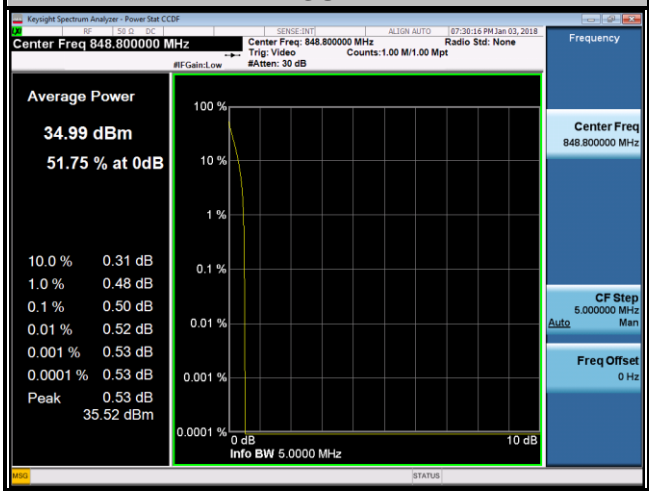
4.5.4 Test Results

Channel	Frequency (MHz)	Peak to Average Ratio (dB)		Channel	Frequency (MHz)	Peak to Average Ratio (dB)
		GSM	EDGE			WCDMA
128	824.2	0.49	3.30	4132	826.4	3.08
189	836.4	0.49	3.27	4182	836.4	3.05
251	848.8	0.50	3.29	4233	846.6	2.98

Channel	Frequency (MHz)	Peak to Average Ratio (dB)
		CDMA
1013	824.70	3.90
384	836.52	3.88
777	848.31	3.29

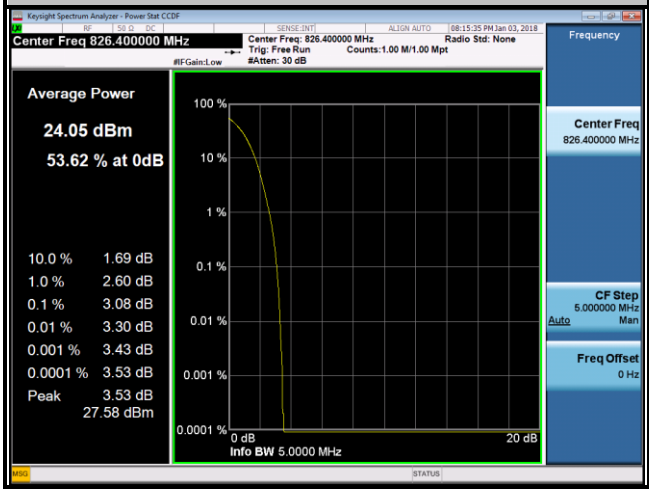
Spectrum Plot of Worst Value

GSM

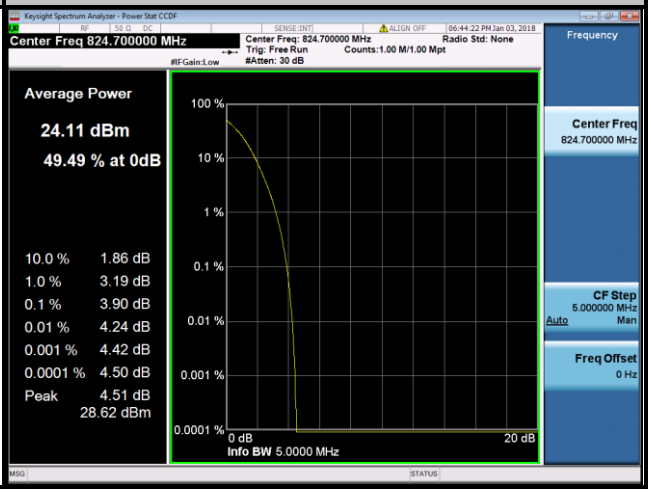


EDGE

WCDMA

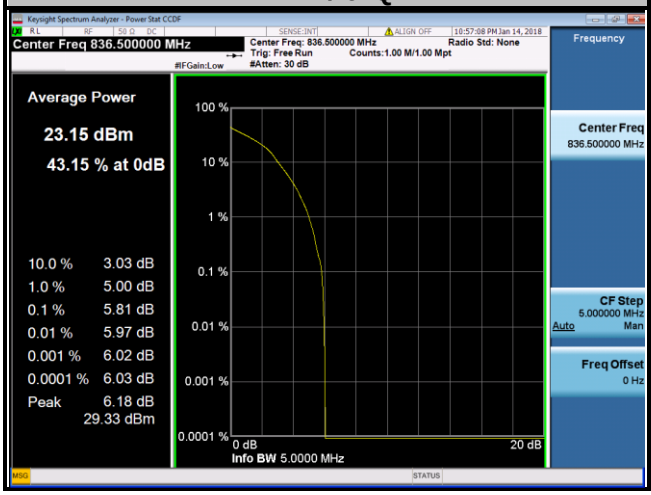


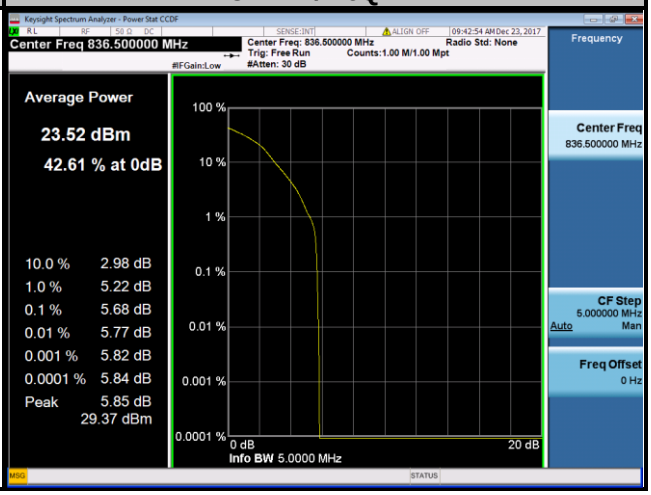
CDMA



LTE Band 5									
Channel Bandwidth: 1.4 MHz					Channel Bandwidth: 3 MHz				
Channel	Frequency (MHz)	Peak to Average Ratio (dB)			Channel	Frequency (MHz)	Peak to Average Ratio (dB)		
		QPSK	16QAM	64QAM			QPSK	16QAM	64QAM
20407	824.7	4.98	5.75	5.70	20415	825.5	4.90	5.65	5.51
20525	836.5	4.98	5.79	5.81	20525	836.5	4.94	5.68	5.67
20643	848.3	4.29	5.07	5.12	20635	847.5	4.21	4.98	4.88

Spectrum Plot of Worst Value	
1.4 MHz / 64QAM	3 MHz / 16QAM

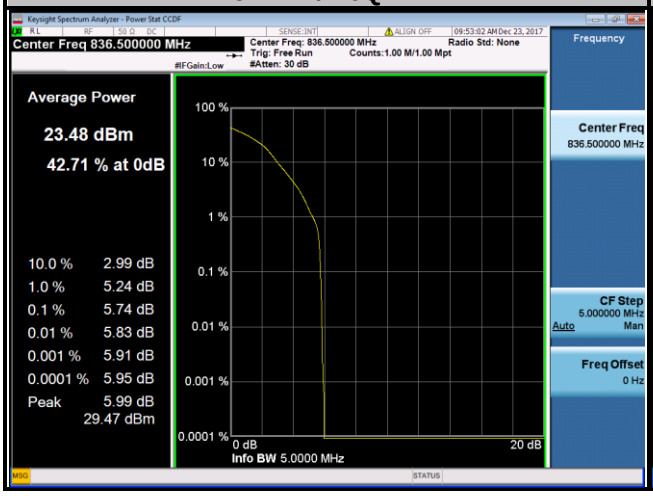




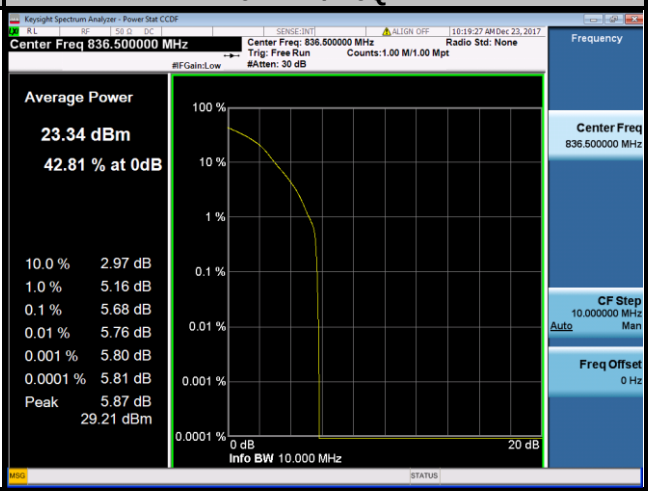
LTE Band 5									
Channel Bandwidth: 5 MHz					Channel Bandwidth: 10 MHz				
Channel	Frequency (MHz)	Peak to Average Ratio (dB)			Channel	Frequency (MHz)	Peak to Average Ratio (dB)		
		QPSK	16QAM	64QAM			QPSK	16QAM	64QAM
20425	826.5	4.89	5.62	5.47	20450	829.0	4.86	5.63	5.53
20525	836.5	4.94	5.74	5.71	20525	836.5	4.89	5.68	5.60
20625	846.5	4.19	4.97	4.80	20600	844.0	4.67	5.39	5.38

Spectrum Plot of Worst Value

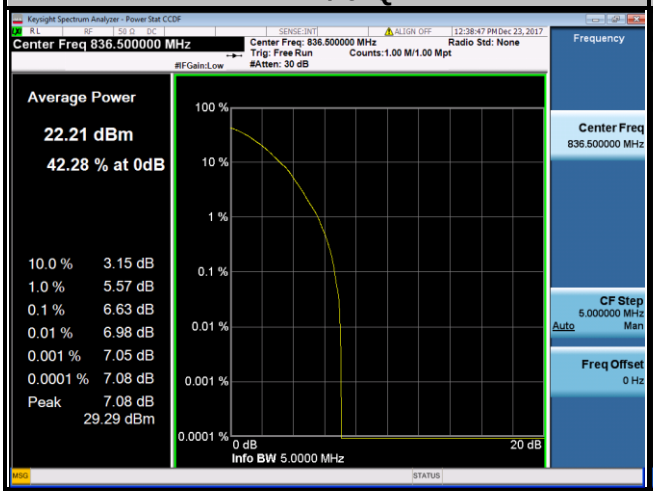
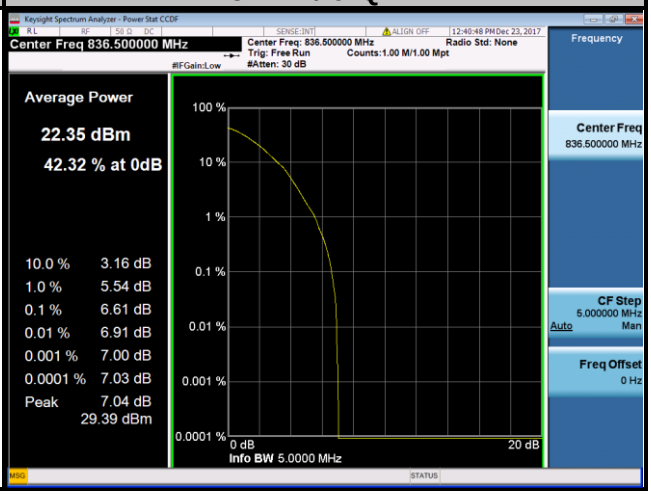
5 MHz / 16QAM



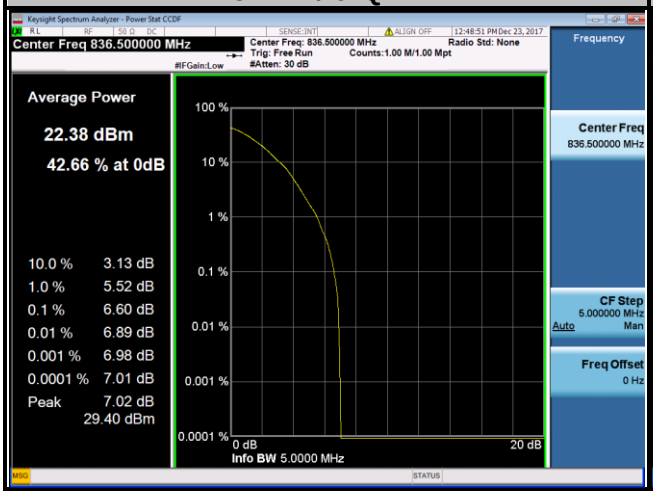
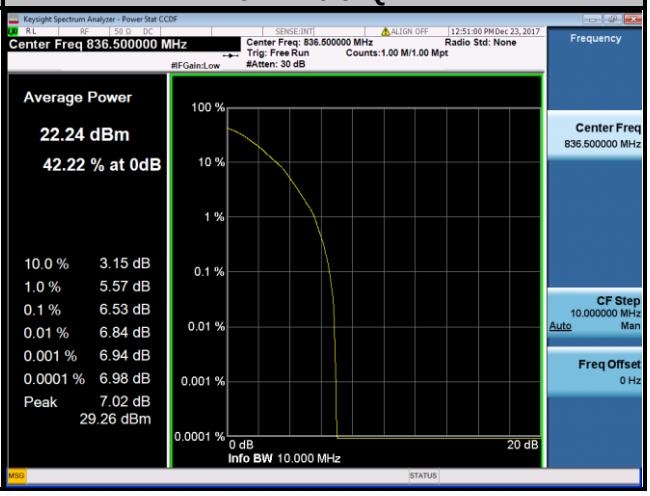
10 MHz / 16QAM



LTE Band 26									
Channel Bandwidth: 1.4 MHz					Channel Bandwidth: 3 MHz				
Channel	Frequency (MHz)	Peak to Average Ratio (dB)			Channel	Frequency (MHz)	Peak to Average Ratio (dB)		
		QPSK	16QAM	64QAM			QPSK	16QAM	64QAM
26797	824.7	5.01	5.78	6.56	26805	825.5	4.94	5.72	6.52
26915	836.5	5.08	5.89	6.63	26915	836.5	5.01	5.81	6.61
27033	848.3	4.35	5.14	5.95	27025	847.5	4.29	5.04	5.89

Spectrum Plot of Worst Value	
1.4 MHz / 64QAM	3 MHz / 64QAM
	

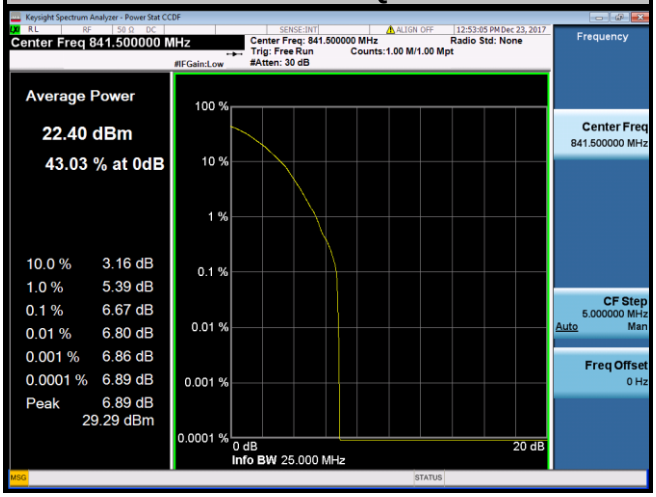
LTE Band 26									
Channel Bandwidth: 5 MHz					Channel Bandwidth: 10 MHz				
Channel	Frequency (MHz)	Peak to Average Ratio (dB)			Channel	Frequency (MHz)	Peak to Average Ratio (dB)		
		QPSK	16QAM	64QAM			QPSK	16QAM	64QAM
26815	826.5	4.56	5.37	6.15	26840	829.0	4.88	5.67	6.49
26915	836.5	4.72	5.80	6.60	26915	836.5	4.98	5.75	6.53
27015	846.5	3.75	4.55	5.37	26990	844.0	4.26	5.05	5.87

Spectrum Plot of Worst Value	
5 MHz / 64QAM	10 MHz / 64QAM
	

LTE Band 26				
Channel Bandwidth: 15 MHz				
Channel	Frequency (MHz)	Peak to Average Ratio (dB)		
		QPSK	16QAM	64QAM
26865	831.5	4.87	5.60	6.34
26915	836.5	4.88	5.62	6.51
26965	841.5	4.93	5.71	6.67

Spectrum Plot of Worst Value

15 MHz / 64QAM

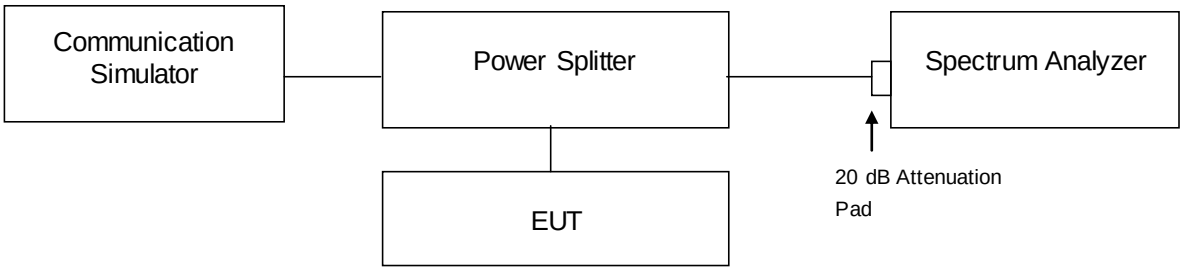


4.6 Conducted Spurious Emissions

4.6.1 Limits of Conducted Spurious Emissions Measurement

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. The emission limit equal to -13 dBm.

4.6.2 Test Setup



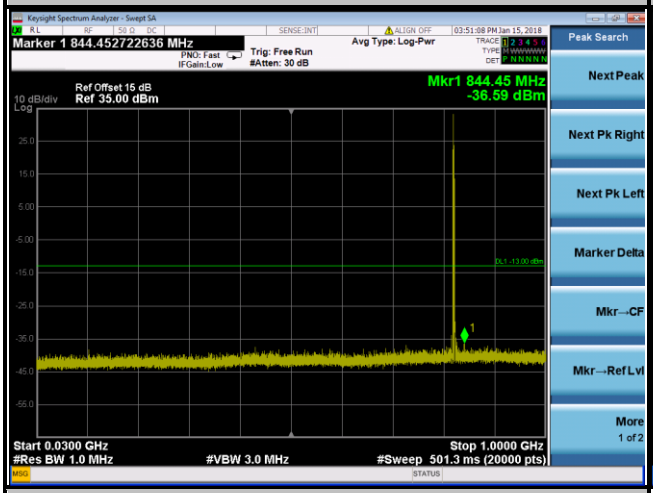
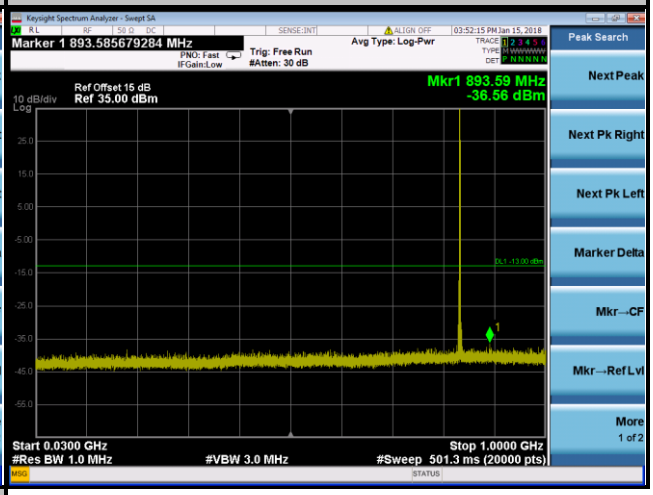
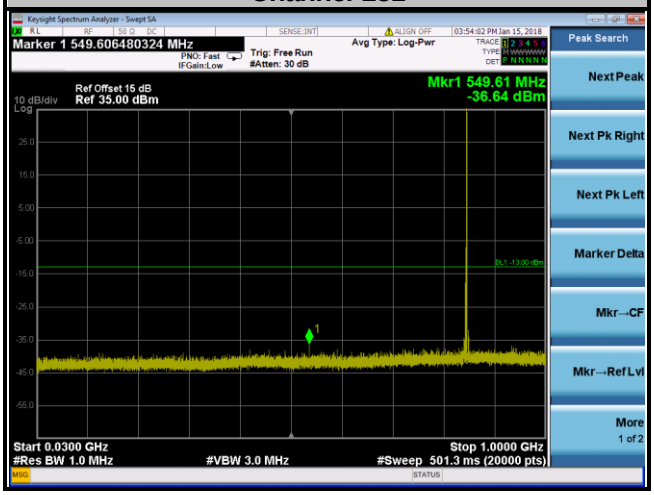
4.6.3 Test Procedure

a. The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
b. Measuring frequency range is from 30 MHz to 1 GHz and 1 GHz to 10 GHz. 20 dB attenuation pad is connected with spectrum. RBW = 100 kHz and VBW = 300 kHz is used for conducted emission measurement.

4.6.4 Test Results

GSM

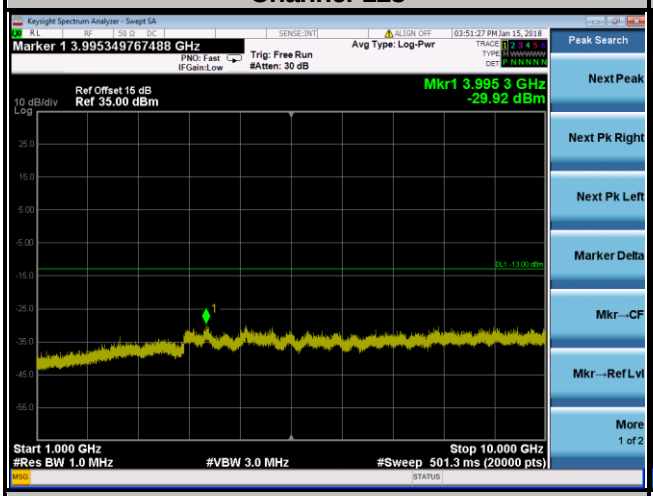
30MHz ~ 1GHz

GSM	
Channel 128	**Channel 189**
	
Channel 251	
	

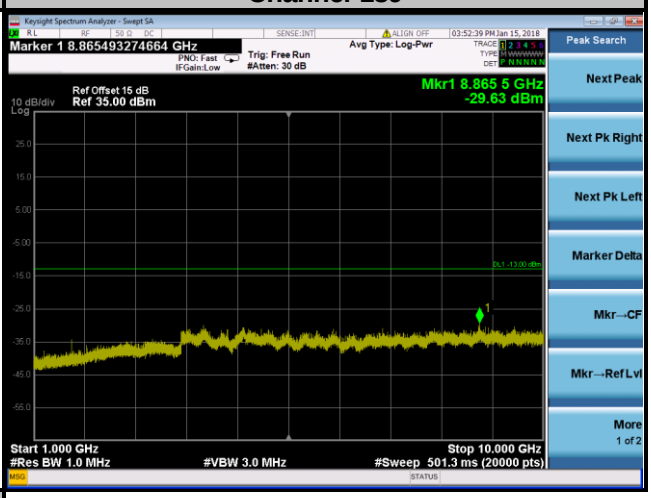
1GHz ~ 10GHz

GSM

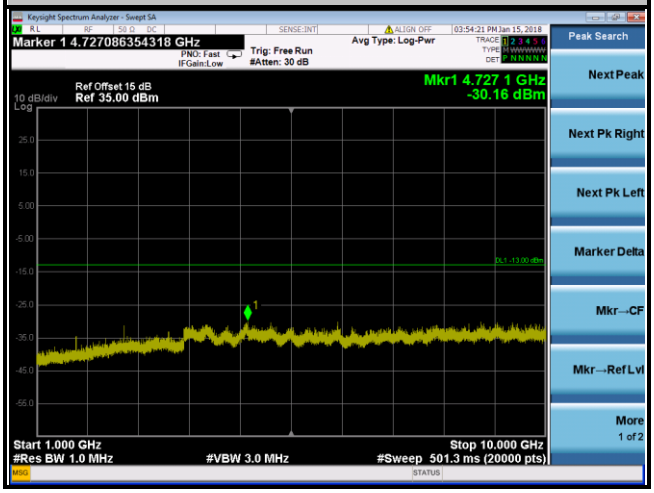
Channel 128



Channel 189

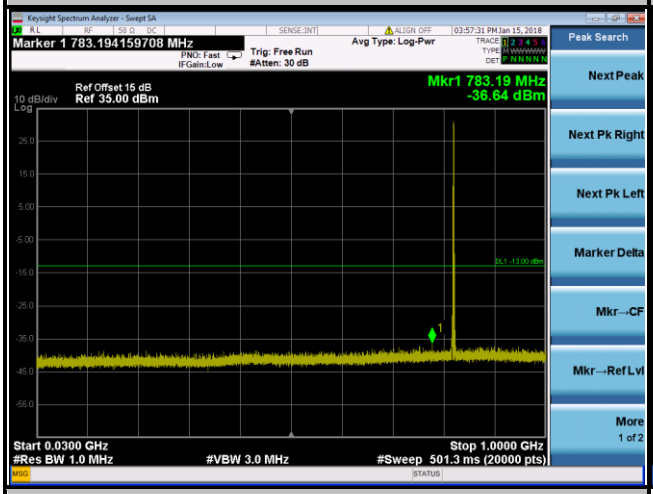
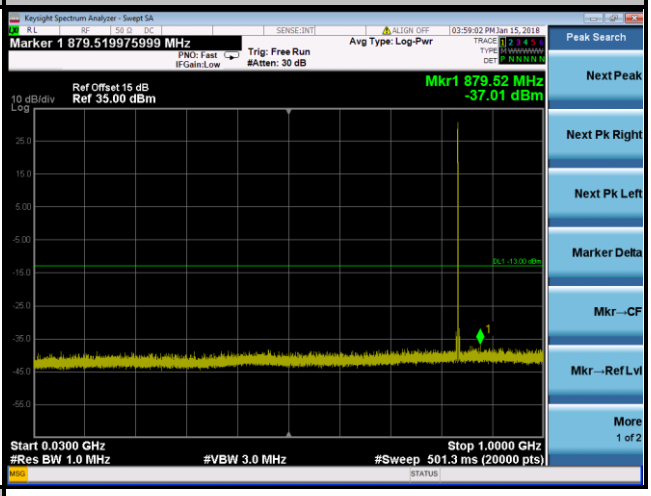
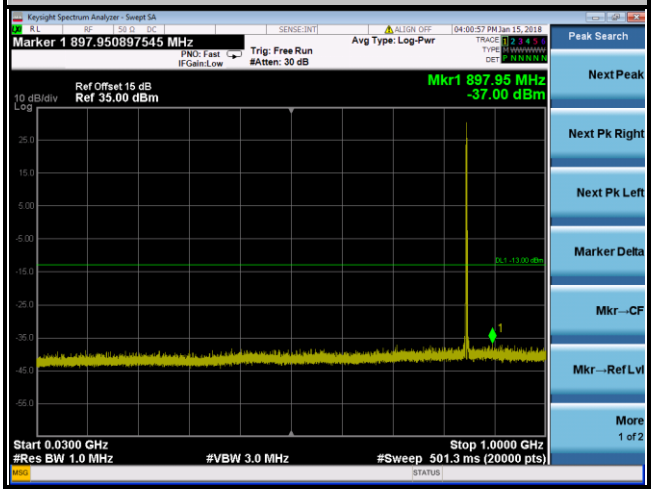


Channel 251



EDGE

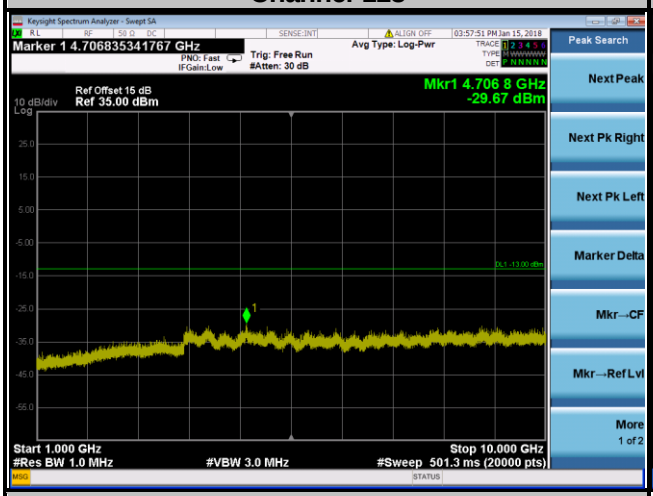
30MHz ~ 1GHz

EDGE	
Channel 128	Channel 189
	
Channel 251	
	

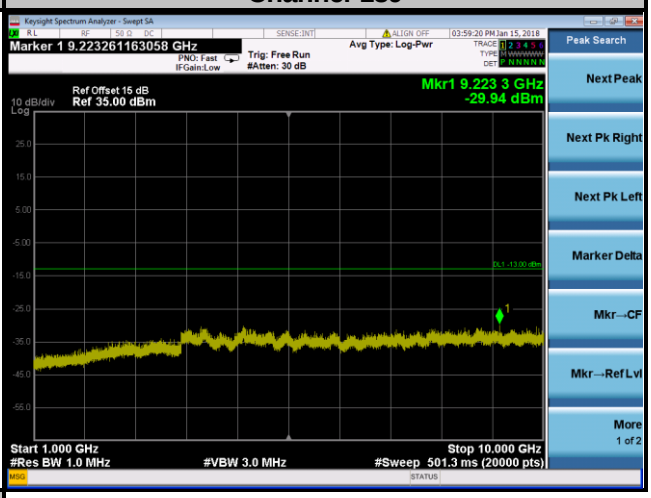
1GHz ~ 10GHz

EDGE

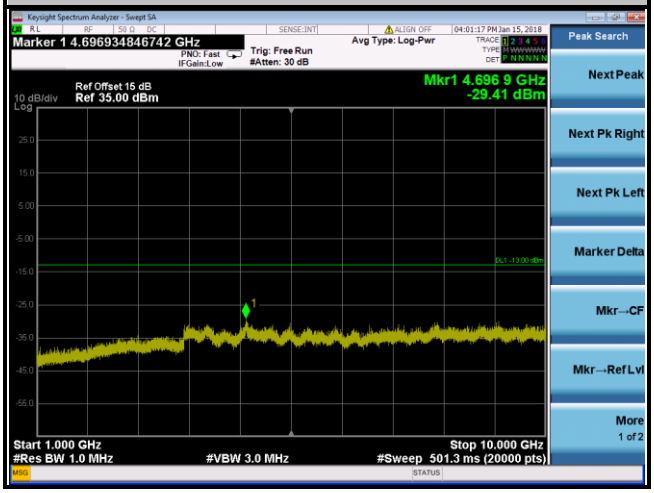
Channel 128



Channel 189



Channel 251

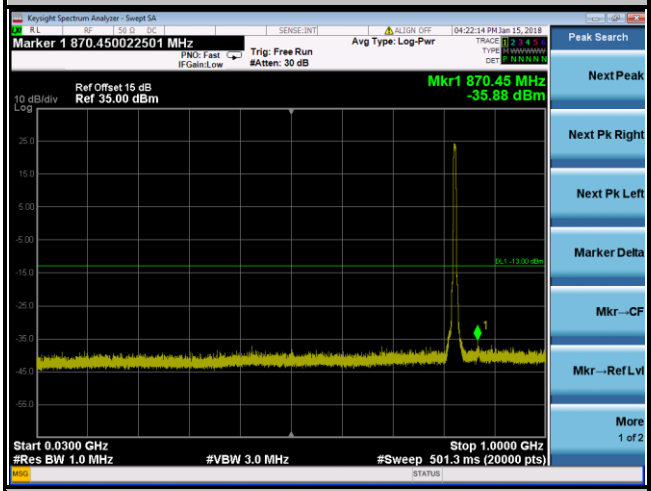


WCDMA

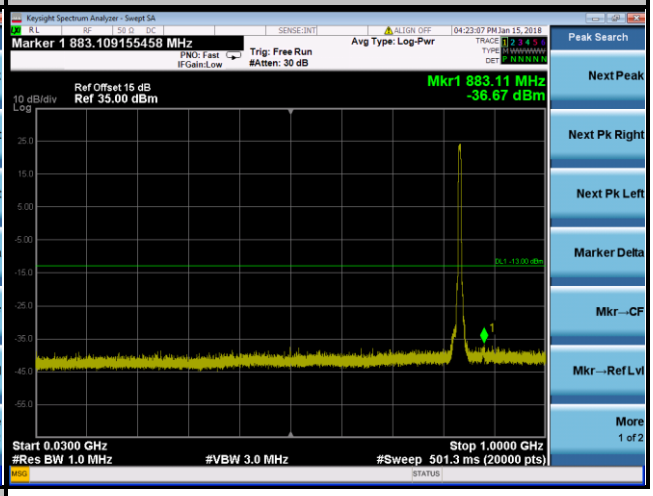
30MHz ~ 1GHz

WCDMA

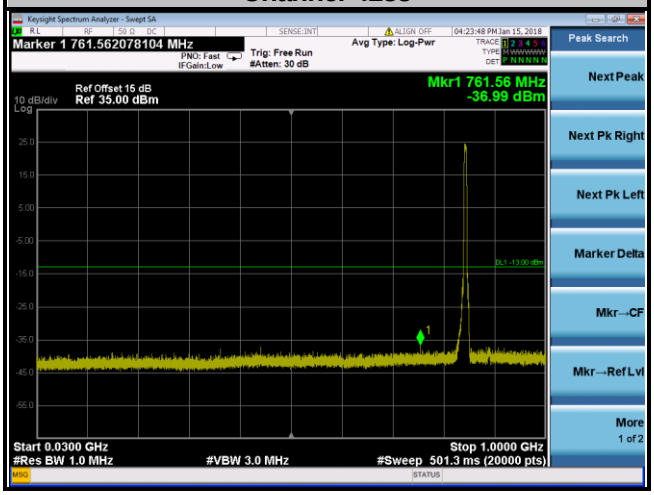
Channel 4132



Channel 4182



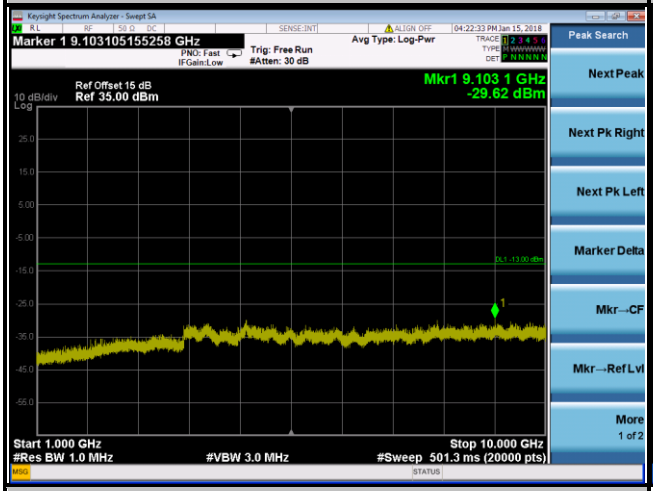
Channel 4233



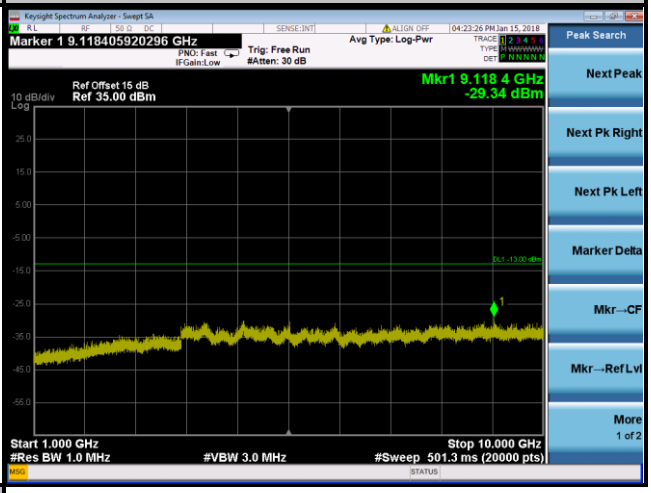
1GHz ~ 10GHz

WCDMA

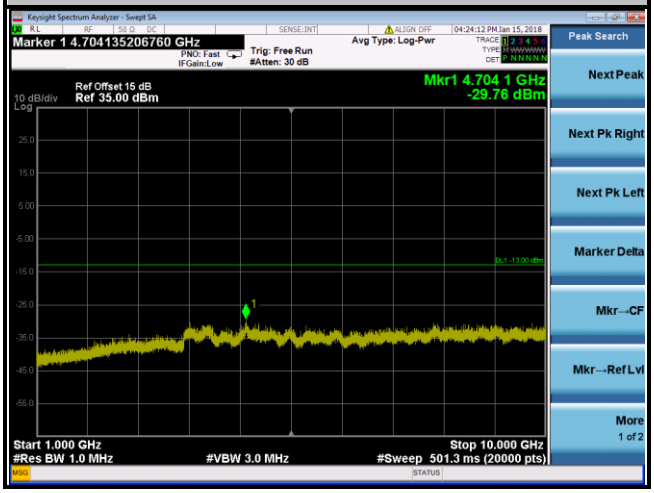
Channel 4132



Channel 4182

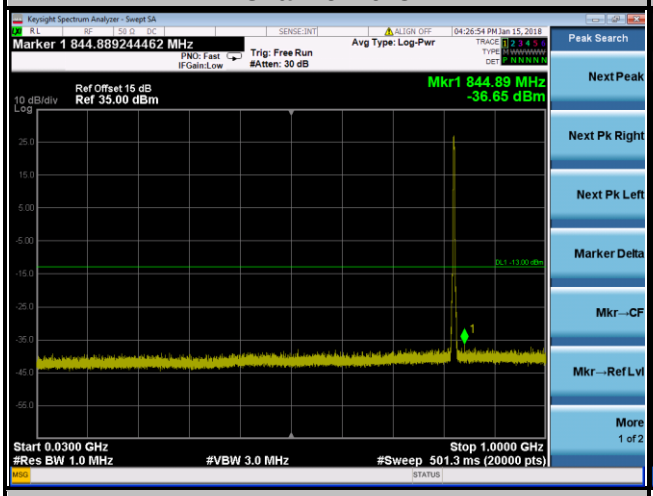
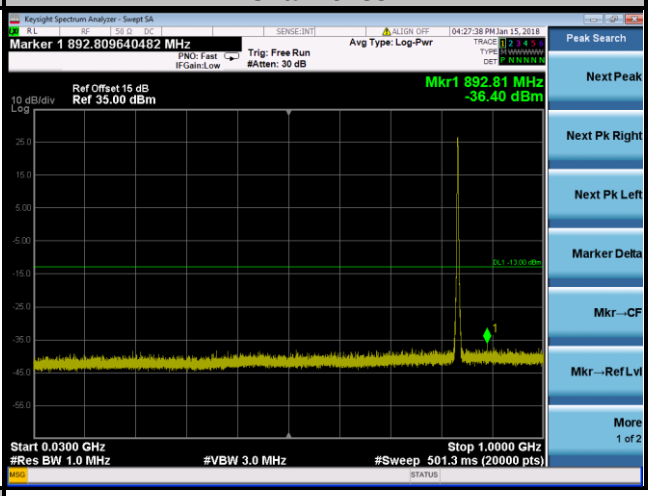
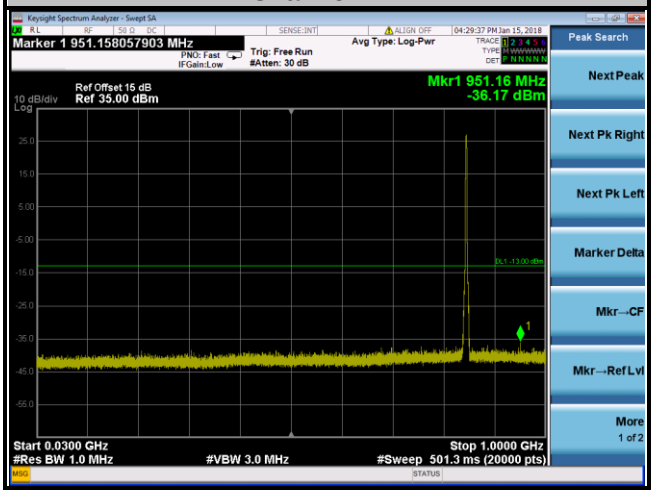


Channel 4233



CDMA

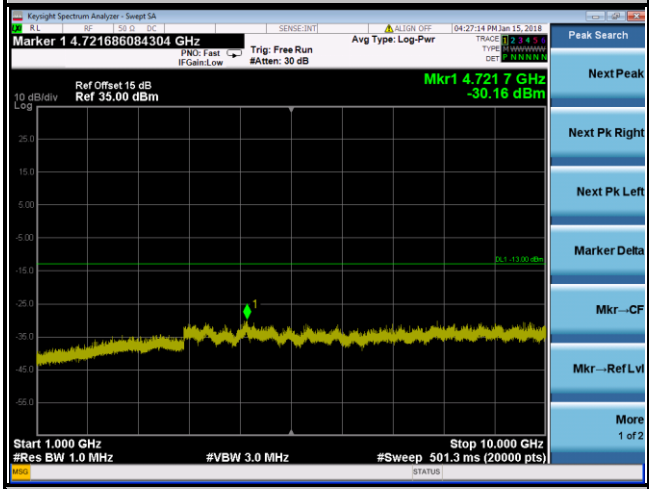
30MHz ~ 1GHz

CDMA	
Channel 1013	Channel 384
	
Channel 777	
	

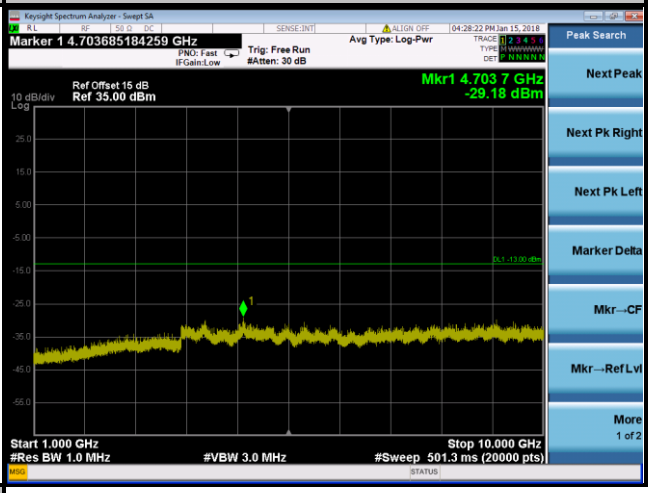
1GHz ~ 10GHz

CDMA

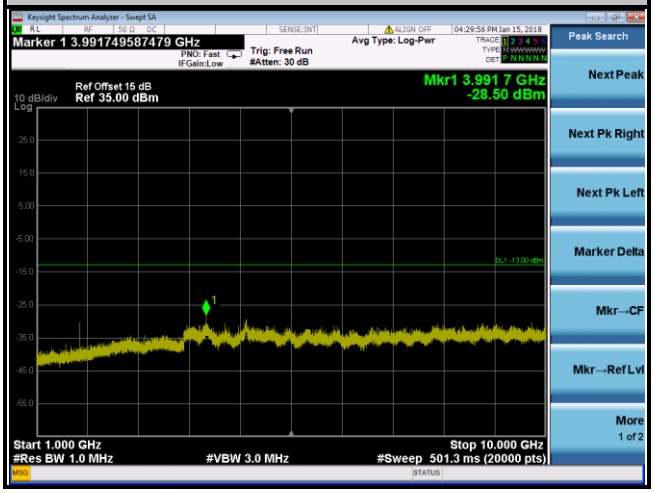
Channel 1013



Channel 384



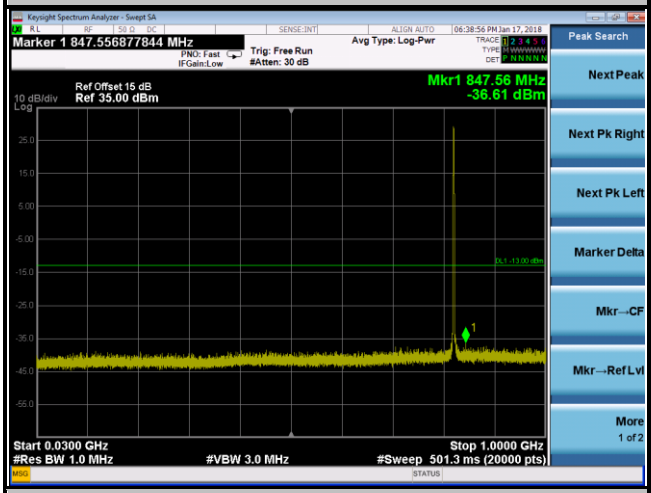
Channel 777

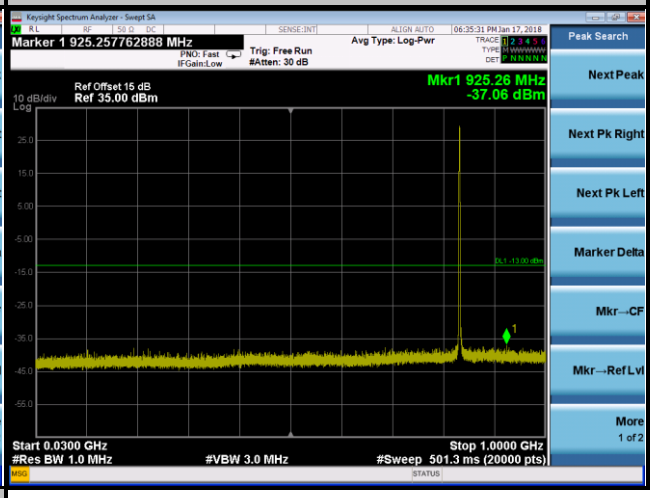


LTE Band 5

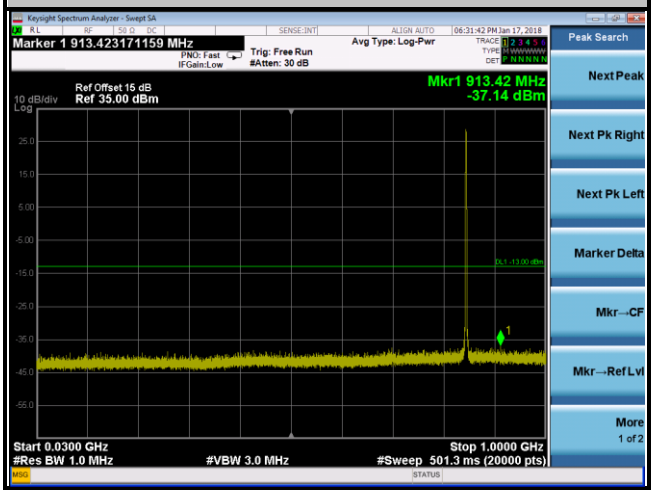
30MHz ~ 1GHz

LTE Band 5	
Channel Bandwidth: 1.4 MHz	
Channel 20407	Channel 20525





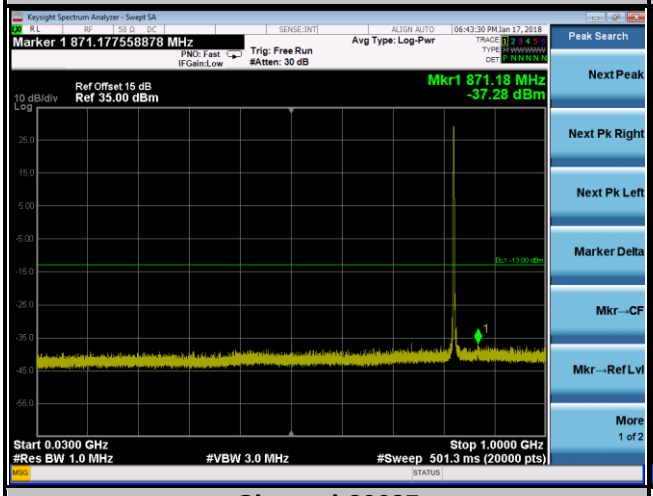
Channel 20643



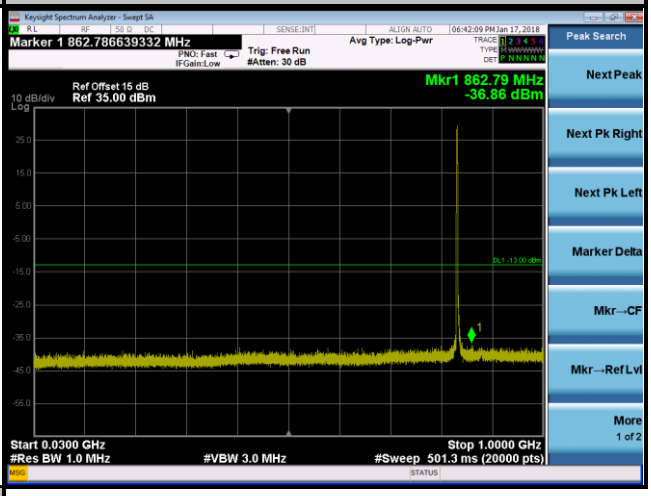
LTE Band 5

Channel Bandwidth: 3 MHz

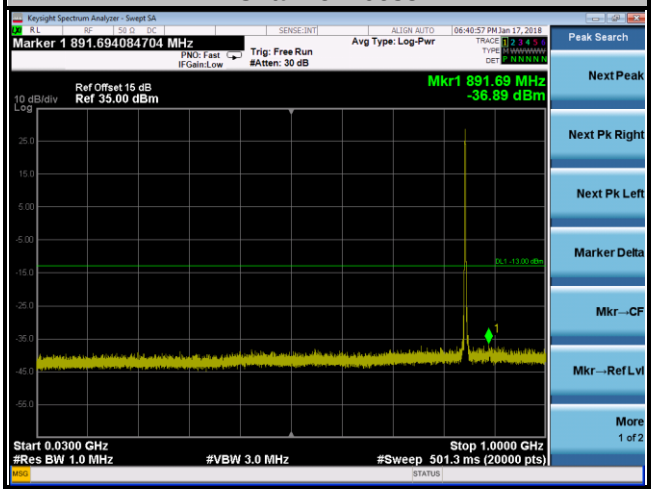
Channel 20415



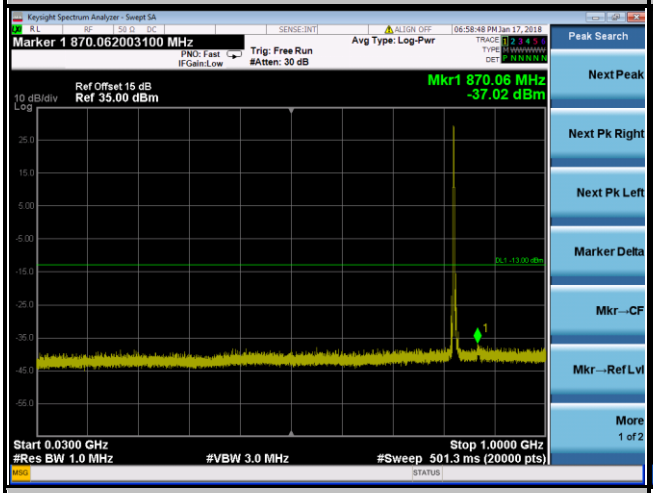
Channel 20525

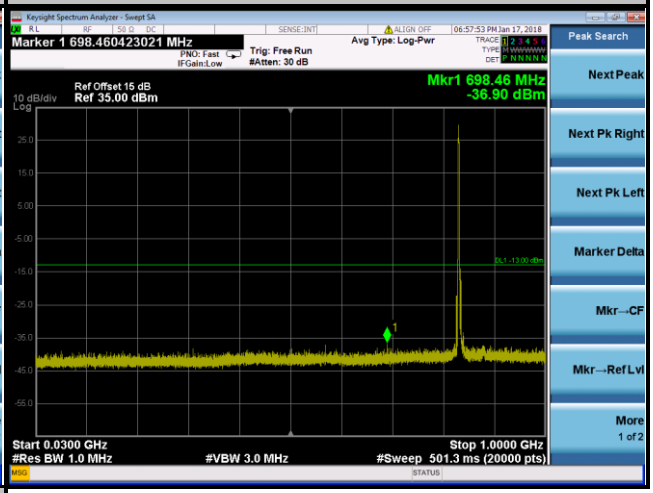


Channel 20635

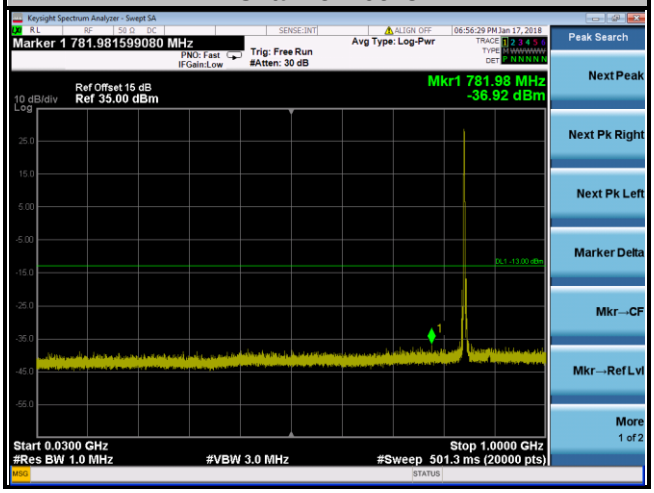


LTE Band 5	
Channel Bandwidth: 5 MHz	
Channel 20425	Channel 20525





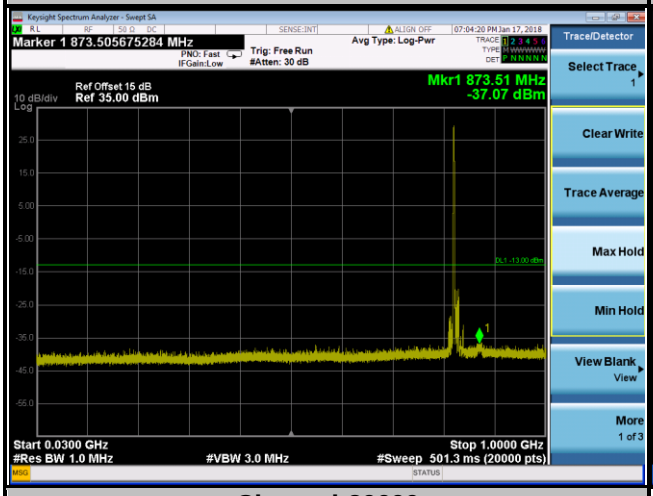
Channel 20625



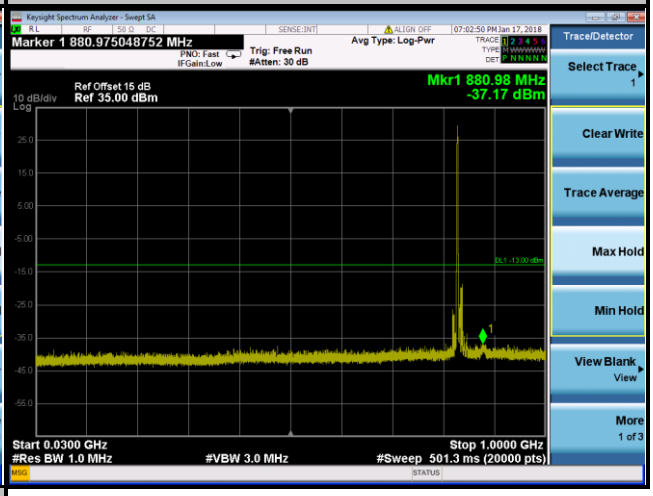
LTE Band 5

Channel Bandwidth: 10 MHz

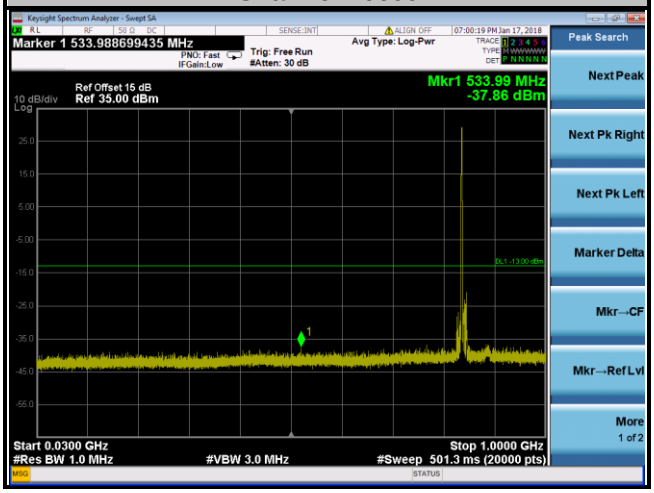
Channel 20450



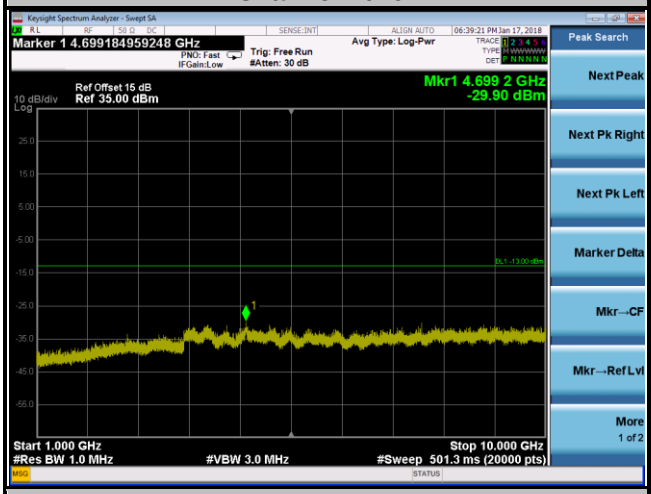
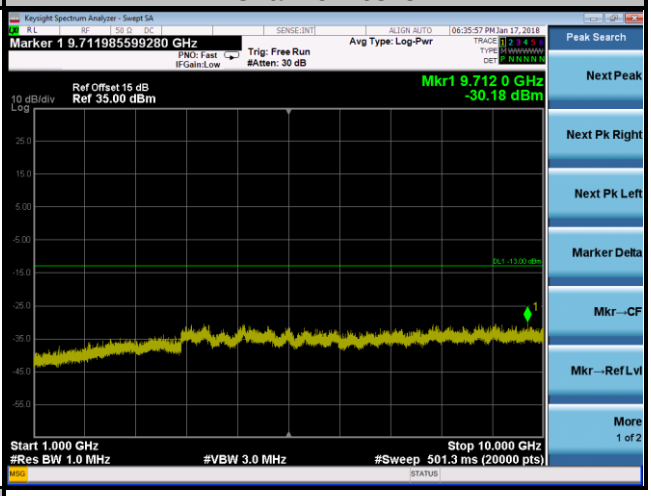
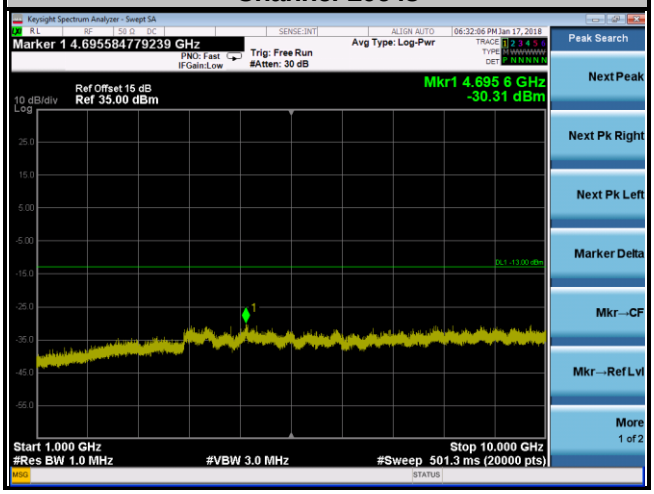
Channel 20525



Channel 20600



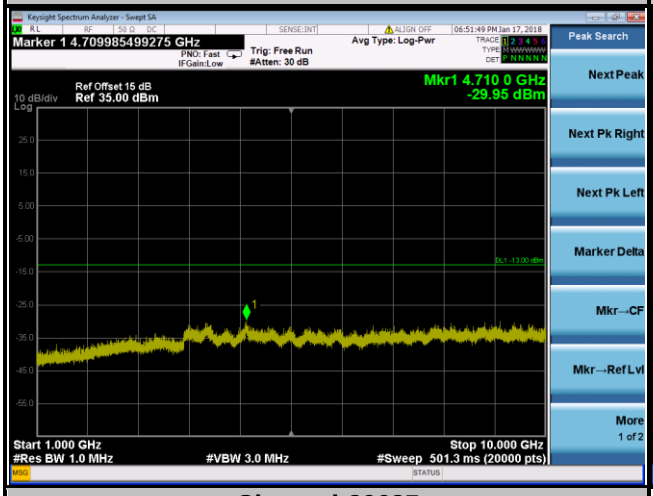
1GHz ~ 10GHz

LTE Band 5	
Channel Bandwidth: 1.4 MHz	
Channel 20407	Channel 20525
	
Channel 20643	
	

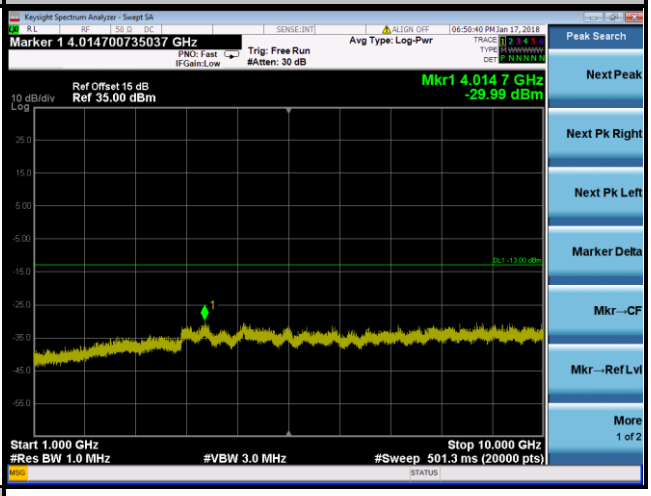
LTE Band 5

Channel Bandwidth: 3 MHz

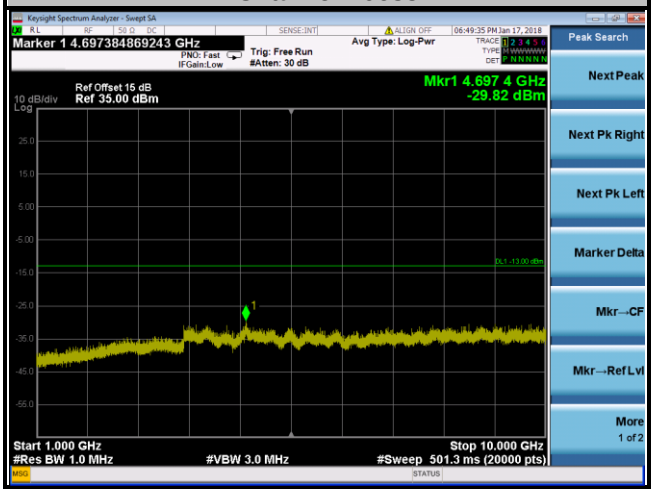
Channel 20415



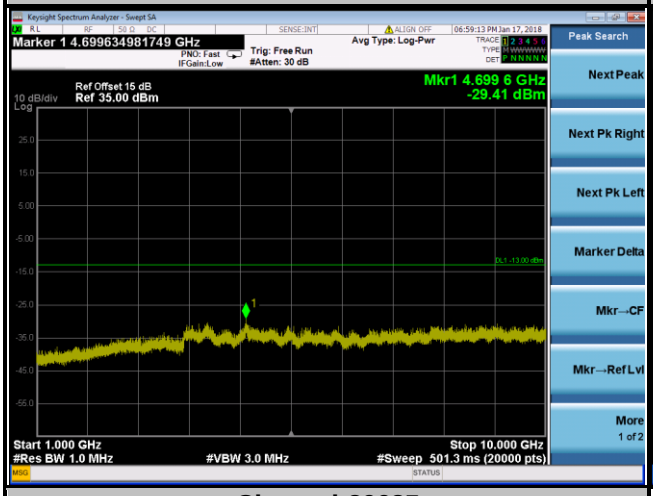
Channel 20525

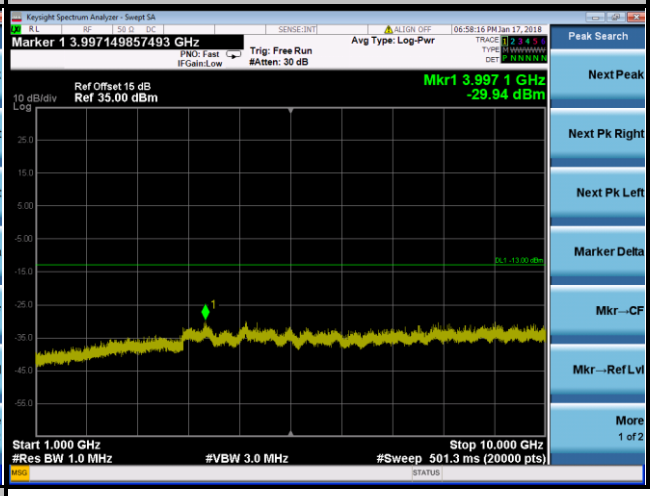


Channel 20635

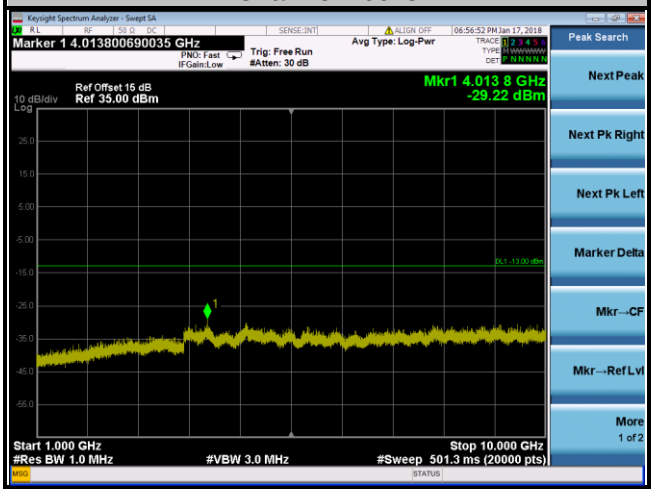


LTE Band 5	
Channel Bandwidth: 5 MHz	
Channel 20425	Channel 20525





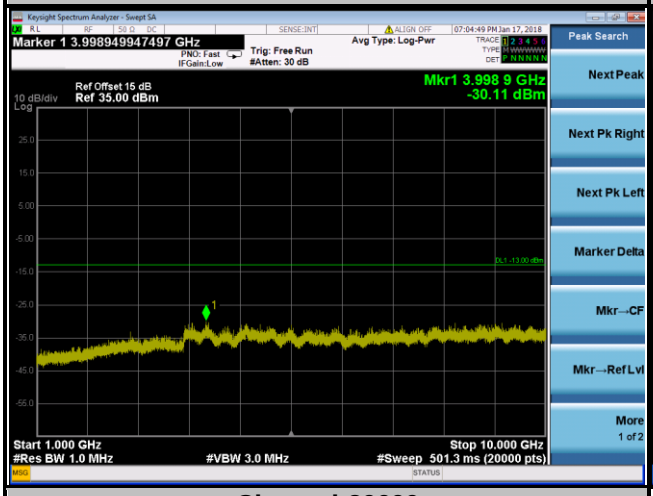
Channel 20625



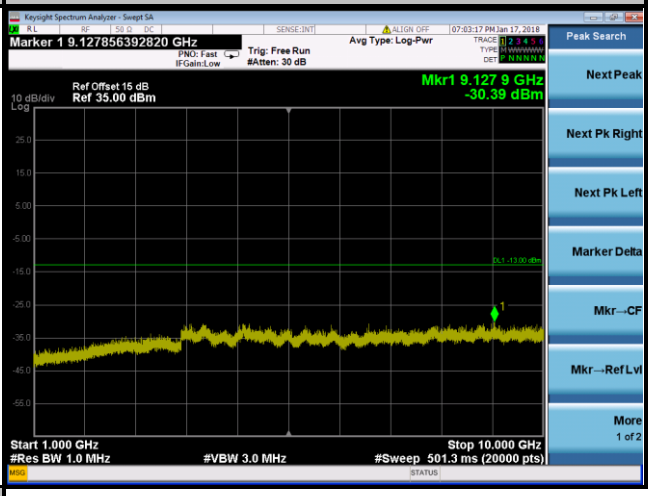
LTE Band 5

Channel Bandwidth: 10 MHz

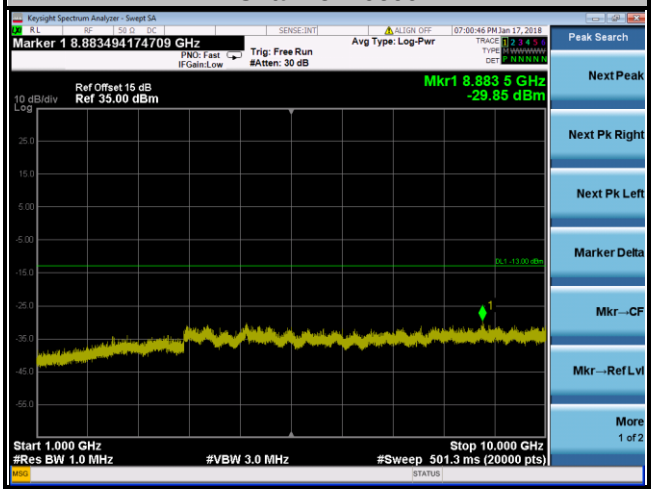
Channel 20450



Channel 20525



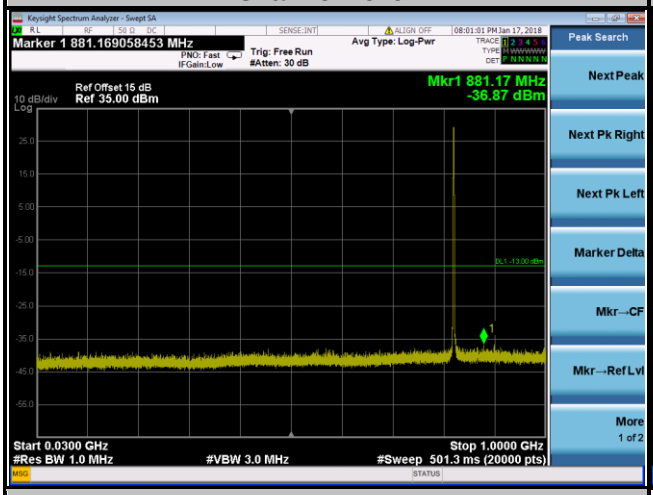
Channel 20600

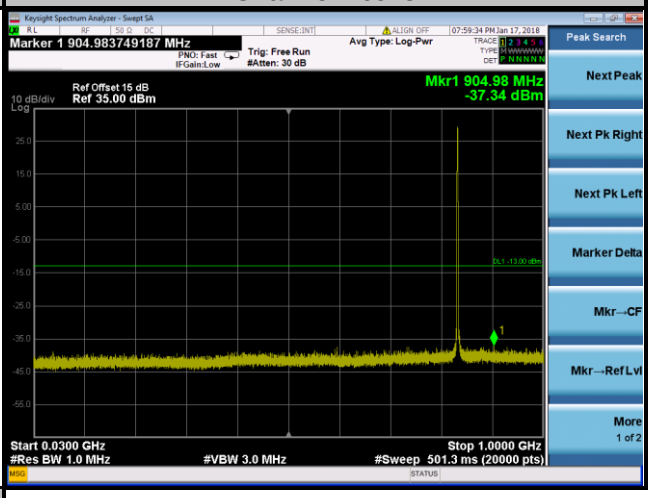
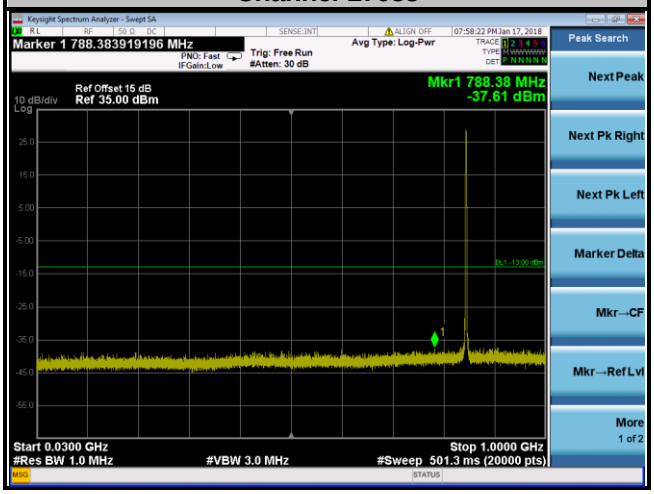


LTE Band 26

30MHz ~ 1GHz

LTE Band 26	
Channel Bandwidth: 1.4 MHz	
Channel 26797	Channel 26915





Channel 27033