



RF Conducted Test - appendix III Bluetooth_(Class Bluetooth)_Test data.

E.U.T:	Active Loudspeaker
Model Number:	CUBITT 5
Sample ID	33000262245
Sample(s) Status:	Engineer sample
Date of Receipt:	2026.02.06
Date of Test:	2026.02.06 ~ 2026.02.09
FCC ID:	2BUKJCUBITT5
IC:	35125-CUBITT5
Report No.	2026020783832914-00
Tester	Hugh Zhang

A.1 DUTY CYCLE

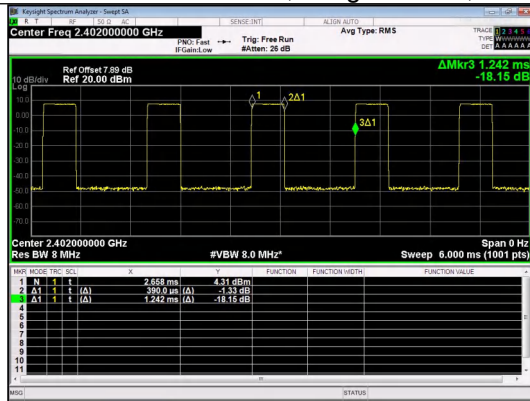
Test Result

Modulation	Packets	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
GFSK	DH1	0	0.383	1.249	30.64	0.3064	5.1371	2.6110
		39	0.383	1.249	30.64	0.3064	5.1371	2.6110
		78	0.383	1.250	30.68	0.3068	5.1314	2.6110
$\pi/4$ DQPSK	2-DH1	0	0.390	1.242	31.40	0.3140	5.0307	2.5641
		39	0.390	1.248	31.25	0.3125	5.0515	2.5641
		78	0.390	1.242	31.40	0.3140	5.0307	2.5641
8DPSK	3-DH1	0	0.390	1.242	31.40	0.3140	5.0307	2.5641
		39	0.390	1.242	31.40	0.3140	5.0307	2.5641
		78	0.390	1.248	31.25	0.3125	5.0515	2.5641

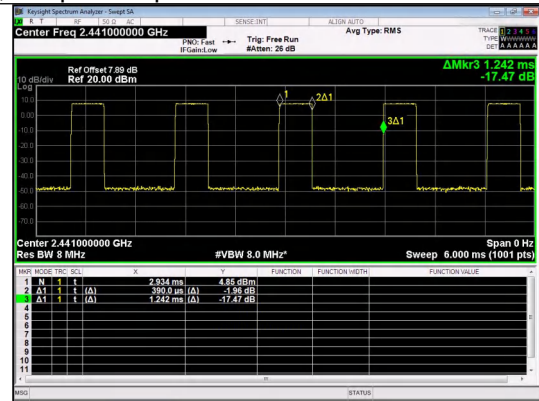
Note: input compensation coefficient (dB)= Cable Loss (dB)

Test Graphs

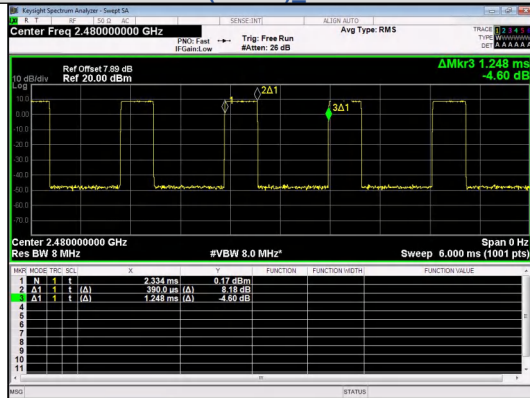




8DPSK(3-DH1)_Channel 0



8DPSK(3-DH1)_Channel 39



8DPSK(3-DH1)_Channel 78

A.2 DWELL TIME

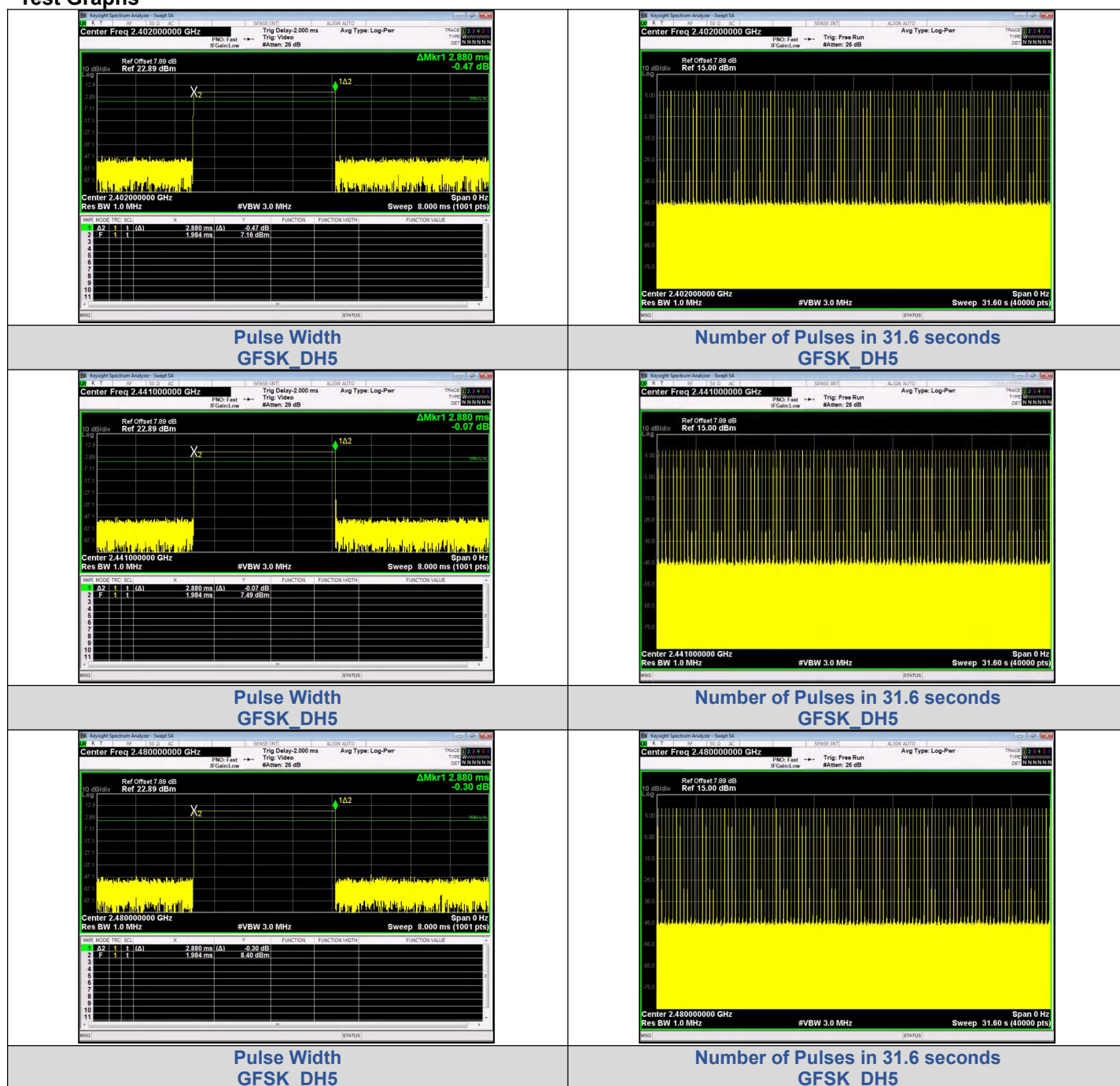
Test Result

Modulation	Packet	Channel	Pulse Width (ms)	Number of Pulses in 31.6 seconds	Dwell Time (ms)	Limit (ms)	Result
GFSK	DH5	Hopping	2.880	106	305.28	< 400	PASS
	DH5		2.880	107	308.16		PASS
	DH5		2.880	107	308.16		PASS
$\pi/4$ DQPSK	2-DH5		2.880	106	305.28		PASS
	2-DH5		2.880	107	308.16		PASS
	2-DH5		2.896	107	309.87		PASS
8DPSK	3-DH5		2.896	107	309.87		PASS
	3-DH5		2.880	107	308.16		PASS
	3-DH5		2.896	107	309.87		PASS

Note: Dwell time= Pulse time(ms)*Number of Pulses in 31.6 seconds

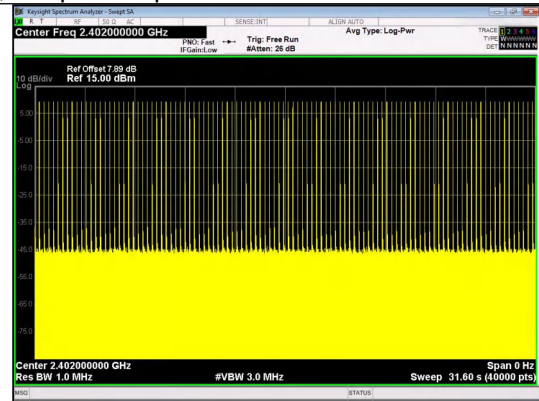
Note: input compensation coefficient (dB)= Cable Loss (dB)

Test Graphs





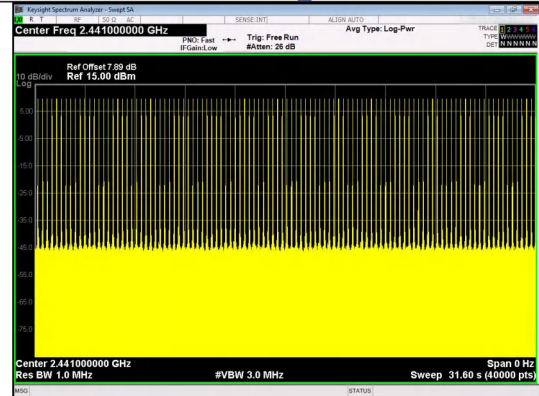
Pulse Width
 $\pi/4$ DQPSK_2-DH5



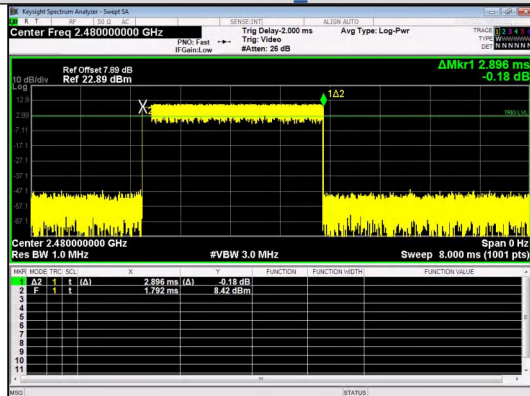
Number of Pulses in 31.6 seconds
 $\pi/4$ DQPSK_2-DH5



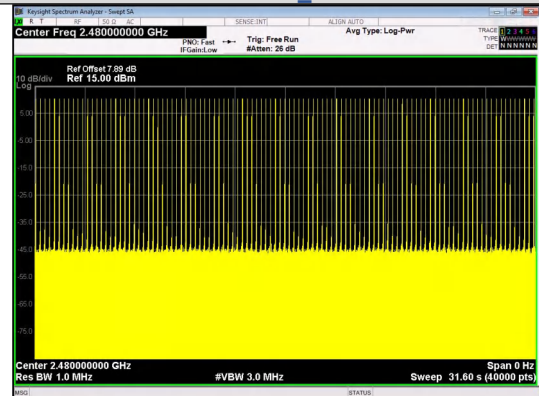
Pulse Width
 $\pi/4$ DQPSK_2-DH5



Number of Pulses in 31.6 seconds
 $\pi/4$ DQPSK_2-DH5



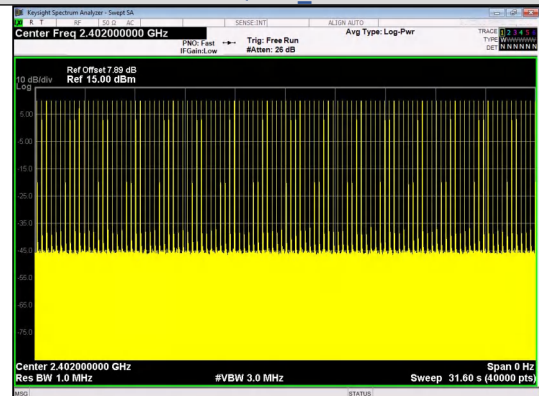
Pulse Width
 $\pi/4$ DQPSK_2-DH5



Number of Pulses in 31.6 seconds
 $\pi/4$ DQPSK_2-DH5



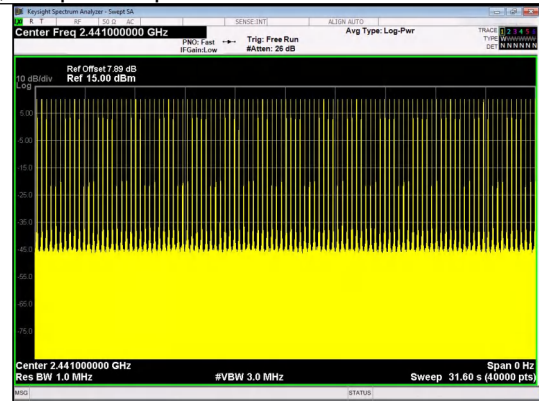
Pulse Width
8DPSK_3-DH5



Number of Pulses in 31.6 seconds
8DPSK_3-DH5



**Pulse Width
8DPSK 3-DH5**



**Number of Pulses in 31.6 seconds
8DPSK 3-DH5**



**Pulse Width
8DPSK 3-DH5**



**Number of Pulses in 31.6 seconds
8DPSK 3-DH5**

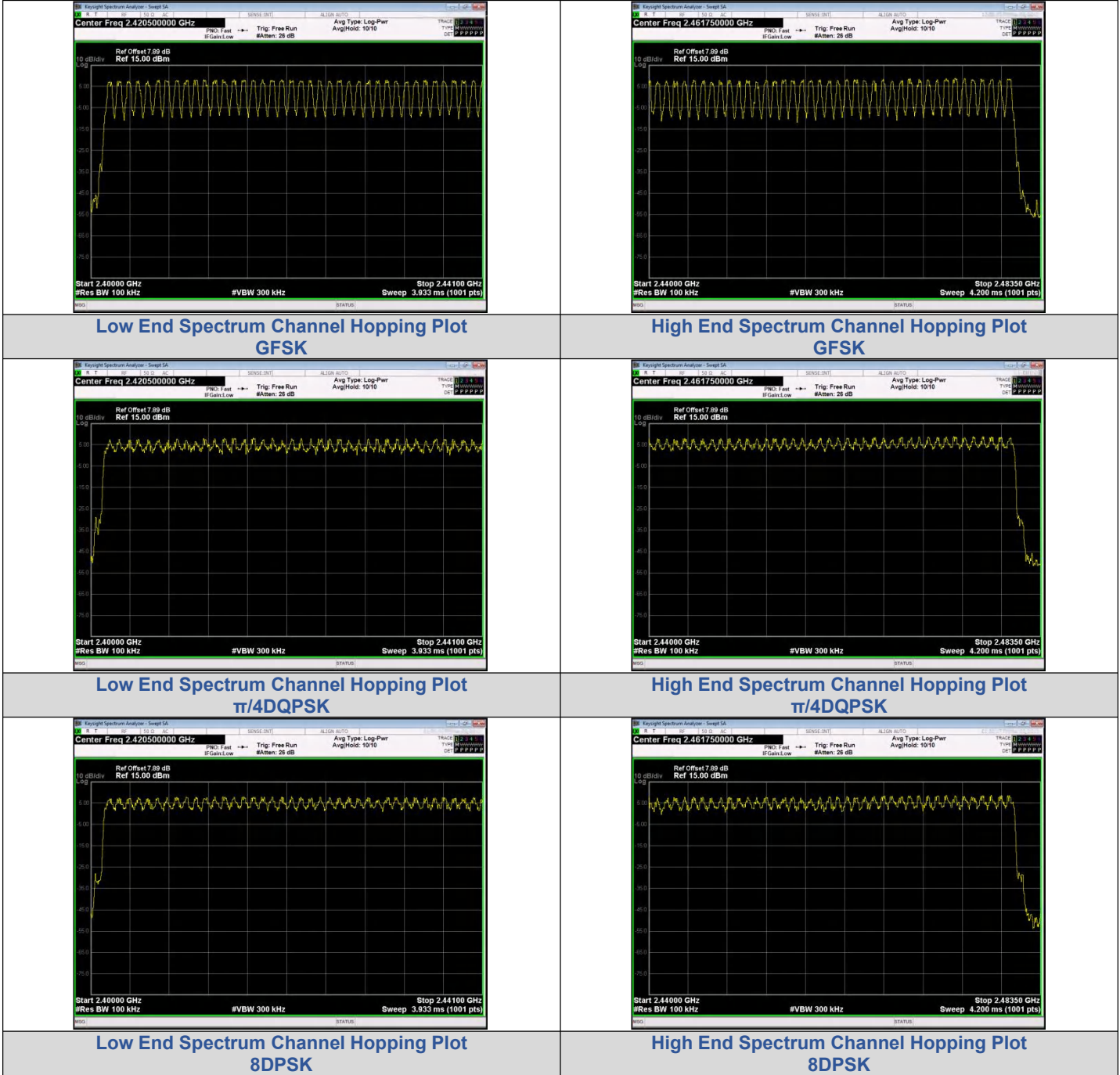
A.3 NUMBER OF HOPPING CHANNEL

Test Result

Modulation	Packet	Number of Hopping Channel	Limit	Result
GFSK	DH1	79	15	PASS
$\pi/4$ DQPSK	2-DH1	79	15	PASS
8DPSK	3-DH1	79	15	PASS

Note: input compensation coefficient (dB)= Cable Loss (dB)

Test Graphs



A.4 CONDUCTED PEAK OUTPUT POWER

Test Result

Modulation	Packet Type	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Max. Avg. Power (dBm)	Limit (dBm)	Result
GFSK	DH1	0	7.24	5.29	None	≤30	PASS
		39	7.70	5.88	None		PASS
		78	8.58	7.21	None		PASS
π/4DQPSK	2-DH1	0	9.87	9.70	None		PASS
		39	9.16	8.23	None		PASS
		78	9.50	8.91	None		PASS
8DPSK	3-DH1	0	9.87	9.70	None		PASS
		39	9.81	9.57	None		PASS
		78	8.71	7.43	None		PASS

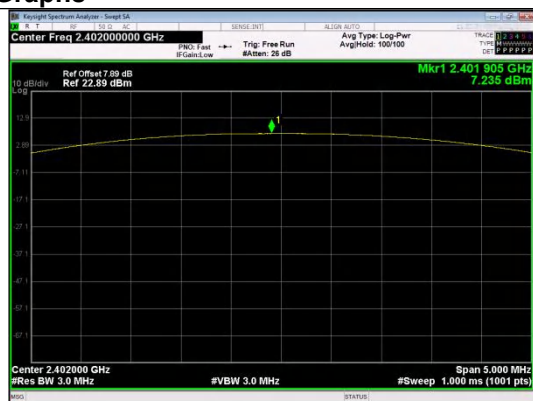
Note: input compensation coefficient (dB)= Cable Loss (dB)

Modulation	Packet Type	Channel	Peak Output Power (dBm)	Peak Power Limit (dBm)	ISED EIRP (dBm)	ISED EIRP Limit (dBm)	Max. Avg. Power (dBm)	Result
GFSK	DH1	0	7.24	≤30	10.54	≤36.02	None	PASS
		39	7.70	≤30	11	≤36.02	None	PASS
		78	8.58	≤30	11.88	≤36.02	None	PASS
π/4DQPSK	2-DH1	0	9.87	≤30	13.17	≤36.02	None	PASS
		39	9.16	≤30	12.46	≤36.02	None	PASS
		78	9.50	≤30	12.8	≤36.02	None	PASS
8DPSK	3-DH1	0	9.87	≤30	13.17	≤36.02	None	PASS
		39	9.81	≤30	13.11	≤36.02	None	PASS
		78	8.71	≤30	12.01	≤36.02	None	PASS

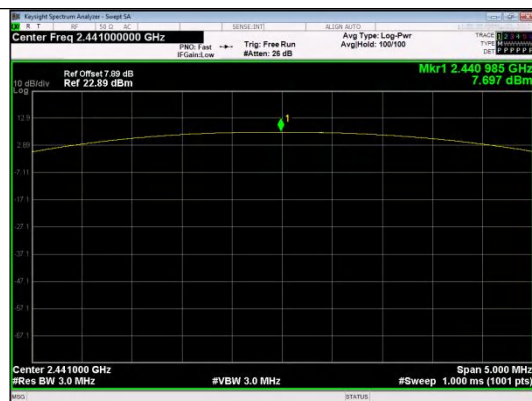
Note: EIRP=Output Power+ANT Gain

Note: input compensation coefficient (dB)= Cable Loss (dB)

Test Graphs



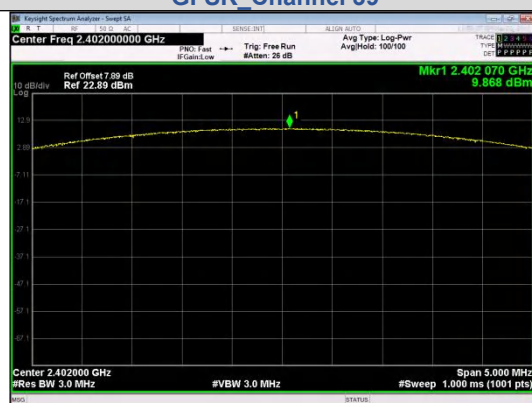
Peak Output Power
GFSK_Channel 0



Peak Output Power
GFSK_Channel 39



Peak Output Power
GFSK_Channel 78



Peak Output Power
π/4DQPSK_Channel 0



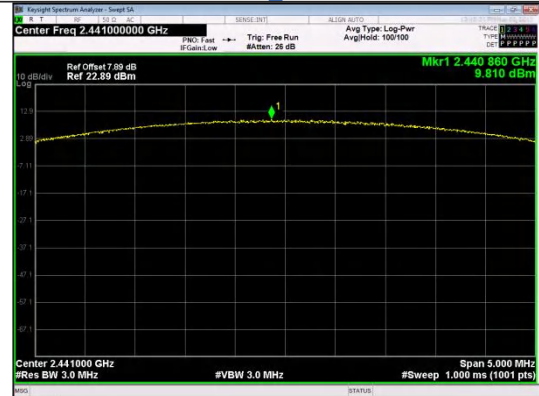
Peak Output Power
 $\pi/4$ DQPSK_Channel 39



Peak Output Power
 $\pi/4$ DQPSK_Channel 78



Peak Output Power
8DPSK_Channel 0



Peak Output Power
8DPSK_Channel 39



Peak Output Power
8DPSK_Channel 78

A.5 99% BANDWIDTH

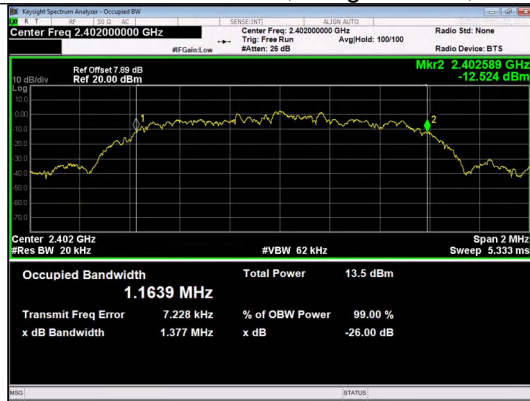
Test Result

Modulation	Channel	Center Frequency (MHz)	99% BW (MHz)
GFSK	0	2402	0.83225
	39	2441	0.85568
	78	2480	0.85165
$\pi/4$ DQPSK	0	2402	1.1855
	39	2441	1.1843
	78	2480	1.1879
8DPSK	0	2402	1.1639
	39	2441	1.1669
	78	2480	1.1658

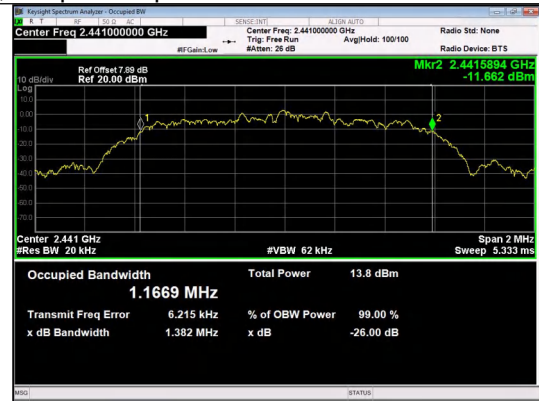
Note: input compensation coefficient (dB)= Cable Loss (dB)

Test Graphs

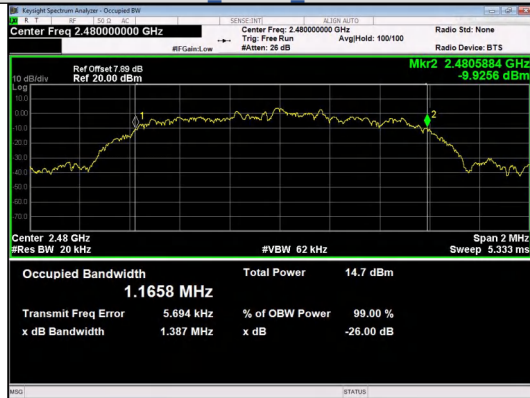




8DPSK_3-DH1_Channel 0



8DPSK_3-DH1_Channel 39



8DPSK_3-DH1_Channel 78

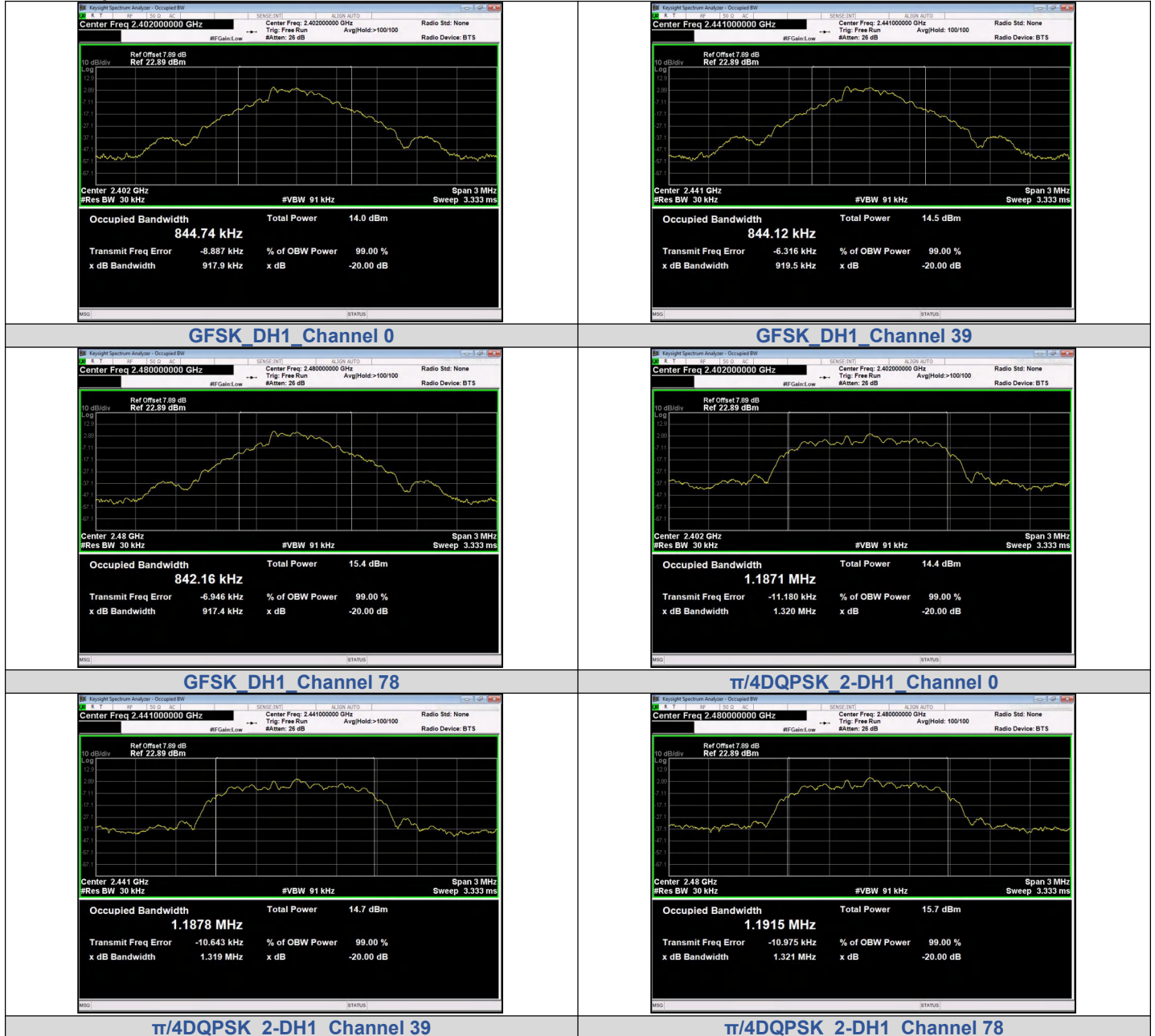
A.6 20DB BANDWIDTH

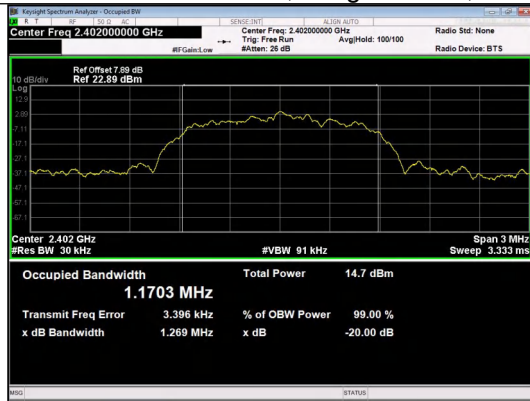
Test Result

Modulation	Channel	Center Frequency (MHz)	20 dB Bandwidth (MHz)
GFSK	0	2402 MHz	0.9179
	39	2441 MHz	0.9195
	78	2480 MHz	0.9174
$\pi/4$ DQPSK	0	2402 MHz	1.320
	39	2441 MHz	1.319
	78	2480 MHz	1.321
8DPSK	0	2402 MHz	1.269
	39	2441 MHz	1.267
	78	2480 MHz	1.267

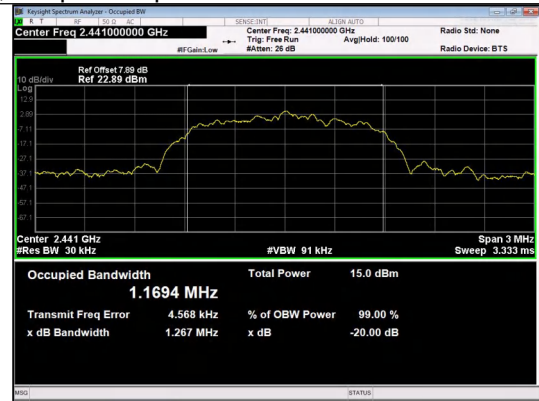
Note: input compensation coefficient (dB)= Cable Loss (dB)

Test Graphs

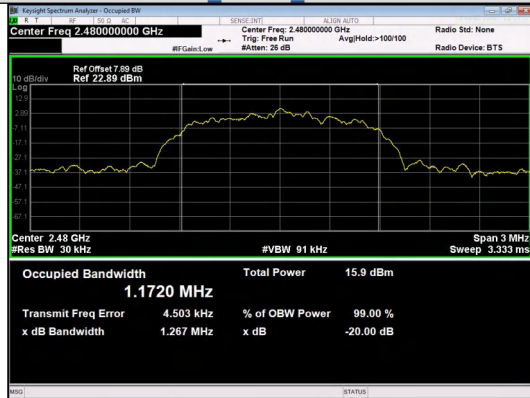




8DPSK_3-DH1_Channel 0



8DPSK_3-DH1_Channel 39



8DPSK_3-DH1_Channel 78

A.7 CARRIER FREQUENCIES SEPARATION

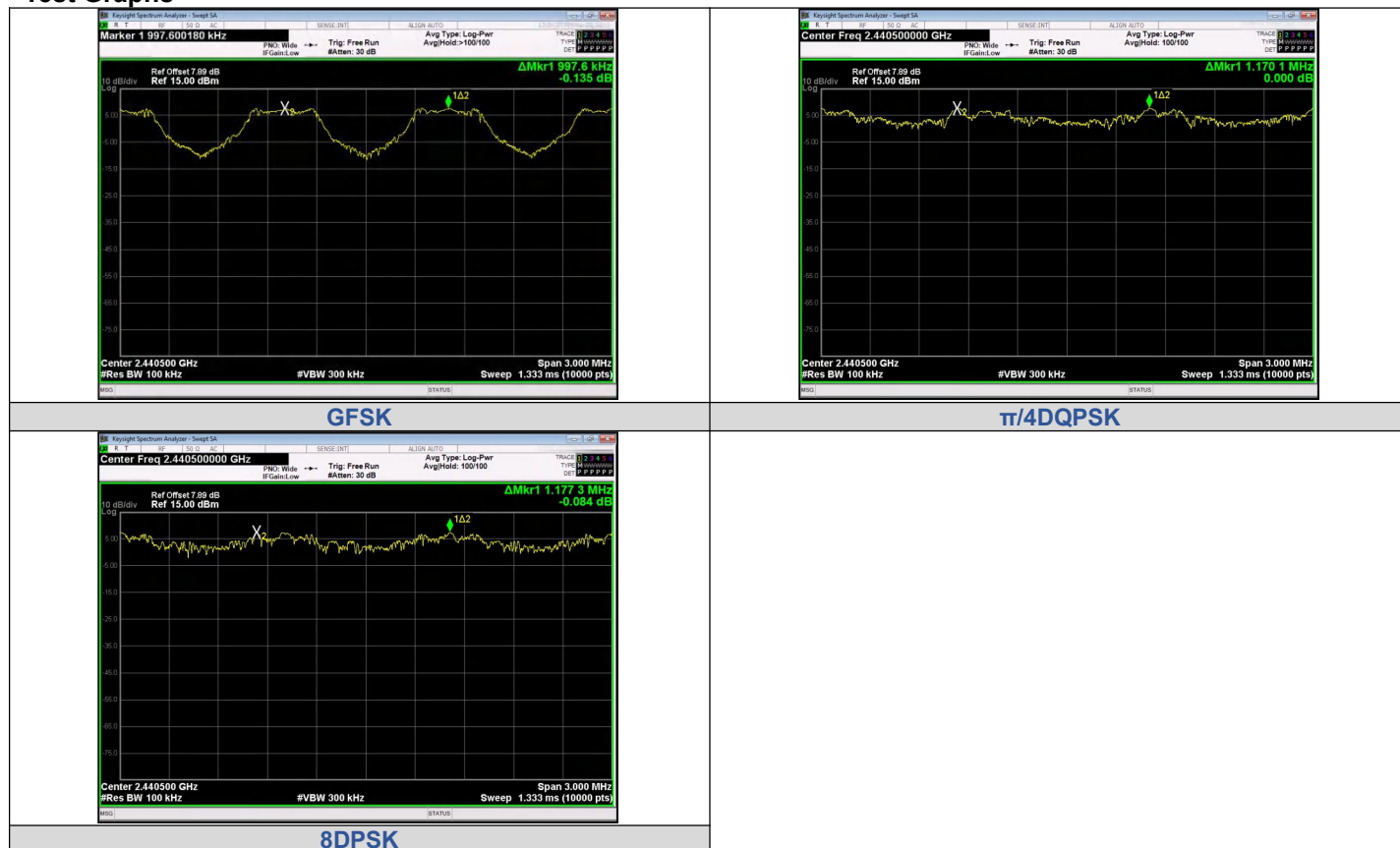
Test Result

Modulation	Packet	Left Center frequency (MHz)	Right Center frequency (MHz)	Hopping Frequency Separation (MHz)	Limit (MHz)	Result
GFSK	DH1	0.9976	2440.0042	2439.0066	0.613	PASS
$\pi/4$ DQPSK	2-DH1	2439.8296	2440.9997	1.1701	0.881	PASS
8DPSK	3-DH1	2439.832	2441.0093	1.1773	0.846	PASS

Note: input compensation coefficient (dB)= Cable Loss (dB)

Note: For conducted power less than 0.125 W(20.97 dBm), the limit can be set using hopping channel carrier frequencies that are separated by 25 kHz or two thirds of the 20 dB bandwidth of the hopping channel, whichever is greater.

Test Graphs



A.8 CONDUCTED SPURIOUS & BAND EDGE EMISSION

Test Result
Non-Hopping

Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH1	0	2393.98	-48.476	-12.74	-35.736	PASS
			2400.00	-50.533	-12.74	-37.793	PASS
			24496.2	-47.334	-12.74	-34.594	PASS
		39	24925.1	-47.569	-12.3	-35.269	PASS
		78	2483.50	-54.781	-11.4	-43.381	PASS
			24546.8	-47.828	-11.4	-36.428	PASS
$\pi/4$ DQPSK	2-DH1	0	2394.02	-47.627	-12.65	-34.977	PASS
			2400.00	-48.280	-12.65	-35.630	PASS
			24938.8	-46.844	-12.65	-34.194	PASS
		39	24742.2	-47.267	-12.26	-35.007	PASS
		78	2483.50	-46.308	-11.32	-34.988	PASS
			24914.5	-46.344	-11.32	-35.024	PASS
8DPSK	3-DH1	0	2394.00	-46.589	-12.57	-34.019	PASS
			2400.00	-47.260	-12.57	-34.690	PASS
			24383.2	-47.044	-12.57	-34.474	PASS
		39	24878.3	-47.291	-12.33	-34.961	PASS
		78	2483.50	-52.384	-11.28	-41.104	PASS
			24938.8	-47.087	-11.28	-35.807	PASS

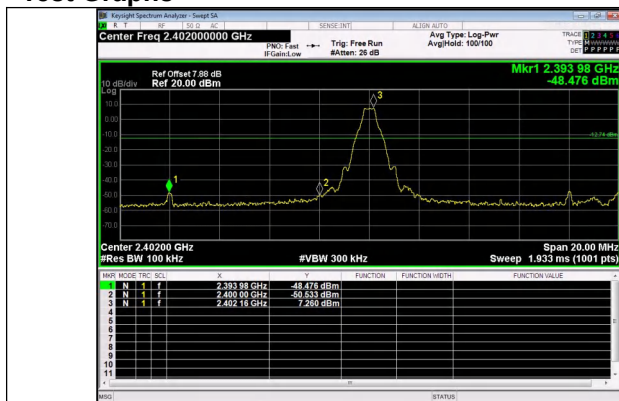
Note: input compensation coefficient (dB)= Cable Loss (dB)

Hopping

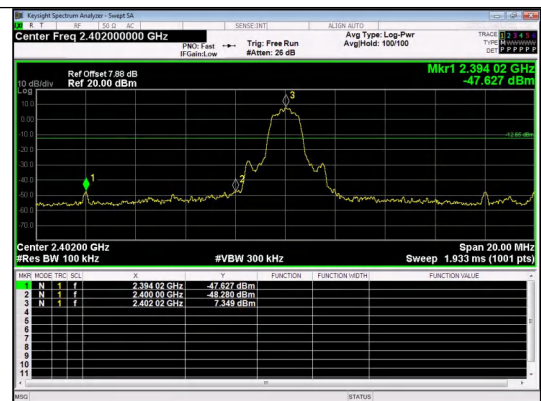
Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH1	Hopping	2400.00	-52.539	-12.1	-40.439	PASS
			2483.50	-54.539	-11.2	-43.339	PASS
$\pi/4$ DQPSK	2-DH1		2400.00	-47.401	-12.09	-35.311	PASS
			2483.50	-50.321	-11.25	-39.071	PASS
8DPSK	3-DH1		2400.00	-47.786	-12.24	-35.546	PASS
			2483.50	-48.066	-11.46	-36.606	PASS

Note: input compensation coefficient (dB)= Cable Loss (dB)

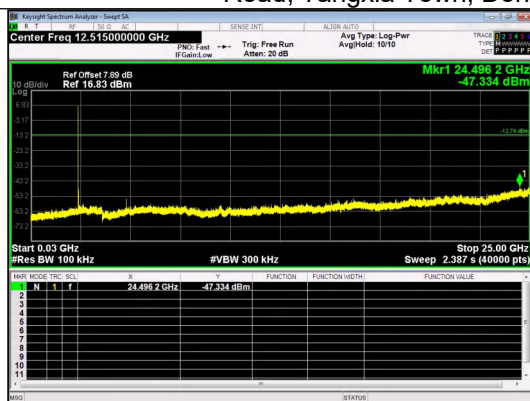
Test Graphs



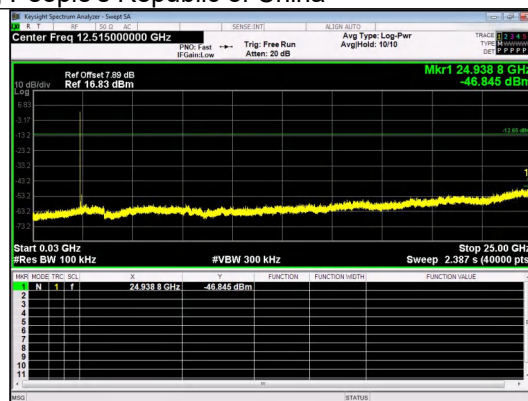
Out Of Band Emission
GFSK_DH1_Channel 0



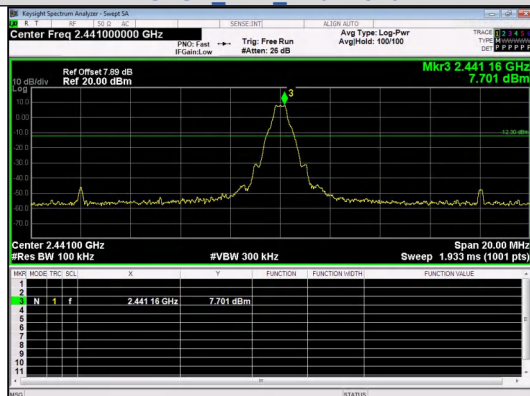
Out Of Band Emission
 $\pi/4$ DQPSK_2-DH1_Channel 0



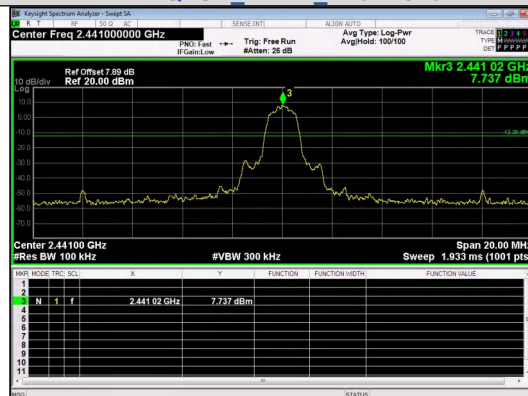
30.0 MHz - 25000.0 MHz
GFSK DH1 Channel 0



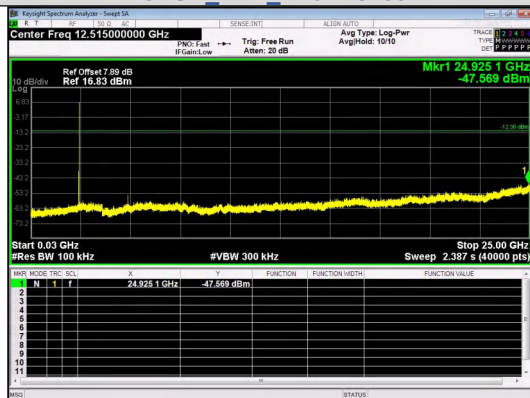
30.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK 2-DH1 Channel 0



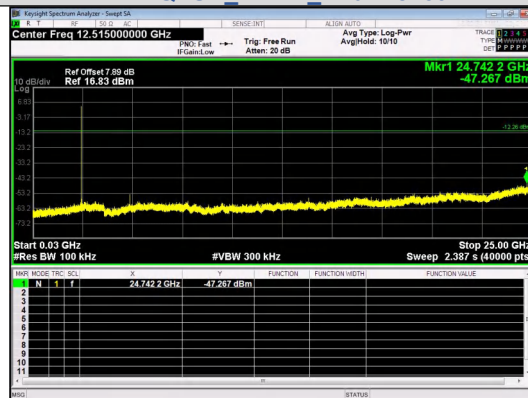
Out Of Band Emission
GFSK DH1 Channel 39



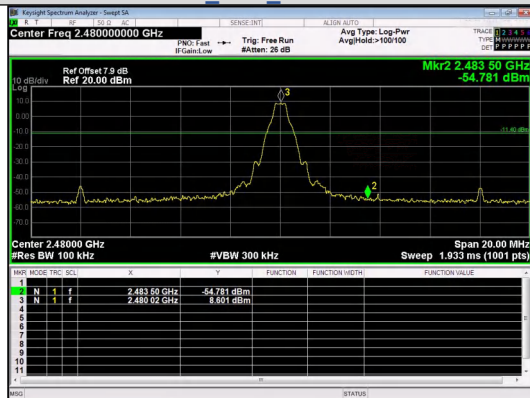
Out Of Band Emission
 $\pi/4$ DQPSK 2-DH1 Channel 39



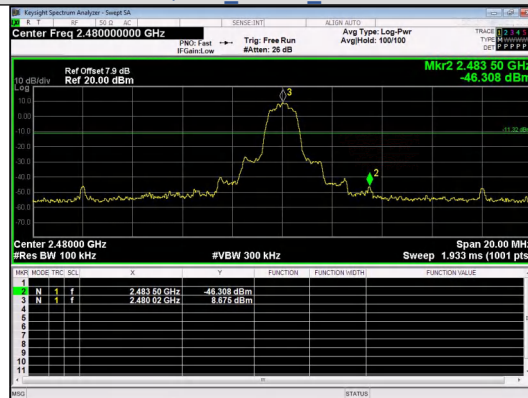
30.0 MHz - 25000.0 MHz
GFSK DH1 Channel 39



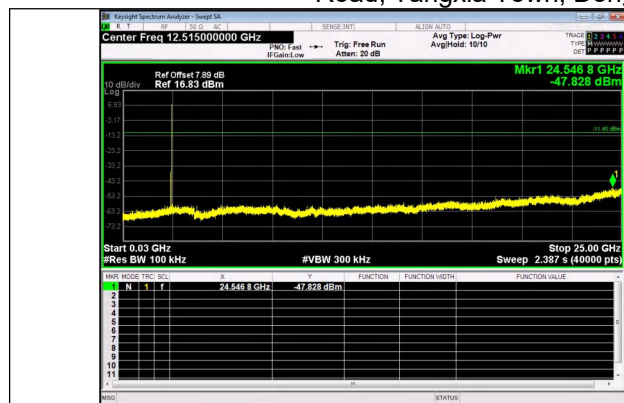
30.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK 2-DH1 Channel 39



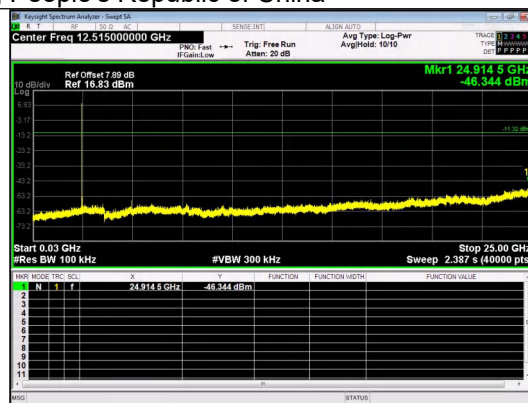
Out Of Band Emission
GFSK DH1 Channel 78



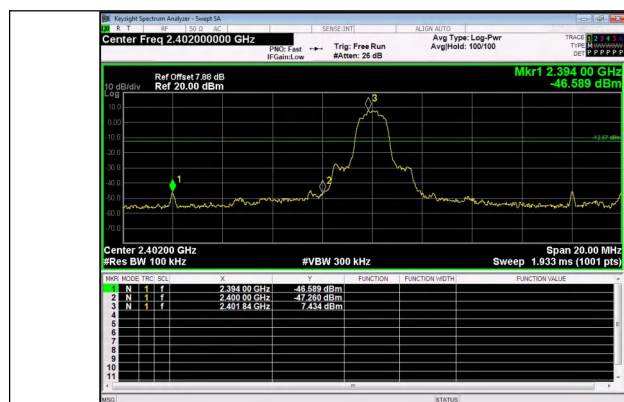
Out Of Band Emission
 $\pi/4$ DQPSK 2-DH1 Channel 78



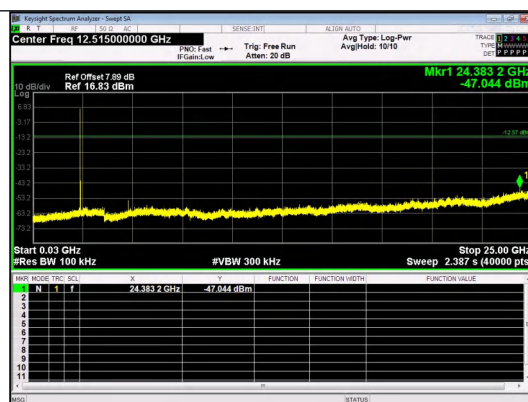
30.0 MHz - 25000.0 MHz
GFSK_DH1_Channel 78



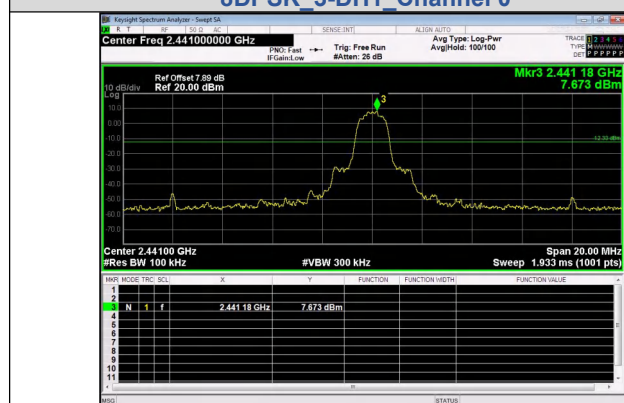
30.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK_2-DH1_Channel 78



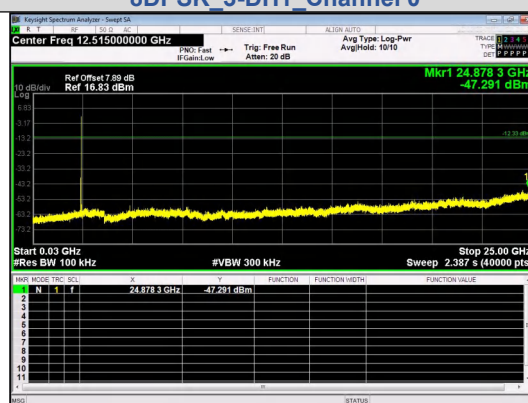
Out Of Band Emission
8DPSK_3-DH1_Channel 0



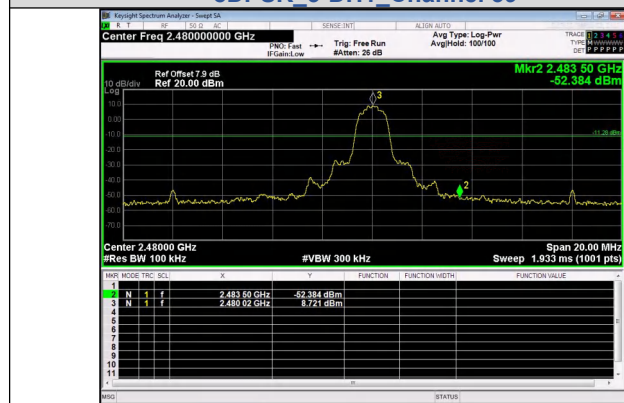
30.0 MHz - 25000.0 MHz
8DPSK_3-DH1_Channel 0



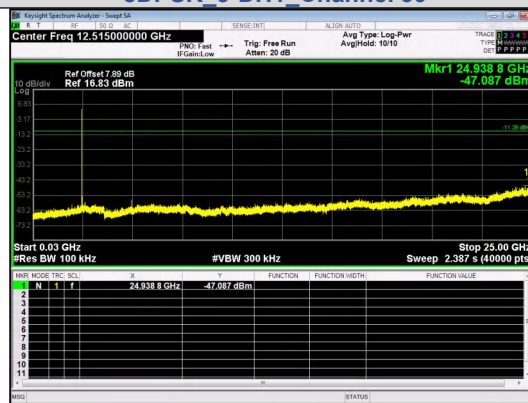
Out Of Band Emission
8DPSK_3-DH1_Channel 39



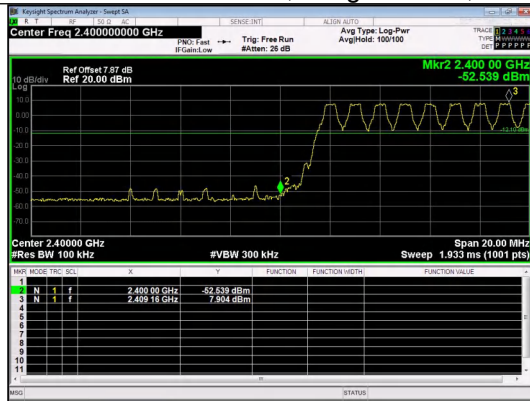
30.0 MHz - 25000.0 MHz
8DPSK_3-DH1_Channel 39



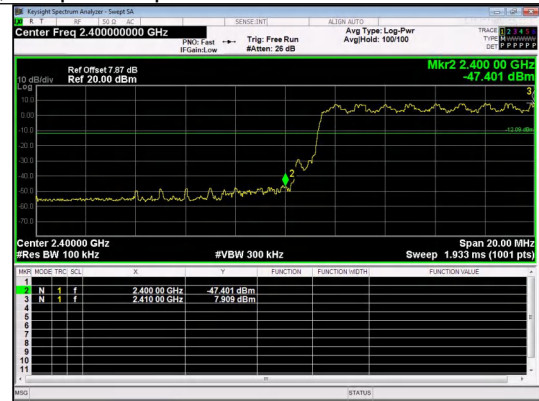
Out Of Band Emission
8DPSK_3-DH1_Channel 78



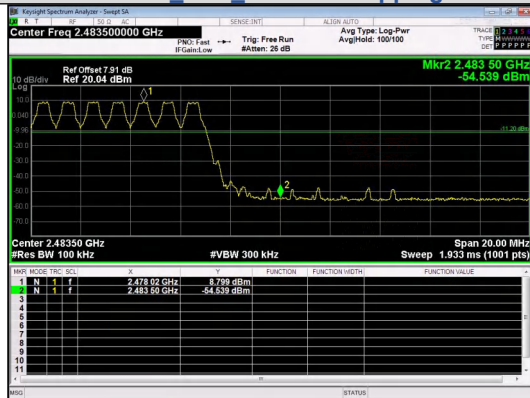
30.0 MHz - 25000.0 MHz
8DPSK_3-DH1_Channel 78



Out Of Band Emission(Left)
GFSK_DH1_Channel Hopping



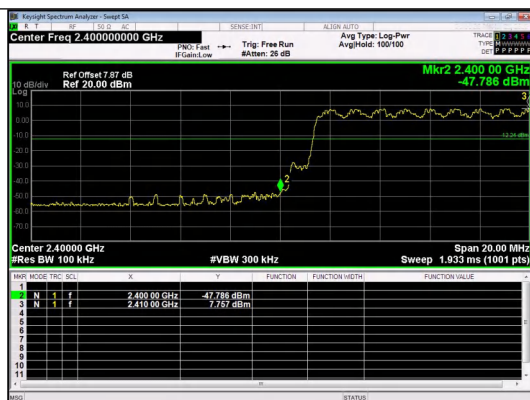
Out Of Band Emission(Left)
 $\pi/4$ DQPSK_2-DH1_Channel Hopping



Out Of Band Emission(Right)
GFSK_DH1_Channel Hopping



Out Of Band Emission(Right)
 $\pi/4$ DQPSK_2-DH1_Channel Hopping



Out Of Band Emission(Left)
8DPSK_3-DH1_Channel Hopping



Out Of Band Emission(Right)
8DPSK_3-DH1_Channel Hopping