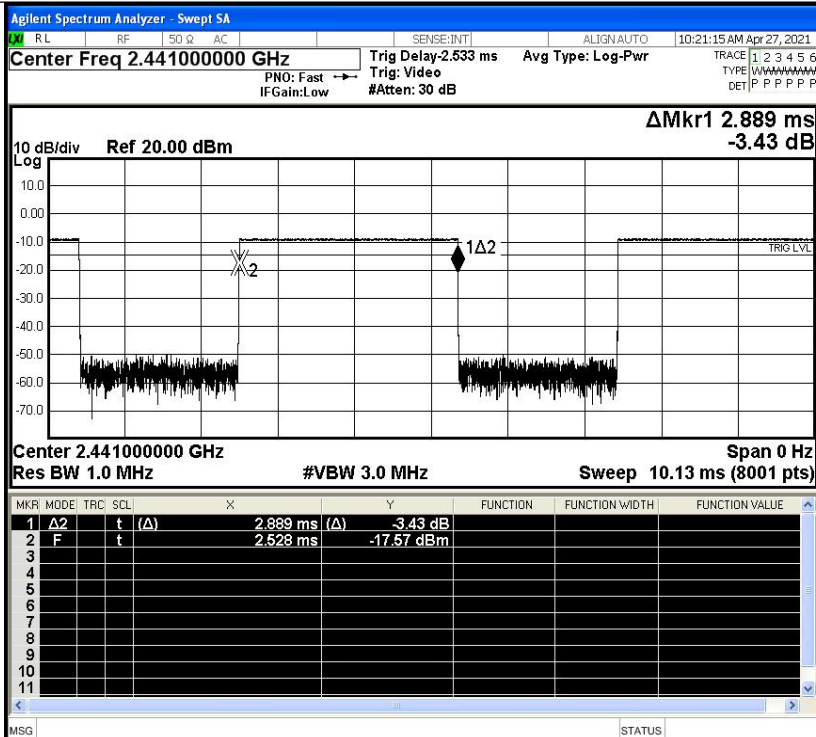


GFSK_DH5/MCH

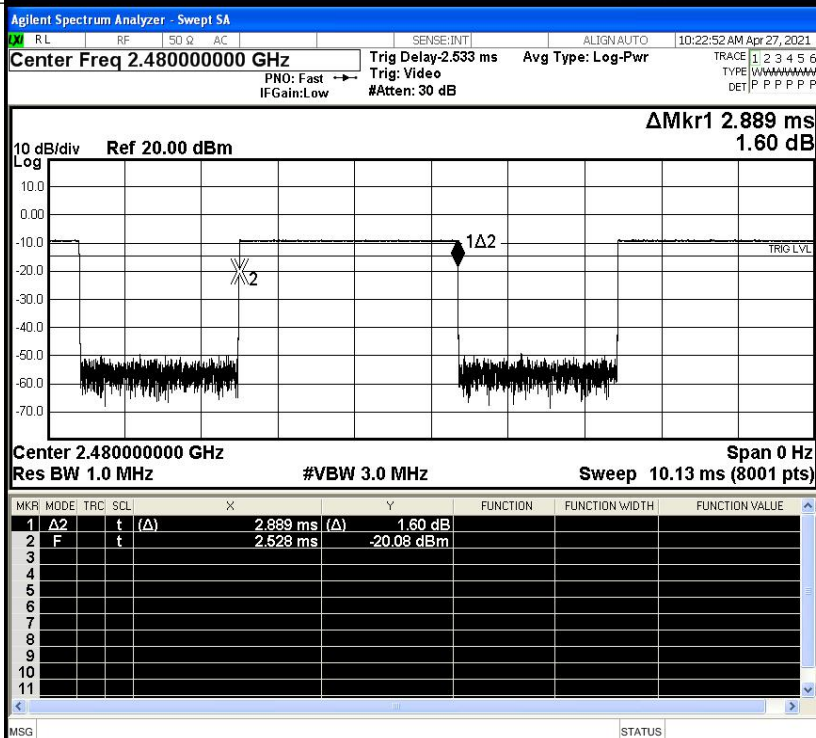


Frequency

Auto Tune

Center Freq
2.441000000 GHzStart Freq
2.441000000 GHzStop Freq
2.441000000 GHzCF Step
1.000000 MHz
Auto ManFreq Offset
0 Hz

GFSK_DH5/HCH



Frequency

Auto Tune

Center Freq
2.480000000 GHzStart Freq
2.480000000 GHzStop Freq
2.480000000 GHzCF Step
1.000000 MHz
Auto ManFreq Offset
0 Hz

[illegible]

Agilent Spectrum Analyzer - Swept SA

UN RL RF SO Q AC SENSE:INT ALIGN:AUTO 10:30:26 AM Apr 27, 2021
 Center Freq 2.441000000 GHz Trig Delay: 2.533 ms Avg Type: Log-Pwr
 PNO: Fast IF Gain: Low Trig: Video #Atten: 30 dB TRACE 1 2 3 4 5 6
 TYPE: W W W W W W W W W W
 DET: P P P P P P P P

10 dB/div Ref 20.00 dBm Δ Mkr1 2.894 ms
 Log -1.06 dB

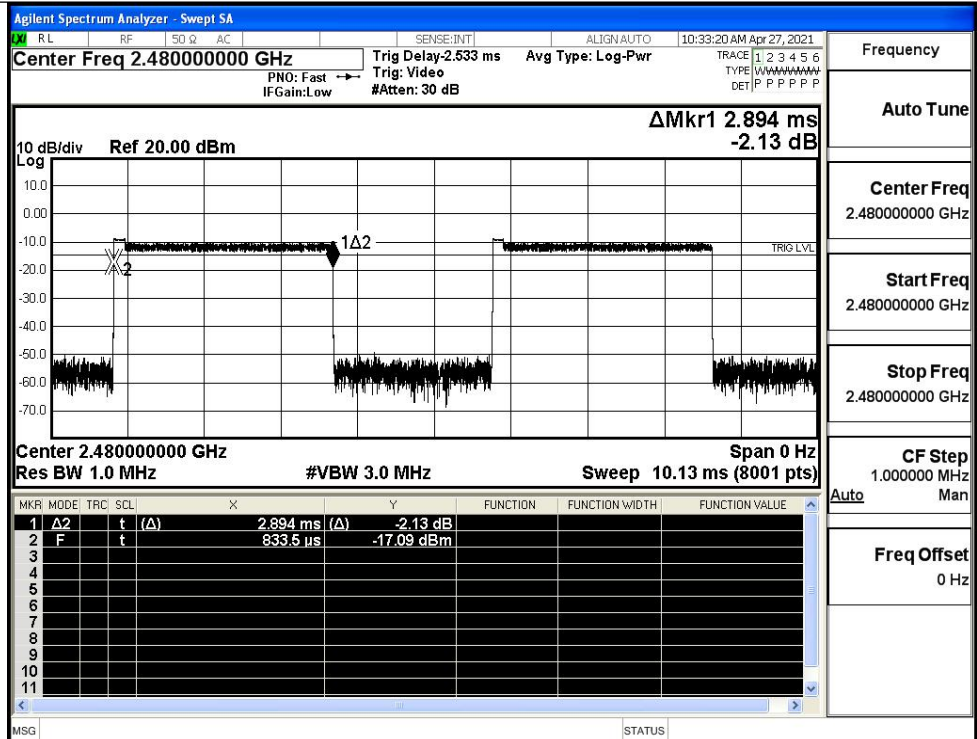
Center 2.441000000 GHz Span 0 Hz
 Res BW 1.0 MHz #VBW 3.0 MHz Sweep 10.13 ms (8001 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	Δ 2	t	(Δ)	2.894 ms	(Δ) -1.06 dB			
2	F	t		4.784 ms	-17.57 dBm			
3								
4								
5								
6								
7								
8								
9								
10								
11								

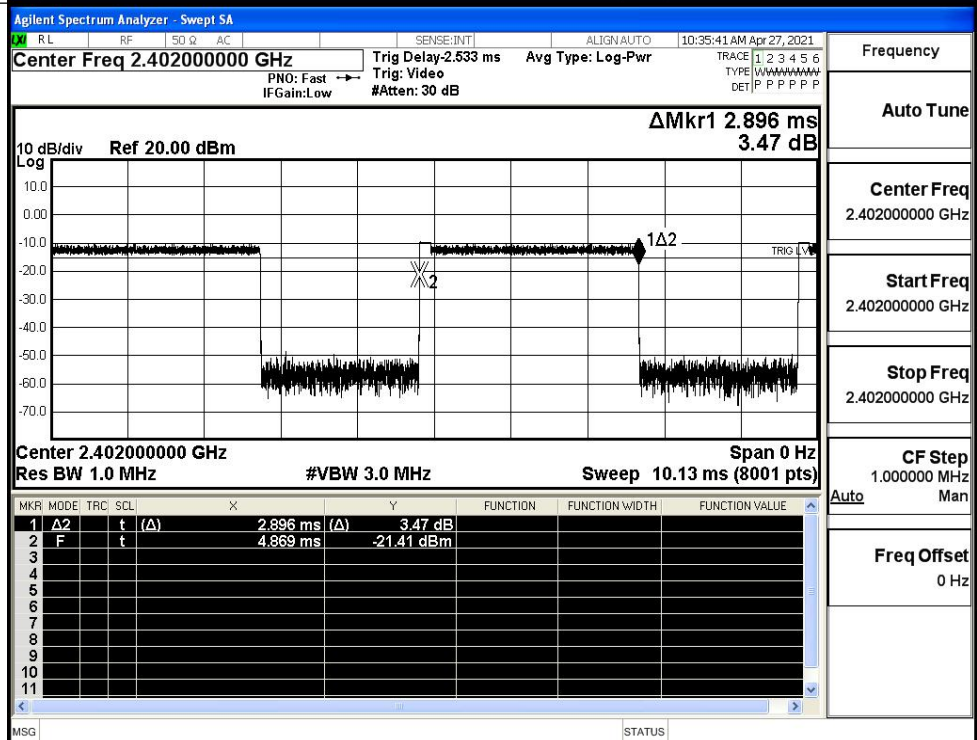
Auto Tune
 Center Freq 2.441000000 GHz
 Start Freq 2.441000000 GHz
 Stop Freq 2.441000000 GHz
 CF Step 1.000000 MHz
 Man
 Freq Offset 0 Hz

MSG STATUS

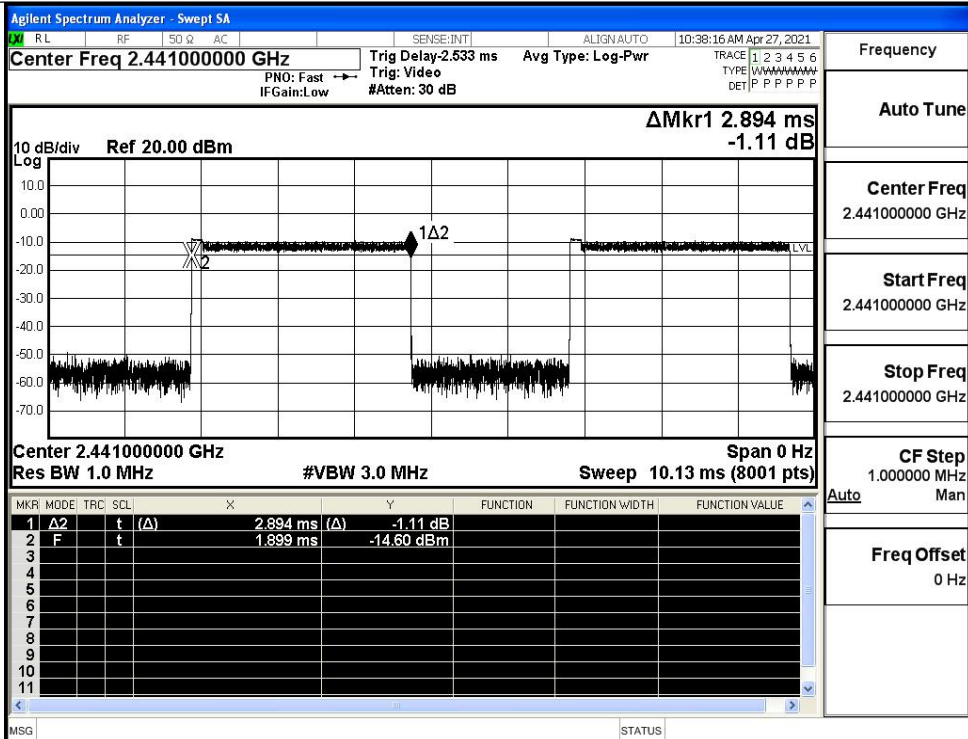
$\pi/4$ DQPSK
_2DH5/HCH



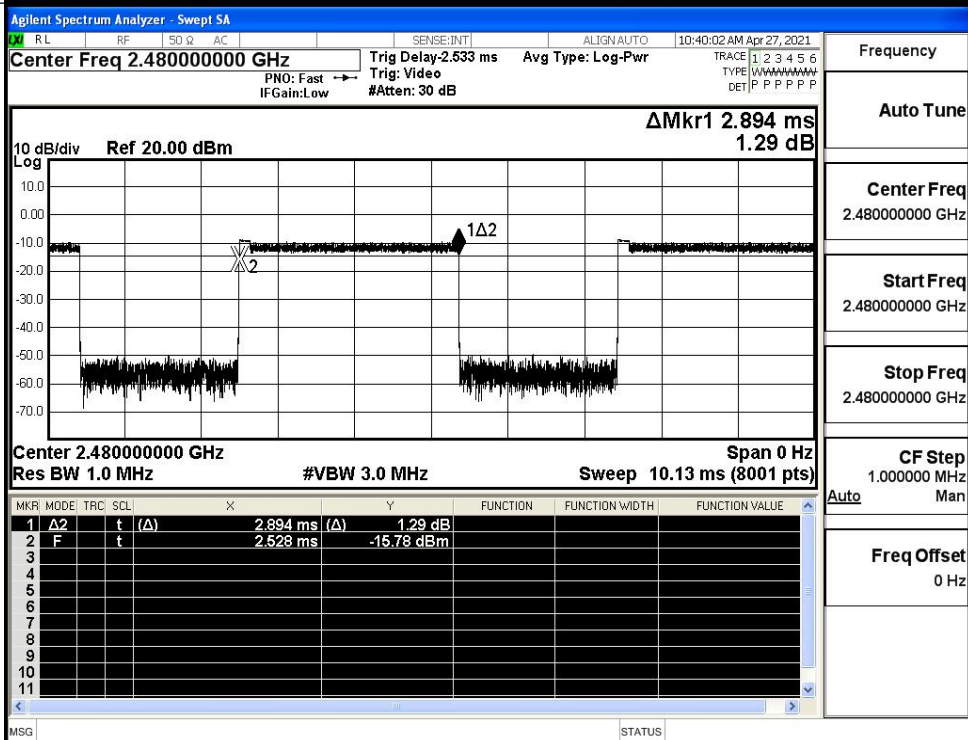
8DPSK _3DH5/LCH



8DPSK_3DH5/MCH



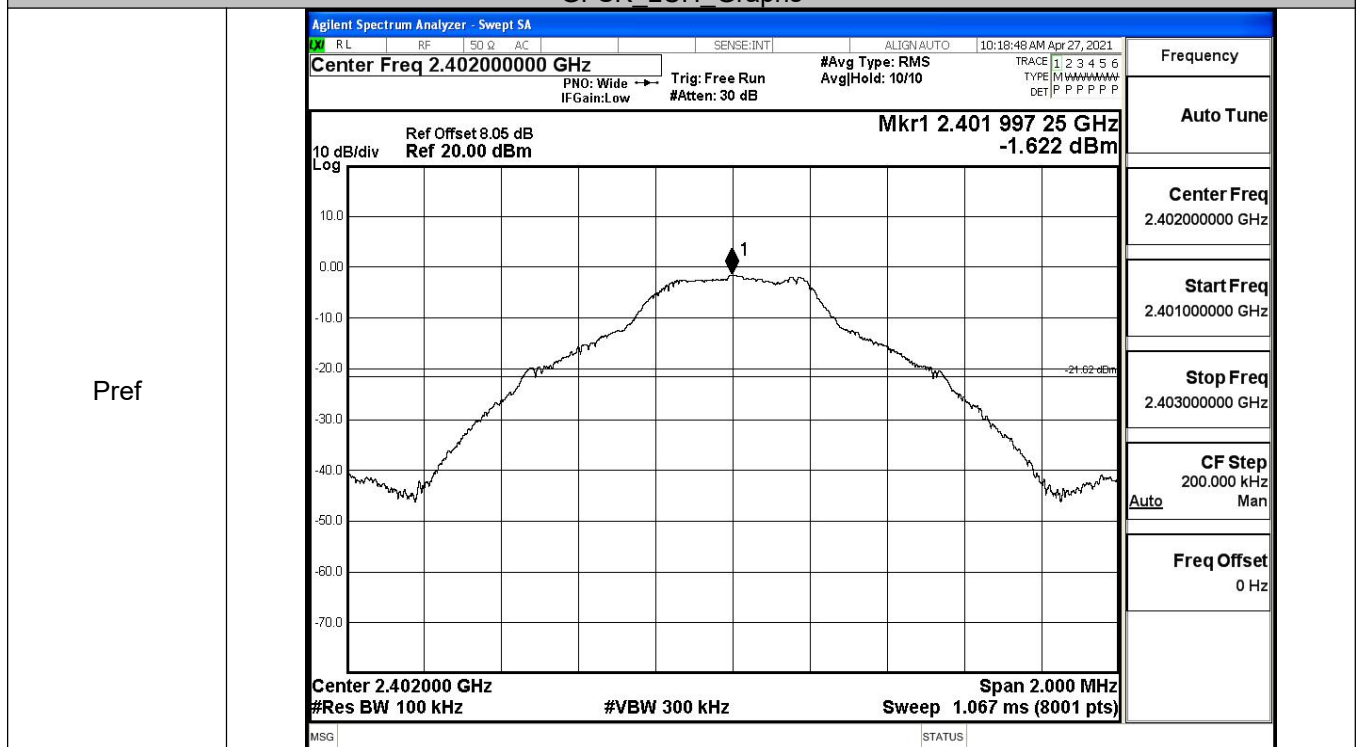
8DPSK_3DH5/HCH



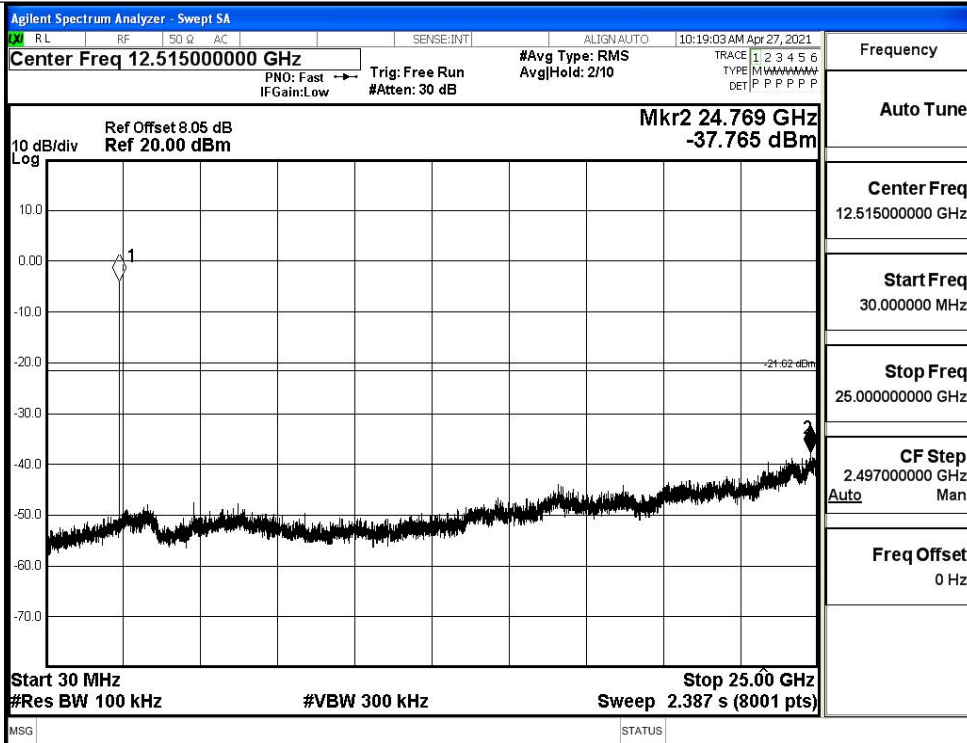
A.7 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-1.622	-37.765	-21.622	PASS
	MCH	-0.909	-37.961	-20.909	PASS
	HCH	-1.083	-37.418	-21.083	PASS
$\pi/4$ DQPSK	LCH	-2.032	-37.390	-22.032	PASS
	MCH	-1.21	-37.825	-21.210	PASS
	HCH	-0.978	-37.527	-20.978	PASS
8DPSK	LCH	-1.656	-37.436	-21.656	PASS
	MCH	-1.004	-36.544	-21.004	PASS
	HCH	-1.029	-37.335	-21.029	PASS

GFSK_LCH_Graphs

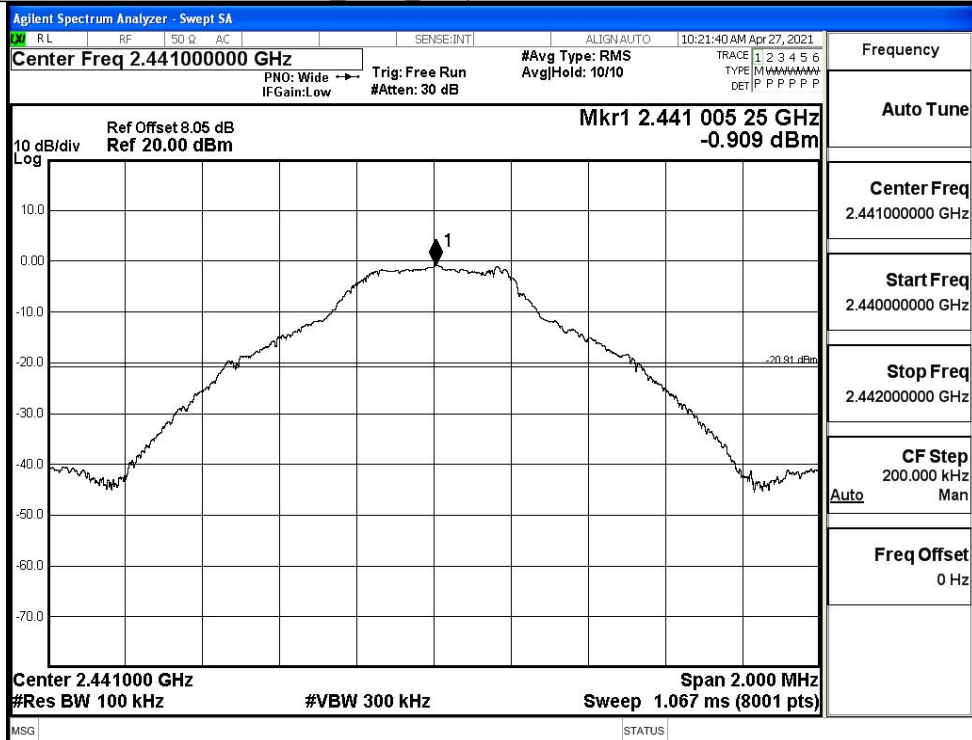


Puw

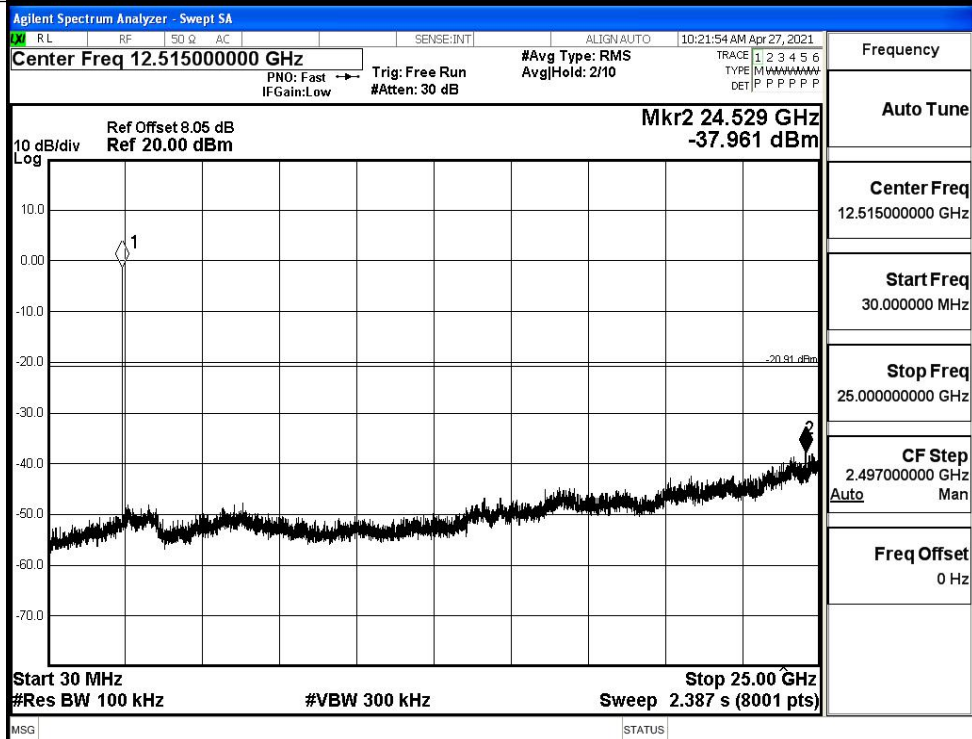


GFSK MCH_Graphs

Pref

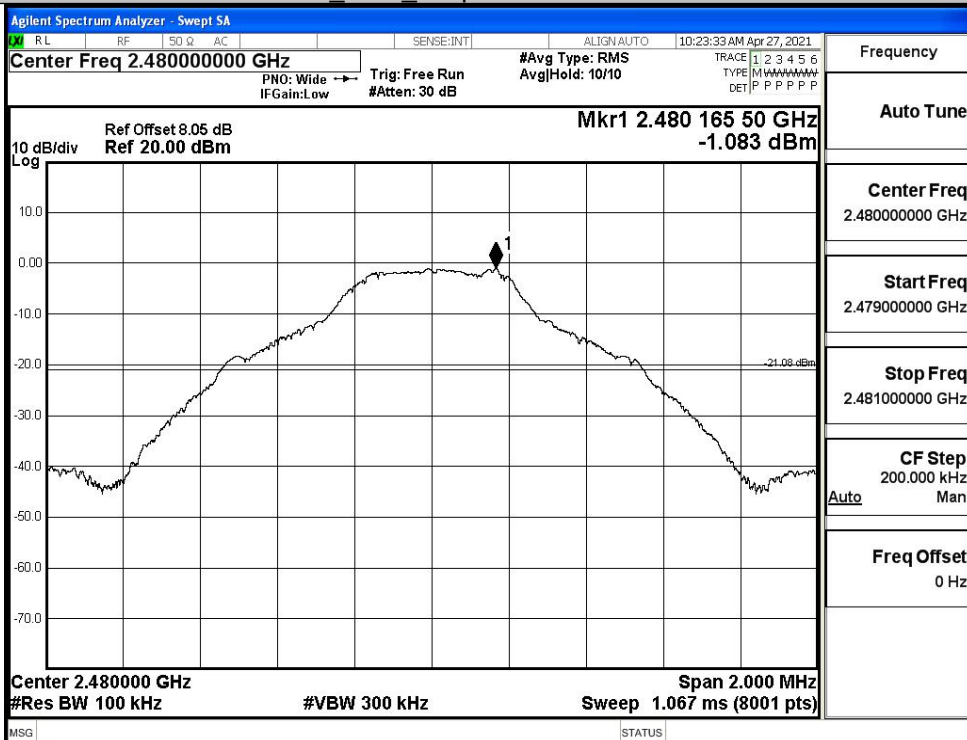


Puw

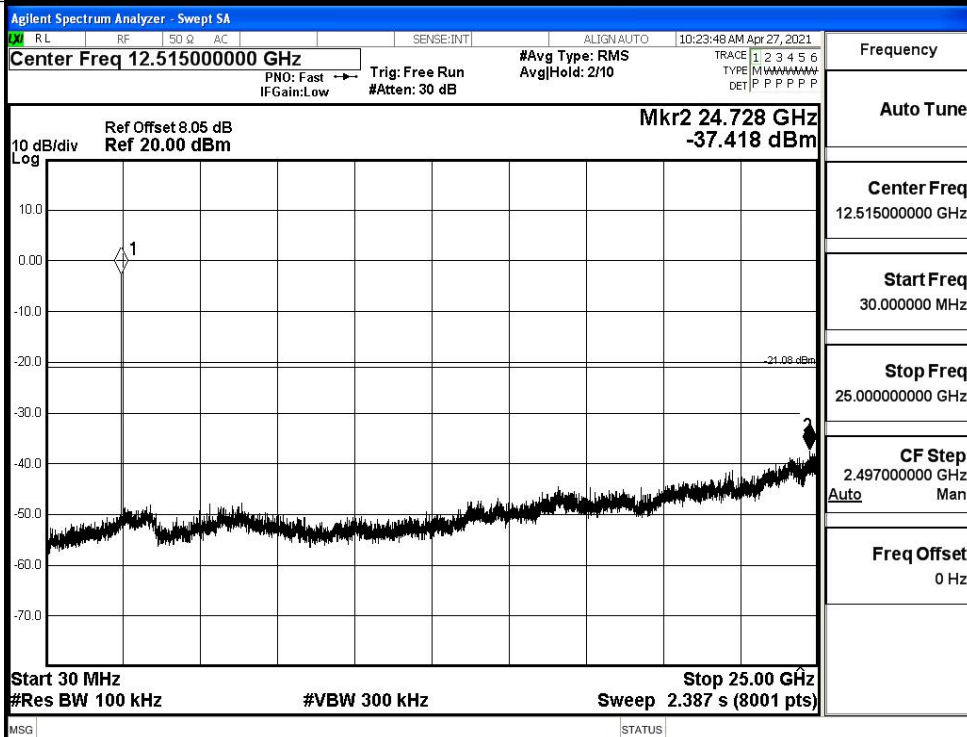


GFSK HCH_Graphs

Pref

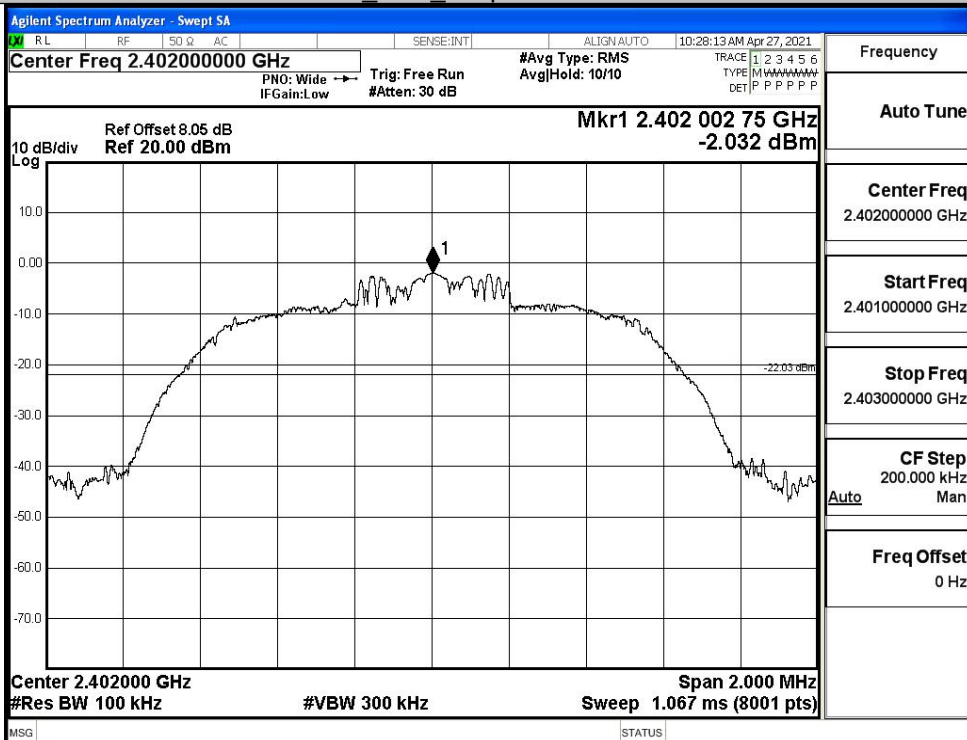


Puw

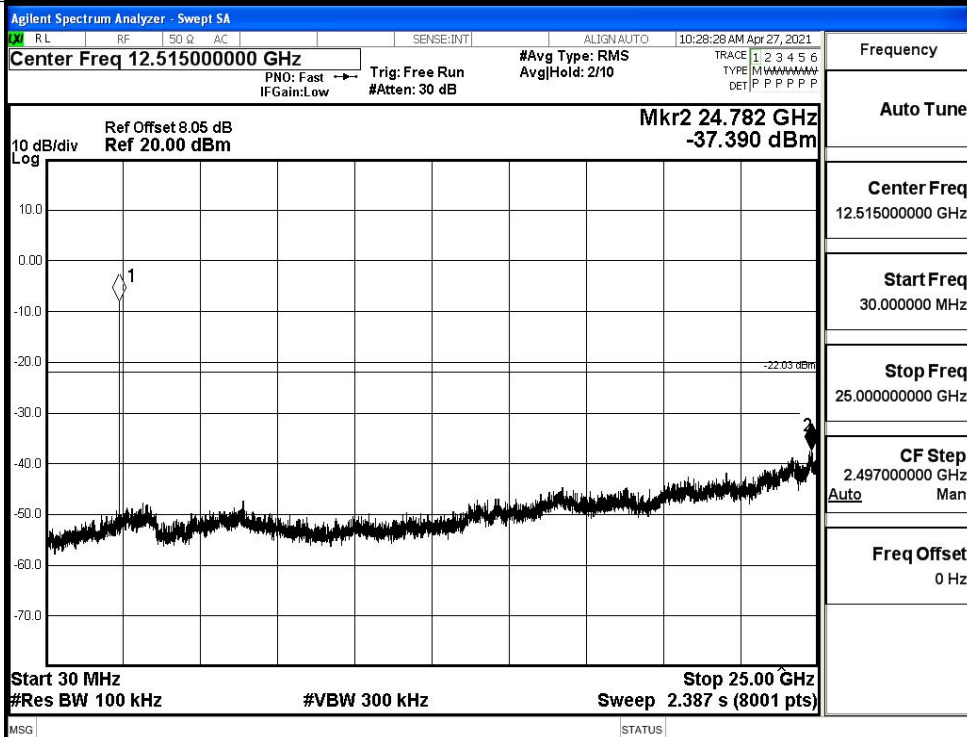


$\pi/4$ DQPSK LCH_Graphs

Pref

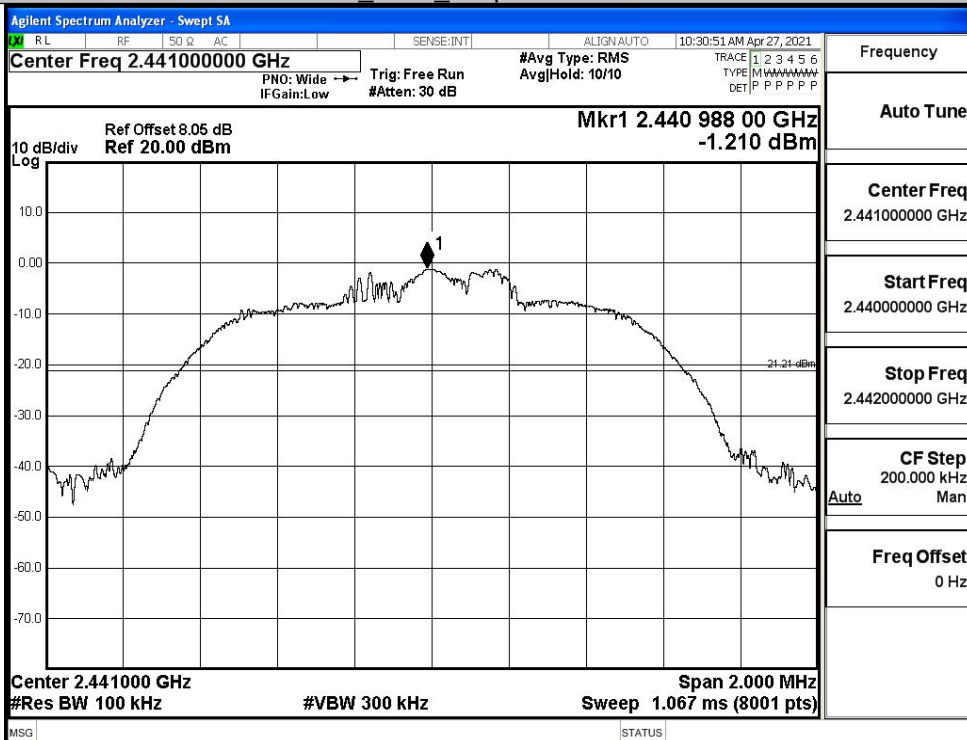


Puw

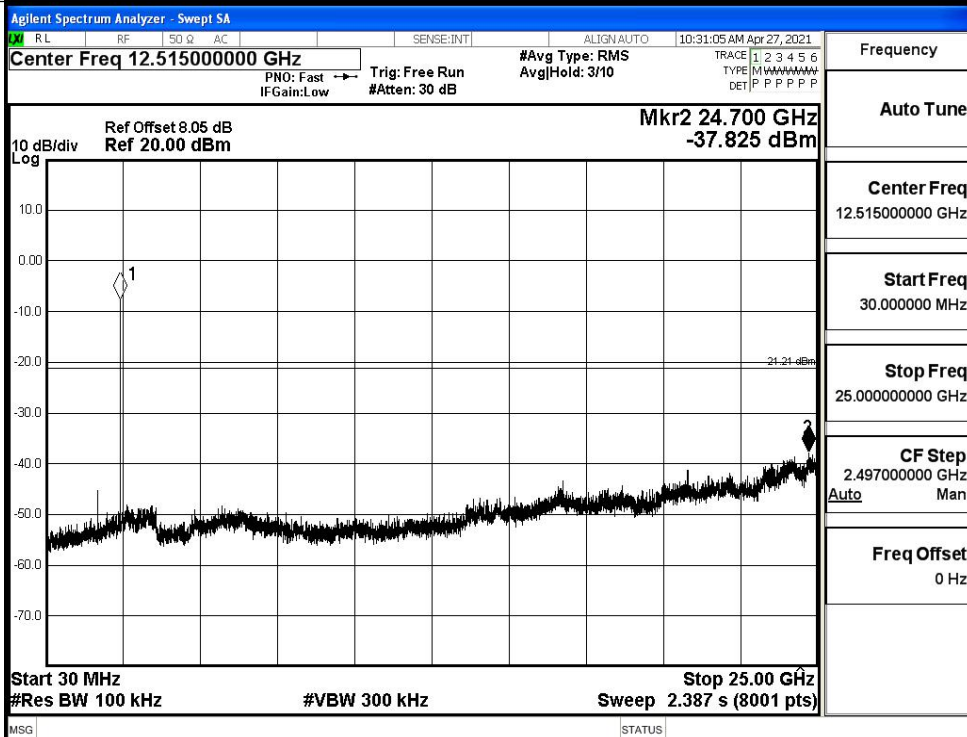


$\pi/4$ DQPSK_MCH_Graphs

Pref

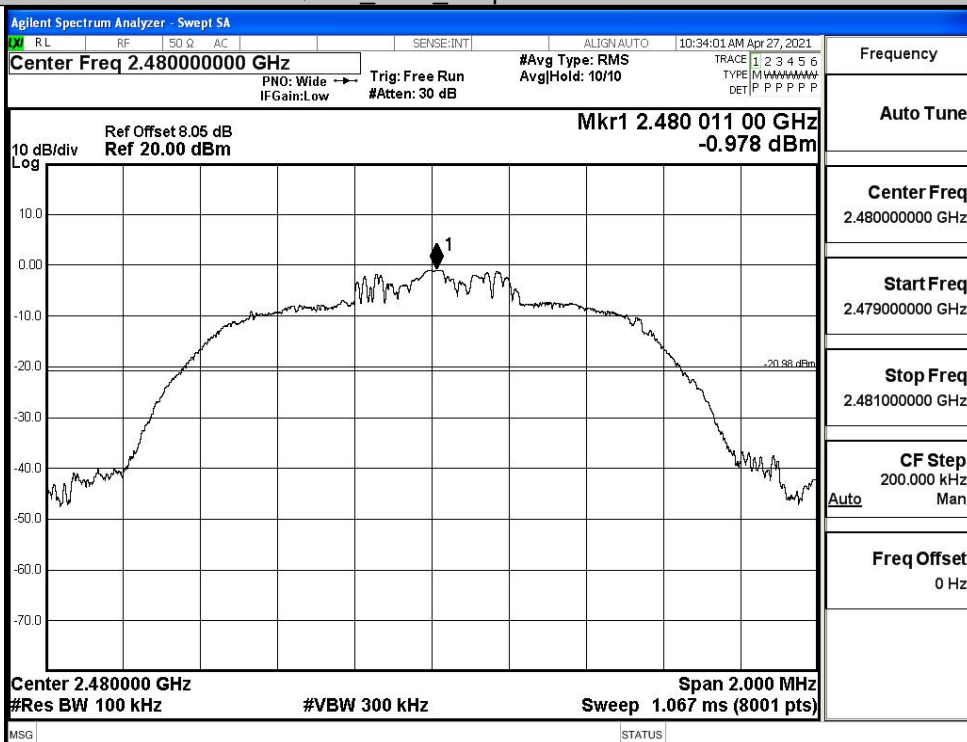


Puw

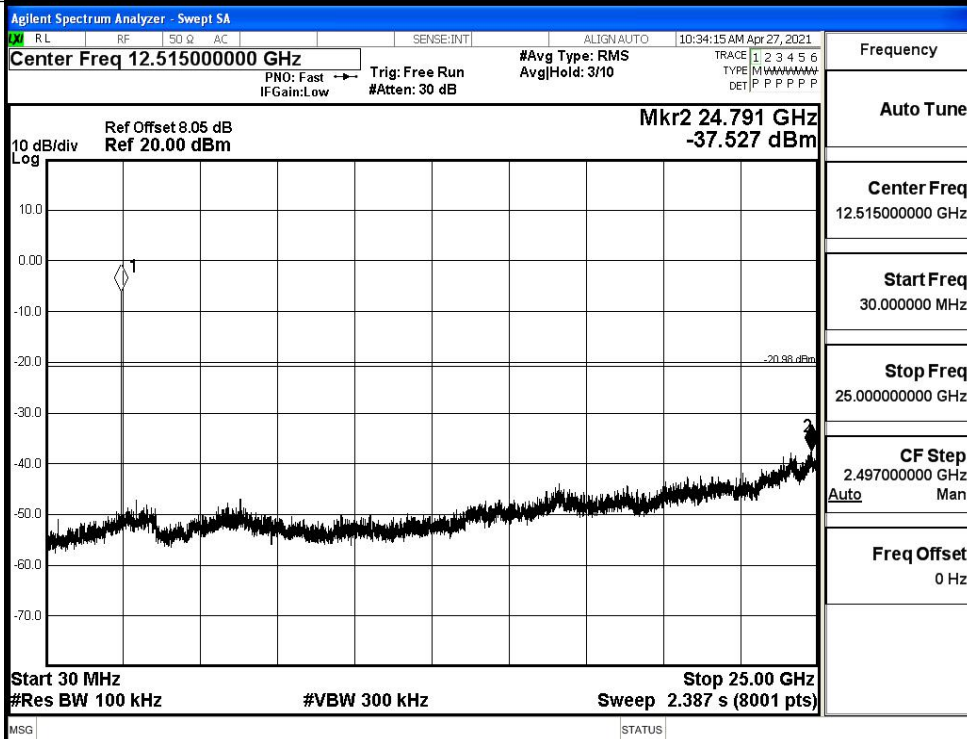


π /4DQPSK HCH_Graphs

Pref

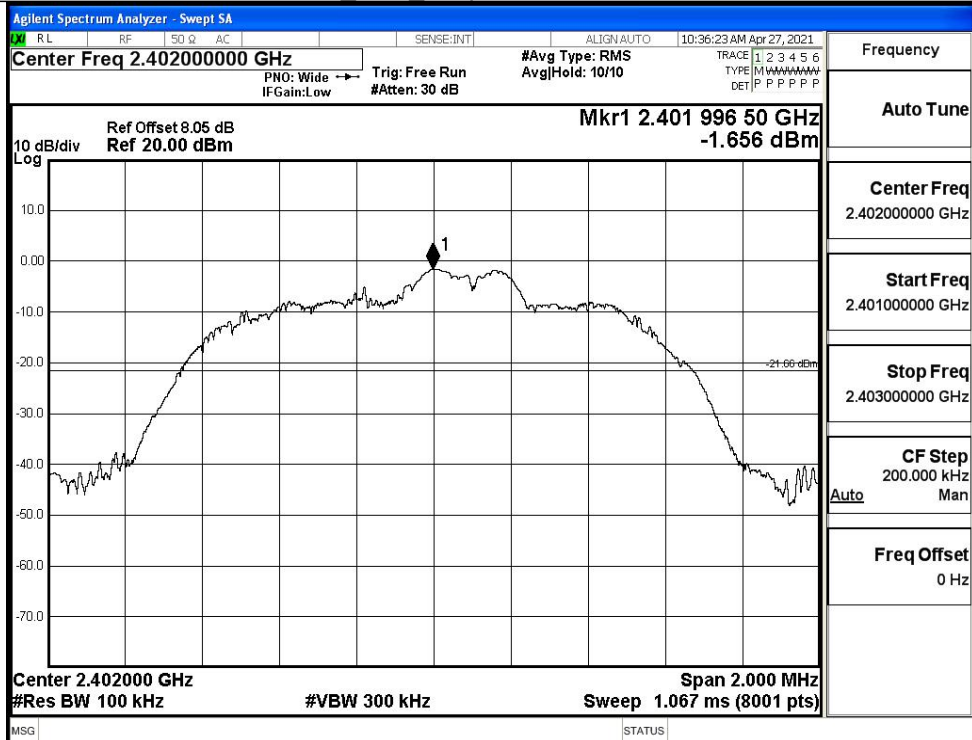


Puw

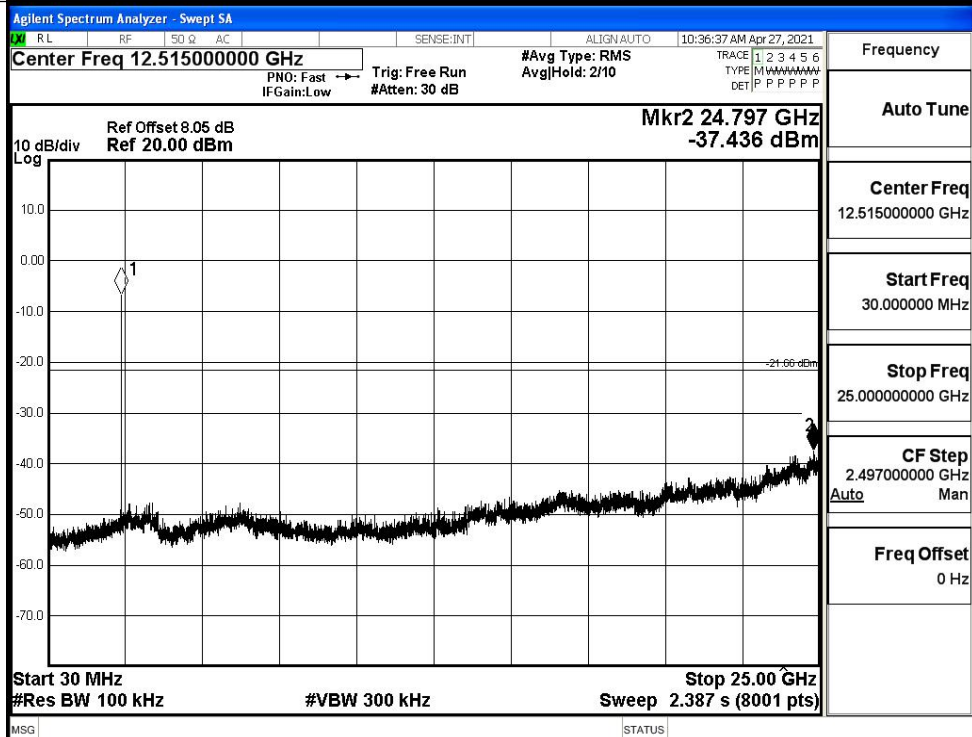


8DPSK_LCH_Graphs

Pref

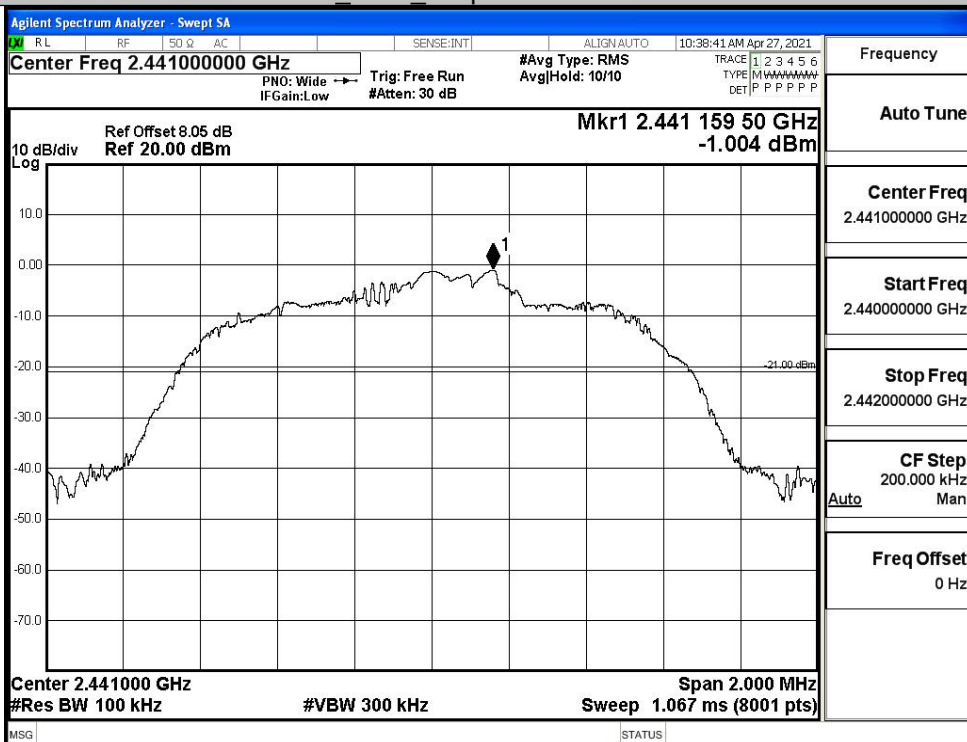


Puw

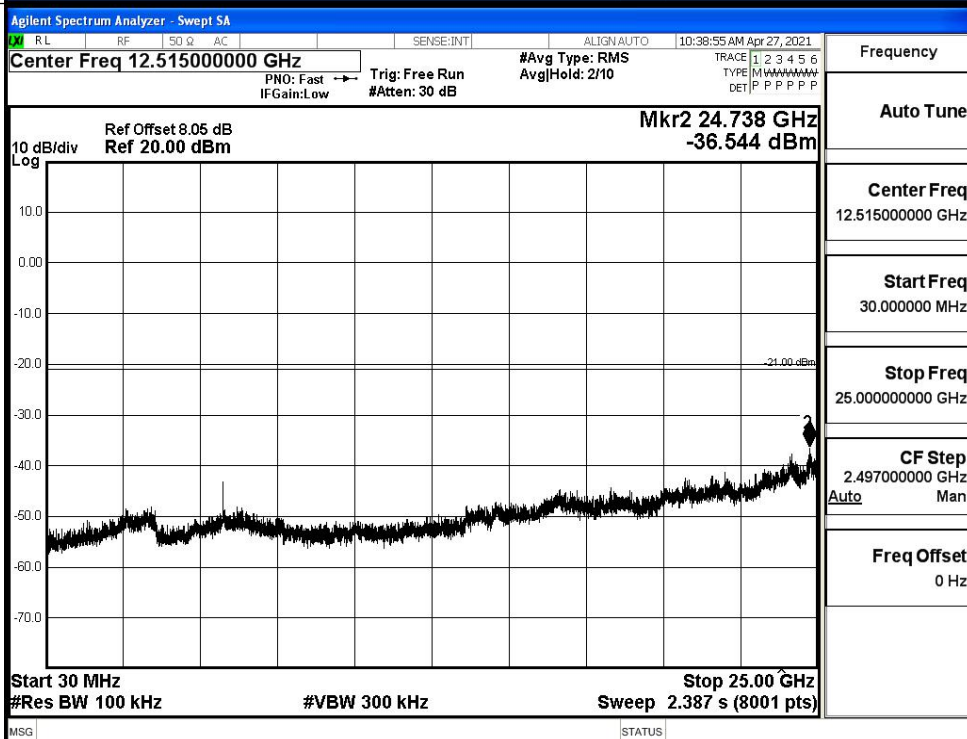


8DPSK_MCH_Graphs

Pref

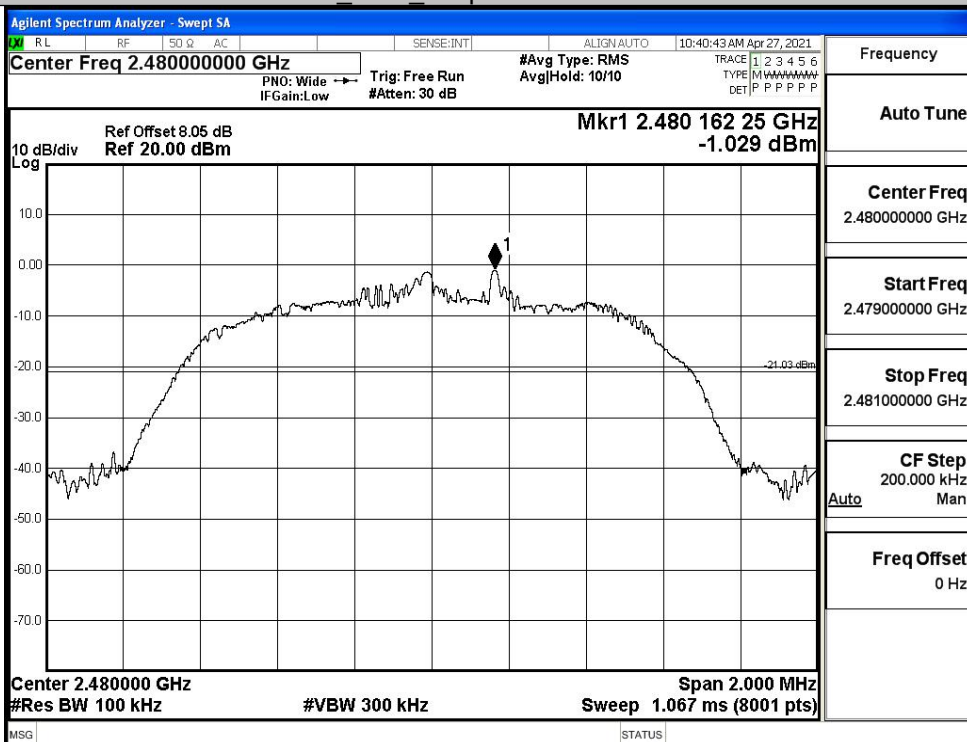


Puw

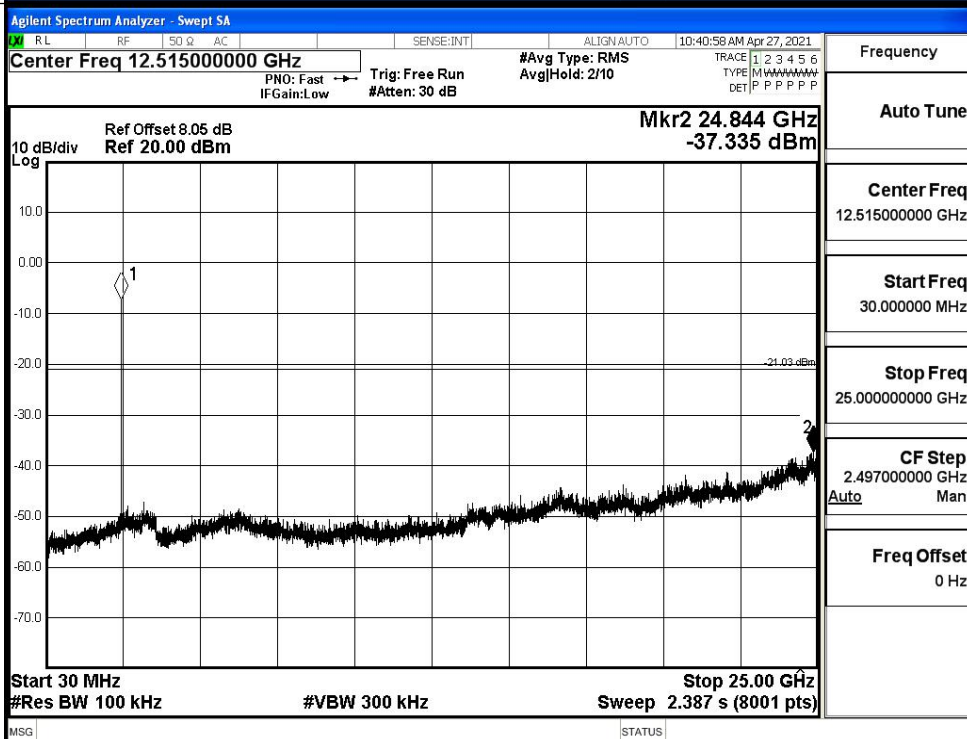


8DPSK_HCH_Graphs

Pref



Puw

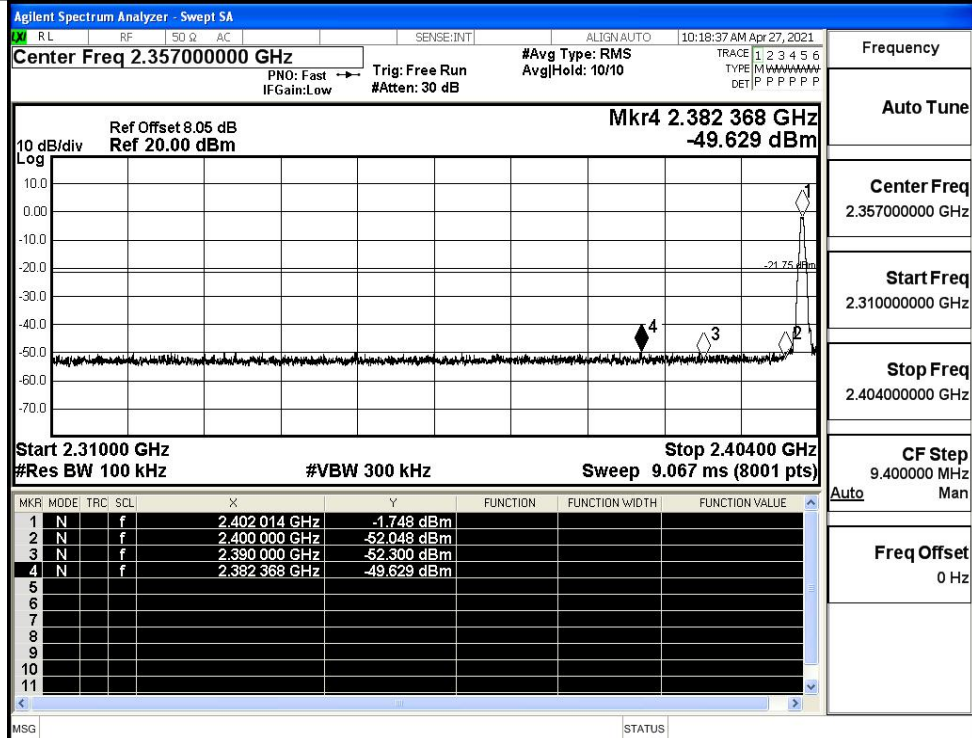


A.8 Band-edge for RF Conducted Emissions

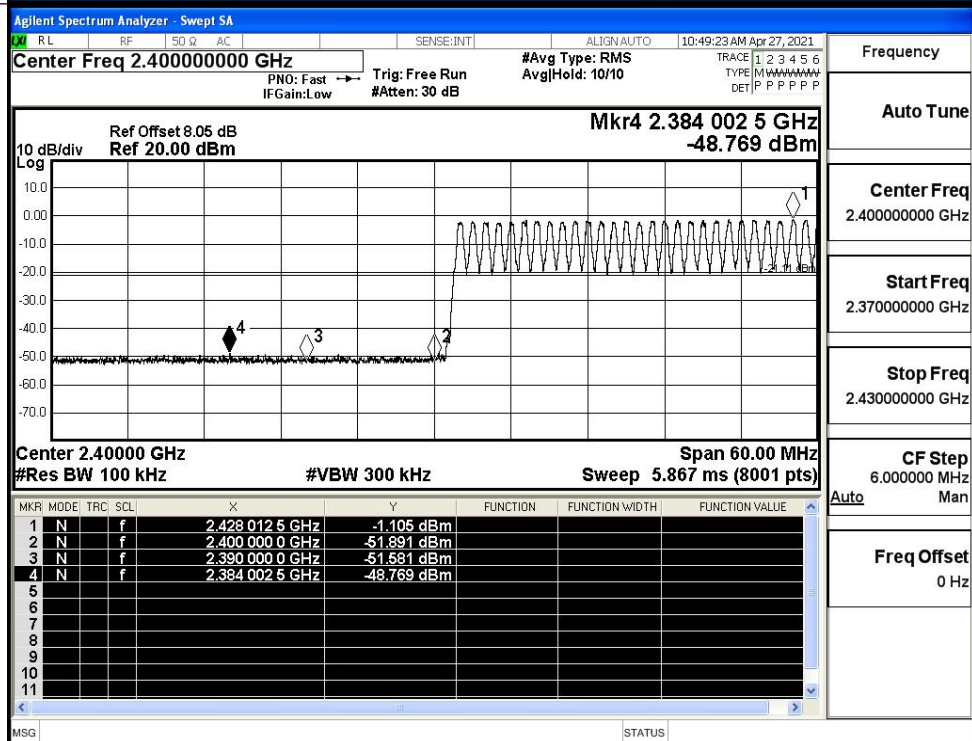
Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	-1.748	Off	-49.629	-21.75	PASS
			-1.105	On	-48.769	-21.11	PASS
	HCH	2480	-0.828	Off	-48.542	-20.83	PASS
			-0.868	On	-48.751	-20.87	PASS
$\pi/4$ DQPSK	LCH	2402	-6.346	Off	-49.413	-26.35	PASS
			-0.961	On	-49.207	-20.96	PASS
	HCH	2480	-0.767	Off	-49.233	-20.77	PASS
			-0.703	On	-48.682	-20.7	PASS
8DPSK	LCH	2402	-1.460	Off	-49.883	-21.46	PASS
			-1.275	On	-48.502	-21.28	PASS
	HCH	2480	-0.783	Off	-49.227	-20.78	PASS
			-0.772	On	-48.026	-20.77	PASS

Test Graphs

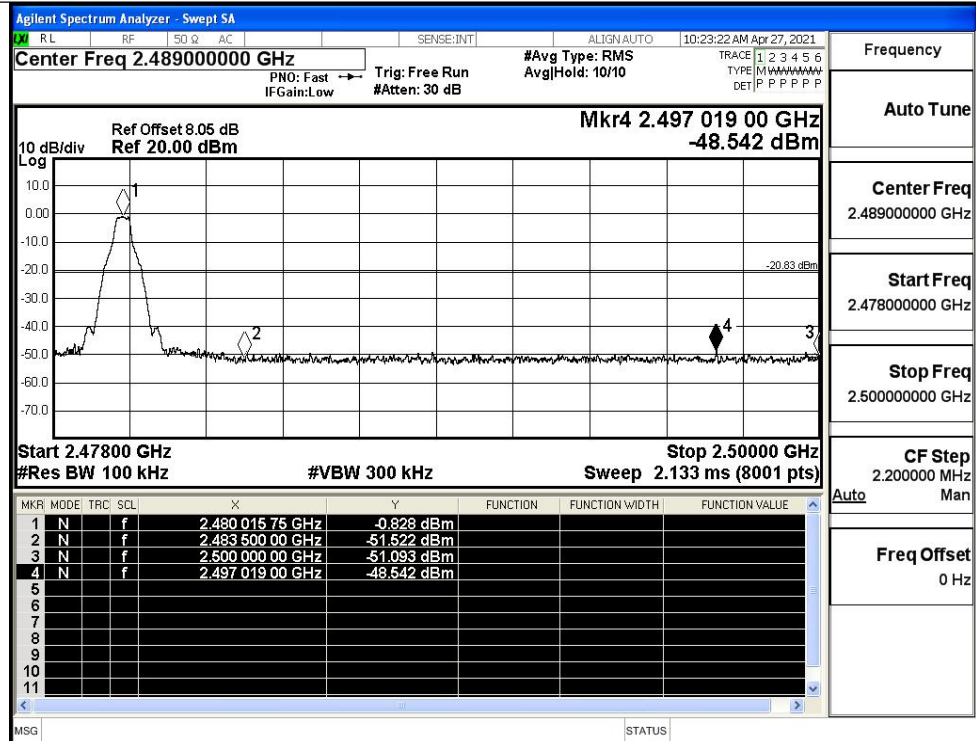
GFSK/LCH/No Hop



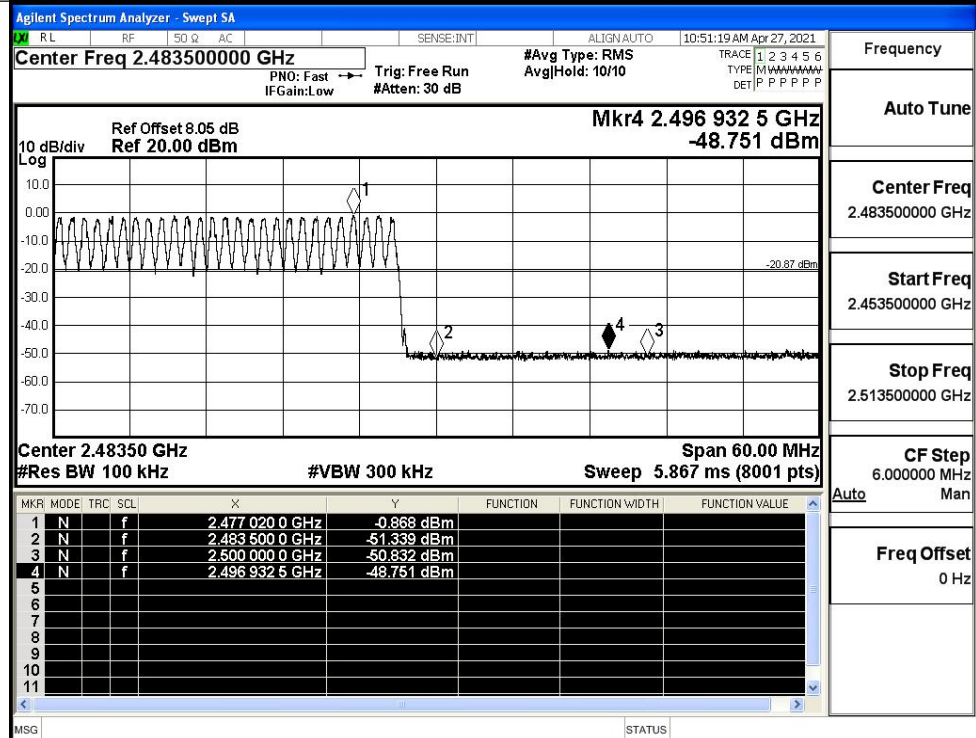
GFSK/LCH/Hop



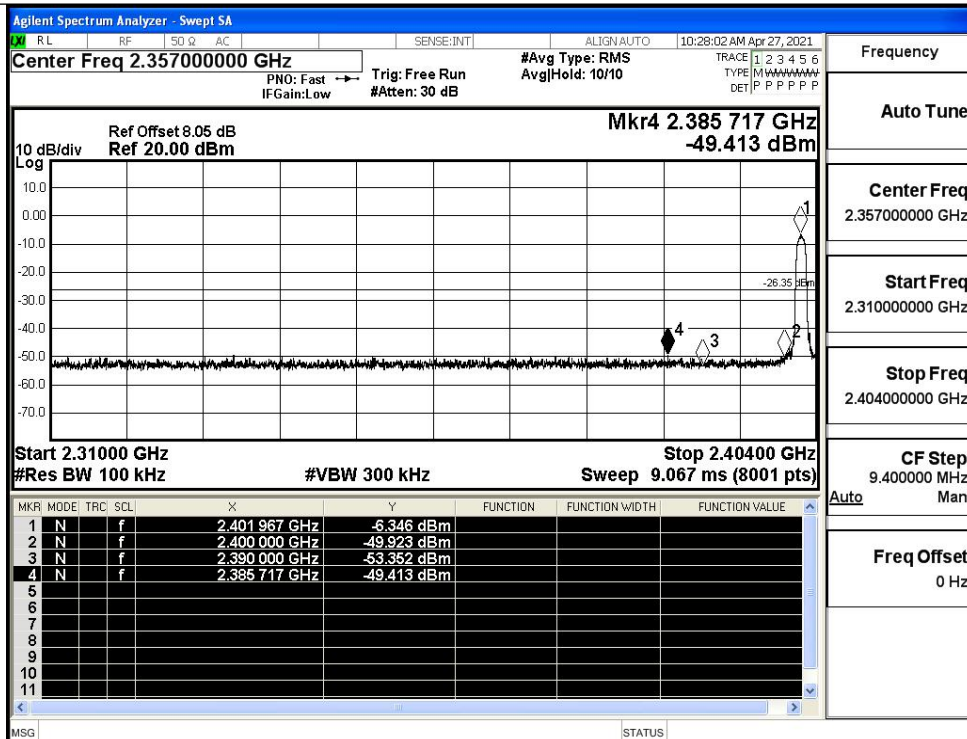
GFSK/HCH/No Hop



GFSK/HCH/Hop



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



Frequency

Auto Tune

Center Freq
2.357000000 GHz

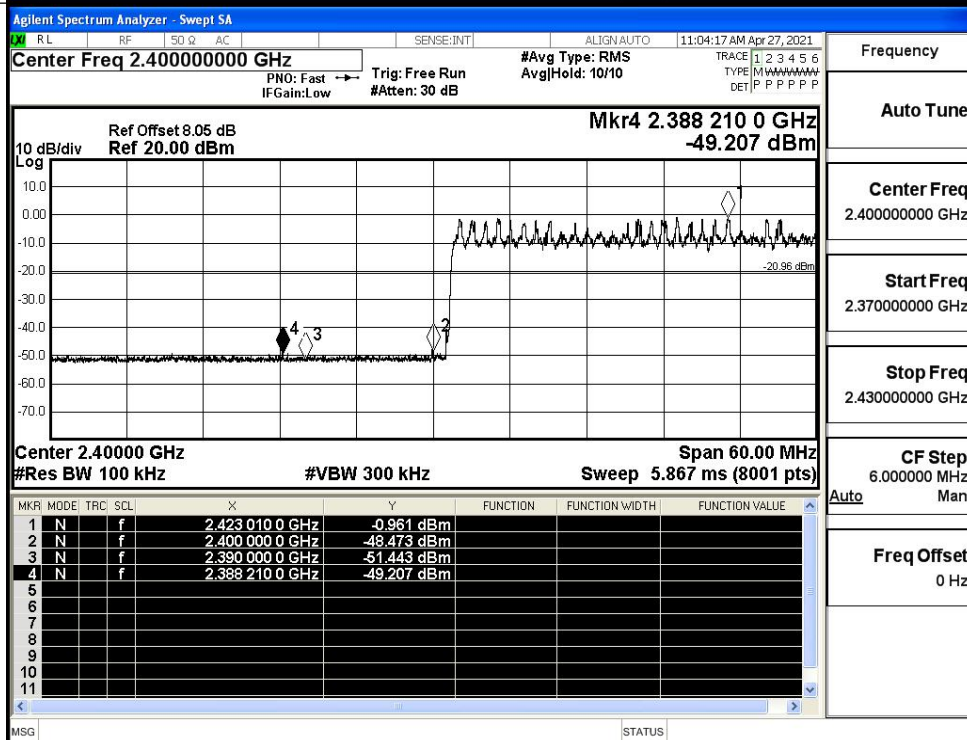
Start Freq
2.310000000 GHz

Stop Freq
2.404000000 GHz

CF Step
9.400000 MHz
Auto Man

Freq Offset
0 Hz

$\pi/4$ DQPSK/LCH/Hop



Frequency

Auto Tune

Center Freq
2.400000000 GHz

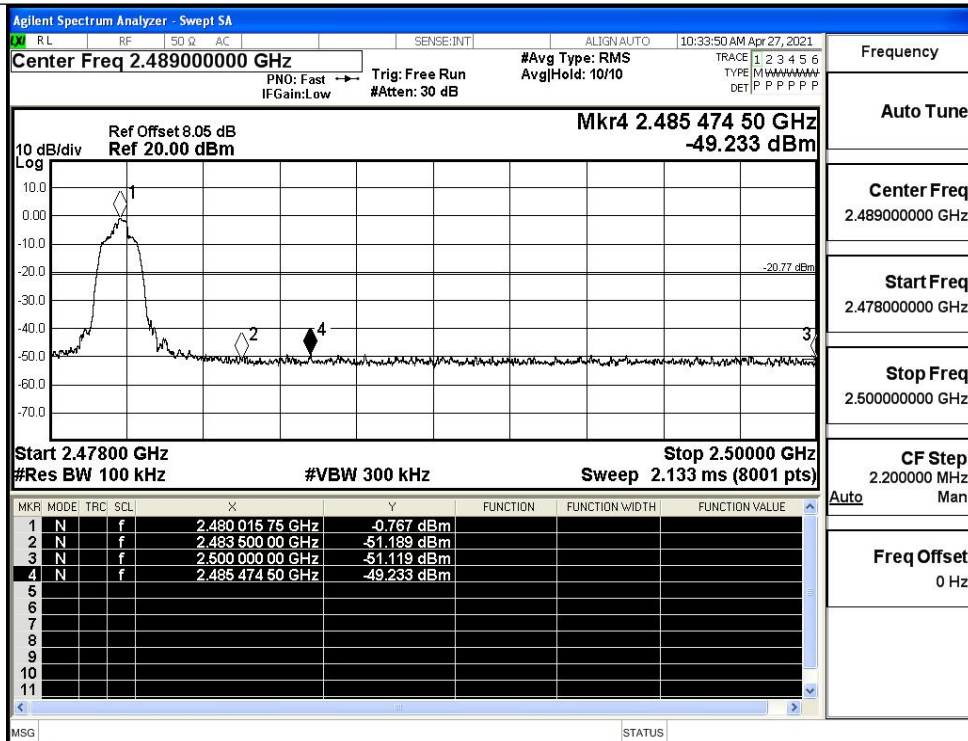
Start Freq
2.370000000 GHz

Stop Freq
2.430000000 GHz

CF Step
6.000000 MHz
Auto Man

Freq Offset
0 Hz

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

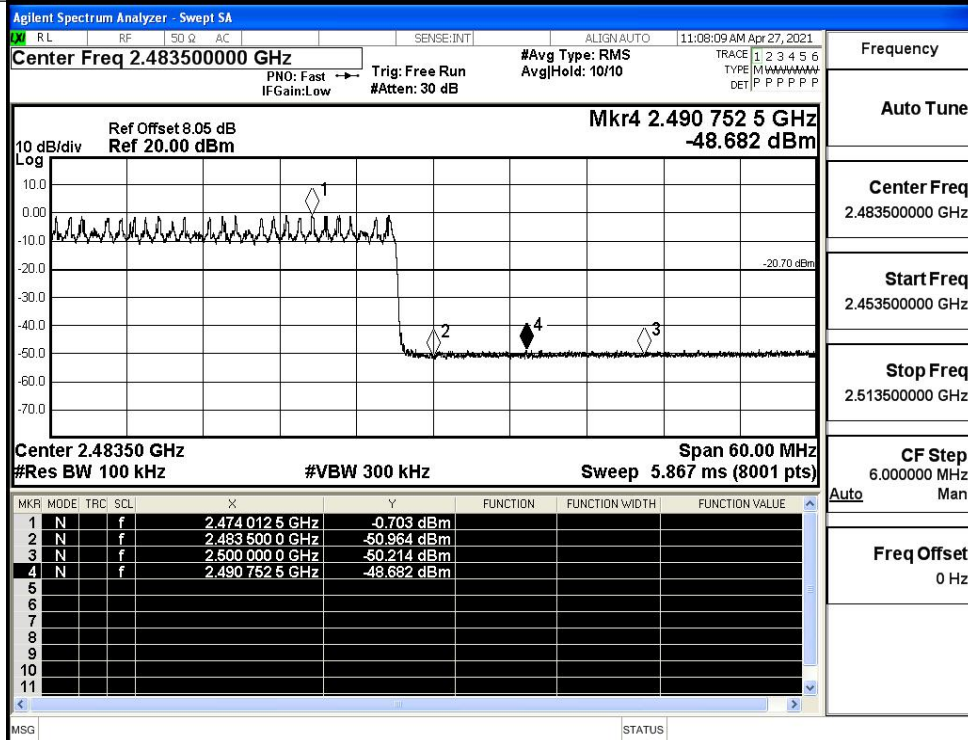


Frequency

Auto Tune

Center Freq
2.489000000 GHzStart Freq
2.478000000 GHzStop Freq
2.500000000 GHzCF Step
2.200000 MHz
Auto ManFreq Offset
0 Hz

$\pi/4$ DQPSK/HCH/Hop

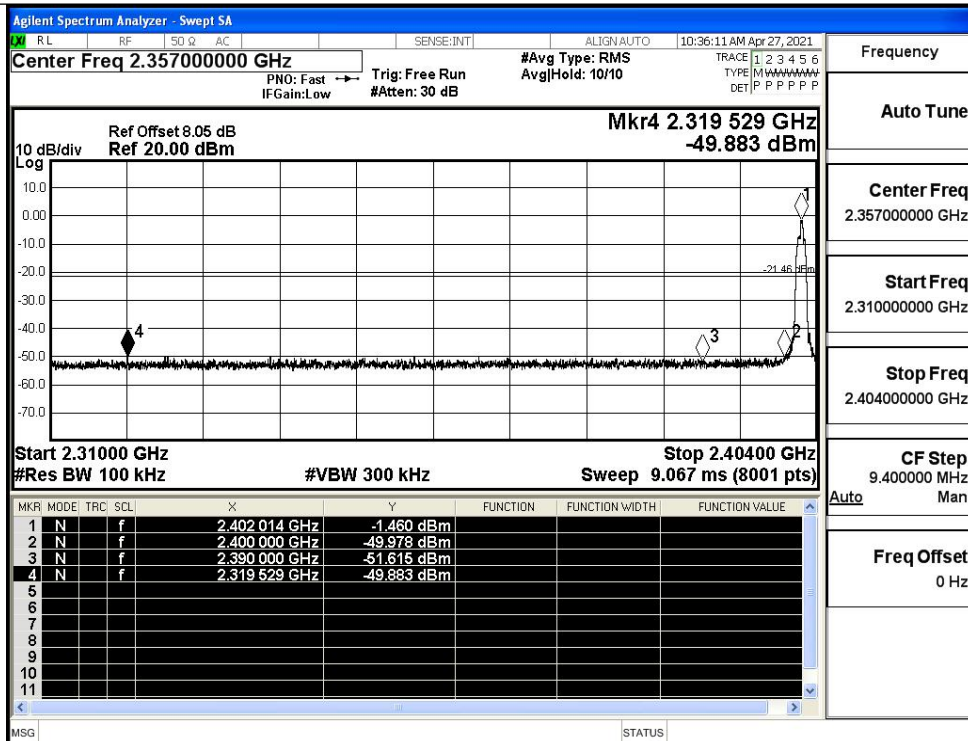


Frequency

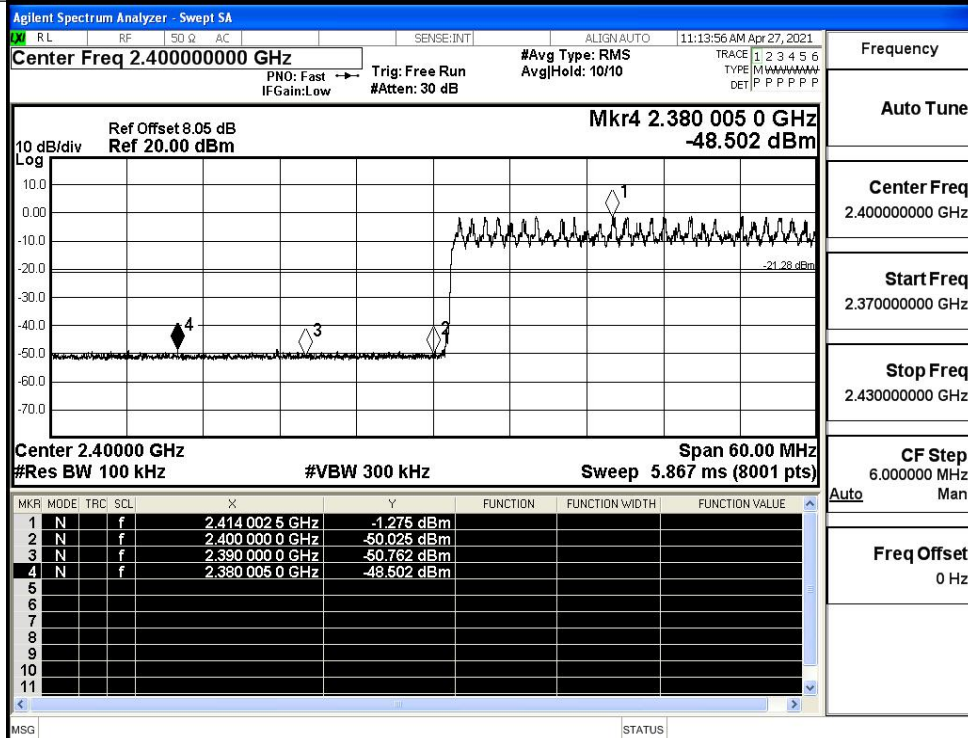
Auto Tune

Center Freq
2.483500000 GHzStart Freq
2.453500000 GHzStop Freq
2.513500000 GHzCF Step
6.000000 MHz
Auto ManFreq Offset
0 Hz

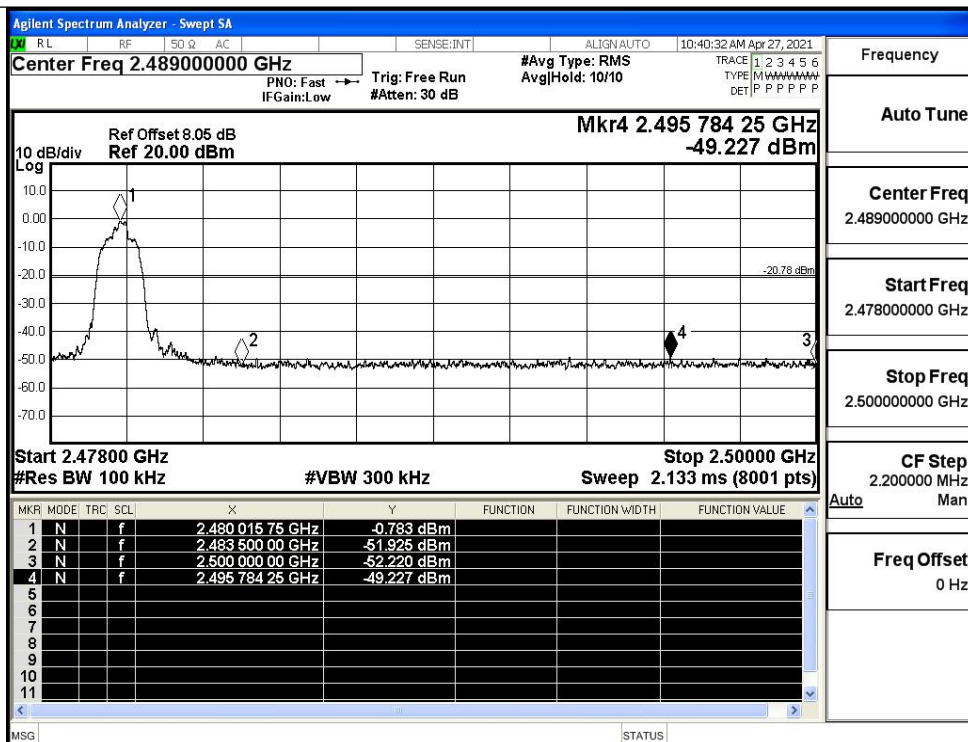
8DPSK/LCH/No Hop



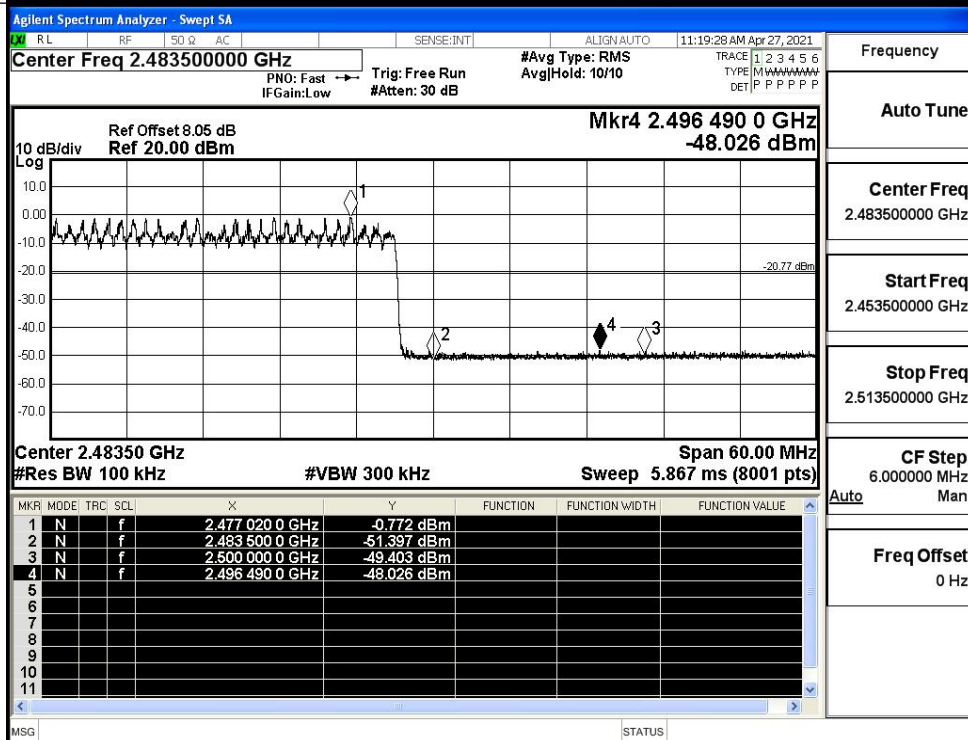
8DPSK/LCH/Hop



8DPSK/HCH/No Hop



8DPSK/HCH/Hop



A.9 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	-41.24	2.0	0	56.02	PEAK	74	PASS
	Off	2310.0	-53.32	2.0	0	43.94	AV	54	PASS
	Off	2390.0	-41.88	2.0	0	55.38	PEAK	74	PASS
	Off	2390.0	-52.89	2.0	0	44.37	AV	54	PASS
	Off	2483.5	-43.08	2.0	0	54.18	PEAK	74	PASS
	Off	2483.5	-51.85	2.0	0	45.41	AV	54	PASS
	Off	2500.0	-41.35	2.0	0	55.91	PEAK	74	PASS
	Off	2500.0	-52.22	2.0	0	45.04	AV	54	PASS
$\pi/4$ DQPSK	Off	2310.0	-43.25	2.0	0	54.00	PEAK	74	PASS
	Off	2310.0	-53.30	2.0	0	43.95	AV	54	PASS
	Off	2390.0	-42.80	2.0	0	54.46	PEAK	74	PASS
	Off	2390.0	-52.98	2.0	0	44.27	AV	54	PASS
	Off	2483.5	-40.96	2.0	0	56.30	PEAK	74	PASS
	Off	2483.5	-51.87	2.0	0	45.39	AV	54	PASS
	Off	2500.0	-40.43	2.0	0	56.83	PEAK	74	PASS
	Off	2500.0	-52.26	2.0	0	44.99	AV	54	PASS
8DPSK	Off	2310.0	-42.95	2.0	0	54.31	PEAK	74	PASS
	Off	2310.0	-53.43	2.0	0	43.83	AV	54	PASS
	Off	2390.0	-41.94	2.0	0	55.32	PEAK	74	PASS
	Off	2390.0	-52.94	2.0	0	44.32	AV	54	PASS
	Off	2483.5	-41.44	2.0	0	55.82	PEAK	74	PASS
	Off	2483.5	-51.94	2.0	0	45.31	AV	54	PASS
	Off	2500.0	-41.42	2.0	0	55.84	PEAK	74	PASS
	Off	2500.0	-52.26	2.0	0	45.00	AV	54	PASS