

SPURIOUS CONDUCTED EMISSIONS

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

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval (mo)
Spectrum Analyzer	Agilent	E4440A	AFE	6/22/2015	12
Spectrum Analyzer	Keysight	N9010A	AFO	6/23/2015	12
NC02 Cable	ESM Cable Corp.	TTBJ-141 KMKM-72	NC5	6/6/2015	12
Attenuator	Fairview Microwave	SA4014-20	TKE	1/16/2015	12
DC Block, 40 GHz	Fairview Microwave	SD3379	AMJ	6/6/2015	12
Signal Generator	Keysight	N5182B	TFY	4/16/2015	36

TEST DESCRIPTION

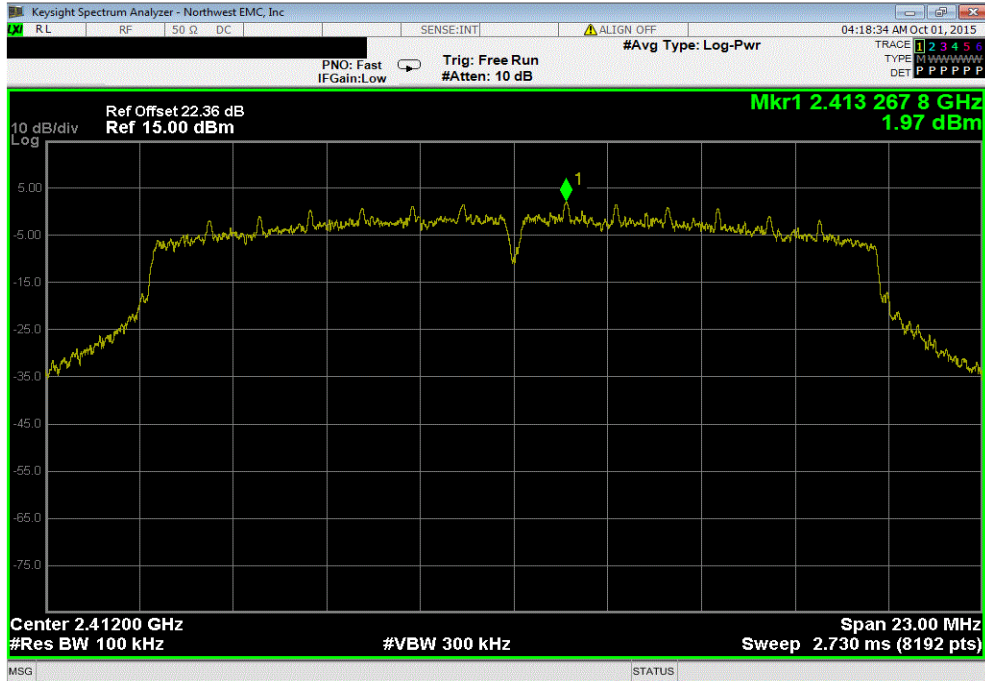
The spurious RF conducted emissions were measured with the EUT set to low, medium and high transmit frequencies. The measurements were made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at the data rate(s) listed in the datasheet. For each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

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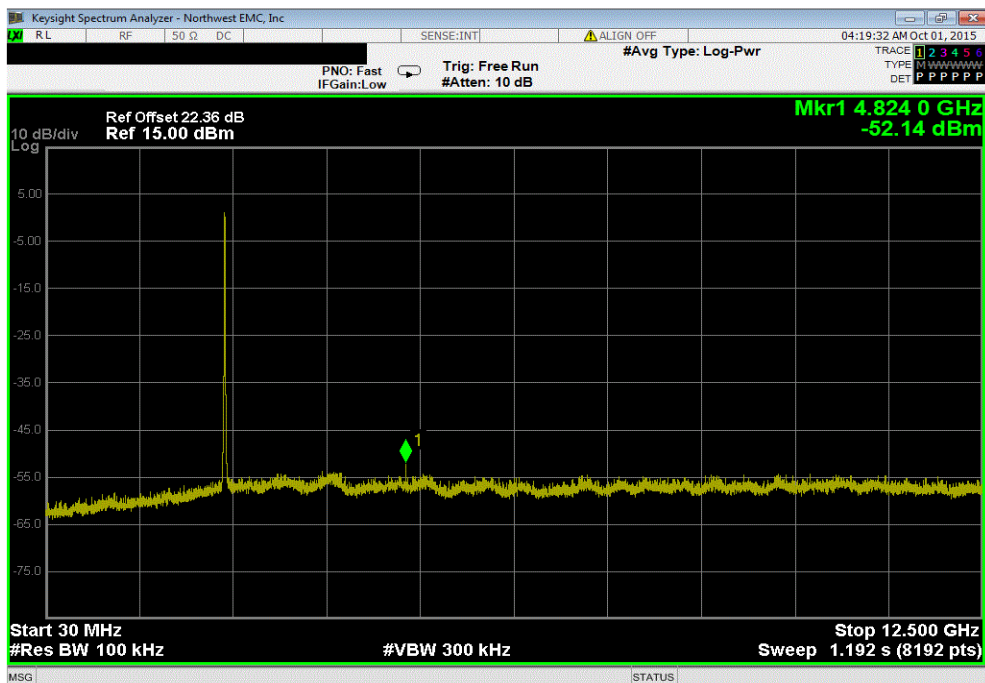
EUT: Precor Wi-Fi / Bluetooth Module Model 303346		Work Order: PRCR0230	
Serial Number: None		Date: 10/01/15	
Customer: Precor, Inc.		Temperature: 23°C	
Attendees: Rich Whitbeck		Humidity: 44%	
Project: None		Barometric Pres.: 1017mb	
Tested by: Richard Mellroth		Power: 110VAC/60Hz	
TEST SPECIFICATIONS		Test Method	
FCC 15.247.2015		ANSI C63.10.2013	
COMMENTS			
Power settings at Maximum.			
DEVIATIONS FROM TEST STANDARD			
None			
Configuration #	1	Signature	
		Frequency Range	Max Value (dBc) Limit ≤ (dBc) Result
Ant 1 (2x2 MIMO)			
20 MHz			
2.4 GHz Band			
802.11(n) MCS12			
	Low Channel 1, 2412 MHz	Fundamental	N/A N/A N/A
	Low Channel 1, 2412 MHz	30 MHz - 12.5 GHz	-54.12 -20 Pass
	Low Channel 1, 2412 MHz	12.5 GHz - 25 GHz	-52.64 -20 Pass
	Mid Channel 6, 2437 MHz	Fundamental	N/A N/A N/A
	Mid Channel 6, 2437 MHz	30 MHz - 12.5 GHz	-56.72 -20 Pass
	Mid Channel 6, 2437 MHz	12.5 GHz - 25 GHz	-56 -20 Pass
	High Channel 11, 2462 MHz	Fundamental	N/A N/A N/A
	High Channel 11, 2462 MHz	30 MHz - 12.5 GHz	-53.63 -20 Pass
	High Channel 11, 2462 MHz	12.5 GHz - 25 GHz	-52.79 -20 Pass
802.11(n) MCS15			
	Low Channel 1, 2412 MHz	Fundamental	N/A N/A N/A
	Low Channel 1, 2412 MHz	30 MHz - 12.5 GHz	-51.01 -20 Pass
	Low Channel 1, 2412 MHz	12.5 GHz - 25 GHz	-50.55 -20 Pass
	Mid Channel 6, 2437 MHz	Fundamental	N/A N/A N/A
	Mid Channel 6, 2437 MHz	30 MHz - 12.5 GHz	-50.44 -20 Pass
	Mid Channel 6, 2437 MHz	12.5 GHz - 25 GHz	-52.24 -20 Pass
	High Channel 11, 2462 MHz	Fundamental	N/A N/A N/A
	High Channel 11, 2462 MHz	30 MHz - 12.5 GHz	-51.11 -20 Pass
	High Channel 11, 2462 MHz	12.5 GHz - 25 GHz	-52.23 -20 Pass
Ant 2 (2x2 MIMO)			
20 MHz			
2.4 GHz Band			
802.11(n) MCS12			
	Low Channel 1, 2412 MHz	Fundamental	N/A N/A N/A
	Low Channel 1, 2412 MHz	30 MHz - 12.5 GHz	-51.13 -20 Pass
	Low Channel 1, 2412 MHz	12.5 GHz - 25 GHz	-51.01 -20 Pass
	Mid Channel 6, 2437 MHz	Fundamental	N/A N/A N/A
	Mid Channel 6, 2437 MHz	30 MHz - 12.5 GHz	-53.64 -20 Pass
	Mid Channel 6, 2437 MHz	12.5 GHz - 25 GHz	-53.71 -20 Pass
	High Channel 11, 2462 MHz	Fundamental	N/A N/A N/A
	High Channel 11, 2462 MHz	30 MHz - 12.5 GHz	-50.82 -20 Pass
	High Channel 11, 2462 MHz	12.5 GHz - 25 GHz	-49.61 -20 Pass
802.11(n) MCS15			
	Low Channel 1, 2412 MHz	Fundamental	N/A N/A N/A
	Low Channel 1, 2412 MHz	30 MHz - 12.5 GHz	-50.87 -20 Pass
	Low Channel 1, 2412 MHz	12.5 GHz - 25 GHz	-48.54 -20 Pass
	Mid Channel 6, 2437 MHz	Fundamental	N/A N/A N/A
	Mid Channel 6, 2437 MHz	30 MHz - 12.5 GHz	-47.97 -20 Pass
	Mid Channel 6, 2437 MHz	12.5 GHz - 25 GHz	-48.36 -20 Pass
	High Channel 11, 2462 MHz	Fundamental	N/A N/A N/A
	High Channel 11, 2462 MHz	30 MHz - 12.5 GHz	-47.66 -20 Pass
	High Channel 11, 2462 MHz	12.5 GHz - 25 GHz	-48.94 -20 Pass

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Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, Low Channel 1, 2412 MHz						
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result			
Fundamental	N/A	N/A	N/A			

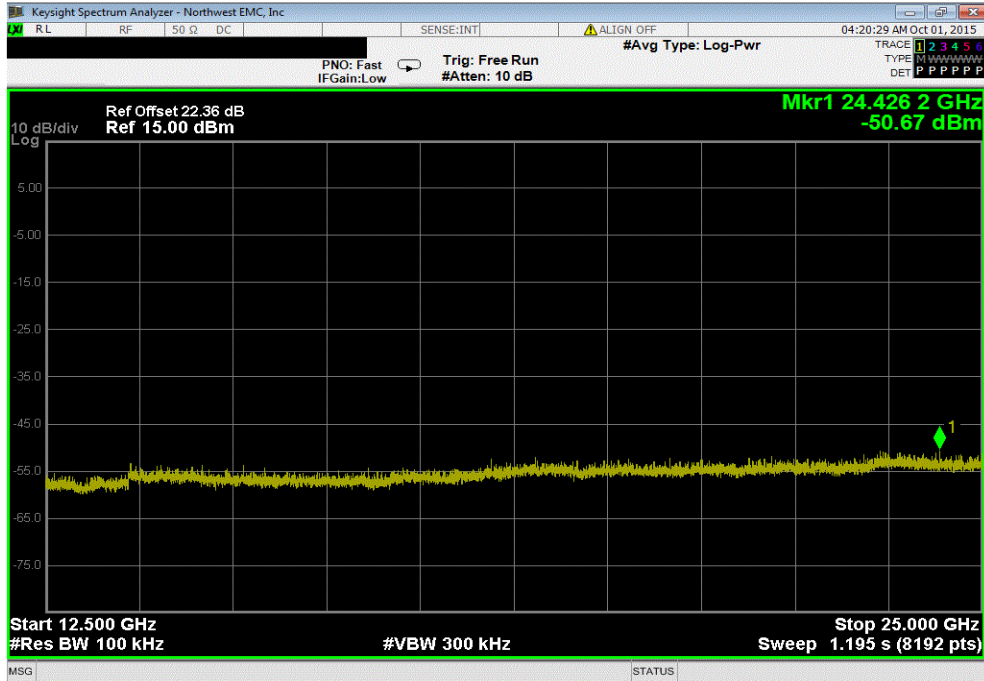


Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, Low Channel 1, 2412 MHz						
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result			
30 MHz - 12.5 GHz	-54.12	-20	Pass			

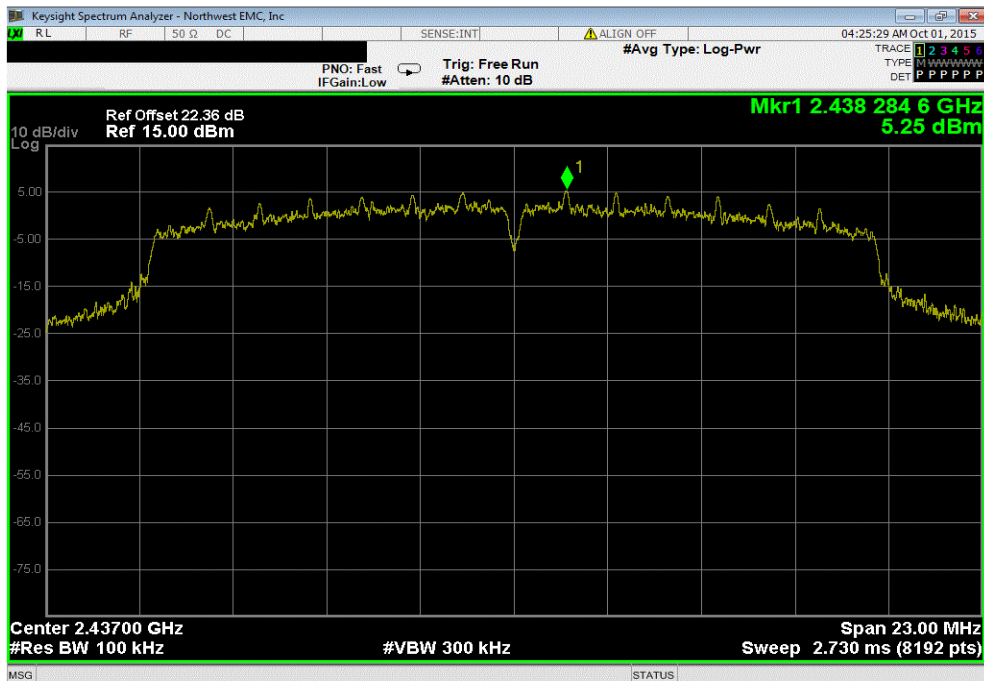


SPURIOUS CONDUCTED EMISSIONS

Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, Low Channel 1, 2412 MHz				
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result	
12.5 GHz - 25 GHz	-52.64	-20	Pass	

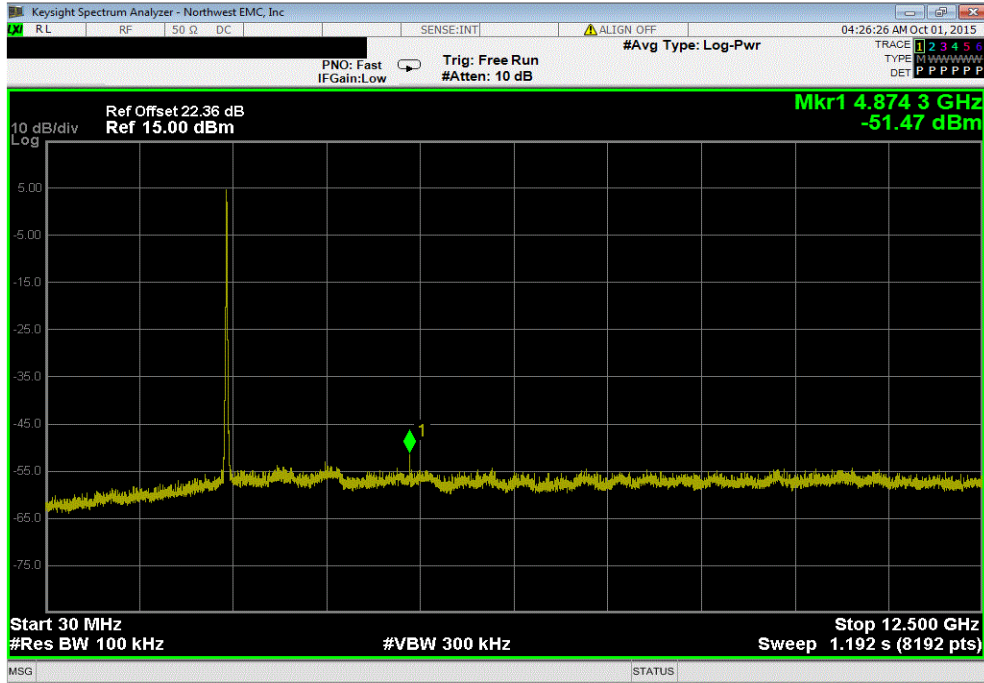


Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, Mid Channel 6, 2437 MHz				
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result	
Fundamental	N/A	N/A	N/A	

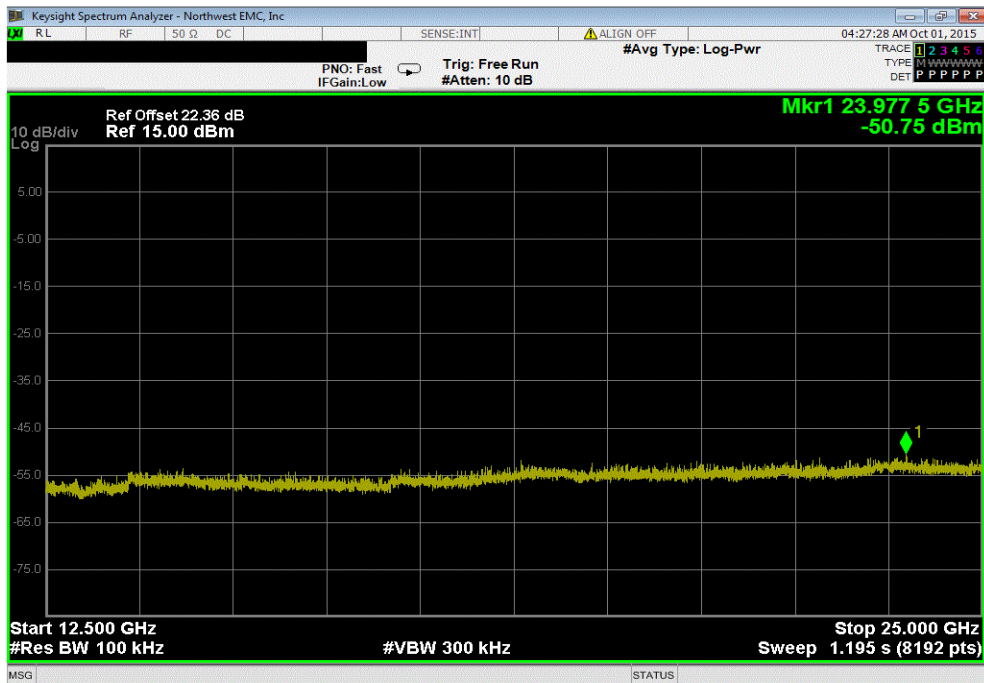


SPURIOUS CONDUCTED EMISSIONS

Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, Mid Channel 6, 2437 MHz				
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result	
30 MHz - 12.5 GHz	-56.72	-20	Pass	

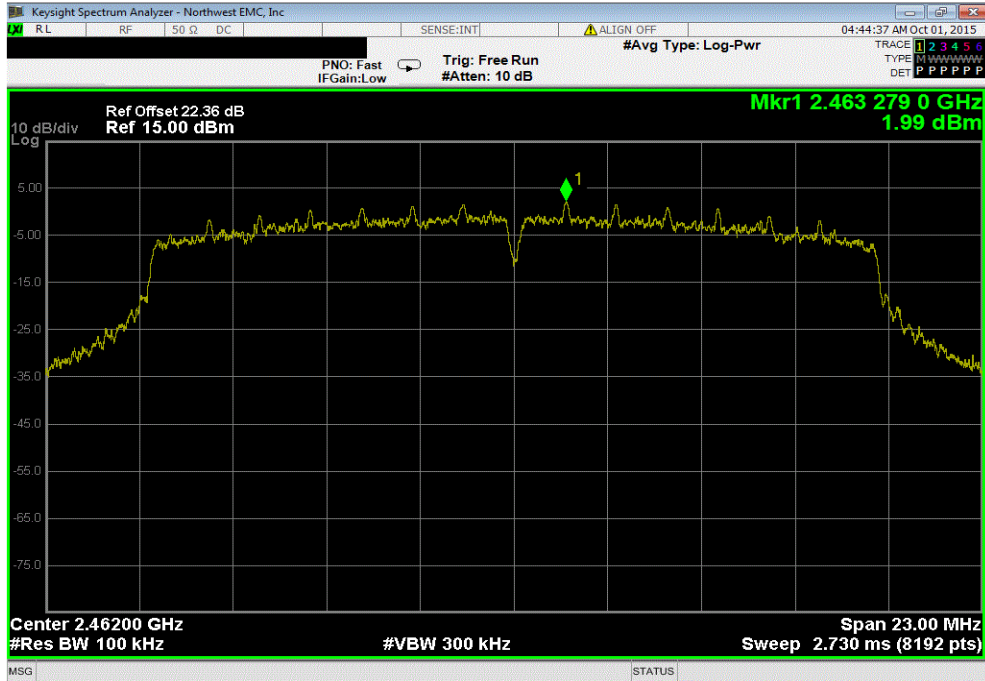


Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, Mid Channel 6, 2437 MHz				
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result	
12.5 GHz - 25 GHz	-56	-20	Pass	

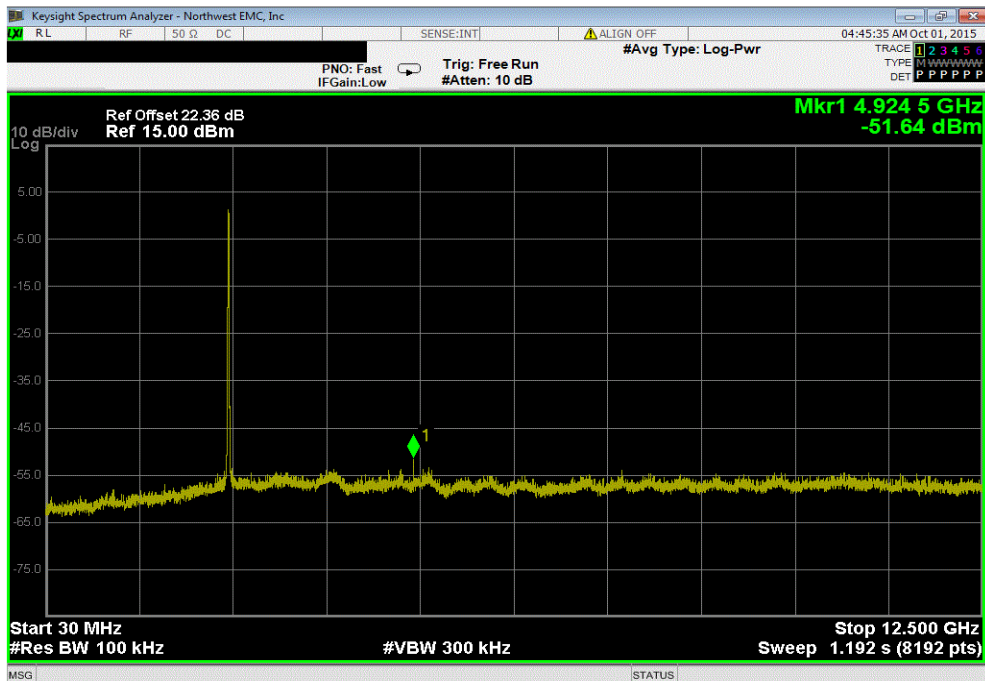


SPURIOUS CONDUCTED EMISSIONS

Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, High Channel 11, 2462 MHz						
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result			
Fundamental	N/A	N/A	N/A			

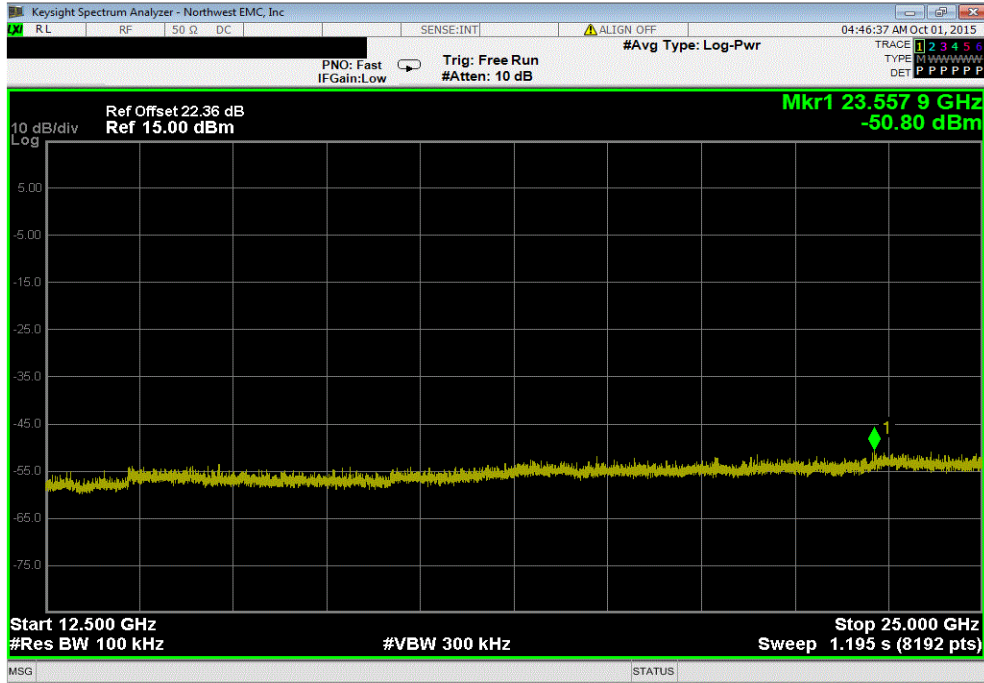


Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, High Channel 11, 2462 MHz						
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result			
30 MHz - 12.5 GHz	-53.63	-20	Pass			

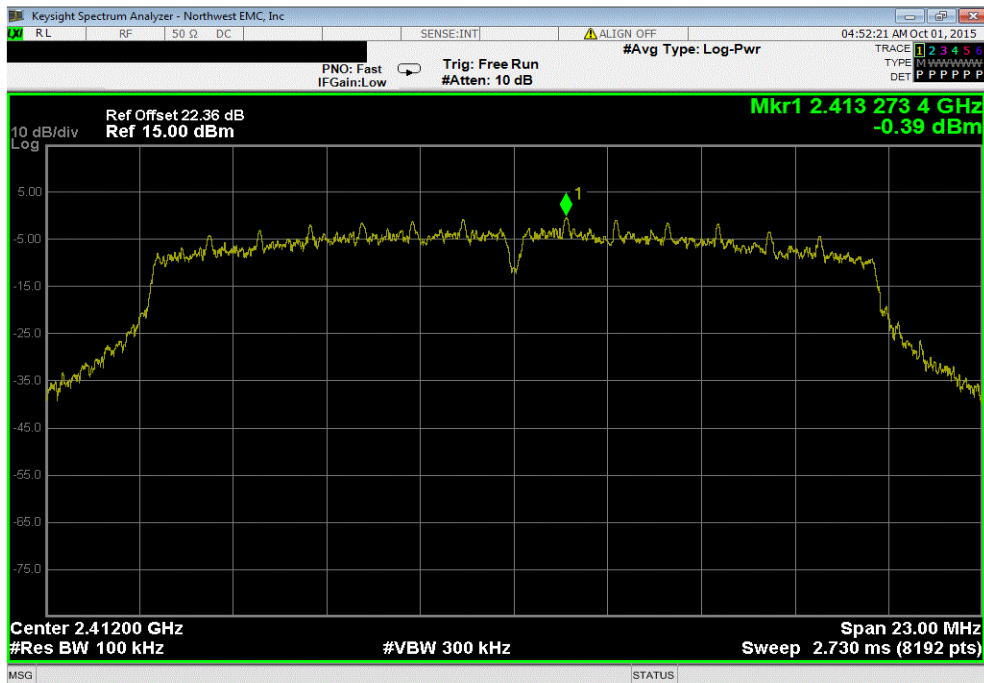


SPURIOUS CONDUCTED EMISSIONS

Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, High Channel 11, 2462 MHz				
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result	
12.5 GHz - 25 GHz	-52.79	-20	Pass	

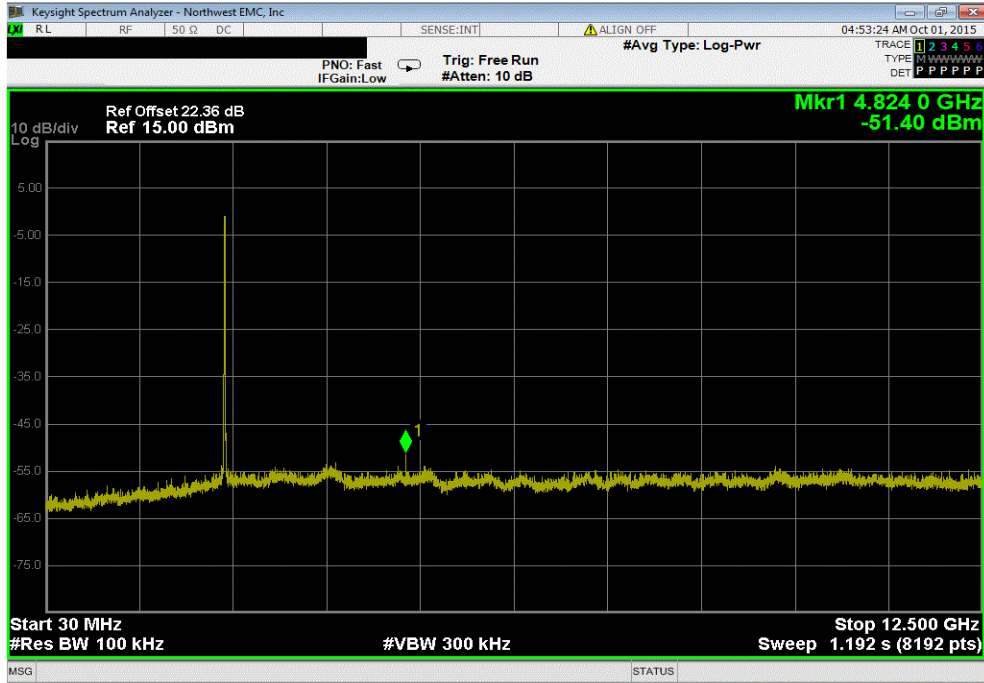


Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, Low Channel 1, 2412 MHz				
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result	
Fundamental	N/A	N/A	N/A	

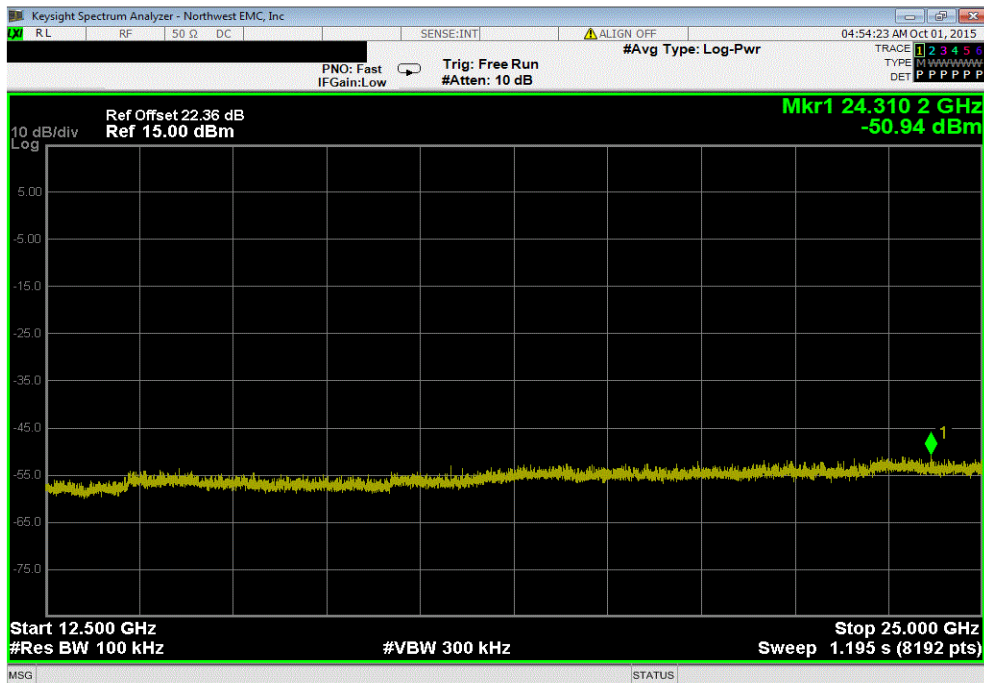


SPURIOUS CONDUCTED EMISSIONS

Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, Low Channel 1, 2412 MHz				
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result	
30 MHz - 12.5 GHz	-51.01	-20	Pass	

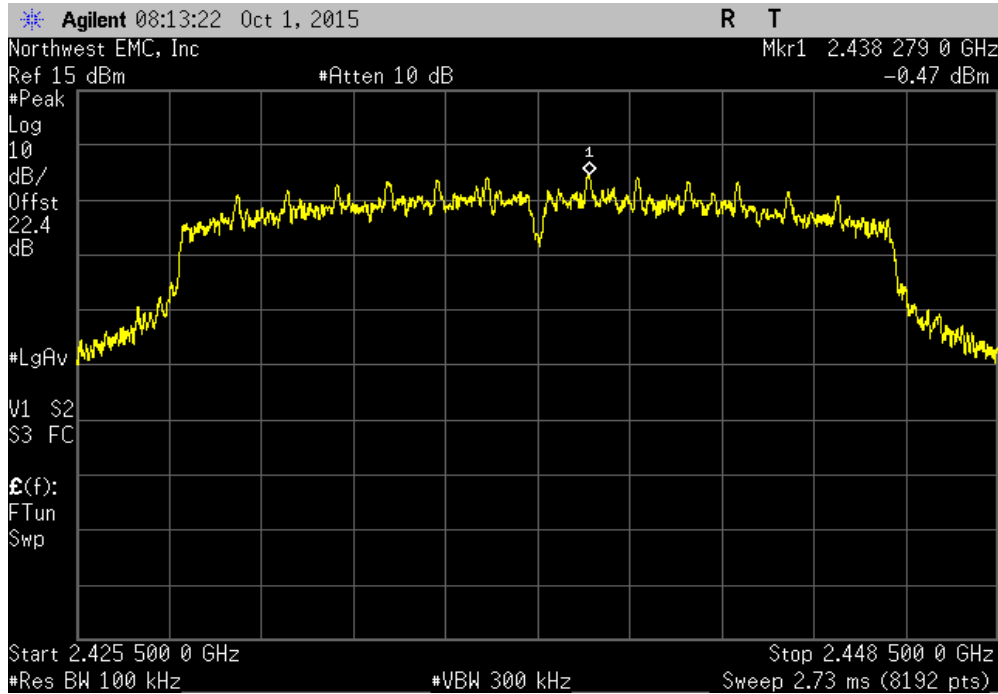


Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, Low Channel 1, 2412 MHz				
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result	
12.5 GHz - 25 GHz	-50.55	-20	Pass	

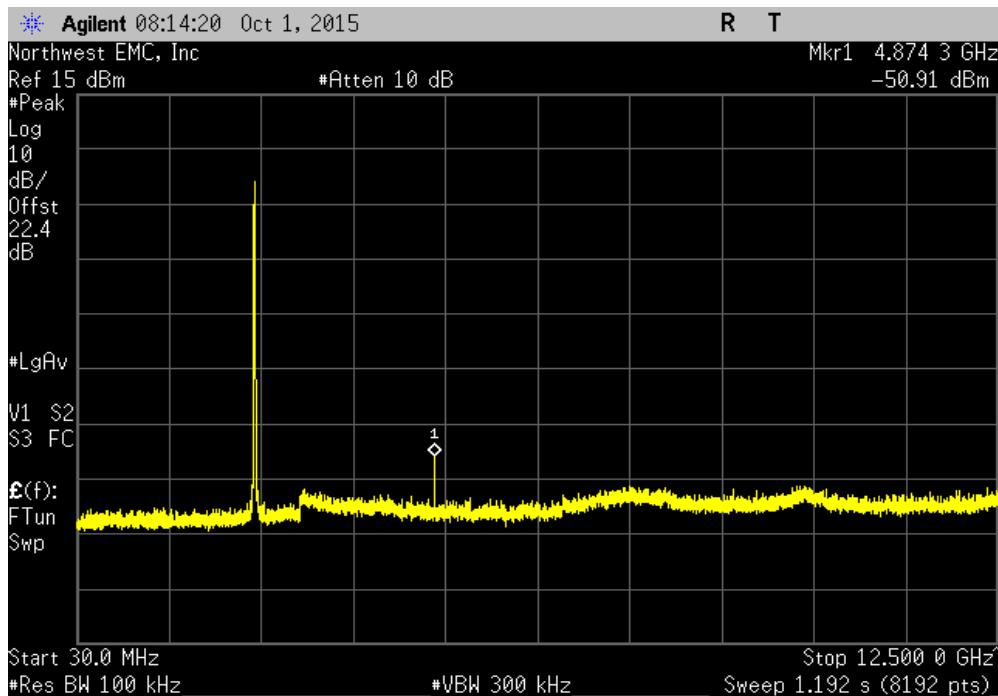


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Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, Mid Channel 6, 2437 MHz					
Frequency Range		Max Value (dBc)	Limit ≤ (dBc)	Result	
Fundamental		N/A	N/A	N/A	

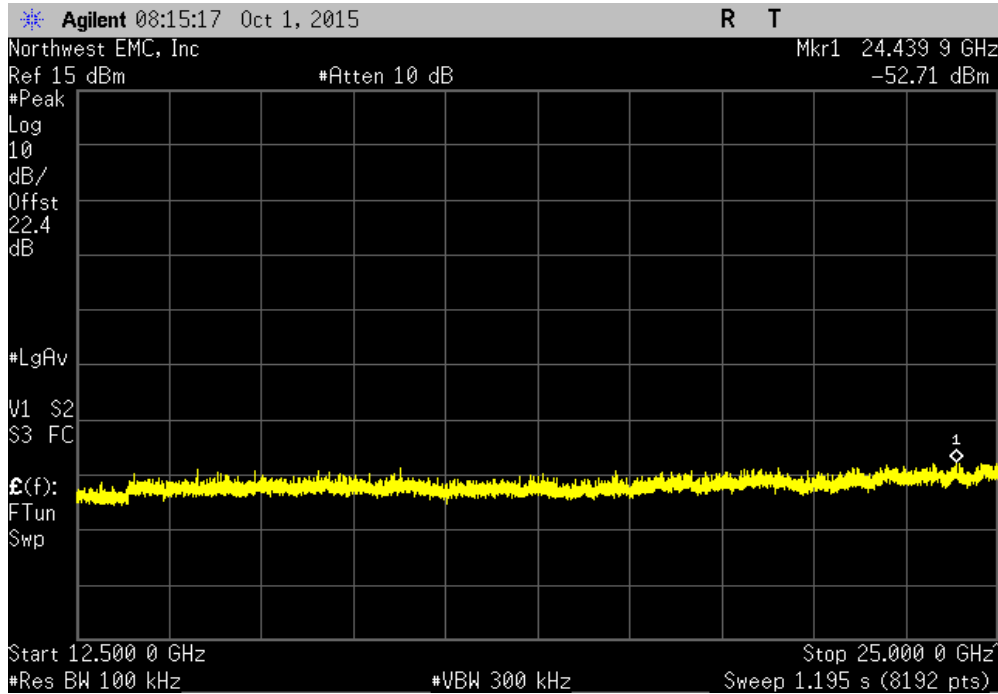


Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, Mid Channel 6, 2437 MHz					
Frequency Range		Max Value (dBc)	Limit ≤ (dBc)	Result	
30 MHz - 12.5 GHz		-50.44	-20	Pass	

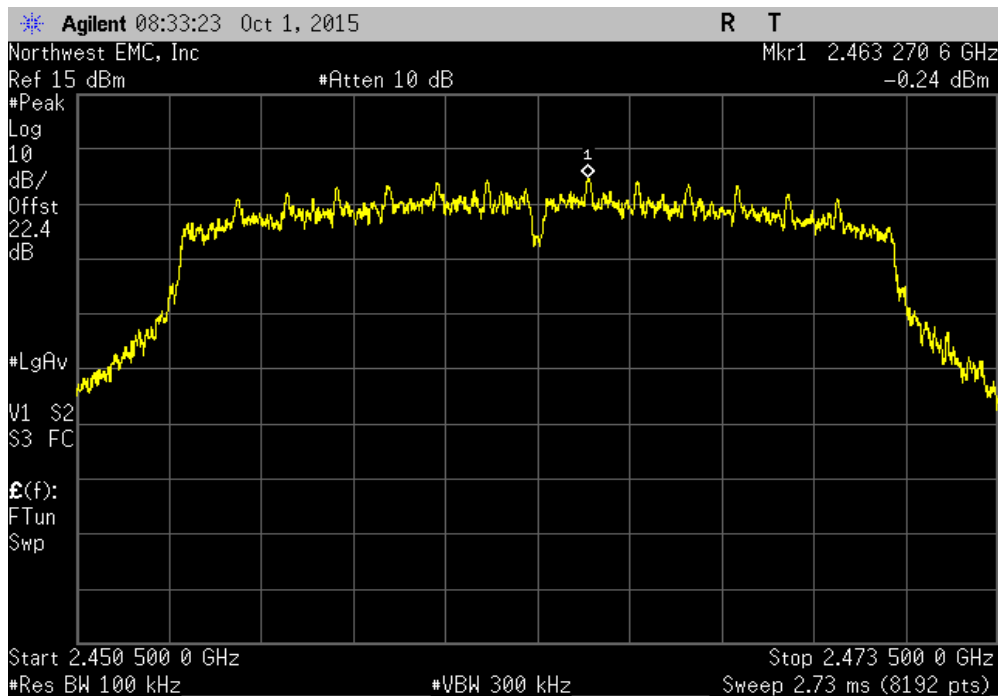


SPURIOUS CONDUCTED EMISSIONS

Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, Mid Channel 6, 2437 MHz				
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result	
12.5 GHz - 25 GHz	-52.24	-20	Pass	

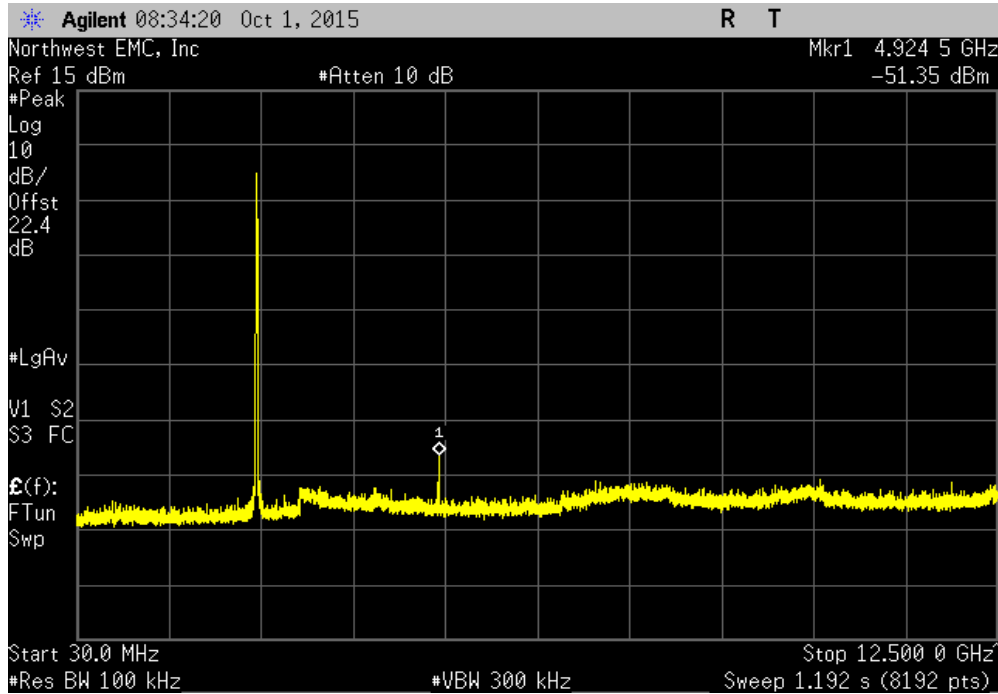


Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, High Channel 11, 2462 MHz				
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result	
Fundamental	N/A	N/A	N/A	

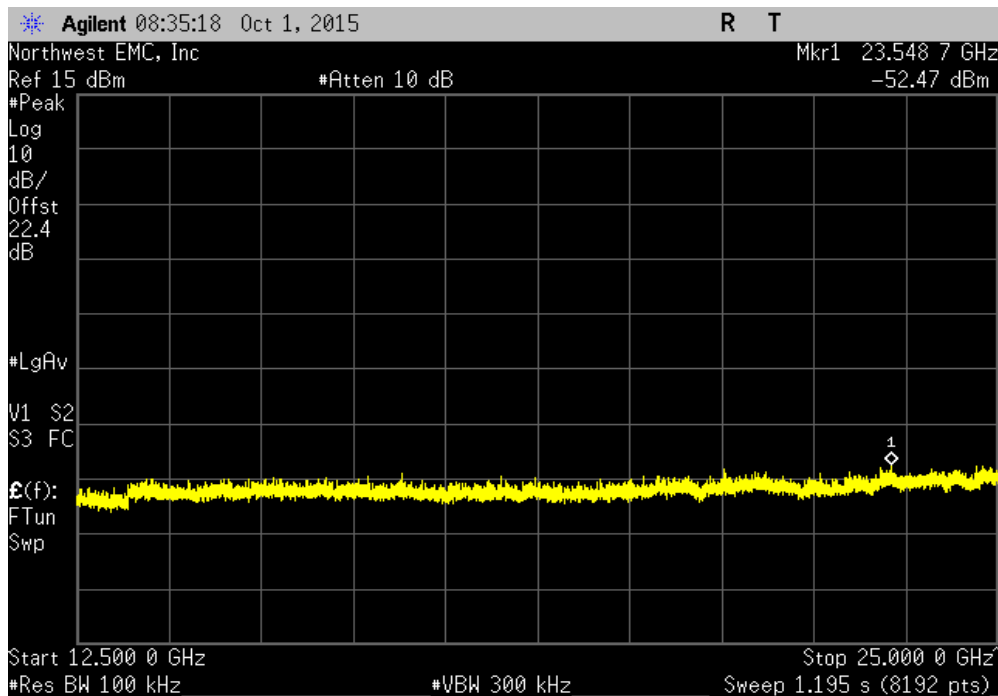


SPURIOUS CONDUCTED EMISSIONS

Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, High Channel 11, 2462 MHz				
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result	
30 MHz - 12.5 GHz	-51.11	-20	Pass	

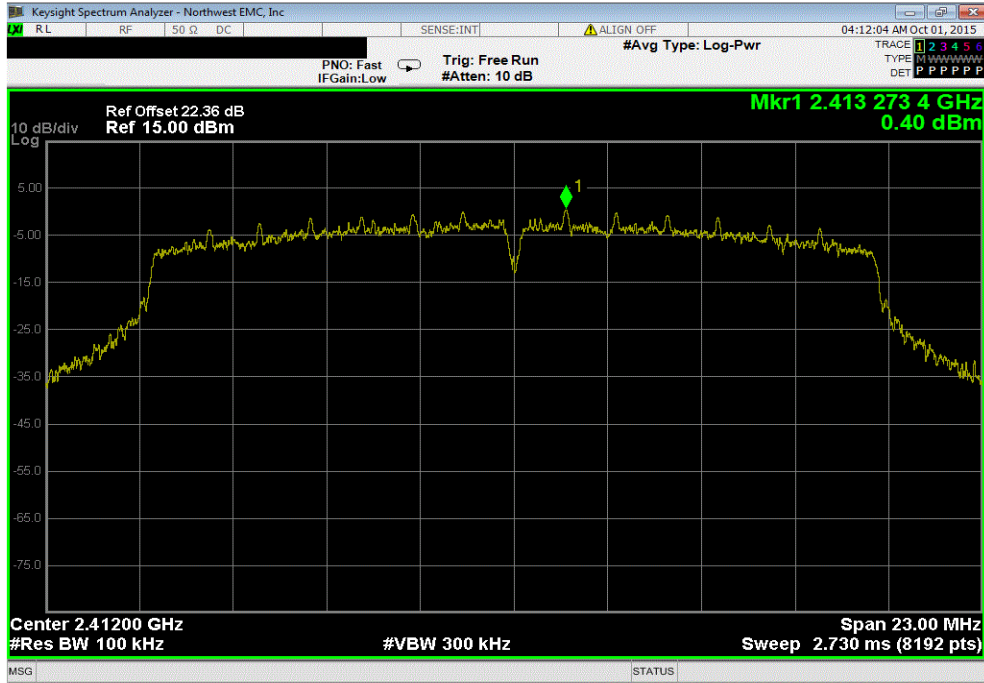


Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, High Channel 11, 2462 MHz				
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result	
12.5 GHz - 25 GHz	-52.23	-20	Pass	

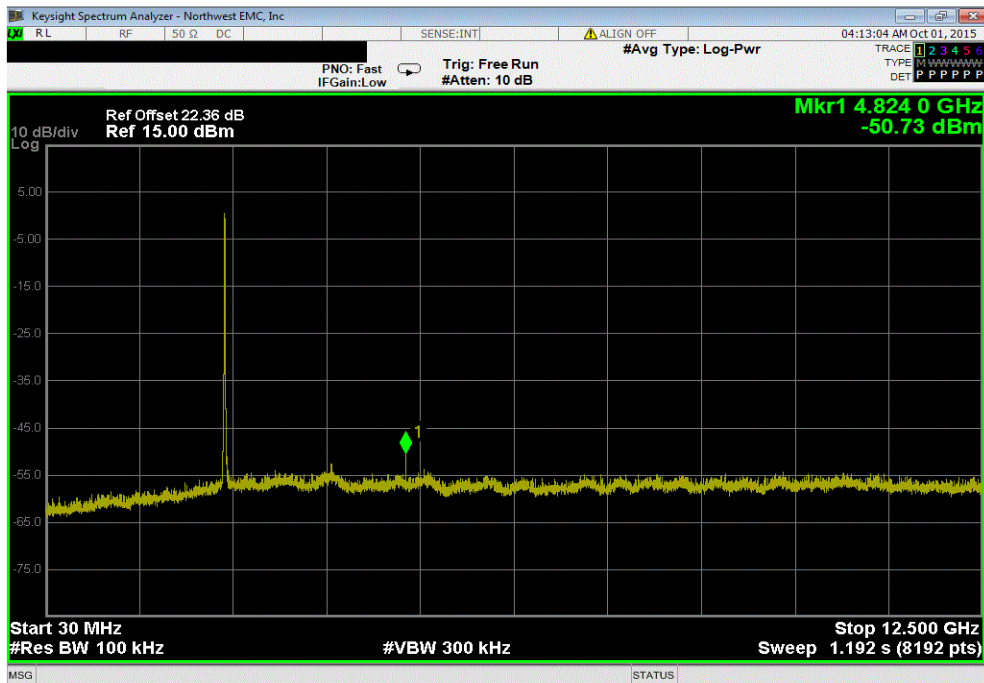


SPURIOUS CONDUCTED EMISSIONS

Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, Low Channel 1, 2412 MHz						
Frequency Range		Max Value (dBc)	Limit ≤ (dBc)	Result		
Fundamental		N/A	N/A	N/A		

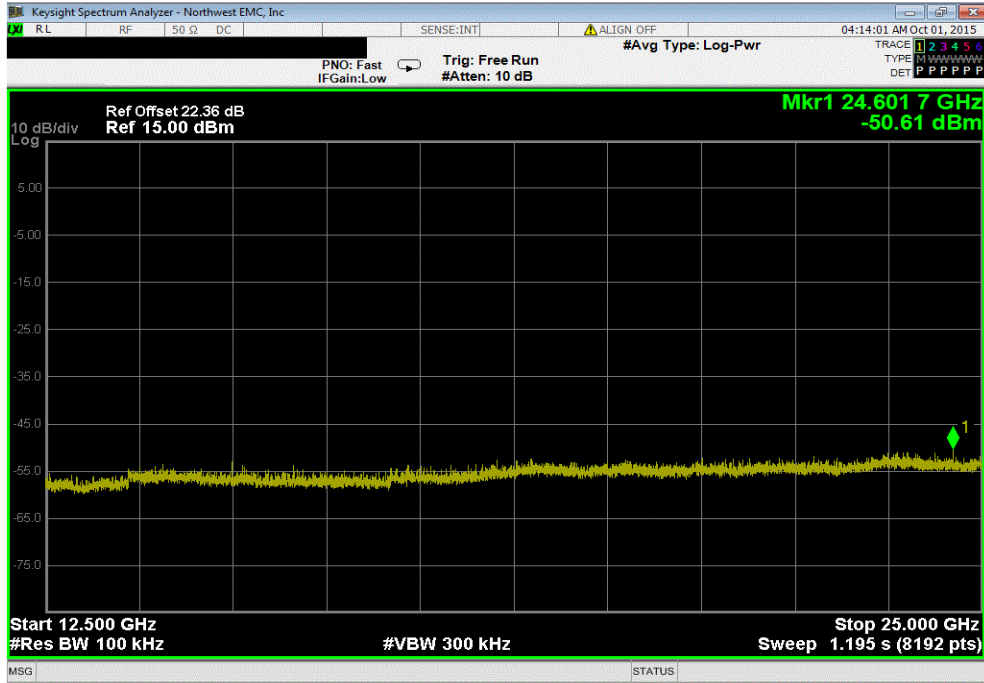


Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, Low Channel 1, 2412 MHz						
Frequency Range		Max Value (dBc)	Limit ≤ (dBc)	Result		
30 MHz - 12.5 GHz		-51.13	-20	Pass		

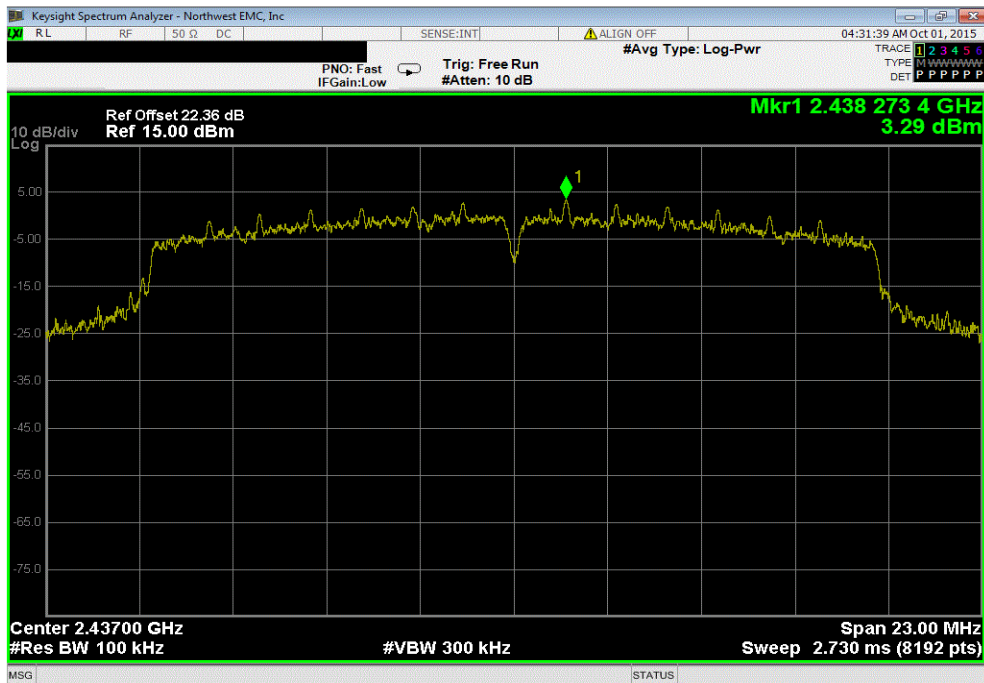


SPURIOUS CONDUCTED EMISSIONS

Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, Low Channel 1, 2412 MHz				
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result	
12.5 GHz - 25 GHz	-51.01	-20	Pass	

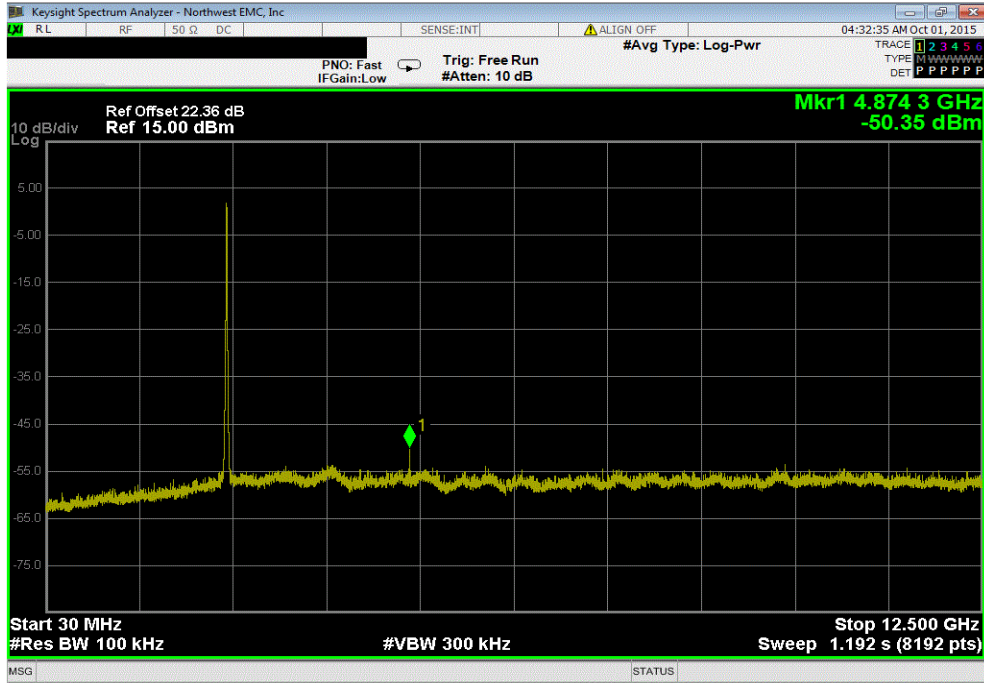


Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, Mid Channel 6, 2437 MHz				
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result	
Fundamental	N/A	N/A	N/A	

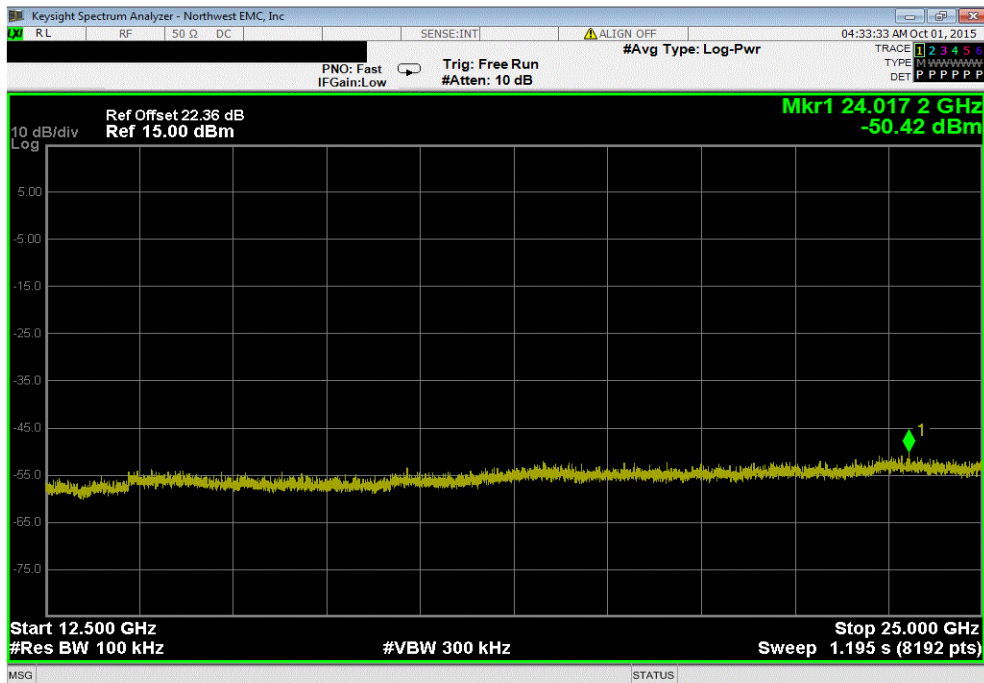


SPURIOUS CONDUCTED EMISSIONS

Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, Mid Channel 6, 2437 MHz				
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result	
30 MHz - 12.5 GHz	-53.64	-20	Pass	

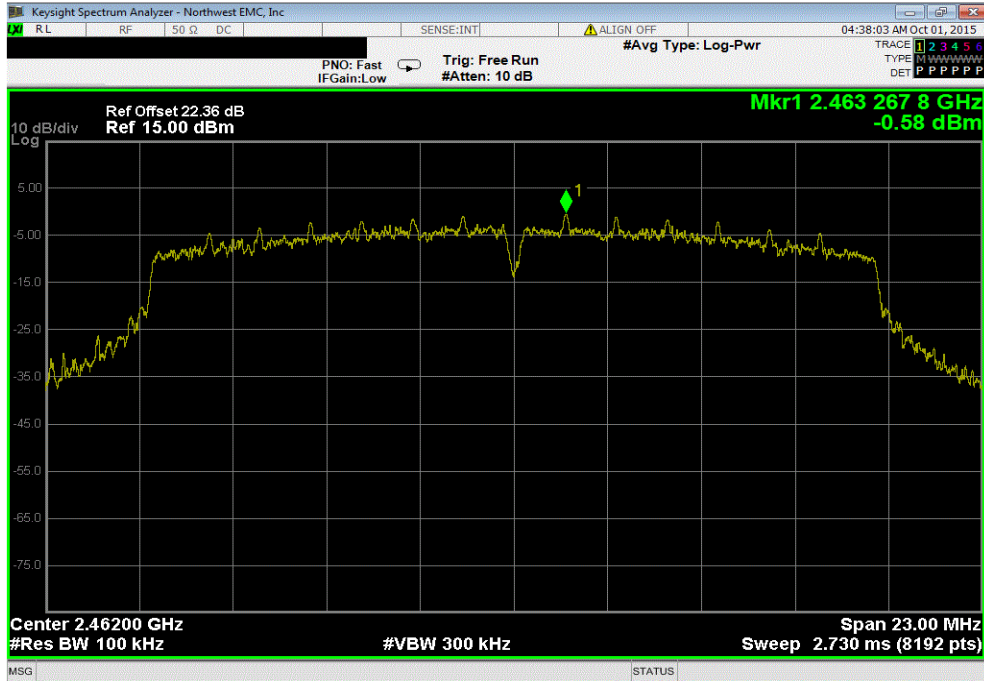


Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, Mid Channel 6, 2437 MHz				
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result	
12.5 GHz - 25 GHz	-53.71	-20	Pass	

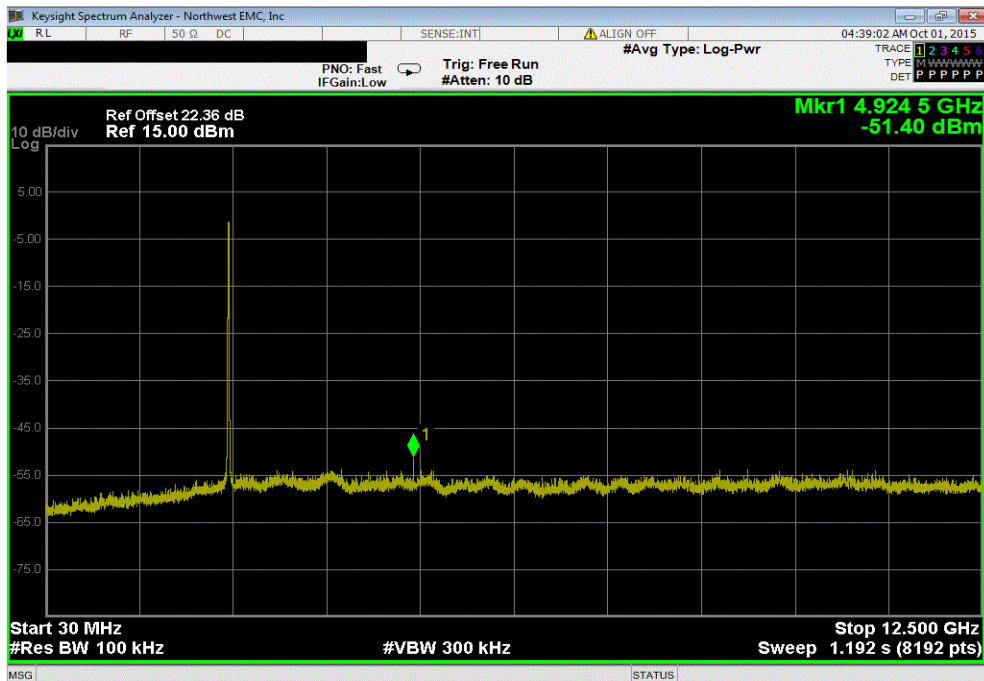


SPURIOUS CONDUCTED EMISSIONS

Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, High Channel 11, 2462 MHz						
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result			
Fundamental	N/A	N/A	N/A			

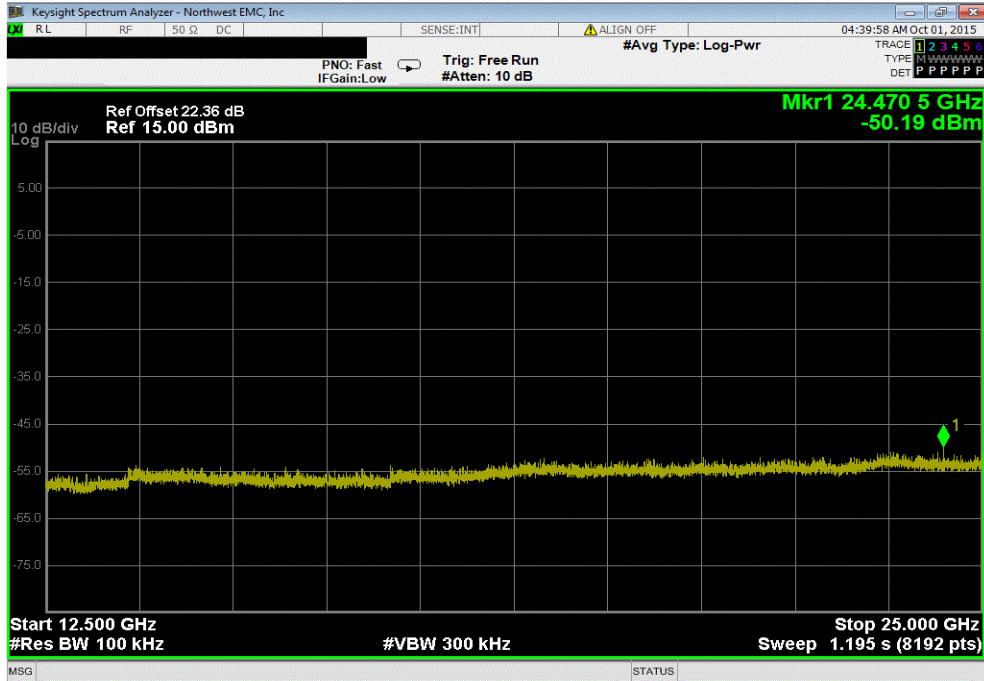


Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, High Channel 11, 2462 MHz						
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result			
30 MHz - 12.5 GHz	-50.82	-20	Pass			

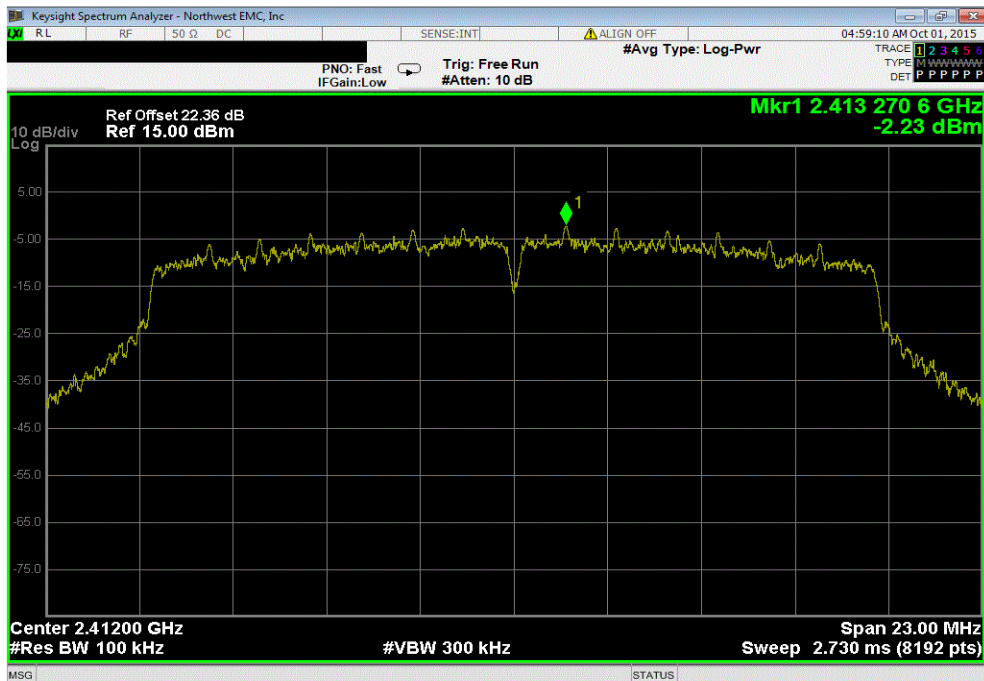


SPURIOUS CONDUCTED EMISSIONS

Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, High Channel 11, 2462 MHz				
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result	
12.5 GHz - 25 GHz	-49.61	-20	Pass	

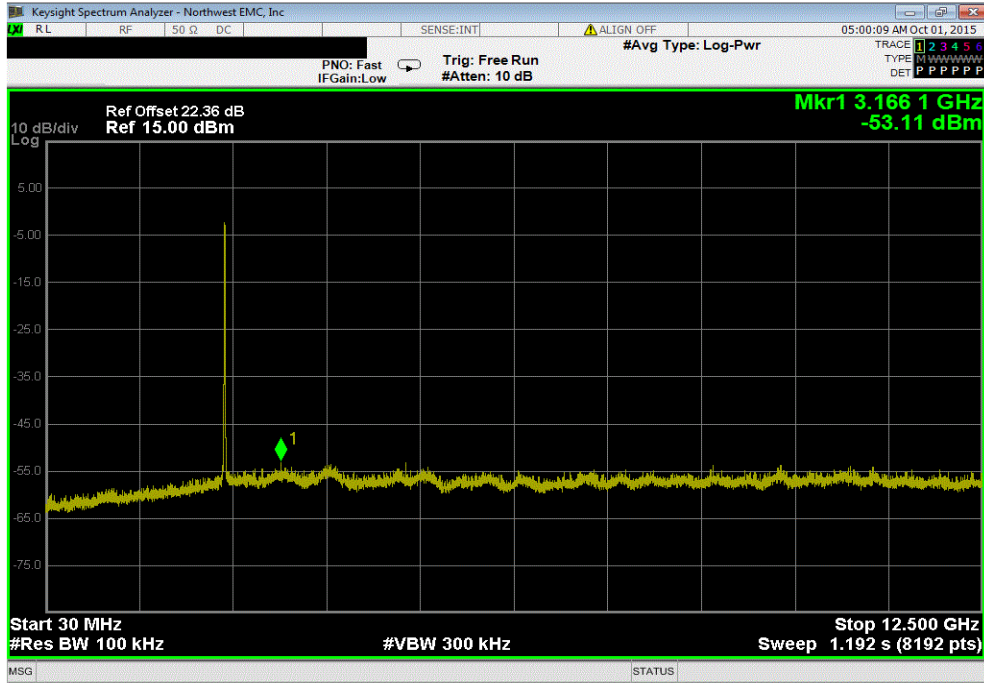


Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, Low Channel 1, 2412 MHz				
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result	
Fundamental	N/A	N/A	N/A	

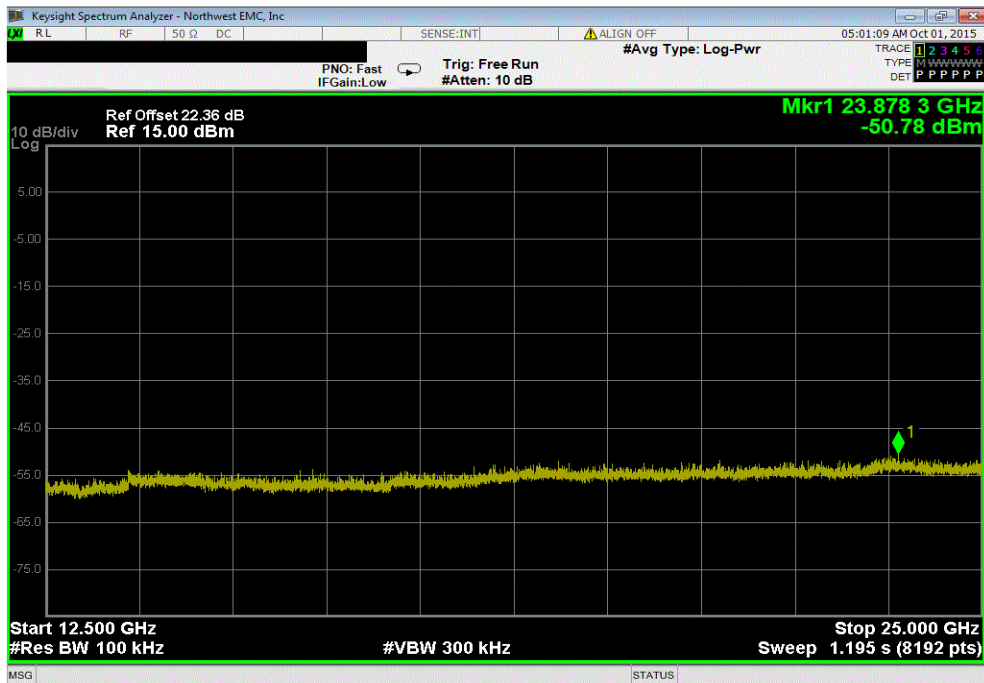


SPURIOUS CONDUCTED EMISSIONS

Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, Low Channel 1, 2412 MHz				
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result	
30 MHz - 12.5 GHz	-50.87	-20	Pass	

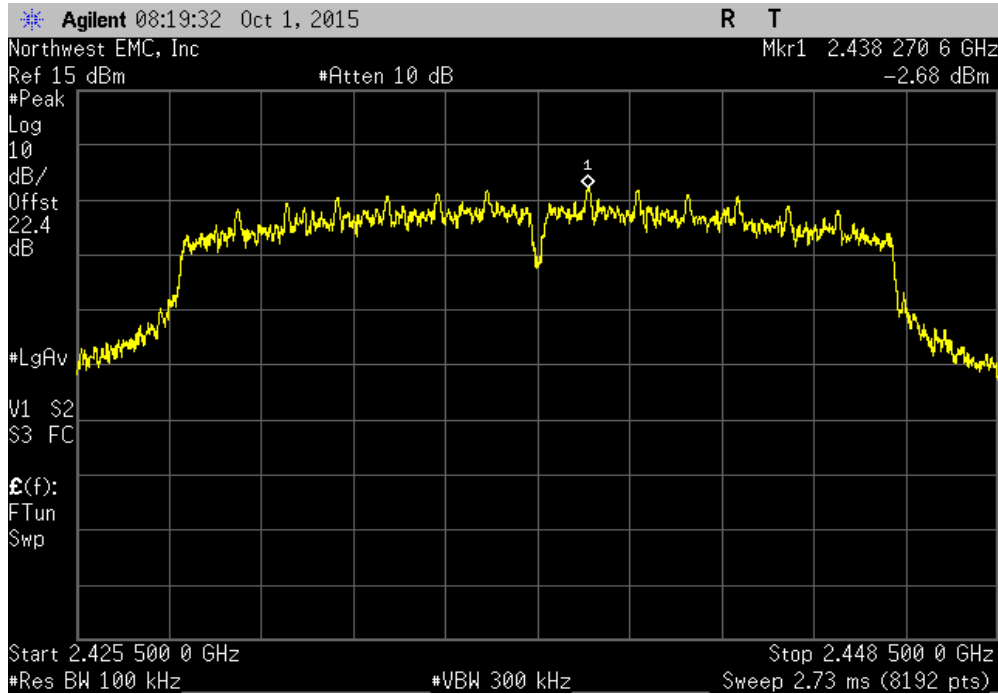


Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, Low Channel 1, 2412 MHz				
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result	
12.5 GHz - 25 GHz	-48.54	-20	Pass	

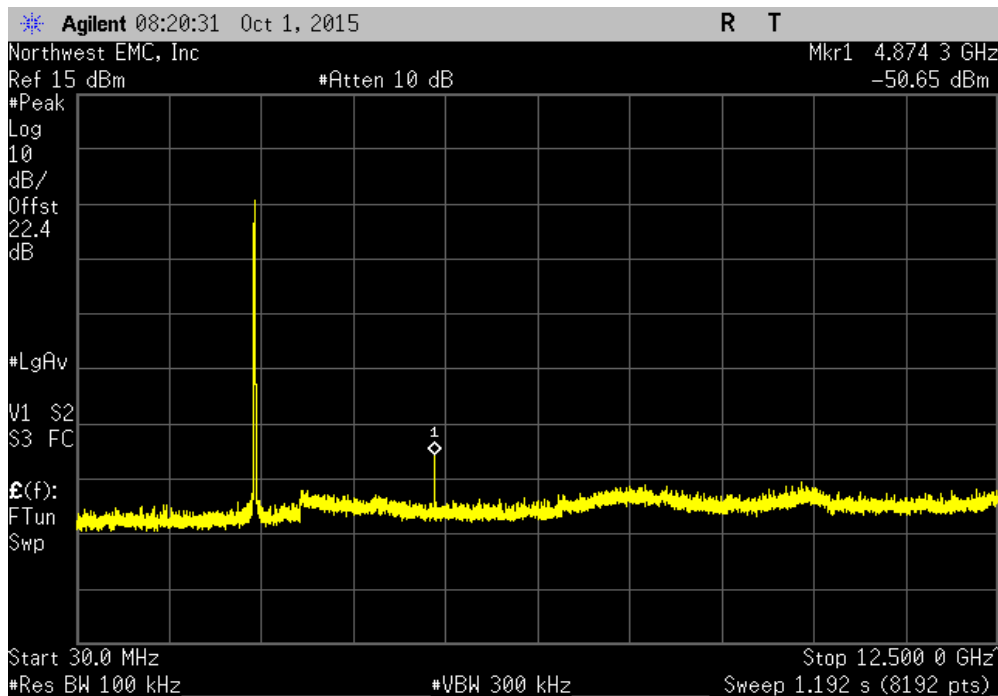


SPURIOUS CONDUCTED EMISSIONS

Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, Mid Channel 6, 2437 MHz					
Frequency Range		Max Value (dBc)	Limit ≤ (dBc)	Result	
Fundamental		N/A	N/A	N/A	

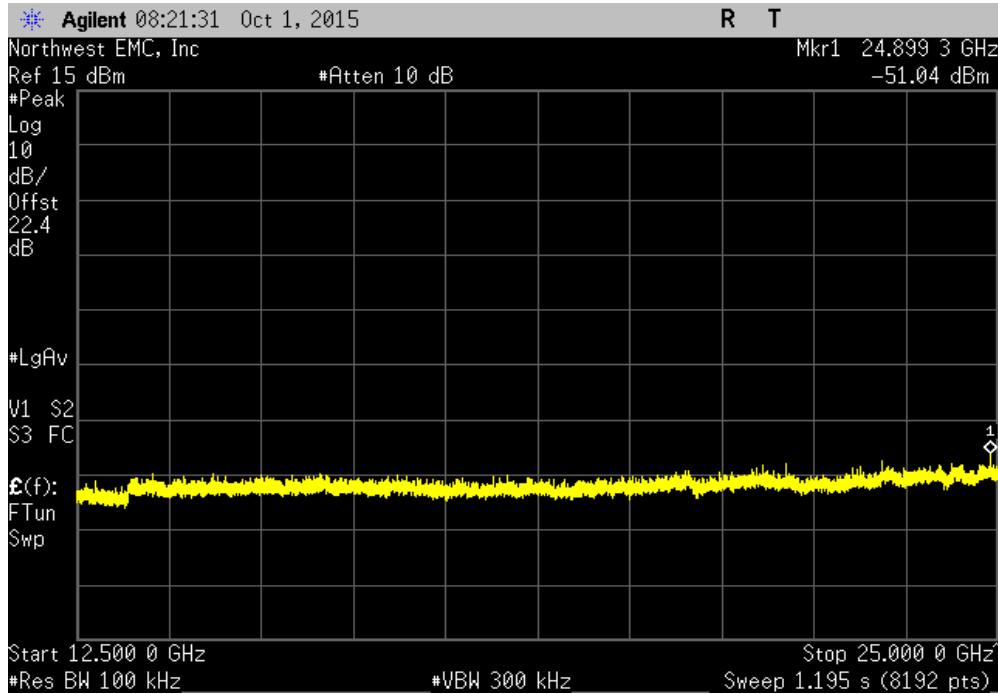


Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, Mid Channel 6, 2437 MHz					
Frequency Range		Max Value (dBc)	Limit ≤ (dBc)	Result	
30 MHz - 12.5 GHz		-47.97	-20	Pass	

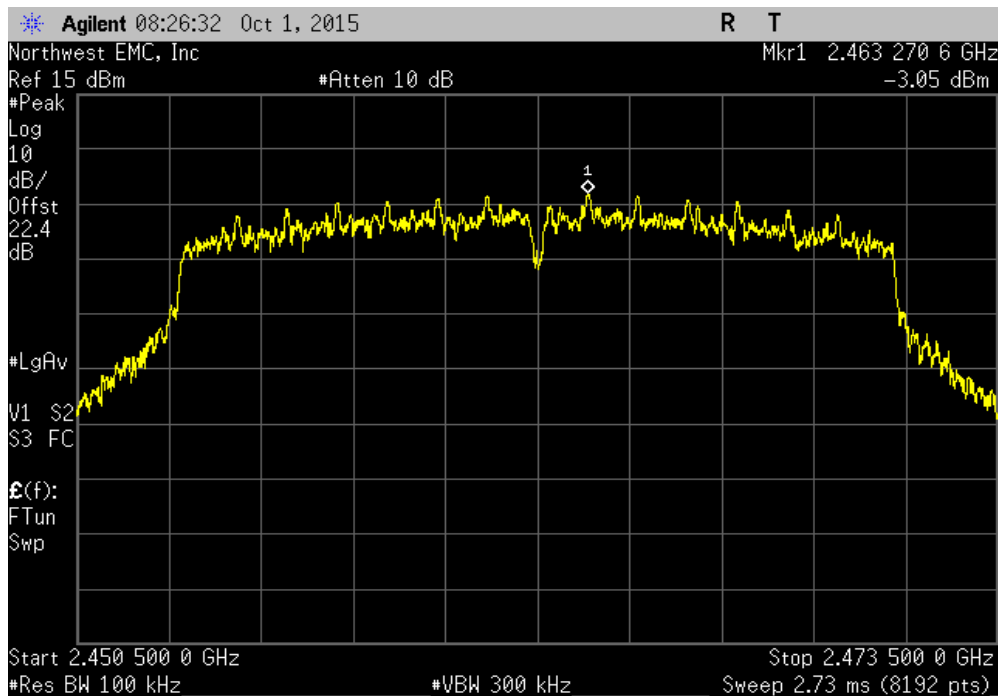


SPURIOUS CONDUCTED EMISSIONS

Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, Mid Channel 6, 2437 MHz				
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result	
12.5 GHz - 25 GHz	-48.36	-20	Pass	

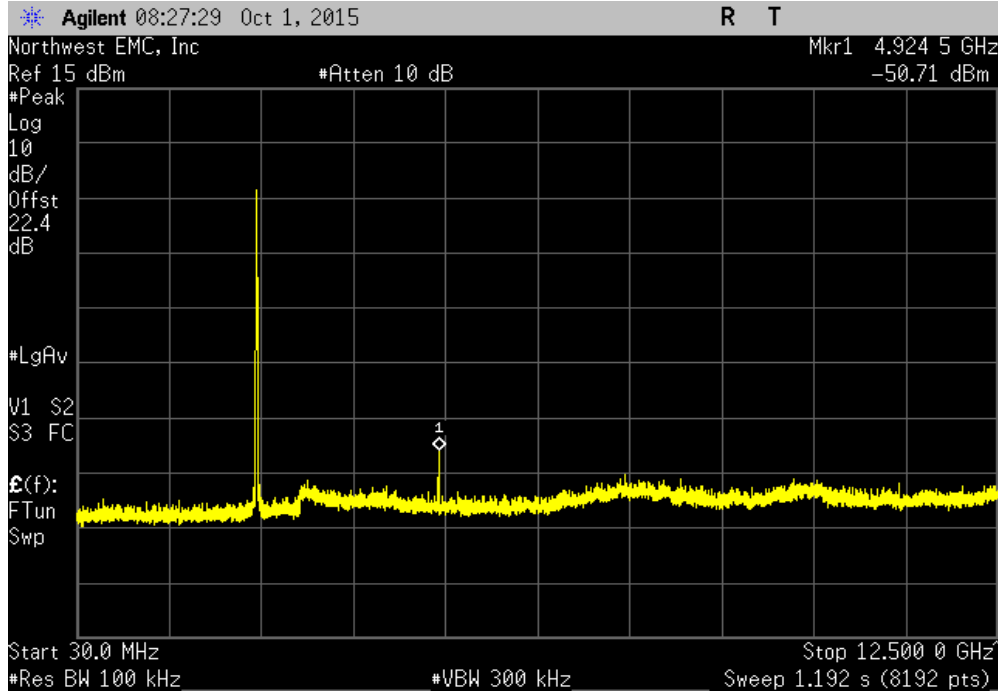


Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, High Channel 11, 2462 MHz				
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result	
Fundamental	N/A	N/A	N/A	



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Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, High Channel 11, 2462 MHz				
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result	
30 MHz - 12.5 GHz	-47.66	-20	Pass	



Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, High Channel 11, 2462 MHz				
Frequency Range	Max Value (dBc)	Limit ≤ (dBc)	Result	
12.5 GHz - 25 GHz	-48.94	-20	Pass	

