

10 M\_Band Edge(2300MHz-2304MHz)\_Mid\_BPSK\_FullRB

Note: We used a narrower RBW in order to increase accuracy.

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Calculation = Reading Value +  $10 \times \log(1 \text{ MHz}/100 \text{ kHz})$  dB = -31.858 dBm + 10 dB = -21.858 dBm

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10 M\_Band Edge(2304MHz-2305MHz)\_Mid\_BPSK\_FullRB

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Start 2.3150000 GHz #Res BW 100 kHz

### ø Frequency #Avg Type: Power (RMS 1 2 3 4 5 6 Trig: Free Run Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive #Atten: 10 dB Preamp: Off PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off KEYSIGHT Input RF Center Frequency Settings Align: Auto 2.315500000 GHz AAAAAA ĻΧI Mkr1 2.315 771 GHz 1 Spectrum 1.00000000 MHz Ref LvI Offset 27.16 dB Ref Level 0.00 dBm -31.770 dBm Scale/Div 10 dB Swept Span Zero Span Full Span Start Freq 2.315000000 GHz Stop Freq 2.316000000 GHz AUTO TUNE 100.000 kHz Auto Man Freq Offset 0 Hz Local X Axis Scale

#Video BW 390 kHz

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Stop 2.3160000 GHz #Sweep 1.00 s (1001 pts)

Log Lin

### 10 M\_Band Edge(2315MHz-2316MHz)\_Mid\_BPSK\_FullRB

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Note: We used a narrower RBW in order to increase accuracy.

Calculation = Reading Value +  $10 \times \log(1 \text{ MHz}/100 \text{ kHz})$  dB = -33.771 dBm +  $10 \times dB$  = -23.771 dBm

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10 M\_Band Edge(2320MHz-2324MHz)\_Mid\_BPSK\_FullRB

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# 10 M\_Band Edge(2324MHz-2328MHz)\_Mid\_BPSK\_FullRB



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Local

X Axis Scale

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Stop 2.337000 GHz #Sweep ~1.01 s (1001 pts)

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Start 2.328000 GHz #Res BW 1.0 MHz

#### ø Frequency #Avg Type: Power (RMS 1 2 3 4 5 6 Trig: Free Run Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive #Atten: 10 dB Preamp: Off PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off KEYSIGHT Input RF Center Frequency Settings Align: Auto 2.332500000 GHz AAAAAA ĻΧI Mkr1 2.328 000 GHz 1 Spectrum Ref LvI Offset 27.16 dB Ref Level 0.00 dBm 9.00000000 MHz -45.067 dBm Scale/Div 10 dB Swept Span Zero Span Full Span Start Freq 2.328000000 GHz Stop Freq 2.337000000 GHz DL1 -37.00 dB 40.0 AUTO TUNE 900.000 kHz Auto Man Freq Offset 0 Hz

#Video BW 3.0 MHz

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### 10 M\_Band Edge(2328MHz-2337MHz)\_Mid\_BPSK\_FullRB

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#### ø Frequency #Avg Type: Power (RMS 1 2 3 4 5 6 Trig: Free Run Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive #Atten: 10 dB Preamp: Off PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off KEYSIGHT Input RF Center Frequency Settings Align: Auto 2.339000000 GHz AAAAAA ĻΧI Mkr1 2.337 048 GHz 1 Spectrum Ref LvI Offset 27.16 dB Ref Level 0.00 dBm 4.00000000 MHz -64.718 dBm Scale/Div 10 dB Swept Span Zero Span Full Span Start Freq 2.337000000 GHz Stop Freq 2.341000000 GHz AUTO TUNE 400.000 kHz Auto Man Freq Offset 0 Hz Local X Axis Scale Start 2.337000 GHz #Res BW 1.0 MHz Stop 2.341000 GHz #Sweep ~1.01 s (1001 pts) #Video BW 3.0 MHz Log Lin

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### 10 M\_Band Edge(2337MHz-2341MHz)\_Mid\_BPSK\_FullRB

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#### ø Frequency #Avg Type: Power (RMS 1 2 3 4 5 6 Trig: Free Run Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive #Atten: 10 dB Preamp: Off PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off KEYSIGHT Input RF Center Frequency Settings Align: Auto 2.343000000 GHz AAAAAA ĻΧI Mkr1 2.341 204 GHz 1 Spectrum Ref LvI Offset 27.16 dB Ref Level 0.00 dBm 4.00000000 MHz -65.638 dBm Scale/Div 10 dB Swept Span Zero Span Full Span Start Freq 2.341000000 GHz Stop Freq 2.345000000 GHz AUTO TUNE **√**1 400.000 kHz Auto Man Freq Offset 0 Hz Local X Axis Scale Start 2.341000 GHz #Res BW 1.0 MHz Stop 2.345000 GHz #Sweep ~1.01 s (1001 pts) #Video BW 3.0 MHz Log Lin

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### 10 M\_Band Edge(2341MHz-2345MHz)\_Mid\_BPSK\_FullRB

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X Axis Scale

Log Lin

Stop 2.36500 GHz #Sweep 1.00 s (1001 pts)



Start 2.34500 GHz #Res BW 1.0 MHz

#### ø Frequency #Avg Type: Power (RMS 1 2 3 4 5 6 Trig: Free Run Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive #Atten: 10 dB Preamp: Off PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off KEYSIGHT Input RF Center Frequency Settings Align: Auto 2.355000000 GHz AAAAAA ĻΧI Mkr1 2.352 10 GHz 1 Spectrum Ref LvI Offset 27.16 dB Ref Level 0.00 dBm 20.0000000 MHz -64.320 dBm Scale/Div 10 dB Swept Span Zero Span Full Span Start Freq 2.345000000 GHz Stop Freq 2.365000000 GHz AUTO TUNE **V**1 CF Step 2.000000 MHz Auto Man Freq Offset 0 Hz Local

#Video BW 3.0 MHz

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### 10 M\_Band Edge(2345MHz-2365MHz)\_Mid\_BPSK\_FullRB

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Start 2.36500 GHz #Res BW 1.0 MHz

#### ø Frequency #Avg Type: Power (RMS 1 2 3 4 5 6 Trig: Free Run Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive #Atten: 10 dB Preamp: Off PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off KEYSIGHT Input RF Center Frequency Settings Align: Auto 2.382500000 GHz AAAAAA ĻΧI Mkr1 2.383 095 GHz 1 Spectrum Ref LvI Offset 27.16 dB Ref Level 0.00 dBm 35.0000000 MHz -65.682 dBm Scale/Div 10 dB Swept Span Zero Span Full Span Start Freq 2.365000000 GHz Stop Freq 2.400000000 GHz DL1-40.00 dB AUTO TUNE **1**1 CF Step 3.500000 MHz Auto Man Freq Offset 0 Hz Local X Axis Scale

#Video BW 3.0 MHz

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Log Lin

### 10 M\_Band Edge(2365MHz-2400MHz)\_Mid\_BPSK\_FullRB

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## 12. TEST PLOTS(ANT F)

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#### Spectrum Analyzer Power Stat CCDF ø Amplitude Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) Center Freq: 2.310000000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None Atten: 10 dB Preamp: Off Trig: Free Run #IF Gain: Low KEYSIGHT Input. RF Ref Level Offset Align: Auto 27.27 dB L)(I On Off Attenuation 1 Metrics 2 Graph Signal Path Average Power 20.65 dBm 46.09 % at 0 dB 10.0 % 2.05 dB 1.0 % 3.66 dB 0.1 % 4.42 dB 5.10 dB 0.01 % 5.44 dB 0.001 % 5.60 dB 0.0001 % 5.79 dB 26.44 dBm Local 0.00 dB Info BW 5.0000 MHz 20.00 dB ? Jun 03, 2024 4:45:45 PM

## 5 M\_PAR\_Mid\_BPSK\_FullRB

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#### ectrum Analyzer 1 ower Stat CCDF **\*** Amplitude Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) Center Freq: 2.310000000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None KEYSIGHT Input RF Atten: 10 dB Preamp: Off Ref Level Offset 27.27 dB Y Scale R L Align: Auto On Off Attenuation 2 Graph 1 Metrics Signal Path Average Power 20.32 dBm 44.86 % at 0 dB 10.0 % 2.49 dB 1.0 % 4.38 dB 0.1 % 5.58 dB 0.01 % 6.22 dB 0.001 % 6.60 dB 0.0001 % 6.78 dB 6.86 dB Peak 27.18 dBm Local 0.00 dB Info BW 5.0000 MHz 20.00 dB

### 5 M\_PAR\_Mid\_QPSK\_FullRB

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#### ectrum Analyzer 1 ower Stat CCDF **\*** Amplitude Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) Center Freq: 2.310000000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None KEYSIGHT Input RF Atten: 10 dB Preamp: Off Ref Level Offset 27.27 dB Y Scale R L Align: Auto On Off Attenuation 1 Metrics 2 Graph Signal Path Average Power 19.63 dBm 43.05 % at 0 dB 10.0 % 2.99 dB 1.0 % 4.94 dB 0.1 % 6.23 dB 0.01 % 6.96 dB 0.001 % 7.36 dB 0.0001 % 7.53 dB 7.60 dB Peak 27.23 dBm Local 0.00 dB Info BW 5.0000 MHz 20.00 dB

### 5 M\_PAR\_Mid\_16QAM\_FullRB

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#### 5 M\_PAR\_Mid\_64QAM\_FullRB ectrum Analyzer 1 ower Stat CCDF **\*** Amplitude Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) Center Freq: 2.310000000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None KEYSIGHT Input RF Atten: 10 dB Preamp: Off Ref Level Offset 27.27 dB Y Scale R L Align: Auto On Off Attenuation 1 Metrics 2 Graph Signal Path Average Power 19.38 dBm 43.34 % at 0 dB 10.0 % 3.16 dB 1.0 % 5.02 dB 0.1 % 6.27 dB 0.01 % 7.05 dB 0.001 % 7.40 dB 0.0001 % 7.60 dB 7.66 dB Peak 27.04 dBm Local 0.00 dB Info BW 5.0000 MHz 20.00 dB

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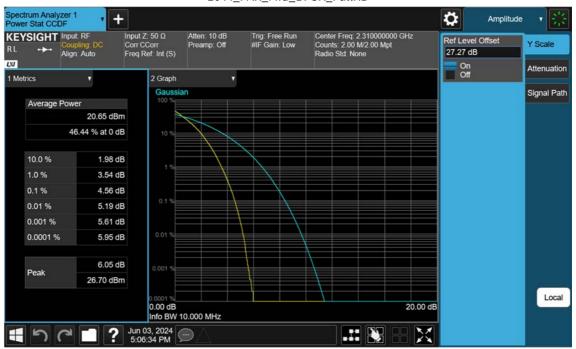
#### ectrum Analyzer 1 ower Stat CCDF **\*** Amplitude Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) Center Freq: 2.310000000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None KEYSIGHT Input RF Atten: 10 dB Preamp: Off Ref Level Offset 27.27 dB Y Scale R L Align: Auto On Off Attenuation 1 Metrics 2 Graph Signal Path Average Power 18.02 dBm 41.69 % at 0 dB 10.0 % 3.07 dB 1.0 % 5.67 dB 0.1 % 6.08 dB 0.01 % 6.65 dB 0.001 % 6.95 dB 0.0001 % 7.19 dB 7.55 dB Peak 25.57 dBm Local 0.00 dB Info BW 5.0000 MHz 20.00 dB 1 9 P 1 9 Jun 03, 2024 9 4:47:51 PM

### 5 M\_PAR\_Mid\_256QAM\_FullRB

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## 10 M\_PAR\_Mid\_BPSK\_FullRB



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## 10 M\_PAR\_Mid\_QPSK\_FullRB



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### 10 M\_PAR\_Mid\_16QAM\_FullRB

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#### 10 M\_PAR\_Mid\_64QAM\_FullRB ectrum Analyzer 1 ower Stat CCDF **\*** Amplitude Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) Center Freq: 2.310000000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None KEYSIGHT Input RF Atten: 10 dB Preamp: Off Ref Level Offset 27.27 dB Y Scale R L Align: Auto On Off Attenuation 1 Metrics 2 Graph Signal Path Average Power 19.23 dBm 44.01 % at 0 dB 10.0 % 2.90 dB 1.0 % 5.19 dB 0.1 % 6.49 dB 0.01 % 7.22 dB 0.001 % 7.84 dB 0.0001 % 8.26 dB 8.26 dB Peak 27.49 dBm Local 0.00 dB Info BW 10.000 MHz 20.00 dB

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#### 10 M\_PAR\_Mid\_256QAM\_FullRB ectrum Analyzer 1 ower Stat CCDF **\*** Amplitude Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) Center Freq: 2.310000000 GHz Counts: 2.00 M/2.00 Mpt Radio Std: None KEYSIGHT Input RF Atten: 10 dB Preamp: Off Ref Level Offset 27.27 dB Y Scale R L Align: Auto On Off Attenuation 1 Metrics 2 Graph Signal Path Average Power 17.66 dBm 44.09 % at 0 dB 10.0 % 2.91 dB 1.0 % 5.17 dB 0.1 % 6.48 dB 0.01 % 7.28 dB 0.001 % 7.60 dB 0.0001 % 7.65 dB 7.65 dB Peak 25.31 dBm Local 0.00 dB Info BW 10.000 MHz 20.00 dB Jun 03, 2024 5:08:05 PM

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# 5 M\_OBW\_Mid\_BPSK\_FullRB



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#### pectrum Analyzer 1 ccupied BW ø Frequency Center Freq. 2.310000000 GHz Avg|Hold: 500/500 Radio Std: None Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive Trig: Free Run Gate: Off #IF Gain: Low KEYSIGHT Input RF Atten: 10 dB Preamp: Off Settings RL Coupling: CAlign: Auto 2.310000000 GHz 1 Graph Ref LvI Offset 27.27 dB Ref Value 40.00 dBm 10.000 MHz Scale/Div 10.0 dB CF Step 1.000000 MHz Auto Man Freq Offset 0 Hz Center 2.310000 GHz #Res BW 100.00 kHz Span 10 MHz Sweep 16.7 ms (1001 pts) #Video BW 390.00 kHz 2 Metrics Occupied Bandwidth 4.6560 MHz Total Power 30.8 dBm % of OBW Power x dB Transmit Freq Error x dB Bandwidth -93.634 kHz 5.234 MHz 99.00 % -26.00 dB Local

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### 5 M\_OBW\_Mid\_QPSK\_FullRB

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### pectrum Analyzer 1 ccupied BW ø Frequency Center Freq. 2.310000000 GHz Avg|Hold: 500/500 Radio Std: None Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive Trig: Free Run Gate: Off #IF Gain: Low KEYSIGHT Input RF Atten: 10 dB Preamp: Off Settings RL Coupling: CAlign: Auto 2.310000000 GHz 1 Graph Ref LvI Offset 27.27 dB Ref Value 40.00 dBm 10.000 MHz Scale/Div 10.0 dB CF Step 1.000000 MHz Auto Man Freq Offset 0 Hz Center 2.310000 GHz #Res BW 100.00 kHz Span 10 MHz Sweep 16.7 ms (1001 pts) #Video BW 390.00 kHz 2 Metrics Occupied Bandwidth 4.6784 MHz Total Power 30.6 dBm % of OBW Power x dB Transmit Freq Error x dB Bandwidth -116.69 kHz 5.177 MHz 99.00 % -26.00 dB Local III 🐺 1961

### 5 M\_OBW\_Mid\_16QAM\_FullRB

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### 5 M\_OBW\_Mid\_64QAM\_FullRB pectrum Analyzer 1 ccupied BW ø Frequency Center Freq. 2.310000000 GHz Avg|Hold: 500/500 Radio Std: None Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive Trig: Free Run Gate: Off #IF Gain: Low KEYSIGHT Input RF Atten: 10 dB Preamp: Off Settings RL Coupling: CAlign: Auto 2.310000000 GHz 1 Graph Ref LvI Offset 27.27 dB Ref Value 40.00 dBm 10.000 MHz Scale/Div 10.0 dB CF Step 1.000000 MHz Auto Man Freq Offset 0 Hz Center 2.310000 GHz #Res BW 100.00 kHz Span 10 MHz Sweep 16.7 ms (1001 pts) #Video BW 390.00 kHz 2 Metrics Occupied Bandwidth 4.6784 MHz Total Power 30.2 dBm % of OBW Power x dB Transmit Freq Error x dB Bandwidth -128.25 kHz 5.171 MHz 99.00 % -26.00 dB Local

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#### pectrum Analyzer 1 ccupied BW ø Frequency Center Freq. 2.310000000 GHz Avg|Hold: 500/500 Radio Std: None Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive Trig: Free Run Gate: Off #IF Gain: Low KEYSIGHT Input RF Atten: 10 dB Preamp: Off Settings RL Coupling: CAlign: Auto 2.310000000 GHz 1 Graph Ref LvI Offset 27.27 dB Ref Value 40.00 dBm 10.000 MHz Scale/Div 10.0 dB CF Step 1.000000 MHz Auto Man Freq Offset 0 Hz William Million Center 2.310000 GHz #Res BW 100.00 kHz Span 10 MHz Sweep 16.7 ms (1001 pts) #Video BW 390.00 kHz 2 Metrics Occupied Bandwidth 4.7468 MHz Total Power 29.4 dBm % of OBW Power x dB Transmit Freq Error x dB Bandwidth -158.25 kHz 5.170 MHz 99.00 % -26.00 dB Local ? Jun 03, 2024 .... III 🐺 1 5 6

### 5 M\_OBW\_Mid\_256QAM\_FullRB

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### pectrum Analyzer 1 ccupied BW ø Frequency Center Freq. 2.310000000 GHz Avg|Hold: 500/500 Radio Std: None Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive Trig: Free Run Gate: Off #IF Gain: Low KEYSIGHT Input RF Atten: 10 dB Preamp: Off Settings RL Coupling: CAlign: Auto 2.310000000 GHz 1 Graph 20.000 MHz Ref LvI Offset 27.27 dB Ref Value 40.00 dBm Scale/Div 10.0 dB CF Step 2.000000 MHz Auto Man Freq Offset 0 Hz Center 2.31000 GHz #Res BW 200.00 kHz Span 20 MHz Sweep 1.00 ms (1001 pts) #Video BW 820.00 kHz 2 Metrics Occupied Bandwidth 9.0022 MHz Total Power 28.9 dBm % of OBW Power x dB Transmit Freq Error x dB Bandwidth -203.66 kHz 9.904 MHz 99.00 % -26.00 dB Local

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### 10 M\_OBW\_Mid\_BPSK\_FullRB

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Local



### pectrum Analyzer 1 ccupied BW ø Frequency Center Freq. 2.310000000 GHz Avg|Hold: 500/500 Radio Std: None Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive Trig: Free Run Gate: Off #IF Gain: Low KEYSIGHT Input RF Atten: 10 dB Preamp: Off Settings RL Coupling: CAlign: Auto 2.310000000 GHz 1 Graph 20.000 MHz Ref LvI Offset 27.27 dB Ref Value 40.00 dBm Scale/Div 10.0 dB CF Step 2.000000 MHz Auto Man Freq Offset 0 Hz Center 2.31000 GHz #Res BW 200.00 kHz Span 20 MHz Sweep 1.00 ms (1001 pts) #Video BW 820.00 kHz 2 Metrics Occupied Bandwidth 8.9998 MHz 28.7 dBm Total Power % of OBW Power x dB Transmit Freq Error x dB Bandwidth -193.32 kHz 9.963 MHz 99.00 % -26.00 dB

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### 10 M\_OBW\_Mid\_QPSK\_FullRB

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#### pectrum Analyzer 1 ccupied BW ø Frequency Center Freq. 2.310000000 GHz Avg|Hold: 500/500 Radio Std: None Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive Trig: Free Run Gate: Off #IF Gain: Low KEYSIGHT Input RF Atten: 10 dB Preamp: Off Settings RL Coupling: CAlign: Auto 2.310000000 GHz 1 Graph 20.000 MHz Ref LvI Offset 27.27 dB Ref Value 40.00 dBm Scale/Div 10.0 dB CF Step 2.000000 MHz Auto Man Freq Offset 0 Hz Center 2.31000 GHz #Res BW 200.00 kHz Span 20 MHz Sweep 1.00 ms (1001 pts) #Video BW 820.00 kHz 2 Metrics Occupied Bandwidth 9.0075 MHz Total Power 27.8 dBm % of OBW Power x dB Transmit Freq Error x dB Bandwidth -187.80 kHz 9.956 MHz 99.00 % -26.00 dB Local

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### 10 M\_OBW\_Mid\_16QAM\_FullRB

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### ø Frequency Center Freq. 2.310000000 GHz Avg|Hold: 500/500 Radio Std: None Trig: Free Run Gate: Off #IF Gain: Low Atten: 10 dB Preamp: Off 2.310000000 GHz 20.000 MHz Ref LvI Offset 27.27 dB Ref Value 40.00 dBm CF Step 2.000000 MHz

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### pectrum Analyzer 1 ccupied BW Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive KEYSIGHT Input RF Settings RL Coupling: CAlign: Auto 1 Graph Scale/Div 10.0 dB Auto Man Freq Offset 0 Hz Center 2.31000 GHz #Res BW 200.00 kHz Span 20 MHz Sweep 1.00 ms (1001 pts) #Video BW 820.00 kHz 2 Metrics Occupied Bandwidth 9.0275 MHz Total Power 27.4 dBm % of OBW Power x dB Transmit Freq Error x dB Bandwidth -188.34 kHz 9.997 MHz 99.00 % -26.00 dB Local

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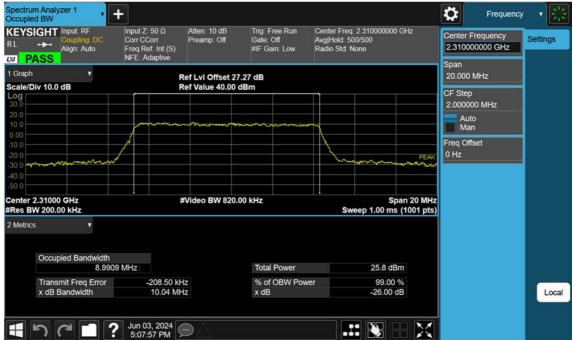
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# 10 M\_OBW\_Mid\_256QAM\_FullRB



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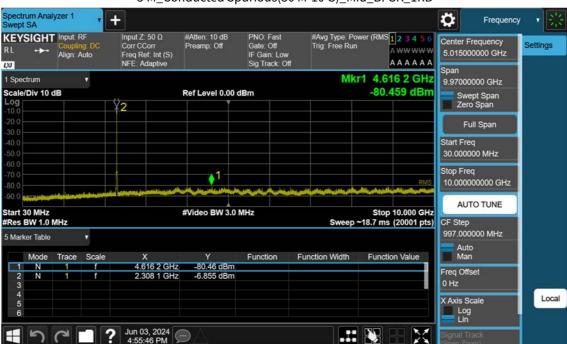




### 5 M\_Conducted Spurious(30 M-10 G)\_Low\_BPSK\_1RB

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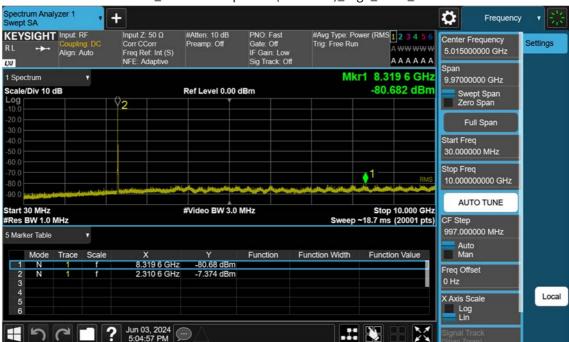




### 5 M\_Conducted Spurious(30 M-10 G)\_Mid\_BPSK\_1RB

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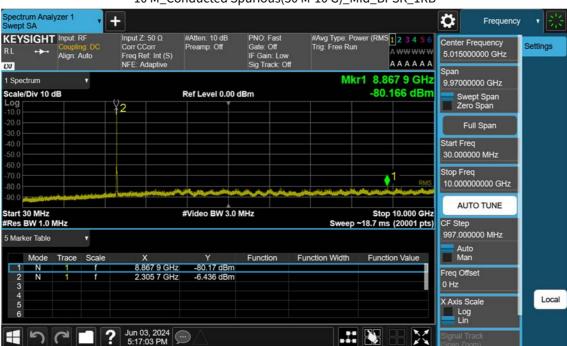




### 5 M\_Conducted Spurious(30 M-10 G)\_High\_BPSK\_1RB

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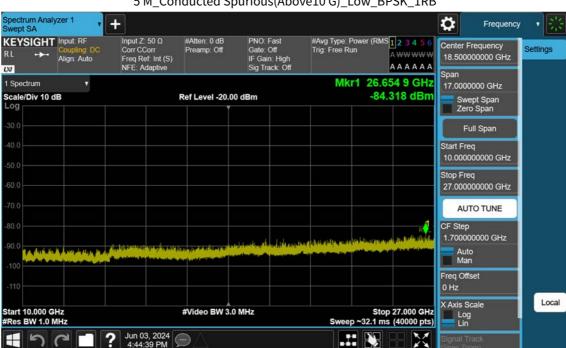




### 10 M\_Conducted Spurious(30 M-10 G)\_Mid\_BPSK\_1RB

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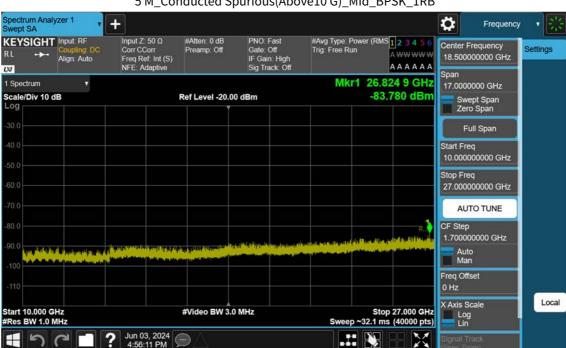




## 5 M\_Conducted Spurious(Above10 G)\_Low\_BPSK\_1RB

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## 5 M\_Conducted Spurious(Above10 G)\_Mid\_BPSK\_1RB

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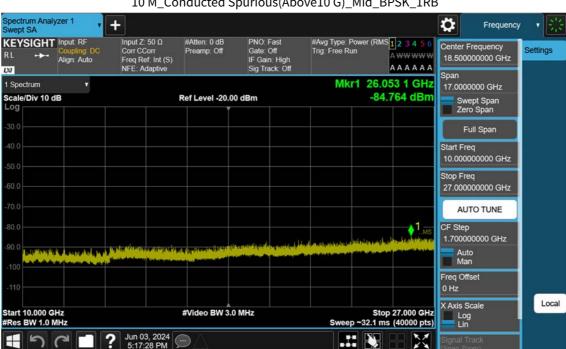




# 5 M\_Conducted Spurious(Above10 G)\_High\_BPSK\_1RB

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## 10 M\_Conducted Spurious(Above10 G)\_Mid\_BPSK\_1RB

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## 5 M\_Band Edge(2280MHz-2288MHz)\_Low\_BPSK\_1RB

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#### ø Frequency Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive #Avg Type: Power (RMS 1 2 3 4 5 6 Trig: Free Run #Atten: 10 dB Preamp: Off PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off KEYSIGHT Input RF Center Frequency Settings Align: Auto 2.290000000 GHz AAAAAA ĻΧI Mkr1 2.292 000 GHz 1 Spectrum Ref LvI Offset 27.27 dB Ref Level 0.00 dBm 4.00000000 MHz -51.857 dBm Scale/Div 10 dB Swept Span Zero Span Full Span Start Freq 2.288000000 GHz Stop Freq 2.292000000 GHz AUTO TUNE 400.000 kHz Auto Man Freq Offset 0 Hz Local X Axis Scale Start 2.288000 GHz #Res BW 1.0 MHz Stop 2.292000 GHz #Sweep ~1.01 s (1001 pts) #Video BW 3.0 MHz Log Lin

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## 5 M\_Band Edge(2288MHz-2292MHz)\_Low\_BPSK\_1RB

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## 5 M\_Band Edge(2292MHz-2296MHz)\_Low\_BPSK\_1RB

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## 5 M\_Band Edge(2296MHz-2300MHz)\_Low\_BPSK\_1RB

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5 M\_Band Edge(2300MHz-2304MHz)\_Low\_BPSK\_1RB

Note: We used a narrower RBW in order to increase accuracy.

Calculation = Reading Value +  $10 \times \log(1 \text{ MHz}/100 \text{ kHz})$  dB = -38.709 dBm + 10 dB = -28.709 dBm

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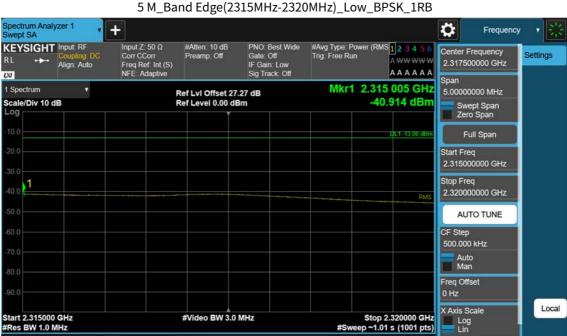




5 M\_Band Edge(2304MHz-2305MHz)\_Low\_BPSK\_1RB

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## 5 M\_Band Edge(2320MHz-2324MHz)\_Low\_BPSK\_1RB

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## 5 M\_Band Edge(2324MHz-2328MHz)\_Low\_BPSK\_1RB

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#### 5 M\_Band Edge(2328MHz-2337MHz)\_Low\_BPSK\_1RB ø Frequency Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive #Avg Type: Power (RMS 1 2 3 4 5 6 Trig: Free Run #Atten: 10 dB Preamp: Off PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off KEYSIGHT Input RF Center Frequency Settings Align: Auto 2.332500000 GHz AAAAAA ĻΧI Mkr1 2.328 009 GHz 1 Spectrum Ref LvI Offset 27.27 dB Ref Level 0.00 dBm 9.00000000 MHz -54.711 dBm Scale/Div 10 dB Swept Span Zero Span Full Span Start Freq 2.328000000 GHz Stop Freq 2.337000000 GHz DL1 -37.00 dB AUTO TUNE 900.000 kHz Auto Man Freq Offset 0 Hz Local X Axis Scale Start 2.328000 GHz #Res BW 1.0 MHz Stop 2.337000 GHz #Sweep ~1.01 s (1001 pts) #Video BW 3.0 MHz Log Lin

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## 5 M\_Band Edge(2337MHz-2341MHz)\_Low\_BPSK\_1RB

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## 5 M\_Band Edge(2341MHz-2345MHz)\_Low\_BPSK\_1RB

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#### ø Frequency Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive #Avg Type: Power (RMS 1 2 3 4 5 6 Trig: Free Run #Atten: 10 dB Preamp: Off PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off KEYSIGHT Input RF Center Frequency Settings Align: Auto 2.355000000 GHz AAAAAA ĻΧI Mkr1 2.352 06 GHz 1 Spectrum Ref LvI Offset 27.27 dB Ref Level 0.00 dBm 20.0000000 MHz -64.405 dBm Scale/Div 10 dB Swept Span Zero Span Full Span Start Freq 2.345000000 GHz Stop Freq 2.365000000 GHz AUTO TUNE 1 1 CF Step 2.000000 MHz Auto Man Freq Offset 0 Hz Local X Axis Scale Start 2.34500 GHz #Res BW 1.0 MHz Stop 2.36500 GHz #Sweep 1.00 s (1001 pts) #Video BW 3.0 MHz Log Lin

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## 5 M\_Band Edge(2345MHz-2365MHz)\_Low\_BPSK\_1RB

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## 5 M\_Band Edge(2365MHz-2400MHz)\_Low\_BPSK\_1RB

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## 5 M\_Band Edge(2280MHz-2288MHz)\_Low\_BPSK\_FullRB

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#### ø Frequency Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive #Avg Type: Power (RMS 1 2 3 4 5 6 Trig: Free Run PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off KEYSIGHT Input RF #Atten: 10 dB Preamp: Off Center Frequency Settings Align: Auto 2.290000000 GHz AAAAAA ĻΧI Mkr1 2.291 992 GHz 1 Spectrum Ref LvI Offset 27.27 dB Ref Level 0.00 dBm 4.00000000 MHz -52.333 dBm Scale/Div 10 dB Swept Span Zero Span Full Span Start Freq 2.288000000 GHz Stop Freq 2.292000000 GHz AUTO TUNE 400.000 kHz Auto Man Freq Offset 0 Hz Local X Axis Scale Start 2.288000 GHz #Res BW 1.0 MHz Stop 2.292000 GHz #Sweep ~1.01 s (1001 pts) #Video BW 3.0 MHz Log Lin ? Jun 03, 2024 4:36:27 PM III 🐺

## 5 M\_Band Edge(2288MHz-2292MHz)\_Low\_BPSK\_FullRB

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#### ø Frequency Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive #Avg Type: Power (RMS 1 2 3 4 5 6 Trig: Free Run PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off KEYSIGHT Input RF #Atten: 10 dB Preamp: Off Center Frequency Settings Align: Auto 2.294000000 GHz AAAAAA ĻΧI Mkr1 2.296 000 GHz 1 Spectrum Ref LvI Offset 27.27 dB Ref Level 0.00 dBm 4.00000000 MHz -43.938 dBm Scale/Div 10 dB Swept Span Zero Span Full Span Start Freq 2.292000000 GHz Stop Freq 2.296000000 GHz AUTO TUNE 400.000 kHz Auto Man Freq Offset 0 Hz Local X Axis Scale Start 2.292000 GHz #Res BW 1.0 MHz Stop 2.296000 GHz #Sweep ~1.01 s (1001 pts) #Video BW 3.0 MHz Log Lin

III 🐺

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## 5 M\_Band Edge(2292MHz-2296MHz)\_Low\_BPSK\_FullRB

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#### ø Frequency Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive #Avg Type: Power (RMS 1 2 3 4 5 6 Trig: Free Run PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off KEYSIGHT Input RF #Atten: 10 dB Preamp: Off Center Frequency Settings Align: Auto 2.298000000 GHz AAAAAA ĻΧI Mkr1 2.299 992 GHz 1 Spectrum Ref LvI Offset 27.27 dB Ref Level 0.00 dBm 4.00000000 MHz -34.575 dBm Scale/Div 10 dB Swept Span Zero Span Full Span Start Freq 2.296000000 GHz Stop Freq 2.300000000 GHz AUTO TUNE 400.000 kHz Auto Man Freq Offset 0 Hz Local X Axis Scale Start 2.296000 GHz #Res BW 1.0 MHz Stop 2.300000 GHz #Sweep ~1.01 s (1001 pts) #Video BW 3.0 MHz Log Lin

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## 5 M\_Band Edge(2296MHz-2300MHz)\_Low\_BPSK\_FullRB

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5 M\_Band Edge(2300MHz-2304MHz)\_Low\_BPSK\_FullRB

Note: We used a narrower RBW in order to increase accuracy.

Calculation = Reading Value +  $10 \times \log(1 \text{ MHz}/100 \text{ kHz})$  dB = -34.664 dBm + 10 dB = -24.664 dBm

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5 M\_Band Edge(2304MHz-2305MHz)\_Low\_BPSK\_FullRB

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Local

X Axis Scale

Log Lin

Stop 2.320000 GHz #Sweep ~1.01 s (1001 pts)

III 🐺



Start 2.315000 GHz #Res BW 1.0 MHz

### ø Frequency Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive #Avg Type: Power (RMS 1 2 3 4 5 6 Trig: Free Run PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off KEYSIGHT Input RF #Atten: 10 dB Preamp: Off Center Frequency Settings Align: Auto 2.317500000 GHz AAAAAA ĻΧI Mkr1 2.315 000 GHz 1 Spectrum Ref LvI Offset 27.27 dB Ref Level 0.00 dBm 5.00000000 MHz -36.094 dBm Scale/Div 10 dB Swept Span Zero Span Full Span Start Freq 2.315000000 GHz Stop Freq 2.320000000 GHz AUTO TUNE 500.000 kHz Auto Man Freq Offset 0 Hz

#Video BW 3.0 MHz

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## 5 M\_Band Edge(2315MHz-2320MHz)\_Low\_BPSK\_FullRB

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## 5 M\_Band Edge(2320MHz-2324MHz)\_Low\_BPSK\_FullRB

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## 5 M\_Band Edge(2324MHz-2328MHz)\_Low\_BPSK\_FullRB

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Local

X Axis Scale

Log Lin

Stop 2.337000 GHz #Sweep ~1.01 s (1001 pts)

III 🐺



Start 2.328000 GHz #Res BW 1.0 MHz

#### ø Frequency Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive #Avg Type: Power (RMS 1 2 3 4 5 6 Trig: Free Run PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off KEYSIGHT Input RF #Atten: 10 dB Preamp: Off Center Frequency Settings Align: Auto 2.332500000 GHz AAAAAA ĻΧI Mkr1 2.328 018 GHz 1 Spectrum Ref LvI Offset 27.27 dB Ref Level 0.00 dBm 9.00000000 MHz -54.469 dBm Scale/Div 10 dB Swept Span Zero Span Full Span Start Freq 2.328000000 GHz Stop Freq 2.337000000 GHz DL1 -37.00 dB AUTO TUNE 900.000 kHz Auto Man Freq Offset 0 Hz

#Video BW 3.0 MHz

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## 5 M\_Band Edge(2328MHz-2337MHz)\_Low\_BPSK\_FullRB

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#### ø Frequency Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive #Avg Type: Power (RMS 1 2 3 4 5 6 Trig: Free Run PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off KEYSIGHT Input RF #Atten: 10 dB Preamp: Off Center Frequency Settings Align: Auto 2.339000000 GHz AAAAAA ĻΧI Mkr1 2.339 520 GHz 1 Spectrum Ref LvI Offset 27.27 dB Ref Level 0.00 dBm 4.00000000 MHz -65.621 dBm Scale/Div 10 dB Swept Span Zero Span Full Span Start Freq 2.337000000 GHz Stop Freq 2.341000000 GHz AUTO TUNE **♦**1 400.000 kHz Auto Man Freq Offset 0 Hz Local X Axis Scale Start 2.337000 GHz #Res BW 1.0 MHz Stop 2.341000 GHz #Sweep ~1.01 s (1001 pts) #Video BW 3.0 MHz Log Lin

III 🐺

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## 5 M\_Band Edge(2337MHz-2341MHz)\_Low\_BPSK\_FullRB

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Local

X Axis Scale

Log Lin

Stop 2.345000 GHz #Sweep ~1.01 s (1001 pts)

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Start 2.341000 GHz #Res BW 1.0 MHz

### ø Frequency Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive #Avg Type: Power (RMS 1 2 3 4 5 6 Trig: Free Run PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off KEYSIGHT Input RF #Atten: 10 dB Preamp: Off Center Frequency Settings Align: Auto 2.343000000 GHz AAAAAA ĻΧI Mkr1 2.343 716 GHz 1 Spectrum Ref LvI Offset 27.27 dB Ref Level 0.00 dBm 4.00000000 MHz -65.626 dBm Scale/Div 10 dB Swept Span Zero Span Full Span Start Freq 2.341000000 GHz Stop Freq 2.345000000 GHz AUTO TUNE 400.000 kHz Auto Man Freq Offset 0 Hz

#Video BW 3.0 MHz

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## 5 M\_Band Edge(2341MHz-2345MHz)\_Low\_BPSK\_FullRB

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## 5 M\_Band Edge(2345MHz-2365MHz)\_Low\_BPSK\_FullRB

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#### ø Frequency Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) NFE: Adaptive #Avg Type: Power (RMS 1 2 3 4 5 6 Trig: Free Run PNO: Best Wide Gate: Off IF Gain: Low Sig Track: Off KEYSIGHT Input RF #Atten: 10 dB Preamp: Off Center Frequency Settings Align: Auto 2.382500000 GHz AAAAAA ĻΧI Mkr1 2.392 510 GHz 1 Spectrum Ref LvI Offset 27.27 dB Ref Level 0.00 dBm 35.0000000 MHz -65.562 dBm Scale/Div 10 dB Swept Span Zero Span Full Span Start Freq 2.365000000 GHz Stop Freq 2.400000000 GHz DL1-40.00 dB AUTO TUNE CF Step 3.500000 MHz Auto Man Freq Offset 0 Hz Local X Axis Scale Start 2.36500 GHz #Res BW 1.0 MHz Stop 2.40000 GHz #Sweep 1.00 s (1001 pts) #Video BW 3.0 MHz Log Lin

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## 5 M\_Band Edge(2365MHz-2400MHz)\_Low\_BPSK\_FullRB

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# 5 M\_Band Edge(2280MHz-2288MHz)\_Mid\_BPSK\_1RB

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# 5 M\_Band Edge(2288MHz-2292MHz)\_Mid\_BPSK\_1RB

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