



Boston Scientific Corporation

**Auriga XL 4007
Auriga 30**

LP0002 (2.8):2018

Report # BSTN0902 Rev 1



NVLAP LAB CODE: 200676-0



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CERTIFICATE OF TEST

Last Date of Test: February 12, 2019
 Boston Scientific Corporation
 Model: Auriga XL 4007 & Auriga 30

Radio Equipment Testing

Standards

Specification	Method
LP0002 (2.8):2018	LP0002 (2.8):2018

Results

Method Clause	Test Description	Applied	Results	Comments
Appendix I, II.(II)	Powerline Conducted Emissions	Yes	Pass	
Appendix I, II.(III, IV)	Field Strength of Fundamental	Yes	Pass	
Appendix I, II.(III, IV)	Spurious Radiated Emissions	Yes	Pass	

Deviations From Test Standards

None

Approved By:



Matt Nuernberg, Operations Manager

Product compliance is the responsibility of the client; therefore, the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test. This report reflects only those tests from the referenced standards shown in the certificate of test. It does not include inspection or verification of labels, identification, marking or user information. 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
01	Updated test standard reference to LP0002 (2.8) :2018	2019-03-26	1, 2, 8, 13, 15, 19, 23, 24
01	Added Antenna Details	2019-03-26	Annex

ACCREDITATIONS AND AUTHORIZATIONS



United States

FCC - Designated by the FCC as a Telecommunications Certification Body (TCB). Certification chambers, Open Area Test Sites, and conducted measurement facilities are listed with the FCC.

A2LA - Accredited by A2LA to ISO / IEC 17065 as a product certifier. This allows Element to certify transmitters to FCC and IC specifications.

NVLAP - Each laboratory is accredited by NVLAP to ISO 17025

Canada

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

European Union

European Commission – Within Element, we have a EU Notified Body validated for the EMCD and RED Directives.

Australia/New Zealand

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

Korea

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

Japan

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

Taiwan

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

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

Singapore

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

Israel

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

Hong Kong

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

Vietnam

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

SCOPE

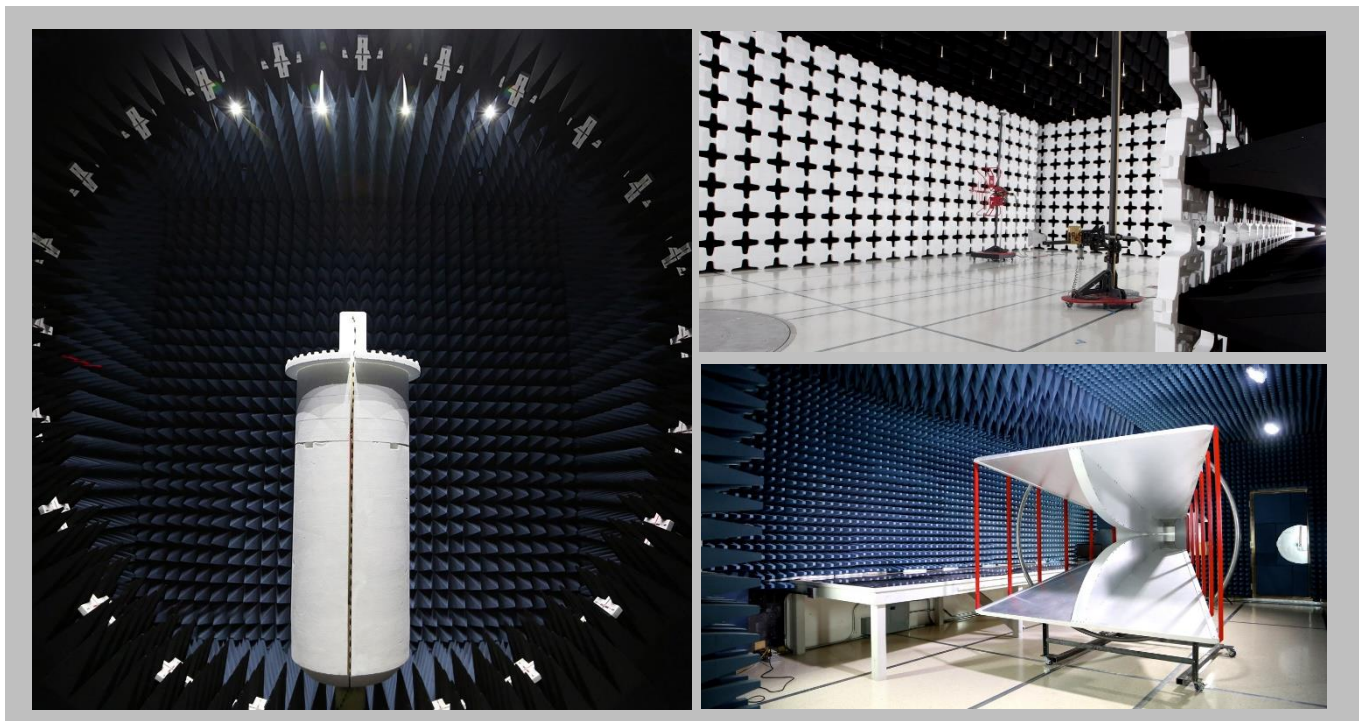
For details on the Scopes of our Accreditations, please visit:

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

FACILITIES



California Labs OC01-17 41 Tesla Irvine, CA 92618 (949) 861-8918	Minnesota Labs MN01-10 9349 W Broadway Ave. Brooklyn Park, MN 55445 (612)-638-5136	New York Labs NY01-04 4939 Jordan Rd. Elbridge, NY 13060 (315) 554-8214	Oregon Labs EV01-12 6775 NE Evergreen Pkwy #400 Hillsboro, OR 97124 (503) 844-4066	Texas Labs TX01-09 3801 E Plano Pkwy Plano, TX 75074 (469) 304-5255	Washington Labs NC01-05 19201 120 th Ave NE Bothell, WA 98011 (425)984-6600
NVLAP					
NVLAP Lab Code: 200676-0	NVLAP Lab Code: 200881-0	NVLAP Lab Code: 200761-0	NVLAP Lab Code: 200630-0	NVLAP Lab Code:201049-0	NVLAP Lab Code: 200629-0
Innovation, Science and Economic Development Canada					
2834B-1, 2834B-3	2834E-1, 2834E-3	N/A	2834D-1	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/RRR, MIC, MOC, NCC, OFCA					
US0158	US0175	N/A	US0017	US0191	US0157



MEASUREMENT UNCERTAINTY



Measurement Uncertainty

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

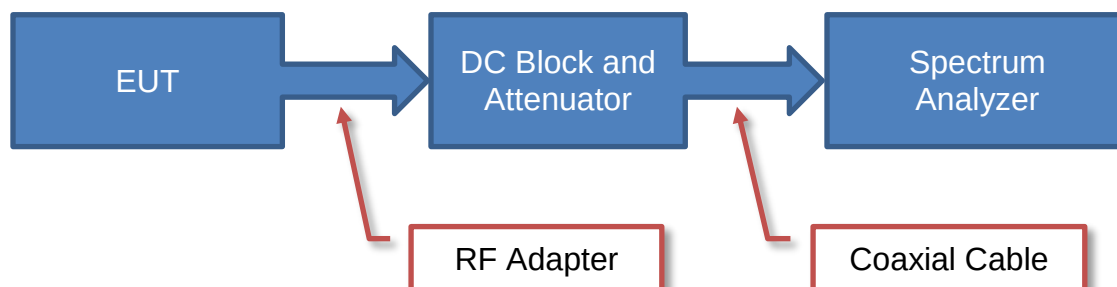
A measurement uncertainty estimation has been performed for each test per our internal quality document QM205.4.6. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty (K=2) can be found included as part of the applicable test description page. Our measurement data meets or exceeds the measurement uncertainty requirements of the applicable specification; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for estimating measurement uncertainty are based upon ETSI TR 100 028 (or CISPR 16-4-2 as applicable), and are available upon request.

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

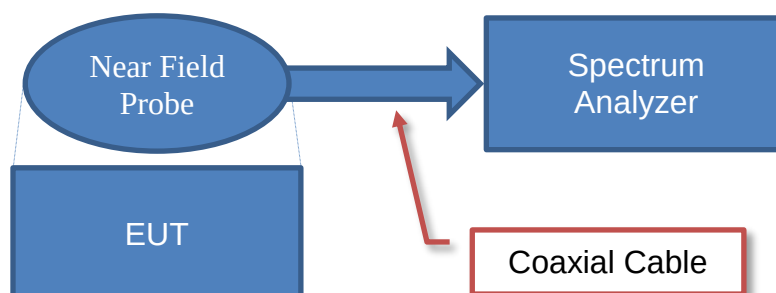
Test	+ MU	- MU
Frequency Accuracy (Hz)	0.0007%	-0.0007%
Amplitude Accuracy (dB)	1.2 dB	-1.2 dB
Conducted Power (dB)	0.3 dB	-0.3 dB
Radiated Power via Substitution (dB)	0.7 dB	-0.7 dB
Temperature (degrees C)	0.7°C	-0.7°C
Humidity (% RH)	2.5% RH	-2.5% RH
Voltage (AC)	1.0%	-1.0%
Voltage (DC)	0.7%	-0.7%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

Test Setup Block Diagrams

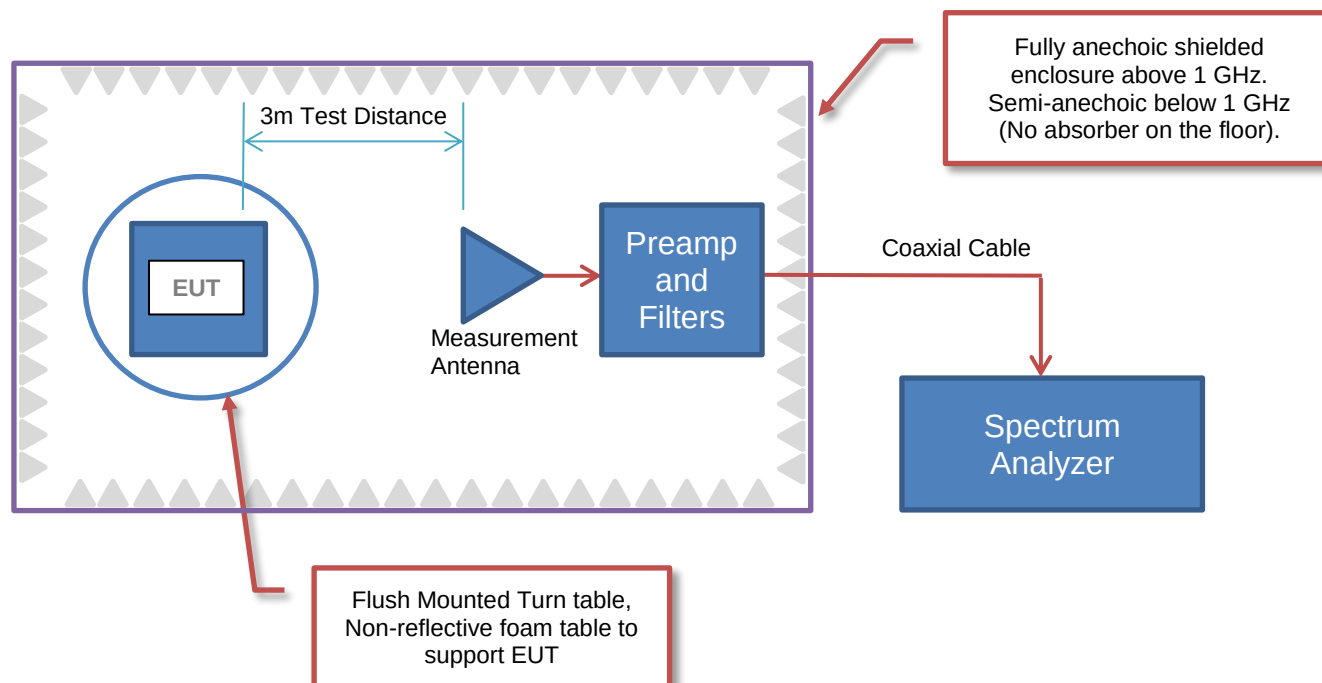
Antenna Port Conducted Measurements



Near Field Test Fixture Measurements



Spurious Radiated Emissions



PRODUCT DESCRIPTION

Client and Equipment Under Test (EUT) Information

Company Name:	Boston Scientific Corporation
Address:	150 Baytech Drive
City, State, Zip:	San Jose, CA 95134
Test Requested By:	Carlos Medina
Model:	Auriga XL 4007 Auriga 30
First Date of Test:	February 12, 2019
Last Date of Test:	February 12, 2019
Receipt Date of Samples:	February 12, 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:

125 kHz RFID Radio

Client Justification:

Auriga™ 30 Laser System (30 Watt console) is based on the Auriga XL 4007 Laser System (50 Watt console). The Auriga 30 Laser System is identical to the Auriga XL 4007 Laser System design and also has an identical indications for use statement. The only difference between the Auriga XL 4007 Laser System and Auriga 30 Laser System is limited to a software setting change to the Auriga XL 4007 Laser system. This software modification will restrict the Auriga 30 Laser System to generate a maximum average output of 30 Watts instead of 50 Watts. Auriga 30 is technically still capable of generating 50 watts but is software controlled to limit output power to only generate 30 watts, as part of a strategy to offer a multi-tier laser line.

Testing Objective:

To demonstrate compliance of the inductive portion of the device to LP0002 (2.8) specifications.

EUT Photo



PRODUCT DESCRIPTION



CONFIGURATIONS



Configuration BSTN0902- 1

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Auriga 30 Laser System	steute	M006830BR0	21302773
Foot Pedal	steute	MKF 2S-MED-AP	00090

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC cable with Switch	No	1.5m	No	AC mains	Auriga 30 Laser System
Foot Pedal Cable	No	2m	No	Foot Pedal	Auriga 30 Laser System
Fiber optic cable	No	2.5m	No	N/A	Auriga 30 Laser System

Configuration BSTN0902- 2

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Auriga 30 Laser System	steute	M006830BR0	21302773
Foot Pedal	steute	MKF 2S-MED-AP	00090

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC cable	No	4m	No	AC mains	Auriga 30 Laser System
Foot Pedal Cable	No	2m	No	Foot Pedal	Auriga 30 Laser System
Fiber optic cable	No	2.5m	No	N/A	Auriga 30 Laser System

MODIFICATIONS



Equipment Modifications

Item	Date	Test	Modification	Note	Disposition of EUT
1	2019-02-11	Field Strength of Fundamental	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	2019-02-11	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.
3	2019-02-12	Powerline Conducted Emissions	Modified from delivered configuration.	Client rearranged wire bundles and improved grounding within his EUT. Modification authorized by Carlos Medina from Boston Scientific.	Scheduled testing was completed.

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. 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 50ohm measuring port is terminated by a 50ohm EMI meter or a 50ohm resistive load. All 50ohm measuring ports of the LISN are terminated by 50ohm. 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
Receiver	Rohde & Schwarz	ESCI	ARG	7/5/2018	7/5/2019
LISN	Solar Electronics	9252-50-24-BNC	LIA	1/8/2019	1/8/2020
Cable - Conducted Cable Assembly	Northwest EMC	OCP, HFP, AWC	OCPA	10/5/2018	10/5/2019
Power Supply	Pacific Power	AFX 12KVA	SMT	NCR	NCR

MEASUREMENT UNCERTAINTY

Description		
Expanded k=2	2.4 dB	-2.4 dB

CONFIGURATIONS INVESTIGATED

BSTN0902-2

MODES INVESTIGATED

RFID on

POWERLINE CONDUCTED EMISSIONS



EUT:	Auriga 30 Laser System	Work Order:	BSTN0902
Serial Number:	21302773	Date:	02/12/2019
Customer:	Boston Scientific Corporation	Temperature:	15.5°C
Attendees:	Carlos Medina	Relative Humidity:	43.4%
Customer Project:	None	Bar. Pressure:	1023 mb
Tested By:	Salvador Solorzano	Job Site:	OC12
Power:	220VAC/60Hz	Configuration:	BSTN0902-2

TEST SPECIFICATIONS

Specification:	Method:
LP0002 (2.8):2018	LP0002 (2.8):2018

TEST PARAMETERS

Run #:	2	Line:	High Line	Add. Ext. Attenuation (dB):	0
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COMMENTS

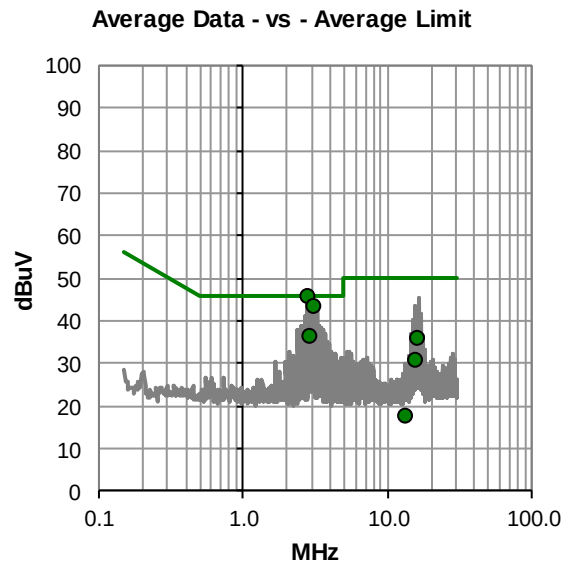
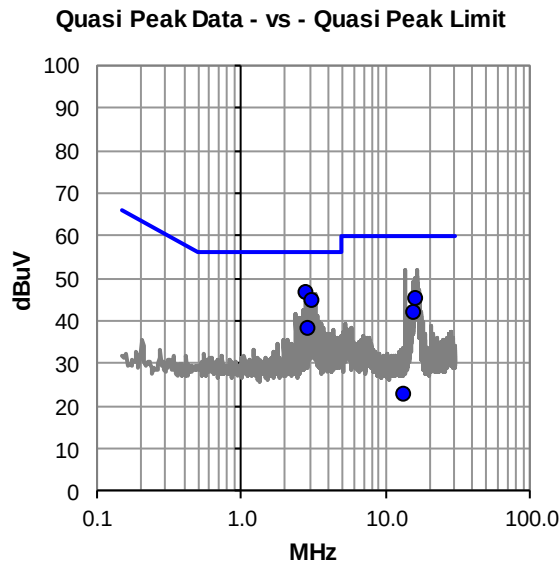
New AC Cable

EUT OPERATING MODES

RFID on

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #2

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
2.822	26.3	20.2	46.5	56.0	-9.5
3.134	24.2	20.3	44.5	56.0	-11.5
16.414	24.3	21.0	45.3	60.0	-14.7
2.932	17.9	20.2	38.1	56.0	-17.9
15.822	20.8	20.9	41.7	60.0	-18.3
13.559	2.0	20.7	22.7	60.0	-37.3

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
2.822	25.6	20.2	45.8	46.0	-0.2
3.134	22.8	20.3	43.1	46.0	-2.9
2.932	15.9	20.2	36.1	46.0	-9.9
16.414	14.9	21.0	35.9	50.0	-14.1
15.822	9.6	20.9	30.5	50.0	-19.5
13.559	-3.1	20.7	17.6	50.0	-32.4

CONCLUSION

Pass



Tested By

POWERLINE CONDUCTED EMISSIONS



EUT:	Auriga 30 Laser System	Work Order:	BSTN0902
Serial Number:	21302773	Date:	02/12/2019
Customer:	Boston Scientific Corporation	Temperature:	15.5°C
Attendees:	Carlos Medina	Relative Humidity:	43.4%
Customer Project:	None	Bar. Pressure:	1023 mb
Tested By:	Salvador Solorzano	Job Site:	OC12
Power:	220VAC/60Hz	Configuration:	BSTN0902-2

TEST SPECIFICATIONS

Specification:	Method:
LP0002 (2.8):2018	LP0002 (2.8):2018

TEST PARAMETERS

Run #:	5	Line:	Neutral	Add. Ext. Attenuation (dB):	0
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COMMENTS

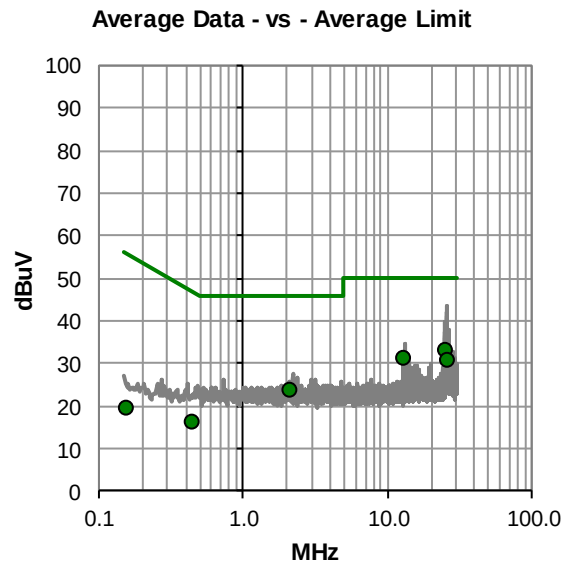
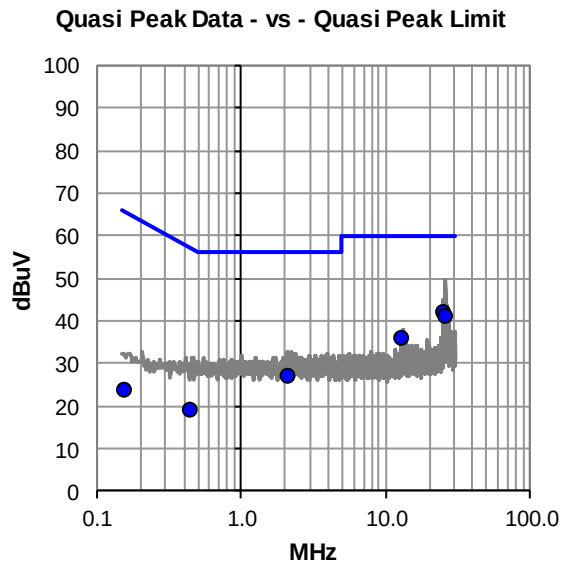
New AC Cable, Rerouted Wire inside of EUT

EUT OPERATING MODES

RFID on

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #5

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
25.507	20.0	21.7	41.7	60.0	-18.3
25.925	19.1	21.8	40.9	60.0	-19.1
13.172	15.1	20.7	35.8	60.0	-24.2
2.093	7.0	20.1	27.1	56.0	-28.9
0.446	-0.9	20.0	19.1	57.0	-37.9
0.156	3.2	20.3	23.5	65.7	-42.2

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
25.507	11.1	21.7	32.8	50.0	-17.2
13.172	10.3	20.7	31.0	50.0	-19.0
25.925	9.0	21.8	30.8	50.0	-19.2
2.093	3.7	20.1	23.8	46.0	-22.2
0.446	-3.9	20.0	16.1	47.0	-30.9
0.156	-1.0	20.3	19.3	55.7	-36.4

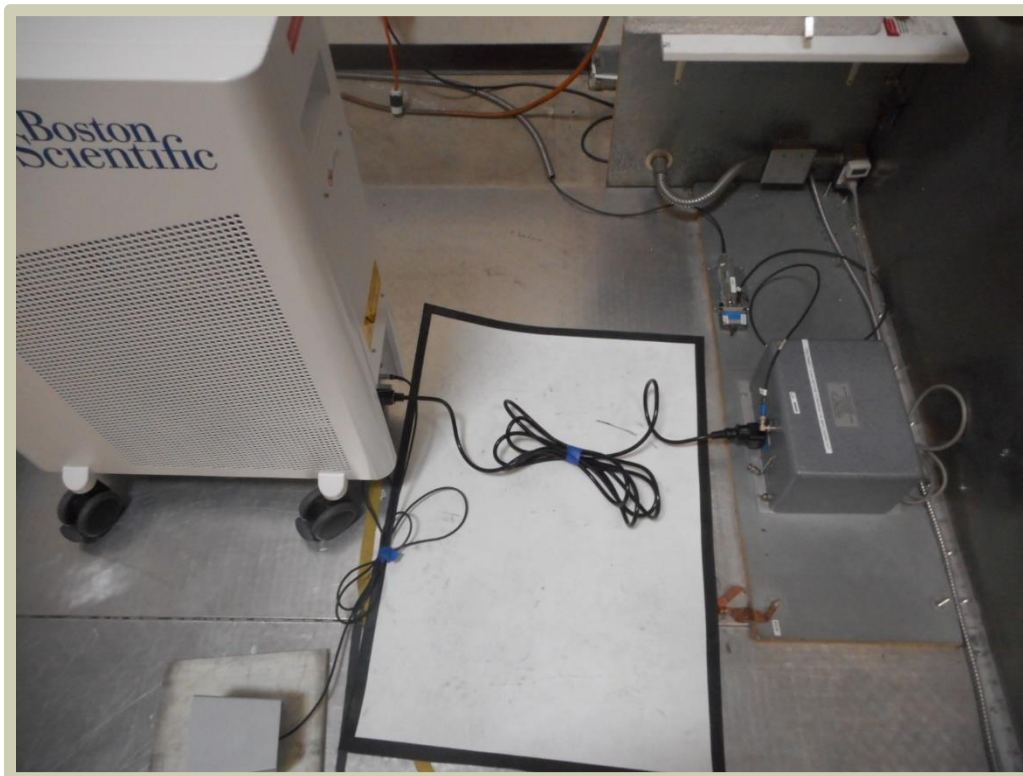
CONCLUSION

Pass



Tested By

POWERLINE CONDUCTED EMISSIONS



FIELD STRENGTH OF FUNDAMENTAL



PSA-ESCI 2018.07.27

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

MODES OF OPERATION

RFID on

POWER SETTINGS INVESTIGATED

220VAC/60Hz

CONFIGURATIONS INVESTIGATED

BSTN0902 - 1

FREQUENCY RANGE INVESTIGATED

Start Frequency 9 kHz Stop Frequency 460 kHz

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
Analyzer - Spectrum Analyzer	Agilent	E4443A	AAR	7-Aug-2018	12 mo
Antenna - Loop	EMCO	6502	AZB	22-Aug-2017	24 mo
Cable	Northwest EMC	3 kHz - 1 GHz RE Cables	OCB	1-Aug-2018	12 mo

TEST DESCRIPTION

The antennas to be used with the EUT were tested. The EUT was continuously transmitting while set to the channel specified.

The fundamental carrier of the EUT was maximized by rotating the EUT on a turntable, adjusting the position of the EUT and EUT antenna in three orthogonal axis, and adjusting the measurement antenna polarization (per ANSI C63.10). A calibrated active loop antenna was used for this test in order to provide sufficient measurement sensitivity. The reference point of the loop antenna was maintained at 1m above the ground plane during the testing.

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

As outlined in 15.209(e), 15.31(f)(2), and RSS-GEN, 6.4, measurements may be performed at a distance closer than what is specified with the limit. The limit at the specified distance is shown on the data sheet. Measurements are made at a closer distance and the data is adjusted using a distance correction factor of 40dB/decade for comparison to the limit.

FIELD STRENGTH OF FUNDAMENTAL



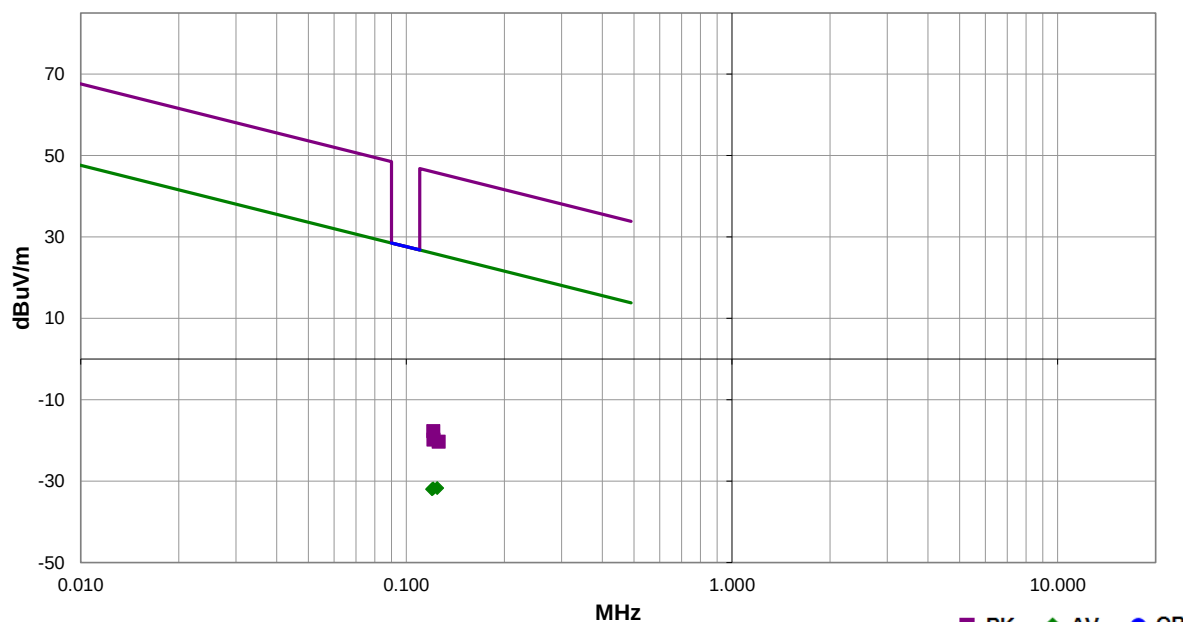
EmiR5 2018.09.26

PSA-ESCI 2018.07.27

Work Order:	BSTN0902	Date:	11-Feb-2019	
Project:	None	Temperature:	18 °C	
Job Site:	OC08	Humidity:	46.6% RH	
Serial Number:	21302773	Barometric Pres.:	1024 mbar	
		Tested by:		Nolan De Ramos, Salvador Solorzano
EUT:	Auriga 30 Laser System			
Configuration:	1			
Customer:	Boston Scientific Corporation			
Attendees:	Carlos Medina			
EUT Power:	220VAC/60Hz			
Operating Mode:	RFID on			
Deviations:	None			
Comments:	None			

Test Specifications	Test Method
LP0002 (2.8):2018	LP0002 (2.8):2018

Run #	5	Test Distance (m)	10	Antenna Height(s)	1 to 4(m)	Results	Pass
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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
0.124	38.0	10.3	1.0	52.0	10.0	0.0	Perp to EUT	AV	-80.0	-31.7	25.7	-57.4	EUT Standing
0.121	37.9	10.3	1.0	289.0	10.0	0.0	Par to Gnd	AV	-80.0	-31.8	26.0	-57.8	EUT Standing
0.120	37.7	10.3	1.0	10.0	3.0	0.0	Par to EUT	AV	-80.0	-32.0	26.0	-58.0	EUT Standing
0.121	52.0	10.3	1.0	52.0	10.0	0.0	Perp to EUT	PK	-80.0	-17.7	46.0	-63.7	EUT Standing
0.121	49.9	10.3	1.0	10.0	3.0	0.0	Par to EUT	PK	-80.0	-19.8	46.0	-65.8	EUT Standing
0.126	49.4	10.3	1.0	289.0	10.0	0.0	Par to Gnd	PK	-80.0	-20.3	45.6	-65.9	EUT Standing

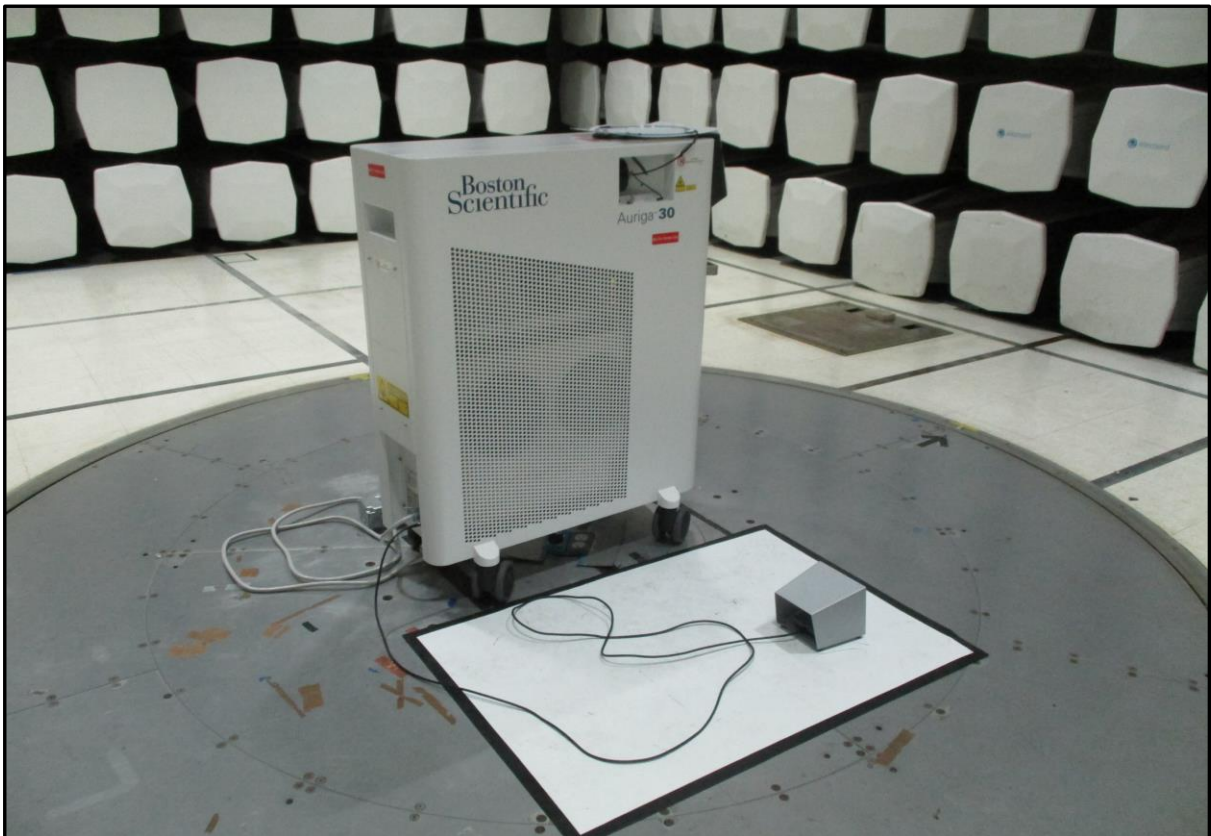
FIELD STRENGTH OF FUNDAMENTAL



PSA-ESCI 2018.07.27



FIELD STRENGTH OF FUNDAMENTAL



SPURIOUS RADIATED EMISSIONS



PSA-ESCI 2018.07.27

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

MODES OF OPERATION

RFID on

POWER SETTINGS INVESTIGATED

220VAC/60Hz

CONFIGURATIONS INVESTIGATED

BSTN0902 - 1

FREQUENCY RANGE INVESTIGATED

Start Frequency	9 kHz	Stop Frequency	30 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
Cable	Northwest EMC	3 kHz - 1 GHz RE Cables	OCB	1-Aug-2018	12 mo
Antenna - Loop	EMCO	6502	AZB	22-Aug-2017	24 mo
Analyzer - Spectrum Analyzer	Agilent	E4443A	AAR	7-Aug-2018	12 mo

TEST DESCRIPTION

The antennas to be used with the EUT were tested. The EUT was continuously transmitting while set to the channel specified.

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, and adjusting the measurement antenna height (where applicable) and polarization (per ANSIC63.10). A calibrated active loop antenna was used for this test in order to provide sufficient measurement sensitivity. The reference point of the loop antenna was maintained at 1m above the ground plane during the testing.

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

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

As outlined in 15.209(e), 15.31(f)(2), and RSS-GEN, 6.4, measurements may be performed at a distance closer than what is specified with the limit. The limit at the specified distance is shown on the data sheet. Measurements are made at a closer distance and the data is adjusted using a distance correction factor of 40dB/decade for comparison to the limit.

SPURIOUS RADIATED EMISSIONS



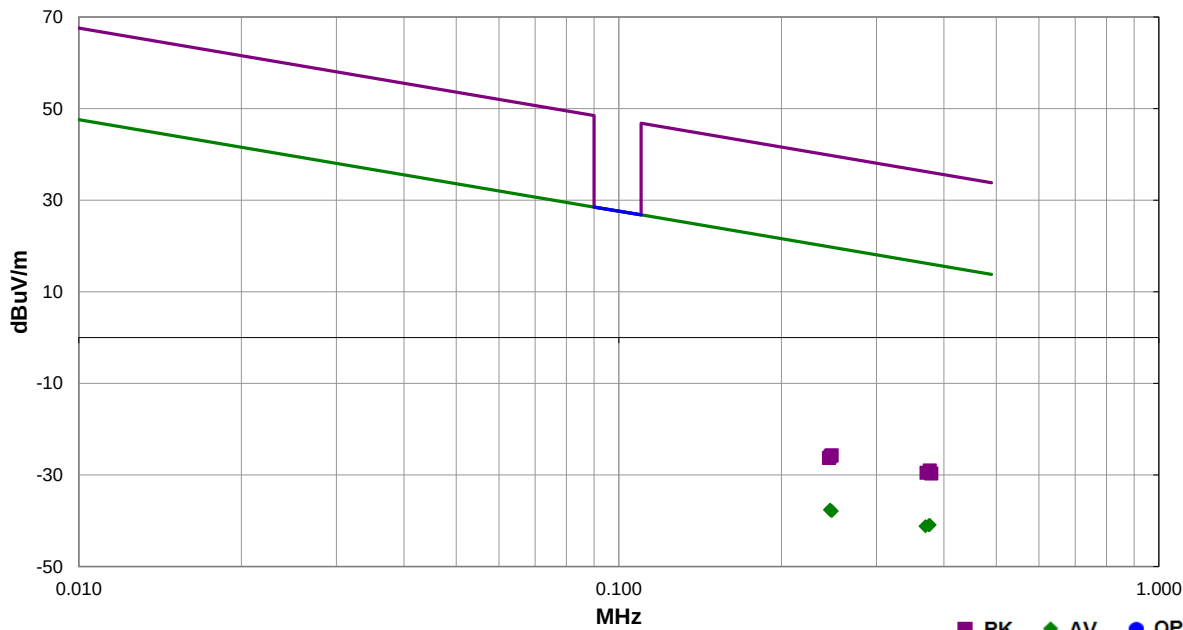
EmiRS 2018.09.26

PSA-ESCI 2018.07.27

Work Order:	BSTN0902	Date:	11-Feb-2019	
Project:	None	Temperature:	18 °C	
Job Site:	OC08	Humidity:	46.6% RH	
Serial Number:	21302773	Barometric Pres.:	1024 mbar	
		Tested by: Nolan De Ramos, Salvador Solorzano		
EUT:	Auriga 30 Laser System			
Configuration:	1			
Customer:	Boston Scientific Corporation			
Attendees:	Carlos Medina			
EUT Power:	220VAC/60Hz			
Operating Mode:	RFID on			
Deviations:	None			
Comments:	None			

Test Specifications	Test Method
LP0002 (2.8):2018	LP0002 (2.8):2018

Run #	8	Test Distance (m)	10	Antenna Height(s)	1 to 4(m)	Results	Pass
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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
0.377	28.7	10.4	1.5	359.0	10.0	0.0	Par to Gnd	AV	-80.0	-40.9	16.1	-57.0	EUT Standing
0.375	28.6	10.4	2.4	360.0	10.0	0.0	Par to EUT	AV	-80.0	-41.0	16.1	-57.1	EUT Standing
0.246	32.1	10.3	1.0	58.0	10.0	0.0	Par to Gnd	AV	-80.0	-37.6	19.8	-57.4	EUT Standing
0.247	32.0	10.3	1.0	256.0	10.0	0.0	Par to EUT	AV	-80.0	-37.7	19.8	-57.5	EUT Standing
0.376	40.6	10.4	1.5	359.0	10.0	0.0	Par to Gnd	PK	-80.0	-29.0	36.1	-65.1	EUT Standing
0.248	44.0	10.3	1.0	256.0	10.0	0.0	Par to EUT	PK	-80.0	-25.7	39.7	-65.4	EUT Standing
0.247	43.8	10.3	1.0	58.0	10.0	0.0	Par to Gnd	PK	-80.0	-25.9	39.8	-65.7	EUT Standing
0.379	39.9	10.4	2.4	360.0	10.0	0.0	Par to EUT	PK	-80.0	-29.7	36.0	-65.7	EUT Standing
0.370	28.4	10.4	1.1	170.0	10.0	0.0	Perp to EUT	AV	-80.0	-41.2	16.2	-57.4	EUT Standing
0.248	31.8	10.3	1.0	237.0	10.0	0.0	Perp to EUT	AV	-80.0	-37.9	19.7	-57.6	EUT Standing
0.371	40.1	10.4	1.1	170.0	10.0	0.0	Perp to EUT	PK	-80.0	-29.5	36.2	-65.7	EUT Standing
0.245	43.4	10.3	1.0	237.0	10.0	0.0	Perp to EUT	PK	-80.0	-26.3	39.8	-66.1	EUT Standing

SPURIOUS RADIATED EMISSIONS



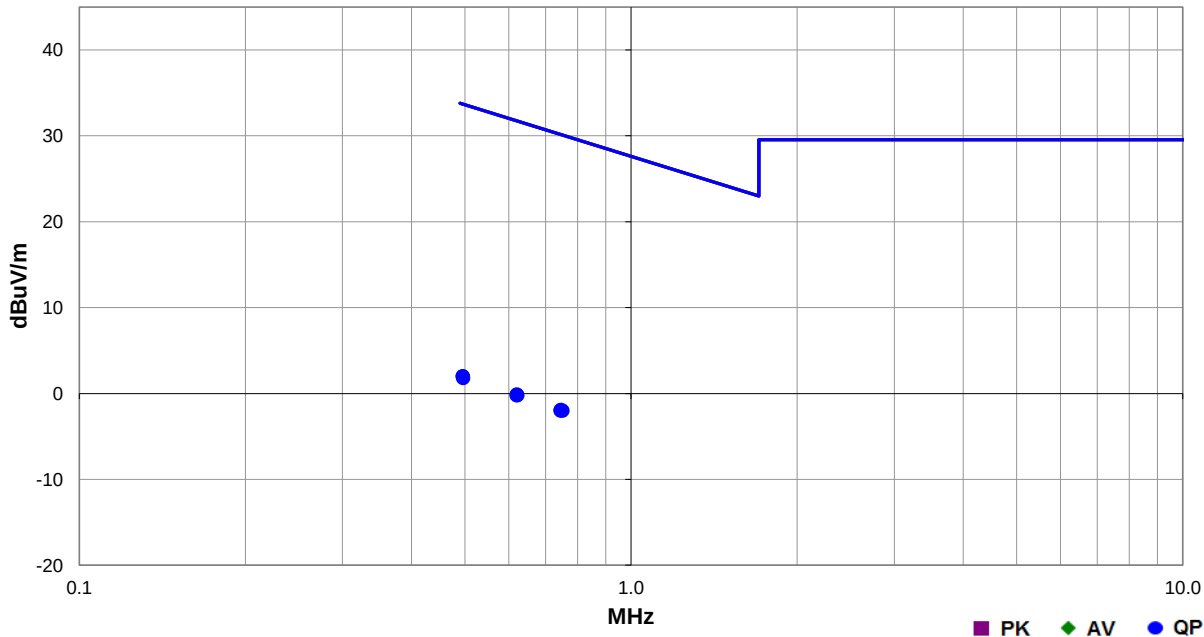
EmiRS 2018.09.26

PSA-ESCI 2018.07.27

Work Order:	BSTN0902	Date:	11-Feb-2019		
Project:	None	Temperature:	18 °C		
Job Site:	OC08	Humidity:	46.6% RH		
Serial Number:	21302773	Barometric Pres.:	1024 mbar	Tested by:	Nolan De Ramos, Salvador Solorzano
EUT:	Auriga 30 Laser System				
Configuration:	1				
Customer:	Boston Scientific Corporation				
Attendees:	Carlos Medina				
EUT Power:	220VAC/60Hz				
Operating Mode:	RFID on				
Deviations:	None				
Comments:	None				

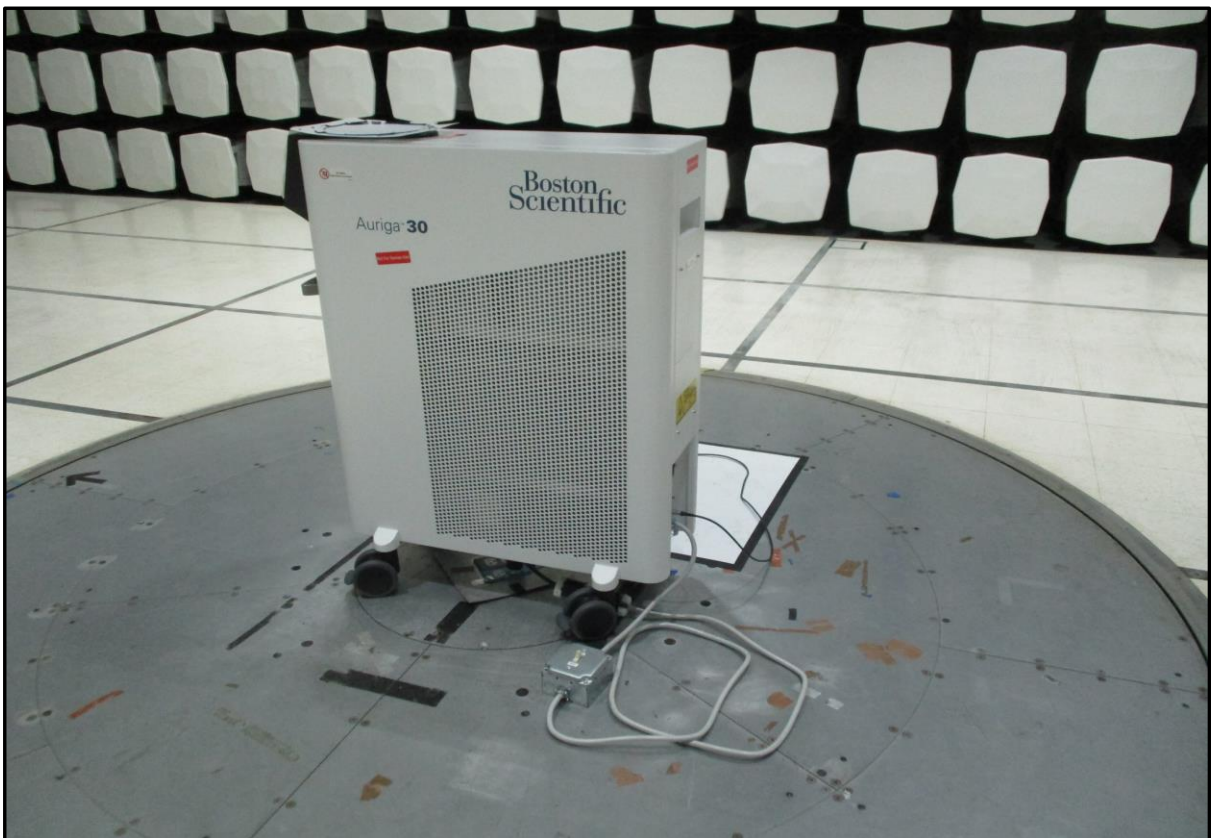
Test Specifications	Test Method
LP0002 (2.8):2018	LP0002 (2.8):2018

Run #	9	Test Distance (m)	10	Antenna Height(s)	1 to 4(m)	Results	Pass
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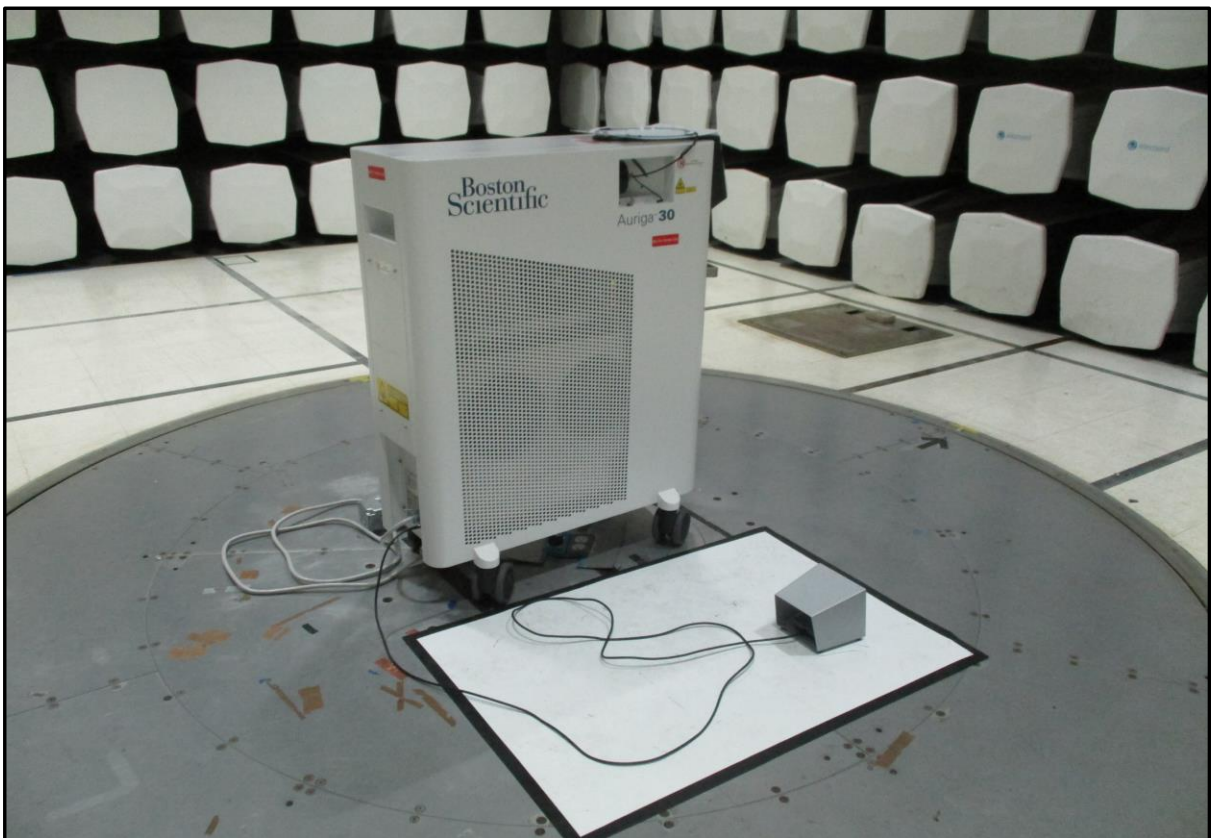


Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
0.495	31.5	10.5	1.0	80.0	10.0	0.0	Par to Gnd	QP	-40.0	2.0	33.7	-31.7	EUT Standing
0.495	31.5	10.5	1.4	2.0	10.0	0.0	Par to EUT	QP	-40.0	2.0	33.7	-31.7	EUT Standing
0.622	29.4	10.4	1.0	177.0	10.0	0.0	Par to Gnd	QP	-40.0	-0.2	31.7	-31.9	EUT Standing
0.621	29.5	10.4	1.0	297.0	10.0	0.0	Par to EUT	QP	-40.0	-0.1	31.8	-31.9	EUT Standing
0.496	31.3	10.5	1.0	149.0	10.0	0.0	Perp to EUT	QP	-40.0	1.8	33.7	-31.9	EUT Standing
0.620	29.4	10.4	1.0	60.0	10.0	0.0	Perp to EUT	QP	-40.0	-0.2	31.8	-32.0	EUT Standing
0.745	27.8	10.3	3.1	28.0	10.0	0.0	Par to Gnd	QP	-40.0	-1.9	30.2	-32.1	EUT Standing
0.751	27.7	10.3	1.1	40.0	10.0	0.0	Par to EUT	QP	-40.0	-2.0	30.1	-32.1	EUT Standing
0.745	27.7	10.3	1.4	256.0	10.0	0.0	Perp to EUT	QP	-40.0	-2.0	30.2	-32.2	EUT Standing

SPURIOUS RADIATED EMISSIONS



SPURIOUS RADIATED EMISSIONS



Annex I

Antenna Information

Max Gain 1.64 dBi



TS-A1250 RFID-Antenne 125kHz

