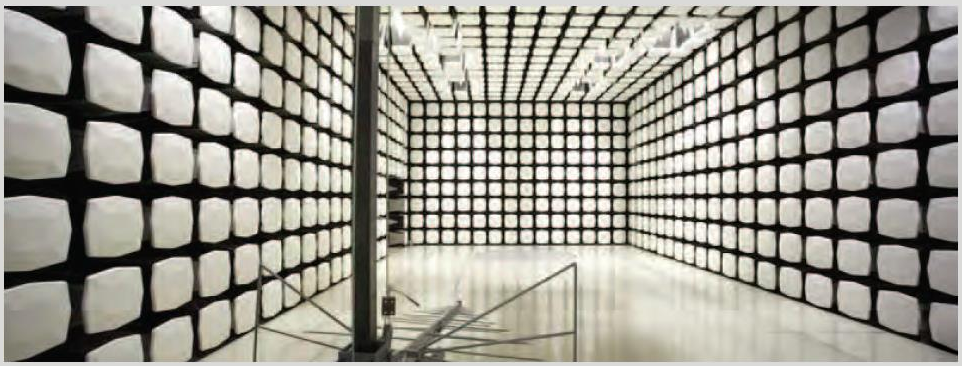
Inspire Medical Systems

Inspire Remote Model 2580

FCC 15.209:2021

Inductive Radio

Report: INSP0027.3 Rev. 1, Issue Date: May 13, 2021



NVLAP LAB CODE: 200881-0

CERTIFICATE OF TEST

Last Date of Test: March 18, 2021
Inspire Medical Systems
EUT: Inspire Remote Model 2580

Radio Equipment Testing

Standards

Specification	Method
FCC 15.209:2021	ANSI C63.10:2013

Results

Method Clause	Test Description	Applied	Results	Comments
6.2	Powerline Conducted Emissions	No	N/A	Not required for a battery powered EUT.
6.4	Field Strength of Fundamental	Yes	Pass	
6.4, 6.5	Spurious Radiated Emissions	Yes	Pass	

Deviations From Test Standards

None

Approved By:

Eric Brandon, Department 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	Added note to TD, worst case orientation was determined at 3m and remeasured at 10m	2021-05-13	13
	Added details about how the radio was operating during testing	2021-05-13	13, 14, 16 and 17
	Added power table	2021-05-13	all

ACCREDITATIONS AND AUTHORIZATIONS

United States

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

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

NVLAP - Each laboratory is accredited by NVLAP to ISO 17025

Canada

ISED - Recognized by Innovation, Science and Economic Development Canada as a Certification Body (CB) and as a CAB for the acceptance of test data.

European Union

European Commission – Recognized as an EU Notified Body validated for the EMCD and RED Directives.

United Kingdom

BEIS – Recognized by the UK as an Approved Body under the UK Radio Equipment and UK EMC Regulations.

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.

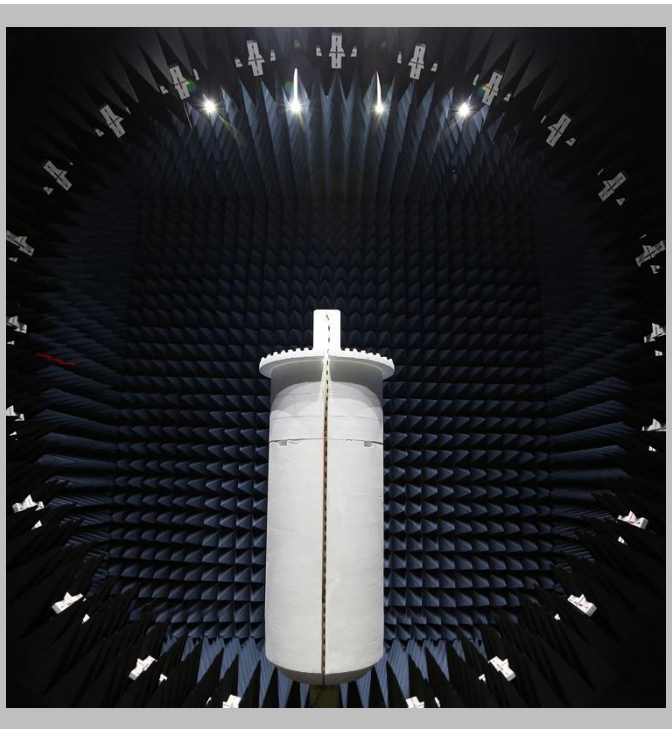
SCOPE

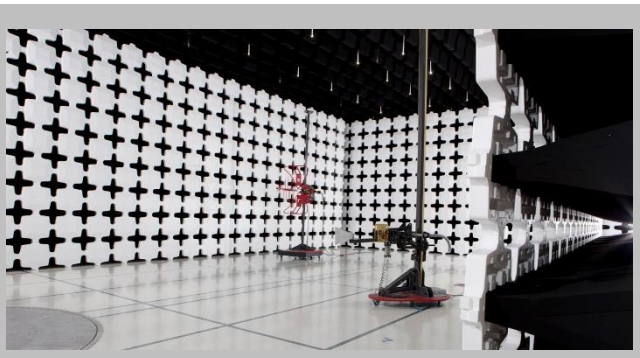
For details on the Scopes of our Accreditations, please visit:
https://www.nwemc.com/emc-testing-accreditations

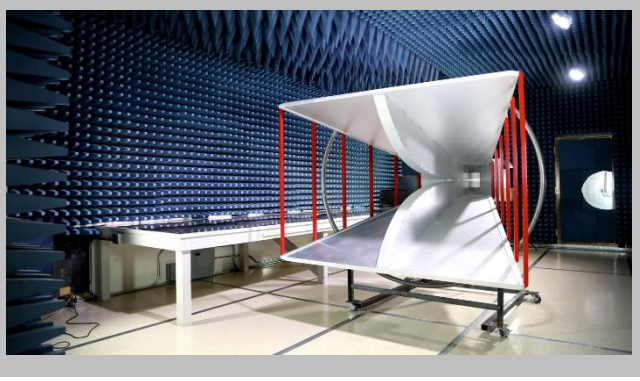
FACILITIES

element
2020.12.15

California	Minnesota	Oregon	Texas	Washington
Labs OC01-17 41 Tesla Irvine, CA 92618 (949) 861-8918	Labs MN01-11 9349 W Broadway Ave. Brooklyn Park, MN 55445 (612)-638-5136	Labs EV01-12 6775 NE Evergreen Pkwy #400 Hillsboro, OR 97124 (503) 844-4066	Labs TX01-09 3801 E Plano Pkwy Plano, TX 75074 (469) 304-5255	Labs NC01-05 19201 120th Ave NE Bothell, WA 98011 (425)984-6600
NVLAP				
NVLAP Lab Code: 200676-0	NVLAP Lab Code: 200881-0	NVLAP Lab Code: 200630-0	NVLAP Lab Code:201049-0	NVLAP Lab Code: 200629-0
Innovation, Science and Economic Development Canada				
2834B-1, 2834B-3	2834E-1, 2834E-3	2834D-1	2834G-1	2834F-1
BSMI				
SL2-IN-E-1154R	SL2-IN-E-1152R	SL2-IN-E-1017	SL2-IN-E-1158R	SL2-IN-E-1153R
VCCI				
A-0029	A-0109	A-0108	A-0201	A-0110
Recognized Phase I CAB for ISED, ACMA, BSMI, IDA, KCC/RRA, MIC, MOC, NCC, OFCA				
US0158	US0175	US0017	US0191	US0157







MEASUREMENT UNCERTAINTY

element
TMU.2015.07.10

Measurement Uncertainty

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

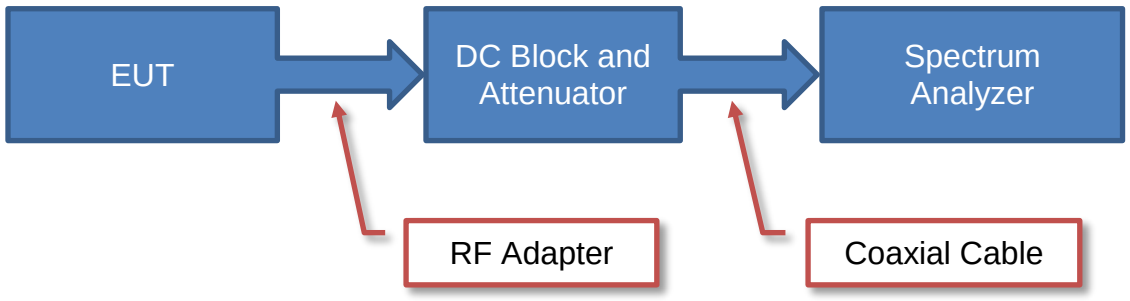
A measurement uncertainty estimation has been performed for each test per our internal quality document QM205.4.6. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty (K=2) can be found in the table below. A lab specific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

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

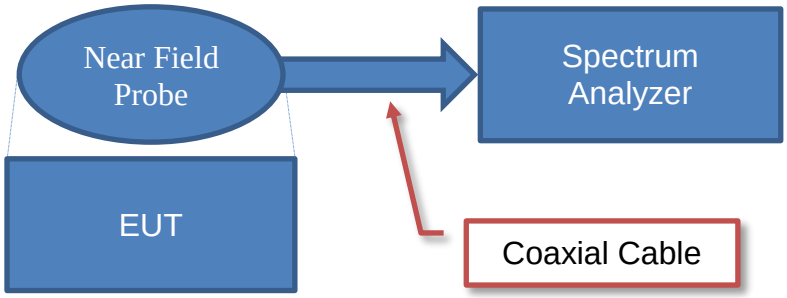
Test	+ MU	- MU
Frequency Accuracy	0.0007%	-0.0007%
Amplitude Accuracy (dB)	1.2 dB	-1.2 dB
Conducted Power (dB)	1.2 dB	-1.2 dB
Radiated Power via Substitution (dB)	0.7 dB	-0.7 dB
Temperature (degrees C)	0.7°C	-0.7°C
Humidity (% RH)	2.5% RH	-2.5% RH
Voltage (AC)	1.0%	-1.0%
Voltage (DC)	0.7%	-0.7%
Field Strength (dB)	5.2 dB	-5.2 dB
AC Powerline Conducted Emissions (dB)	2.6 dB	-2.6 dB

Test Setup Block Diagrams

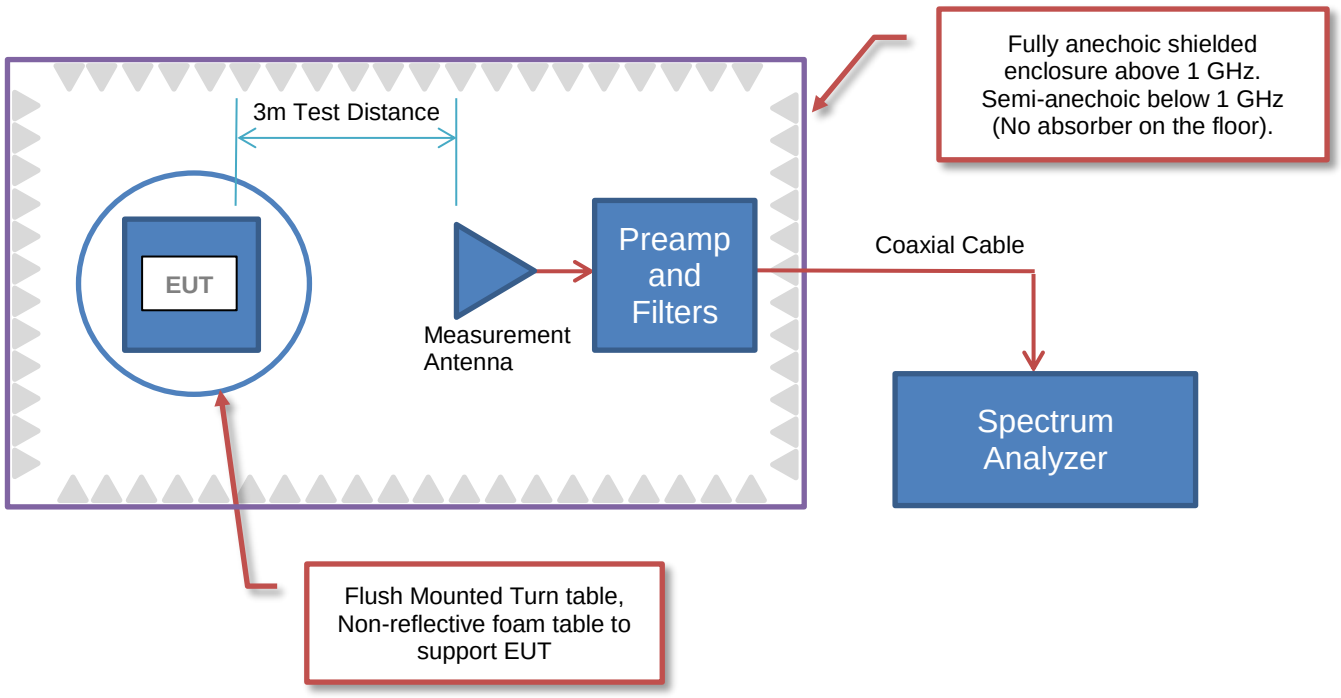
Antenna Port Conducted Measurements



Near Field Test Fixture Measurements



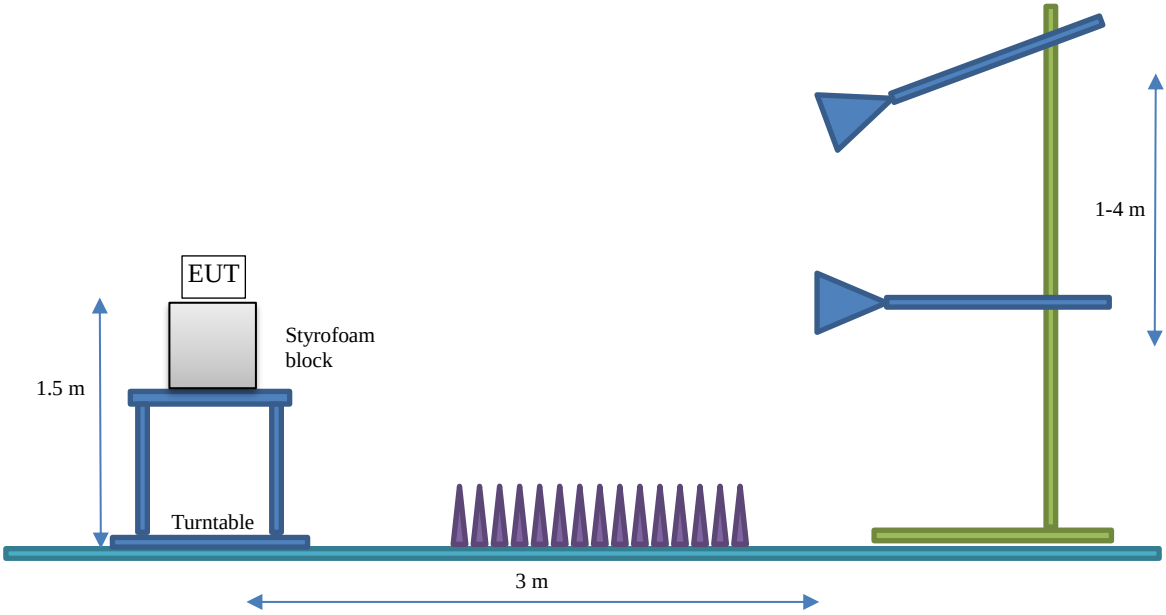
Spurious Radiated Emissions



Test Setup Block Diagrams

Bore Siting (>1GHz)

The diameter of the illumination area is the dimension of the line tangent to the EUT formed by 3 dB beamwidth of the measurement antenna at the measurement distance. At a 3 meter test distance, the diameter of the illumination area was 3.8 meters at 1 GHz and greater than 2.1 meters up to 6 GHz. Above 1 GHz, when required by the measurement standard, the antenna is pointed for both azimuth and elevation to maintain the receive antenna within the cone of radiation from the EUT. The specified measurement detectors were used for comparison of the emissions to the peak and average specification limits.



PRODUCT DESCRIPTION

Client and Equipment Under Test (EUT) Information

Company Name:	Inspire Medical Systems
Address:	5500 Wayzata Blvd., Suite 1600
City, State, Zip:	Golden Valley, MN 55416
Test Requested By:	Charles Steaderman
EUT:	Inspire Remote Model 2580
First Date of Test:	March 18, 2021
Last Date of Test:	March 18, 2021
Receipt Date of Samples:	March 11, 2021
Equipment Design Stage:	Production
Equipment Condition:	No Damage
Purchase Authorization:	Verified

Information Provided by the Party Requesting the Test

Functional Description of the EUT:
Medical device programmer with BLE and inductive.

Testing Objective:
To demonstrate compliance of the inductive portion of the device to FCC Part 15.209 specifications.

CONFIGURATIONS

Configuration INSP0027- 6

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Inspire Remote	Inspire Medical Systems	2580	REM000098

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Battery Pack	Unknown	None	None

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
Battery Leads (x2)	No	0.1m	No	Inspire Remote	Battery Pack

MODIFICATIONS

Equipment Modifications

Item	Date	Test	Modification	Note	Disposition of EUT
1	2021-03-18	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	2021-03-18	Spurious Radiated Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was completed.

POWER SETTINGS AND ANTENNAS

The power settings, antenna gain value(s) and cable loss (if applicable) used for the testing contained in this report were provided by the customer and will affect the validity of the results. Element assumes no responsibility for the accuracy of this information.

ANTENNA GAIN (dBi)

Type	Provided by:	Frequency Range (kHz)	Gain (dBi)
34 loop, 1.92" x 1.80" coil	Inspire Medical Systems	175	Unknown

No adjustable power settings were provided. The EUT was tested using power settings pre-defined by the manufacturer.

FIELD STRENGTH OF FUNDAMENTAL

PSA-ESCI 2021.01.22.0

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

Inductive radio: Transmitting 175 kHz with 100% duty cycle

POWER SETTINGS INVESTIGATED

Battery

CONFIGURATIONS INVESTIGATED

INSP0027 - 6

FREQUENCY RANGE INVESTIGATED

Start Frequency	9 kHz	Stop Frequency	490 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.	Cal. Due
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFM	2020-04-14	2021-04-14
Cable	ESM Cable Corp.	Antenna Loop Cable	MNE	2021-02-17	2022-02-17
Antenna - Loop	ETS Lindgren	6502	AOB	2019-05-21	2021-05-21

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 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, 6.5, 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. Worst case orientation was determined at 3 m and remeasured at 10 m.

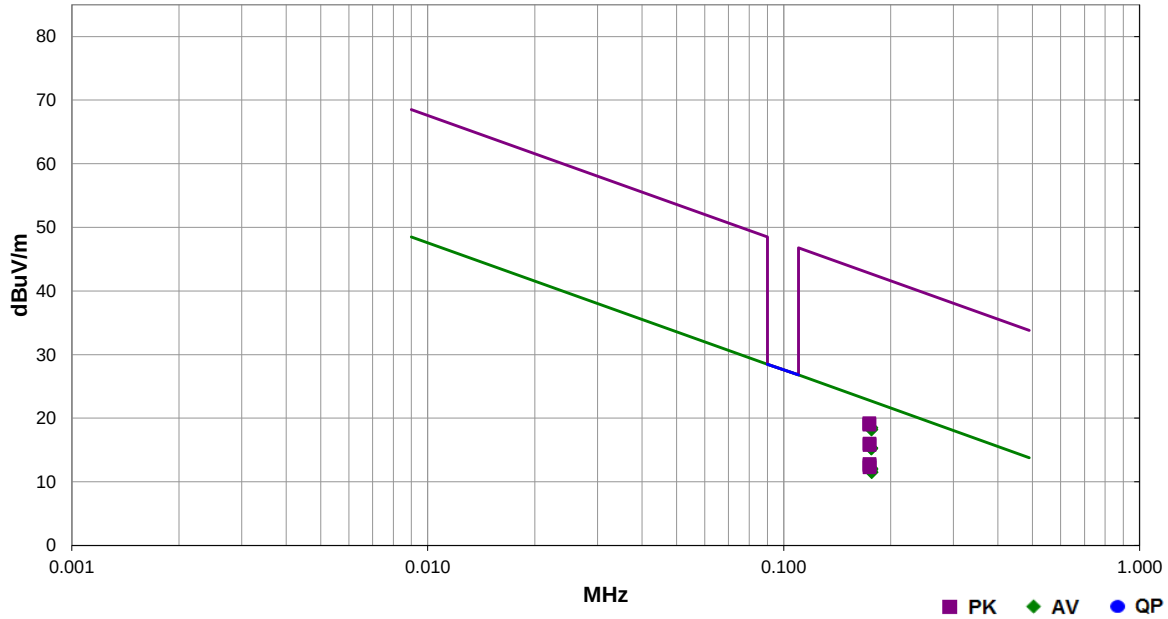
FIELD STRENGTH OF FUNDAMENTAL

EmiR5 2021.01.08.0 PSA-ESCI 2021.01.22.0

Work Order:	INSP0027	**Date:**	2021-03-18		
Project:	None	**Temperature:**	23 °C		
Job Site:	MN04	**Humidity:**	26.6% RH		
Serial Number:	REM000098	**Barometric Pres.:**	1028 mbar	**Tested by:**	Chris Patterson
EUT:	Inspire Remote Model 2580				
Configuration:	6				
Customer:	Inspire Medical Systems				
Attendees:	Tom Haider				
EUT Power:	Battery				
Operating Mode:	Inductive radio: Transmitting 175 kHz with 100% duty cycle				
Deviations:	None				
Comments:	None				

Test Specifications	**Test Method**
FCC 15.209:2021	ANSI C63.10:2013

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



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
0.177	87.0	11.5	1.0	277.0	3.0	0.0	Para to EUT	AV	-80.0	18.5	22.7	-4.2	EUT Vert
0.177	86.7	11.5	1.0	274.0	3.0	0.0	Para to EUT	AV	-80.0	18.2	22.7	-4.5	EUT On Side
0.177	83.8	11.5	1.0	189.0	3.0	0.0	Perp to EUT	AV	-80.0	15.3	22.7	-7.4	EUT On Side
0.176	83.7	11.5	1.0	191.0	3.0	0.0	Perp to EUT	AV	-80.0	15.2	22.7	-7.5	EUT Vert
0.177	80.6	11.5	1.0	97.0	3.0	0.0	Para to GND	AV	-80.0	12.1	22.7	-10.6	EUT Horz
0.177	80.4	11.5	1.0	276.0	3.0	0.0	Para to GND	AV	-80.0	11.9	22.7	-10.8	EUT Vert
0.177	80.0	11.5	1.0	261.0	3.0	0.0	Para to GND	AV	-80.0	11.5	22.7	-11.2	EUT On Side
0.174	87.7	11.5	1.0	277.0	3.0	0.0	Para to EUT	PK	-80.0	19.2	42.8	-23.6	EUT Vert
0.174	87.5	11.5	1.0	274.0	3.0	0.0	Para to EUT	PK	-80.0	19.0	42.8	-23.8	EUT On Side
0.174	84.5	11.5	1.0	189.0	3.0	0.0	Perp to EUT	PK	-80.0	16.0	42.8	-26.8	EUT On Side
0.174	84.3	11.5	1.0	191.0	3.0	0.0	Perp to EUT	PK	-80.0	15.8	42.8	-27.0	EUT Vert
0.174	81.3	11.5	1.0	97.0	3.0	0.0	Para to GND	PK	-80.0	12.8	42.8	-30.0	EUT Horz
0.174	81.1	11.5	1.0	276.0	3.0	0.0	Para to GND	PK	-80.0	12.6	42.8	-30.2	EUT Vert
0.174	80.8	11.5	1.0	261.0	3.0	0.0	Para to GND	PK	-80.0	12.3	42.8	-30.5	EUT On Side
0.177	57.9	11.5	1.0	196.0	3.0	0.0	Para to EUT	AV	-80.0	-10.6	22.7	-33.3	EUT Horz
0.177	50.6	11.5	1.0	159.0	3.0	0.0	Perp to EUT	AV	-80.0	-17.9	22.7	-40.6	EUT Horz
0.176	59.7	11.5	1.0	196.0	3.0	0.0	Para to EUT	PK	-80.0	-8.8	42.7	-51.5	EUT Horz
0.176	53.8	11.5	1.0	159.0	3.0	0.0	Perp to EUT	PK	-80.0	-14.7	42.7	-57.4	EUT Horz

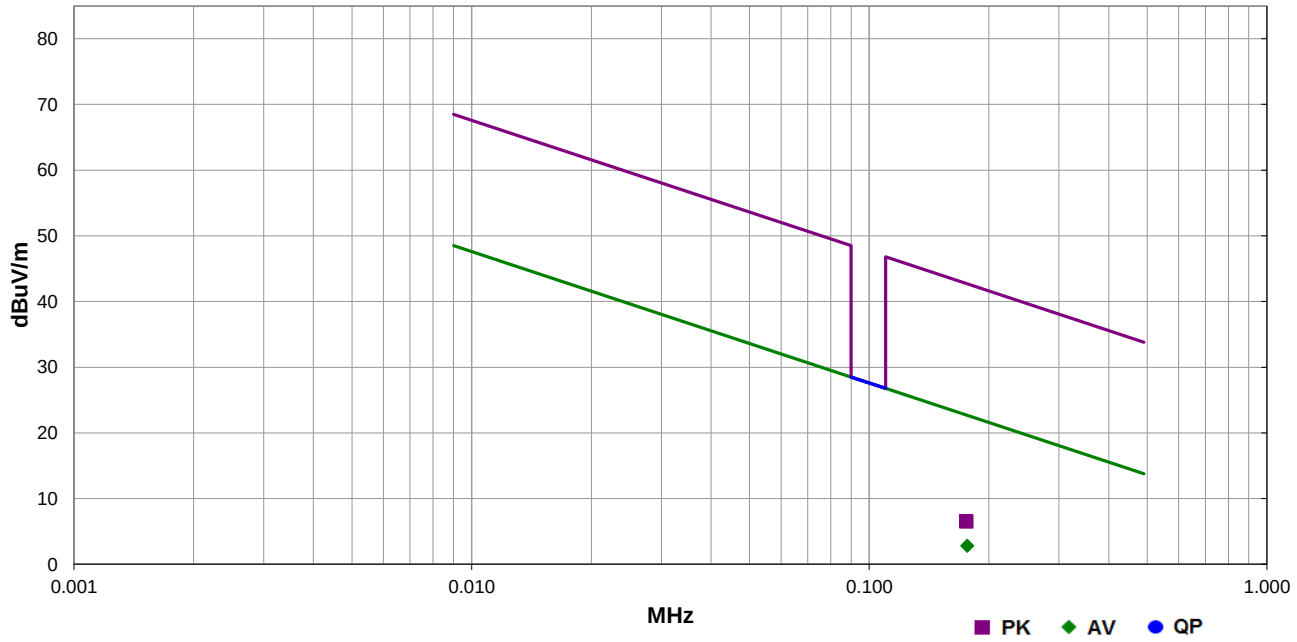
FIELD STRENGTH OF FUNDAMENTAL

EmiR5 2021.01.08.0 PSA-ESCI 2021.01.22.0

Work Order:	INSP0027	**Date:**	2021-03-18		
Project:	None	**Temperature:**	24 °C		
Job Site:	MN04	**Humidity:**	26% RH		
Serial Number:	REM000098	**Barometric Pres.:**	1029 mbar	**Tested by:**	Chris Patterson
EUT:	Inspire Remote Model 2580				
Configuration:	6				
Customer:	Inspire Medical Systems				
Attendees:	Tom Haider				
EUT Power:	Battery				
Operating Mode:	Inductive radio: Transmitting 175 kHz with 100% duty cycle				
Deviations:	None				
Comments:	Worst case was determined at 3 m and remeasured at 10 m.				

Test Specifications	**Test Method**
FCC 15.209:2021	ANSI C63.10:2013

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



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
0.177	50.4	11.5	1.0	102.0	10.0	0.0	Para to EUT	AV	-59.1	2.8	22.7	-19.9	EUT Vert
0.176	54.1	11.5	1.0	102.0	10.0	0.0	Para to EUT	PK	-59.1	6.5	42.7	-36.2	EUT Vert

SPURIOUS RADIATED EMISSIONS

PSA-ESCI 2021.01.22.0

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

Inductive radio: Transmitting 175 kHz with 100% duty cycle

POWER SETTINGS INVESTIGATED

Battery

CONFIGURATIONS INVESTIGATED

INSP0027 - 6

FREQUENCY RANGE INVESTIGATED

Start Frequency	9 kHz	Stop Frequency	30 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.	Cal. Due
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFM	2020-04-14	2021-04-14
Cable	ESM Cable Corp.	Antenna Loop Cable	MNE	2021-02-17	2022-02-17
Antenna - Loop	ETS Lindgren	6502	AOB	2019-05-21	2021-05-21

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 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 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

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, 6.5, 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.

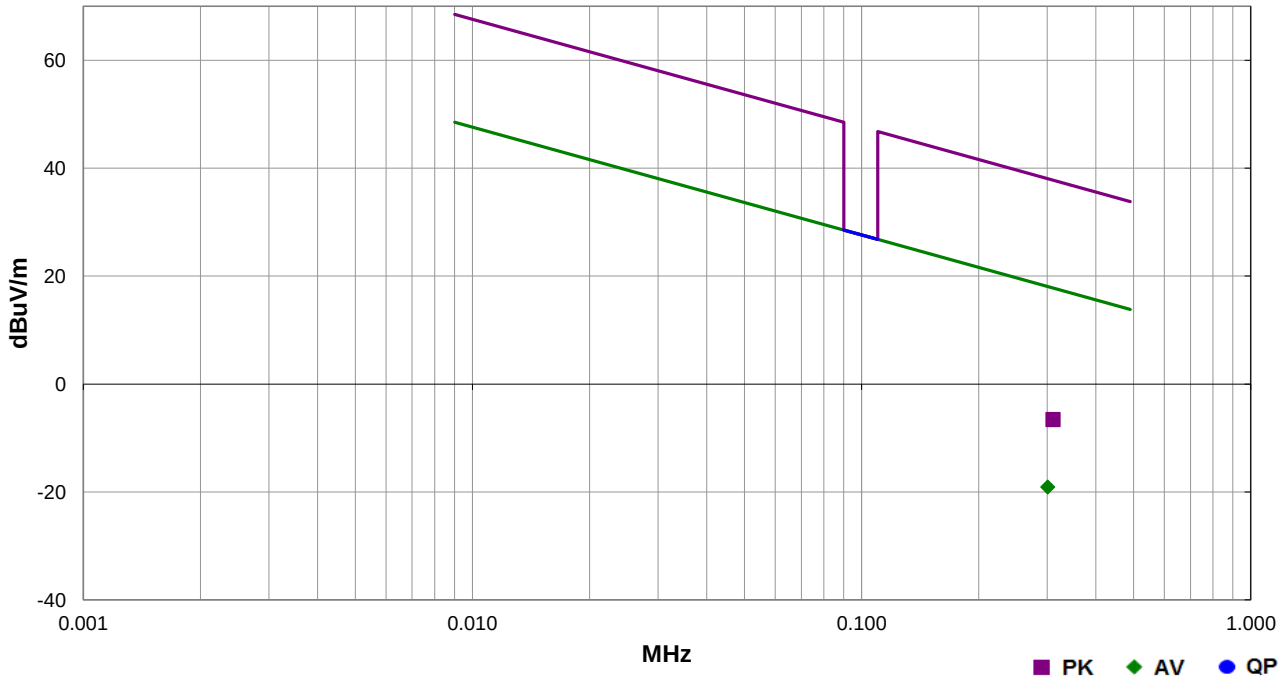
SPURIOUS RADIATED EMISSIONS

EmiR5 2021.01.08.0 PSA-ESCI 2021.01.22.0

Work Order:	INSP0027	**Date:**	2021-03-18		
Project:	None	**Temperature:**	24 °C		
Job Site:	MN04	**Humidity:**	26% RH		
Serial Number:	REM000098	**Barometric Pres.:**	1029 mbar	**Tested by:**	Chris Patterson
EUT:	Inspire Remote Model 2580				
Configuration:	6				
Customer:	Inspire Medical Systems				
Attendees:	Tom Haider				
EUT Power:	Battery				
Operating Mode:	Inductive radio: Transmitting 175 kHz with 100% duty cycle				
Deviations:	None				
Comments:	Worst case antenna position and EUT orientation used from Field Strength of Fundamental testing.				

Test Specifications	**Test Method**
FCC 15.209:2021	ANSI C63.10:2013

Run #	8	**Test Distance (m)**	10	**Antenna Height(s)**	1(m)	**Results**	Pass



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
0.301	28.5	11.5	1.0	302.0	10.0	0.0	Para to EUT	AV	-59.1	-19.1	18.0	-37.1	EUT Vert
0.310	41.0	11.5	1.0	302.0	10.0	0.0	Para to EUT	PK	-59.1	-6.6	37.8	-44.4	EUT Vert

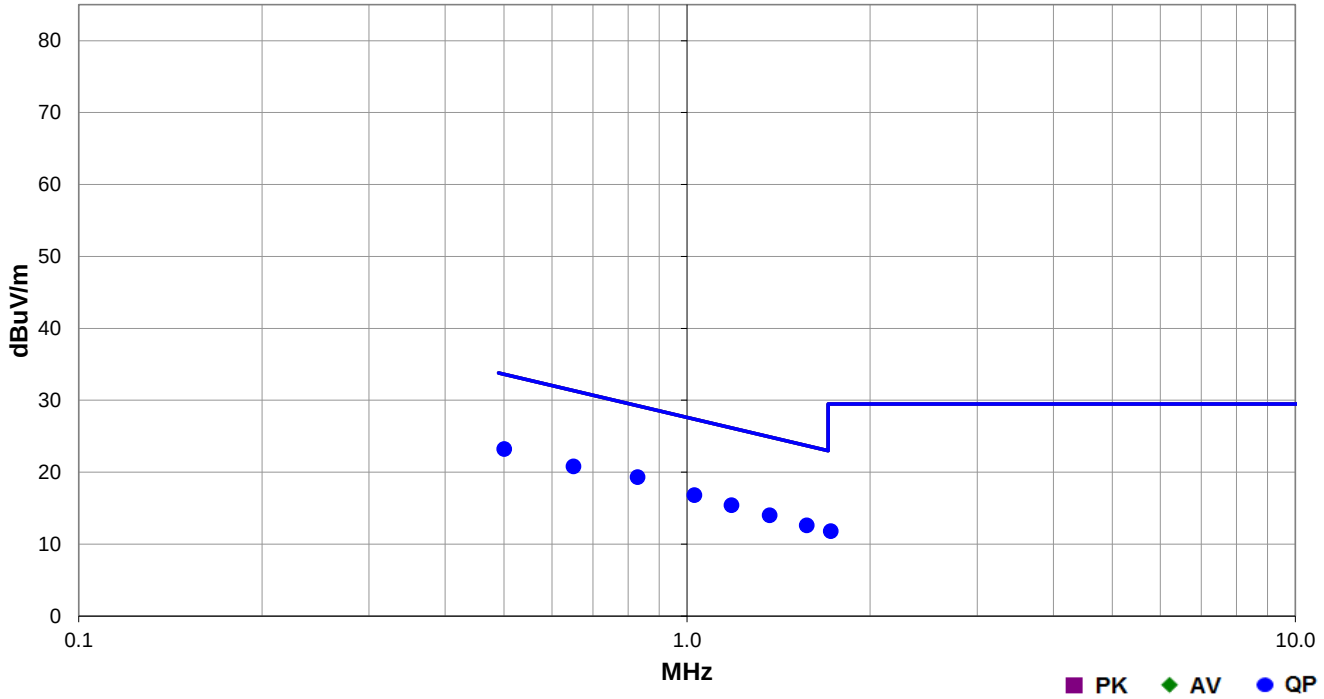
SPURIOUS RADIATED EMISSIONS

EmiR5 2021.01.08.0 PSA-ESCI 2021.01.22.0

Work Order:	INSP0027	**Date:**	2021-03-18		
Project:	None	**Temperature:**	24 °C		
Job Site:	MN04	**Humidity:**	26% RH		
Serial Number:	REM000098	**Barometric Pres.:**	1029 mbar	**Tested by:**	Chris Patterson
EUT:	Inspire Remote Model 2580				
Configuration:	6				
Customer:	Inspire Medical Systems				
Attendees:	Tom Haider				
EUT Power:	Battery				
Operating Mode:	Inductive radio: Transmitting 175 kHz with 100% duty cycle				
Deviations:	None				
Comments:	Worst case antenna position and EUT orientation used from Field Strength of Fundamental testing.				

Test Specifications	**Test Method**
FCC 15.209:2021	ANSI C63.10:2013

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



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)
0.829	26.6	11.8	1.0	126.0	10.0	0.0	Para to EUT	QP	-19.1	19.3	29.2	-9.9
0.501	30.6	11.7	1.0	196.0	10.0	0.0	Para to EUT	QP	-19.1	23.2	33.6	-10.4
0.651	28.2	11.7	1.0	32.0	10.0	0.0	Para to EUT	QP	-19.1	20.8	31.3	-10.5
1.028	23.7	12.2	1.0	330.0	10.0	0.0	Para to EUT	QP	-19.1	16.8	27.4	-10.6
1.183	22.3	12.2	1.0	113.0	10.0	0.0	Para to EUT	QP	-19.1	15.4	26.2	-10.8
1.367	20.9	12.2	1.0	7.0	10.0	0.0	Para to EUT	QP	-19.1	14.0	24.9	-10.9
1.573	19.5	12.2	1.0	15.0	10.0	0.0	Para to EUT	QP	-19.1	12.6	23.7	-11.1
1.723	18.7	12.2	1.0	187.0	10.0	0.0	Para to EUT	QP	-19.1	11.8	29.5	-17.7