EMC & RF Test Report

As per

RSS-210 Issue 9
&
FCC Part 15 Subpart 15.249

Unlicensed Intentional Radiators

on the

FIXED ZONE BADGE, model: BADGEFIX

Canada

Choose certainty.
Add value.

Issued by:

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Testing produced for

PROXIPI INC

See Appendix A for full client & EUT details.

Industry Canada
Registration # 6844B-1

Testing Laboratory
Certificate #2955.02

Registration # 382292

Table of Contents

Report Scope

This report addresses the EMC verification testing and test results of the **FIXED ZONE BADGE, model: BADGEFIX**, and is herein referred to as EUT (Equipment Under Test). The EUT was tested for compliance against the following standards:

RSS-210 Issue 9:2016

FCC Part 15 Subpart C 15.249:2016

Test procedures, results, justifications, and engineering considerations, if any, follow later in this report.

This report does not imply product endorsement by any government, accreditation agency, or TÜV SÜD Canada Inc.

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Summary

The results contained in this report relate only to the item(s) tested.

EUT:	FIXED ZONE BADGE, model: BADGEFIX
FCC Certification #, FCC ID:	2AIUY-BFBC
Industry Canada Certification #, IC:	21748- BFBC
EUT passed all tests performed	Yes
Tests conducted by	Abderrahmane Ferhat

For testing dates, see "Testing Environmental Conditions and Dates".

Test Results Summary

Standard/Method	Description	Class/Limit	Result
FCC 15.203	Antenna Requirement	Unique	Pass See Justification
FCC 15.205 RSS-GEN (Table 6)	Restricted Bands for Intentional Operation	QuasiPeak Average	Pass See Justification
FCC 15.209 FCC 15.249 RSS-GEN (Table 4)	Spurious Radiated Emissions	QuasiPeak Average	Pass
	Fundamental	< 50mV/m	
	Harmonics	< 500uV/m	
	Occupied bandwidth	—	—
FCC 15.207 RSS-GEN (Table 3)	Power Line Conducted Emissions	QuasiPeak Average	Pass
FCC 15.247(i) RSS-102	RF Exposure	—	Pass
Overall Result			**Pass**

If the product as tested or otherwise complies with the specification, the EUT is deemed to comply with the requirement and is deemed a 'PASS' grade. If not 'FAIL' grade will be issued. Note that 'PASS' / 'FAIL' grade is independent of any measurement uncertainties. A 'PASS' / 'FAIL' grade within measurement uncertainty is marked with a '*'.

Notes, Justifications, or Deviations

The following notes, justifications for tests not performed or deviations from the above listed specifications apply:

For the Antenna requirement specified in FCC 15.203, the unit uses an 8.5cm monopole antenna wire about (1.9dBi gain).

For the Restricted Bands of operation, the EUT is designed to only operate at 915MHz.

For the scope of this test report, the EUT was mounted in three orthogonal axis to maximize emissions. Worst case results are presented.

Sample Calculation(s)

Radiated Emission Test

Margin = Limit – (Received Signal + Antenna Factor + Cable Loss – Pre-Amp Gain)
Margin = 50.5dBµV/m – (50dBµV + 10dB + 2.5dB – 20dB)
Margin = 8.0 dB (pass)

Power Line Conducted Emission Test

Margin = Limit – (Received Signal + Attenuation Factor + Cable Loss + LISN Factor)
Margin = 73.0dBµV – (50dBµV + 10dB + 2.5dB + 0.5dB)
Margin = 10.0 dB (pass)

Applicable Standards, Specifications and Methods

ANSI C63.4:2014	Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz
ANSI C63.10:2013	American National Standard For Testing Unlicensed Wireless Devices
CFR 47 FCC 15 Subpart C:2016	Code of Federal Regulations – Radio Frequency Devices, Intentional Radiators
CISPR 22:2008	Information Technology Equipment - Radio Disturbance Characteristics - Limits and Methods of Measurement
FCC KDB 558074: 2016	FCC KDB 558074 Digital Transmission Systems, measurements and procedures
ICES-003 Issue 6 2016	Digital Apparatus - Spectrum Management and Telecommunications Policy Interference-Causing Equipment Standard
RSS-GEN Issue 4 2014	General Requirements and Information for the Certification of Radio Apparatus
RSS-210 Issue 9 :2016	Issue 9: Licence-Exempt Radio Apparatus: Category I Equipment
ISO 17025:2005	General Requirements for the Competence of Testing and Calibration Laboratories

Document Revision Status

Revision 0	July 21, 2017.	Initial Release
Revision 1	January 15, 2018.	Added product name.

Definitions and Acronyms

The following definitions and acronyms are applicable in this report.
See also ANSI C63.14.

AE – Auxiliary Equipment. A digital accessory that feeds data into or receives data from another device (host) that in turn, controls its operation.

BW – Bandwidth. Unless otherwise stated, this is refers to the 6 dB bandwidth.

EMC – Electro-Magnetic Compatibility. The ability of an equipment or system to function satisfactorily in its electromagnetic environment without introducing intolerable electromagnetic disturbances to anything in that environment.

EMI – Electro-Magnetic Immunity. The ability to maintain a specified performance when the equipment is subjected to disturbance (unwanted) signals of specified levels.

EUT – Equipment Under Test. A device or system being evaluated for compliance that is representative of a product to be marketed.

ITE – Information Technology Equipment with a primary function(s) of entry, storage, display, retrieval, transmission, processing, switching, or control, of data.

LISN – Line Impedance Stabilization Network

NCR – No Calibration Required

RF – Radio Frequency

Testing Facility

Testing for EMC on the EUT was carried out at TÜV SÜD Canada testing lab in Laval, near Montréal, Québec, Canada. The testing lab has a calibrated 3m semi-anechoic chamber which allows measurements on an EUT that has a maximum width or length of up to 2m and a height of up to 3m. The chamber is equipped with a turntable that is capable of testing devices up to 3300lb in weight. This facility is capable of testing products that are rated for 120Vac and 240Vac single phase, or devices that are rated for a 208Vac 3 phase input. DC capability is also available for testing. The chamber is equipped with a mast that controls the polarization and height of the antenna. Control of the mast occurs in the control room adjoining the shielded chamber. Radiated emission measurements are performed using a BiLog antenna and a Horn antenna where applicable. Conducted emissions, unless otherwise stated, are performed using a LISN and using the Vertical Ground plane if applicable. For ESD testing, the HCP is 1.6m x 0.8m and the VCP is 0.5m x 0.5m. The reference ground plane, when applicable, is 1.6m x 1.6m.

Calibrations and Accreditations

The 3m semi-anechoic chamber is registered with Federal Communications Commission (FCC, 382292) and Industry Canada (IC, 6844B-1). This chamber was calibrated for Normalized Site Attenuation (NSA) using test procedures outlined in ANSI C63.4 "Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz". The chamber is lined with ferrite tiles and absorption cones to minimize any undesired reflections. The NSA data is kept on file at TÜV SÜD Canada. For radiated susceptibility testing, a 16 point field calibration has been performed on the chamber. The field uniformity data is kept on file at TÜV SÜD Canada. TÜV SÜD Canada Inc is accredited to ISO 17025 by A2LA with Testing Certificate #2955.02. The laboratory's current scope of accreditation listing can be found as listed on the A2LA website. All measuring equipment is calibrated on an annual or bi-annual basis as listed for each respective test.

Testing Environmental Conditions and Dates

Following environmental conditions were recorded in the facility during time of testing

Date	Test	Initials	Temperature (ºC)	Humidity (%)	Pressure (kPa)
27-Oct-2016 to 31-Oct-2016	Radiated Emissions	AF	20 – 24	40 – 51	98.0 – 102.0
28-Oct-2016	Conducted Emissions	AF	20 – 24	40 – 51	98.0 – 102.0

Detailed Test Results Section

Transmitter Spurious Radiated Emissions

Purpose

The purpose of this test is to ensure that the RF energy unintentionally emitted from the EUT does not exceed the limits listed below as defined in the applicable test standard, as measured from a receiving antenna. This helps protect broadcast radio services such as television, FM radio, pagers, cellular telephones, emergency services, and so on, from unwanted interference.

Limits and Method

The method is as defined in Section 12.2 of FCC KDB 558074 and ANSI C63.10.

The limits, as defined in 15.249(a) for intentional radiated emissions are:

Fundamental frequency	Field strength of fundamental (millivolts/meter)	Field strength of harmonics (microvolts/meter)
902-928 MHz	50	500 uV/m at 3m ([1])
2400-2483.5 MHz	50	500 uV/m at 3m ([2])
5725-5875 MHz	50	500 uV/m at 3m ([2])
24.0-24.25 GHz	250	2500 uV/m at 3m ([2])

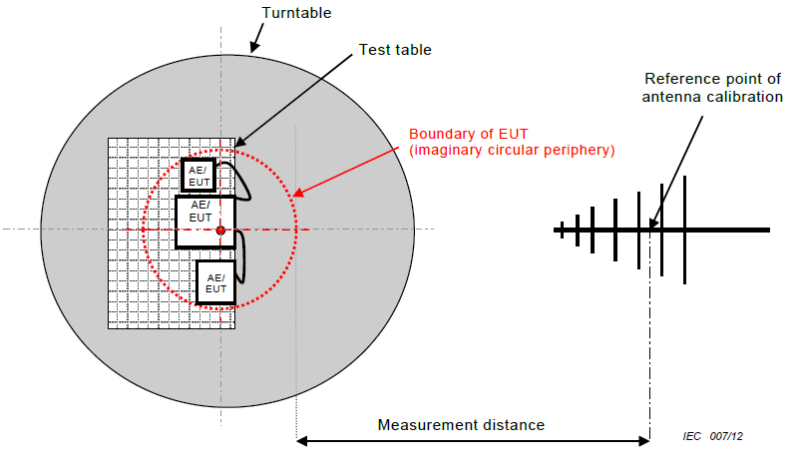
The limits, as defined in 15.249(d) for unintentional radiated emissions, apply for those emissions that fall in the restricted bands, as defined in Section 15.205(a). These emissions must comply with the radiated emission limits specified in Section 15.209(a).

Frequency	Limit
0.009 MHz – 0.490 MHz	2400/F(kHz) uV/m at 300m ([1])
0.490 MHz – 1.705 MHz	24000/F(kHz) uV/m at 30m ([1])
1.705 MHz – 30 MHz	30 uV/m at 30m ([1])
30 MHz – 88 MHz	100 uV/m (40.0 dBuV/m) at 3m ([1])
88 MHz – 216 MHz	150 uV/m (43.5 dBuV/m) at 3m ([1])
216 MHz – 960 MHz	200 uV/m (46.0 dBuV/m) at 3m ([1])
Above 960 MHz	500 uV/m (54.0 dBuV/m) at 3m ([1])
Above 1000 MHz	500 uV/m (54 dBuV/m) at 3m ([2])

[1]Limit is with Quasi Peak detector with bandwidths as defined in CISPR-16-1-1
[2]Limit is with 1 MHz measurement bandwidth and using an Average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

Based on ANSI C63.4 Section 4.2, if the Peak detector measurements do not exceed the Quasi-Peak limits, where defined, then the EUT is deemed to have passed the requirements.

Typical Radiated Emissions Setup



Measurement Uncertainty

The expanded measurement uncertainty is calculated in accordance with CISPR 16-4-2 and is ±4.25dB for 30MHz – 1GHz and ±4.93dB for 1GHz – 18GHz with a 'k=2' coverage factor and a 95% confidence level.

Preliminary Graphs

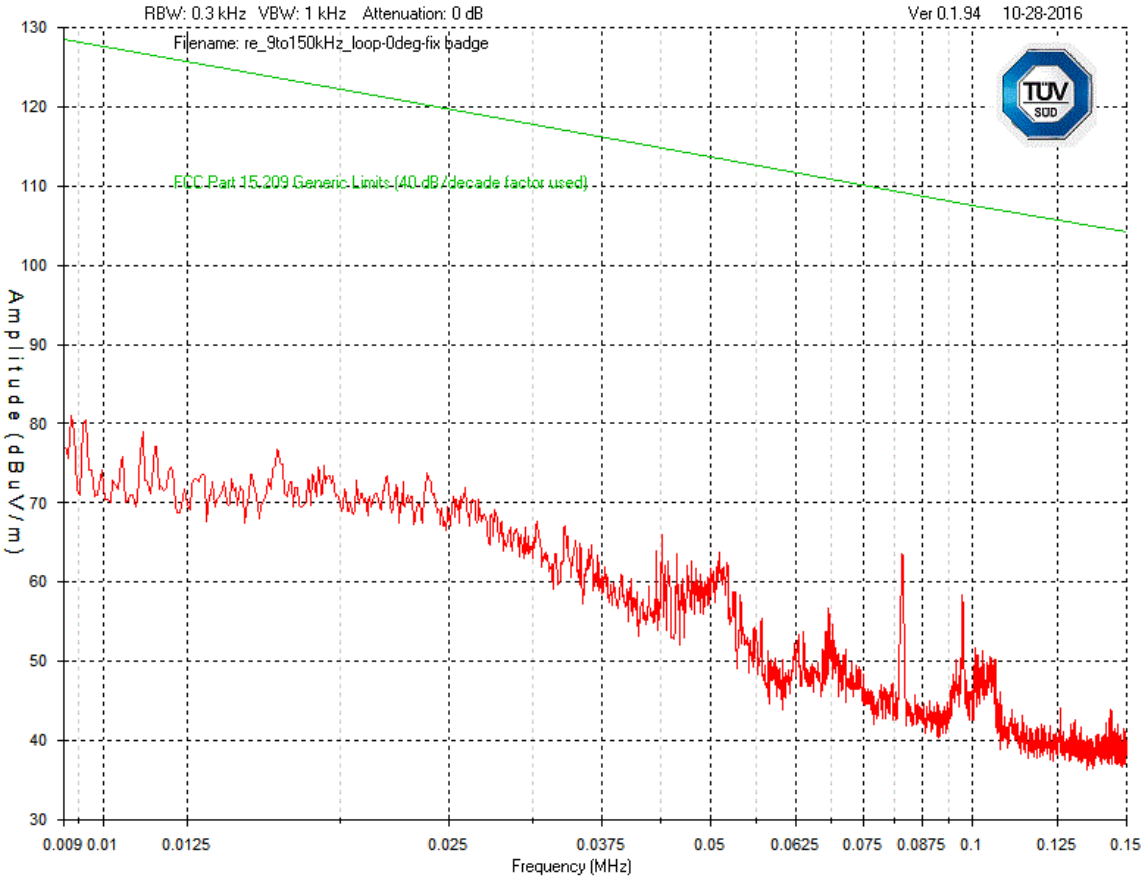
The graphs shown below are maximized peak measurement graphs measured with a resolution bandwidth greater than or equal to the final required detector over a full 0-360°. This peaking process is done as a worst case measurement and enables the detection of frequencies of concern for final measurement. For final measurements with the appropriate detector, where applicable, please refer to the tables under Final Measurements.

In accordance with FCC Part 15, Subpart A, Section 15.33, the device was scanned to the 10^{th} harmonic.

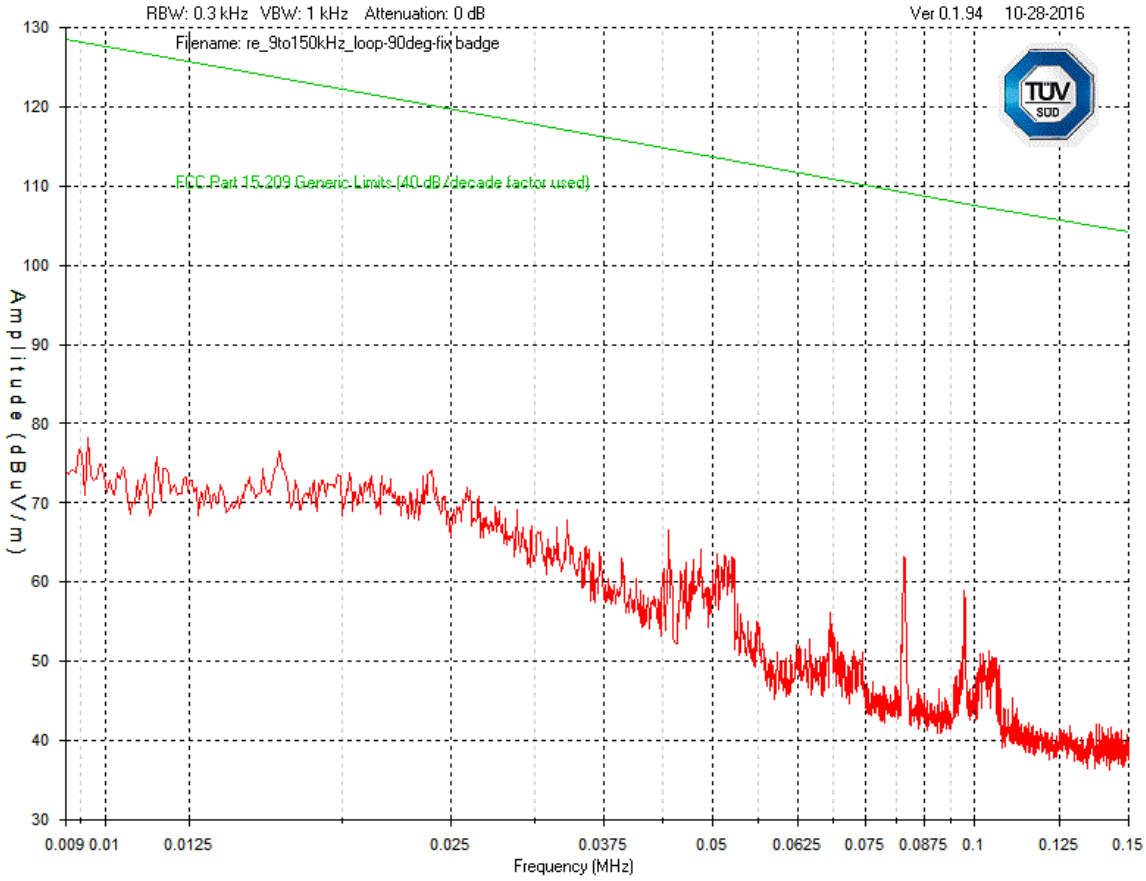
Devices scanned may be scanned at alternate test distances and in accordance with FCC Part 15, Subpart A, Section 15.31, an extrapolation factor of 20 dB/decade was used above 30 MHz and 40 dB/decade below 30 MHz. For example for 1 meter measurements, an extrapolation factor 9.5 dB from 20 Log (1m / 3m) is applied.

Low, middle and high channels, each in three orthogonal axis were checked. However, the worst case graphs are presented.

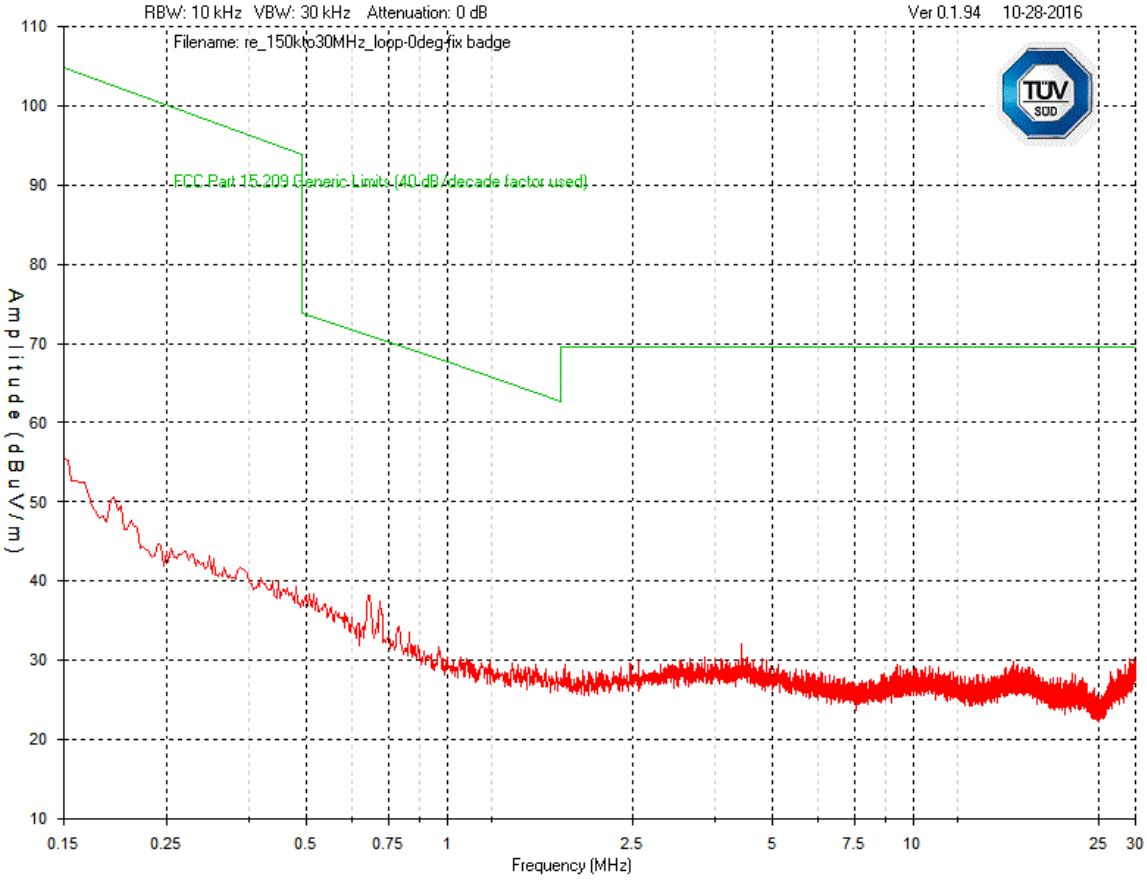
9 kHz – 150 kHz
Peak Emission Graph – Loop @ 0 degree



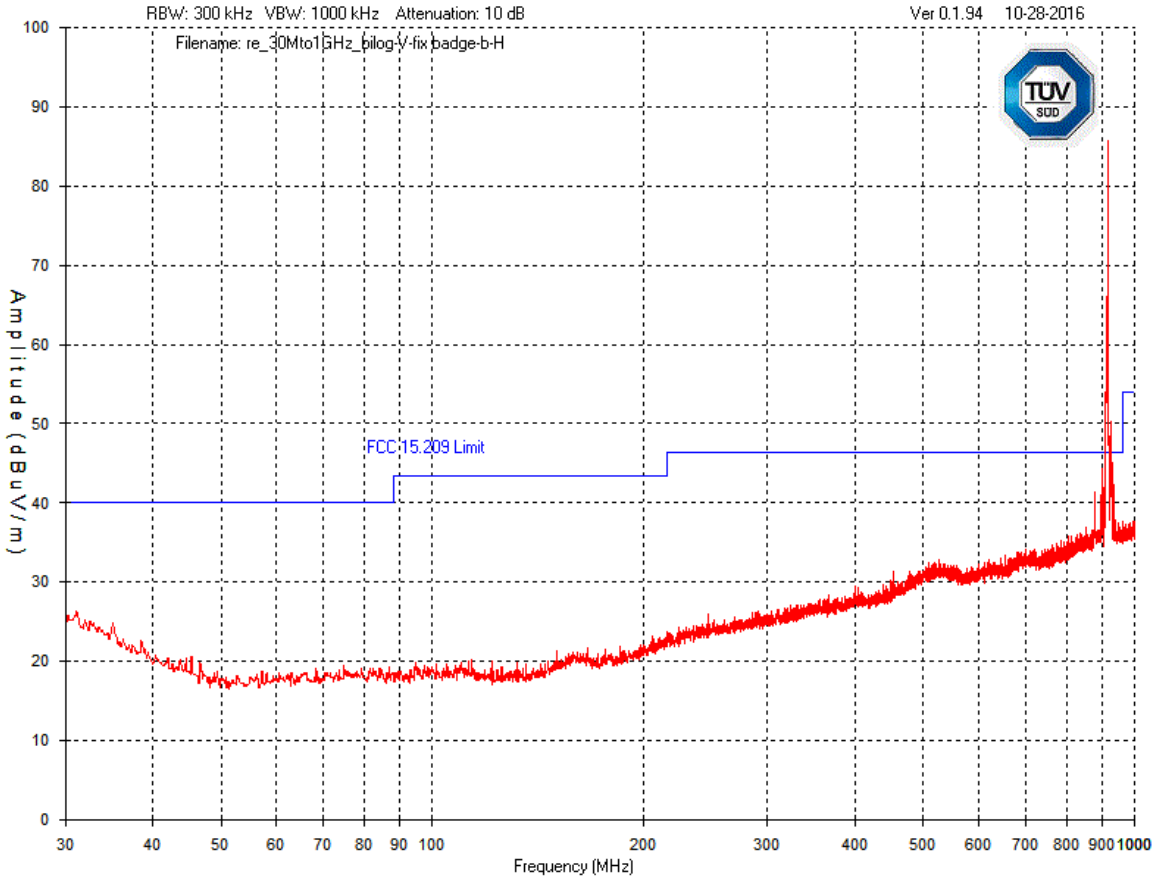
9 kHz – 150 kHz
Peak Emission Graph – Loop @ 90 degree



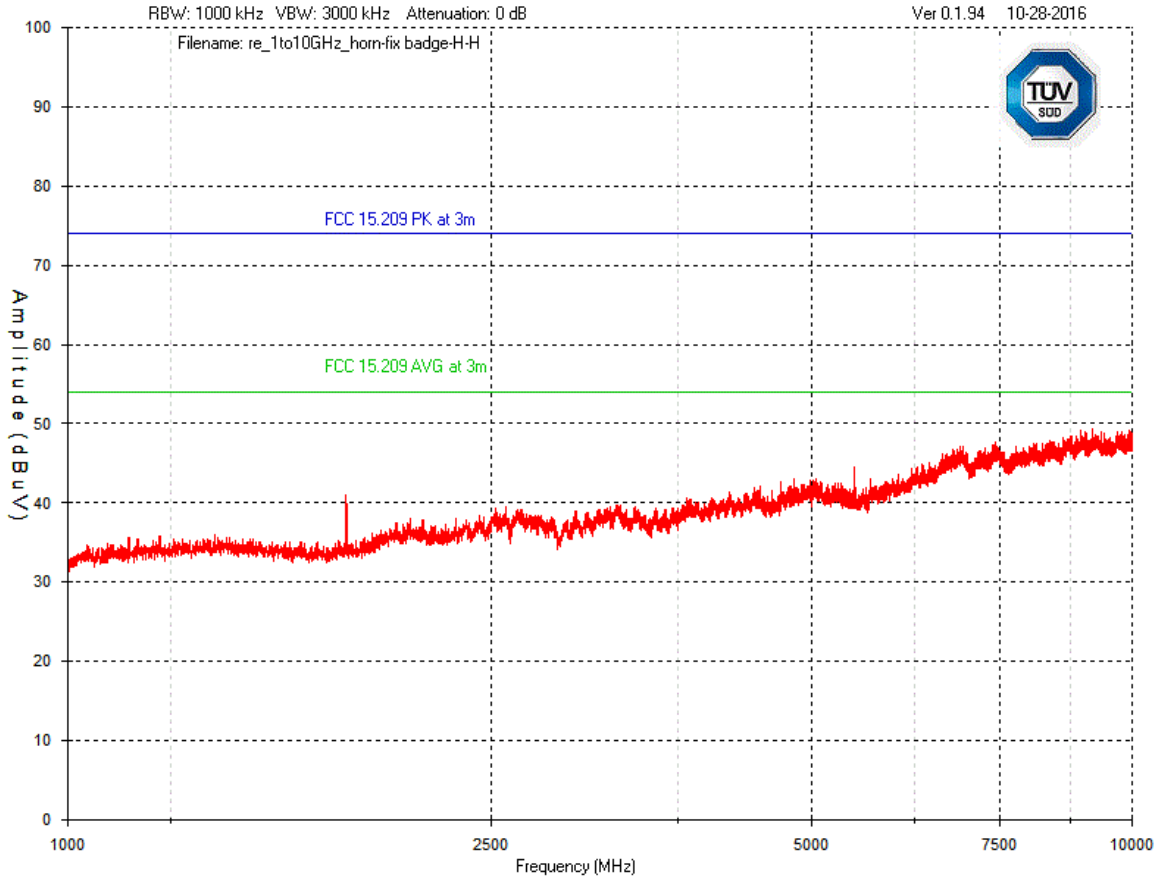
150 kHz – 30 MHz
Peak Emission Graph



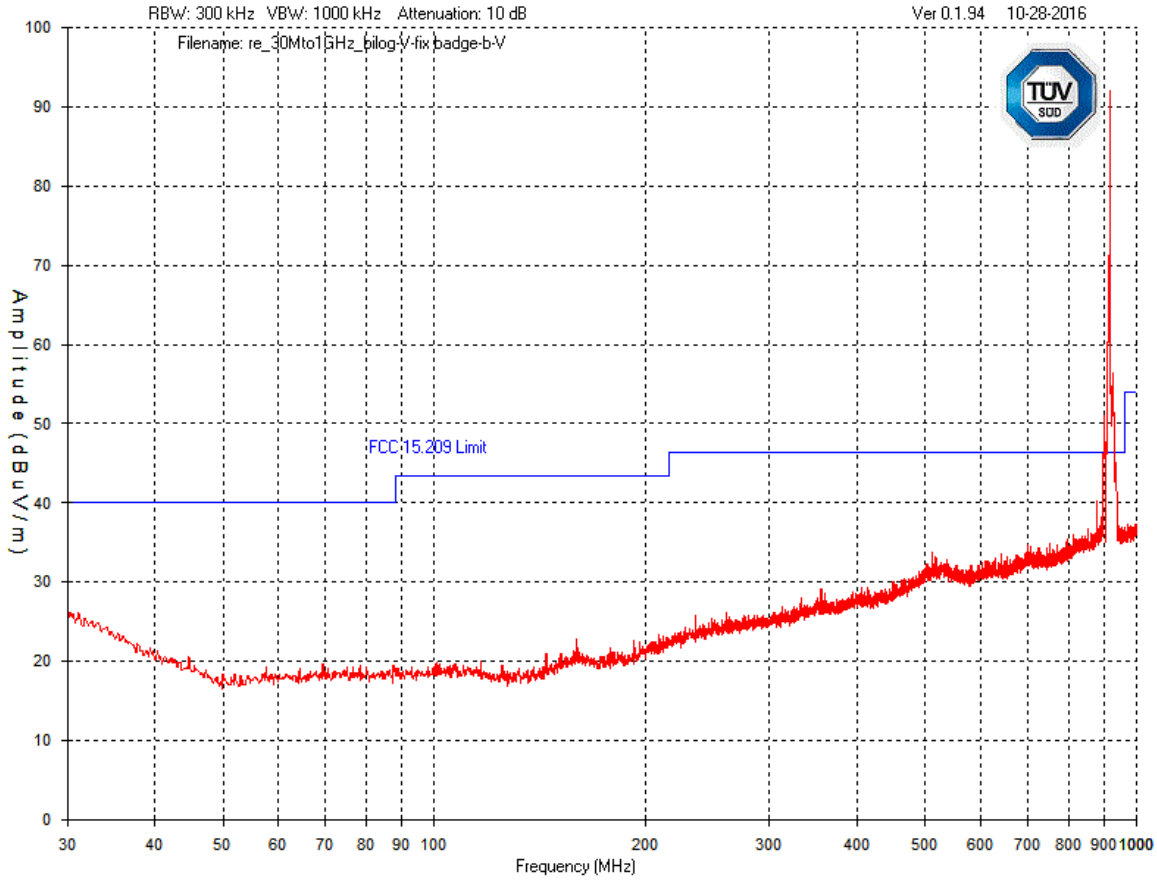
30 MHz – 1 GHz
Horizontal - Peak Emission Graph



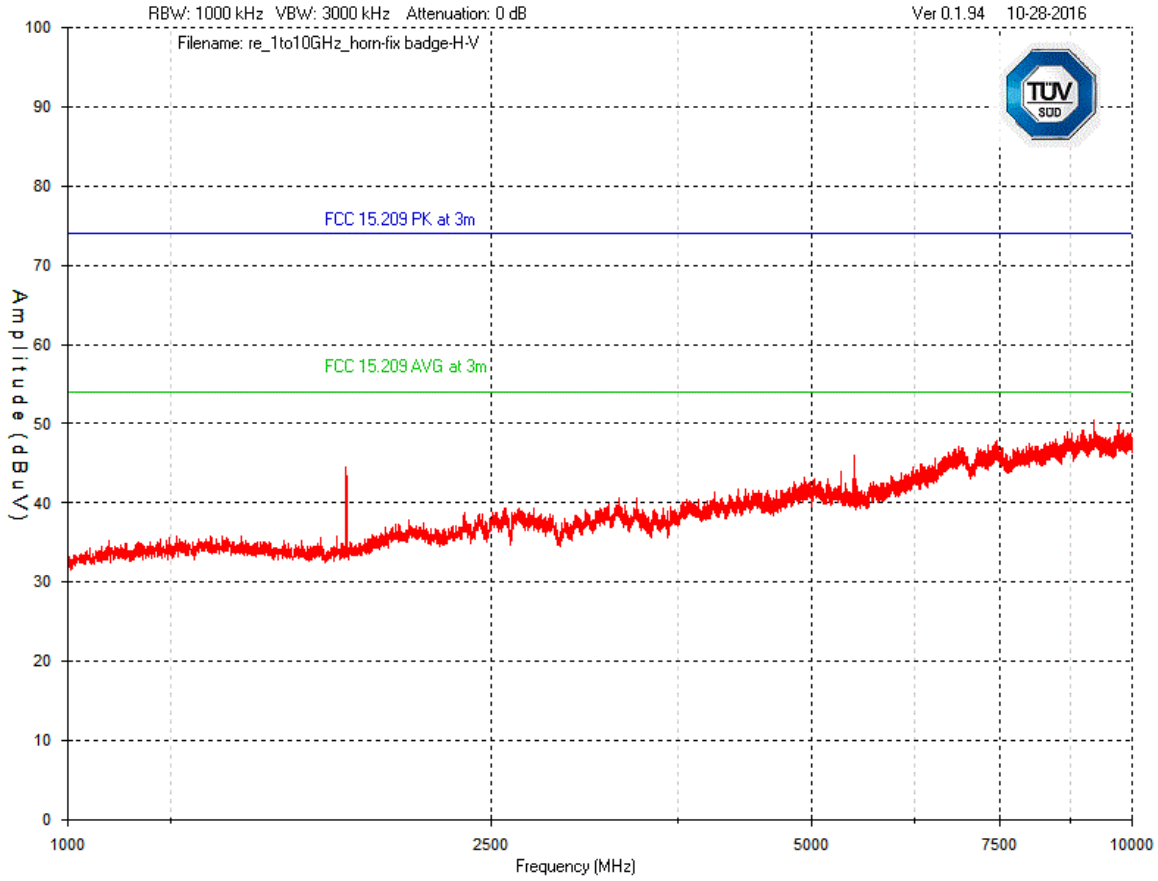
1 GHz – 10 GHz
Horizontal - Peak Emission Graph



30 MHz – 1 GHz
Vertical - Peak Emission Graph



1 GHz – 10 GHz
Vertical - Peak Emission Graph



Occupied Bandwidth

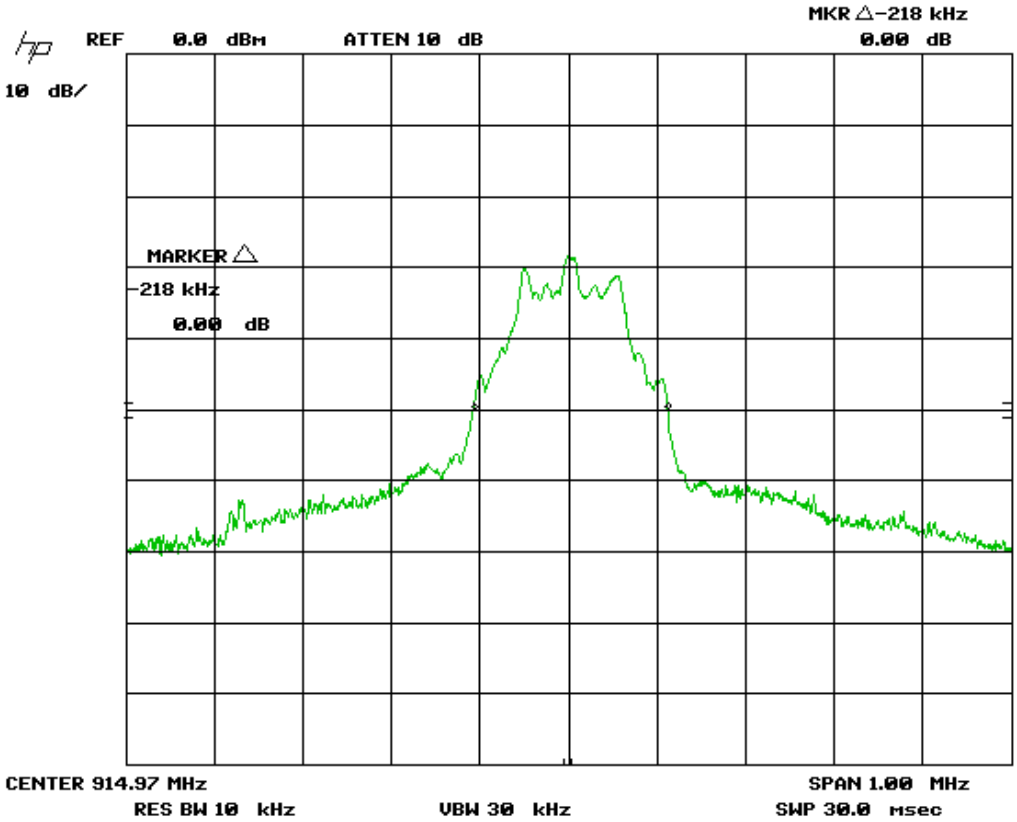
Purpose
The purpose of this test is to measure the bandwidth occupied.

Limits
No limit applies for 15.249, however the device must be within 902 to 928 MHz.

Method
For the 20 dB or occupied BW, FCC KDB 558074, Section 2.0 references ANSI C63.10 for occupied bandwidth. ANSI C63.10 Section 6.9.1 was used for occupied bandwidth.

Results
For information purposes, the 99% occupied BW was measured to be: 218 kHz.

Graph(s)
The graphs shown below shows the max hold on the spectrum analyzer and the highest resolution bandwidth that is sufficiently low to exhibit the occupied bandwidth during operation of the EUT. This measurement is a peak measurement. Max hold is performed for a duration of not less than 1 minute.



Final Measurements and Results

The EUT passed requirements.

In accordance with 15.249(d), only frequencies exceeding the 15.209 limit that occur within the bands listed in 15.205 need to be verified with a final detector. Emissions outside the restricted bands were measured for informational purposes.

The measurements were maximized by rotating the turn table over a full 0-360 rotation and the antenna height was varied from 1 m to 4 m.

Fundamental Emission Reading Table – Horizontal

Frequency (MHz)	Det. mode	Raw (dBuV)	Ant. (dB/m)	Att. (dB)	Cab. (dB)	Amp (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pass/ Fail
914.543	PEAK	85.3	23.7	3	2.8	-28.4	86.4	94	7.6	Pass
914.543	QP	84.9	23.7	3	2.8	-28.4	86	94	8.0	Pass

Fundamental Emission Reading Table – Vertical

Frequency (MHz)	Det. mode	Raw (dBuV)	Ant. (dB/m)	Att. (dB)	Cab. (dB)	Amp (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pass/ Fail
914.446	PEAK	89.1	23.7	3	2.8	-28.4	90.2	94	3.8	Pass
914.446	Q.P	88.9	23.7	3	2.8	-28.4	90.0	94	4.0	Pass

Band Edge Emission Reading Table – Horizontal

Frequency (MHz)	Det. mode	Raw (dBuV)	Ant. (dB/m)	Att. (dB)	Cab. (dB)	Amp (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pass/ Fail
928	QP	26.1	23.7	3	2.8	-28.4	27.2	46.4	19.2	Pass
902	PEAK	43.5	23.6	3	2.8	-28.5	44.4	46.4	2.0	Pass

Band Edge Emission Reading Table – Vertical

Frequency (MHz)	Det. mode	Raw (dBuV)	Ant. (dB/m)	Att. (dB)	Cab. (dB)	Amp (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pass/ Fail
902	Q.P	25.4	23.7	3	2.8	-28.4	26.5	46.4	19.9	Pass
928	Q.P	26.5	23.7	3	2.8	-28.4	27.6	46.4	18.8	Pass

Harmonic Emission Reading Table – Horizontal

Frequency (MHz)	Det. mode	Raw (dBuV)	Ant. (dB/m)	Att. (dB)	Cab. (dB)	Amp (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pass/ Fail
1828	PEAK	49.1	25.2	0	4.1	-33.1	45.3	54	8.7	Pass
2743.33	PEAK	42.4	28.9	0	5.3	-33.1	43.5	54	10.5	Pass
3658.33	PEAK	40.3	30.2	0	6.6	-32.9	44.2	54	9.8	Pass
4574.33	PEAK	40.2	32.1	0	6.9	-32.9	46.3	54	7.7	Pass
5489.67	PEAK	43.9	33.3	0	7.5	-32.7	52	54	2.0	Pass
6403.33	PEAK	40.3	35.6	0	8.3	-32.8	51.4	54	2.6	Pass

Harmonic Emission Reading Table – Vertical

Frequency (MHz)	Det. mode	Raw (dBuV)	Ant. (dB/m)	Att. (dB)	Cab. (dB)	Amp (dB)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pass/ Fail
1828	PEAK	52.6	25.2	0	4.1	-33.1	48.8	54	5.2	Pass
2743.33	PEAK	43.6	28.9	0	5.3	-33.1	44.7	54	9.3	Pass
3658.33	PEAK	40.2	30.2	0	6.6	-32.9	44.1	54	9.9	Pass
4574.33	PEAK	40.9	32.1	0	6.9	-32.9	47	54	7.0	Pass
5487.67	PEAK	44.9	33.3	0	7.5	-32.7	53	54	1.0	Pass
6403.33	PEAK	40.1	35.6	0	8.3	-32.8	51.2	54	2.8	Pass

Test Equipment List

Equipment	Model No.	Manufacturer	Last Calibration / Verification Date	Next Calibration / Verification Date	Asset #
Spectrum Analyzer Display	8566B	HP	1-28-15	1-28-17	4168
Spectrum Analyzer	8566B	HP	1-28-15	1-28-17	4169
Quasi Peak Adapter	85650A	HP	1-28-15	1-28-17	4170
Spectrum Analyzer	FSL6	Rohde & Schwarz	1-28-2016	1-28-2018	4095
Attenuator 10 dB	4779-10	narda	NCR	NCR	4096
BiLog Antenna	3142-C	ETS	9-8-15	9-8-17	8
Horn Antenna	ATH1G18G	AR	4-23-15	4-23-17	4003
Biconical Antenna	EM-6913	Electro-Metrics	4-28-15	4-28-17	4060
Log Periodic Antenna	LPA-25	Electro-Metrics	4-14-15	4-14-17	4087
Attenuator 3 dB	FP-50-3	Trilithic	NCR	NCR	4028
LNA pre-amp	LNA-1450	RF Bay Inc.	7-22-15	7-22-17	4089
1-26.5GHz preamp	8449B	Agilent	9-9-15	9-9-17	6351
RF Cable 10m	LMR-400-10M-50OHM-MN-MN	LexTec	NCR	NCR	4025
RF Cable 7m	LMR-400-7M-50OHM-MN-MN	LexTec	NCR	NCR	4026
Emission software	0.1.93	Global EMC	NCR	NCR	58

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Power Line Conducted Emissions

Purpose

The purpose of this test is to ensure that the RF energy unintentionally emitted from the EUT's power line does not exceed the limits listed below as defined in the applicable test standard, as measured from a LISN. This helps protect lower frequency radio services such as AM radio, shortwave radio, amateur radio operators, maritime radio, CB radio, and so on, from unwanted interference.

Limits and Method

The limits are as defined in 47 CFR FCC Part 15 Section 15.207
Method is as defined in ANSI C63.4:2014

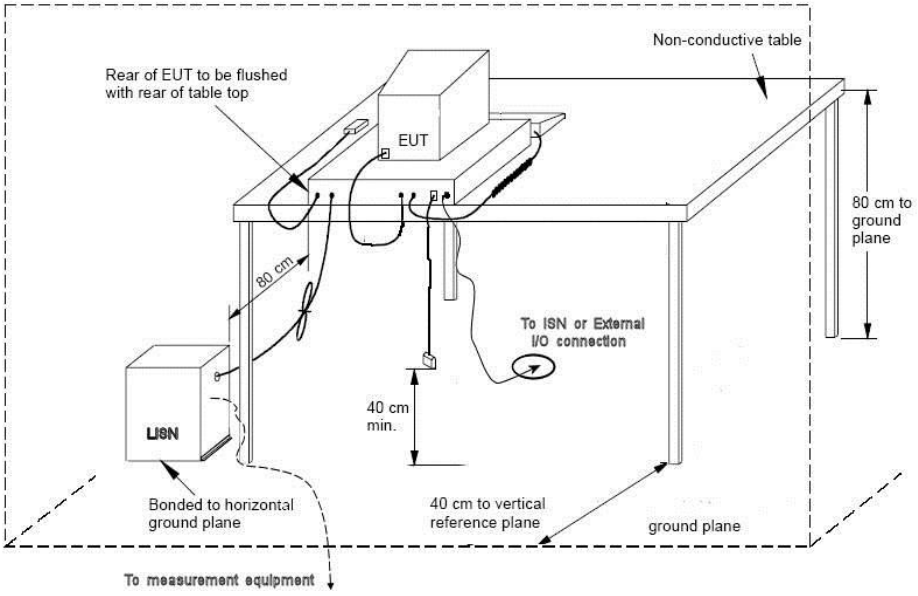
Average Limits		Quasi-Peak Limits	
150 kHz – 500 kHz	56 to 46* dBµV	150 kHz – 500 kHz	66 to 56* dBµV
500 kHz – 5 MHz	46 dBµV	500 kHz – 5 MHz	56 dBµV
5 MHz – 30 MHz	50 dBµV	5 MHz – 30 MHz	60 dBµV

* Decreases linearly with the logarithm of the frequency

Both Quasi-Peak and Average limits are applicable and each is specified as being measured with a resolution bandwidth of 9 kHz. For Quasi-Peak, a video bandwidth at least three times greater than the resolution bandwidth is used.

Based on ANSI C63.4 Section 4.2, if the Peak or Quasi-Peak detector measurements do not exceed the Average limits, then the EUT is deemed to have passed the requirements.

Typical Setup Diagram



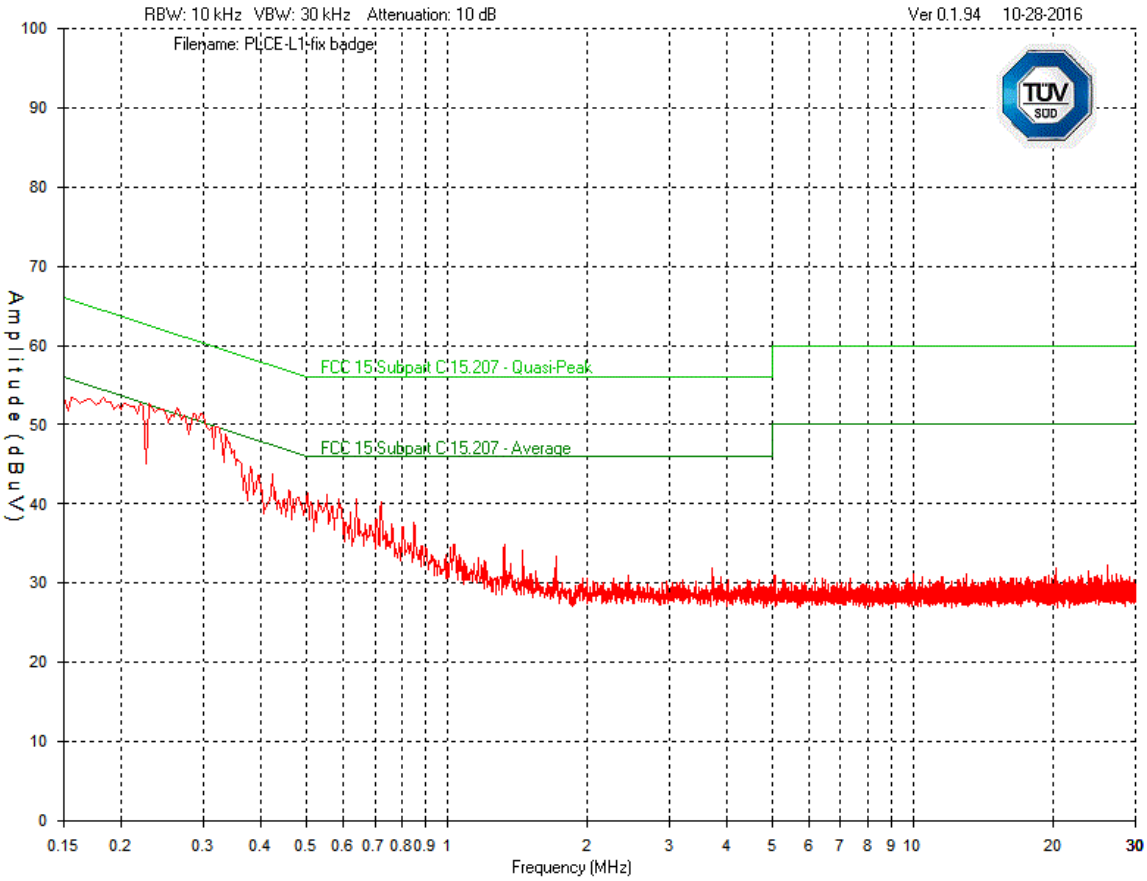
Measurement Uncertainty

The expanded measurement uncertainty is calculated in accordance with CISPR 16-4-2 and is ±2.91dB with a 'k=2' coverage factor and a 95% confidence level.

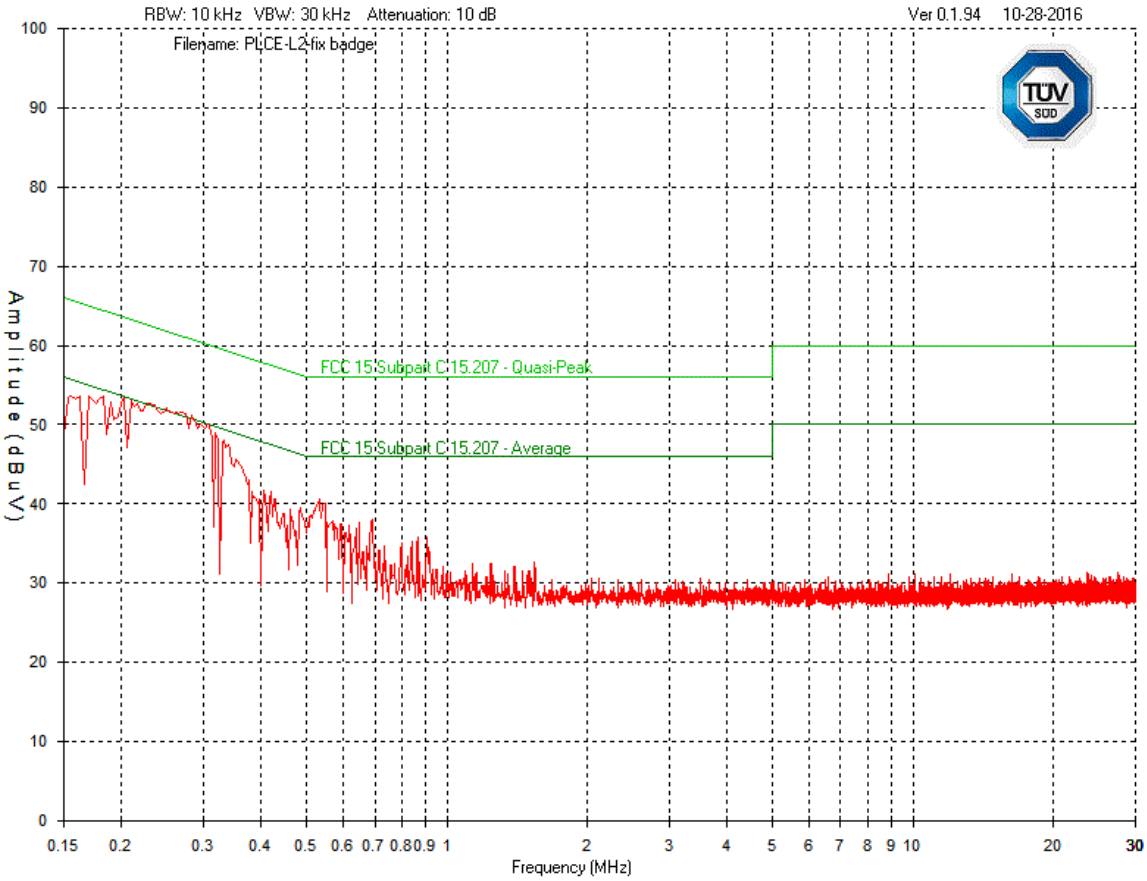
Preliminary Graphs

The graphs shown below are maximized peak measurement graphs measured with a resolution bandwidth greater than or equal to the final required detector. This peaking process is done as a worst case measurement and enables the detection of frequencies of concern for final measurement. For final measurements with the appropriate detector, where applicable, please refer to the tables under Final Measurements.

Line 1 (L1) – 120Vac 60Hz



Line 2 (L2) – 120Vac 60Hz



Final Measurements

Peak & Average Emissions Table vs Average Limits

Product Category			Class B						
Product			FIXED ZONE BADGE, MODEL BADGEFIX						
Supply			**120Vac, 60Hz (Power adapter)**						
Frequency (MHz)	**Detector Peak/ AVG/ QP**	**Received Signal (dBµV)**	**Atten Factor (dB)**	**Cable Factor (dB)**	**LISN Factor (dB)**	**Level (dBµV)**	**AVG Limit (dB)**	**AVG Margin (dB)**	**Pass/ Fail**
Line (L1)									
0.281	AVG	26.8	10	0	0.9	37.7	52.5	14.8	Pass
0.1832	AVG	24.3	10	0	1.2	35.5	54.3	18.8	Pass
0.2296	AVG	21.3	10	0	0.9	32.2	52.5	20.3	Pass
0.7238	Peak	30	10	0	0.2	40.2	46	5.8	Pass
1.3274	Peak	24.6	10	0	0.2	34.8	46	11.2	Pass
1.4568	Peak	23.9	10	0	0.2	34.1	46	11.9	Pass
Neutral (L2)									
0.1832	AVG	15.7	10	0	1.2	26.9	54.3	27.4	Pass
0.3192	AVG	15.1	10	0	0.4	25.5	49.7	24.2	Pass
0.3324	AVG	14.1	10	0	0.4	24.5	49.4	24.9	Pass
0.1633	AVG	14.1	10	0	1.4	25.5	55.3	29.8	Pass
0.5314	Peak	30.4	10	0	0.2	40.6	46	5.4	Pass
0.4054	Peak	31.5	10	0	0.2	41.7	47.7	6	Pass

Note:

Peak = Peak measurement
AVG = Average measurement
QP = Quasi-Peak measurement

See 'Appendix B – EUT, Peripherals and Test Setup Photos' for photos showing the test set-up for the highest line conducted emission

Test Equipment List

Equipment	Model No.	Manufacturer	Last Calibration Date	Next Calibration Date	Asset #
Spectrum Analyzer Display	8566B	HP	1-28-15	1-28-17	4168
Spectrum Analyzer	8566B	HP	1-28-15	1-28-17	4169
Quasi Peak Adapter	85650A	HP	1-28-15	1-28-17	4170
LISN	FCC-LISN-50/250-16-2-01	FCC	3-20-15	3-20-17	4005
RF Cable 10m	LMR-400-7M-50OHM-MN-MN	LexTec	NCR	NCR	4025
RF Cable 7m	LMR-400-1M-50OHM-MN-MN	LexTec	NCR	NCR	4026
Attenuator 10 dB	FP-50-10	Trilithic	NCR	NCR	4027
Emissions Software	0.1.94	Global EMC	NCR	NCR	58

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RF Exposure

Purpose

The purpose of this test is to ensure that the RF energy intentionally transmitted, in terms of power density emitted from the EUT at a stated operating distance does not exceed the limits listed below as defined in the applicable test standard, as calculated based upon readings obtained during testing. This helps protect human exposure to excessive RF fields.

Limits and Method

The limits, as defined in RSS-102, Section 2.5.1 Table 1 and in FCC 15.247(i) and FCC 1.1310 Table 1 (B), limits for general public exposure were applied. The limit for the frequency range of 300 MHz to 1.5 GHz was applied. The distance used for calculations was 5mm.

Results

The EUT passed the requirements.

Calculations

This device has a maximum measured field strength at 3 meters of:
90.2dBuV/m (EIRP = -5.0dBm = **0.32mW**).

As per RSS-102, Section 2.5.1, the limit for 915MHz obtained by linear interpolation at ≤5mm is 7.75mW. This device is under limit for 5 mm.

As per FCC §1.1310 Table 1(B), the limit for MPE for General Population/Uncontrolled Exposure in the frequency range of 300 MHz to 1.5 GHz is:
f/1500 mW/cm^2 = 915/1500 = 0.61mW/cm^2

The power density formula is given by:
$P_d = (P_{out}*G) / (4*Pi*R^2)$ = EIRP/$(4*Pi*R^2)$
Where: P_d = Power density in mW/cm^2, R = Separation distance in cm
Therefore for minimum of 5mm distance:
P_d = 0.32mW $(4*3.14*0.5^2)$ = 0.32/ 3.14.
= **0.1mW/cm^2** which is less than 0.61mW/cm^2, therefore this device level is under *SAR Test Exclusion Threshold*.

Appendix A – EUT Summary

For further details for filing purposes, refer to filing package.

General EUT Description

Client	
Organization / Address	PROXIPI INC, 5782 BOUL THIMENS, SAINT LAURENT, QC, H4R 2K9, Canada
Contact	Gilles Vaquin
Phone	514 333.0077 ext. 223
Email	gilles.vaquin@proxipi.com
EUT Details	
EUT Name	FIXED ZONE BADGE, MODEL BADGEFIX
FCC ID	2AIUY-BFBC
Industry Canada #	21748-BFBC
Equipment Category	
Basic EUT Functionality	The FIXED ZONE BADGE, when installed in a dangerous zone, activates the speed limiter of the trucks that enter that zone. When installed on a truck it alerts the pedestrian and truck driver of a possible collision tied to their proximity
Input Voltage and Frequency	Battery: 7Vdc
Rated Input Current	1 A
Connectors available on EUT	Connector to Electronic unit
Peripherals Required for Test	Electronic unit
Release type	
Intentional Radiator Frequency	915 MHz
EUT Configuration	Wireless configured to transmit continuously.

Note the EUT is considered to have been received the date of the commencement of the first test, unless otherwise stated.