

Appendix A

RF Test Data for BT V5.0(BDR/EDR) (Conducted Measurement)

Product Name: Bluetooth speaker with wireless charger

Trade Mark: N/A

Test Model: B86

Environmental Conditions

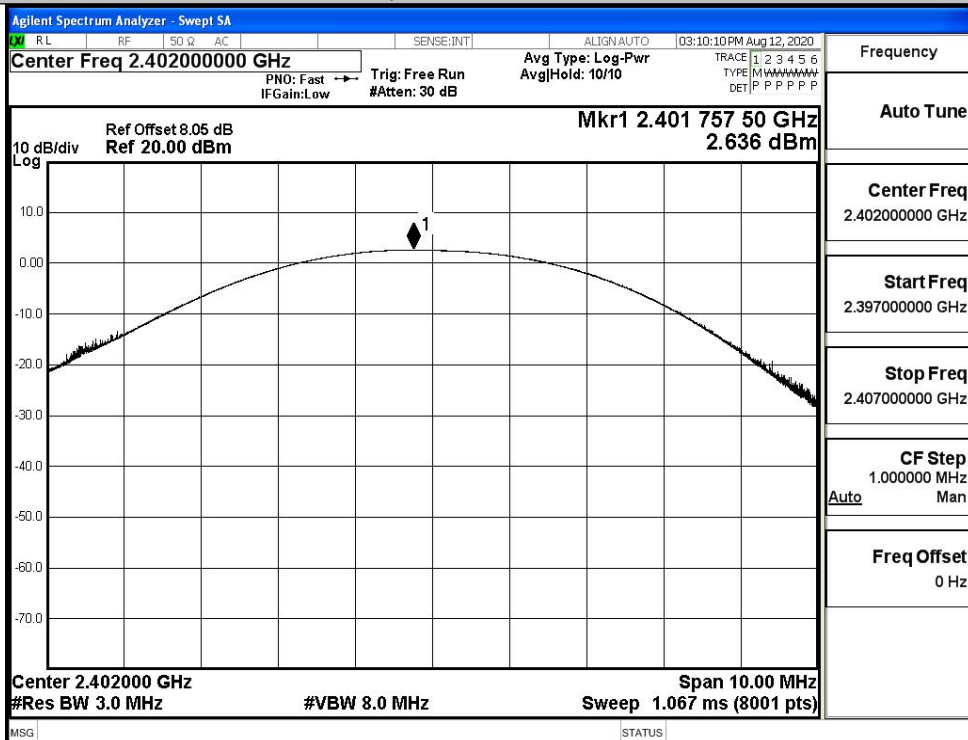
Temperature:	24.6° C
Relative Humidity:	54.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond Lu
Supervised by:	Li Huan

A.1 Maxmum Conducted Peak Output Power

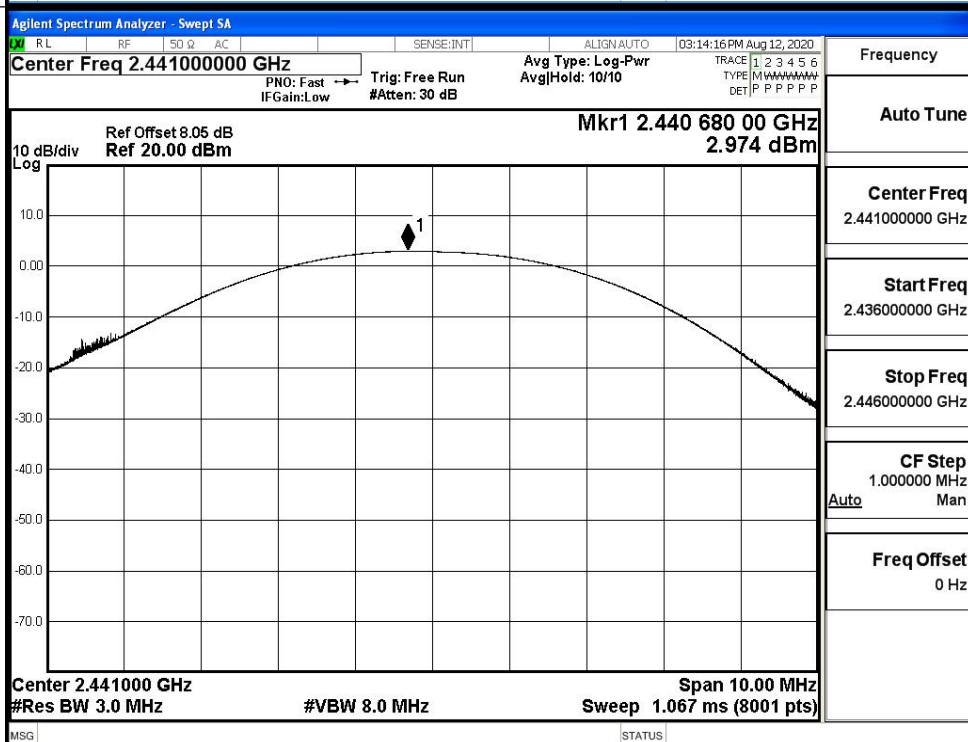
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2.636	21	PASS
	MCH	2.974	21	PASS
	HCH	3.027	21	PASS
$\pi/4$ DQPSK	LCH	3.459	21	PASS
	MCH	3.741	21	PASS
	HCH	3.686	21	PASS

Test Graphs

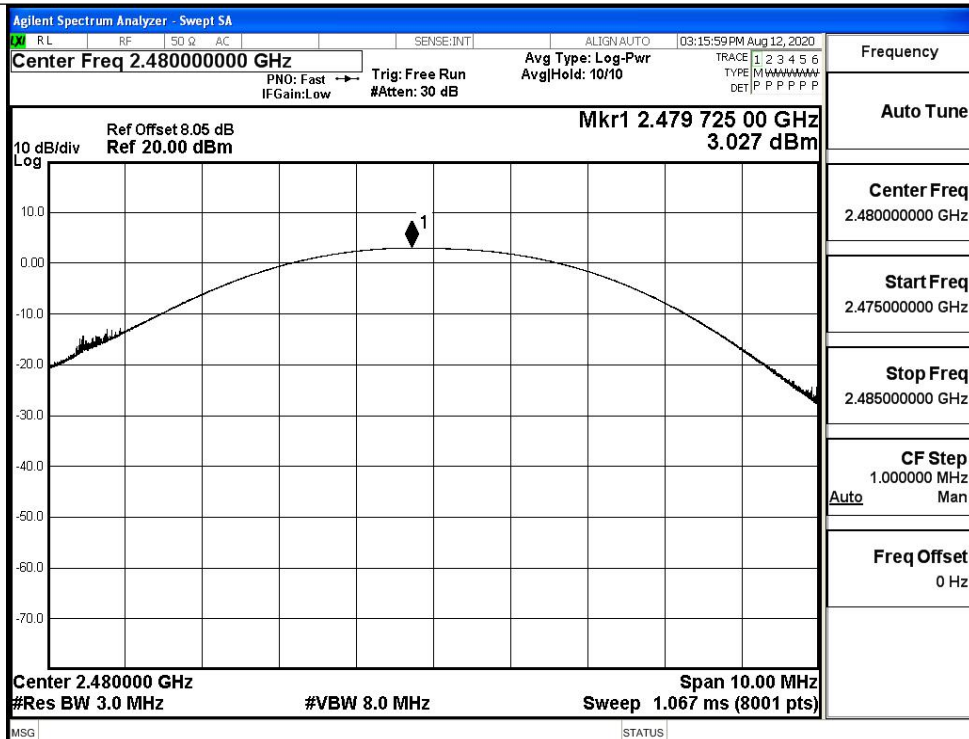
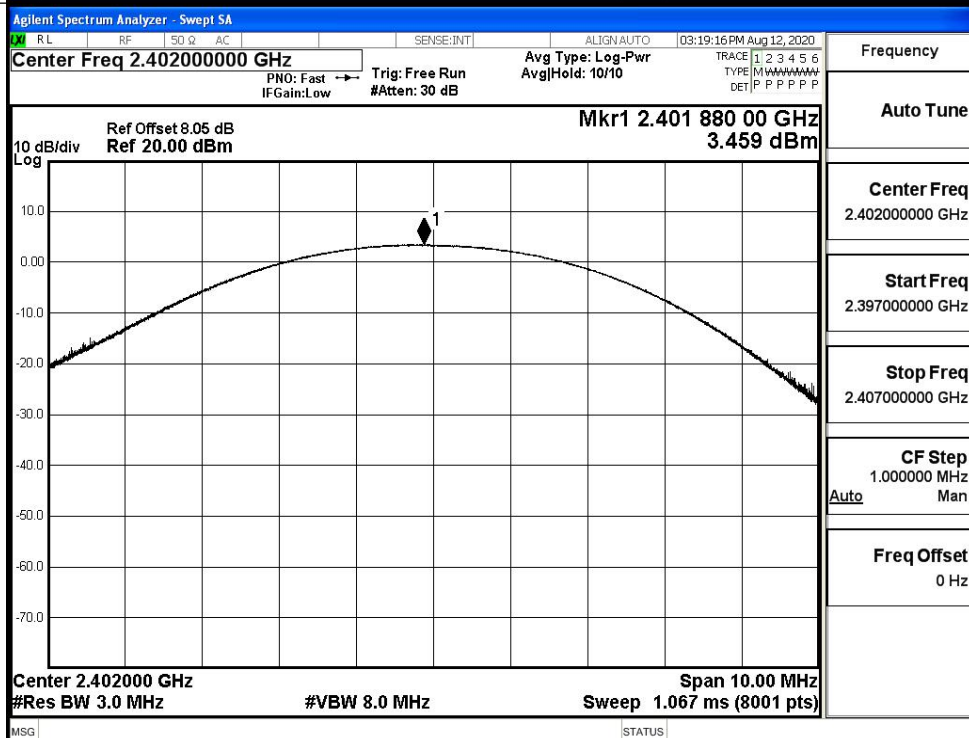
GFSK/LCH

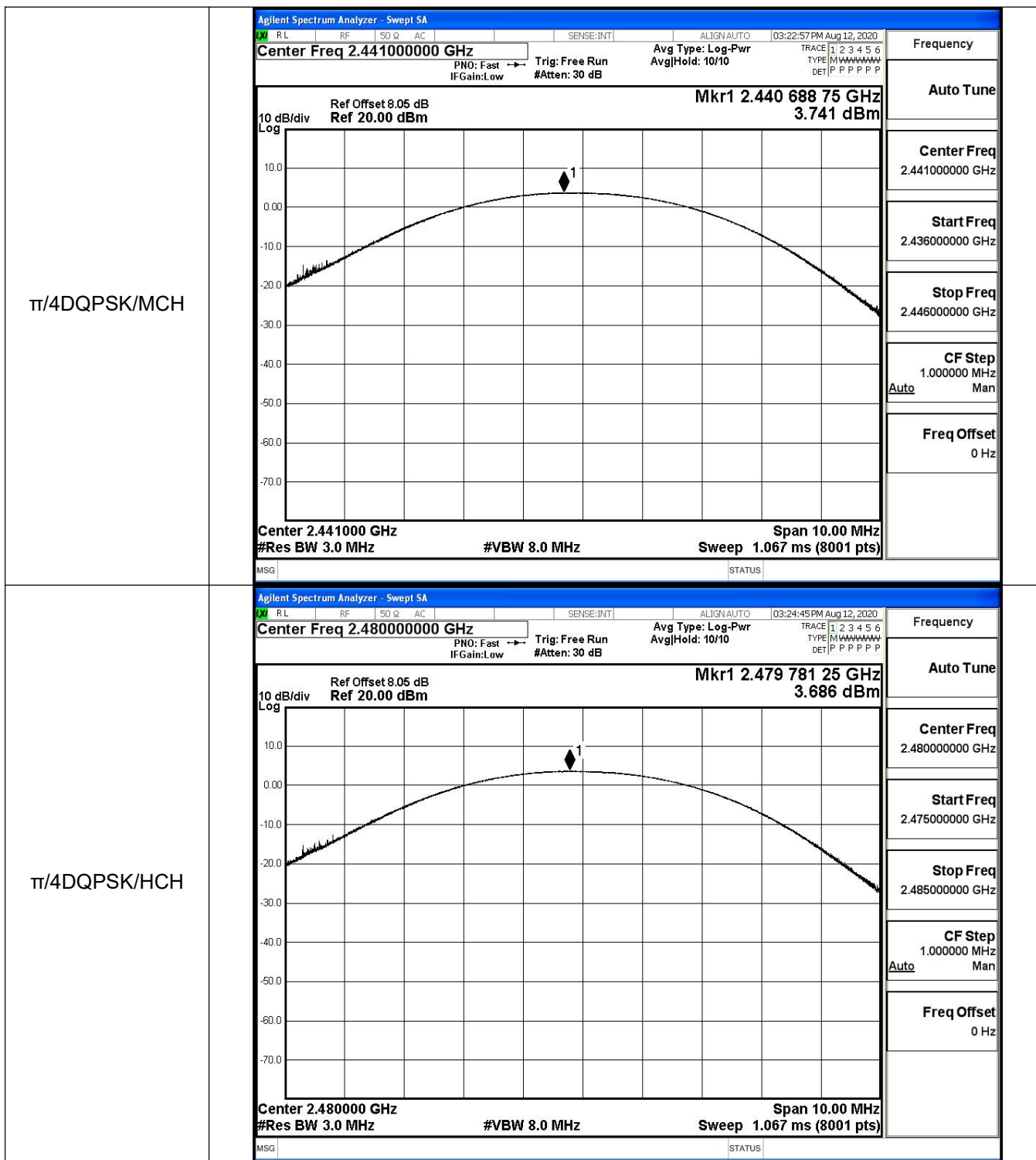


GFSK/MCH



GFSK/HCH

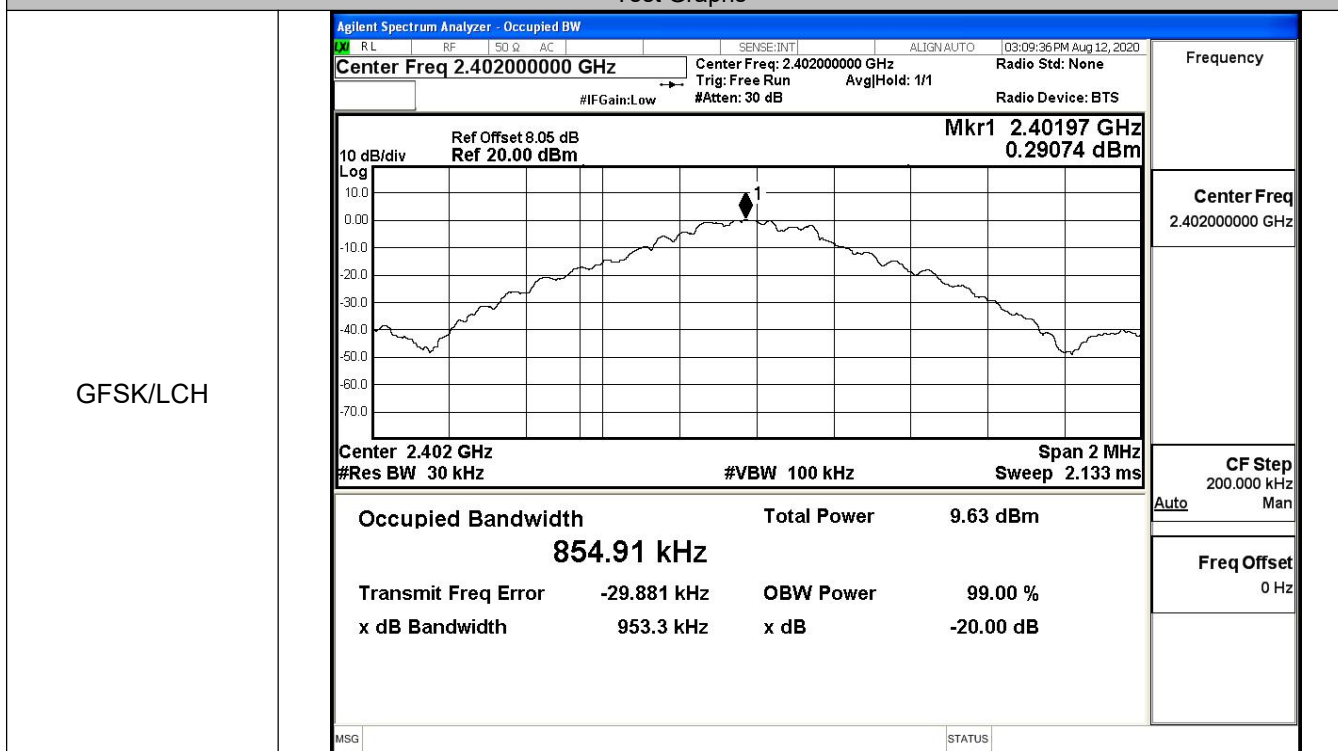
 $\pi/4$ DQPSK/LCH



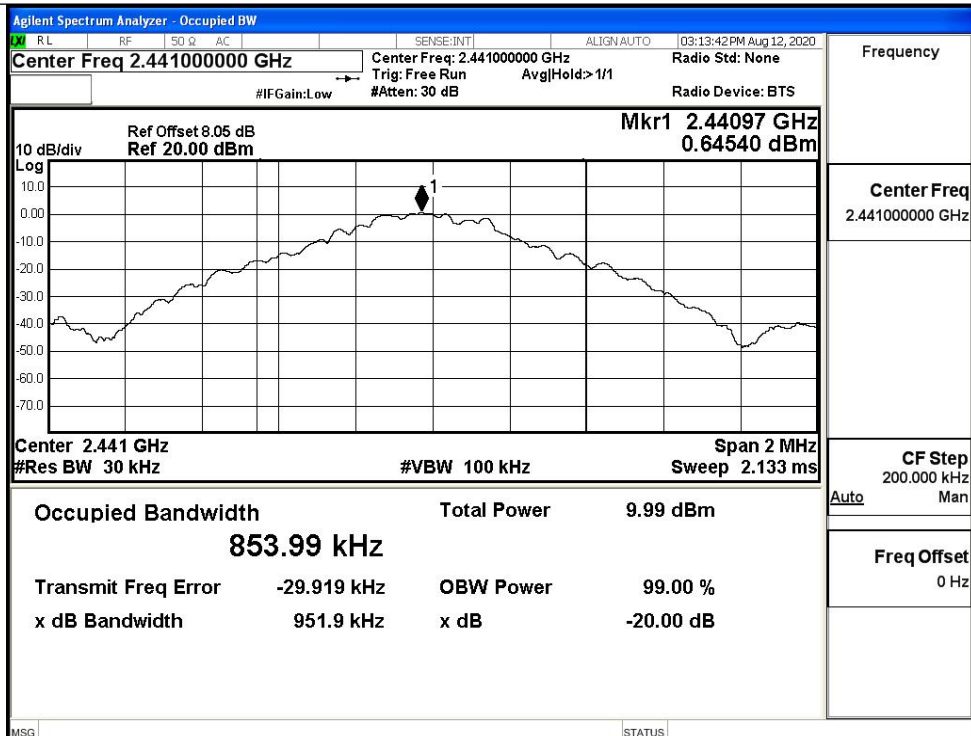
A.2 20dB Bandwidth

Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.9533	Not Specified	PASS
	MCH	0.9519	Not Specified	PASS
	HCH	0.9535	Not Specified	PASS
$\pi/4$ DQPSK	LCH	1.310	Not Specified	PASS
	MCH	1.308	Not Specified	PASS
	HCH	1.311	Not Specified	PASS

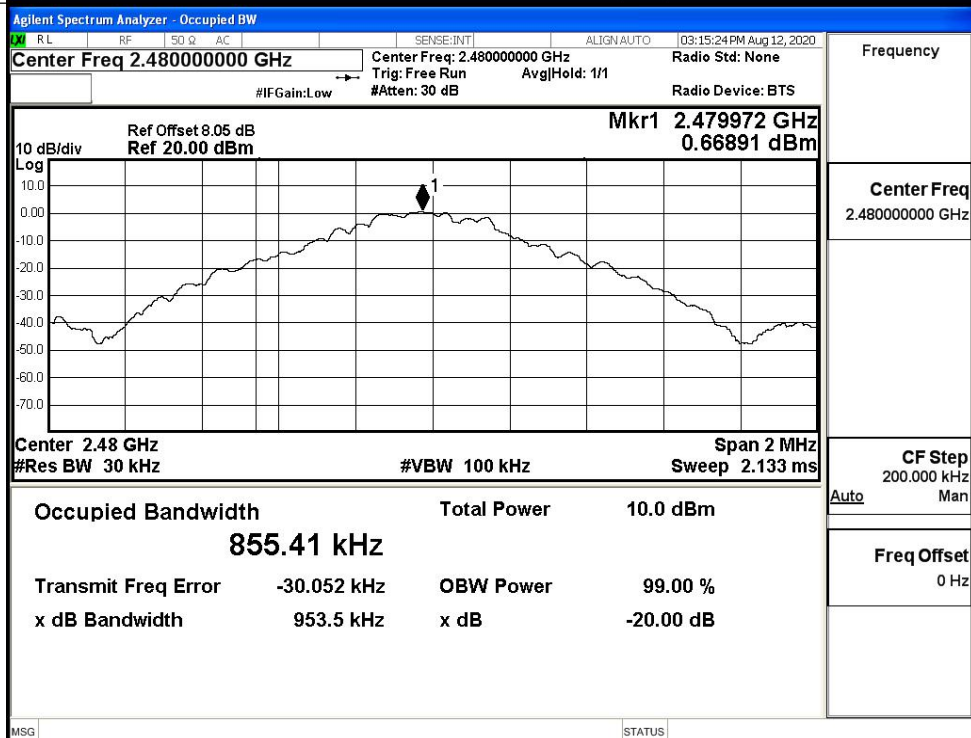
Test Graphs

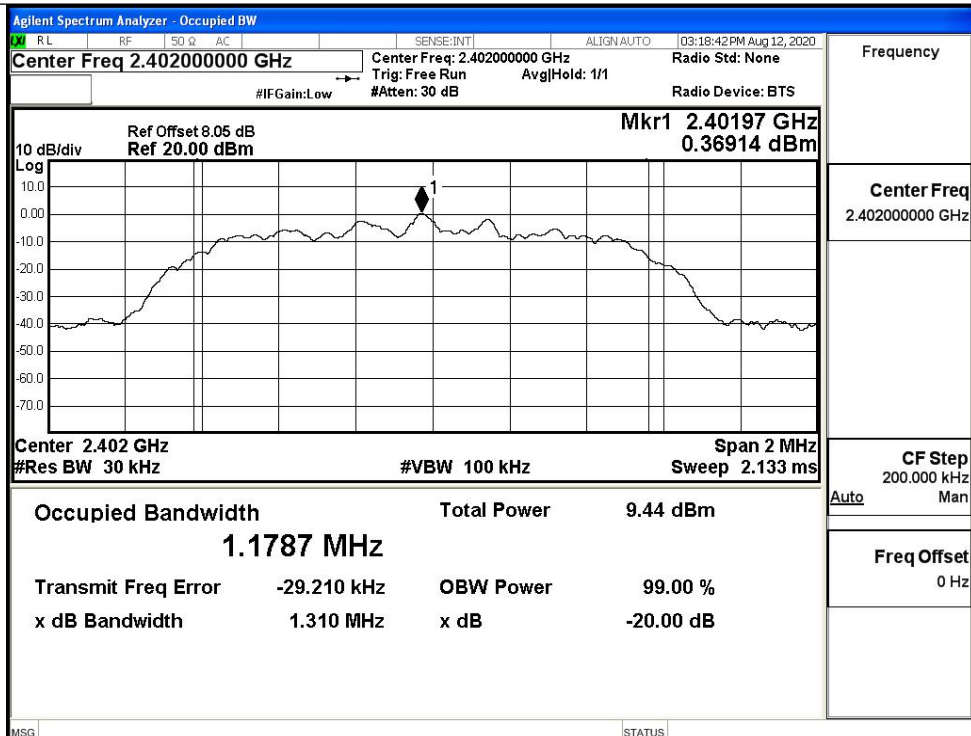
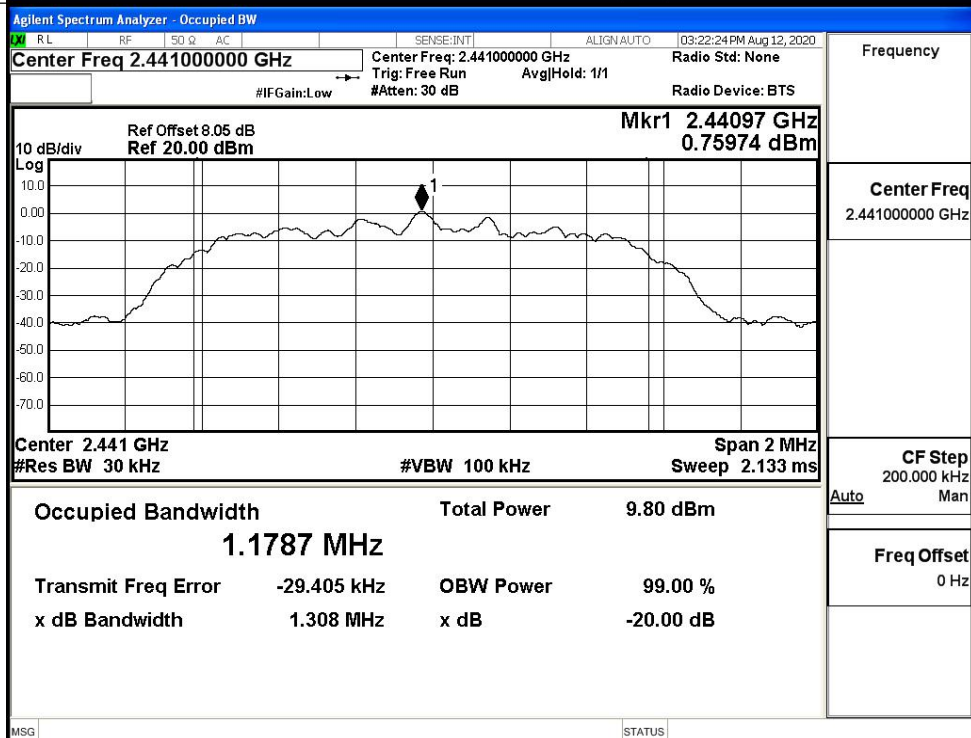


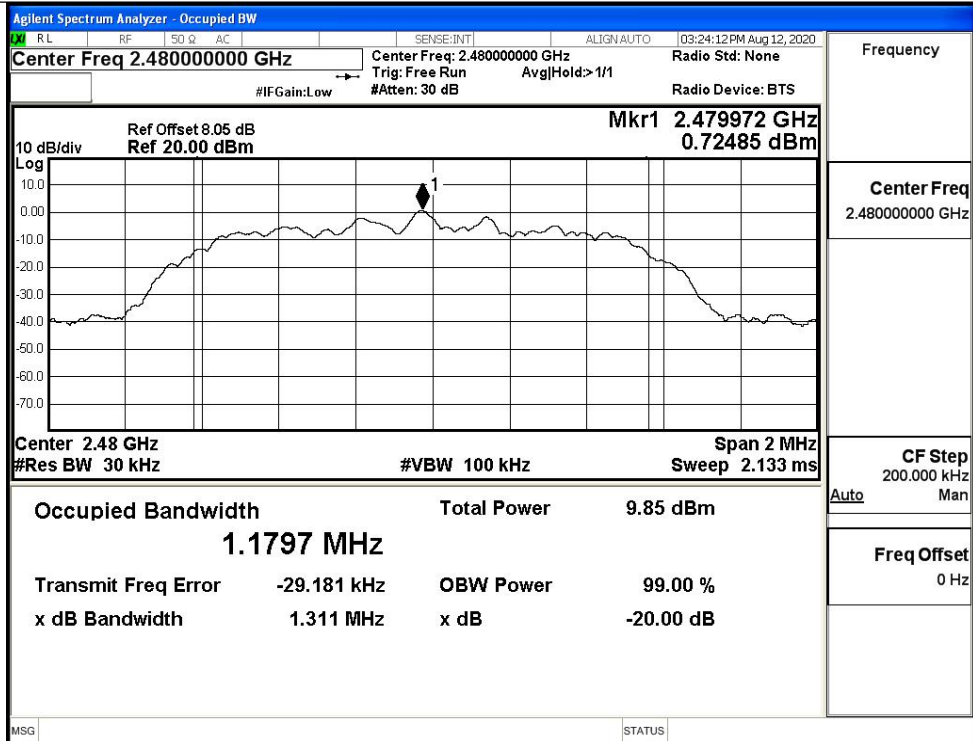
GFSK/MCH



GFSK/HCH



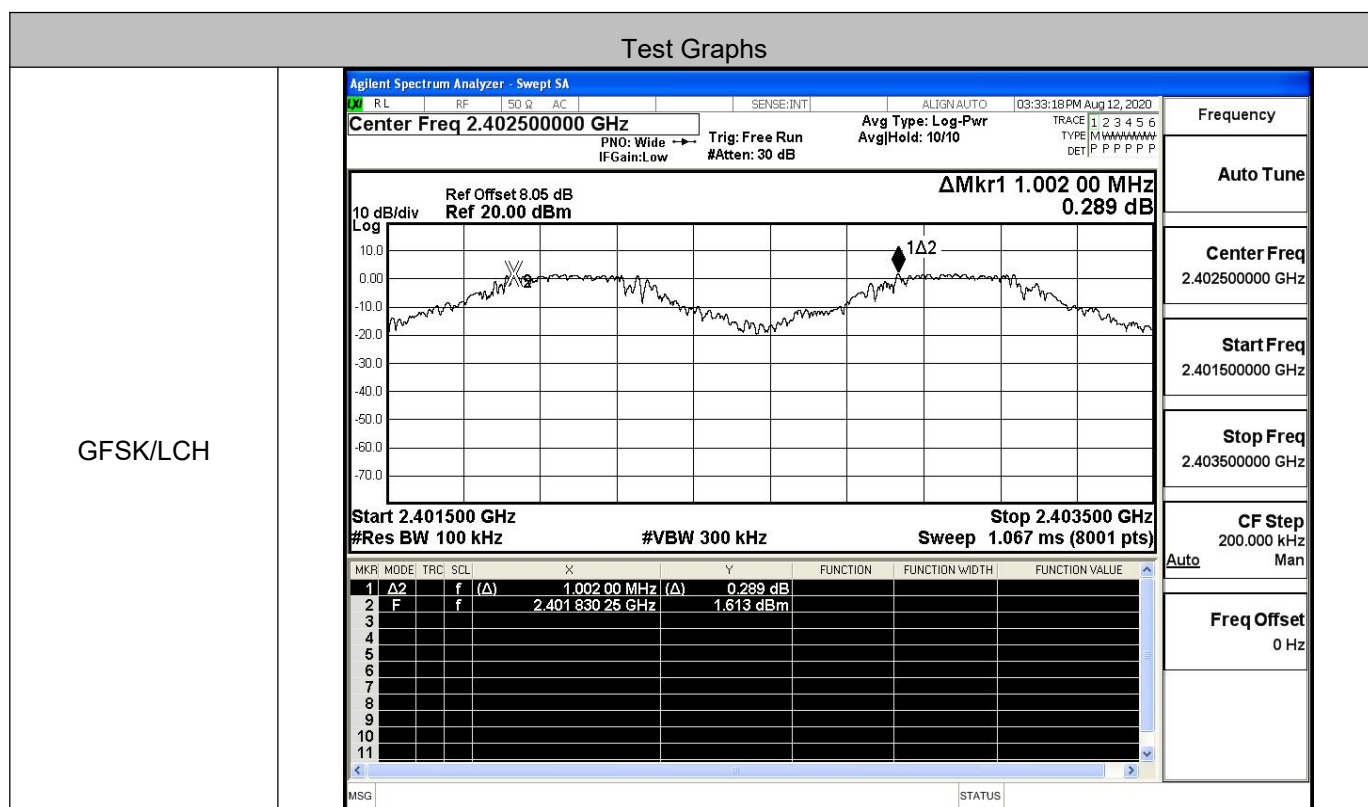
$\pi/4$ DQPSK/LCH $\pi/4$ DQPSK/MCH

$\pi/4$ DQPSK/HCH

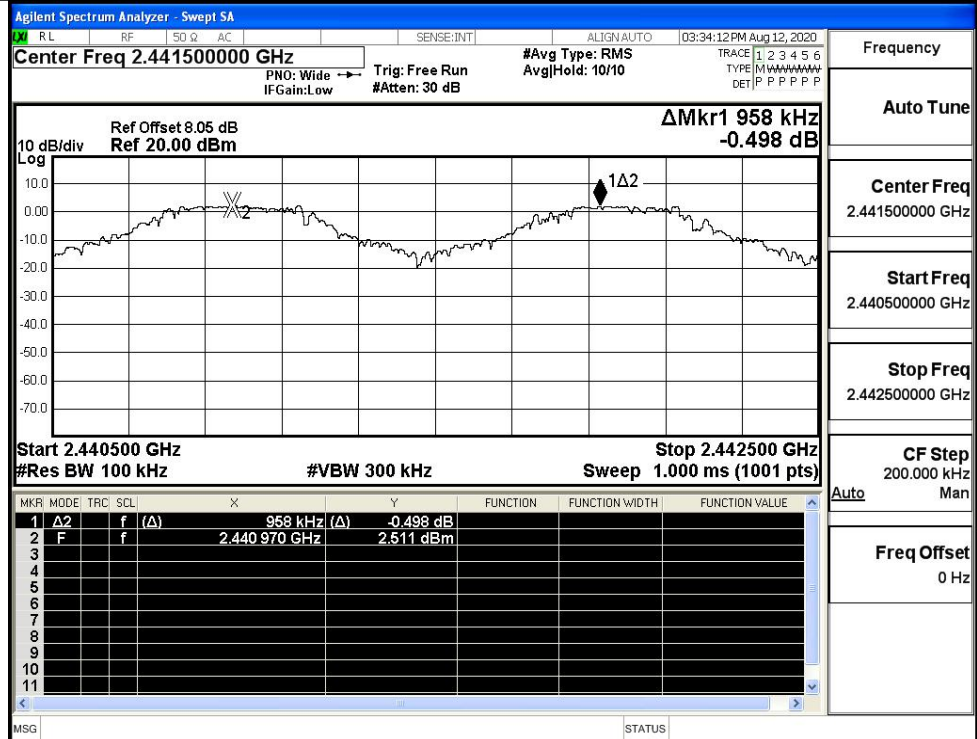
A.3 Carrier Frequency Separation

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.002	0.636	PASS
	MCH	0.958	0.636	PASS
	HCH	1.088	0.636	PASS
$\pi/4$ DQPSK	LCH	0.962	0.874	PASS
	MCH	1.148	0.874	PASS
	HCH	1.022	0.874	PASS

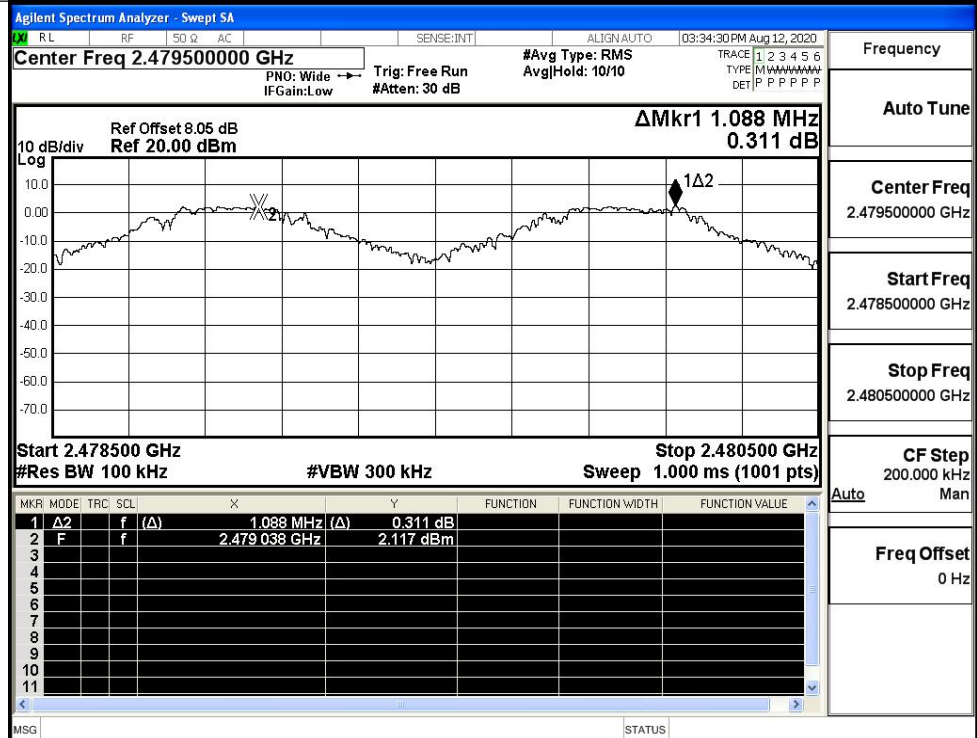
Test Graphs

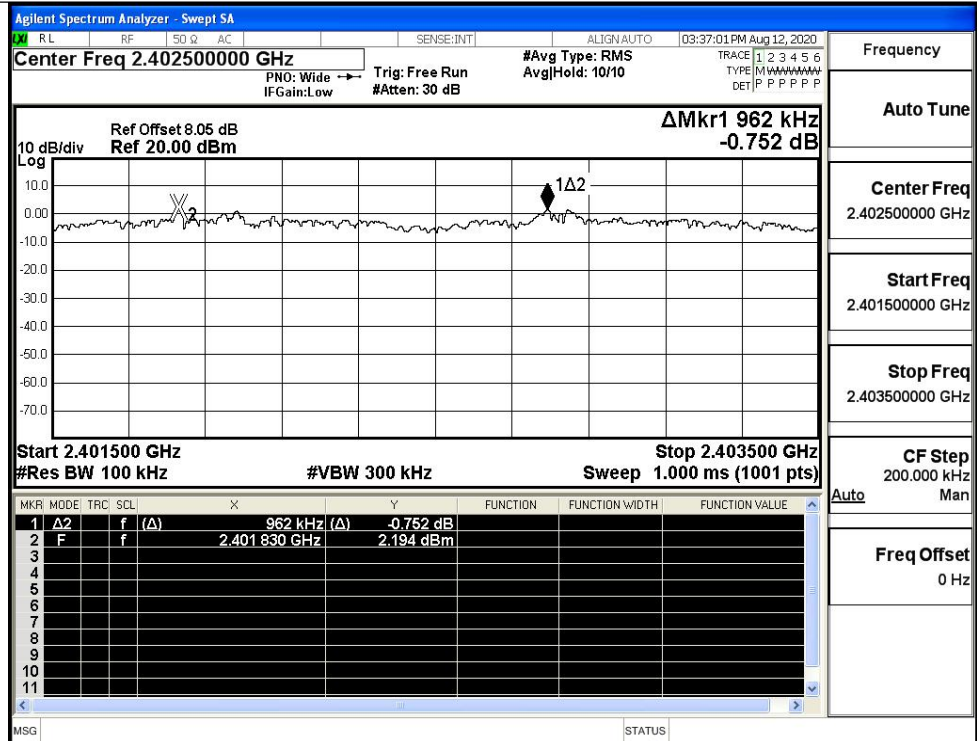
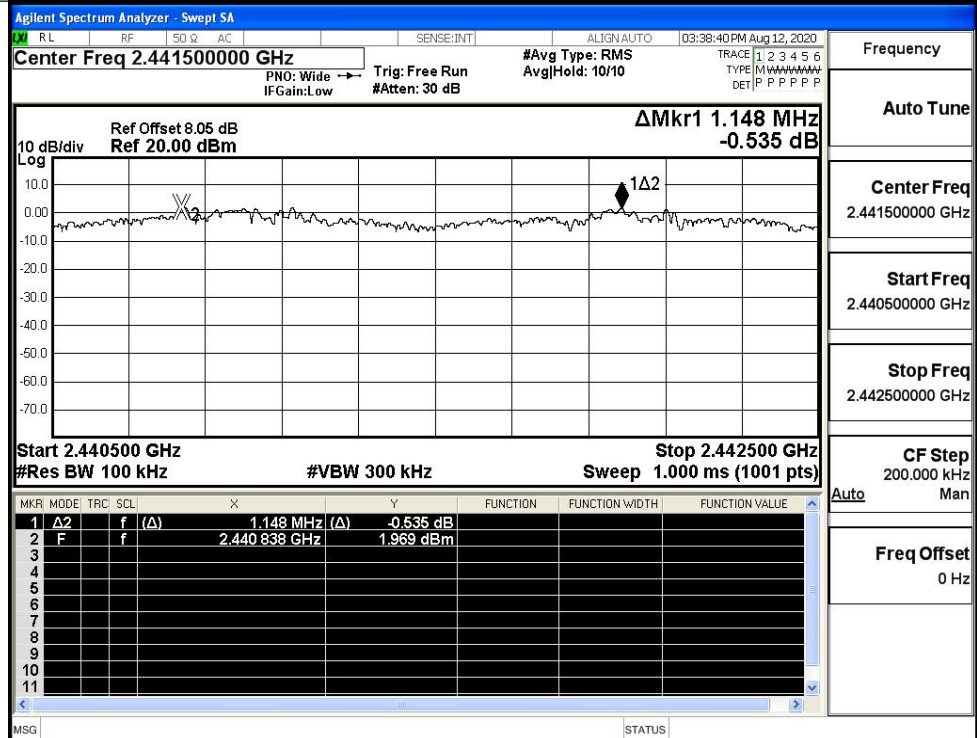


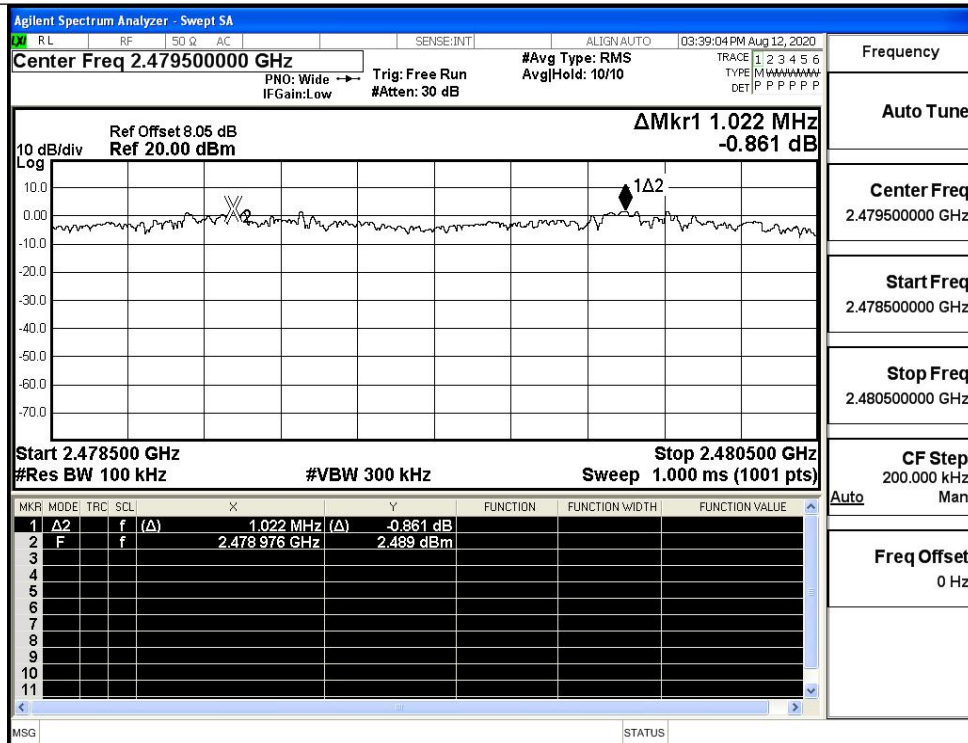
GFSK/MCH



GFSK/HCH



$\pi/4$ DQPSK/LCH $\pi/4$ DQPSK/MCH

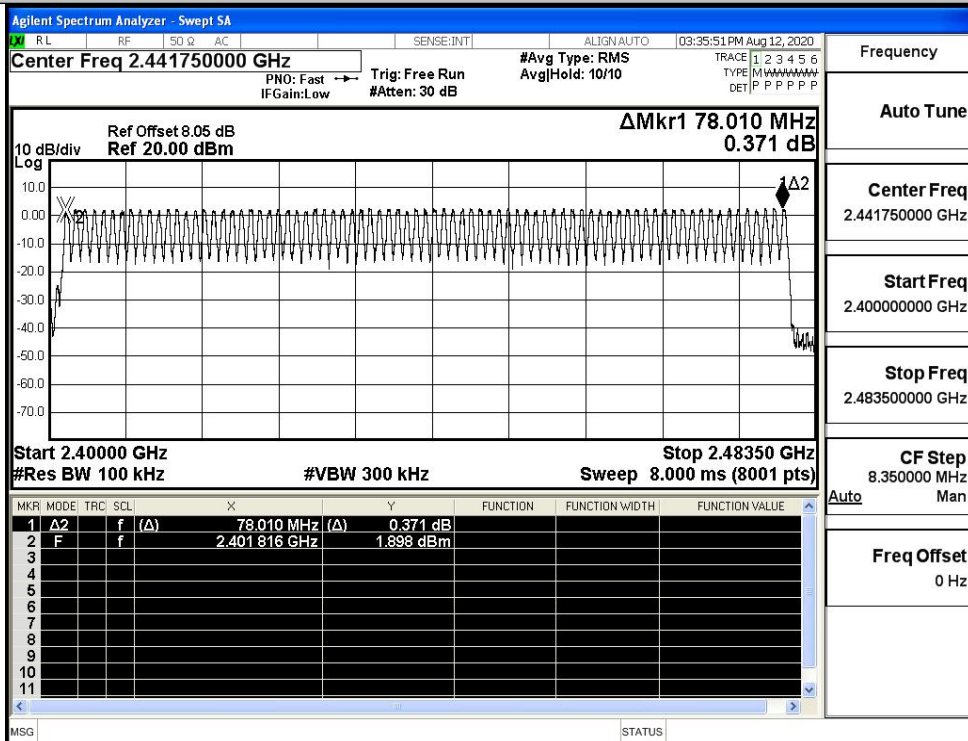
π /4DQPSK/HCH

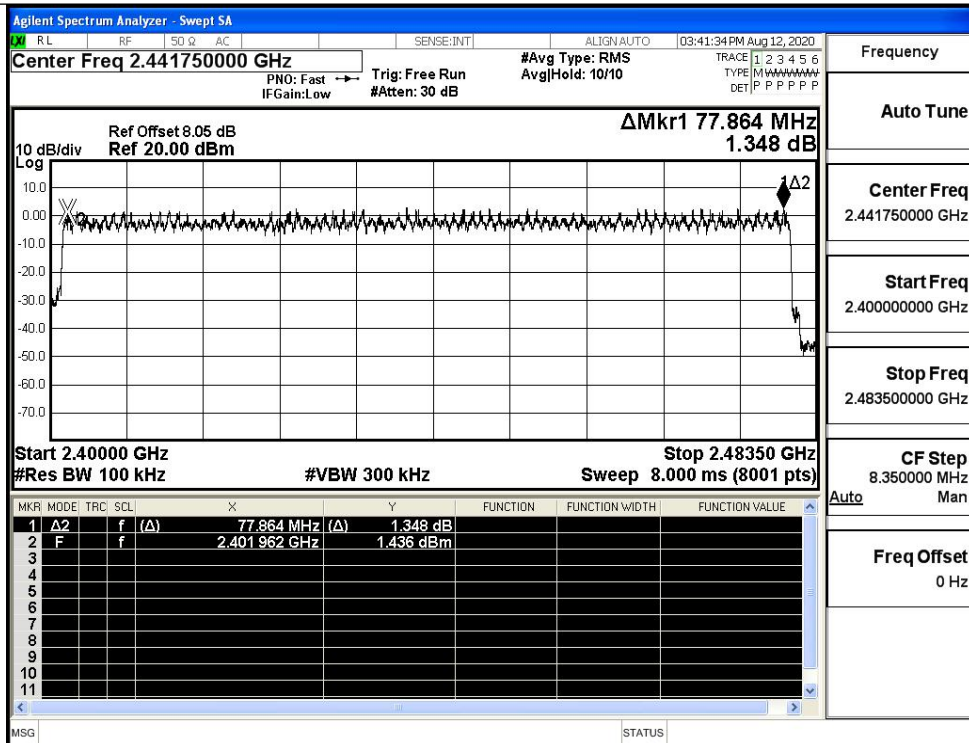
A.4 Hopping Channel Number

Mode	Channel.	Number of Hopping Channel [N]	Limit [N]	Verdict
GFSK	Hop	79	≥ 15	PASS
π /4DQPSK	Hop	79	≥ 15	PASS

Test Graphs

GFSK/Hop



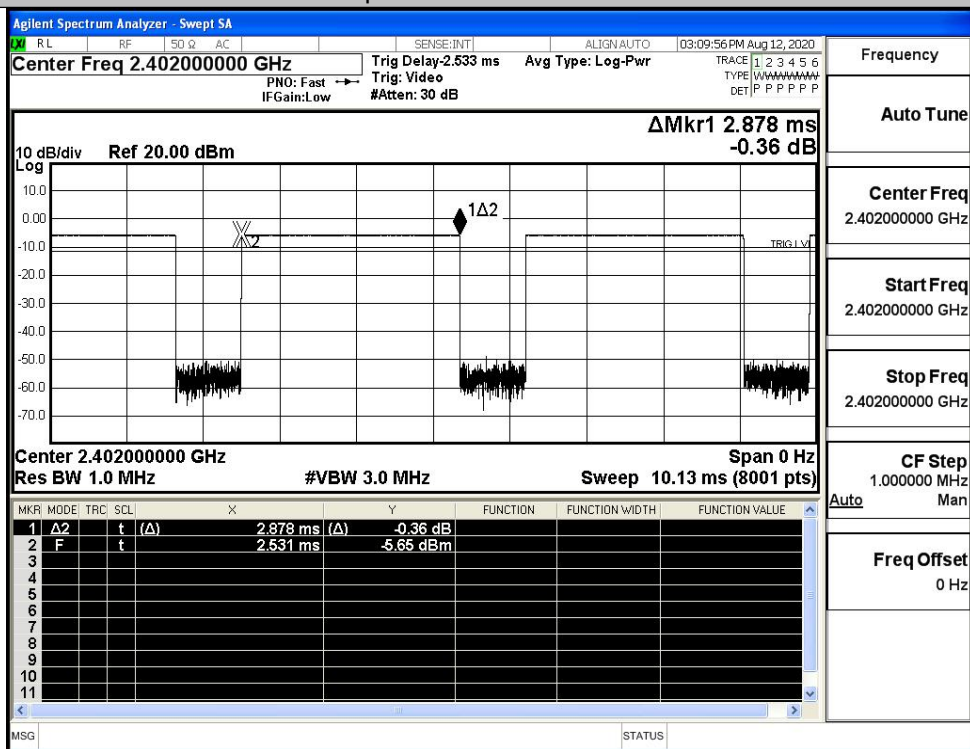
$\pi/4$ DQPSK/Hop

A.5 Dwell Time

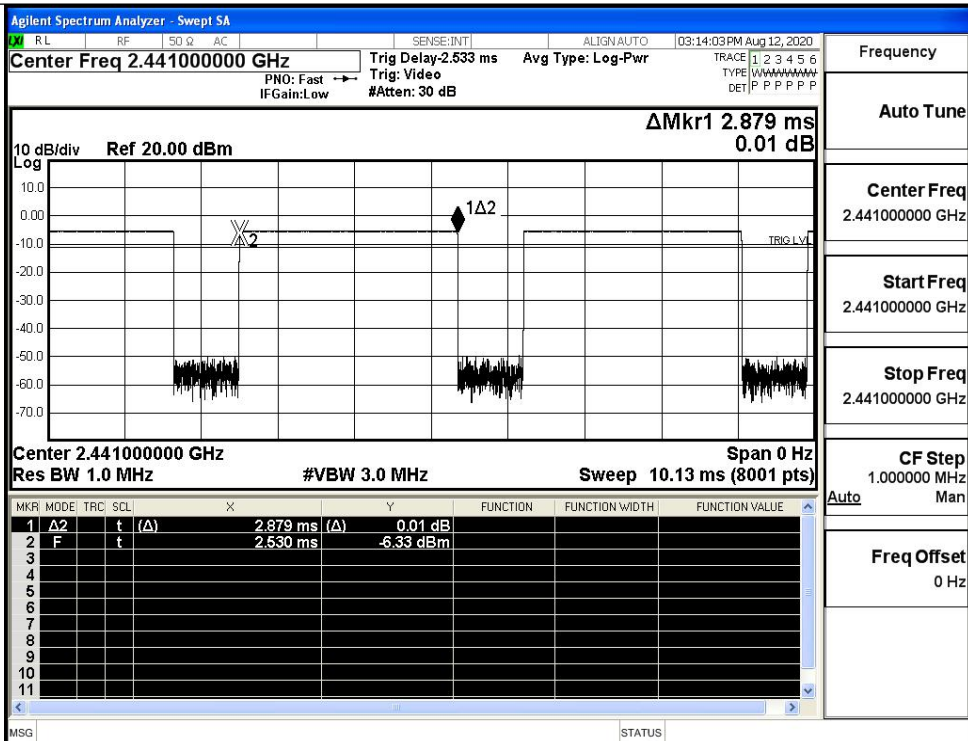
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.88	106.7	0.307	0.4	PASS
	DH5	MCH	2.88	106.7	0.307	0.4	PASS
	DH5	HCH	2.88	106.7	0.307	0.4	PASS
$\pi/4$ DQPSK	2DH5	LCH	2.88	106.7	0.307	0.4	PASS
	2DH5	MCH	2.88	106.7	0.308	0.4	PASS
	2DH5	HCH	2.88	106.7	0.307	0.4	PASS

Test Graphs

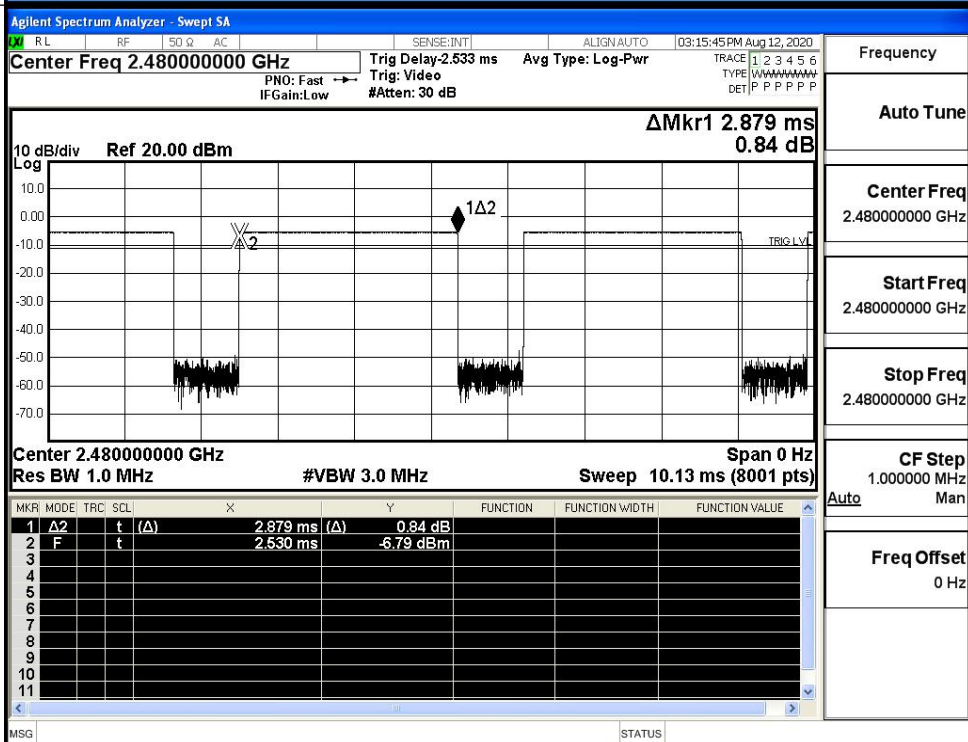
GFSK_DH5/LCH



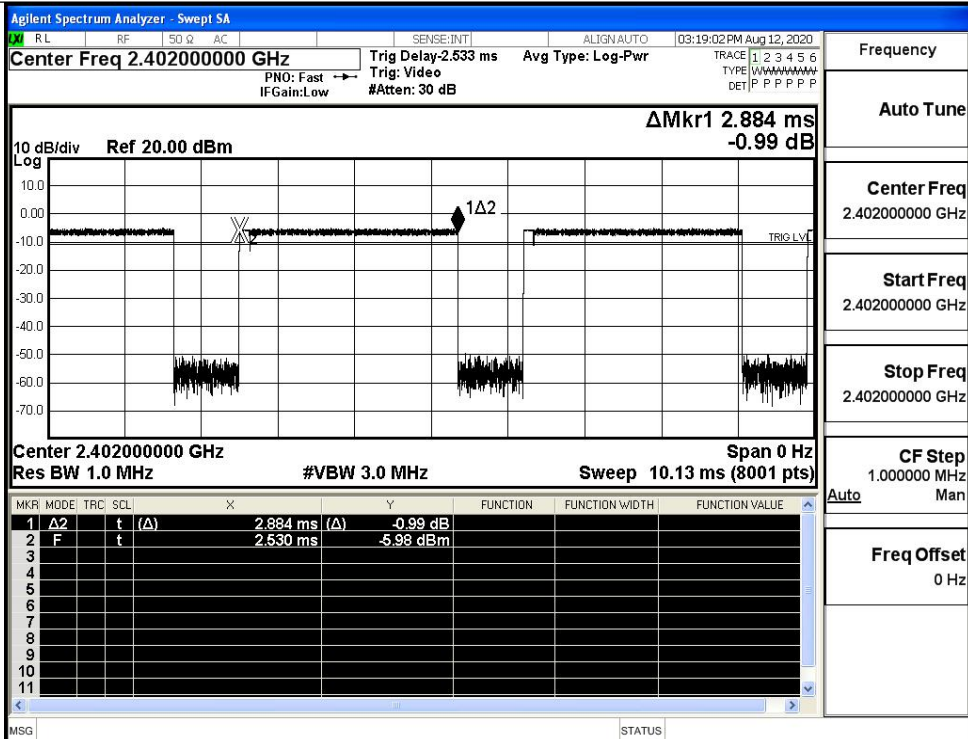
GFSK_DH5/MCH



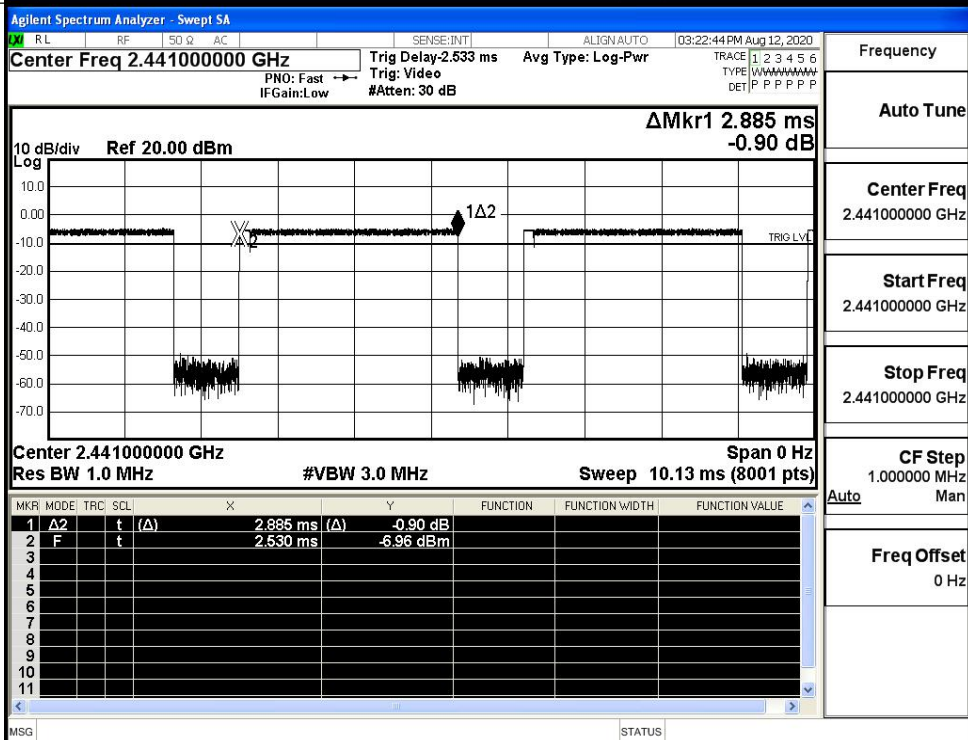
GFSK_DH5/HCH



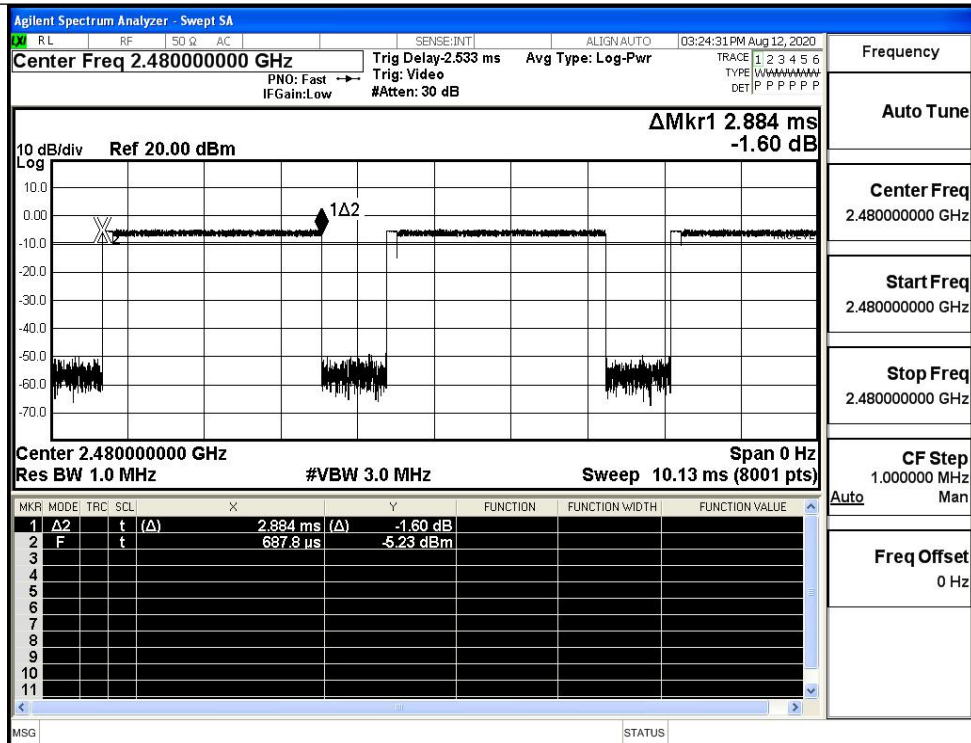
$\pi/4$ DQPSK
_2DH5/LCH



$\pi/4$ DQPSK
_2DH5/MCH



π/4DQPSK
_2DH5/HCH



A.6 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2.222	-37.852	-17.778	PASS
	MCH	2.577	-37.738	-17.423	PASS
	HCH	2.622	-37.061	-17.378	PASS
$\pi/4$ DQPSK	LCH	2.445	-37.846	-17.555	PASS
	MCH	2.637	-37.507	-17.363	PASS
	HCH	2.25	-37.088	-17.750	PASS

GFSK LCH Graphs

