

OUTPUT POWER

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

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval (mo)
Analyzer - Spectrum Analyzer	Agilent	E4440A	AFE	6/22/2015	12
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 fundamental emission output power (maximum average conducted output power) was measured using the channels and modes as called out on the following data sheets. The transmit power was set to its default maximum.

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.

Prior to measuring output power; the emission bandwidth (B) and the transmission pulse duration (T) were measured. Both are required to determine the method of measuring Maximum Conducted Output Power. The transmission pulse duration (T) was measured using a zero span on the spectrum analyzer to see the pulses in the time domain.

The method AVGSA-2 in section 11.9.2.2.4 of ANSI C63.10:2013 was used to make the measurement. This method uses trace averaging across ON and OFF times of the EUT transmissions in the spectrum analyzer channel power function using an RMS detector. Following the measurement a duty cycle correction was applied by adding $[10 \log (1 / D)]$, where D is the duty cycle, to the measured power to compute the average power during the actual transmission times.

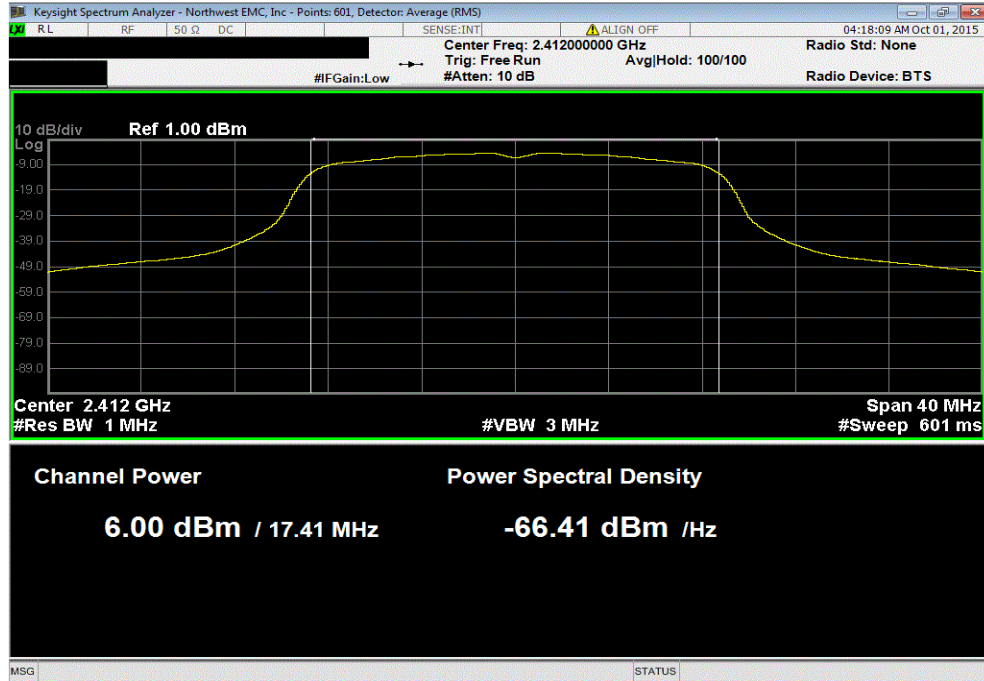
De Facto EIRP Limit: Per 47 CFR 15.247 (b)(1-3), the EUT meets the de facto EIRP limit of +36 dBm.

OUTPUT POWER

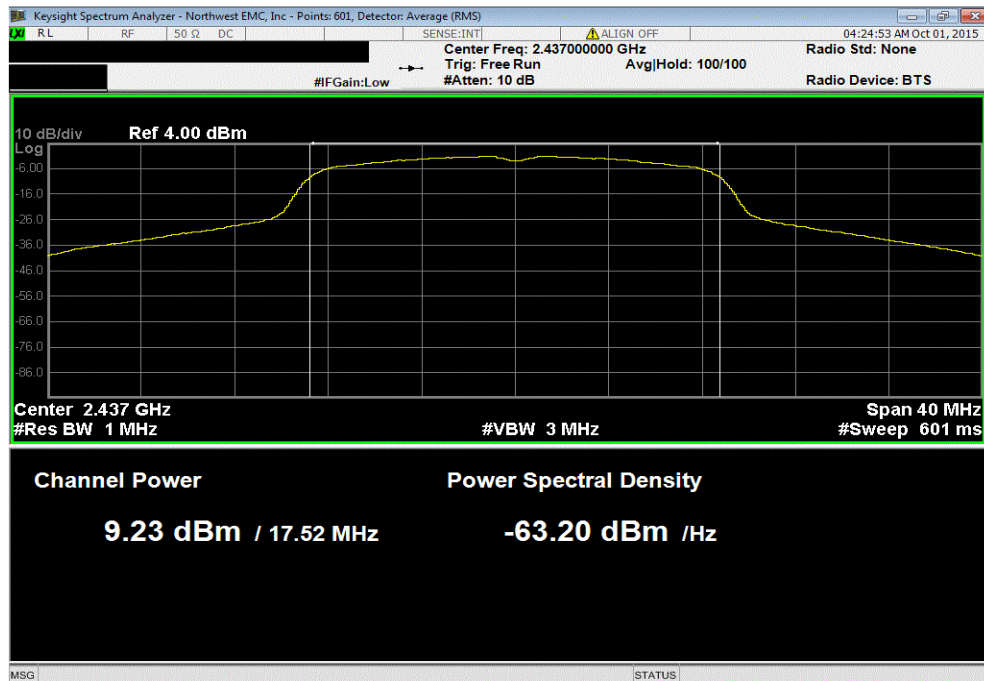
EUT: Precor Wi-Fi / Bluetooth Module Model 303346			Work Order: PRCR0230		
Serial Number: None			Date: 10/01/15		
Customer: Precor, Inc.			Temperature: 23°C		
Attendees: Rich Whitbeck			Humidity: 44%		
Project: None			Barometric Pres.: 1017mb		
Tested by: Richard Mellroth		Power: 110VAC/60Hz	Job Site: NC01 / NC02		
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 			
		Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Value (dBm)	Limit (dBm) Results
Ant 1 (2x2 MIMO)					
20 MHz					
2.4 GHz Band					
802.11(n) MCS12					
Low Channel 1, 2412 MHz		5.998	6.2	12.2	30 Pass
Mid Channel 6, 2437 MHz		9.235	6.2	15.4	30 Pass
High Channel 11, 2462 MHz		5.982	6.1	12.1	30 Pass
802.11(n) MCS15					
Low Channel 1, 2412 MHz		2.571	7.4	9.9	30 Pass
Mid Channel 6, 2437 MHz		2.702	7.4	10.1	30 Pass
High Channel 11, 2462 MHz		2.75	7.4	10.1	30 Pass
Ant 2 (2x2 MIMO)					
20 MHz					
2.4 GHz Band					
802.11(n) MCS12					
Low Channel 1, 2412 MHz		4.368	6.1	10.5	30 Pass
Mid Channel 6, 2437 MHz		6.907	6.1	13	30 Pass
High Channel 11, 2462 MHz		3.441	6.1	9.5	30 Pass
802.11(n) MCS15					
Low Channel 1, 2412 MHz		0.785	7.3	8	30 Pass
Mid Channel 6, 2437 MHz		0.323	7.3	7.7	30 Pass
High Channel 11, 2462 MHz		0.001	7.3	7.3	30 Pass
Power Summing (2x2 MIMO)					
20 MHz					
2.4 GHz Band					
802.11(n) MCS12		Ant 1 (mW)	Ant 2 (mW)	Summed Power (mW)	Summed Power (dBm) Limit (dBm) Results
Low Channel 1, 2412 MHz		16.596	11.220	27.816	14.443 30 Pass
Mid Channel 6, 2437 MHz		34.674	19.953	54.626	17.374 30 Pass
High Channel 11, 2462 MHz		16.218	8.913	25.131	14.002 30 Pass
802.11(n) MCS15					
Low Channel 1, 2412 MHz		9.772	6.310	16.082	12.063 30 Pass
Mid Channel 6, 2437 MHz		10.233	5.888	16.121	12.074 30 Pass
High Channel 11, 2462 MHz		10.233	5.370	15.603	11.932 30 Pass

OUTPUT POWER

Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, Low Channel 1, 2412 MHz						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)		Value (dBm)	Limit (dBm)	Results
	5.998	6.2		12.2	30	Pass

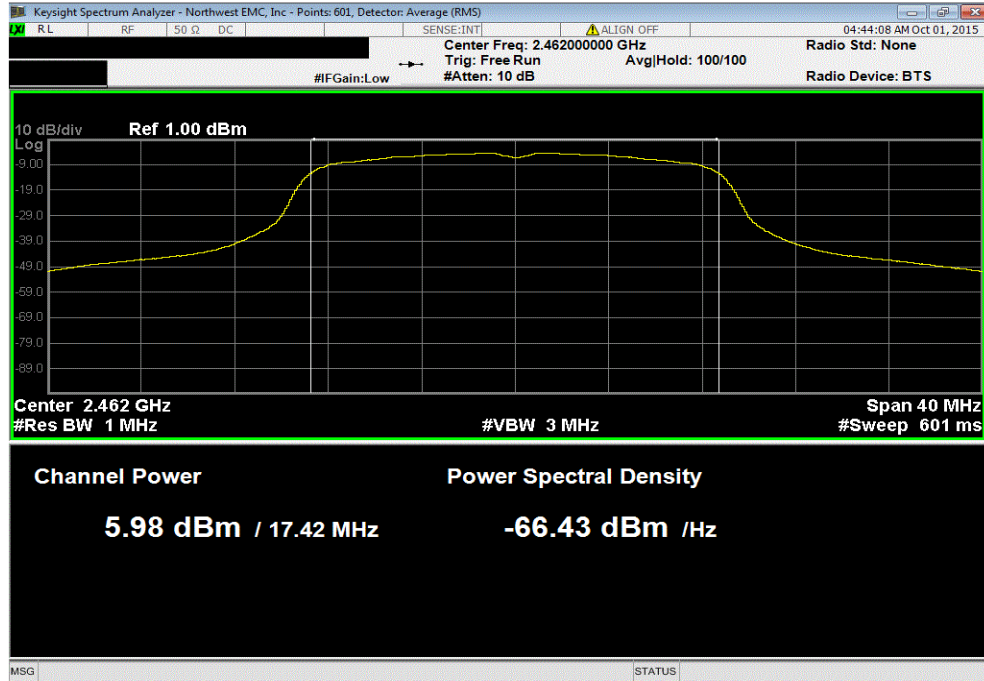


Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, Mid Channel 6, 2437 MHz						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)		Value (dBm)	Limit (dBm)	Results
	9.235	6.2		15.4	30	Pass

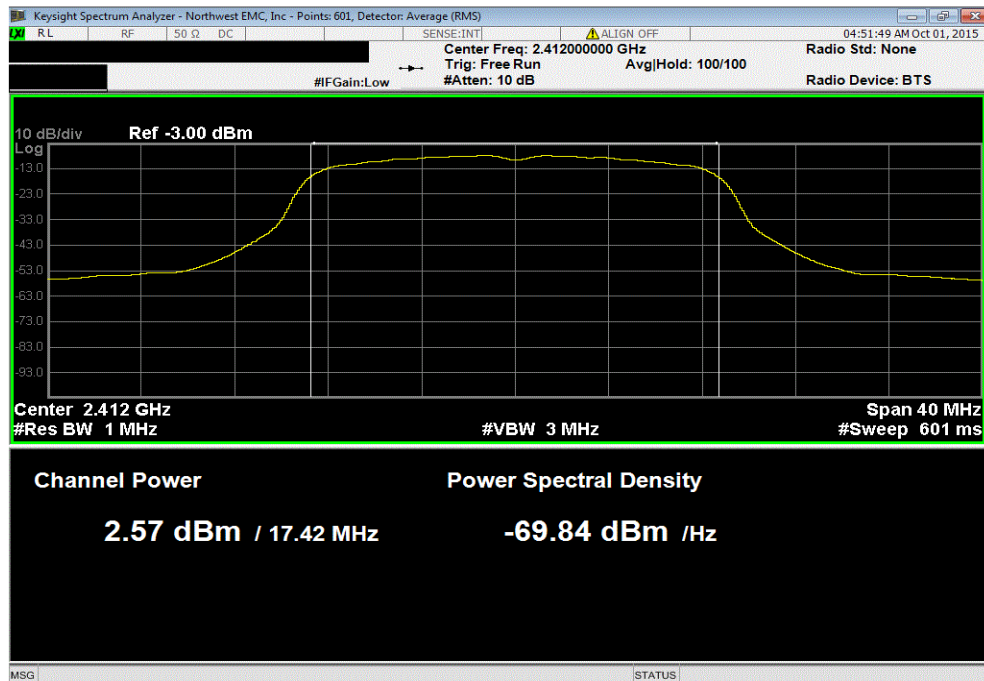


OUTPUT POWER

Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, High Channel 11, 2462 MHz						
Avg Cond	Duty Cycle	Value	Limit	Results		
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)			
5.982	6.1	12.1	30	Pass		

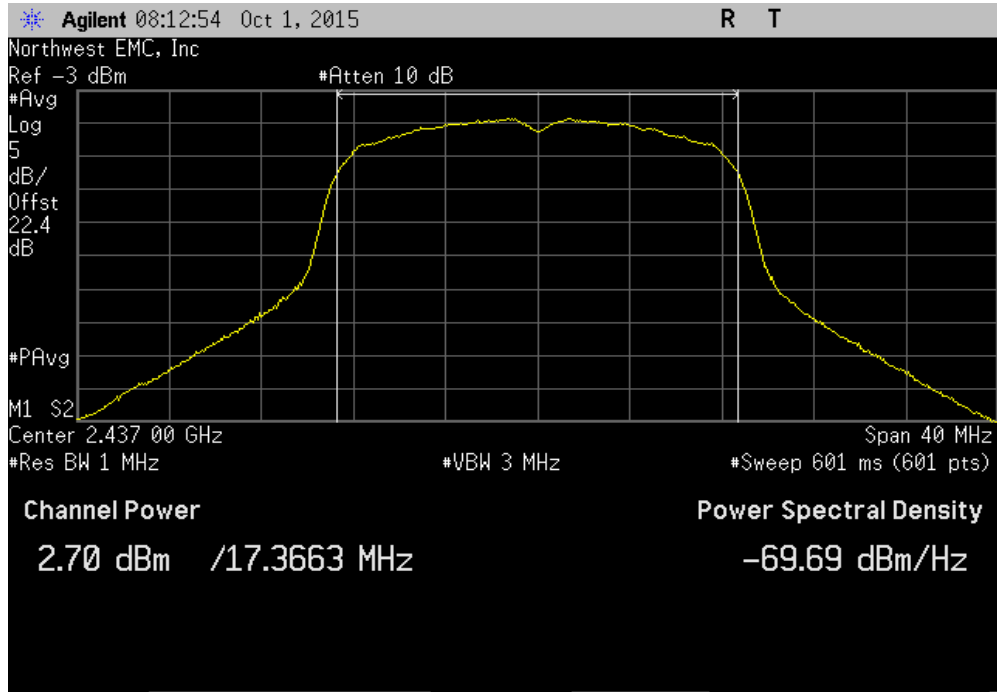


Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, Low Channel 1, 2412 MHz						
Avg Cond	Duty Cycle	Value	Limit	Results		
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)			
2.571	7.4	9.9	30	Pass		

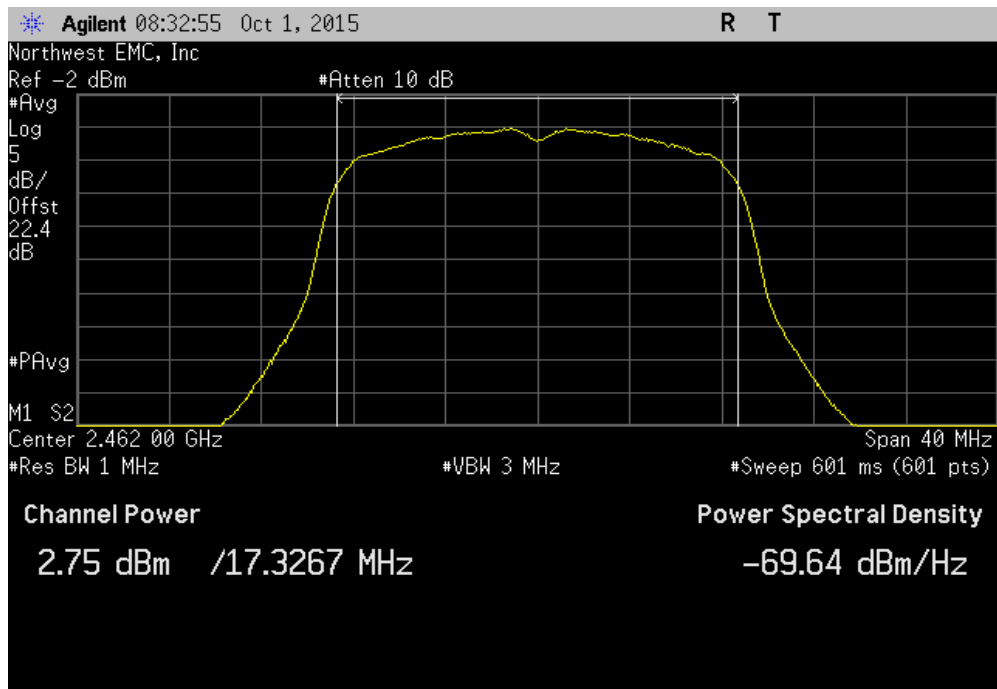


OUTPUT POWER

Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, Mid Channel 6, 2437 MHz						
Avg Cond	Duty Cycle	Value	Limit	Results		
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)			
2.702	7.4	10.1	30	Pass		

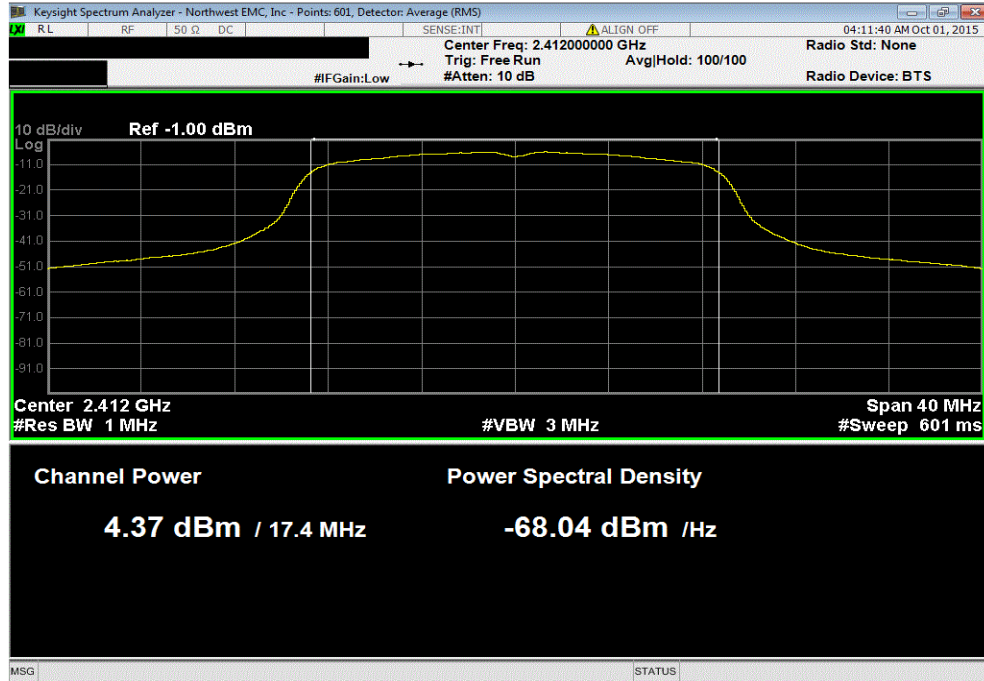


Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, High Channel 11, 2462 MHz						
Avg Cond	Duty Cycle	Value	Limit	Results		
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)			
2.75	7.4	10.1	30	Pass		

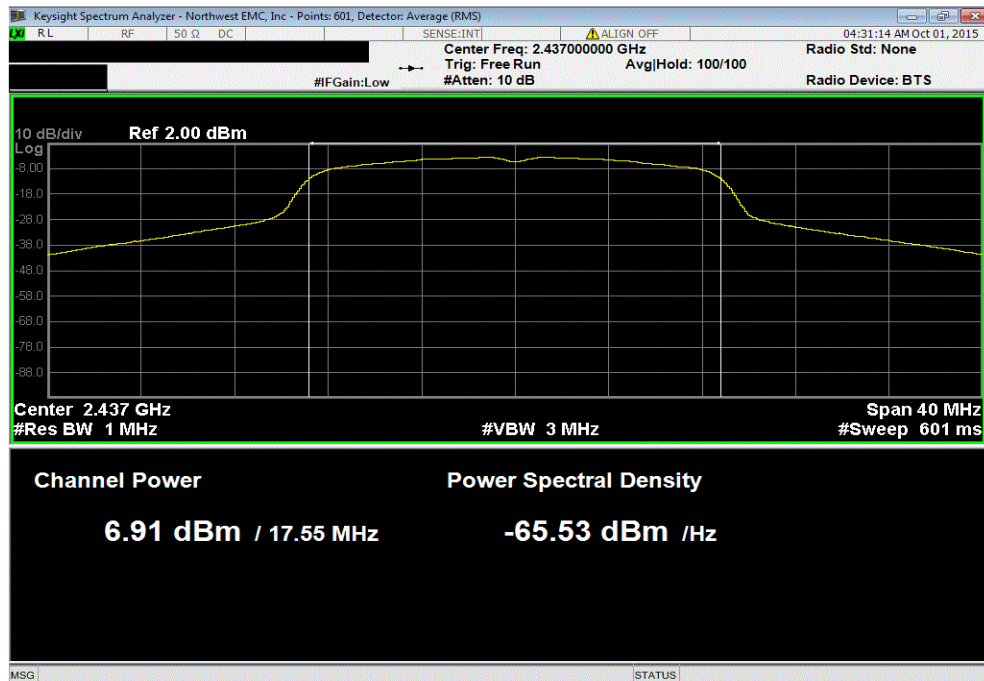


OUTPUT POWER

Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, Low Channel 1, 2412 MHz						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)		Value (dBm)	Limit (dBm)	Results
	4.368	6.1		10.5	30	Pass

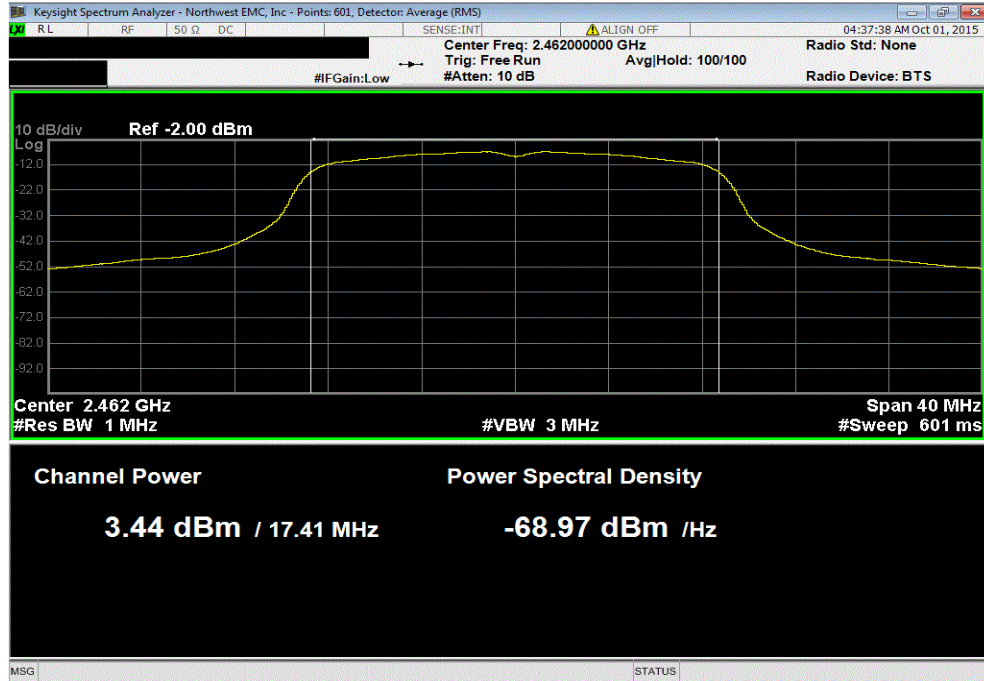


Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, Mid Channel 6, 2437 MHz						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)		Value (dBm)	Limit (dBm)	Results
	6.907	6.1		13	30	Pass

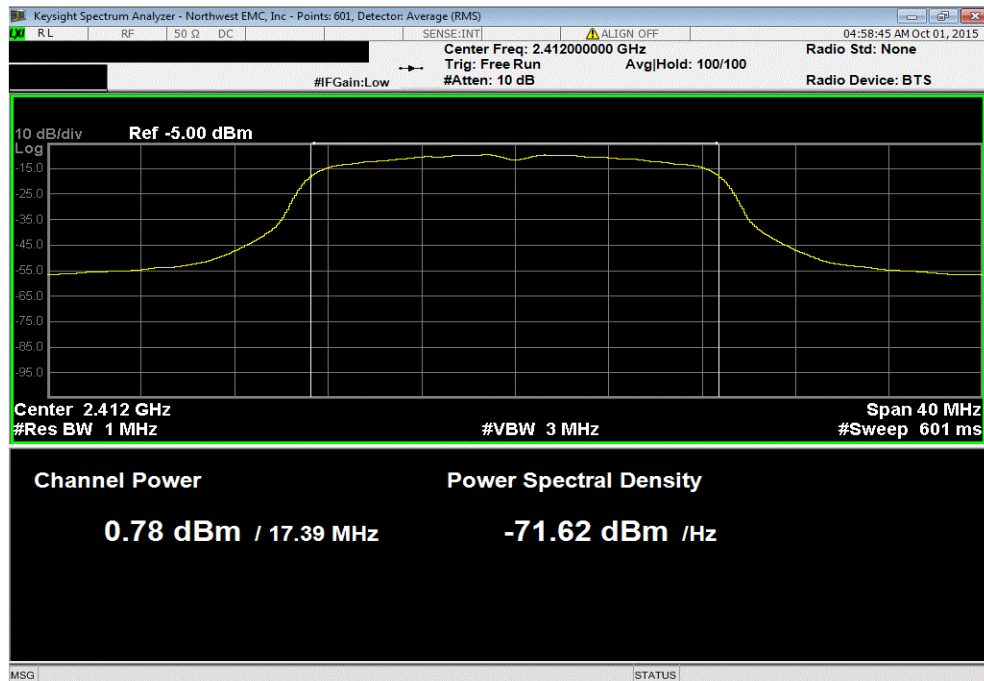


OUTPUT POWER

Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, High Channel 11, 2462 MHz						
Avg Cond	Duty Cycle	Value	Limit	Results		
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)			
3.441	6.1	9.5	30	Pass		

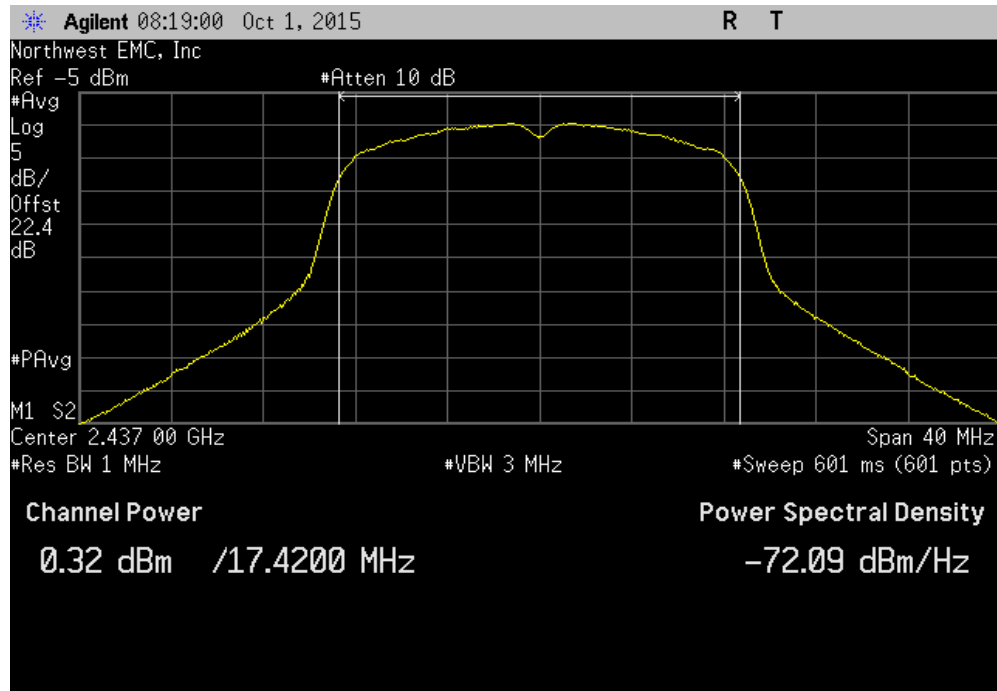


Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, Low Channel 1, 2412 MHz						
Avg Cond	Duty Cycle	Value	Limit	Results		
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)			
0.785	7.3	8	30	Pass		

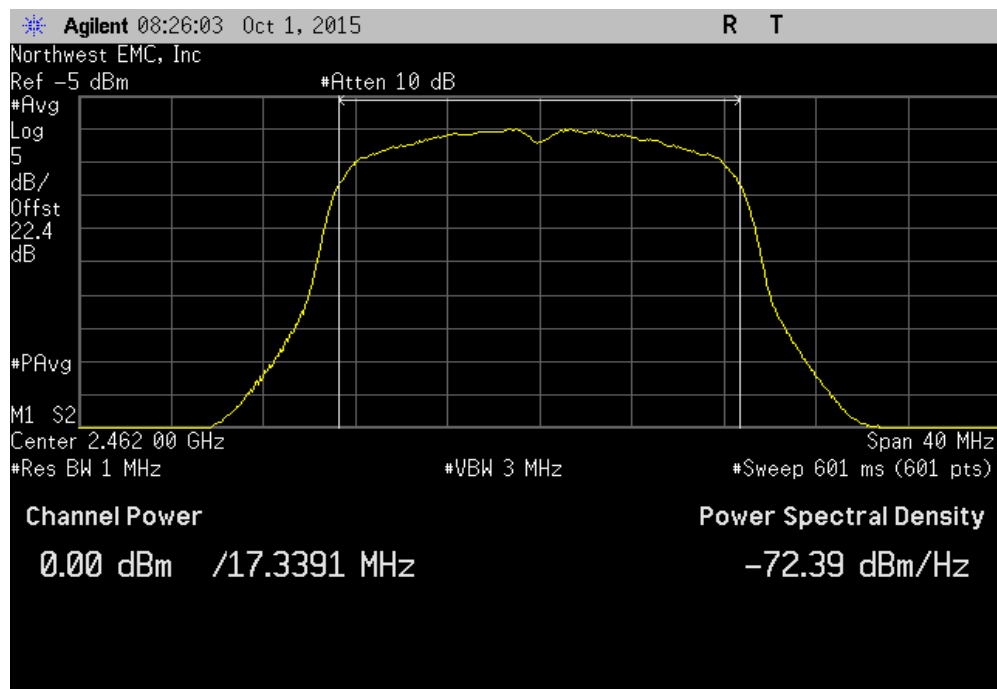


OUTPUT POWER

Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, Mid Channel 6, 2437 MHz						
Avg Cond	Duty Cycle	Value	Limit	Results		
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)			
0.323	7.3	7.7	30	Pass		



Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, High Channel 11, 2462 MHz						
Avg Cond	Duty Cycle	Value	Limit	Results		
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)			
0.001	7.3	7.3	30	Pass		



OUTPUT POWER

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

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 fundamental emission output power (maximum average conducted output power) was measured using the channels and modes as called out on the following data sheets. The transmit power was set to its default maximum.

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.

Prior to measuring output power; the emission bandwidth (B) and the transmission pulse duration (T) were measured. Both are required to determine the method of measuring Maximum Conducted Output Power. The transmission pulse duration (T) was measured using a zero span on the spectrum analyzer to see the pulses in the time domain.

The method AVGSA-2 in section 11.9.2.2.4 of ANSI C63.10:2013 was used to make the measurement. This method uses trace averaging across ON and OFF times of the EUT transmissions in the spectrum analyzer channel power function using an RMS detector. Following the measurement a duty cycle correction was applied by adding $[10 \log (1 / D)]$, where D is the duty cycle, to the measured power to compute the average power during the actual transmission times.

De Facto EIRP Limit: Per 47 CFR 15.247 (b)(1-3), the EUT meets the de facto EIRP limit of +36 dBm.

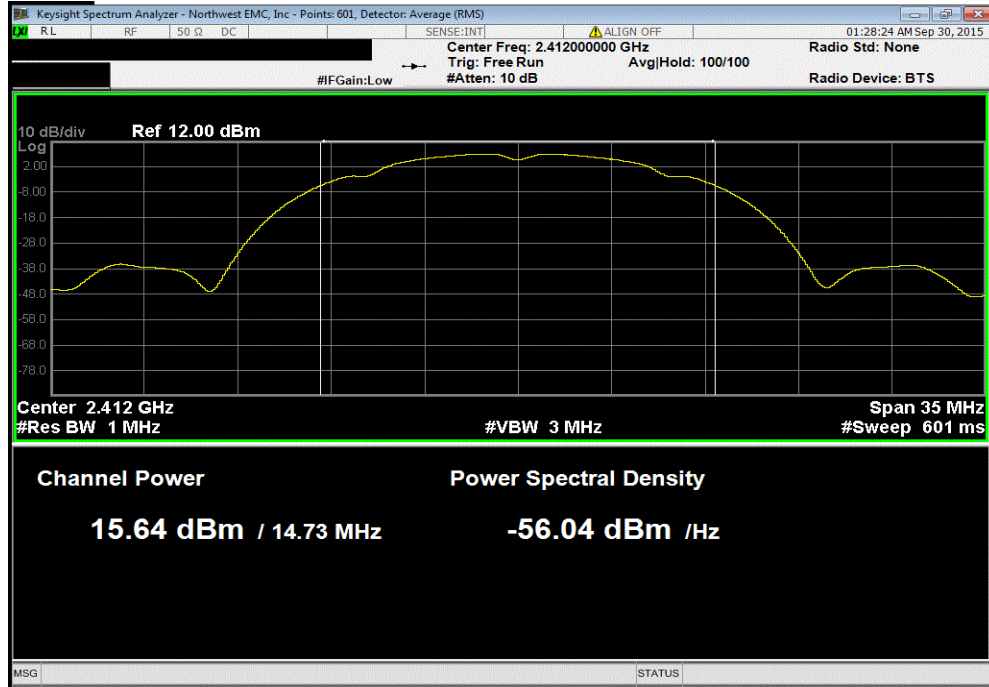
OUTPUT POWER

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.: 1017 mbar	
Tested by: Richard Mellroth		Power: 110VAC/60Hz	
Job Site: NC01			
TEST SPECIFICATIONS		Test Method	
FCC 15.247:2015		ANSI C63.10:2013	
COMMENTS			
All Power Settings at the Default Maximum, with the following exceptions: 40MHz BW Channel 5, MCS0, Antenna 1 = Power Level 15. 40MHz BW Channel 5, MCS0, Antenna 2 = Power Level 12.			
DEVIATIONS FROM TEST STANDARD			
None			
Configuration #	1	Signature 	
		Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)
		Value (dBm)	Limit (dBm)
			Results

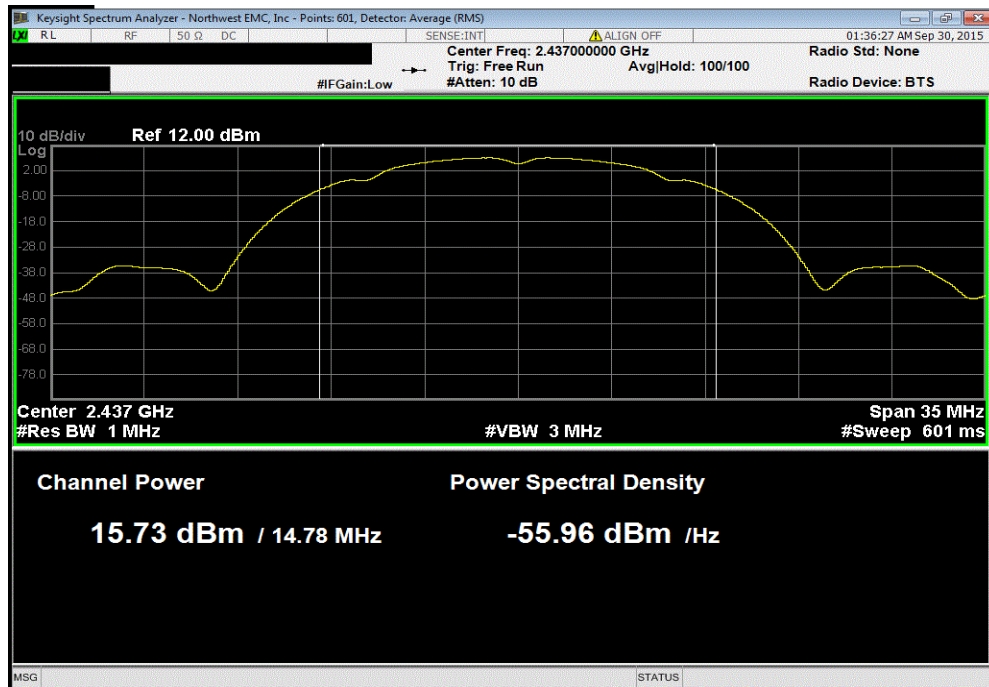
Ant 1			
20 MHz			
2.4 GHz Band			
802.11(b) 1Mbps			
Low Channel 1, 2412 MHz	15.643	0.2	15.8
Mid Channel 6, 2437 MHz	15.735	0.2	15.9
High Channel 11, 2462 MHz	15.693	0.2	15.9
802.11(b) 11Mbps			
Low Channel 1, 2412 MHz	14.863	1.5	16.4
Mid Channel 6, 2437 MHz	14.692	1.5	16.2
High Channel 11, 2462 MHz	14.725	1.5	16.2
802.11(g) 6Mbps			
Low Channel 1, 2412 MHz	10.339	1.1	11.4
Mid Channel 6, 2437 MHz	14.833	1.1	16
High Channel 11, 2462 MHz	10.108	1.1	11.2
802.11(g) 36Mbps			
Low Channel 1, 2412 MHz	7.482	4.2	11.7
Mid Channel 6, 2437 MHz	10.417	4.2	14.6
High Channel 11, 2462 MHz	7.499	4.2	11.7
802.11(g) 54Mbps			
Low Channel 1, 2412 MHz	6.593	5.2	11.8
Mid Channel 6, 2437 MHz	8.032	5.3	13.3
High Channel 11, 2462 MHz	6.491	5.3	11.8
802.11(n) MCS0			
Low Channel 1, 2412 MHz	10.301	1.3	11.6
Mid Channel 6, 2437 MHz	13.86	1.3	15.1
High Channel 11, 2462 MHz	10.097	1.3	11.4
802.11(n) MCS7			
Low Channel 1, 2412 MHz	6.186	5.8	12
Mid Channel 6, 2437 MHz	6.66	5.8	12.5
High Channel 11, 2462 MHz	6.277	5.7	12
40 MHz			
2.4 GHz Band			
802.11(n) MCS0			
Low Channel 5, 2432 MHz	10.639	2.5	13.1
High Channel 9, 2452 MHz	7.195	2.5	9.7
802.11(n) MCS7			
Low Channel 5, 2432 MHz	4.422	9	13.4
High Channel 9, 2452 MHz	2.784	8.9	11.7
Ant 2			
20 MHz			
2.4 GHz Band			
802.11(b) 1Mbps			
Low Channel 1, 2412 MHz	14.173	0.2	14.4
Mid Channel 6, 2437 MHz	13.792	0.2	14
High Channel 11, 2462 MHz	13.398	0.2	13.6
802.11(b) 11Mbps			
Low Channel 1, 2412 MHz	13.248	1.5	14.7
Mid Channel 6, 2437 MHz	12.748	1.5	14.3
High Channel 11, 2462 MHz	12.263	1.5	13.8
802.11(g) 6Mbps			
Low Channel 1, 2412 MHz	8.692	1.1	9.8
Mid Channel 6, 2437 MHz	12.859	1.1	14
High Channel 11, 2462 MHz	7.555	1.1	8.7
802.11(g) 36Mbps			
Low Channel 1, 2412 MHz	5.878	4.2	10.1
Mid Channel 6, 2437 MHz	8.382	4.2	12.6
High Channel 11, 2462 MHz	4.874	4.2	9.1
802.11(g) 54Mbps			
Low Channel 1, 2412 MHz	4.876	5.3	10.2
Mid Channel 6, 2437 MHz	5.884	5.3	11.2
High Channel 11, 2462 MHz	3.883	5.2	9.1
802.11(n) MCS0			
Low Channel 1, 2412 MHz	8.718	1.3	10
Mid Channel 6, 2437 MHz	11.955	1.3	13.3
High Channel 11, 2462 MHz	7.569	1.3	8.8
802.11(n) MCS7			
Low Channel 1, 2412 MHz	4.421	5.7	10.1
Mid Channel 6, 2437 MHz	4.552	5.7	10.3
High Channel 11, 2462 MHz	3.639	5.8	9.4
40 MHz			
2.4 GHz Band			
802.11(n) MCS0			
Low Channel 5, 2432 MHz	7.812	2.5	10.3
High Channel 9, 2452 MHz	4.647	2.5	7.1
802.11(n) MCS7			
Low Channel 5, 2432 MHz	2.077	8.9	11
High Channel 9, 2452 MHz	0.141	8.9	9

OUTPUT POWER

Ant 1, 20 MHz, 2.4 GHz Band, 802.11(b) 1Mbps, Low Channel 1, 2412 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
15.643	0.2		15.8	30	Pass	

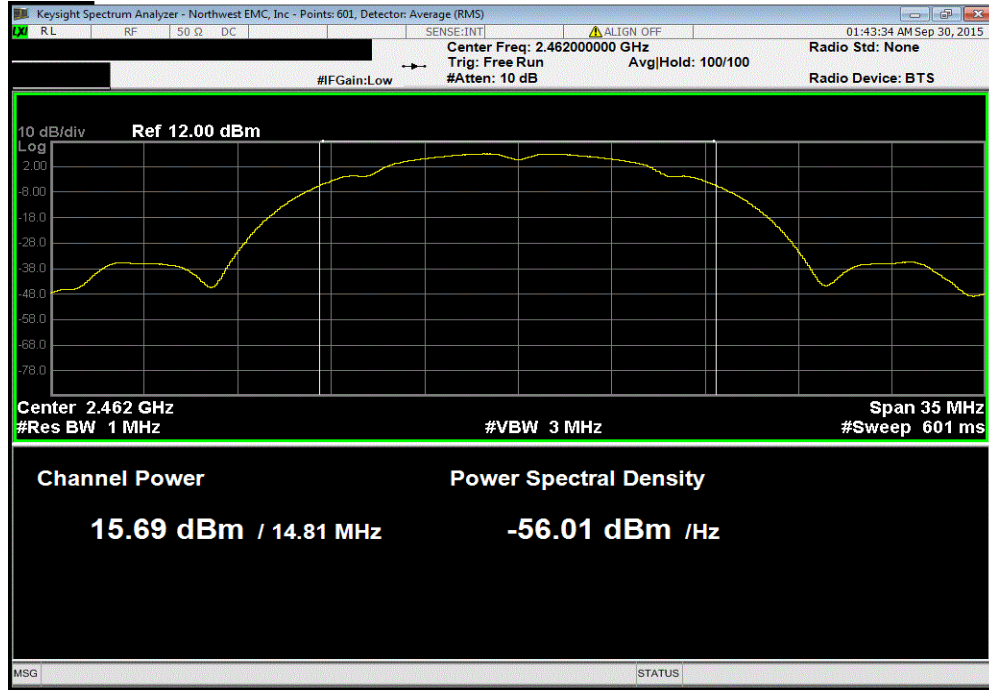


Ant 1, 20 MHz, 2.4 GHz Band, 802.11(b) 1Mbps, Mid Channel 6, 2437 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
15.735	0.2		15.9	30	Pass	

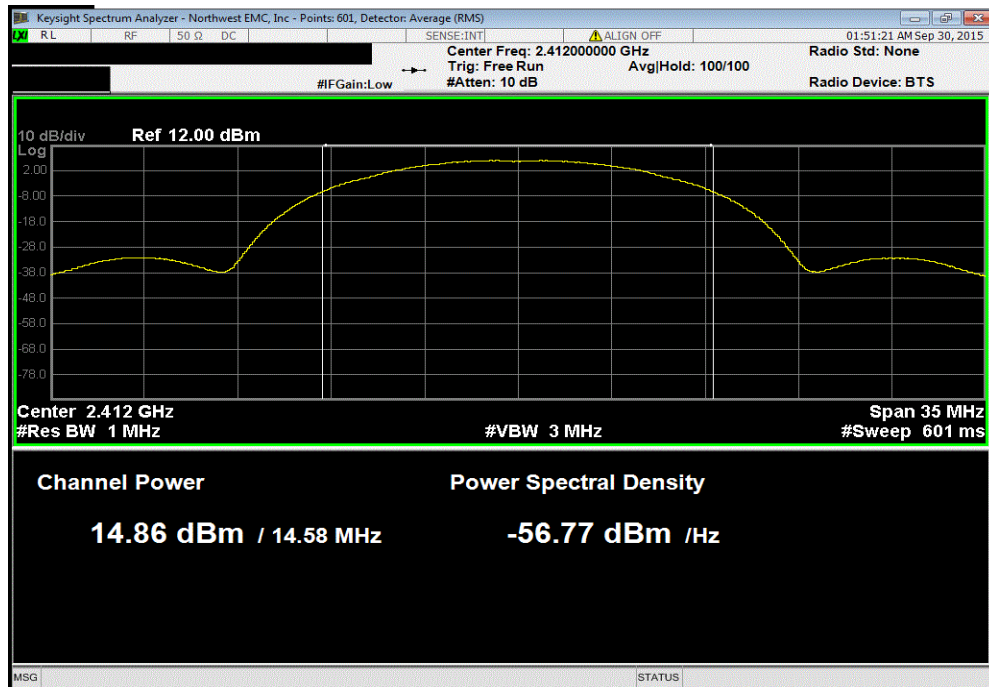


OUTPUT POWER

Ant 1, 20 MHz, 2.4 GHz Band, 802.11(b) 1Mbps, High Channel 11, 2462 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
15.693	0.2		15.9	30	Pass	

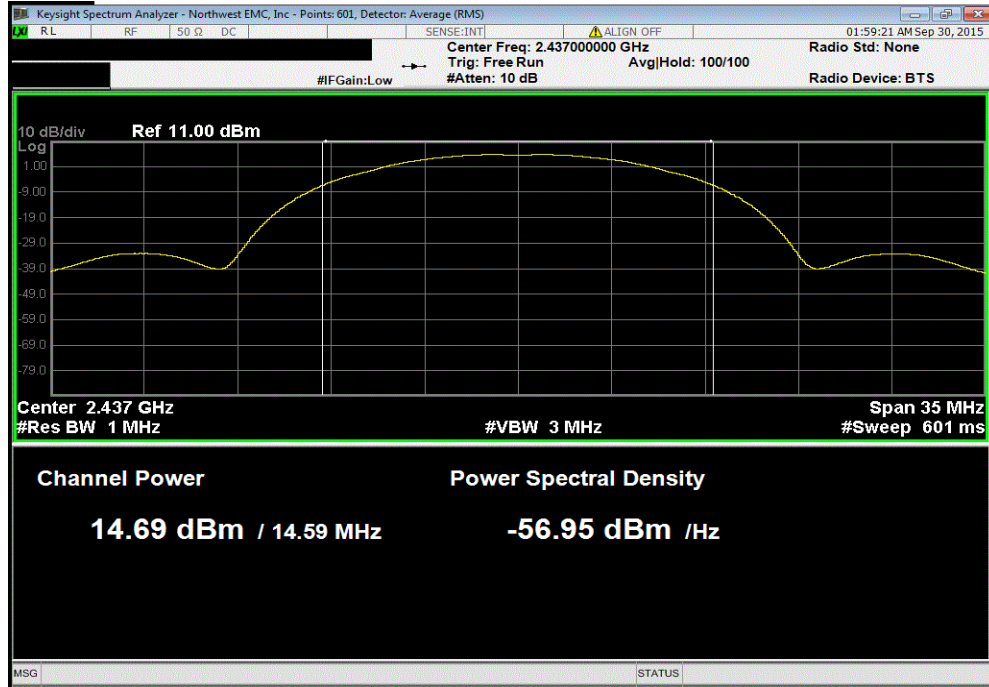


Ant 1, 20 MHz, 2.4 GHz Band, 802.11(b) 11Mbps, Low Channel 1, 2412 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
14.863	1.5		16.4	30	Pass	

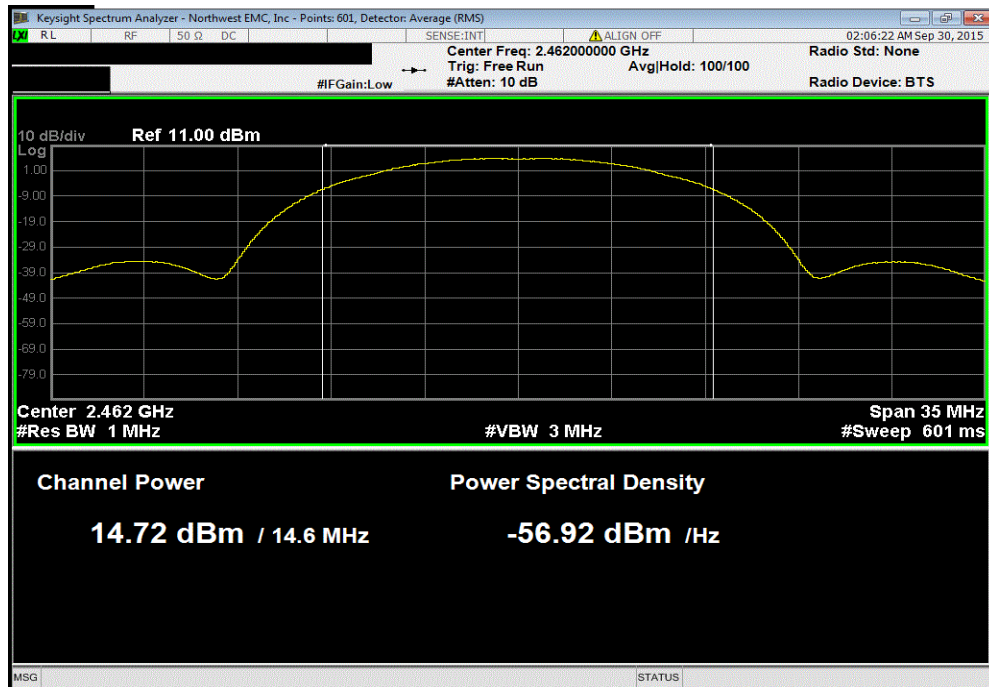


OUTPUT POWER

Ant 1, 20 MHz, 2.4 GHz Band, 802.11(b) 11Mbps, Mid Channel 6, 2437 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
14.692	1.5		16.2	30	Pass	

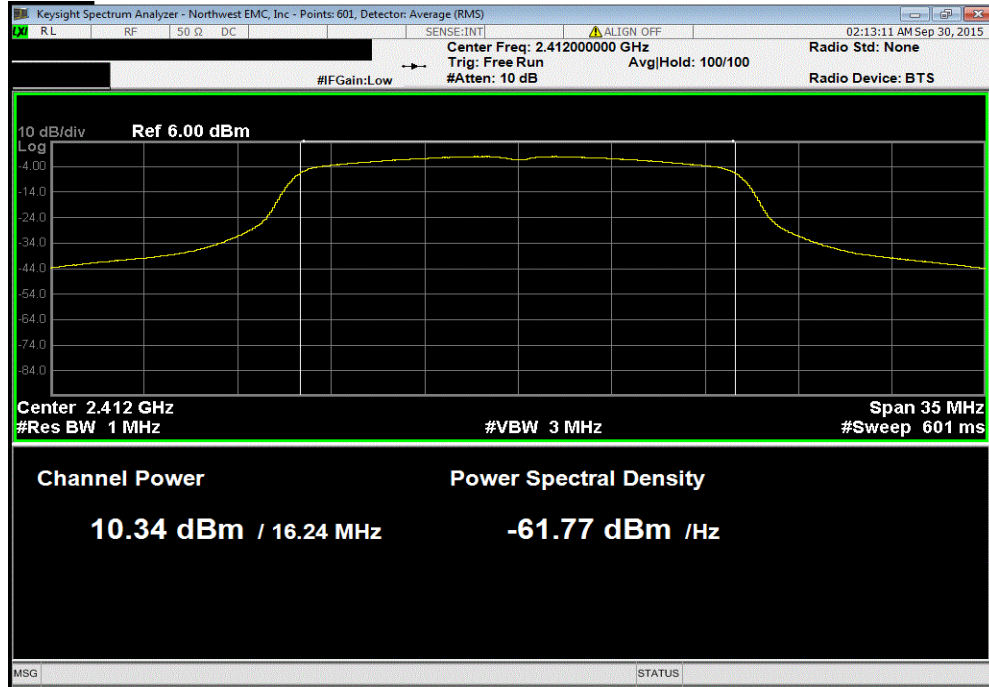


Ant 1, 20 MHz, 2.4 GHz Band, 802.11(b) 11Mbps, High Channel 11, 2462 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
14.725	1.5		16.2	30	Pass	

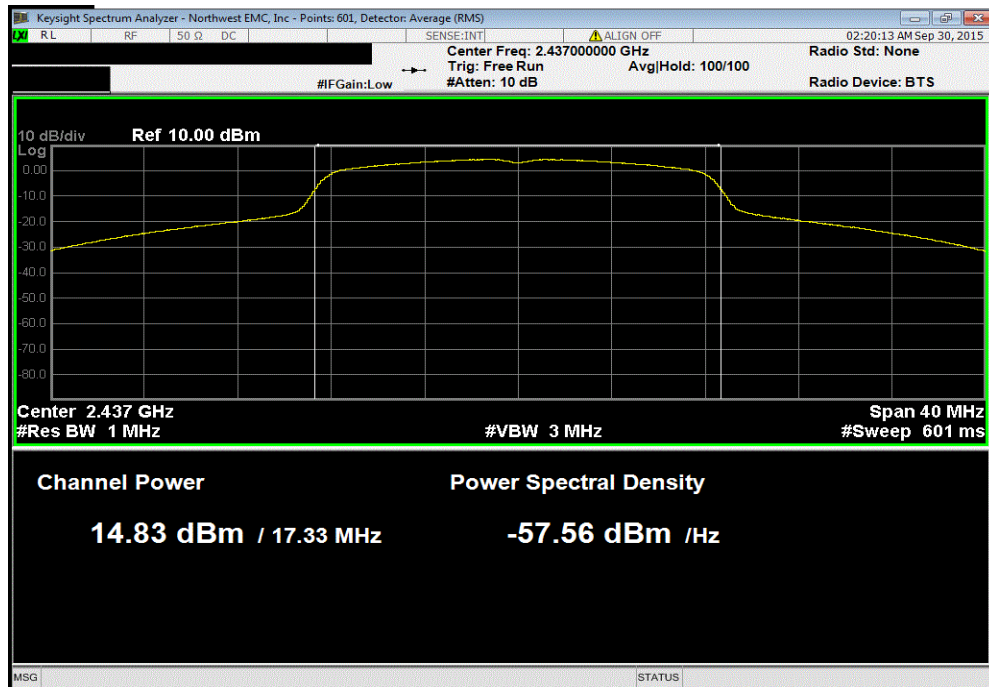


OUTPUT POWER

Ant 1, 20 MHz, 2.4 GHz Band, 802.11(g) 6Mbps, Low Channel 1, 2412 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
10.339	1.1		11.4	30	Pass	

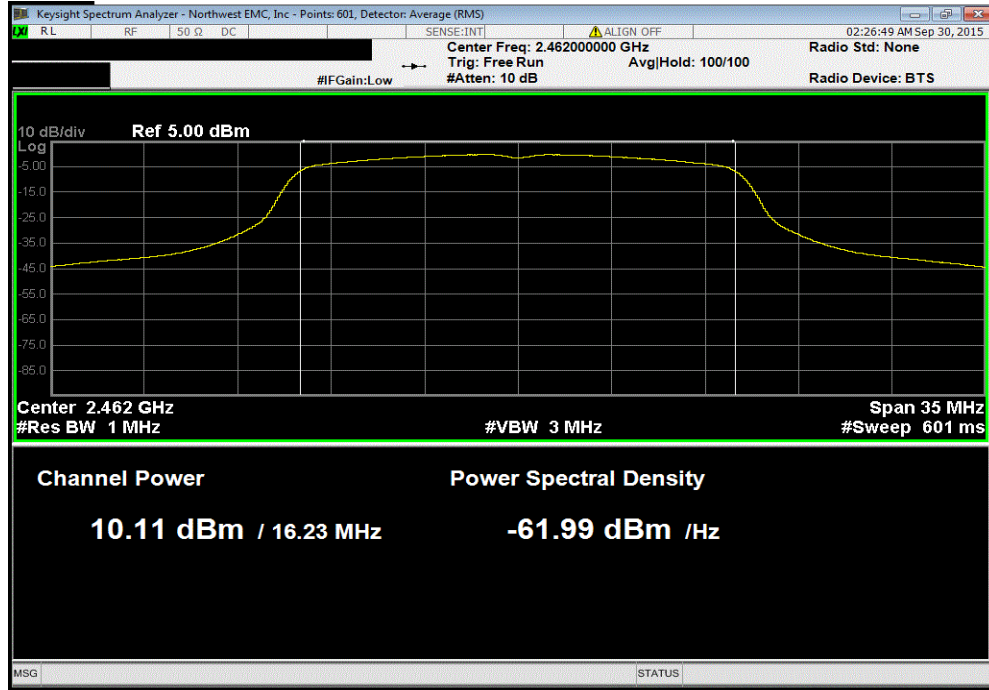


Ant 1, 20 MHz, 2.4 GHz Band, 802.11(g) 6Mbps, Mid Channel 6, 2437 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
14.833	1.1		16	30	Pass	

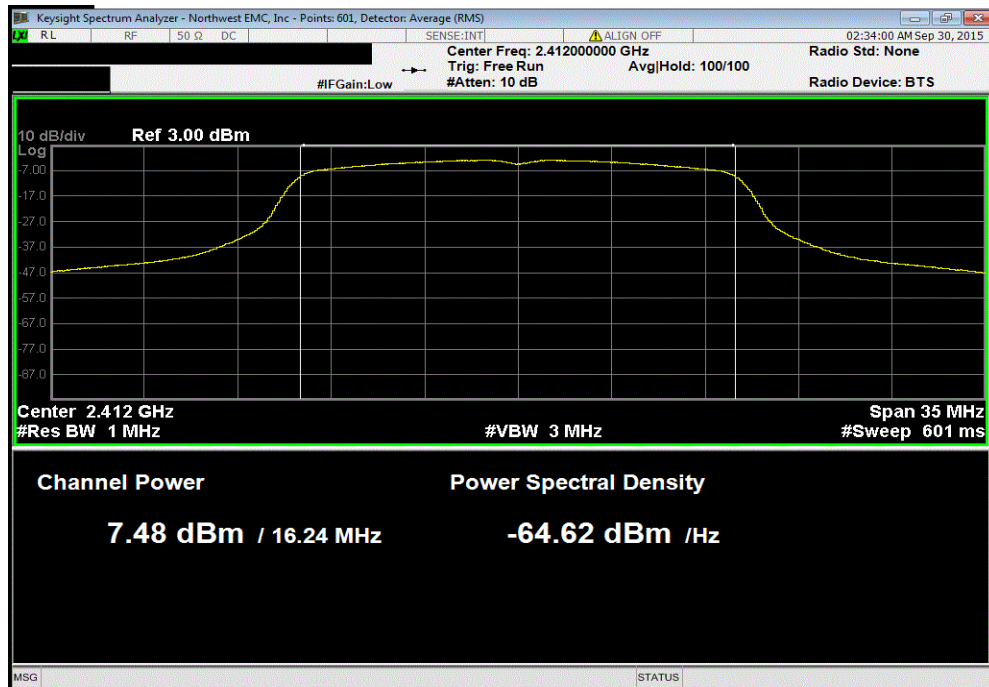


OUTPUT POWER

Ant 1, 20 MHz, 2.4 GHz Band, 802.11(g) 6Mbps, High Channel 11, 2462 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
10.108	1.1		11.2	30	Pass	

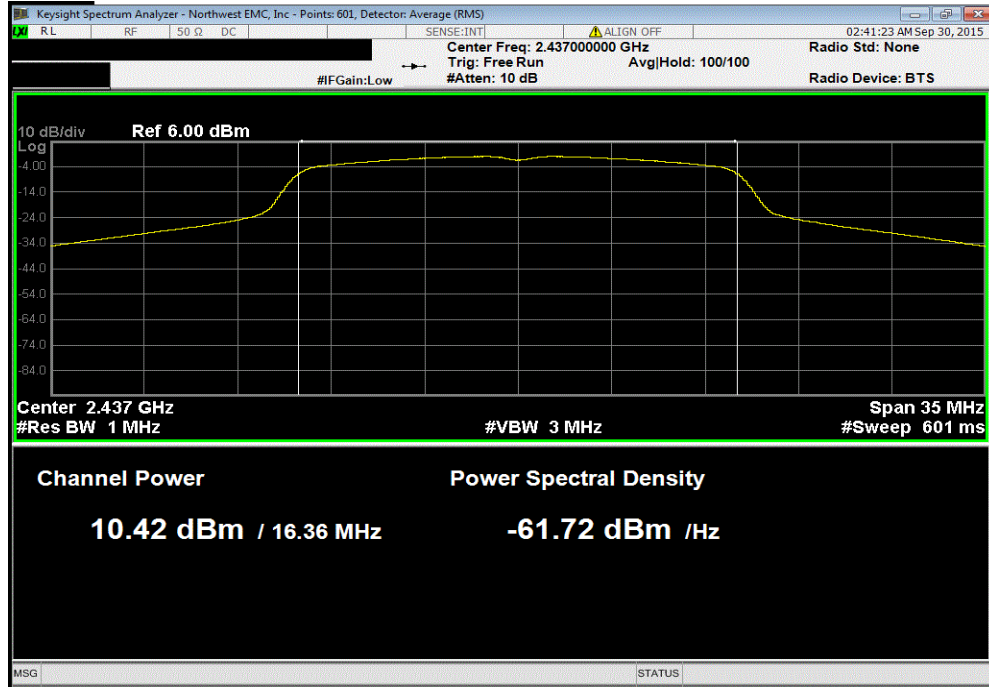


Ant 1, 20 MHz, 2.4 GHz Band, 802.11(g) 36Mbps, Low Channel 1, 2412 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
7.482	4.2		11.7	30	Pass	

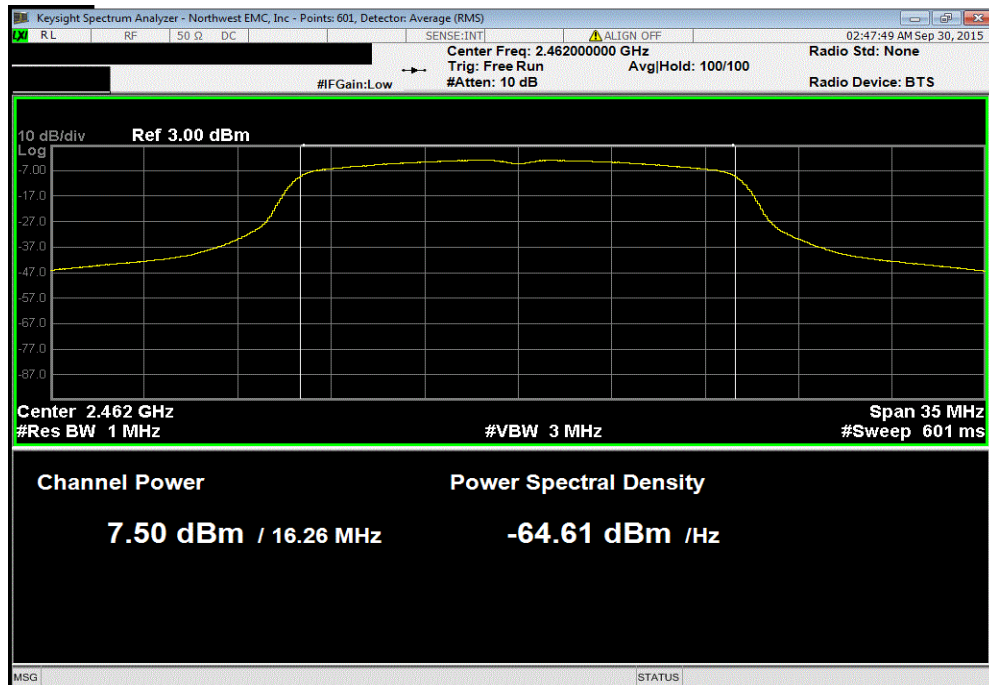


OUTPUT POWER

Ant 1, 20 MHz, 2.4 GHz Band, 802.11(g) 36Mbps, Mid Channel 6, 2437 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
10.417	4.2		14.6	30	Pass	

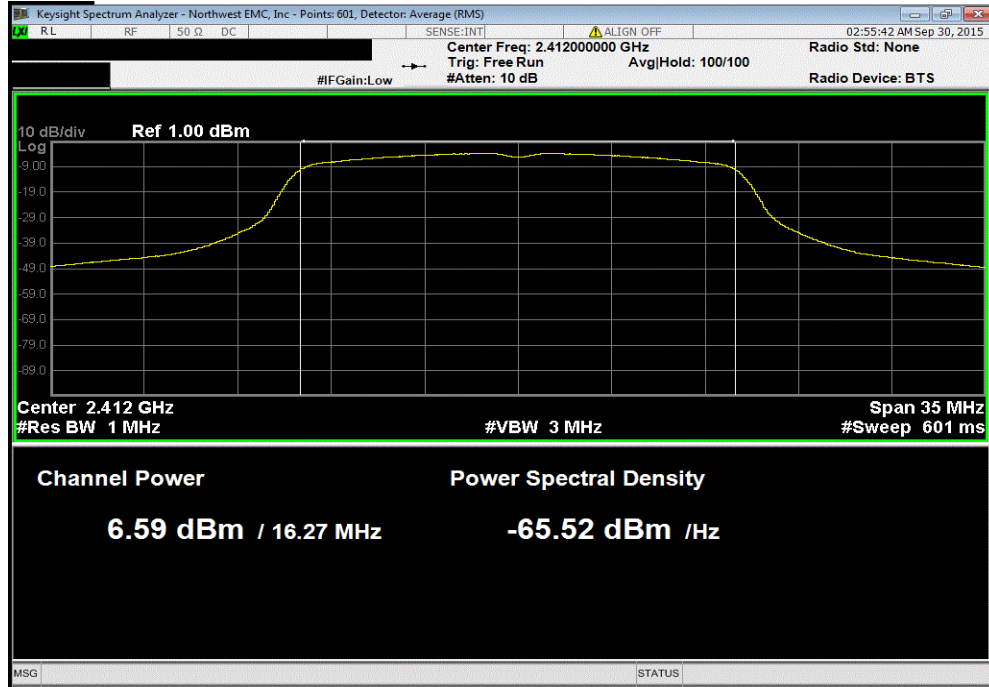


Ant 1, 20 MHz, 2.4 GHz Band, 802.11(g) 36Mbps, High Channel 11, 2462 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
7.499	4.2		11.7	30	Pass	

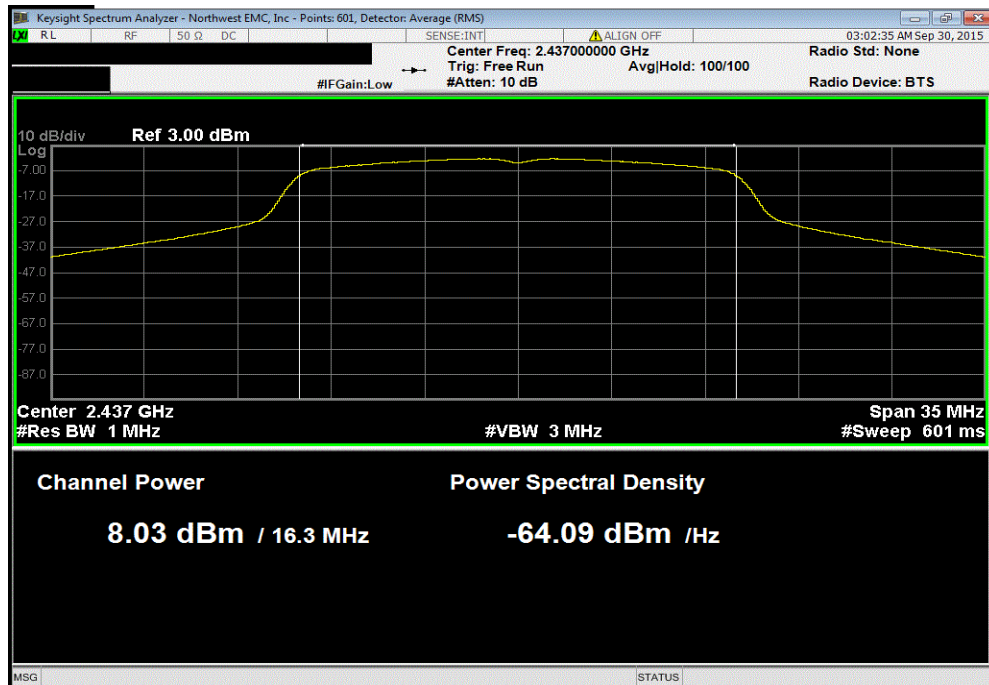


OUTPUT POWER

Ant 1, 20 MHz, 2.4 GHz Band, 802.11(g) 54Mbps, Low Channel 1, 2412 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
6.593	5.2		11.8	30	Pass	

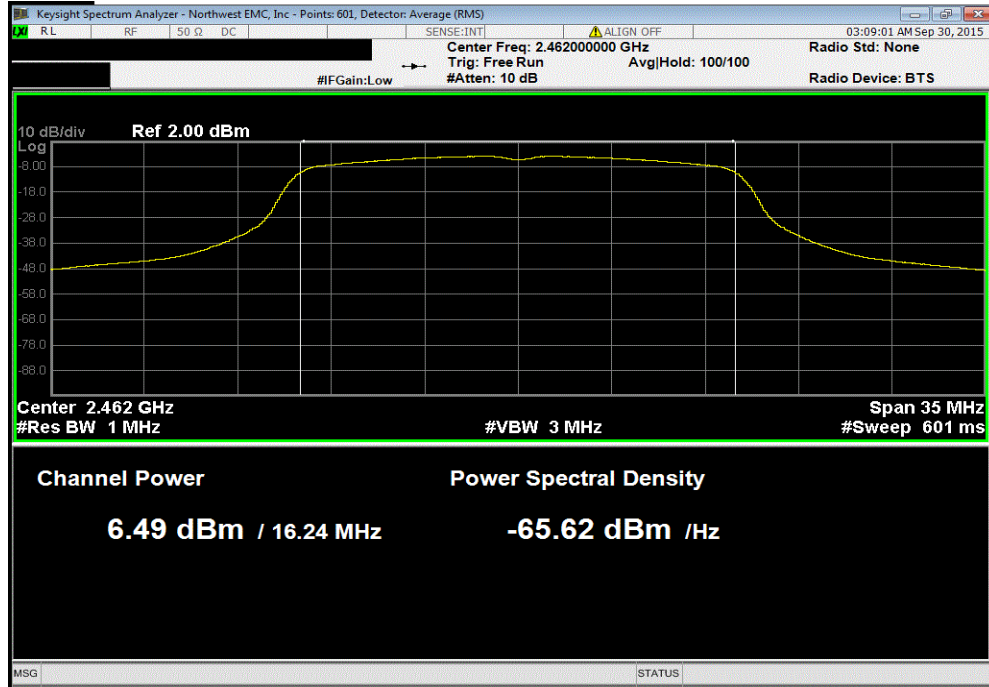


Ant 1, 20 MHz, 2.4 GHz Band, 802.11(g) 54Mbps, Mid Channel 6, 2437 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
8.032	5.3		13.3	30	Pass	

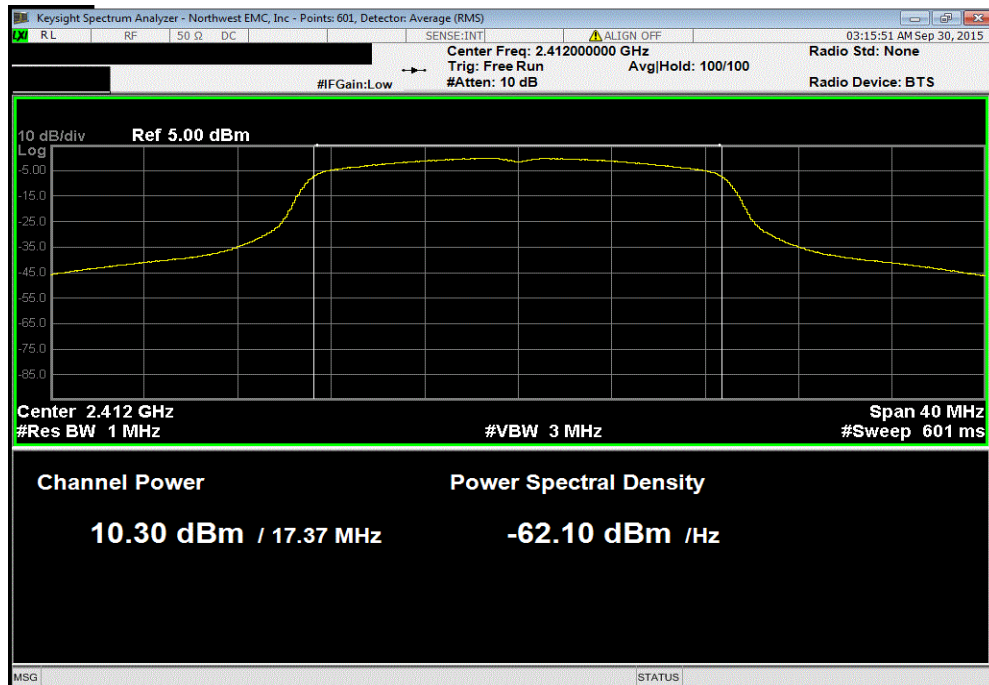


OUTPUT POWER

Ant 1, 20 MHz, 2.4 GHz Band, 802.11(g) 54Mbps, High Channel 11, 2462 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
	6.491	5.3	11.8	30	Pass	

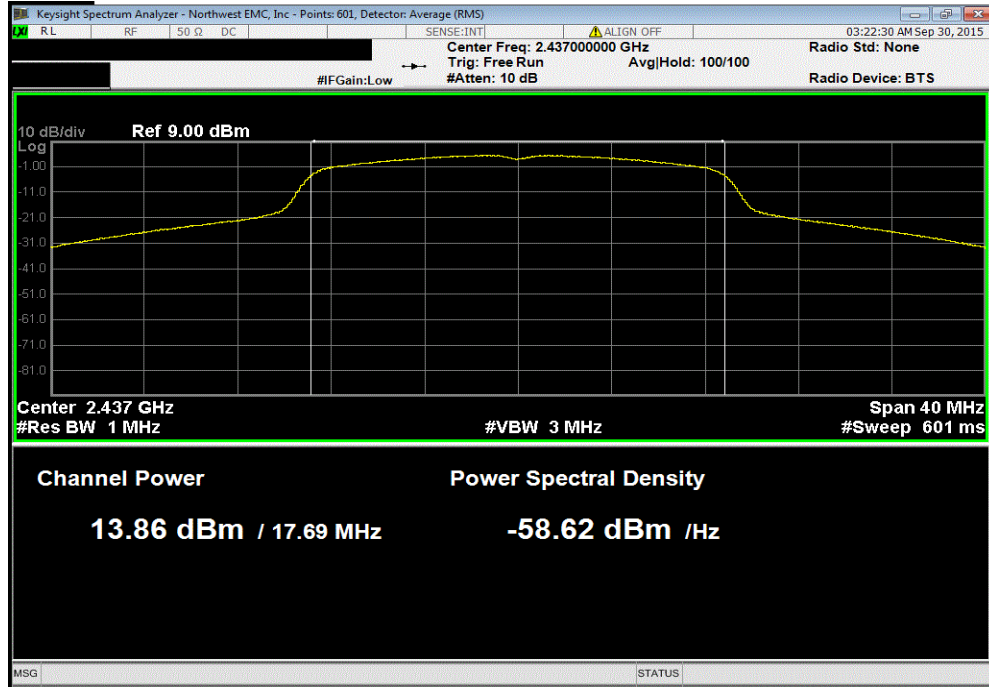


Ant 1, 20 MHz, 2.4 GHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
	10.301	1.3	11.6	30	Pass	

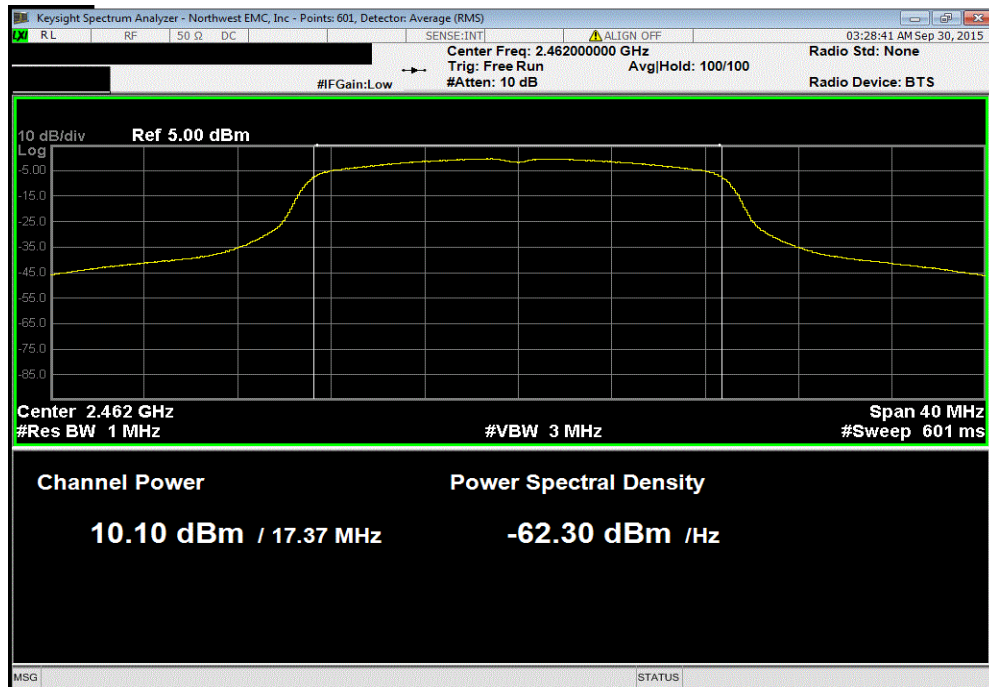


OUTPUT POWER

Ant 1, 20 MHz, 2.4 GHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
13.86	1.3		15.1	30	Pass	

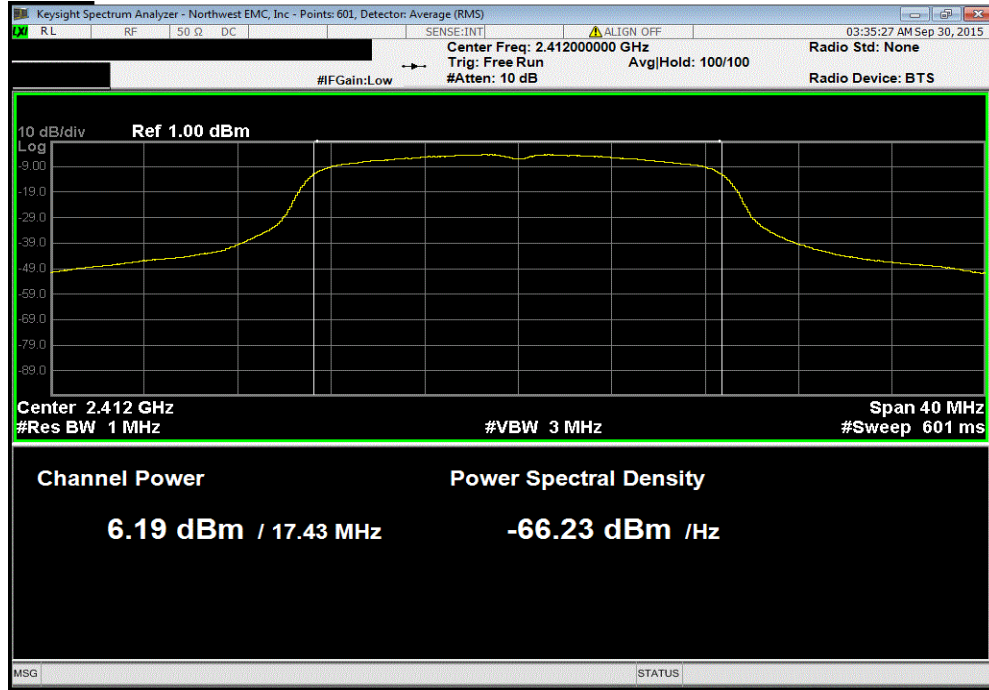


Ant 1, 20 MHz, 2.4 GHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
10.097	1.3		11.4	30	Pass	

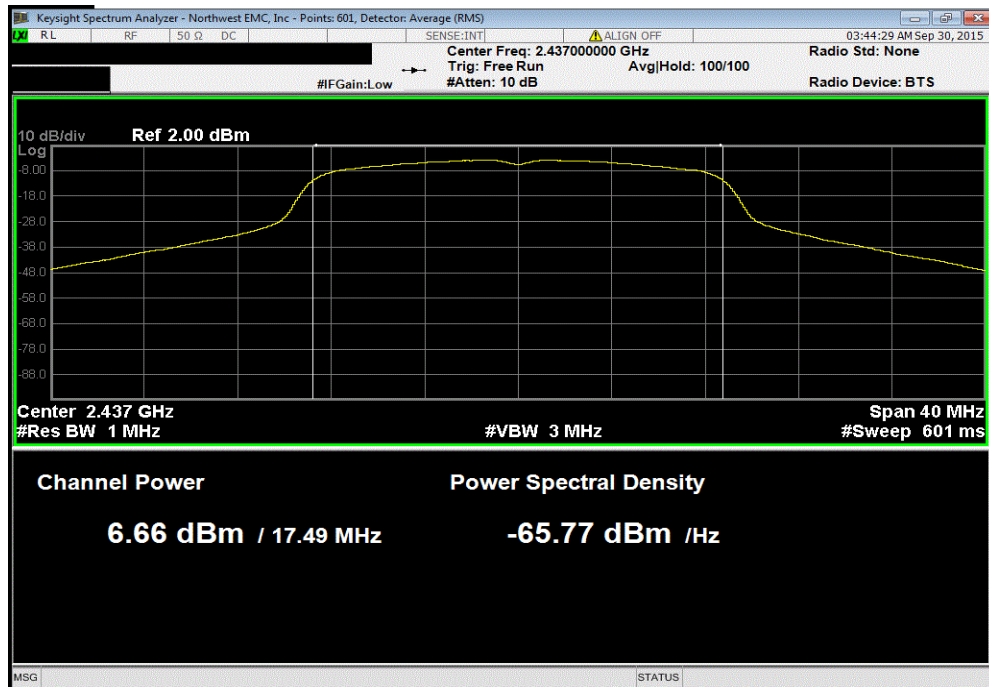


OUTPUT POWER

Ant 1, 20 MHz, 2.4 GHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz						
Avg Cond	Duty Cycle	Value	Limit	Results		
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)			
6.186	5.8	12	30	Pass		

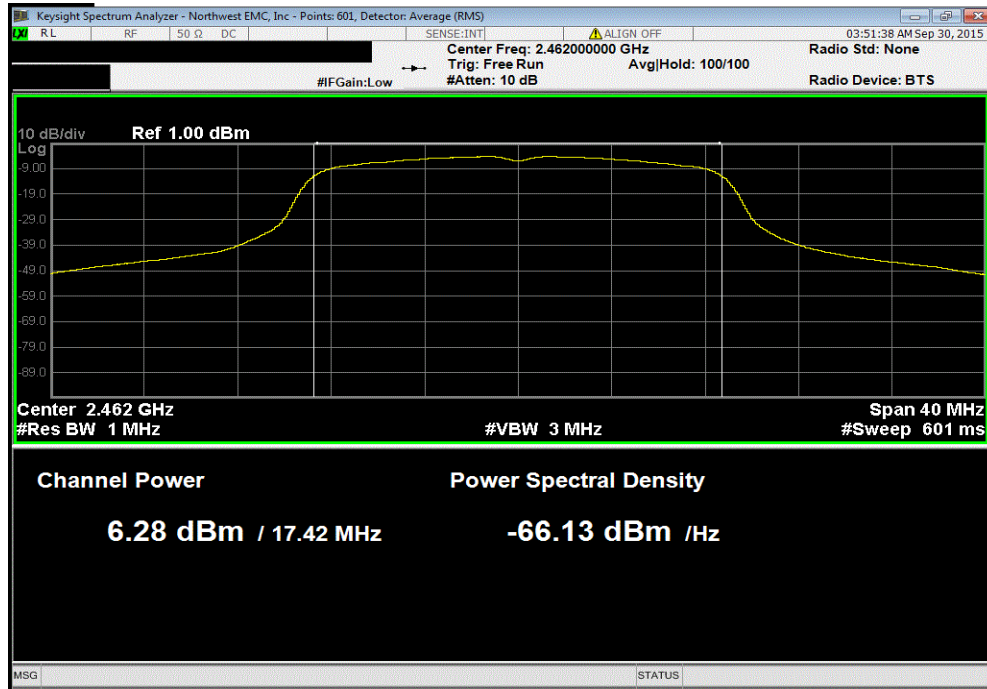


Ant 1, 20 MHz, 2.4 GHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz						
Avg Cond	Duty Cycle	Value	Limit	Results		
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)			
6.66	5.8	12.5	30	Pass		

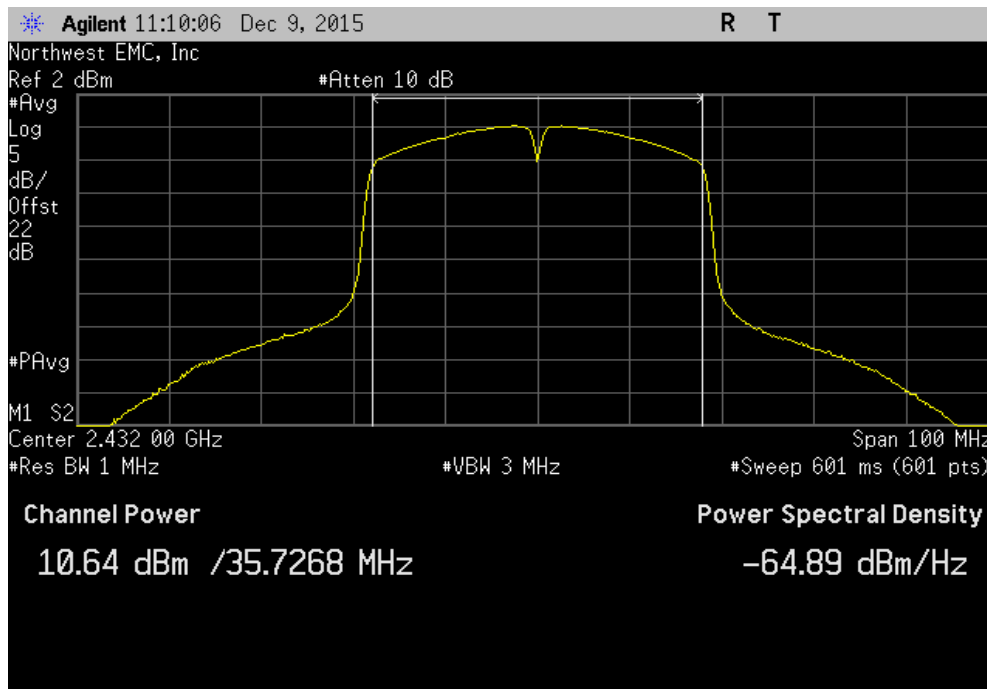


OUTPUT POWER

Ant 1, 20 MHz, 2.4 GHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz						
Avg Cond	Duty Cycle	Value	Limit	Results		
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)			
6.277	5.7	12	30	Pass		

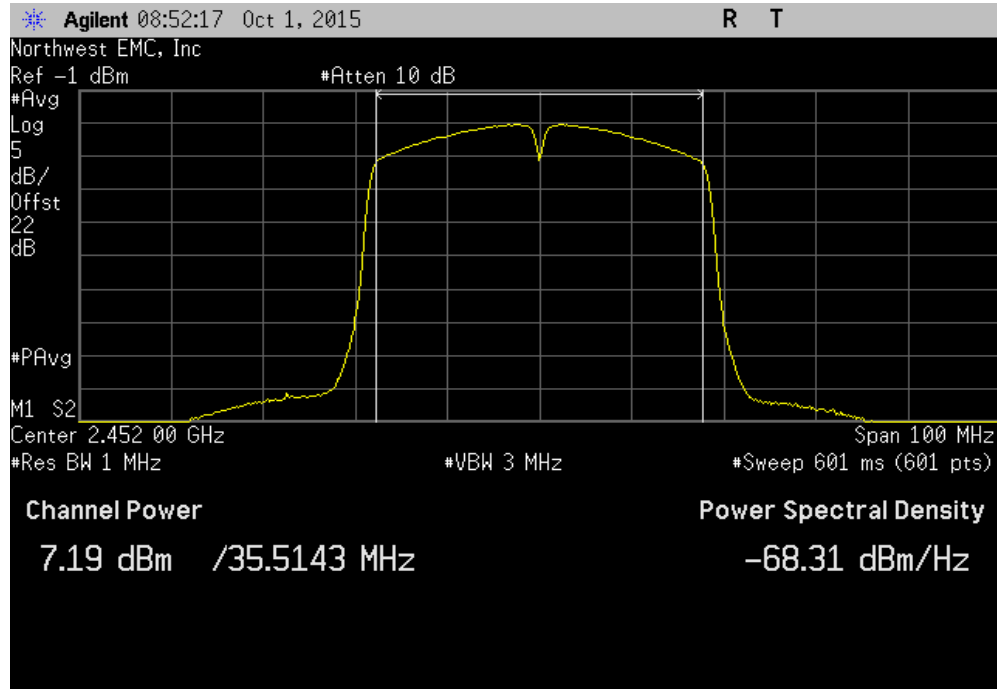


Ant 1, 40 MHz, 2.4 GHz Band, 802.11(n) MCS0, Low Channel 5, 2432 MHz						
Avg Cond	Duty Cycle	Value	Limit	Results		
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)			
10.639	2.5	13.1	30	Pass		

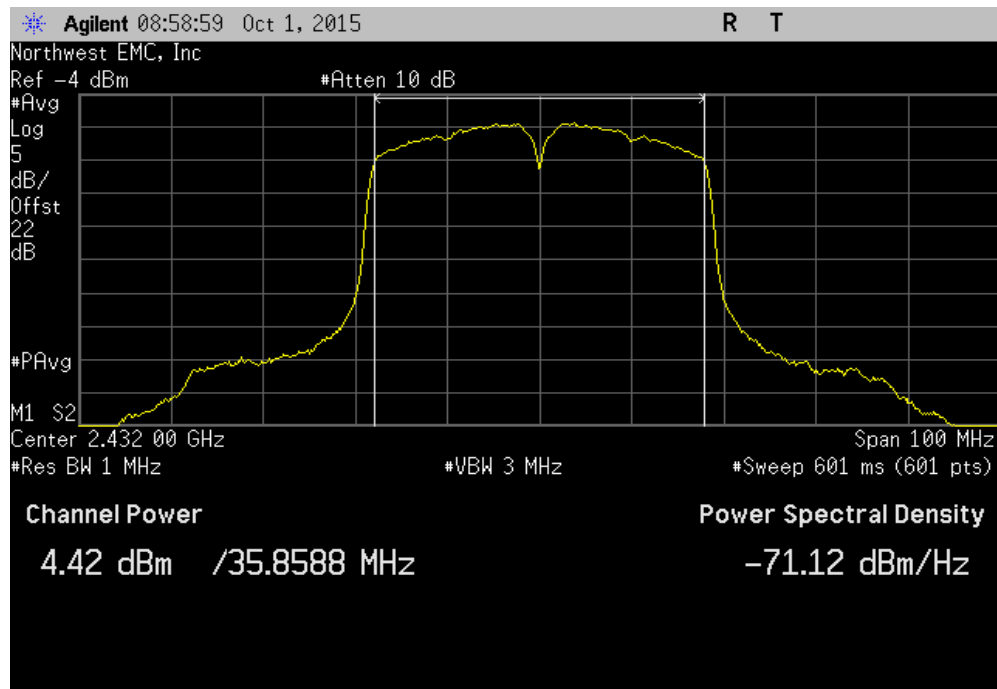


OUTPUT POWER

Ant 1, 40 MHz, 2.4 GHz Band, 802.11(n) MCS0, High Channel 9, 2452 MHz						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)		Value (dBm)	Limit (dBm)	Results
	7.195	2.5		9.7	30	Pass

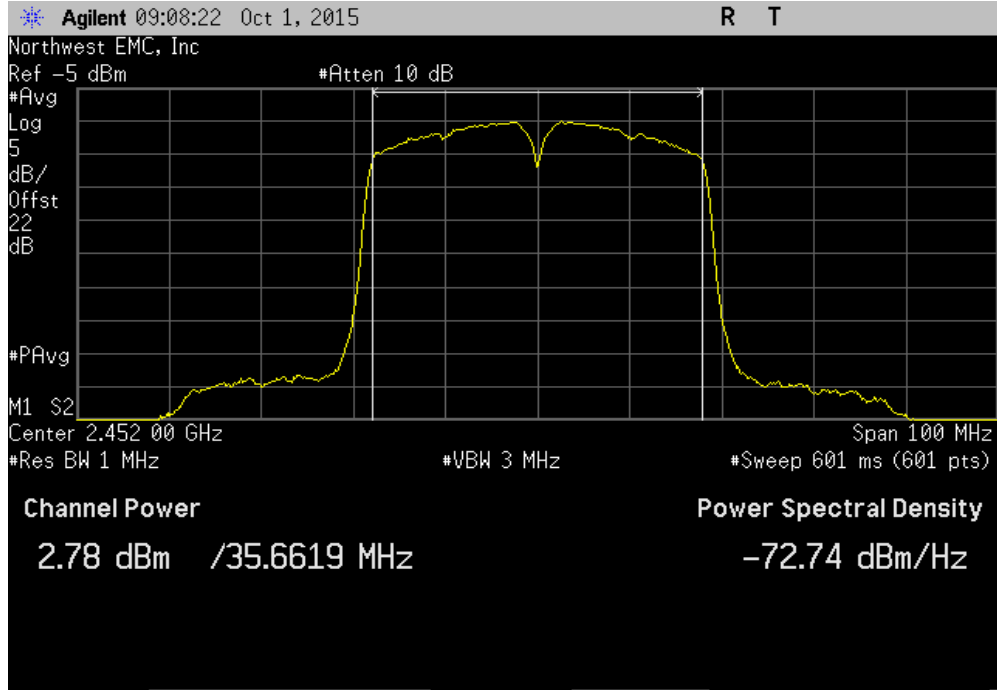


Ant 1, 40 MHz, 2.4 GHz Band, 802.11(n) MCS7, Low Channel 5, 2432 MHz						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)		Value (dBm)	Limit (dBm)	Results
	4.422	9		13.4	30	Pass

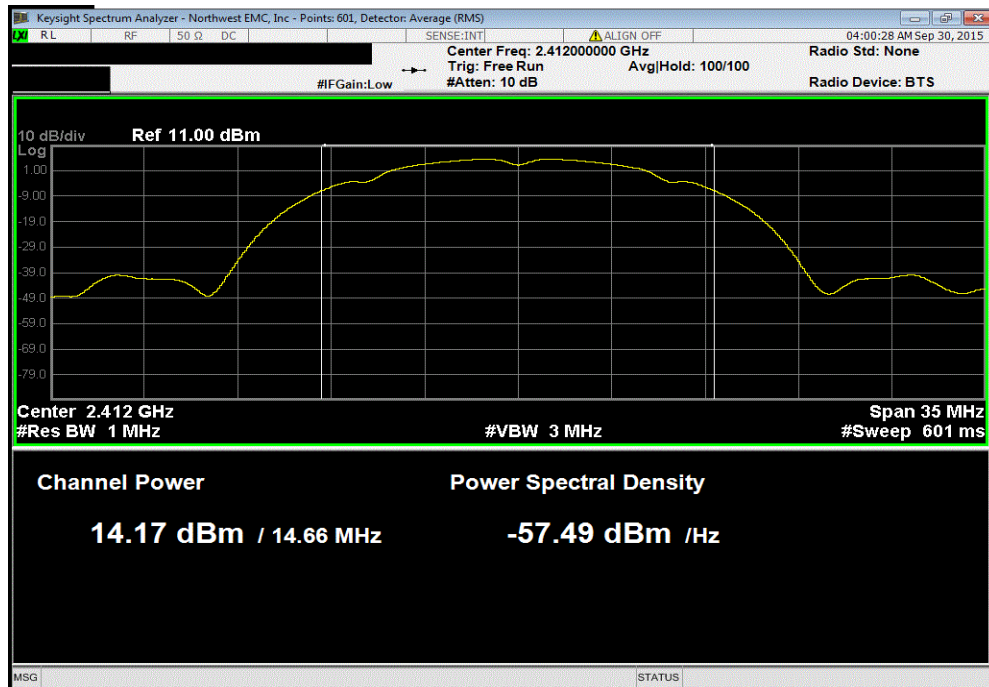


OUTPUT POWER

Ant 1, 40 MHz, 2.4 GHz Band, 802.11(n) MCS7, High Channel 9, 2452 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
2.784	8.9		11.7	30	Pass	

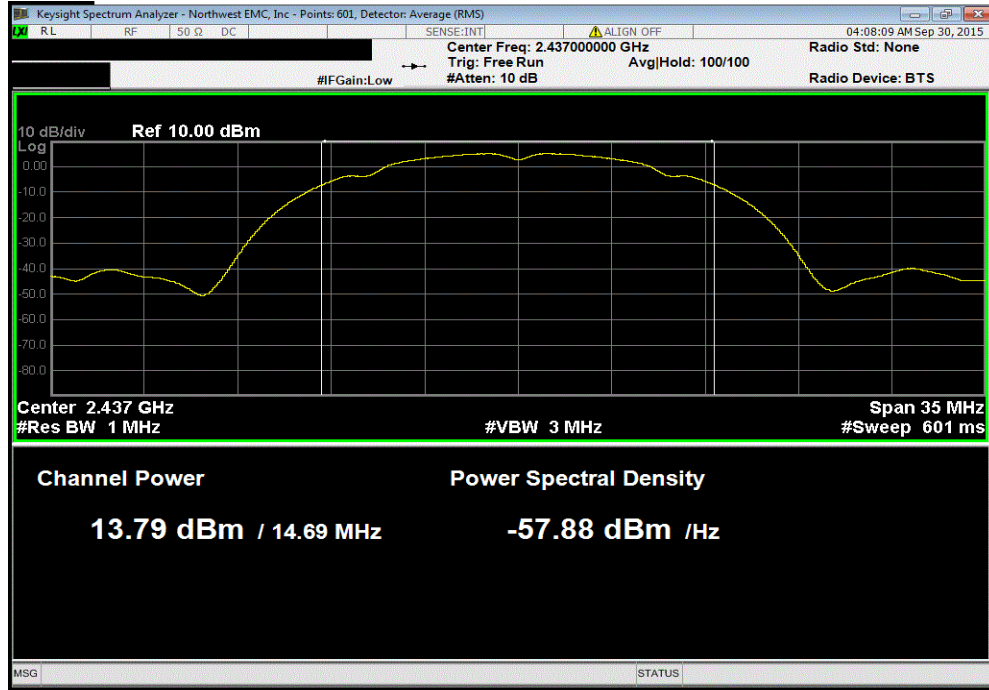


Ant 2, 20 MHz, 2.4 GHz Band, 802.11(b) 1Mbps, Low Channel 1, 2412 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
14.173	0.2		14.4	30	Pass	

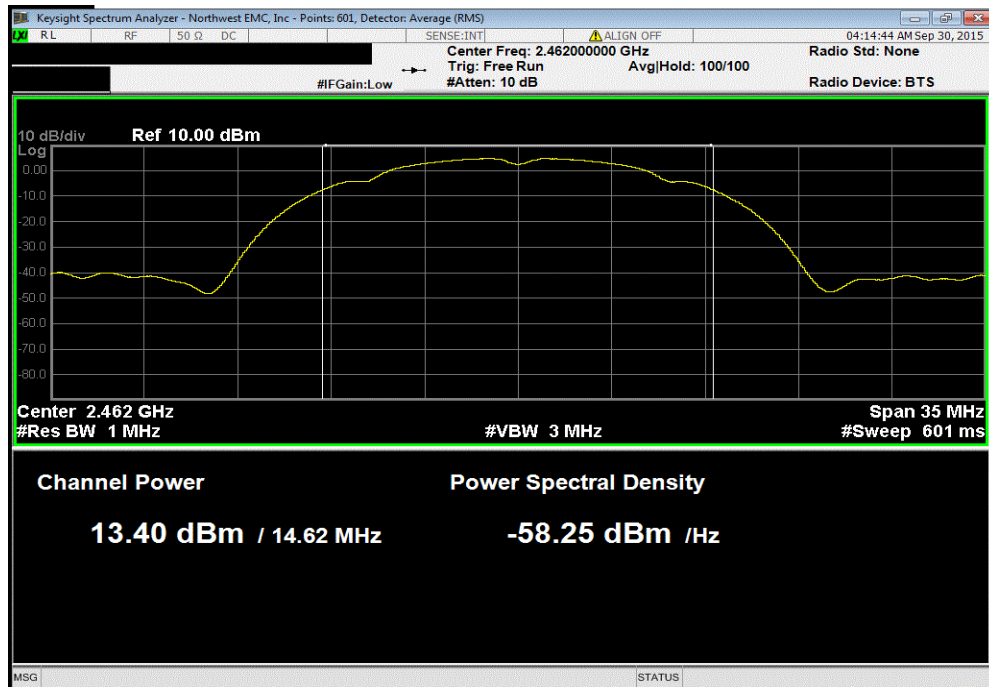


OUTPUT POWER

Ant 2, 20 MHz, 2.4 GHz Band, 802.11(b) 1Mbps, Mid Channel 6, 2437 MHz						
Avg Cond	Duty Cycle	Value	Limit	Results		
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)			
13.792	0.2	14	30	Pass		

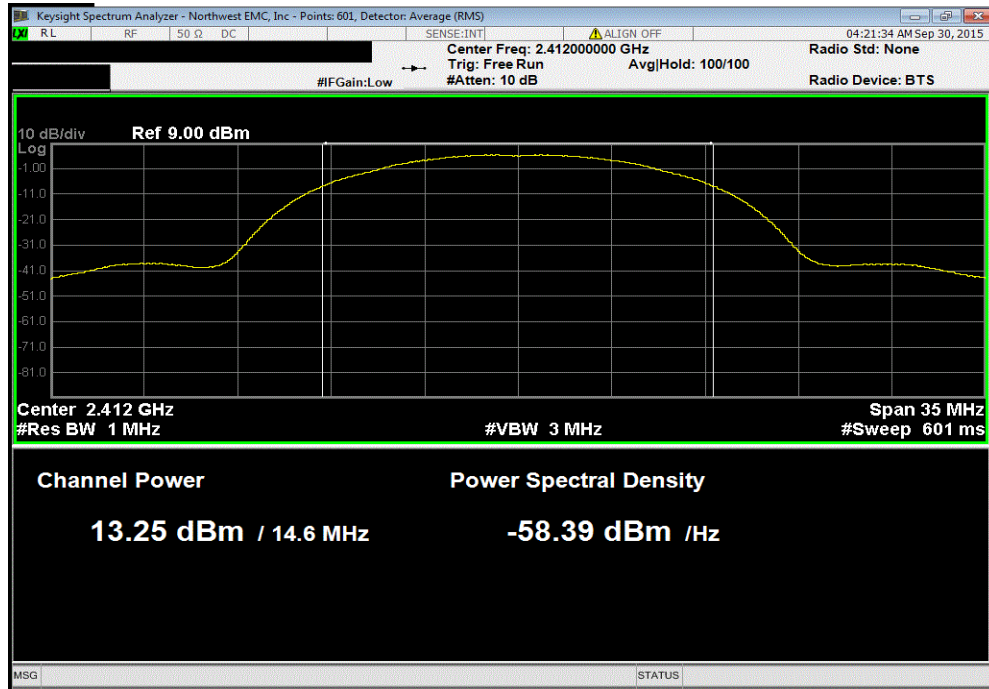


Ant 2, 20 MHz, 2.4 GHz Band, 802.11(b) 1Mbps, High Channel 11, 2462 MHz						
Avg Cond	Duty Cycle	Value	Limit	Results		
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)			
13.398	0.2	13.6	30	Pass		

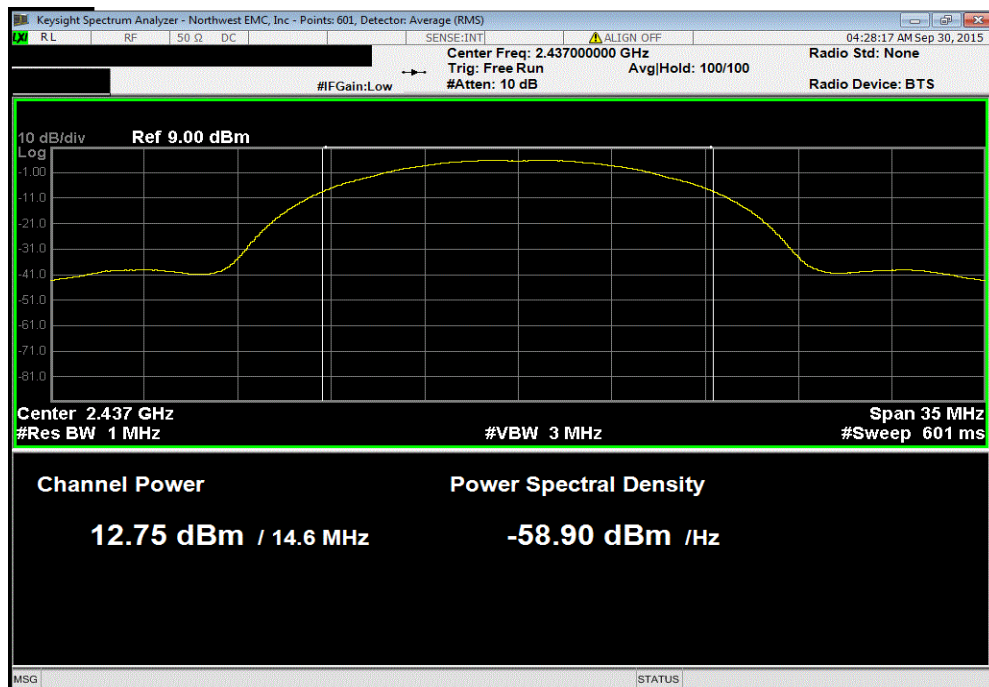


OUTPUT POWER

Ant 2, 20 MHz, 2.4 GHz Band, 802.11(b) 11Mbps, Low Channel 1, 2412 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
	13.248	1.5		14.7	30	Pass

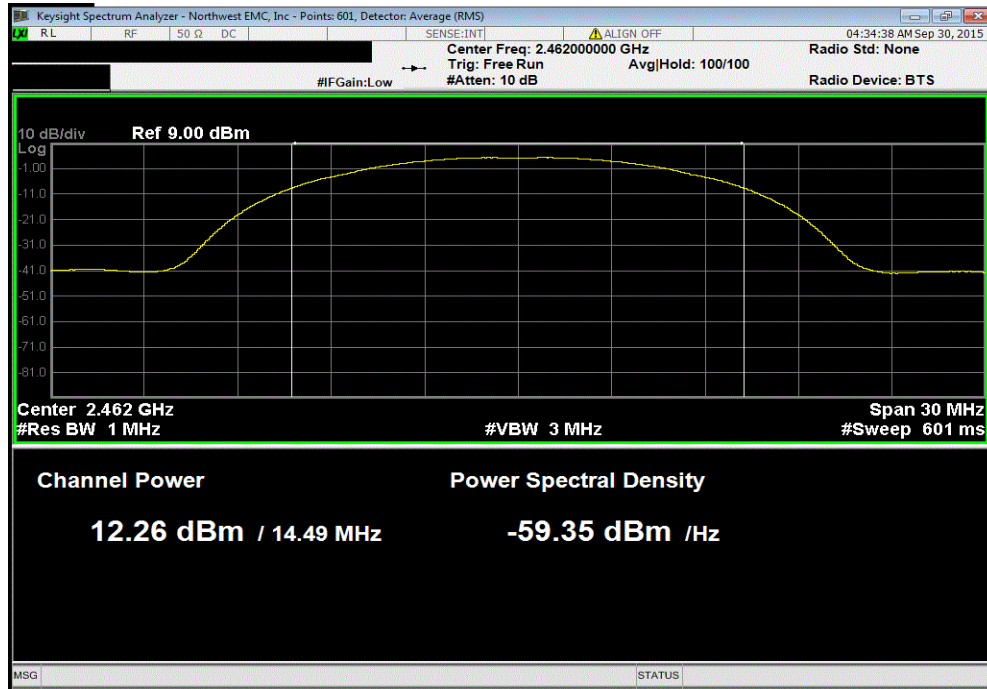


Ant 2, 20 MHz, 2.4 GHz Band, 802.11(b) 11Mbps, Mid Channel 6, 2437 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
	12.748	1.5		14.3	30	Pass

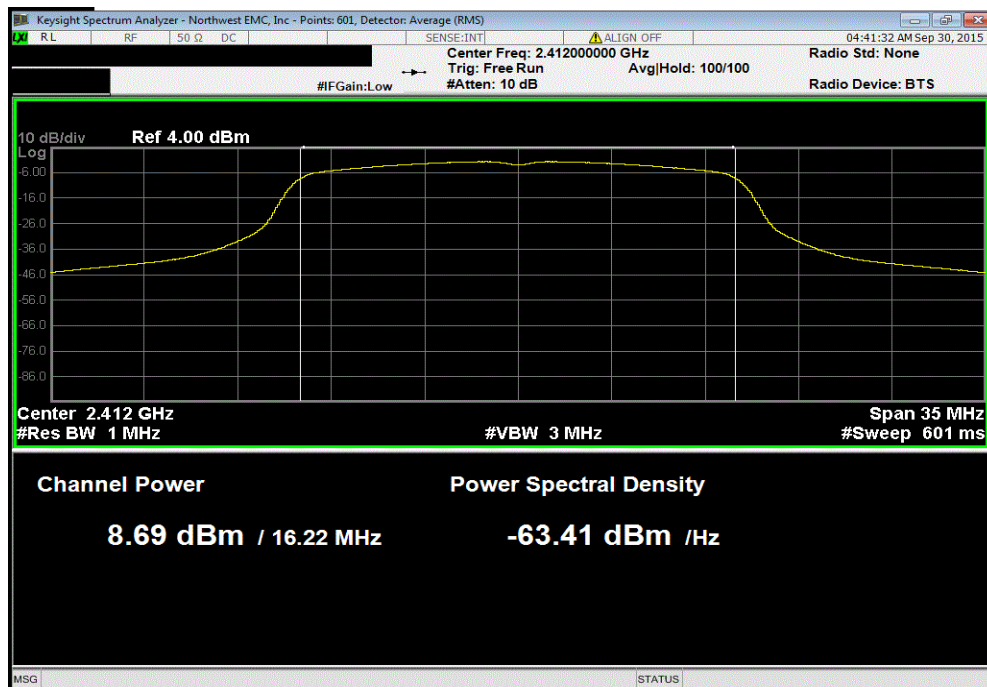


OUTPUT POWER

Ant 2, 20 MHz, 2.4 GHz Band, 802.11(b) 11Mbps, High Channel 11, 2462 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
	12.263	1.5		13.8	30	Pass

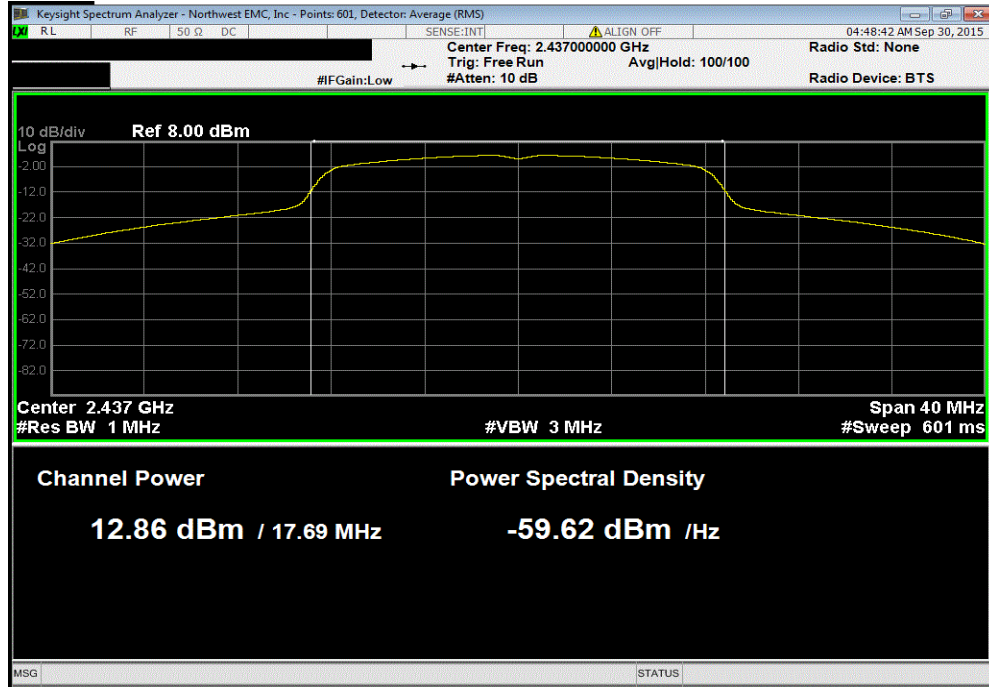


Ant 2, 20 MHz, 2.4 GHz Band, 802.11(g) 6Mbps, Low Channel 1, 2412 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
	8.692	1.1		9.8	30	Pass

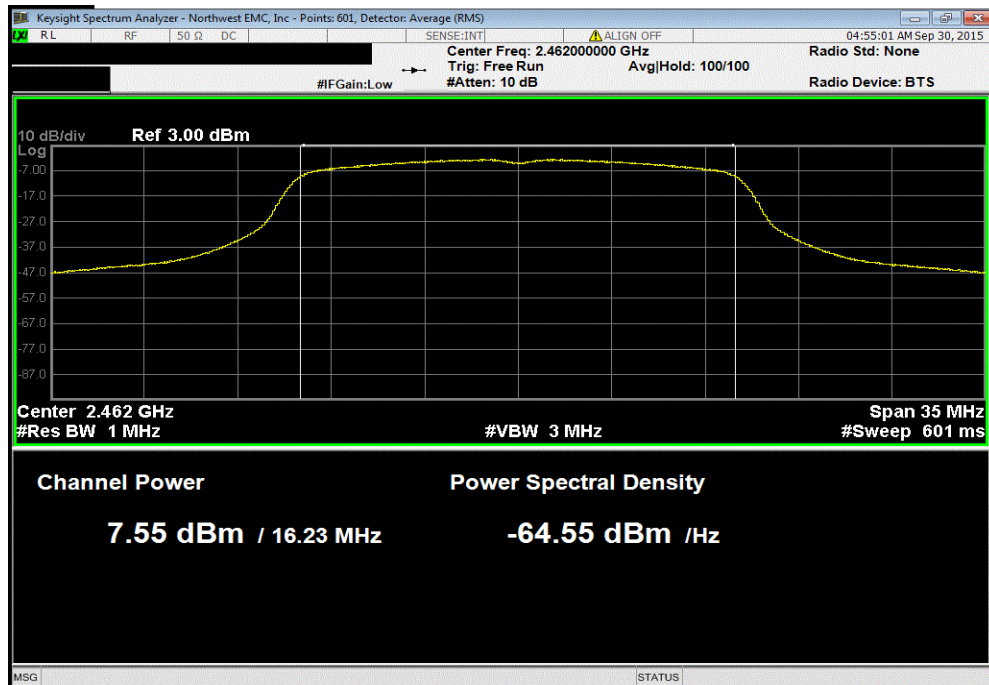


OUTPUT POWER

Ant 2, 20 MHz, 2.4 GHz Band, 802.11(g) 6Mbps, Mid Channel 6, 2437 MHz						
Avg Cond	Duty Cycle	Value	Limit	Results		
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)			
12.859	1.1	14	30	Pass		

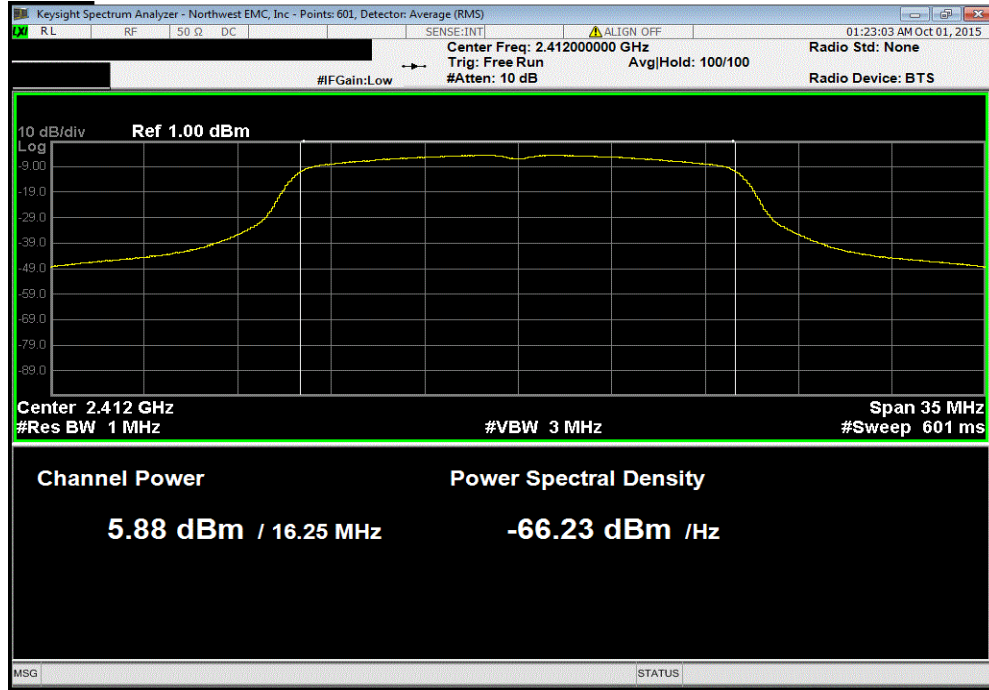


Ant 2, 20 MHz, 2.4 GHz Band, 802.11(g) 6Mbps, High Channel 11, 2462 MHz						
Avg Cond	Duty Cycle	Value	Limit	Results		
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)			
7.555	1.1	8.7	30	Pass		

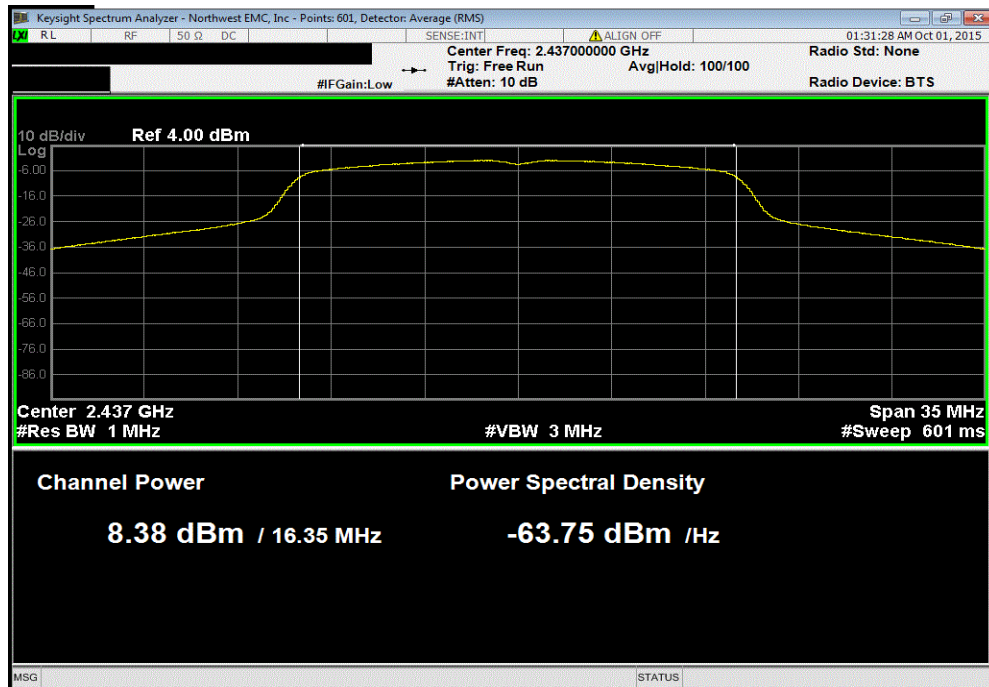


OUTPUT POWER

Ant 2, 20 MHz, 2.4 GHz Band, 802.11(g) 36Mbps, Low Channel 1, 2412 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
5.878	4.2		10.1	30	Pass	

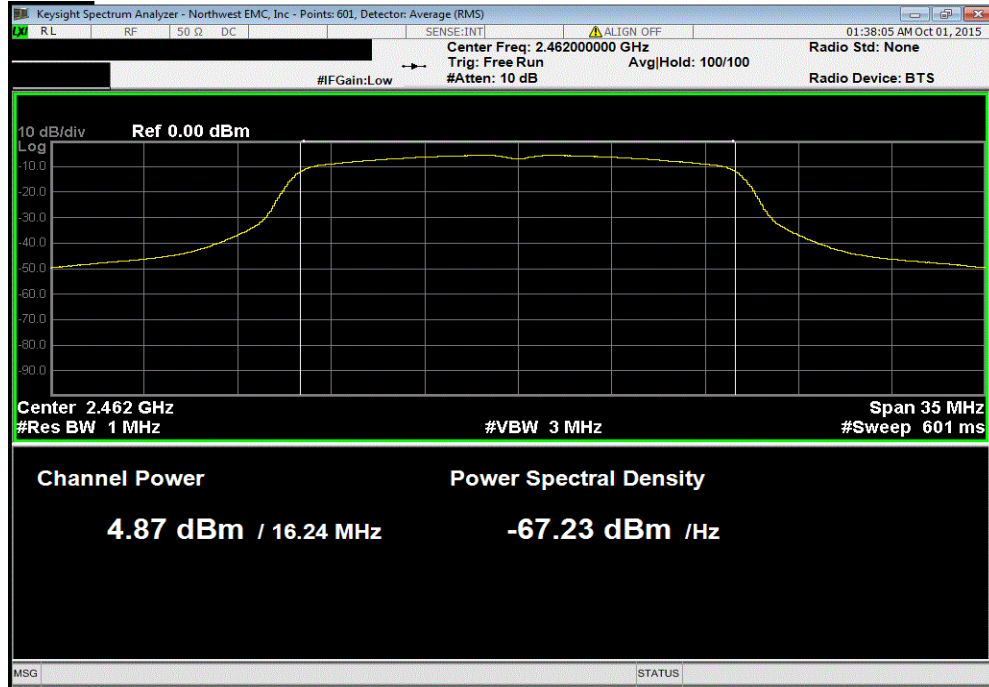


Ant 2, 20 MHz, 2.4 GHz Band, 802.11(g) 36Mbps, Mid Channel 6, 2437 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
8.382	4.2		12.6	30	Pass	

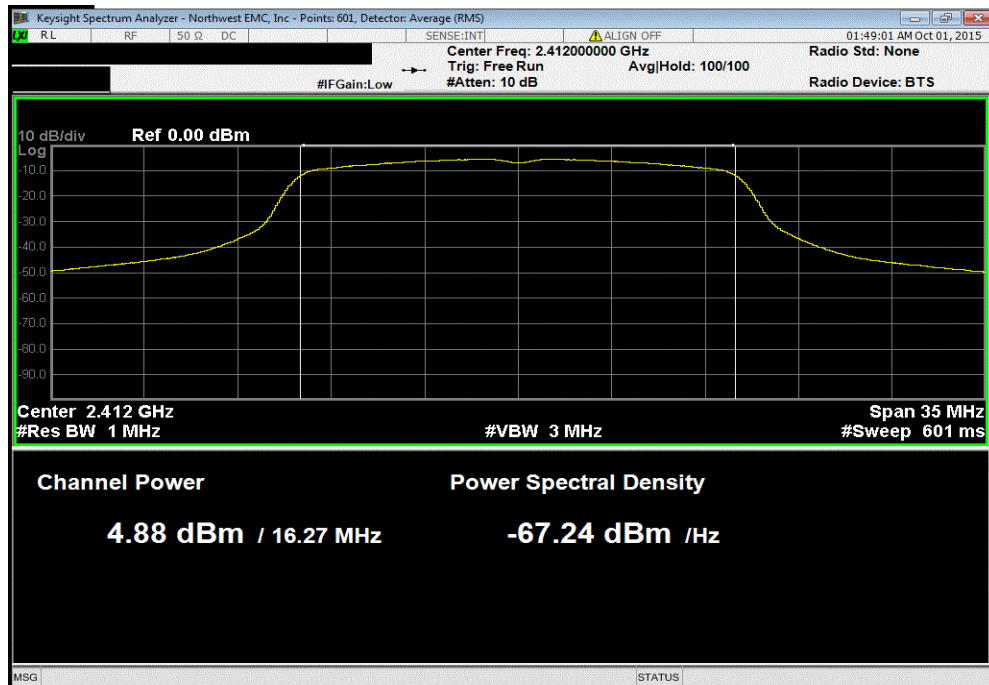


OUTPUT POWER

Ant 2, 20 MHz, 2.4 GHz Band, 802.11(g) 36Mbps, High Channel 11, 2462 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
	4.874	4.2	9.1	30	Pass	

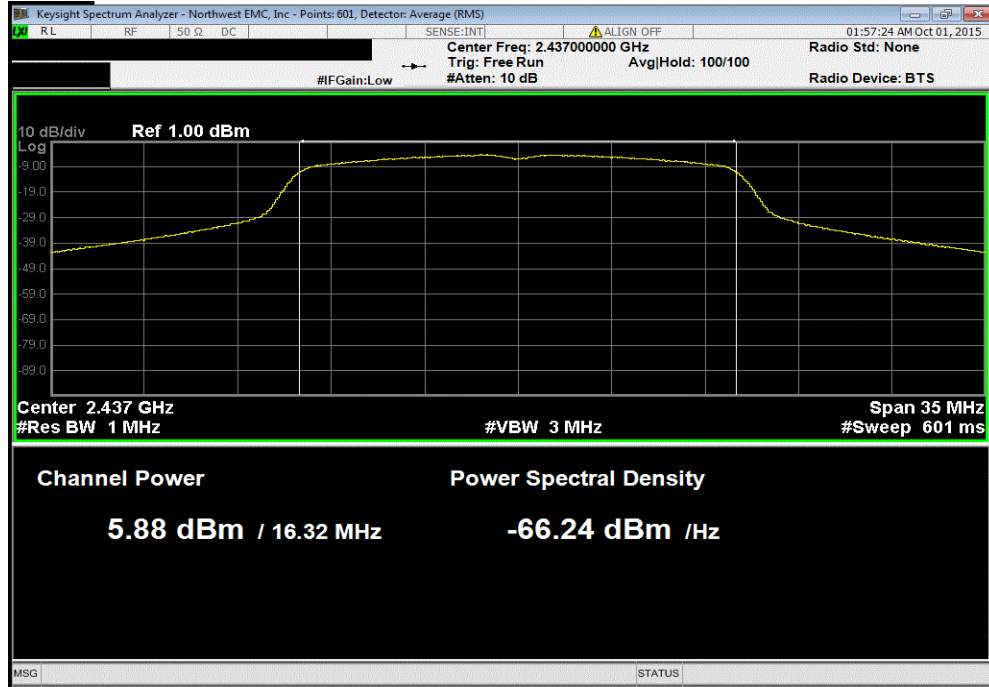


Ant 2, 20 MHz, 2.4 GHz Band, 802.11(g) 54Mbps, Low Channel 1, 2412 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
	4.876	5.3	10.2	30	Pass	

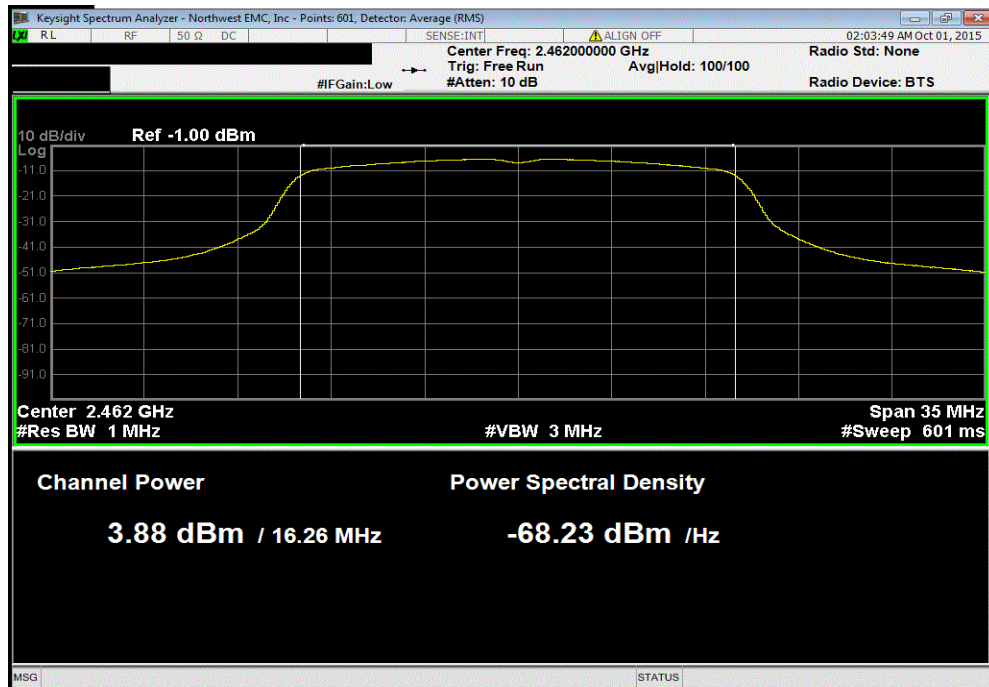


OUTPUT POWER

Ant 2, 20 MHz, 2.4 GHz Band, 802.11(g) 54Mbps, Mid Channel 6, 2437 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
5.884	5.3		11.2	30	Pass	

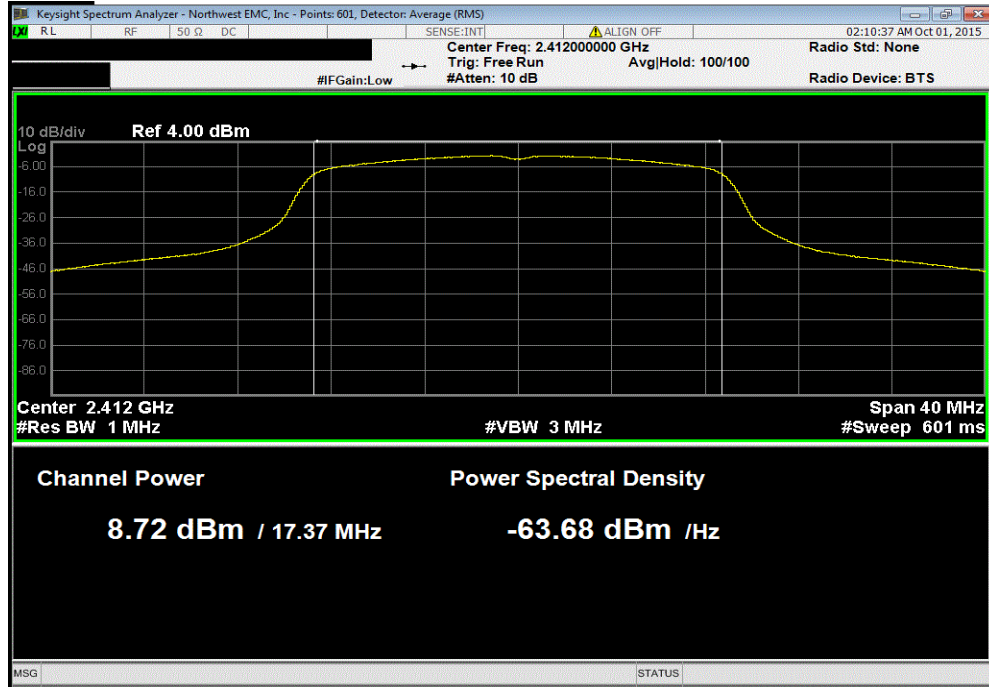


Ant 2, 20 MHz, 2.4 GHz Band, 802.11(g) 54Mbps, High Channel 11, 2462 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
3.883	5.2		9.1	30	Pass	

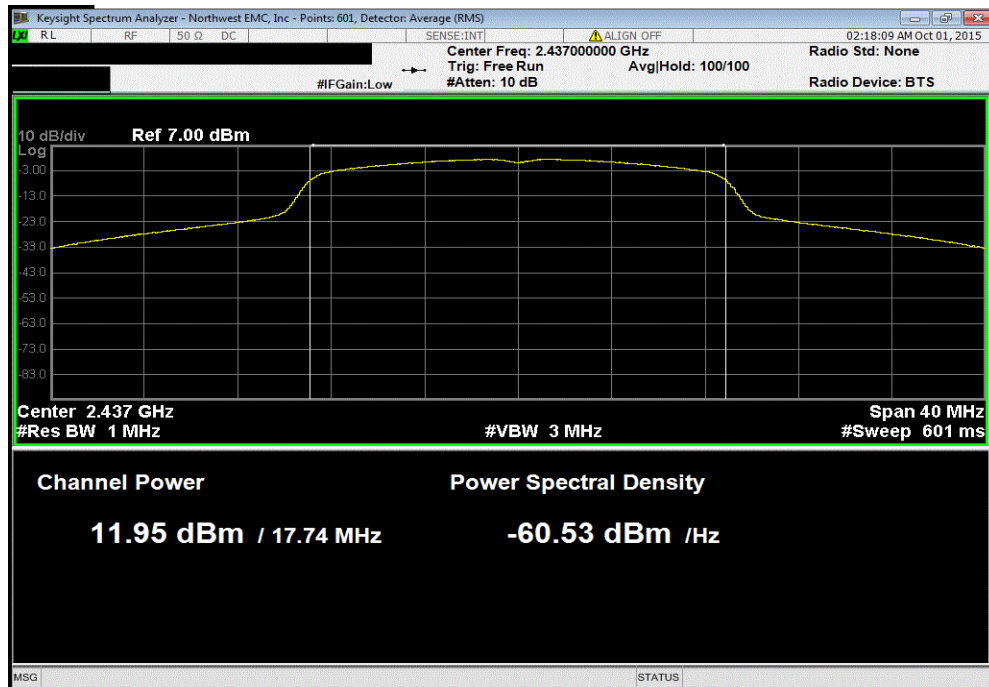


OUTPUT POWER

Ant 2, 20 MHz, 2.4 GHz Band, 802.11(n) MCS0, Low Channel 1, 2412 MHz						
Avg Cond	Duty Cycle	Value	Limit	Results		
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)			
8.718	1.3	10	30	Pass		

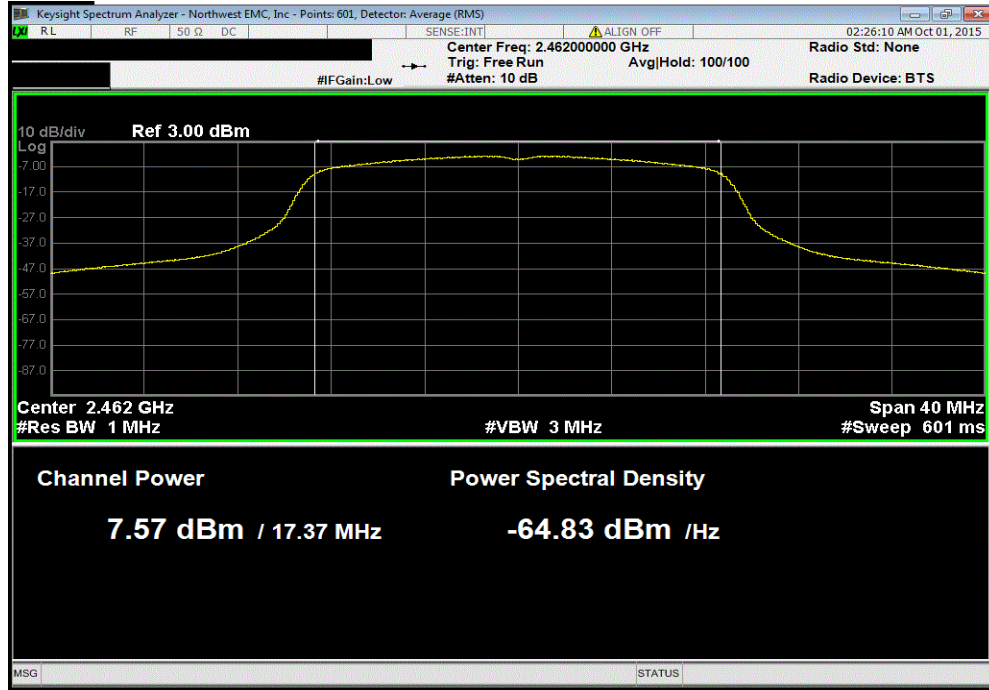


Ant 2, 20 MHz, 2.4 GHz Band, 802.11(n) MCS0, Mid Channel 6, 2437 MHz						
Avg Cond	Duty Cycle	Value	Limit	Results		
Pwr (dBm)	Factor (dB)	(dBm)	(dBm)			
11.955	1.3	13.3	30	Pass		

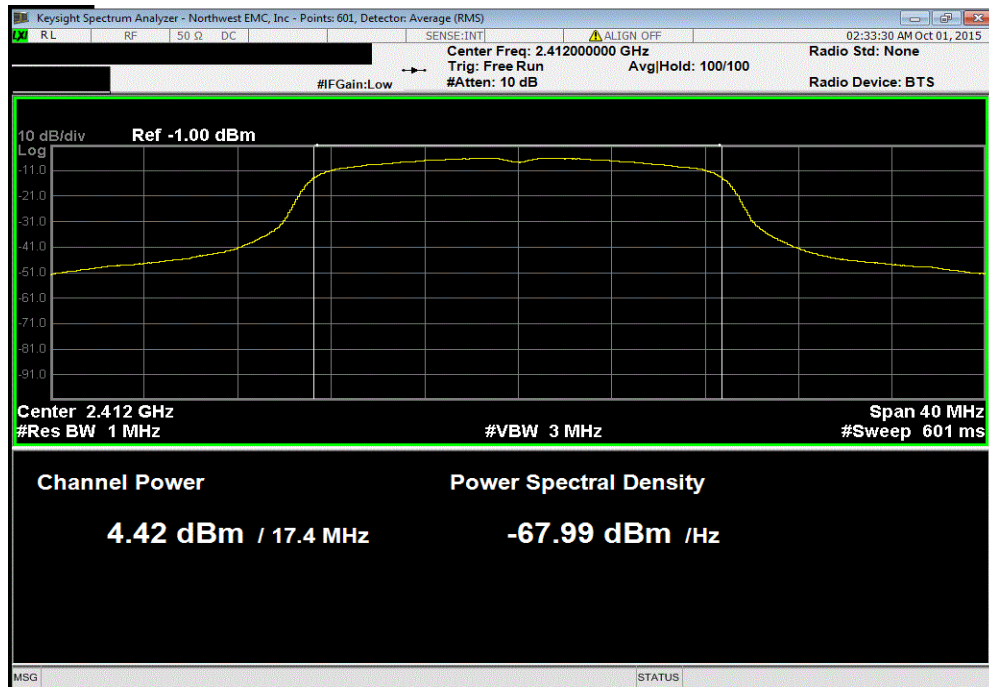


OUTPUT POWER

Ant 2, 20 MHz, 2.4 GHz Band, 802.11(n) MCS0, High Channel 11, 2462 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
7.569	1.3		8.8	30	Pass	

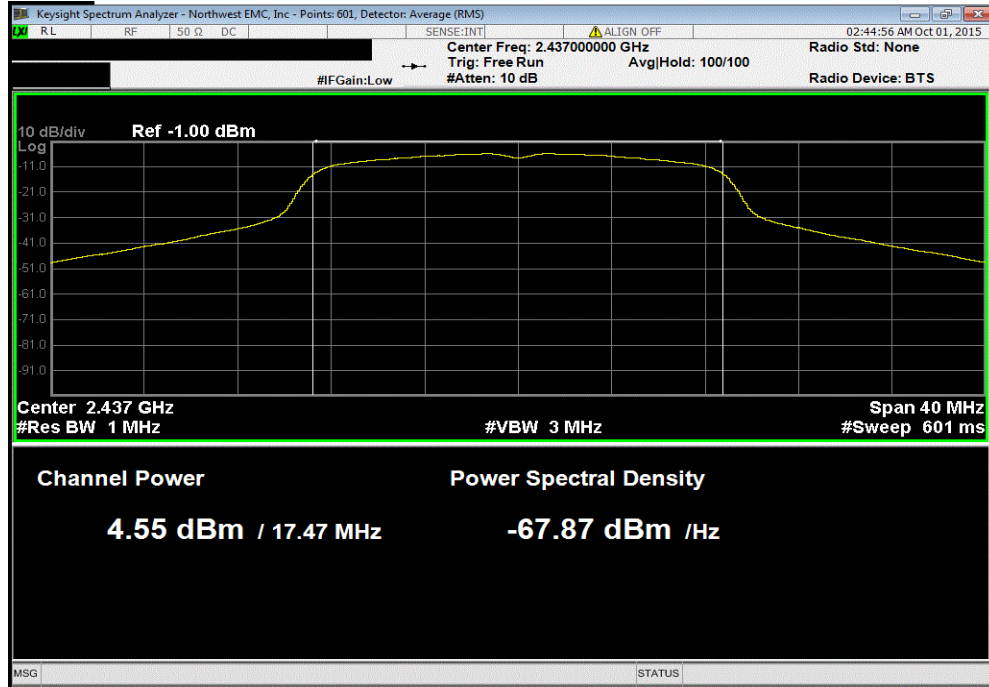


Ant 2, 20 MHz, 2.4 GHz Band, 802.11(n) MCS7, Low Channel 1, 2412 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
4.421	5.7		10.1	30	Pass	

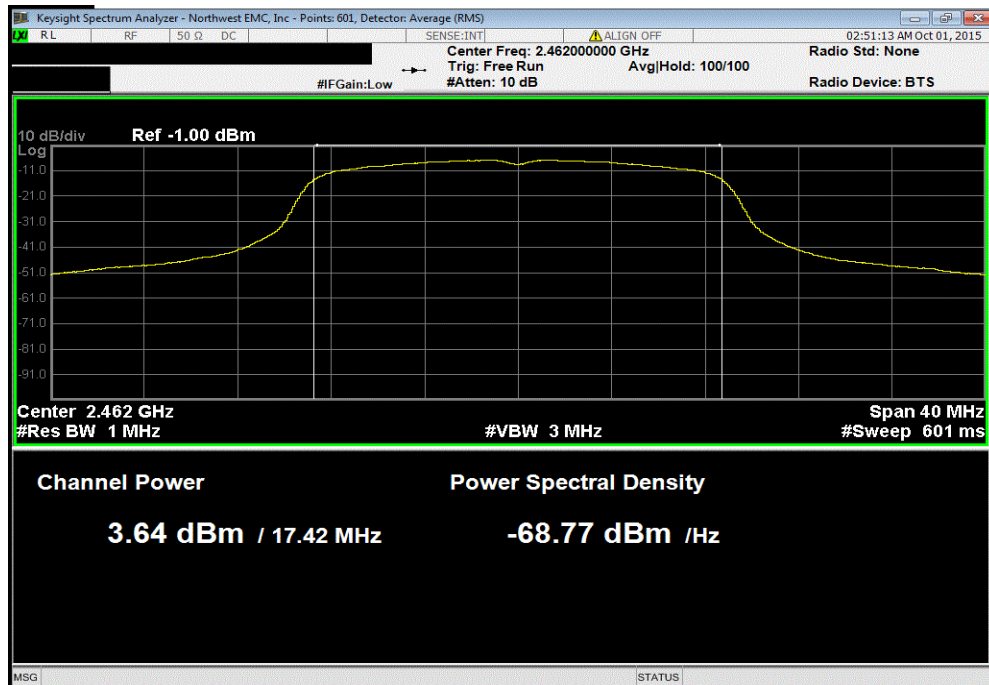


OUTPUT POWER

Ant 2, 20 MHz, 2.4 GHz Band, 802.11(n) MCS7, Mid Channel 6, 2437 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
	4.552	5.7	10.3	30	Pass	

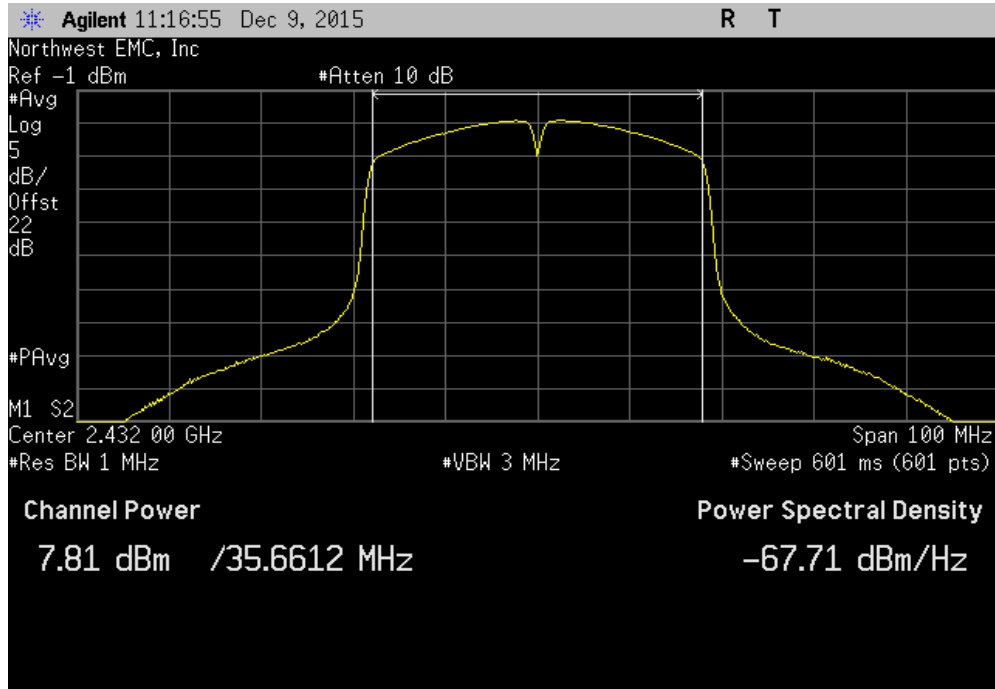


Ant 2, 20 MHz, 2.4 GHz Band, 802.11(n) MCS7, High Channel 11, 2462 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
	3.639	5.8	9.4	30	Pass	

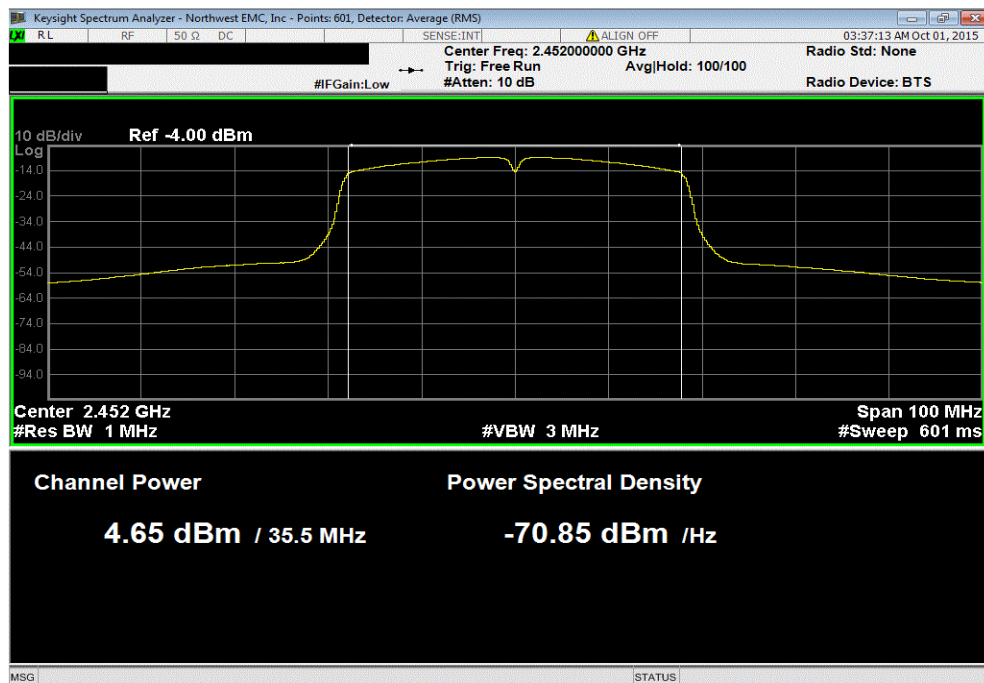


OUTPUT POWER

Ant 2, 40 MHz, 2.4 GHz Band, 802.11(n) MCS0, Low Channel 5, 2432 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
7.812	2.5		10.3	30	Pass	

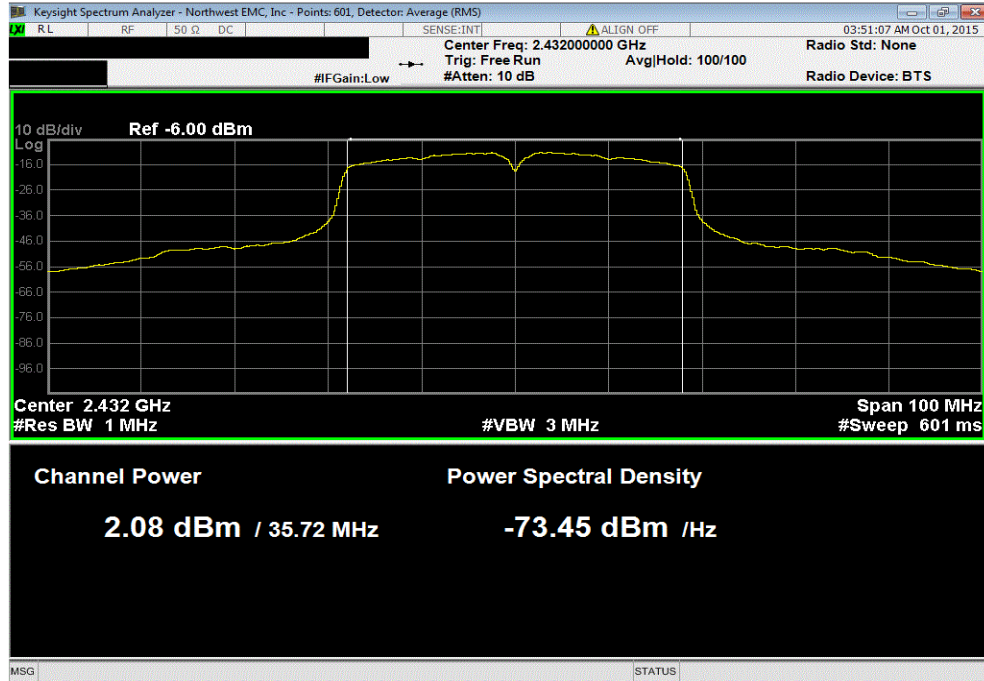


Ant 2, 40 MHz, 2.4 GHz Band, 802.11(n) MCS0, High Channel 9, 2452 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
4.647	2.5		7.1	30	Pass	

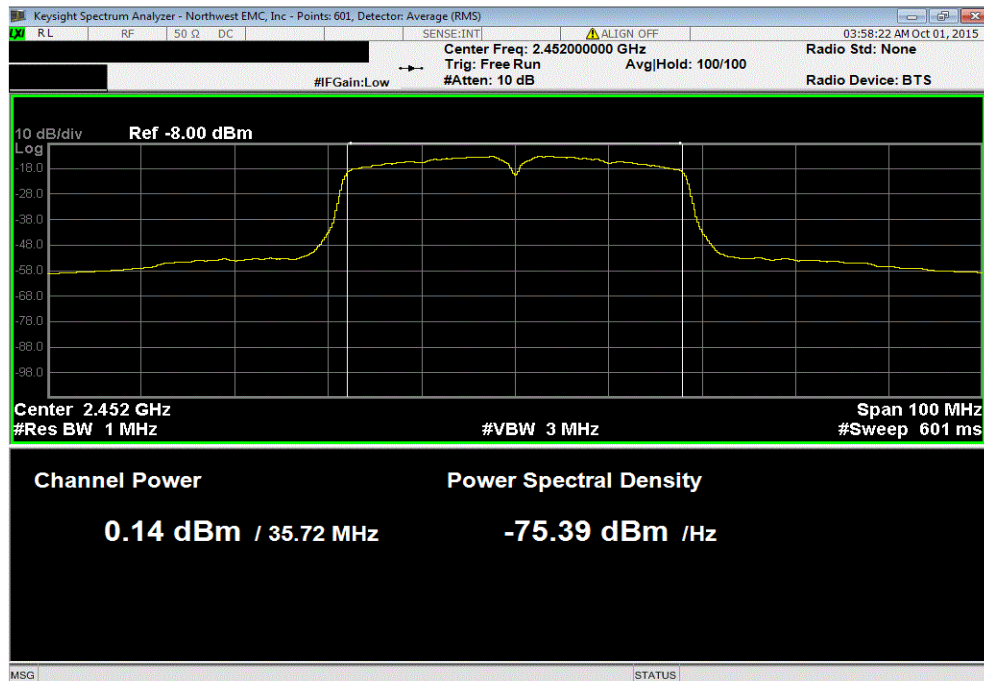


OUTPUT POWER

Ant 2, 40 MHz, 2.4 GHz Band, 802.11(n) MCS7, Low Channel 5, 2432 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
	2.077	8.9	11	30	Pass	



Ant 2, 40 MHz, 2.4 GHz Band, 802.11(n) MCS7, High Channel 9, 2452 MHz						
Avg Cond	Duty Cycle		Value	Limit	Results	
Pwr (dBm)	Factor (dB)		(dBm)	(dBm)		
	0.141	8.9	9	30	Pass	



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 (mo)
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFO	6/23/2015	12
Analyzer - Spectrum Analyzer	Agilent	E4440A	AFE	6/22/2015	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.

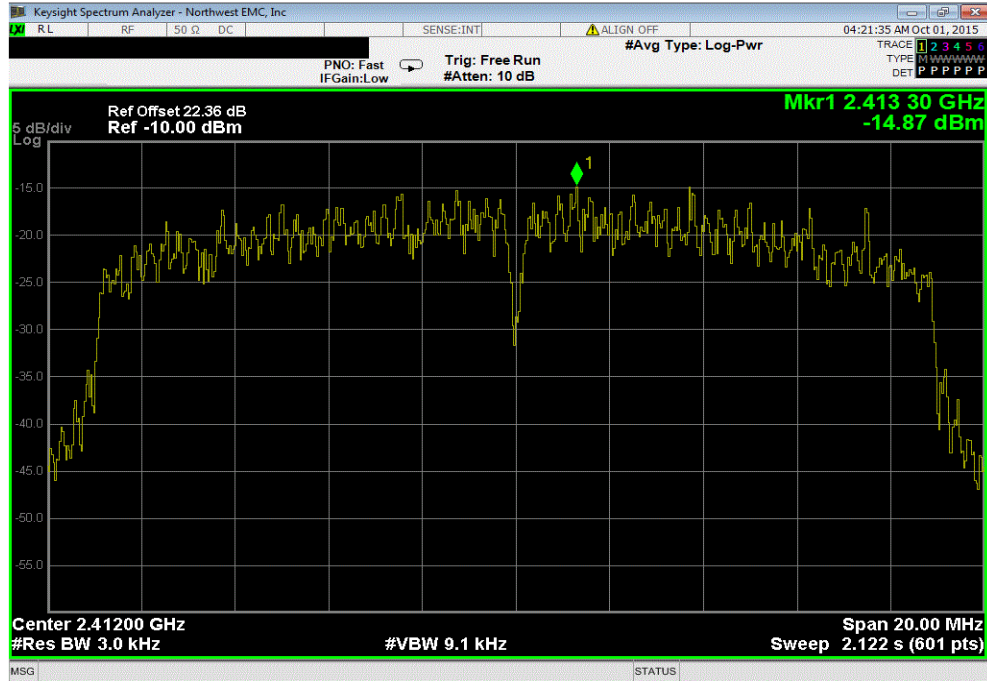
Per the procedure outlined in ANSI C63.10 the peak power spectral density was measured in a 3 kHz RBW.

POWER SPECTRAL DENSITY

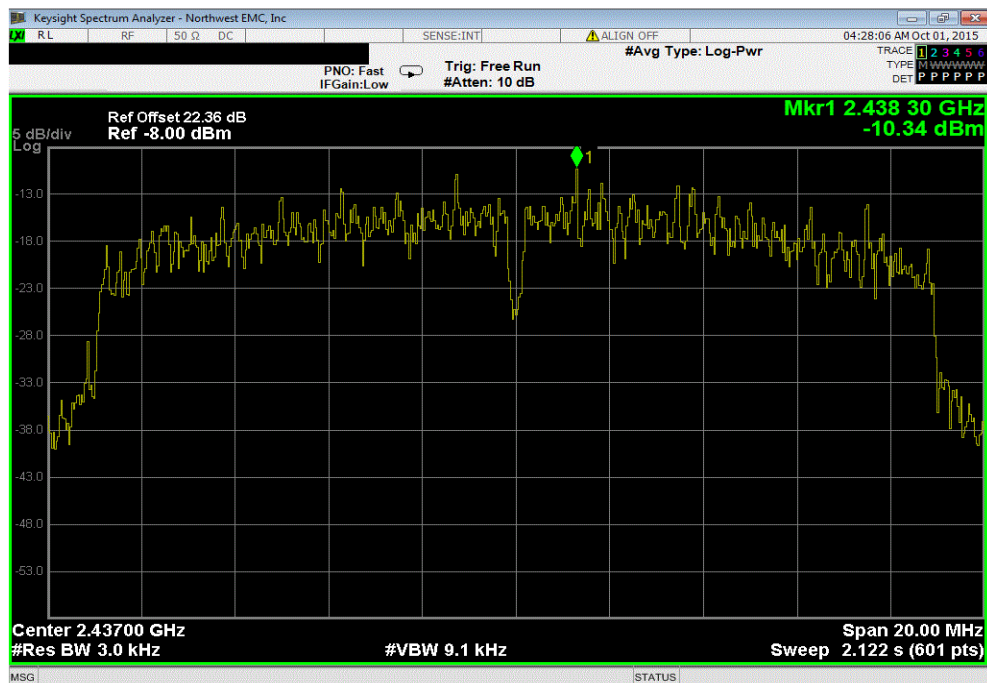
EUT: Precor Wi-Fi / Bluetooth Module Model 303346		Work Order: PRCR0230	
Serial Number: None		Date: 10/01/15	
Customer: Precor, Inc.		Temperature: 23°C	
Attendees: Rich Whitbeck		Humidity: 44%	
Project: None		Barometric Pres.: 1017mb	
Tested by: Richard Mellroth		Power: 110VAC/60Hz	
		Job Site: NC01 / NC02	
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 	
		Value dBm/3kHz	Summing Factor (dB)
		Summed Value dBm/3kHz	Limit < dBm/3kHz
			Results
Ant 1 (2x2 MIMO)			
20 MHz			
2.4 GHz Band			
802.11(n) MCS12			
	Low Channel 1, 2412 MHz	-14.874	3
	Mid Channel 6, 2437 MHz	-10.341	3
	High Channel 11, 2462 MHz	-15.005	3
	802.11(n) MCS15		
	Low Channel 1, 2412 MHz	-16.323	3
	Mid Channel 6, 2437 MHz	-17.781	3
	High Channel 11, 2462 MHz	-16.382	3
Ant 2 (2x2 MIMO)			
20 MHz			
2.4 GHz Band			
802.11(n) MCS12			
	Low Channel 1, 2412 MHz	-16.28	3
	Mid Channel 6, 2437 MHz	-13.871	3
	High Channel 11, 2462 MHz	-16.773	3
	802.11(n) MCS15		
	Low Channel 1, 2412 MHz	-20.248	3
	Mid Channel 6, 2437 MHz	-20.028	3
	High Channel 11, 2462 MHz	-20.686	3

POWER SPECTRAL DENSITY

Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, Low Channel 1, 2412 MHz						
Value	Summing Factor	Summed Value	Limit			
dBm/3kHz	(dB)	dBm/3kHz	< dBm/3kHz	Results		
-14.874	3	-11.874	8	Pass		

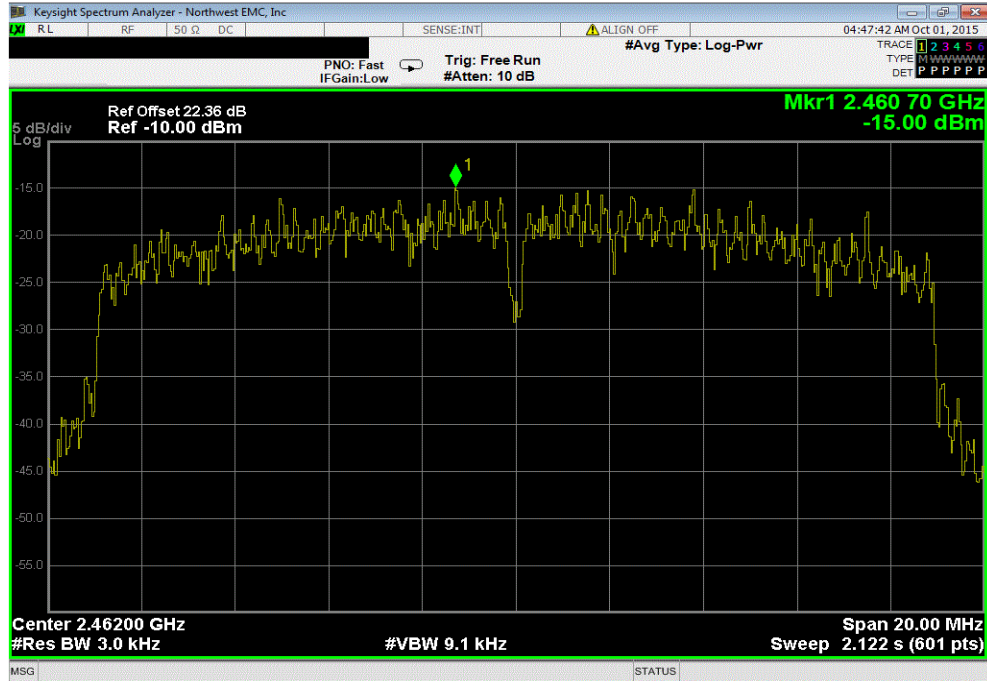


Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, Mid Channel 6, 2437 MHz						
Value	Summing Factor	Summed Value	Limit			
dBm/3kHz	(dB)	dBm/3kHz	< dBm/3kHz	Results		
-10.341	3	-7.341	8	Pass		

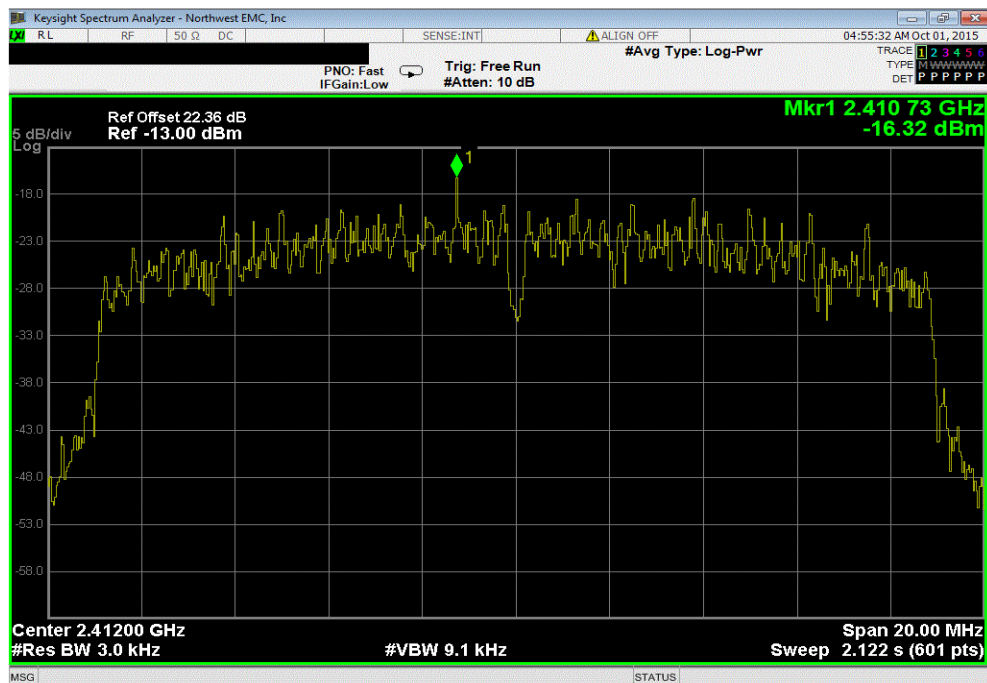


POWER SPECTRAL DENSITY

Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, High Channel 11, 2462 MHz						
	Value	Summing Factor	Summed Value	Limit	Results	
	dBm/3kHz	(dB)	dBm/3kHz	< dBm/3kHz		
	-15.005	3	-12.005	8	Pass	

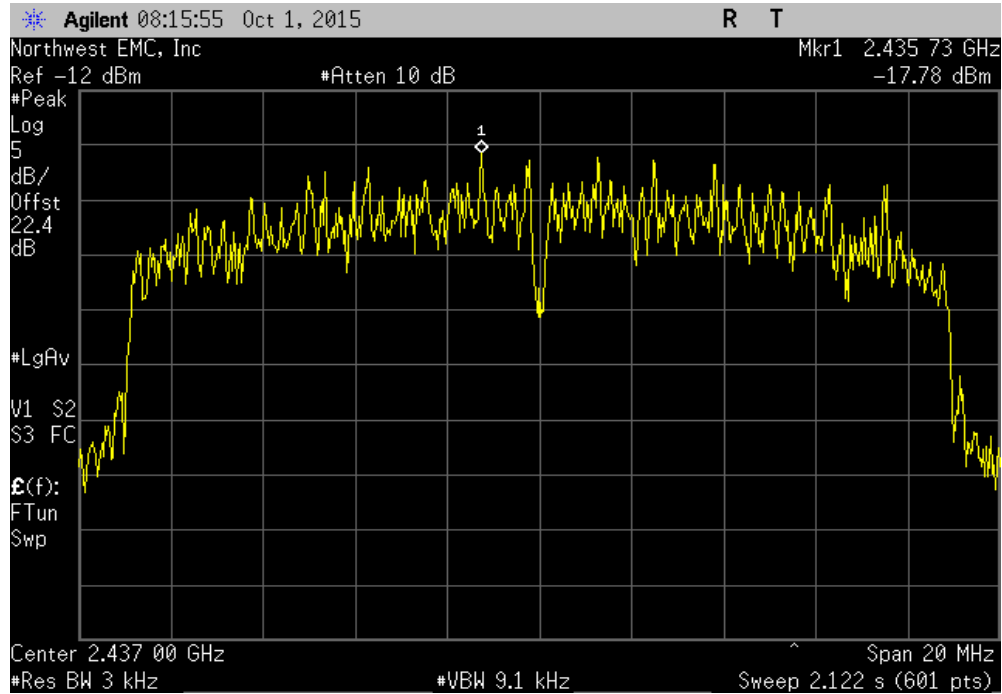


Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, Low Channel 1, 2412 MHz						
	Value	Summing Factor	Summed Value	Limit	Results	
	dBm/3kHz	(dB)	dBm/3kHz	< dBm/3kHz		
	-16.323	3	-13.323	8	Pass	

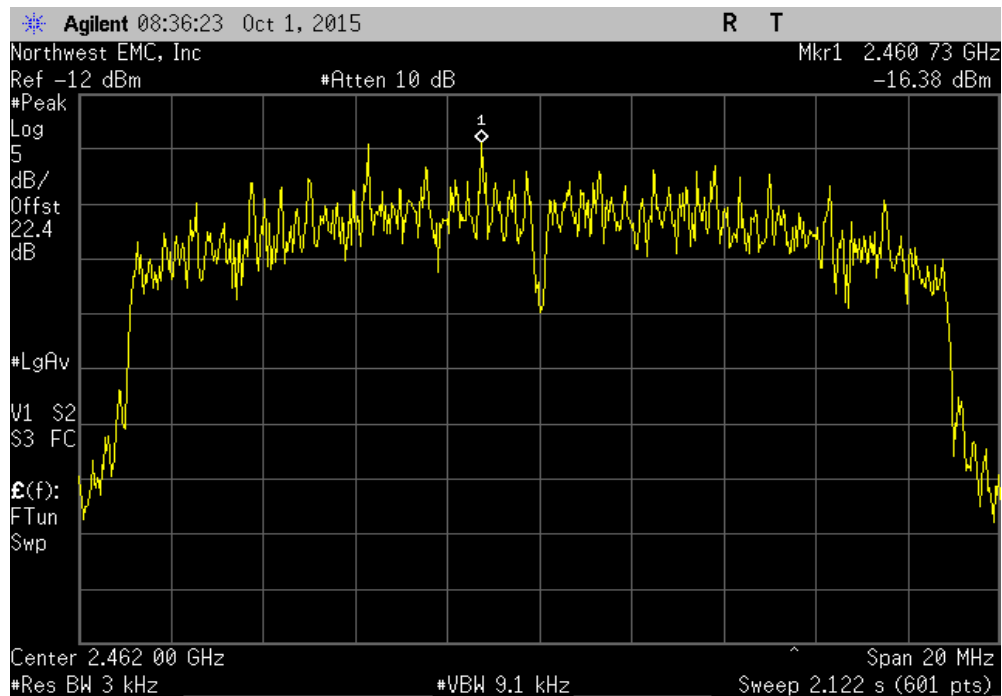


POWER SPECTRAL DENSITY

Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, Mid Channel 6, 2437 MHz						
	Value	Summing Factor	Summed Value	Limit	Results	
	dBm/3kHz	(dB)	dBm/3kHz	< dBm/3kHz		
	-17.781	3	-14.781	8	Pass	

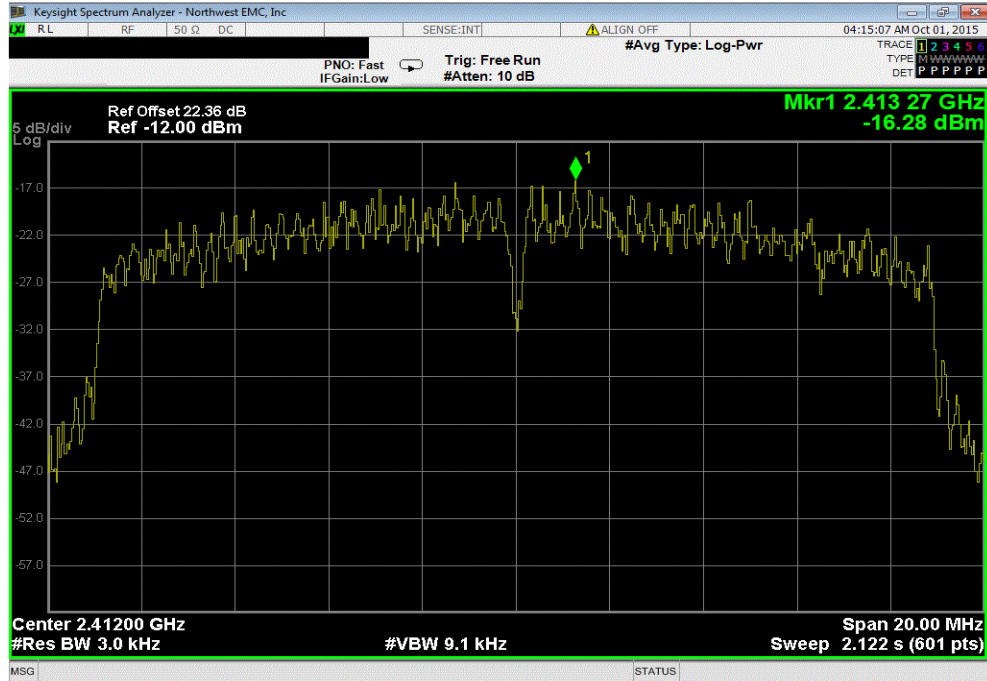


Ant 1 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, High Channel 11, 2462 MHz						
	Value	Summing Factor	Summed Value	Limit	Results	
	dBm/3kHz	(dB)	dBm/3kHz	< dBm/3kHz		
	-16.382	3	-13.382	8	Pass	

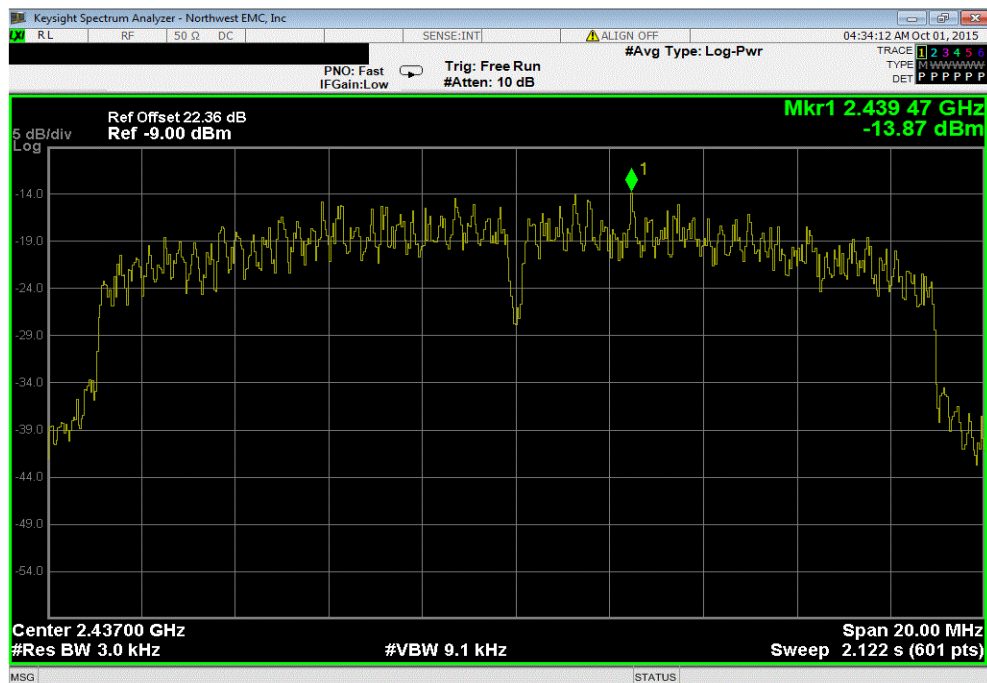


POWER SPECTRAL DENSITY

Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, Low Channel 1, 2412 MHz						
	Value	Summing Factor	Summed Value	Limit	Results	
	dBm/3kHz	(dB)	dBm/3kHz	< dBm/3kHz		
	-16.28	3	-13.28	8	Pass	

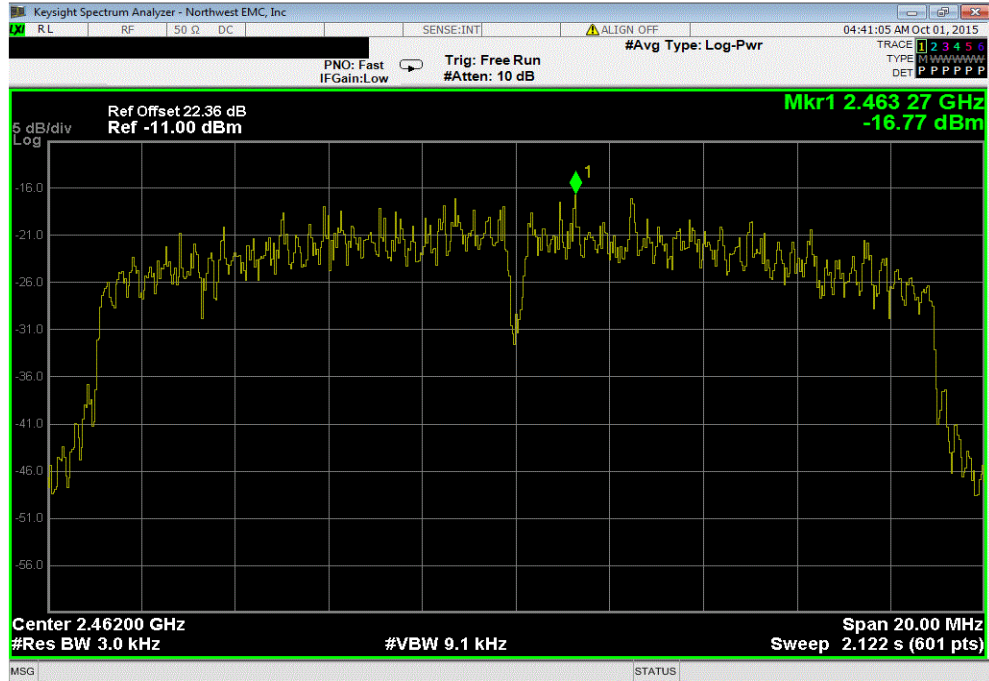


Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, Mid Channel 6, 2437 MHz						
	Value	Summing Factor	Summed Value	Limit	Results	
	dBm/3kHz	(dB)	dBm/3kHz	< dBm/3kHz		
	-13.871	3	-10.871	8	Pass	

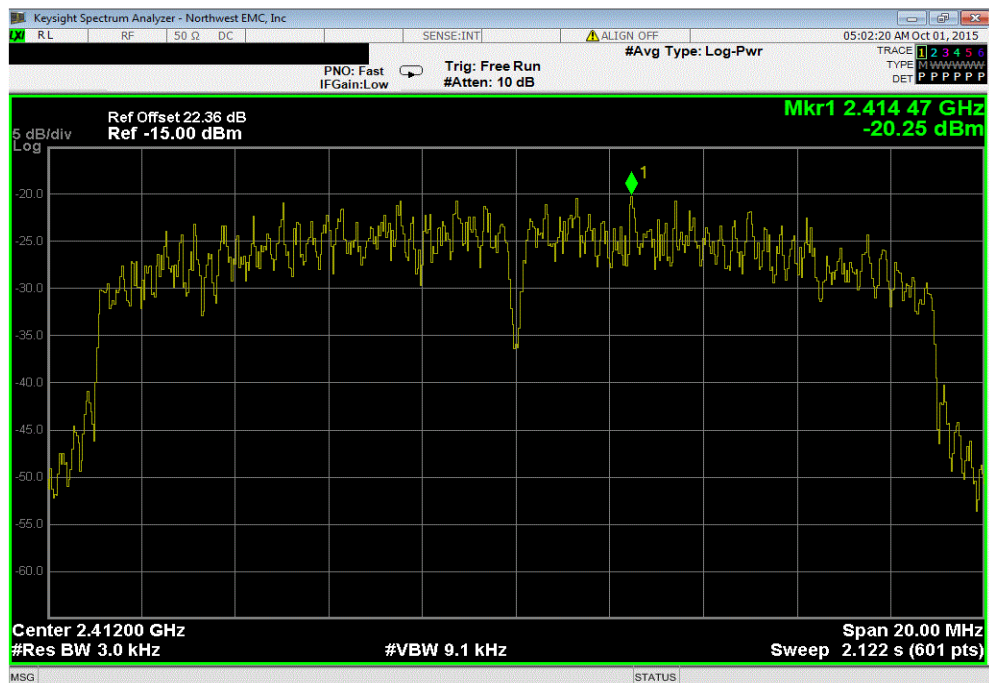


POWER SPECTRAL DENSITY

Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS12, High Channel 11, 2462 MHz						
	Value	Summing Factor	Summed Value	Limit	Results	
	dBm/3kHz	(dB)	dBm/3kHz	< dBm/3kHz		
	-16.773	3	-13.773	8	Pass	

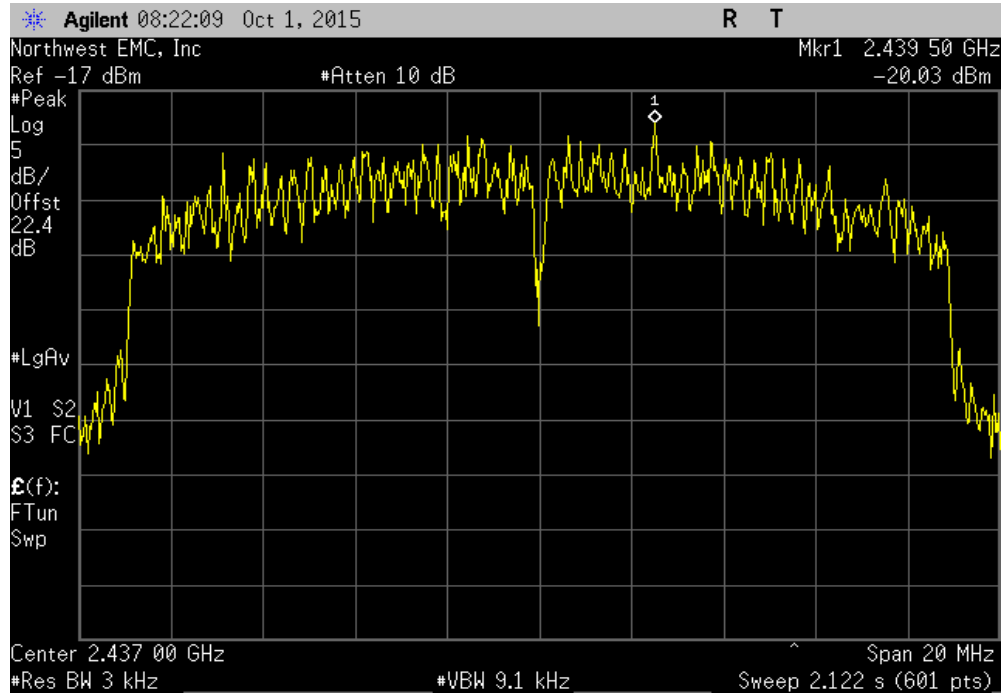


Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, Low Channel 1, 2412 MHz						
	Value	Summing Factor	Summed Value	Limit	Results	
	dBm/3kHz	(dB)	dBm/3kHz	< dBm/3kHz		
	-20.248	3	-17.248	8	Pass	



POWER SPECTRAL DENSITY

Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, Mid Channel 6, 2437 MHz						
	Value	Summing Factor	Summed Value	Limit	Results	
	dBm/3kHz	(dB)	dBm/3kHz	< dBm/3kHz		
	-20.028	3	-17.028	8	Pass	



Ant 2 (2x2 MIMO), 20 MHz, 2.4 GHz Band, 802.11(n) MCS15, High Channel 11, 2462 MHz						
	Value	Summing Factor	Summed Value	Limit	Results	
	dBm/3kHz	(dB)	dBm/3kHz	< dBm/3kHz		
	-20.686	3	-17.686	8	Pass	

