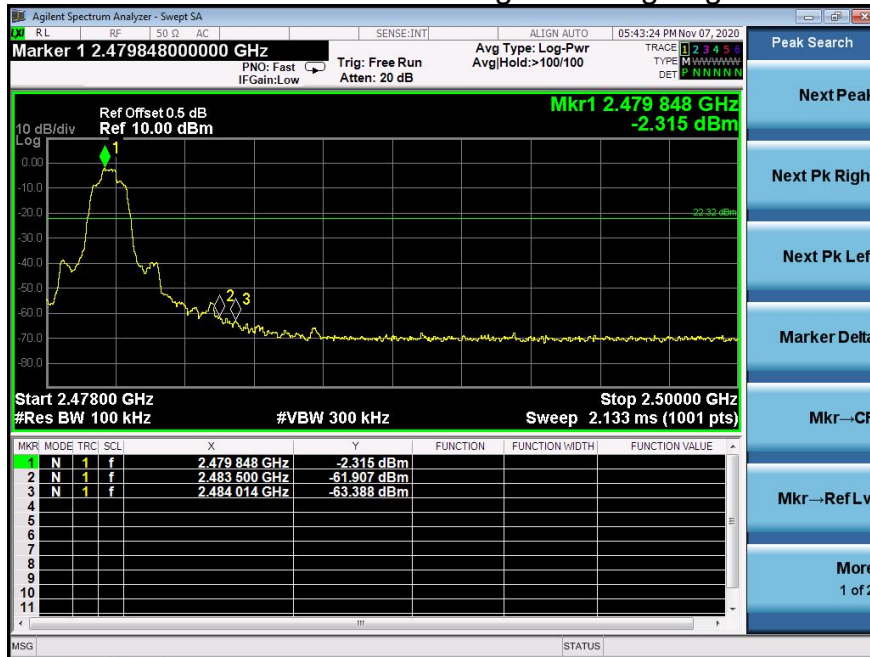
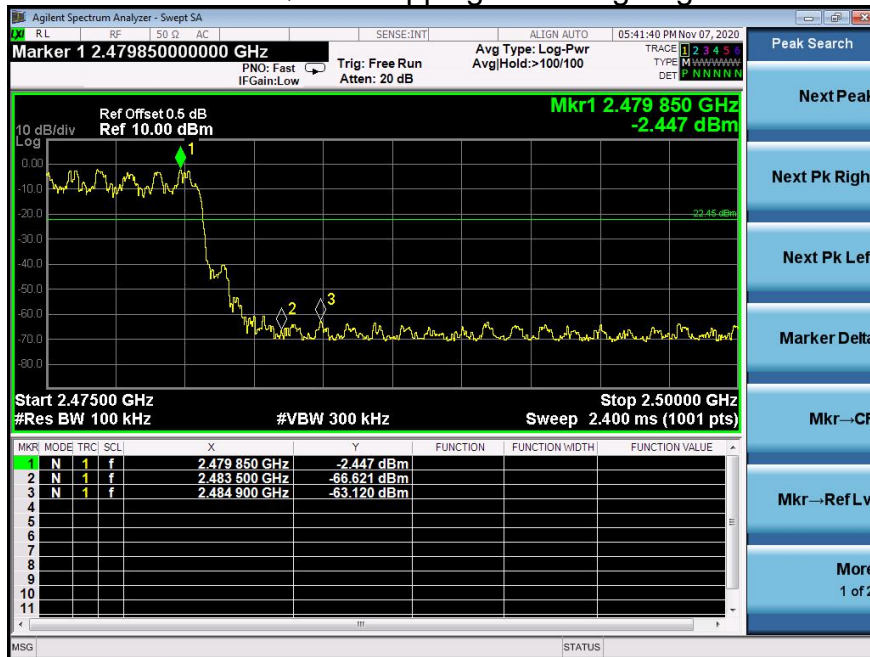


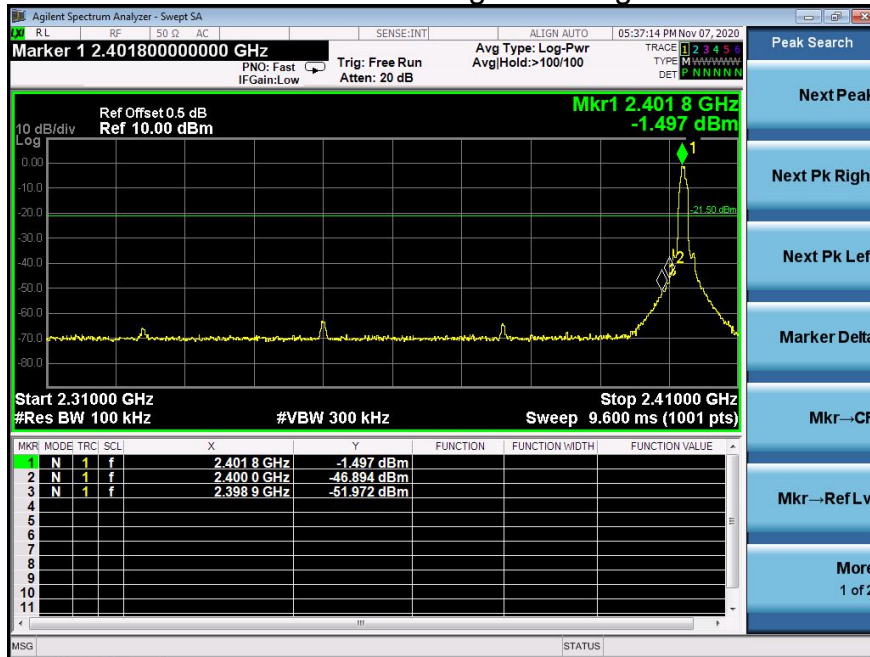
Pi/4 DQPSK Transmitting Band edge-right side



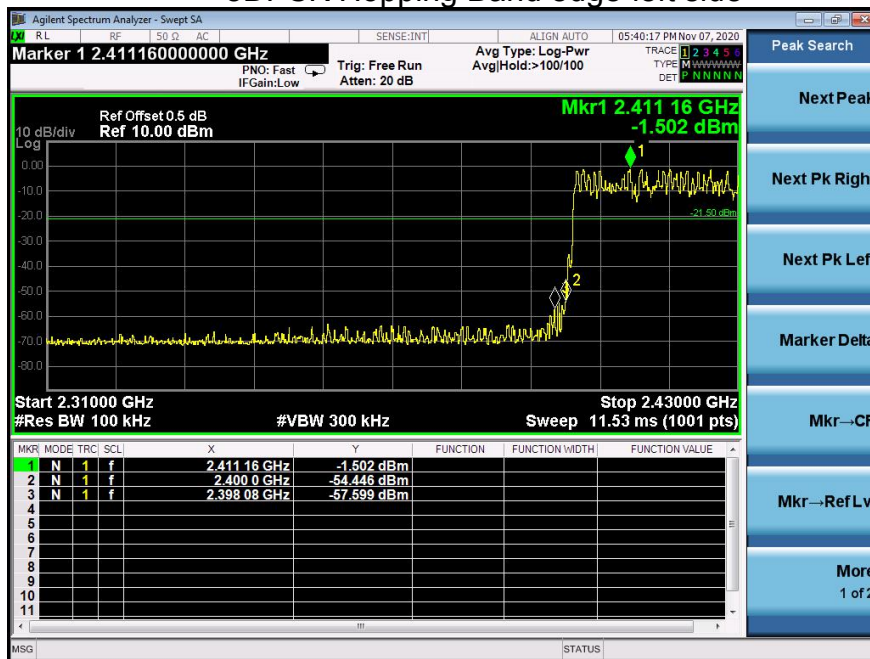
Pi/4 DQPSK Hopping Band edge-right side



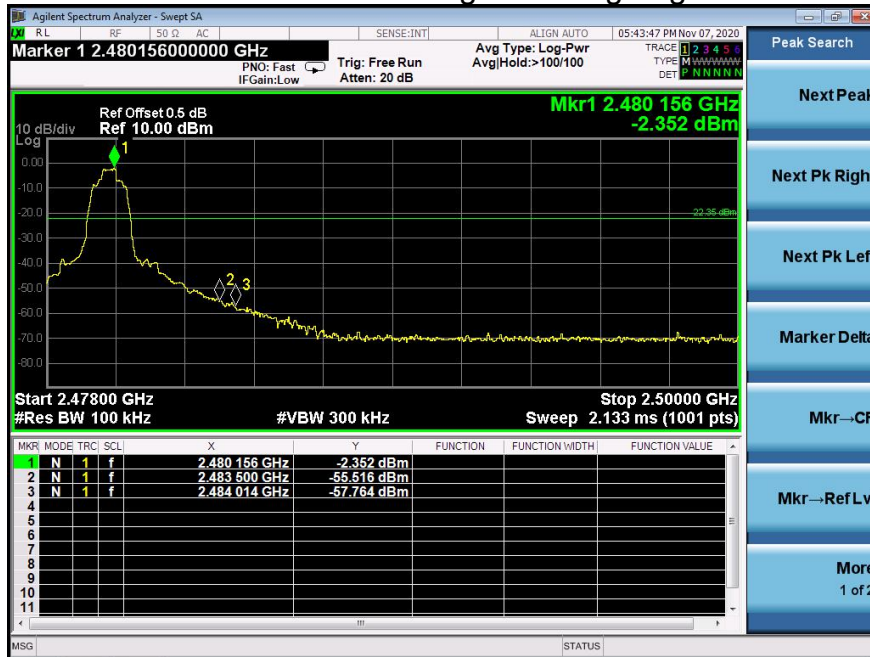
8DPSK Transmitting Band edge-left side



8DPSK Hopping Band edge-left side



8DPSK Transmitting Band edge-right side



8DPSK Hopping Band edge-right side



10. 20 DB BANDWIDTH

10.1 Block Diagram Of Test Setup



10.2 Limit

N/A

10.3 Test procedure

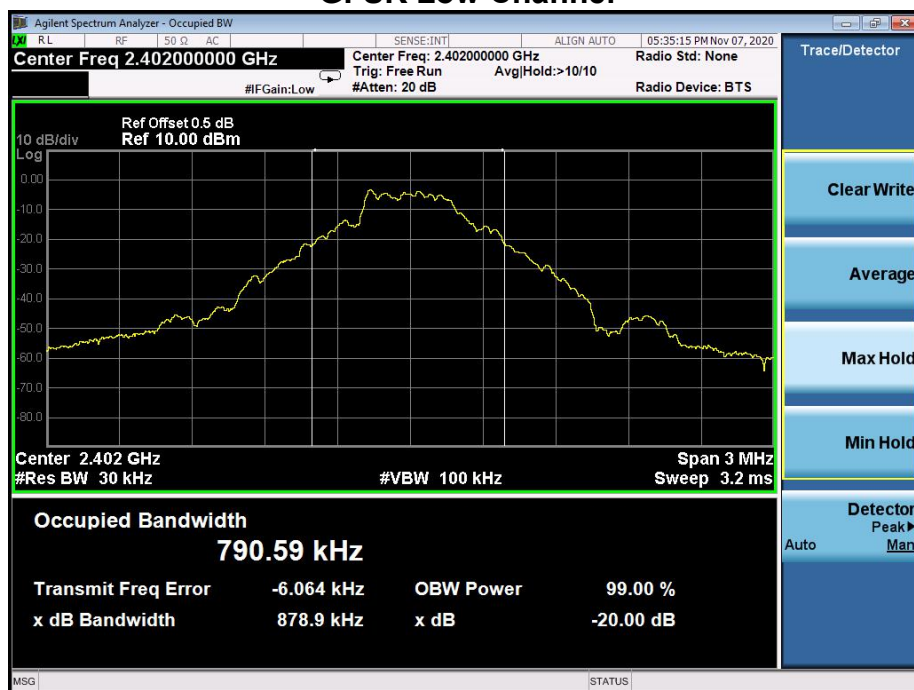
1. Set RBW = 30kHz.
2. Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

10.4 Test Result

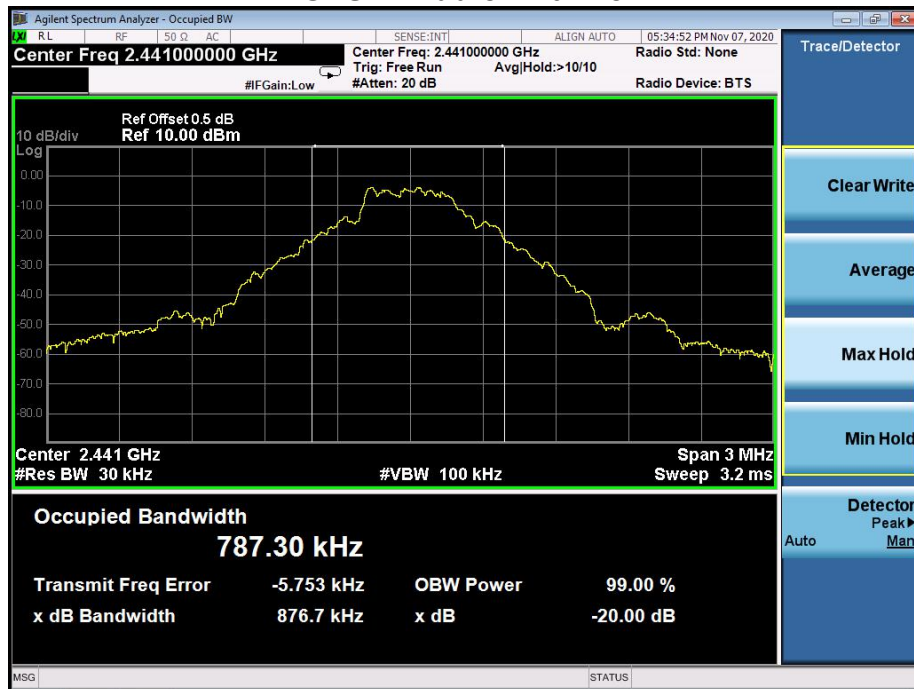
Temperature :	26°C	Relative Humidity :	54%
Test Voltage :	DC 11.1V	Remark	N/A

Modulation	Test Channel	Bandwidth(MHz)
GFSK	Low	0.879
GFSK	Middle	0.877
GFSK	High	0.879
Pi/4 DQPSK	Low	1.244
Pi/4 DQPSK	Middle	1.246
Pi/4 DQPSK	High	1.228
8DPSK	Low	1.217
8DPSK	Middle	1.212
8DPSK	High	1.217

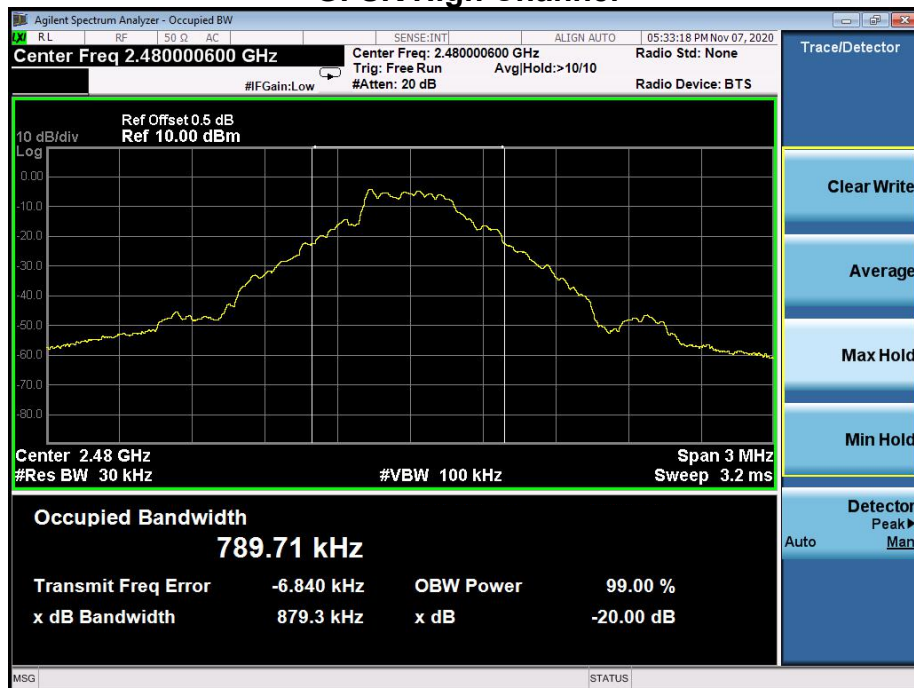
**Test plots
GFSK Low Channel**



GFSK Middle Channel



GFSK High Channel



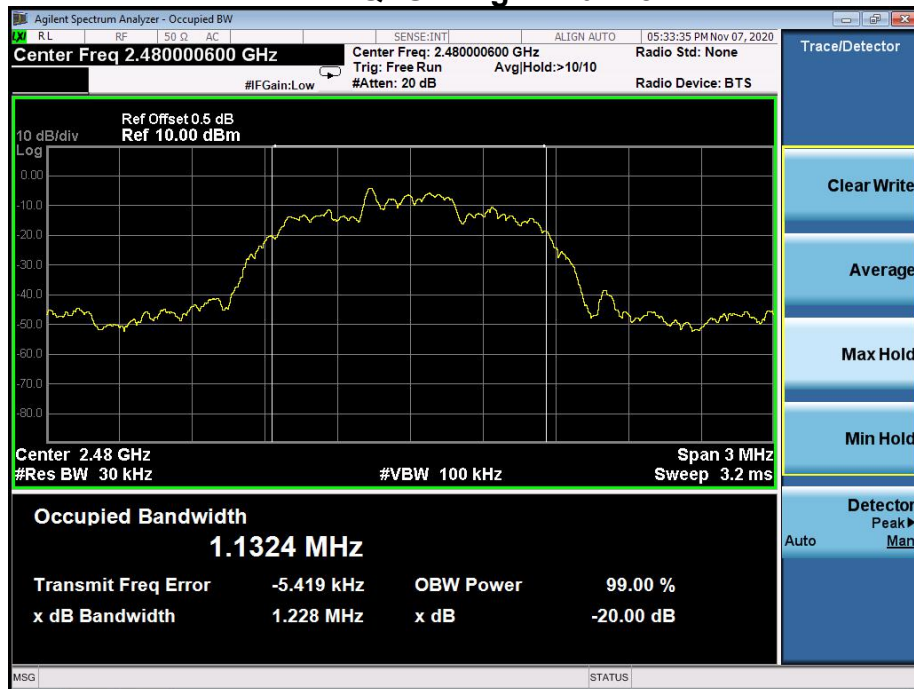
Pi/4 DQPSK Low Channel



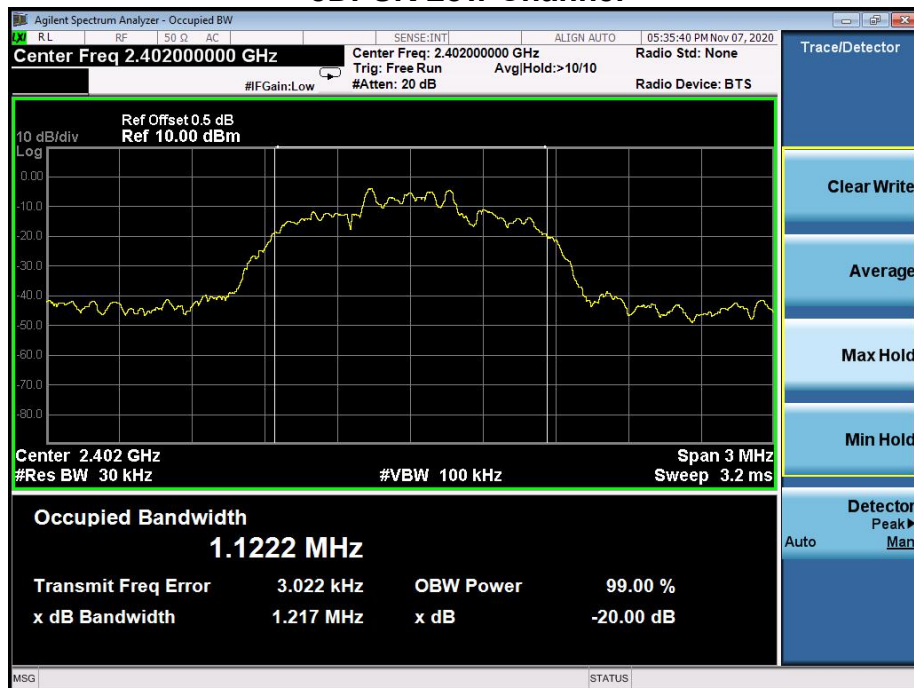
Pi/4 DQPSK Middle Channel



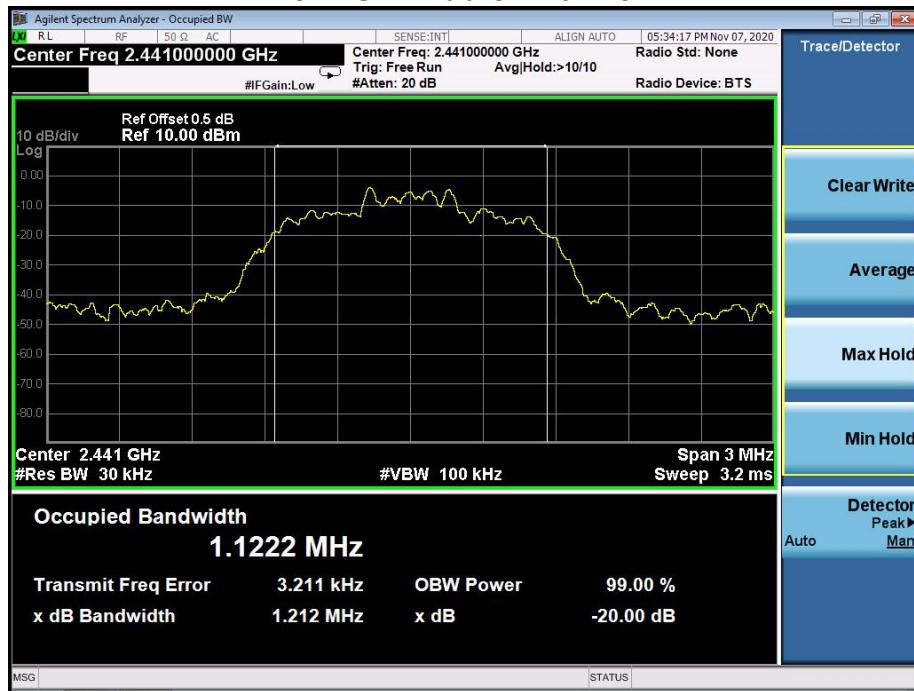
Pi/4 DQPSK High Channel



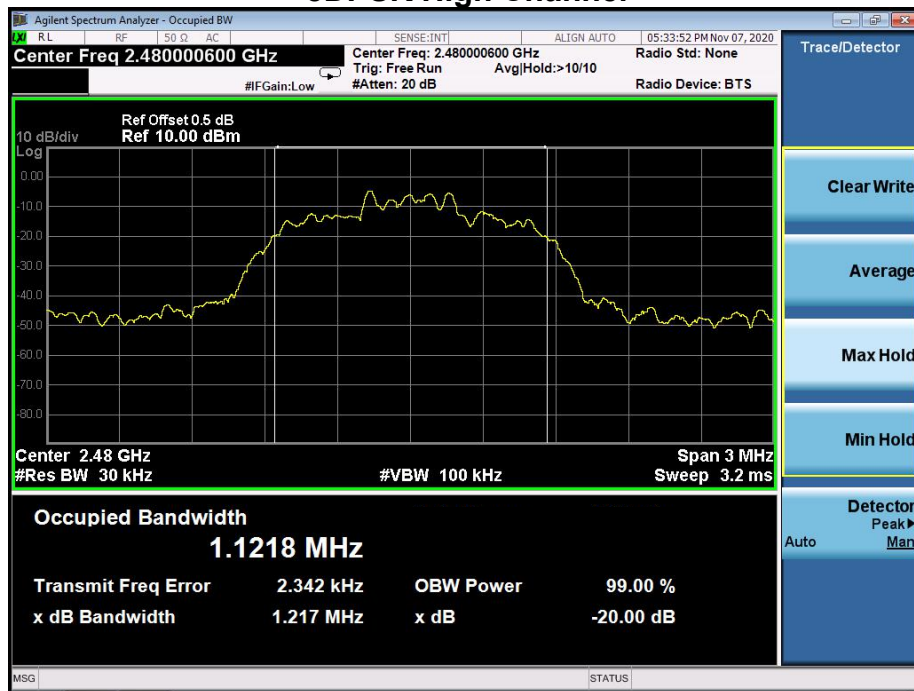
8DPSK Low Channel



8DPSK Middle Channel



8DPSK High Channel



11. MAXIMUM PEAK OUTPUT POWER

11.1 Block Diagram Of Test Setup

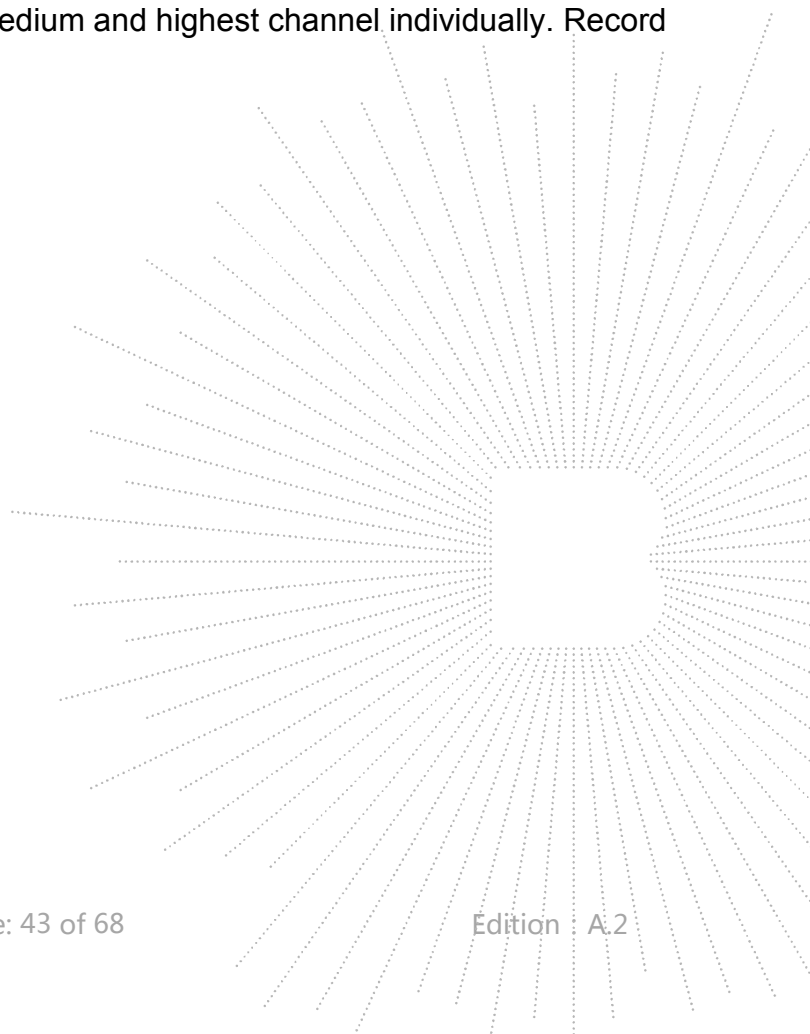


11.2 Limit

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(1)	Peak Output Power	0.125 watt or 21dBm	2400-2483.5	PASS

11.3 Test procedure

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum.
2. Set the spectrum analyzer: RBW = 3MHz. VBW = 3MHz. Sweep = auto; Detector Function = Peak.
3. Keep the EUT in transmitting at lowest, medium and highest channel individually. Record the max value.



11.4 Test Result

Temperature :	26℃	Relative Humidity :	54%
Test Voltage :	DC 11.1V	Remark:	N/A

Modulation	Test Channel	Output Power (dBm)	Limit (dBm)
GFSK	Low	-1.067	21
GFSK	Middle	-1.143	21
GFSK	High	-1.935	21
Pi/4 DQPSK	Low	-0.292	21
Pi/4 DQPSK	Middle	-0.410	21
Pi/4 DQPSK	High	-1.220	21
8DPSK	Low	0.200	21
8DPSK	Middle	0.071	21
8DPSK	High	-1.244	21

Test plots
GFSK Low Channel



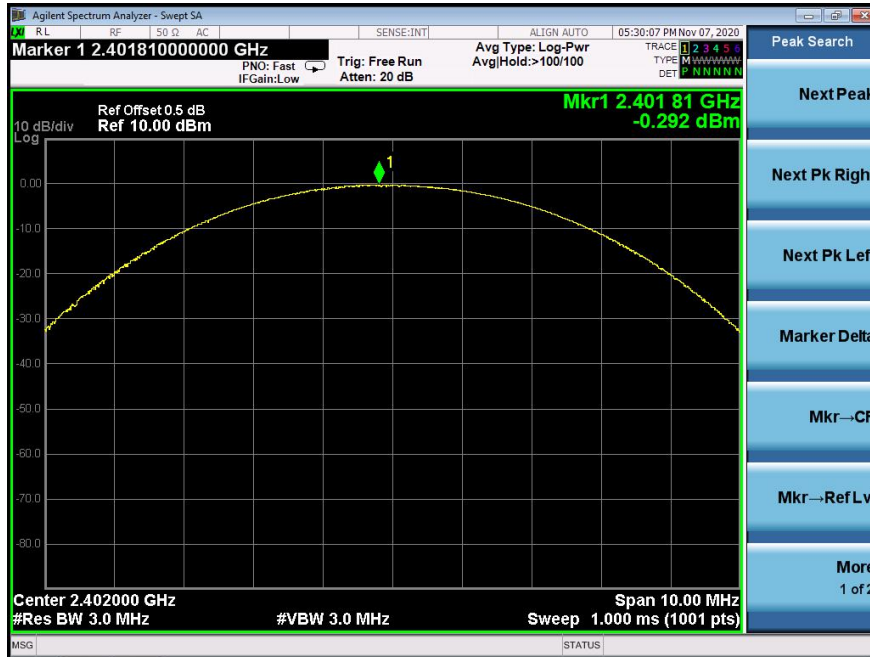
GFSK Middle Channel



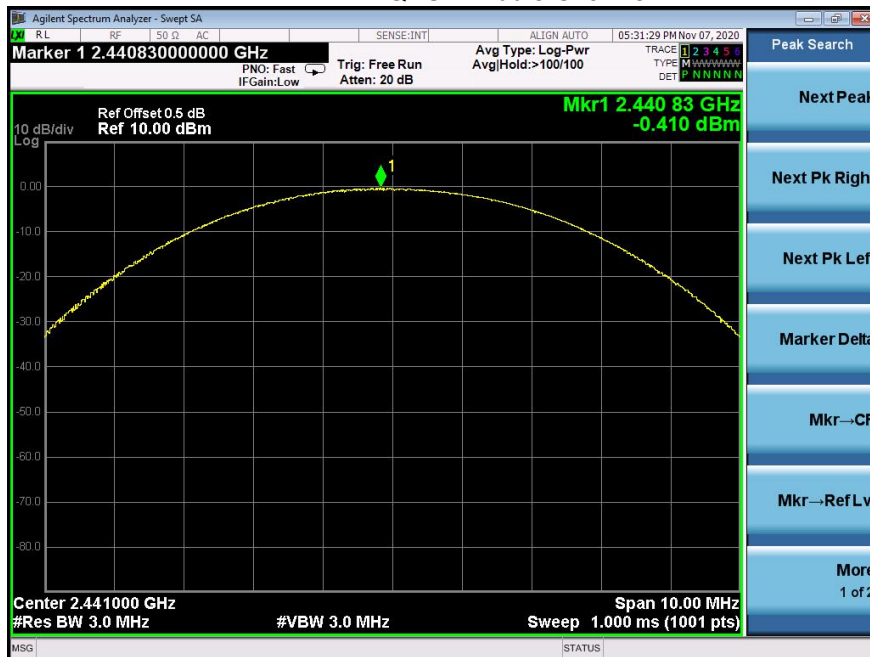
GFSK High Channel



Pi/4 DQPSK Low Channel



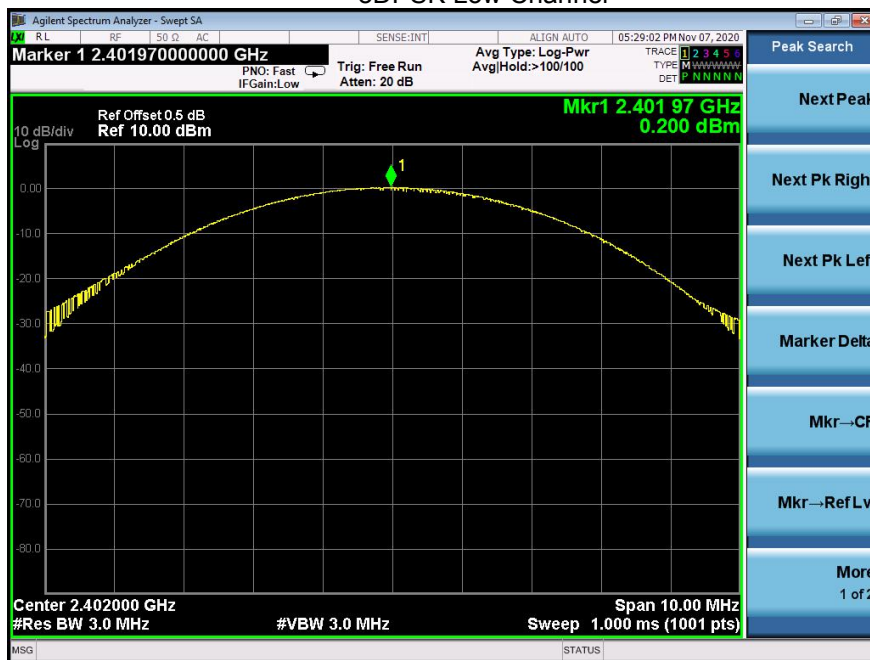
Pi/4 DQPSK Middle Channel



Pi/4 DQPSK High Channel



8DPSK Low Channel



8DPSK Middle Channel



8DPSK High Channel



12. HOPPING CHANNEL SEPARATION

12.1 Block Diagram Of Test Setup



12.2 Limit

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have 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, provided the systems operate with an output power no greater than 0.125W.

12.3 Test procedure

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum.
2. Set the spectrum analyzer: RBW = 30kHz. VBW = 100kHz , Span = 2.0MHz. Sweep = auto; Detector Function = Peak. Trace = Max hold.
3. Allow the trace to stabilize. Use the marker-delta function to determine the separation between the peaks of the adjacent channels. The limit is specified in one of the subparagraphs of this Section Submit this plot.

12.4 Test Result

Modulation	Test Channel	Separation (MHz)	Limit(MHz)	Result
GFSK	Low	1.006	0.586	PASS
GFSK	Middle	0.996	0.585	PASS
GFSK	High	0.994	0.586	PASS
Pi/4 DQPSK	Low	1.004	0.829	PASS
Pi/4 DQPSK	Middle	0.996	0.831	PASS
Pi/4 DQPSK	High	0.992	0.819	PASS
8DPSK	Low	0.994	0.811	PASS
8DPSK	Middle	1.014	0.808	PASS
8DPSK	High	1.004	0.811	PASS

Test plots
GFSK Low Channel



GFSK Middle Channel



GFSK High Channel



Pi/4 DQPSK Low Channel



Pi/4 DQPSK Middle Channel



Pi/4 DQPSK High Channel



8DPSK Low Channel



8DPSK Middle Channel



8DPSK High Channel



13. NUMBER OF HOPPING FREQUENCY

13.1 Block Diagram Of Test Setup



13.2 Limit

Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels.

13.3 Test procedure

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum.
2. Set the spectrum analyzer: RBW = 100kHz. VBW = 300kHz. Sweep = auto; Detector Function = Peak. Trace = Max hold.
3. Allow the trace to stabilize. It may prove necessary to break the span up to sections. in order to clearly show all of the hopping frequencies. The limit is specified in one of the subparagraphs of this Section.
4. Set the spectrum analyzer: Start Frequency = 2.4GHz, Stop Frequency = 2.4835GHz. Sweep=auto;