

Boston Scientific Corporation

Model 3300 FCC 15.95I:2016 FCC 15.207:2016 2 Channel MICS Radio - SICD

Report # BSTN0663 Rev 01





NVLAP Lab Code: 200881-0

This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government of the United States of America. This Report may only be duplicated in its entirety

CERTIFICATE OF TEST



Last Date of Test: August 11, 2016 Boston Scientific Corporation Model: 3300

Radio Equipment Testing

Standards

Specification	Method
FCC 951:2016	ANSI/TIA/EIA-603-D-2010
FCC 15.207:2016	ANSI C63.10:2013

Results

Method Clause	Test Description	Applied	Results	Comments
ANSI C63.10-6.2	Powerline Conducted Emissions	Yes	Pass	
FCC 95.627(a)	Frequency Monitoring	No	N/A	Refer to BSTN0663.22 Report
FCC 95.633(e)(3)	Emission Bandwidth	Yes	Pass	
FCC 95.635(d)(4-5)	Emission Mask	Yes	Pass	
TIA-603-D 2.2.1	Conducted Output Power	Yes	Pass	
TIA-603-D 2.2.2	Frequency Stability	Yes	Pass	
TIA-603-D 2.2.12	Spurious Radiated Emissions	Yes	Pass	
TIA-603-D 2.2.13	Spurious Conducted Emissions	Yes	Pass	
TIA-603-D 2.2.17.2	Radiated Power (EIRP)	Yes	Pass	

Deviations from Test Standards

None

Approved By:

Imitly P.O.

Tim O'Shea, Operations Manager

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

REVISION HISTORY



Revision Number	Description	Date	Page Number
01	Corrected Method Clause reference	5/11/17	2
01	Added Test Setup Block Diagrams	5/11/17	7
01	Added Details for Configuration BSTN0663-14	5/11/17	12
01	Corrected Configuration Reference	5/11/17	14,15,17
01	Corrected Test Method References	5/11/17	Various

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 Northwest EMC to certify transmitters to FCC and IC specifications.

NVLAP - Each laboratory is accredited by NVLAP to ISO 17025

Canada

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

European Union

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

Australia/New Zealand

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

Korea

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

Japan

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

Taiwan

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

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

Singapore

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

Israel

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

Hong Kong

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

Vietnam

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

SCOPE

For details on the Scopes of our Accreditations, please visit: <u>http://www.nwemc.com/accreditations/</u> http://gsi.nist.gov/global/docs/cabs/designations.html

MEASUREMENT UNCERTAINTY



Measurement Uncertainty

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

A measurement uncertainty estimation has been performed for each test per our internal quality document WP 342. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty (K=2) for each test is on each data sheet. Our measurement data meets or exceeds the measurement uncertainty requirements of the applicable specification; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for estimating measurement uncertainty are based upon ETSI TR 100 028 (or CISPR 16-4-2 as applicable), and are available upon request.

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

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

FACILITIES





California	Minnesota	New York	Oregon	Texas	Washington
Labs OC01-13	Labs MN01-08, MN10	Labs NY01-04	Labs EV01-12	Labs TX01-09	Labs NC01-05
41 Tesla	9349 W Broadway Ave.	4939 Jordan Rd.	22975 NW Evergreen Pkwy	3801 E Plano Pkwy	19201 120 th Ave NE
Irvine, CA 92618	Brooklyn Park, MN 55445	Elbridge, NY 13060	Hillsboro, OR 97124	Plano, TX 75074	Bothell, WA 98011
(949) 861-8918	(612)-638-5136	(315) 554-8214	(503) 844-4066	(469) 304-5255	(425)984-6600
				_	
		NV	LAP		
NVLAP Lab Code: 200676-0	NVLAP Lab Code: 200881-0	NVLAP Lab Code: 200761-0	NVLAP Lab Code: 200630-0	NVLAP Lab Code:201049-0	NVLAP Lab Code: 200629-0
	Innovation, Science and Economic Development Canada				
2834B-1, 2834B-3	2834E-1	N/A	2834D-1, 2834D-2	2834G-1	2834F-1
BSMI					
SL2-IN-E-1154R	SL2-IN-E-1152R	N/A	SL2-IN-E-1017	SL2-IN-E-1158R	SL2-IN-E-1153R
VCCI					
A-0029	A-0109	N/A	A-0108	A-0201	A-0110
Recognized Phase I CAB for ACMA, BSMI, IDA, KCC/RRA, MIC, MOC, NCC, OFCA					
US0158	US0175	N/A	US0017	US0191	US0157



Test Setup Block Diagrams





PRODUCT DESCRIPTION



Client and Equipment Under Test (EUT) Information

Company Name:	Boston Scientific Corporation
Address:	4100 Hamline Avenue North
City, State, Zip:	St. Paul, MN 55112-5798
Test Requested By:	Pete Musto
Model:	Model 3300
First Date of Test:	July 14, 2016
Last Date of Test:	August 11, 2016
Receipt Date of Samples:	July 14, 2016
Equipment Design Stage:	Production
Equipment Condition:	No Damage

Information Provided by the Party Requesting the Test

Functional Description of the EUT:

The Boston Scientific Model 3300 Latitude Programmer (PRM) is a device that is used to interrogate and program Boston Scientific PGs and defibrillators. PG specific software applications are loaded into the PRM and communicate with the implanted device. The telemetry communications allow the physician the ability to program the PG or query the PG for historical data or operating parameters. The PRM allows other external instruments or equipment to be connected, including printers, network connections, external display monitors, USB data storage devices, and cellular adapters. The PRM also provides a Pacing Systems Analyzer for implant lead evaluation and diagnostics.

Testing Objective:

Seeking FCC authorization for the 2 Channel MedRadio transmitter to FCC Part 95I.



Software/Firmware Running during test		
Description	Version	
MTI	1.3-1	

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Latitude Vision Programmer	Boston Scientific Corporation	3300	097

Peripherals in test setup boundary				
Description	Manufacturer	Model/Part Number	Serial Number	
AC/DC Adapter	GlobTek, Inc	GTM41133-9016-1.0-T3A	None	
External Antenna	Boston Scientific Corporation	3203	None	
USB Cellular Adapter	Boston Scientific Corporation	6295	085	
USB Memory Feature Key	Boston Scientific Corporation	None	043	
USB Memory MTI	Kingston	DTSE9 G2	None	
Inductive Telemetry Wand	Boston Scientific Corporation	6395	117	
Latitude Vision Stand	Boston Scientific Corporation	6755	None	

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Cable	Yes	2.5m	No	AC/DC Adapter	AC Mains
DC Cable	No	2m	Yes	AC/DC Adapter	Programmer
2.3/1.0 External Ant Cable	Yes	3m	No	External Antenna	Programmer
USB Cable	Yes	15 cm	Yes	USB Cellular Adapter	Programmer
Inductive Telemetry Wand Cable	Yes	3m	No	Inductive Telemetry Wand	Programmer
Display Port	Yes	2m	Yes	Programmer	Not Terminated
USB Cable	Yes	2m	Yes	Programmer	Not Terminated
Ethernet Cable	No	3m	No	Programmer	Terminated
Non Disposable PSA x2	Yes	2.5m	Yes	Programmer	Not Terminated
ECG Cable	Yes	3.5m	No	Programmer	Not Terminated
Conducted Telemetry Cable	Yes	2.5m	Yes	Programmer	Not Terminated



Software/Firmware Running during test		
Description	Version	
MTI	2.0-7	

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Latitude Vision Programmer	Boston Scientific Corporation	3300	097

Peripherals in test setup boundary				
Description	Manufacturer	Model/Part Number	Serial Number	
AC/DC Adapter	GlobTek, Inc	GTM41133-9016-1.0-T3A	None	
External Antenna	Boston Scientific Corporation	3203	None	
USB Cellular Adapter	Boston Scientific Corporation	6295	085	
USB Memory Feature Key	Boston Scientific Corporation	None	043	
USB Memory MTI	Kingston	DTSE9 G2	None	
Inductive Telemetry Wand	Boston Scientific Corporation	6395	117	
Latitude Vision Stand	Boston Scientific Corporation	6755	None	

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Cable	Yes	2.5m	No	AC/DC Adapter	AC Mains
DC Cable	No	2m	Yes	AC/DC Adapter	Programmer
2.3/1.0 External Ant Cable	Yes	3m	No	External Antenna	Programmer
USB Cable	Yes	15 cm	Yes	USB Cellular Adapter	Programmer
Inductive Telemetry Wand Cable	Yes	3m	No	Inductive Telemetry Wand	Programmer
Display Port	Yes	2m	Yes	Programmer	Not Terminated
USB Cable	Yes	2m	Yes	Programmer	Not Terminated
Ethernet Cable	No	3m	No	Programmer	Terminated
Non Disposable PSA x2	Yes	2.5m	Yes	Programmer	Not Terminated
ECG Cable	Yes	3.5m	No	Programmer	Not Terminated
Conducted Telemetry Cable	Yes	2.5m	Yes	Programmer	Not Terminated



Software/Firmware Running during test			
Description	Version		
MTI	2.0-7		

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Latitude Vision Programmer	Boston Scientific Corporation	3300	058

Peripherals in test setup boundary					
Description	Manufacturer	Model/Part Number	Serial Number		
AC/DC Adapter	GlobTek, Inc	GTM41133-9016-1.0-T3A	None		
USB Memory Feature Key	Boston Scientific Corporation	None	043		
USB Memory MTI	Kingston	DTSE9 G2	None		
Keyboard	Lenovo	KU-0989	1S54Y94890909725E		

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Cable	Yes	2.5m	No	AC/DC Adapter	AC Mains
DC Cable	No	2m	Yes	AC/DC Adapter	Programmer
USB Cable (Keyboard)	Yes	1.8m	No	Keyboard	Programmer



Software/Firmware Running during test			
Description	Version		
MTI	2.0-7		

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Latitude Vision Programmer	Boston Scientific Corporation	3300	058

Peripherals in test setup boundary				
Description	Manufacturer	Model/Part Number	Serial Number	
AC/DC Adapter	GlobTek, Inc	GTM41133-9016-1.0-T3A	None	
USB Memory Feature Key	Boston Scientific Corporation	None	043	
USB Memory MTI	Kingston	DTSE9 G2	None	
Keyboard	Lenovo	KU-0989	1S54Y94890909725E	
Mouse	Dynex	DX-WMSE	9D15A010642	
Monitor	Lenovo	2572-HD6	V8-M8573	

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Cable	Yes	2.5m	No	AC/DC Adapter	AC Mains
DC Cable	No	2m	Yes	AC/DC Adapter	Programmer
USB Cable (Keyboard)	Yes	1.8m	No	Keyboard	Programmer
USB Cable (Mouse)	Yes	1.8m	Yes	Mouse	Programmer
DisplayPort Cable	Yes	2m	Yes	Monitor	Programmer
AC Cable (Monitor)	No	1.8m	No	Monitor	AC Mains



Software/Firmware Running during test			
Description	Version		
MTI	1.3-1		

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Latitude Vision Programmer	Boston Scientific Corporation	3300	097

Peripherals in test setup boundary							
Description	Manufacturer	Model/Part Number	Serial Number				
AC/DC Adapter	GlobTek, Inc	GTM41133-9016-1.0-T3A	None				
External Antenna	Boston Scientific Corporation	3203	None				
USB Cellular Adapter	Boston Scientific Corporation	6295	085				
USB Memory Feature Key	Boston Scientific Corporation	None	043				
USB Memory MTI	Kingston	DTSE9 G2	None				
Inductive Telemetry Wand	Boston Scientific Corporation	6395	117				
Latitude Vision Stand	Boston Scientific Corporation	6755	None				

Cables							
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2		
AC Cable	Yes	2.5m	No	AC/DC Adapter	AC Mains		
DC Cable	No	2m	Yes	AC/DC Adapter	Programmer		
2.3/1.0 External Ant Cable	Yes	3m	3m No External Antenna		Programmer		
USB Cable	Yes	15 cm	Yes	USB Cellular Adapter	Programmer		
Inductive Telemetry Wand Cable	Yes	3m	No Inductive Telemetry Wand		Programmer		
Display Port	Yes	2m	Yes	Programmer	Not Terminated		
USB Cable	Yes	2m	Yes	Programmer	Not Terminated		
Non Disposable PSA x2	Yes	2.5m	Yes	Programmer	Not Terminated		
ECG Cable	Yes	3.5m	No	Programmer	Not Terminated		
Conducted Telemetry Cable	Yes	2.5m	Yes	Programmer	Not Terminated		

MODIFICATIONS



Equipment Modifications

Item	Date	Test	Modification	Note	Disposition of EUT
1	7/14/2016	Radiated Power	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
2	7/26/2016	Spurious Radiated Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
3	8/2/2016	Emissions Bandwidth	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
4	8/2/2016	Output Power	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
5	8/2/2016	Emissions Mask	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
6	8/2/2016	Spurious Conducted Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
7	8/10/2016	Frequency Stability	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
8	8/11/2016	Powerline Conducted Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was completed.



TEST DESCRIPTION

Using the mode of operation and configuration noted within this report, conducted emissions tests were performed. The frequency range investigated (scanned), is also noted in this report. Conducted power line measurements are made, unless otherwise specified, over the frequency range from 150 kHz to 30 MHz to determine the line-to-ground radio-noise voltage that is conducted from the EUT power-input terminals that are directly (or indirectly via separate transformer or power supplies) connected to a public power network. Per the standard, an insulating material was also added to ground plane between the EUT's power and remote I/O cables. Equipment is tested with power cords that are normally used or that have electrical or shielding characteristics that are the same as those cords normally used. Typically, those measurements are made using a LISN (Line Impedance Stabilization Network), the 500hm measuring port is terminated by a 500hm EMI meter or a 500hm resistive load. All 500hm measuring ports of the LISN are terminated by 500hm. The test data represents the configuration / operating mode/ model that produced the highest emission levels as compared to the specification limit.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
LISN	Solar Electronics	9252-50-R-24-BNC	LIY	3/21/2016	3/21/2017
Cable - Conducted Cable Assembly	Northwest EMC	MNC, HGN, TYK	MNCA	1/29/2016	1/29/2017
Receiver	Rohde & Schwarz	ESR7	ARI	6/14/2016	6/14/2017

MEASUREMENT UNCERTAINTY

Description		
Expanded k=2	2.4 dB	-2.4 dB

CONFIGURATIONS INVESTIGATED

BSTN0663-14

MODES INVESTIGATED

Transmitting MICS, 403.5108 MHz



EUT:	Model 3300				Work Order:	BSTN0663	
Serial Number:	097			Date:	08/11/2016		
Customer:	Boston Scien	tific Corpo	ration		Temperature:	23.6°C	
Attendees:	None				Relative Humidity:	57%	
Customer Project:	Laramie Visio	on			Bar. Pressure:	1012 mb	
Tested By:	Dustin Spark	S			Job Site:	MN03	
Power:	110VAC/60H	Z			Configuration:	BSTN0663-14	
TEST SPECIFIC	CATIONS						
Specification:	Specification: Method:						
FCC 15.207:2016				ANSI C63.1	0:2013		
TEST PARAME	TERS						
Run #: 7		Line:	High Line	1	Add. Ext. Attenuation (dB): 0	
COMMENTS							
Antenna port C							
EUT OPERATIN	NG MODES						
Transmitting MICS,	403.5108 MHz						
DEVIATIONS F	ROM TEST	STAND	ARD				
Nama							

None









RESULTS - Run #7

Quasi Peak Data - vs - Quasi Peak Limit							
Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)		
0.990	27.9	20.1	48.0	56.0	-8.0		
12.462	28.3	20.8	49.1	60.0	-10.9		
12.170	28.0	20.8	48.8	60.0	-11.2		
1.161	24.6	20.1	44.7	56.0	-11.3		
13.213	27.7	20.9	48.6	60.0	-11.4		
12.003	27.4	20.8	48.2	60.0	-11.8		
0.354	26.7	20.2	46.9	58.9	-12.0		
12.317	27.1	20.8	47.9	60.0	-12.1		
11.679	26.5	20.7	47.2	60.0	-12.8		
0.820	23.0	20.1	43.1	56.0	-12.9		
11.372	26.1	20.7	46.8	60.0	-13.2		

Average Data - vs - Average Limit							
Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)		
0.990	22.2	20.1	42.3	46.0	-3.7		
0.354	23.0	20.2	43.2	48.9	-5.7		
1.161	18.2	20.1	38.3	46.0	-7.7		
12.462	20.9	20.8	41.7	50.0	-8.3		
13.213	20.7	20.9	41.6	50.0	-8.4		
12.317	20.7	20.8	41.5	50.0	-8.5		
12.170	20.4	20.8	41.2	50.0	-8.8		
12.003	20.3	20.8	41.1	50.0	-8.9		
0.820	16.2	20.1	36.3	46.0	-9.7		
11.679	18.9	20.7	39.6	50.0	-10.4		
11.372	18.3	20.7	39.0	50.0	-11.0		

CONCLUSION

Pass

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Tested By



EUT:	Model 3300				Work Order:	BSTN0663	
Serial Number:	097				Date:	08/11/2016	
Customer:	Boston Scier	ntific Corpo	ration		Temperature:	23.6°C	
Attendees:	None				Relative Humidity:	57%	
Customer Project:	Laramie Visio	on			Bar. Pressure:	1012 mb	
Tested By:	Dustin Spark	S			Job Site:	MN03	
Power:	110VAC/60H	lz			Configuration:	BSTN0663-14	
TEST SPECIFI	CATIONS						
Specification:	Specification: Method:						
FCC 15.207:2016 ANSI C63.10:2013							
TEST PARAME	ETERS						
Run #: 8		Line:	Neutral		Add. Ext. Attenuation (dB	6): 0	
COMMENTS							
Antenna port C							
EUT OPERATI	NG MODES						
Transmitting MICS	, 403.5108 MHz	Z					
DEVIATIONS F	ROM TEST	STAND	ARD				
Mana							

None









RESULTS - Run #8

Quasi Peak Data - vs - Quasi Peak Limit								
Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)			
0.362	27.6	20.2	47.8	58.7	-10.9			
0.984	24.7	20.1	44.8	56.0	-11.2			
1.165	24.4	20.1	44.5	56.0	-11.5			
12.063	26.3	20.8	47.1	60.0	-12.9			
0.857	22.9	20.1	43.0	56.0	-13.0			
13.010	25.7	20.9	46.6	60.0	-13.4			
11.887	25.7	20.8	46.5	60.0	-13.5			
0.815	22.3	20.1	42.4	56.0	-13.6			

Average Data - vs - Average Limit							
Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)		
0.362	25.8	20.2	46.0	48.7	-2.7		
0.857	19.1	20.1	39.2	46.0	-6.8		
0.984	19.1	20.1	39.2	46.0	-6.8		
1.165	17.7	20.1	37.8	46.0	-8.2		
12.063	19.9	20.8	40.7	50.0	-9.3		
0.815	16.5	20.1	36.6	46.0	-9.4		
13.010	19.5	20.9	40.4	50.0	-9.6		
11.887	19.5	20.8	40.3	50.0	-9.7		

CONCLUSION

Pass

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Tested By

EMISSIONS BANDWIDTH



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

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Generator - Signal	Agilent	N5183A	TIK	10/17/2014	10/17/2017
Cable	ESM Cable Corp.	TTBJ141 KMKM-72	MNU	9/18/2015	9/18/2016
Attenuator	S.M. Electronics	SA26B-20	RFW	2/26/2016	2/26/2017
Block - DC	Fairview Microwave	SD3379	AMI	9/18/2015	9/18/2016
Analyzer - Spectrum Analyzer	Agilent	E4440A	AAX	3/24/2016	3/24/2017

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. Per 47 CFR 95.633(e)(3), the emission bandwidth was determined by measuring the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, that are 20 dB down relative to the maximum level of the modulated carrier. A spectrum analyzer using a peak detector with no video filtering was used with a resolution bandwidth equal to approximately 1.0 percent of the emission bandwidth of the EUT.

EMISSIONS BANDWIDTH

NORTH	WEST
EN	IC Mit 2016.05.06

EUT	Model 3300	Work Order	BSTN0663	
Serial Number	058	Date	08/02/16	
Customer	Boston Scientific Corporation	Temperature	23.4 °C	
Attendees	None	Humidity	59.3% RH	
Project	Laramie Vision	Barometric Pres.	1020 mbar	
Tested by	Dustin Sparks Power: 110VAC/60Hz	Job Site	MN08	
TEST SPECIFICAT	ONS Test Method			
FCC 95I:2016	FCC 95.633(e)(3)			
COMMENTS				
Transmitting MICS	2 Channel (Gen 1/2), antenna port C.			
DEVIATIONS FRO	I TEST STANDARD			
None				
Configuration #	5 Signature			
			Limit	
		Value	(≤)	Result
Antenna Port C				
	Mid Band, 403.5108 MHz (Gen 1/2)	90.825 kHz	300 kHz	Pass

EMISSIONS BANDWIDTH





EMISSIONS MASK



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

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Generator - Signal	Agilent	N5183A	TIK	10/17/2014	10/17/2017
Cable	ESM Cable Corp.	TTBJ141 KMKM-72	MNU	9/18/2015	9/18/2016
Attenuator	S.M. Electronics	SA26B-20	RFW	2/26/2016	2/26/2017
Block - DC	Fairview Microwave	SD3379	AMI	9/18/2015	9/18/2016
Analyzer - Spectrum Analyzer	Agilent	E4440A	AAX	3/24/2016	3/24/2017

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. Per 47 CFR 95.635(d)(4) the emission mask was measured. Emissions more than 150 kHz away from the center frequency must be attenuated below the transmitter output power by at least 20 dB. This was evaluated by the Occupied Bandwidth measurement according to 47 CFR 95.633(e)(1). In addition, emissions 250 kHz or less above and below the MICS band (402-405 MHz) must be attenuated below the maximum permitted output power by at least 20 dB.

A spectrum analyzer was used to measure the emission mask. A spectrum analyzer using a peak detector with no video filtering was used with a resolution bandwidth equal to approximately 1.0 percent of the emission bandwidth of the EUT. However, various plots were made using different frequency spans and resolution bandwidths in an attempt to not only satisfy the measurement criteria, but to also show that all emissions outside of the occupied band are greatly attenuated.

EMISSIONS MASK



EUT	: Model 3300			Work Order:	BSTN0663		
Serial Number	r: 058		Date: 08/02/16				
Customer	r: Boston Scientific Corpora	tion		Temperature:	23.7 °C		
Attendees	: None			Humidity:	58.9% RH		
Project	t: Laramie Vision			Barometric Pres.:	1020 mbar		
Tested by	: Dustin Sparks		Power: 110VAC/60Hz	Job Site:	MN08		
TEST SPECIFICAT	TIONS		Test Method				
FCC 95I:2016			FCC 95.635(d)(4-5)				
COMMENTS							
Transmitting MICS	S 2 Channel (Gen 1/2).						
DEVIATIONS FRO	M TEST STANDARD						
None							
Configuration #	5	Signature	Dustin Sparlo				
		olghatare		Value	Limit		
				(dBc)	≤ (dBc)	Result	
Antenna Port C							
	402.8183 MHz (Gen 1/2)			-64.56	-20	Pass	
	100 5100 101 (0 10)						

EMISSIONS MASK





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der dar bei

#VBW 9.1 kHz

£(f): f>50k

Swp

Center 405.000 0 MHz

#Res BW 3 kHz

Span 4.5 MHz

Sweep 477.5 ms (2000 pts)

CONDUCTED OUTPUT POWER



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	S.M. Electronics	SA26B-20	RFW	2/26/2016	2/26/2017
Block - DC	Fairview Microwave	SD3379	AMI	9/18/2015	9/18/2016
Cable	ESM Cable Corp.	TTBJ141 KMKM-72	MNU	9/18/2015	9/18/2016
Generator - Signal	Agilent	N5183A	TIK	10/17/2014	10/17/2017
Analyzer - Spectrum Analyzer	Agilent	E4440A	AAX	3/24/2016	3/24/2017

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. Per FCC Part 2.1046, RSS-GEN, the output power shall be measured at the RF terminal. The peak output power was measured with the EUT configured in the modes listed in the datasheet. The EUT was transmitting at its maximum data rate.

FCC Part 95 and RSS-243 have no conducted output power limit. It is a requirement to characterize this information and that data is contained within this datasheet.

CONDUCTED OUTPUT POWER



Limit

N/A

Result

N/A

FCC 951:2016				ANSI/TIA/EIA-603-D-2010	
COMMENTS					
None.					
DEVIATIONS FRO	M TEST STANDARD				
None					
Configuration #	5	Signature	Dusting	Sparlo	
					Value
Antenna Port C					
	Mid Band, 403.5108 MHz	(Gen 1/2)			52.869 uW

CONDUCTED OUTPUT POWER



NORTHWEST



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

Manufacturer	Model	ID	Last Cal.	Cal. Due
Omega Engineering, Inc.	HH311	DUB	11/3/2014	11/3/2017
Cincinnati Sub Zero (CSZ)	ZPH-32-3.5-SCT/AC	TBF	10/21/2015	10/21/2016
Fluke	114	MMU	6/30/2014	6/30/2017
Agilent	N5182A	TIF	8/12/2014	8/12/2017
ESM Cable Corp.	TTBJ141 KMKM-72	MNU	9/18/2015	9/18/2016
S.M. Electronics	SA26B-20	RFW	2/26/2016	2/26/2017
Fairview Microwave	SD3379	AMI	9/18/2015	9/18/2016
Agilent	E4440A	AAX	3/24/2016	3/24/2017
	Manufacturer Omega Engineering, Inc. Cincinnati Sub Zero (CSZ) Fluke Agilent ESM Cable Corp. S.M. Electronics Fairview Microwave Agilent	ManufacturerModelOmega Engineering, Inc.HH311Cincinnati Sub Zero (CSZ)ZPH-32-3.5-SCT/ACFluke114AgilentN5182AESM Cable Corp.TTBJ141 KMKM-72S.M. ElectronicsSA26B-20Fairview MicrowaveSD3379AgilentE4440A	ManufacturerModelIDOmega Engineering, Inc.HH311DUBCincinnati Sub Zero (CSZ)ZPH-32-3.5-SCT/ACTBFFluke114MMUAgilentN5182ATIFESM Cable Corp.TTBJ141 KMKM-72MNUS.M. ElectronicsSA26B-20RFWFairview MicrowaveSD3379AMIAgilentE4440AAAX	Manufacturer Model ID Last Cal. Omega Engineering, Inc. HH311 DUB 11/3/2014 Cincinnati Sub Zero (CSZ) ZPH-32-3.5-SCT/AC TBF 10/21/2015 Fluke 114 MMU 6/30/2014 Agilent N5182A TIF 8/12/2015 S.M. Electronics SA26B-20 RFW 2/26/2016 Fairview Microwave SD3379 AMI 9/18/2015 Agilent E4440A AAX 3/24/2016

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. The spectrum analyzer is configured with a precision frequency reference that exceeds the stability requirement of the transmitter. The EUT was placed inside a temperature / humidity chamber.

Variation of Supply Voltage

The primary supply voltage was varied from 85% to 115% of the nominal voltage. A variac was used to vary the supply voltage.

Variation of Ambient Temperature

Using a temperature chamber, the transmit frequency was recorded at the extremes of the specified temperature range ($+0^{\circ}C$, $+10^{\circ}C$, $+20^{\circ}C$, $+30^{\circ}C$, $+40^{\circ}C$, $+50^{\circ}C$, and $+55^{\circ}C$).

NOR	THW	/EST
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EUT:	Model 3300						Work Order:	BSTN0663	
Serial Number:	058			Date:	08/10/16				
Customer:	Boston Scientific Corpor	ration					Temperature:	23.3 °C	
Attendees:	None						Humidity:	65.1% RH	
Project:	Laramie Vision						Barometric Pres.:	1016 mbar	
Tested by:	Dustin Sparks		Pow	er: 120VAC/60Hz			Job Site:	MN08	
TEST SPECIFICATI	ONS			Test Method					
FCC 95I:2016				ANSI/TIA/EIA-603-D	-2010				
COMMENTS									
Transmitting rando	m MICS 2 Channel (Gen	1/2), antenna port C.							
DEVIATIONS FROM	I TEST STANDARD								
None									
Configuration #	6	Signature	Sustin	Sparlo					
					Measured Value (MHz)	Assigned Value (MHz)	Error (ppm)	Limit (ppm)	Results
Normal Voltage (120	VAC/60Hz)								
	403.5108 MHz				403.523	403.5108	30.2	100	Pass
Extreme Voltage +15	5% (138VAC/60Hz)								
	403.5108 MHz				403.528	403.5108	42.6	100	Pass
Extreme Voltage -15	% (102VAC/60Hz)								_
	403.5108 MHz				403.527	403.5108	40.2	100	Pass
Extreme Temperatur	re +55°C								
	403.5108 MHz				403.528	403.5108	42.6	100	Pass
Extreme Temperatur	re +50°C				400 500	100 5100			
E	403.5108 MHz				403.523	403.5108	30.2	100	Pass
Extreme Temperatur	102 5100 MU				400 500	400 5100	20.0	100	Deee
Extreme Temperature	403.5106 MHZ				403.523	403.5106	30.2	100	Pass
Extreme remperatur	402 E108 MH-				402 529	402 5109	10.6	100	Bass
Extromo Tomporatur	403.5106 MHZ				403.320	403.3106	42.0	100	F d55
	403 5108 MHz				403 528	403 5108	42.6	100	Pass
Extreme Temperatur	200.0100 Nin 2				400.020	400.0100	42.0	100	1 435
Exactine remperator	403 5108 MHz				403 532	403 5108	52.5	100	Pass
Extreme Temperatur	re 0°C				100.002	100.0100	02.0		
	403.5108 MHz				403.532	403.5108	52.5	100	Pass





	Measured	Assigned	Error	Limit	
	Value (MHz)	Value (MHz)	(ppm)	(ppm)	Results
	403.528	403.5108	42.6	100	Pass































	Measured	Assigned	Error	Limit	
	Value (MHz)	Value (MHz)	(ppm)	(ppm)	Results
	403.532	403.5108	52.5	100	Pass



SPURIOUS RADIATED EMISSIONS



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

Transmit. Mid Channel 10, 403.5108 MHz, FSK Modulation

POWER SETTINGS INVESTIGATED

110VAC/60Hz

CONFIGURATIONS INVESTIGATED

BSTN0663 - 3

FREQUENCY RANGE INVESTIGATED

Start Frequency 30 MHz

Stop Frequency 5000 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
Amplifier - Pre-Amplifier	Miteq	AM-1616-1000	AVO	12/10/2015	12 mo
Cable	ESM Cable Corp.	Bilog Cables	MNH	12/7/2015	12 mo
Antenna - Biconilog	Teseq	CBL 6141B	AYD	1/6/2016	24 mo
Amplifier - Pre-Amplifier	Miteq	AMF-3D-00100800-32-13P	AVT	3/1/2016	12 mo
Cable	ESM Cable Corp.	Double Ridge Guide Horn Cables	MNI	12/7/2015	12 mo
Antenna - Double Ridge	ETS Lindgren	3115	AIB	8/12/2014	24 mo
Analyzer - Spectrum Analyzer	Agilent	N9010A	AFI	1/27/2016	12 mo

MEASUREMENT BANDWIDTHS

Frequency Range	Peak Data	Quasi-Peak Data	Average Data					
(MHz)	(kHz)	(kHz)	(kHz)					
0.01 - 0.15	1.0	0.2	0.2					
0.15 - 30.0	10.0	9.0	9.0					
30.0 - 1000	100.0	120.0	120.0					
Above 1000	1000.0	N/A	1000.0					

TEST DESCRIPTION

At an approved test site, the transmitter is place on a remotely controlled turntable, and the measurement antenna is placed 3 meters antenna is also varied from 1 to 4 meters. The amplitude and frequency of the highest emissions are noted. The transmitter is then replaced with a ½ wave dipole that is successively tuned to each of the highest spurious emissions. A signal generator is connected to the dipole (horn antenna for frequencies above 1 GHz), and its output is adjusted to match the level previously noted for each frequency. The output of the signal generator is recorded, and by factoring in the cable loss to the dipole antenna and its gain; the power (dBm) into an ideal ½ wave dipole antenna is determined for each radiated spurious emission.

SPURIOUS RADIATED EMISSIONS



NORTHWEST

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
807.073	15.3	10.0	1.0	264.0	3.0	0.0	Horz	QP	0.0	25.3	46.0	-20.7	Mid Ch 10, 403.51 MHz, Ant C, EUT Vert
806.592	15.1	10.1	1.0	190.0	3.0	0.0	Vert	QP	0.0	25.2	46.0	-20.8	Mid Ch 10, 403.51 MHz, Ant C, EUT Vert
1210.420	35.3	-7.6	1.2	14.0	3.0	0.0	Vert	AV	0.0	27.7	54.0	-26.3	Mid Ch 10, 403.51 MHz, Ant C, EUT Vert
1210.605	35.0	-7.6	1.0	360.0	3.0	0.0	Horz	AV	0.0	27.4	54.0	-26.6	Mid Ch 10, 403.51 MHz, Ant C, EUT Vert
1614.580	31.5	-6.2	1.0	46.0	3.0	0.0	Horz	AV	0.0	25.3	54.0	-28.7	Mid Ch 10, 403.51 MHz, Ant C, EUT Vert
1615.105	31.5	-6.2	1.0	166.1	3.0	0.0	Vert	AV	0.0	25.3	54.0	-28.7	Mid Ch 10, 403.51 MHz, Ant C, EUT Vert
1210.530	32.5	-7.6	1.0	39.0	3.0	0.0	Horz	AV	0.0	24.9	54.0	-29.1	Mid Ch 10, 403.51 MHz, Ant C, EUT Horz
1210.460	31.9	-7.6	1.0	312.9	3.0	0.0	Vert	AV	0.0	24.3	54.0	-29.7	Mid Ch 10, 403.51 MHz, Ant C, EUT Horz
1210.345	44.5	-7.6	1.2	14.0	3.0	0.0	Vert	PK	0.0	36.9	74.0	-37.1	Mid Ch 10, 403.51 MHz, Ant C, EUT Vert
1615.405	42.9	-6.2	1.0	46.0	3.0	0.0	Horz	PK	0.0	36.7	74.0	-37.3	Mid Ch 10, 403.51 MHz, Ant C, EUT Vert
1210.125	44.1	-7.6	1.0	39.0	3.0	0.0	Horz	PK	0.0	36.5	74.0	-37.5	Mid Ch 10, 403.51 MHz, Ant C, EUT Horz
1615.015	42.5	-6.2	1.0	166.1	3.0	0.0	Vert	PK	0.0	36.3	74.0	-37.7	Mid Ch 10, 403.51 MHz, Ant C, EUT Vert
1210.525	43.8	-7.6	1.0	360.0	3.0	0.0	Horz	PK	0.0	36.2	74.0	-37.8	Mid Ch 10, 403.51 MHz, Ant C, EUT Vert
1210.770	43.3	-7.6	1.0	312.9	3.0	0.0	Vert	PK	0.0	35.7	74.0	-38.3	Mid Ch 10, 403.51 MHz, Ant C, EUT Horz

SPURIOUS CONDUCTED EMISSIONS



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

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Generator - Signal	Agilent	N5183A	TIK	10/17/2014	10/17/2017
Cable	ESM Cable Corp.	TTBJ141 KMKM-72	MNU	9/18/2015	9/18/2016
Attenuator	S.M. Electronics	SA26B-20	RFW	2/26/2016	2/26/2017
Block - DC	Fairview Microwave	SD3379	AMI	9/18/2015	9/18/2016
Analyzer - Spectrum Analyzer	Agilent	E4440A	AAX	3/24/2016	3/24/2017

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. Per FCC Part 2.1052, RSS-GEN, the spurious emissions shall be measured at the RF terminal. The peak spurious emissions were measured with the EUT configured to the modes listed in the datasheet. The EUT was transmitting at its maximum data rate.

FCC Part 95 and RSS-243 have no conducted spurious emissions limit. It is a requirement to characterize this information and that data is contained within this datasheet.

SPURIOUS CONDUCTED EMISSIONS



EUT:	Model 3300		Work Order:	BSTN0663						
Serial Number:	058	Date:	08/02/16							
Customer:	Boston Scientific Corporation		Temperature:	23.5 °C						
Attendees:	None		Humidity:	59.3% RH						
Project:	Laramie Vision		Barometric Pres.:	1020 mbar						
Tested by:	Dustin Sparks	Power: 110VAC/60Hz	Job Site:	MN08						
TEST SPECIFICAT	IONS	Test Method								
FCC 95I:2016		ANSI/TIA/EIA-603-D-2010								
COMMENTS										
Transmitting MICS	Transmitting MICS 2 Channel (Gen 1/2).									
DEVIATIONS FROM	M TEST STANDARD									
None										
Configuration #	5 Signature	Dustin Spards								
		Frequency	Max Value	Limit						
		Range	(dBc)	A (dBc)	Result					
Antenna Port C										
	Mid Band, 403.5108 MHz (Gen 1/2)	30 MHz - 5 GHz	-45.18	N/A	N/A					

SPURIOUS CONDUCTED EMISSIONS



Antenna Port C, Mid Band, 403.5108 MHz (Gen 1/2)												
			Freque	ncy			Max	Value	Limit			
			Rang	e			(d	IBc)	A (dBc)	Res	ult	
			30 MHz - 5	5 GHz			-4	5.18	N/A	N//	Ą	
												_
	🗧 Agilei	nt 09:3	36 : 11 Au	ıg 2, 201	6				RT			
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#Re	es BW 1	.00 kH:	Z		#	ARM 300	kHz		Sweep 475	.1 ms (8)	192 pts)	

RADIATED POWER



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

Transmit, 403.5108 MHz, CW

POWER SETTINGS INVESTIGATED

110VAC/60Hz

CONFIGURATIONS INVESTIGATED

BSTN0663 - 2

FREQUENCY RANGE INVESTIGATED

Stop Frequency 406 MHz

SAMPLE CALCULATIONS

Start Frequency 401 MHz

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
Power Sensor	Agilent	N8481A	SQN	8/17/2015	12 mo
Meter - Power	Agilent	N1913A	SQL	8/17/2015	12 mo
Antenna - Dipole	EMCO	3121C-DB4	ADI	2/10/2016	36 mo
Generator - Signal	Agilent	N5183A	TIK	10/17/2014	36 mo
Cable	ESM Cable Corp.	Bilog Cables	MNH	12/7/2015	12 mo
Antenna - Biconilog	Teseq	CBL 6141B	AYD	1/6/2016	24 mo
Analyzer - Spectrum Analyzer	Agilent	N9010A	AFI	1/27/2016	12 mo

MEASUREMENT BANDWIDTHS

Frequency Range	Peak Data	Quasi-Peak Data	Average Data
(MHz)	(kHz)	(kHz)	(kHz)
0.01 - 0.15	1.0	0.2	0.2
0.15 - 30.0	10.0	9.0	9.0
30.0 - 1000	100.0	120.0	120.0
Above 1000	1000.0	N/A	1000.0

TEST DESCRIPTION

Per 95.627(g)(3)(i), the maximum radiated field strength for a MICS transmitter is 25uW EIRP. The Field Strength of the Fundamental data was converted to EIRP with the formula based upon the Friis transmission equation with 6 dB removed due to reflections from the ground plane: EIRP = $((E/2)*d)^2/30$ where E is V/m and d = distance = 3m, and EIRP = W.

The Field Strength of the Fundamental was measured in the far-field at an FCC Listed Semi-anechoic Chamber. Spectrum analyzer and linearly polarized antennas were used to measure the radiated field strength of the fundamental.

The orientation of the EUT and measurement antenna were manipulated to maximize the level of emissions. The turntable azimuth was varied to maximize the level of radiated emissions. The height of the measurement antenna was also varied from 1 to 4 meters. The amplitude and frequency of the emissions were noted.

The EUT was configured to transmit in a fixture that simulates the human torso. The dimensions of the test fixture and the characteristics of the tissue substitute material met the requirements 95.627(g)(3)(i), and FCC KDB 617965. The height of the transmitter was 1.5-meter above the reference ground plane.

RADIATED POWER



Work Order: BSTN0663 Date: 07/20/16 Project: 24.2 °C Laramie Vision Temperature: Job Site: MN05 Humidity: 57.6% RH Serial Number: 097 **Barometric Pres.:** 1019 mbar Tested by: Jared Ison EUT: Model 3300 Configuration: 2 Customer: Boston Scientific Corporation Attendees: Pete Musto EUT Power: 110VAC/60Hz Transmit, 403.5108 MHz, CW **Operating Mode:** None **Deviations:** 2 Channel. Comments: **Test Specifications** Test Method FCC 95I:2016 ANSI/TIA/EIA-603-D-2010 1 to 4(m) Run # 44 Test Distance (m) 3 Antenna Height(s) Results Pass 0 -10 -20 -30 **Hang** -40 -50 -60 -70 -80 402.0 402.5 403.0 403.5 404.0 404.5 405.0 MHz QP PK AV Polarity/ Transduce Compared to FIRP FIRP Spec. Limit Comments Freq Antenna Height Azimuth Туре Detector Spec. (Watts) (dBm) (dB) (MHz) (meters) (degrees) (dBm) ΡK 403.558 1.98E-05 -17.03 Ch. 10: 403.5108 MHz, Ant C, EUT Horz 1.0 12.1 Horz -16.0 -1.0

2.3

2.6

1.0

9.0

93.0

108.1

Horz

Vert

Vert

ΡK

ΡK

ΡK

1.22E-05

9.93E-06

6.41E-06

-19.13

-20.03

-21.93

-16.0

-16.0

-16.0

-3.1

-4.0

-5.9

403.558

403.552

403.558

Ch. 10: 403.5108 MHz, Ant C, EUT Vert

Ch. 10: 403.5108 MHz, Ant C, EUT Horz

Ch. 10: 403.5108 MHz, Ant C, EUT Vert