



element

Boston Scientific Neuromodulation

RC5

FCC 15.247:2019
Bluetooth LE Radio

Report # BOSN0134.3



NVLAP[®]
TESTING

NVLAP LAB CODE: 200676-0



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CERTIFICATE OF TEST



Last Date of Test: October 21, 2019
Boston Scientific Neuromodulation
EUT: RC5

Radio Equipment Testing

Standards

Specification	Method
FCC 15.247:2019	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.
6.5, 6.6, 11.12.1, 11.13.2	Spurious Radiated Emissions	Yes	Pass	
11.6	Duty Cycle	Yes	N/A	
11.8.2	Occupied Bandwidth	Yes	Pass	
11.9.1.1	Output Power	Yes	Pass	
11.9.1.1	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:

Victor Ratinoff, 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) and as a CAB for the acceptance of test data.

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

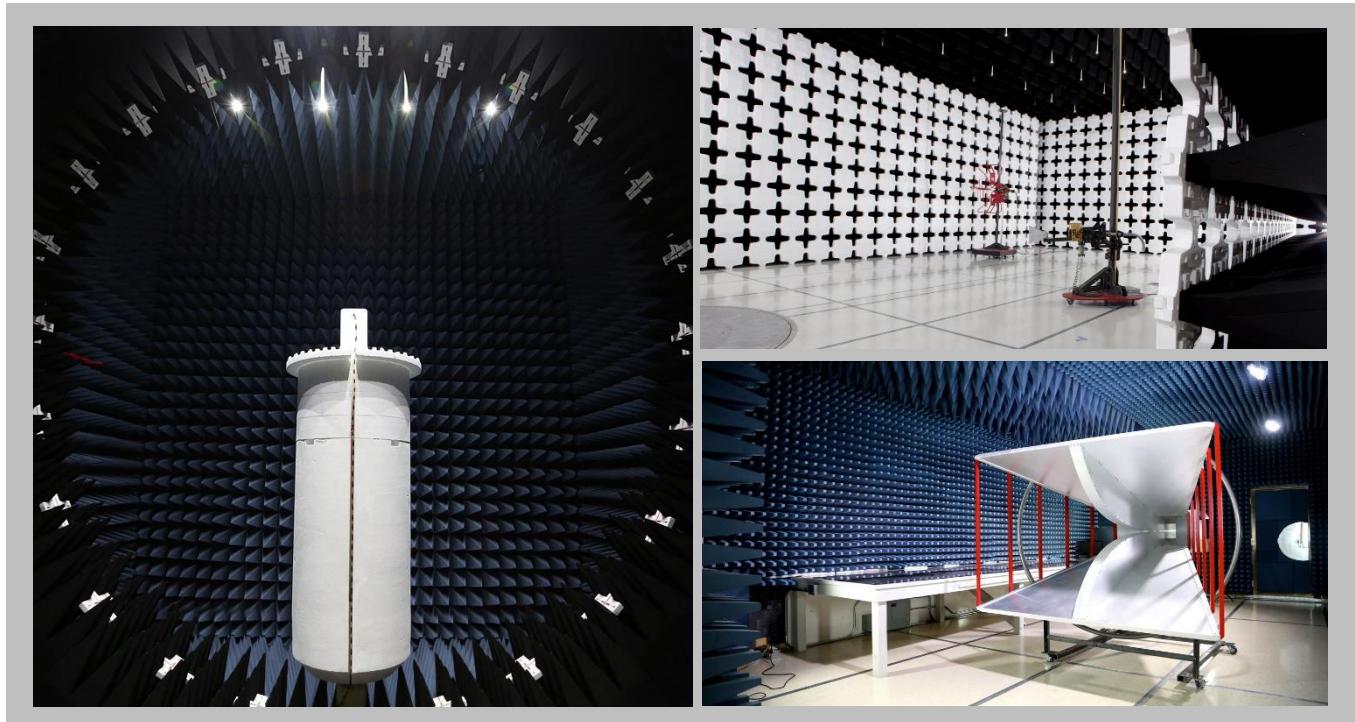
For details on the Scopes of our Accreditations, please visit:

<https://www.nwemc.com/emc-testing-accreditations>

FACILITIES



California	Minnesota	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 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: 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	2834D-1	2834G-1	2834F-1
BSMI				
SL2-IN-E-1154R	SL2-IN-E-1152R	SL2-IN-E-1017	SL2-IN-E-1158R	SL2-IN-E-1153R
VCCI				
A-0029	A-0109	A-0108	A-0201	A-0110
Recognized Phase I CAB for ISED, ACMA, BSMI, IDA, KCC/RRA, MIC, MOC, NCC, OFCA				
US0158	US0175	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.

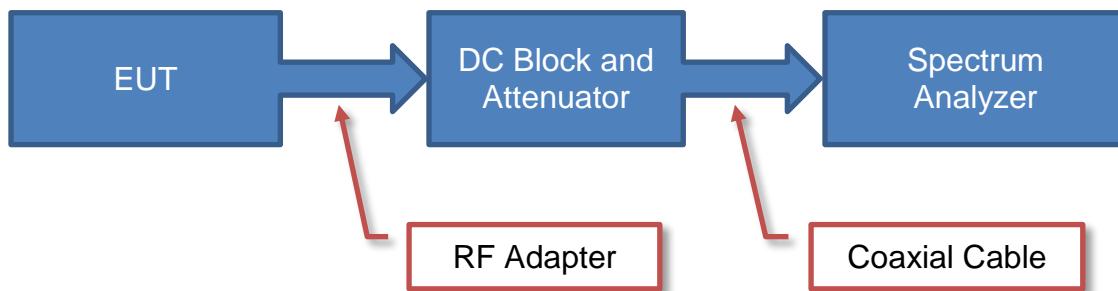
A measurement uncertainty estimation has been performed for each test per our internal quality document QM205.4.6. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty (K=2) can be found included as part of the applicable 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	0.0007%	-0.0007%
Amplitude Accuracy (dB)	1.2 dB	-1.2 dB
Conducted Power (dB)	1.2 dB	-1.2 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

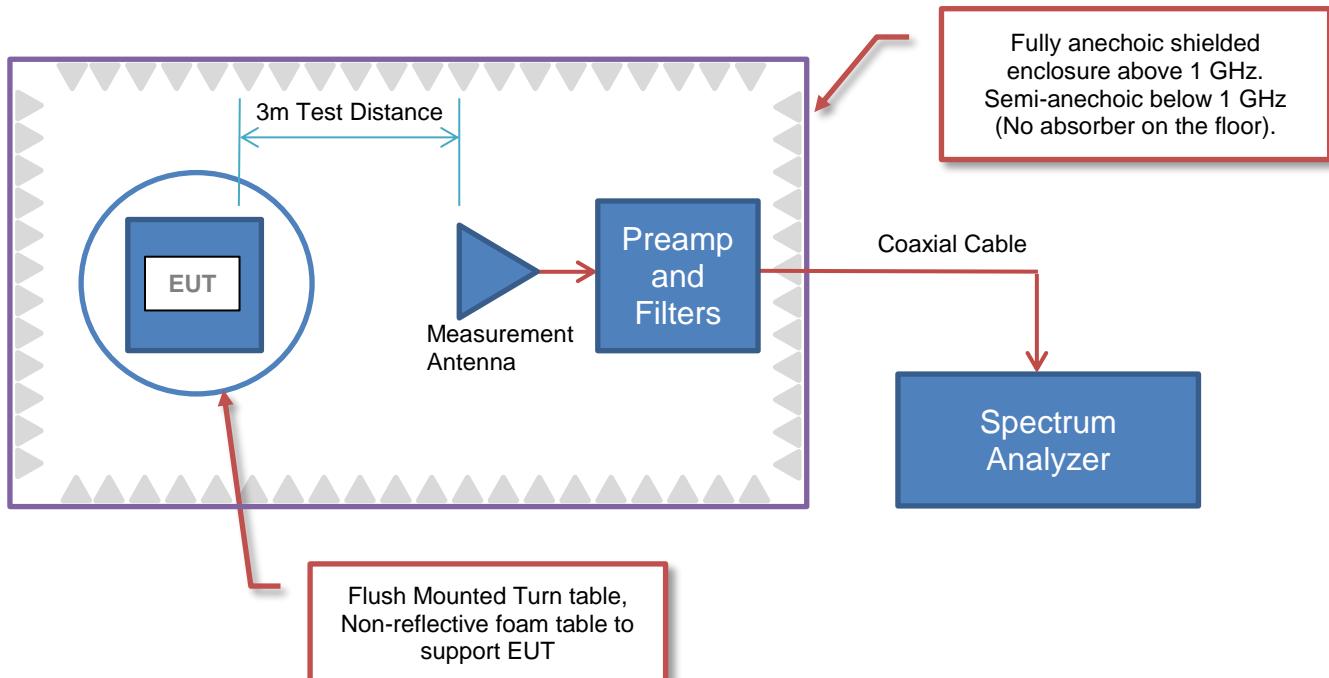
Antenna Port Conducted Measurements



Near Field Test Fixture Measurements



Spurious Radiated Emissions



PRODUCT DESCRIPTION

Client and Equipment Under Test (EUT) Information

Company Name:	Boston Scientific Neuromodulation
Address:	25155 Rye Canyon Loop
City, State, Zip:	Santa Clarita, CA 91355
Test Requested By:	Habet Ter-Petrosyan
EUT:	RC5
First Date of Test:	October 14, 2019
Last Date of Test:	October 21, 2019
Receipt Date of Samples:	October 14, 2019
Equipment Design Stage:	Production
Equipment Condition:	No Damage
Purchase Authorization:	Verified

Information Provided by the Party Requesting the Test

Functional Description of the EUT:

Remote Control (RC) is used by the patients to control the stimulation settings of their implants through RF communication.

Testing Objective:

To demonstrate compliance of the Bluetooth low energy radio to FCC 15.247 requirements.

CONFIGURATIONS



Configuration BOSN0134- 1

EUT				
Description	Manufacturer	Model/Part Number	Serial Number	
Remote Control (RC5)	Boston Scientific Neuromodulation	7095920-009 Rev: B	401490	

Configuration BOSN0134- 5

EUT				
Description	Manufacturer	Model/Part Number	Serial Number	
Remote Control (RC5)	Boston Scientific Neuromodulation	7095920-009 Rev: B	401485	

MODIFICATIONS



Equipment Modifications

Item	Date	Test	Modification	Note	Disposition of EUT
1	2019-10-14	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	2019-10-18	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.
3	2019-10-18	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.
4	2019-10-21	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.
5	2019-10-21	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.
6	2019-10-21	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	2019-10-21	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 2019.05.10

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

Transmitting on Low Ch 37 - 2402 MHz & High Ch 39 - 2480 MHz

Transmitting on Low Ch 37 - 2402 MHz, Mid Ch 18 - 2442 MHz, & High Ch 39 - 2480 MHz

POWER SETTINGS INVESTIGATED

Battery

CONFIGURATIONS INVESTIGATED

BOSN0134 - 1

FREQUENCY RANGE INVESTIGATED

Start Frequency	30 MHz	Stop Frequency	26500 MHz
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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
Filter - Low Pass	Micro-Tronics	LPM50003	HGO	23-Jan-2019	12 mo
Attenuator	S.M. Electronics	SA6-20	REO	23-Jan-2019	12 mo
Amplifier - RF	Amplifier Research	500W1000A	TRQ	NCR	0 mo
Cable	Northwest EMC	8-18GHz RE Cables	OCO	10-Jan-2019	12 mo
Cable	Northwest EMC	18-26GHz RE Cables	OCK	19-Dec-2018	12 mo
Cable	Northwest EMC	1-8GHz RE Cables	OCJ	10-Jan-2019	12 mo
Cable	Northwest EMC	10kHz-1GHz RE Cables	OCH	9-Sep-2019	12 mo
Filter - High Pass	Micro-Tronics	HPM50111	HHX	2-Jul-2019	12 mo
Antenna - Biconilog	Teseq	CBL 6141A	AYE	7-Nov-2017	24 mo
Amplifier - Pre-Amplifier	Miteq	AM-1402	AOZ	2-Jul-2019	12 mo
Amplifier - Pre-Amplifier	Miteq	AMF-4D-010120-30-10P-1	AOP	10-Jan-2019	12 mo
Amplifier - Pre-Amplifier	Miteq	AMF-6F-18002650-25-10P	AOI	19-Dec-2018	12 mo
Amplifier - Pre-Amplifier	Miteq	AMF-6F-12001800-30-10P	AOF	10-Jan-2019	12 mo
Amplifier - Pre-Amplifier	Miteq	AMF-6F-08001200-30-10P	AOE	10-Jan-2019	12 mo
Antenna - Standard Gain	ETS Lindgren	3160-08	AHT	NCR	0 mo
Antenna - Standard Gain	ETS Lindgren	3160-07	AHR	NCR	0 mo
Antenna - Standard Gain	ETS Lindgren	3160-09	AHN	NCR	0 mo
Antenna - Double Ridge	EMCO	3115	AHB	28-Mar-2018	24 mo
Analyzer - Spectrum Analyzer	Agilent	N9010A	AFJ	18-Dec-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.

SPURIOUS RADIATED EMISSIONS

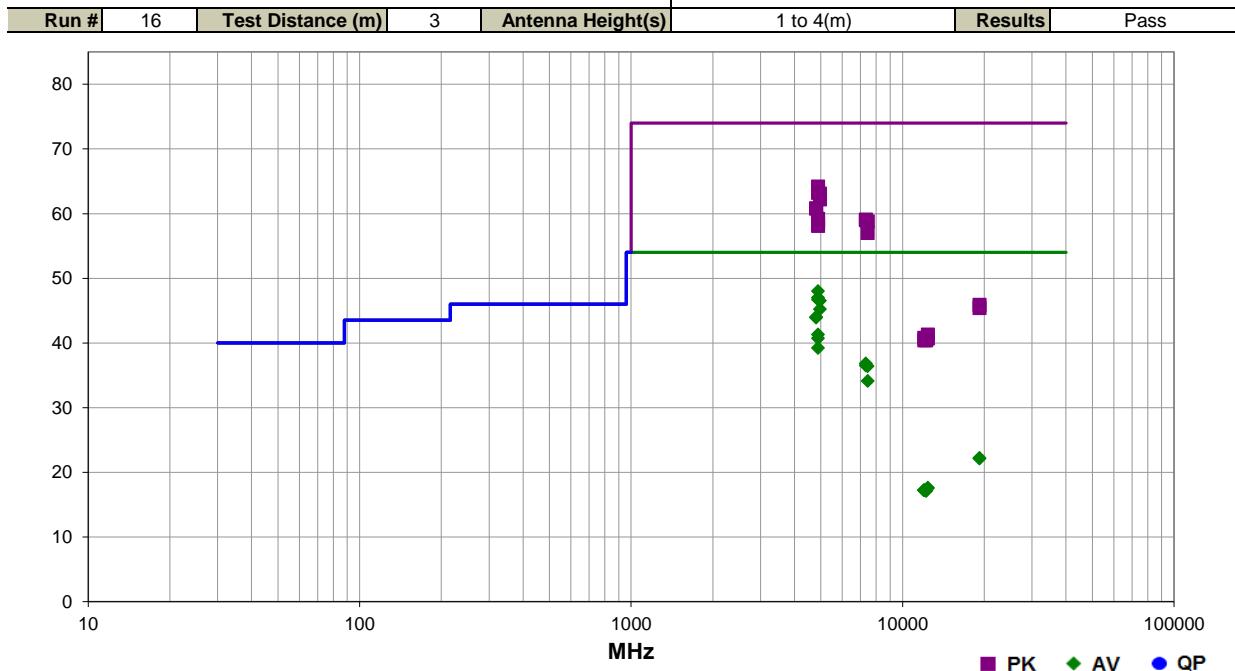


EmiR5 2019.08.15.1

PSA-ESCI 2019.05.10

Work Order:	BOSN0134	Date:	14-Oct-2019	
Project:	None	Temperature:	20.2 °C	
Job Site:	OC10	Humidity:	49.4% RH	
Serial Number:	401490	Barometric Pres.:	1016 mbar	Tested by: Johnny Candelas
EUT:	RC5			
Configuration:	1			
Customer:	Boston Scientific Neuromodulation			
Attendees:	Habet Ter-Petrosyan			
EUT Power:	Battery			
Operating Mode:	Transmitting on Low Ch 37 - 2402 MHz, Mid Ch 18 - 2442 MHz, & High Ch 39 - 2480 MHz			
Deviations:	None			
Comments:	Manufacturer attests that the maximum possible duty cycle in any 100ms window is 24%. This is based upon the maximum data transfer of 240 kbps (raw PHY data including radio overhead) on a physical radio signal of 1 Mbps. Converting to "dB", the Duty Cycle Correction Factor (DCCF) as DCCF = 20*log(0.24) = -12.39 dB.			

Test Specifications	Test Method
FCC 15.247:2019	ANSI C63.10:2013



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
4884.050	47.1	13.3	1.0	132.0	-12.4	0.0	Horz	AV	0.0	48.0	54.0	-6.0	EUT Vert, Mid Ch
4883.983	46.1	13.3	1.5	122.0	-12.4	0.0	Vert	AV	0.0	47.0	54.0	-7.0	EUT on Side, Mid Ch
4883.958	45.8	13.3	3.7	51.0	-12.4	0.0	Vert	AV	0.0	46.7	54.0	-7.3	EUT Horiz, Mid Ch
4959.900	45.4	13.5	1.1	128.0	-12.4	0.0	Vert	AV	0.0	46.5	54.0	-7.5	EUT on Side, High Ch
4959.983	44.1	13.5	1.5	139.0	-12.4	0.0	Horz	AV	0.0	45.2	54.0	-8.8	EUT Vert, High Ch
4884.492	50.9	13.3	1.0	132.0	0.0	0.0	Horz	PK	0.0	64.2	74.0	-9.8	EUT Vert, Mid Ch
4804.058	43.7	12.7	1.0	117.0	-12.4	0.0	Horz	AV	0.0	44.0	54.0	-10.0	EUT Vert, Low Ch
4804.100	43.6	12.7	1.1	185.0	-12.4	0.0	Vert	AV	0.0	43.9	54.0	-10.1	EUT on Side, Low Ch
4883.475	50.1	13.3	1.5	122.0	0.0	0.0	Vert	PK	0.0	63.4	74.0	-10.6	EUT on Side, Mid Ch
4884.458	49.9	13.3	3.7	51.0	0.0	0.0	Vert	PK	0.0	63.2	74.0	-10.8	EUT Horiz, Mid Ch
4960.575	49.6	13.5	1.1	128.0	0.0	0.0	Vert	PK	0.0	63.1	74.0	-10.9	EUT on Side, High Ch
4960.283	48.7	13.5	1.5	139.0	0.0	0.0	Horz	PK	0.0	62.2	74.0	-11.8	EUT Vert, High Ch
4884.050	40.4	13.3	1.5	82.0	-12.4	0.0	Horz	AV	0.0	41.3	54.0	-12.7	EUT Horiz, Mid Ch
4804.483	48.1	12.7	1.0	117.0	0.0	0.0	Horz	PK	0.0	60.8	74.0	-13.2	EUT Vert, Low Ch
4803.508	48.1	12.7	1.1	185.0	0.0	0.0	Vert	PK	0.0	60.8	74.0	-13.2	EUT on Side, Low Ch
4883.967	39.8	13.3	1.0	61.0	-12.4	0.0	Vert	AV	0.0	40.7	54.0	-13.3	EUT Vert, Mid Ch
4883.933	38.3	13.3	1.0	233.0	-12.4	0.0	Horz	AV	0.0	39.2	54.0	-14.8	EUT on Side, Mid Ch
4883.317	45.9	13.3	1.5	82.0	0.0	0.0	Horz	PK	0.0	59.2	74.0	-14.8	EUT Horiz, Mid Ch

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
7326.625	40.7	18.4	3.3	193.0	0.0	0.0	Horz	PK	0.0	59.1	74.0	-14.9	EUT Vert, Mid Ch
7325.650	40.6	18.4	1.1	207.0	0.0	0.0	Vert	PK	0.0	59.0	74.0	-15.0	EUT Vert, Mid Ch
7439.767	40.3	18.5	1.1	205.0	0.0	0.0	Horz	PK	0.0	58.8	74.0	-15.2	EUT Vert, High Ch
4884.217	45.4	13.3	1.0	61.0	0.0	0.0	Vert	PK	0.0	58.7	74.0	-15.3	EUT Vert, Mid Ch
4883.158	44.8	13.3	1.0	233.0	0.0	0.0	Horz	PK	0.0	58.1	74.0	-15.9	EUT on Side, Mid Ch
7439.600	38.5	18.5	1.5	161.0	0.0	0.0	Vert	PK	0.0	57.0	74.0	-17.0	EUT on Side, High Ch
7325.242	30.8	18.4	1.1	207.0	-12.4	0.0	Vert	AV	0.0	36.8	54.0	-17.2	EUT Vert, Mid Ch
7325.367	30.5	18.4	3.3	193.0	-12.4	0.0	Horz	AV	0.0	36.5	54.0	-17.5	EUT Vert, Mid Ch
7439.292	30.3	18.5	1.1	205.0	-12.4	0.0	Horz	AV	0.0	36.4	54.0	-17.6	EUT Vert, High Ch
7440.542	28.0	18.5	1.5	161.0	-12.4	0.0	Vert	AV	0.0	34.1	54.0	-19.9	EUT on Side, High Ch
19216.430	50.5	-4.6	1.5	232.0	0.0	0.0	Horz	PK	0.0	45.9	74.0	-28.1	EUT Vert, Low Ch
19216.570	50.0	-4.6	1.5	354.0	0.0	0.0	Vert	PK	0.0	45.4	74.0	-28.6	EUT on Side, Low Ch
19215.070	39.2	-4.6	1.5	232.0	-12.4	0.0	Horz	AV	0.0	22.2	54.0	-31.8	EUT Vert, Low Ch
19215.880	39.1	-4.6	1.5	354.0	-12.4	0.0	Vert	AV	0.0	22.1	54.0	-31.9	EUT on Side, Low Ch
12398.480	44.0	-2.7	1.7	169.0	0.0	0.0	Vert	PK	0.0	41.3	74.0	-32.7	EUT on Side, High Ch
12009.780	44.5	-3.7	1.5	34.0	0.0	0.0	Horz	PK	0.0	40.8	74.0	-33.2	EUT Vert, Low Ch
12399.950	43.4	-2.7	3.0	207.0	0.0	0.0	Horz	PK	0.0	40.7	74.0	-33.3	EUT Vert, High Ch
12208.510	43.1	-2.5	2.0	348.0	0.0	0.0	Vert	PK	0.0	40.6	74.0	-33.4	EUT on Side, Mid Ch
12210.380	42.9	-2.5	1.5	78.0	0.0	0.0	Horz	PK	0.0	40.4	74.0	-33.6	EUT Vert, Mid Ch
12009.090	44.1	-3.7	3.4	28.0	0.0	0.0	Vert	PK	0.0	40.4	74.0	-33.6	EUT on Side, Low Ch
12399.800	32.7	-2.7	3.0	207.0	-12.4	0.0	Horz	AV	0.0	17.6	54.0	-36.4	EUT Vert, High Ch
12398.750	32.6	-2.7	1.7	169.0	-12.4	0.0	Vert	AV	0.0	17.5	54.0	-36.5	EUT on Side, High Ch
12008.690	33.3	-3.7	1.5	34.0	-12.4	0.0	Horz	AV	0.0	17.2	54.0	-36.8	EUT Vert, Low Ch
12008.080	33.3	-3.7	3.4	28.0	-12.4	0.0	Vert	AV	0.0	17.2	54.0	-36.8	EUT on Side, Low Ch
12208.620	32.0	-2.5	1.5	78.0	-12.4	0.0	Horz	AV	0.0	17.1	54.0	-36.9	EUT Vert, Mid Ch
12208.590	32.0	-2.5	2.0	348.0	-12.4	0.0	Vert	AV	0.0	17.1	54.0	-36.9	EUT on Side, Mid Ch

SPURIOUS RADIATED EMISSIONS

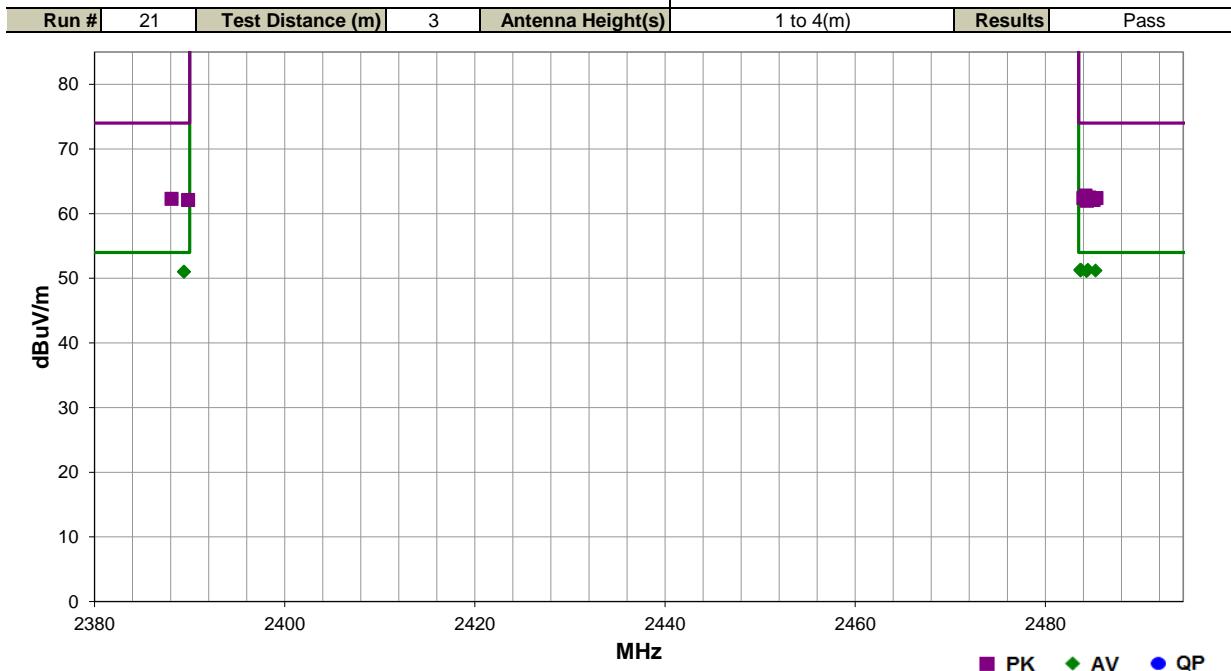


EmiR5 2019.08.15.1

PSA-ESCI 2019.05.10

Work Order:	BOSN0134	Date:	14-Oct-2019	
Project:	None	Temperature:	20.2 °C	
Job Site:	OC10	Humidity:	49.4% RH	
Serial Number:	401490	Barometric Pres.:	1016 mbar	Tested by: Johnny Candelas
EUT:	RC5			
Configuration:	1			
Customer:	Boston Scientific Neuromodulation			
Attendees:	Habet Ter-Petrosyan			
EUT Power:	Battery			
Operating Mode:	Transmitting on Low Ch 37 - 2402 MHz & High Ch 39 - 2480 MHz			
Deviations:	None			
Comments:	Band Edge Floor Noise therefore no DCCF added			

Test Specifications	Test Method
FCC 15.247:2019	ANSI C63.10:2013



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
2484.483	27.9	3.4	1.5	286.0	3.0	20.0	Vert	AV	0.0	51.3	54.0	-2.7	EUT on Side, High Ch
2483.743	27.9	3.4	1.5	196.0	3.0	20.0	Horz	AV	0.0	51.3	54.0	-2.7	EUT on Side, High Ch
2483.663	27.9	3.4	1.5	190.0	3.0	20.0	Horz	AV	0.0	51.3	54.0	-2.7	EUT Vert, High Ch
2483.707	27.8	3.4	1.5	354.0	3.0	20.0	Vert	AV	0.0	51.2	54.0	-2.8	EUT Vert, High Ch
2485.283	27.8	3.4	3.81	243.0	3.0	20.0	Horz	AV	0.0	51.2	54.0	-2.8	EUT Horiz, High Ch
2484.343	27.7	3.4	1.5	161.0	3.0	20.0	Vert	AV	0.0	51.1	54.0	-2.9	EUT Horiz, High Ch
2389.390	27.8	3.2	1.5	198.0	3.0	20.0	Horz	AV	0.0	51.0	54.0	-3.0	EUT on Side, Low Ch
2389.427	27.8	3.2	1.5	81.0	3.0	20.0	Vert	AV	0.0	51.0	54.0	-3.0	EUT on Side, Low Ch
2484.213	39.4	3.4	1.5	161.0	3.0	20.0	Vert	PK	0.0	62.8	74.0	-11.2	EUT Horiz, High Ch
2484.607	39.1	3.4	1.5	196.0	3.0	20.0	Horz	PK	0.0	62.5	74.0	-11.5	EUT on Side, High Ch
2484.003	39.0	3.4	1.5	190.0	3.0	20.0	Horz	PK	0.0	62.4	74.0	-11.6	EUT Vert, High Ch
2485.377	39.0	3.4	1.5	354.0	3.0	20.0	Vert	PK	0.0	62.4	74.0	-11.6	EUT Vert, High Ch
2388.110	39.1	3.2	1.5	198.0	3.0	20.0	Horz	PK	0.0	62.3	74.0	-11.7	EUT on Side, Low Ch
2485.067	38.7	3.4	1.5	286.0	3.0	20.0	Vert	PK	0.0	62.1	74.0	-11.9	EUT on Side, High Ch
2389.843	38.9	3.2	1.5	81.0	3.0	20.0	Vert	PK	0.0	62.1	74.0	-11.9	EUT on Side, Low Ch
2484.387	38.6	3.4	3.81	243.0	3.0	20.0	Horz	PK	0.0	62.0	74.0	-12.0	EUT Horiz, High Ch

DUTY CYCLE



XMit 2019.06.11

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 test software provided for operation in a fixed, single channel mode allows the EUT to operate continuously at 100% Duty Cycle.

OCCUPIED BANDWIDTH



XMit 2019.09.05

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	E8257D	TGU	15-Feb-18	15-Feb-21
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFP	2-Jul-19	2-Jul-20
Block - DC	Fairview Microwave	SD3379	AMV	3-Jan-19	3-Jan-20
Attenuator	Fairview Microwave	SA18H-20	TKR	20-Dec-18	20-Dec-19
Cable	Fairview Microwave	SCA1814-0101-120	OCZ	NCR	NCR

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



TbTx 2019.08.30.0

XMI 2019.08.05

EUT:	RC5	Work Order:	BOSN0134
Serial Number:	401485	Date:	21-Oct-19
Customer:	Boston Scientific Neuromodulation	Temperature:	20.9 °C
Attendees:	Habet	Humidity:	48.7% RH
Project:	None	Barometric Pres.:	1018 mbar
Tested by:	Salvador Solorzano	Power:	Battery
TEST SPECIFICATIONS		Test Method	
FCC 15.247:2019		ANSI C63.10:2013	
COMMENTS			
DC Block + 20 dB Attenuator + Cable + customers patch cable = 23.51 dB Offset			
DEVIATIONS FROM TEST STANDARD			
None			
Configuration #	5	Signature	
		Value	Limit (±)
		710.238 kHz	500 kHz
		718.317 kHz	500 kHz
		715.373 kHz	500 kHz

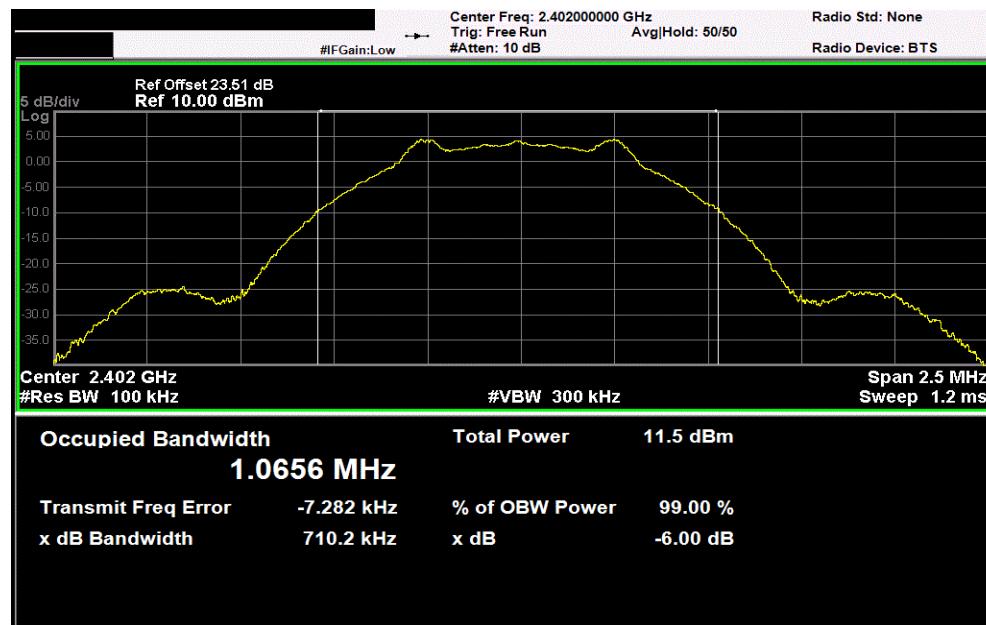
BLE/GFSK Low Channel, 2402 MHz
BLE/GFSK Mid Channel, 2442 MHz
BLE/GFSK High Channel, 2480 MHz

OCCUPIED BANDWIDTH

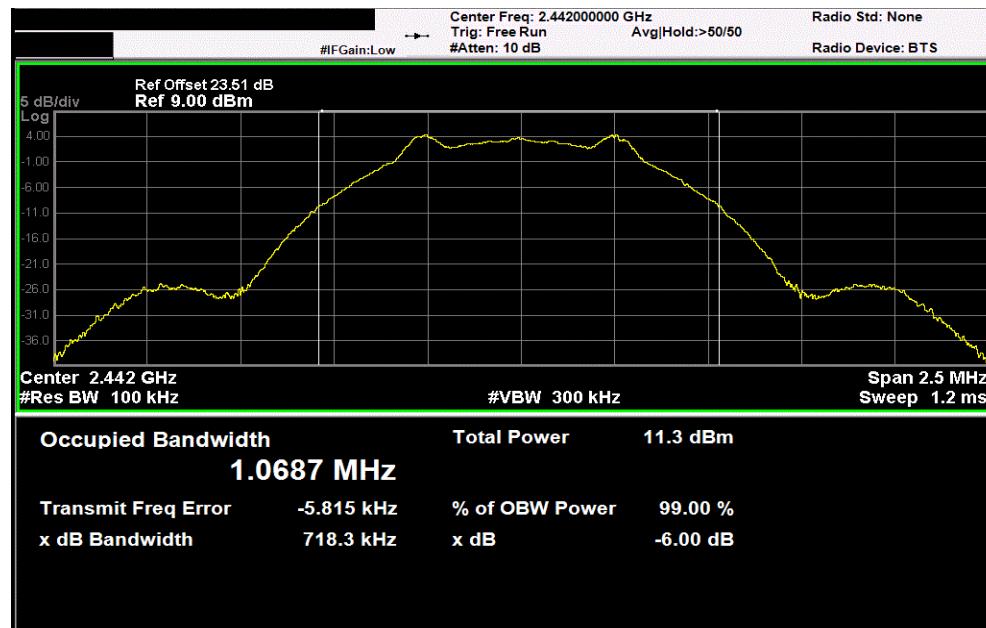


TbtTx 2019.08.30.0 XMT 2019.09.05

BLE/GFSK Low Channel, 2402 MHz			Value	Limit	Result
			(≥)		
			710.238 kHz	500 kHz	Pass



BLE/GFSK Mid Channel, 2442 MHz			Value	Limit	Result
			(≥)		
			718.317 kHz	500 kHz	Pass

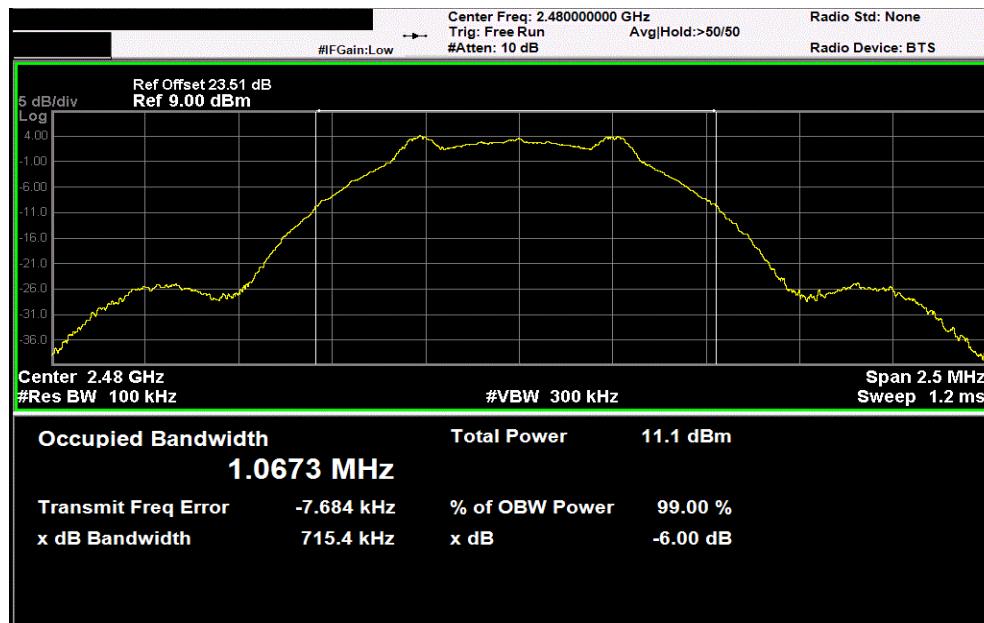


OCCUPIED BANDWIDTH



TbtTx 2019.08.30.0 XM1 2019.09.05

BLE/GFSK High Channel, 2480 MHz			Value	Limit (≥)	Result
			715.373 kHz	500 kHz	Pass



OUTPUT POWER



XMIT 2019.09.05

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	E8257D	TGU	15-Feb-18	15-Feb-21
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFP	2-Jul-19	2-Jul-20
Block - DC	Fairview Microwave	SD3379	AMV	3-Jan-19	3-Jan-20
Attenuator	Fairview Microwave	SA18H-20	TKR	20-Dec-18	20-Dec-19
Cable	Fairview Microwave	SCA1814-0101-120	OCZ	NCR	NCR

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. The transmit frequency was set to the required channels in each band. The transmit power was set to its default maximum.

Prior to measuring peak transmit power the DTS bandwidth (B) was measured.

The method found in ANSI C63.10:2013 Section 11.9.1.1 was used because the RBW on the analyzer was greater than the DTS Bandwidth of the radio.

OUTPUT POWER



TbTx 2019.08.30.0

XMI 2019.08.05

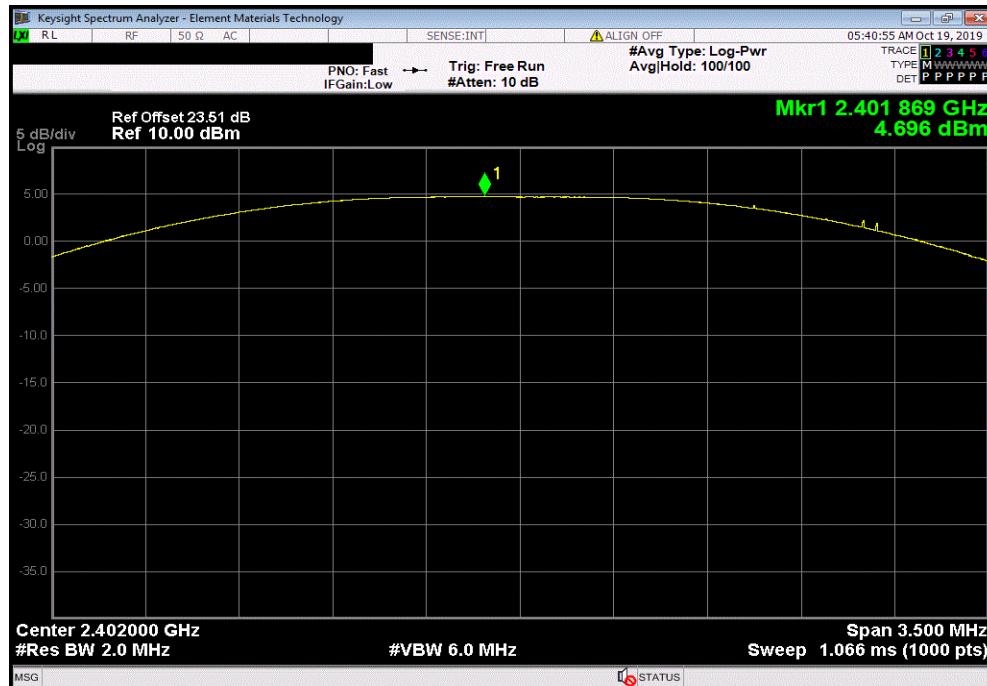
EUT:	RC5	Work Order:	BOSN0134	
Serial Number:	401485	Date:	21-Oct-19	
Customer:	Boston Scientific Neuromodulation	Temperature:	21 °C	
Attendees:	Habet	Humidity:	49.1% RH	
Project:	None	Barometric Pres.:	1018 mbar	
Tested by:	Salvador Solorzano	Power:	Battery	
TEST SPECIFICATIONS		Test Method		
FCC 15.247:2019		ANSI C63.10:2013		
COMMENTS				
DC Block + 20 dB Attenuator + Cable + customers patch cable = 23.51 dB Offset				
DEVIATIONS FROM TEST STANDARD				
None				
Configuration #	5	Signature		
		Out Pwr (dBm)	Limit (dBm)	
		4.696	30	Pass
		4.436	30	Pass
		4.226	30	Pass
BLE/GFSK Low Channel, 2402 MHz				
BLE/GFSK Mid Channel, 2442 MHz				
BLE/GFSK High Channel, 2480 MHz				

OUTPUT POWER

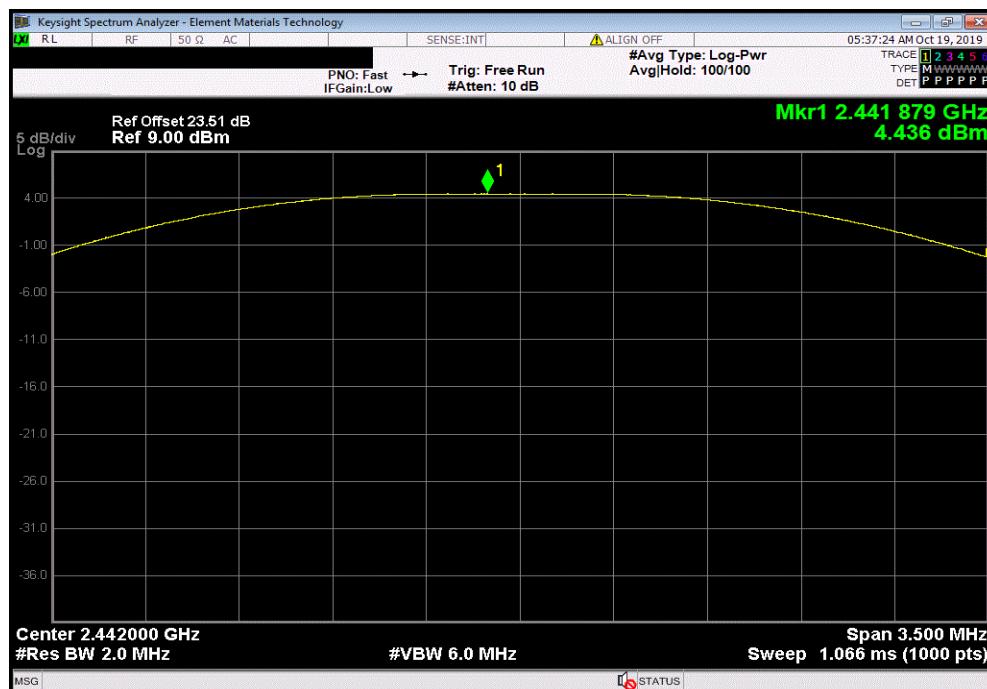


TbtTx 2019.08.30.0 XMT 2019.09.05

BLE/GFSK Low Channel, 2402 MHz			Out Pwr (dBm)	Limit (dBm)	Result
			4.696	30	Pass



BLE/GFSK Mid Channel, 2442 MHz			Out Pwr (dBm)	Limit (dBm)	Result
			4.436	30	Pass

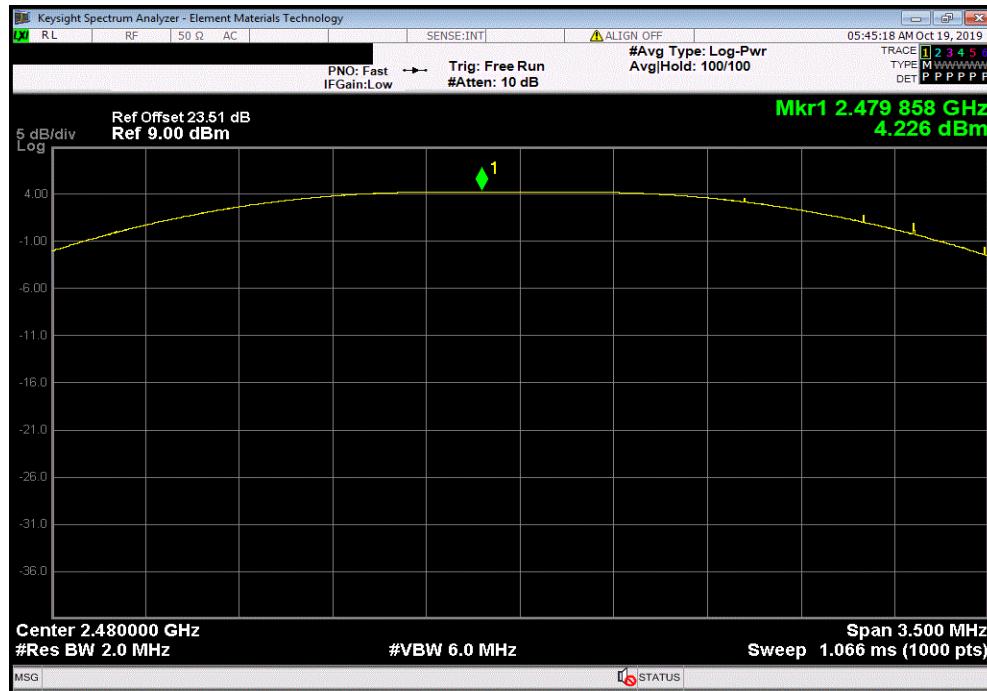


OUTPUT POWER



TbtTx 2019.08.30.0 XMT 2019.09.05

BLE/GFSK High Channel, 2480 MHz			Out Pwr (dBm)	Limit (dBm)	Result
			4.226	30	Pass



EQUIVALENT ISOTROPIC RADIATED POWER (EIRP)



XMit 2019.09.05

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	AFP	2-Jul-19	2-Jul-20
Block - DC	Fairview Microwave	SD3379	AMV	3-Jan-19	3-Jan-20
Attenuator	Fairview Microwave	SA18H-20	TKR	20-Dec-18	20-Dec-19
Cable	Fairview Microwave	SCA1814-0101-120	OCZ	NCR	NCR
Generator - Signal	Agilent	E8257D	TGU	15-Feb-18	15-Feb-21

TEST DESCRIPTION

The transmit frequency was set to the required channels in each band. The transmit power was set to its default maximum.

Prior to measuring peak transmit power the DTS bandwidth (B) was measured.

The method found in ANSI C63.10:2013 Section 11.9.1.1 was used because the RBW on the analyzer was greater than the DTS Bandwidth of the radio.

EQUIVALENT ISOTROPIC RADIATED POWER (EIRP)



TbTx 2019.08.30.0

XMI 2019.08.05

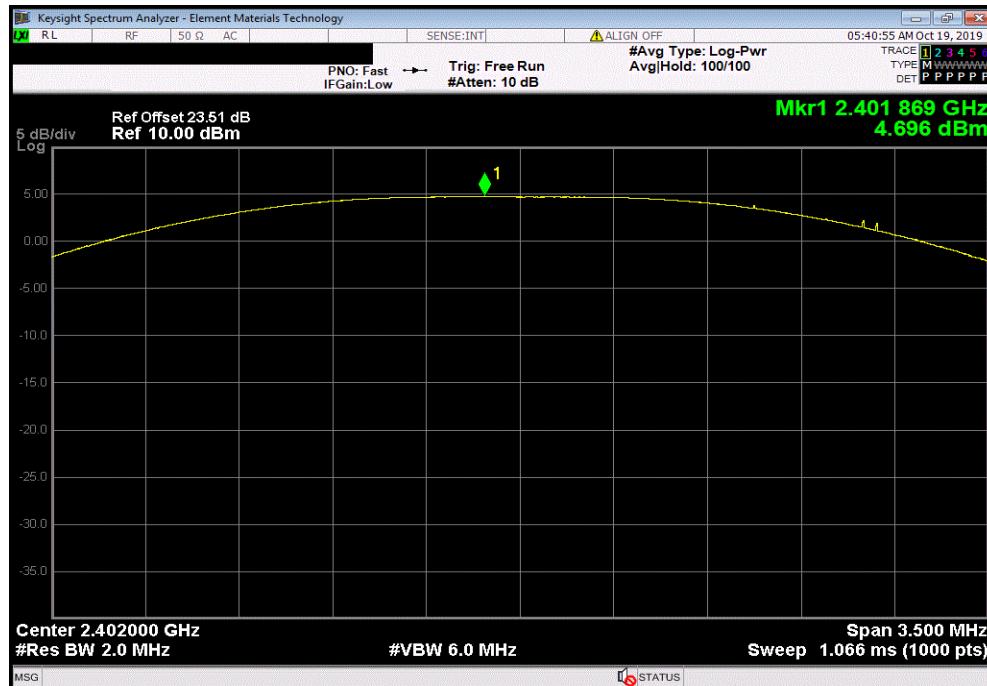
EUT:	RC5	Work Order:	BOSN0134			
Serial Number:	401485	Date:	18-Oct-19			
Customer:	Boston Scientific Neuromodulation	Temperature:	21.1 °C			
Attendees:	Habet	Humidity:	54.2% RH			
Project:	None	Barometric Pres.:	1015 mbar			
Tested by:	Salvador Solorzano	Power:	Battery			
TEST SPECIFICATIONS		Test Method				
FCC 15.247:2019		ANSI C63.10:2013				
COMMENTS						
DC Block + 20 dB Attenuator + Cable + customers patch cable = 23.51 dB Offset						
DEVIATIONS FROM TEST STANDARD						
None						
Configuration #	5	 Signature				
		Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
BLE/GFSK Low Channel, 2402 MHz		4.696	0.44	5.136	36	Pass
BLE/GFSK Mid Channel, 2442 MHz		4.436	0.44	4.876	36	Pass
BLE/GFSK High Channel, 2480 MHz		4.226	0.44	4.666	36	Pass

EQUIVALENT ISOTROPIC RADIATED POWER (EIRP)

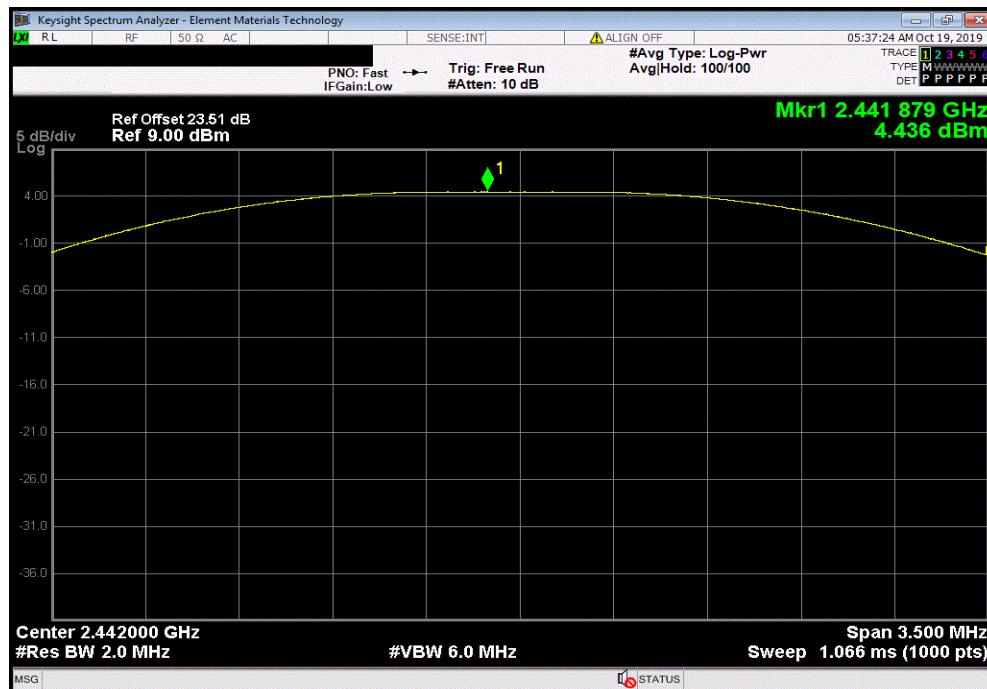


TbtTx 2019.08.30.0 XMI 2019.09.05

BLE/GFSK Low Channel, 2402 MHz					
Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result	
4.696	0.44	5.136	36	Pass	



BLE/GFSK Mid Channel, 2442 MHz					
Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result	
4.436	0.44	4.876	36	Pass	

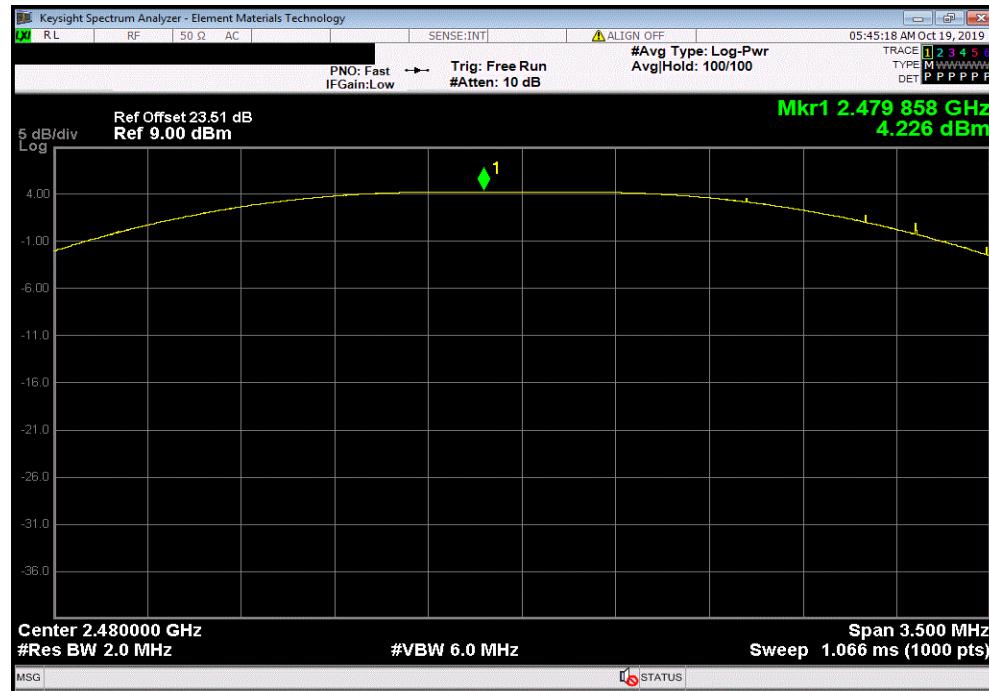


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP)



TbtTx 2019.08.30.0 XM1 2019.09.05

BLE/GFSK High Channel, 2480 MHz					
Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result	
4.226	0.44	4.666	36	Pass	



POWER SPECTRAL DENSITY



XMit 2019.09.05

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	E8257D	TGU	15-Feb-18	15-Feb-21
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFP	2-Jul-19	2-Jul-20
Block - DC	Fairview Microwave	SD3379	AMV	3-Jan-19	3-Jan-20
Attenuator	Fairview Microwave	SA18H-20	TKR	20-Dec-18	20-Dec-19
Cable	Fairview Microwave	SCA1814-0101-120	OCZ	NCR	NCR

TEST DESCRIPTION

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 2019.08.30.0 XMII 2019.08.05

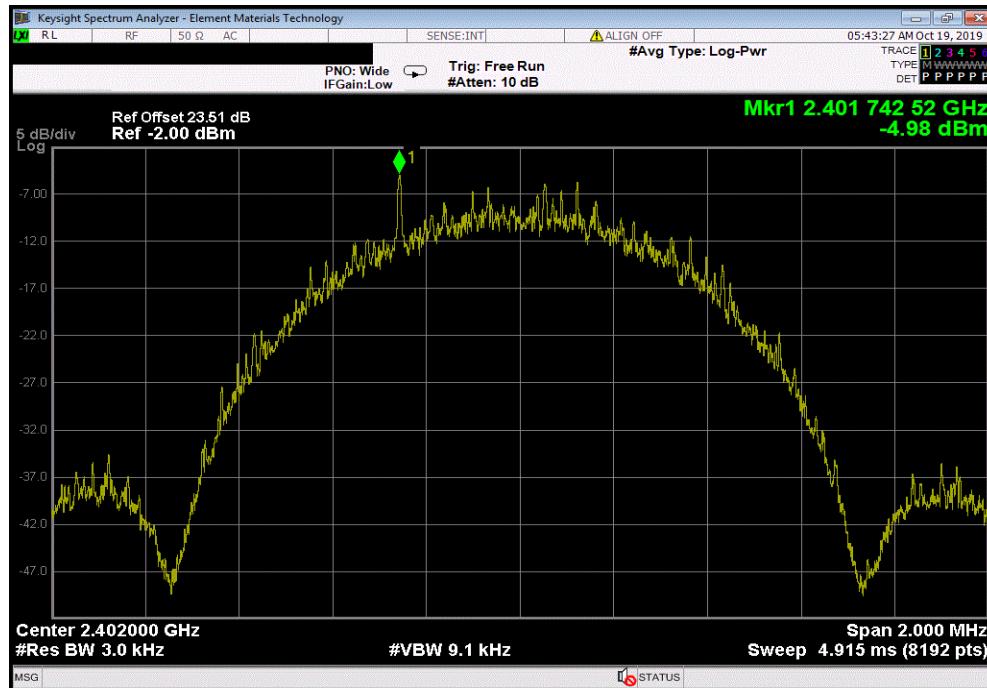
EUT:	RC5	Work Order:	BOSN0134															
Serial Number:	401485	Date:	21-Oct-19															
Customer:	Boston Scientific Neuromodulation	Temperature:	21.4 °C															
Attendees:	Habet	Humidity:	49.1% RH															
Project:	None	Barometric Pres.:	1018 mbar															
Tested by:	Salvador Solorzano	Power:	Battery															
TEST SPECIFICATIONS		Test Method																
FCC 15.247:2019		ANSI C63.10:2013																
COMMENTS																		
DC Block + 20 dB Attenuator + Cable + customers patch cable = 23.51 dB Offset																		
DEVIATIONS FROM TEST STANDARD																		
None																		
Configuration #	5	Signature																
<table border="1"> <thead> <tr> <th>Value</th> <th>Limit</th> <th>Results</th> </tr> <tr> <th>dBm/3kHz</th> <th>< dBm/3kHz</th> <th></th> </tr> </thead> <tbody> <tr> <td>-4.98</td> <td>8</td> <td>Pass</td> </tr> <tr> <td>-5.075</td> <td>8</td> <td>Pass</td> </tr> <tr> <td>-5.092</td> <td>8</td> <td>Pass</td> </tr> </tbody> </table>				Value	Limit	Results	dBm/3kHz	< dBm/3kHz		-4.98	8	Pass	-5.075	8	Pass	-5.092	8	Pass
Value	Limit	Results																
dBm/3kHz	< dBm/3kHz																	
-4.98	8	Pass																
-5.075	8	Pass																
-5.092	8	Pass																
BLE/GFSK Low Channel, 2402 MHz BLE/GFSK Mid Channel, 2442 MHz BLE/GFSK High Channel, 2480 MHz																		

POWER SPECTRAL DENSITY

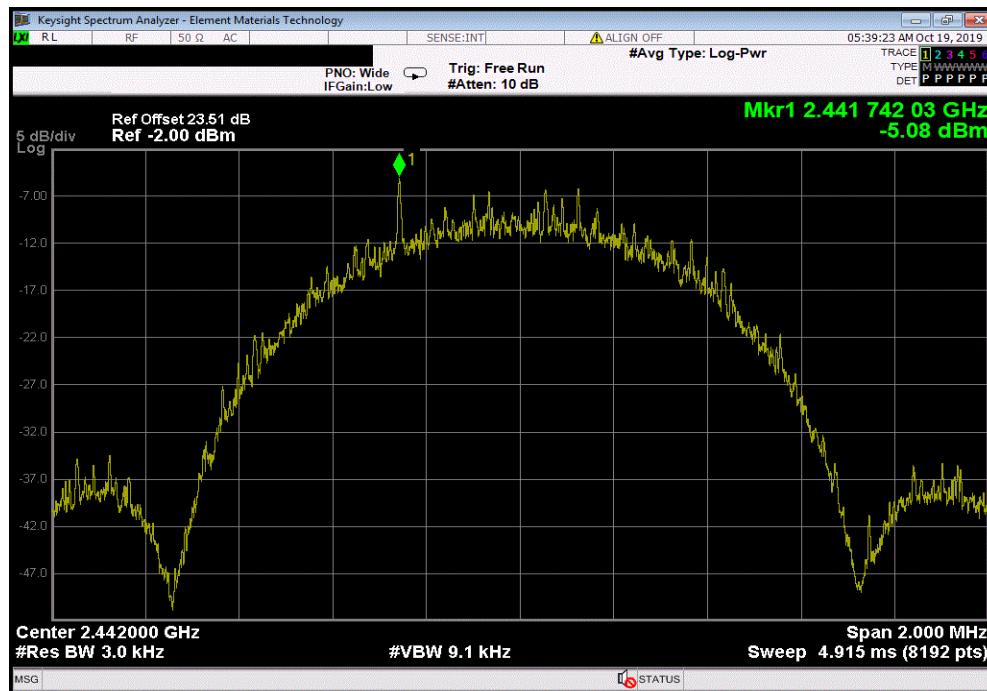


TbtTx 2019.08.30.0 XMI 2019.09.05

BLE/GFSK Low Channel, 2402 MHz			Value	Limit	Results
	dBm/3kHz	< dBm/3kHz			
	-4.98	8	Pass		



BLE/GFSK Mid Channel, 2442 MHz			Value	Limit	Results
	dBm/3kHz	< dBm/3kHz			
	-5.075	8	Pass		

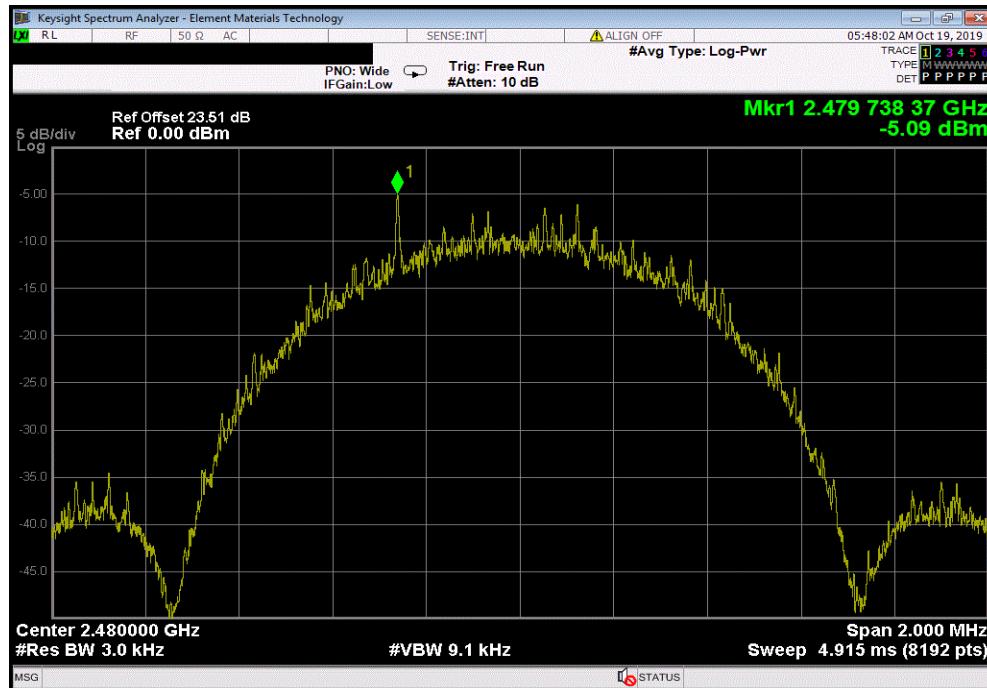


POWER SPECTRAL DENSITY



TbtTx 2019.08.30.0 XMI 2019.09.05

BLE/GFSK High Channel, 2480 MHz			Value	Limit	Results
	dBm/3kHz	< dBm/3kHz			
	-5.092	8	Pass		



BAND EDGE COMPLIANCE



XMit 2019.09.05

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	AFP	2-Jul-19	2-Jul-20
Block - DC	Fairview Microwave	SD3379	AMV	3-Jan-19	3-Jan-20
Attenuator	Fairview Microwave	SA18H-20	TKR	20-Dec-18	20-Dec-19
Cable	Fairview Microwave	SCA1814-0101-120	OCZ	NCR	NCR
Generator - Signal	Agilent	E8257D	TGU	15-Feb-18	15-Feb-21

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.

BAND EDGE COMPLIANCE



TbTx 2019.08.30.0

XMI 2019.08.05

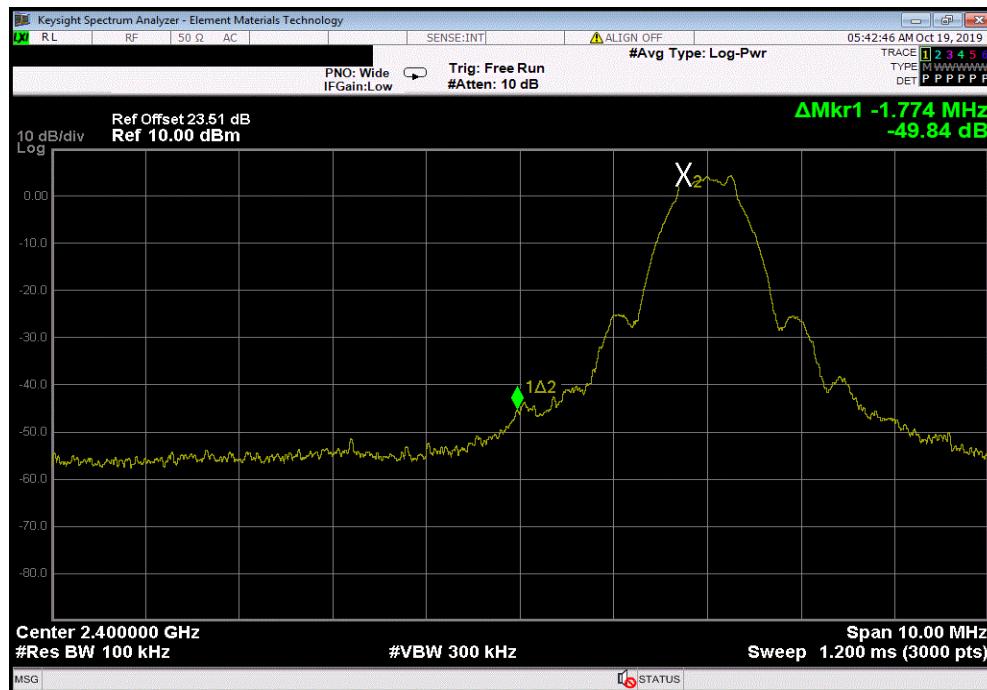
EUT:	RC5	Work Order:	BOSN0134
Serial Number:	401485	Date:	18-Oct-19
Customer:	Boston Scientific Neuromodulation	Temperature:	21.1 °C
Attendees:	Habet	Humidity:	54.2% RH
Project:	None	Barometric Pres.:	1015 mbar
Tested by:	Salvador Solorzano	Power:	Battery
TEST SPECIFICATIONS		Test Method	
FCC 15.247:2019		ANSI C63.10:2013	
COMMENTS			
DC Block + 20 dB Attenuator + Cable + customers patch cable = 23.51 dB Offset			
DEVIATIONS FROM TEST STANDARD			
None			
Configuration #	5	Signature	
		Value (dBc)	Limit ≤ (dBc)
		-49.84	-20
		-57.11	-20
			Pass
			Pass
BLE/GFSK Low Channel, 2402 MHz			
BLE/GFSK High Channel, 2480 MHz			

BAND EDGE COMPLIANCE



TbtTx 2019.08.30.0 XMT 2019.09.05

BLE/GFSK Low Channel, 2402 MHz			Value (dBc)	Limit ≤ (dBc)	Result
			-49.84	-20	Pass



BLE/GFSK High Channel, 2480 MHz			Value (dBc)	Limit ≤ (dBc)	Result
			-57.11	-20	Pass



SPURIOUS CONDUCTED EMISSIONS



XMit 2019.06.11

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	E8257D	TGU	15-Feb-18	15-Feb-21
Cable	Fairview Microwave	SCA1814-0101-120	OCZ	NCR	NCR
Attenuator	Fairview Microwave	SA18H-20	TKR	20-Dec-18	20-Dec-19
Block - DC	Fairview Microwave	SD3379	AMV	3-Jan-19	3-Jan-20
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFP	2-Jul-19	2-Jul-20

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 2019.08.30.0

XMI 2019.08.05

EUT:	RC5	Work Order:	BOSN0134		
Serial Number:	401485	Date:	21-Oct-19		
Customer:	Boston Scientific Neuromodulation	Temperature:	21.5 °C		
Attendees:	Habet	Humidity:	49.1% RH		
Project:	None	Barometric Pres.:	1018 mbar		
Tested by:	Salvador Solorzano	Power:	Battery		
TEST SPECIFICATIONS		Test Method			
FCC 15.247:2019		ANSI C63.10:2013			
COMMENTS					
DC Block + 20 dB Attenuator + Cable + customers patch cable = 23.51 dB Offset					
DEVIATIONS FROM TEST STANDARD					
None					
Configuration #	5	Signature			
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result	
BLE/GFSK Low Channel, 2402 MHz	Fundamental	2402.24	N/A	N/A	
BLE/GFSK Low Channel, 2402 MHz	30 MHz - 12.5 GHz	4802.73	-54.11	-20	Pass
BLE/GFSK Low Channel, 2402 MHz	12.5 GHz - 25 GHz	24952.69	-39.25	-20	Pass
BLE/GFSK Mid Channel, 2442 MHz	Fundamental	2441.74	N/A	N/A	N/A
BLE/GFSK Mid Channel, 2442 MHz	30 MHz - 12.5 GHz	4884.94	-53.91	-20	Pass
BLE/GFSK Mid Channel, 2442 MHz	12.5 GHz - 25 GHz	24977.11	-40.37	-20	Pass
BLE/GFSK High Channel, 2480 MHz	Fundamental	2480.25	N/A	N/A	N/A
BLE/GFSK High Channel, 2480 MHz	30 MHz - 12.5 GHz	4959.54	-53.43	-20	Pass
BLE/GFSK High Channel, 2480 MHz	12.5 GHz - 25 GHz	24977.11	-40.71	-20	Pass

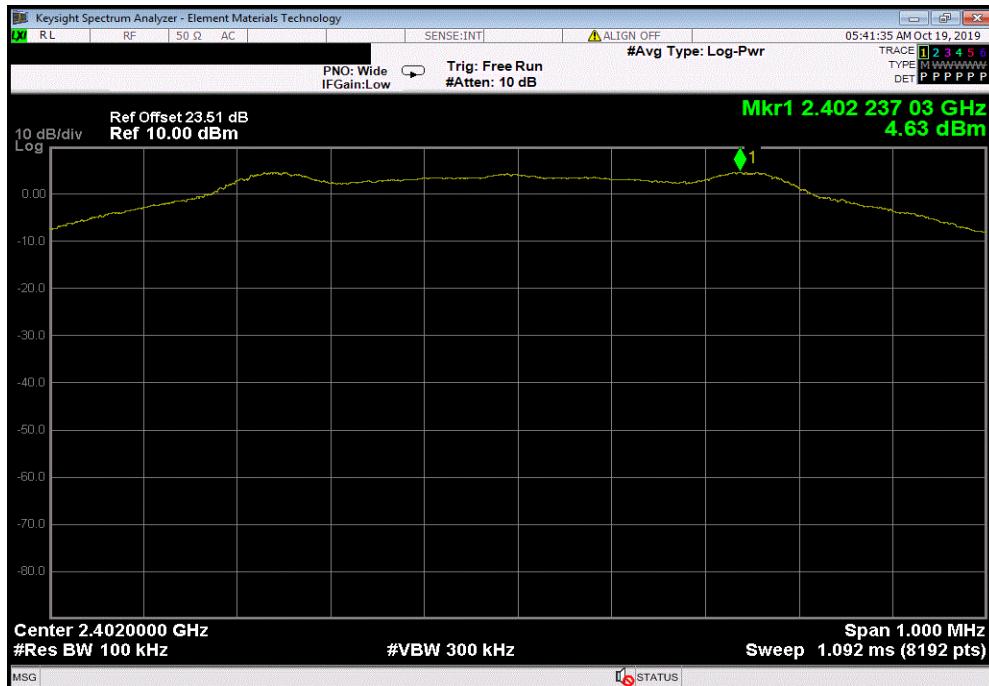
SPURIOUS CONDUCTED EMISSIONS



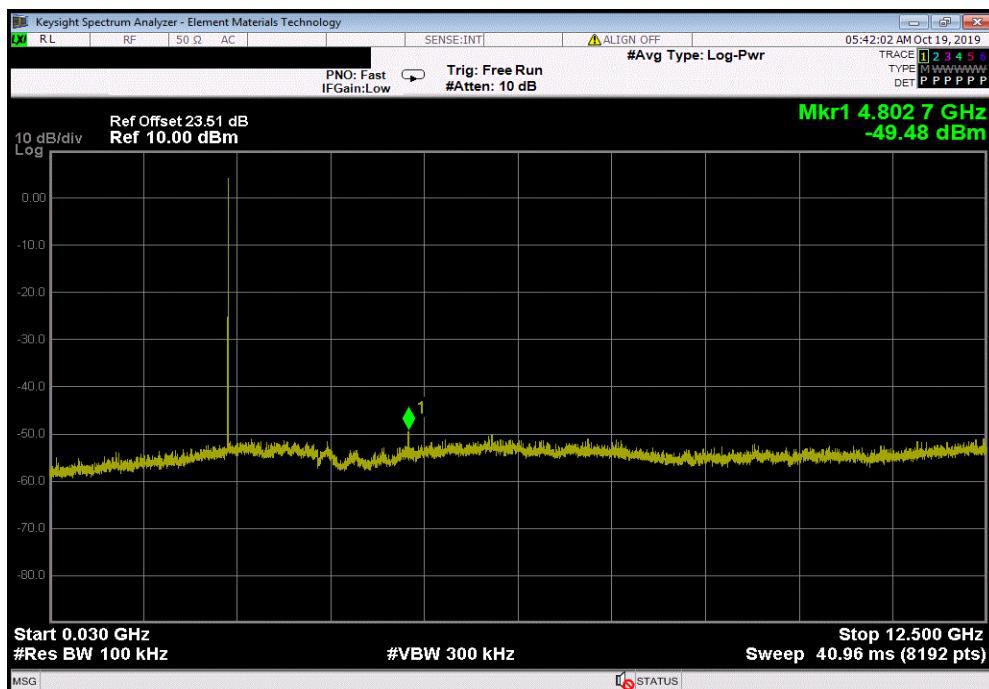
TbtTx 2019.08.30.0

XMit 2019.09.05

BLE/GFSK Low Channel, 2402 MHz					
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result	
	Fundamental	2402.24	N/A	N/A	N/A



BLE/GFSK Low Channel, 2402 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
30 MHz - 12.5 GHz	4802.73	-54.11	-20	Pass

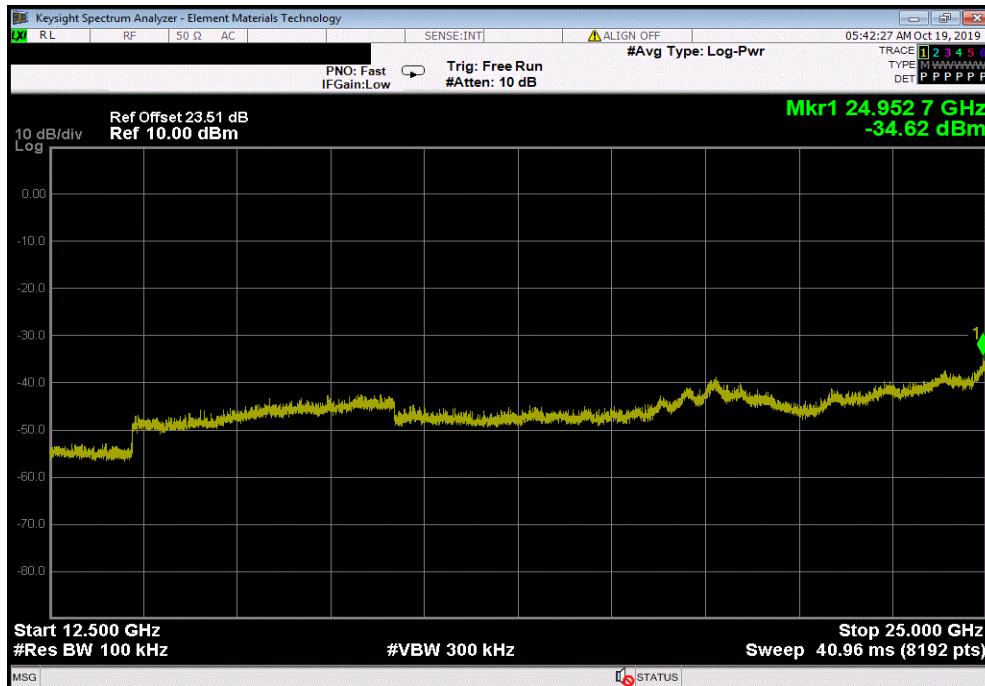


SPURIOUS CONDUCTED EMISSIONS

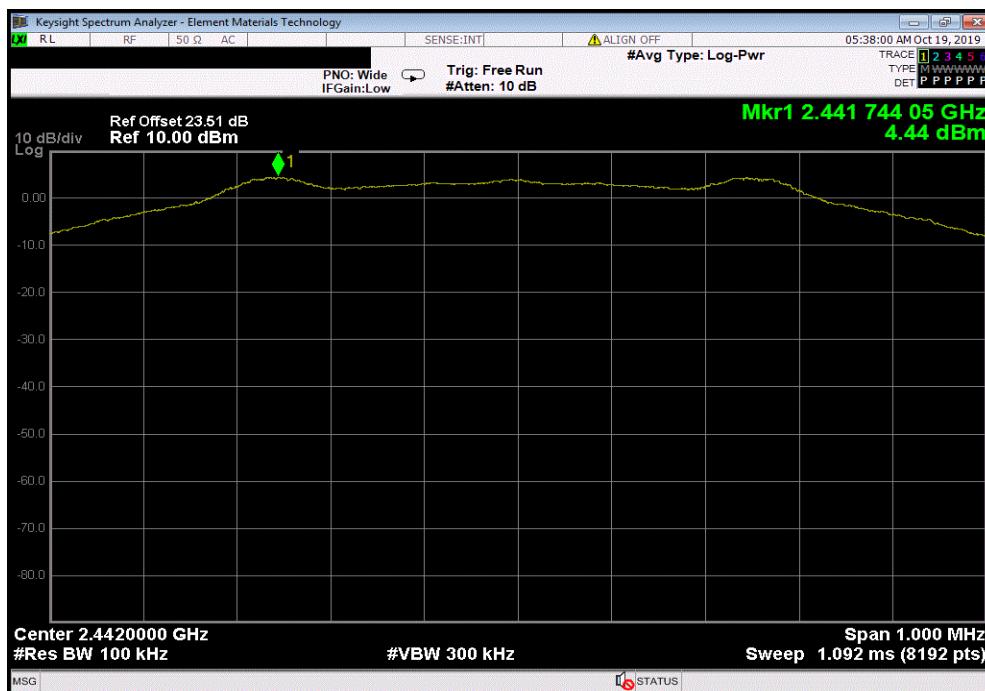


TbtTx 2019.08.30.0 XMI 2019.09.05

Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
12.5 GHz - 25 GHz	24952.69	-39.25	-20	Pass



Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
Fundamental	2441.74	N/A	N/A	N/A

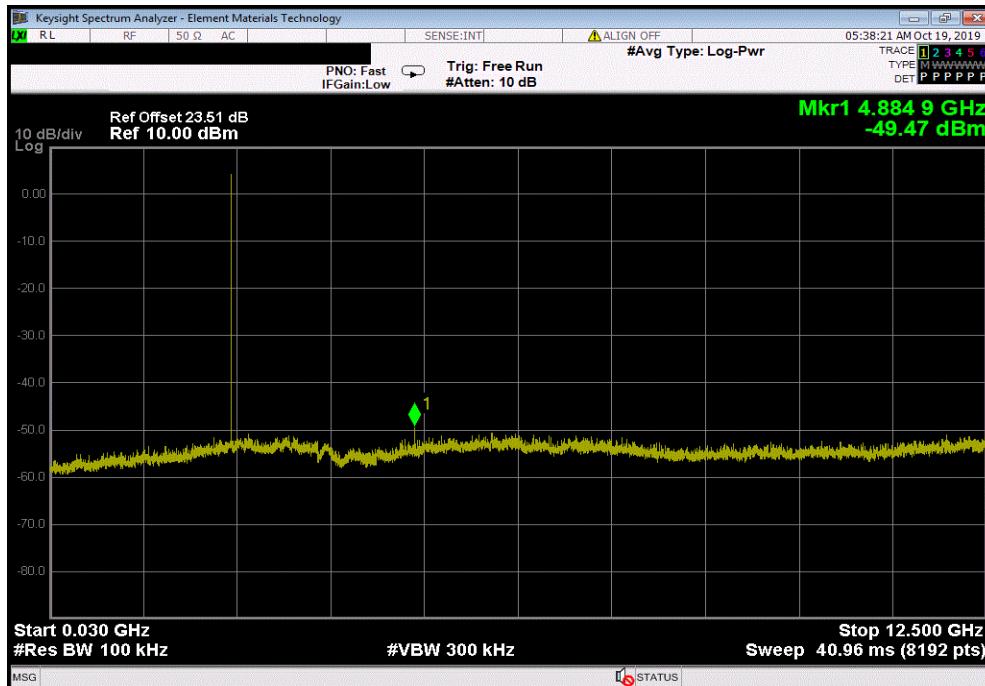


SPURIOUS CONDUCTED EMISSIONS

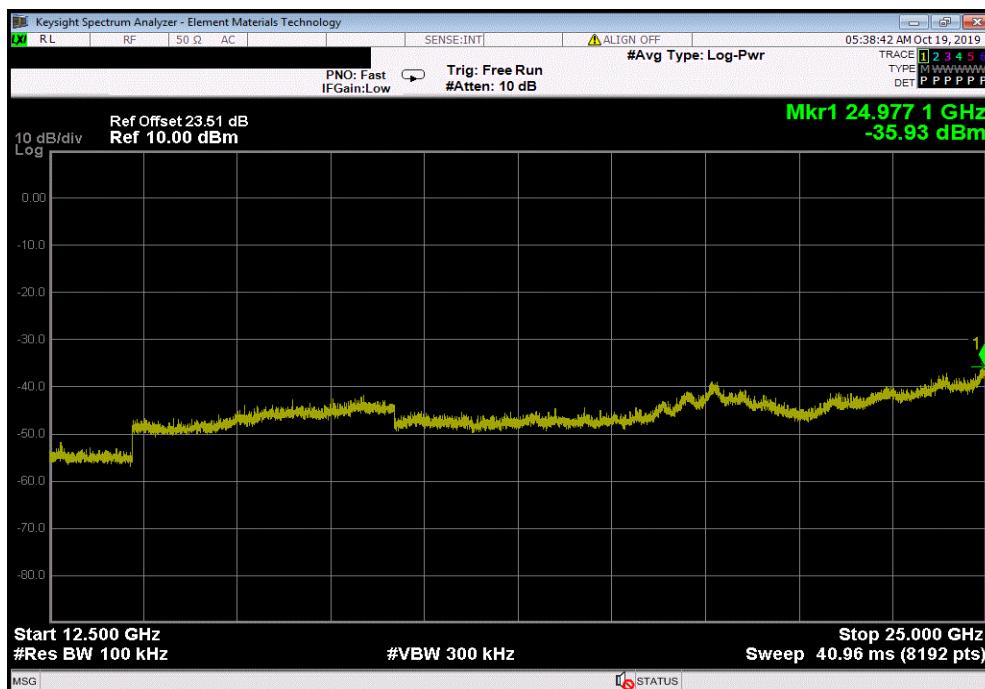


TbtTx 2019.08.30.0 XMI 2019.09.05

BLE/GFSK Mid Channel, 2442 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit \leq (dBc)	Result
30 MHz - 12.5 GHz	4884.94	-53.91	-20	Pass



BLE/GFSK Mid Channel, 2442 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit \leq (dBc)	Result
12.5 GHz - 25 GHz	24977.11	-40.37	-20	Pass



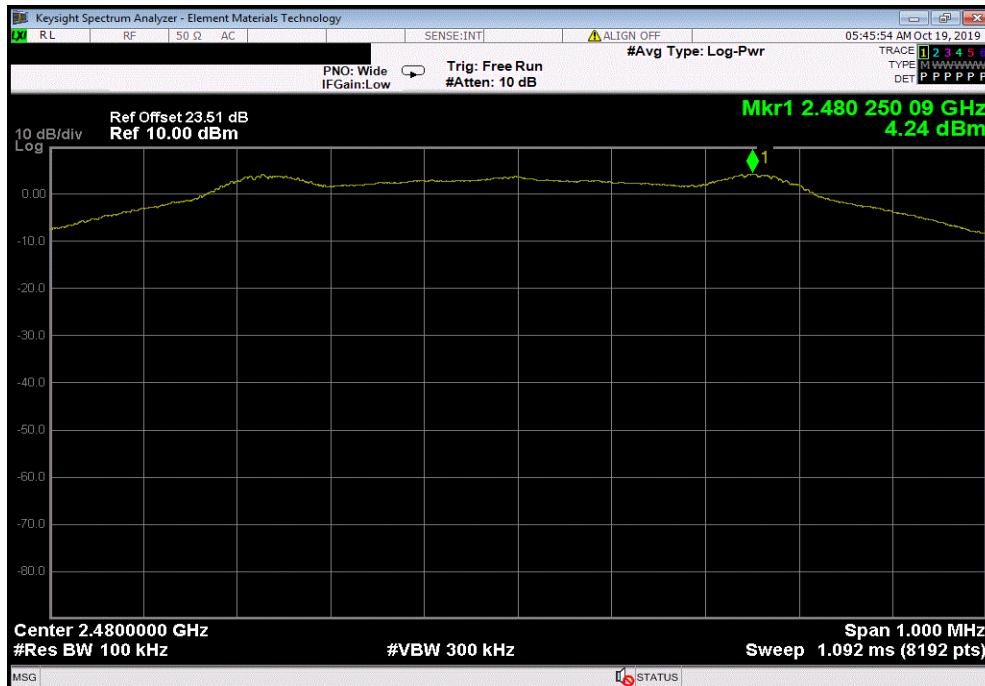
SPURIOUS CONDUCTED EMISSIONS



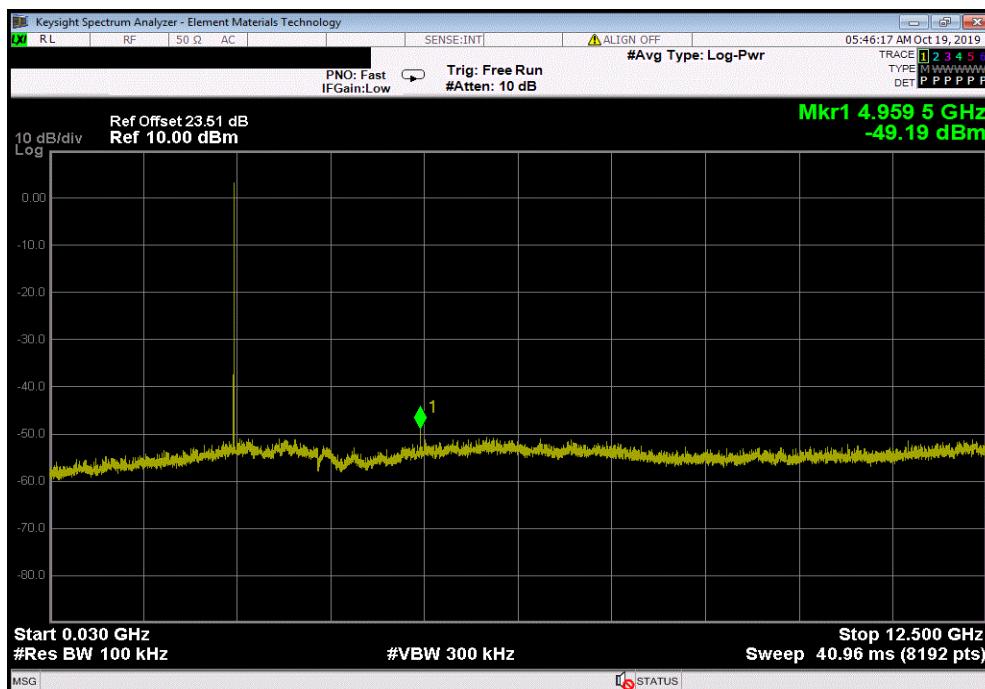
TbtTx 2019.08.30.0

XMit 2019.09.05

BLE/GFSK High Channel, 2480 MHz						
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result		
Fundamental	2480.25	N/A	N/A	N/A		



BLE/GFSK High Channel, 2480 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit \leq (dBc)	Result
30 MHz - 12.5 GHz	4959.54	-53.43	-20	Pass



SPURIOUS CONDUCTED EMISSIONS



TbtTx 2019.08.30.0 XMI 2019.09.05

BLE/GFSK High Channel, 2480 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit \leq (dBc)	Result
12.5 GHz - 25 GHz	24977.11	-40.71	-20	Pass

