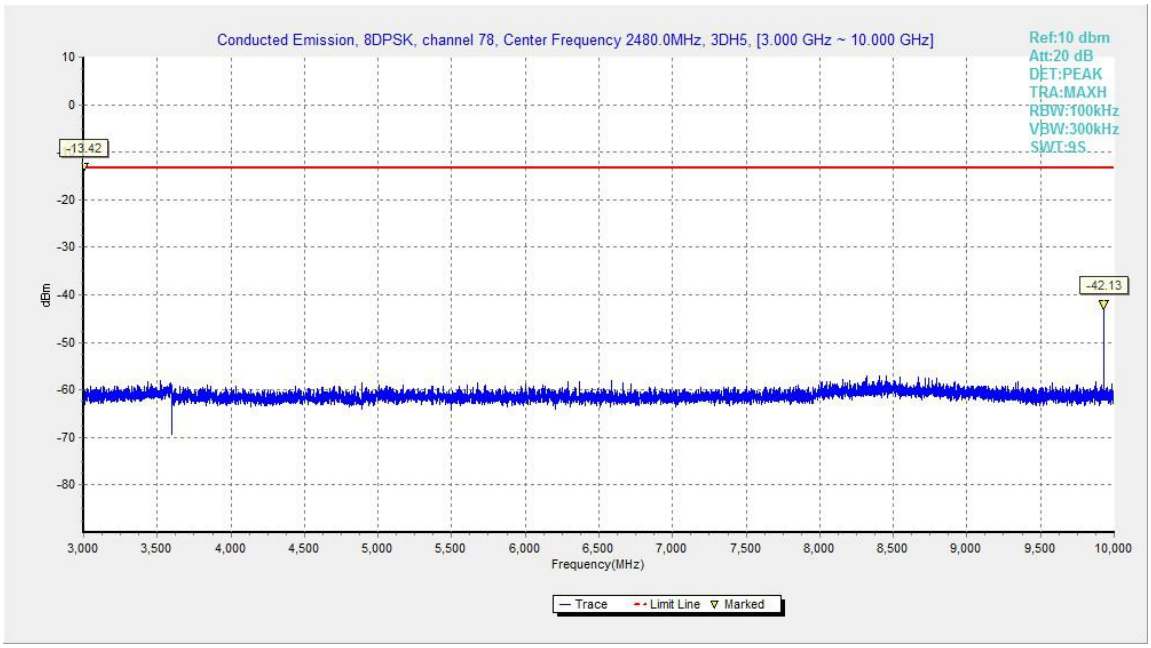


Fig.56. Conducted spurious emission: 8DPSK, Channel 78, 3GHz - 10GHz

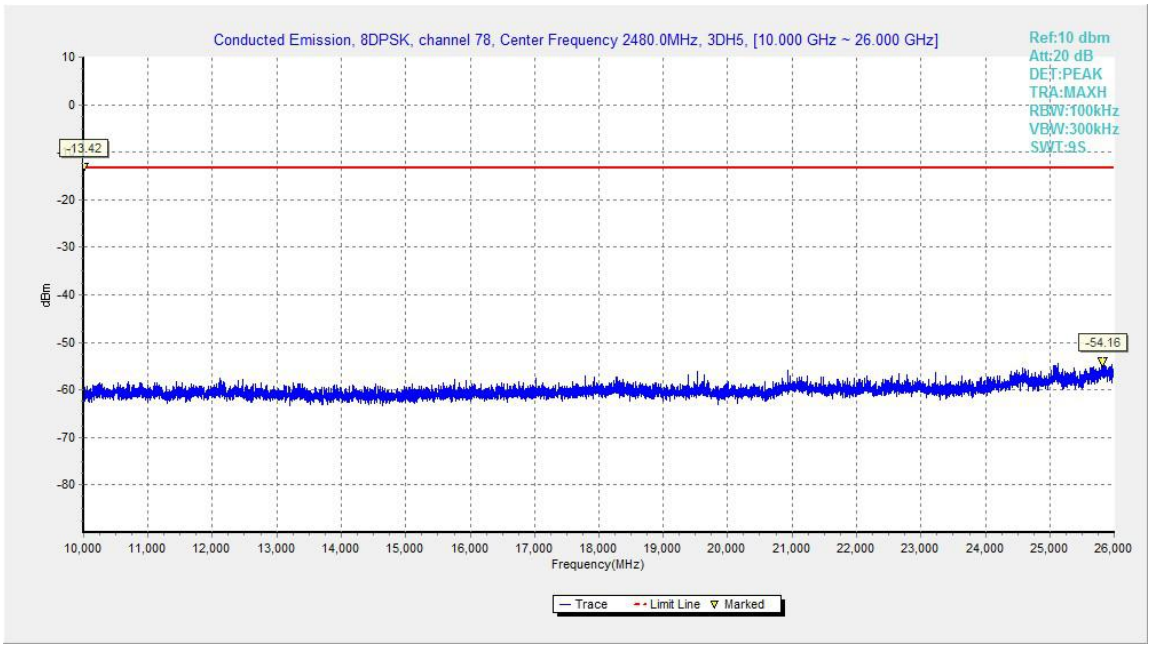


Fig.57. Conducted spurious emission: 8DPSK, Channel 78, 10GHz - 26GHz

A.5. Transmitter Spurious Emission - Radiated

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.247, 15.205, 15.209	20dB below peak output power

In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

The measurement is made according to ANSI C63.10

Limit in restricted band:

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Test Condition

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

Frequency of emission (MHz)	RBW/VBW	Sweep Time(s)
30-1000	100KHz/300KHz	5
1000-4000	1MHz/1MHz	15
4000-18000	1MHz/1MHz	40
18000-26500	1MHz/1MHz	20

Measurement Results:

Result=P_{Mea}+ARPL

For GFSK

Channel	Frequency Range	Test Results	Conclusion
Ch 0 2402 MHz	1 GHz ~ 3 GHz	--	P
	3 GHz ~ 18 GHz	--	P
Ch 39 2441 MHz	9 kHz ~ 30 MHz	--	P
	30 MHz ~ 1 GHz	--	P
	1 GHz ~ 3 GHz	--	P
	3 GHz ~ 18 GHz	--	P
Ch 78 2480 MHz	1 GHz ~ 3 GHz	--	P
	3 GHz ~ 18 GHz	--	P
Power	2.38GHz~2.4GHz---L	Fig.58	P
Power	2.45GHz~2.5GHz---H	Fig.59	P

For all channels	18 GHz ~ 26 GHz	--	P

Forπ/4 DQPSK

Channel	Frequency Range	Test Results	Conclusion
Ch 0 2402 MHz	1 GHz ~ 3 GHz	--	P
	3 GHz ~ 18 GHz	--	P
Ch 39 2441 MHz	30 MHz ~ 1 GHz	--	P
	1 GHz ~ 3 GHz	--	P
	3 GHz ~ 18 GHz	--	P
Ch 78 2480 MHz	1 GHz ~ 3 GHz	--	P
	3 GHz ~ 18 GHz	--	P
Power	2.38GHz~2.4GHz---L	Fig.60	P
Power	2.45GHz~2.5GHz---H	Fig.61	P
For all channels	18 GHz ~ 26 GHz	--	P

For 8DPSK

Channel	Frequency Range	Test Results	Conclusion
Ch 0 2402 MHz	1 GHz ~ 3 GHz	--	P
	3 GHz ~ 18 GHz	--	P
Ch 39 2441 MHz	30 MHz ~ 1 GHz	--	P
	1 GHz ~ 3 GHz	--	P
	3 GHz ~ 18 GHz	--	P
Ch 78 2480 MHz	1 GHz ~ 3 GHz	--	P
	3 GHz ~ 18 GHz	--	P
Power	2.38GHz~2.4GHz---L	Fig.62	P
Power	2.45GHz~2.5GHz---H	Fig.63	P
For all channels	18 GHz ~ 26 GHz	--	P

GFSK Ch 0 - Average

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dBμV)	Polarization
2886.920	41.8	-38.7	28.4	52.075	H
9608.000	42.7	-33.2	37.6	38.295	H
17761.000	39.5	-25.7	43.4	21.842	V
17869.000	39.2	-25.7	43.4	21.542	H
17783.500	39.2	-25.7	43.4	21.542	H
17839.000	39.2	-25.7	43.4	21.542	H

GFSK Ch 39 - Average

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dBμV)	Polarization
9764.000	45.9	-33.0	37.6	41.302	H
9763.500	40.5	-33.0	37.6	35.902	H
7323.000	40.2	-35.0	35.2	39.996	V
9764.500	40.1	-33.0	37.6	35.502	H
17843.000	39.2	-25.7	43.4	21.542	H
17412.000	39.2	-25.9	40.1	25.045	H

GFSK Ch 78 - Average

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dBμV)	Polarization
2498.490	41.2	-38.9	27.2	52.9	H
9920.000	45.0	-33.5	37.6	40.9	H
9920.500	44.7	-33.5	37.6	40.6	V
17869.000	39.3	-25.7	43.4	21.6	H
17755.500	39.3	-25.7	43.4	21.6	H
17913.500	39.2	-25.7	43.4	21.5	H

π/4 DQPSK Ch 0 - Average

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dBμV)	Polarization
2387.055	41.8	-38.8	27.2	53.4	H
9608.000	43.2	-33.2	37.6	38.8	H
9608.500	39.8	-33.2	37.6	35.4	V
17912.000	39.2	-25.7	43.4	21.5	H
17857.500	39.1	-25.7	43.4	21.4	H
17903.500	39.0	-25.7	43.4	21.3	H

π/4 DQPSK Ch 39 - Average

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dBμV)	Polarization
9764.000	47.4	-33.0	37.6	42.8	H
9763.500	41.9	-33.0	37.6	37.3	H
9764.500	41.0	-33.0	37.6	36.4	V
7322.500	39.9	-35.0	35.2	39.7	H
17948.500	39.4	-25.5	43.4	21.5	H
17763.500	39.4	-25.7	43.4	21.7	H

π/4 DQPSK Ch 78 - Average

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dBμV)	Polarization
2489.110	41.0	-39.0	27.2	52.8	H
9920.000	43.1	-33.5	37.6	39.0	H
9920.500	39.3	-33.5	37.6	35.2	V
17863.500	39.3	-25.7	43.4	21.6	H
17890.000	39.2	-25.7	43.4	21.5	H
17871.500	39.2	-25.7	43.4	21.5	H

8DPSK Ch 0 - Average

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dBμV)	Polarization
2387.165	41.8	-38.8	27.2	53.4	H
9608.000	44.2	-33.2	37.6	39.8	H
9608.500	40.0	-33.2	37.6	35.6	V
17866.000	39.3	-25.7	43.4	21.6	H
17849.500	39.2	-25.7	43.4	21.5	H
17886.500	39.1	-25.7	43.4	21.4	H

8DPSK Ch 39 - Average

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dBμV)	Polarization
17862.000	39.4	-25.7	43.4	21.7	H
17847.500	39.3	-25.7	43.4	21.6	H
17899.000	39.2	-25.7	43.4	21.5	V
17860.500	39.2	-25.7	43.4	21.5	H
17844.500	39.2	-25.7	43.4	21.5	H
17870.000	39.2	-25.7	43.4	21.5	H

8DPSK Ch 78 - Average

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dBμV)	Polarization
2485.145	41.1	-39.0	27.2	52.9	H
9920.000	41.0	-33.5	37.6	36.9	H
17871.500	39.3	-25.7	43.4	21.6	V
17871.000	39.3	-25.7	43.4	21.6	H
17862.500	39.2	-25.7	43.4	21.5	H
17862.000	39.2	-25.7	43.4	21.5	H

GFSK Ch 0 – Peak

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dBμV)	Polarization
2387.175	53.9	-38.8	27.2	65.5	H
17714.500	51.7	-26.9	43.4	35.2	H
17787.500	51.0	-25.7	43.4	33.3	V
17487.000	50.9	-25.9	40.1	36.7	H
17812.000	50.9	-25.7	43.4	33.2	H
17850.000	50.9	-25.7	43.4	33.2	H

GFSK Ch 39 - Peak

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dBμV)	Polarization
17111.000	50.8	-26.3	40.1	37.0	H
17315.000	50.8	-26.6	40.1	37.3	H
17913.500	50.8	-25.7	43.4	33.1	V
17794.000	50.6	-25.7	43.4	32.9	H
17379.000	50.6	-26.6	40.1	37.1	H
17498.500	50.6	-25.9	40.1	36.4	H

GFSK Ch 78 - Peak

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dBμV)	Polarization
2493.170	53.7	-39.0	27.2	65.5	H
9920.000	52.9	-33.5	37.6	48.8	H
17356.500	51.5	-26.6	40.1	38.0	V
17799.500	51.3	-25.7	43.4	33.6	H
9920.500	51.1	-33.5	37.6	47.0	H
17949.000	50.9	-25.5	43.4	33.0	H

π/4 DQPSK Ch 0 - Peak

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dBμV)	Polarization
2387.070	53.9	-38.8	27.2	65.5	H
17392.000	51.1	-25.9	40.1	36.9	H
17822.000	50.9	-25.7	43.4	33.2	V
17889.500	50.8	-25.7	43.4	33.1	H
17836.000	50.8	-25.7	43.4	33.1	H
17826.000	50.7	-25.7	43.4	33.0	H

π/4 DQPSK Ch 39 - Peak

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dBμV)	Polarization
17744.500	51.2	-25.7	43.4	33.5	H
17781.500	50.9	-25.7	43.4	33.2	H
17953.000	50.9	-25.5	43.4	33.0	V
17354.000	50.9	-26.6	40.1	37.4	H
17394.000	50.8	-25.9	40.1	36.6	H
9764.000	50.7	-33.0	37.6	46.1	H

π/4 DQPSK Ch 78 - Peak

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dBμV)	Polarization
2488.940	54.0	-39.0	27.2	65.8	H
17797.000	51.5	-25.7	43.4	33.8	H
17930.500	51.5	-25.5	43.4	33.6	V
17863.500	51.0	-25.7	43.4	33.3	H
17872.500	51.0	-25.7	43.4	33.3	H
17819.500	50.8	-25.7	43.4	33.1	H

8DPSK Ch 0 - Peak

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dBμV)	Polarization
2387.380	54.2	-38.8	27.2	65.8	H
17861.000	51.4	-25.7	43.4	33.7	H
17645.500	51.0	-26.9	43.4	34.5	V
17948.000	51.0	-25.5	43.4	33.1	H
17915.500	50.9	-25.5	43.4	33.0	H
17817.000	50.8	-25.7	43.4	33.1	H

8DPSK Ch 39 - Peak

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dBμV)	Polarization
17712.500	50.9	-26.9	43.4	34.4	H
17943.000	50.9	-25.5	43.4	33.0	H
17748.000	50.6	-25.7	43.4	32.9	V
17564.000	50.6	-26.9	43.4	34.1	H
17481.000	50.5	-25.9	40.1	36.3	H
17869.000	50.5	-25.7	43.4	32.8	H

8DPSK Ch 78 - Peak

Frequency(MHz)	Result (dBuV/m)	Cable Loss(dB)	Antenna Factor	Receiver Reading (dBμV)	Polarization
2485.200	53.3	-39.0	27.2	65.114	H
17365.000	51.2	-26.6	40.1	37.701	H
17763.000	50.9	-25.7	43.4	33.242	V
17514.000	50.9	-25.9	43.4	33.445	H
17416.500	50.8	-25.9	40.1	36.645	H
17899.500	50.8	-25.7	43.4	33.142	H

Conclusion: PASS

Test graphs as below:

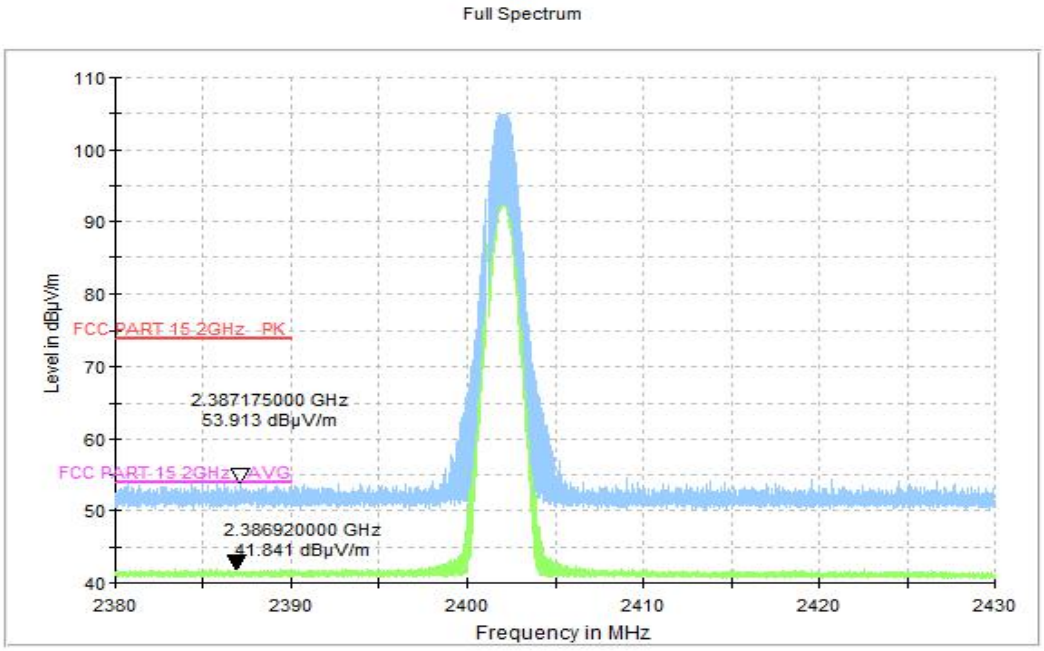


Fig.58. Radiated emission (Power): GFSK, low channel

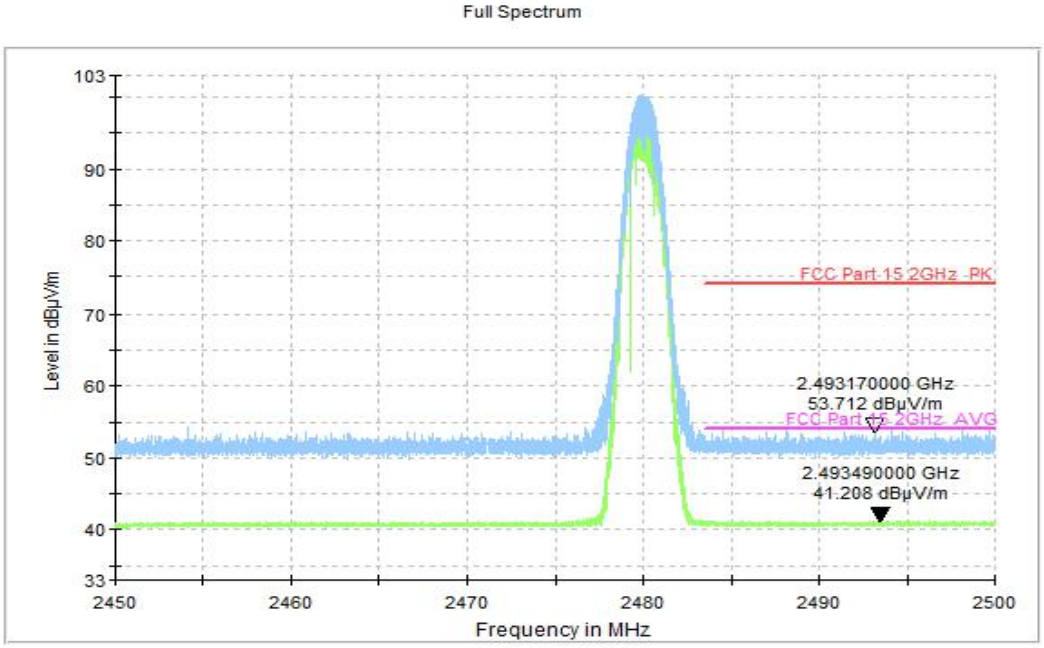


Fig.59. Radiated emission (Power) GFSK, high channel

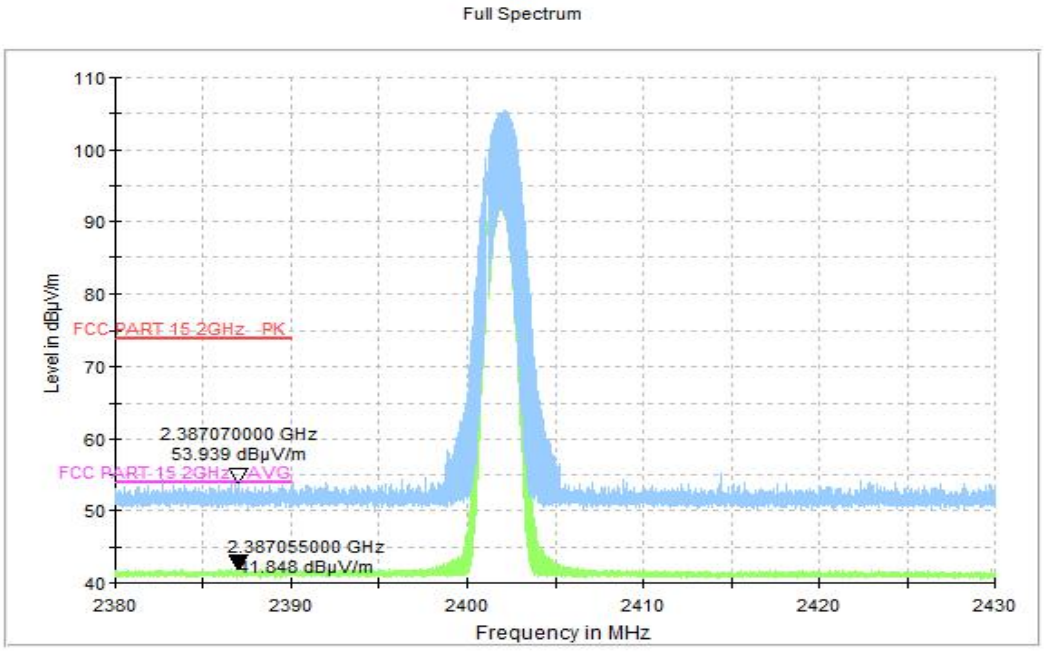


Fig.60. Radiated emission (Power): π/4 DQPSK, low channel

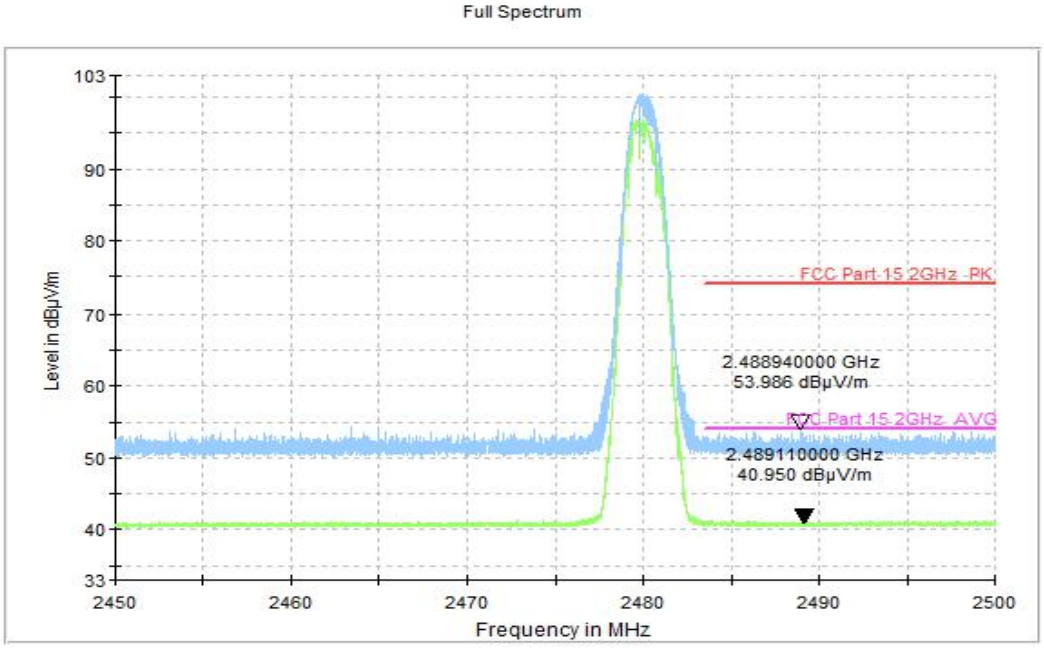


Fig.61. Radiated emission (Power): π/4 DQPSK, high channel

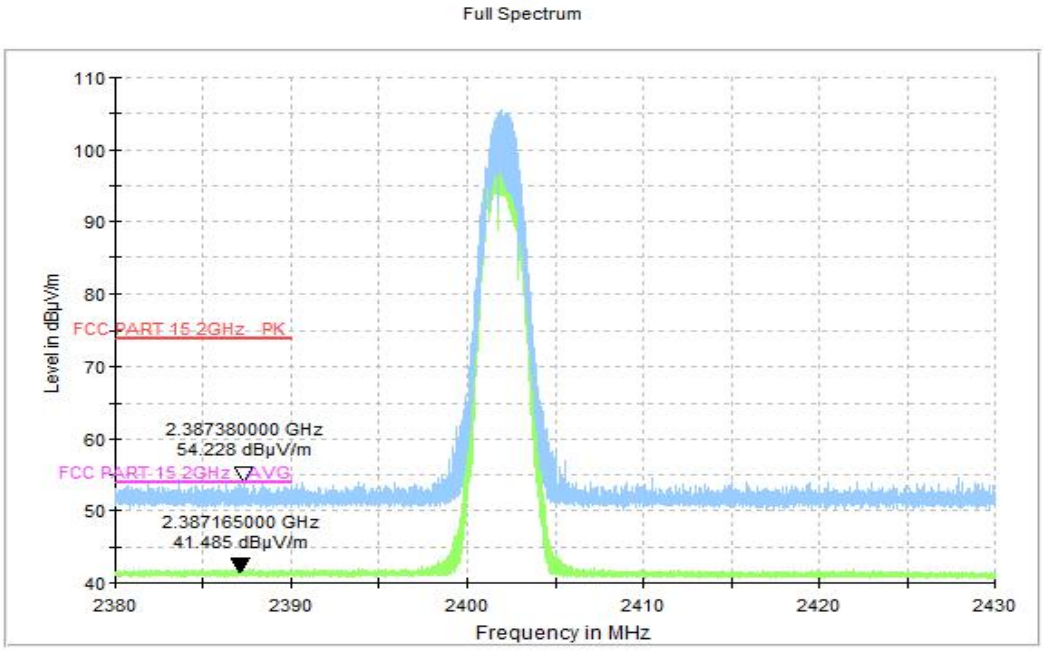


Fig.62. Radiated emission (Power): 8DPSK, low channel

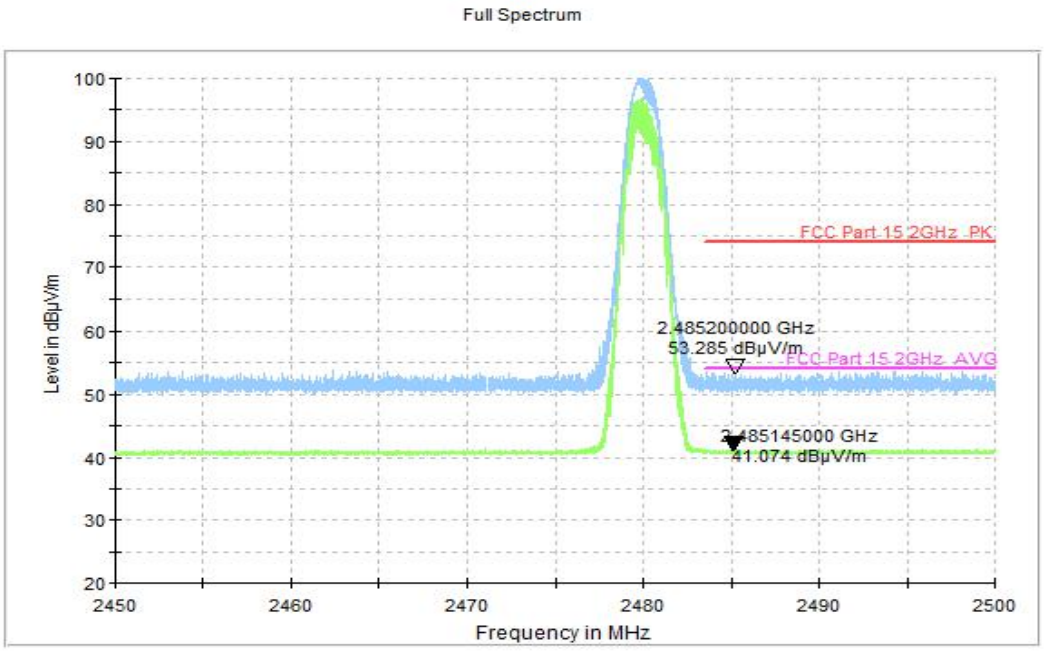


Fig.63. Radiated emission (Power): 8DPSK, high channel

A.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:

For GFSK

Channel	Packet	Dwell Time (ms)		Conclusion
39	DH1	Fig.64	121.21	P
		Fig.65		
	DH3	Fig.66	173.54	P
		Fig.67		
	DH5	Fig.68	176.00	P
		Fig.69		

For π/4 DQPSK

Channel	Packet	Dwell Time (ms)		Conclusion
39	DH1	Fig.70	123.04	P
		Fig.71		
	DH3	Fig.72	183.56	P
		Fig.73		
	DH5	Fig.74	158.79	P
		Fig.75		

For 8DPSK

Channel	Packet	Dwell Time (ms)		Conclusion
39	DH1	Fig.76	122.27	P
		Fig.77		
	DH3	Fig.78	186.71	P

		Fig.79		
	DH5	Fig.80	225.34	P
		Fig.81		

Conclusion: PASS

Test graphs as below:

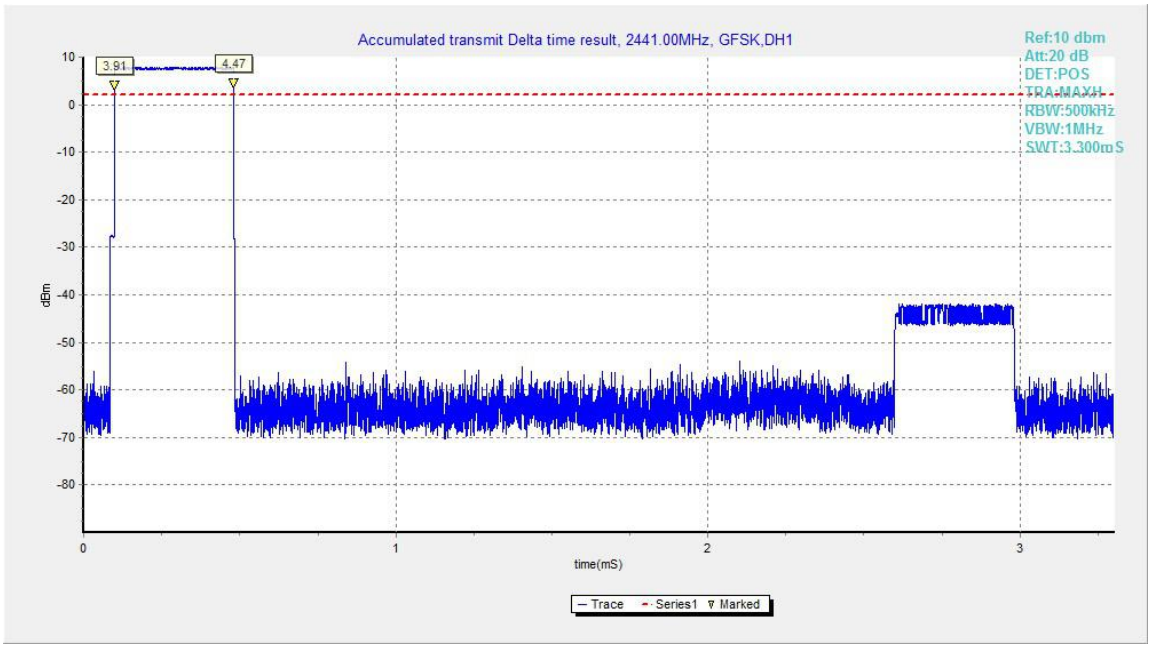


Fig.64. Time of occupancy (Dwell Time): Channel 39, Packet DH1

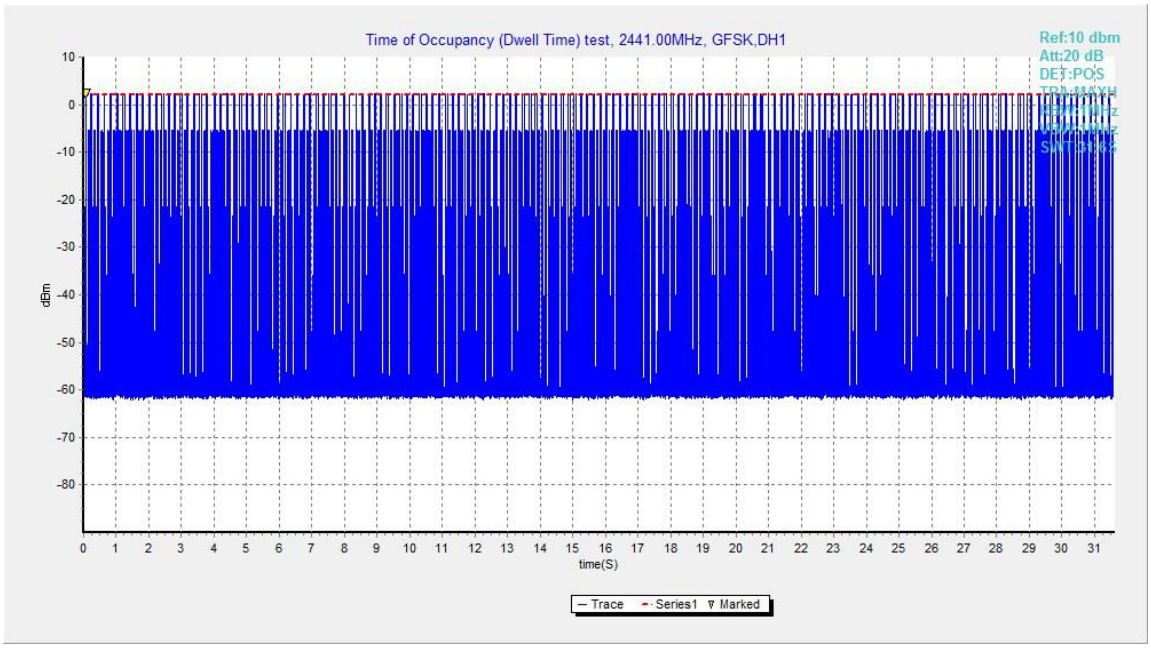


Fig.65. Number of Transmissions Measurement: Channel 39,Packet DH1

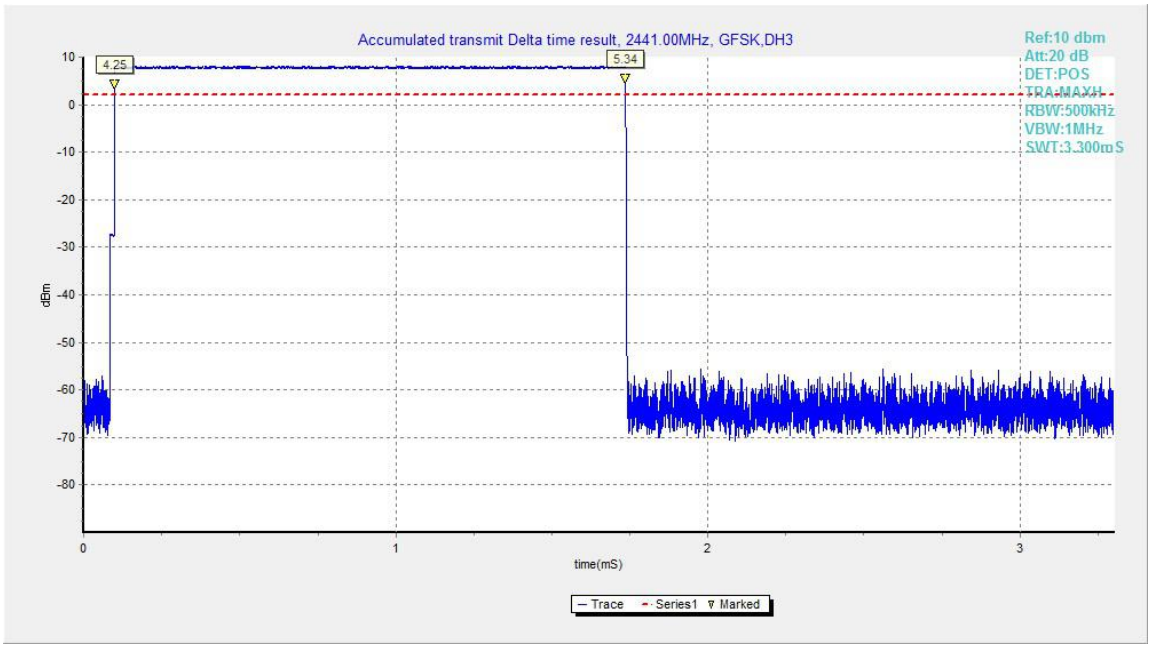


Fig.66. Time of occupancy (Dwell Time): Channel 39, Packet DH3

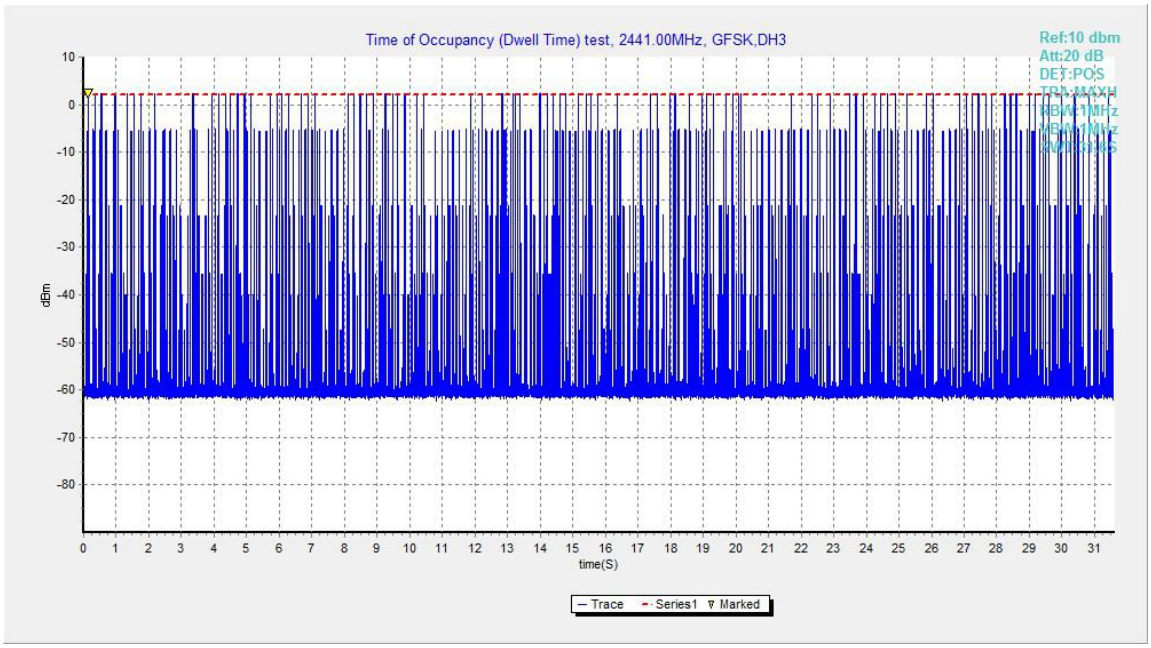


Fig.67. Number of Transmissions Measurement: Channel 39,Packet DH3

Fig.68. Time of occupancy (Dwell Time): Channel 39, Packet DH5

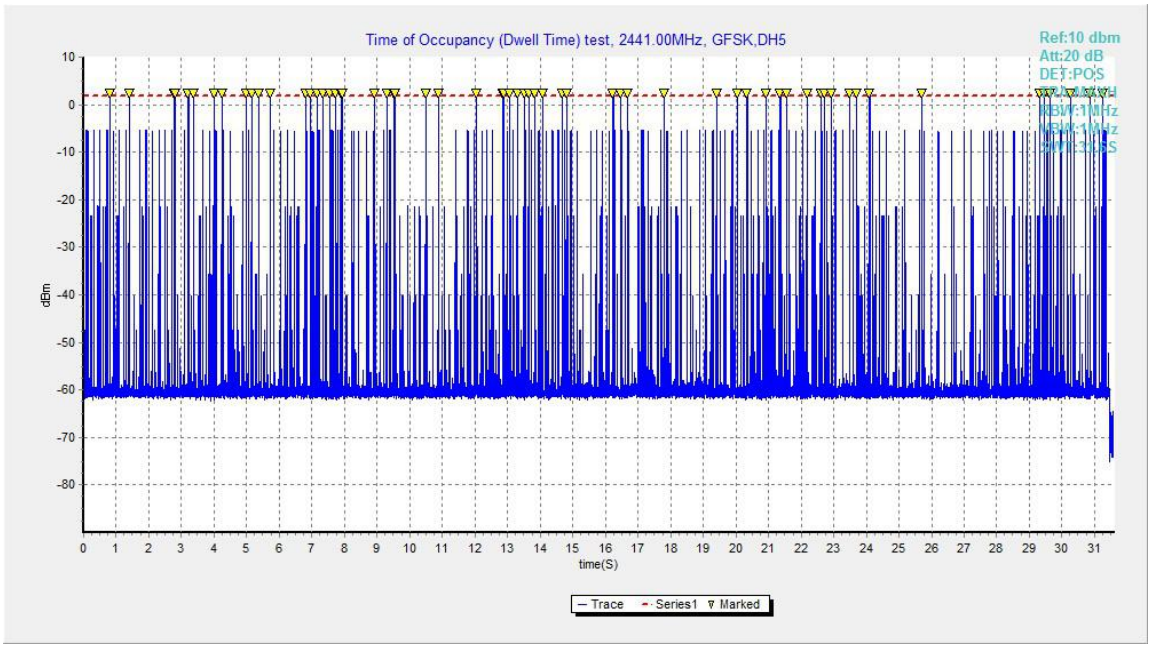


Fig.69. Number of Transmissions Measurement: Channel 39,Packet DH5

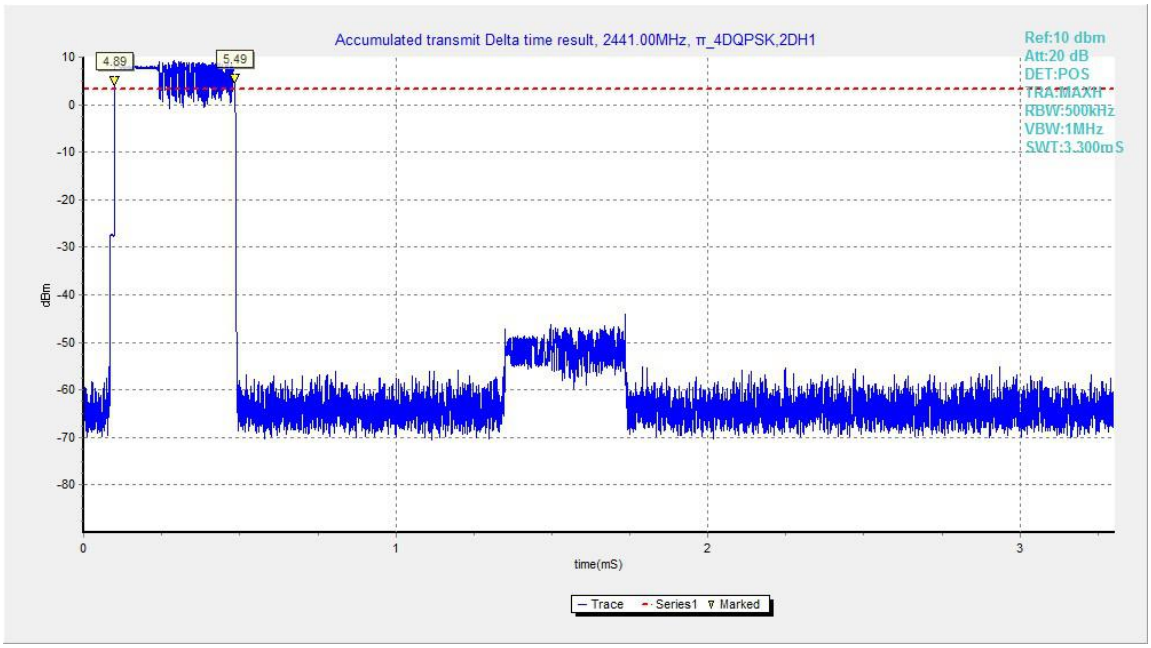


Fig.70. Time of occupancy (Dwell Time): Channel 39, Packet 2-DH1

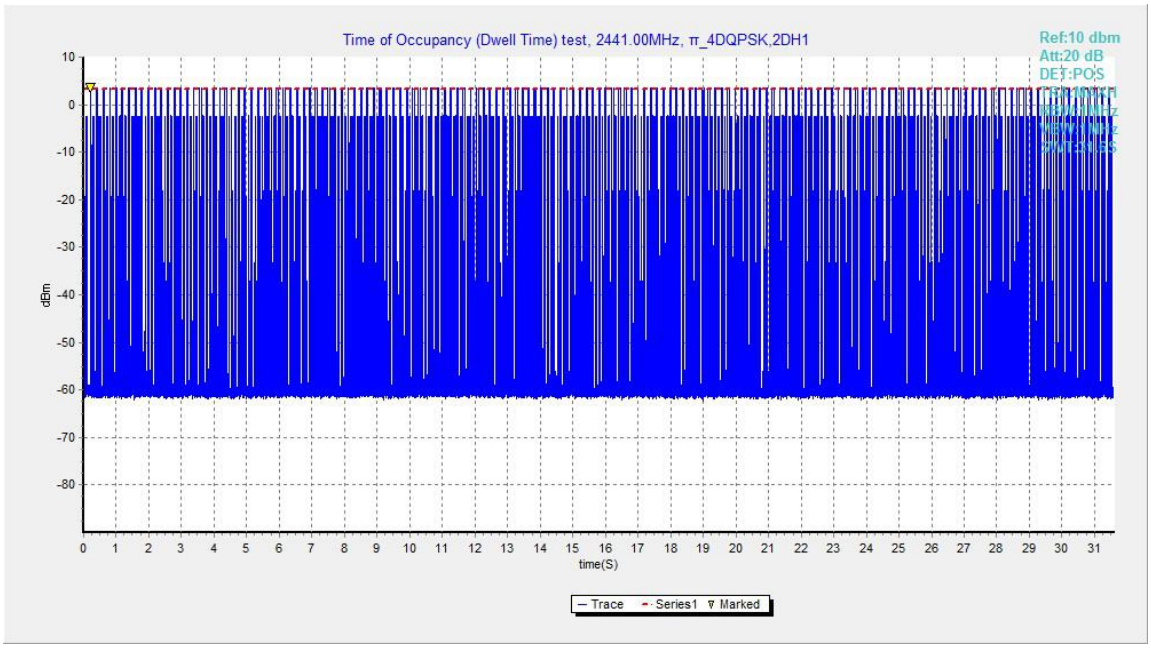


Fig.71. Number of Transmissions Measurement: Channel 39,Packet 2-DH1

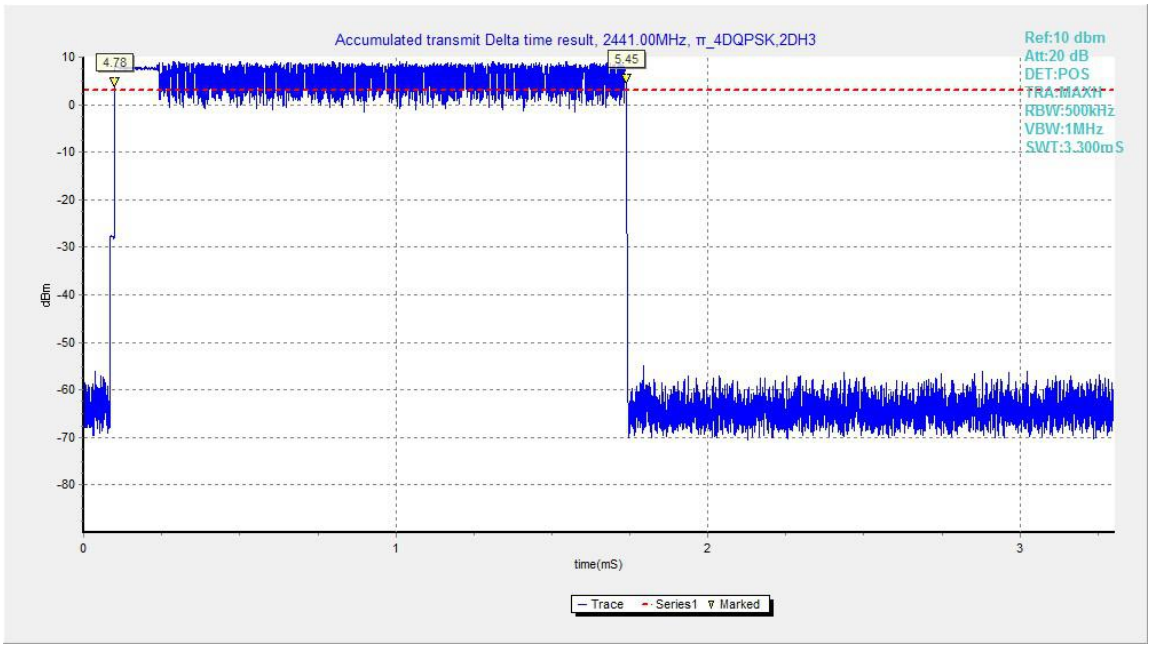


Fig.72. Time of occupancy (Dwell Time): Channel 39, Packet 2-DH3

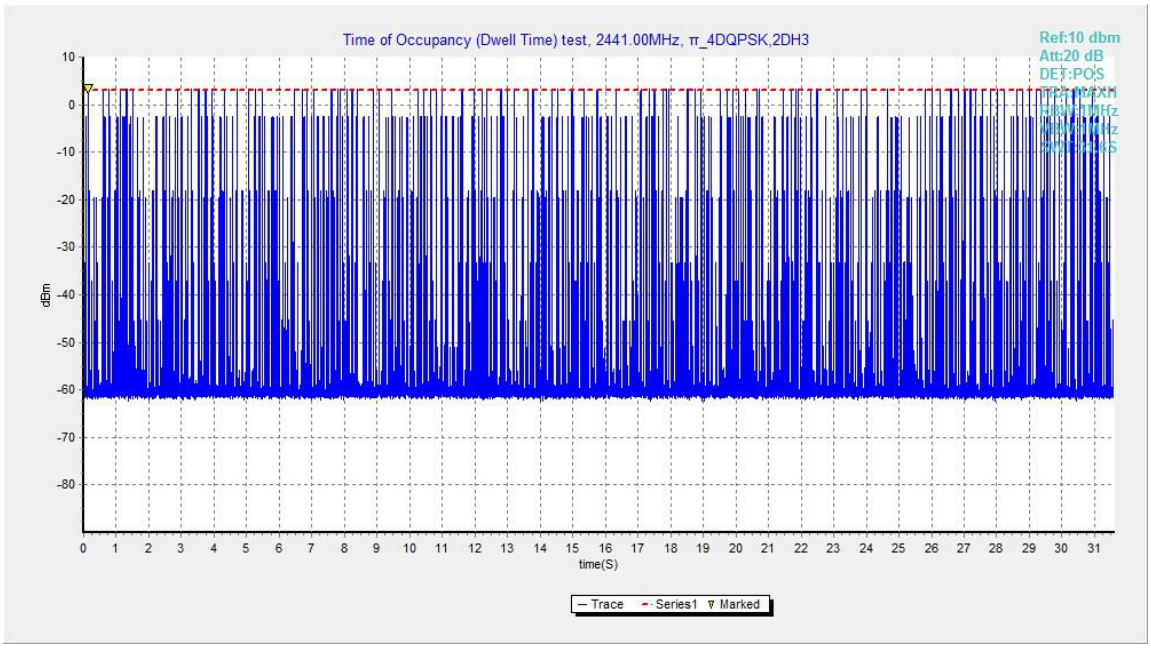


Fig.73. Number of Transmissions Measurement: Channel 39,Packet 2-DH3

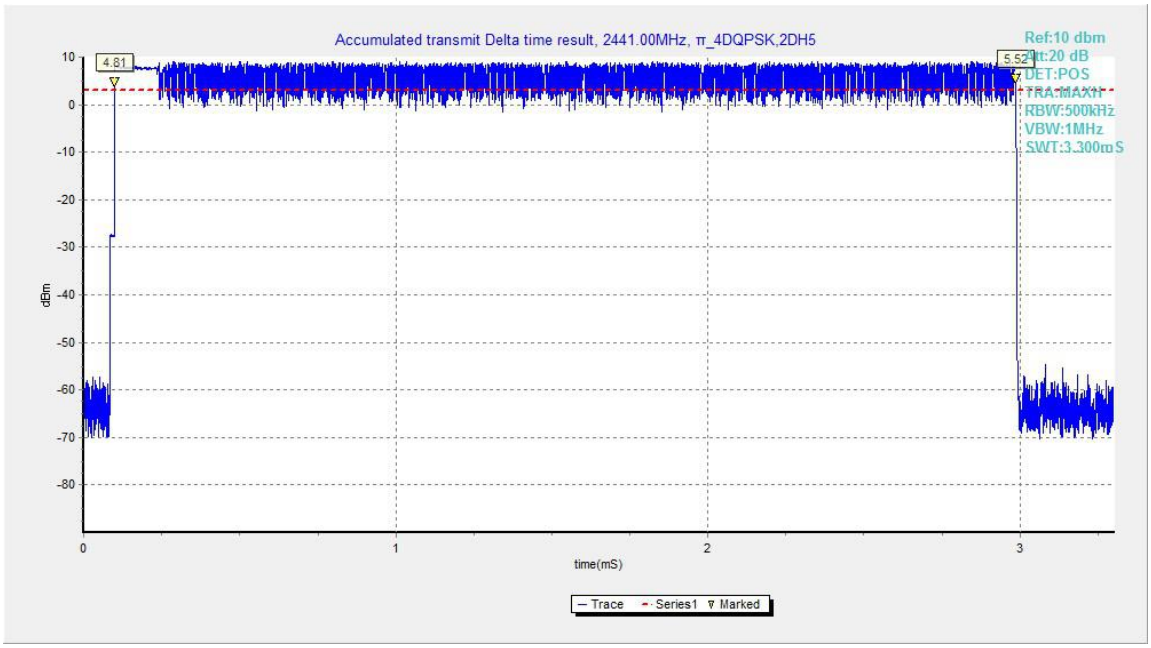


Fig.74. Time of occupancy (Dwell Time): Channel 39, Packet 2-DH5

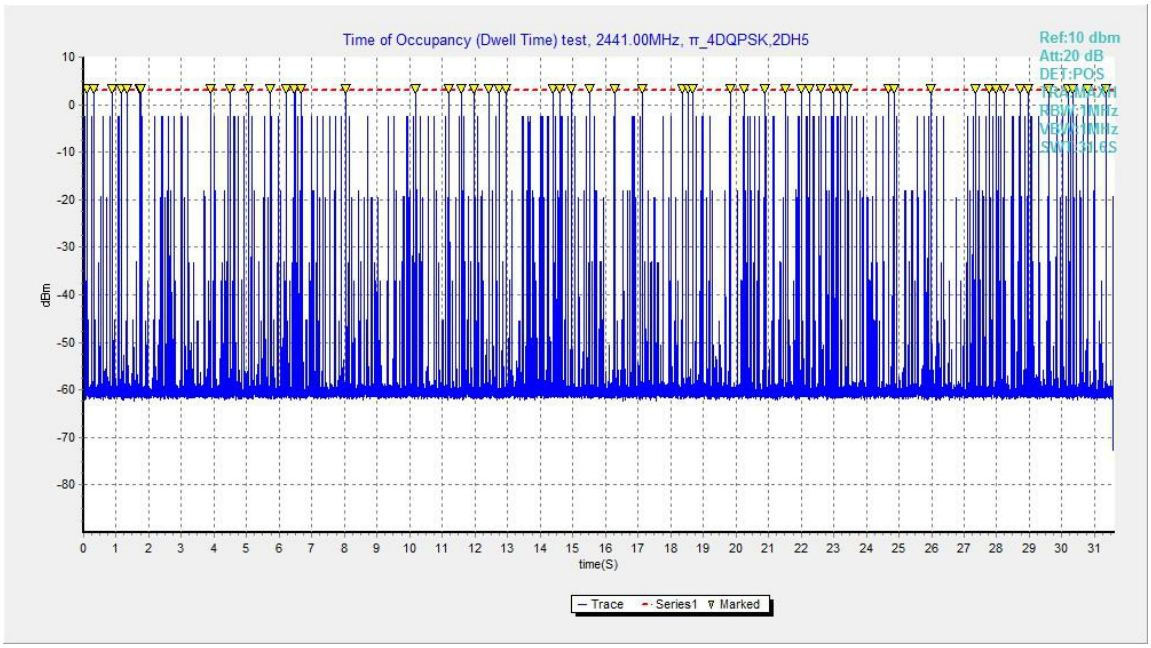


Fig.75. Number of Transmissions Measurement: Channel 39,Packet 2-DH5

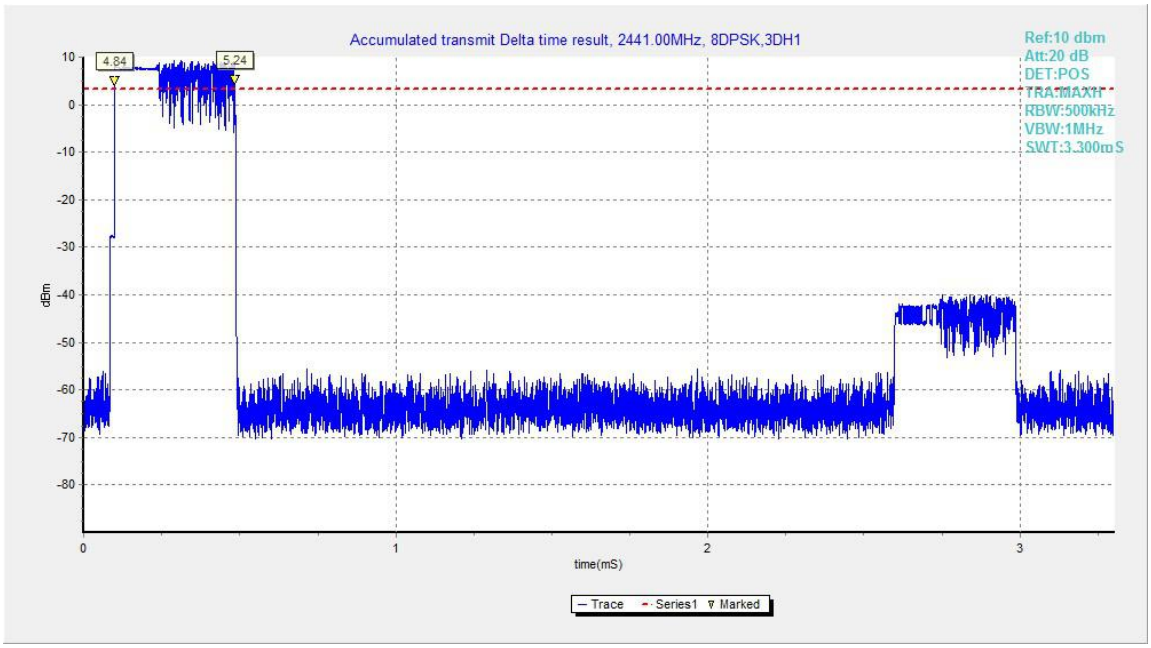


Fig.76. Time of occupancy (Dwell Time): Channel 39, Packet 3-DH1

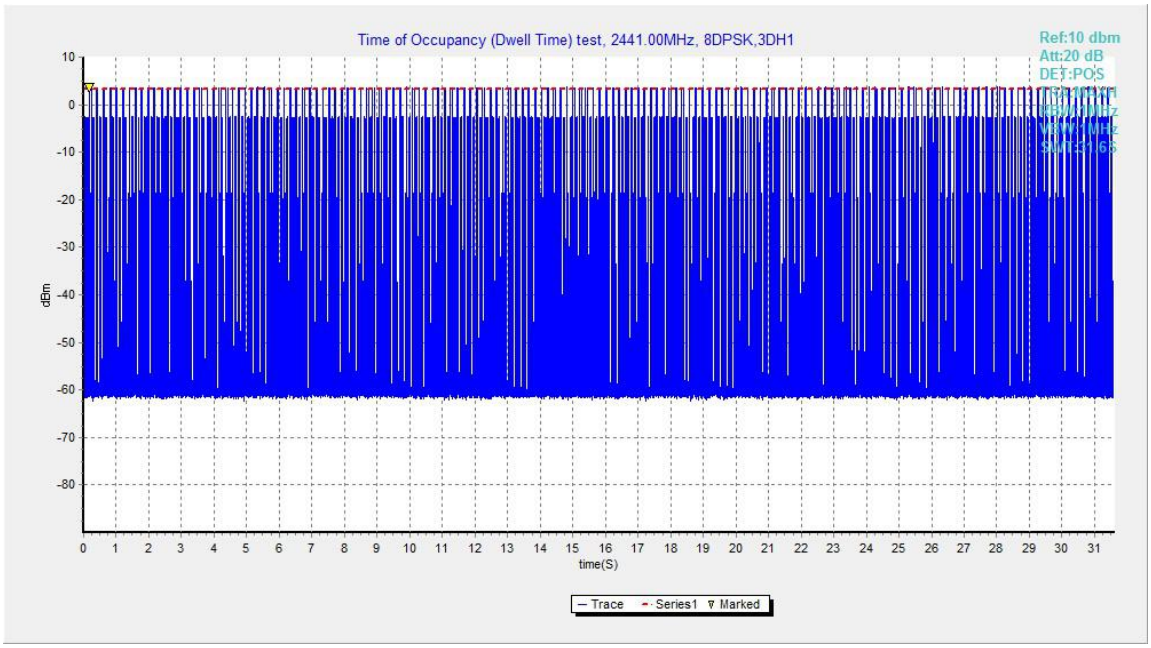


Fig.77. Number of Transmissions Measurement: Channel 39,Packet 3-DH1

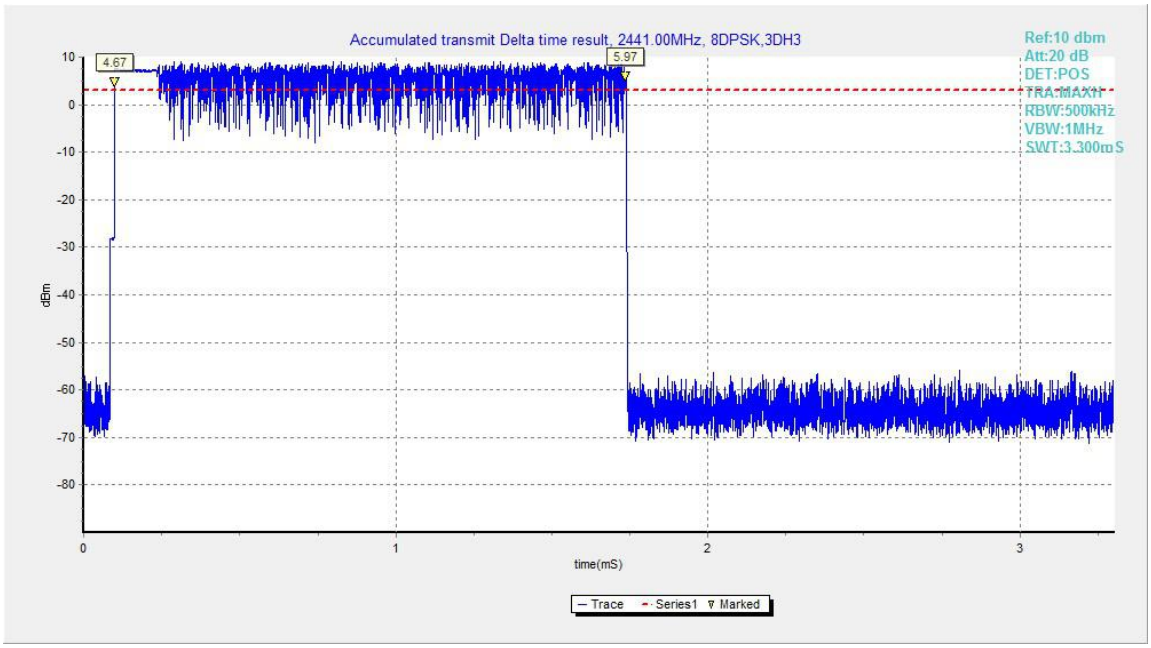


Fig.78. Time of occupancy (Dwell Time): Channel 39, Packet 3-DH3

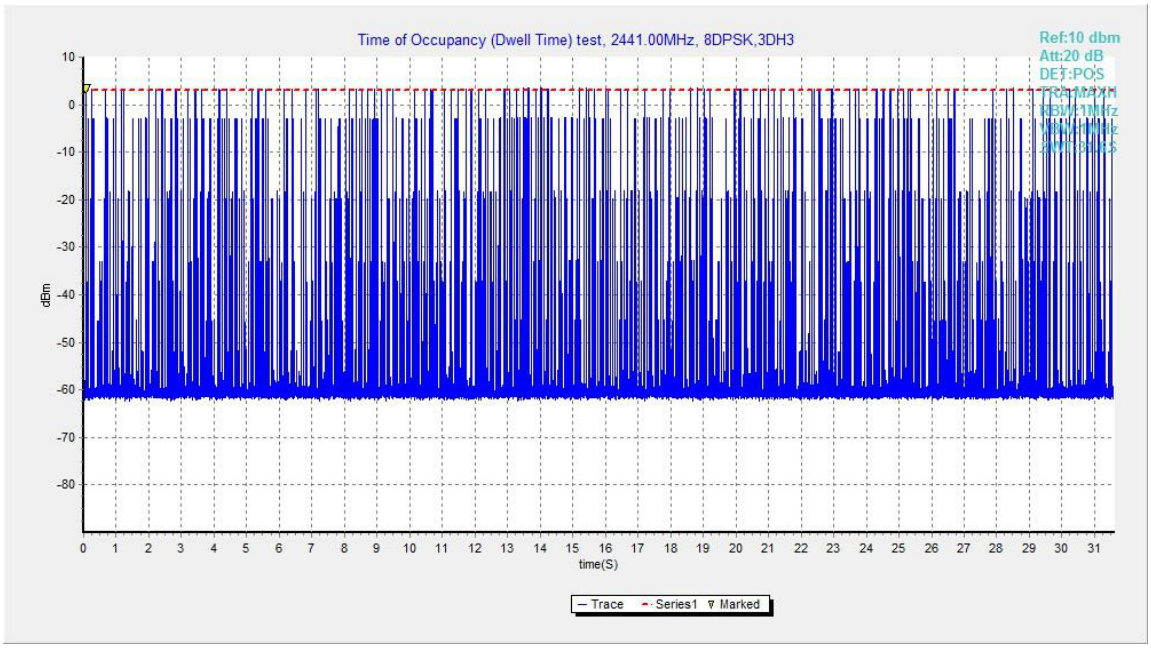


Fig.79. Number of Transmissions Measurement: Channel 39,Packet 3-DH3

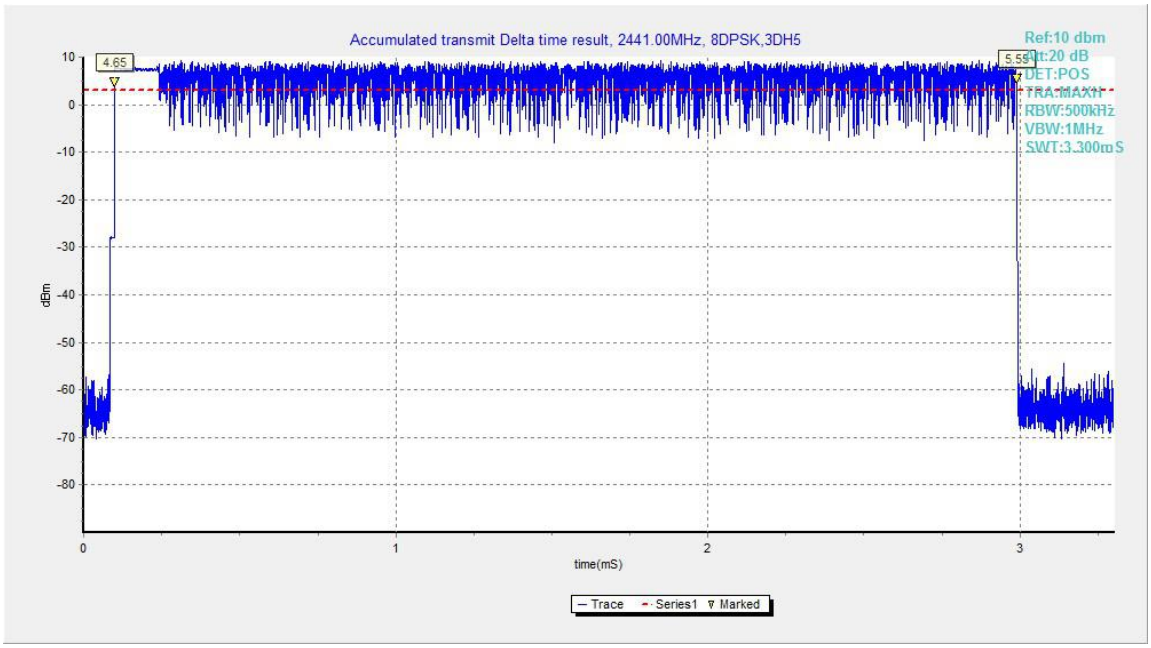


Fig.80. Time of occupancy (Dwell Time): Channel 39, Packet 3-DH5

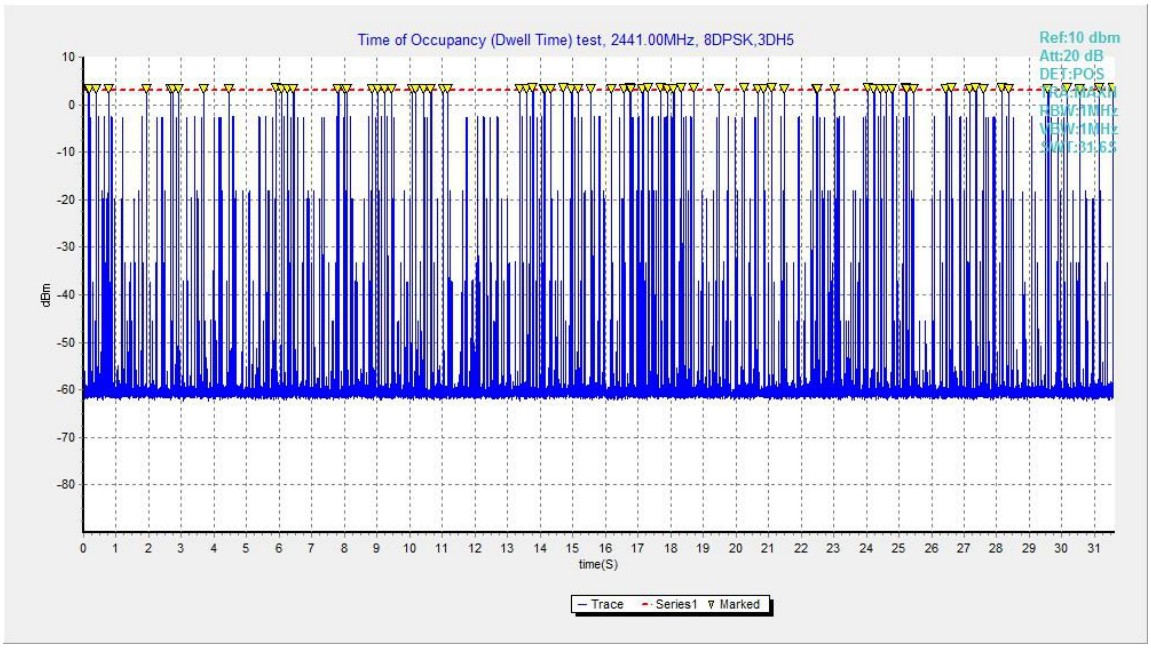


Fig.81. Number of Transmissions Measurement: Channel 39,Packet 3-DH5

A.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:

For GFSK

Channel	20dB Bandwidth (kHz)		Conclusion
0	Fig.82	944.25	NA
39	Fig.83	936.00	NA
78	Fig.84	937.50	NA

For π/4 DQPSK

Channel	20dB Bandwidth (kHz)		Conclusion
0	Fig.85	1280.25	NA
39	Fig.86	1281.75	NA
78	Fig.87	1311.75	NA

For 8DPSK

Channel	20dB Bandwidth (kHz)		Conclusion
0	Fig.88	1274.25	NA
39	Fig.89	1295.25	NA
78	Fig.90	1272.75	NA

Conclusion: NA

Test graphs as below:

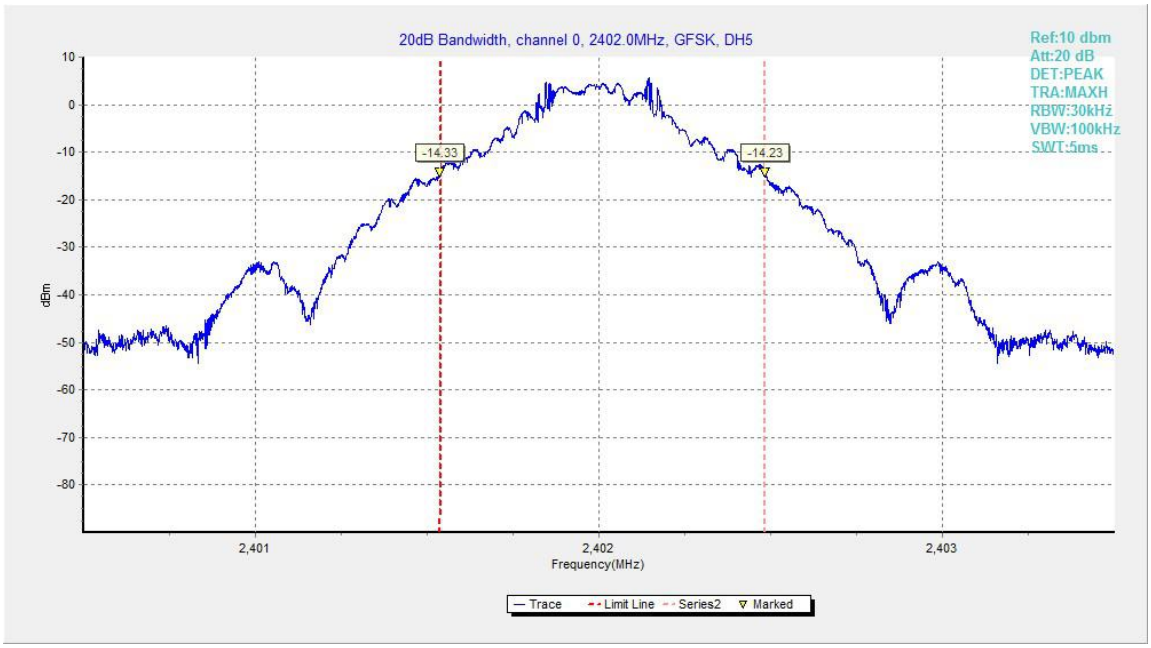


Fig.82. 20dB Bandwidth: GFSK, Channel 0

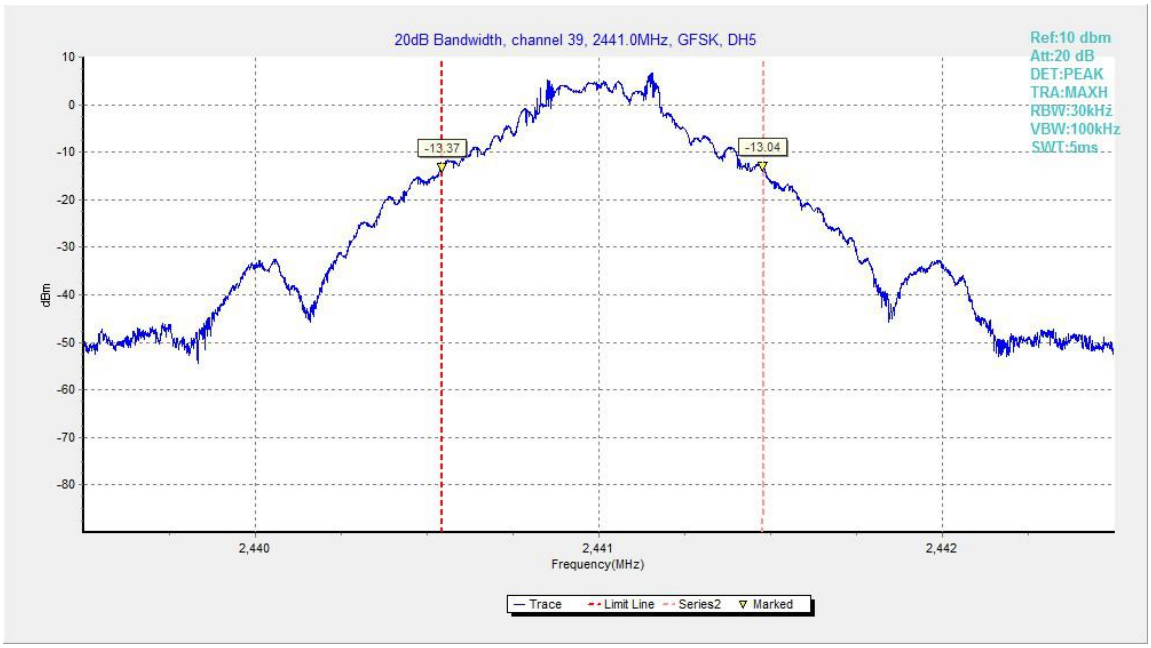


Fig.83. 20dB Bandwidth: GFSK, Channel 39

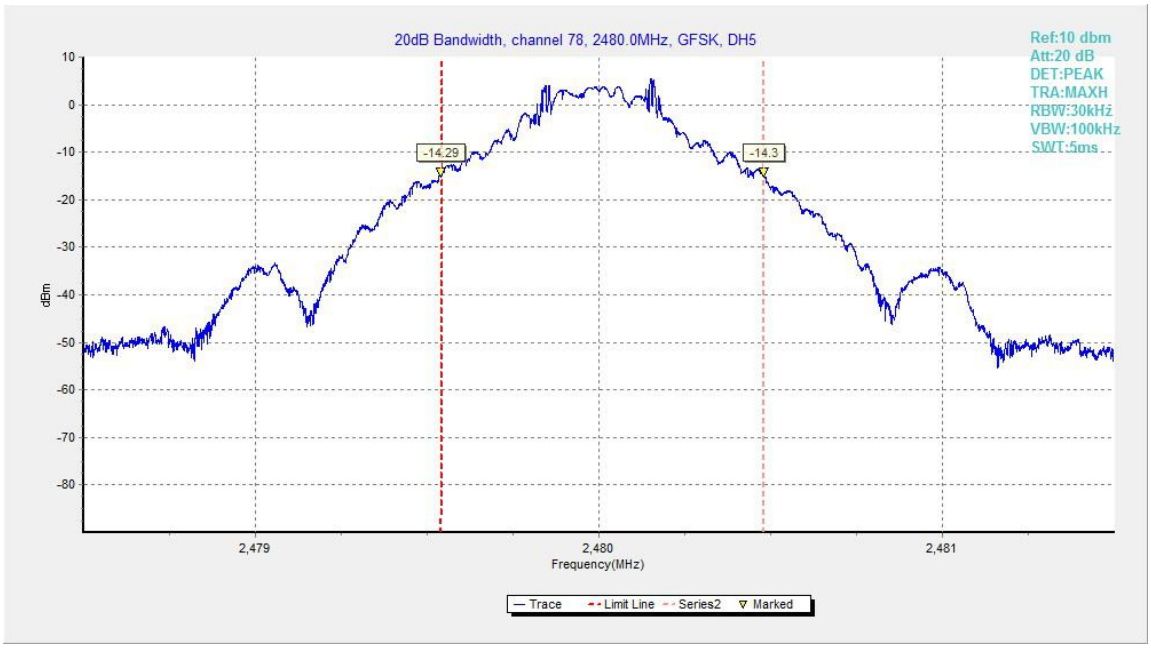


Fig.84. 20dB Bandwidth: GFSK, Channel 78

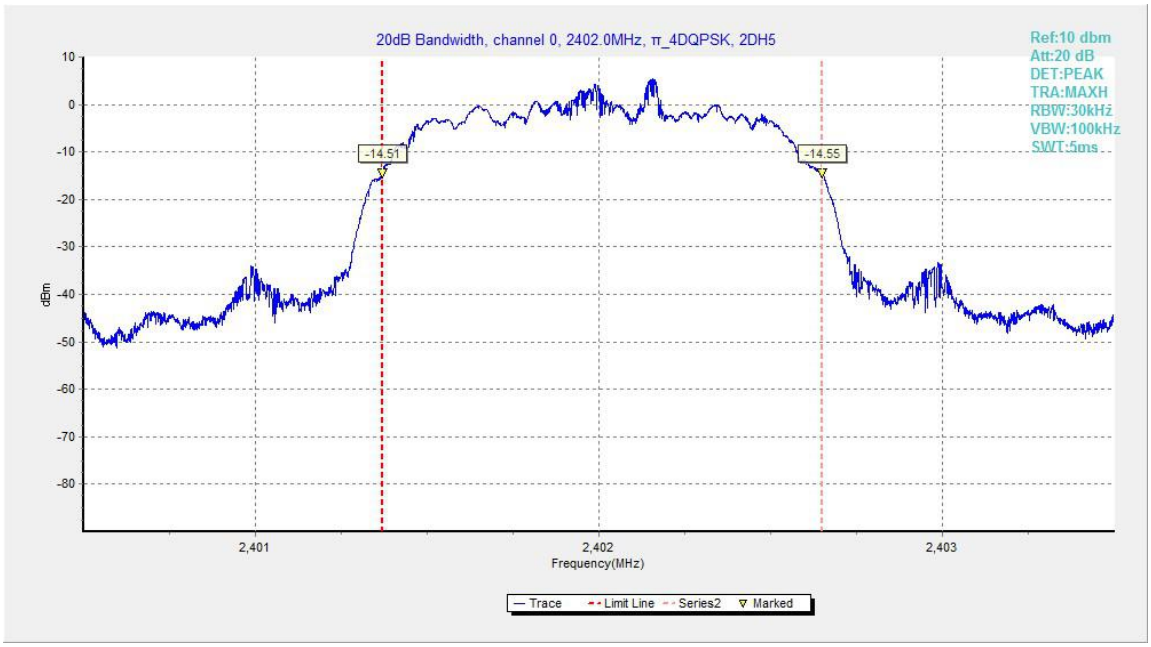


Fig.85. 20dB Bandwidth: π/4 DQPSK, Channel 0

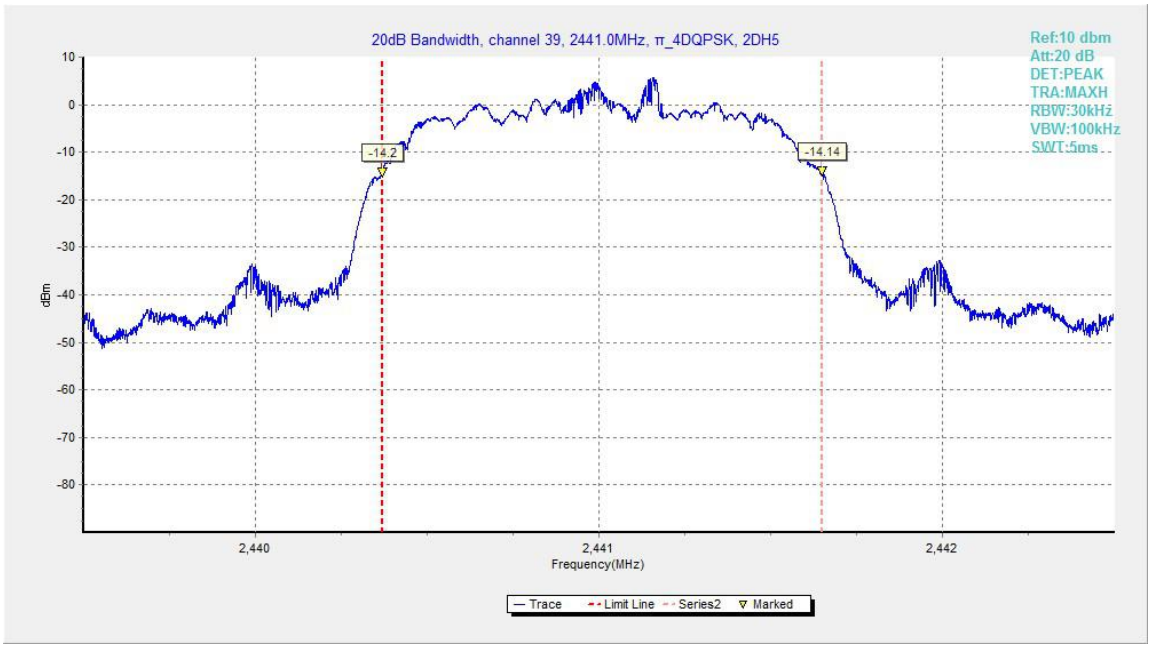


Fig.86. 20dB Bandwidth: π/4 DQPSK, Channel 39

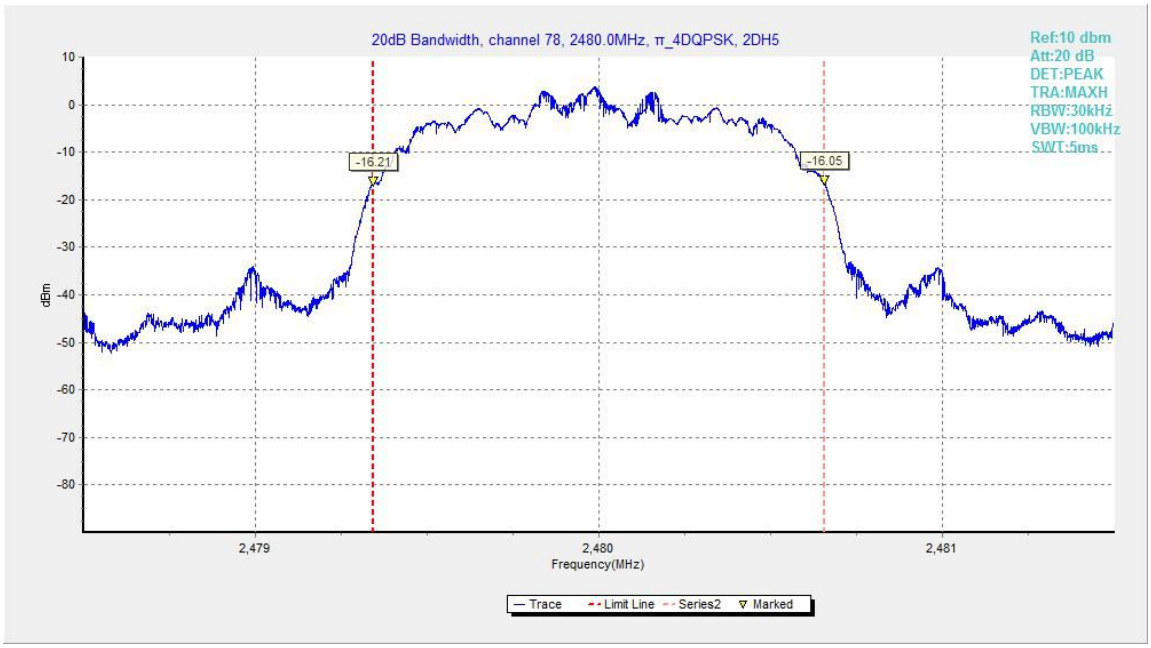


Fig.87. 20dB Bandwidth: π/4 DQPSK, Channel 78

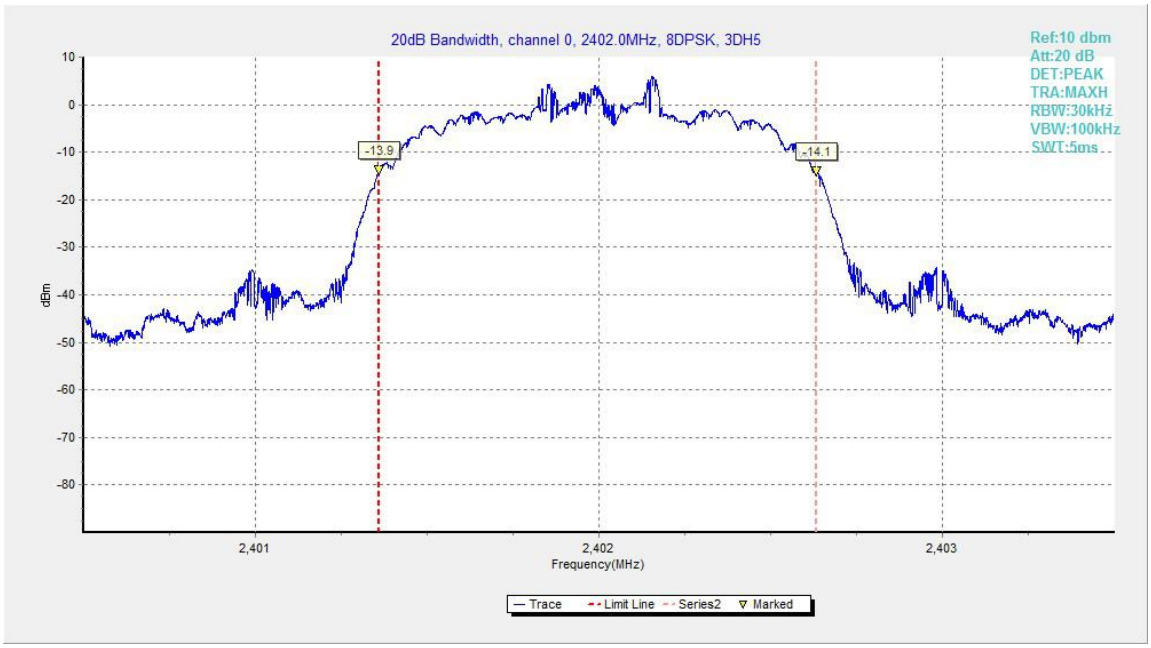


Fig.88. 20dB Bandwidth: 8DPSK, Channel 0

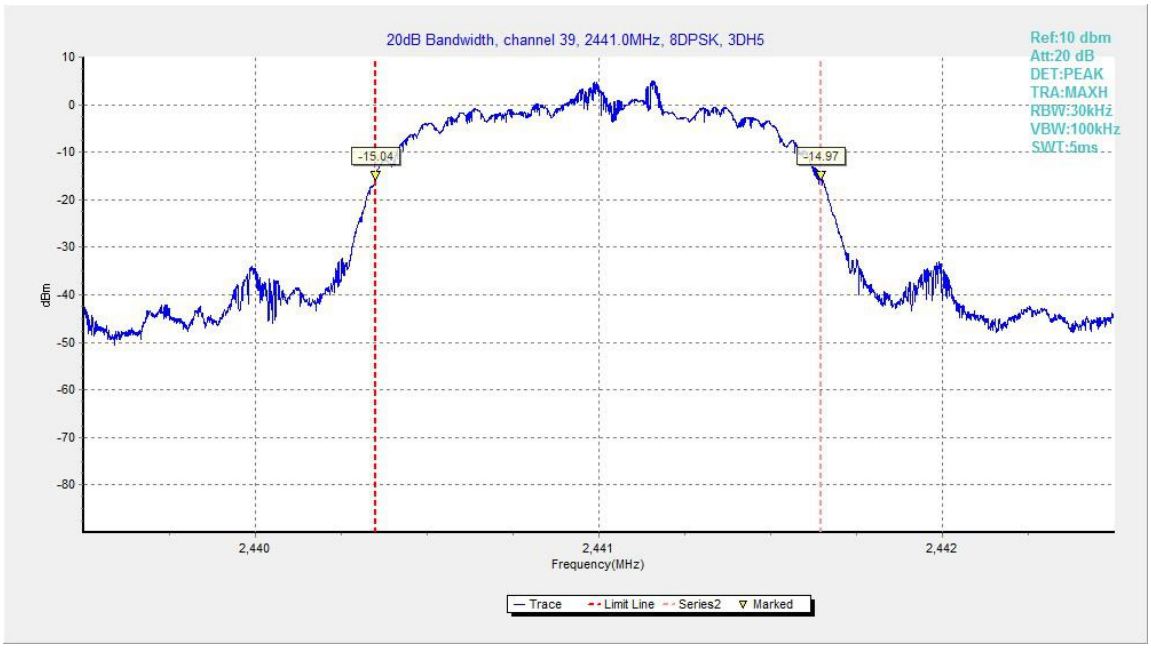


Fig.89. 20dB Bandwidth: 8DPSK, Channel 39

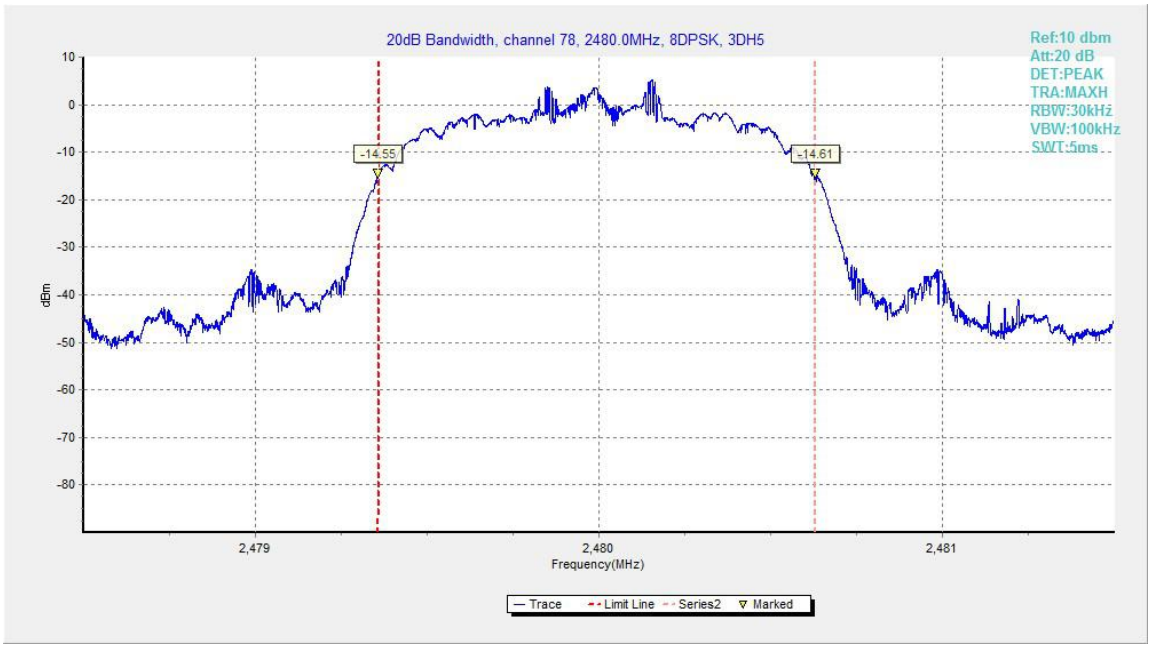


Fig.90. 20dB Bandwidth: 8DPSK, Channel 78

A.8. Carrier Frequency Separation

Method of Measurement: See ANSI C63.10-clause 7.8.2

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

- Span = 3MHz
- RBW=300kHz
- VBW=300kHz
- Sweep = auto
- Detector function = peak
- Trace = max hold
- Allow the trace to stabilize

Search the peak marks of the middle frequency and adjacent channel, then record the separation between them.

* Comment: This limit should be over 25 kHz or (2/3) * 20dB bandwidth, whichever is greater.

Measurement Limit:

Standard	Limit(kHz)
FCC 47 CFR Part 15.247(a)(1)	over 25 kHz or (2/3) * 20dB bandwidth

Measurement Result:

For GFSK

Channel	Carrier frequency separation (kHz)		Conclusion
39	Fig.91	1010.25	P

For π/4 DQPSK

Channel	Carrier frequency separation (kHz)		Conclusion
39	Fig.92	994.50	P

For 8DPSK

Channel	Carrier frequency separation (kHz)		Conclusion
39	Fig.93	1163.25	P

Conclusion: PASS

Test graphs as below:

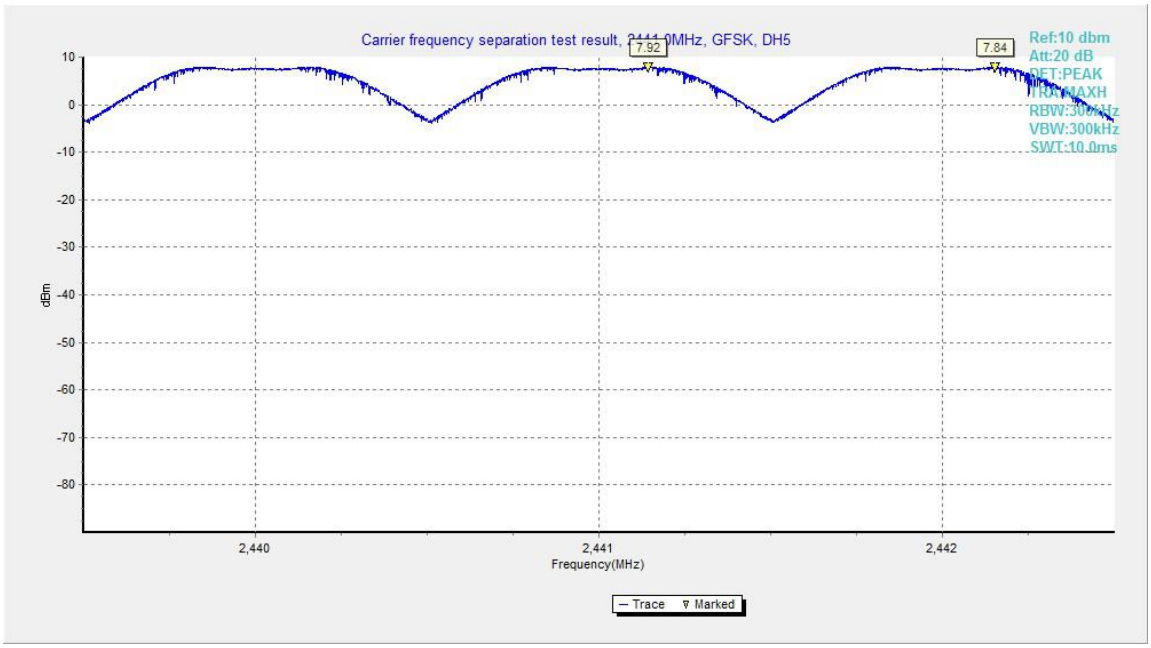


Fig.91. Carrier frequency separation measurement: GFSK, Channel 39

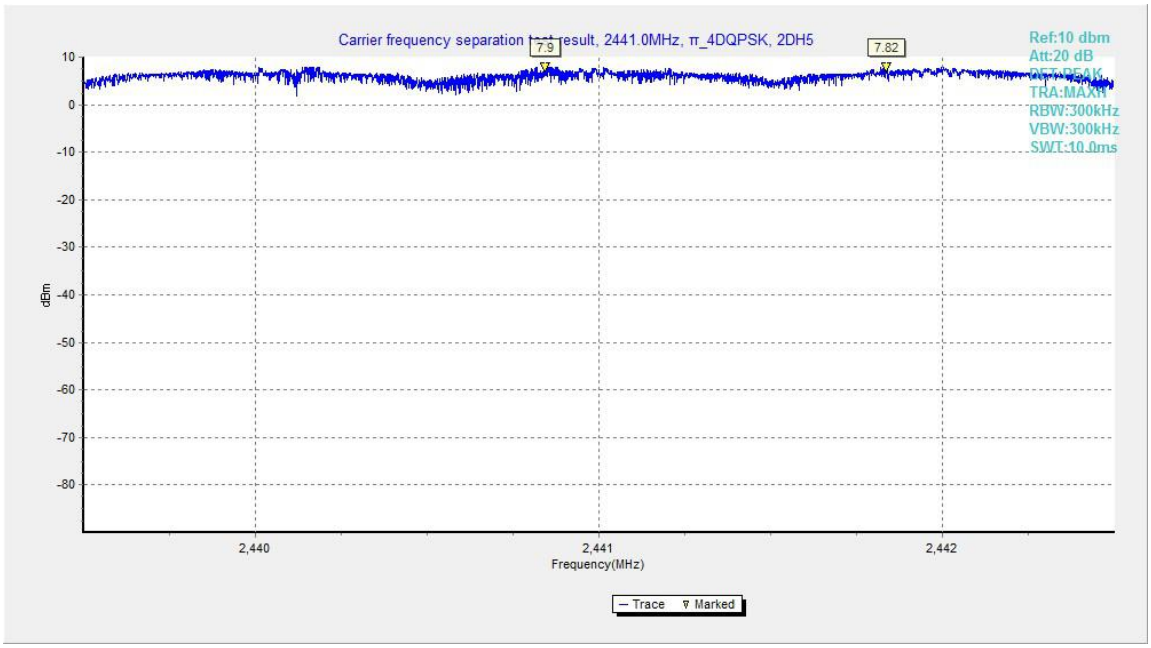


Fig.92. Carrier frequency separation measurement: π/4 DQPSK, Channel 39

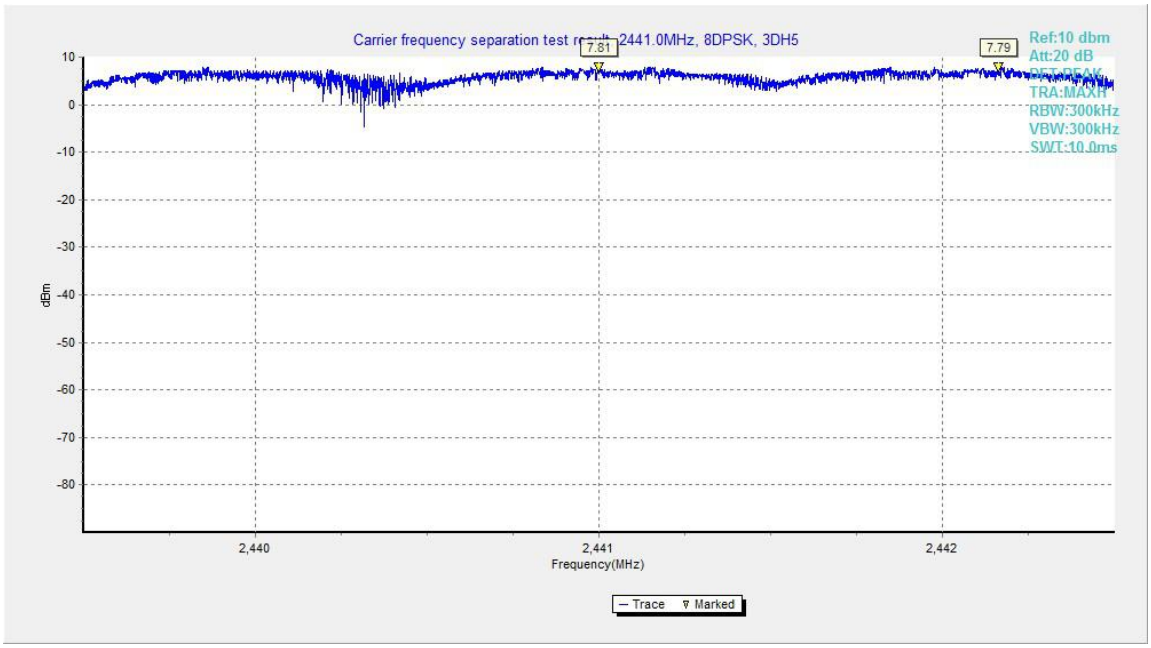


Fig.93. Carrier frequency separation measurement: 8DPSK, Channel 39

A.9. Number of Hopping Channels

Method of Measurement: See ANSI C63.10-clause 7.8.3

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

- Span = the frequency band of operation
- RBW = 500kHz
- VBW = 500kHz
- Sweep = auto
- Detector function = peak
- Trace = max hold
- Allow the trace to stabilize

It might prove necessary to break the span up into subranges to show clearly all of the hopping frequencies. Compliance of an EUT with the appropriate regulatory limit shall be determined for the number of hopping channels. A plot of the data shall be included in the test report.

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.247(a) (1)(iii)	At least 15 non-overlapping channels

Measurement Result:

For GFSK

Channel	Number of hopping channels		Conclusion
0~39	Fig.94	79	P
40~78	Fig.95		

Forπ/4 DQPSK

Channel	Number of hopping channels		Conclusion
0~39	Fig.96	79	P
40~78	Fig.97		

For 8DPSK

Channel	Number of hopping channels		Conclusion
0~39	Fig.98	79	P
40~78	Fig.99		

Conclusion: PASS

Test graphs as below:

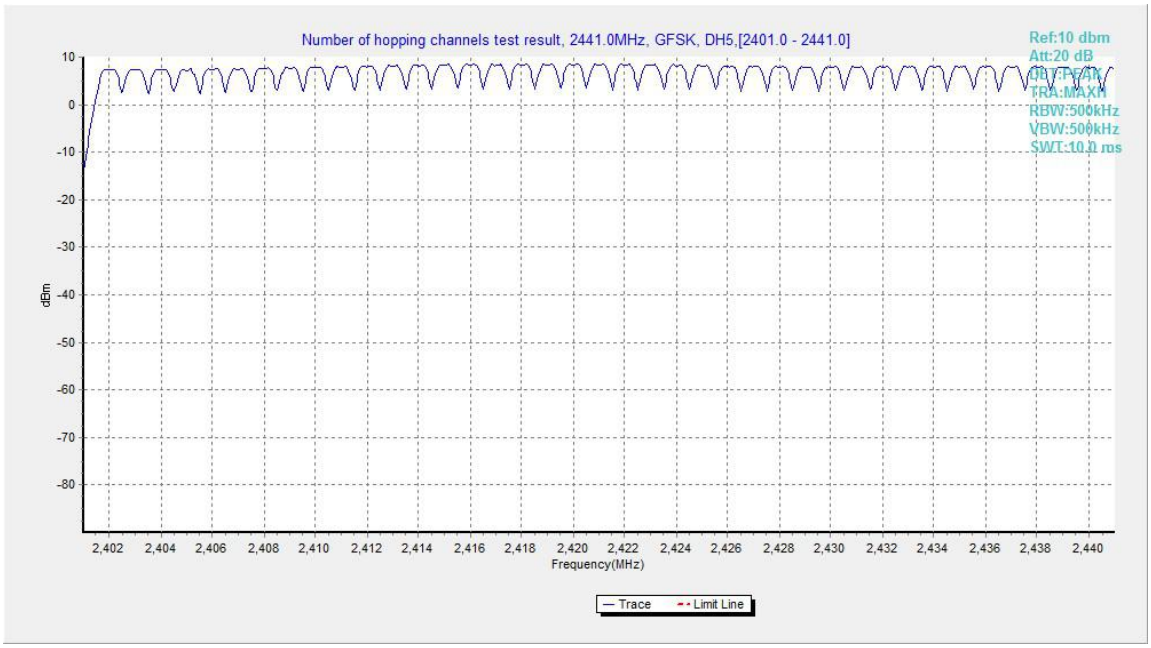


Fig.94. Number of hopping frequencies: GFSK, Channel 0 - 39

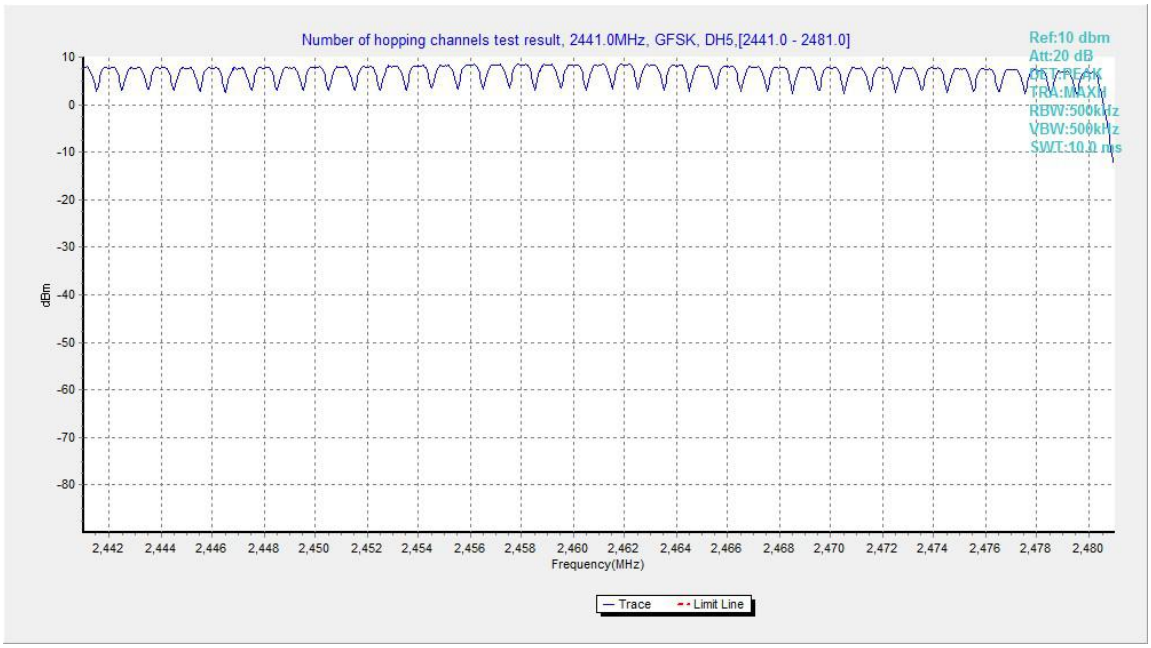


Fig.95. Number of hopping frequencies: GFSK, Channel 40 - 78

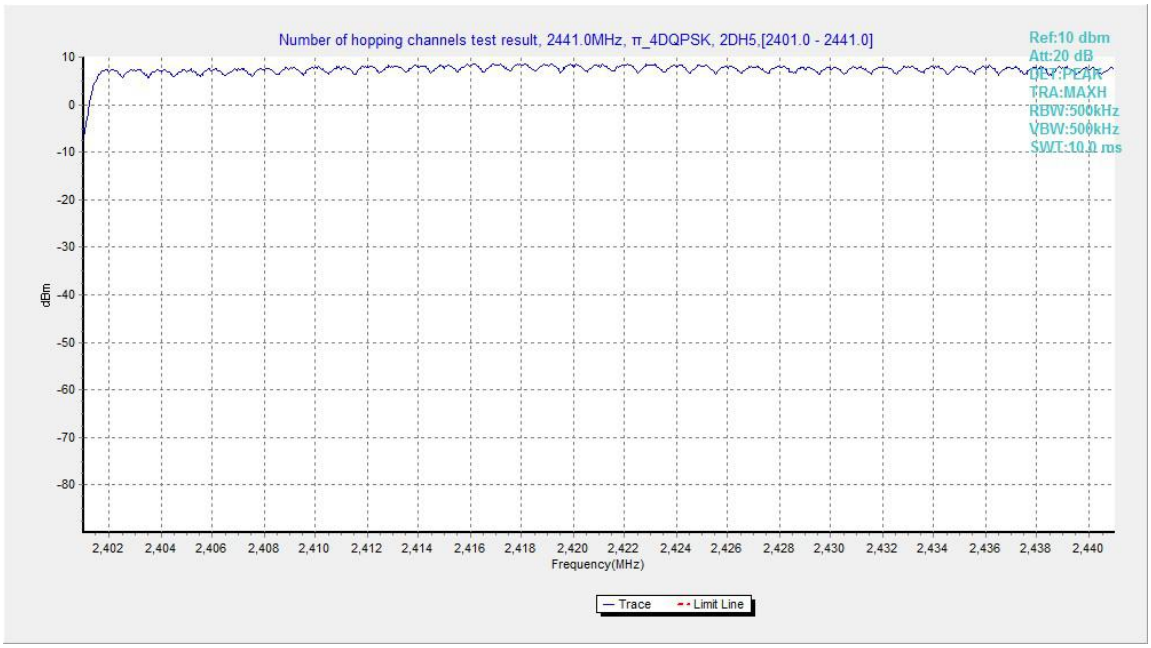


Fig.96. Number of hopping frequencies: π/4 DQPSK, Channel 0 - 39

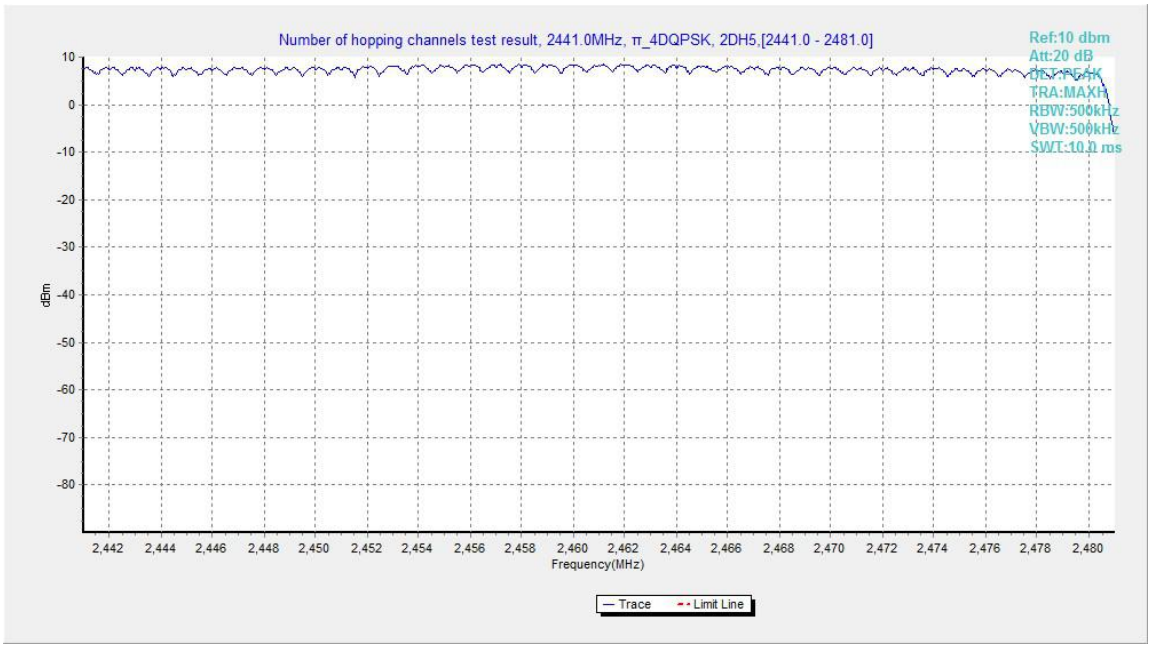


Fig.97. Number of hopping frequencies: π/4 DQPSK, Channel 40 - 78

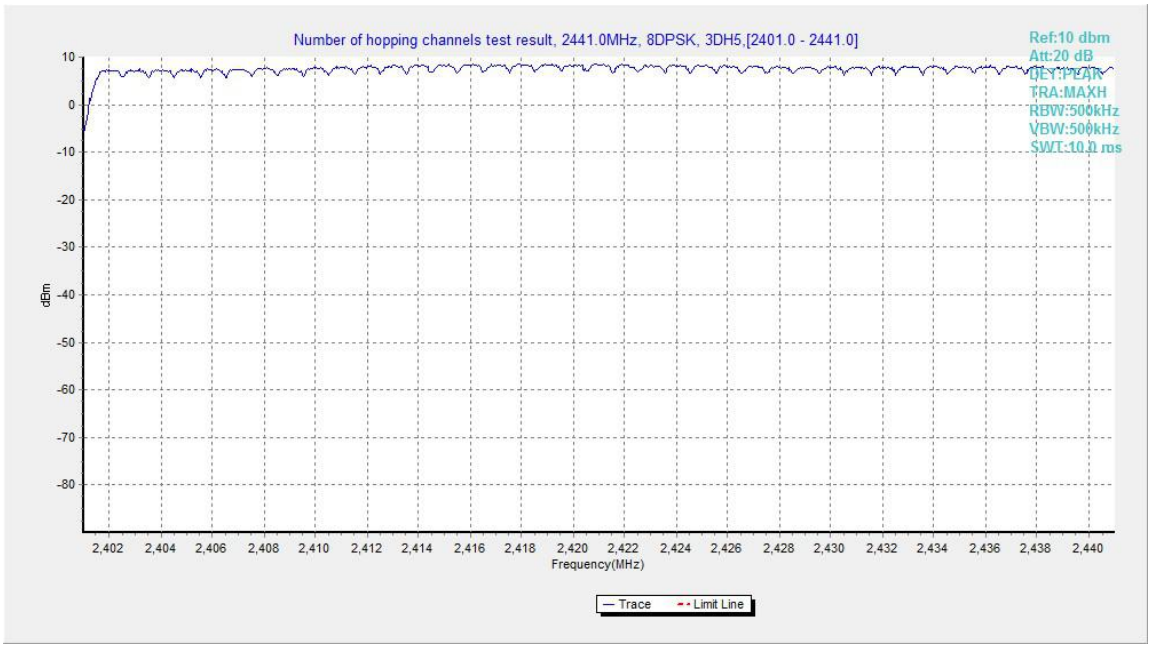


Fig.98. Number of hopping frequencies: 8DPSK, Channel 0 - 39

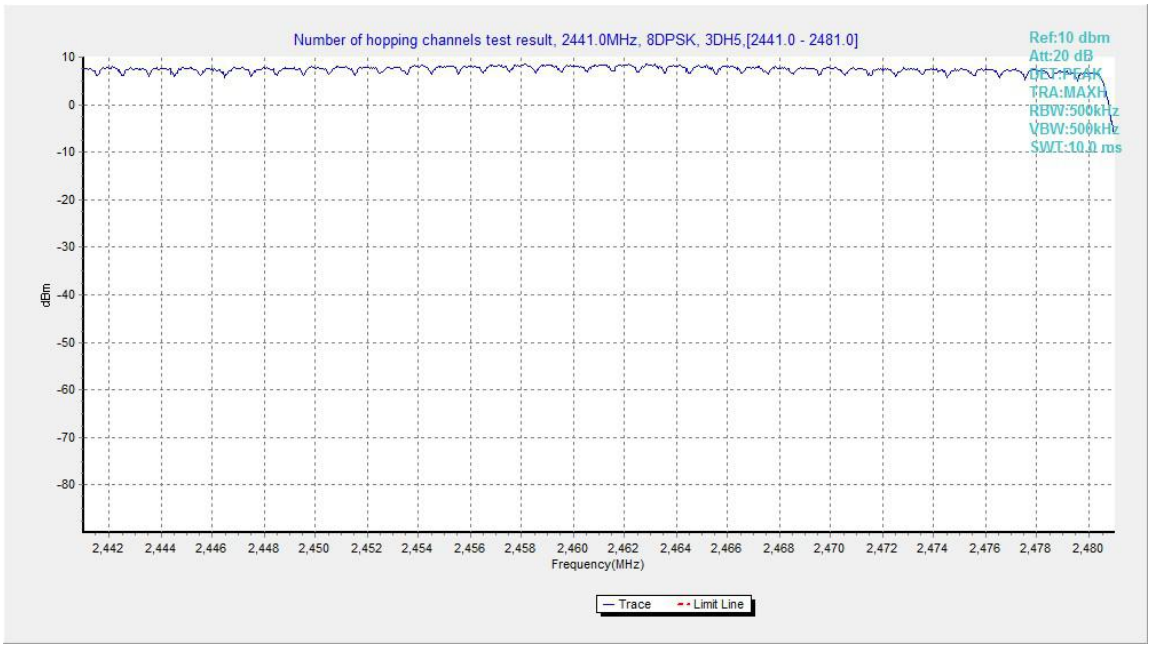


Fig.99. Number of hopping frequencies: 8DPSK, Channel 40 - 78

A.10. AC Powerline Conducted Emission

Method of Measurement: See ANSI C63.10-clause 6.2

1. the one EUT cable configuration and arrangement and mode of operation that produced the emission with the highest amplitude relative to the limit is selected for the final measurement, while applying the appropriate modulating signal to the EUT.
2. If the EUT is relocated from an exploratory test site to a final test site, the highest emissions shall be remaximized at the final test location before final ac power-line conducted emission measurements are performed.
3. The final test on all current-carrying conductors of all of the power cords to the equipment that comprises the EUT (but not the cords associated with other non-EUT equipment in the system) is then performed for the full frequency range for which the EUT is being tested for compliance without further variation of the EUT arrangement, cable positions, or EUT mode of operation.
4. If the EUT is comprised of equipment units that have their own separate ac power connections, e.g., floor-standing equipment with independent power cords for each shelf that are able to connect directly to the ac power network, each current-carrying conductor of one unit is measured while the other units are connected to a second (or more) LISN(s). All units shall be separately measured. If a power strip is provided by the manufacturer, to supply all of the units making up the EUT, only the conductors in the power cord of the power strip shall be measured.
5. If the EUT uses a detachable antenna, these measurements shall be made with a suitable dummy load connected to the antenna output terminals; otherwise, the tests shall be made with the antenna connected and, if adjustable, fully extended. When measuring the ac conducted emissions from a device that operates between 150 kHz and 30 MHz a non-detachable antenna may be replaced with a dummy load for the measurements within the fundamental emission band of the transmitter, but only for those measurements.36 Record the six highest EUT emissions relative to the limit of each of the current-carrying conductors of the power cords of the equipment that comprises the EUT over the frequency range specified by the procuring or regulatory agency. Diagram or photograph the test setup that was used. See Clause 8 for full reporting requirements.

Test Condition

Voltage（V）	Frequency（Hz）
120	60

Measurement Result and limit:

Bluetooth (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Conclusion
0.15 to 0.5	66 to 56	P
0.5 to 5	56	
5 to 30	60	
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.		

Bluetooth (Average Limit)

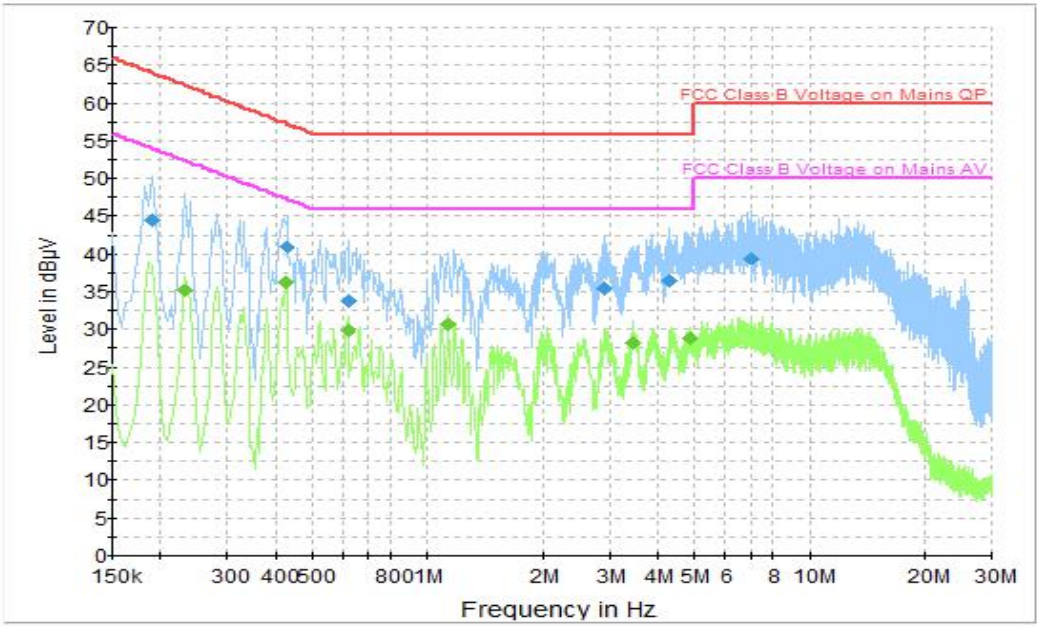
Frequency range (MHz)	Average Limit (dBμV)	Conclusion
0.15 to 0.5	56 to 46	P
0.5 to 5	46	
5 to 30	50	
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.		

The measurement is made according to ANSI C63.10

Conclusion: PASS

Test graphs as below:

Traffic:



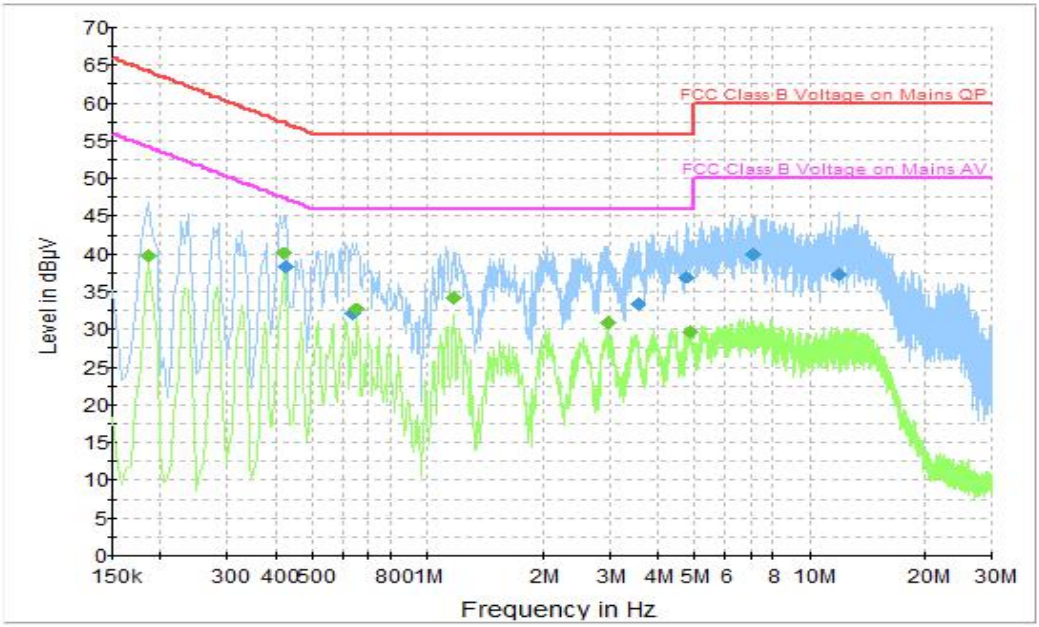
Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.190500	44.6	2000.0	9.000	On	L1	19.8	19.4	64.0
0.429000	40.9	2000.0	9.000	On	L1	19.9	16.3	57.3
0.622500	33.8	2000.0	9.000	On	L1	19.9	22.2	56.0
2.899500	35.5	2000.0	9.000	On	L1	19.7	20.5	56.0
4.312500	36.5	2000.0	9.000	On	L1	19.7	19.5	56.0
7.030500	39.5	2000.0	9.000	On	L1	19.8	20.5	60.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.231000	35.2	2000.0	9.000	On	L1	19.9	17.3	52.4
0.424500	36.4	2000.0	9.000	On	L1	19.9	11.0	47.4
0.618000	29.9	2000.0	9.000	On	L1	19.9	16.1	46.0
1.135500	30.7	2000.0	9.000	On	L1	19.8	15.3	46.0
3.453000	28.2	2000.0	9.000	On	L1	19.7	17.8	46.0
4.852500	28.8	2000.0	9.000	On	L1	19.7	17.2	46.0

Idle:



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.424500	38.2	2000.0	9.000	On	L1	19.9	19.1	57.4
0.636000	32.2	2000.0	9.000	On	L1	19.9	23.8	56.0
3.556500	33.3	2000.0	9.000	On	N	19.7	22.7	56.0
4.762500	37.0	2000.0	9.000	On	L1	19.7	19.0	56.0
7.107000	40.0	2000.0	9.000	On	L1	19.8	20.0	60.0
11.931000	37.3	2000.0	9.000	On	L1	19.9	22.7	60.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.186000	39.8	2000.0	9.000	On	L1	19.9	14.4	54.2
0.420000	40.1	2000.0	9.000	On	L1	19.9	7.4	47.4
0.654000	32.7	2000.0	9.000	On	L1	19.9	13.3	46.0
1.162500	34.1	2000.0	9.000	On	N	19.8	11.9	46.0
2.971500	30.9	2000.0	9.000	On	L1	19.7	15.1	46.0
4.875000	29.7	2000.0	9.000	On	L1	19.7	16.3	46.0

ANNEX E: Accreditation Certificate

United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 600118-0

Telecommunication Technology Labs, CAICT
Beijing
China

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Electromagnetic Compatibility & Telecommunications

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2016-09-29 through 2017-09-30
Effective Dates

DEPARTMENT OF COMMERCE · UNITED STATES OF AMERICA

For the National Voluntary Laboratory Accreditation Program

*****END OF REPORT*****