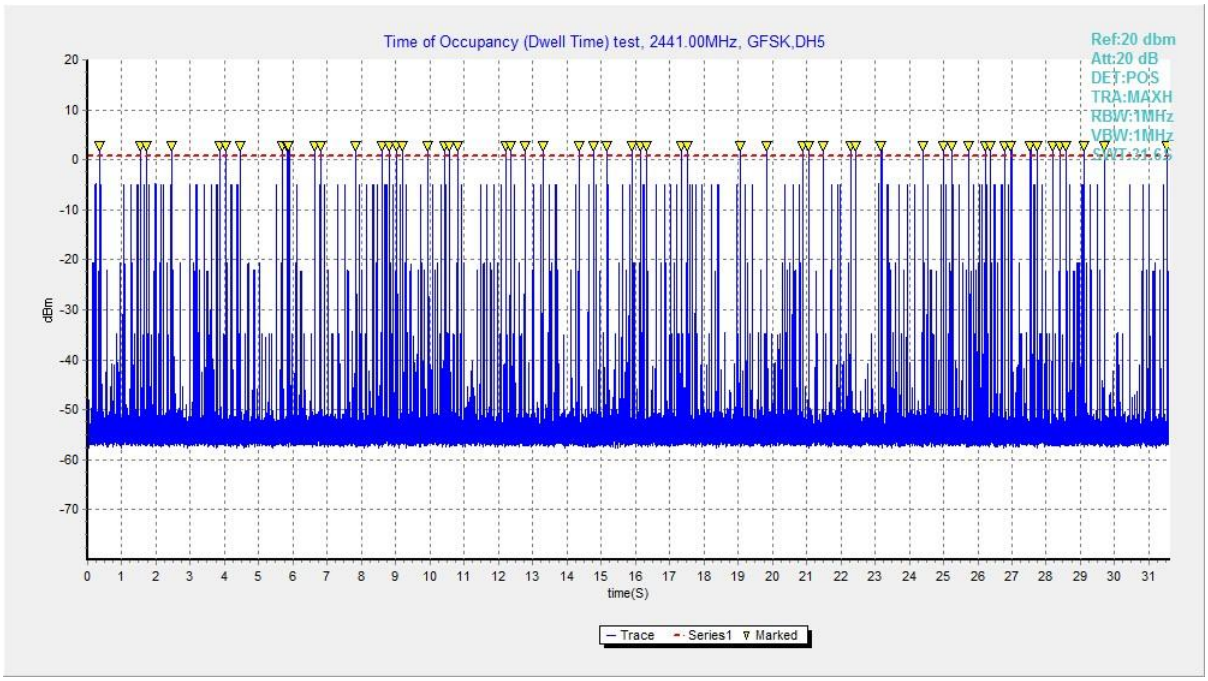

Fig. 71 Time of Occupancy (Dwell Time) (GFSK, Ch39)

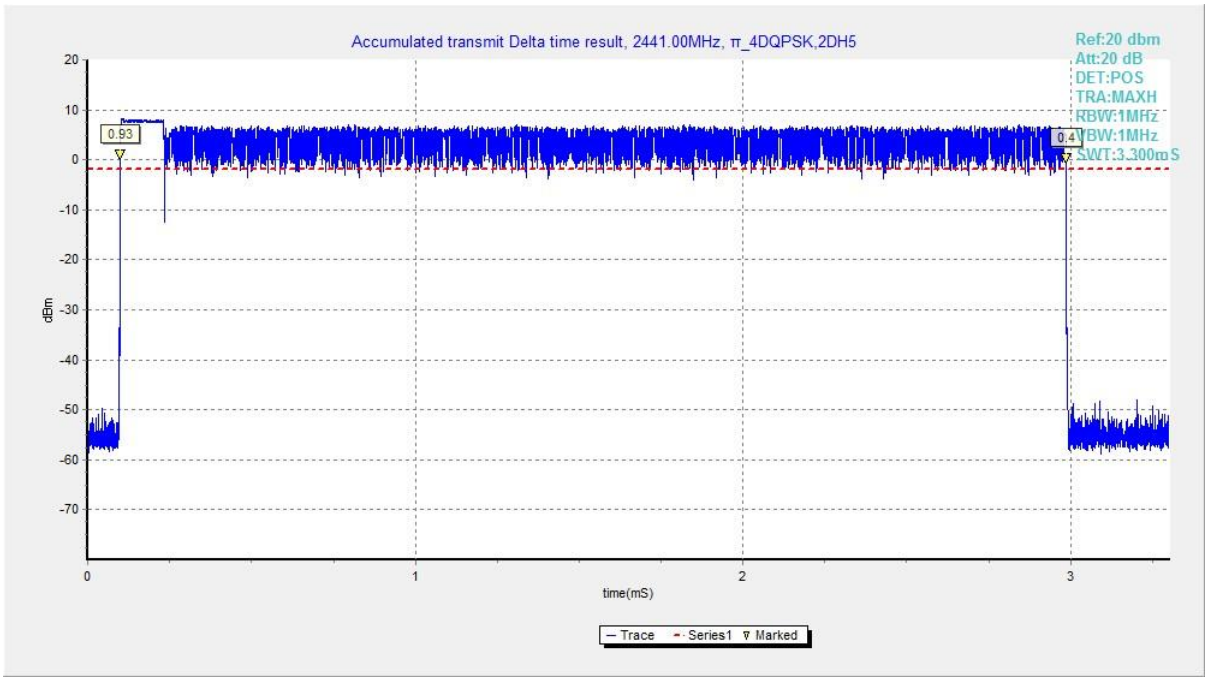

Fig. 72 Time of Occupancy (Dwell Time) (π /4 DQPSK, Ch39)

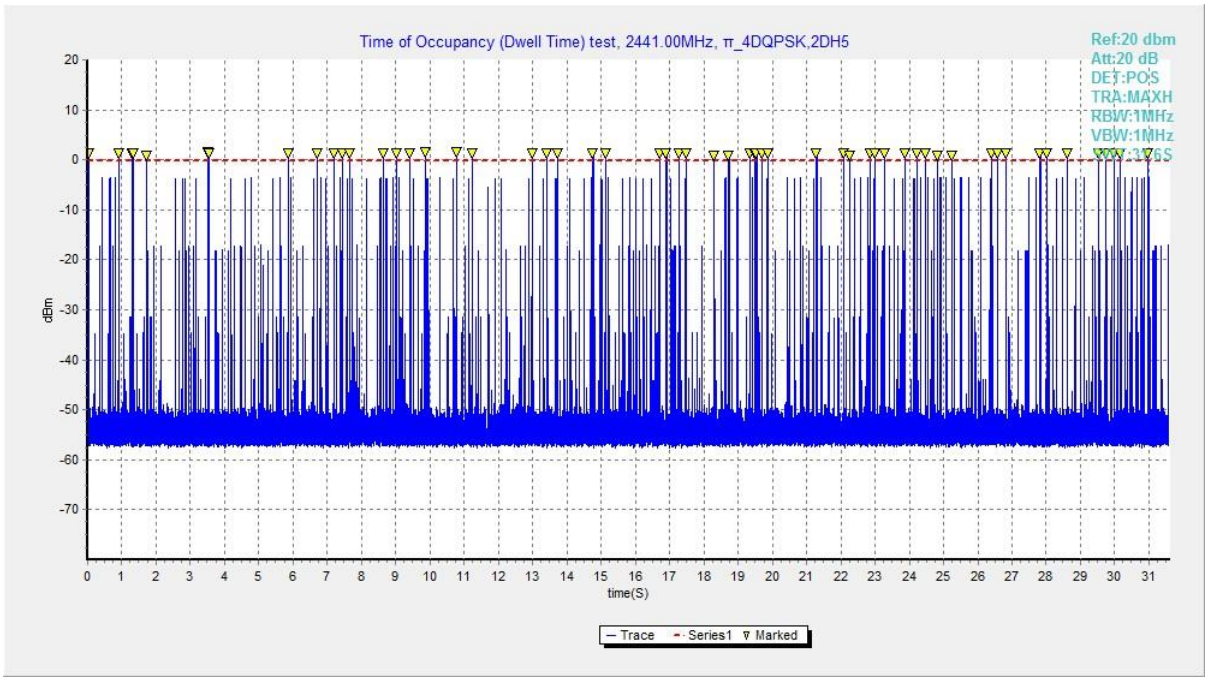

Fig. 73 Time of Occupancy (Dwell Time) (π /4 DQPSK, Ch39)

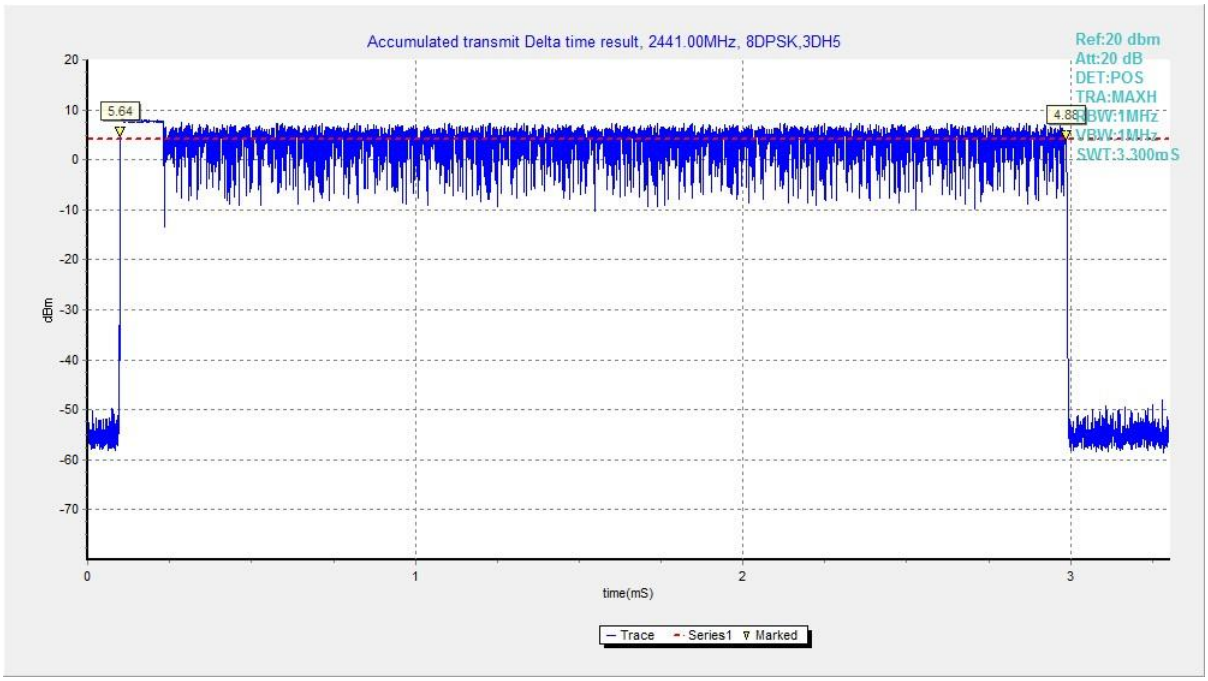

Fig. 74 Time of Occupancy (Dwell Time) (8DPSK, Ch39)

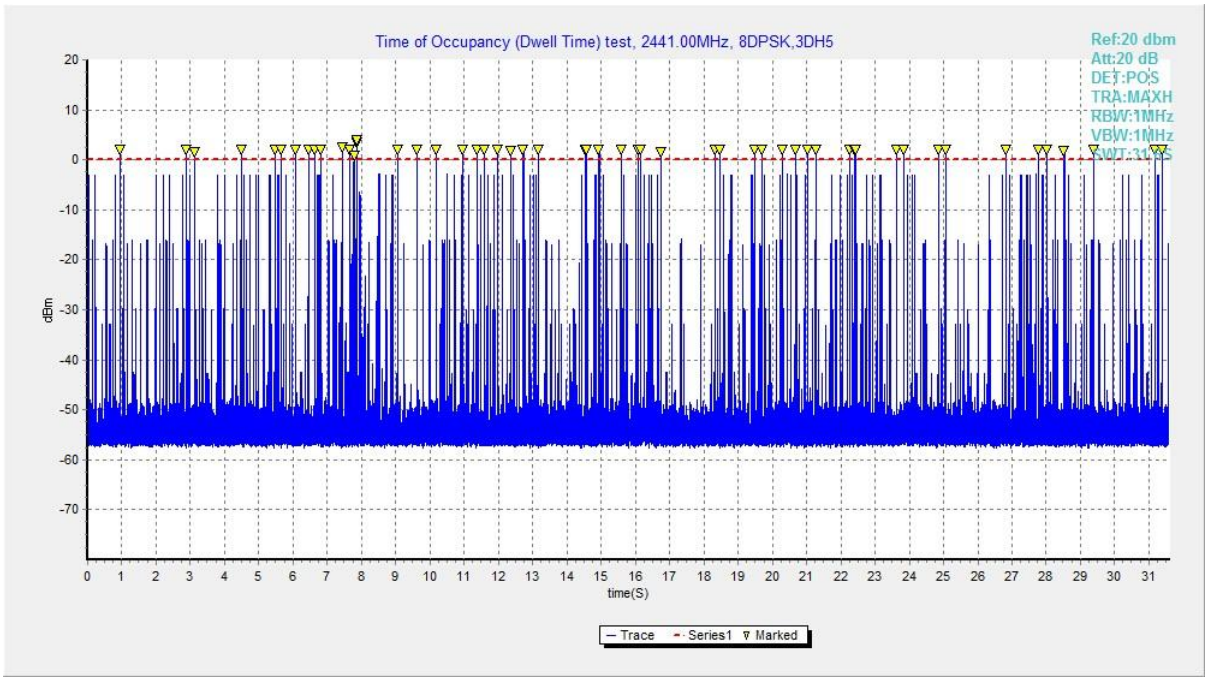

Fig. 75 Time of Occupancy (Dwell Time) (8DPSK, Ch39)

A.7 Number of Hopping Channels

Measurement Limit:

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

Measurement Results:

Mode	Packet	Number of hopping channels		Test result	Conclusion
GFSK	DH5	Fig.76	Fig.77	79	**P**
π /4 DQPSK	2-DH5	Fig.78	Fig.79	79	**P**
8DPSK	3-DH5	Fig.80	Fig.81	79	**P**

See below for test graphs.

Conclusion: Pass

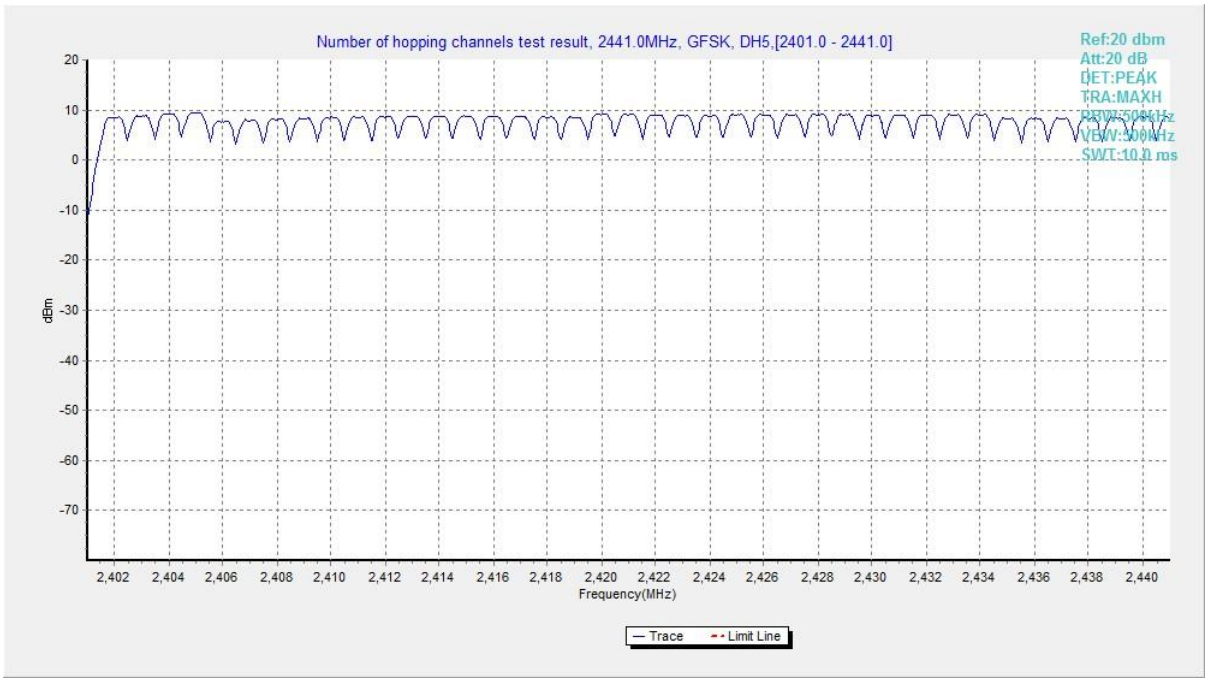

Fig. 76 Hopping channel ch0~39 (GFSK, Ch39)

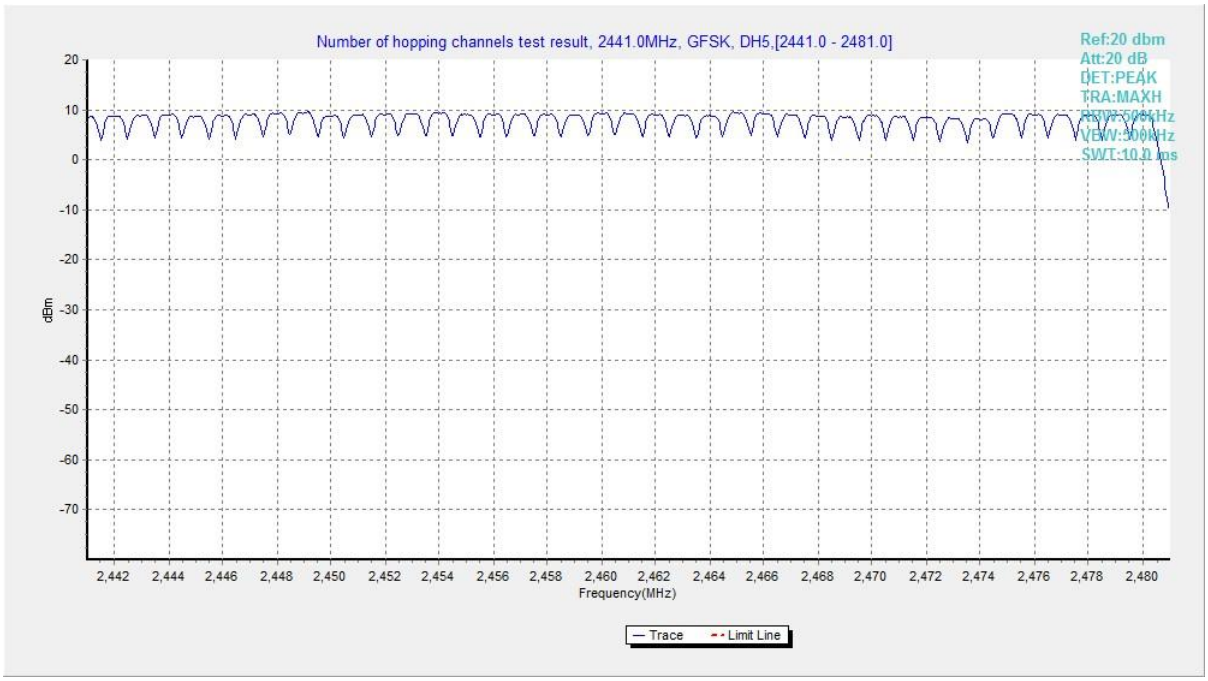

Fig. 77 Hopping channel ch40~78 (GFSK, Ch39)

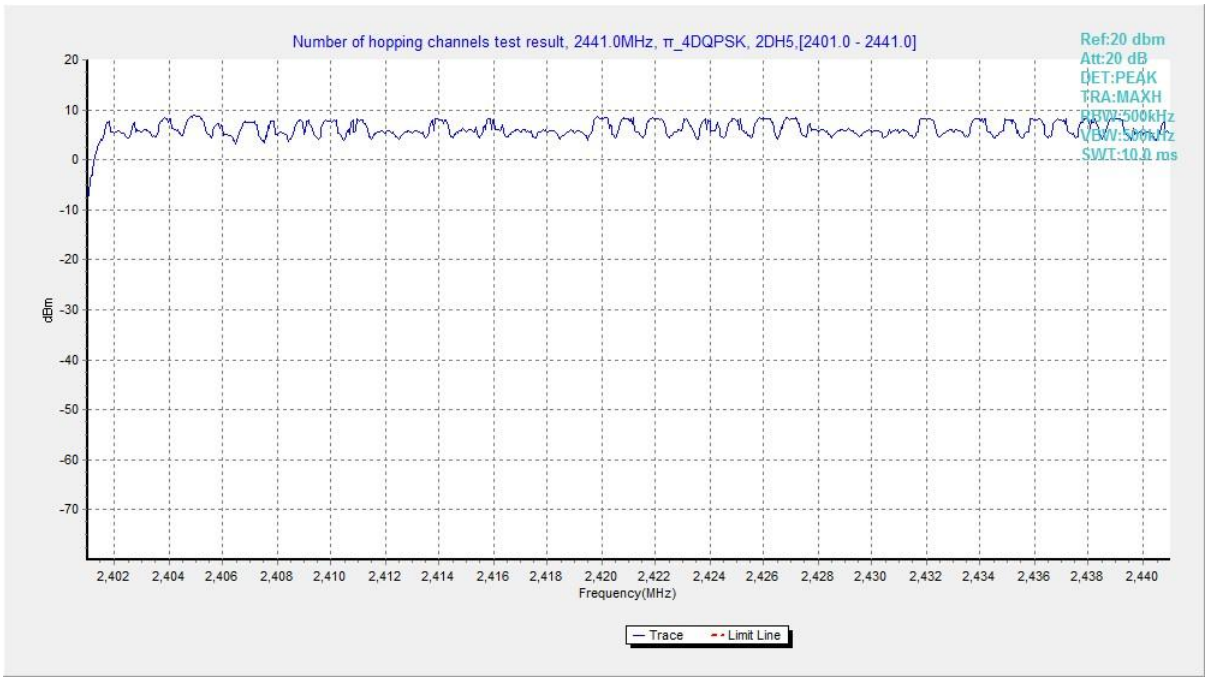

Fig. 78 Hopping channel ch0~39 (π /4 DQPSK, Ch39)

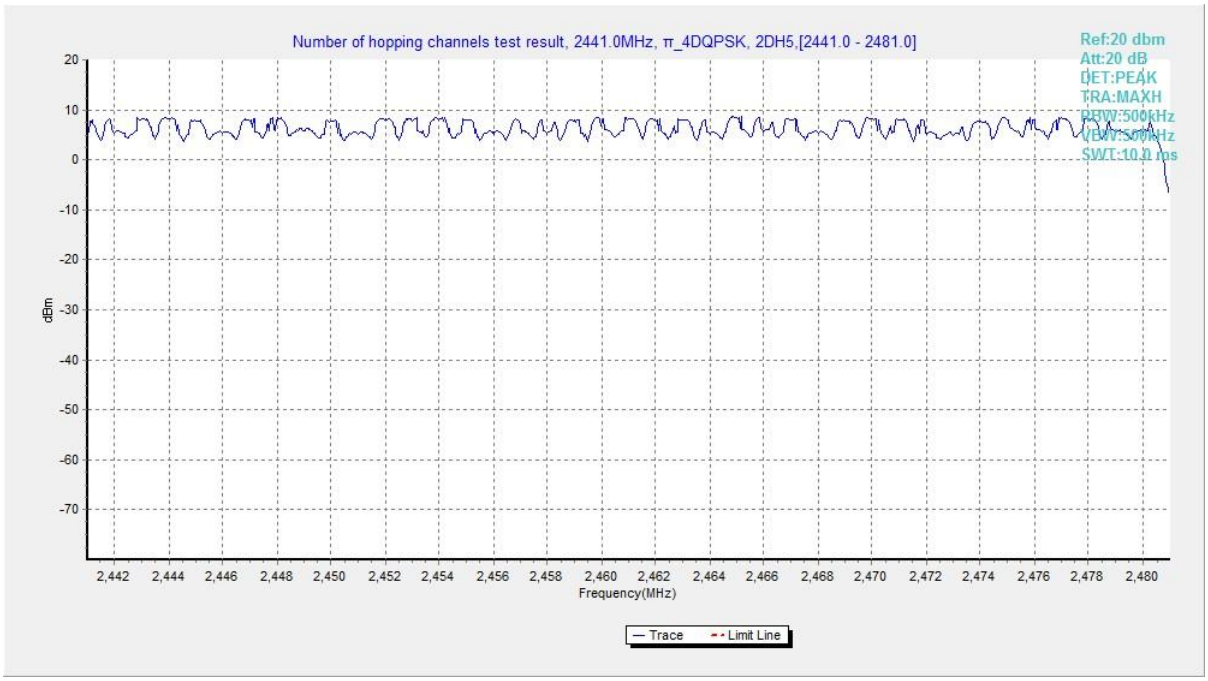

Fig. 79 Hopping channel ch40~78 (π /4 DQPSK, Ch39)

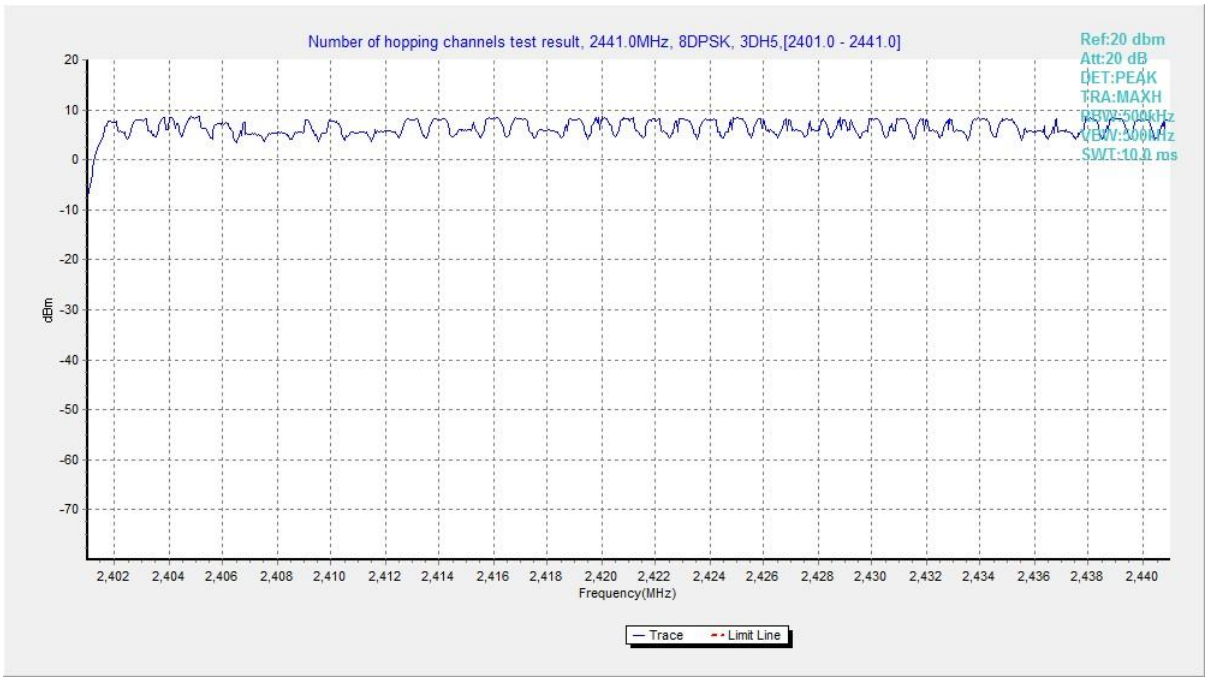

Fig. 80 Hopping channel ch0~39 (8DPSK, Ch39)

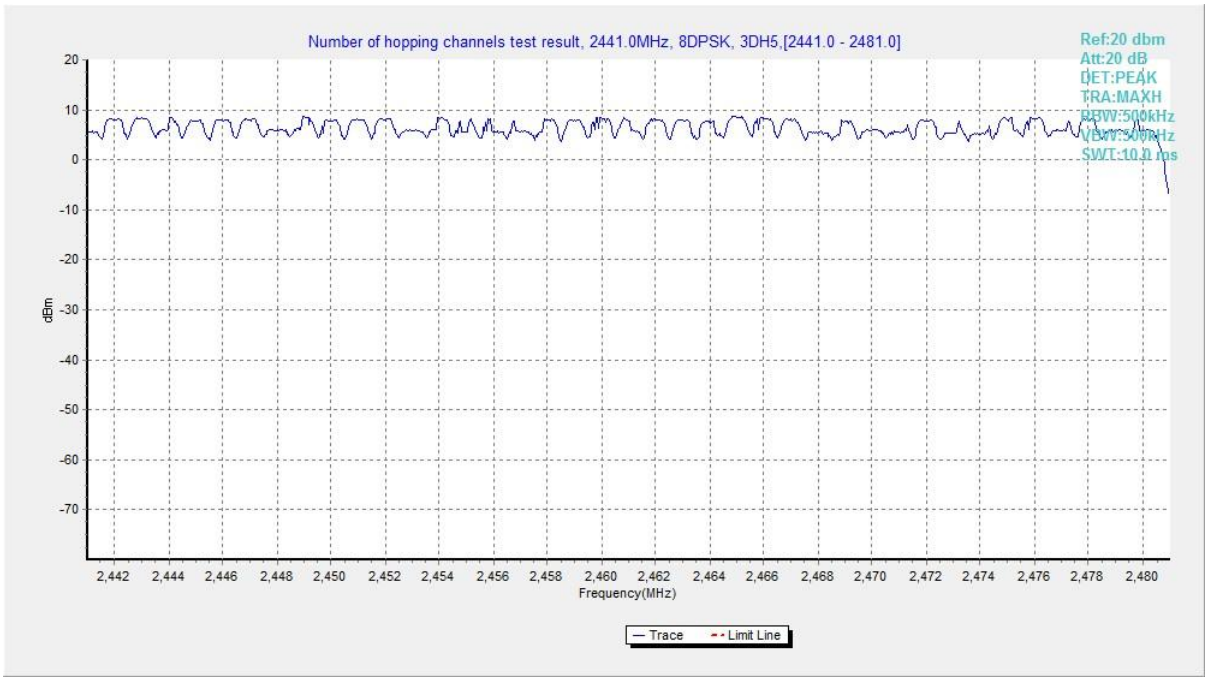

Fig. 81 Hopping channel ch40~78 (8DPSK, Ch39)

A.8 Carrier Frequency Separation

Measurement Limit:

Standard	Limit
FCC 47 CFR Part 15.247(a)	By a minimum of 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater

Measurement Results:

Mode	Channel	Packet	Separation of hopping channels	Test result (MHz)	Conclusion
GFSK	39	DH5	Fig.82	1.00	**P**
π /4 DQPSK	39	2-DH5	Fig.83	1.00	**P**
8DPSK	39	3-DH5	Fig.84	1.00	**P**

See below for test graphs.

Conclusion: Pass

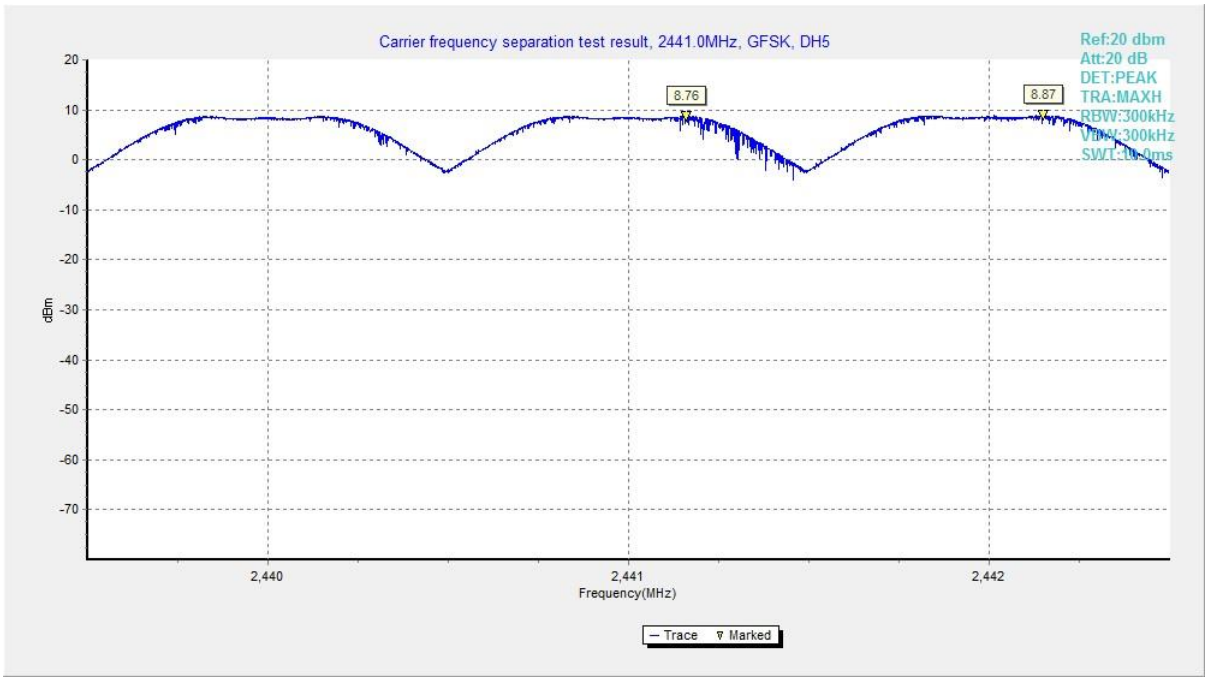

Fig. 82 Carrier Frequency Separation (GFSK, Ch39)

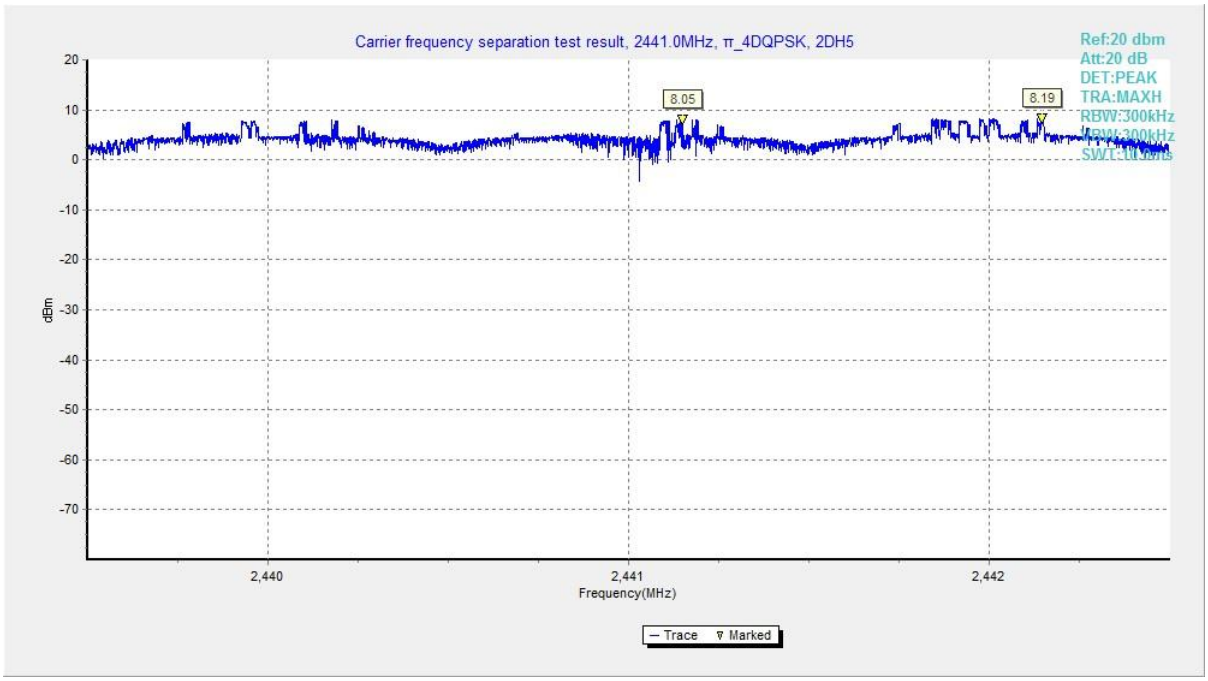

Fig. 83 Carrier Frequency Separation (π /4 DQPSK, Ch39)

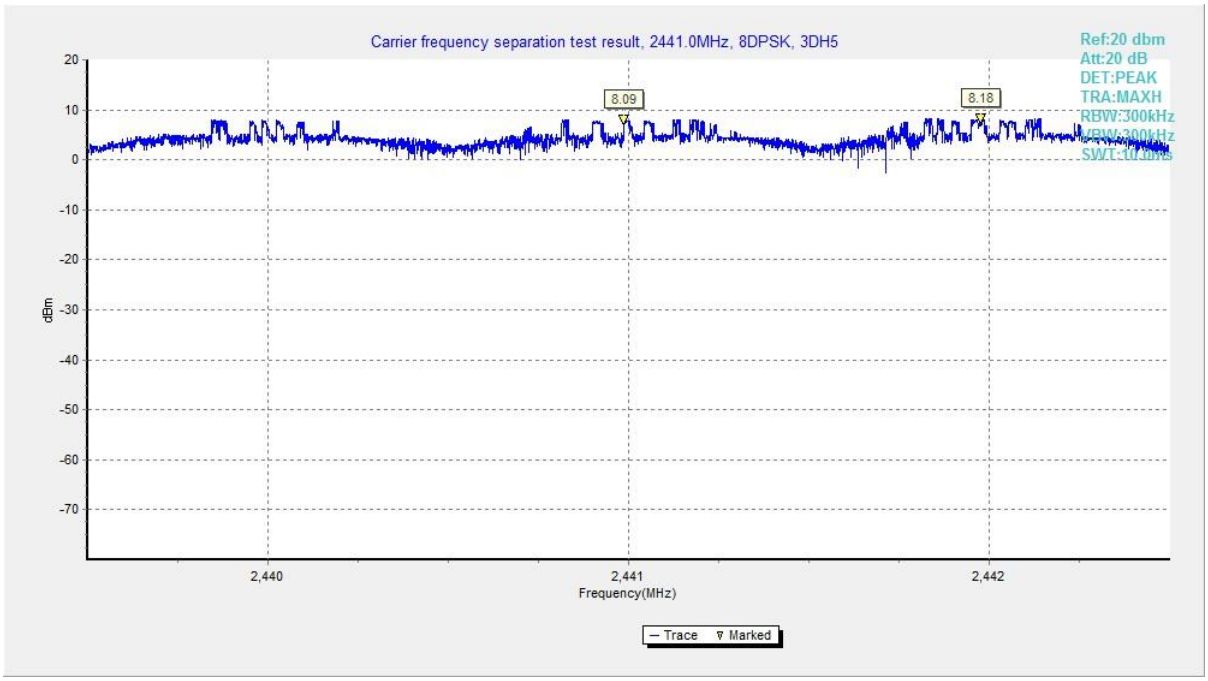

Fig. 84 Carrier Frequency Separation (8DPSK, Ch39)

A.9 AC Power line Conducted Emission

Test Condition:

Voltage (V)	Frequency (Hz)
120	60

Measurement Result and limit:

BT (Quasi-peak Limit) - AE2

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Result (dBμV)		Conclusion
		Traffic	Idle	
0.15 to 0.5	66 to 56	Fig.85	Fig.86	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.				

BT (Average Limit) - AE2

Frequency range (MHz)	Average-peak Limit (dBμV)	Result (dBμV)		Conclusion
		Traffic	Idle	
0.15 to 0.5	56 to 46	Fig.85	Fig.86	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.				

Note: The measurement results include the L1 and N measurements.

See below for test graphs.

Conclusion: Pass

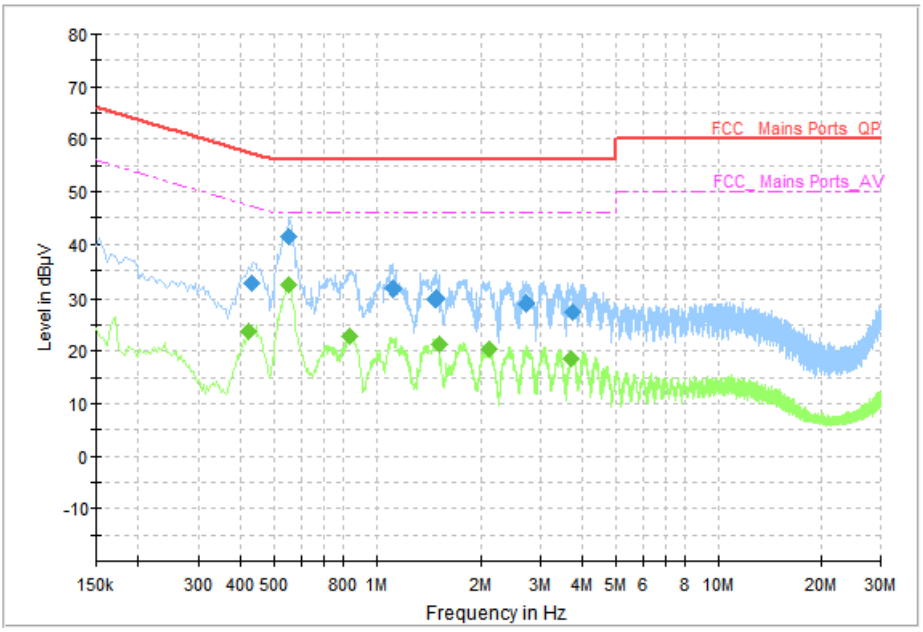

Fig. 85 AC Powerline Conducted Emission (Traffic, AE2, 120V)

Measurement Results: Quasi Peak

Frequency (MHz)	Quasi Peak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.430000	32.67	57.25	24.58	N	ON	10
0.554000	41.38	56.00	14.62	N	ON	10
1.114000	31.57	56.00	24.43	N	ON	10
1.486000	29.88	56.00	26.12	N	ON	10
2.730000	28.98	56.00	27.02	N	ON	10
3.746000	27.34	56.00	28.66	N	ON	10

Measurement Results: Average

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.422000	23.74	47.41	23.67	N	ON	10
0.554000	32.31	46.00	13.69	N	ON	10
0.838000	22.93	46.00	23.07	N	ON	10
1.510000	21.36	46.00	24.64	N	ON	10
2.126000	20.38	46.00	25.62	N	ON	10
3.706000	18.44	46.00	27.56	N	ON	10

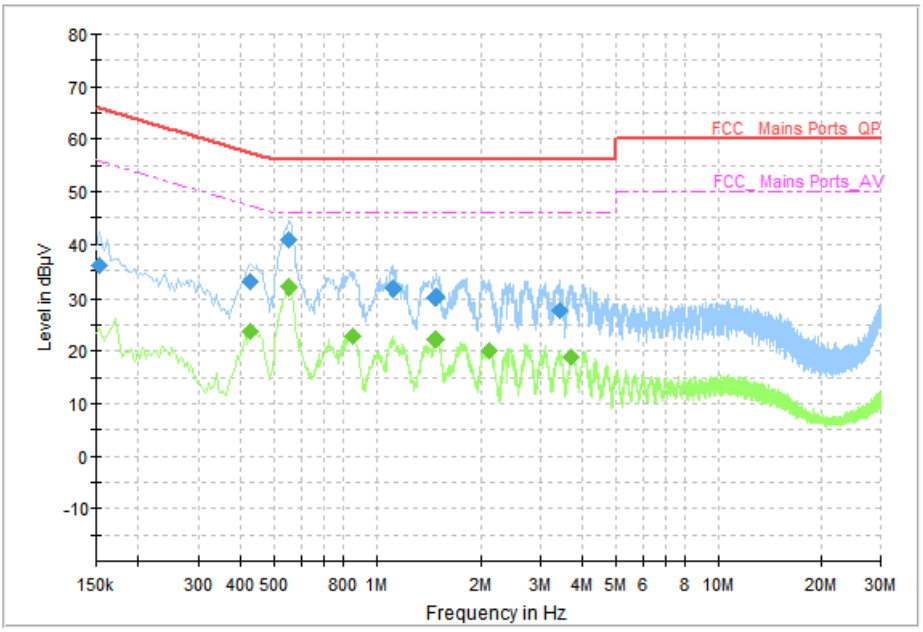

Fig. 86 AC Power line Conducted Emission (Idle, AE2, 120V)

Measurement Results: Quasi Peak

Frequency (MHz)	Quasi Peak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.154000	35.97	65.78	29.81	N	ON	10
0.426000	32.81	57.33	24.52	N	ON	10
0.550000	40.93	56.00	15.07	N	ON	10
1.114000	31.80	56.00	24.20	N	ON	10
1.490000	30.13	56.00	25.87	N	ON	10
3.402000	27.82	56.00	28.18	N	ON	10

Measurement Results: Average

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.426000	23.70	47.33	23.63	N	ON	10
0.550000	31.86	46.00	14.14	N	ON	10
0.850000	22.78	46.00	23.22	N	ON	10
1.486000	22.05	46.00	23.95	N	ON	10
2.126000	20.16	46.00	25.84	N	ON	10
3.690000	18.81	46.00	27.19	N	ON	10

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