3.4.3 TEST PROCEDURES

a. All measurements were done at low and high operational frequency range.

b. The center frequency of spectrum is the band edge frequency and span is 1.5 MHz. RBW of the spectrum is 10kHz and VBW of the spectrum is 30kHz (GSM/GPRS/ EDGE).

c. The center frequency of spectrum is the band edge frequency and span is 10MHz. RBW of the spectrum is 100kHz and VBW of the spectrum is 300kHz (WCDMA).

d. The center frequency of spectrum is the band edge frequency and span is 1~5 MHz. RBW of the spectrum is 20kHz and VBW of the spectrum is 100 kHz. (LTE bandwidth 1.4MHz)

e. The center frequency of spectrum is the band edge frequency and span is 1~5 MHz. RBW of the spectrum is 30kHz and VBW of the spectrum is 100kHz. (LTE bandwidth 3MHz)

f. The center frequency of spectrum is the band edge frequency and span is 1~5 MHz. RBW of the spectrum is 50kHz and VBW of the spectrum is 200kHz. (LTE bandwidth 5MHz)

g. The center frequency of spectrum is the band edge frequency and span is 1~5 MHz. RBW of the spectrum is 100kHz and VBW of the spectrum is 300kHz. (LTE bandwidth 10MHz)

h. The center frequency of spectrum is the band edge frequency and span is 1~5 MHz. RBW of the spectrum is 200kHz and VBW of the spectrum is 1MHz. (LTE bandwidth 15MHz)

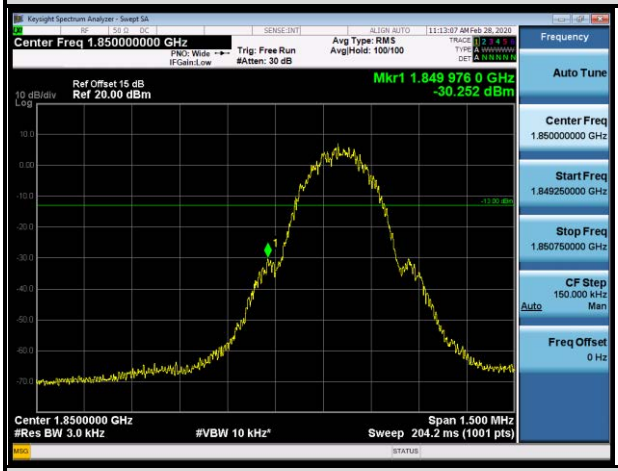
i. he center frequency of spectrum is the band edge frequency and span is 1~5 MHz. RBW of the spectrum is 200kHz and VBW of the spectrum is 1MHz. (LTE bandwidth 20MHz)

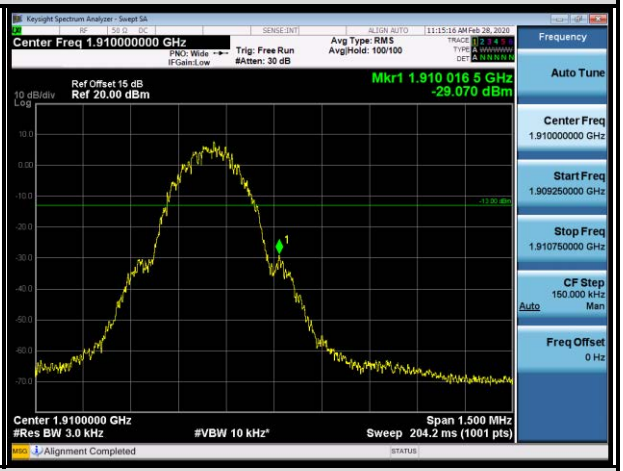
j. Record the max trace plot into the test report.

3.4.4. TEST RESULTS

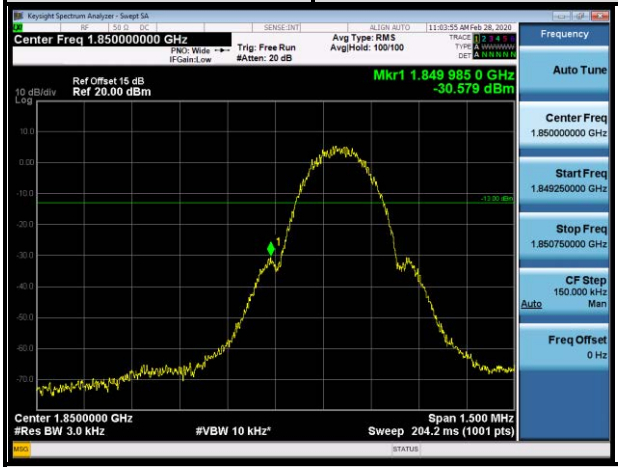
GSM			
CHANNEL	512	CHANNEL	810

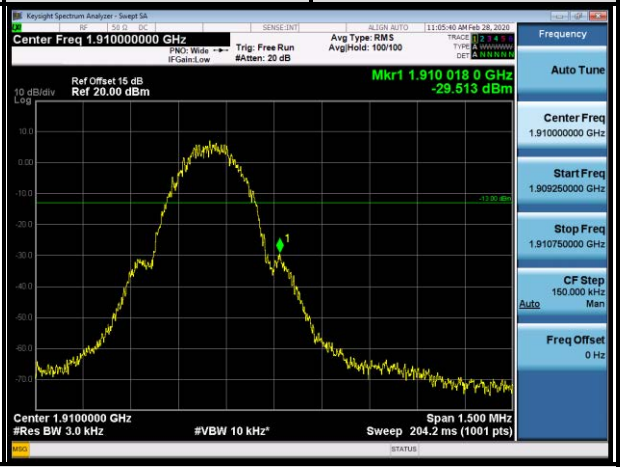
GSM





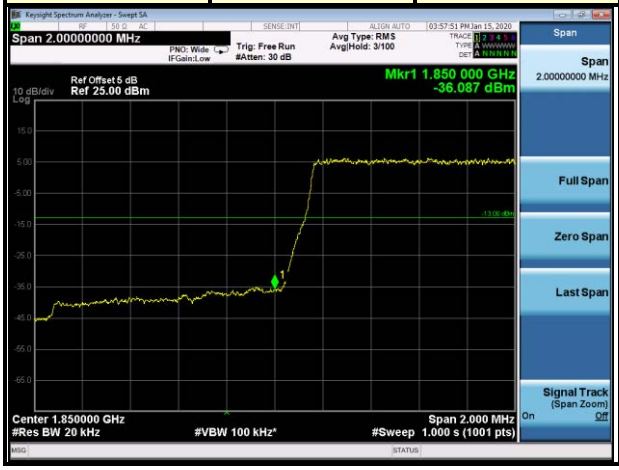
EDGE			
CHANNEL	512	CHANNEL	810





WCDMA			
CHANNEL	9262	CHANNEL	9538

LTE BAND 2

Channel Bandwidth: 1.4MHz QPSK					
CHANNEL	18607	1 RB	CHANNEL	19193	1 RB
CHANNEL	18607	Full RB	CHANNEL	19193	Full RB
					

Channel Bandwidth: 1.4MHz 16QAM

CHANNEL	18607	1 RB	CHANNEL	19193	1 RB

CHANNEL	18607	Full RB	CHANNEL	19193	Full RB

Channel Bandwidth: 1.4MHz 64QAM

CHANNEL	18607	1 RB	CHANNEL	19193	1 RB

CHANNEL	18607	Full RB	CHANNEL	19193	Full RB

LTE BAND 2

Channel Bandwidth: 3MHz QPSK

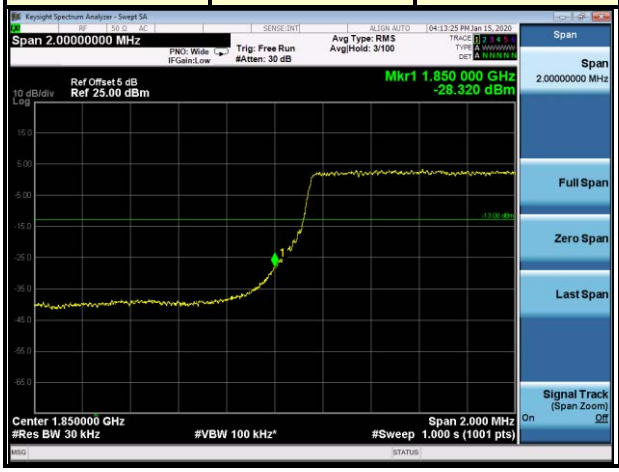
CHANNEL	18615	1 RB	CHANNEL	19185	1 RB

CHANNEL	18615	Full RB	CHANNEL	19185	Full RB

Channel Bandwidth: 3MHz 16QAM

CHANNEL	18615	1 RB	CHANNEL	19185	1 RB

CHANNEL	18615	Full RB	CHANNEL	19185	Full RB



Channel Bandwidth: 3MHz 64QAM

CHANNEL	18615	1 RB	CHANNEL	19185	1 RB

CHANNEL	18615	Full RB	CHANNEL	19185	Full RB

LTE BAND 2

Channel Bandwidth: 5MHz QPSK

CHANNEL	18625	1 RB	CHANNEL	19175	1 RB

CHANNEL	18625	Full RB	CHANNEL	19175	Full RB

Channel Bandwidth: 5MHz 16QAM

CHANNEL	18625	1 RB	CHANNEL	19175	1 RB

CHANNEL	18625	Full RB	CHANNEL	19175	Full RB

Channel Bandwidth: 5MHz 64QAM

CHANNEL	18625	1 RB	CHANNEL	19175	1 RB

CHANNEL	18625	Full RB	CHANNEL	19175	Full RB

LTE BAND 2

Channel Bandwidth: 10MHz QPSK

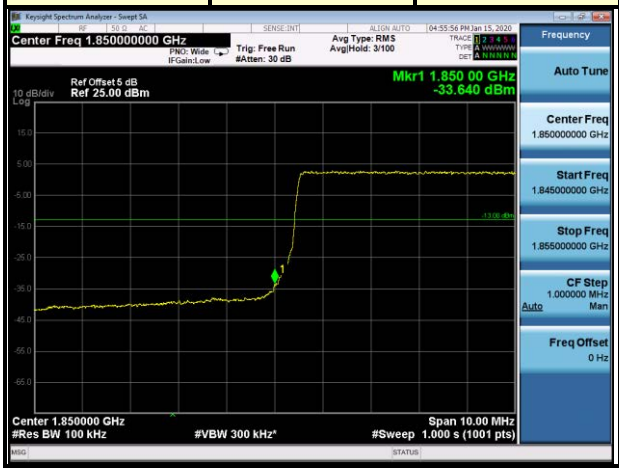
CHANNEL	18650	1 RB	CHANNEL	19150	1 RB

CHANNEL	18650	Full RB	CHANNEL	19150	Full RB

Channel Bandwidth: 10MHz 16QAM

CHANNEL	18650	1 RB	CHANNEL	19150	1 RB

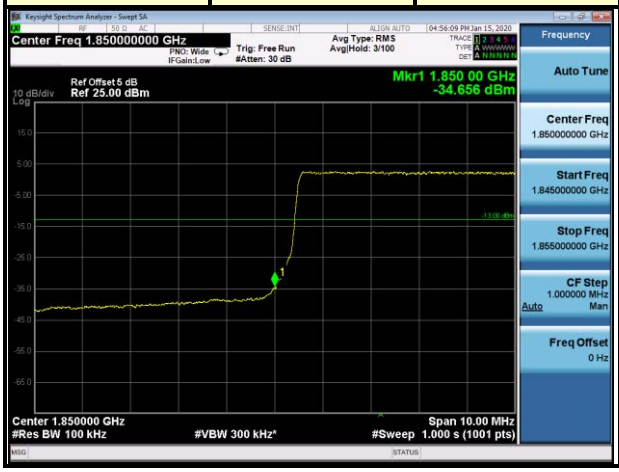
CHANNEL	18650	Full RB	CHANNEL	19150	Full RB



Channel Bandwidth: 10MHz 64QAM

CHANNEL	18650	1 RB	CHANNEL	19150	1 RB

CHANNEL	18650	Full RB	CHANNEL	19150	Full RB



LTE BAND 2

Channel Bandwidth: 15MHz QPSK

CHANNEL	18675	1 RB	CHANNEL	19125	1 RB

CHANNEL	18675	Full RB	CHANNEL	19125	Full RB

Channel Bandwidth: 15MHz 16QAM

CHANNEL	18675	1 RB	CHANNEL	19125	1 RB

CHANNEL	18675	Full RB	CHANNEL	19125	Full RB

Channel Bandwidth: 15MHz 64QAM

CHANNEL	18675	1 RB	CHANNEL	19125	1 RB

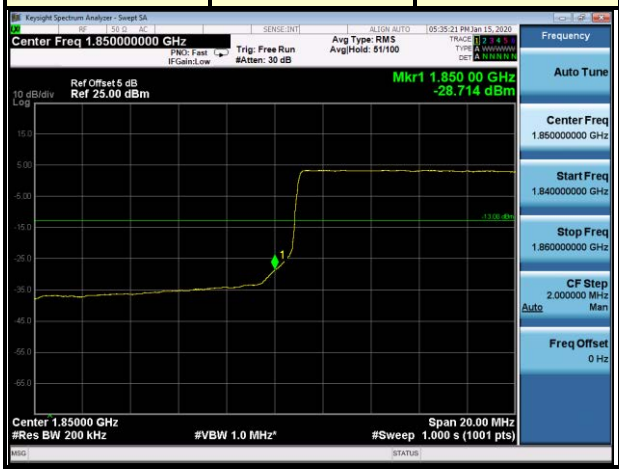
CHANNEL	18675	Full RB	CHANNEL	19125	Full RB

LTE BAND 2

Channel Bandwidth: 20MHz QPSK

CHANNEL	18700	1 RB	CHANNEL	19100	1 RB

CHANNEL	18700	Full RB	CHANNEL	19100	Full RB



Channel Bandwidth: 20MHz 16QAM

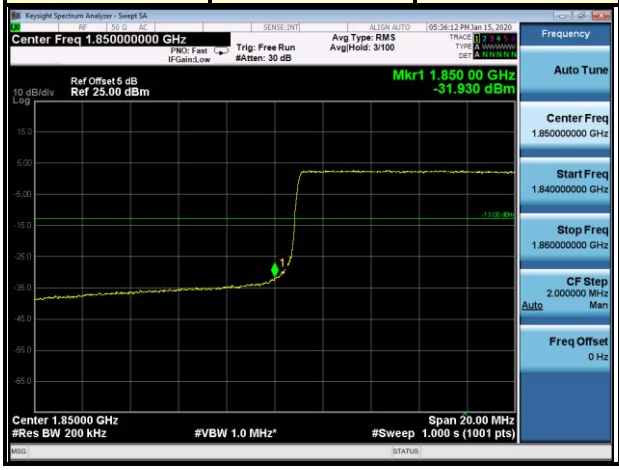
CHANNEL	18700	1 RB	CHANNEL	19100	1 RB

CHANNEL	18700	Full RB	CHANNEL	19100	Full RB

Channel Bandwidth: 20MHz 64QAM

CHANNEL	18700	1 RB	CHANNEL	19100	1 RB

CHANNEL	18700	Full RB	CHANNEL	19100	Full RB



3.5 CONDUCTED SPURIOUS EMISSIONS

3.5.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

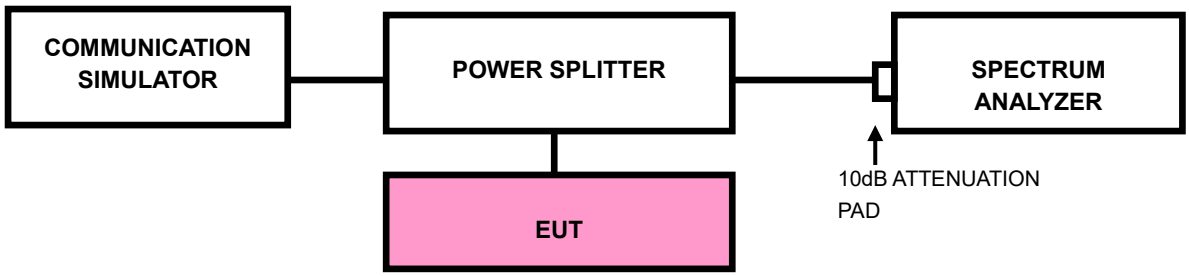
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. The emission limit equal to –13dBm.

3.5.2 TEST PROCEDURE

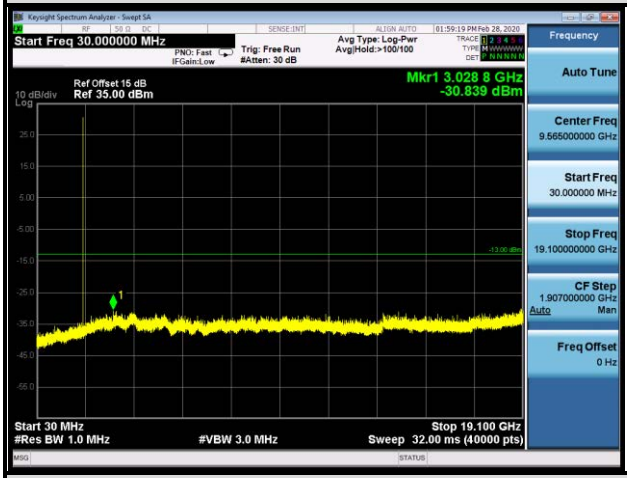
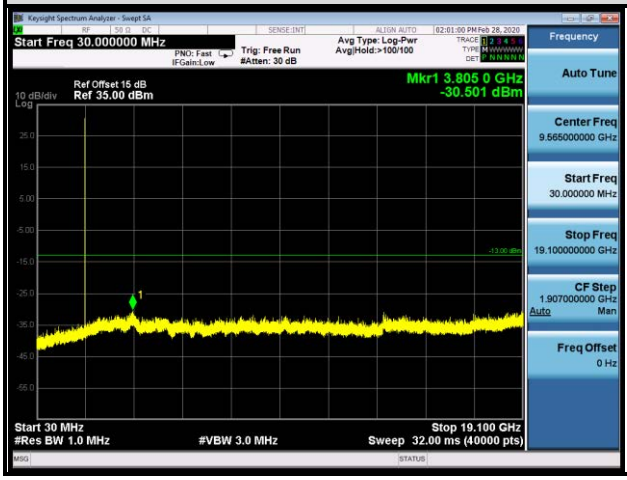
a. The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.

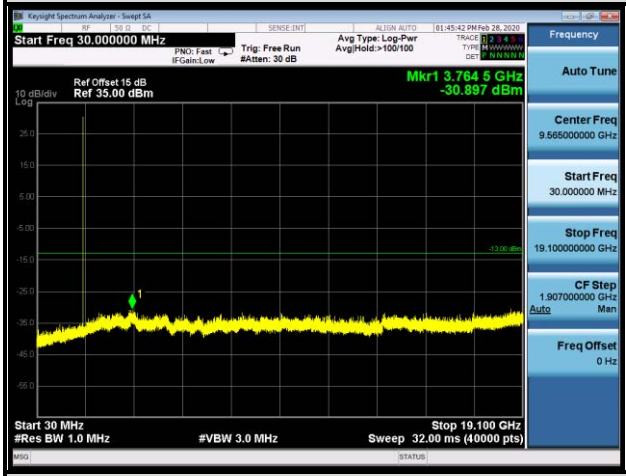
b. Measuring frequency range is from 30 MHz to 19.1GHz. 10dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz is used for conducted emission measurement.

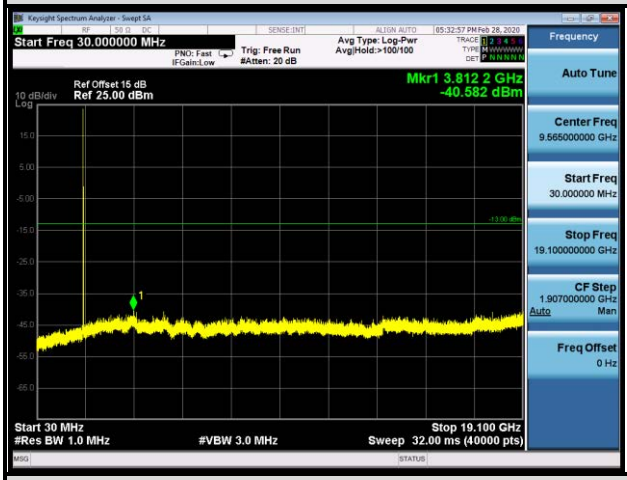
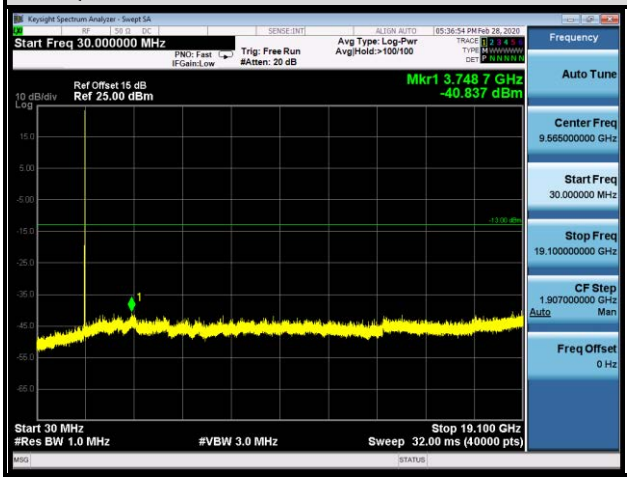
3.5.3 TEST SETUP



3.5.4 TEST RESULTS

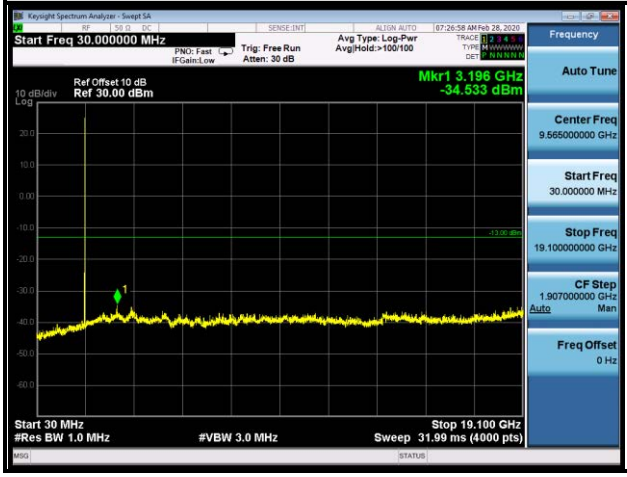
GSM	
CHANNEL 512	CHANNEL 661
FREQUENCY RANGE : 30MHz~19.1GHz	FREQUENCY RANGE : 30MHz~19.1GHz
	
CHANNEL 810	
FREQUENCY RANGE : 30MHz~19.1GHz	
	

EDGE	
CHANNEL 512	CHANNEL 661
FREQUENCY RANGE : 30MHz~19.1GHz	FREQUENCY RANGE : 30MHz~19.1GHz
	
CHANNEL 810	
FREQUENCY RANGE : 30MHz~19.1GHz	

WCDMA	
CHANNEL 9262	CHANNEL 9400
FREQUENCY RANGE : 30MHz~19.1GHz	FREQUENCY RANGE : 30MHz~19.1GHz
	
CHANNEL 9538	
FREQUENCY RANGE : 30MHz~19.1GHz	
	

LTE BAND 2

1.4MHz / QPSK

CHANNEL 18607	CHANNEL 18900
FREQUENCY RANGE : 30MHz~19.1GHz	FREQUENCY RANGE : 30MHz~19.1GHz
CHANNEL 19193	
FREQUENCY RANGE : 30MHz~19.1GHz	
	

3MHz / QPSK

CHANNEL 18615

FREQUENCY RANGE : 30MHz~19.1GHz

CHANNEL 18900

FREQUENCY RANGE : 30MHz~19.1GHz

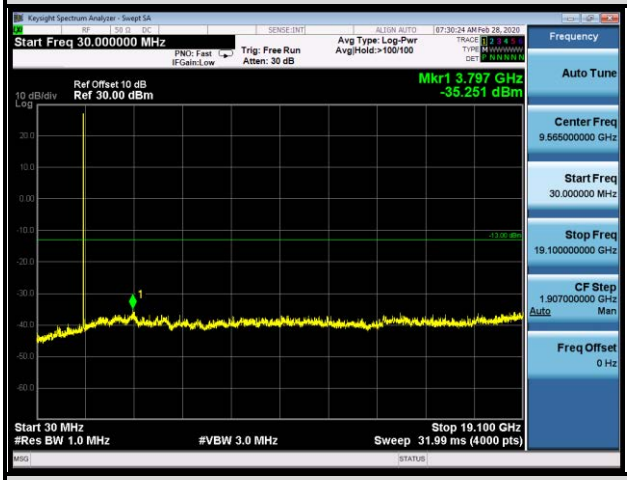
CHANNEL 19185

FREQUENCY RANGE : 30MHz~19.1GHz

5MHz / QPSK

CHANNEL 18625

FREQUENCY RANGE : 30MHz~19.1GHz



CHANNEL 18900

FREQUENCY RANGE : 30MHz~19.1GHz

CHANNEL 19175

FREQUENCY RANGE : 30MHz~19.1GHz

10MHz / QPSK

CHANNEL 18650

FREQUENCY RANGE : 30MHz~19.1GHz

CHANNEL 18900

FREQUENCY RANGE : 30MHz~19.1GHz

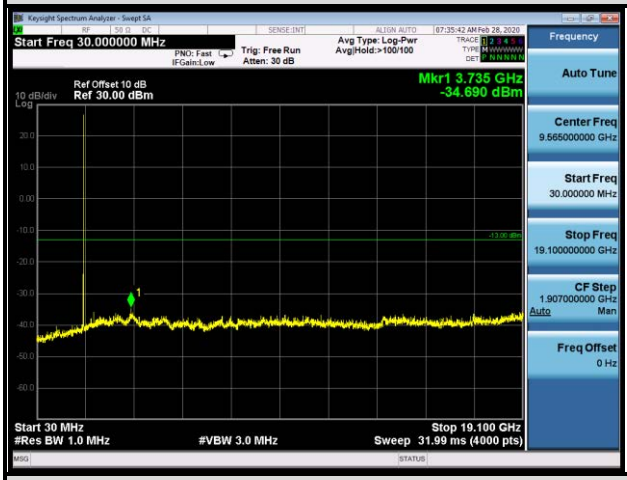
CHANNEL 19150

FREQUENCY RANGE : 30MHz~19.1GHz

15MHz / QPSK

CHANNEL 18675

FREQUENCY RANGE : 30MHz~19.1GHz



CHANNEL 18900

FREQUENCY RANGE : 30MHz~19.1GHz

CHANNEL 19125

FREQUENCY RANGE : 30MHz~19.1GHz

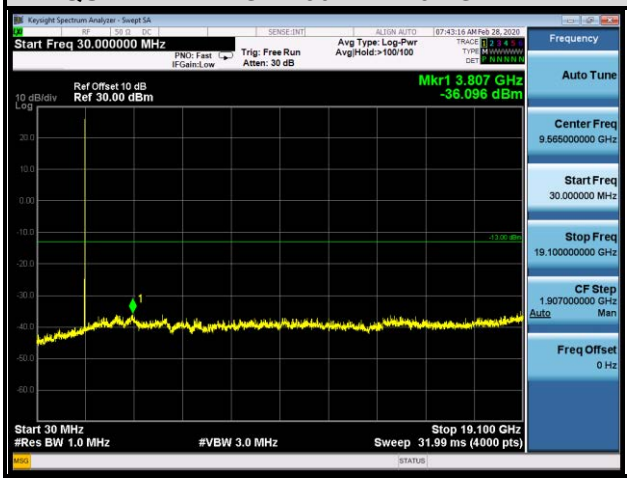
20MHz / QPSK

CHANNEL 18700

FREQUENCY RANGE : 30MHz~19.1GHz

CHANNEL 18900

FREQUENCY RANGE : 30MHz~19.1GHz

CHANNEL 19100

FREQUENCY RANGE : 30MHz~19.1GHz