

Appendix A

RF Test Data for BT V4.2(BDR/EDR) (Conducted Measurement)

Product Name: Tablet PC

Trade Mark: ASIUR

Test Model: ASIUR-101

Environmental Conditions

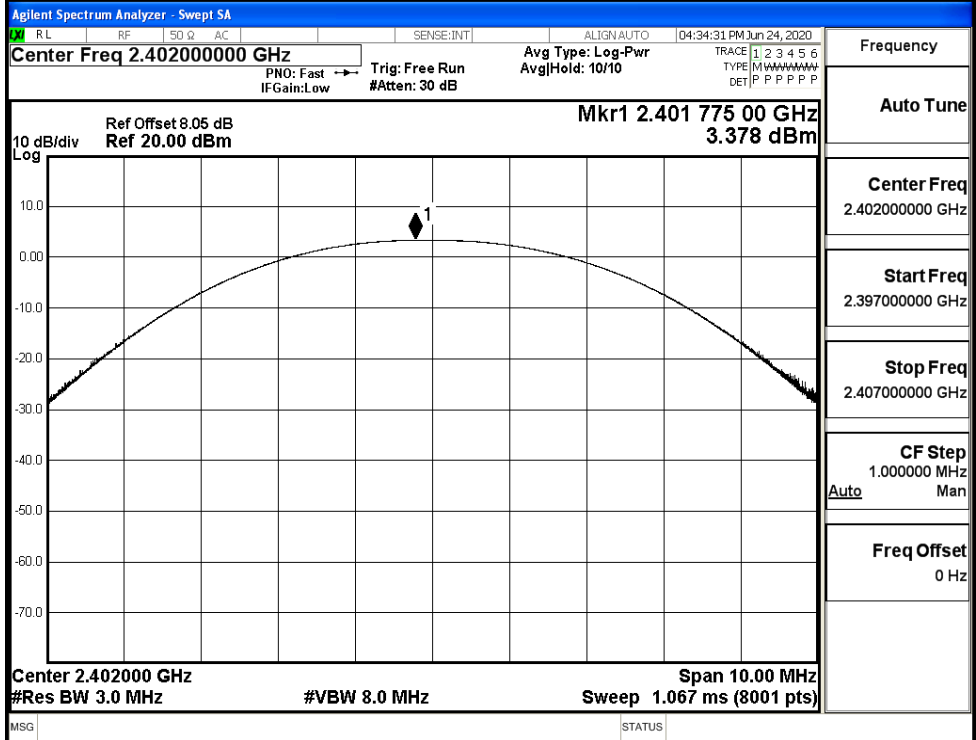
| | |
|--------------------|-----------|
| Temperature: | 24.1 °C |
| Relative Humidity: | 53.8% |
| ATM Pressure: | 100.0 kPa |
| Test Engineer: | Qu Xin |
| Supervised by: | Li Huan |

A.1 Maxmum Conducted Peak Output Power

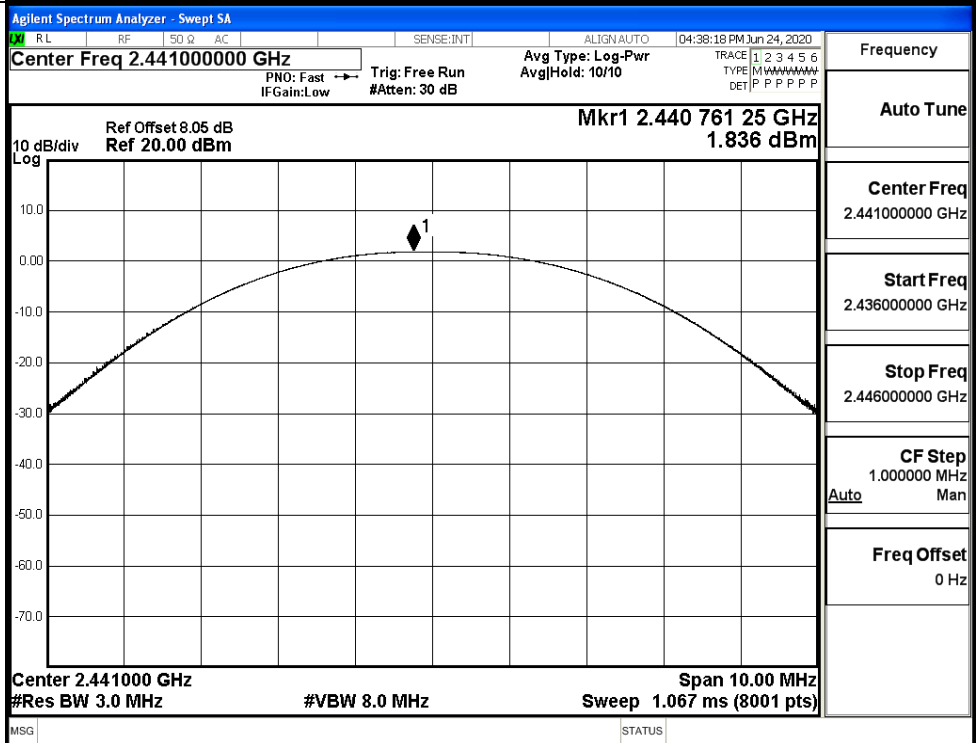
| Mode | Channel. | Maximum Peak Output Power [dBm] | Limit [dBm] | Verdict |
|----------|----------|---------------------------------|-------------|---------|
| GFSK | LCH | 3.378 | 21 | PASS |
| | MCH | 1.836 | 21 | PASS |
| | HCH | 0.457 | 21 | PASS |
| π/4DQPSK | LCH | 1.380 | 21 | PASS |
| | MCH | -1.417 | 21 | PASS |
| | HCH | -2.791 | 21 | PASS |
| 8DPSK | LCH | 1.594 | 21 | PASS |
| | MCH | 0.109 | 21 | PASS |
| | HCH | -1.565 | 21 | PASS |

Test Graphs

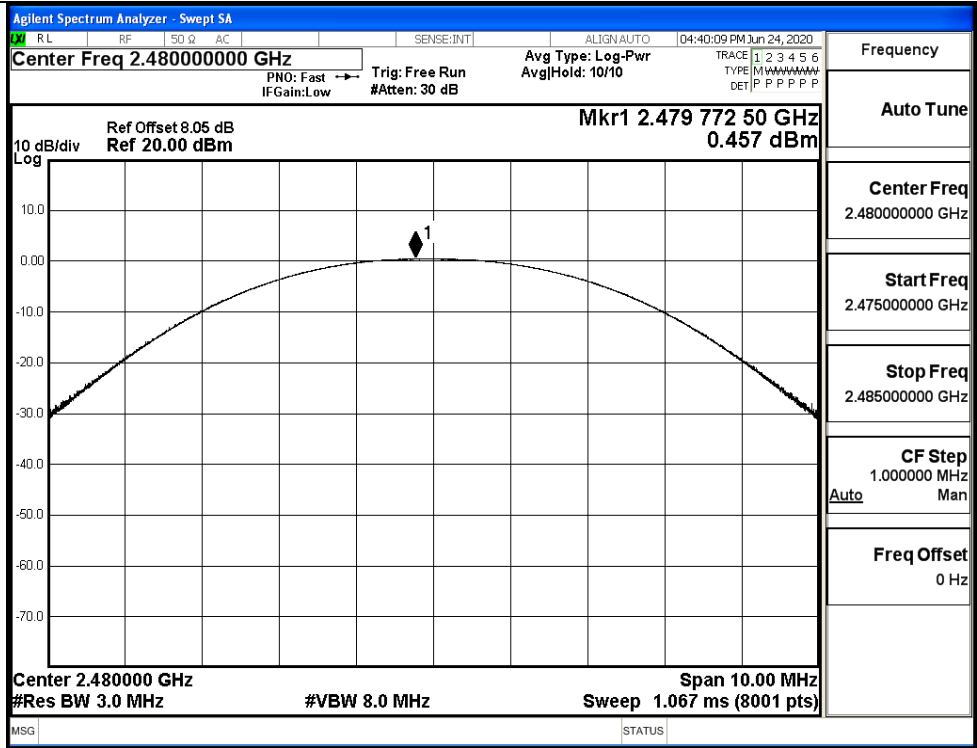
GFSK/LCH



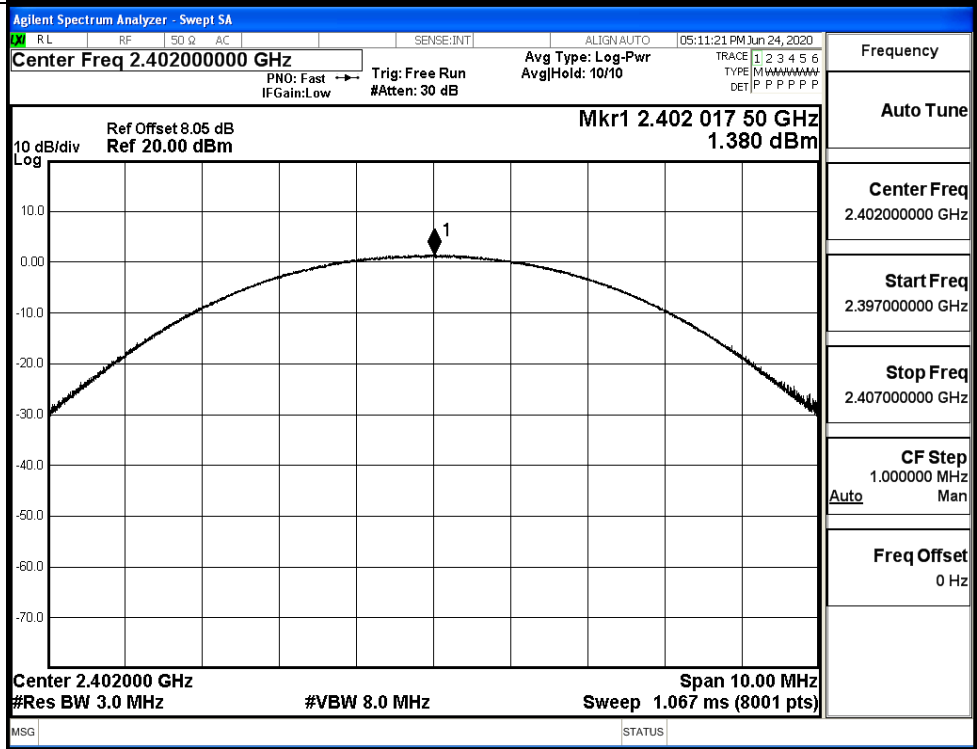
GFSK/MCH

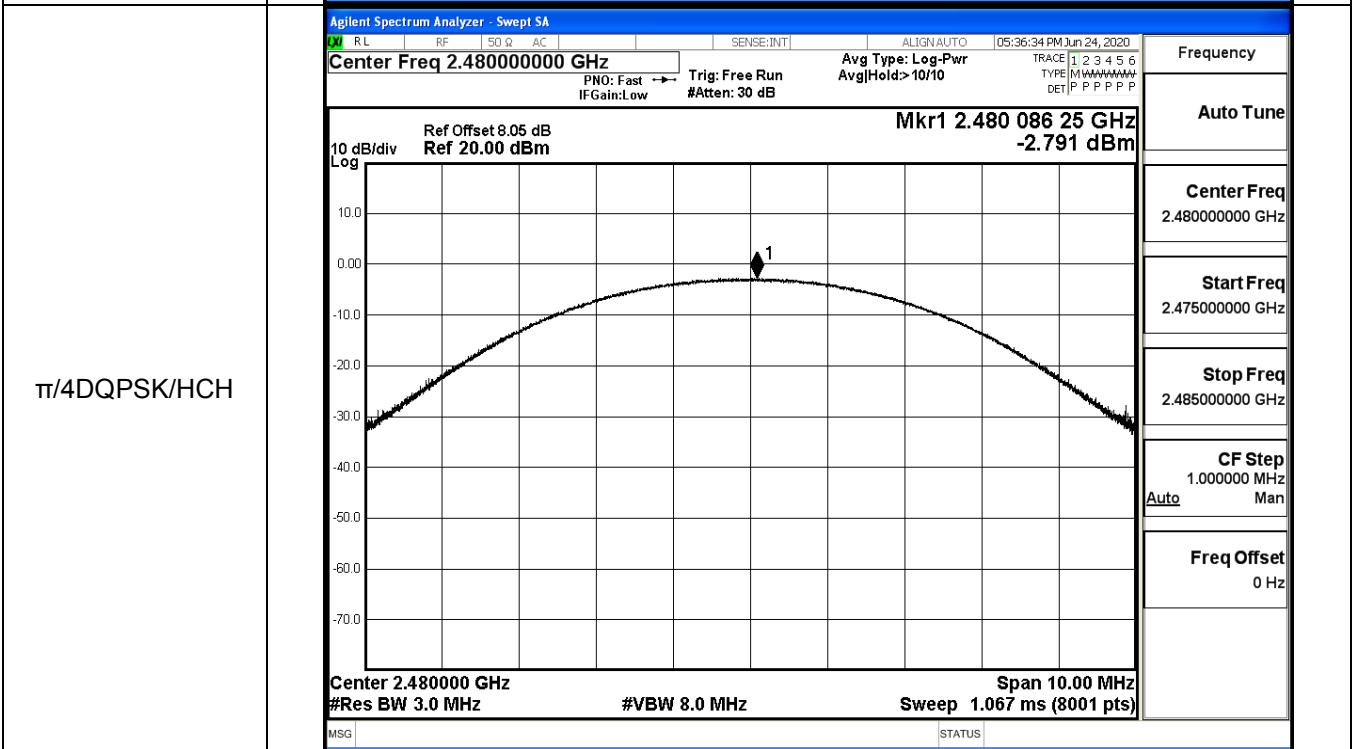
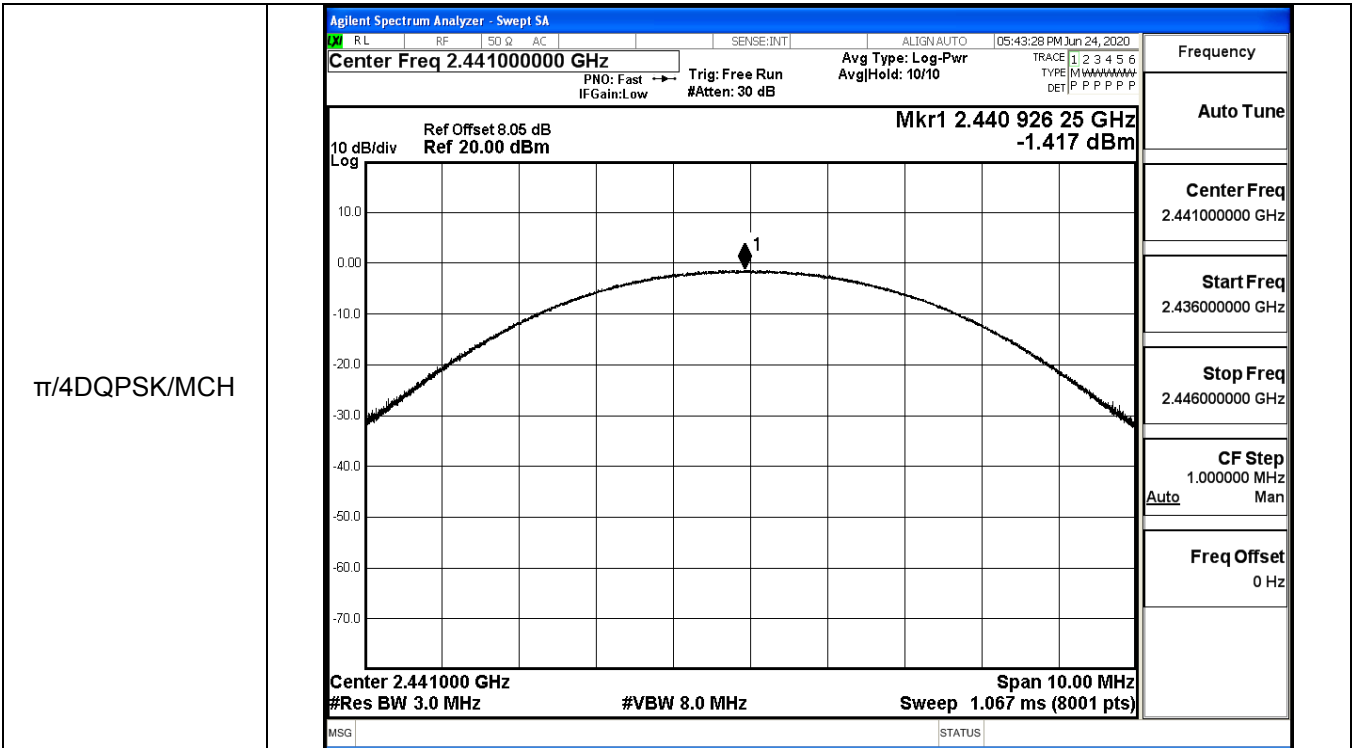


GFSK/HCH

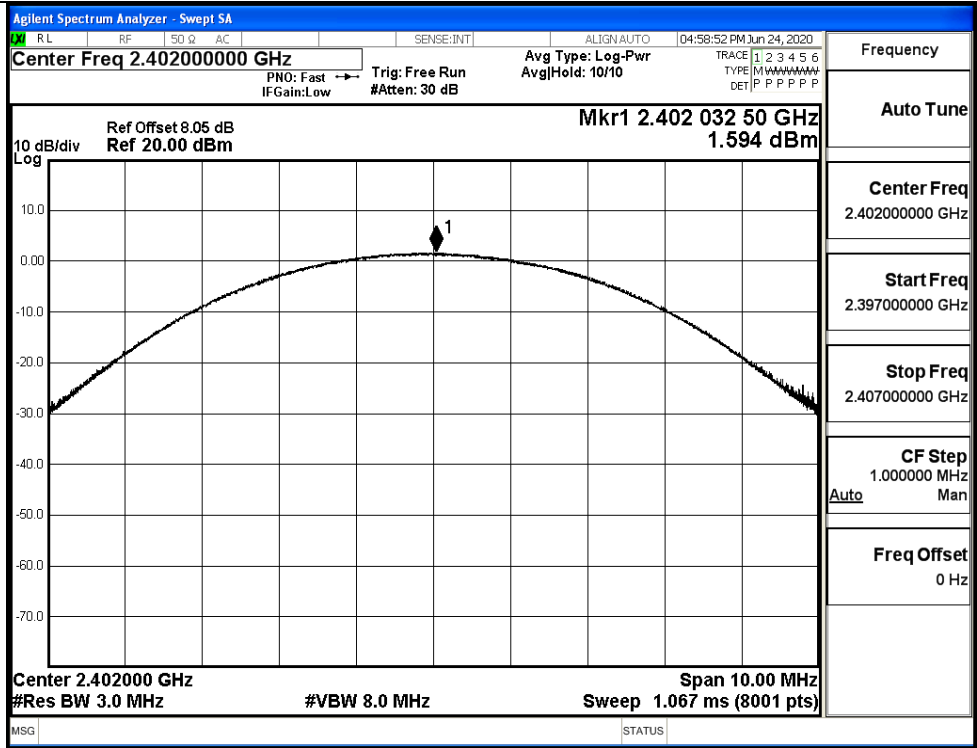


$\pi/4$ DQPSK/LCH

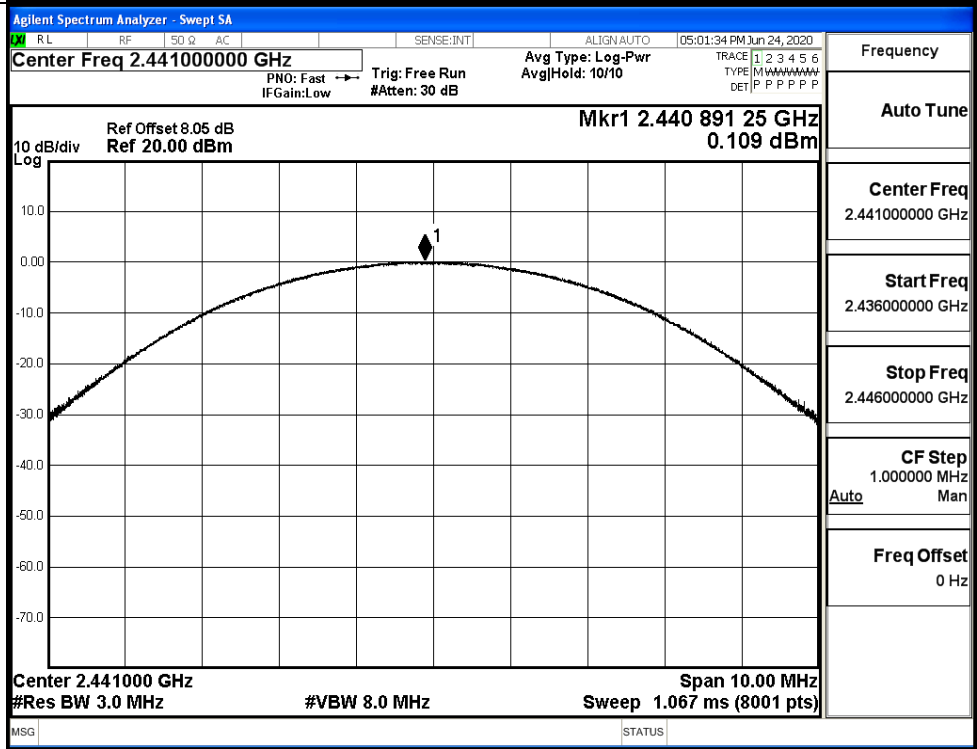




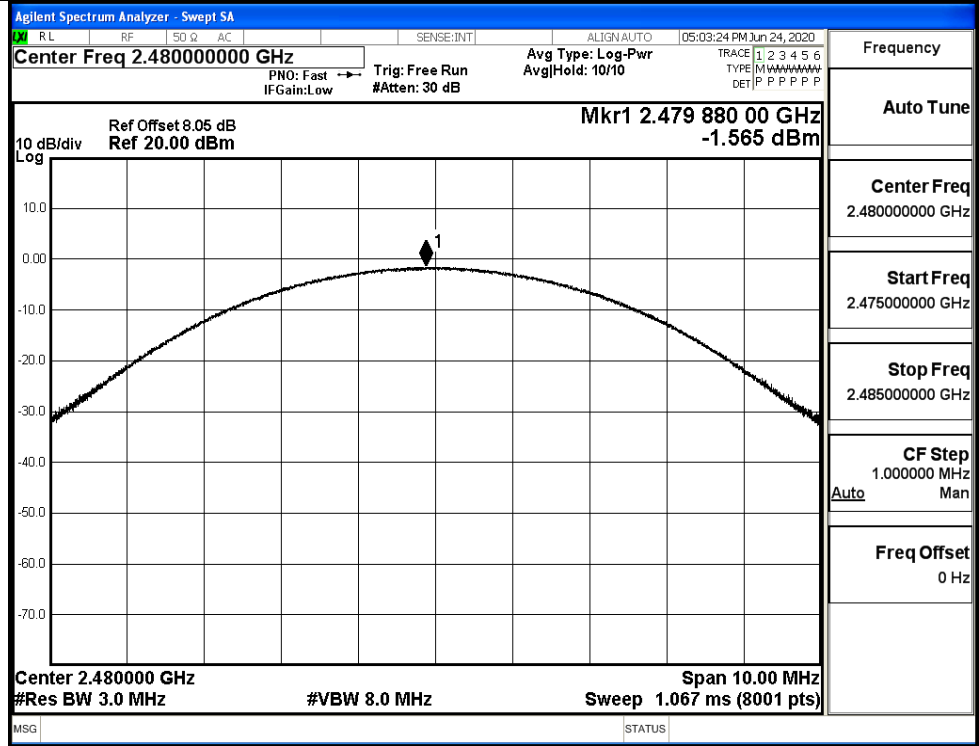
8DPSK/LCH



8DPSK/MCH

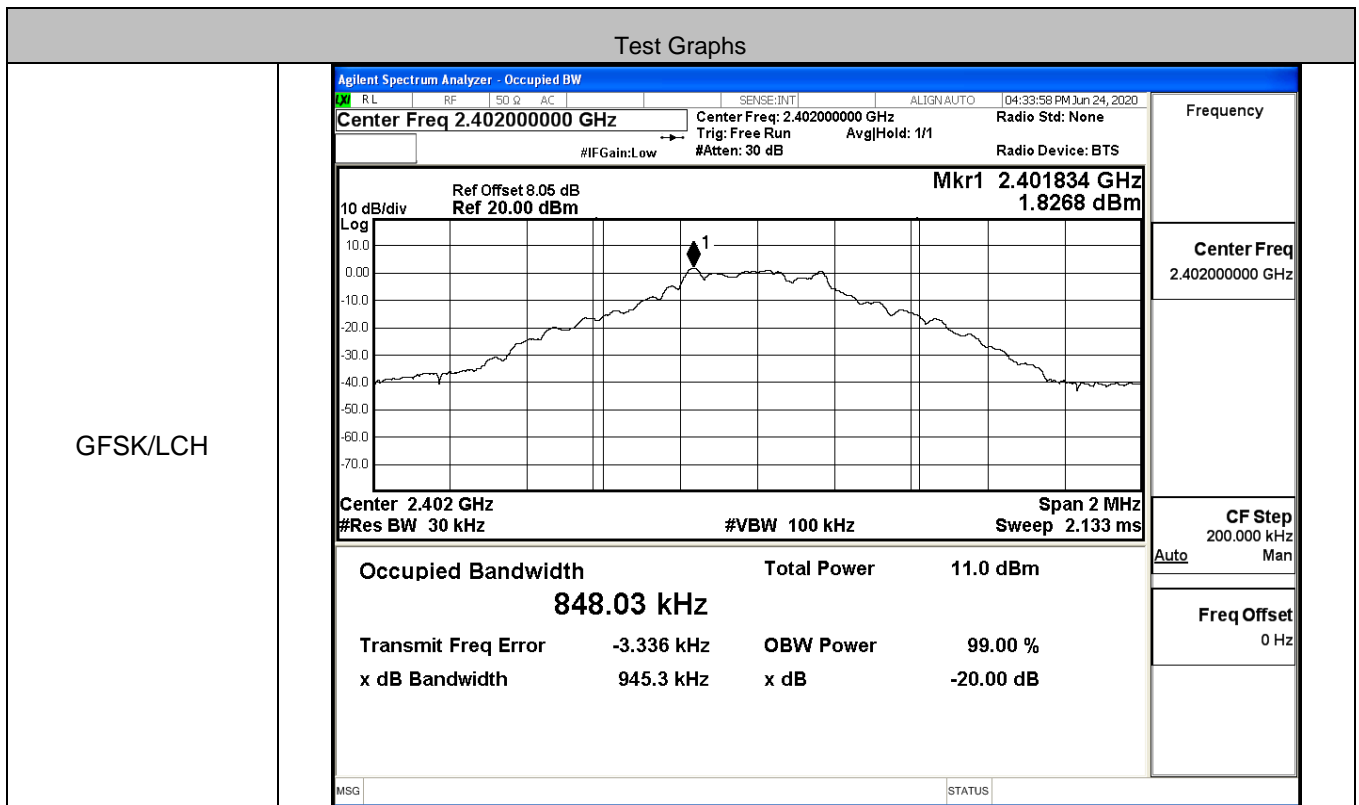


8DPSK/HCH

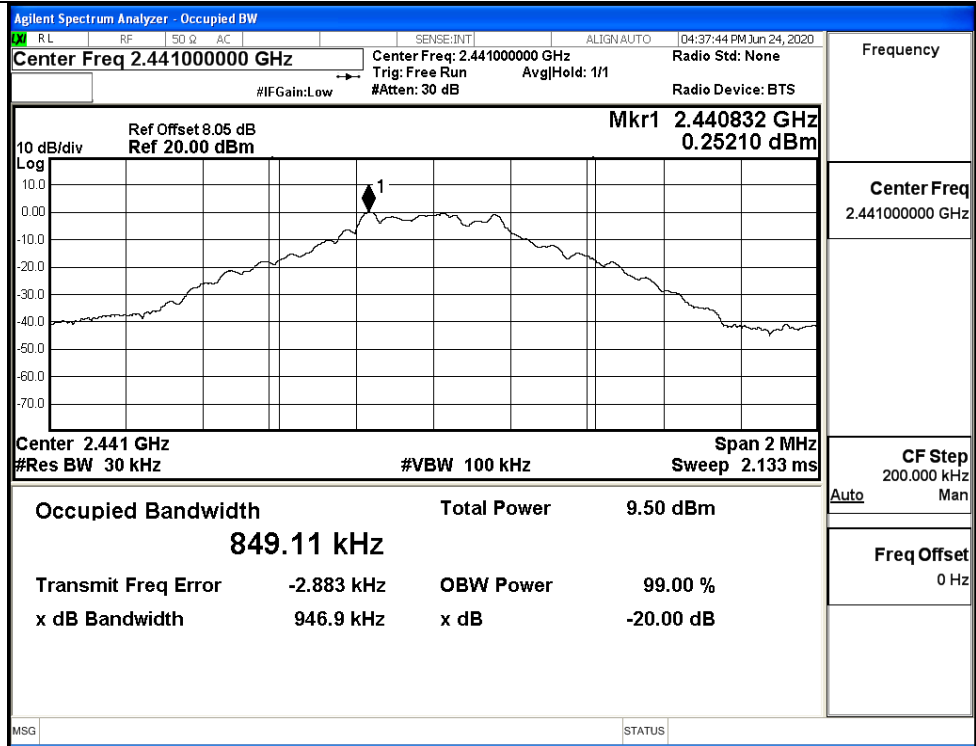


A.2 20dB Bandwidth

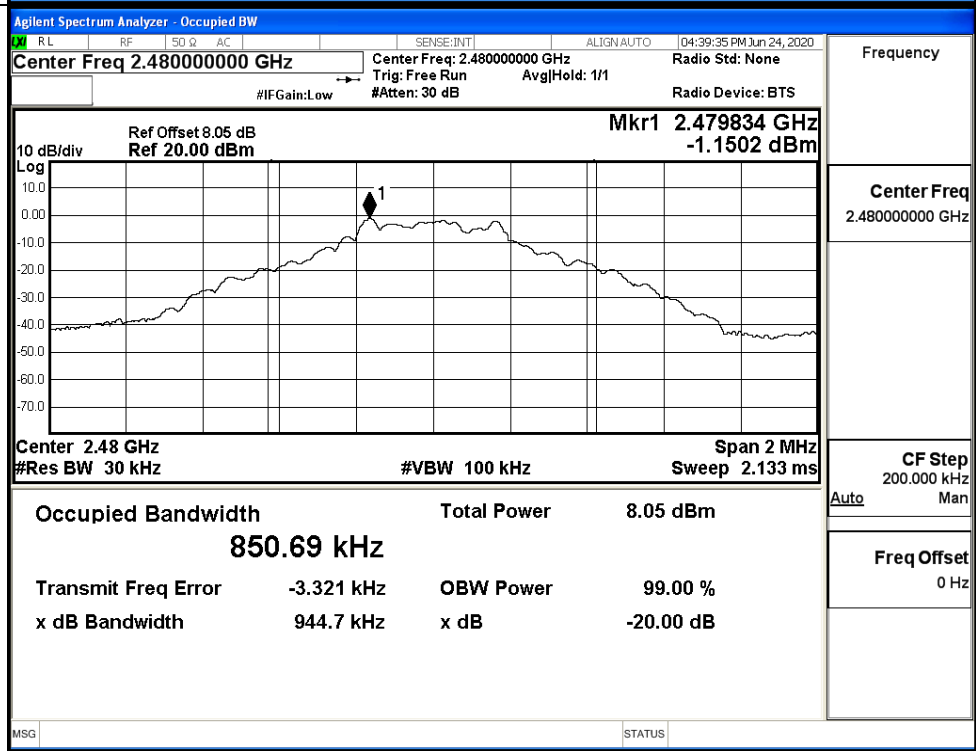
| Mode | Channel. | 20dB Bandwidth [MHz] | Limit [MHz] | Verdict |
|----------|----------|----------------------|---------------|---------|
| GFSK | LCH | 0.9453 | Not Specified | PASS |
| | MCH | 0.9469 | Not Specified | PASS |
| | HCH | 0.9447 | Not Specified | PASS |
| π/4DQPSK | LCH | 1.289 | Not Specified | PASS |
| | MCH | 1.289 | Not Specified | PASS |
| | HCH | 1.290 | Not Specified | PASS |
| 8DPSK | LCH | 1.303 | Not Specified | PASS |
| | MCH | 1.301 | Not Specified | PASS |
| | HCH | 1.300 | Not Specified | PASS |

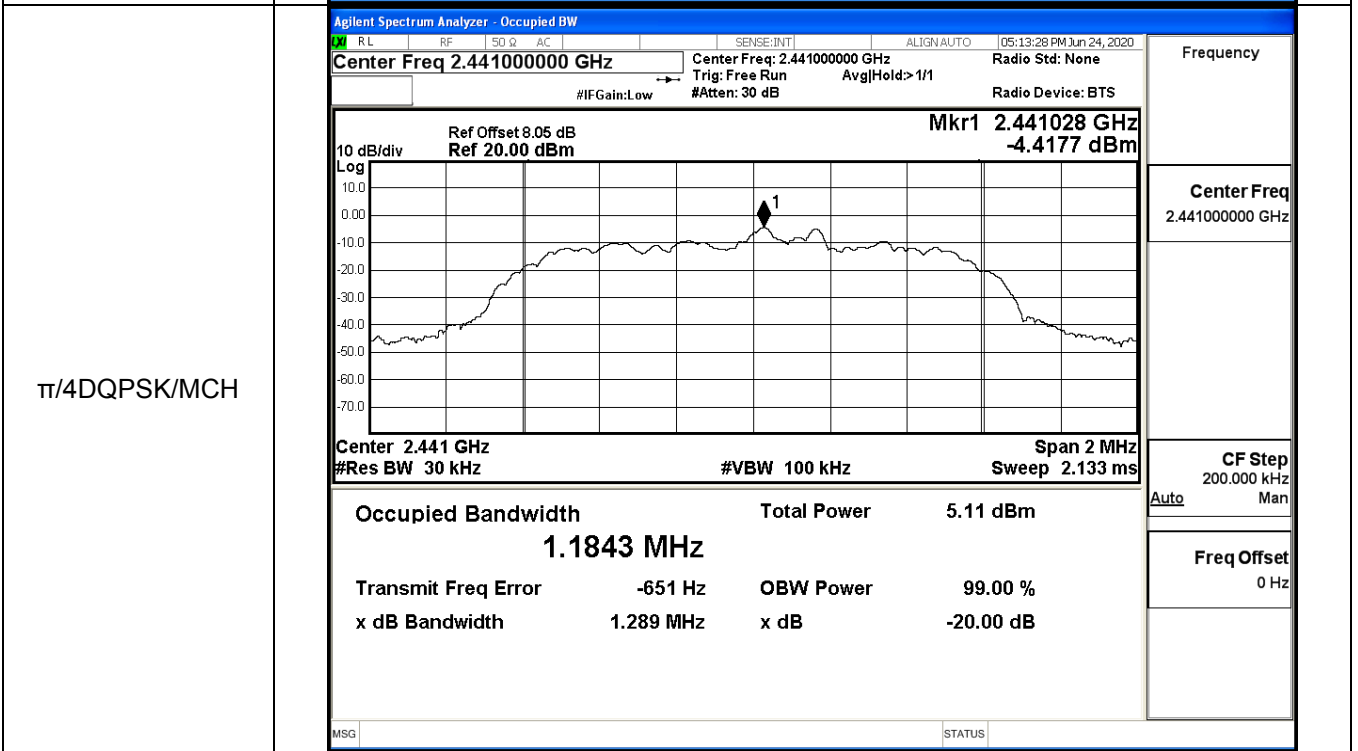
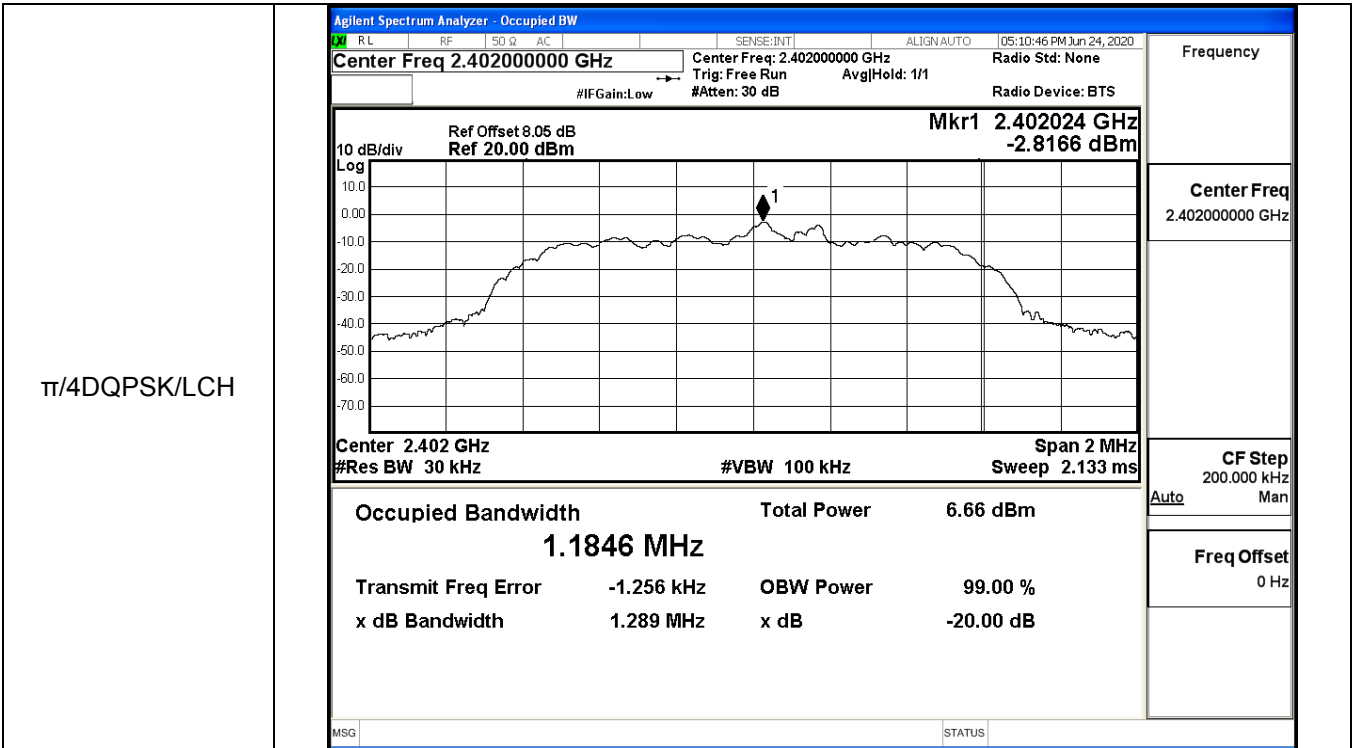


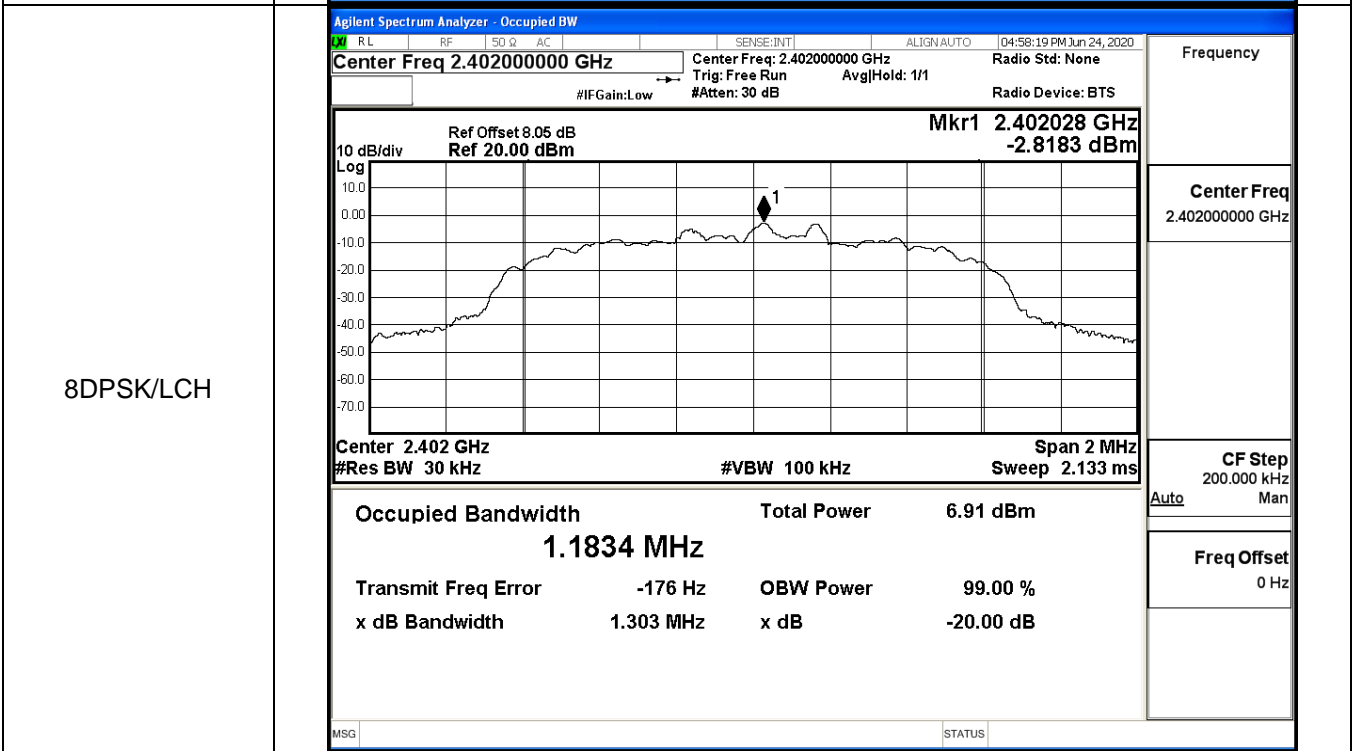
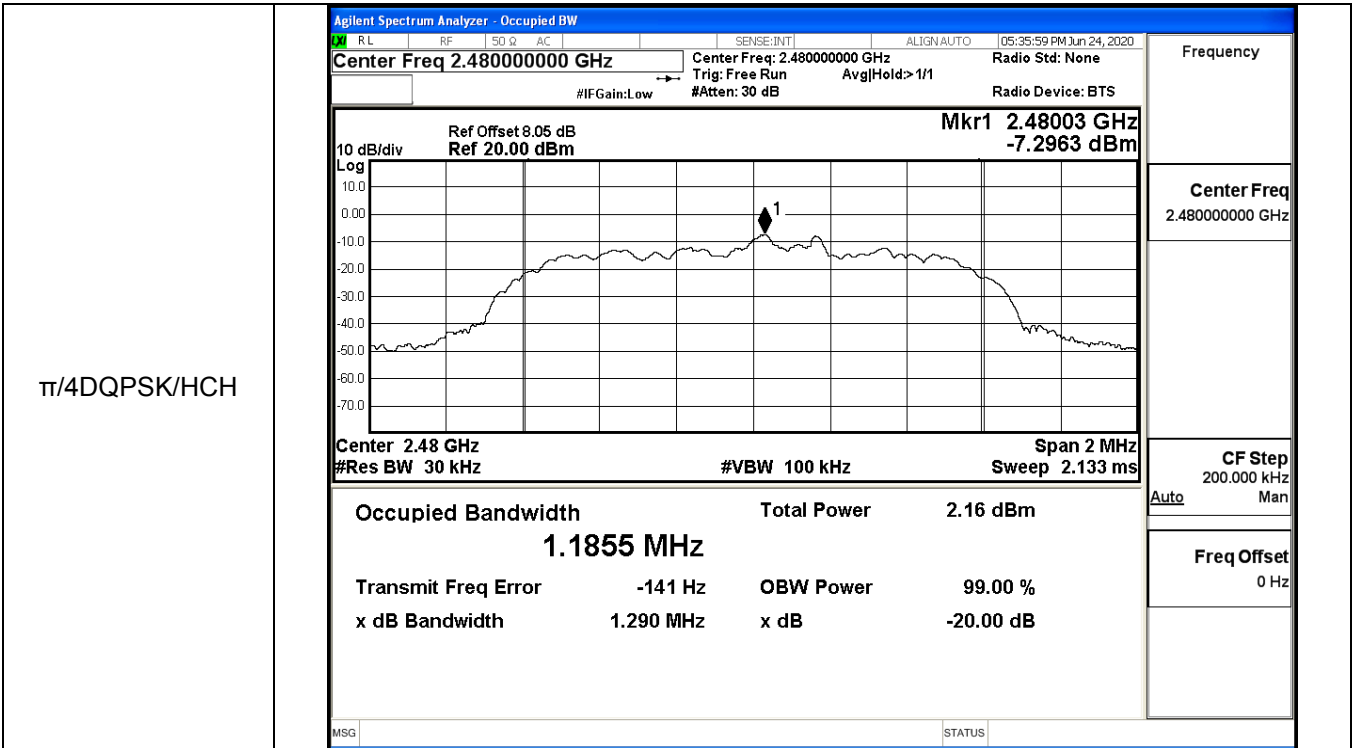
GFSK/MCH



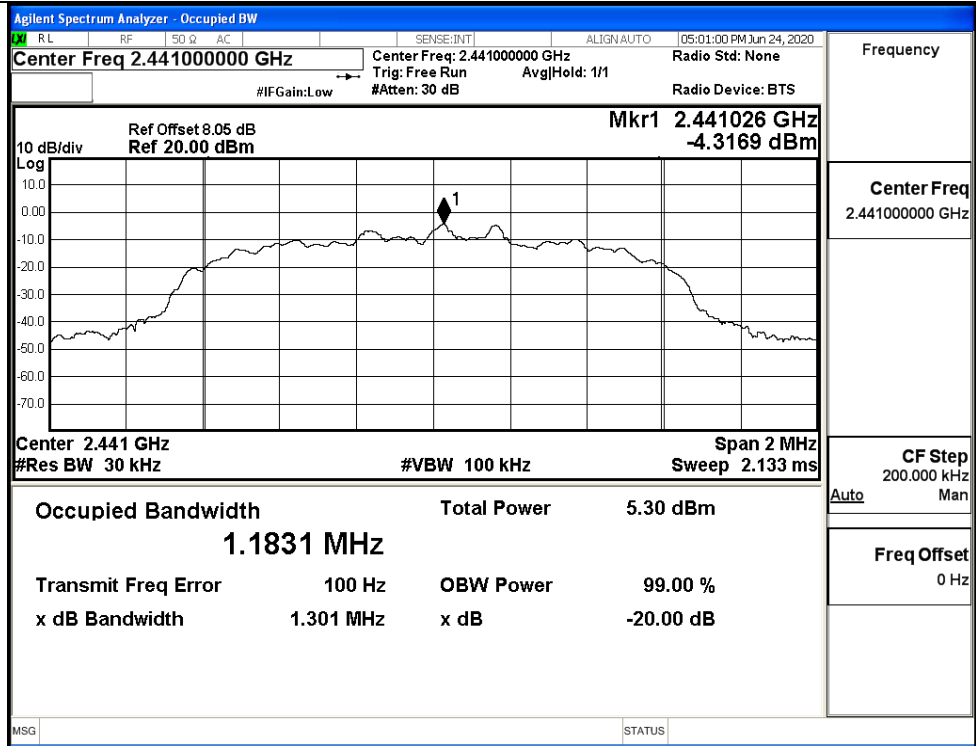
GFSK/HCH



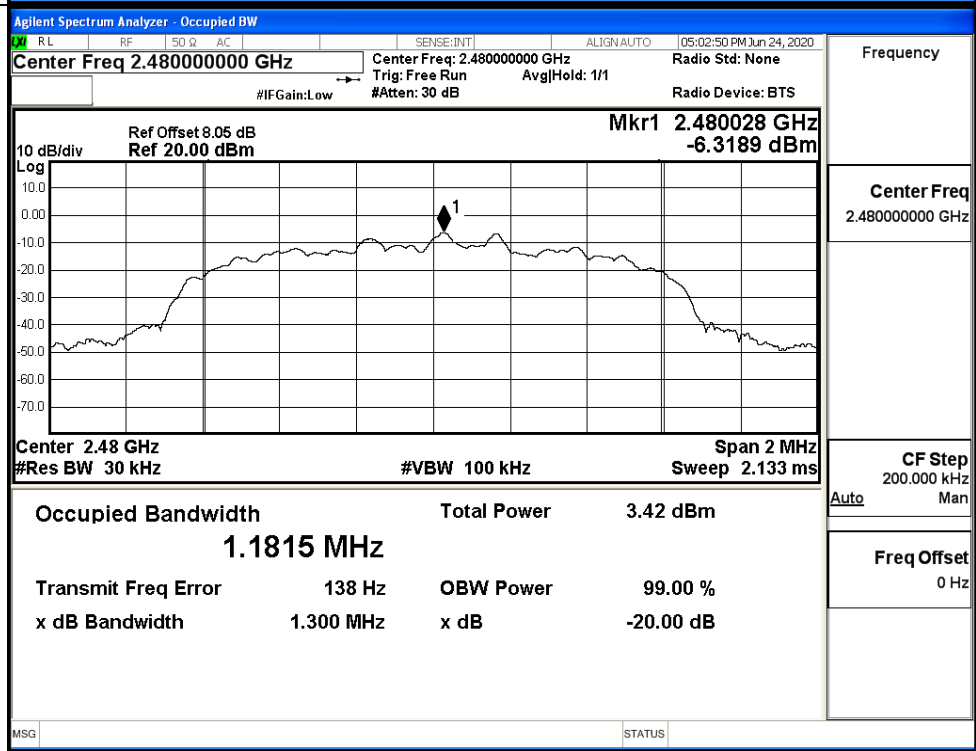




8DPSK/MCH

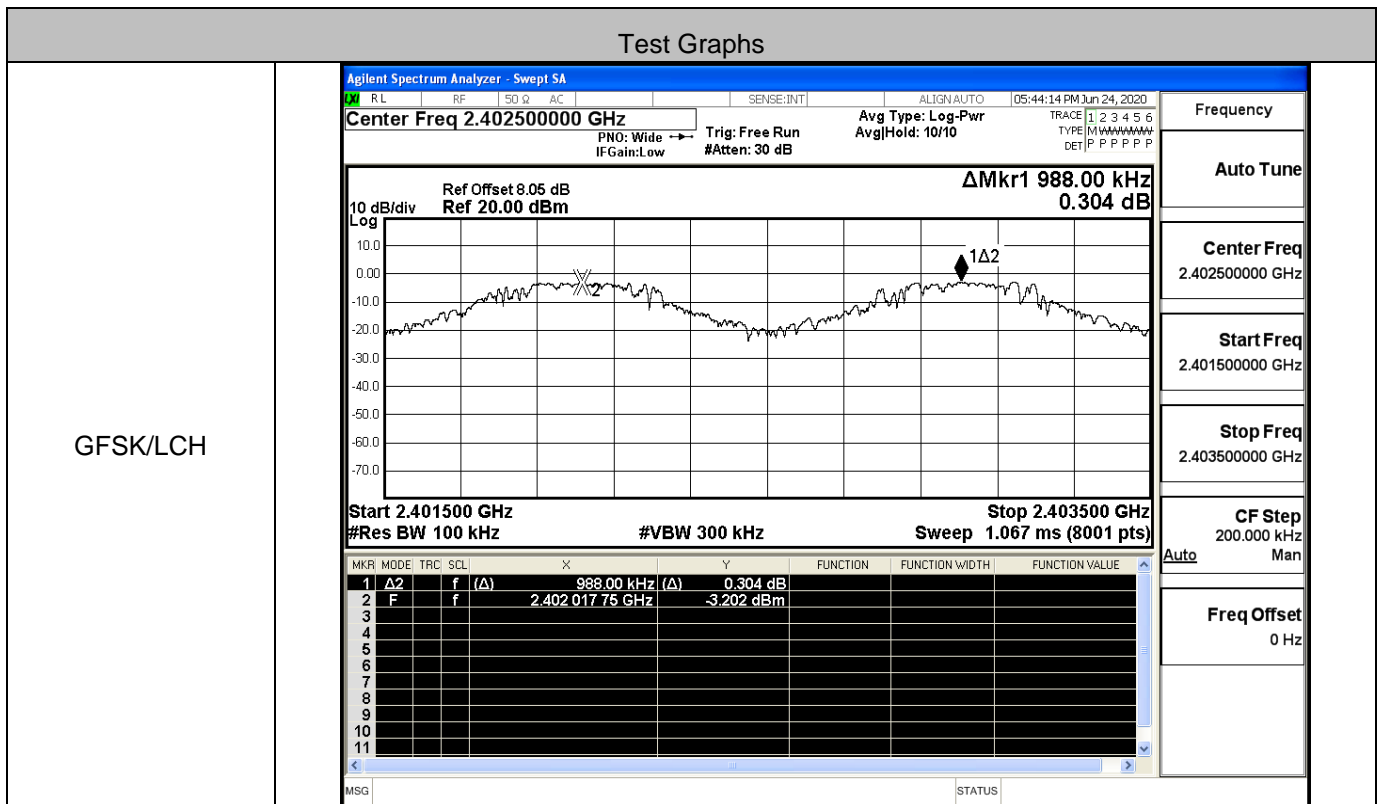


8DPSK/HCH

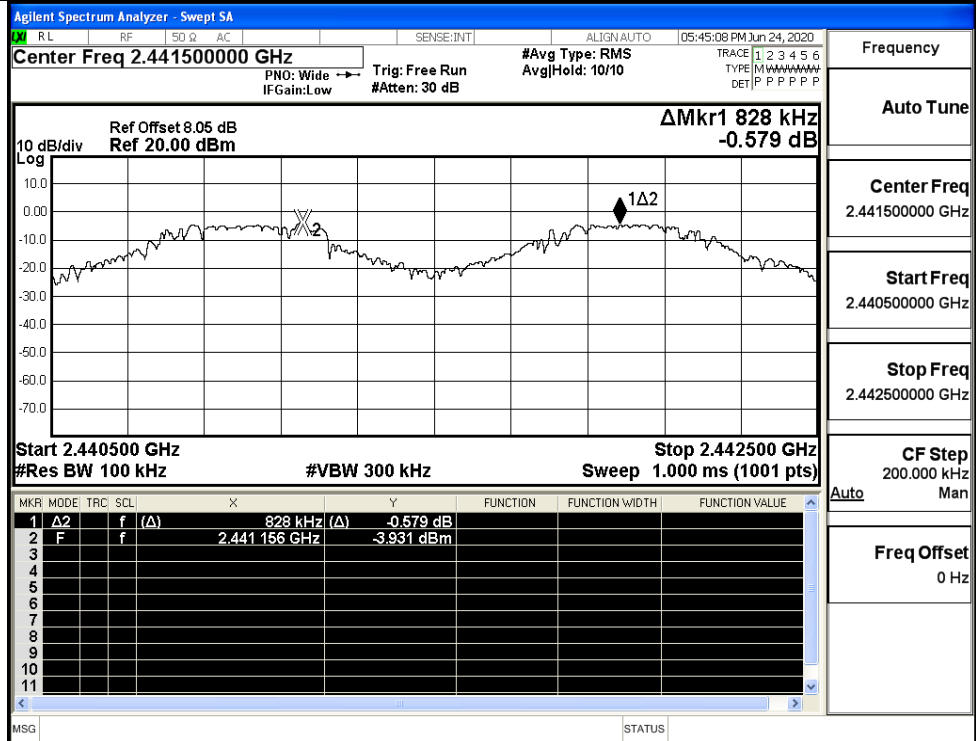


A.3 Carrier Frequency Separation

| Mode | Channel | Carrier Frequency Separation [MHz] | Limit [MHz] | Verdict |
|----------|---------|------------------------------------|-------------|---------|
| GFSK | LCH | 0.988 | 0.631 | PASS |
| | MCH | 0.828 | 0.631 | PASS |
| | HCH | 0.906 | 0.631 | PASS |
| π/4DQPSK | LCH | 1.024 | 0.860 | PASS |
| | MCH | 1.016 | 0.860 | PASS |
| | HCH | 1.130 | 0.860 | PASS |
| 8DPSK | LCH | 1.032 | 0.869 | PASS |
| | MCH | 1.148 | 0.869 | PASS |
| | HCH | 1.138 | 0.869 | PASS |



GFSK/MCH



Frequency

Auto Tune

Center Freq
2.44150000 GHz

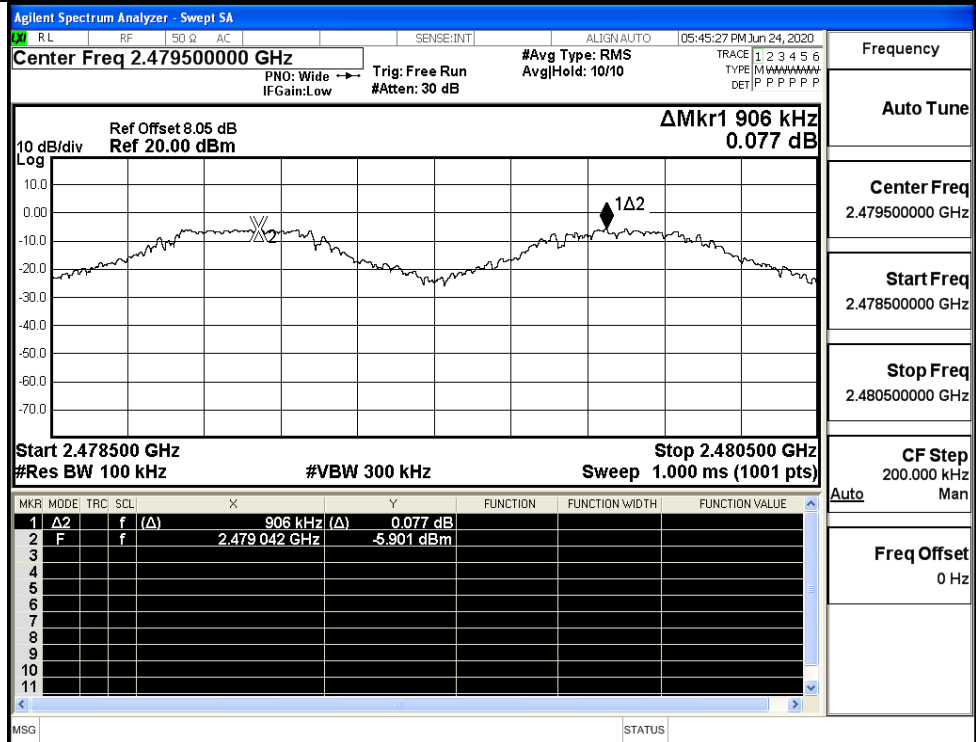
Start Freq
2.44050000 GHz

Stop Freq
2.44250000 GHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

GFSK/HCH



Frequency

Auto Tune

Center Freq
2.47950000 GHz

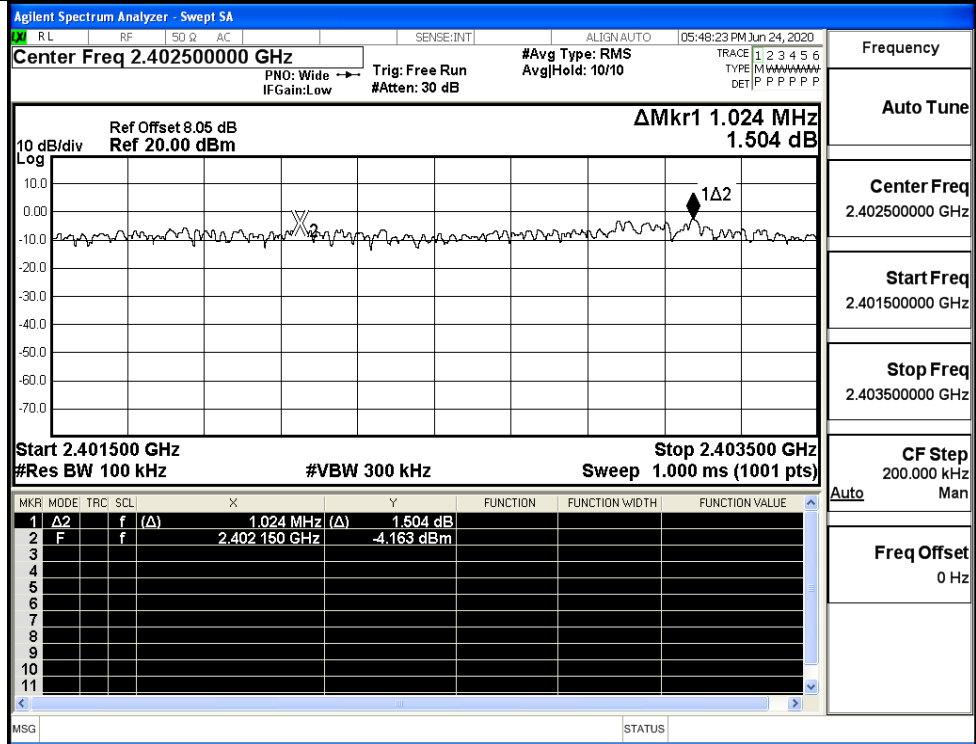
Start Freq
2.47850000 GHz

Stop Freq
2.48050000 GHz

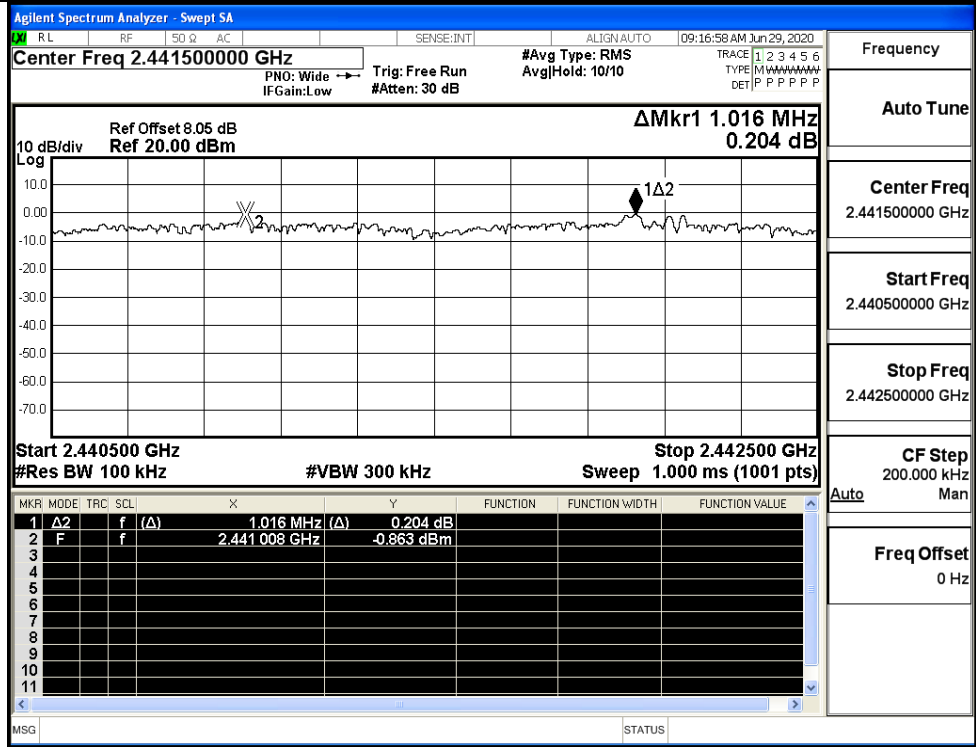
CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

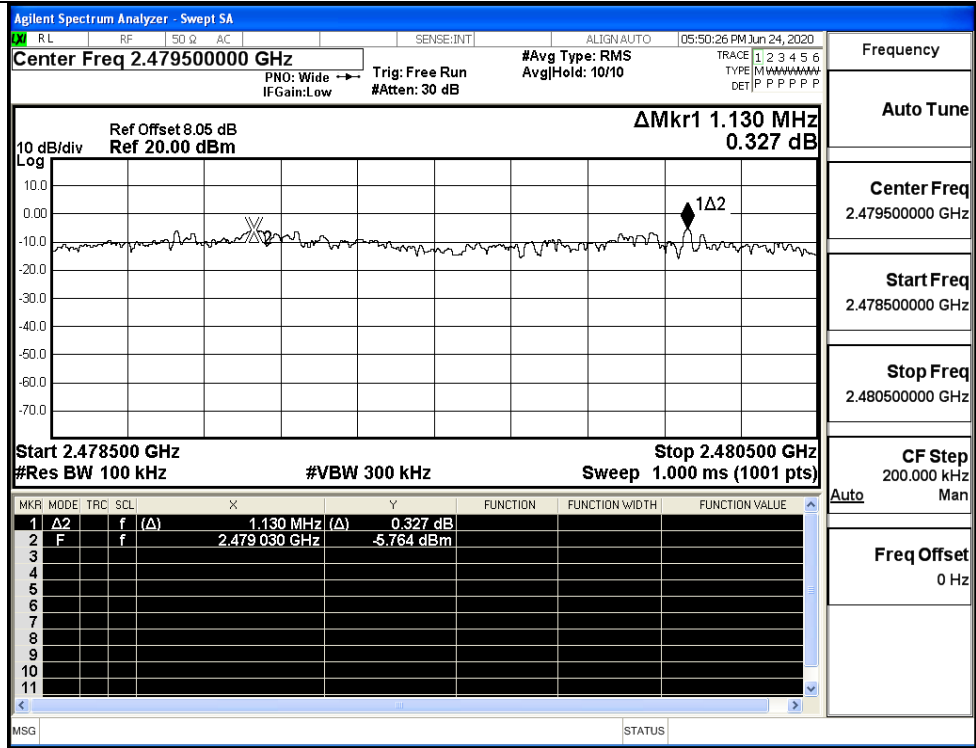
$\pi/4$ DQPSK/LCH



$\pi/4$ DQPSK/MCH

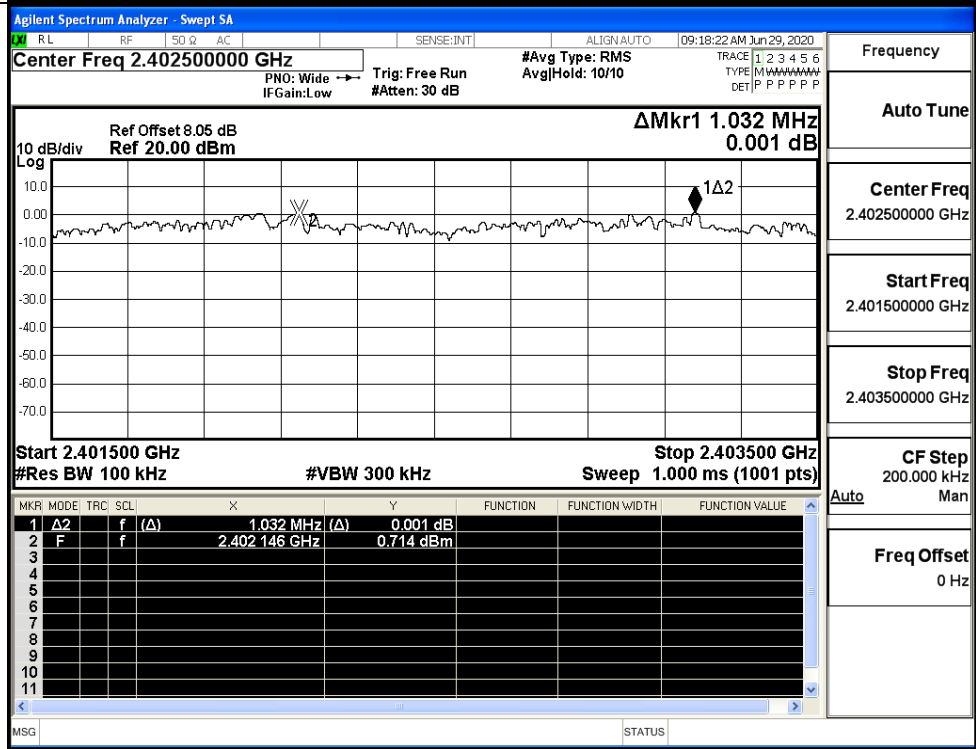


π/4DQPSK/HCH



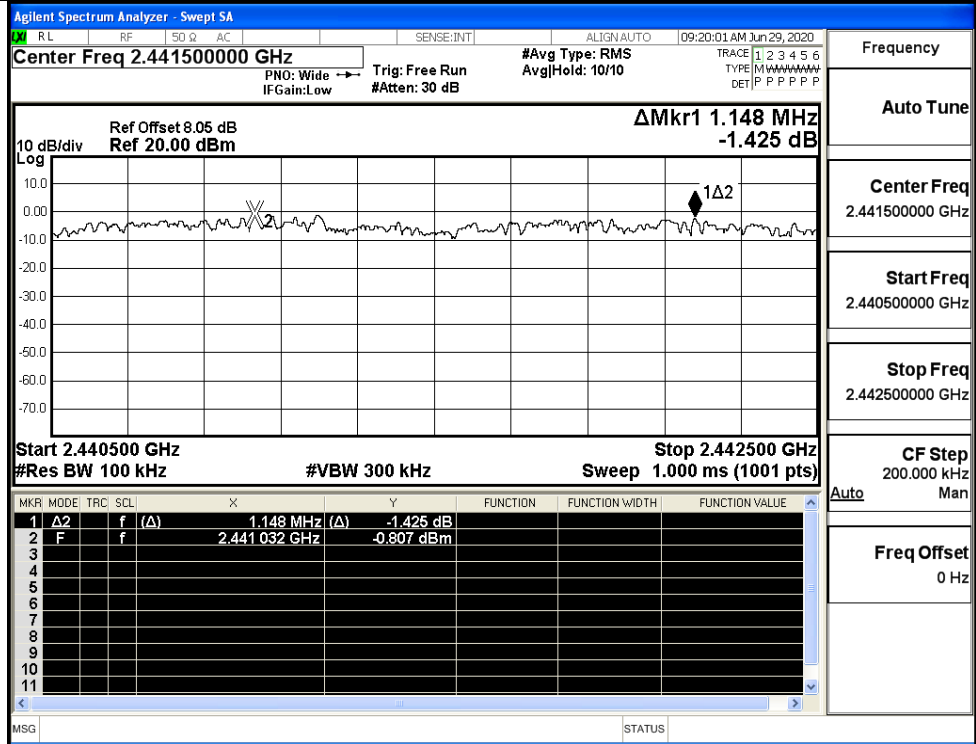
| |
|------------------------------------|
| Frequency |
| Auto Tune |
| Center Freq 2.479500000 GHz |
| Start Freq 2.478500000 GHz |
| Stop Freq 2.480500000 GHz |
| CF Step 200.000 kHz Auto Man |
| Freq Offset 0 Hz |

8DPSK/LCH

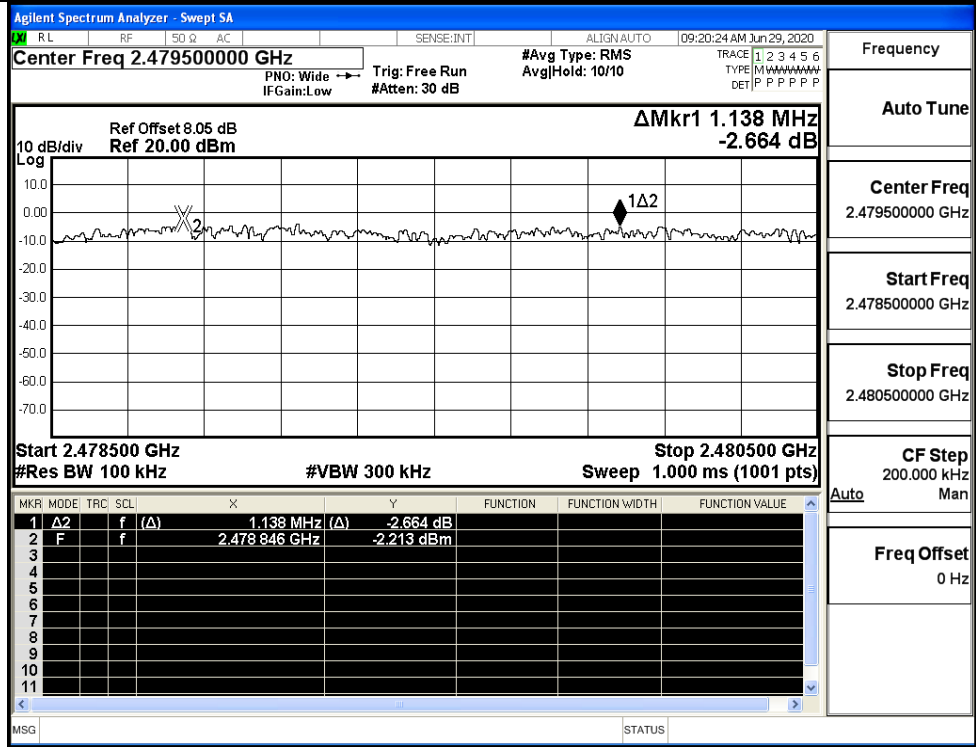


| |
|------------------------------------|
| Frequency |
| Auto Tune |
| Center Freq 2.402500000 GHz |
| Start Freq 2.401500000 GHz |
| Stop Freq 2.403500000 GHz |
| CF Step 200.000 kHz Auto Man |
| Freq Offset 0 Hz |

8DPSK/MCH



8DPSK/HCH



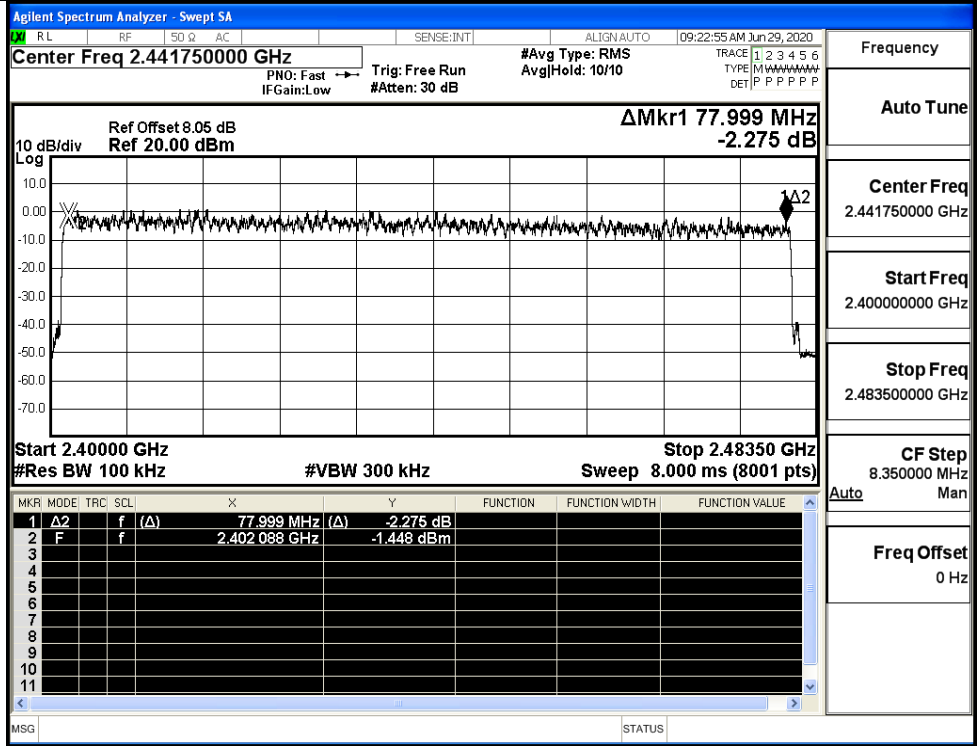
A.4 Hopping Channel Number

| Mode | Channel. | Number of Hopping Channel [N] | Limit [N] | Verdict |
|---------------|----------|-------------------------------|-----------|---------|
| GFSK | Hop | 79 | >=15 | PASS |
| $\pi/4$ DQPSK | Hop | 79 | >=15 | PASS |
| 8DPSK | Hop | 79 | >=15 | PASS |

Test Graphs

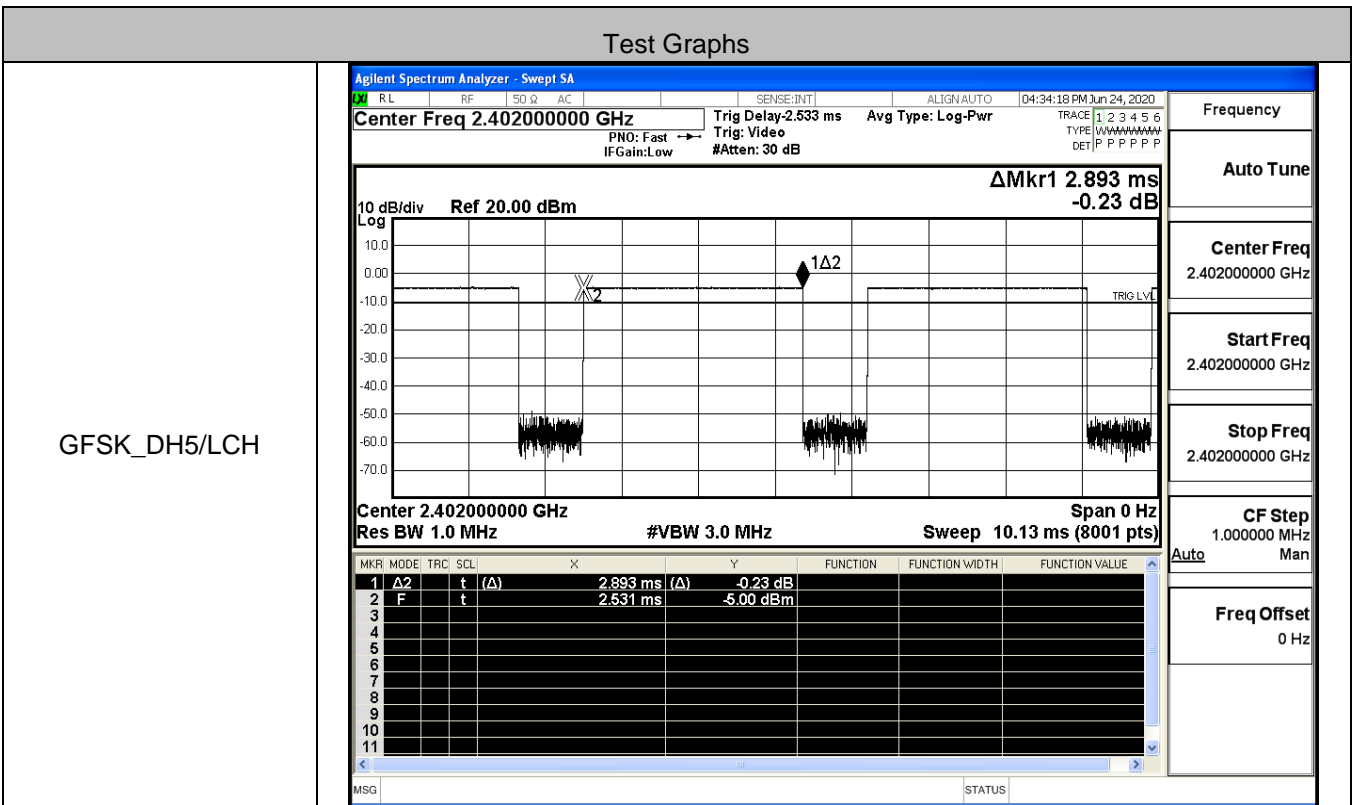
| <p>GFSK/Hop</p> | <p>Agilent Spectrum Analyzer - Swept SA</p> <p>Center Freq 2.441750000 GHz</p> <p>Ref Offset 8.05 dB Ref 20.00 dBm</p> <p>ΔMkr1 78.010 MHz -3.384 dB</p> <p>Start 2.40000 GHz Stop 2.48350 GHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 8.000 ms (8001 pts)</p> <table border="1"> <thead> <tr> <th>MKR</th> <th>MODE</th> <th>TRC</th> <th>SCL</th> <th>X</th> <th>Y</th> <th>FUNCTION</th> <th>FUNCTION WIDTH</th> <th>FUNCTION VALUE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Δ2</td> <td>f</td> <td>(Δ)</td> <td>78.010 MHz (Δ)</td> <td>-3.384 dB</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>F</td> <td>f</td> <td>(Δ)</td> <td>2.401983 GHz</td> <td>-2.919 dBm</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> | MKR | MODE | TRC | SCL | X | Y | FUNCTION | FUNCTION WIDTH | FUNCTION VALUE | 1 | Δ 2 | f | (Δ) | 78.010 MHz (Δ) | -3.384 dB | | | | 2 | F | f | (Δ) | 2.401983 GHz | -2.919 dBm | | | | <p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.441750000 GHz</p> <p>Start Freq 2.400000000 GHz</p> <p>Stop Freq 2.483500000 GHz</p> <p>CF Step 8.350000 MHz Auto Man</p> <p>Freq Offset 0 Hz</p> |
|------------------------------------|--|-----|--------------|-------------------------|------------|----------|----------------|----------------|----------------|----------------|---|------------|---|--------------|-------------------------|-----------|--|--|--|---|---|---|--------------|--------------|------------|--|--|--|--|
| MKR | MODE | TRC | SCL | X | Y | FUNCTION | FUNCTION WIDTH | FUNCTION VALUE | | | | | | | | | | | | | | | | | | | | | |
| 1 | Δ 2 | f | (Δ) | 78.010 MHz (Δ) | -3.384 dB | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | F | f | (Δ) | 2.401983 GHz | -2.919 dBm | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>$\pi/4$DQPSK/Hop</p> | <p>Agilent Spectrum Analyzer - Swept SA</p> <p>Center Freq 2.441750000 GHz</p> <p>Ref Offset 8.05 dB Ref 20.00 dBm</p> <p>ΔMkr1 77.895 MHz -4.236 dB</p> <p>Start 2.40000 GHz Stop 2.48350 GHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 8.000 ms (8001 pts)</p> <table border="1"> <thead> <tr> <th>MKR</th> <th>MODE</th> <th>TRC</th> <th>SCL</th> <th>X</th> <th>Y</th> <th>FUNCTION</th> <th>FUNCTION WIDTH</th> <th>FUNCTION VALUE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Δ2</td> <td>f</td> <td>(Δ)</td> <td>77.895 MHz (Δ)</td> <td>-4.236 dB</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>F</td> <td>f</td> <td>(Δ)</td> <td>2.402171 GHz</td> <td>-2.537 dBm</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> | MKR | MODE | TRC | SCL | X | Y | FUNCTION | FUNCTION WIDTH | FUNCTION VALUE | 1 | Δ 2 | f | (Δ) | 77.895 MHz (Δ) | -4.236 dB | | | | 2 | F | f | (Δ) | 2.402171 GHz | -2.537 dBm | | | | <p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.441750000 GHz</p> <p>Start Freq 2.400000000 GHz</p> <p>Stop Freq 2.483500000 GHz</p> <p>CF Step 8.350000 MHz Auto Man</p> <p>Freq Offset 0 Hz</p> |
| MKR | MODE | TRC | SCL | X | Y | FUNCTION | FUNCTION WIDTH | FUNCTION VALUE | | | | | | | | | | | | | | | | | | | | | |
| 1 | Δ 2 | f | (Δ) | 77.895 MHz (Δ) | -4.236 dB | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | F | f | (Δ) | 2.402171 GHz | -2.537 dBm | | | | | | | | | | | | | | | | | | | | | | | | |

8DPSK/Hop

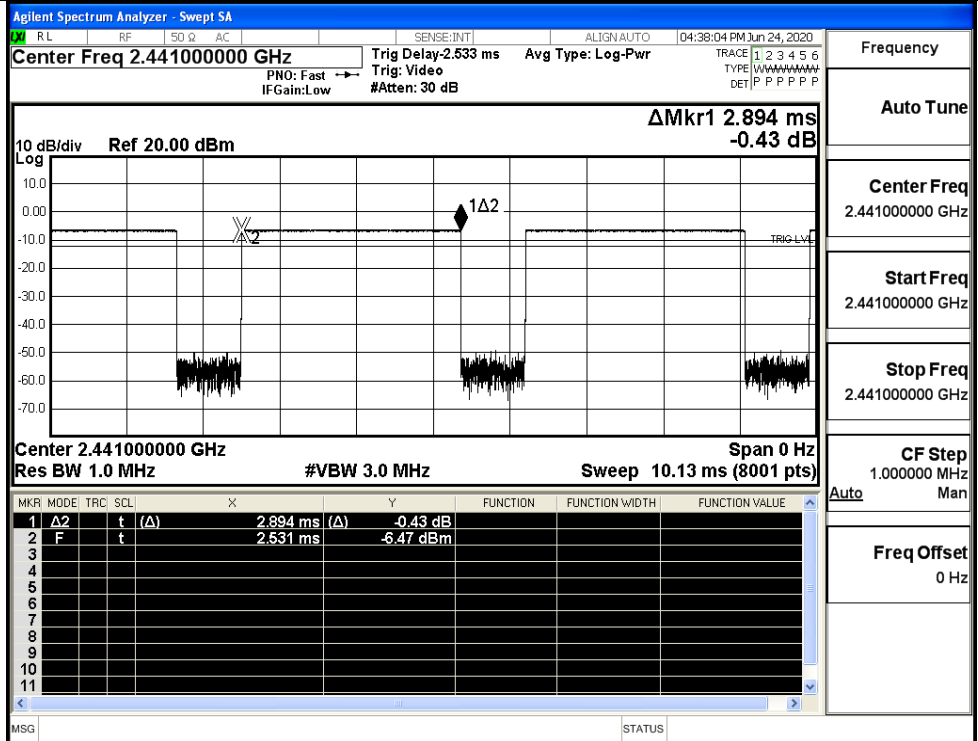


A.5 Dwell Time

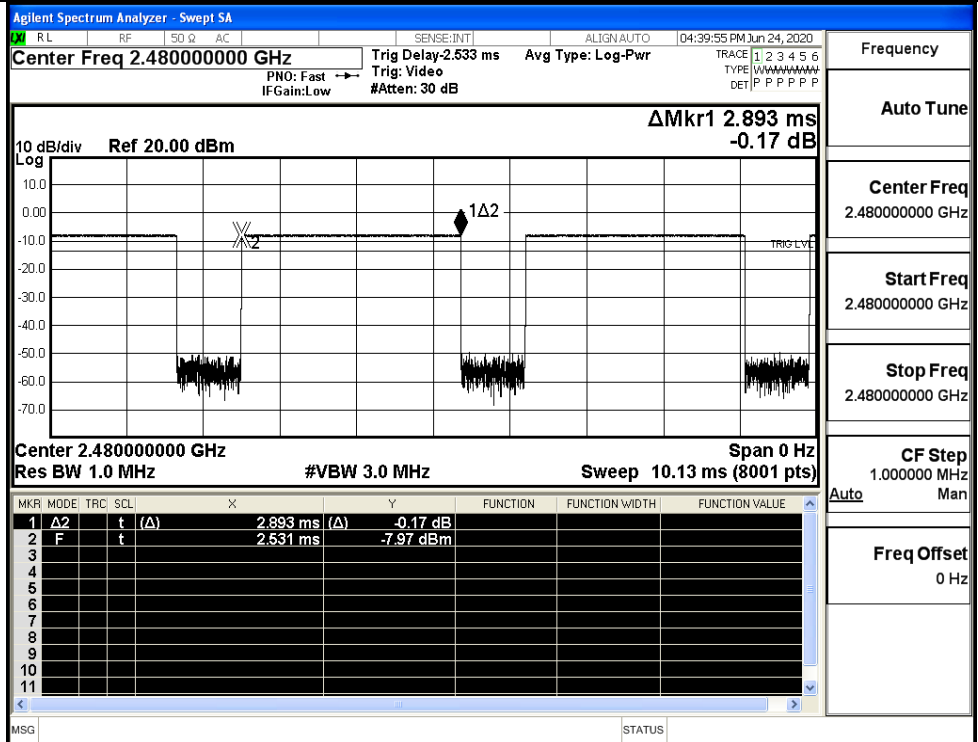
| Mode | Packet | Channel | Burst Width [ms/hop/ch] | Total Hops[hop*ch] | Dwell Time[s] | Limit [s] | Verdict |
|----------|--------|---------|-------------------------|--------------------|---------------|-----------|---------|
| GFSK | DH5 | LCH | 2.89 | 106.7 | 0.308 | 0.4 | PASS |
| | DH5 | MCH | 2.89 | 106.7 | 0.308 | 0.4 | PASS |
| | DH5 | HCH | 2.89 | 106.7 | 0.308 | 0.4 | PASS |
| π/4DQPSK | 2DH5 | LCH | 2.89 | 106.7 | 0.307 | 0.4 | PASS |
| | 2DH5 | MCH | 2.89 | 106.7 | 0.307 | 0.4 | PASS |
| | 2DH5 | HCH | 2.89 | 106.7 | 0.307 | 0.4 | PASS |
| 8DPSK | 3DH5 | LCH | 2.89 | 106.7 | 0.307 | 0.4 | PASS |
| | 3DH5 | MCH | 2.89 | 106.7 | 0.307 | 0.4 | PASS |
| | 3DH5 | HCH | 2.89 | 106.7 | 0.307 | 0.4 | PASS |



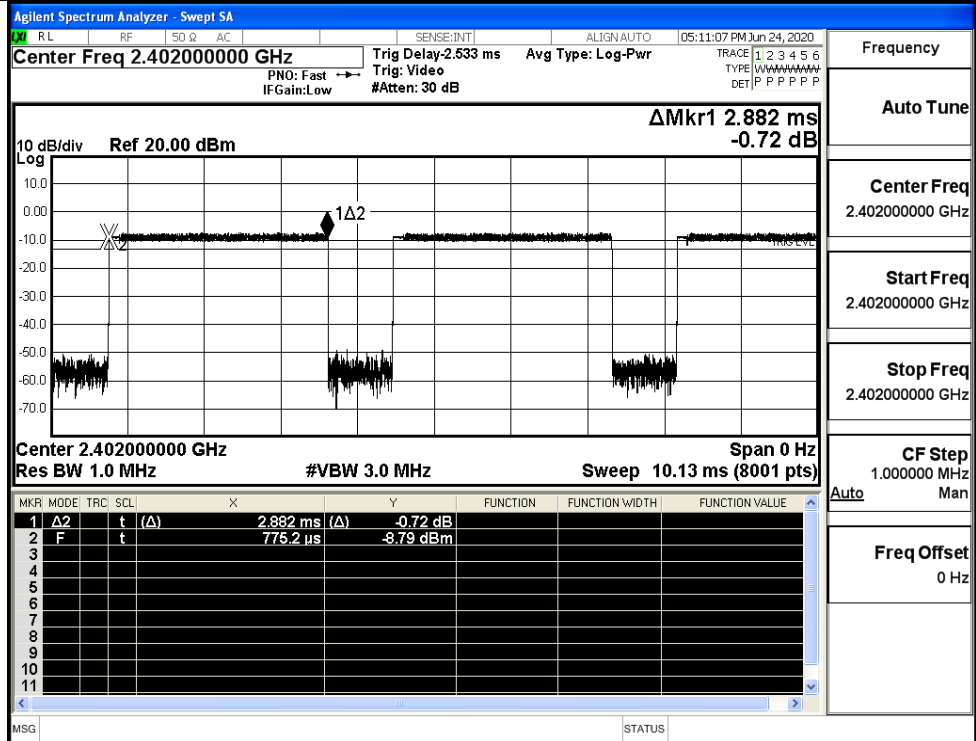
GFSK_DH5/MCH



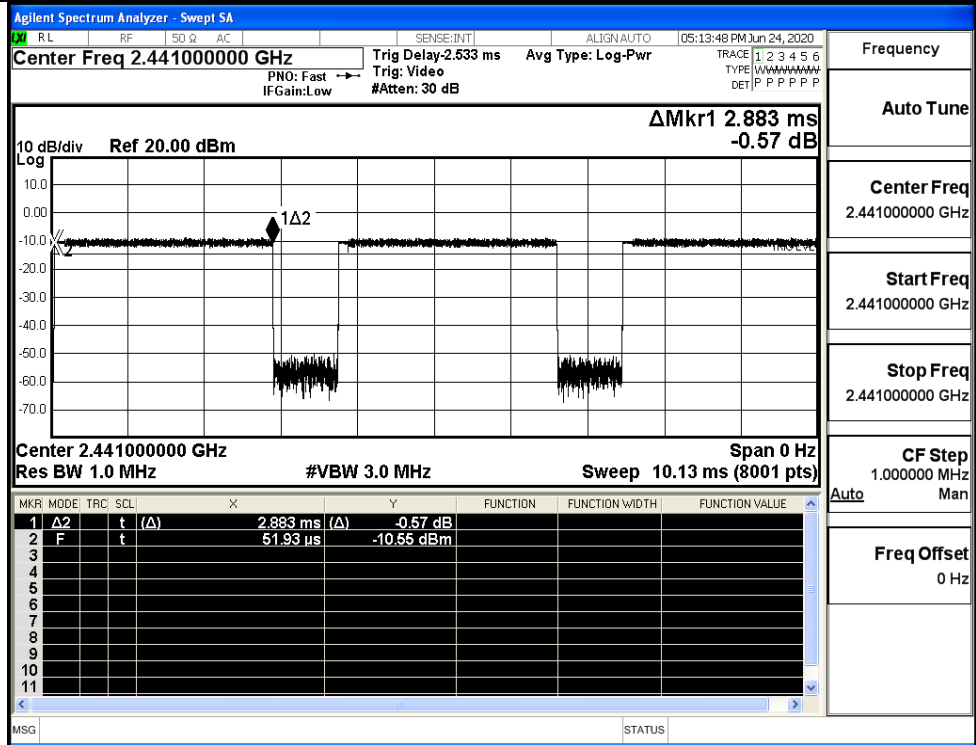
GFSK_DH5/HCH



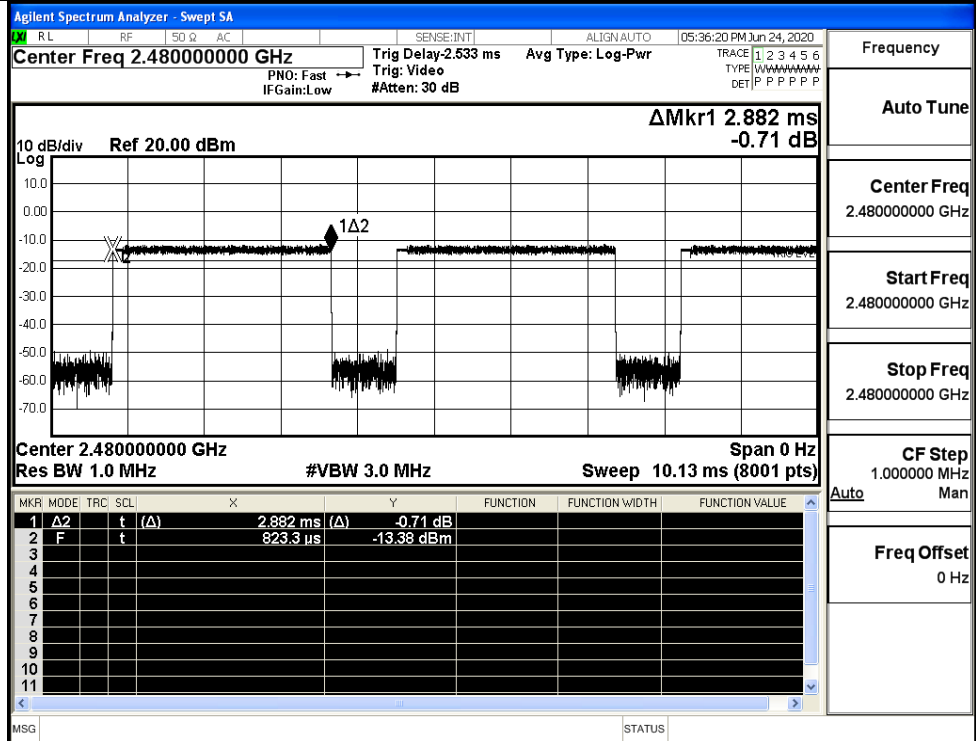
$\pi/4$ DQPSK
_2DH5/LCH



$\pi/4$ DQPSK
_2DH5/MCH

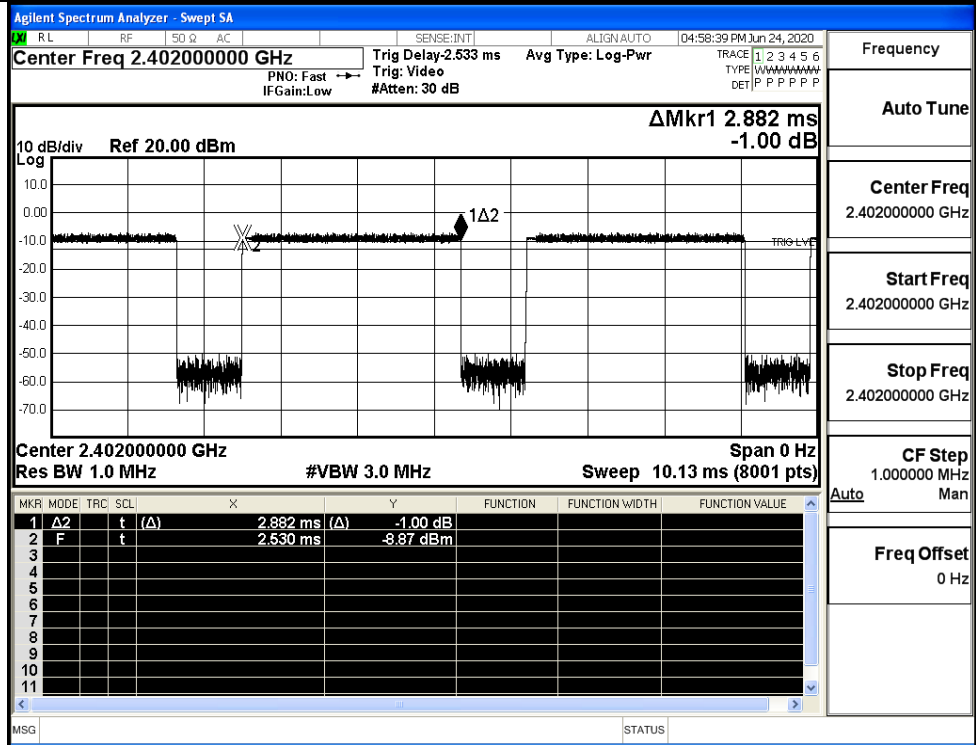


$\pi/4$ DQPSK
_2DH5/HCH



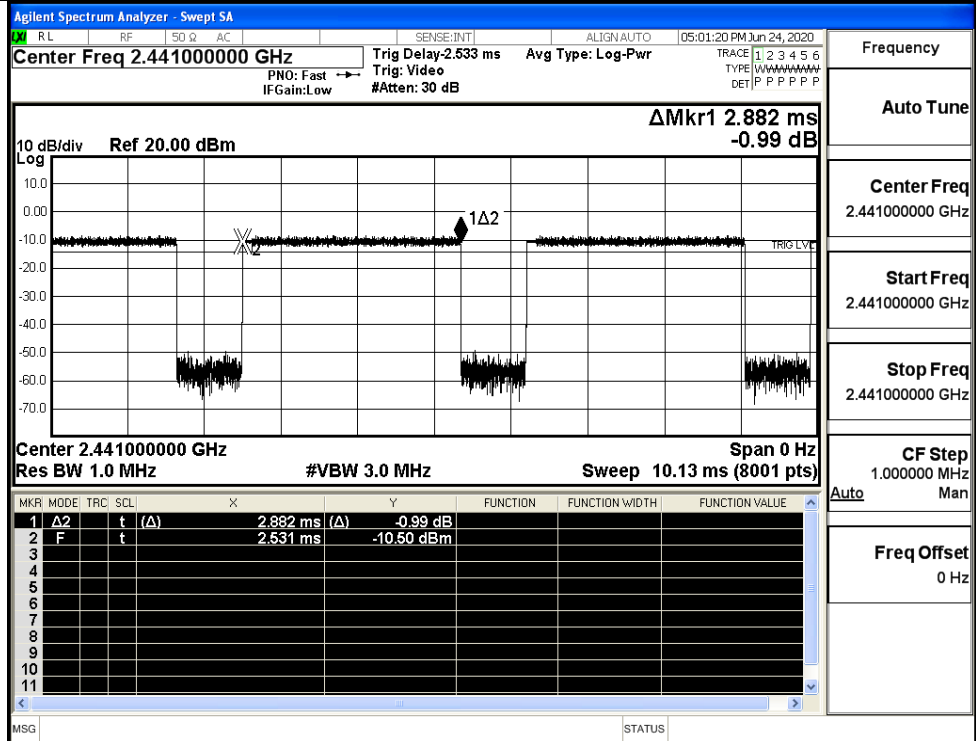
| | |
|-------------|-----------------|
| Frequency | |
| Auto Tune | |
| Center Freq | 2.480000000 GHz |
| Start Freq | 2.480000000 GHz |
| Stop Freq | 2.480000000 GHz |
| CF Step | 1.000000 MHz |
| Auto | Man |
| Freq Offset | 0 Hz |

8DPSK_3DH5/LCH

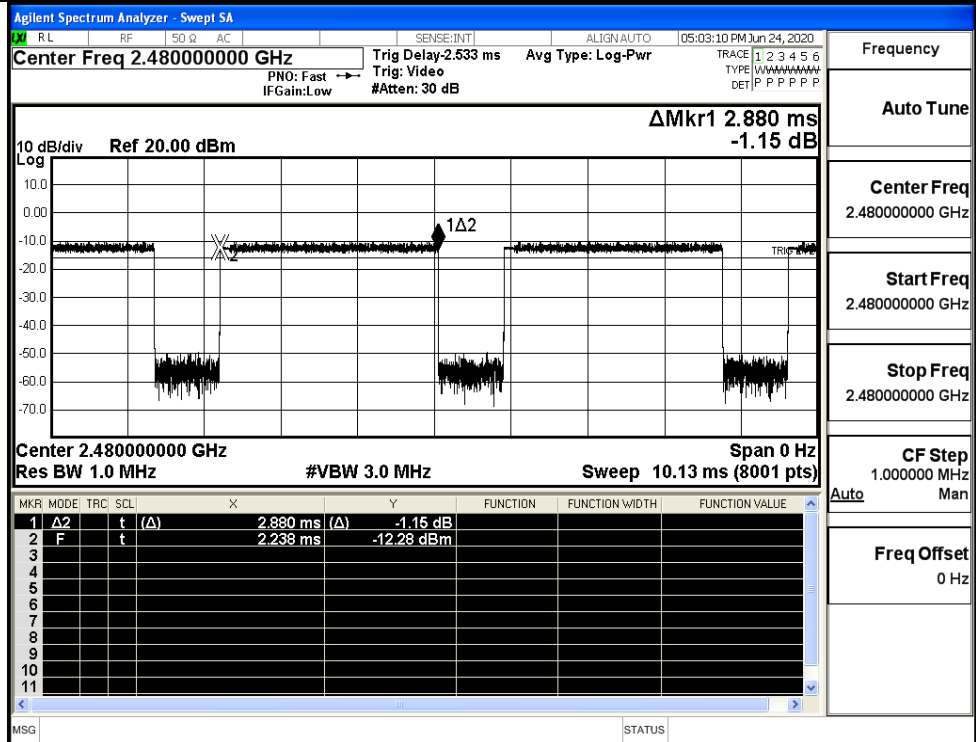


| | |
|-------------|-----------------|
| Frequency | |
| Auto Tune | |
| Center Freq | 2.402000000 GHz |
| Start Freq | 2.402000000 GHz |
| Stop Freq | 2.402000000 GHz |
| CF Step | 1.000000 MHz |
| Auto | Man |
| Freq Offset | 0 Hz |

8DPSK_3DH5/MCH

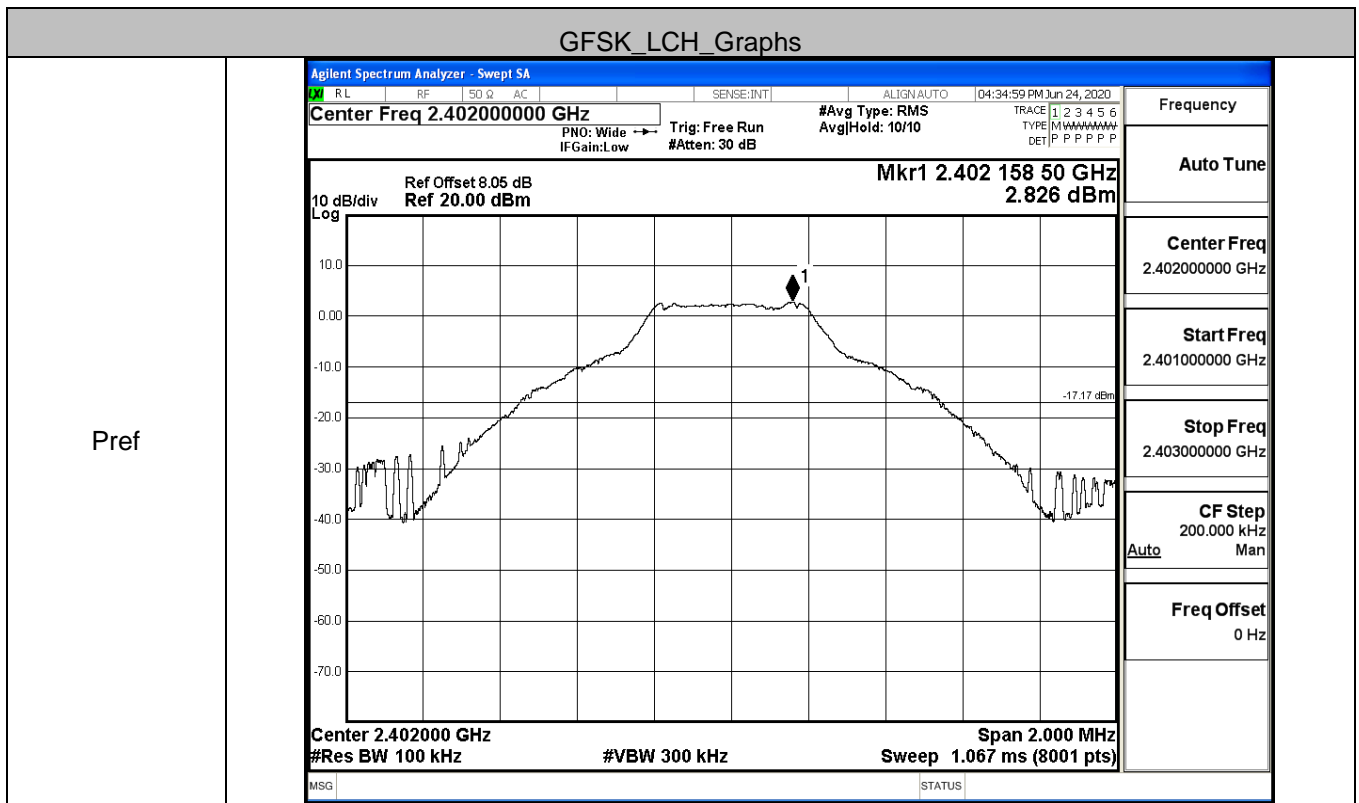


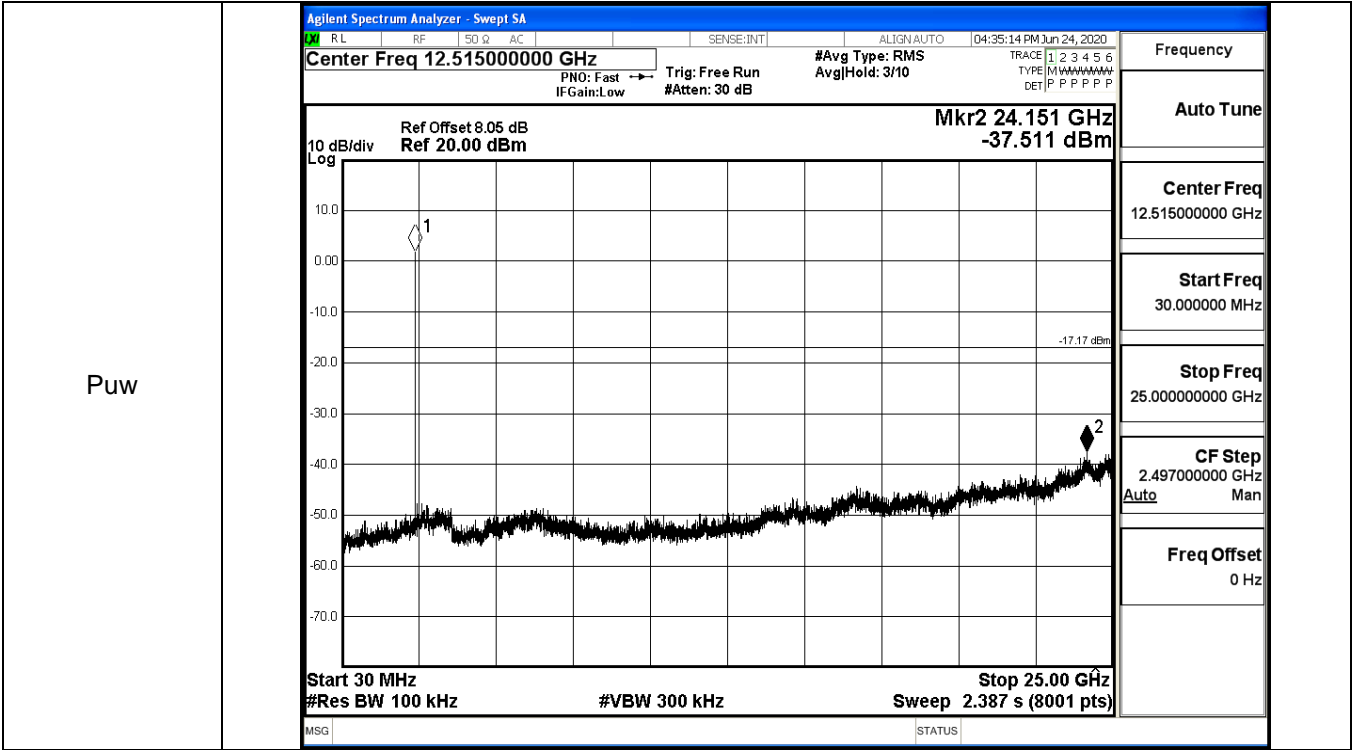
8DPSK_3DH5/HCH



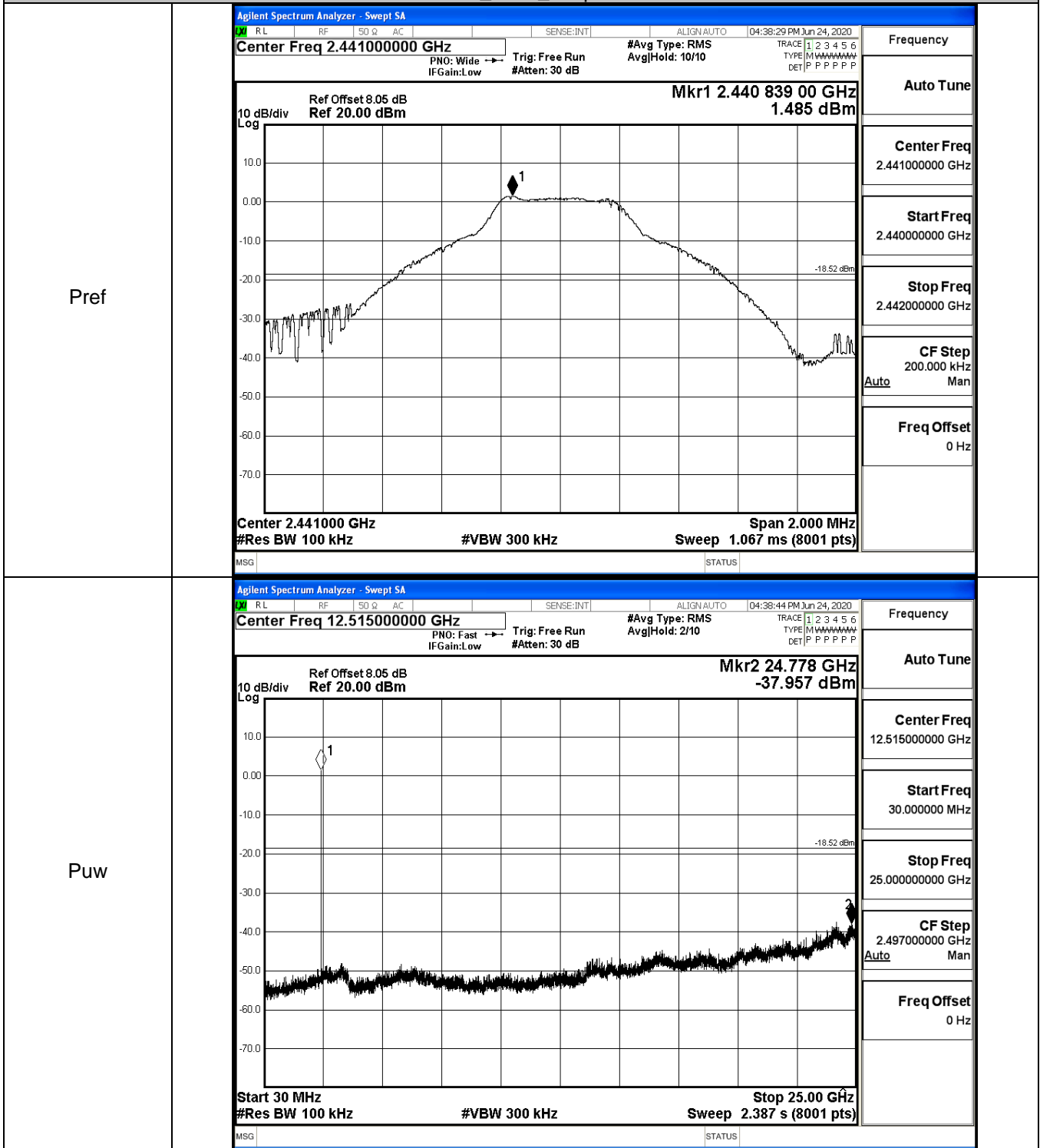
A.6 RF Conducted Spurious Emissions

| Mode | Channel | Pref [dBm] | Max. Level [dBm] | Limit [dBm] | Verdict |
|---------------|---------|------------|------------------|-------------|---------|
| GFSK | LCH | 2.826 | -37.511 | -17.174 | PASS |
| | MCH | 1.485 | -37.957 | -18.515 | PASS |
| | HCH | 0.101 | -37.115 | -19.899 | PASS |
| π /4DQPSK | LCH | -1.262 | -38.487 | -21.262 | PASS |
| | MCH | -4.034 | -36.769 | -24.034 | PASS |
| | HCH | -6.084 | -38.046 | -26.084 | PASS |
| 8DPSK | LCH | -0.868 | -58.321 | -20.868 | PASS |
| | MCH | -2.583 | -37.917 | -22.583 | PASS |
| | HCH | -4.409 | -37.393 | -24.409 | PASS |

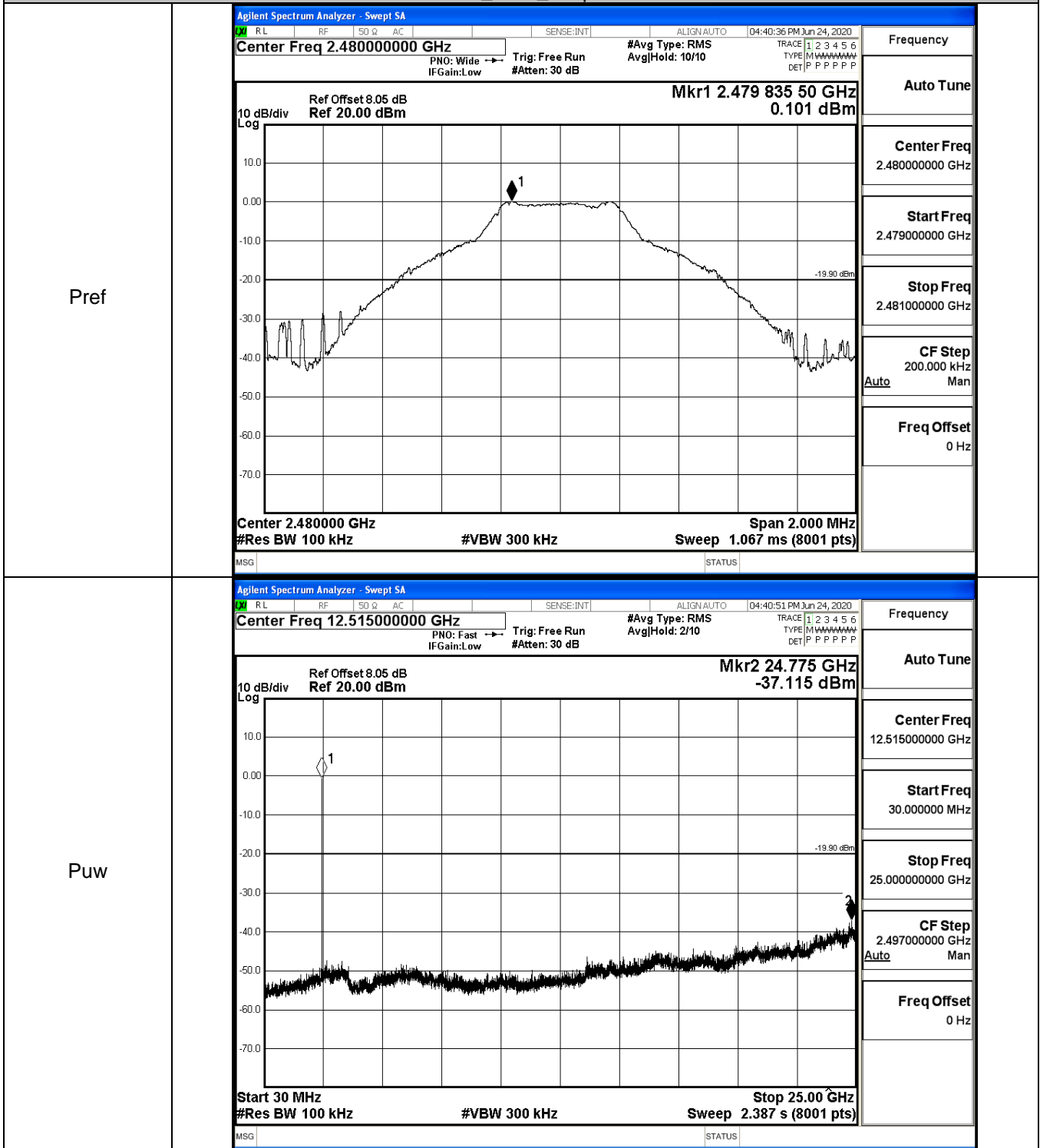




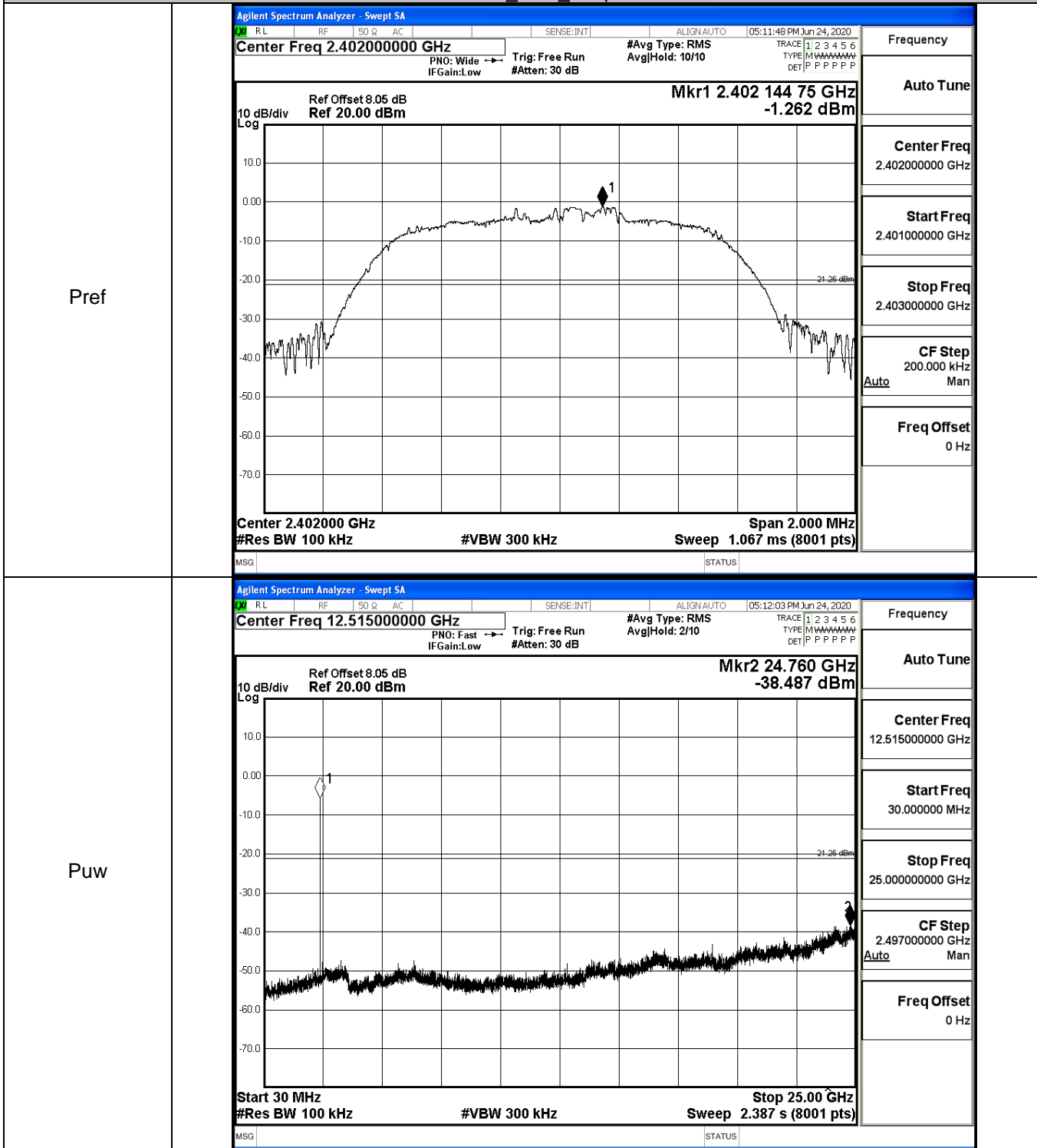
GFSK_MCH_Graphs



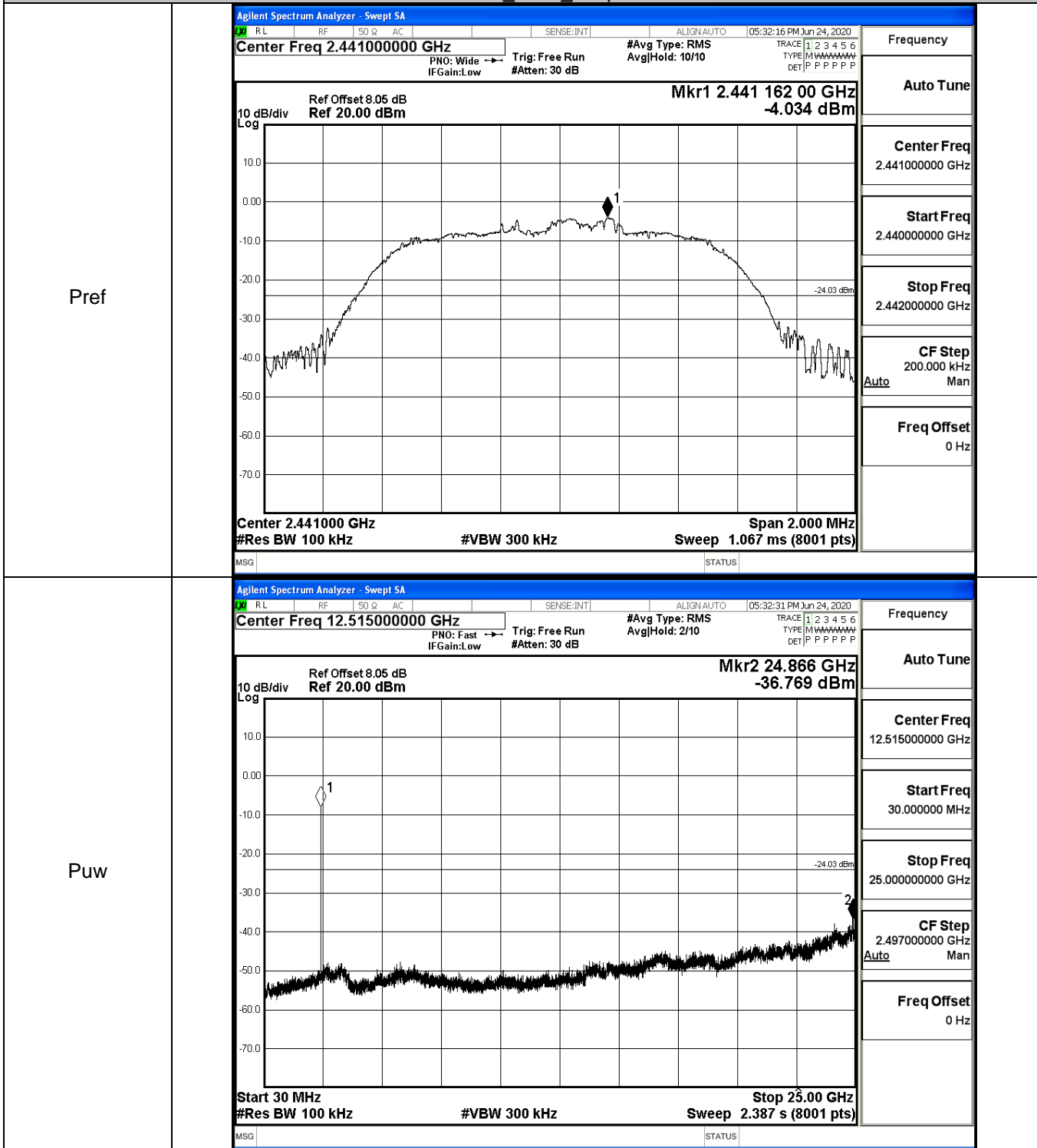
GFSK_HCH_Graphs



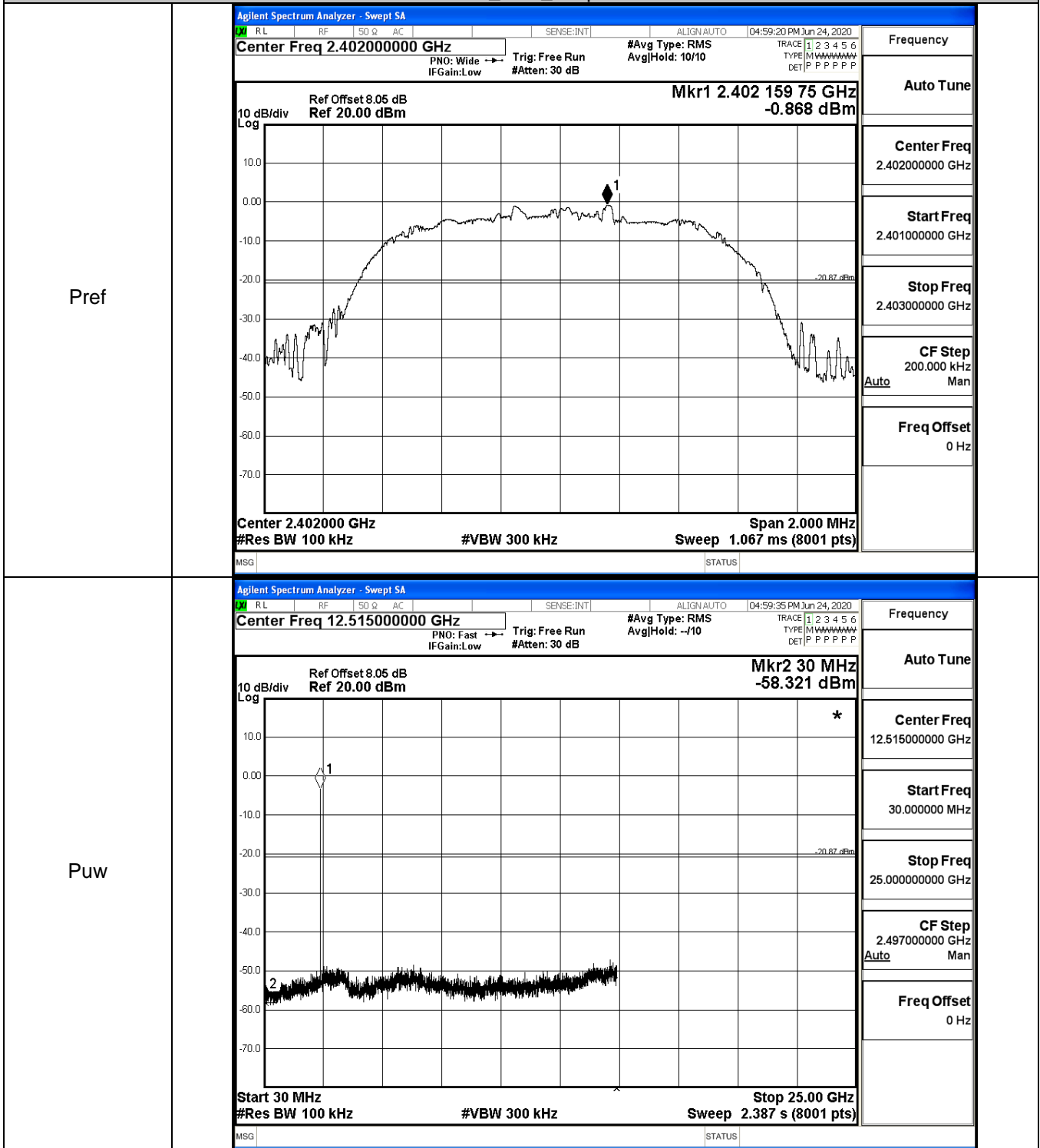
$\pi/4$ DQPSK_LCH_Graphs



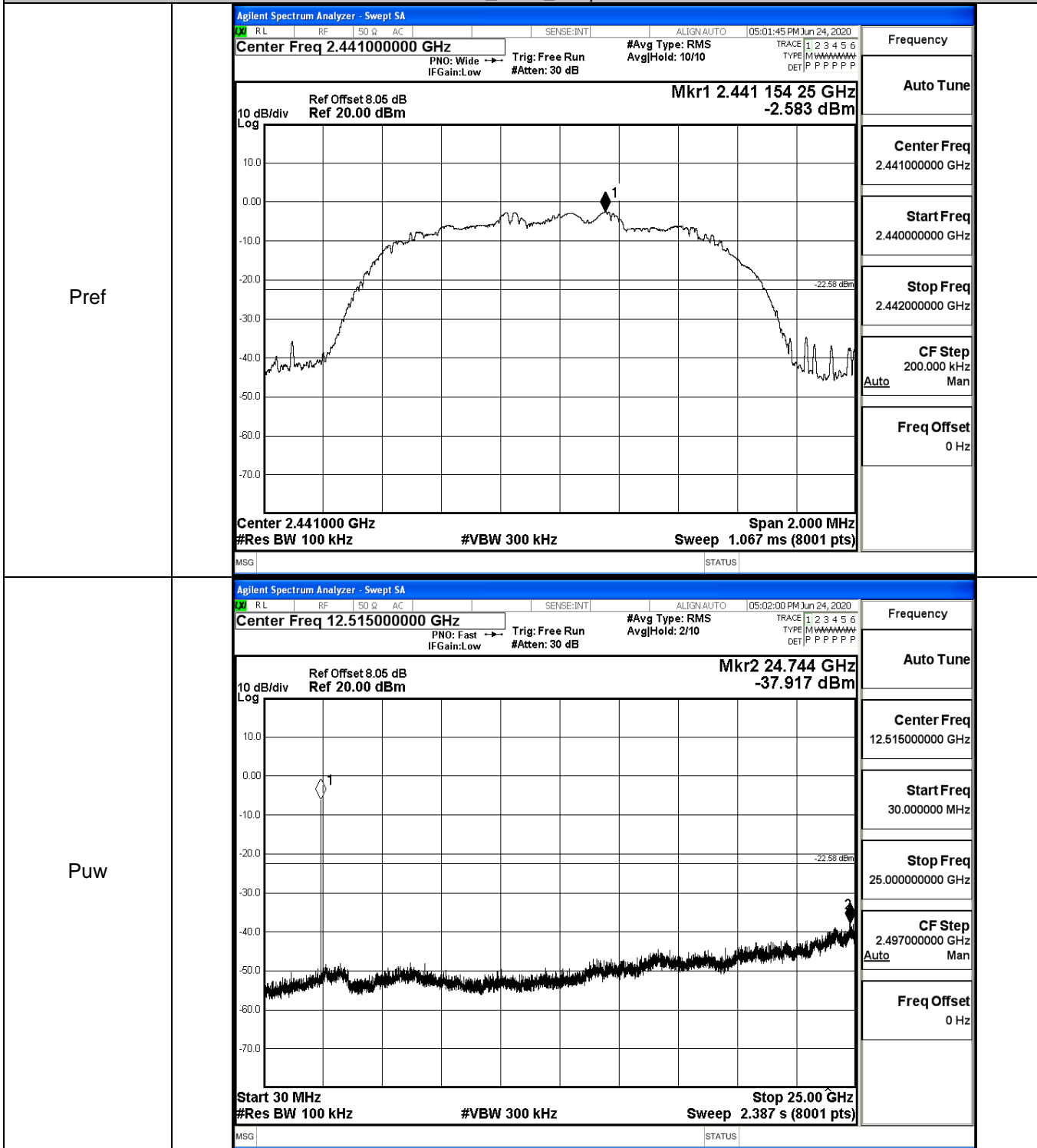
$\pi/4$ DQPSK_MCH_Graphs



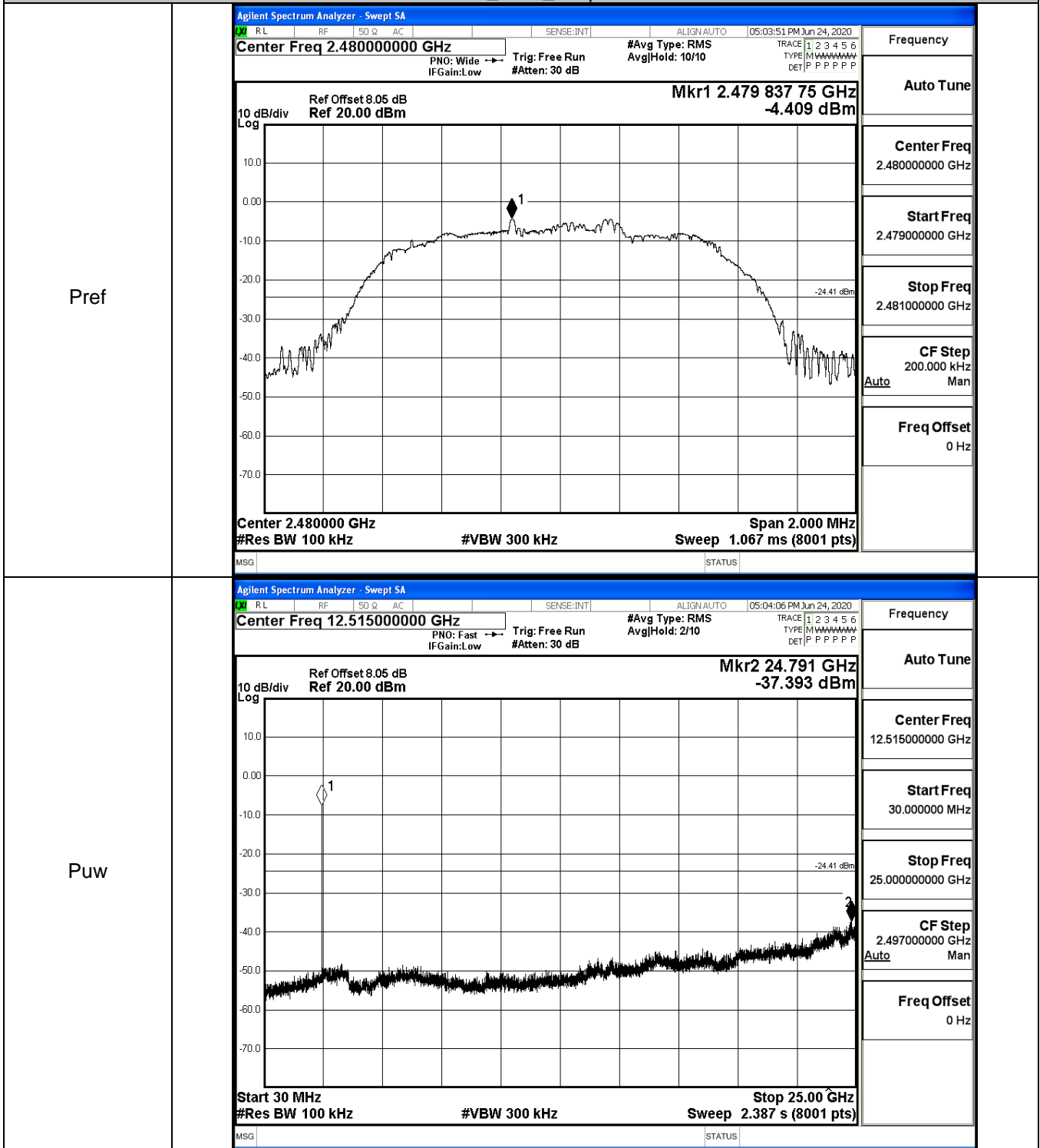
8DPSK_LCH_Graphs



8DPSK_MCH_Graphs



8DPSK_HCH_Graphs

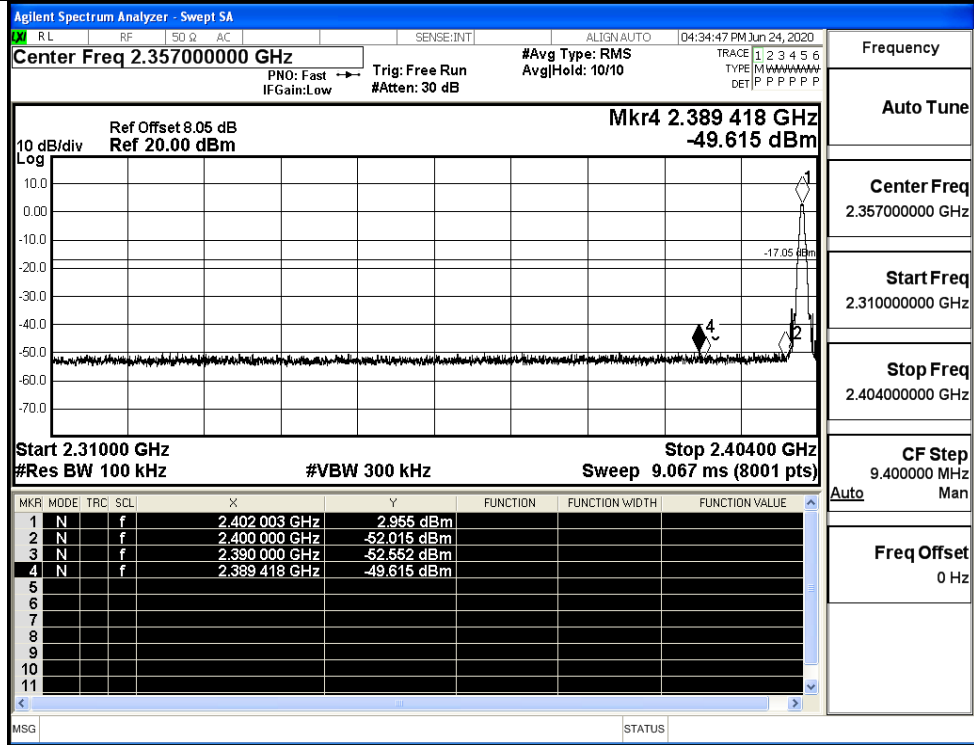


A.7 Band-edge for RF Conducted Emissions

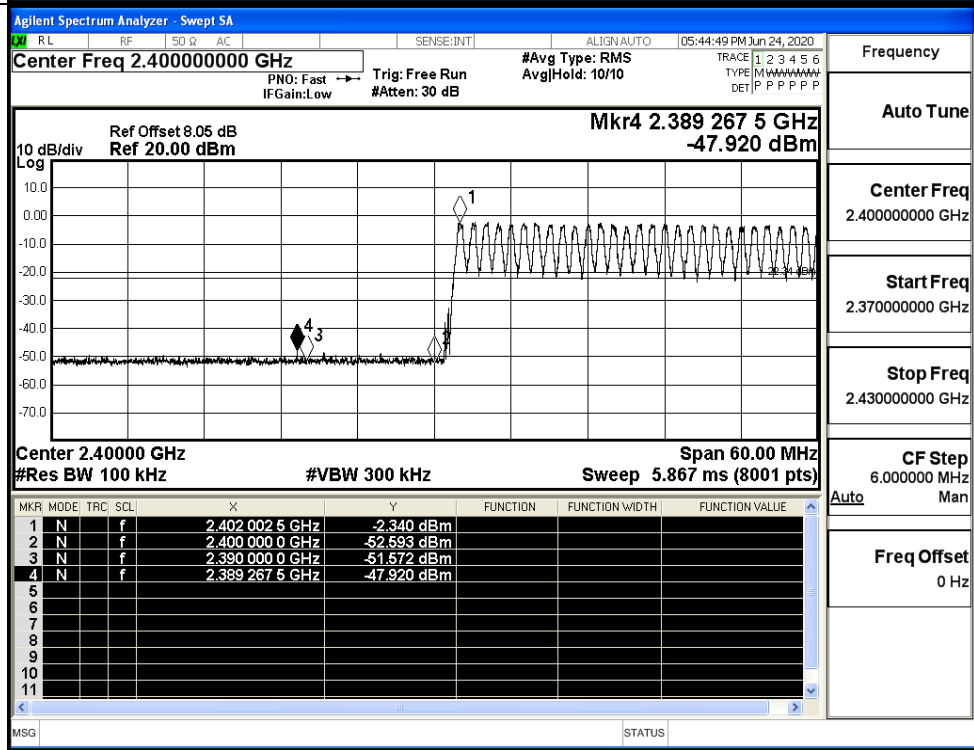
| Mode | Channel | Carrier Frequency [MHz] | Carrier Power [dBm] | Frequency Hopping | Max Spurious Level [dBm] | Limit [dBm] | Verdict |
|---------------|---------|-------------------------|---------------------|-------------------|--------------------------|-------------|---------|
| GFSK | LCH | 2402 | 2.955 | Off | -49.615 | -17.05 | PASS |
| | | | -2.340 | On | -47.920 | -22.34 | PASS |
| | HCH | 2480 | 0.128 | Off | -49.292 | -19.87 | PASS |
| | | | -4.252 | On | -47.816 | -24.25 | PASS |
| $\pi/4$ DQPSK | LCH | 2402 | -1.529 | Off | -49.436 | -21.53 | PASS |
| | | | -2.566 | On | -48.875 | -22.57 | PASS |
| | HCH | 2480 | -5.508 | Off | -48.875 | -25.51 | PASS |
| | | | -4.474 | On | -48.235 | -24.47 | PASS |
| 8DPSK | LCH | 2402 | -0.850 | Off | -49.351 | -20.85 | PASS |
| | | | 1.050 | On | -48.390 | -18.95 | PASS |
| | HCH | 2480 | -4.433 | Off | -49.437 | -24.43 | PASS |
| | | | -1.044 | On | -48.854 | -21.04 | PASS |

Test Graphs

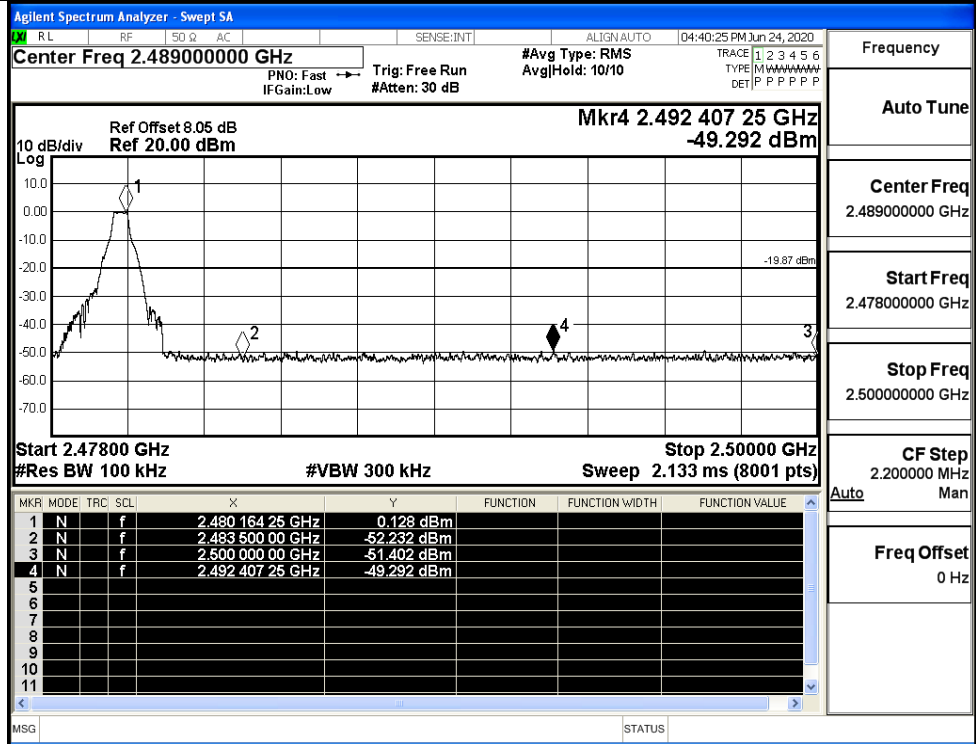
GFSK/LCH/No Hop



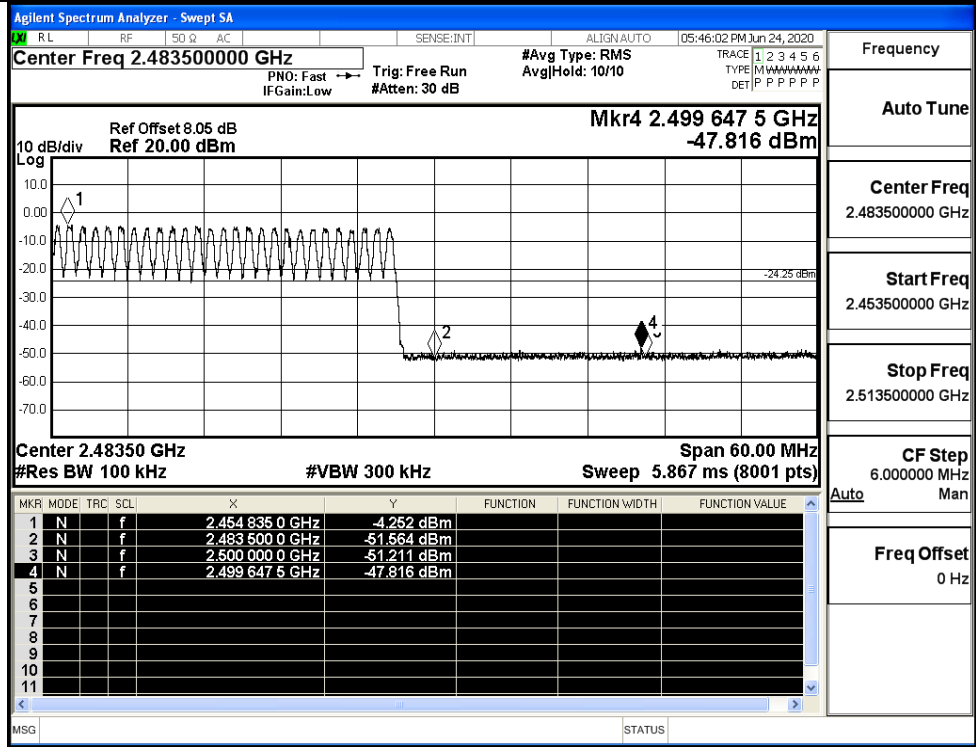
GFSK/LCH/Hop



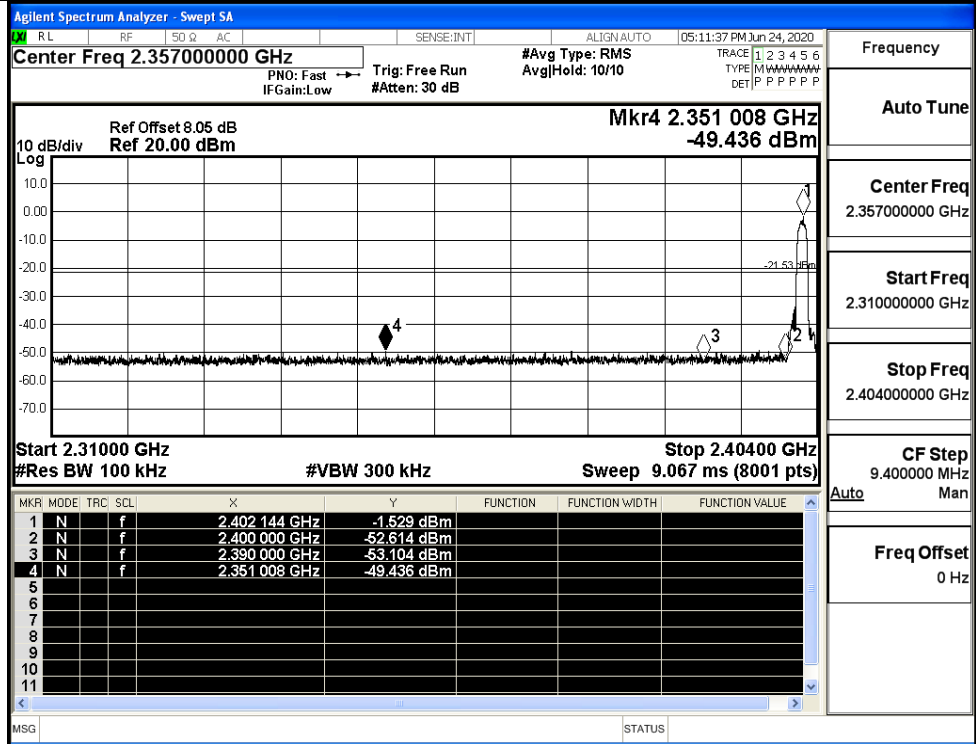
GFSK/HCH/No Hop



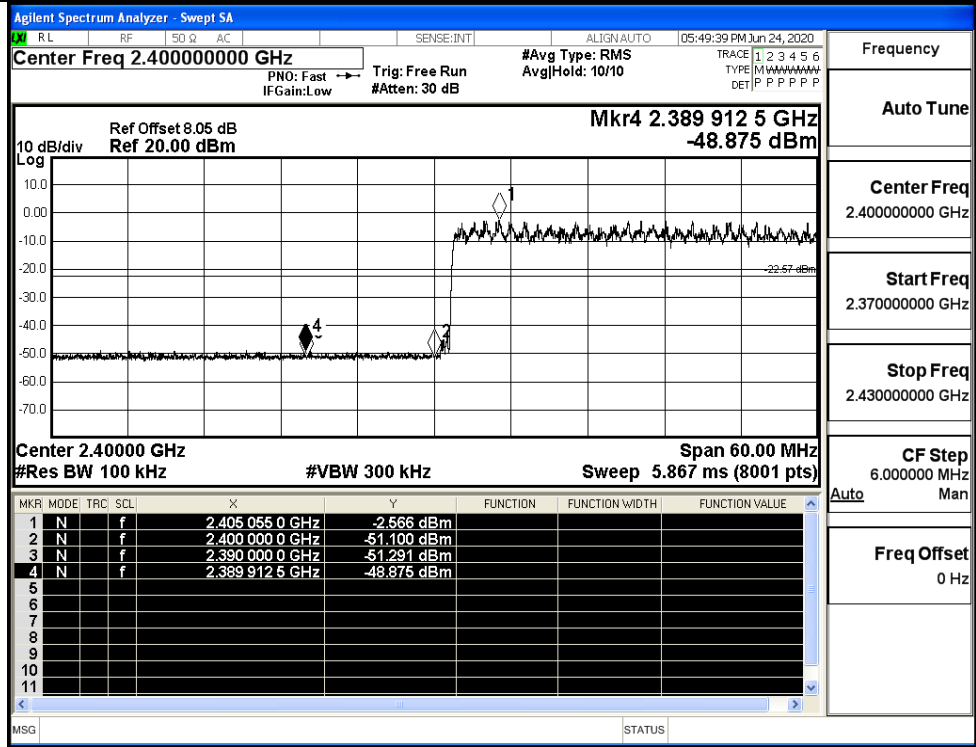
GFSK/HCH/Hop



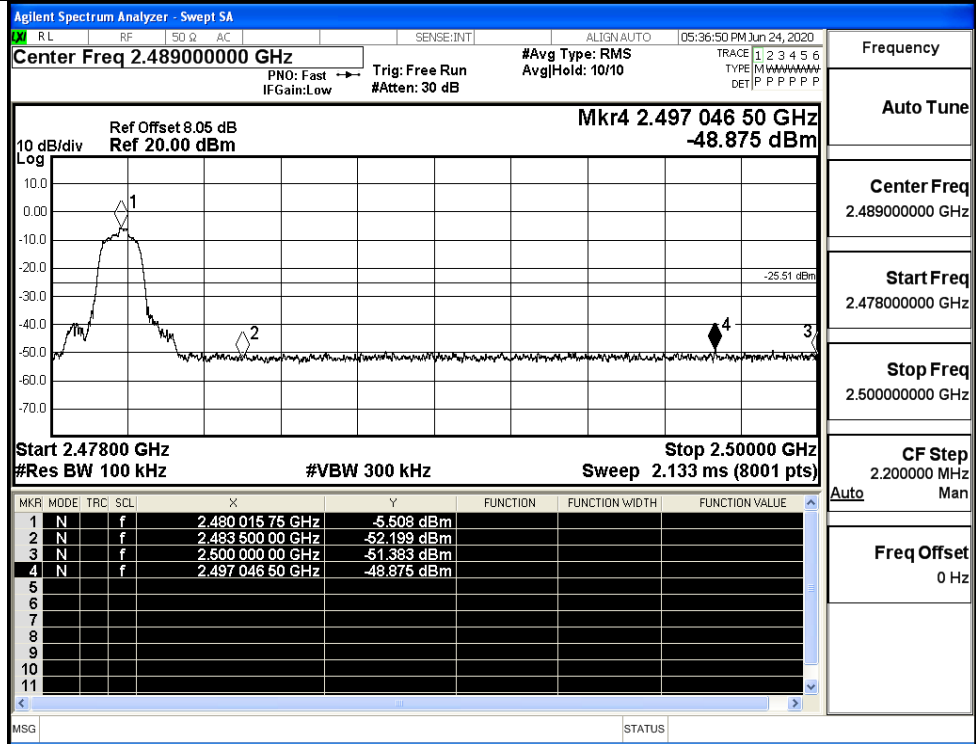
$\pi/4$ DQPSK/LCH/No Hop



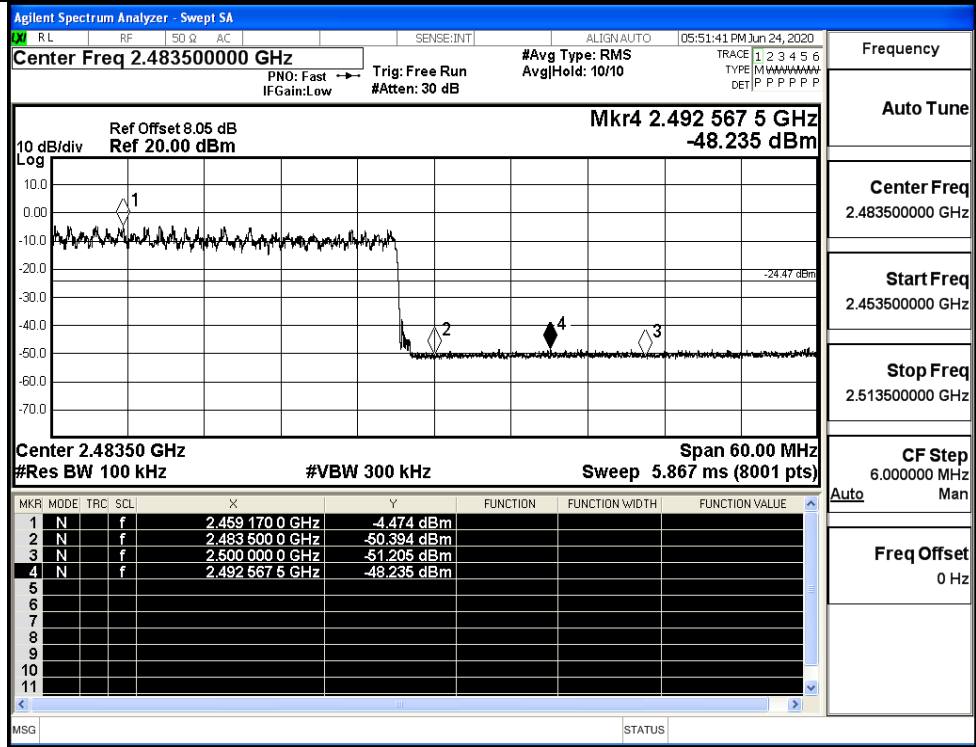
$\pi/4$ DQPSK/LCH/Hop



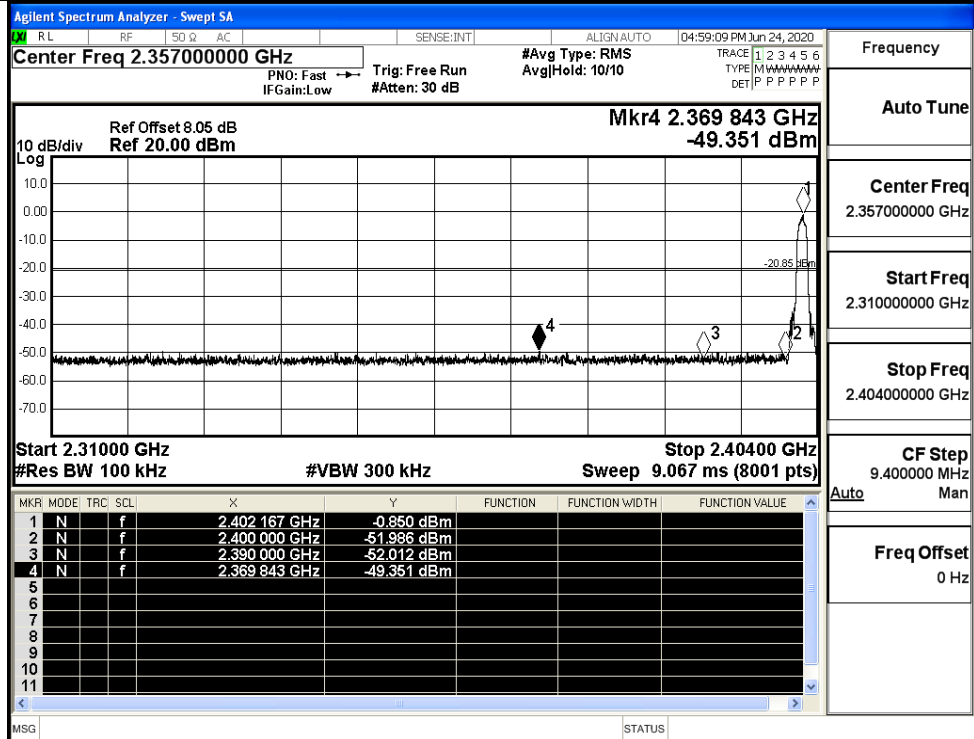
π /4DQPSK/HCH/No
Hop



π /4DQPSK/HCH/Hop

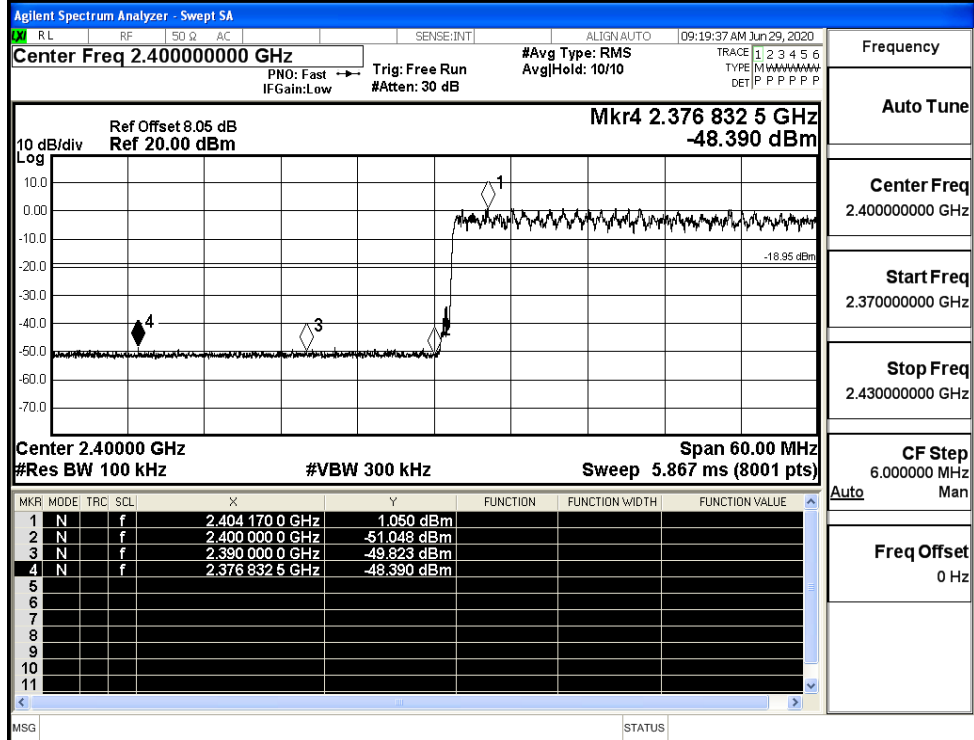


8DPSK/LCH/No Hop



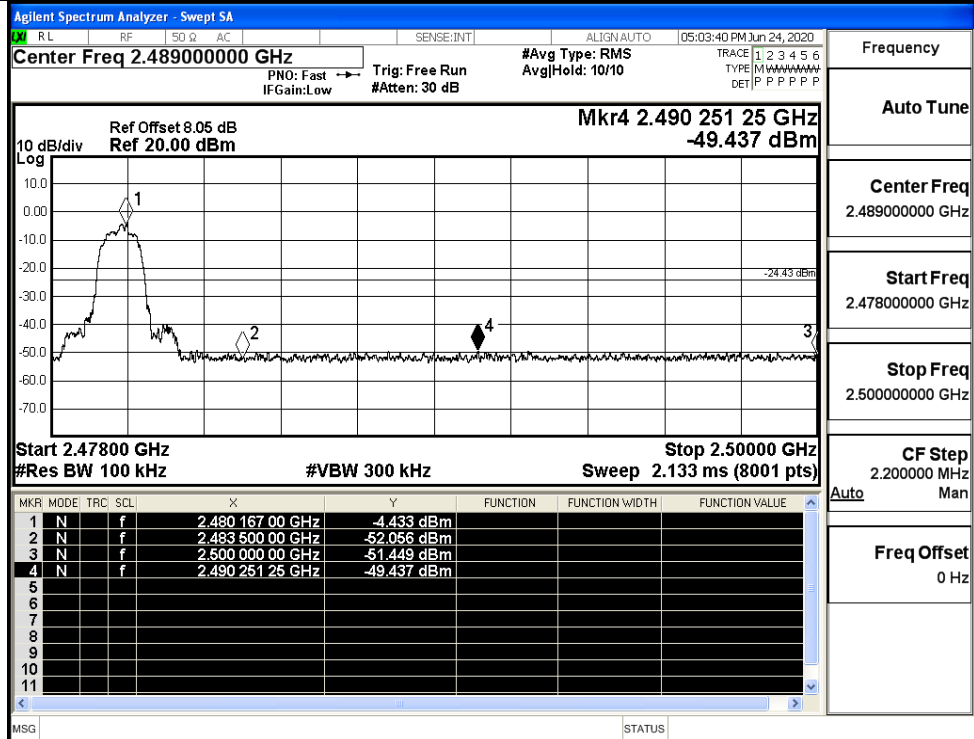
Frequency
Auto Tune
Center Freq
2.357000000 GHz
Start Freq
2.310000000 GHz
Stop Freq
2.404000000 GHz
CF Step
9.400000 MHz
Auto Man
Freq Offset
0 Hz

8DPSK/LCH/Hop



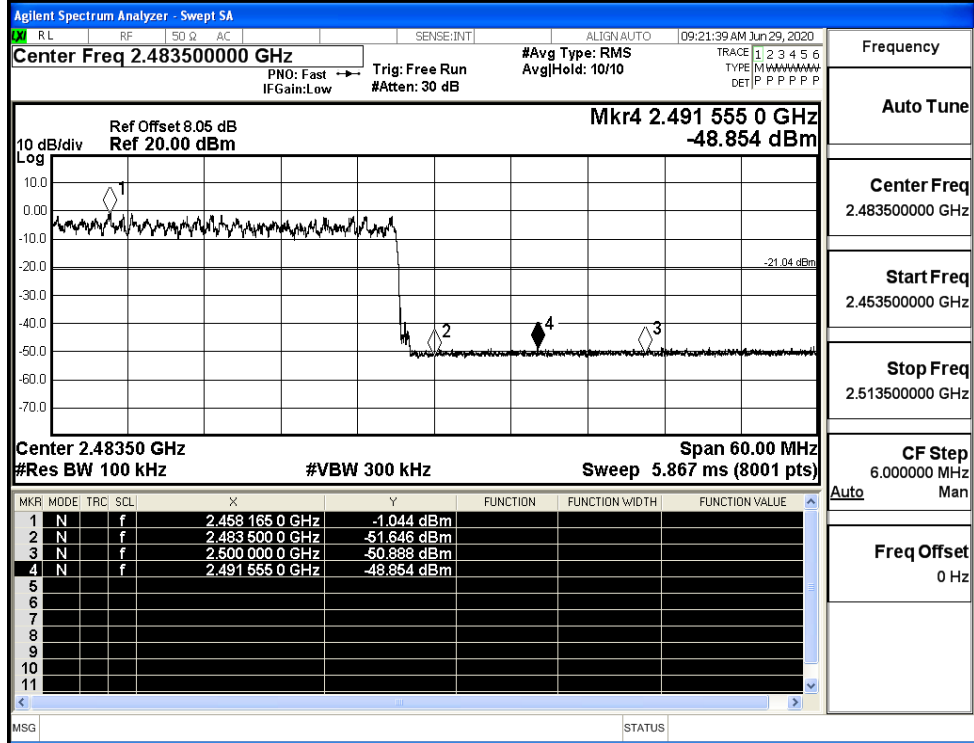
Frequency
Auto Tune
Center Freq
2.400000000 GHz
Start Freq
2.370000000 GHz
Stop Freq
2.430000000 GHz
CF Step
6.000000 MHz
Auto Man
Freq Offset
0 Hz

8DPSK/HCH/No Hop



Frequency
Auto Tune
Center Freq
2.489000000 GHz
Start Freq
2.478000000 GHz
Stop Freq
2.500000000 GHz
CF Step
2.200000 MHz
Auto Man
Freq Offset
0 Hz

8DPSK/HCH/Hop

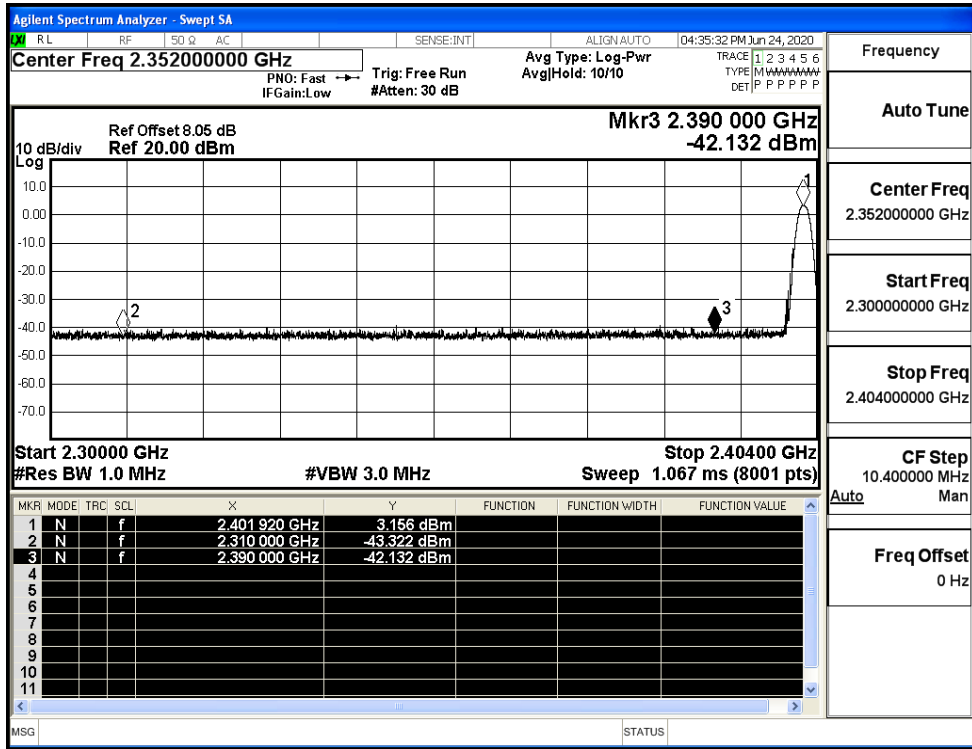


Frequency
Auto Tune
Center Freq
2.483500000 GHz
Start Freq
2.453500000 GHz
Stop Freq
2.513500000 GHz
CF Step
6.000000 MHz
Auto Man
Freq Offset
0 Hz

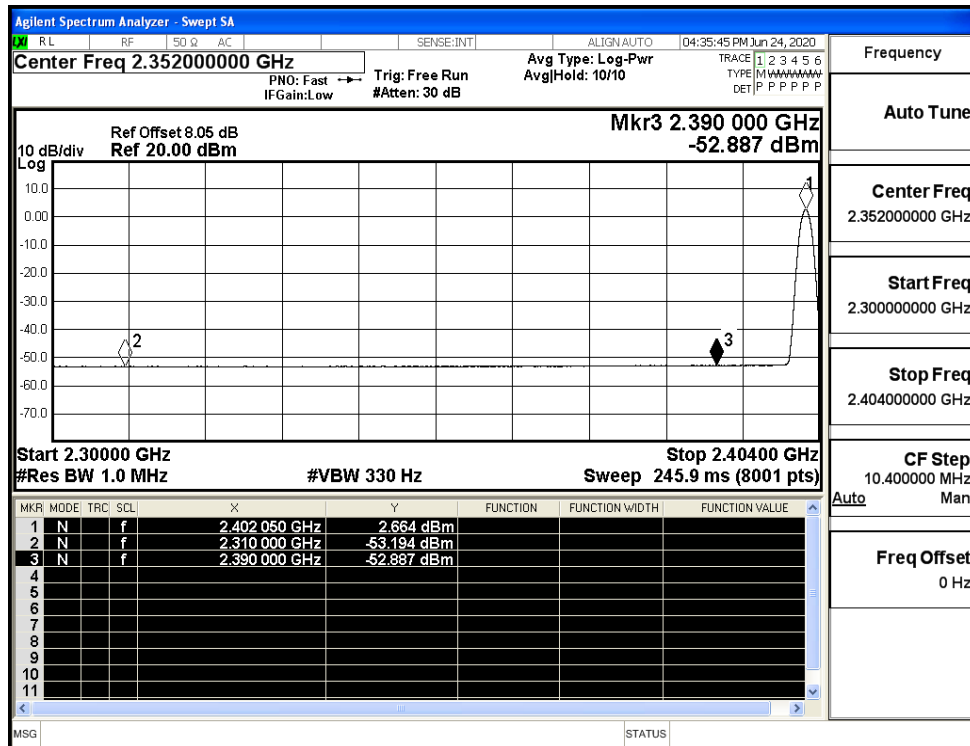
A.8 Restrict-band band-edge measurements

| Test Mode | Hopping | Freq. | Power [dBm] | Gain | Ground Factor | E [dBuV/m] | Detector | Limit [dBuV/m] | Verdict |
|---------------|---------|--------|-------------|------|---------------|------------|----------|----------------|---------|
| GFSK | Off | 2310.0 | -43.32 | 2.0 | 0 | 51.94 | PEAK | 74 | PASS |
| | Off | 2310.0 | -53.19 | 2.0 | 0 | 42.06 | AV | 54 | PASS |
| | Off | 2390.0 | -42.13 | 2.0 | 0 | 53.13 | PEAK | 74 | PASS |
| | Off | 2390.0 | -52.89 | 2.0 | 0 | 42.37 | AV | 54 | PASS |
| | Off | 2483.5 | -41.54 | 2.0 | 0 | 53.71 | PEAK | 74 | PASS |
| | Off | 2483.5 | -52.41 | 2.0 | 0 | 42.85 | AV | 54 | PASS |
| | Off | 2500.0 | -42.59 | 2.0 | 0 | 52.67 | PEAK | 74 | PASS |
| | Off | 2500.0 | -52.23 | 2.0 | 0 | 43.03 | AV | 54 | PASS |
| $\pi/4$ DQPSK | Off | 2310.0 | -42.81 | 2.0 | 0 | 52.45 | PEAK | 74 | PASS |
| | Off | 2310.0 | -53.03 | 2.0 | 0 | 42.23 | AV | 54 | PASS |
| | Off | 2390.0 | -41.84 | 2.0 | 0 | 53.41 | PEAK | 74 | PASS |
| | Off | 2390.0 | -52.86 | 2.0 | 0 | 42.40 | AV | 54 | PASS |
| | Off | 2483.5 | -41.20 | 2.0 | 0 | 54.06 | PEAK | 74 | PASS |
| | Off | 2483.5 | -52.36 | 2.0 | 0 | 42.90 | AV | 54 | PASS |
| | Off | 2500.0 | -42.82 | 2.0 | 0 | 52.44 | PEAK | 74 | PASS |
| | Off | 2500.0 | -52.15 | 2.0 | 0 | 43.11 | AV | 54 | PASS |
| 8DPSK | Off | 2310.0 | -43.22 | 2.0 | 0 | 52.04 | PEAK | 74 | PASS |
| | Off | 2310.0 | -53.29 | 2.0 | 0 | 41.97 | AV | 54 | PASS |
| | Off | 2390.0 | -41.86 | 2.0 | 0 | 53.40 | PEAK | 74 | PASS |
| | Off | 2390.0 | -52.83 | 2.0 | 0 | 42.42 | AV | 54 | PASS |
| | Off | 2483.5 | -41.17 | 2.0 | 0 | 54.08 | PEAK | 74 | PASS |
| | Off | 2483.5 | -52.33 | 2.0 | 0 | 42.93 | AV | 54 | PASS |
| | Off | 2500.0 | -41.88 | 2.0 | 0 | 53.38 | PEAK | 74 | PASS |
| | Off | 2500.0 | -52.15 | 2.0 | 0 | 43.11 | AV | 54 | PASS |

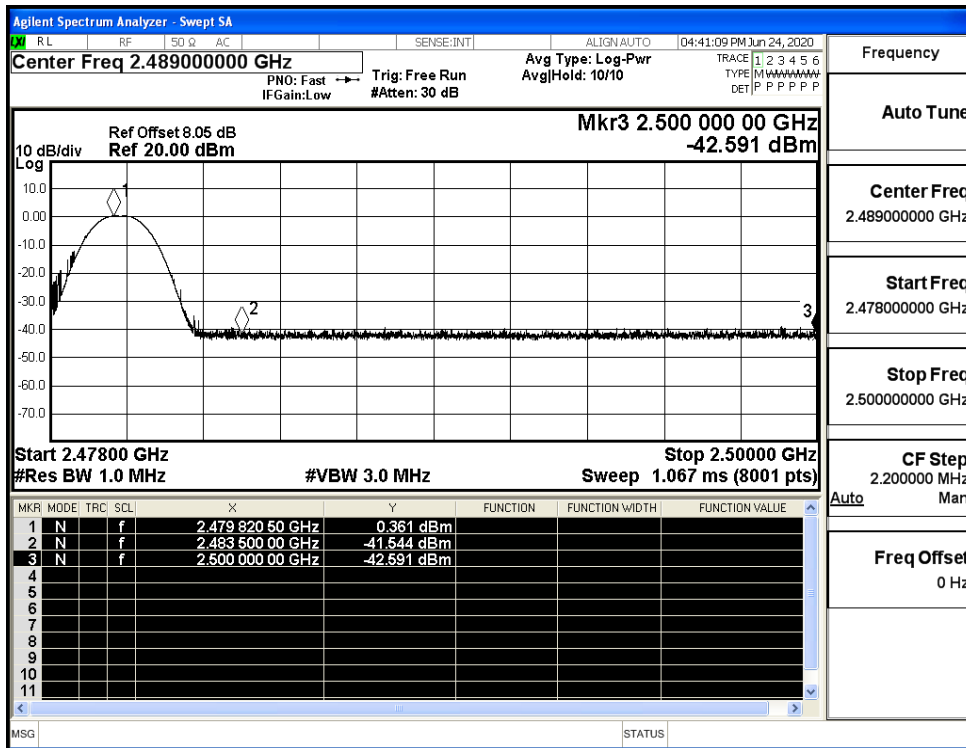
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (Low Channel)



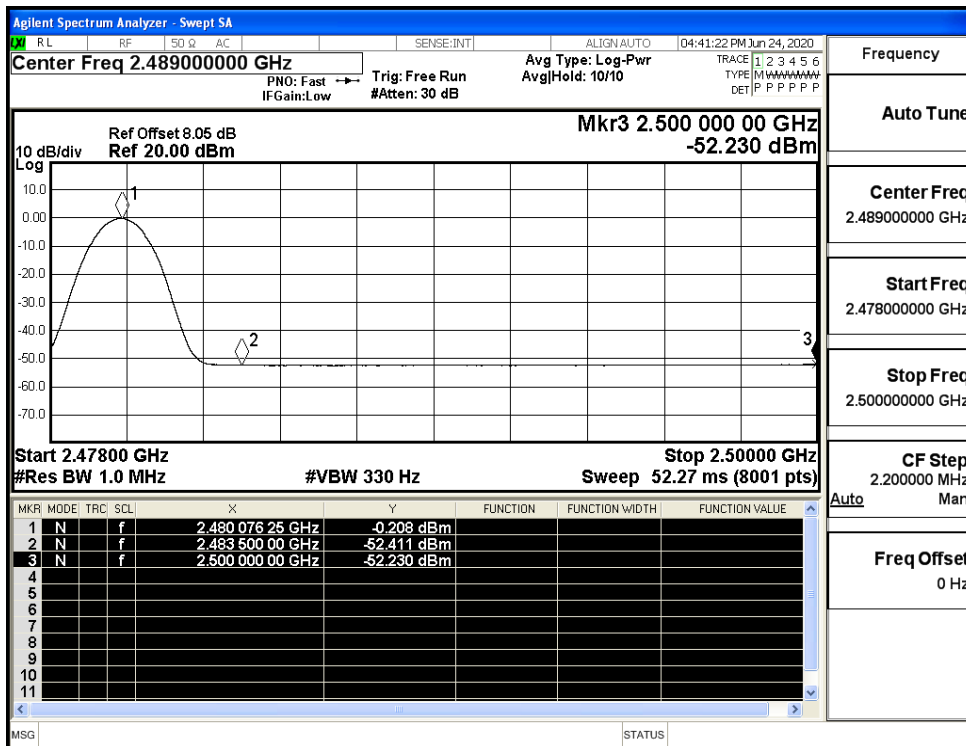
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (Low Channel)



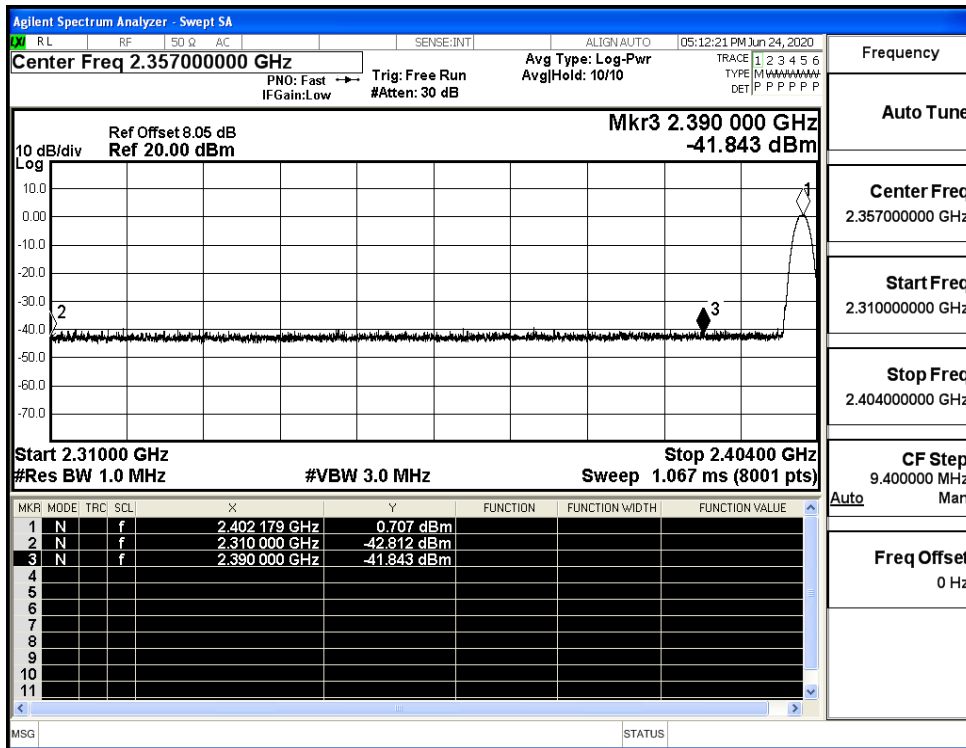
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (High Channel)



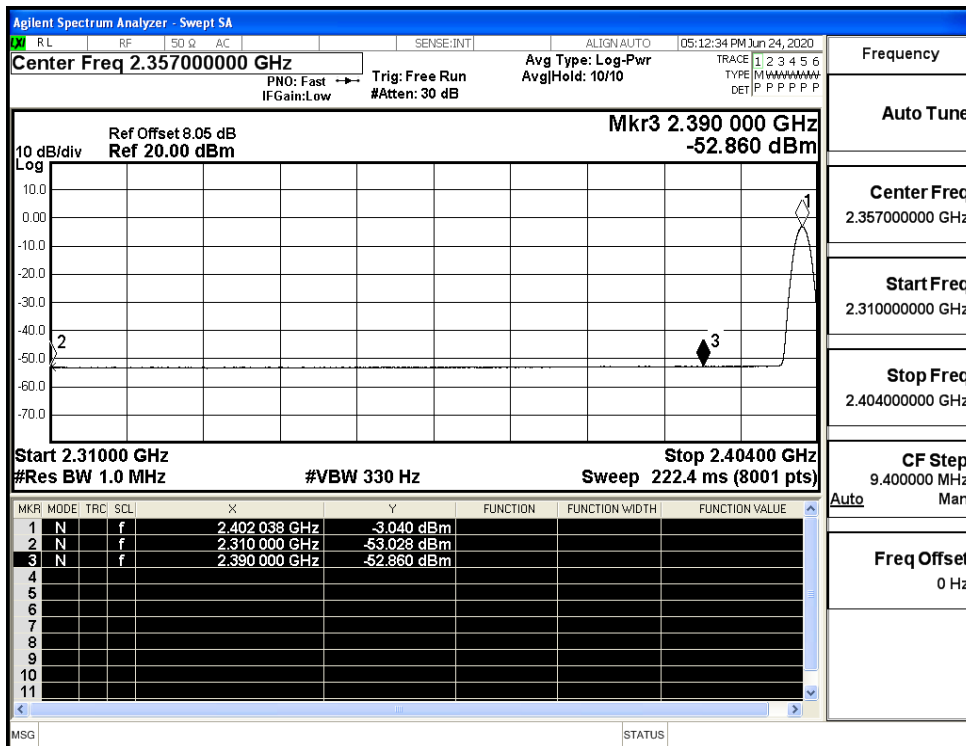
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (High Channel)



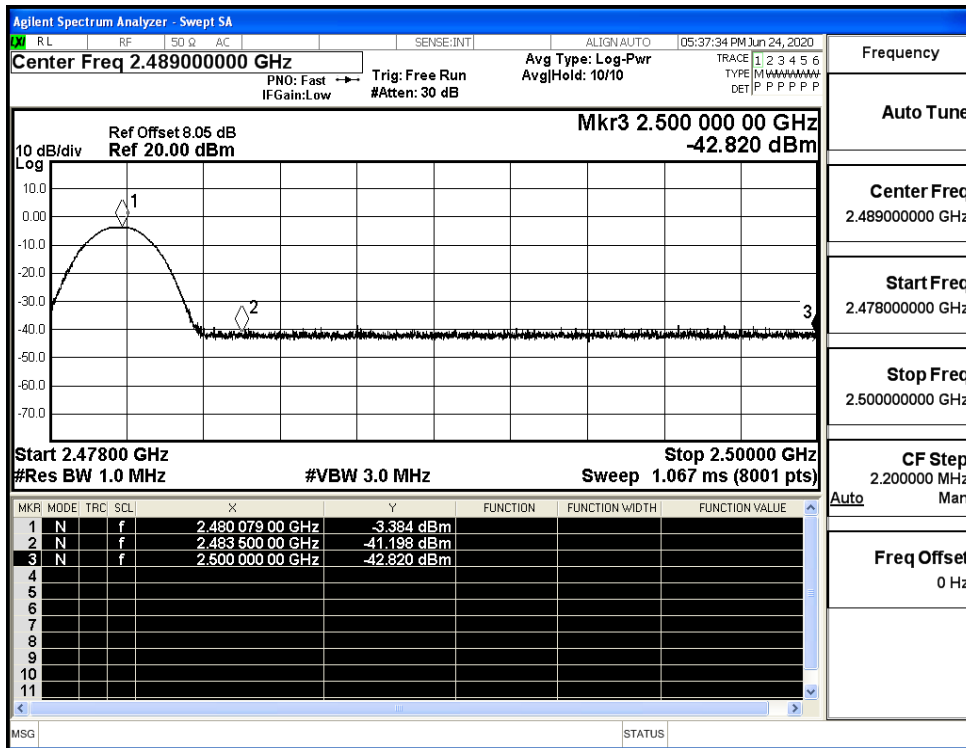
Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_PEAK (Low Channel)



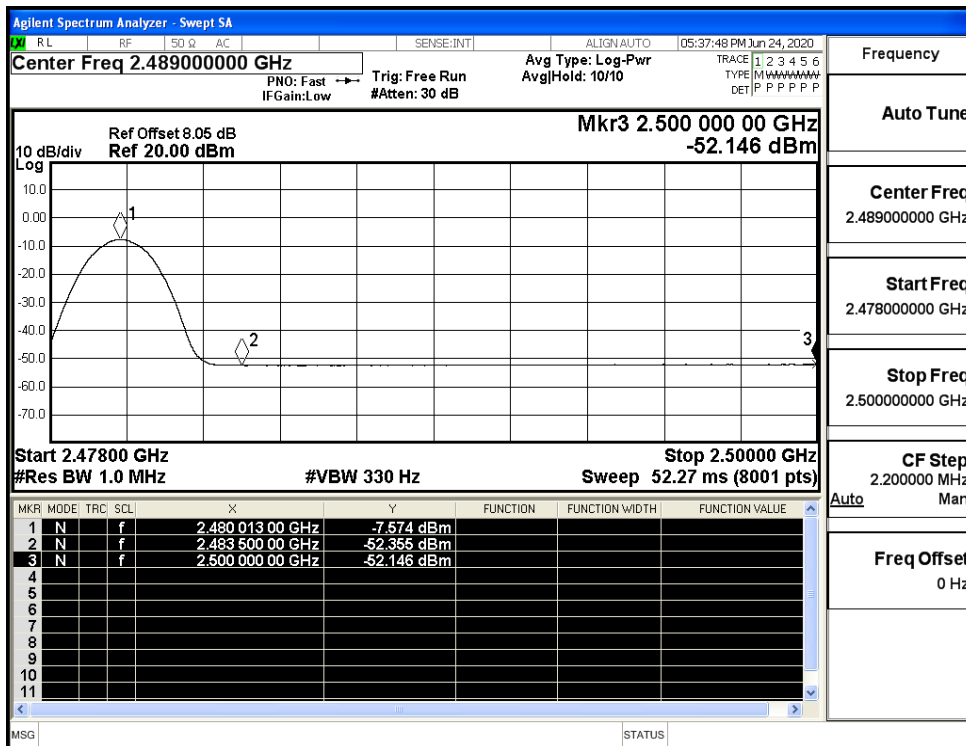
Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_Average (Low Channel)



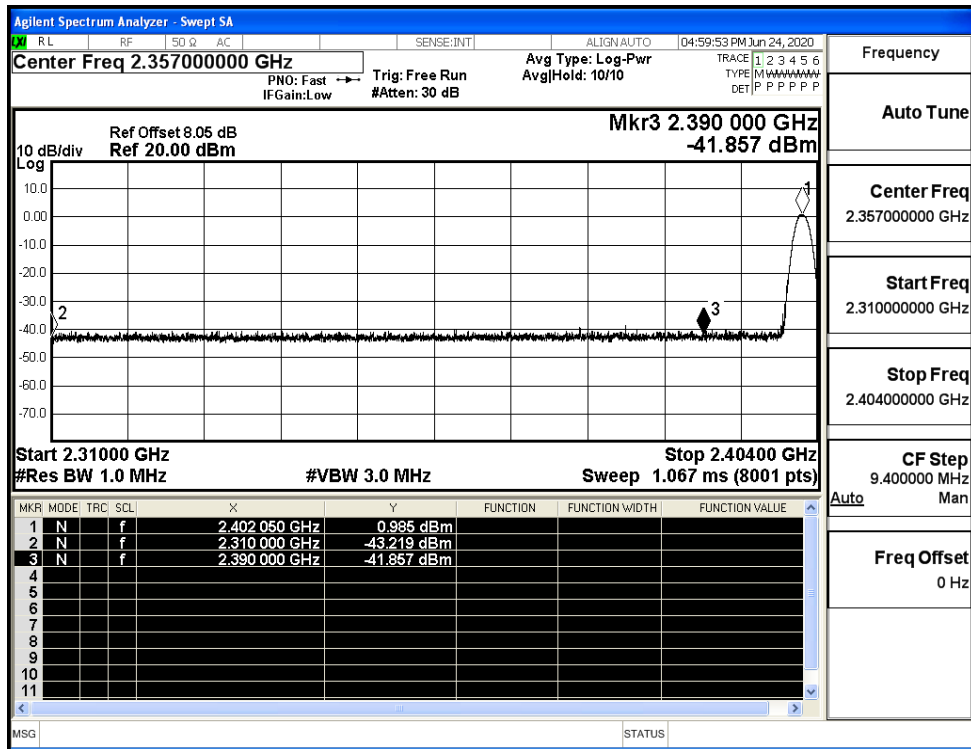
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_PEAK (High Channel)



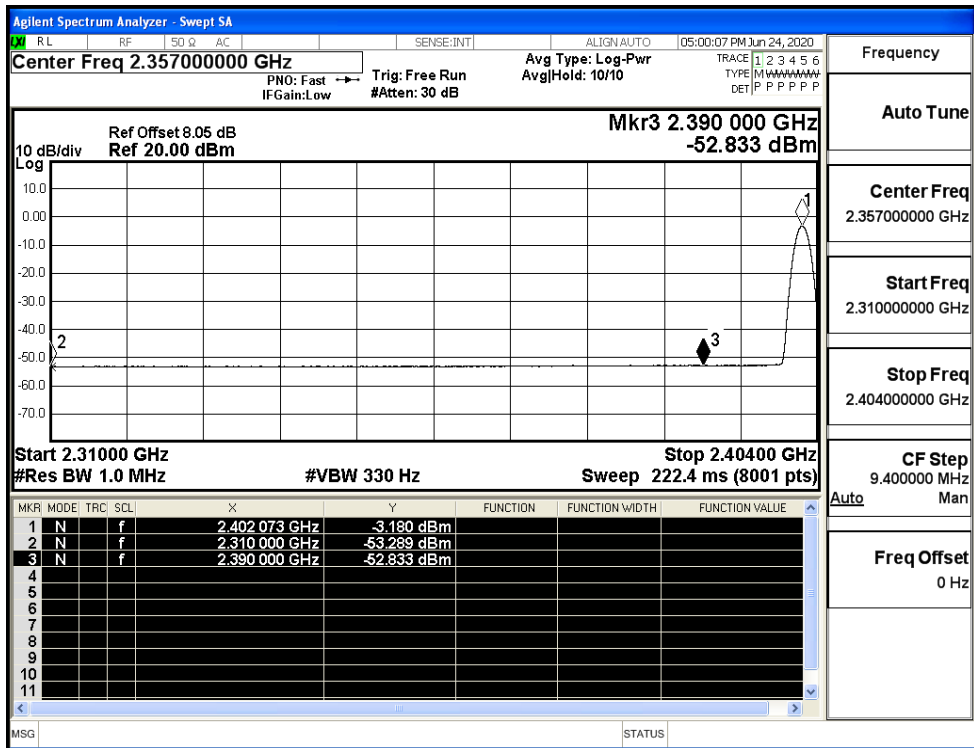
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_Average (High Channel)



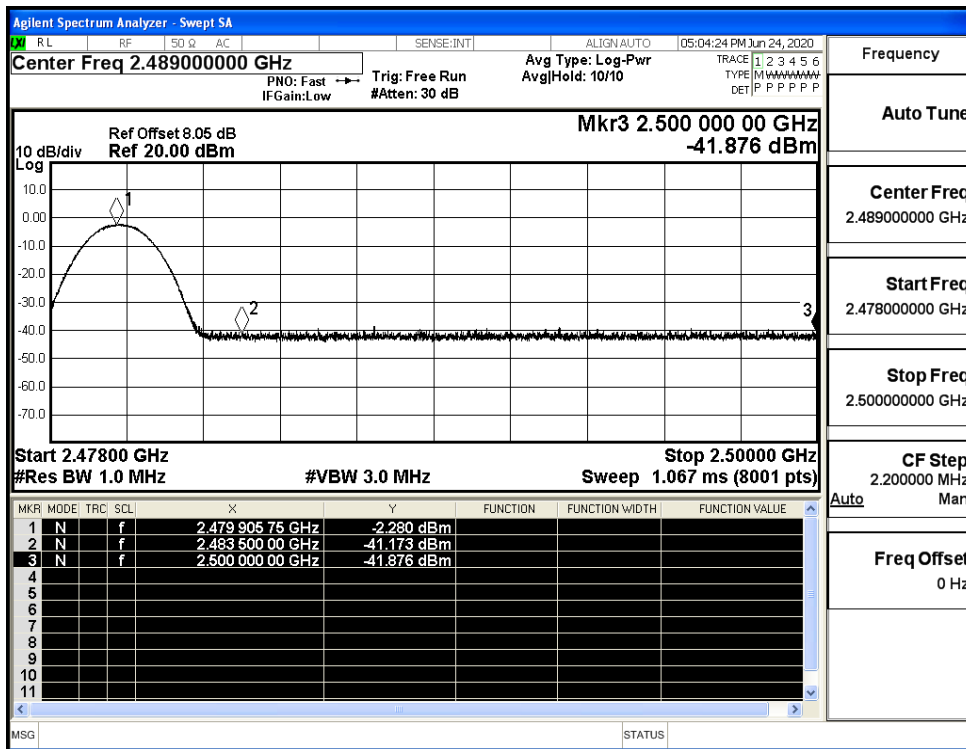
Restrict-band band-edge measurements_Hopping Off_8DPSK_PEAK (Low Channel)



Restrict-band band-edge measurements_Hopping Off_8DPSK_Average (Low Channel)



Restrict-band band-edge measurements_Hopping Off_8DPSK_PEAK (High Channel)



Restrict-band band-edge measurements_Hopping Off_8DPSK_Average (High Channel)

