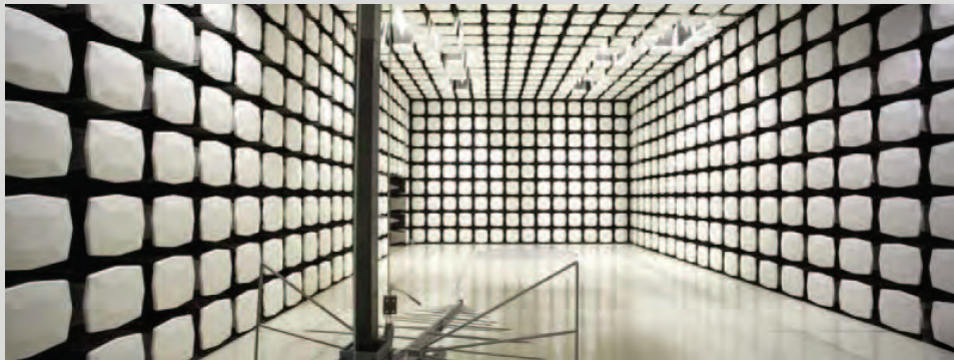




Zonar Systems, LLC
81010

Report #: ZONA0039



Report Prepared By Northwest EMC Inc.

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

California – Minnesota – Oregon – New York – Washington



22975 NW Evergreen Parkway
Suite 400
Hillsboro, Oregon 97124

Certificate of Test
Last Date of Test: April 30, 2012
Zonar Systems, LLC
Model: 81010

Emissions

Test Description	Specification	Test Method	Pass/Fail
Field Strength of Fundamental	FCC 15.209:2012	ANSI C63.10:2009	Pass
Spurious Radiated Emissions	FCC 15.209:2012	ANSI C63.10:2009	Pass

Deviations From Test Standards

None

Approved By:

Tim O'Shea, Operations Manager



NVLAP Lab Code: 200630-0

Test Facility

The measurement facility used to collect the data is located at:

Northwest EMC, Inc.
22975 NW Evergreen Parkway, Suite 400
Hillsboro, OR 97124

Phone: (503) 844-4066 Fax: 844-3826

This site has been fully described in a report filed with and accepted by the FCC (Federal Communications Commission) and Industry Canada (Site filing #2834D-1).

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.



Revision History

Revision Number	Description	Date	Page Number
00	None		

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. The scope includes radio, ITE, and medical standards from around the world. See: <http://www.nwemc.com/accreditations/>

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

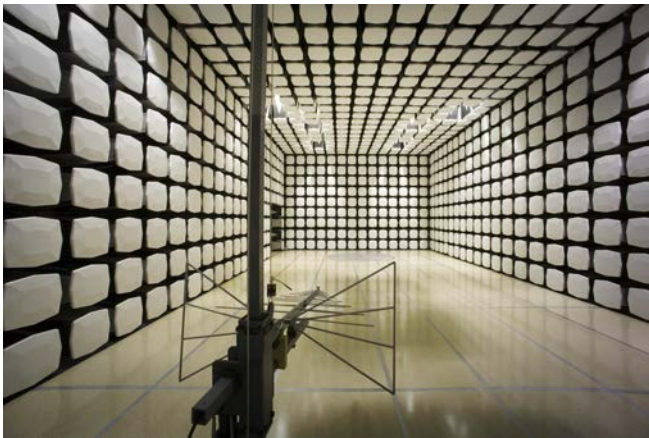
MIC – Recognized by MIC as a CAB for the acceptance of test data.

Russia

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



Oregon Labs EV01-EV12 22975 NW Evergreen Pkwy, #400 Hillsboro, OR 97124 (503) 844-4066	California Labs OC01-OC13 41 Tesla Irvine, CA 92618 (949) 861-8918	New York Labs WA01-WA04 4939 Jordan Rd. Elbridge, NY 13060 (315) 685-0796	Minnesota Labs MN01-MN08 9349 W Broadway Ave. Brooklyn Park, MN 55445 (763) 425-2281	Washington Labs SU01-SU07 14128 339 th Ave. SE Sultan, WA 98294 (360) 793-8675
VCCI				
C-1071, R-1025, G-84, C-2687, T-1658, R-2318	R-1943, G-85, C-2766, T-1659, G-548		R-3125, G-86, G-141, C-3464, T-1634	R-871, G-83, C-3265, T-1511
Industry Canada				
2834D-1, 2834D-2	2834B-1, 2834B-2, 2834B-3		2834E-1	2834C-1





Product Description

Client and Equipment Under Test (EUT) Information

Company Name:	Zonar Systems, LLC
Address:	18200 Cascade Ave. S Suite, 200
City, State, Zip:	Seattle, WA 98188
Test Requested By:	Andrew Mannery
Model:	81010
First Date of Test:	April 30, 2012
Last Date of Test:	April 30, 2012
Receipt Date of Samples:	April 30, 2012
Equipment Design Stage:	Production
Equipment Condition:	No Damage

Information Provided by the Party Requesting the Test

Functional Description of the EUT (Equipment Under Test):
126 kHz RFID unit
Testing Objective:
To demonstrate compliance to FCC 15.209 requirements.

Configuration 1 ZONA0039

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
RFID unit	Zonar Systems, LLC	81010	unknown

Remote Equipment Outside of Test Setup Boundary			
Description	Manufacturer	Model/Part Number	Serial Number
Basestation	Zonar Systems, LLC	V2J	1017

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
I/O	No	1.8m	No	Basestation	EUT

PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.

Equipment Modifications

Item	Date	Test	Modification	Note	Disposition of EUT
1	4/30/2012	Field Strength of Fundamental	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	4/30/2012	Spurious Radiated Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was completed.

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 continuous

POWER SETTINGS INVESTIGATED

DC from host

CONFIGURATIONS INVESTIGATED

ZONA0039 - 1

FREQUENCY RANGE INVESTIGATED

Start Frequency | 110 kHz | Stop Frequency | 140 kHz

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
Spectrum Analyzer	Agilent	E4446A	AAQ	2/7/2012	12 mo
Antenna, Loop	EMCO	6502	AOA	6/28/2011	24 mo
EV01 Cables	N/A	Bilog Cables	EVA	6/28/2011	12 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

MEASUREMENT UNCERTAINTY

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 for radiated emissions measurements is less than +/- 4 dB, and for conducted emissions measurements is less than +/- 2.7 dB. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for measurement uncertainty are available upon request.

TEST DESCRIPTION

The antenna to be used with the EUT was tested (Integral). The EUT was transmitting and receiving while set at the only channel available.

While scanning, the fundamental emission from the EUT were maximized by rotating the EUT, adjusting the measurement antenna height and orientation in 3 orthogonal plane, and manipulating the EUT antenna in 3 orthogonal planes (per ANSI C63.10:2009).

An active loop antenna was used for this test in order to provide sufficient measurement sensitivity.



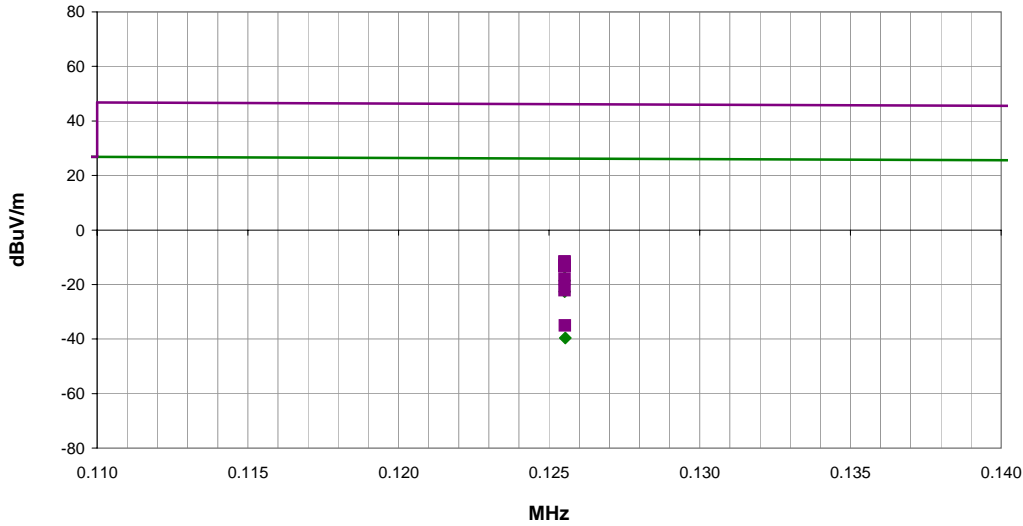
FIELD STRENGTH OF FUNDAMENTAL

PSA-ESCI 2012.03.23
PSA-ESCI Version 2011.12.21

Work Order:	ZONA0039	Date:	04/30/12	<i>Rod Pelouquin</i>
Project:	None	Temperature:	22.7 °C	
Job Site:	EV01	Humidity:	43% RH	
Serial Number:	None	Barometric Pres.:	1009.9 mbar	
EUT:	81010	Tested by: Rod Pelouquin		
Configuration:	1			
Customer:	Zonar Systems, LLC			
Attendees:	None			
EUT Power:	DC from host			
Operating Mode:	Transmitting continuous			
Deviations:	None			
Comments:	None			

Test Specifications	Test Method
FCC 15.209:2012	ANSI C63.10:2009

Run #	6	Test Distance (m)	3	Antenna Height(s)	1-4m	Results	Pass
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■ PK ◆ AV ● QP

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
0.126	57.6	10.5	1.8	164.0	3.0	0.0	Loop	AV	-80.0	-11.9	25.7	-37.5	EUT vertical, Ant par to EUT
0.126	57.4	10.5	1.8	97.0	3.0	0.0	Loop	AV	-80.0	-12.1	25.7	-37.7	EUT on side, Ant perp to EUT
0.126	56.2	10.5	1.8	-1.0	3.0	0.0	Loop	AV	-80.0	-13.3	25.7	-38.9	EUT on side, Ant perp to EUT, perp to ground
0.126	56.0	10.5	1.8	260.0	3.0	0.0	Loop	AV	-80.0	-13.5	25.7	-39.1	EUT vertical, Ant perp to EUT, perp to ground
0.126	55.9	10.5	2.1	280.0	3.0	0.0	Loop	AV	-80.0	-13.6	25.7	-39.2	EUT on side, Ant perp to EUT, par to ground
0.126	55.9	10.5	1.9	343.0	3.0	0.0	Loop	AV	-80.0	-13.6	25.7	-39.2	EUT vertical, Ant perp to EUT, par to ground
0.126	50.8	10.5	1.8	-1.0	3.0	0.0	Loop	AV	-80.0	-18.7	25.7	-44.3	EUT horizontal, Ant perp to EUT, par to ground
0.126	46.8	10.5	2.6	110.0	3.0	0.0	Loop	AV	-80.0	-22.7	25.7	-48.3	EUT horizontal, Ant par to EUT
0.126	57.9	10.5	1.8	164.0	3.0	0.0	Loop	PK	-80.0	-11.6	45.7	-57.2	EUT vertical, Ant par to EUT
0.126	57.6	10.5	1.8	97.0	3.0	0.0	Loop	PK	-80.0	-11.9	45.7	-57.5	EUT on side, Ant par to EUT
0.126	56.5	10.5	1.8	-1.0	3.0	0.0	Loop	PK	-80.0	-13.0	45.7	-58.6	EUT on side, Ant perp to EUT, perp to ground
0.126	56.3	10.5	1.8	260.0	3.0	0.0	Loop	PK	-80.0	-13.2	45.7	-58.8	EUT vertical, Ant perp to EUT, perp to ground
0.126	56.1	10.5	2.1	280.0	3.0	0.0	Loop	PK	-80.0	-13.4	45.7	-59.0	EUT on side, Ant perp to EUT, par to ground
0.126	56.1	10.5	1.9	343.0	3.0	0.0	Loop	PK	-80.0	-13.4	45.7	-59.0	EUT vertical, Ant perp to EUT, par to ground
0.126	51.4	10.5	1.8	-1.0	3.0	0.0	Loop	PK	-80.0	-18.1	45.7	-63.7	EUT horizontal, Ant perp to EUT, par to ground
0.126	29.8	10.5	1.8	38.0	3.0	0.0	Loop	AV	-80.0	-39.7	25.7	-65.3	EUT horizontal, Ant perp to EUT, perp to ground
0.126	47.3	10.5	2.6	110.0	3.0	0.0	Loop	PK	-80.0	-22.2	45.7	-67.8	EUT horizontal, Ant par to EUT
0.126	34.4	10.5	1.8	38.0	3.0	0.0	Loop	PK	-80.0	-35.1	45.7	-80.7	EUT horizontal, Ant perp to EUT, perp to ground

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 continuous

POWER SETTINGS INVESTIGATED

DC from host

CONFIGURATIONS INVESTIGATED

ZONA0039 - 1

FREQUENCY RANGE INVESTIGATED

Start Frequency	10 kHz	Stop Frequency	30 MHz
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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
Spectrum Analyzer	Agilent	E4446A	AAQ	2/7/2012	12 mo
Antenna, Loop	EMCO	6502	AOA	6/28/2011	24 mo
EV01 Cables	N/A	Bilog Cables	EVA	6/28/2011	12 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

MEASUREMENT UNCERTAINTY

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 for radiated emissions measurements is less than +/- 4 dB, and for conducted emissions measurements is less than +/- 2.7 dB. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for measurement uncertainty are available upon request.

TEST DESCRIPTION

The antennas to be used with the EUT were tested. The EUT was transmitting and receiving while set at the channel available. While scanning, emissions from the EUT were maximized by rotating the EUT, adjusting the measurement antenna height and orientation in 3 orthogonal plane, and manipulating the EUT antenna in 3 orthogonal planes (per ANSI C63.10:2009). An active loop antenna was used for this test in order to provide sufficient measurement sensitivity.



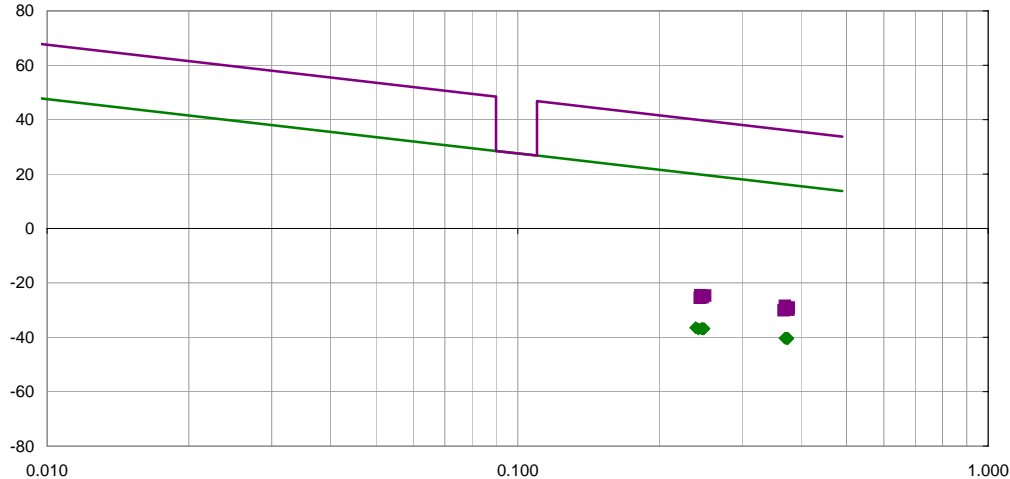
SPURIOUS RADIATED EMISSIONS

PSA-ESCI 2012.03.23
PSA-ESCI Version 2011.12.21

Work Order:	ZONA0039	Date:	04/30/12	<i>Rod Peloquin</i>
Project:	None	Temperature:	23 °C	
Job Site:	EV01	Humidity:	42% RH	
Serial Number:	None	Barometric Pres.:	1010.3 mbar	
EUT:	81010	Tested by: Rod Peloquin		
Configuration:	1			
Customer:	Zonar Systems, LLC			
Attendees:	None			
EUT Power:	DC from host			
Operating Mode:	Transmitting continuous			
Deviations:	None			
Comments:	None			

Test Specifications	Test Method
FCC 15.209:2012	ANSI C63.10:2009

Run #	6	Test Distance (m)	3	Antenna Height(s)	1-4m	Results	Pass
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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
0.373	29.4	10.3	1.8	225.0	3.0	0.0	Vert	AV	-80.0	-40.3	16.2	-56.5	EUT on side, Ant perp to EUT, par to ground
0.239	33.2	10.4	1.8	142.0	3.0	0.0	Horz	AV	-80.0	-36.4	20.0	-56.5	EUT vertical, Ant par to EUT
0.375	29.3	10.3	1.8	171.0	3.0	0.0	Vert	AV	-80.0	-40.4	16.1	-56.5	EUT vertical, Ant perp to EUT, par to ground
0.249	32.8	10.4	1.8	111.0	3.0	0.0	Horz	AV	-80.0	-36.8	19.7	-56.5	EUT on side, Ant par to EUT
0.247	32.8	10.4	1.8	225.0	3.0	0.0	Vert	AV	-80.0	-36.8	19.8	-56.6	EUT on side, Ant perp to EUT, par to ground
0.375	29.2	10.3	1.8	0.0	3.0	0.0	Horz	AV	-80.0	-40.5	16.1	-56.6	EUT vertical, Ant par to EUT
0.375	29.2	10.3	1.8	183.0	3.0	0.0	Horz	AV	-80.0	-40.5	16.1	-56.6	EUT on side, Ant perp to EUT, perp to ground
0.370	29.3	10.3	1.8	111.0	3.0	0.0	Horz	AV	-80.0	-40.4	16.2	-56.6	EUT on side, Ant par to EUT
0.246	32.8	10.4	1.8	210.0	3.0	0.0	Horz	AV	-80.0	-36.8	19.8	-56.6	EUT vertical, Ant perp to EUT, perp to ground
0.373	29.2	10.3	1.6	2.0	3.0	0.0	Horz	AV	-80.0	-40.5	16.2	-56.7	EUT vertical, Ant perp to EUT, perp to ground
0.248	32.7	10.4	2.6	149.0	3.0	0.0	Vert	AV	-80.0	-36.9	19.7	-56.7	EUT vertical, Ant perp to EUT, par to ground
0.242	32.7	10.4	1.8	183.0	3.0	0.0	Horz	AV	-80.0	-36.9	19.9	-56.9	EUT on side, Ant perp to EUT, perp to ground
0.251	45.0	10.3	2.6	149.0	3.0	0.0	Vert	PK	-80.0	-24.7	39.6	-64.3	EUT vertical, Ant perp to EUT, par to ground
0.245	45.0	10.4	1.8	142.0	3.0	0.0	Horz	PK	-80.0	-24.6	39.8	-64.5	EUT vertical, Ant par to EUT
0.370	41.2	10.3	1.8	0.0	3.0	0.0	Horz	PK	-80.0	-28.5	36.2	-64.7	EUT vertical, Ant par to EUT
0.246	44.7	10.4	1.8	183.0	3.0	0.0	Horz	PK	-80.0	-24.9	39.8	-64.7	EUT on side, Ant perp to EUT, perp to ground
0.247	44.4	10.4	1.8	225.0	3.0	0.0	Vert	PK	-80.0	-25.2	39.7	-65.0	EUT on side, Ant perp to EUT, par to ground
0.246	44.3	10.4	1.8	210.0	3.0	0.0	Horz	PK	-80.0	-25.3	39.8	-65.1	EUT vertical, Ant perp to EUT, perp to ground
0.377	40.5	10.3	1.6	2.0	3.0	0.0	Horz	PK	-80.0	-29.2	36.1	-65.3	EUT vertical, Ant perp to EUT, perp to ground
0.377	40.5	10.3	1.8	171.0	3.0	0.0	Vert	PK	-80.0	-29.2	36.1	-65.3	EUT vertical, Ant perp to EUT, par to ground
0.244	44.1	10.4	1.8	111.0	3.0	0.0	Horz	PK	-80.0	-25.5	39.9	-65.4	EUT on side, Ant par to EUT
0.374	40.1	10.3	1.8	111.0	3.0	0.0	Horz	PK	-80.0	-29.6	36.2	-65.8	EUT on side, Ant par to EUT
0.377	39.8	10.3	1.8	225.0	3.0	0.0	Vert	PK	-80.0	-29.9	36.1	-66.0	EUT on side, Ant perp to EUT, par to ground
0.368	39.6	10.3	1.8	183.0	3.0	0.0	Horz	PK	-80.0	-30.1	36.3	-66.4	EUT on side, Ant perp to EUT, perp to ground

■ PK ◆ AV ● QP



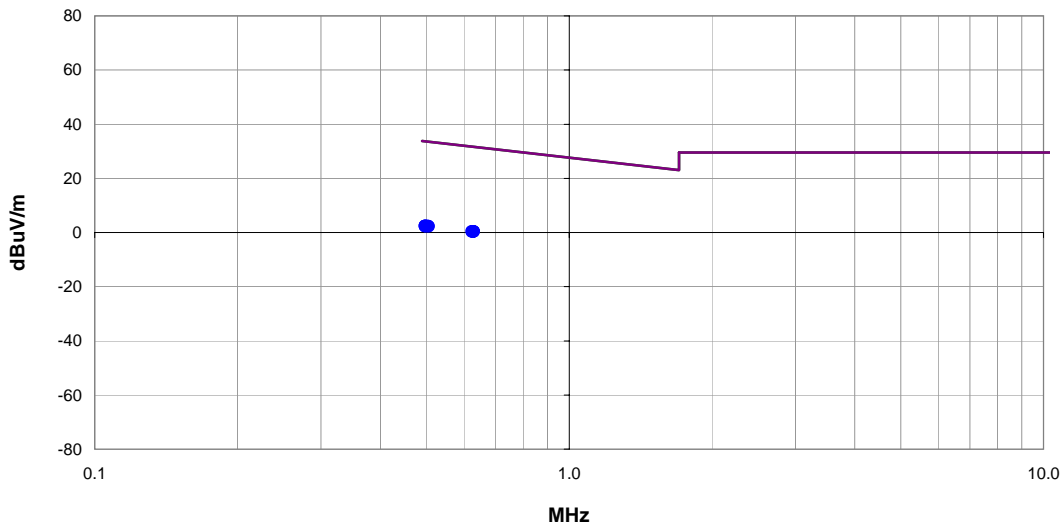
SPURIOUS RADIATED EMISSIONS

PSA-ESCI 2012.03.23
PSA-ESCI Version 2011.12.21

Work Order:	ZONA0039	Date:	04/30/12	<i>Rod Peloquin</i>
Project:	None	Temperature:	23 °C	
Job Site:	EV01	Humidity:	42% RH	
Serial Number:	None	Barometric Pres.:	1010.8 mbar	
EUT:	81010	Tested by: Rod Peloquin		
Configuration:	1			
Customer:	Zonar Systems, LLC			
Attendees:	None			
EUT Power:	DC from host			
Operating Mode:	Transmitting continuous			
Deviations:	None			
Comments:	None			

Test Specifications	Test Method
FCC 15.209:2012	ANSI C63.10:2009

Run #	7	Test Distance (m)	3	Antenna Height(s)	1-4m	Results	Pass
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■ PK ◆ AV ● QP

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
0.499	32.1	10.3	1.9	1.0	3.0	0.0	Horz	QP	-40.0	2.4	33.6	-31.2	EUT horz, Ant par to EUT
0.629	30.1	10.3	1.9	1.0	3.0	0.0	Horz	QP	-40.0	0.4	31.6	-31.2	EUT horz, Ant perp to EUT, perp to ground
0.499	32.1	10.3	1.9	0.0	3.0	0.0	Vert	QP	-40.0	2.4	33.6	-31.2	EUT vert, Ant perp to EUT, par to ground
0.499	32.1	10.3	3.1	216.0	3.0	0.0	Vert	QP	-40.0	2.4	33.6	-31.2	EUT horz, Ant perp to EUT, par to ground
0.504	32.0	10.3	2.4	-1.0	3.0	0.0	Vert	QP	-40.0	2.3	33.6	-31.2	EUT on side, Ant perp to EUT, par to ground
0.504	32.0	10.3	1.9	1.0	3.0	0.0	Horz	QP	-40.0	2.3	33.6	-31.3	EUT on side, Ant par to EUT
0.627	30.1	10.3	1.9	0.0	3.0	0.0	Horz	QP	-40.0	0.4	31.7	-31.3	EUT vert, Ant par to EUT
0.497	32.1	10.3	1.9	0.0	3.0	0.0	Horz	QP	-40.0	2.4	33.7	-31.3	EUT vert, Ant par to EUT
0.497	32.1	10.3	1.7	276.0	3.0	0.0	Horz	QP	-40.0	2.4	33.7	-31.3	EUT on side, Ant perp to EUT, perp to ground
0.630	30.0	10.3	1.9	0.0	3.0	0.0	Vert	QP	-40.0	0.3	31.6	-31.3	EUT vert, Ant perp to EUT, par to ground
0.506	31.9	10.3	1.8	1.0	3.0	0.0	Horz	QP	-40.0	2.2	33.5	-31.3	EUT horz, Ant perp to EUT, perp to ground
0.629	30.0	10.3	2.3	183.0	3.0	0.0	Horz	QP	-40.0	0.3	31.6	-31.3	EUT vert, Ant perp to EUT, perp to ground
0.629	30.0	10.3	1.9	338.0	3.0	0.0	Vert	QP	-40.0	0.3	31.6	-31.3	EUT horz, Ant perp to EUT, par to ground
0.628	30.0	10.3	1.9	1.0	3.0	0.0	Horz	QP	-40.0	0.3	31.6	-31.3	EUT horz, Ant par to EUT
0.627	30.0	10.3	1.9	0.0	3.0	0.0	Horz	QP	-40.0	0.3	31.7	-31.3	EUT on side, Ant par to EUT
0.626	30.0	10.3	1.9	0.0	3.0	0.0	Horz	QP	-40.0	0.3	31.7	-31.4	EUT on side, Ant perp to EUT, perp to ground
0.497	32.0	10.3	1.9	200.0	3.0	0.0	Horz	QP	-40.0	2.3	33.7	-31.4	EUT vert, Ant perp to EUT, perp to ground
0.623	30.0	10.3	1.9	0.0	3.0	0.0	Vert	QP	-40.0	0.3	31.7	-31.4	EUT on side, Ant perp to EUT, par to ground