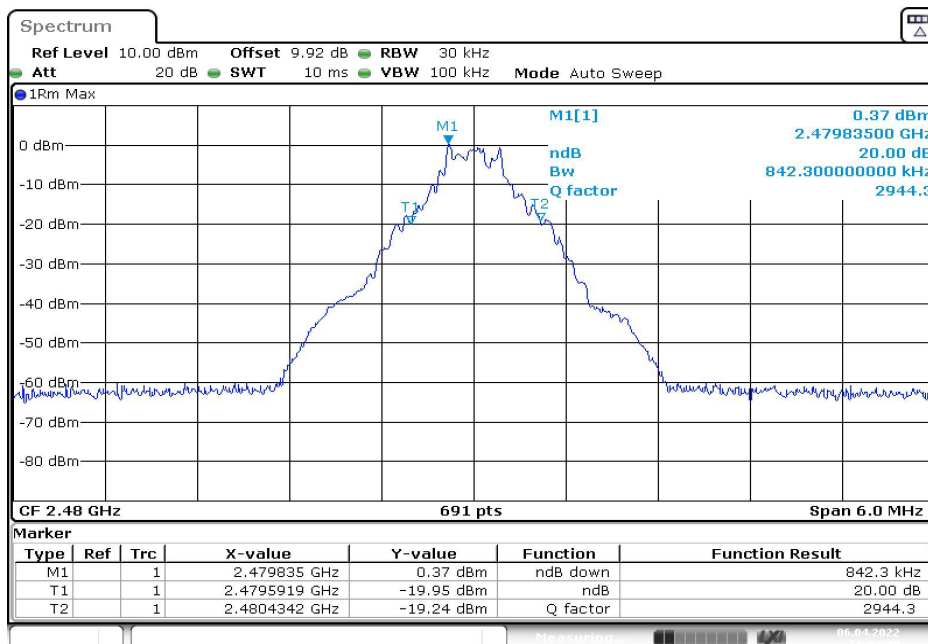


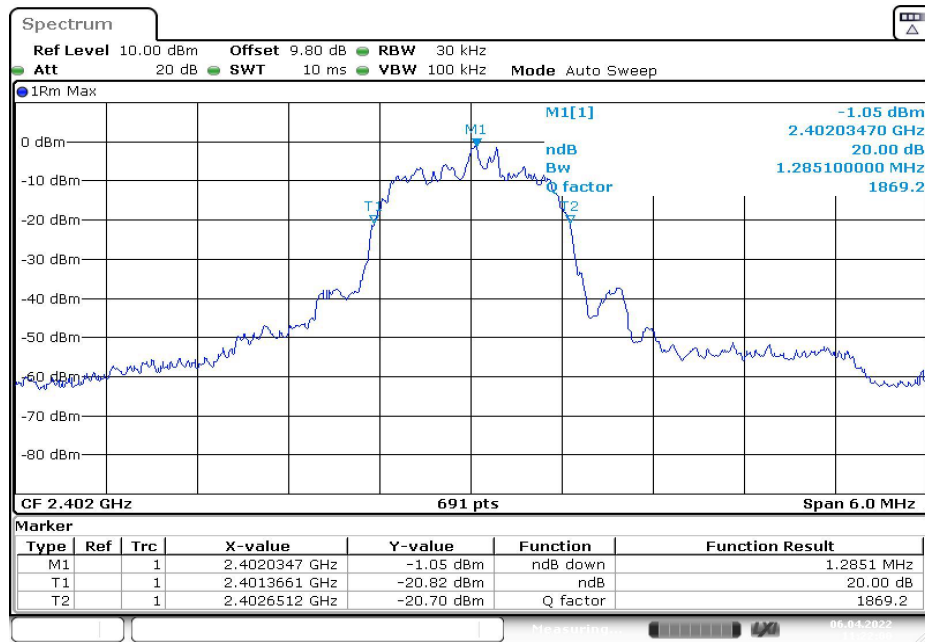
Date: 6.APR.2022 11:01:02

Fig. 41 20dB Bandwidth (GFSK, Ch 39)



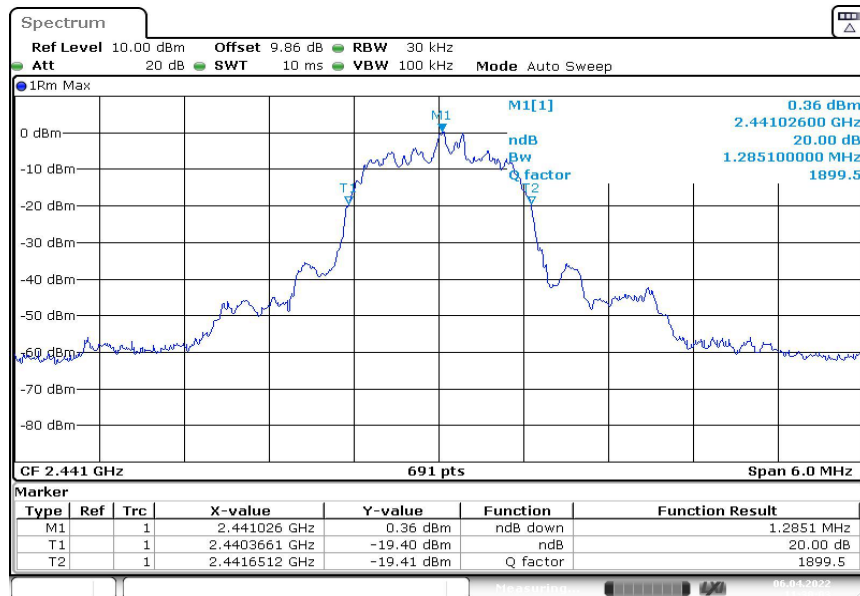
Date: 6.APR.2022 11:03:41

Fig. 42 20dB Bandwidth (GFSK, Ch 78)



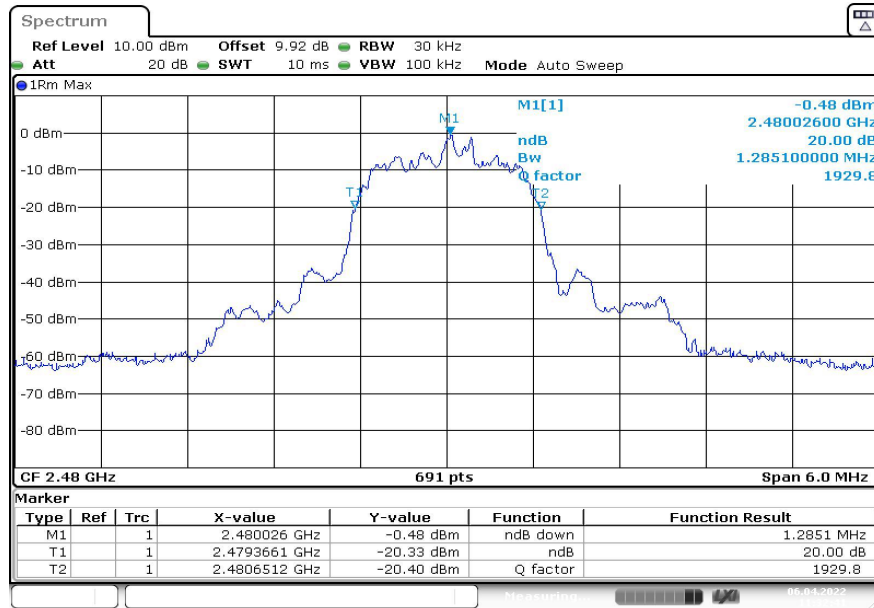
Date: 6.APR.2022 11:22:01

Fig. 43 20dB Bandwidth ( $\pi/4$  DQPSK, Ch 0)



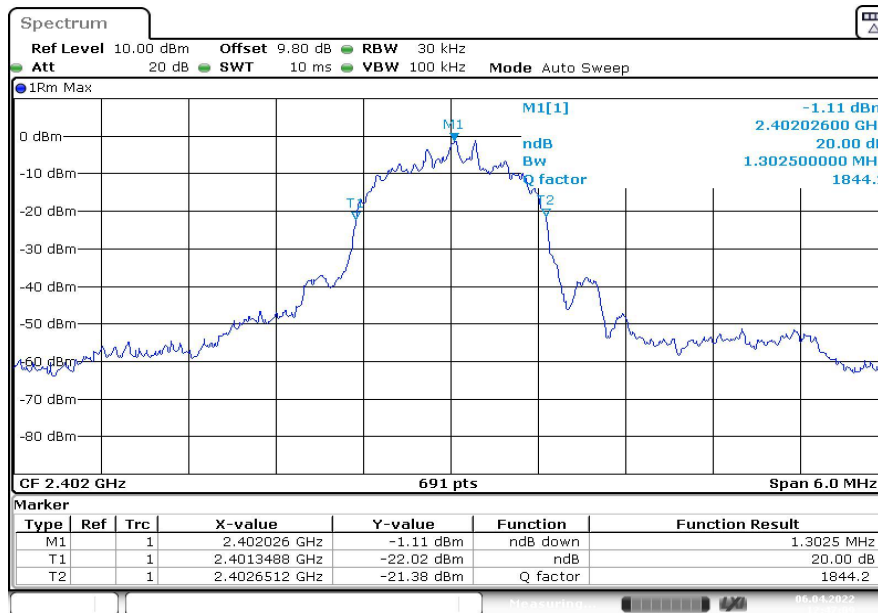
Date: 6.APR.2022 11:30:03

Fig. 44 20dB Bandwidth ( $\pi/4$  DQPSK, Ch 39)



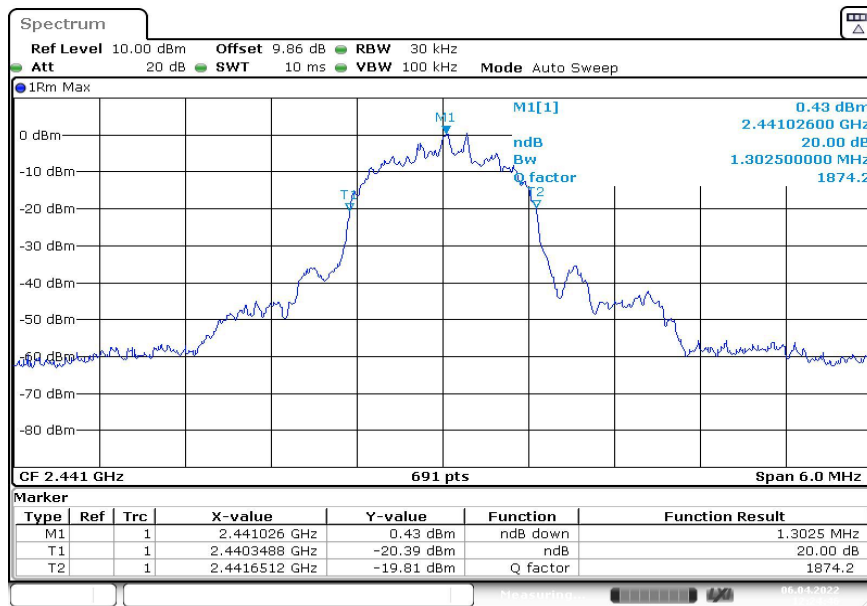
Date: 6.APR.2022 11:32:41

Fig. 45 20dB Bandwidth ( $\pi/4$  DQPSK, Ch 78)



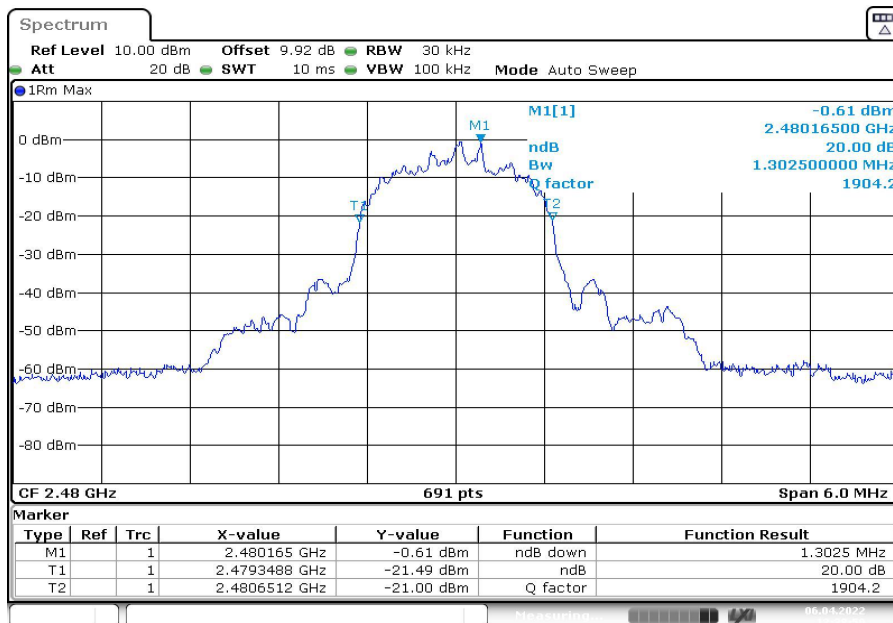
Date: 6.APR.2022 12:47:09

Fig. 46 20dB Bandwidth (8DPSK, Ch 0)



Date: 6.APR.2022 12:24:46

Fig. 47 20dB Bandwidth (8DPSK, Ch 39)



Date: 6.APR.2022 12:39:00

Fig. 48 20dB Bandwidth (8DPSK, Ch 78)

### A.6 Time of Occupancy (Dwell Time)

**Measurement Limit:**

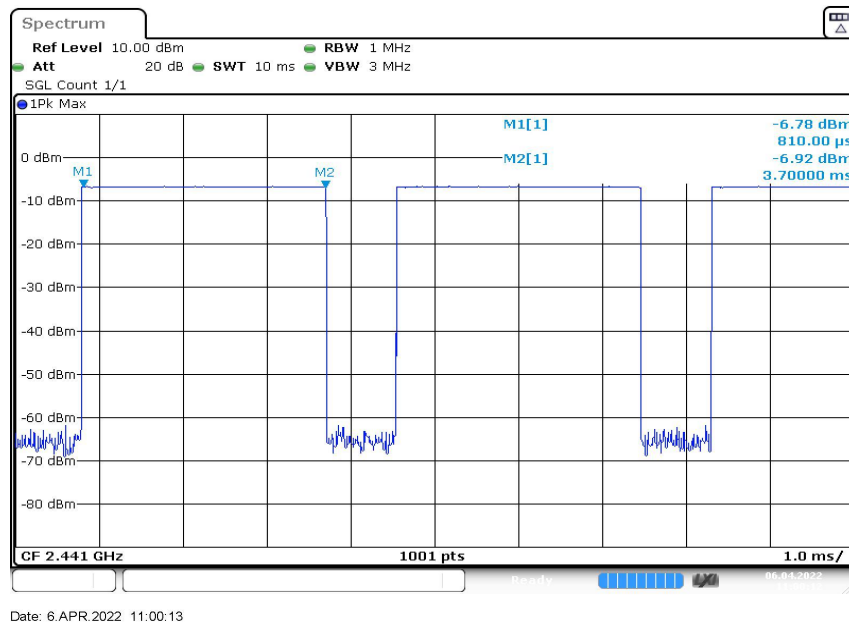
Standard	Limit
FCC 47 CFR Part 15.247(a)	< 400 ms

**Measurement Results:**

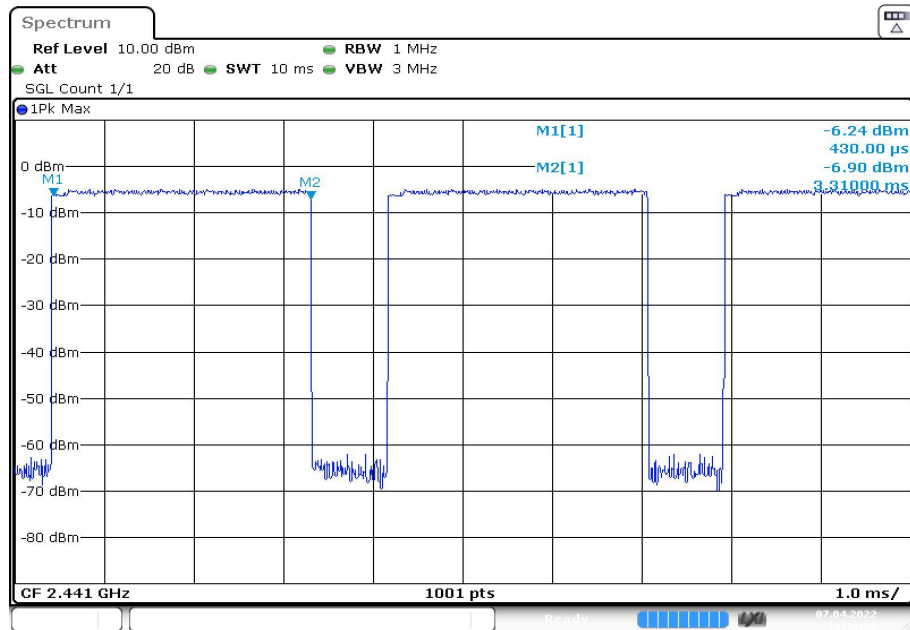
Mode	Channel	Packet	Dwell Time(ms)		Conclusion
GFSK	39	DH5	Fig.49	306.10	<b>P</b>
$\pi/4$ DQPSK	39	2-DH5	Fig.50	305.10	<b>P</b>
8DPSK	39	3-DH5	Fig.51	305.10	<b>P</b>

See below for test graphs.

**Conclusion: Pass**

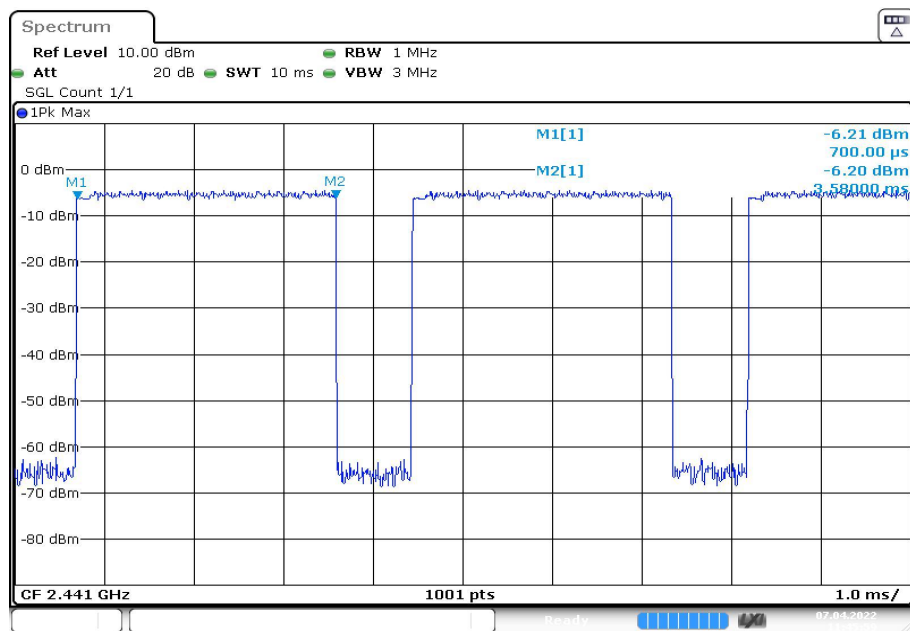


**Fig. 49 Time of Occupancy (Dwell Time) (GFSK, Ch39)**



Date: 7.APR.2022 11:43:08

**Fig. 50 Time of Occupancy (Dwell Time) ( $\pi/4$  DQPSK, Ch39)**



Date: 7.APR.2022 11:46:00

**Fig. 51 Time of Occupancy (Dwell Time) (8DPSK, Ch39)**

### A.7 Number of Hopping Channels

**Measurement Limit:**

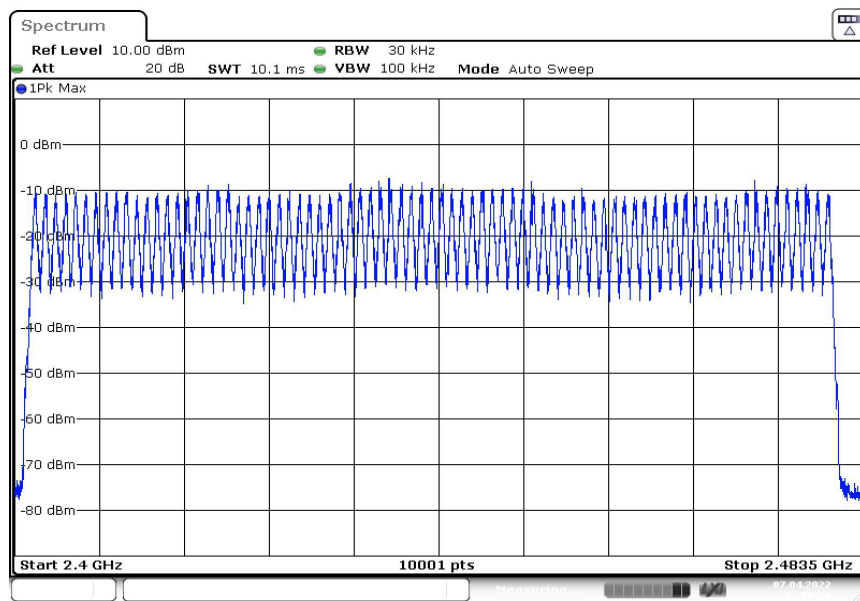
Standard	Limit
FCC 47 CFR Part 15.247(a)	At least 15 non-overlapping channels

**Measurement Results:**

Mode	Packet	Number of hopping	Test result	Conclusion
GFSK	DH5	Fig.52	79	<b>P</b>
$\pi/4$ DQPSK	2-DH5	Fig.53	79	<b>P</b>
8DPSK	3-DH5	Fig.54	79	<b>P</b>

See below for test graphs.

**Conclusion: Pass**



Date: 7.APR.2022 12:00:26

**Fig. 52 Hopping channel ch0~39 (GFSK, Ch39)**

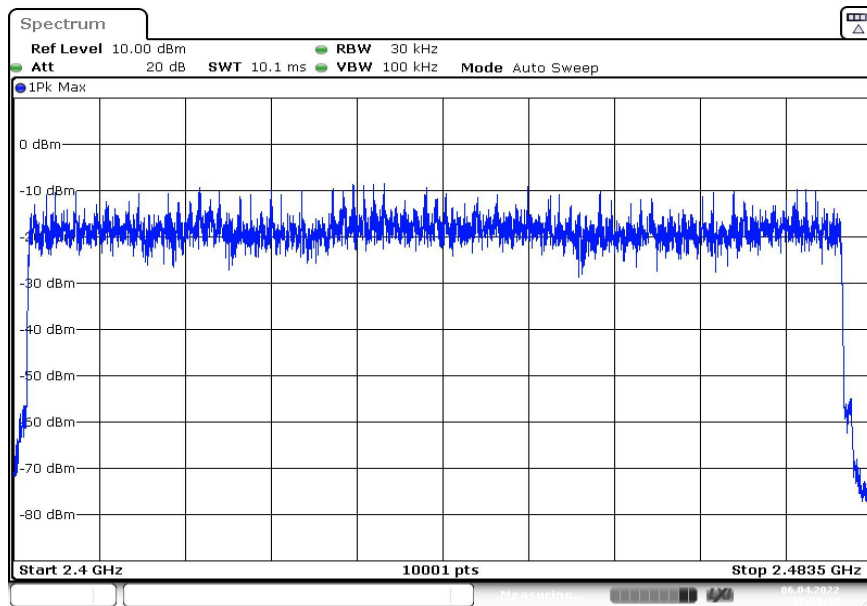


Fig. 53 Hopping channel ch0~78 ( $\pi/4$  DQPSK, Ch39)

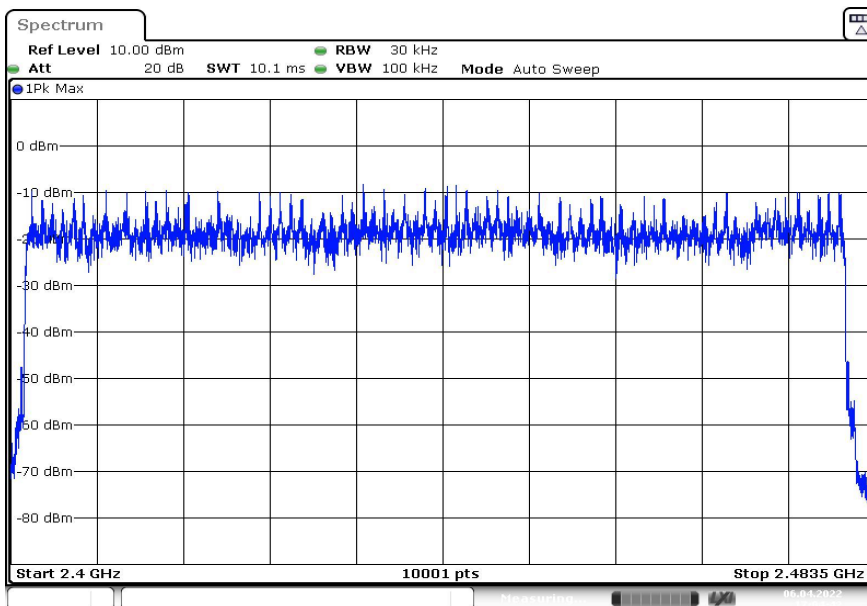


Fig. 54 Hopping channel ch0~78 (8DPSK, Ch39)



### A.8 Carrier Frequency Separation

**Measurement Limit:**

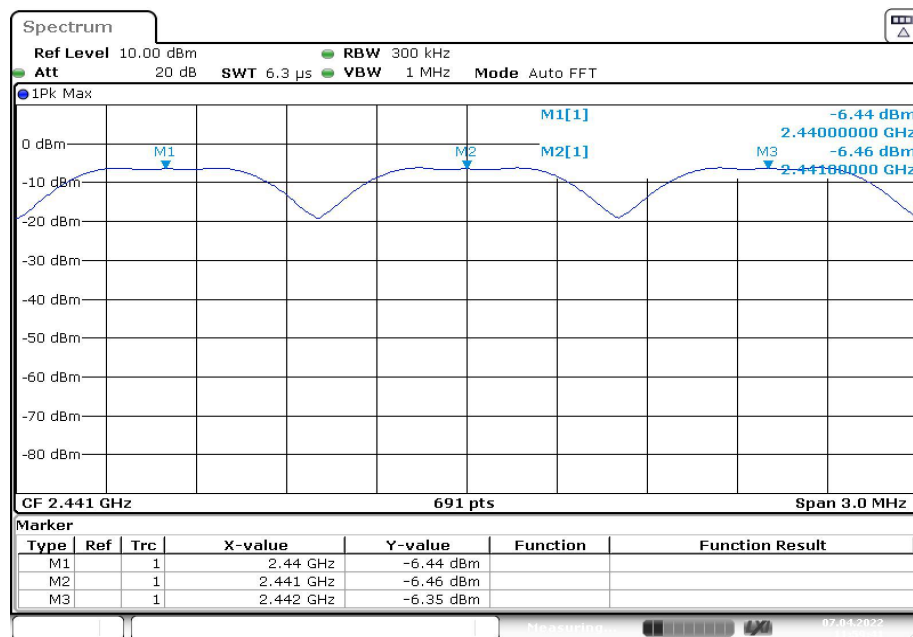
Standard	Limit
FCC 47 CFR Part 15.247(a)	By a minimum of 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater

**Measurement Results:**

Mode	Channel	Packet	Separation of hopping channels	Test result (MHz)	Conclusion
GFSK	39	DH5	Fig.55	1.00	P
$\pi/4$ DQPSK	39	2-DH5	Fig.56	1.00	P
8DPSK	39	3-DH5	Fig.57	1.00	P

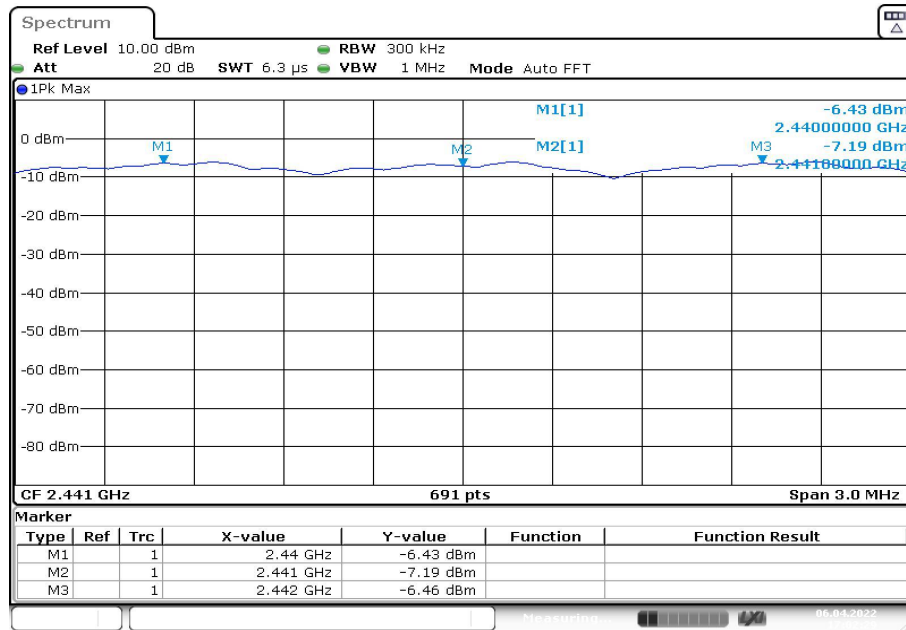
See below for test graphs.

**Conclusion: Pass**



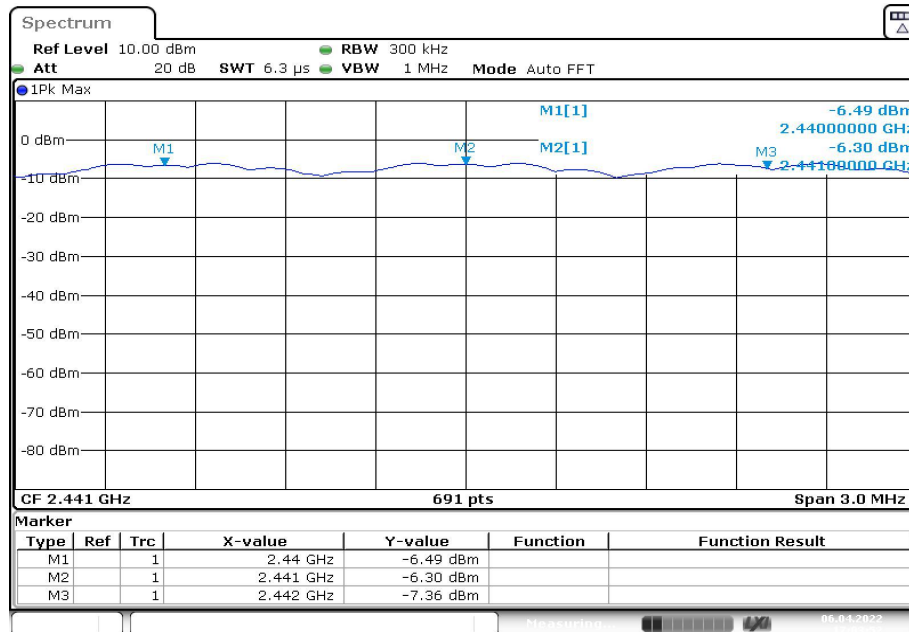
Date: 7.APR.2022 11:59:42

**Fig. 55 Carrier Frequency Separation (GFSK, Ch39)**



Date: 6.APR.2022 17:02:29

Fig. 56 Carrier Frequency Separation ( $\pi/4$  DQPSK, Ch39)



Date: 6.APR.2022 17:03:52

Fig. 57 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-AE1,AE2**

Frequency range (MHz)	Quasi-peak Limit (dB $\mu$ V)	Average-peak Limit (dB $\mu$ V)	Result (dB $\mu$ V)		Conclusion
			Traffic	Idle	
0.15 to 0.5	66 to 56	56 to 46	Fig.58	Fig.59	<b>P</b>
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**

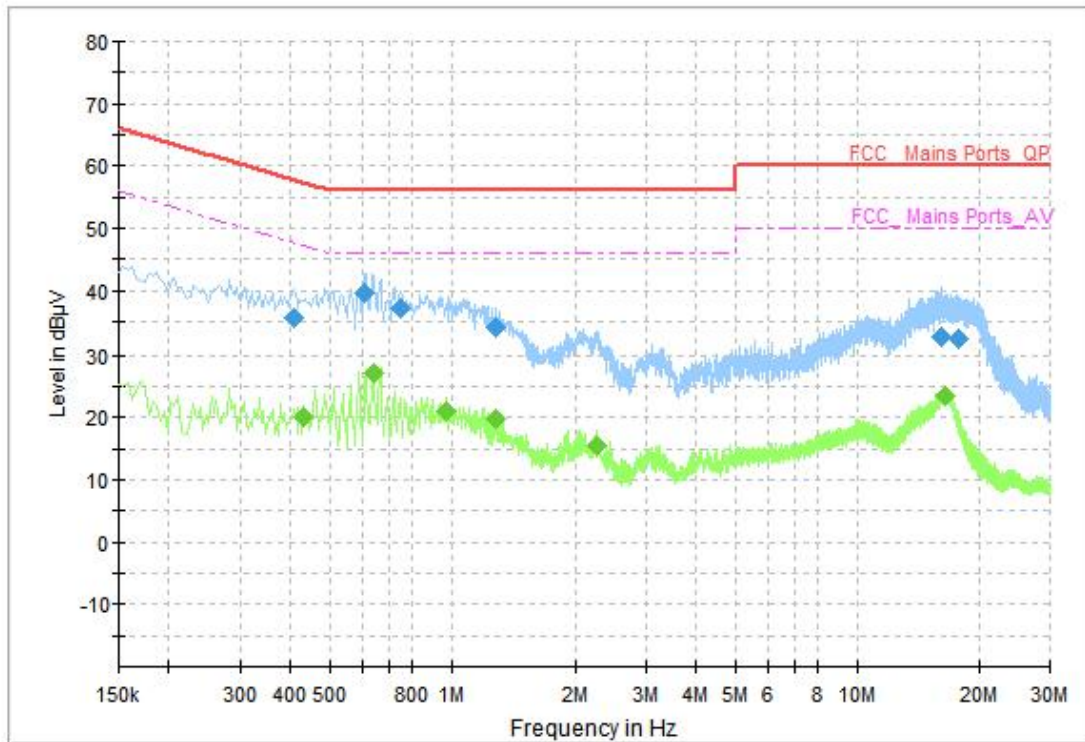


Fig. 58 AC Power line Conducted Emission (Traffic)

**Measurement Results: Quasi Peak**

Frequency (MHz)	Quasi Peak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.406000	35.69	57.73	22.04	L1	ON	10
0.610000	39.55	56.00	16.45	L1	ON	10
0.746000	37.12	56.00	18.88	N	ON	10
1.286000	34.24	56.00	21.76	N	ON	10
16.130000	32.67	60.00	27.33	N	ON	11
17.810000	32.44	60.00	27.56	N	ON	10

**Measurement Results: Average**

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.430000	19.97	47.25	27.28	L1	ON	10
0.642000	27.20	46.00	18.80	N	ON	10
0.970000	21.03	46.00	24.97	N	ON	10
1.286000	19.73	46.00	26.27	N	ON	10
2.258000	15.60	46.00	30.40	N	ON	10
16.438000	23.34	50.00	26.66	N	ON	11

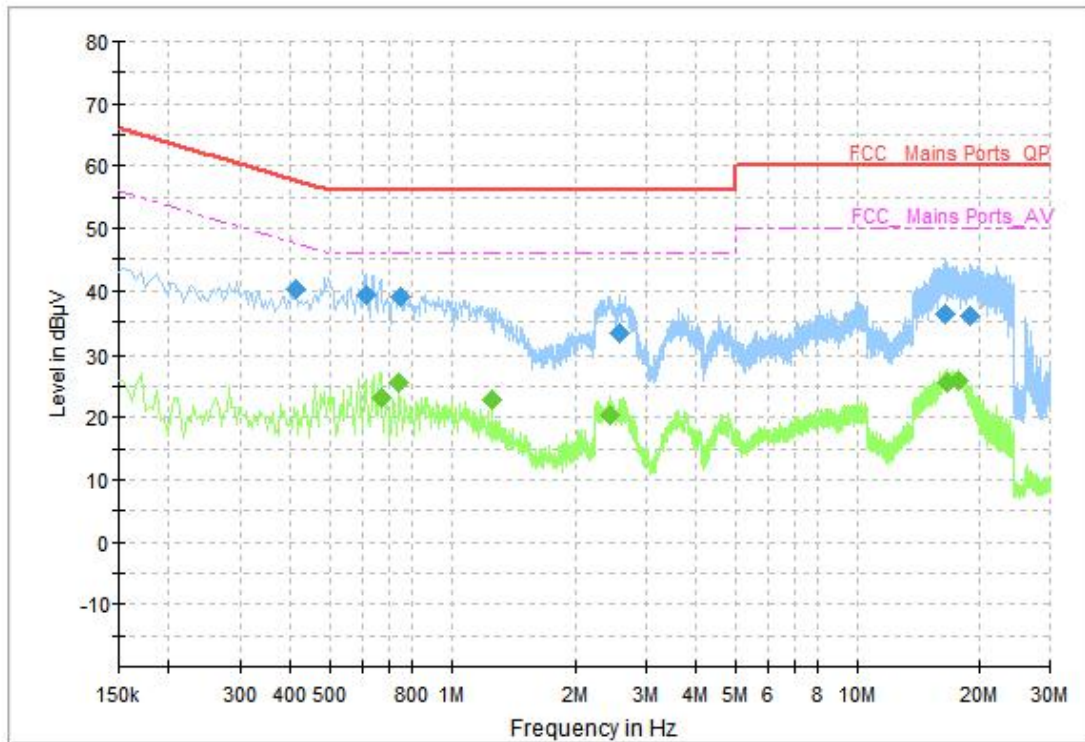


Fig. 59 AC Power line Conducted Emission (Idle)

**Measurement Results: Quasi Peak**

Frequency (MHz)	Quasi Peak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.410000	40.34	57.65	17.31	L1	ON	10
0.614000	39.47	56.00	16.53	L1	ON	10
0.746000	39.08	56.00	16.92	N	ON	10
2.578000	33.21	56.00	22.79	N	ON	10
16.526000	36.12	60.00	23.88	N	ON	11
18.974000	36.03	60.00	23.97	L1	ON	10

**Measurement Results: Average**

Frequency (MHz)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.670000	23.19	46.00	22.81	L1	ON	10
0.742000	25.42	46.00	20.58	N	ON	10
1.254000	22.70	46.00	23.30	N	ON	10
2.454000	20.48	46.00	25.52	N	ON	10
16.706000	25.54	50.00	24.46	N	ON	11
17.898000	26.00	50.00	24.00	N	ON	10

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



## ANNEX- Spot Check of Output Power

**Company Name:** HMD Global Oy

**Product Name:** Smart Phone

**Model Name:** TA-1413 (FCC ID:2AJOTTA-1413); TA-1429 (FCC ID:2AJOTTA-1429)

### Differences between models

TA-1429 is the variant of the initial certified product TA-1413, TA-1413 supports 2 SIM slots and TA-1429 supports 1 SIM slot.

### Spot Check of Different Mode

Model	Mode	Frequency (MHz)	Conducted Output Power (dBm)
TA-1413	LE 1M	2440(CH19)	7.66
	EDR(8DPSK)	2441(CH39)	10.23
	802.11b	2412 (CH1)	15.67
	802.11a	5320 (CH64)	14.65
TA-1429	LE 1M	2440(CH19)	7.69
	EDR(8DPSK)	2441(CH39)	10.15
	802.11b	2412 (CH1)	15.52
	802.11a	5320 (CH64)	14.59

Note: Spot check test data included for the variants based on worst-case results reported in the original.

From the above data, it can be concluded that the conducted output power of the variant is less than or near to the original. And the variant conducted test data can refer to the original report (**I22N00716**).

This condition applies to the reports **I22N00718**.