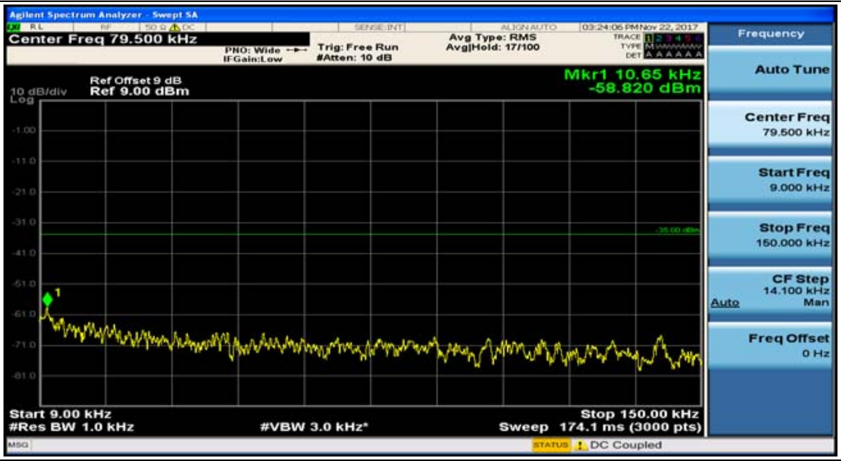


Agilent Spectrum Analyzer - Swept SA

Center Freq 79.500 kHz

PNO: Wide

IFGain:Low

Trig: Free Run

#Atten: 10 dB

Avg Type: RMS

Avg|Hold: 17/100

03:24:06 PM Nov 22, 2017

Ref Offset 9 dB

Ref 9.00 dBm

Mkr1 10.65 kHz

-58.820 dBm

Start 9.00 kHz

#Res BW 1.0 kHz

#VBW 3.0 kHz*

Stop 150.00 kHz

Sweep 174.1 ms (3000 pts)

DC Coupled

Center Freq 79.500 kHz

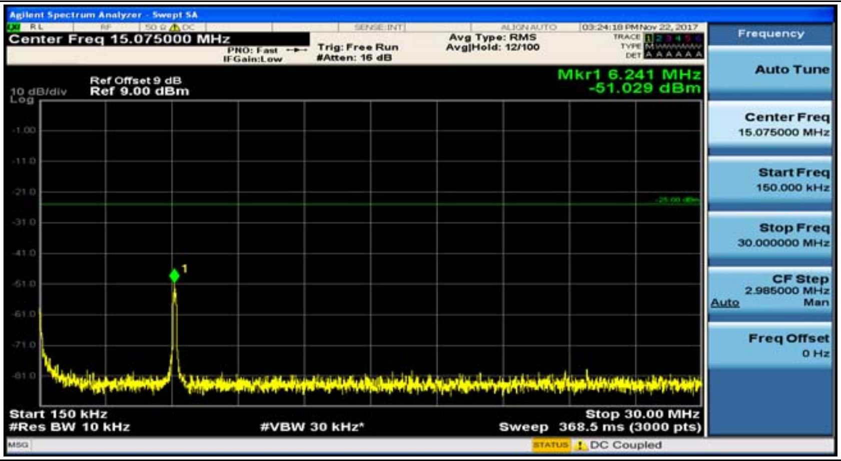
Start Freq 9.000 kHz

Stop Freq 150.000 kHz

CF Step 14.100 kHz

Freq Offset 0 Hz

RL
RF
50 Ω
DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-35.00 dBm
1
Frequency
Auto Tune
Auto
Man
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA

Center Freq 15.075000 MHz

PNO: Fast

IFGain:Low

Trig: Free Run

#Atten: 16 dB

Avg Type: RMS

Avg|Hold: 12/100

03:24:18 PM Nov 22, 2017

Ref Offset 9 dB

Ref 9.00 dBm

Mkr1 6.241 MHz

-51.029 dBm

Start 150 kHz

#Res BW 10 kHz

#VBW 30 kHz*

Stop 30.00 MHz

Sweep 368.5 ms (3000 pts)

DC Coupled

Center Freq 15.075000 MHz

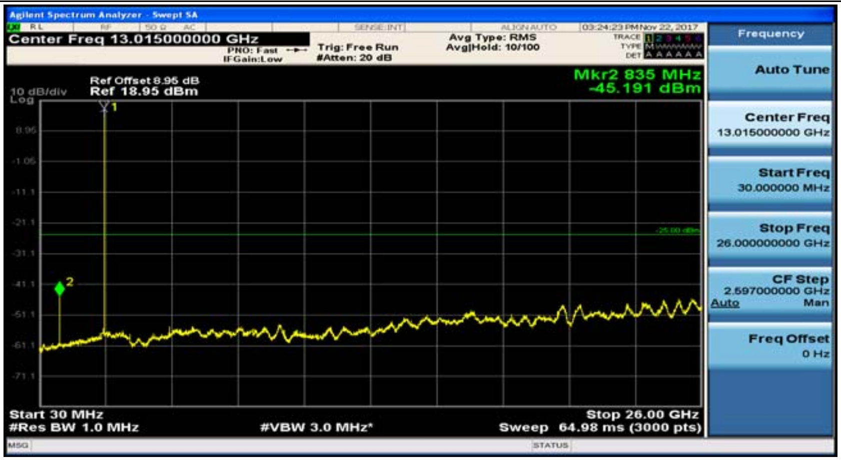
Start Freq 150.000 kHz

Stop Freq 30.000000 MHz

CF Step 2.985000 MHz

Freq Offset 0 Hz

RL
RF
50 Ω
DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
Frequency
Auto Tune
Auto
Man
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA

Center Freq 13.015000000 GHz

PNO: Fast

IFGain:Low

Trig: Free Run

#Atten: 20 dB

Avg Type: RMS

Avg|Hold: 10/100

03:24:23 PM Nov 22, 2017

Ref Offset 8.95 dB

Ref 18.95 dBm

Mkr2 835 MHz

-45.191 dBm

Start 30 MHz

#Res BW 1.0 MHz

#VBW 3.0 MHz*

Stop 26.00 GHz

Sweep 64.98 ms (3000 pts)

Center Freq 13.015000000 GHz

Start Freq 30.000000 MHz

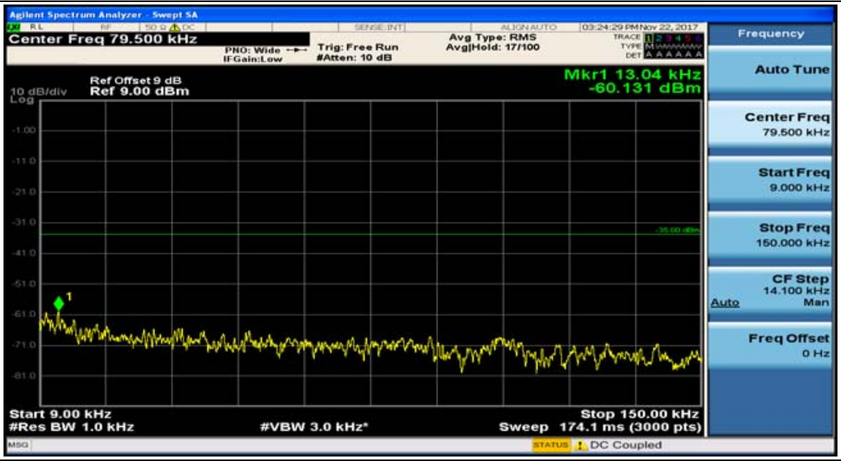
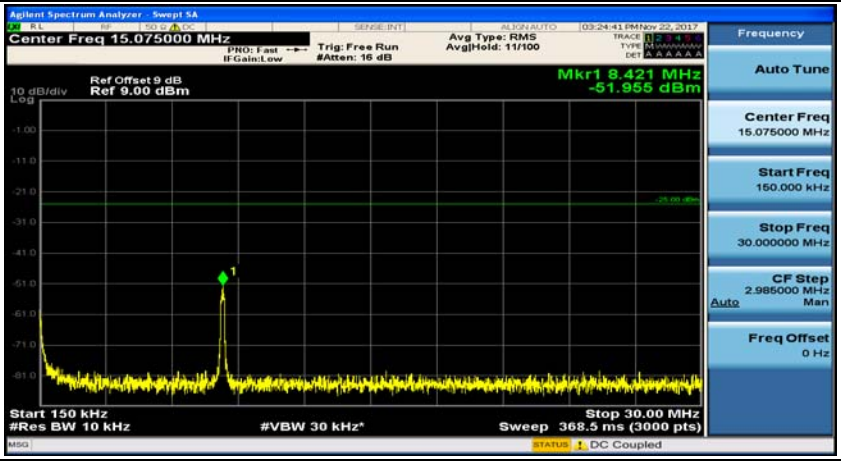
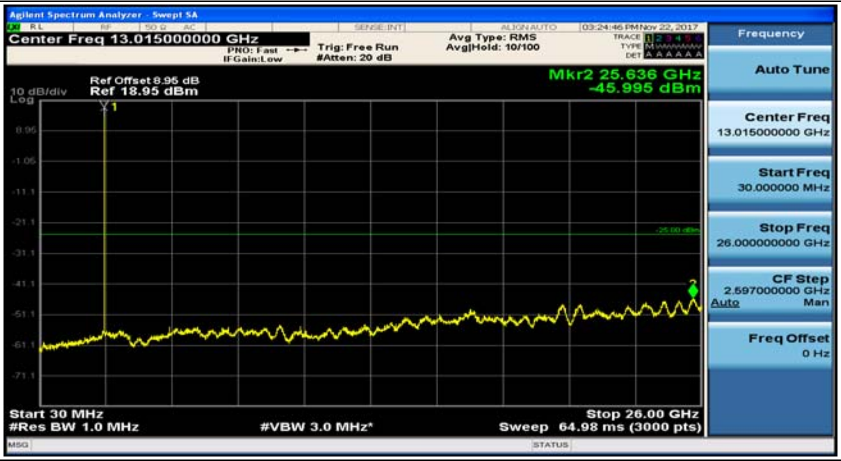
Stop Freq 26.000000000 GHz

CF Step 2.597000000 GHz

Freq Offset 0 Hz

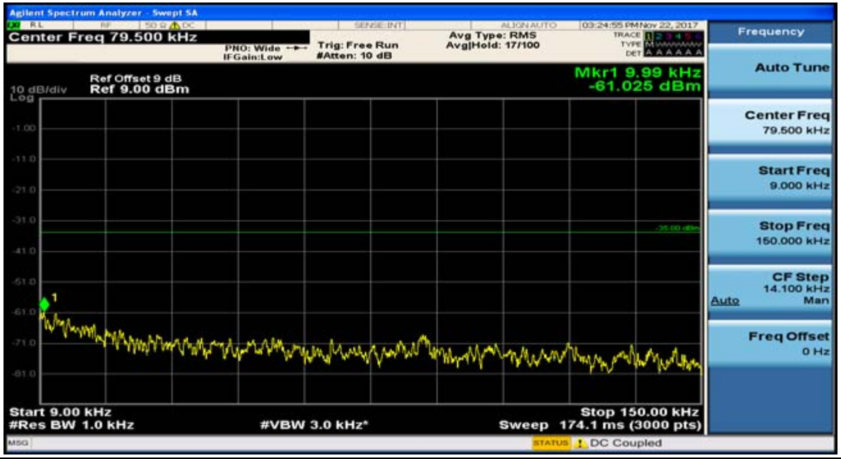
RL
RF
50 Ω
AC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
Frequency
Auto Tune
Auto
Man
MSG
STATUS

(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#24

 Center Freq 79.500 kHz PNO: Wide IFGain:Low Trig: Free Run #Atten: 10 dB Avg Type: RMS Avg|Hold: 17/100 03:24:29 PM Nov 22, 2017 Ref Offset 9 dB Ref 9.00 dBm Mkr1 13.04 kHz -60.131 dBm Start 9.00 kHz #Res BW 1.0 kHz #VBW 3.0 kHz* Stop 150.00 kHz Sweep 174.1 ms (3000 pts) DC Coupled Center Freq 79.500 kHz Start Freq 9.000 kHz Stop Freq 150.000 kHz CF Step 14.100 kHz Freq Offset 0 Hz
 Center Freq 15.075000 MHz PNO: Fast IFGain:Low Trig: Free Run #Atten: 16 dB Avg Type: RMS Avg|Hold: 11/100 03:24:41 PM Nov 22, 2017 Ref Offset 9 dB Ref 9.00 dBm Mkr1 8.421 MHz -51.955 dBm Start 150 kHz #Res BW 10 kHz #VBW 30 kHz* Stop 30.00 MHz Sweep 368.5 ms (3000 pts) DC Coupled Center Freq 15.075000 MHz Start Freq 150.000 kHz Stop Freq 30.000000 MHz CF Step 2.985000 MHz Freq Offset 0 Hz
 Center Freq 13.015000000 GHz PNO: Fast IFGain:Low Trig: Free Run #Atten: 20 dB Avg Type: RMS Avg|Hold: 10/100 03:24:46 PM Nov 22, 2017 Ref Offset 8.95 dB Ref 18.95 dBm Mkr2 25.636 GHz -45.995 dBm Start 30 MHz #Res BW 1.0 MHz #VBW 3.0 MHz* Stop 26.00 GHz Sweep 64.98 ms (3000 pts) Center Freq 13.015000000 GHz Start Freq 30.000000 MHz Stop Freq 26.000000000 GHz CF Step 2.597000000 GHz Freq Offset 0 Hz

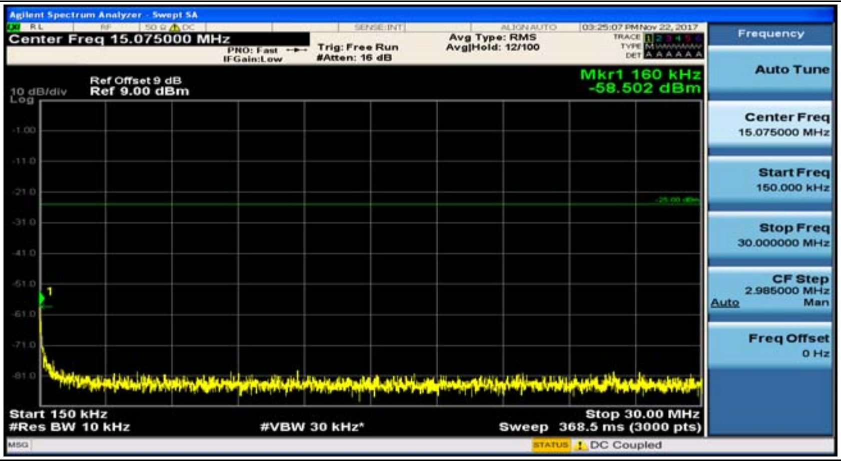
Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#0



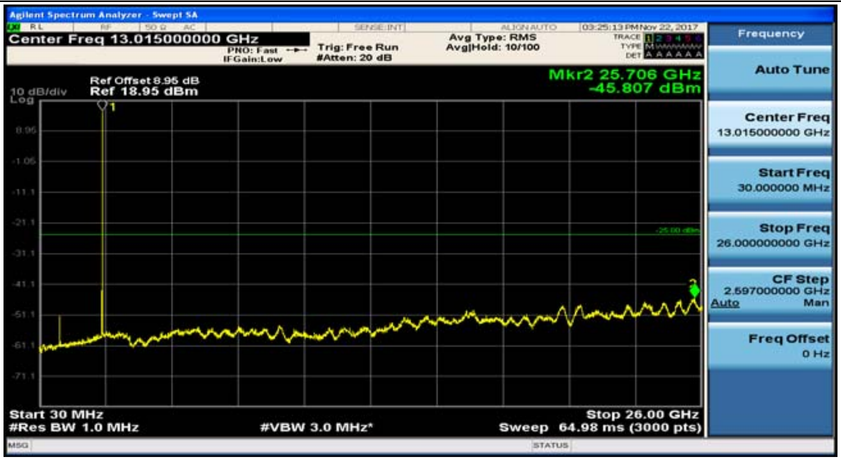
Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide IFGain:Low
Trig: Free Run #Atten: 10 dB
Avg Type: RMS Avg|Hold: 17/100
03:24:55 PM Nov 22, 2017
Ref Offset 9 dB Ref 9.00 dBm
10 dB/div Log
Mkr1 9.99 kHz -61.025 dBm
Start 9.00 kHz #Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz Sweep 174.1 ms (3000 pts)
DC Coupled

Frequency
Auto Tune
Center Freq 79.500 kHz
Start Freq 9.000 kHz
Stop Freq 150.000 kHz
CF Step 14.100 kHz Auto Man
Freq Offset 0 Hz
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-35.00 dBm
1
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast IFGain:Low
Trig: Free Run #Atten: 16 dB
Avg Type: RMS Avg|Hold: 12/100
03:25:07 PM Nov 22, 2017
Ref Offset 9 dB Ref 9.00 dBm
10 dB/div Log
Mkr1 160 kHz -58.502 dBm
Start 150 kHz #Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz Sweep 368.5 ms (3000 pts)
DC Coupled

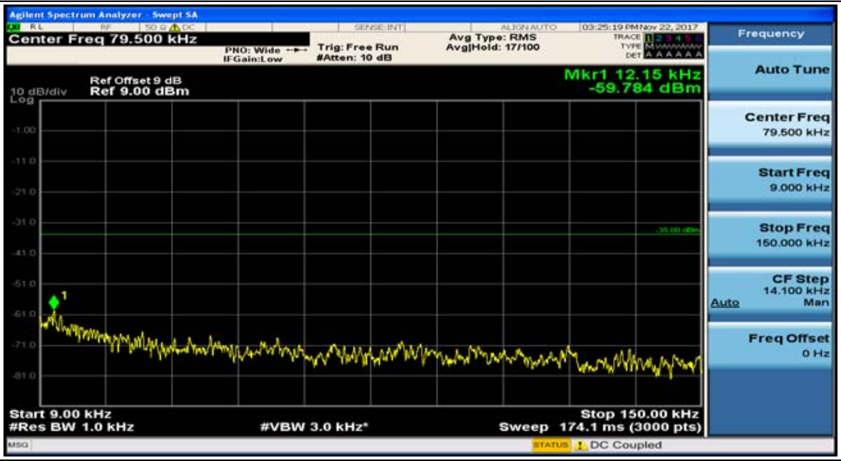
Frequency
Auto Tune
Center Freq 15.075000 MHz
Start Freq 150.000 kHz
Stop Freq 30.000000 MHz
CF Step 2.985000 MHz Auto Man
Freq Offset 0 Hz
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast IFGain:Low
Trig: Free Run #Atten: 20 dB
Avg Type: RMS Avg|Hold: 10/100
03:25:13 PM Nov 22, 2017
Ref Offset 8.95 dB Ref 18.95 dBm
10 dB/div Log
Mkr2 25.706 GHz -45.807 dBm
Start 30 MHz #Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz Sweep 64.98 ms (3000 pts)

Frequency
Auto Tune
Center Freq 13.015000000 GHz
Start Freq 30.000000 MHz
Stop Freq 26.000000000 GHz
CF Step 2.597000000 GHz Auto Man
Freq Offset 0 Hz
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
MSG
STATUS

Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#24



Agilent Spectrum Analyzer - Swept SA

03:25:19 PM Nov 22, 2017

Center Freq 79.500 kHz

PNO: Wide

IFGain:Low

Trig: Free Run

#Atten: 10 dB

Avg Type: RMS

Avg|Hold: 17/100

Ref Offset 9 dB

Ref 9.00 dBm

10 dB/div Log

Mkr1 12.15 kHz -59.784 dBm

Start 9.00 kHz

#Res BW 1.0 kHz

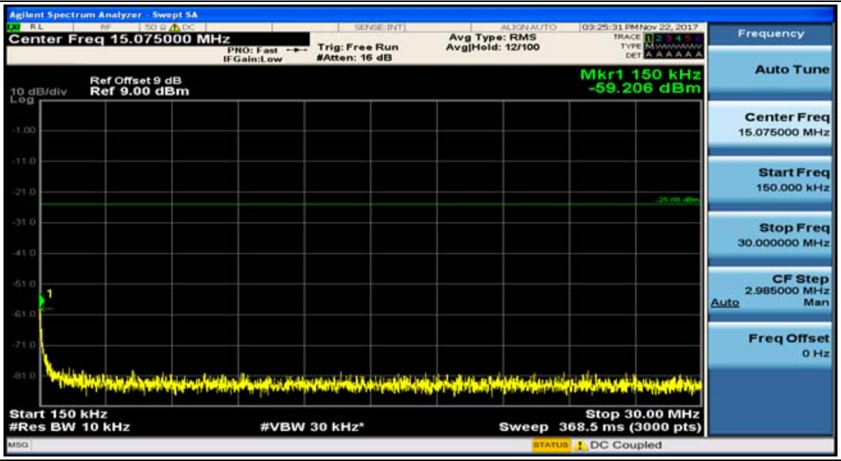
#VBW 3.0 kHz*

Stop 150.00 kHz

Sweep 174.1 ms (3000 pts)

DC Coupled

Frequency
Auto Tune
Center Freq 79.500 kHz
Start Freq 9.000 kHz
Stop Freq 150.000 kHz
CF Step 14.100 kHz Auto Man
Freq Offset 0 Hz
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-35.00 dBm
1
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA

03:25:31 PM Nov 22, 2017

Center Freq 15.075000 MHz

PNO: Fast

IFGain:Low

Trig: Free Run

#Atten: 16 dB

Avg Type: RMS

Avg|Hold: 12/100

Ref Offset 9 dB

Ref 9.00 dBm

10 dB/div Log

Mkr1 150 kHz -59.206 dBm

Start 150 kHz

#Res BW 10 kHz

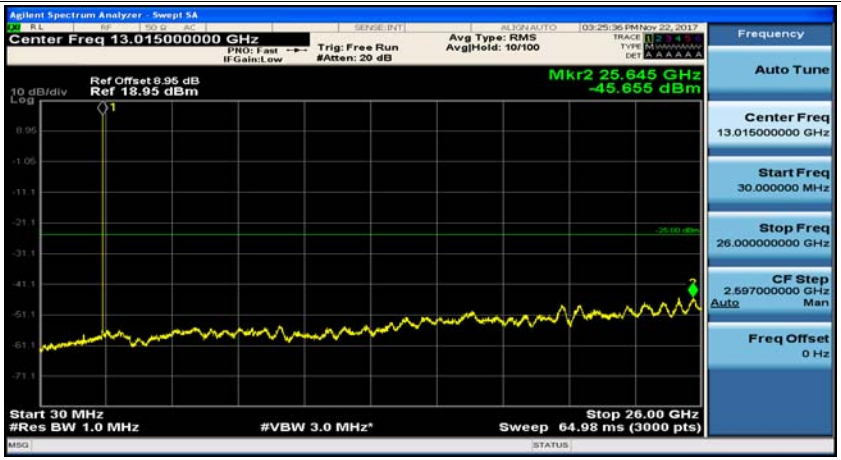
#VBW 30 kHz*

Stop 30.00 MHz

Sweep 368.5 ms (3000 pts)

DC Coupled

Frequency
Auto Tune
Center Freq 15.075000 MHz
Start Freq 150.000 kHz
Stop Freq 30.000000 MHz
CF Step 2.985000 MHz Auto Man
Freq Offset 0 Hz
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA

03:25:36 PM Nov 22, 2017

Center Freq 13.015000000 GHz

PNO: Fast

IFGain:Low

Trig: Free Run

#Atten: 20 dB

Avg Type: RMS

Avg|Hold: 10/100

Ref Offset 8.95 dB

Ref 18.95 dBm

10 dB/div Log

Mkr2 25.645 GHz -45.655 dBm

Start 30 MHz

#Res BW 1.0 MHz

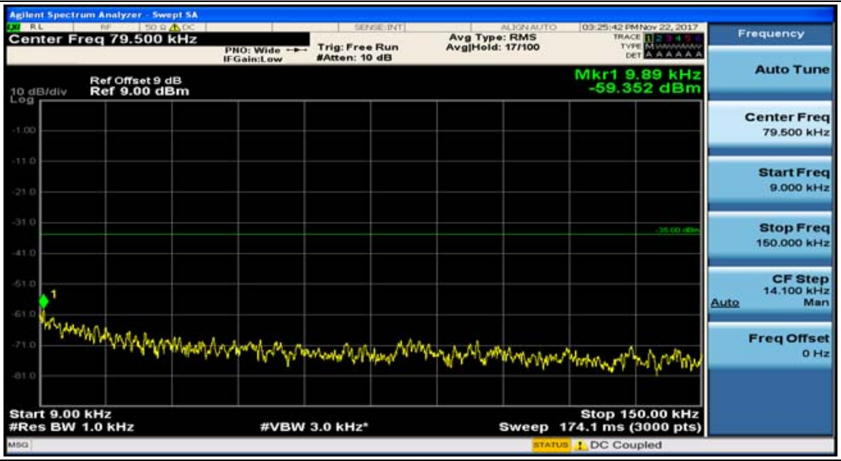
#VBW 3.0 MHz*

Stop 26.00 GHz

Sweep 64.98 ms (3000 pts)

Frequency
Auto Tune
Center Freq 13.015000000 GHz
Start Freq 30.000000 MHz
Stop Freq 26.000000000 GHz
CF Step 2.597000000 GHz Auto Man
Freq Offset 0 Hz
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
MSG
STATUS

Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#49



Agilent Spectrum Analyzer - Swept SA

Center Freq 79.500 kHz

PNO: Wide
IFGain:Low

Trig: Free Run
#Atten: 10 dB

Avg Type: RMS
Avg|Hold: 17/100

03:25:42 PM Nov 22, 2017

Ref Offset 9 dB
Ref 9.00 dBm

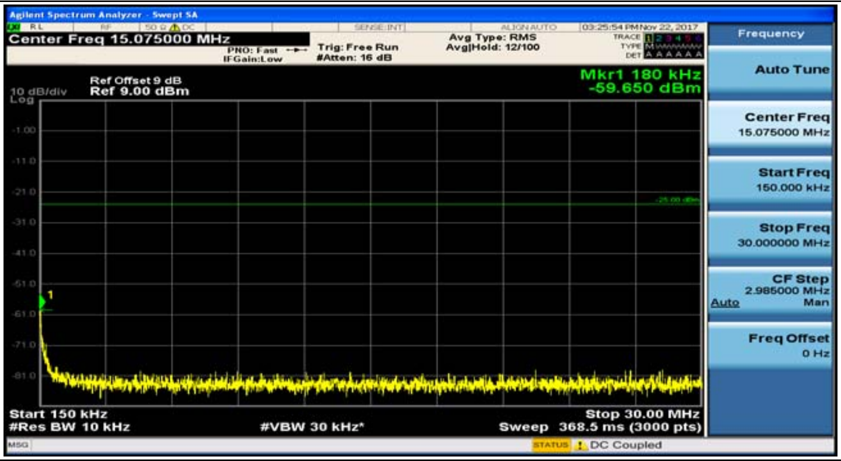
Mkr1 9.89 kHz
-59.352 dBm

Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)

DC Coupled

Center Freq 79.500 kHz
Start Freq 9.000 kHz
Stop Freq 150.000 kHz
CF Step 14.100 kHz Auto Man
Freq Offset 0 Hz

RL
RF
50 Ω
DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE
DET A A A A A A
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-35.00 dBm
1
MSG
STATUS
Frequency
Auto Tune



Agilent Spectrum Analyzer - Swept SA

Center Freq 15.075000 MHz

PNO: Fast
IFGain:Low

Trig: Free Run
#Atten: 16 dB

Avg Type: RMS
Avg|Hold: 12/100

03:25:54 PM Nov 22, 2017

Ref Offset 9 dB
Ref 9.00 dBm

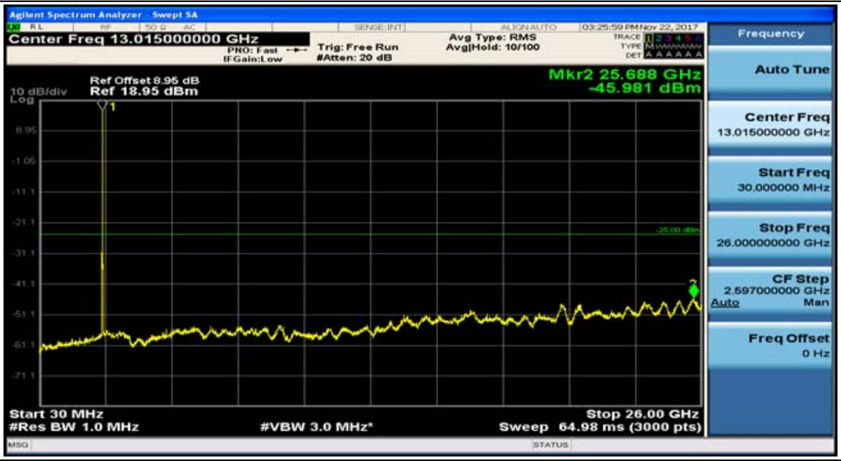
Mkr1 180 kHz
-59.650 dBm

Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)

DC Coupled

Center Freq 15.075000 MHz
Start Freq 150.000 kHz
Stop Freq 30.000000 MHz
CF Step 2.985000 MHz Auto Man
Freq Offset 0 Hz

RL
RF
50 Ω
DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE
DET A A A A A A
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
MSG
STATUS
Frequency
Auto Tune



Agilent Spectrum Analyzer - Swept SA

Center Freq 13.015000000 GHz

PNO: Fast
IFGain:Low

Trig: Free Run
#Atten: 20 dB

Avg Type: RMS
Avg|Hold: 10/100

03:25:59 PM Nov 22, 2017

Ref Offset 8.95 dB
Ref 18.95 dBm

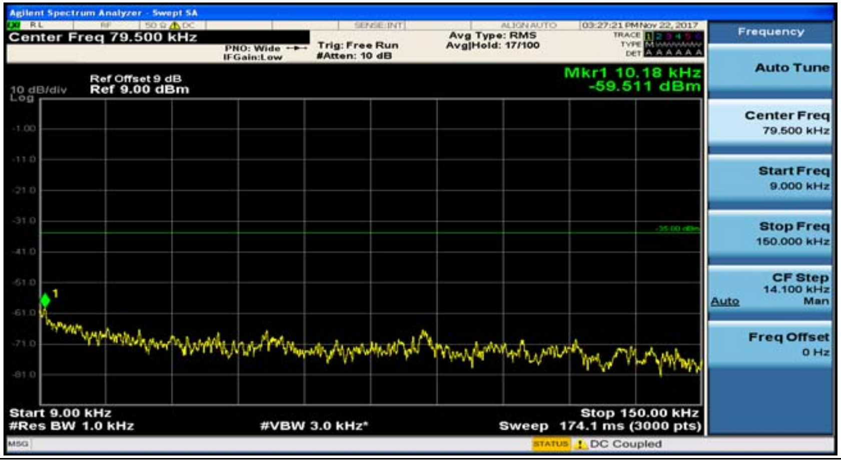
Mkr2 25.688 GHz
-45.981 dBm

Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

Center Freq 13.015000000 GHz
Start Freq 30.000000 MHz
Stop Freq 26.000000000 GHz
CF Step 2.597000000 GHz Auto Man
Freq Offset 0 Hz

RL
RF
50 Ω
AC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE
DET A A A A A A
10 dB/div
Log
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
MSG
STATUS
Frequency
Auto Tune

Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#0



Agilent Spectrum Analyzer - Swept SA

Center Freq 79.500 kHz

PNO: Wide

IFGain:Low

Trig: Free Run

#Atten: 10 dB

Avg Type: RMS

Avg|Hold: 17/100

03:27:21 PM Nov 22, 2017

Ref Offset 9 dB

Ref 9.00 dBm

Mkr1 10.18 kHz -59.511 dBm

Start 9.00 kHz

#Res BW 1.0 kHz

#VBW 3.0 kHz*

Stop 150.00 kHz

Sweep 174.1 ms (3000 pts)

DC Coupled

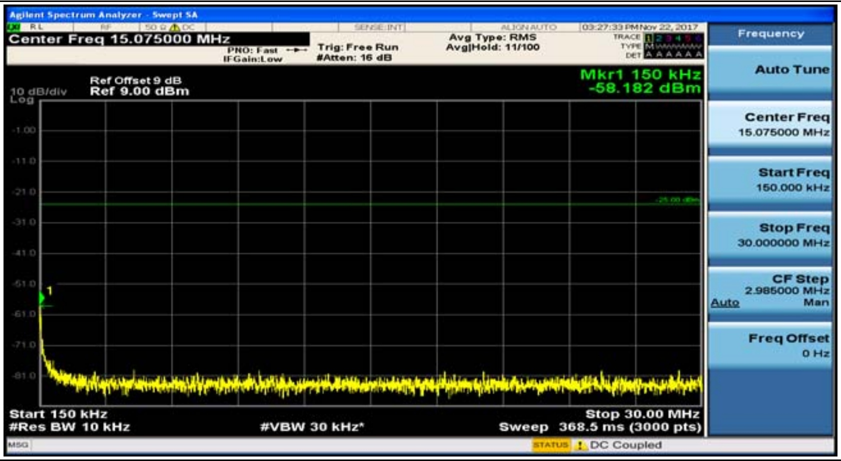
Center Freq 79.500 kHz

Start Freq 9.000 kHz

Stop Freq 150.000 kHz

CF Step 14.100 kHz

RL
RF
50 Ω
DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-35.00 dBm
1
Frequency
Auto Tune
Auto
Man
Freq Offset
0 Hz
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA

Center Freq 15.075000 MHz

PNO: Fast

IFGain:Low

Trig: Free Run

#Atten: 16 dB

Avg Type: RMS

Avg|Hold: 11/100

03:27:33 PM Nov 22, 2017

Ref Offset 9 dB

Ref 9.00 dBm

Mkr1 150 kHz -58.182 dBm

Start 150 kHz

#Res BW 10 kHz

#VBW 30 kHz*

Stop 30.00 MHz

Sweep 368.5 ms (3000 pts)

DC Coupled

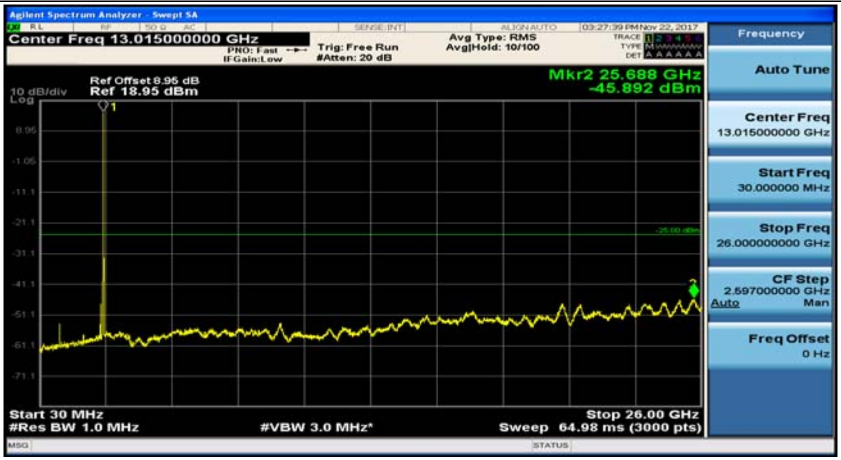
Center Freq 15.075000 MHz

Start Freq 150.000 kHz

Stop Freq 30.000000 MHz

CF Step 2.985000 MHz

RL
RF
50 Ω
DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
Frequency
Auto Tune
Auto
Man
Freq Offset
0 Hz
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA

Center Freq 13.015000000 GHz

PNO: Fast

IFGain:Low

Trig: Free Run

#Atten: 20 dB

Avg Type: RMS

Avg|Hold: 10/100

03:27:39 PM Nov 22, 2017

Ref Offset 8.95 dB

Ref 18.95 dBm

Mkr2 25.688 GHz -45.892 dBm

Start 30 MHz

#Res BW 1.0 MHz

#VBW 3.0 MHz*

Stop 26.00 GHz

Sweep 64.98 ms (3000 pts)

Center Freq 13.015000000 GHz

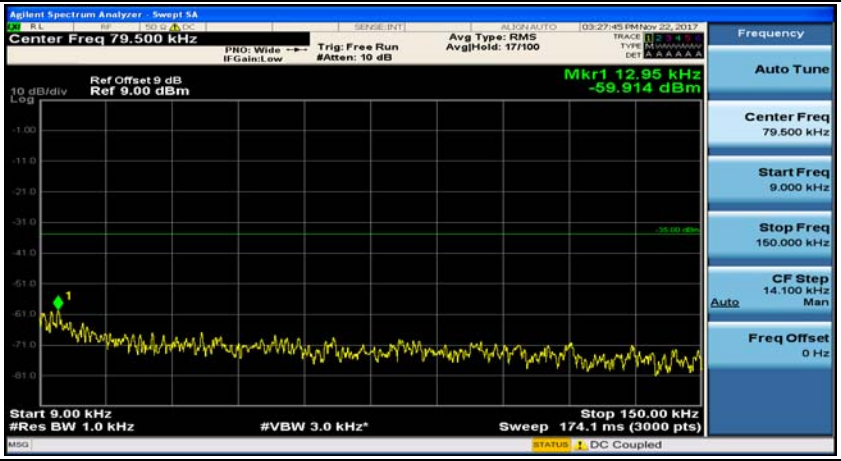
Start Freq 30.000000 MHz

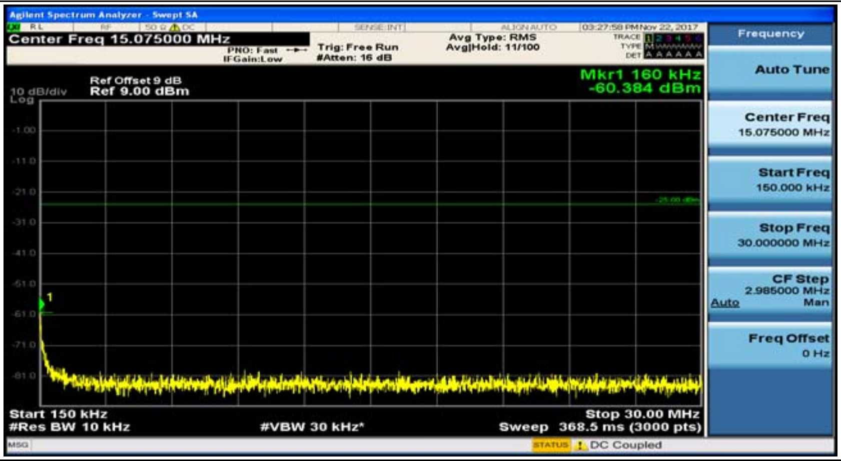
Stop Freq 26.000000000 GHz

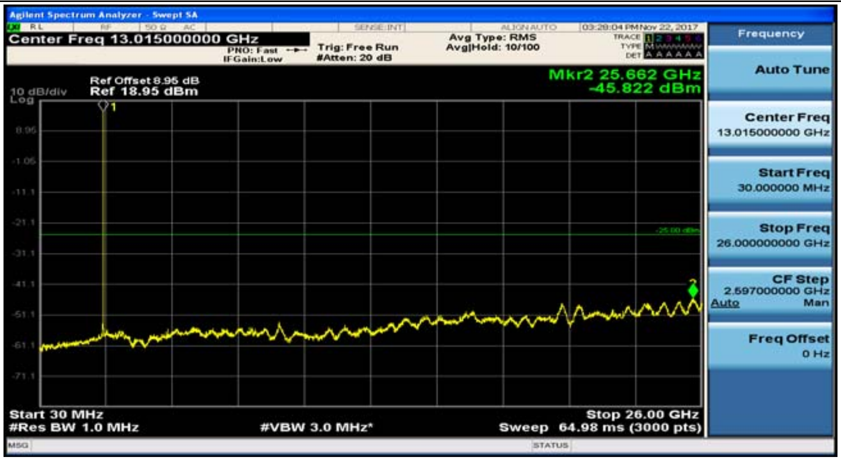
CF Step 2.597000000 GHz

RL
RF
50 Ω
AC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
Frequency
Auto Tune
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

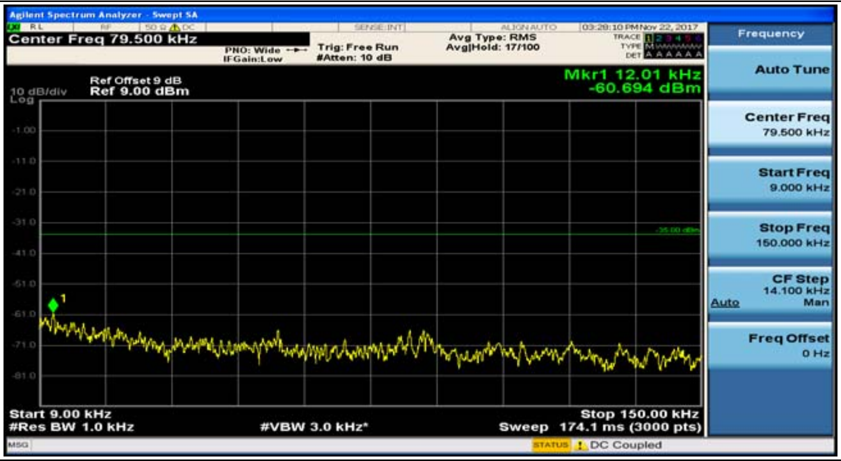
Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#24


Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
03:27:45 PM Nov 22, 2017
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Log
Mkr1 12.95 kHz
-59.914 dBm
-35.00 dBm
1
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 11/100
03:27:58 PM Nov 22, 2017
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Log
Mkr1 160 kHz
-60.384 dBm
-25.00 dBm
1
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 10/100
03:28:04 PM Nov 22, 2017
Ref Offset 8.95 dB
10 dB/div
Ref 18.95 dBm
Log
Mkr2 25.662 GHz
-45.822 dBm
-25.00 dBm
1
2
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#49



Agilent Spectrum Analyzer - Swept SA

Center Freq 79.500 kHz

PNO: Wide
IFGain:Low

Trig: Free Run
#Atten: 10 dB

Avg Type: RMS
Avg|Hold: 17/100

03:28:10 PM Nov 22, 2017

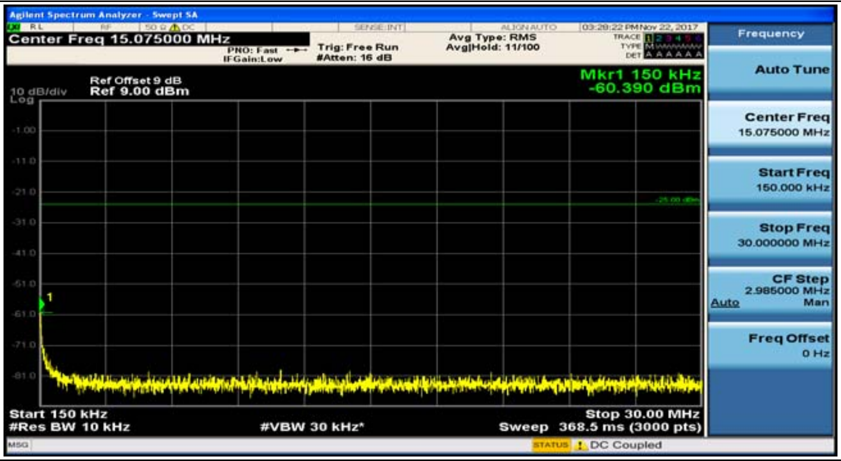
Ref Offset 9 dB
Ref 9.00 dBm

Mkr1 12.01 kHz
-60.694 dBm

Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)

DC Coupled

10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-35.00 dBm
1
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA

Center Freq 15.075000 MHz

PNO: Fast
IFGain:Low

Trig: Free Run
#Atten: 16 dB

Avg Type: RMS
Avg|Hold: 11/100

03:28:22 PM Nov 22, 2017

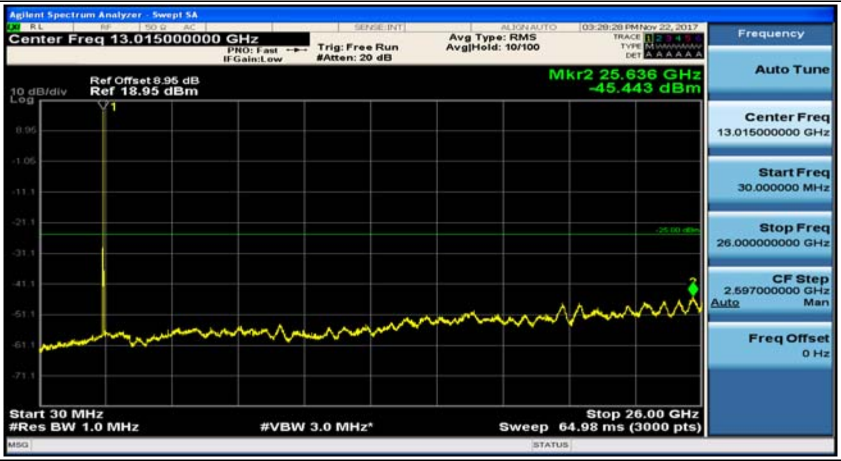
Ref Offset 9 dB
Ref 9.00 dBm

Mkr1 150 kHz
-60.390 dBm

Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)

DC Coupled

10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA

Center Freq 13.015000000 GHz

PNO: Fast
IFGain:Low

Trig: Free Run
#Atten: 20 dB

Avg Type: RMS
Avg|Hold: 10/100

03:28:28 PM Nov 22, 2017

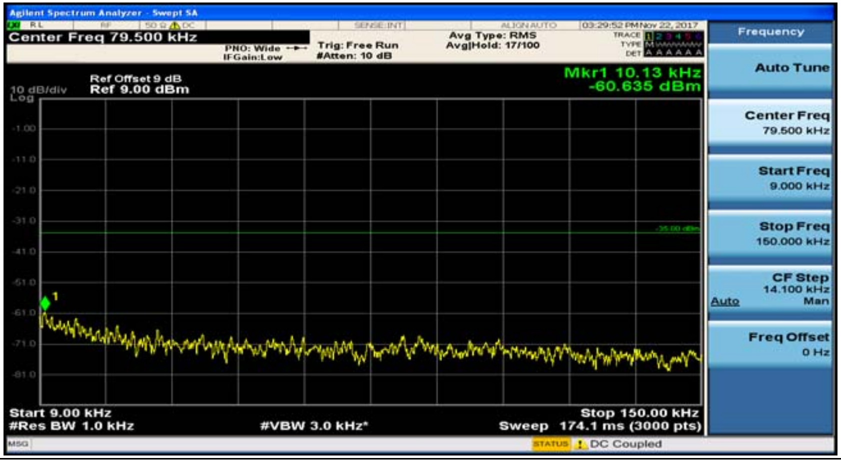
Ref Offset 8.95 dB
Ref 18.95 dBm

Mkr2 25.636 GHz
-45.443 dBm

Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

10 dB/div
Log
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#0


Agilent Spectrum Analyzer - Swept SA

03:29:52 PM Nov 22, 2017

Center Freq 79.500 kHz

PNO: Wide

IFGain:Low

Trig: Free Run

#Atten: 10 dB

Avg Type: RMS

Avg|Hold: 17/100

Ref Offset 9 dB

Ref 9.00 dBm

Mkr1 10.13 kHz

-60.635 dBm

Start 9.00 kHz

#Res BW 1.0 kHz

#VBW 3.0 kHz*

Stop 150.00 kHz

Sweep 174.1 ms (3000 pts)

DC Coupled

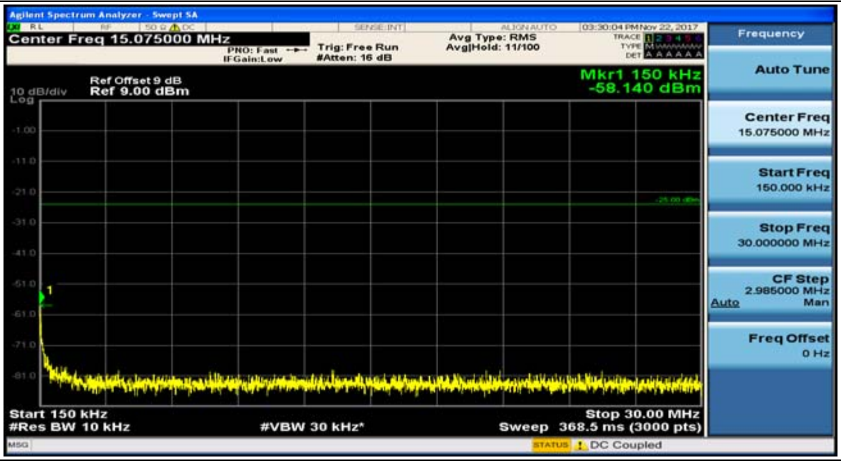
Center Freq 79.500 kHz

Start Freq 9.000 kHz

Stop Freq 150.000 kHz

CF Step 14.100 kHz

Freq Offset 0 Hz
RL
RF
50 Ω
DC
SENSE:INT
ALIGN AUTO
TRACE
TYPE
DET
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-35.00 dBm
1
MSG
STATUS
Frequency
Auto Tune
Auto
Man


Agilent Spectrum Analyzer - Swept SA

03:30:04 PM Nov 22, 2017

Center Freq 15.075000 MHz

PNO: Fast

IFGain:Low

Trig: Free Run

#Atten: 16 dB

Avg Type: RMS

Avg|Hold: 11/100

Ref Offset 9 dB

Ref 9.00 dBm

Mkr1 150 kHz

-58.140 dBm

Start 150 kHz

#Res BW 10 kHz

#VBW 30 kHz*

Stop 30.00 MHz

Sweep 368.5 ms (3000 pts)

DC Coupled

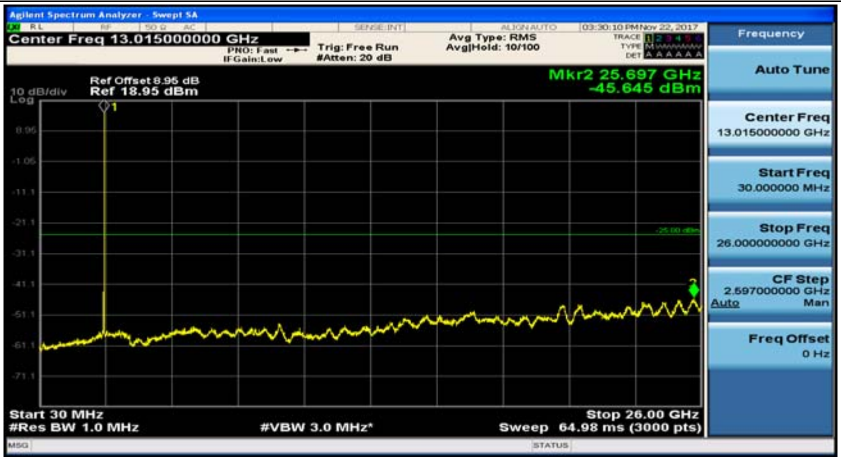
Center Freq 15.075000 MHz

Start Freq 150.000 kHz

Stop Freq 30.000000 MHz

CF Step 2.985000 MHz

Freq Offset 0 Hz
RL
RF
50 Ω
DC
SENSE:INT
ALIGN AUTO
TRACE
TYPE
DET
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
MSG
STATUS
Frequency
Auto Tune
Auto
Man


Agilent Spectrum Analyzer - Swept SA

03:30:10 PM Nov 22, 2017

Center Freq 13.015000000 GHz

PNO: Fast

IFGain:Low

Trig: Free Run

#Atten: 20 dB

Avg Type: RMS

Avg|Hold: 10/100

Ref Offset 8.95 dB

Ref 18.95 dBm

Mkr2 25.697 GHz

-45.645 dBm

Start 30 MHz

#Res BW 1.0 MHz

#VBW 3.0 MHz*

Stop 26.00 GHz

Sweep 64.98 ms (3000 pts)

Center Freq 13.015000000 GHz

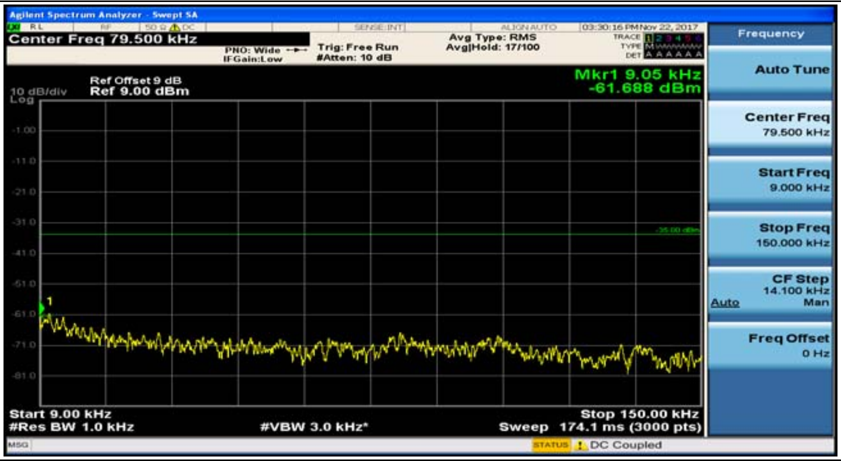
Start Freq 30.000000 MHz

Stop Freq 26.000000000 GHz

CF Step 2.597000000 GHz

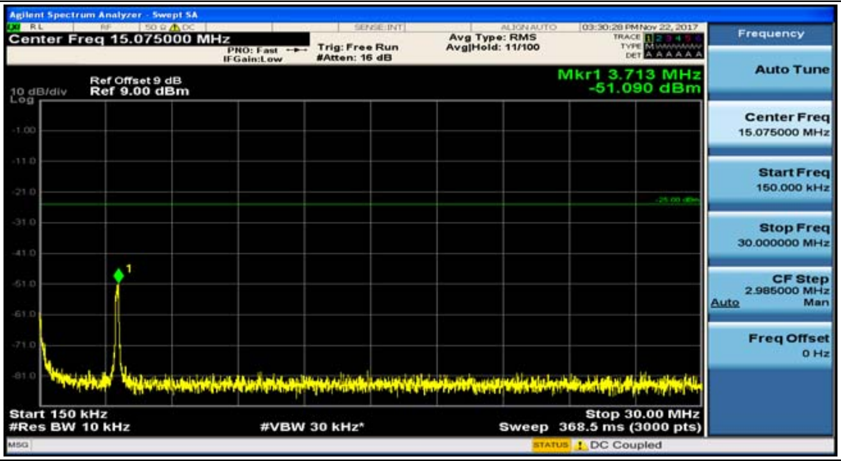
Freq Offset 0 Hz
RL
RF
50 Ω
AC
SENSE:INT
ALIGN AUTO
TRACE
TYPE
DET
10 dB/div
Log
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
MSG
STATUS
Frequency
Auto Tune
Auto
Man

Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#24



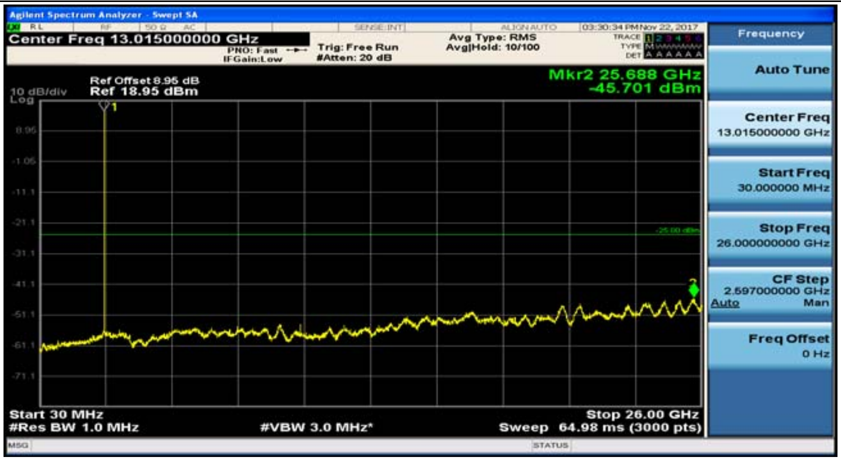
Agilent Spectrum Analyzer - Swept SA
03:30:16 PM Nov 22, 2017
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
Ref Offset 9 dB
Ref 9.00 dBm
Mkr1 9.05 kHz
-61.688 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled

10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-35.00 dBm
1
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA
03:30:28 PM Nov 22, 2017
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 11/100
Ref Offset 9 dB
Ref 9.00 dBm
Mkr1 3.713 MHz
-51.090 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled

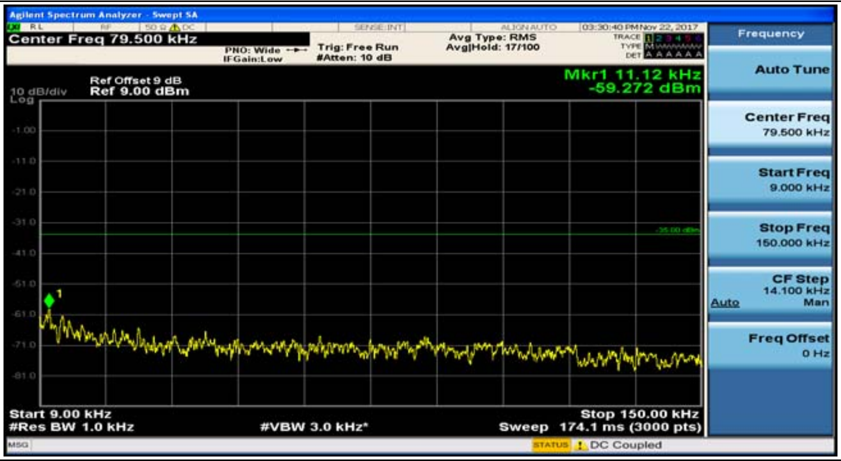
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA
03:30:34 PM Nov 22, 2017
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 10/100
Ref Offset 8.95 dB
Ref 18.95 dBm
Mkr2 25.688 GHz
-45.701 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

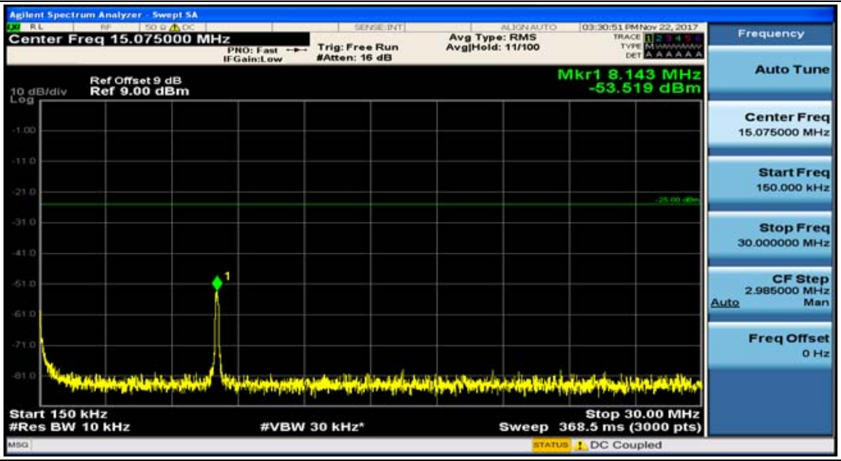
10 dB/div
Log
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#49



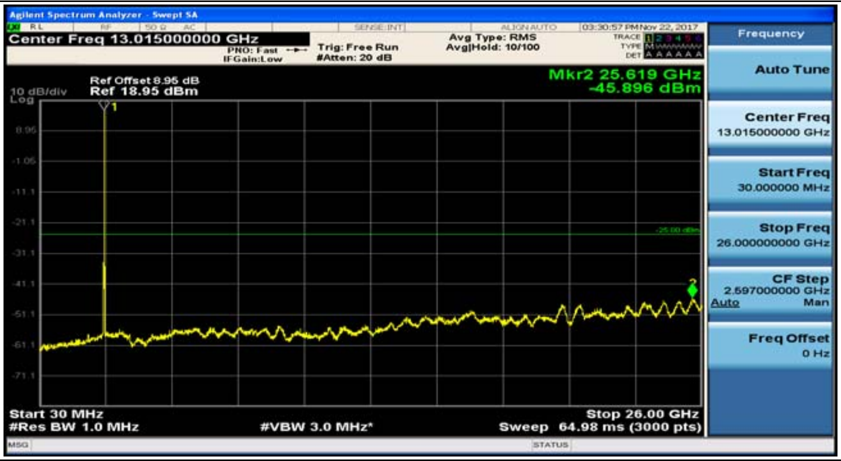
Agilent Spectrum Analyzer - Swept SA
RL RF 50 Ω DC SENSE:INT ALIGN AUTO 03:30:40 PM Nov 22, 2017
Center Freq 79.500 kHz
PNO: Wide IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
Ref Offset 9 dB
10 dB/div Log
Ref 9.00 dBm
Mkr1 11.12 kHz
-59.272 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
STATUS DC Coupled

Frequency
Auto Tune
Center Freq 79.500 kHz
Start Freq 9.000 kHz
Stop Freq 150.000 kHz
CF Step 14.100 kHz Auto Man
Freq Offset 0 Hz
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-35.00 dBm
1
MSG



Agilent Spectrum Analyzer - Swept SA
RL RF 50 Ω DC SENSE:INT ALIGN AUTO 03:30:51 PM Nov 22, 2017
Center Freq 15.075000 MHz
PNO: Fast IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 11/100
Ref Offset 9 dB
10 dB/div Log
Ref 9.00 dBm
Mkr1 8.143 MHz
-53.519 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
STATUS DC Coupled

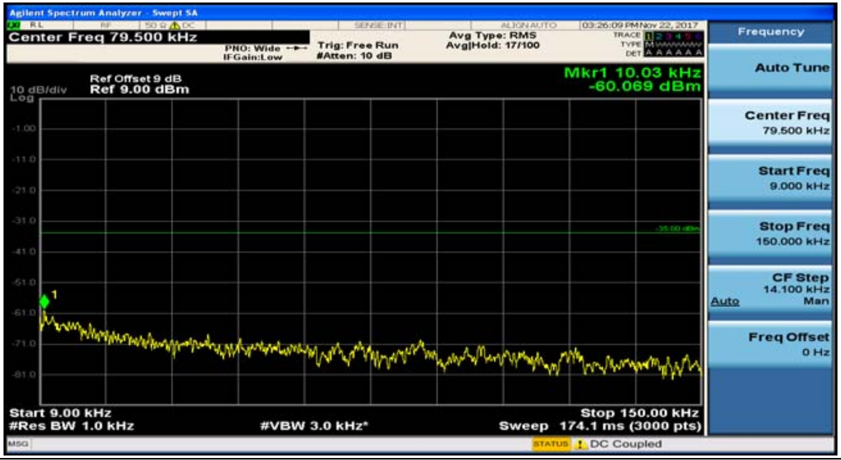
Frequency
Auto Tune
Center Freq 15.075000 MHz
Start Freq 150.000 kHz
Stop Freq 30.000000 MHz
CF Step 2.985000 MHz Auto Man
Freq Offset 0 Hz
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
MSG



Agilent Spectrum Analyzer - Swept SA
RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:30:57 PM Nov 22, 2017
Center Freq 13.015000000 GHz
PNO: Fast IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 10/100
Ref Offset 8.95 dB
10 dB/div Log
Ref 18.95 dBm
Mkr2 25.619 GHz
-45.896 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
STATUS

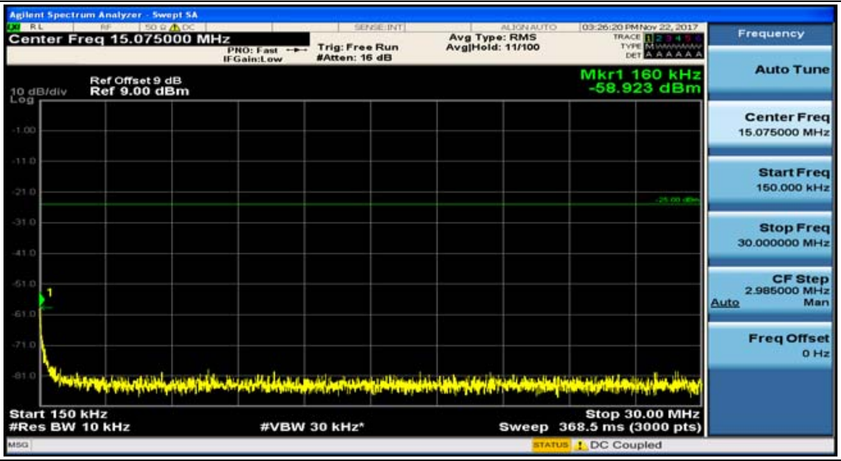
Frequency
Auto Tune
Center Freq 13.015000000 GHz
Start Freq 30.000000 MHz
Stop Freq 26.000000000 GHz
CF Step 2.597000000 GHz Auto Man
Freq Offset 0 Hz
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
MSG

Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#0



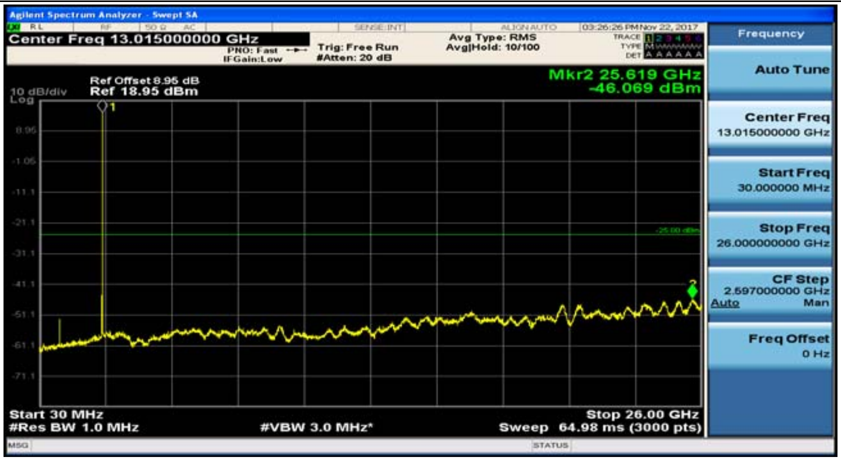
Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide IFGain:Low
Trig: Free Run #Atten: 10 dB
Avg Type: RMS Avg|Hold: 17/100
03:26:09 PM Nov 22, 2017
Ref Offset 9 dB Ref 9.00 dBm
Mkr1 10.03 kHz -60.069 dBm
Start 9.00 kHz #Res BW 1.0 kHz #VBW 3.0 kHz*
Stop 150.00 kHz Sweep 174.1 ms (3000 pts)
DC Coupled

10 dB/div Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
Frequency
Auto Tune
Center Freq 79.500 kHz
Start Freq 9.000 kHz
Stop Freq 150.000 kHz
CF Step 14.100 kHz Auto Man
Freq Offset 0 Hz



Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast IFGain:Low
Trig: Free Run #Atten: 16 dB
Avg Type: RMS Avg|Hold: 11/100
03:26:20 PM Nov 22, 2017
Ref Offset 9 dB Ref 9.00 dBm
Mkr1 160 kHz -58.923 dBm
Start 150 kHz #Res BW 10 kHz #VBW 30 kHz*
Stop 30.00 MHz Sweep 368.5 ms (3000 pts)
DC Coupled

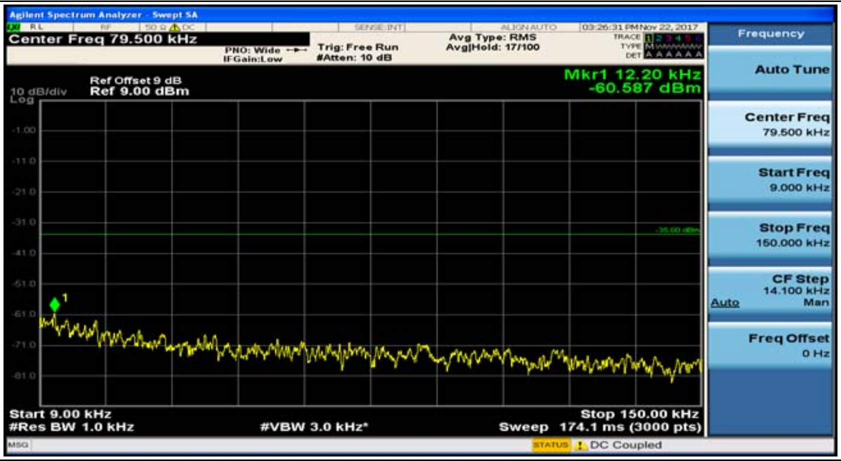
10 dB/div Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
Frequency
Auto Tune
Center Freq 15.075000 MHz
Start Freq 150.000 kHz
Stop Freq 30.000000 MHz
CF Step 2.985000 MHz Auto Man
Freq Offset 0 Hz



Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast IFGain:Low
Trig: Free Run #Atten: 20 dB
Avg Type: RMS Avg|Hold: 10/100
03:26:26 PM Nov 22, 2017
Ref Offset 8.95 dB Ref 18.95 dBm
Mkr2 25.619 GHz -46.069 dBm
Start 30 MHz #Res BW 1.0 MHz #VBW 3.0 MHz*
Stop 26.00 GHz Sweep 64.98 ms (3000 pts)

10 dB/div Log
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
Frequency
Auto Tune
Center Freq 13.015000000 GHz
Start Freq 30.000000 MHz
Stop Freq 26.000000000 GHz
CF Step 2.597000000 GHz Auto Man
Freq Offset 0 Hz

Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#24


Agilent Spectrum Analyzer - Swept SA

Center Freq 79.500 kHz

PNO: Wide

IFGain:Low

Trig: Free Run

#Atten: 10 dB

Avg Type: RMS

Avg|Hold: 17/100

03:26:31 PM Nov 22, 2017

Ref Offset 9 dB

Ref 9.00 dBm

Mkr1 12.20 kHz -60.587 dBm

Start 9.00 kHz

#Res BW 1.0 kHz

#VBW 3.0 kHz*

Stop 150.00 kHz

Sweep 174.1 ms (3000 pts)

Center Freq 79.500 kHz

Start Freq 9.000 kHz

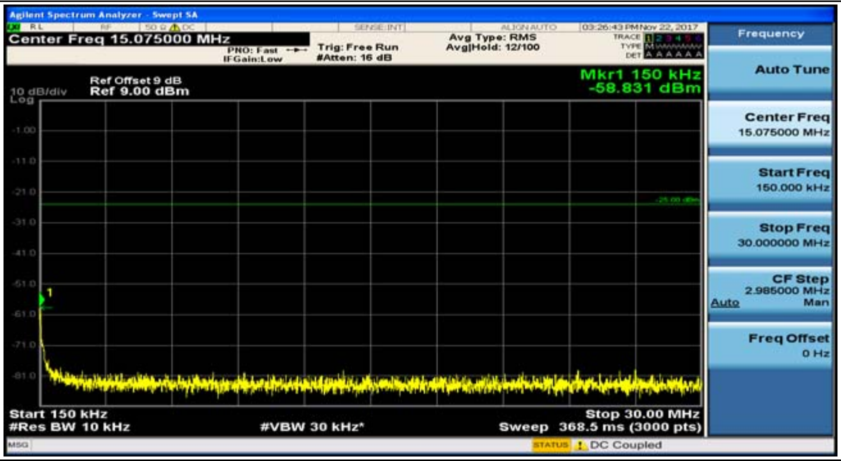
Stop Freq 150.000 kHz

CF Step 14.100 kHz Auto Man

Freq Offset 0 Hz

STATUS DC Coupled

Frequency
Auto Tune
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-35.00 dBm
1


Agilent Spectrum Analyzer - Swept SA

Center Freq 15.075000 MHz

PNO: Fast

IFGain:Low

Trig: Free Run

#Atten: 16 dB

Avg Type: RMS

Avg|Hold: 12/100

03:26:43 PM Nov 22, 2017

Ref Offset 9 dB

Ref 9.00 dBm

Mkr1 150 kHz -58.831 dBm

Start 150 kHz

#Res BW 10 kHz

#VBW 30 kHz*

Stop 30.00 MHz

Sweep 368.5 ms (3000 pts)

Center Freq 15.075000 MHz

Start Freq 150.000 kHz

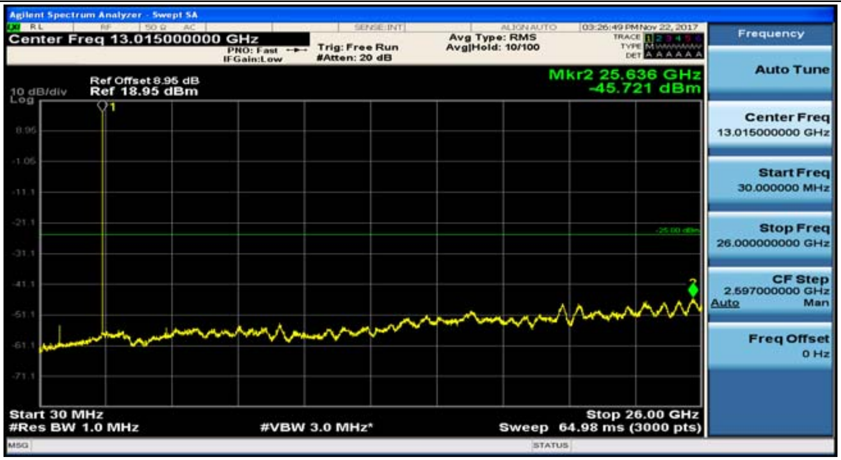
Stop Freq 30.000000 MHz

CF Step 2.985000 MHz Auto Man

Freq Offset 0 Hz

STATUS DC Coupled

Frequency
Auto Tune
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1


Agilent Spectrum Analyzer - Swept SA

Center Freq 13.015000000 GHz

PNO: Fast

IFGain:Low

Trig: Free Run

#Atten: 20 dB

Avg Type: RMS

Avg|Hold: 10/100

03:26:49 PM Nov 22, 2017

Ref Offset 8.95 dB

Ref 18.95 dBm

Mkr2 25.636 GHz -45.721 dBm

Start 30 MHz

#Res BW 1.0 MHz

#VBW 3.0 MHz*

Stop 26.00 GHz

Sweep 64.98 ms (3000 pts)

Center Freq 13.015000000 GHz

Start Freq 30.000000 MHz

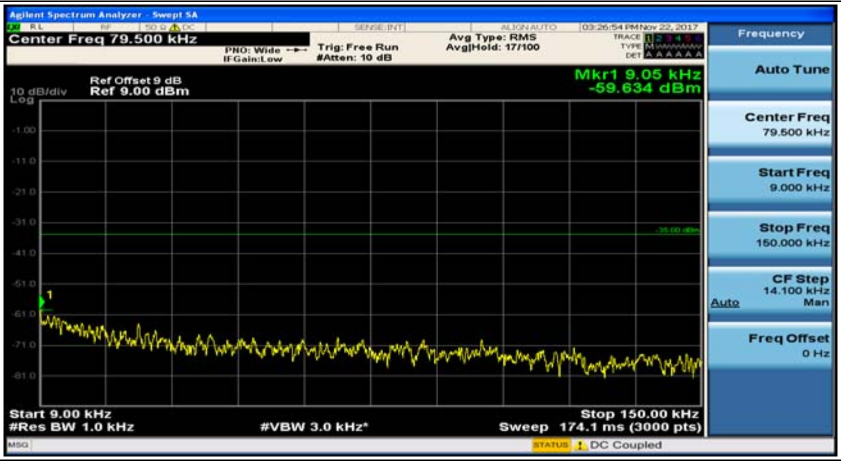
Stop Freq 26.000000000 GHz

CF Step 2.597000000 GHz Auto Man

Freq Offset 0 Hz

Frequency
Auto Tune
10 dB/div
Log
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
STATUS

Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#49



Agilent Spectrum Analyzer - Swept SA

Center Freq 79.500 kHz

PNO: Wide IFGain:Low

Trig: Free Run

#Atten: 10 dB

Avg Type: RMS

Avg|Hold: 17/100

03:26:54 PM Nov 22, 2017

Ref Offset 9 dB

Ref 9.00 dBm

10 dB/div Log

Mkr1 9.05 kHz

-59.634 dBm

Start 9.00 kHz

#Res BW 1.0 kHz

#VBW 3.0 kHz*

Stop 150.00 kHz

Sweep 174.1 ms (3000 pts)

DC Coupled

Frequency

Auto Tune

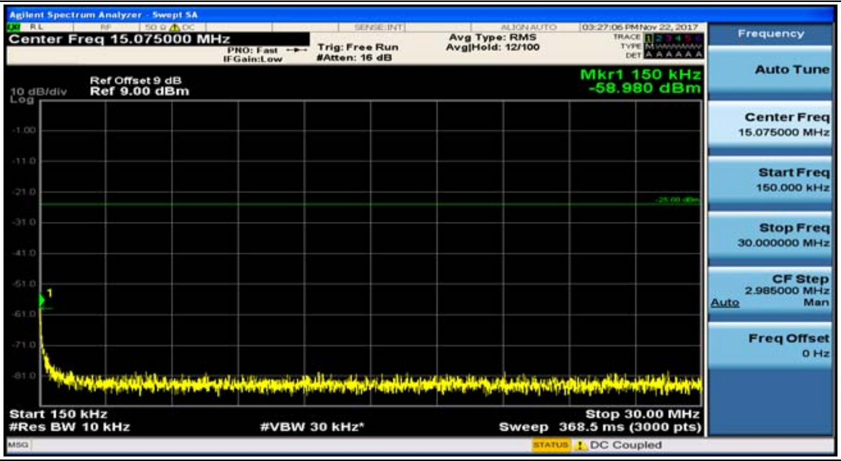
Center Freq 79.500 kHz

Start Freq 9.000 kHz

Stop Freq 150.000 kHz

CF Step 14.100 kHz Auto Man

Freq Offset 0 Hz



Agilent Spectrum Analyzer - Swept SA

Center Freq 15.075000 MHz

PNO: Fast IFGain:Low

Trig: Free Run

#Atten: 16 dB

Avg Type: RMS

Avg|Hold: 12/100

03:27:06 PM Nov 22, 2017

Ref Offset 9 dB

Ref 9.00 dBm

10 dB/div Log

Mkr1 150 kHz

-58.980 dBm

Start 150 kHz

#Res BW 10 kHz

#VBW 30 kHz*

Stop 30.00 MHz

Sweep 368.5 ms (3000 pts)

DC Coupled

Frequency

Auto Tune

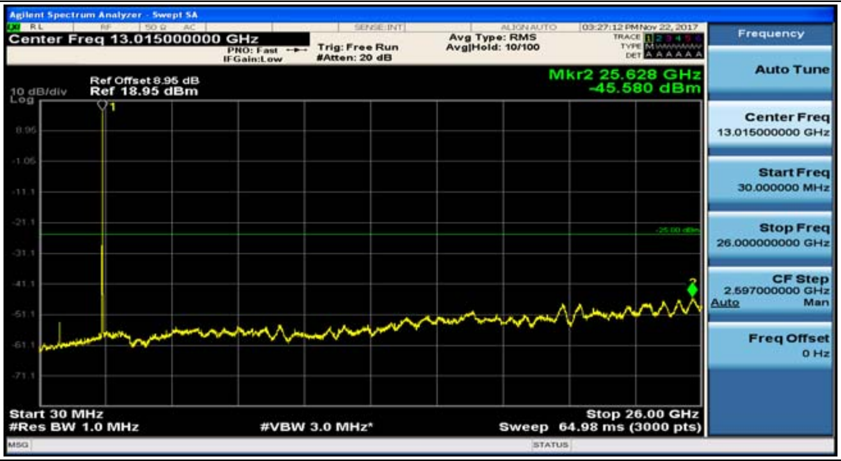
Center Freq 15.075000 MHz

Start Freq 150.000 kHz

Stop Freq 30.000000 MHz

CF Step 2.985000 MHz Auto Man

Freq Offset 0 Hz



Agilent Spectrum Analyzer - Swept SA

Center Freq 13.015000000 GHz

PNO: Fast IFGain:Low

Trig: Free Run

#Atten: 20 dB

Avg Type: RMS

Avg|Hold: 10/100

03:27:12 PM Nov 22, 2017

Ref Offset 8.95 dB

Ref 18.95 dBm

10 dB/div Log

Mkr2 25.628 GHz

-45.580 dBm

Start 30 MHz

#Res BW 1.0 MHz

#VBW 3.0 MHz*

Stop 26.00 GHz

Sweep 64.98 ms (3000 pts)

Frequency

Auto Tune

Center Freq 13.015000000 GHz

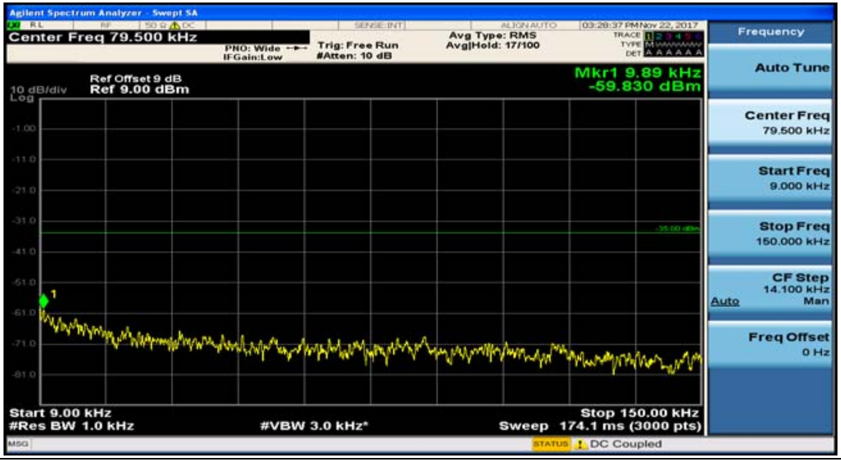
Start Freq 30.000000 MHz

Stop Freq 26.000000000 GHz

CF Step 2.597000000 GHz Auto Man

Freq Offset 0 Hz

Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0



Agilent Spectrum Analyzer - Swept SA

Center Freq 79.500 kHz

PNO: Wide

IFGain:Low

Trig: Free Run

#Atten: 10 dB

Avg Type: RMS

Avg|Hold: 17/100

03:28:37 PM Nov 22, 2017

Ref Offset 9 dB

Ref 9.00 dBm

Mkr1 9.89 kHz

-59.830 dBm

Start 9.00 kHz

#Res BW 1.0 kHz

#VBW 3.0 kHz*

Stop 150.00 kHz

Sweep 174.1 ms (3000 pts)

DC Coupled

Center Freq 79.500 kHz

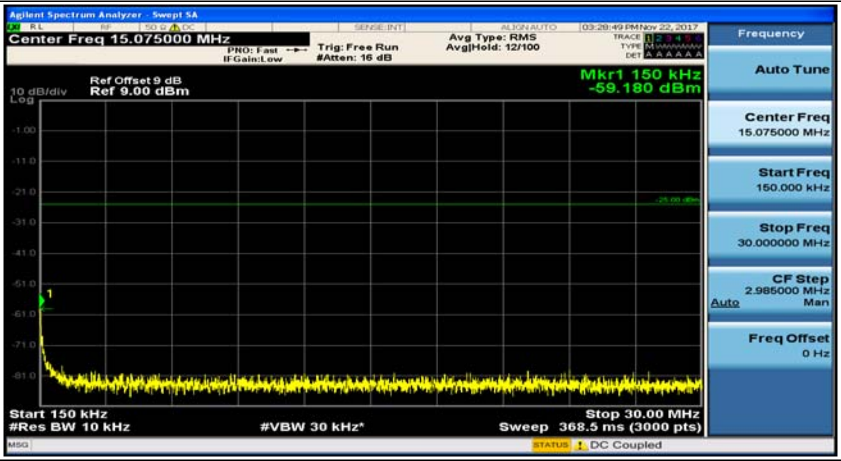
Start Freq 9.000 kHz

Stop Freq 150.000 kHz

CF Step 14.100 kHz

Freq Offset 0 Hz

RL
RF
50 Ω
DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-35.00 dBm
1
MSG
STATUS
Frequency
Auto Tune
Center Freq
Start Freq
Stop Freq
CF Step
Auto
Man
Freq Offset



Agilent Spectrum Analyzer - Swept SA

Center Freq 15.075000 MHz

PNO: Fast

IFGain:Low

Trig: Free Run

#Atten: 16 dB

Avg Type: RMS

Avg|Hold: 12/100

03:28:49 PM Nov 22, 2017

Ref Offset 9 dB

Ref 9.00 dBm

Mkr1 150 kHz

-59.180 dBm

Start 150 kHz

#Res BW 10 kHz

#VBW 30 kHz*

Stop 30.00 MHz

Sweep 368.5 ms (3000 pts)

DC Coupled

Center Freq 15.075000 MHz

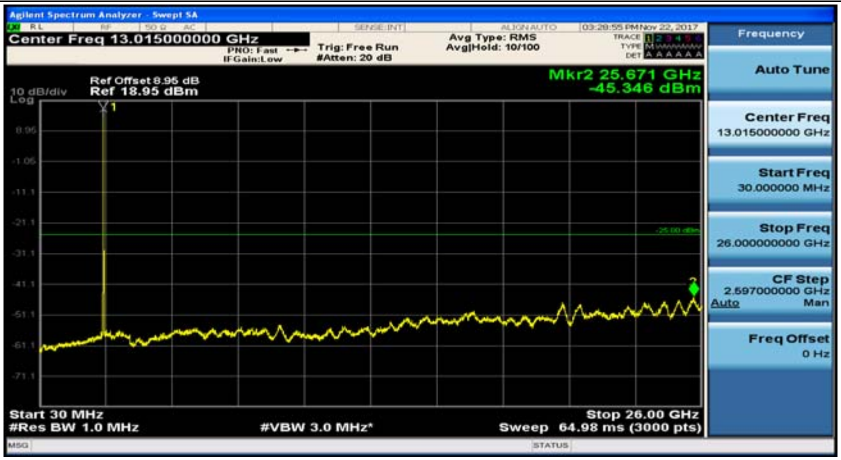
Start Freq 150.000 kHz

Stop Freq 30.000000 MHz

CF Step 2.985000 MHz

Freq Offset 0 Hz

RL
RF
50 Ω
DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
MSG
STATUS
Frequency
Auto Tune
Center Freq
Start Freq
Stop Freq
CF Step
Auto
Man
Freq Offset



Agilent Spectrum Analyzer - Swept SA

Center Freq 13.015000000 GHz

PNO: Fast

IFGain:Low

Trig: Free Run

#Atten: 20 dB

Avg Type: RMS

Avg|Hold: 10/100

03:28:55 PM Nov 22, 2017

Ref Offset 8.95 dB

Ref 18.95 dBm

Mkr2 25.671 GHz

-45.346 dBm

Start 30 MHz

#Res BW 1.0 MHz

#VBW 3.0 MHz*

Stop 26.00 GHz

Sweep 64.98 ms (3000 pts)

Center Freq 13.015000000 GHz

Start Freq 30.000000 MHz

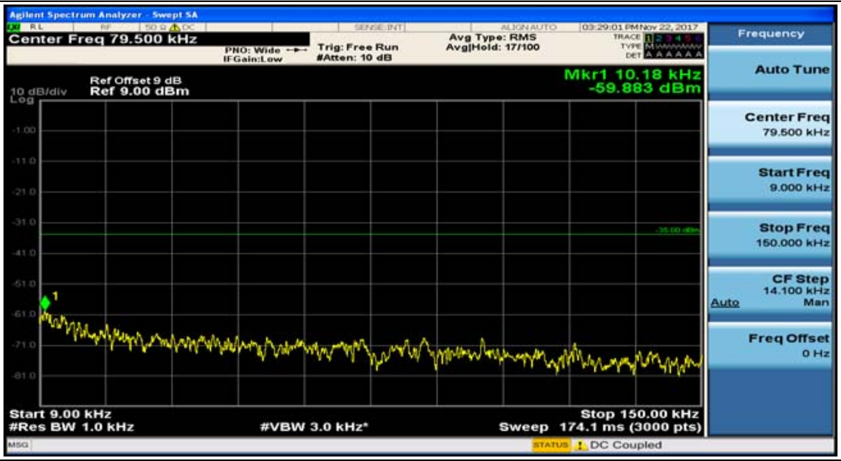
Stop Freq 26.000000000 GHz

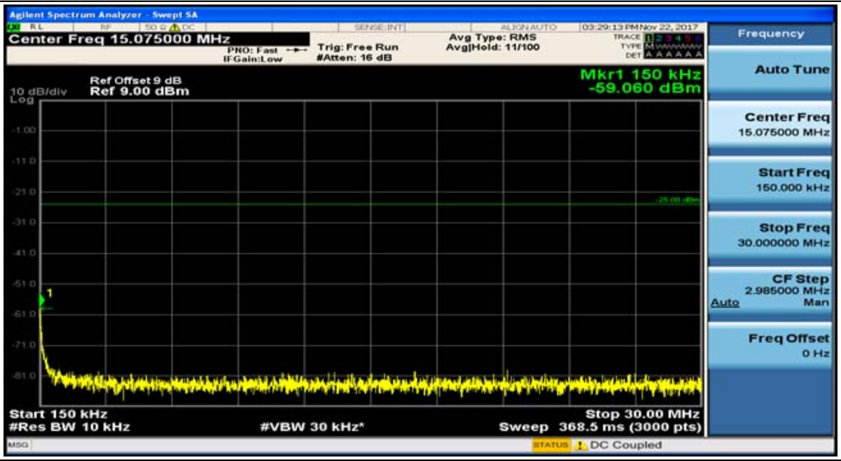
CF Step 2.597000000 GHz

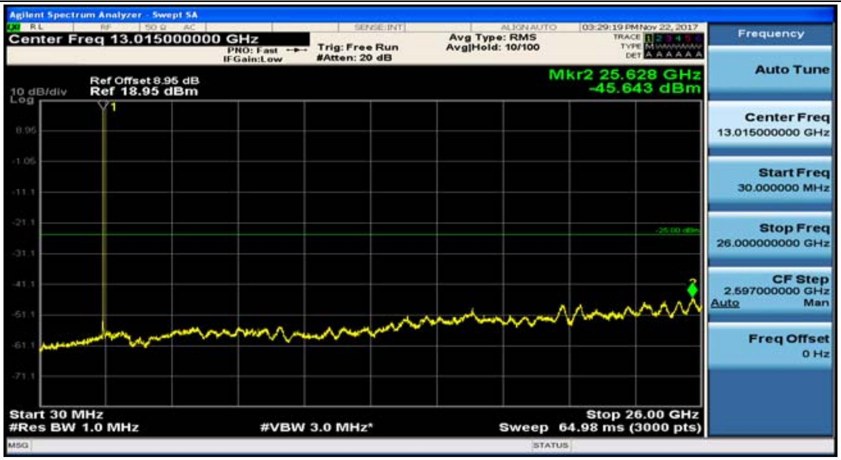
Freq Offset 0 Hz

RL
RF
50 Ω
AC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
MSG
STATUS
Frequency
Auto Tune
Center Freq
Start Freq
Stop Freq
CF Step
Auto
Man
Freq Offset

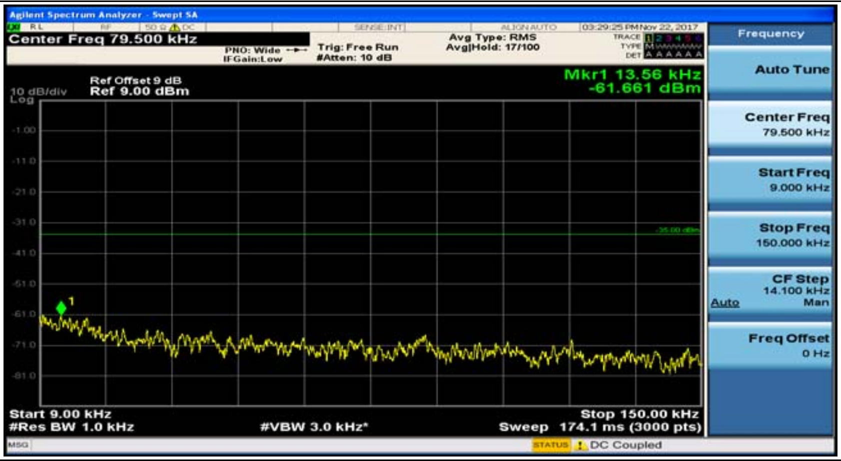
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24


Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
Ref Offset 9 dB
Ref 9.00 dBm
Mkr1 10.18 kHz
-59.883 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Agilent Spectrum Analyzer - Swept SA
03:29:01 PM Nov 22, 2017
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-35.00 dBm
1
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS


Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 11/100
Ref Offset 9 dB
Ref 9.00 dBm
Mkr1 150 kHz
-59.060 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
Agilent Spectrum Analyzer - Swept SA
03:29:13 PM Nov 22, 2017
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS


Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 10/100
Ref Offset 8.95 dB
Ref 18.95 dBm
Mkr2 25.628 GHz
-45.643 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Agilent Spectrum Analyzer - Swept SA
03:29:19 PM Nov 22, 2017
10 dB/div
Log
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#49


Agilent Spectrum Analyzer - Swept SA

Center Freq 79.500 kHz

PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100

03:29:25 PM Nov 22, 2017

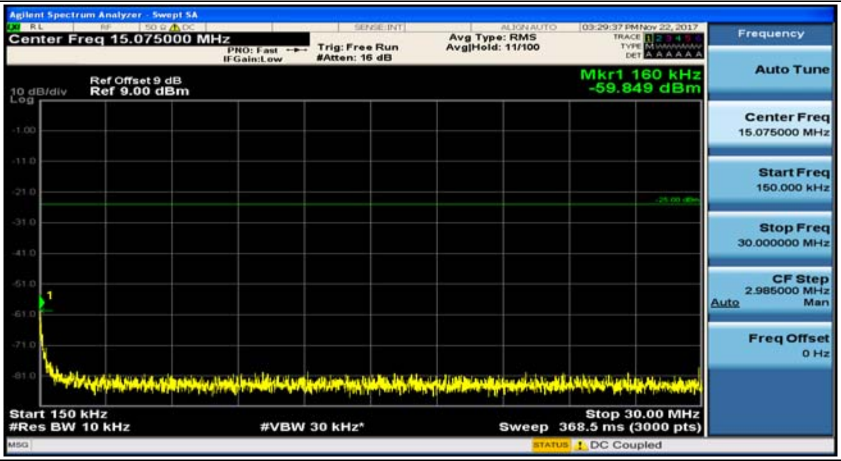
Ref Offset 9 dB
Ref 9.00 dBm

Mkr1 13.56 kHz
-61.661 dBm

Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)

Center Freq 79.500 kHz
Start Freq 9.000 kHz
Stop Freq 150.000 kHz
CF Step 14.100 kHz
Freq Offset 0 Hz

DC Coupled
RL
RF
50 Ω
DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-35.00 dBm
1
Frequency
Auto Tune
Auto
Man
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA

Center Freq 15.075000 MHz

PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 11/100

03:29:37 PM Nov 22, 2017

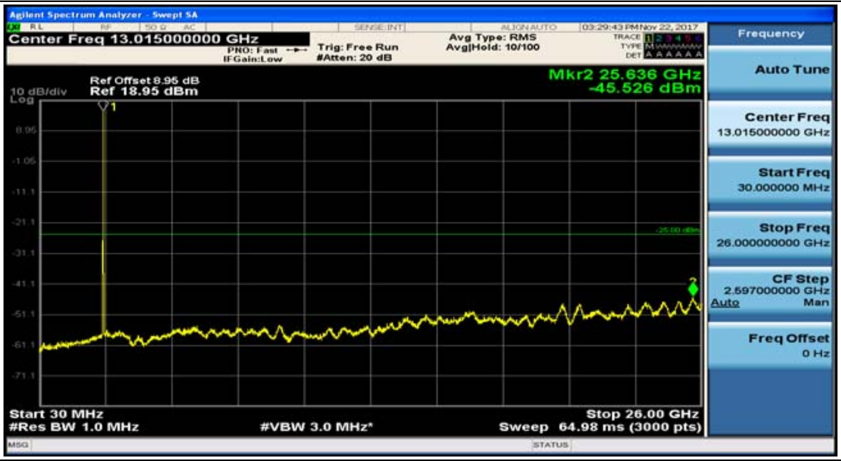
Ref Offset 9 dB
Ref 9.00 dBm

Mkr1 160 kHz
-59.849 dBm

Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)

Center Freq 15.075000 MHz
Start Freq 150.000 kHz
Stop Freq 30.000000 MHz
CF Step 2.985000 MHz
Freq Offset 0 Hz

DC Coupled
RL
RF
50 Ω
DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
Frequency
Auto Tune
Auto
Man
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA

Center Freq 13.015000000 GHz

PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 10/100

03:29:43 PM Nov 22, 2017

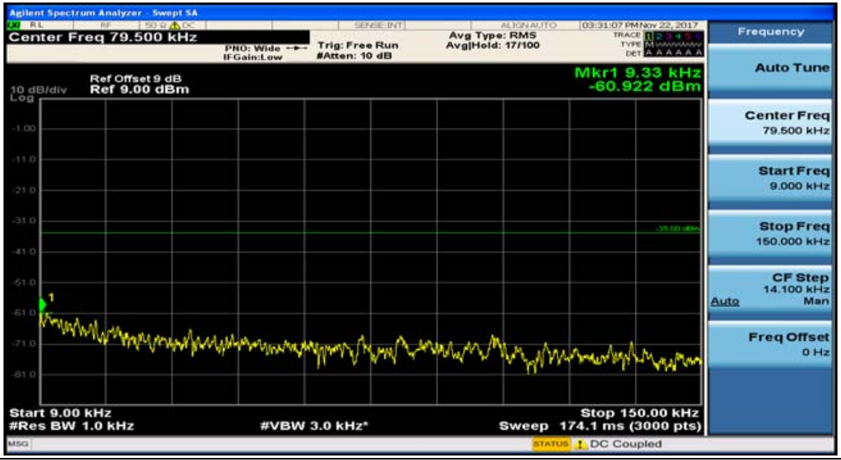
Ref Offset 8.95 dB
Ref 18.95 dBm

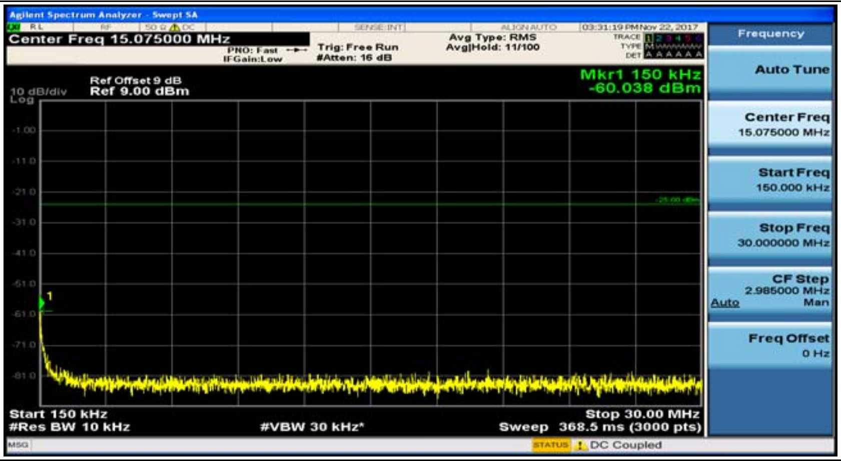
Mkr2 25.636 GHz
-45.526 dBm

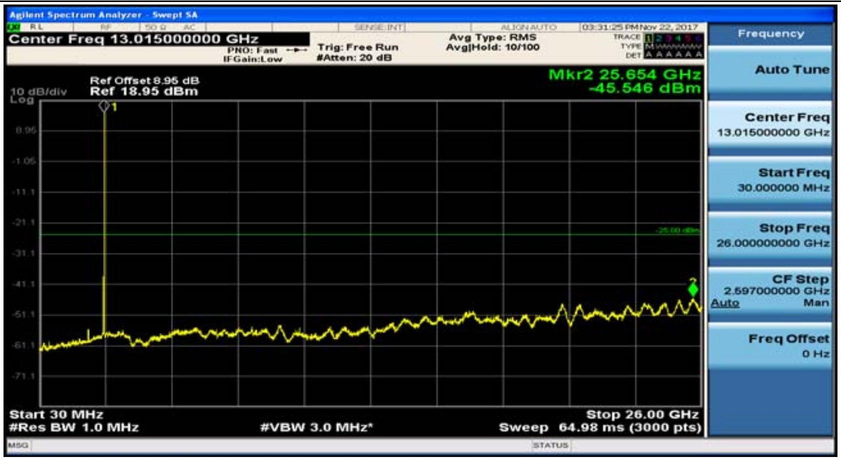
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

Center Freq 13.015000000 GHz
Start Freq 30.000000 MHz
Stop Freq 26.000000000 GHz
CF Step 2.597000000 GHz
Freq Offset 0 Hz
RL
RF
50 Ω
AC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
Frequency
Auto Tune
Auto
Man
MSG
STATUS

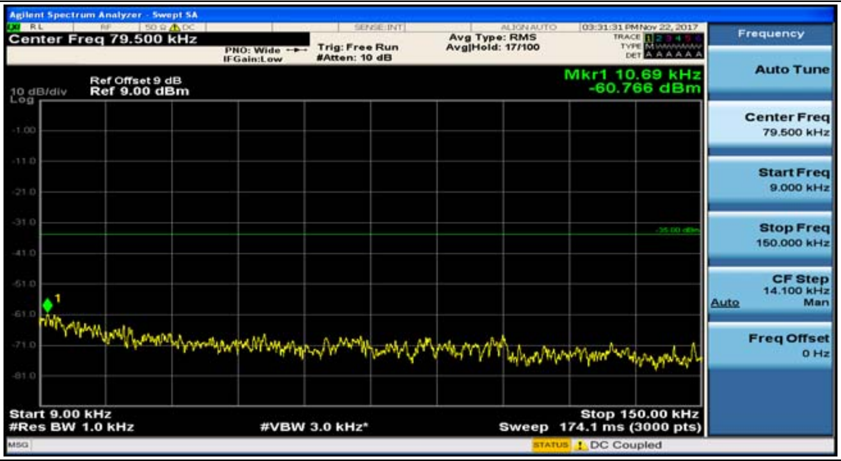
Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#0


Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
Ref Offset 9 dB
10 dB/div Ref 9.00 dBm
Log
Mkr1 9.33 kHz
-60.922 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq 79.500 kHz
Start Freq 9.000 kHz
Stop Freq 150.000 kHz
CF Step 14.100 kHz
Auto Man
Freq Offset 0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 11/100
Ref Offset 9 dB
10 dB/div Ref 9.00 dBm
Log
Mkr1 150 kHz
-60.038 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq 15.075000 MHz
Start Freq 150.000 kHz
Stop Freq 30.000000 MHz
CF Step 2.985000 MHz
Auto Man
Freq Offset 0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 10/100
Ref Offset 8.95 dB
10 dB/div Ref 18.95 dBm
Log
Mkr2 25.654 GHz
-45.546 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq 13.015000000 GHz
Start Freq 30.000000 MHz
Stop Freq 26.000000000 GHz
CF Step 2.597000000 GHz
Auto Man
Freq Offset 0 Hz

Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#24



Agilent Spectrum Analyzer - Swept SA

Center Freq 79.500 kHz

PNO: Wide IFGain:Low

Trig: Free Run #Atten: 10 dB

Avg Type: RMS Avg|Hold: 17/100

03:31:31 PM Nov 22, 2017

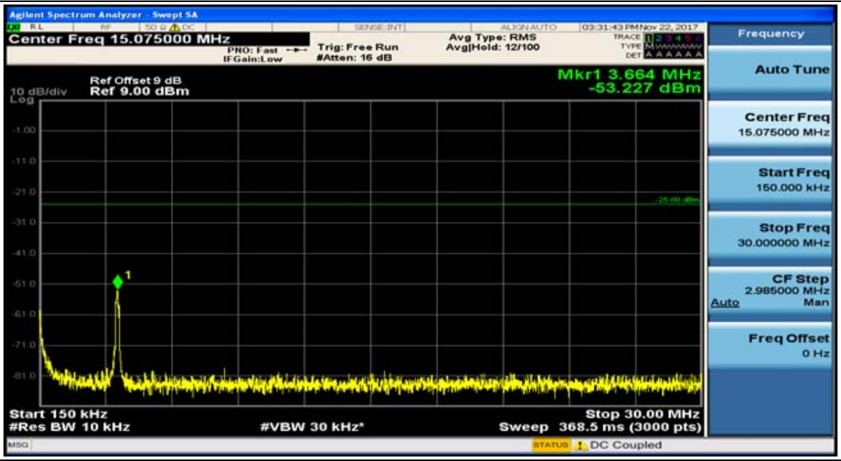
Ref Offset 9 dB Ref 9.00 dBm

Mkr1 10.69 kHz -60.766 dBm

Start 9.00 kHz #Res BW 1.0 kHz #VBW 3.0 kHz* Stop 150.00 kHz Sweep 174.1 ms (3000 pts)

DC Coupled

RL
RF
50 Ω
DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-35.00 dBm
1
Frequency
Auto Tune
Center Freq 79.500 kHz
Start Freq 9.000 kHz
Stop Freq 150.000 kHz
CF Step 14.100 kHz
Auto Man
Freq Offset 0 Hz
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA

Center Freq 15.075000 MHz

PNO: Fast IFGain:Low

Trig: Free Run #Atten: 16 dB

Avg Type: RMS Avg|Hold: 12/100

03:31:43 PM Nov 22, 2017

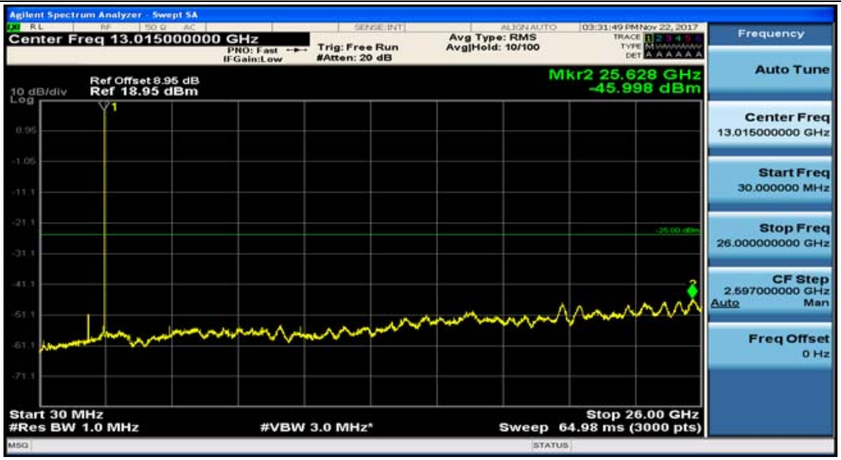
Ref Offset 9 dB Ref 9.00 dBm

Mkr1 3.664 MHz -53.227 dBm

Start 150 kHz #Res BW 10 kHz #VBW 30 kHz* Stop 30.00 MHz Sweep 368.5 ms (3000 pts)

DC Coupled

RL
RF
50 Ω
DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
Frequency
Auto Tune
Center Freq 15.075000 MHz
Start Freq 150.000 kHz
Stop Freq 30.000000 MHz
CF Step 2.985000 MHz
Auto Man
Freq Offset 0 Hz
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA

Center Freq 13.015000000 GHz

PNO: Fast IFGain:Low

Trig: Free Run #Atten: 20 dB

Avg Type: RMS Avg|Hold: 10/100

03:31:49 PM Nov 22, 2017

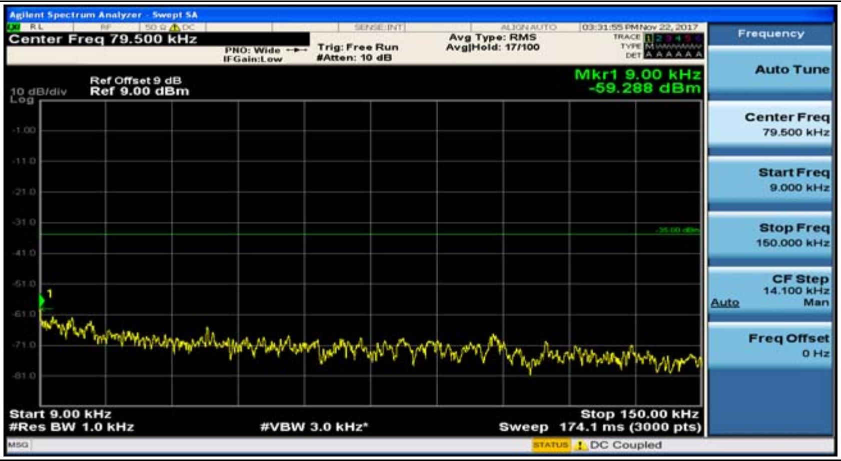
Ref Offset 8.95 dB Ref 18.95 dBm

Mkr2 25.628 GHz -45.998 dBm

Start 30 MHz #Res BW 1.0 MHz #VBW 3.0 MHz* Stop 26.00 GHz Sweep 64.98 ms (3000 pts)

RL
RF
50 Ω
AC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
Frequency
Auto Tune
Center Freq 13.015000000 GHz
Start Freq 30.000000 MHz
Stop Freq 26.000000000 GHz
CF Step 2.597000000 GHz
Auto Man
Freq Offset 0 Hz
MSG
STATUS

Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#49



Agilent Spectrum Analyzer - Swept SA

03:31:55 PM Nov 22, 2017

Center Freq 79.500 kHz

PNO: Wide

IFGain:Low

Trig: Free Run

#Atten: 10 dB

Avg Type: RMS

Avg|Hold: 17/100

Ref Offset 9 dB

Ref 9.00 dBm

Mkr1 9.00 kHz

-59.288 dBm

Start 9.00 kHz

#Res BW 1.0 kHz

#VBW 3.0 kHz*

Stop 150.00 kHz

Sweep 174.1 ms (3000 pts)

Center Freq 79.500 kHz

Start Freq 9.000 kHz

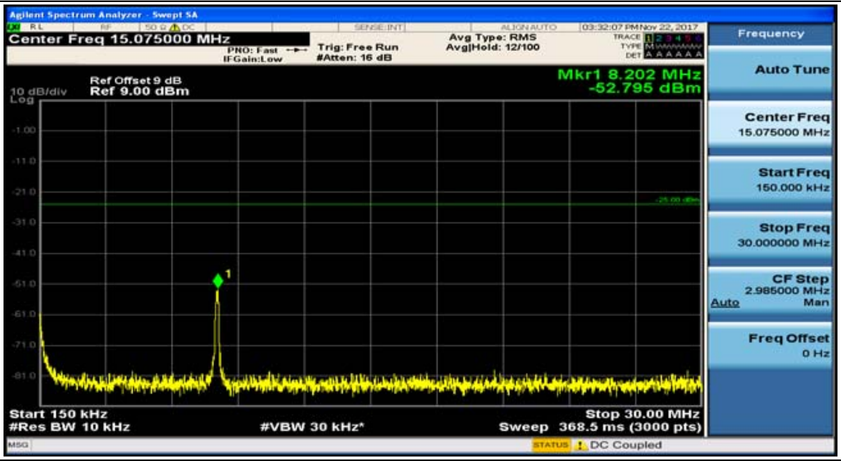
Stop Freq 150.000 kHz

CF Step 14.100 kHz

Freq Offset 0 Hz

DC Coupled

RL
RF
50 Ω
DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-35.00 dBm
1
Frequency
Auto Tune
Auto
Man
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA

03:32:07 PM Nov 22, 2017

Center Freq 15.075000 MHz

PNO: Fast

IFGain:Low

Trig: Free Run

#Atten: 16 dB

Avg Type: RMS

Avg|Hold: 12/100

Ref Offset 9 dB

Ref 9.00 dBm

Mkr1 8.202 MHz

-52.795 dBm

Start 150 kHz

#Res BW 10 kHz

#VBW 30 kHz*

Stop 30.00 MHz

Sweep 368.5 ms (3000 pts)

Center Freq 15.075000 MHz

Start Freq 150.000 kHz

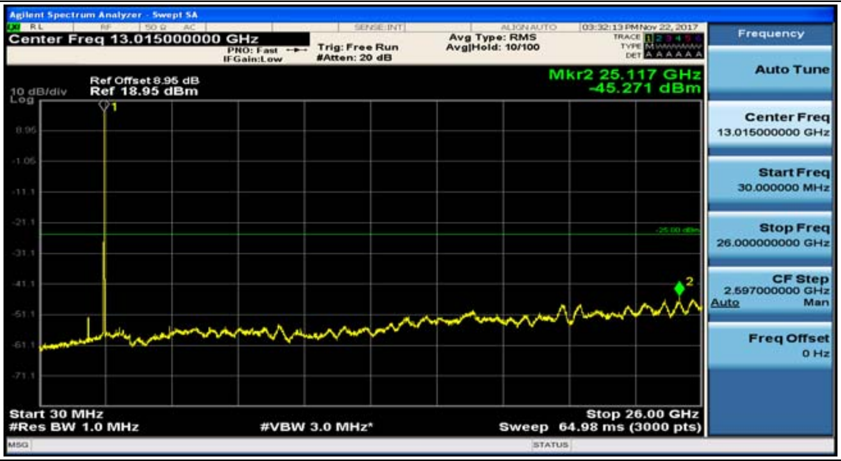
Stop Freq 30.000000 MHz

CF Step 2.985000 MHz

Freq Offset 0 Hz

DC Coupled

RL
RF
50 Ω
DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
Frequency
Auto Tune
Auto
Man
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA

03:32:13 PM Nov 22, 2017

Center Freq 13.015000000 GHz

PNO: Fast

IFGain:Low

Trig: Free Run

#Atten: 20 dB

Avg Type: RMS

Avg|Hold: 10/100

Ref Offset 8.95 dB

Ref 18.95 dBm

Mkr2 25.117 GHz

-45.271 dBm

Start 30 MHz

#Res BW 1.0 MHz

#VBW 3.0 MHz*

Stop 26.00 GHz

Sweep 64.98 ms (3000 pts)

Center Freq 13.015000000 GHz

Start Freq 30.000000 MHz

Stop Freq 26.000000000 GHz

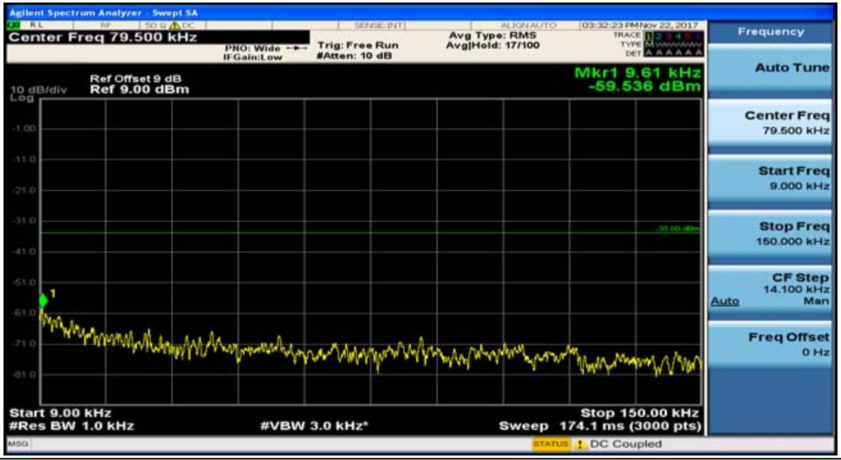
CF Step 2.597000000 GHz

Freq Offset 0 Hz

RL
RF
50 Ω
AC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
Frequency
Auto Tune
Auto
Man
MSG
STATUS

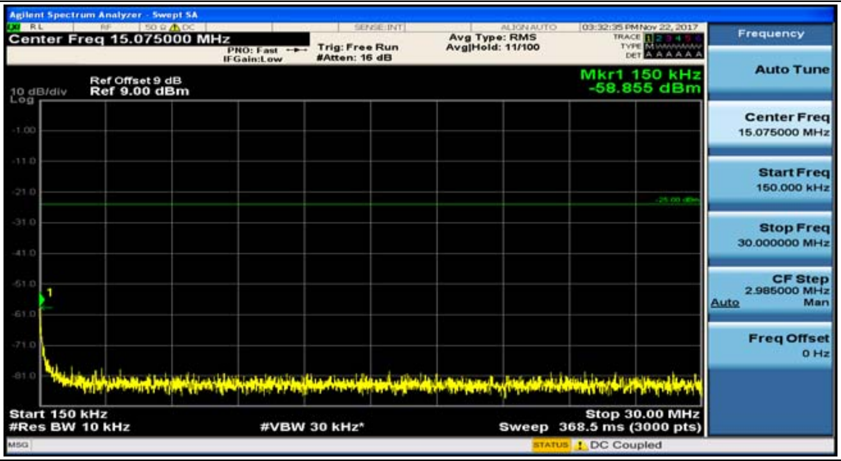
Channel Bandwidth: 15 MHz

(Channel Bandwidth:15 MHz)_LCH_QPSK_1RB#0



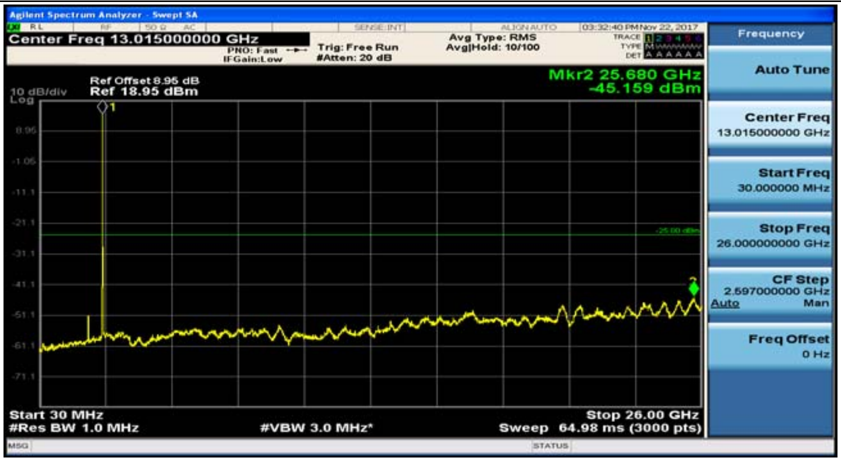
Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
03:32:23 PM Nov 22, 2017
Ref Offset 9 dB
Ref 9.00 dBm
10 dB/div
Log
Mkr1 9.61 kHz
-59.536 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Center Freq 79.500 kHz
Start Freq 9.000 kHz
Stop Freq 150.000 kHz
CF Step 14.100 kHz
Freq Offset 0 Hz

Frequency
Auto Tune
Auto
Man
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-35.00 dBm
1
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 11/100
03:32:35 PM Nov 22, 2017
Ref Offset 9 dB
Ref 9.00 dBm
10 dB/div
Log
Mkr1 150 kHz
-58.855 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
Center Freq 15.075000 MHz
Start Freq 150.000 kHz
Stop Freq 30.000000 MHz
CF Step 2.985000 MHz
Freq Offset 0 Hz

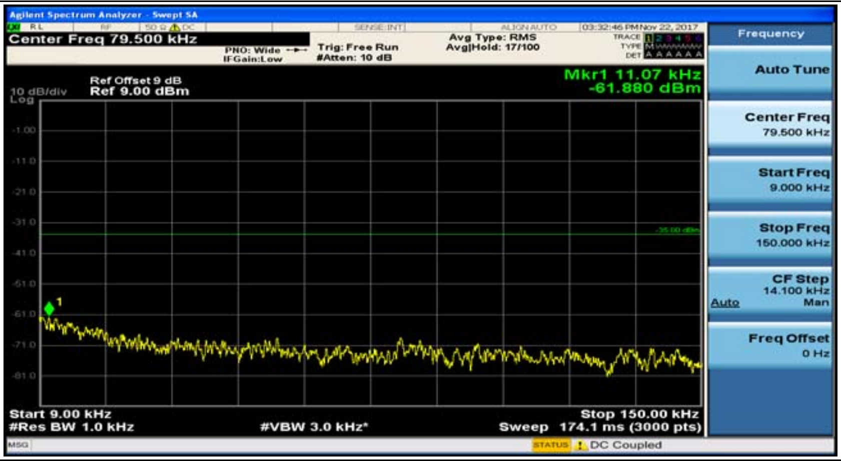
Frequency
Auto Tune
Auto
Man
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 10/100
03:32:40 PM Nov 22, 2017
Ref Offset 8.95 dB
Ref 18.95 dBm
10 dB/div
Log
Mkr2 25.680 GHz
-45.159 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Center Freq 13.015000000 GHz
Start Freq 30.000000 MHz
Stop Freq 26.000000000 GHz
CF Step 2.597000000 GHz
Freq Offset 0 Hz

Frequency
Auto Tune
Auto
Man
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
MSG
STATUS

(Channel Bandwidth:15 MHz)_LCH_QPSK_1RB#37



Agilent Spectrum Analyzer - Swept SA

Center Freq 79.500 kHz

PNO: Wide

IFGain:Low

Trig: Free Run

#Atten: 10 dB

Avg Type: RMS

Avg|Hold: 17/100

03:32:46 PM Nov 22, 2017

Ref Offset 9 dB

Ref 9.00 dBm

Mkr1 11.07 kHz

-61.880 dBm

Start 9.00 kHz

#Res BW 1.0 kHz

#VBW 3.0 kHz*

Stop 150.00 kHz

Sweep 174.1 ms (3000 pts)

DC Coupled

Center Freq 79.500 kHz

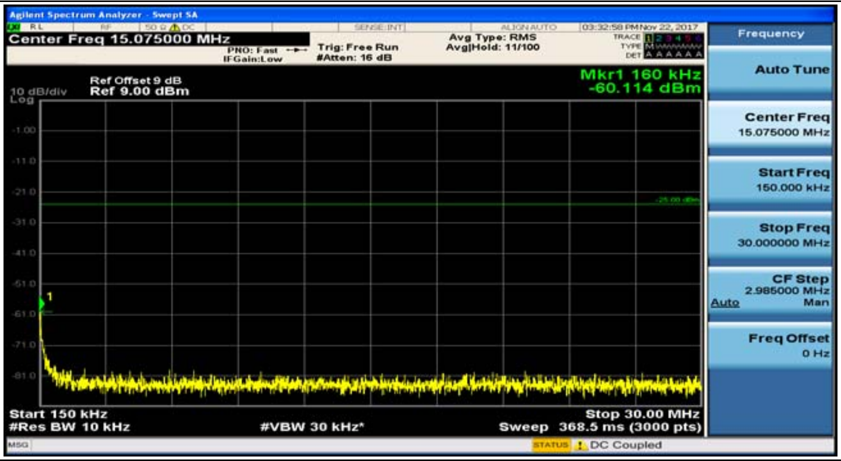
Start Freq 9.000 kHz

Stop Freq 150.000 kHz

CF Step 14.100 kHz

Freq Offset 0 Hz

R L
RF
50 Ω
DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-35.00 dBm
1
Frequency
Auto Tune
Auto
Man
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA

Center Freq 15.075000 MHz

PNO: Fast

IFGain:Low

Trig: Free Run

#Atten: 16 dB

Avg Type: RMS

Avg|Hold: 11/100

03:32:58 PM Nov 22, 2017

Ref Offset 9 dB

Ref 9.00 dBm

Mkr1 160 kHz

-60.114 dBm

Start 150 kHz

#Res BW 10 kHz

#VBW 30 kHz*

Stop 30.00 MHz

Sweep 368.5 ms (3000 pts)

DC Coupled

Center Freq 15.075000 MHz

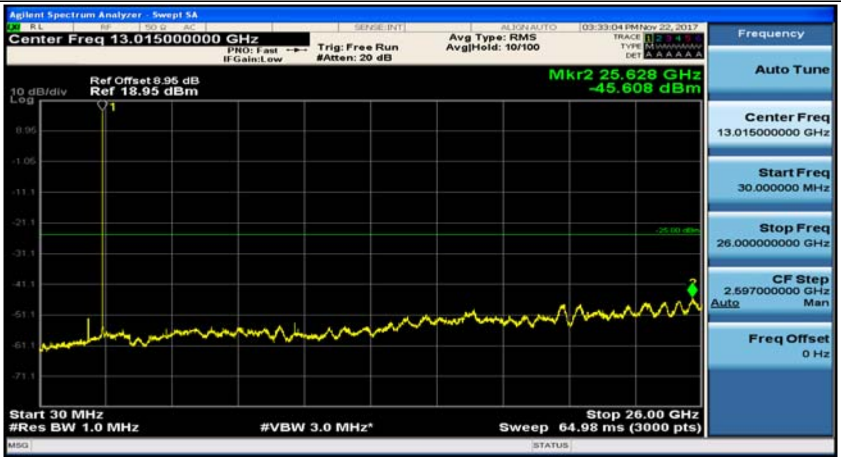
Start Freq 150.000 kHz

Stop Freq 30.000000 MHz

CF Step 2.985000 MHz

Freq Offset 0 Hz

R L
RF
50 Ω
DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
Frequency
Auto Tune
Auto
Man
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA

Center Freq 13.015000000 GHz

PNO: Fast

IFGain:Low

Trig: Free Run

#Atten: 20 dB

Avg Type: RMS

Avg|Hold: 10/100

03:33:04 PM Nov 22, 2017

Ref Offset 8.95 dB

Ref 18.95 dBm

Mkr2 25.628 GHz

-45.608 dBm

Start 30 MHz

#Res BW 1.0 MHz

#VBW 3.0 MHz*

Stop 26.00 GHz

Sweep 64.98 ms (3000 pts)

Center Freq 13.015000000 GHz

Start Freq 30.000000 MHz

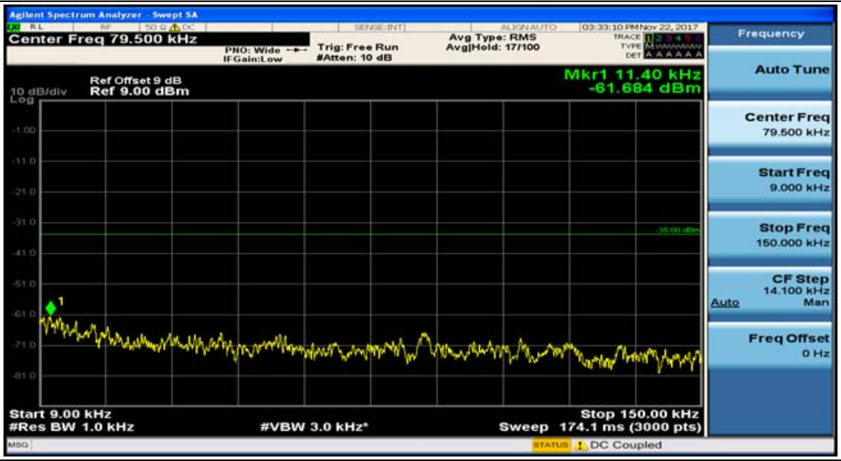
Stop Freq 26.000000000 GHz

CF Step 2.597000000 GHz

Freq Offset 0 Hz

R L
RF
50 Ω
AC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
Frequency
Auto Tune
Auto
Man
MSG
STATUS

(Channel Bandwidth:15 MHz)_LCH_QPSK_1RB#74


Agilent Spectrum Analyzer - Swept SA

Center Freq 79.500 kHz

PNO: Wide IFGain:Low Trig: Free Run #Atten: 10 dB Avg Type: RMS Avg|Hold: 17/100

03:33:10 PM Nov 22, 2017

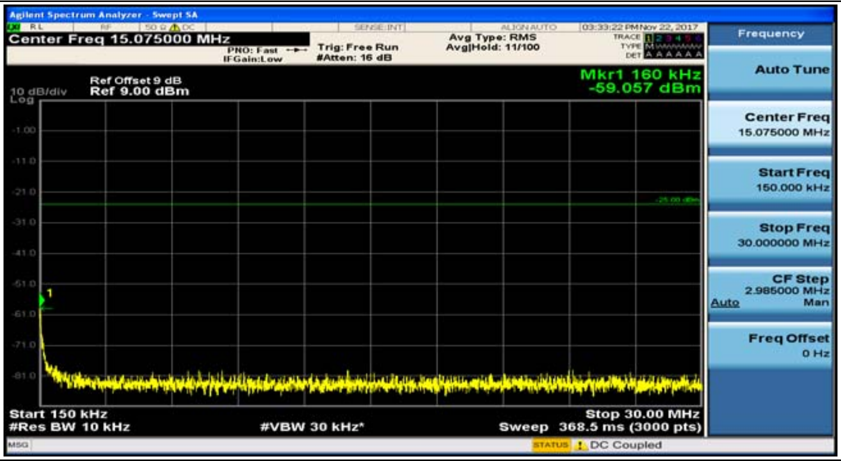
Ref Offset 9 dB Ref 9.00 dBm 10 dB/div Log

Mkr1 11.40 kHz -61.684 dBm

Start 9.00 kHz #Res BW 1.0 kHz #VBW 3.0 kHz* Stop 150.00 kHz Sweep 174.1 ms (3000 pts)

Frequency Auto Tune Center Freq 79.500 kHz Start Freq 9.000 kHz Stop Freq 150.000 kHz CF Step 14.100 kHz Auto Man Freq Offset 0 Hz

DC Coupled
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-35.00 dBm
1
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA

Center Freq 15.075000 MHz

PNO: Fast IFGain:Low Trig: Free Run #Atten: 16 dB Avg Type: RMS Avg|Hold: 11/100

03:33:22 PM Nov 22, 2017

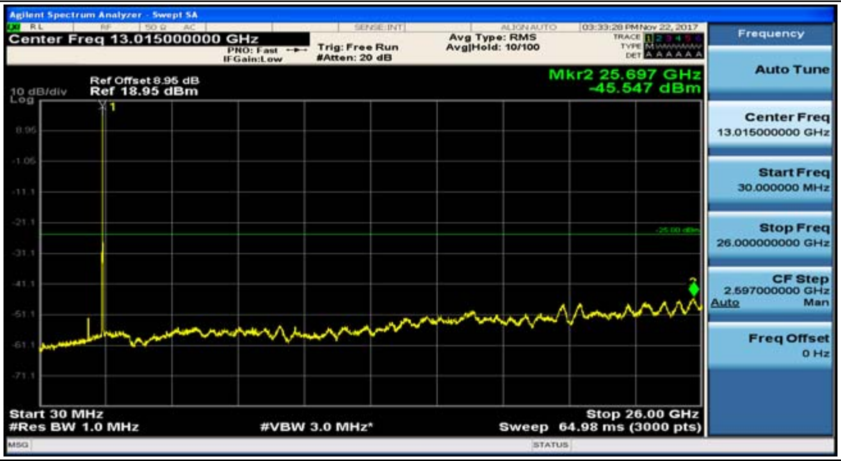
Ref Offset 9 dB Ref 9.00 dBm 10 dB/div Log

Mkr1 160 kHz -59.057 dBm

Start 150 kHz #Res BW 10 kHz #VBW 30 kHz* Stop 30.00 MHz Sweep 368.5 ms (3000 pts)

Frequency Auto Tune Center Freq 15.075000 MHz Start Freq 150.000 kHz Stop Freq 30.000000 MHz CF Step 2.985000 MHz Auto Man Freq Offset 0 Hz

DC Coupled
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA

Center Freq 13.015000000 GHz

PNO: Fast IFGain:Low Trig: Free Run #Atten: 20 dB Avg Type: RMS Avg|Hold: 10/100

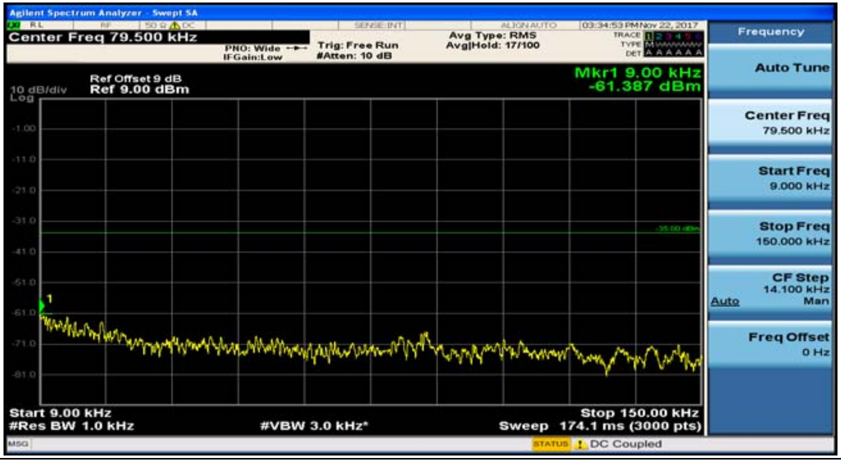
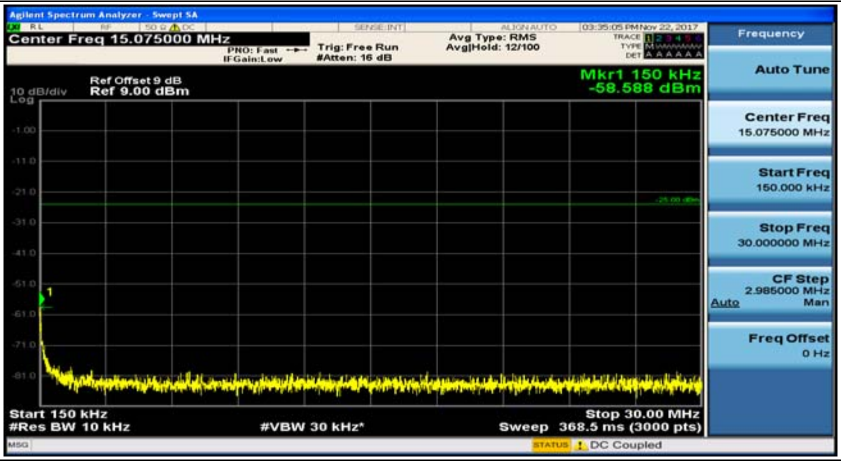
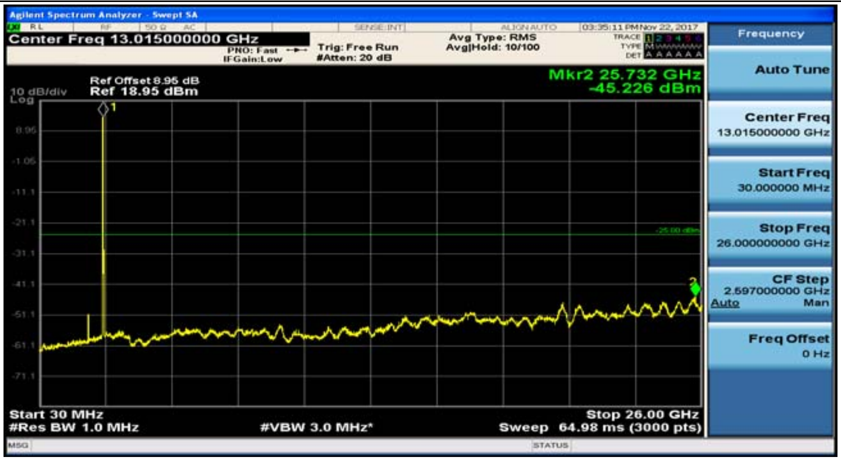
03:33:28 PM Nov 22, 2017

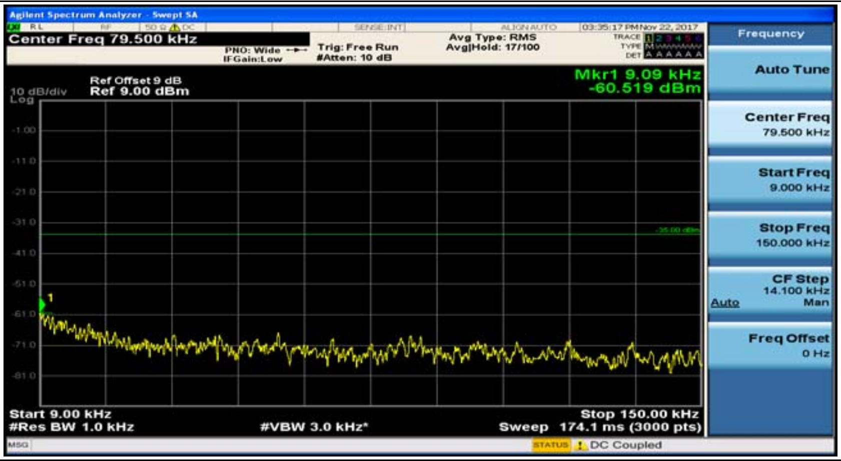
Ref Offset 8.95 dB Ref 18.95 dBm 10 dB/div Log

Mkr2 25.697 GHz -45.547 dBm

Start 30 MHz #Res BW 1.0 MHz #VBW 3.0 MHz* Stop 26.00 GHz Sweep 64.98 ms (3000 pts)

Frequency Auto Tune Center Freq 13.015000000 GHz Start Freq 30.000000 MHz Stop Freq 26.000000000 GHz CF Step 2.597000000 GHz Auto Man Freq Offset 0 Hz
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
MSG
STATUS

(Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#0
 Agilent Spectrum Analyzer - Swept SA 03:34:53 PM Nov 22, 2017 Center Freq 79.500 kHz PNO: Wide IFGain:Low Trig: Free Run #Atten: 10 dB Avg Type: RMS Avg|Hold: 17/100 Ref Offset 9 dB Ref 9.00 dBm Mkr1 9.00 kHz -61.387 dBm Start 9.00 kHz #Res BW 1.0 kHz #VBW 3.0 kHz* Stop 150.00 kHz Sweep 174.1 ms (3000 pts) Center Freq 79.500 kHz Start Freq 9.000 kHz Stop Freq 150.000 kHz CF Step 14.100 kHz Freq Offset 0 Hz DC Coupled
 Agilent Spectrum Analyzer - Swept SA 03:35:05 PM Nov 22, 2017 Center Freq 15.075000 MHz PNO: Fast IFGain:Low Trig: Free Run #Atten: 16 dB Avg Type: RMS Avg|Hold: 12/100 Ref Offset 9 dB Ref 9.00 dBm Mkr1 150 kHz -58.588 dBm Start 150 kHz #Res BW 10 kHz #VBW 30 kHz* Stop 30.00 MHz Sweep 368.5 ms (3000 pts) Center Freq 15.075000 MHz Start Freq 150.000 kHz Stop Freq 30.000000 MHz CF Step 2.985000 MHz Freq Offset 0 Hz DC Coupled
 Agilent Spectrum Analyzer - Swept SA 03:35:11 PM Nov 22, 2017 Center Freq 13.015000000 GHz PNO: Fast IFGain:Low Trig: Free Run #Atten: 20 dB Avg Type: RMS Avg|Hold: 10/100 Ref Offset 8.95 dB Ref 18.95 dBm Mkr2 25.732 GHz -45.226 dBm Start 30 MHz #Res BW 1.0 MHz #VBW 3.0 MHz* Stop 26.00 GHz Sweep 64.98 ms (3000 pts) Center Freq 13.015000000 GHz Start Freq 30.000000 MHz Stop Freq 26.000000000 GHz CF Step 2.597000000 GHz Freq Offset 0 Hz
(Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#37



Agilent Spectrum Analyzer - Swept SA

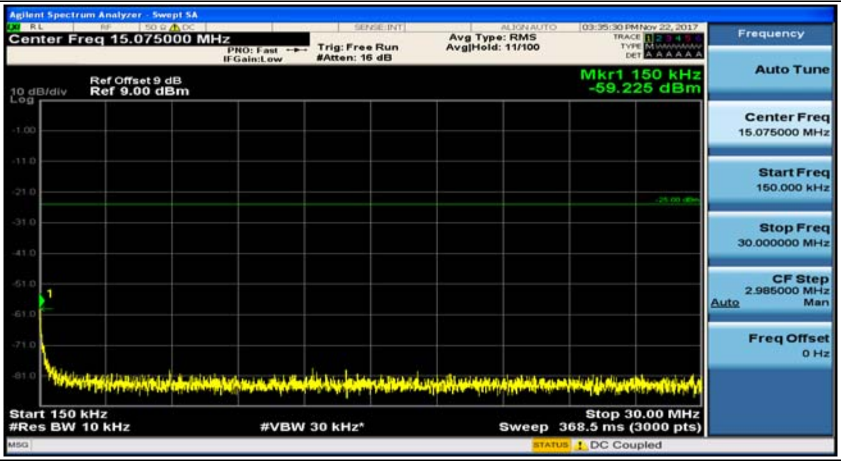
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
03:35:17 PM Nov 22, 2017

Ref Offset 9 dB
Ref 9.00 dBm
Mkr1 9.09 kHz
-60.519 dBm

Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)

DC Coupled

10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-35.00 dBm
1
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA

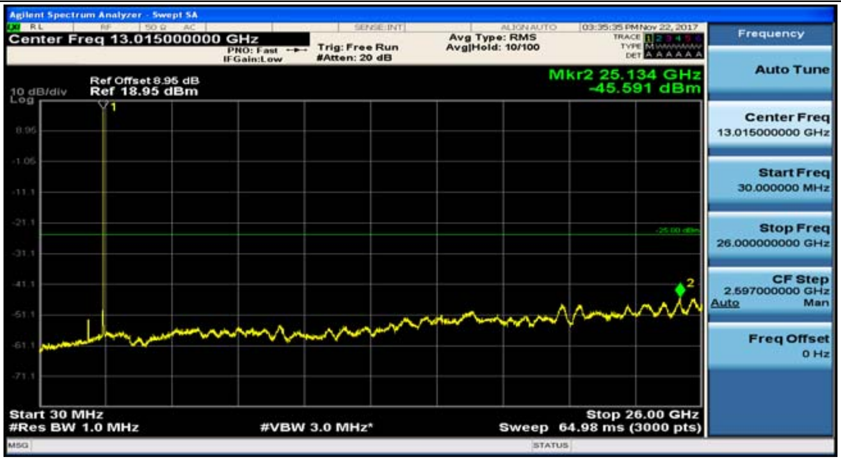
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 11/100
03:35:30 PM Nov 22, 2017

Ref Offset 9 dB
Ref 9.00 dBm
Mkr1 150 kHz
-59.225 dBm

Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)

DC Coupled

10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA

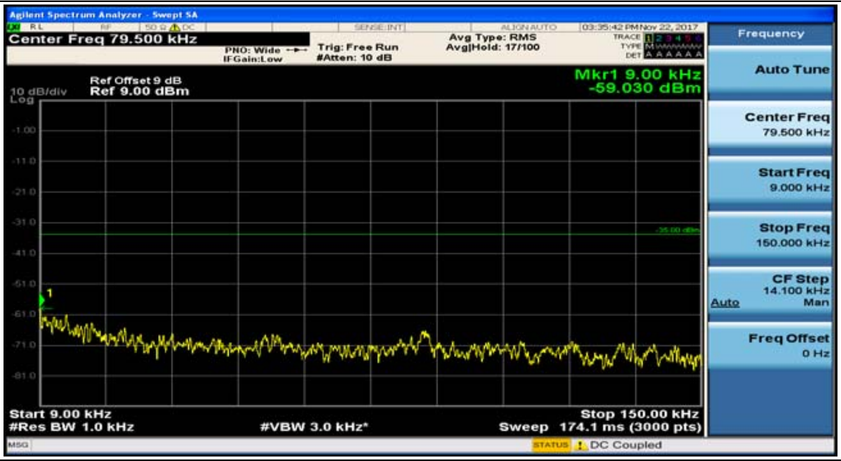
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 10/100
03:35:35 PM Nov 22, 2017

Ref Offset 8.95 dB
Ref 18.95 dBm
Mkr2 25.134 GHz
-45.591 dBm

Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

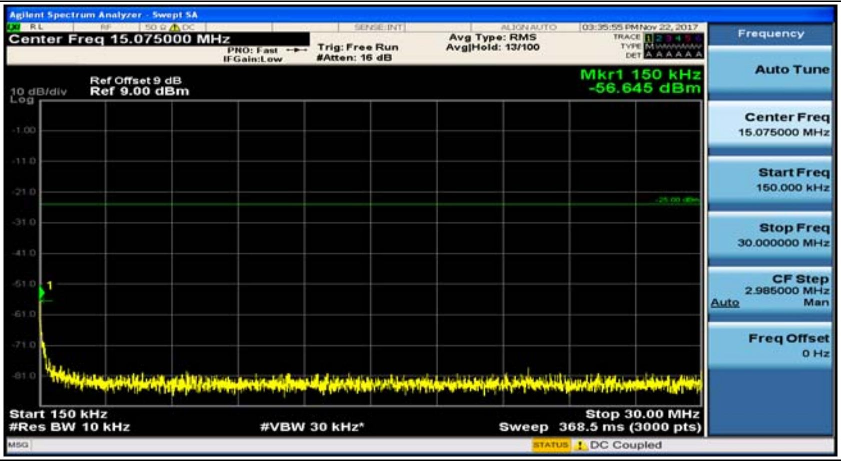
10 dB/div
Log
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

(Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#74



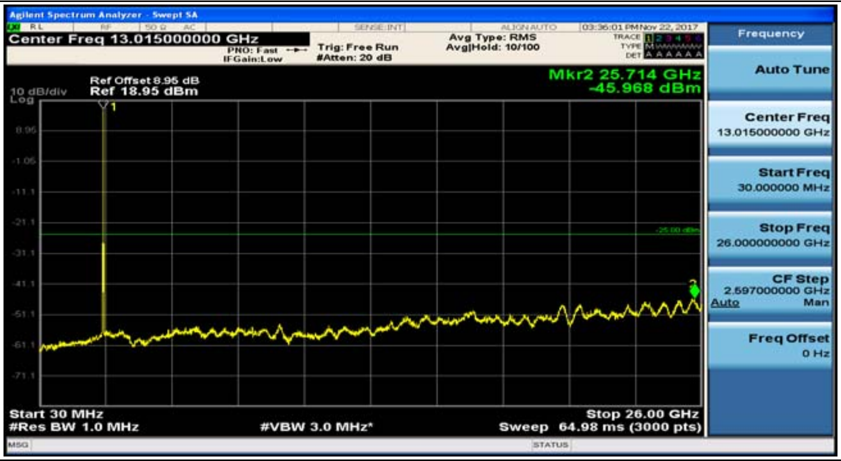
Agilent Spectrum Analyzer - Swept SA
03:35:42 PM Nov 22, 2017
Center Freq 79.500 kHz
PNO: Wide IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
Ref Offset 9 dB
Ref 9.00 dBm
Mkr1 9.00 kHz
-59.030 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled

RL
RF
50 Ω DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-35.00 dBm
1
Frequency
Auto Tune
Center Freq 79.500 kHz
Start Freq 9.000 kHz
Stop Freq 150.000 kHz
CF Step 14.100 kHz Auto Man
Freq Offset 0 Hz
MSG
STATUS



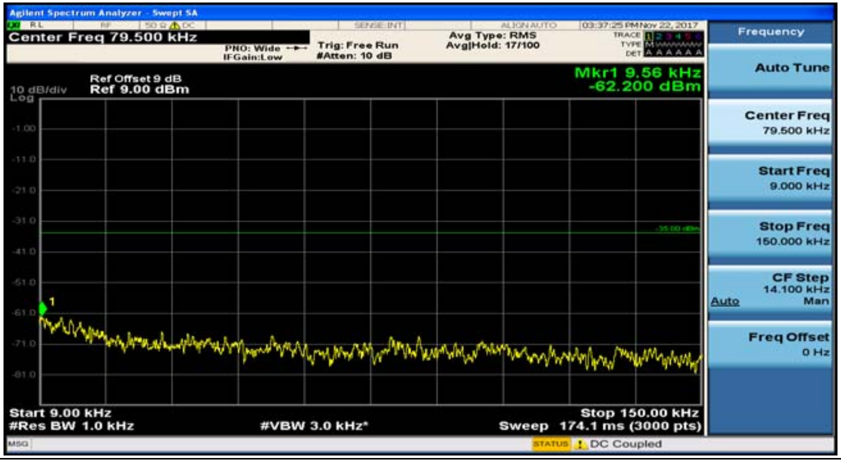
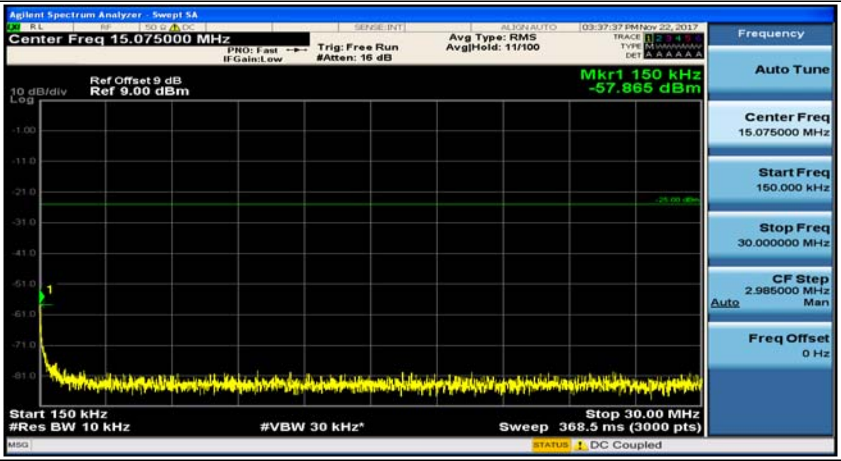
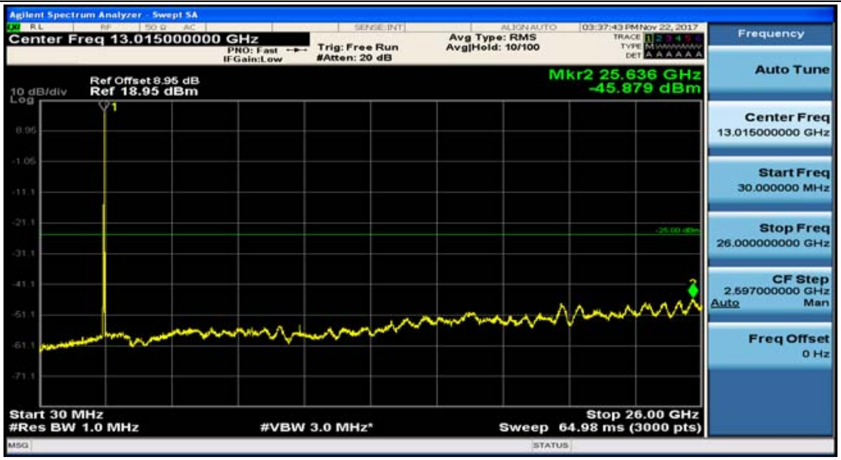
Agilent Spectrum Analyzer - Swept SA
03:35:55 PM Nov 22, 2017
Center Freq 15.075000 MHz
PNO: Fast IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 13/100
Ref Offset 9 dB
Ref 9.00 dBm
Mkr1 150 kHz
-56.645 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled

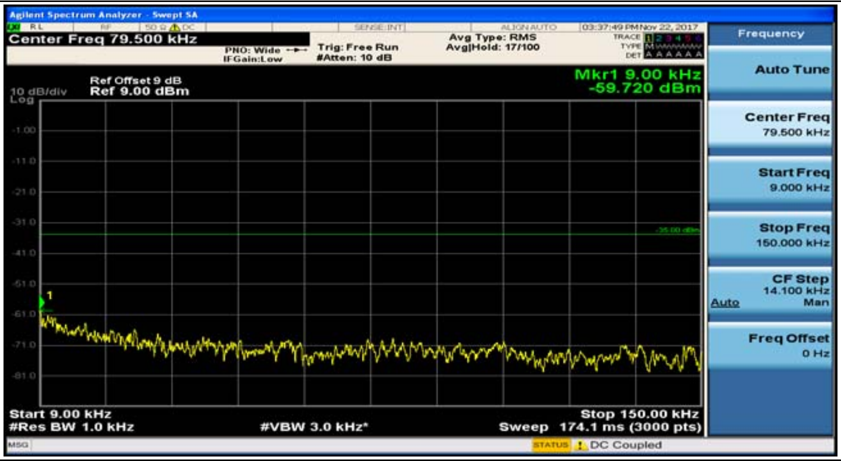
RL
RF
50 Ω DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
Frequency
Auto Tune
Center Freq 15.075000 MHz
Start Freq 150.000 kHz
Stop Freq 30.000000 MHz
CF Step 2.985000 MHz Auto Man
Freq Offset 0 Hz
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA
03:36:01 PM Nov 22, 2017
Center Freq 13.015000000 GHz
PNO: Fast IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 10/100
Ref Offset 8.95 dB
Ref 18.95 dBm
Mkr2 25.714 GHz
-45.968 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div Log
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
Frequency
Auto Tune
Center Freq 13.015000000 GHz
Start Freq 30.000000 MHz
Stop Freq 26.000000000 GHz
CF Step 2.597000000 GHz Auto Man
Freq Offset 0 Hz
MSG
STATUS

(Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#0
 Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω DC SENSE:INT ALIGN AUTO 03:37:25 PM Nov 22, 2017 Center Freq 79.500 kHz PNO: Wide IFGain:Low Trig: Free Run #Atten: 10 dB Avg Type: RMS Avg|Hold: 17/100 Ref Offset 9 dB 10 dB/div Log Ref 9.00 dBm Mkr1 9.56 kHz -62.200 dBm Start 9.00 kHz Stop 150.00 kHz #Res BW 1.0 kHz #VBW 3.0 kHz* Sweep 174.1 ms (3000 pts) MSG STATUS DC Coupled TRACE 1 2 3 4 5 6 TYPE M W W W W W DET A A A A A A -1.00 -11.0 -21.0 -31.0 -41.0 -51.0 -61.0 -71.0 -81.0 -35.00 dBm 1 Frequency Auto Tune Center Freq 79.500 kHz Start Freq 9.000 kHz Stop Freq 150.000 kHz CF Step 14.100 kHz Auto Man Freq Offset 0 Hz
 Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω DC SENSE:INT ALIGN AUTO 03:37:37 PM Nov 22, 2017 Center Freq 15.075000 MHz PNO: Fast IFGain:Low Trig: Free Run #Atten: 16 dB Avg Type: RMS Avg|Hold: 11/100 Ref Offset 9 dB 10 dB/div Log Ref 9.00 dBm Mkr1 150 kHz -57.865 dBm Start 150 kHz Stop 30.00 MHz #Res BW 10 kHz #VBW 30 kHz* Sweep 368.5 ms (3000 pts) MSG STATUS DC Coupled TRACE 1 2 3 4 5 6 TYPE M W W W W W DET A A A A A A -1.00 -11.0 -21.0 -31.0 -41.0 -51.0 -61.0 -71.0 -81.0 -25.00 dBm 1 Frequency Auto Tune Center Freq 15.075000 MHz Start Freq 150.000 kHz Stop Freq 30.000000 MHz CF Step 2.985000 MHz Auto Man Freq Offset 0 Hz
 Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:37:43 PM Nov 22, 2017 Center Freq 13.015000000 GHz PNO: Fast IFGain:Low Trig: Free Run #Atten: 20 dB Avg Type: RMS Avg|Hold: 10/100 Ref Offset 8.95 dB 10 dB/div Log Ref 18.95 dBm Mkr2 25.636 GHz -45.879 dBm Start 30 MHz Stop 26.00 GHz #Res BW 1.0 MHz #VBW 3.0 MHz* Sweep 64.98 ms (3000 pts) MSG STATUS TRACE 1 2 3 4 5 6 TYPE M W W W W W DET A A A A A A 8.95 -1.05 -11.1 -21.1 -31.1 -41.1 -51.1 -61.1 -71.1 -25.00 dBm 1 2 Frequency Auto Tune Center Freq 13.015000000 GHz Start Freq 30.000000 MHz Stop Freq 26.000000000 GHz CF Step 2.597000000 GHz Auto Man Freq Offset 0 Hz
(Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#37



Agilent Spectrum Analyzer - Swept SA

Center Freq 79.500 kHz

PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100

03:37:49 PM Nov 22, 2017

Ref Offset 9 dB
Ref 9.00 dBm
10 dB/div Log

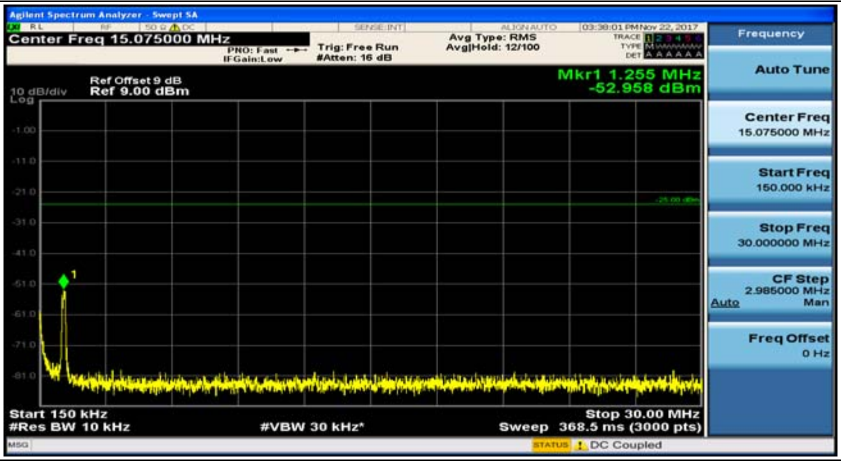
Mkr1 9.00 kHz
-59.720 dBm

Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)

DC Coupled

Center Freq 79.500 kHz
Start Freq 9.000 kHz
Stop Freq 150.000 kHz
CF Step 14.100 kHz
Freq Offset 0 Hz

RL
RF
50 Ω
DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-35.00 dBm
1
MSG
STATUS
Frequency
Auto Tune
Auto
Man



Agilent Spectrum Analyzer - Swept SA

Center Freq 15.075000 MHz

PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 12/100

03:38:01 PM Nov 22, 2017

Ref Offset 9 dB
Ref 9.00 dBm
10 dB/div Log

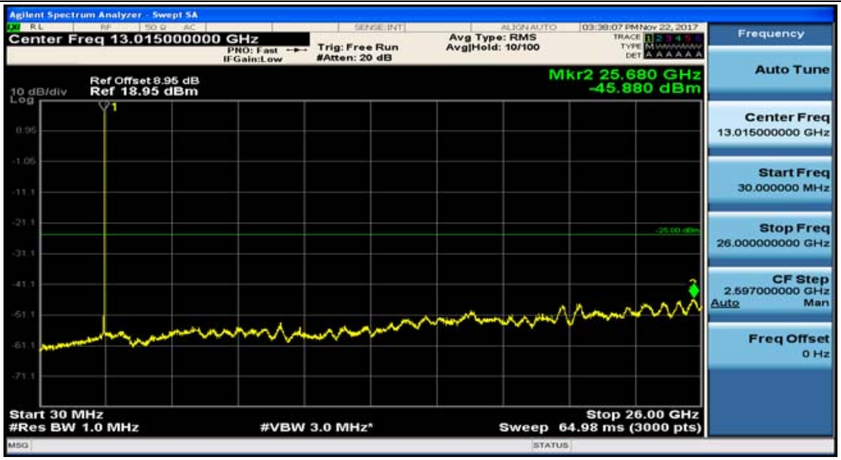
Mkr1 1.255 MHz
-52.958 dBm

Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)

DC Coupled

Center Freq 15.075000 MHz
Start Freq 150.000 kHz
Stop Freq 30.000000 MHz
CF Step 2.985000 MHz
Freq Offset 0 Hz

RL
RF
50 Ω
DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
MSG
STATUS
Frequency
Auto Tune
Auto
Man



Agilent Spectrum Analyzer - Swept SA

Center Freq 13.015000000 GHz

PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 10/100

03:38:07 PM Nov 22, 2017

Ref Offset 8.95 dB
Ref 18.95 dBm
10 dB/div Log

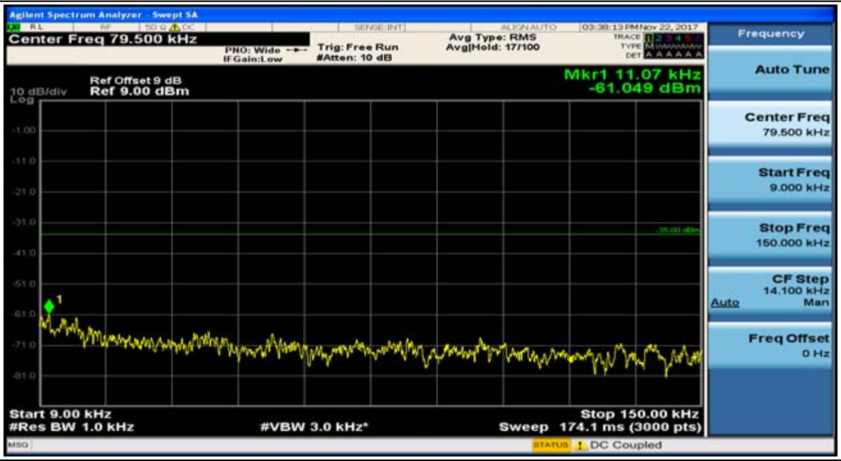
Mkr2 25.680 GHz
-45.880 dBm

Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

Center Freq 13.015000000 GHz
Start Freq 30.000000 MHz
Stop Freq 26.000000000 GHz
CF Step 2.597000000 GHz
Freq Offset 0 Hz

RL
RF
50 Ω
AC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
MSG
STATUS
Frequency
Auto Tune
Auto
Man

(Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#74


Agilent Spectrum Analyzer - Swept SA

Center Freq 79.500 kHz

PNO: Wide IFGain:Low

Trig: Free Run #Atten: 10 dB

Avg Type: RMS Avg|Hold: 17/100

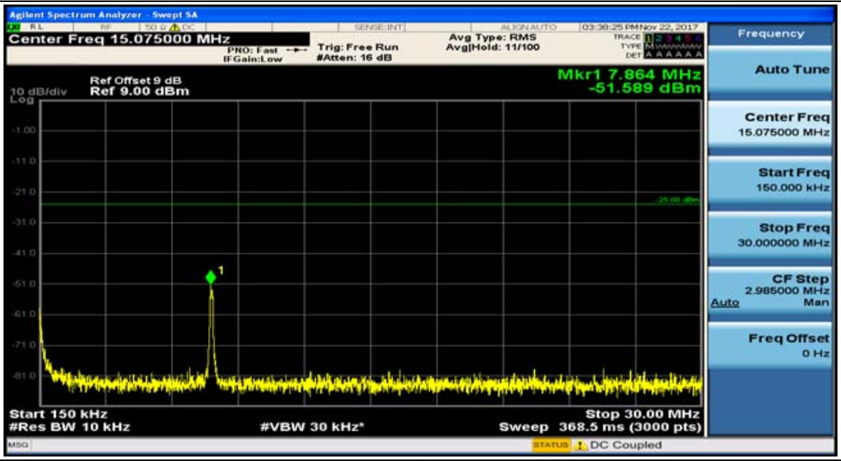
03:38:13 PM Nov 22, 2017

Ref Offset 9 dB Ref 9.00 dBm

Mkr1 11.07 kHz -61.049 dBm

Start 9.00 kHz #Res BW 1.0 kHz #VBW 3.0 kHz* Stop 150.00 kHz Sweep 174.1 ms (3000 pts)

DC Coupled
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-35.00 dBm
1
Frequency
Auto Tune
Center Freq 79.500 kHz
Start Freq 9.000 kHz
Stop Freq 150.000 kHz
CF Step 14.100 kHz Auto Man
Freq Offset 0 Hz
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA

Center Freq 15.075000 MHz

PNO: Fast IFGain:Low

Trig: Free Run #Atten: 16 dB

Avg Type: RMS Avg|Hold: 11/100

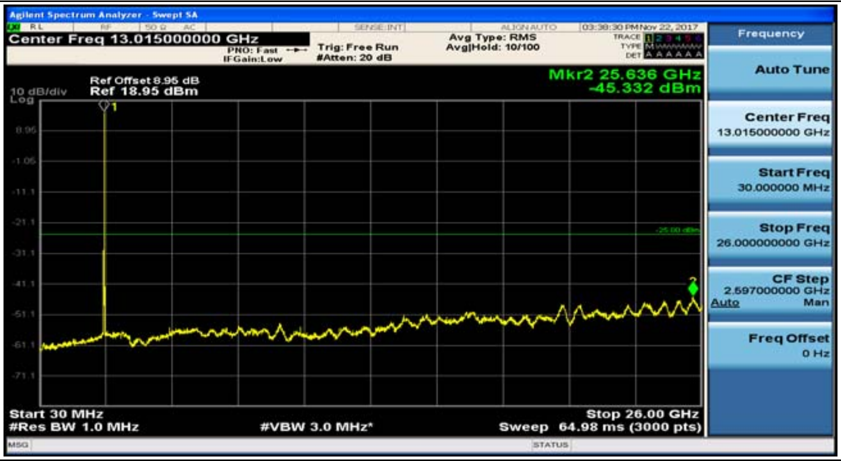
03:38:25 PM Nov 22, 2017

Ref Offset 9 dB Ref 9.00 dBm

Mkr1 7.864 MHz -51.589 dBm

Start 150 kHz #Res BW 10 kHz #VBW 30 kHz* Stop 30.00 MHz Sweep 368.5 ms (3000 pts)

DC Coupled
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
Frequency
Auto Tune
Center Freq 15.075000 MHz
Start Freq 150.000 kHz
Stop Freq 30.000000 MHz
CF Step 2.985000 MHz Auto Man
Freq Offset 0 Hz
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA

Center Freq 13.015000000 GHz

PNO: Fast IFGain:Low

Trig: Free Run #Atten: 20 dB

Avg Type: RMS Avg|Hold: 10/100

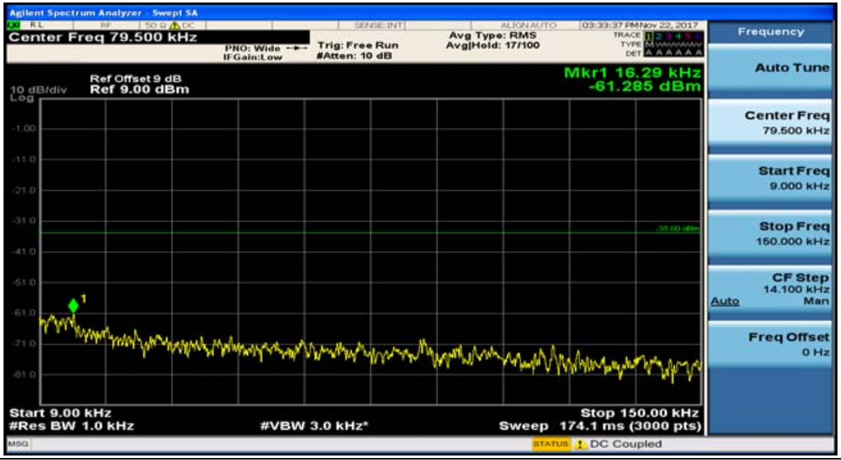
03:38:30 PM Nov 22, 2017

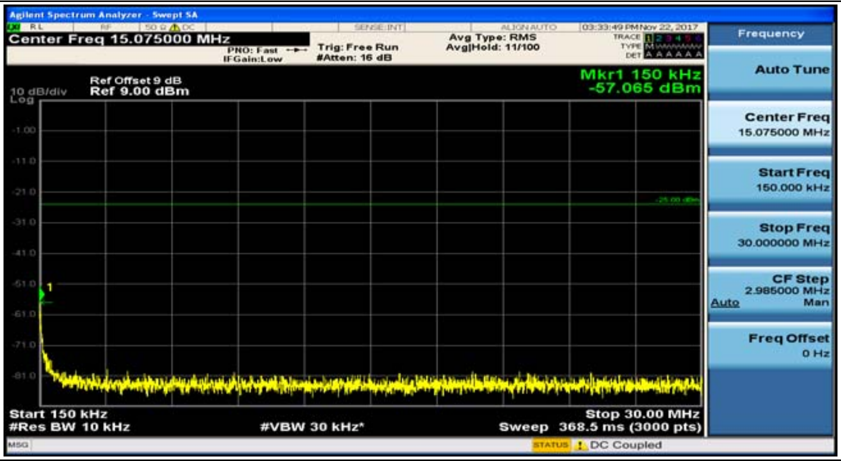
Ref Offset 8.95 dB Ref 18.95 dBm

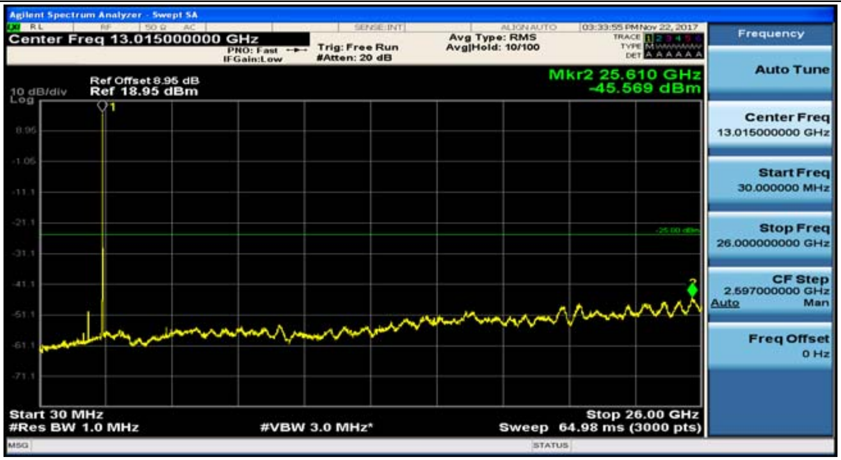
Mkr2 25.636 GHz -45.332 dBm

Start 30 MHz #Res BW 1.0 MHz #VBW 3.0 MHz* Stop 26.00 GHz Sweep 64.98 ms (3000 pts)
10 dB/div
Log
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
Frequency
Auto Tune
Center Freq 13.015000000 GHz
Start Freq 30.000000 MHz
Stop Freq 26.000000000 GHz
CF Step 2.597000000 GHz Auto Man
Freq Offset 0 Hz
MSG
STATUS

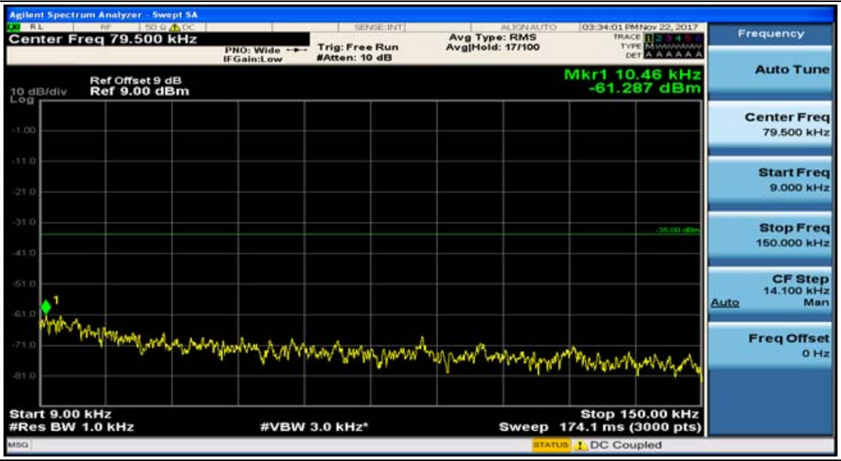
(Channel Bandwidth:15 MHz)_LCH_16QAM_1RB#0


Agilent Spectrum Analyzer - Swept SA
03:33:37 PM Nov 22, 2017
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
Ref Offset 9 dB
Ref 9.00 dBm
Mkr1 16.29 kHz
-61.285 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
Center Freq 79.500 kHz
Start Freq 9.000 kHz
Stop Freq 150.000 kHz
CF Step 14.100 kHz
Freq Offset 0 Hz
DC Coupled
RL
RF
50 Ω
DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
1
Frequency
Auto Tune
Auto
Man
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
03:33:49 PM Nov 22, 2017
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 11/100
Ref Offset 9 dB
Ref 9.00 dBm
Mkr1 150 kHz
-57.065 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
Center Freq 15.075000 MHz
Start Freq 150.000 kHz
Stop Freq 30.000000 MHz
CF Step 2.985000 MHz
Freq Offset 0 Hz
DC Coupled
RL
RF
50 Ω
DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
1
Frequency
Auto Tune
Auto
Man
MSG
STATUS

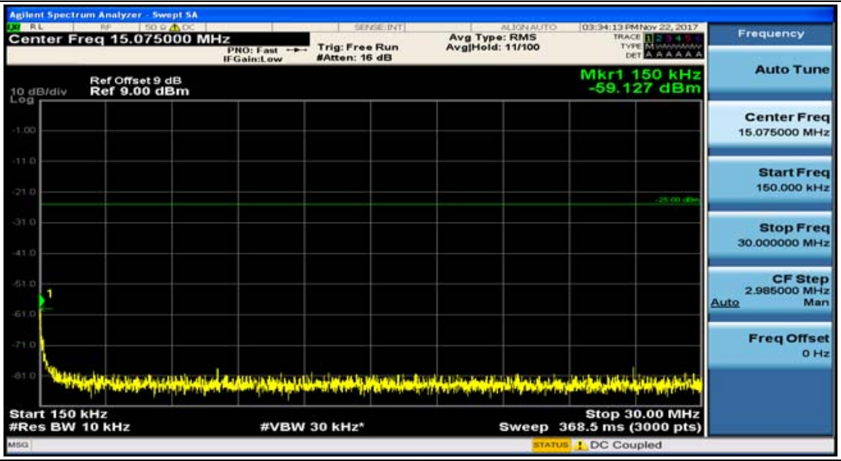

Agilent Spectrum Analyzer - Swept SA
03:33:55 PM Nov 22, 2017
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 10/100
Ref Offset 8.95 dB
Ref 18.95 dBm
Mkr2 25.610 GHz
-45.569 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Center Freq 13.015000000 GHz
Start Freq 30.000000 MHz
Stop Freq 26.000000000 GHz
CF Step 2.597000000 GHz
Freq Offset 0 Hz
RL
RF
50 Ω
AC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
1
2
Frequency
Auto Tune
Auto
Man
MSG
STATUS

(Channel Bandwidth:15 MHz)_LCH_16QAM_1RB#37



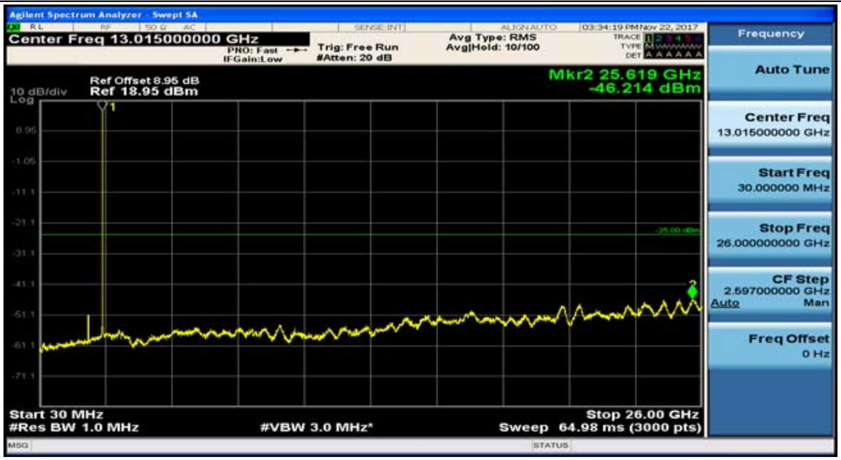
Agilent Spectrum Analyzer - Swept SA
03:34:01 PM Nov 22, 2017
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
Ref Offset 9 dB
Ref 9.00 dBm
10 dB/div Log
Mkr1 10.46 kHz
-61.287 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled

Frequency
Auto Tune
Center Freq 79.500 kHz
Start Freq 9.000 kHz
Stop Freq 150.000 kHz
CF Step 14.100 kHz Auto Man
Freq Offset 0 Hz
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-35.00 dBm
1



Agilent Spectrum Analyzer - Swept SA
03:34:13 PM Nov 22, 2017
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 11/100
Ref Offset 9 dB
Ref 9.00 dBm
10 dB/div Log
Mkr1 150 kHz
-59.127 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled

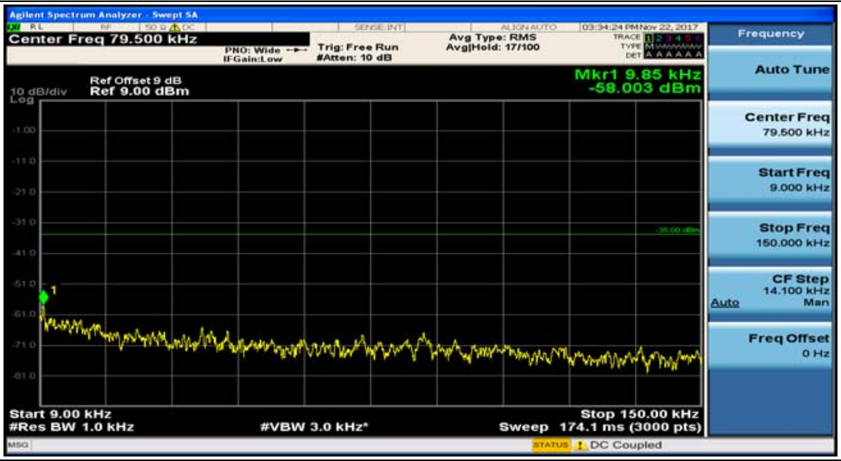
Frequency
Auto Tune
Center Freq 15.075000 MHz
Start Freq 150.000 kHz
Stop Freq 30.000000 MHz
CF Step 2.985000 MHz Auto Man
Freq Offset 0 Hz
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1



Agilent Spectrum Analyzer - Swept SA
03:34:19 PM Nov 22, 2017
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 10/100
Ref Offset 8.95 dB
Ref 18.95 dBm
10 dB/div Log
Mkr2 25.619 GHz
-46.214 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

Frequency
Auto Tune
Center Freq 13.015000000 GHz
Start Freq 30.000000 MHz
Stop Freq 26.000000000 GHz
CF Step 2.597000000 GHz Auto Man
Freq Offset 0 Hz
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2

(Channel Bandwidth:15 MHz)_LCH_16QAM_1RB#74


Agilent Spectrum Analyzer - Swept SA

Center Freq 79.500 kHz

PNO: Wide

IFGain:Low

Trig: Free Run

#Atten: 10 dB

Avg Type: RMS

Avg|Hold: 17/100

03:34:24 PM Nov 22, 2017

Ref Offset 9 dB

Ref 9.00 dBm

Mkr1 9.85 kHz

-58.003 dBm

Start 9.00 kHz

Stop 150.00 kHz

#Res BW 1.0 kHz

#VBW 3.0 kHz*

Sweep 174.1 ms (3000 pts)

Center Freq 79.500 kHz

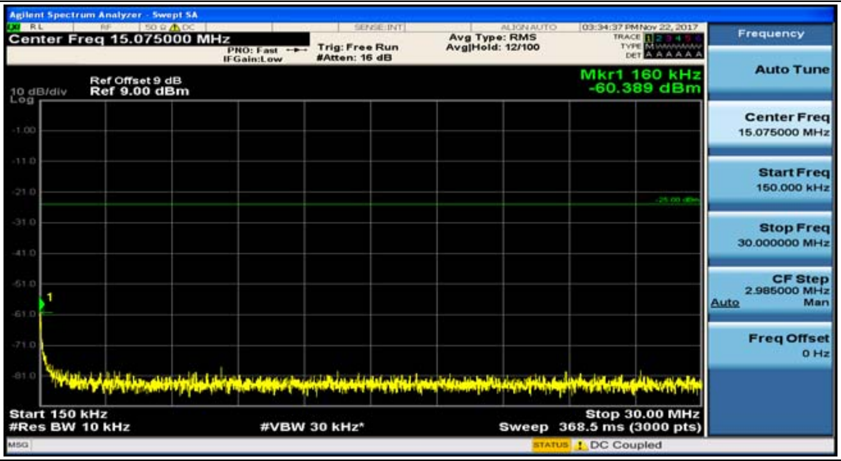
Start Freq 9.000 kHz

Stop Freq 150.000 kHz

CF Step 14.100 kHz

Freq Offset 0 Hz

DC Coupled
RL
RF
50 Ω
DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-35.00 dBm
1
Frequency
Auto Tune
Auto
Man
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA

Center Freq 15.075000 MHz

PNO: Fast

IFGain:Low

Trig: Free Run

#Atten: 16 dB

Avg Type: RMS

Avg|Hold: 12/100

03:34:37 PM Nov 22, 2017

Ref Offset 9 dB

Ref 9.00 dBm

Mkr1 160 kHz

-60.389 dBm

Start 150 kHz

Stop 30.00 MHz

#Res BW 10 kHz

#VBW 30 kHz*

Sweep 368.5 ms (3000 pts)

Center Freq 15.075000 MHz

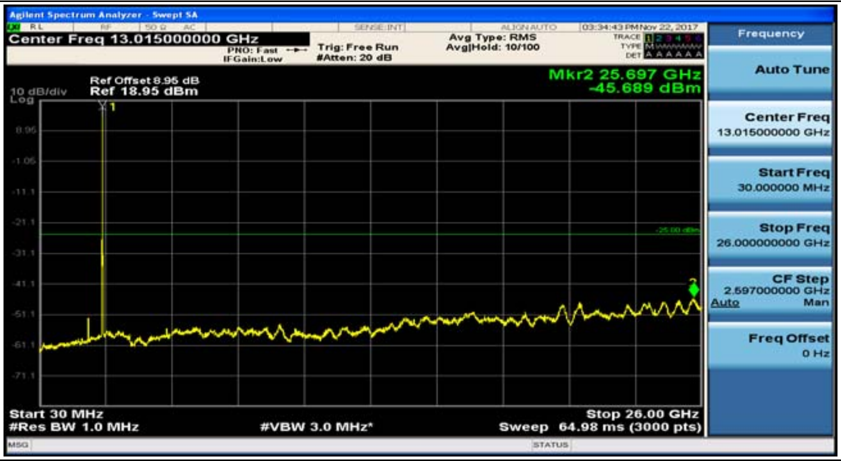
Start Freq 150.000 kHz

Stop Freq 30.000000 MHz

CF Step 2.985000 MHz

Freq Offset 0 Hz

DC Coupled
RL
RF
50 Ω
DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
Frequency
Auto Tune
Auto
Man
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA

Center Freq 13.015000000 GHz

PNO: Fast

IFGain:Low

Trig: Free Run

#Atten: 20 dB

Avg Type: RMS

Avg|Hold: 10/100

03:34:43 PM Nov 22, 2017

Ref Offset 8.95 dB

Ref 18.95 dBm

Mkr2 25.697 GHz

-45.689 dBm

Start 30 MHz

Stop 26.00 GHz

#Res BW 1.0 MHz

#VBW 3.0 MHz*

Sweep 64.98 ms (3000 pts)

Center Freq 13.015000000 GHz

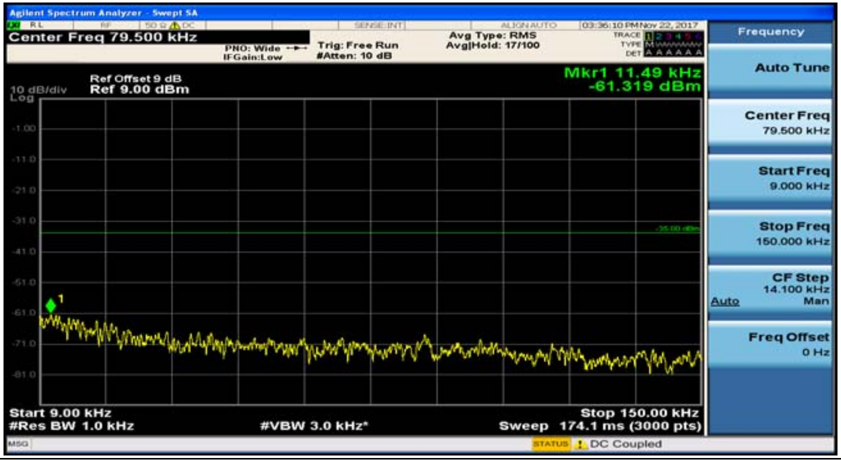
Start Freq 30.000000 MHz

Stop Freq 26.000000000 GHz

CF Step 2.597000000 GHz

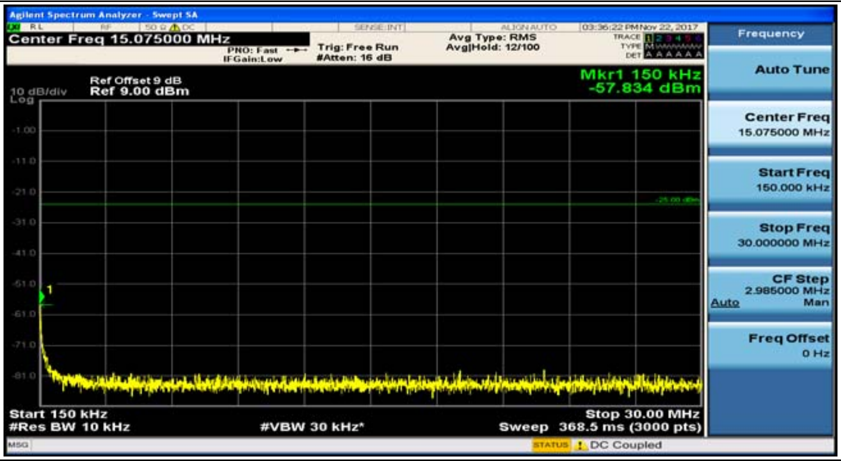
Freq Offset 0 Hz
RL
RF
50 Ω
AC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
Frequency
Auto Tune
Auto
Man
MSG
STATUS

(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#0



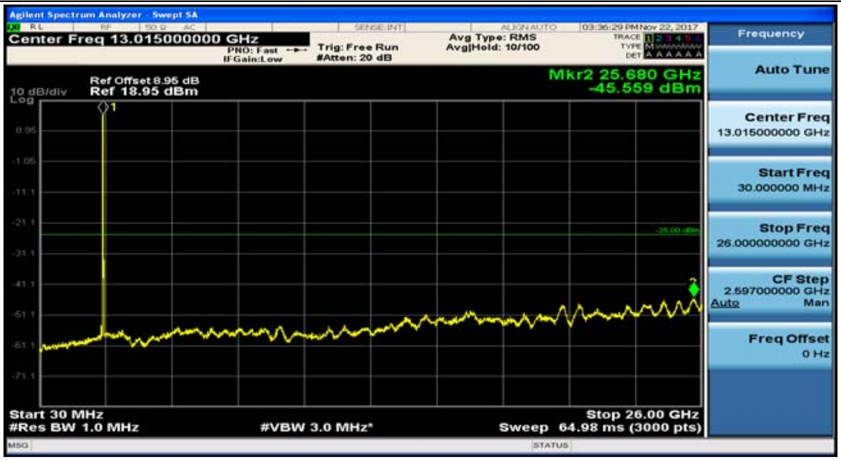
Agilent Spectrum Analyzer - Swept SA
03:36:10 PM Nov 22, 2017
Center Freq 79.500 kHz
PNO: Wide IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
Ref Offset 9 dB
Ref 9.00 dBm
Mkr1 11.49 kHz
-61.319 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled

RL
RF
50 Ω DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-35.00 dBm
1
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA
03:36:22 PM Nov 22, 2017
Center Freq 15.075000 MHz
PNO: Fast IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 12/100
Ref Offset 9 dB
Ref 9.00 dBm
Mkr1 150 kHz
-57.834 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled

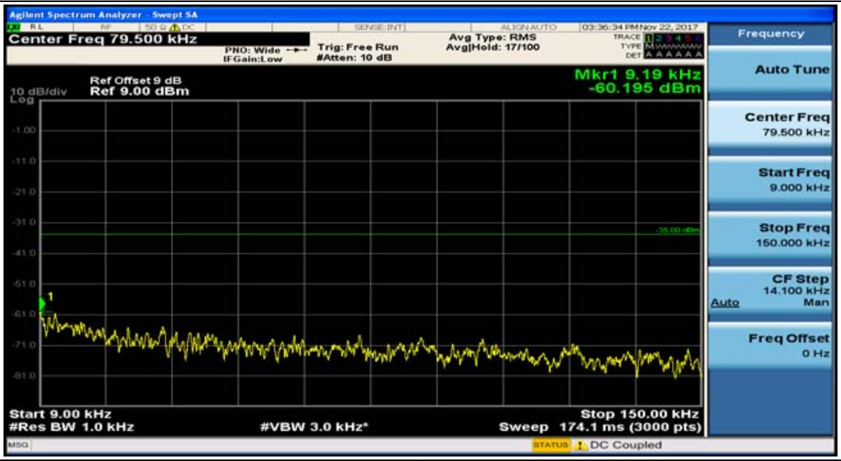
RL
RF
50 Ω DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA
03:36:29 PM Nov 22, 2017
Center Freq 13.015000000 GHz
PNO: Fast IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 10/100
Ref Offset 8.95 dB
Ref 18.95 dBm
Mkr2 25.680 GHz
-45.559 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

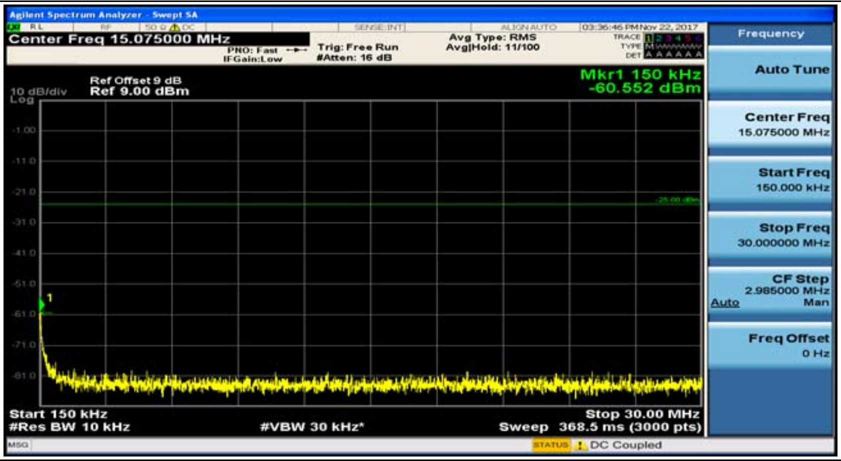
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#37



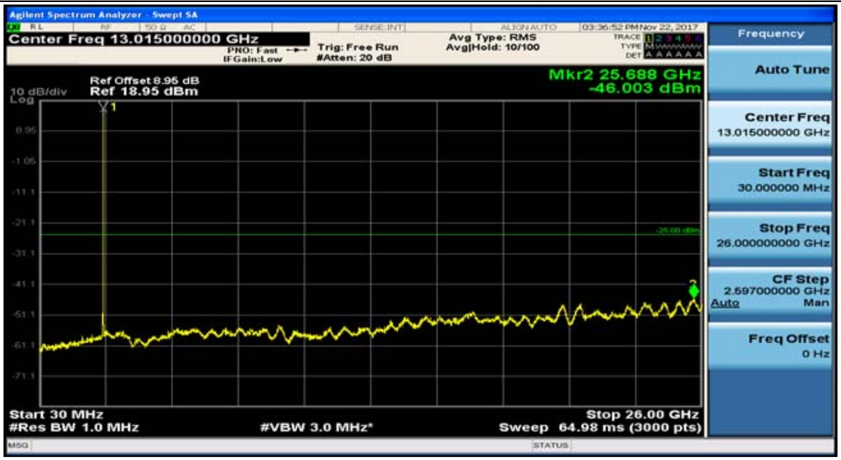
Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
03:36:34 PM Nov 22, 2017
Ref Offset 9 dB
Ref 9.00 dBm
Mkr1 9.19 kHz
-60.195 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Center Freq 79.500 kHz
Start Freq 9.000 kHz
Stop Freq 150.000 kHz
CF Step 14.100 kHz Auto Man
Freq Offset 0 Hz

RL
RF
50 Ω
DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
1
Frequency
Auto Tune
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 11/100
03:36:46 PM Nov 22, 2017
Ref Offset 9 dB
Ref 9.00 dBm
Mkr1 150 kHz
-60.552 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
Center Freq 15.075000 MHz
Start Freq 150.000 kHz
Stop Freq 30.000000 MHz
CF Step 2.985000 MHz Auto Man
Freq Offset 0 Hz

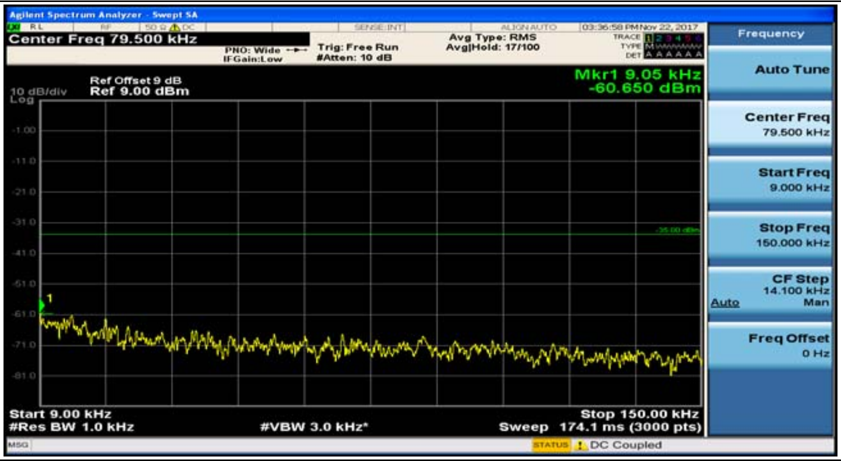
RL
RF
50 Ω
DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
1
Frequency
Auto Tune
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 10/100
03:36:52 PM Nov 22, 2017
Ref Offset 8.95 dB
Ref 18.95 dBm
Mkr2 25.688 GHz
-46.003 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Center Freq 13.015000000 GHz
Start Freq 30.000000 MHz
Stop Freq 26.000000000 GHz
CF Step 2.597000000 GHz Auto Man
Freq Offset 0 Hz

RL
RF
50 Ω
AC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
1
2
Frequency
Auto Tune
MSG
STATUS

(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#74



Agilent Spectrum Analyzer - Swept SA

03:36:58 PM Nov 22, 2017

Center Freq 79.500 kHz

PNO: Wide

IFGain:Low

Trig: Free Run

#Atten: 10 dB

Avg Type: RMS

Avg|Hold: 17/100

Ref Offset 9 dB

Ref 9.00 dBm

Mkr1 9.05 kHz

-60.650 dBm

Start 9.00 kHz

#Res BW 1.0 kHz

#VBW 3.0 kHz*

Stop 150.00 kHz

Sweep 174.1 ms (3000 pts)

Center Freq 79.500 kHz

Start Freq 9.000 kHz

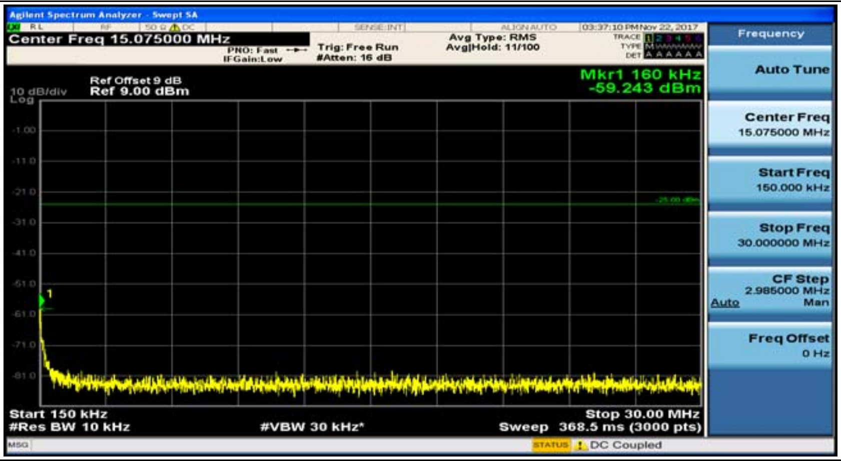
Stop Freq 150.000 kHz

CF Step 14.100 kHz

Freq Offset 0 Hz

DC Coupled

10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-35.00 dBm
1
Frequency
Auto Tune
Auto
Man
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA

03:37:10 PM Nov 22, 2017

Center Freq 15.075000 MHz

PNO: Fast

IFGain:Low

Trig: Free Run

#Atten: 16 dB

Avg Type: RMS

Avg|Hold: 11/100

Ref Offset 9 dB

Ref 9.00 dBm

Mkr1 160 kHz

-59.243 dBm

Start 150 kHz

#Res BW 10 kHz

#VBW 30 kHz*

Stop 30.00 MHz

Sweep 368.5 ms (3000 pts)

Center Freq 15.075000 MHz

Start Freq 150.000 kHz

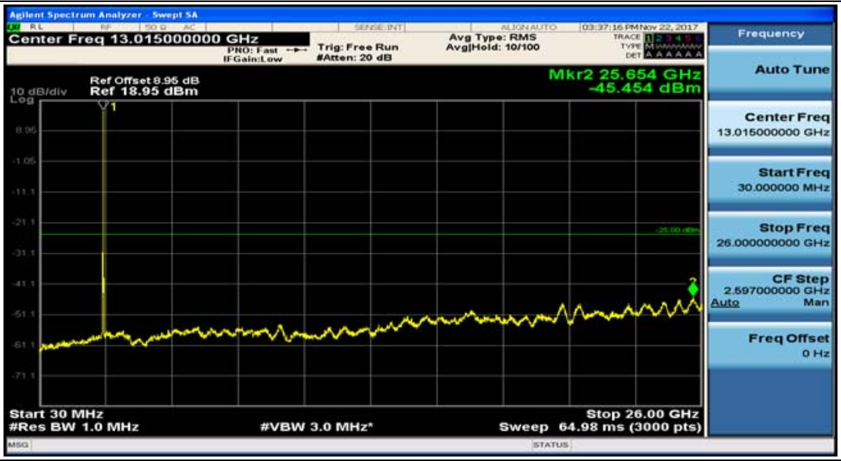
Stop Freq 30.000000 MHz

CF Step 2.985000 MHz

Freq Offset 0 Hz

DC Coupled

10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
Frequency
Auto Tune
Auto
Man
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA

03:37:16 PM Nov 22, 2017

Center Freq 13.015000000 GHz

PNO: Fast

IFGain:Low

Trig: Free Run

#Atten: 20 dB

Avg Type: RMS

Avg|Hold: 10/100

Ref Offset 8.95 dB

Ref 18.95 dBm

Mkr2 25.654 GHz

-45.454 dBm

Start 30 MHz

#Res BW 1.0 MHz

#VBW 3.0 MHz*

Stop 26.00 GHz

Sweep 64.98 ms (3000 pts)

Center Freq 13.015000000 GHz

Start Freq 30.000000 MHz

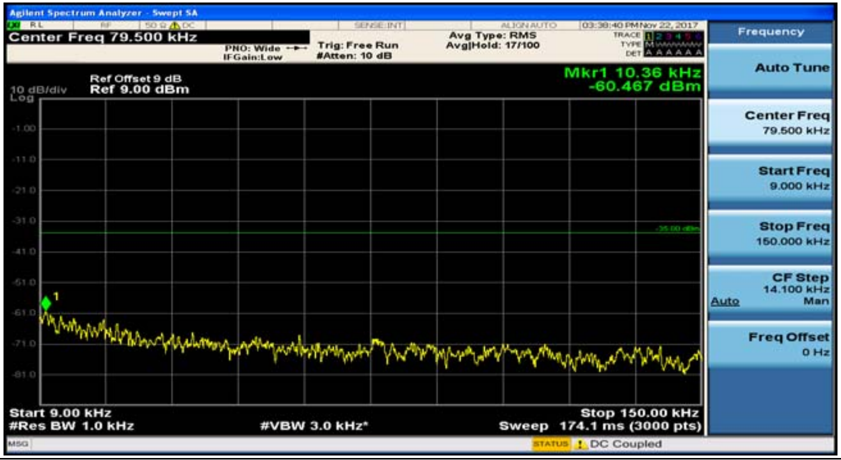
Stop Freq 26.000000000 GHz

CF Step 2.597000000 GHz

Freq Offset 0 Hz

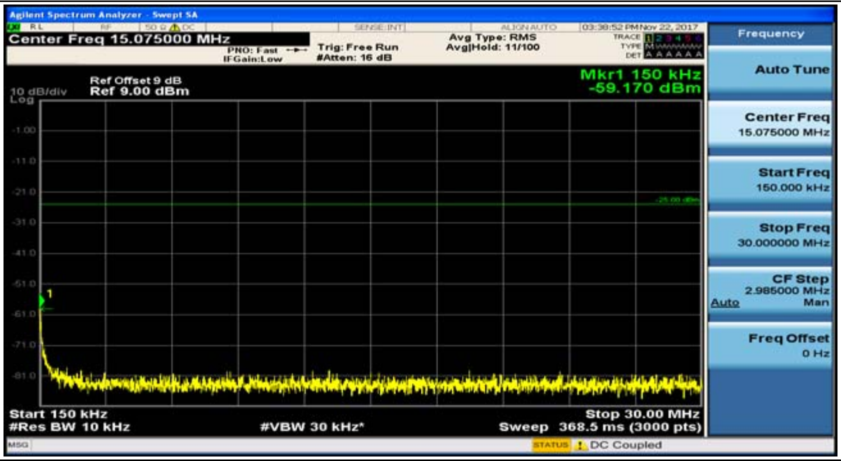
10 dB/div
Log
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
Frequency
Auto Tune
Auto
Man
MSG
STATUS

(Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#0



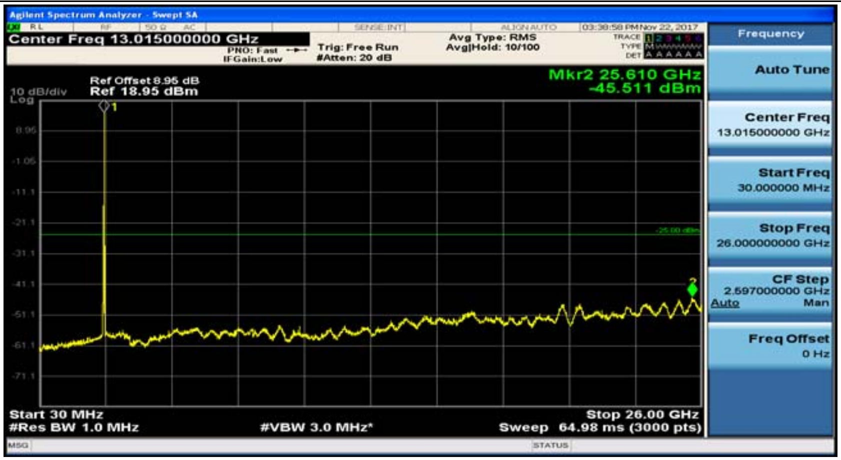
Agilent Spectrum Analyzer - Swept SA
RL RF 50 Ω DC SENSE:INT ALIGN AUTO 03:38:40 PM Nov 22, 2017
Center Freq 79.500 kHz
PNO: Wide IFGain:Low
Trig: Free Run #Atten: 10 dB
Avg Type: RMS Avg|Hold: 17/100
Ref Offset 9 dB
Ref 9.00 dBm
Mkr1 10.36 kHz -60.467 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
MSG STATUS DC Coupled

TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-35.00 dBm
1
Frequency
Auto Tune
Center Freq 79.500 kHz
Start Freq 9.000 kHz
Stop Freq 150.000 kHz
CF Step 14.100 kHz
Auto Man
Freq Offset 0 Hz



Agilent Spectrum Analyzer - Swept SA
RL RF 50 Ω DC SENSE:INT ALIGN AUTO 03:38:52 PM Nov 22, 2017
Center Freq 15.075000 MHz
PNO: Fast IFGain:Low
Trig: Free Run #Atten: 16 dB
Avg Type: RMS Avg|Hold: 11/100
Ref Offset 9 dB
Ref 9.00 dBm
Mkr1 150 kHz -59.170 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
MSG STATUS DC Coupled

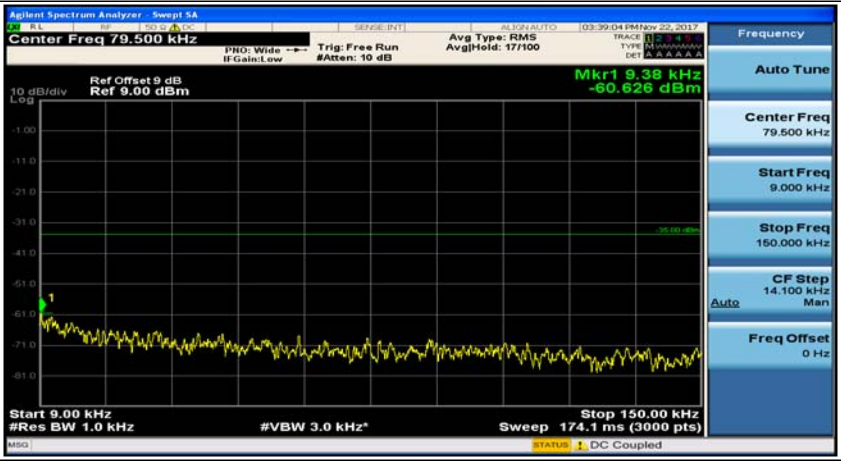
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
Frequency
Auto Tune
Center Freq 15.075000 MHz
Start Freq 150.000 kHz
Stop Freq 30.000000 MHz
CF Step 2.985000 MHz
Auto Man
Freq Offset 0 Hz



Agilent Spectrum Analyzer - Swept SA
RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:38:58 PM Nov 22, 2017
Center Freq 13.015000000 GHz
PNO: Fast IFGain:Low
Trig: Free Run #Atten: 20 dB
Avg Type: RMS Avg|Hold: 10/100
Ref Offset 8.95 dB
Ref 18.95 dBm
Mkr2 25.610 GHz -45.511 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
MSG STATUS

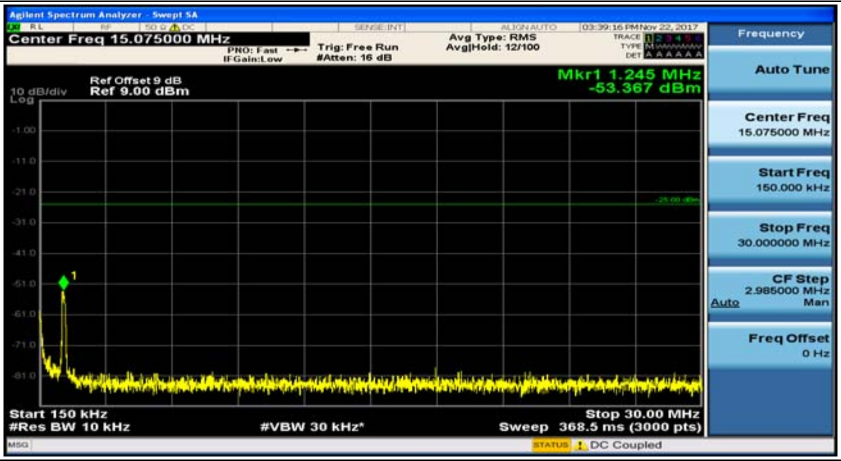
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
Frequency
Auto Tune
Center Freq 13.015000000 GHz
Start Freq 30.000000 MHz
Stop Freq 26.000000000 GHz
CF Step 2.597000000 GHz
Auto Man
Freq Offset 0 Hz

(Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#37



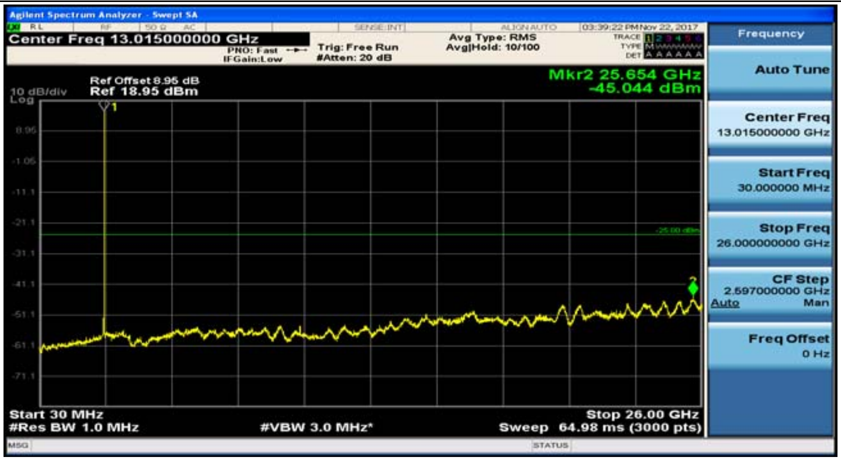
Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
03:39:04 PM Nov 22, 2017
Ref Offset 9 dB
10 dB/div Ref 9.00 dBm
Mkr1 9.38 kHz
-60.626 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled

Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-35.00 dBm
1
Frequency
Auto Tune
Center Freq 79.500 kHz
Start Freq 9.000 kHz
Stop Freq 150.000 kHz
CF Step 14.100 kHz Auto Man
Freq Offset 0 Hz
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 12/100
03:39:16 PM Nov 22, 2017
Ref Offset 9 dB
10 dB/div Ref 9.00 dBm
Mkr1 1.245 MHz
-53.367 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled

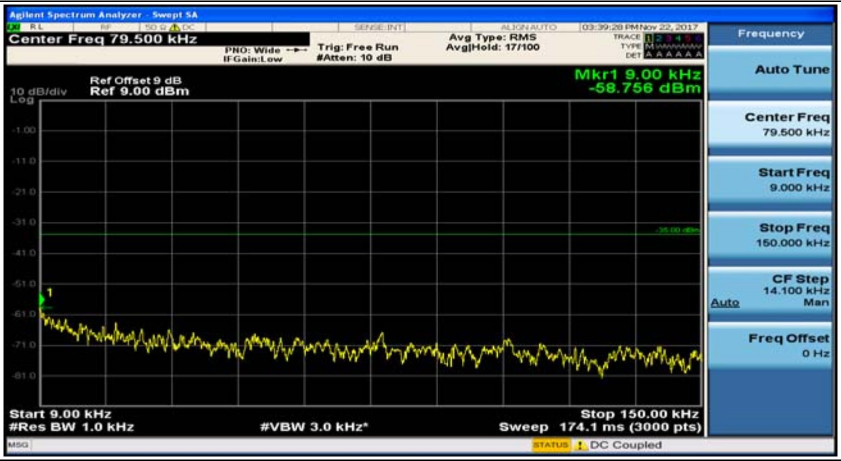
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
Frequency
Auto Tune
Center Freq 15.075000 MHz
Start Freq 150.000 kHz
Stop Freq 30.000000 MHz
CF Step 2.985000 MHz Auto Man
Freq Offset 0 Hz
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 10/100
03:39:22 PM Nov 22, 2017
Ref Offset 8.95 dB
10 dB/div Ref 18.95 dBm
Mkr2 25.654 GHz
-45.044 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

Log
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
Frequency
Auto Tune
Center Freq 13.015000000 GHz
Start Freq 30.000000 MHz
Stop Freq 26.000000000 GHz
CF Step 2.597000000 GHz Auto Man
Freq Offset 0 Hz
MSG
STATUS

(Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#74



Agilent Spectrum Analyzer - Swept SA

03:39:28 PM Nov 22, 2017

Center Freq 79.500 kHz

PNO: Wide

IFGain:Low

Trig: Free Run

#Atten: 10 dB

Avg Type: RMS

Avg|Hold: 17/100

Ref Offset 9 dB

Ref 9.00 dBm

Mkr1 9.00 kHz

-58.756 dBm

Start 9.00 kHz

#Res BW 1.0 kHz

#VBW 3.0 kHz*

Stop 150.00 kHz

Sweep 174.1 ms (3000 pts)

Center Freq 79.500 kHz

Start Freq 9.000 kHz

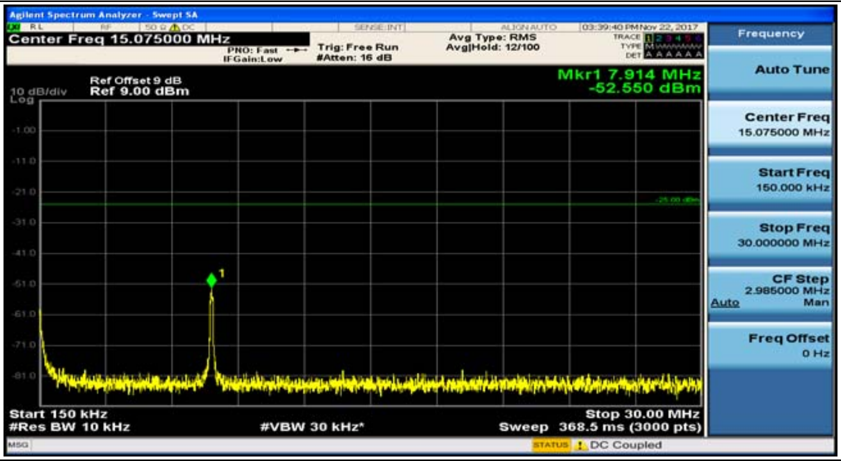
Stop Freq 150.000 kHz

CF Step 14.100 kHz

Freq Offset 0 Hz

DC Coupled

RL
RF
50 Ω
DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-35.00 dBm
1
Frequency
Auto Tune
Auto
Man
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA

03:39:40 PM Nov 22, 2017

Center Freq 15.075000 MHz

PNO: Fast

IFGain:Low

Trig: Free Run

#Atten: 16 dB

Avg Type: RMS

Avg|Hold: 12/100

Ref Offset 9 dB

Ref 9.00 dBm

Mkr1 7.914 MHz

-52.550 dBm

Start 150 kHz

#Res BW 10 kHz

#VBW 30 kHz*

Stop 30.00 MHz

Sweep 368.5 ms (3000 pts)

Center Freq 15.075000 MHz

Start Freq 150.000 kHz

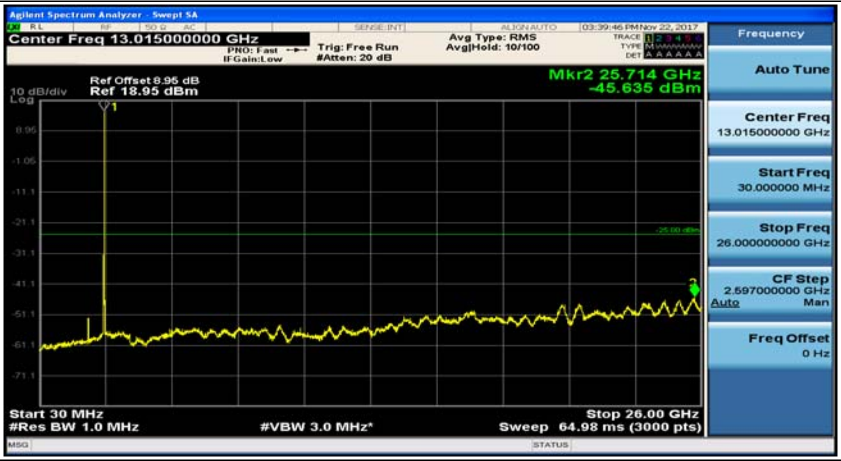
Stop Freq 30.000000 MHz

CF Step 2.985000 MHz

Freq Offset 0 Hz

DC Coupled

RL
RF
50 Ω
DC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
Frequency
Auto Tune
Auto
Man
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA

03:39:46 PM Nov 22, 2017

Center Freq 13.015000000 GHz

PNO: Fast

IFGain:Low

Trig: Free Run

#Atten: 20 dB

Avg Type: RMS

Avg|Hold: 10/100

Ref Offset 8.95 dB

Ref 18.95 dBm

Mkr2 25.714 GHz

-45.635 dBm

Start 30 MHz

#Res BW 1.0 MHz

#VBW 3.0 MHz*

Stop 26.00 GHz

Sweep 64.98 ms (3000 pts)

Center Freq 13.015000000 GHz

Start Freq 30.000000 MHz

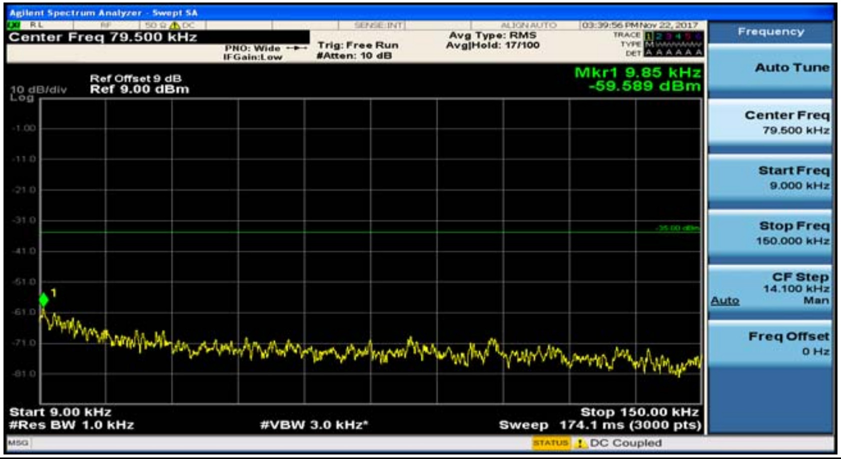
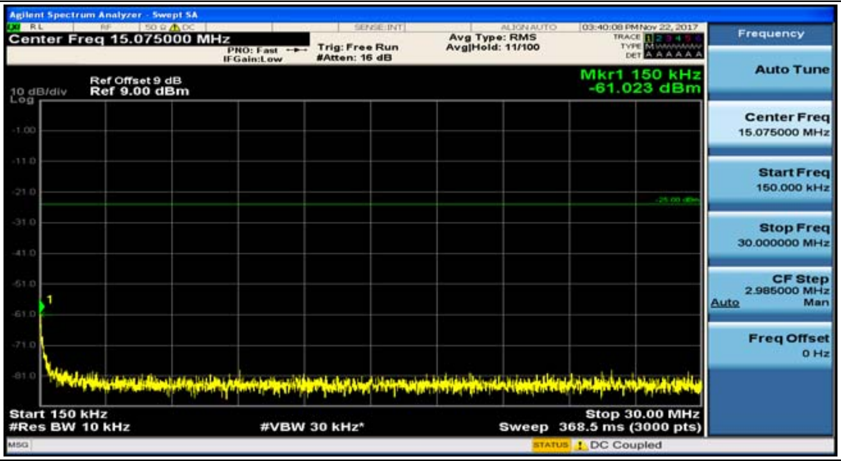
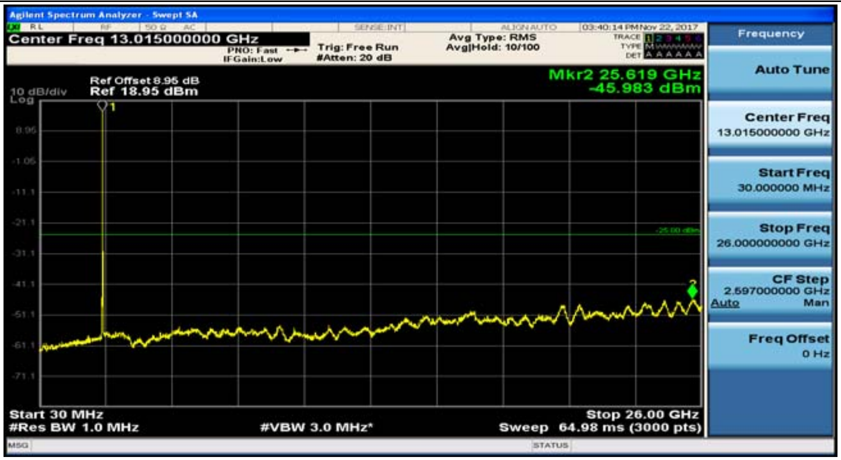
Stop Freq 26.000000000 GHz

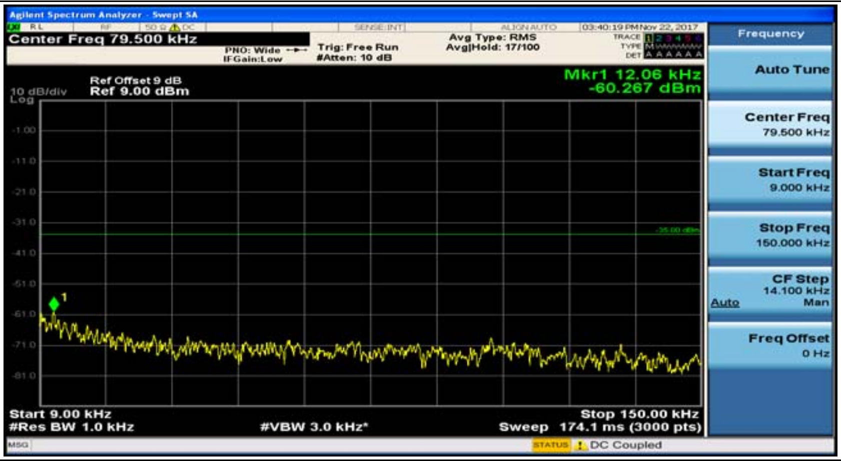
CF Step 2.597000000 GHz

Freq Offset 0 Hz

RL
RF
50 Ω
AC
SENSE:INT
ALIGN AUTO
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A
10 dB/div
Log
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
Frequency
Auto Tune
Auto
Man
MSG
STATUS

Channel Bandwidth: 20 MHz

(Channel Bandwidth:20 MHz)_LCH_QPSK_1RB#0
 Center Freq 79.500 kHz PNO: Wide IFGain:Low Trig: Free Run #Atten: 10 dB Avg Type: RMS Avg|Hold: 17/100 Ref Offset 9 dB Ref 9.00 dBm Mkr1 9.85 kHz -59.589 dBm Start 9.00 kHz #Res BW 1.0 kHz #VBW 3.0 kHz* Stop 150.00 kHz Sweep 174.1 ms (3000 pts) DC Coupled Agilent Spectrum Analyzer - Swept SA 03:39:56 PM Nov 22, 2017 10 dB/div Log -1.00 -11.0 -21.0 -31.0 -41.0 -51.0 -61.0 -71.0 -81.0 -35.00 dBm Frequency Auto Tune Center Freq 79.500 kHz Start Freq 9.000 kHz Stop Freq 150.000 kHz CF Step 14.100 kHz Auto Man Freq Offset 0 Hz
 Center Freq 15.075000 MHz PNO: Fast IFGain:Low Trig: Free Run #Atten: 16 dB Avg Type: RMS Avg|Hold: 11/100 Ref Offset 9 dB Ref 9.00 dBm Mkr1 150 kHz -61.023 dBm Start 150 kHz #Res BW 10 kHz #VBW 30 kHz* Stop 30.00 MHz Sweep 368.5 ms (3000 pts) DC Coupled Agilent Spectrum Analyzer - Swept SA 03:40:08 PM Nov 22, 2017 10 dB/div Log -1.00 -11.0 -21.0 -31.0 -41.0 -51.0 -61.0 -71.0 -81.0 -25.00 dBm Frequency Auto Tune Center Freq 15.075000 MHz Start Freq 150.000 kHz Stop Freq 30.000000 MHz CF Step 2.985000 MHz Auto Man Freq Offset 0 Hz
 Center Freq 13.015000000 GHz PNO: Fast IFGain:Low Trig: Free Run #Atten: 20 dB Avg Type: RMS Avg|Hold: 10/100 Ref Offset 8.95 dB Ref 18.95 dBm Mkr2 25.619 GHz -45.983 dBm Start 30 MHz #Res BW 1.0 MHz #VBW 3.0 MHz* Stop 26.00 GHz Sweep 64.98 ms (3000 pts) Agilent Spectrum Analyzer - Swept SA 03:40:14 PM Nov 22, 2017 10 dB/div Log 8.95 -1.05 -11.1 -21.1 -31.1 -41.1 -51.1 -61.1 -71.1 -25.00 dBm Frequency Auto Tune Center Freq 13.015000000 GHz Start Freq 30.000000 MHz Stop Freq 26.000000000 GHz CF Step 2.597000000 GHz Auto Man Freq Offset 0 Hz
(Channel Bandwidth:20 MHz)_LCH_QPSK_1RB#49



Agilent Spectrum Analyzer - Swept SA

Center Freq 79.500 kHz

PNO: Wide IFGain:Low

Trig: Free Run

#Atten: 10 dB

Avg Type: RMS

Avg|Hold: 17/100

03:40:19 PM Nov 22, 2017

Ref Offset 9 dB

Ref 9.00 dBm

Mkr1 12.06 kHz -60.267 dBm

Start 9.00 kHz

#Res BW 1.0 kHz

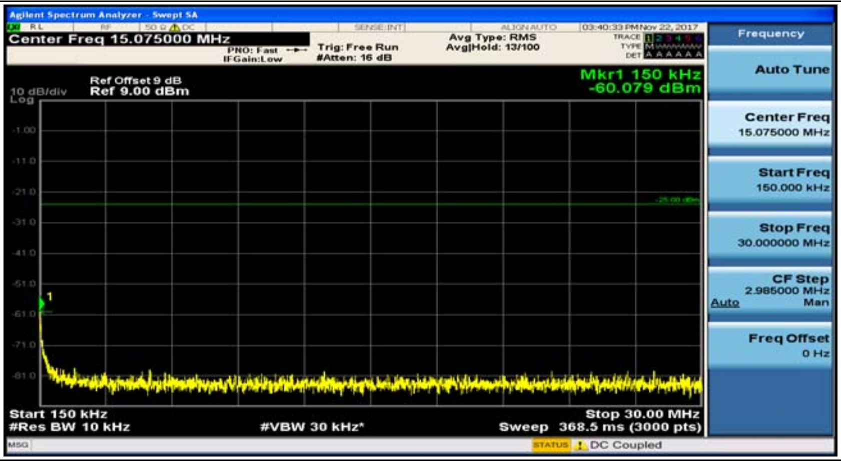
#VBW 3.0 kHz*

Stop 150.00 kHz

Sweep 174.1 ms (3000 pts)

DC Coupled

10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
1
Frequency
Auto Tune
Center Freq 79.500 kHz
Start Freq 9.000 kHz
Stop Freq 150.000 kHz
CF Step 14.100 kHz
Auto Man
Freq Offset 0 Hz
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA

Center Freq 15.075000 MHz

PNO: Fast IFGain:Low

Trig: Free Run

#Atten: 16 dB

Avg Type: RMS

Avg|Hold: 13/100

03:40:33 PM Nov 22, 2017

Ref Offset 9 dB

Ref 9.00 dBm

Mkr1 150 kHz -60.079 dBm

Start 150 kHz

#Res BW 10 kHz

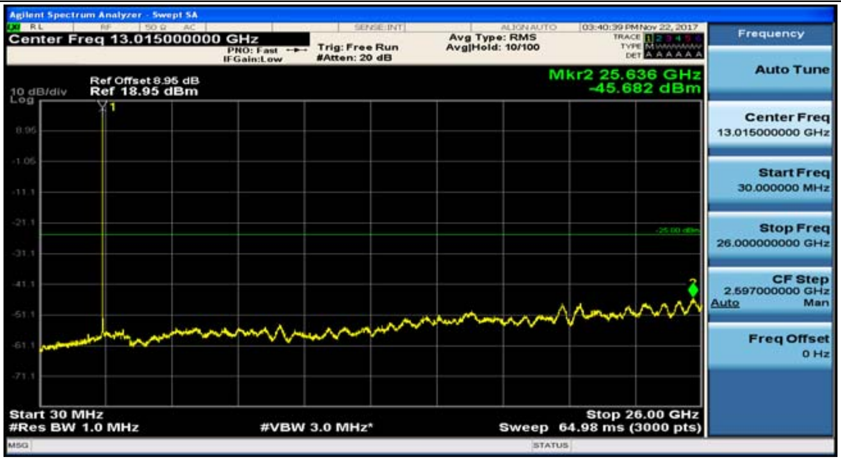
#VBW 30 kHz*

Stop 30.00 MHz

Sweep 368.5 ms (3000 pts)

DC Coupled

10 dB/div
Log
-1.00
-11.0
-21.0
-31.0
-41.0
-51.0
-61.0
-71.0
-81.0
-25.00 dBm
1
Frequency
Auto Tune
Center Freq 15.075000 MHz
Start Freq 150.000 kHz
Stop Freq 30.000000 MHz
CF Step 2.985000 MHz
Auto Man
Freq Offset 0 Hz
MSG
STATUS



Agilent Spectrum Analyzer - Swept SA

Center Freq 13.015000000 GHz

PNO: Fast IFGain:Low

Trig: Free Run

#Atten: 20 dB

Avg Type: RMS

Avg|Hold: 10/100

03:40:39 PM Nov 22, 2017

Ref Offset 8.95 dB

Ref 18.95 dBm

Mkr2 25.636 GHz -45.682 dBm

Start 30 MHz

#Res BW 1.0 MHz

#VBW 3.0 MHz*

Stop 26.00 GHz

Sweep 64.98 ms (3000 pts)

10 dB/div
Log
8.95
-1.05
-11.1
-21.1
-31.1
-41.1
-51.1
-61.1
-71.1
-25.00 dBm
1
2
Frequency
Auto Tune
Center Freq 13.015000000 GHz
Start Freq 30.000000 MHz
Stop Freq 26.000000000 GHz
CF Step 2.597000000 GHz
Auto Man
Freq Offset 0 Hz
MSG
STATUS

(Channel Bandwidth:20 MHz)_LCH_QPSK_1RB#99