

Linear LLC

Go!Bridge (2GIG-BRDG1-900)

FCC 15.207:2014 FCC 15.209:2014 FCC 15.247:2014

Report #: 2GIG0021.3



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
Linear LLC
Model: GO!Bridge (2GIG-BRDG1-900)

Emissions

Test Description	Specification	Test Method	Pass/Fail
Occupied Bandwidth	FCC 15.247:2014	ANSI C63.10:2009	Pass
Output Power	FCC 15.247:2014	ANSI C63.10:2009	Pass
Band Edge Compliance	FCC 15.247:2014	ANSI C63.10:2009	Pass
Band Edge Compliance-Hopping Mode	FCC 15.247:2014	ANSI C63.10:2009	Pass
Channel Separation	FCC 15.247:2014	ANSI C63.10:2009	Pass
Number of Hopping Frequencies	FCC 15.247:2014	ANSI C63.10:2009	Pass
Dwell Time	FCC 15.247:2014	ANSI C63.10:2009	Pass
Spurious Radiated Emissions	FCC 15.209:2014	ANSI C63.10:2009	Pass
Powerline Conducted Emissions	FCC 15.207:2014	ANSI C63.10:2009	Pass

Deviations From Test Standards

None

Approved By:

Victor Ratinoff, Operations Manager

NVLAP Lab Code: 200676-0

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.



REVISION HISTORY

Revision Number	Description	Date	Page Number
00	None		

Barometric Pressure

The recorded barometric pressure has been normalized to sea level.



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



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



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 120 th 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

Client and Equipment Under Test (EUT) Information

Company Name:	Linear LLC
Address:	1950 Camino Vida Roble #150
City, State, Zip:	Carlsbabd, CA 92008
Test Requested By:	Verdin J. Orozco
Model:	Go!Bridge (2GIG-BRDG1-900)
First Date of Test:	April 21, 2014
Last Date of Test:	May 08, 2014
Receipt Date of Samples:	April 21, 2014
Equipment Design Stage:	Production
Equipment Condition:	No Damage

Information Provided by the Party Requesting the Test

900 MHz FHSS radio module with 1 antenna(s).

Testing Objective:

To demonstrate compliance to FCC 15.247 requirements.



CONFIGURATIONS

Configuration 2GIG0021-1

Software/Firmware Running during test			
Description	Version		
PuTTY	0.60		

EUT				
Description	Manufacturer	Model/Part Number	Serial Number	
Wireless Module (TX-RX)	Linear LLC	Go!Bridge (2GIG-BRDG1-900)	15234	
Power Supply	Hon Kwang Electric Co	HK-UA-050A100-US	None	

Remote Equipment Outside of Test Setup Boundary					
Description Manufacturer Model/Part Number Serial Number					
Host Laptop	Lenovo	X131e	X1693704		
Host Laptop PS	Lenovo	42T4430	11S42T440Z1ZGWE12C6XR		

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
DC Cable	No	1.8m	No	Wireless Module	Power Supply
Ethernet Cable	No	5.0m	No	Wireless Module	Unterminated
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					



CONFIGURATIONS

Configuration 2GIG0021- 2

Software/Firmware Running during test			
Description	Version		
Multi-Port UDP Test	2.5.0.0		

EUT				
Description	Manufacturer	Model/Part Number	Serial Number	
Power Supply	Hon Kwang Electric Co	HK-UA-050A100-US	None	
Wireless Module (Hopper)	Linear LLC	Go!Bridge (2GIG-BRDG1-900)	15223	

Peripherals in test setup boundary				
Description	Manufacturer	Model/Part Number	Serial Number	
Home Panel	Linear LLC	Go!Control Panel	1351222000040705	
Home Panel PS	AB Power Supply	ZB-A140017	None	

Remote Equipment Outside of Test Setup Boundary					
Description	Manufacturer	Model/Part Number	Serial Number		
Host Laptop	Lenovo	X131e	X1693704		
Host Laptop PS	Lenovo	42T4430	11S42T440Z1ZGWE12C6XR		
Router	Netgear	GS605 v3	1YG2993T03907		
Router PS	Netgear	MT12-Y120100-A1	332-10190-01		

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
DC Cable	No	1.8m	No	Wireless Module	Power Supply
Ethernet Cable	No	5.0m	No	Router	Internet
Ethernet Cable	No	5.0m	No	Router	Wireless Module
AC Cable	No	1.8m	No	Host Laptop PS	AC Mains
DC Cable	No	1.5m	Yes	Host Laptop PS	Host Laptop
DC Cable	No	1.8m	No	Router	Router PS
DC Cable	No	0.5m	No	Home Panel	Home Panel PS
PA = Ca	ble is permaner	ntly attached to the de	vice. Shieldir	ng and/or presence of ferrite	may be unknown.



MODIFICATIONS

Equipment Modifications

Item	Date	Test	Modification	Note	Disposition of EUT
1	4/21/2014	Output Power	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	4/21/2014	Spurious Radiated 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.
3	4/21/2014	Powerline Conducted 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.
4	4/22/2014	Occupied Bandwidth	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.
5	4/22/2014	Band Edge Compliance	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.
6	4/22/2014	Band Edge Compliance- Hopping Mode	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.
7	5/8/2014	Channel Separation	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.
8	5/8/2014	Dwell Time	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.
9	5/8/2014	Number of Hopping Frequencies	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was completed.



DUTY CYCLE

TEST DESCRIPTION

The Duty Cycle was measured for each of the EUT operating modes. The measurement was made using a zero span on the spectrum analyzer to see the pulses in the time domain. The transmit power was set to its maximum setting. Using a near feild probe connected to the spectrum analyzer and secured to the EUT where the highest amplitude was found.

The Duty Cycle was calculated by dividing the transmission pulse duration (T) by the total period of a single on and off time.

➤ The EUT operates at 100% Duty Cycle.



OCCUPIED BANDWIDTH

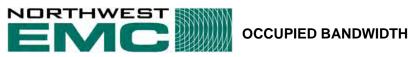
Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this 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.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Signal Generator	Agilent	E8257D	TGU	2/1/2012	36
Attenuator, 6dB	S.M. Electronics	18N-06	AWN	2/3/2014	12
OC13 Cables	Fairview Microwave	SCA1814-0101-120	OCZ	NCR	0
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	7/30/2013	12
40GHz DC Block	Miteq	DCB4000	AMD	5/16/2013	12
Spectrum Analyzer	Agilent	E4446A	AAY	2/22/2013	24

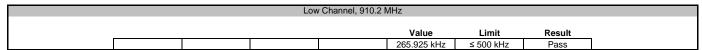
TEST DESCRIPTION

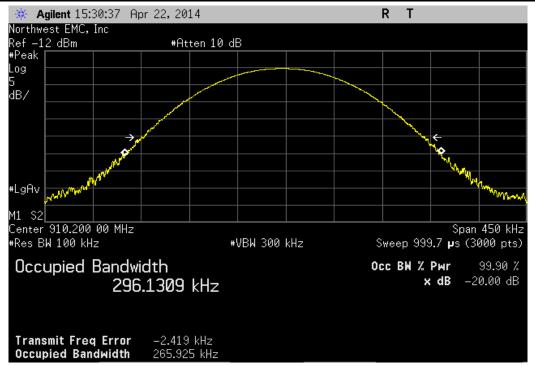
The occupied bandwidth was measured with the EUT set to low, medium, and high transmit frequencies. The measurement was made using a near feild probe connected to the spectrum analyzer and secured to the EUT where the highest amplitude was found. The EUT was transmitting at the data rate(s) listed in the datasheet in a no-hop mode.



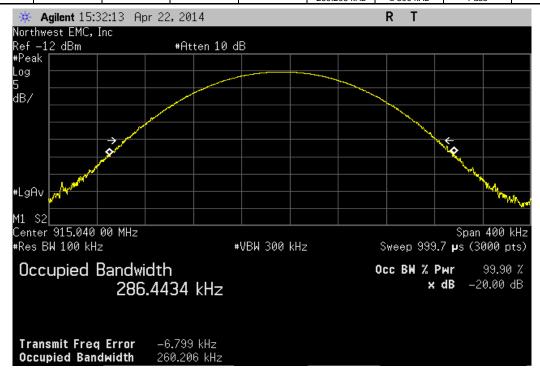
EUT:	Go!Bridge (2GIG-BRDG1-90	0)	Work Order:	2GIG0021			
Serial Number:	15234		Date:	04/22/14			
Customer:	Linear LLC				Temperature:	23.1 C°C	
Attendees:	Verdin Orozco				Humidity:	44%	
Project:	None				Barometric Pres.:	1015	
Tested by:	Johnny Candelas		Power:	110VAC/60Hz	Job Site:	OC13	
TEST SPECIFICATI	IONS			Test Method			
FCC 15.247:2014				ANSI C63.10:2009			
COMMENTS							
Using Power Settin	Using Power Setting 7						
DEVIATIONS FROM	/I TEST STANDARD						
None							
Configuration #	1	Signature	for d.	Collen			
					Value	Limit	Result
Low Channel, 910.2 Mid Channel, 915.04 High Channel, 919.8	4 MHz				265.925 kHz 260.206 kHz 257.050 kHz	≤ 500 kHz ≤ 500 kHz ≤ 500 kHz	Pass Pass Pass



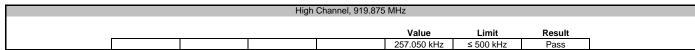


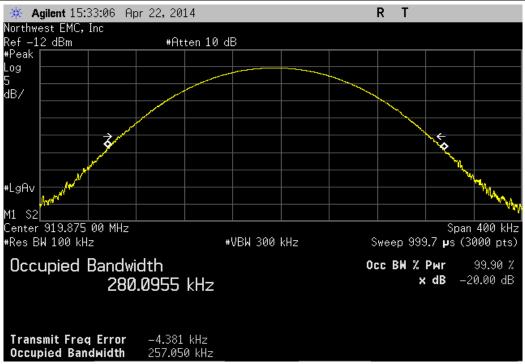


		Mid	Channel, 915.04	MHz		
				Value	Limit	Result
		_		260 206 kHz	≤ 500 kHz	Pass



OCCUPIED BANDWIDTH







OUTPUT POWER

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

Continuously Transmitting at Low, Mid, & High Channels (910.2, 915.04, & 919.875 MHz)

POWER SETTINGS INVESTIGATED

110VAC/60Hz

CONFIGURATIONS INVESTIGATED

2GIG0021 - 1

FREQUENCY RANGE INVESTIGATED

Start Frequency 902 MHz	Stop Frequency	928 MHz
Start Frequency 1902 WHZ	Olop i requericy	1920 IVII IZ

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
Antenna, Biconilog	EMCO	3142	AXB	6/2/2013	36 mo
OC10 Cables	N/A	10kHz-1GHz RE Cables	OCH	6/6/2013	12 mo
Pre-Amplifier	Miteq	AM-1064-9079	AOO	6/6/2013	12 mo
Spectrum Analyzer	Agilent	E4440A	AFA	6/15/2012	24 mo

MEASUREMENT BANDWIDTHS

Frequency Range	Peak Data	Quasi-Peak Data	Average Data
(MHz)	(kHz)	(kHz)	(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 peak output power was measured with the EUT set to low, medium, and high transmit frequencies. The radiated power was measured using a spectrum analyzer and bilog antenna in a semi-anechoic chamber. A peak detector was used. The EUT was transmitting at its maximum data rate. The level of fundamental emission was maximized by rotating the turntable and moving the measurement antenna from 1-4 meters in height.

The field strength measurement was converted to effective radiated power (EIRP) using the Friis transmission equation. A simplified version is found in ANSI C63.10:2009, Equation 5.

De Facto EIRP Limit: Per 47 CFR 15.247 (b)(1-3), the EUT meets the de facto EIRP limit of +30dBm.

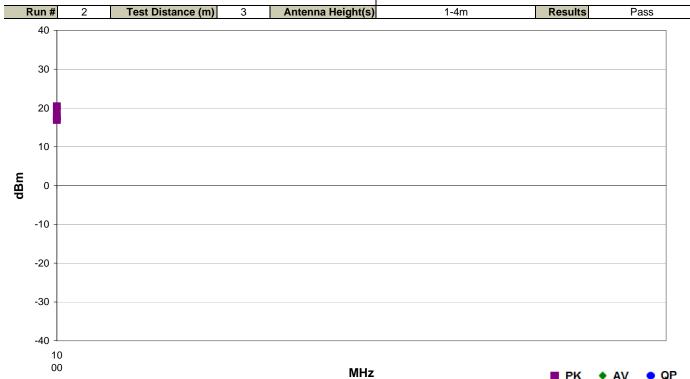


OUTPUT POWER

Work Order:	2GIG0021	Date:	04/21/14				
Project:	2GIG0021 Date: 04/21/14 None Temperature: 22.6 °C						
Job Site:	OC07	Humidity:	54.8% RH				
Serial Number:	15234	Barometric Pres.:	1018 mbar	Tested by: Johnny Candelas			
EUT:	GolBridge (2GIG-BRDG1-900)						
Configuration:	Ī						
Customer:	Linear LLC						
Attendees:	Verdin Orozco						
EUT Power:	110VAC/60Hz						
	Continuously Transmitting at Low, Mid, & High Channels (910.2, 915.04, & 919.875 MHz)						
Deviations:	None						
Comments:	None						

Test Specifications
FCC 15.247:2014

Test Method ANSI C63.10:2009



ΛH	Z	
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00			MHz	Z			■ PK	◆ AV	QP
Freq (MHz)	Antenna Height (meters)	Azimuth (degrees)		Polarity/ Transducer Type	Detector	EIRP (Watts)	EIRP (dBm)	Spec. Limit (dBm)	Compared to Spec. (dB)
919.868	1.0	283.0		Horz	PK	1.11E-01	20.5	30.0	-9.5
915.032	1.0	350.0		Horz	PK	1.11E-01	20.5	30.0	-9.5
910.195	1.0	355.0		Horz	PK	1.03E-01	20.1	30.0	-9.9
919.868	1.0	22.0		Vert	PK	8.62E-02	19.4	30.0	-10.6
915.032	2.1	204.0		Vert	PK	6.10E-02	17.9	30.0	-12.1
910.192	1.2	314.0		Horz	PK	6.09E-02	17.8	30.0	-12.2
910.193	1.0	105.0		Vert	PK	5.43E-02	17.3	30.0	-12.7
910.195	1.0	318.0		Vert	PK	4.95E-02	16.9	30.0	-13.1
910.195	3.2	91.0		Vert	PK	4.95E-02	16.9	30.0	-13.1
910.197	1.0	110.0		Horz	PK	4.95E-02	16.9	30.0	-13.1



BAND EDGE COMPLIANCE

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.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Signal Generator	Agilent	E8257D	TGU	2/1/2012	36
Attenuator, 6dB	S.M. Electronics	18N-06	AWN	2/3/2014	12
OC13 Cables	Fairview Microwave	SCA1814-0101-120	OCZ	NCR	0
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	7/30/2013	12
40GHz DC Block	Miteq	DCB4000	AMD	5/16/2013	12
Spectrum Analyzer	Agilent	E4446A	AAY	2/22/2013	24

TEST DESCRIPTION

The spurious RF conducted emissions at the edges of the authorized band were measured with the EUT set to low and high transmit frequencies. The measurement was made using a near feild probe connected to the spectrum analyzer and secured to the EUT where the highest amplitude was found. An offset was then used to obtain the relative output power reading. The EUT was transmitting at the data rate(s) listed in the datasheet in a no hop mode. The channels closest to the band edges were selected.

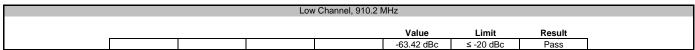
The spectrum was scanned below the lower band edge and above the higher band edge.

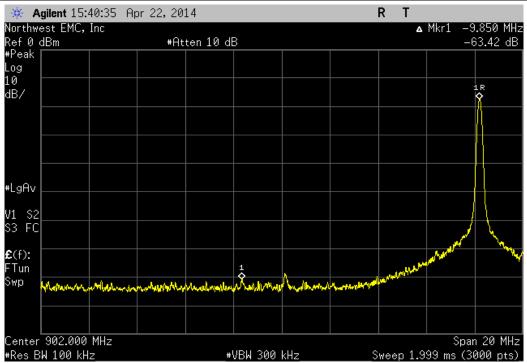


BAND EDGE COMPLIANCE

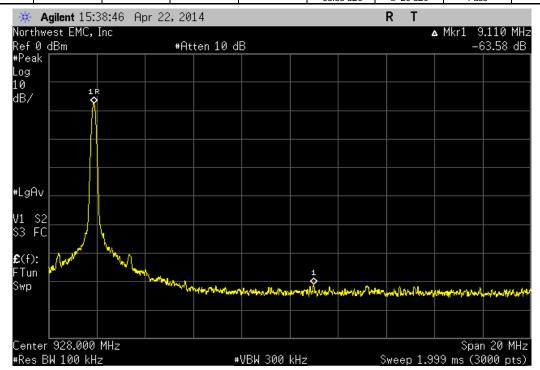
EUT:	Go!Bridge (2GIG-BRDG1-	900)		Work Order:	2GIG0021	
Serial Number:	15234			Date:	04/22/14	
Customer:	Linear LLC			Temperature:	23.1 C°C	
	Verdin Orozco			Humidity:		
Project:				Barometric Pres.:		
	Johnny Candelas		Power: 110VAC/60Hz	Job Site:	OC13	
TEST SPECIFICATION	ONS		Test Method			
FCC 15.247:2014			ANSI C63.10:2009			
COMMENTS						
Using Power Setting	g 7					
DEVIATIONS FROM	I TEST STANDARD					
None						
Configuration #	1	Signature	for d. Colle			
	·	·	•	Value	Limit	Result
Low Channel, 910.2		•	•	-63.42 dBc	≤ -20 dBc	Pass
High Channel, 919.8	75 MHz			-63.58 dBc	≤ -20 dBc	Pass







	High	Channel, 919.875	MHz		
			Value	Limit	Result
			-63.58 dBc	≤ -20 dBc	Pass





BAND EDGE COMPLIANCE - HOPPING MODE

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.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Signal Generator	Agilent	E8257D	TGU	2/1/2012	36
Attenuator, 6dB	S.M. Electronics	18N-06	AWN	2/3/2014	12
OC13 Cables	Fairview Microwave	SCA1814-0101-120	OCZ	NCR	0
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	7/30/2013	12
40GHz DC Block	Miteq	DCB4000	AMD	5/16/2013	12
Spectrum Analyzer	Agilent	E4446A	AAY	2/22/2013	24

TEST DESCRIPTION

The spurious RF conducted emissions at the edges of the authorized band were measured with the EUT set to its normal pseudorandom hopping sequence. The measurement was made using a near feild probe connected to the spectrum analyzer and secured to the EUT where the highest amplitude was found. An offset was then used to obtain the relative output power reading. The EUT was transmitting at the data rate(s) listed in the datasheet.

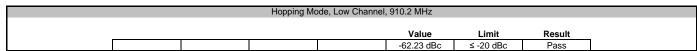
The spectrum was scanned below the lower band edge and above the higher band edge.

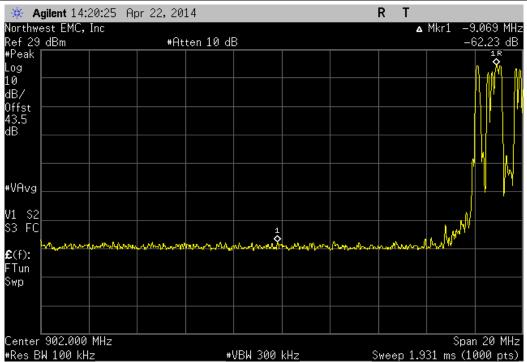


BAND EDGE COMPLIANCE - HOPPING MODE

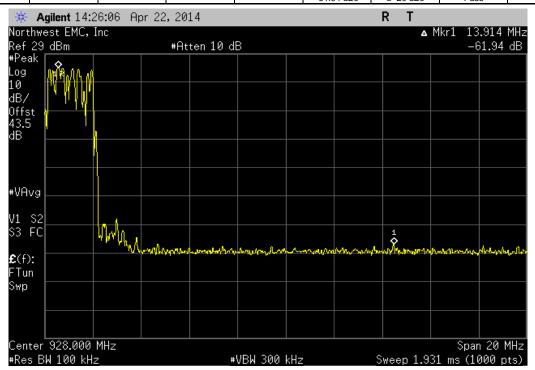
EUT	: Go!Bridge (2GIG-BRDG1-900)			Work Order	2GIG0021	
Serial Number	: 15223			Date	04/22/14	
Customer	: Linear LLC			Temperature	23.1 C°C	
Attendees	: Verdin Orozco			Humidity	44%	
	:: None			Barometric Pres.		
	/: Johnny Candelas		Power: 110VAC/60Hz	Job Site	OC13	,
TEST SPECIFICAT	TIONS		Test Method			
FCC 15.247:2014			ANSI C63.10:2009			
COMMENTS						
None						
DEVIATIONS FRO	M TEST STANDARD					
None						
Configuration #	2 Signature	-	for d. lather			
				Value	Limit	Result
Hopping Mode						
	Low Channel, 910.2 MHz			-62.23 dBc	≤ -20 dBc	Pass
	High Channel, 919.875 MHz			-61.94 dBc	≤ -20 dBc	Pass

BAND EDGE COMPLIANCE - HOPPING MODE





Value Limit Result		Hopping Mod	le, High Channel,	919.875 MHz	
Value Limit Result					





CHANNEL SEPARATION

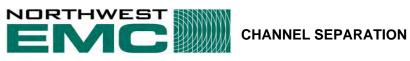
Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this 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.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Signal Generator	Agilent	E8257D	TGU	2/1/2012	36
Attenuator, 6dB	S.M. Electronics	18N-06	AWN	2/3/2014	12
OC13 Cables	Fairview Microwave	SCA1814-0101-120	OCZ	NCR	0
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	7/30/2013	12
40GHz DC Block	Miteq	DCB4000	AMD	5/16/2013	12
Spectrum Analyzer	Agilent	E4446A	AAY	2/22/2013	24

TEST DESCRIPTION

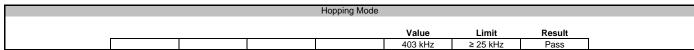
The carrier frequency separation was measured between channels in the middle of the authorized band. The measurement was made using a near feild probe connected to the spectrum analyzer and secured to the EUT where the highest amplitude was found. An offset was then used to obtain the relative output power reading. The hopping function of the EUT was enabled.

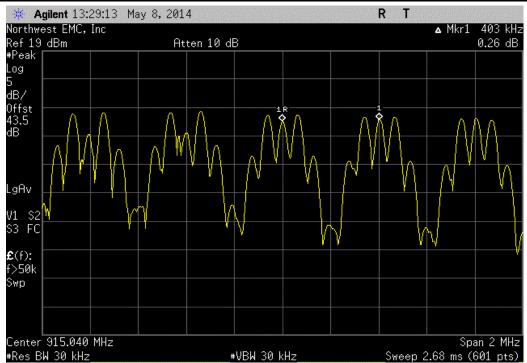


	Go!Bridge (2GIG-BRDG1-90	10)		Work Order:		
Serial Number:	15223			Date:	05/08/14	
Customer:	Linear LLC			Temperature:	24.3°C	
Attendees:	None			Humidity:	48%	
Project:	None			Barometric Pres.:	1013	
Tested by:	Johnny Candelas		Power: 110VAC/60Hz	Job Site:	OC13	
TEST SPECIFICATI	IONS		Test Method			
FCC 15.247:2014			ANSI C63.10:2009			
COMMENTS						
None						
DEVIATIONS FROM	M TEST STANDARD					
None						
Configuration #	2	Signature	for d. lotte			
				Value	Limit	Result
Hopping Mode				403 kHz	≥ 25 kHz	Pass



CHANNEL SEPARATION







NUMBER OF HOPPING FREQUENCIES

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.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Signal Generator	Agilent	E8257D	TGU	2/1/2012	36
Attenuator, 6dB	S.M. Electronics	18N-06	AWN	2/3/2014	12
OC13 Cables	Fairview Microwave	SCA1814-0101-120	OCZ	NCR	0
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	7/30/2013	12
40GHz DC Block	Miteq	DCB4000	AMD	5/16/2013	12
Spectrum Analyzer	Agilent	E4446A	AAY	2/22/2013	24

TEST DESCRIPTION

The number of hopping frequencies was measured across the authorized band. The measurement was made using a near feild probe connected to the spectrum analyzer and secured to the EUT where the highest amplitude was found. An offset was then used to obtain the relative output power reading. The hopping function of the EUT was enabled.

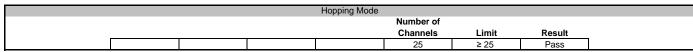


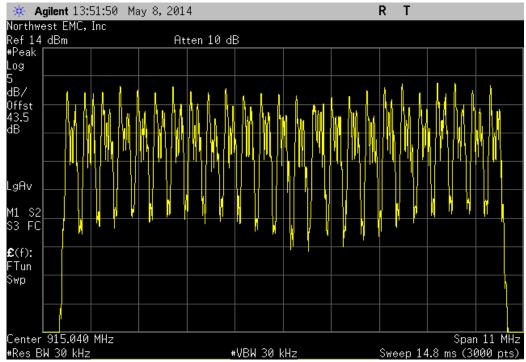
NUMBER OF HOPPING FREQUENCIES

	Go!Bridge (2GIG-BRDG1	-900)		Work Order:	2GIG0021		
Serial Number:	15223			Date:	05/08/14		
Customer:	Linear LLC			Temperature:	24.3°C		
Attendees:	None			Humidity:	48%		
Project:	None			Barometric Pres.:	1013		
Tested by:	Johnny Candelas		Power: 110VAC/60Hz	Job Site:	Job Site: OC13		
TEST SPECIFICAT	IONS		Test Method				
FCC 15.247:2014			ANSI C63.10:2009				
COMMENTS							
None							
	M TEST STANDARD						
None							
Configuration #	2	Signature	for d. later				
				Number of			
				Channels	Limit	Result	
Hopping Mode		_		25	≥ 25	Pass	



NUMBER OF HOPPING FREQUENCIES







DWELL TIME

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.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Signal Generator	Agilent	E8257D	TGU	2/1/2012	36
Attenuator, 6dB	S.M. Electronics	18N-06	AWN	2/3/2014	12
OC13 Cables	Fairview Microwave	SCA1814-0101-120	OCZ	NCR	0
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	7/30/2013	12
40GHz DC Block	Miteq	DCB4000	AMD	4/28/2014	12
Spectrum Analyzer	Agilent	E4446A	AAY	2/22/2013	24

TEST DESCRIPTION

The average dwell time per hopping channel was measured at one hopping channel in the middle of the authorized band. The measurement was made using a near feild probe connected to the spectrum analyzer and secured to the EUT where the highest amplitude was found. An offset was then used to obtain the relative output power reading. The hopping function of the EUT was enabled.

The dwell time limit is based on the Number of Hopping Channels * 400 mS. For 902-928MHz band this would be 25 Channels * 400mS = 10 Sec.

On Time During 10 Sec = Pulse Width * Average Number of Pulses * Scale Factor

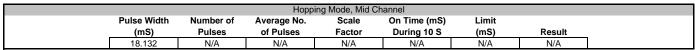
➤ Average Number of Pulses is based on 4 samples.

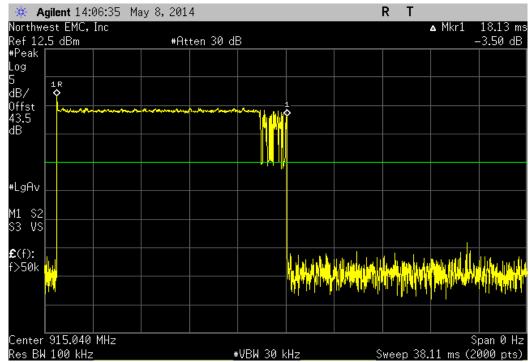
➤ Scale Factor = 10 Sec / Screen Capture Sweep Time = 10 Sec / 2 Sec = 5



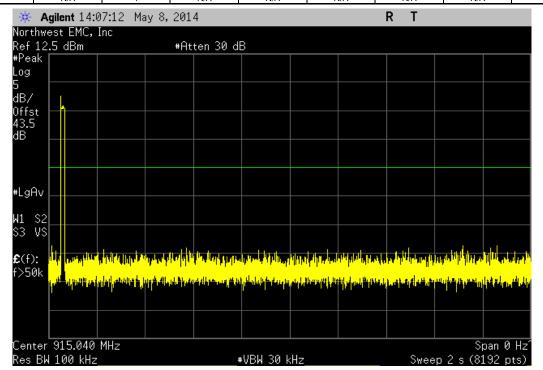
	Go!Bridge (2GIG-BRD)	G1-900)						Work Order: 20		
Serial Number:								Date: 05		
	: Linear LLC					Temperature: 24				
Attendees:						Humidity: 48				
Project:						Barometric Pres.: 10				
	Johnny Candelas				110VAC/60Hz			Job Site: O	C13	
TEST SPECIFICAT	TONS				Test Method					
FCC 15.247:2014					ANSI C63.10:2009					
COMMENTS										
None										
DEVIATIONS FROM	M TEST STANDARD									
None										
None Configuration #	2	Sign	pature	fu d.	La.					
	2	Sign	pature	Fulse Width	Number of	Average No.	Scale	On Time (mS)	Limit	
	2	Sign	nature				Scale Factor	On Time (mS) During 10 S	Limit (mS)	Result
	2	Sign	nature	Pulse Width	Number of	Average No.				Result
Configuration #	2 Mid Channel	Sign	mature	Pulse Width	Number of	Average No.				Result N/A
Configuration #	Mid Channel Mid Channel	Sign	pature	Pulse Width (mS) 18.132 N/A	Number of Pulses	Average No. of Pulses N/A N/A	N/A N/A	During 10 S N/A N/A	N/A N/A	N/A N/A
Configuration #	Mid Channel Mid Channel Mid Channel	Sign	nature	Pulse Width (mS) 18.132 N/A N/A	Number of Pulses	Average No. of Pulses N/A N/A N/A	N/A N/A N/A	During 10 S N/A N/A N/A N/A	(mS) N/A N/A N/A	N/A N/A N/A
Configuration #	Mid Channel Mid Channel	Sign	nature	Pulse Width (mS) 18.132 N/A N/A N/A	Number of Pulses	Average No. of Pulses N/A N/A	N/A N/A	During 10 S N/A N/A	N/A N/A	N/A N/A N/A N/A
Configuration #	Mid Channel Mid Channel Mid Channel	Sign	nature	Pulse Width (mS) 18.132 N/A N/A	Number of Pulses	Average No. of Pulses N/A N/A N/A	N/A N/A N/A	During 10 S N/A N/A N/A N/A	(mS) N/A N/A N/A	N/A N/A N/A



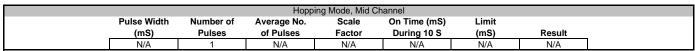


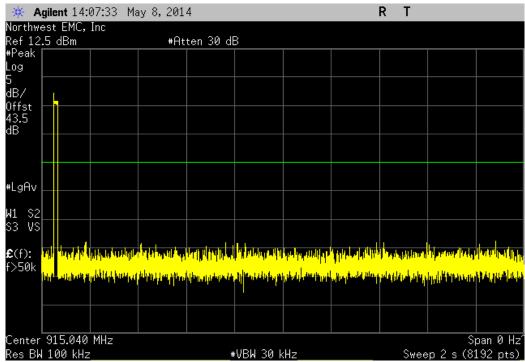


Hopping Mode, Mid Channel							
Puls	Pulse Width Number of Average No. Scale On Time (mS) Limit						
	(mS)	Pulses	of Pulses	Factor	During 10 S	(mS)	Result
	N/A	1	N/A	N/A	N/A	N/A	N/A

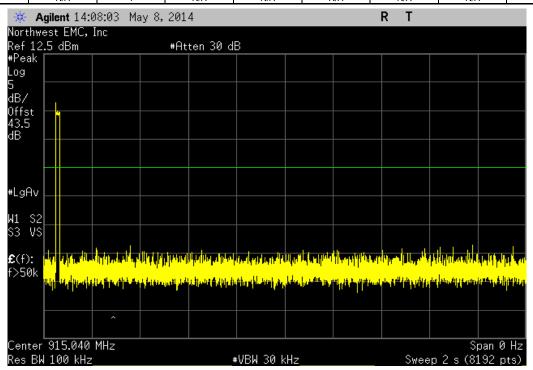




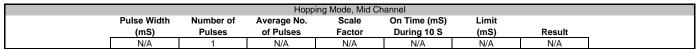


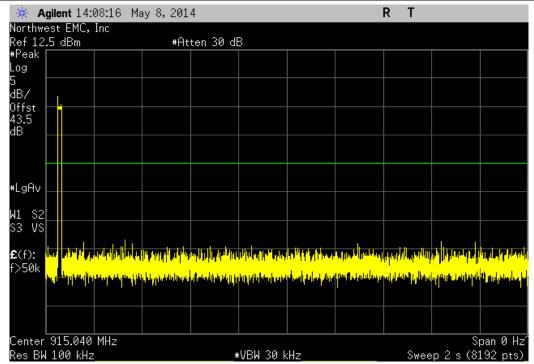


Hopping Mode, Mid Channel							
Pulse	Width	Number of	Average No.	Scale	On Time (mS)	Limit	
(r	nS)	Pulses	of Pulses	Factor	During 10 S	(mS)	Result
N	l/A	1	N/A	N/A	N/A	N/A	N/A









	Hopping Mode, Mid Channel								
Pulse Width	Pulse Width Number of Average No. Scale On Time (mS) Limit								
(mS)	Pulses	of Pulses	Factor	During 10 S	(mS)	Result			
18.132	N/A	1	5	90.66	400	Pass			

Calculation Only

No Screen Capture Required



SPURIOUS RADIATED 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

Continuously Transmitting at Low, Mid, & High Channels (910.2, 915.04, & 919.875 MHz)

POWER SETTINGS INVESTIGATED

110VAC/60Hz

CONFIGURATIONS INVESTIGATED

2GIG0021 - 1

FREQUENCY RANGE INVESTIGATED

|--|

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
BP Filter	K&L Microwave	3TNF-500/1000-N/N	HFR	11/27/2012	36 mo
Attenuator	Coaxicom	66702 3910AF-20	TKI	6/6/2013	12 mo
HP Filter	Micro-Tronics	HPM50108	HFW	4/2/2012	36 mo
Pre-Amplifier	Miteq	AMF-6F-08001200-30-10P	AOE	10/24/2013	12 mo
Antenna, Horn	ETS	3160-07	AHR	NCR	0 mo
OC 10 Cables	N/A	8-18GHz RE Cables	OCO	10/24/2013	12 mo
Pre-Amplifier	Miteq	AMF-4D-010120-30-10P-1	AOP	6/6/2013	12 mo
OC10 Cables	N/A	1-8GHz RE Cables	OCJ	10/24/2013	12 mo
Antenna, Horn	EMCO	3115	AHB	3/10/2014	36 mo
Antenna, Biconilog	EMCO	3142	AXB	6/2/2013	36 mo
OC10 Cables	N/A	10kHz-1GHz RE Cables	OCH	6/6/2013	12 mo
Pre-Amplifier	Miteq	AM-1064-9079	AOO	6/6/2013	12 mo
Spectrum Analyzer	Agilent	E4440A	AFA	6/15/2012	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 highest gain of each type of antenna to be used with the EUT was tested. The EUT was configured for low, mid, and high band transmit frequencies. For each configuration, the spectrum was scanned throughout the specified range. In addition, measurements were made in the restricted bands to verify compliance. While scanning, emissions from the EUT were maximized by rotating the EUT on a turntable, adjusting the position of the EUT and the EUT antenna in three orthogonal axis, and adjusting measurement antenna height and polarization. A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

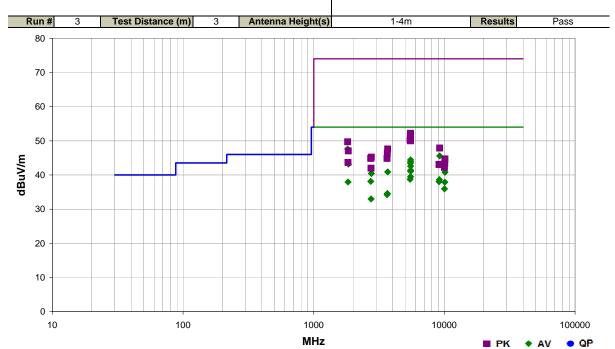


SPURIOUS RADIATED EMISSIONS

Work Order:	2GIG0021	Date:	04/21/14								
Project:	None	Temperature:	22.6 °C	for de Collen							
Job Site:	OC07	Humidity:	54.8% RH	O							
Serial Number:	15234	Barometric Pres.:	1018 mbar	Tested by: Johnny Candelas							
EUT:	Go!Bridge (2GIG-BRDG1-900)										
Configuration:	1										
Customer:	Linear LLC										
Attendees:	Verdin Orozco										
EUT Power:	110VAC/60Hz										
Operating Mode:	Continuously Transmitting at Low, Mid, & High Channels (910.2, 915.04, & 919.875 MHz)										
Deviations:	None										
Comments:	Using Power Setting 7										

Test Specifications Test Method

FCC 15.209:2014 ANSI C63.10:2009



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
1820.390	47.1	0.5	1.0	260.0	3.0	0.0	Horz	AV	0.0	47.6	54.0	-6.4	EUT Vert, Low Ch
9198.708	56.1	-10.5	1.3	299.0	3.0	0.0	Horz	AV	0.0	45.6	54.0	-8.4	EUT Vert, High Ch
5519.180	31.5	12.9	1.2	310.0	3.0	0.0	Horz	AV	0.0	44.4	54.0	-9.6	EUT Vert, High Ch
5519.225	31.0	12.9	1.2	272.0	3.0	0.0	Vert	AV	0.0	43.9	54.0	-10.1	EUT Horiz, High Ch
5490.170	30.6	12.9	1.2	84.0	3.0	0.0	Vert	AV	0.0	43.5	54.0	-10.5	EUT Horiz, Mid Ch
1839.750	42.6	0.6	2.1	105.0	3.0	0.0	Horz	AV	0.0	43.2	54.0	-10.8	EUT Vert, High Ch
5519.205	29.7	12.9	1.2	257.0	3.0	0.0	Vert	AV	0.0	42.6	54.0	-11.4	EUT Vert, High Ch
5519.235	28.5	12.9	1.2	250.0	3.0	0.0	Vert	AV	0.0	41.4	54.0	-12.6	EUT on Side, High Ch
5519.275	28.2	12.9	1.2	243.0	3.0	0.0	Horz	AV	0.0	41.1	54.0	-12.9	EUT on Side, High Ch
3679.455	33.7	7.2	1.2	49.0	3.0	0.0	Horz	AV	0.0	40.9	54.0	-13.1	EUT Vert, High Ch
10118.580	50.2	-9.4	1.2	47.0	3.0	0.0	Horz	AV	0.0	40.8	54.0	-13.2	EUT Vert, High Ch
2759.635	37.8	2.6	1.7	114.0	3.0	0.0	Horz	AV	0.0	40.4	54.0	-13.6	EUT Vert, High Ch
5519.230	26.6	12.9	1.2	12.0	3.0	0.0	Horz	AV	0.0	39.5	54.0	-14.5	EUT Horiz, High Ch
5461.130	25.9	12.8	1.2	92.0	3.0	0.0	Horz	AV	0.0	38.7	54.0	-15.3	EUT Vert, Low Ch
9150.310	49.2	-10.5	1.0	86.0	3.0	0.0	Vert	AV	0.0	38.7	54.0	-15.3	EUT Horiz, Mid Ch
2730.605	35.6	2.5	1.0	263.0	3.0	0.0	Horz	AV	0.0	38.1	54.0	-15.9	EUT Vert, Low Ch
9101.920	48.6	-10.6	1.0	85.0	3.0	0.0	Vert	AV	0.0	38.0	54.0	-16.0	EUT Horiz, Low Ch
1830.060	37.4	0.5	1.2	74.0	3.0	0.0	Vert	AV	0.0	37.9	54.0	-16.1	EUT Horiz, Mid Ch
10065.390	47.4	-9.5	1.0	52.0	3.0	0.0	Vert	AV	0.0	37.9	54.0	-16.1	EUT Horiz, Mid Ch
10012.140	45.5	-9.6	0.0	34.0	3.0	0.0	Vert	AV	0.0	35.9	54.0	-18.1	EUT Horiz, Low Ch
3659.770	27.5	7.1	1.2	296.0	3.0	0.0	Vert	AV	0.0	34.6	54.0	-19.4	EUT Horiz, Mid Ch
3640.915	27.3	6.9	3.6	209.0	3.0	0.0	Horz	AV	0.0	34.2	54.0	-19.8	EUT Vert, Low Ch

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
2745.090	30.4	2.6	1.2	204.0	3.0	0.0	Vert	AV	0.0	33.0	54.0	-21.0	EUT Horiz, Mid Ch
5519.275	39.3	12.9	1.2	272.0	3.0	0.0	Vert	PK	0.0	52.2	74.0	-21.8	EUT Horiz, High Ch
5519.115	39.1	12.9	1.2	310.0	3.0	0.0	Horz	PK	0.0	52.0	74.0	-22.0	EUT Vert, High Ch
5490.310	38.7	12.9	1.2	84.0	3.0	0.0	Vert	PK	0.0	51.6	74.0	-22.4	EUT Horiz, Mid Ch
5518.910	38.3	12.9	1.2	257.0	3.0	0.0	Vert	PK	0.0	51.2	74.0	-22.8	EUT Vert, High Ch
5519.025	37.9	12.9	1.2	243.0	3.0	0.0	Horz	PK	0.0	50.8	74.0	-23.2	EUT on Side, High Ch
5519.390	37.5	12.9	1.2	250.0	3.0	0.0	Vert	PK	0.0	50.4	74.0	-23.6	EUT on Side, High Ch
5462.455	37.4	12.8	1.2	92.0	3.0	0.0	Horz	PK	0.0	50.2	74.0	-23.8	EUT Vert, Low Ch
5519.225	37.1	12.9	1.2	12.0	3.0	0.0	Horz	PK	0.0	50.0	74.0	-24.0	EUT Horiz, High Ch
1820.400	49.2	0.5	1.0	260.0	3.0	0.0	Horz	PK	0.0	49.7	74.0	-24.3	EUT Vert, Low Ch
9198.642	58.4	-10.5	1.3	299.0	3.0	0.0	Horz	PK	0.0	47.9	74.0	-26.1	EUT Vert, High Ch
3679.195	40.4	7.2	1.2	49.0	3.0	0.0	Horz	PK	0.0	47.6	74.0	-26.4	EUT Vert, High Ch
1839.750	46.4	0.6	2.1	105.0	3.0	0.0	Horz	PK	0.0	47.0	74.0	-27.0	EUT Vert, High Ch
3660.780	39.2	7.1	1.2	296.0	3.0	0.0	Vert	PK	0.0	46.3	74.0	-27.7	EUT Horiz, Mid Ch
2759.680	42.6	2.6	1.7	114.0	3.0	0.0	Horz	PK	0.0	45.2	74.0	-28.8	EUT Vert, High Ch
3642.500	37.9	6.9	3.6	209.0	3.0	0.0	Horz	PK	0.0	44.8	74.0	-29.2	EUT Vert, Low Ch
2730.385	42.3	2.5	1.0	263.0	3.0	0.0	Horz	PK	0.0	44.8	74.0	-29.2	EUT Vert, Low Ch
10118.630	54.1	-9.4	1.2	47.0	3.0	0.0	Horz	PK	0.0	44.7	74.0	-29.3	EUT Vert, High Ch
1829.880	43.1	0.5	1.2	74.0	3.0	0.0	Vert	PK	0.0	43.6	74.0	-30.4	EUT Horiz, Mid Ch
10065.200	52.9	-9.5	1.0	52.0	3.0	0.0	Vert	PK	0.0	43.4	74.0	-30.6	EUT Horiz, Mid Ch
9101.850	53.7	-10.6	1.0	85.0	3.0	0.0	Vert	PK	0.0	43.1	74.0	-30.9	EUT Horiz, Low Ch
9150.330	53.6	-10.5	1.0	86.0	3.0	0.0	Vert	PK	0.0	43.1	74.0	-30.9	EUT Horiz, Mid Ch
10011.850	51.8	-9.6	0.0	34.0	3.0	0.0	Vert	PK	0.0	42.2	74.0	-31.8	EUT Horiz, Low Ch
2745.350	39.4	2.6	1.2	204.0	3.0	0.0	Vert	PK	0.0	42.0	74.0	-32.0	EUT Horiz, Mid Ch



POWERLINE CONDUCTED 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.

MODES OF OPERATION

Continuously Transmitting at Low Channel, 910.2 MHz

Continuously Transmitting at Mid Channel, 915.04 MHz

Continuously Transmitting at High Channel, 919.875 MHz

POWER SETTINGS INVESTIGATED

110VAC/60Hz

CONFIGURATIONS INVESTIGATED

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SAMPLE CALCULATIONS

Conducted Emissions: Adjusted Level = Measured Level + Transducer Factor + Cable Attenuation Factor + External Attenuator

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
LISN	Solar	9252-50-24-BNC	LIA	6/3/2013	12 mo
Attenuator	Pasternack	6N10W-20	AWC	1/3/2014	12 mo
HP Filter	TTE	H97-100K-50-720B	HFP	3/1/2012	36 mo
OC06 Cables	N/A	Telecom Cables	OCP	10/8/2013	12 mo
Receiver	Rohde & Schwarz	ESCI	ARF	5/21/2013	12 mo

MEASUREMENT BANDWIDTHS

Frequency Range	BWI			
(MHz)	(kHz)			
0.15 - 30.0	1.0			
30.0 - 400.0	10.0			
400.0 - 1000.0	100.0			
1000.0 - 6000.0	1000.0			

TEST DESCRIPTION

The EUT will be powered either directly or indirectly from the AC power line. Therefore, conducted emissions measurements were made on the AC input of the EUT, or on the AC input of the device used to power the EUT.

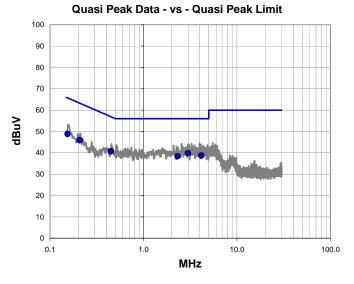
The EUT was transmitting at its maximum data rate. For each mode, the spectrum was scanned from 150 kHz to 30 MHz. The test setup and procedures were in accordance with ANSI C63.10-2009.

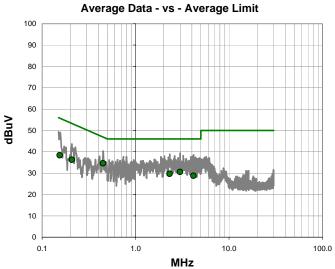


POWERLINE CONDUCTED EMISSIONS

Work Order:	2GIG0021	Date:	04/21/14	11/10/				
Project:	None	Temperature:	22.7 °C	for S. Collen				
Job Site:	OC06	Humidity:	54.7% RH	O				
Serial Number:	15234	Barometric Pres.:	1017 mbar	Tested by: Johnny Candelas				
EUT:	Go!Bridge (2GIG-BRI	OG1-900)						
Configuration:	1							
Customer:	Linear LLC							
Attendees:	Verdin Orozco							
EUT Power:	110VAC/60Hz							
Operating Mode:	Continuously Transmitting at Low Channel, 910.2 MHz							
Deviations:	None							
Comments:	Using Power Setting 7							
Test Specifications			Test Meth	od				
FCC 15.207:2014			ANSI C63.	10:2009				

Run # 6 Line: High Line Ext. Attenuation: 20 Results Pass





Quasi Peak	: Data -	vs -	Quasi	Peak	Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.449	20.6	20.1	40.7	56.9	-16.2
2.996	19.7	20.1	39.8	56.0	-16.2
0.154	28.7	20.1	48.8	65.8	-17.0
4.164	18.6	20.1	38.7	56.0	-17.3
0.208	25.8	20.1	45.9	63.3	-17.4
2.320	18.3	20.1	38.4	56.0	-17.6

	Average	Data -	vs - A	Average	Limit
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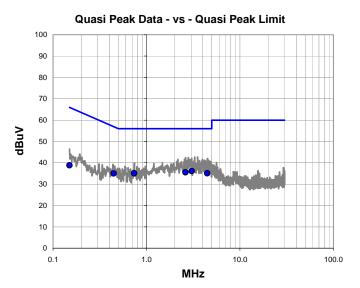
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.449	14.5	20.1	34.6	46.9	-12.3
2.996	10.5	20.1	30.6	46.0	-15.4
2.320	9.6	20.1	29.7	46.0	-16.3
0.208	16.2	20.1	36.3	53.3	-17.0
4.164	8.7	20.1	28.8	46.0	-17.2
0.154	18.3	20.1	38.4	55.8	-17.4



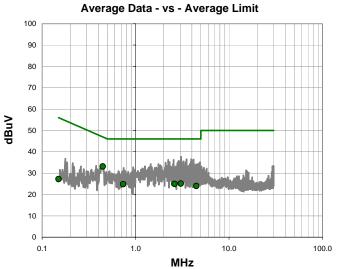
POWERLINE CONDUCTED EMISSIONS

Work Order:	2GIG0021	Date:	04/21/14	11111					
Project:	None	Temperature:	22.7 °C	for I little					
Job Site:	OC06	Humidity:	54.7% RH						
Serial Number:	15234	Barometric Pres.:	1017 mbar	Tested by: Johnny Candelas					
EUT:	Go!Bridge (2GIG-BRI	OG1-900)							
Configuration:	1								
Customer:	Linear LLC								
Attendees:	Verdin Orozco								
EUT Power:	110VAC/60Hz								
Operating Mode:	Continuously Transmi	Continuously Transmitting at Low Channel, 910.2 MHz							
Deviations:	None								
Comments:	•	Using Power Setting 7							
Test Specifications			Test Meth	od					
FCC 15.207:2014			ANSI C63.	.10:2009					

Ext. Attenuation:



Line: Neutral



Results

Pass

Quasi Peak	: Data -	vs -	Quasi	Peak	Limit

Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
16.0	20.1	36.1	56.0	-19.9
15.4	20.1	35.5	56.0	-20.5
15.0	20.1	35.1	56.0	-20.9
14.9	20.2	35.1	56.0	-20.9
14.9	20.1	35.0	57.0	-22.0
18.7	20.1	38.8	66.0	-27.2
	16.0 15.4 15.0 14.9 14.9	(dBuV) (dB) 16.0 20.1 15.4 20.1 15.0 20.1 14.9 20.2 14.9 20.1	(dBuV) (dB) (dBuV) 16.0 20.1 36.1 15.4 20.1 35.5 15.0 20.1 35.1 14.9 20.2 35.1 14.9 20.1 35.0	(dBuV) (dB) (dBuV) (dBuV) 16.0 20.1 36.1 56.0 15.4 20.1 35.5 56.0 15.0 20.1 35.1 56.0 14.9 20.2 35.1 56.0 14.9 20.1 35.0 57.0

Average Data -	· vs - /	Average	Limit

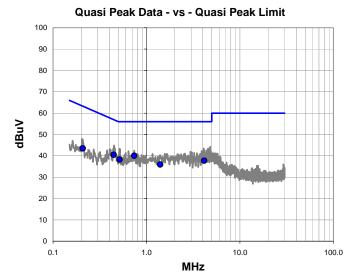
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.445	13.0	20.1	33.1	47.0	-13.9
3.056	5.0	20.1	25.1	46.0	-20.9
2.620	4.9	20.1	25.0	46.0	-21.0
0.739	4.7	20.1	24.8	46.0	-21.2
4.480	3.8	20.2	24.0	46.0	-22.0
0.150	7.1	20.1	27.2	56.0	-28.8



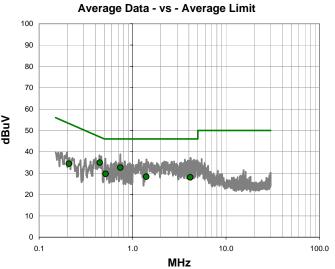
POWERLINE CONDUCTED EMISSIONS

Work Order:	2GIG0021	Date:	04/21/14	11111					
Project:	None	Temperature:	22.7 °C	for S. Collen					
Job Site:	OC06	Humidity:	54.7% RH						
Serial Number:	15234	Barometric Pres.:	1017 mbar	Tested by: Johnny Candelas					
EUT:	Go!Bridge (2GIG-BRD	OG1-900)							
Configuration:	1								
Customer:	Linear LLC								
Attendees:	Verdin Orozco								
EUT Power:	110VAC/60Hz								
Operating Mode:	Continuously Transmi	tting at Mid Channel, 9	15.04 MHz						
Deviations:	None								
Comments:	0	Using Power Setting 7							
Test Specifications			Test Meth	od					
FCC 15.207:2014			ANSI C63.	10:2009					

Ext. Attenuation:



Line: High Line



Results

Pass

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.740	19.9	20.1	40.0	56.0	-16.0
0.446	20.4	20.1	40.5	56.9	-16.4
0.516	18.1	20.1	38.2	56.0	-17.8
4.148	17.6	20.1	37.7	56.0	-18.3
0.208	23.4	20.1	43.5	63.3	-19.8
1.404	15.8	20.1	35.9	56.0	-20.1

Avorage	Doto W	s - Average	Limit
Average	Dala - V	s - Average	; LIIIIII

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.446	14.8	20.1	34.9	46.9	-12.0
0.740	12.5	20.1	32.6	46.0	-13.4
0.516	9.6	20.1	29.7	46.0	-16.3
1.404	8.2	20.1	28.3	46.0	-17.7
4.148	7.9	20.1	28.0	46.0	-18.0
0.208	14.3	20.1	34.4	53.3	-18.9

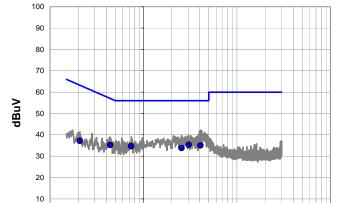


0.1

POWERLINE CONDUCTED EMISSIONS

Work Order:	2GIG0021	Date:	04/21/14	0 1100			
Project:	None	Temperature:	22.7 °C	for S. Collen			
Job Site:	OC06	Humidity:	54.7% RH				
Serial Number:	15234	Barometric Pres.:	1017 mbar	Tested by: Johnny Candelas			
EUT:	Go!Bridge (2GIG-BRI	OG1-900)					
Configuration:	1						
Customer:	Linear LLC						
Attendees:	Verdin Orozco						
	110VAC/60Hz						
Operating Mode:	Continuously Transmi	tting at Mid Channel, 9	15.04 MHz				
Deviations:	None						
Comments:	Using Power Setting 7						
Test Specifications			Test Meth	od			
FCC 15.207:2014			ANSI C63.	10:2009			

Ext. Attenuation:

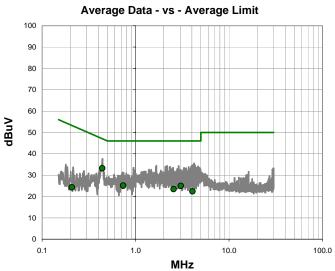


Quasi Peak Data - vs - Quasi Peak Limit

Line: Neutral

10.0

100.0



Results

Pass

Quasi Peak Data - vs - Quasi Peak Limit

MHz

1.0

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
3.056	15.2	20.1	35.3	56.0	-20.7
4.076	14.9	20.1	35.0	56.0	-21.0
0.738	14.6	20.1	34.7	56.0	-21.3
0.441	15.1	20.1	35.2	57.0	-21.8
2.556	13.7	20.1	33.8	56.0	-22.2
0.208	17.1	20.1	37.2	63.3	-26.1

Avorage	Doto W	s - Average	Limit
Average	Dala - V	s - Average	; LIIIIII

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.441	13.1	20.1	33.2	47.0	-13.8
0.738	5.0	20.1	25.1	46.0	-20.9
3.056	4.9	20.1	25.0	46.0	-21.0
2.556	3.4	20.1	23.5	46.0	-22.5
4.076	2.3	20.1	22.4	46.0	-23.6
0.208	4.2	20.1	24.3	53.3	-29.0

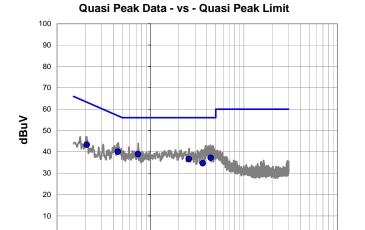


0.1

POWERLINE CONDUCTED EMISSIONS

Work Order:	2GIG0021	Date:	04/21/14	11111
Project:	None	Temperature:	22.7 °C	for S. Collen
Job Site:	OC06	Humidity:	54.7% RH	O
Serial Number:	15234	Barometric Pres.:	1017 mbar	Tested by: Johnny Candelas
EUT:	Go!Bridge (2GIG-BRI)G1-900)		
Configuration:	1			
Customer:	Linear LLC			
Attendees:	Verdin Orozco			
EUT Power:	110VAC/60Hz			
Operating Mode:	Continuously Transmi	tting at High Channel,	919.875 MHz	
Deviations:	None			
Comments:	Using Power Setting 7	7		
Test Specifications			Test Meth	od
FCC 15.207:2014	•		ANSI C63.	10:2009

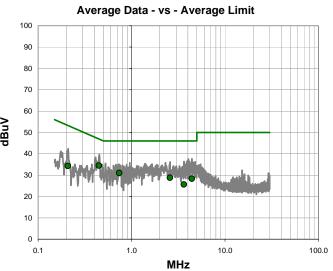
Ext. Attenuation:



Line: High Line

10.0

100.0



Results

Pass

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Quasi	Peak	Data	- VS -	Quasi	reak	Limit

MHz

1.0

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.447	19.9	20.1	40.0	56.9	-16.9
0.738	18.8	20.1	38.9	56.0	-17.1
4.416	17.0	20.2	37.2	56.0	-18.8
2.580	16.5	20.1	36.6	56.0	-19.4
0.208	23.2	20.1	43.3	63.3	-20.0
3.636	14.5	20.1	34.6	56.0	-21.4

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Average	Data -	VC -	Average	I imit

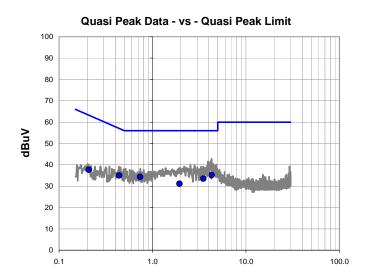
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.447	14.4	20.1	34.5	46.9	-12.4
0.738	10.9	20.1	31.0	46.0	-15.0
2.580	8.7	20.1	28.8	46.0	-17.2
4.416	8.2	20.2	28.4	46.0	-17.6
0.208	14.2	20.1	34.3	53.3	-19.0
3.636	5.5	20.1	25.6	46.0	-20.4



POWERLINE CONDUCTED EMISSIONS

Work Order:	2GIG0021	Date:	04/21/14	11111			
Project:	None	Temperature:	22.7 °C	for S. Collen			
Job Site:	OC06	Humidity:	54.7% RH				
Serial Number:	15234	Barometric Pres.:	1017 mbar	Tested by: Johnny Candelas			
EUT:	Go!Bridge (2GIG-BRI	OG1-900)					
Configuration:	1						
Customer:	Linear LLC						
Attendees:	Verdin Orozco						
EUT Power:	110VAC/60Hz						
Operating Mode:	Continuously Transmi	itting at High Channel, 9	919.875 MHz				
Deviations:	None						
Comments:	Using Power Setting 7						
Test Specifications			Test Meth	od			
FCC 15.207:2014			ANSI C63.	10:2009			

Ext. Attenuation:



Line: Neutral

Average Data - vs - Average Limit 100 90 80 70 40 30 20 10 0.1 1.0 10.0 100.0

Results

Pass

o . D			D	
Quasi Pe	ak Data -	vs - Quasi	Peak I	∟ımıt

MHz

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
4.304	15.0	20.1	35.1	56.0	-20.9
0.738	14.2	20.1	34.3	56.0	-21.7
0.440	14.9	20.1	35.0	57.1	-22.1
3.500	13.4	20.1	33.5	56.0	-22.5
1.948	11.0	20.1	31.1	56.0	-24.9
0.208	17.6	20.1	37.7	63.3	-25.6

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Average	Data -	νς - Δ	Merage	l imit

MHz

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.440	12.8	20.1	32.9	47.1	-14.2
0.738	4.7	20.1	24.8	46.0	-21.2
1.948	4.4	20.1	24.5	46.0	-21.5
3.500	4.2	20.1	24.3	46.0	-21.7
4.304	2.8	20.1	22.9	46.0	-23.1
0.208	4.9	20.1	25.0	53.3	-28.3