

POWER SPECTRAL DENSITY

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 (mos)
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFO	6/23/2015	12
Cable	ESM Cable Corp.	TTBJ-141 KMKM-72	NC5	6/6/2015	12
Attenuator	Fairview Microwave	SA4014-20	TKE	1/16/2015	12
Block - DC	Fairview Microwave	SD3379	AMJ	6/6/2015	12
Generator - Signal	Keysight	N5182B	TFY	4/16/2015	36

TEST DESCRIPTION

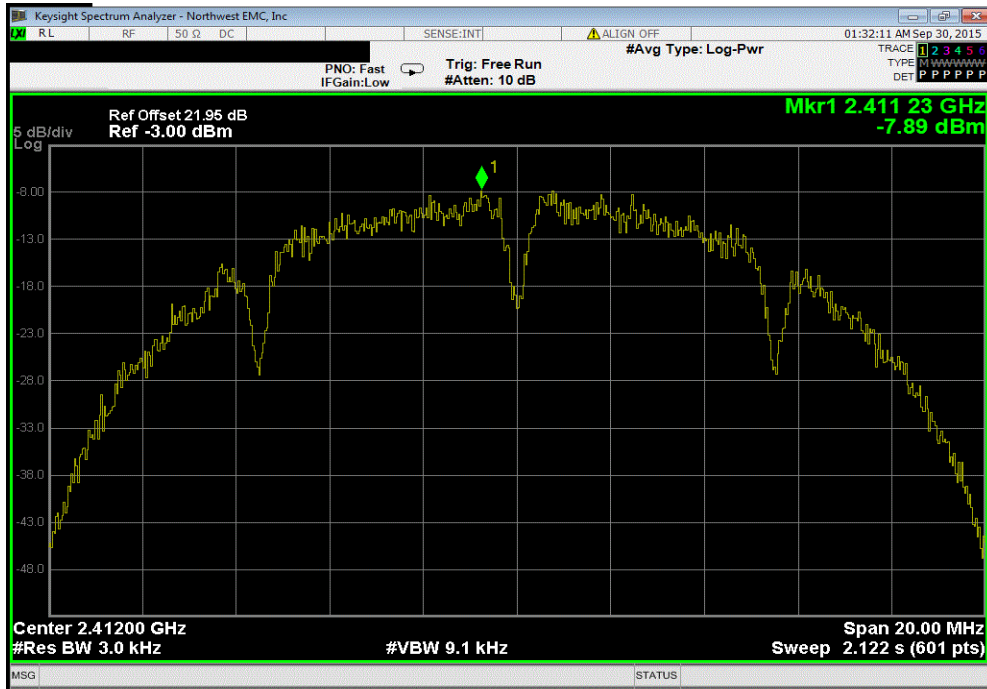
The maximum power spectral density measurements was measured using the channels and modes as called out on the following data sheets.

A direct connection was made between the RF output of the EUT and a spectrum analyzer. External attenuation and a DC block were used. The reference level offset on the spectrum analyzer was adjusted to compensate for cable loss and the external attenuation used between the RF output and the spectrum analyzer input.

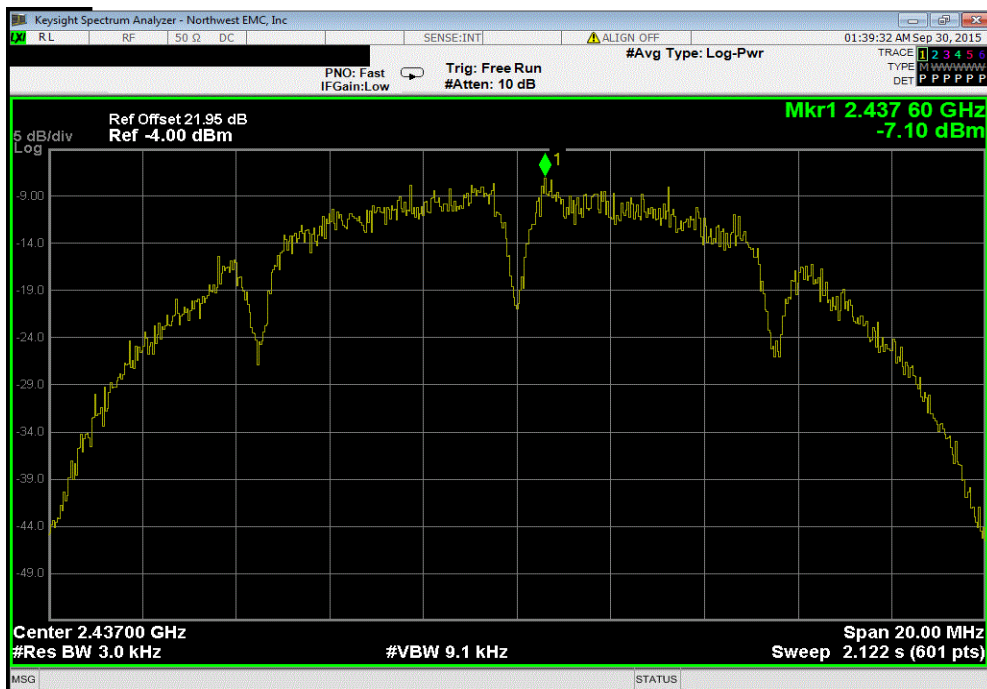
Per the procedure outlined in ANSI C63.10 the peak power spectral density was measured in a 3 kHz RBW.

POWER SPECTRAL DENSITY

Ant 1, 20 MHz, 2.4 GHz Band, 802.11(b) 1Mbps, Low Channel 1, 2412 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-7.886	8	Pass			

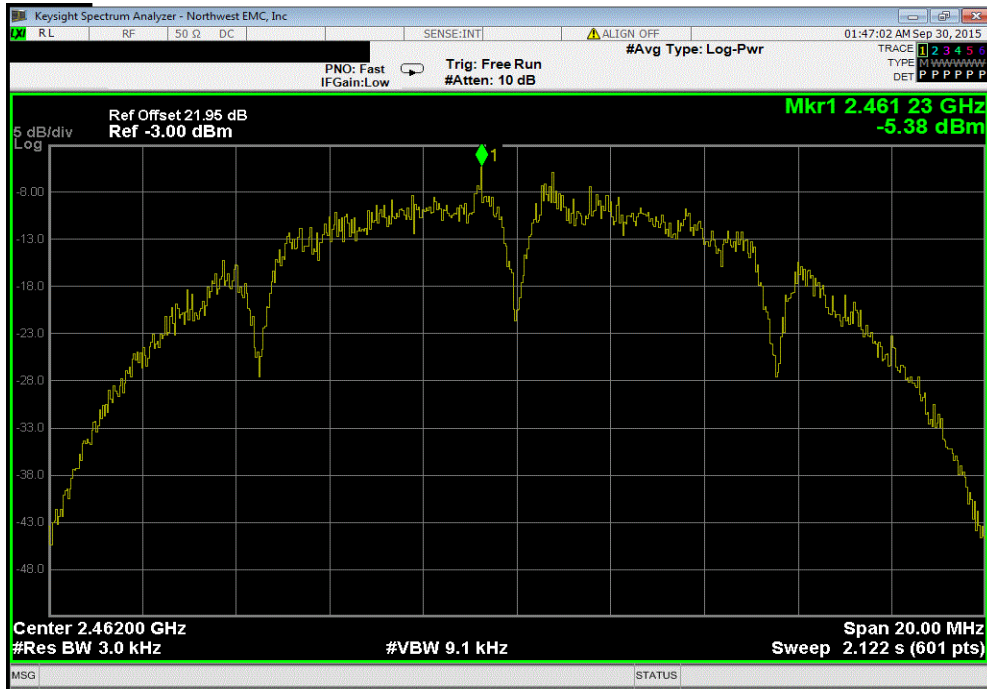


Ant 1, 20 MHz, 2.4 GHz Band, 802.11(b) 1Mbps, Mid Channel 6, 2437 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-7.097	8	Pass			

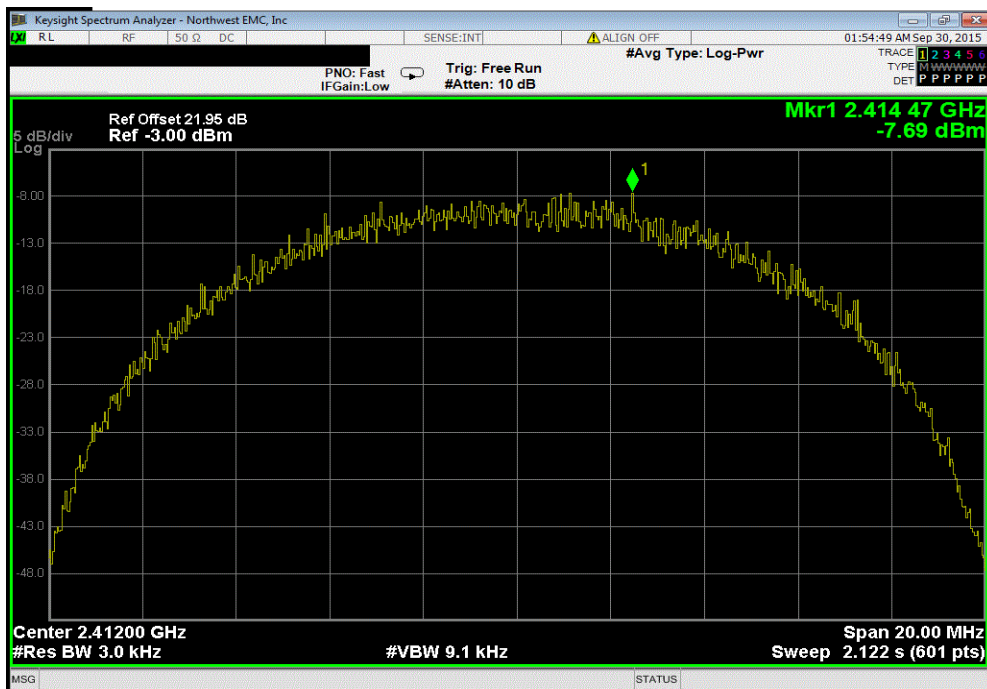


POWER SPECTRAL DENSITY

Ant 1, 20 MHz, 2.4 GHz Band, 802.11(b) 1Mbps, High Channel 11, 2462 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-5.384	8	Pass			

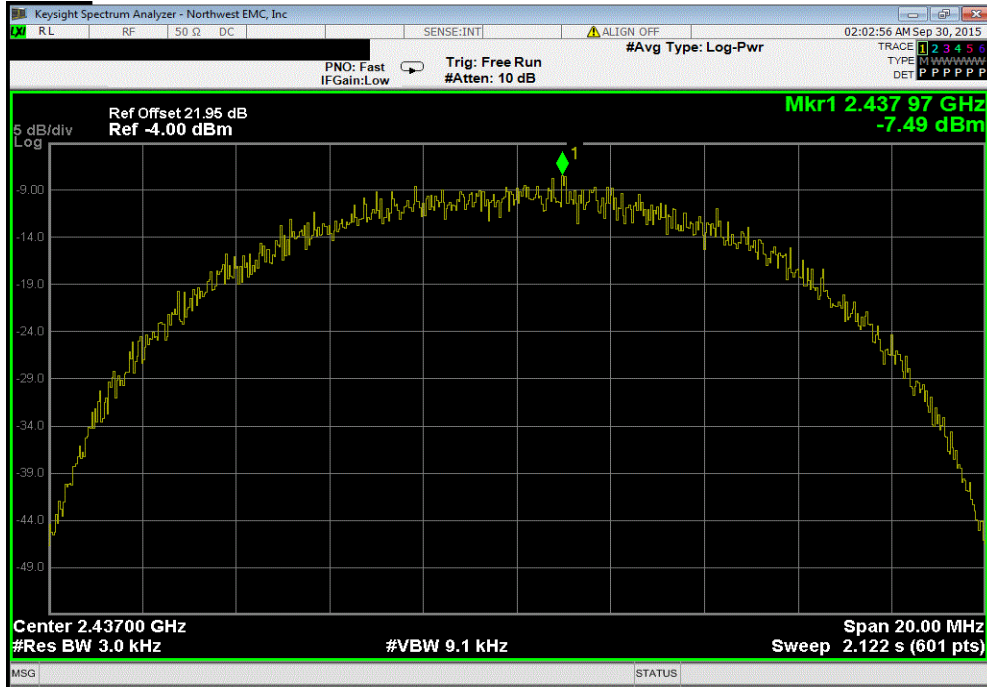


Ant 1, 20 MHz, 2.4 GHz Band, 802.11(b) 11Mbps, Low Channel 1, 2412 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-7.694	8	Pass			

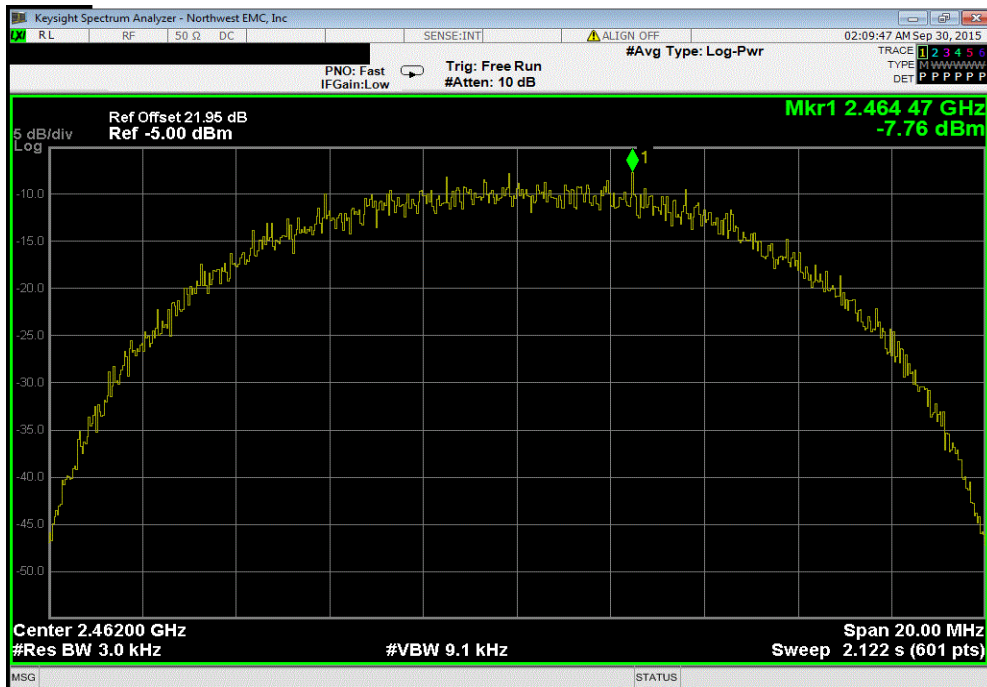


POWER SPECTRAL DENSITY

Ant 1, 20 MHz, 2.4 GHz Band, 802.11(b) 11Mbps, Mid Channel 6, 2437 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-7.492	8	Pass			

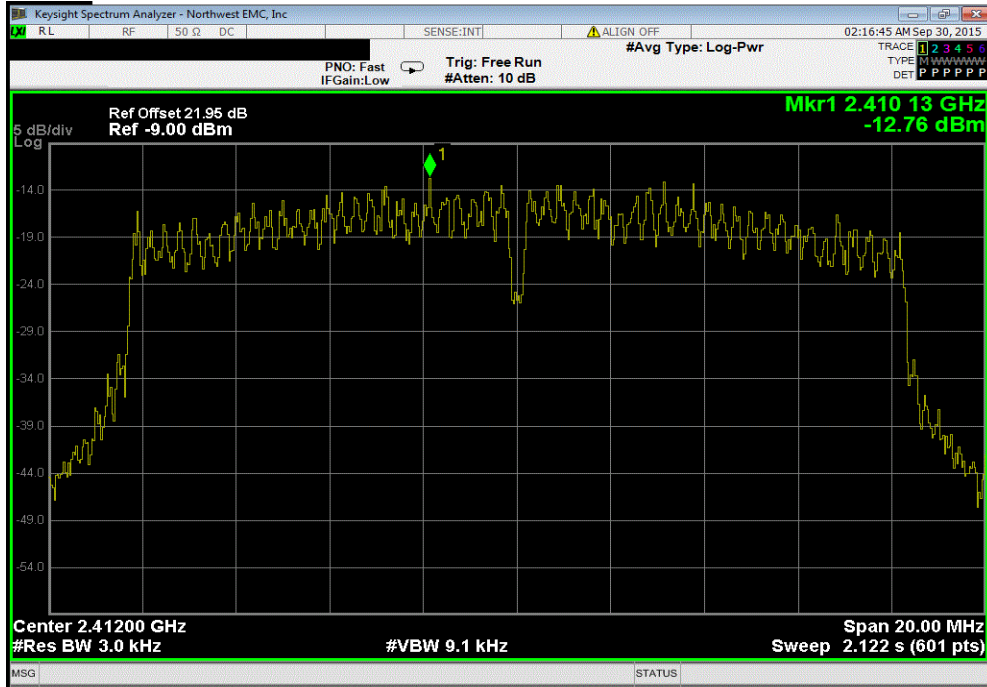


Ant 1, 20 MHz, 2.4 GHz Band, 802.11(b) 11Mbps, High Channel 11, 2462 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-7.761	8	Pass			

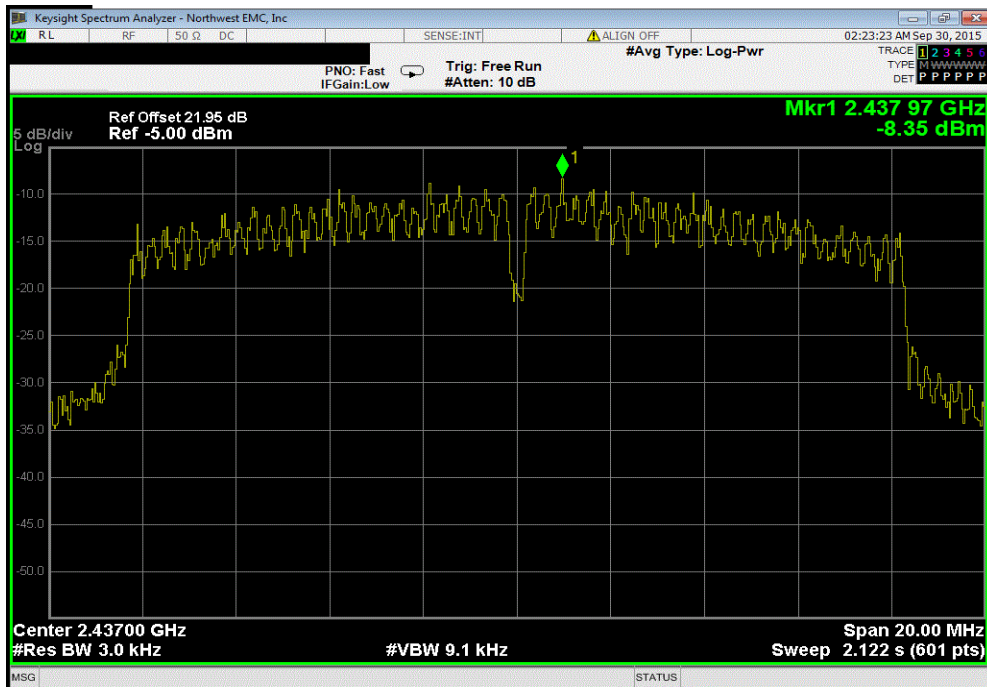


POWER SPECTRAL DENSITY

Ant 1, 20 MHz, 2.4 GHz Band, 802.11(g) 6Mbps, Low Channel 1, 2412 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-12.761	8	Pass			

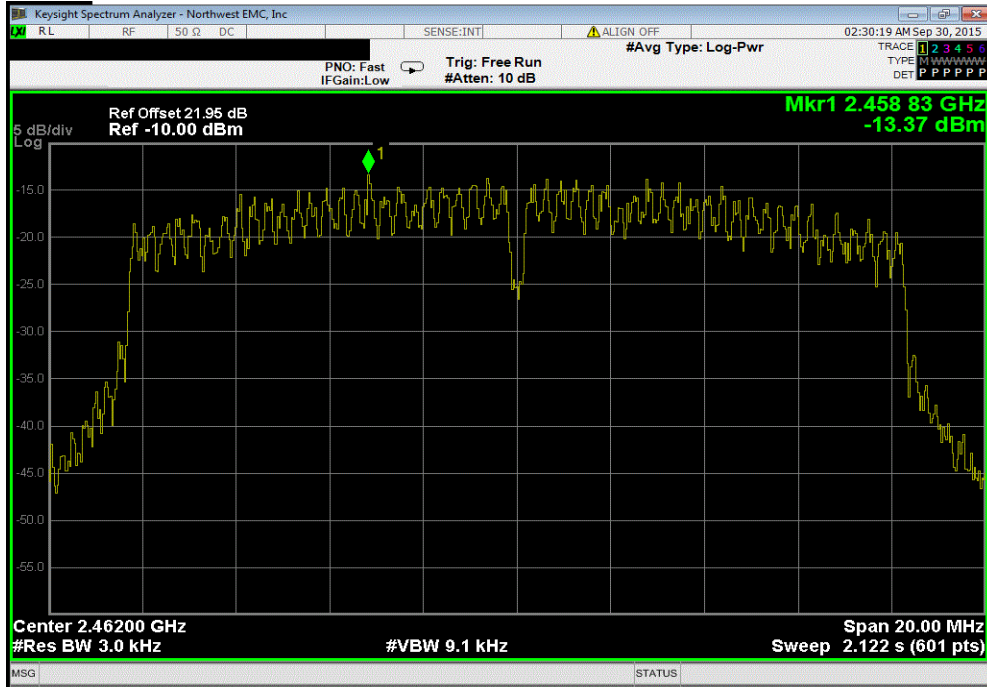


Ant 1, 20 MHz, 2.4 GHz Band, 802.11(g) 6Mbps, Mid Channel 6, 2437 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-8.354	8	Pass			

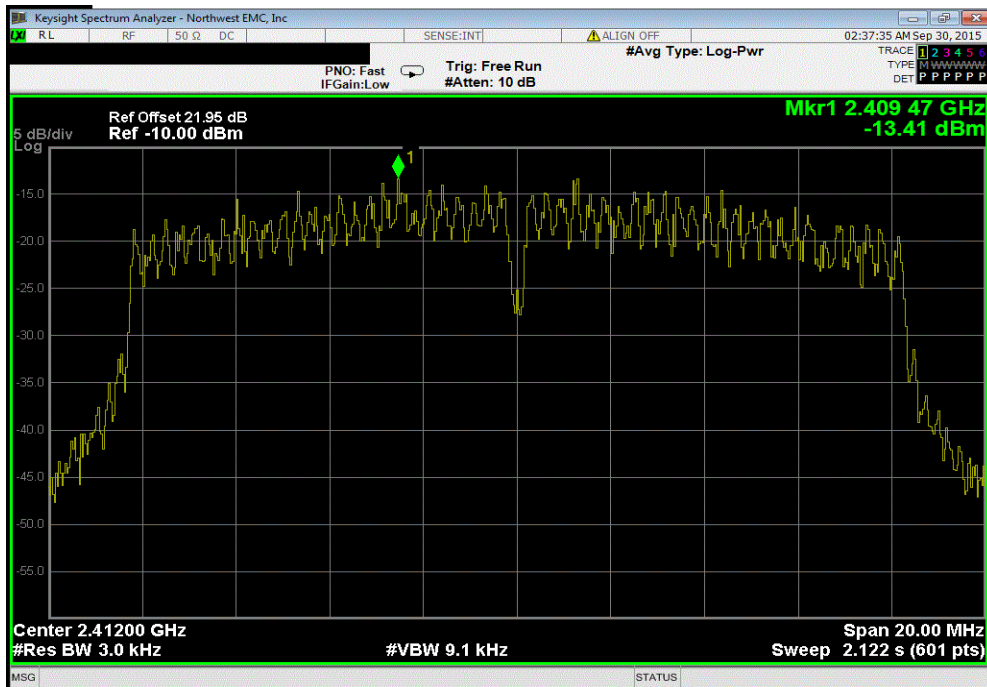


POWER SPECTRAL DENSITY

Ant 1, 20 MHz, 2.4 GHz Band, 802.11(g) 6Mbps, High Channel 11, 2462 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-13.369	8	Pass			



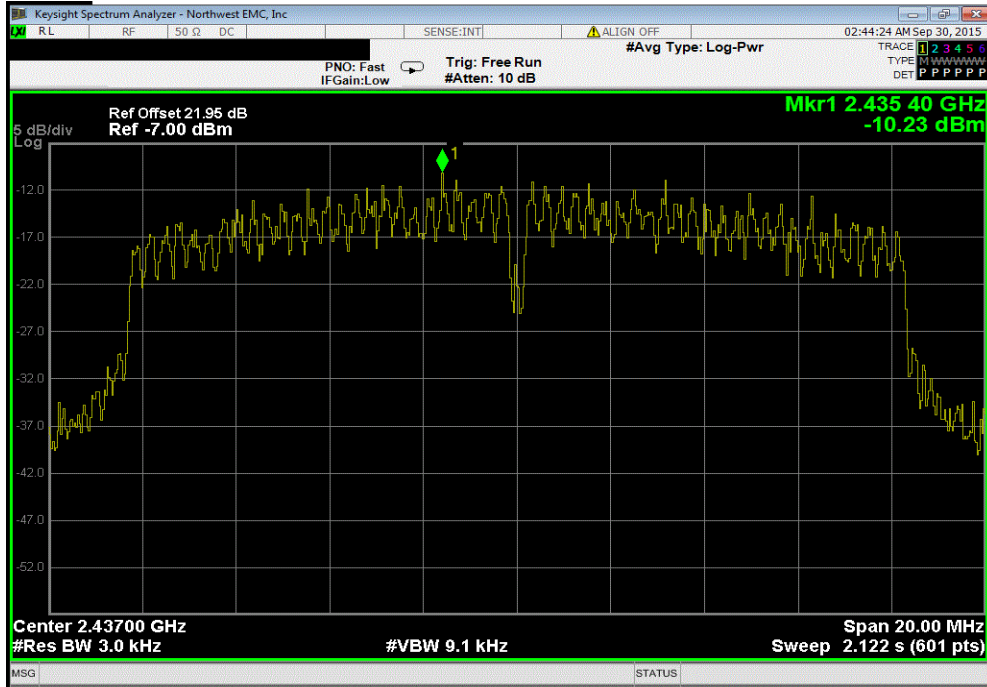
Ant 1, 20 MHz, 2.4 GHz Band, 802.11(g) 36Mbps, Low Channel 1, 2412 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-13.408	8	Pass			



POWER SPECTRAL DENSITY

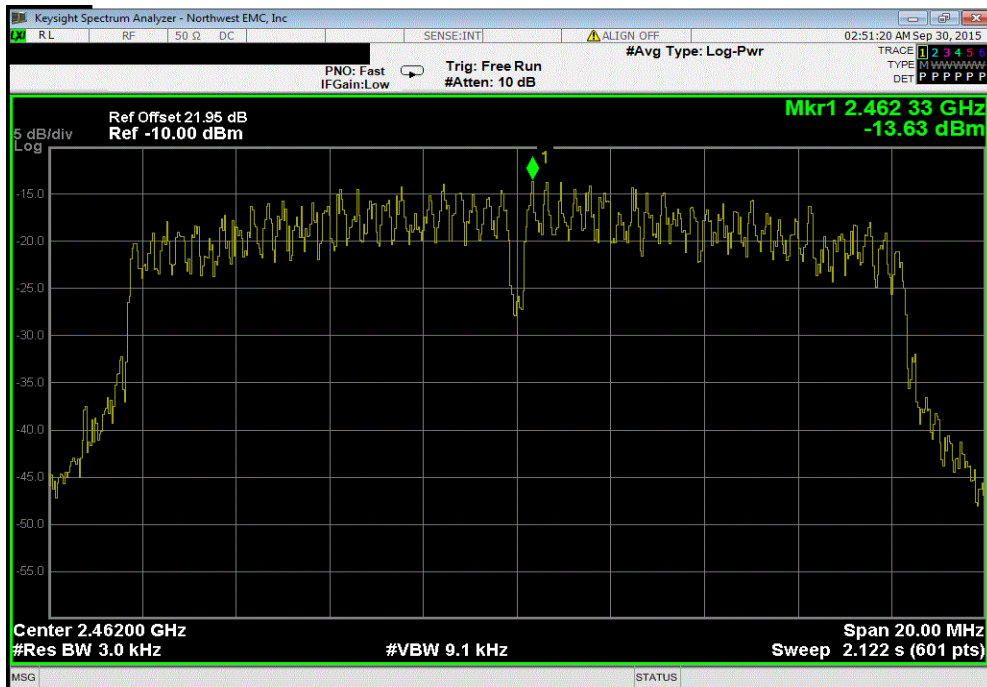
Ant 1, 20 MHz, 2.4 GHz Band, 802.11(g) 36Mbps, Mid Channel 6, 2437 MHz

	Value	Limit	Results
	dBm/3kHz	< dBm/3kHz	
	-10.231	8	Pass



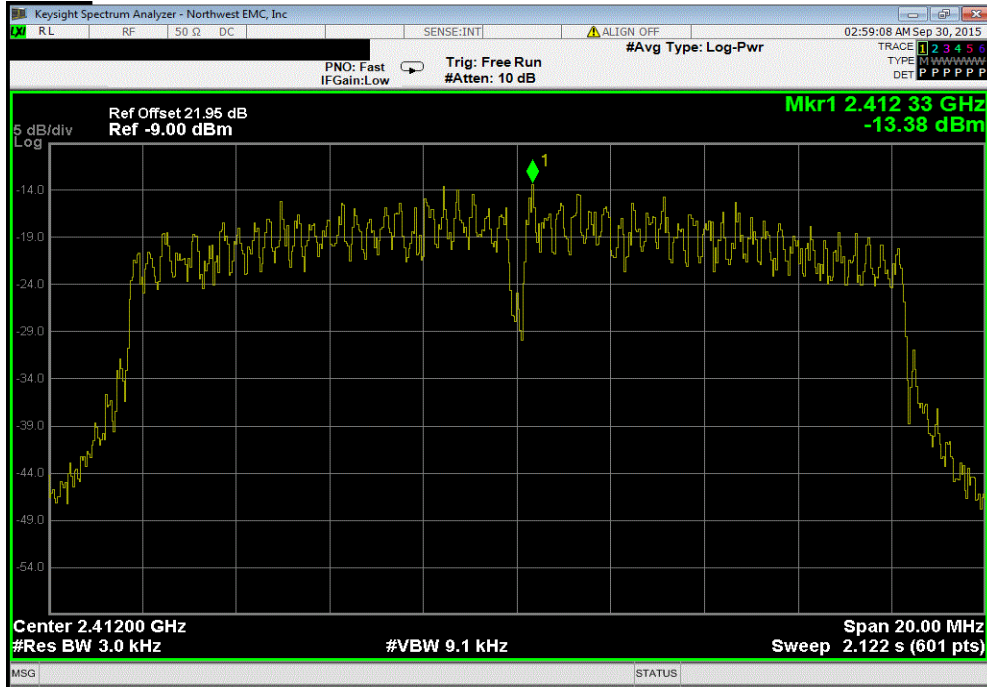
Ant 1, 20 MHz, 2.4 GHz Band, 802.11(g) 36Mbps, High Channel 11, 2462 MHz

	Value	Limit	Results
	dBm/3kHz	< dBm/3kHz	
	-13.627	8	Pass

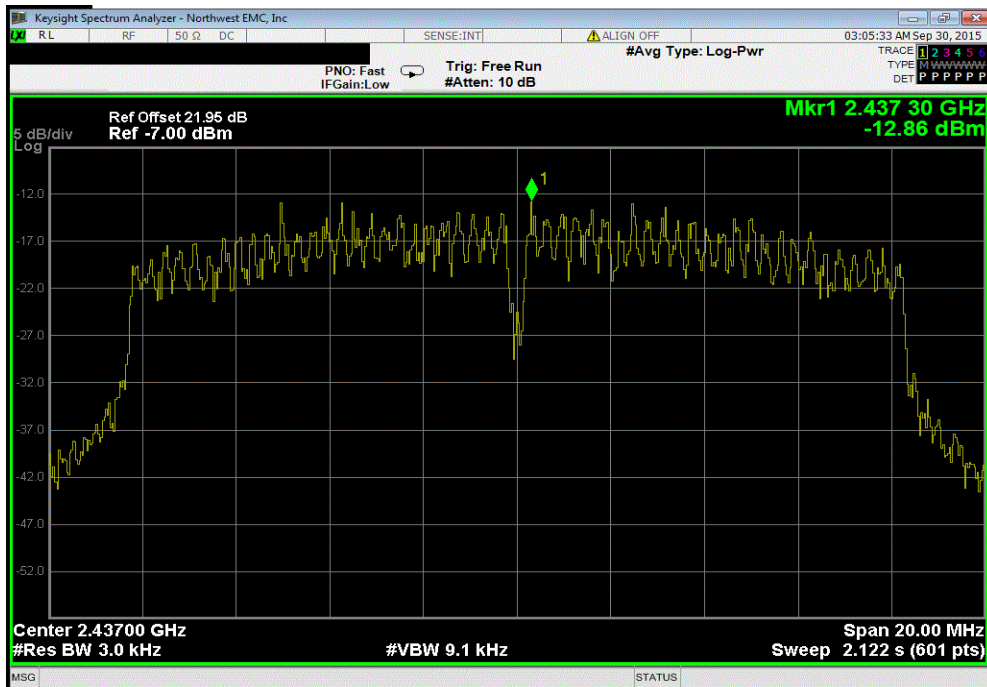


POWER SPECTRAL DENSITY

Ant 1, 20 MHz, 2.4 GHz Band, 802.11(g) 54Mbps, Low Channel 1, 2412 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-13.382	8	Pass			

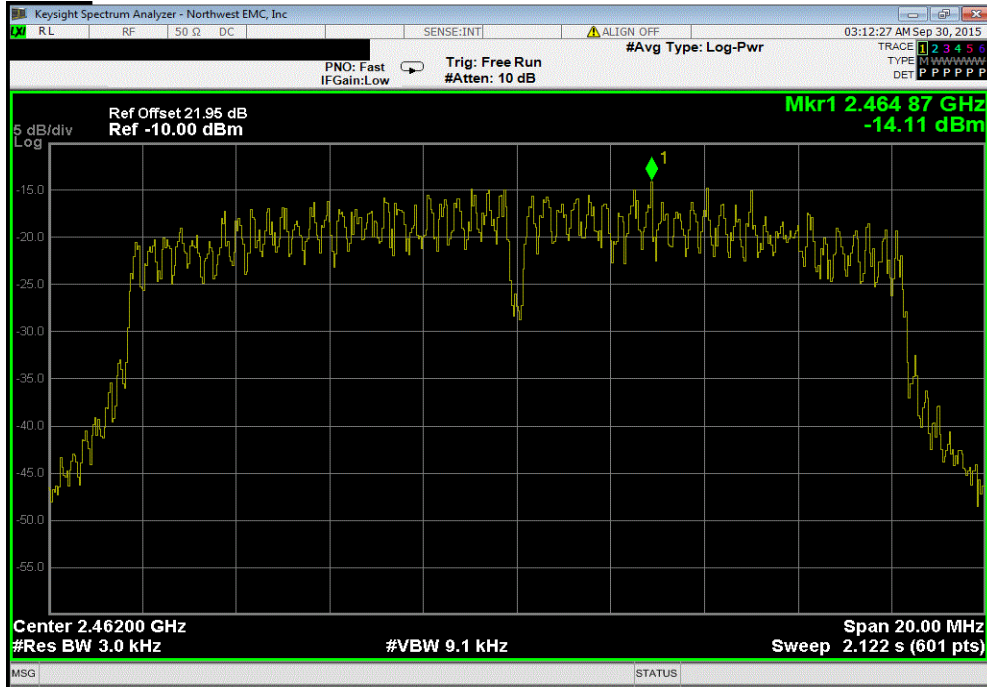


Ant 1, 20 MHz, 2.4 GHz Band, 802.11(g) 54Mbps, Mid Channel 6, 2437 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-12.857	8	Pass			

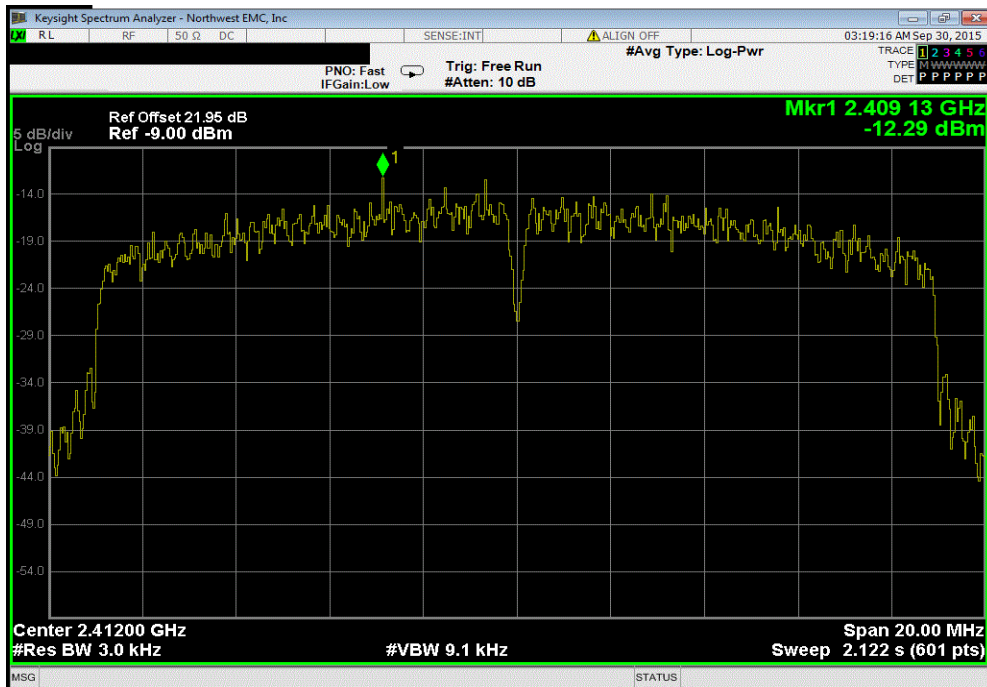


POWER SPECTRAL DENSITY

Ant 1, 20 MHz, 2.4 GHz Band, 802.11(g) 54Mbps, High Channel 11, 2462 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-14.112	8	Pass			

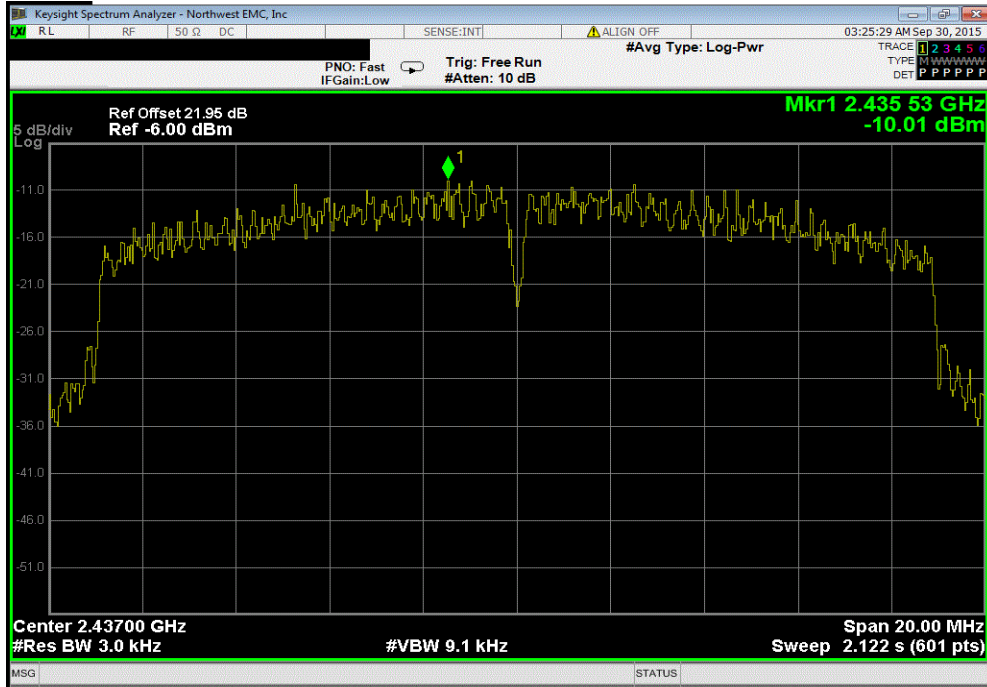


Ant 1, 20 MHz, 2.4 GHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-12.293	8	Pass			

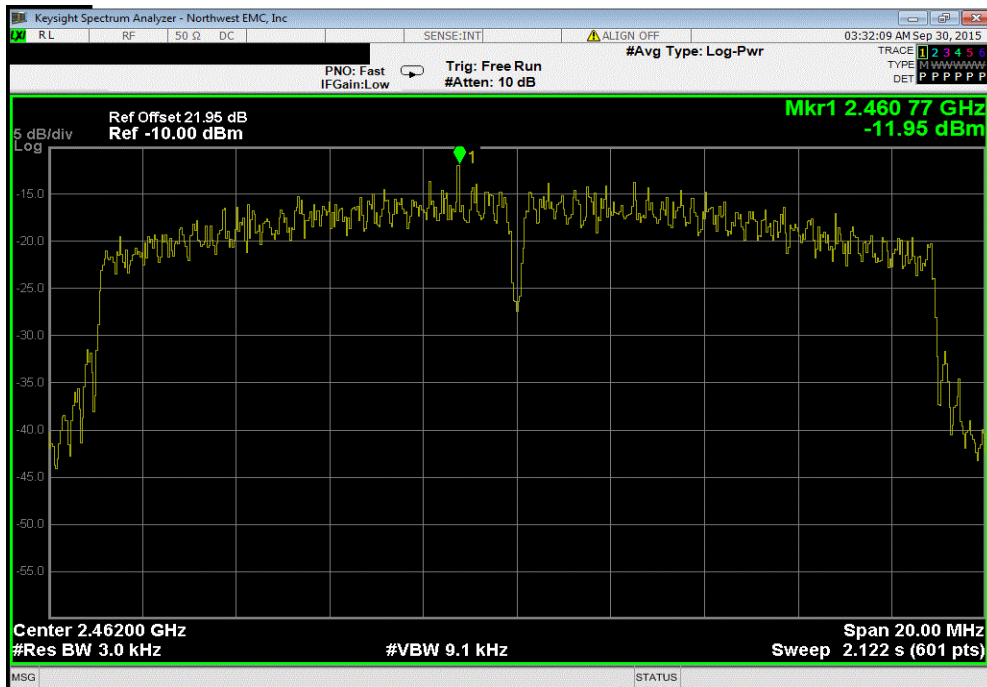


POWER SPECTRAL DENSITY

Ant 1, 20 MHz, 2.4 GHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-10.012	8	Pass			

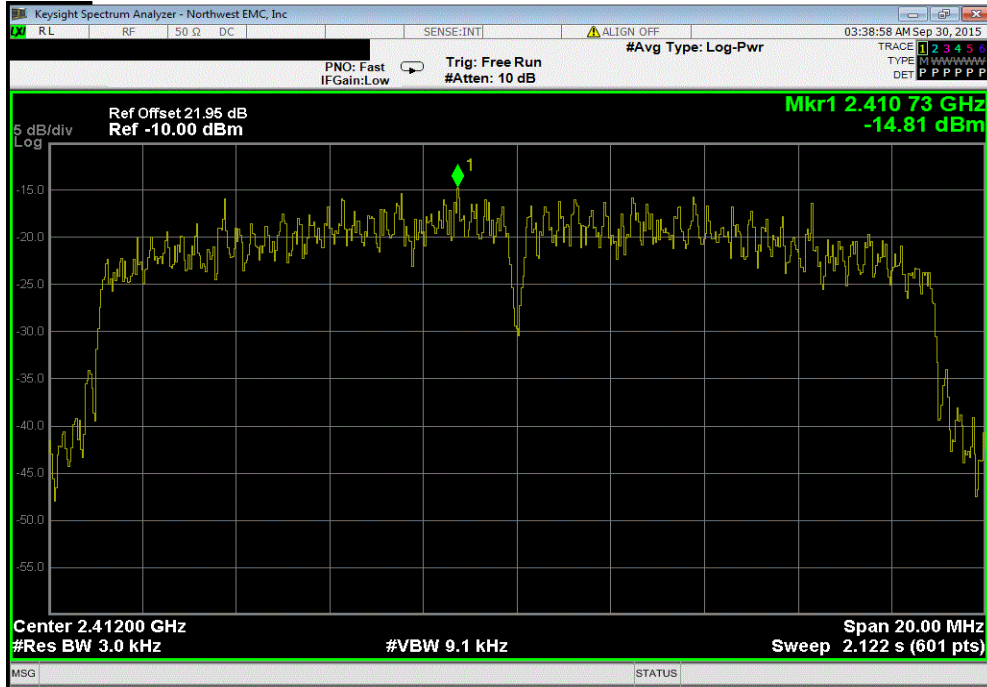


Ant 1, 20 MHz, 2.4 GHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-11.948	8	Pass			

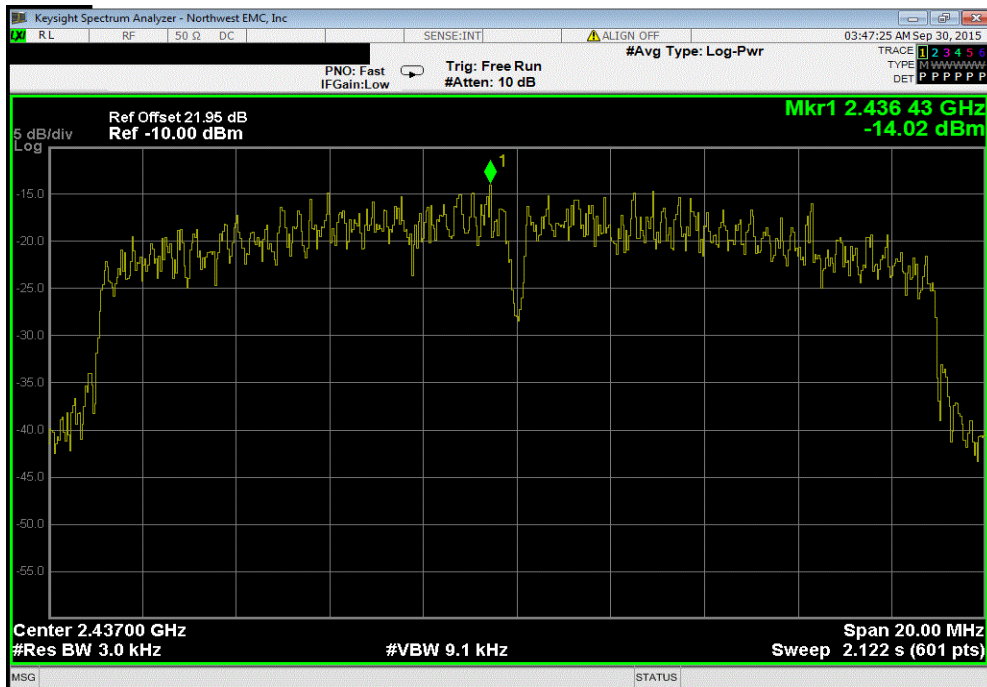


POWER SPECTRAL DENSITY

Ant 1, 20 MHz, 2.4 GHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-14.814	8	Pass			

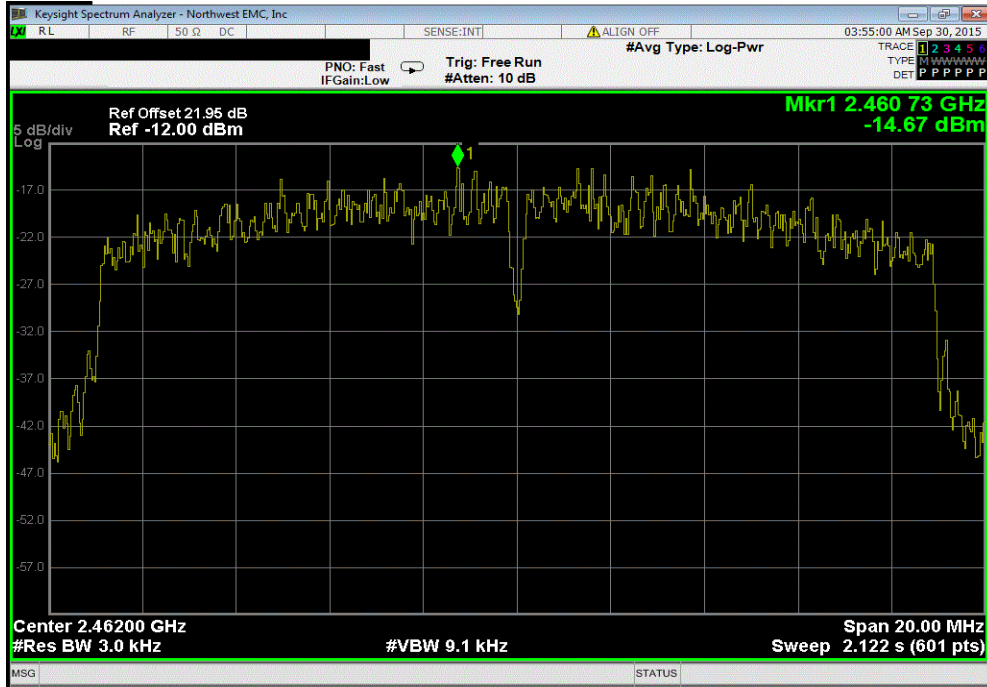


Ant 1, 20 MHz, 2.4 GHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-14.021	8	Pass			

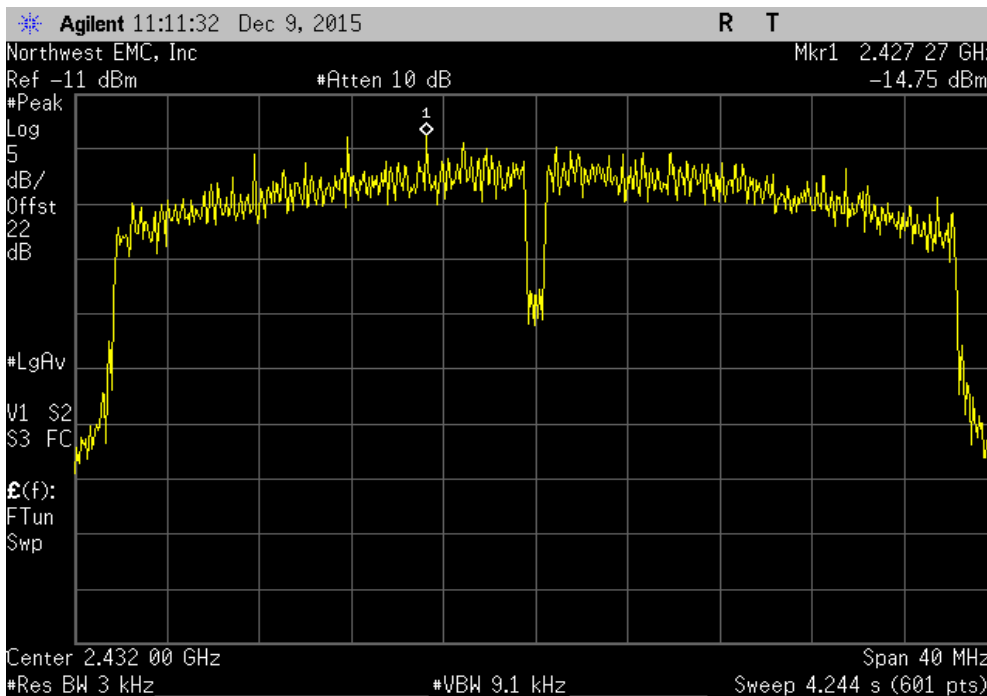


POWER SPECTRAL DENSITY

Ant 1, 20 MHz, 2.4 GHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz			
	Value	Limit	Results
	dBm/3kHz	< dBm/3kHz	
	-14.667	8	Pass

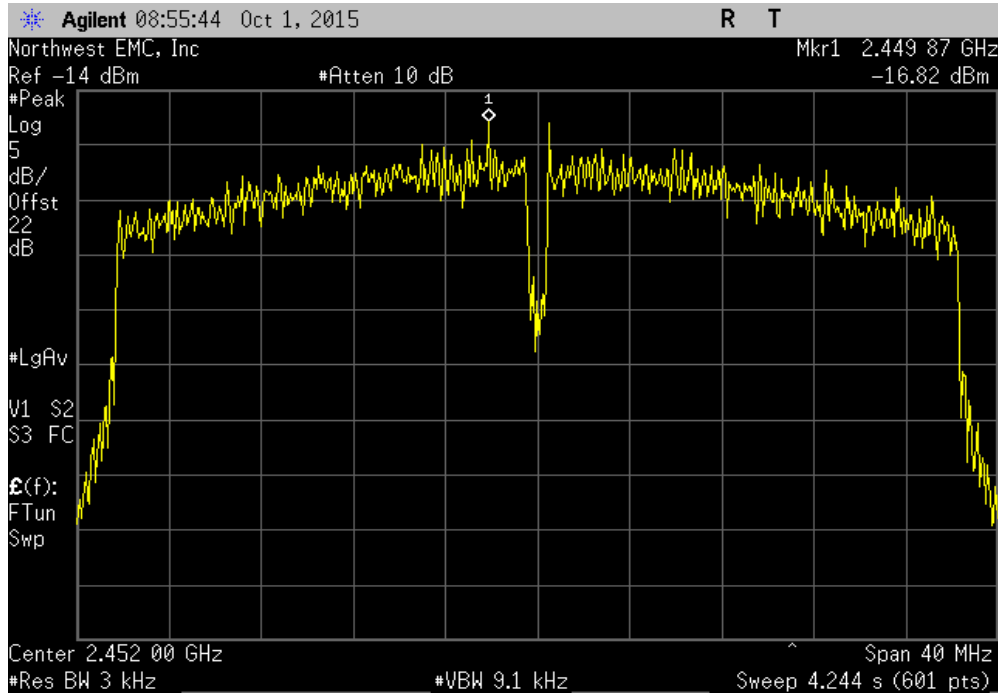


Ant 1, 40 MHz, 2.4 GHz Band, 802.11(n) MCS0, Low Channel 5, 2432 MHz			
	Value	Limit	Results
	dBm/3kHz	< dBm/3kHz	
	-14.752	8	Pass

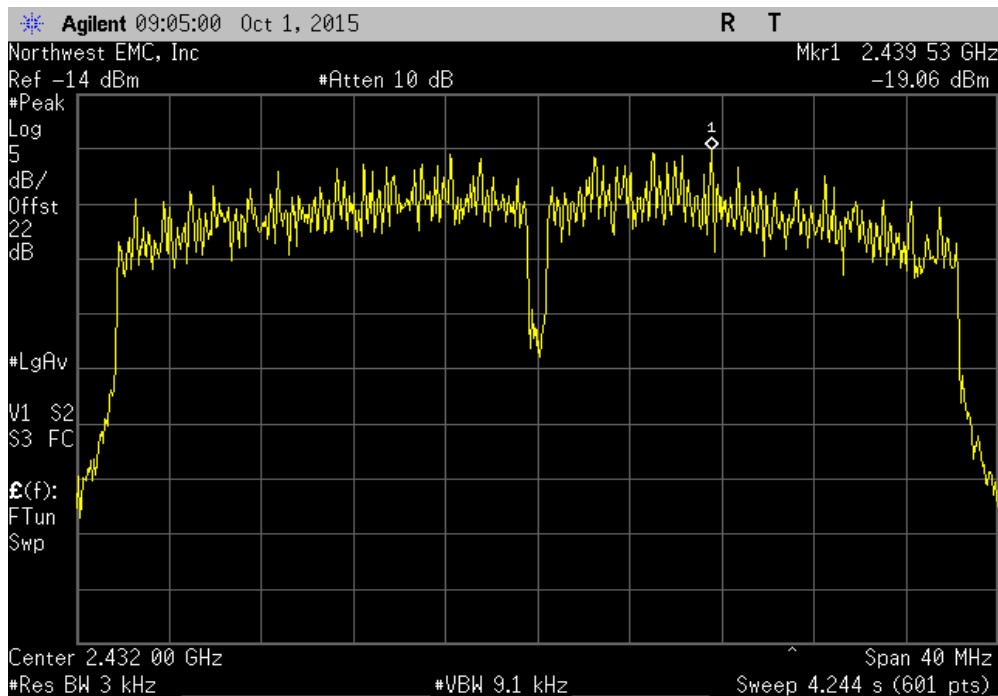


POWER SPECTRAL DENSITY

Ant 1, 40 MHz, 2.4 GHz Band, 802.11(n) MCS0, High Channel 9, 2452 MHz			
	Value	Limit	Results
	dBm/3kHz	< dBm/3kHz	
	-16.823	8	Pass

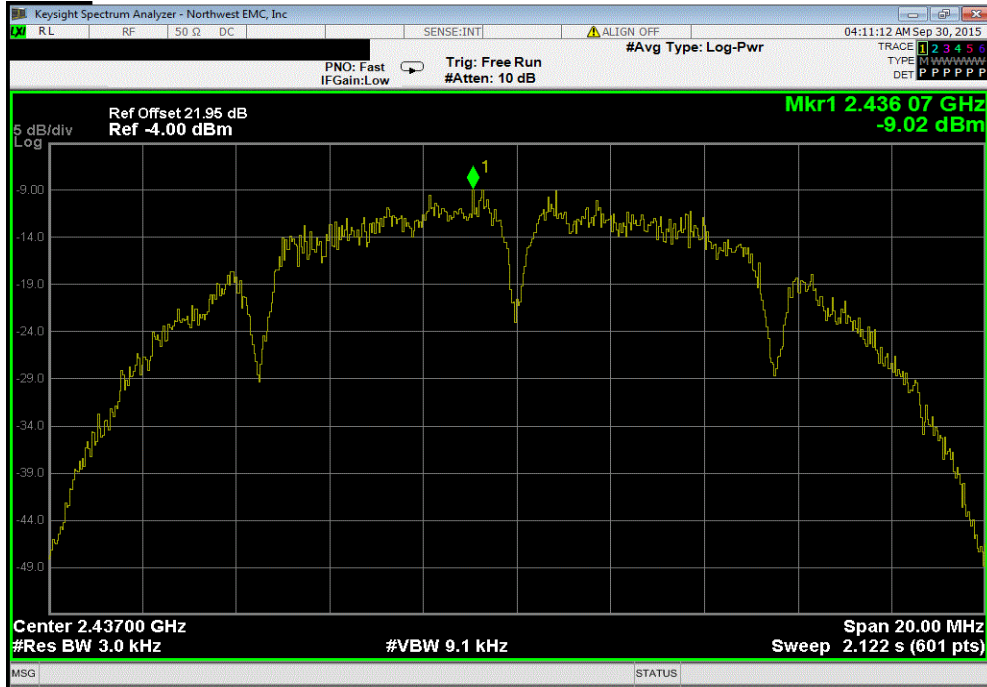


Ant 1, 40 MHz, 2.4 GHz Band, 802.11(n) MCS7, Low Channel 5, 2432 MHz			
	Value	Limit	Results
	dBm/3kHz	< dBm/3kHz	
	-19.062	8	Pass

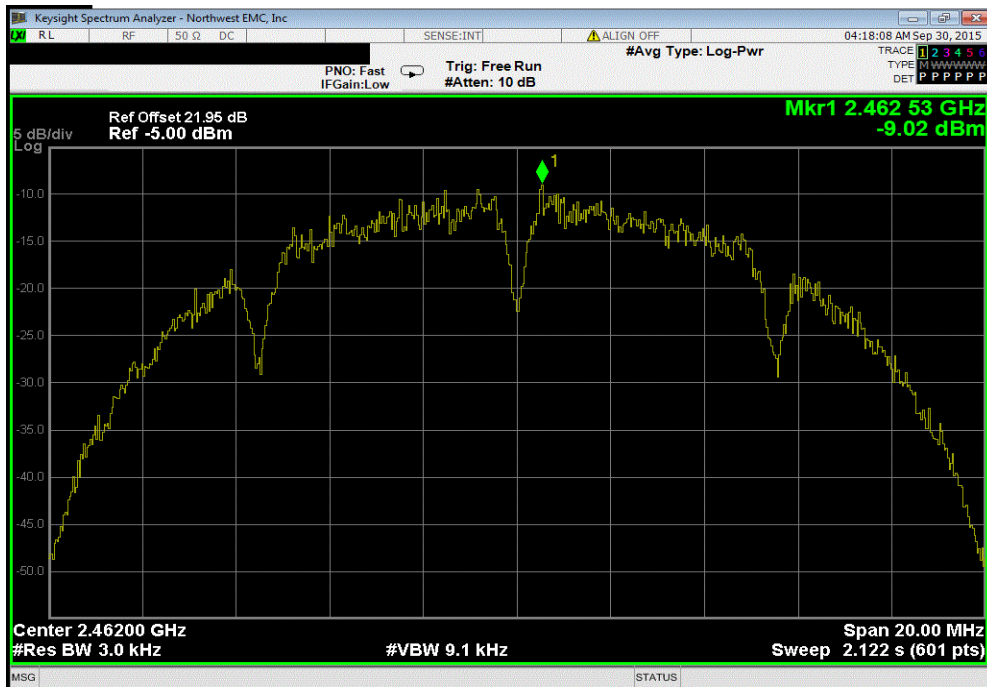


POWER SPECTRAL DENSITY

Ant 2, 20 MHz, 2.4 GHz Band, 802.11(b) 1Mbps, Mid Channel 6, 2437 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-9.023	8	Pass			

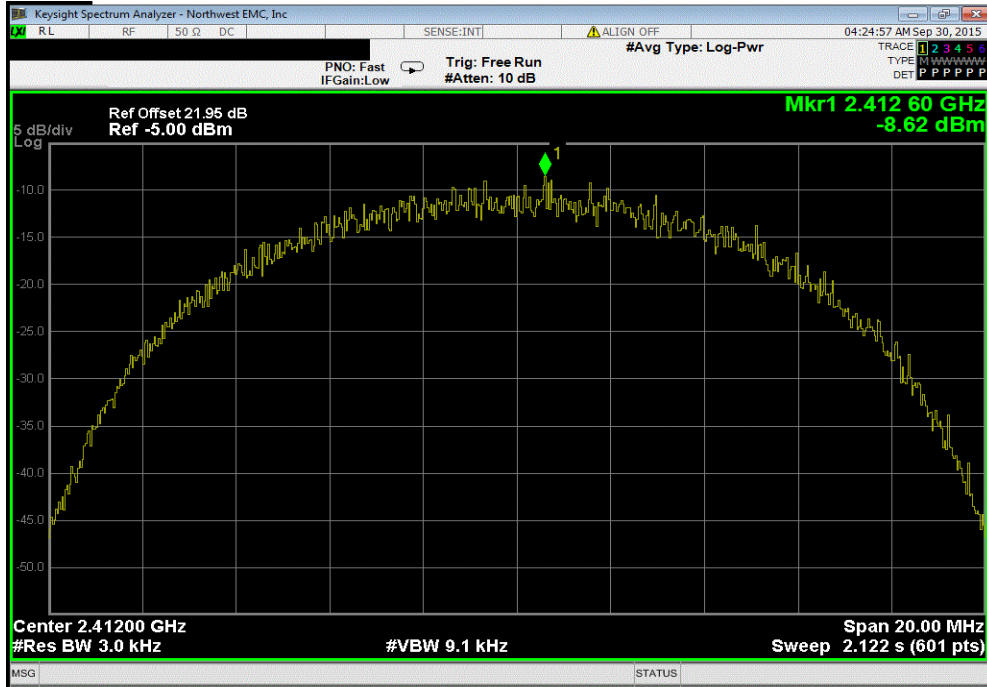


Ant 2, 20 MHz, 2.4 GHz Band, 802.11(b) 1Mbps, High Channel 11, 2462 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-9.021	8	Pass			

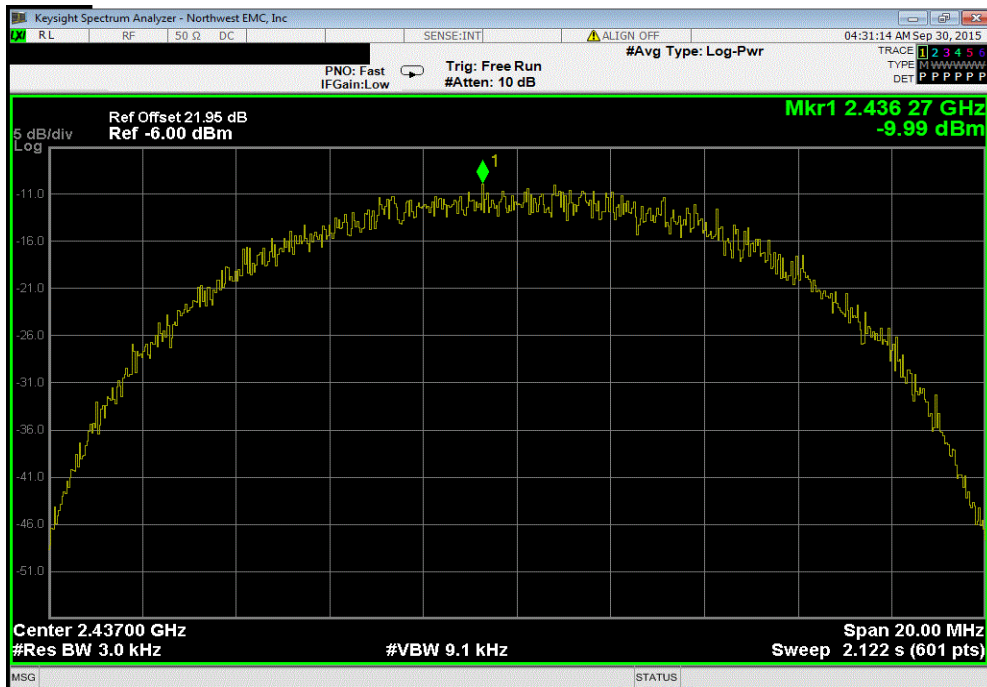


POWER SPECTRAL DENSITY

Ant 2, 20 MHz, 2.4 GHz Band, 802.11(b) 11Mbps, Low Channel 1, 2412 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-8.623	8	Pass			

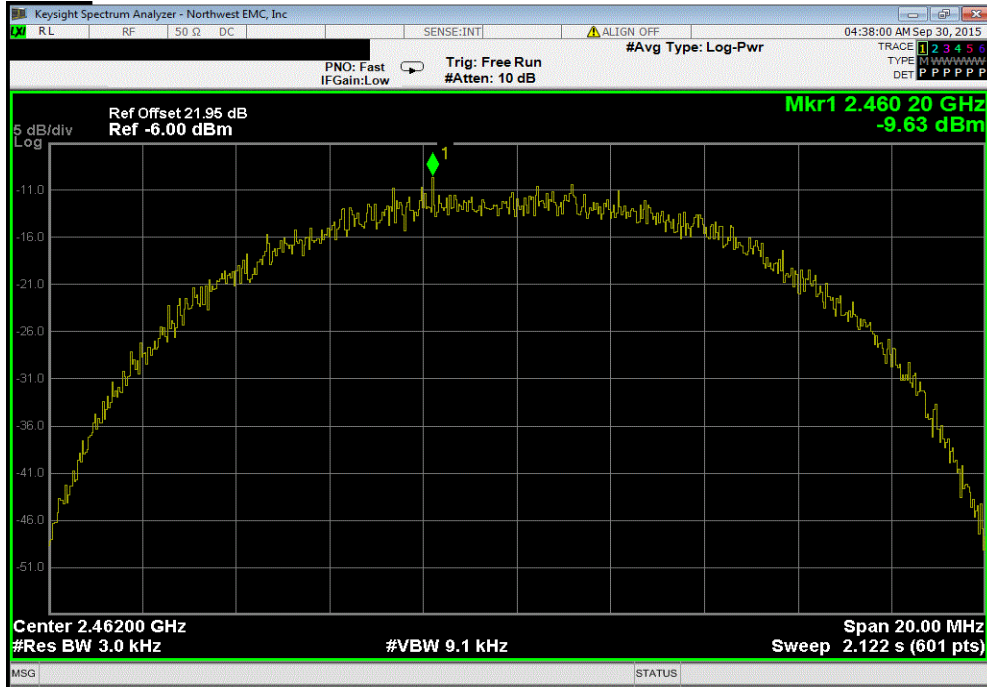


Ant 2, 20 MHz, 2.4 GHz Band, 802.11(b) 11Mbps, Mid Channel 6, 2437 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-9.986	8	Pass			

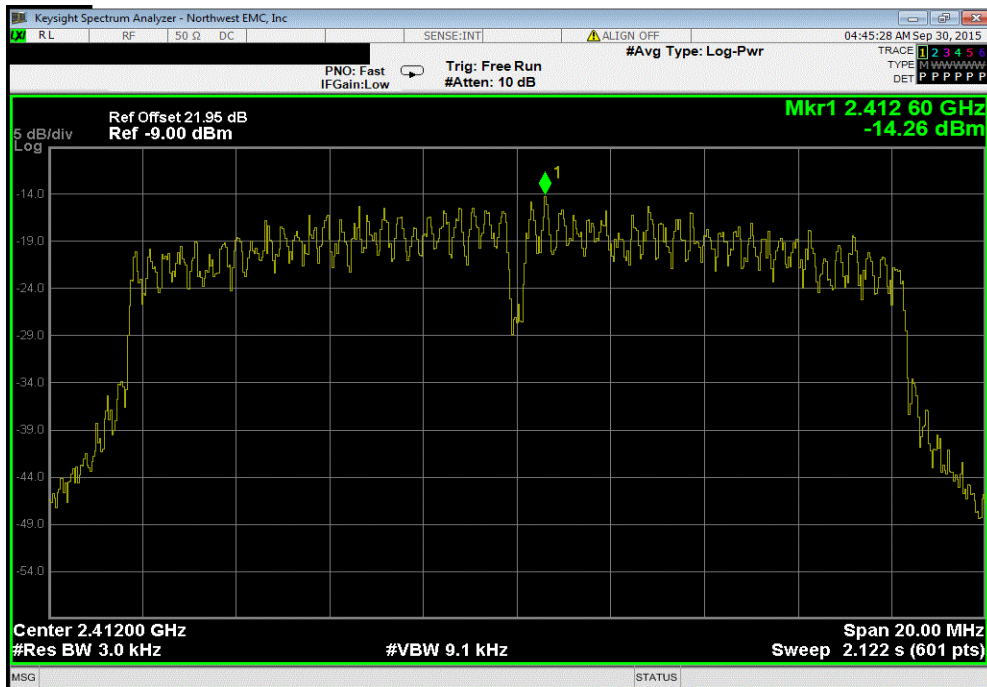


POWER SPECTRAL DENSITY

Ant 2, 20 MHz, 2.4 GHz Band, 802.11(b) 11Mbps, High Channel 11, 2462 MHz			
	Value	Limit	Results
	dBm/3kHz	< dBm/3kHz	
	-9.633	8	Pass

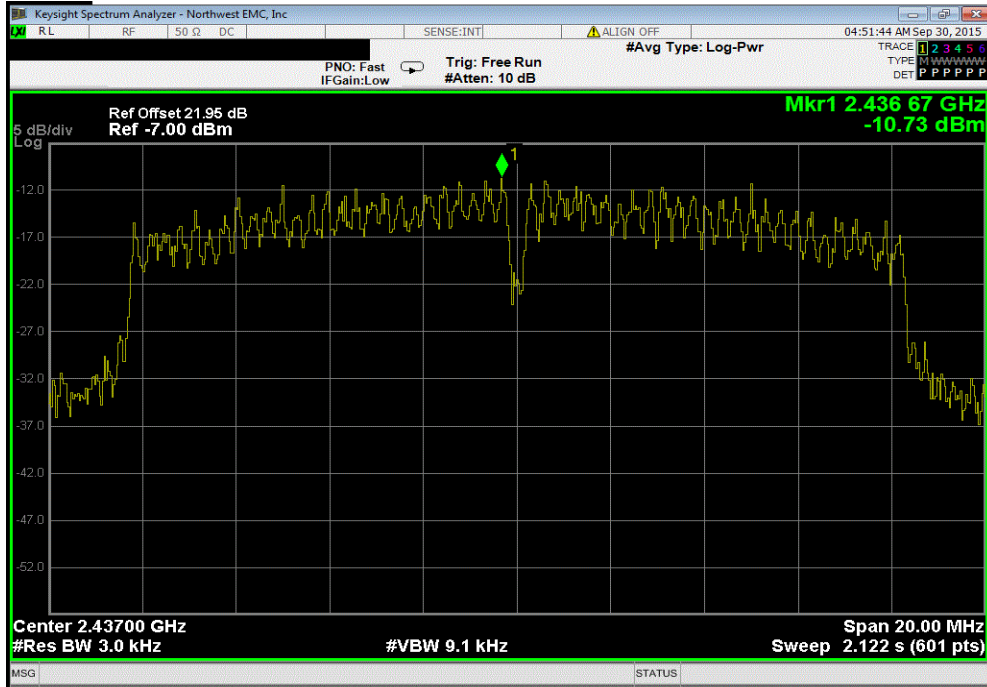


Ant 2, 20 MHz, 2.4 GHz Band, 802.11(g) 6Mbps, Low Channel 1, 2412 MHz			
	Value	Limit	Results
	dBm/3kHz	< dBm/3kHz	
	-14.258	8	Pass

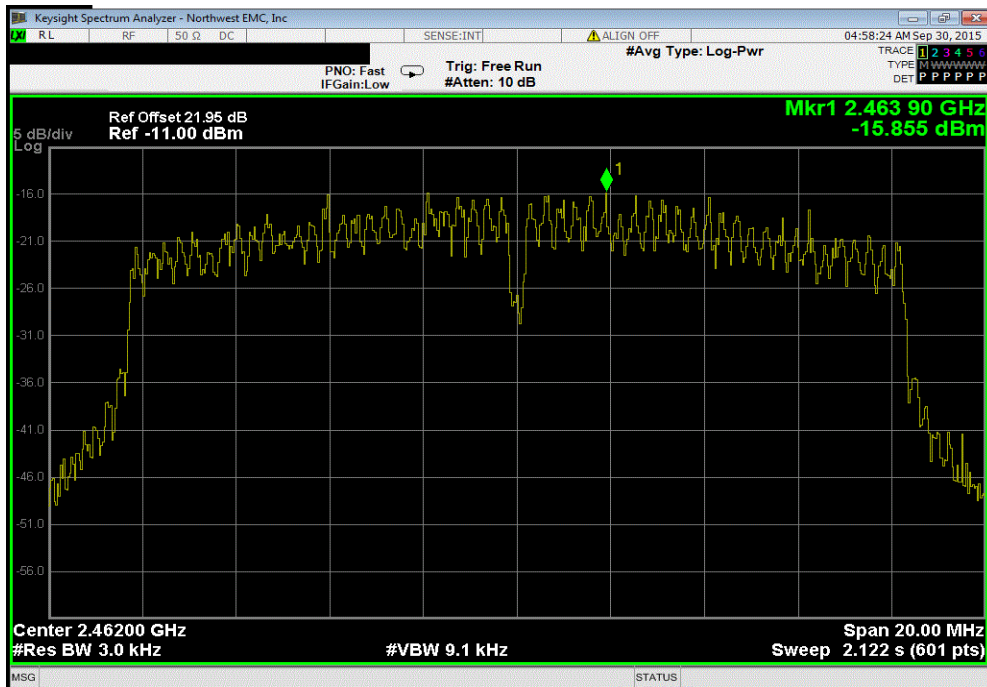


POWER SPECTRAL DENSITY

Ant 2, 20 MHz, 2.4 GHz Band, 802.11(g) 6Mbps, Mid Channel 6, 2437 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-10.733	8	Pass			

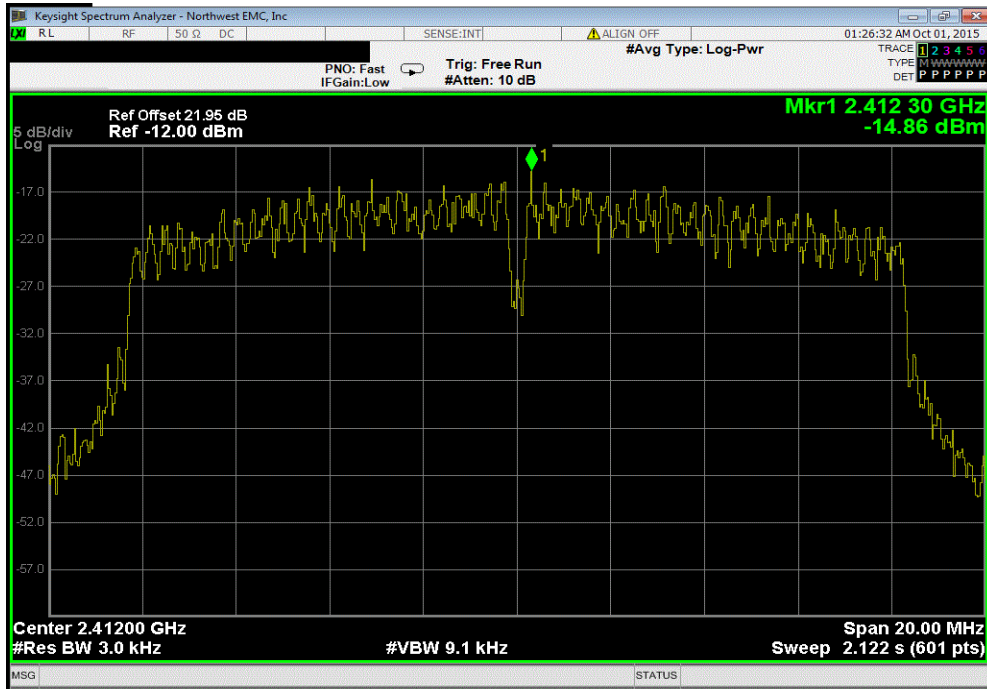


Ant 2, 20 MHz, 2.4 GHz Band, 802.11(g) 6Mbps, High Channel 11, 2462 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-15.855	8	Pass			

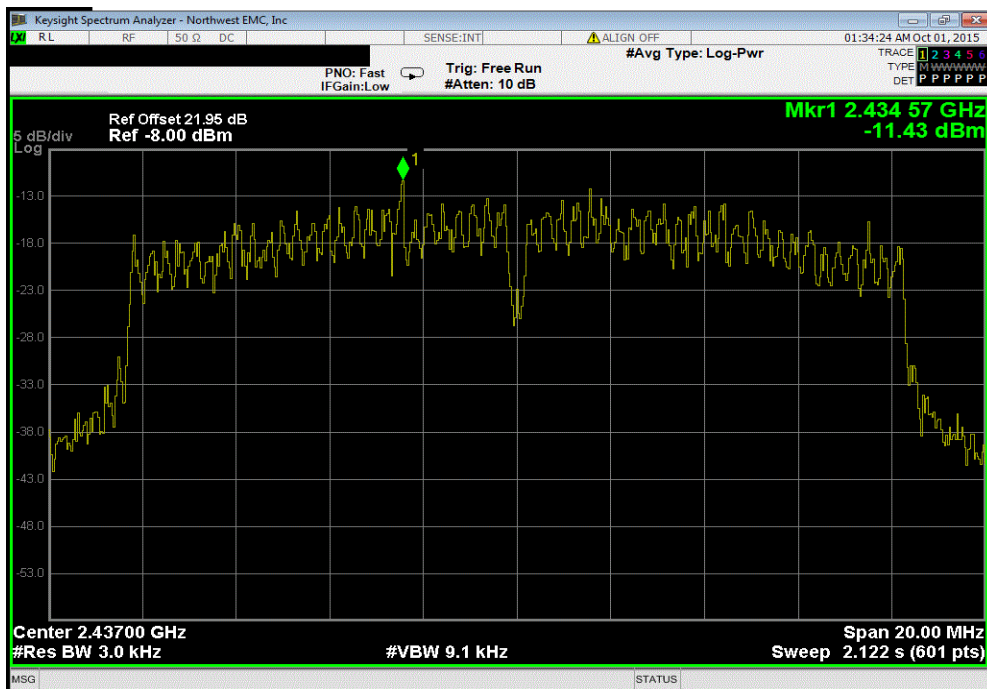


POWER SPECTRAL DENSITY

Ant 2, 20 MHz, 2.4 GHz Band, 802.11(g) 36Mbps, Low Channel 1, 2412 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-14.864	8	Pass			

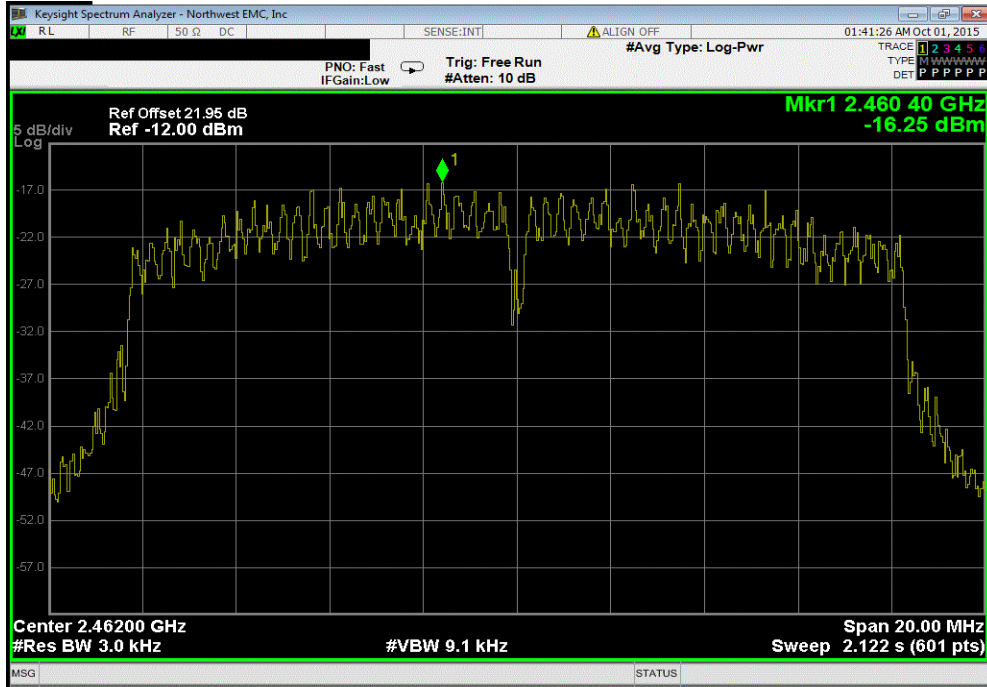


Ant 2, 20 MHz, 2.4 GHz Band, 802.11(g) 36Mbps, Mid Channel 6, 2437 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-11.435	8	Pass			

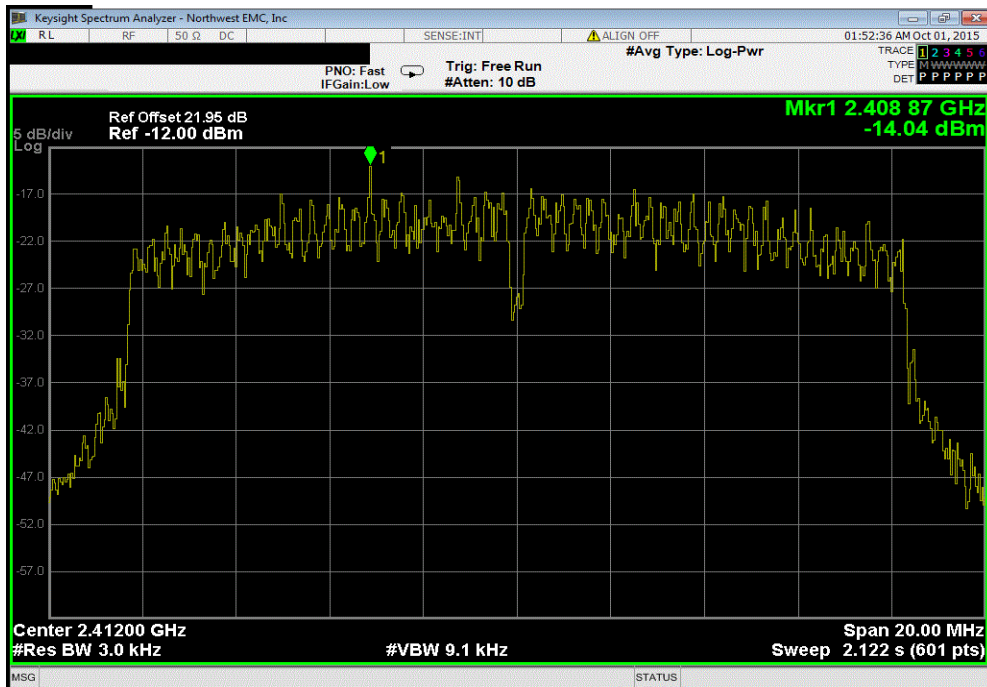


POWER SPECTRAL DENSITY

Ant 2, 20 MHz, 2.4 GHz Band, 802.11(g) 36Mbps, High Channel 11, 2462 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-16.25	8	Pass			

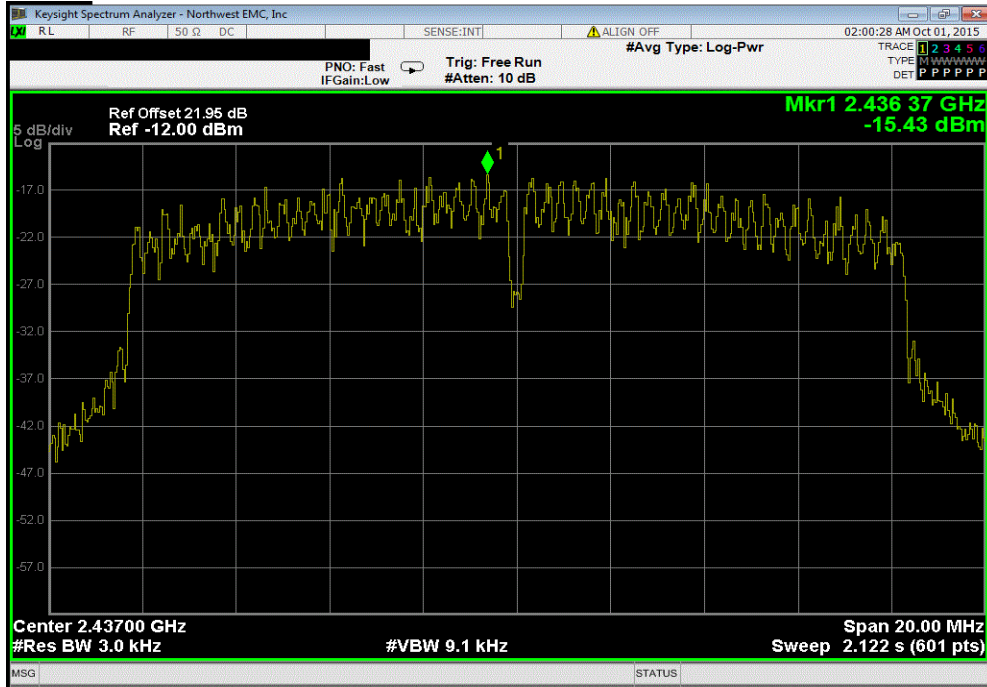


Ant 2, 20 MHz, 2.4 GHz Band, 802.11(g) 54Mbps, Low Channel 1, 2412 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-14.036	8	Pass			

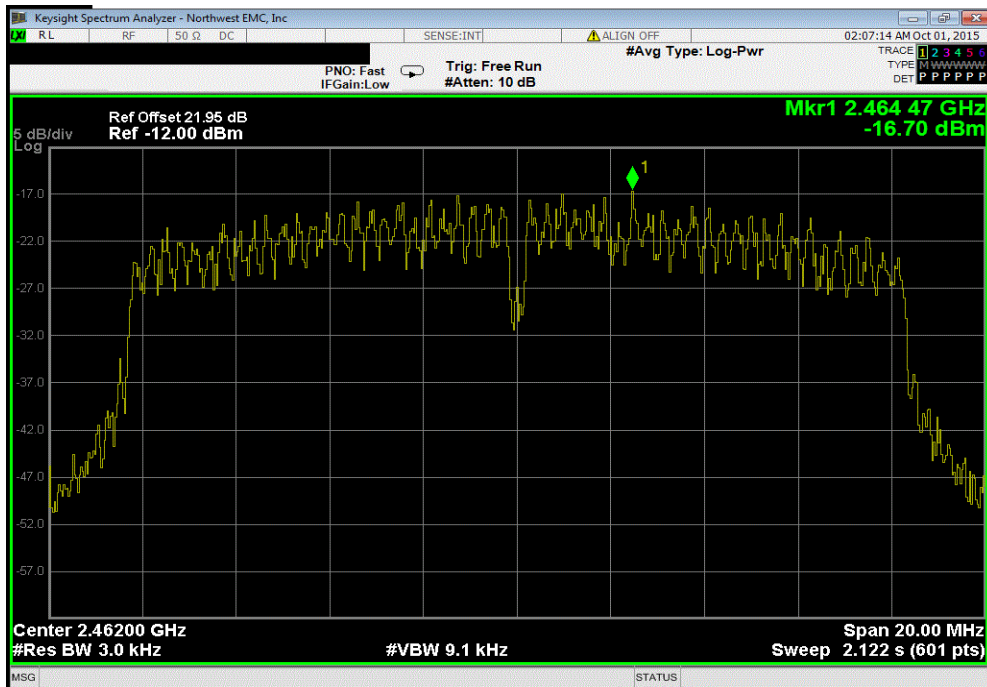


POWER SPECTRAL DENSITY

Ant 2, 20 MHz, 2.4 GHz Band, 802.11(g) 54Mbps, Mid Channel 6, 2437 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-15.432	8	Pass			



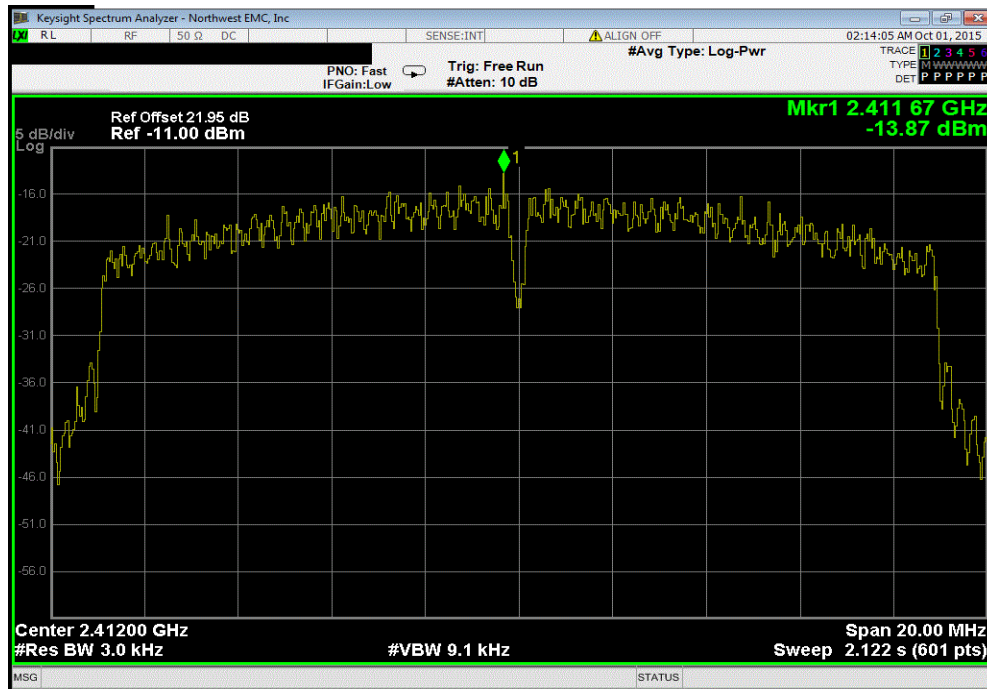
Ant 2, 20 MHz, 2.4 GHz Band, 802.11(g) 54Mbps, High Channel 11, 2462 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-16.699	8	Pass			



POWER SPECTRAL DENSITY

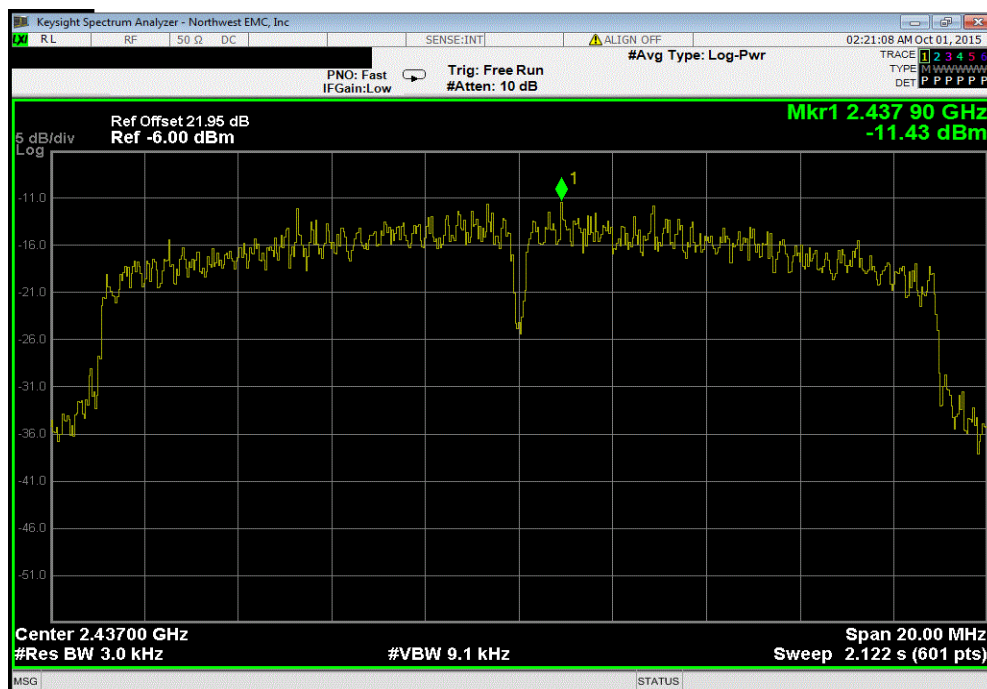
Ant 2, 20 MHz, 2.4 GHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz

	Value	Limit	Results
	dBm/3kHz	< dBm/3kHz	
	-13.869	8	Pass



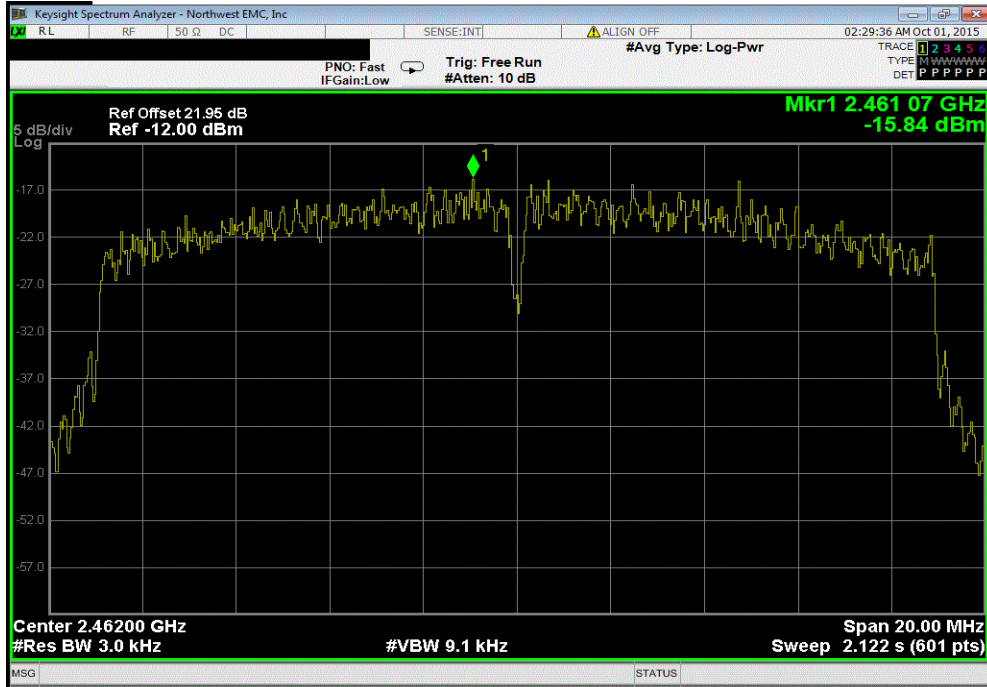
Ant 2, 20 MHz, 2.4 GHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz

	Value	Limit	Results
	dBm/3kHz	< dBm/3kHz	
	-11.43	8	Pass

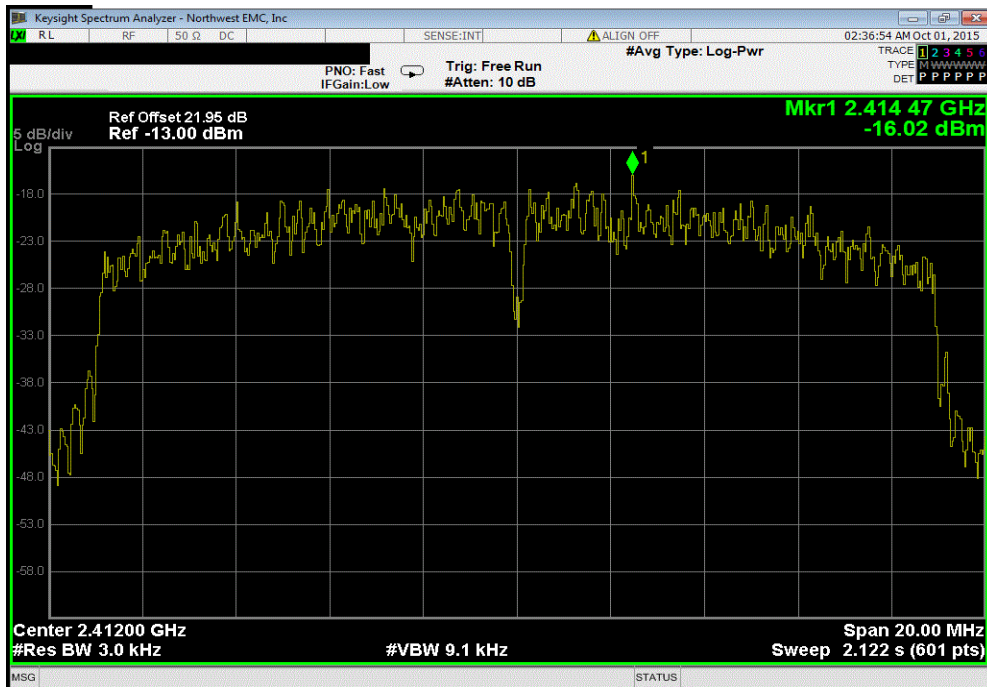


POWER SPECTRAL DENSITY

Ant 2, 20 MHz, 2.4 GHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-15.839	8	Pass			

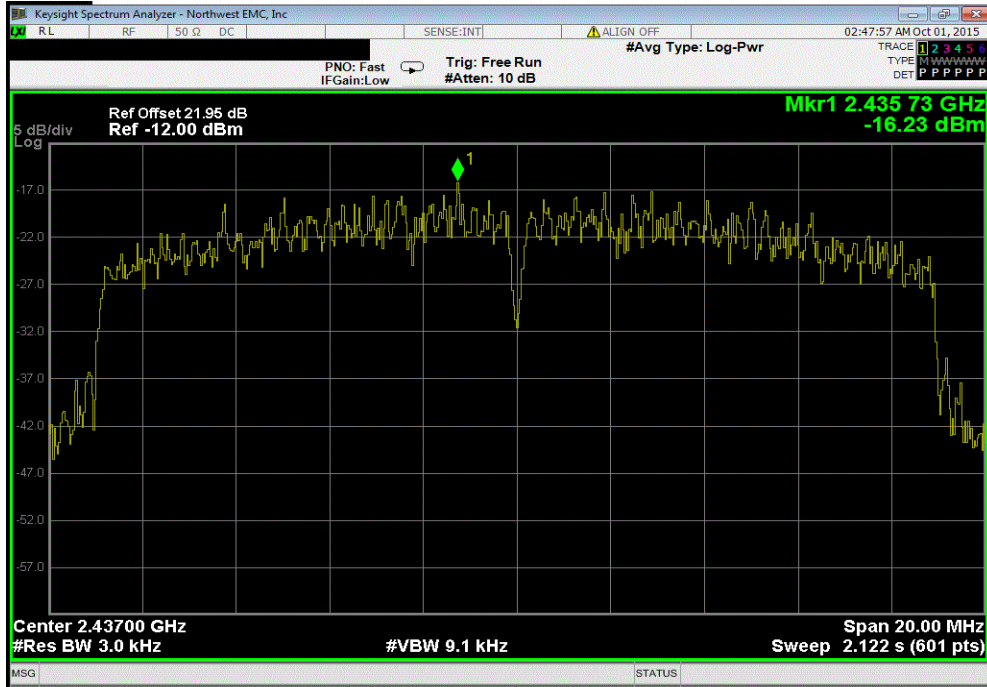


Ant 2, 20 MHz, 2.4 GHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-16.021	8	Pass			

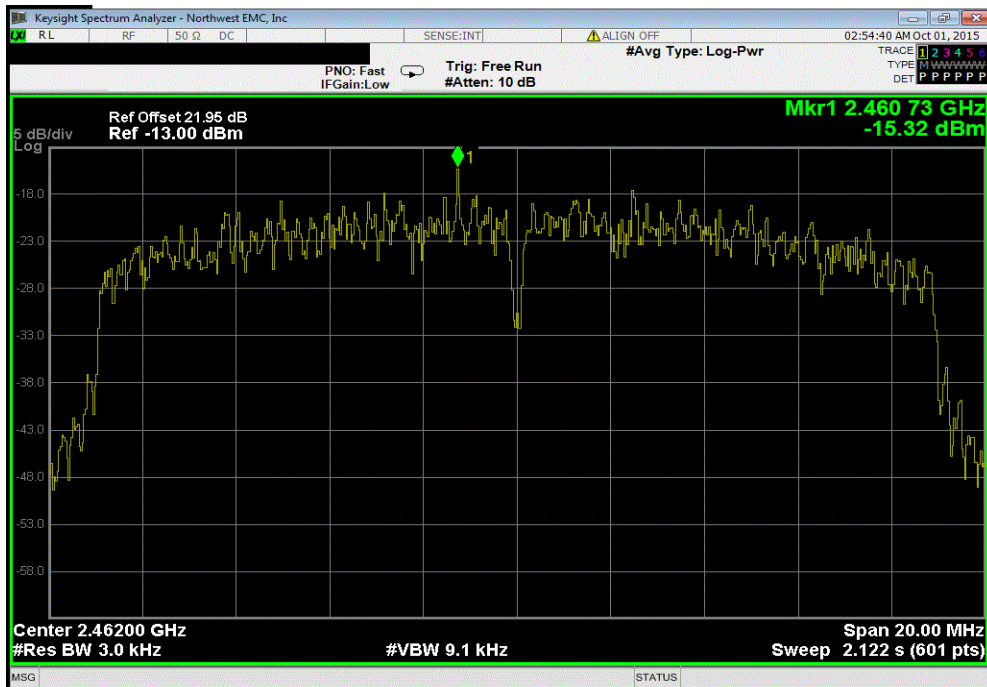


POWER SPECTRAL DENSITY

Ant 2, 20 MHz, 2.4 GHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-16.229	8	Pass			

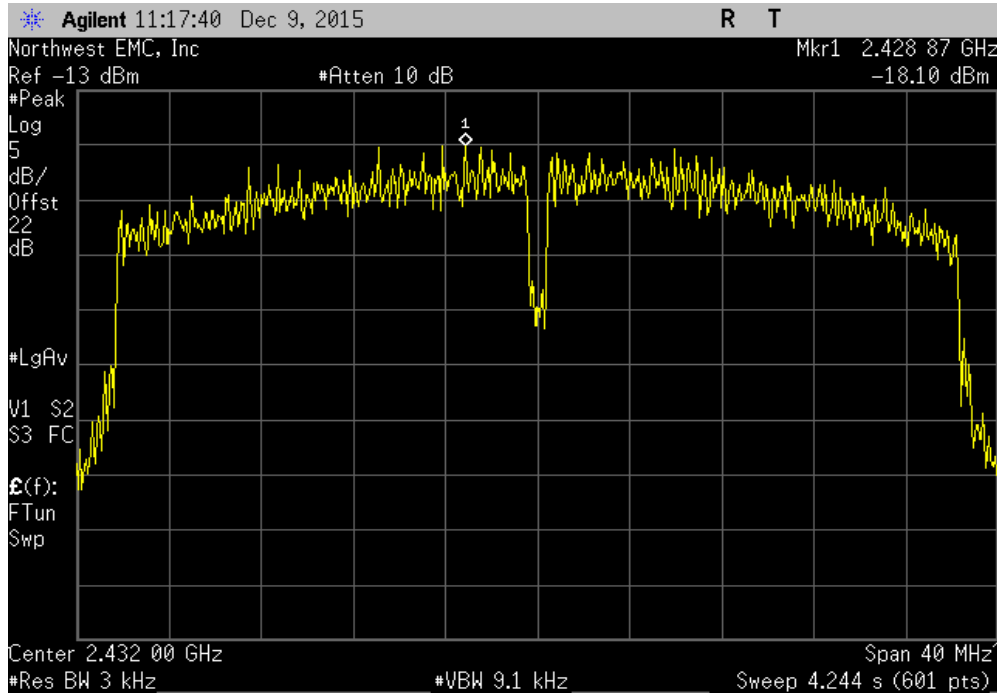


Ant 2, 20 MHz, 2.4 GHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-15.319	8	Pass			

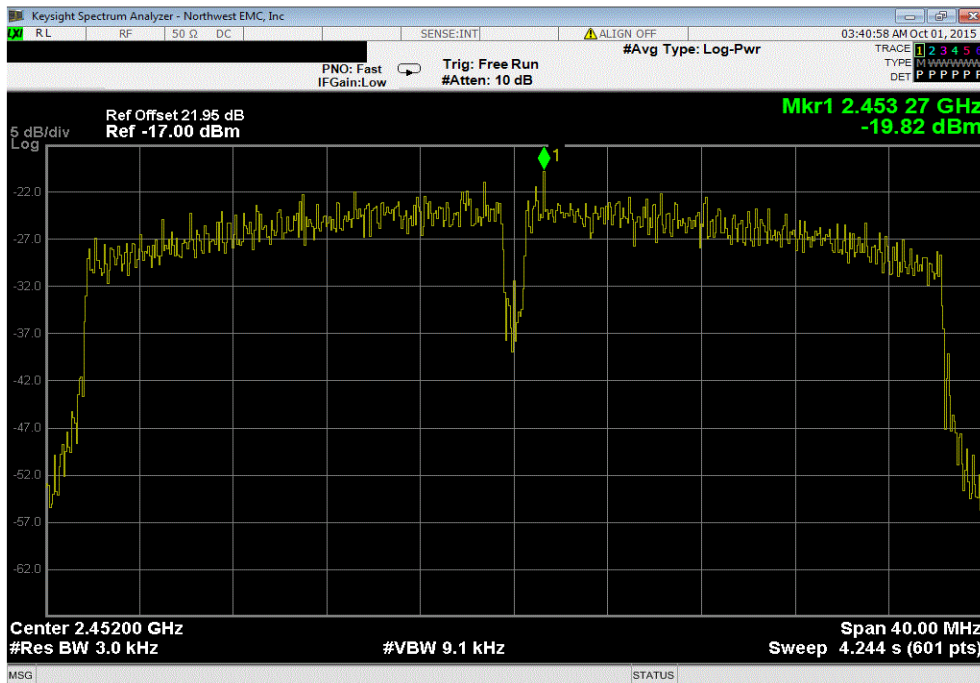


POWER SPECTRAL DENSITY

Ant 2, 40 MHz, 2.4 GHz Band, 802.11(n) MCS0, Low Channel 5, 2432 MHz						
	Value	Limit				
	dBm/3kHz	< dBm/3kHz	Results			
	-18.096	8	Pass			

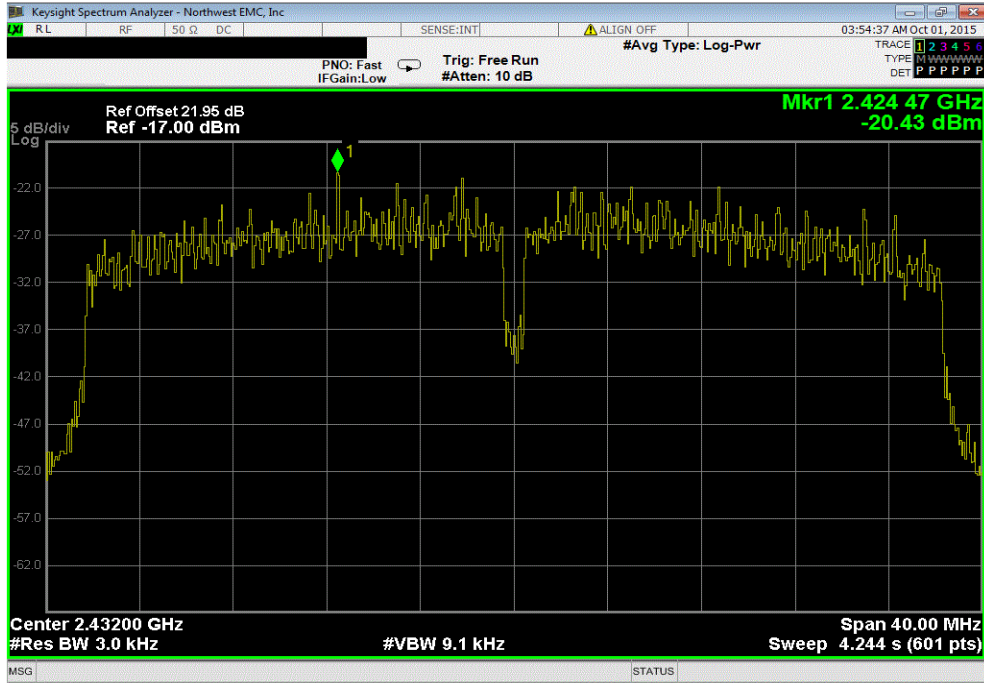


Ant 2, 40 MHz, 2.4 GHz Band, 802.11(n) MCS0, High Channel 9, 2452 MHz						
	Value	Limit				
	dBm/3kHz	< dBm/3kHz	Results			
	-19.815	8	Pass			



POWER SPECTRAL DENSITY

Ant 2, 40 MHz, 2.4 GHz Band, 802.11(n) MCS7, Low Channel 5, 2432 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-20.425	8	Pass			



Ant 2, 40 MHz, 2.4 GHz Band, 802.11(n) MCS7, High Channel 9, 2452 MHz						
	Value	Limit	Results			
	dBm/3kHz	< dBm/3kHz				
	-23.111	8	Pass			

