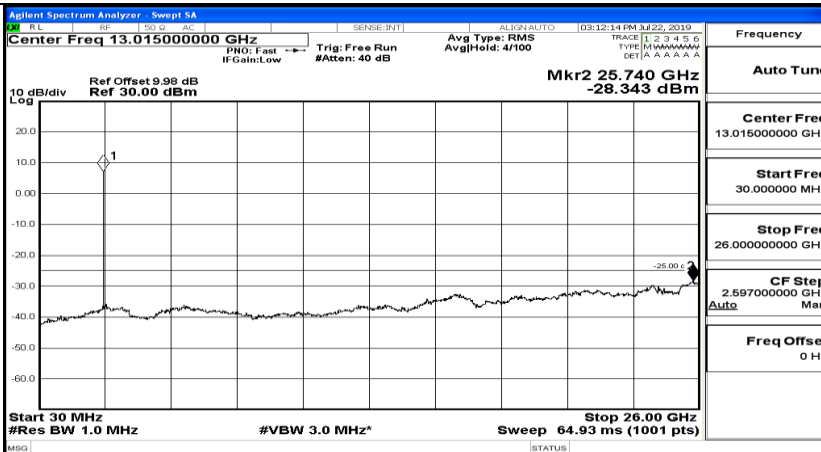
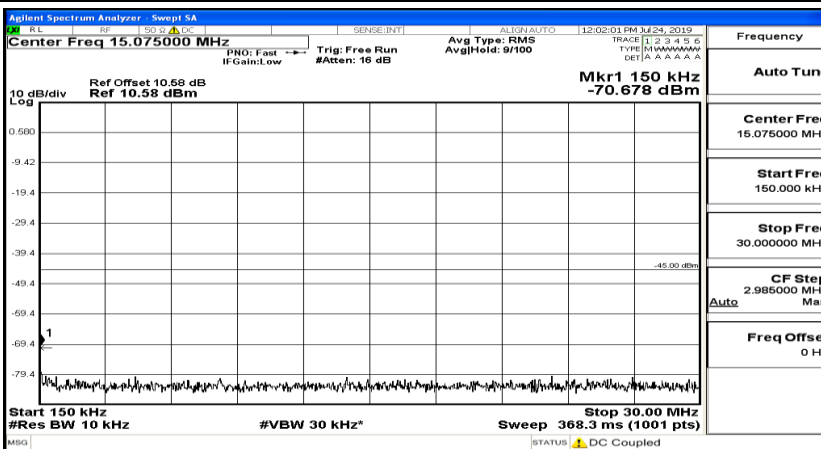
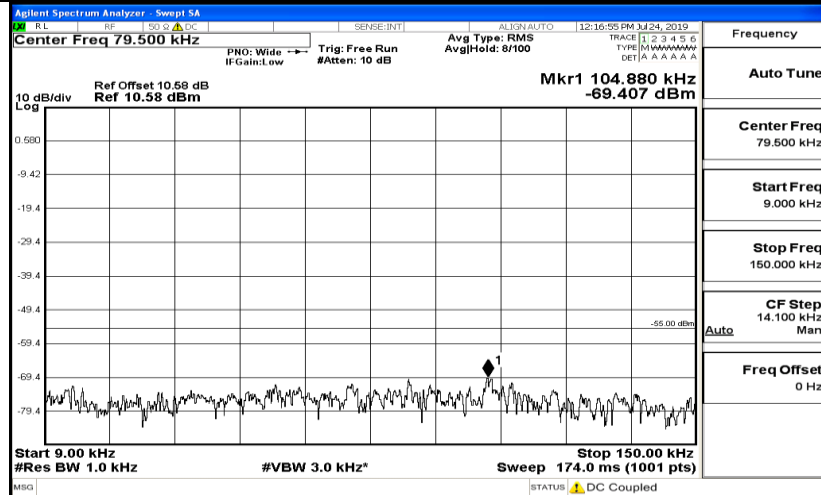
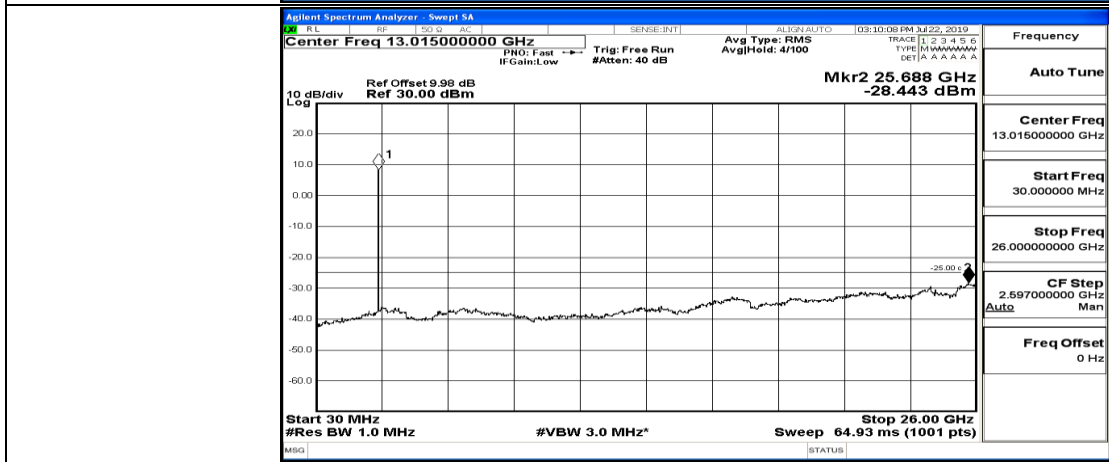
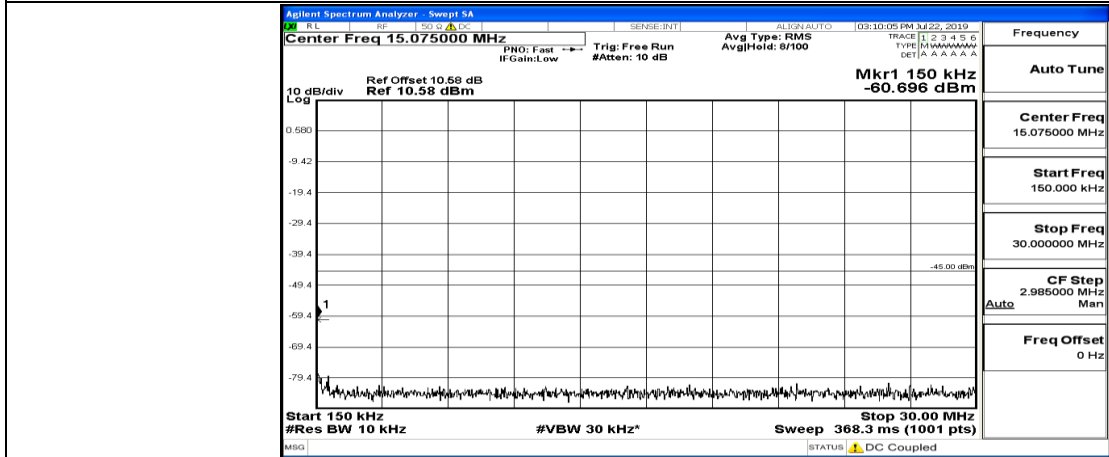
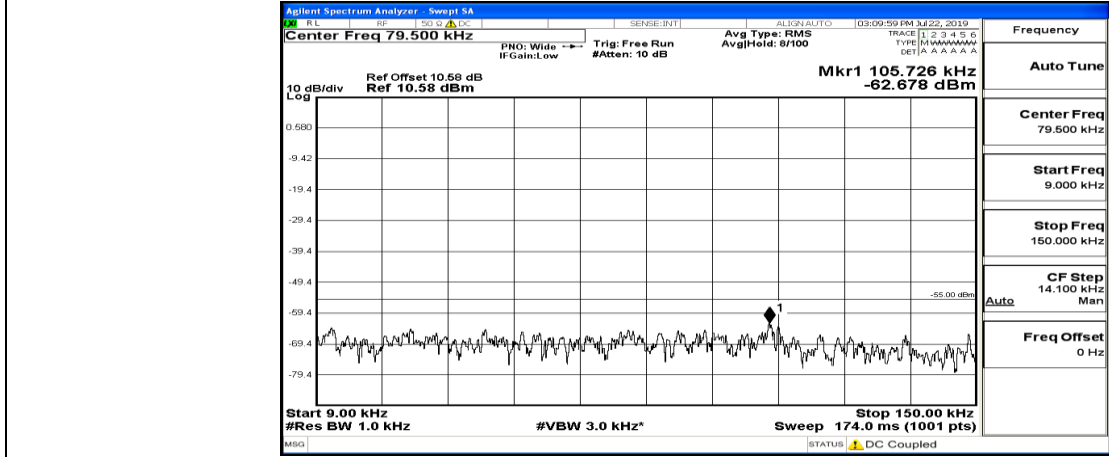


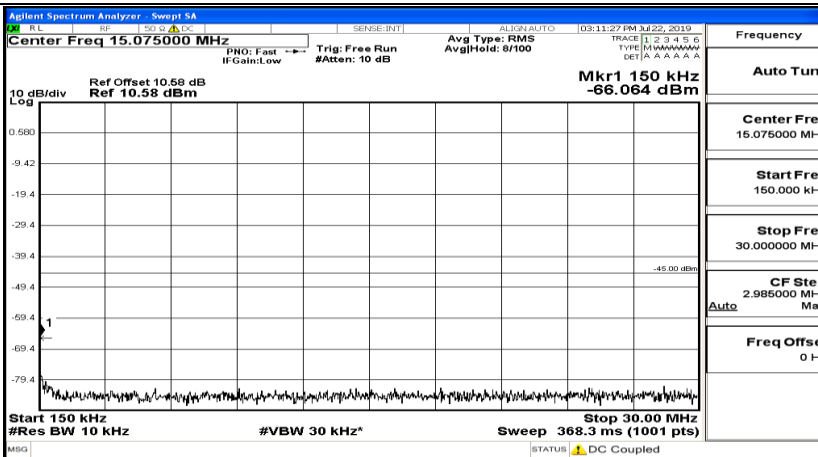
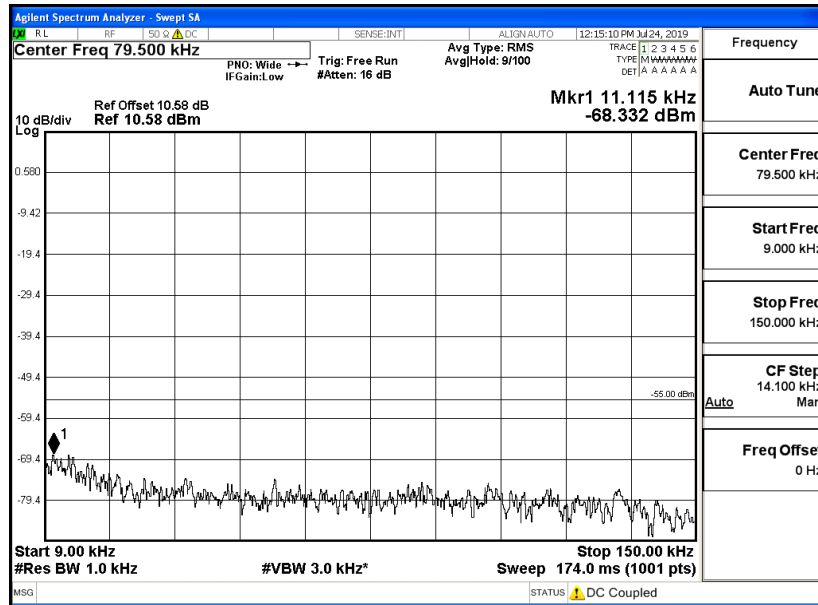
## CSE Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_QPSK



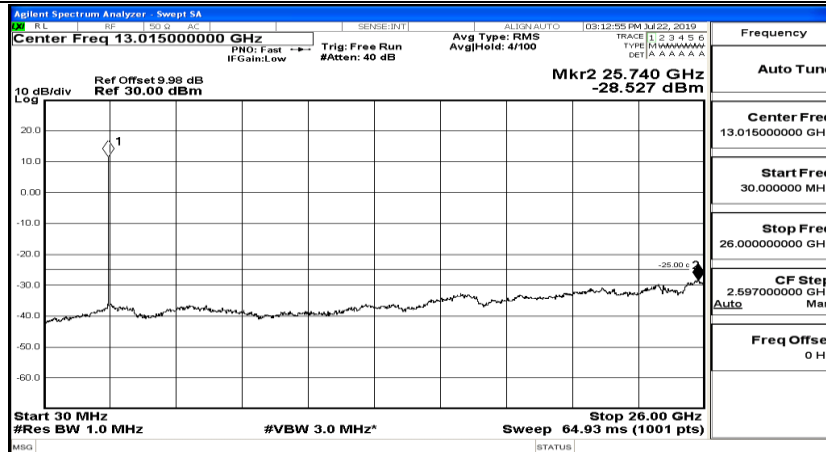
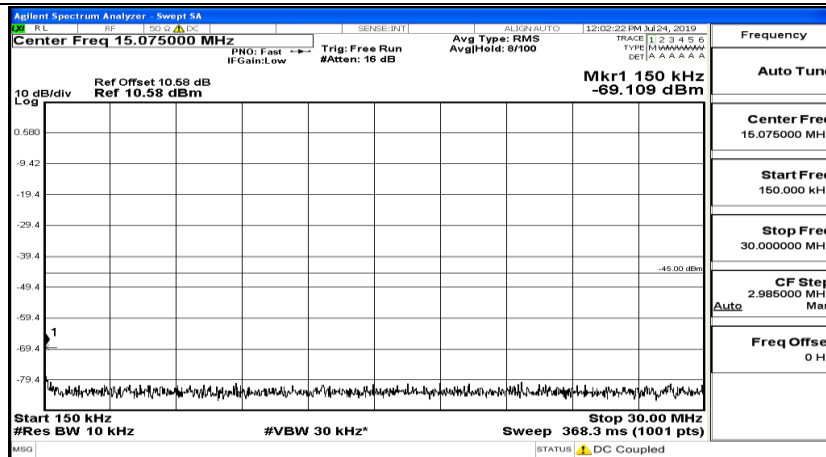
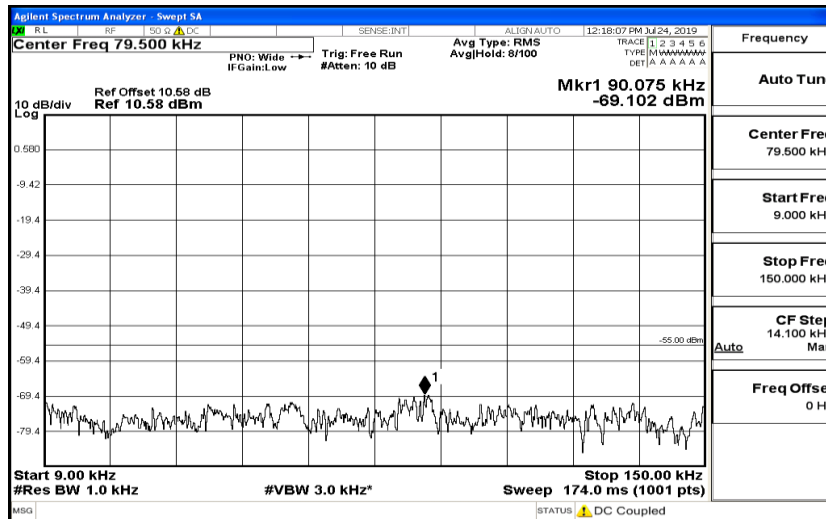
|                                                        |
|--------------------------------------------------------|
| CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM |
|--------------------------------------------------------|



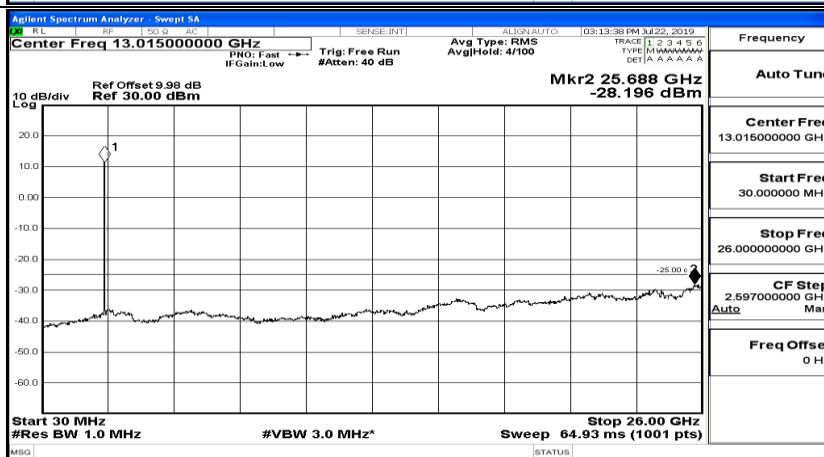
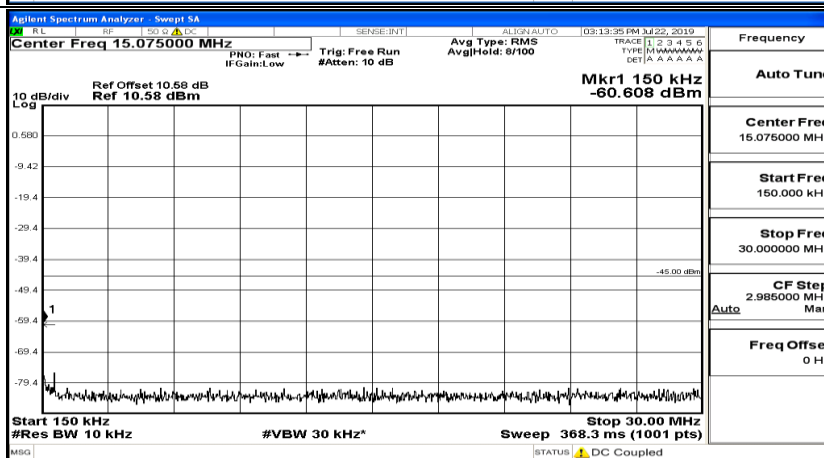
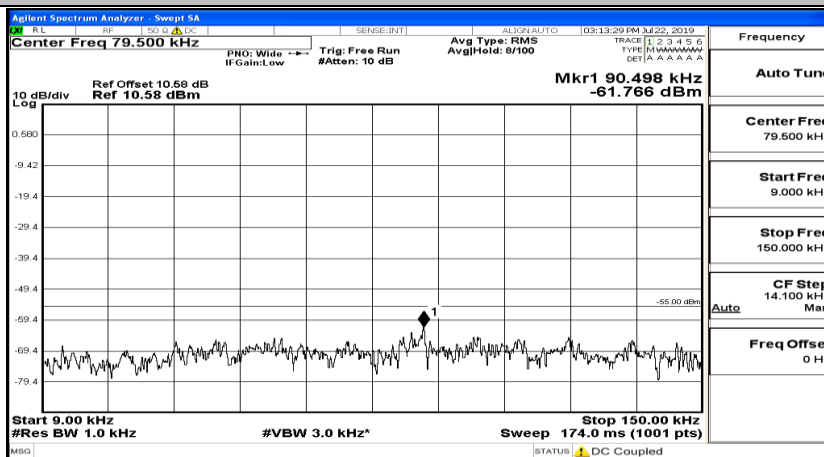
## CSE Test Graph(s) (Channel Bandwidth: 5 MHz)\_MCH\_16QAM



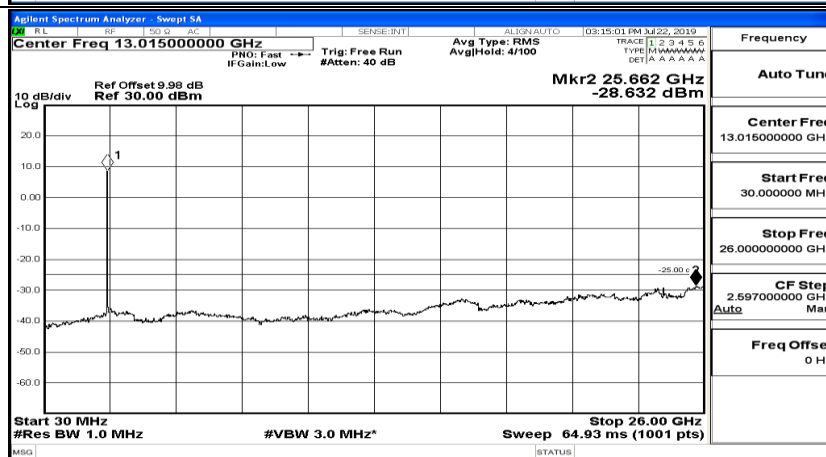
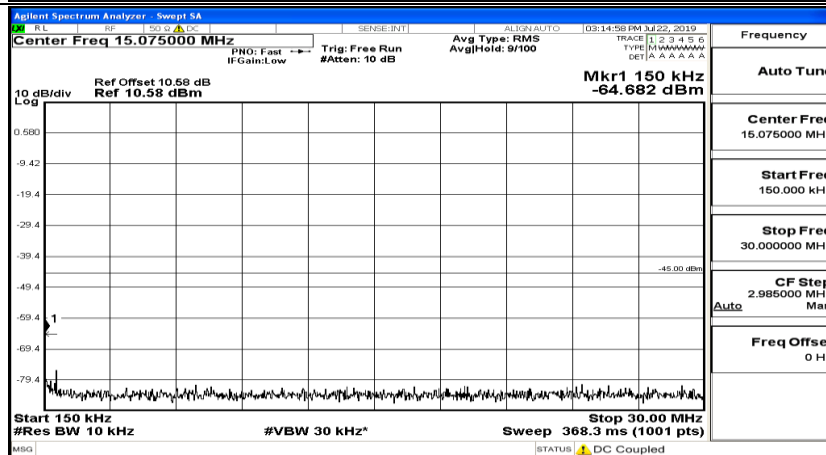
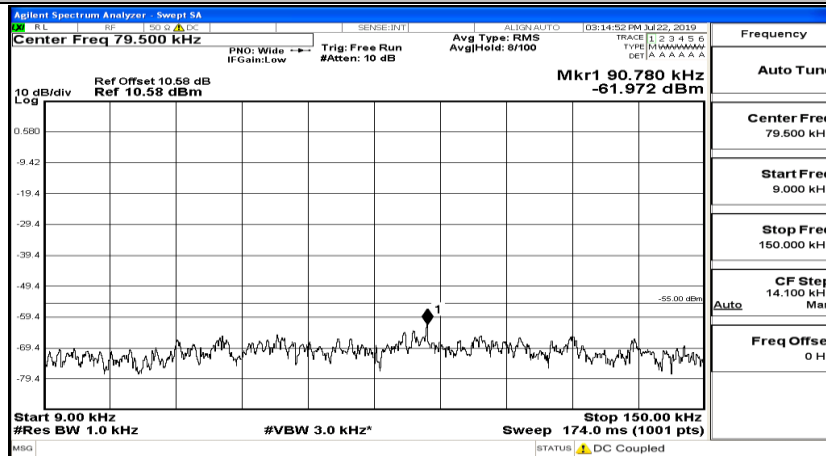
## CSE Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_16QAM



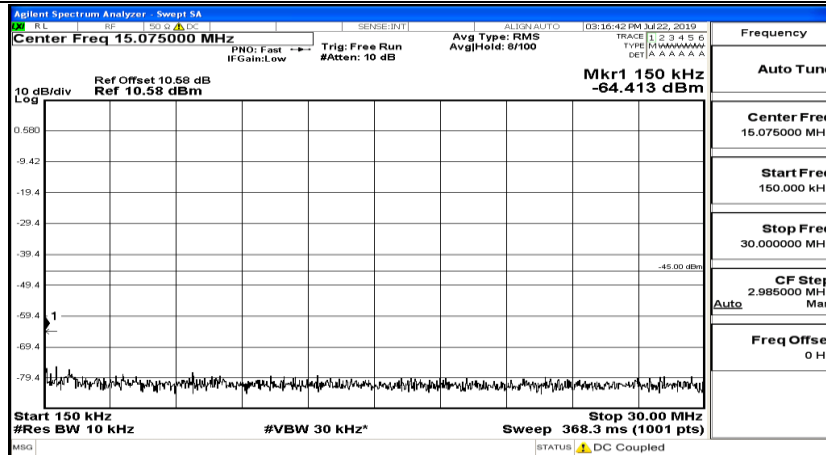
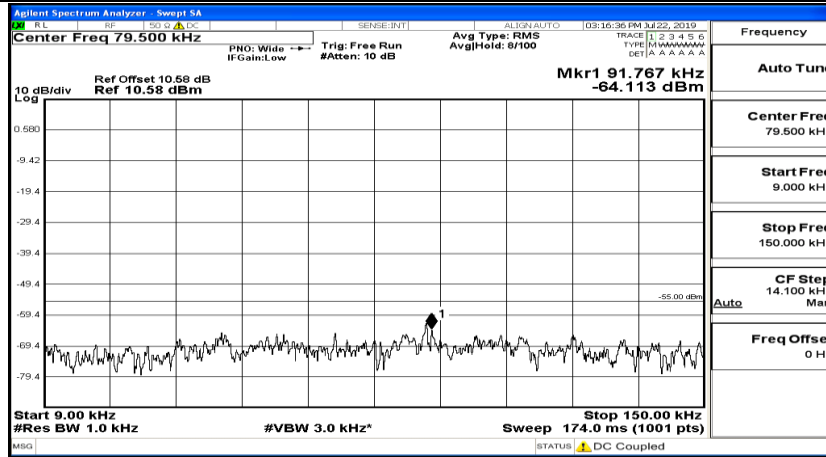
## CSE Test Graph(s) (Channel Bandwidth: 10 MHz)\_LCH\_QPSK



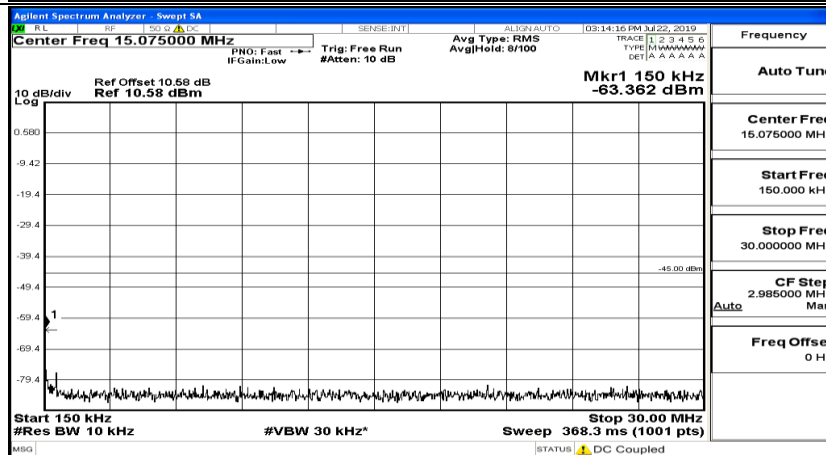
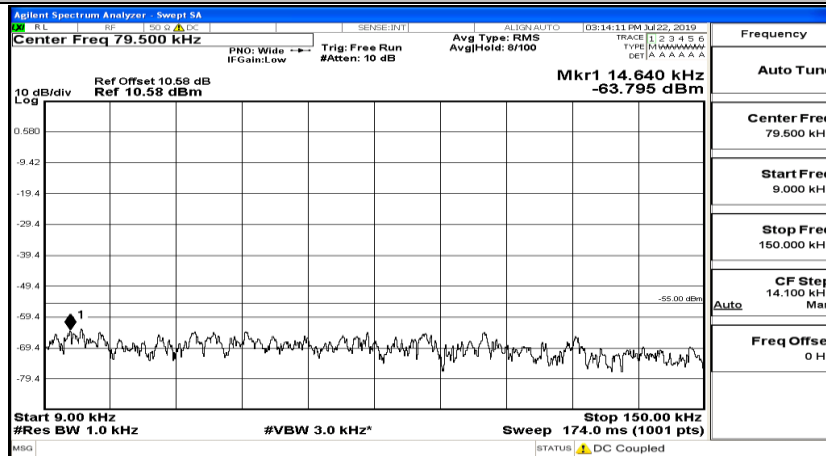
## CSE Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_QPSK



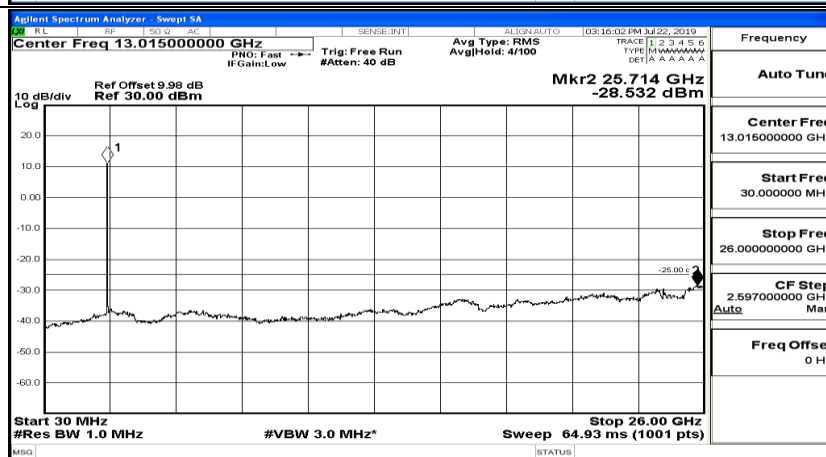
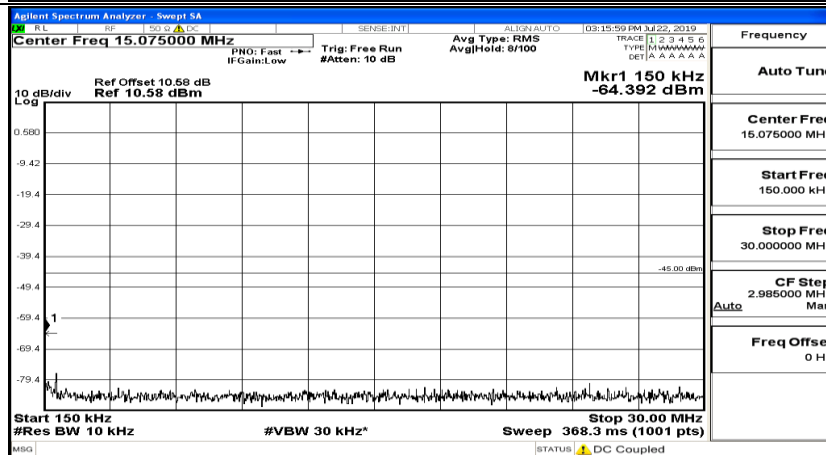
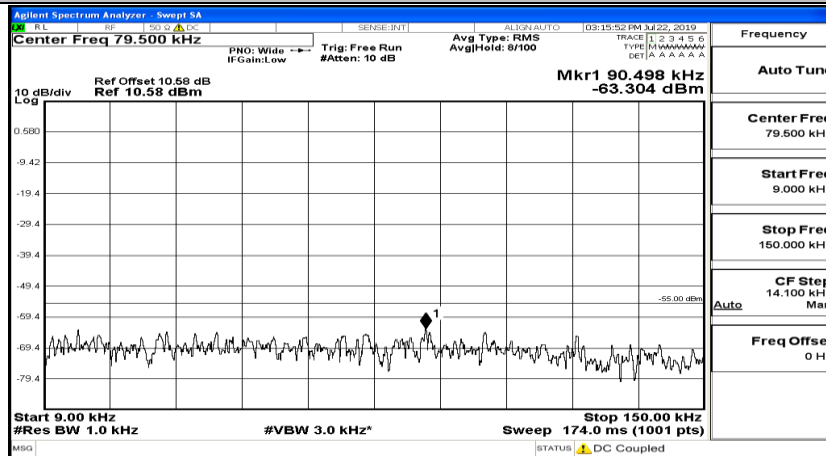
## CSE Test Graph(s) (Channel Bandwidth: 10 MHz)\_HCH\_QPSK



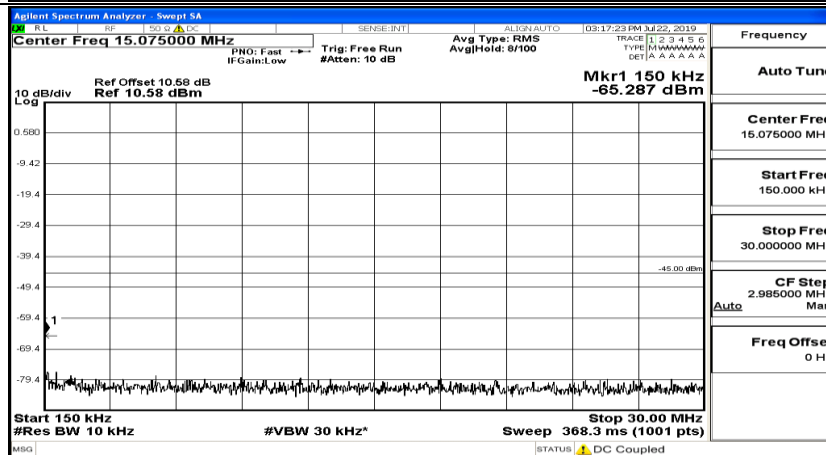
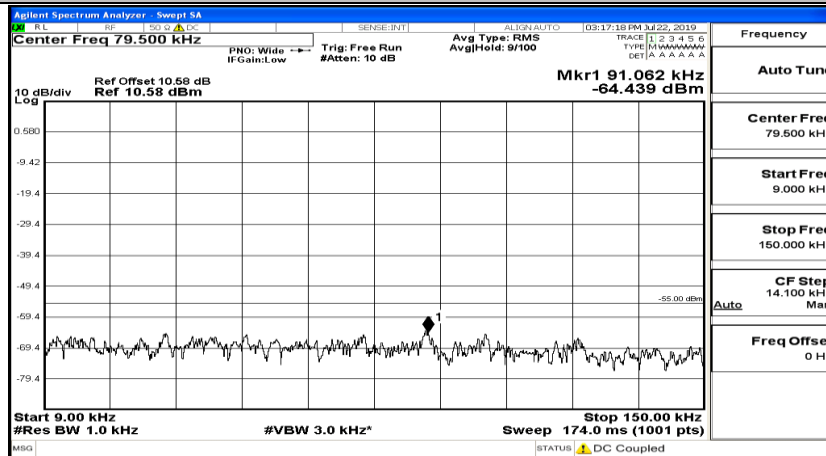
## CSE Test Graph(s) (Channel Bandwidth: 10 MHz)\_LCH\_16QAM



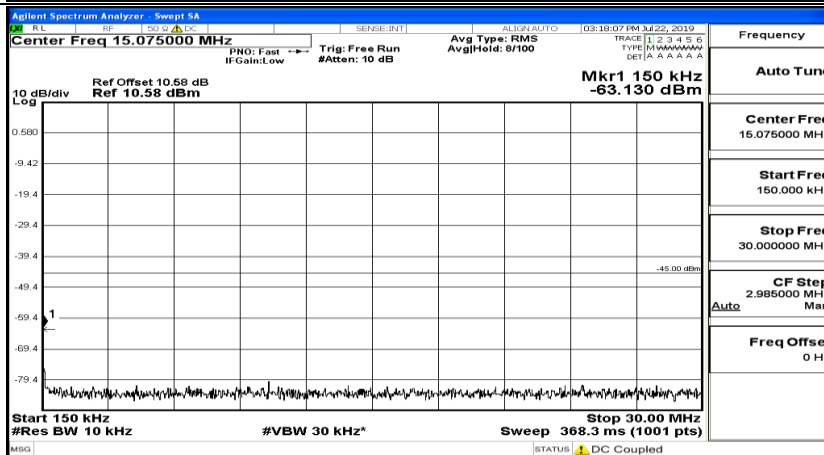
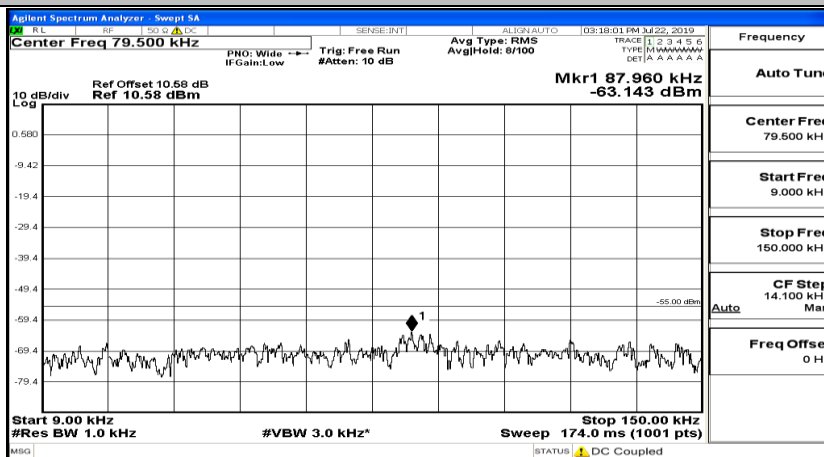
## CSE Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_16QAM



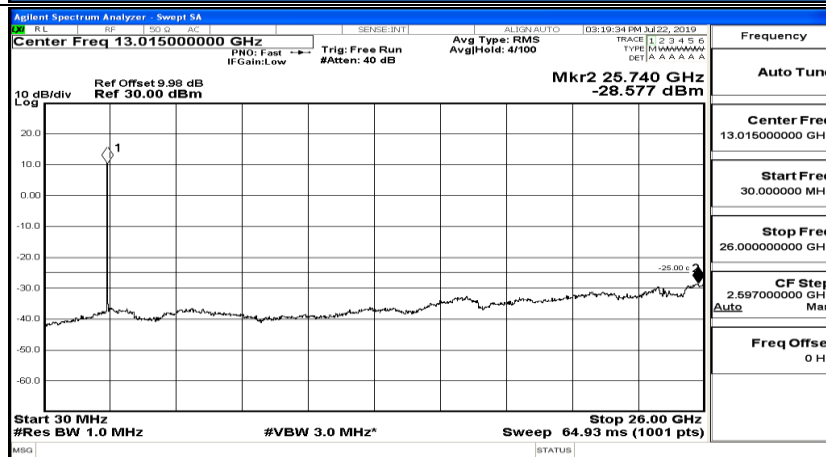
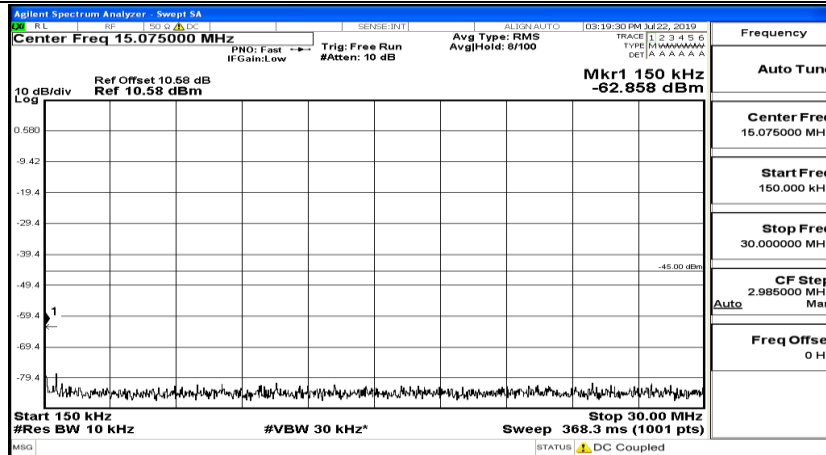
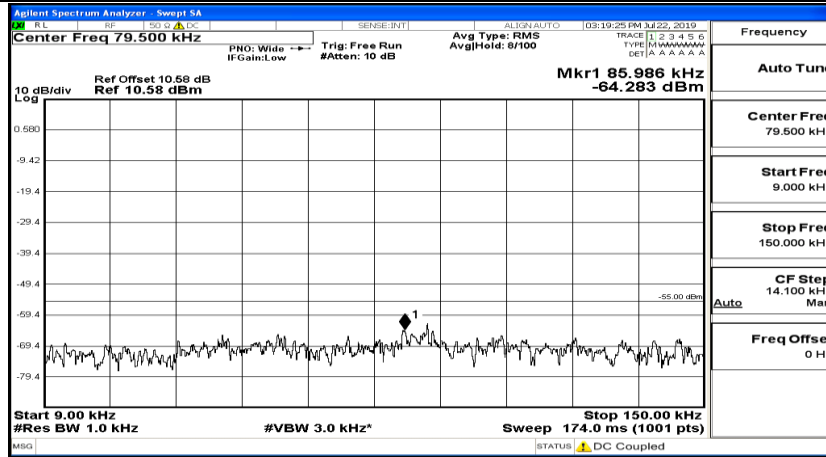
## CSE Test Graph(s) (Channel Bandwidth: 10 MHz)\_HCH\_16QAM



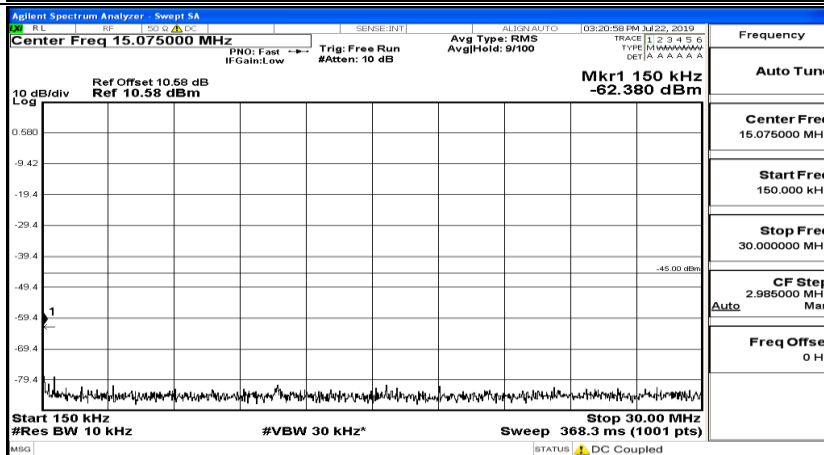
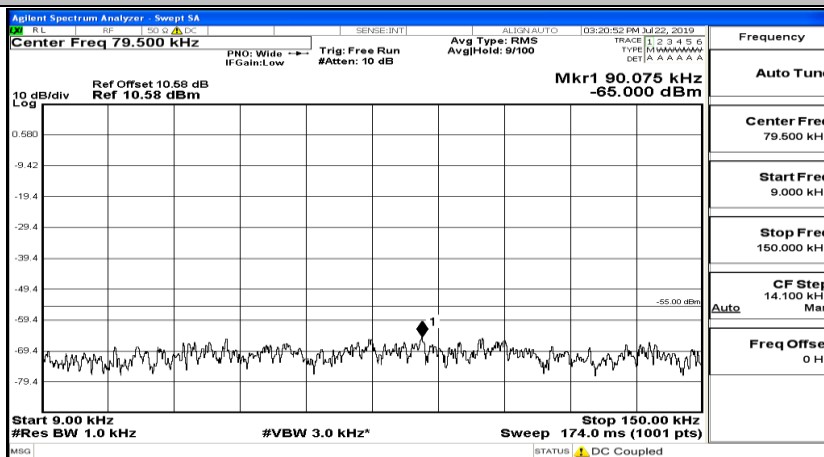
## CSE Test Graph(s) (Channel Bandwidth:15 MHz)\_LCH\_QPSK



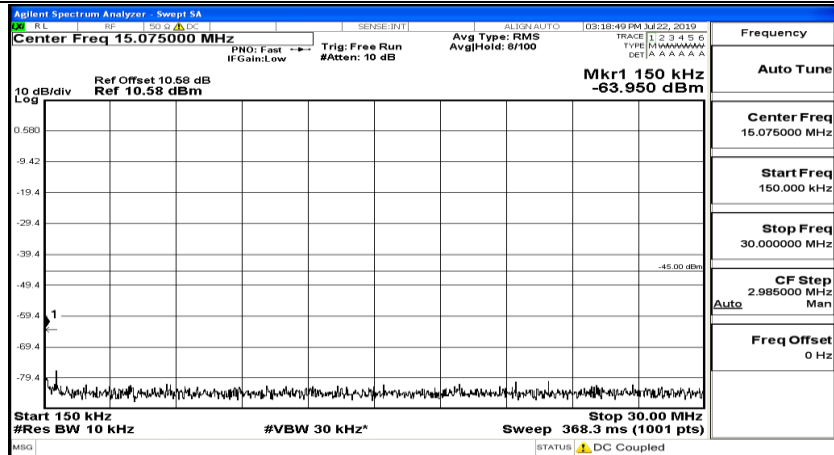
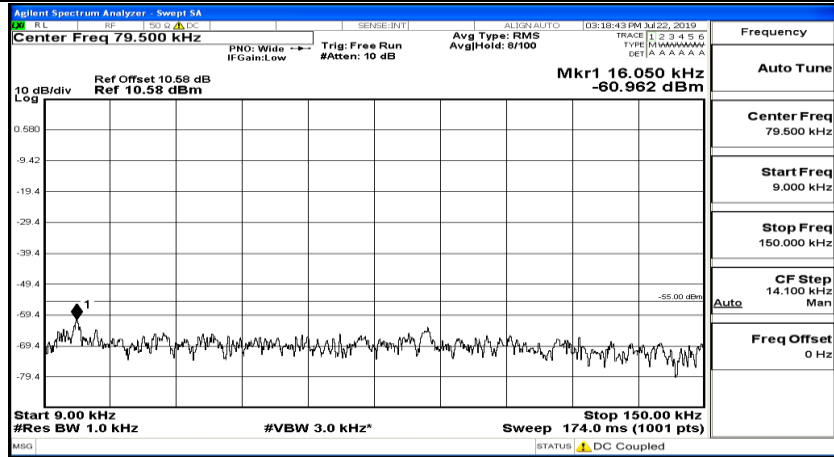
## CSE Test Graph(s) (Channel Bandwidth:15 MHz)\_MCH\_QPSK



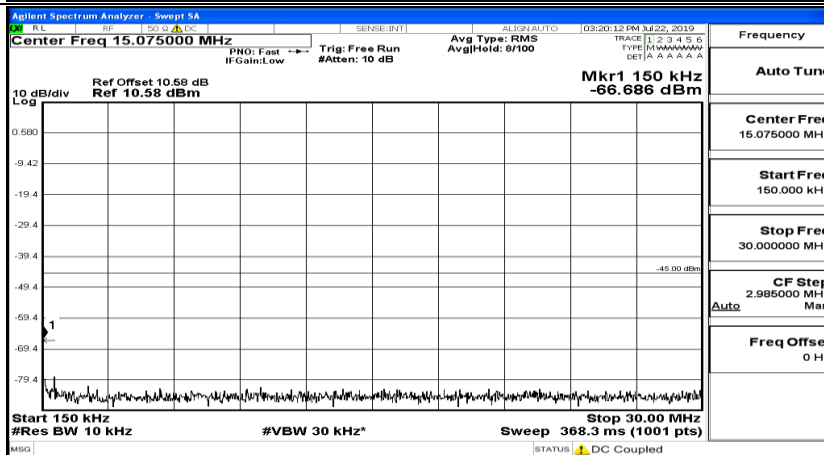
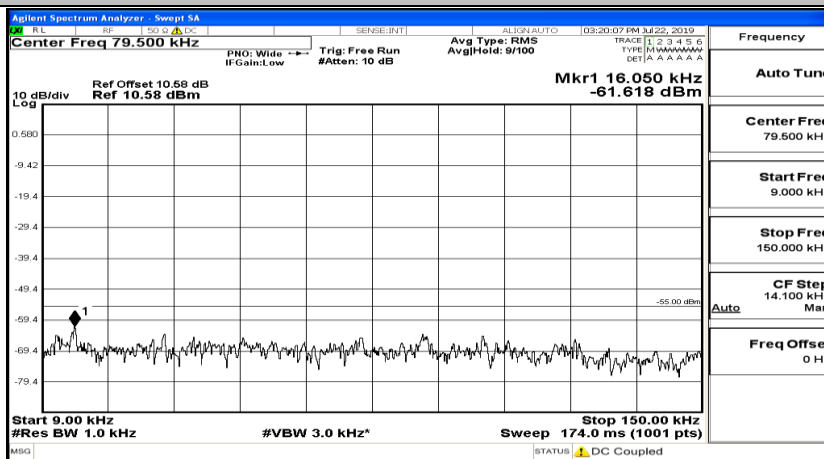
## CSE Test Graph(s) (Channel Bandwidth:15 MHz)\_HCH\_QPSK



## CSE Test Graph(s) (Channel Bandwidth:15 MHz)\_LCH\_16QAM



## CSE Test Graph(s) (Channel Bandwidth:15 MHz)\_MCH\_16QAM



CSE Test Graph(s) (Channel Bandwidth:15 MHz)\_HCH\_16QAM

Apigent Spectrum Analyzer - Sweep SA

Center Freq 79.500 kHz

Ref Offset 10.58 dB  
Ref 10.58 dBm

Mkr1 80.910 kHz  
-64.566 dBm

Start 9.00 kHz  
#Res BW 1.0 kHz  
#VBW 3.0 kHz\*

Sweep 174.0 ms (1001 pts)

Frequency

Auto Tune

Center Freq 79.500 kHz

Start Freq 9.000 kHz

Stop Freq 150.000 kHz

CF Step 14.100 kHz  
Man

Freq Offset 0 Hz

10 dB/div  
Log

0.580  
-9.42  
-19.4  
-29.4  
-39.4  
-49.4  
-59.4  
-69.4  
-79.4

0.580  
-9.42  
-19.4  
-29.4  
-39.4  
-49.4  
-59.4  
-69.4  
-79.4

Start 150 kHz  
#Res BW 10 kHz  
#VBW 30 kHz\*

Sweep 368.3 ms (1001 pts)

Frequency

Auto Tune

Center Freq 15.075000 MHz

Start Freq 150.000 kHz

Stop Freq 30.000000 MHz

CF Step 2.985000 MHz  
Man

Freq Offset 0 Hz

10 dB/div  
Log

0.580  
-9.42  
-19.4  
-29.4  
-39.4  
-49.4  
-59.4  
-69.4  
-79.4

0.580  
-9.42  
-19.4  
-29.4  
-39.4  
-49.4  
-59.4  
-69.4  
-79.4

Start 30 MHz  
#Res BW 1.0 MHz  
#VBW 3.0 MHz\*

Sweep 64.93 ms (1001 pts)

Frequency

Auto Tune

Center Freq 13.015000000 GHz

Start Freq 30.000000 MHz

Stop Freq 26.000000000 GHz

CF Step 2.597000000 GHz  
Man

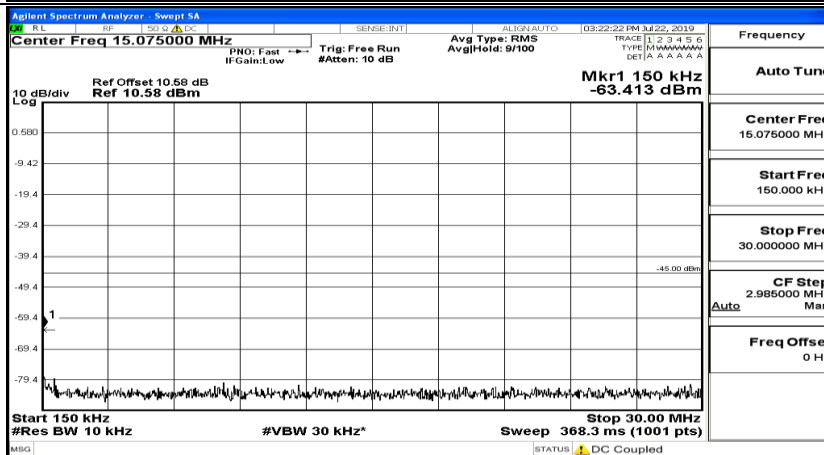
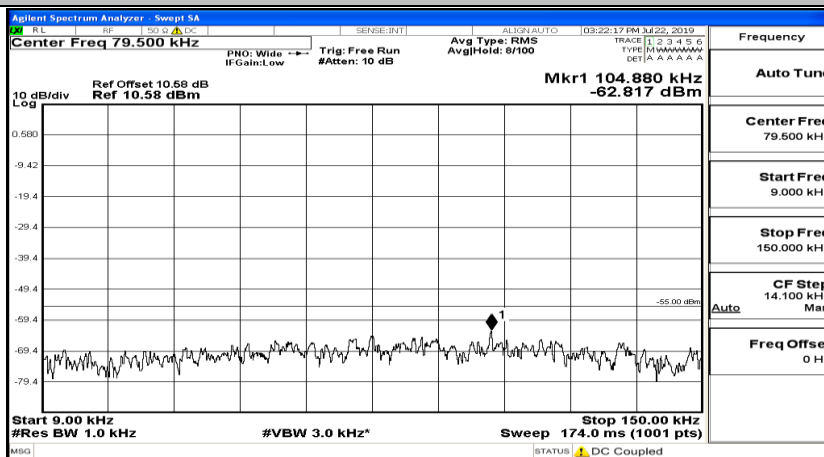
Freq Offset 0 Hz

10 dB/div  
Log

20.0  
10.0  
0.00  
-10.0  
-20.0  
-30.0  
-40.0  
-50.0  
-60.0

20.0  
10.0  
0.00  
-10.0  
-20.0  
-30.0  
-40.0  
-50.0  
-60.0

## CSE Test Graph(s) (Channel Bandwidth:20 MHz)\_LCH\_QPSK



Agilent Spectrum Analyzer - Swnpt SA

RL RP 150 kHz DC SENSE:INT ALGN: AUTO 03:23:38 PM 3/22, 2019

Center Freq 79.500 kHz PNO: Wide -- Trg: Free Run #Atten: 10 dB Avg Type: RMS AvgHold: 9/100

TRACE 1 2 3 4 5 6  
TYPE: IAWAAAAW  
DET: AAAAAA

Ref Offset 10.58 dB  
Ref 10.58 dBm

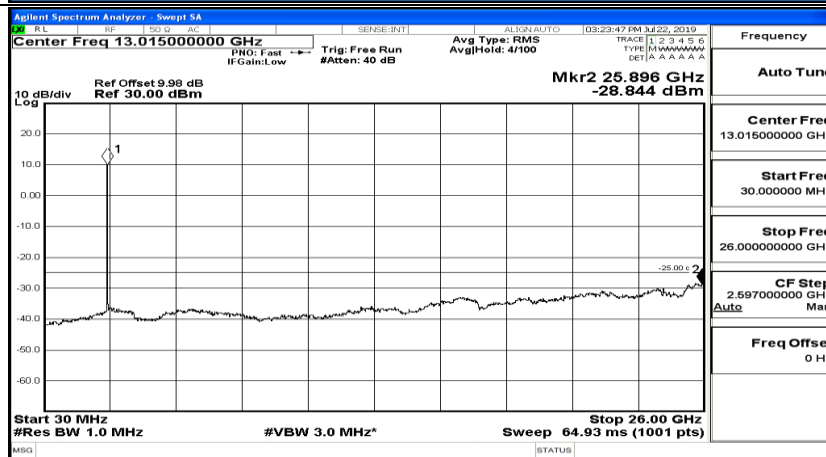
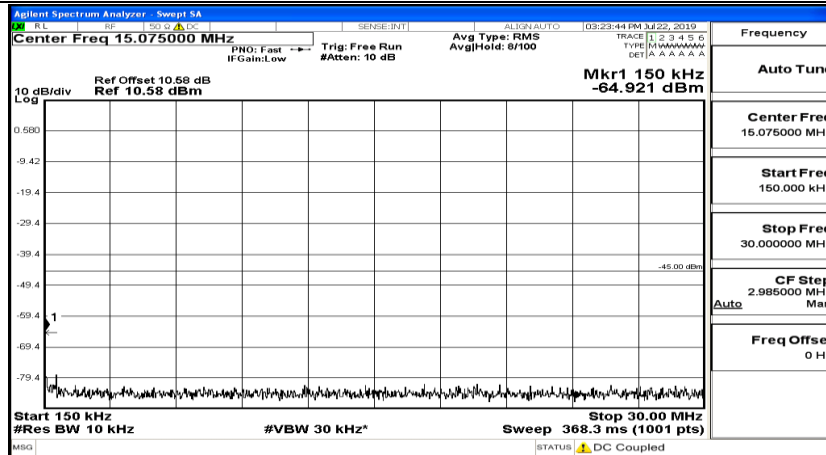
Mkr1 79.359 kHz  
-64.858 dBm

10 dB/div  
Log

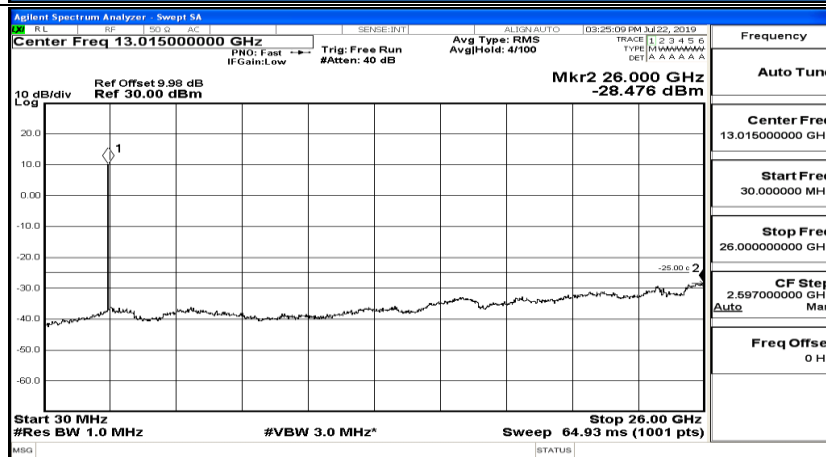
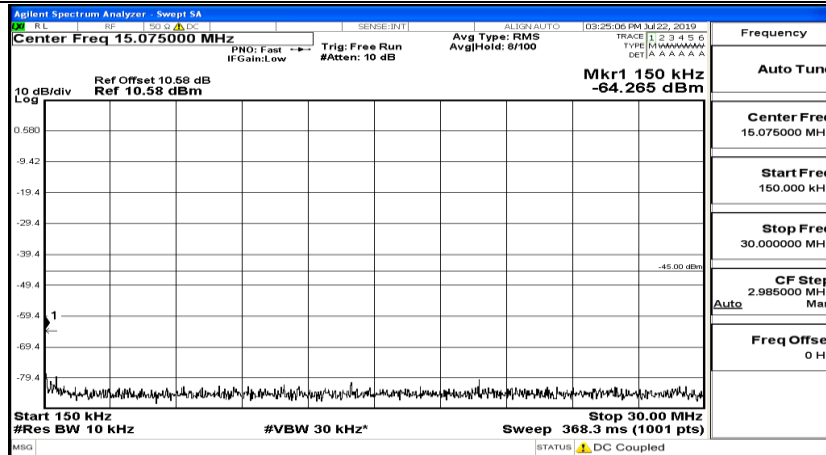
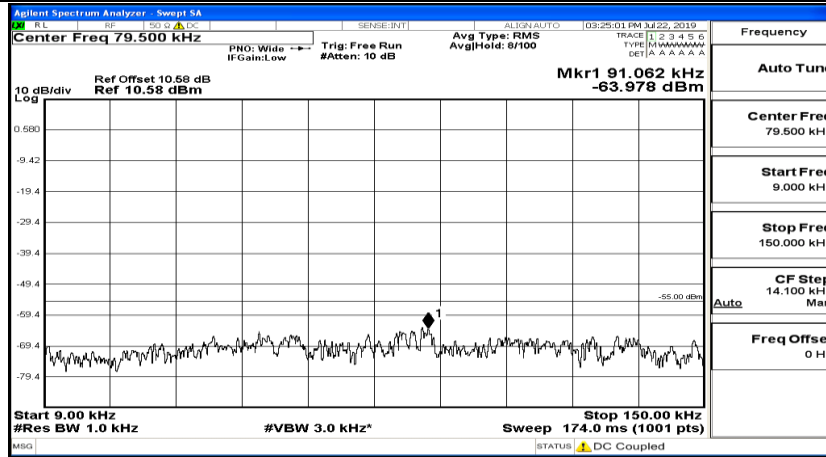
Start 9.00 kHz  
#Res BW 1.0 kHz  
#VBW 3.0 kHz\*

Stop 150.00 kHz  
Sweep 174.0 ms (1001 pts)

MSG STATUS DC Coupled



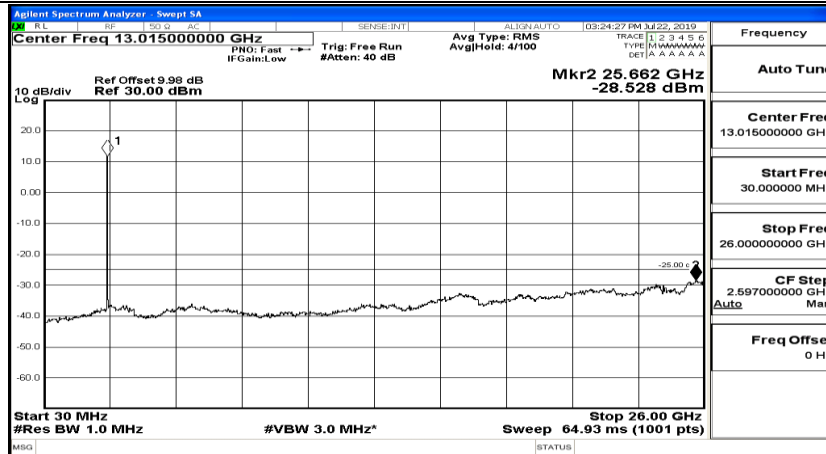
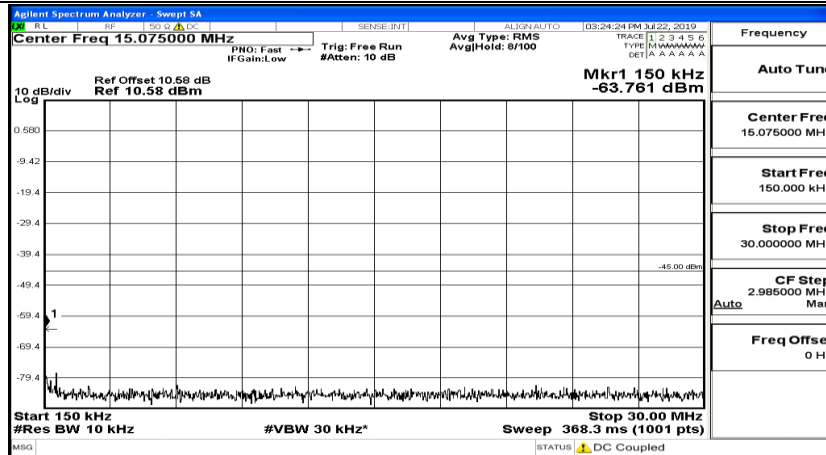
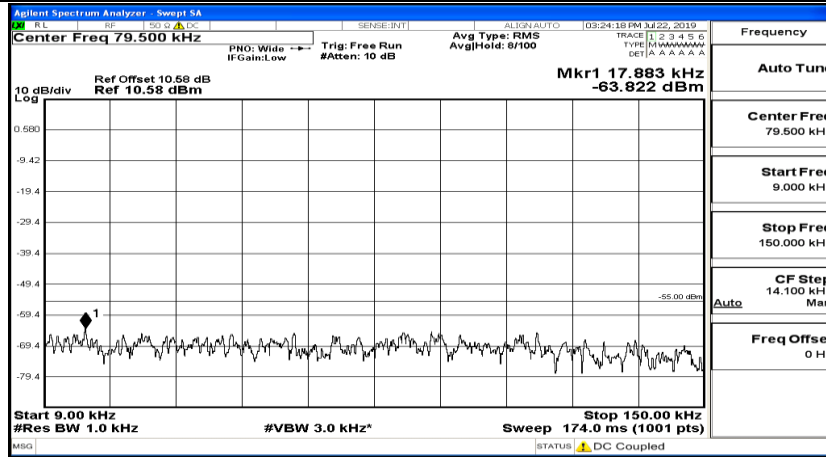
## CSE Test Graph(s) (Channel Bandwidth:20 MHz)\_HCH\_QPSK



**CSE Test Graph(s) (Channel Bandwidth:20 MHz)\_LCH\_16QAM**

| Frequency        | Auto Tune | Center Freq      | Start Freq    | Stop Freq        | CF Step             | Freq Offset |
|------------------|-----------|------------------|---------------|------------------|---------------------|-------------|
| 79.500 kHz       | Auto      | 79.500 kHz       | 9.000 kHz     | 150.000 kHz      | 14.100 kHz Man      | 0 Hz        |
| 15.075000 MHz    | Auto      | 15.075000 MHz    | 150.000 kHz   | 30.000000 MHz    | 2.985000 MHz Man    | 0 Hz        |
| 13.015000000 GHz | Auto      | 13.015000000 GHz | 30.000000 MHz | 26.000000000 GHz | 2.597000000 GHz Man | 0 Hz        |

## CSE Test Graph(s) (Channel Bandwidth:20 MHz)\_MCH\_16QAM



## CSE Test Graph(s) (Channel Bandwidth:20 MHz)\_HCH\_16QAM

