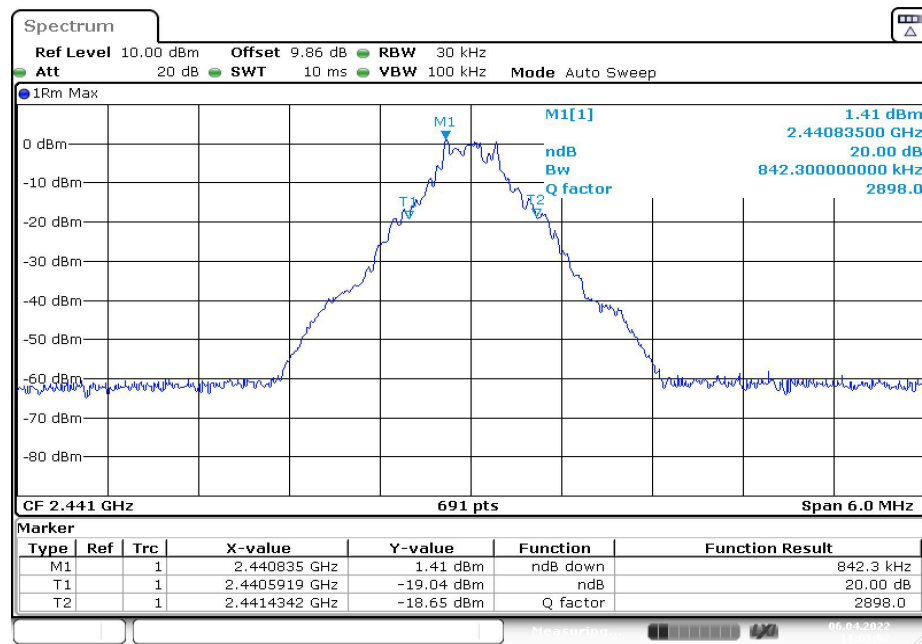
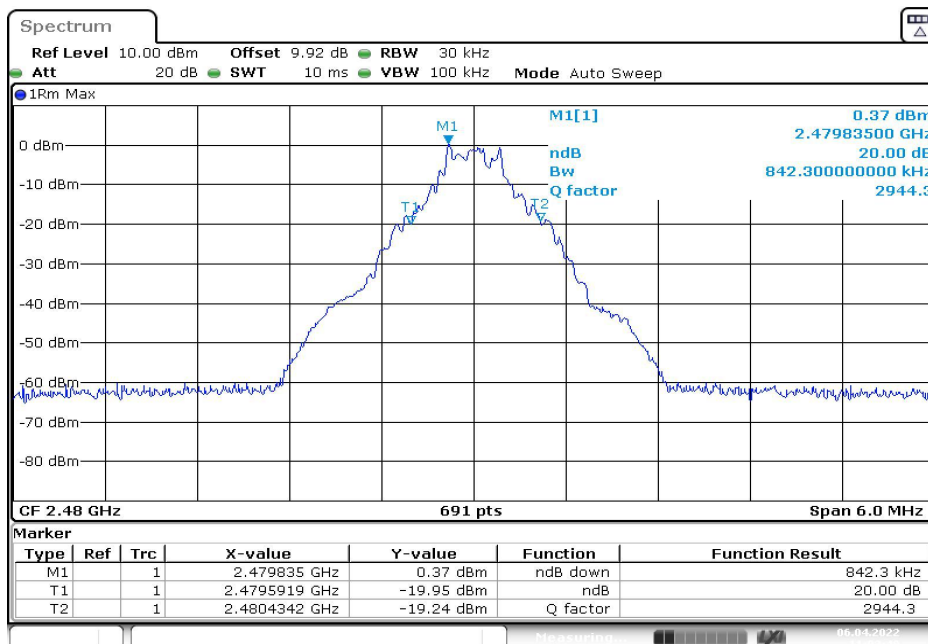




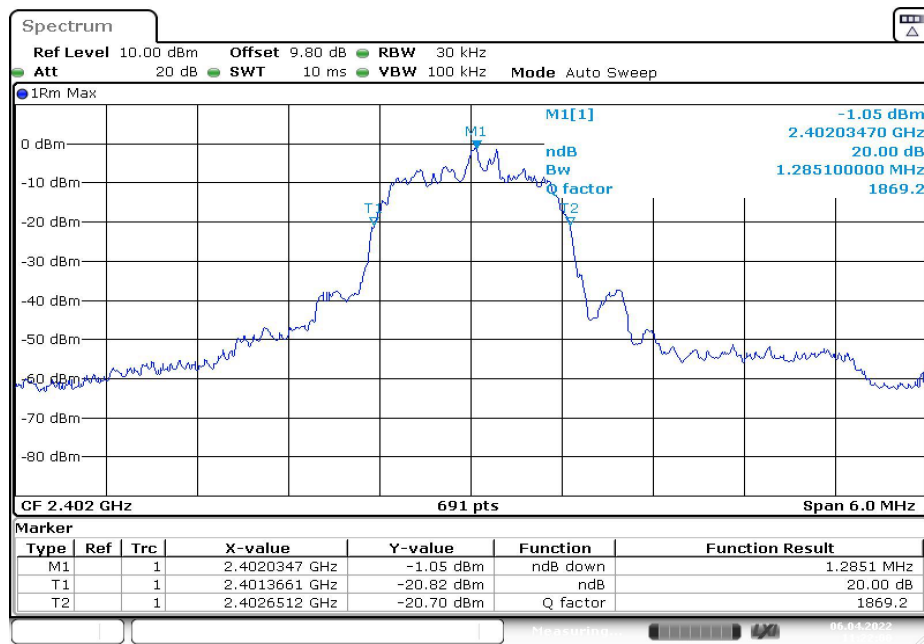
Date: 6.APR.2022 11:01:02

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



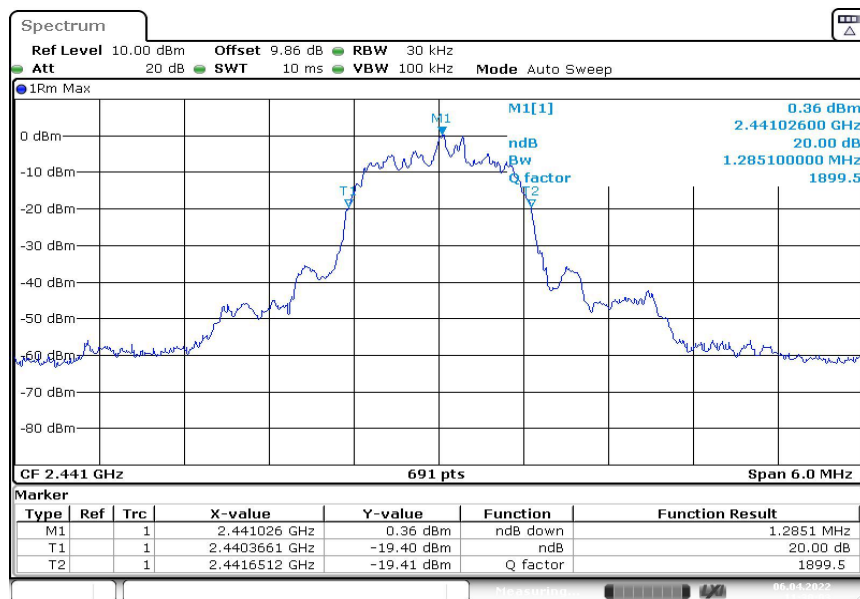
Date: 6.APR.2022 11:03:41

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



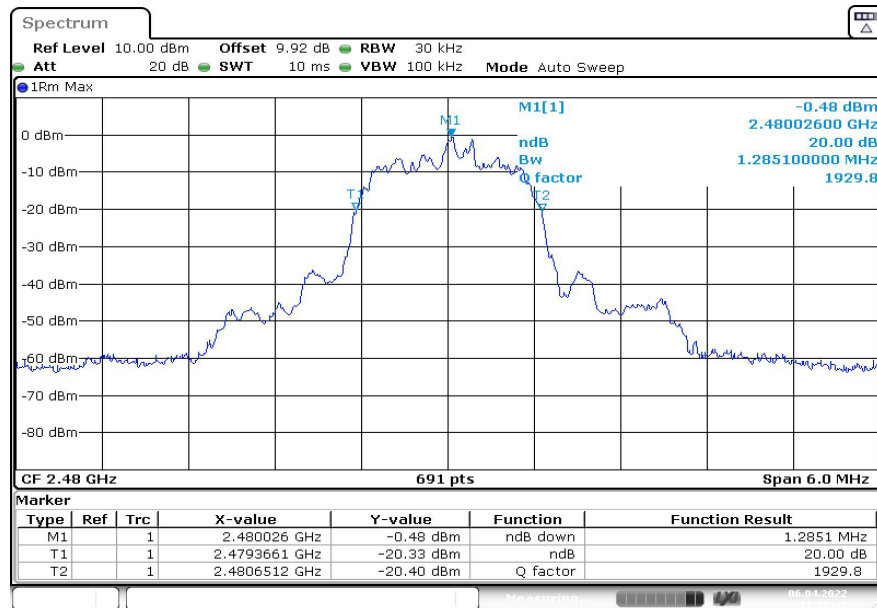
Date: 6.APR.2022 11:22:01

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



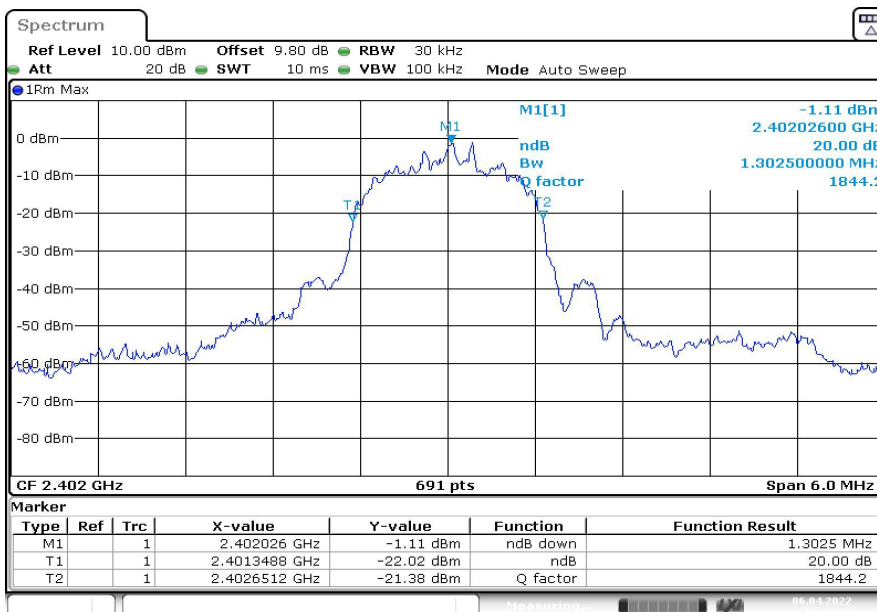
Date: 6.APR.2022 11:30:03

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)

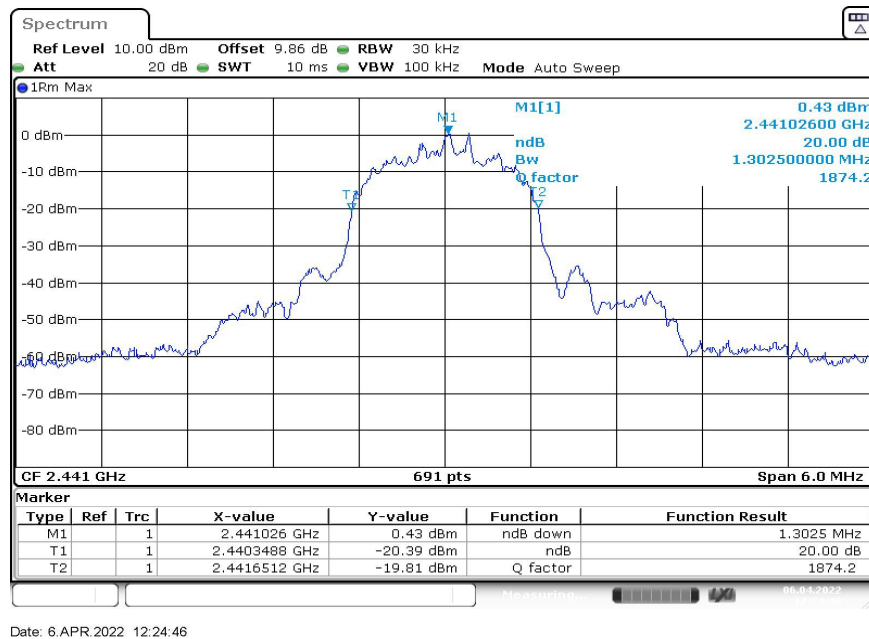


Fig. 47 20dB Bandwidth (8DPSK, Ch 39)

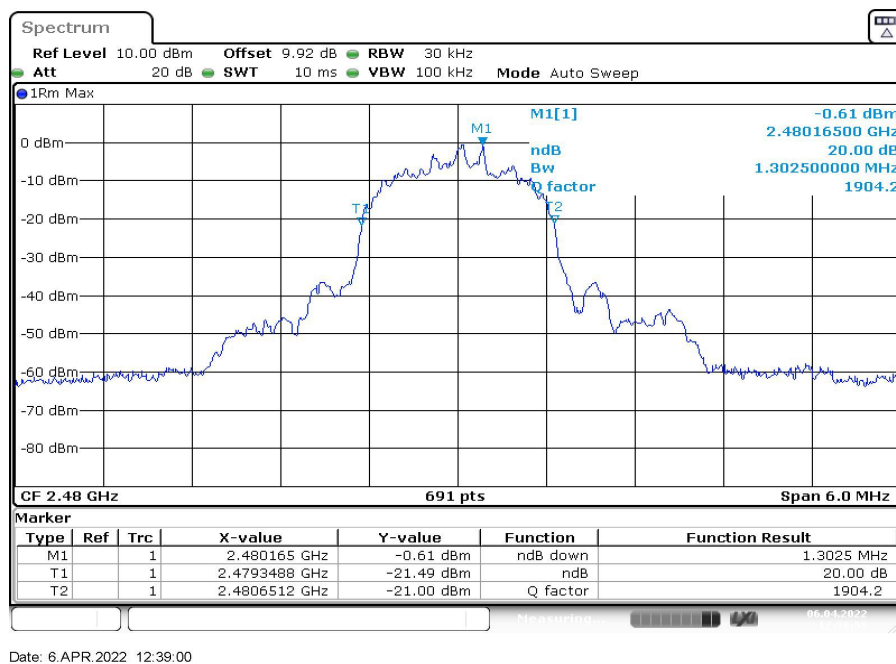


Fig. 48 20dB Bandwidth (8DPSK, Ch 78)

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

### Measurement Limit:

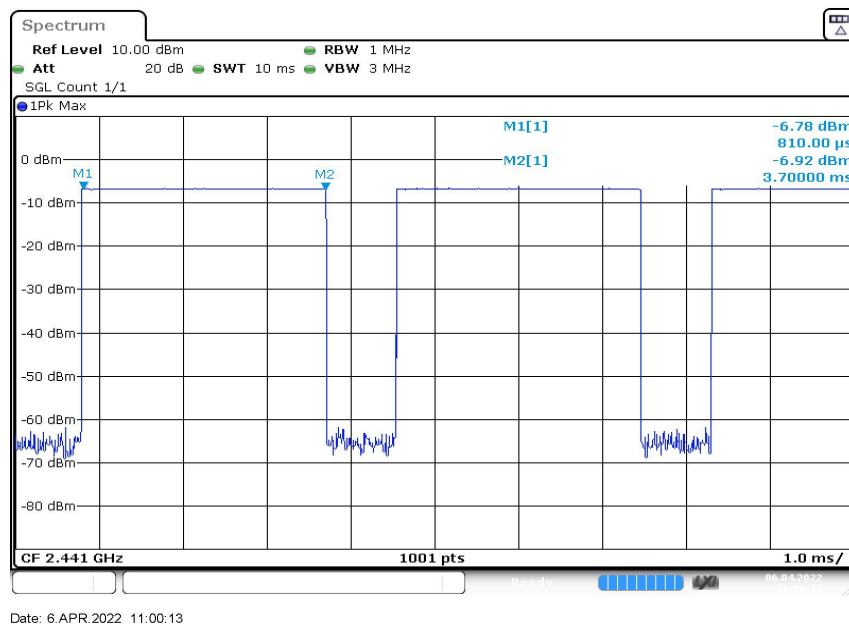
| Standard                  | Limit    |
|---------------------------|----------|
| FCC 47 CFR Part 15.247(a) | < 400 ms |

### Measurement Results:

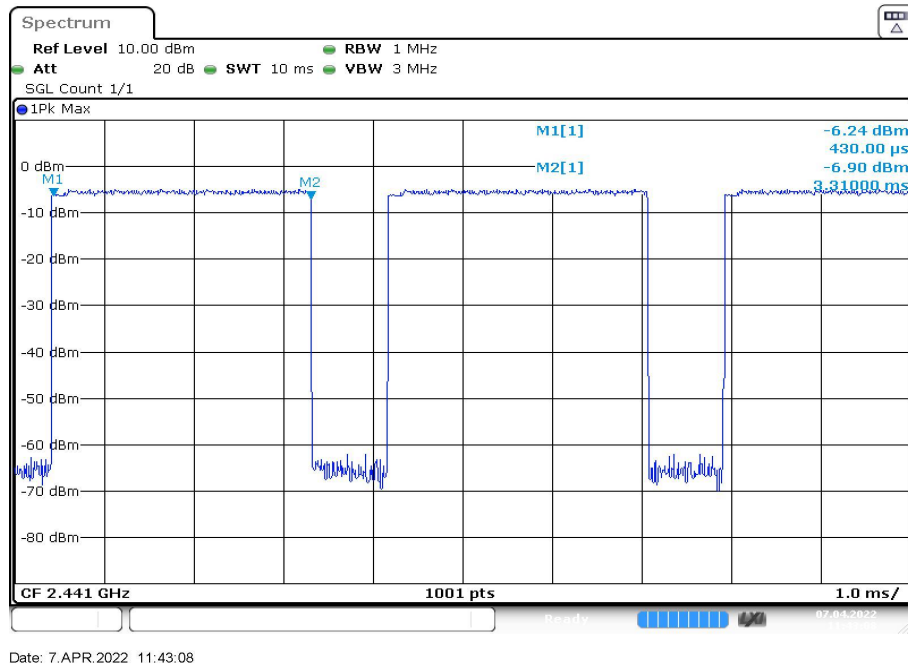
| Mode          | Channel | Packet | Dwell Time(ms) |        | Conclusion |
|---------------|---------|--------|----------------|--------|------------|
| GFSK          | 39      | DH5    | Fig.49         | 306.10 | <b>P</b>   |
| $\pi/4$ DQPSK | 39      | 2-DH5  | Fig.50         | 305.10 | <b>P</b> 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

See below for test graphs.

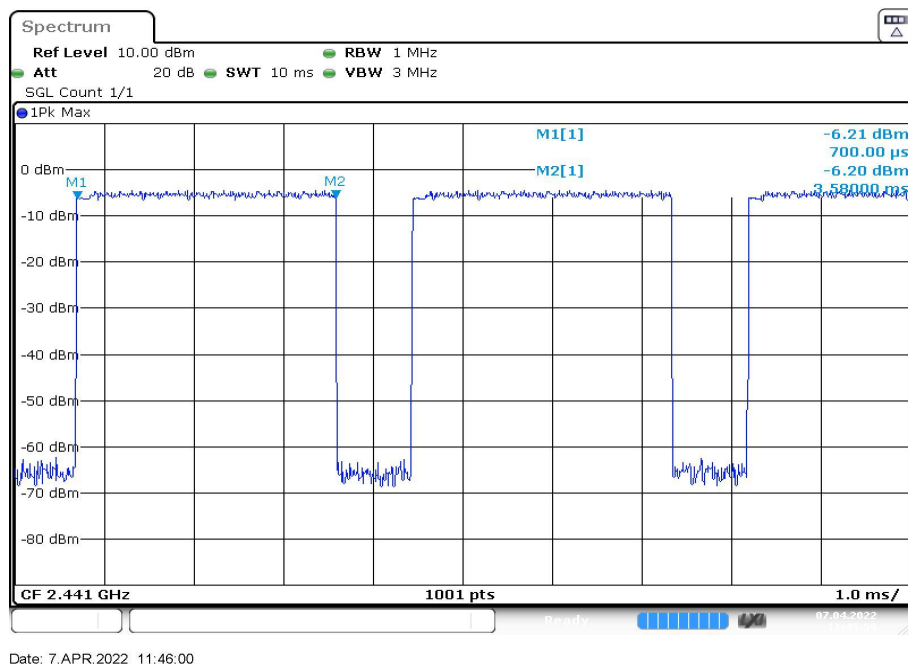
**Conclusion: Pass**



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



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



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

## A.7 Number of Hopping Channels

### Measurement Limit:

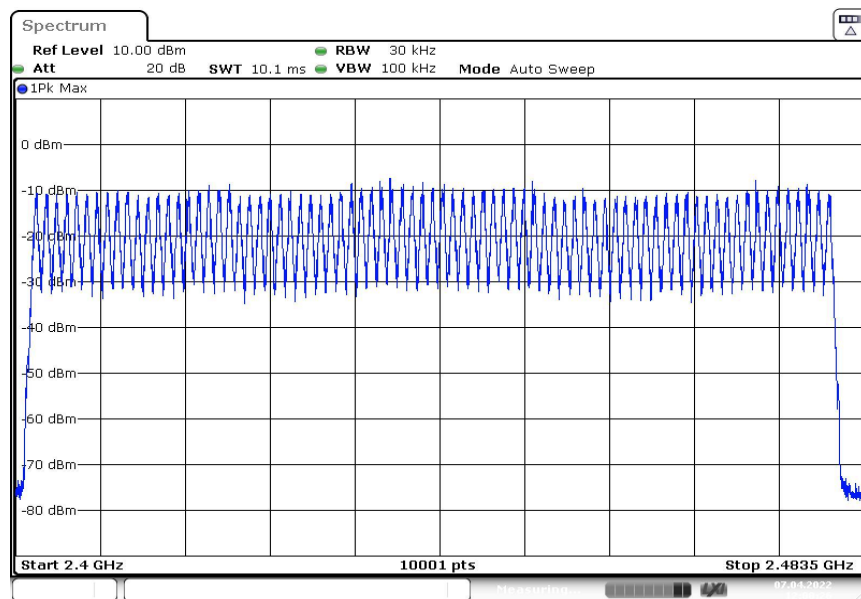
| Standard                  | Limit                                |
|---------------------------|--------------------------------------|
| FCC 47 CFR Part 15.247(a) | At least 15 non-overlapping channels |

### 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)

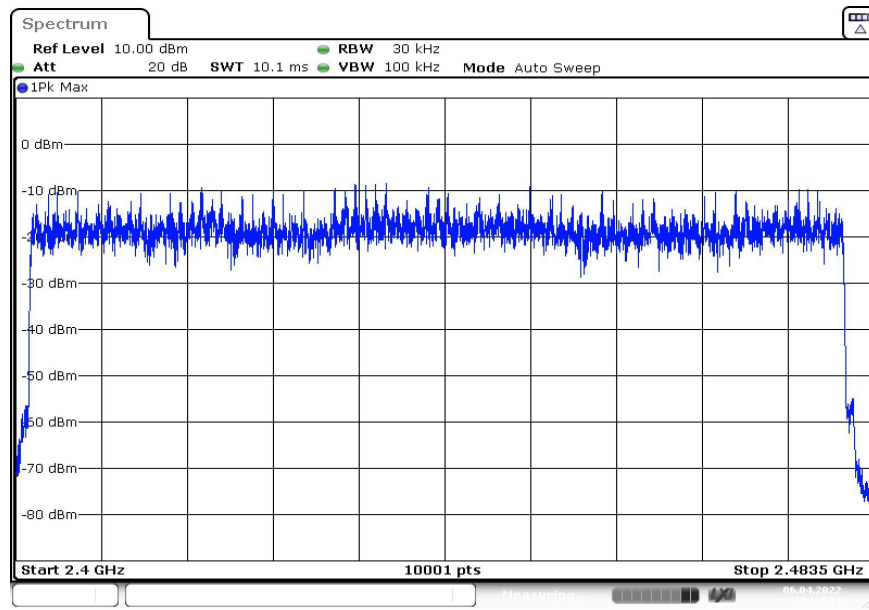


Fig. 53 Hopping channel ch0~78 ( $\pi/4$  DQPSK, Ch39)

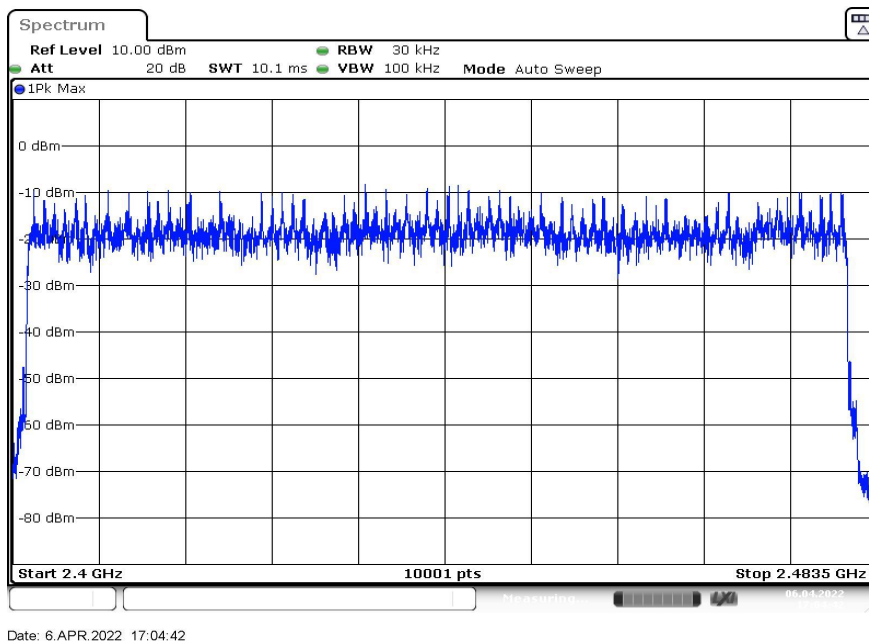


Fig. 54 Hopping channel ch0~78 (8DPSK, Ch39)

## 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

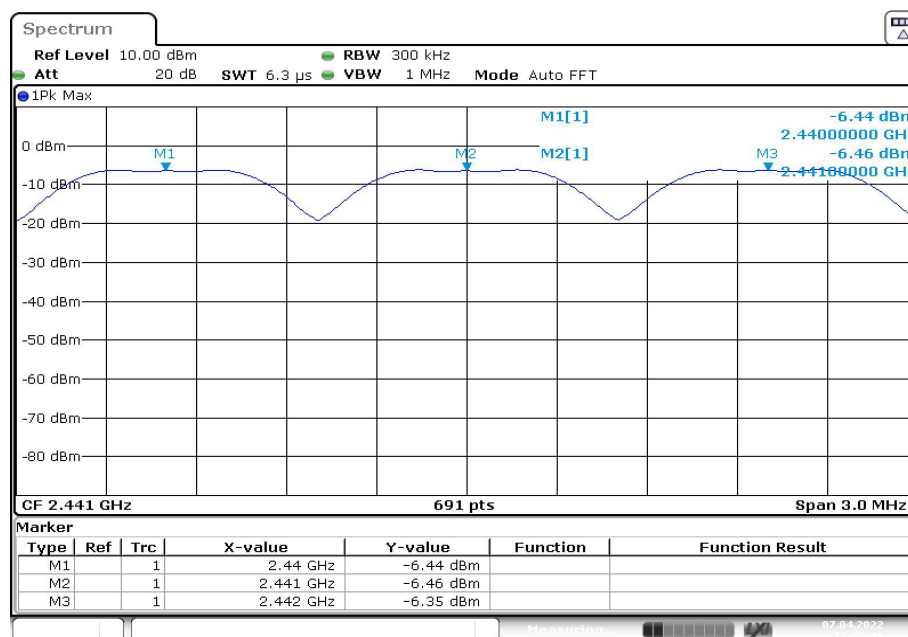
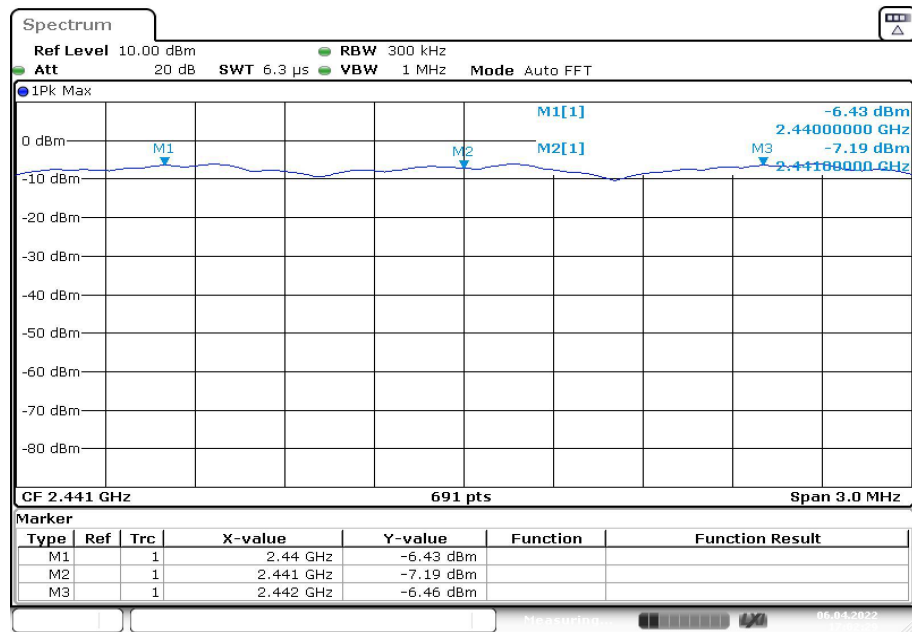
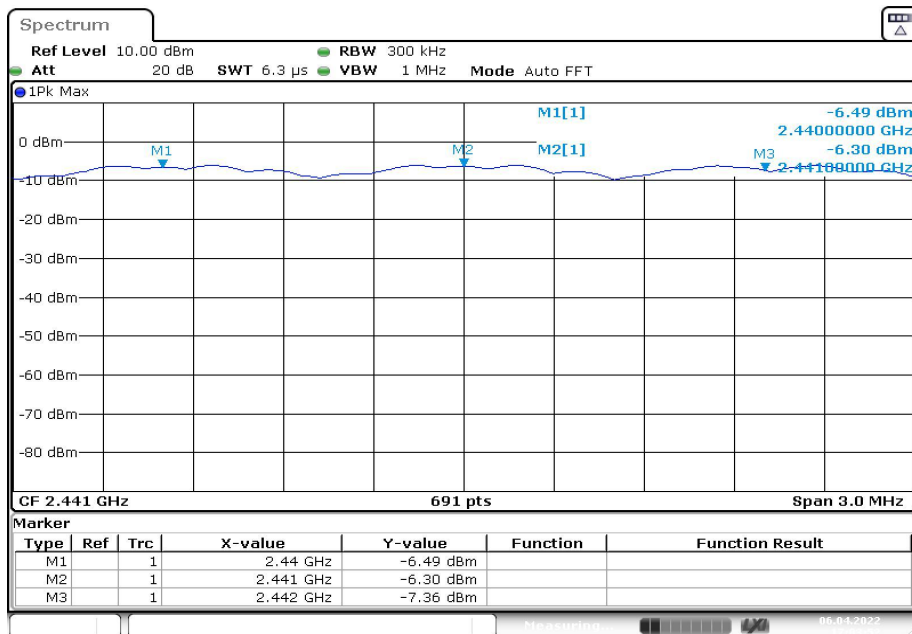


Fig. 55 Carrier Frequency Separation (GFSK, Ch39)



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<br>(MHz) | Quasi-peak<br>Limit (dB $\mu$ V) | Average-peak<br>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**

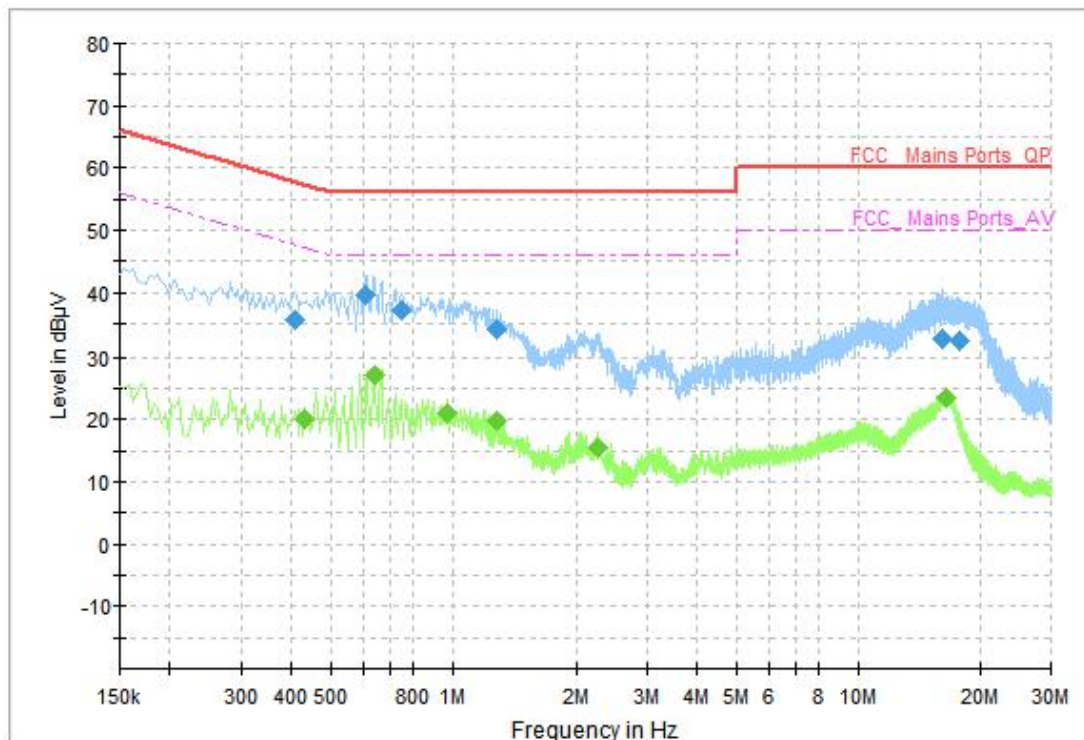


Fig. 58 AC Power line Conducted Emission (Traffic)

#### 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         |

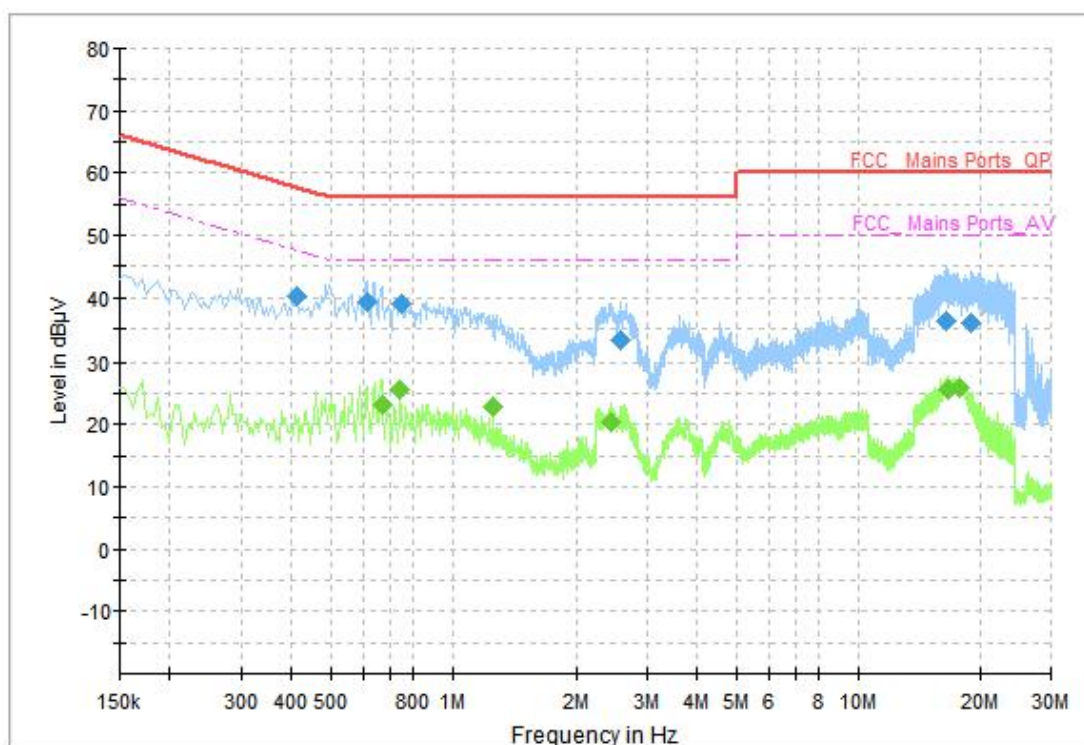


Fig. 59 AC Power line Conducted Emission (Idle)

#### 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**.