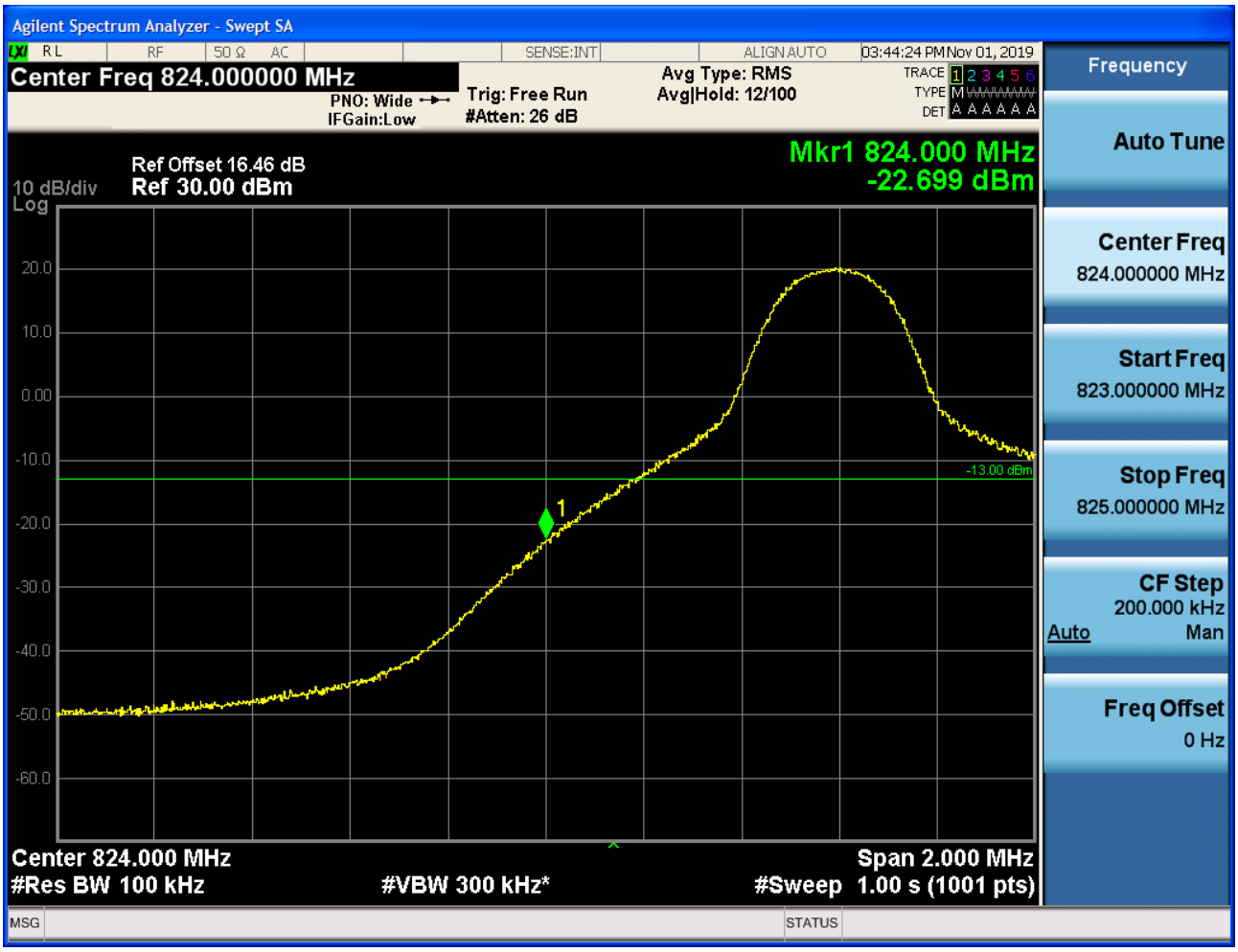
#### 5.1.1.2.3.2.3 Test RB = RB12#6

#### 5.1.1.2.3.2.4 Test RB = RB25#0

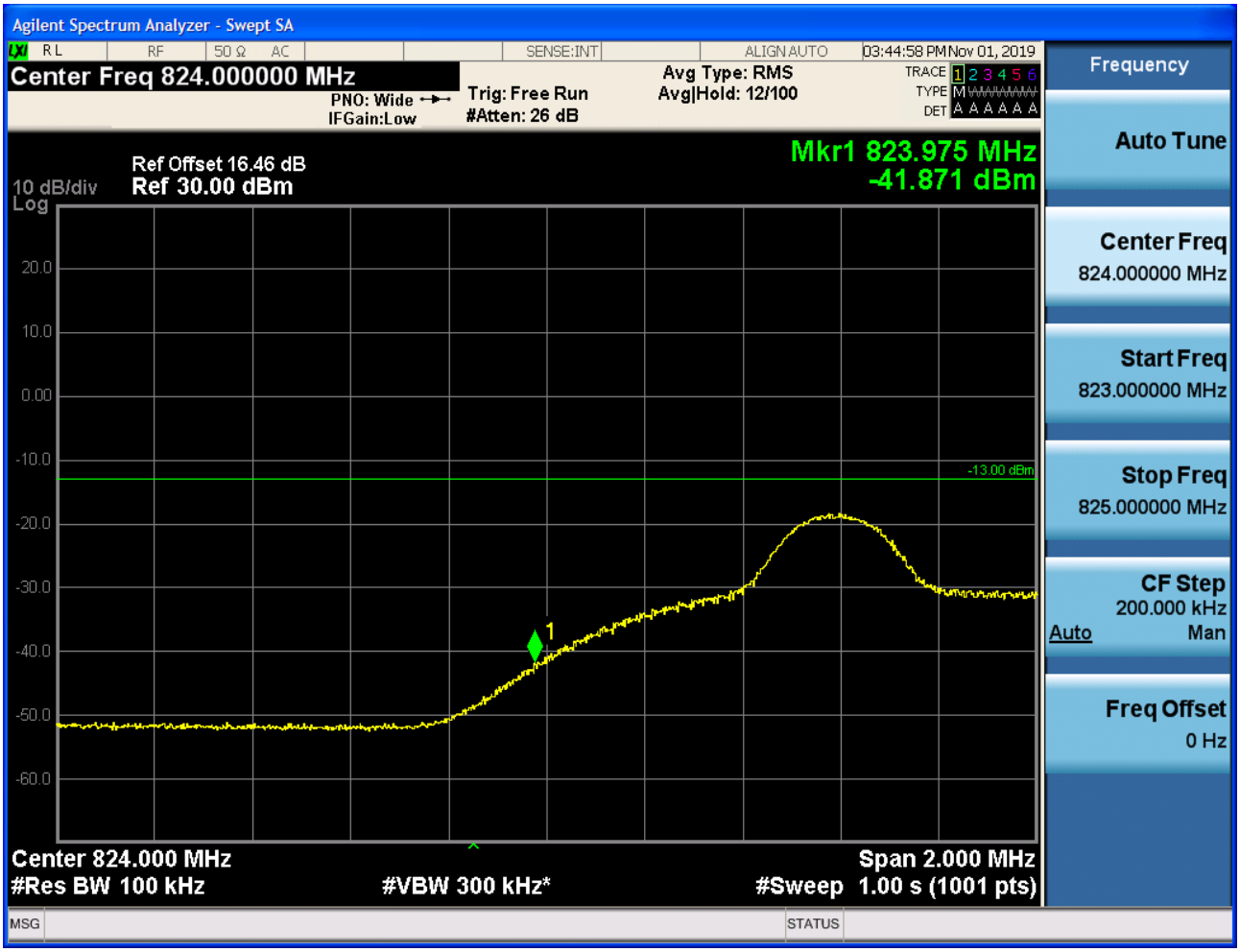
#### 5.1.1.2.4 Test Bandwidth = 10

##### 5.1.1.2.4.1 Test Channel = LCH

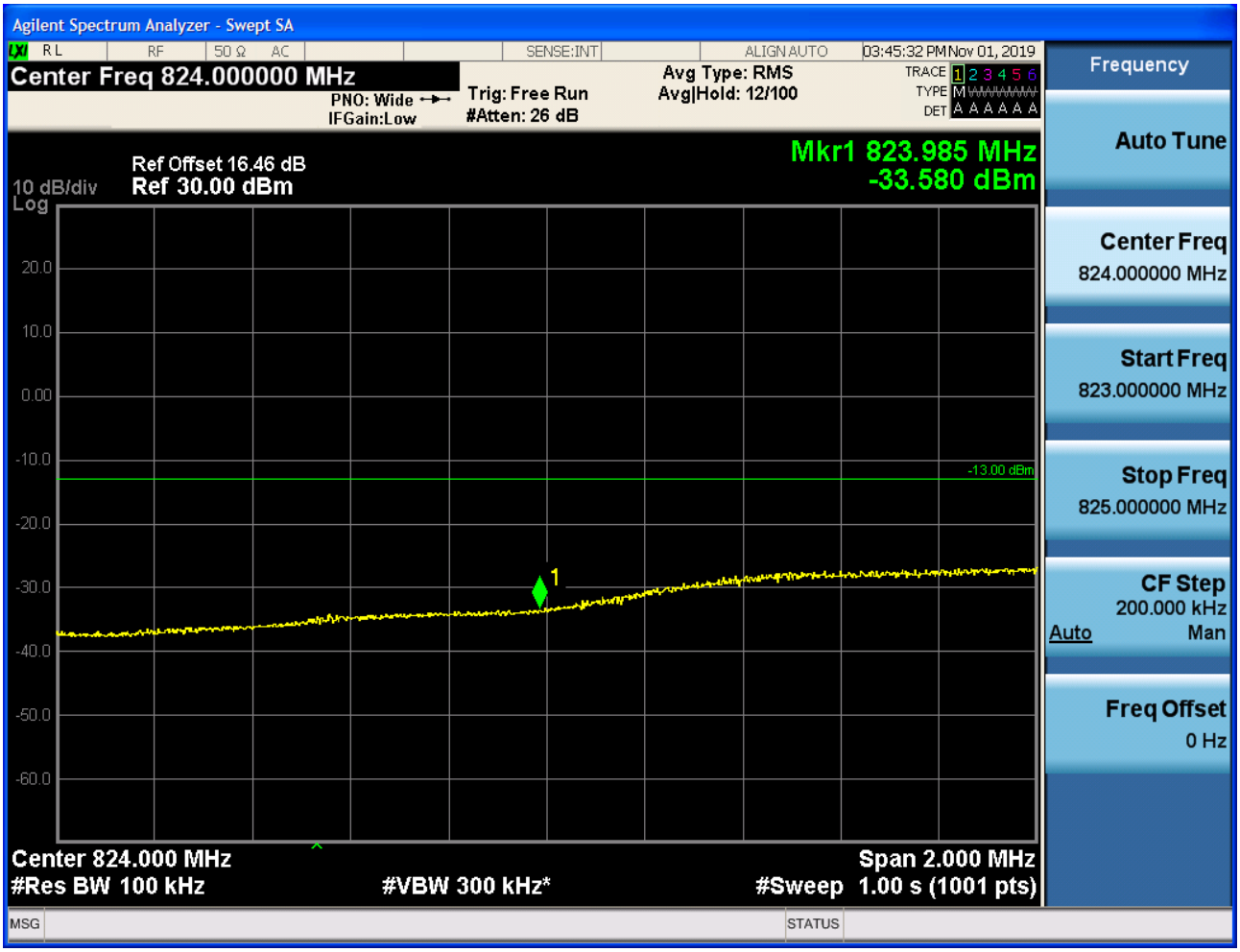
###### 5.1.1.2.4.1.1 Test RB = RB1#0



#### 5.1.1.2.4.1.2 Test RB = RB1#49



#### 5.1.1.2.4.1.3 Test RB = RB25#13

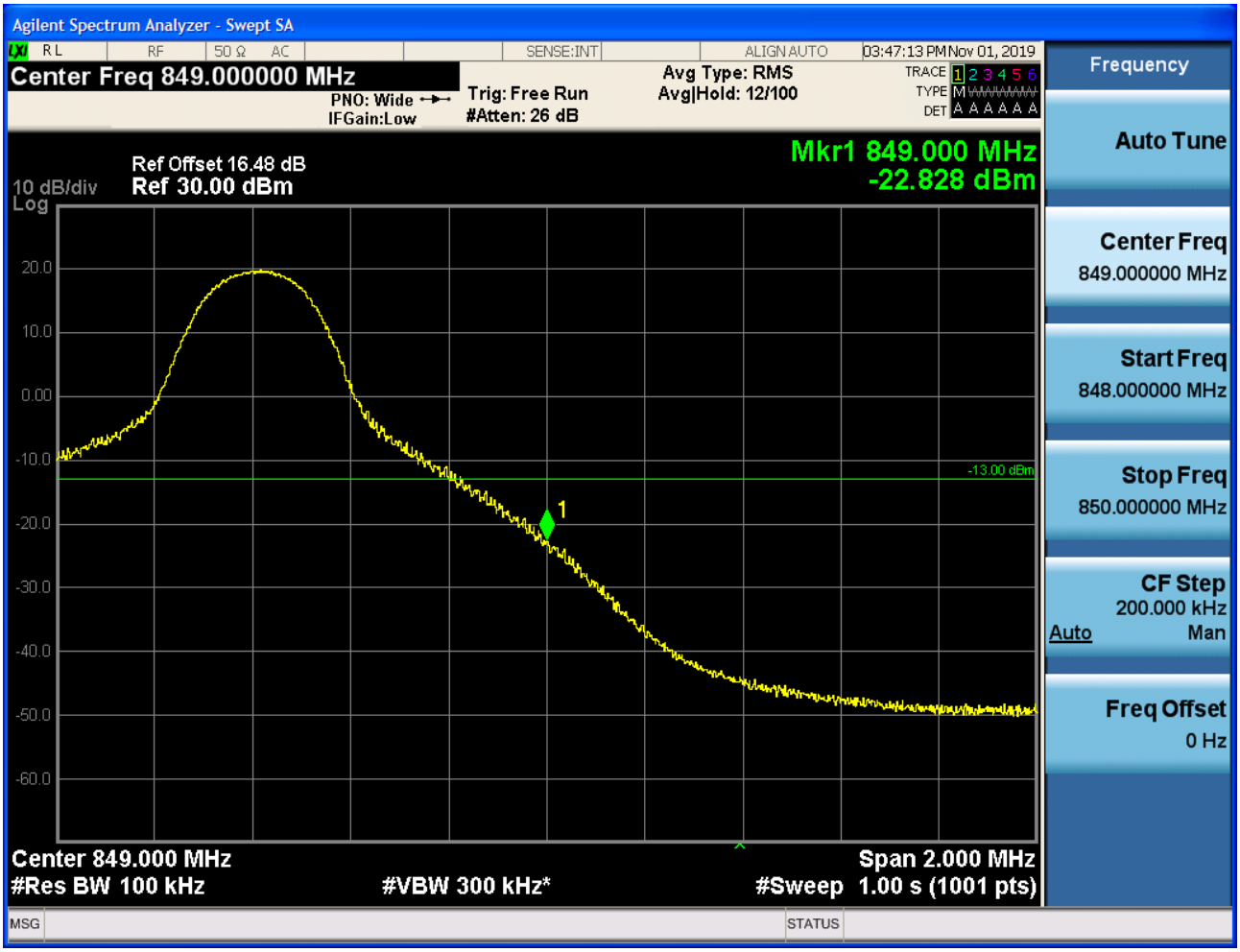


#### 5.1.1.2.4.1.4 Test RB = RB50#0

#### 5.1.1.2.4.2 Test Channel = HCH

##### 5.1.1.2.4.2.1 Test RB = RB1#0

#### 5.1.1.2.4.2.2 Test RB = RB1#49



#### 5.1.1.2.4.2.3 Test RB = RB25#13

#### 5.1.1.2.4.2.4 Test RB = RB50#0

# 6Appendix_F: Spurious Emission at Antenna Terminal

NOTE: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of < RBW/2 so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = k * (Span / RBW)" with k between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

**Part I - Test Plots**

**6.1 For LTE**

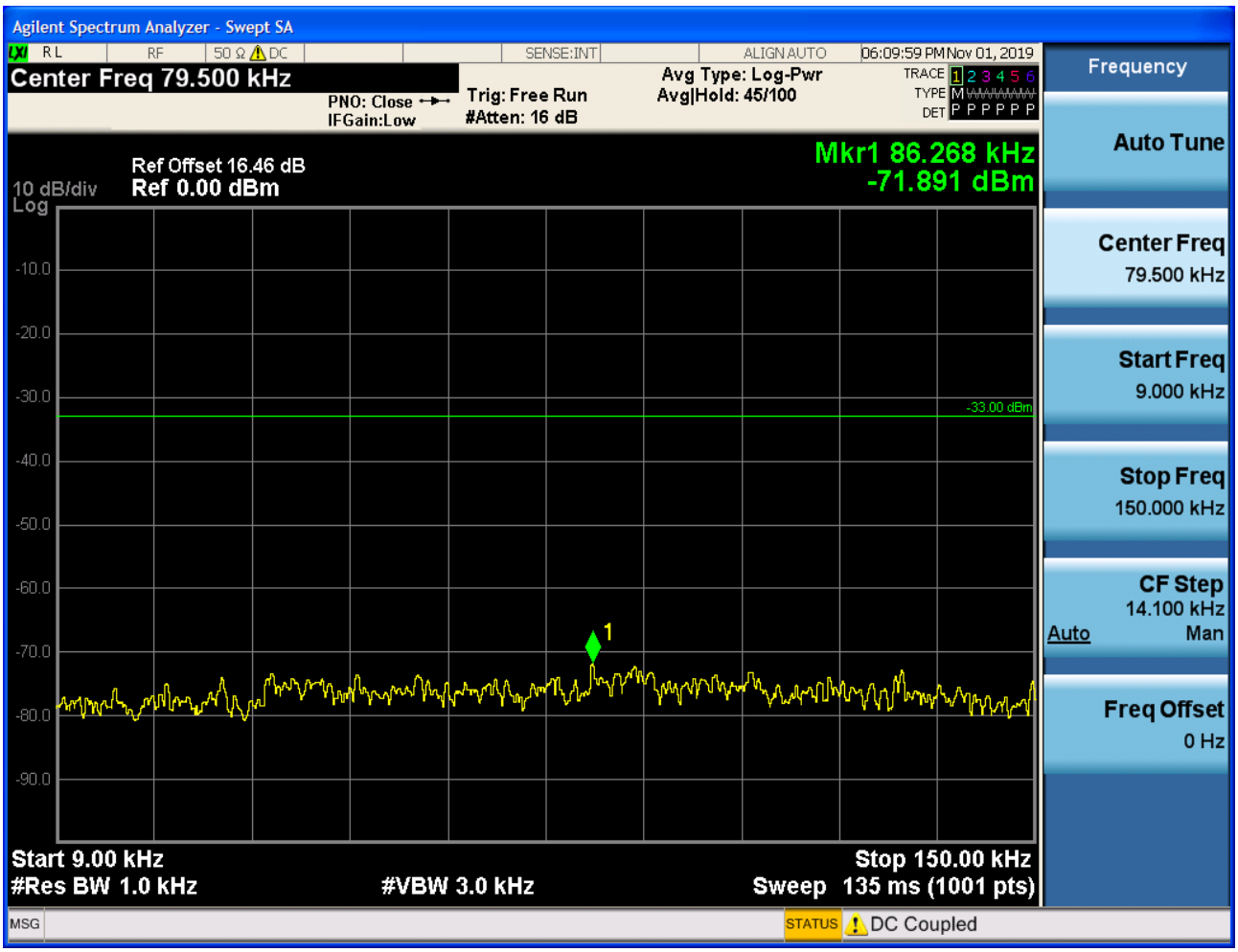
**6.1.1 Test Band = Band5**

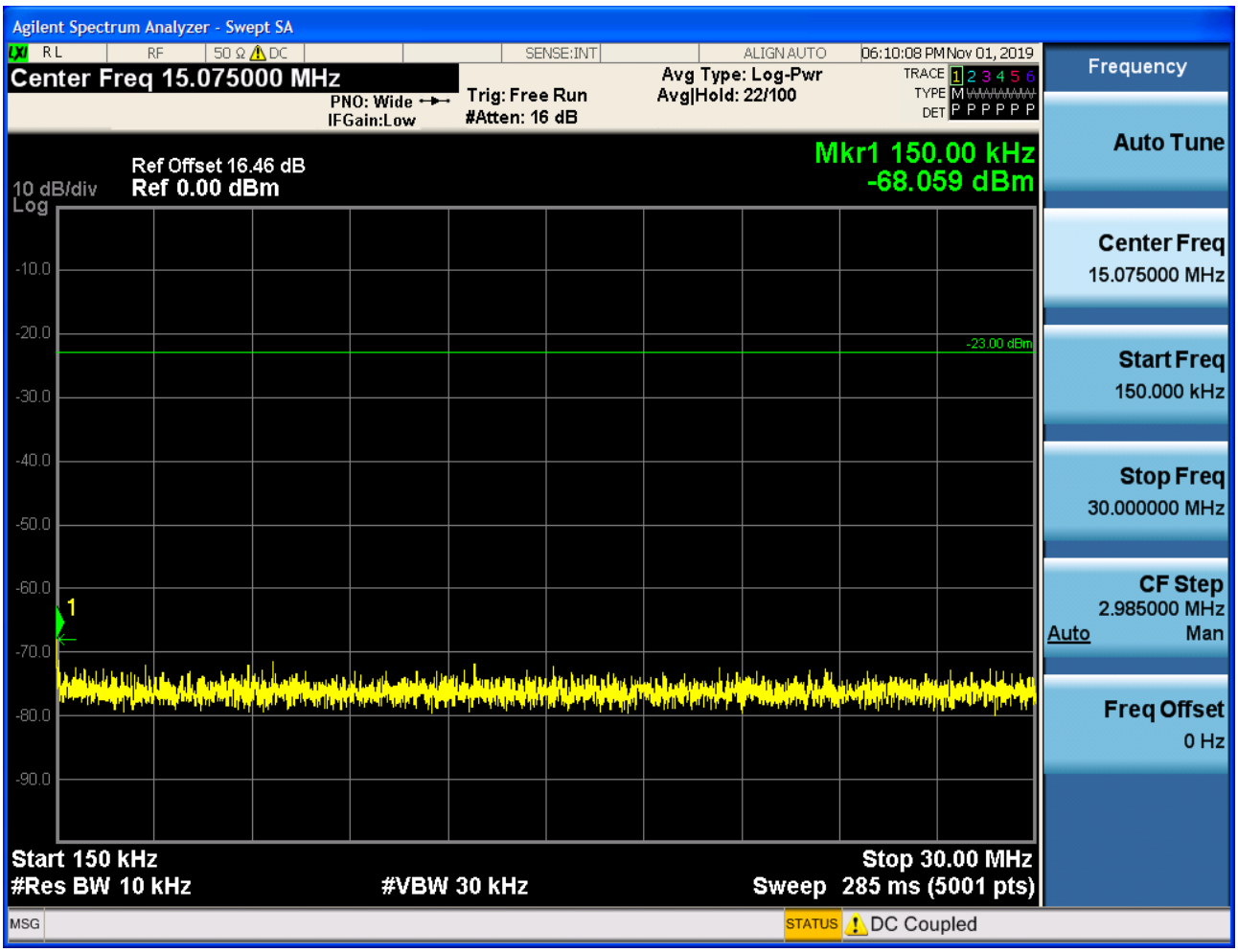
**6.1.1.1 Test Mode = LTE/TM1**

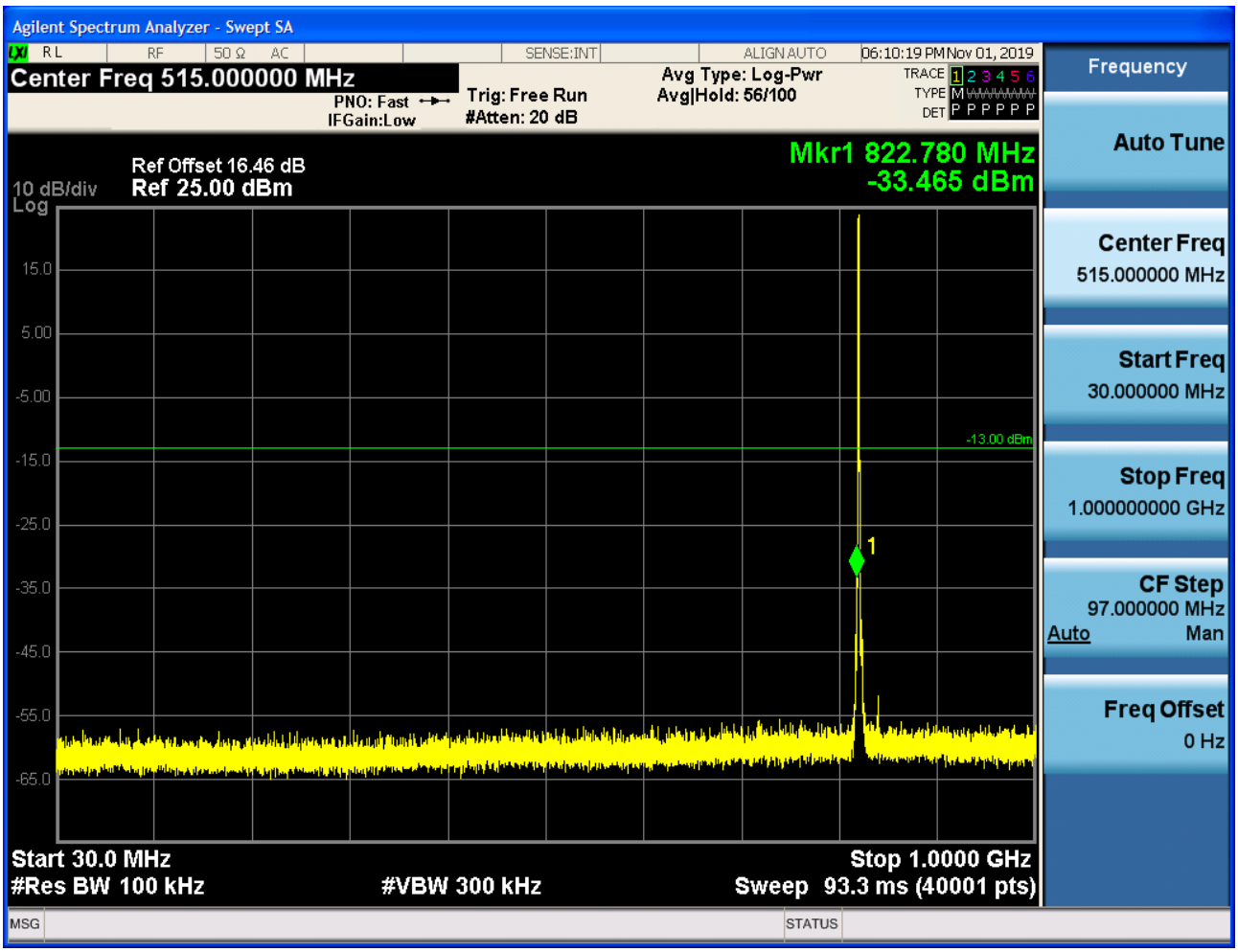
**6.1.1.1.1 Test Bandwidth = 1.4**

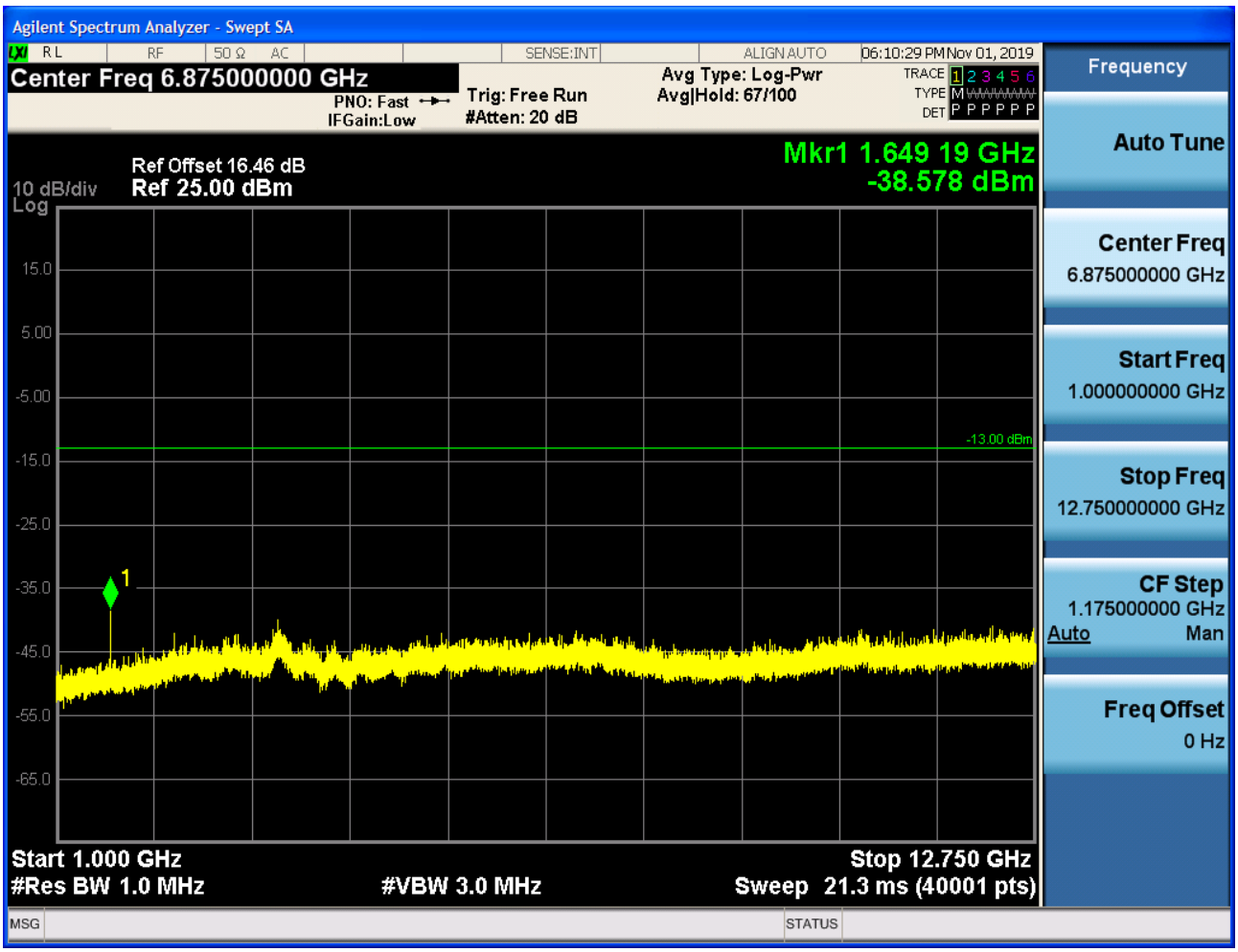
**6.1.1.1.1.1 Test Channel = LCH**

**6.1.1.1.1.1.1 Test RB = RB1#0**



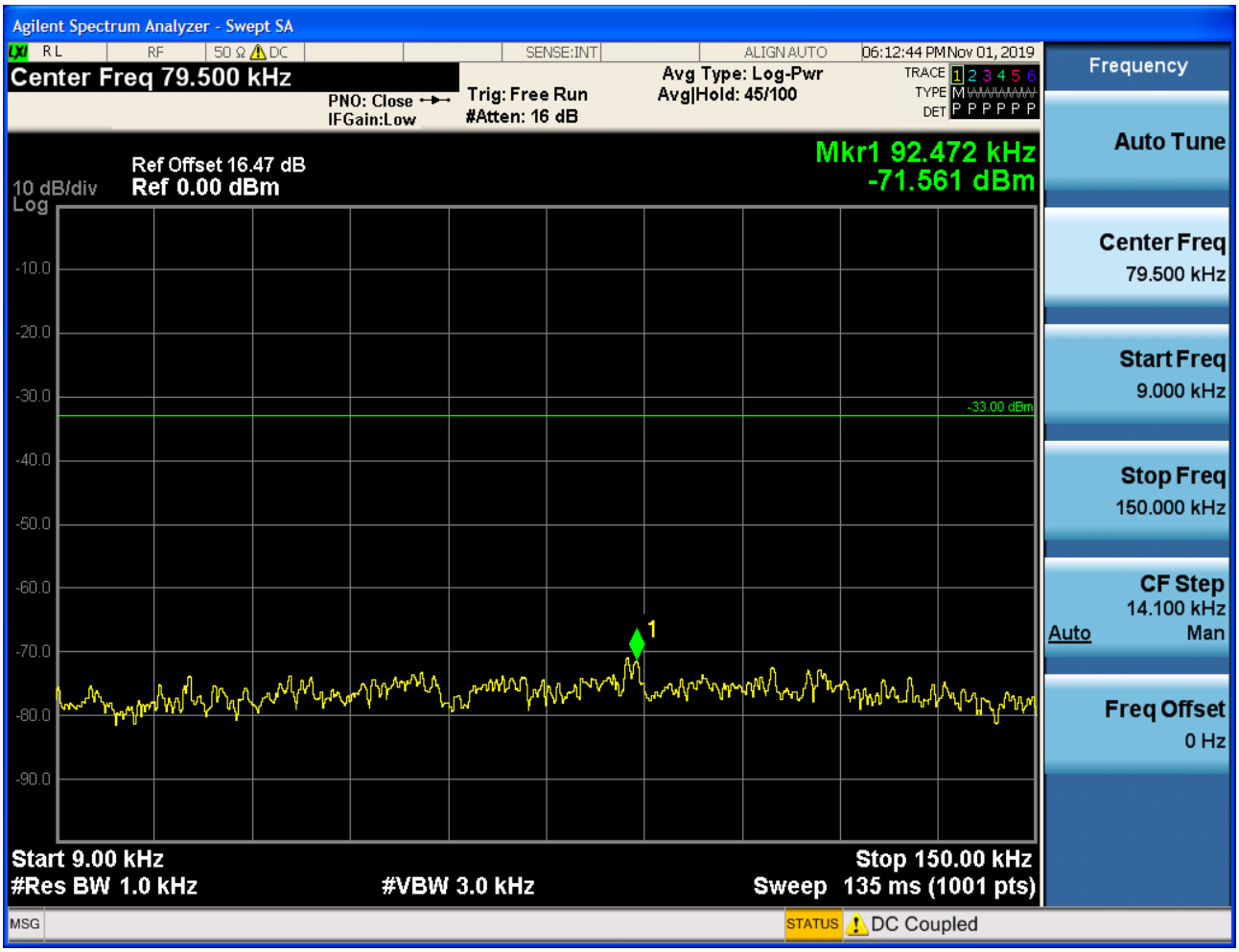


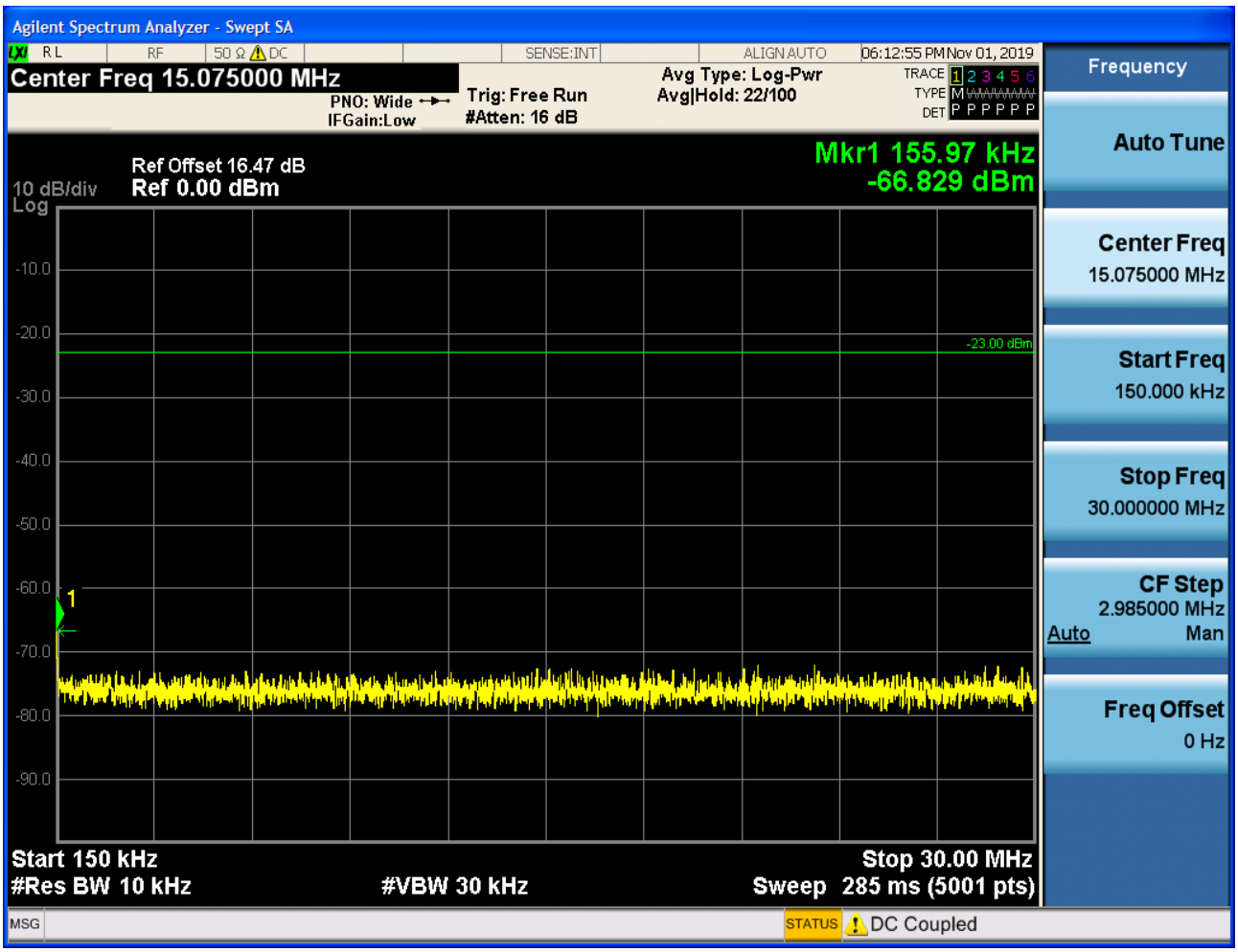

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
06:10:19 PM Nov 01, 2019
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 56/100
TRACE 1 2 3 4 5 6
TYPE M
DET P P P P P P
Ref Offset 16.46 dB
10 dB/div
Log
Ref 25.00 dBm
Mkr1 822.780 MHz
-33.465 dBm
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
-13.00 dBm
1
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.3 ms (40001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz

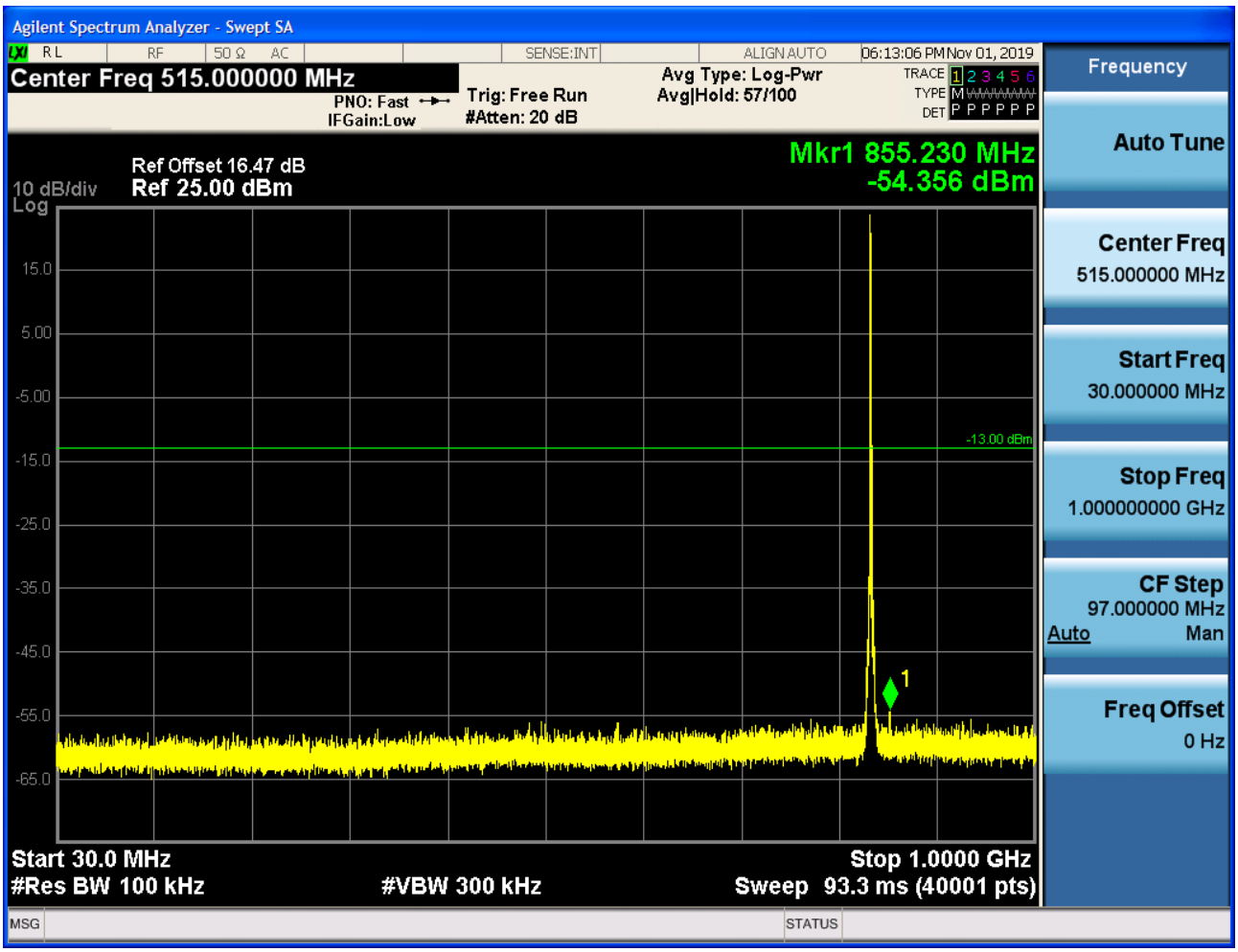


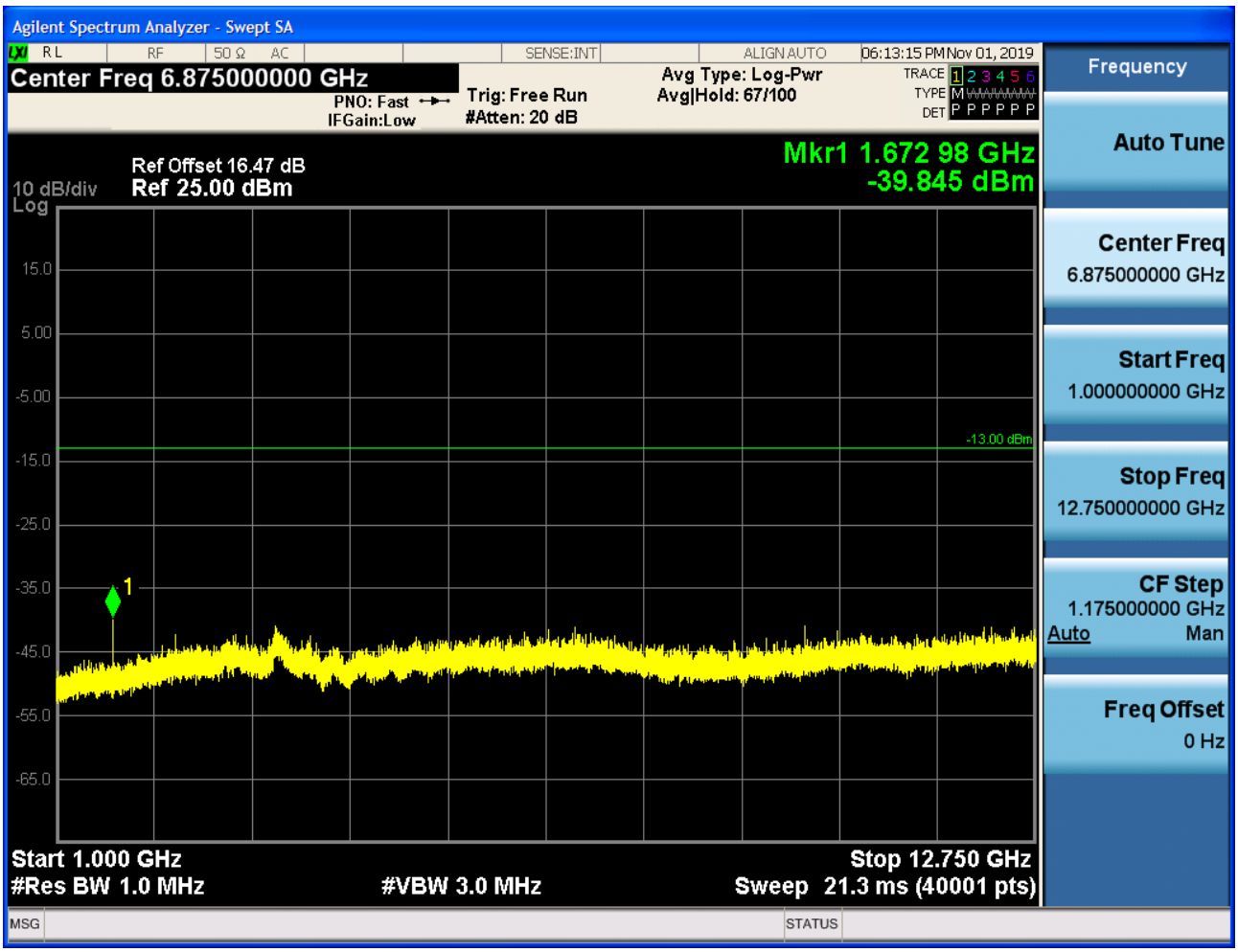
#### 6.1.1.1.1.2 Test Channel = MCH

##### 6.1.1.1.1.2.1 Test RB = RB1#0



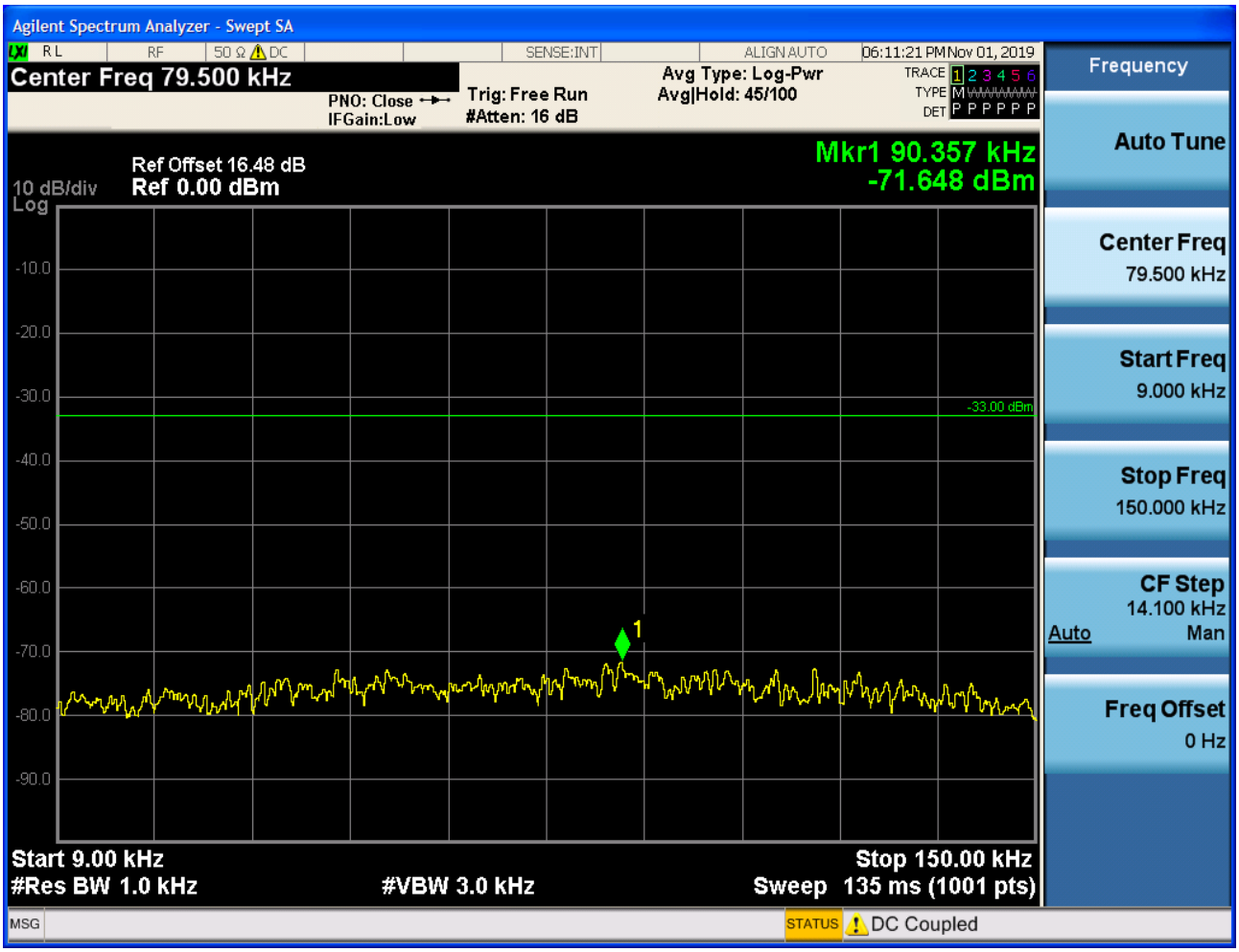


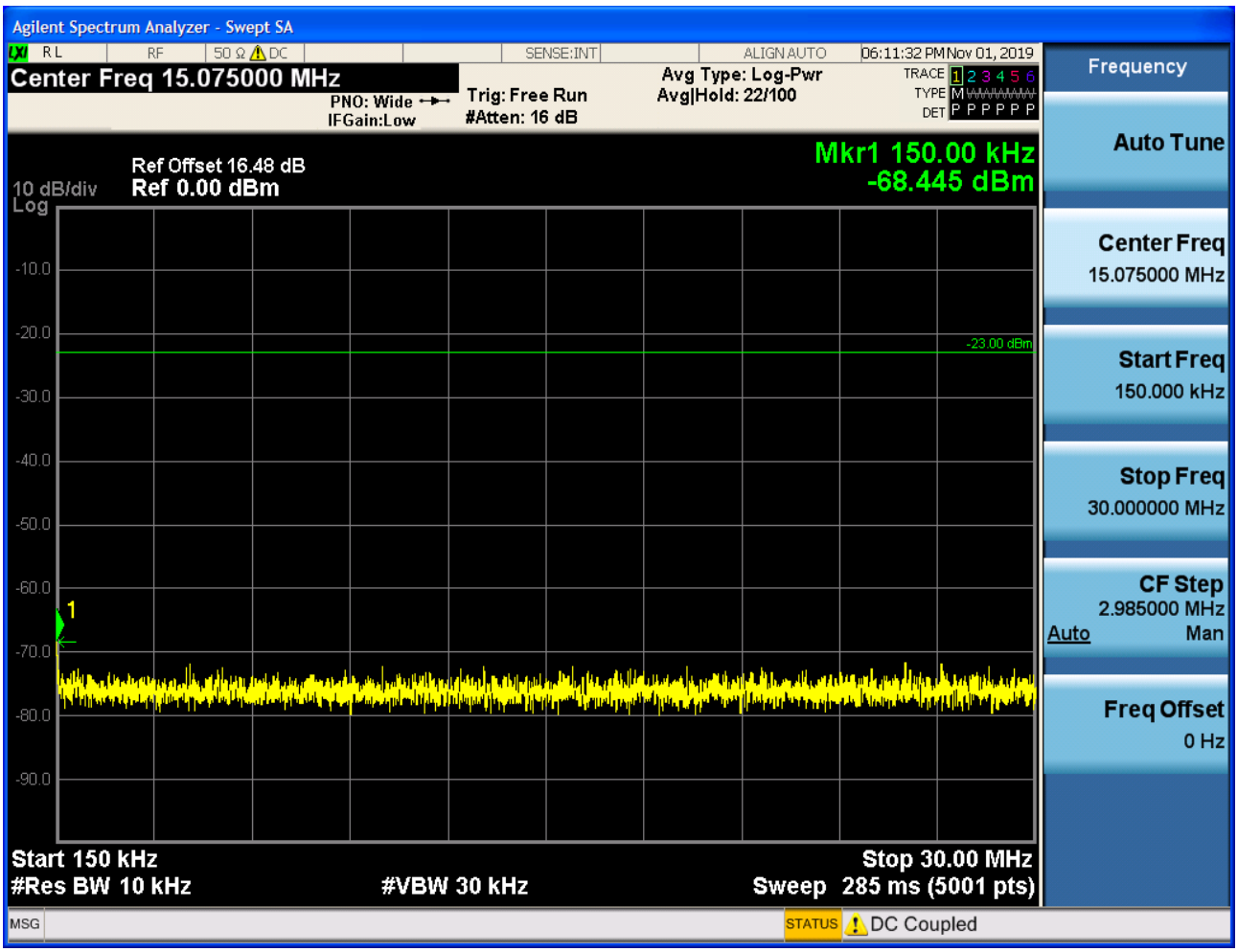

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
06:13:06 PM Nov 01, 2019
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 57/100
TRACE 1 2 3 4 5 6
TYPE M
DET P P P P P P
Ref Offset 16.47 dB
10 dB/div
Log
Ref 25.00 dBm
Mkr1 855.230 MHz
-54.356 dBm
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
-13.00 dBm
1
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.3 ms (40001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz

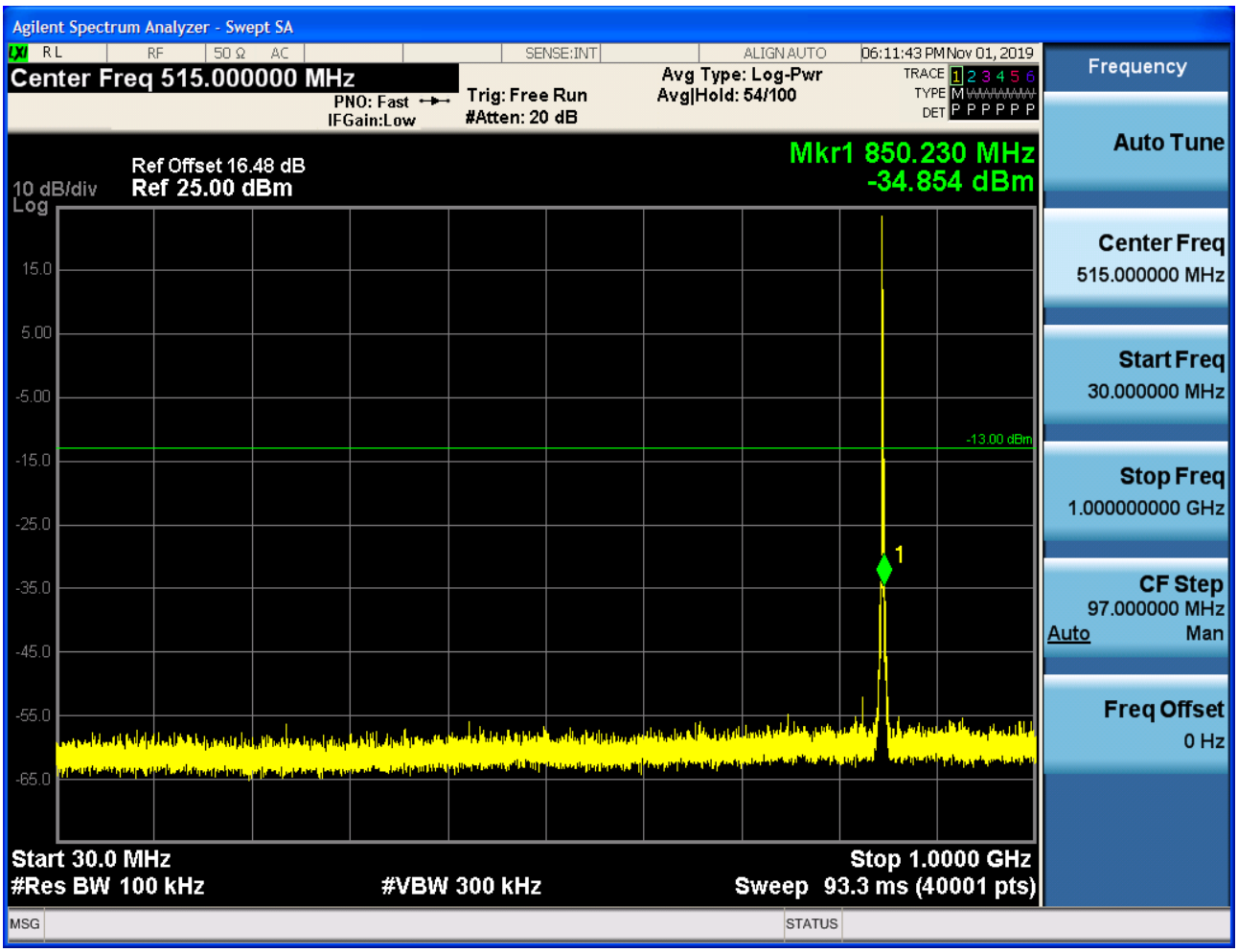


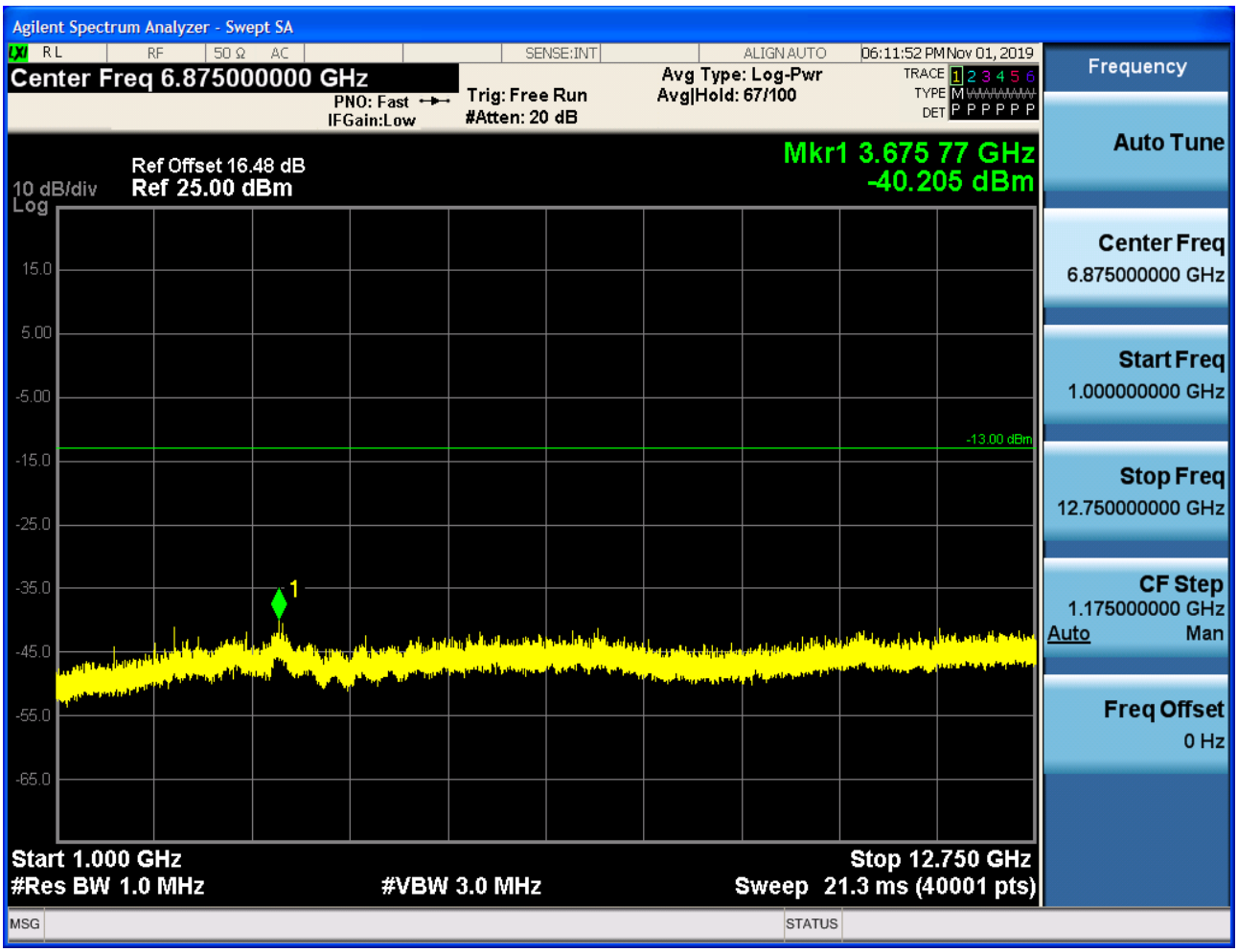
#### 6.1.1.1.1.3 Test Channel = HCH

##### 6.1.1.1.1.3.1 Test RB = RB1#0





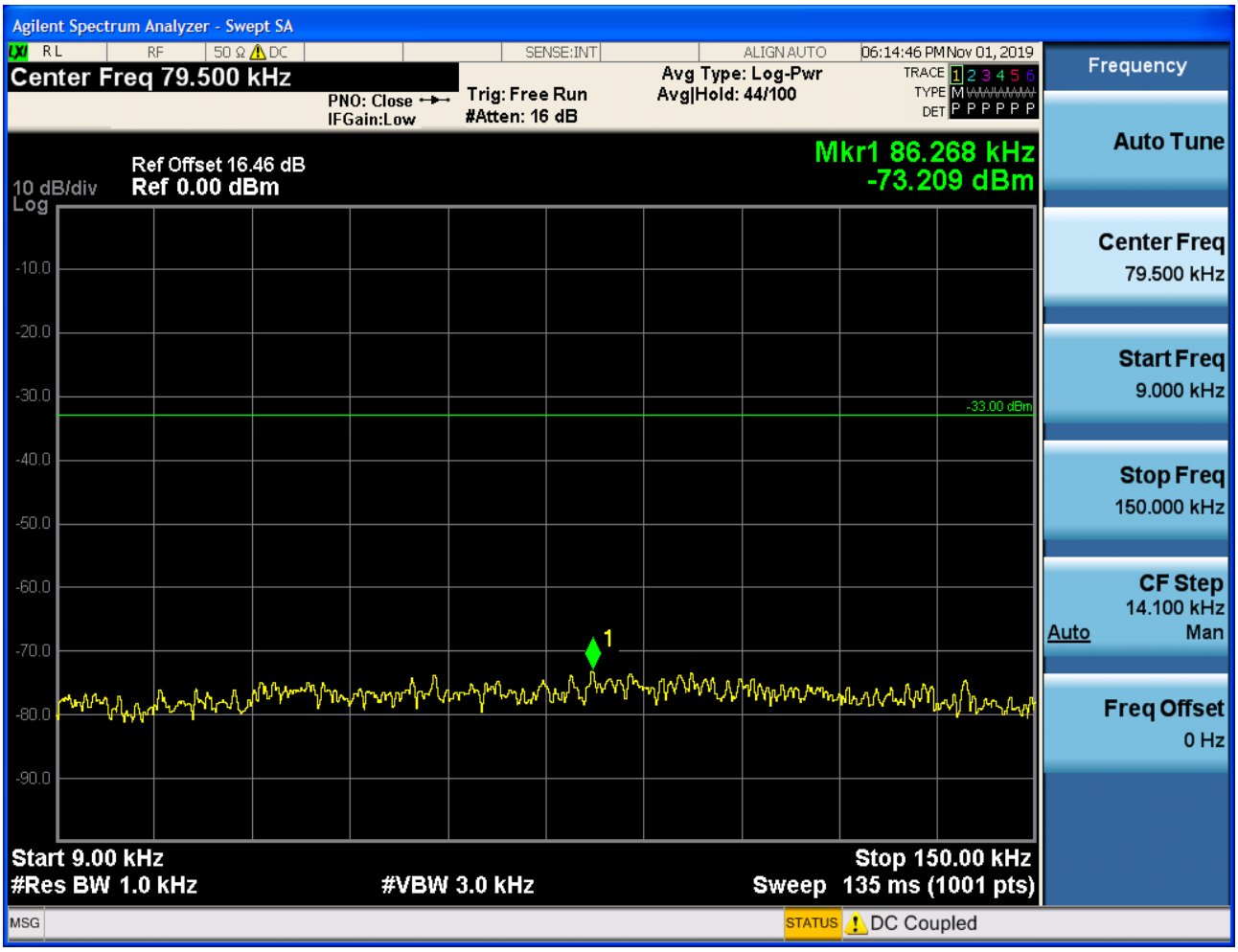

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
06:11:43 PM Nov 01, 2019
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 54/100
TRACE 1 2 3 4 5 6
TYPE M
DET P P P P P P
Ref Offset 16.48 dB
10 dB/div
Log
Ref 25.00 dBm
Mkr1 850.230 MHz
-34.854 dBm
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
-13.00 dBm
1
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.3 ms (40001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz

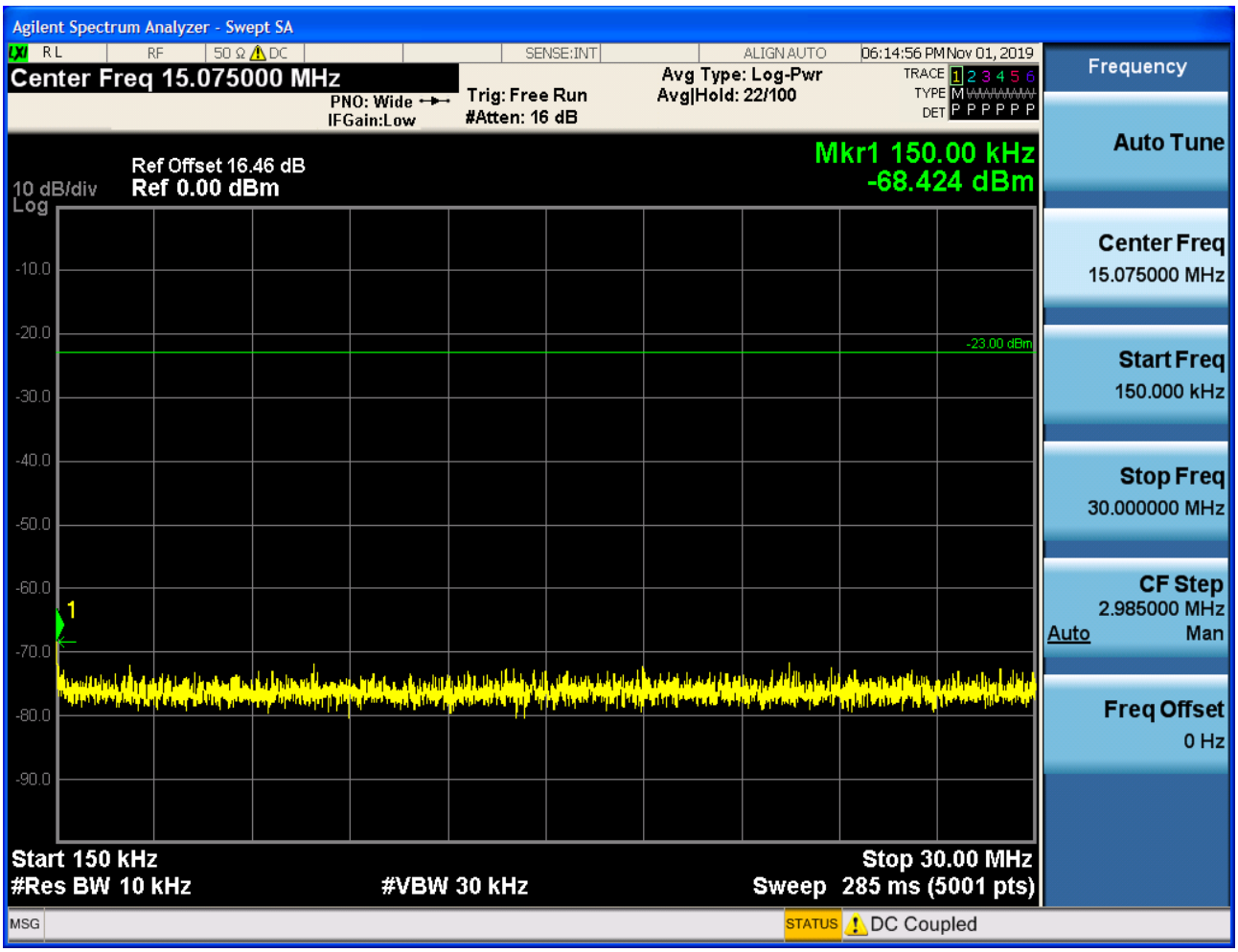


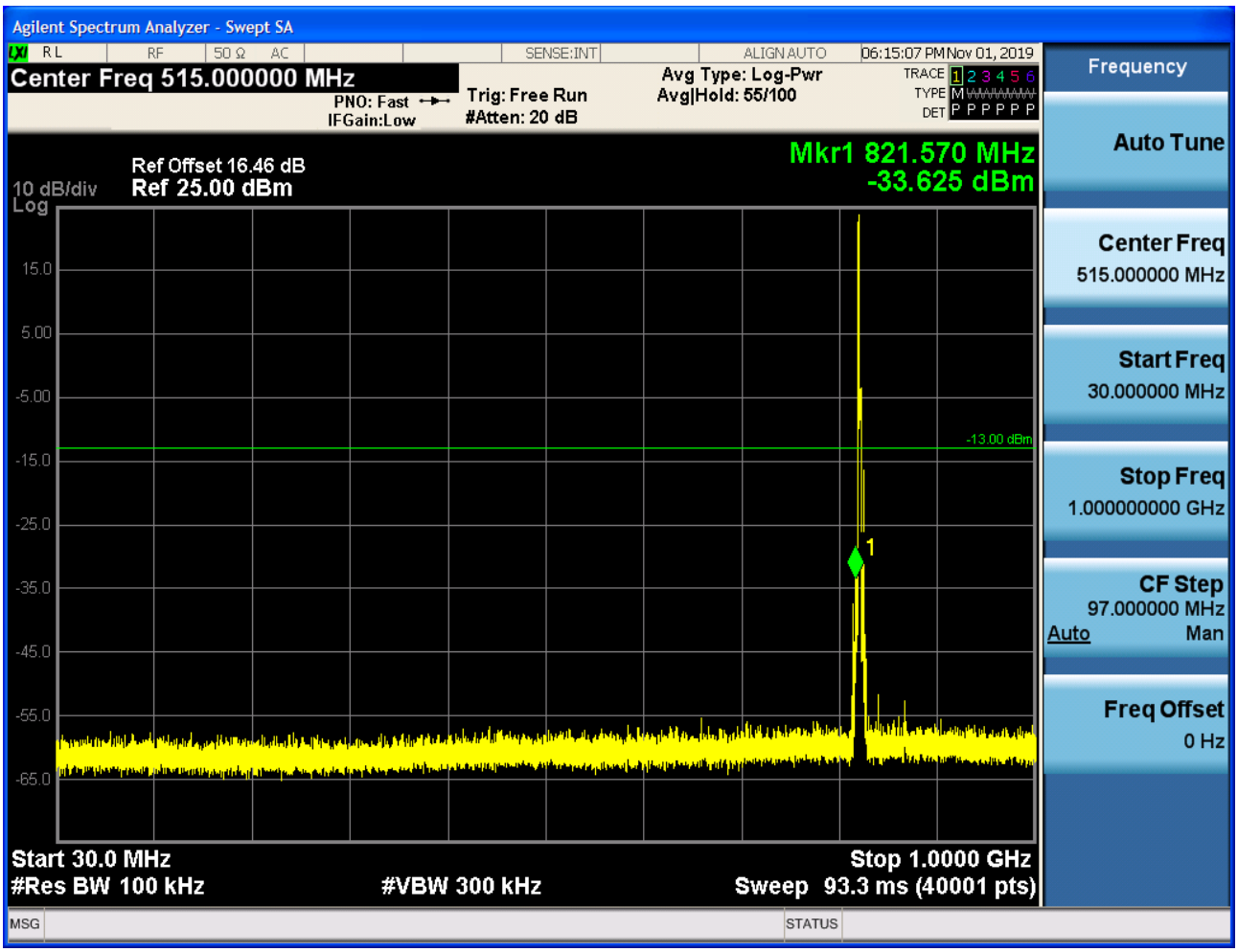
#### 6.2.1.1.2 Test Bandwidth = 3

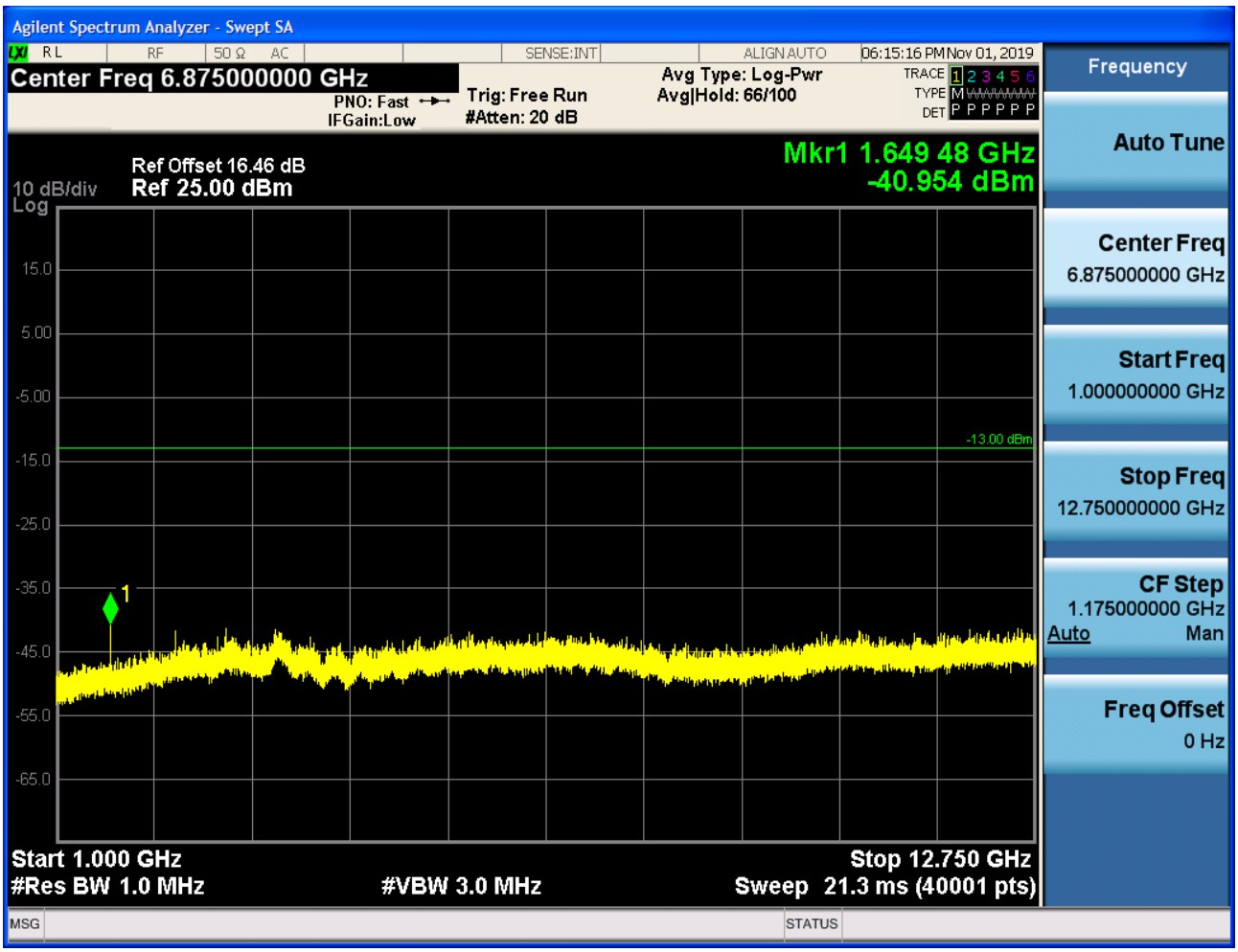
##### 6.2.1.1.2.1 Test Channel = LCH

###### 6.2.1.1.2.1.1 Test RB = RB1#0



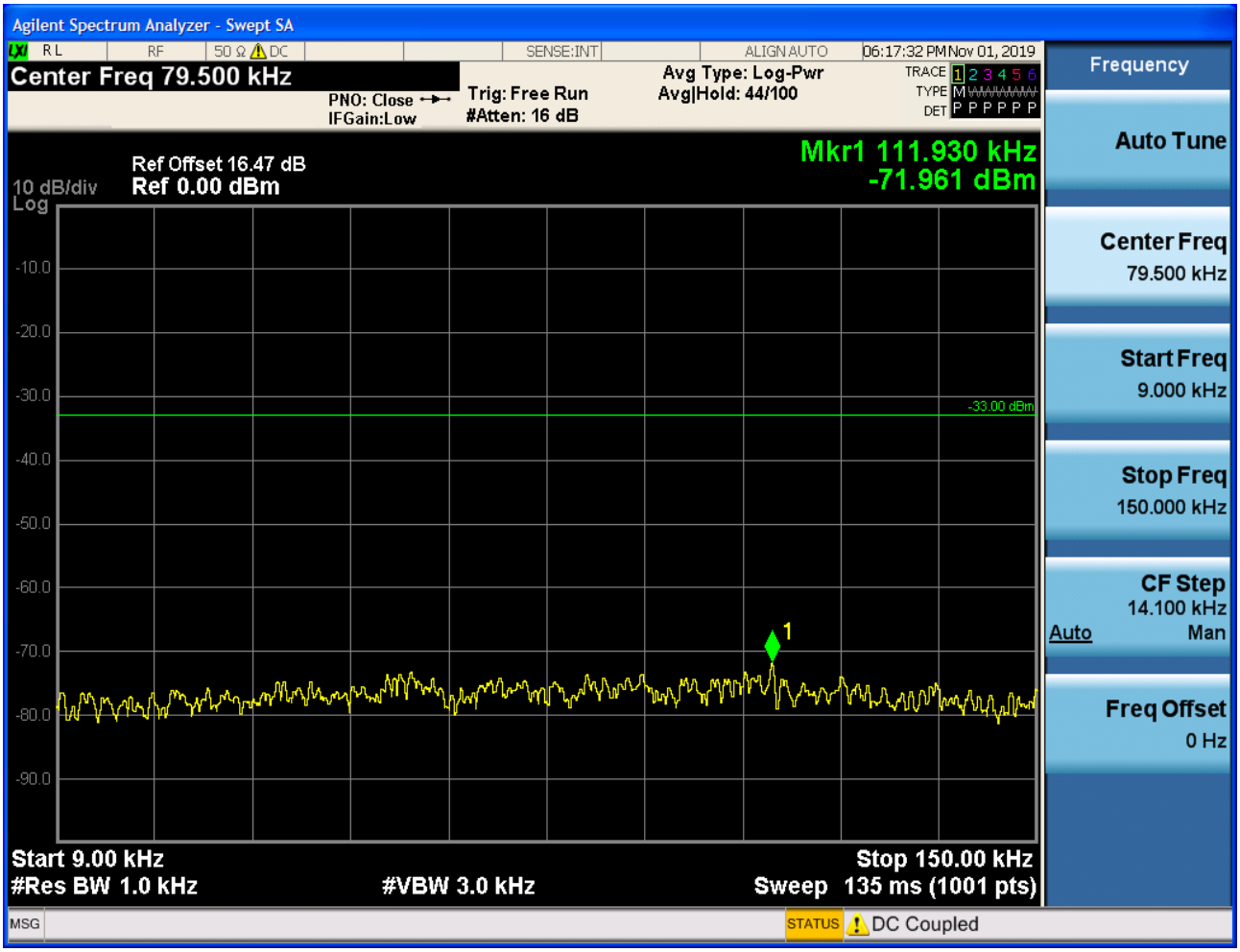


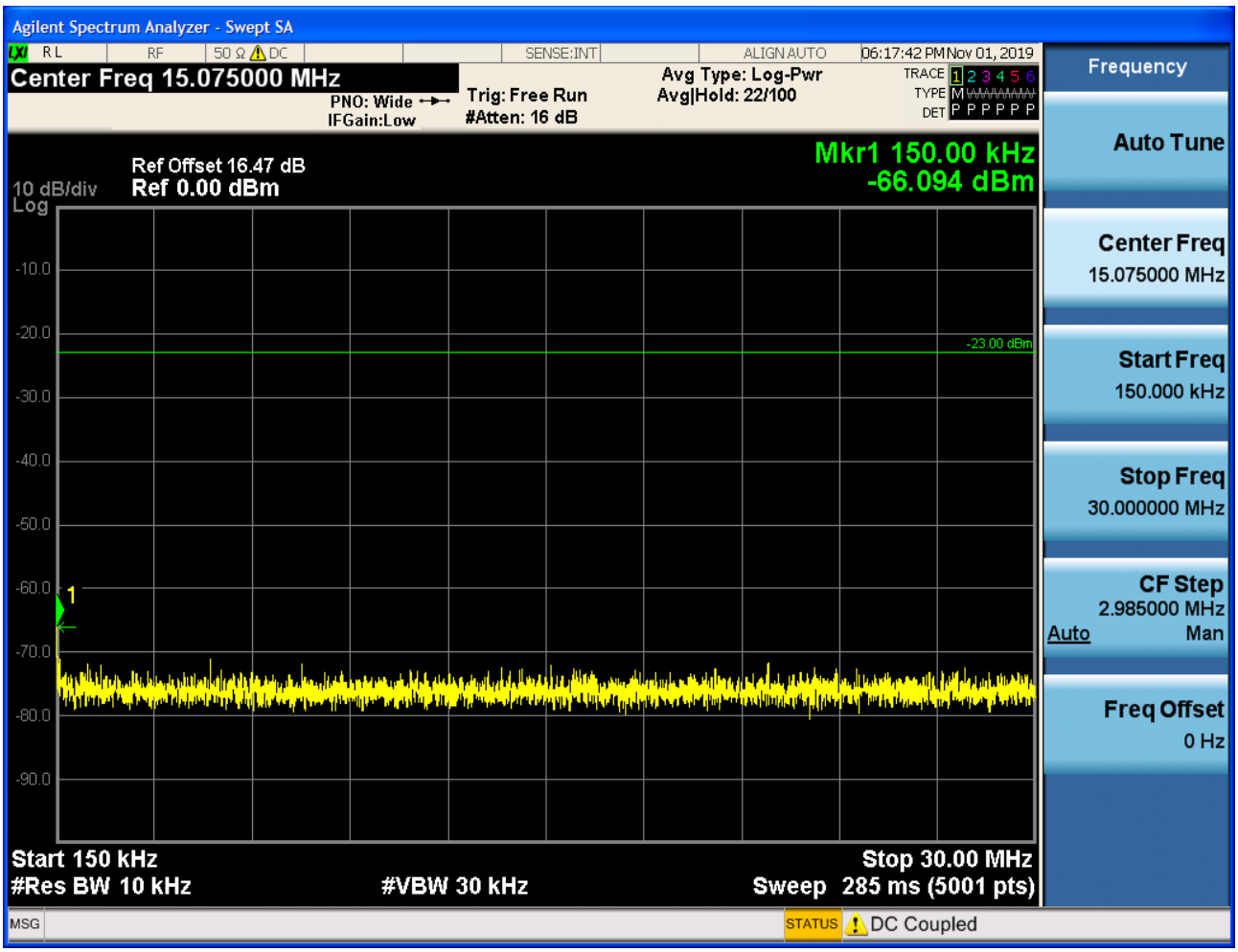

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
06:15:07 PM Nov 01, 2019
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 55/100
TRACE 1 2 3 4 5 6
TYPE M
DET P P P P P P
Ref Offset 16.46 dB
10 dB/div
Log
Ref 25.00 dBm
Mkr1 821.570 MHz
-33.625 dBm
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
-13.00 dBm
1
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.3 ms (40001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz

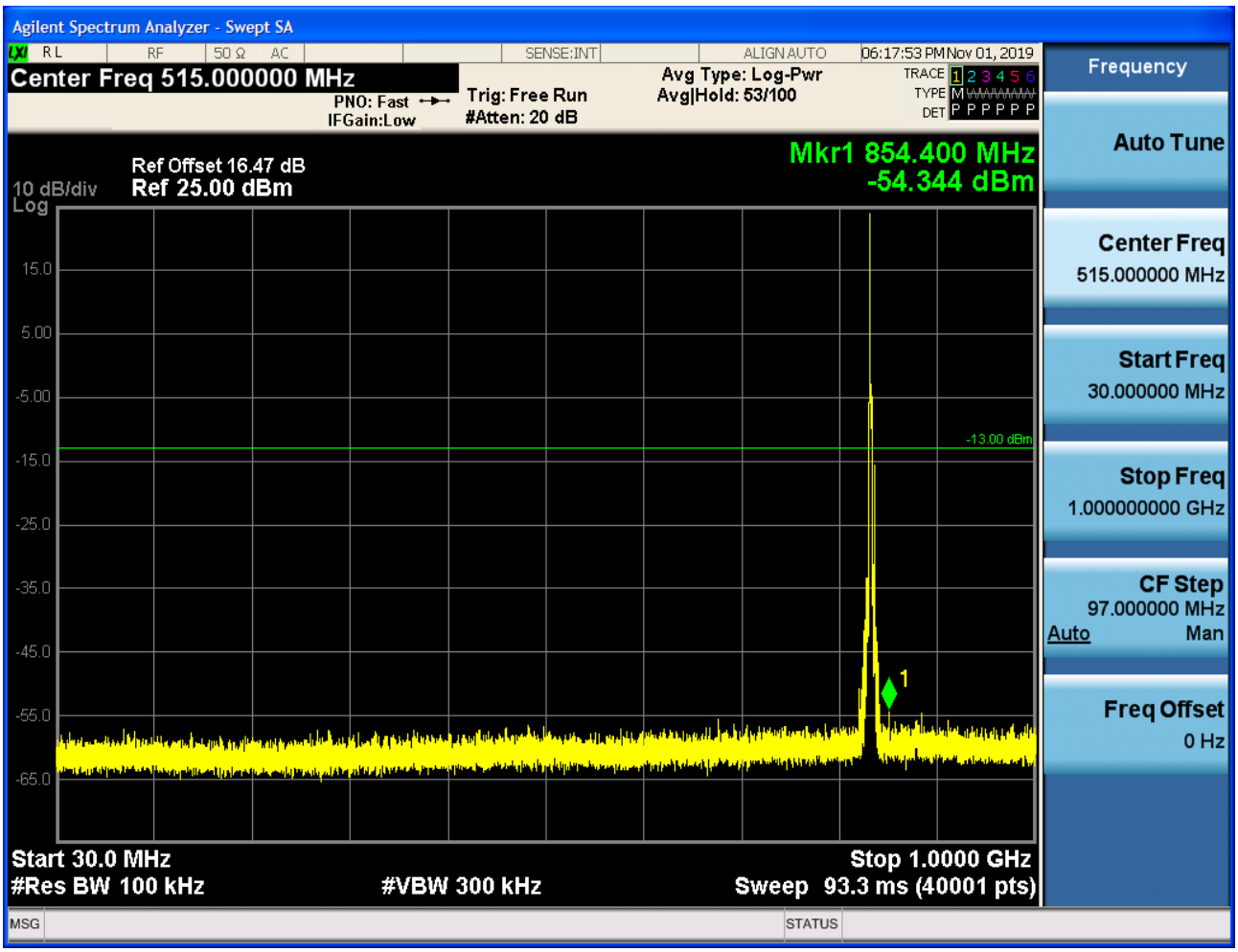


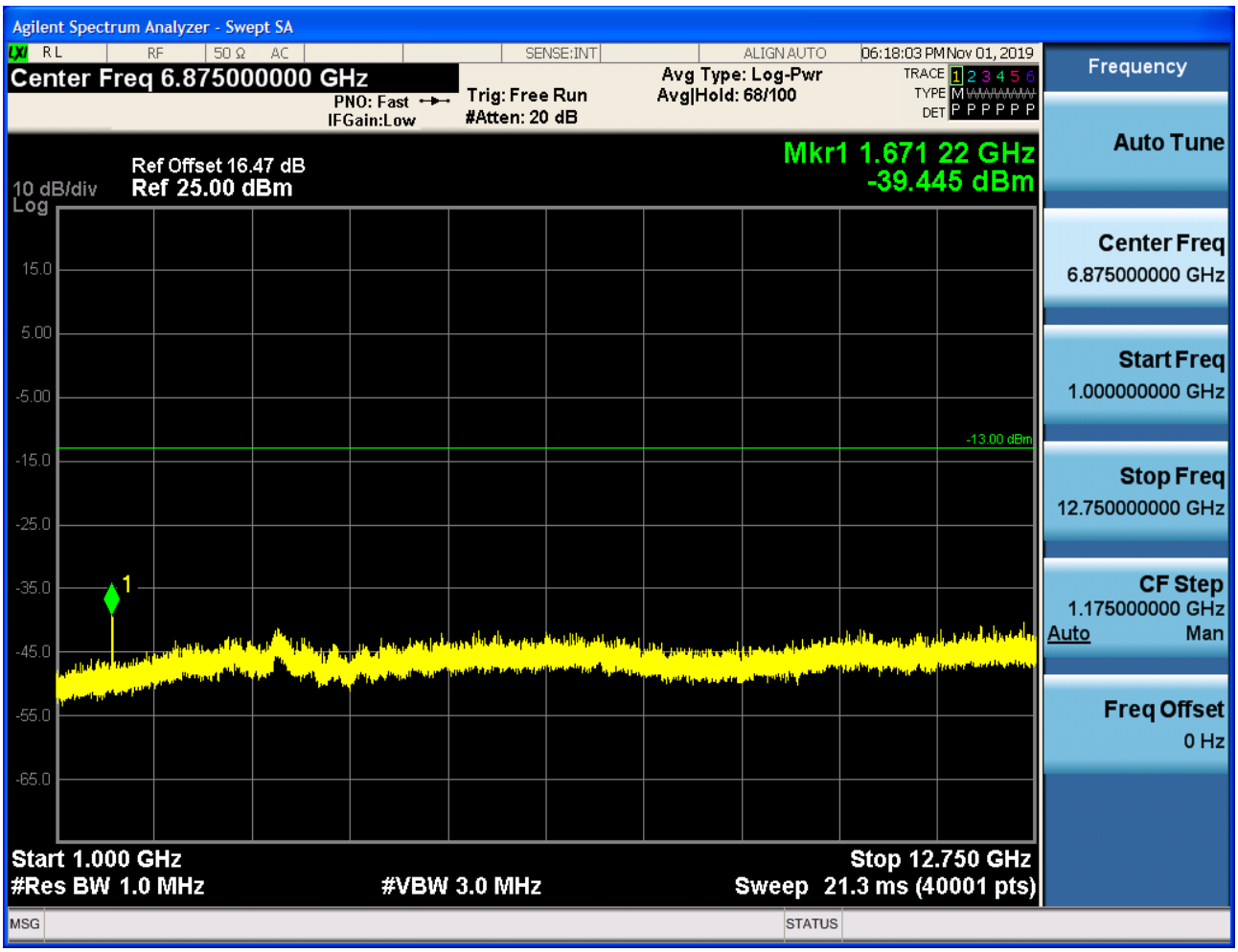
#### 6.2.1.1.2.2 Test Channel = MCH

##### 6.2.1.1.2.2.1 Test RB = RB1#0



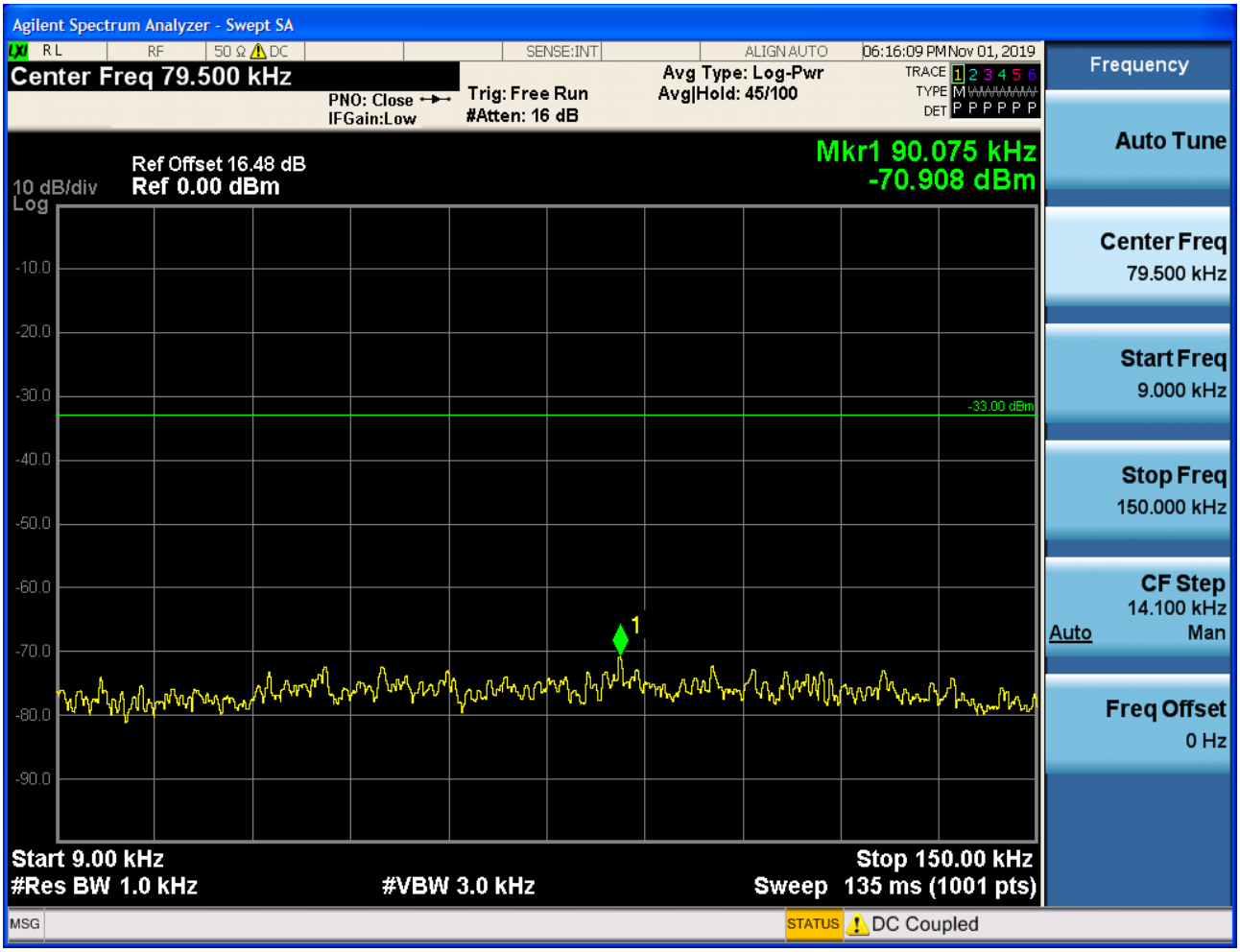


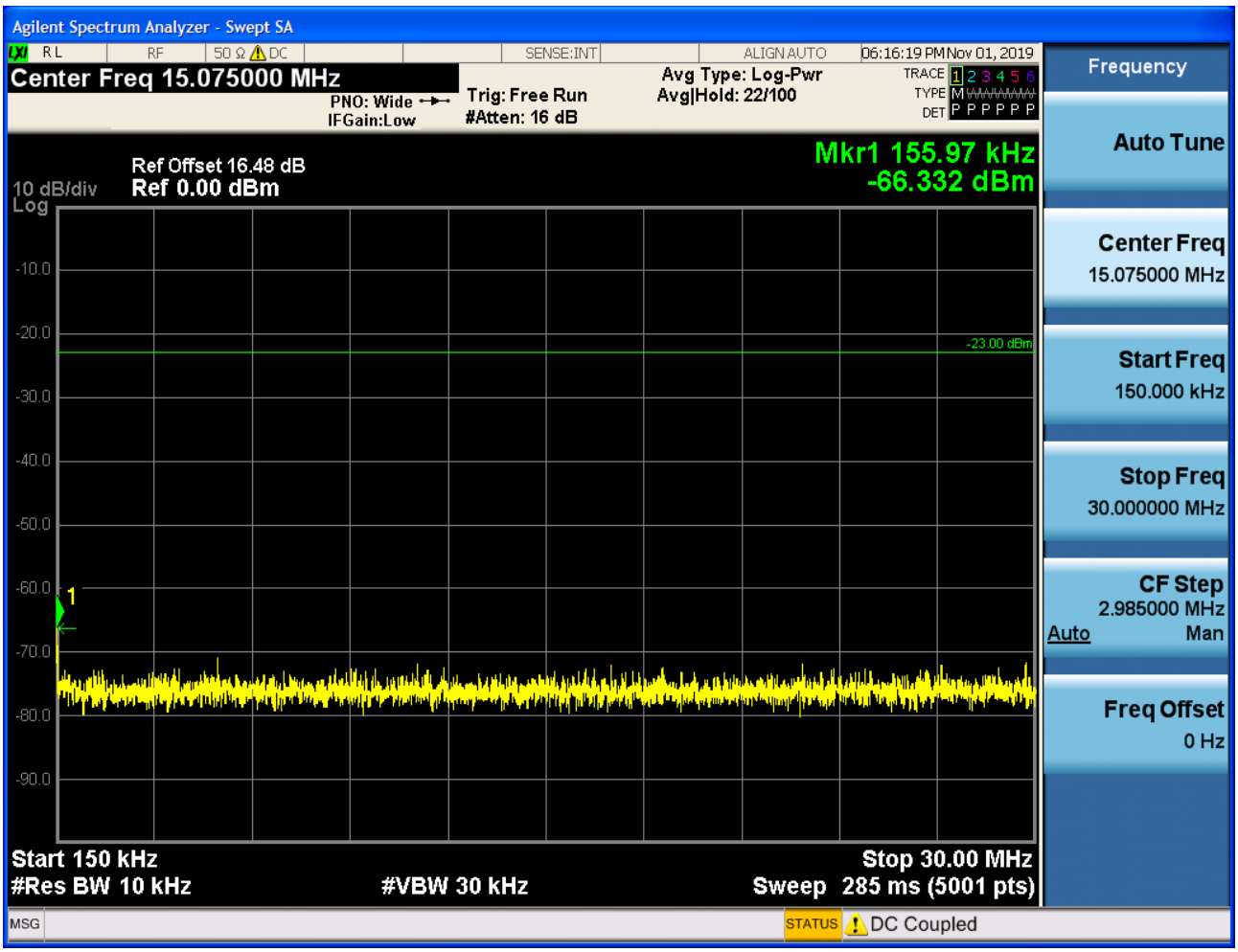

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
06:17:53 PM Nov 01, 2019
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 53/100
TRACE 1 2 3 4 5 6
TYPE M
DET P P P P P P
Ref Offset 16.47 dB
10 dB/div
Log
Ref 25.00 dBm
Mkr1 854.400 MHz
-54.344 dBm
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
-13.00 dBm
1
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.3 ms (40001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz

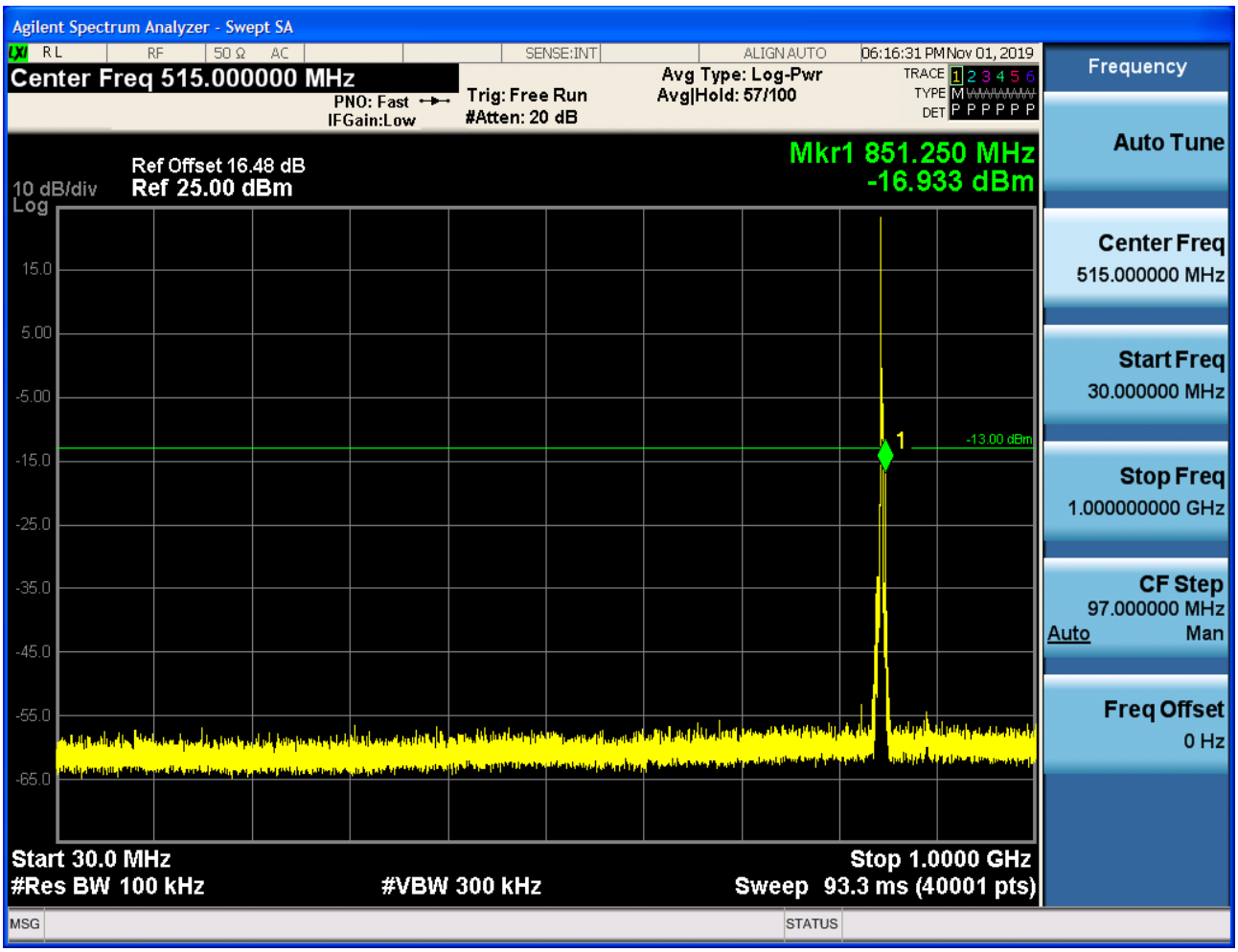


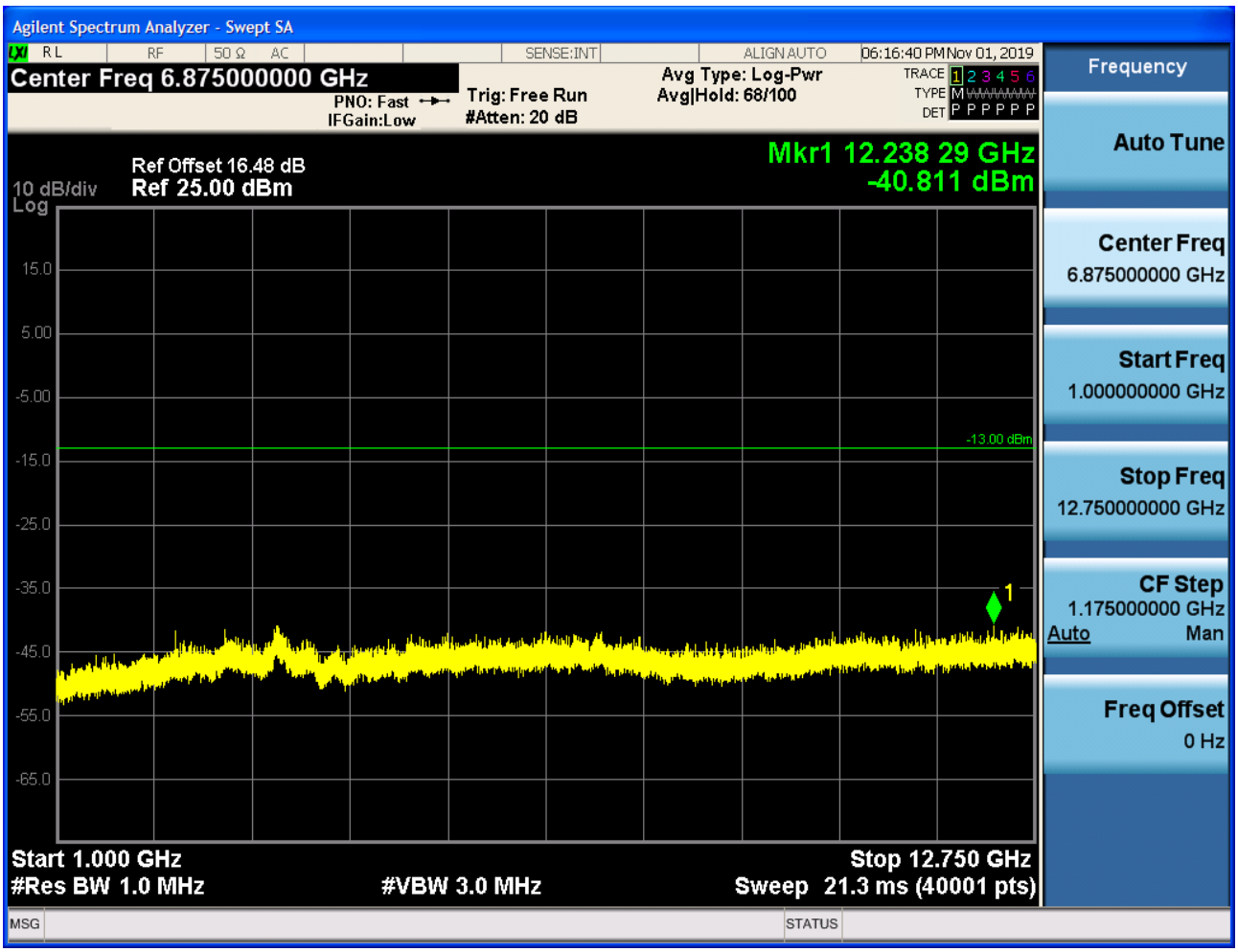
#### 6.2.1.1.2.3 Test Channel = HCH

##### 6.2.1.1.2.3.1 Test RB = RB1#0




Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω DC
SENSE:INT
ALIGN AUTO
06:16:19 PM Nov 01, 2019
Center Freq 15.075000 MHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Log-Pwr
Avg|Hold: 22/100
TRACE 1 2 3 4 5 6
TYPE M
DET P P P P P P
Ref Offset 16.48 dB
10 dB/div
Log
Ref 0.00 dBm
Mkr1 155.97 kHz
-66.332 dBm
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
-23.00 dBm
1
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz
Stop 30.00 MHz
Sweep 285 ms (5001 pts)
MSG
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

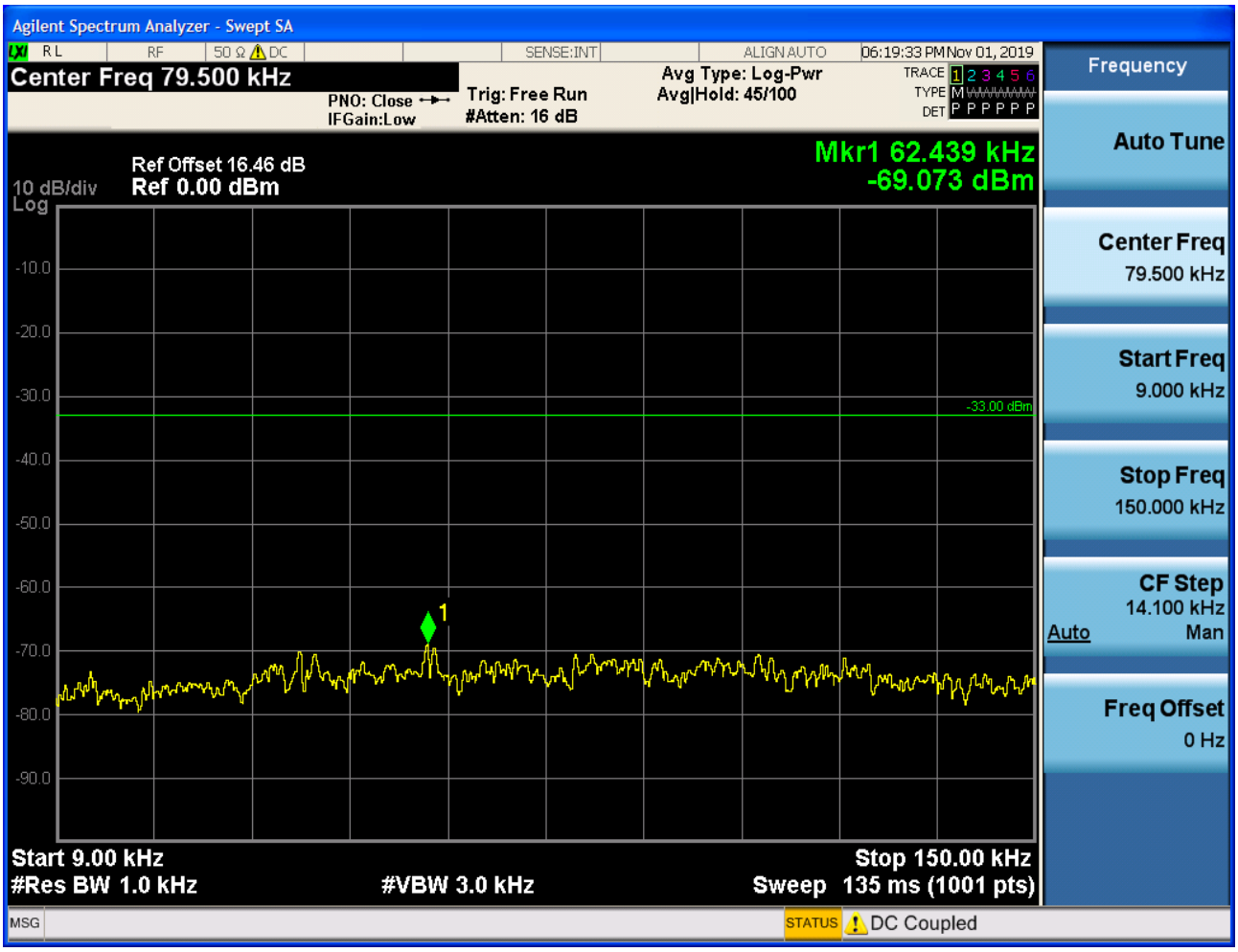

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
06:16:31 PM Nov 01, 2019
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 57/100
TRACE 1 2 3 4 5 6
TYPE M
DET P P P P P P
Ref Offset 16.48 dB
10 dB/div
Log
Ref 25.00 dBm
Mkr1 851.250 MHz
-16.933 dBm
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
1
-13.00 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.3 ms (40001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz

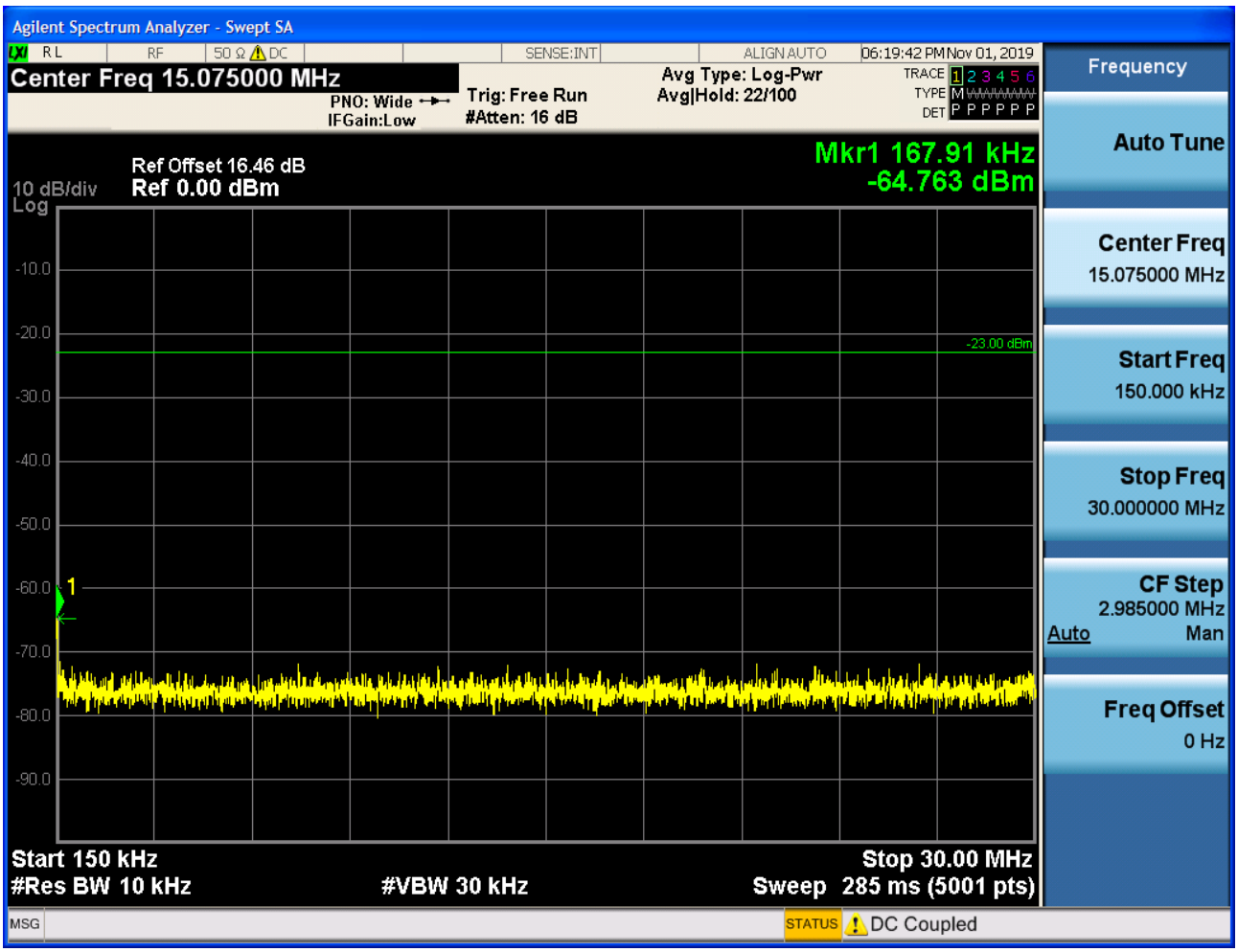


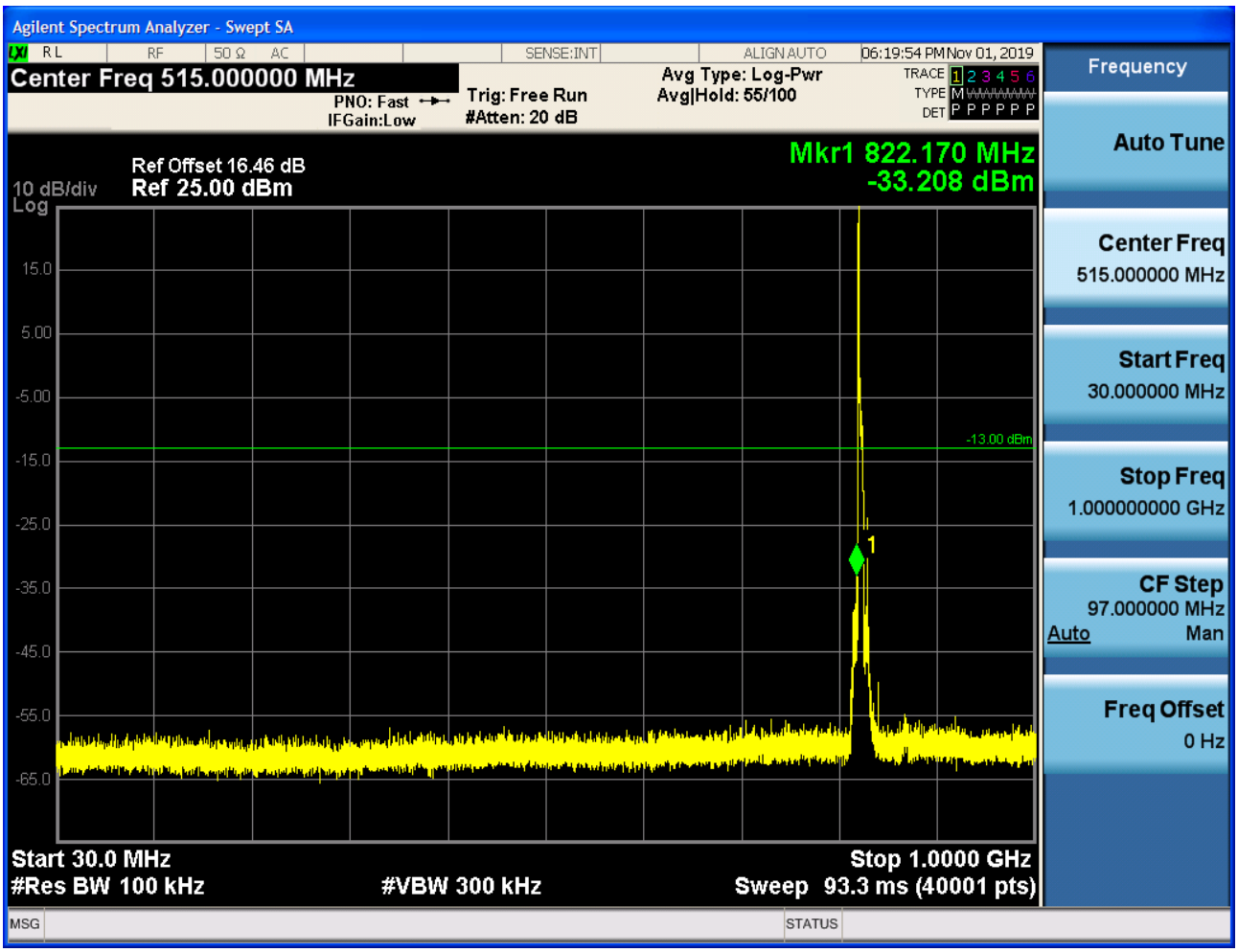
#### 6.2.1.1.3 Test Bandwidth = 5

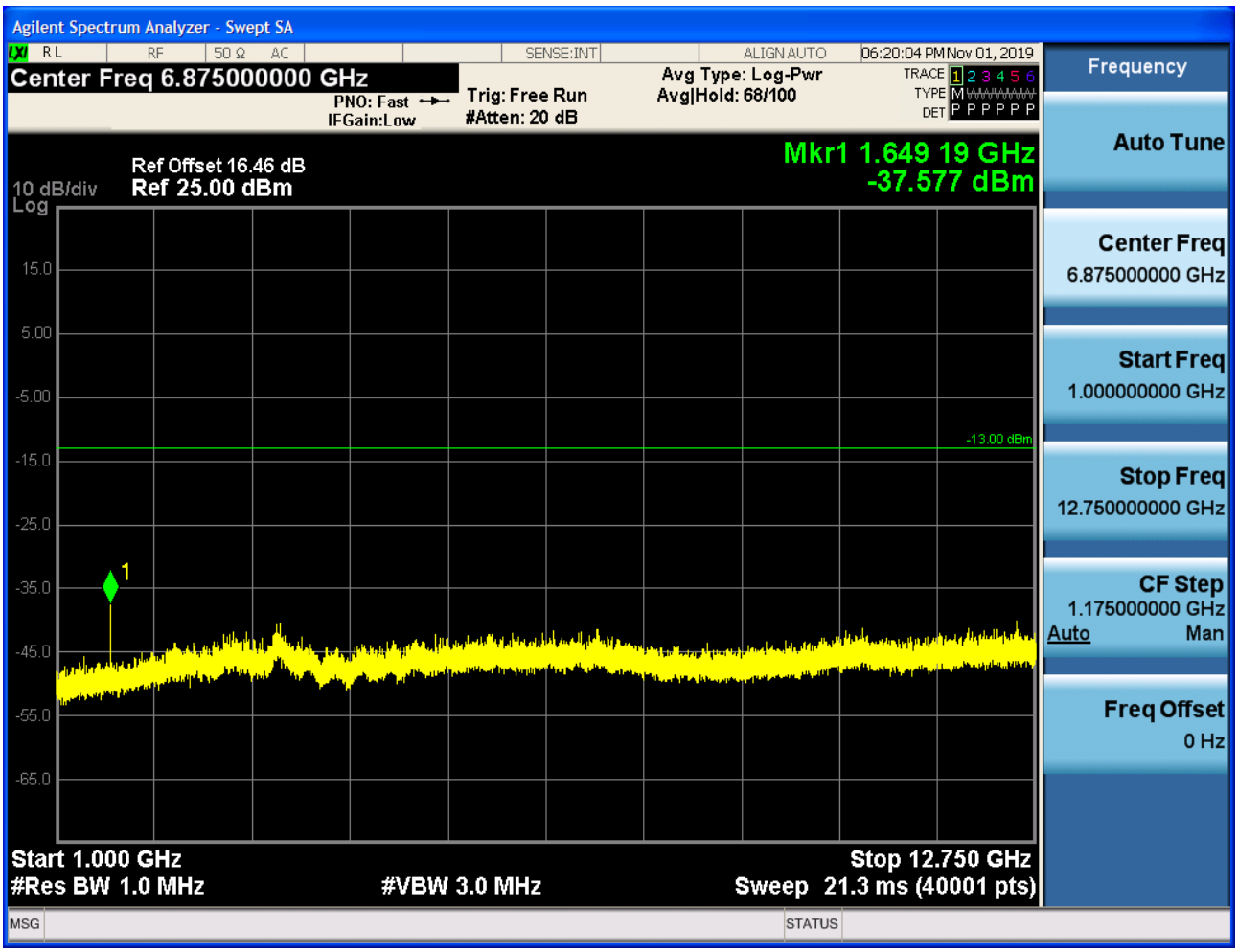
##### 6.2.1.1.3.1 Test Channel = LCH

###### 6.2.1.1.3.1.1 Test RB = RB1#0



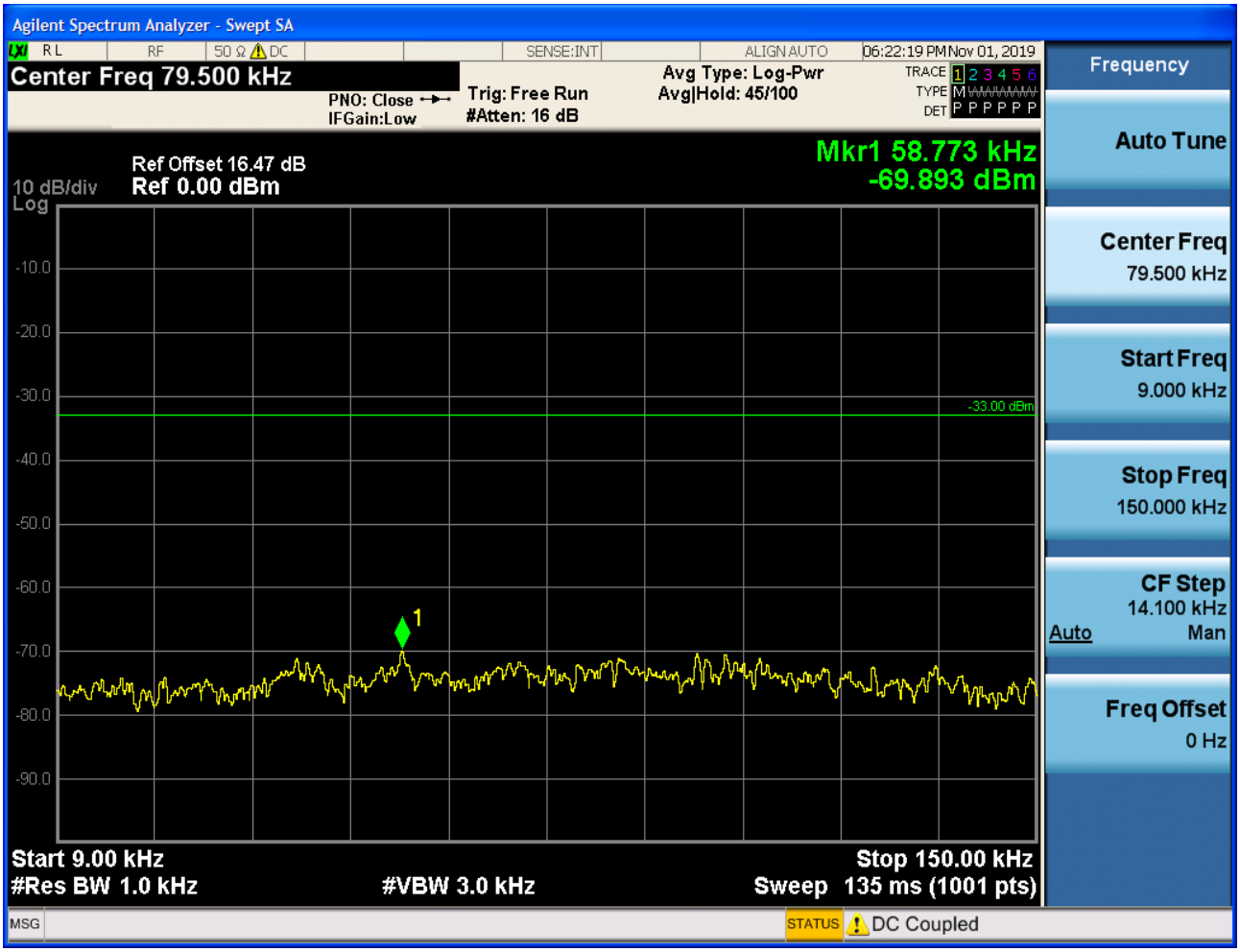


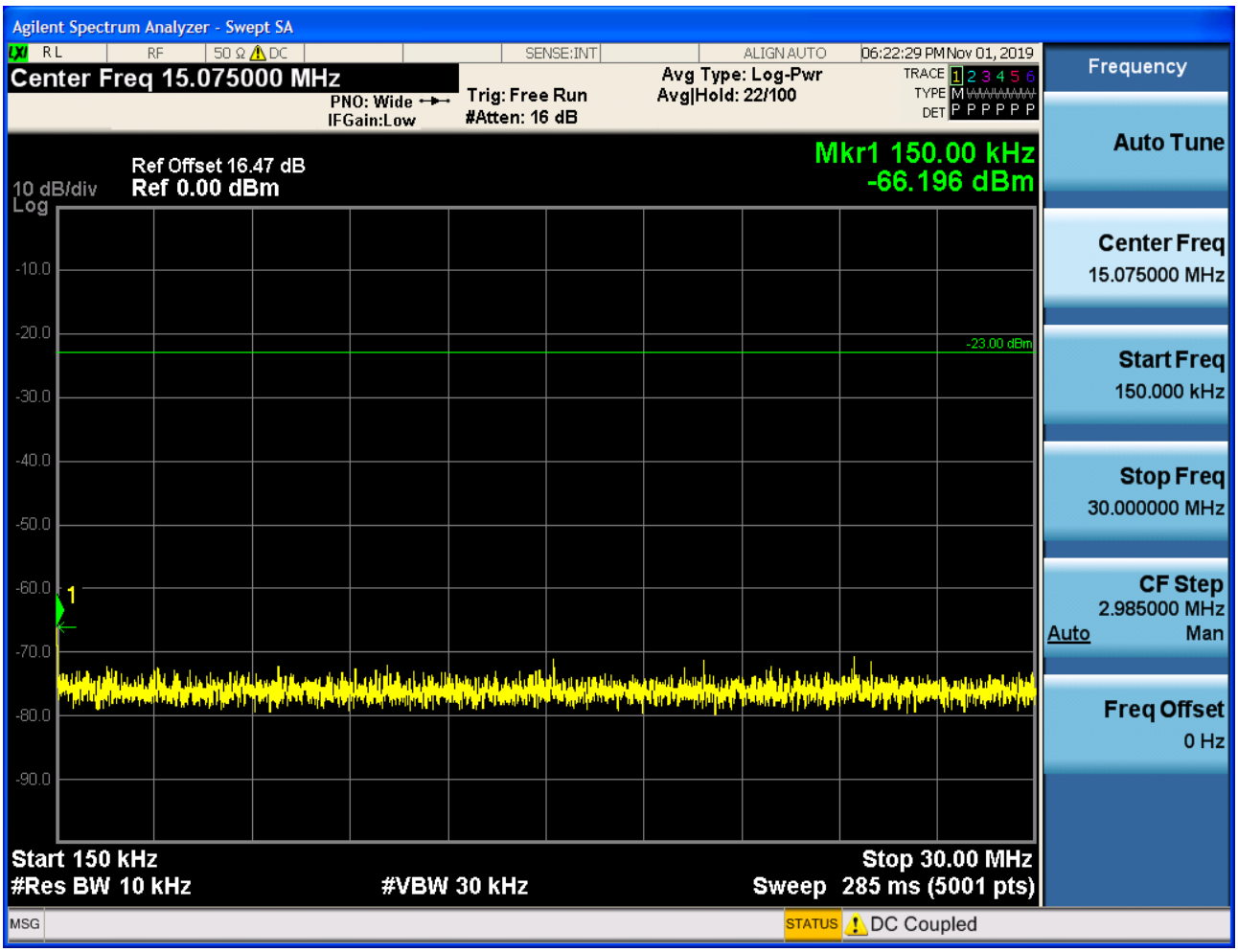

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
06:19:54 PM Nov 01, 2019
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 55/100
TRACE 1 2 3 4 5 6
TYPE M
DET P P P P P P
Ref Offset 16.46 dB
10 dB/div
Log
Ref 25.00 dBm
Mkr1 822.170 MHz
-33.208 dBm
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
-13.00 dBm
1
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.3 ms (40001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz

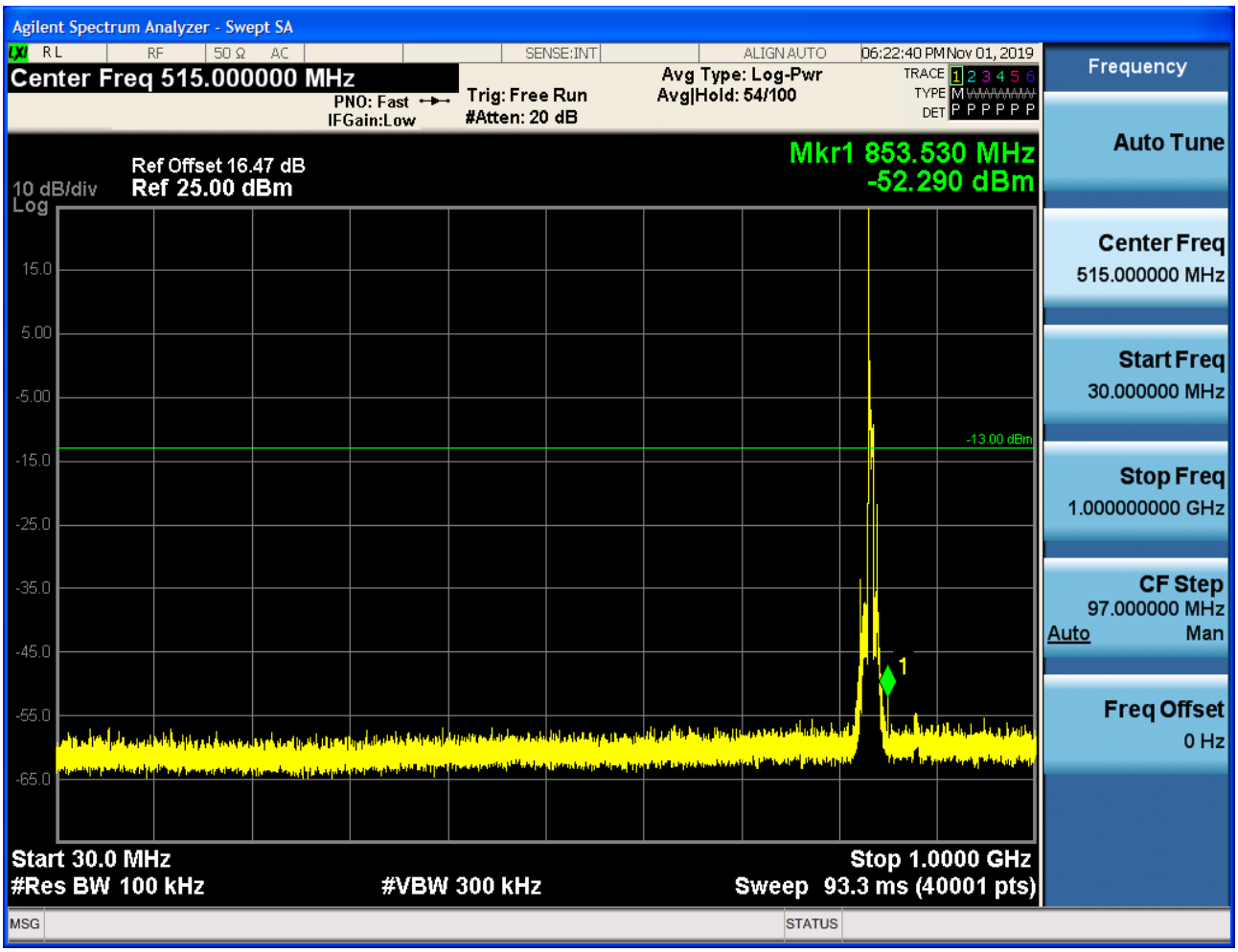


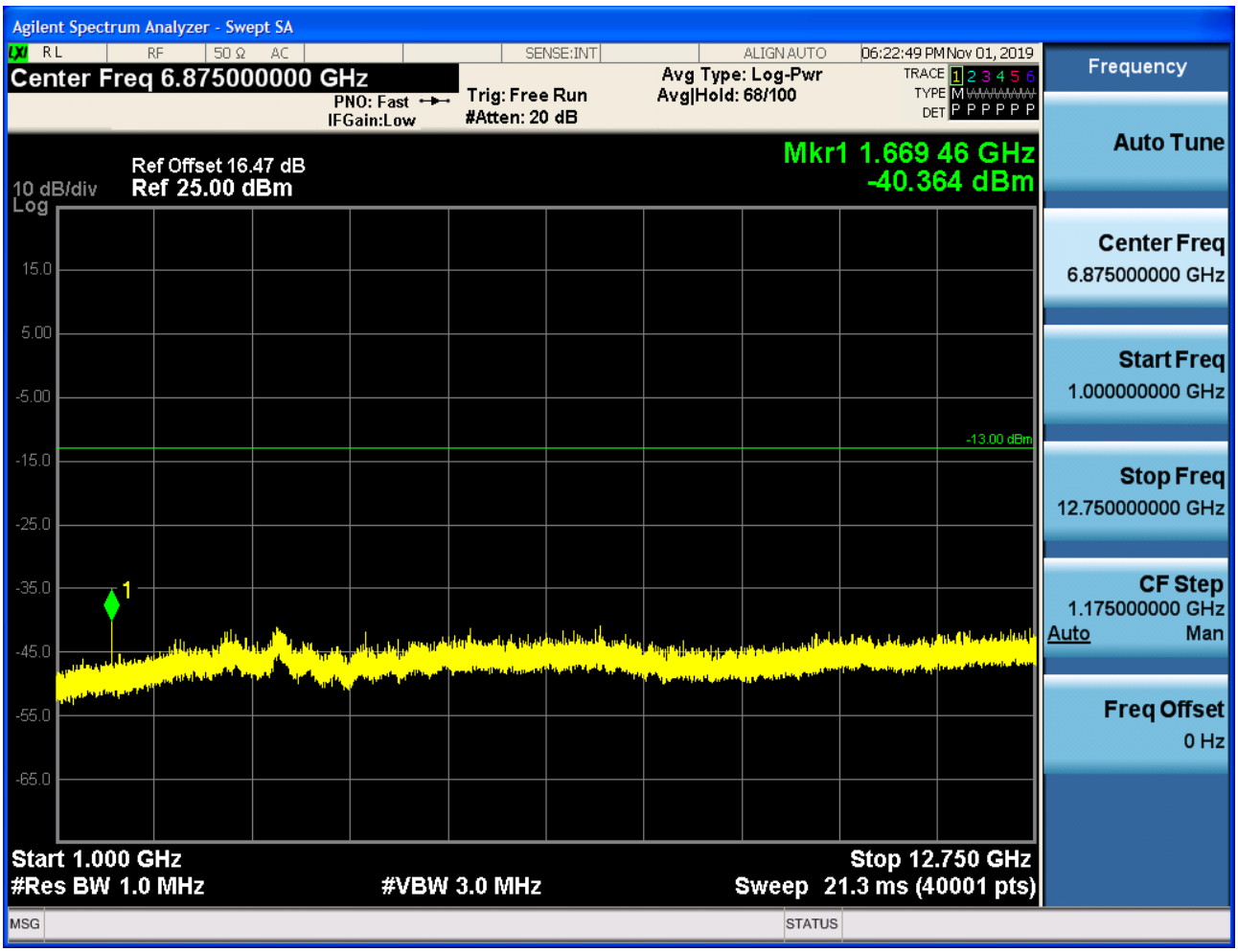
#### 6.2.1.1.3.2 Test Channel = MCH

##### 6.2.1.1.3.2.1 Test RB = RB1#0



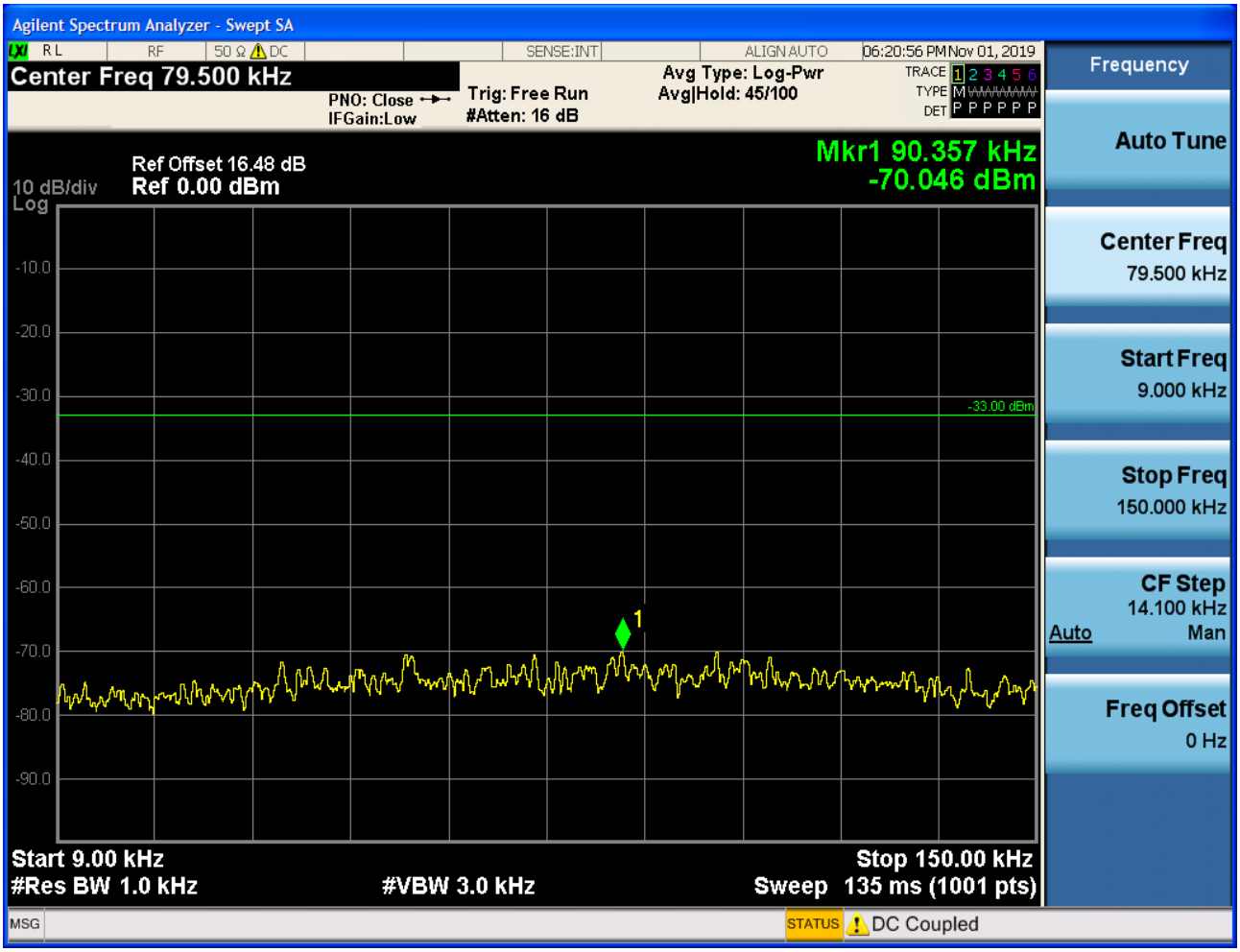


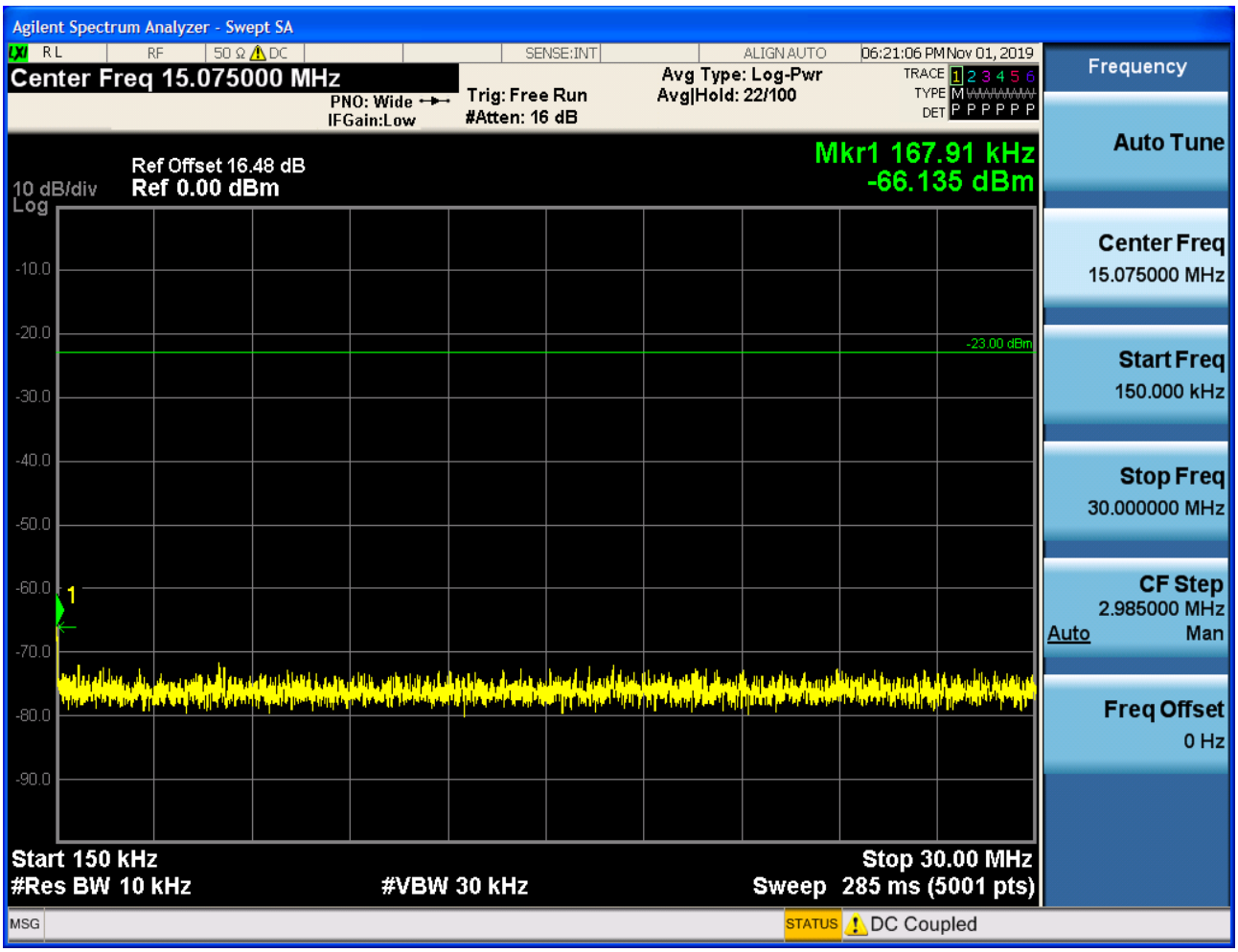

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
06:22:40 PM Nov 01, 2019
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 54/100
TRACE 1 2 3 4 5 6
TYPE M
DET P P P P P P
Ref Offset 16.47 dB
10 dB/div
Log
Ref 25.00 dBm
Mkr1 853.530 MHz
-52.290 dBm
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
-13.00 dBm
1
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.3 ms (40001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz

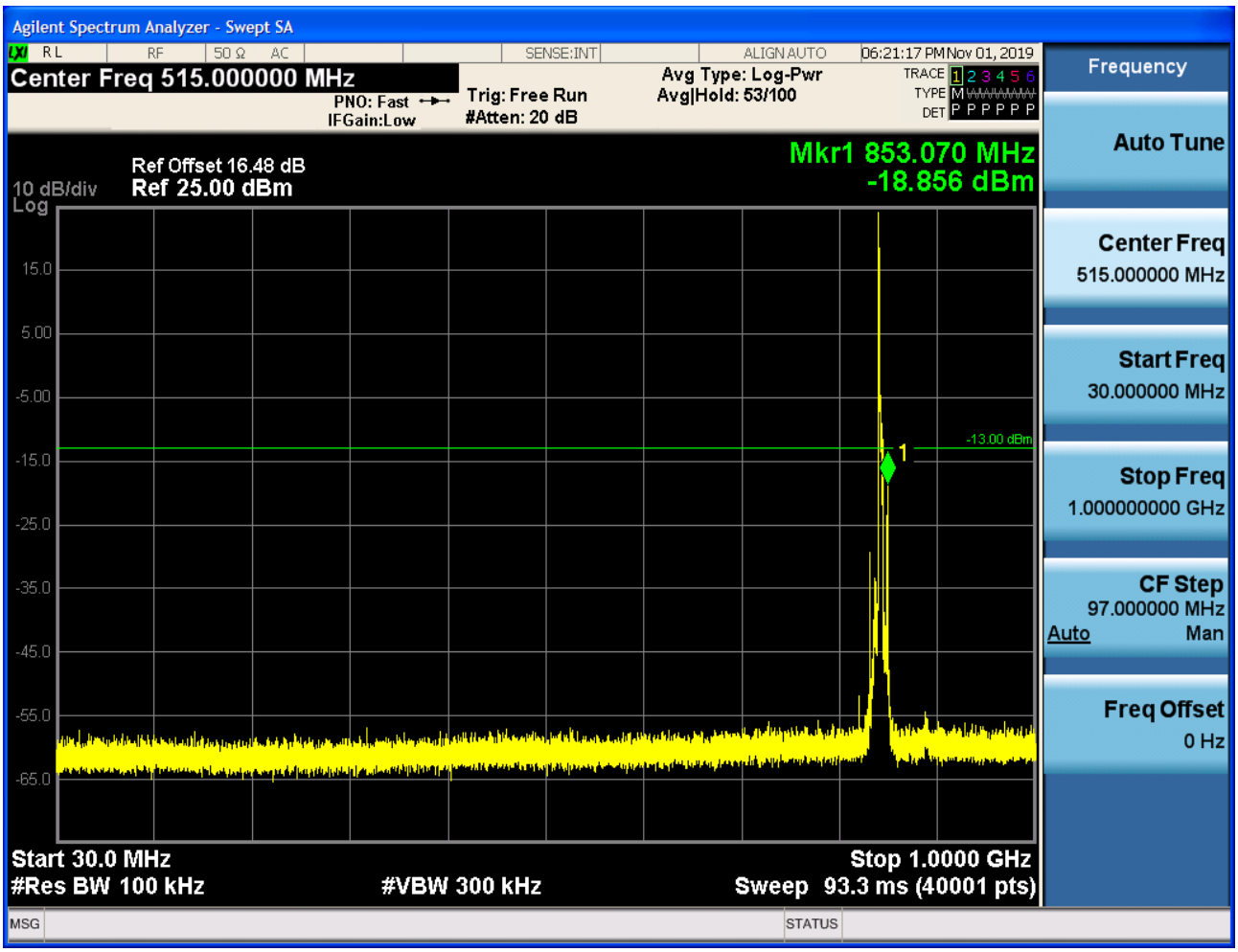


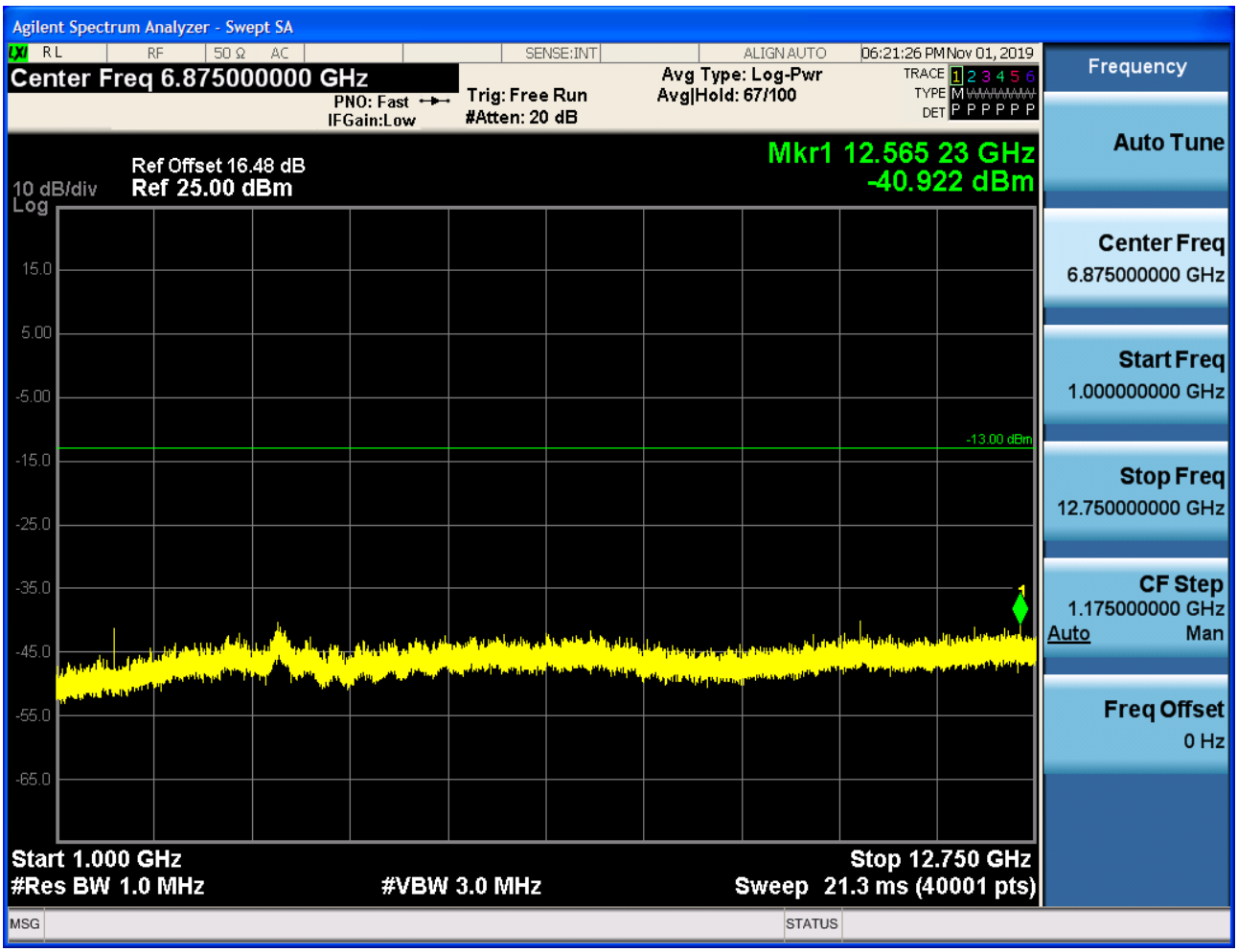
#### 6.2.1.1.3.3 Test Channel = HCH

##### 6.2.1.1.3.3.1 Test RB = RB1#0




Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω DC
SENSE:INT
ALIGN AUTO
06:21:06 PM Nov 01, 2019
Center Freq 15.075000 MHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: Log-Pwr
Avg|Hold: 22/100
TRACE 1 2 3 4 5 6
TYPE M
DET P P P P P P
Ref Offset 16.48 dB
10 dB/div
Log
Ref 0.00 dBm
Mkr1 167.91 kHz
-66.135 dBm
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
-23.00 dBm
1
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz
Stop 30.00 MHz
Sweep 285 ms (5001 pts)
MSG
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

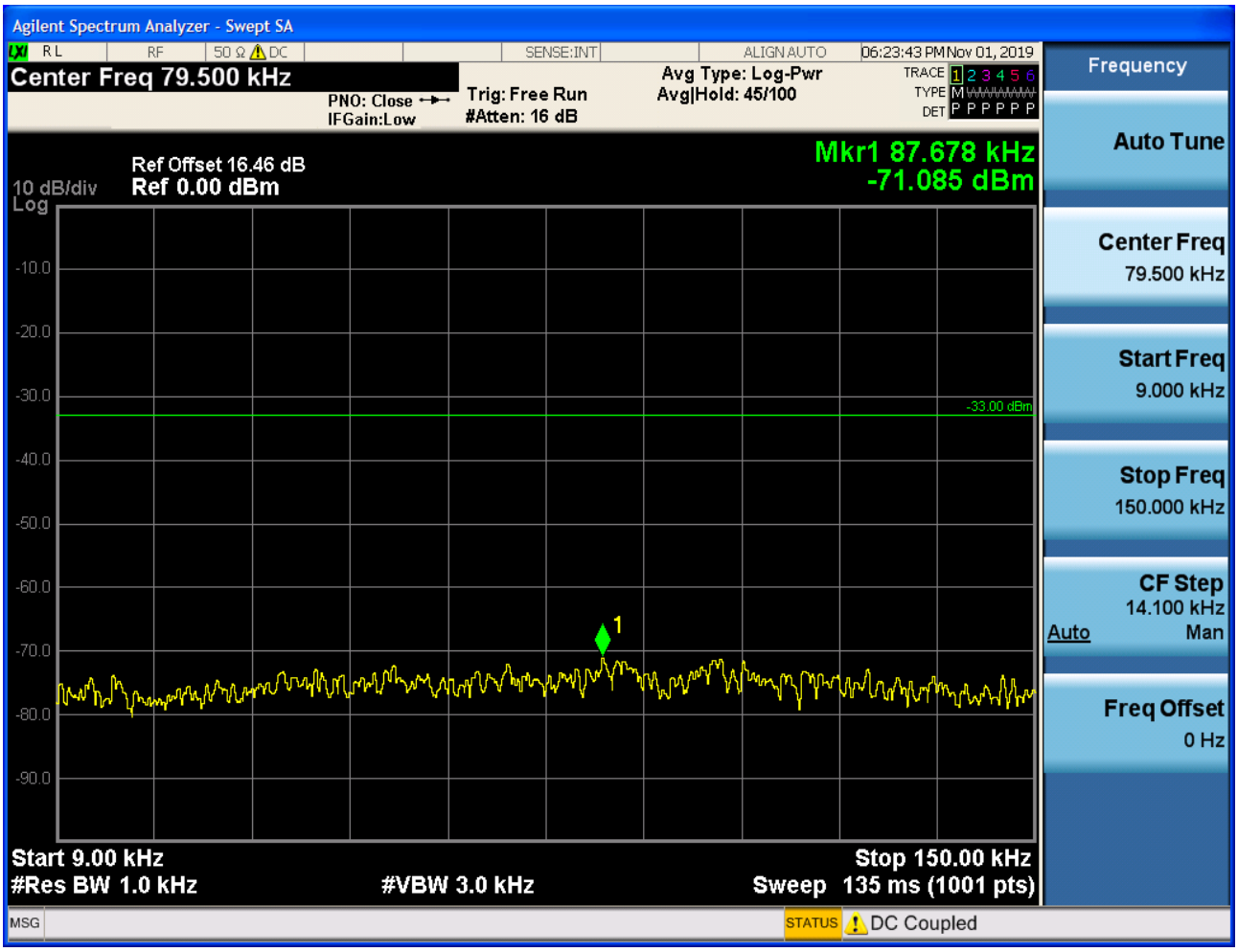


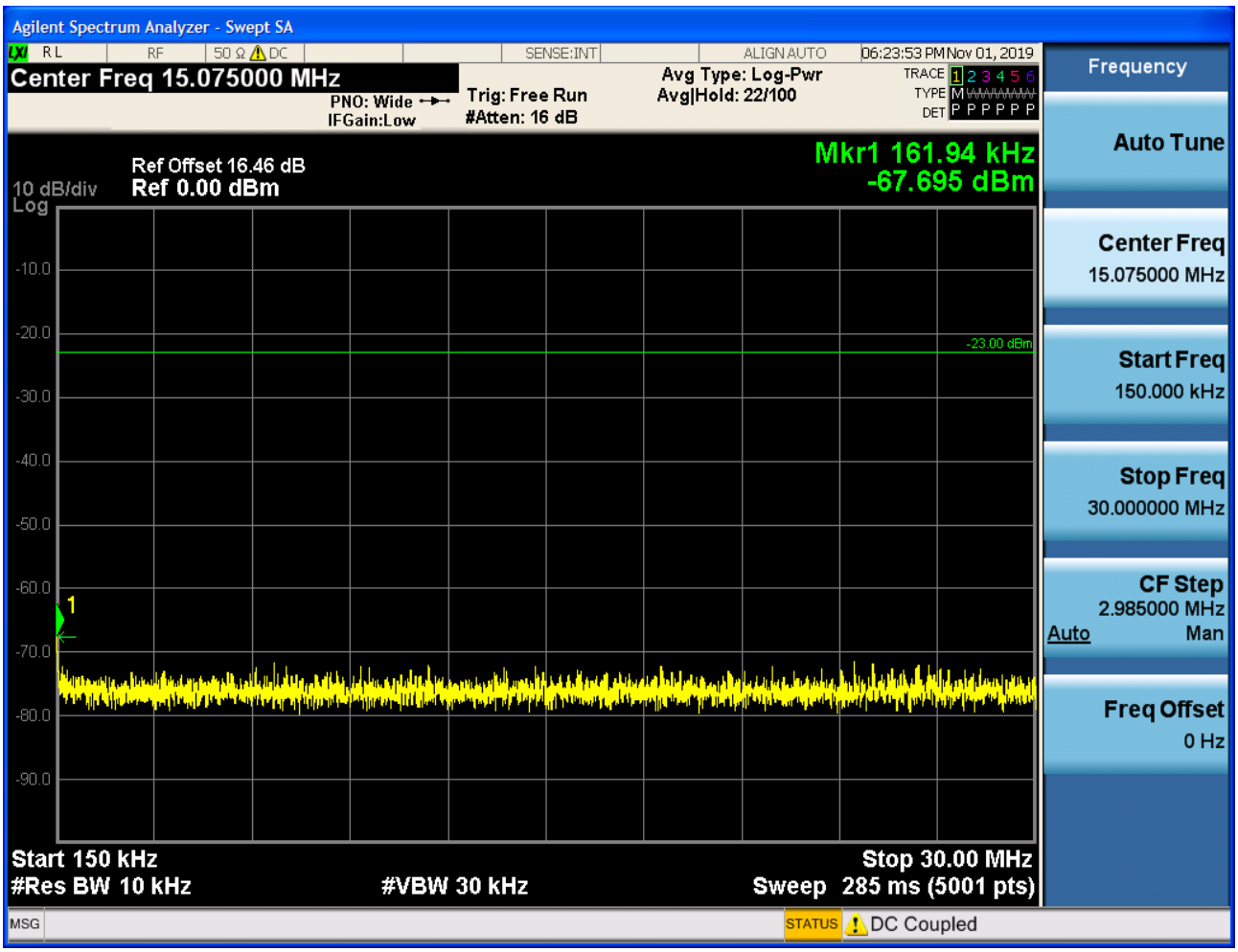


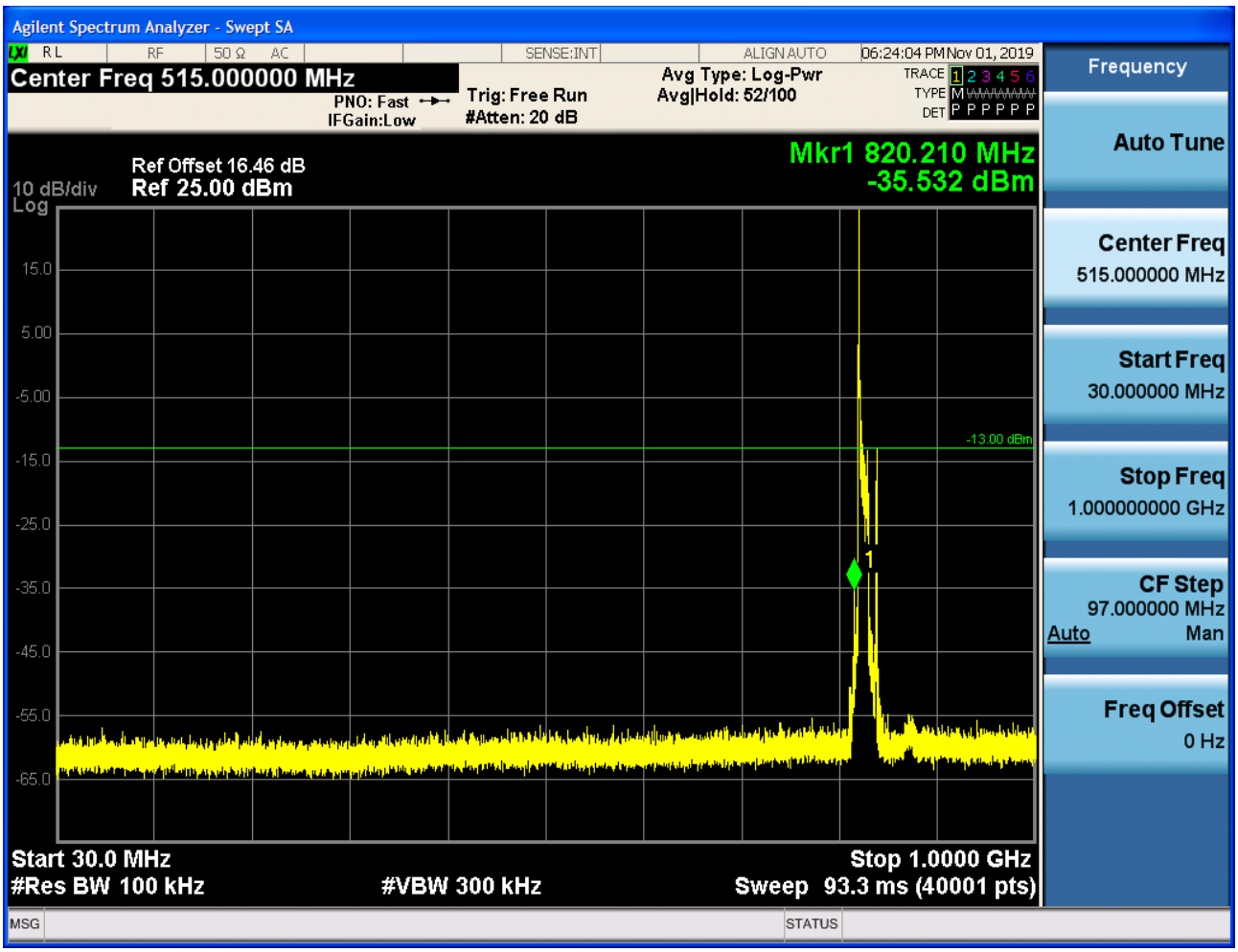
#### 6.2.1.1.4 Test Bandwidth = 10

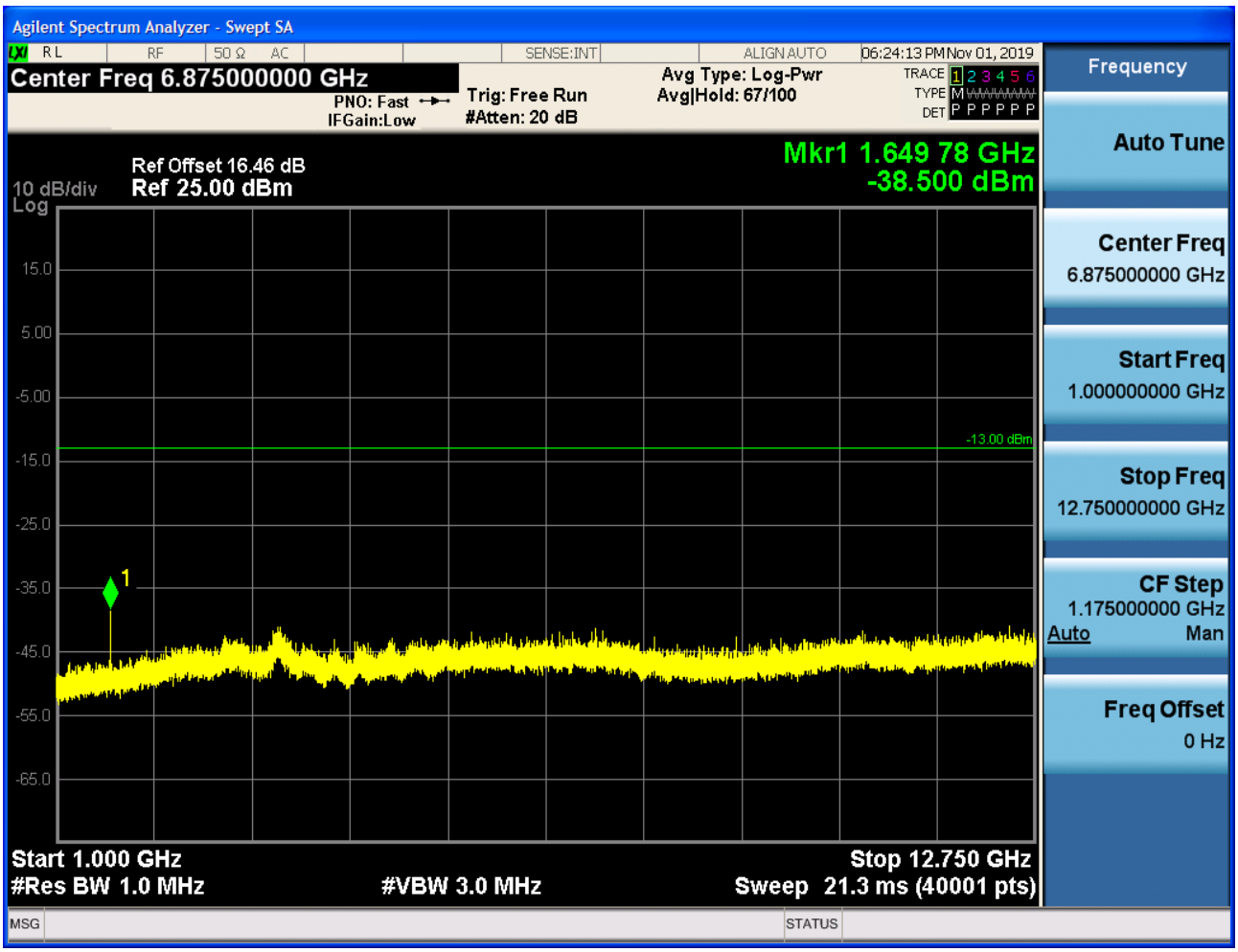
##### 6.2.1.1.4.1 Test Channel = LCH

###### 6.2.1.1.4.1.1 Test RB = RB1#0



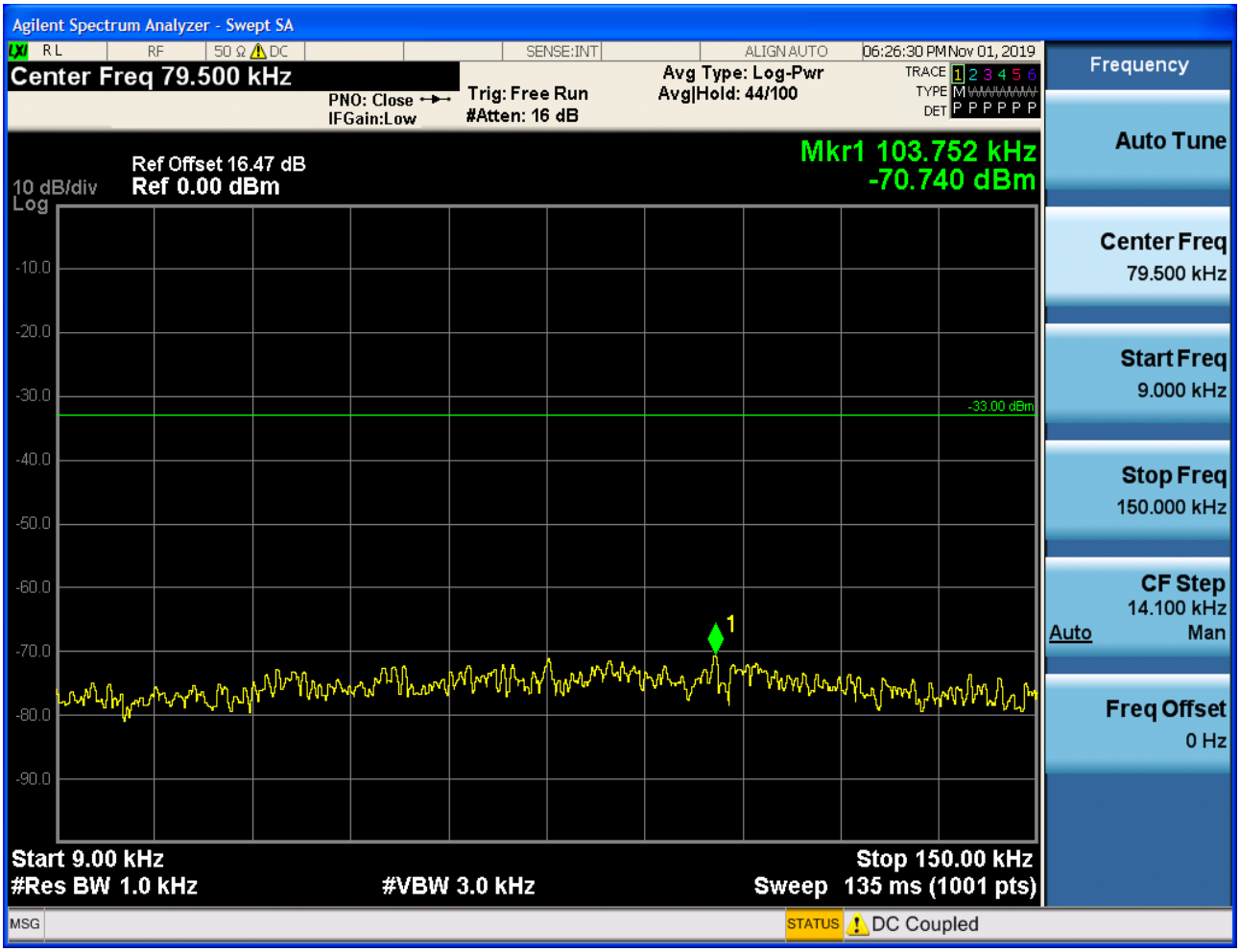


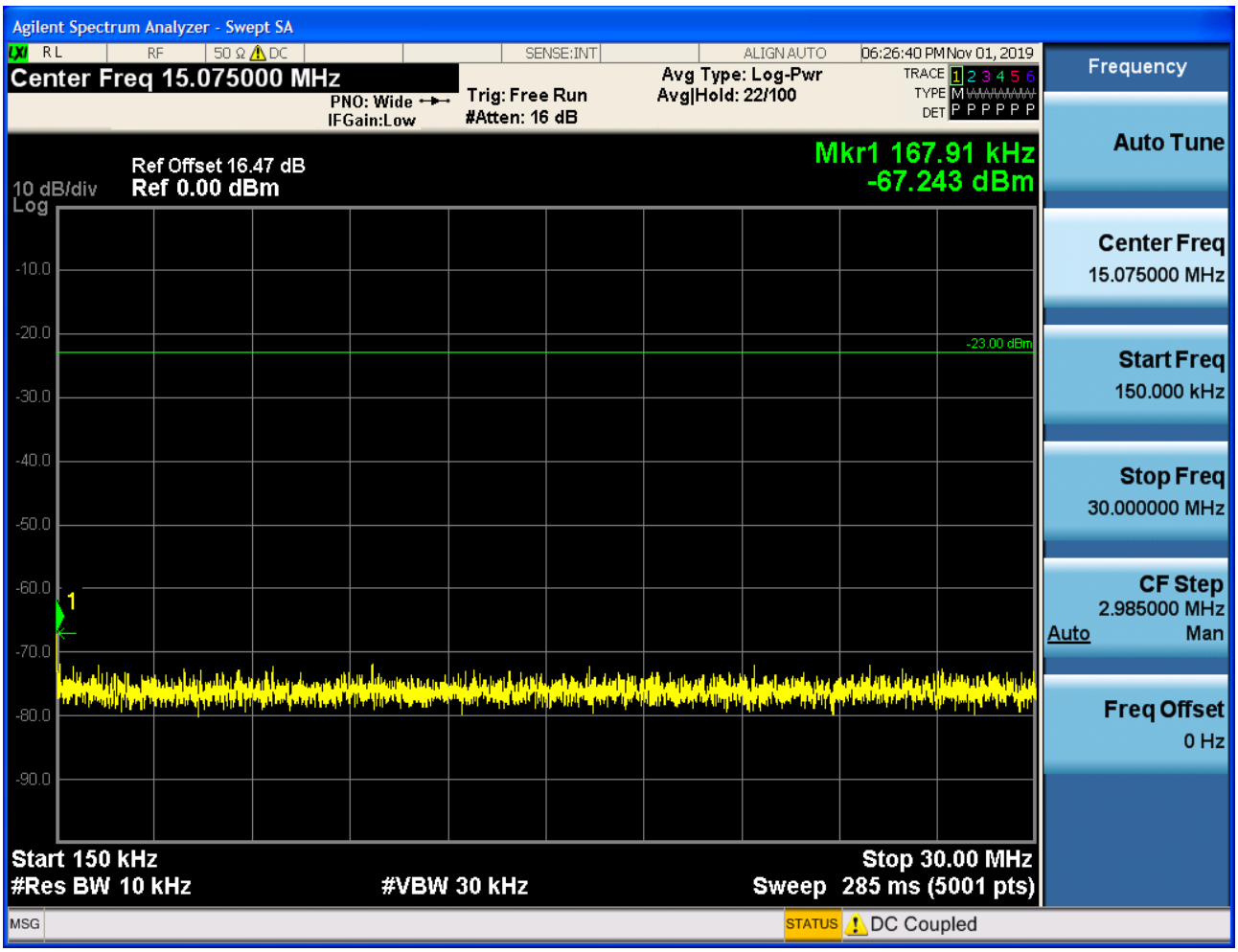

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
06:24:04 PM Nov 01, 2019
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 52/100
TRACE 1 2 3 4 5 6
TYPE M
DET P P P P P P
Ref Offset 16.46 dB
10 dB/div
Log
Ref 25.00 dBm
Mkr1 820.210 MHz
-35.532 dBm
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
-13.00 dBm
1
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.3 ms (40001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz

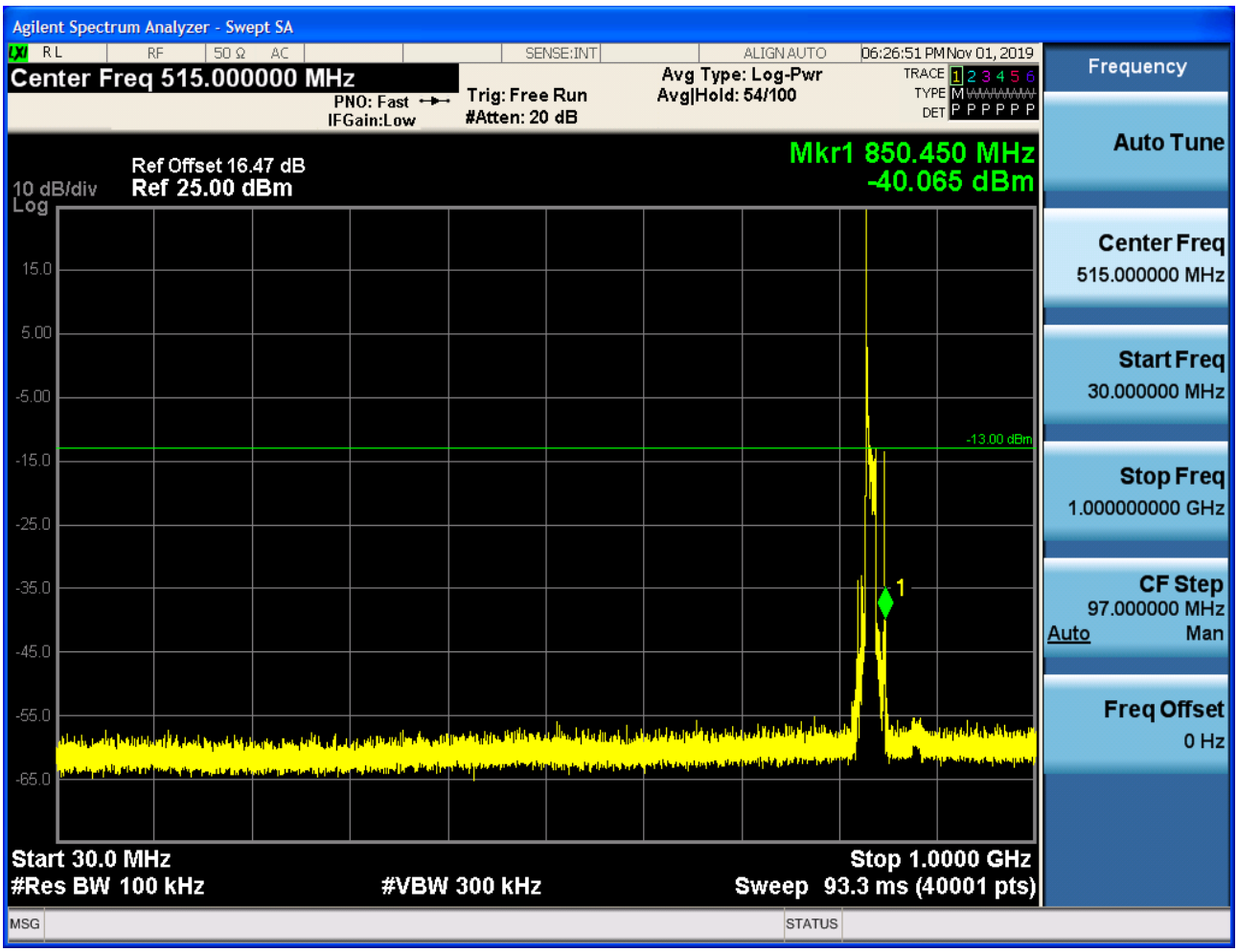


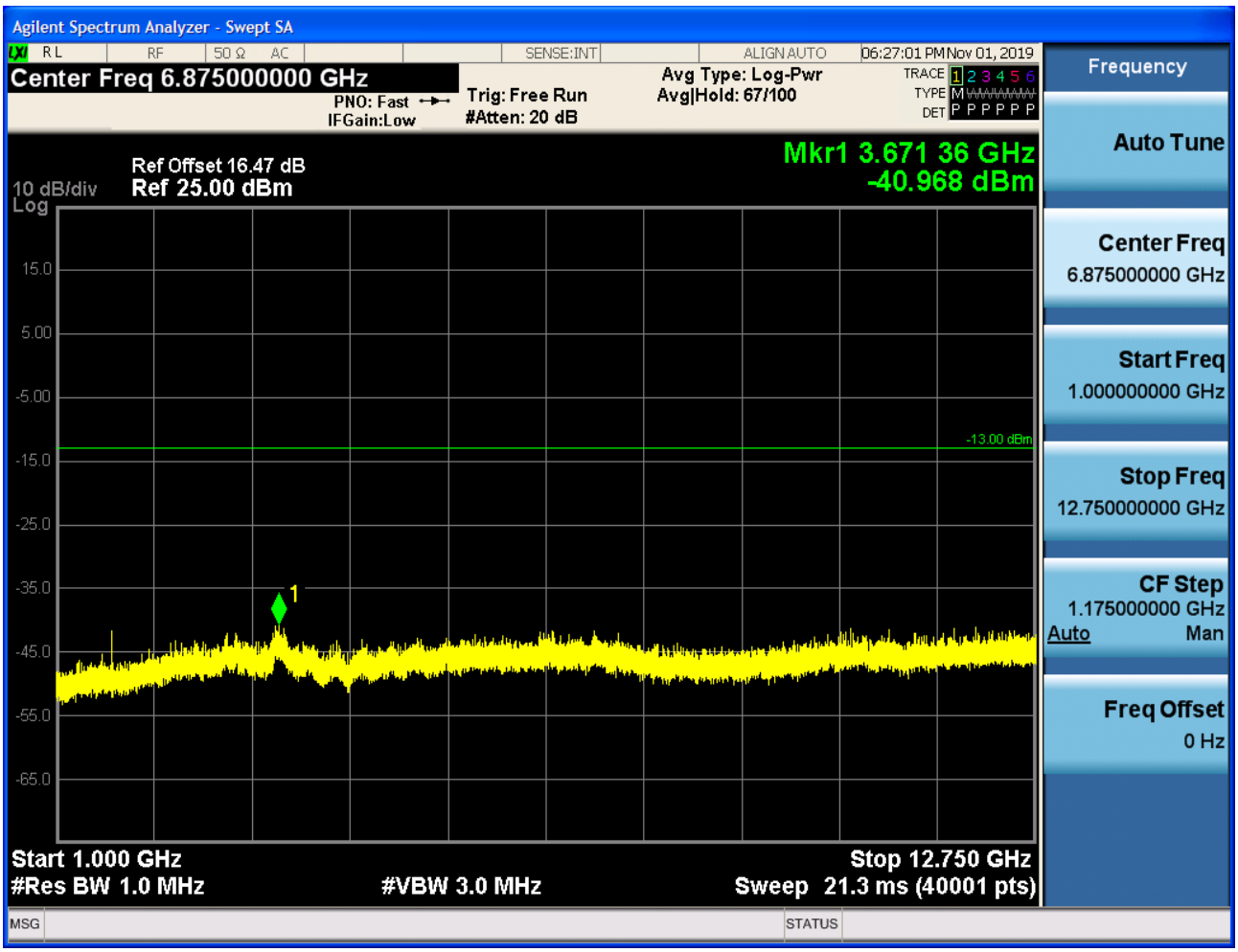
#### 6.2.1.1.4.2 Test Channel = MCH

##### 6.2.1.1.4.2.1 Test RB = RB1#0



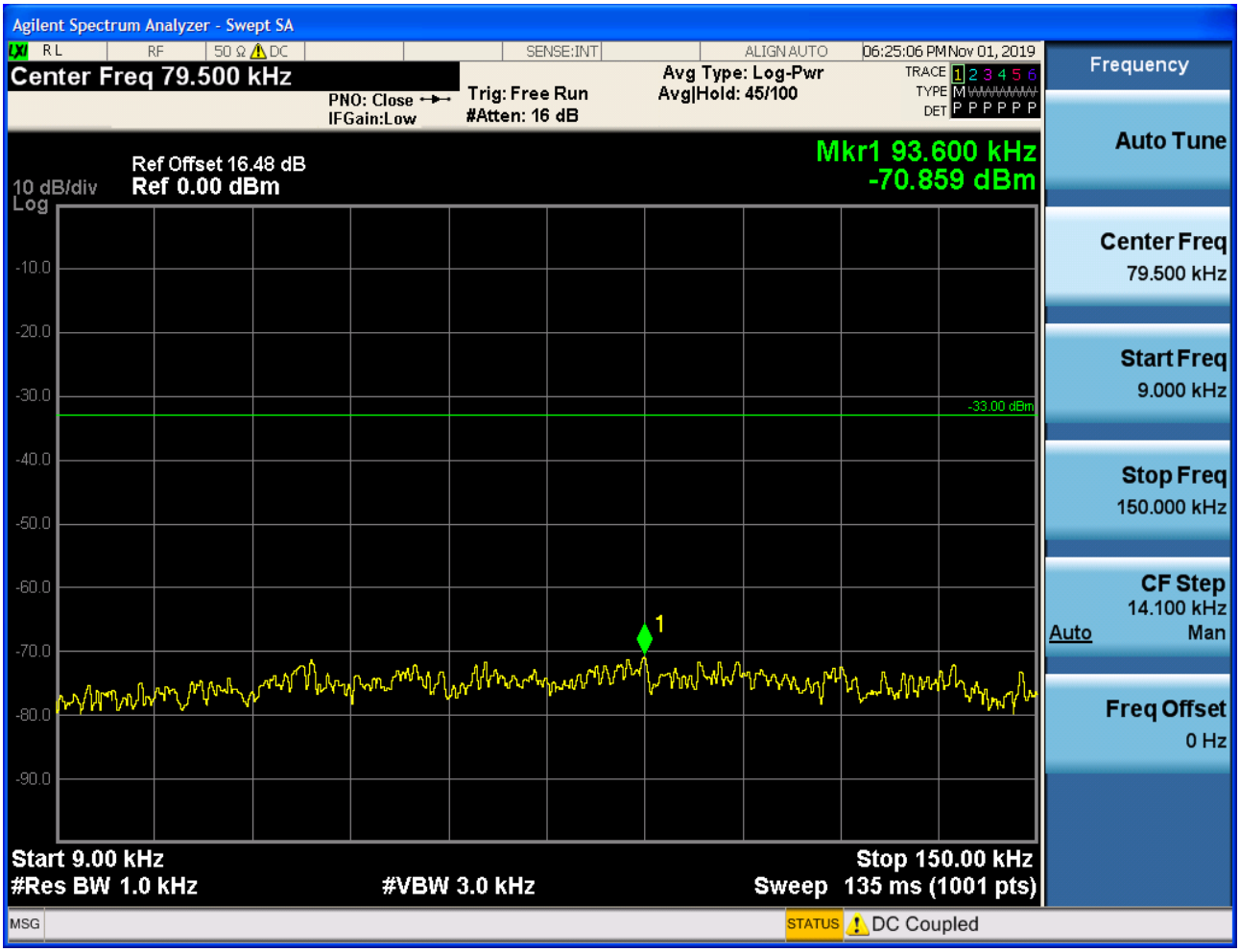


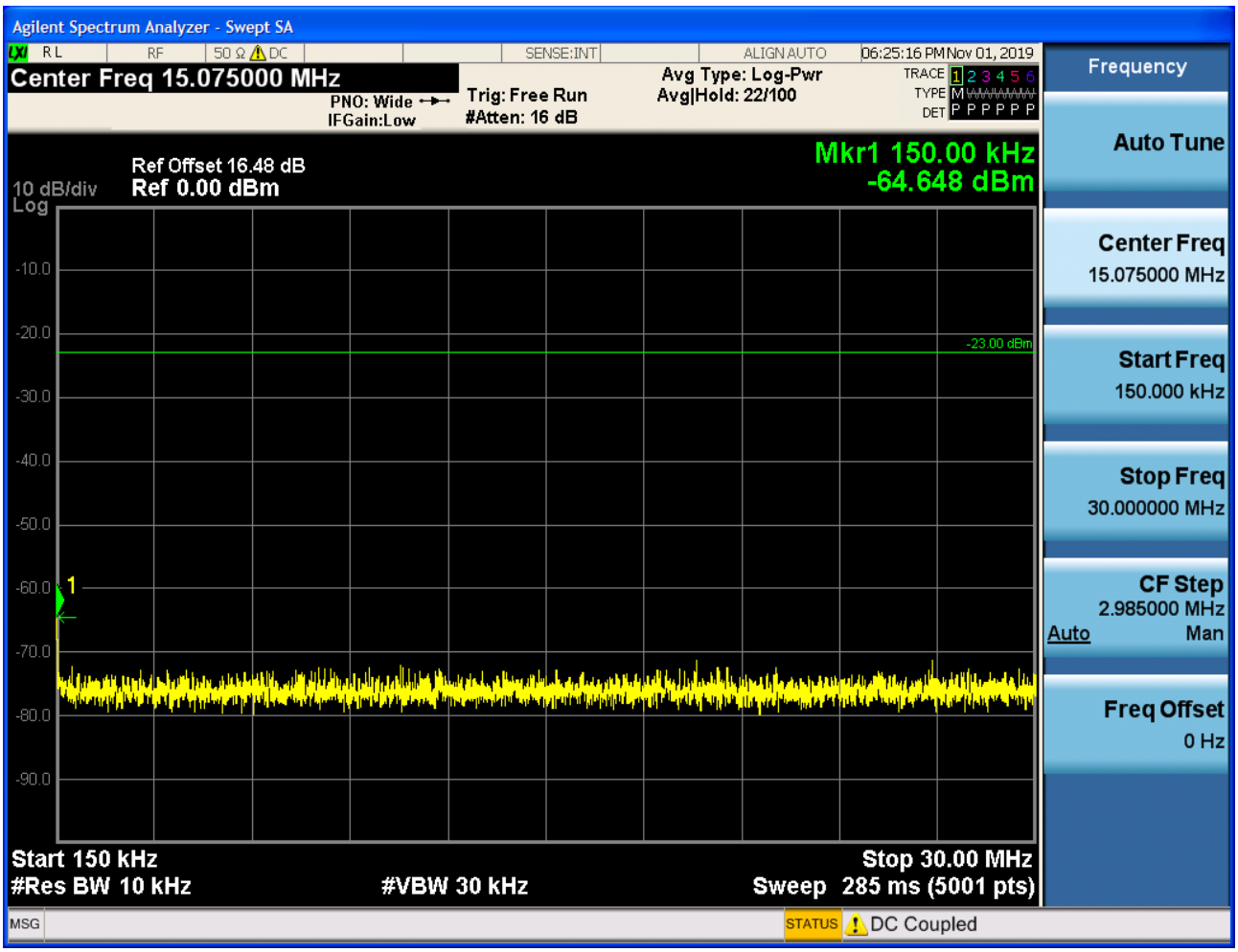


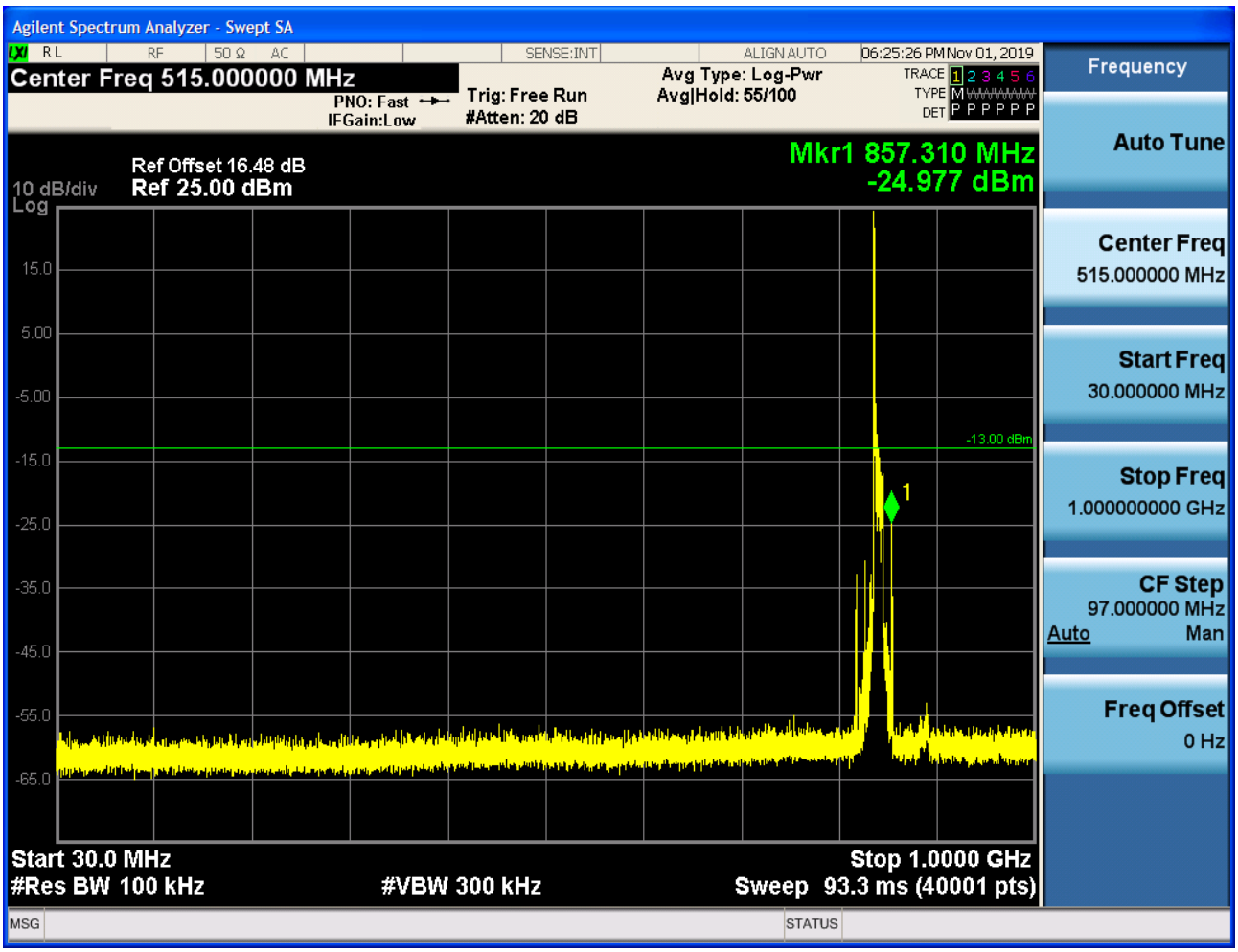


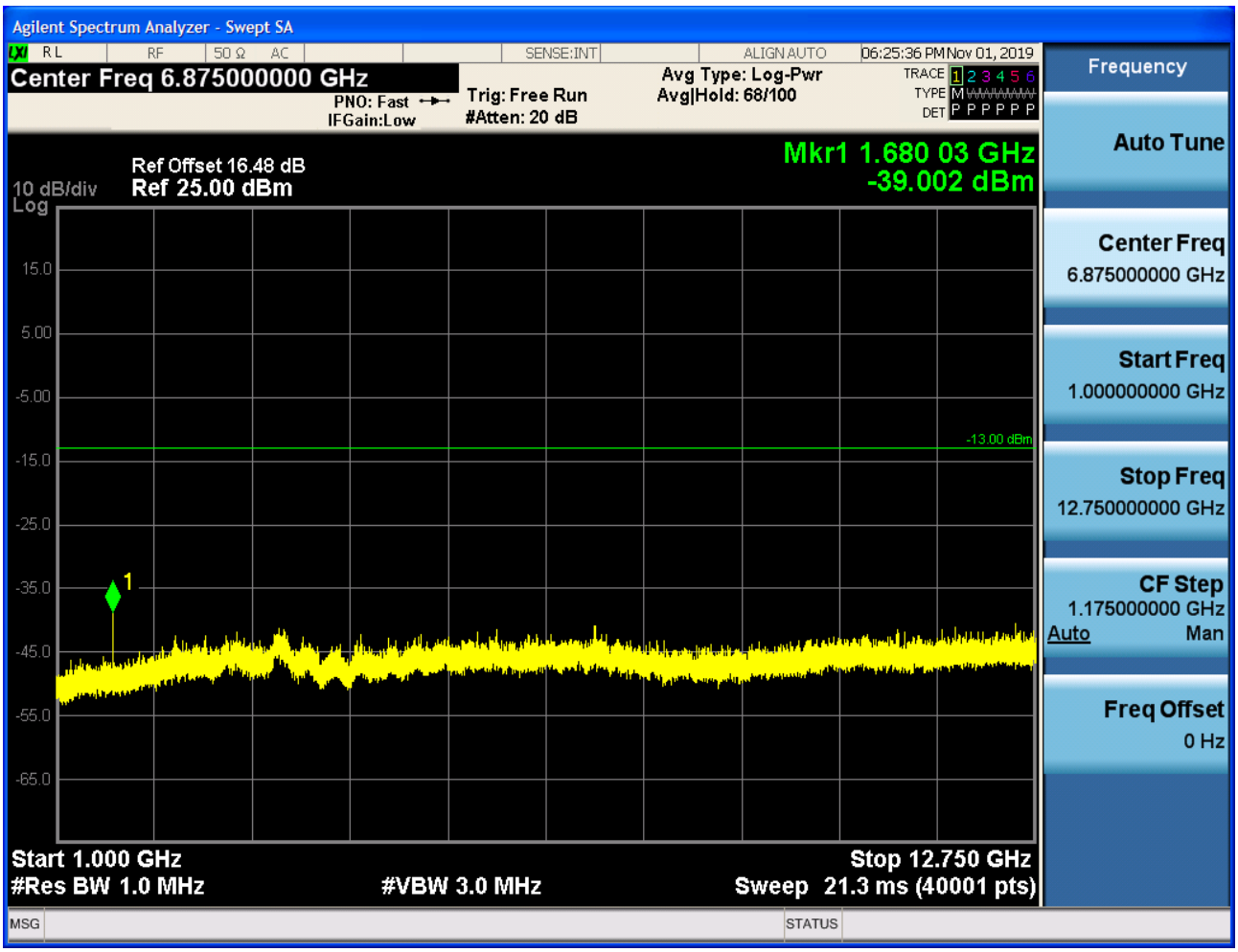
#### 6.2.1.1.4.3 Test Channel = HCH

##### 6.2.1.1.4.3.1 Test RB = RB1#0






Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
06:25:26 PM Nov 01, 2019
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 55/100
TRACE 1 2 3 4 5 6
TYPE M
DET P P P P P P
Ref Offset 16.48 dB
10 dB/div
Log
Ref 25.00 dBm
Mkr1 857.310 MHz
-24.977 dBm
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
-13.00 dBm
1
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.3 ms (40001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz

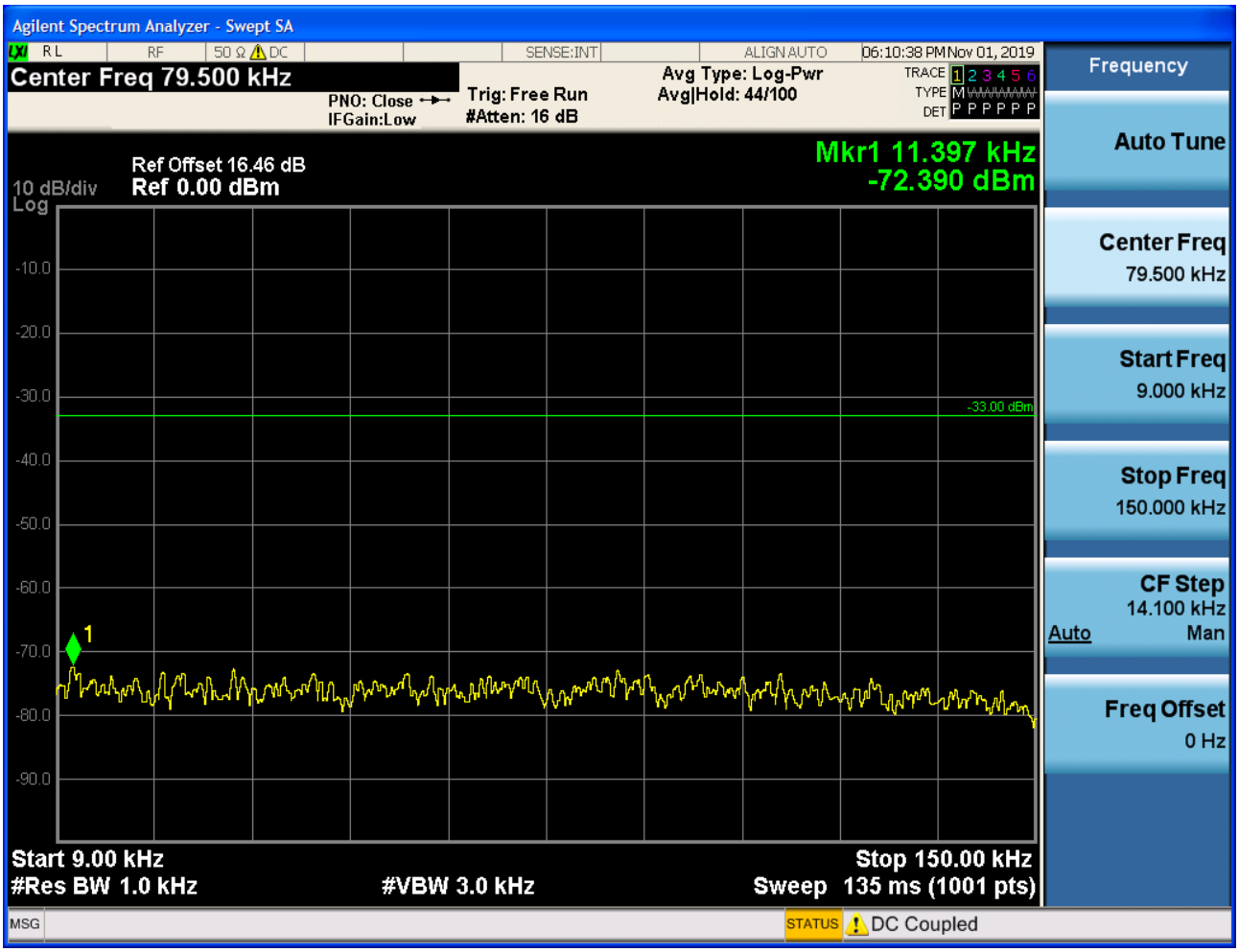


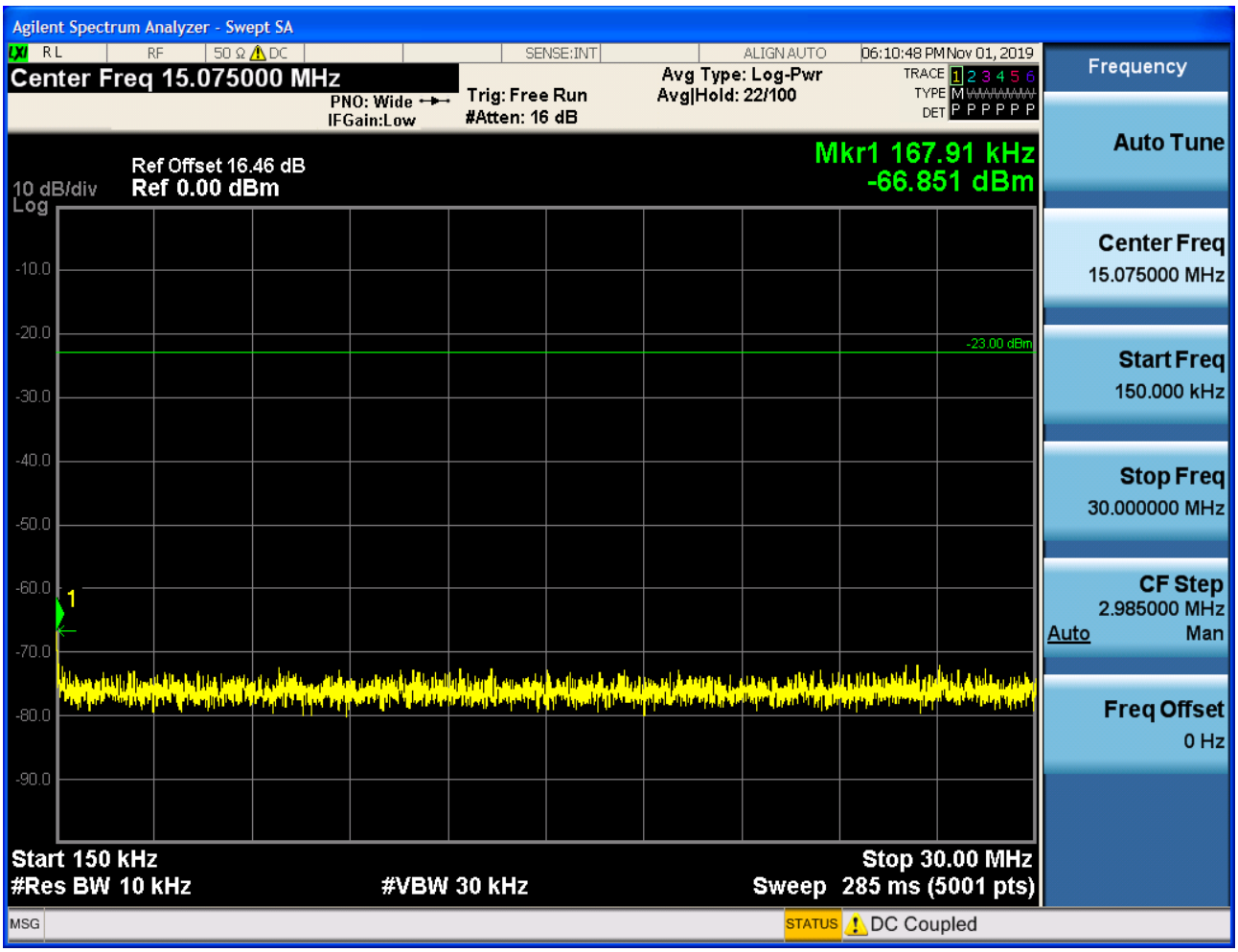
#### 6.2.1.2 Test Mode = LTE/TM2

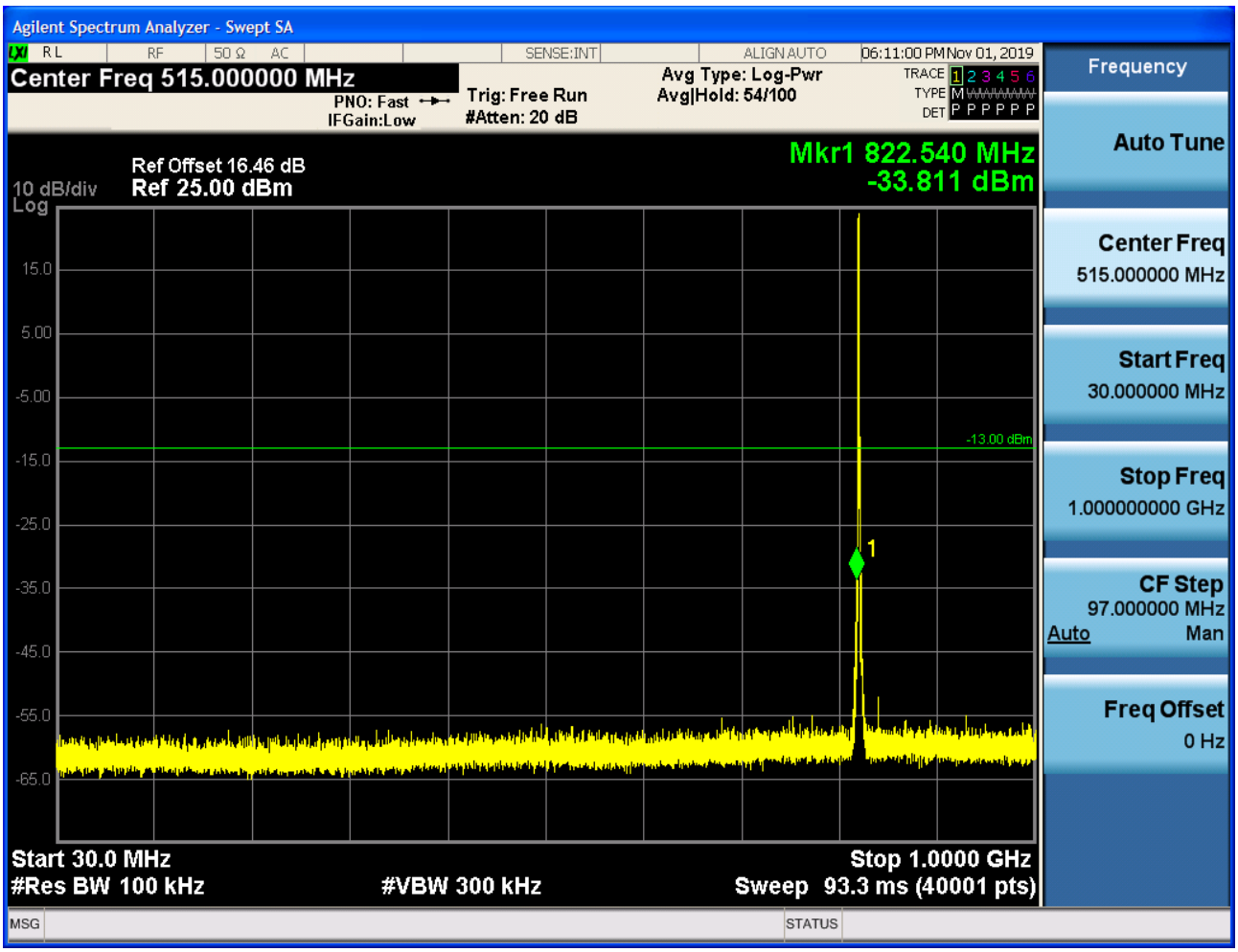
##### 6.2.1.2.1 Test Bandwidth = 1.4

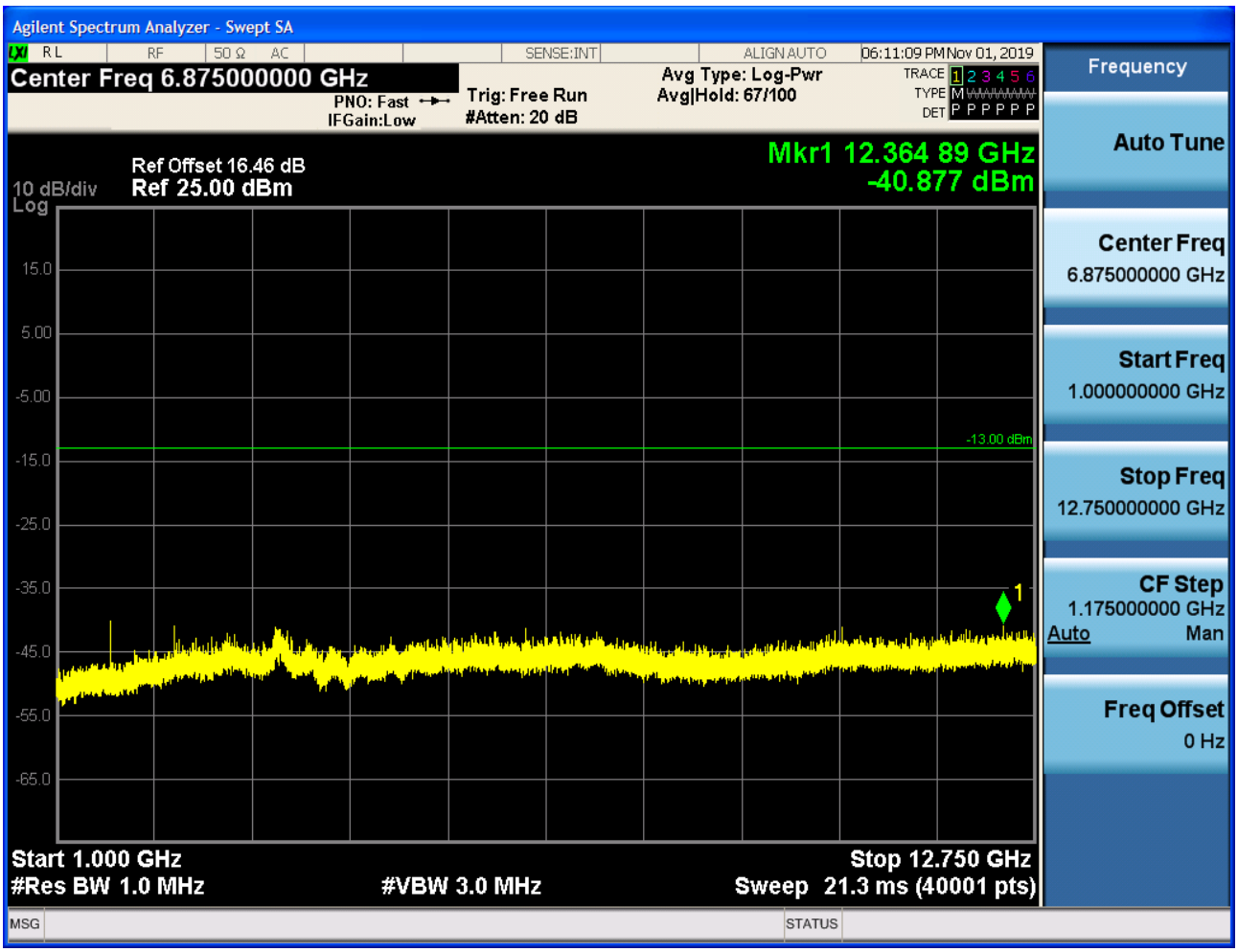
###### 6.2.1.2.1.1 Test Channel = LCH

####### 6.2.1.2.1.1.1 Test RB = RB1#0



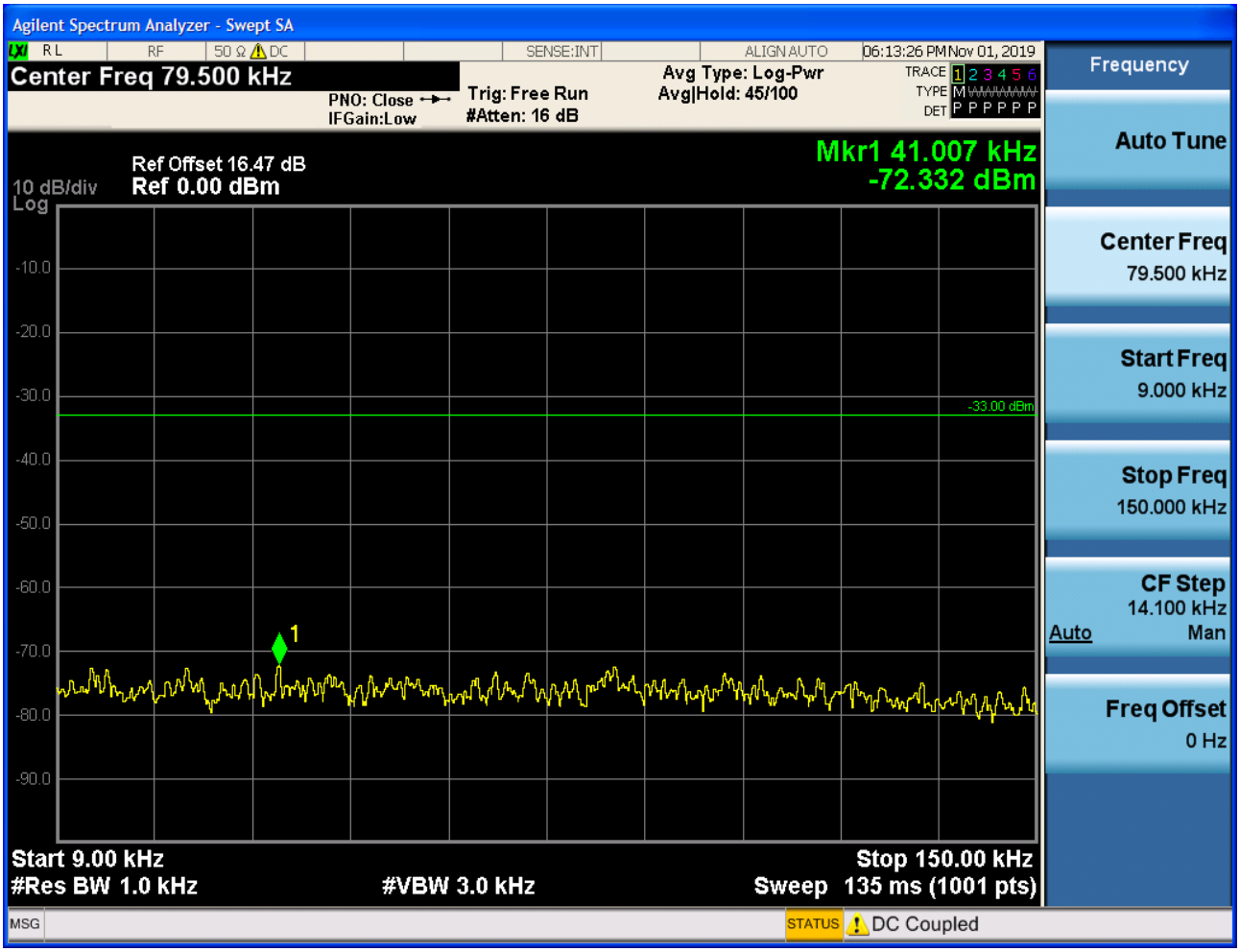


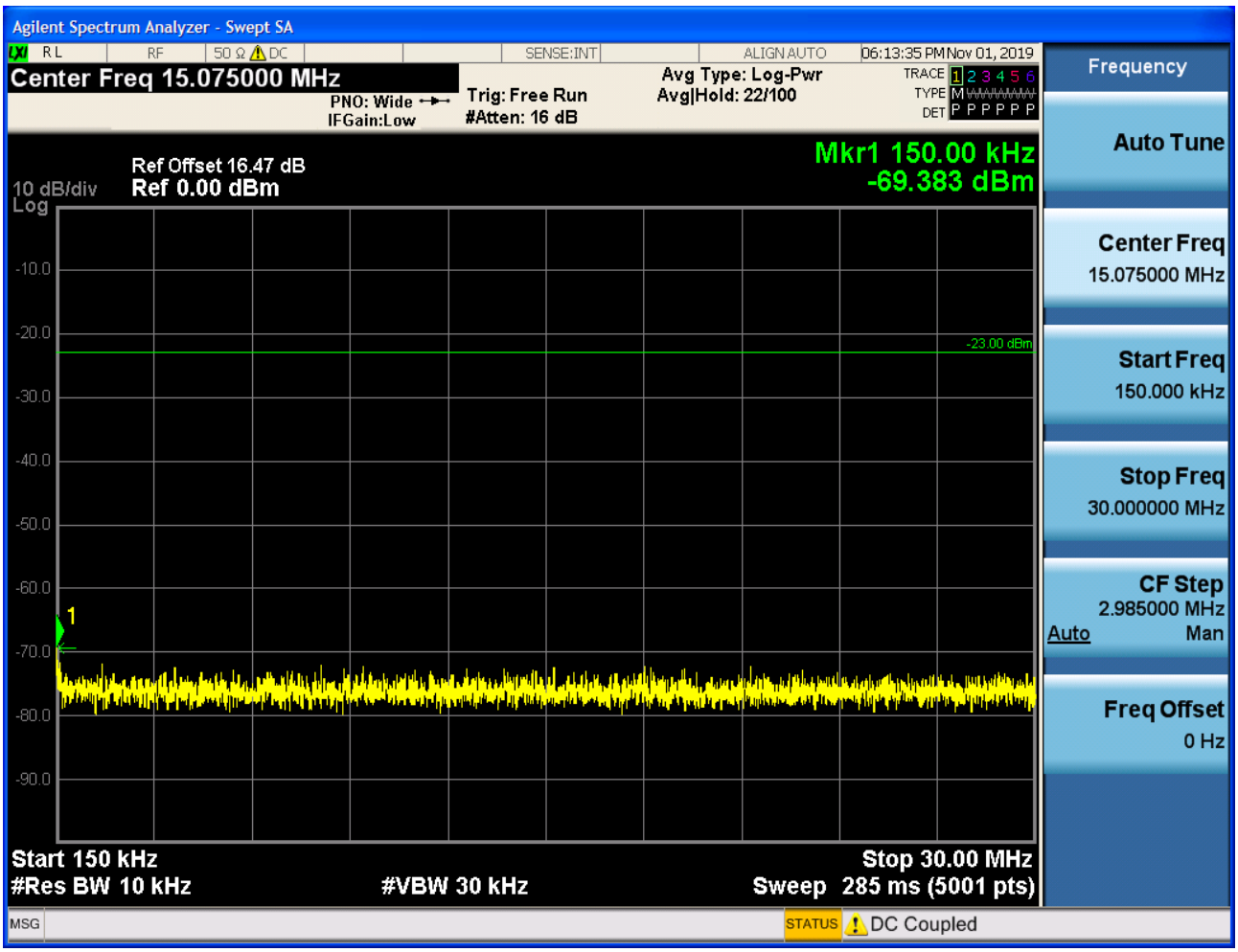

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
06:11:00 PM Nov 01, 2019
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 54/100
TRACE 1 2 3 4 5 6
TYPE M
DET P P P P P P
Ref Offset 16.46 dB
10 dB/div
Log
Ref 25.00 dBm
Mkr1 822.540 MHz
-33.811 dBm
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
-13.00 dBm
1
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.3 ms (40001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz

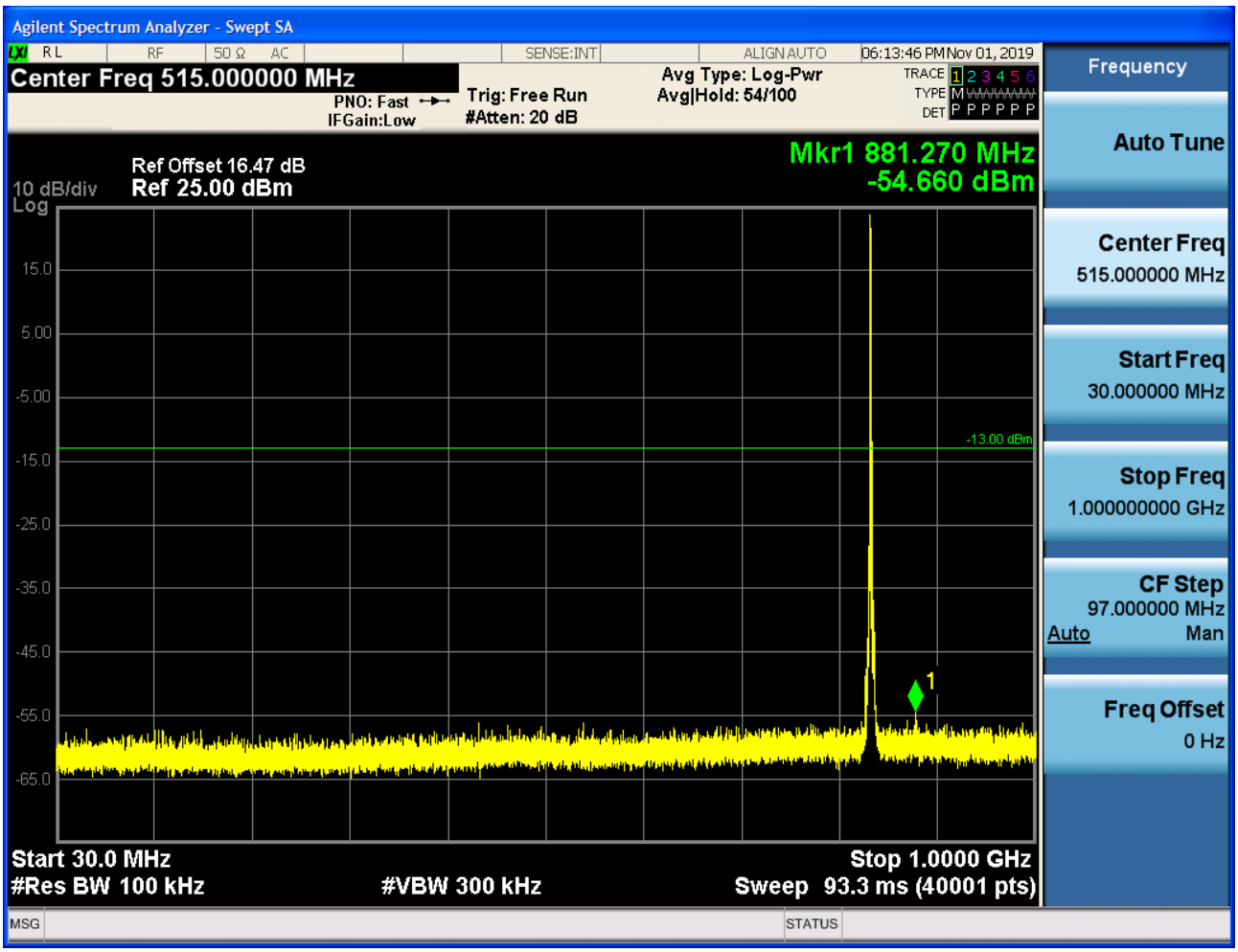


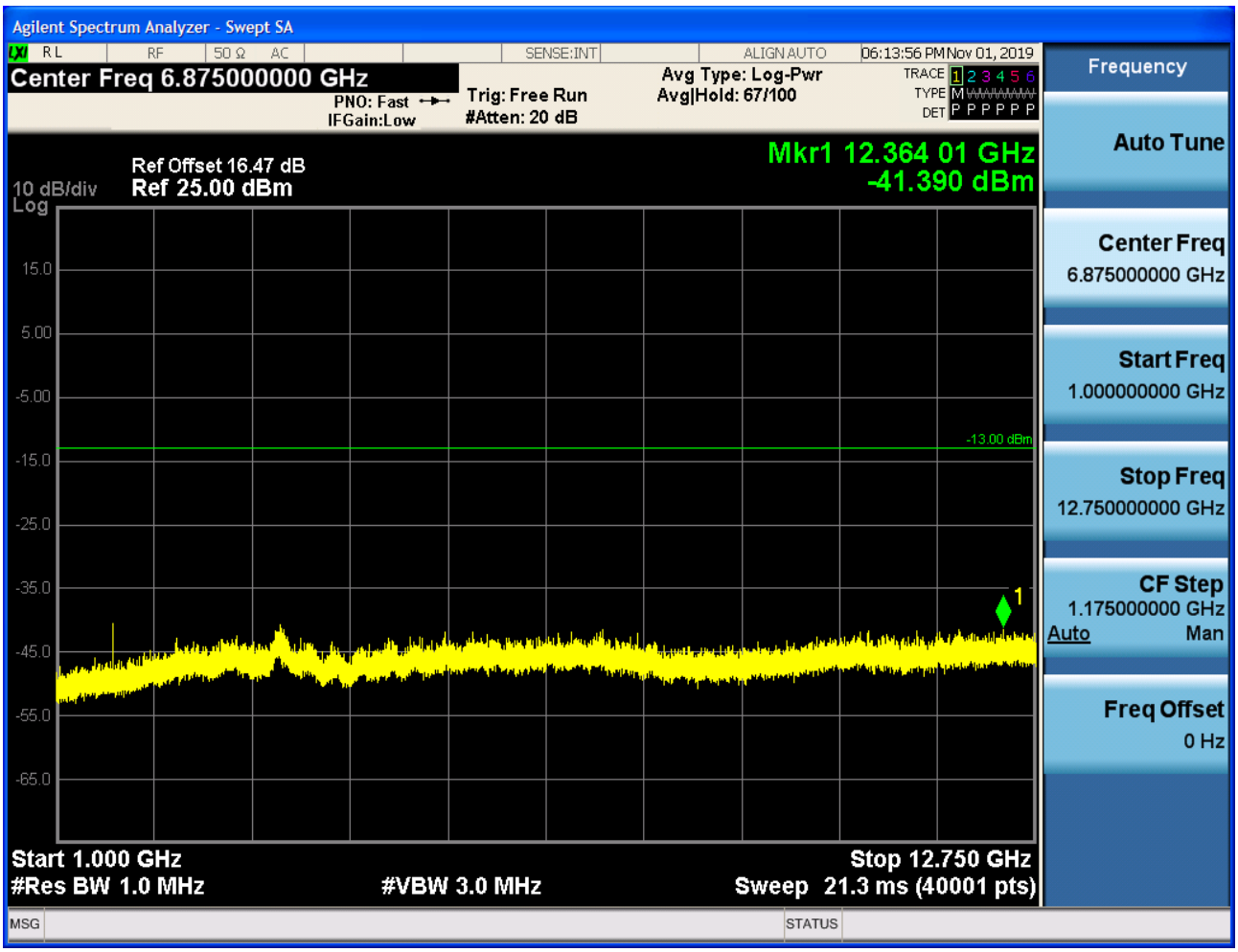
#### 6.2.1.2.1.2 Test Channel = MCH

##### 6.2.1.2.1.2.1 Test RB = RB1#0



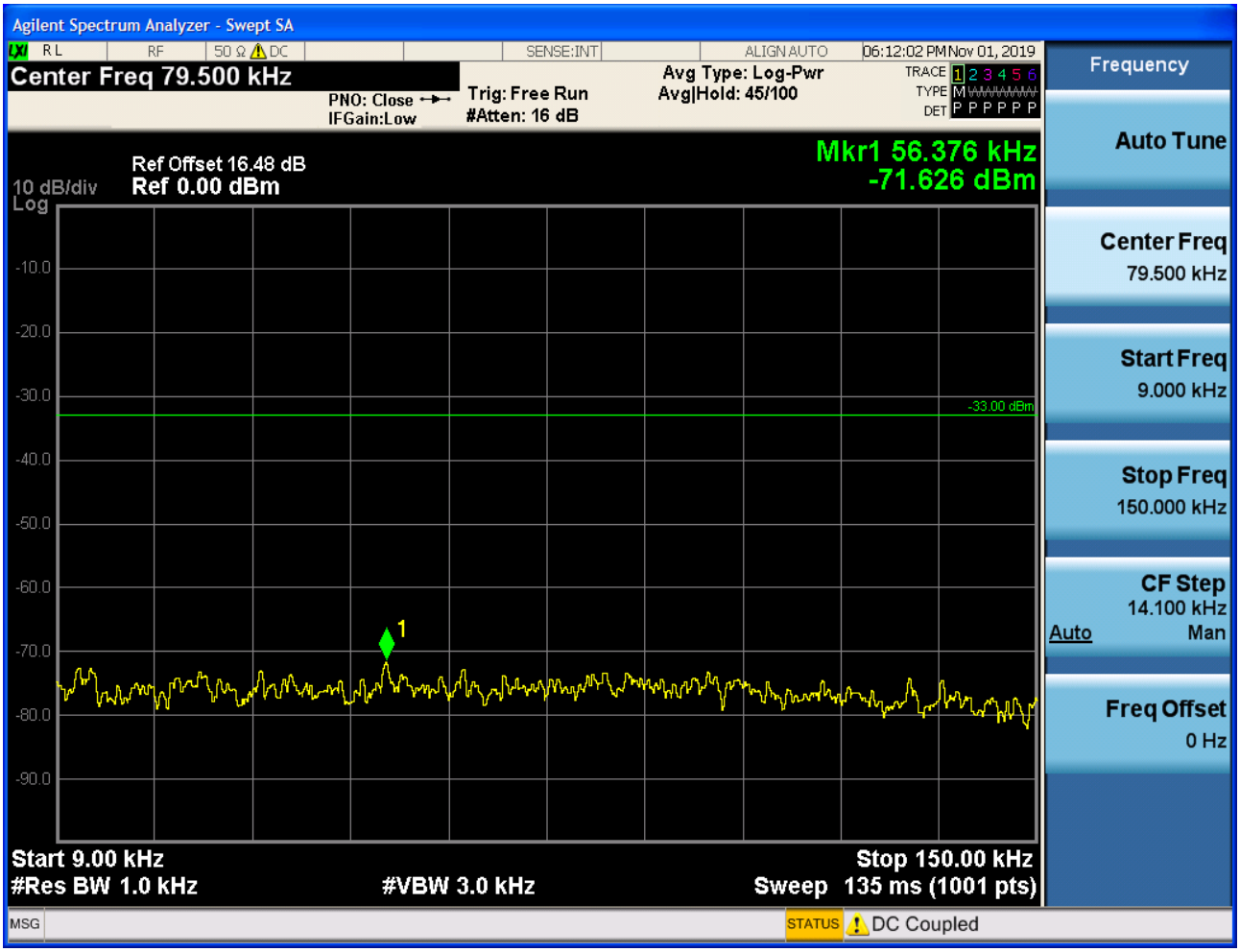


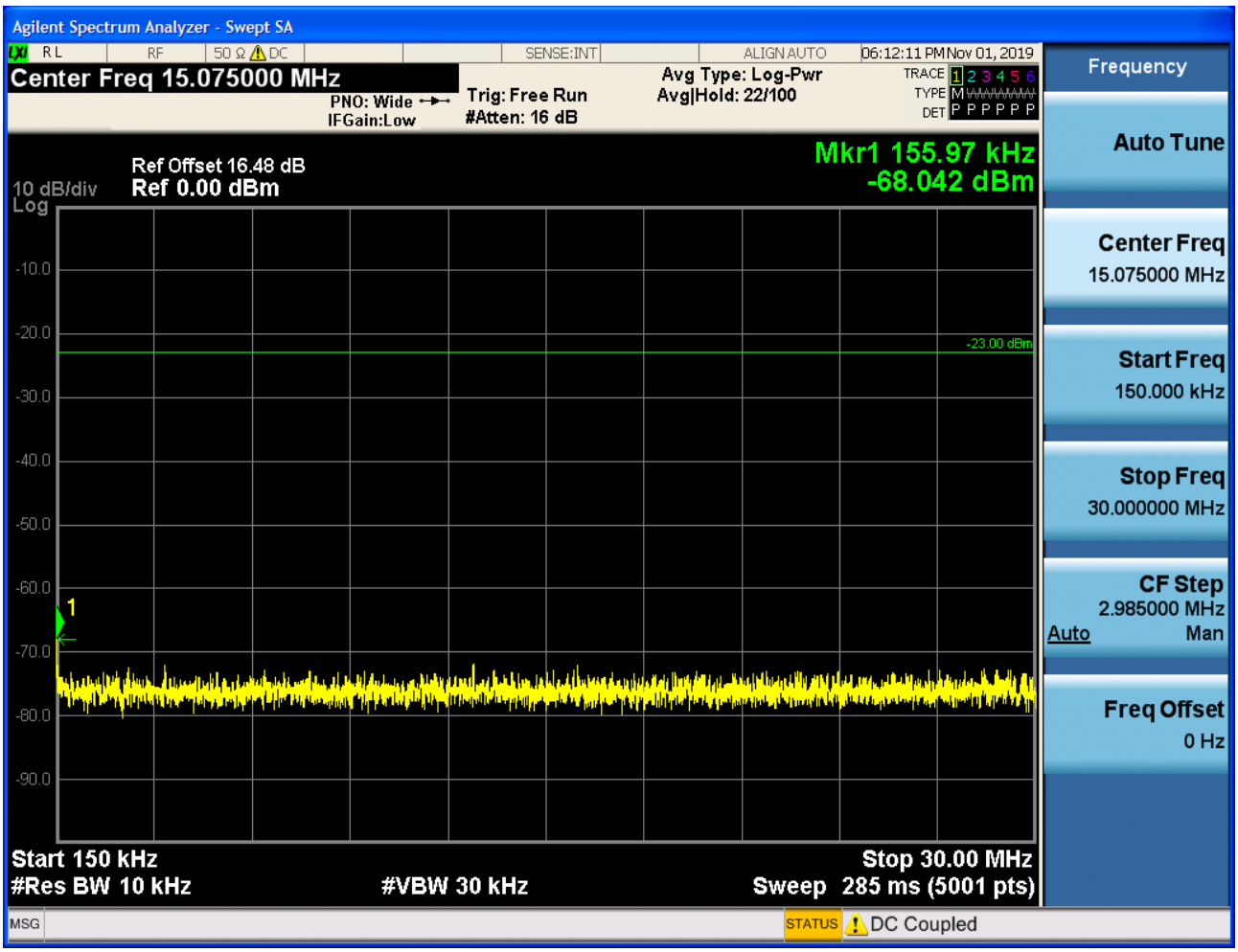


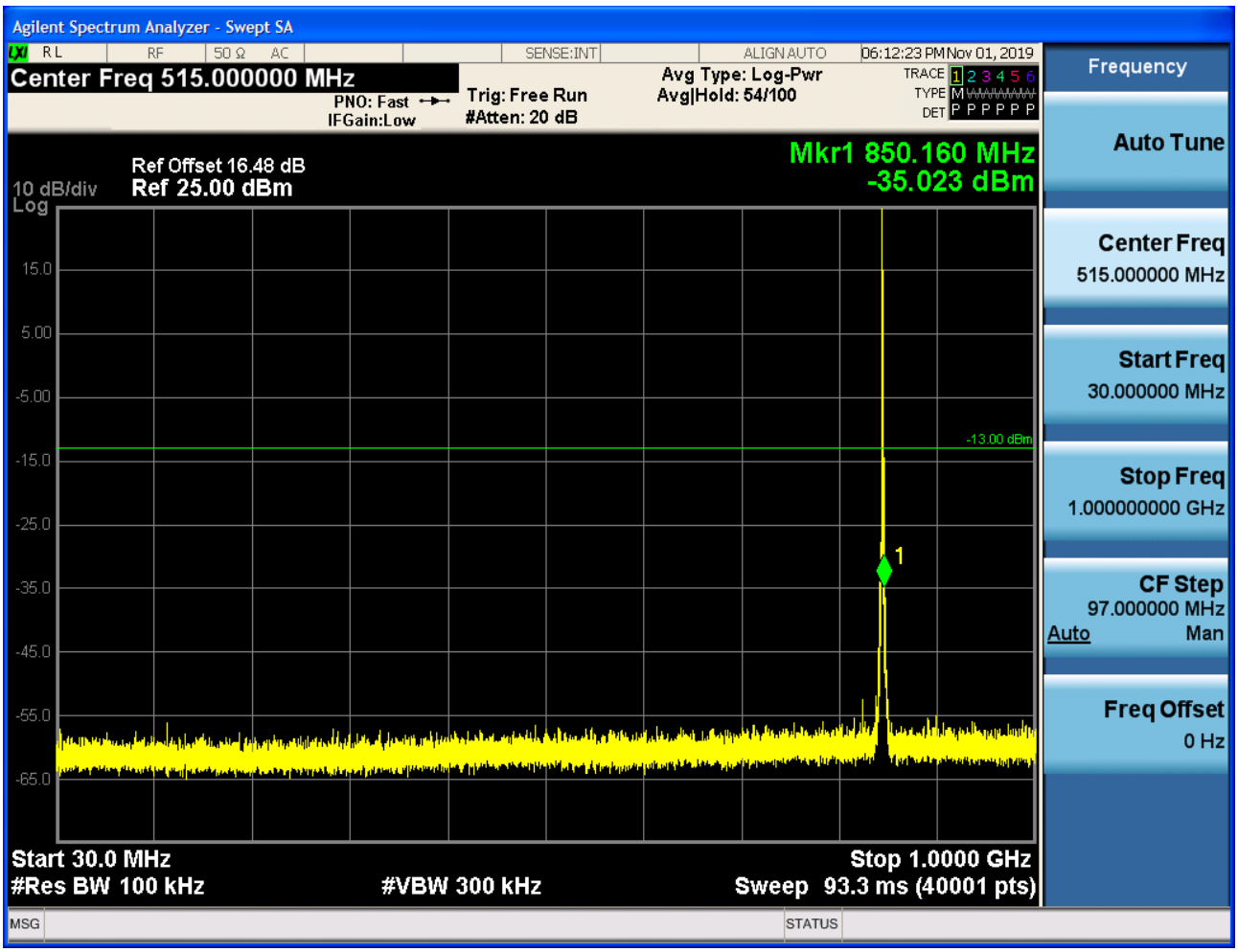


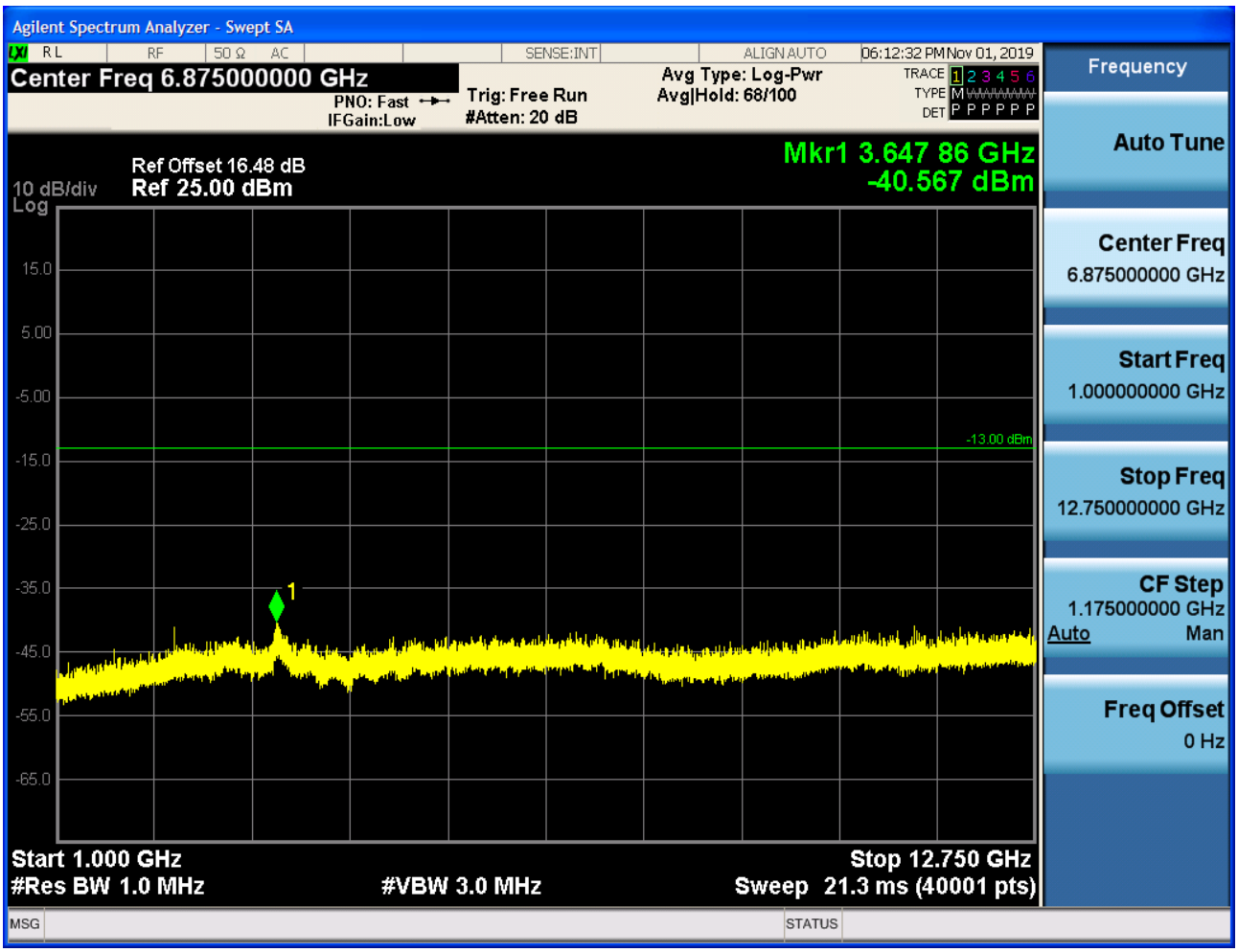
#### 6.2.1.2.1.3 Test Channel = HCH

##### 6.2.1.2.1.3.1 Test RB = RB1#0





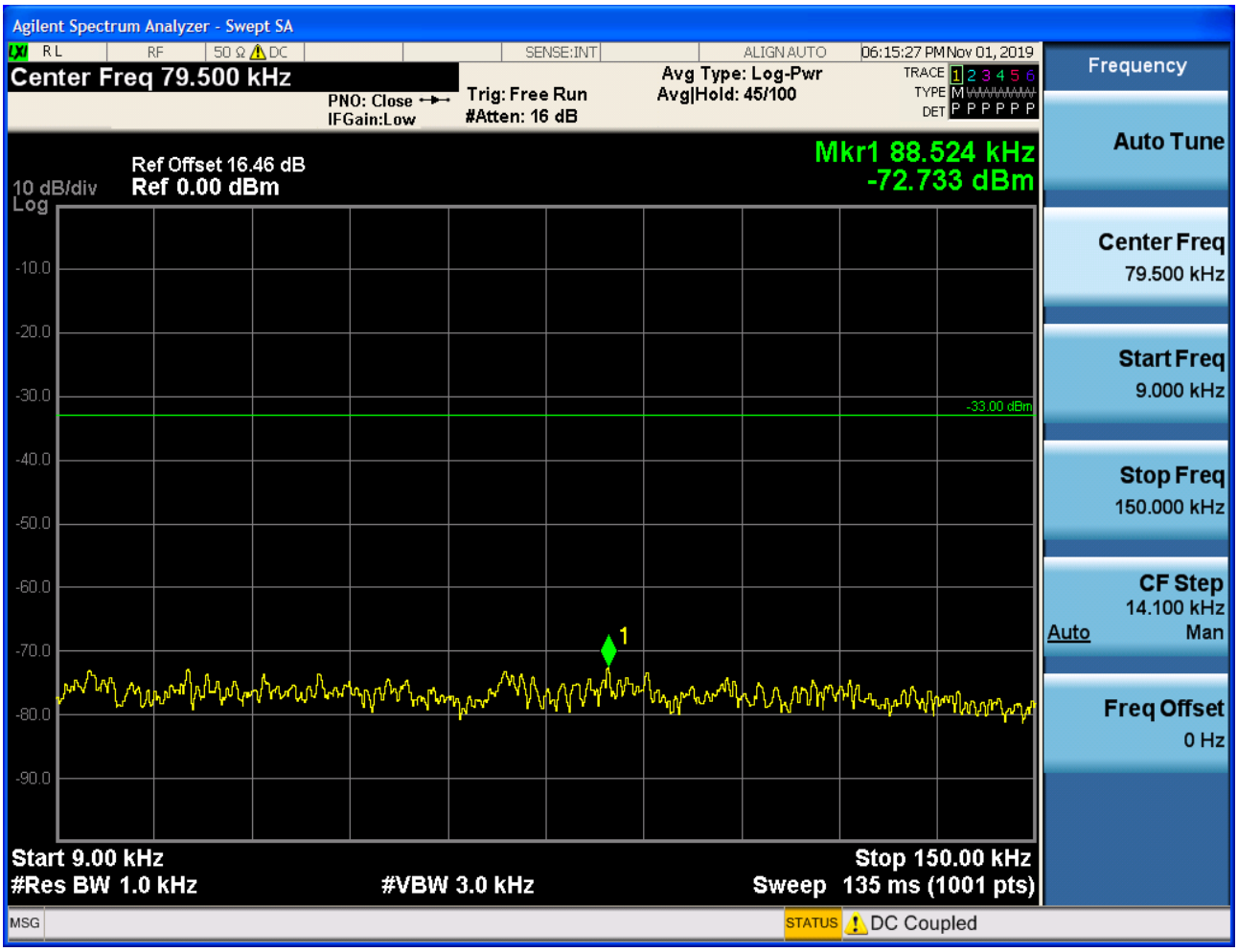


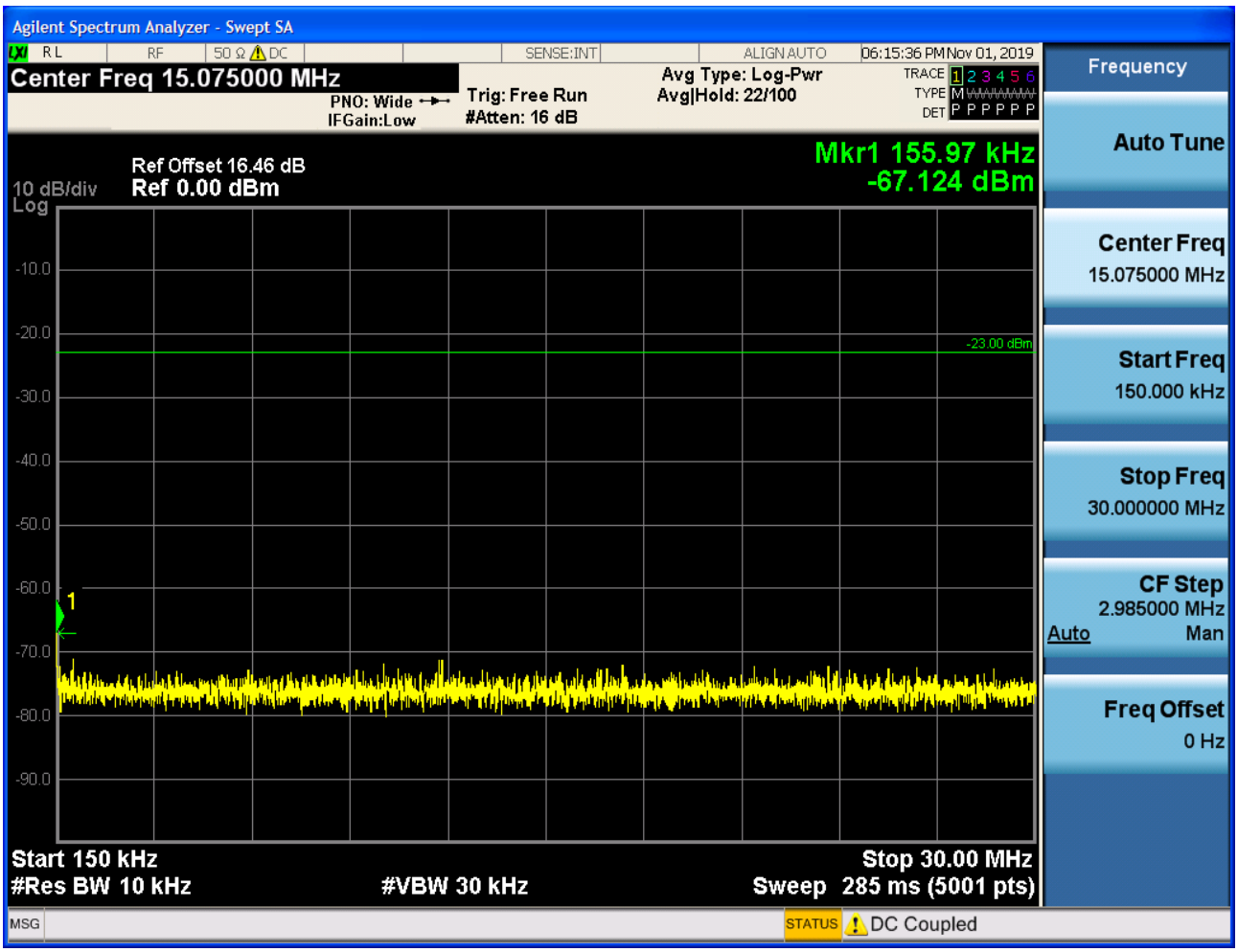


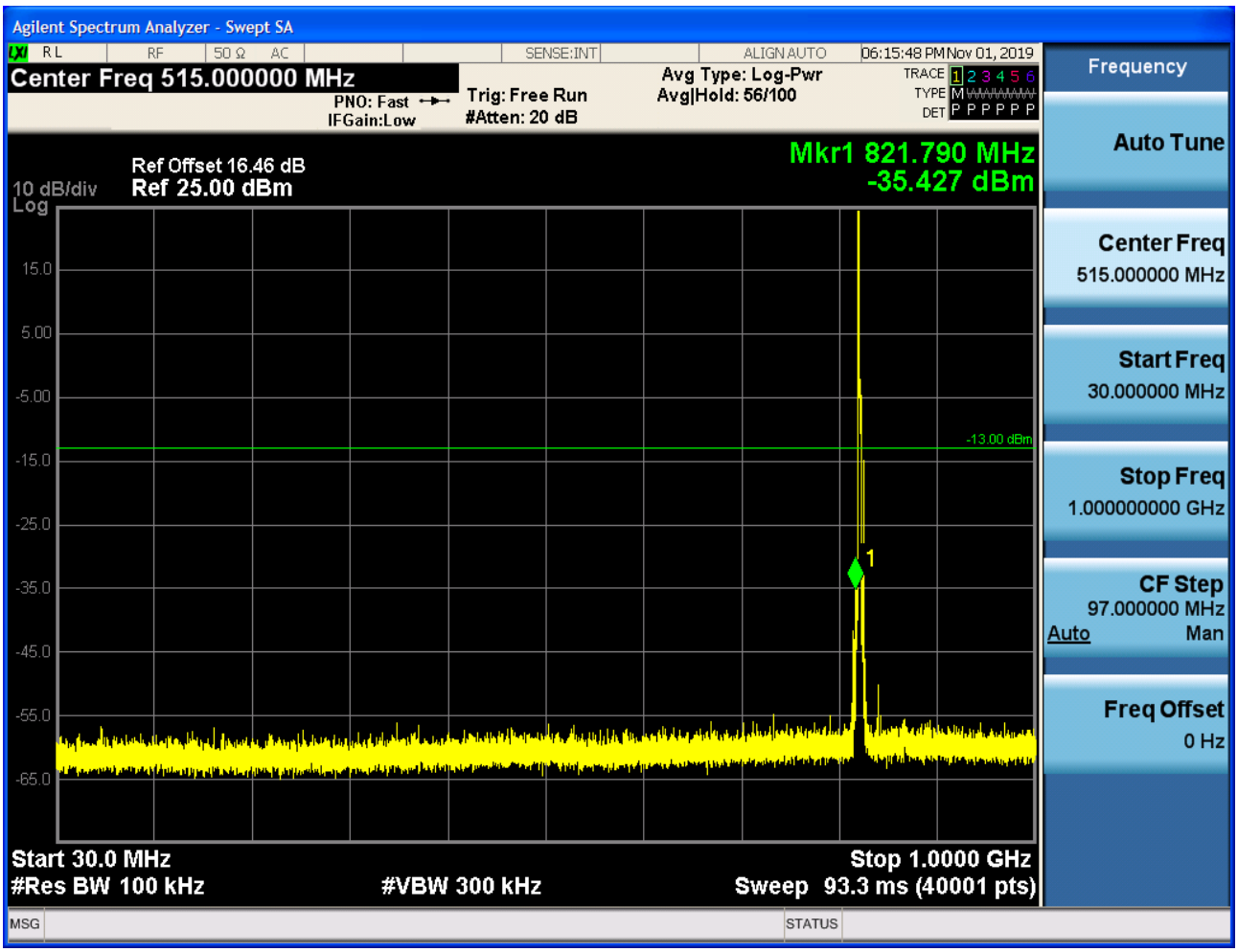
#### 6.2.1.2.2 Test Bandwidth = 3

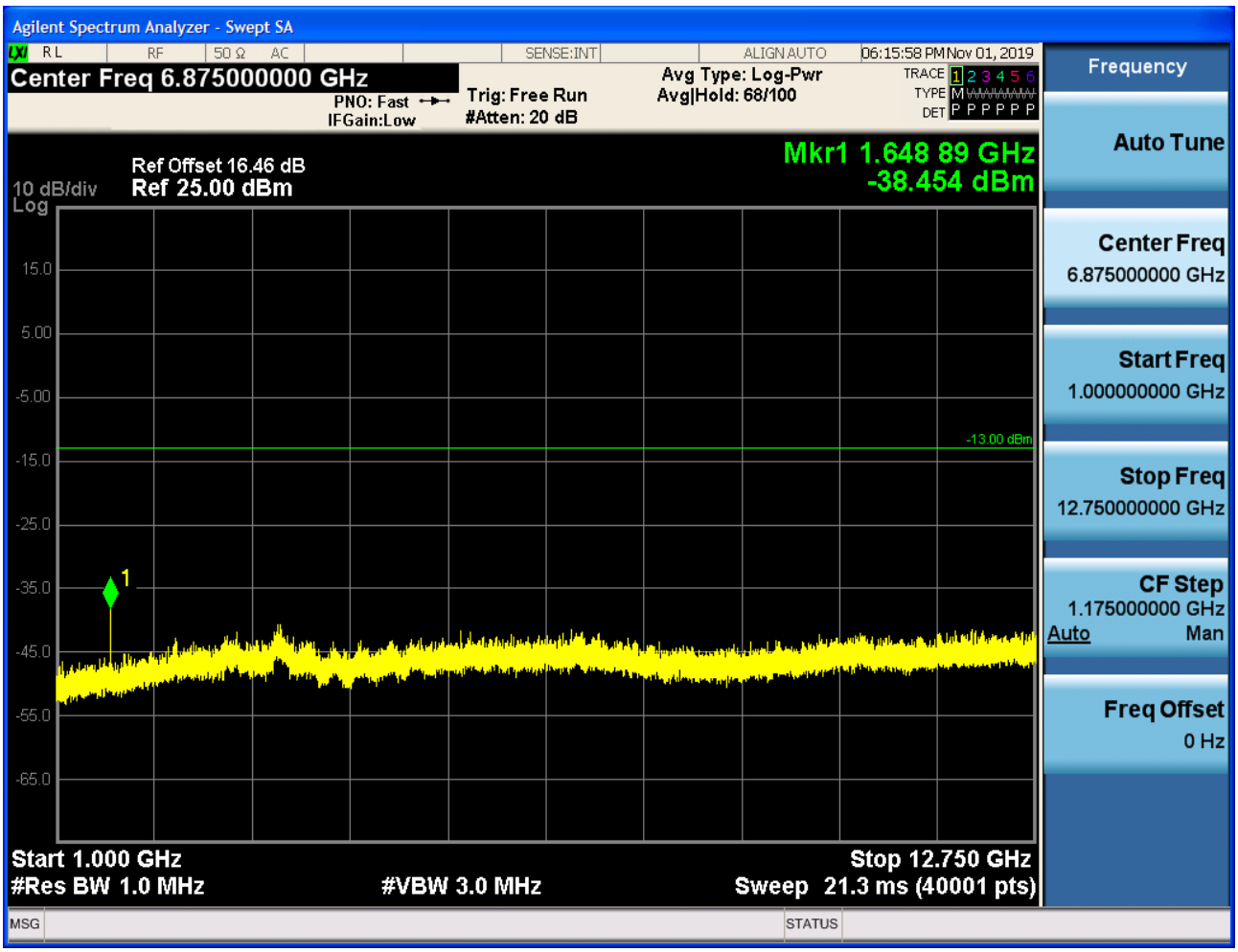
##### 6.2.1.2.2.1 Test Channel = LCH

###### 6.2.1.2.2.1.1 Test RB = RB1#0



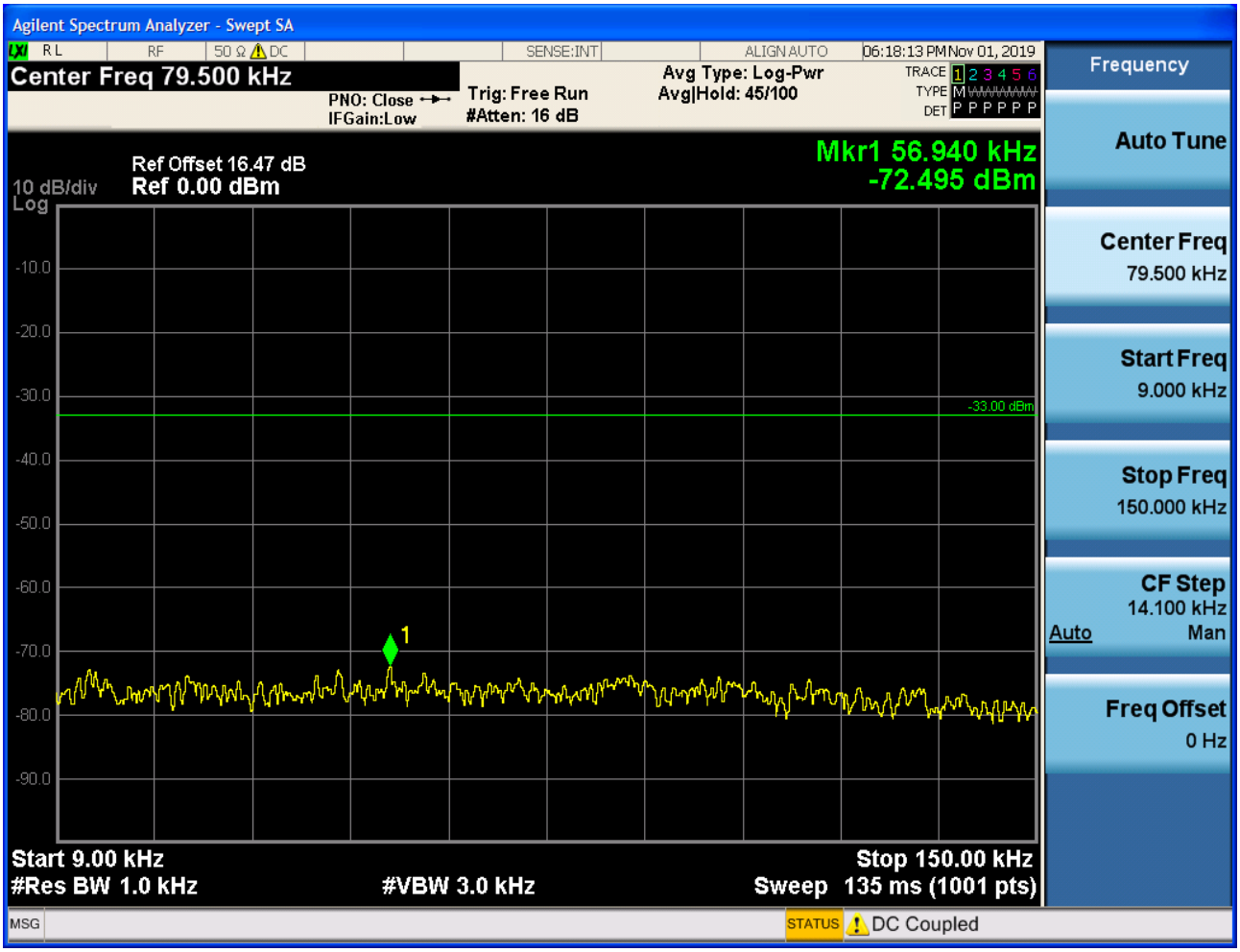


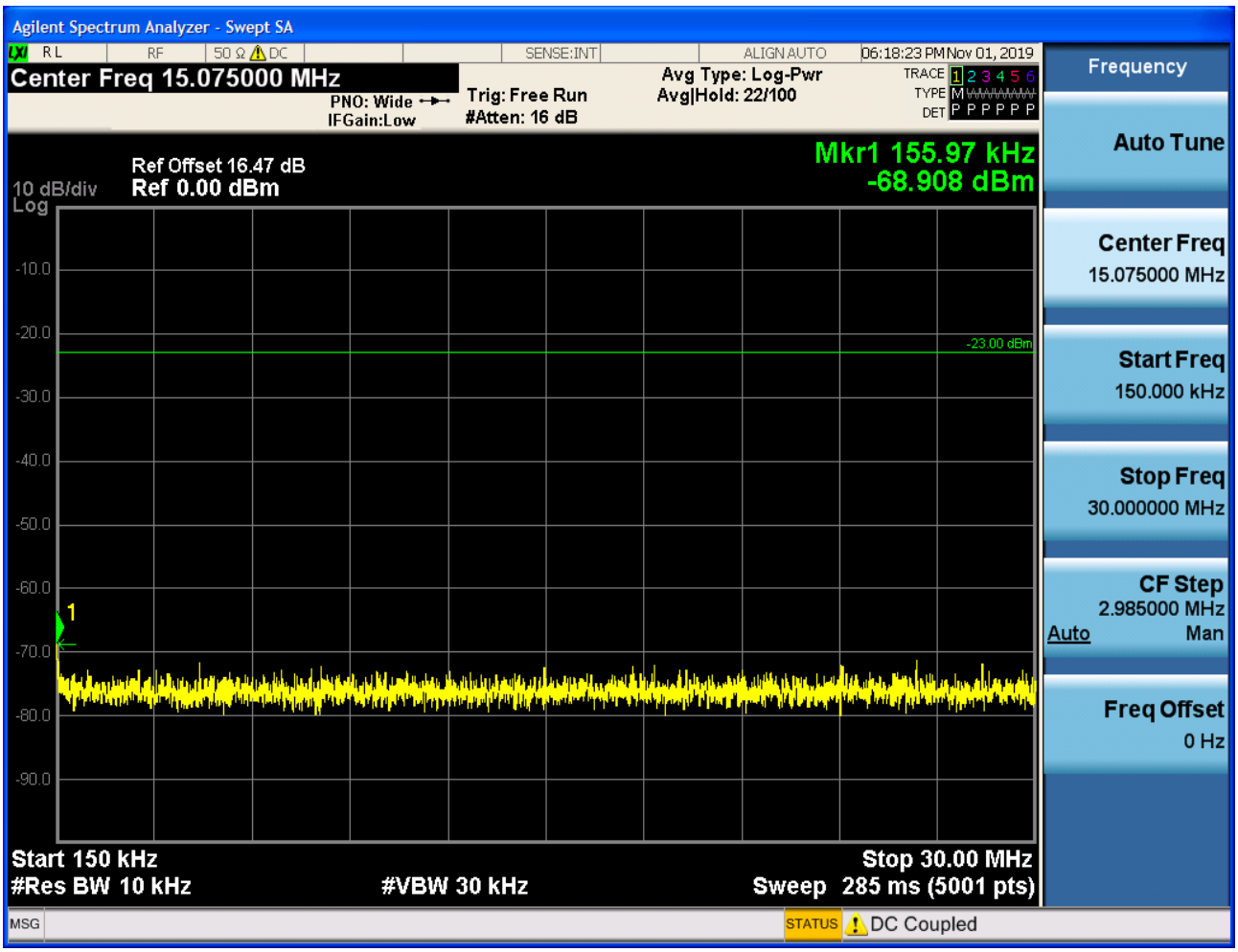


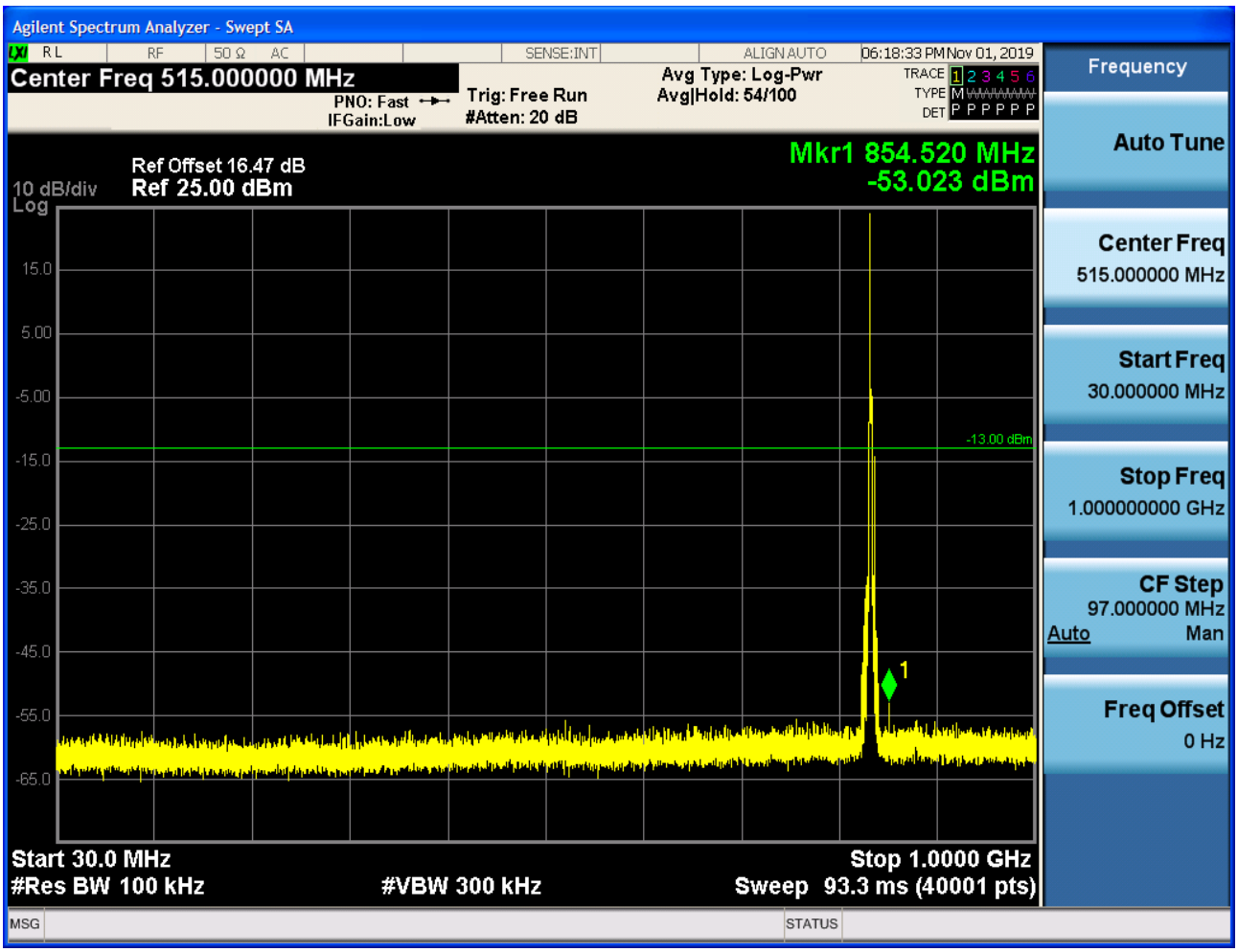


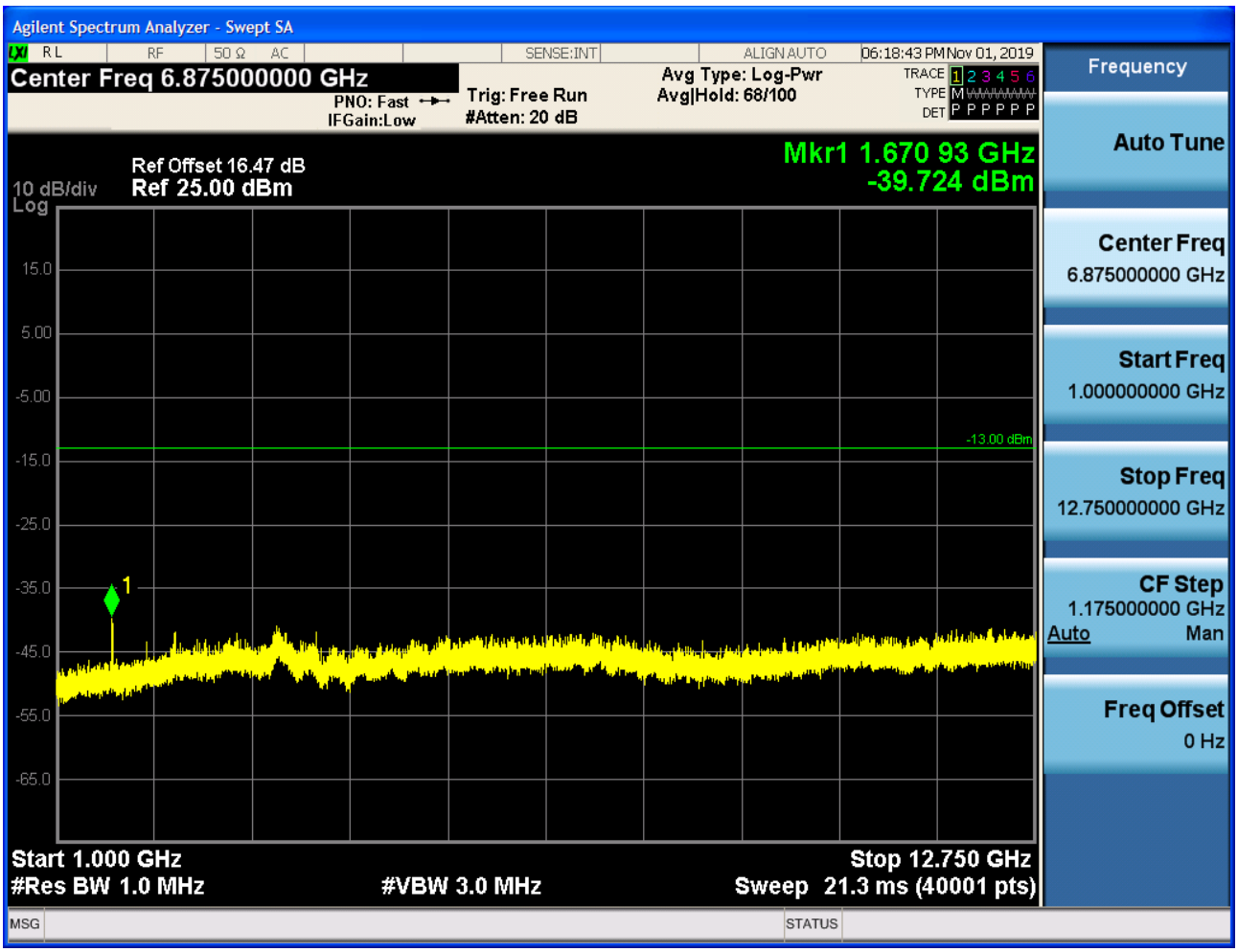
#### 6.2.1.2.2.2 Test Channel = MCH

##### 6.2.1.2.2.2.1 Test RB = RB1#0



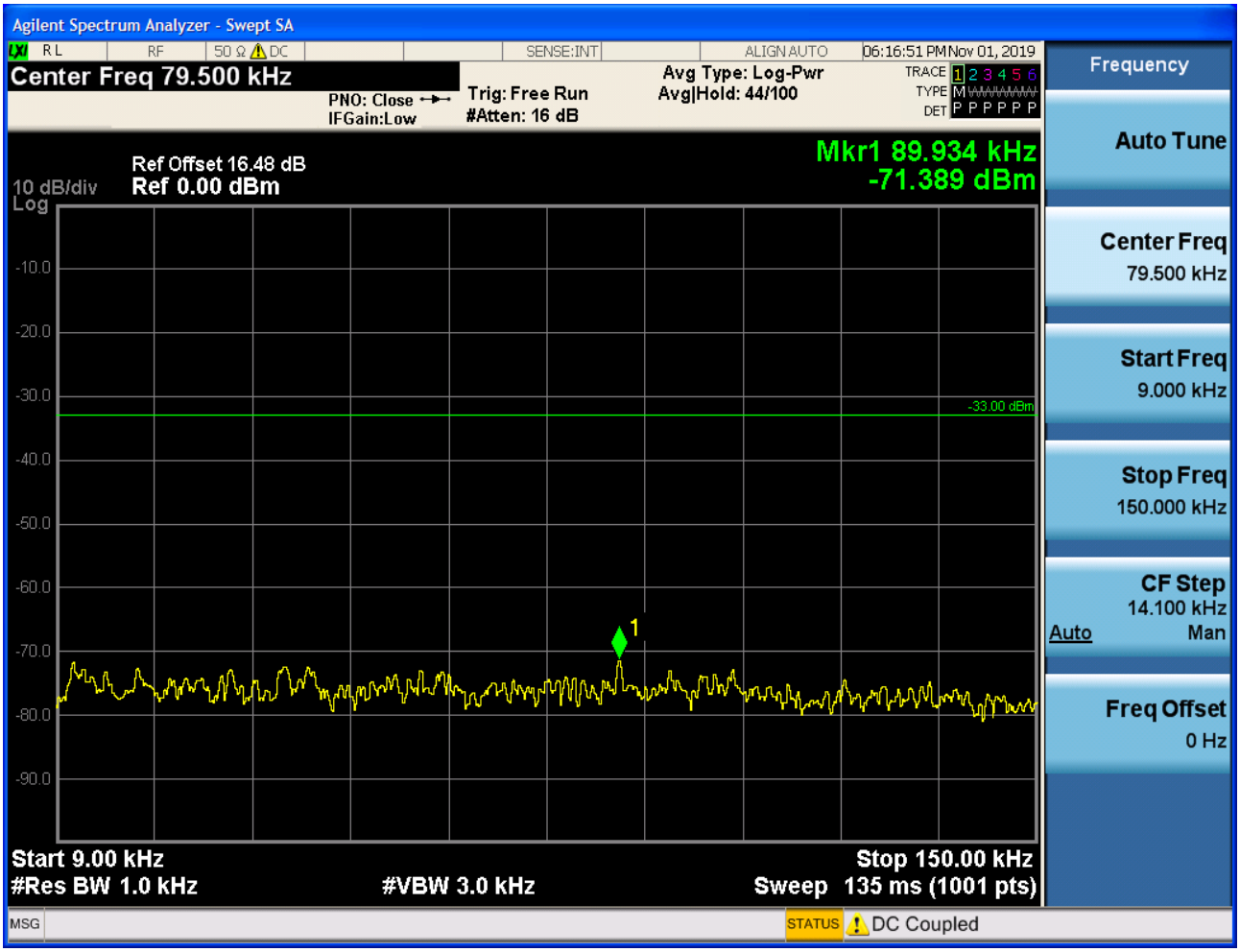


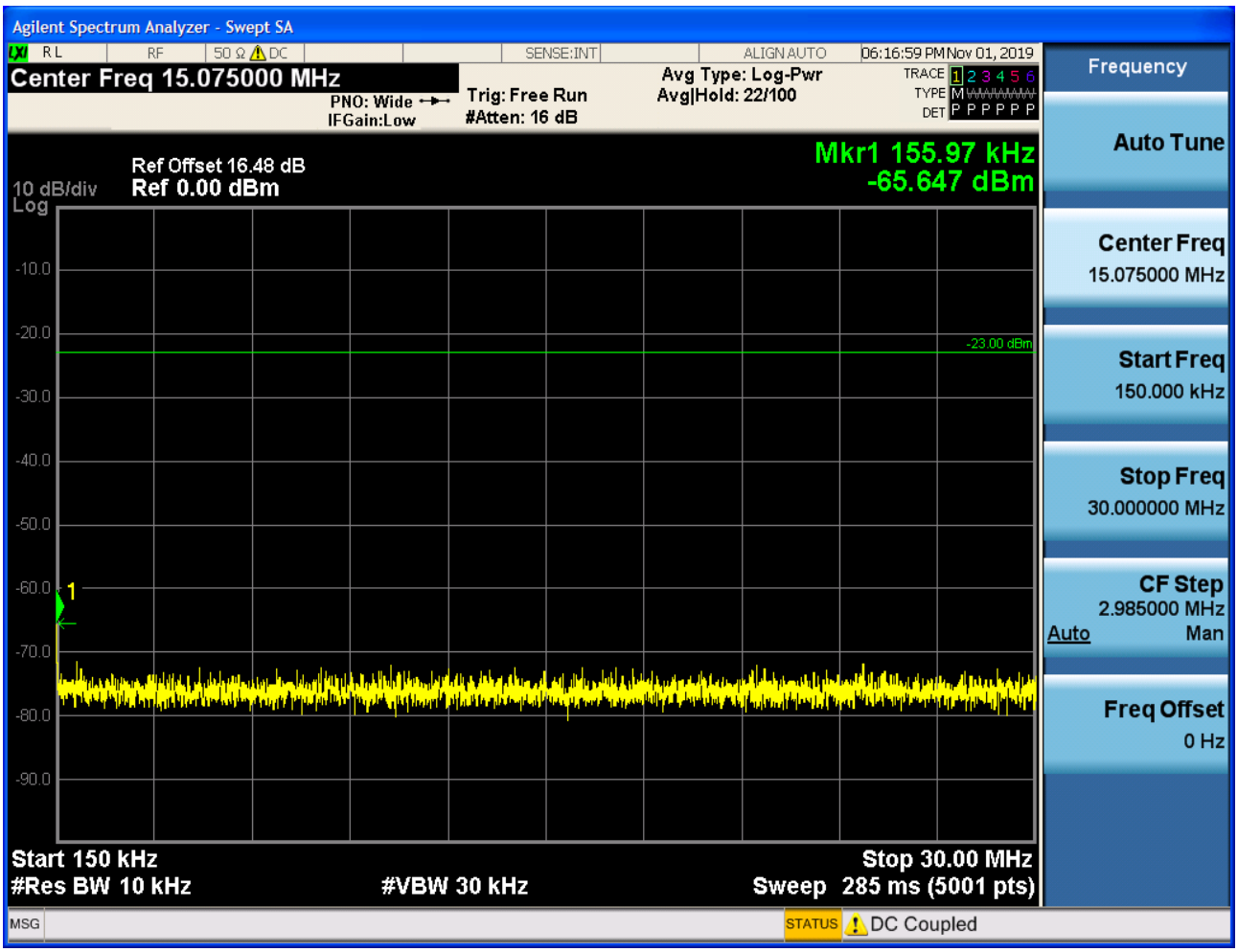


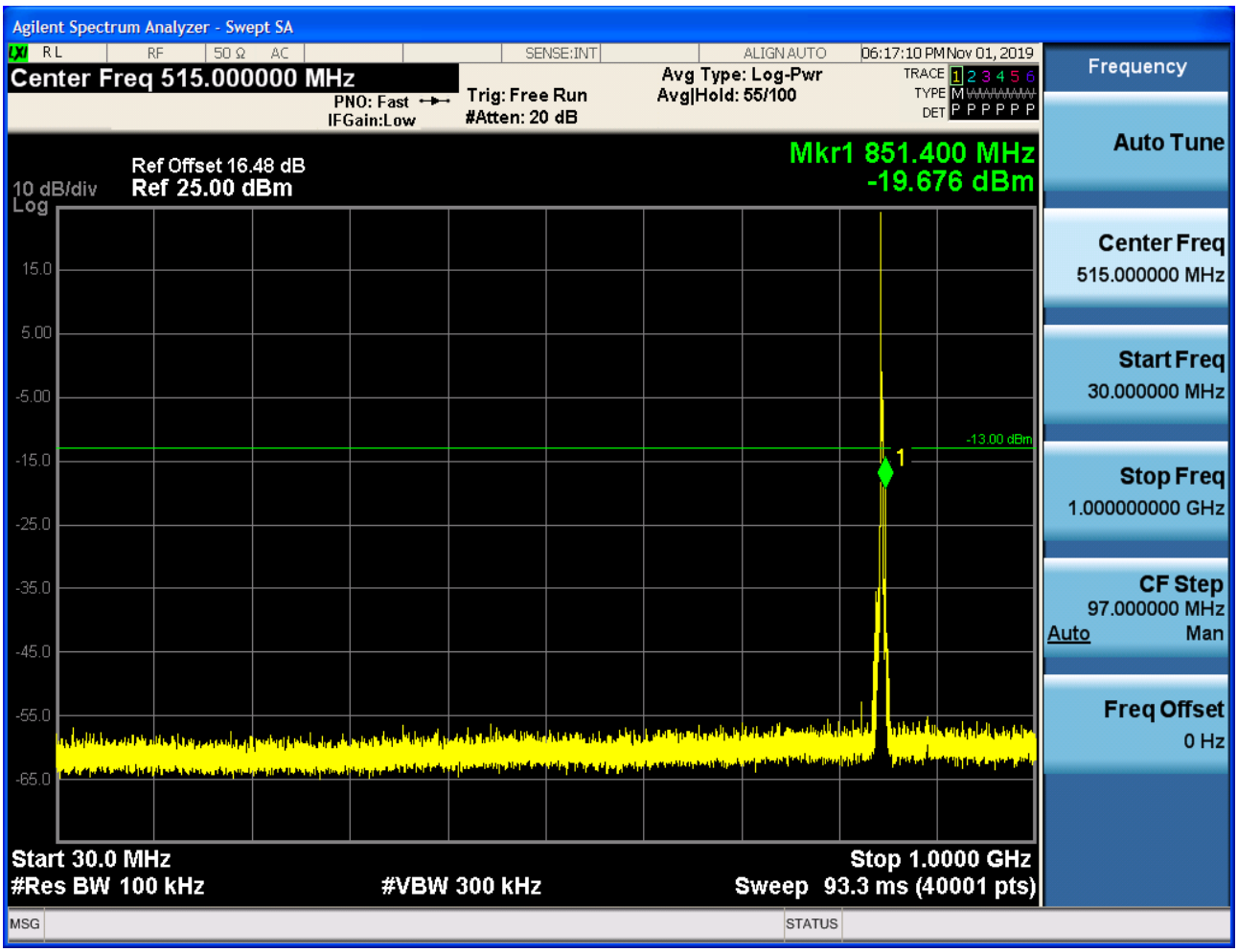


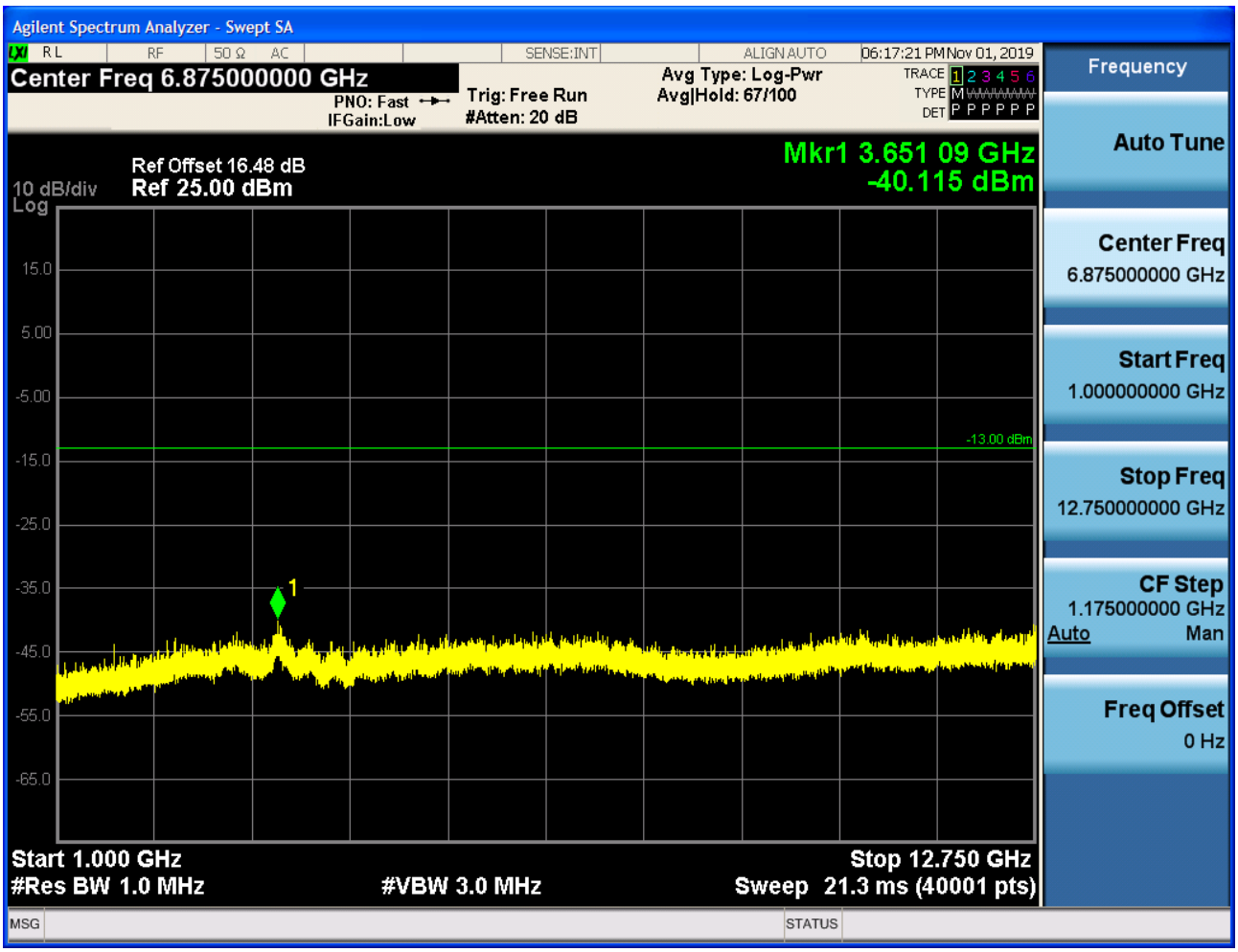
#### 6.2.1.2.2.3 Test Channel = HCH

##### 6.2.1.2.2.3.1 Test RB = RB1#0





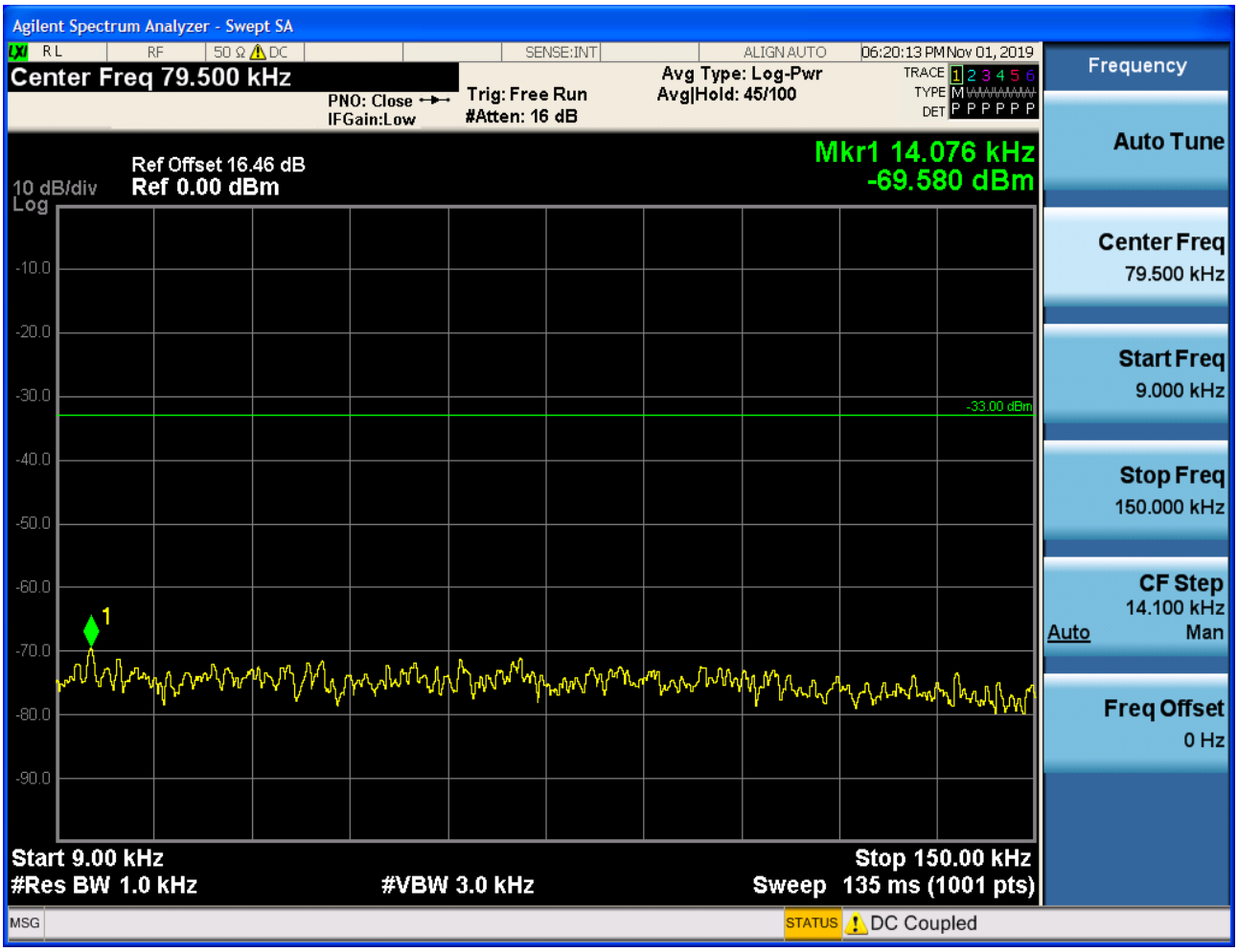

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
06:17:10 PM Nov 01, 2019
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 55/100
TRACE 1 2 3 4 5 6
TYPE M
DET P P P P P P
Ref Offset 16.48 dB
10 dB/div
Log
Ref 25.00 dBm
Mkr1 851.400 MHz
-19.676 dBm
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
-13.00 dBm
1
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.3 ms (40001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz

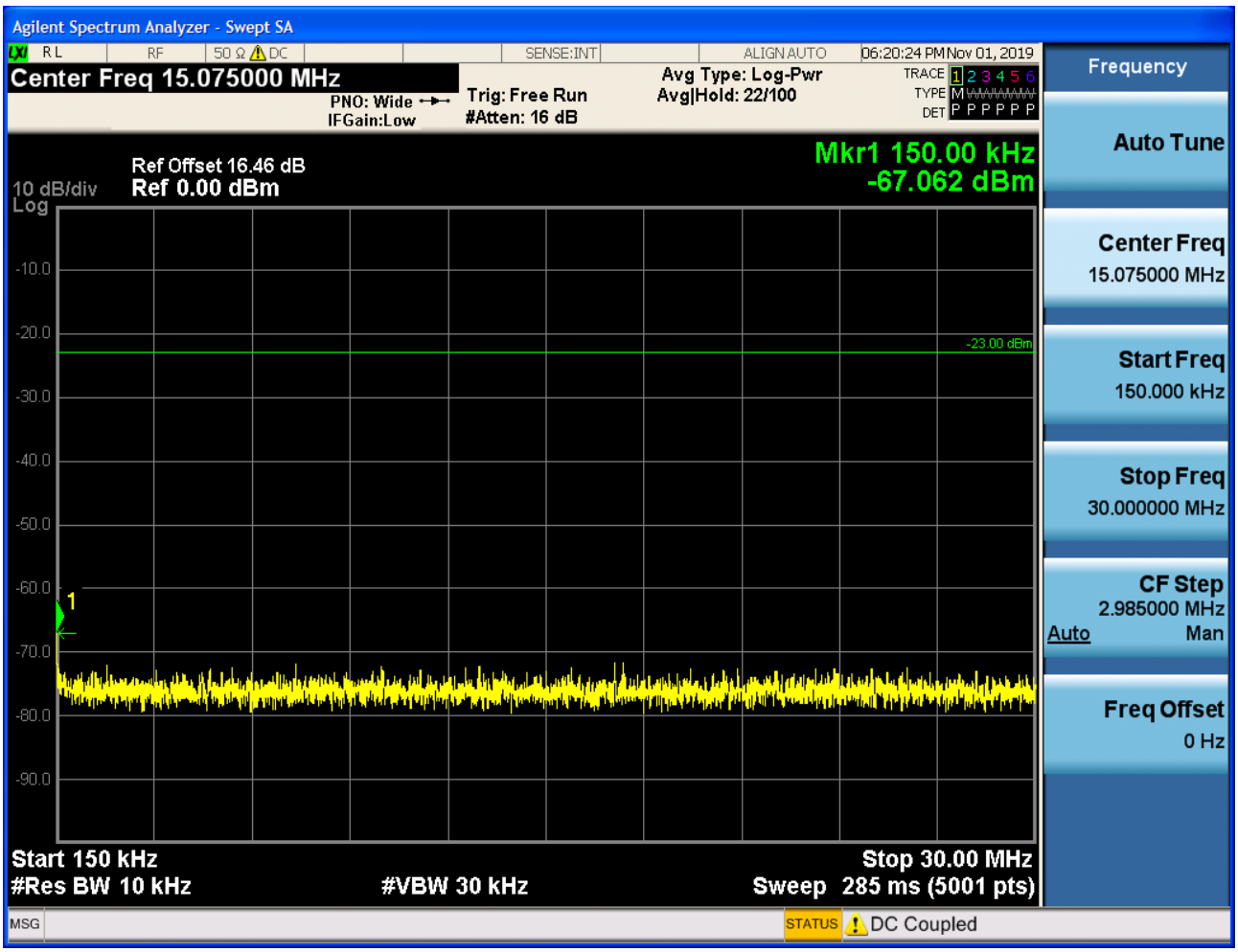


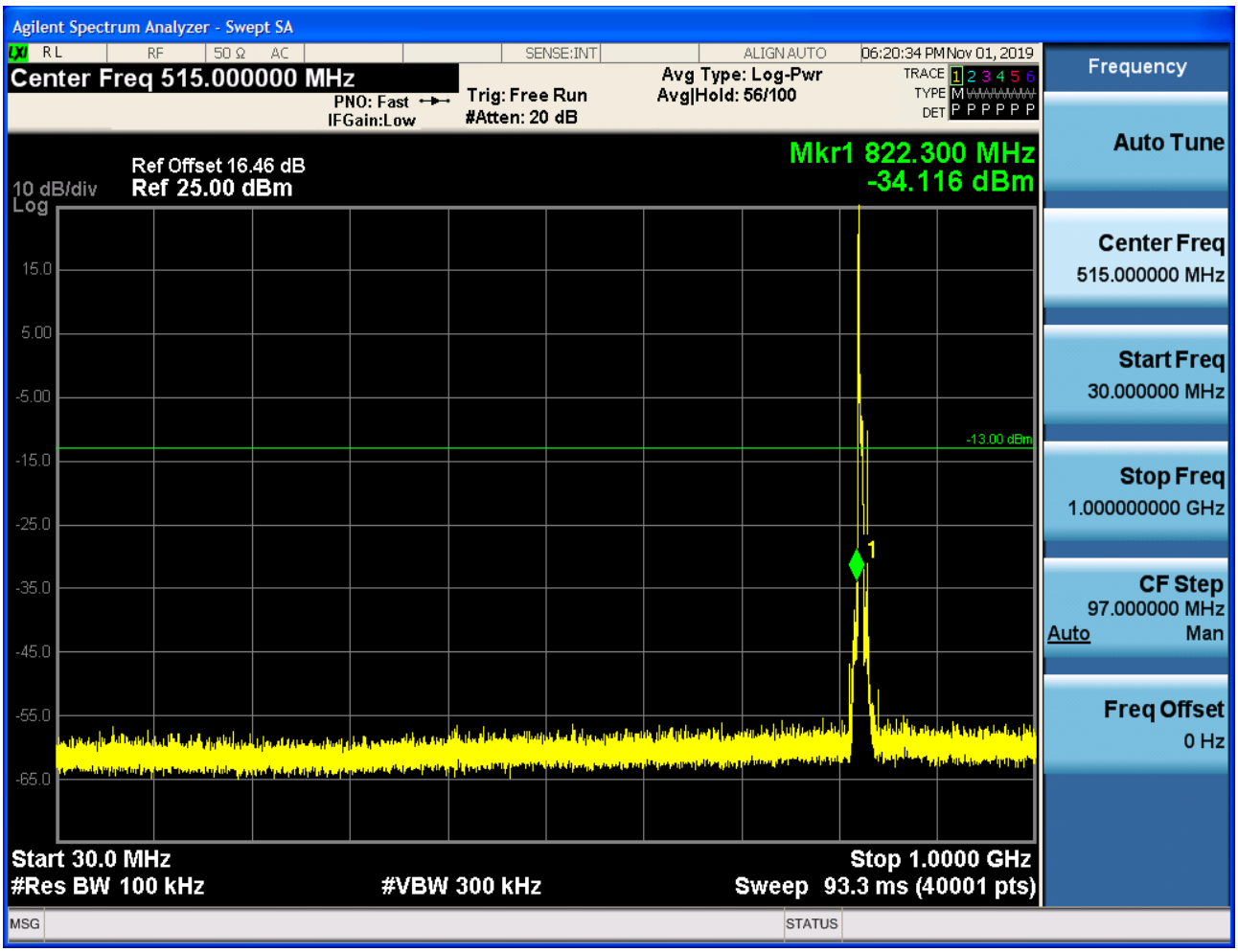
#### 6.2.1.2.3 Test Bandwidth = 5

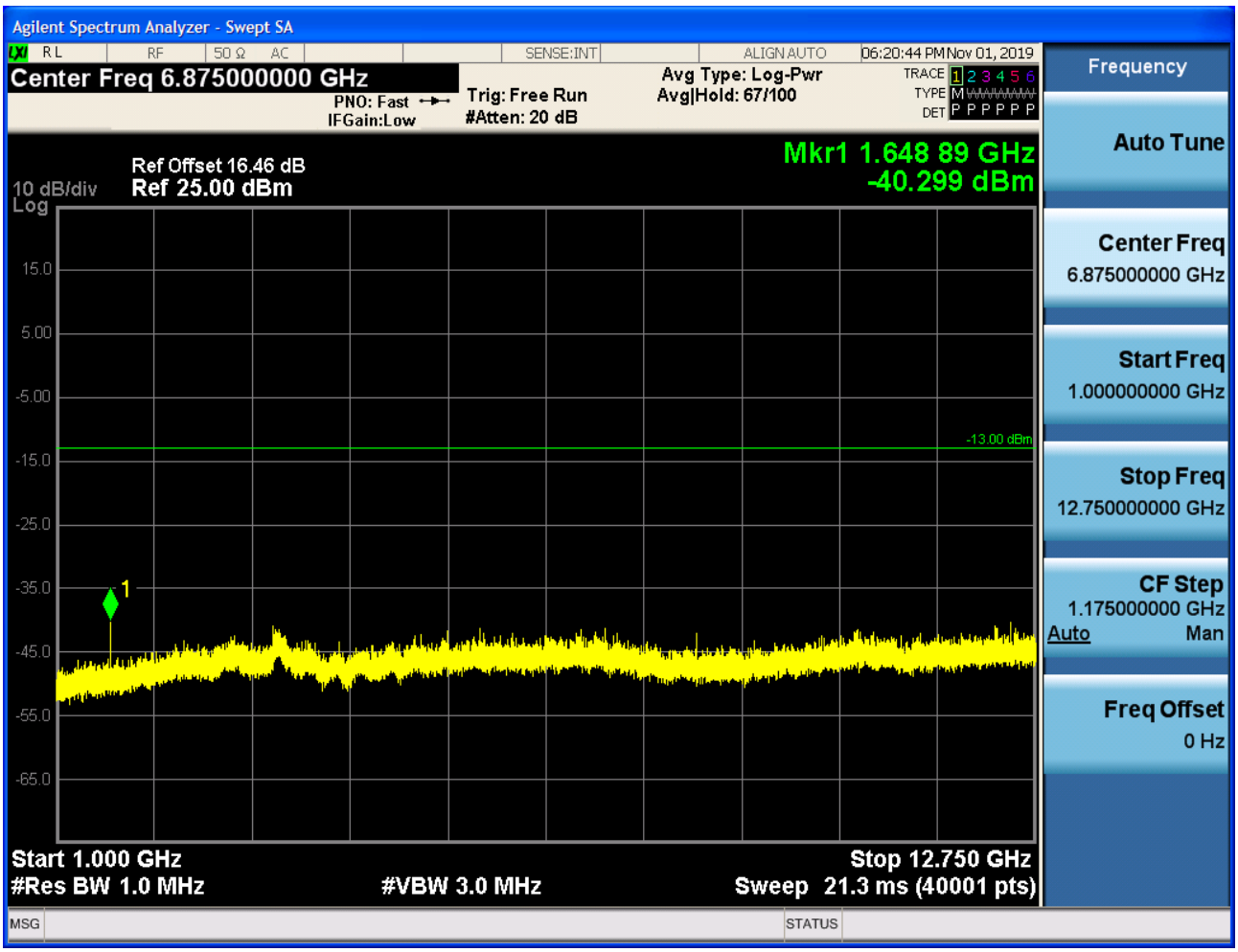
##### 6.2.1.2.3.1 Test Channel = LCH

###### 6.2.1.2.3.1.1 Test RB = RB1#0



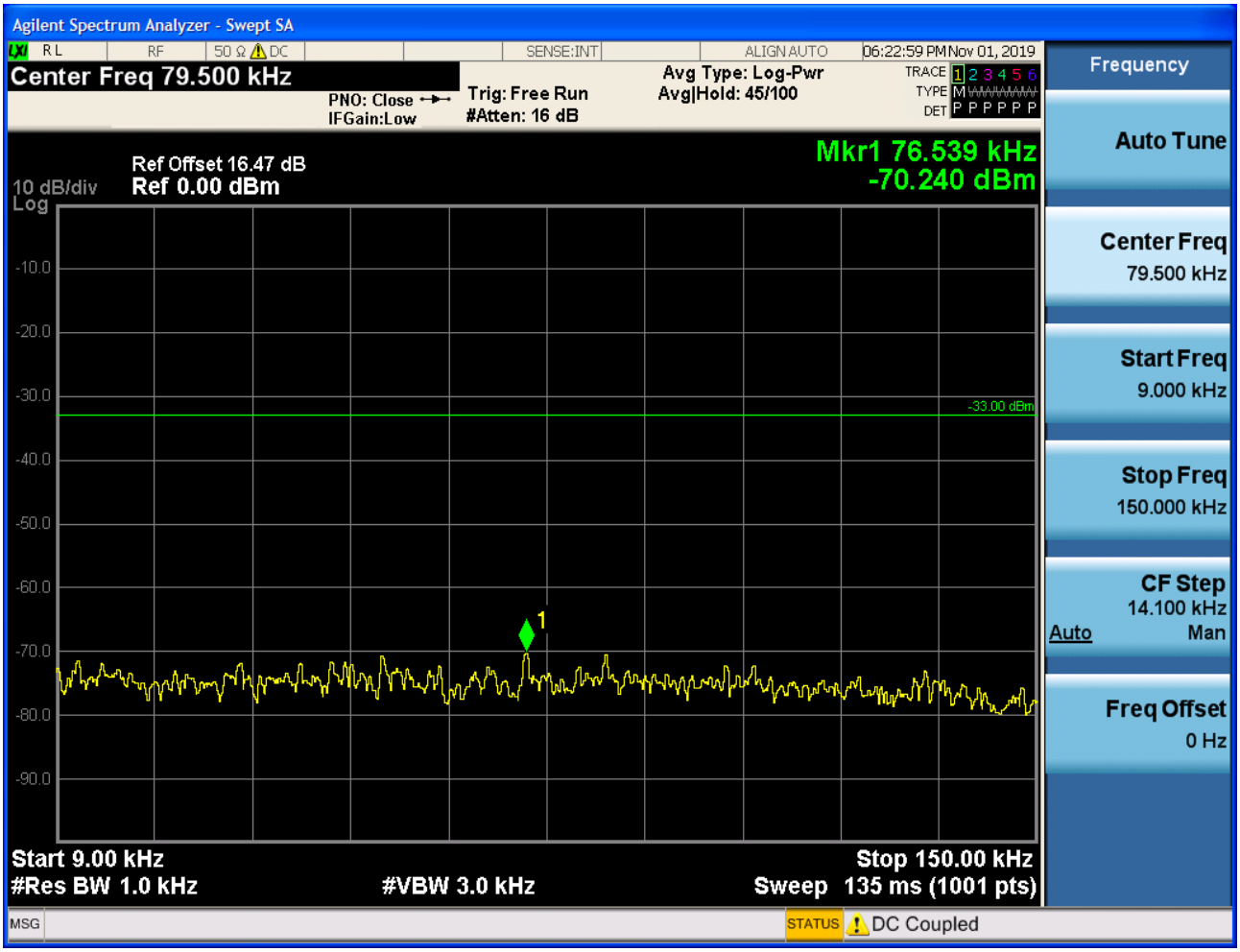


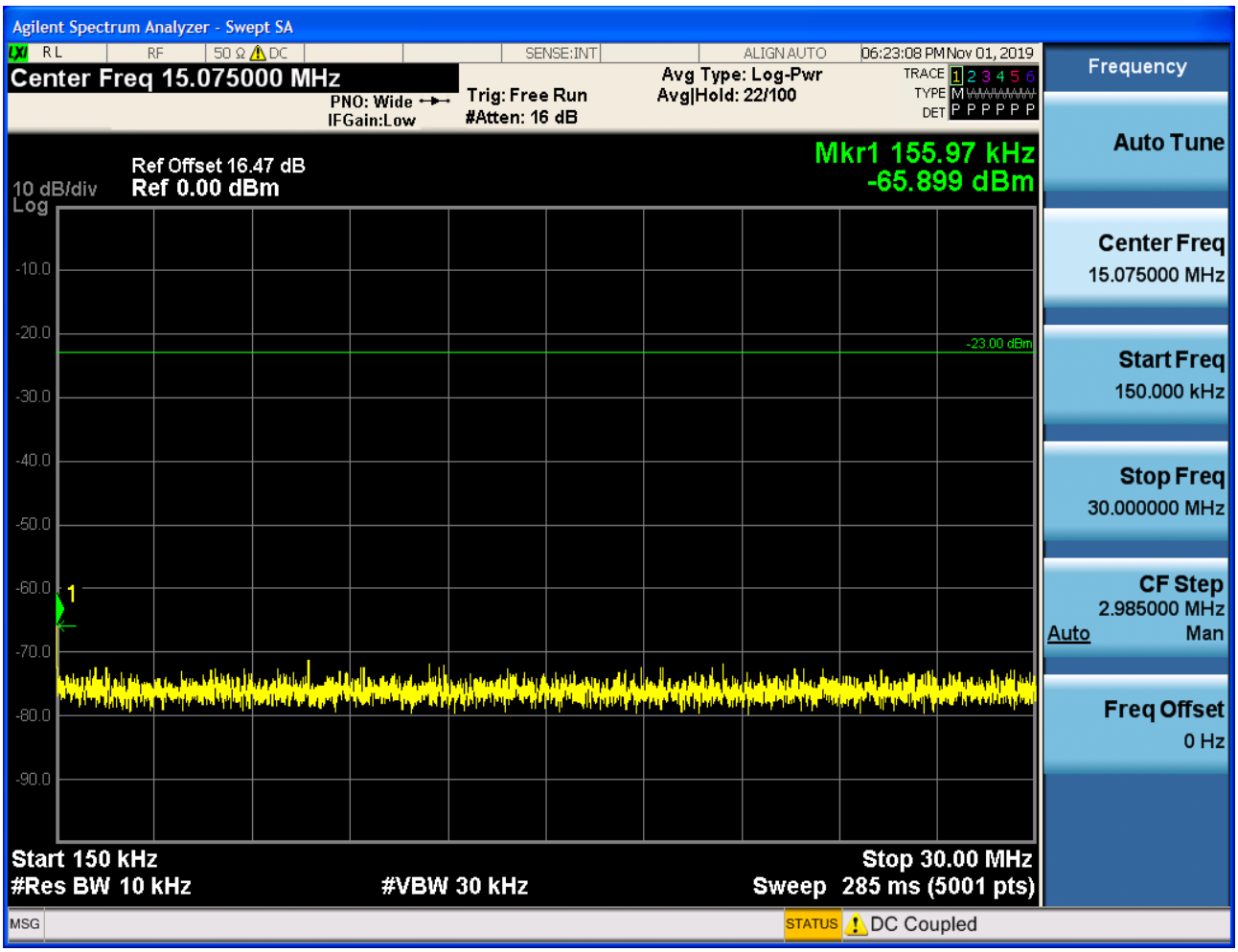

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
06:20:34 PM Nov 01, 2019
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 56/100
TRACE 1 2 3 4 5 6
TYPE M
DET P P P P P P
Ref Offset 16.46 dB
10 dB/div
Log
Ref 25.00 dBm
Mkr1 822.300 MHz
-34.116 dBm
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
-13.00 dBm
1
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.3 ms (40001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz

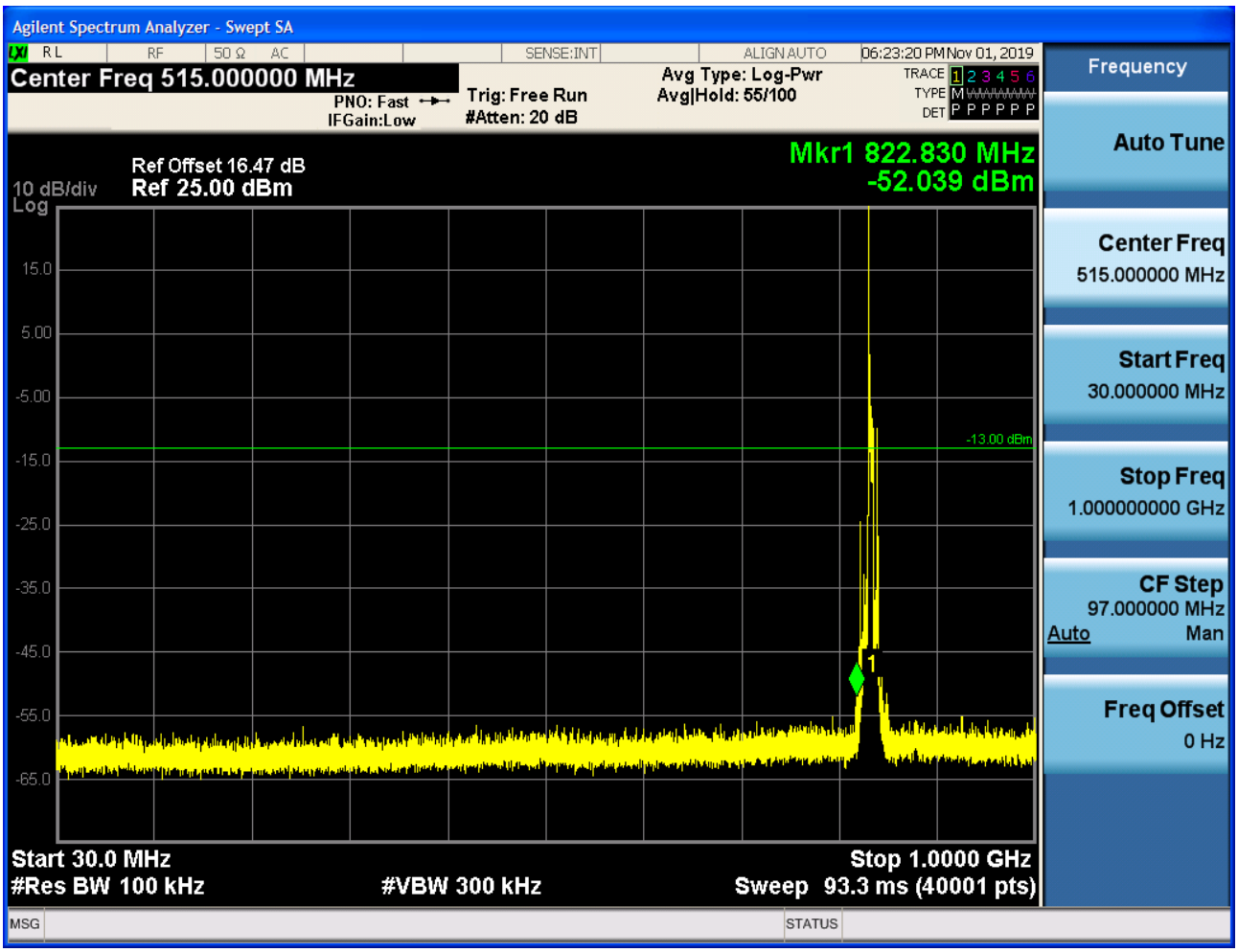


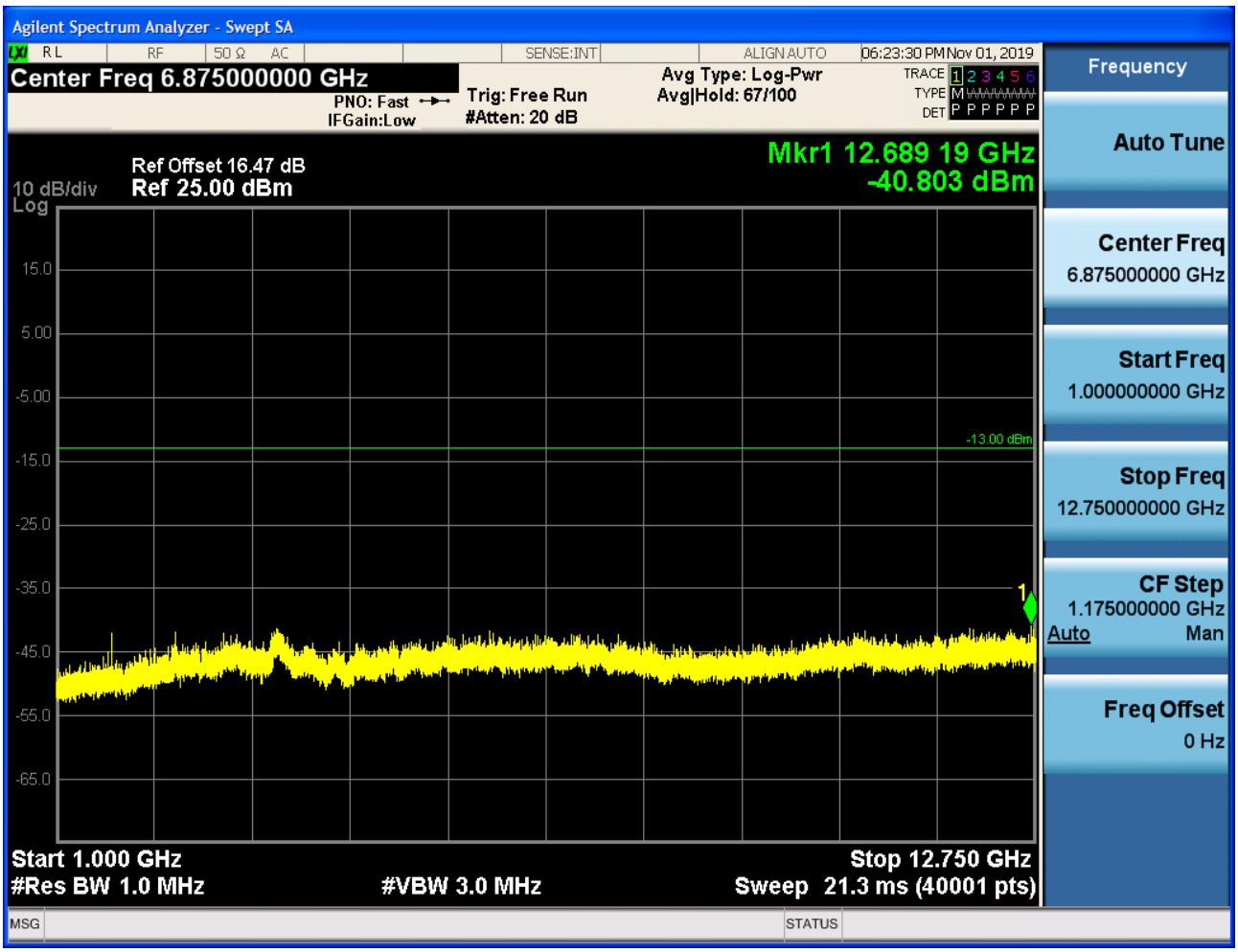
#### 6.2.1.2.3.2 Test Channel = MCH

##### 6.2.1.2.3.2.1 Test RB = RB1#0



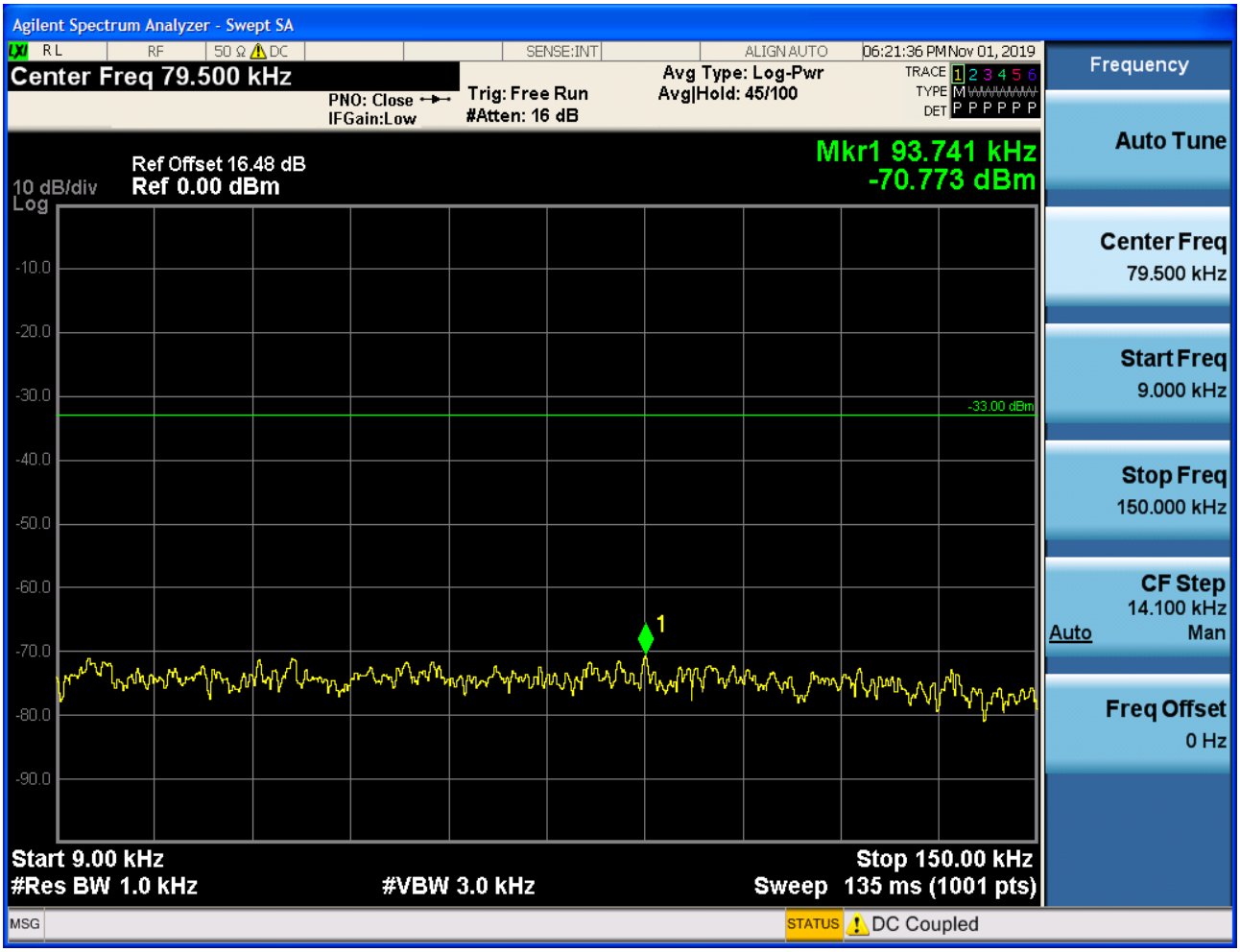


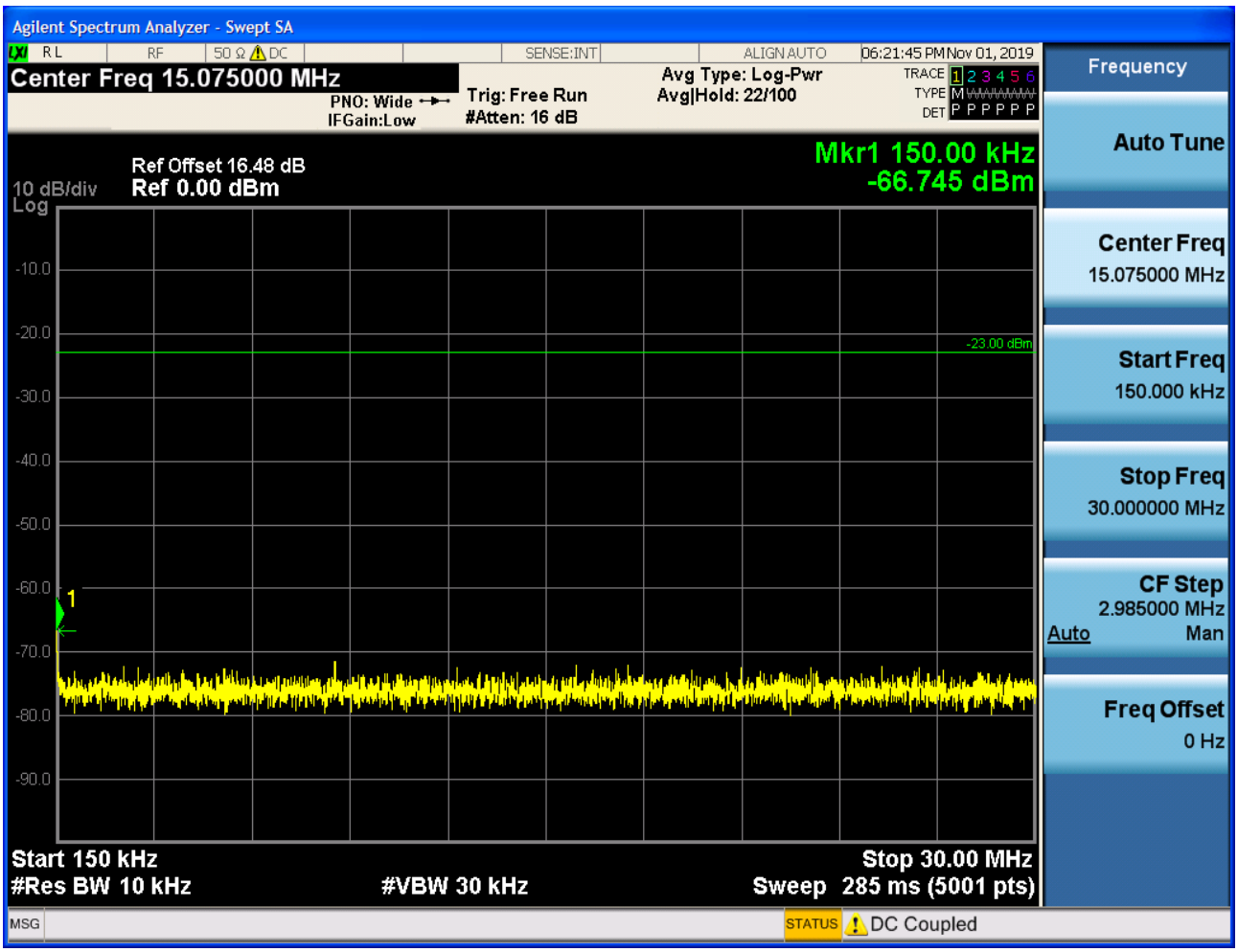

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
06:23:20 PM Nov 01, 2019
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 55/100
TRACE 1 2 3 4 5 6
TYPE M
DET P P P P P P
Ref Offset 16.47 dB
10 dB/div
Log
Ref 25.00 dBm
Mkr1 822.830 MHz
-52.039 dBm
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
-13.00 dBm
1
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.3 ms (40001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz

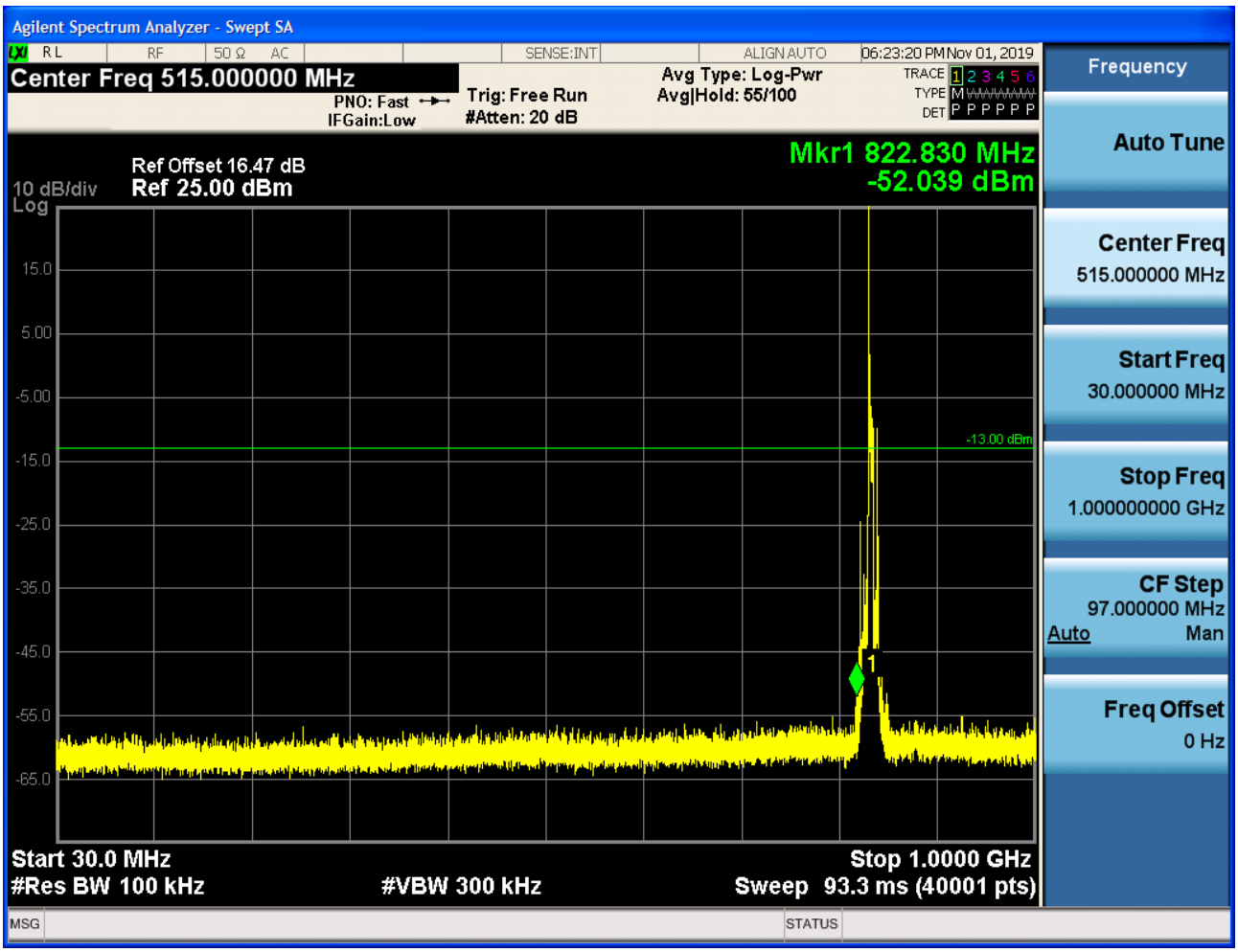


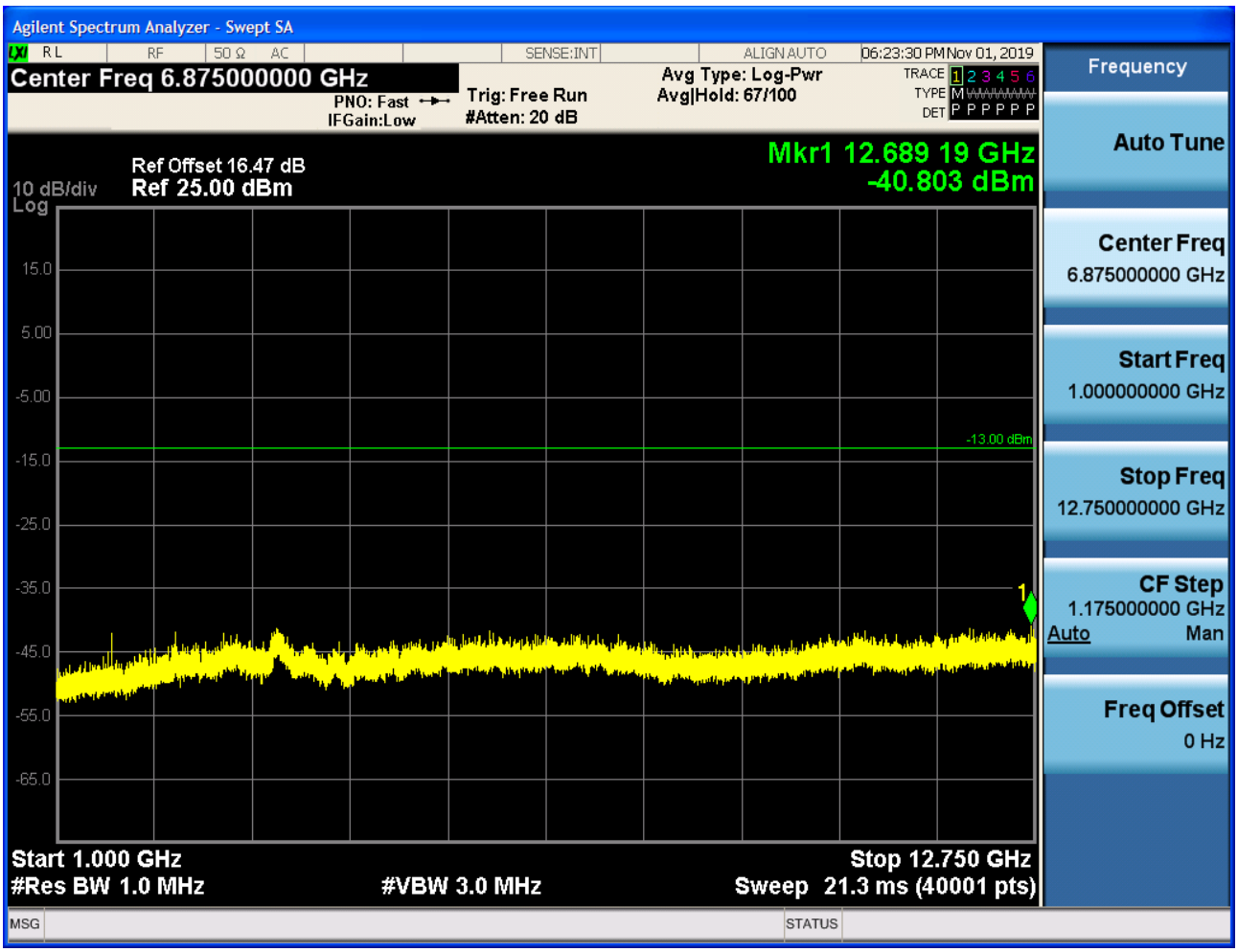
#### 6.2.1.2.3.3 Test Channel = HCH

##### 6.2.1.2.3.3.1 Test RB = RB1#0





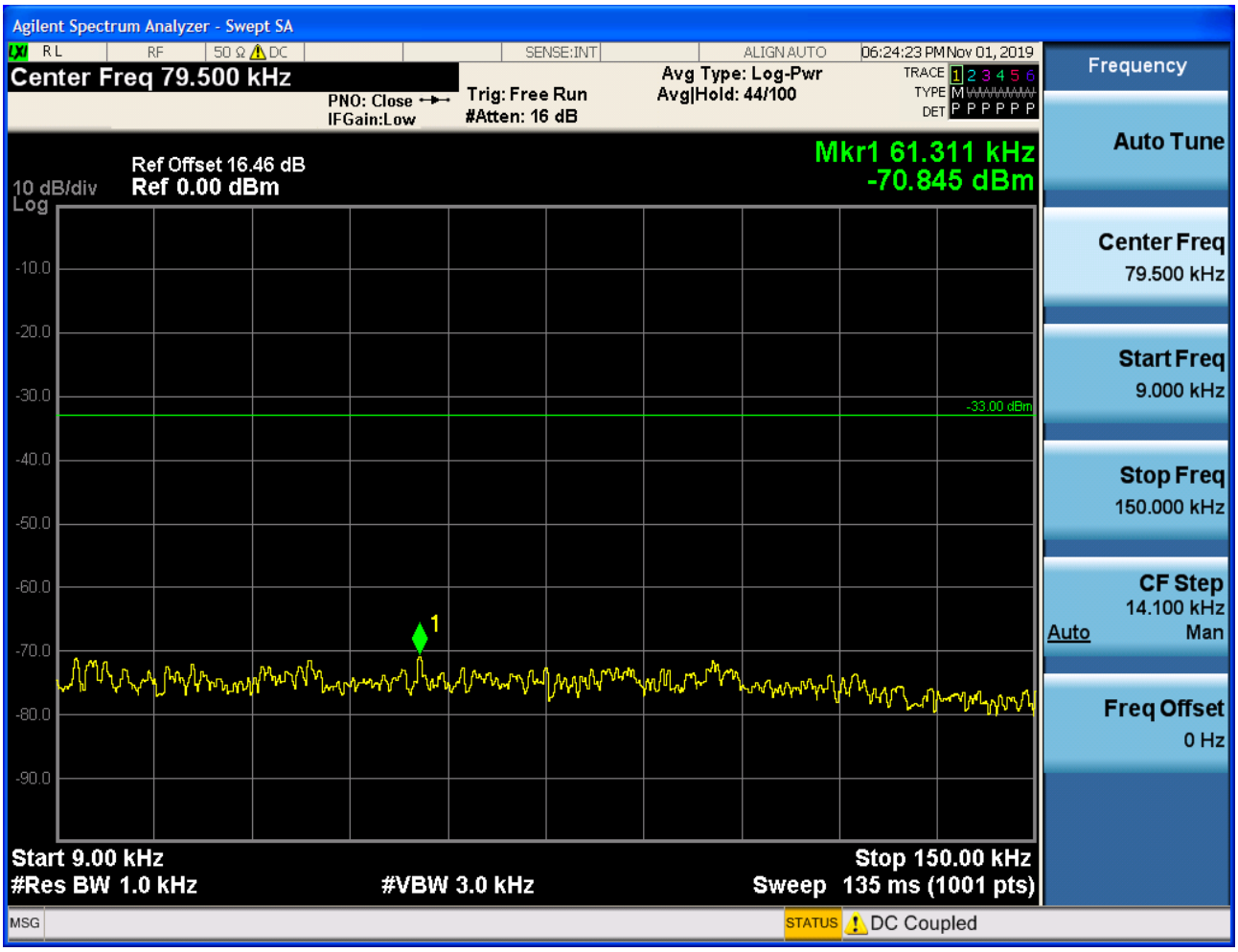

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
06:23:20 PM Nov 01, 2019
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 55/100
TRACE 1 2 3 4 5 6
TYPE M
DET P P P P P P
Ref Offset 16.47 dB
10 dB/div
Log
Ref 25.00 dBm
Mkr1 822.830 MHz
-52.039 dBm
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
-13.00 dBm
1
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.3 ms (40001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz

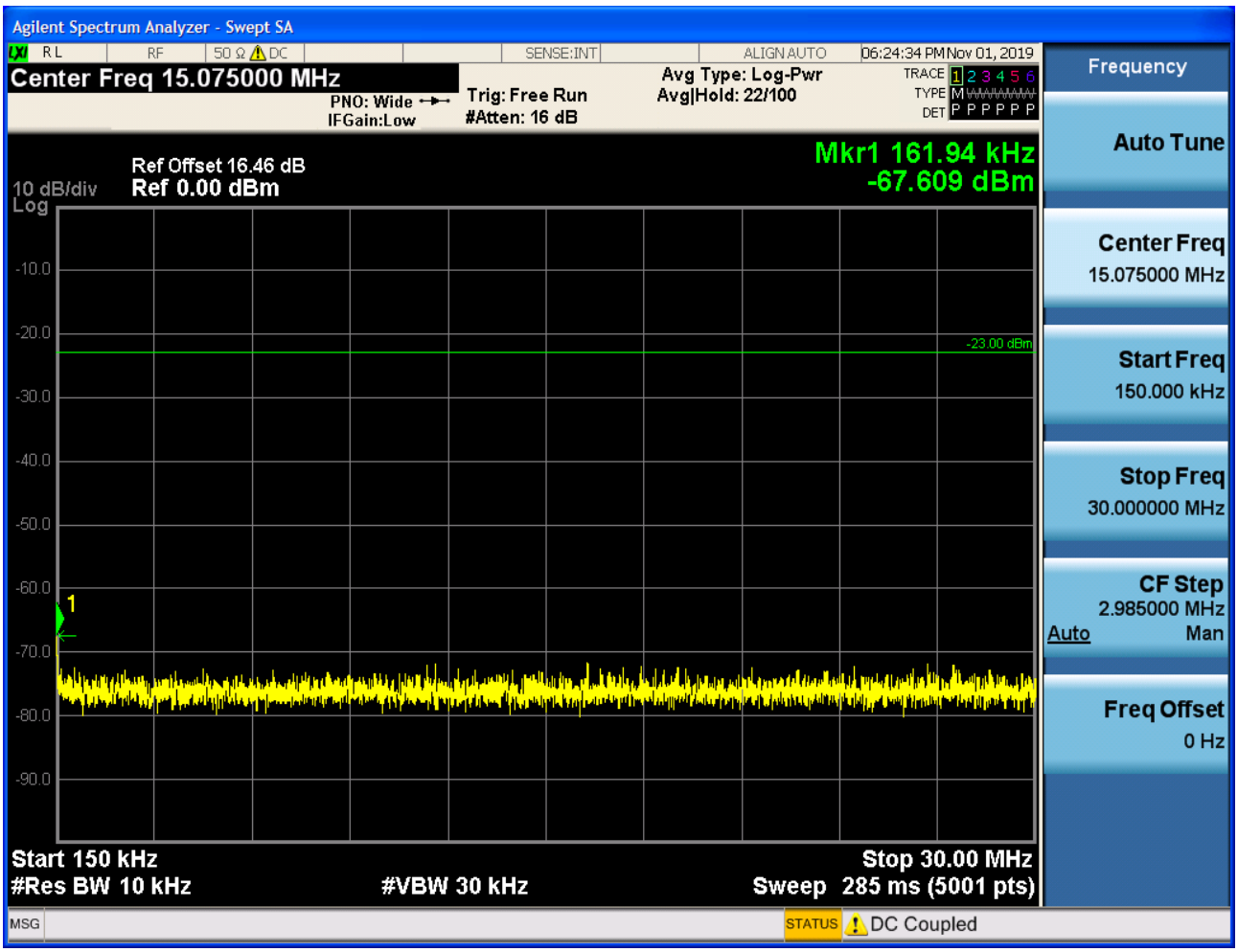


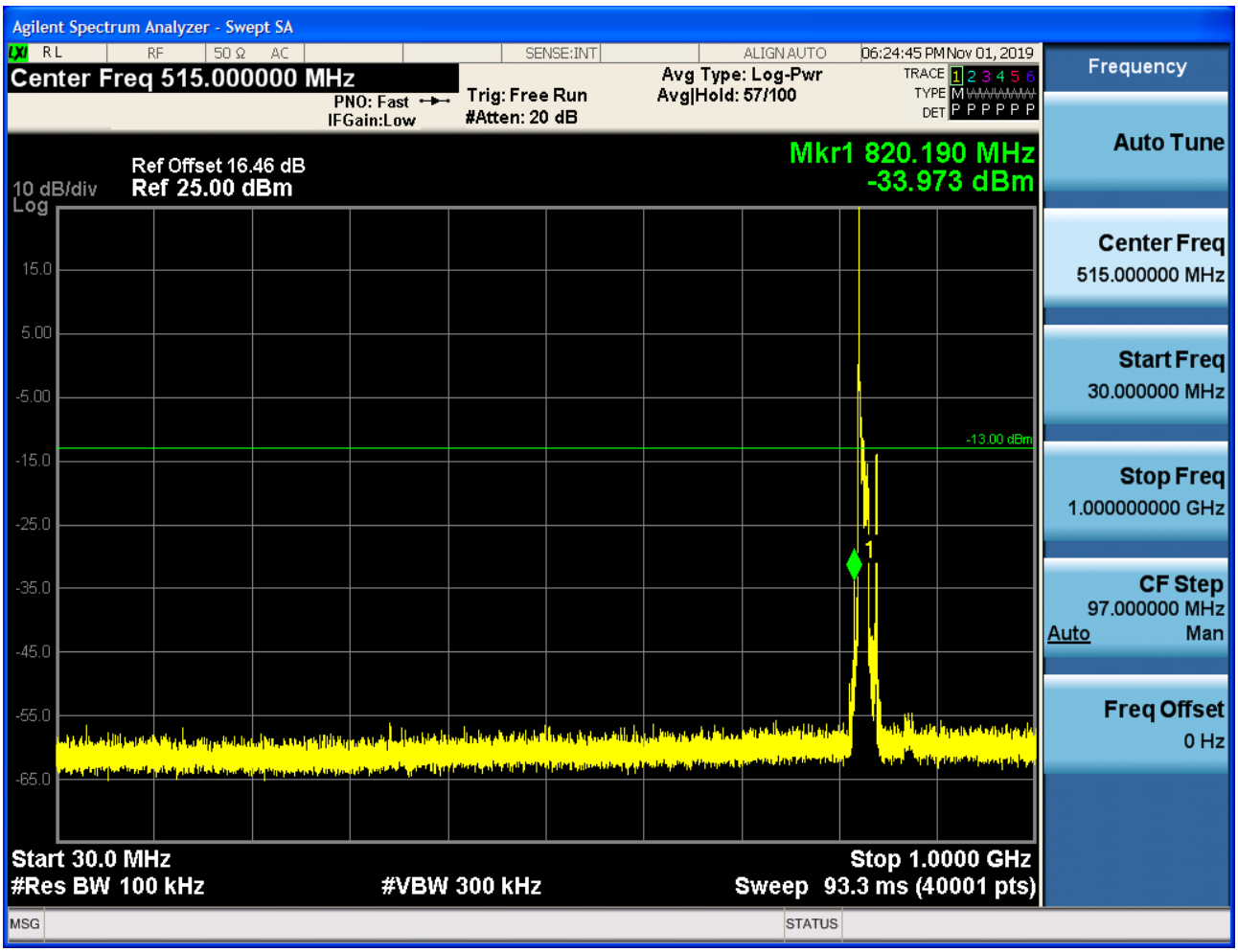
#### 6.2.1.2.4 Test Bandwidth = 10

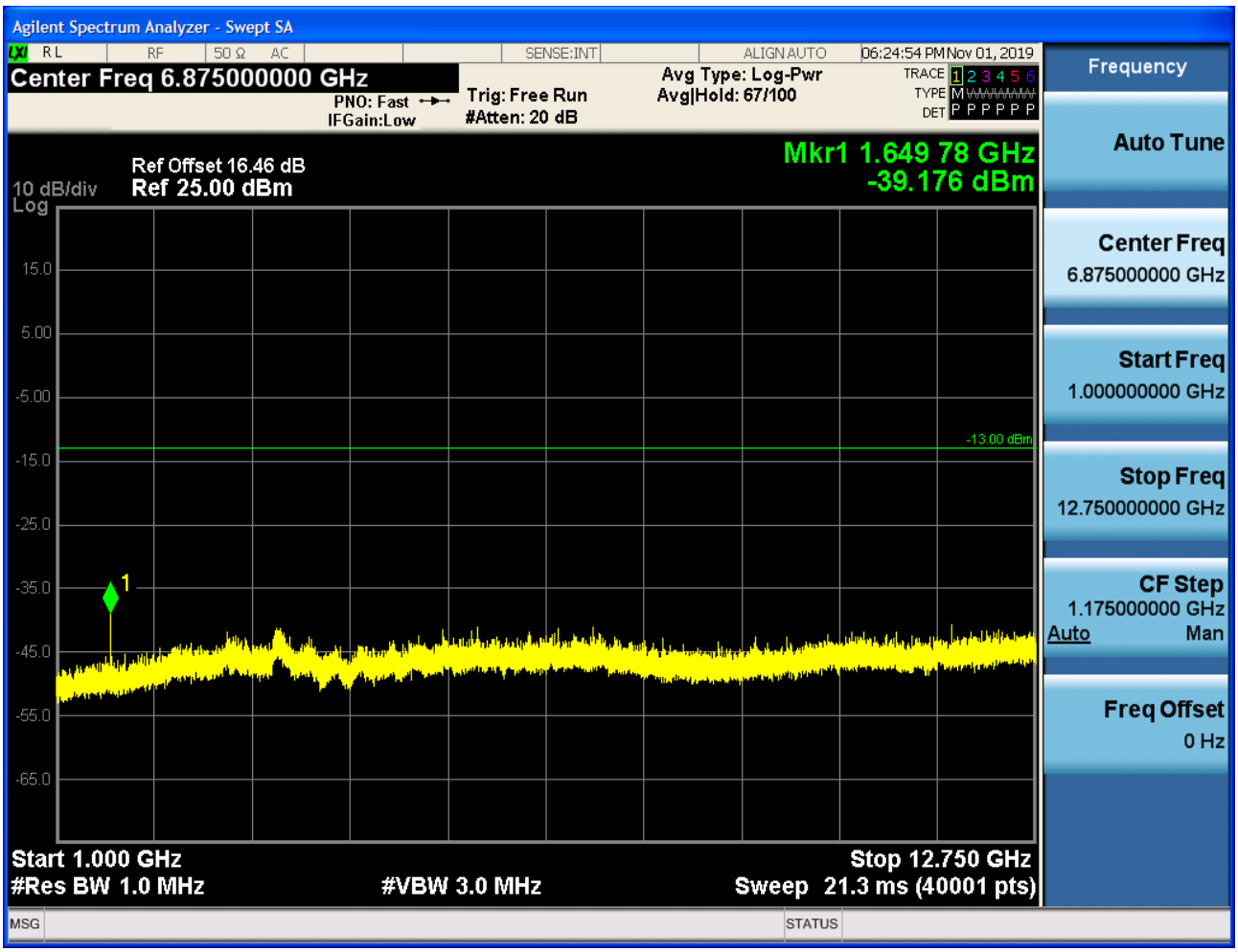
##### 6.2.1.2.4.1 Test Channel = LCH

###### 6.2.1.2.4.1.1 Test RB = RB1#0



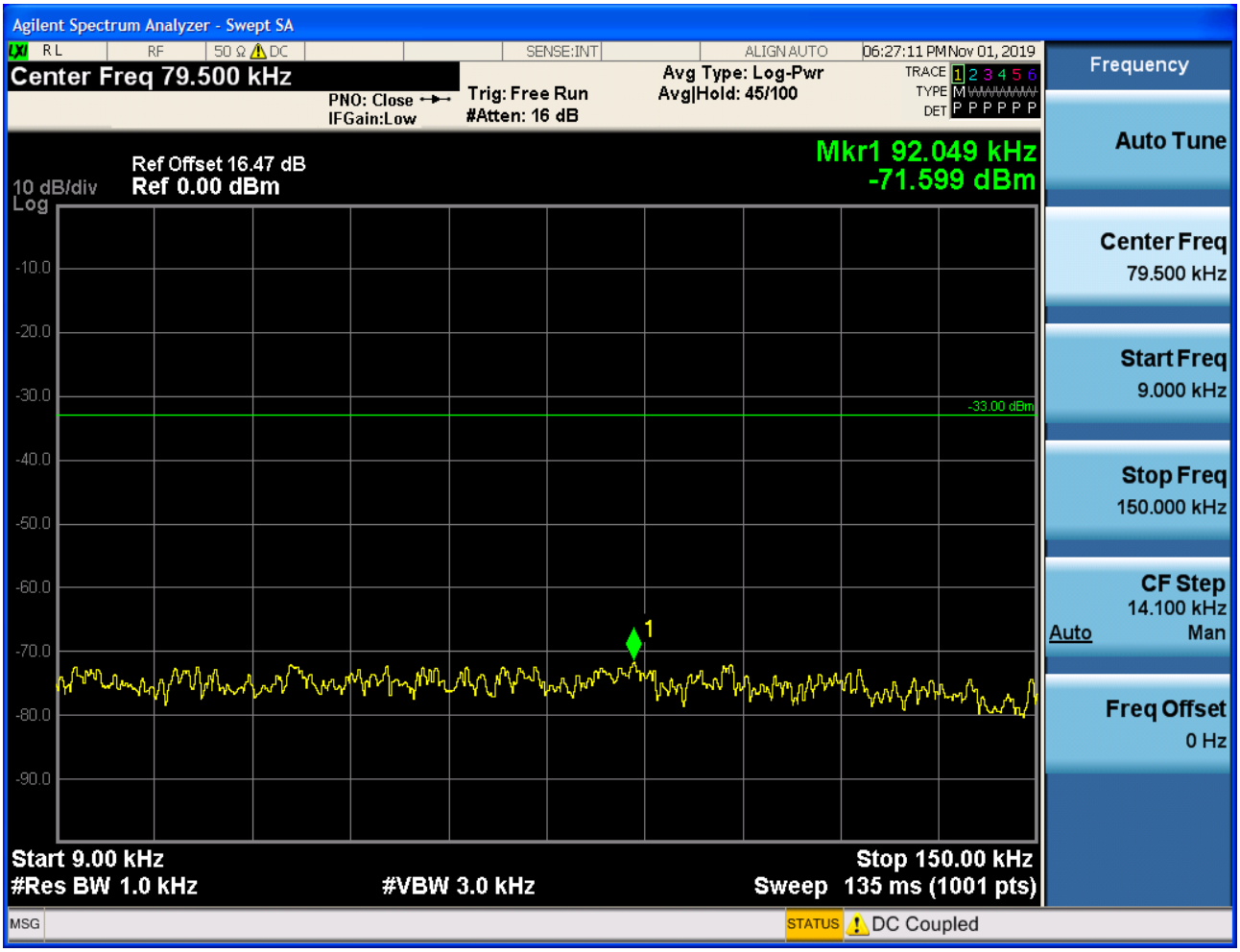


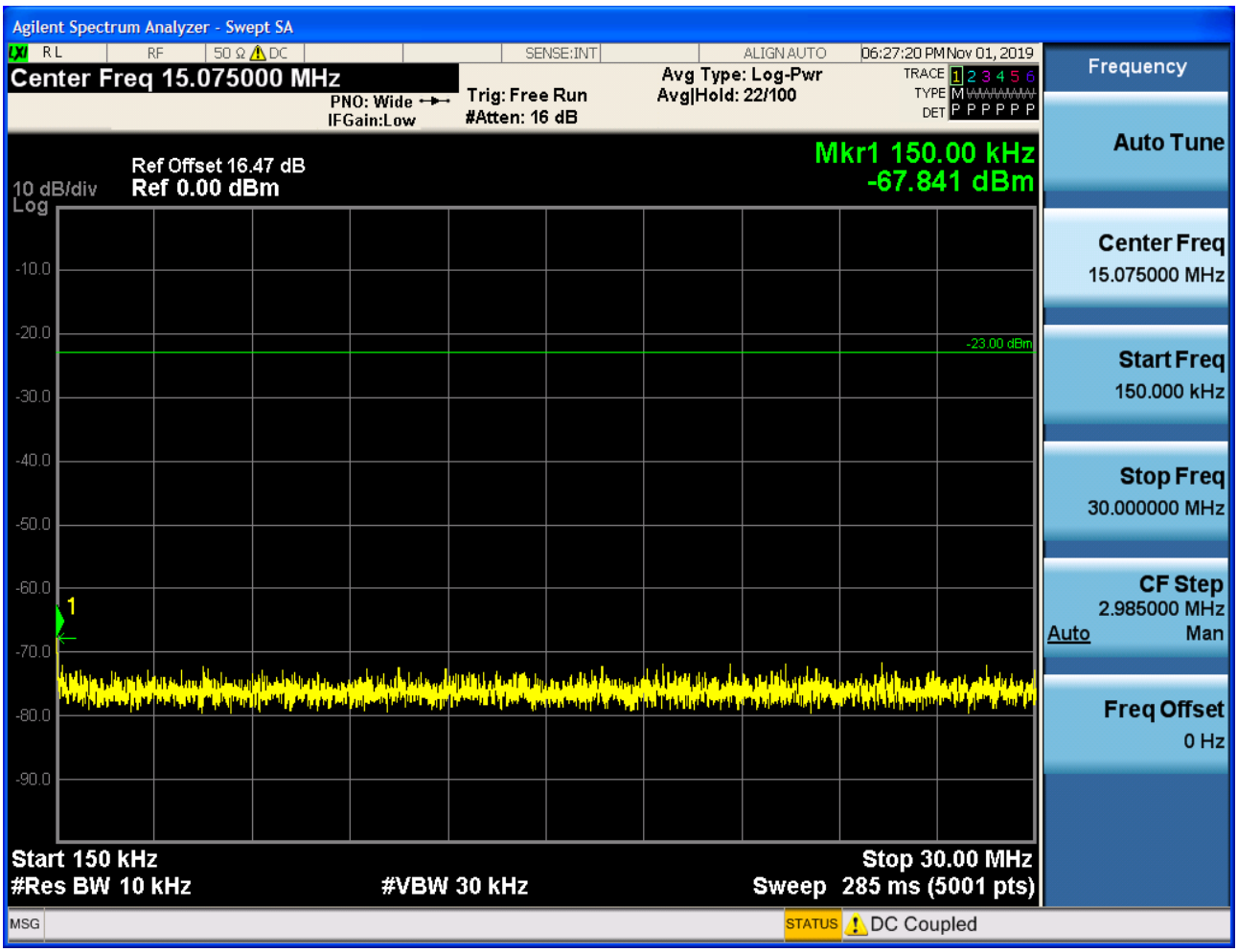

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
06:24:45 PM Nov 01, 2019
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 57/100
TRACE 1 2 3 4 5 6
TYPE M
DET P P P P P P
Ref Offset 16.46 dB
10 dB/div
Log
Ref 25.00 dBm
Mkr1 820.190 MHz
-33.973 dBm
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
-13.00 dBm
1
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.3 ms (40001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz

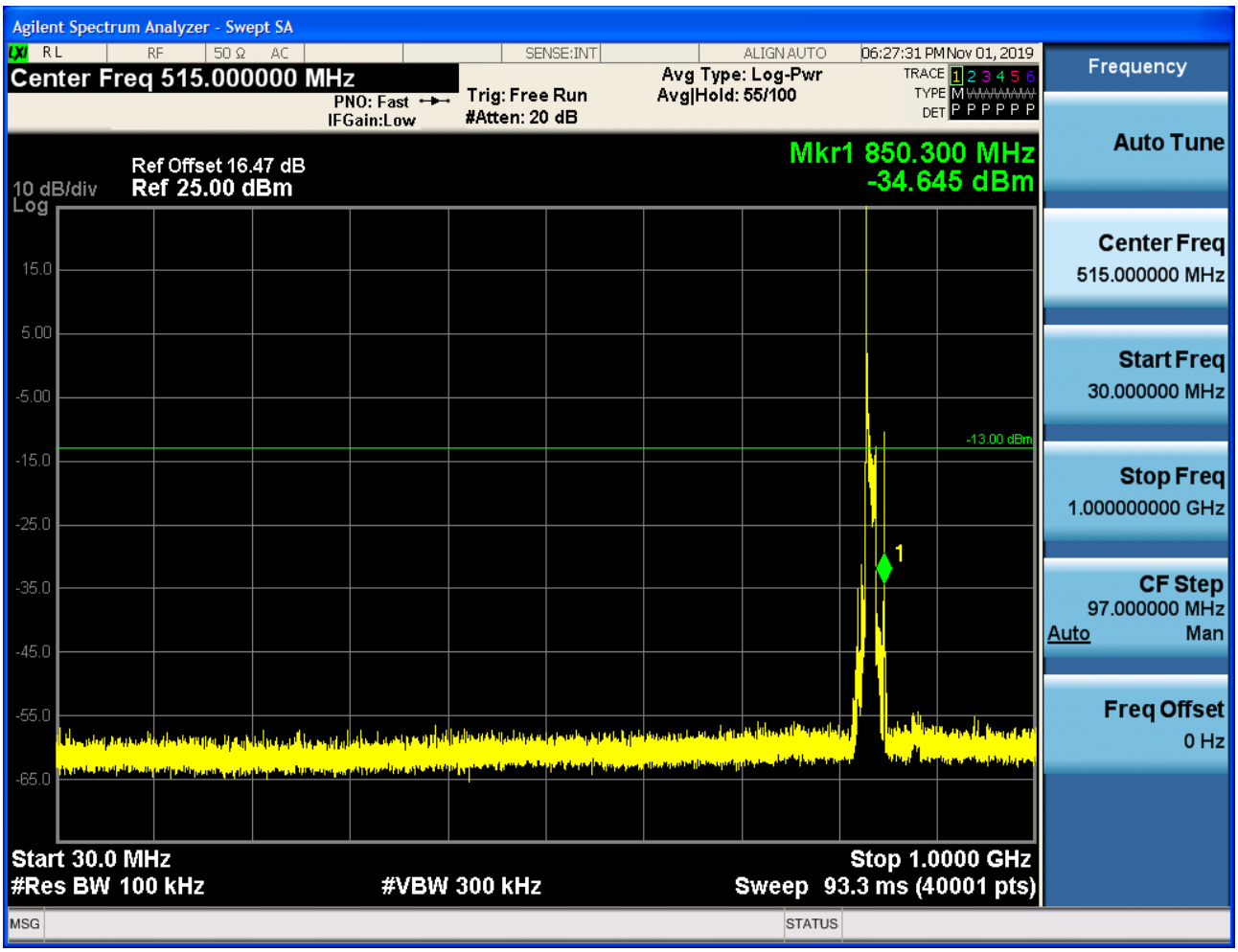


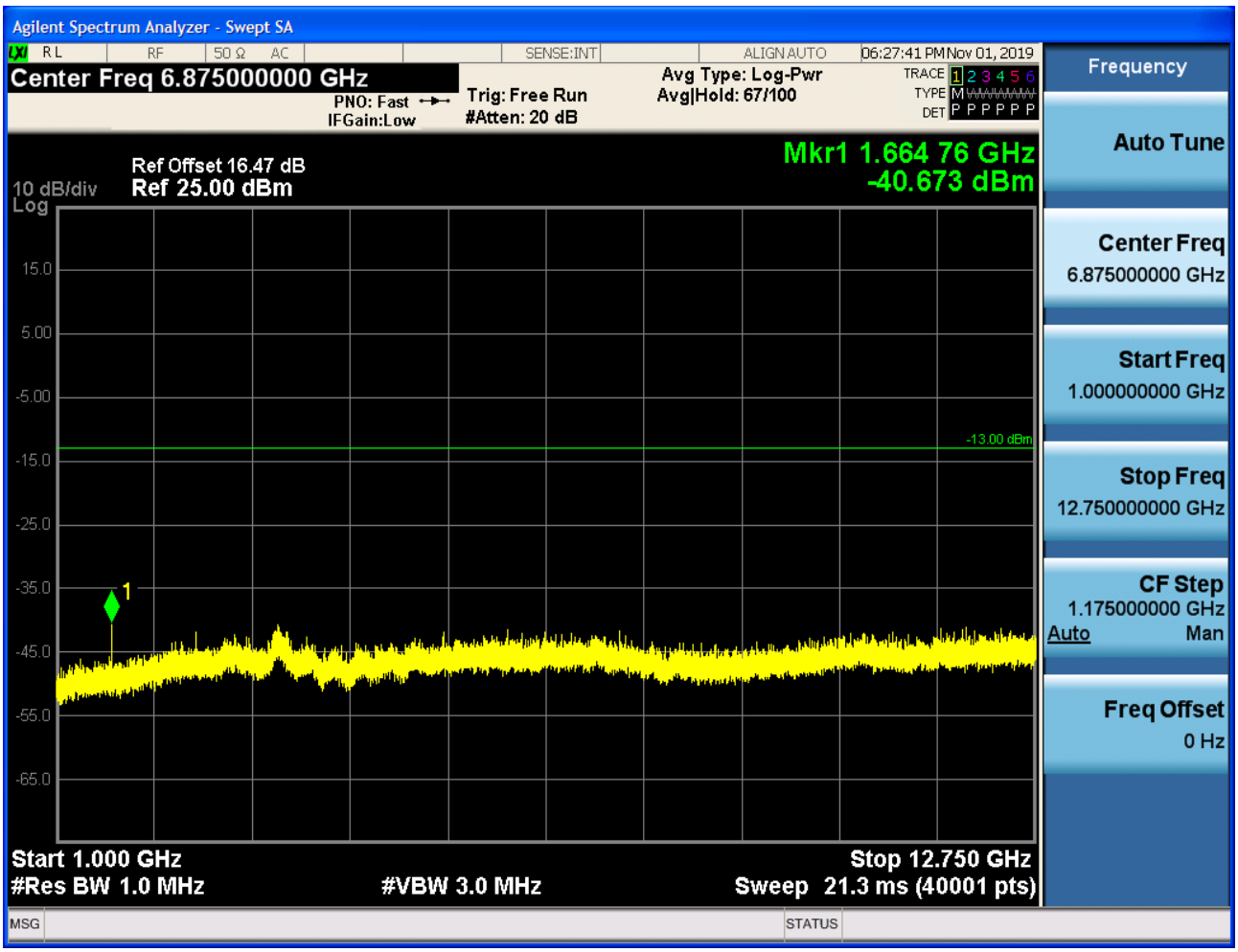
#### 6.2.1.2.4.2 Test Channel = MCH

##### 6.2.1.2.4.2.1 Test RB = RB1#0



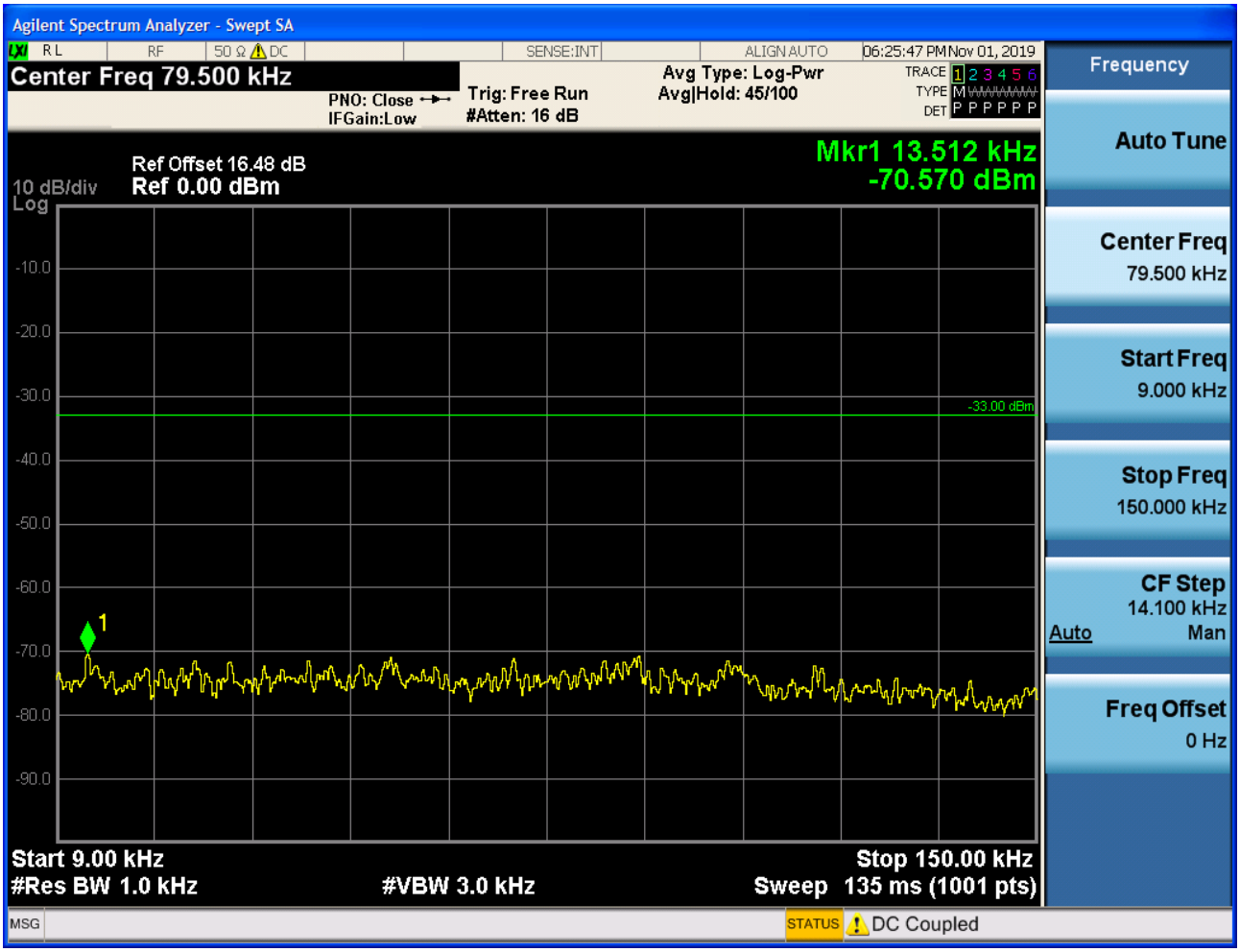


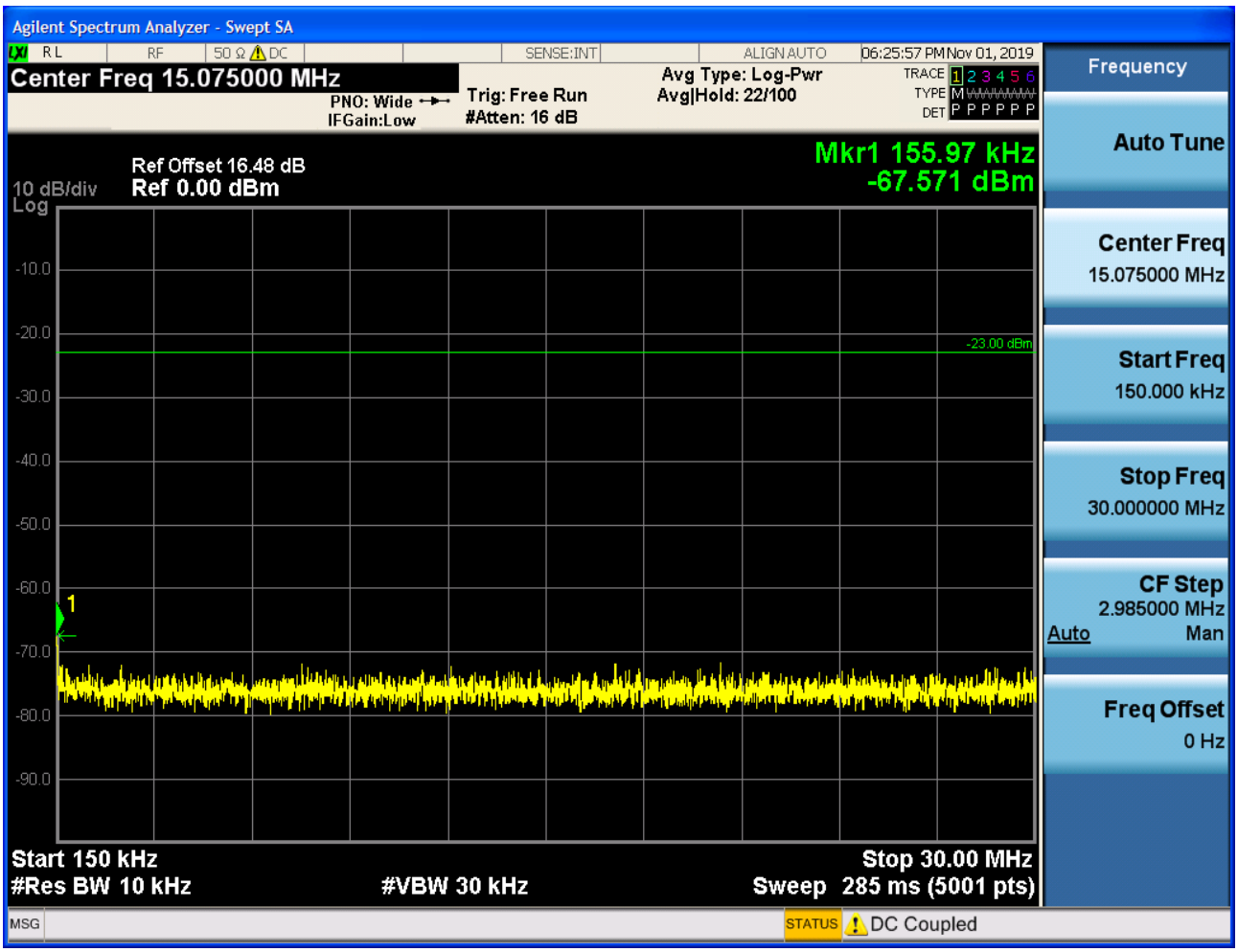

Agilent Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
06:27:31 PM Nov 01, 2019
Center Freq 515.000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 55/100
TRACE 1 2 3 4 5 6
TYPE M
DET P P P P P P
Ref Offset 16.47 dB
10 dB/div
Log
Ref 25.00 dBm
Mkr1 850.300 MHz
-34.645 dBm
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
-13.00 dBm
1
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.3 ms (40001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
515.000000 MHz
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz

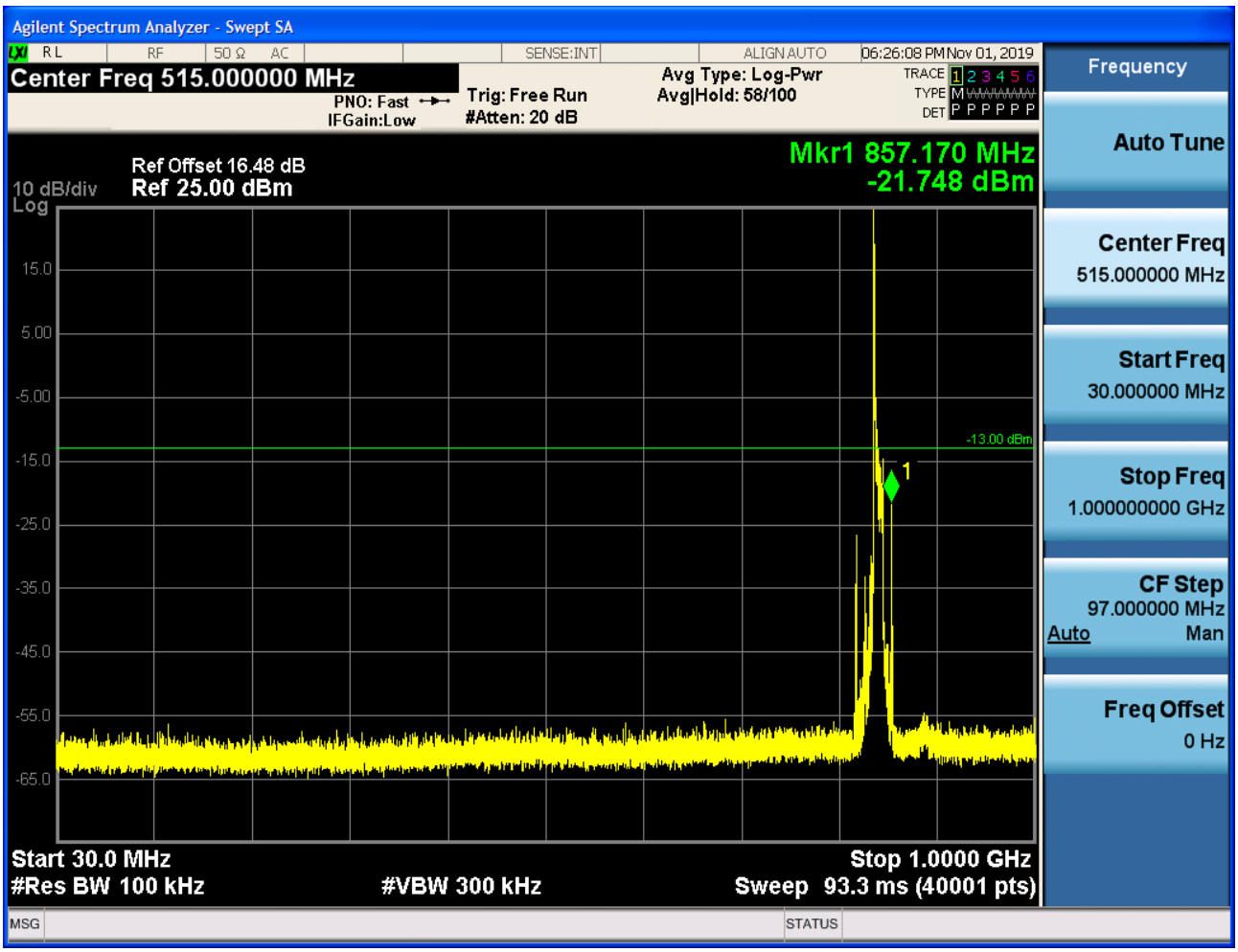


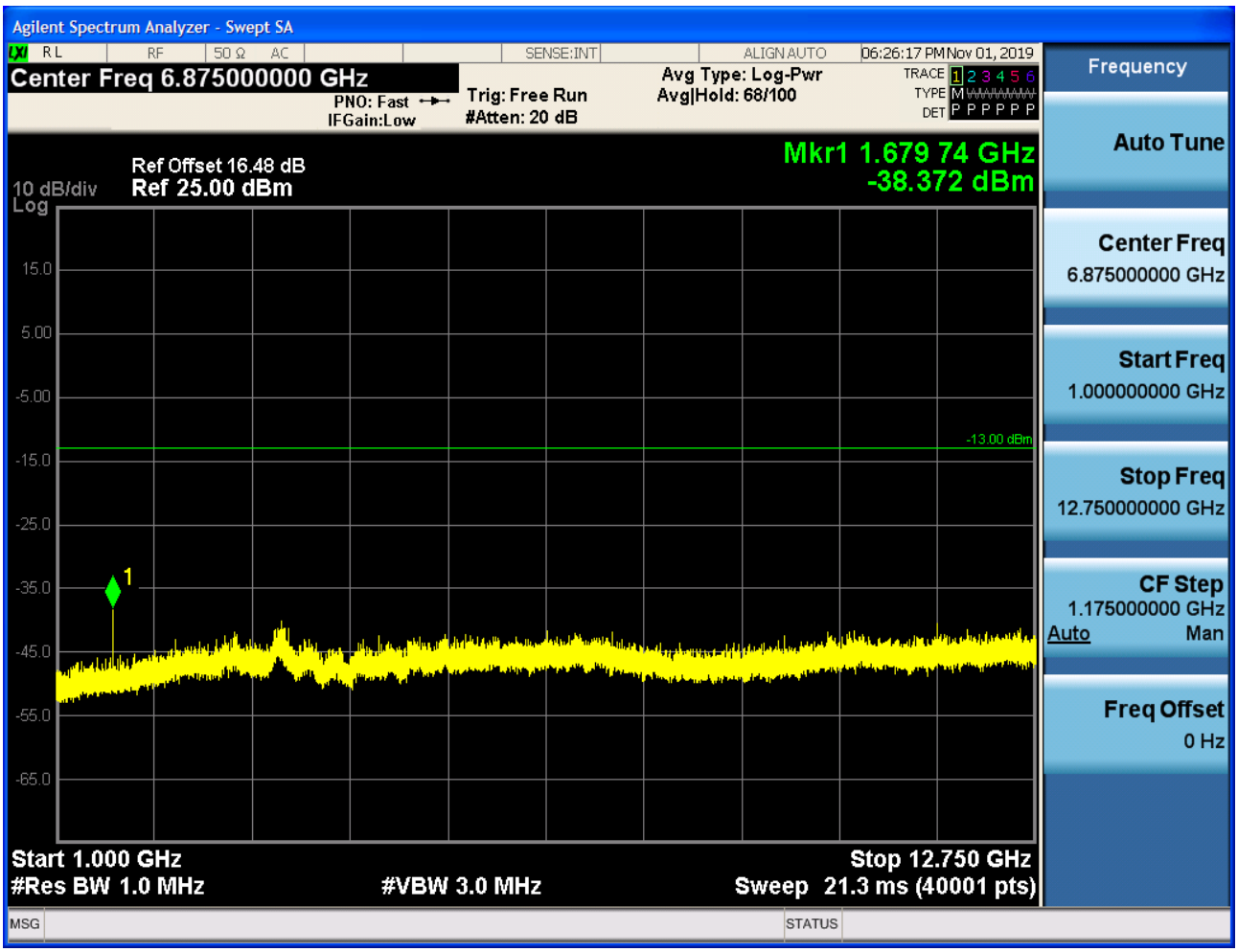
#### 6.2.1.2.4.3 Test Channel = HCH

##### 6.2.1.2.4.3.1 Test RB = RB1#0









# 7Appendix_G: Field Strength of Spurious Radiation

Note: We tested all modes, but the data presented below is the worst case.

9kHz~150kHz, RBW = 200Hz, VBW = 600 Hz, Detector: PK

150kHz~30MHz, RBW = 9kHz, VBW = 30k Hz, Detector: PK

30MHz~1GHz, RBW = 100 kHz, VBW = 300 kHz. Detector: PK

Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

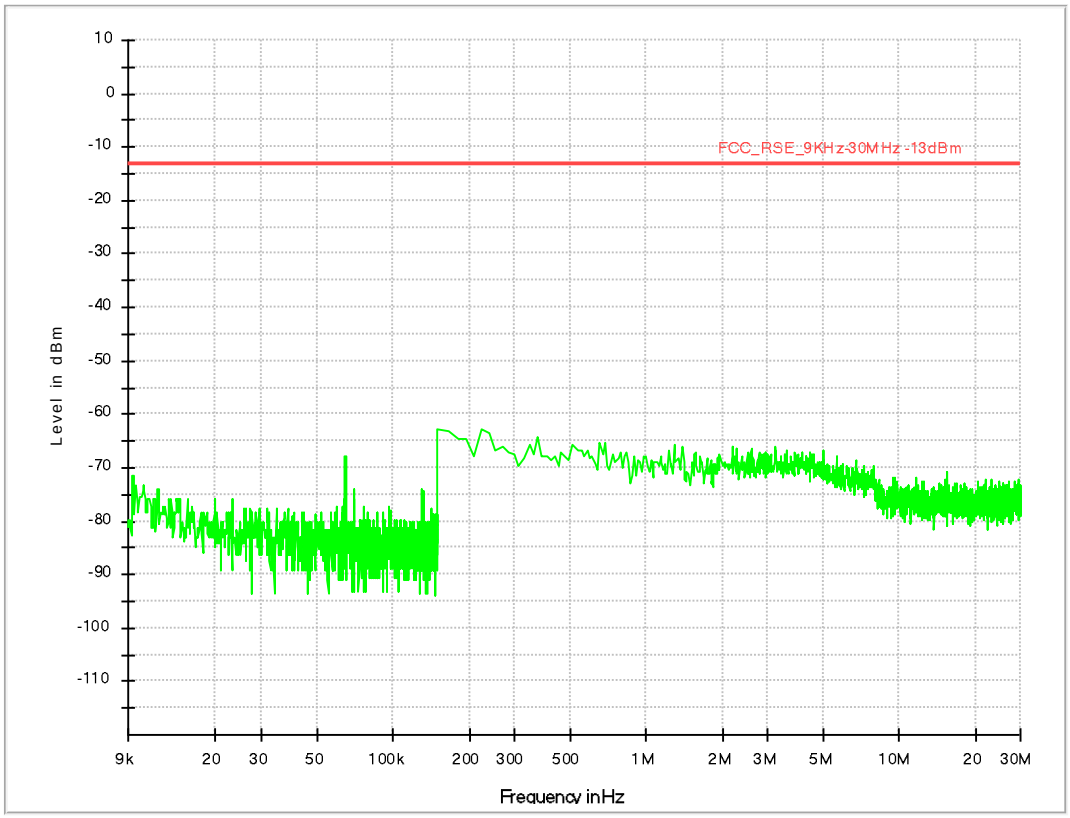
**Part I - Test Plots**

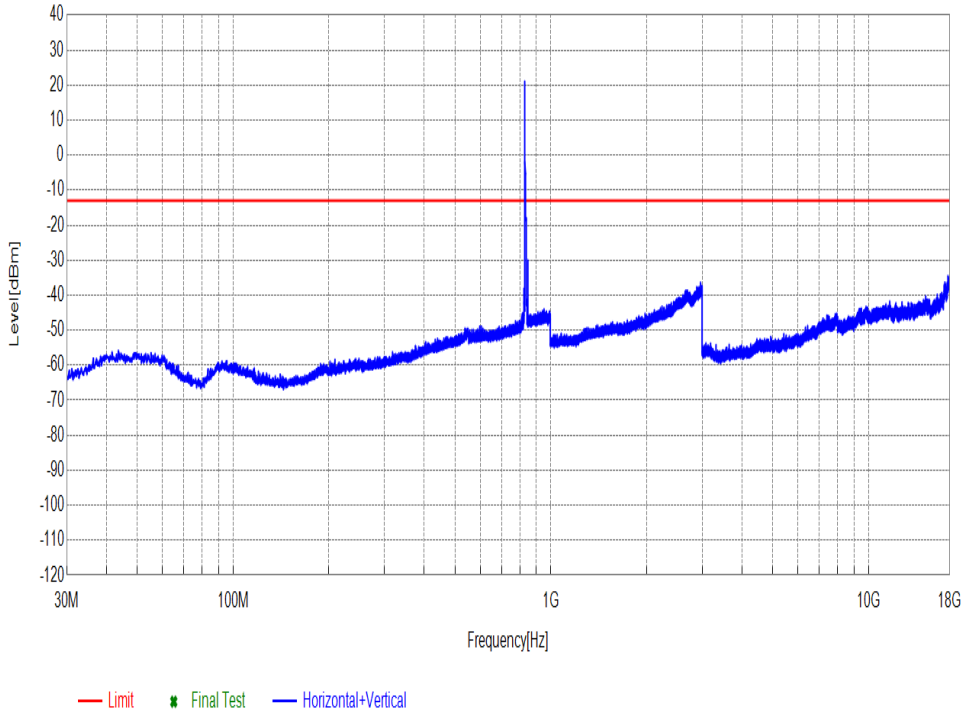
**7.1 For LTE**

**7.1.1 Test Band = Band5**

**7.1.1.1 Test Bandwidth = 1.4**

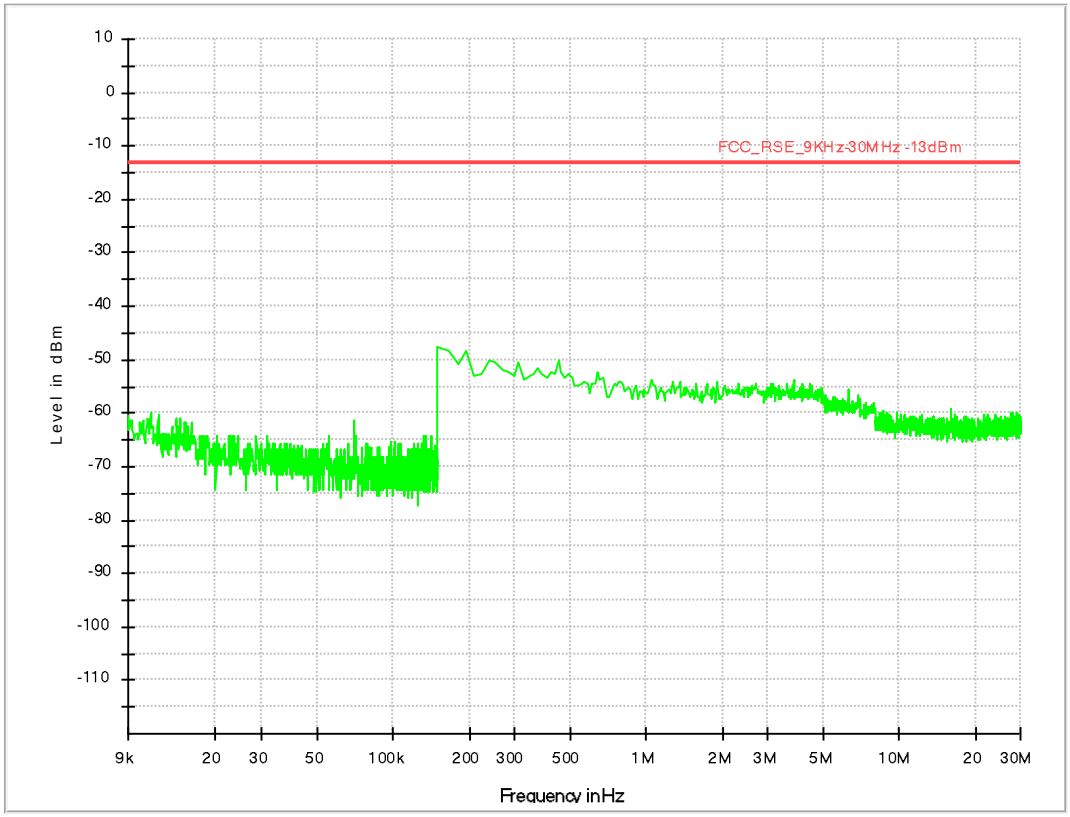
| Band5/TM1 |
|---|

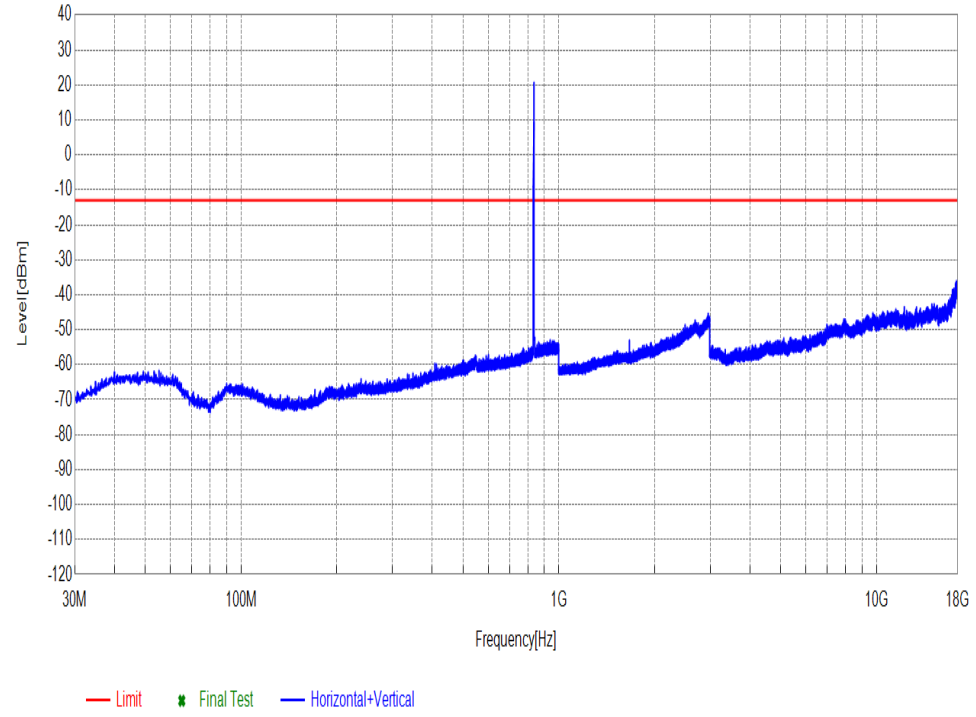


### 7.1.1.2 Test Bandwidth = 10

Band5/TM1





# 8Appendix_H: Frequency Stability

## 8.1 For LTE

### 8.1.1Frequency Error vs. Voltage:

| Test Band | Test Mode | Test Bandwidth (MHz) | Test Channel | Test Temp. | Test Volt. | Freq. Error [Hz] | Freq. vs. rated [ppm] | Verdict |
|---|---|---|---|---|---|---|---|---|
| Band5 | LTE/TM1 | 1.4 | LCH | TN | VL | -31.55708 | -0.03826 | PASS |
| | | | | | VN | -38.52367 | -0.04671 | PASS |
| | | | | | VH | -63.04264 | -0.07644 | PASS |
| | | | MCH | TN | VL | 200.94390 | 0.24022 | PASS |
| | | | | | VN | -20.99991 | -0.02510 | PASS |
| | | | | | VH | 14.73427 | 0.01761 | PASS |
| | | | HCH | TN | VL | -2.41756 | -0.00285 | PASS |
| | | | | | VN | -321.80790 | -0.37936 | PASS |
| | | | | | VH | -33.57410 | -0.03958 | PASS |
| | | 3 | LCH | TN | VL | -22.78805 | -0.02761 | PASS |
| | | | | | VN | -5.95093 | -0.00721 | PASS |
| | | | | | VH | 4.37737 | 0.00530 | PASS |
| | | | MCH | TN | VL | -1.21593 | -0.00145 | PASS |
| | | | | | VN | 4.00543 | 0.00479 | PASS |
| | | | | | VH | -1.23024 | -0.00147 | PASS |
| | | | HCH | TN | VL | 0.05722 | 0.00007 | PASS |
| | | | | | VN | 60.85396 | 0.07180 | PASS |
| | | | | | VH | -1.21593 | -0.00143 | PASS |
| | | 5 | LCH | TN | VL | -0.04292 | -0.00005 | PASS |
| | | | | | VN | -0.21458 | -0.00026 | PASS |
| | | | | | VH | -0.84400 | -0.00102 | PASS |
| | | | MCH | TN | VL | 12.55989 | 0.01501 | PASS |
| | | | | | VN | 45.44735 | 0.05433 | PASS |
| | | | | | VH | 23.74649 | 0.02839 | PASS |
| | | | HCH | TN | VL | 0.02861 | 0.00003 | PASS |
| | | | | | VN | -34.94740 | -0.04128 | PASS |
| | | | | | VH | -0.57220 | -0.00068 | PASS |
| | | 10 | LCH | TN | VL | 134.56820 | 0.16233 | PASS |
| | | | | | VN | -104.64190 | -0.12623 | PASS |
| | | | | | VH | 95.31498 | 0.11498 | PASS |

| Test Band | Test Mode | Test Bandwidth (MHz) | Test Channel | Test Temp. | Test Volt. | Freq. Error [Hz] | Freq. vs. rated [ppm] | Verdict |
|---|---|---|---|---|---|---|---|---|
| | | | MCH | TN | VL | -1.21633 | -0.00082 | PASS |
| | | | | | VN | -12.10213 | -0.01447 | PASS |
| | | | | | VH | -11.25453 | -0.01149 | PASS |
| | | | HCH | TN | VL | -0.60052 | -0.00048 | PASS |
| | | | | | VN | -2.61168 | -0.00023 | PASS |
| | | | | | VH | 4.79221 | 0.00568 | PASS |
| | LTE/TM2 | 1.4 | LCH | TN | VL | 19.81258 | 0.02402 | PASS |
| | | | | | VN | -34.54685 | -0.04189 | PASS |
| | | | | | VH | -32.85885 | -0.03984 | PASS |
| | | | MCH | TN | VL | -58.27904 | -0.06967 | PASS |
| | | | | | VN | -119.36190 | -0.14269 | PASS |
| | | | | | VH | -54.57401 | -0.06524 | PASS |
| | | | HCH | TN | VL | 11.20090 | 0.01320 | PASS |
| | | | | | VN | -419.58330 | -0.49462 | PASS |
| | | | | | VH | 21.88683 | 0.02580 | PASS |
| | | 3 | LCH | TN | VL | 1.94550 | 0.00236 | PASS |
| | | | | | VN | -3.81947 | -0.00463 | PASS |
| | | | | | VH | -0.67234 | -0.00081 | PASS |
| | | | MCH | TN | VL | 1.47343 | 0.00176 | PASS |
| | | | | | VN | 10.22816 | 0.01223 | PASS |
| | | | | | VH | -2.27451 | -0.00272 | PASS |
| | | | HCH | TN | VL | 0.85831 | 0.00101 | PASS |
| | | | | | VN | 49.25251 | 0.05812 | PASS |
| | | | | | VH | 0.65804 | 0.00078 | PASS |
| | | 5 | LCH | TN | VL | -0.42915 | -0.00052 | PASS |
| | | | | | VN | 1.54495 | 0.00187 | PASS |
| | | | | | VH | -0.97275 | -0.00118 | PASS |
| | | | MCH | TN | VL | 15.36369 | 0.01837 | PASS |
| | | | | | VN | -0.35763 | -0.00043 | PASS |
| | | | | | VH | 399.52750 | 0.47762 | PASS |
| | | | HCH | TN | VL | 38.42354 | 0.04539 | PASS |
| | | | | | VN | -77.16179 | -0.09115 | PASS |
| | | | | | VH | -1.37329 | -0.00162 | PASS |
| | | 10 | LCH | TN | VL | 266.80470 | 0.32184 | PASS |
| | | | | | VN | -155.41080 | -0.18747 | PASS |
| | | | | | VH | 239.05280 | 0.28836 | PASS |
| | | | MCH | TN | VL | 7.37478 | 0.00896 | PASS |
| | | | | | VN | 6.66618 | 0.00797 | PASS |