



Mode	Channel	Frequency Range	Test Results	Conclusion	
π/4 DQPSK	0	2.31GHz ~2.43GHz	Fig.3	Р	
	78	2.45GHz ~2.5GHz	Fig.4	Р	

Mode	Channel	Frequency Range	Test Results	Conclusion
8DPSK	0	2.31GHz ~2.43GHz	Fig.5	Р
	78	2.45GHz ~2.5GHz	Fig.6	Р

Conclusion: PASS
Test graphs as below

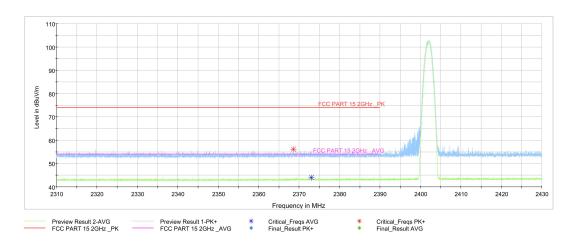


Fig.1. Frequency Band Edges: GFSK, Channel 0, Hopping Off, 2.31 GHz – 2.45GHz

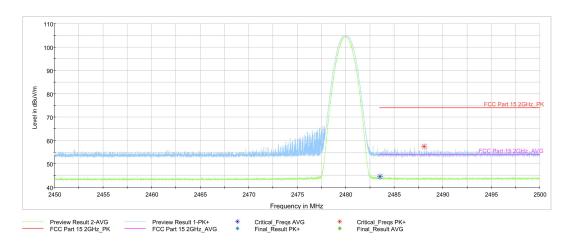


Fig.2. Frequency Band Edges: GFSK, Channel 78, Hopping Off, ch11, 2.45 GHz - 2.50GHz





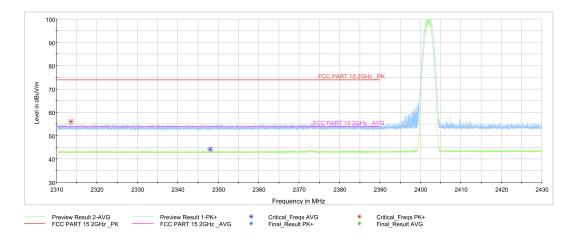


Fig.3. Frequency Band Edges: $\pi/4$ DQPSK, Channel 0, Hopping Off, 2.31 GHz - 2.45GHz

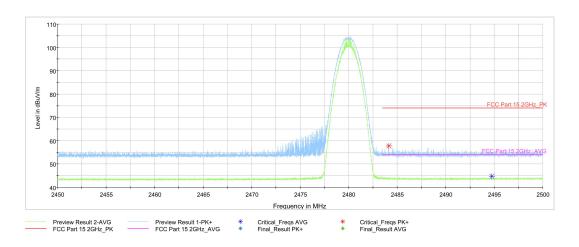


Fig.4. Frequency Band Edges: π/4 DQPSK, Channel 78, Hopping Off, 2.45 GHz - 2.50GHz

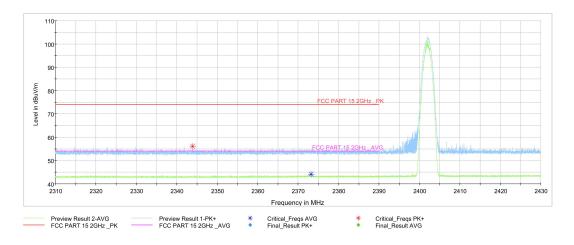


Fig.5. Frequency Band Edges: 8DPSK, Channel 0, 2.31 GHz - 2.45GHz





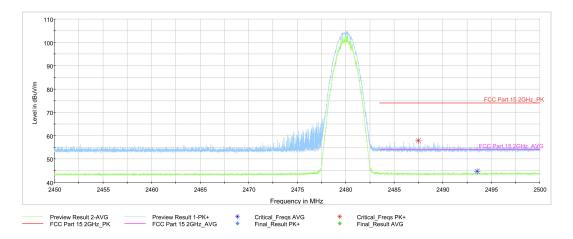


Fig.6. Frequency Band Edges: 8DPSK, Channel 78, 2.45 GHz - 2.50GHz





B.6. Time of Occupancy (Dwell Time)

Method of Measurement: See ANSI C63.10-clause 7.8.4

The EUT must have its hopping function enabled. Use the following spectrum analyzer settings:

- Span = zero span, centered on a hopping channel
- RBW = 1 MHz
- VBW ≥ RBW
- Sweep = as necessary to capture the entire dwell time per hopping channel
- Detector function = peak
- Trace = max hold

Measure a pulse time in time domain at middle frequency and then count the hopping number in 31.6s(which equals with 0.4 multiply 79) of middle frequency ,then multiply the pulse time and hopping number and record them.

Measurement Limit:

Standard	Limit (ms)
FCC 47 CFR Part 15.247(a) (1)(iii)	< 400

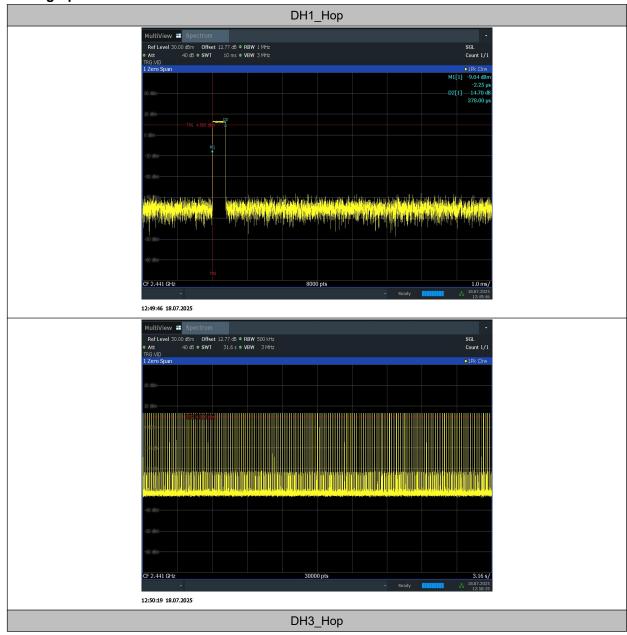
Measurement Result:

TestMode	Frequency[MHz]	BurstWidth	TotalHops	Result[s]	Limit[s]	Verdict
		[ms]	[Num]			
DH1	Нор	0.378	320	0.121	≤0.4	PASS
DH3	Нор	1.633	161	0.263	≤0.4	PASS
DH5	Нор	2.882	107	0.308	≤0.4	PASS
2DH1	Нор	0.384	320	0.123	≤0.4	PASS
2DH3	Нор	1.636	167	0.273	≤0.4	PASS
2DH5	Нор	2.884	106	0.306	≤0.4	PASS
3DH1	Нор	0.385	320	0.123	≤0.4	PASS
3DH3	Нор	1.634	167	0.273	≤0.4	PASS
3DH5	Нор	2.887	103	0.297	≤0.4	PASS



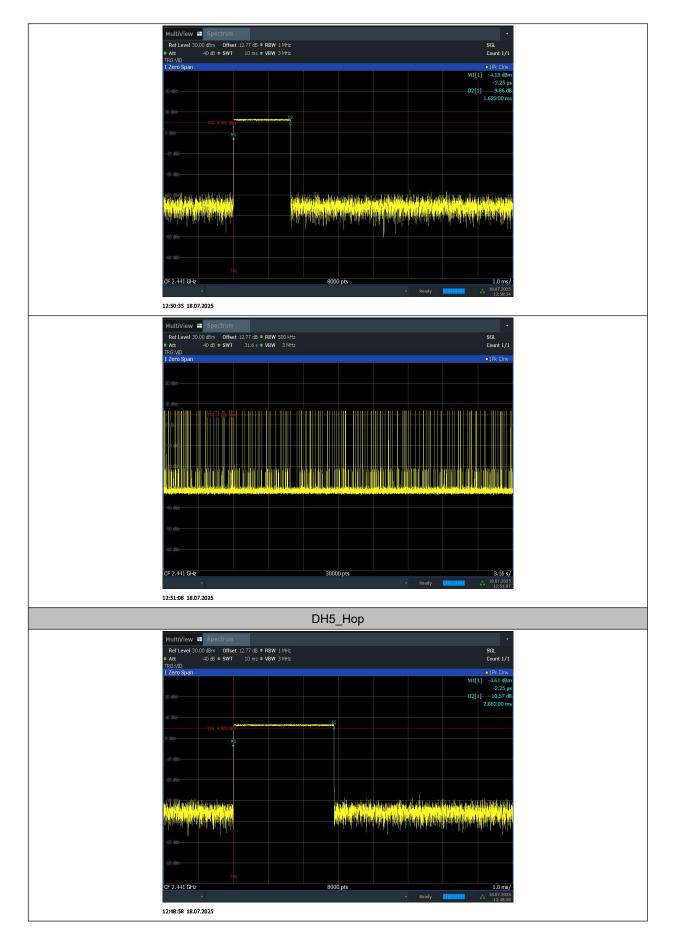


Test graphs as below:



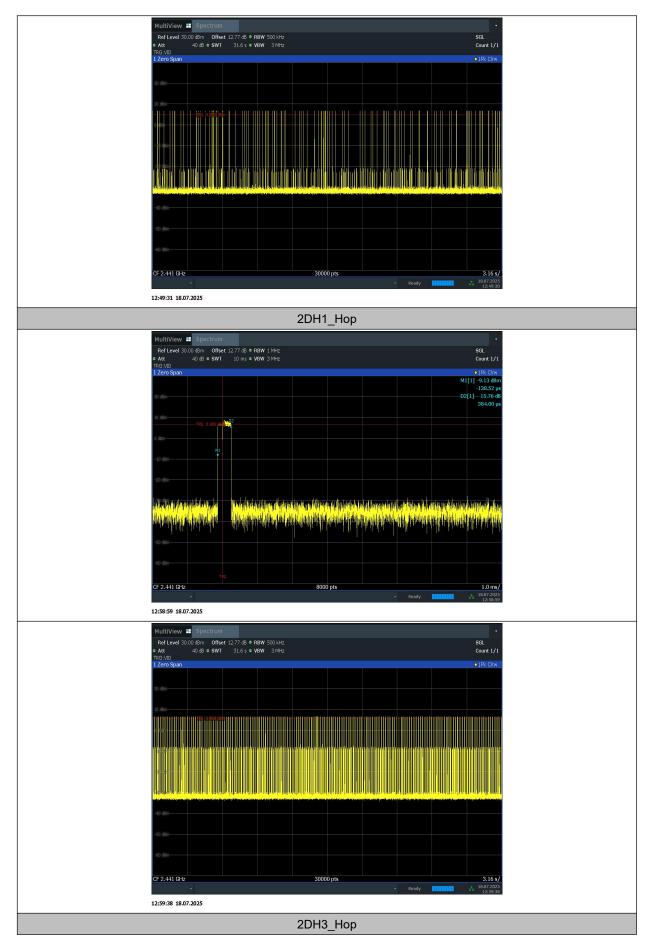






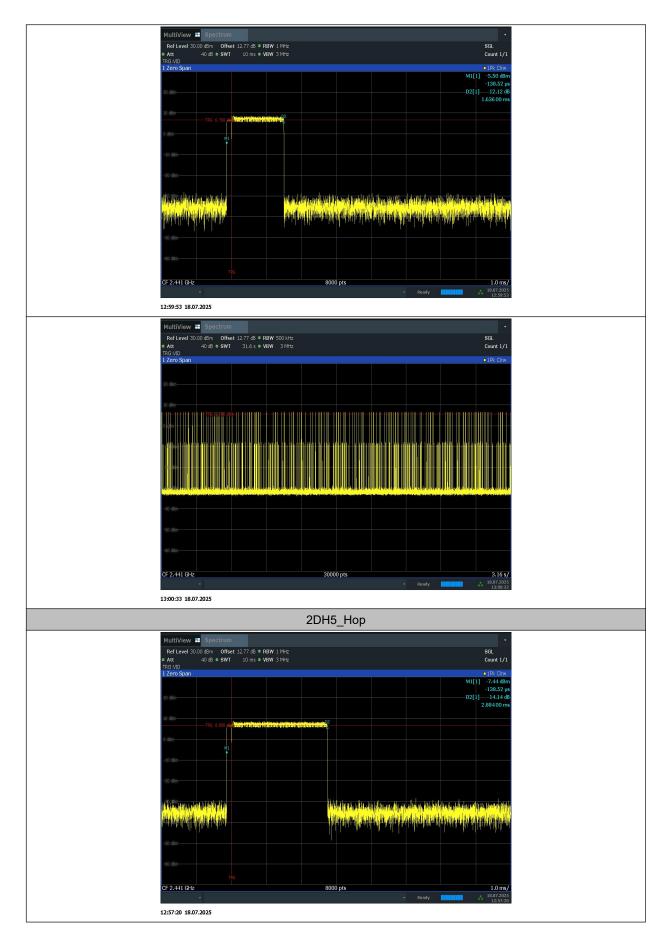






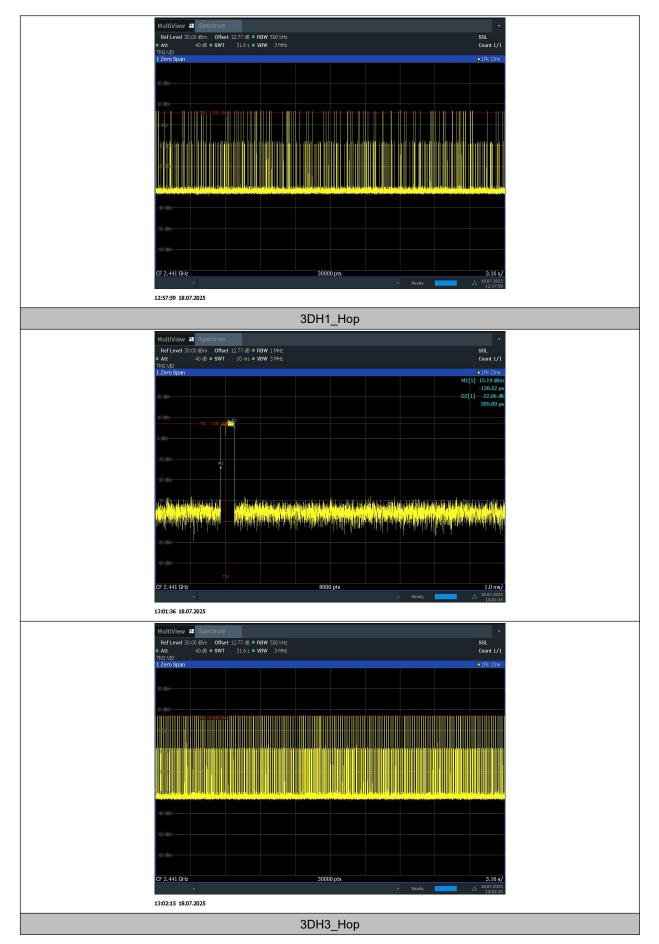




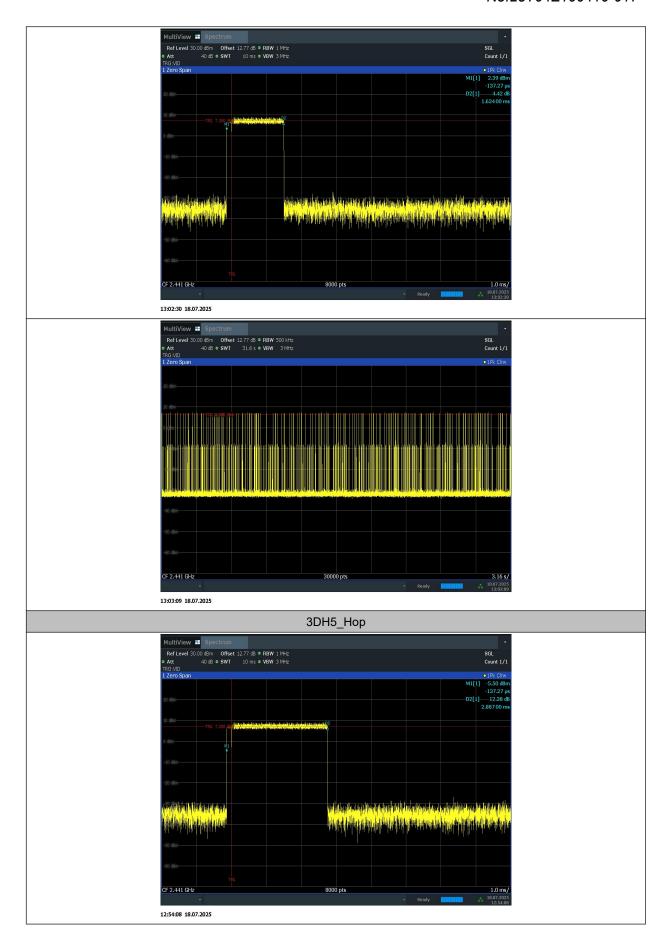






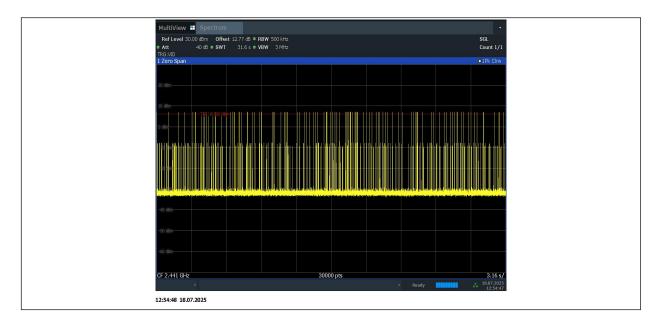












Conclusion: PASS





B.7. 20dB Bandwidth

Method of Measurement: See ANSI C63.10-clause 6.9.2

Measurement Procedure - Unwanted Emissions

- 1. Set RBW = 30kHz.
- 2. Set VBW = 100 kHz.
- 3. Set span to 3MHz
- 4. Detector = peak.
- 5. Trace Mode = max hold.
- 6. Sweep = auto couple.
- 7. Allow the trace to stabilize (this may take some time, depending on the extent of the span).

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.247(a)(1)	NA *

Use NdB Down function of the SA to measure the 20dB Bandwidth

* Comment: This test case is not required according to the latest FCC 47 CFR Part 15.247. But the test results are necessary for "carrier frequency separation" test case, in Annex A.8.

Measurement Results:

TestMode	Frequency[MHz]	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	2402	0.86	2401.54	2402.41		
	2441	0.86	2440.54	2441.41		
	2480	0.86	2479.54	2480.41		
2DH5	2402	1.30	2401.35	2402.65		
	2441	1.31	2440.34	2441.65		
	2480	1.31	2479.34	2480.65		
3DH5	2402	1.31	2401.34	2402.65		
	2441	1.31	2440.34	2441.65		
	2480	1.31	2479.34	2480.65		

Conclusion: NA





Test graphs as below:

