

Test Report

Curtis-Straus LLC, a wholly owned subsidiary of BV CPS

Report No EN3397-1

Client Fitlinxx Technologies

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Items tested Pebble+

FRN 0004307153

Equipment Type Low Power Communication Device Transmitter

Equipment Code DXX

Standards 47CFR 15.249,RSS 210 Issue 8, RSS GEN Issue 3

Test Dates April 1 – 3, 14 and 15, 2014

Results As detailed within this report

Prepared by Cypynany

Tuyen Truong A. – Test ≝ngineer

Authorized by Christopher Royalds FMC Supervisor

Issue Date 6/23/2014

Conditions of Issue This Test Report is issued subject to the conditions stated in the 'Conditions of Testing'

section on page 18 of this report.





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Form Final Report REV 2-16-07 (DW)



Product Tested - Configuration Documentation

EUT Configuration

Work Order: N3397

Company: Fitlinxx Technologies Company Address: 134 Flanders Road Westborough, MA 01581 Contact: Dave Goodall

Person Present: Dave Goodall

MN EUT: Body LAN Configuration

Pebble+ Bluetooth Configuration Pebble+ Sleep Mode Config

Pebble+

HGEN-00512-12297 HGWT-00512-12235 HGVH-00512-10156

EUT Description: Pebble+ EUT Max Frequency: 16 MHz EUT TX Frequency: 2402 - 2480MHz

MN SN Support Equipment:

None

EUT Ports: No. of Port Type

Populated Cable Type Shielded Ferrites ports

Max Length Length NEBS Type Unpopulated

Port Label None

Software / Operating Mode Description:

1) For Body LAN configuration: EUT is set to transmit at 2429MHz,

2) For Bluetooth configuration: EUT is set to transmit at 2402MHz, 2426MHz and 2480MHz simultaneously.

3) For Body LAN / Bluetooth configuration tested in Sleep mode: EUT is set to transmit for 8ms, then go into silent mode until it detects movement again.

Reason for change Date Issued Issue No. Original Release June 23, 2014





Summary

This test report supports an application for certification of a transmitter operating pursuant to 47 CFR 15.249. The product is Pebble+. It is a transmitter that operates on a single channel 2429MHz for Body LAN configuration and operates in the range 2402 - 2480MHz for Bluetooth configuration.

We found that the product met the above requirements. The test samples were received in good condition.

Test Methodology

Radiated emission testing was performed according to the procedures specified in ANSI C63.4 (2003) and RSS-GEN. Radiated Emissions were maximized by rotating the device around three orthogonal axes as well as varying the test antenna's height and polarity. The device antenna cannot be maximized separately.

AC Main conducted emission was not done because the EUT is battery powered. The product was tested with modulation on and peak readings were compared against the average limit presented in section CFR 15.249.

The EUT operating voltage is 3VDC. (Fresh batteries were used during testing.)

The following bandwidths were used during radiated spurious and line conducted emissions.

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Frequency	RBW	VBW							
0.15-30MHz	9kHz	30kHz							
30-1000MHz	120kHz	1MHz							
1-25GHz	1MHz	3MHz							

Issue No.

Reason for change Original Release

Date Issued June 23, 2014





Compliance Statement

The Pebble+ has been found to conform to the following parts of 47 CFR and RSS 210 as detailed below:

RSS-GEN	RSS 210	Part 15	Comments
5.4		15.15(b)	There are no controls accessible to the users that
			vary the output power.
5.2		15.19	The label is shown in the label exhibit.
7.1.3		15.21	Information to the user is shown in the instruction
			manual exhibit.
		15.27	No special accessories are required for
			compliance.
7.1.2		15.203	The antenna for this device is hardwired to the
			PCB.
7.2.4		15.207	EUT is Battery powered
	A2.9(a)	15.249(a)	The fundamental frequencies and harmonics meet
			the limits in 15.249(a)
	A2.9(b)	15.249(d)	Spurious emissions meet the limits in 15.209.
4.6.1			99% emissions bandwidth plot is provided.



Test Results

Fundamental Measurements

LIMITS

The field strength from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental Frequency	Field Strength of Fundamental (millivolts/meter)	Field Strength of Harmonics (microvolts/meter)
902 - 928 MHz	50	500
2400 - 2483.5 MHz	50	500
5725 - 5875 MHz	50	500
24.0 - 24.25 GHz	250	2500

[15.249(a)]

MEASUREMENTS / RESULTS

Adjusted Peak Reading = Reading - Preamp Factor + Antenna Factor + Cable Factor Average readings were taken with 30Hz VBW

Field Strength of Fundamental - Body LAN mode

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Radiated	Emissic	ons Tab	le											
Date:	01-Apr-14			Company:	Fitlinxx Te	chnologie	s					\	Vork Order:	N3397
Engineer:	Tuyen Truong	/ Ryan Brow	vn	EUT Desc:	Pebble+						EUT Opera	ting Voltage/	Frequency:	3Vdc
Temp:	24°C			Humidity:	2%			Pressure:	1001mBar					
		Freque	ency Range	2429 MHz							Measureme	nt Distance:	3 m	
Notes:	Body LAN mo	de - (S/N: H	GEN-00512-	12297) - all I	EUT orienta	tions were	e investigated.				EU	T Max Freq:	16MHz	
	•						ŭ					TX Freq:	2429MHz	
									47CFR 15	.249 High Fr	equency -	47CFR 15	.249 High F	requency -
Antenna		Peak	Average	Preamp	Antenna	Cable	Adjusted	Adjusted		Peak			Average	
Polarization (H / V)	Frequency (MHz)	Reading (dBµV)	Reading (dBµV)	Factor (dB)	Factor (dB/m)	Factor (dB)	Peak Reading (dBµV/m)	Avg Reading (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result (Pass/Fail)	Limit (dBµV/m)	Margin (dB)	Result (Pass/Fail)
x-orientation	0.0													
v	2429.0	79.3	75.8	22.4	28.2	4.0	89.1	85.6	113.9	-24.8	Pass	93.9	-8.3	Pass
h	2429.0	66.72	63.4	22.4	28.2	4.0	76.5	73.2	113.9	-37.4	Pass	93.9	-20.7	Pass
												93.9		
y-orientation											_			_
v	2429.0	74.18	61.3	22.4	28.2	4.0	84.0	71.1	113.9	-29.9	Pass	93.9	-22.8	Pass
h	2429.0	77.25	63.7	22.4	28.2	4.0	87.1	73.5	113.9	-26.8	Pass	93.9	-20.4	Pass
z-orientation														
V	2429.0	70.87	66.7	22.4	28.2	4.0	80.7	76.5	113.9	-33.2	Pass	93.9	-17.4	Pass
h	2429.0	78.92	75.2	22.4	28.2	4.0	88.7	85.0	113.9	-25.2	Pass	93.9	-8.9	Pass
Tab	le Result:		Pass	by	-8.3	dB					W	orst Freq:	2429.0	MHz
Test Site:	EMI Chamber	. 2		Cable 1:	Asset #150)6				Cable 2:	Asset #1786		Cable 3:	
Analyzer:	Asset #1328			Preamp:	Asset #151	17				Antenna:	Yellow Horn	·	Preselector:	

Spectrum Analyzers / Receivers /Preselectors SA EMI Chamber (1328)	Range 9kHz-13.2 GHz	MN E4405B	Mfr Agilent	SN MY44210241	Asset 1328	Cat I	Calibration Due 1/13/2015	Calibrated on 1/13/2014
Radiated Emissions Sites EMI Chamber 2	FCC Code 719150	IC Code 2762A-7	VCCI Code A-0015	Range >1GHz		Cat I	Calibration Due 5/16/2015	Calibrated on 5/16/2013
Preamps /Couplers Attenuators / Filters 1517 HF Preamp	Range 1-20GHz	MN CS	Mfr CS	SN N/A	Asset 1517	Cat II	Calibration Due 9/11/2014	Calibrated on 9/11/2013
Antennas Yellow Horn	Range 1-18GHz	MN 3115	Mfr EMCO	SN 9608-4898	Asset 37	Cat I	Calibration Due 7/19/2014	Calibrated on 7/19/2013
Meteorological Meters Temp./Humidity/Atm. Pressure Gauge TH A#1833	74	MN 00 Perceptior 35519-044	Mfr Davis Control Company	SN N/A 130318278	Asset 965 1833	Cat I II	Calibration Due 5/29/2014 6/13/2015	Calibrated on 5/29/2013 6/13/2013
Cables Asset #1506 Asset #1786	Range 9kHz - 18GHz 9kHz - 18GHz		Mfr Florida RF Florida RF			Cat II II	Calibration Due 3/7/2015 3/15/2015	Calibrated on 3/7/2014 3/15/2014





Field Strength of Harmonics - Body LAN mode

Date:	01-Apr-14			Company:	Fitlinxx Te	chnologie	s					1	Work Order:	N3397
Engineer:	Tuyen Truong	/ Ryan Brow	'n	EUT Desc:	Pebble+						EUT Opera	ting Voltage	/Frequency:	3Vdc
Temp:	24°C			Humidity:	2%			Pressure:	1001mBar					
		Freque	ency Range:	Harmonics	of 2429MH	lz - 1-6GH	łz				Measureme	nt Distance:	3 m	
Notes:	Body LAN mo	de - (S/N: H	GEN-00512-1	2297) - all I	EUT orienta	tions were	e investigated.				EU	T Max Freq:	16MHz	
												TX Freq:	2429MHz	
	Poak	Book A							47CFR 15.249 High Frequency -			47CFR 1	5.249 High F	requency -
Antenna		Peak	Average	Preamp	Antenna	Antenna Cable Adjusted Adjusted Peak				Average				
Polarization	Frequency	Reading	Reading	Factor	Factor	Factor	Peak Reading	Avg Reading	Limit	Margin	Result	Limit	Margin	Result
(H / V)	(MHz)	(dBµV)	(dBµV)	(dB)	(dB/m)	(dB)	(dBµV/m)	(dBµV/m)	(dBµV/m)	(dB)	(Pass/Fail)	(dBµV/m)	(dB)	(Pass/Fai
V	4858.0	34.26	23.2	20.8	33.0	5.8	52.3	41.2	74.0	-21.7	Pass	54.0	-12.8	Pass
h	4858.0	33.51	23.1	20.8	33.0	5.8	51.5	41.1	74.0	-22.5	Pass	54.0	-12.9	Pass
Tab	ole Result:		Pass	by	-12.8	dB					W	orst Freq:	4858.0	MHz
										0-11-0			0-1-1-0	
Test Site:	EMI Chamber	2		Cable 1:	Asset #150	J6				Cable 2	: Asset #1786		Cable 3:	

Date:	01-Apr-14			Company:	Fitlinxx Te	chnologie	S					١	Work Order:	N3397				
Engineer:	Tuyen Truong	/ Ryan Brow	/n	EUT Desc:	Pebble+						EUT Opera	ting Voltage/	Frequency:	3Vdc				
Temp:	24°C			Humidity:	2%			Pressure:	1001mBar									
		Freque	ency Range:	Harmonics	of 2429MH	lz - 6-18G	Hz				Measureme	nt Distance:	1 m					
Notes:	Body LAN mo	de - (S/N: H	GEN-00512-1	2297) - all l	EUT orienta	tions were	e investigated.				EU	T Max Freq:	16MHz					
												TX Freq:	2429MHz					
									47CFR 15	.249 High Fr	equency -	47CFR 15	i.249 High Fı	equency -				
	Frequency						Preamp		Antenna	Cable		Adjusted		Peak			Average	
Antenna		Peak	Average															
Polarization	Frequency	Reading	Reading	Factor	Factor	Factor	Peak Reading	Avg Reading	Limit	Margin	Result	Limit	Margin	Result				
	Frequency (MHz)				Factor (dB/m)	Factor (dB)	Peak Reading (dBµV/m)	Avg Reading (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result (Pass/Fail)	Limit (dBµV/m)	Margin (dB)	Result (Pass/Fail)				
Polarization		Reading	Reading	Factor			-			-			-					
Polarization (H / V)	(MHz)	Reading (dBµV)	Reading (dBµV)	Factor (dB)	(dB/m)	(dB)	(dBµV/m)	(dBµV/m)	(dBµV/m)	(dB)	(Pass/Fail)	(dBµV/m)	(dB)	(Pass/Fai				
Polarization (H / V) V h	(MHz) 9716.0	Reading (dBµV) 42.28	Reading (dBµV) 36.6	Factor (dB) 19.4	(dB/m) 38.4	(dB) 7.8 7.8	(dBµV/m) 69.1	(dBµV/m) 63.4	(dBµV/m) 83.5	(dB) -14.4	(Pass/Fail) Pass Pass	(dBµV/m) 63.5	(dB) -0.1	(Pass/Fail Pass Pass				

Spectrum Analyzers / Receivers / Preselectors SA EMI Chamber (1328)	Range 9kHz-13.2 GHz	MN E4405B	Mfr Agilent	SN MY44210241	Asset 1328	Cat I	Calibration Due 1/13/2015	Calibrated on 1/13/2014
Radiated Emissions Sites EMI Chamber 2	FCC Code 719150	IC Code 2762A-7	VCCI Code A-0015	Range >1GHz		Cat I	Calibration Due 5/16/2015	Calibrated on 5/16/2013
Preamps /Couplers Attenuators / Filters 1517 HF Preamp	Range 1-20GHz	MN CS	Mfr CS	SN N/A	Asset 1517	Cat II	Calibration Due 9/11/2014	Calibrated on 9/11/2013
Antennas Yellow Horn	Range 1-18GHz	MN 3115	Mfr EMCO	SN 9608-4898	Asset 37	Cat I	Calibration Due 7/19/2014	Calibrated on 7/19/2013
Meteorological Meters Temp./Humidity/Atm. Pressure Gauge TH A#1833	74	MN 900 Perception 35519-044	Mfr Davis Control Company	SN N/A 130318278	Asset 965 1833	Cat I II	Calibration Due 5/29/2014 6/13/2015	Calibrated on 5/29/2013 6/13/2013
Cables Asset #1506 Asset #1786	Range 9kHz - 18GHz 9kHz - 18GHz		M fr Florida RF Florida RF			Cat II II	Calibration Due 3/7/2015 3/15/2015	Calibrated on 3/7/2014 3/15/2014

 $All \ equipment \ is \ calibrated \ using \ standards \ traceable \ to \ NIST \ or \ other \ nationally \ recognized \ calibration \ standard.$

Date:	01-Apr-14		Company:	Fitlinxx Te	chnologies	3					Work Order:	N3397
Engineer:	Tuyen Truong	/ Ryan Brow	EUT Desc:	Pebble+					EUT Opera	ting Voltage	/Frequency:	3Vdc
Temp:	24°C		Humidity:	2%		Pressure:	1001mBar					
	Freque	ency Range:	18-26.5GH	Z					Measureme	nt Distance:	0.1 m	
Notes:	Body LAN mod	de - (S/N: HG	EN-00512-	12297) - all	EUT orien	tations were inv	estigated.		EU	T Max Freq:	16MHz	
										TX Freq:	2429MHz	
Antenna	Antenna		Preamn Antenna	Preamp	Antenna Cable	Adjusted					FCC Class	В
Polarization (H / V)	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Factor (dB/m)	Factor (dB)	Reading (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result (Pass/Fail)	Limit (dBµV/m)	Margin (dB)	Result (Pass/Fail
				No emissio	ns found ir	n this range						
Test Site:	EMI Chamber	2	Cable 1:	EMIR-HIG	H-22			Cable 2:			Cable 3:	
	Analyzer: Rental SA#1 P			18-26.5GH	I-		Antenna: 18-26.5GHz Horn Preselector:					





Spectrum Analyzers / Receivers / Preselectors Brown (1328)	Range 9kHz-26.5GHz	MN E4407B	Mfr Agilent	SN SG44210511	Asset 1510	Cat 	Calibration Due 4/18/2014	Calibrated on 4/18/2013
Radiated Emissions Sites EMI Chamber 2	FCC Code	IC Code	VCCI Code	Range		Cat	Calibration Due	Calibrated on
EMI Chamber 2	719150	2762A-7	A-0015	>1GHz		- 1	5/16/2015	5/16/2013
Preamps /Couplers Attenuators / Filters	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
HF (Yellow)	18-26.5GHz	AFS4-18002650-60-8P-4	CS	467559	1266	- 1	3/30/2015	3/30/2014
Antennas	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
HF (White) Horn	18-26.5GHz	801-WLM	Waveline	758	758	1	Verify before Use	date of test
Meteorological Meters		MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Temp./Humidity/Atm. Pressure Gauge		7400 Perception II	Davis	N/A	965	1	5/29/2014	5/29/2013
TH A#1833		35519-044	Control Company	130318278	1833	II	6/13/2015	6/13/2013
Cables	Range		Mfr			Cat	Calibration Due	Calibrated on
REMI-High-22	9kHz - 18GHz		C-S			II	2/12/2015	2/12/2014

All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard.

Field Strength of Fundamental - Bluetooth mode

Date:	01-Apr-14			Company:	Fitlinxx Te	chnologie	S						Work Order:	N3397
Engineer:	Tuyen Truong	/ Ryan Brow	/n	EUT Desc:	Pebble+						EUT Opera	ting Voltage	/Frequency:	3Vdc
Temp:	24°C			Humidity:	2%			Pressure:	1001mBar					
		Freque	ency Range:	Fundamen	tal Frequen	cies					Measureme	nt Distance:	3 m	
Notes:	Bluetooth mod	de - (S/N: HG	SWT-00512-1	2235) - all E	UT orienta	tions were	e investigated.				EU	T Max Freq:	16MHz	
												TX Freq:	2400-2483.5	MHz
									47CFR 15	.249 High Fr	requency -	47CFR 1	5.249 High F	requency
Antenna		Peak	Average	Preamp	Antenna	Cable	Adjusted	Adjusted		Peak			Average	
olarization	Frequency	Reading	Reading	Factor	Factor	Factor	Peak Reading	Avg Reading	Limit	Margin	Result	Limit	Margin	Result
(H / V)	(MHz)	(dBµV)	(dBµV)	(dB)	(dB/m)	(dB)	(dBµV/m)	(dBµV/m)	(dBµV/m)	(dB)	(Pass/Fail)	(dBµV/m)	(dB)	(Pass/Fa
V	2402.0	79.32	60.3	22.3	28.1	4.0	89.1	70.1	113.9	-24.8	Pass	93.9	-23.8	Pass
h	2402.0	72.72	55.8	22.3	28.1	4.0	82.5	65.6	113.9	-31.4	Pass	93.9	-28.3	Pass
v	2426.0	77.65	58.2	22.4	28.2	4.0	87.5	68.0	113.9	-26.4	Pass	93.9	-25.9	Pass
h	2426.0	64.54	53.3	22.4	28.2	4.0	74.3	63.1	113.9	-39.6	Pass	93.9	-30.8	Pass
V	2480.0	74.71	56.5	22.7	28.3	4.0	84.3	66.1	113.9	-29.6	Pass	93.9	-27.8	Pass
h	2480.0	68.38	53.9	22.7	28.3	4.0	78.0	63.5	113.9	-35.9	Pass	93.9	-30.4	Pass
Tab	le Result:		Pass	by	-23.8	dB					W	orst Freq:	2402.0	MHz
	EMI Chamber Asset #1328	2			Asset #150 Asset #151						Asset #1786 Yellow Horn			

Rev. 3/15/2014								
Spectrum Analyzers / Receivers / Preselectors	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
SA EMI Chamber (1328)	9kHz-13.2 GHz	E4405B	Agilent	MY44210241	1328	I	1/13/2015	1/13/2014
Radiated Emissions Sites	FCC Code	IC Code	VCCI Code	Range		Cat	Calibration Due	Calibrated on
EMI Chamber 2	719150	2762A-7	A-0015	>1GHz		ı	5/16/2015	5/16/2013
Preamps /Couplers Attenuators / Filters	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
1517 HF Preamp	1-20GHz	CS	CS	N/A	1517	II	9/11/2014	9/11/2013
Antennas	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Yellow Horn	1-18GHz	3115	EMCO	9608-4898	37	I	7/19/2014	7/19/2013
Meteorological Meters		MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Temp./Humidity/Atm. Pressure Gauge		7400 Perception II	Davis	N/A	965	1	5/29/2014	5/29/2013
TH A#1833		35519-044	Control Company	130318278	1833	II	6/13/2015	6/13/2013
Cables	Range		Mfr			Cat	Calibration Due	Calibrated on
Asset #1506	9kHz - 18GHz		Florida RF			II	3/7/2015	3/7/2014
Asset #1786	9kHz - 18GHz		Florida RF			II	3/15/2015	3/15/2014

All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard.

Field Strength of Harmonics - Bluetooth mode

Date:	03-Apr-14			Company:	Fitlinxx Te	chnologie	s					V	Nork Order:	N3397
Engineer:	Tuyen Truong			EUT Desc:	Pebble+						EUT Opera	ting Voltage/	Frequency:	3Vdc
Temp:	21.5°C			Humidity:	21%			Pressure:	1010mBar					
		Freque	ency Range:	1-6GHz							Measureme	nt Distance:	3 m	
Notes:	Bluetooth mod	le - (S/N: HG	WT-00512-1	2235) - all I	EUT orienta	tions were	e investigated.				EU	T Max Freq:	16 MHz	
Antenna		Peak	Average	Preamp	Antenna	Cable	Adjusted	Adjusted	47CFR 15.249 High Frequency - 47CFR 15.249 High Frequency - Average				requency -	
Polarization	Frequency	Reading	Reading	Factor	Factor	Factor	Peak Reading	Avg Reading	Limit	Margin	Result	Limit	Margin	Result
	(MHz)	(dBµV)	(dBµV)	(dB)	(dB/m)	(dB)	(dBµV/m)	(dBµV/m)	(dBµV/m)	(dB)	(Pass/Fail)	(dBµV/m)	(dB)	(Pass/Fai
(H / V)		33.0	21.4	20.7	33.1	5.1	50.5	38.9	74.0	-23.5	Pass	54.0	-15.1	Pass
(H / V) V	4804.0	33.0						00.4						
(H / V) V V	4804.0 4852.0	33.87	21.5	20.8	33.2	5.2	51.5	39.1	74.0	-22.5	Pass	54.0	-14.9	Pass
(H / V) V V				20.8 20.7	33.2 33.4	5.2 5.4	51.5 50.4	39.1 44.1	74.0	-22.5 -23.6	Pass Pass	54.0 54.0	-9.9	Pass
v v v	4852.0	33.87	21.5			5.4					Pass			Pass





	Emissio : 03-Apr-14			Company:	Fitlinxx	Technologies						V	Vork Order	: N3397
Engineer:	: Tuyen Truong			EUT Desc:	Pebble+						EUT Ope	erating Voltage/	Frequency	: 3Vdc
Temp:	: 21.5°C			Humidity:	21%		Pr	essure:	1010mBar					
		Freque	ency Range:	6-18GHz							Measuren	nent Distance:	1 m	
Notes:	: Bluetooth mod	le - (S/N: HG	GWT-00512-12	2235) - all	EUT orier	ntations were inv	estigated.				E	UT Max Freq:	16 MHz	
Antenna		Peak	Average	Preamp	Antenna	a Cable	Adjusted Adju	sted	47CFR 1	5.249 High F Peak	requency -	47CFR 15	.249 High I Average	requency -
Polarization	Frequency	Reading	Reading	Factor	Factor			eading	Limit	Margin	Result	Limit	Margin	Result
(H / V)	(MHz) 9704.0	(dBµV) 35.14	(dBµV) 24.8	(dB) 19.3	(dB/m) 38.7	(dB) 8.0		V/m)	(dBµV/m) 83.5	(dB) -21.0	(Pass/Fail) Pass	(dBµV/m) 63.5	(dB) -11.3	(Pass/Fail)
V		35.14		19.3			62.5	2	83.5	-21.0				
Tab	ole Result:		Pass	by	-11	.3 dB						Worst Freq:	9704.0) MHz
	Test Site: 1DCC-OATS-3M-I Cable 1: EMIR-I Analyzer: Rental SA#1 Preamp: Asset #									Cable 2 Antenna	2: a: Black Horr	n F	Cable 3 reselector	
ev. 3/15/20 ⁻ Spectrum A	14 I nalyzers / Re Brown (1		reselectors	Ran 9kHz-26		MN E4407B	Mfr Agilent		SN 4210511	Asset 1510	Cat I	Calibration D 4/18/2014		librated or 1/18/2013
R	adiated Emis	sions Sites	s	FCC (Code	IC Code	VCCI Code	R	ange		Cat	Calibration D	ue Ca	librated on
	1DCC-OAT	S-3M-I		7191	150	2762A-8	A-0015		000MHz		II	5/17/2015		5/17/2013
Preamps	/Couplers At	tenuators	/ Filters	Ran	ae	MN	Mfr		SN	Asset	Cat	Calibration D	ue Ca	librated on
	1517 HF P			1-200		CS	CS	I	N/A	1517	II	9/11/2014	9	9/11/2013
	Antennas Black Horn			Ran 1-180		MN 3115	Mfr EMCO		SN 3-5148	Asset 56	Cat I	Calibration D 8/5/2015		librated on 8/5/2013
	Black F			Meteorological Meters Temp./Humidity/Atm. Pressure Gauge 7400										
	Meteorologic		Gauge		74	MN 400 Perception	Mfr I Davis		SN N/A	Asset 965	Cat I	Calibration D 5/29/2014		librated on 5/29/2013
	Meteorologic	Pressure G	Gauge		74			1			Cat I II			librated on 5/29/2013 5/13/2013

 $All\ equipment\ is\ calibrated\ using\ standards\ traceable\ to\ NIST\ or\ other\ nationally\ recognized\ calibration\ standard.$

Radiated	l Emissio	ns Tab	le											
Date:	: 03-Apr-14			Company:	Fitlinxx Ted	chnolo	gies					,	Work Order:	N3397
Engineer:	: Tuyen Truong			EUT Desc:	Pebble+						EUT Opera	ating Voltage	/Frequency:	3Vdc
Temp:	: 21.5°C			Humidity:	21%			Pressure:	1010mBar					
		Freque	ency Range:	18-26.5GH	z						Measureme	ent Distance:	0.1 m	
Notes:	: Bluetooth mod	de - (S/N: HC	GWT-00512-1	2235) - all E	UT orienta	tions w	ere investigated.				El	JT Max Freq:	16 MHz	
	T	1			1		<u> </u>	1 1	47CFR 15.2	MO High E	roguency -	47CED 1	5.249 High F	roguency -
Antenna		Peak	Average	Preamp	Antenna	Cable	e Adjusted	Adjusted	47011013.2	Peak	requericy -	4/CI K 1	Average	requericy -
Polarization	Frequency	Reading	Reading	Factor	Factor	Facto		Avg Reading	Limit	Margin	Result	Limit	Margin	Result
(H / V)	(MHz)	(dBµV)	(dBµV)	(dB)	(dB/m)	(dB)	(dBµV/m)	(dBµV/m)	(dBµV/m)	(dB)	(Pass/Fail)	(dBµV/m)	(dB)	(Pass/Fail)
					No emissior	ns four	nd in this range							
	: 1DCC-OATS-3 : Rental SA#1	3M-I			EMIR-HIGH 18-26.5GH					Cable 2: Antenna:	: : 18-26.5GHz	Horn	Cable 3: Preselector:	
Rev. 3/15/2014	4													
Spectrum	Analyzers / Re		eselectors		Range		MN	Mfr	SN	Asset	Cat	Calibration		alibrated on
	Brown (1328)		9k	Hz-26.5GH:	Z	E4407B	Agilent	3G4421051	1510	I	4/18/2014	ı	4/18/2013
	Radiated Emis	ssions Sites			CC Code		IC Code	VCCI Code	Range		Cat	Calibration	Due Ca	alibrated on
	1DCC-OA	TS-3M-I	-		719150		2762A-8	A-0015	30-1000MHz		II	5/17/2015	5	5/17/2013
Preamp	os /Couplers A	ttenuators	/ Filters		Range		MN	Mfr	SN	Asset	Cat	Calibration	Due Ca	alibrated on
	HF (Ye	llow)		1	8-26.5GHz		4-18002650-60-	CS	467559	1266	I	3/30/2015	5	3/30/2014
	Anten				Range		MN	Mfr	SN	Asset	Cat	Calibration		alibrated on
	HF (White	e) Horn		1	8-26.5GHz		801-WLM	Waveline	758	758	I	Verify before	Use o	date of test
	Meteorologi	cal Meters					MN	Mfr	SN	Asset	Cat	Calibration	Due Ca	alibrated on
Temp	./Humidity/Atm		Sauge			7	7400 Perception I	Davis	N/A	965	1	5/29/2014		5/29/2013
	TH A#1	1834					35519-044	Control Company	1.3E+08	1834	II	6/13/2015	5	6/13/2013
	Cabl	es			Range			Mfr			Cat	Calibration		alibrated on
	REMI-Hi	igh-22		9k	Hz - 18GHz	<u> </u>		C-S			II	2/12/2015	5	2/12/2014





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Radiated Spurious Emissions

LIMITS

15.249 (d) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in § 15.209, whichever is the lesser attenuation.

MEASUREMENTS / RESULTS

Adjusted Reading = Reading - Preamp Factor + Antenna Factor + Cable Factor

Radiated Spurious - Body LAN mode

·uu.u.u.	a Opanio		· · · · ·									
Radiated	Emissior	ns Table										
Date:	01-Apr-14		Company:	Fitlinxx Te	chnologies	3					Work Order:	N3397
Engineer:	Tuyen Truong /	Ryan Brown	EUT Desc:	Pebble+					EUT Opera	ating Voltage	/Frequency:	3Vdc
Temp:	24°C		Humidity:	2%		Pressure:	1001mBar		•			
	Frequ	uency Range	: 25-1000MH	Ηz					Measureme	nt Distance:	3 m	
Notes:	Body LAN mode	e - (S/N: HGE	N-00512-122	297) - all EL	JT orientat	tions were invest	igated.		EU	IT Max Freq:	16MHz	
										TX Freq:	2429MHz	
											FCC Class I	3
Antenna			Preamp	Antenna	Cable	Adjusted						
Polarization	Frequency	Reading	Factor	Factor	Factor	Reading	Limit	Margin	Result	Limit	Margin	Result
(H / V)	(MHz)	(dBµV)	(dB)	(dB/m)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	(Pass/Fail)	(dBµV/m)	(dB)	(Pass/Fail)
v, peak	44.6	37.2	22.5	10.5	0.5	25.7				40.0	-14.3	Pass
v, peak	125.0	28.9	22.5	14.2	0.9	21.5				43.5	-22.0	Pass
v, peak	161.0	32.5	22.6	12.1	1.0	23.0				43.5	-20.5	Pass
h, peak	240.0	26.9	22.5	11.8	1.1	17.3				46.0	-28.7	Pass
v, peak	466.5	30.5	22.3	17.3	1.6	27.1				46.0	-18.9	Pass
v, peak	616.9	28.4	22.7	19.1	1.7	26.5				46.0	-19.5	Pass
v, peak	847.2	28.1	21.6	21.8	2.2	30.5				46.0	-15.5	Pass
Tab	le Result:	Pass	by	-14.3	dB				W	orst Freq:	44.6	MHz
	EMI Chamber 2			Asset #150	06				Asset #1786		Cable 3:	
Analyzer:	Asset #1328		Preamp:	Blue				Antenna:	Red-Black		Preselector:	

Note: No emissions found from 1 to 25 GHz other than the Harmonics (see Fundamental Measurements section)

Rev. 3/15/2014								
Spectrum Analyzers / Receivers / Preselectors	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
SA EMI Chamber (1328)	9kHz-13.2 GHz	E4405B	Agilent	MY44210241	1328	I	1/13/2015	1/13/2014
Radiated Emissions Sites	FCC Code	IC Code	VCCI Code	Range		Cat	Calibration Due	Calibrated on
EMI Chamber 2	719150	2762A-7	A-0015	>1GHz		1	5/16/2015	5/16/2013
Preamps /Couplers Attenuators / Filters	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Blue	0.009-2000MHz	ZFL-1000-LN	CS	N/A	759	Ш	5/31/2014	5/31/2013
Antennas	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Red-Black Bilog	30-2000MHz	JB1	Sunol	A091604-2	1106	1	1/28/2015	1/28/2013
Meteorological Meters		MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Temp./Humidity/Atm. Pressure Gauge		7400 Perception II	Davis	N/A	965	- 1	5/29/2014	5/29/2013
TH A#1833		35519-044	Control Company	130318278	1833	Ш	6/13/2015	6/13/2013
Cables	Range		Mfr			Cat	Calibration Due	Calibrated on
Asset #1506	9kHz - 18GHz		Florida RF			Ш	3/7/2015	3/7/2014
Asset #1786	9kHz - 18GHz		Florida RF			П	3/15/2015	3/15/2014





Band Edge – Body LAN mode

Dadiatad	Emissis	no Tob	i.												
	DEMISSIO 01-Apr-14	ns rab	ie	Company:	Eitlinyy T	oobnologio	•							Work Ord	or: N2207
	Tuyen Truong	/ Puon Prou	(D)	EUT Desc:		ecrinologie	5					EUT Operat			
Temp:	, ,	/ Kyan biov	VII	Humidity:					Proceur	e: 1001mBar		EUI Opera	illig voltage	rrequent	y. svuc
remp.	24 0	F=====	ency Range:			and 0 400	-CII-		riessuit	s. 100 IIIDai		Measuremer	at Distance.	2	
Neter	Destri ANI													-	
notes:	Body LAN mo	ue - (5/N: H	GEN-00512-	2297) - all I	=O1 oneni	ations were	einvestig	jateu.				EU	T Max Freq:	IOIVITZ	
Antenna		Peak	Average	Preamp	Antenna	Cable	Adjus	sted	Adjusted	FCC 15.209 I	ligh Freque	ency - Peak	FCC 15.	.209 High Averag	Frequency -
Polarization	Frequency	Reading	Reading	Factor	Factor	Factor	Peak Re		Avg Reading	Limit	Margin	Result	Limit	Margin	Result
(H / V)	(MHz)	(dBµV)	(dBµV)	(dB)	(dB/m)	(dB)	(dBµ\		(dBµV/m)	(dBµV/m)	(dB)	(Pass/Fail)	(dBµV/m)	(dB)	(Pass/Fail)
v	2400.0	36.26	27.1	22.3	28.1	4.0	46		36.9	74.0	-27.9	Pass	54.0	-17.1	Pass
V	2483.5	36.11	27.1	22.7	28.3	4.0	45.	./	36.7	74.0	-28.3	Pass	54.0	-17.3	Pass
Tab	le Result:		Pass	by	-17.1	l dB						Wo	orst Freq:	2400	0.0 MHz
Analyzer:	Test Site: EMI Chamber 2 Cable 1: As Analyzer: Rental SA#1 Preamp: As 3/15/2014 Preamp: As											Asset #1786 Yellow Horn		Cable Preselect	
	\(\frac{3\text{Visited Formula (No. 1)}}{3\text{Visited Formula (No. 1)}} \(\frac{3\text{Visited Formula (No. 1)}}{3\text{Visited Formula (No. 1)}} \(\frac{1\text{Visited Formula (No. 1)}}{3				MN E440			Mfr agilent	SN SG44210511	Asset 1510	Cat I	Calibratio 4/18/2		Calibrated o 4/18/2013	
Ra	diated Emissi EMI Chamb			FCC C 7191		IC Co 2762/			CI Code -0015	Range >1GHz		Cat I	Calibratio 5/16/2		Calibrated of 5/16/2013
Preamps /	/Couplers Atte	enuators / F	ilters	Ranc	ie	MN	ı		Mfr	SN	Asset	Cat	Calibratio	on Due	Calibrated o
	1517 HF Pre			1-20G	Hz	CS			CS	N/A	1517	II	9/11/2	014	9/11/2013
	Antenna Yellow Ho			Rang 1-18G		MN 311			Mfr MCO	SN 9608-4898	Asset 37	Cat I	Calibratio		Calibrated or 7/19/2013
		l Matara				MN			Mfr	SN	A	Cat	Calibratio	D	Calibrated
	Meteorological lumidity/Atm. F		1100		-	NIN 7400 Perce			Mitr Davis	SN N/A	Asset 965	Lat	5/29/2		5/29/2013
remp./n	TH A#18		uge		,	35519-			l Company	130318278	1833	i	6/13/2		6/13/2013
	Cables Asset #15 Asset #17	606		Rang 9kHz - 18 9kHz - 18	BGHz			Flo	Mfr rida RF rida RF			Cat II II	Calibratio 3/7/20 3/15/2	015	Calibrated or 3/7/2014 3/15/2014

All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard.

Radiated Spurious - Bluetooth mode

Date:	14-Apr-14		Company:	Fitlinxx Te	chnologie	S				V	Vork Order:	N3397
Engineer:	Tuyen Truong		EUT Desc:	Pebble+					EUT Operat	ing Voltage/	Frequency:	3Vdc
Temp:	24°C		Humidity:	28%		Pressure:	1006mBar					
	Freque	ncy Range:	25 to 1000	MHz					Measureme	nt Distance:	3 m	
Notes:	Bluetooth mod	e - (S/N: HG	WT-00512-	12235) - all	EUT orie	ntations were in	estigated.		EU	T Max Freq:	16MHz	
									EUT TX F	requencies:	2400-2483.5	MHz
											FCC Class I	В
Antenna			Preamp	Antenna	Cable	Adjusted						
Polarization	Frequency	Reading	Factor	Factor	Factor	Reading	ding Limit Margin Resu			Limit	Margin	Result
(H/V)	(MHz)	(dBµV)	(dB)	(dB/m)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	(Pass/Fail)	(dBµV/m)	(dB)	(Pass/Fai
v, peak	47.0	33.4	25.3	10.1	0.6	18.8				40.0	-21.2	Pass
v, peak	76.1	39.8	25.3	8.6	0.7	23.8				40.0	-16.2	Pass
v, peak	100.3	42.5	25.3	10.5	0.8	28.5				43.5	-15.0	Pass
v, peak	119.7	31.8	25.3	14.1	1.0	21.6				43.5	-21.9	Pass
h, peak	175.5	33.4	24.3	11.8	1.2	22.1				43.5	-21.4	Pass
v, peak	177.9	33.4	24.2	11.7	1.1	22.0				43.5	-21.5	Pass
v, peak	590.2	28.4	25.4	19.2	2.0	24.2				46.0	-21.8	Pass
Table	Result:	Pass	by	-15.0	dB				W	orst Freq:	100.3	MHz
Test Site: EMI Chamber 1 Cable 1: Asset #1505 Analyzer: Asset #1327 Preamp: Blue-Blk								Cable 2:	Asset #1507		Cable 3:	

Note: No emissions found from 1 to 25 GHz other than the Harmonics (see Fundamental Measurements section)





Rev. 4/13/2014 Spectrum Analyzers / Receivers / Preselectors SA EMI Chamber (1327)	Range 9kHz-13.2 GHz	MN E4405B	Mfr Agilent	SN MY45103416	Asset 1327	Cat 	Calibration Due 5/30/2014	Calibrated on 5/30/2013
Radiated Emissions Sites EMI Chamber 1	FCC Code 719150	IC Code 2762A-6	VCCI Code A-0015	Range >1GHz		Cat 	Calibration Due 5/17/2015	Calibrated on 5/17/2013
Preamps/Couplers Attenuators / Filters Blue-Black	Range 0.009-2000MHz	MN ZFL-1000-LN	Mfr CS	SN N/A	Asset 800	Cat II	Calibration Due 11/19/2014	Calibrated on 11/19/2013
Antennas Red-White Bilog	Range 30-2000MHz	MN JB1	Mfr Sunol	SN A091604-1	Asset 1105	Cat 	Calibration Due 7/24/2015	Calibrated on 7/24/2013
Meteorological Meters Temp./Humidity/Atm. Pressure Gauge TH A#1832	7	MN 400 Perception 35519-044	Mfr Davis Control Company	SN N/A 130318277	Asset 965 1832	Cat 	Calibration Due 5/29/2014 6/13/2015	Calibrated on 5/29/2013 6/13/2013
Cables Asset #1505 Asset #1507	Range 9kHz - 18GHz 9kHz - 18GHz		Mfr Florida RF			Cat II	Calibration Due 3/7/2015 2/23/2015	Calibrated on 3/7/2014 2/23/2014

All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard.

Date:	11-Dec-13		Company:	Fitlinxx Te	chnologi	es					V	Vork Orde	r: N3397
Engineer:	Tuyen Truong		EUT Desc:	Pebble+	Ü			E	UT Oper	ating	Voltage/	Frequency	y: 3Vdc
Temp:	23°C		Humidity:	8%		Pressu	re: 1010mBar						
	Freque	ncy Range:	30 to 2500	0MHz				M	easuren	nent D	istance:	3 m	
Notes:	Body LAN / BI	uetooth Con	figuration - S	Sleep Mode	1				Е	UT Ma	x Freq:	16 MHz	
Antenna			Draama	Antenna	Cable	Adinated						FCC 15.20	09
Polarization (H/V)	Frequency (MHz)	Reading (dBµV)	Preamp Factor (dB)	Factor (dB/m)	Factor (dB)	Adjusted Reading (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result (Pass/Fail		Lim it BµV/m)	Margin (dB)	Result (Pass/Fail)
			No emiss	on found in	this ran	ge							
Table	e Result:	Pass	by		dB				I	Nors	Freq:		MHz
Analyzer:	EMI Chamber Asset #1327	1	Cable 1: Preamp:	Asset #178 Red	81			Cable 2: A Antenna: R			F	Cable 3 Preselecto	
ev. 6/22/2014 Spectrum	Analyzers / Re		selectors	Ra i 9kHz-10	n ge 3.2 GHz	MN E4405B	Mfr Agilent	SN MY45103416	Asset 1327	Cat I		ition Due 0/2015	Calibrated o 4/29/2014
	Radiated Emis EMI Chan			FCC 719	Code 150	IC Code 2762A-6	VCCI Code A-0015	Range >1GHz		Cat I		ition Due 1/2015	Calibrated of 5/17/2013
Pream	i ps/Couplers A Red		Filters		n ge 000MHz	MN ZFL-1000-LN	Mfr CS	SN N/A	Asset 798	Cat II		tion Due /2015	Calibrated of 2/4/2014
	Anteni Red-White				n ge 00MHz	MN JB1	Mfr Sunol	SN A091604-1	Asset 1105	Cat 		tion Due 1/2015	Calibrated o 7/24/2013
Meteorological Meters Weather Clock (Pressure Only) TH A#1832						MN BA928 35519-044	Mfr Oregon Scientific Control Company	SN C3166-1 130318277	Asset 831 1832	Cat 	3/19	ition Due 0/2016 8/2015	Calibrated of 3/19/2014 6/13/2013
	Cables Asset #1781 Asset #1785				nge 18GHz		Mfr Florida RF			Cat II		tion Due	Calibrated of 3/9/2014





Calibration Due

3/7/2015

3/15/2015

Calibrated on

3/15/2014

Cat

П

Band Edge - Bluetooth mode

Cables

Asset #1506

Asset #1786

Dana L	-ugu	Diact		ac										
Radiated	Emissio	ns Tab	le											
Date:	01-Apr-14			Company	: Fitlinxx Te	chnolo	gies					,	Work Order:	N3397
Engineer:	Tuyen Truong	/ Ryan Brow	/n	EUT Desc	Pebble+						EUT Oper	rating Voltage	/Frequency:	3Vdc
Temp:	24°C			Humidity	2%			Pressure	: 1001mBar					
		Freque	ency Range:	Band Edge	e - 2.4GHz a	and 2.4	835GHz				Measurem	ent Distance:	3 m	
Notes:	Bluetooth mod	de - (S/N: HG	WT-00512-1	12235) - all	EUT orienta	tions w	ere investigated.				E	UT Max Freq:	16MHz	
								_	-					
				_		Cable			FCC 15.209 F	ligh Freque	ency - Pea	k FCC 15.	209 High Fr	equency -
Antenna Polarization	Frequency	Peak Reading	Average Reading	Preamp Factor	Antenna Factor	Facto		Adjusted Avg Reading	Limit	Margin	Result	Limit	Average Margin	Result
(H / V)	(MHz)	(dBµV)	(dBµV)	(dB)	(dB/m)	(dB)	(dBµV/m)	(dBµV/m)	(dBµV/m)	(dB)	(Pass/Fail)	(dBµV/m)	(dB)	(Pass/Fail)
٧	2400.0	63.66	27.9	22.3	28.1	4.0	73.5	37.7	74.0	-0.5	Pass	54.0	-16.3	Pass
v	2395.0	45.5	25.8	22.3	28.1	4.0	55.3	35.6	74.0	-18.7	Pass	54.0	-18.4	Pass
v	2483.5	40.62	26.6	22.7	28.3	4.0	50.2	36.2	74.0	-23.8	Pass	54.0	-17.8	Pass
V	2487.5	37.18	25.7	22.7	28.4	4.0	46.9	35.4	74.0	-27.1	Pass	54.0	-18.6	Pass
Tab	Table Result: Pass by -0.5 dB										V	Vorst Freq:	2400.0	MHz
	EMI Chamber	2			: Asset #150						Asset #178		Cable 3:	
	Asset #1328			Preamp	: Asset #151	7				Antenna:	Yellow Hori	n	Preselector:	
Rev. 3/15/20					_									
Spectrum	Analyzers / SA EMI Ch				Range 9kHz-13.2		MN E4405B	Mfr Agilent	SN MY44210241	Asset 1328	Cat	Calibration I 1/13/2015		ibrated on /13/2014
	SA EIVII CII	iamber (132	20)		9KHZ-13.Z	GHZ	E4403B	Aglient	W1144210241	1320	'	1/13/2013	1,	13/2014
	Radiated Er	nissions S	ites		FCC Co	de	IC Code	VCCI Code	Range		Cat	Calibration I	Due Cali	ibrated on
	EMI CI	hamber 2			71915		2762A-7	A-0015	>1GHz		1	5/16/2015		/16/2013
Pream	ps /Couplers		ors / Filters	;	Range		MN	Mfr	SN	Asset		Calibration I		ibrated on
	1517 H	F Preamp			1-20GF	lz	CS	CS	N/A	1517	II	9/11/2014	. 9,	/11/2013
	Ans	onnoo			Banas		MN	Mfr	SN	Asset	Cat	Calibration I	Oue Celi	ibrated on
	Antennas Range Yellow Horn 1-18GH						3115	EMCO	9608-4898	ASSet 37	Cat	7/19/2014		/19/2013
	i end	7** 1 10111			1-1001	14	3113	LIVIOO	2000- 1 090	31	'	1/13/2014		15/2015
	Meteorological Meters						MN	Mfr	SN	Asset	Cat	Calibration I	Due Cali	ibrated on
Tem	Temp./Humidity/Atm. Pressure Gauge						100 Perceptio	Davis	N/A	965	1	5/29/2014	- 5/	/29/2013
	TH A	A#1833	_				35519-044 C	ontrol Company	/ 130318278	1833	II	6/13/2015	6	/13/2013

Mfr Florida RF

Florida RF

All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard.

Range 9kHz - 18GHz

9kHz - 18GHz



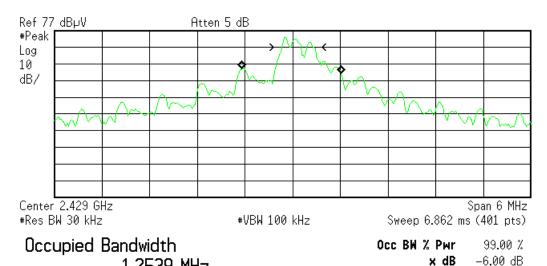
Occupied Bandwidth

REQUIREMENT

When an occupied bandwidth is no specified in the applicable RSS, the transmitted signal bandwidth to be reported is to be its 99% emission bandwidth, as calculated or measured. [RSS-GEN 4.6.1]

> 🔆 Agilent 09:28:47 Apr 15, 2014

R T



Transmit Freq Error -12.100 kHz x dB Bandwidth 407.157 kHz

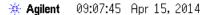
1.2539 MHz

C:temp.gif file saved

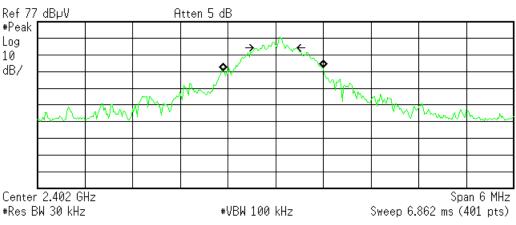
Occupied Bandwidth - Body LAN configuration







R T



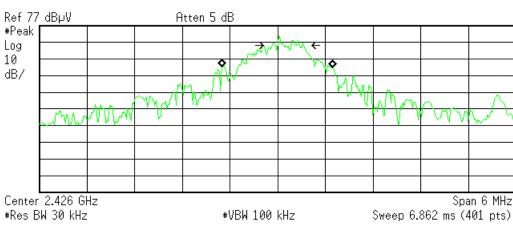
Occupied Bandwidth 1.2474 MHz Occ BW % Pwr 99.00 % x dB -6.00 dB

Transmit Freq Error -29.888 kHz x dB Bandwidth 344.858 kHz

Occupied Bandwidth - Low Channel - Bluetooth configuration

* Agilent 09:12:59 Apr 15, 2014

R T



Occupied Bandwidth 1.3951 MHz Occ BW % Pwr 99.00 % x dB -6.00 dB

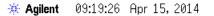
Transmit Freq Error −6.425 kHz x dB Bandwidth 406.678 kHz

C:temp.gif file saved

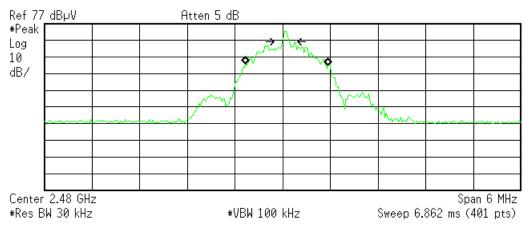
Occupied Bandwidth - Mid Channel - Bluetooth configuration







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Occupied Bandwidth 1.0245 MHz Occ BW % Pwr 99.00 % x dB -6.00 dB

Transmit Freq Error 54.259 kHz x dB Bandwidth 87.689 kHz

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Occupied Bandwidth - High Channel - Bluetooth configuration

Rev. 4/13/2014								
Spectrum Analyzers / Receivers / Preselectors SA EMI Chamber (1327)	Range 9kHz-13.2 GHz	MN E4405B	Mfr Agilent	SN MY45103416	Asset 1327	Cat I	Calibration Due 5/30/2014	Calibrated on 5/30/2013
Radiated Emissions Sites EMI Chamber 1	FCC Code 719150	IC Code 2762A-6	VCCI Code A-0015	Range >1GHz		Cat 	Calibration Due 5/17/2015	Calibrated on 5/17/2013
Preamps /Couplers Attenuators / Filters	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
1517 HF Preamp	1-20GHz	CS	CS	N/A	1517	II	9/11/2014	9/11/2013
Antennas	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Orange Horn	1-18GHz	3115	EMCO	0004-6123	390	- 1	10/2/2014	10/2/2013
Meteorological Meters		MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Temp./Humidity/Atm. Pressure Gauge		7400 Perception II	Davis	N/A	965	- 1	5/29/2014	5/29/2013
TH A#1832		35519-044	Control Company	130318277	1832	II	6/13/2015	6/13/2013
Cables	Range		Mfr			Cat	Calibration Due	Calibrated on
Asset #1505	9kHz - 18GHz		Florida RF			II	3/7/2015	3/7/2014
Asset #1507	9kHz - 18GHz		Florida RF			II	2/23/2015	2/23/2014





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Measurement Uncertainty

The listed uncertainties are the worst case uncertainty for the entire range of measurement. Please note that the uncertainty values are provided for informational purposes only and are not used in determining the PASS/FAIL results.

Measurement Radiated Emissions (30-1000MHz)	Expanded Uncertainty k=2	Maximum allowable uncertainty
NIST CISPR	5.6dB 4.6dB	N/A 5.2dB (Ucispr)
Radiated Emissions (1-26.5GHz)	4.6dB	N/A
Radiated Emissions (above 26.5GHz)	4.9dB	N/A
Magnetic Radiated Emissions	5.6dB	N/A
Conducted Emissions NIST	3.9dB	N/A
CISPR	3.6dB	3.6dB (Ucispr)
Telco Conducted Emissions (Current)	2.9dB	N/A
Telco Conducted Emissions (Voltage)	4.4dB	N/A
Electrostatic Discharge	11.5%	N/A
Radiated RF Immunity (Uniform Field)	1.6dB	N/A
Electrical Fast Transients	23.1%	N/A
Surge	23.1%	N/A
Conducted RF Immunity	3dB	N/A
Magnetic Immunity	12.8%	N/A
Dips and Interrupts	2.3V	N/A
Harmonics	3.5%	N/A
Flicker	3.5%	N/A
Radio frequency (@ 2.4GHz)	3.23 x 10 ⁻⁸	1 x 10 ⁻⁷
RF power, conducted	0.40dB	0.75dB
Maximum frequency deviation: Within 300Hz and 6kHz of audio frequency / Within 6kHz and 25kHz of audio frequency	3.4% 0.3dB	5% 3dB
Adjacent channel power	1.9dB	3dB
Conducted spurious emission of transmitter, valid up to 12.75GHz	2.39dB	3dB
Conducted emission of receivers	1.3dB	3dB
Radiated emission of transmitter, valid up to 26.5GHz	3.9dB	6dB
Radiated emission of transmitter, valid up to 80GHz	3.3dB	6dB
Radiated emission of receiver, valid up to 26.5GHz	3.9dB	6dB
Radiated emission of receiver, valid up to 80GHz	3.3dB	6dB
Humidity	2.37%	5%
Temperature	0.7°C	1.0°C
Time	4.1%	10%
RF Power Density, Conducted	0.4dB	3dB
DC and low frequency voltages	1.3%	3%
Voltage (AC, <10kHz)	1.3%	2%
Voltage (DC)	0.62%	1%
The above reflects a 95% confidence level		



Conditions Of Testing

[Bureau Veritas Consumer Products Services, Inc., a Massachusetts corporation], and/or its affiliates (collectively, the "Company") will conduct, at the request of the Submitter ("Client"), the tests specified on the submitted Test Request Form or equivalent in accordance with, and subject to, the following terms and conditions (collectively, "Conditions"):

- 1. All orders for tests are subject to acceptance by the Company, and no order will constitute a binding commitment of the Company unless and until such order is accepted by it, as evidenced by the issuance of a written report ("Test Report") by the Company. The Test Report is issued solely by the Company, is intended for the exclusive use of Client and shall not be published, used for advertising purposes, copied or replicated for distribution to any other person or entity or otherwise publicly disclosed without the prior written consent of the Company. By submitting a request for services to the Company, Client consents to the disclosure to accreditation bodies of those records of Client relevant to the accreditation body's assessment of the Company's competence and compliance with relevant accreditation criteria. The Company shall not be liable for any loss or damage whatsoever resulting from the failure of the Company to provide its services within any time period for completion estimated by the Company. If Client anticipates using the Test Report in any legal proceeding, arbitration, dispute resolution forum or other proceeding, it shall so notify the Company prior to submitting the Test Report in such proceeding. The Company has no obligation to provide a fact or expert witness at such proceeding unless the Company agrees in advance to do so for a separate and additional fee.
- 2. The Test Report will set forth the findings of the Company solely with respect to the test samples identified therein. Unless specifically and expressly indicated in the Test Report, the results set forth in such Test Report are not intended to be indicative or representative of the quality or characteristics of the lot from which a test sample is taken, and Client shall not rely upon the Test Report as being so indicative or representative of the lot or of the tested product in general. The Test Report will reflect the findings of the Company at the time of testing only, and the Company shall have no obligation to update the Test Report after its issuance. The Test Report will set forth the results of the tests performed by the Company based upon the written information provided to the Company. The Test Report will be based solely on the samples and written information submitted to the Company by Client, and the Company shall not be obligated to conduct any independent investigation or inquiry with respect thereto.
- 3. The Company may, in its sole discretion, destroy samples which have been furnished to the Company for testing and which have not been destroyed in the course of testing. The Company may delegate the performance of all or a portion of the services contemplated hereunder to an affiliate, agent or subcontractor of the Company, and Client consents to such delegation.
- 4. These Conditions and the Test Report represent the entire understanding of the parties hereto with respect to the subject matter hereof and of the Test Report, and no modification, variance or extrapolation with respect thereto shall be permitted without the prior written consent of the Company.
- 5. The names, service marks, trademarks and copyrights of the Company and its affiliates, including the names "BUREAU VERITAS," "BUREAU VERITAS CONSUMER PRODUCTS SERVICES," "BVCPS", "MTL", "ACTS", "MTL-ACTS" and CURTIS-STRAUS (collectively, the "Marks") are and shall remain the sole property of the Company or its affiliates and shall not be used by Client except solely to the extent that Client obtains the prior written approval of the Company and then only in the manner prescribed by the Company. Client shall not contest the validity of the Marks or take any action that might impair the value or goodwill associated with the Marks or the image or reputation of the Company or its affiliates.
- 6. Payment in full shall be due 30 days after the date of invoice. Interest shall be due on overdue amounts from the due date until paid at an interest rate of 1.5% per month or, if less, the maximum rate permitted by law. The Company reserves the right, at any time and from time to time, to revoke any credit extended to Client. Client shall reimburse the Company for any costs it incurs in collecting past due amounts, including court costs and fees and expenses of attorneys and collection agencies. The Test Report may not be used or relied upon by Client if and for so long as Client fails to pay when due any invoice issued by the Company or any affiliate of it to Client or any affiliate or subsidiary of Client together with interest and penalties, if any, accrued thereon.
- 7. The Company disclaims any and all responsibility or liability arising out of or in connection with e-mail transmissions of such information.
- 8. Client understands and agrees that the Company is neither an insurer nor a guarantor, that the Company does not take the place of Client or any designer, manufacturer, agent, buyer, distributor or transportation or shipping company, and that the Company disclaims all liability in such capacities. Client further understands that if it seeks assurance against loss or damage, it should obtain appropriate insurance.
- 9. Client agrees that the Company, by providing the services, does not take the place of Client nor any third party, nor does the Company release them from any of their obligations, nor does the Company otherwise assume, abridge, abrogate or undertake to discharge any duty of any third party to Client or any duty of Client or any third party to any other third party, and Client will not release any third party from its obligations and duties with respect to the tested goods.
- 10. Client shall, on a timely basis, (a) provide adequate instructions to the Company in order to enable the Company to perform properly its services, (b) provide, or cause Client's suppliers and contractors to provide, the Company with all documents necessary to enable the Company to perform its services, (c) furnish the Company with all relevant information regarding Client's intended use and purposes of the tested goods, (d) advise the Company of essential dates and deadlines relevant to the tested goods and (e) fully exercise all rights and remedies available to Client against third parties in respect of the tested goods.
- 11. The Company shall undertake due care and ordinary skill in the performance of its services to Client, and the Company shall accept responsibility only were such skill has not been exercised and, even in such event, only to the extent of the limitation of liability set forth herein.
- 12. If Client desires to assert a claim arising from or relating to (i) the performance, purported performance or non-performance of any services by the Company or (ii) the sale, resale, manufacture, distribution or use of any tested goods, it must submit that claim to the Company in a writing that sets forth with particularity the basis for such claim within 60 days from discovery





of the potential claim and not more than six months after the date of issuance of the Test Report to Client. Client waives any and all such claims including, without limitation, claims that the Test Report is inaccurate, incomplete or misleading or that additional or different testing is required, unless and then only to the extent that Client submits a written claim to the Company within both such time periods.

- 13. CLIENT SHALL, EXCEPT TO THE EXTENT OF COMPANY'S LIABILITY TO CLIENT HEREUNDER (WHICH IN NO EVENT SHALL EXCEED THE LIMITATION OF LIABILITY HEREIN), HOLD HARMLESS AND INDEMNIFY THE COMPANY, ITS AFFILIATES AND THEIR RESPECTIVE DIRECTORS, OFFICERS, EMPLOYEES, AGENTS AND SUBCONTRACTORS AGAINST ALL ACTUAL OR ALLEGED THIRD PARTY CLAIMS FOR LOSS, DAMAGE OR EXPENSE OF WHATSOEVER NATURE AND HOWSOEVER ARISING FROM OR RELATING TO (i) THE PERFORMANCE, PURPORTED PERFORMANCE OR NON-PERFORMANCE OF ANY SERVICES BY THE COMPANY OR (ii) THE SALE, RESALE, MANUFACTURE, DISTRIBUTION OR USE OF ANY TESTED GOODS.
- 14. EXCEPT AS MAY OTHERWISE BE EXPRESSLY AGREED TO IN WRITING BY THE COMPANY AND NOTWITHSTANDING ANY PROVISION TO THE CONTRARY CONTAINED HEREIN OR IN ANY TEST REPORT, NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, IS MADE.
- 15. (A) IN NO EVENT WHATSOEVER SHALL THE COMPANY BE LIABLE FOR ANY CONSEQUENTIAL, SPECIAL, INCIDENTAL, EXEMPLARY OR PUNITIVE DAMAGES IN CONNECTION WITH, RELATING TO OR ARISING OUT OF THE TEST REPORT OR THE SERVICES PROVIDED BY THE COMPANY HEREUNDER, INCLUDING WITHOUT LIMITATION LOSS OF OR DAMAGE TO PROPERTY; LOSS OF INCOME, PROFIT OR USE; OR ANY CLAIMS OR DEMANDS MADE AGAINST CLIENT OR ANY OTHER PERSON BY ANY THIRD PARTY IN CONNECTION WITH, RELATING TO OR ARISING OUT OF THE SERVICES PROVIDED BY THE COMPANY HEREUNDER.
- (B)NOTWITHSTANDING ANY PROVISION TO THE CONTRARY CONTAINED HEREIN, AND IN RECOGNITION OF THE RELATIVE RISKS AND BENEFITS TO CLIENT AND THE COMPANY ASSOCIATED WITH THE TESTING SERVICES CONTEMPLATED HEREBY, THE RISKS HAVE BEEN ALLOCATED SUCH THAT UNDER NO CIRCUMSTANCES WHATSOEVER SHALL THE LIABILITY OF THE COMPANY TO CLIENT OR ANY THIRD PARTY IN RESPECT OF ANY CLAIM FOR LOSS, DAMAGE OR EXPENSE, OF WHATSOEVER NATURE OR MAGNITUDE, AND HOWSOEVER ARISING, EXCEED AN AMOUNT EQUAL TO FIVE (5) TIMES THE AMOUNT OF THE FEES PAID TO THE COMPANY FOR THE SPECIFIC SERVICES WHICH GAVE RISE TO SUCH CLAIM OR U.S.\$10,000, WHICHEVER IS THE LESSER AMOUNT.
- 16. The Company shall not be liable for any loss or damage resulting from any delay or failure in performance of its obligations hereunder resulting directly or indirectly from any event of force majeure or any event outside the control of the Company. If any such event occurs, the Company may immediately cancel or suspend its performance hereunder without incurring any liability whatsoever to Client.

Company's services, including these Conditions, shall be governed by, and construed in accordance with, the local laws of the country where the Company performs the tests or, in the case of tests performed in the United States of America, the laws of Massachusetts without regard to conflicts of laws principles. If any aspect(s) of these Conditions is found to be illegal or unenforceable, the validity, legality and enforceability of all remaining aspects of these Conditions shall not in any way be affected or impaired thereby. Any proceeding related to the subject matter hereof shall be brought, if at all, in the courts of the country where the Company performs the tests or, in the case of tests performed in the United States of America, in the courts of Massachusetts. Client waives the right to interpose any counterclaim or setoffs of any nature in any litigation arising hereunder.

The complete list of the Approved Subcontractors Curtis-Straus may use to delegate the performance of work can be provided upon request.



