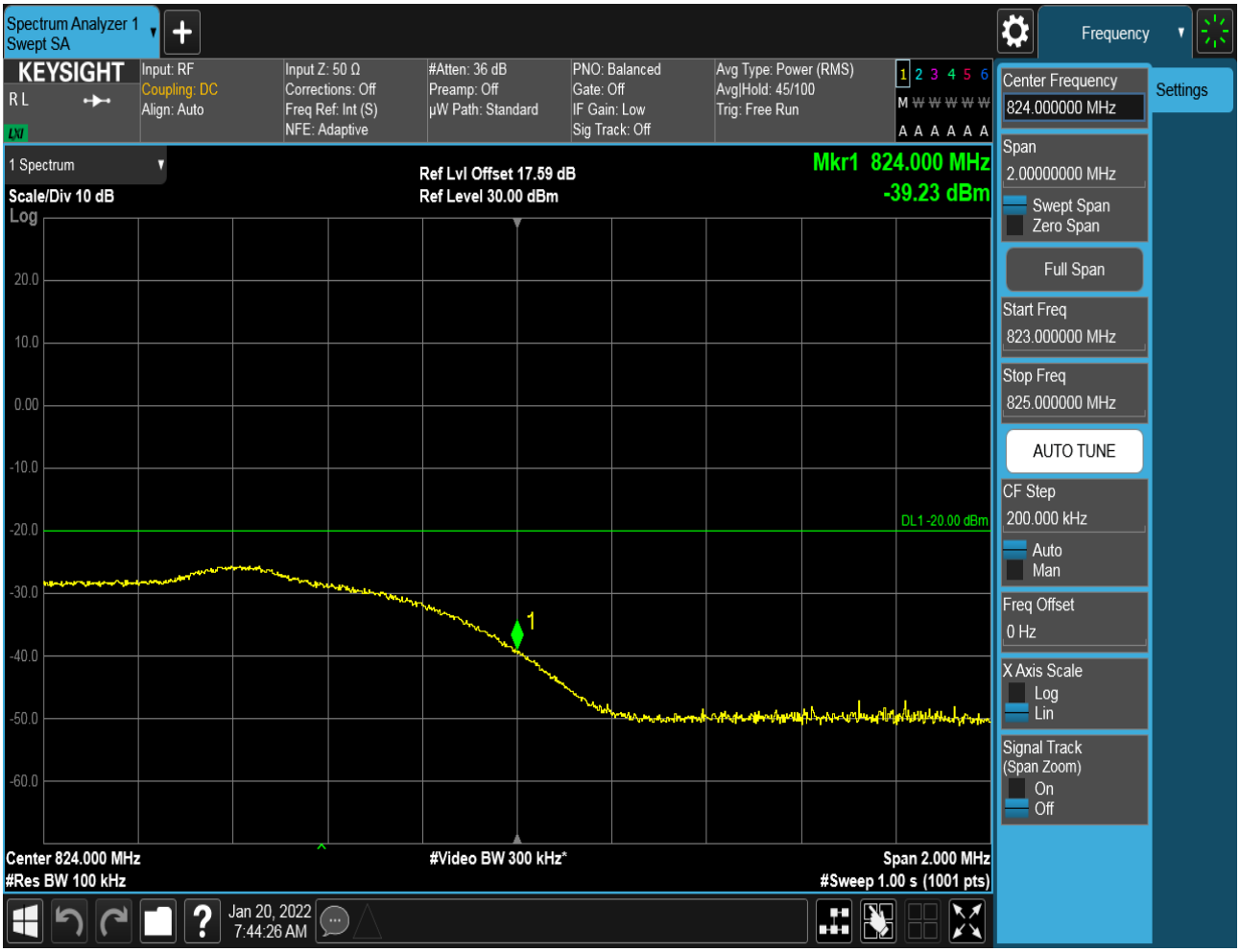
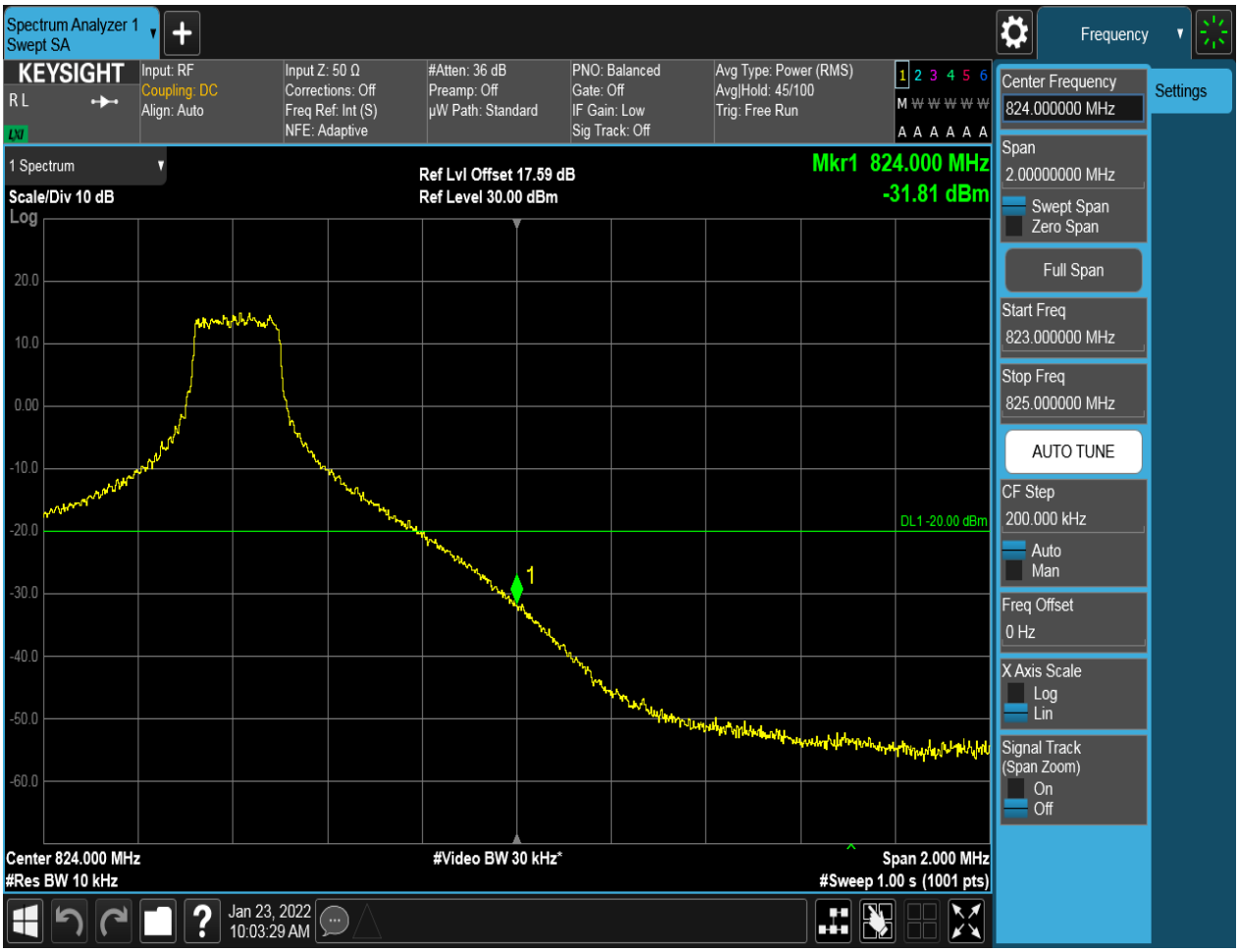
5.1.1.2.4.2 Test Channel = HCH

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

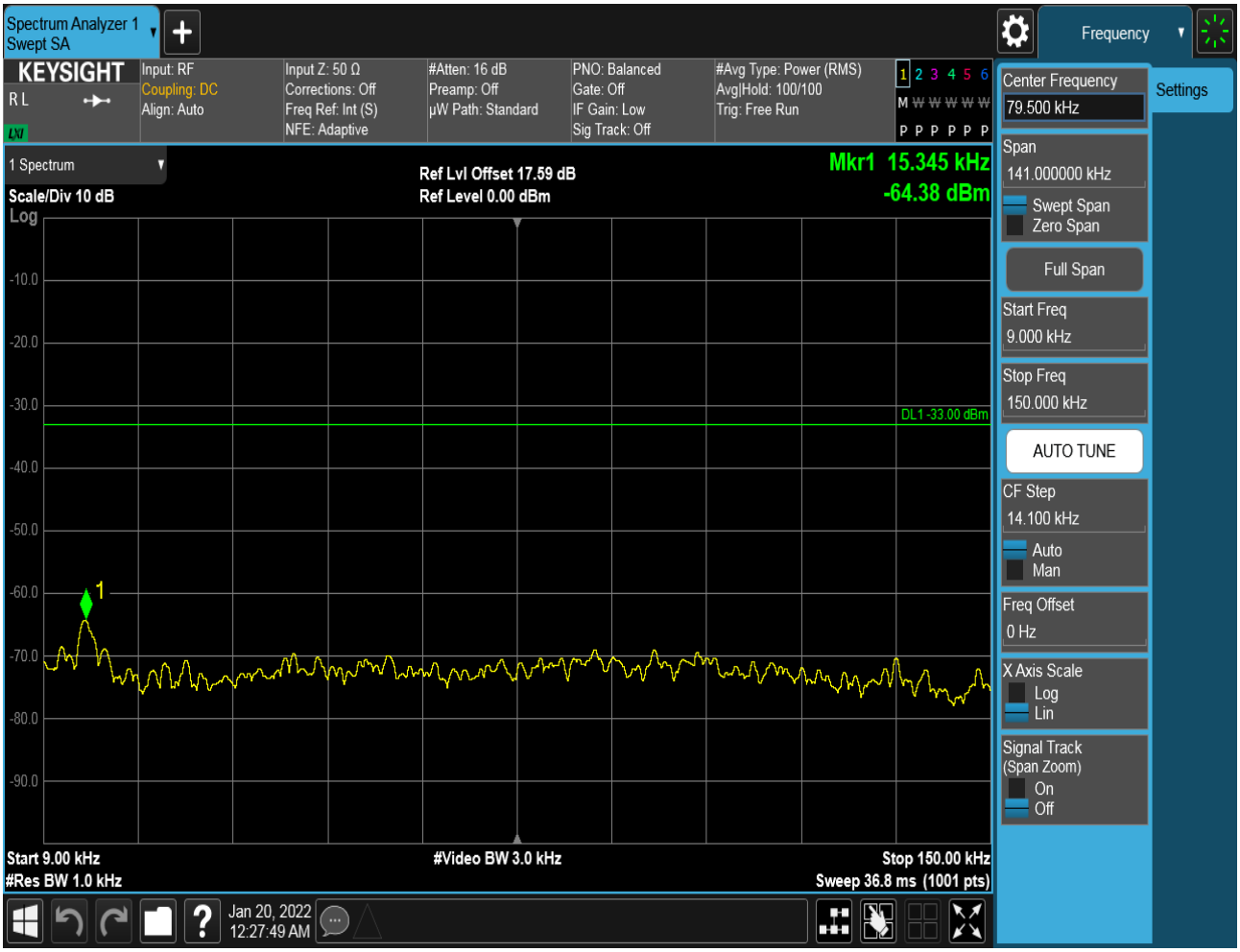
6.1.1 Test Band = Band26_A

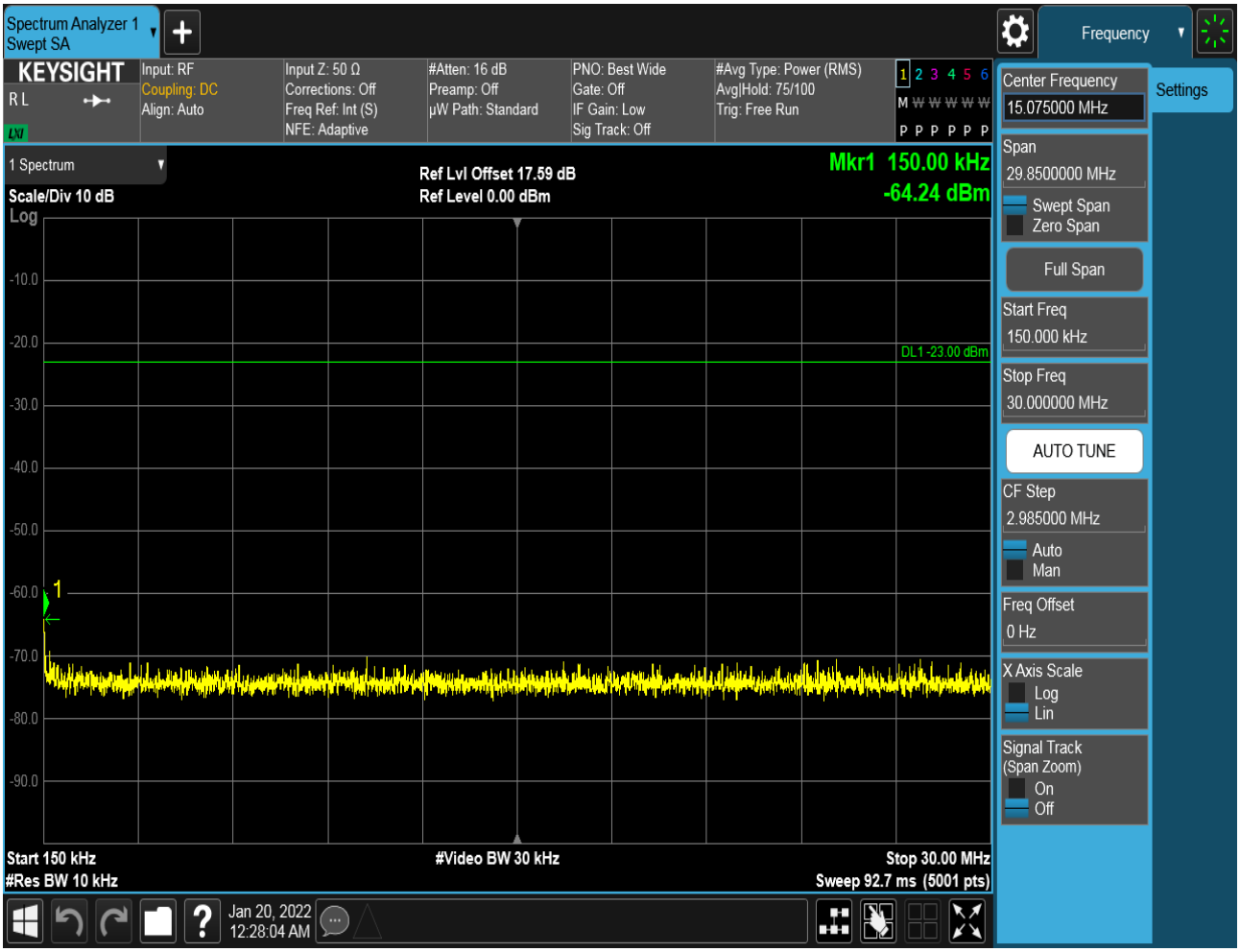
6.1.1.1 Test Mode = LTE/TM1

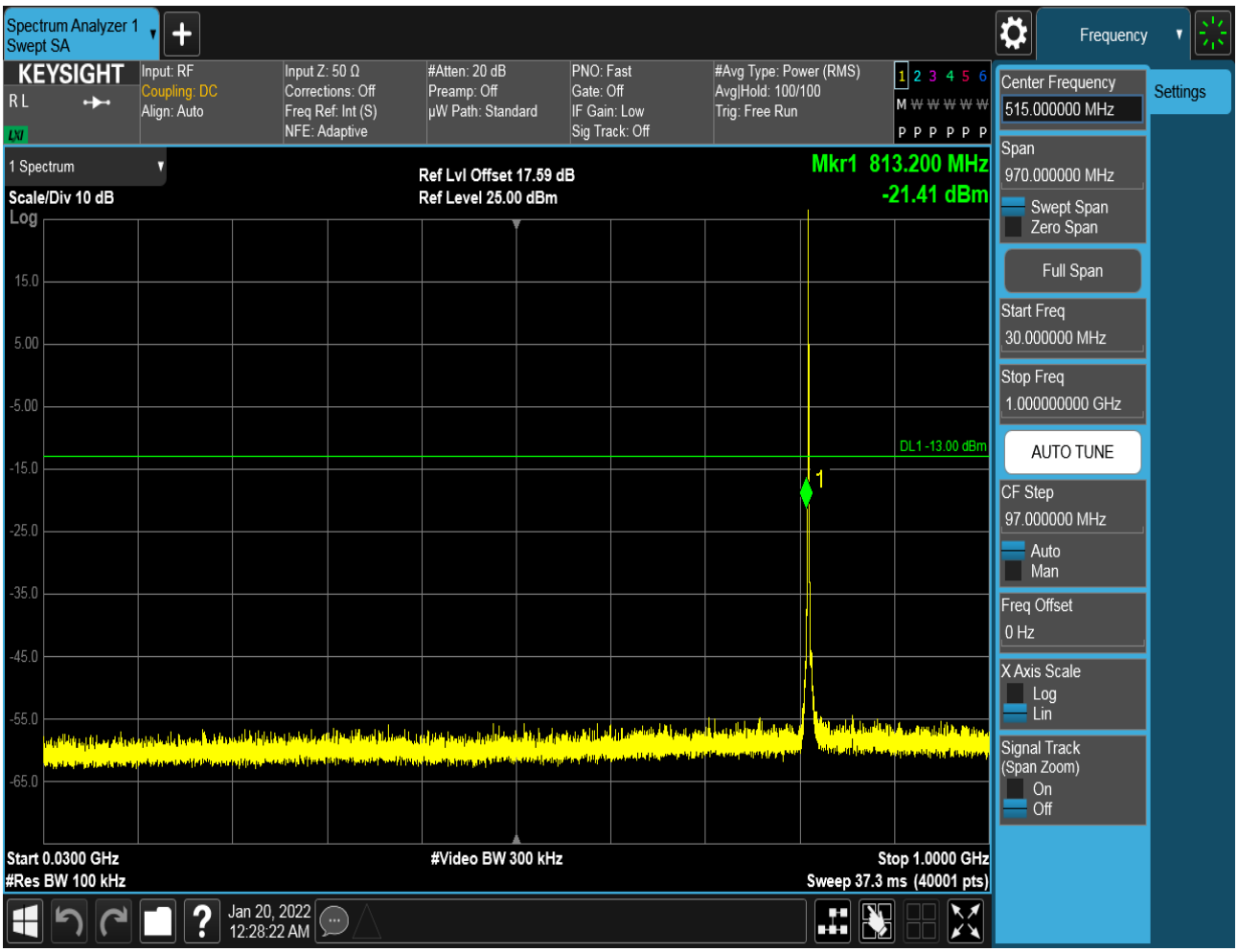
6.1.1.1.1 Test Bandwidth = 1.4MHz

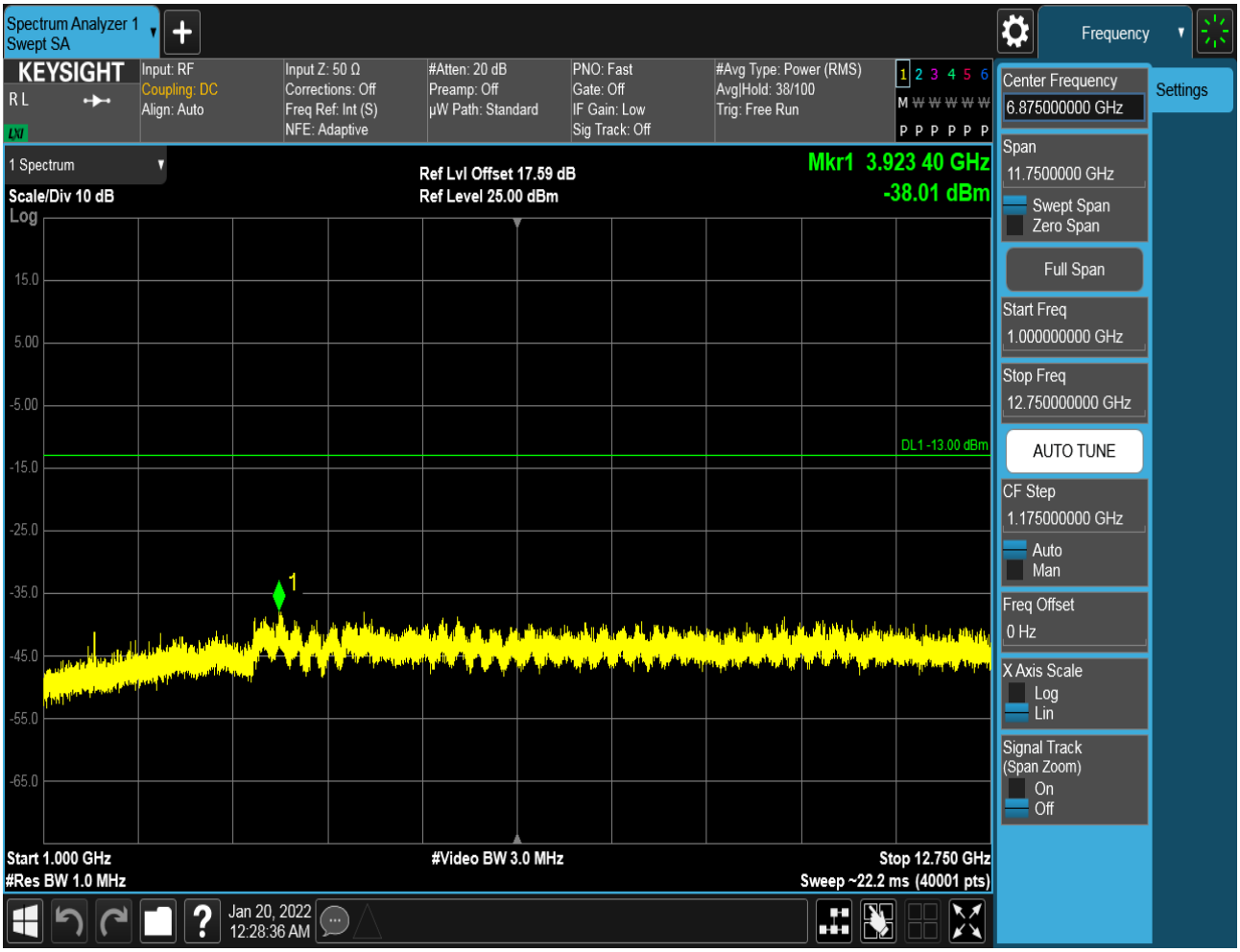
6.1.1.1.1.1 Test Channel = LCH

6.1.1.1.1.1.1 Test RB = RB1#0


Spectrum Analyzer 1
Swept SA
KEYSIGHT
RL
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 16 dB
Preamp: Off
µW Path: Standard
PNO: Balanced
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 100/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 0.00 dBm
Mkr1 15.345 kHz
-64.38 dBm
Scale/Div 10 dB
Log
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
DL1 -33.00 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#Video BW 3.0 kHz
Stop 150.00 kHz
Sweep 36.8 ms (1001 pts)
Jan 20, 2022
12:27:49 AM
Frequency
Settings
Center Frequency
79.500 kHz
Span
141.000000 kHz
Swept Span
Zero Span
Full Span
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
AUTO TUNE
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

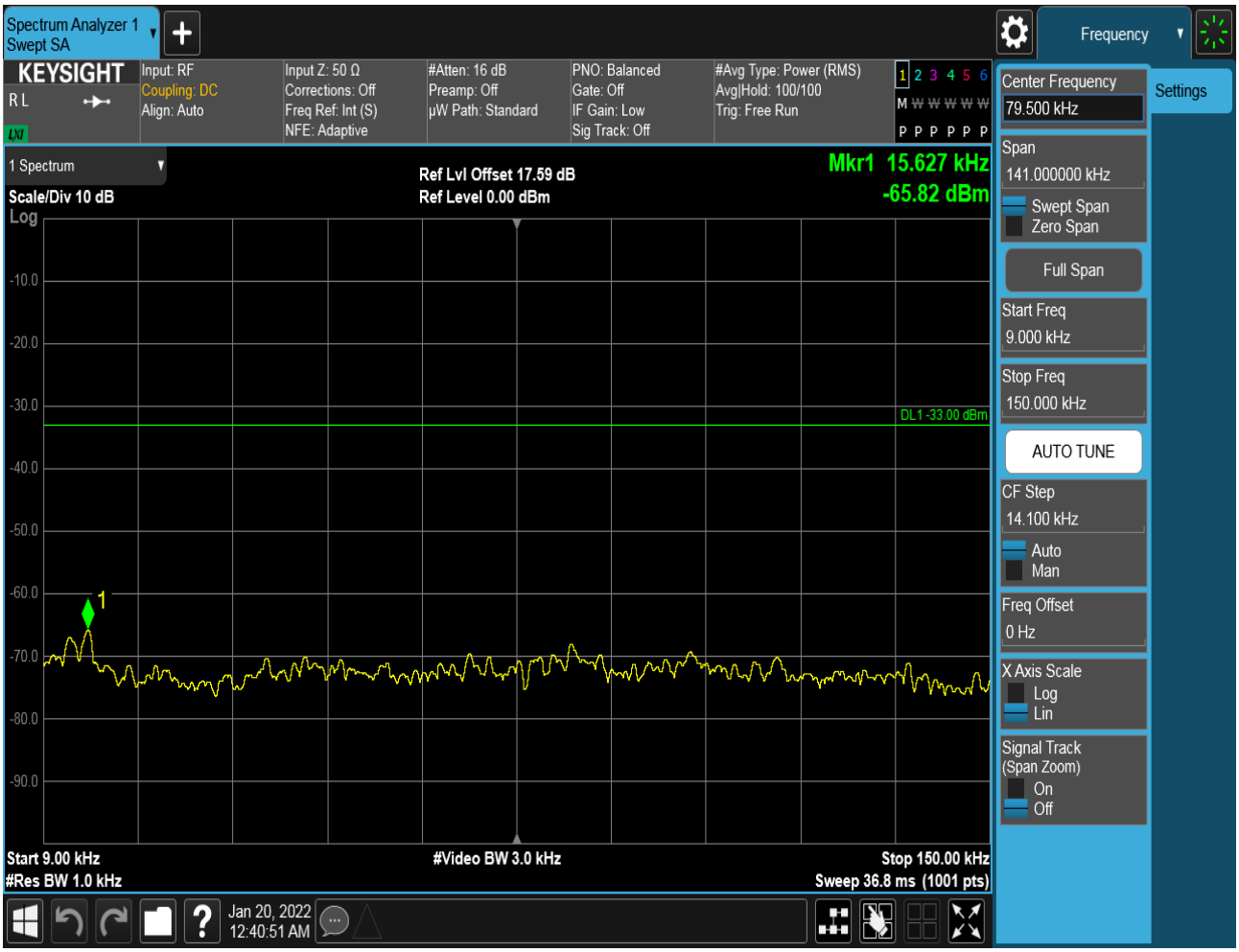

Spectrum Analyzer 1
Swept SA
KEYSIGHT
RL
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 16 dB
Preamp: Off
µW Path: Standard
PNO: Best Wide
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 75/100
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 17.59 dB
Ref Level 0.00 dBm
Mkr1 150.00 kHz
-64.24 dBm
DL1 -23.00 dBm
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
Start 150 kHz
#Res BW 10 kHz
#Video BW 30 kHz
Stop 30.00 MHz
Sweep 92.7 ms (5001 pts)
Jan 20, 2022
12:28:04 AM
Frequency
Settings
Center Frequency
15.075000 MHz
Span
29.8500000 MHz
Swept Span
Zero Span
Full Span
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
AUTO TUNE
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

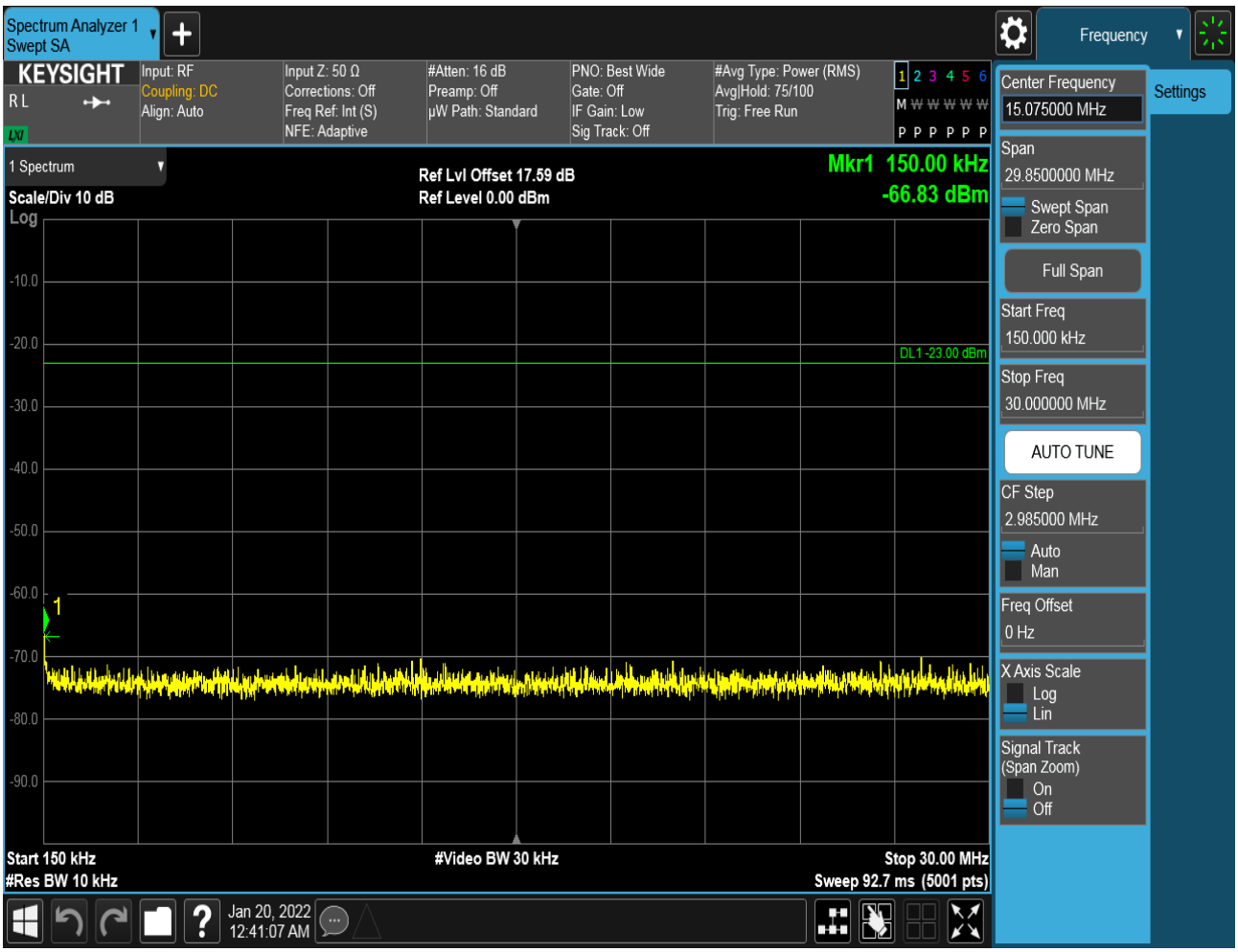

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 100/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 813.200 MHz
-21.41 dBm
Scale/Div 10 dB
Log
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
DL1 -13.00 dBm
Start 0.0300 GHz
#Res BW 100 kHz
#Video BW 300 kHz
Stop 1.0000 GHz
Sweep 37.3 ms (40001 pts)
Jan 20, 2022
12:28:22 AM
Frequency
Settings
Center Frequency
515.000000 MHz
Span
970.000000 MHz
Swept Span
Zero Span
Full Span
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
AUTO TUNE
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

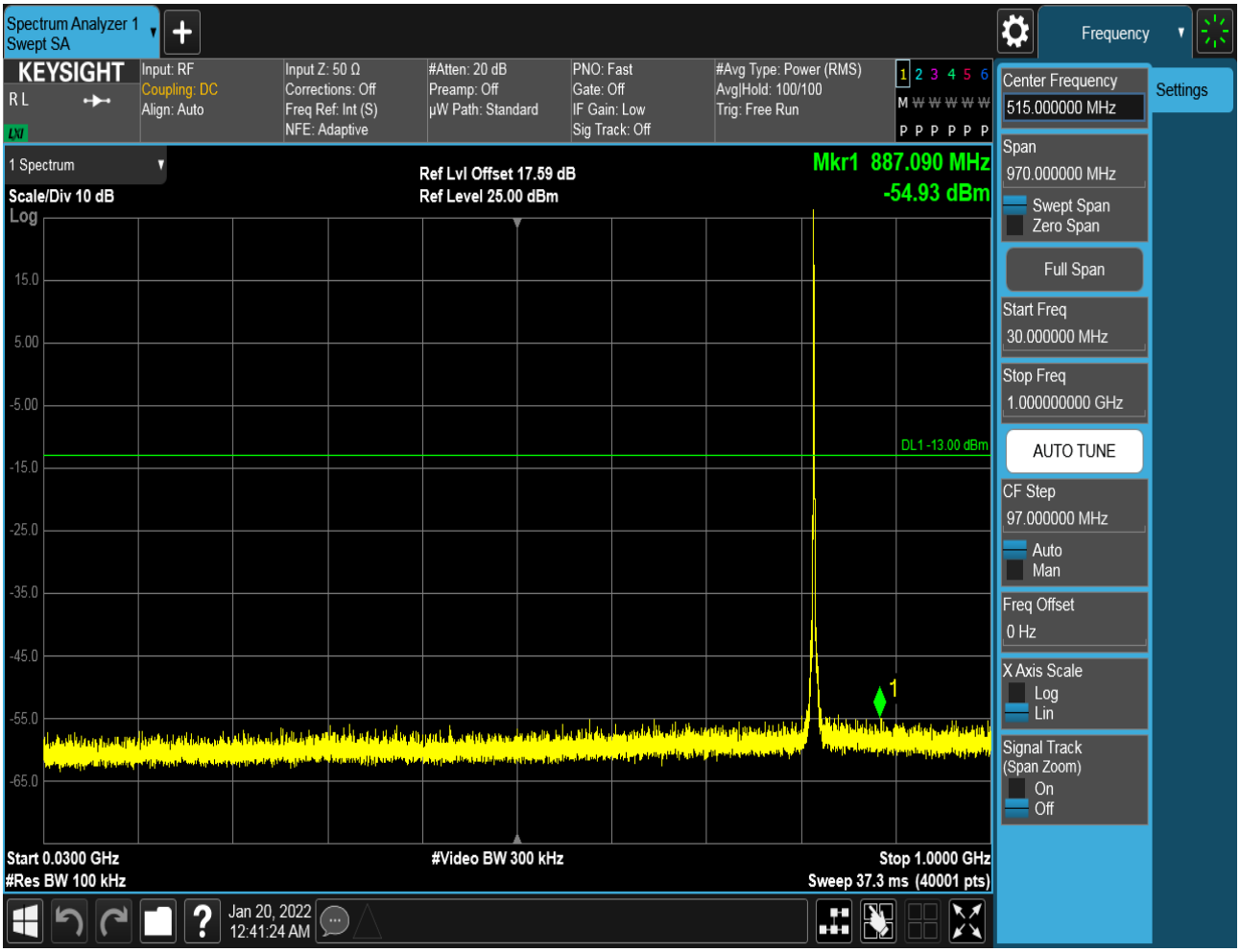

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 38/100
Trig: Free Run
Frequency
Settings
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 3.923 40 GHz
-38.01 dBm
Scale/Div 10 dB
Log
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
DL1 -13.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#Video BW 3.0 MHz
Stop 12.750 GHz
Sweep ~22.2 ms (40001 pts)
Center Frequency
6.875000000 GHz
Span
11.7500000 GHz
Swept Span
Zero Span
Full Span
Start Freq
1.000000000 GHz
Stop Freq
12.750000000 GHz
AUTO TUNE
CF Step
1.175000000 GHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off
Jan 20, 2022
12:28:36 AM

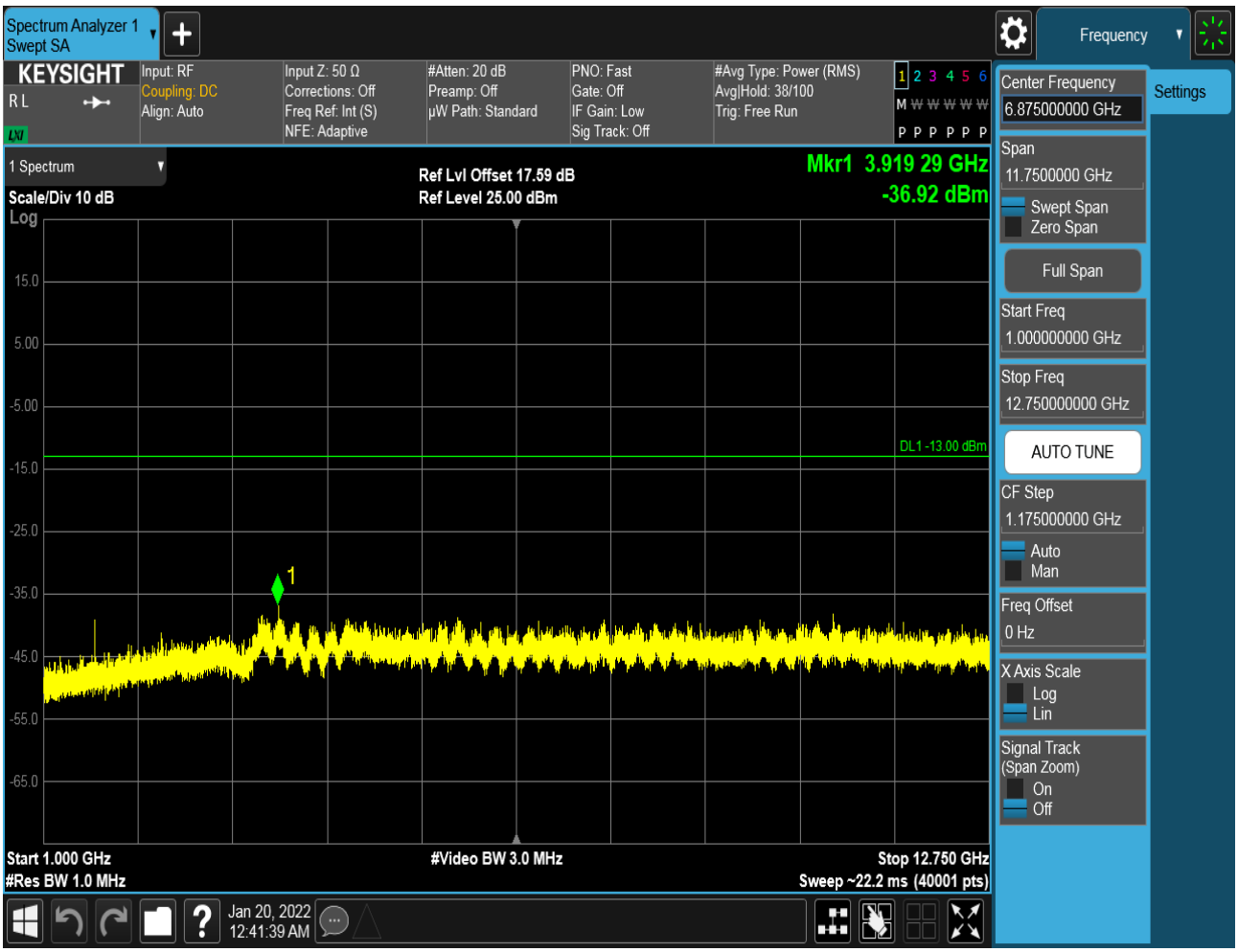
6.1.1.1.1.2 Test Channel = MCH

6.1.1.1.1.2.1 Test RB = RB1#0



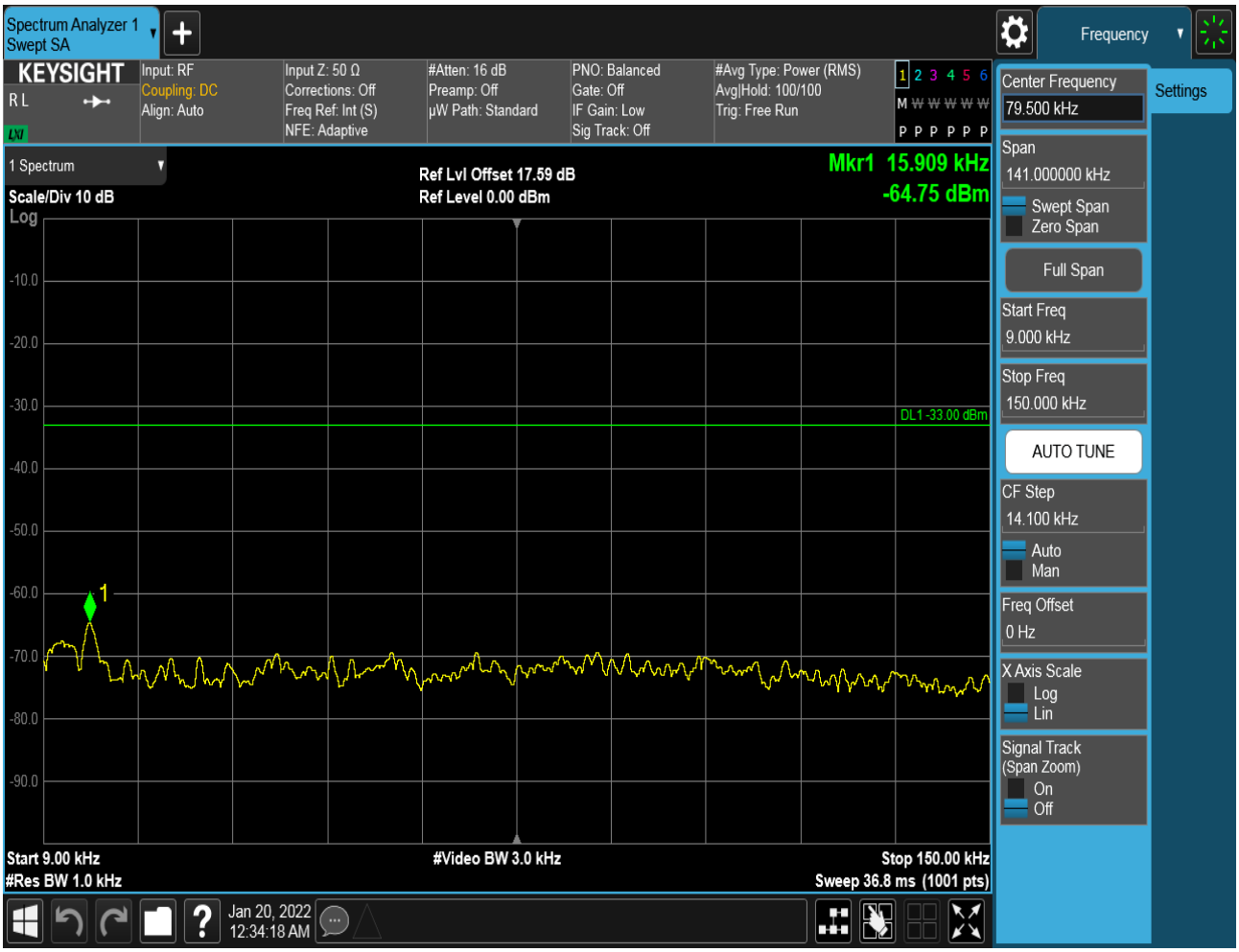

Spectrum Analyzer 1
Swept SA
KEYSIGHT
RL
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 16 dB
Preamp: Off
µW Path: Standard
PNO: Best Wide
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 75/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 0.00 dBm
Mkr1 150.00 kHz
-66.83 dBm
Scale/Div 10 dB
Log
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
DL1 -23.00 dBm
Start 150 kHz
#Res BW 10 kHz
#Video BW 30 kHz
Stop 30.00 MHz
Sweep 92.7 ms (5001 pts)
Jan 20, 2022
12:41:07 AM
Frequency
Settings
Center Frequency
15.075000 MHz
Span
29.8500000 MHz
Swept Span
Zero Span
Full Span
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
AUTO TUNE
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

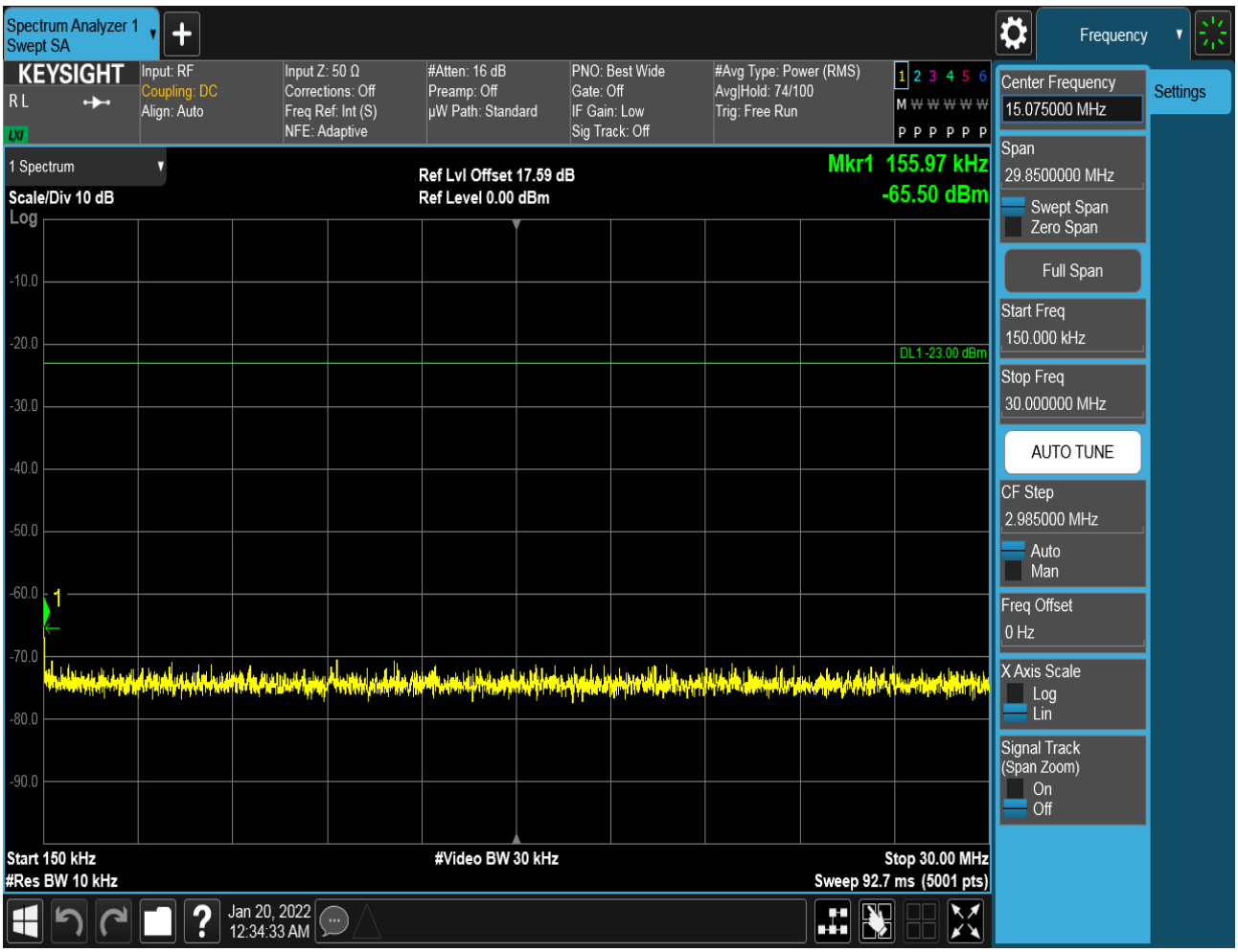

Spectrum Analyzer 1
Swept SA
KEYSIGHT
RL
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 100/100
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 887.090 MHz
-54.93 dBm
DL1 -13.00 dBm
Start 0.0300 GHz
#Res BW 100 kHz
#Video BW 300 kHz
Stop 1.0000 GHz
Sweep 37.3 ms (40001 pts)
Jan 20, 2022
12:41:24 AM
Frequency
Settings
Center Frequency
515.000000 MHz
Span
970.000000 MHz
Swept Span
Zero Span
Full Span
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
AUTO TUNE
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

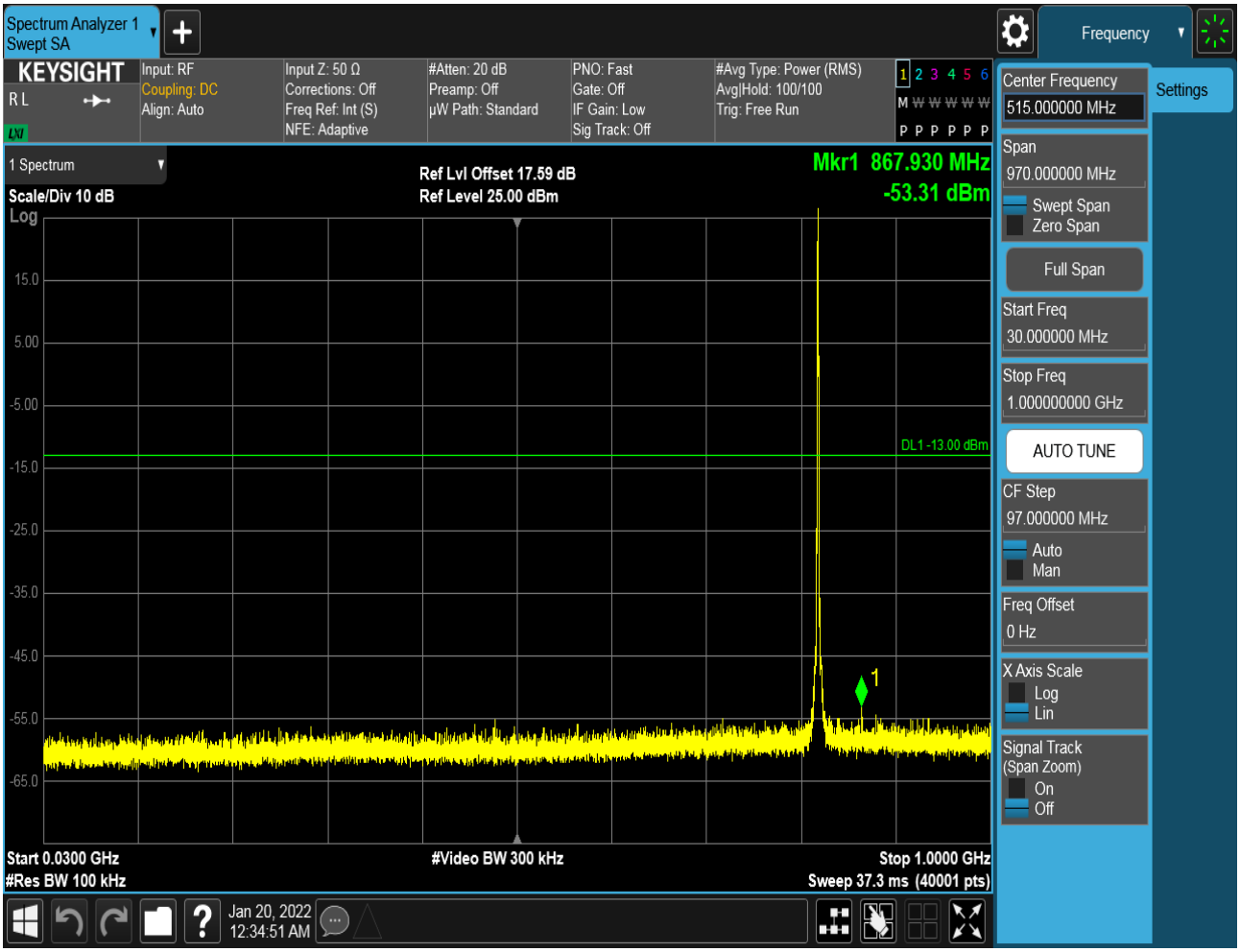

Spectrum Analyzer 1
Swept SA
KEYSIGHT
RL
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
μW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 38/100
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 3.919 29 GHz
-36.92 dBm
DL1 -13.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#Video BW 3.0 MHz
Stop 12.750 GHz
Sweep ~22.2 ms (40001 pts)
Jan 20, 2022
12:41:39 AM
Frequency
Settings
Center Frequency
6.875000000 GHz
Span
11.7500000 GHz
Swept Span
Zero Span
Full Span
Start Freq
1.000000000 GHz
Stop Freq
12.750000000 GHz
AUTO TUNE
CF Step
1.175000000 GHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

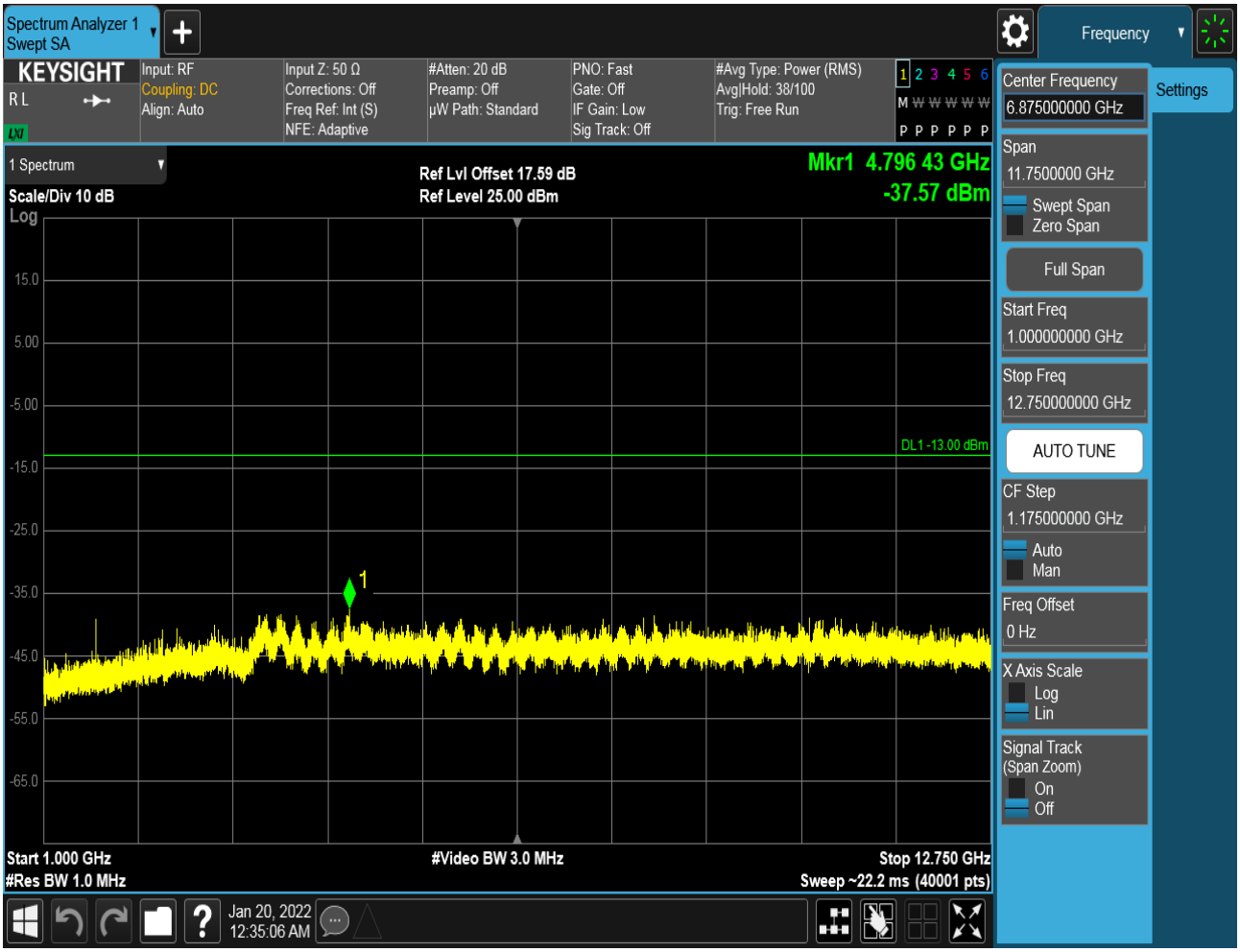
6.1.1.1.1.3 Test Channel = HCH

6.1.1.1.1.3.1 Test RB = RB1#0




Spectrum Analyzer 1
Swept SA
KEYSIGHT
RL
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 16 dB
Preamp: Off
µW Path: Standard
PNO: Best Wide
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 74/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 0.00 dBm
Mkr1 155.97 kHz
-65.50 dBm
Scale/Div 10 dB
Log
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
DL1 -23.00 dBm
Start 150 kHz
#Res BW 10 kHz
#Video BW 30 kHz
Stop 30.00 MHz
Sweep 92.7 ms (5001 pts)
Jan 20, 2022
12:34:33 AM
Frequency
Settings
Center Frequency
15.075000 MHz
Span
29.8500000 MHz
Swept Span
Zero Span
Full Span
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
AUTO TUNE
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

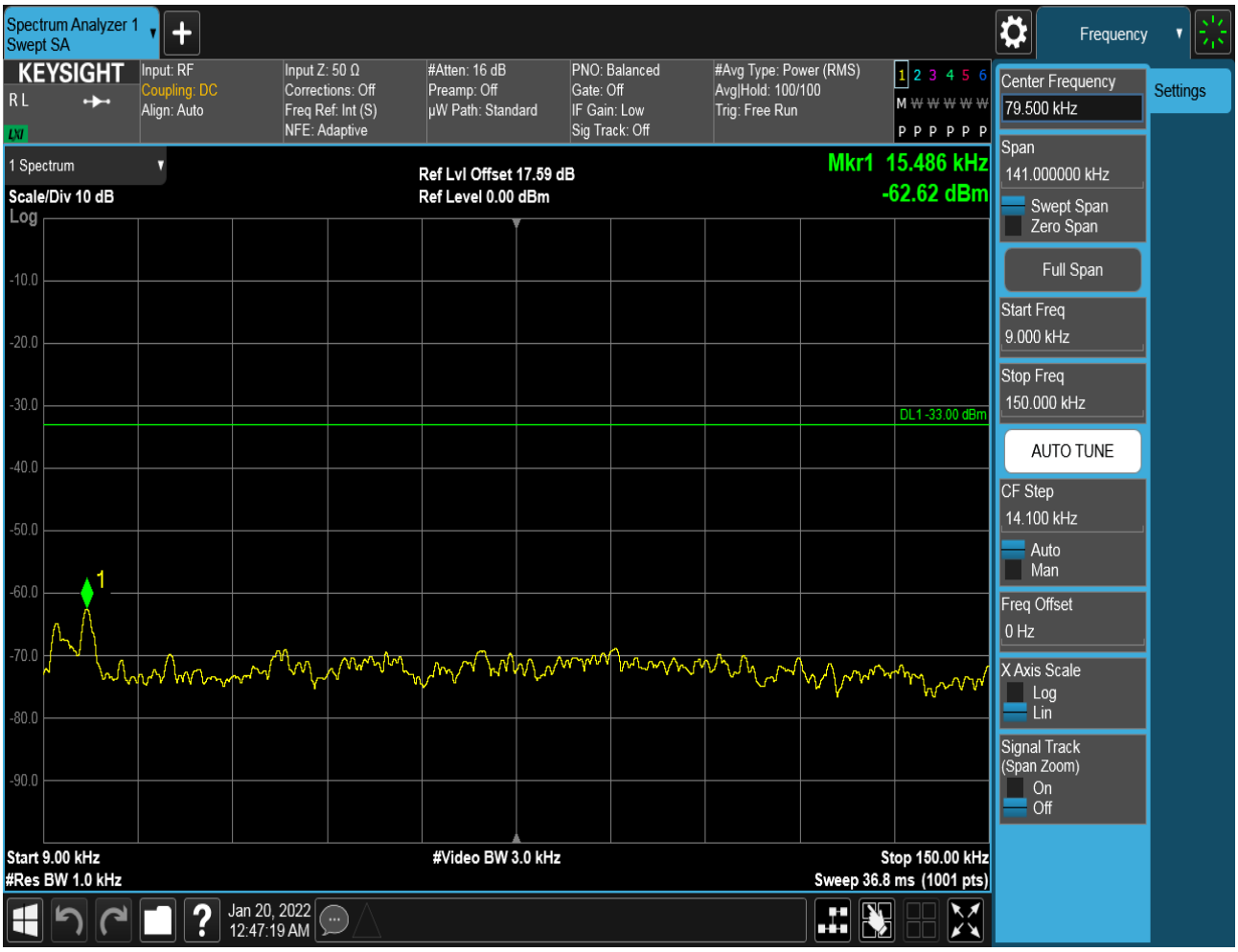

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 100/100
Trig: Free Run
Frequency
Settings
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 867.930 MHz
-53.31 dBm
Scale/Div 10 dB
Log
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
DL1 -13.00 dBm
Start 0.0300 GHz
#Res BW 100 kHz
#Video BW 300 kHz
Stop 1.0000 GHz
Sweep 37.3 ms (40001 pts)
Center Frequency
515.000000 MHz
Span
970.000000 MHz
Swept Span
Zero Span
Full Span
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
AUTO TUNE
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off
Jan 20, 2022
12:34:51 AM

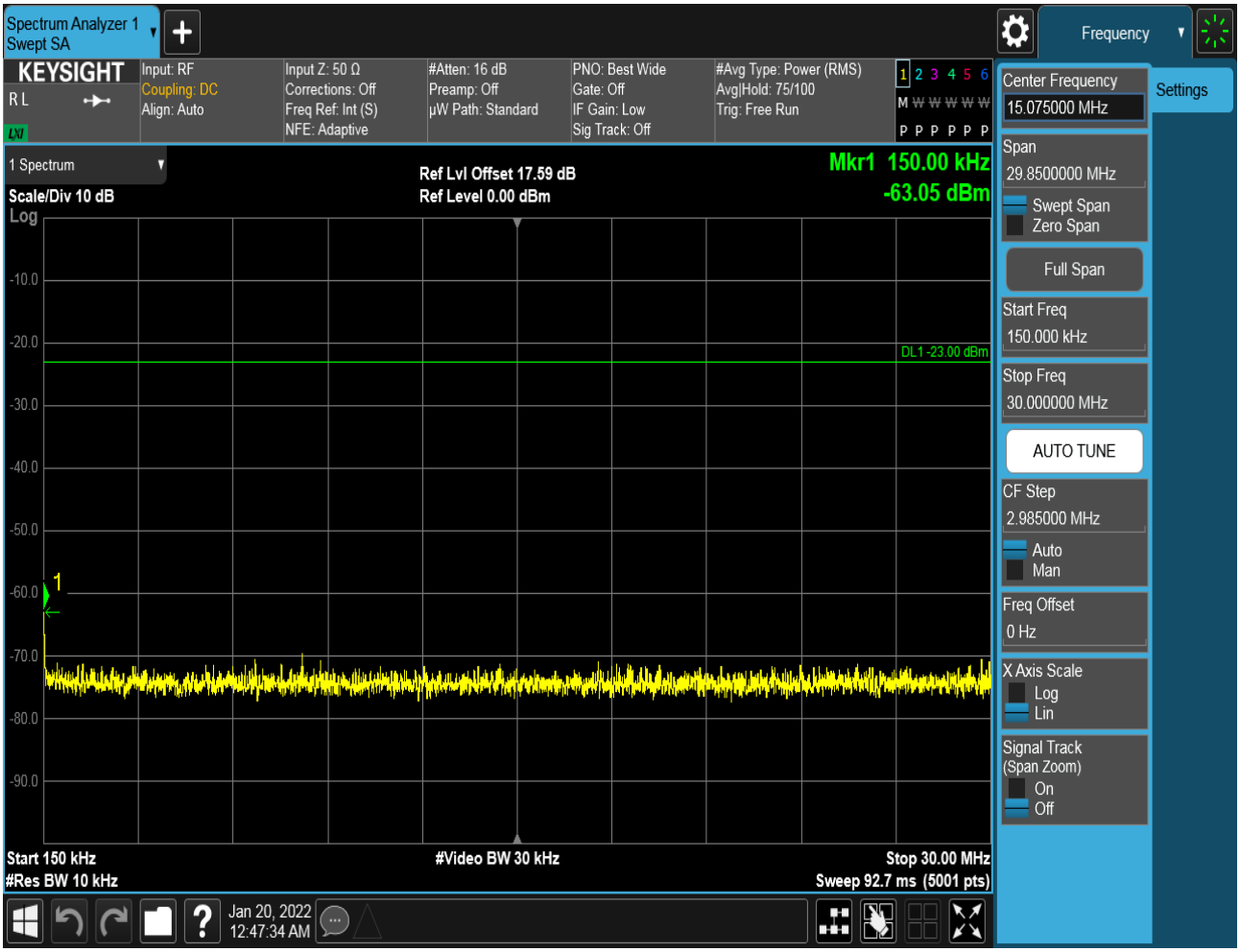

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 38/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 4.796 43 GHz
-37.57 dBm
Scale/Div 10 dB
Log
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
DL1 -13.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#Video BW 3.0 MHz
Stop 12.750 GHz
Sweep ~22.2 ms (40001 pts)
Jan 20, 2022
12:35:06 AM
Frequency
Settings
Center Frequency
6.875000000 GHz
Span
11.7500000 GHz
Swept Span
Zero Span
Full Span
Start Freq
1.000000000 GHz
Stop Freq
12.750000000 GHz
AUTO TUNE
CF Step
1.175000000 GHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

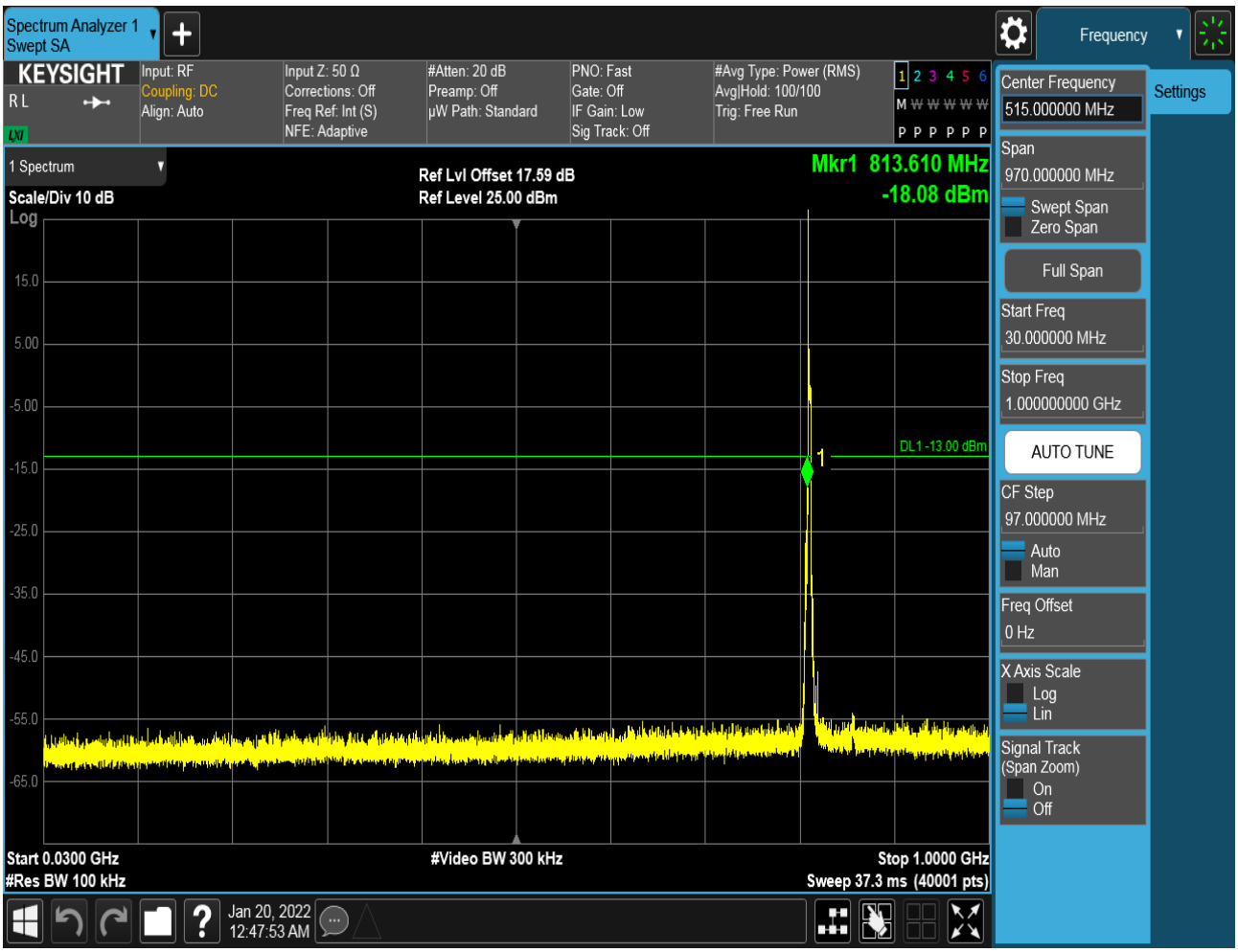
6.2.1.1.2 Test Bandwidth = 3MHz

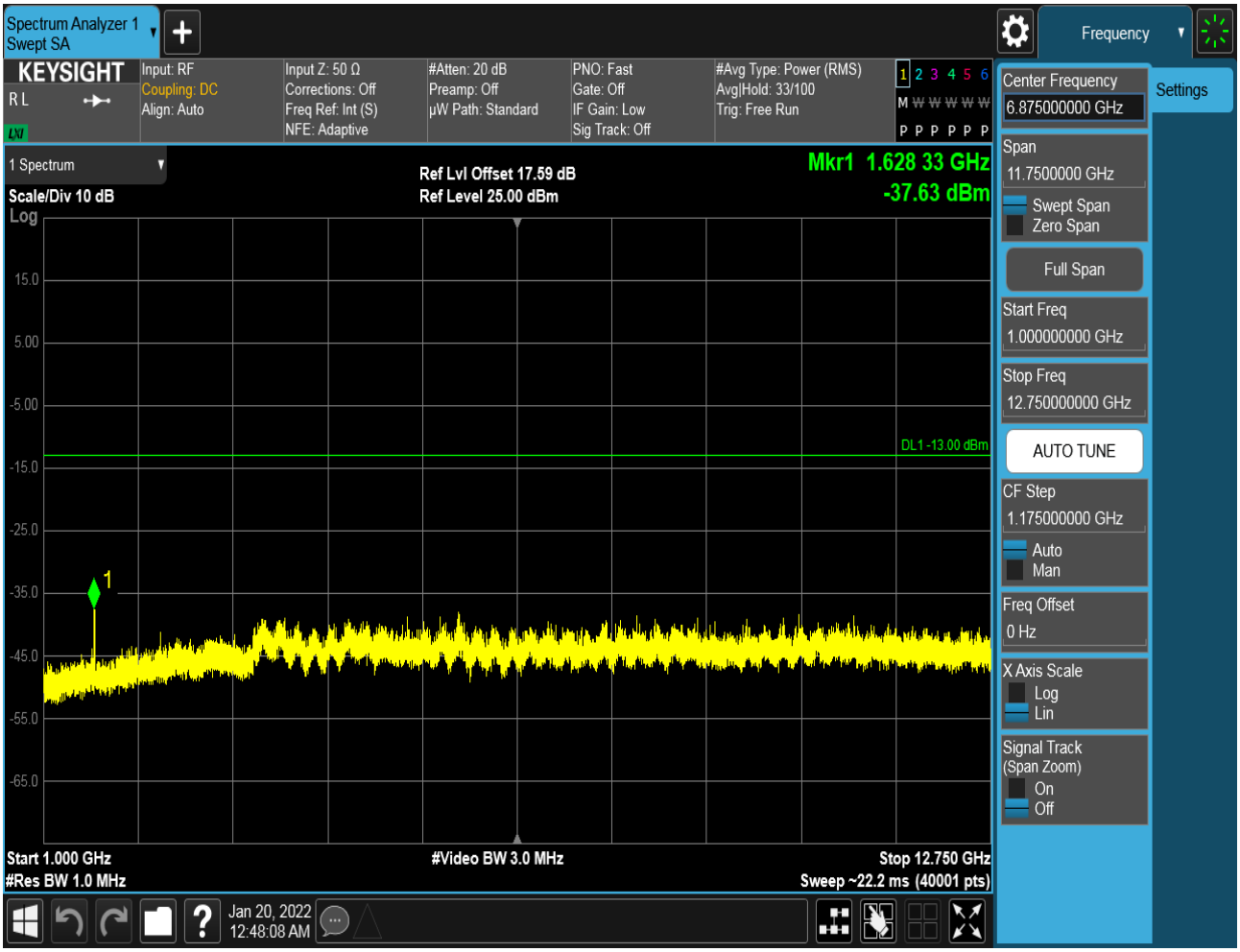
6.2.1.1.2.1 Test Channel = LCH

6.2.1.1.2.1.1 Test RB = RB1#0



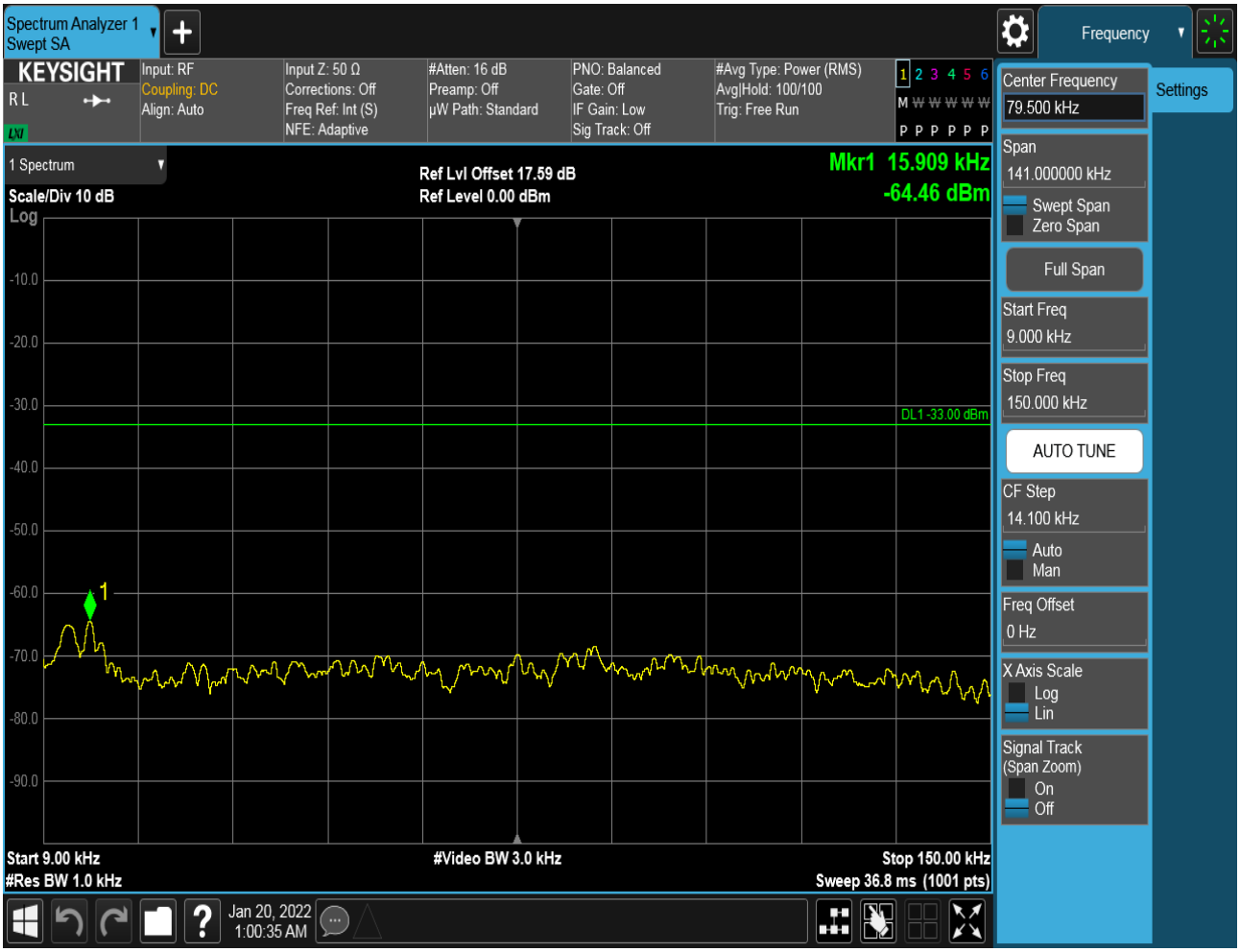

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 16 dB
Preamp: Off
µW Path: Standard
PNO: Best Wide
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 75/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 0.00 dBm
Mkr1 150.00 kHz
-63.05 dBm
Scale/Div 10 dB
Log
DL1 -23.00 dBm
Start 150 kHz
#Res BW 10 kHz
#Video BW 30 kHz
Stop 30.00 MHz
Sweep 92.7 ms (5001 pts)
Jan 20, 2022
12:47:34 AM
Frequency
Settings
Center Frequency
15.075000 MHz
Span
29.8500000 MHz
Swept Span
Zero Span
Full Span
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
AUTO TUNE
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

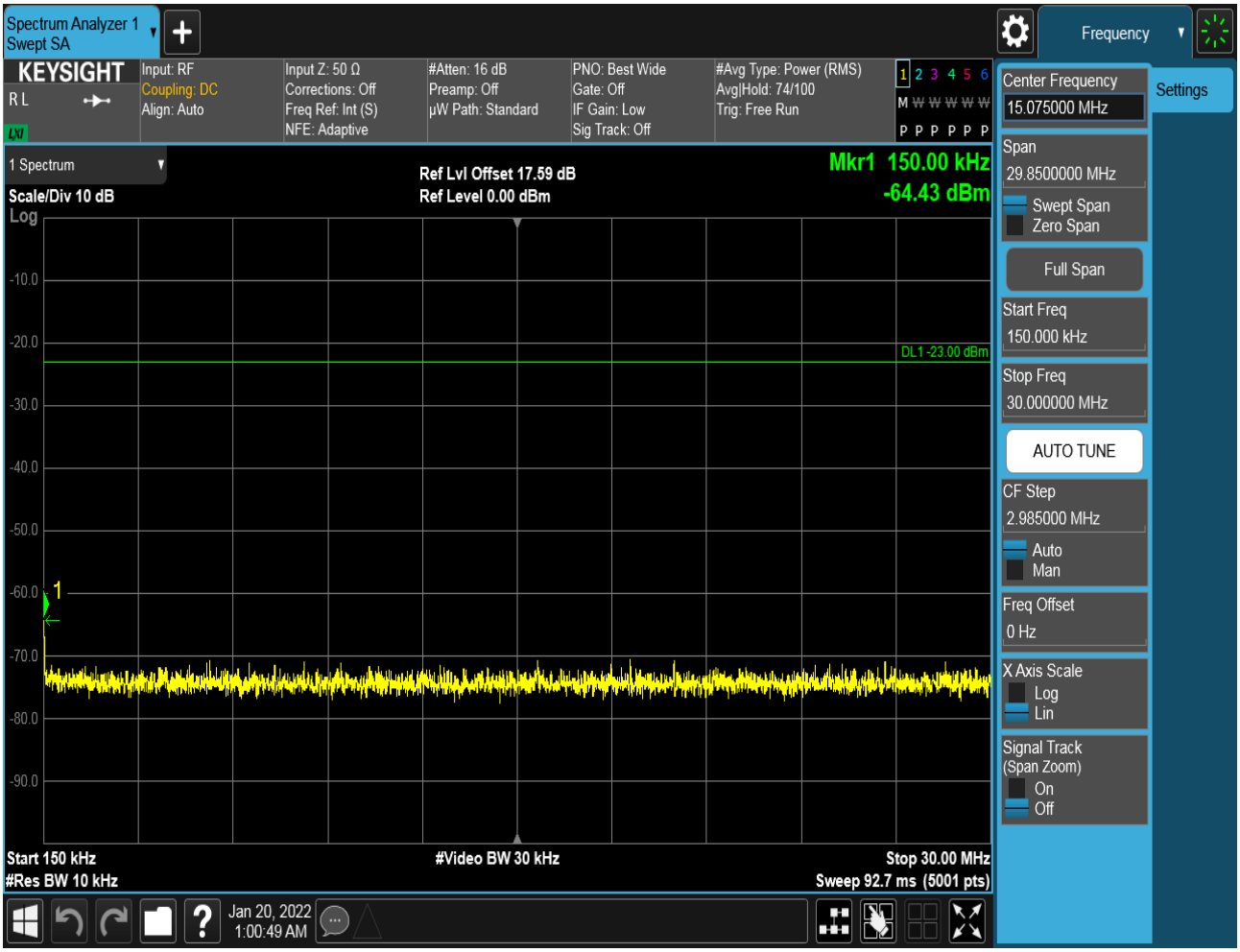

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 100/100
Trig: Free Run
Frequency
Settings
Center Frequency
515.000000 MHz
Span
970.000000 MHz
Swept Span
Zero Span
Full Span
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
AUTO TUNE
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off
1 Spectrum
Scale/Div 10 dB
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 813.610 MHz
-18.08 dBm
DL1 -13.00 dBm
Start 0.0300 GHz
#Res BW 100 kHz
#Video BW 300 kHz
Stop 1.0000 GHz
Sweep 37.3 ms (40001 pts)
Jan 20, 2022
12:47:53 AM

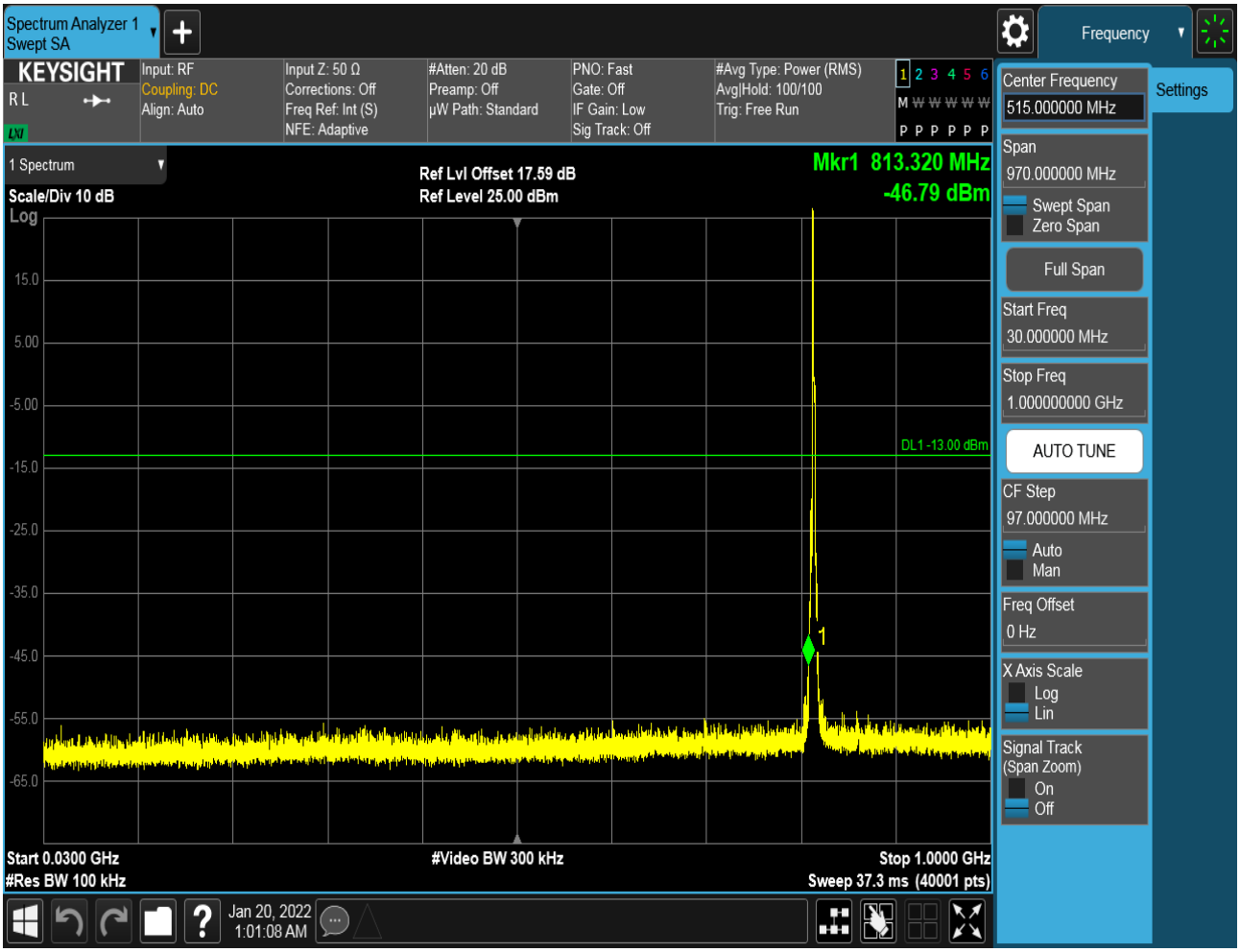


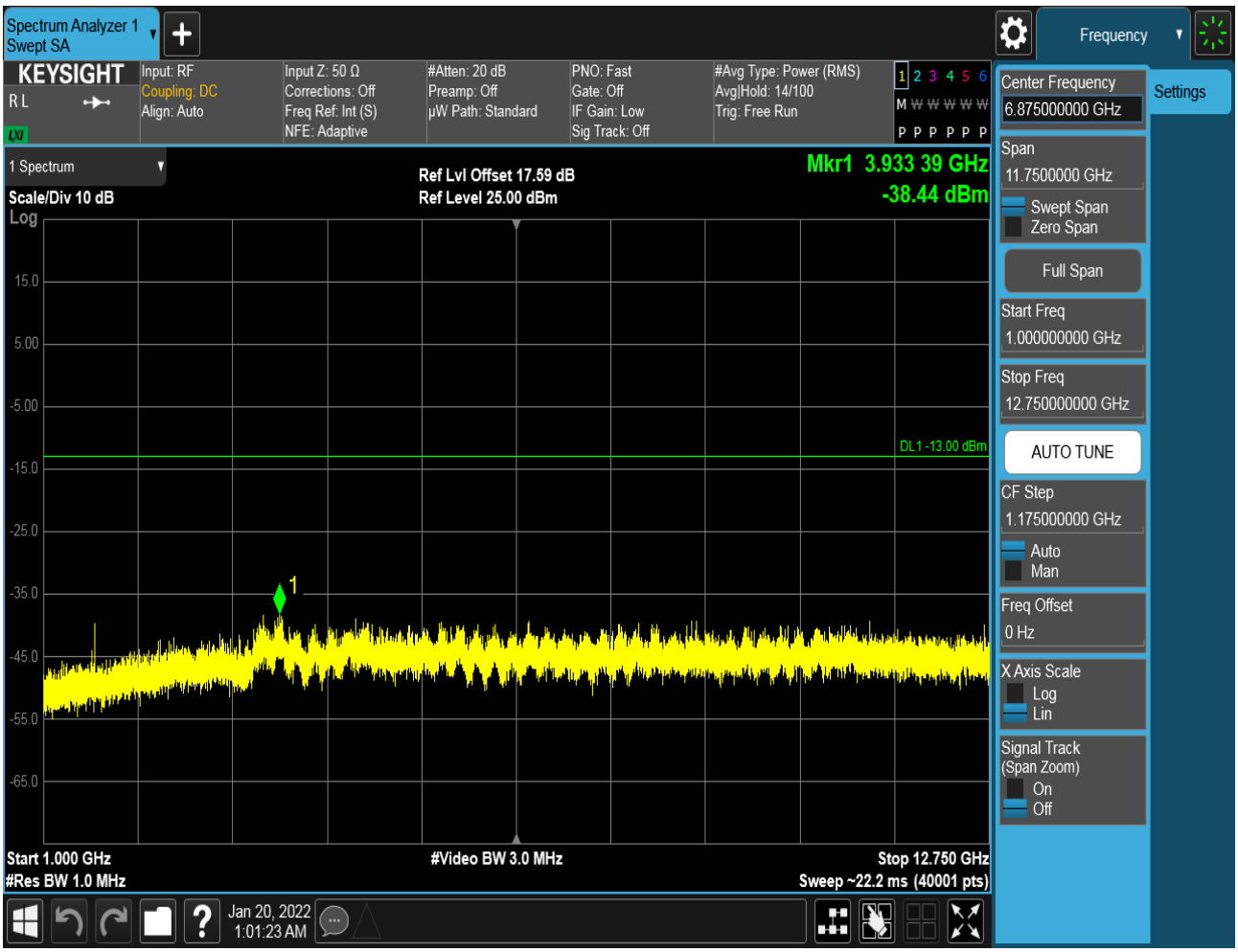
6.2.1.1.2.2 Test Channel = MCH

6.2.1.1.2.2.1 Test RB = RB1#0



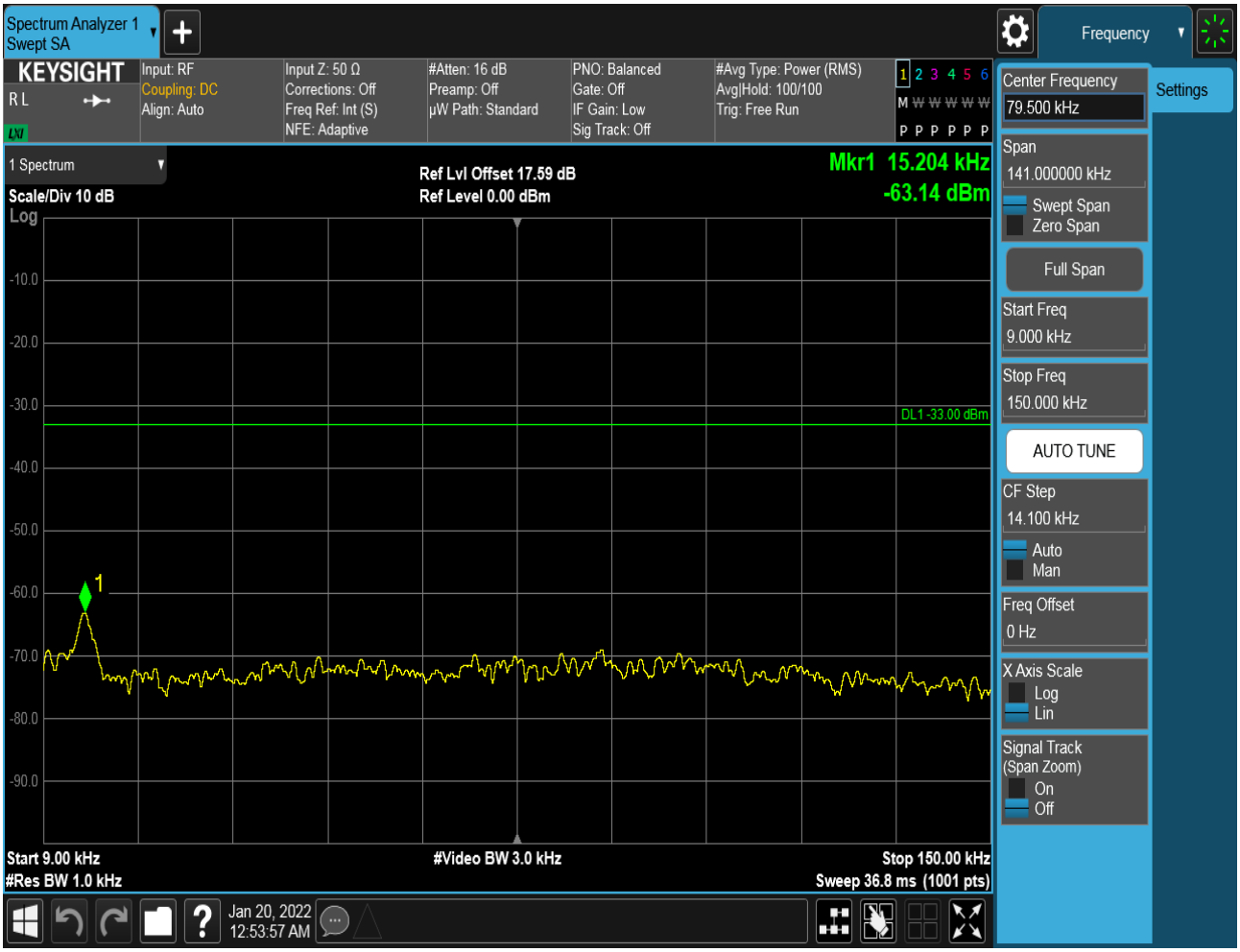

Spectrum Analyzer 1
Swept SA
KEYSIGHT
RL
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 16 dB
Preamp: Off
µW Path: Standard
PNO: Best Wide
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 74/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 0.00 dBm
Mkr1 150.00 kHz
-64.43 dBm
Scale/Div 10 dB
Log
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
DL1 -23.00 dBm
Start 150 kHz
#Res BW 10 kHz
#Video BW 30 kHz
Stop 30.00 MHz
Sweep 92.7 ms (5001 pts)
Jan 20, 2022
1:00:49 AM
Frequency
Settings
Center Frequency
15.075000 MHz
Span
29.8500000 MHz
Swept Span
Zero Span
Full Span
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
AUTO TUNE
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

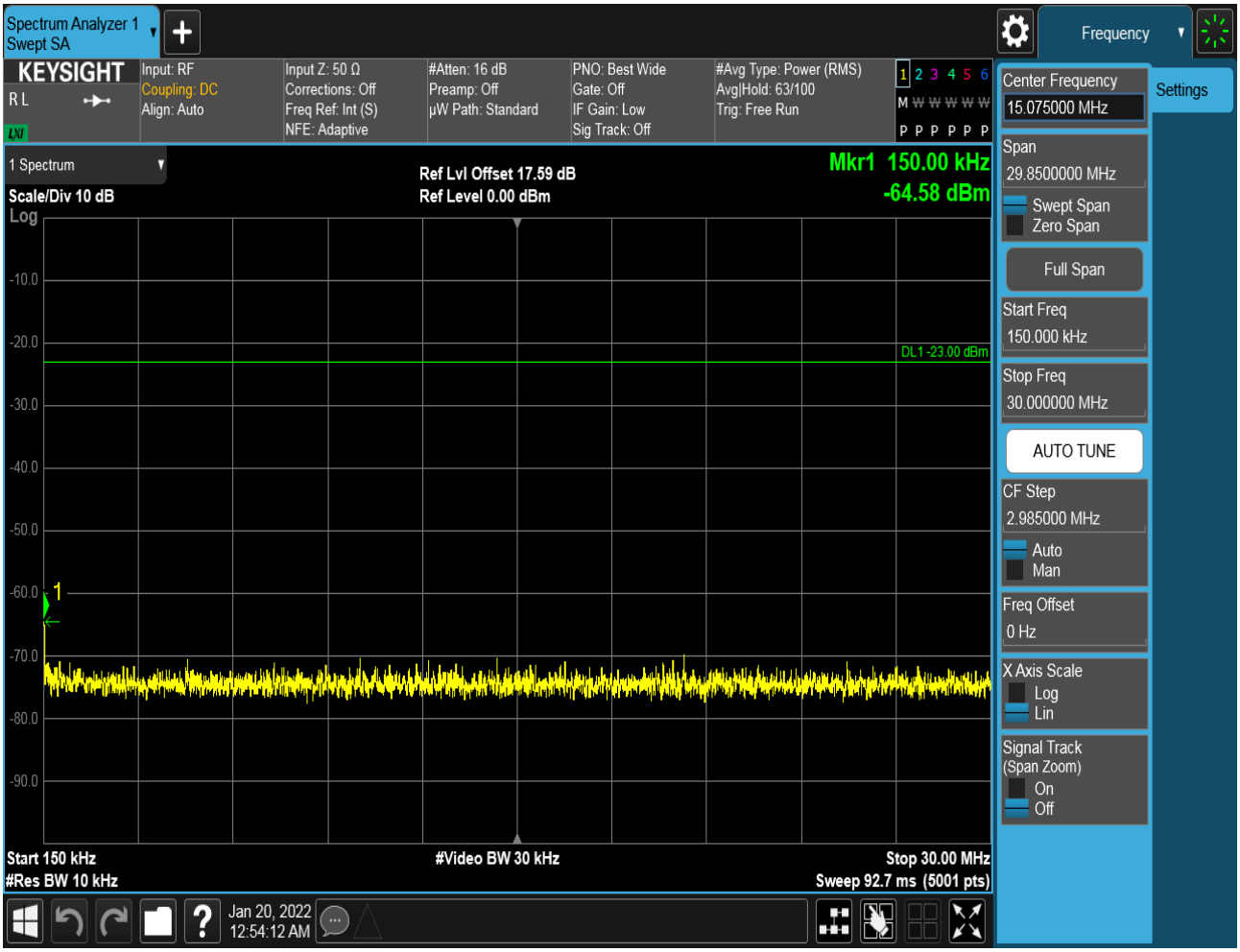

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 100/100
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 813.320 MHz
-46.79 dBm
DL1 -13.00 dBm
Start 0.0300 GHz
#Res BW 100 kHz
#Video BW 300 kHz
Stop 1.0000 GHz
Sweep 37.3 ms (40001 pts)
Jan 20, 2022
1:01:08 AM
Frequency
Settings
Center Frequency
515.000000 MHz
Span
970.000000 MHz
Swept Span
Zero Span
Full Span
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
AUTO TUNE
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

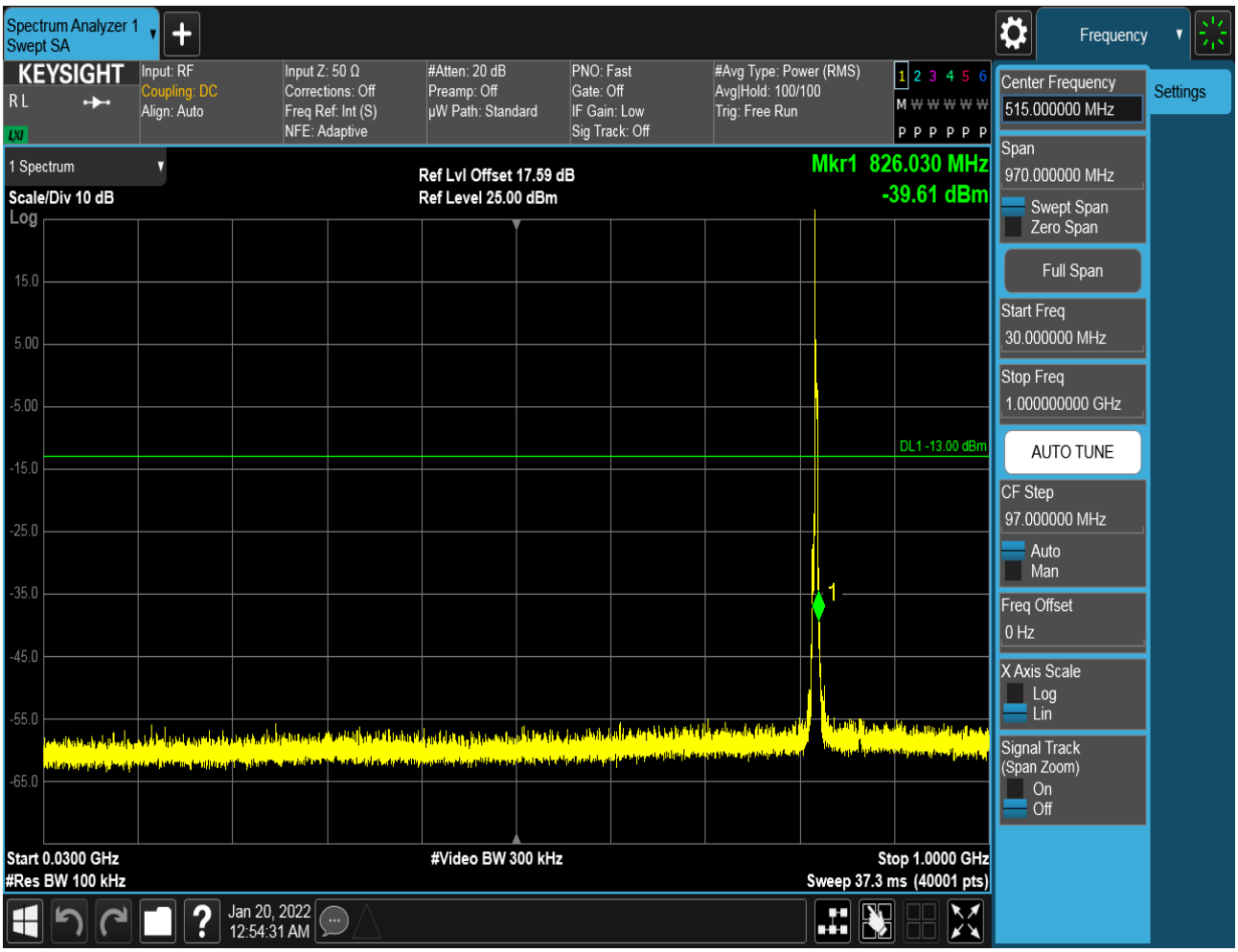

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 14/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 3.933 39 GHz
-38.44 dBm
Scale/Div 10 dB
Log
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
DL1 -13.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#Video BW 3.0 MHz
Stop 12.750 GHz
Sweep ~22.2 ms (40001 pts)
Jan 20, 2022
1:01:23 AM
Frequency
Settings
Center Frequency
6.875000000 GHz
Span
11.7500000 GHz
Swept Span
Zero Span
Full Span
Start Freq
1.000000000 GHz
Stop Freq
12.750000000 GHz
AUTO TUNE
CF Step
1.175000000 GHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

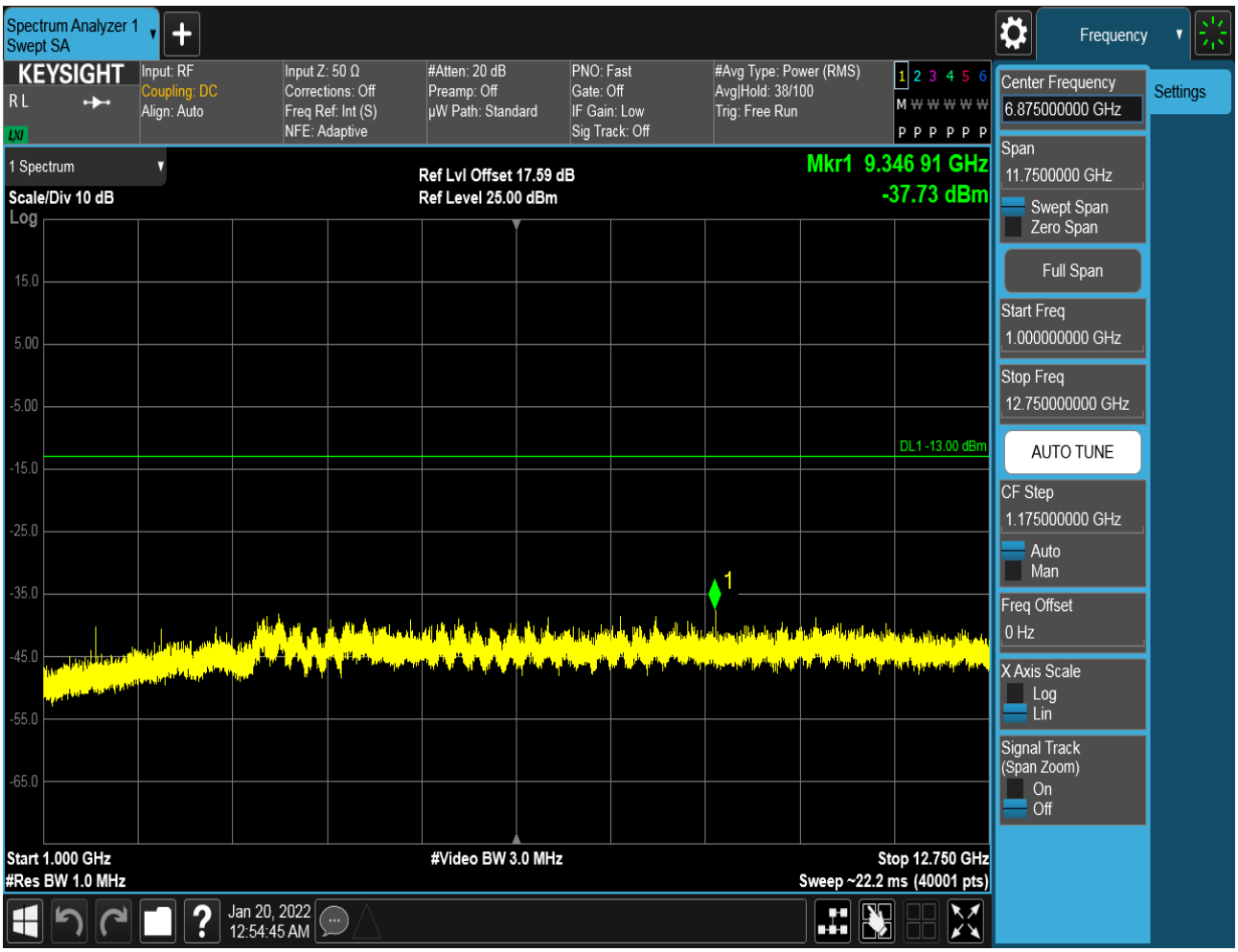
6.2.1.1.2.3 Test Channel = HCH

6.2.1.1.2.3.1 Test RB = RB1#0




Spectrum Analyzer 1
Swept SA
KEYSIGHT
RL
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 16 dB
Preamp: Off
µW Path: Standard
PNO: Best Wide
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 63/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 0.00 dBm
Mkr1 150.00 kHz
-64.58 dBm
Scale/Div 10 dB
Log
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
DL1 -23.00 dBm
Start 150 kHz
#Res BW 10 kHz
#Video BW 30 kHz
Stop 30.00 MHz
Sweep 92.7 ms (5001 pts)
Jan 20, 2022
12:54:12 AM
Frequency
Settings
Center Frequency
15.075000 MHz
Span
29.8500000 MHz
Swept Span
Zero Span
Full Span
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
AUTO TUNE
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

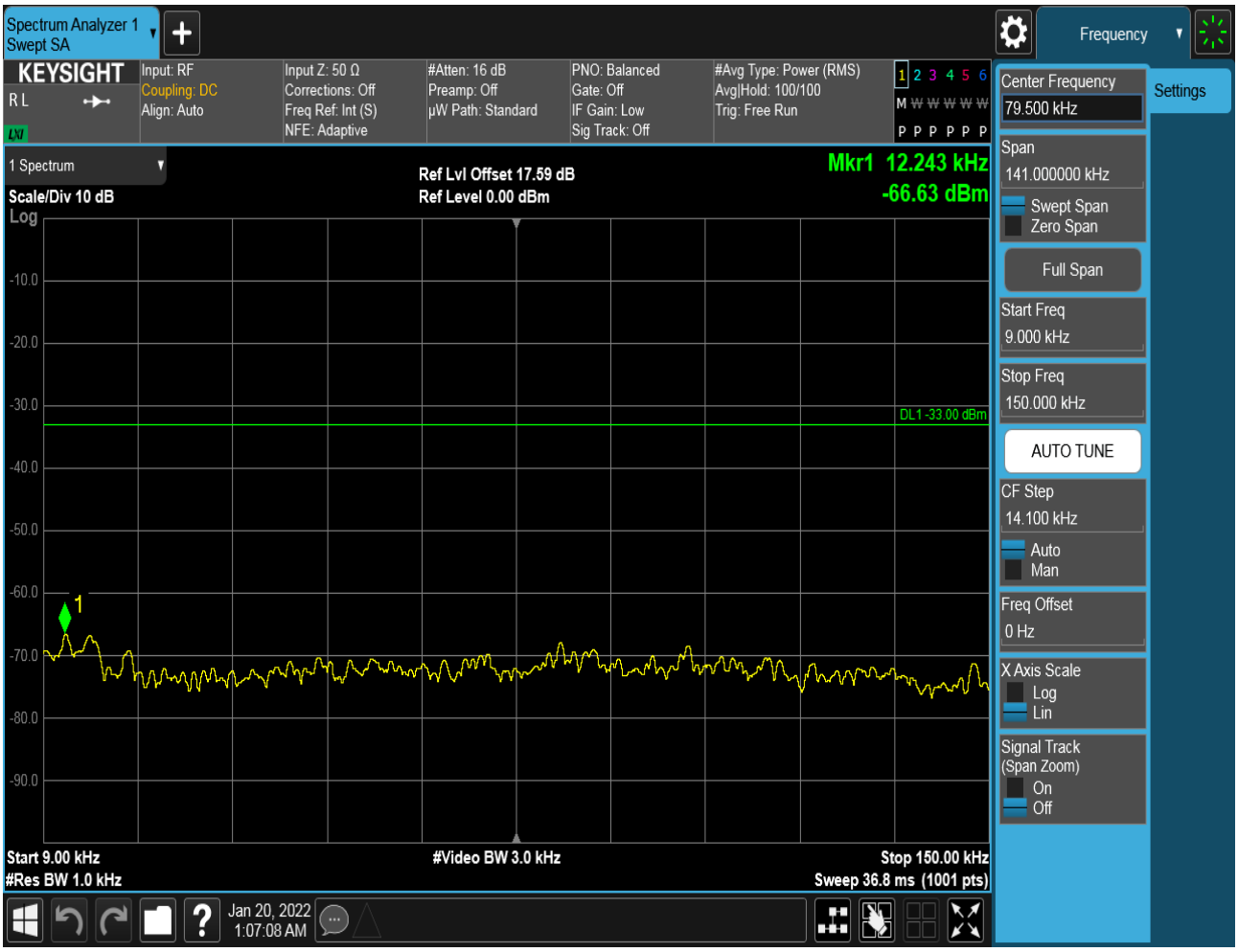

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 100/100
Trig: Free Run
Frequency
Settings
Center Frequency
515.000000 MHz
Span
970.000000 MHz
Swept Span
Zero Span
Full Span
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
AUTO TUNE
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 826.030 MHz
-39.61 dBm
Scale/Div 10 dB
Log
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
DL1 -13.00 dBm
Start 0.0300 GHz
#Res BW 100 kHz
#Video BW 300 kHz
Stop 1.0000 GHz
Sweep 37.3 ms (40001 pts)
Jan 20, 2022
12:54:31 AM

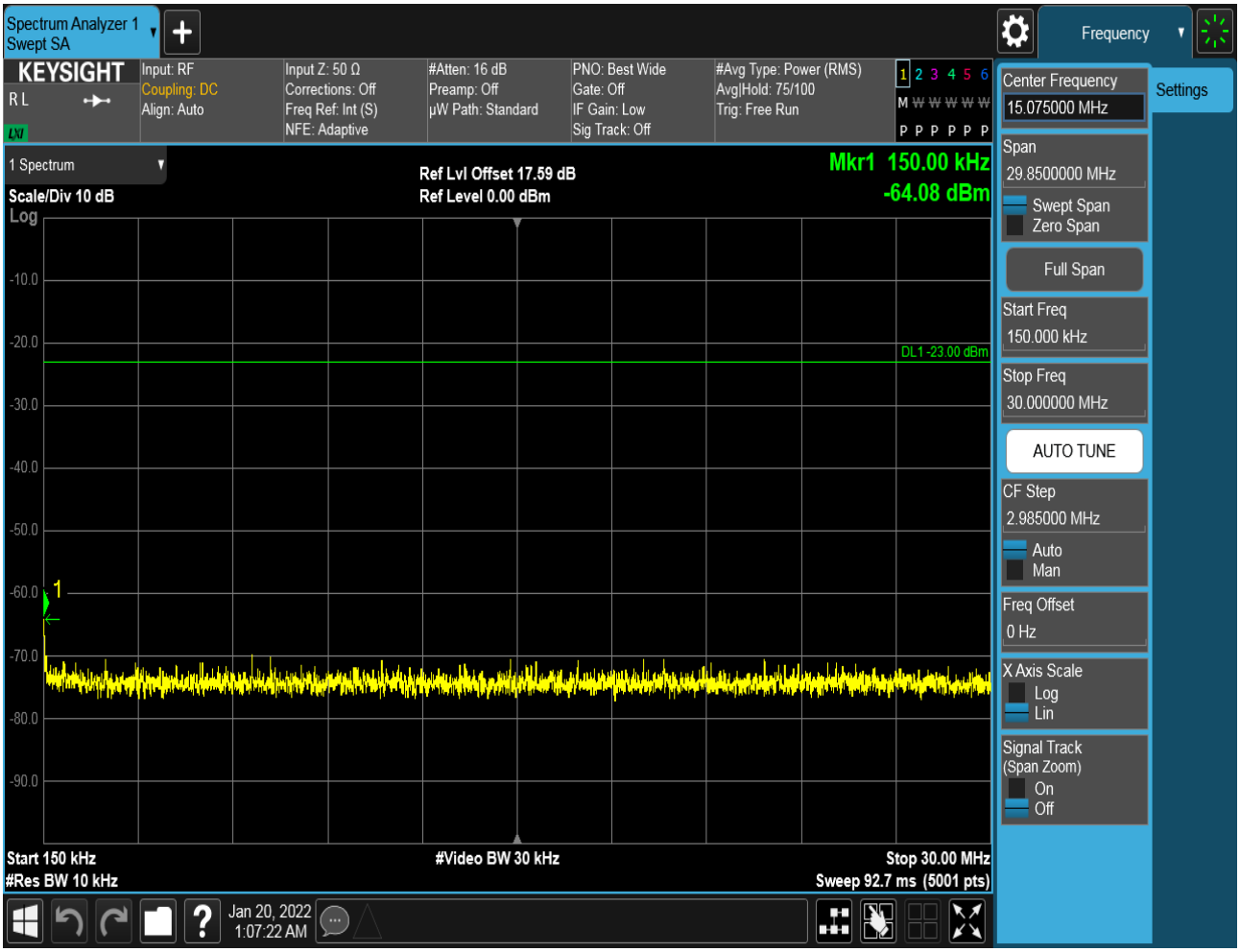

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 38/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 9.346 91 GHz
-37.73 dBm
Scale/Div 10 dB
Log
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
DL1 -13.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#Video BW 3.0 MHz
Stop 12.750 GHz
Sweep ~22.2 ms (40001 pts)
Jan 20, 2022
12:54:45 AM
Frequency
Settings
Center Frequency
6.875000000 GHz
Span
11.7500000 GHz
Swept Span
Zero Span
Full Span
Start Freq
1.000000000 GHz
Stop Freq
12.750000000 GHz
AUTO TUNE
CF Step
1.175000000 GHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

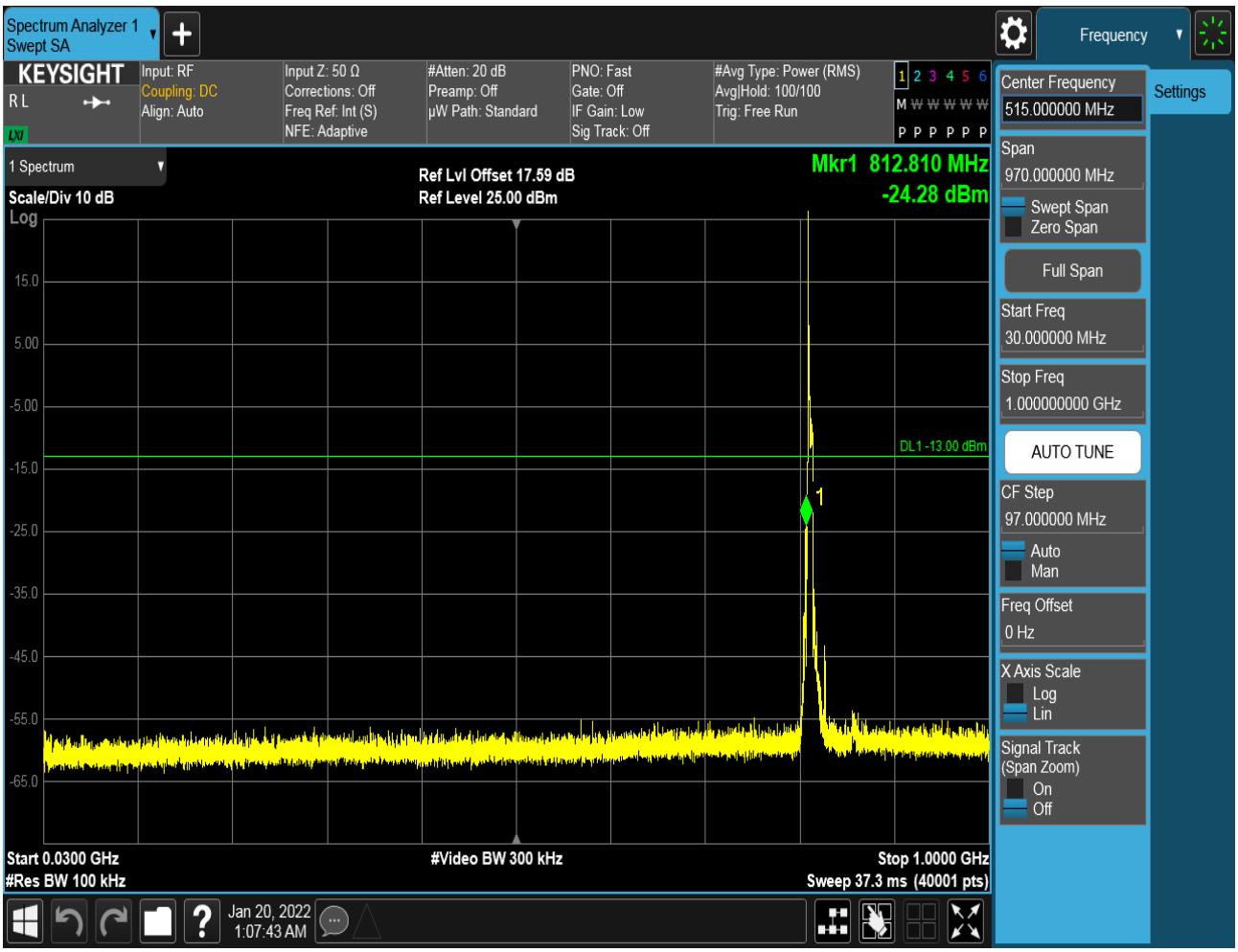
6.2.1.1.3 Test Bandwidth = 5MHz

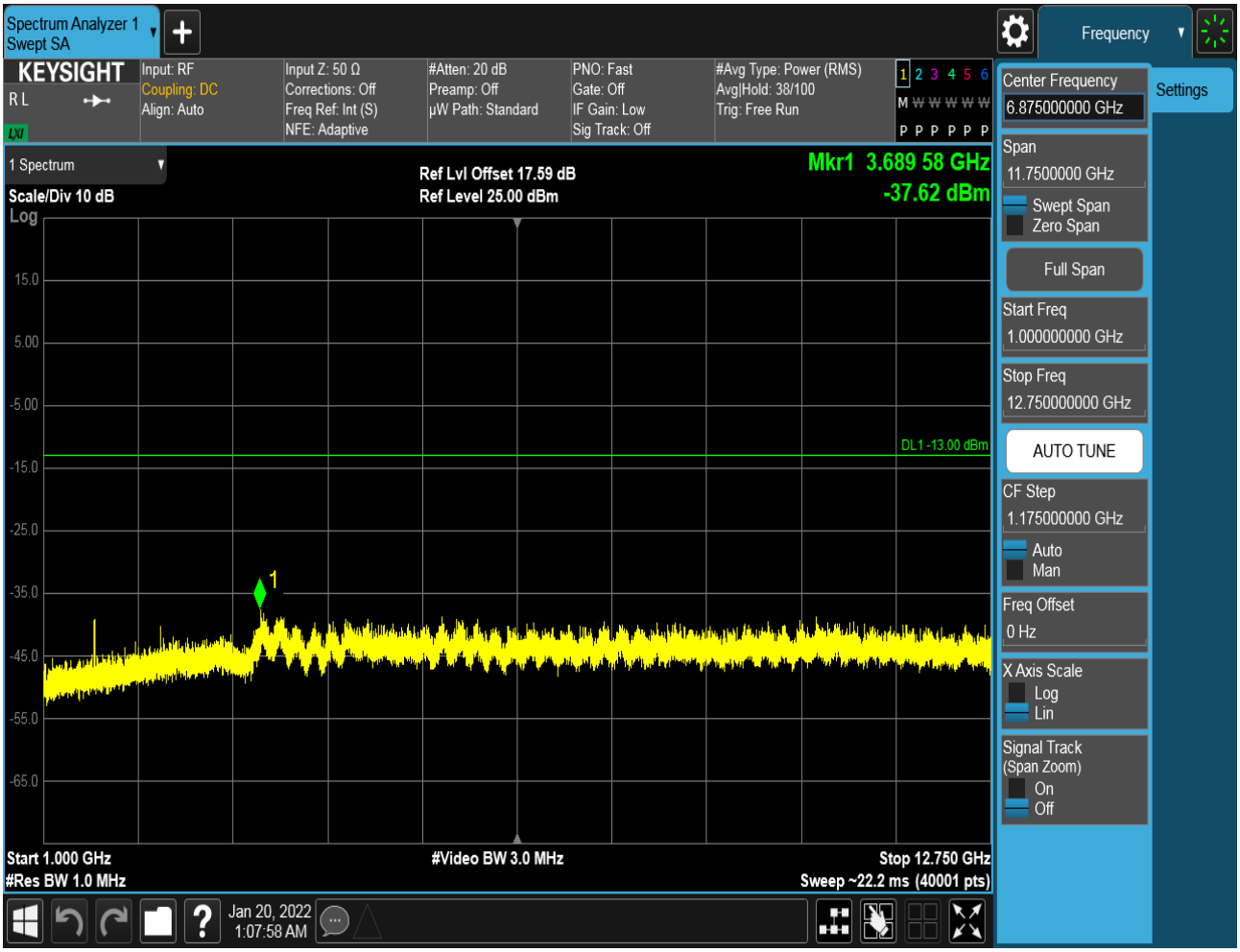
6.2.1.1.3.1 Test Channel = LCH

6.2.1.1.3.1.1 Test RB = RB1#0



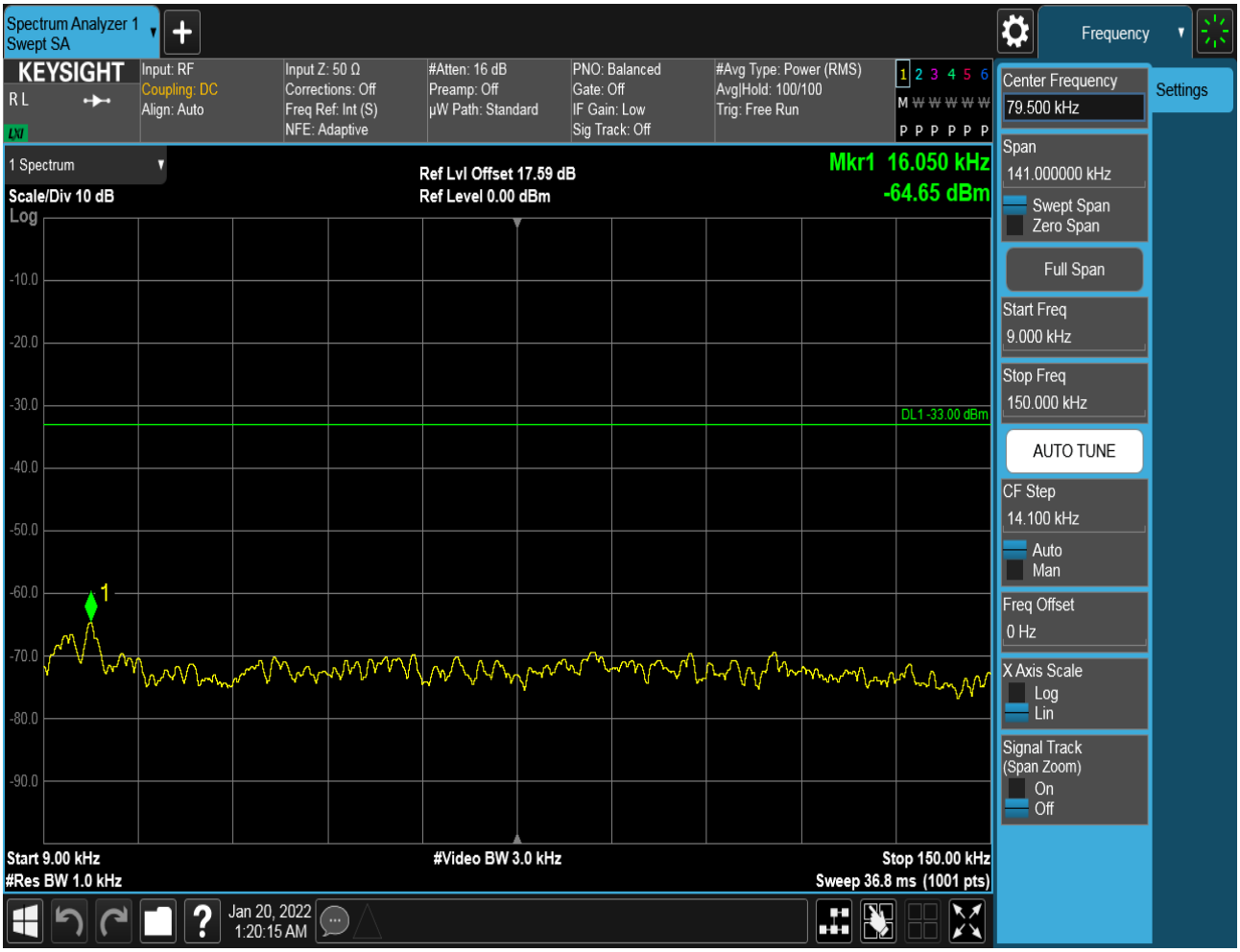

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 16 dB
Preamp: Off
µW Path: Standard
PNO: Best Wide
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 75/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 0.00 dBm
Mkr1 150.00 kHz
-64.08 dBm
Scale/Div 10 dB
Log
DL1 -23.00 dBm
Start 150 kHz
#Res BW 10 kHz
#Video BW 30 kHz
Stop 30.00 MHz
Sweep 92.7 ms (5001 pts)
Jan 20, 2022
1:07:22 AM
Frequency
Settings
Center Frequency
15.075000 MHz
Span
29.8500000 MHz
Swept Span
Zero Span
Full Span
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
AUTO TUNE
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

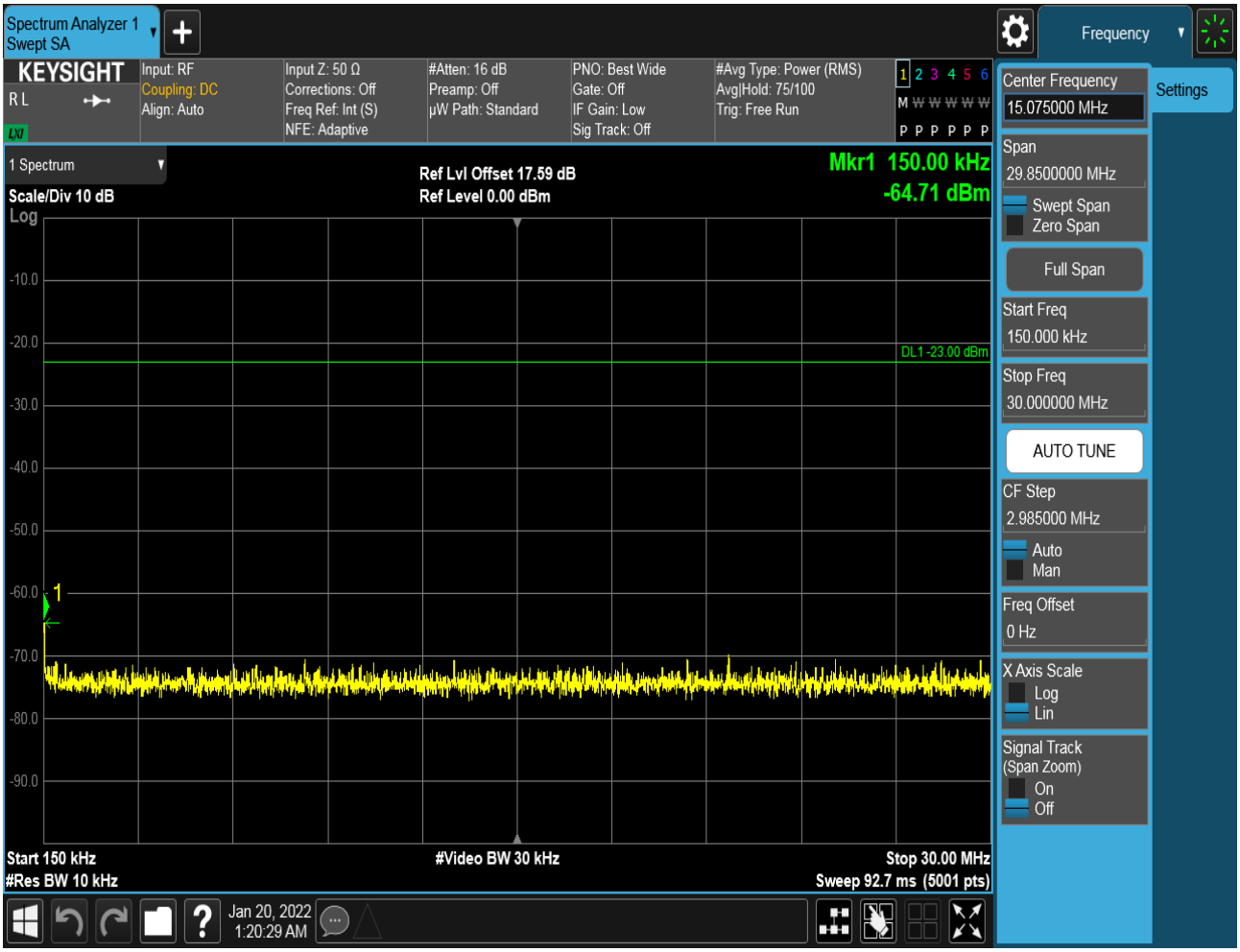

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 100/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 812.810 MHz
-24.28 dBm
Scale/Div 10 dB
Log
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
DL1 -13.00 dBm
Start 0.0300 GHz
#Res BW 100 kHz
#Video BW 300 kHz
Stop 1.0000 GHz
Sweep 37.3 ms (40001 pts)
Jan 20, 2022
1:07:43 AM
Frequency
Settings
Center Frequency
515.000000 MHz
Span
970.000000 MHz
Swept Span
Zero Span
Full Span
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
AUTO TUNE
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

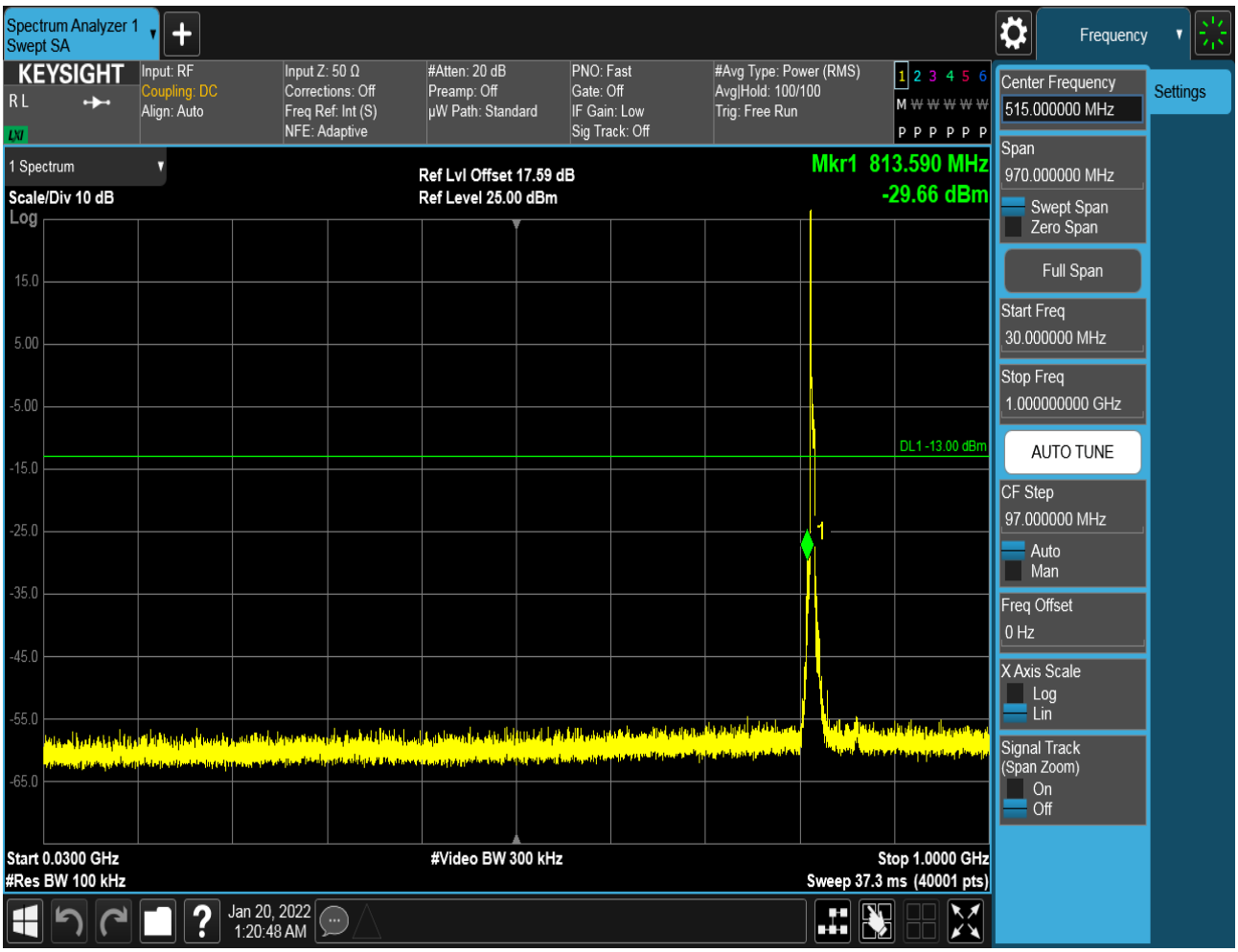

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 38/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 3.689 58 GHz
-37.62 dBm
Scale/Div 10 dB
Log
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
DL1 -13.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#Video BW 3.0 MHz
Stop 12.750 GHz
Sweep ~22.2 ms (40001 pts)
Jan 20, 2022
1:07:58 AM
Frequency
Settings
Center Frequency
6.875000000 GHz
Span
11.7500000 GHz
Swept Span
Zero Span
Full Span
Start Freq
1.000000000 GHz
Stop Freq
12.750000000 GHz
AUTO TUNE
CF Step
1.175000000 GHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

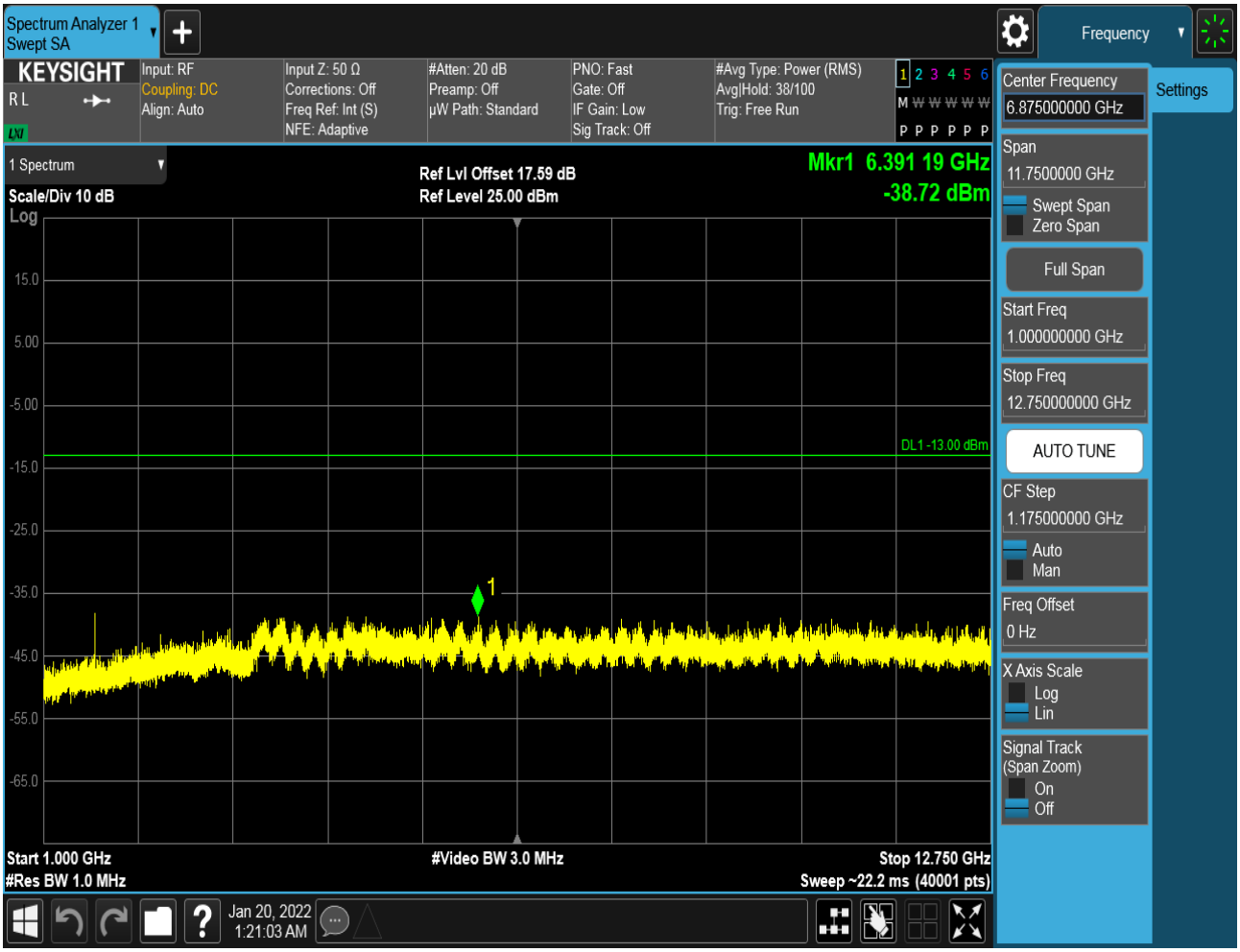
6.2.1.1.3.2 Test Channel = MCH

6.2.1.1.3.2.1 Test RB = RB1#0



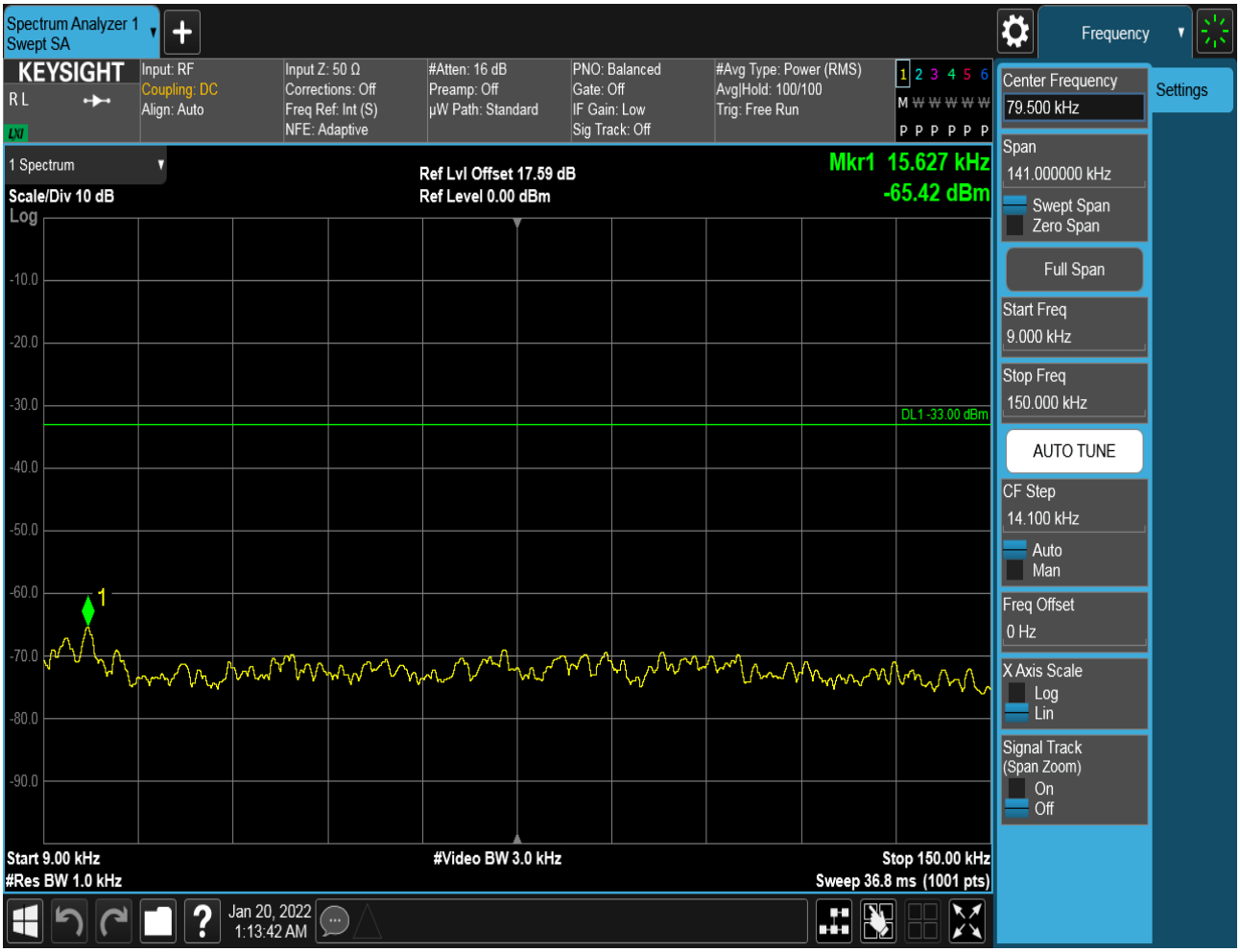

Spectrum Analyzer 1
Swept SA
KEYSIGHT
RL
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 16 dB
Preamp: Off
µW Path: Standard
PNO: Best Wide
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 75/100
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 17.59 dB
Ref Level 0.00 dBm
Mkr1 150.00 kHz
-64.71 dBm
DL1 -23.00 dBm
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
Start 150 kHz
#Res BW 10 kHz
#Video BW 30 kHz
Stop 30.00 MHz
Sweep 92.7 ms (5001 pts)
Jan 20, 2022
1:20:29 AM
Frequency
Settings
Center Frequency
15.075000 MHz
Span
29.8500000 MHz
Swept Span
Zero Span
Full Span
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
AUTO TUNE
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

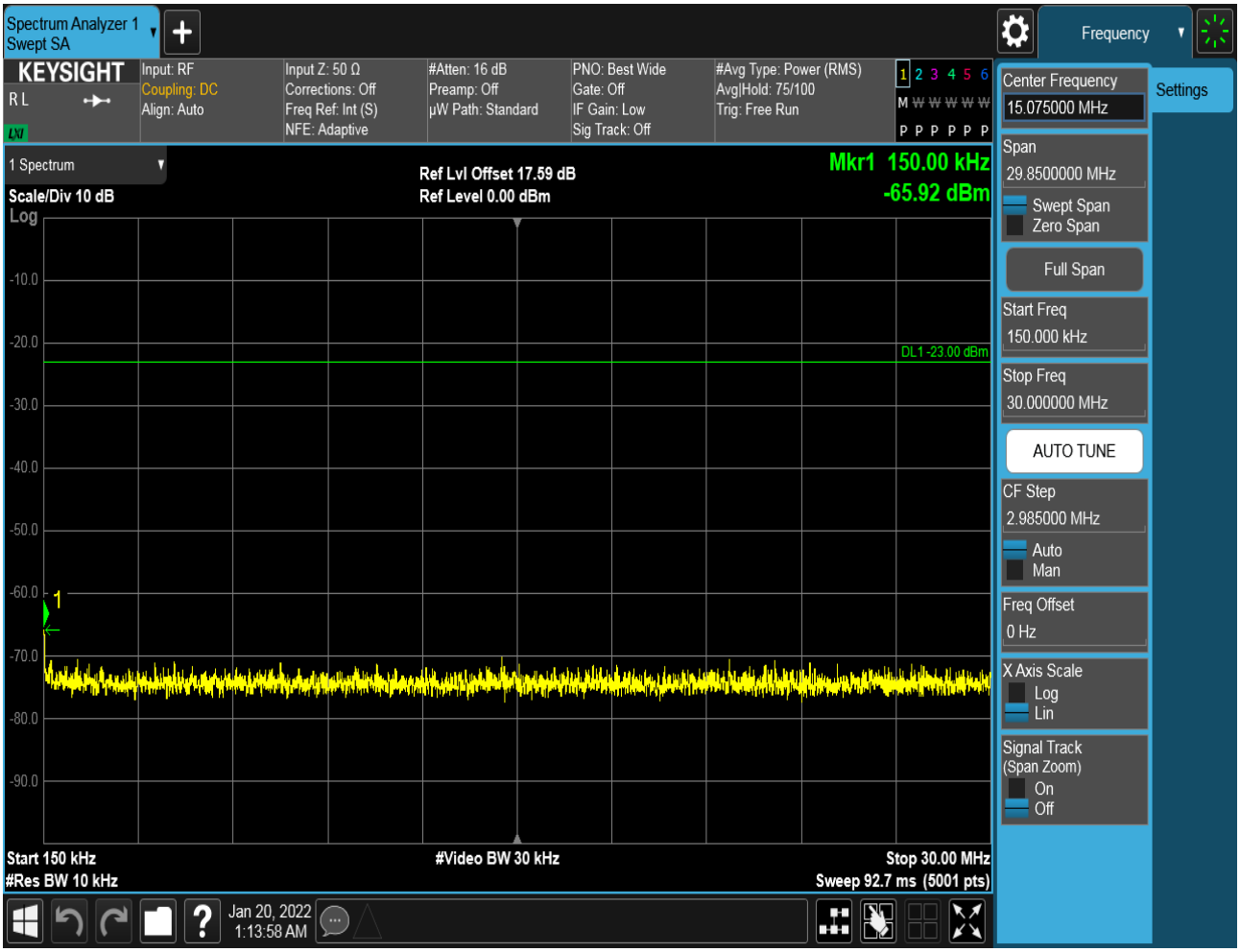

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 100/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 813.590 MHz
-29.66 dBm
Scale/Div 10 dB
Log
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
DL1 -13.00 dBm
Start 0.0300 GHz
#Res BW 100 kHz
#Video BW 300 kHz
Stop 1.0000 GHz
Sweep 37.3 ms (40001 pts)
Jan 20, 2022
1:20:48 AM
Frequency
Settings
Center Frequency
515.000000 MHz
Span
970.000000 MHz
Swept Span
Zero Span
Full Span
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
AUTO TUNE
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

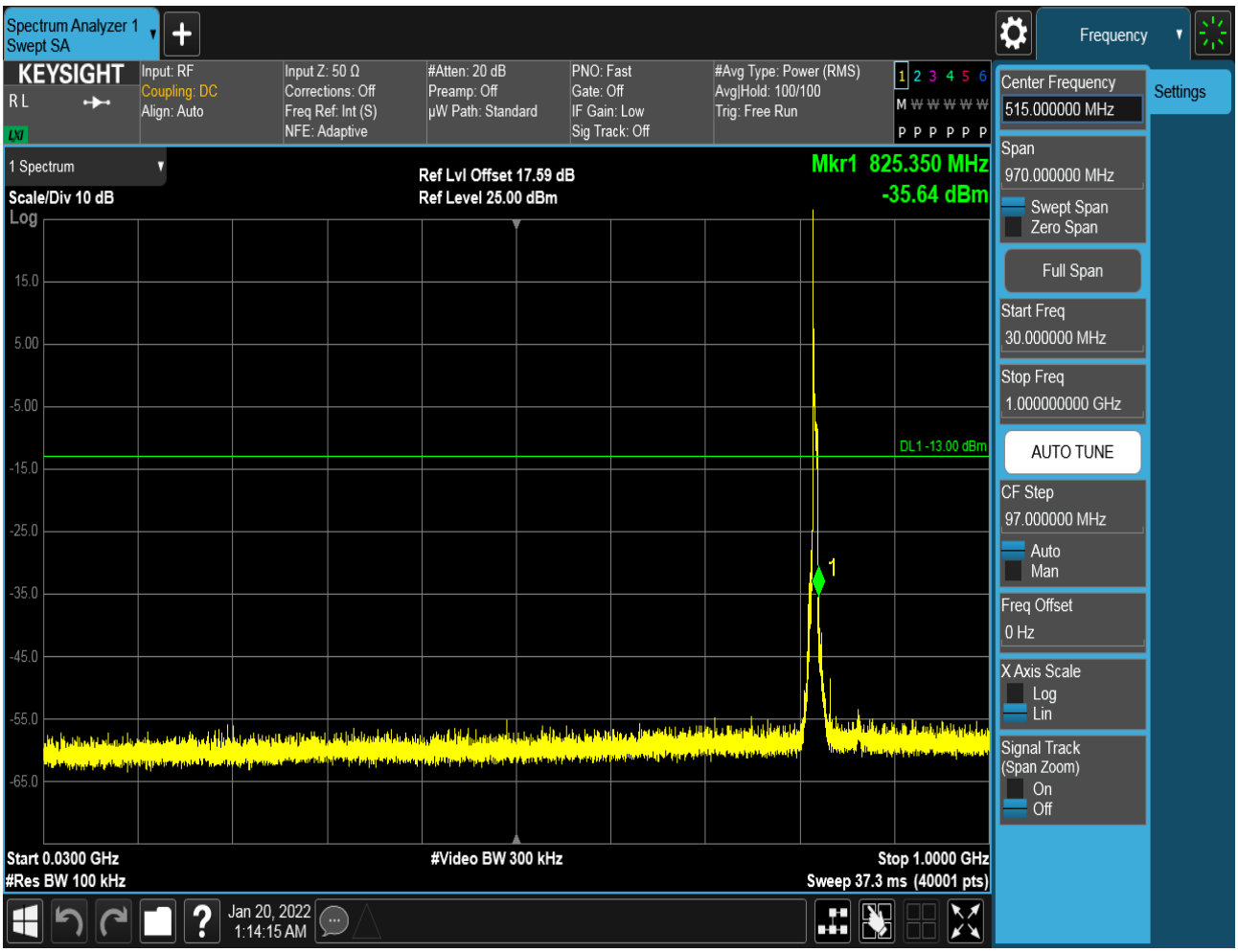


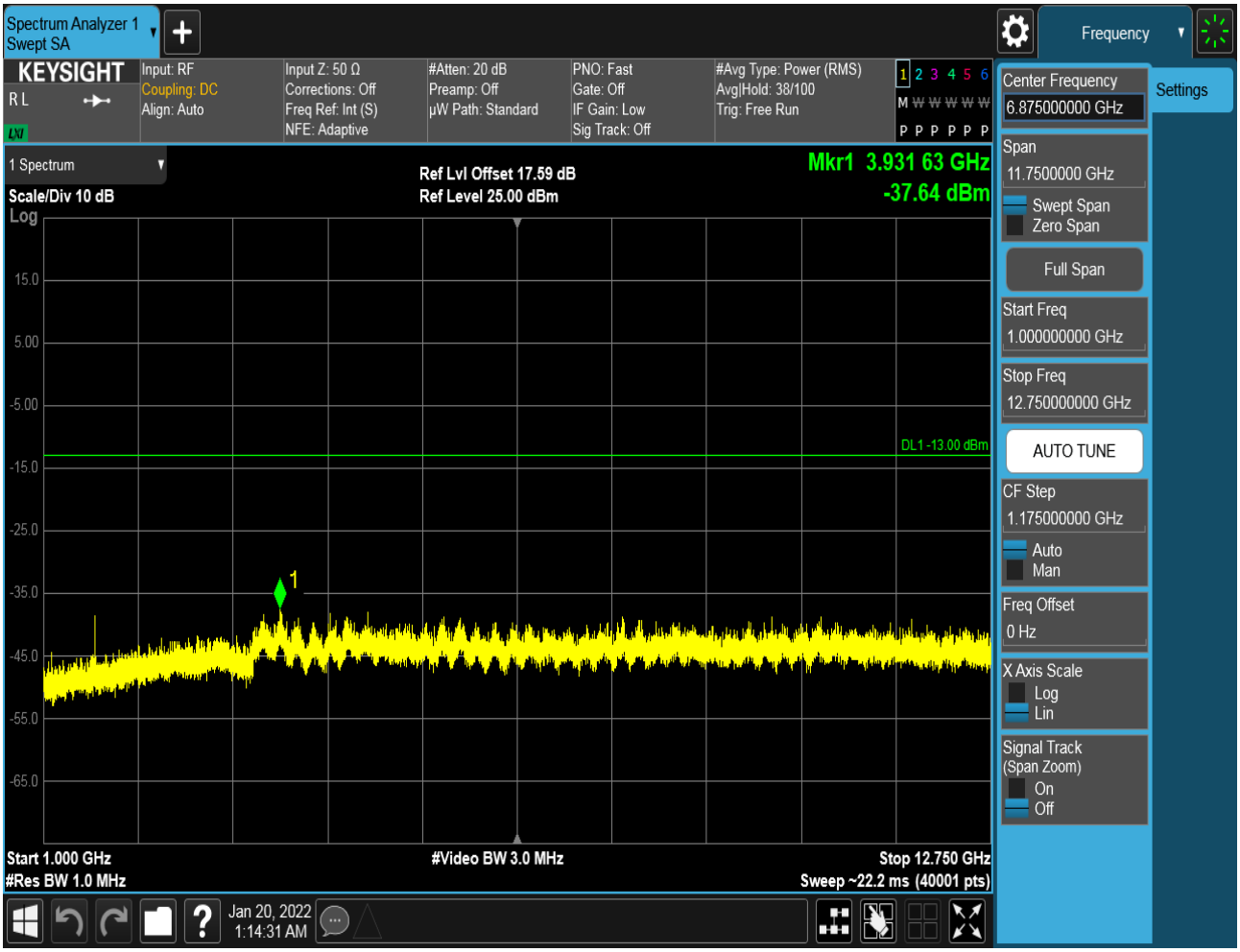
6.2.1.1.3.3 Test Channel = HCH

6.2.1.1.3.3.1 Test RB = RB1#0




Spectrum Analyzer 1
Swept SA
KEYSIGHT
RL
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 16 dB
Preamp: Off
µW Path: Standard
PNO: Best Wide
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 75/100
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 17.59 dB
Ref Level 0.00 dBm
Mkr1 150.00 kHz
-65.92 dBm
DL1 -23.00 dBm
Start 150 kHz
#Res BW 10 kHz
#Video BW 30 kHz
Stop 30.00 MHz
Sweep 92.7 ms (5001 pts)
Jan 20, 2022
1:13:58 AM
Frequency
Settings
Center Frequency
15.075000 MHz
Span
29.8500000 MHz
Swept Span
Zero Span
Full Span
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
AUTO TUNE
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

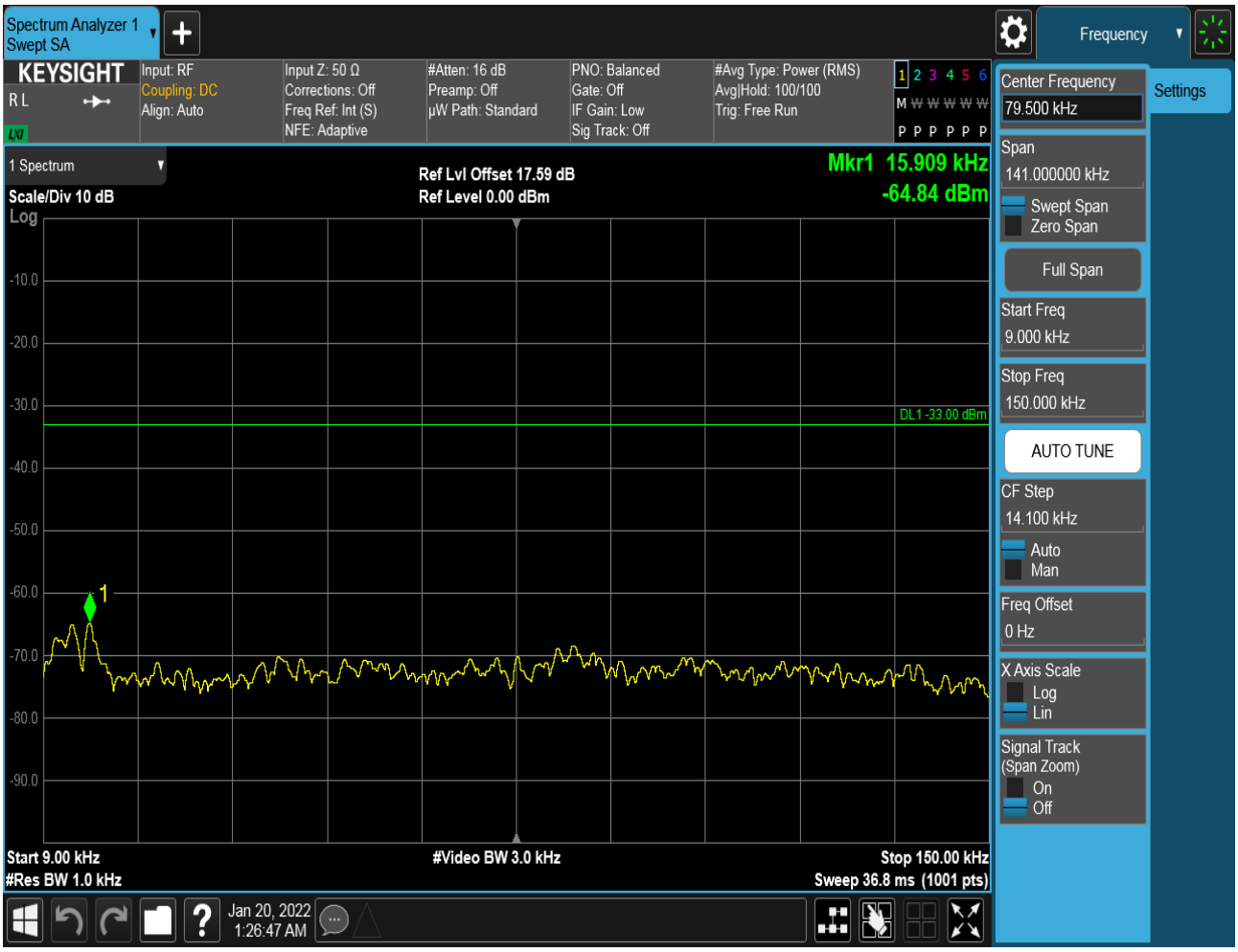

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 100/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 825.350 MHz
-35.64 dBm
Scale/Div 10 dB
Log
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
DL1 -13.00 dBm
Start 0.0300 GHz
#Res BW 100 kHz
#Video BW 300 kHz
Stop 1.0000 GHz
Sweep 37.3 ms (40001 pts)
Jan 20, 2022
1:14:15 AM
Frequency
Settings
Center Frequency
515.000000 MHz
Span
970.000000 MHz
Swept Span
Zero Span
Full Span
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
AUTO TUNE
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

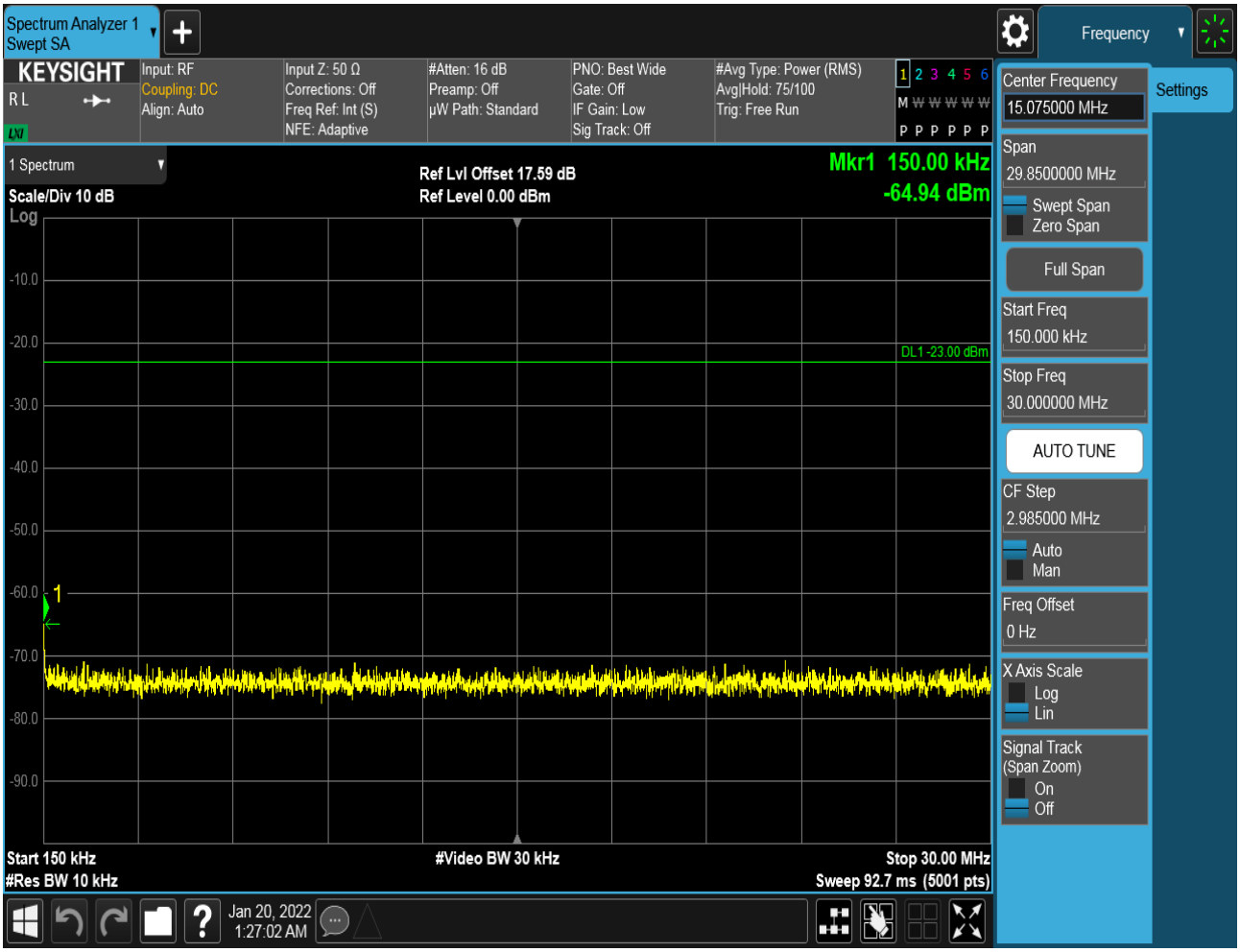

Spectrum Analyzer 1
Swept SA
KEYSIGHT
RL
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 38/100
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 3.931 63 GHz
-37.64 dBm
DL1 -13.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#Video BW 3.0 MHz
Stop 12.750 GHz
Sweep ~22.2 ms (40001 pts)
Jan 20, 2022
1:14:31 AM
Frequency
Settings
Center Frequency
6.875000000 GHz
Span
11.7500000 GHz
Swept Span
Zero Span
Full Span
Start Freq
1.000000000 GHz
Stop Freq
12.750000000 GHz
AUTO TUNE
CF Step
1.175000000 GHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

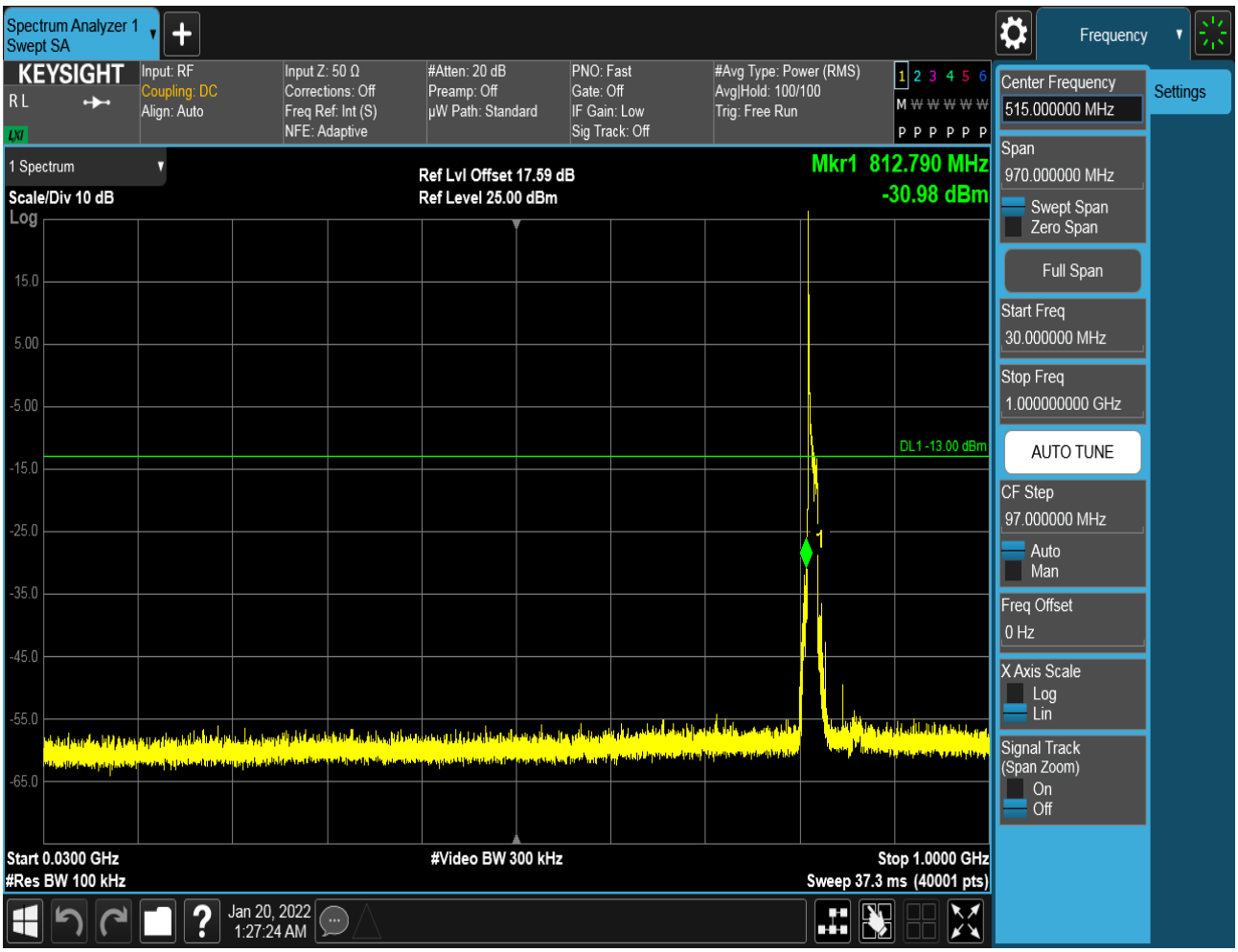
6.2.1.1.4 Test Bandwidth = 10MHz

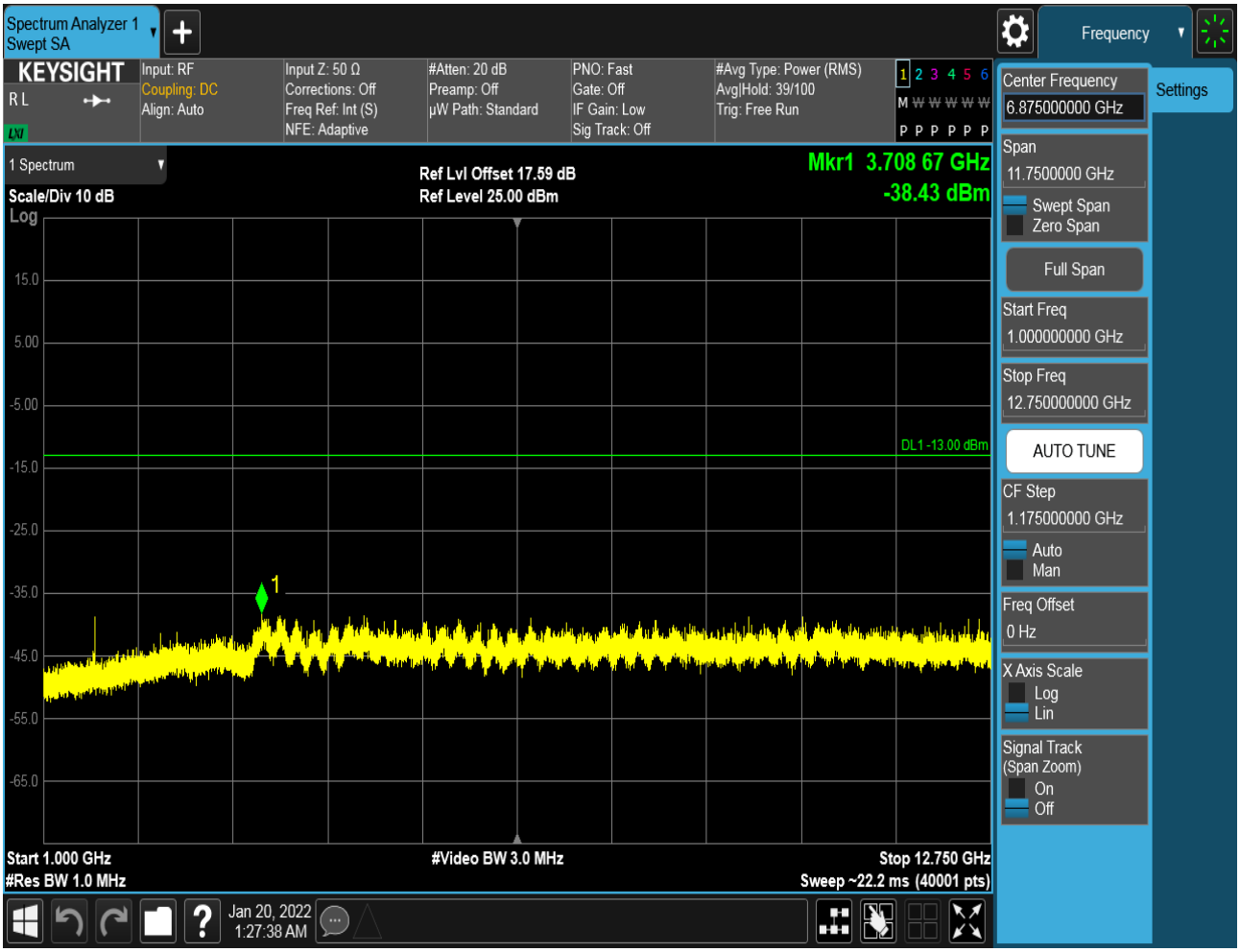
6.2.1.1.4.1 Test Channel = MCH

6.2.1.1.4.1.1 Test RB = RB1#0




Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 16 dB
Preamp: Off
µW Path: Standard
PNO: Best Wide
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 75/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 0.00 dBm
Mkr1 150.00 kHz
-64.94 dBm
Scale/Div 10 dB
Log
DL1 -23.00 dBm
Start 150 kHz
#Res BW 10 kHz
#Video BW 30 kHz
Stop 30.00 MHz
Sweep 92.7 ms (5001 pts)
Jan 20, 2022
1:27:02 AM
Frequency
Settings
Center Frequency
15.075000 MHz
Span
29.8500000 MHz
Swept Span
Zero Span
Full Span
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
AUTO TUNE
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off


Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 100/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 812.790 MHz
-30.98 dBm
Scale/Div 10 dB
Log
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
DL1 -13.00 dBm
Start 0.0300 GHz
#Res BW 100 kHz
#Video BW 300 kHz
Stop 1.0000 GHz
Sweep 37.3 ms (40001 pts)
Jan 20, 2022
1:27:24 AM
Frequency
Settings
Center Frequency
515.000000 MHz
Span
970.000000 MHz
Swept Span
Zero Span
Full Span
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
AUTO TUNE
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

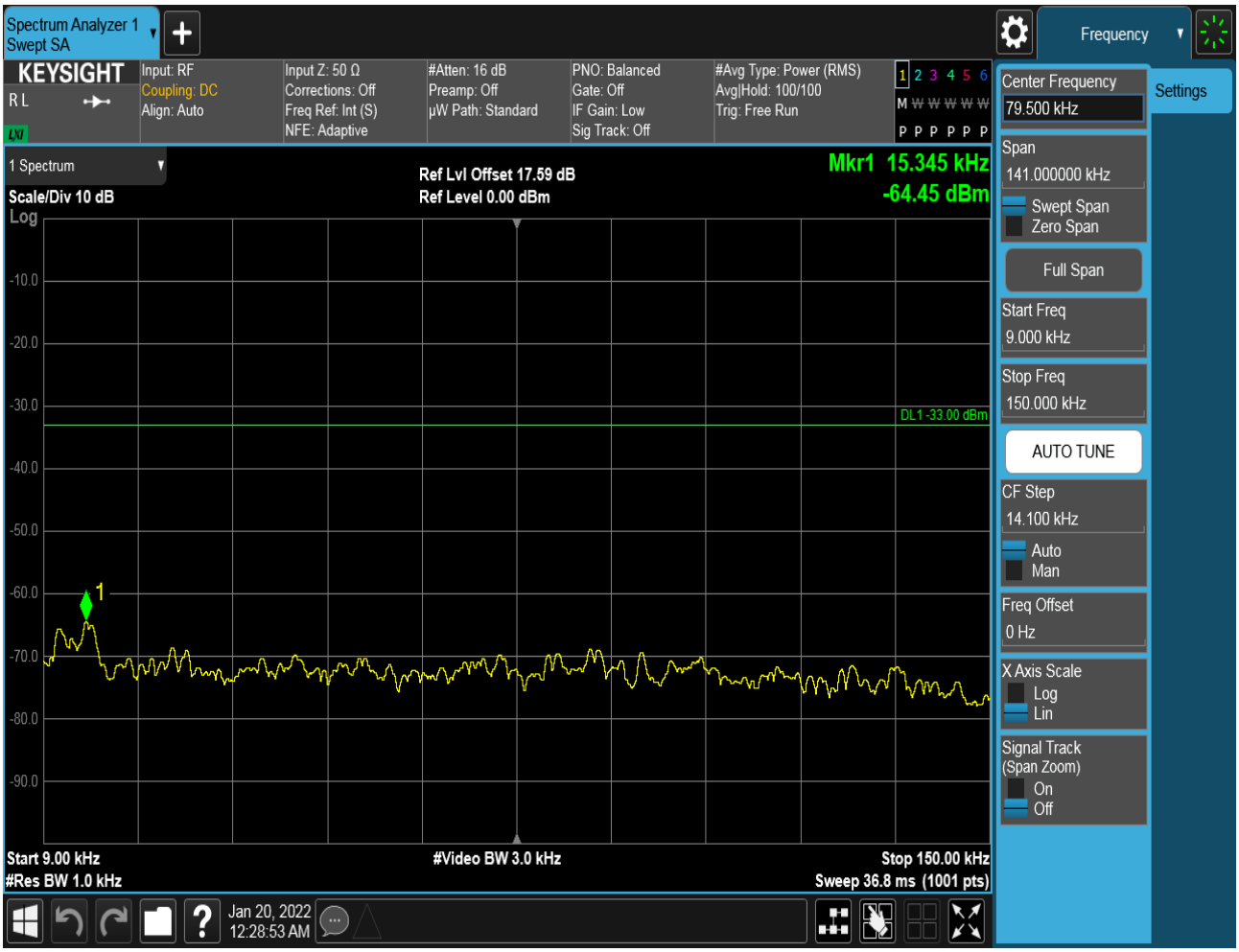

Spectrum Analyzer 1
Swept SA
KEYSIGHT
RL
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 39/100
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 3.708 67 GHz
-38.43 dBm
DL1 -13.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#Video BW 3.0 MHz
Stop 12.750 GHz
Sweep ~22.2 ms (40001 pts)
Jan 20, 2022
1:27:38 AM
Frequency
Settings
Center Frequency
6.875000000 GHz
Span
11.7500000 GHz
Swept Span
Zero Span
Full Span
Start Freq
1.000000000 GHz
Stop Freq
12.750000000 GHz
AUTO TUNE
CF Step
1.175000000 GHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

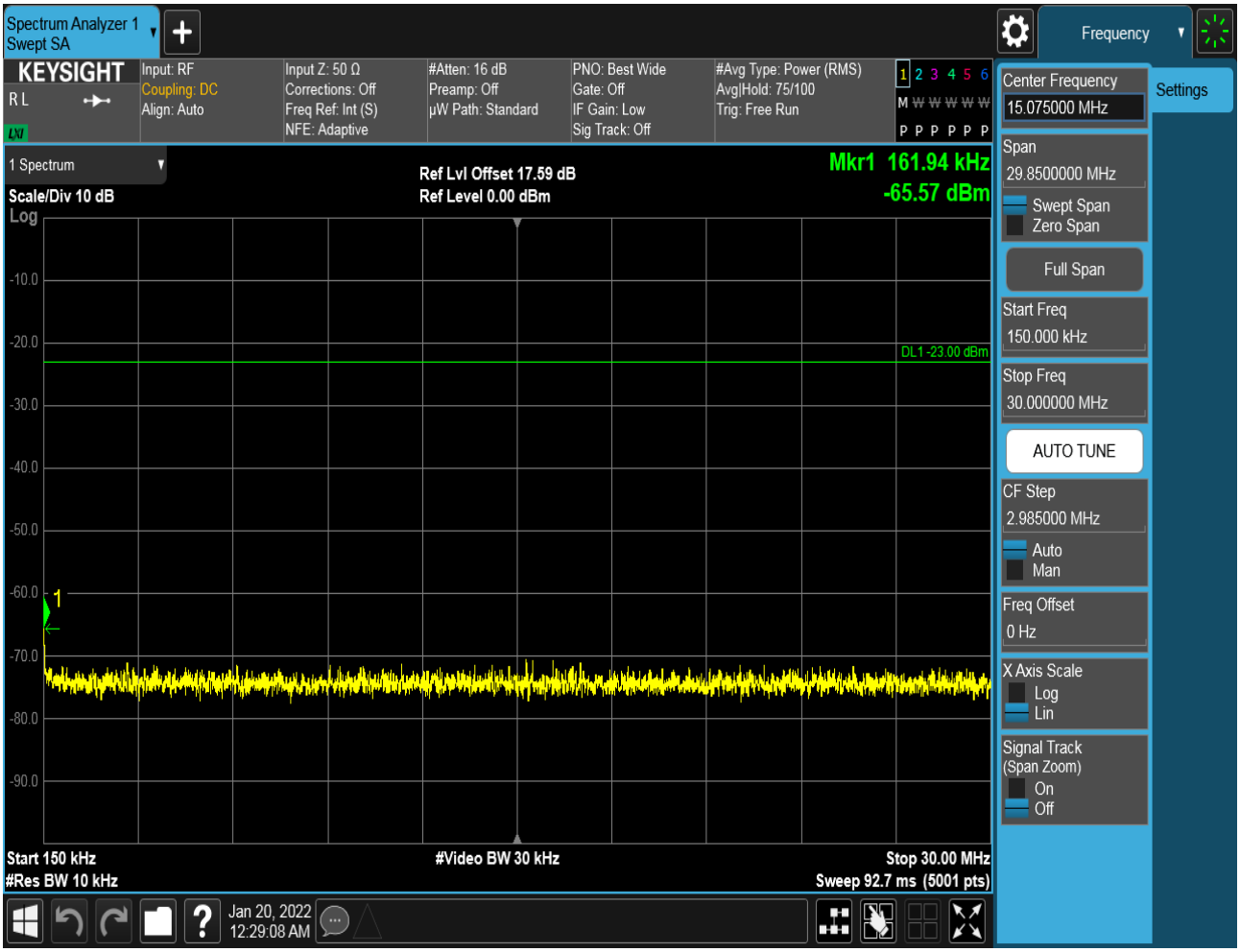
6.2.1.2 Test Mode = LTE/TM2

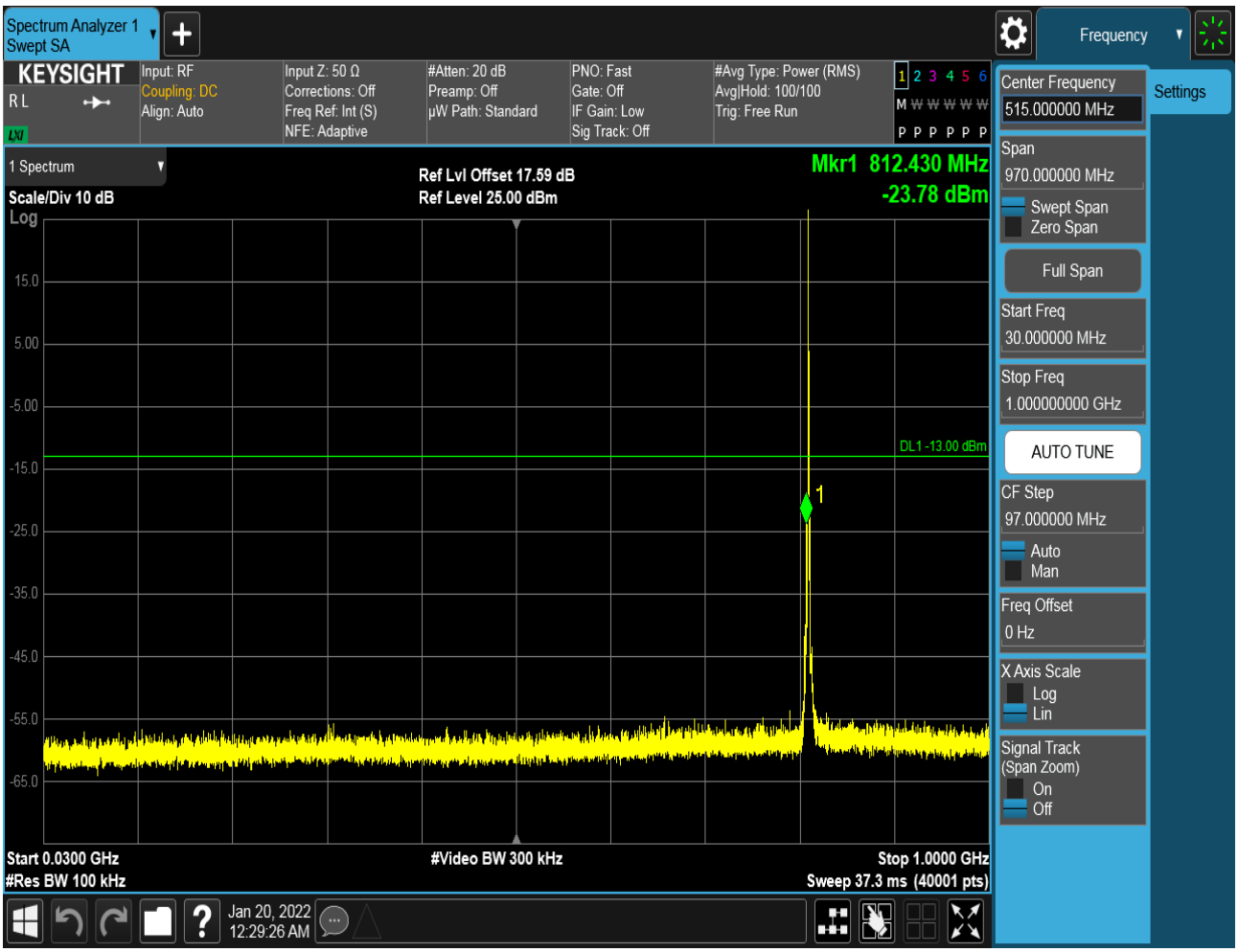
6.2.1.2.1 Test Bandwidth = 1.4MHz

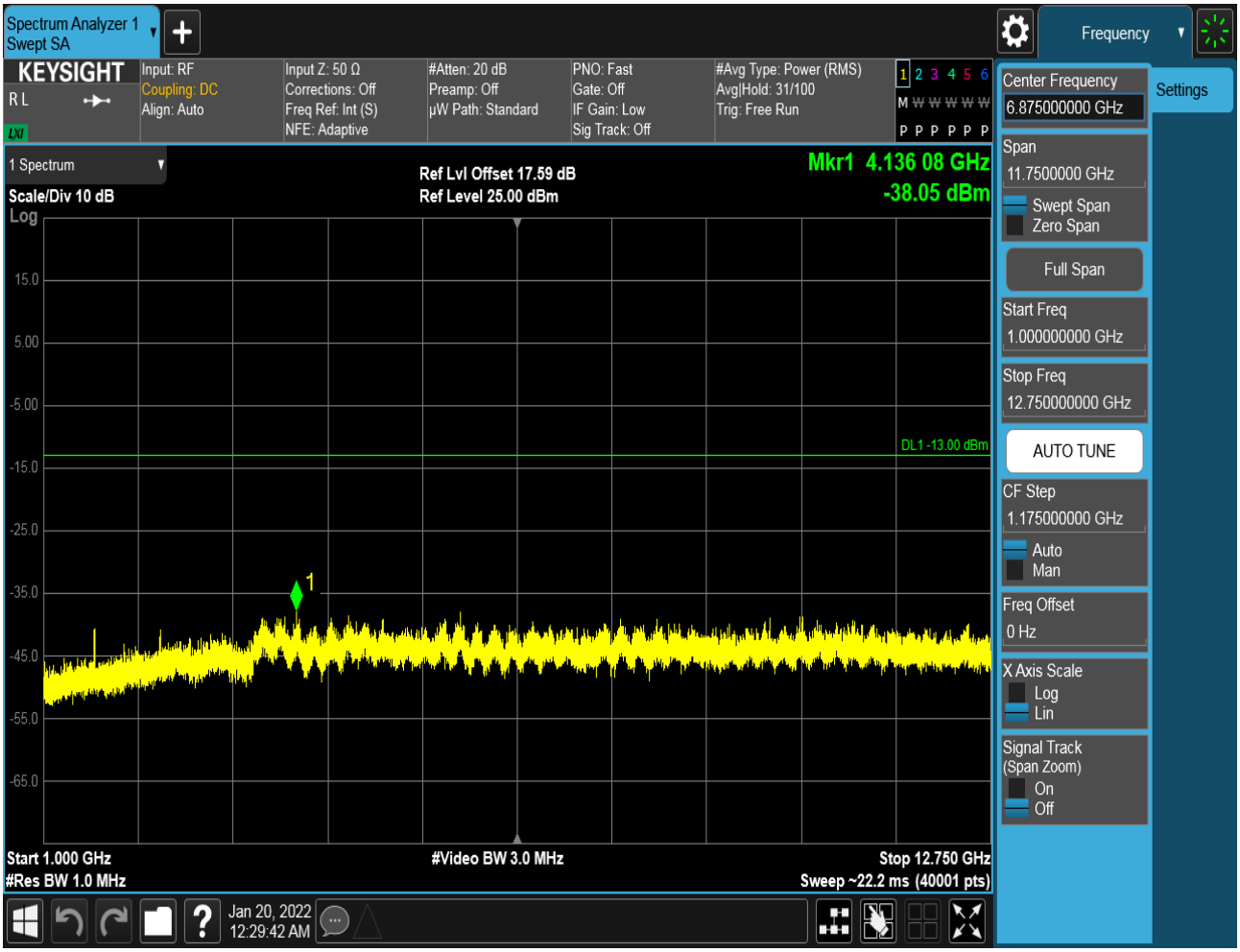
6.2.1.2.1.1 Test Channel = LCH

6.2.1.2.1.1.1 Test RB = RB1#0



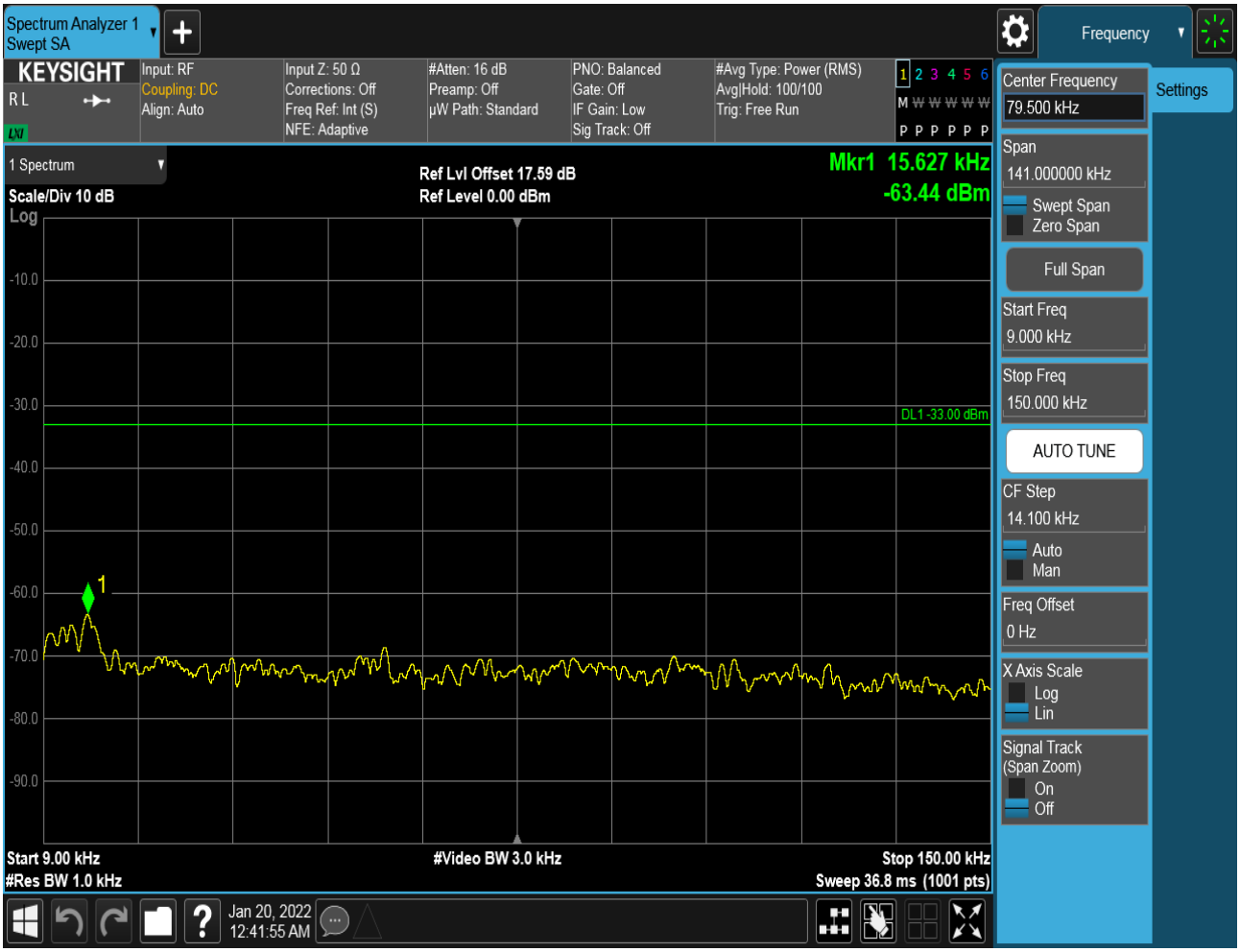

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 16 dB
Preamp: Off
µW Path: Standard
PNO: Best Wide
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 75/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 0.00 dBm
Mkr1 161.94 kHz
-65.57 dBm
Scale/Div 10 dB
Log
DL1 -23.00 dBm
Start 150 kHz
#Res BW 10 kHz
#Video BW 30 kHz
Stop 30.00 MHz
Sweep 92.7 ms (5001 pts)
Jan 20, 2022
12:29:08 AM
Frequency
Settings
Center Frequency
15.075000 MHz
Span
29.8500000 MHz
Swept Span
Zero Span
Full Span
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
AUTO TUNE
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

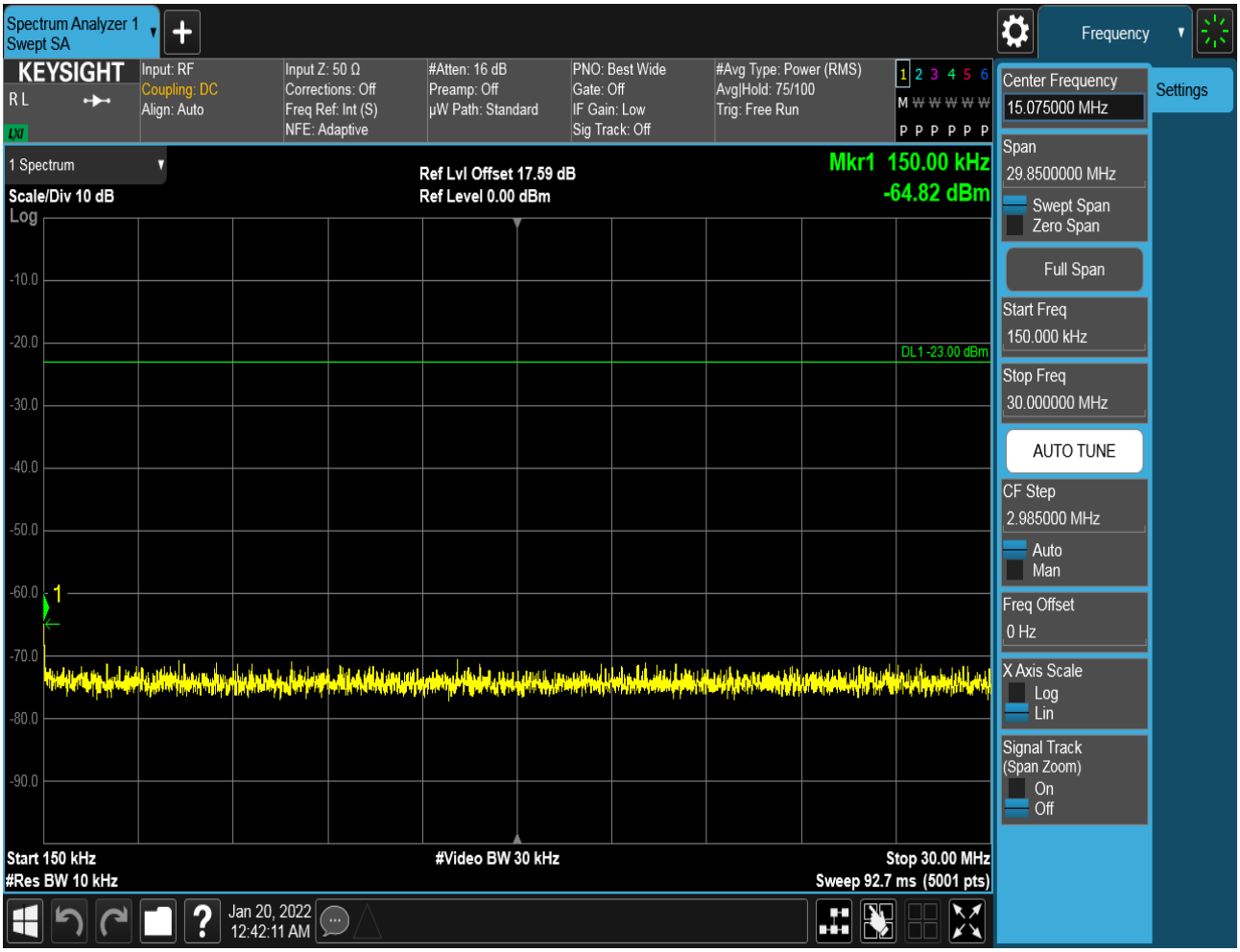

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 100/100
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 812.430 MHz
-23.78 dBm
DL1 -13.00 dBm
Start 0.0300 GHz
#Res BW 100 kHz
#Video BW 300 kHz
Stop 1.0000 GHz
Sweep 37.3 ms (40001 pts)
Jan 20, 2022
12:29:26 AM
Frequency
Settings
Center Frequency
515.000000 MHz
Span
970.000000 MHz
Swept Span
Zero Span
Full Span
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
AUTO TUNE
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

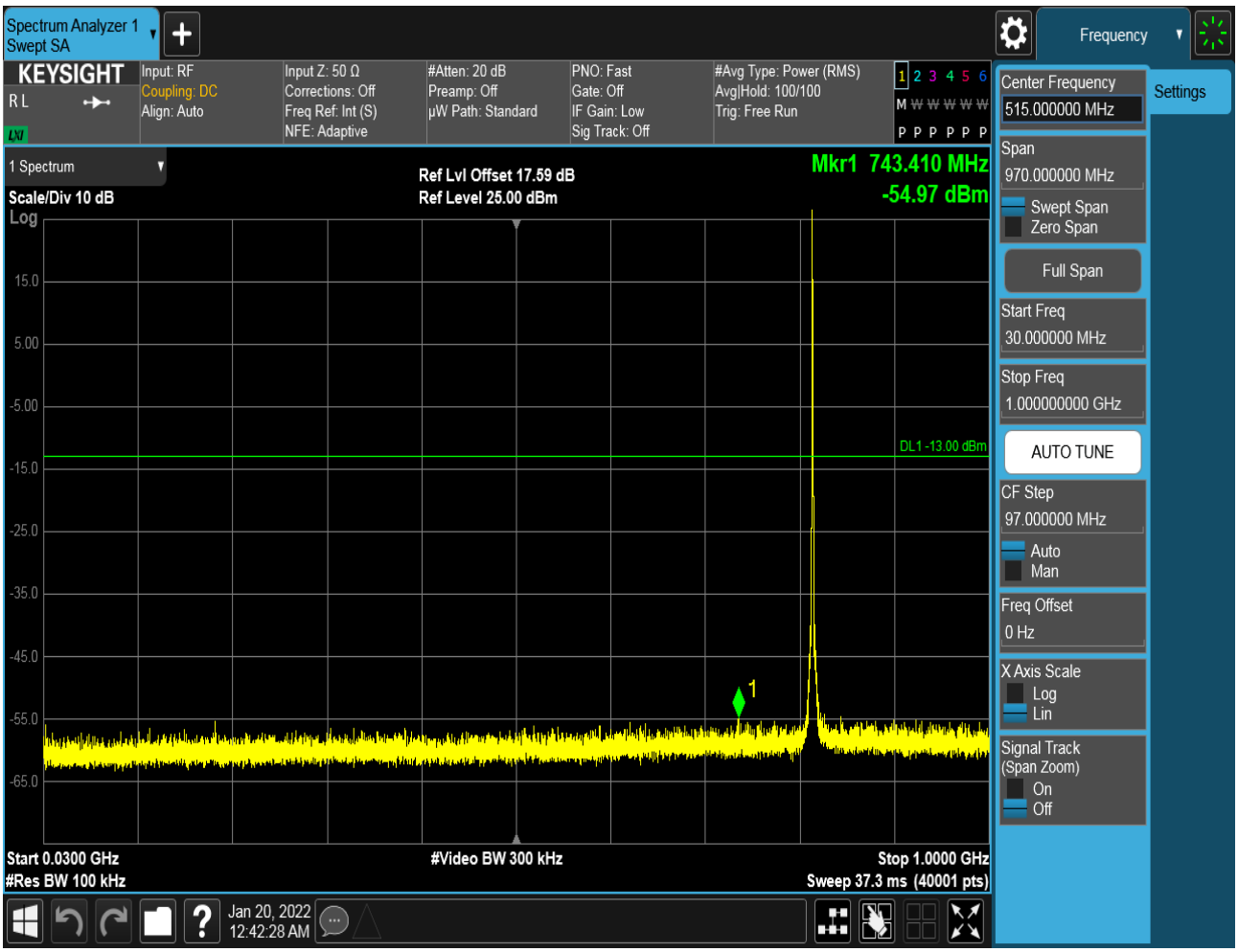

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 31/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 4.136 08 GHz
-38.05 dBm
Scale/Div 10 dB
Log
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
DL1 -13.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#Video BW 3.0 MHz
Stop 12.750 GHz
Sweep ~22.2 ms (40001 pts)
Jan 20, 2022
12:29:42 AM
Frequency
Settings
Center Frequency
6.875000000 GHz
Span
11.7500000 GHz
Swept Span
Zero Span
Full Span
Start Freq
1.000000000 GHz
Stop Freq
12.750000000 GHz
AUTO TUNE
CF Step
1.175000000 GHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

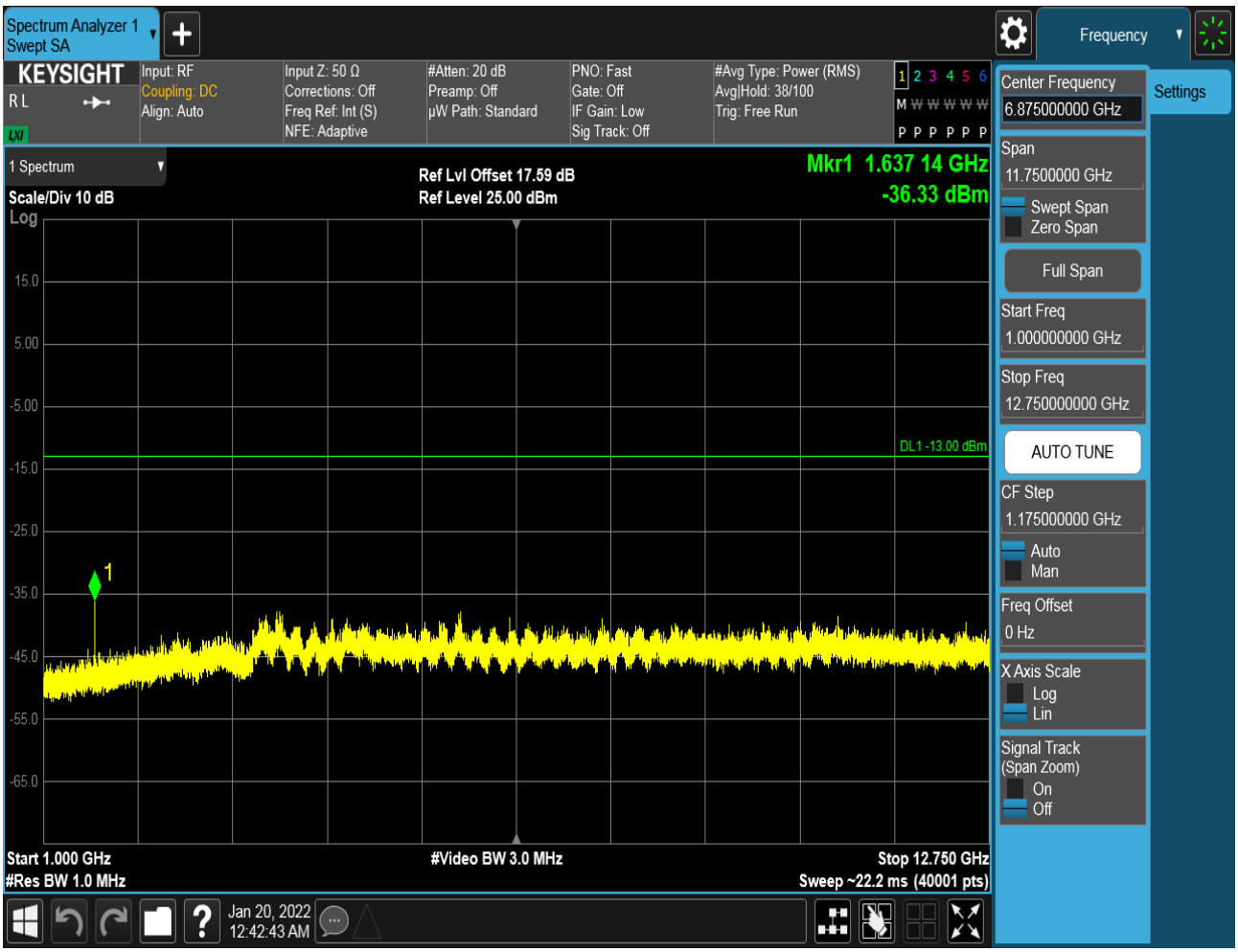
6.2.1.2.1.2 Test Channel = MCH

6.2.1.2.1.2.1 Test RB = RB1#0



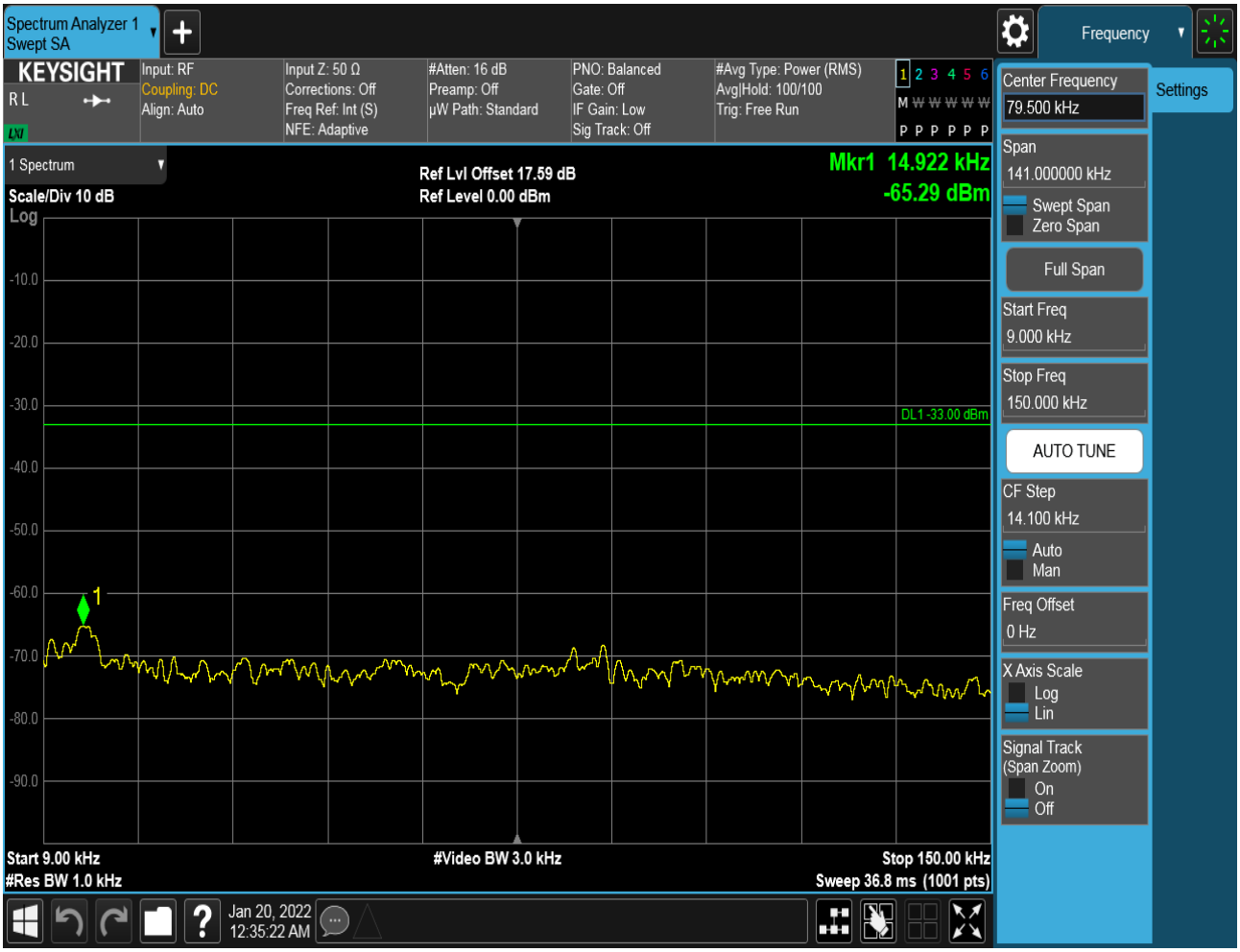

Spectrum Analyzer 1
Swept SA
KEYSIGHT
RL
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 16 dB
Preamp: Off
µW Path: Standard
PNO: Best Wide
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 75/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 0.00 dBm
Mkr1 150.00 kHz
-64.82 dBm
Scale/Div 10 dB
Log
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
DL1 -23.00 dBm
Start 150 kHz
#Res BW 10 kHz
#Video BW 30 kHz
Stop 30.00 MHz
Sweep 92.7 ms (5001 pts)
Jan 20, 2022
12:42:11 AM
Frequency
Settings
Center Frequency
15.075000 MHz
Span
29.8500000 MHz
Swept Span
Zero Span
Full Span
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
AUTO TUNE
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

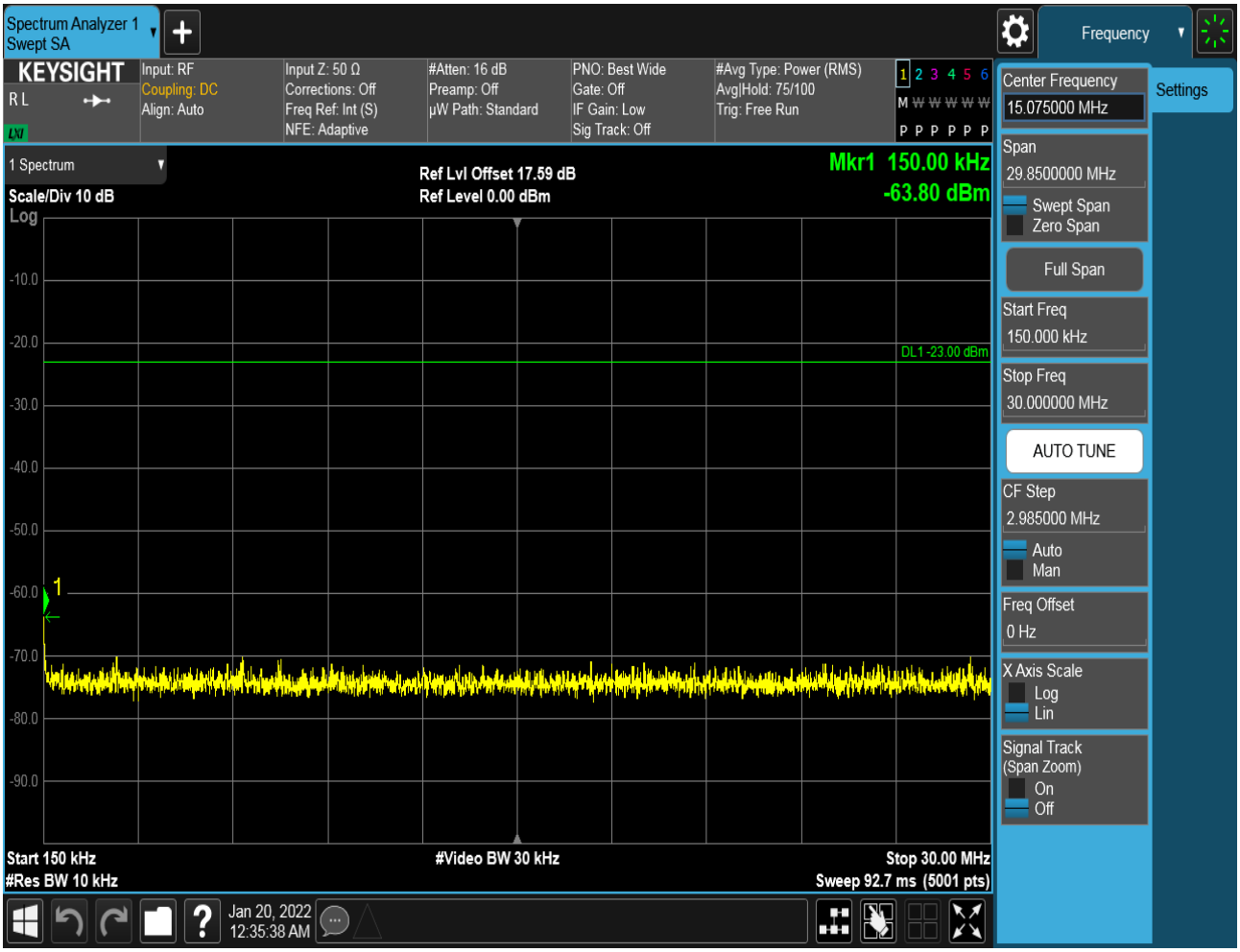

Spectrum Analyzer 1
Swept SA
KEYSIGHT
RL
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 100/100
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 743.410 MHz
-54.97 dBm
DL1 -13.00 dBm
Start 0.0300 GHz
#Res BW 100 kHz
#Video BW 300 kHz
Stop 1.0000 GHz
Sweep 37.3 ms (40001 pts)
Jan 20, 2022
12:42:28 AM
Frequency
Settings
Center Frequency
515.000000 MHz
Span
970.000000 MHz
Swept Span
Zero Span
Full Span
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
AUTO TUNE
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

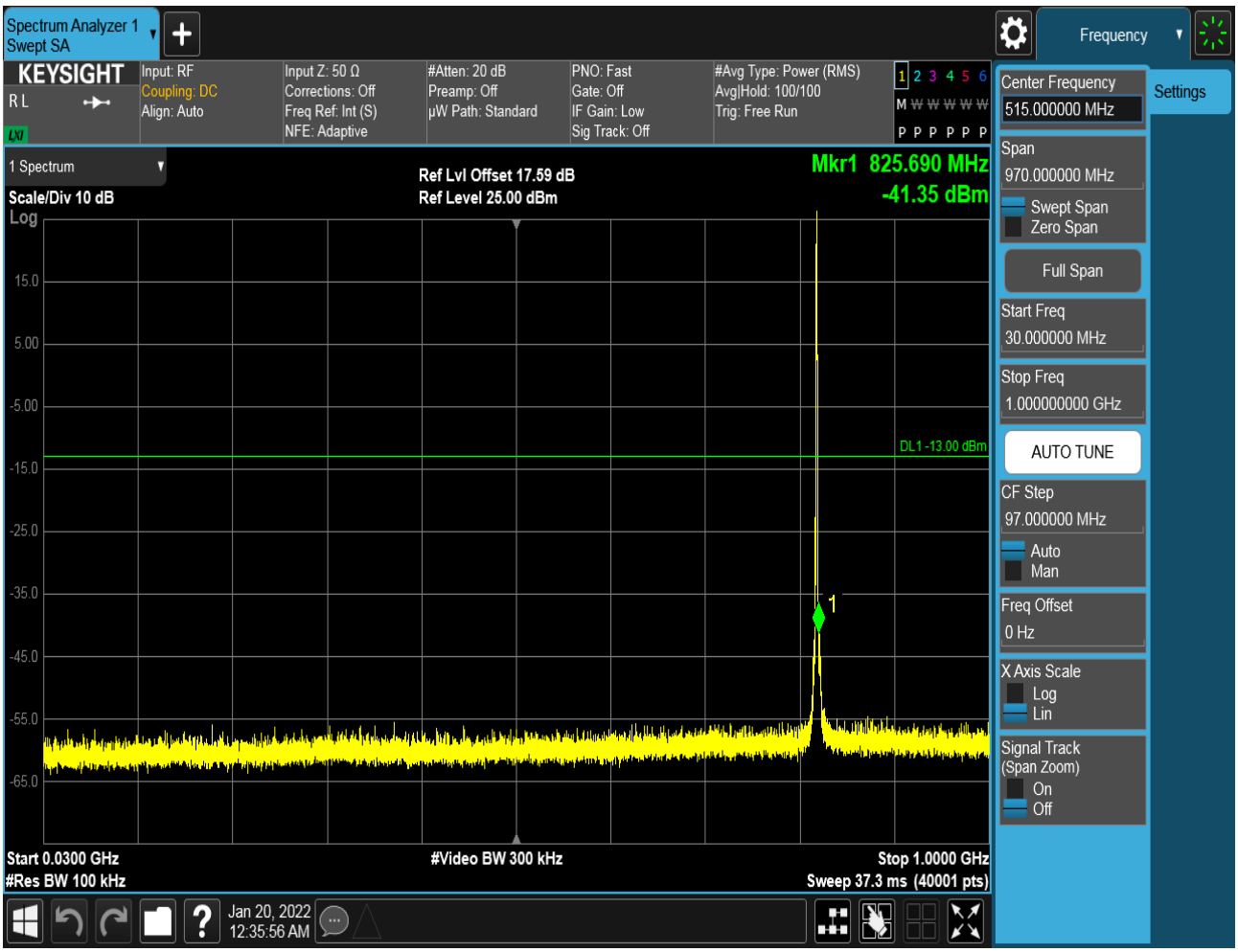


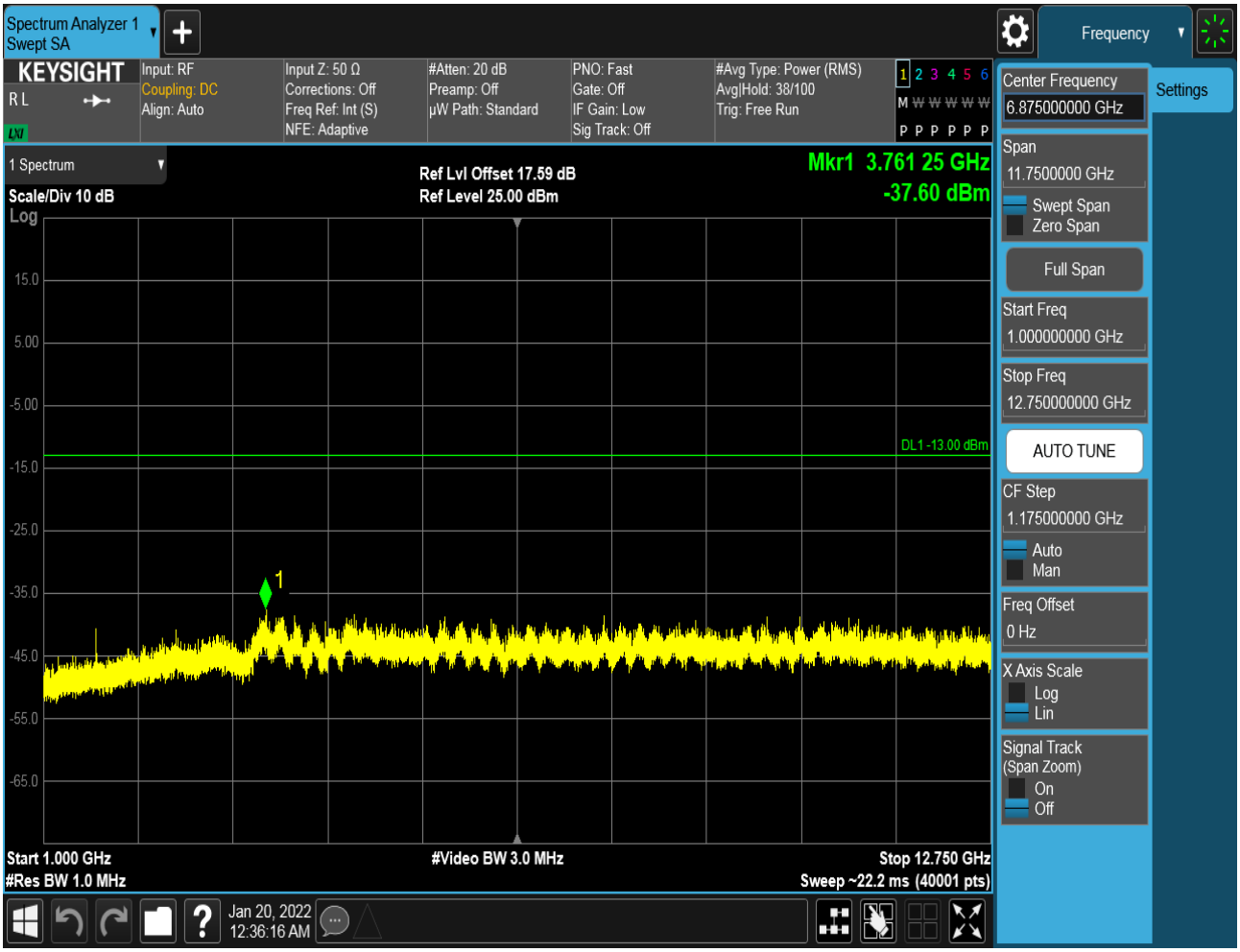
6.2.1.2.1.3 Test Channel = HCH

6.2.1.2.1.3.1 Test RB = RB1#0




Spectrum Analyzer 1
Swept SA
KEYSIGHT
RL
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 16 dB
Preamp: Off
µW Path: Standard
PNO: Best Wide
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 75/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 0.00 dBm
Mkr1 150.00 kHz
-63.80 dBm
Scale/Div 10 dB
Log
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
DL1 -23.00 dBm
Start 150 kHz
#Res BW 10 kHz
#Video BW 30 kHz
Stop 30.00 MHz
Sweep 92.7 ms (5001 pts)
Jan 20, 2022
12:35:38 AM
Frequency
Settings
Center Frequency
15.075000 MHz
Span
29.8500000 MHz
Swept Span
Zero Span
Full Span
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
AUTO TUNE
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

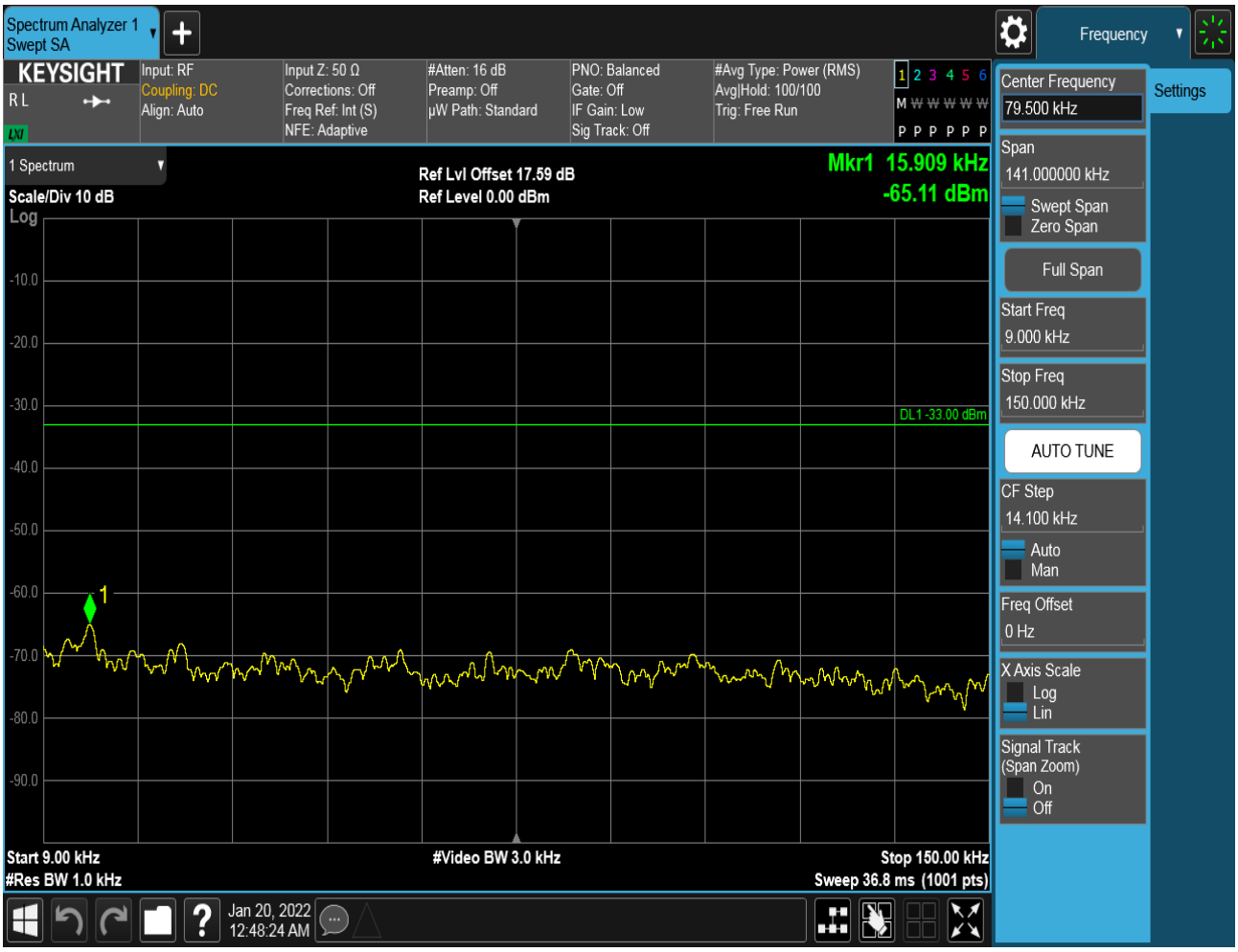

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 100/100
Trig: Free Run
Frequency
Settings
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 825.690 MHz
-41.35 dBm
Scale/Div 10 dB
Log
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
DL1 -13.00 dBm
Start 0.0300 GHz
#Res BW 100 kHz
#Video BW 300 kHz
Stop 1.0000 GHz
Sweep 37.3 ms (40001 pts)
Center Frequency
515.000000 MHz
Span
970.000000 MHz
Swept Span
Zero Span
Full Span
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
AUTO TUNE
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off
Jan 20, 2022
12:35:56 AM

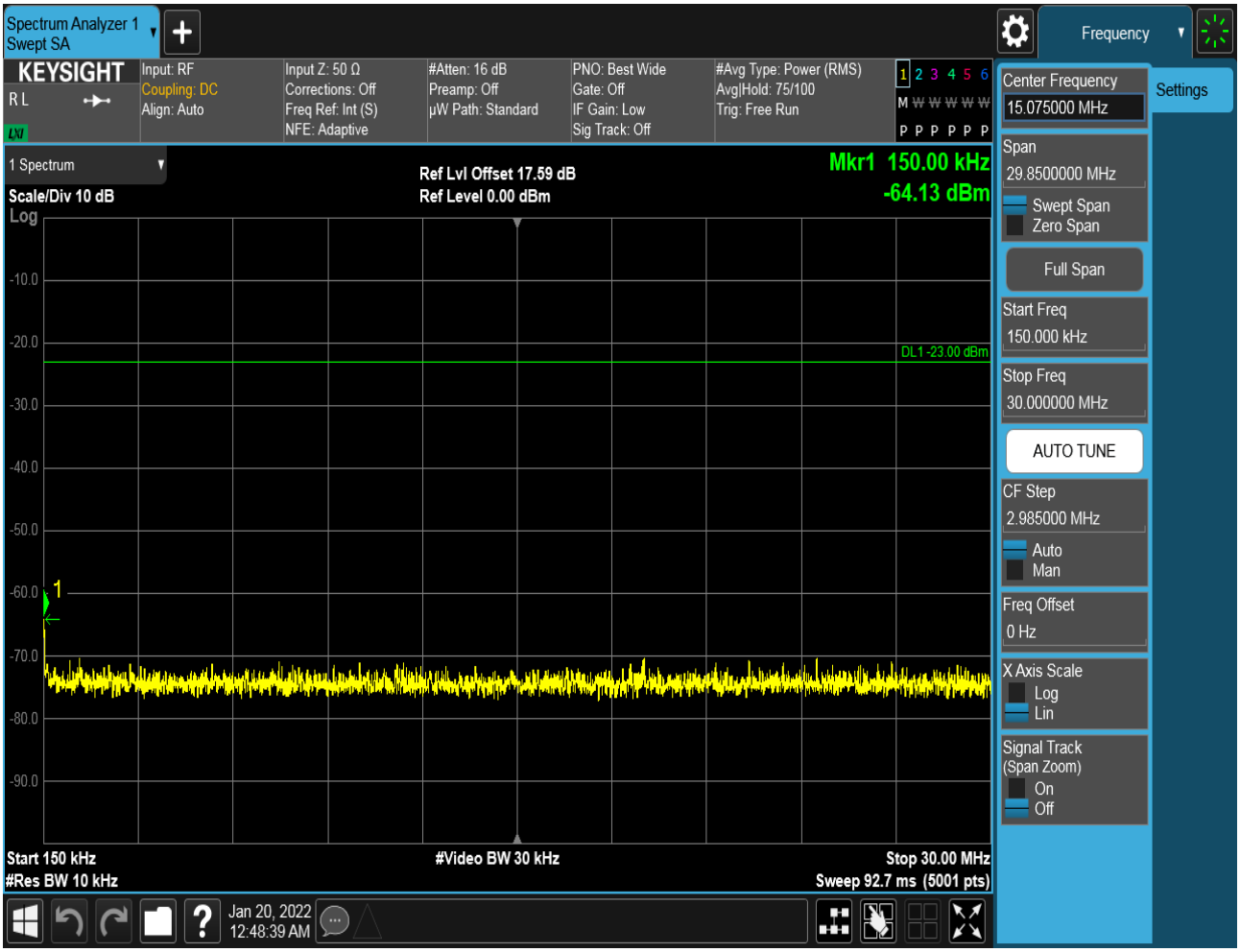

Spectrum Analyzer 1
Swept SA
KEYSIGHT
RL
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 38/100
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 3.761 25 GHz
-37.60 dBm
DL1 -13.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#Video BW 3.0 MHz
Stop 12.750 GHz
Sweep ~22.2 ms (40001 pts)
Jan 20, 2022
12:36:16 AM
Frequency
Settings
Center Frequency
6.875000000 GHz
Span
11.7500000 GHz
Swept Span
Zero Span
Full Span
Start Freq
1.000000000 GHz
Stop Freq
12.750000000 GHz
AUTO TUNE
CF Step
1.175000000 GHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

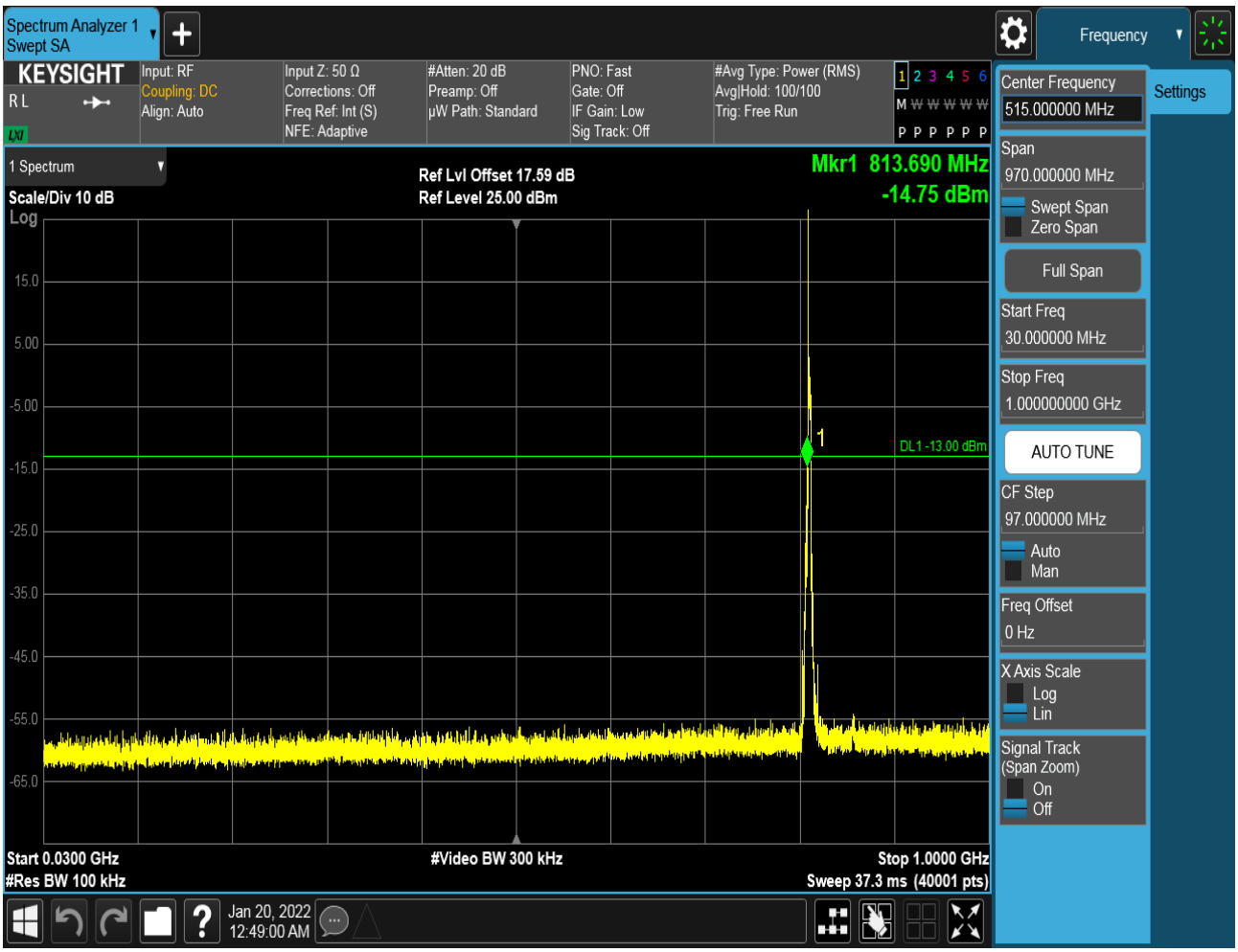
6.2.1.2.2 Test Bandwidth = 3MHz

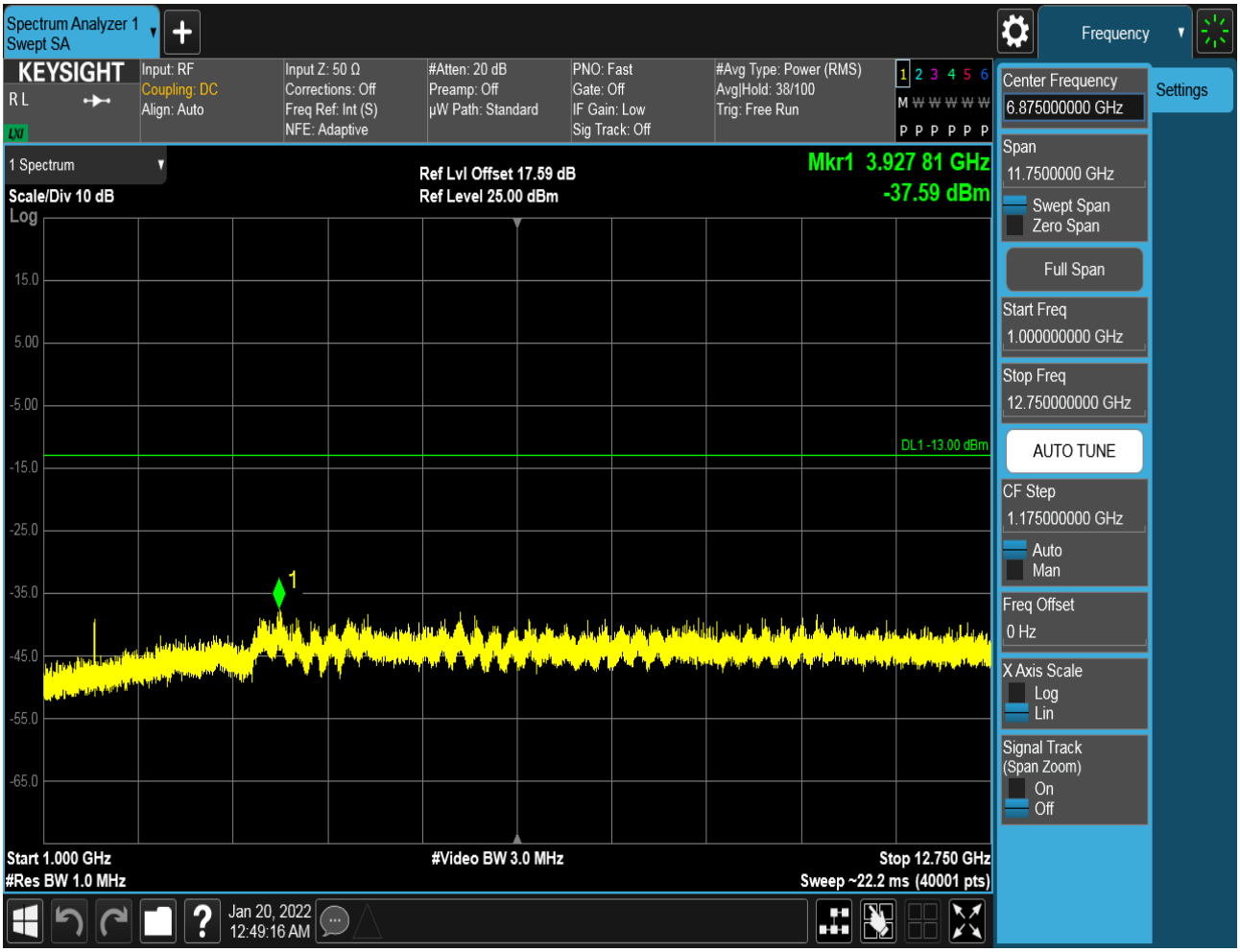
6.2.1.2.2.1 Test Channel = LCH

6.2.1.2.2.1.1 Test RB = RB1#0



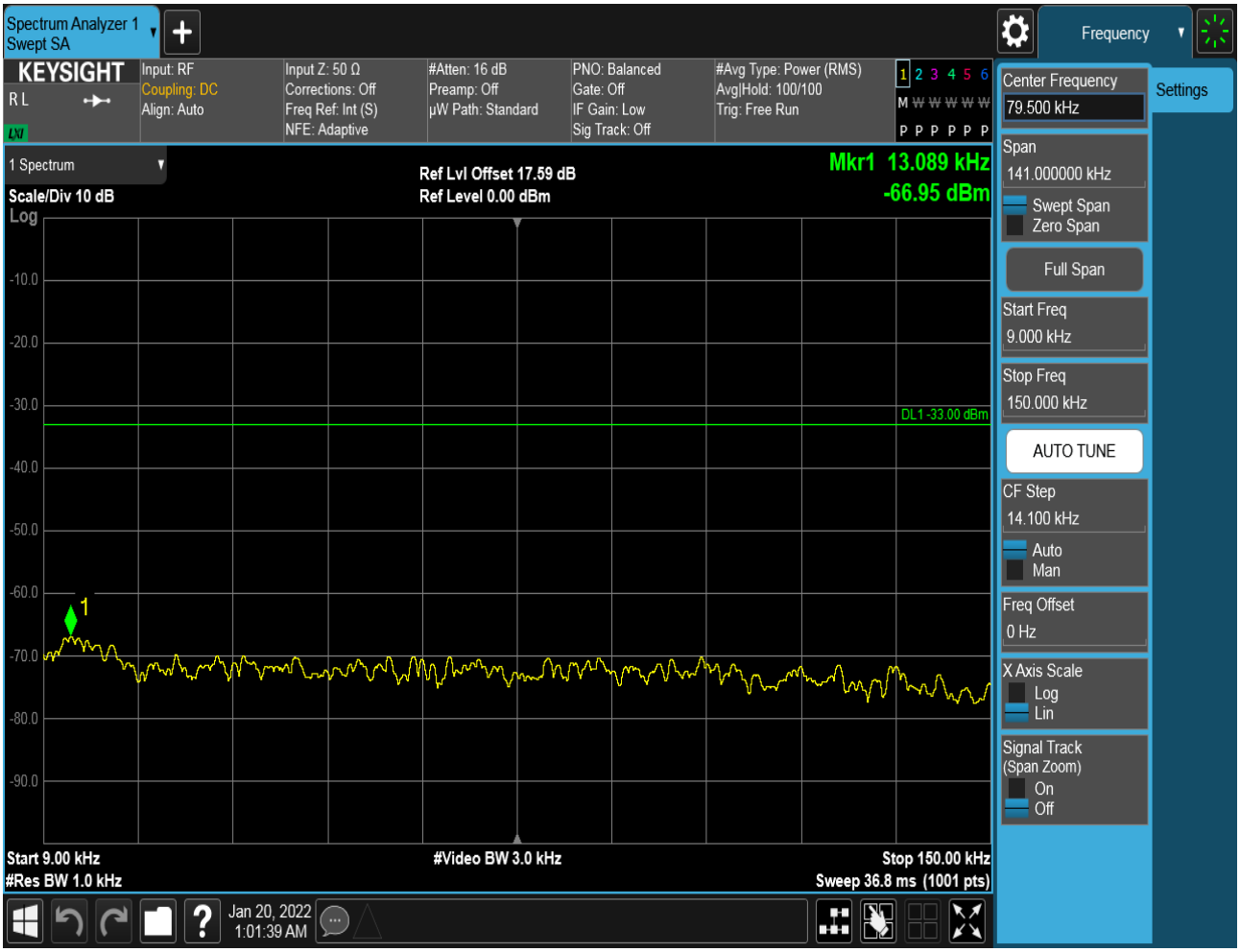

Spectrum Analyzer 1
Swept SA
KEYSIGHT
RL
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 16 dB
Preamp: Off
µW Path: Standard
PNO: Best Wide
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 75/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 0.00 dBm
Mkr1 150.00 kHz
-64.13 dBm
Scale/Div 10 dB
Log
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
DL1 -23.00 dBm
Start 150 kHz
#Res BW 10 kHz
#Video BW 30 kHz
Stop 30.00 MHz
Sweep 92.7 ms (5001 pts)
Jan 20, 2022
12:48:39 AM
Frequency
Settings
Center Frequency
15.075000 MHz
Span
29.8500000 MHz
Swept Span
Zero Span
Full Span
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
AUTO TUNE
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

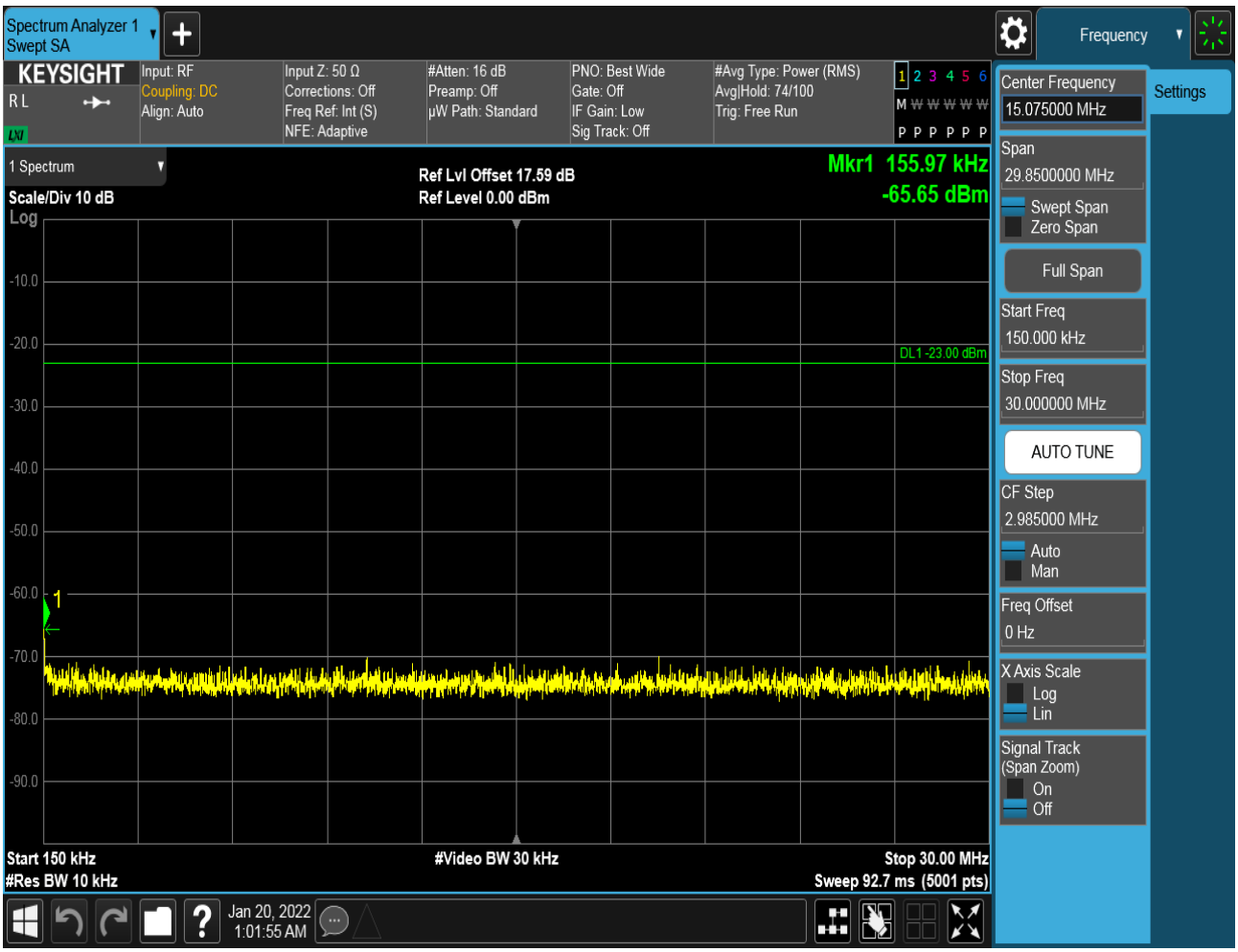

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 100/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 813.690 MHz
-14.75 dBm
Scale/Div 10 dB
Log
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
DL1 -13.00 dBm
Start 0.0300 GHz
#Res BW 100 kHz
#Video BW 300 kHz
Stop 1.0000 GHz
Sweep 37.3 ms (40001 pts)
Jan 20, 2022
12:49:00 AM
Frequency
Settings
Center Frequency
515.000000 MHz
Span
970.000000 MHz
Swept Span
Zero Span
Full Span
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
AUTO TUNE
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

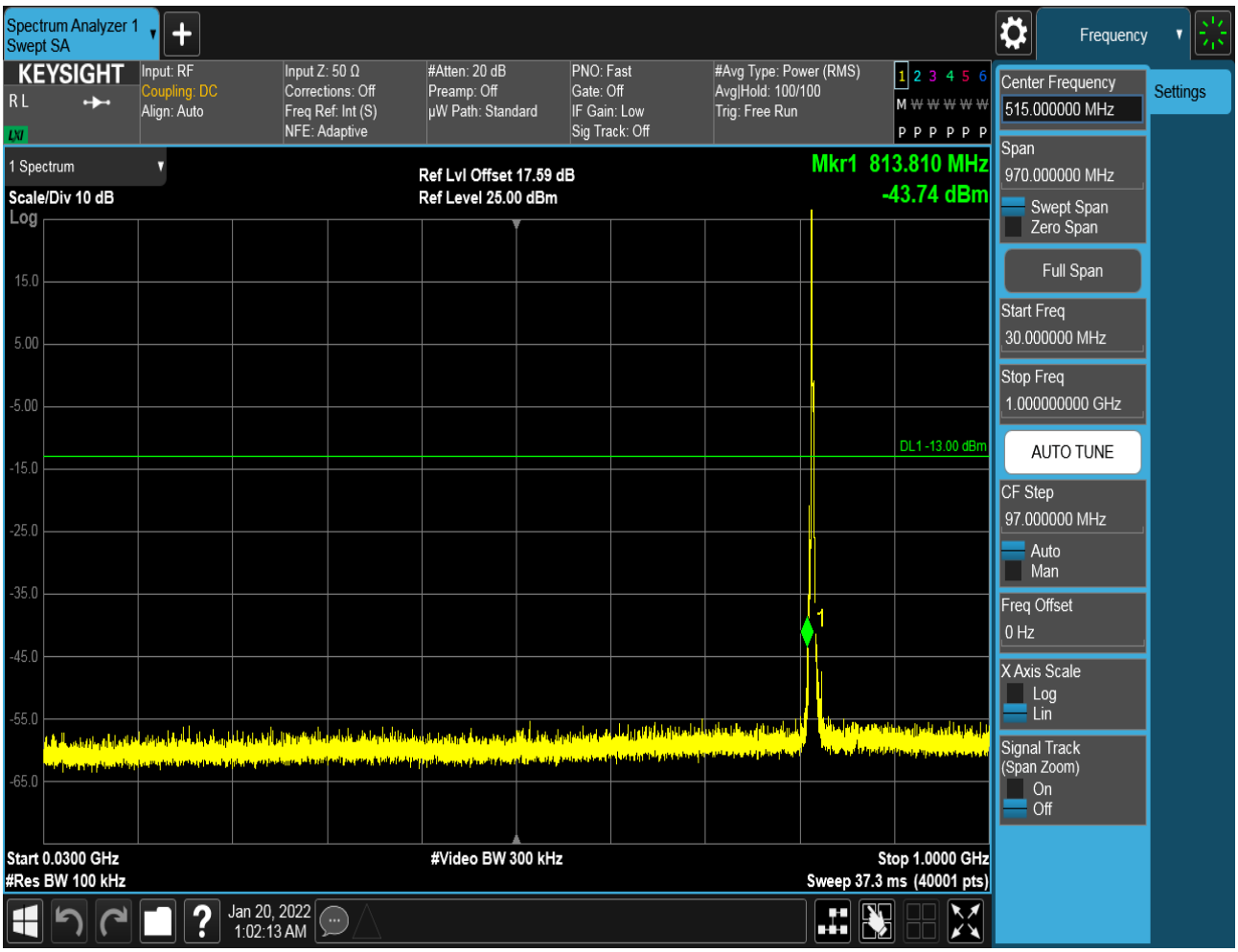

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 38/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 3.927 81 GHz
-37.59 dBm
Scale/Div 10 dB
Log
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
DL1 -13.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#Video BW 3.0 MHz
Stop 12.750 GHz
Sweep ~22.2 ms (40001 pts)
Jan 20, 2022
12:49:16 AM
Frequency
Settings
Center Frequency
6.875000000 GHz
Span
11.7500000 GHz
Swept Span
Zero Span
Full Span
Start Freq
1.000000000 GHz
Stop Freq
12.750000000 GHz
AUTO TUNE
CF Step
1.175000000 GHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

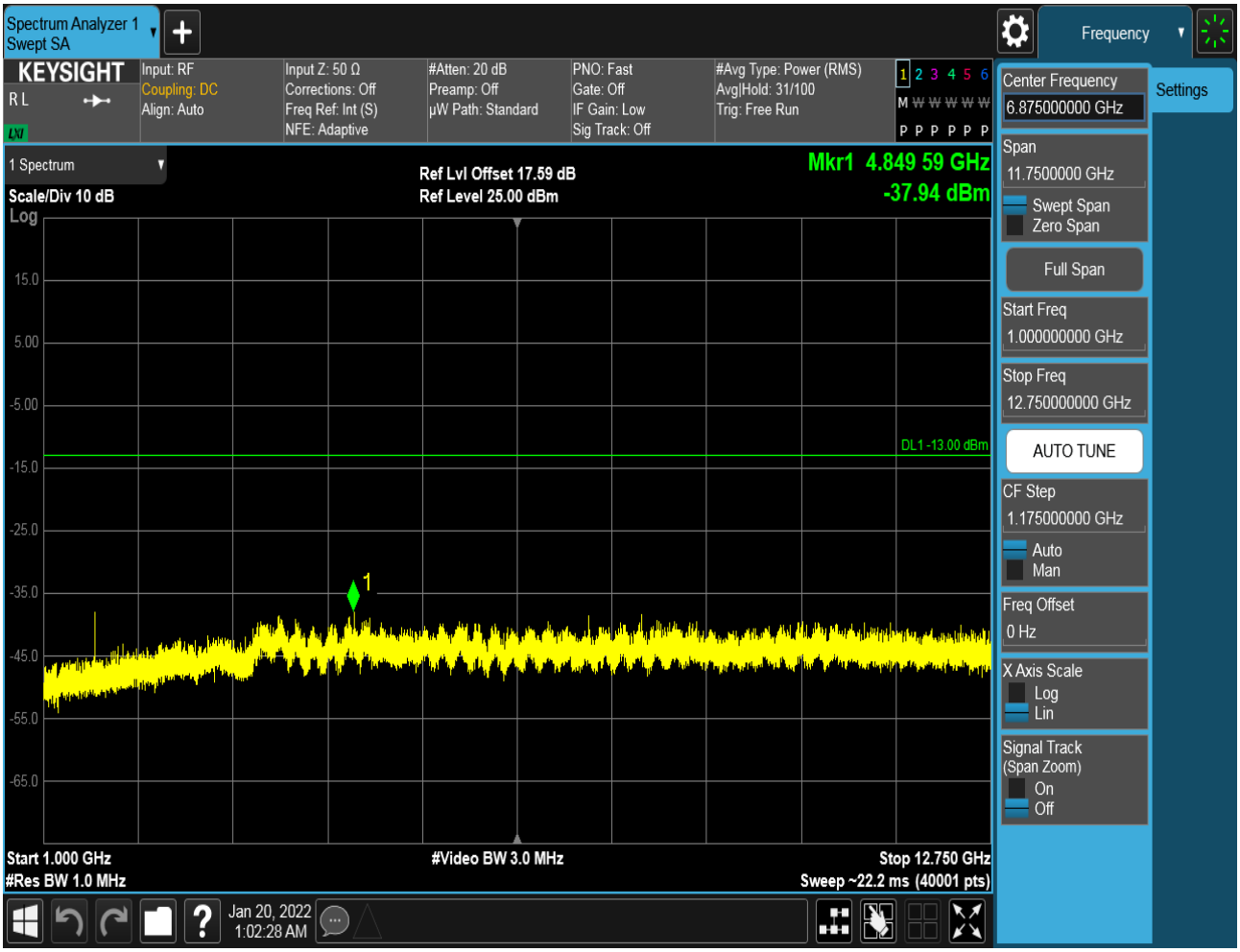
6.2.1.2.2.2 Test Channel = MCH

6.2.1.2.2.2.1 Test RB = RB1#0



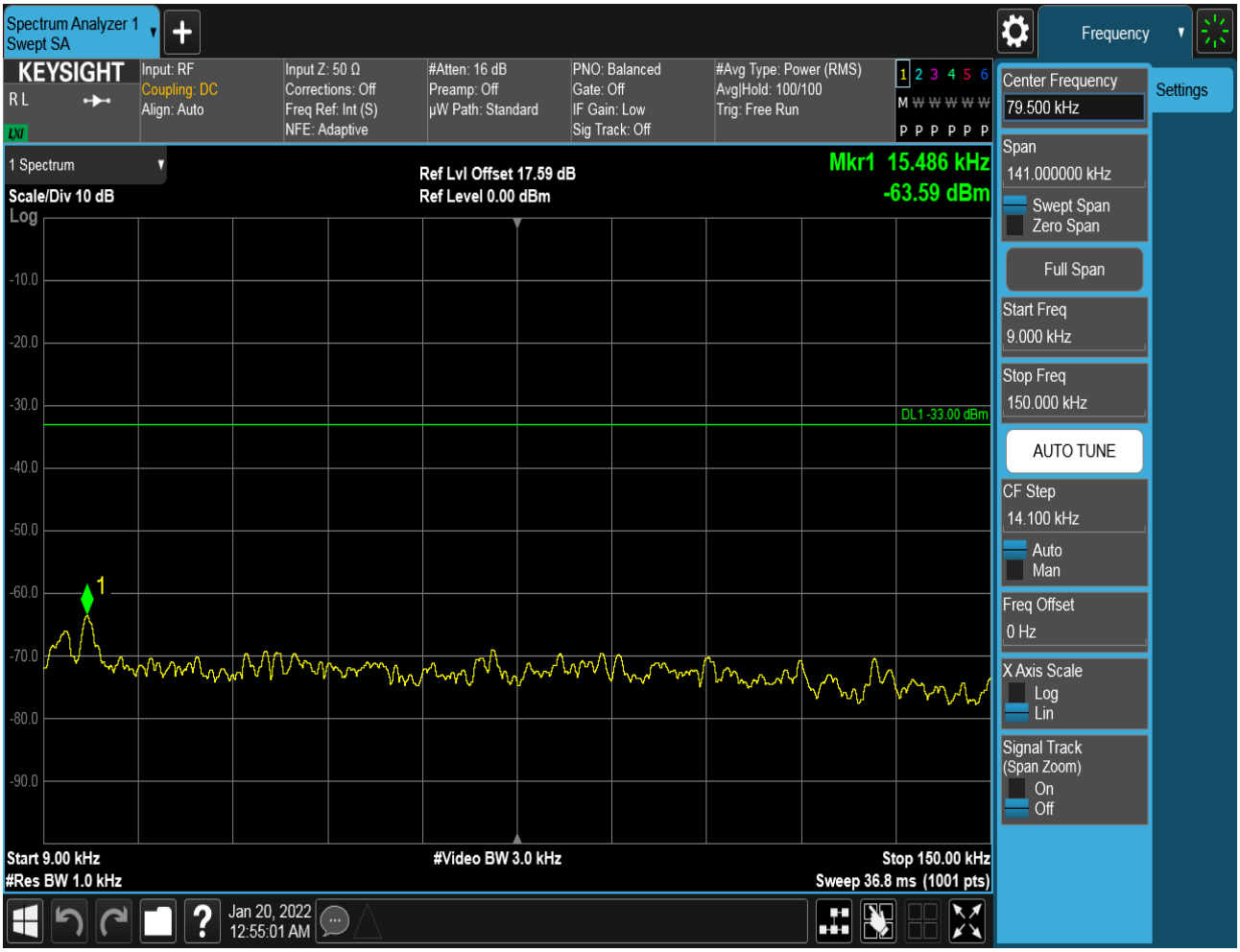

Spectrum Analyzer 1
Swept SA
KEYSIGHT
RL
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 16 dB
Preamp: Off
µW Path: Standard
PNO: Best Wide
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 74/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 0.00 dBm
Mkr1 155.97 kHz
-65.65 dBm
Scale/Div 10 dB
Log
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
DL1 -23.00 dBm
Start 150 kHz
#Res BW 10 kHz
#Video BW 30 kHz
Stop 30.00 MHz
Sweep 92.7 ms (5001 pts)
Jan 20, 2022
1:01:55 AM
Frequency
Settings
Center Frequency
15.075000 MHz
Span
29.8500000 MHz
Swept Span
Zero Span
Full Span
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
AUTO TUNE
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

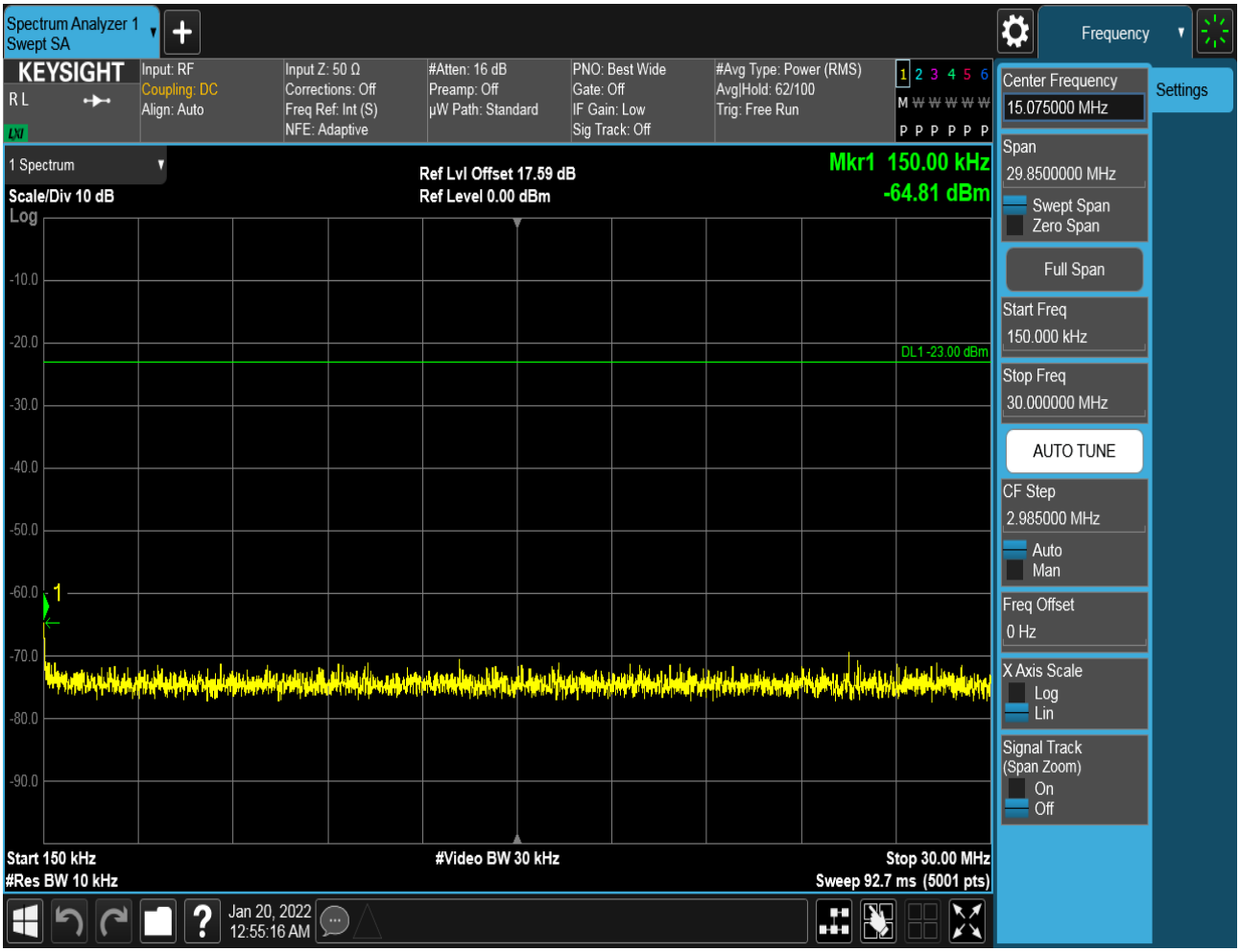

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 100/100
Trig: Free Run
Frequency
Settings
1 Spectrum
Scale/Div 10 dB
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 813.810 MHz
-43.74 dBm
DL1 -13.00 dBm
Start 0.0300 GHz
#Res BW 100 kHz
#Video BW 300 kHz
Stop 1.0000 GHz
Sweep 37.3 ms (40001 pts)
Center Frequency
515.000000 MHz
Span
970.000000 MHz
Swept Span
Zero Span
Full Span
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
AUTO TUNE
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off
Jan 20, 2022
1:02:13 AM

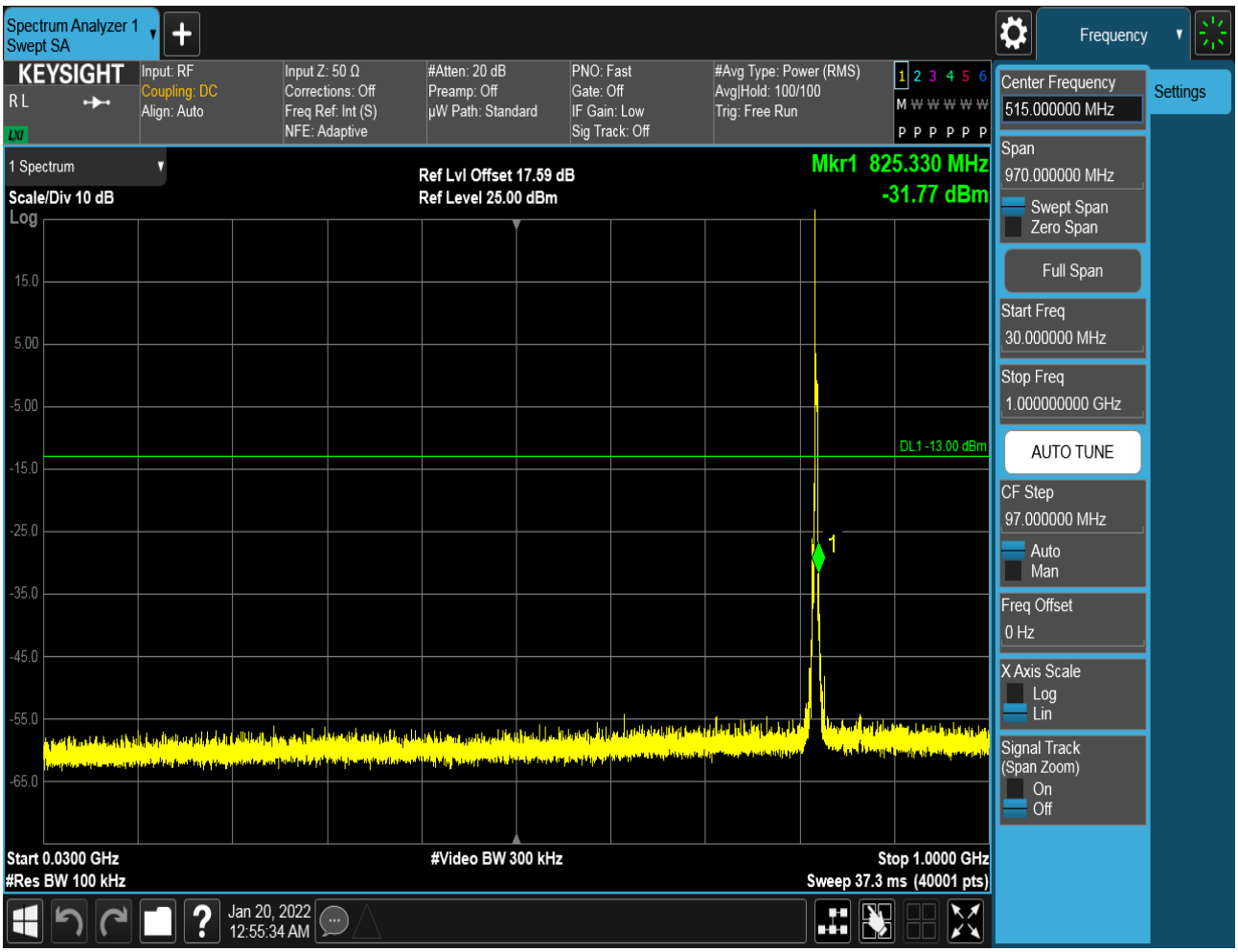

Spectrum Analyzer 1
Swept SA
KEYSIGHT
RL
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
μW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 31/100
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 4.849 59 GHz
-37.94 dBm
DL1 -13.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#Video BW 3.0 MHz
Stop 12.750 GHz
Sweep ~22.2 ms (40001 pts)
Jan 20, 2022
1:02:28 AM
Frequency
Settings
Center Frequency
6.875000000 GHz
Span
11.7500000 GHz
Swept Span
Zero Span
Full Span
Start Freq
1.000000000 GHz
Stop Freq
12.750000000 GHz
AUTO TUNE
CF Step
1.175000000 GHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

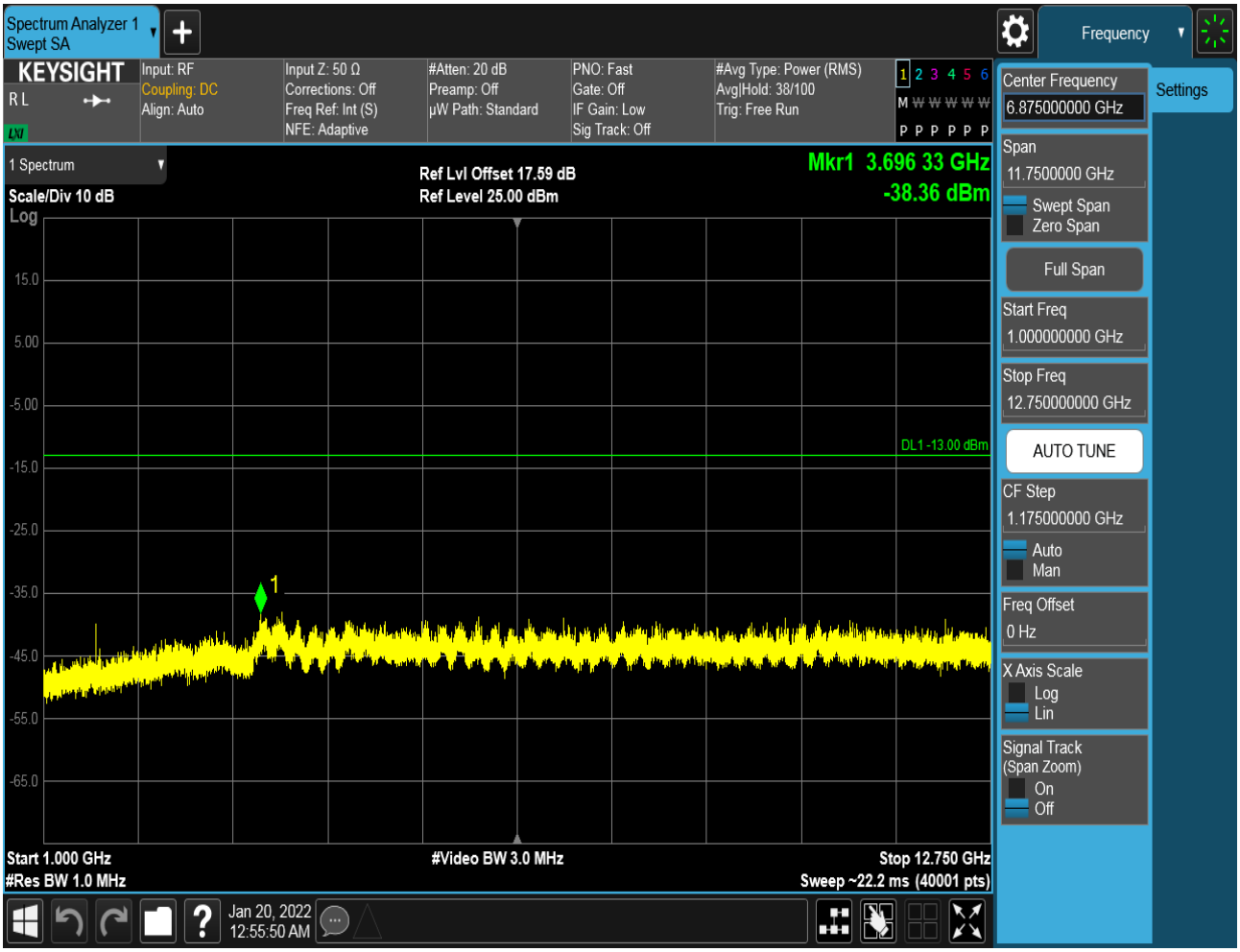
6.2.1.2.2.3 Test Channel = HCH

6.2.1.2.2.3.1 Test RB = RB1#0




Spectrum Analyzer 1
Swept SA
KEYSIGHT
RL
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 16 dB
Preamp: Off
µW Path: Standard
PNO: Best Wide
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 62/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 0.00 dBm
Mkr1 150.00 kHz
-64.81 dBm
Scale/Div 10 dB
Log
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
DL1 -23.00 dBm
Start 150 kHz
#Res BW 10 kHz
#Video BW 30 kHz
Stop 30.00 MHz
Sweep 92.7 ms (5001 pts)
Jan 20, 2022
12:55:16 AM
Frequency
Settings
Center Frequency
15.075000 MHz
Span
29.8500000 MHz
Swept Span
Zero Span
Full Span
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
AUTO TUNE
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

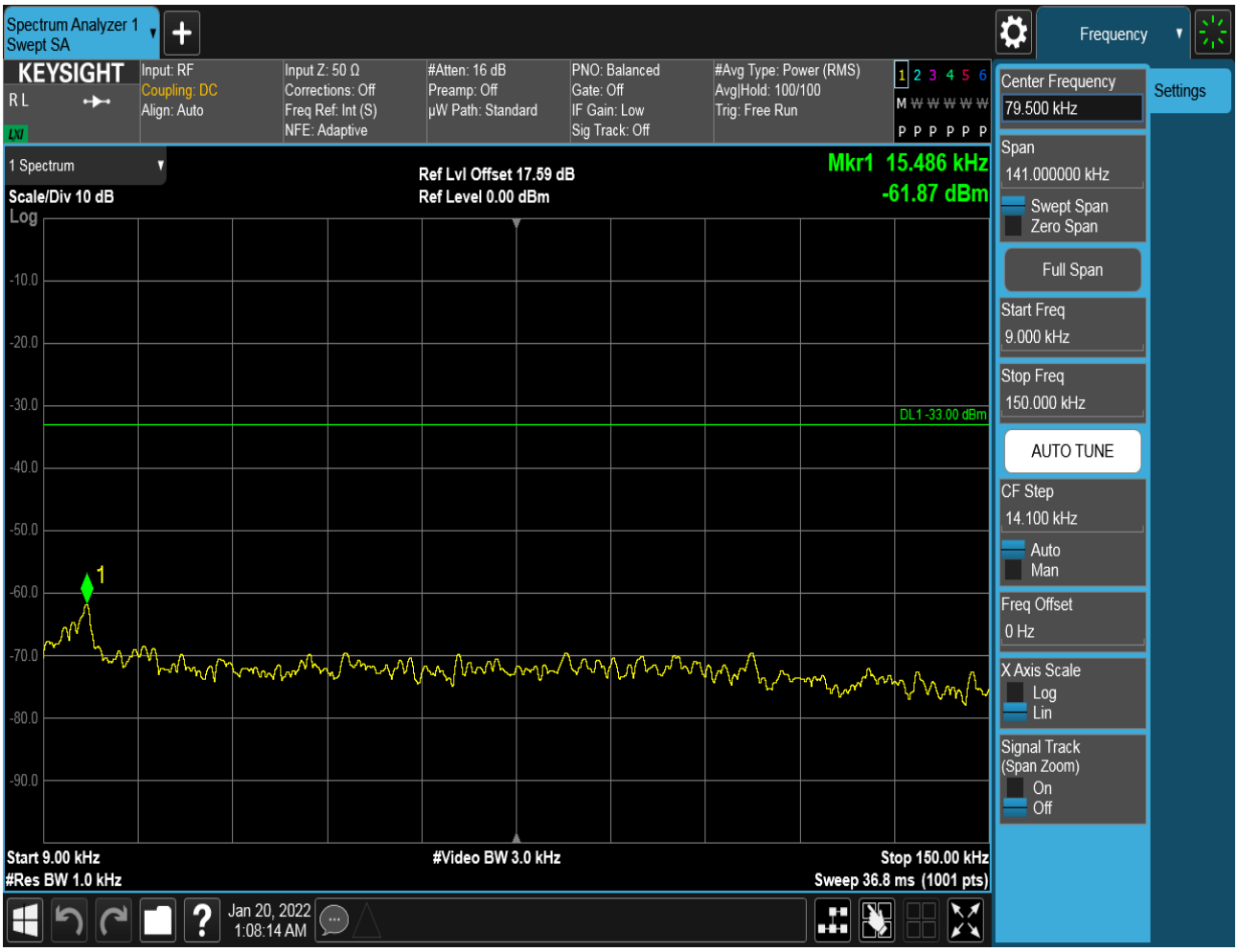

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 100/100
Trig: Free Run
Frequency
Settings
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 825.330 MHz
-31.77 dBm
Scale/Div 10 dB
Log
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
DL1 -13.00 dBm
Start 0.0300 GHz
#Res BW 100 kHz
#Video BW 300 kHz
Stop 1.0000 GHz
Sweep 37.3 ms (40001 pts)
Center Frequency
515.000000 MHz
Span
970.000000 MHz
Swept Span
Zero Span
Full Span
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
AUTO TUNE
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off
Jan 20, 2022
12:55:34 AM

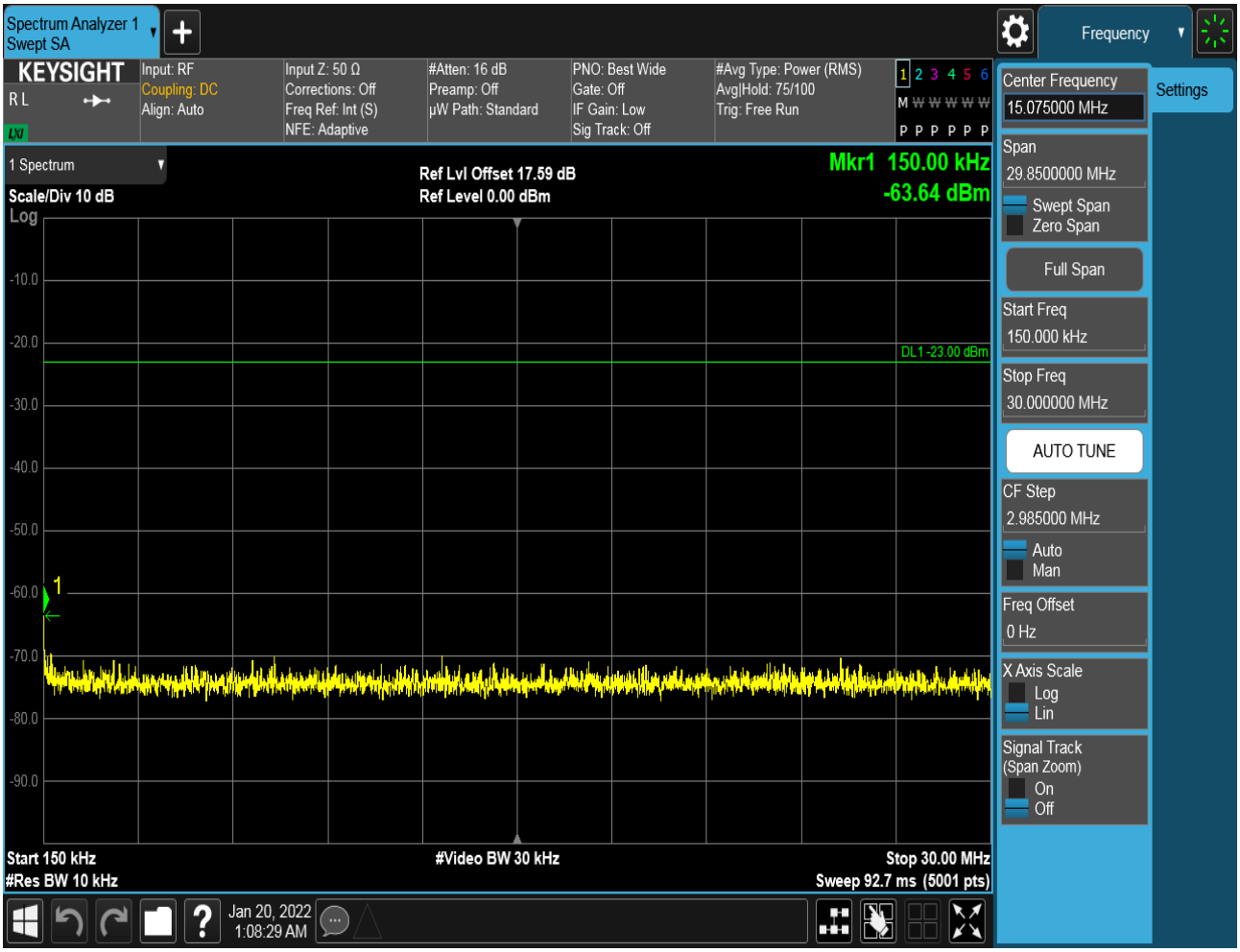

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 38/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 3.696 33 GHz
-38.36 dBm
Scale/Div 10 dB
Log
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
DL1 -13.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#Video BW 3.0 MHz
Stop 12.750 GHz
Sweep ~22.2 ms (40001 pts)
Jan 20, 2022
12:55:50 AM
Frequency
Settings
Center Frequency
6.875000000 GHz
Span
11.7500000 GHz
Swept Span
Zero Span
Full Span
Start Freq
1.000000000 GHz
Stop Freq
12.750000000 GHz
AUTO TUNE
CF Step
1.175000000 GHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

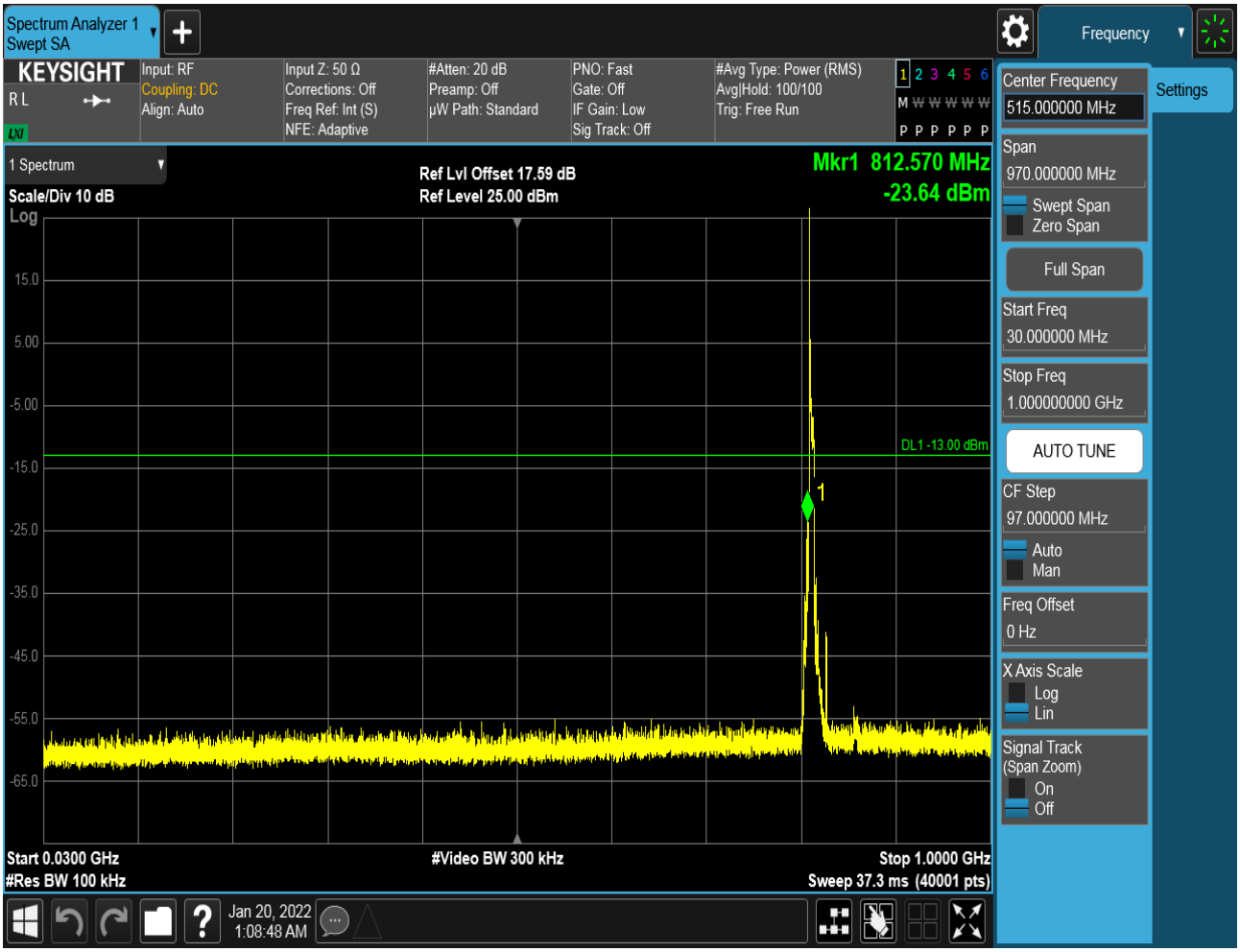
6.2.1.2.3 Test Bandwidth = 5MHz

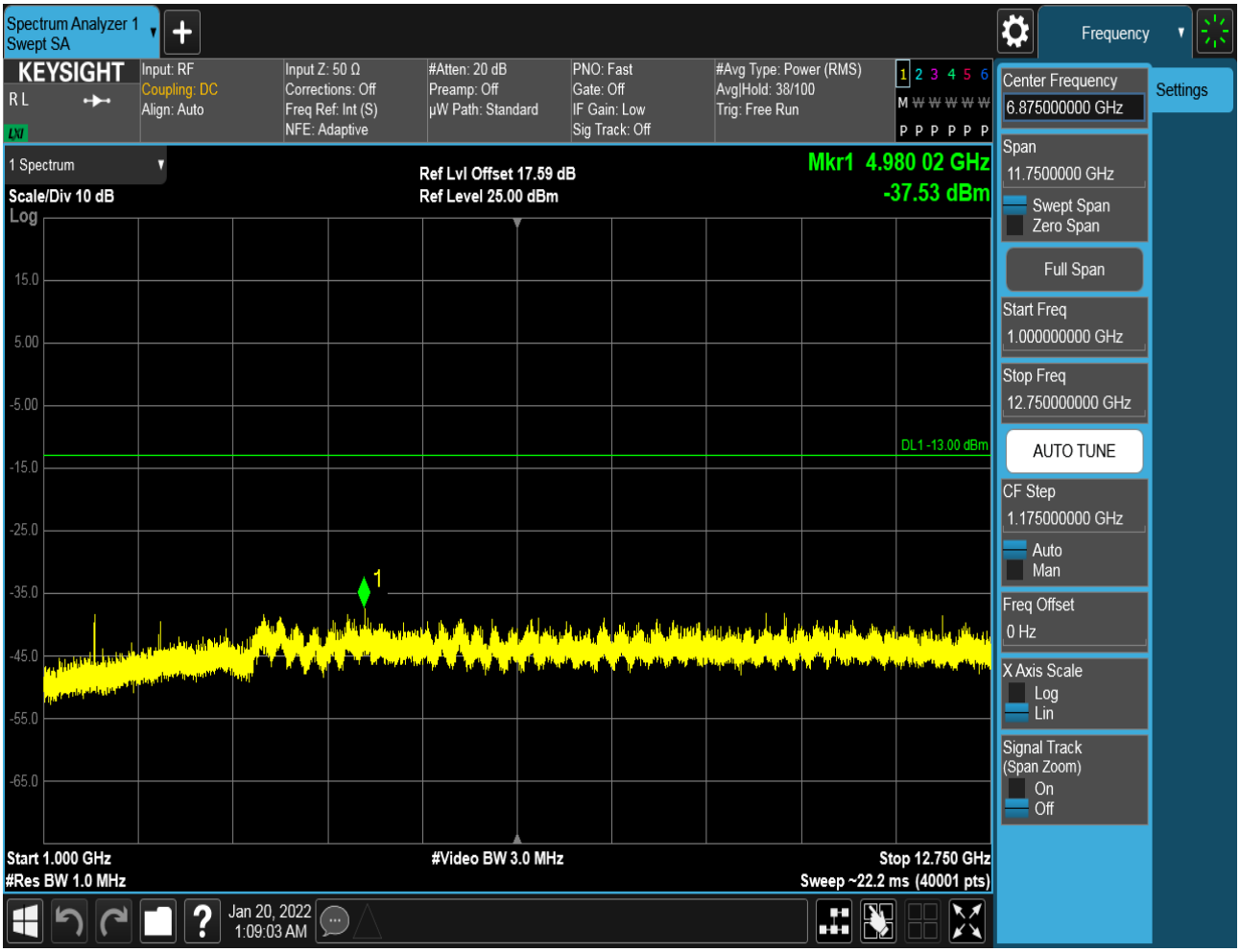
6.2.1.2.3.1 Test Channel = LCH

6.2.1.2.3.1.1 Test RB = RB1#0



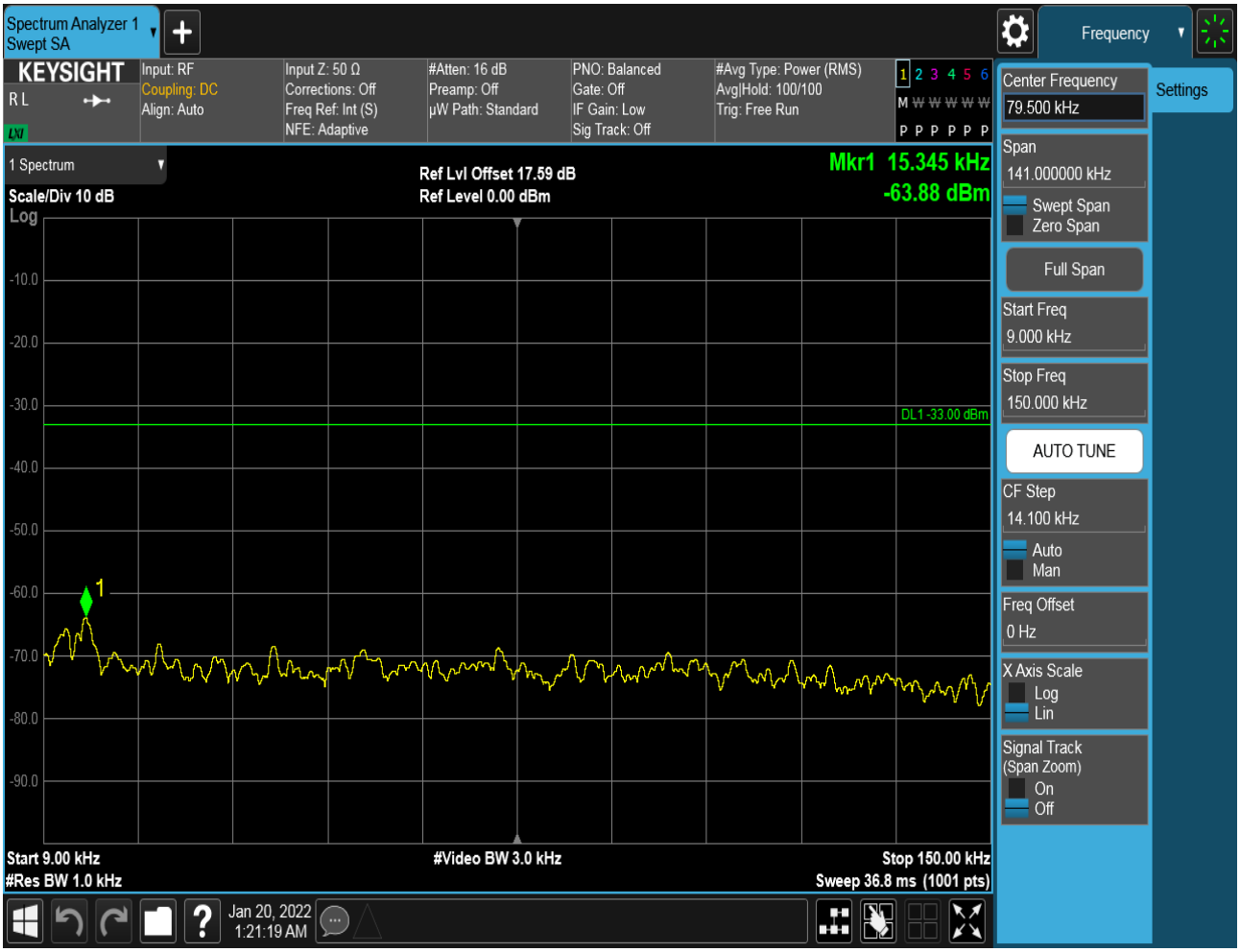

Spectrum Analyzer 1
Swept SA
KEYSIGHT
RL
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 16 dB
Preamp: Off
µW Path: Standard
PNO: Best Wide
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 75/100
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 17.59 dB
Ref Level 0.00 dBm
Mkr1 150.00 kHz
-63.64 dBm
DL1 -23.00 dBm
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
Start 150 kHz
#Res BW 10 kHz
#Video BW 30 kHz
Stop 30.00 MHz
Sweep 92.7 ms (5001 pts)
Jan 20, 2022
1:08:29 AM
Frequency
Settings
Center Frequency
15.075000 MHz
Span
29.8500000 MHz
Swept Span
Zero Span
Full Span
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
AUTO TUNE
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

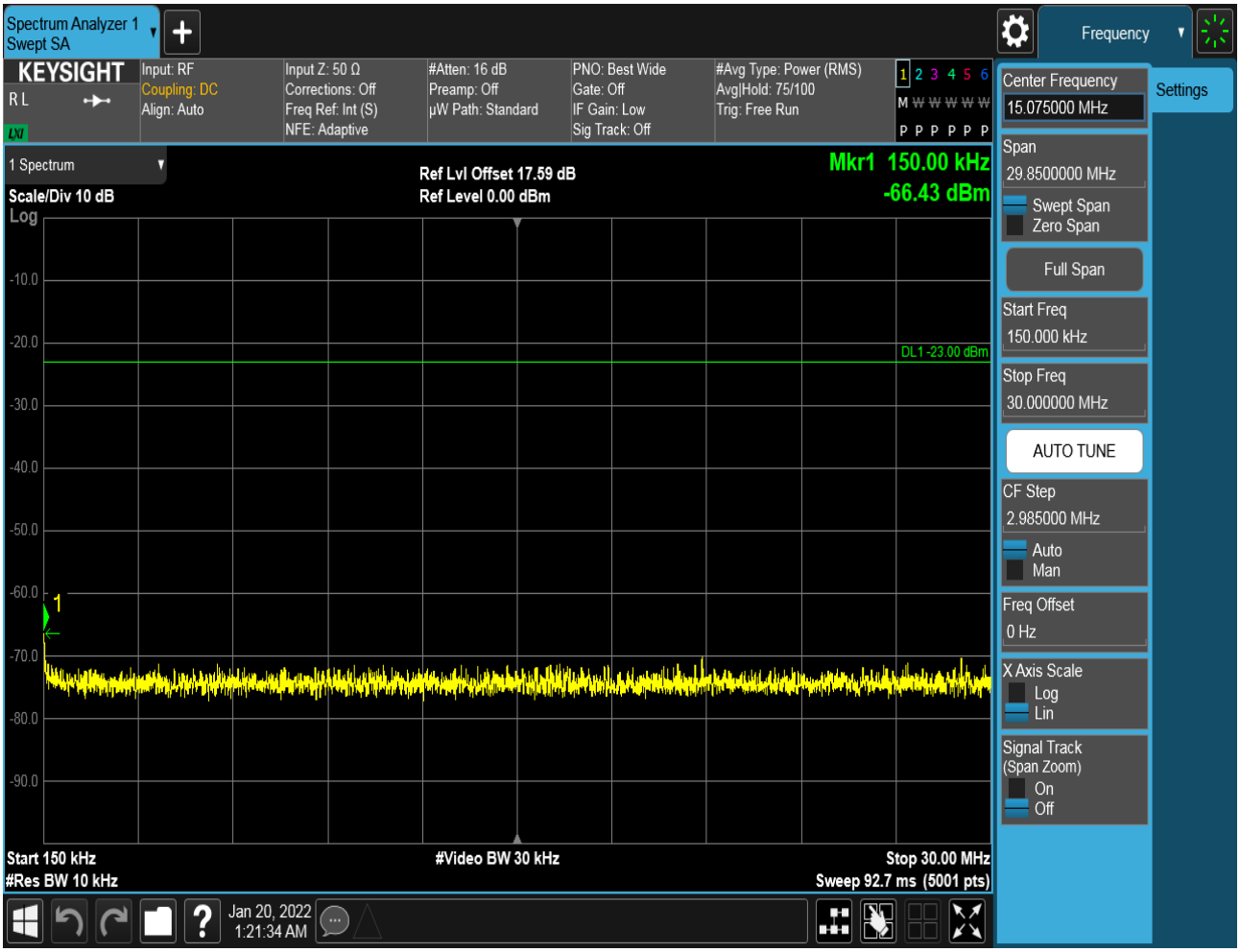

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 100/100
Trig: Free Run
Frequency
Settings
Center Frequency
515.000000 MHz
Span
970.000000 MHz
Swept Span
Zero Span
Full Span
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
AUTO TUNE
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 812.570 MHz
-23.64 dBm
Scale/Div 10 dB
Log
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
DL1 -13.00 dBm
Start 0.0300 GHz
#Res BW 100 kHz
#Video BW 300 kHz
Stop 1.0000 GHz
Sweep 37.3 ms (40001 pts)
Jan 20, 2022
1:08:48 AM

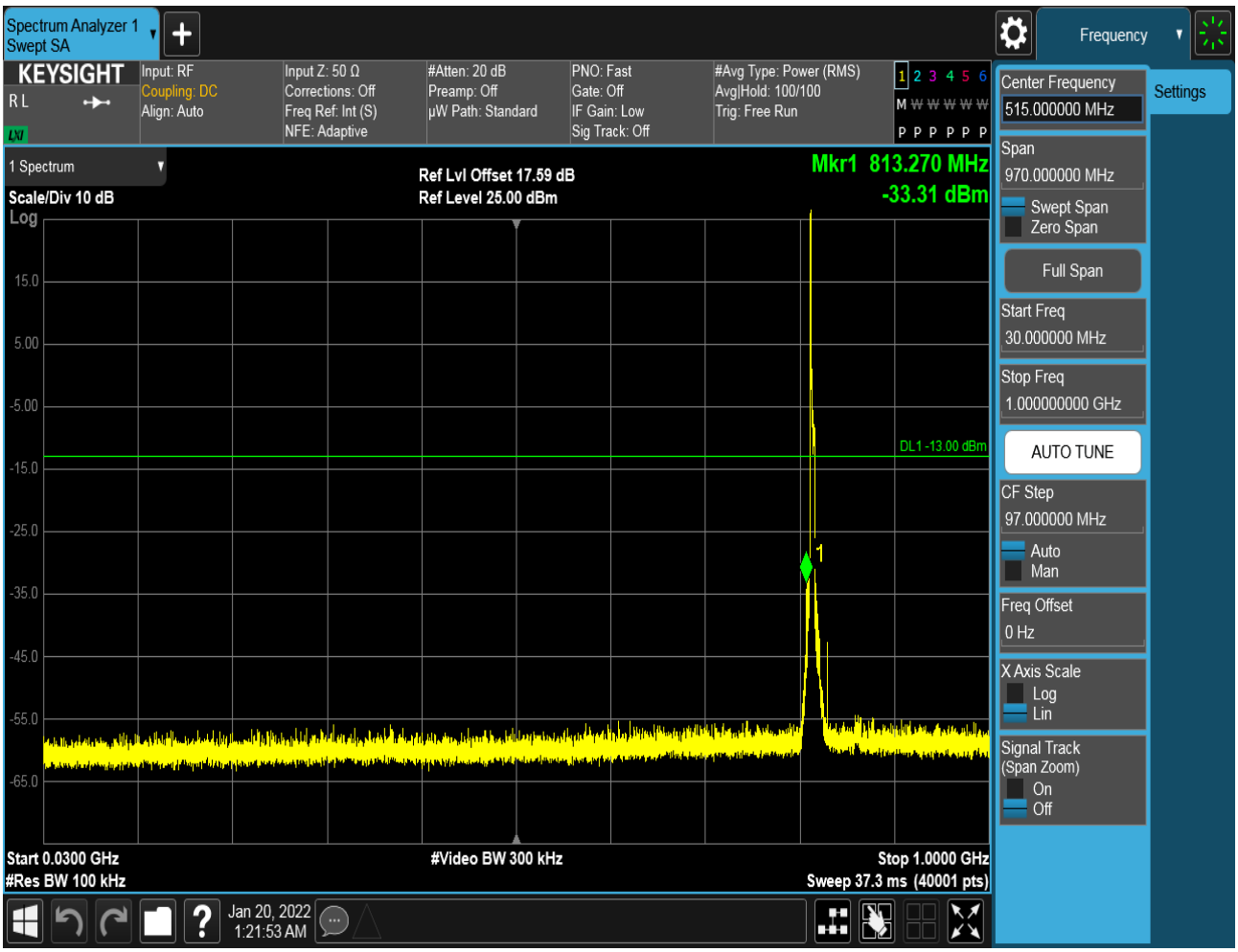

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 38/100
Trig: Free Run
Frequency
Settings
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 4.980 02 GHz
-37.53 dBm
Scale/Div 10 dB
Log
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
DL1 -13.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#Video BW 3.0 MHz
Stop 12.750 GHz
Sweep ~22.2 ms (40001 pts)
Center Frequency
6.875000000 GHz
Span
11.7500000 GHz
Swept Span
Zero Span
Full Span
Start Freq
1.000000000 GHz
Stop Freq
12.750000000 GHz
AUTO TUNE
CF Step
1.175000000 GHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off
Jan 20, 2022
1:09:03 AM

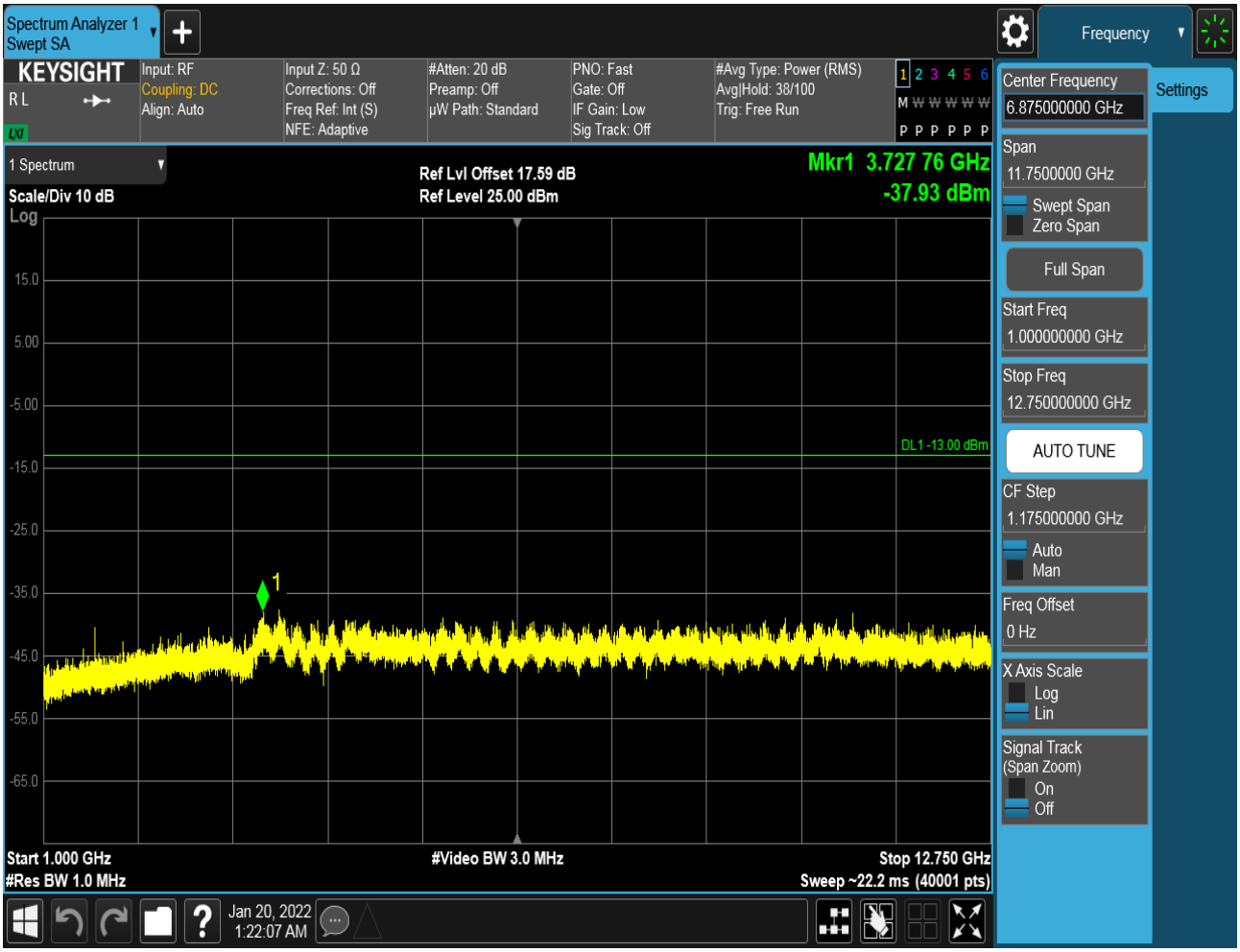
6.2.1.2.3.2 Test Channel = MCH

6.2.1.2.3.2.1 Test RB = RB1#0



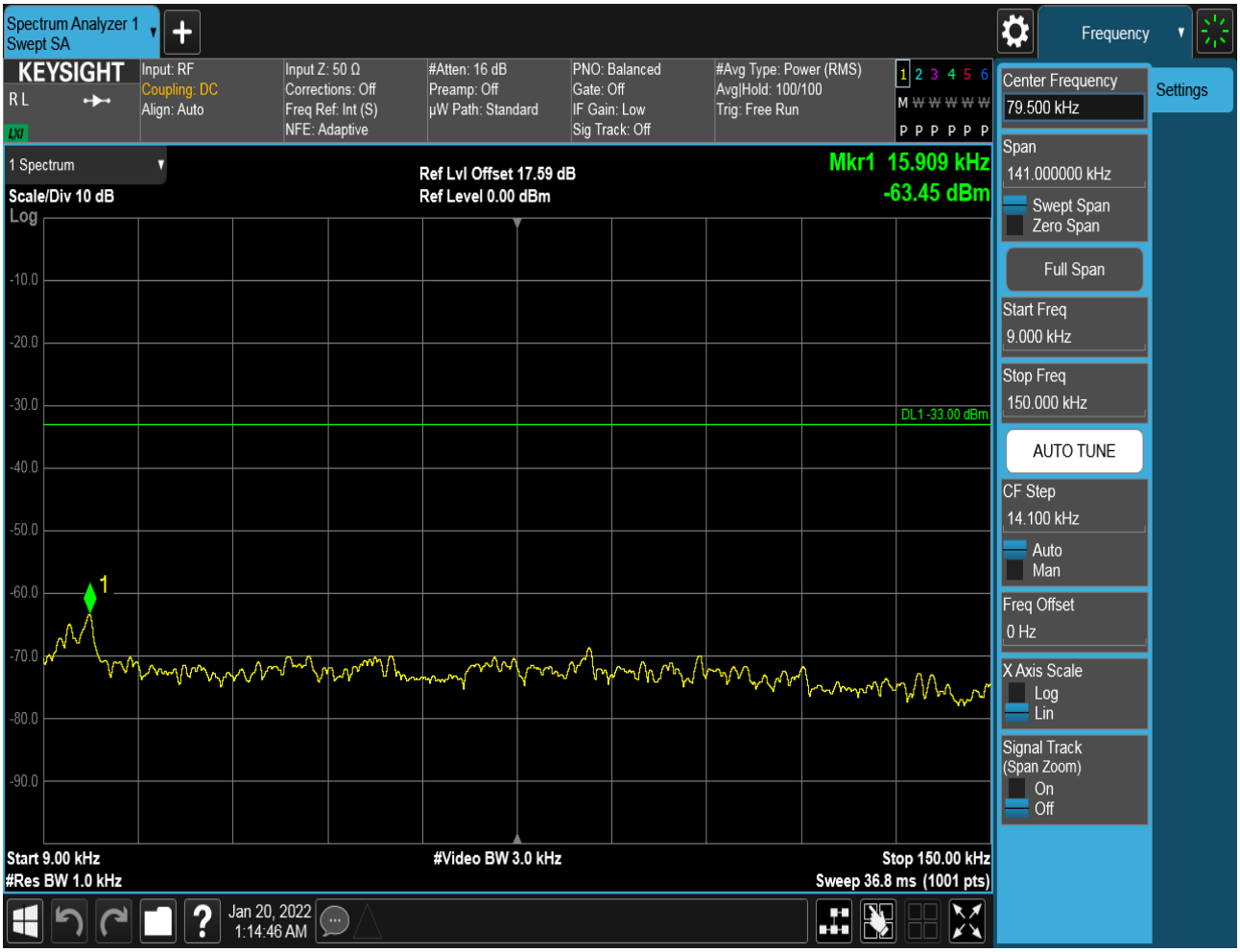

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 16 dB
Preamp: Off
µW Path: Standard
PNO: Best Wide
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 75/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 0.00 dBm
Mkr1 150.00 kHz
-66.43 dBm
Scale/Div 10 dB
Log
DL1 -23.00 dBm
Start 150 kHz
#Res BW 10 kHz
#Video BW 30 kHz
Stop 30.00 MHz
Sweep 92.7 ms (5001 pts)
Jan 20, 2022
1:21:34 AM
Frequency
Settings
Center Frequency
15.075000 MHz
Span
29.8500000 MHz
Swept Span
Zero Span
Full Span
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
AUTO TUNE
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

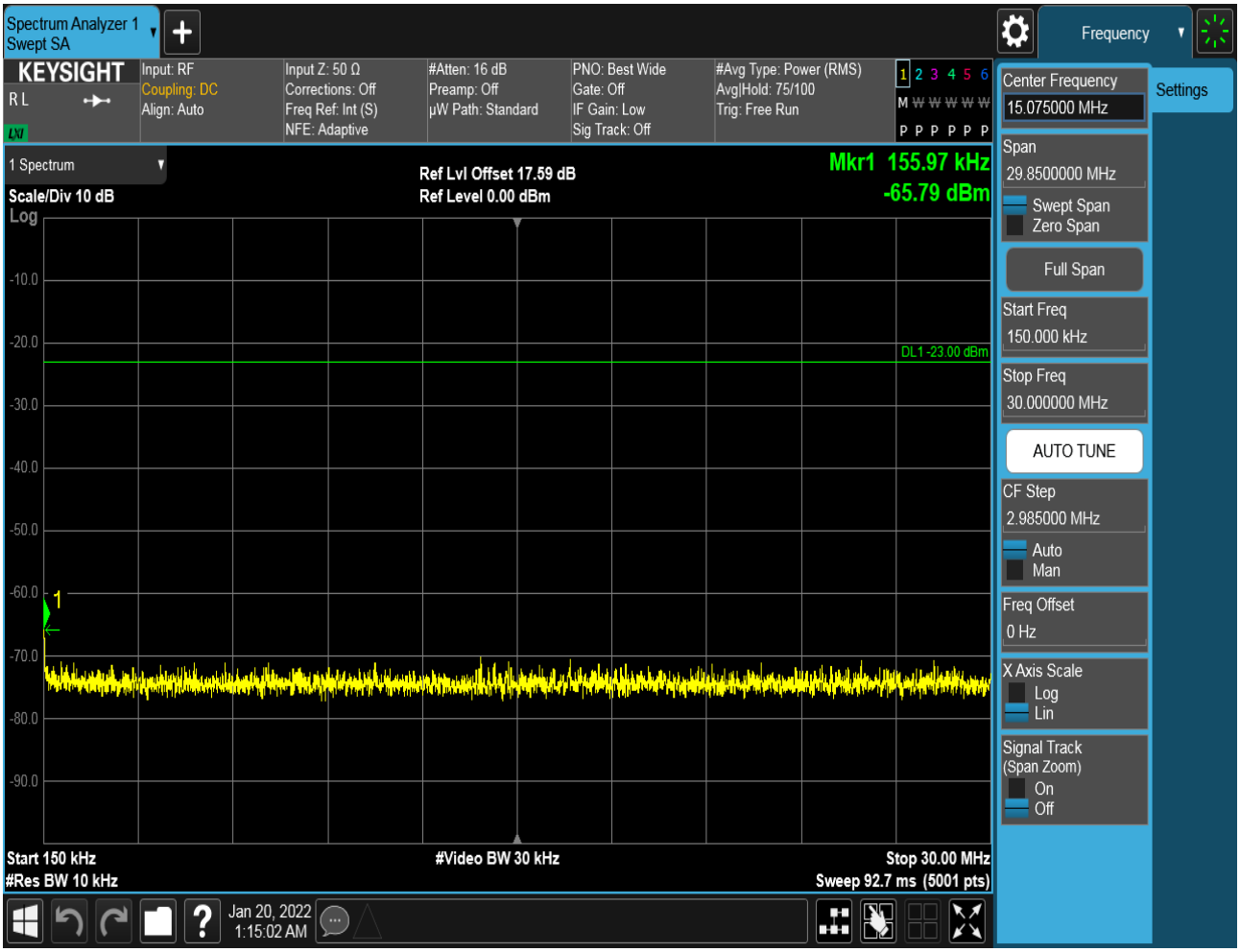

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 100/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 813.270 MHz
-33.31 dBm
Scale/Div 10 dB
Log
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
DL1 -13.00 dBm
Start 0.0300 GHz
#Res BW 100 kHz
#Video BW 300 kHz
Stop 1.0000 GHz
Sweep 37.3 ms (40001 pts)
Jan 20, 2022
1:21:53 AM
Frequency
Settings
Center Frequency
515.000000 MHz
Span
970.000000 MHz
Swept Span
Zero Span
Full Span
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
AUTO TUNE
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

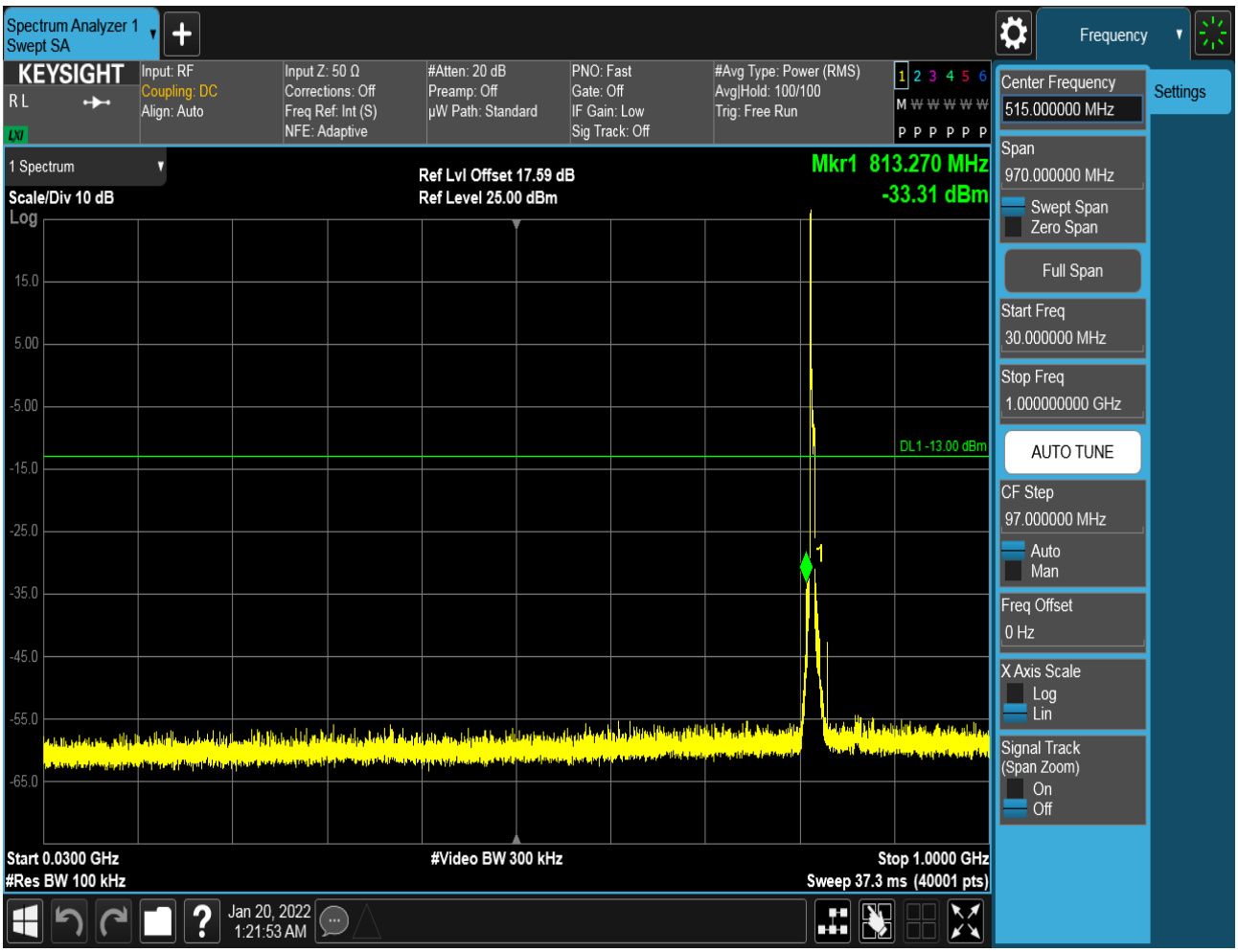

Spectrum Analyzer 1
Swept SA
KEYSIGHT
RL
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
μW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 38/100
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 3.727 76 GHz
-37.93 dBm
DL1 -13.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#Video BW 3.0 MHz
Stop 12.750 GHz
Sweep ~22.2 ms (40001 pts)
Jan 20, 2022
1:22:07 AM
Frequency
Settings
Center Frequency
6.875000000 GHz
Span
11.7500000 GHz
Swept Span
Zero Span
Full Span
Start Freq
1.000000000 GHz
Stop Freq
12.750000000 GHz
AUTO TUNE
CF Step
1.175000000 GHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

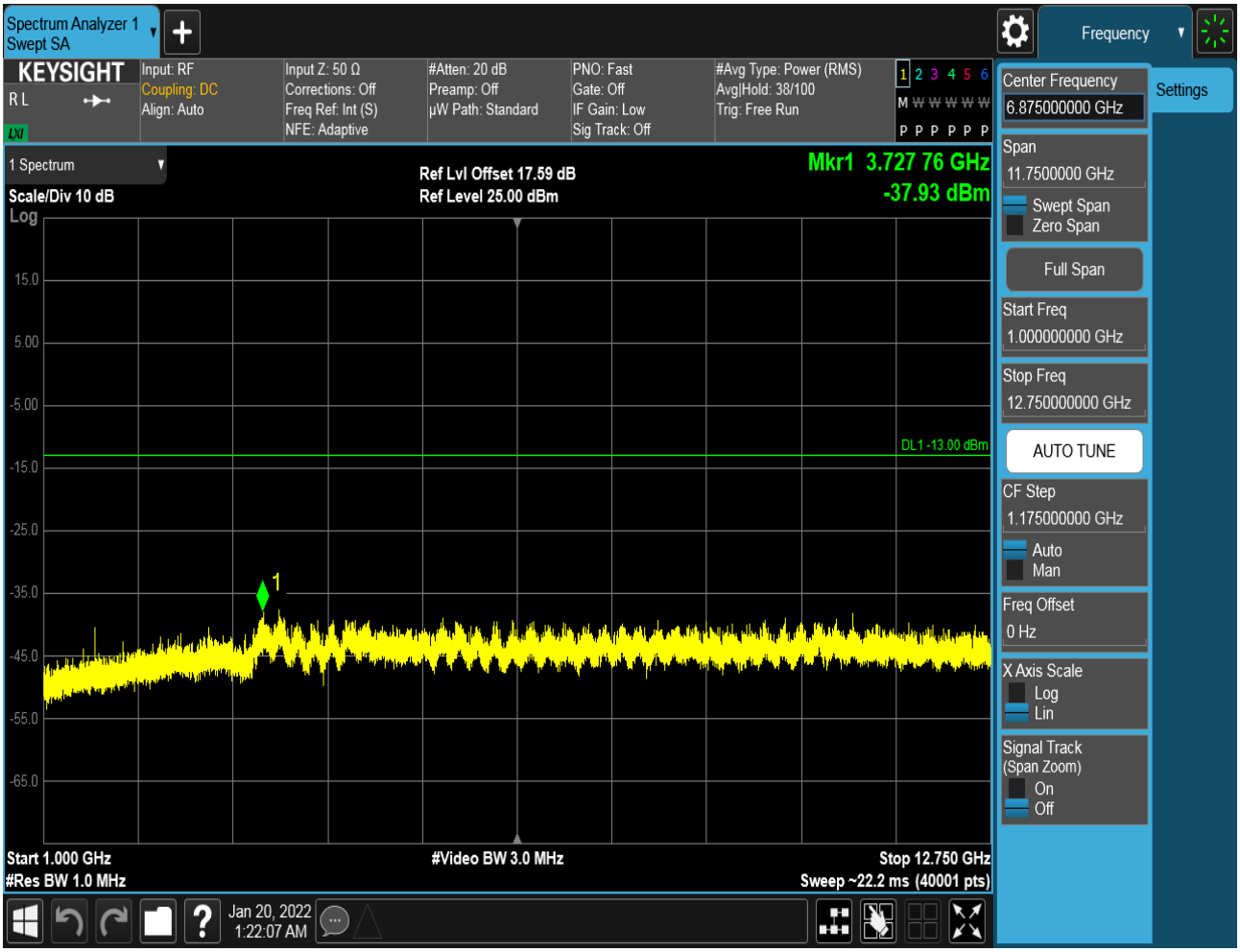
6.2.1.2.3.3 Test Channel = HCH

6.2.1.2.3.3.1 Test RB = RB1#0




Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 16 dB
Preamp: Off
µW Path: Standard
PNO: Best Wide
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 75/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 0.00 dBm
Mkr1 155.97 kHz
-65.79 dBm
Scale/Div 10 dB
Log
DL1 -23.00 dBm
Start 150 kHz
#Res BW 10 kHz
#Video BW 30 kHz
Stop 30.00 MHz
Sweep 92.7 ms (5001 pts)
Jan 20, 2022
1:15:02 AM
Frequency
Settings
Center Frequency
15.075000 MHz
Span
29.8500000 MHz
Swept Span
Zero Span
Full Span
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
AUTO TUNE
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

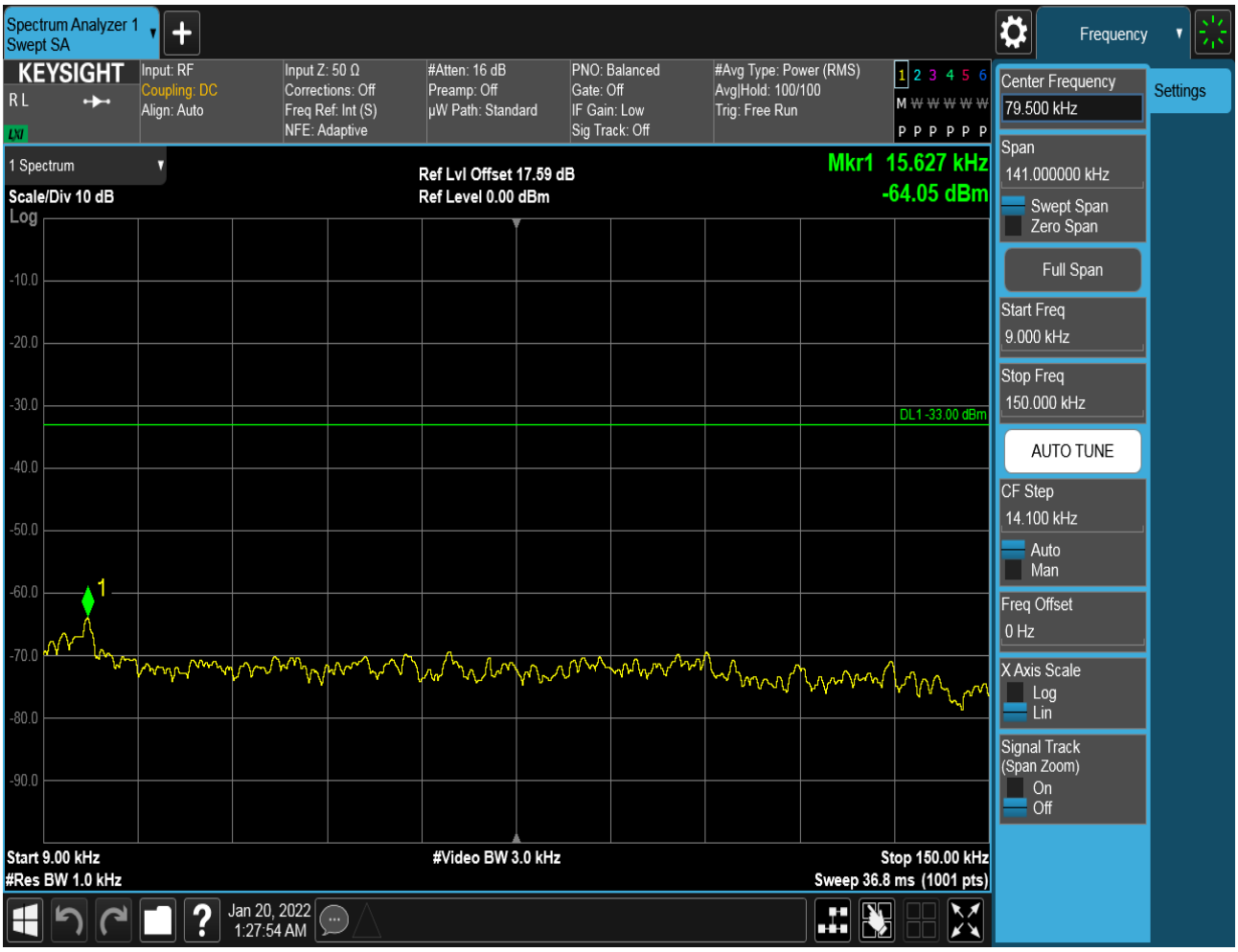

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 100/100
Trig: Free Run
Frequency
Settings
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 813.270 MHz
-33.31 dBm
Scale/Div 10 dB
Log
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
DL1 -13.00 dBm
Start 0.0300 GHz
#Res BW 100 kHz
#Video BW 300 kHz
Stop 1.0000 GHz
Sweep 37.3 ms (40001 pts)
Center Frequency
515.000000 MHz
Span
970.000000 MHz
Swept Span
Zero Span
Full Span
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
AUTO TUNE
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off
Jan 20, 2022
1:21:53 AM

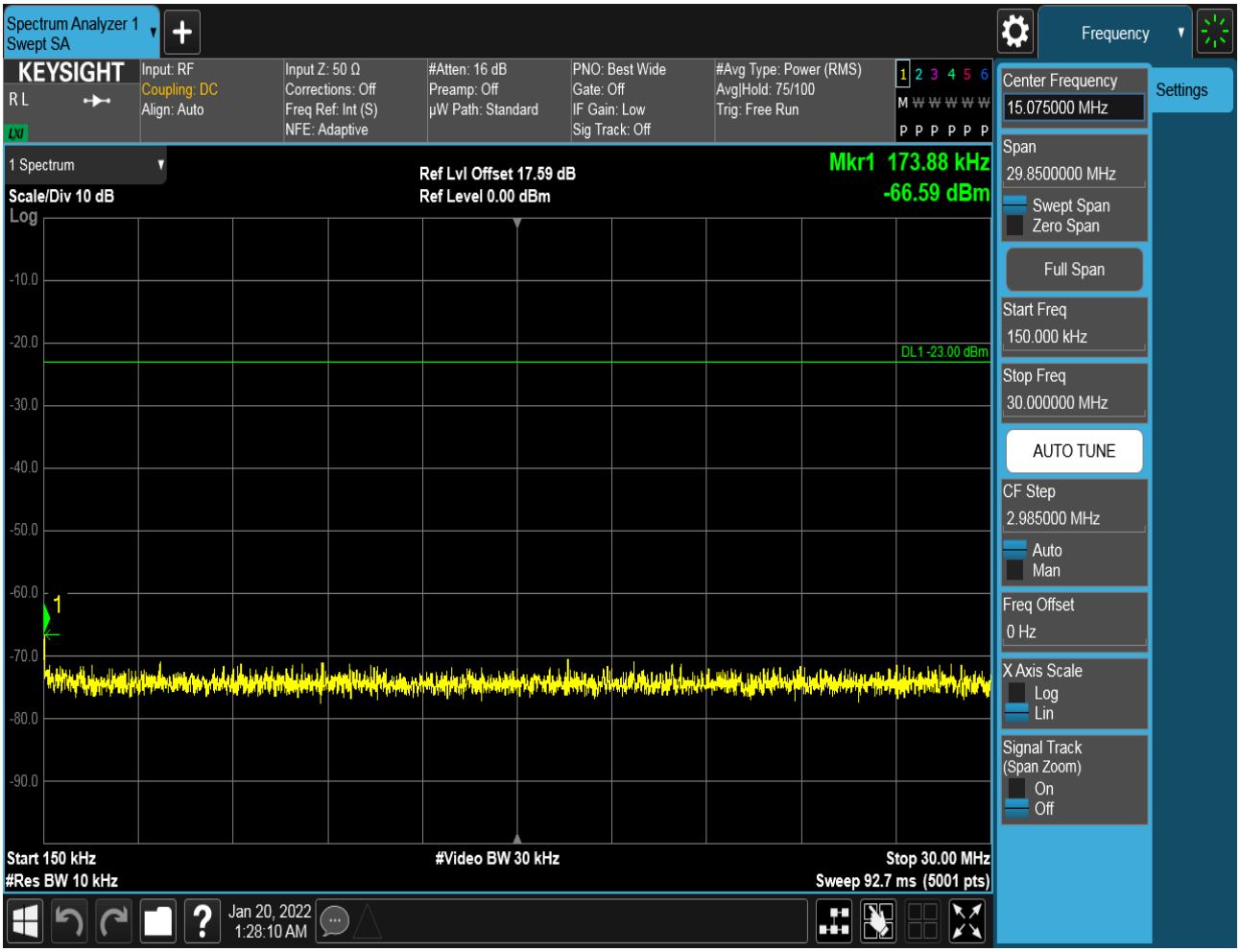

Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 38/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 3.727 76 GHz
-37.93 dBm
Scale/Div 10 dB
Log
15.0
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
DL1 -13.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#Video BW 3.0 MHz
Stop 12.750 GHz
Sweep ~22.2 ms (40001 pts)
Jan 20, 2022
1:22:07 AM
Frequency
Settings
Center Frequency
6.875000000 GHz
Span
11.7500000 GHz
Swept Span
Zero Span
Full Span
Start Freq
1.000000000 GHz
Stop Freq
12.750000000 GHz
AUTO TUNE
CF Step
1.175000000 GHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

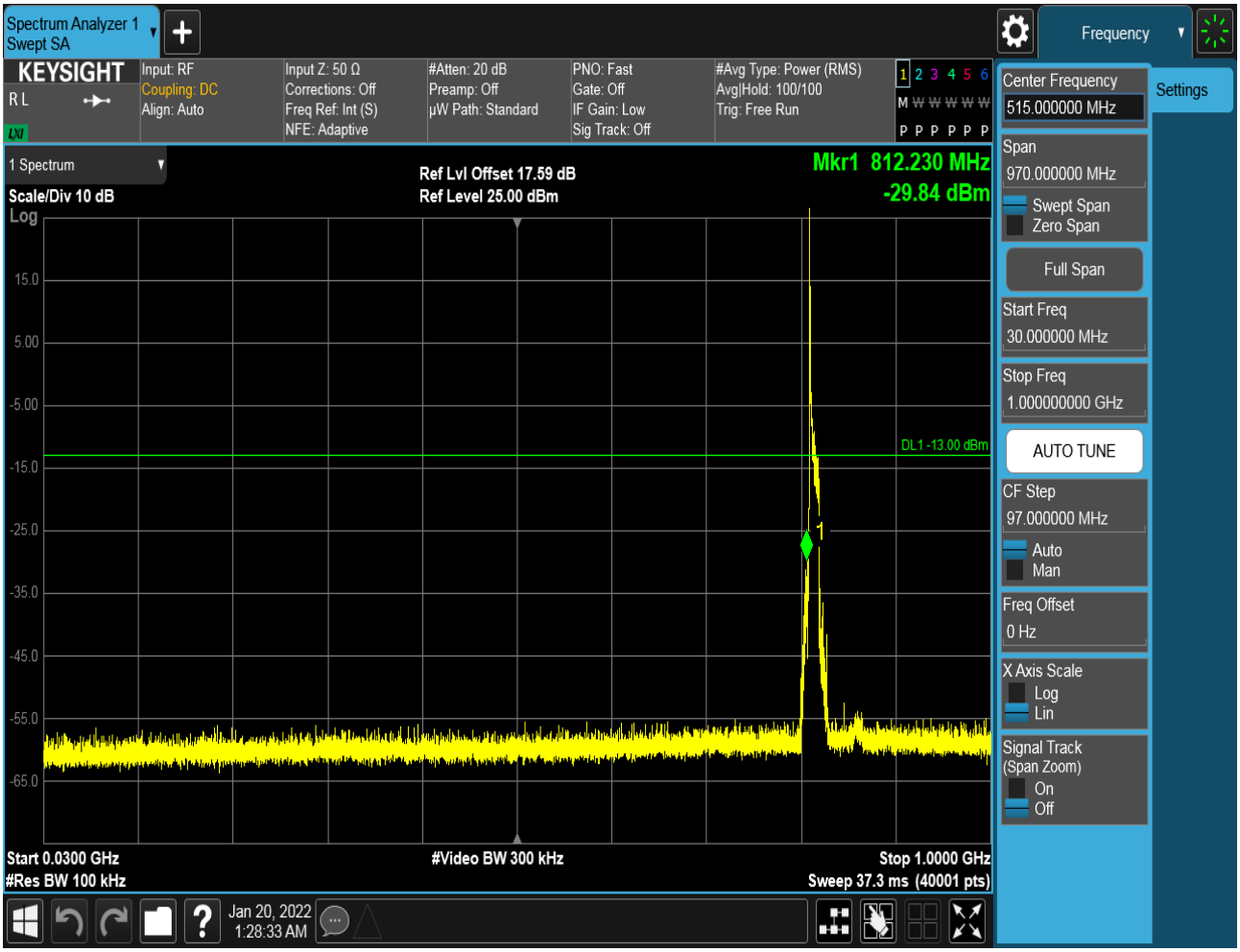
6.2.1.2.4 Test Bandwidth = 10MHz

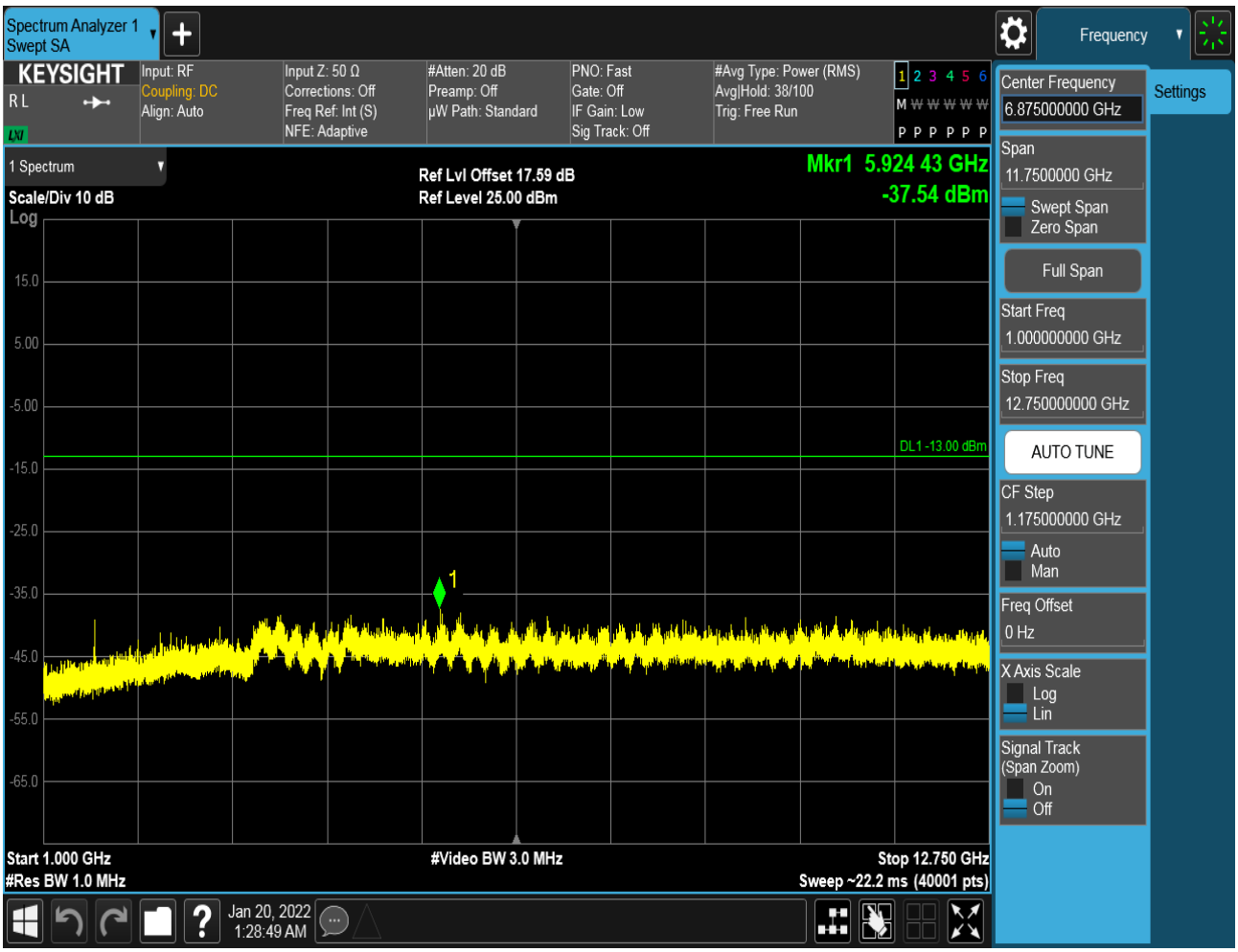
6.2.1.2.4.1 Test Channel = MCH

6.2.1.2.4.1.1 Test RB = RB1#0




Spectrum Analyzer 1
Swept SA
KEYSIGHT
RL
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 16 dB
Preamp: Off
µW Path: Standard
PNO: Best Wide
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 75/100
Trig: Free Run
1 Spectrum
Ref Lvl Offset 17.59 dB
Ref Level 0.00 dBm
Mkr1 173.88 kHz
-66.59 dBm
Scale/Div 10 dB
Log
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
DL1 -23.00 dBm
Start 150 kHz
#Res BW 10 kHz
#Video BW 30 kHz
Stop 30.00 MHz
Sweep 92.7 ms (5001 pts)
Jan 20, 2022
1:28:10 AM
Frequency
Settings
Center Frequency
15.075000 MHz
Span
29.8500000 MHz
Swept Span
Zero Span
Full Span
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
AUTO TUNE
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off


Spectrum Analyzer 1
Swept SA
KEYSIGHT
RL
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 100/100
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 812.230 MHz
-29.84 dBm
DL1 -13.00 dBm
Start 0.0300 GHz
#Res BW 100 kHz
#Video BW 300 kHz
Stop 1.0000 GHz
Sweep 37.3 ms (40001 pts)
Jan 20, 2022
1:28:33 AM
Frequency
Settings
Center Frequency
515.000000 MHz
Span
970.000000 MHz
Swept Span
Zero Span
Full Span
Start Freq
30.000000 MHz
Stop Freq
1.000000000 GHz
AUTO TUNE
CF Step
97.000000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off


Spectrum Analyzer 1
Swept SA
KEYSIGHT
RL
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
NFE: Adaptive
#Atten: 20 dB
Preamp: Off
µW Path: Standard
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Avg|Hold: 38/100
Trig: Free Run
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 17.59 dB
Ref Level 25.00 dBm
Mkr1 5.924 43 GHz
-37.54 dBm
DL1 -13.00 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#Video BW 3.0 MHz
Stop 12.750 GHz
Sweep ~22.2 ms (40001 pts)
Jan 20, 2022
1:28:49 AM
Frequency
Settings
Center Frequency
6.875000000 GHz
Span
11.7500000 GHz
Swept Span
Zero Span
Full Span
Start Freq
1.000000000 GHz
Stop Freq
12.750000000 GHz
AUTO TUNE
CF Step
1.175000000 GHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
On
Off

7Appendix_G: Field Strength of Spurious Radiation

Note 1: We tested all modes & antennas, the data presented below is the worst case.
Note 2: For Below 30MHz, the data presented below is the worst case for all Channel Bandwidth.

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

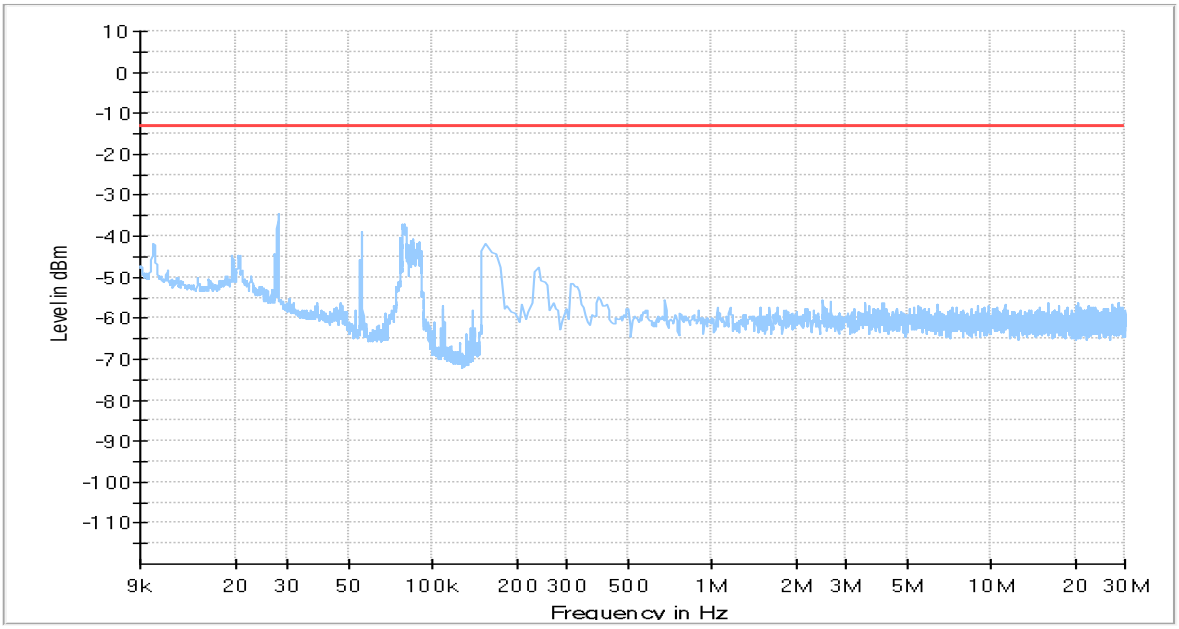
Part I - Test Plots

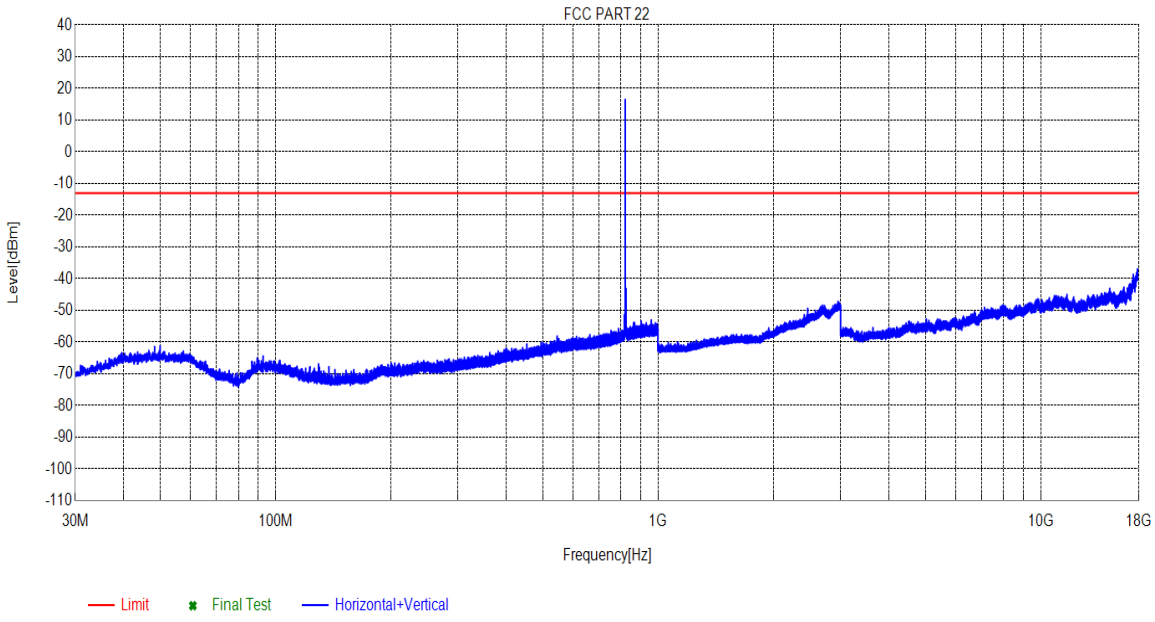
7.1 For LTE

7.1.1 Test Band = Band26_A

7.1.1.1 Test Bandwidth = 1.4MHz

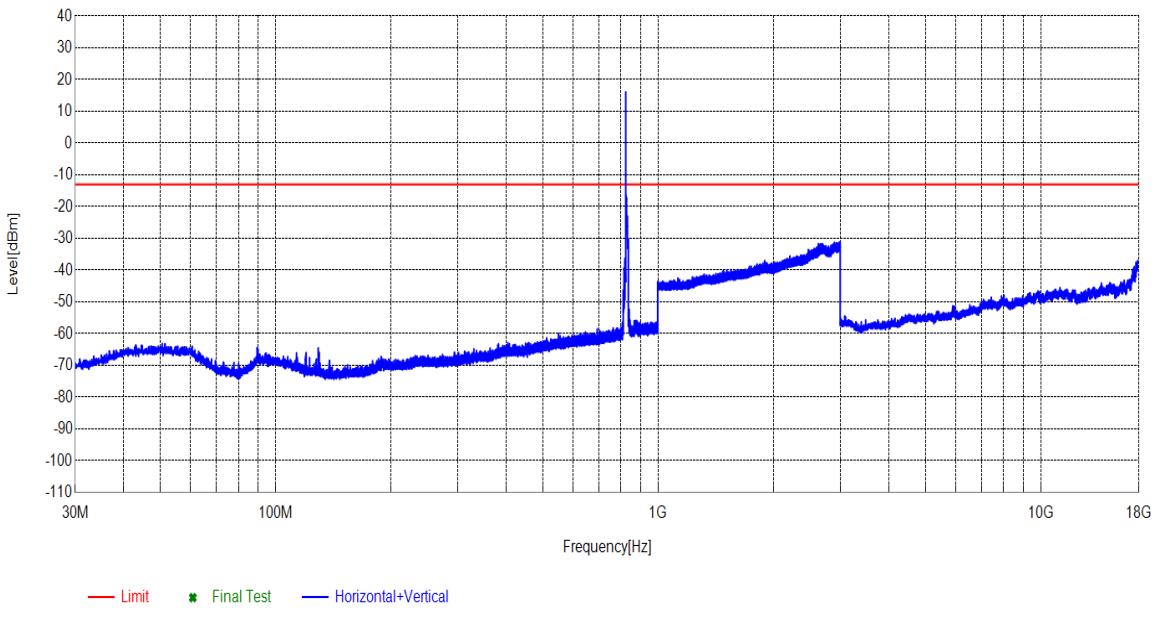
Worst case





7.1.1.2 Test Bandwidth = 10MHz

Worst case



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
Band26_A	LTE/TM1	1.4	LCH	TN	VL	-6.09398	-0.00748	PASS
					VN	7.23839	0.00888	PASS
					VH	-26.45016	-0.03247	PASS
			MCH	TN	VL	-11.87325	-0.01450	PASS
					VN	5.23567	0.00639	PASS
					VH	1.27316	0.00155	PASS
			HCH	TN	VL	-4.26292	-0.00518	PASS
					VN	3.04699	0.00370	PASS
					VH	-0.92983	-0.00113	PASS
		3	LCH	TN	VL	-0.01431	-0.00002	PASS
					VN	-1.77383	-0.00218	PASS
					VH	1.43051	0.00175	PASS
			MCH	TN	VL	-7.98225	-0.00975	PASS
					VN	-14.57691	-0.01780	PASS
					VH	-4.43459	-0.00541	PASS
			HCH	TN	VL	7.05242	0.00857	PASS
					VN	4.90665	0.00597	PASS
					VH	-8.62598	-0.01049	PASS
		5	LCH	TN	VL	-0.31471	-0.00039	PASS
					VN	0.95844	0.00117	PASS
					VH	-0.51498	-0.00063	PASS
			MCH	TN	VL	-10.72884	-0.01310	PASS
					VN	-4.34875	-0.00531	PASS
					VH	2.50339	0.00306	PASS
			HCH	TN	VL	1.87397	0.00228	PASS
					VN	1.73092	0.00211	PASS
					VH	0.17166	0.00021	PASS
		10	MCH	TN	VL	-2.41756	-0.00295	PASS
					VN	0.60081	0.00073	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					VH	-0.21458	-0.00026	PASS
	LTE/TM2	1.4	LCH	TN	VL	-4.23431	-0.00520	PASS
					VN	-6.15120	-0.00755	PASS
					VH	8.15391	0.01001	PASS
			MCH	TN	VL	-6.53744	-0.00798	PASS
					VN	0.82970	0.00101	PASS
					VH	-18.28194	-0.02232	PASS
			HCH	TN	VL	1.90258	0.00231	PASS
					VN	-7.63893	-0.00928	PASS
					VH	-7.58171	-0.00921	PASS
		3	LCH	TN	VL	1.17302	0.00144	PASS
					VN	3.99113	0.00489	PASS
					VH	-1.64509	-0.00202	PASS
			MCH	TN	VL	1.64509	0.00201	PASS
					VN	-10.52856	-0.01286	PASS
					VH	-7.93934	-0.00969	PASS
			HCH	TN	VL	-0.20027	-0.00024	PASS
					VN	-0.70095	-0.00085	PASS
					VH	3.21865	0.00391	PASS
		5	LCH	TN	VL	-0.38624	-0.00047	PASS
					VN	-1.55926	-0.00191	PASS
					VH	-2.74658	-0.00336	PASS
			MCH	TN	VL	-0.70095	-0.00086	PASS
					VN	-3.00407	-0.00367	PASS
					VH	9.62734	0.01175	PASS
			HCH	TN	VL	2.84672	0.00347	PASS
					VN	3.01838	0.00367	PASS
					VH	-1.40190	-0.00171	PASS
		10	MCH	TN	VL	-5.42164	-0.00662	PASS
					VN	0.14305	0.00017	PASS
					VH	2.04563	0.00250	PASS

8.1.2Frequency Error vs. Temperature:

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
Band26	LTE/TM1	1.4	LCH	VN	-30	-1.48773	-0.00183	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
_A					-20	6.52313	0.00801	PASS
					-10	5.50747	0.00676	PASS
					0	-7.25269	-0.00890	PASS
					10	2.40326	0.00295	PASS
					20	7.23839	0.00888	PASS
					30	-1.98841	-0.00244	PASS
					40	0.95844	0.00118	PASS
					50	-14.66274	-0.01800	PASS
			MCH	VN	-30	3.81947	0.00466	PASS
					-20	3.17573	0.00388	PASS
					-10	-6.10828	-0.00746	PASS
					0	-11.55853	-0.01411	PASS
					10	-1.93119	-0.00236	PASS
					20	5.23567	0.00639	PASS
					30	-11.50131	-0.01404	PASS
					40	-11.05785	-0.01350	PASS
					50	8.49724	0.01038	PASS
			HCH	VN	-30	-3.91960	-0.00476	PASS
					-20	0.44346	0.00054	PASS
					-10	1.28746	0.00156	PASS
					0	-3.36170	-0.00408	PASS
					10	18.31055	0.02224	PASS
					20	3.04699	0.00370	PASS
					30	-6.38008	-0.00775	PASS
					40	-5.17845	-0.00629	PASS
					50	-4.64916	-0.00565	PASS
		3	LCH	VN	-30	1.21593	0.00149	PASS
					-20	-2.83241	-0.00347	PASS
					-10	-1.67370	-0.00205	PASS
					0	-0.70095	-0.00086	PASS
					10	-1.58787	-0.00195	PASS
					20	-1.77383	-0.00218	PASS
					30	0.35763	0.00044	PASS
					40	-1.64509	-0.00202	PASS
					50	0.41485	0.00051	PASS
			MCH	VN	-30	0.67234	0.00082	PASS
					-20	0.38624	0.00047	PASS
					-10	5.99384	0.00732	PASS
					0	-10.35690	-0.01265	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					10	-1.83106	-0.00224	PASS
					20	-14.57691	-0.01780	PASS
					30	1.15871	0.00141	PASS
					40	4.90665	0.00599	PASS
					50	6.09398	0.00744	PASS
			HCH	VN	-30	2.43187	0.00296	PASS
					-20	4.99249	0.00607	PASS
					-10	-2.91824	-0.00355	PASS
					0	-5.87940	-0.00715	PASS
					10	-0.98705	-0.00120	PASS
					20	4.90665	0.00597	PASS
					30	-5.33581	-0.00649	PASS
					40	-2.14577	-0.00261	PASS
					50	-7.02381	-0.00854	PASS
		5	LCH	VN	-30	2.87533	0.00352	PASS
					-20	0.11444	0.00014	PASS
					-10	1.21593	0.00149	PASS
					0	0.72956	0.00089	PASS
					10	0.45776	0.00056	PASS
					20	0.95844	0.00117	PASS
					30	1.50204	0.00184	PASS
					40	1.20163	0.00147	PASS
					50	-2.57492	-0.00315	PASS
			MCH	VN	-30	3.51906	0.00430	PASS
					-20	5.10693	0.00624	PASS
					-10	-4.09126	-0.00500	PASS
					0	-2.97546	-0.00363	PASS
					10	-9.18388	-0.01121	PASS
					20	-4.34875	-0.00531	PASS
					30	4.23431	0.00517	PASS
					40	-1.17302	-0.00143	PASS
					50	-4.92096	-0.00601	PASS
			HCH	VN	-30	-0.34332	-0.00042	PASS
					-20	-1.18732	-0.00145	PASS
					-10	0.50068	0.00061	PASS
					0	-1.14441	-0.00139	PASS
					10	-0.85831	-0.00104	PASS
					20	1.73092	0.00211	PASS
					30	1.77383	0.00216	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					40	-1.27316	-0.00155	PASS
					50	-2.27451	-0.00277	PASS
		10	MCH	VN	-30	1.47343	0.00180	PASS
					-20	0.47207	0.00058	PASS
					-10	3.51906	0.00430	PASS
					0	1.24455	0.00152	PASS
					10	-7.35283	-0.00898	PASS
					20	0.60081	0.00073	PASS
					30	2.73228	0.00334	PASS
					40	-2.37465	-0.00290	PASS
					50	-0.30041	-0.00037	PASS
	LTE/TM2	1.4	LCH	VN	-30	-16.10756	-0.01977	PASS
					-20	1.14441	0.00140	PASS
					-10	-9.38415	-0.01152	PASS
					0	-11.24382	-0.01380	PASS
					10	-13.38959	-0.01643	PASS
					20	-6.15120	-0.00755	PASS
					30	-13.61847	-0.01672	PASS
					40	7.05242	0.00866	PASS
					50	-6.89506	-0.00846	PASS
			MCH	VN	-30	7.73907	0.00945	PASS
					-20	-1.83106	-0.00224	PASS
					-10	-0.68665	-0.00084	PASS
					0	4.37737	0.00534	PASS
					10	-10.37121	-0.01266	PASS
					20	0.82970	0.00101	PASS
					30	-6.99520	-0.00854	PASS
					40	-5.12123	-0.00625	PASS
					50	2.57492	0.00314	PASS
			HCH	VN	-30	1.71661	0.00209	PASS
					-20	6.32286	0.00768	PASS
					-10	-1.21593	-0.00148	PASS
					0	7.16686	0.00871	PASS
					10	-11.60145	-0.01409	PASS
					20	-7.63893	-0.00928	PASS
					30	-3.23296	-0.00393	PASS
					40	-9.98497	-0.01213	PASS
					50	-3.31879	-0.00403	PASS
		3	LCH	VN	-30	-0.30041	-0.00037	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					-20	-4.10557	-0.00503	PASS
					-10	-2.81811	-0.00346	PASS
					0	-3.83377	-0.00470	PASS
					10	-3.19004	-0.00391	PASS
					20	3.99113	0.00489	PASS
					30	-3.50475	-0.00430	PASS
					40	-1.27316	-0.00156	PASS
					50	-4.00543	-0.00491	PASS
			MCH	VN	-30	-4.73499	-0.00578	PASS
					-20	2.50339	0.00306	PASS
					-10	13.91888	0.01699	PASS
					0	-7.56741	-0.00924	PASS
					10	2.96116	0.00362	PASS
					20	-10.52856	-0.01286	PASS
					30	-2.13146	-0.00260	PASS
					40	-6.98090	-0.00852	PASS
					50	8.06808	0.00985	PASS
			HCH	VN	-30	-5.50747	-0.00670	PASS
					-20	4.79221	0.00583	PASS
					-10	-4.93527	-0.00600	PASS
					0	3.36170	0.00409	PASS
					10	6.32286	0.00769	PASS
					20	-0.70095	-0.00085	PASS
					30	-3.21865	-0.00391	PASS
					40	-2.11716	-0.00257	PASS
					50	-0.82970	-0.00101	PASS
		5	LCH	VN	-30	-5.23567	-0.00641	PASS
					-20	-2.10285	-0.00258	PASS
					-10	0.72956	0.00089	PASS
					0	-0.25749	-0.00032	PASS
					10	-3.63350	-0.00445	PASS
					20	-1.55926	-0.00191	PASS
					30	-0.95844	-0.00117	PASS
					40	1.24455	0.00152	PASS
					50	-1.91688	-0.00235	PASS
			MCH	VN	-30	-0.50068	-0.00061	PASS
					-20	15.32078	0.01871	PASS
					-10	-0.62943	-0.00077	PASS
					0	4.60625	0.00562	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					10	1.23024	0.00150	PASS
					20	-3.00407	-0.00367	PASS
					30	-3.01838	-0.00369	PASS
					40	0.37193	0.00045	PASS
					50	2.74658	0.00335	PASS
			HCH	VN	-30	3.06129	0.00373	PASS
					-20	5.66483	0.00690	PASS
					-10	2.51770	0.00306	PASS
					0	3.36170	0.00409	PASS
					10	4.00543	0.00488	PASS
					20	3.01838	0.00367	PASS
					30	0.52929	0.00064	PASS
					40	-0.34332	-0.00042	PASS
					50	1.83106	0.00223	PASS
		10	MCH	VN	-30	3.66211	0.00447	PASS
					-20	1.33038	0.00162	PASS
					-10	1.61648	0.00197	PASS
					0	2.80380	0.00342	PASS
					10	2.67506	0.00327	PASS
					20	0.14305	0.00017	PASS
					30	-2.90394	-0.00355	PASS
					40	-1.84536	-0.00225	PASS
					50	-4.07696	-0.00498	PASS

END