



Boston Scientific Corporation
Model 6280

FCC 15.205:2013 / FCC 15.249:2013 / FCC 15.109:2013 / FCC 15.207:2013

Report #: BSTN0429



Report Prepared By Northwest EMC Inc.

NORTHWEST EMC – (888) 364-2378 – www.nwemc.com

California – Minnesota – Oregon – New York – Washington



CERTIFICATE OF TEST

Last Date of Test: August 16, 2013
Boston Scientific Corporation
Model: 6280

Emissions

| Test Description | Specification | Test Method | Pass/Fail |
|--------------------------------------|-------------------------|------------------|-----------|
| Field Strength of Spurious Emissions | FCC 15.205:2013 | ANSI C63.10:2009 | Pass |
| Field Strength of Fundamental | FCC 15.249:2013 | ANSI C63.10:2009 | Pass |
| Spurious Radiated Emissions | FCC 15.249:2013 | ANSI C63.10:2009 | Pass |
| Receiver Spurious Emissions | FCC 15.109:2013 Class B | ANSI C63.4:2009 | Pass |
| AC Powerline Conducted Emissions | FCC 15.207:2013 | ANSI C63.10:2009 | Pass |

Deviations From Test Standards

None

Approved By:

Tim O'Shea, Operations Manager



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.

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. This Report may only be duplicated in its entirety. 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.

| Revision Number | Description | Date | Page Number |
|-----------------|-------------|------|-------------|
| 00 | None | | |

Barometric Pressure

The recorded barometric pressure has been normalized to sea level.

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 Guide 65 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

IC - Recognized by Industry Canada as a Certification Body (CB). Certification chambers and Open Area Test Sites are filed with IC.

European Union

European Commission - Validated by the European Commission as a Conformity Assessment Body (CAB) under the EMC directive and 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

KCC / 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.

Hong Kong

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

Vietnam

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

Russia

GOST - Accredited by Certinform VNIINMASH, CERTINFO, SAMTES, and Federal CHEC to perform EMC and Hygienic testing for Information Technology products to GOST standards.

SCOPE

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

<http://www.nwemc.com/accreditations/>

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 listed below. 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 16-4-1 as applicable), and are available upon request.

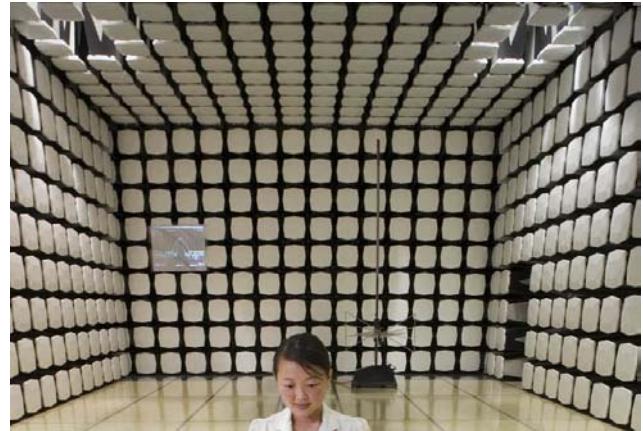
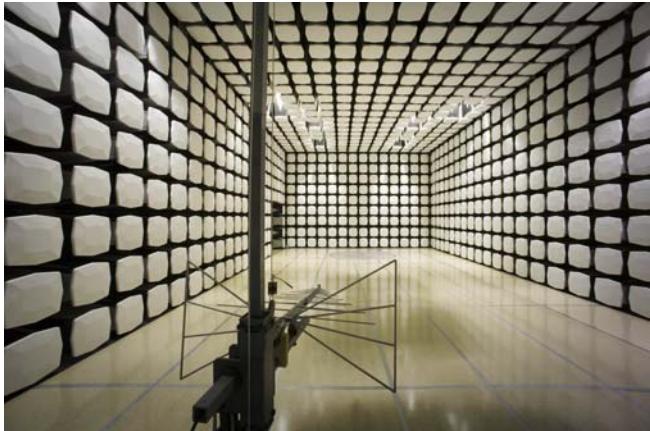
The following table represents the Measurement Uncertainty (MU) budgets for each of the tests that may be contained in this report.

| Test | + MU | - MU |
|---------------------------------------|------|-------|
| Frequency Accuracy (Hz) | 0.12 | -0.01 |
| Amplitude Accuracy (dB) | 0.49 | -0.49 |
| Conducted Power (dB) | 0.41 | -0.41 |
| Radiated Power via Substitution (dB) | 0.69 | -0.68 |
| Temperature (degrees C) | 0.81 | -0.81 |
| Humidity (% RH) | 2.89 | -2.89 |
| Field Strength (dB) | 3.80 | -3.80 |
| AC Powerline Conducted Emissions (dB) | 2.94 | -2.94 |

LOCATIONS



| | | | | |
|---|---|--|---|---|
| Oregon Labs EV01-12 22975 NW Evergreen Pkwy Hillsboro, OR 97124 (503) 844-4066 | California Labs OC01-13 41 Tesla Irvine, CA 92618 (949) 861-8918 | New York Labs NY01-04 4939 Jordan Rd. Elbridge, NY 13060 (315) 685-0796 | Minnesota Labs MN01-08 9349 W Broadway Ave. Brooklyn Park, MN 55445 (763) 425-2281 | Washington Labs NC01-05, SU02, SU07 19201 120 th Ave. NE Bothell, WA 98011 (425) 984-6600 |
| VCCI | | | | |
| A-0108 | A-0029 | | A-0109 | A-0110 |
| Industry Canada | | | | |
| 2834D-1, 2834D-2 | 2834B-1, 2834B-2, 2834B-3 | | 2834E-1 | 2834C-1 |
| NVLAP | | | | |
| NVLAP Lab Code: 200630-0 | NVLAP Lab Code: 200676-0 | NVLAP Lab Code: 200761-0 | NVLAP Lab Code: 200881-0 | NVLAP Lab Code: 200629-0 |





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 6280 |
| First Date of Test: | August 8, 2013 |
| Last Date of Test: | August 16, 2013 |
| Receipt Date of Samples: | August 1, 2013 |
| Equipment Design Stage: | Production |
| Equipment Condition: | No Damage |

Information Provided by the Party Requesting the Test

Functional Description of the EUT (Equipment Under Test):

In-Home Patient Management System allows one to remotely follow most Boston Scientific device patients.

Testing Objective:

To demonstrate FCC compliance for the ISM radio per Boston Scientific EDVT Protocol 1114585.

Configuration BSTN0429- 9

| EUT | | | | |
|---------------------------|-------------------------------|-------------------|---------------|--|
| Description | Manufacturer | Model/Part Number | Serial Number | |
| Jaguar Communicator (ISM) | Boston Scientific Corporation | 6280 | 0000270 | |
| Cell Modem (ISM) | Boston Scientific Corporation | 400379-010 | 0000090 | |
| DC Brick (Jaguar) | GlobTek Inc. | GTM41061-1512-7.0 | None | |
| Bluetooth Dongle | Delta Mobile Systems | DM210 | None | |

| Peripherals in test setup boundary | | | | |
|------------------------------------|-------------------------------|-------------------|---------------|--|
| Description | Manufacturer | Model/Part Number | Serial Number | |
| Pulse Generator (ISM) | Boston Scientific Corporation | K274-200-0 | 300601 | |

| Remote Equipment Outside of Test Setup Boundary | | | | |
|---|-------------------------|-------------------|---------------|--|
| Description | Manufacturer | Model/Part Number | Serial Number | |
| Netbook (ISM) | Gateway | LT4004U | 20210594576 | |
| DC Brick (Gateway Netbook) | Leader Electronics Inc. | 1U40-11190-0115 | None | |
| USB to Serial Adapter | FTDI | None | None | |

| Cables | | | | | |
|------------|--------|------------|---------|-----------------------|---------------------|
| Cable Type | Shield | Length (m) | Ferrite | Connection 1 | Connection 2 |
| DC Power | No | 1.90m | Yes | DC Brick | Jaguar Communicator |
| USB | Yes | 0.20m | Yes | Cell Modem | Jaguar Communicator |
| Serial | Yes | 1.90m | No | USB to Serial Adapter | Jaguar Communicator |
| DC Power | No | 2.50m | Yes | DC Brick | Netbook |
| RJ11 (x2) | No | 2.15m | No | Unterminated | Jaguar Communicator |

PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.

Configuration BSTN0429- 14

| EUT | | | |
|---------------------------|-------------------------------|--------------------------|----------------------|
| Description | Manufacturer | Model/Part Number | Serial Number |
| Cell Modem (MICS) | Boston Scientific Corporation | 400379-010 | 0000085 |
| DC Brick (Jaguar) | GlobTek Inc. | GTM41061-1512-7.0 | None |
| Bluetooth Dongle | Delta Mobile Systems | DM210 | None |
| Jaguar Communicator (ISM) | Boston Scientific Corporation | 6280 | 0000245 |

| Cables | | | | | |
|-------------------|---------------|-------------------|----------------|---------------------|---------------------|
| Cable Type | Shield | Length (m) | Ferrite | Connection 1 | Connection 2 |
| DC Power | No | 1.90m | Yes | DC Brick | Jaguar Communicator |
| USB | Yes | 0.20m | Yes | Cell Modem | Jaguar Communicator |
| RJ11 (x2) | No | 2.15m | No | Unterminated | Jaguar Communicator |

PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.

MODIFICATIONS

Equipment Modifications

| Item | Date | Test | Modification | Note | Disposition of EUT |
|------|-----------|----------------------------------|--------------------------------------|---|---|
| 1 | 8/8/2013 | AC Powerline 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. |
| 2 | 8/16/2013 | Field Strength of Fundamental | 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 | 8/16/2013 | 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. |
| 4 | 8/16/2013 | Receiver Spurious Emissions | Tested as delivered to Test Station. | No EMI suppression devices were added or modified during this test. | Scheduled testing was completed. |

Field Strength of Fundamental

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

Per Boston Scientific EDVT# 1114585: Mode 2, Transmitting 916.5 MHz ISM, unmodulated (All ones).

POWER SETTINGS INVESTIGATED

110VAC/60Hz

CONFIGURATIONS INVESTIGATED

BSTN0429 - 14

FREQUENCY RANGE INVESTIGATED

| | | | |
|-----------------|---------|----------------|---------|
| Start Frequency | 902 MHz | Stop Frequency | 928 MHz |
|-----------------|---------|----------------|---------|

SAMPLE CALCULATIONS

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

TEST EQUIPMENT

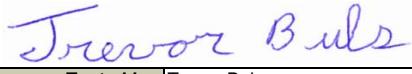
| Description | Manufacturer | Model | ID | Last Cal. | Interval |
|-------------------|-----------------|--------------|-----|------------|----------|
| MN05 Cables | ESM Cable Corp. | Bilog Cables | MNH | 5/20/2013 | 12 mo |
| Antenna, Bilog | Teseq | CBL 6141B | AYD | 12/17/2012 | 12 mo |
| Spectrum Analyzer | Agilent | N9010A | AFI | 1/27/2013 | 24 mo |

MEASUREMENT BANDWIDTHS

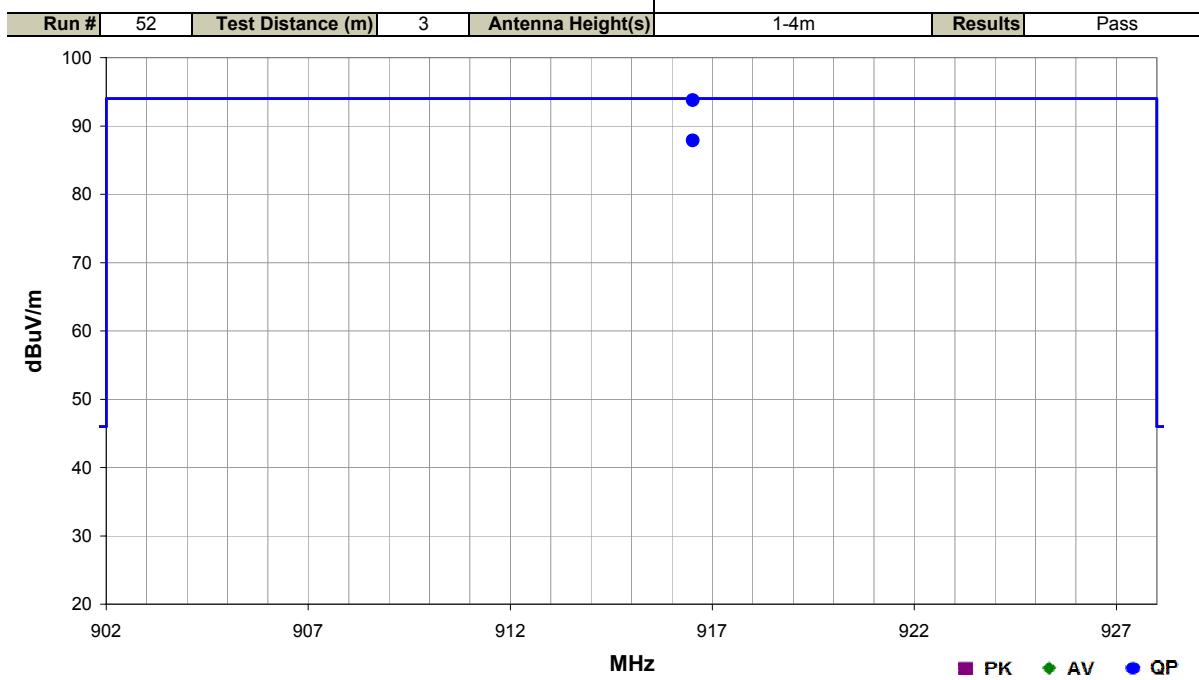
| Frequency Range (MHz) | Peak Data (kHz) | Quasi-Peak Data (kHz) | Average Data (kHz) |
|-----------------------|-----------------|-----------------------|--------------------|
| 0.01 - 0.15 | 1.0 | 0.2 | 0.2 |
| 0.15 - 30.0 | 10.0 | 9.0 | 9.0 |
| 30.0 - 1000 | 100.0 | 120.0 | 120.0 |
| Above 1000 |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

TEST DESCRIPTION

The antennas to be used with the EUT were tested. The EUT was transmitting and while set at the only channel available. While scanning, emissions from the EUT were maximized by rotating the EUT, adjusting the measurement antenna height and polarization, and manipulating the EUT and EUT antenna in 3 orthogonal planes (per ANSI C63.10:2009).

| | | | | | |
|-----------------|--|-------------------|-------------|--|-------------|
| Work Order: | BSTN0429 | Date: | 08/16/13 |  | |
| Project: | None | Temperature: | 23.7 °C | | |
| Job Site: | MN05 | Humidity: | 46.9% RH | | |
| Serial Number: | 245 | Barometric Pres.: | 1021.5 mbar | Tested by: | Trevor Buls |
| EUT: | Model 6280 | | | | |
| Configuration: | 14 | | | | |
| Customer: | Boston Scientific Corporation | | | | |
| Attendees: | None | | | | |
| EUT Power: | 110VAC/60Hz | | | | |
| Operating Mode: | Per Boston Scientific EDVT# 1114585: Mode 2, Transmitting 916.5 MHz ISM, unmodulated (All ones). | | | | |
| Deviations: | None | | | | |
| Comments: | Manufacturer states that EUT will always be operated in horizontal position. | | | | |

| Test Specifications | Test Method |
|---------------------|------------------|
| FCC 15.249:2013 | ANSI C63.10:2009 |



| 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) |
|------------|------------------|-------------|-------------------------|-------------------|------------------------|---------------------------|--------------------------|----------|--------------------------|-------------------|----------------------|------------------------|
| 916.515 | 63.8 | 29.9 | 1.0 | 144.0 | 3.0 | 0.0 | QP | QP | 0.0 | 93.7 | 94.0 | -0.3 |
| 916.515 | 57.9 | 29.9 | 1.1 | 214.0 | 3.0 | 0.0 | QP | QP | 0.0 | 87.8 | 94.0 | -6.2 |

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

Per Boston Scientific EDVT# 1114585: Mode 2, Transmitting 916.5 MHz ISM, modulated (Pseudorandom).

POWER SETTINGS INVESTIGATED

110VAC/60Hz

CONFIGURATIONS INVESTIGATED

BSTN0429 - 14

FREQUENCY RANGE INVESTIGATED

| | | | |
|-----------------|--------|----------------|--------|
| Start Frequency | 30 MHz | Stop Frequency | 10 GHz |
|-----------------|--------|----------------|--------|

SAMPLE CALCULATIONS

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

TEST EQUIPMENT

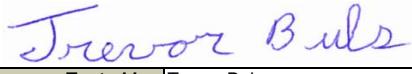
| Description | Manufacturer | Model | ID | Last Cal. | Interval |
|---------------------------|------------------|--------------------------------|-----|------------|----------|
| High Pass Filter | Micro-Tronics | HPM50108 | HGP | 5/31/2012 | 24 mo |
| Low Pass Filter 0-425 MHz | Micro-Tronics | LPM50003 | HGO | 5/31/2012 | 24 mo |
| Attenuator, 20 dB, 'SMA' | SM Electronics | SA6-20 | REO | 5/20/2013 | 12 mo |
| Attenuator, 10db, 'SMA' | S.M. Electronics | SA18H-10 | REN | 5/20/2013 | 12 mo |
| Pre-Amplifier | Miteq | AMF-6F-08001200-30-10P | AVV | 5/20/2013 | 12 mo |
| Antenna, Horn | ETS | 3160-07 | AXP | NCR | 0 mo |
| MN05 Cables | ESM Cable Corp. | Standard Gain Horn Cables | MNJ | 8/12/2013 | 12 mo |
| MN05 Cables | ESM Cable Corp. | Double Ridge Guide Horn Cables | MNI | 8/12/2013 | 12 mo |
| Antenna, Horn (DRG) | ETS Lindgren | 3115 | AIP | 6/29/2011 | 36 mo |
| Pre-Amplifier | Miteq | AMF-3D-00100800-32-13P | AVX | 5/20/2013 | 12 mo |
| Pre-Amplifier | Miteq | AM-1616-1000 | PAD | 5/20/2013 | 12 mo |
| MN05 Cables | ESM Cable Corp. | Bilog Cables | MNH | 5/20/2013 | 12 mo |
| Antenna, Bilog | Teseq | CBL 6141B | AYD | 12/17/2012 | 12 mo |
| Spectrum Analyzer | Agilent | N9010A | AFI | 1/27/2013 | 24 mo |

MEASUREMENT BANDWIDTHS

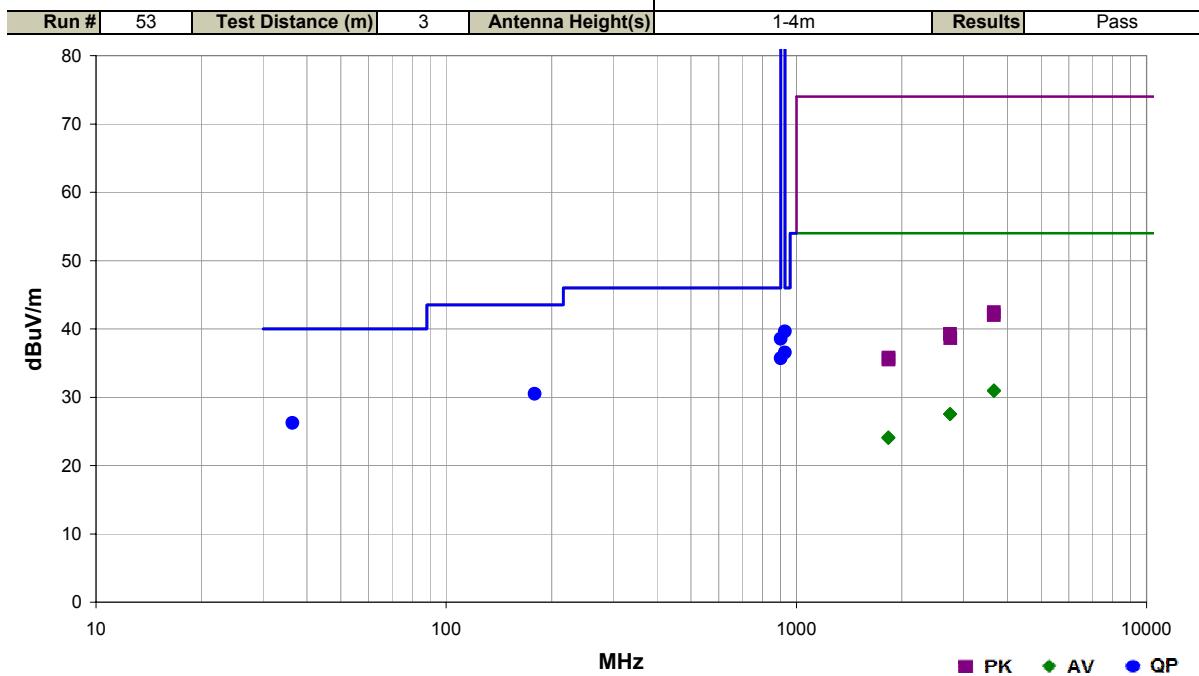
| Frequency Range (MHz) | Peak Data (kHz) | Quasi-Peak Data (kHz) | Average Data (kHz) |
|-----------------------|-----------------|-----------------------|--------------------|
| 0.01 - 0.15 | 1.0 | 0.2 | 0.2 |
| 0.15 - 30.0 | 10.0 | 9.0 | 9.0 |
| 30.0 - 1000 | 100.0 | 120.0 | 120.0 |
| Above 1000 |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

TEST DESCRIPTION

The antennas to be used with the EUT were tested. The EUT was transmitting and receiving while set at the only channel available. While scanning, emissions from the EUT were maximized by rotating the EUT, adjusting the measurement antenna height and polarization, and manipulating the EUT antenna in 3 orthogonal planes (per ANSI C63.10:2009). A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

| | | | | | |
|-----------------|--|-------------------|-------------|--|-------------|
| Work Order: | BSTN0429 | Date: | 08/16/13 |  | |
| Project: | None | Temperature: | 23.7 °C | | |
| Job Site: | MN05 | Humidity: | 46.9% RH | | |
| Serial Number: | 245 | Barometric Pres.: | 1021.5 mbar | Tested by: | Trevor Buls |
| EUT: | Model 6280 | | | | |
| Configuration: | 14 | | | | |
| Customer: | Boston Scientific Corporation | | | | |
| Attendees: | None | | | | |
| EUT Power: | 110VAC/60Hz | | | | |
| Operating Mode: | Per Boston Scientific EDVT# 1114585: Mode 2, Transmitting 916.5 MHz ISM, modulated (Pseudorandom). | | | | |
| Deviations: | None | | | | |
| Comments: | Manufacturer states that EUT will always be operated in horizontal position. | | | | |

| Test Specifications | Test Method |
|---------------------|------------------|
| FCC 15.249:2013 | ANSI C63.10:2009 |



| 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) |
|------------|------------------|-------------|-------------------------|-------------------|------------------------|---------------------------|--------------------------|----------|--------------------------|-------------------|----------------------|------------------------|
| 928.000 | 20.5 | 9.1 | 1.0 | 139.0 | 3.0 | 10.0 | Horz | QP | 0.0 | 39.6 | 46.0 | -6.4 |
| 902.000 | 19.3 | 9.3 | 1.0 | 131.0 | 3.0 | 10.0 | Horz | QP | 0.0 | 38.6 | 46.0 | -7.4 |
| 928.000 | 17.4 | 9.1 | 1.7 | 225.0 | 3.0 | 10.0 | Vert | QP | 0.0 | 36.5 | 46.0 | -9.5 |
| 901.867 | 16.4 | 9.3 | 1.0 | 301.0 | 3.0 | 10.0 | Vert | QP | 0.0 | 35.7 | 46.0 | -10.3 |
| 179.065 | 36.9 | -6.4 | 1.5 | 203.0 | 3.0 | 0.0 | Horz | QP | 0.0 | 30.5 | 43.5 | -13.0 |
| 36.373 | 24.4 | 1.8 | 1.8 | 175.0 | 3.0 | 0.0 | Vert | QP | 0.0 | 26.2 | 40.0 | -13.8 |
| 3663.683 | 29.6 | 1.4 | 1.0 | 98.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 31.0 | 54.0 | -23.0 |
| 3663.750 | 29.5 | 1.4 | 1.2 | 83.0 | 3.0 | 0.0 | Vert | AV | 0.0 | 30.9 | 54.0 | -23.1 |
| 2749.533 | 29.5 | -2.0 | 2.6 | 116.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 27.5 | 54.0 | -26.5 |
| 2748.642 | 29.5 | -2.0 | 1.0 | 7.0 | 3.0 | 0.0 | Vert | AV | 0.0 | 27.5 | 54.0 | -26.5 |
| 1830.767 | 28.4 | -4.3 | 1.0 | 87.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 24.1 | 54.0 | -29.9 |
| 1831.208 | 28.3 | -4.3 | 1.0 | 119.0 | 3.0 | 0.0 | Vert | AV | 0.0 | 24.0 | 54.0 | -30.0 |
| 3664.683 | 41.0 | 1.4 | 1.0 | 98.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 42.4 | 74.0 | -31.6 |
| 3666.133 | 40.6 | 1.4 | 1.2 | 83.0 | 3.0 | 0.0 | Vert | PK | 0.0 | 42.0 | 74.0 | -32.0 |
| 2748.025 | 41.2 | -2.0 | 2.6 | 116.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 39.2 | 74.0 | -34.8 |
| 2750.333 | 40.6 | -1.9 | 1.0 | 7.0 | 3.0 | 0.0 | Vert | PK | 0.0 | 38.7 | 74.0 | -35.3 |
| 1834.917 | 40.0 | -4.2 | 1.0 | 119.0 | 3.0 | 0.0 | Vert | PK | 0.0 | 35.8 | 74.0 | -38.2 |
| 1835.250 | 39.7 | -4.2 | 1.0 | 87.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 35.5 | 74.0 | -38.5 |

Receiver Spurious 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

Per Boston Scientific EDVT# 1114585: Mode 3, Receiving 916.5 MHz ISM.

POWER SETTINGS INVESTIGATED

110VAC/60Hz

CONFIGURATIONS INVESTIGATED

BSTN0429 - 14

FREQUENCY RANGE INVESTIGATED

| | | | |
|-----------------|--------|----------------|--------|
| Start Frequency | 30 MHz | Stop Frequency | 10 GHz |
|-----------------|--------|----------------|--------|

SAMPLE CALCULATIONS

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

TEST EQUIPMENT

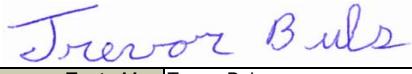
| Description | Manufacturer | Model | ID | Last Cal. | Interval |
|---------------------|-----------------|--------------------------------|-----|------------|----------|
| MN05 Cables | ESM Cable Corp. | Standard Gain Horn Cables | MNJ | 8/12/2013 | 12 mo |
| Pre-Amplifier | Miteq | AMF-6F-08001200-30-10P | AVV | 5/20/2013 | 12 mo |
| Antenna, Horn | ETS | 3160-07 | AXP | NCR | 0 mo |
| Pre-Amplifier | Miteq | AMF-3D-00100800-32-13P | AVX | 5/20/2013 | 12 mo |
| MN05 Cables | ESM Cable Corp. | Double Ridge Guide Horn Cables | MNI | 8/12/2013 | 12 mo |
| Antenna, Horn (DRG) | ETS Lindgren | 3115 | AIP | 6/29/2011 | 36 mo |
| Pre-Amplifier | Miteq | AM-1616-1000 | PAD | 5/20/2013 | 12 mo |
| MN05 Cables | ESM Cable Corp. | Bilog Cables | MNH | 5/20/2013 | 12 mo |
| Antenna, Bilog | Teseq | CBL 6141B | AYD | 12/17/2012 | 12 mo |
| Spectrum Analyzer | Agilent | N9010A | AFI | 1/27/2013 | 24 mo |

MEASUREMENT BANDWIDTHS

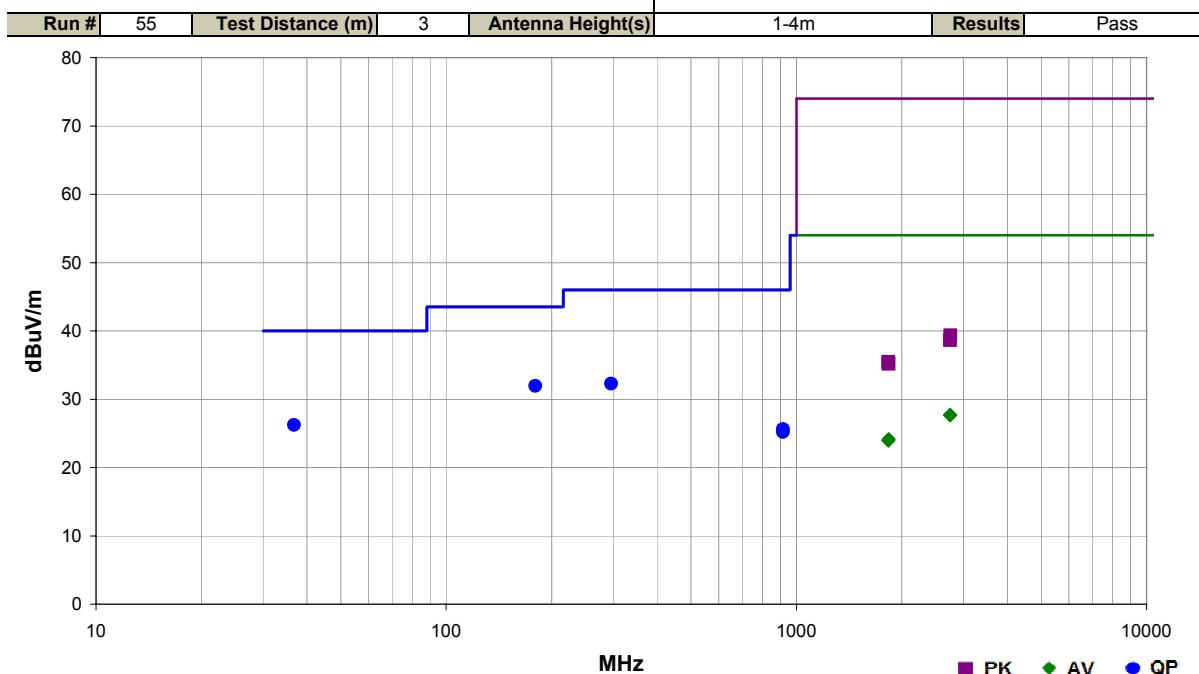
| Frequency Range (MHz) | Peak Data (kHz) | Quasi-Peak Data (kHz) | Average Data (kHz) |
|-----------------------|-----------------|-----------------------|--------------------|
| 0.01 - 0.15 | 1.0 | 0.2 | 0.2 |
| 0.15 - 30.0 | 10.0 | 9.0 | 9.0 |
| 30.0 - 1000 | 100.0 | 120.0 | 120.0 |
| Above 1000 |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

TEST DESCRIPTION

The antennas to be used with the EUT were tested. The EUT was receiving while set at the only channel available. While scanning, emissions from the EUT were maximized by rotating the EUT, adjusting the measurement antenna height and polarization, and manipulating the EUT antenna in 3 orthogonal planes (per ANSI C63.10:2009). A preamp was used for this test in order to provide sufficient measurement sensitivity.

| | | | | | |
|-----------------|--|-------------------|-------------|--|-------------|
| Work Order: | BSTN0429 | Date: | 08/16/13 |  | |
| Project: | None | Temperature: | 23.7 °C | | |
| Job Site: | MN05 | Humidity: | 46.9% RH | | |
| Serial Number: | 245 | Barometric Pres.: | 1021.5 mbar | Tested by: | Trevor Buls |
| EUT: | Model 6280 | | | | |
| Configuration: | 14 | | | | |
| Customer: | Boston Scientific Corporation | | | | |
| Attendees: | None | | | | |
| EUT Power: | 110VAC/60Hz | | | | |
| Operating Mode: | Per Boston Scientific EDVT# 1114585: Mode 3, Receiving 916.5 MHz ISM. | | | | |
| Deviations: | None | | | | |
| Comments: | Manufacturer states that EUT will always be operated in horizontal position. | | | | |

| Test Specifications | Class B | Test Method |
|---------------------|---------|-----------------|
| FCC 15.109:2013 | | ANSI C63.4:2009 |



| 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) |
|------------|------------------|-------------|-------------------------|-------------------|------------------------|---------------------------|--------------------------|----------|--------------------------|-------------------|----------------------|------------------------|
| 179.796 | 38.4 | -6.5 | 1.5 | 201.0 | 3.0 | 0.0 | Horz | QP | 0.0 | 31.9 | 43.5 | -11.6 |
| 296.215 | 35.7 | -3.4 | 1.0 | 215.0 | 3.0 | 0.0 | Horz | QP | 0.0 | 32.3 | 46.0 | -13.7 |
| 36.810 | 24.6 | 1.6 | 1.5 | 130.0 | 3.0 | 0.0 | Vert | QP | 0.0 | 26.2 | 40.0 | -13.8 |
| 915.998 | 16.8 | 8.8 | 1.0 | 194.0 | 3.0 | 0.0 | Horz | QP | 0.0 | 25.6 | 46.0 | -20.4 |
| 916.037 | 16.4 | 8.8 | 1.0 | 333.0 | 3.0 | 0.0 | Vert | QP | 0.0 | 25.2 | 46.0 | -20.8 |
| 2747.633 | 29.7 | -2.0 | 1.0 | 23.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 27.7 | 54.0 | -26.3 |
| 2747.775 | 29.6 | -2.0 | 1.0 | 120.0 | 3.0 | 0.0 | Vert | AV | 0.0 | 27.6 | 54.0 | -26.4 |
| 1834.125 | 28.4 | -4.2 | 1.0 | 341.0 | 3.0 | 0.0 | Vert | AV | 0.0 | 24.2 | 54.0 | -29.8 |
| 1832.167 | 28.2 | -4.2 | 1.0 | 141.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 24.0 | 54.0 | -30.0 |
| 2750.575 | 41.3 | -1.9 | 1.0 | 23.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 39.4 | 74.0 | -34.6 |
| 2749.242 | 40.6 | -2.0 | 1.0 | 120.0 | 3.0 | 0.0 | Vert | PK | 0.0 | 38.6 | 74.0 | -35.4 |
| 1831.117 | 39.7 | -4.3 | 1.0 | 141.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 35.4 | 74.0 | -38.6 |
| 1833.275 | 39.4 | -4.2 | 1.0 | 341.0 | 3.0 | 0.0 | Vert | PK | 0.0 | 35.2 | 74.0 | -38.8 |

AC POWERLINE CONDUCTED EMISSIONS

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. 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 50 Ω measuring port is terminated by a 50 Ω EMI meter or a 50 Ω resistive load. All 50 Ω measuring ports of the LISN are terminated by 50Ω.

TEST EQUIPMENT

| Description | Manufacturer | Model | ID | Last Cal. | Interval |
|----------------------|--------------------|------------------|-----|------------|----------|
| Receiver | Rohde & Schwarz | ESCI | ARG | 04/01/2013 | 12 mo |
| Attenuator 20dB, BNC | Fairview Microwave | SA01B-20 | AQP | 08/09/2013 | 12 mo |
| High Pass Filter | TTE | H97-100K-50-720B | HGN | 05/31/2012 | 24 mo |
| LISN | Solar Electronics | 9252-50-R-24-BNC | LIY | 05/24/2013 | 12 mo |
| MN03 Cables | ESM Cable Corp. | Conducted Cables | MNC | 01/17/2013 | 12 mo |

CONFIGURATIONS INVESTIGATED

 BSTN0429-9

MODES INVESTIGATED

 Per Boston Scientific EDVT# 1114585: Mode 2

AC POWERLINE CONDUCTED EMISSIONS

| | | | |
|-------------------|-------------------------------|--------------------|------------|
| EUT: | Model 6280 | Work Order: | BSTN0429 |
| Serial Number: | 270 | Date: | 08/08/2013 |
| Customer: | Boston Scientific Corporation | Temperature: | 23.6°C |
| Attendees: | None | Relative Humidity: | 48.5% |
| Customer Project: | None | Bar. Pressure: | 1017.3 mb |
| Tested By: | Johnathan Lee | Job Site: | MN03 |
| Power: | 110VAC/60Hz | Configuration: | BSTN0429-9 |

TEST SPECIFICATIONS

| | |
|-----------------|------------------|
| Specification: | Method: |
| FCC 15.207:2013 | ANSI C63.10:2009 |

TEST PARAMETERS

| | | | | | |
|--------|----|-------|-----------|------------------------|----|
| Run #: | 58 | Line: | High Line | Ext. Attenuation (dB): | 20 |
|--------|----|-------|-----------|------------------------|----|

COMMENTS

None

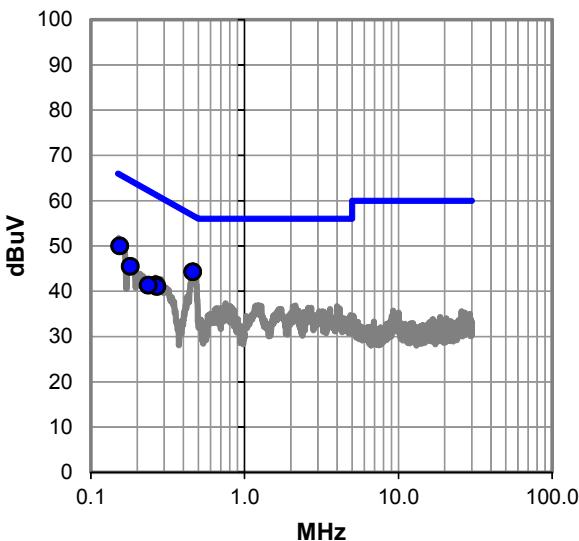
EUT OPERATING MODES

Per Boston Scientific EDVT# 1114585: Mode 2

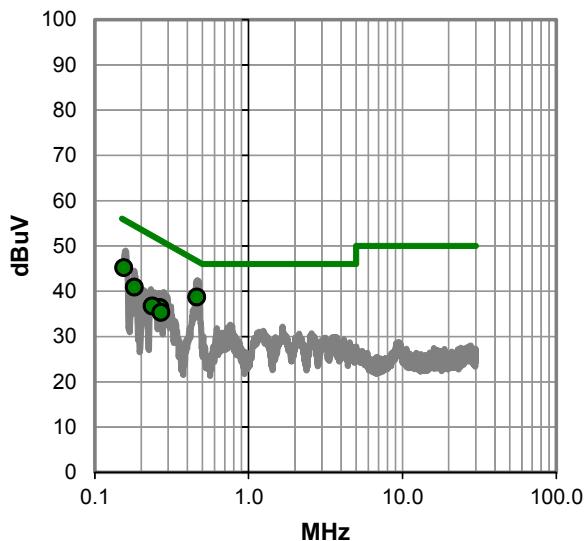
DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit



Average Data - vs - Average Limit



AC POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #58

Quasi Peak Data - vs - Quasi Peak Limit

| Freq (MHz) | Amp. (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Margin (dB) |
|------------|-------------|-------------|-----------------|--------------------|-------------|
| 0.461 | 24.1 | 20.2 | 44.3 | 56.7 | -12.4 |
| 0.154 | 29.8 | 20.2 | 50.0 | 65.8 | -15.8 |
| 0.181 | 25.3 | 20.2 | 45.5 | 64.4 | -18.9 |
| 0.265 | 21.2 | 20.2 | 41.4 | 61.3 | -19.9 |
| 0.269 | 20.8 | 20.2 | 41.0 | 61.1 | -20.1 |
| 0.236 | 21.1 | 20.2 | 41.3 | 62.2 | -20.9 |

Average Data - vs - Average Limit

| Freq (MHz) | Amp. (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Margin (dB) |
|------------|-------------|-------------|-----------------|--------------------|-------------|
| 0.461 | 18.5 | 20.2 | 38.7 | 46.7 | -8.0 |
| 0.154 | 25.0 | 20.2 | 45.2 | 55.8 | -10.6 |
| 0.181 | 20.7 | 20.2 | 40.9 | 54.4 | -13.5 |
| 0.265 | 16.2 | 20.2 | 36.4 | 51.3 | -14.9 |
| 0.236 | 16.5 | 20.2 | 36.7 | 52.2 | -15.5 |
| 0.269 | 15.1 | 20.2 | 35.3 | 51.1 | -15.8 |

CONCLUSION

Pass



Tested By

AC POWERLINE CONDUCTED EMISSIONS

| | | | |
|-------------------|-------------------------------|--------------------|------------|
| EUT: | Model 6280 | Work Order: | BSTN0429 |
| Serial Number: | 270 | Date: | 08/08/2013 |
| Customer: | Boston Scientific Corporation | Temperature: | 23.6°C |
| Attendees: | None | Relative Humidity: | 48.5% |
| Customer Project: | None | Bar. Pressure: | 1017.3 mb |
| Tested By: | Johnathan Lee | Job Site: | MN03 |
| Power: | 110VAC/60Hz | Configuration: | BSTN0429-9 |

TEST SPECIFICATIONS

| | |
|-----------------|------------------|
| Specification: | Method: |
| FCC 15.207:2013 | ANSI C63.10:2009 |

TEST PARAMETERS

| | | | | | |
|--------|----|-------|---------|------------------------|----|
| Run #: | 59 | Line: | Neutral | Ext. Attenuation (dB): | 20 |
|--------|----|-------|---------|------------------------|----|

COMMENTS

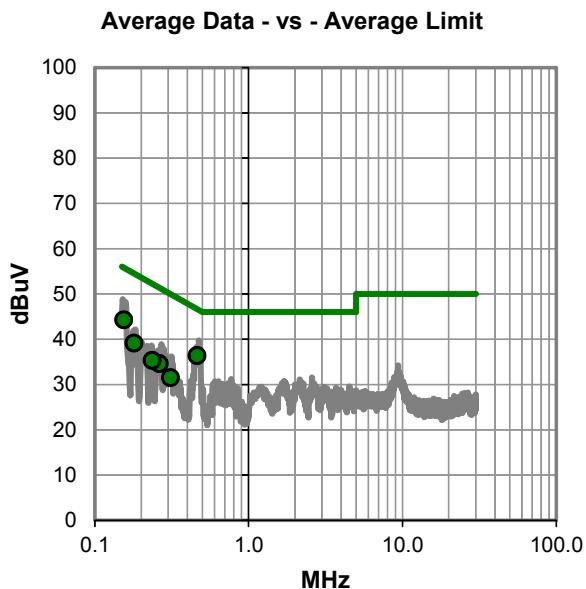
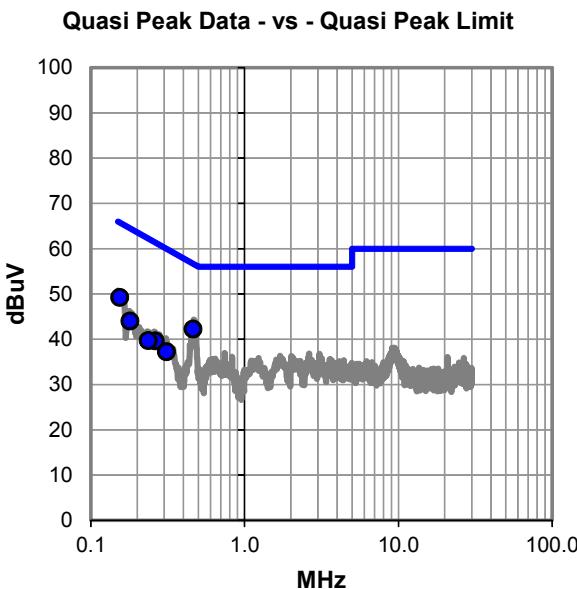
None

EUT OPERATING MODES

Per Boston Scientific EDVT# 1114585: Mode 2

DEVIATIONS FROM TEST STANDARD

None



AC POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #59

Quasi Peak Data - vs - Quasi Peak Limit

| Freq (MHz) | Amp. (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Margin (dB) |
|------------|-------------|-------------|-----------------|--------------------|-------------|
| 0.463 | 22.0 | 20.2 | 42.2 | 56.6 | -14.4 |
| 0.154 | 29.0 | 20.2 | 49.2 | 65.8 | -16.6 |
| 0.180 | 23.8 | 20.2 | 44.0 | 64.5 | -20.5 |
| 0.263 | 19.4 | 20.2 | 39.6 | 61.3 | -21.7 |
| 0.237 | 19.5 | 20.2 | 39.7 | 62.2 | -22.5 |
| 0.311 | 17.0 | 20.2 | 37.2 | 59.9 | -22.7 |

Average Data - vs - Average Limit

| Freq (MHz) | Amp. (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Margin (dB) |
|------------|-------------|-------------|-----------------|--------------------|-------------|
| 0.463 | 16.2 | 20.2 | 36.4 | 46.6 | -10.2 |
| 0.154 | 24.1 | 20.2 | 44.3 | 55.8 | -11.5 |
| 0.180 | 18.9 | 20.2 | 39.1 | 54.5 | -15.4 |
| 0.263 | 14.4 | 20.2 | 34.6 | 51.3 | -16.7 |
| 0.237 | 15.1 | 20.2 | 35.3 | 52.2 | -16.9 |
| 0.311 | 11.3 | 20.2 | 31.5 | 49.9 | -18.4 |

CONCLUSION

Pass



Tested By