



**BUREAU
VERITAS**

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

Test Report

Report No EP1633-1

Client ThingMagic, A division of Trimble
John Carrick

Address 1 Merrill Street
Woburn, MA 01801


Phone (781) 305-4321

Items tested M6E-NANO

Standards FCC 15.247 & RSS-247 (partial testing)

FCC ID QV5MERCURY6EN
IC 5407A-MERCURY6EN

Results As detailed within this report

Prepared by 
Tuyen A. Truong – Test Engineer

Authorized by 
Christopher Reynolds – EMC Supervisor

Issue Date 9/4/2015

Conditions of Issue This Test Report is issued subject to the conditions stated in the 'Conditions of Testing' section on page 17 of this report.

Curtis-Straus LLC is accredited by the American Association for Laboratory Accreditation for the specific scope of accreditation under Certificate Number 1627-01. This report may contain data which is not covered by the A2LA accreditation.



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REV 28-MAR-12 (KK)



Summary

This report details the partial testing of the M6e-NANO board (with existing FCC ID:QV5MERCURY6EN and IC:5407A-MERCURY6EN) with the following modifications:

The channel plan was changed to space 51 channels (formerly 50 channels), with a narrower spacing of 100 kHz instead of the original 200 kHz. Per client, this is only a software change of the frequency and the end user cannot switch between channel plans.

Original (MHz) Channel spacing is 200 KHz

917.4,917.6,917.8,918,918.2,918.4,918.6,918.8,919,919.2,919.4,919.6,919.8,920,920.2,920.4,920.6,920.8,921,921.2,921.4,921.6,921.8,922,922.2,922.4,922.6,922.8,923,923.2,923.4,923.6,923.8,924,924.2,924.4,924.6,924.8,925,925.2,925.4,925.6,925.8,926,926.2,926.4,926.6,926.8,927,927.2

New (MHz) Channel spacing is 100 Hz

917.5, 917.6, 917.7, 917.8, 917.9, 918, 918.1, 918.2, 918.3, 918.4, 918.5, 918.6, 918.7, 918.8, 918.9, 919, 919.1, 919.2, 919.3, 919.4, 919.5, 919.6, 919.7, 919.8, 919.9, 920, 920.1, 920.2, 920.3, 920.4, 920.5, 920.6, 920.7, 920.8, 920.9, 921, 921.1, 921.2, 921.3, 921.4, 921.5, 921.6, 921.7, 921.8, 921.9, 922, 922.1, 922.2, 922.3, 922.4, 922.5

Three transmitter tests were done to evaluate the above modifications: Number of Channels, Peak Output Power, and Frequency Separation. We found the product to be compliant with FCC part 15.247 and RSS-247 for the above tests. Testing of the original channel plan was previously performed under report EP0016-1.

John Carrick from ThingMagic, A division of Trimble was present during testing. The test sample was received in good condition.

Issue No.	Reason for change	Date Issued
1	Original Release	September 4, 2015



Test Methodology

Conducted antenna port tests were performed according to DA-00-705 and ANSI C63.10 (2013).

Issue No.	Reason for change	Date Issued
1	Original Release	September 4, 2015

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Product Tested

EUT Configuration											
Work Order:		P1633									
Company:		ThingMagic, A Division of Trimble									
Company Address:		1 Merrill Street Woburn, MA, 01801									
Contact:		John Carrick									
EUT:		MN			PN			SN			
		M6e Nano			400-0067-01			451467701502			
EUT Description:		M6e Nano									
EUT Max Frequency:		922.5 MHz									
EUT Min Frequency:		917.5 MHz									
Support Equipment		MN					SN				
Development Kit		430-0033-01					SL15013001TMG001				
Carrier Board		430-0070-01 X2					451470702164				
AC/DC Power Brick		--					--				
Laptop		--					--				
Host Port Label	Port Type	# ports	# populated	cable type	shielded	ferrites	length (m)	max length (m)	indoor/outdoor	comment	
J1 Antenna Port	other	1	1	other	No	No			Indoor	On Board	
USB	USB	1	1	USB	Yes	No	1	5	Indoor	Programming only	
AC/DC Power	Power	1	1	Power	No	No	1	--	Indoor		
Software Operating Mode Description:											
EUT is set to transmit on Low, Mid and High channels from 917.5 to 922.5 MHz											

Modifications Required for Compliance

None



Test Results

PEAK OUTPUT POWER LIMIT

“The maximum peak conducted output power of the intentional radiator shall not exceed...1 watt for systems employing at least 50 hopping channels...” [FCC 15.247(b)(2)]

Limit = 30dBm

MEASUREMENTS

Results:

Peak Output Power - J1 Antenna Port											
Date: 16-Jul-15			Company: Trimble Navigation				Work Order: P1633				
Engineer: Tuyen Truong			EUT Desc: M6e Nano				EUT Operating Voltage/Frequency: 5Vdc				
Temp: 23°C			Humidity: 42%		Pressure: 1005mBar						
Frequency Range: Fundamental Frequency											
Notes: Attenuation: 1840 PE7322						Laird Antenna Gain: 8.15dBIL					
Modulation: CW											
Channel	Frequency (MHz)	Reading (dBm)	Attenuation Factor (dB)	Cable Factor (dB)	Carrier Board Loss (dBm)	Adjusted Reading (dBm)	FCC 15.247				
							Adjusted Limit for Laird 8.15dB Antenna (dBm)	Margin (dB)	Result (Pass/Fail)		
Low	917.5	-3.370	29.65	0.0	0.30	26.580	27.85	-1.270	Pass		
Mid	920.0	-3.404	29.65	0.0	0.30	26.546	27.85	-1.304	Pass		
High	922.5	-3.523	29.65	0.0	0.30	26.427	27.85	-1.423	Pass		
Table Result:		Pass		by		-1.270 MHz		Worst Freq:		917.5 MHz	
Test Site: CEMI5			Attenuation: 1840 PE7322				RBW: 300KHz				
Analyzer: Brown							VBW: 300KHz				

Note: Carrier board loss is declared by client and not calibrated by the test lab.
Adjusted Reading = Reading + Attenuation Factor + Carrier Board Loss

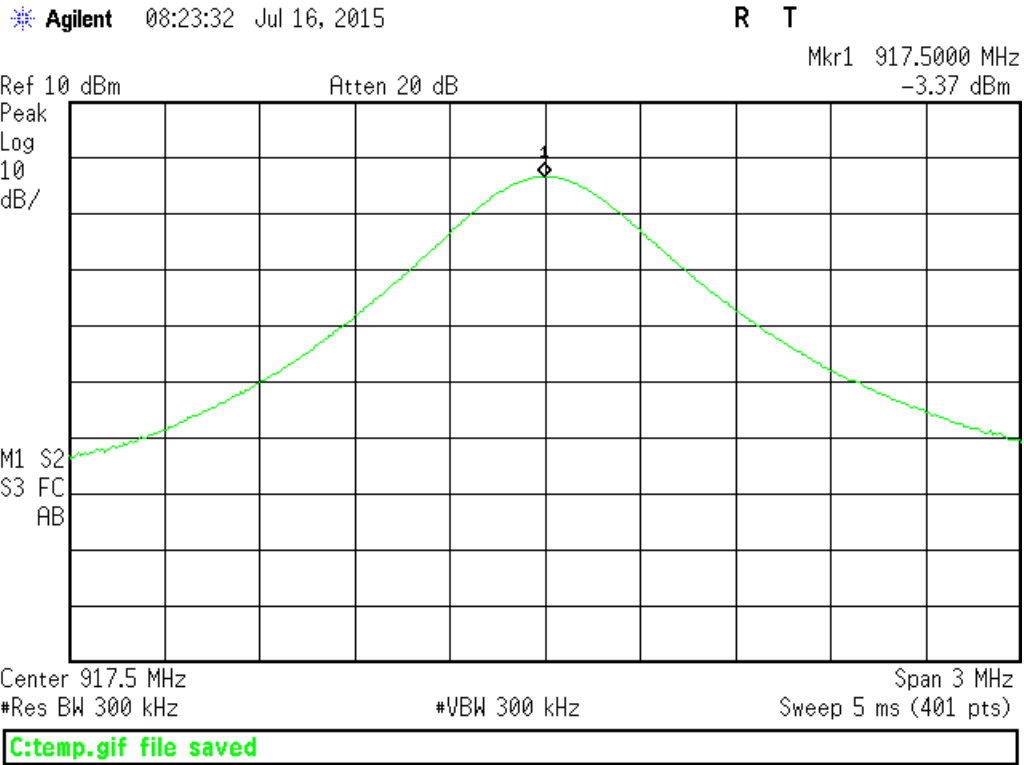
Rev. 7/6/2015

Spectrum Analyzers / Receivers / Preselectors	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on	
Brown	9kHz-26.5GHz	E4407B	Agilent	SG44210511	1510	I	6/30/2016	6/30/2015	
Conducted Test Sites (Mains / Telco)	FCC Code	VCCI Code	Cat	Calibration Due	Calibrated on				
CEMI 5	719150	A-0015	III	NA	N/A				
Meteorological Meters	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on		
Weather Clock (Pressure Only) TH A#2085	BA928 HTC-1	Oregon Scientific HDE	C3166-1	831 2085	I II	3/19/2016 4/2/2016	3/19/2014 4/2/2015		
Preamps / Couplers Attenuators / Filters	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on	
HF 30dB 50W Attenuator	0.009-18 GHz	PE 7322-30	Pasternack	1	1840	II	9/16/2015	9/16/2014	

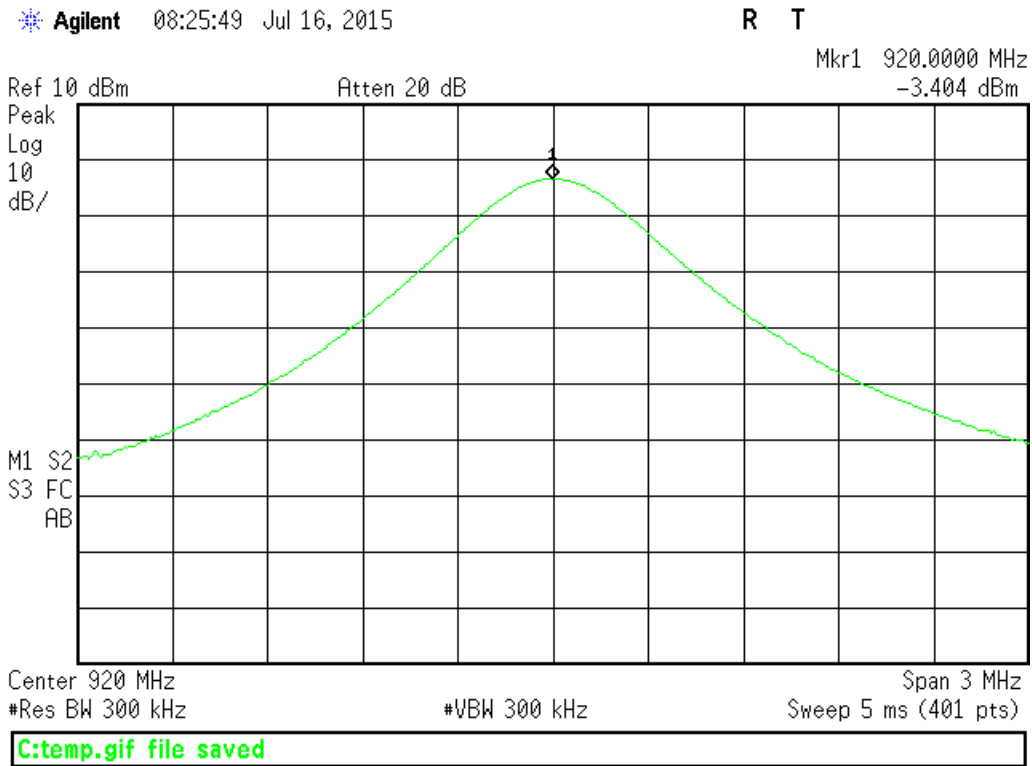
All equipment is calibrated using standards traceable to NIST or other nationally recognized calibration standard.



Plot(s)



Peak Output Power – Low Channel



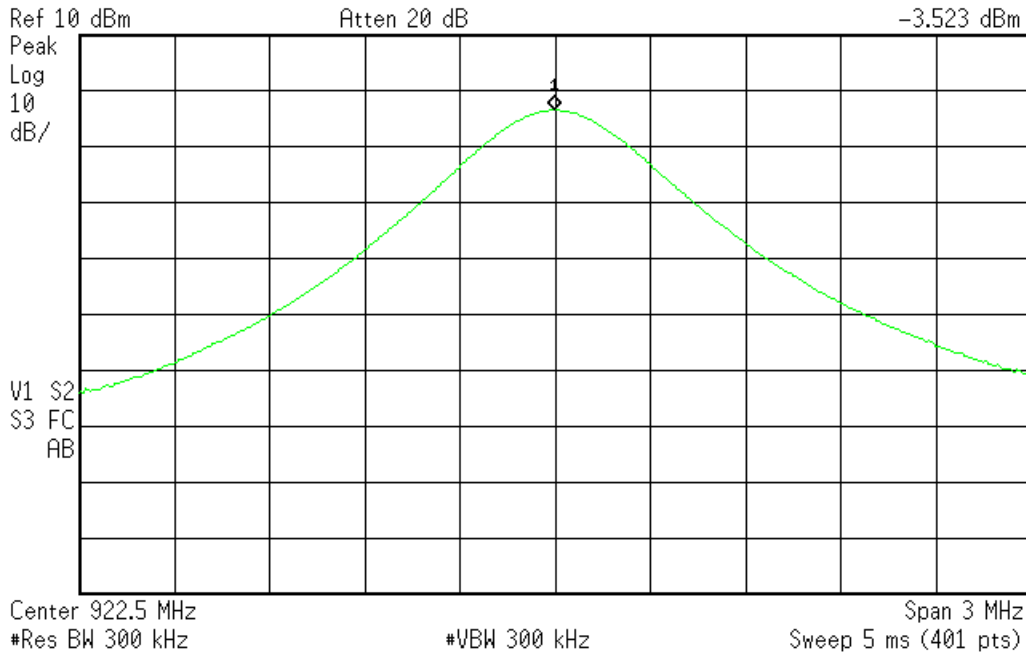
Peak Output Power – Mid Channel



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Mkr1 922.5000 MHz
-3.523 dBm



Peak Output Power – High Channel



NUMBER OF HOPPING FREQUENCIES

LIMIT

“...if the 20dB bandwidth of the hopping channel is less than 250kHz, the system shall use at least 50 hopping frequencies...”

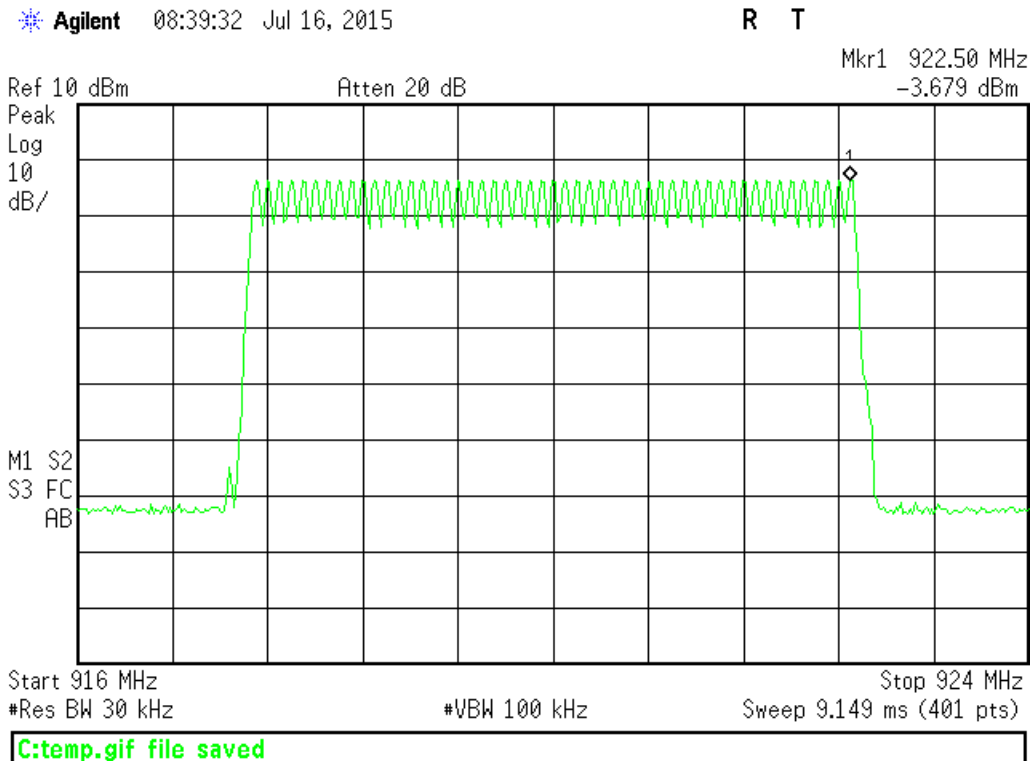
[15.247(a)(1)(i)]

Engineer	Tuyen A. Truong
Date	July 16, 2015
Test Site:	CEMI5
Test Equipments:	Brown SA, #1840 30dB Attenuation
Temp/Humidity/Pressure	23°C, 42% and 1005mBar
Note:	Modulation: PR-ASK

MEASUREMENTS / RESULTS

Number of hopping frequencies = 51 Pass

Plot(s)



Number of Hopping Frequencies - 51 Channels

Rev. 7/6/2015

Spectrum Analyzers / Receivers / Preselectors	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Brown	9kHz-26.5GHz	E4407B	Agilent	SG44210511	1510	I	6/30/2016	6/30/2015
Conducted Test Sites (Mains / Telco)	FCC Code		VCCI Code			Cat	Calibration Due	Calibrated on
CEMI 5	719150		A-0015			III	NA	N/A
Meteorological Meters		MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Weather Clock (Pressure Only)		BA928	Oregon Scientific	C3166-1	831	I	3/19/2016	3/19/2014
TH A#2085		HTC-1	HDE		2085	II	4/2/2016	4/2/2015
Preamps / Couplers Attenuators / Filters	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
HF 30dB 50W Attenuator	0.009-18 GHz	PE 7322-30	Pasternack	1	1840	II	9/16/2015	9/16/2014

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



CHANNEL FREQUENCY SEPARATION

LIMIT

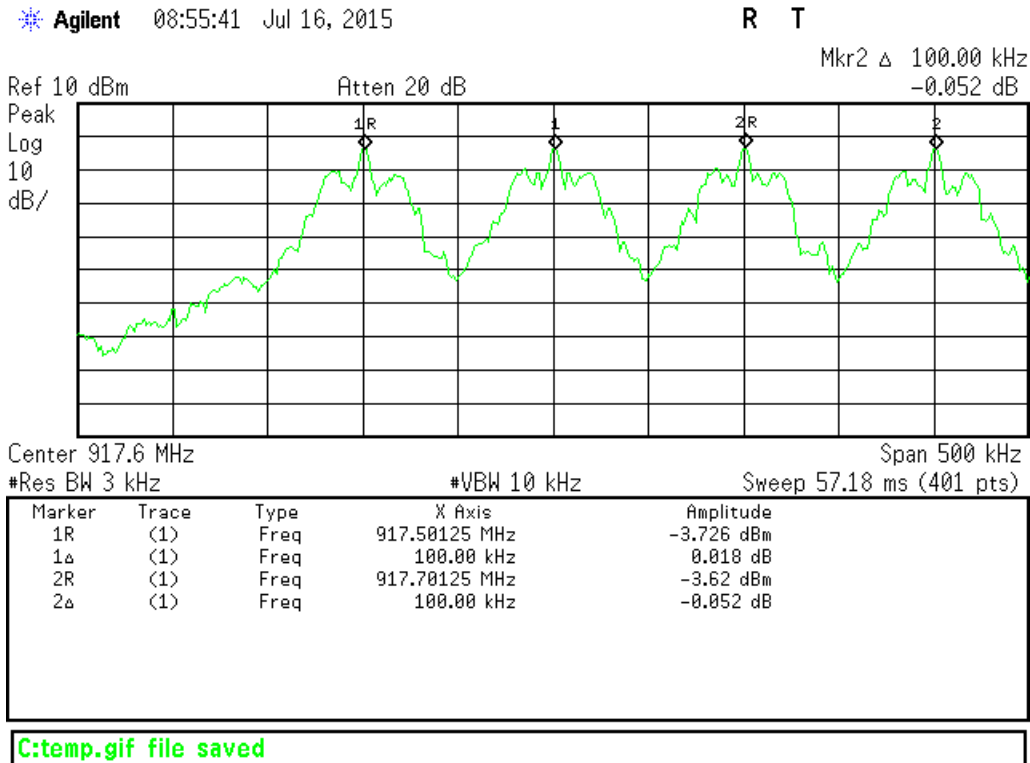
“Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.”
[15.247(a)(1)]

Limit = 20dB bandwidth = 57.75kHz. (max 20dB BW observed from report EP0016-1)

Engineer	Tuyen A. Truong
Date	July 16, 2015
Test Site:	CEMI5
Test Equipments:	Brown SA, #1840 30dB Attenuation
Temp/Humidity/Pressure	23°C, 42% and 1005mBar
Note:	Modulation: PR-ASK

MEASUREMENTS / RESULTS

Channel Frequency Separation = 100 kHz Pass

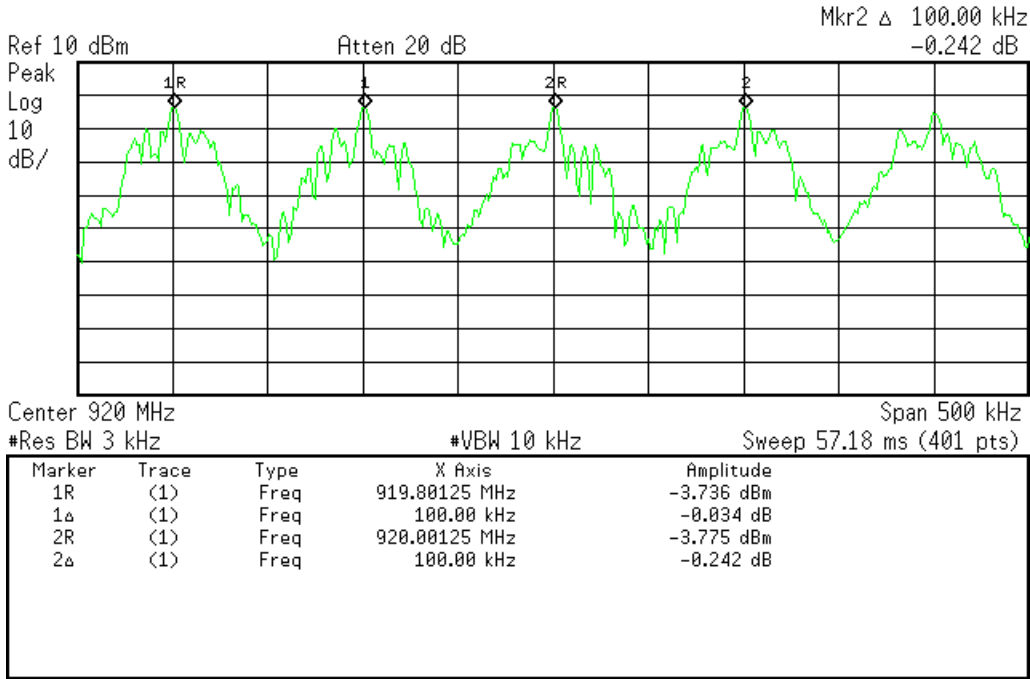


Low Pairs of Channels



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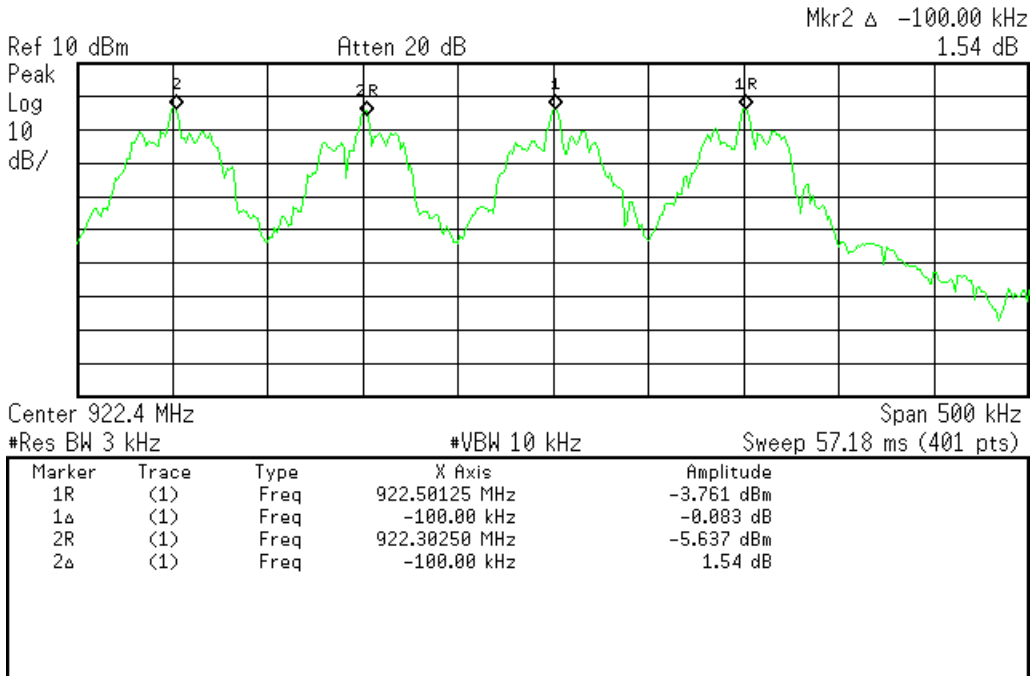


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Mid Pairs of Channels

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High Pairs of Channels



Rev. 7/6/2015

Spectrum Analyzers / Receivers / Preselectors	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Brown	9kHz-26.5GHz	E4407B	Agilent	SG44210511	1510	I	6/30/2016	6/30/2015
Conducted Test Sites (Mains / Telco)	FCC Code		VCCI Code			Cat	Calibration Due	Calibrated on
CEMI 5	719150		A-0015			III	NA	N/A
Meteorological Meters		MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
Weather Clock (Pressure Only)		BA928	Oregon Scientific	C3166-1	831	I	3/19/2016	3/19/2014
TH A#2085		HTC-1	HDE		2085	II	4/2/2016	4/2/2015
Preamps / Couplers Attenuators / Filters	Range	MN	Mfr	SN	Asset	Cat	Calibration Due	Calibrated on
HF 30dB 50W Attenuator	0.009-18 GHz	PE 7322-30	Pasternack	1	1840	II	9/16/2015	9/16/2014

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



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	Expanded Uncertainty k=2	Maximum allowable uncertainty
Radiated Emissions (30-1000MHz)		
NIST	5.6dB	N/A
CISPR	4.6dB	5.2dB (Ucisprr)
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 (Ucisprr)
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)	3.23×10^{-8}	1×10^{-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		



Jurisdictional Labeling and Required Instruction Manual Inserts**FCC Requirements****Required Equipment Authorization for Device Type**

Type of Device	Equipment Authorization Required
TV broadcast receiver	Verification
FM broadcast receiver	Verification
CB receiver	Declaration of Conformity or Certification
Superregenerative receiver	Declaration of Conformity or Certification
Scanning receiver	Certification
Radar detector	Certification
All other receivers subject to part 15	Declaration of Conformity or Certification
TV interface device	Declaration of Conformity or Certification
Cable system terminal device	Declaration of Conformity
Stand-alone cable input selector switch	Verification
Class B personal computers and peripherals	Declaration of Conformity or Certification
CPU boards and internal power supplies used with Class B personal computers	Declaration of Conformity or Certification
Class B personal computers assembled using authorized CPU boards or power supplies	Declaration of Conformity
Class B external switching power supplies	Verification
Other Class B digital devices & peripherals	Verification
Class A digital devices, peripherals & external switching power supplies	Verification
Access Broadband over Power Line (Access BPL)	Certification
All other devices	Verification

FCC Required labeling for Verified Devices 47 CFR Part 15.19

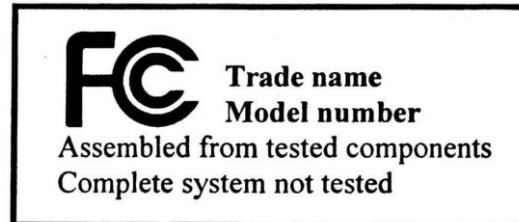
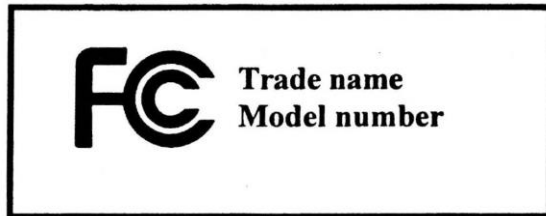
The specific labeling requirements for a device subject to the Verification or Certification procedure are contained in Section 15.19(a). These labeling requirements are:

- One of three compliance statements specified in Section 15.19(a);
- If the device is subject only to Verification include a label bearing a unique identifier - Section 2.954;
- If the device is subject to Certification (1) Section 2.925 contains information on identification of the equipment; (2) include a label bearing an FCC Identifier (FCC ID) - Section 2.926.

If the labeling area for the device is so small, and / or it is not practical to place the required statement on the device, then the statement can be placed in the user manual or product packaging - Section 15.19(a)(5). Generally, devices smaller than the palm of the hand are considered small. However, the device must still be labeled with the unique identifier (Verification) or the FCC ID (Certification).

Declaration of Conformity (DoC):

The labeling requirements for a device subject to the Declaration of Conformity (DoC) procedure are specified in Section 15.19(b). The label should include the FCC logo along with the Trade Name and Model Number, which satisfies the unique identifier requirement of Section 2.1074 if it represents the identical equipment tested for DoC compliance. For personal computers assembled from authorized components, the following additional text must also be included: "Assembled from tested components," "Complete system not tested." When the device is so small and / or when it is not practical to place the required additional text on the device, the text may be placed in the user manual or pamphlet supplied to the user. However, the FCC logo, Trade Name, and Model Number must still be displayed on the device - Section 15.19(b)(3).



Part 15 Declaration of Conformity (DoC) Label Examples

FCC Required Instruction Manual Inserts CFR 47 Part 15.21 and 15.105

Section 15.21 requires that in the user manual, the user shall be cautioned that changes / modifications not approved by the responsible party could void the user's authority to operate the equipment. The acceptable formats for user information dissemination are paper, computer disk or over the Internet. Where special accessories, such as shielded cables and/or special connectors, are required to comply with the emission limits, the instruction manual shall include appropriate instructions on the first page of the text describing the installation of the device (Section 15.27(a)).

For a Class A or Class B digital device (unintentional radiator), as well as any composite device that is both an intentional and unintentional radiator, the text specified in Section 15.105 must be placed in the user manual.

Devices authorized under the Declaration of Conformity (DoC) procedure must also include a compliance information statement (in the user manual or on a separate sheet) as required by Section 2.1077. The objective of this compliance statement is to allow the FCC to associate the equipment with the party responsible for compliance with the DoC requirements.

Devices certified as software defined radio that use an electronic labeling method to display the FCC ID must provide instructions in the user manual on how to access the electronic display (Section 2.925(e)).

Additional statements and information may be required for compliance to specific or general rule parts. The following is an example of some additional user information requirements. The party responsible for compliance must provide any additional statement(s) required.

- Kits - TV interface and Cable system terminal device marketed as Kits: Section 15.25 (d);
- TV interface devices, including cable system terminal devices: Section 15.115 (c) (5);
- Labeling of digital cable ready products: Section 15.123 - use of the term cable ready/compatible;

- External power amplifiers and antenna modifications: Section 15:204 (d) (2) – 1 notice of authorized amplifiers;
- Cordless telephones: Section 15.214 (c) & (d) (3) - privacy statement & security code statement;
- Cordless telephones: Section 15.233 (b) (2) (ii) - interference to TV;
- Cordless telephones: Section 15.233 (h) - cordless phones without digital security (Section 15.214);
- Professionally installed systems: Section 15.247 (c) (1) (iii);
- Operation within the Band 92-95 GHz: Section 15.257 (a) (4) - indoor use only;
- Unlicensed PCS: Section 15.311 - notification and coordination with UTAM, Inc.;
- RF exposure statements: Section 2.1091 (d) (3) - Mobile devices (a minimum separation distance may be required).

Our facility codes can be found in the test equipment lists in each emissions section of this report.



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 where 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.

17. 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.
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