
	Test Report Serial No.:	011612TS5-T1152-E15F	Report Issue Date:	Jan. 27, 2012	
	Measurement Date(s):	January 17-19, 2012	Report Revision No.:	1.1 (2nd Release)	
	FCC Rule Part(s):	47 CFR §2; §15.231a	FCC Test Firm Reg. No.:	Accredited	
	IC Standard(s):	RSS-210 RSS-Gen	IC Test Site No.:	IC 3874A-1	
					Test Lab Certificate No. 2470.01

DECLARATION OF COMPLIANCE		RF MEASUREMENT REPORT		FCC & IC
Test Lab Information	Name	CELLTECH LABS INCORPORATED		
	Address	21-364 Lougheed Road, Kelowna, British Columbia V1X 7R8 Canada		
Test Lab Registration No.(s)	FCC	Accredited (ISO 17025 - A2LA Test Lab Certificate No. 2470.01)		
	IC	3874A-1		
Applicant Information	Name	SENDUM WIRELESS CORPORATION		
	Address	4500 Beedie Street, Burnaby, British Columbia V5J 5L2 Canada		
Standard(s) & Procedure(s)	FCC	47 CFR Part 2; 15.231(a)		
	IC	RSS-210 Issue 8; RSS-Gen Issue 3		
	ANSI	C63.4-2003		
Device Classification(s)	FCC	Part 15 Security / Remote Control Transmitter (DSC)		
	IC	Low-power Licence-exempt Radiocommunication Device (Category 1)		
Application Type	FCC/IC	New Certification		
Device Identifier(s)	FCC ID:	TS5-EB300HP		
	IC:	6234A-EB300HP		
Device Under Test (DUT)	Beacon Transmitter for Tracking Offenders			
Device Model(s) Tested	EB300HP			
Measurement Date(s)	January 17-19, 2012			
Test Sample Receipt Date	January 16, 2012			
Test Sample Serial No.(s)	6300908 (Occ. BW & Emissions Tests) - Identical Prototype			
	None (Duty Cycle Measurement) - Identical Prototype			
Transmit Frequency Band	314.21 - 314.36 MHz			
Transmit Operating Frequency	314.285 MHz			
Modulation Type(s)	FSK			
Max. Transmit Duty Cycle	0.05 % (9ms on-time / 17-20s off-time)			
Antenna Type(s) Tested	Internal Monopole (Transmit Diversity)			
Antenna Gain Specification	-4 dBi			
Power Source(s) Tested	Alkaline Battery (D-size x2)			
<p>This wireless device has demonstrated compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in FCC 47 CFR Rule Part 2 and Rule Part 15.231(a); Industry Canada RSS-210 Issue 8 and RSS-Gen Issue 3; and ANSI C63.4-2003.</p> <p>I attest to the accuracy of data. All measurements were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.</p> <p>The results and statements contained in this report pertain only to the device(s) evaluated.</p> <p>This report shall not be reproduced partially or in full without the prior written approval of Celltech Labs Inc.</p>				
Test Report Approved By		Sean Johnston	Lab Manager	Celltech Labs Inc.

Applicant:	Sendum Wireless Corporation	FCC ID:	TS5-EB300HP	IC:	6234A-EB300HP	Sendum
DUT Model:	EB300HP	DUT Type:	Beacon Transmitter for Tracking Offenders	Tx Freq.:	315.285 MHz	
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	FCC Rule Part(s):	47 CFR §2; §15.231a	FCC Test Firm Reg. No.:	Accredited	
	IC Standard(s):	RSS-210 RSS-Gen	IC Test Site No.:	IC 3874A-1	

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	IC Standard(s):	RSS-210 RSS-Gen	IC Test Site No.:	IC 3874A-1	
					Test Lab Certificate No. 2470.01

TEST SUMMARY


Referenced Standard(s):		FCC CFR Title 47 Part 15 Subpart C				
Appendix	Description of Test	Procedure Reference	Limit Reference	Test Start	Test End	Result
A	Transmission Time / Silent period between transmission	ANSI C63.4-2003	15.231(a)	17Jan12	17Jan12	Pass
B	Occupied Bandwidth	ANSI C63.4-2003	15.231(c)	17Jan12	17Jan12	Pass
C	Field Strength of Fundamental	ANSI C63.4-2003	15.231(a)	18Jan12	18Jan12	Pass
C	Field strength of harmonics and spurious emissions	ANSI C63.4-2003	15.231(a)	18Jan12	19Jan12	Pass



Referenced Standard(s):		Industry Canada RSS-210 Issue 8				
Appendix	Description of Test	Procedure Reference	Limit Reference	Test Start	Test End	Result
A	Transmission Time / Silent period between transmission	ANSI C63.4-2003	A1.1.1	17Jan12	17Jan12	Pass
B	Occupied Bandwidth	ANSI C63.4-2003	A1.1.3	17Jan12	17Jan12	Pass
C	Field Strength of Fundamental	ANSI C63.4-2003	A1.1.1	18Jan12	18Jan12	Pass
C	Field strength of harmonics and spurious emissions	ANSI C63.4-2003	A1.1.1	18Jan12	19Jan12	Pass

REVISION LOG

Revision	Description	Implemented By	Implementation Date
1.0	1st Release	Jonathan Hughes	January 25, 2012
1.1	2nd Release	Jonathan Hughes	January 27, 2012
	Added Note 1 to Appendix C (Page 14)		

SIGNATORIES

Prepared By		January 20, 2012
Name/Title	Sean Johnston / Lab Manager	Date

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	IC Standard(s):	RSS-210 RSS-Gen	IC Test Site No.:	IC 3874A-1	

1.0 SCOPE

This report outlines the measurements made and results collected during electromagnetic emissions testing of the Sendum Wireless Corporation Model: EB300HP Beacon Transmitter for Tracking Offenders. The measurement results were applied against the applicable EMC requirements and limits outlined in the technical rules and regulations set forth in the Federal Communication's Commission Code of Federal Regulations Title 47 Part 15 Subpart C and Industry Canada Radio Standards Specification RSS-210 Issue 8 and RSS-Gen Issue 3.

2.0 REFERENCES



2.1 Normative References

ANSI/ISO 17025:2005	General Requirements for competence of testing and calibration laboratories
IEEE/ANSI C63.4-2003	Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz
CFR Title 47 Part 15C	Code of Federal Regulations Title 47: Telecommunication Part 15C: Intentional Radiators
IC Spectrum Management & Telecommunications Policy	Radio Standards Specification RSS-210 Issue 8 - Low-Power Licence-Exempt Radiocommunication Devices (All Frequency Bands): Category I Equipment RSS-Gen Issue 3 - General Requirements and Information for the Certification of Radiocommunication Equipment

3.0 PASS/FAIL CRITERIA

Unless otherwise noted in the Appendices, the pass/fail criteria is the limit set forth in the reference standards. The DUT is considered to have passed the requirements if the data collected during the described measurement procedure is no greater than the specified limits as defined. The pass/fail statements made in this report only apply to the unit tested.

Applicant:	Sendum Wireless Corporation	FCC ID:	TS5-EB300HP	IC:	6234A-EB300HP	Sendum
DUT Model:	EB300HP	DUT Type:	Beacon Transmitter for Tracking Offenders	Tx Freq.:	315.285 MHz	
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	FCC Rule Part(s):	47 CFR §2, §15.231a	FCC Test Firm Reg. No.:	Accredited	
	IC Standard(s):	RSS-210 RSS-Gen	IC Test Site No.:	IC 3874A-1	

4.0 FACILITIES AND ACCREDITATIONS

The facilities used in collecting the test results outlined in this report are located at 21-364 Lougheed Road, Kelowna, British Columbia, Canada V1X 7R8. The radiated emissions site conforms to the requirements set forth in ANSI C63.4 and is filed and listed with the FCC as an Accredited Test Firm and with Industry Canada under Test Site File Number IC 3874A-1.

5.0 GENERAL INFORMATION

5.1 Applicant Information

Company Name	SENDUM WIRELESS CORPORATION
Address	4500 Beedie Street
	Burnaby, BC V5J 5L2
	Canada

5.2 DUT Description

Device Type	Beacon Transmitter for Tracking Offenders
Device Model(s) Tested	EB300HP
Device Identifier(s)	FCC ID: TS5-EB300HP
	IC: 6234A-EB300HP
Power Source Tested	Alkaline Battery (D-size x2)
Antenna Type Tested	Two monopole antennas printed on PCB to provide antenna diversity
Antenna Gain Specification	-4.0 dBi



5.3 Mode(s) of Operation Tested

Transmit Frequency Range	314.21 - 314.36 MHz
Transmitter Test Frequency	314.285 MHz
Transmitter Test Mode(s)	Test mode #1: Tx set to continuously transmit the modulated signal. RF switched between the two antennas to allow simultaneous radiated testing of both antennas. Test mode#2: Tx set to transmit at the intended duty cycle of 0.05%, with the on time set to 10.2 ms and the period set to 20 s
Modulation Type(s)	FSK

5.4 Modification(s)

None

Applicant:	Sendum Wireless Corporation	FCC ID:	TS5-EB300HP	IC:	6234A-EB300HP	Sendum
DUT Model:	EB300HP	DUT Type:	Beacon Transmitter for Tracking Offenders	Tx Freq.:	315.285 MHz	
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	Test Report Serial No.:	011612TS5-T1152-E15F	Report Issue Date:	Jan. 27, 2012	 Test Lab Certificate No. 2470.01
	Measurement Date(s):	January 17-19, 2012	Report Revision No.:	1.1 (2nd Release)	
	FCC Rule Part(s):	47 CFR §2; §15.231a	FCC Test Firm Reg. No.:	Accredited	
	IC Standard(s):	RSS-210 RSS-Gen	IC Test Site No.:	IC 3874A-1	

Appendix A

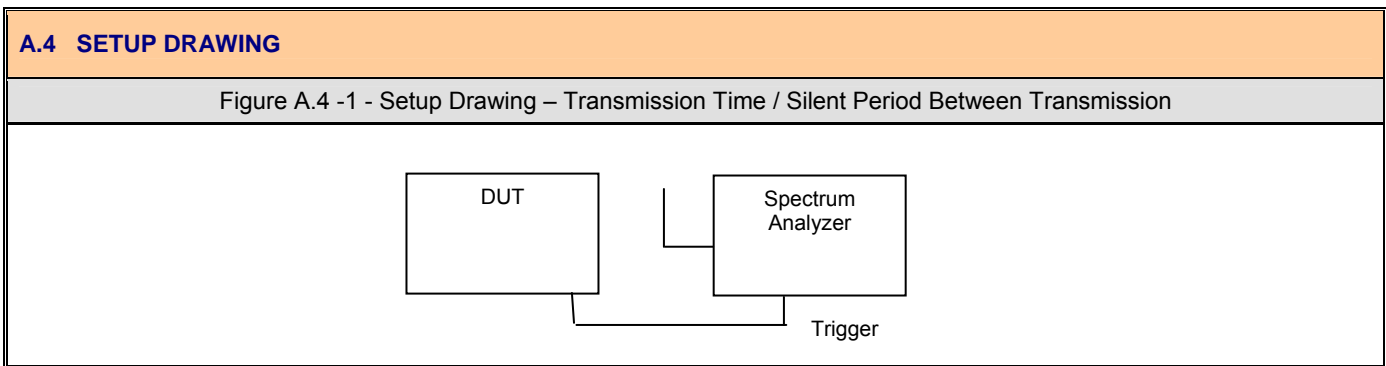
Transmission Time / Silent Period Between Transmission

A.1 REFERENCES	
Normative Reference Standard	FCC CFR 47 §15.231(a); IC RSS-210 Issue 8
Procedure Reference	ANSI C63.4:2003

A.2 LIMITS	
FCC §15.231(a)	(3) Periodic transmissions at regular predetermined intervals are not permitted. However, polling or supervision transmissions, including data, to determine system integrity of transmitters used in security or safety applications are allowed if the total duration of transmissions does not exceed more than two seconds per hour for each transmitter. There is no limit on the number of individual transmissions, provided the total transmission time does not exceed two seconds per hour.
IC RSS-210 A1.1.1(c)	Periodic transmissions at regular predetermined intervals are not permitted, except as provided in Section A.1.1.5. However, polling or supervision transmissions to determine system integrity of transmitters used in security or safety applications are allowed if the total duration of transmission does not exceed 2 seconds per hour for each transmitter.


A.3 ENVIRONMENTAL CONDITIONS	
Temperature	25 +/- 5 °C
Humidity	40 +/- 10 %
Barometric Pressure	101 +/- 3 kPa



ASSET NUMBER	MANUFACTURER	MODEL	DESCRIPTION	CAL DUE
00015	Agilent	E4408B	Spectrum Analyzer	23Apr12



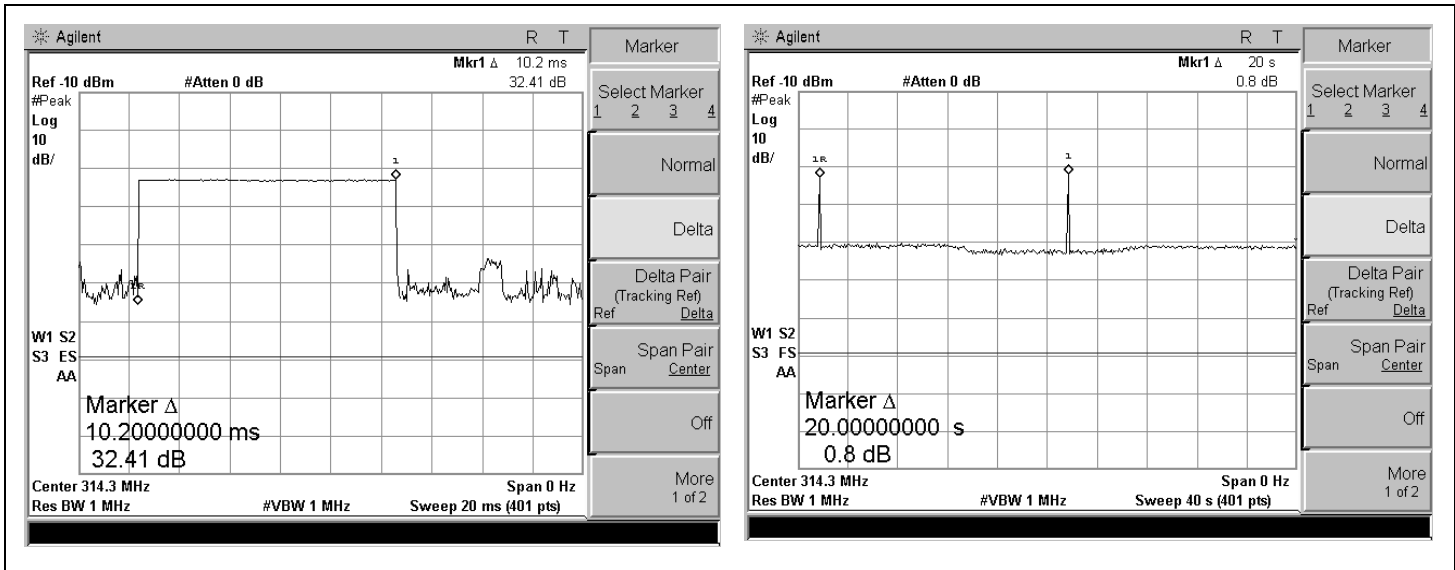
Test Procedure:

- 1) Couple the final radio frequency output signal to the input of a spectrum analyzer. This can be performed by a radiated, direct connect or a “near-field” coupling method. The signal received must be of sufficient level to adequately trigger the spectrum analyzer swept display.
- 2) Adjust the center frequency of the spectrum analyzer to the center of the RF signal.
- 3) Set the spectrum analyzer for ZERO SPAN.
- 4) Determine the total “on time” for one pulse train.
- 5) Determine the total period.

Applicant:	Sendum Wireless Corporation	FCC ID:	TS5-EB300HP	IC:	6234A-EB300HP	
DUT Model:	EB300HP	DUT Type:	Beacon Transmitter for Tracking Offenders	Tx Freq.:	315.285 MHz	
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	Test Report Serial No.:	011612TS5-T1152-E15F	Report Issue Date:	Jan. 27, 2012	
	Measurement Date(s):	January 17-19, 2012	Report Revision No.:	1.1 (2nd Release)	
	FCC Rule Part(s):	47 CFR §2; §15.231a	FCC Test Firm Reg. No.:	Accredited	
	IC Standard(s):	RSS-210 RSS-Gen	IC Test Site No.:	IC 3874A-1	
Test Lab Certificate No. 2470.01					

Test Results:




Carrier Frequency (MHz)	Transmission Time	Limit	Result
314.285	1.84 seconds per hour	2 seconds per hour	Pass



Duty Cycle: $(10.2/1000)/20 \times 100\% = 0.05\%$

180 Transmissions per 1 Hr

10.2 ms Transmission time

$180 \times (10.2/1000) = 1.84 \text{ s}$

Applicant:	Sendum Wireless Corporation	FCC ID:	TS5-EB300HP	IC:	6234A-EB300HP	
DUT Model:	EB300HP	DUT Type:	Beacon Transmitter for Tracking Offenders	Tx Freq.:	315.285 MHz	
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	Test Report Serial No.:	011612TS5-T1152-E15F	Report Issue Date:	Jan. 27, 2012	 Test Lab Certificate No. 2470.01
	Measurement Date(s):	January 17-19, 2012	Report Revision No.:	1.1 (2nd Release)	
	FCC Rule Part(s):	47 CFR §2; §15.231a	FCC Test Firm Reg. No.:	Accredited	
	IC Standard(s):	RSS-210 RSS-Gen	IC Test Site No.:	IC 3874A-1	

Appendix B

Occupied Bandwidth

B.1 REFERENCES

Normative Reference Standard	FCC CFR 47 §15.231(c); IC RSS-210 Issue 8
Procedure Reference	ANSI C63.4

B.2 LIMITS

FCC §15.231(c)	The bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70 MHz and below 900 MHz. For devices operating above 900 MHz, the emission shall be no wider than 0.5% of the center frequency. Bandwidth is determined at the points 20dB down from the modulated carrier.
IC RSS-210 A1.1.3	For the purpose of Section A1.1, the 99% bandwidth shall be no wider than 0.25% of the centre frequency for devices operating between 70-900 MHz. For devices operating above 900 MHz, the emission shall be no wider than 0.5% of the centre frequency.

B.3 ENVIRONMENTAL CONDITIONS



Temperature	25 +/- 5 °C
Humidity	40 +/- 10 %
Barometric Pressure	101 +/- 3 kPa

ASSET NUMBER	MANUFACTURER	MODEL	DESCRIPTION	CAL DUE
00015	Agilent	E4408B	Spectrum Analyzer	23Apr12

B.4 SETUP DRAWING

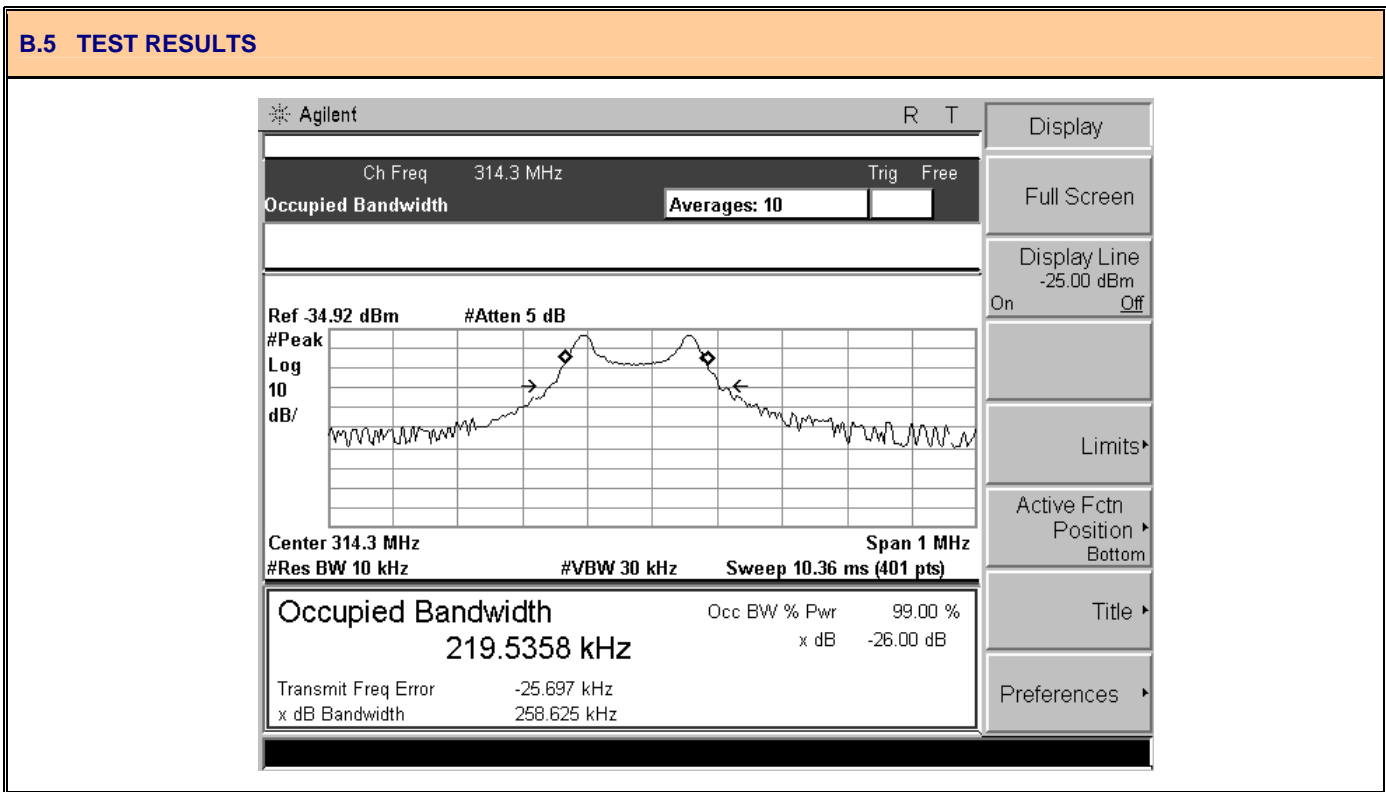
Figure B.4-1 - Setup Drawing – Occupied Bandwidth



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	FCC Rule Part(s):	47 CFR §2, §15.231a	FCC Test Firm Reg. No.:	Accredited	
	IC Standard(s):	RSS-210 RSS-Gen	IC Test Site No.:	IC 3874A-1	


Test Procedure:



- 1) The span range for the SA display shall be between two times and five times the OBW.
- 2) The nominal IF filter bandwidth (3 dB RBW) is should be approximately 1 percent to 5 percent of the OBW, unless otherwise specified, depending on the applicable requirement.
- 3) The dynamic range of the SA at the selected RBW is more than 10 dB below the target “dB down” (attenuation) requirement, i.e., if the requirement calls for measuring the -20 dB OBW, the SA noise floor at the selected RBW should be at least 30 dB below the largest measured value on the display.
- 4) Supply the DUT voltage, or install a new or fully charged battery in the DUT. Turn the DUT on and set it to any convenient frequency within its operating range. Set a reference level on the measuring instrument at any location that will allow measuring the specified bandwidth.
- 5) Supply the DUT with modulation.
- 6) Perform occupied bandwidth measurement function on the E4408B spectrum analyzer.



Carrier Frequency (MHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Result	Remark
314.285	219.5	785.7	Pass	99% Occupied bandwidth
Carrier Frequency (MHz)	Emission Bandwidth (kHz)	Limit (kHz)	Result	Remark
314.285	258.6	785.7	Pass	The point 20dB down from the modulated carrier

Note: Limit = Fundamental frequency x 0.25% = 314.285 x 0.25% = 785.7 kHz

Applicant:	Sendum Wireless Corporation	FCC ID:	TS5-EB300HP	IC:	6234A-EB300HP	
DUT Model:	EB300HP	DUT Type:	Beacon Transmitter for Tracking Offenders	Tx Freq.:	315.285 MHz	
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	FCC Rule Part(s):	47 CFR §2; §15.231a	FCC Test Firm Reg. No.:	Accredited	
	IC Standard(s):	RSS-210 RSS-Gen	IC Test Site No.:	IC 3874A-1	

Appendix C

Field Strength of the Fundamental and Spurious Emissions

C.1 REFERENCES

Normative Reference Standard	FCC CFR 47 §15.231(a); §15.209; IC RSS-210 Issue 8
Procedure Reference	ANSI C63.4:2003

C.2 LIMITS

TX Emission Limits (FCC §15.231(a))


Fundamental Frequency (MHz)	Field Strength of Fundamental (microvolts/meter)	Field Strength of Spurious Emission (microvolts/meter)
40.66–40.70	2,250	225
70–130	1,250	125
130–174	1,250 to 3,750	125 to 375
174–260	3,750	375
260–470	3,750 to 12,500	375 to 1,250
Above 470	12,500	1,250
¹ Linear interpolations		

TX Emission Limits (IC RSS-210 A1.1.1)

Fundamental Frequency (MHz), excluding restricted band frequencies of RSS-Gen	Field Strength of the Fundamental (microvolts/meter)	Field Strength of Unwanted Emissions (microvolts/meter)
40.66–40.70	See Section A2.7	
70–130	1,250	125
130–174	1,250 to 3,750	125 to 375
174–260	3,750	375
260–470	3,750 to 12,500	375 to 1,250
Above 470	12,500	1,250
¹ Linear interpolations		

C.3 ENVIRONMENTAL CONDITIONS

Temperature	25 +/- 5 °C
Humidity	40 +/- 10 %
Barometric Pressure	101 +/- 3 kPa

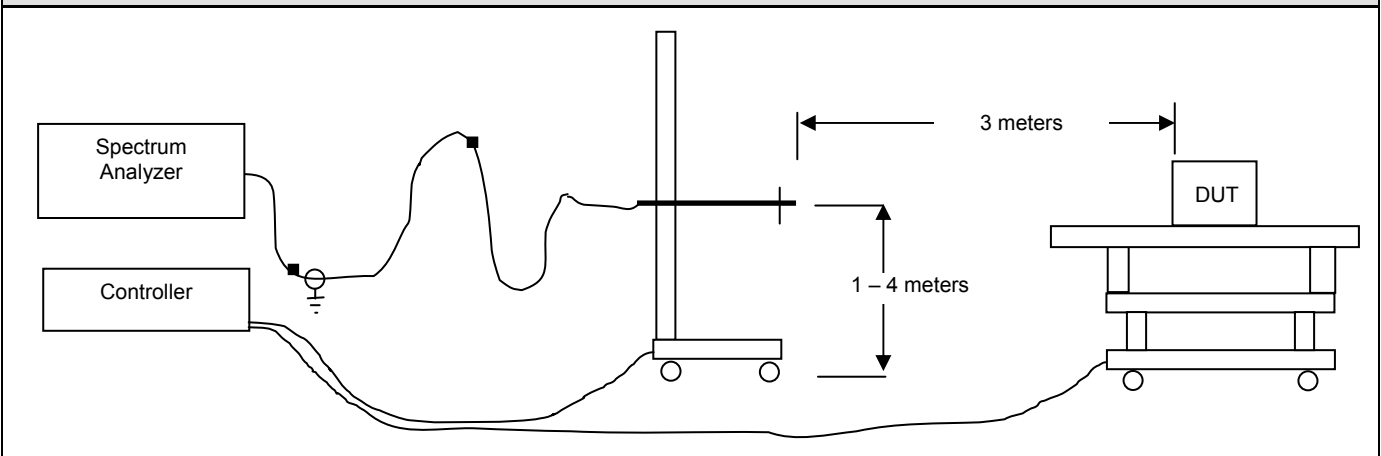
Applicant:	Sendum Wireless Corporation	FCC ID:	TS5-EB300HP	IC:	6234A-EB300HP	
DUT Model:	EB300HP	DUT Type:	Beacon Transmitter for Tracking Offenders	Tx Freq.:	315.285 MHz	
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C.4 EQUIPMENT LIST

ASSET NUMBER	MANUFACTURER	MODEL	DESCRIPTION	CAL DUE
00051	HP	8566B	Spectrum Analyzer RF Section	09Apr12
00049	HP	85650A	Quasi-peak Adapter	09Apr12
00047	HP	85685A	RF Preselector	09Apr12
00072	EMCO	2075	Mini-mast	n/a
00073	EMCO	2080	Turn Table	n/a
00071	EMCO	2090	Multi-Device Controller	n/a
00030	HP	83017A	Microwave system amplifier	n/a
00015	Agilent	E4408B	Spectrum Analyzer	23Apr12
00050	Chase	CBL-6111A	Bilog Antenna	15Mar12
00055	EMCO	3121C	Dipole Antenna	04Apr12
00034	ETS	3115	Double Ridged Guide Horn	03Apr12

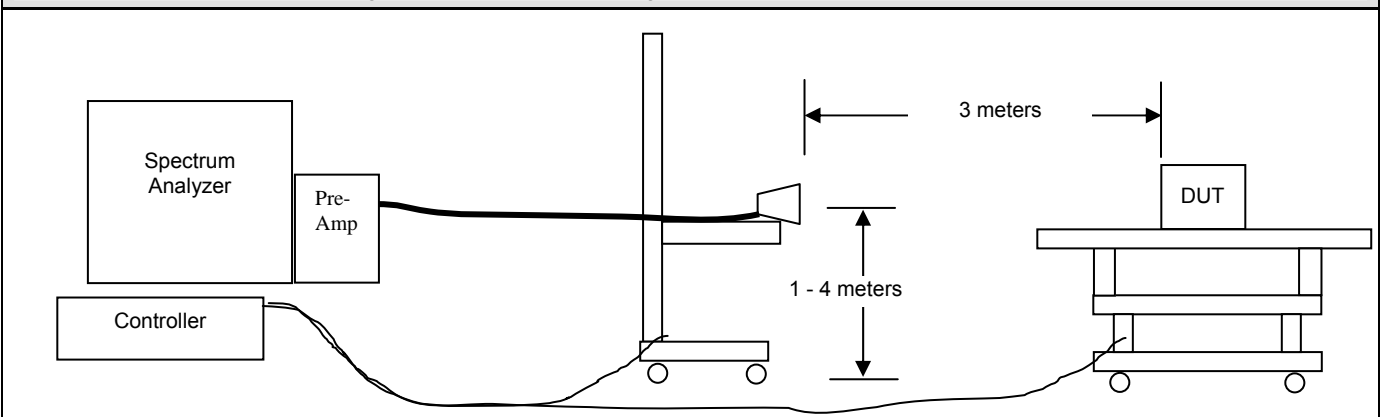
C.5 SETUP DRAWING



Figure C.5-1 - Setup Drawing – Field Strength of the Fundamental



C.6 SETUP DRAWING

Figure C.6-1 - Setup Drawing – Radiated TX Spurious Emissions



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	FCC Rule Part(s):	47 CFR §2; §15.231a	FCC Test Firm Reg. No.:	Accredited	
	IC Standard(s):	RSS-210 RSS-Gen	IC Test Site No.:	IC 3874A-1	

Procedure for determining the average value of pulsed emissions (ANSI C63.4:2003)

When the average value of the pulsed emissions from an DUT must be determined, the average can be found by measuring the peak pulse amplitude and determining the duty cycle correction factor of the pulse modulation. The duty cycle correction factor $\bar{\delta}$ may be expressed in terms of dB as

$$\bar{\delta} \text{ (dB)} = 20\log(\bar{\delta})$$

This correction factor can then be applied to the peak pulse amplitude to find the average. This correction is applied for all emissions including the fundamental and harmonics. The duty cycle correction is determined as follows:

- a) Couple the final radio frequency output signal to the input of a spectrum analyzer. This can be performed by a radiated, direct connect or a "near-field" coupling method. The signal received must be of sufficient level to adequately trigger the spectrum analyzer swept display.
- b) Adjust the center frequency of the spectrum analyzer to the center of the RF signal
- c) Set the spectrum analyzer for ZERO SPAN
- d) Adjust the SWEEP TIME to obtain at least a 100 ms period of time on the horizontal display axis of the spectrum analyzer.
- e) Set the TRIGGER on the spectrum analyzer to capture the greatest amount of "on time" for pulse train length less than 100 ms, or the greatest amount of "on time" in 100 ms for pulse train length greater than 100 ms.
- f) Determine the total "on time" for one pulse train (or 100 ms).
- g) The duty cycle correction factor is the total "on time" divided by the period of the pulse train (or 100 ms)


Test Results:

$T_p = 20 \text{ s}$ therefore $T_p = 100\text{ms}$

$T_{on} = 10.2 \text{ ms}$



$$\bar{\delta} \text{ (dB)} = 20 \text{ Log}(10.2/100) = -19.8 \text{ dB}$$

Test Procedure: As described in ANSI C63.4:2003

Applicant:	Sendum Wireless Corporation	FCC ID:	TS5-EB300HP	IC:	6234A-EB300HP	
DUT Model:	EB300HP	DUT Type:	Beacon Transmitter for Tracking Offenders	Tx Freq.:	315.285 MHz	
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C.7 TEST RESULTS

Fundamental										
Frequency	Antenna Pol.	DUT Orientation	E-Field	δ (dB)	Corrected E-Field	Limit	Limit Peak	Margin	Margin Peak	Result
[MHz]	V/H		[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]	
314.3	V	X	92.76	-19.8	72.96	75.6	95.6	2.6	2.8	Pass
314.3	H	X	85.35	-19.8	65.55	75.6	95.6	10.1	10.3	Pass
314.3	V	Y	86.98	-19.8	67.18	75.6	95.6	8.4	8.6	Pass
314.3	H	Y	91.11	-19.8	71.31	75.6	95.6	4.3	4.5	Pass
314.3	V	Z	87.35	-19.8	67.55	75.6	95.6	8.1	8.3	Pass
314.3	H	Z	91.55	-19.8	71.75	75.6	95.6	3.8	4.1	Pass
Spurious Emissions										
628.6	V	X	44.9	-19.8	25.1	55.6	75.6	30.5	30.7	Pass
628.6	H	X	37.0	-19.8	17.2	55.6	75.6	38.4	38.6	Pass
628.6	V	Y	42.3	-19.8	22.5	55.6	75.6	33.1	33.3	Pass
628.6	H	Y	41.2	-19.8	21.4	55.6	75.6	34.2	34.4	Pass
628.6	V	Z	42.8	-19.8	23.0	55.6	75.6	32.6	32.8	Pass
628.6	H	Z	44.2	-19.8	24.4	55.6	75.6	31.2	31.4	Pass
942.9	V	X	54.3	-19.8	34.5	55.6	75.6	21.1	21.3	Pass
942.9	H	X	49.2	-19.8	29.4	55.6	75.6	26.2	26.4	Pass
942.9	V	Y	51.2	-19.8	31.4	55.6	75.6	24.2	24.4	Pass
942.9	H	Y	50.7	-19.8	30.9	55.6	75.6	24.7	24.9	Pass
942.9	V	Z	50.6	-19.8	30.8	55.6	75.6	24.8	25.0	Pass
942.9	H	Z	50.4	-19.8	30.6	55.6	75.6	25.0	25.2	Pass
1257.1	V	X	49.7	-19.8	29.9	55.6	75.6	25.7	25.9	Pass
1257.1	H	X	nf	-19.8	nf	55.6	75.6	n/a	n/a	Pass
1257.1	V	Y	49.6	-19.8	29.8	55.6	75.6	25.8	26.0	Pass
1257.1	H	Y	nf	-19.8	nf	55.6	75.6	n/a	n/a	Pass
1257.1	V	Z	nf	-19.8	nf	55.6	75.6	n/a	n/a	Pass
1257.1	H	Z	nf	-19.8	nf	55.6	75.6	n/a	n/a	Pass
*1571.4	V	X	54.4	-19.8	34.6	54.0	74	19.5	19.7	Pass
*1571.4	H	X	52.4	-19.8	32.6	54.0	74	21.5	21.7	Pass
*1571.4	V	Y	53.5	-19.8	33.7	54.0	74	20.4	20.6	Pass
*1571.4	H	Y	56.1	-19.8	36.3	54.0	74	17.8	18.0	Pass
*1571.4	V	Z	56.5	-19.8	36.7	54.0	74	17.4	17.6	Pass
*1571.4	H	Z	55.0	-19.8	35.2	54.0	74	18.9	19.1	Pass
1885.7	V	X	54.3	-19.8	34.5	55.6	75.6	21.1	21.3	Pass
1885.7	H	X	nf	-19.8	nf	55.6	75.6	n/a	n/a	Pass
1885.7	V	Y	nf	-19.8	nf	55.6	75.6	n/a	n/a	Pass
1885.7	H	Y	nf	-19.8	nf	55.6	75.6	n/a	n/a	Pass
1885.7	V	Z	nf	-19.8	nf	55.6	75.6	n/a	n/a	Pass
1885.7	H	Z	55.1	-19.8	35.3	55.6	75.6	20.3	20.5	Pass

	Test Report Serial No.:	011612TS5-T1152-E15F	Report Issue Date:	Jan. 27, 2012	 Test Lab Certificate No. 2470.01
	Measurement Date(s):	January 17-19, 2012	Report Revision No.:	1.1 (2nd Release)	
	FCC Rule Part(s):	47 CFR §2; §15.231a	FCC Test Firm Reg. No.:	Accredited	
	IC Standard(s):	RSS-210 RSS-Gen	IC Test Site No.:	IC 3874A-1	

Note:

1. Radiated spurious emissions were measured at the lowest radio frequency signal generated (32 kHz) up to the 10th harmonic. The amplitude of spurious emissions attenuated were more than 20 dB below the permissible value and therefore are not reported.

Remarks:

- 1) E-Field = Antenna Factor + Cable Loss + Meter Reading – Amp Gain
- 2) Peak Limit = Average Limit + 20dB
- 3) All DUT Orientations investigate, only highest reported for spurious emissions.
- 4) nf indicates emission not detectable above noise floor.
- 5) Remark “*” means restricted band
- 6) DUT orientations: x = Vertical, Y = Side, Z=Side rotated 90°


Example Calculations:



Margin Calculation: Margin = Limit – (Corrected E-Field)

Example Calculation of the Limit Channel 314.285MHz





260-470 MHz: FS (microvolts/m) = (41.667 x 314.285) – 7083.333 = 6011.980

Limit (dBuV) = 20 Log(6011.875) = 75.6 dBuV



Applicant:	Sendum Wireless Corporation	FCC ID:	TS5-EB300HP	IC:	6234A-EB300HP	
DUT Model:	EB300HP	DUT Type:	Beacon Transmitter for Tracking Offenders	Tx Freq.:	315.285 MHz	
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	IC Standard(s):	RSS-210 RSS-Gen	IC Test Site No.:	IC 3874A-1	

C.8 SETUP PHOTOGRAPHS

DUT Orientation X	DUT Orientation X
	
	DUT Orientation Y
	
	DUT Orientation Z
	

Applicant:	Sendum Wireless Corporation	FCC ID:	TS5-EB300HP	IC:	6234A-EB300HP	Sendum
DUT Model:	EB300HP	DUT Type:	Beacon Transmitter for Tracking Offenders	Tx Freq.:	315.285 MHz	
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	Test Report Serial No.:	011612TS5-T1152-E15F	Report Issue Date:	Jan. 27, 2012	 Test Lab Certificate No. 2470.01
	Measurement Date(s):	January 17-19, 2012	Report Revision No.:	1.1 (2nd Release)	
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	IC Standard(s):	RSS-210 RSS-Gen	IC Test Site No.:	IC 3874A-1	

END OF DOCUMENT

Applicant:	Sendum Wireless Corporation	FCC ID:	TS5-EB300HP	IC:	6234A-EB300HP	Sendum
DUT Model:	EB300HP	DUT Type:	Beacon Transmitter for Tracking Offenders	Tx Freq.:	315.285 MHz	
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