NORTHWEST EMC

Stimwave Technologies, Inc.

PDBT-915-2A

FCC 15.249:2016

902-928 MHz Transmitter

Report # SWAV0031.1

NVLAP Lab Code: 201049-0

CERTIFICATE OF TEST

NORTHWEST EMC
2014-12-10

Last Date of Test: June 2, 2016
Stimwave Technologies, Inc.
Model: PDBT-915-2A

Radio Equipment Testing

Standards

Specification	Method
FCC 15.249:2016	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.
6.5	Field Strength of Fundamental	Yes	Pass	
6.5, 6.6	Field Strength of Harmonics and Spurious Radiated Emissions	Yes	Pass	

Deviations From Test Standards

None

Approved By:

Jeremiah Darden, 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

NORTHWEST EMC
REV 2014.10.14

Revision Number	Description	Date	Page Number
00	None		

ACCREDITATIONS AND AUTHORIZATIONS

REV 2016.3.22

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

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 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:
http://www.nwemc.com/accreditations/
http://gsi.nist.gov/global/docs/cabs/designations.html

MEASUREMENT UNCERTAINTY

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 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.

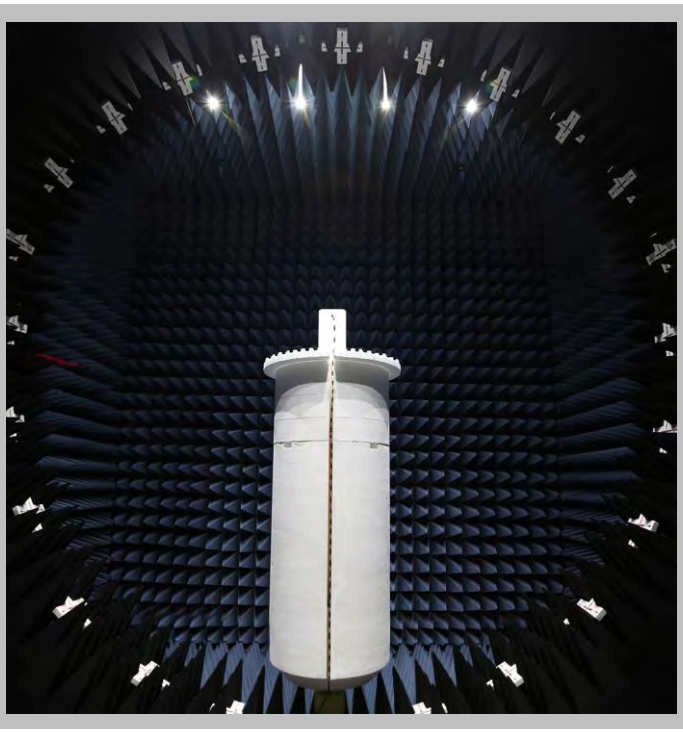
The following table represents the Measurement Uncertainty (MU) budgets for each of the tests that may be contained in this report.

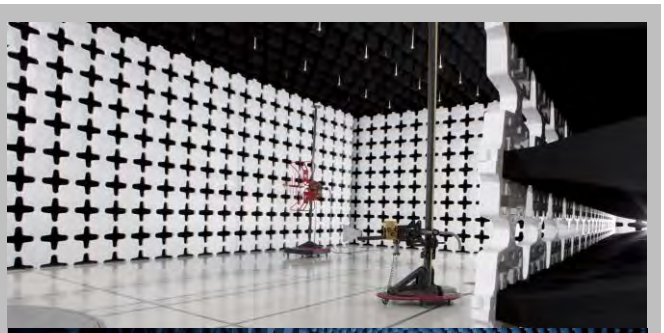
Test	+ MU	- MU
Frequency Accuracy (Hz)	0.0007%	-0.0007%
Amplitude Accuracy (dB)	1.2 dB	-1.2 dB
Conducted Power (dB)	0.3 dB	-0.3 dB
Radiated Power via Substitution (dB)	0.7 dB	-0.7 dB
Temperature (degrees C)	0.7°C	-0.7°C
Humidity (% RH)	2.5% RH	-2.5% RH
Voltage (AC)	1.0%	-1.0%
Voltage (DC)	0.7%	-0.7%
Field Strength (dB)	4.9 dB	-4.9 dB
AC Powerline Conducted Emissions (dB)	2.4 dB	-2.4 dB

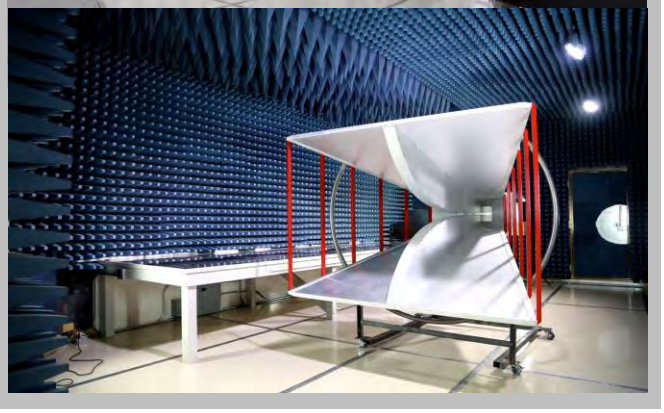
FACILITIES

NORTHWEST EMC
REV 2015.2.19

California	Minnesota	New York	Oregon	Texas	Washington
Labs OC01-13 41 Tesla Irvine, CA 92618 (949) 861-8918	Labs MN01-08, MN10 9349 W Broadway Ave. Brooklyn Park, MN 55445 (612)-638-5136	Labs NY01-04 4939 Jordan Rd. Elbridge, NY 13060 (315) 554-8214	Labs EV01-12 22975 NW Evergreen Pkwy 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: 200761-0	NVLAP Lab Code: 200630-0	NVLAP Lab Code:201049-0	NVLAP Lab Code: 200629-0
Industry 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







PRODUCT DESCRIPTION

NORTHWEST EMC 2014-12-10

Client and Equipment Under Test (EUT) Information

Company Name:	Stimwave Technologies, Inc.
Address:	901 E. Las Olas Blvd., Suite 201
City, State, Zip:	Fort Lauderdale, FL 33301
Test Requested By:	Lawrence LaFranier
Model:	PDBT-915-2A
First Date of Test:	June 1, 2016
Last Date of Test:	June 2, 2016
Receipt Date of Samples:	May 31, 2016
Equipment Design Stage:	Production
Equipment Condition:	No Damage

Information Provided by the Party Requesting the Test

Functional Description of the EUT:
Wireless 915MHz digital transmission transmitter to an implanted spinal device.

Testing Objective:
Seeking to demonstrate compliance under FCC 15.249:2016 for operation in the 902 - 928 MHz Band.

CONFIGURATIONS

NORTHWEST EMC 2014-12-10

Configuration SWAV0031- 1

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Wearable Antenna Assembly	Stimwave Technologies	PDBT-915-2A	FD1F

MODIFICATIONS

NORTHWEST EMC
2014-12-10

Equipment Modifications

Item	Date	Test	Modification	Note	Disposition of EUT
1	6/1/2016	Field Strength of Harmonics and 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.
2	6/2/2016	Field Strength of Fundamental	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

EUT on, transmitting 915MHz data only at -5dBm power setting

POWER SETTINGS INVESTIGATED

Battery

CONFIGURATIONS INVESTIGATED

SWAV0031 - 1

FREQUENCY RANGE INVESTIGATED

Start Frequency	450 MHz	Stop Frequency	1000 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
Attenuator	Weinschel Corp	4H-10	AWA	3/4/2016	12 mo
Analyzer - Spectrum Analyzer	Agilent	N9010A	AFL	10/29/2015	12 mo
Antenna - Biconilog	ETS Lindgren	3143B	AYF	4/13/2016	24 mo
Cable	Northwest EMC	RE 9kHz - 1GHz	TXB	5/31/2016	12 mo

TEST DESCRIPTION

Using the mode of operation and configuration noted within this report, a final spurious radiated emissions test was performed. The frequency range investigated (scanned), is also noted in this report. Emissions measurements were made at the EUT azimuth and antenna height such that the maximum radiated emissions level was detected. This required the use of a turntable and an antenna positioner. The preferred method of a continuous azimuth search was utilized for frequency scans of the EUT field strength with two polarities of the measuring antenna. A calibrated antenna was positioned at the specified distance from the periphery of the EUT. Tests were made with the antenna positioned in all listed planes of polarization.

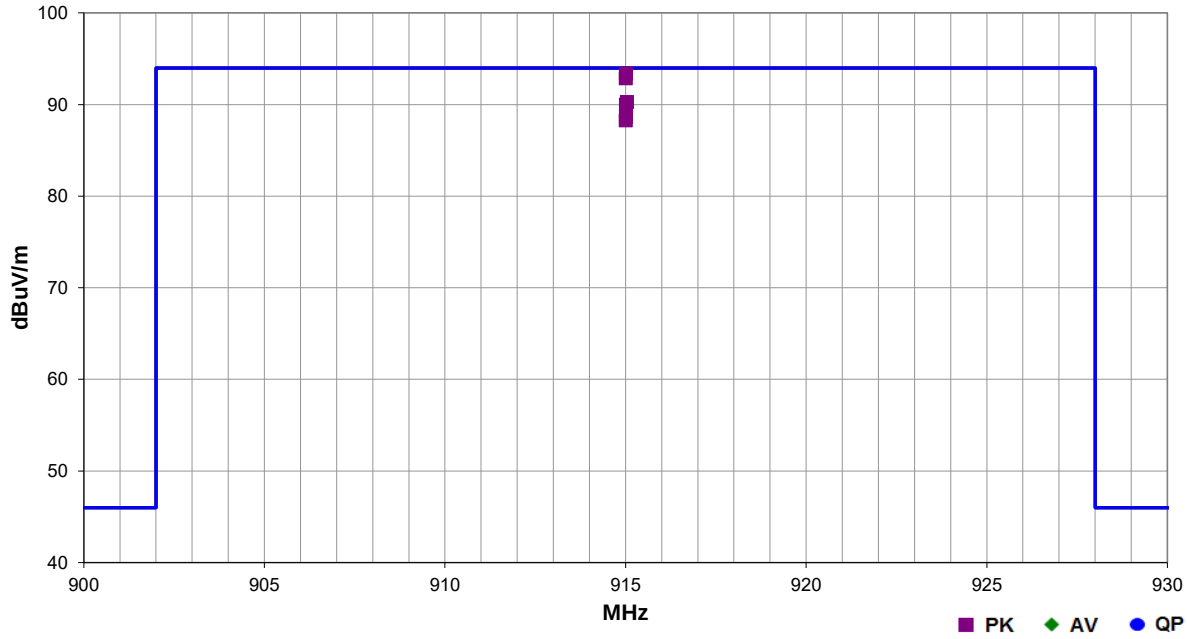
The EUT arrangement is configured as equivalent to that occurring in normal use. Tabletop equipment is placed on a 80 centimeter high non-conductive table and floor-standing equipment is placed on, but insulated from a ground reference plane by the use of its own rollers or stand-off supports. If measurements above 1 GHz were required, the test setup was modified to meet the regulatory requirements for higher frequency measurements. If required, RF absorber was placed on the floor between the measurement antenna and EUT.

FIELD STRENGTH OF FUNDAMENTAL

Work Order:	SWAV0031	**Date:**	06/02/16		
Project:	None	**Temperature:**	19.8 °C		
Job Site:	TX02	**Humidity:**	60.3% RH		
Serial Number:	FD1F	**Barometric Pres.:**	1015 mbar	**Tested by:**	Frank Sun
EUT:	PDBT-915-2A				
Configuration:	1				
Customer:	Stimwave Technologies, Inc.				
Attendees:	Patrick Larson				
EUT Power:	Battery				
Operating Mode:	EUT on, transmitting 915MHz data only at -5dBm power setting				
Deviations:	None				
Comments:	PK. Per FCC 15.35, a peak detector was used where applicable since the EUT pulse repetition frequency was less than 20Hz				

Test Specifications	**Test Method**
FCC 15.249:2016	ANSI C63.10:2013

Run #	7	**Test Distance (m)**	3	**Antenna Height(s)**	1 to 4(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
915.008	49.9	33.5	1.0	135.0	3.0	10.0	Horz	PK	0.0	93.4	94.0	-0.6	EUT Side
915.003	49.4	33.5	1.0	135.0	3.0	10.0	Horz	PK	0.0	92.9	94.0	-1.1	EUT Horz
915.037	46.8	33.5	1.5	90.0	3.0	10.0	Vert	PK	0.0	90.3	94.0	-3.7	EUT Horz
915.010	46.5	33.5	1.0	315.0	3.0	10.0	Vert	PK	0.0	90.0	94.0	-4.0	EUT Vert
915.008	45.2	33.5	1.5	90.0	3.0	10.0	Vert	PK	0.0	88.7	94.0	-5.3	EUT Side
915.003	44.8	33.5	1.0	315.0	3.0	10.0	Horz	PK	0.0	88.3	94.0	-5.7	EUT Vert

FIELD STRENGTH OF HARMONICS AND 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

EUT on, transmitting 915MHz data only at -5dBm power setting

POWER SETTINGS INVESTIGATED

Battery

CONFIGURATIONS INVESTIGATED

SWAV0031 - 1

FREQUENCY RANGE INVESTIGATED

Start Frequency	30 MHz	Stop Frequency	12400 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
Attenuator	Weinschel Corp	4H-20	AWB	3/9/2016	12 mo
Filter - Band Reject	Wainwright Instruments	WTRCTV5-750-1000-20-70-60EEK	CUL	11/4/2015	12 mo
Filter - High Pass	Micro-Tronics	HPM50108	HGD	11/3/2015	12 mo
Filter - Low Pass	Micro-Tronics	LPM50003	HHT	8/11/2015	12 mo
Amplifier - Pre-Amplifier	Miteq	AMF-6F-08001200-30-10P	PAK	10/22/2015	12 mo
Amplifier - Pre-Amplifier	Miteq	AMF-3D-00100800-32-13P	PAJ	9/18/2015	12 mo
Amplifier - Pre-Amplifier	Miteq	AM-1551	PAH	9/18/2015	12 mo
Antenna - Standard Gain	ETS Lindgren	3160-07	AJF	NCR	0 mo
Antenna - Double Ridge	ETS Lindgren	3115	AJL	9/15/2014	24 mo
Antenna - Biconilog	ETS Lindgren	3143B	AYF	4/13/2016	24 mo
Analyzer - Spectrum Analyzer	Agilent	N9010A	AFL	10/29/2015	12 mo
Cable	Northwest EMC	8-18GHz	TXD	5/31/2016	12 mo
Cable	Northwest EMC	1-8.2 GHz	TXC	5/31/2016	12 mo
Cable	Northwest EMC	RE 9kHz - 1GHz	TXB	5/31/2016	12 mo

TEST DESCRIPTION

Using the mode of operation and configuration noted within this report, a final spurious radiated emissions test was performed. The frequency range investigated (scanned), is also noted in this report. Emissions measurements were made at the EUT azimuth and antenna height such that the maximum radiated emissions level was detected. This required the use of a turntable and an antenna positioner. The preferred method of a continuous azimuth search was utilized for frequency scans of the EUT field strength with two polarities of the measuring antenna. A calibrated antenna was positioned at the specified distance from the periphery of the EUT. Tests were made with the antenna positioned in all listed planes of polarization.

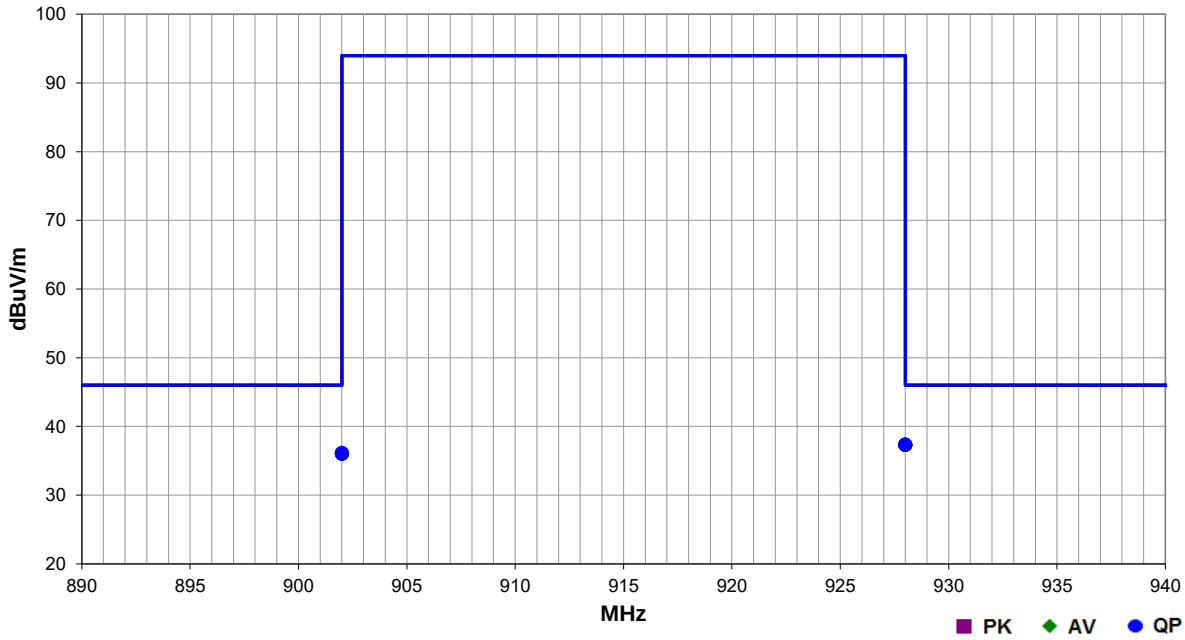
The EUT arrangement is configured as equivalent to that occurring in normal use. Tabletop equipment is placed on a 1.5 meter high non-conductive table and floor-standing equipment is placed on, but insulated from a ground reference plane by the use of its own rollers or stand-off supports. If measurements above 1 GHz were required, the test setup was modified to meet the regulatory requirements for higher frequency measurements. If required, RF absorber was placed on the floor between the measurement antenna and EUT.

FIELD STRENGTH OF HARMONICS AND SPURIOUS RADIATED EMISSIONS

Work Order:	SWAV0031	**Date:**	06/01/16		
Project:	None	**Temperature:**	19.8 °C		
Job Site:	TX02	**Humidity:**	60.3% RH		
Serial Number:	FD1F	**Barometric Pres.:**	1015 mbar	**Tested by:**	Frank Sun
EUT:	PDBT-915-2A				
Configuration:	1				
Customer:	Stimwave Technologies, Inc.				
Attendees:	Patrick Larson				
EUT Power:	Battery				
Operating Mode:	EUT on, transmitting 915MHz data only at -5dBm power setting				
Deviations:	None				
Comments:	QP. Notch filter factor of -14.7dB at 902 and 928 MHz adjusted.				

Test Specifications	**Test Method**
FCC 15.249:2016	ANSI C63.10:2013

Run #	10	**Test Distance (m)**	3	**Antenna Height(s)**	1 to 4(m)	**Results**	Pass



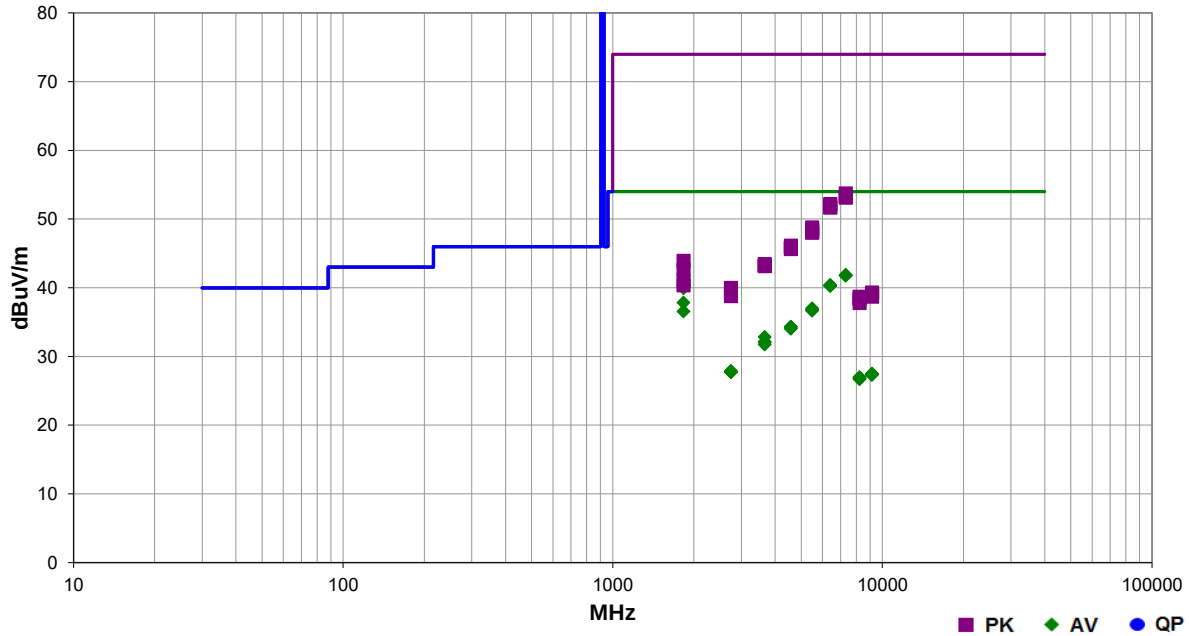
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
928.000	32.3	5.0	1.0	16.9	3.0	0.0	Horz	QP	0.0	37.3	46.0	-8.7	EUT Side
928.000	32.3	5.0	1.0	308.0	3.0	0.0	Vert	QP	0.0	37.3	46.0	-8.7	EUT Side
928.000	32.3	5.0	1.0	246.0	3.0	0.0	Horz	QP	0.0	37.3	46.0	-8.7	EUT Horz
928.000	32.3	5.0	1.0	158.0	3.0	0.0	Vert	QP	0.0	37.3	46.0	-8.7	EUT Horz
928.000	32.3	5.0	1.0	2.0	3.0	0.0	Horz	QP	0.0	37.3	46.0	-8.7	EUT Vert
928.000	32.3	5.0	1.0	201.0	3.0	0.0	Vert	QP	0.0	37.3	46.0	-8.7	EUT Vert
902.000	32.6	3.6	1.0	45.9	3.0	0.0	Horz	QP	0.0	36.2	46.0	-9.8	EUT Side
902.000	32.5	3.6	1.0	160.9	3.0	0.0	Vert	QP	0.0	36.1	46.0	-9.9	EUT Side
902.000	32.5	3.6	1.0	3.9	3.0	0.0	Horz	QP	0.0	36.1	46.0	-9.9	EUT Horz
902.000	32.5	3.6	1.0	177.9	3.0	0.0	Vert	QP	0.0	36.1	46.0	-9.9	EUT Horz
902.000	32.5	3.6	1.0	327.9	3.0	0.0	Horz	QP	0.0	36.1	46.0	-9.9	EUT Vert
902.000	32.5	3.6	1.0	246.0	3.0	0.0	Vert	QP	0.0	36.1	46.0	-9.9	EUT Vert

FIELD STRENGTH OF HARMONICS AND SPURIOUS RADIATED EMISSIONS

Work Order:	SWAV0031	**Date:**	06/01/16		
Project:	None	**Temperature:**	19.8 °C		
Job Site:	TX02	**Humidity:**	60.3% RH		
Serial Number:	FD1F	**Barometric Pres.:**	1015 mbar	**Tested by:**	Frank Sun
EUT:	PDBT-915-2A				
Configuration:	1				
Customer:	Stimwave Technologies, Inc.				
Attendees:	Patrick Larson				
EUT Power:	Battery				
Operating Mode:	EUT on, transmitting 915MHz data only at -5dBm power setting				
Deviations:	None				
Comments:	PK and RMS AV				

Test Specifications	**Test Method**
FCC 15.249:2016	ANSI C63.10:2013

Run #	12	**Test Distance (m)**	3	**Antenna Height(s)**	1 to 4(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
1830.015	49.0	-7.0	2.5	196.9	3.0	0.0	Vert	AV	0.0	42.0	54.0	-12.0	EUT Side
7320.335	28.5	13.3	1.0	286.9	3.0	0.0	Horz	AV	0.0	41.8	54.0	-12.2	EUT Side
7320.343	28.5	13.3	1.0	8.0	3.0	0.0	Horz	AV	0.0	41.8	54.0	-12.2	EUT Horz
7319.675	28.5	13.3	1.0	212.0	3.0	0.0	Vert	AV	0.0	41.8	54.0	-12.2	EUT Horz
7320.370	28.4	13.3	2.6	255.9	3.0	0.0	Vert	AV	0.0	41.7	54.0	-12.3	EUT Side
6405.372	28.6	11.8	1.0	255.9	3.0	0.0	Vert	AV	0.0	40.4	54.0	-13.6	EUT Horz
6405.448	28.5	11.8	1.0	278.0	3.0	0.0	Vert	AV	0.0	40.3	54.0	-13.7	EUT Side
6405.457	28.5	11.8	1.0	356.0	3.0	0.0	Horz	AV	0.0	40.3	54.0	-13.7	EUT Horz
6404.895	28.5	11.8	1.0	357.9	3.0	0.0	Horz	AV	0.0	40.3	54.0	-13.7	EUT Side
1830.062	46.9	-7.0	1.0	225.0	3.0	0.0	Vert	AV	0.0	39.9	54.0	-14.1	EUT Horz
1829.988	44.8	-7.0	3.0	135.0	3.0	0.0	Horz	AV	0.0	37.8	54.0	-16.2	EUT Side
5490.368	28.4	8.6	1.0	67.0	3.0	0.0	Horz	AV	0.0	37.0	54.0	-17.0	EUT Horz
5490.483	28.2	8.6	2.8	82.9	3.0	0.0	Vert	AV	0.0	36.8	54.0	-17.2	EUT Horz
5490.375	28.1	8.6	1.0	15.9	3.0	0.0	Vert	AV	0.0	36.7	54.0	-17.3	EUT Side
5489.563	28.1	8.6	1.0	243.0	3.0	0.0	Horz	AV	0.0	36.7	54.0	-17.3	EUT Side
1829.970	43.5	-7.0	4.0	135.0	3.0	0.0	Horz	AV	0.0	36.5	54.0	-17.5	EUT Horz
4575.413	28.9	5.4	1.0	271.0	3.0	0.0	Vert	AV	0.0	34.3	54.0	-19.7	EUT Horz
4575.323	28.9	5.4	1.0	309.9	3.0	0.0	Horz	AV	0.0	34.3	54.0	-19.7	EUT Horz
4574.610	28.7	5.4	1.0	318.0	3.0	0.0	Horz	AV	0.0	34.1	54.0	-19.9	EUT Side
4575.415	28.6	5.4	1.0	31.0	3.0	0.0	Vert	AV	0.0	34.0	54.0	-20.0	EUT Side
7319.915	40.4	13.3	1.0	212.0	3.0	0.0	Vert	PK	0.0	53.7	74.0	-20.3	EUT Horz

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
7319.528	40.0	13.3	2.6	255.9	3.0	0.0	Vert	PK	0.0	53.3	74.0	-20.7	EUT Side
7320.447	39.8	13.3	1.0	8.0	3.0	0.0	Horz	PK	0.0	53.1	74.0	-20.9	EUT Horz
7320.320	39.8	13.3	1.0	286.9	3.0	0.0	Horz	PK	0.0	53.1	74.0	-20.9	EUT Side
3659.977	30.9	1.9	1.0	288.0	3.0	0.0	Horz	AV	0.0	32.8	54.0	-21.2	EUT Side
6405.168	40.4	11.8	1.0	357.9	3.0	0.0	Horz	PK	0.0	52.2	74.0	-21.8	EUT Side
3659.710	30.2	1.9	1.0	69.9	3.0	0.0	Horz	AV	0.0	32.1	54.0	-21.9	EUT Horz
6404.963	40.3	11.8	1.0	356.0	3.0	0.0	Horz	PK	0.0	52.1	74.0	-21.9	EUT Horz
3660.032	30.1	1.9	1.0	57.0	3.0	0.0	Vert	AV	0.0	32.0	54.0	-22.0	EUT Horz
3660.120	29.8	1.9	1.0	123.0	3.0	0.0	Vert	AV	0.0	31.7	54.0	-22.3	EUT Side
6405.305	39.9	11.8	1.0	278.0	3.0	0.0	Vert	PK	0.0	51.7	74.0	-22.3	EUT Side
6404.888	39.9	11.8	1.0	255.9	3.0	0.0	Vert	PK	0.0	51.7	74.0	-22.3	EUT Horz
5489.613	40.2	8.6	1.0	67.0	3.0	0.0	Horz	PK	0.0	48.8	74.0	-25.2	EUT Horz
5489.898	39.8	8.6	2.8	82.9	3.0	0.0	Vert	PK	0.0	48.4	74.0	-25.6	EUT Horz
5489.887	39.5	8.6	1.0	15.9	3.0	0.0	Vert	PK	0.0	48.1	74.0	-25.9	EUT Side
5490.450	39.4	8.6	1.0	243.0	3.0	0.0	Horz	PK	0.0	48.0	74.0	-26.0	EUT Side
2745.138	31.0	-3.1	1.0	326.0	3.0	0.0	Vert	AV	0.0	27.9	54.0	-26.1	EUT Side
2744.993	30.9	-3.1	1.0	336.0	3.0	0.0	Vert	AV	0.0	27.8	54.0	-26.2	EUT Horz
2744.562	30.9	-3.1	1.0	171.0	3.0	0.0	Horz	AV	0.0	27.8	54.0	-26.2	EUT Side
2745.122	30.8	-3.1	1.0	255.0	3.0	0.0	Horz	AV	0.0	27.7	54.0	-26.3	EUT Horz
9150.320	31.2	-3.7	1.0	0.0	3.0	0.0	Horz	AV	0.0	27.5	54.0	-26.5	EUT Horz
9149.890	31.1	-3.7	4.0	294.0	3.0	0.0	Vert	AV	0.0	27.4	54.0	-26.6	EUT Side
9149.537	31.1	-3.7	1.0	79.0	3.0	0.0	Vert	AV	0.0	27.4	54.0	-26.6	EUT Horz
9149.797	31.0	-3.7	1.0	43.0	3.0	0.0	Horz	AV	0.0	27.3	54.0	-26.7	EUT Side
8234.528	32.2	-5.2	1.0	123.0	3.0	0.0	Horz	AV	0.0	27.0	54.0	-27.0	EUT Horz
8235.270	32.1	-5.2	1.0	280.9	3.0	0.0	Vert	AV	0.0	26.9	54.0	-27.1	EUT Horz
8235.298	32.0	-5.2	1.0	242.0	3.0	0.0	Horz	AV	0.0	26.8	54.0	-27.2	EUT Side
8235.258	31.9	-5.2	1.0	122.0	3.0	0.0	Vert	AV	0.0	26.7	54.0	-27.3	EUT Side
4575.462	40.7	5.4	1.0	271.0	3.0	0.0	Vert	PK	0.0	46.1	74.0	-27.9	EUT Horz
4575.345	40.4	5.4	1.0	318.0	3.0	0.0	Horz	PK	0.0	45.8	74.0	-28.2	EUT Side
4574.827	40.3	5.4	1.0	31.0	3.0	0.0	Vert	PK	0.0	45.7	74.0	-28.3	EUT Side
4575.140	40.2	5.4	1.0	309.9	3.0	0.0	Horz	PK	0.0	45.6	74.0	-28.4	EUT Horz
1829.977	50.9	-7.0	2.5	196.9	3.0	0.0	Vert	PK	0.0	43.9	74.0	-30.1	EUT Side
3659.785	41.5	1.9	1.0	57.0	3.0	0.0	Vert	PK	0.0	43.4	74.0	-30.6	EUT Horz
3659.898	41.3	1.9	1.0	288.0	3.0	0.0	Horz	PK	0.0	43.2	74.0	-30.8	EUT Side
3659.742	41.3	1.9	1.0	123.0	3.0	0.0	Vert	PK	0.0	43.2	74.0	-30.8	EUT Side
3659.993	41.2	1.9	1.0	69.9	3.0	0.0	Horz	PK	0.0	43.1	74.0	-30.9	EUT Horz
1830.085	49.6	-7.0	1.0	225.0	3.0	0.0	Vert	PK	0.0	42.6	74.0	-31.4	EUT Horz
1829.843	47.9	-7.0	3.0	135.0	3.0	0.0	Horz	PK	0.0	40.9	74.0	-33.1	EUT Side
1830.010	47.3	-7.0	4.0	135.0	3.0	0.0	Horz	PK	0.0	40.3	74.0	-33.7	EUT Horz
2744.892	43.1	-3.1	1.0	326.0	3.0	0.0	Vert	PK	0.0	40.0	74.0	-34.0	EUT Side
2745.282	42.7	-3.1	1.0	336.0	3.0	0.0	Vert	PK	0.0	39.6	74.0	-34.4	EUT Horz
9150.387	43.0	-3.7	1.0	79.0	3.0	0.0	Vert	PK	0.0	39.3	74.0	-34.7	EUT Horz
9150.422	42.8	-3.7	4.0	294.0	3.0	0.0	Vert	PK	0.0	39.1	74.0	-34.9	EUT Side
2744.957	42.2	-3.1	1.0	255.0	3.0	0.0	Horz	PK	0.0	39.1	74.0	-34.9	EUT Horz
9150.230	42.5	-3.7	1.0	43.0	3.0	0.0	Horz	PK	0.0	38.8	74.0	-35.2	EUT Side
2745.063	41.9	-3.1	1.0	171.0	3.0	0.0	Horz	PK	0.0	38.8	74.0	-35.2	EUT Side
9149.777	42.4	-3.7	1.0	0.0	3.0	0.0	Horz	PK	0.0	38.7	74.0	-35.3	EUT Horz
8235.127	43.9	-5.2	1.0	280.9	3.0	0.0	Vert	PK	0.0	38.7	74.0	-35.3	EUT Horz
8235.122	43.7	-5.2	1.0	122.0	3.0	0.0	Vert	PK	0.0	38.5	74.0	-35.5	EUT Side
8234.803	43.6	-5.2	1.0	123.0	3.0	0.0	Horz	PK	0.0	38.4	74.0	-35.6	EUT Horz
8235.488	43.0	-5.2	1.0	242.0	3.0	0.0	Horz	PK	0.0	37.8	74.0	-36.2	EUT Side