Appendix A

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

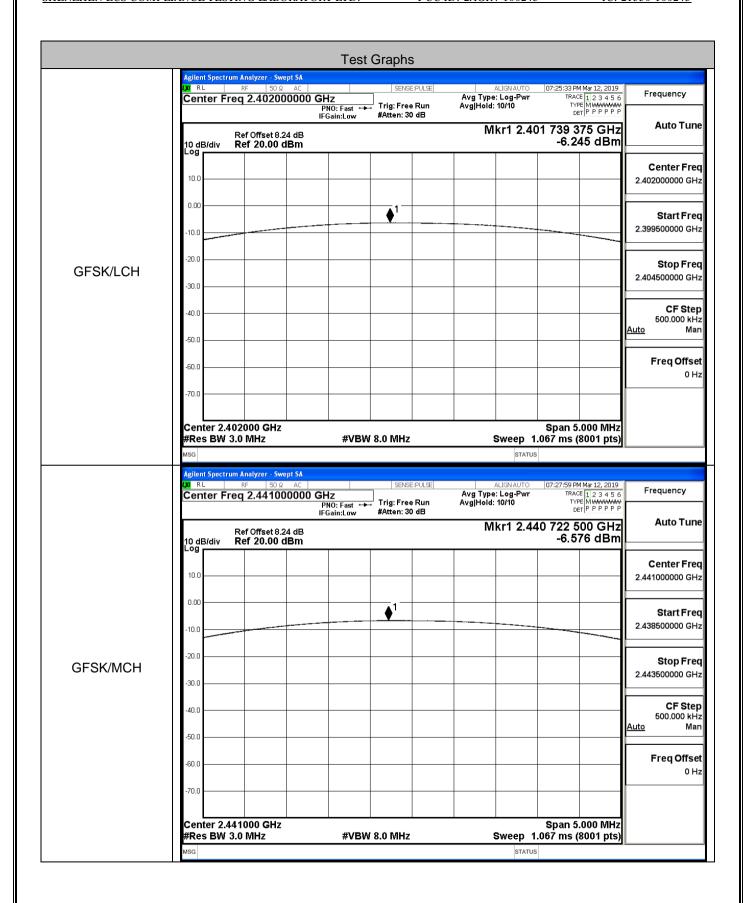
Product Name: Exos Bluetooth® Headphones
Trade Mark: Gemline
Test Model: 100245-001B

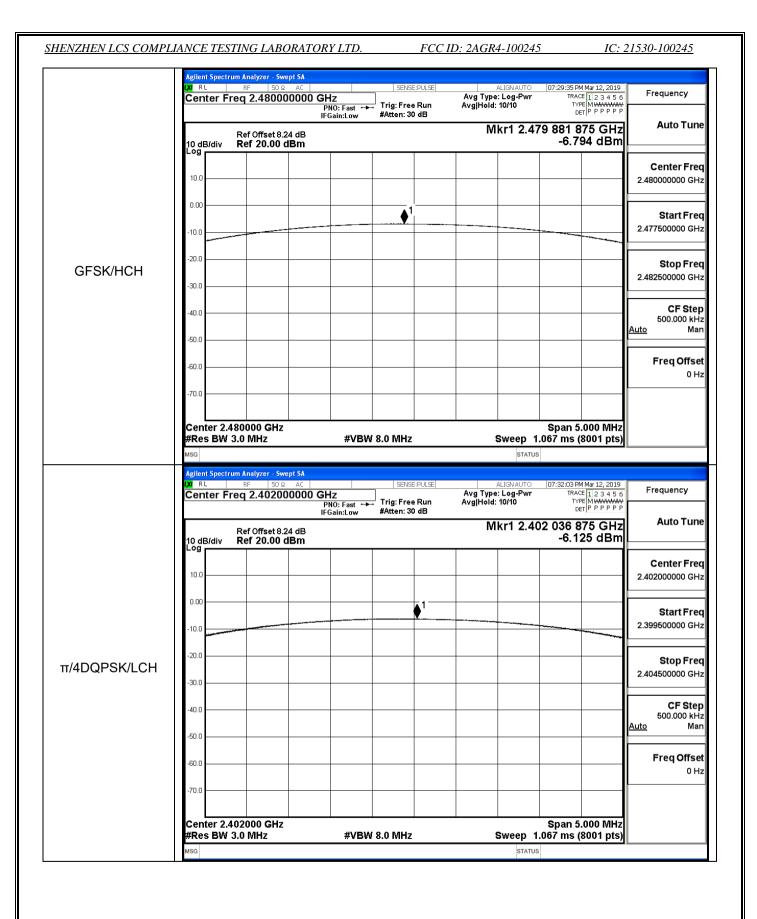
Environmental Conditions

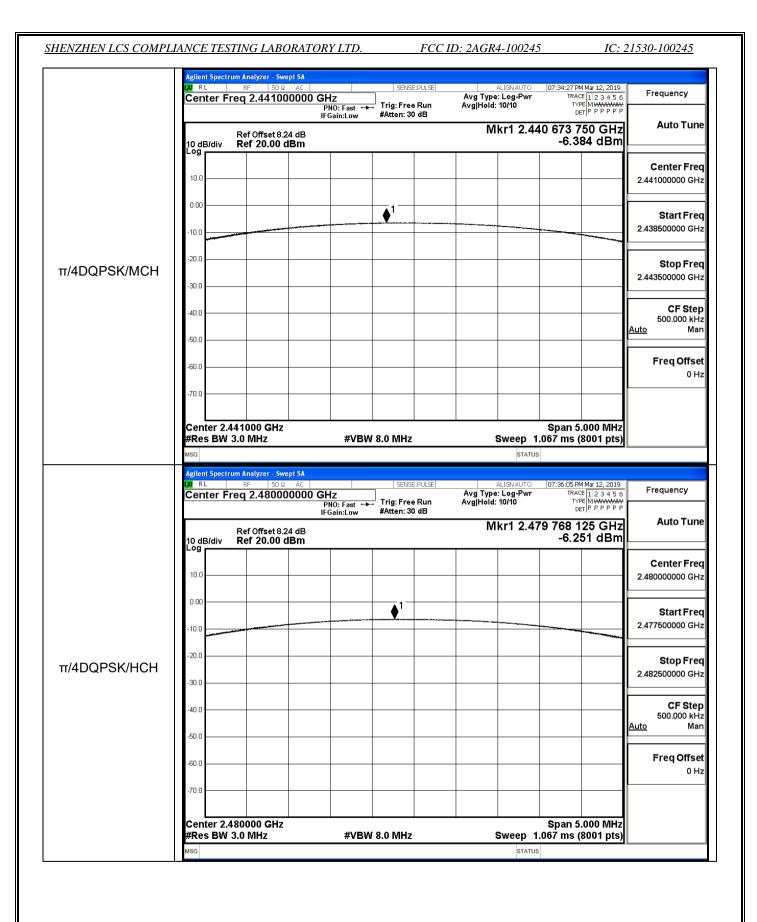
	 -							
	Temperature:	24.5 ° C						
Relative Humidity:		51.9%						
ATM Pressure:		100.0 kPa						
Test Engineer:		David.Luo						
	Supervised by:	Wang Chuang						

A.1 Maximum Conducted Peak Output Power

Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
	LCH	-6.245	21	PASS
GFSK	MCH	-6.576	21	PASS
	НСН	-6.794	21	PASS
	LCH	-6.125	21	PASS
π/4DQPSK	MCH	-6.384	21	PASS
	HCH	-6.251	21	PASS

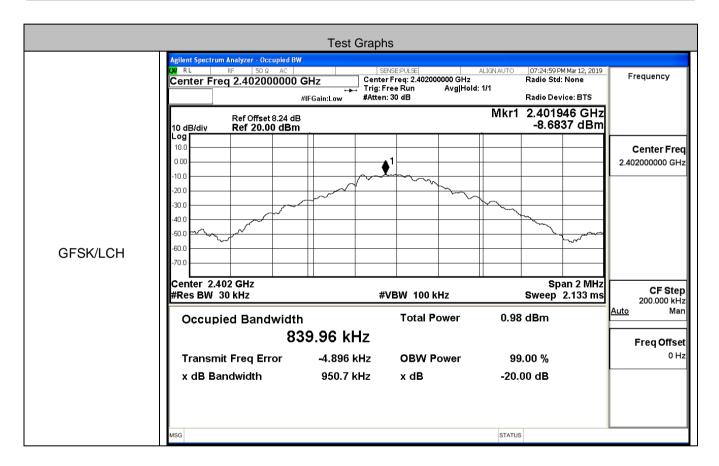


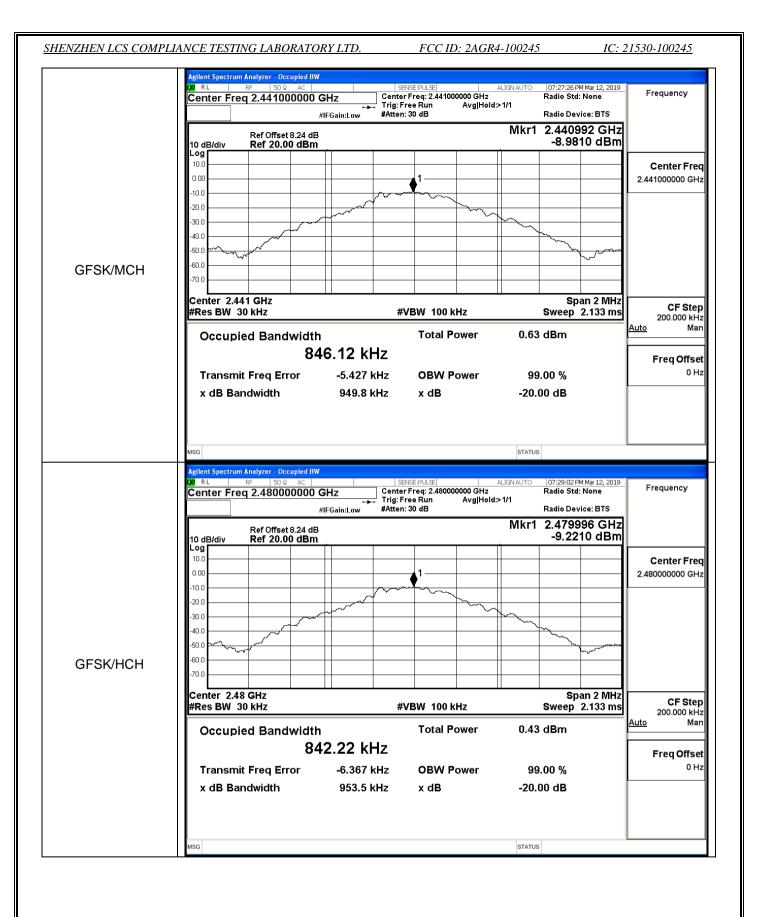


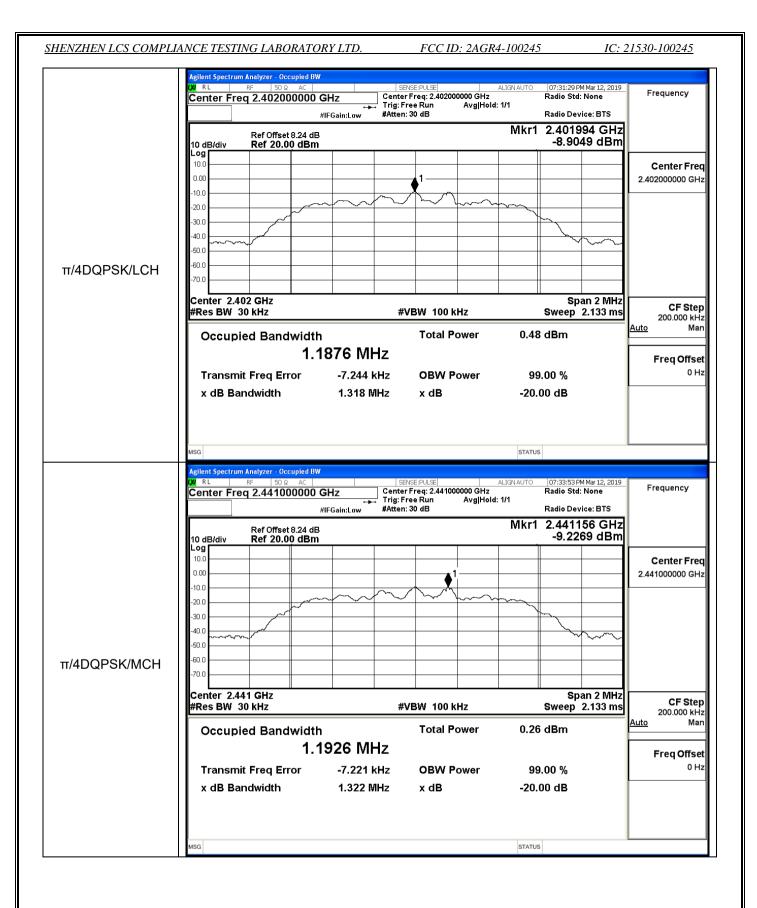


A.2 99% and 20dB Bandwidth

Mode	Channel.	99% Bandwidth [MHz]	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
	LCH	0.83996	0.9507	Not Specified	PASS
GFSK	MCH	0.84612	0.9498	Not Specified	PASS
	HCH	0.84222	0.9535	Not Specified	PASS
	LCH	1.1876	1.318	Not Specified	PASS
π/4DQPSK	MCH	1.1926	1.322	Not Specified	PASS
	HCH	1.1883	1.320	Not Specified	PASS



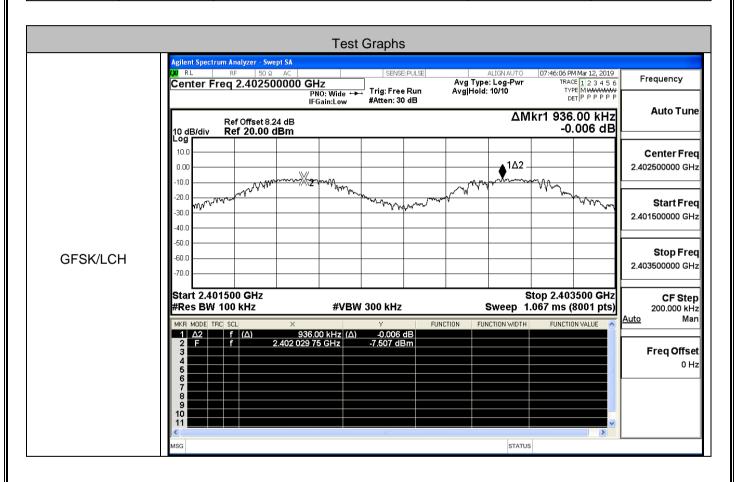


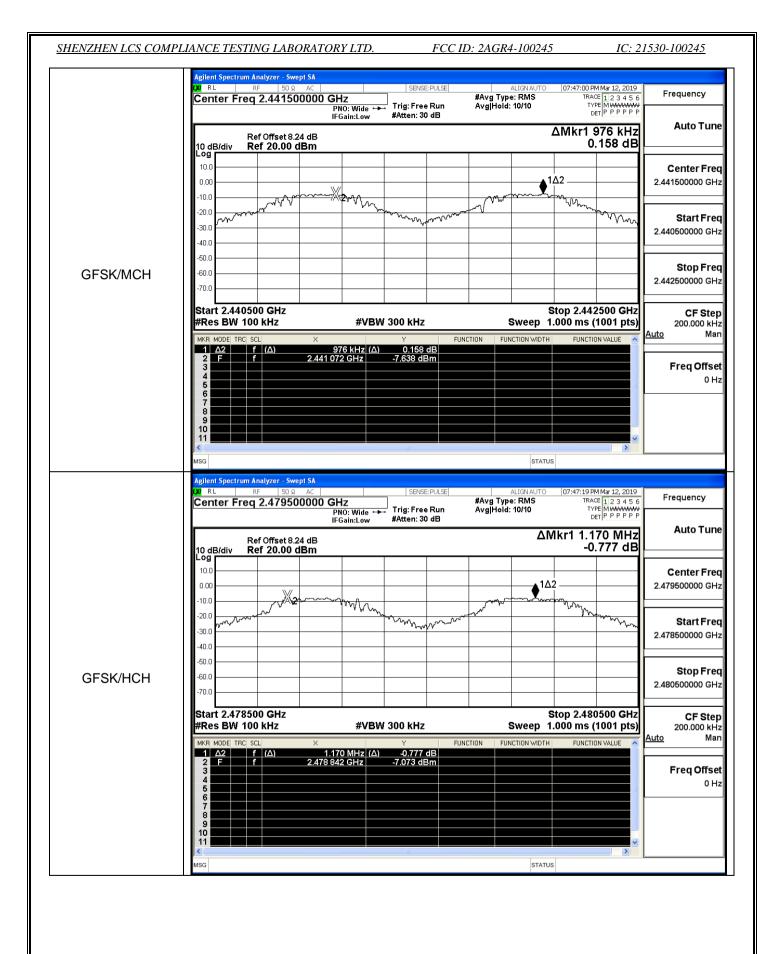


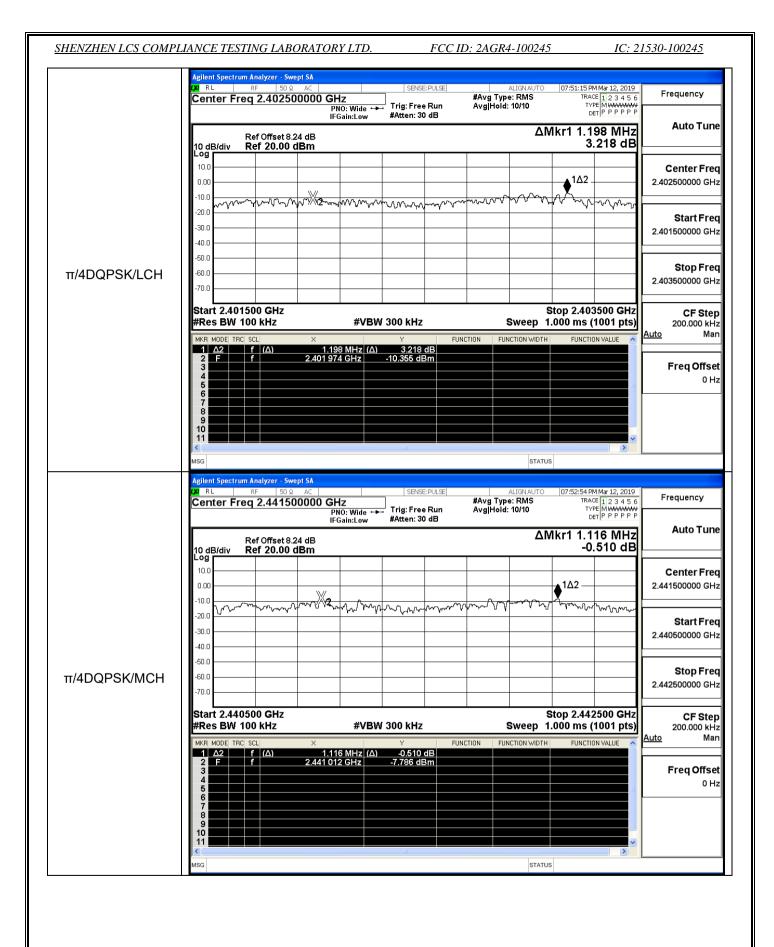
STATUS

A.3 Carrier Frequency Separation

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
	LCH	0.936	0.636	PASS
GFSK	MCH	0.976	0.636	PASS
	HCH	1.170	0.636	PASS
	LCH	1.198	0.881	PASS
π/4DQPSK	MCH	1.116	0.881	PASS
	HCH	0.992	0.881	PASS







SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD. FCC ID: 2AGR4-100245 IC: 21530-100245 Agilent Spectrum Analyzer - Swept SA ALIGNAUTO 07:53:18 PM Mar 12, 2019

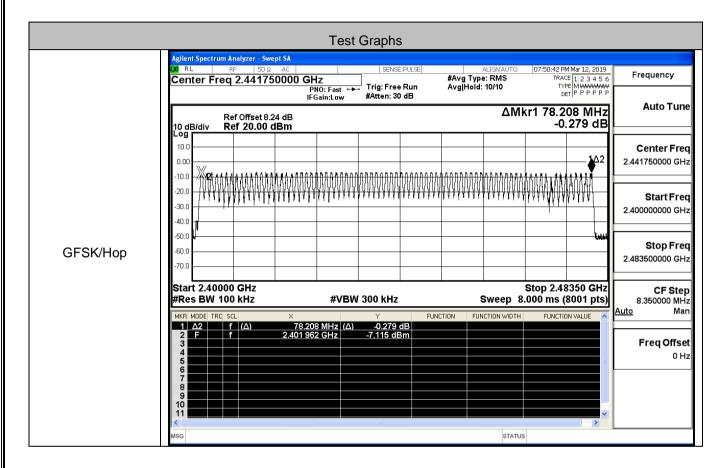
DE: RMS TRACE 1 2 3 4 5 6

1: 10/10 TYPE MWWWWW

DET PPPPP SENSE:PULSE #Avg Type: RMS Avg|Hold: 10/10 Frequency Center Freq 2.479500000 GHz Trig: Free Run PNO: Wide ↔ IFGain:Low #Atten: 30 dB Auto Tune ΔMkr1 992 kHz Ref Offset 8.24 dB Ref 20.00 dBm 0.038 dB 10 dB/div Log 10.0 Center Freq . Δ2 0.00 2.479500000 GHz -10.0 ᠕ᡙ᠕ᠰᡗᠬ -Marrie wardow was a series brow www -20.0 Start Freq -30.0 2.478500000 GHz -40.0 -50.0 Stop Freq π/4DQPSK/HCH -60.0 2.480500000 GHz Start 2.478500 GHz Stop 2.480500 GHz CF Step Sweep 1.000 ms (1001 pts) #Res BW 100 kHz **#VBW** 300 kHz 200.000 kHz Man Auto MKRI MODEI TRCI SCL FUNCTION FUNCTION WIDTH FUNCTION VALUE f (Δ) 992 kHz (Δ) 2.479 166 GHz 0.038 dB -7.319 dBm 1 Δ2 Freq Offset 0 Hz STATUS

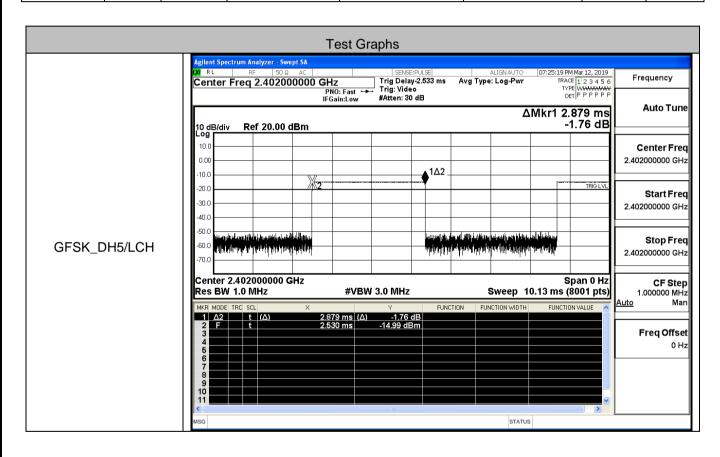
A.4 Hopping Channel Number

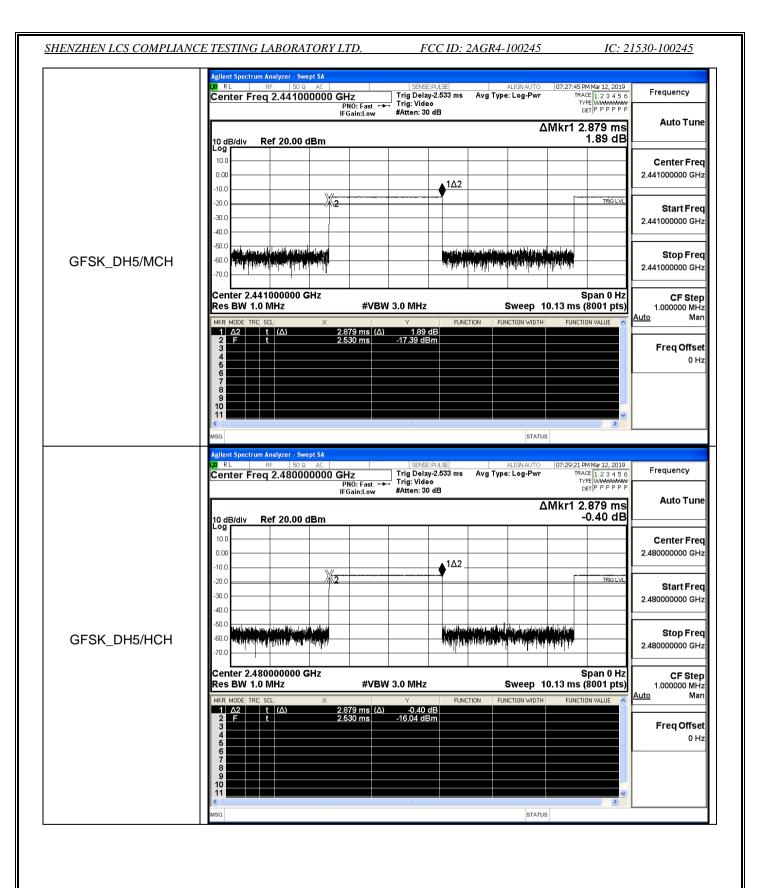
Mode	Channel. Number of Hopping Channel [N]		Limit [N]	Verdict
GFSK Hop		79	>=15	PASS
π/4DQPSK	Нор	79	>=15	PASS

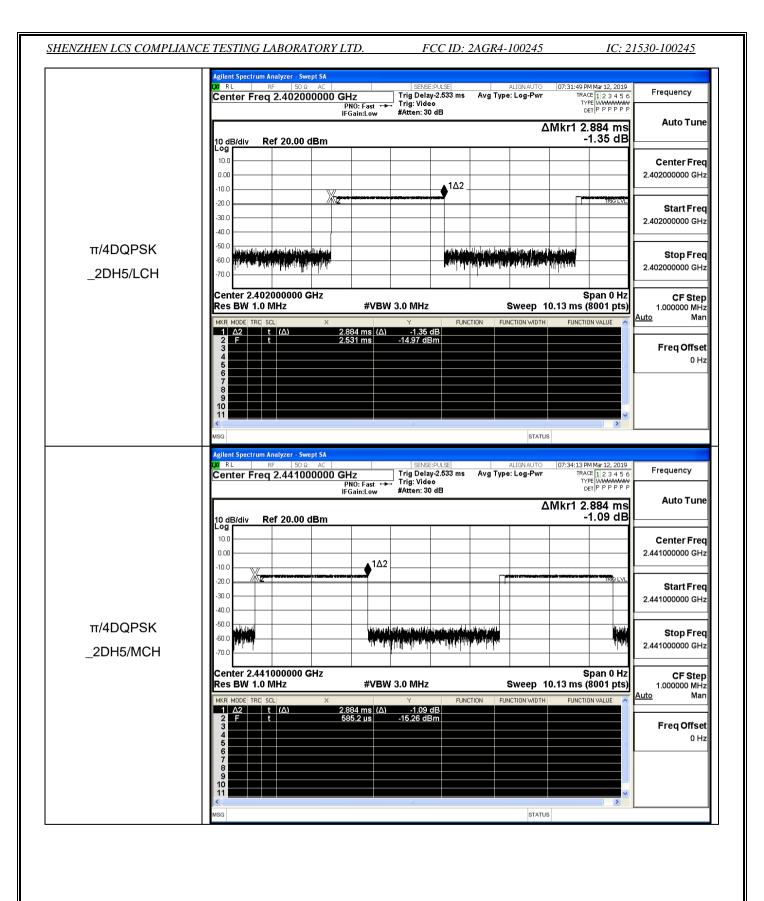


A.5 Dwell Time

Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
	DH5	LCH	2.88	106.7	0.307	0.4	PASS
GFSK	DH5	MCH	2.88	106.7	0.307	0.4	PASS
	DH5	HCH	2.88	106.7	0.307	0.4	PASS
	2DH5	LCH	2.88	106.7	0.307	0.4	PASS
π/4DQPSK	2DH5	MCH	2.88	106.7	0.307	0.4	PASS
	2DH5	HCH	2.89	106.7	0.308	0.4	PASS







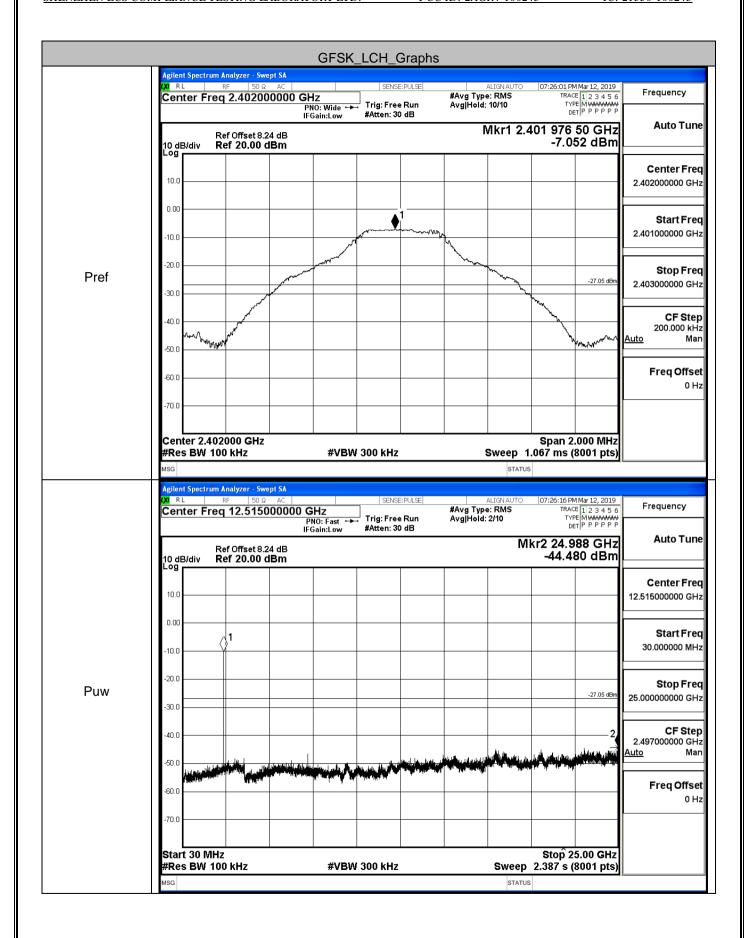
SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD. FCC ID: 2AGR4-100245 IC: 21530-100245 Agilent Spectrum Analyzer - Swept SA TO 07:35:51 PM Mar 12, 2019

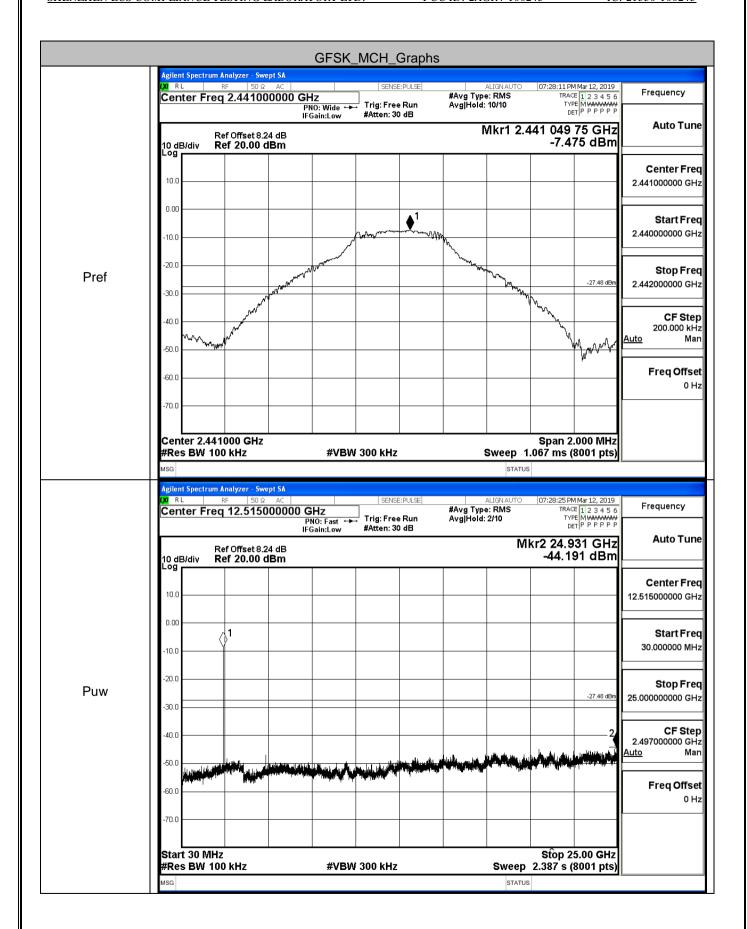
WY TRACE 1 2 3 4 5 6

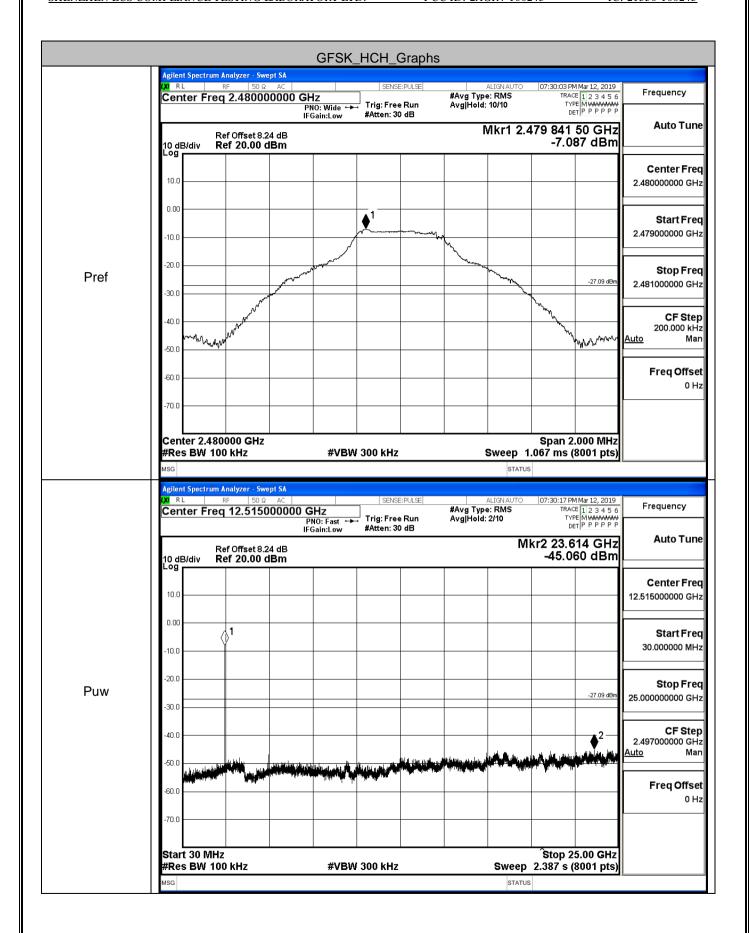
TYPE WWWWWW DET P P P P P P Trig Delay-2.533 ms Avg Type: Log-Pwr
Trig: Video
#Atten: 30 dB Frequency Center Freq 2.480000000 GHz PNO: Fast ↔ IFGain:Low **Auto Tune** ΔMkr1 2.885 ms -1.55 dB 10 dB/div Log Ref 20.00 dBm Center Freq n no 2.480000000 GHz 1Δ2 -10.0 -20.0 Start Freq -30.0 2.480000000 GHz -40.0 -50.0 π/4DQPSK niin dhe che ne ne n bainn a fu dh caeadh fu na chain a gaire. e Tir fi gairt gairt a fu an fa an fa chain a gairt gairt a gairt a chain air ceann a chain a chain a cae a' A Maria de Caractería de C A Caractería de Caractería Stop Freq -60 O 2.480000000 GHz _2DH5/HCH -70.0 **CF Step** 1.000000 MHz Center 2.480000000 GHz Span 0 Hz Sweep 10.13 ms (8001 pts) Res BW 1.0 MHz **#VBW 3.0 MHz** <u>Auto</u> Man 2.885 ms (Δ) -1.55 dB 2.214 ms -16.09 dBm Freq Offset 0 Hz STATUS

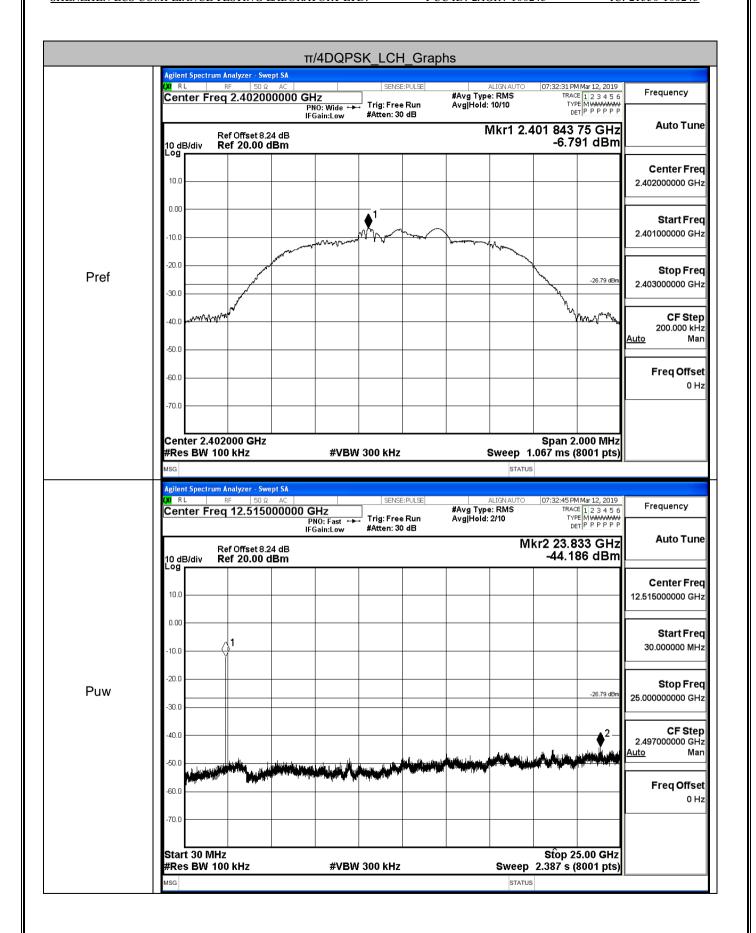
A.6 RF Conducted Spurious Emissions

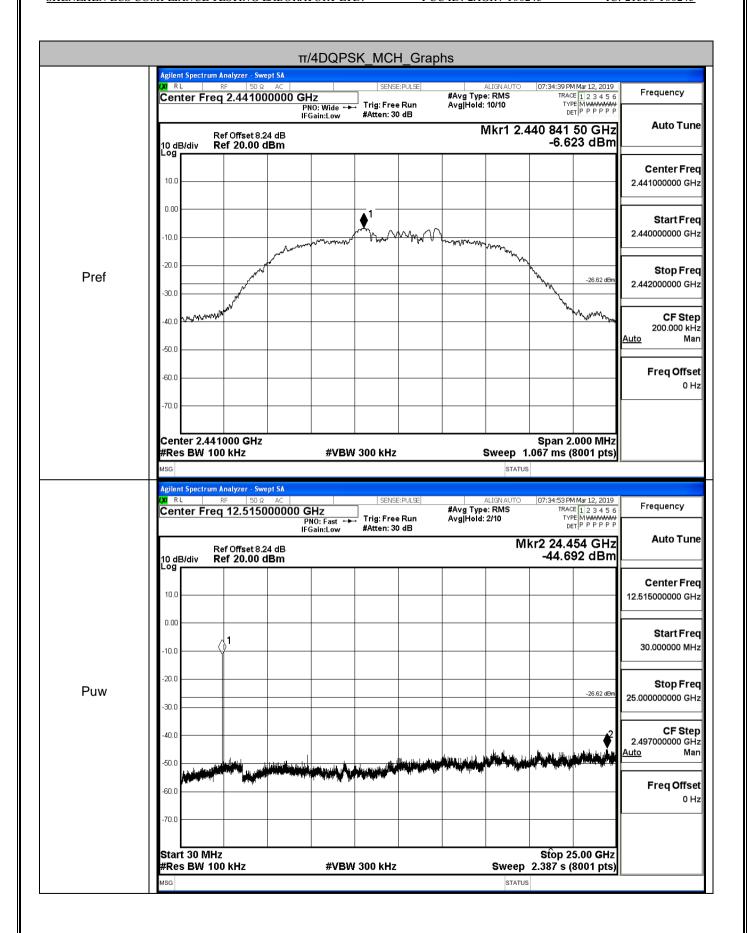
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
	LCH	-7.052	-44.480	-27.052	PASS
GFSK	MCH	-7.475	-44.191	-27.475	PASS
	НСН	-7.087	-45.060	-27.087	PASS
	LCH	-6.791	-44.186	-26.791	PASS
π/4DQPSK	MCH	-6.623	-44.692	-26.623	PASS
	HCH	-7.237	-44.559	-27.237	PASS

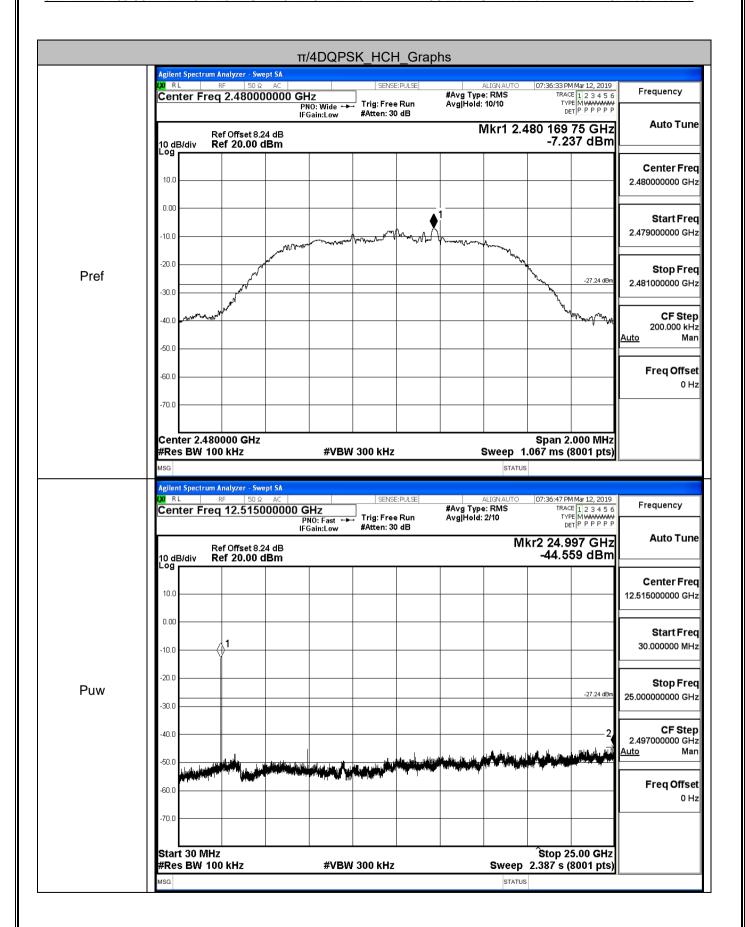






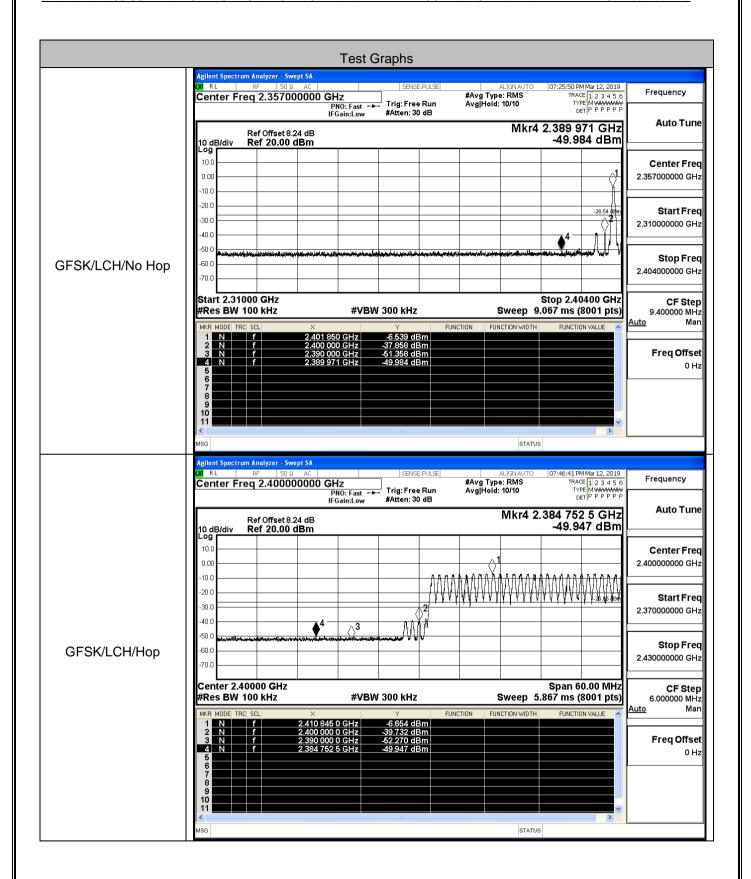






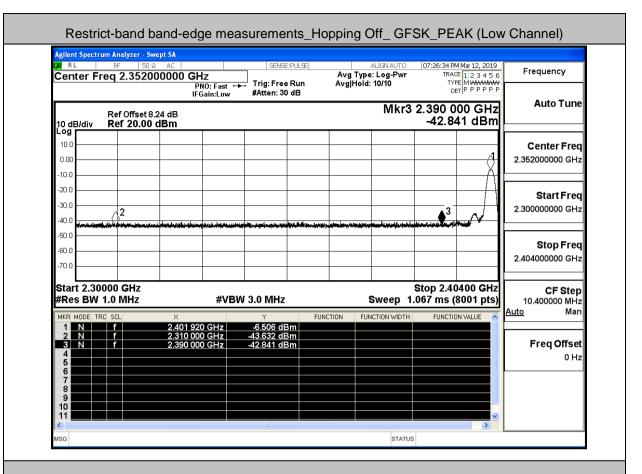
A.7 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
		0.400	-6.539	Off	-49.984	-26.54	PASS
0.5014	LCH	2402	-6.654	On	-49.947	-26.65	PASS
GFSK			-7.276	Off	-45.965	-27.28	PASS
	HCH	2480	-6.959	On	-46.157	-26.96	PASS
			-8.121	Off	-49.794	-28.12	PASS
	LCH	2402	-6.743	On	-49.781	-26.74	PASS PASS PASS
π/4DQPSK			-7.001	Off	-45.184	-27.00	PASS
	HCH	2480	-7.069	On	-48.575	-27.07	PASS

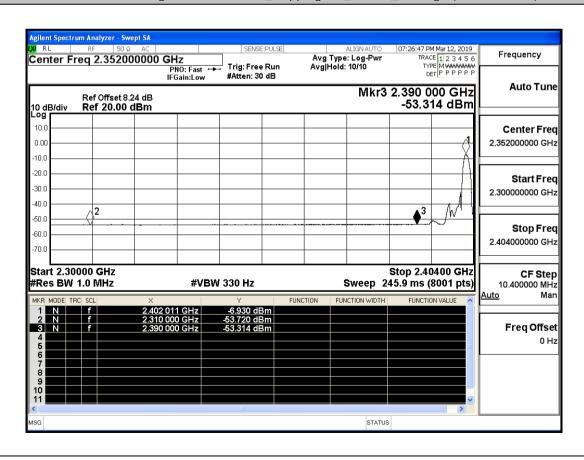


A.8 Restrict-band band-edge measurements

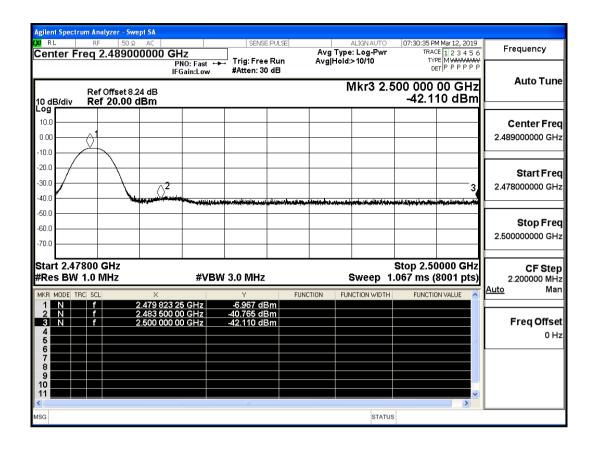
Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
	Off	2310.0	-43.63	2.0	0	53.63	PEAK	74	PASS
	Off	2310.0	-53.72	2.0	0	43.54	AV	54	PASS
	Off	2390.0	-42.84	2.0	0	54.42	PEAK	74	PASS
	Off	2390.0	-53.31	2.0	0	43.94	AV	54	PASS
GFSK	Off	2483.5	-40.77	2.0	0	56.49	PEAK	74	PASS
	Off	2483.5	-49.22	2.0	0	48.04	AV	54	PASS
	Off	2500.0	-42.11	2.0	0	55.15	PEAK	74	PASS
	Off	2500.0	-53.03	2.0	0	44.23	AV	54	PASS
	Off	2310.0	-43.46	2.0	0	53.79	PEAK	74	PASS
	Off	2310.0	-53.67	2.0	0	43.58	AV	54	PASS
	Off	2390.0	-43.32	2.0	0	53.93	PEAK	74	PASS
	Off	2390.0	-53.22	2.0	0	44.04	AV	54	PASS
π/4DQPSK	Off	2483.5	-41.00	2.0	0	56.26	PEAK	74	PASS
	Off	2483.5	-50.85	2.0	0	46.40	AV	54	PASS
	Off	2500.0	-42.39	2.0	0	54.87	PEAK	74	PASS
	Off	2500.0	-52.90	2.0	0	44.35	AV	54	PASS



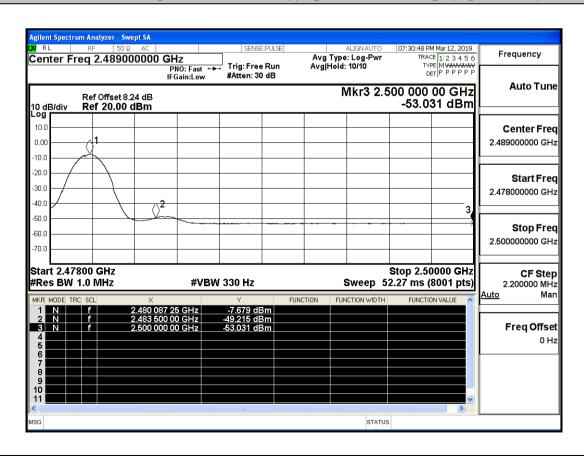
Restrict-band band-edge measurements_Hopping Off_ GFSK_Average (Low Channel)



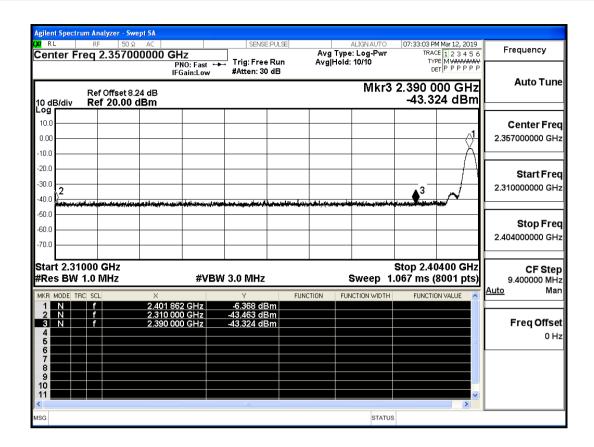
Restrict-band band-edge measurements_Hopping Off_ GFSK_PEAK (High Channel)



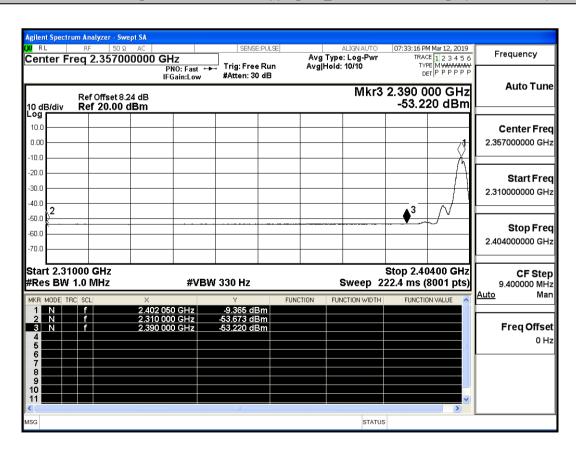
Restrict-band band-edge measurements_Hopping Off_ GFSK_Average (High Channel)



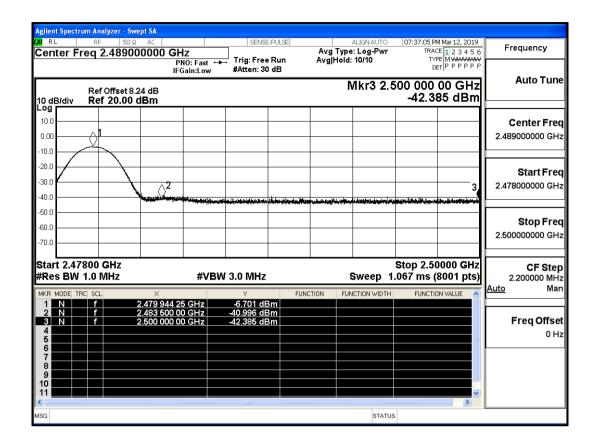
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_PEAK (Low Channel)



Restrict-band band-edge measurements_Hopping Off_π/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)

