

Fig. 61 20dB Bandwidth ($\pi/4$ DQPSK, CH0)

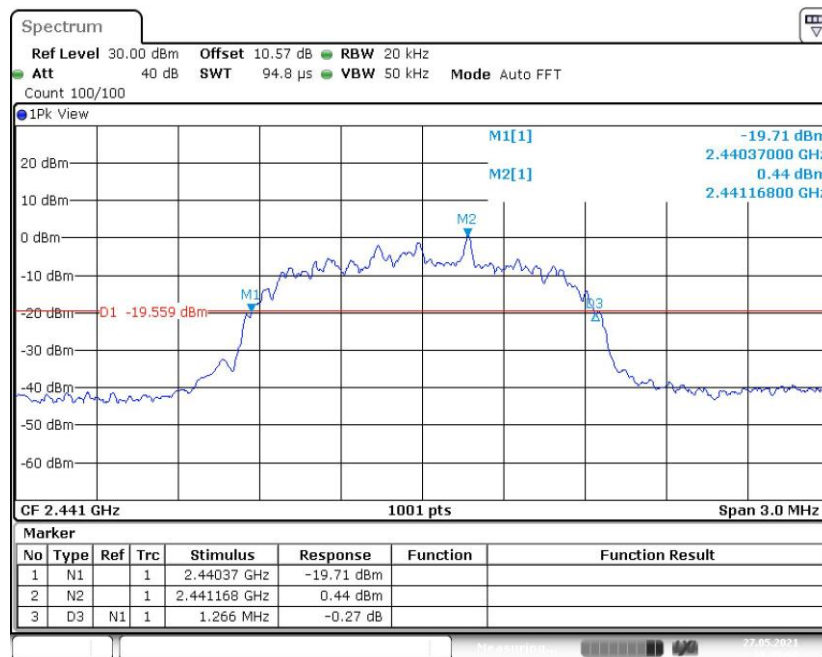


Fig. 62 20dB Bandwidth ($\pi/4$ DQPSK, CH39)

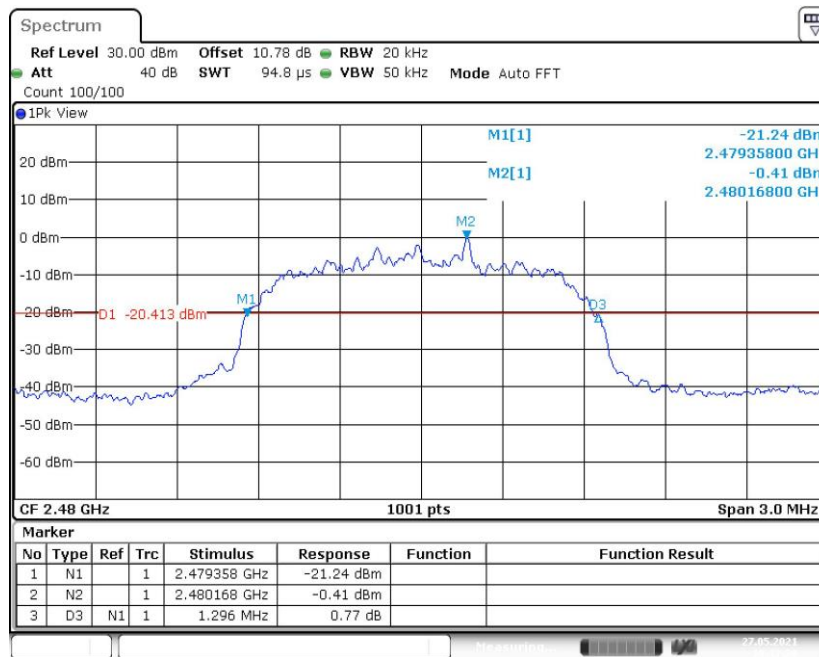


Fig. 63 20dB Bandwidth ($\pi/4$ DQPSK, CH78)

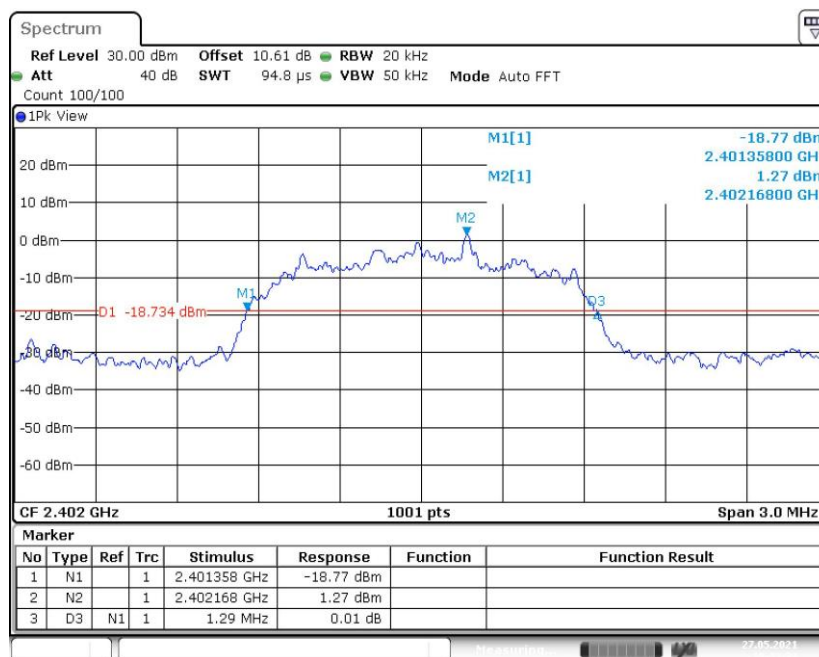


Fig. 64 20dB Bandwidth (8DPSK, CH0)

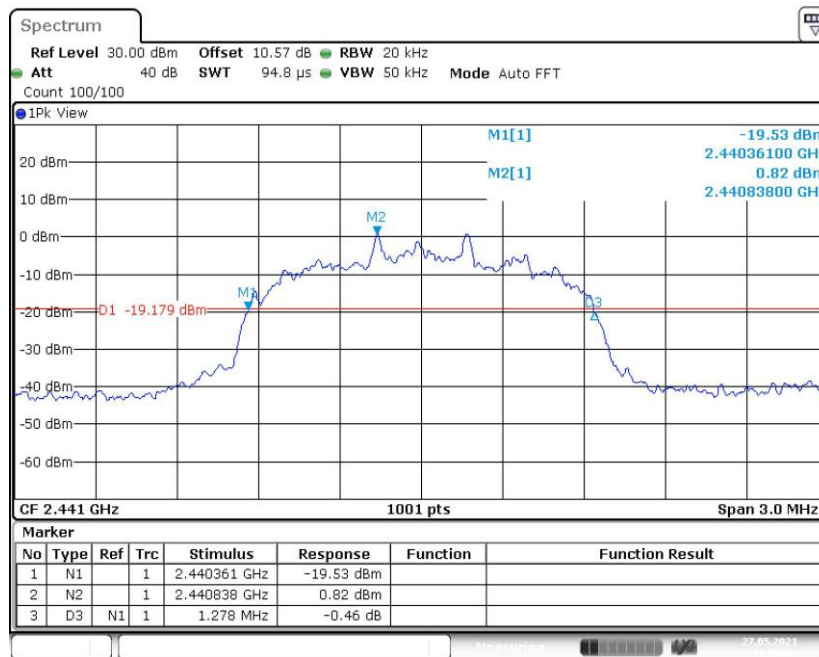


Fig. 65 20dB Bandwidth (8DPSK, CH39)

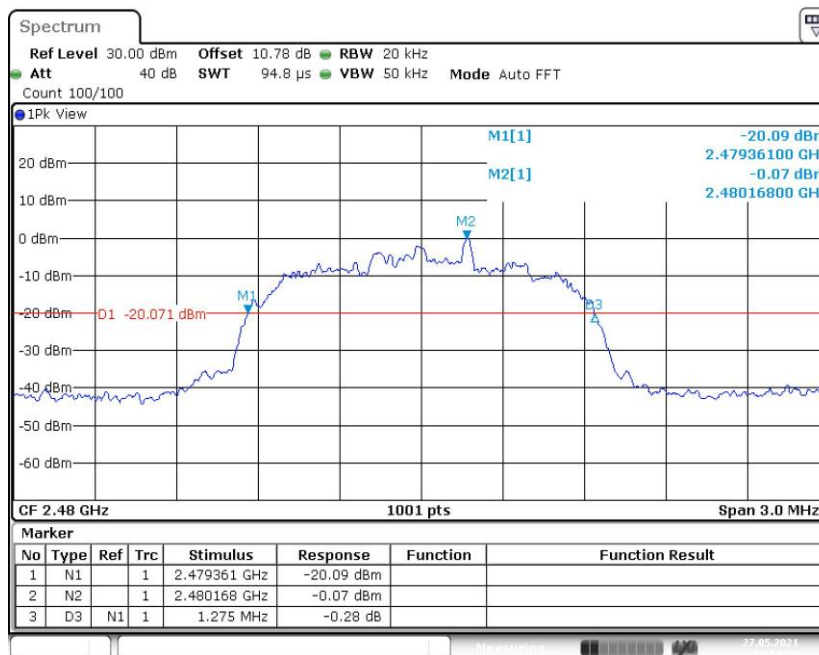


Fig. 66 20dB Bandwidth (8DPSK, CH78)



A.6 Time of Occupancy (Dwell Time)

Measurement Limit:

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

Measurement Results:

Mode	Channel	Packet	BurstWidth (ms)		TotalHops (Num)		Result (ms)	Conclusion
			Fig.67	2.89	Fig.68	100		
GFSK	39	DH5	Fig.67	2.89	Fig.68	100	289.00	P
$\pi/4$ DQPSK	39	2-DH5	Fig.69	2.86	Fig.70	90	258.00	P
8DPSK	39	3-DH5	Fig.71	2.86	Fig.72	100	286.00	P

See below for test graphs.

Conclusion: Pass

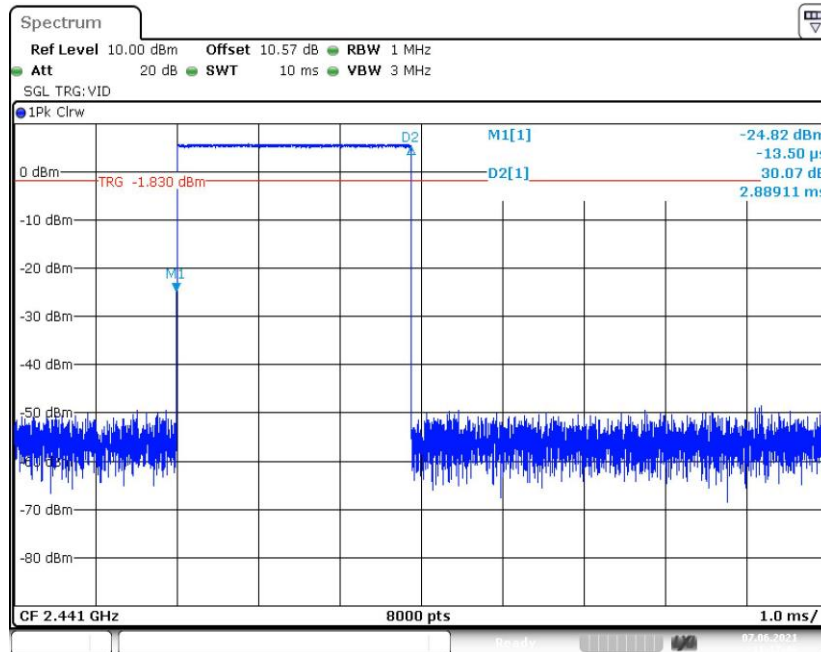


Fig. 67 BurstWidth (Dwell Time) (GFSK, CH39)

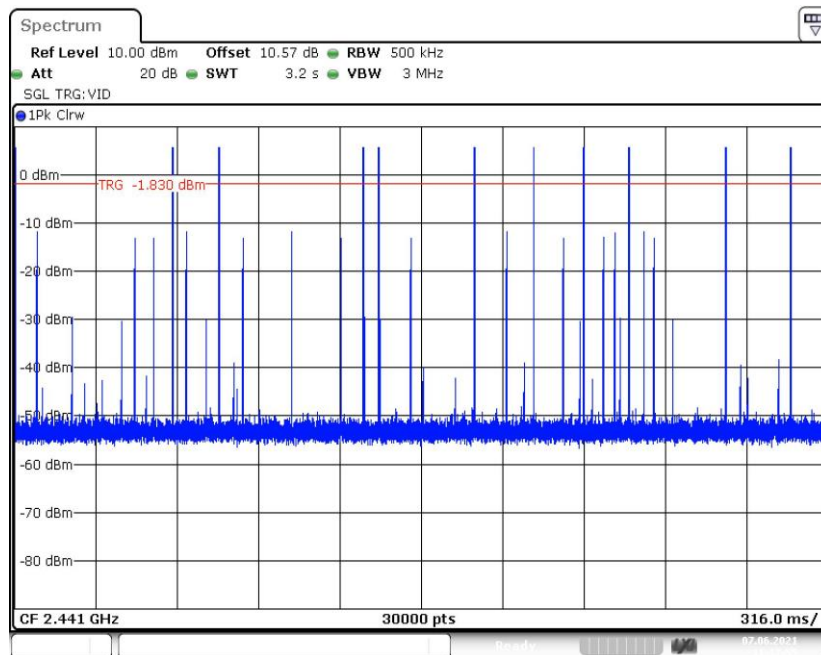


Fig. 68 Number of Burst in Observation Period (Dwell Time) (GFSK, CH39)

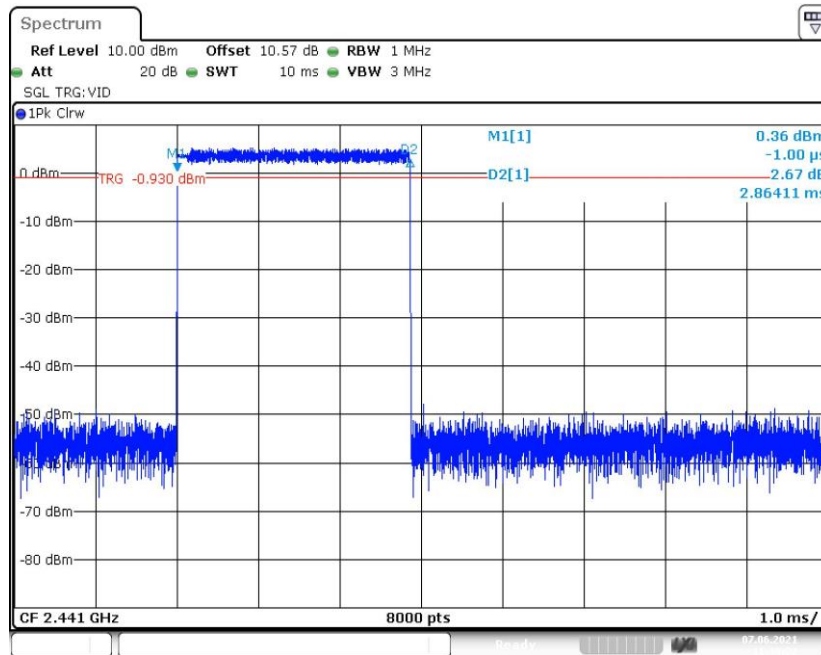


Fig. 69 BurstWidth (Dwell Time) ($\pi/4$ DQPSK, CH39)

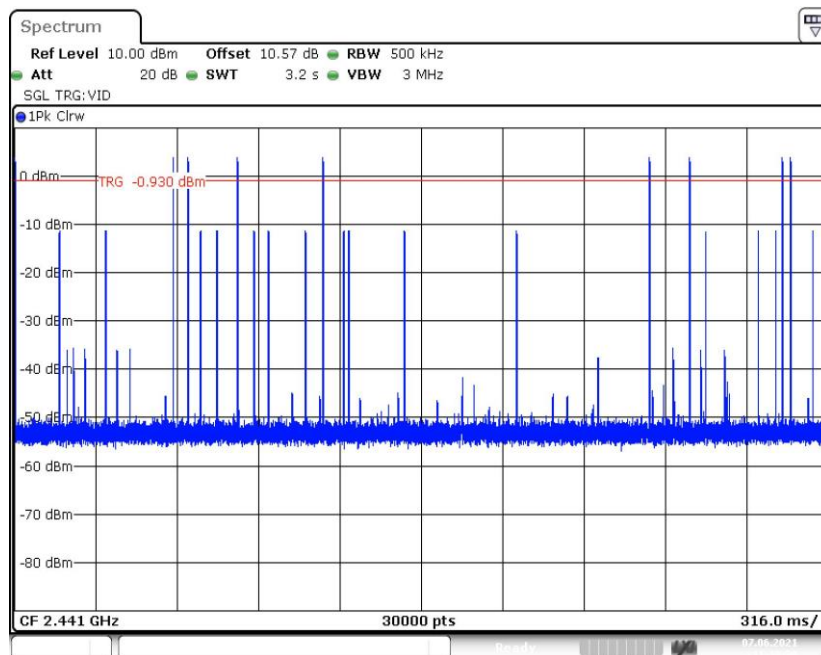


Fig. 70 Number of Burst in Observation Period (Dwell Time) ($\pi/4$ DQPSK, CH39)

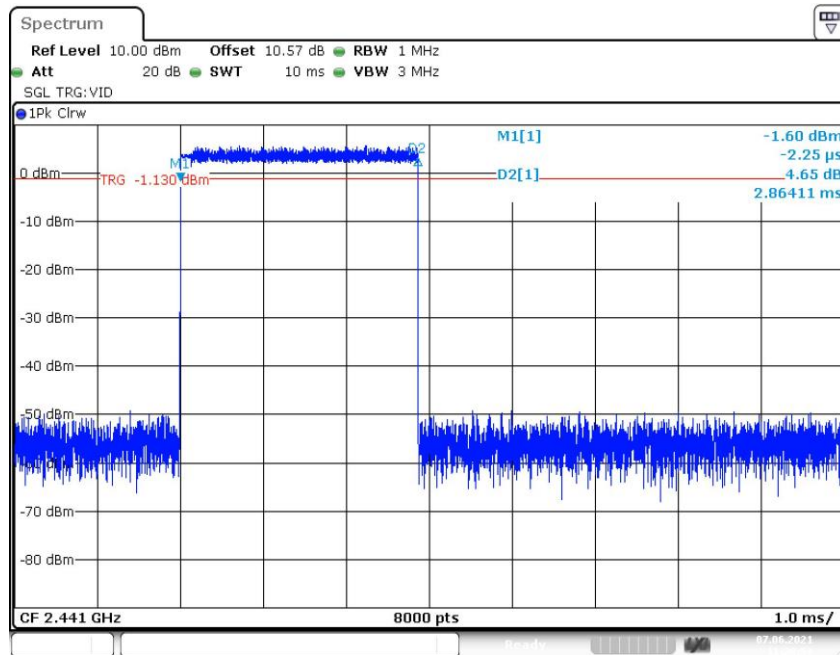


Fig. 71 BurstWidth (Dwell Time) (8DPSK, CH39)

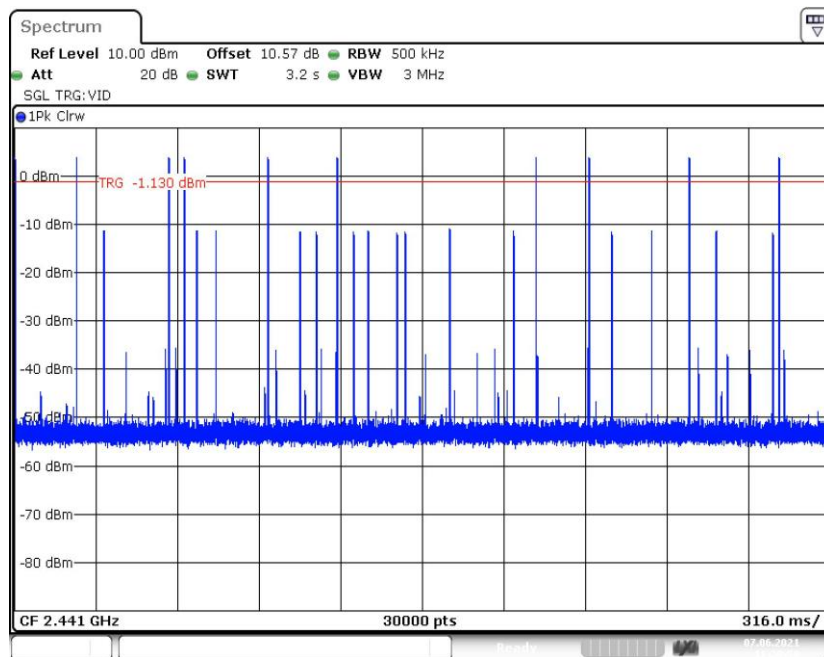


Fig. 72 Number of Burst in Observation Period (Dwell Time) (8DPSK, CH39)



A.7 Number of Hopping Channels

Measurement Limit:

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

Measurement Results:

Mode	Packet	Number of Hopping Channels	Test results (Num)	Conclusion
GFSK	DH5	Fig.73	79	P
$\pi/4$ DQPSK	2-DH5	Fig.74	79	P
8DPSK	3-DH5	Fig.75	79	P

See below for test graphs.

Conclusion: Pass

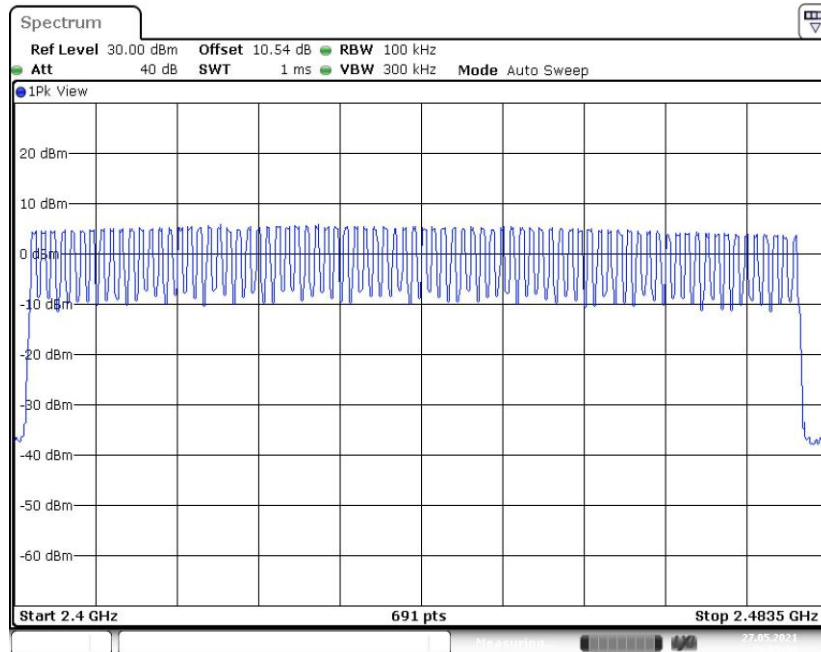


Fig. 73 Number of Hopping Channels (GFSK, CH39)

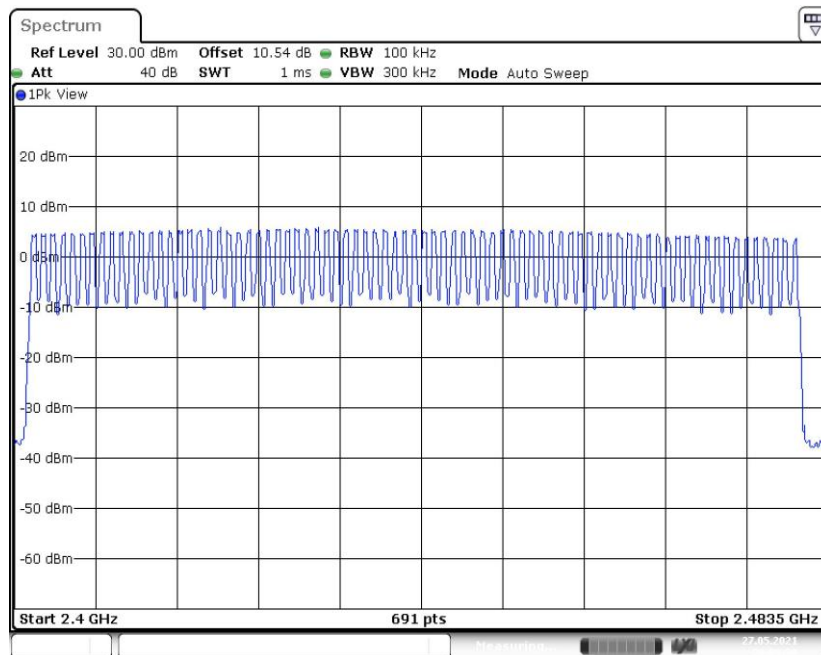


Fig. 74 Number of Hopping Channels ($\pi/4$ DQPSK, CH39)

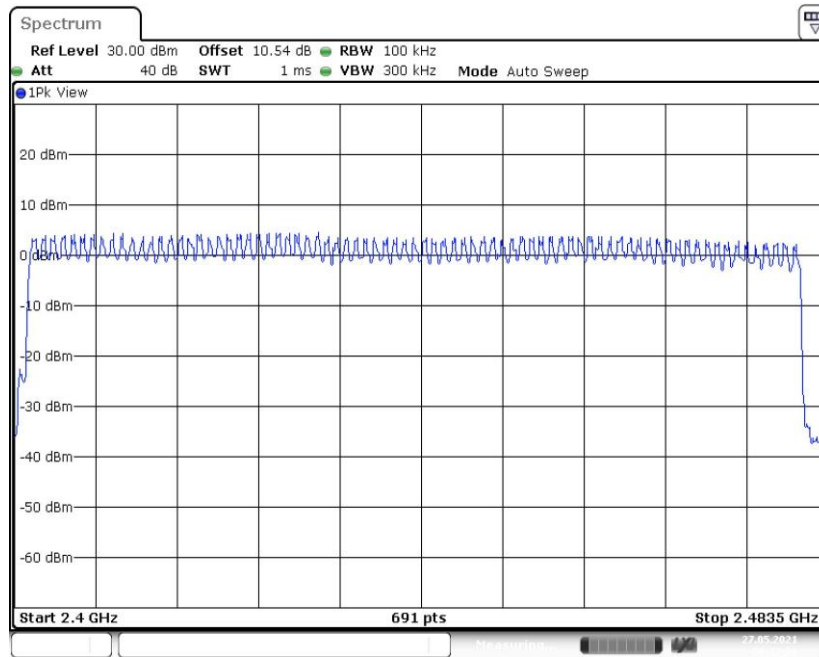


Fig. 75 Number of Hopping Channels (8DPSK, CH39)

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 (kHz)	Conclusion
GFSK	39	DH5	Fig.76	1003.00	P
$\pi/4$ DQPSK	39	2-DH5	Fig.77	1003.00	P
8DPSK	39	3-DH5	Fig.78	1000.00	P

See below for test graphs.

Conclusion: Pass

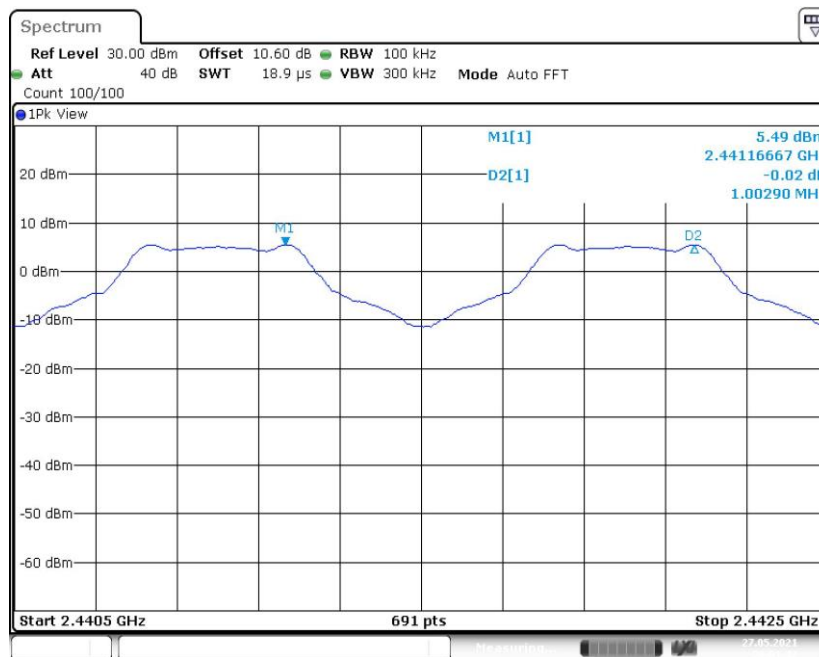


Fig. 76 Carrier Frequency Separation (GFSK, CH39)

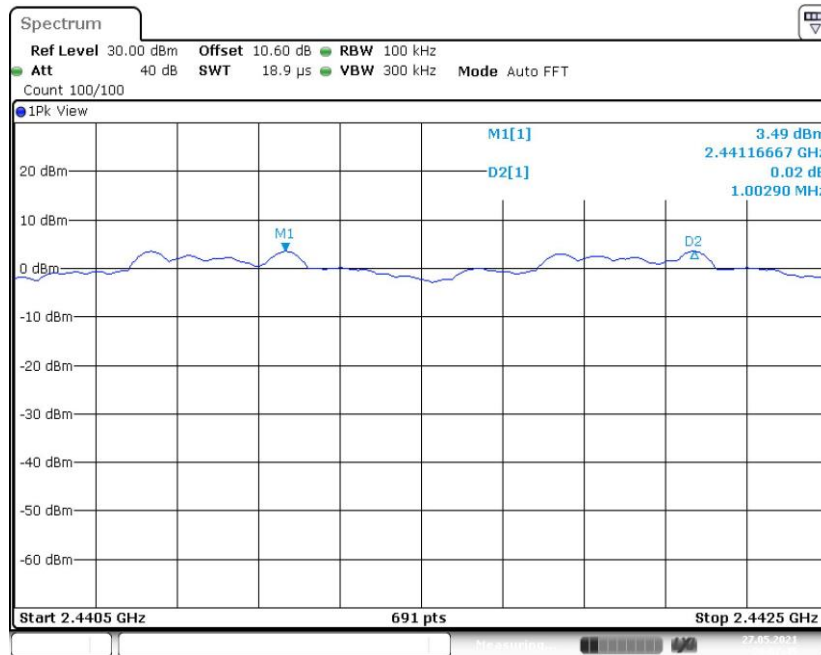


Fig. 77 Carrier Frequency Separation ($\pi/4$ DQPSK, CH39)

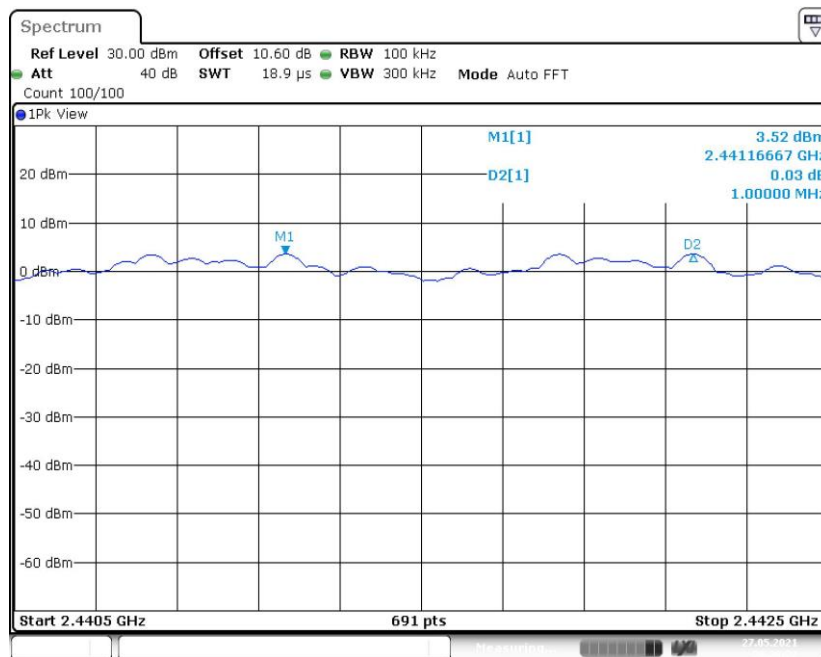


Fig. 78 Carrier Frequency Separation (8DPSK, CH39)



A.9 AC Power line Conducted Emission

Test Condition:

Voltage (V)	Frequency (Hz)
120	60

Measurement Result and limit:

BT-AE2, AE3, AE4

Frequency range (MHz)	Quasi-peak Limit (dB μ V)	Average-peak Limit (dB μ V)	Result (dB μ V)		Conclusion
			Traffic	Idle	
0.15 to 0.5	66 to 56	56 to 46	Fig.79	Fig.80	P
0.5 to 5	56	46			
5 to 30	60	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

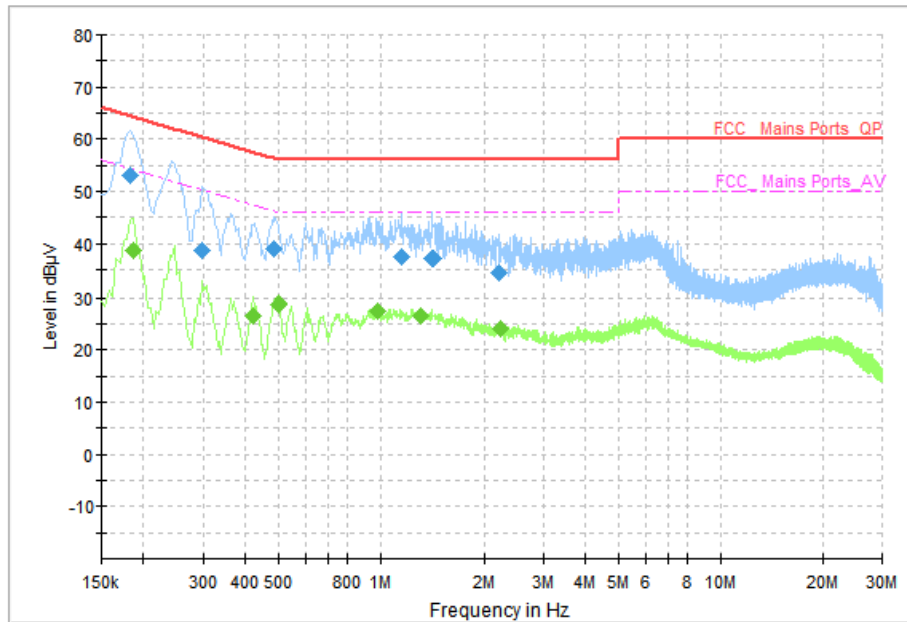


Fig. 79 AC Power line Conducted Emission (Traffic)

Measurement Results: Quasi Peak

Frequency (MHz)	Quasi Peak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.182000	53.19	64.39	11.20	N	ON	10
0.298000	38.62	60.30	21.67	N	ON	10
0.482000	38.99	56.31	17.31	L1	ON	10
1.150000	37.34	56.00	18.66	L1	ON	10
1.418000	37.27	56.00	18.73	L1	ON	10
2.214000	34.38	56.00	21.62	L1	ON	10

Measurement Results: Average

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.186000	38.65	54.21	15.57	N	ON	10
0.422000	26.60	47.41	20.80	N	ON	10
0.498000	28.56	46.03	17.48	L1	ON	10
0.982000	27.32	46.00	18.68	L1	ON	10
1.318000	26.46	46.00	19.54	L1	ON	10
2.246000	23.91	46.00	22.09	L1	ON	10

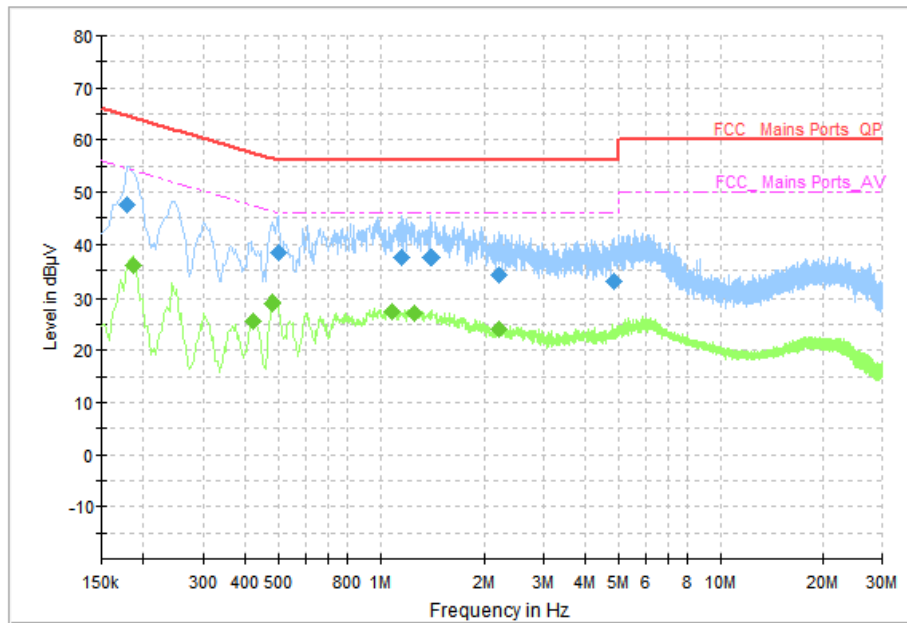


Fig. 80 AC Power line Conducted Emission (Idle)

Measurement Results: Quasi Peak

Frequency (MHz)	Quasi Peak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.178000	47.53	64.58	17.05	N	ON	10
0.498000	38.37	56.03	17.66	L1	ON	10
1.154000	37.54	56.00	18.46	L1	ON	10
1.406000	37.43	56.00	18.57	L1	ON	10
2.226000	34.09	56.00	21.91	L1	ON	10
4.862000	32.99	56.00	23.01	L1	ON	10

Measurement Results: Average

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.186000	36.01	54.21	18.20	L1	ON	10
0.422000	25.67	47.41	21.74	N	ON	10
0.478000	28.81	46.37	17.56	L1	ON	10
1.086000	27.28	46.00	18.72	L1	ON	10
1.262000	27.03	46.00	18.97	L1	ON	10
2.226000	23.99	46.00	22.01	L1	ON	10

END OF REPORT