

FreeWave Technologies, Inc.

WavePoint - 5GHz Radio (W5800-01)

Report # FREW0040







CERTIFICATE OF TEST

Last Date of Test: November 14, 2014 FreeWave Technologies, Inc. Model: WavePoint - 5GHz Radio (W5800-01)

Radio Equipment Testing

Standards

Specification	Method
FCC 15.247:2014	ANSI C63.10:2009

Results

rtocuito							
Method Clause	Test Description	Applied	Results	Comments			
6.5, 6.6	Spurious Radiated Emissions	No	N/A	Not required.			
6.7	Band Edge Compliance	Yes	Pass				
6.7	Spurious Conducted Emissions	Yes	Pass				
6.9.1	Occupied Bandwidth	Yes	Pass				
6.10.2	Output Power	Yes	Pass				
6.11.2	Power Spectral Density	Yes	Pass				
7.5	Duty Cycle	Yes	Pass				

Deviations From Test Standards

None

Approved By:

Kyle Holgate, Operations Manager

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. 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.

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REVISION HISTORY

Revision Number		Description	Date	Page Number
00	None			

Barometric Pressure

The recorded barometric pressure has been normalized to sea level.

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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

MSIP / 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.

Israel

MOC - Recognized by MOC 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.

SCOPE

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

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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 on each data sheet. 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 16-4-2 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)	4.00	-4.00
AC Powerline Conducted Emissions (dB)	2.70	-2.70

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FACILITIES

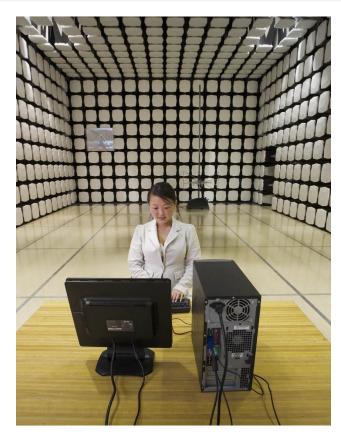




Oregon Labs EV01-12 22975 NW Evergreen Pkwy Hillsboro, OR 97124 (503) 844-4066	California Labs OC01-13 41 Tesla Irvine, CA 92618 (949) 861-8918	New York Labs NY01-04 4939 Jordan Rd. Elbridge, NY 13060 (315) 685-0796	Minnesota Labs MN01-08 9349 W Broadway Ave. Brooklyn Park, MN 55445 (763) 425-2281	Washington 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		







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PRODUCT DESCRIPTION

Client and Equipment Under Test (EUT) Information

Company Name:	FreeWave Technologies, Inc.
Address:	5395 Pearl Parkway, Suite 100
City, State, Zip:	Boulder, CO 80301
Test Requested By:	Dean Busch
Model:	WavePoint - 5GHz Radio (W5800-01)
First Date of Test:	June 03, 2014
Last Date of Test:	November 14, 2014
Receipt Date of Samples:	June 03, 2014
Equipment Design Stage:	Production
Equipment Condition:	No Damage

Information Provided by the Party Requesting the Test

Functional Description of the EUT:

Wireless Router 5.8 GHz Radio

Testing Objective:

To demonstrate compliance to FCC 15.247 requirements for a Class II Permissive Change to add these additional channel bandwidths to the grant.

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CONFIGURATIONS

Configuration FREW0028-1

EUT					
Description	Manufacturer	Model/Part Number	Serial Number		
Wireless Router 5GHz Radio	FreeWave Technologies, Inc.	W5800-01	00:07::E7:A0:01:F1		

Peripherals in test setup boundary					
Description	Manufacturer	Model/Part Number	Serial Number		
AC/DC Power Supply	Septre Power	PS-1230APL05	None		
Laptop	Lenovo	T520	R9-KVPNV 11/12		
AC/DC Adapter (Lenovo)	Lenovo	42T4438	None		

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
RS-232 Cable	No	.9m	No	Wireless Router	Serial/USB cable
Serial/USB Cable	No	1m	No	RS-232 Cable	Remote PC
Ethernet Cable	No	1m	No	Wireless Router	Remote PC
DC Power Cable	Unknown	1.5m	Unknown	AC/DC Power Adapter	Wireless Router
AC Power Cable	No	1.4m	No	AC mains	AC/DC Power Adapter
SMA/MMCX Cable Adapter	No	.1m	No	SMA Cable	Wireless Router
DC Power Cable	Unknown	1.2m	Unknown	AC/DC Power Adapter	Laptop
AC Power Cable	No	1m	No	AC mains	AC/DC Power Adapter (Lenovo)

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CONFIGURATIONS

Configuration FREW0041-1

Software/Firmware Running during test			
Description	Version		
Tera Term VT	3.2		

EUT					
Description	Manufacturer	Model/Part Number	Serial Number		
Wireless Router 5GHz Radio	FreeWave Technologies, Inc.	W5800-01	00:07::E7:A0:01:B6		

Peripherals in test setup boundary					
Description	Manufacturer	Model/Part Number	Serial Number		
AC/DC Power Supply	Septre Power	PS-1230APL05	None		
Laptop	Lenovo	T520	R9-KVPNV 11/12		
AC/DC Adapter (Lenovo)	Lenovo	42T4438	None		

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
RS-232 Cable	No	.9m	No	Wireless Router	Serial/USB cable
Serial/USB Cable	No	1m	No	RS-232 Cable	Remote PC
Ethernet Cable	No	1m	No	Wireless Router	Remote PC
DC Power Cable	Unknown	1.5m	Unknown	AC/DC Power Adapter	Wireless Router
AC Power Cable	No	1.4m	No	AC mains	AC/DC Power Adapter
DC Power Cable	Unknown	1.2m	Unknown	AC/DC Power Adapter	Laptop
AC Power Cable	No	1m	No	AC mains	AC/DC Power Adapter (Lenovo)

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MODIFICATIONS

Equipment Modifications

Item	Date	Test	Modification	Note	Disposition of EUT
		Rand Edga	Tested as	No EMI suppression	EUT remained at
1	6/03/2014	Band Edge Compliance	delivered to	devices were added or	Northwest EMC
		Compliance	Test Station.	modified during this test.	following the test.
		Occupied	Tested as	No EMI suppression	EUT remained at
2	6/03/2014	Bandwidth	delivered to	devices were added or	Northwest EMC
		Danuwidin	Test Station.	modified during this test.	following the test.
		Power	Tested as	No EMI suppression	EUT remained at
3	6/03/2014	Spectral	delivered to	devices were added or	Northwest EMC
		Density	Test Station.	modified during this test.	following the test.
		Spurious	Tested as	No EMI suppression	EUT remained at
4	6/03/2014	Conducted	delivered to	devices were added or	Northwest EMC
		Emissions	Test Station.	modified during this test.	following the test.
		Output	Tested as	No EMI suppression	EUT remained at
5	6/03/2014	Power	delivered to	devices were added or	Northwest EMC
		rowei	Test Station.	modified during this test.	following the test.
			Tested as	No EMI suppression	Scheduled testing
6	6/03/2014	Duty Cycle	delivered to	devices were added or	was completed.
			Test Station.	modified during this test.	was completed.
		Band Edge	Tested as	No EMI suppression	EUT remained at
7	11/14/2014	Compliance	delivered to	devices were added or	Northwest EMC
		Compliance	Test Station.	modified during this test.	following the test.
		Spurious	Tested as	No EMI suppression	Scheduled testing
8	11/14/2014	Conducted	delivered to	devices were added or	was completed.
		Emissions	Test Station.	modified during this test.	was completed.

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TEST SOFTWARE POWER SETTING TABLE

				Channe	el Bandwidth SI	SO Chain A			
		2.5MHz			5MHz			10MHz	
Channel	(MHz)	Mode	Setting	(MHz)	Mode	Setting	(MHz)	Mode	Setting
		BPSK, 1/2	23		BPSK, 1/2	22		BPSK, 1/2	24
		16-QAM, 3/4	23		16-QAM, 3/4	22		16-QAM, 3/4	24
Low	5738	64-QAM, 3/4	23	5739	64-QAM, 3/4	22	5742	64-QAM, 3/4	24
		BPSK, 1/2	16		BPSK, 1/2	15		BPSK, 1/2	24
		64-QAM, 5/6	16		64-QAM, 5/6	15		64-QAM, 5/6	24
		BPSK, 1/2	23		BPSK, 1/2	22		BPSK, 1/2	24
		16-QAM, 3/4	23		16-QAM, 3/4	22		16-QAM, 3/4	24
Mid	5783	64-QAM, 3/4	23	5784	64-QAM, 3/4	22	5782	64-QAM, 3/4	24
		BPSK, 1/2	16		BPSK, 1/2	15		BPSK, 1/2	24
		64-QAM, 5/6	16		64-QAM, 5/6	15	-	64-QAM, 5/6	24
		BPSK, 1/2	23		BPSK, 1/2	22		BPSK, 1/2	24
		16-QAM, 3/4	23		16-QAM, 3/4	22		16-QAM, 3/4	24
High	5831	64-QAM, 3/4	23	5829	64-QAM, 3/4	22	2464	64-QAM, 3/4	24
High 5		BPSK, 1/2	16		BPSK, 1/2	15		BPSK, 1/2	24
		64-QAM, 5/6	16		64-QAM, 5/6	15		64-QAM, 5/6	24

			Ch	annel B	andwidth 2x2 N	/IIMO Chair	ı A		
		2.5MHz			5MHz			10MHz	
Channel	(MHz)	Mode	Setting	(MHz)	Mode	Setting	(MHz)	Mode	Setting
Low	5738	BPSK, 1/2	14	5739	BPSK, 1/2	13	5742	BPSK, 1/2	19
Low 5	3/30	64-QAM, 5/6	14	3/33	64-QAM, 5/6	13	3742	64-QAM, 5/6	19
Mid	5783 BPSK, 1/2	14	5784	BPSK, 1/2	13	5782	BPSK, 1/2	19	
IVIIU	3/03	64-QAM, 5/6	14	5/84	64-QAM, 5/6	13	3/02	64-QAM, 5/6	19
High 5	5831	BPSK, 1/2	14	5829	BPSK, 1/2	13	2464	BPSK, 1/2	19
півіі	2021	64-QAM, 5/6	14	3023	64-QAM, 5/6	13	2404	64-QAM, 5/6	19

			Ch	annel B	andwidth 2x2 N	/IIMO Chaii	n B		
		2.5MHz			5MHz			10MHz	
Channel	(MHz)	Mode	Setting	(MHz)	Mode	Setting	(MHz)	Mode	Setting
Low	5738	BPSK, 1/2	12	5739	BPSK, 1/2	11	5742	BPSK, 1/2	19
Low	3/30	64-QAM, 5/6	12	3/33	64-QAM, 5/6	11	3742	64-QAM, 5/6	19
Mid	5783	BPSK, 1/2	12	5784	BPSK, 1/2	11	5782	BPSK, 1/2	19
IVIIG	3763	64-QAM, 5/6	12	3704	64-QAM, 5/6	11	5/82	64-QAM, 5/6	19
High	5831	BPSK, 1/2	12	5829	BPSK, 1/2	11	2464	BPSK, 1/2	19
nign	2021	64-QAM, 5/6	12	3629	64-QAM, 5/6	11	2404	64-QAM, 5/6	19

			Ch	annel B	andwidth 3x3 N	/IIMO Chair	ı A		
_		2.5MHz			5MHz			10MHz	
Channel	(MHz)	Mode	Setting	(MHz)	Mode	Setting	(MHz)	Mode	Setting
Low	5738	BPSK, 1/2	12	5739	BPSK, 1/2	11	5742	BPSK, 1/2	19
LOW 5/38	3738	64-QAM, 5/6	12	3/39	64-QAM, 5/6	11	3742	64-QAM, 5/6	19
Mid	5783	BPSK, 1/2	12	E70/I	BPSK, 1/2	11	5782	BPSK, 1/2	19
IVIIU	3703	64-QAM, 5/6	5784	64-QAM, 5/6	11	3/02	64-QAM, 5/6	19	
High	High 5831	BPSK, 1/2	12	5829	BPSK, 1/2	11	2464	BPSK, 1/2	19
riigii	2021	64-QAM, 5/6	12	3023	64-QAM, 5/6	11	2404	64-QAM, 5/6	19

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TEST SOFTWARE POWER SETTING TABLE

			Ch	annel B	andwidth 3x3 N	/IIMO Chaii	ı B		
		2.5MHz			5MHz			10MHz	
Channel	(MHz)	Mode	Setting	(MHz)	Mode	Setting	(MHz)	Mode	Setting
Low	5738	BPSK, 1/2	9	5739	BPSK, 1/2	9	5742	BPSK, 1/2	18
Low 57	3/30	64-QAM, 5/6	9	3/39	64-QAM, 5/6	9	5/42	64-QAM, 5/6	18
Mid	5783	BPSK, 1/2	9	5784	BPSK, 1/2	9	5782	BPSK, 1/2	18
IVIIU	3/03	64-QAM, 5/6	9	3/64	64-QAM, 5/6	9	5/62	64-QAM, 5/6	18
Lliah	5831	BPSK, 1/2	9	5829	BPSK, 1/2	9	2464	BPSK, 1/2	18
High	2031	64-QAM, 5/6	9	3629	64-QAM, 5/6	9	2404	64-QAM, 5/6	18

		Channel Bandwidth 3x3 MIMO Chain C											
_		2.5MHz			5MHz			10MHz					
Channel	(MHz)	Mode	Setting	(MHz)	Mode	Setting	(MHz)	Mode	Setting				
Low	5738	BPSK, 1/2	9	5739	BPSK, 1/2	8	5742	BPSK, 1/2	18				
Low 5738	3/30	64-QAM, 5/6	9	3/33	64-QAM, 5/6	8	3/42	64-QAM, 5/6	18				
Mid	5783	BPSK, 1/2	9	5784	BPSK, 1/2	8	5782	BPSK, 1/2	18				
IVIIU	3/03	64-QAM, 5/6	9	3704	64-QAM, 5/6	8	3/02	64-QAM, 5/6	18				
High	5831	BPSK, 1/2	9	5829	BPSK, 1/2	8	2464	BPSK, 1/2	18				
riigii	2021	64-QAM, 5/6	9	3023	64-QAM, 5/6	8	2404	64-QAM, 5/6	18				

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BAND EDGE COMPLIANCE - SISO

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

					Interval
Description	Manufacturer	Model	ID	Last Cal.	(mo)
40GHz DC Block	Miteq	DCB4000	AMD	4/28/2014	12
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	7/30/2013	12
EV06 Direct Connect Cable	ESM Cable Corp.	TT	ECA	NCR	0
Attenuator 6 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-6	AUX	7/30/2013	12
Power Meter	Agilent	N1913A	SQR	4/29/2013	36
Power Sensor	Agilent	E9300H	SQO	4/29/2013	36
Spectrum Analyzer	Agilent	E4446A	AAQ	1/21/2014	24
MXG MW Analog Signal Generator 40 Gig	Agilent	N5183A	TID	9/19/2011	36

TEST DESCRIPTION

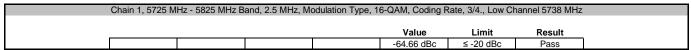
The spurious RF conducted emissions at the edges of the authorized bands were measured with the EUT set to low and high transmit frequencies in each available band. The channels closest to the band edges were selected. The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at the data rate(s) listed in the datasheet.

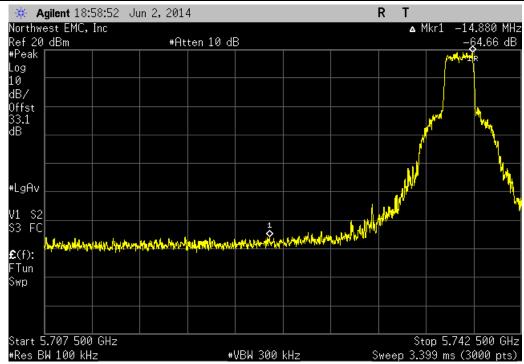
The spectrum was scanned below the lower band edge and above the higher band edge.

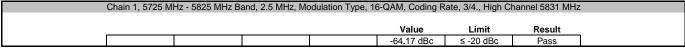


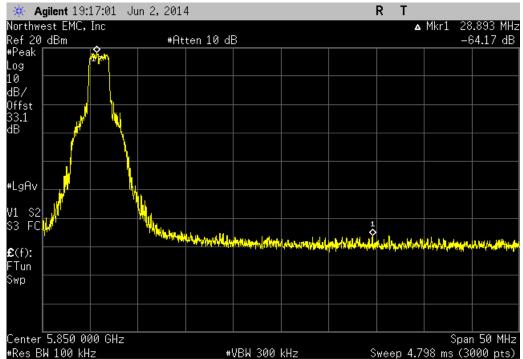
	avePoint - 5GHz Radio (W5	5800-01)		Work Order:		
Serial Number: 00:				Date:	06/03/14	
Customer: Fre	eeWave Technologies, Inc.			Temperature:		
Attendees: De				Humidity:		
Project: No				Barometric Pres.:		
	andon Hobbs, Jared Ison		Power: 110VAC/60Hz	Job Site:	EV06	
EST SPECIFICATION:	S		Test Method			
CC 15.247:2014			ANSI C63.10:2009			
OMMENTS						
			und for 8011a/n modes. An additional 10dB 5watt	attenuater was used inline for all measureme	ents made while und	ler test. Please
ference the power ta	ble for power settings use	ed while under test.				
EVALUATION OF FROM TE	OT OTANDARD					
EVIATIONS FROM TE	EST STANDARD					
onfiguration #	1		7-1-1			
omiguration #	•	Signature	1			
		Signature	C C C C C C C C C C C C C C C C C C C			
				Value	Limit	Result
nain 1						
	25 MHz - 5825 MHz Band					
	2.5 MHz					
	Mod	dulation Type, 16-QAM, Coding Rat	te, 3/4.			
		Low Channel 5738 MHz		-64.66 dBc	≤ -20 dBc	Pass
		High Channel 5831 MHz		-64.17 dBc	≤ -20 dBc	Pass
	Mod	dulation Type, 64-QAM, Coding Rat	te, 5/6.			
		Low Channel 5738 MHz		-65.17 dBc	≤ -20 dBc	Pass
		High Channel 5831 MHz		-64.62 dBc	≤ -20 dBc	Pass
	5 MHz					
	Mod	dulation Type, 16-QAM, Coding Rat	te, 3/4.			
		Low Channel 5739 MHz		-60.73 dBc	≤ -20 dBc	Pass
		High Channel 5829 MHz		-58,66 dBc	≤ -20 dBc	Pass
				00.00 dB0		
	Mod	dulation Type, 64-QAM, Coding Rat				_
	Mod	Low Channel 5739 MHz	te, 5/6.	-59.17 dBc	≤ -20 dBc	Pass
			te, 5/6.		≤ -20 dBc ≤ -20 dBc	Pass Pass
	10 MHz	Low Channel 5739 MHz High Channel 5829 MHz	te, 5/6.	-59.17 dBc		
	10 MHz	Low Channel 5739 MHz High Channel 5829 MHz dulation Type, 16-QAM, Coding Rat	te, 5/6.	-59.17 dBc -58.22 dBc	≤ -20 dBc	Pass
	10 MHz	Low Channel 5739 MHz High Channel 5829 MHz dulation Type, 16-QAM, Coding Rat Low Channel 5742 MHz	te, 5/6.	-59.17 dBc -58.22 dBc -46.47 dBc	≤ -20 dBc ≤ -20 dBc	Pass
	10 MHz	Low Channel 5739 MHz High Channel 5829 MHz dulation Type, 16-QAM, Coding Rat Low Channel 5742 MHz High Channel 5827 MHz	te, 5/6.	-59.17 dBc -58.22 dBc	≤ -20 dBc	Pass
	10 MHz	Low Channel 5739 MHz High Channel 5829 MHz dulation Type, 16-QAM, Coding Rat Low Channel 5742 MHz High Channel 5827 MHz dulation Type, 64-QAM, Coding Rat	te, 5/6.	-59.17 dBc -58.22 dBc -46.47 dBc -59.39 dBc	≤ -20 dBc ≤ -20 dBc ≤ -20 dBc	Pass Pass Pass
	10 MHz	Low Channel 5739 MHz High Channel 5829 MHz dulation Type, 16-QAM, Coding Rat Low Channel 5742 MHz High Channel 5827 MHz	te, 5/6. te, 3/4. te, 5/6.	-59.17 dBc -58.22 dBc -46.47 dBc	≤ -20 dBc ≤ -20 dBc	Pass





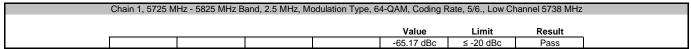


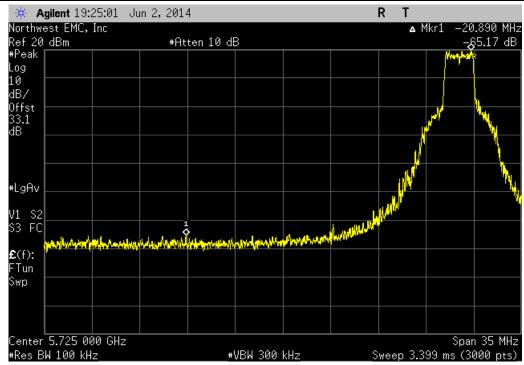


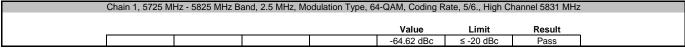


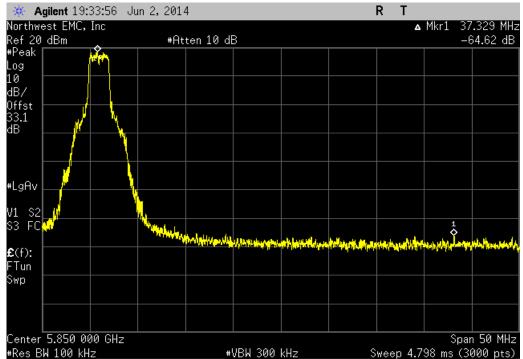
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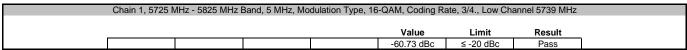


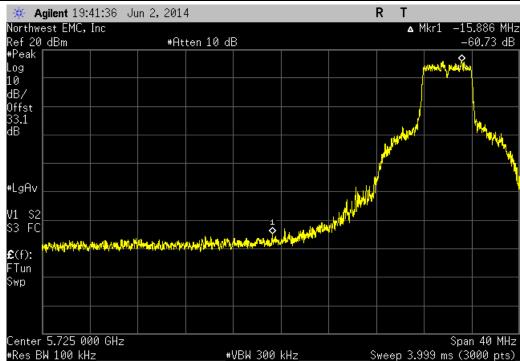


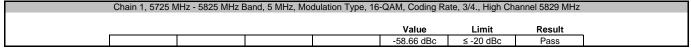


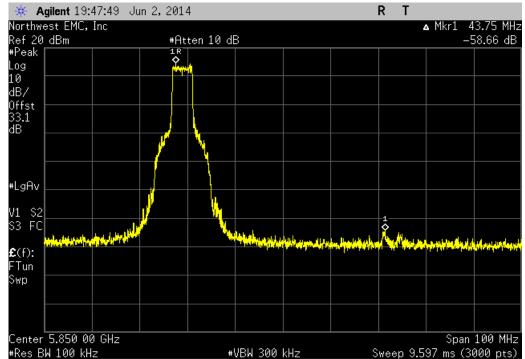
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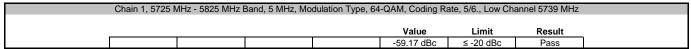


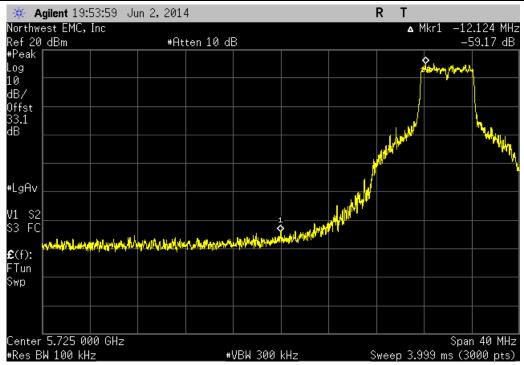


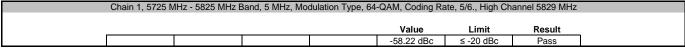


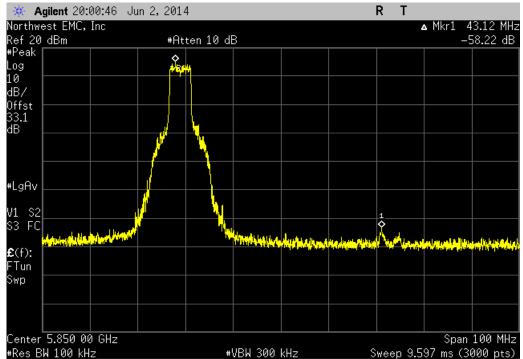
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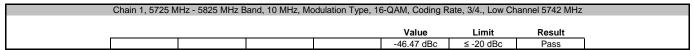


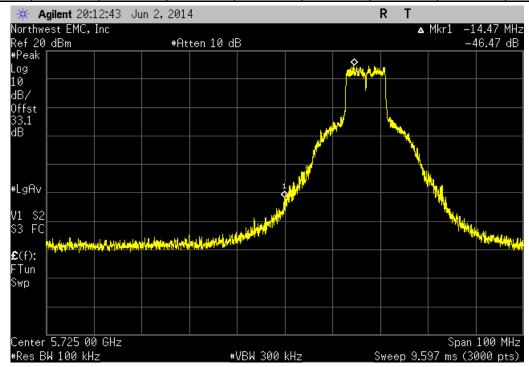




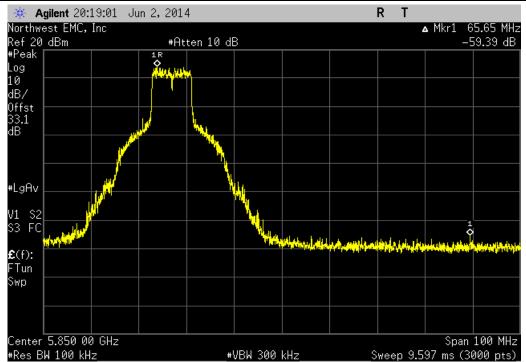
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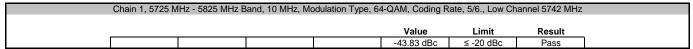


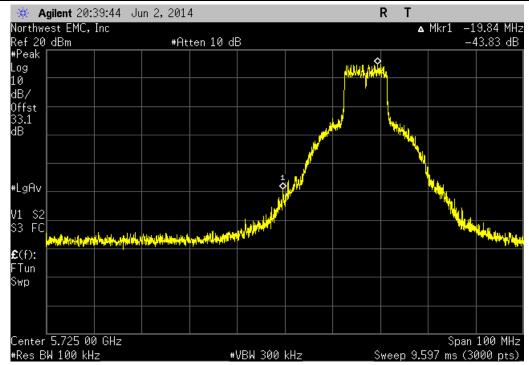
Value Limit Result

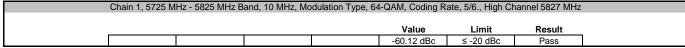


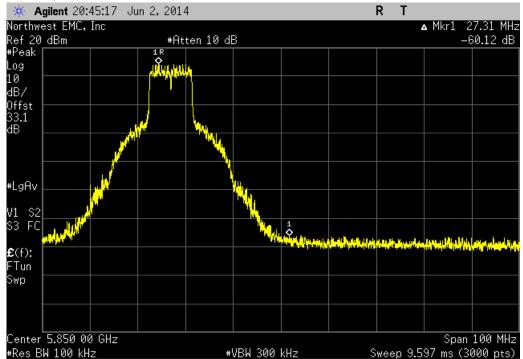
Report No. FREW0040 19/448











Report No. FREW0040 20/448



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

					Interval
Description	Manufacturer	Model	ID	Last Cal.	(mo)
Attenuator, 'Precision N'	S.M. Electronics	SA18N-06/SM4032	REE	10/20/2014	12
MXG Analog Signal Generator	Agilent	N5181A	TIG	3/28/2014	36
Power Meter	Gigatronics	8651A	SPM	9/17/2014	12
Power Sensor	Gigatronics	80701A	SPL	5/28/2014	12
EV06 Direct Connect Cable	ESM Cable Corp.	TT	ECA	NCR	0
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	7/30/2014	12
Spectrum Analyzer	Agilent	E4446A	AAQ	1/21/2014	12

TEST DESCRIPTION

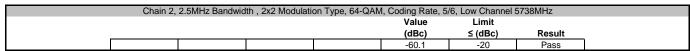
The spurious RF conducted emissions at the edges of the authorized bands were measured with the EUT set to low and high transmit frequencies in each available band. The channels closest to the band edges were selected. The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at the data rate(s) listed in the datasheet.

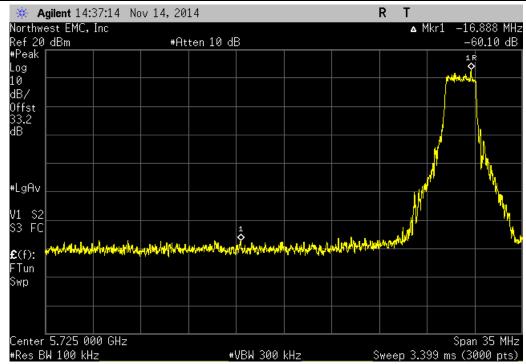
The spectrum was scanned below the lower band edge and above the higher band edge.



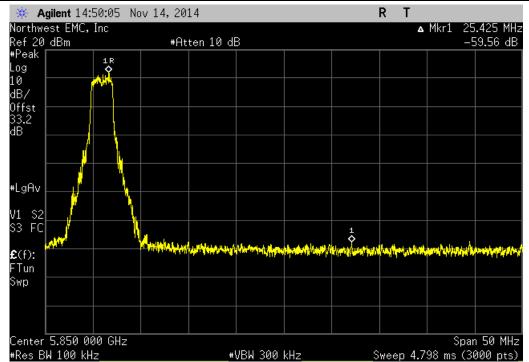
EUT:	: WavePoint - 5GHz Radio	(W5800-01)			Work Order	FREW0028	
Serial Number:	: 00:07:E7:A0:01:B6				Date	11/14/14	
Customer:	: FreeWave Technologies,	Inc.			Temperature	23.0°C	
Attendees:	None				Humidity	25%	
Project:	: None				Barometric Pres.	1012.64	
Tested by:	: Brandon Hobbs		Power:	110VAC/60Hz	Job Site:	EV06	
ST SPECIFICAT	TONS			Test Method			
C 15.247:2014				ANSI C63.10:2009			
MMENTS							
/IATIONS FROM	M TEST STANDARD						
one							
	1	Signature	Jan y	Jan			
	1	Signature	Juny	JA	Value (dBc)	Limit ≤ (dBc)	Result
nfiguration #		Signature	J. 7	Jan			Result
nfiguration #	2.5MHz Bandwidth	Signature	Jan X	Jal			Result
nfiguration #	2.5MHz Bandwidth	Signature Signature		Jal	(dBc)	≤ (dBc)	
nfiguration #	2.5MHz Bandwidth 2x2 Modulation	Signature on Type, 64-QAM, Coding Rate, 5/6 Low Channel 5738MHz		Jal	(dBc) -60.1	≤ (dBc) -20	Pass
nfiguration # ain 2	2.5MHz Bandwidth 2x2 Modulation	Signature Signature	Jmy	Jal	(dBc)	≤ (dBc)	
nfiguration #	2.5MHz Bandwidth 2x2 Modulation	Signature on Type, 64-QAM, Coding Rate, 5/6 Low Channel 5738MHz High Channel 5831MHz	J	Jal	(dBc) -60.1	≤ (dBc) -20	Pass
nfiguration # ain 2	2.5MHz Bandwidth 2x2 Modulation 5MHz Bandwidth 2x2 Modulation	Signature on Type, 64-QAM, Coding Rate, 5/6 Low Channel 5738MHz High Channel 5831MHz on Type, 64-QAM, Coding Rate, 5/6		Jal	(dBc) -60.1 -59.57	≤ (dBc) -20 -20	Pass Pass
nfiguration # ain 2	2.5MHz Bandwidth 2x2 Modulation 5MHz Bandwidth 2x2 Modulation	Signature on Type, 64-QAM, Coding Rate, 5/6 Low Channel 5738MHz High Channel 5831MHz		Jal	(dBc) -60.1	≤ (dBc) -20	Pass
nfiguration #	2.5MHz Bandwidth 2x2 Modulation 5MHz Bandwidth 2x2 Modulation	Signature on Type, 64-QAM, Coding Rate, 5/6 Low Channel 5738MHz High Channel 5831MHz on Type, 64-QAM, Coding Rate, 5/6 Low Channel 5739MHz		Ja	(dBc) -60.1 -59.57	≤ (dBc) -20 -20	Pass Pass Pass
onfiguration #	2.5MHz Bandwidth 2x2 Modulation 5MHz Bandwidth 2x2 Modulation	Signature on Type, 64-QAM, Coding Rate, 5/6 Low Channel 5738MHz High Channel 5831MHz on Type, 64-QAM, Coding Rate, 5/6 Low Channel 5739MHz		Jal	(dBc) -60.1 -59.57	≤ (dBc) -20 -20	Pass Pass Pass
nfiguration #	2.5MHz Bandwidth 2x2 Modulation 5MHz Bandwidth 2x2 Modulation 10MHz Bandwidth 2x2 Modulation	Signature on Type, 64-QAM, Coding Rate, 5/6 Low Channel 5738MHz High Channel 5831MHz on Type, 64-QAM, Coding Rate, 5/6 Low Channel 5739MHz High Channel 5829MHz		Jal	(dBc) -60.1 -59.57	≤ (dBc) -20 -20	Pass Pass Pass





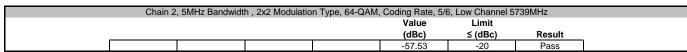


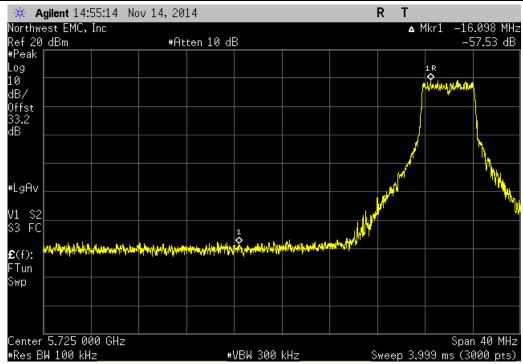
	Chain 2,	2.5MHz Bandwidt	th , 2x2 Modulation	on Type, 64-QAN	l, Coding Rate, 5/	6, High Channel	5831MHz
					Value	Limit	
					(dBc)	≤ (dBc)	Result
					-59.57	-20	Pass



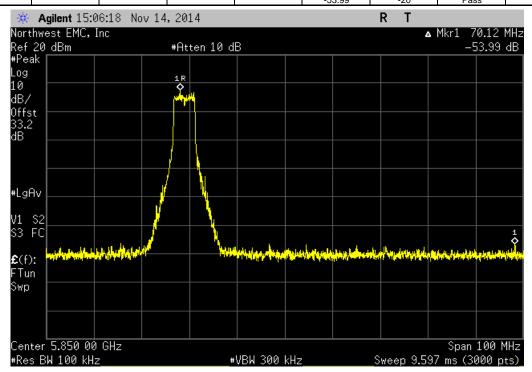
Report No. FREW0040 23/448





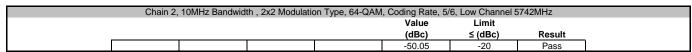


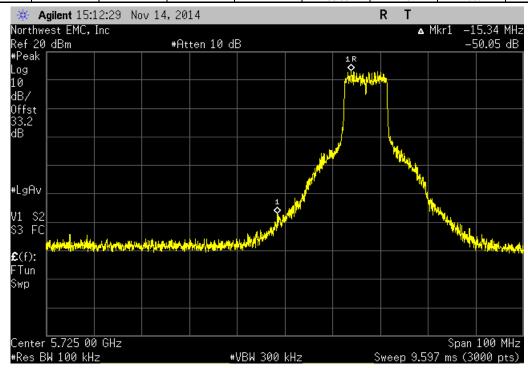
Chain 2	5MHz Bandwidth	, 2x2 Modulatio	n Type, 64-QAM,	Coding Rate, 5/6	6, High Channel 5	829MHz
				Value	Limit	
				(dBc)	≤ (dBc)	Result
				-53 00	-20	Pacc



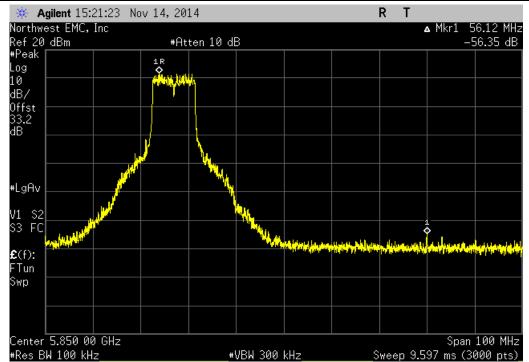
Report No. FREW0040 24/448







ı	Chain 2,	10MHz Bandwidt	h , 2x2 Modulatio	on Type, 64-QAM	, Coding Rate, 5/	6, High Channel :	5827MHz
ı					Value	Limit	
ı					(dBc)	≤ (dBc)	Result
					-56.35	-20	Pass



Report No. FREW0040 25/448



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

					Interval
Description	Manufacturer	Model	ID	Last Cal.	(mo)
Attenuator, 'Precision N'	S.M. Electronics	SA18N-06/SM4032	REE	10/20/2014	12
MXG Analog Signal Generator	Agilent	N5181A	TIG	3/28/2014	36
Power Meter	Gigatronics	8651A	SPM	9/17/2014	12
Power Sensor	Gigatronics	80701A	SPL	5/28/2014	12
EV06 Direct Connect Cable	ESM Cable Corp.	TT	ECA	NCR	0
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	7/30/2014	12
Spectrum Analyzer	Agilent	E4446A	AAQ	1/21/2014	12

TEST DESCRIPTION

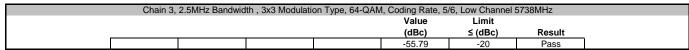
The spurious RF conducted emissions at the edges of the authorized bands were measured with the EUT set to low and high transmit frequencies in each available band. The channels closest to the band edges were selected. The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at the data rate(s) listed in the datasheet.

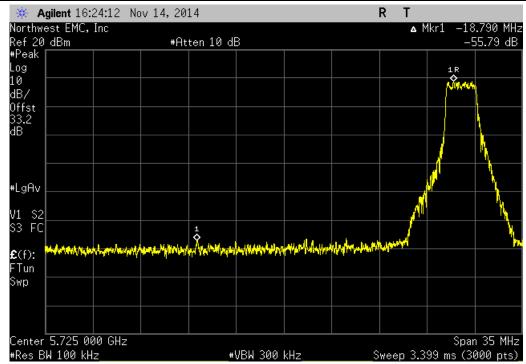
The spectrum was scanned below the lower band edge and above the higher band edge.



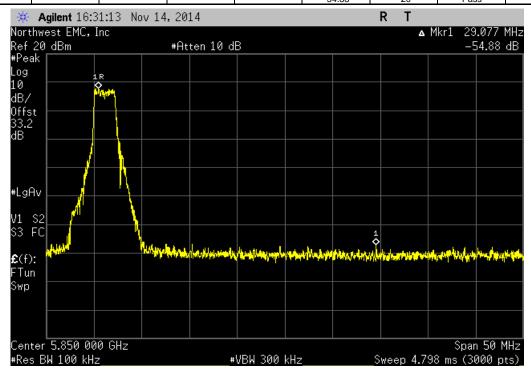
EUT:	: WavePoint - 5GHz Radio	(W5800-01)				Work Order:	FREW0041	
Serial Number:	: 00:07:E7:A0:01:B6					Date:	11/14/14	
Customer	: FreeWave Technologies,	Inc.				Temperature:	23.0°C	
Attendees:	: None					Humidity:	25%	
Project:	: None					Barometric Pres.:	1012.64	
	: Brandon Hobbs			110VAC/60Hz		Job Site:	EV06	
ST SPECIFICAT	TIONS			Test Method				
C 15.247:2014				ANSI C63.10:2009				
MMENTS								
High and Low	Channels were measured	using the worst case modulation for	and for 8011(n) MIM) modes. An additional 40GF	IZ DC block and	10dB 5watt attenuater were u	sed inline for all me	easurements
e while under	test. Please reference the p	power table for power settings used	while under test.					
	M TEST STANDARD							
ne								
			_	<i>/</i>				
onfiguration #	1		7	1-1				
nfiguration #	1	Signature	Fry	Jal				
nfiguration #	1	Signature	Jany	Jan		Value	Limit	
nfiguration #	1	Signature	Jany	Jal		Value (dBc)	Limit ≤ (dBc)	Result
	· ·	Signature	J. Y	Jan				Result
	2.5MHz Bandwidth	Signature /	Jay	Jan				Result
	2.5MHz Bandwidth	Signature Signature	Jany	JM		(dBc)	≤ (dBc)	
	2.5MHz Bandwidth 3x3 Modulatio	Signature on Type, 64-QAM, Coding Rate, 5/6 Low Channel 5738MHz		JM		(dBc) -55.79	≤ (dBc)	Pass
	2.5MHz Bandwidth 3x3 Modulation	Signature Signature	J. Y	Jal		(dBc)	≤ (dBc)	
onfiguration #	2.5MHz Bandwidth 3x3 Modulatio	Signature on Type, 64-QAM, Coding Rate, 5/6 Low Channel 5738MHz High Channel 5831MHz	J. Y	J		(dBc) -55.79	≤ (dBc)	Pass
	2.5MHz Bandwidth 3x3 Modulatio 5MHz Bandwidth 3x3 Modulatio	Signature on Type, 64-QAM, Coding Rate, 5/6 Low Channel 5738MHz High Channel 5831MHz on Type, 64-QAM, Coding Rate, 5/6	Jany	JA		(dBc) -55.79	≤ (dBc)	Pass
	2.5MHz Bandwidth 3x3 Modulatio 5MHz Bandwidth 3x3 Modulatio	Signature on Type, 64-QAM, Coding Rate, 5/6 Low Channel 5738MHz High Channel 5831MHz	Jany.	JA		(dBc) -55.79	≤ (dBc)	Pass
	2.5MHz Bandwidth 3x3 Modulatio 5MHz Bandwidth 3x3 Modulatio	Signature on Type, 64-QAM, Coding Rate, 5/6 Low Channel 5738MHz High Channel 5831MHz on Type, 64-QAM, Coding Rate, 5/6	Jan y	J		(dBc) -55.79 -54.88	≤ (dBc) -20 -20	Pass Pass
	2.5MHz Bandwidth 3x3 Modulatio 5MHz Bandwidth 3x3 Modulatio	Signature on Type, 64-QAM, Coding Rate, 5/6 Low Channel 5738MHz High Channel 5831MHz on Type, 64-QAM, Coding Rate, 5/6 Low Channel 5739MHz High Channel 5829MHz		Jal		(dBc) -55.79 -54.88	-20 -20 -20	Pass Pass Pass
	2.5MHz Bandwidth 3x3 Modulatio 5MHz Bandwidth 3x3 Modulatio	Signature on Type, 64-QAM, Coding Rate, 5/6 Low Channel 5738MHz High Channel 5831MHz on Type, 64-QAM, Coding Rate, 5/6 Low Channel 5739MHz		JA		(dBc) -55.79 -54.88	-20 -20 -20	Pass Pass Pass
	2.5MHz Bandwidth 3x3 Modulation 5MHz Bandwidth 3x3 Modulation 10MHz Bandwidth 3x3 Modulation	Signature on Type, 64-QAM, Coding Rate, 5/6 Low Channel 5738MHz High Channel 5831MHz on Type, 64-QAM, Coding Rate, 5/6 Low Channel 5739MHz High Channel 5829MHz		JA		(dBc) -55.79 -54.88	-20 -20 -20	Pass Pass Pass





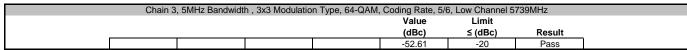


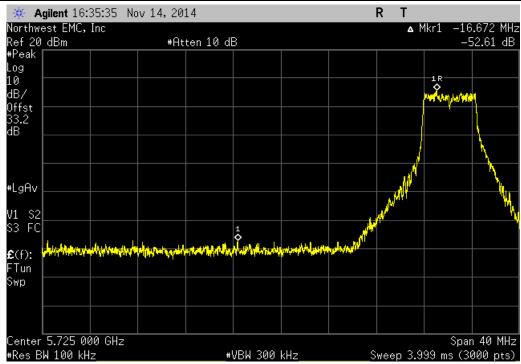
Chain 3,	2.5MHz Bandwidt	h, 3x3 Modulation	on Type, 64-QAN	, Coding Rate, 5/	6, High Channel	5831MHz
				Value	Limit	
				(dBc)	≤ (dBc)	Result
				-54 88	-20	Pass



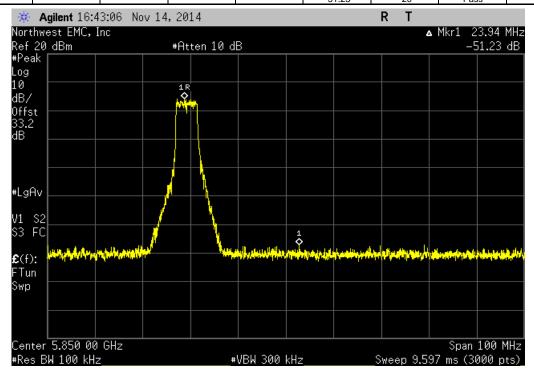
Report No. FREW0040 28/448





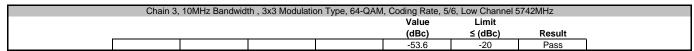


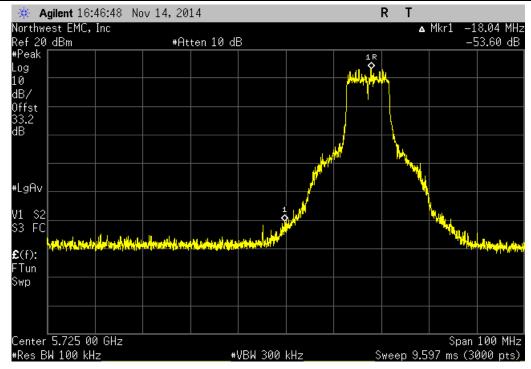
Chain 3	5MHz Bandwidth	, 3x3 Modulation	n Type, 64-QAM,	Coding Rate, 5/6	6, High Channel 5	829MHz
				Value	Limit	
				(dBc)	≤ (dBc)	Result
				-51 23	-20	Pass



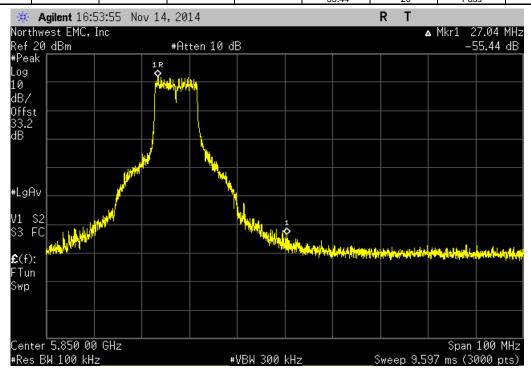
Report No. FREW0040 29/448







	Chain 3,	10MHz Bandwidt	h, 3x3 Modulatio	n Type, 64-QAM	Coding Rate, 5/	6, High Channel 5	5827MHz
					Value	Limit	
					(dBc)	≤ (dBc)	Result
i					-55 44	-20	Pass



Report No. FREW0040 30/448



SPURIOUS CONDUCTED EMISSIONS - SISO

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

					Interval
Description	Manufacturer	Model	ID	Last Cal.	(mo)
40GHz DC Block	Miteq	DCB4000	AMD	4/28/2014	12
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	7/30/2013	12
EV06 Direct Connect Cable	ESM Cable Corp.	TT	ECA	NCR	0
Attenuator 6 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-6	AUX	7/30/2013	12
Power Meter	Agilent	N1913A	SQR	4/29/2013	36
Power Sensor	Agilent	E9300H	SQO	4/29/2013	36
Spectrum Analyzer	Agilent	E4446A	AAQ	1/21/2014	24
MXG MW Analog Signal Generator 40 Gig	Agilent	N5183A	TID	9/19/2011	36

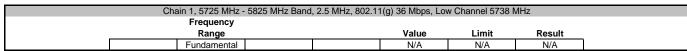
TEST DESCRIPTION

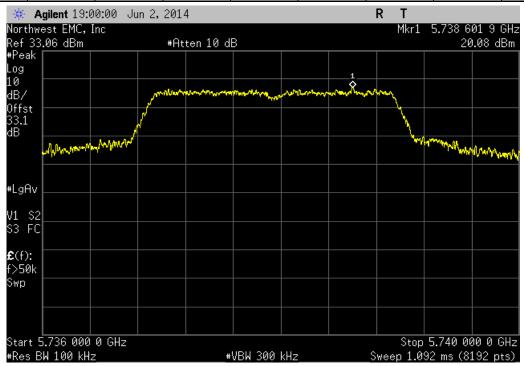
The spurious RF conducted emissions were measured with the EUT set to low, medium and high transmit frequencies. The measurements were made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at the data rate(s) listed in the datasheet. For each transmit frequency, the spectrum was scanned throughout the specified frequency range.

	int - 5GHz Radi	io (W5800-01)		Work Order: FF		
Serial Number: 00:07:E7 Customer: FreeWay		s, Inc.		Date: 06 Temperature: 22	/03/14	
Attendees: Dean Bu Project: None				Humidity: 43 Barometric Pres.: 10	1%	-
Tested by: Brandor	Hobbs, Jared	Ison	Power: 110VAC/60Hz Test Method	Job Site: E		
CC 15.247:2014			ANSI C63.10:2009			
OMMENTS						
he High and Low Channel			or 8011a/n modes. An additional 10dB 5watt atten	uater was used inline for all measurem	ents made while	under test.
	-	r settings used while under test.				
EVIATIONS FROM TEST S	TANDARD					
onfiguration #	1					
		Signature	Frequency			
hain 1			Range	Value	Limit	Result
	lz - 5825 MHz B	and				
	2.5 MHz	802.11(q) 36 Mbps				
		Low Channel 5738 MHz Low Channel 5738 MHz	Fundamental 30 MHz - 12.5 GHz	N/A -63.31 dBc	N/A ≤ -20 dBc	N/A Pass
		Low Channel 5738 MHz Low Channel 5738 MHz	12.5 GHz - 25 GHz 25 GHz - 32 GHz	-56.12 dBc -55.31 dBc	≤ -20 dBc ≤ -20 dBc	Pass Pass
		Low Channel 5738 MHz	32 GHz - 40 GHz	-45.8 dBc	≤ -20 dBc	Pass
		Mid Channel 5783 MHz Mid Channel 5783 MHz	Fundamental 30 MHz - 12.5 GHz	N/A -61.07 dBc	N/A ≤ -20 dBc	N/A Pass
		Mid Channel 5783 MHz	12.5 GHz - 25 GHz	-54.41 dBc	≤ -20 dBc	Pass
		Mid Channel 5783 MHz Mid Channel 5783 MHz	25 GHz - 32 GHz 32 GHz - 40 GHz	-54.46 dBc -45.29 dBc	≤ -20 dBc ≤ -20 dBc	Pass Pass
		High Channel 5831 MHz High Channel 5831 MHz	Fundamental 30 MHz - 12.5 GHz	N/A -60.45 dBc	N/A ≤ -20 dBc	N/A Pass
		High Channel 5831 MHz	12.5 GHz - 25 GHz	-55.53 dBc	≤ -20 dBc	Pass
		High Channel 5831 MHz High Channel 5831 MHz	25 GHz - 32 GHz 32 GHz - 40 GHz	-54.2 dBc -44.86 dBc	≤ -20 dBc ≤ -20 dBc	Pass Pass
		802.11(n) MCS7 - UNII Low Channel 5738 MHz	Fundamental	N/A	N/A	N/A
		Low Channel 5738 MHz	30 MHz - 12.5 GHz	-64.01 dBc	≤ -20 dBc	Pass
		Low Channel 5738 MHz Low Channel 5738 MHz	12.5 GHz - 25 GHz 25 GHz - 32 GHz	-57.28 dBc -55.93 dBc	≤ -20 dBc ≤ -20 dBc	Pass Pass
		Low Channel 5738 MHz Mid Channel 5783 MHz	32 GHz - 40 GHz Fundamental	-45.73 dBc N/A	≤ -20 dBc N/A	Pass N/A
		Mid Channel 5783 MHz	30 MHz - 12.5 GHz	-55.35 dBc	≤ -20 dBc	Pass
		Mid Channel 5783 MHz Mid Channel 5783 MHz	12.5 GHz - 25 GHz 25 GHz - 32 GHz	-48.24 dBc -47.13 dBc	≤ -20 dBc ≤ -20 dBc	Pass Pass
		Mid Channel 5783 MHz	32 GHz - 40 GHz	-38.1 dBc	≤ -20 dBc	Pass
		High Channel 5831 MHz High Channel 5831 MHz	Fundamental 30 MHz - 12.5 GHz	N/A -60.77 dBc	N/A ≤ -20 dBc	N/A Pass
		High Channel 5831 MHz High Channel 5831 MHz	12.5 GHz - 25 GHz 25 GHz - 32 GHz	-54.32 dBc -53.83 dBc	≤ -20 dBc ≤ -20 dBc	Pass Pass
		High Channel 5831 MHz	32 GHz - 40 GHz	-44.25 dBc	≤ -20 dBc	Pass
	5 MHz	802.11(g) 36 Mbps				
		Low Channel 5739 MHz Low Channel 5739 MHz	Fundamental 30 MHz - 12.5 GHz	N/A -58.27 dBc	N/A ≤ -20 dBc	N/A Pass
		Low Channel 5739 MHz	12.5 GHz - 25 GHz	-51.76 dBc	≤ -20 dBc	Pass
		Low Channel 5739 MHz Low Channel 5739 MHz	25 GHz - 32 GHz 32 GHz - 40 GHz	-51.43 dBc -41.85 dBc	≤ -20 dBc ≤ -20 dBc	Pass Pass
		Mid Channel 5784 MHz Mid Channel 5784 MHz	Fundamental 30 MHz - 12.5 GHz	N/A -55.99 dBc	N/A ≤ -20 dBc	N/A Pass
		Mid Channel 5784 MHz	12.5 GHz - 25 GHz	-51.41 dBc	≤ -20 dBc	Pass
		Mid Channel 5784 MHz Mid Channel 5784 MHz	25 GHz - 32 GHz 32 GHz - 40 GHz	-50.13 dBc -40.92 dBc	≤ -20 dBc ≤ -20 dBc	Pass Pass
		High Channel 5829 MHz High Channel 5829 MHz	Fundamental 30 MHz - 12.5 GHz	N/A -56.81 dBc	N/A ≤ -20 dBc	N/A Pass
		High Channel 5829 MHz	12.5 GHz - 25 GHz	-51.69 dBc	≤ -20 dBc	Pass
		High Channel 5829 MHz High Channel 5829 MHz	25 GHz - 32 GHz 32 GHz - 40 GHz	-50.52 dBc -40.93 dBc	≤ -20 dBc ≤ -20 dBc	Pass Pass
		802.11(n) MCS7 - UNII				
		Low Channel 5739 MHz Low Channel 5739 MHz	Fundamental 30 MHz - 12.5 GHz	N/A -59.06 dBc	N/A ≤ -20 dBc	N/A Pass
		Low Channel 5739 MHz Low Channel 5739 MHz	12.5 GHz - 25 GHz 25 GHz - 32 GHz	-52.87 dBc -51.85 dBc	≤ -20 dBc ≤ -20 dBc	Pass Pass
		Low Channel 5739 MHz	32 GHz - 40 GHz	-42.41 dBc	≤ -20 dBc	Pass
		Mid Channel 5784 MHz Mid Channel 5784 MHz	Fundamental 30 MHz - 12.5 GHz	N/A -52.36 dBc	N/A ≤ -20 dBc	N/A Pass
		Mid Channel 5784 MHz Mid Channel 5784 MHz	12.5 GHz - 25 GHz 25 GHz - 32 GHz	-45.21 dBc -43.56 dBc	≤ -20 dBc ≤ -20 dBc	Pass Pass
		Mid Channel 5784 MHz	32 GHz - 40 GHz	-34.92 dBc	≤ -20 dBc	Pass
		High Channel 5829 MHz High Channel 5829 MHz	Fundamental 30 MHz - 12.5 GHz	N/A -56.02 dBc	N/A ≤ -20 dBc	N/A Pass
		High Channel 5829 MHz High Channel 5829 MHz	12.5 GHz - 25 GHz 25 GHz - 32 GHz	-50.82 dBc -48.77 dBc	≤ -20 dBc ≤ -20 dBc	Pass
		High Channel 5829 MHz High Channel 5829 MHz	25 GHz - 32 GHz 32 GHz - 40 GHz	-48.77 dBc -41.21 dBc	≤ -20 dBc ≤ -20 dBc	Pass Pass
	10 MHz	802.11(g) 36 Mbps				
		Low Channel 5742 MHz Low Channel 5742 MHz	Fundamental	N/A -55.95 dBc	N/A ≤ -20 dBc	N/A Pass
		Low Channel 5742 MHz	30 MHz - 12.5 GHz 12.5 GHz - 25 GHz	-51.79 dBc	≤ -20 dBc	Pass
		Low Channel 5742 MHz Low Channel 5742 MHz	25 GHz - 32 GHz 32 GHz - 40 GHz	-49.96 dBc -40.36 dBc	≤ -20 dBc ≤ -20 dBc	Pass Pass
		Mid Channel 5782 MHz	Fundamental	N/A	N/A	N/A
		Mid Channel 5782 MHz Mid Channel 5782 MHz	30 MHz - 12.5 GHz 12.5 GHz - 25 GHz	-56.66 dBc -50.37 dBc	≤ -20 dBc ≤ -20 dBc	Pass Pass
		Mid Channel 5782 MHz Mid Channel 5782 MHz	25 GHz - 32 GHz 32 GHz - 40 GHz	-48.86 dBc -38.8 dBc	≤ -20 dBc ≤ -20 dBc	Pass Pass
		High Channel 5827 MHz	Fundamental	N/A	N/A	N/A
		High Channel 5827 MHz High Channel 5827 MHz	30 MHz - 12.5 GHz 12.5 GHz - 25 GHz	-52.51 dBc -49.66 dBc	≤ -20 dBc ≤ -20 dBc	Pass Pass
		High Channel 5827 MHz High Channel 5827 MHz	25 GHz - 32 GHz 32 GHz - 40 GHz	-48.87 dBc -40.06 dBc	≤ -20 dBc ≤ -20 dBc	Pass Pass
		802.11(n) MCS7 - UNII				
		Low Channel 5742 MHz Low Channel 5742 MHz	Fundamental 30 MHz - 12.5 GHz	N/A -56.16 dBc	N/A ≤ -20 dBc	N/A Pass
		Low Channel 5742 MHz	12.5 GHz - 25 GHz	-51.04 dBc	≤ -20 dBc	Pass
		Low Channel 5742 MHz Low Channel 5742 MHz	25 GHz - 32 GHz 32 GHz - 40 GHz	-50.1 dBc -40.92 dBc	≤ -20 dBc ≤ -20 dBc	Pass Pass
		Mid Channel 5782 MHz Mid Channel 5782 MHz	Fundamental 30 MHz - 12.5 GHz	N/A -55.67 dBc	N/A ≤ -20 dBc	N/A Pass
		Mid Channel 5782 MHz	12.5 GHz - 25 GHz	-50.6 dBc	≤ -20 dBc	Pass
		Mid Channel 5782 MHz Mid Channel 5782 MHz	25 GHz - 32 GHz 32 GHz - 40 GHz	-49.47 dBc -39.21 dBc	≤ -20 dBc ≤ -20 dBc	Pass Pass
		High Channel 5827 MHz	Fundamental	N/A	N/A	N/A
			20 MHz 42 5 OH-	E0 40 4D	< 20 dD -	D
		High Channel 5827 MHz High Channel 5827 MHz High Channel 5827 MHz	30 MHz - 12.5 GHz 12.5 GHz - 25 GHz 25 GHz - 32 GHz	-56.43 dBc -50.81 dBc -49.52 dBc	≤ -20 dBc ≤ -20 dBc ≤ -20 dBc	Pass Pass Pass

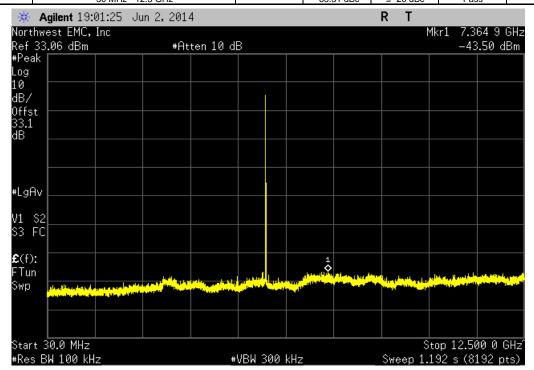








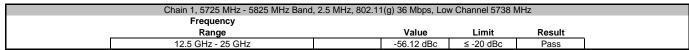
Chain 1, 5725 MHz - 5825 MHz Band	l, 2.5 MHz, 802.11	(g) 36 Mbps, Lov	v Channel 5738 M	1Hz
Frequency				
Range		Value	Limit	Result
30 MHz - 12 5 GHz		-63 31 dBc	< -20 dBc	Pass

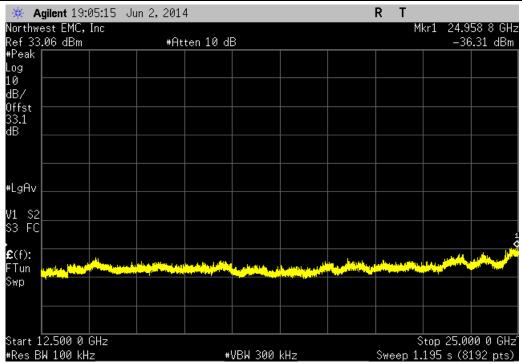


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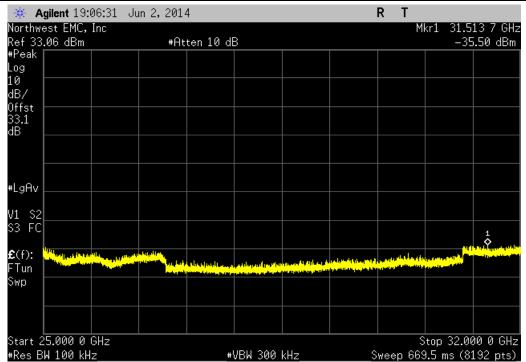






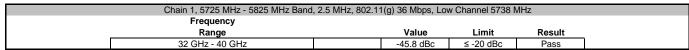


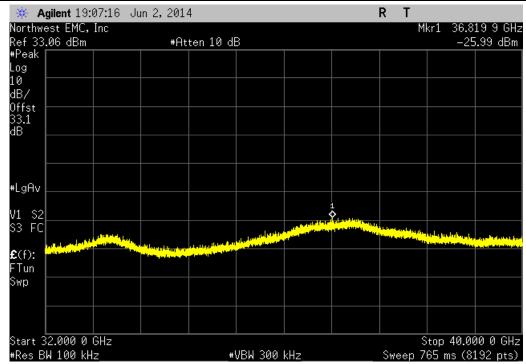
Chain 1, 5725 MHz - 5825 MHz Band,	, 2.5 MHz, 802.11(g) 36 Mbps, L	ow Channel 5738 I	MHz	
Frequency				
Range	Value	Limit	Result	
25 GHz - 32 GHz	-55.31 dBc	≤ -20 dBc	Pass	



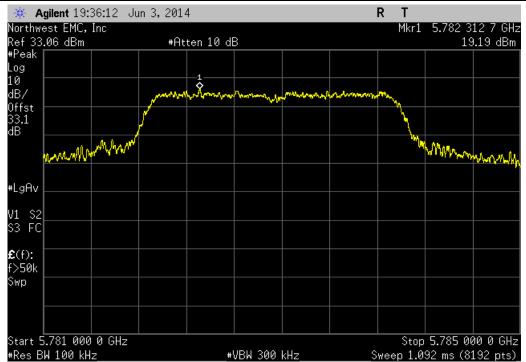






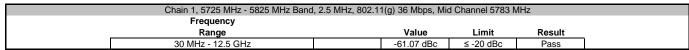


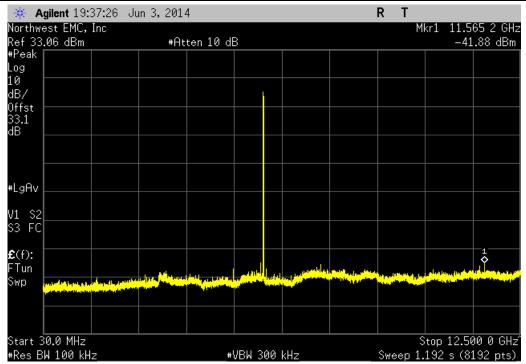
Chain 1, 5725 MHz - 5825 MHz Bar	d, 2.5 MHz, 802.1	1(g) 36 Mbps, Mi	d Channel 5783 N	ЛHz
Frequency				
Range		Value	Limit	Result
Fundamental		N/A	N/A	N/A



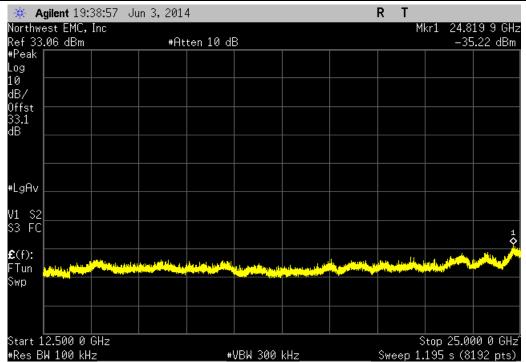






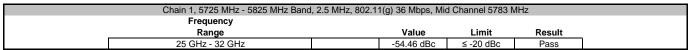


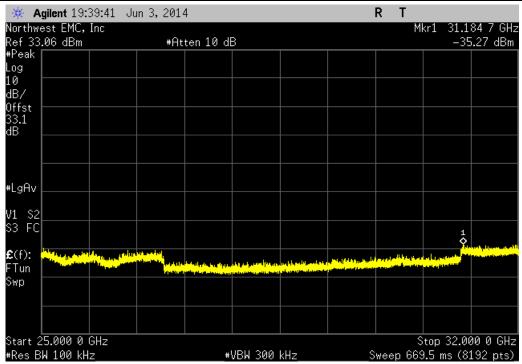
Chain 1, 5725 MHz - 5825 MHz Band	, 2.5 MHz, 802.11(g)	36 Mbps, Mic	d Channel 5783 M	ИHz	
Frequency					
Range		Value	Limit	Result	
12.5 GHz - 25 GHz		-54.41 dBc	≤ -20 dBc	Pass	



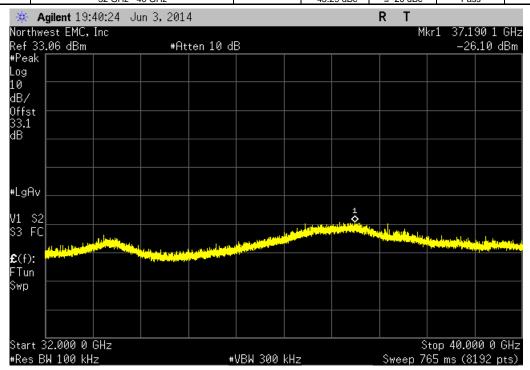








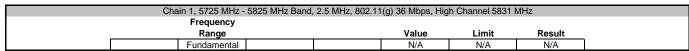
Chain 1, 5725 MHz - 5825 MHz Band	d, 2.5 MHz, 802.11(g) 36 Mbps, N	lid Channel 5783 N	ИНz
Frequency			
Range	Value	Limit	Result
32 GHz - 40 GHz	-45 29 dBc	< -20 dBc	Pagg

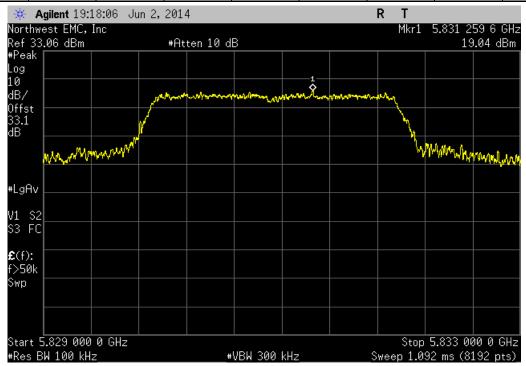


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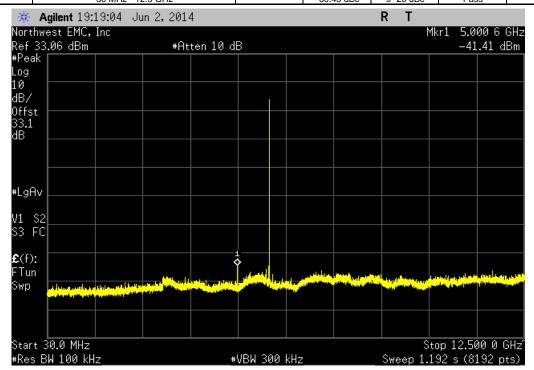








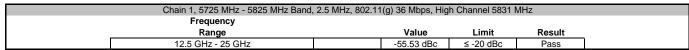
Chain 1, 5725 MHz - 5825 MHz Band	I, 2.5 MHz, 802.11(g)	36 Mbps, Higl	n Channel 5831 M	1Hz			
Frequency							
Range		Value	Limit	Result			
30 MHz - 12 5 GHz		-60 45 dBc	< -20 dBc	Pass			

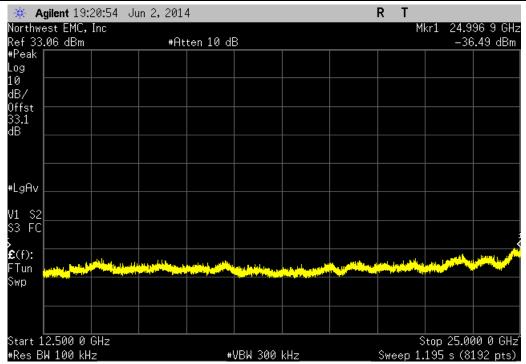


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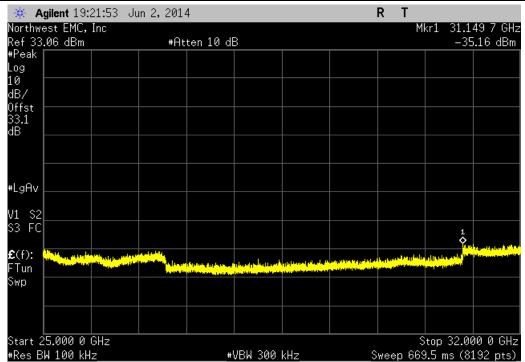






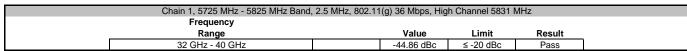


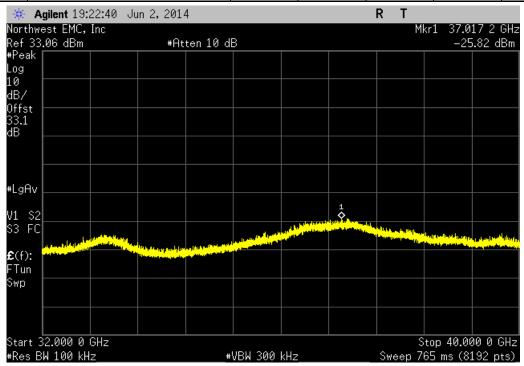
	Chain 1, 5725 MHz - 5825 MHz Band,	2.5 MHz, 802.11(g	g) 36 Mbps, Hig	h Channel 5831 N	ЛHz			
	Frequency							
	Range		Value	Limit	Result			
1	25 GHz - 32 GHz		-54.2 dBc	≤ -20 dBc	Pass			



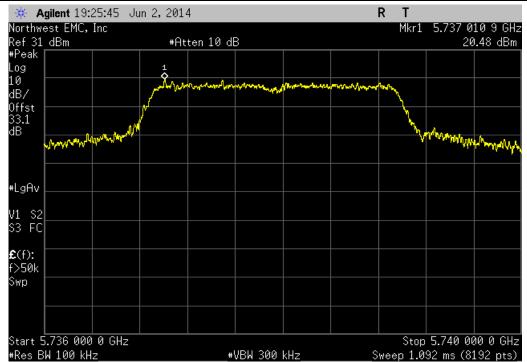
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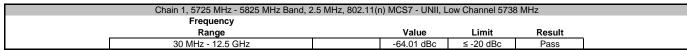
Chain 1, 5725	MHz - 5825 MHz Band, 2.5 MF	Hz, 802.11(n) MCS7 - UNII, L	ow Channel 5738	3 MHz	
Frequ	ency				
Rar	ge	Value	Limit	Result	
Funda	nental	N/A	N/A	N/A	

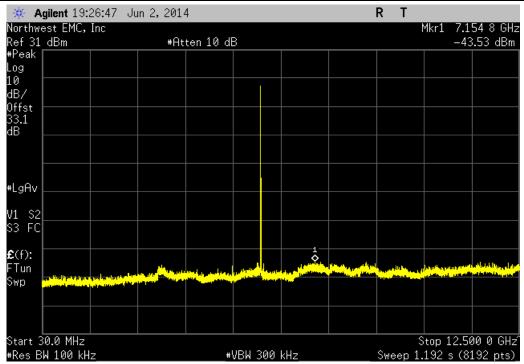


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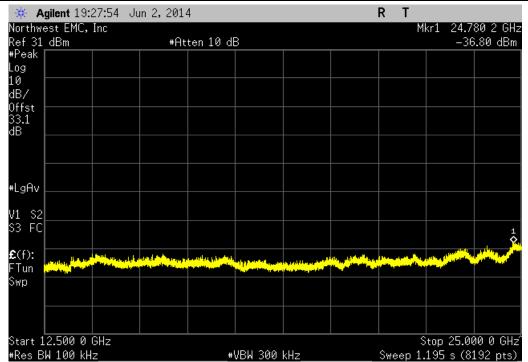






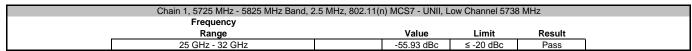


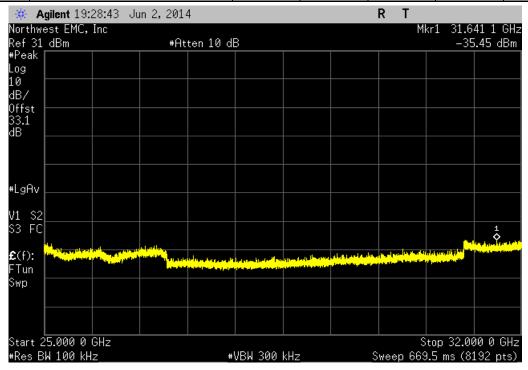
Chain 1, 5725 MHz - 5825 MHz Band, 2	5 MHz, 802.11(r	n) MCS7 - UNII, L	ow Channel 5738	3 MHz	
Frequency					
Range		Value	Limit	Result	
12.5 GHz - 25 GHz		-57.28 dBc	≤ -20 dBc	Pass	



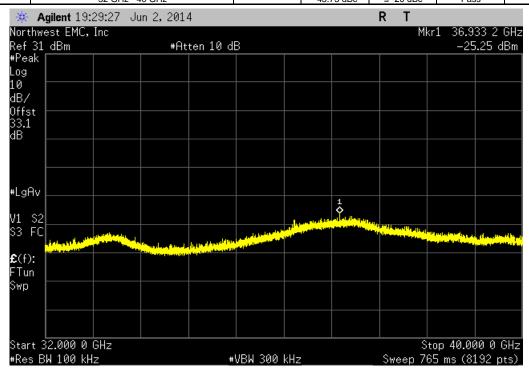
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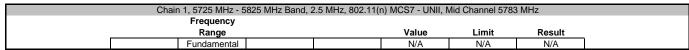
Chain 1, 5725 MHz - 5825 MHz Band,	2.5 MHz, 802.11(n) N	MCS7 - UNII, L	ow Channel 5738	MHz
Frequency				
Range		Value	Limit	Result
32 GHz - 40 GHz		-45 73 dBc	< -20 dBc	Pass

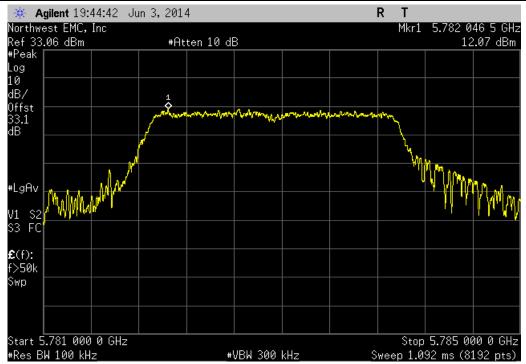


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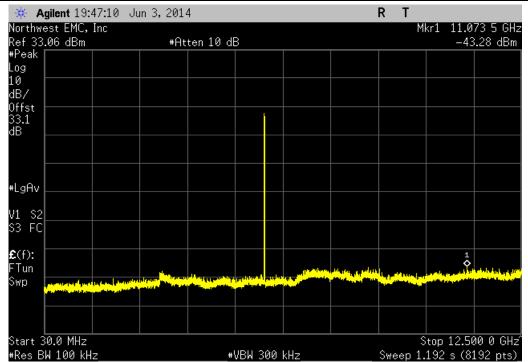




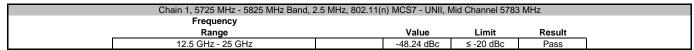


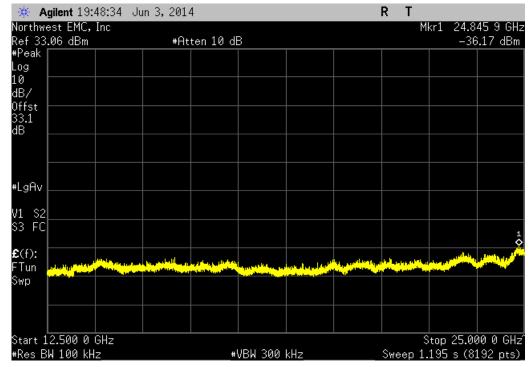


Chain 1, 5725 MHz - 5825 MHz Band, 2	2.5 MHz, 802.11(r	n) MCS7 - UNII, N	Aid Channel 5783	3 MHz	
Frequency					
Range		Value	Limit	Result	
30 MHz - 12.5 GHz		-55.35 dBc	≤ -20 dBc	Pass	

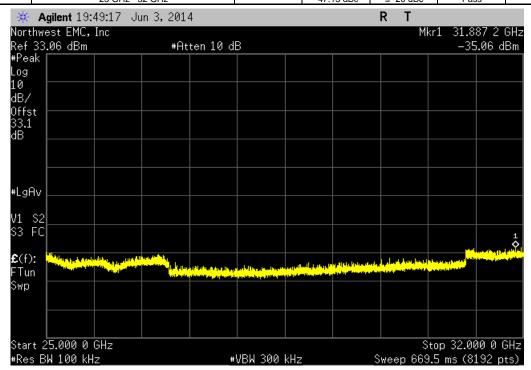


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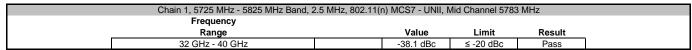
Chain 1, 5725 MHz - 5825 MHz Band, 2.5 MHz, 802.11(n) MCS7 - UNII, Mid Channel 5783 MHz							
Frequency							
Range	Value	Limit	Result				
25 GHz - 32 GHz	-47 13 dBc	< -20 dBc	Pass				

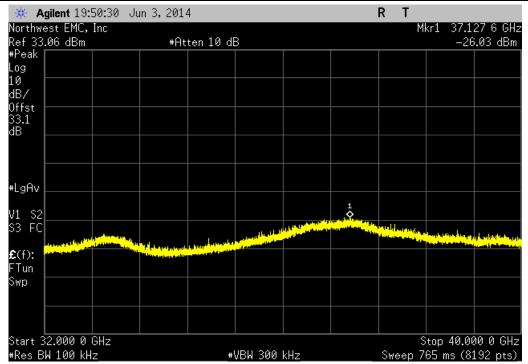


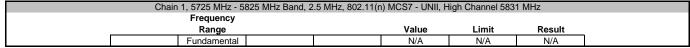
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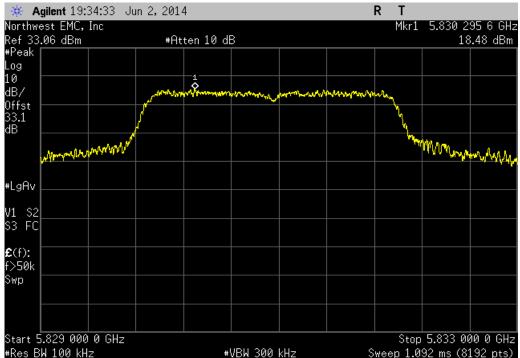








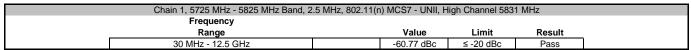


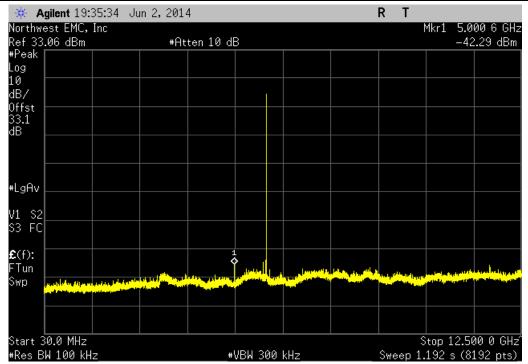


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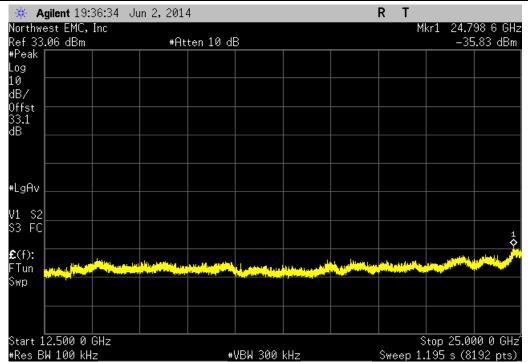








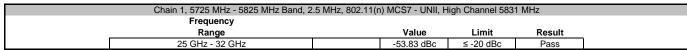
Chain 1, 5725 MHz - 5825 MHz Band, 2	.5 MHz, 802.11(n) MCS7 - UNII, H	ligh Channel 583 [.]	1 MHz			
Frequency							
Range		Value	Limit	Result			
12.5 GHz - 25 GHz		-54.32 dBc	≤ -20 dBc	Pass			

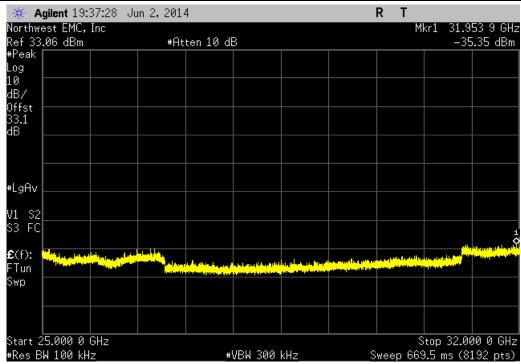


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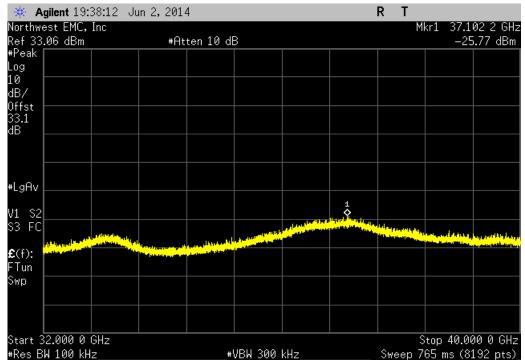








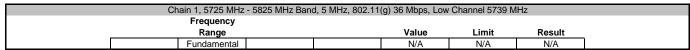
Chain 1, 5725 MHz - 5825 MHz Band, 2.5 MHz, 802.11(n) MCS7 - UNII, High Channel 5831 MHz								
Frequency								
Range	Va	lue	Limit	Result				
32 GHz - 40 GHz	-44.2	5 dBc	≤ -20 dBc	Pass				

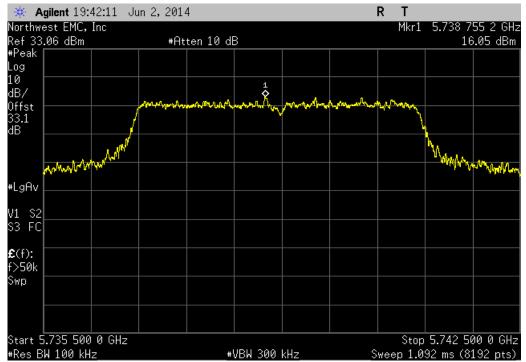


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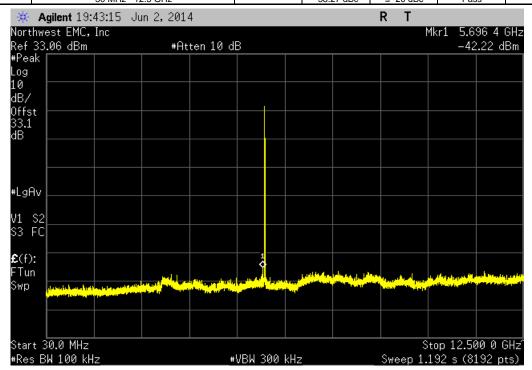






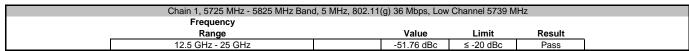


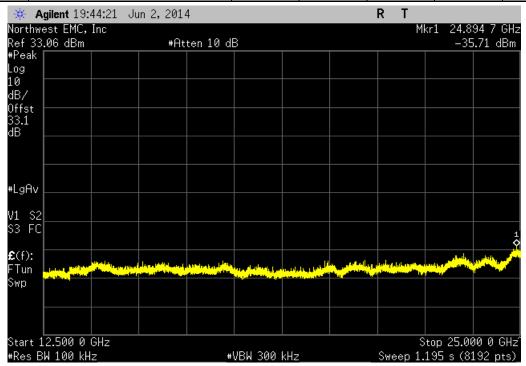
Chain 1, 5725 MHz - 5825 MHz Ban	d, 5 MHz, 802.11((g) 36 Mbps, Low	Channel 5739 MI	Hz
Frequency				
Range		Value	Limit	Result
30 MHz - 12 5 GHz		-58 27 dBc	< -20 dBc	Pass



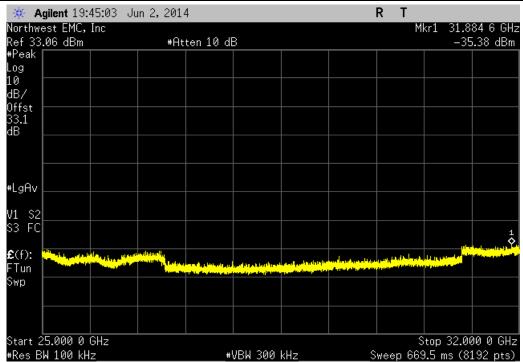
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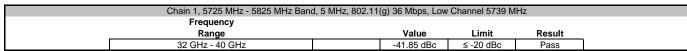


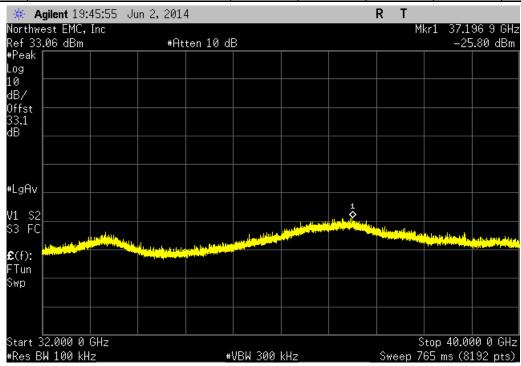
Chain 1, 5725 MHz - 5825 MHz Band	d, 5 MHz, 802.11(g) 36 Mbps, Low	Channel 5739 M	Hz	
Frequency					
Range		Value	Limit	Result	
25 GHz - 32 GHz		-51.43 dBc	≤ -20 dBc	Pass	

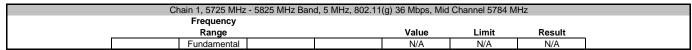


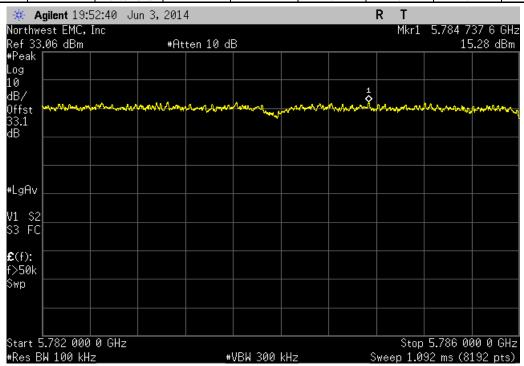
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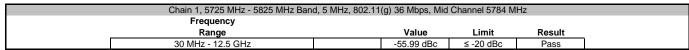


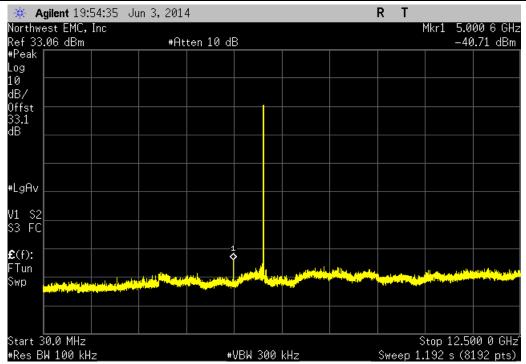




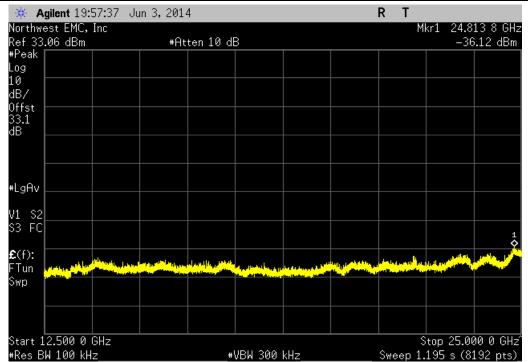


NORTHWEST

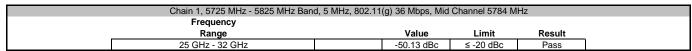


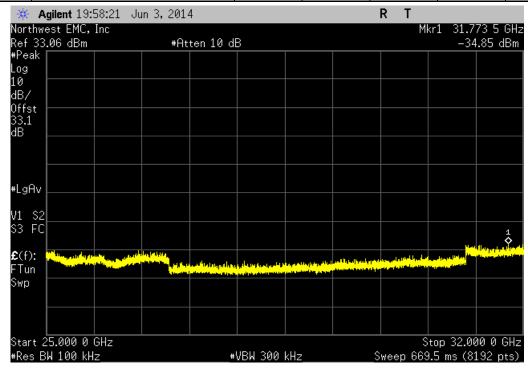


Chain 1, 5725 MHz - 5825 MHz Band	d, 5 MHz, 802.11(g) 36 Mbps, Mid	Channel 5784 M	Hz	
Frequency					
Range		Value	Limit	Result	
12.5 GHz - 25 GHz		-51.41 dBc	≤ -20 dBc	Pass	

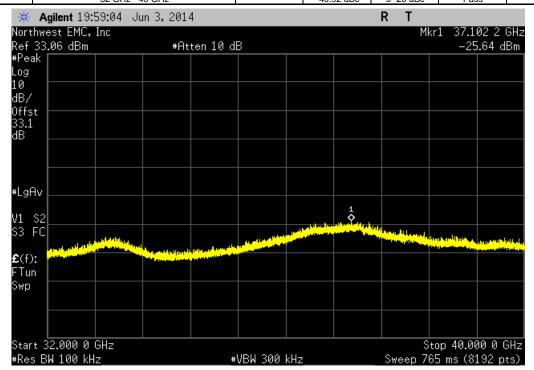




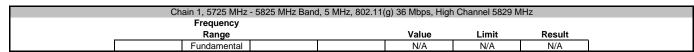


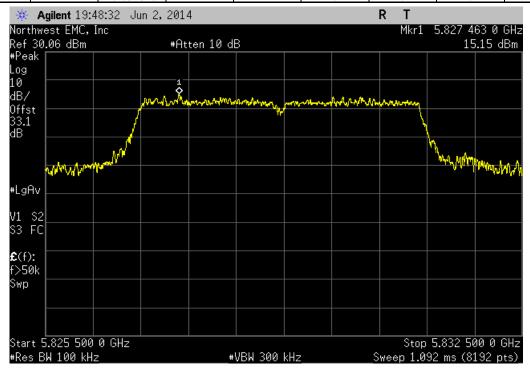


Chain 1, 572	5 MHz - 5825 MHz Band, 5 MHz, 802.1	1(g) 36 Mbps, Mid	Channel 5784 MI	Hz
Freque	псу			
Rang	e	Value	Limit	Result
32 GHz - 4	0 GHz	-40 92 dBc	< -20 dBc	Pass

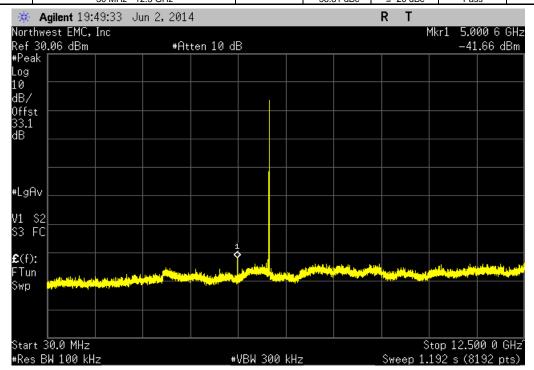






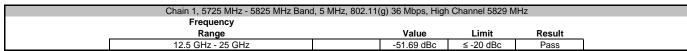


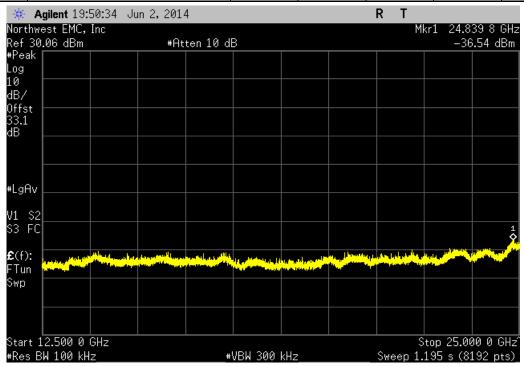
Chain 1,	5725 MHz - 5825 MHz Band, 5 MHz,	802.11(g) 36 Mbps, High	Channel 5829 M	Hz
Fre	quency			
F	ange	Value	Limit	Result
30 MH	- 12 5 GHz	-56.81 dBc	< -20 dBc	Pass



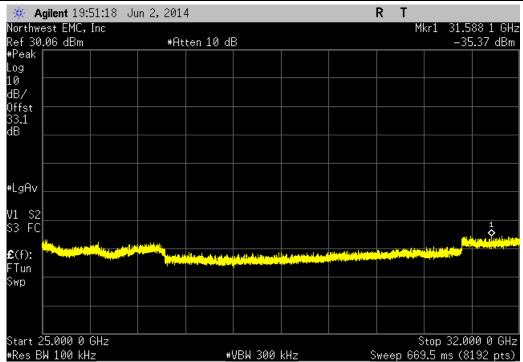
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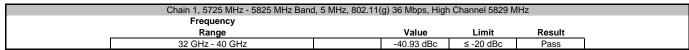


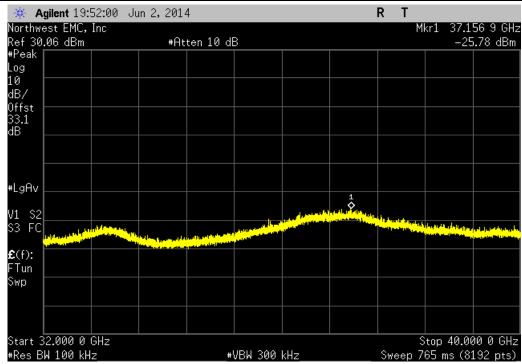
Chain 1, 5725 MHz - 5825 MHz Band	l, 5 MHz, 802.11(g) 36 Mbps, High	n Channel 5829 M	lHz	
Frequency					
Range		Value	Limit	Result	
25 GHz - 32 GHz		-50.52 dBc	≤ -20 dBc	Pass	1

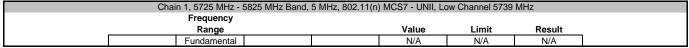


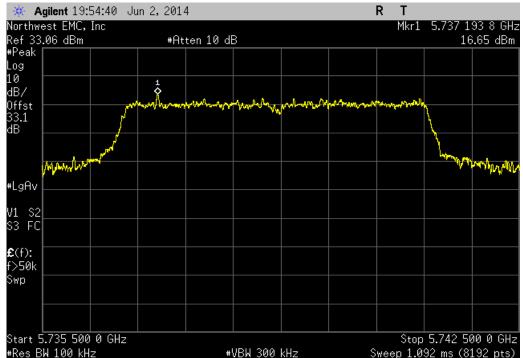






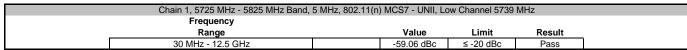


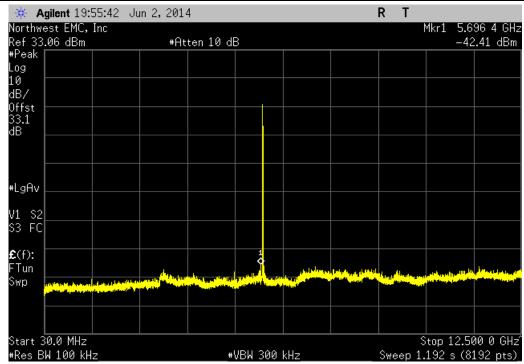




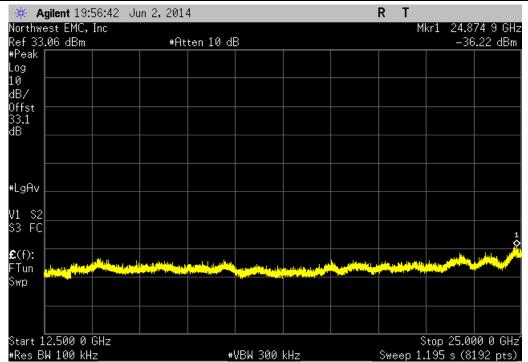








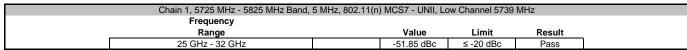
Chain 1, 5725 MHz - 5825 MHz Band,	5 MHz, 802.11(n)	MCS7 - UNII, Lo	ow Channel 5739	MHz	
Frequency					
Range		Value	Limit	Result	
12.5 GHz - 25 GHz		-52.87 dBc	≤ -20 dBc	Pass	

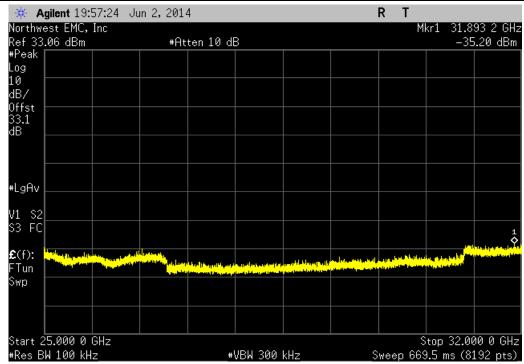


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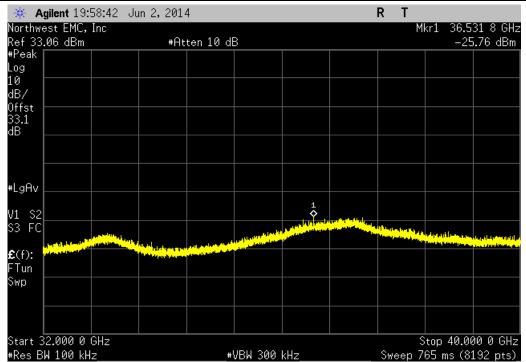




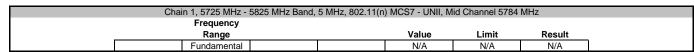


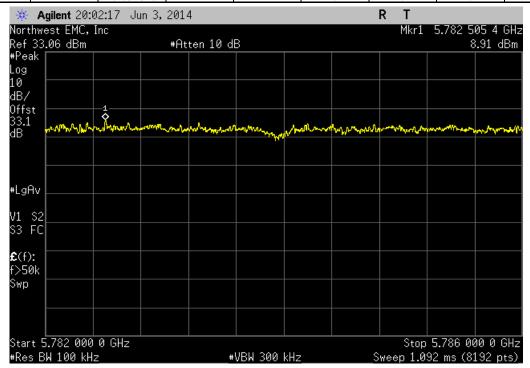


Chain 1, 5725 MHz - 5825 MHz Band,	5 MHz, 802.11(n)	MCS7 - UNII, Lo	w Channel 5739	MHz	
Frequency					
Range		Value	Limit	Result	
32 GHz - 40 GHz		-42.41 dBc	≤ -20 dBc	Pass	

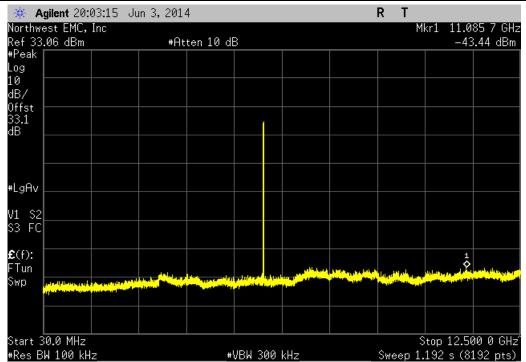




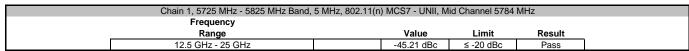


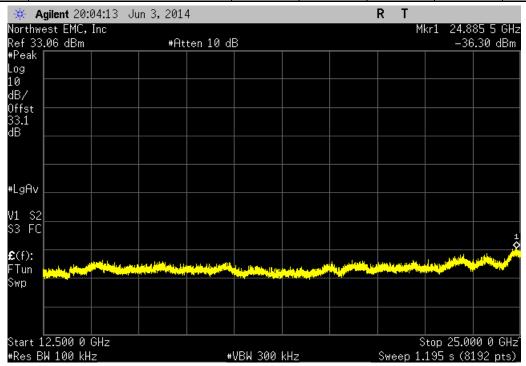


Chain 1, 5725 MHz - 5825 MHz Band,	5 MHz, 802.11(n) N	MCS7 - UNII, M	id Channel 5784	MHz	
Frequency					
Range		Value	Limit	Result	
30 MHz - 12.5 GHz		-52.36 dBc	≤ -20 dBc	Pass	

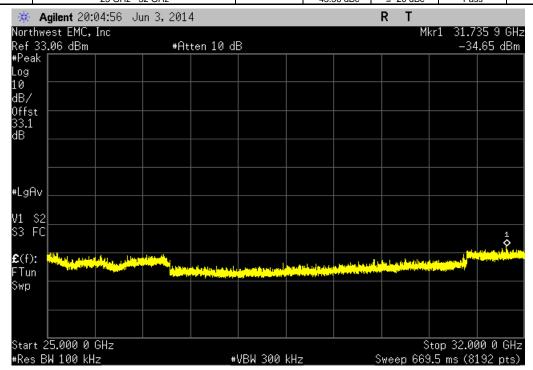






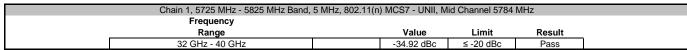


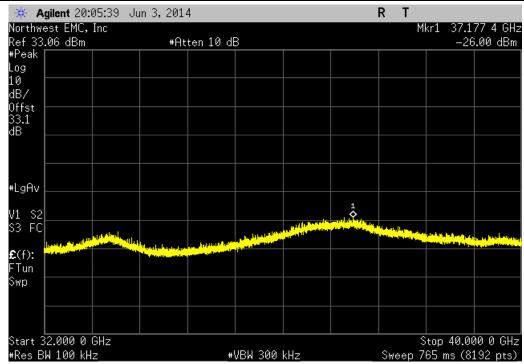
Chain 1, 5725 MHz - 5825 MHz Ban	d, 5 MHz, 802.11(n) MCS7 - UNII, M	id Channel 5784	MHz
Frequency			
Range	Value	Limit	Result
25 GHz - 32 GHz	-43 56 dBc	≤ -20 dBc	Pass

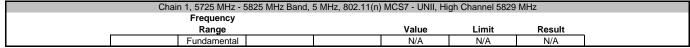


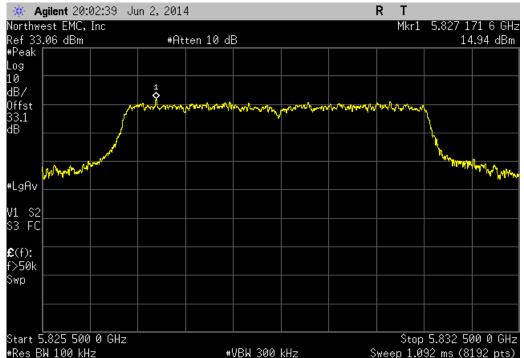








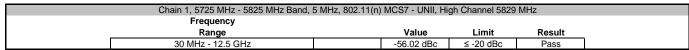


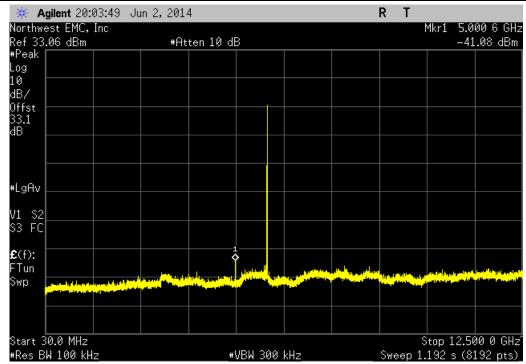


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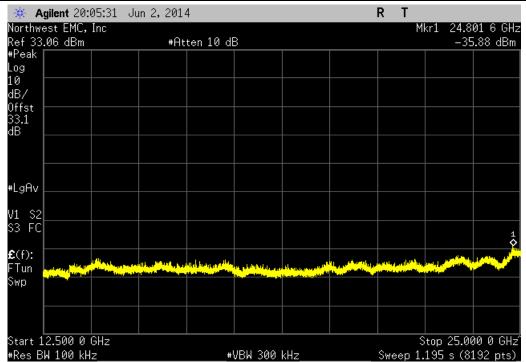






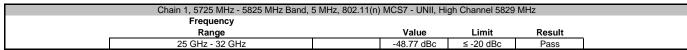


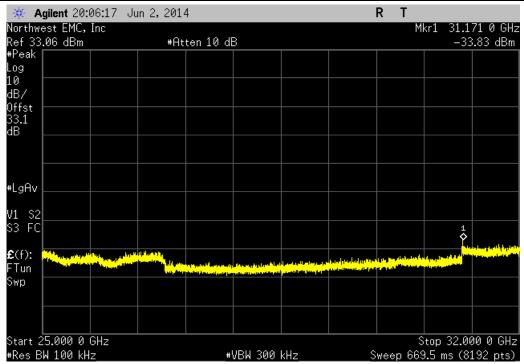
Chain 1, 5725 MHz - 5825 MHz Band, (5 MHz, 802.11(n)	MCS7 - UNII, Hi	gh Channel 5829	MHz	
Frequency					
Range		Value	Limit	Result	
12.5 GHz - 25 GHz		-50.82 dBc	≤ -20 dBc	Pass	



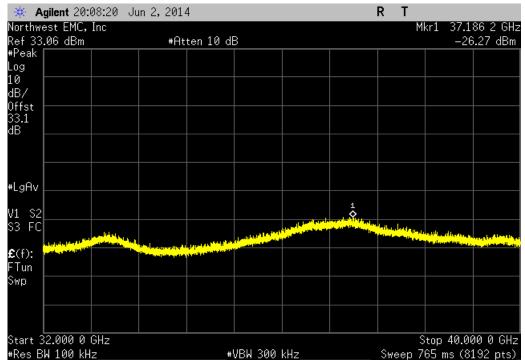








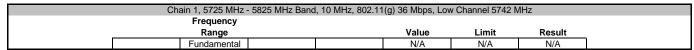
Chain 1, 5725 MHz - 5825 MHz Band,	5 MHz, 802.11(n) MC	:S7 - UNII, Hi	gh Channel 5829	MHz	
Frequency					
Range		Value	Limit	Result	
32 GHz - 40 GHz	-	41.21 dBc	≤ -20 dBc	Pass	

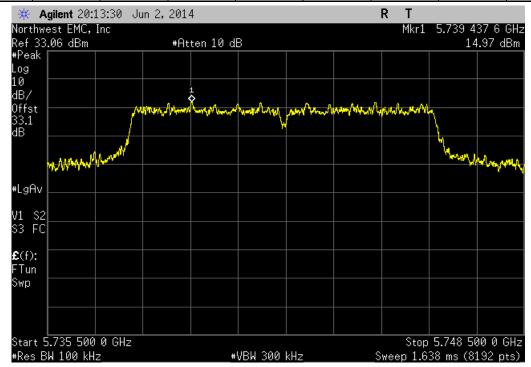


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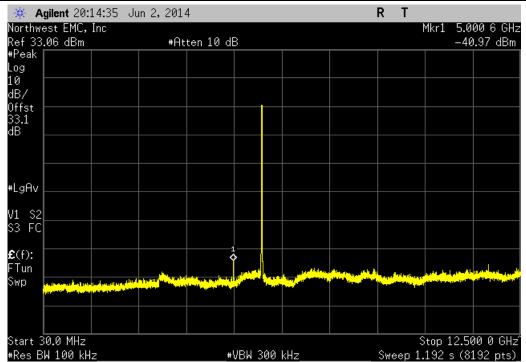






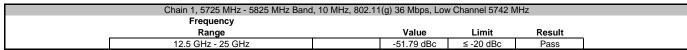


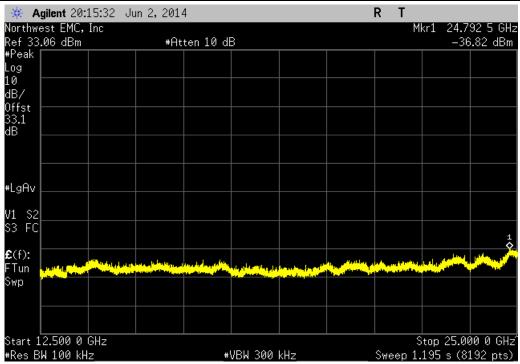
Chain 1, 5725 MHz - 5825 MHz Band	l, 10 MHz, 802.11(g) 36 Mbps, Lov	v Channel 5742 N	ЛHz	
Frequency				
Range	Value	Limit	Result	
30 MHz - 12.5 GHz	-55.95 dBc	≤ -20 dBc	Pass	Î



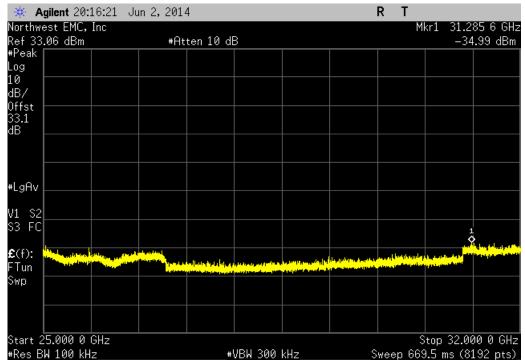






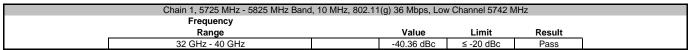


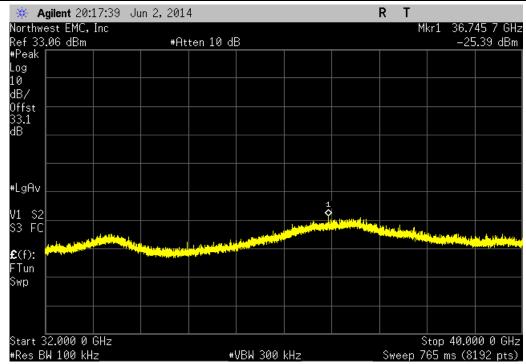
Chain 1, 5725 MHz - 5825 MHz Band	, 10 MHz, 802.11(g) 36 Mbps, Lo	ow Channel 5742 M	ЛHz	
Frequency				
Range	Value	Limit	Result	
25 GHz - 32 GHz	-49.96 dBc	≤ -20 dBc	Pass]



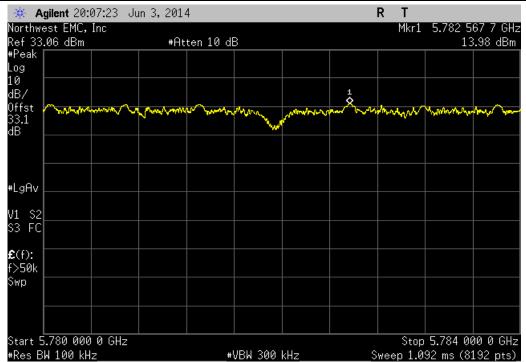






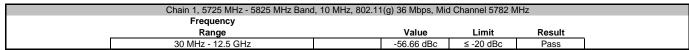


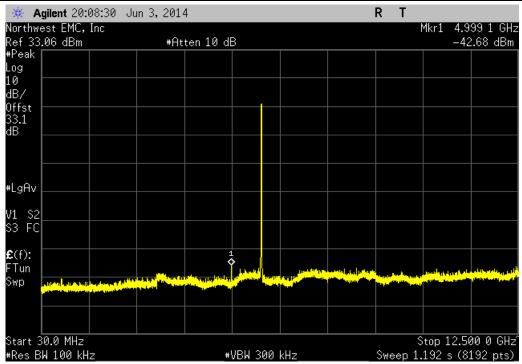
Chain 1, 5725 MHz - 5825 MHz Bar	d, 10 MHz, 802.11	(g) 36 Mbps, Mic	l Channel 5782 M	1Hz
Frequency				
Range		Value	Limit	Result
Fundamental		N/A	N/A	N/A



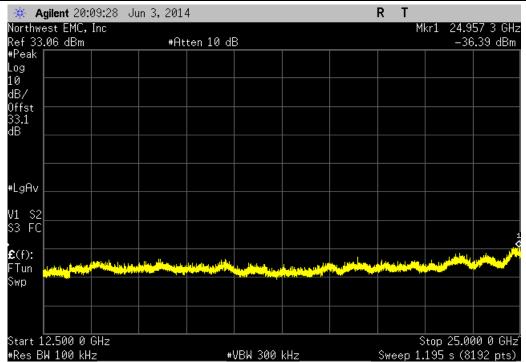






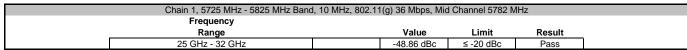


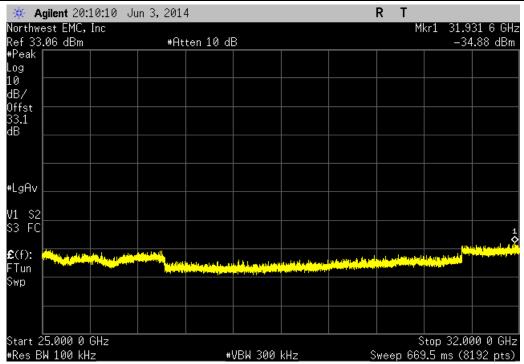
	Chain 1, 5725 MHz - 5825 MHz Band	I, 10 MHz, 802.11	(g) 36 Mbps, Mid	d Channel 5782 M	lHz	
	Frequency					
	Range		Value	Limit	Result	
	12.5 GHz - 25 GHz		-50.37 dBc	≤ -20 dBc	Pass	



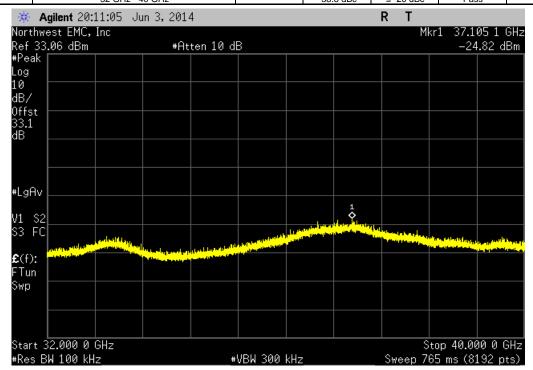








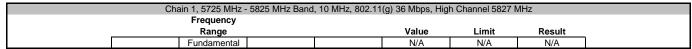
Chain 1, 5725 MHz - 5825 MHz Band, 10 MHz, 802.11(g) 36 Mbps, Mid Channel 5782 MHz						
Frequency						
Range	Value	Limit	Result			
32 GHz - 40 GHz	-38.8 dBc	< -20 dBc	Pass			

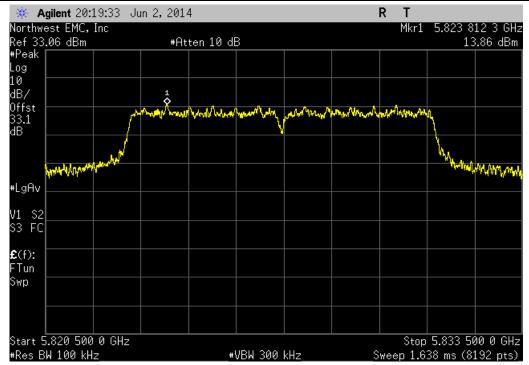


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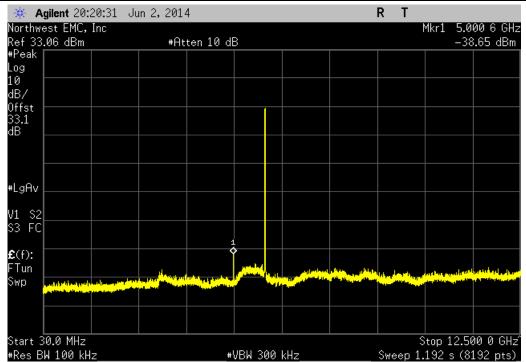






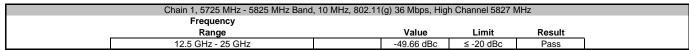


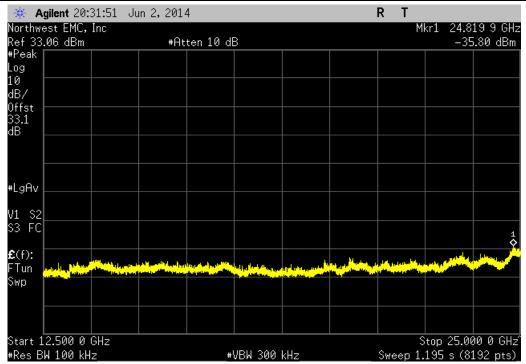
Chain 1, 5725 MHz - 5825 MHz Band,	, 10 MHz, 802.11	(g) 36 Mbps, Higl	h Channel 5827 N	ЛHz	
Frequency					
Range		Value	Limit	Result	
30 MHz - 12.5 GHz		-52.51 dBc	≤ -20 dBc	Pass	



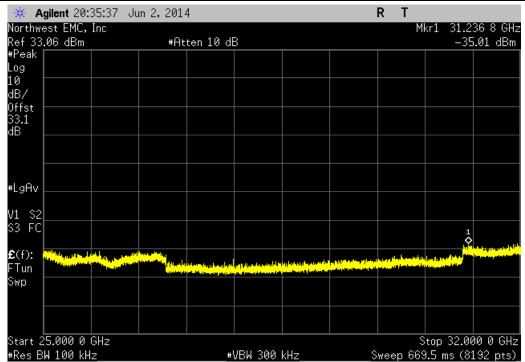








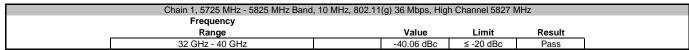
Chain 1, 5725 MHz - 5825 MHz Band	, 10 MHz, 802.11	(g) 36 Mbps, Higl	h Channel 5827 N	ИHz	
Frequency					
Range		Value	Limit	Result	
25 GHz - 32 GHz		-48.87 dBc	≤ -20 dBc	Pass	

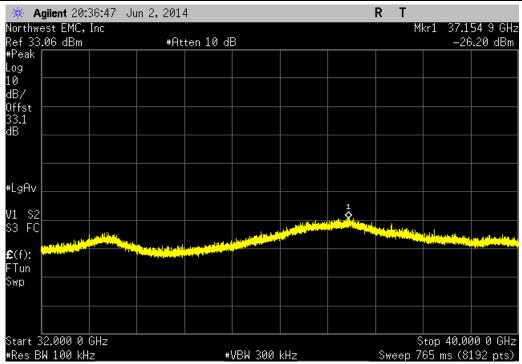


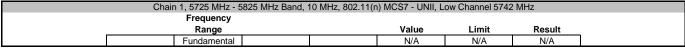
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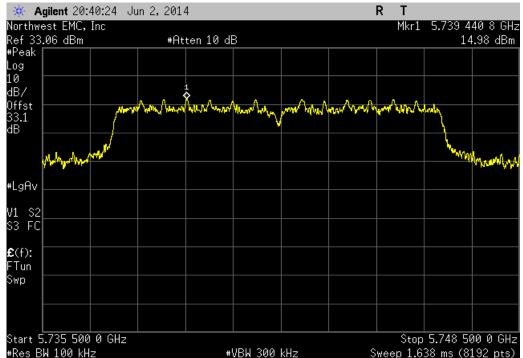








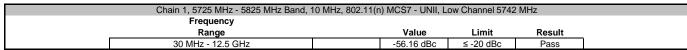


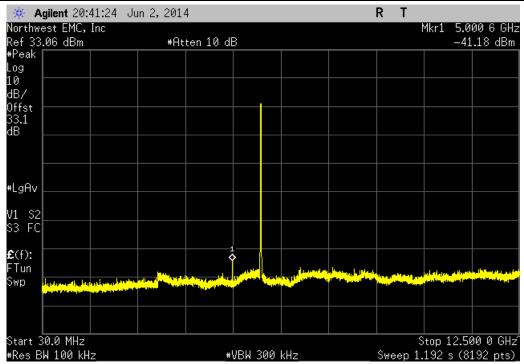


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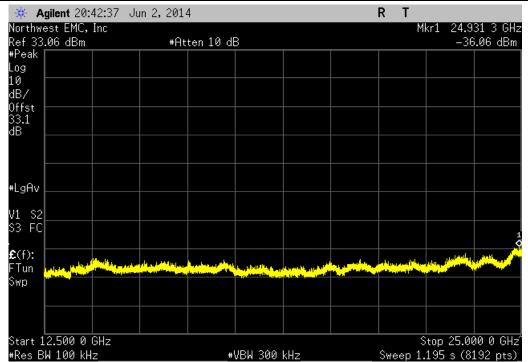






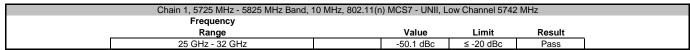


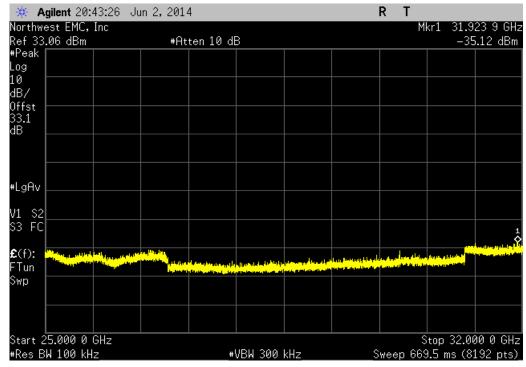
	Chain 1, 5725 MHz - 5825 MHz Band, 1	IO MHz, 802.11(n	ı) MCS7 - UNII, L	ow Channel 5742	2 MHz	
	Frequency					
	Range		Value	Limit	Result	
I	12.5 GHz - 25 GHz		-51.04 dBc	≤ -20 dBc	Pass	



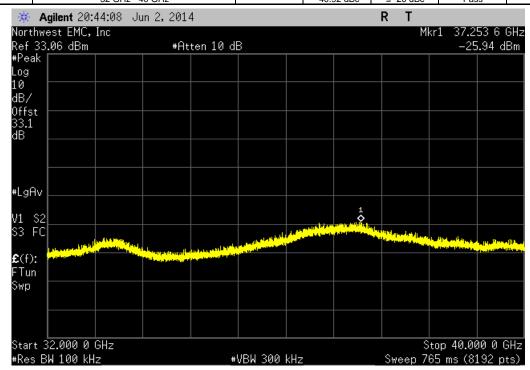
Report No. FREW0040 71/448





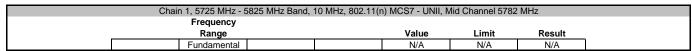


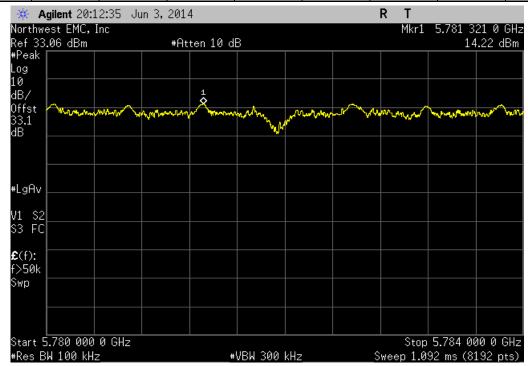
Chain 1, 5725 MHz - 5825 MHz	z Band, 10 MHz, 802.11(r) MCS7 - UNII, L	ow Channel 5742	MHz
Frequency				
Range		Value	Limit	Result
32 GHz - 40 GHz		-40 92 dBc	< -20 dBc	Pass



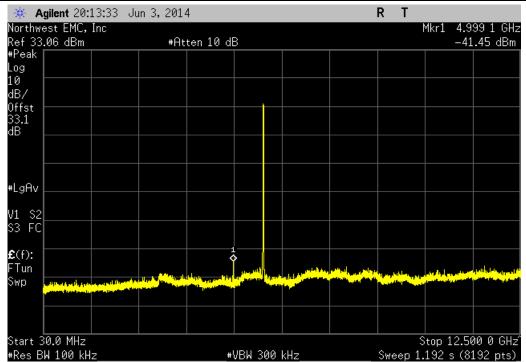






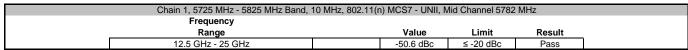


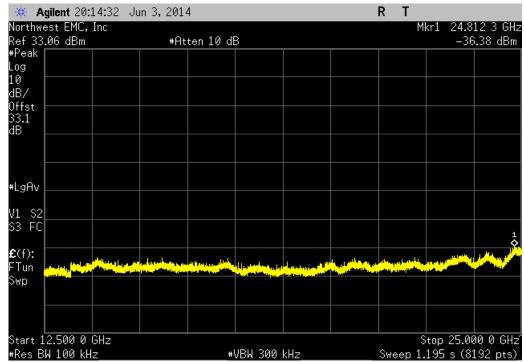
Chain 1, 5725 MHz - 5825 MHz Band, 1	10 MHz, 802.11(r	n) MCS7 - UNII, N	/lid Channel 5782	MHz	
Frequency					
Range		Value	Limit	Result	
30 MHz - 12.5 GHz		-55.67 dBc	≤ -20 dBc	Pass	



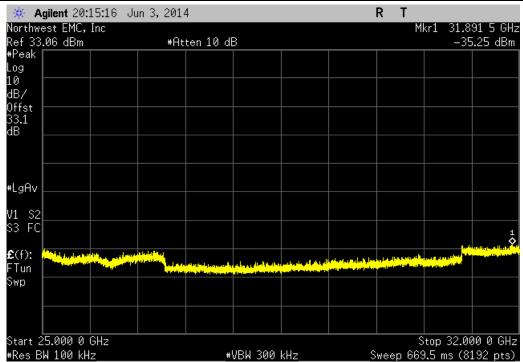






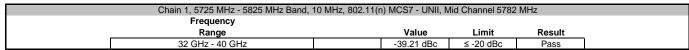


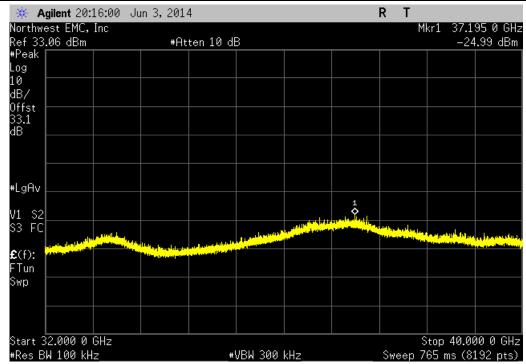
Chain 1, 5725 MHz - 5825 MHz Band, 1	10 MHz, 802.11(n)) MCS7 - UNII, N	/lid Channel 5782	MHz	
Frequency					
Range		Value	Limit	Result	
25 GHz - 32 GHz		-49.47 dBc	≤ -20 dBc	Pass	

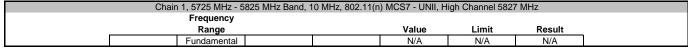


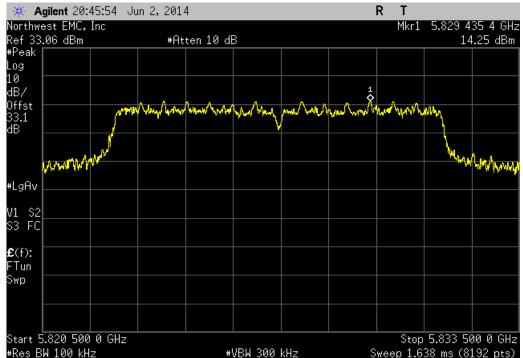








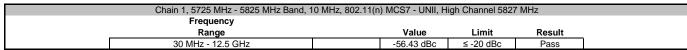


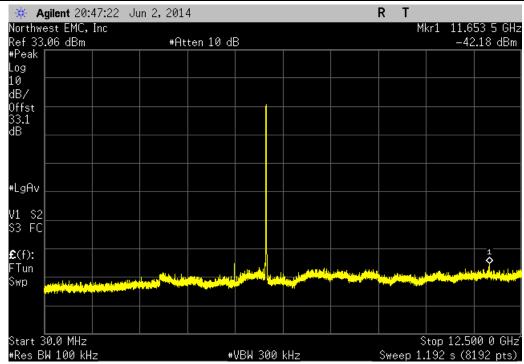


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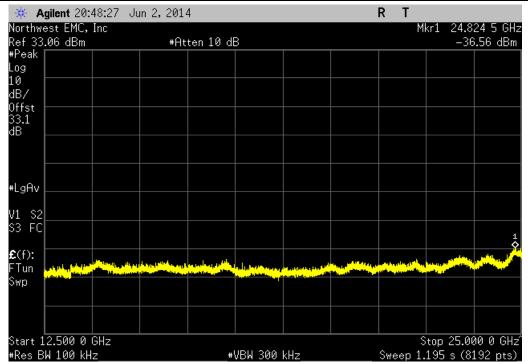








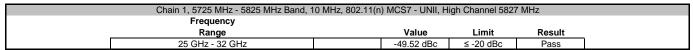
Chain 1, 5725 MHz - 5825 MHz Band, 1	0 MHz, 802.11(n)) MCS7 - UNII, H	igh Channel 5827	7 MHz	
Frequency					
Range		Value	Limit	Result	
12.5 GHz - 25 GHz		-50.81 dBc	≤ -20 dBc	Pass	

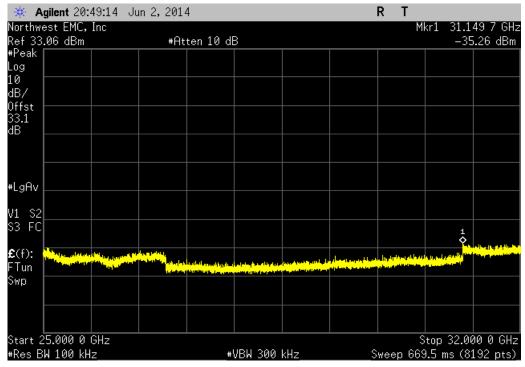


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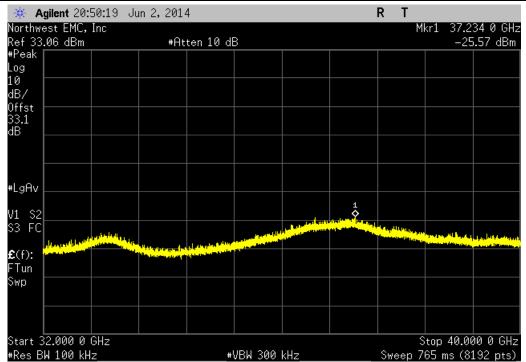








Chain 1, 5725 MHz - 5825 MHz Band, 1	0 MHz, 802.11(n)) MCS7 - UNII, H	igh Channel 5827	' MHz	
Frequency					
Range		Value	Limit	Result	
32 GHz - 40 GHz		-39.82 dBc	≤ -20 dBc	Pass	



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SPURIOUS CONDUCTED EMISSIONS MIMO 2x2

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

					Interval
Description	Manufacturer	Model	ID	Last Cal.	(mo)
Attenuator, 'Precision N'	S.M. Electronics	SA18N-06/SM4032	REE	10/20/2014	12
MXG Analog Signal Generator	Agilent	N5181A	TIG	3/28/2014	36
Power Meter	Gigatronics	8651A	SPM	9/17/2014	12
Power Sensor	Gigatronics	80701A	SPL	5/28/2014	12
Attenuator 20 dB, SMA M/F 26GHz	S.M. Electronics	SA26B-20	AUY	7/30/2014	12
EV06 Direct Connect Cable	ESM Cable Corp.	TT	ECA	NCR	0
Spectrum Analyzer	Agilent	E4446A	AAQ	1/21/2014	12

TEST DESCRIPTION

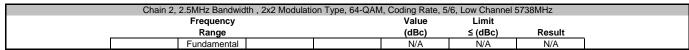
The spurious RF conducted emissions were measured with the EUT set to low, medium and high transmit frequencies. The measurements were made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at the data rate(s) listed in the datasheet. For each transmit frequency, the spectrum was scanned throughout the specified frequency range.

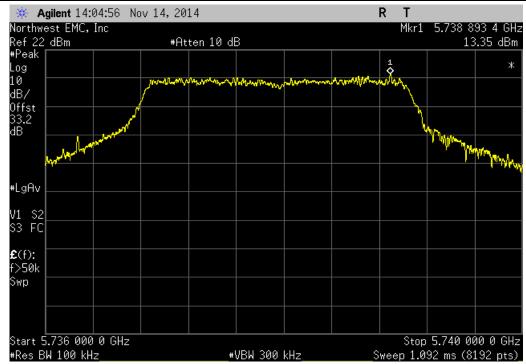


SPURIOUS CONDUCTED EMISSIONS MIMO 2x2

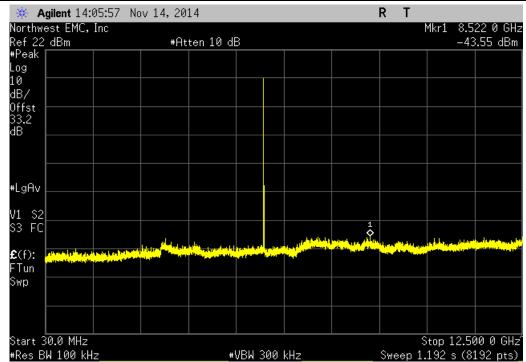
EUT:	WavePoint - 5GHz Radio (W5800-01)		Work Order:	FREW0041	
	00:07:E7:A0:01:B6			11/14/14	
	FreeWave Technologies, Inc.		Temperature:		
Attendees:			Humidity:		
Project:			Barometric Pres.:		
	Brandon Hobbs	Power: 110VAC/60Hz	Job Site:		
EST SPECIFICATI		Test Method	Job Site.	E V 00	
	IONS				
CC 15.247:2014		ANSI C63.10:2009			
OMMENTS					
he High and Low	Channels were measured using the worst case modula	ation found for 8011(n) MIMO modes. An additional 40GHz DC block	k and 10dB 5watt attenuater were us	sed inline for all m	easurements
nade while under t	test. Please reference the power table for power setting	gs used while under test.			
	M TEST STANDARD				
one					
onfiguration #	1	I Tank			
	Signature	7 (
		Frequency	Value	Limit	
		Range	(dBc)	≤ (dBc)	Result
hain 2			` '		
· · · · · · ·	2.5MHz Bandwidth				
	2x2 Modulation Type, 64-QAM, Coding Rate	3. 5/6			
	Low Channel 5738MHz	Fundamental	N/A	N/A	N/A
	Low Channel 5738MHz	30 MHz - 12.5 GHz	-56.9	-20	Pass
			-56.9 -49.46	-20	
	Low Channel 5738MHz	12.5 GHz - 25 GHz			Pass
	Low Channel 5738MHz	25 GHz - 32 GHz	-47.77	-20	Pass
	Low Channel 5738MHz	32 GHz - 40 GHz	-38.23	-20	Pass
	Mid Channel 5783MHz	Fundamental	N/A	N/A	N/A
	Mid Channel 5783MHz	30 MHz - 12.5 GHz	-56.1	-20	Pass
	Mid Channel 5783MHz	12.5 GHz - 25 GHz	-49.13	-20	Pass
	Mid Channel 5783MHz	25 GHz - 32 GHz	-47.22	-20	Pass
	Mid Channel 5783MHz	32 GHz - 40 GHz	-38.11	-20	Pass
	High Channel 5831MHz	Fundamental	N/A	N/A	N/A
	High Channel 5831MHz	30 MHz - 12.5 GHz	-55.13	-20	Pass
	High Channel 5831MHz	12.5 GHz - 25 GHz	-47.53	-20	Pass
	High Channel 5831MHz	25 GHz - 32 GHz	-46.11	-20	Pass
	High Channel 5831MHz	32 GHz - 40 GHz	-37.21	-20	Pass
	5MHz Bandwidth				
	2x2 Modulation Type, 64-QAM, Coding Rate	5/6			
	Low Channel 5739MHz	Fundamental	N/A	N/A	N/A
	Low Channel 5739MHz	30 MHz - 12.5 GHz	-52.91	-20	Pass
	Low Channel 5739MHz	12.5 GHz - 25 GHz	-45.53	-20	Pass
	Low Channel 5739MHz	25 GHz - 32 GHz	-43.2	-20	Pass
	Low Channel 5739MHz	32 GHz - 40 GHz	-34.51	-20	Pass
	Mid Channel 5784MHz	Fundamental	N/A	N/A	N/A
	Mid Channel 5784MHz	30 MHz - 12.5 GHz	-51.95	-20	Pass
	Mid Channel 5784MHz	12.5 GHz - 25 GHz	-45.55	-20	Pass
	Mid Channel 5784MHz	25 GHz - 32 GHz	-43.82	-20	Pass
	Mid Channel 5784MHz	32 GHz - 40 GHz	-33.52	-20	Pass
	High Channel 5829MHz	Fundamental	N/A	N/A	N/A
	High Channel 5829MHz	30 MHz - 12.5 GHz	-52.4	-20	Pass
	High Channel 5829MHz	12.5 GHz - 25 GHz	-45.96	-20	Pass
	High Channel 5829MHz	25 GHz - 32 GHz	-43.34	-20	Pass
	High Channel 5829MHz	32 GHz - 40 GHz	-34.63	-20	Pass
	10MHz Bandwidth				
	2x2 Modulation Type, 64-QAM, Coding Rate	2. 5/6			
	Low Channel 5742MHz	Fundamental	N/A	N/A	N/A
	Low Channel 5742MHz	30 MHz - 12.5 GHz	-56.8	-20	Pass
	Low Channel 5742MHz	12.5 GHz - 25 GHz	-50.28	-20	Pass
	Low Channel 5742MHz	25 GHz - 32 GHz	-48.45	-20	Pass
	Low Channel 5742MHz	32 GHz - 40 GHz	-39.6	-20	Pass
	Mid Channel 5782MHz	S2 GHZ - 40 GHZ Fundamental	-39.6 N/A	-20 N/A	N/A
	Mid Channel 5782MHz	30 MHz - 12.5 GHz	-54.75	-20	Pass
	Mid Channel 5782MHz	12.5 GHz - 25 GHz	-49.14	-20	Pass
	Mid Channel 5782MHz	25 GHz - 32 GHz	-48.77	-20	Pass
	Mid Channel 5782MHz	32 GHz - 40 GHz	-39.29	-20	Pass
	High Channel 5827MHz	Fundamental	N/A	N/A	N/A
	High Channel 5827MHz	30 MHz - 12.5 GHz	-53.18	-20	Pass
	High Channel 5827MHz	12.5 GHz - 25 GHz	-48.68	-20	Pass
		12.5 GHz - 25 GHz 25 GHz - 32 GHz	-48.68 -47.28	-20 -20	Pass Pass





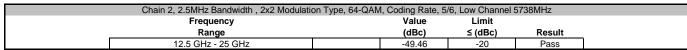


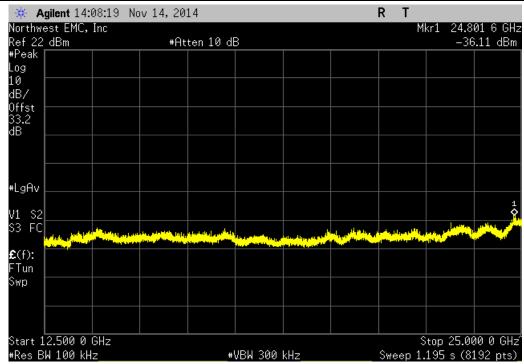
Chain 2, 2.5MHz Bandwidth , 2x2 Modulation Type, 64-QAM, Coding Rate, 5/6, Low Channel 5738MHz						
Frequency	Value	Limit				
Range	(dBc)	≤ (dBc)	Result			
30 MHz - 12.5 GHz	-56.9	-20	Pass			



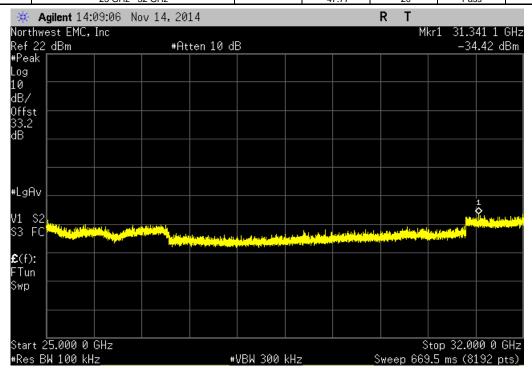
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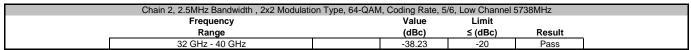


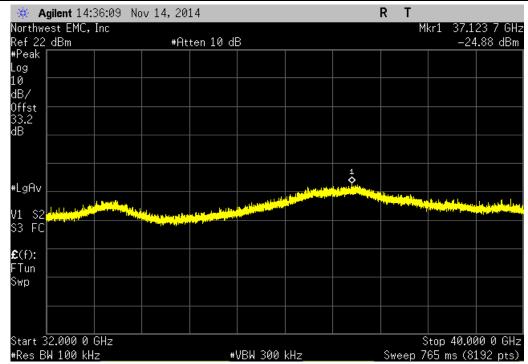
Chain 2, 2.5MHz Bandwidth , 2x2 Modulation Type, 64-QAM, Coding Rate, 5/6, Low Channel 5738MHz						
	Frequency		Value	Limit		
	Range		(dBc)	≤ (dBc)	Result	
	25 GHz - 32 GHz		-47 77	-20	Pagg	

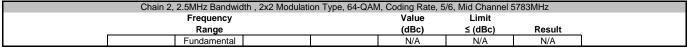


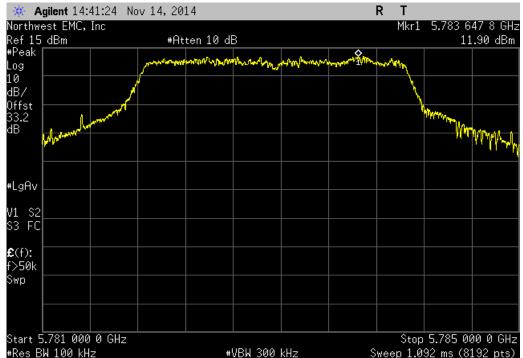
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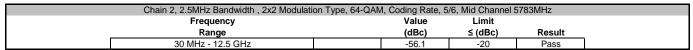


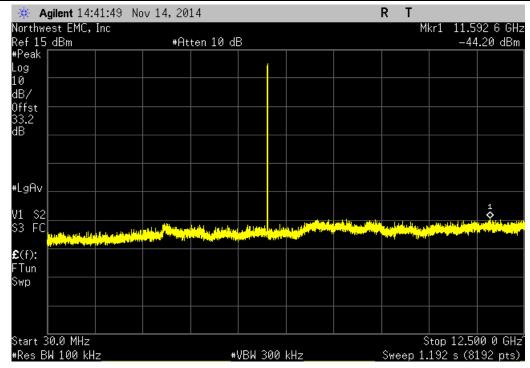




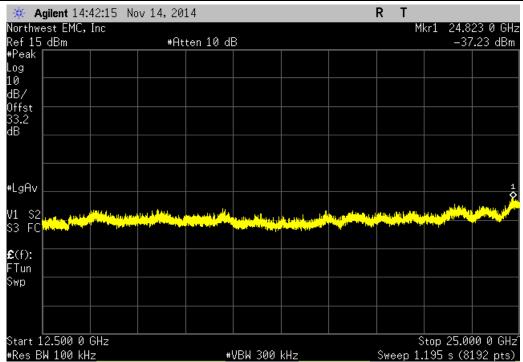
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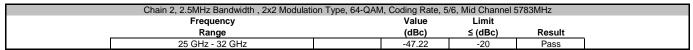


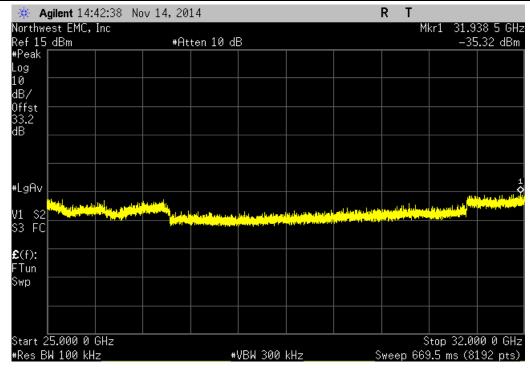
Chain 2, 2.5MHz Bandwidth , 2x2 Modulation Type, 64-QAM, Coding Rate, 5/6, Mid Channel 5783MHz						
Frequency		Value	Limit			
Range		(dBc)	≤ (dBc)	Result		
12.5 GHz - 25 GHz		-49.13	-20	Pass		



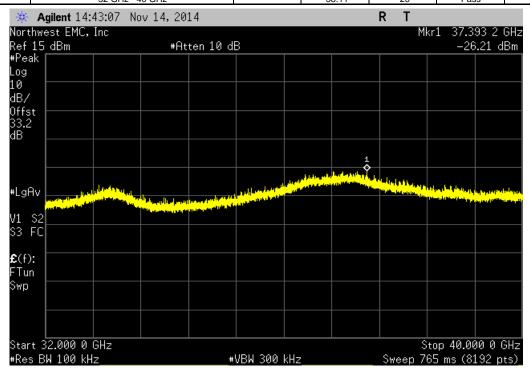
Report No. FREW0040 83/448



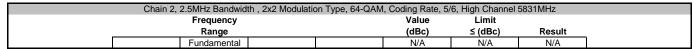


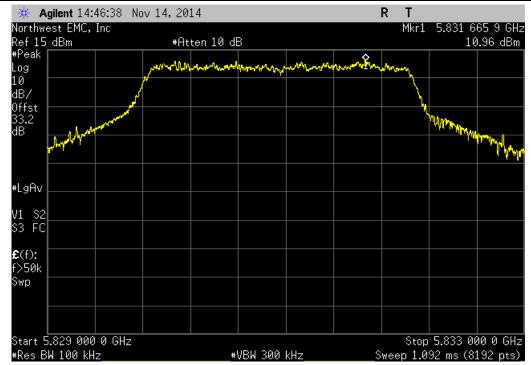


Chain 2, 2.5MHz Bandwidth , 2x2 Modulation Type, 64-QAM, Coding Rate, 5/6, Mid Channel 5783MHz						
Frequency	Value	Limit				
Range	(dBc)	≤ (dBc)	Result			
32 GHz - 40 GHz	-38 11	-20	Pagg			

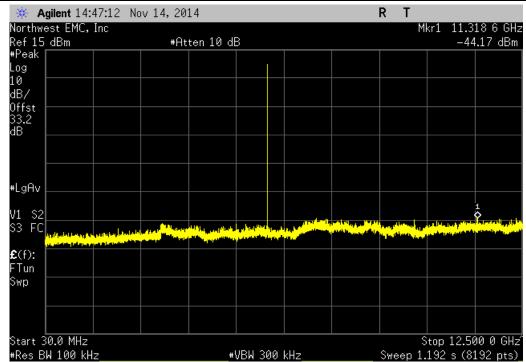




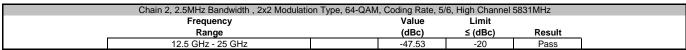


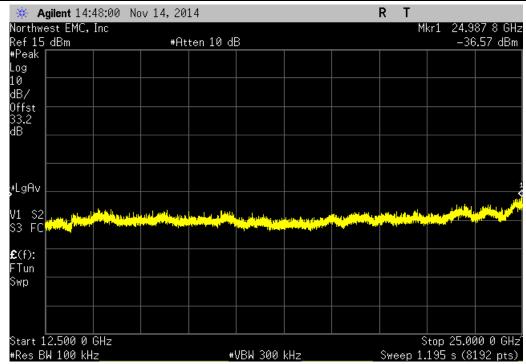


Chain 2, 2.5MHz Bandwidth , 2x2 Modulation Type, 64-QAM, Coding Rate, 5/6, High Channel 5831MHz						
Frequency	Value	Limit				
Range	(dBc)	≤ (dBc)	Result			
30 MHz - 12.5 GHz	-55.13	-20	Pass			

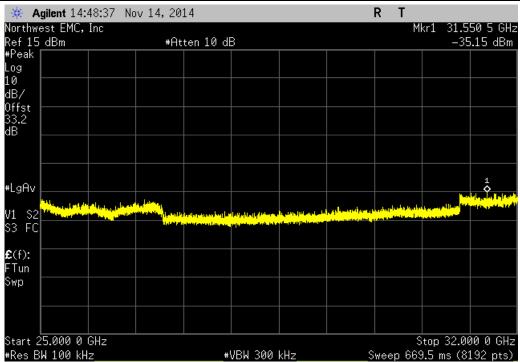






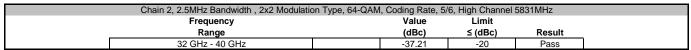


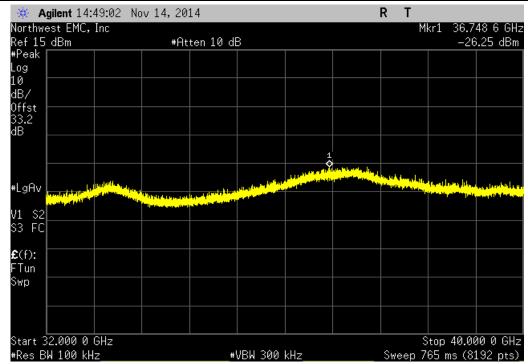
Chain 2, 2.5MHz Bandwidth , 2x2 Modulation Type, 64-QAM, Coding Rate, 5/6, High Channel 5831MHz						
Frequency	Value	Limit				
Range	(dBc)	≤ (dBc)	Result			
25 GHz - 32 GHz	-46.11	-20	Pass			



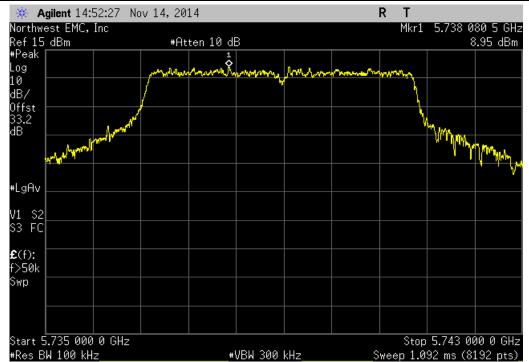
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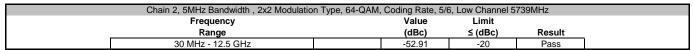


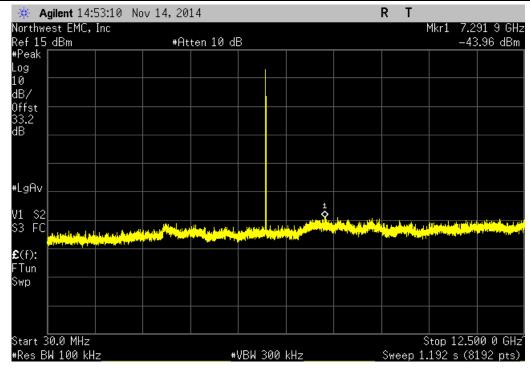
Chain 2, 5MI	Hz Bandwidth, 2x2 Modulatio	n Type, 64-QAM,	Coding Rate, 5/6	S, Low Channel 5	739MHz
F	requency		Value	Limit	
	Range		(dBc)	≤ (dBc)	Result
Fu	undamental		N/A	N/A	N/A



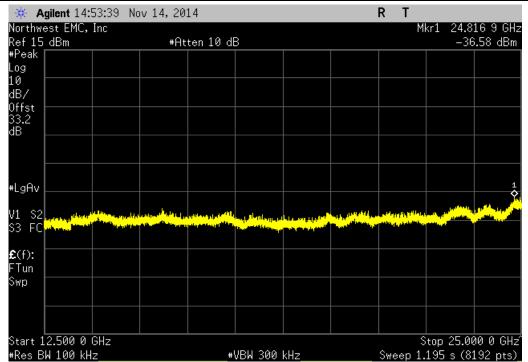
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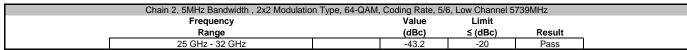


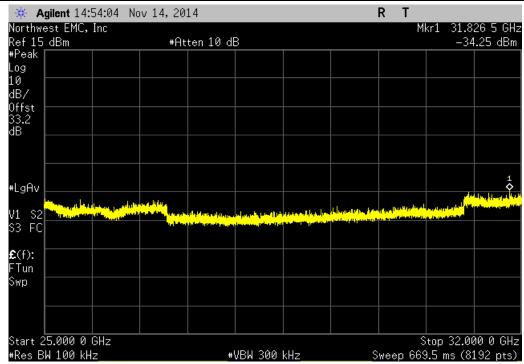
Chain 2, 5MHz Bandwidth	, 2x2 Modulation Type, 64-QAM, Coding Rat	e, 5/6, Low Channel 5	5739MHz
Frequency	Value	Limit	
Range	(dBc)	≤ (dBc)	Result
12.5 GHz - 25 GHz	-45.53	-20	Pass



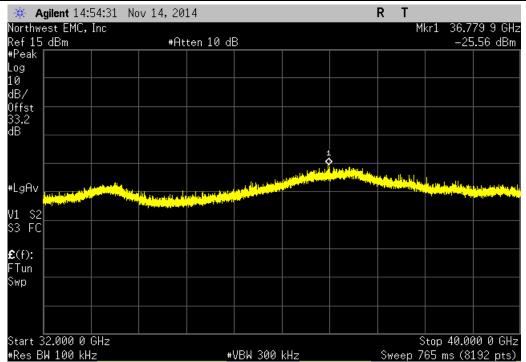
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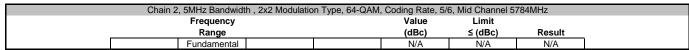


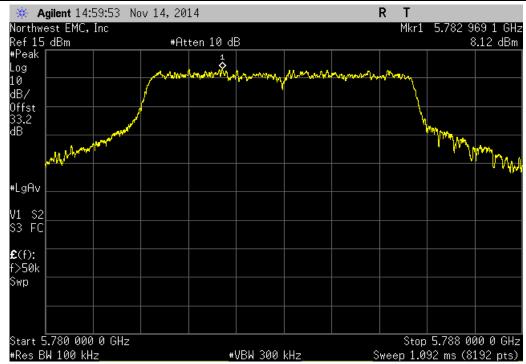
Chain 2, 5MHz Bandwidth , 2x2 Modulation	on Type, 64-QAM, Coding Rate, 5/6	6, Low Channel 5	739MHz
Frequency	Value	Limit	
Range	(dBc)	≤ (dBc)	Result
32 GHz - 40 GHz	-34.51	-20	Pass



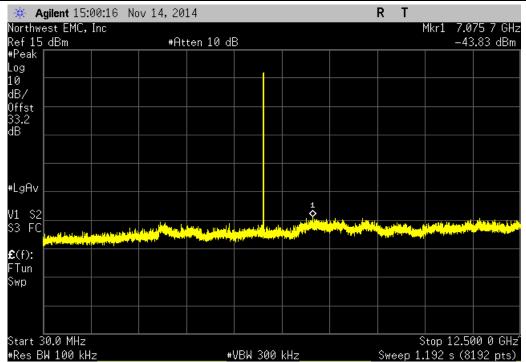
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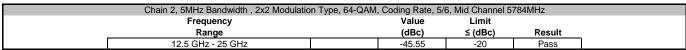


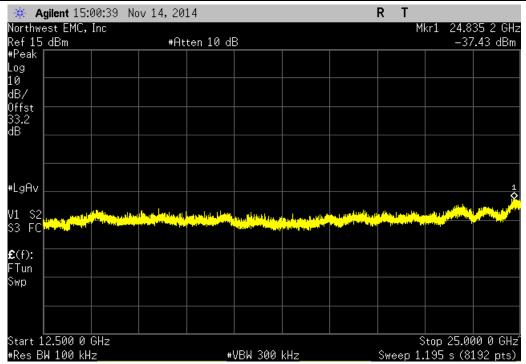
Chain 2, 5MHz Bandwidth , 2x2 Modulatio	n Type, 64-QAM, Coding Rate, 5/6	5, Mid Channel 5	784MHz
Frequency	Value	Limit	
Range	(dBc)	≤ (dBc)	Result
30 MHz - 12.5 GHz	-51.95	-20	Pass



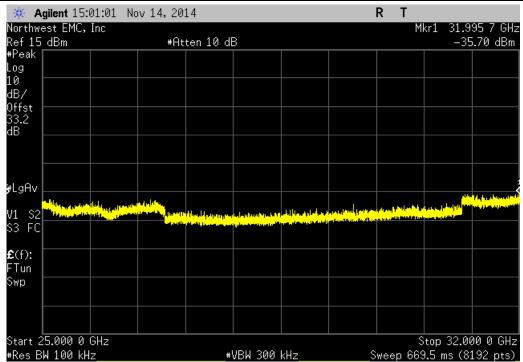
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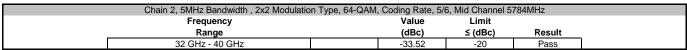


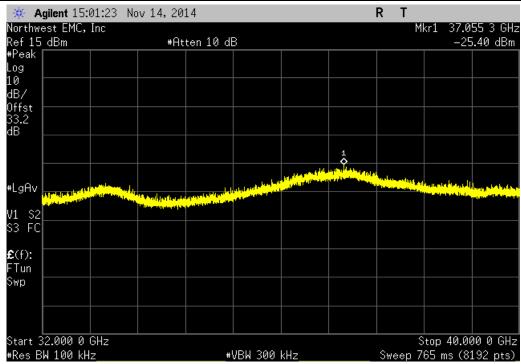


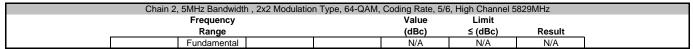
Chain 2, 5MHz Bandwidth, 2x2 Modulatio	n Type, 64-QAM	, Coding Rate, 5/6	6, Mid Channel 5	784MHz
Frequency		Value	Limit	
Range		(dBc)	≤ (dBc)	Result
25 GHz - 32 GHz		-43.82	-20	Pass

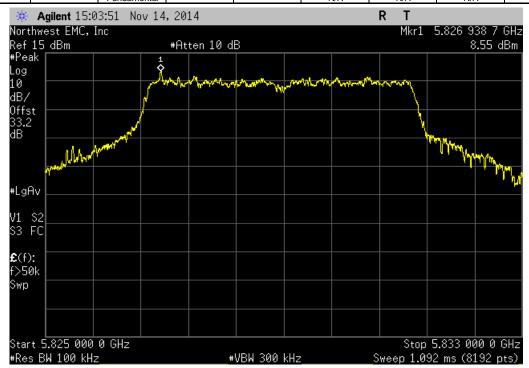






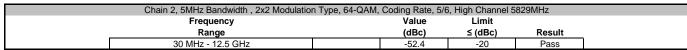


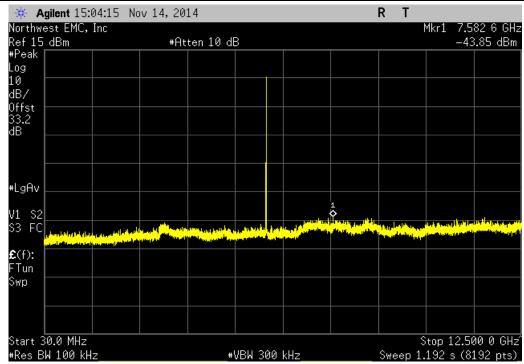




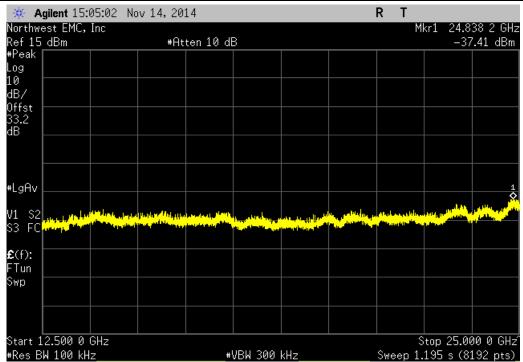
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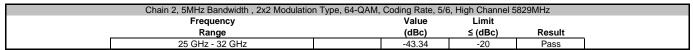


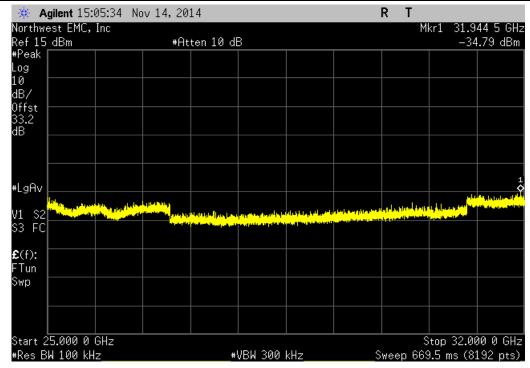
Chain 2, 5MHz Bandwidth , 2x2 Modulation	n Type, 64-QAM, Coding Rate, 5/6	5, High Channel 5	829MHz
Frequency	Value	Limit	
Range	(dBc)	≤ (dBc)	Result
12.5 GHz - 25 GHz	-45.96	-20	Pass



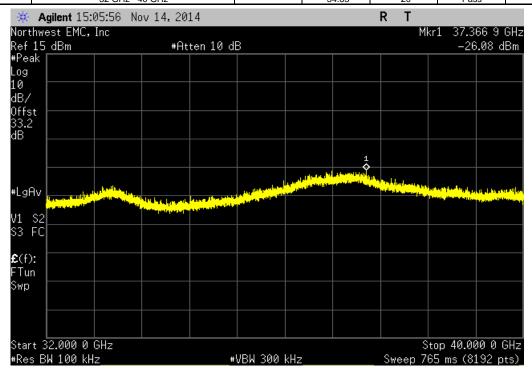
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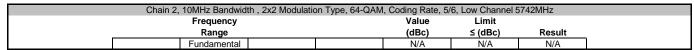


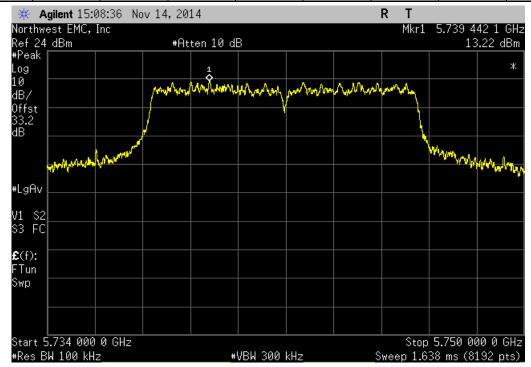
Chain 2, 5MHz Bandwidth, 2x2 Modulation	Type, 64-QAM, Coding Rate, 5	5/6, High Channel	5829MHz
Frequency	Value	Limit	
Range	(dBc)	≤ (dBc)	Result
32 GHz - 40 GHz	-34 63	-20	Page



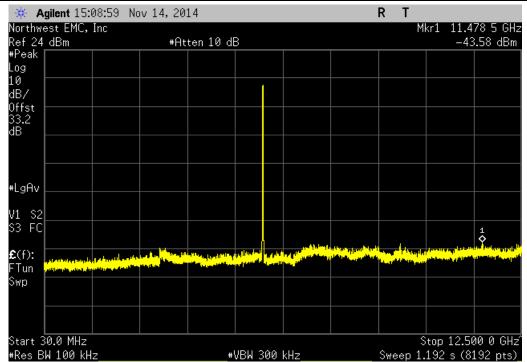
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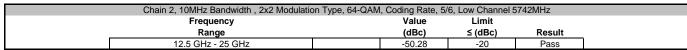


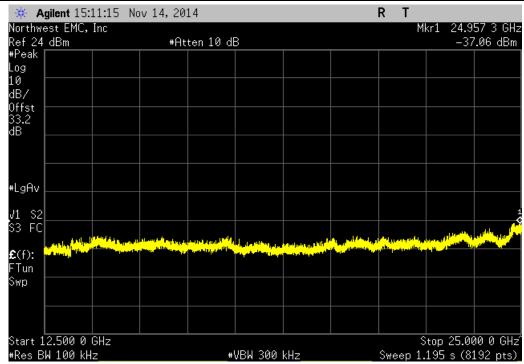


	Chain 2, 10MHz Bandwidth , 2x2 Modulation Type, 64-QAM, Coding Rate, 5/6, Low Channel 5742MHz				
	Frequency		Value	Limit	
	Range		(dBc)	≤ (dBc)	Result
i	30 MHz - 12.5 GHz		-56.8	-20	Pass

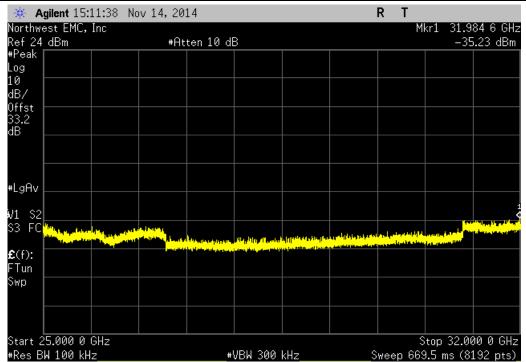




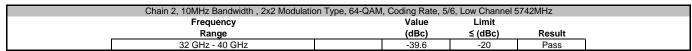


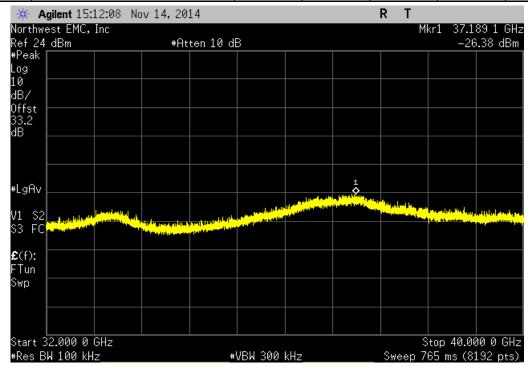


Chain 2, 10MHz Bandwidth , 2x2 Modulation	on Type, 64-QAM, Coding Rate, 5	6, Low Channel 5	5742MHz
Frequency	Value	Limit	
Range	(dBc)	≤ (dBc)	Result
25 GHz - 32 GHz	-48.45	-20	Pass

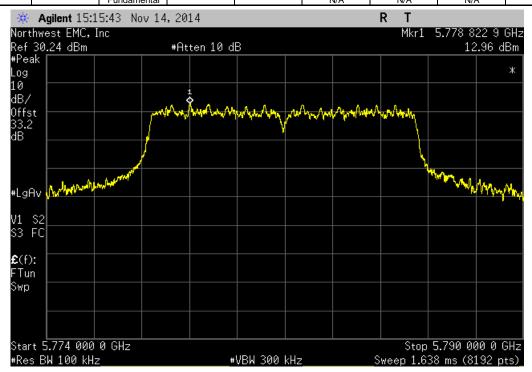






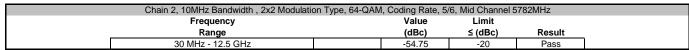


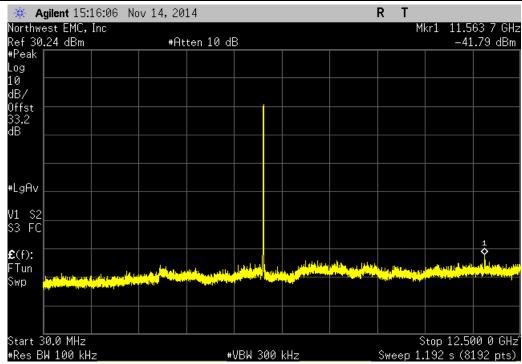
Cha	in 2, 10MHz Bandwidth, 2x2	Modulation Type, 64-Q	AM, Coding Rate, 5	6, Mid Channel 5	5782MHz
	Frequency		Value	Limit	
	Range		(dBc)	≤ (dBc)	Result
	Fundamental		NI/A	N/A	NI/A



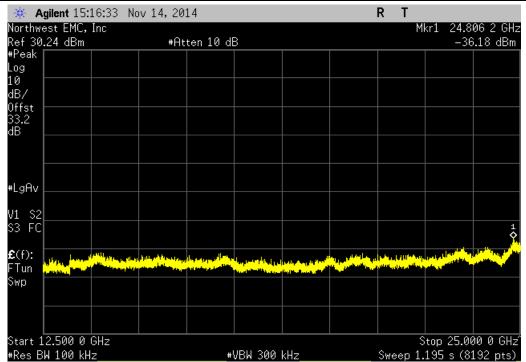
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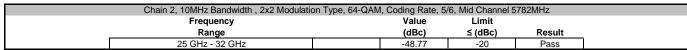


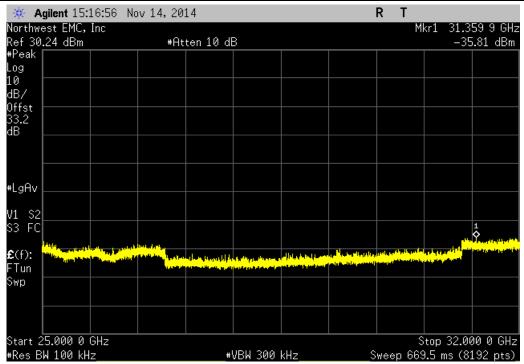
Chain 2, 10MHz Bandwidth , 2x2 Modulatio	on Type, 64-QAM, Coding Rate, 5	/6, Mid Channel 5	5782MHz
Frequency	Value	Limit	
Range	(dBc)	≤ (dBc)	Result
12.5 GHz - 25 GHz	-49.14	-20	Pass



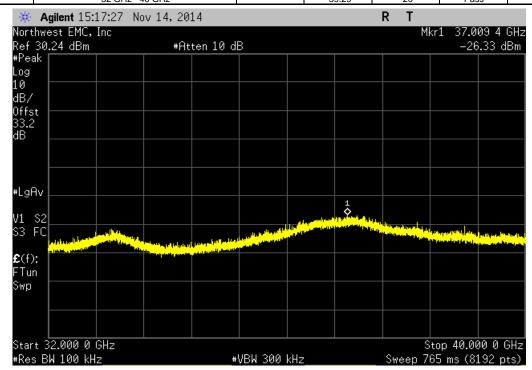
Report No. FREW0040 98/448





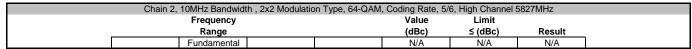


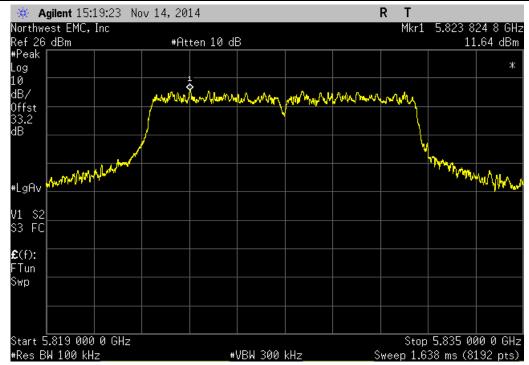
Chain 2, 10MHz Bandwidth, 2x2 Modulation	on Type, 64-QAM, Coding Rate, 5	/6, Mid Channel	5782MHz
Frequency	Value	Limit	
Range	(dBc)	≤ (dBc)	Result
32 GHz - 40 GHz	-30 20	-20	Pass



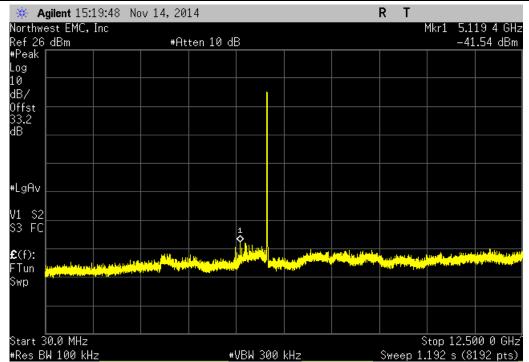
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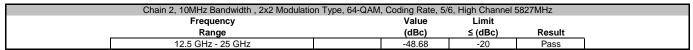


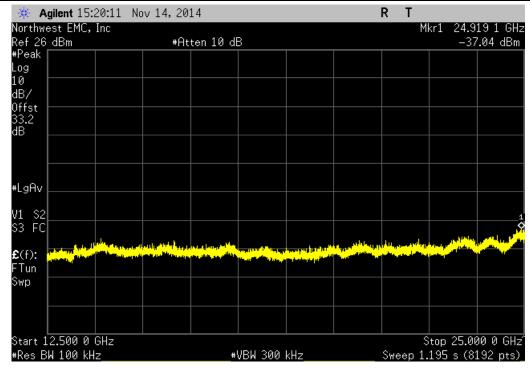
Chain 2, 10MHz Bandwidth , 2x2 Modulation Type, 64-QAM, Coding Rate, 5/6, High Channel 5827MHz						
Frequency	Value	Limit				
Range	(dBc)	≤ (dBc)	Result			
30 MHz - 12.5 GHz	-53.18	-20	Pass			



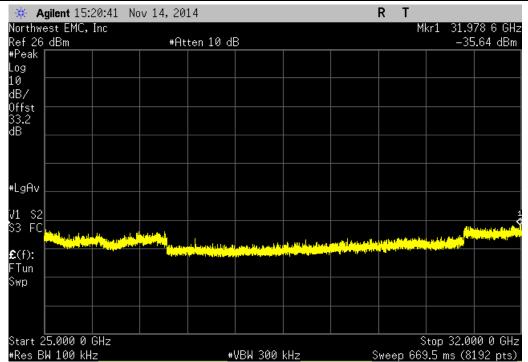
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Chain 2, 10MHz Bandwidth , 2x2 Modulation Type, 64-QAM, Coding Rate, 5/6, High Channel 5827MHz						
Frequency		Value	Limit			
Range		(dBc)	≤ (dBc)	Result		
25 GHz - 32 GHz		-47.28	-20	Pass		



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SPURIOUS CONDUCTED EMISSIONS MIMO 2x2

