Digital Control Incorporated

DigiRadio 2 (DR2)

FCC 90.217:2013
FCC 15.109:2014

Report #: DIGC0199

Report Prepared By Northwest EMC Inc.

NORTHWEST EMC – (888) 364-2378 – www.nwemc.com

California – Minnesota – Oregon – New York – Washington

CERTIFICATE OF TEST

Last Date of Test: May 08, 2014
Digital Control Incorporated
Model: DigiRadio 2 (DR2)

Emissions

Test Description	Specification	Test Method	Pass/Fail
Receiver Spurious Emissions	FCC 15.109:2014	ANSI C63.4:2009	Pass
Transmitter Spurious Emissions	FCC 90.217:2013	ANSI/TIA/EIA-603-C:2004	Pass

Deviations From Test Standards

None

Approved By:

Rod Munro, Operations Manager

NVLAP Lab Code: 200629-0
NVLAP Lab Code: 200630-0

This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government of the United States of America.

Product compliance is the responsibility of the client, therefore the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. This Report may only be duplicated in its entirety. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test.

NORTHWEST EMC
REV 2012.08.02

REVISION HISTORY

Revision Number	Description	Date	Page Number
00	None		

Barometric Pressure

The recorded barometric pressure has been normalized to sea level.

REV 2012.05.24

ACCREDITATIONS AND AUTHORIZATIONS

United States

FCC - Designated by the FCC as a Telecommunications Certification Body (TCB). Certification chambers, Open Area Test Sites, and conducted measurement facilities are listed with the FCC.

A2LA - Accredited by A2LA to ISO / IEC Guide 65 as a product certifier. This allows Northwest EMC to certify transmitters to FCC and IC specifications.

NVLAP - Each laboratory is accredited by NVLAP to ISO 17025

Canada

IC - Recognized by Industry Canada as a Certification Body (CB). Certification chambers and Open Area Test Sites are filed with IC.

European Union

European Commission – Validated by the European Commission as a Conformity Assessment Body (CAB) under the EMC directive and as a Notified Body under the R&TTE Directive.

Australia/New Zealand

ACMA - Recognized by ACMA as a CAB for the acceptance of test data.

Korea

KCC / RRA - Recognized by KCC's RRA as a CAB for the acceptance of test data.

Japan

VCCI - Associate Member of the VCCI. Conducted and radiated measurement facilities are registered.

Taiwan

BSMI – Recognized by BSMI as a CAB for the acceptance of test data.

NCC - Recognized by NCC as a CAB for the acceptance of test data.

Singapore

IDA – Recognized by IDA as a CAB for the acceptance of test data.

Hong Kong

OFTA – Recognized by OFTA as a CAB for the acceptance of test data.

Vietnam

MIC – Recognized by MIC as a CAB for the acceptance of test data.

Russia

GOST – Accredited by Certinform VNIINMASH, CERTINFO, SAMTES, and Federal CHEC to perform EMC and Hygienic testing for Information Technology products to GOST standards.

SCOPE

For details on the Scopes of our Accreditations, please visit:
http://www.nwemc.com/accreditations/

MEASUREMENT UNCERTAINTY

Measurement Uncertainty

When a measurement is made, the result will be different from the true or theoretically correct value. The difference is the result of tolerances in the measurement system that cannot be completely eliminated. To the extent that technology allows us, it has been our aim to minimize this error. Measurement uncertainty is a statistical expression of measurement error qualified by a probability distribution.

A measurement uncertainty estimation has been performed for each test per our internal quality document WP 342. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty (K=2) for each test is listed below. Our measurement data meets or exceeds the measurement uncertainty requirements of the applicable specification; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for estimating measurement uncertainty are based upon ETSI TR 100 028 (or CISPR 16-4-1 as applicable), and are available upon request.

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

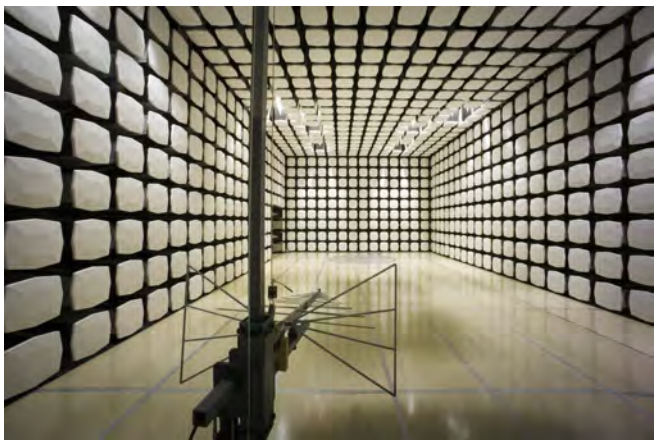
Test	+ MU	- MU
Frequency Accuracy (Hz)	0.12	-0.01
Amplitude Accuracy (dB)	0.49	-0.49
Conducted Power (dB)	0.41	-0.41
Radiated Power via Substitution (dB)	0.69	-0.68
Temperature (degrees C)	0.81	-0.81
Humidity (% RH)	2.89	-2.89
Field Strength (dB)	3.80	-3.80
AC Powerline Conducted Emissions (dB)	2.94	-2.94

NORTHWEST EMC

REV 2013.06.28

FACILITIES

Oregon Labs EV01-12 22975 NW Evergreen Pkwy Hillsboro, OR 97124 (503) 844-4066	**California** Labs OC01-13 41 Tesla Irvine, CA 92618 (949) 861-8918	**New York** Labs NY01-04 4939 Jordan Rd. Elbridge, NY 13060 (315) 685-0796	**Minnesota** Labs MN01-08 9349 W Broadway Ave. Brooklyn Park, MN 55445 (763) 425-2281	**Washington** Labs NC01-05,SU02,SU07 19201 120th Ave. NE Bothell, WA 98011 (425) 984-6600
VCCI				
A-0108	A-0029		A-0109	A-0110
Industry Canada				
2834D-1, 2834D-*2*	2834B-1, 2834B-2, 2834B-3		2834E-1	2834F-1
NVLAP				
NVLAP Lab Code: 200630-0	NVLAP Lab Code: 200676-0	NVLAP Lab Code: 200761-0	NVLAP Lab Code: 200881-0	NVLAP Lab Code: 200629-0



PRODUCT DESCRIPTION

WTD 12.5.23

Client and Equipment Under Test (EUT) Information

Company Name:	Digital Control Incorporated
Address:	19625 62nd Avenue South, Suite B103
City, State, Zip:	Kent, WA 98032
Test Requested By:	Amanda Hamm
Model:	DigiRadio 2 (DR2)
First Date of Test:	May 08, 2014
Last Date of Test:	May 08, 2014
Receipt Date of Samples:	May 08, 2014
Equipment Design Stage:	Preproduction
Equipment Condition:	No Damage

Information Provided by the Party Requesting the Test

Functional Description of the EUT (Equipment Under Test):
FM at 9600 bps (4800 Manchester bps) with an output power of 100mW. Operating at 464.5-469.55 MHz.

Testing Objective:
Demonstrate compliance to FCC requirements of an UHF transmitter contained in a handheld locating device that receives a kHz signal and transmits in the UHF band to a remote display device.

CONFIGURATIONS

Configuration DIGC0199- 2

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Radio	Digital Control Incorporated	DigiRadio 2 (DR2)	007

Remote Equipment Outside of Test Setup Boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
DC Power Supply	Kikusui	PWC0620	1930492

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
DC Power Leads	No	1.8m	No	Radio	DC Power Supply
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

MODIFICATIONS

WTD 12.5.23

Equipment Modifications

Item	Date	Test	Modification	Note	Disposition of EUT
1	5/8/2014	Receiver Spurious Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
2	5/8/2014	Transmitter Spurious Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was completed.

RECEIVER SPURIOUS EMISSIONS

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data. The test data represents the configuration / operating mode/ model that produced the highest emission levels as compared to the specification limit.

MODES OF OPERATION

Receive Mode

CHANNELS TESTED

Low Channel, 464.5 MHz

High Channel, 469.55 MHz

POWER SETTINGS INVESTIGATED

5 VDC

CONFIGURATIONS INVESTIGATED

DIGC0199 - 2

FREQUENCY RANGE INVESTIGATED

Start Frequency	30 MHz	Stop Frequency	6000 MHz

SAMPLE CALCULATIONS

Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Pre-Amplifier	Miteq	AMF-3D-00100800-32-13P	AVZ	10/24/2013	12 mo
Pre-Amplifier	Miteq	AM-1616-1000	PAB	10/24/2013	12 mo
LP Filter	Micro-Tronics	LPM50004	LFF	11/14/2013	24 mo
Antenna, Horn	EMCO	3115	AHM	6/19/2012	24 mo
Antenna, Biconilog	EMCO	3142	AXJ	5/16/2012	36 mo
NC01 Cables	N/A	3115 Horn Cable	NC2	10/24/2013	12 mo
NC01 Cables	N/A	Bilog Cables	NC1	10/24/2013	12 mo
Spectrum Analyzer	Agilent	E4440A	AAW	2/21/2013	24 mo

MEASUREMENT BANDWIDTHS

Frequency Range (MHz)	Peak Data (kHz)	Quasi-Peak Data (kHz)	Average Data (kHz)
0.01 - 0.15	1.0	0.2	0.2
0.15 - 30.0	10.0	9.0	9.0
30.0 - 1000	100.0	120.0	120.0
Above 1000	1000.0	N/A	1000.0

TEST DESCRIPTION

Using the mode of operation and configuration noted within this report, a final radiated emissions test was performed. The frequency range investigated (scanned), is also noted in this report. Radiated emissions measurements were made at the EUT azimuth and antenna height such that the maximum radiated emissions level was detected. A calibrated, linearly polarized antenna was positioned at the specified distance from the periphery of the EUT. Tests were made with the antenna positioned in both the horizontal and vertical planes of polarization. Though specified in the report, the measurement distance was 3 meters or 10 meters. At any measurement distance, the antenna height was varied from 1 meter to 4 meters. These height scans apply for both horizontal and vertical polarization, except that for vertical polarization the minimum height of the center of the antenna was increased so that the lowest point of the bottom of the antenna cleared the ground surface by at least 25 cm.

The antennas to be used with the EUT were tested. The EUT was continuously transmitting (or receiving) while set to the channel specified. The EUT arrangement is configured as equivalent to that occurring in normal use. Tabletop equipment is placed on a 0.8 meter high non-conductive table & for Floor-standing equipment, it is placed on, but insulated from a ground reference plane by the use of its own rollers or stand-off supports. While scanning, emissions from the EUT were maximized by rotating the EUT, adjusting the measurement antenna height and orientation in 3 orthogonal planes, the EUT and/or associated antenna is positioned in 3 orthogonal planes. If there are no detectable emissions above the noise floor, the data included will show noise floor measurements for reference only.

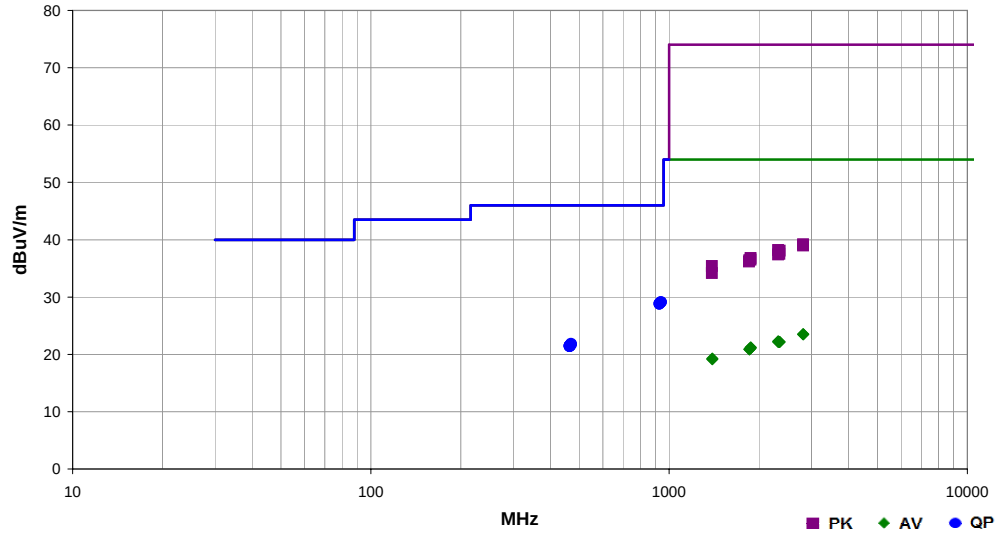
The diameter of the illumination area is the dimension of the line tangent to the EUT formed by 3 dB beamwidth of the measurement antenna at the measurement distance. At a 3 meter test distance, the diameter of the illumination area was 3.8 meters at 1 GHz and greater than 2.1 meters up to 6 GHz. Above 1 GHz, when required by the measurement standard, the antenna is pointed for both azimuth and elevation to maintain the receive antenna within the cone of radiation from the EUT. The specified measurement detectors were used for comparison of the emissions to the peak and average specification limits.

RECEIVER SPURIOUS EMISSIONS

Work Order:	DIGC0199	**Date:**	05/08/14		
Project:	DR2	**Temperature:**	24 °C		
Job Site:	NC01	**Humidity:**	36% RH		
Serial Number:	007	**Barometric Pres.:**	1010 mbar	**Tested by:**	Richard Mellroth
EUT:	DigiRadio 2 (DR2)				
Configuration:	2				
Customer:	Digital Control Incorporated				
Attendees:	None				
EUT Power:	5 VDC				
Operating Mode:	Receive Mode, See comments next to data points for EUT channel and orientation.				
Deviations:	None				
Comments:	DC Power Supply located below ground plane.				

Test Specifications	**Test Method**
FCC 15.109:2014	ANSI C63.4:2009

Run #	13,14	**Test Distance (m)**	3	**Antenna Height(s)**	1-4m	**Results**	Pass



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
939.445	16.4	12.7	1.0	56.0	3.0	0.0	Vert	QP	0.0	29.1	46.0	-16.9	High Ch, 469.55 MHz, EUT Vert
938.953	16.4	12.7	1.0	331.0	3.0	0.0	Horz	QP	0.0	29.1	46.0	-16.9	High Ch, 469.55 MHz, EUT Horz
929.126	16.4	12.4	1.0	319.0	3.0	0.0	Vert	QP	0.0	28.8	46.0	-17.2	Low Ch, 464.5 MHz, EUT Vert
929.007	16.4	12.4	1.0	0.0	3.0	0.0	Horz	QP	0.0	28.8	46.0	-17.2	Low Ch, 464.5 MHz, EUT Horz
469.276	16.7	5.1	1.0	75.0	3.0	0.0	Vert	QP	0.0	21.8	46.0	-24.2	High Ch, 469.55 MHz, EUT Vert
469.567	16.5	5.2	1.0	230.0	3.0	0.0	Horz	QP	0.0	21.7	46.0	-24.3	High Ch, 469.55 MHz, EUT Horz
464.942	16.6	4.9	3.4	33.0	3.0	0.0	Horz	QP	0.0	21.5	46.0	-24.5	Low Ch, 464.5 MHz, EUT Horz
464.777	16.6	4.8	1.0	305.0	3.0	0.0	Vert	QP	0.0	21.4	46.0	-24.6	Low Ch, 464.5 MHz, EUT Vert
464.661	16.6	4.8	1.0	124.0	3.0	0.0	Horz	QP	0.0	21.4	46.0	-24.6	Low Ch, 464.5 MHz, EUT Flat
464.398	16.6	4.8	1.2	151.0	3.0	0.0	Horz	QP	0.0	21.4	46.0	-24.6	Low Ch, 464.5 MHz, EUT Vert
464.310	16.6	4.8	1.0	255.0	3.0	0.0	Vert	QP	0.0	21.4	46.0	-24.6	Low Ch, 464.5 MHz, EUT Flat
464.187	16.6	4.8	1.0	269.0	3.0	0.0	Vert	QP	0.0	21.4	46.0	-24.6	Low Ch, 464.5 MHz, EUT Horz
2818.310	25.0	-1.5	1.0	156.0	3.0	0.0	Horz	AV	0.0	23.5	54.0	-30.5	High Ch, 469.55 MHz, EUT Horz
2818.190	25.0	-1.5	2.7	33.0	3.0	0.0	Vert	AV	0.0	23.5	54.0	-30.5	High Ch, 469.55 MHz, EUT Vert
2322.160	24.8	-2.5	1.0	201.0	3.0	0.0	Vert	AV	0.0	22.3	54.0	-31.7	Low Ch, 464.5 MHz, EUT Vert
2346.570	24.6	-2.4	1.0	241.0	3.0	0.0	Vert	AV	0.0	22.2	54.0	-31.8	High Ch, 469.55 MHz, EUT Vert
2346.340	24.6	-2.4	1.0	330.0	3.0	0.0	Horz	AV	0.0	22.2	54.0	-31.8	High Ch, 469.55 MHz, EUT Horz
2322.025	24.7	-2.5	1.0	89.0	3.0	0.0	Horz	AV	0.0	22.2	54.0	-31.8	Low Ch, 464.5 MHz, EUT Horz
1876.700	24.4	-3.2	1.0	63.0	3.0	0.0	Horz	AV	0.0	21.2	54.0	-32.8	High Ch, 469.55 MHz, EUT Horz
1876.775	24.3	-3.2	1.0	79.0	3.0	0.0	Vert	AV	0.0	21.1	54.0	-32.9	High Ch, 469.55 MHz, EUT Vert
1858.570	24.2	-3.3	1.0	235.0	3.0	0.0	Horz	AV	0.0	20.9	54.0	-33.1	Low Ch, 464.5 MHz, EUT Horz
1858.425	24.2	-3.3	1.0	243.0	3.0	0.0	Vert	AV	0.0	20.9	54.0	-33.1	Low Ch, 464.5 MHz, EUT Vert
1394.850	24.4	-5.1	1.0	9.0	3.0	0.0	Vert	AV	0.0	19.3	54.0	-34.7	Low Ch, 464.5 MHz, EUT Vert
2816.235	40.7	-1.5	2.7	33.0	3.0	0.0	Vert	PK	0.0	39.2	74.0	-34.8	High Ch, 469.55 MHz, EUT Vert
1394.685	24.3	-5.1	1.6	338.0	3.0	0.0	Horz	AV	0.0	19.2	54.0	-34.8	Low Ch, 464.5 MHz, EUT Horz
2817.295	40.5	-1.5	1.0	156.0	3.0	0.0	Horz	PK	0.0	39.0	74.0	-35.0	High Ch, 469.55 MHz, EUT Horz
2323.420	40.7	-2.5	1.0	89.0	3.0	0.0	Horz	PK	0.0	38.2	74.0	-35.8	Low Ch, 464.5 MHz, EUT Horz
2348.890	40.5	-2.4	1.0	330.0	3.0	0.0	Horz	PK	0.0	38.1	74.0	-35.9	High Ch, 469.55 MHz, EUT Horz
2347.270	39.9	-2.4	1.0	241.0	3.0	0.0	Vert	PK	0.0	37.5	74.0	-36.5	High Ch, 469.55 MHz, EUT Vert
2322.700	39.9	-2.5	1.0	201.0	3.0	0.0	Vert	PK	0.0	37.4	74.0	-36.6	Low Ch, 464.5 MHz, EUT Vert
1878.625	40.0	-3.2	1.0	63.0	3.0	0.0	Horz	PK	0.0	36.8	74.0	-37.2	High Ch, 469.55 MHz, EUT Horz
1878.990	39.7	-3.2	1.0	79.0	3.0	0.0	Vert	PK	0.0	36.5	74.0	-37.5	High Ch, 469.55 MHz, EUT Vert
1858.655	39.7	-3.3	1.0	235.0	3.0	0.0	Horz	PK	0.0	36.4	74.0	-37.6	Low Ch, 464.5 MHz, EUT Horz
1856.815	39.5	-3.3	1.0	243.0	3.0	0.0	Vert	PK	0.0	36.2	74.0	-37.8	Low Ch, 464.5 MHz, EUT Vert
1393.610	40.5	-5.1	1.6	338.0	3.0	0.0	Horz	PK	0.0	35.4	74.0	-38.6	Low Ch, 464.5 MHz, EUT Horz
1392.975	39.3	-5.1	1.0	9.0	3.0	0.0	Vert	PK	0.0	34.2	74.0	-39.8	Low Ch, 464.5 MHz, EUT Vert

TRANSMITTER SPURIOUS EMISSIONS

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data. The test data represents the configuration / operating mode/ model that produced the highest emission levels as compared to the specification limit.

MODES OF OPERATION

Transmitting Constant Modulation, Power Level 99

CHANNELS TESTED

Low Channel, 464.5 MHz
High Channel, 469.55 MHz

POWER SETTINGS INVESTIGATED

5 VDC

CONFIGURATIONS INVESTIGATED

DIGC0199 - 2

FREQUENCY RANGE INVESTIGATED

Start Frequency	30 MHz	Stop Frequency	6000 MHz

SAMPLE CALCULATIONS

Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Attenuator	Fairview Microwave	SA18E-20	AQU	12/6/2013	12 mo
LP Filter	Micro-Tronics	LPM50003	LFE	1/18/2013	24 mo
LP Filter	Micro-Tronics	LPM50004	LFF	11/14/2013	24 mo
Pre-Amplifier	Miteq	AMF-3D-00100800-32-13P	AVZ	10/24/2013	12 mo
Pre-Amplifier	Miteq	AM-1616-1000	PAB	10/24/2013	12 mo
Antenna, Horn	EMCO	3115	AHM	6/19/2012	24 mo
Antenna, Biconilog	EMCO	3142	AXJ	5/16/2012	36 mo
NC01 Cables	N/A	3115 Horn Cable	NC2	10/24/2013	12 mo
NC01 Cables	N/A	Bilog Cables	NC1	10/24/2013	12 mo
Spectrum Analyzer	Agilent	E4440A	AAW	2/21/2013	24 mo

MEASUREMENT BANDWIDTHS

Frequency Range (MHz)	Peak Data (kHz)	Quasi-Peak Data (kHz)	Average Data (kHz)
0.01 - 0.15	1.0	0.2	0.2
0.15 - 30.0	10.0	9.0	9.0
30.0 - 1000	100.0	120.0	120.0
Above 1000	1000.0	N/A	1000.0

TEST DESCRIPTION

The Field Strength of Spurious Radiation was measured in the far-field at an FCC Listed OATS up to 10 GHz. Spectrum analyzer, signal generator, and linearly polarized antennas were used to measure radiated harmonics and spurious emissions. The orientation of the EUT and measurement antenna were manipulated to maximize the level of emissions. The EUT was configured to transmit at the highest output power.

For licensed transmitters, the FCC references TIA/EIA-603 as the measurement procedure standard. TIA/EIA-603 Section 2.2.12 describes a method for measuring radiated spurious emissions that utilizes an antenna substitution method:

At an approved test site, the transmitter is place on a remotely controlled turntable, and the measurement antenna is placed 3 meters from the transmitter. The turntable azimuth is varied to maximize the level of spurious emissions. The height of the measurement antenna is also varied from 1 to 4 meters. The amplitude and frequency of the highest emissions are noted. The transmitter is then replaced with a ½ wave dipole that is successively tuned to each of the highest spurious emissions. A signal generator is connected to the dipole (horn antenna for frequencies above 1 GHz), and its output is adjusted to match the level previously noted for each frequency. The output of the signal generator is recorded, and by factoring in the cable loss to the dipole antenna and its gain; the power (dBm) into an ideal ½ wave dipole antenna is determined for each radiated spurious emission.

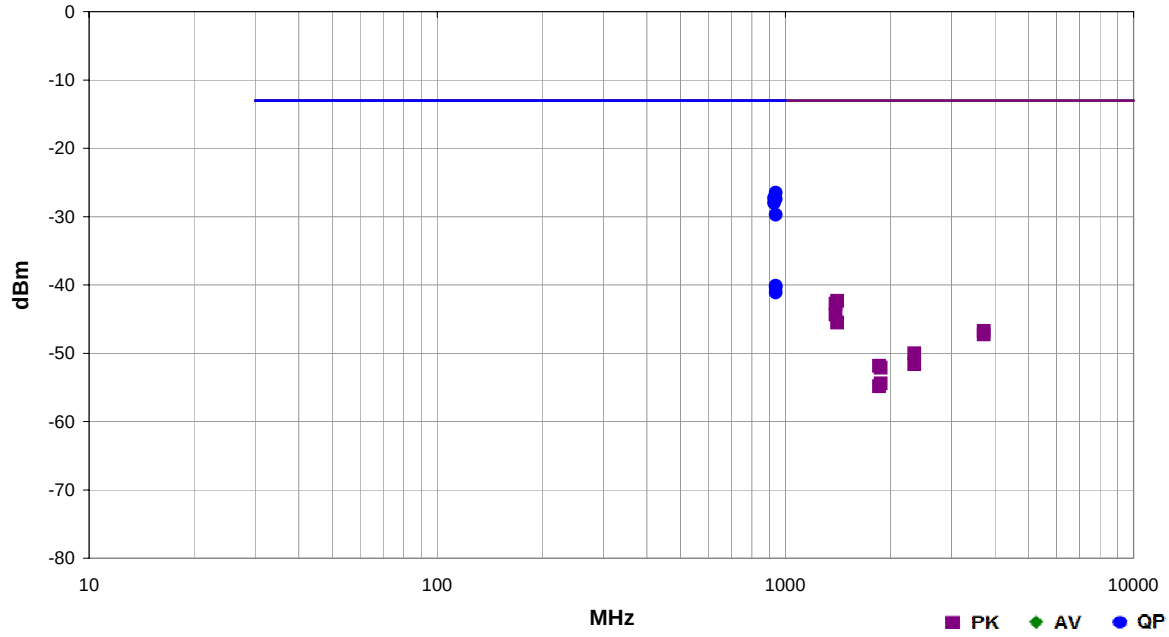
For the purposes of preliminary measurements, the field strength of the spurious emissions can be measured and compared with a 3 meter limit. The 3 meter limit was calculated to be 84.4 dBuV/m at 3 meters. The final measurements must be made utilizing the substitution method described above and applied against the ERP limit of -13 dBm.

TRANSMITTER SPURIOUS EMISSIONS

Work Order:	DIGC0199	**Date:**	05/08/14		
Project:	DR2	**Temperature:**	24 °C		
Job Site:	NC01	**Humidity:**	36% RH		
Serial Number:	007	**Barometric Pres.:**	1010 mbar	**Tested by:**	Richard Mellroth
EUT:	DigiRadio 2 (DR2)				
Configuration:	2				
Customer:	Digital Control Incorporated				
Attendees:	None				
EUT Power:	5 VDC				
Operating Mode:	Transmitting Constant Modulation. Power Level set at 99. See comments next to data points for channel information and EUT orientation.				
Deviations:	None				
Comments:	DC Power Supply located below ground plane.				

Test Specifications	**Test Method**
FCC 90.217:2013	ANSI/TIA/EIA-603-C:2004

Run #	7,8	**Test Distance (m)**	3	**Antenna Height(s)**	1-4m	**Results**	Pass



	Freq (MHz)	Antenna Height (meters)	Azimuth (degrees)	Polarity/ Transducer Type	Detector	EIRP (Watts)	EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)	Comments
	939.105	1.1	74.0	Vert	QP	2.22E-06	-26.5	-13.0	-13.5	High Ch, 469.55 MHz, EUT Vert
	929.005	1.2	141.0	Vert	QP	1.85E-06	-27.3	-13.0	-14.3	Low Ch, 464.5 MHz, EUT Vert
	939.105	1.0	13.0	Horz	QP	1.81E-06	-27.4	-13.0	-14.4	High Ch, 469.55 MHz, EUT Flat
	929.005	1.0	14.0	Horz	QP	1.58E-06	-28.0	-13.0	-15.0	Low Ch, 464.5 MHz, EUT Flat
	939.103	1.8	27.0	Horz	QP	1.06E-06	-29.7	-13.0	-16.7	High Ch, 469.55 MHz, EUT Horz
	939.103	2.1	294.0	Vert	QP	9.70E-08	-40.1	-13.0	-27.1	High Ch, 469.55 MHz, EUT Flat
	939.103	1.0	19.0	Horz	QP	9.06E-08	-40.4	-13.0	-27.4	High Ch, 469.55 MHz, EUT Vert
	939.103	1.2	229.0	Vert	QP	7.71E-08	-41.1	-13.0	-28.1	High Ch, 469.55 MHz, EUT Horz
	1408.650	1.1	351.0	Horz	PK	5.82E-08	-42.3	-13.0	-29.3	High Ch, 469.55 MHz, EUT Flat
	1393.545	1.1	349.0	Horz	PK	5.32E-08	-42.7	-13.0	-29.7	Low Ch, 464.5 MHz, EUT Flat
	1393.480	1.7	332.0	Vert	PK	3.68E-08	-44.3	-13.0	-31.3	Low Ch, 464.5 MHz, EUT Vert
	1408.635	1.3	347.0	Vert	PK	2.79E-08	-45.5	-13.0	-32.5	High Ch, 469.55 MHz, EUT Vert
	3716.150	1.2	178.0	Vert	PK	2.11E-08	-46.8	-13.0	-33.8	Low Ch, 464.5 MHz, EUT Vert
	3716.065	1.8	29.0	Horz	PK	1.88E-08	-47.3	-13.0	-34.3	Low Ch, 464.5 MHz, EUT Flat
	2347.795	1.2	359.0	Vert	PK	9.92E-09	-50.0	-13.0	-37.0	High Ch, 469.55 MHz, EUT Vert
	2347.615	1.5	227.0	Horz	PK	6.86E-09	-51.6	-13.0	-38.6	High Ch, 469.55 MHz, EUT Flat
	1858.060	1.3	153.0	Horz	PK	6.56E-09	-51.8	-13.0	-38.8	Low Ch, 464.5 MHz, EUT Flat
	1878.000	1.0	150.0	Horz	PK	6.13E-09	-52.1	-13.0	-39.1	High Ch, 469.55 MHz, EUT Flat
	1878.180	1.5	203.0	Vert	PK	3.61E-09	-54.4	-13.0	-41.4	High Ch, 469.55 MHz, EUT Vert
	1857.900	1.8	197.0	Vert	PK	3.29E-09	-54.8	-13.0	-41.8	Low Ch, 464.5 MHz, EUT Vert