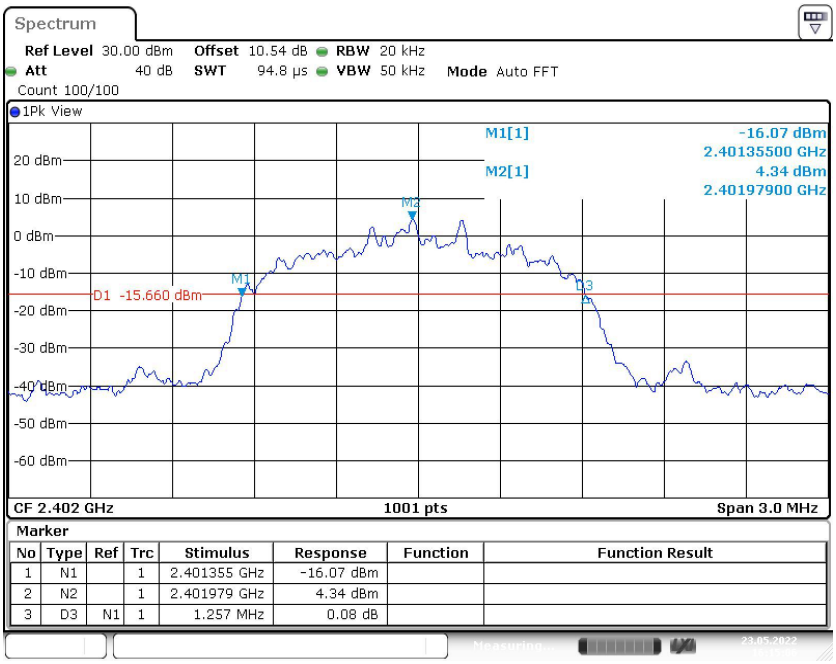

Fig. 64 20dB Bandwidth (8DPSK, CH0)

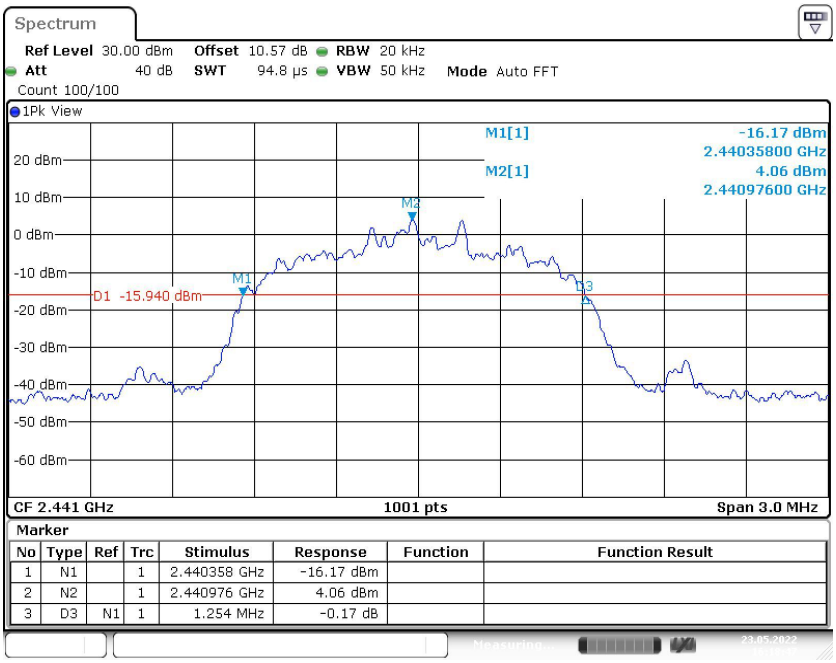

Fig. 65 20dB Bandwidth (8DPSK, CH39)

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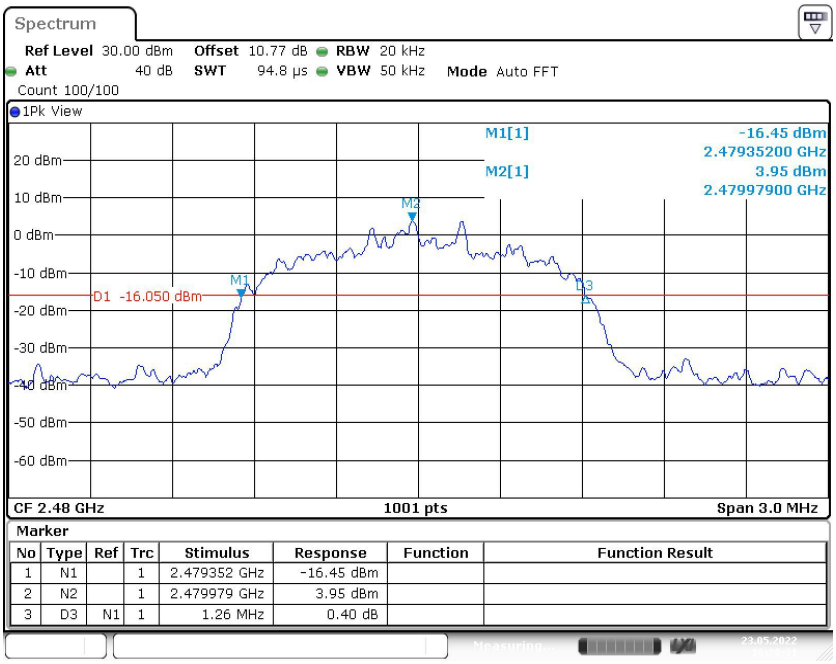

Fig. 66 20dB Bandwidth (8DPSK, CH78)

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A.6 Time of Occupancy (Dwell Time)

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

Measurement Limit:

Standard	Limit (s)
FCC 47 CFR Part 15.247(a)	< 0.4

Measurement Results:

Mode	Channel	Packet	BurstWidth (ms)		TotalHops (Num)		Result (s)	Conclusion
GFSK	39	DH5	Fig.67	2.86	Fig.68	100	0.29	**P**
π/4 DQPSK	39	2-DH5	Fig.69	2.87	Fig.70	120	0.34	**P**
8DPSK	39	3-DH5	Fig.71	2.87	Fig.72	130	0.37	**P**

See below for test graphs.

Conclusion: Pass

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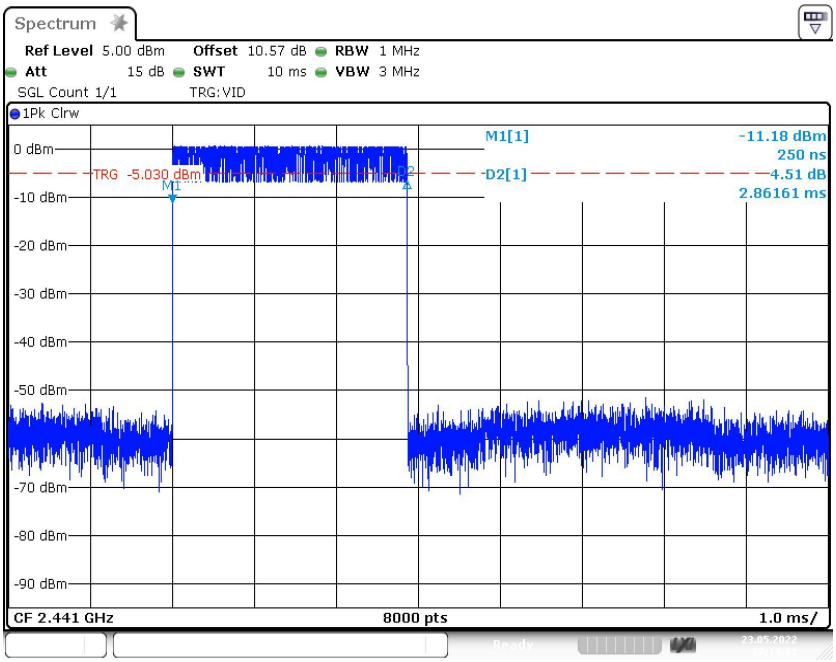

Fig. 67 BurstWidth (Dwell Time) (GFSK, CH39)

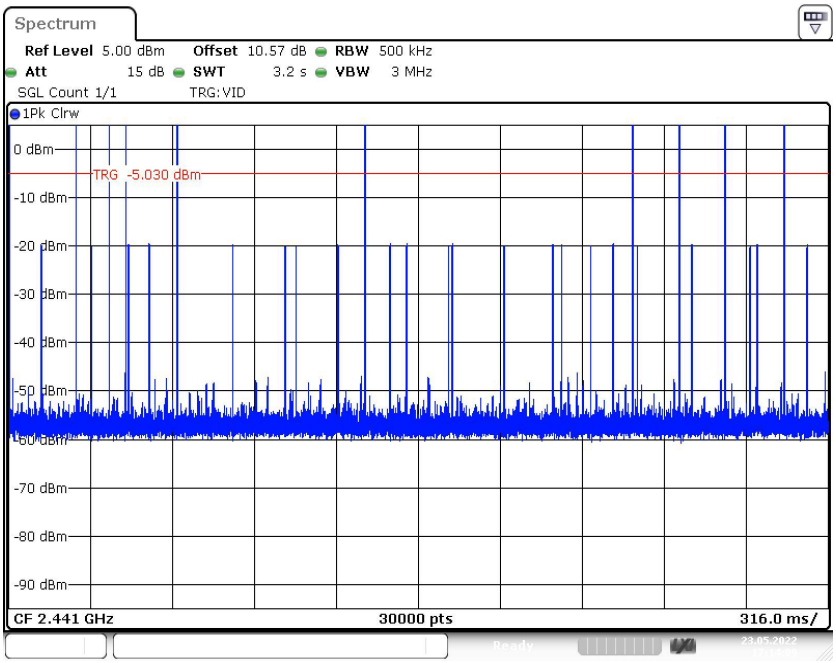

Fig. 68 Number of Burst in Observation Period (Dwell Time) (GFSK, CH39)

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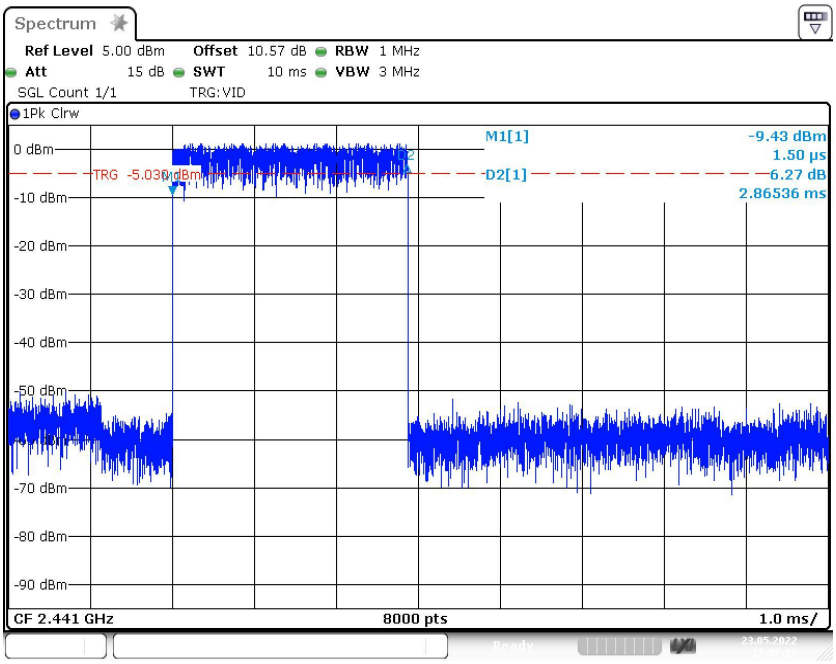

Fig. 69 BurstWidth (Dwell Time) (π/4 DQPSK, CH39)

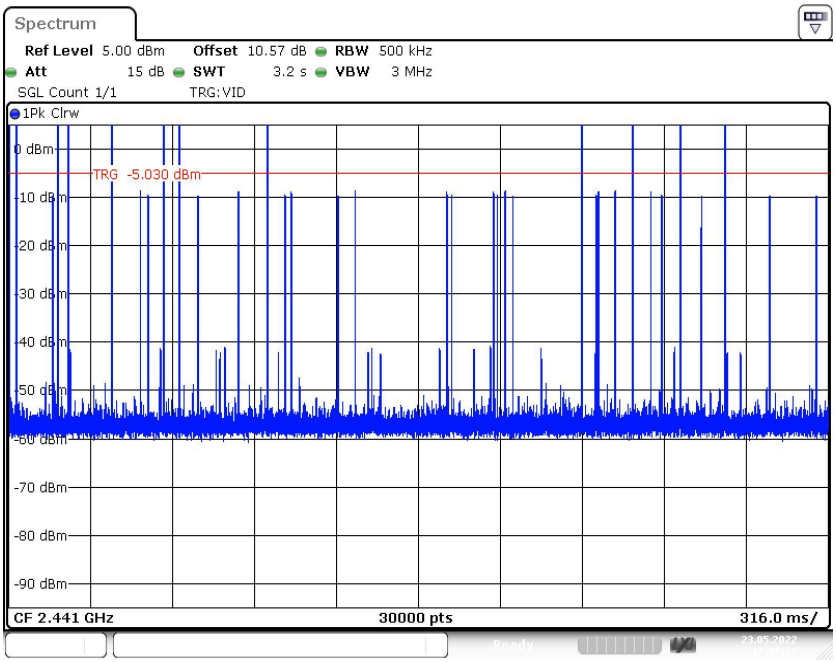

Fig. 70 Number of Burst in Observation Period (Dwell Time) (π/4 DQPSK, CH39)

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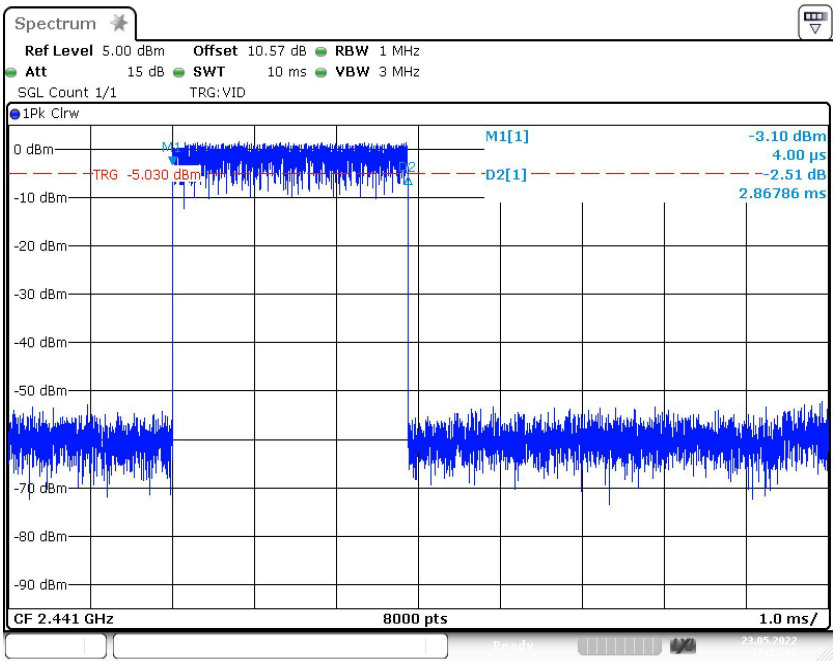

Fig. 71 BurstWidth (Dwell Time) (8DPSK, CH39)

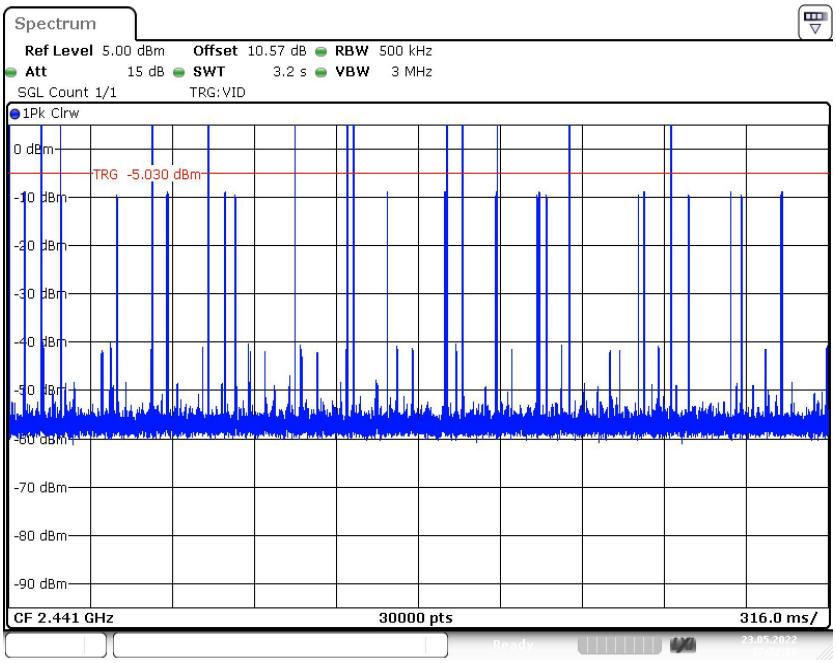

Fig. 72 Number of Burst in Observation Period (Dwell Time) (8DPSK, CH39)

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A.7 Number of Hopping Channels

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

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**
π/4 DQPSK	2-DH5	Fig.74	79	**P**
8DPSK	3-DH5	Fig.75	79	**P**

See below for test graphs.

Conclusion: Pass

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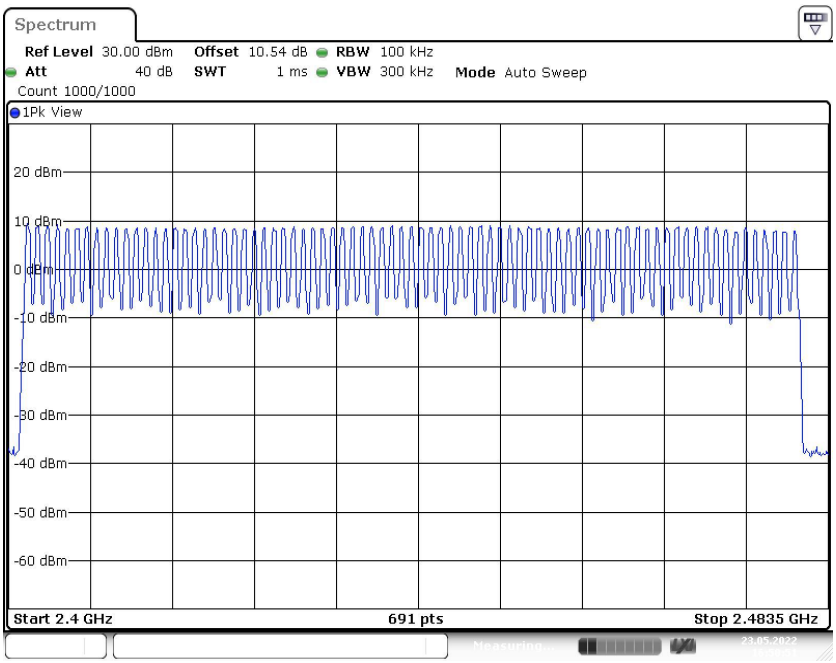

Fig. 73 Number of Hopping Channels (GFSK, Hopping)

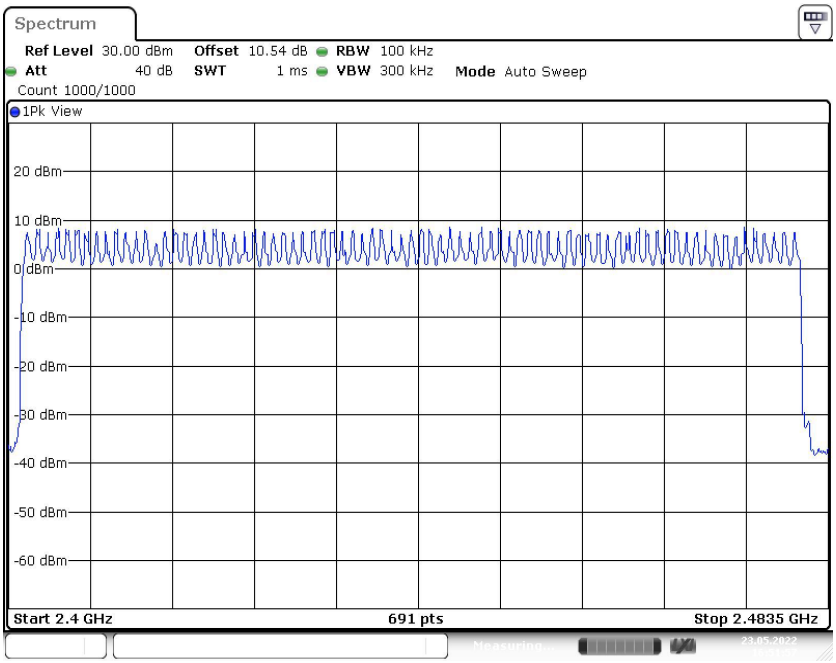

Fig. 74 Number of Hopping Channels (π/4 DQPSK, Hopping)

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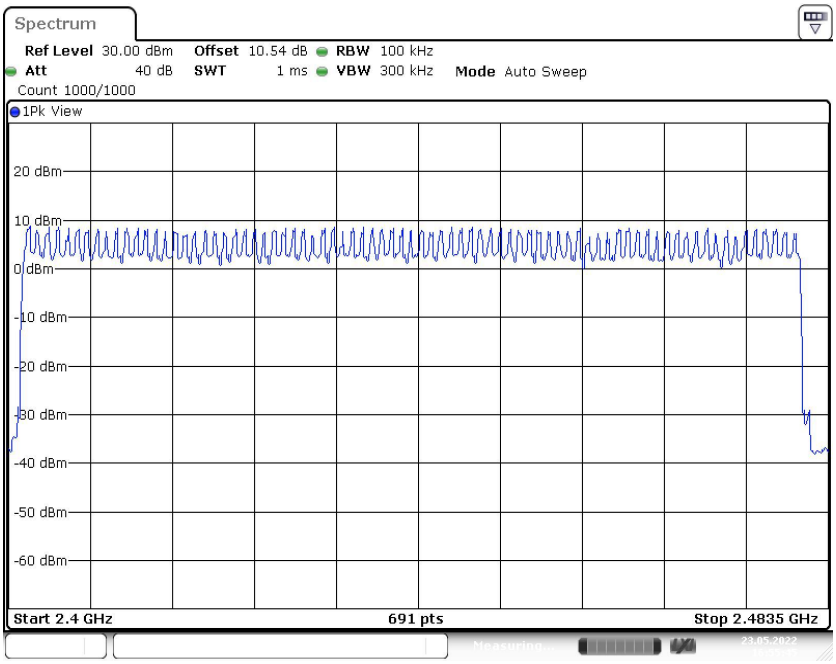

Fig. 75 Number of Hopping Channels (8DPSK, Hopping)

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A.8 Carrier Frequency Separation

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

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**
π/4 DQPSK	39	2-DH5	Fig.77	1006.00	**P**
8DPSK	39	3-DH5	Fig.78	1003.00	**P**

See below for test graphs.

Conclusion: Pass

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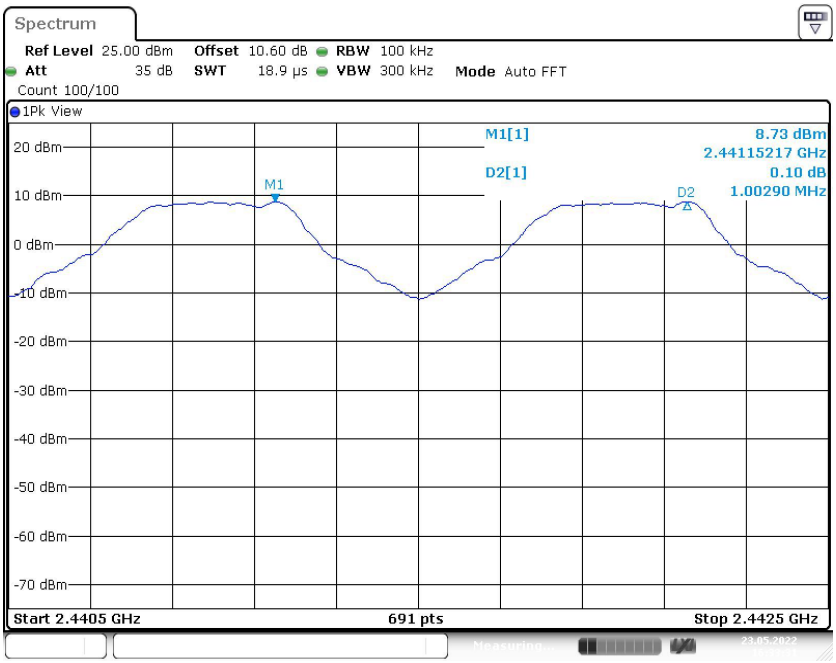

Fig. 76 Carrier Frequency Separation (GFSK, CH39)

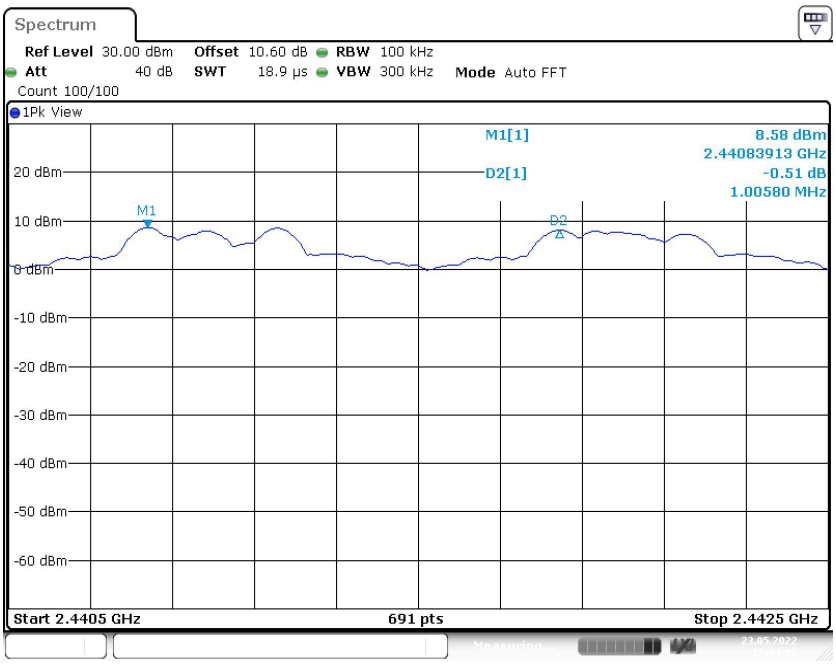

Fig. 77 Carrier Frequency Separation (π/4 DQPSK, CH39)

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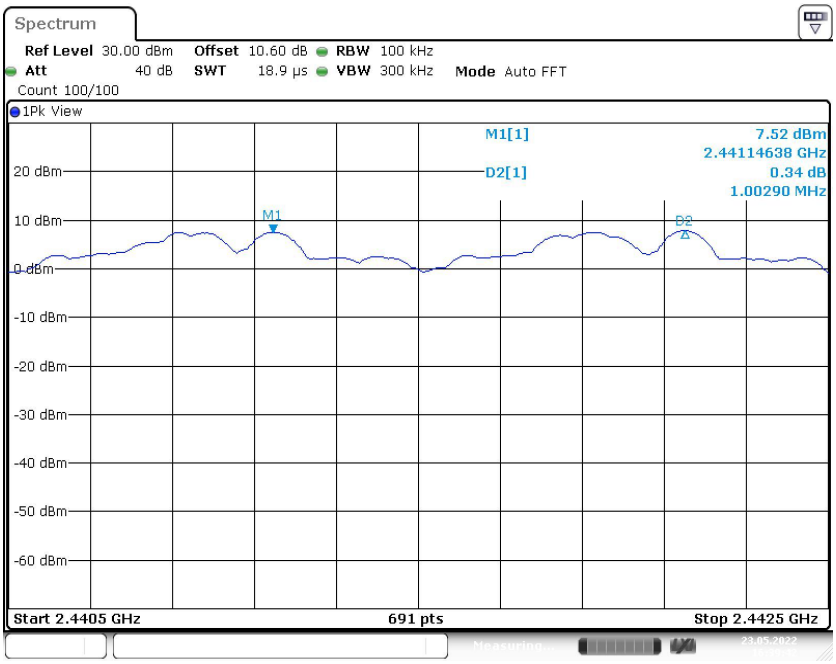

Fig. 78 Carrier Frequency Separation (8DPSK, CH39)

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A.9 AC Power line Conducted Emission

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

Test Condition:

Voltage（V）	Frequency（Hz）
120	60

Measurement Result and limit:

BT- AE2, AE3

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Average-peak Limit (dBμV)	Result (dBμV)		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

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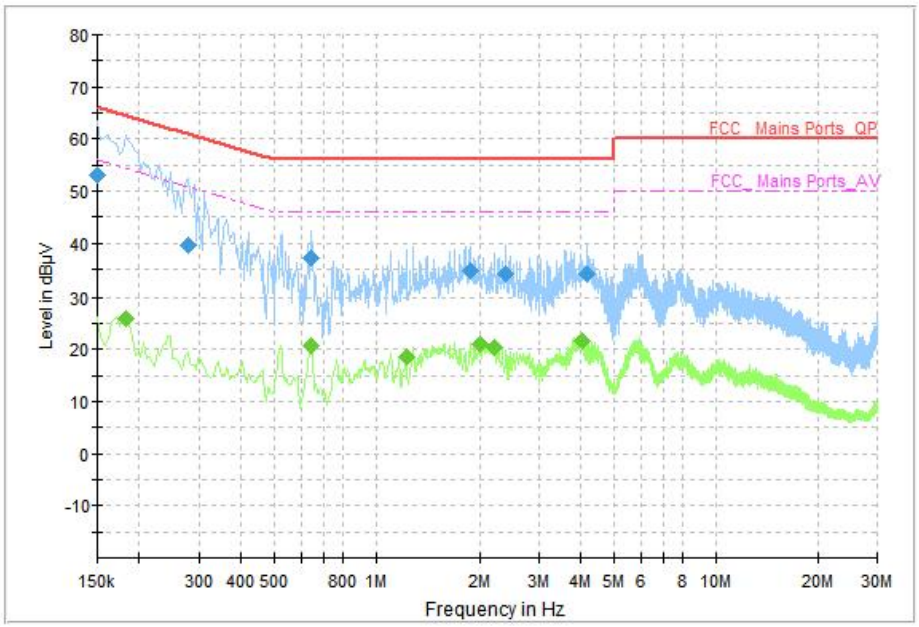

Fig. 79 AC Power line Conducted Emission (Traffic)

Measurement Results: Quasi Peak

Frequency (MHz)	Quasi Peak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.150000	53.18	66.00	12.82	N	ON	10
0.278000	39.50	60.88	21.37	N	ON	10
0.646000	37.05	56.00	18.95	N	ON	10
1.874000	34.89	56.00	21.11	L1	ON	10
2.398000	34.28	56.00	21.72	N	ON	10
4.150000	34.02	56.00	21.98	L1	ON	10

Measurement Results: Average

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.182000	25.75	54.39	28.65	L1	ON	10
0.646000	20.56	46.00	25.44	N	ON	10
1.230000	18.49	46.00	27.51	N	ON	10
2.002000	20.89	46.00	25.11	N	ON	10
2.222000	20.45	46.00	25.55	L1	ON	10
4.042000	21.65	46.00	24.35	N	ON	10

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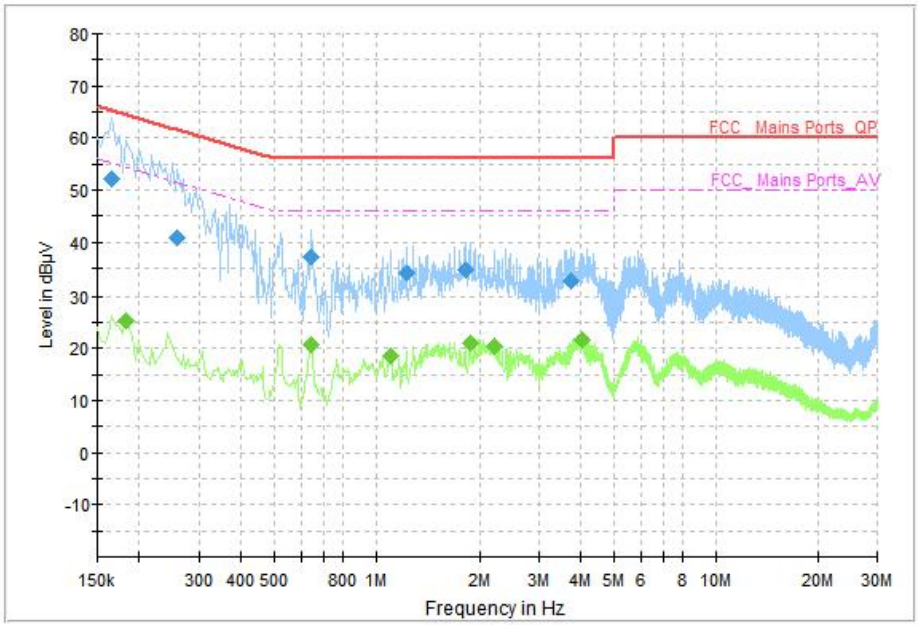

Fig. 80 AC Power line Conducted Emission (Idle)

Measurement Results: Quasi Peak

Frequency (MHz)	Quasi Peak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.166000	52.29	65.16	12.87	N	ON	10
0.258000	40.84	61.50	20.66	N	ON	10
0.646000	37.13	56.00	18.87	N	ON	10
1.230000	34.09	56.00	21.91	L1	ON	10
1.814000	34.88	56.00	21.12	N	ON	10
3.750000	32.69	56.00	23.31	N	ON	10

Measurement Results: Average

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.182000	25.38	54.39	29.02	N	ON	10
0.642000	20.56	46.00	25.44	N	ON	10
1.106000	18.67	46.00	27.33	L1	ON	10
1.882000	20.84	46.00	25.16	L1	ON	10
2.218000	20.35	46.00	25.65	N	ON	10
4.038000	21.46	46.00	24.54	L1	ON	10

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

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