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Single Channel 6, 2437 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
Fundamental	2438.27	N/A	N/A	N/A



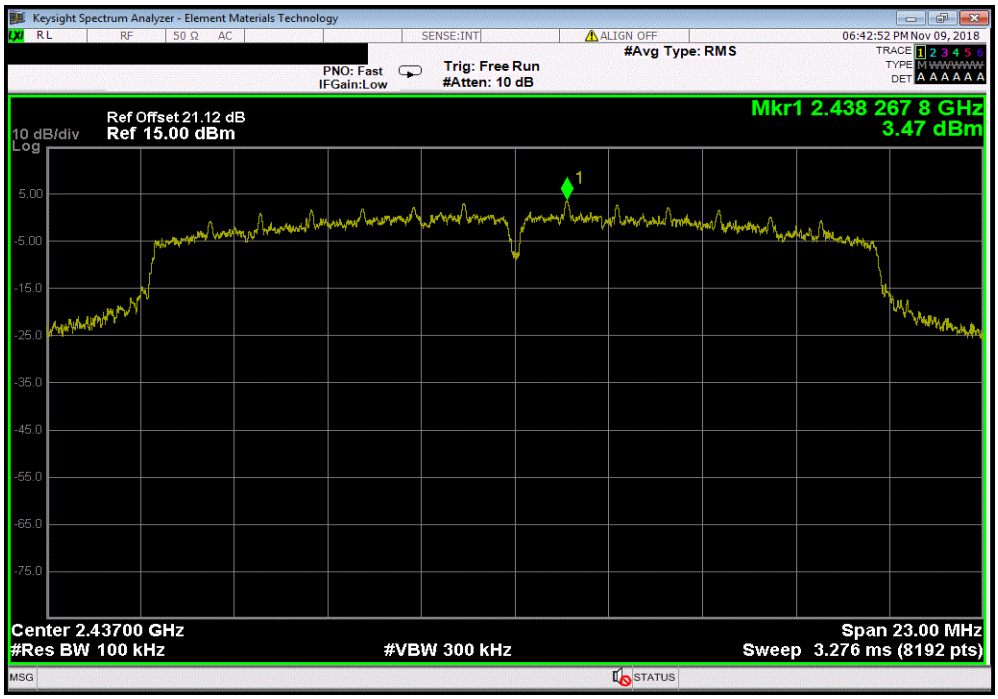
2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Single Channel 6, 2437 MHz				
Frequency Range	**Measured Freq (MHz)**	**Max Value (dBc)**	**Limit ≤ (dBc)**	**Result**
30 MHz - 12.5 GHz	3230.09	-63.33	-30	Pass



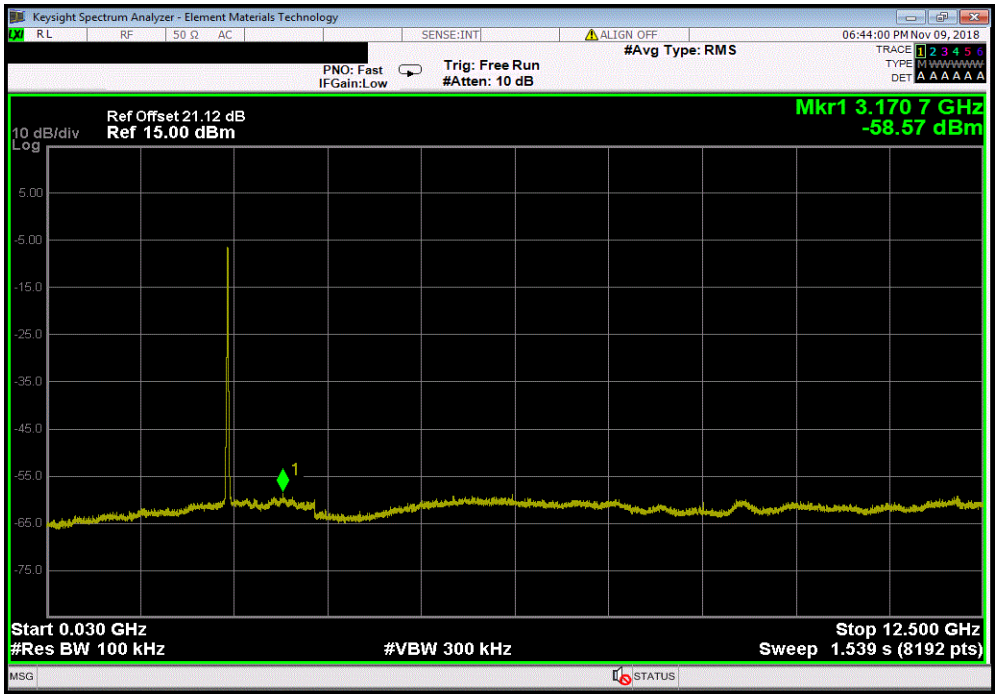
2400 MHz - 2483.5 MHz Band, 802.11(n) MCS0, Single Channel 6, 2437 MHz				
Frequency Range	**Measured Freq (MHz)**	**Max Value (dBc)**	**Limit ≤ (dBc)**	**Result**
12.5 GHz - 25 GHz	24855.02	-52.54	-30	Pass



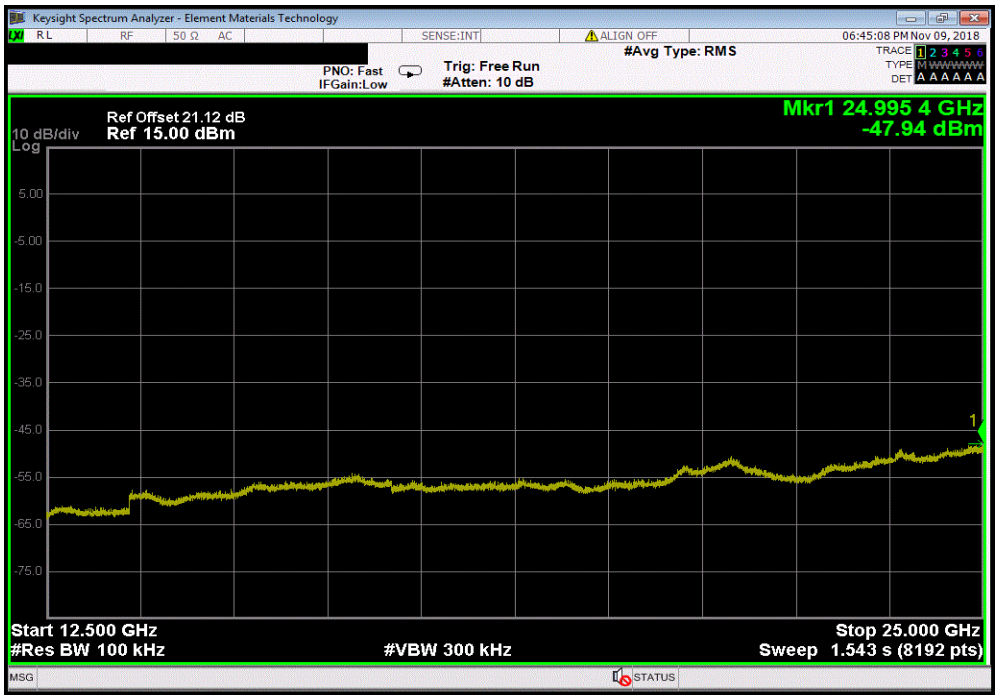
2400 MHz - 2483.5 MHz Band, 802.11(n) MCS4, Single Channel 6, 2437 MHz					
Frequency Range		Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
	Fundamental	2438.27	N/A	N/A	N/A



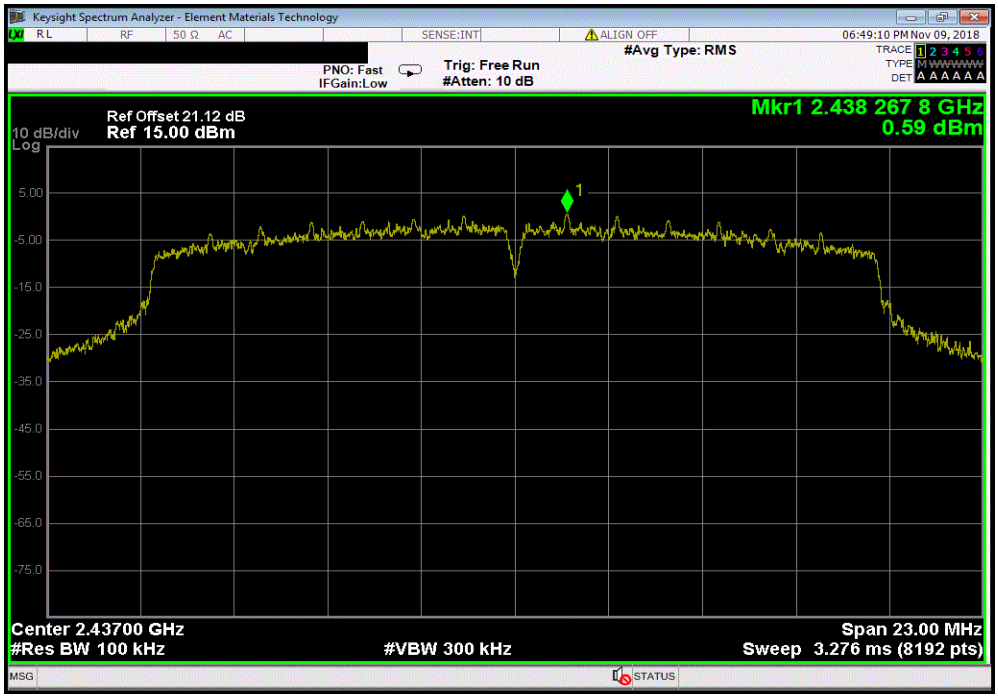
2400 MHz - 2483.5 MHz Band, 802.11(n) MCS4, Single Channel 6, 2437 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
30 MHz - 12.5 GHz	3170.72	-62.04	-30	Pass



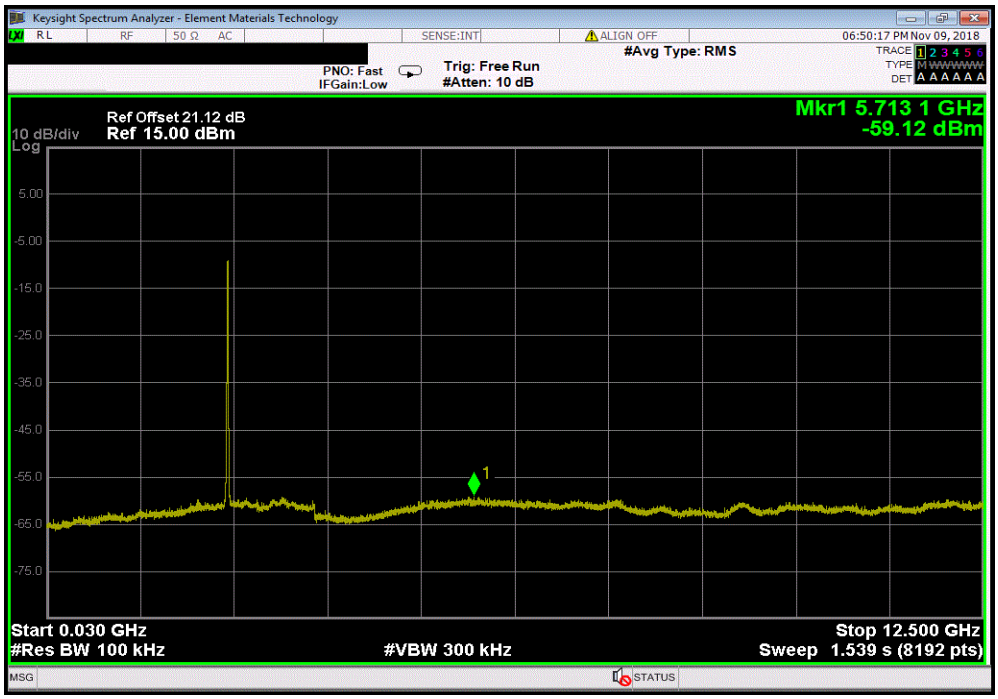
2400 MHz - 2483.5 MHz Band, 802.11(n) MCS4, Single Channel 6, 2437 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
12.5 GHz - 25 GHz	24995.42	-51.41	-30	Pass



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Single Channel 6, 2437 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
Fundamental	2438.27	N/A	N/A	N/A



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Single Channel 6, 2437 MHz				
Frequency Range	**Measured Freq (MHz)**	**Max Value (dBc)**	**Limit ≤ (dBc)**	**Result**
30 MHz - 12.5 GHz	5713.13	-59.71	-30	Pass



2400 MHz - 2483.5 MHz Band, 802.11(n) MCS7, Single Channel 6, 2437 MHz				
Frequency Range	**Measured Freq (MHz)**	**Max Value (dBc)**	**Limit ≤ (dBc)**	**Result**
12.5 GHz - 25 GHz	24835.19	-48.84	-30	Pass