

9. CONDUCTED SPURIOUS EMISSION

9.1. MEASUREMENT PROCEDURE

1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2. Set the EUT Work on Low channel, Medium channel and High channel respectively.
3. Set SPA Trace 1 Max hold, then View.

Note: The Spurious RF conducted emissions compliance of RF radiated emission should be measured by following the guidance in ANSI C63.10-2013 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization etc. Set RBW=100kHz and VBW= 300KHz to measure the peak field strength , and measure frequency range from 30MHz to 25GHz.

9.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

The same as described in section 8.2.

9.3. MEASUREMENT EQUIPMENT USED

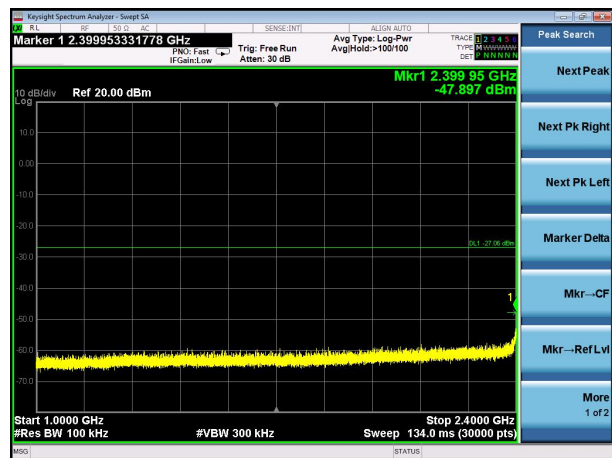
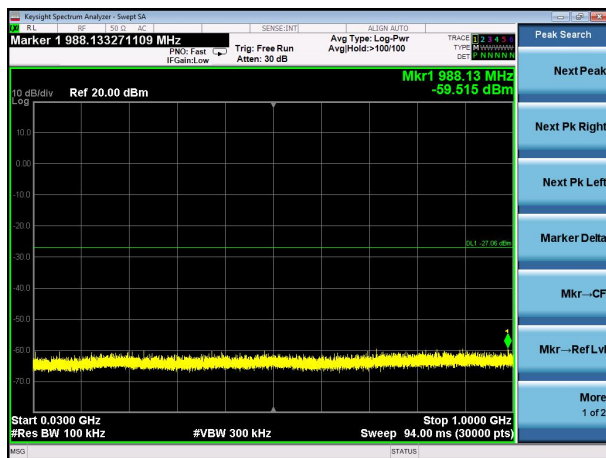
The same as described in section 6.

9.4. LIMITS AND MEASUREMENT RESULT

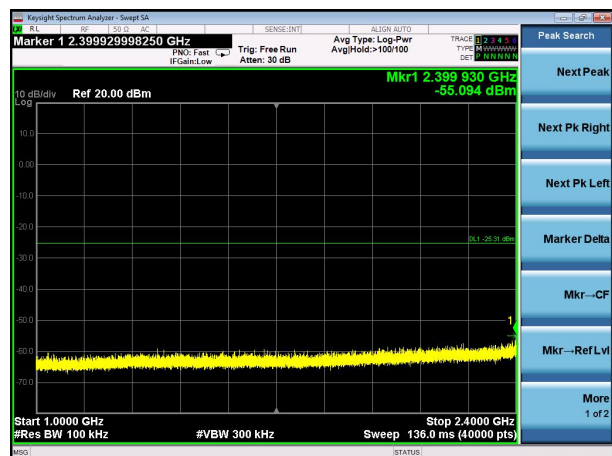
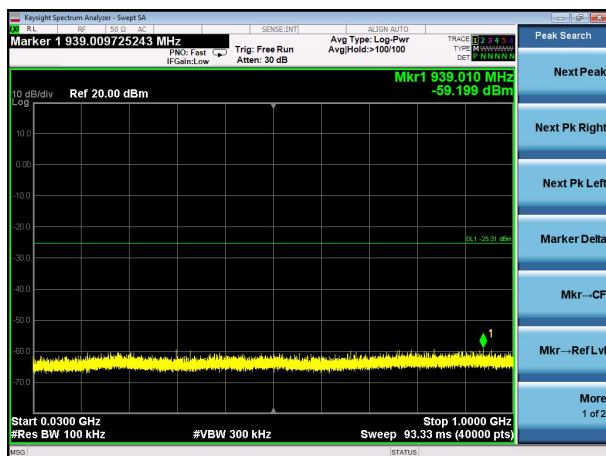
LIMITS AND MEASUREMENT RESULT		
Applicable Limits	Measurement Result	
	Test Data	Criteria
In any 100 KHz Bandwidth Outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produce by the intentional radiator shall be at least 30 dB below that in 100KHz bandwidth within the band that contains the highest level of the desired power. In addition, radiation emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in§15.209(a))	At least -30dBc than the limit Specified on the BOTTOM Channel	PASS
	At least -30dBc than the limit Specified on the TOP Channel	PASS

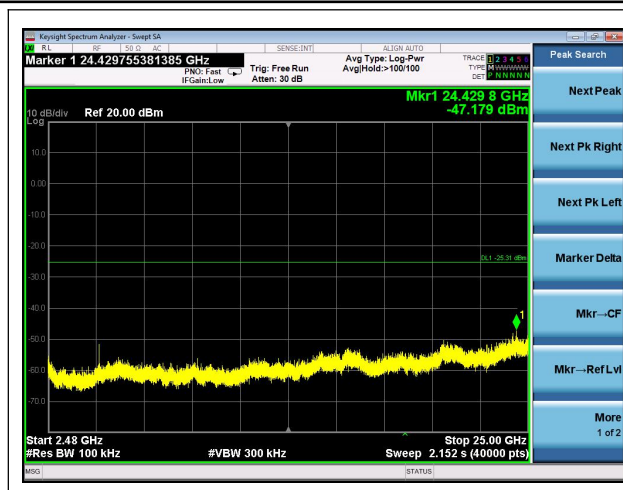
Note: The reference level please see the peak value in plots of 6dB bandwidth

802.11b For Modulation in Low Channel

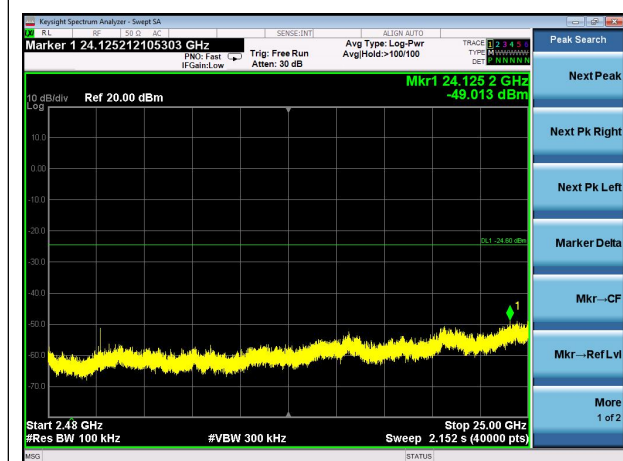
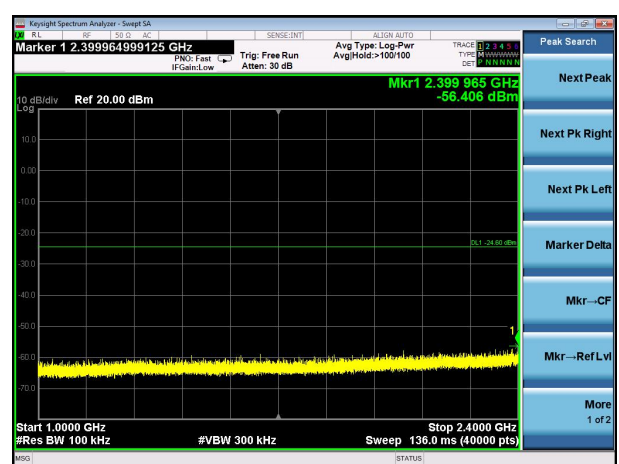
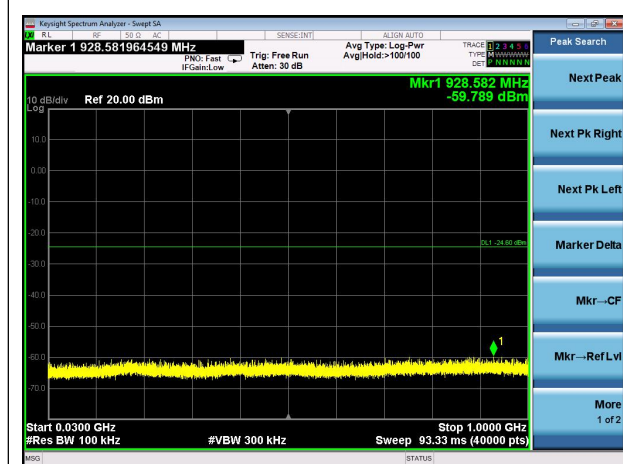


802.11b For Modulation in Middle Channel

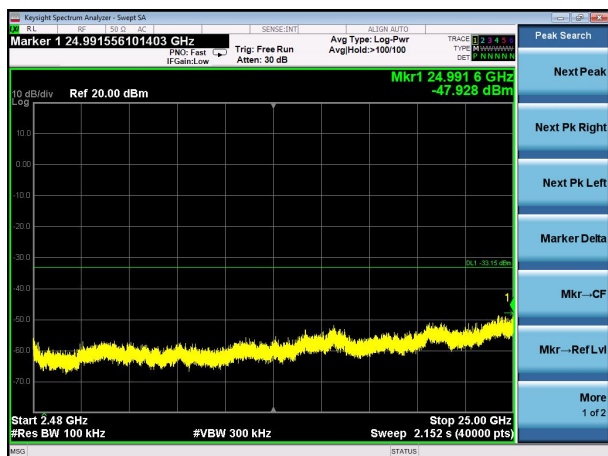
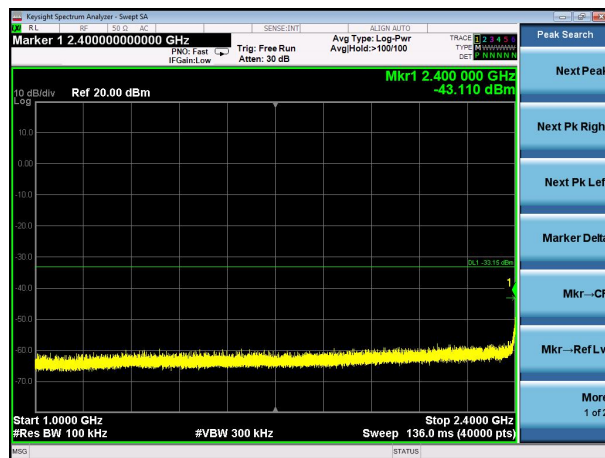
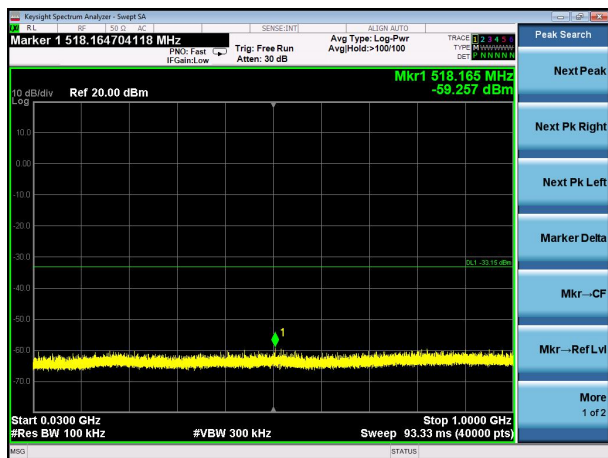




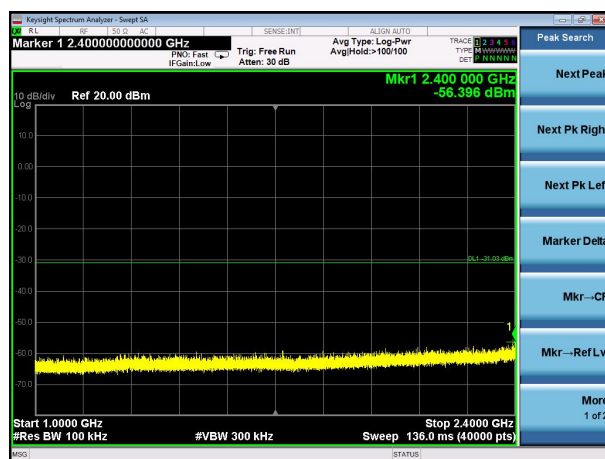
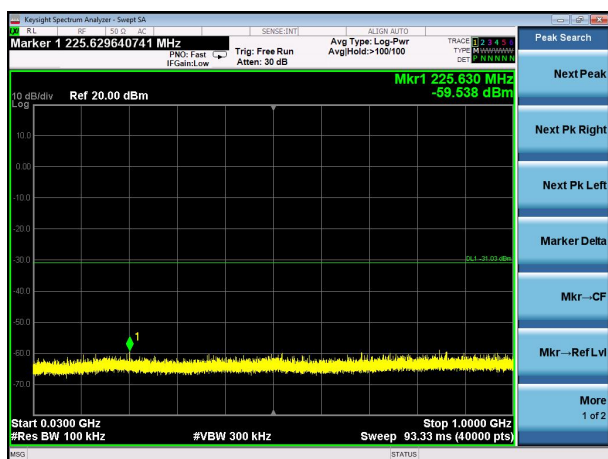
802.11b For Modulation in High Channel

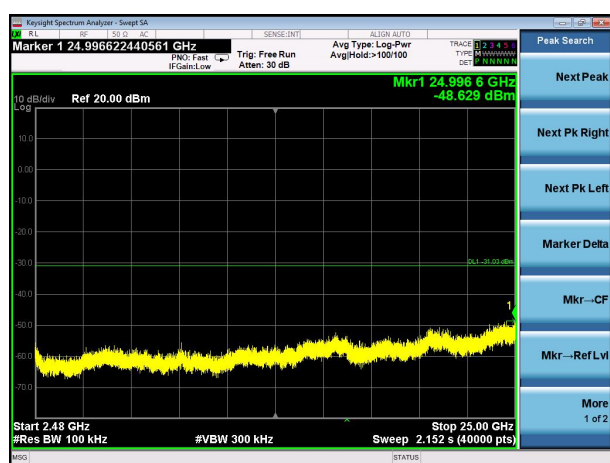


802.11g For Modulation in Low Channel

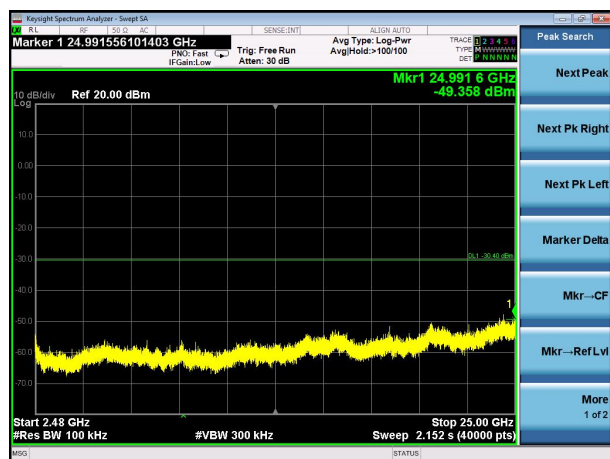
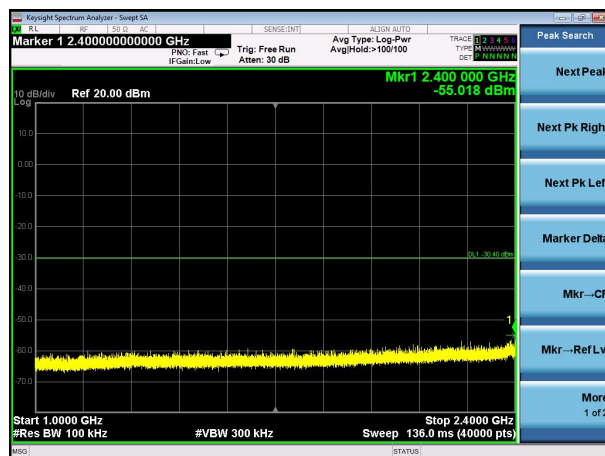
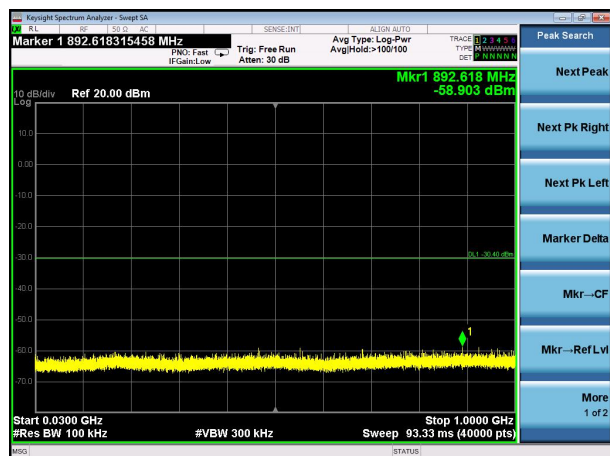


802.11g For Modulation in Middle Channel

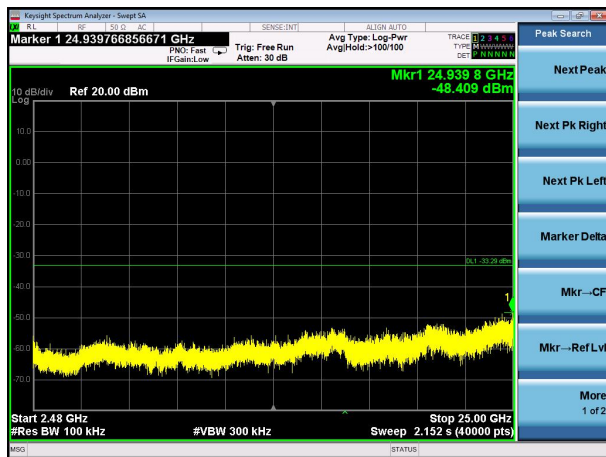
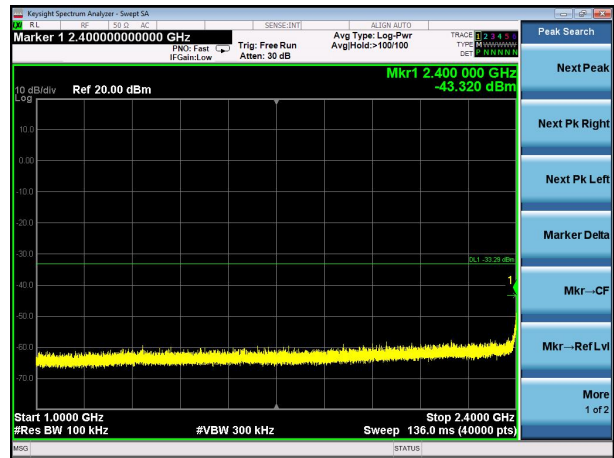
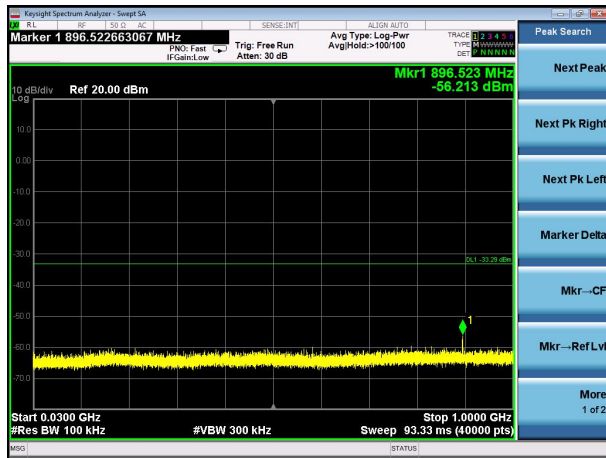




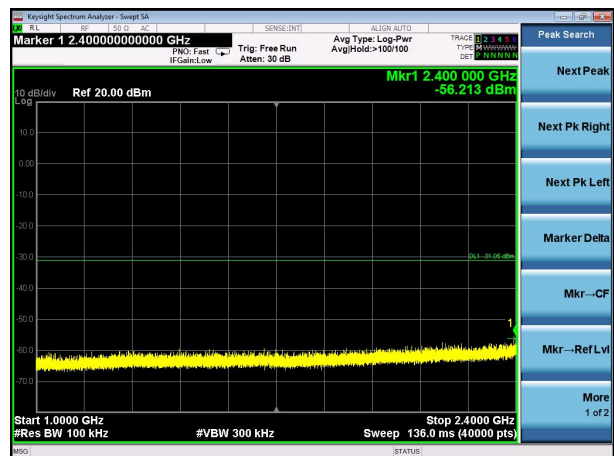
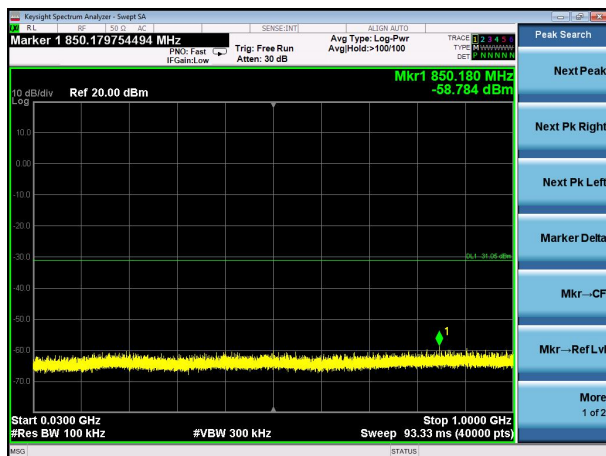
802.11g For Modulation in High Channel

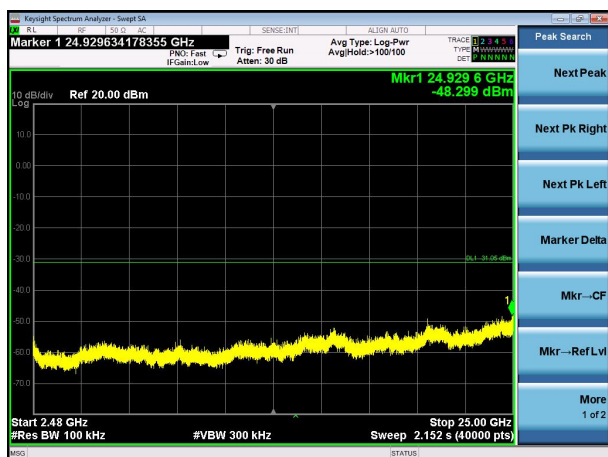


802.11n20 For Modulation in Low Channel

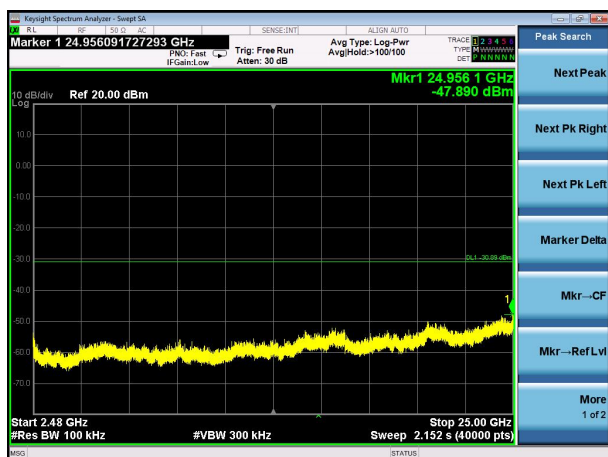
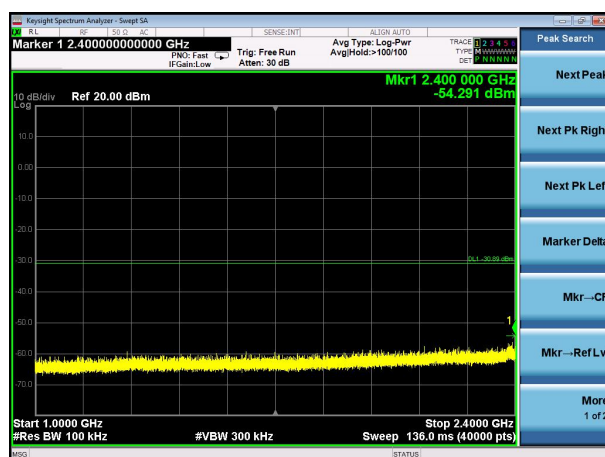
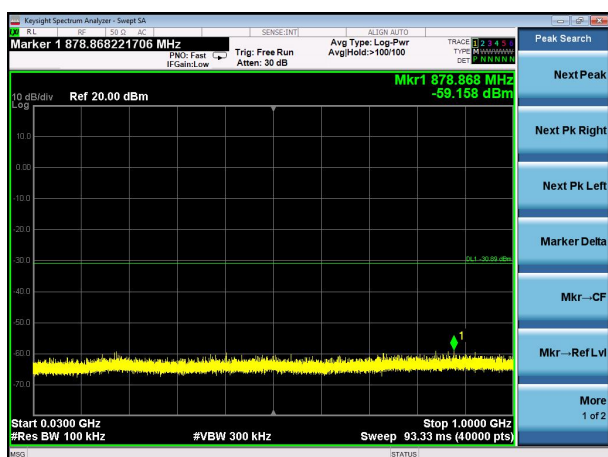


802.11n20 For Modulation in Middle Channel

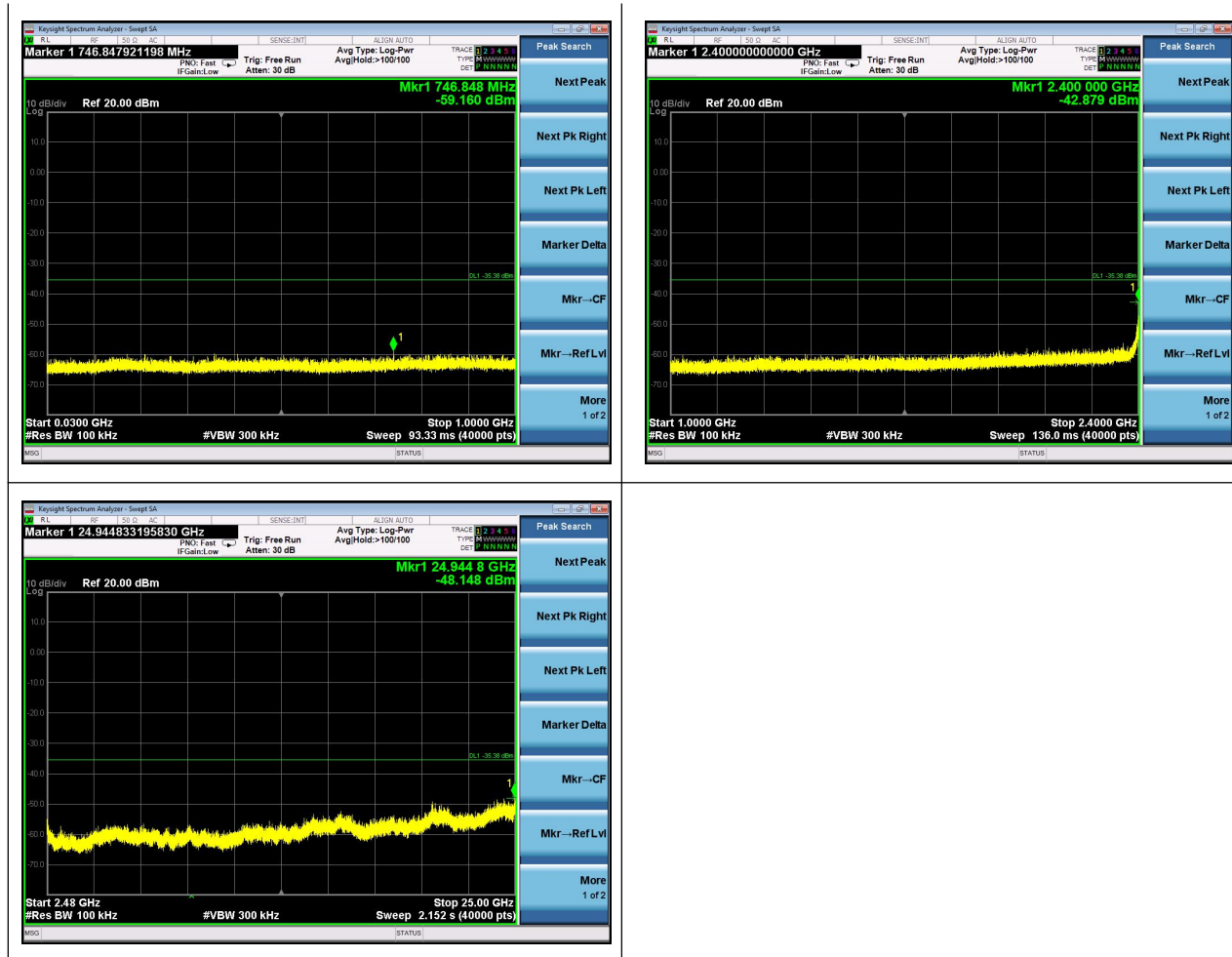




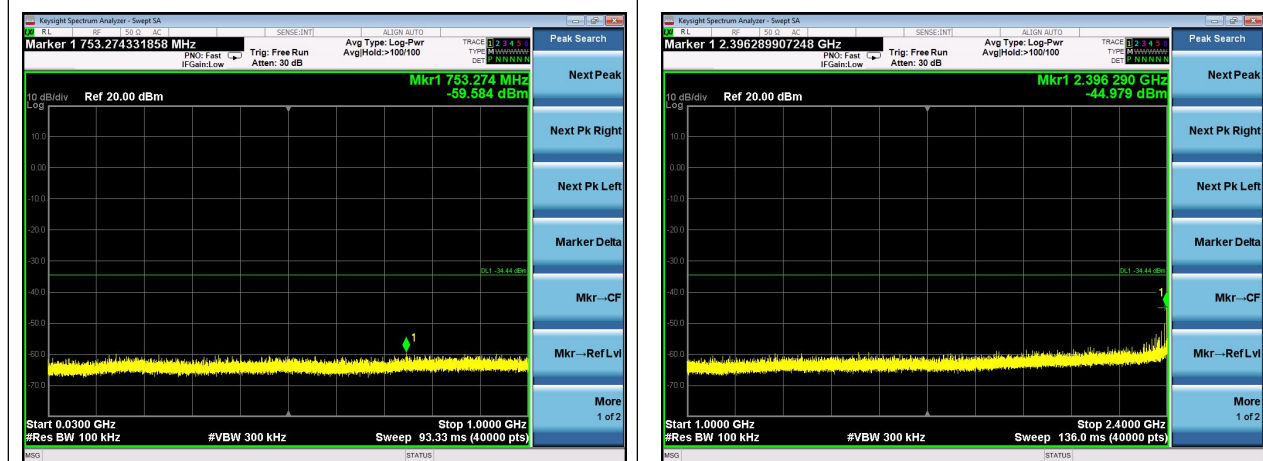
802.11n20 For Modulation in High Channel

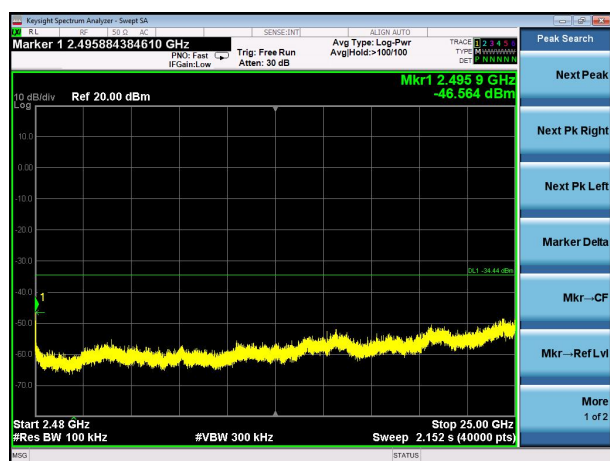


802.11n40 For Modulation in Low Channel

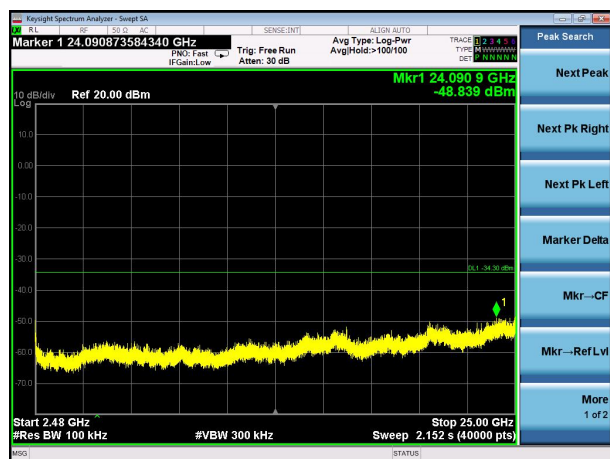
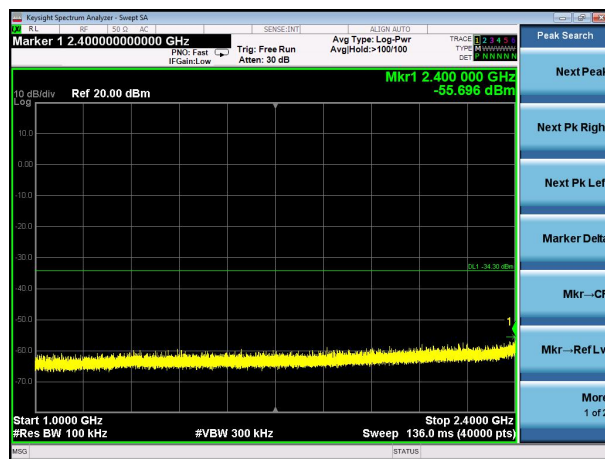
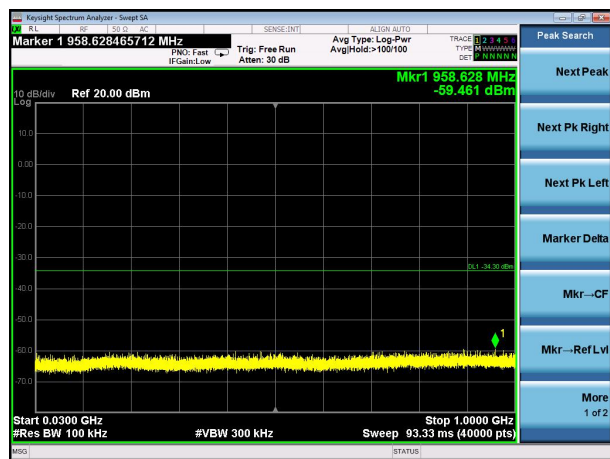


802.11n40 For Modulation in Middle Channel





802.11n40 For Modulation in High Channel



10. MAXIMUM CONDUCTED OUTPUT POWER SPECTRAL DENSITY

10.1 MEASUREMENT PROCEDURE

- (1). Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- (2). Set the EUT Work on Low channel, Medium channel and High channel respectively.
- (3). Set SPA Trace 1 Max hold, then View.

Note: The method of AVGPS-1 in the ANSI C63.10 (2013) item 11.10 was used in this testing.

10.2 TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

Refer To Section 8.2.

10.3 MEASUREMENT EQUIPMENT USED

Refer To Section 6.

10.4 LIMITS AND MEASUREMENT RESULT

TEST ITEM	POWER SPECTRAL DENSITY
TEST MODE	802.11b with data rate 1

Channel No.	Power density (dBm/20kHz)	Power density (dBm/3kHz)	Limit (dBm/3kHz)	Result
Low Channel	-2.366	-10.606	8	Pass
Middle Channel	-0.327	-8.567	8	Pass
High Channel	-0.152	-8.392	8	Pass

TEST ITEM	POWER SPECTRAL DENSITY
TEST MODE	802.11g with data rate 6

Channel No.	Power density (dBm/20kHz)	Power density (dBm/3kHz)	Limit (dBm/3kHz)	Result
Low Channel	-7.761	-16.001	8	Pass
Middle Channel	-5.541	-13.781	8	Pass
High Channel	-5.513	-13.753	8	Pass

TEST ITEM	POWER SPECTRAL DENSITY
TEST MODE	802.11n 20 with data rate 6.5

Channel No.	Power density (dBm/20kHz)	Power density (dBm/3kHz)	Limit (dBm/3kHz)	Result
Low Channel	-7.851	-16.091	8	Pass
Middle Channel	-6.406	-14.646	8	Pass
High Channel	-5.873	-14.113	8	Pass

TEST ITEM	POWER SPECTRAL DENSITY
TEST MODE	802.11n 40 with data rate 13.5

Channel No.	Power density (dBm/20kHz)	Power density (dBm/3kHz)	Limit (dBm/3kHz)	Result
Low Channel	-9.762	-18.002	8	Pass
Middle Channel	-9.254	-17.494	8	Pass
High Channel	-9.648	-17.888	8	Pass

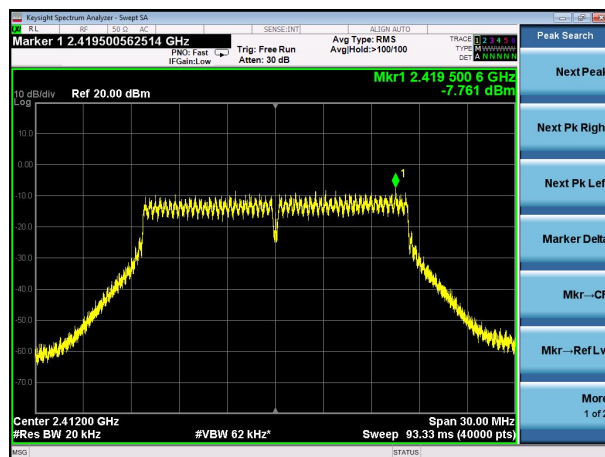
Note: Power density(dBm/3kHz) = Power density(dBm/20kHz) + 10Log(3/20)

Test Plot of Spectral Density

802.11b-Low Channel



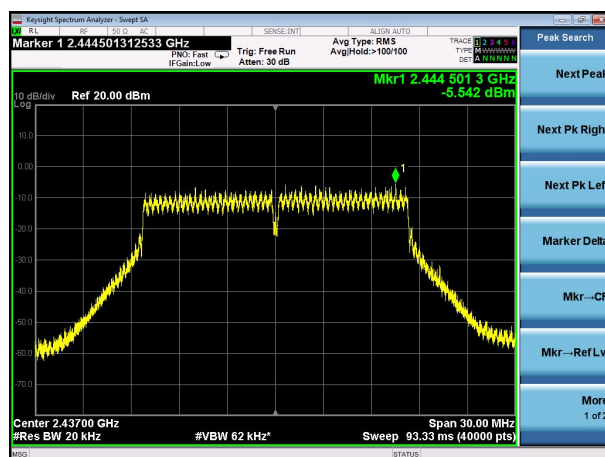
802.11g-Low Channel



802.11b-Middle Channel



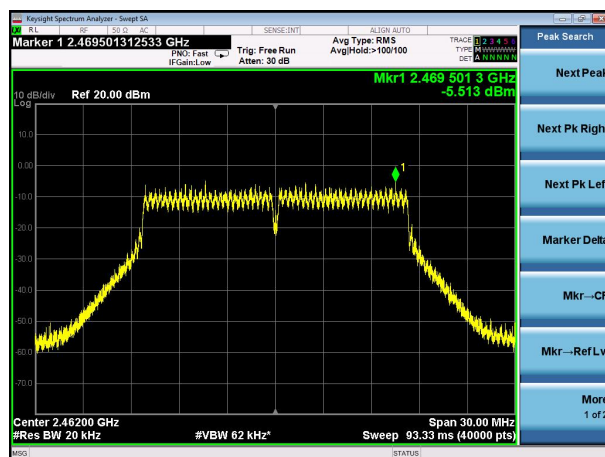
802.11g-Middle Channel



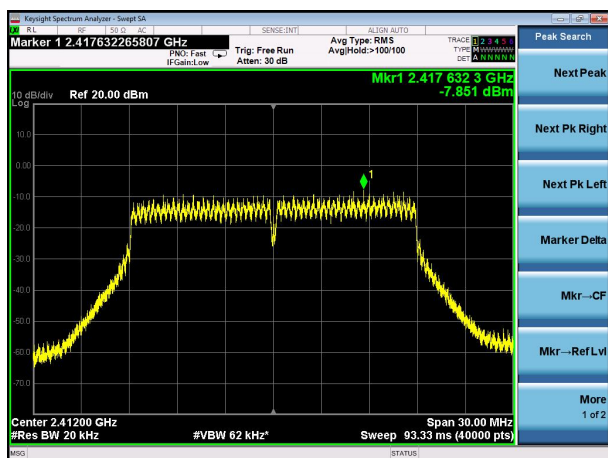
802.11b-High Channel



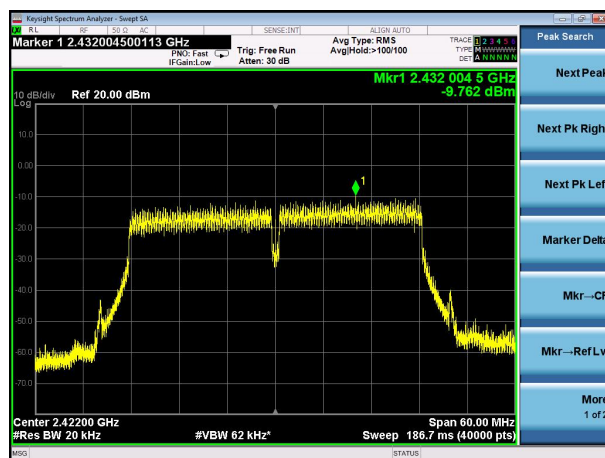
802.11g-High Channel



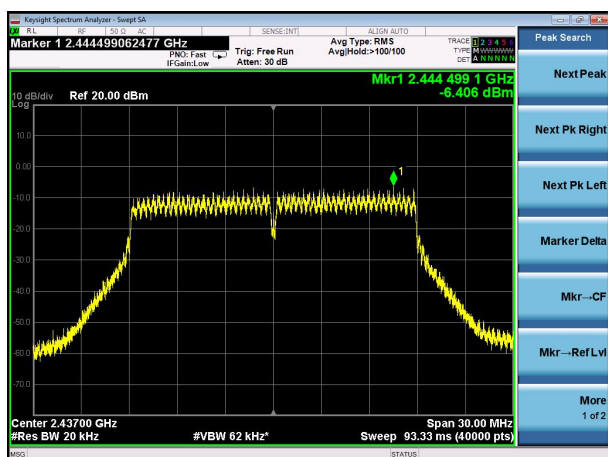
802.11n20-Low Channel



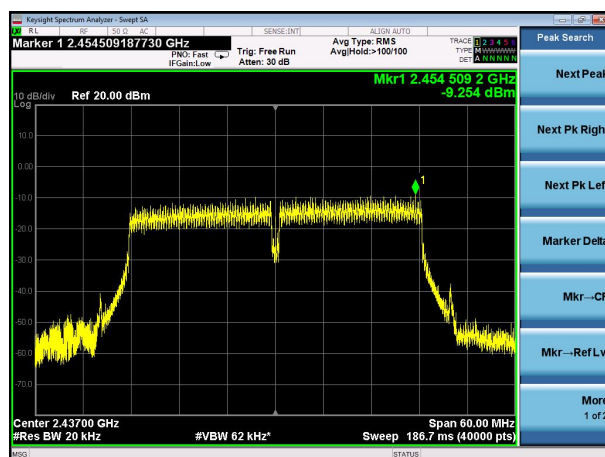
802.11n40-Low Channel



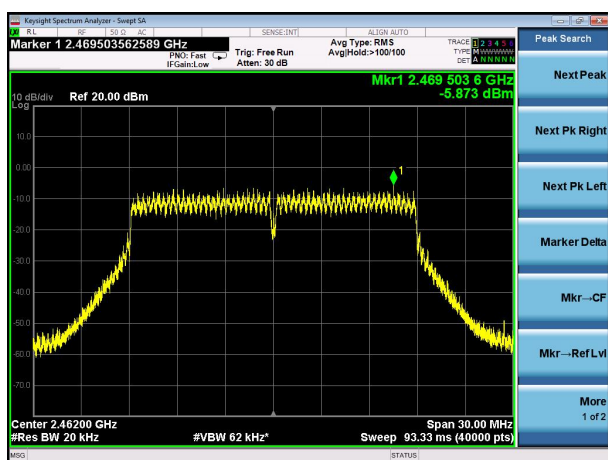
802.11n20-Middle Channel



802.11n40-Middle Channel



802.11n20-High Channel



802.11n40-Middle Channel

