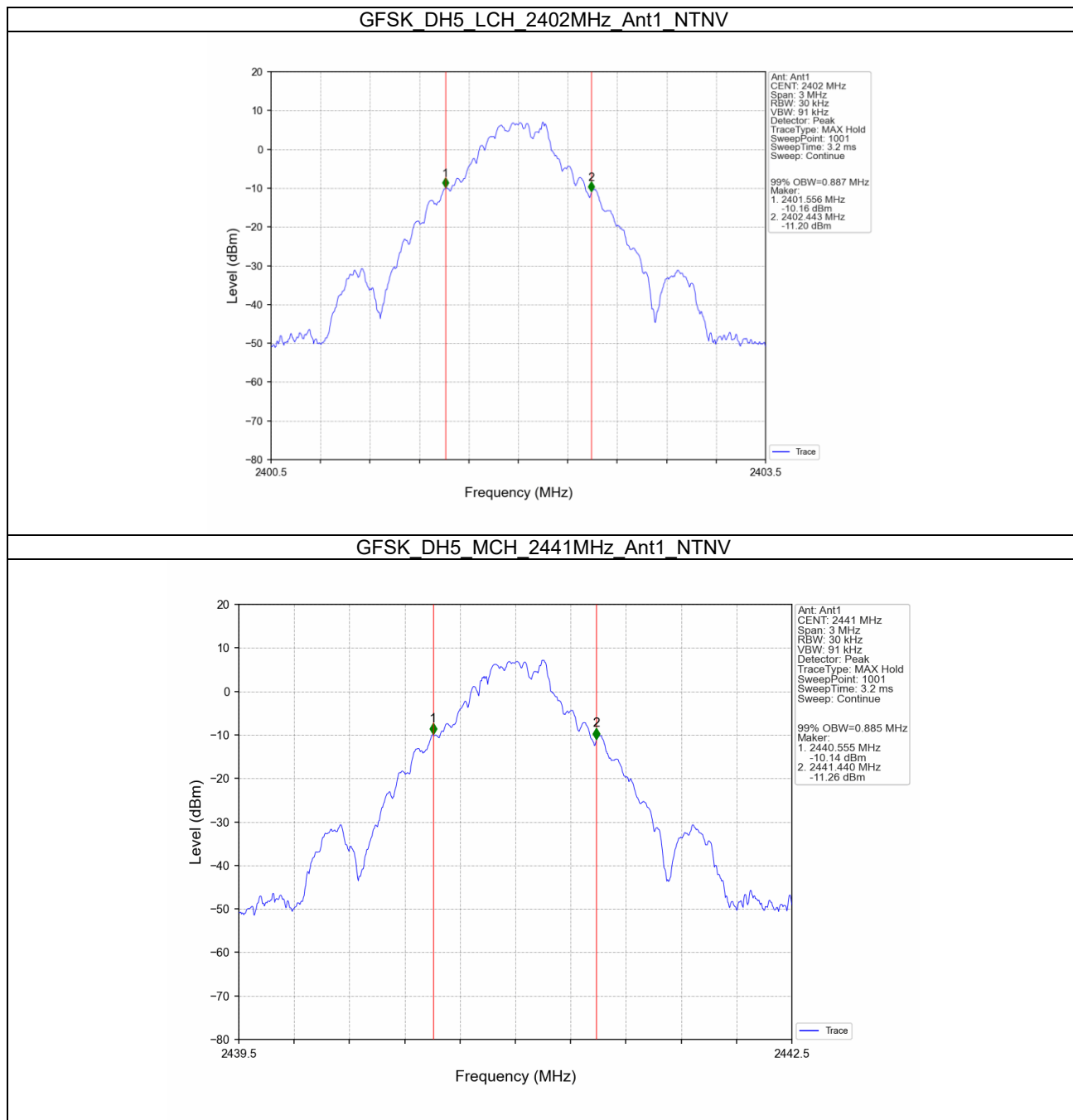


## 2.2 Test Graph

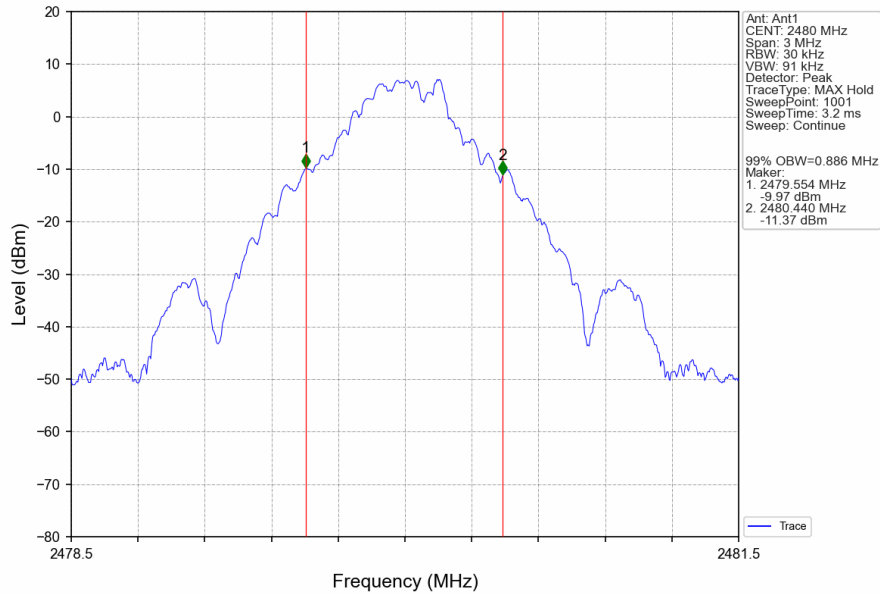
### 2.2.1 OBW



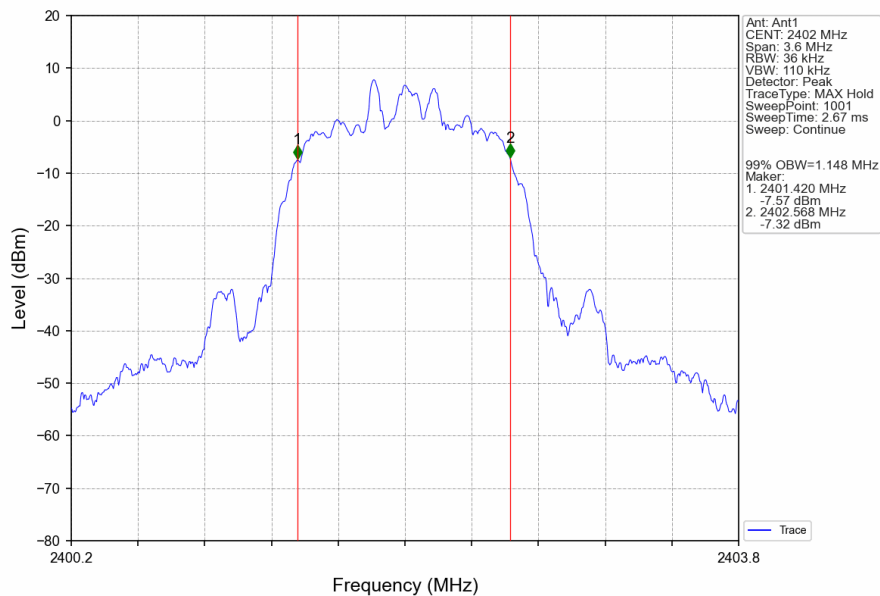
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

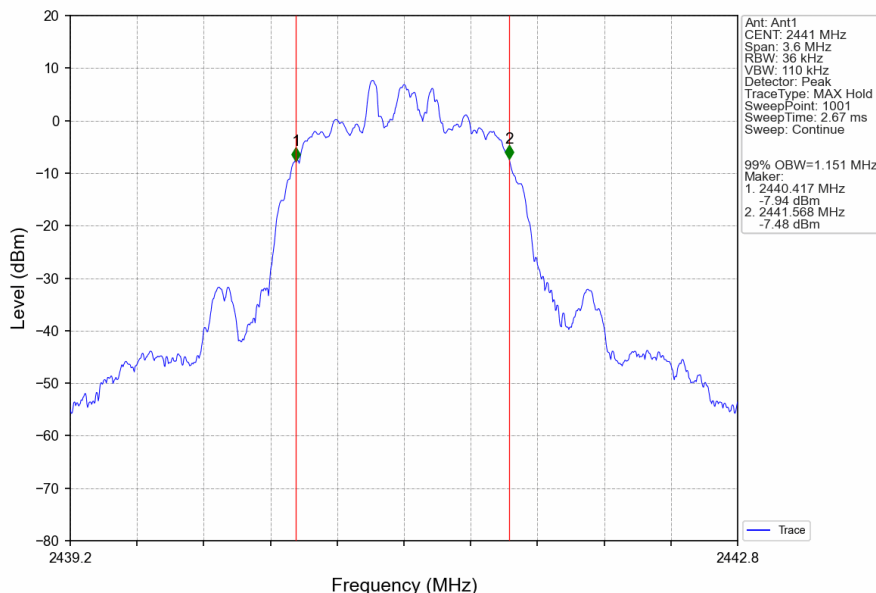
### GFSK DH5 HCH 2480MHz Ant1 NTN



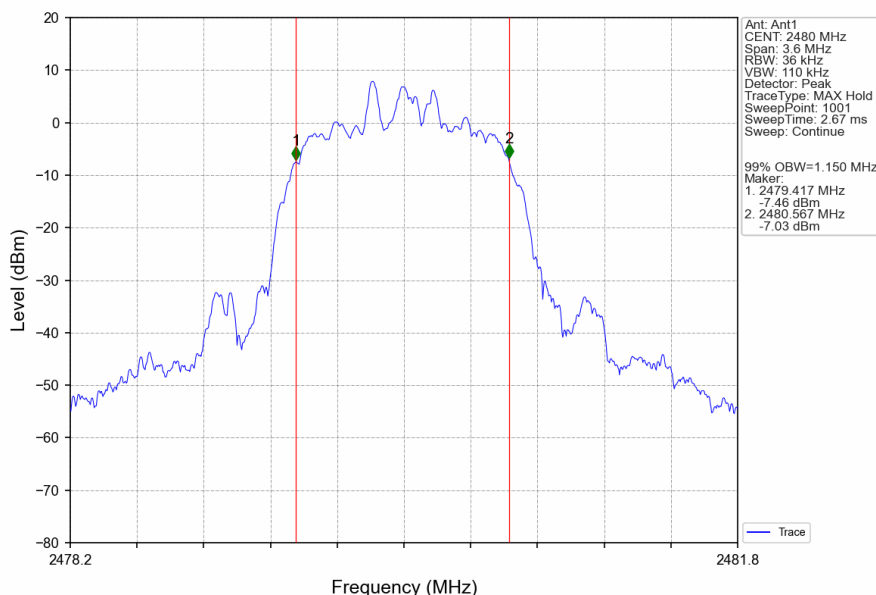
### Pi/4DQPSK 2DH5 LCH 2402MHz Ant1 NTN



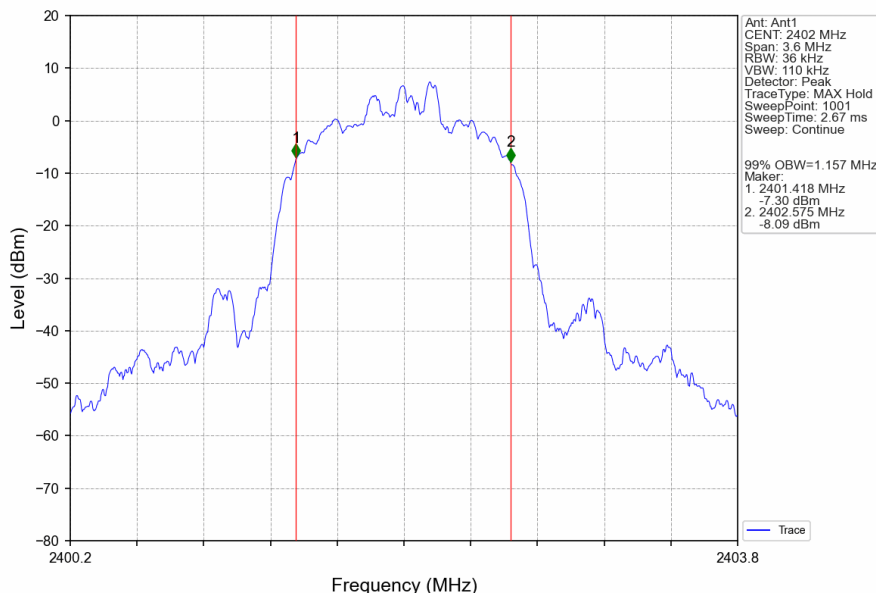
Pi/4DQPSK 2DH5 MCH 2441MHz Ant1 NTN



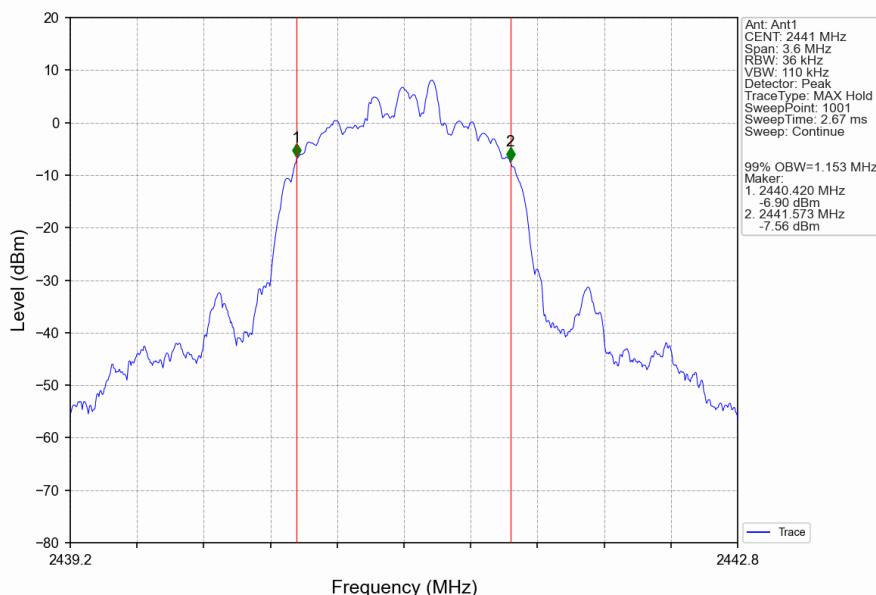
Pi/4DQPSK 2DH5 HCH 2480MHz Ant1 NTN

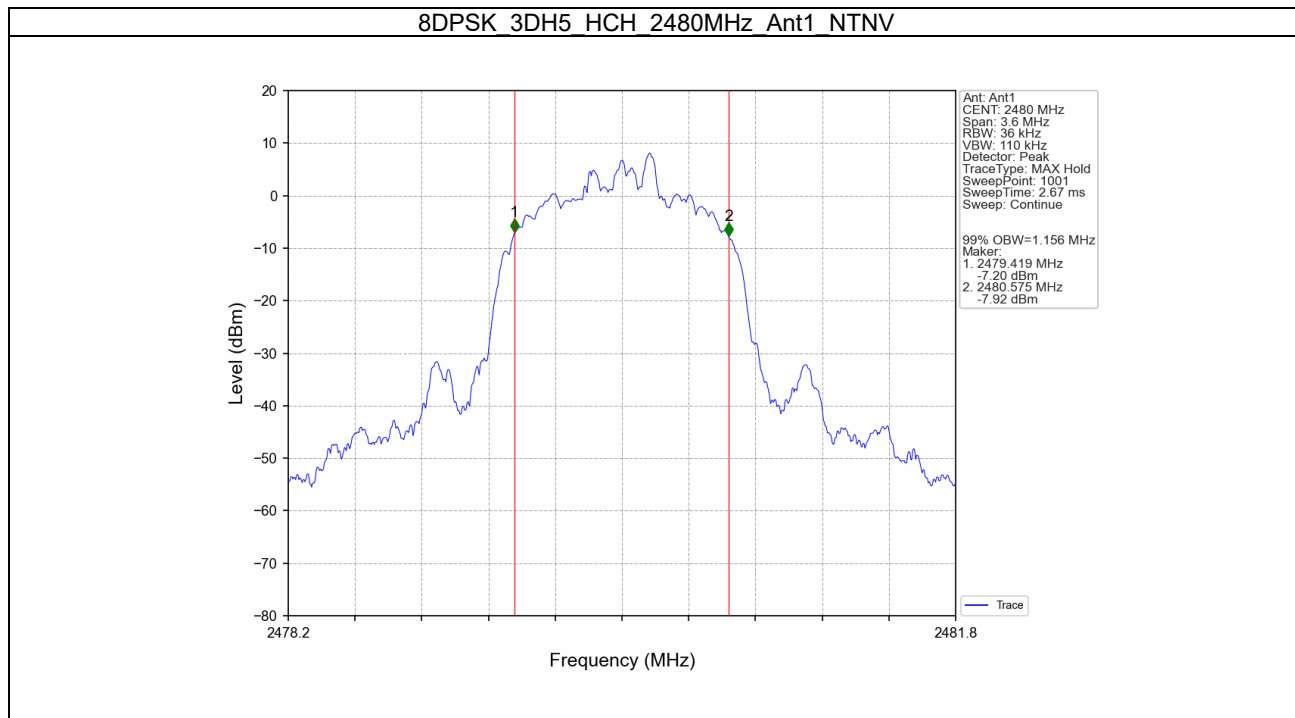


### 8DPSK 3DH5 LCH 2402MHz Ant1 NTN

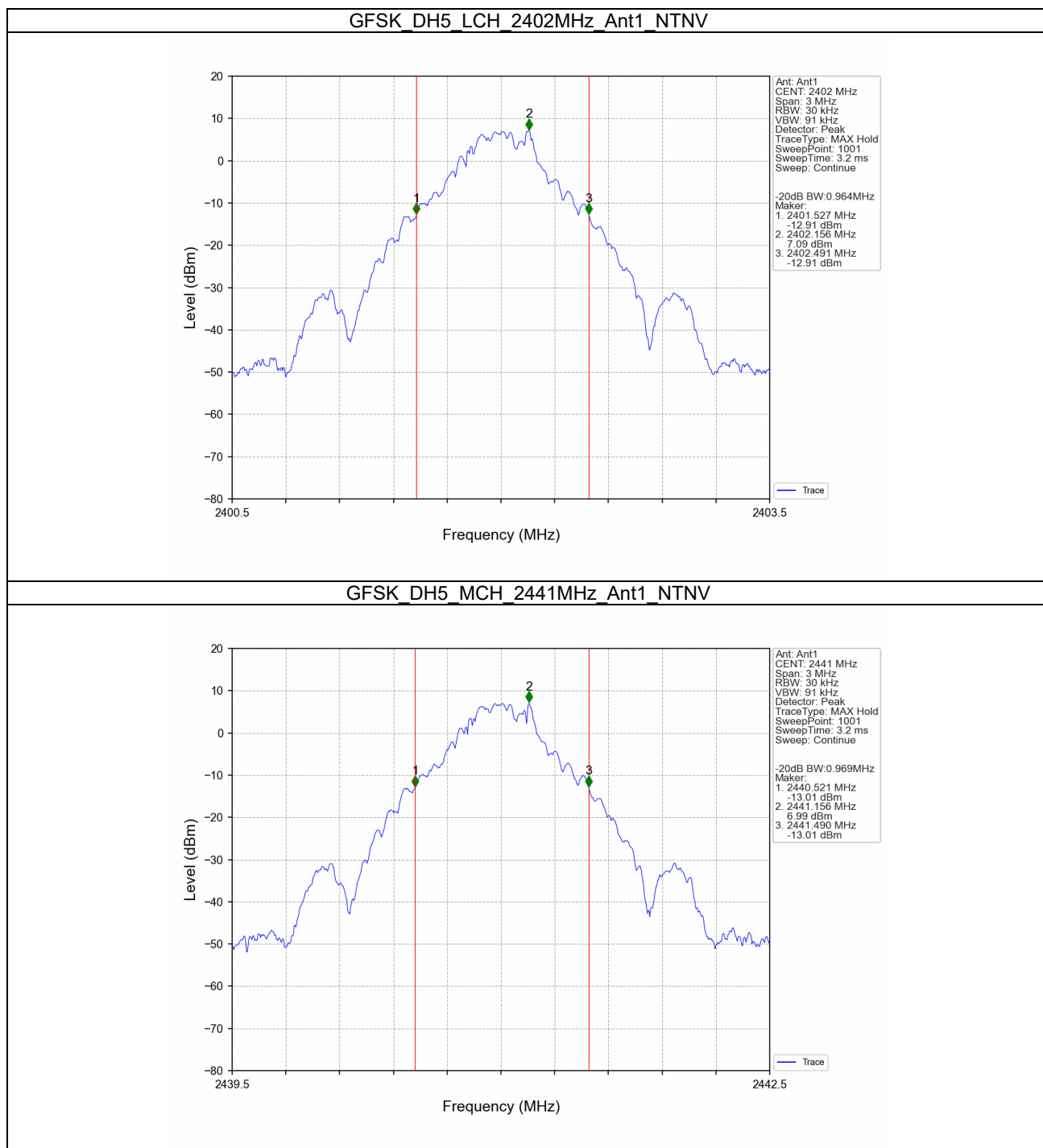


### 8DPSK 3DH5 MCH 2441MHz Ant1 NTN





### 2.2.2 20dB BW



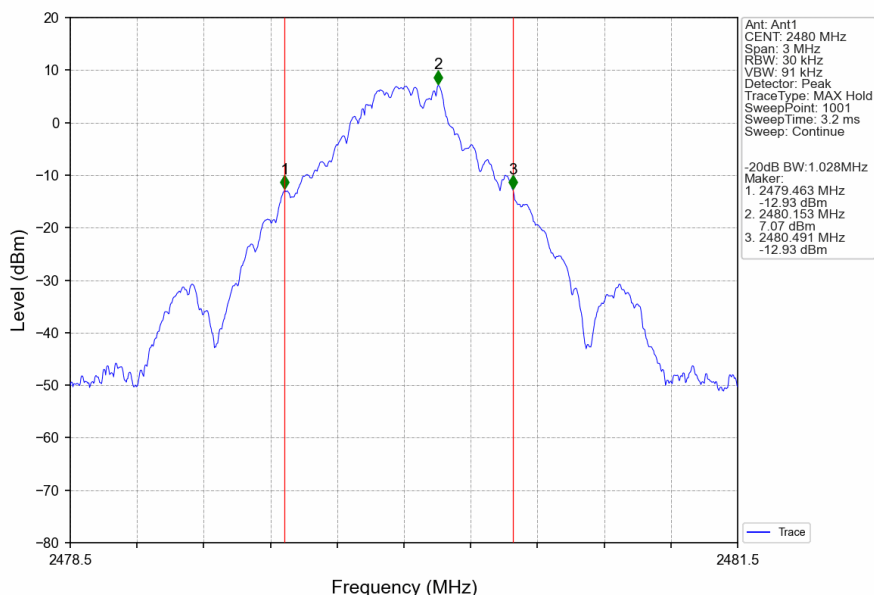
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

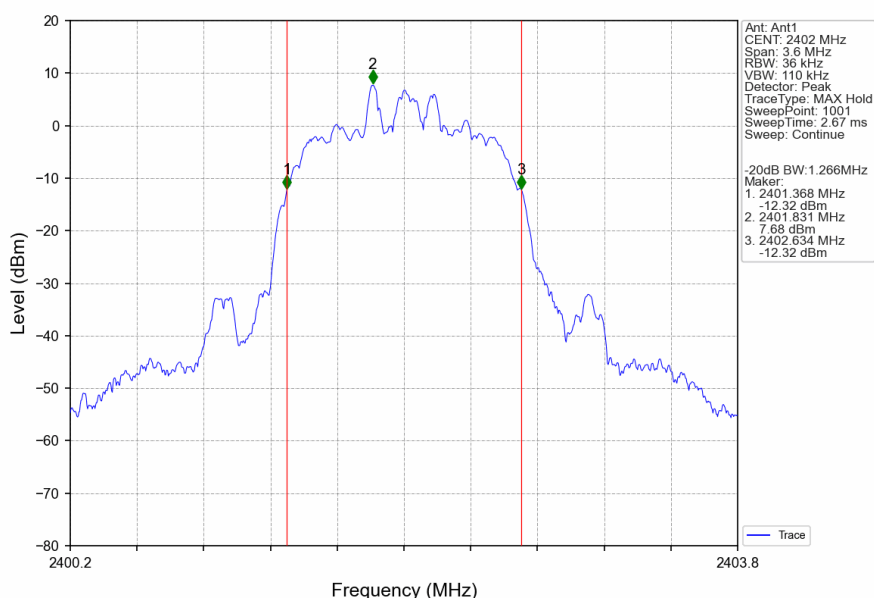
SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch Testing & Calibration Laboratory

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

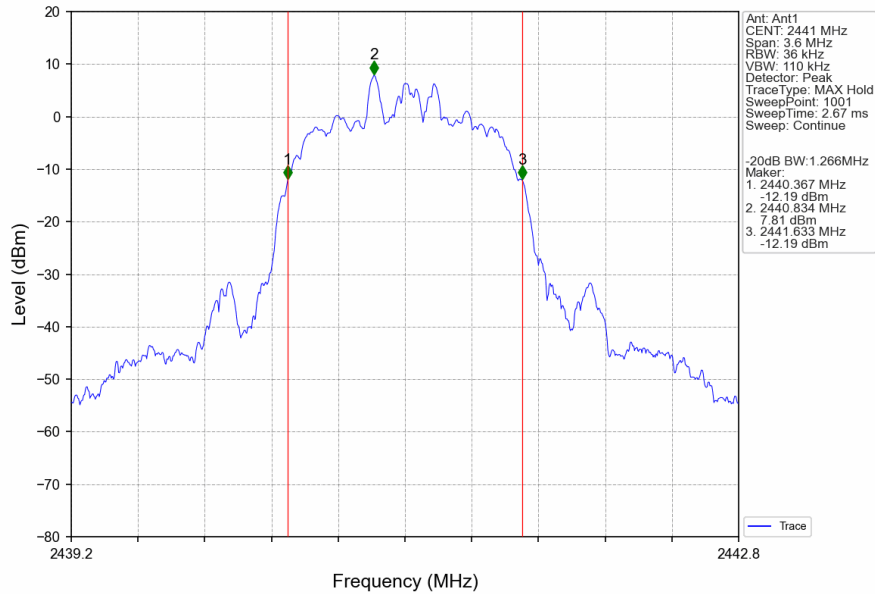
### GFSK DH5 HCH 2480MHz Ant1 NTN



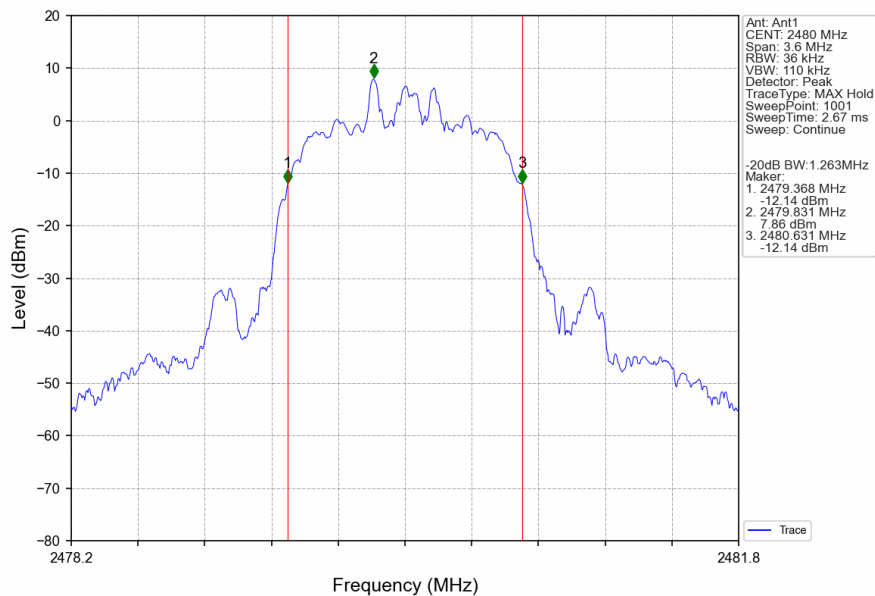
### Pi/4DQPSK 2DH5 LCH 2402MHz Ant1 NTN



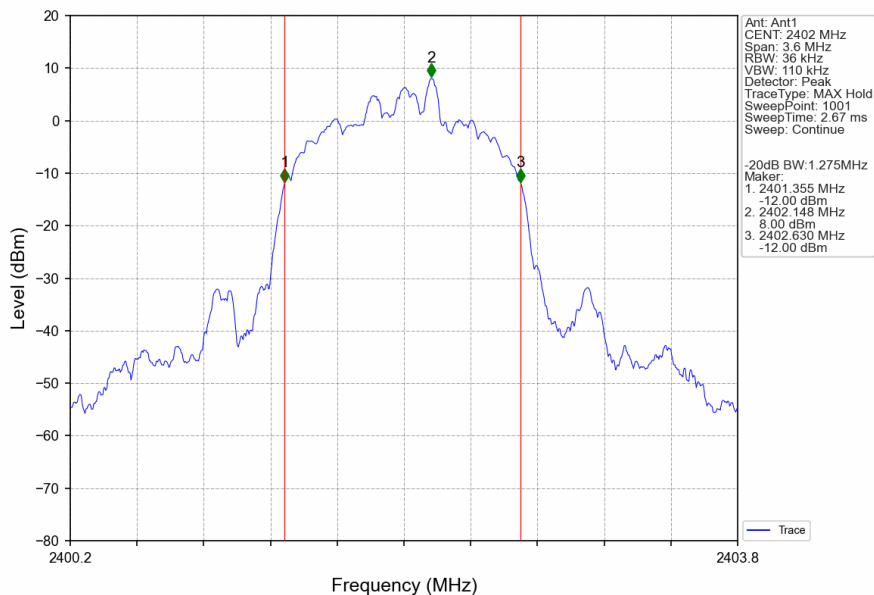
Pi/4DQPSK 2DH5 MCH 2441MHz Ant1 NTN



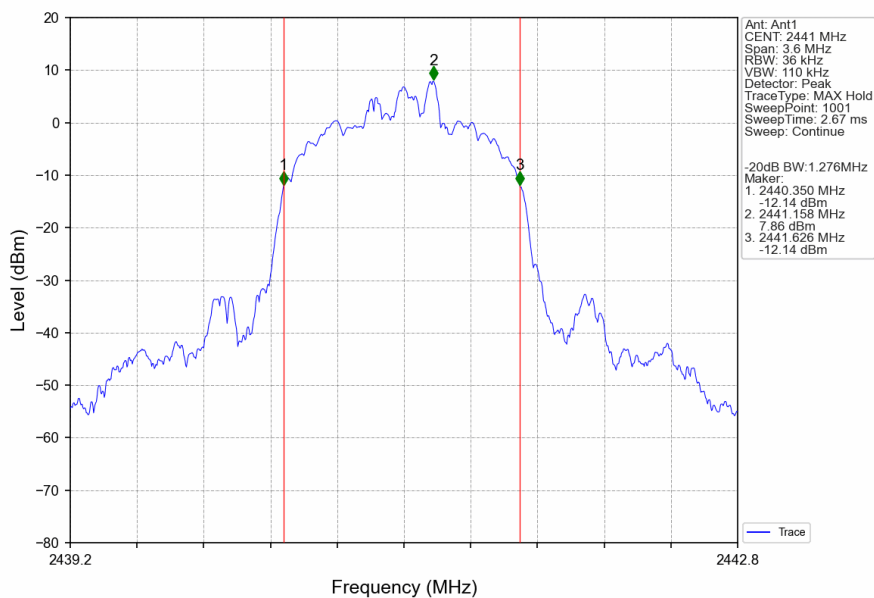
Pi/4DQPSK 2DH5 HCH 2480MHz Ant1 NTN



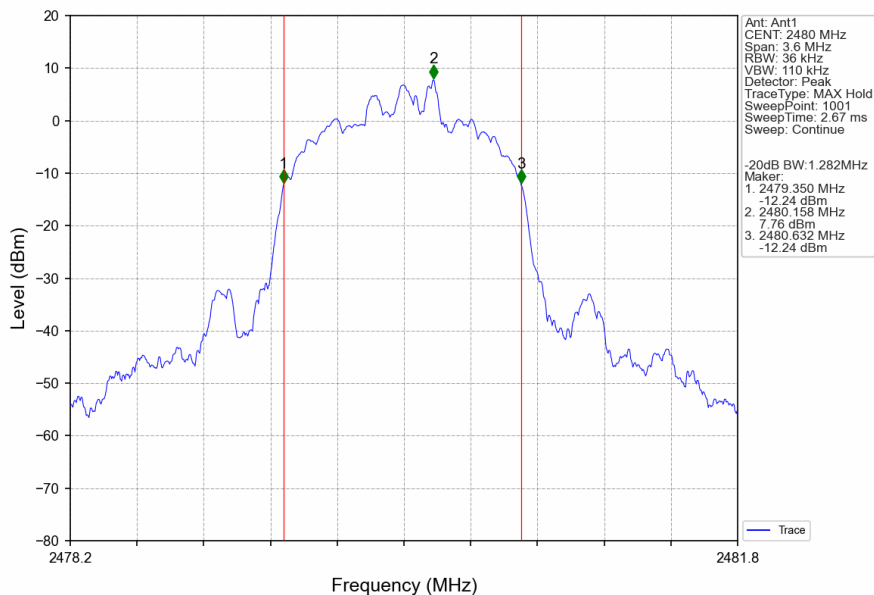
### 8DPSK 3DH5 LCH 2402MHz Ant1 NTNV



### 8DPSK 3DH5 MCH 2441MHz Ant1 NTNV



### 8DPSK 3DH5 HCH 2480MHz Ant1 NTN



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

## 3. Maximum Conducted Output Power

### 3.1 Test Result

#### 3.1.1 Power

| Mode      | TX Type | Frequency (MHz) | Packet Type | Maximum Peak Conducted Output Power (dBm) |         | Verdict |
|-----------|---------|-----------------|-------------|-------------------------------------------|---------|---------|
|           |         |                 |             | ANT1                                      | Limit   |         |
| GFSK      | SISO    | 2402            | DH5         | 5.88                                      | <=20.97 | Pass    |
|           |         | 2441            | DH5         | 6.07                                      | <=20.97 | Pass    |
|           |         | 2480            | DH5         | 6.09                                      | <=20.97 | Pass    |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 5.90                                      | <=20.97 | Pass    |
|           |         | 2441            | 2DH5        | 6.10                                      | <=20.97 | Pass    |
|           |         | 2480            | 2DH5        | 6.10                                      | <=20.97 | Pass    |
| 8DPSK     | SISO    | 2402            | 3DH5        | 5.98                                      | <=20.97 | Pass    |
|           |         | 2441            | 3DH5        | 6.18                                      | <=20.97 | Pass    |
|           |         | 2480            | 3DH5        | 6.16                                      | <=20.97 | Pass    |

Note1: Antenna Gain: Ant1: 3.30dBi;

## 4. Carrier Frequency Separation

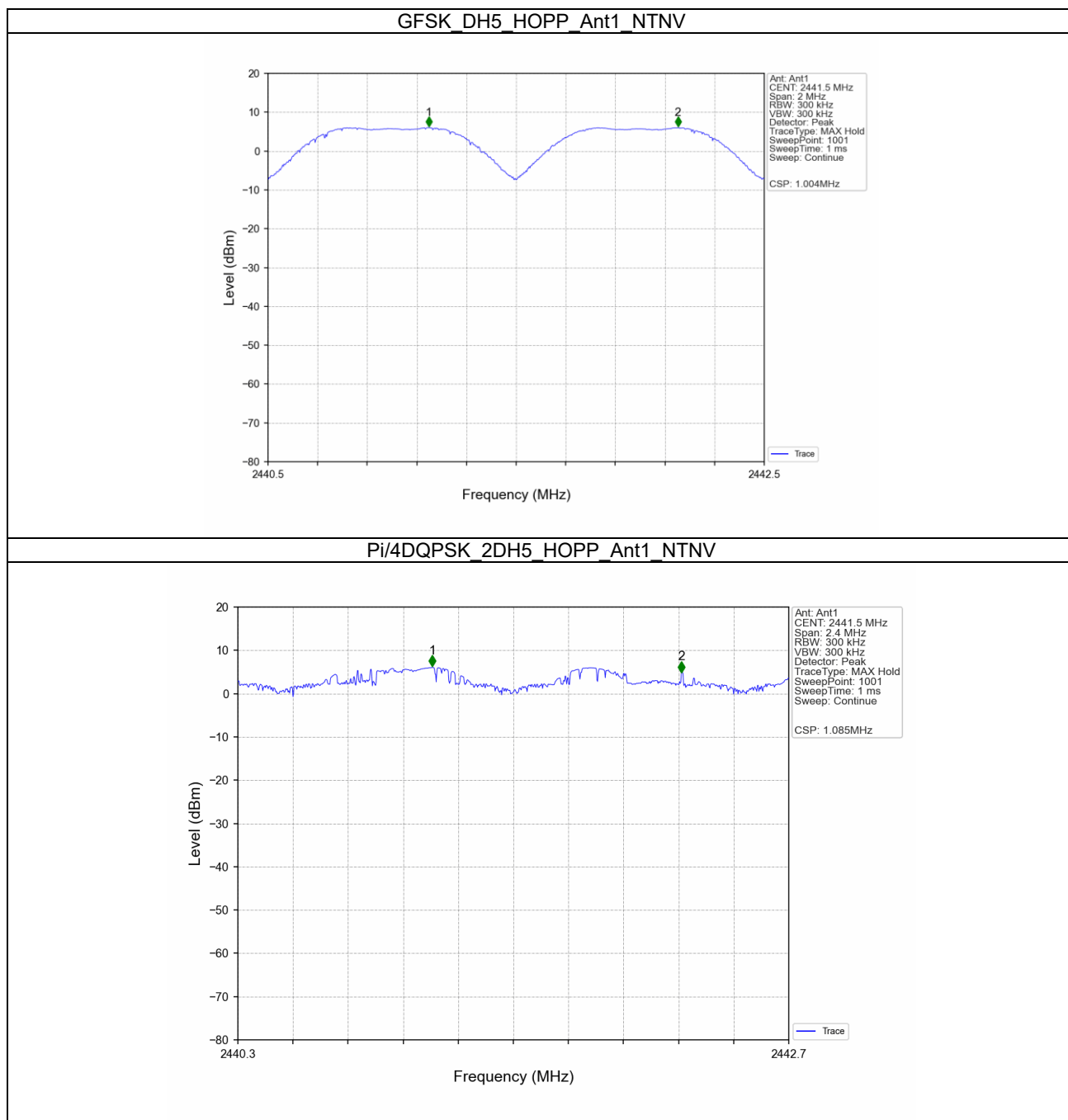
### 4.1 Test Result

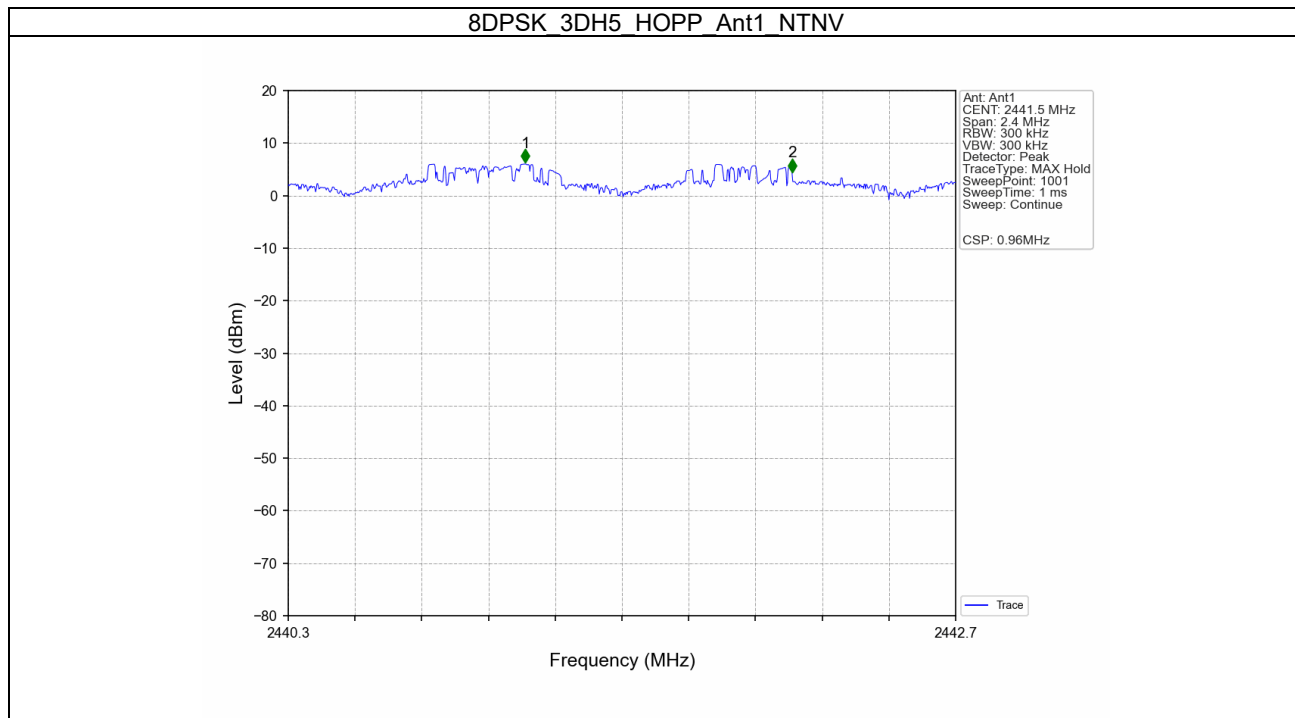
#### 4.1.1 Ant1

| Ant1      |         |                 |             |                          |                      |             |         |
|-----------|---------|-----------------|-------------|--------------------------|----------------------|-------------|---------|
| Mode      | TX Type | Frequency (MHz) | Packet Type | Channel Separation (MHz) | 20dB Bandwidth (MHz) | Limit (MHz) | Verdict |
| GFSK      | SISO    | HOPP            | DH5         | 1.004                    | 1.028                | >=0.685     | Pass    |
| Pi/4DQPSK | SISO    | HOPP            | 2DH5        | 1.085                    | 1.266                | >=0.844     | Pass    |
| 8DPSK     | SISO    | HOPP            | 3DH5        | 0.960                    | 1.282                | >=0.855     | Pass    |

### 4.2 Test Graph

#### 4.2.1 Ant1





### 5. Number of Hopping Frequencies

#### 5.1 Test Result

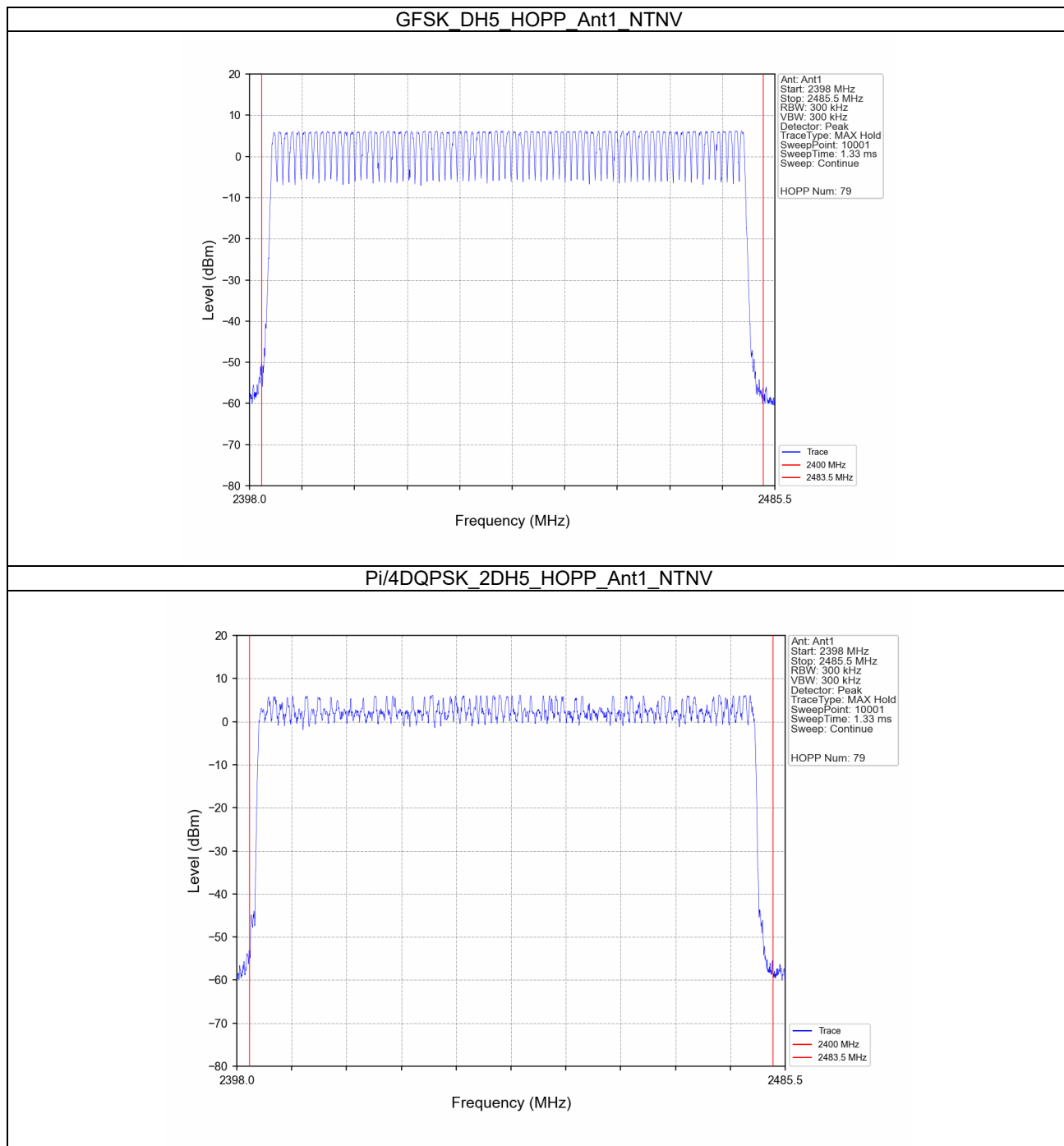
##### 5.1.1 HoppNum

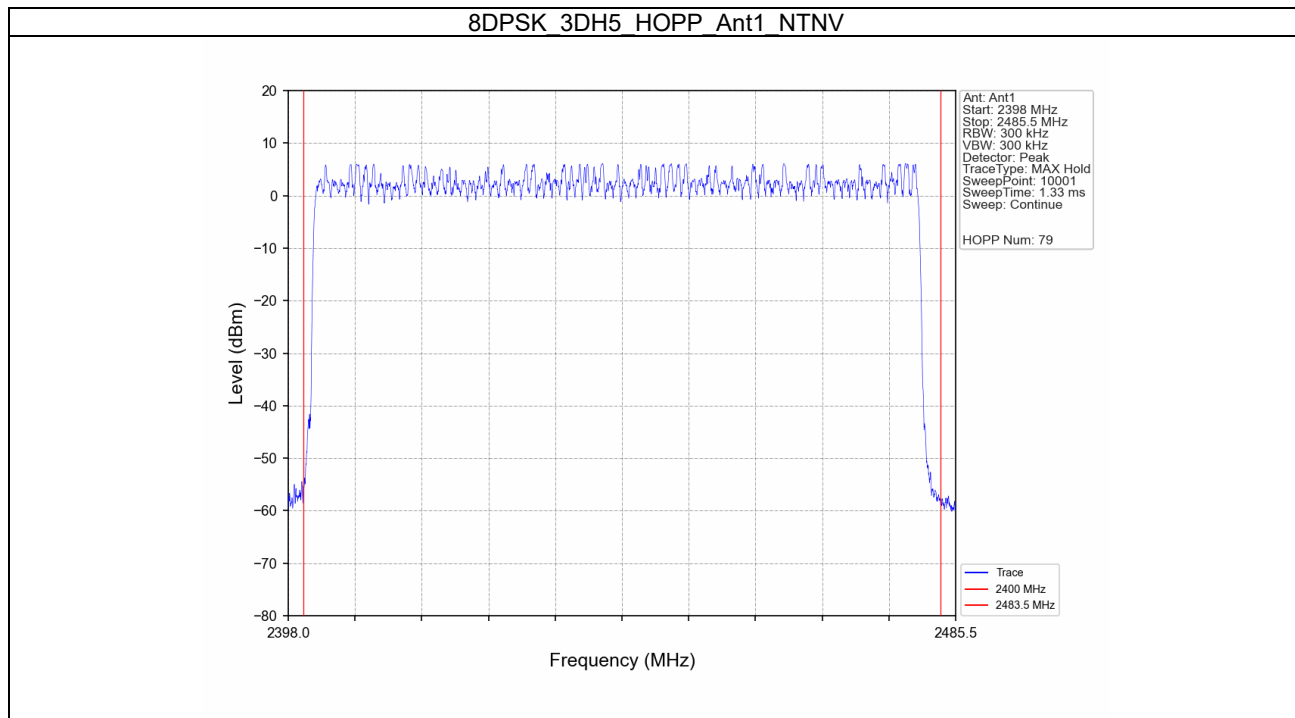
| Mode      | TX Type | Frequency (MHz) | Packet Type | Num of Hopping Frequencies |           | Verdict |
|-----------|---------|-----------------|-------------|----------------------------|-----------|---------|
|           |         |                 |             | ANT1                       | Limit     |         |
| GFSK      | SISO    | HOPP            | DH5         | 79                         | $\geq 15$ | Pass    |
| Pi/4DQPSK | SISO    | HOPP            | 2DH5        | 79                         | $\geq 15$ | Pass    |
| 8DPSK     | SISO    | HOPP            | 3DH5        | 79                         | $\geq 15$ | Pass    |



### 5.2 Test Graph

#### 5.2.1 HoppNum





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

#### 6.1 Test Result

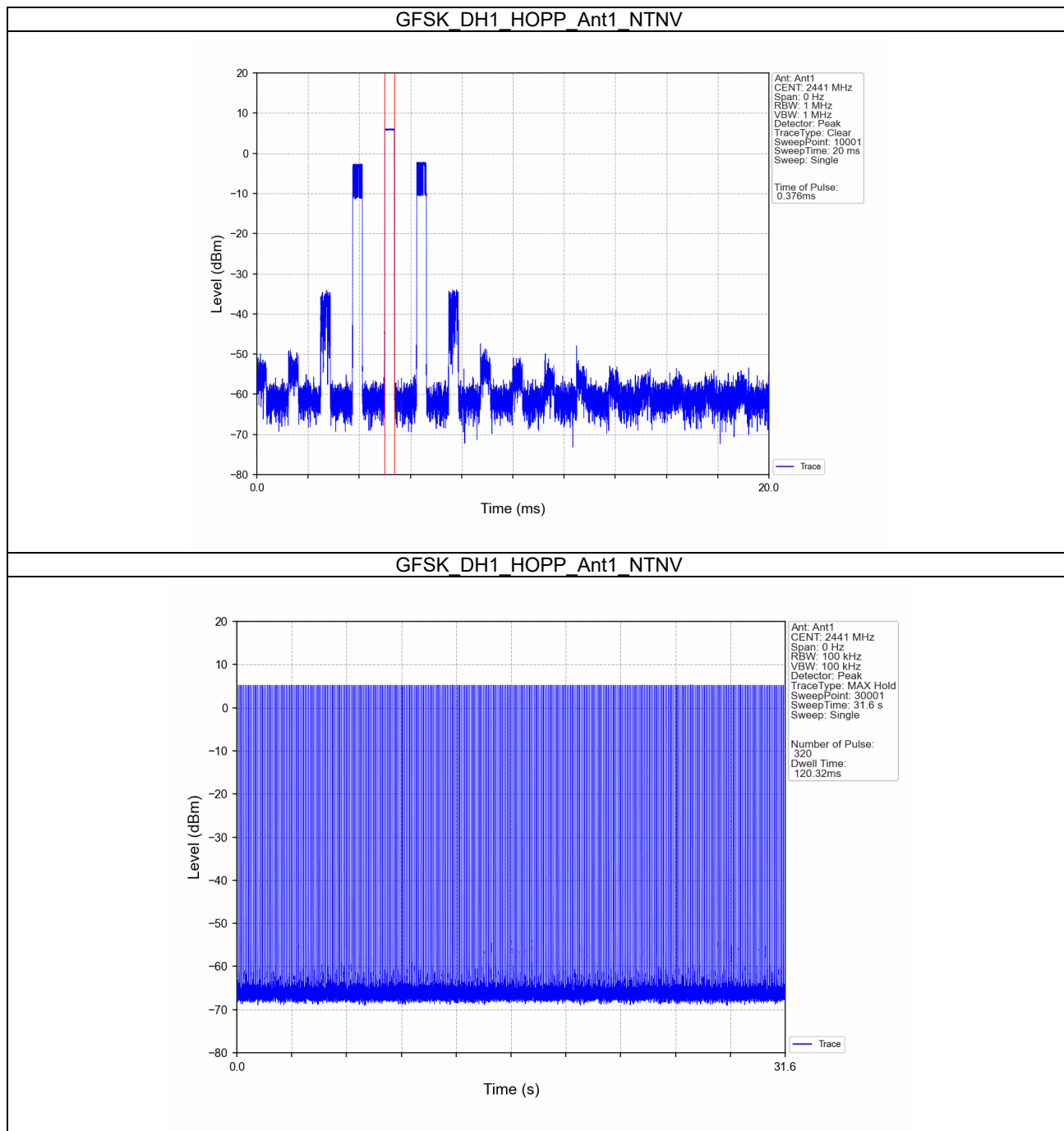
##### 6.1.1 Ant1

| Ant1      |         |                 |             |                               |                        |                                    |                 |            |         |
|-----------|---------|-----------------|-------------|-------------------------------|------------------------|------------------------------------|-----------------|------------|---------|
| Mode      | TX Type | Frequency (MHz) | Packet Type | Duration of Single Pulse (ms) | Observation Period (s) | Num of Pulse in Observation Period | Dwell Time (ms) | Limit (ms) | Verdict |
| GFSK      | SISO    | HOPP            | DH1         | 0.376                         | 31.600                 | 320                                | 120.320         | <=400      | Pass    |
|           |         |                 | DH3         | 1.632                         | 31.600                 | 160                                | 261.120         | <=400      | Pass    |
|           |         |                 | DH5         | 2.880                         | 31.600                 | 107                                | 308.160         | <=400      | Pass    |
| Pi/4DQPSK | SISO    | HOPP            | 2DH1        | 0.382                         | 31.600                 | 320                                | 122.240         | <=400      | Pass    |
|           |         |                 | 2DH3        | 1.634                         | 31.600                 | 160                                | 261.440         | <=400      | Pass    |
|           |         |                 | 2DH5        | 2.882                         | 31.600                 | 107                                | 308.374         | <=400      | Pass    |
| 8DPSK     | SISO    | HOPP            | 3DH1        | 0.382                         | 31.600                 | 320                                | 122.240         | <=400      | Pass    |
|           |         |                 | 3DH3        | 1.634                         | 31.600                 | 160                                | 261.440         | <=400      | Pass    |
|           |         |                 | 3DH5        | 2.884                         | 31.600                 | 107                                | 308.588         | <=400      | Pass    |

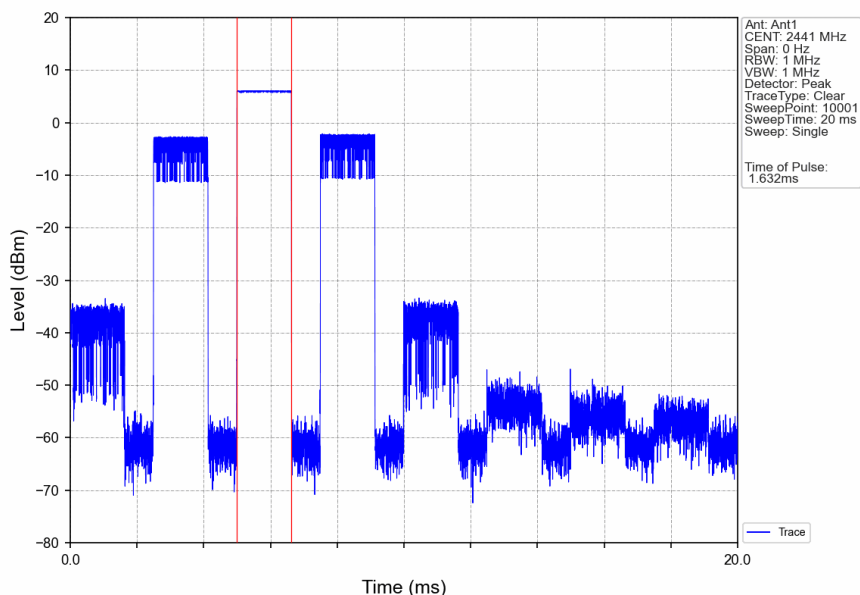


### 6.2 Test Graph

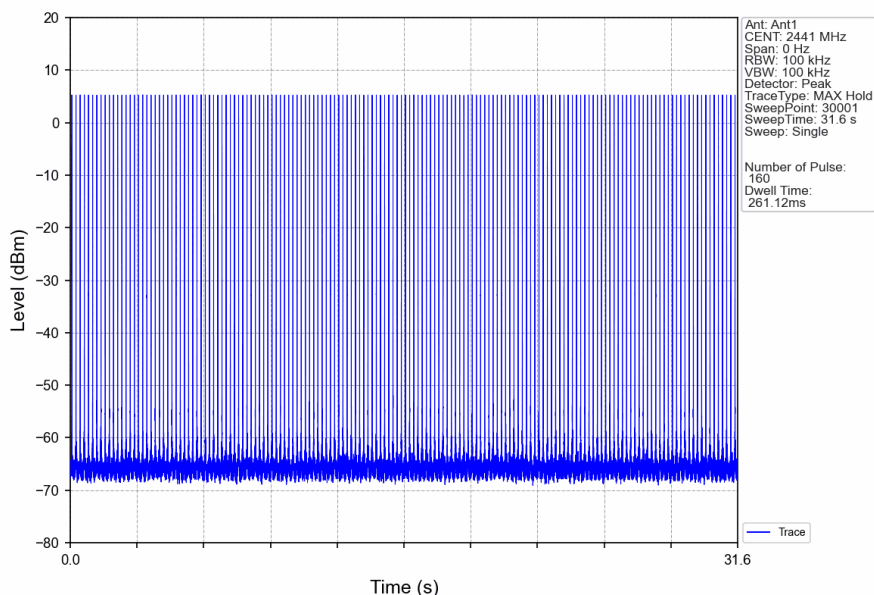
#### 6.2.1 Ant1



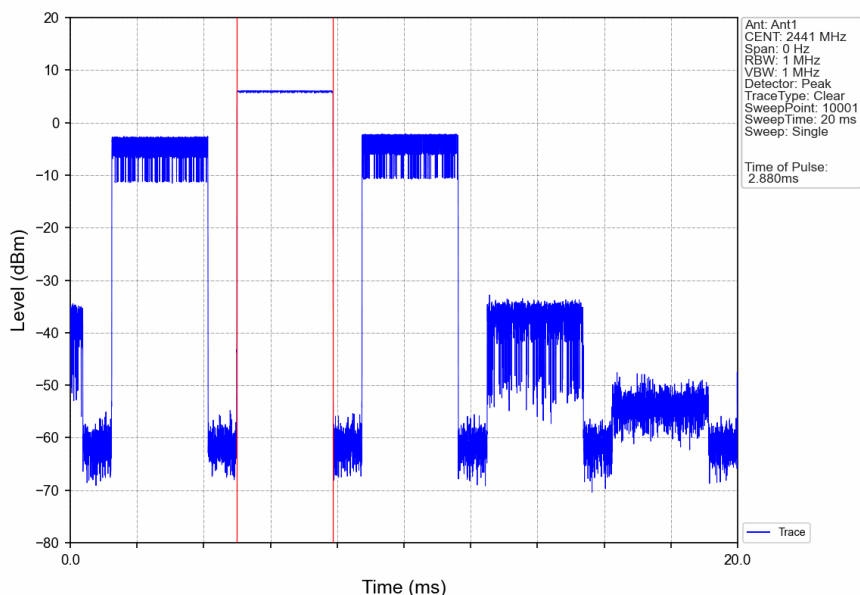
GFSK DH3 HOPP Ant1 NTN



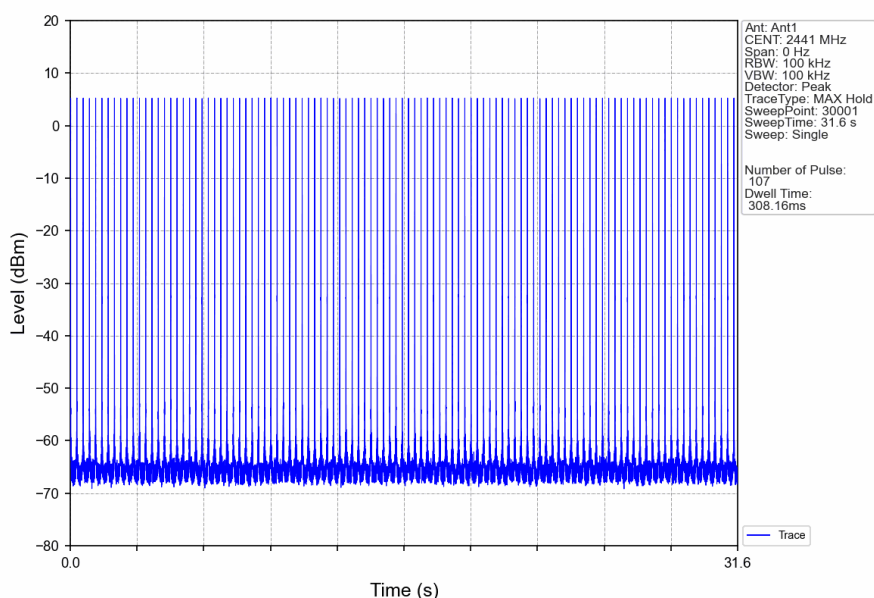
GFSK DH3 HOPP Ant1 NTN



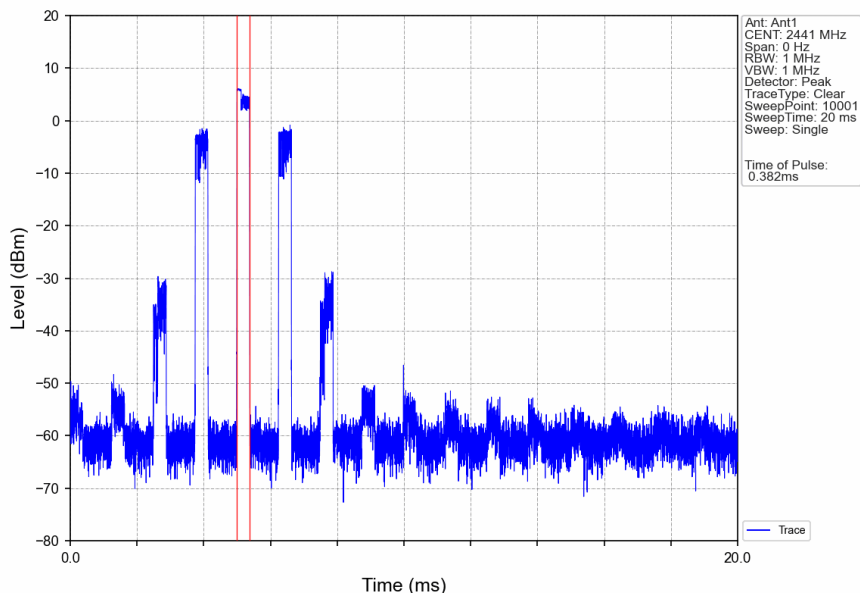
GFSK DH5 HOPP Ant1 NTN



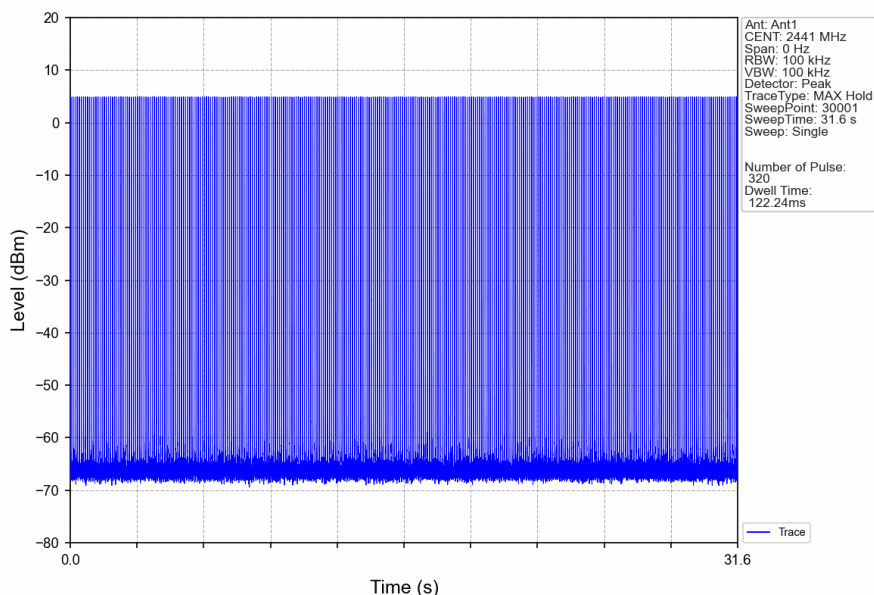
GFSK DH5 HOPP Ant1 NTN



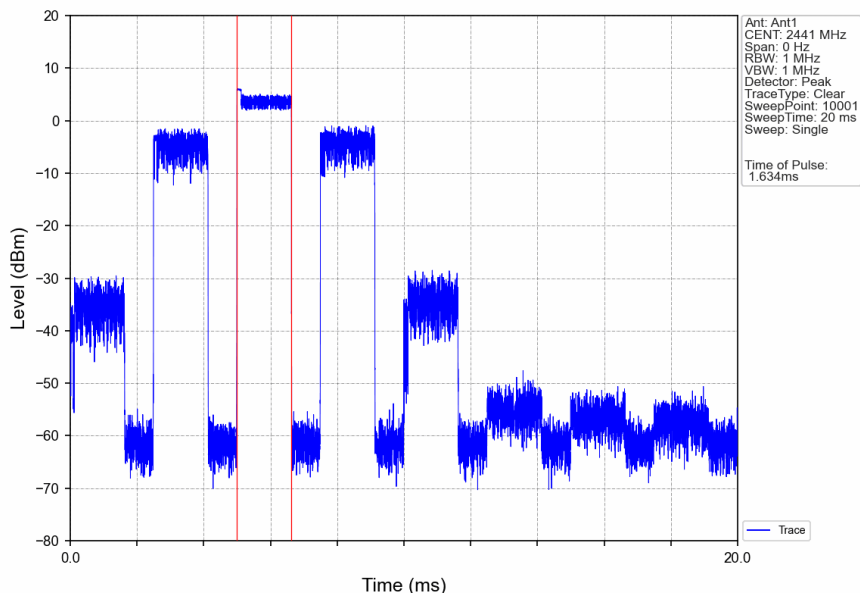
Pi/4DQPSK 2DH1\_HOPP Ant1 NTN



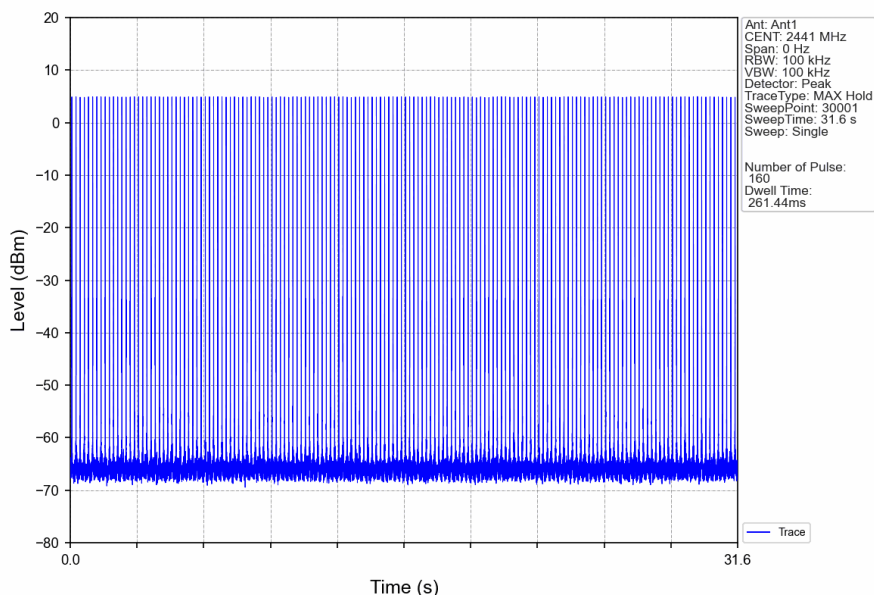
Pi/4DQPSK 2DH1\_HOPP Ant1 NTN



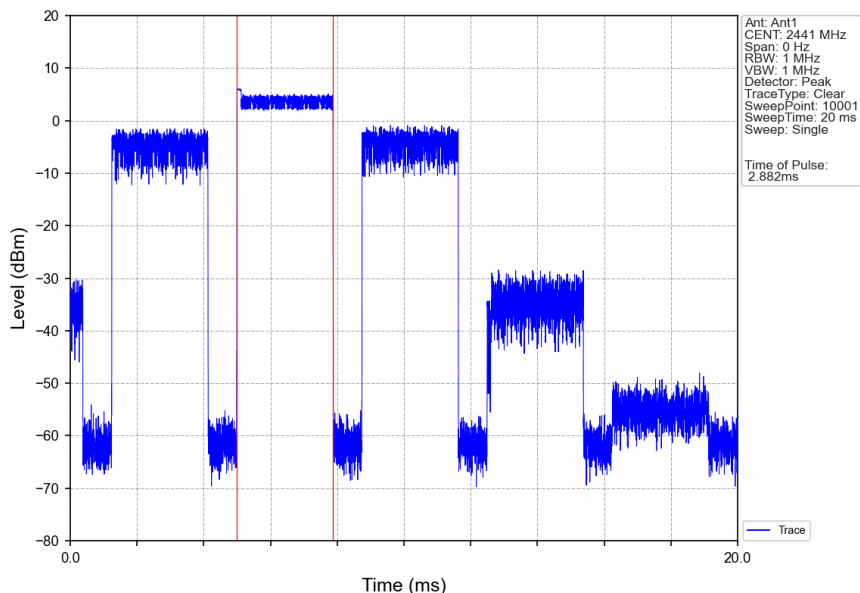
Pi/4DQPSK 2DH3 HOPP Ant1 NTN



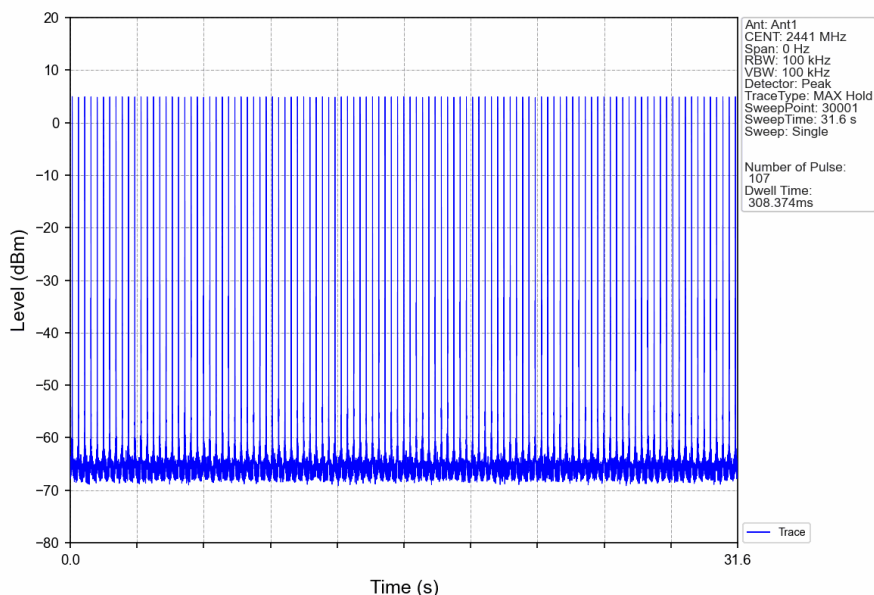
Pi/4DQPSK 2DH3 HOPP Ant1 NTN



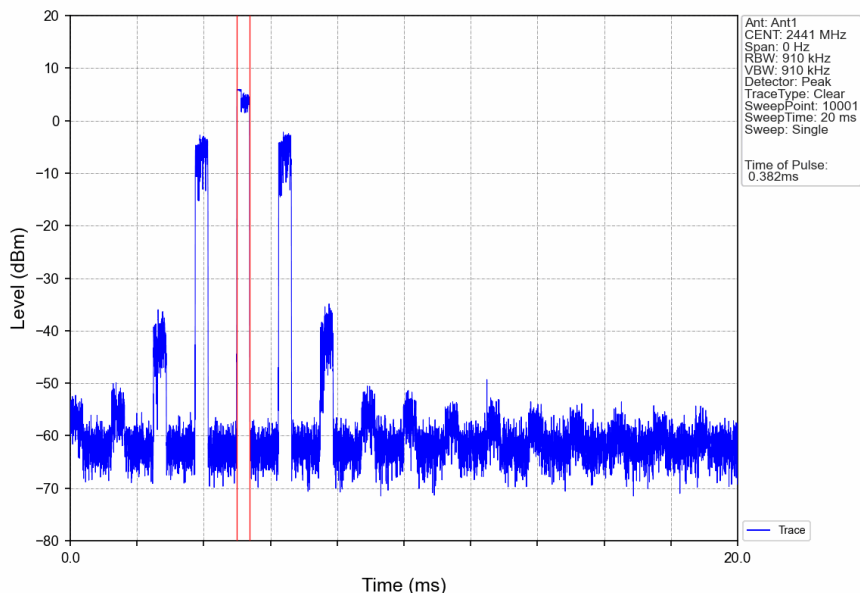
Pi/4DQPSK 2DH5 HOPP Ant1 NTN



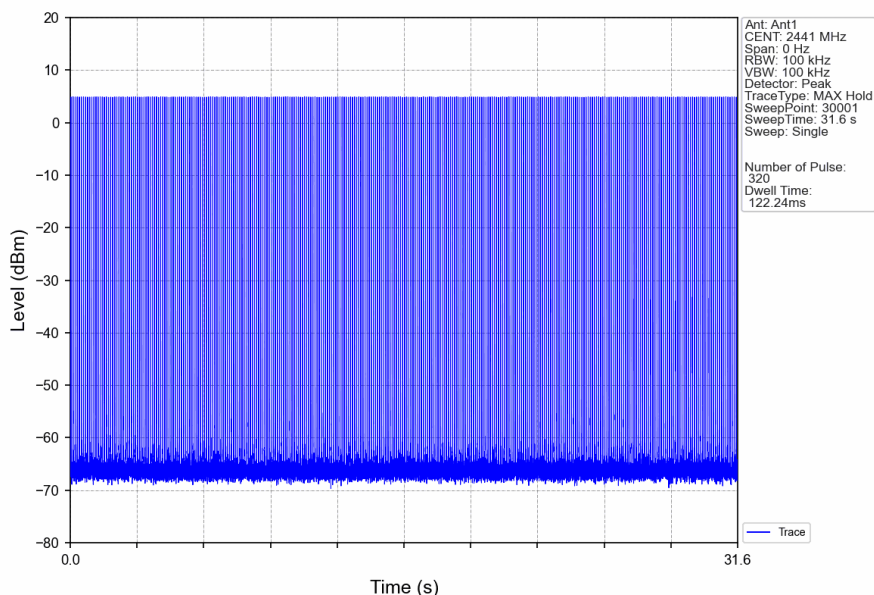
Pi/4DQPSK 2DH5 HOPP Ant1 NTN



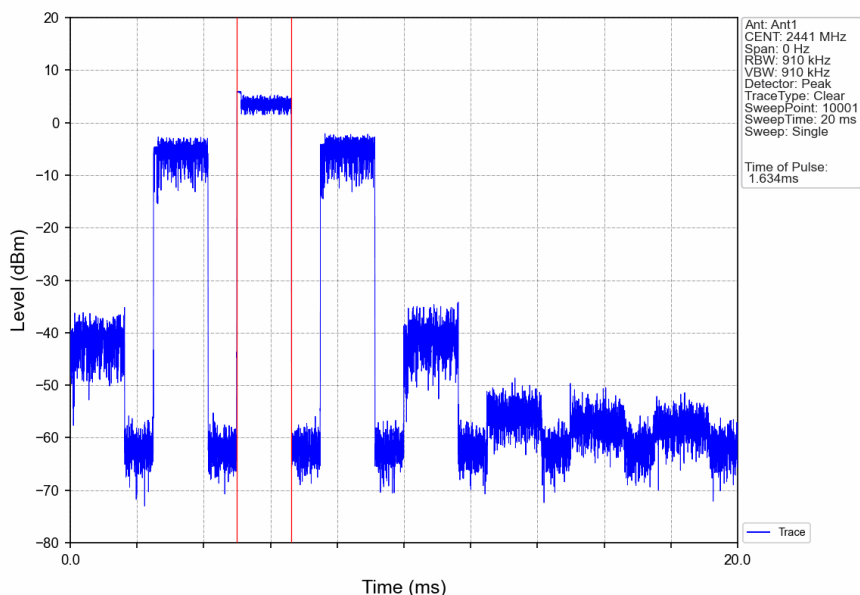
8DPSK 3DH1 HOPP Ant1 NTN



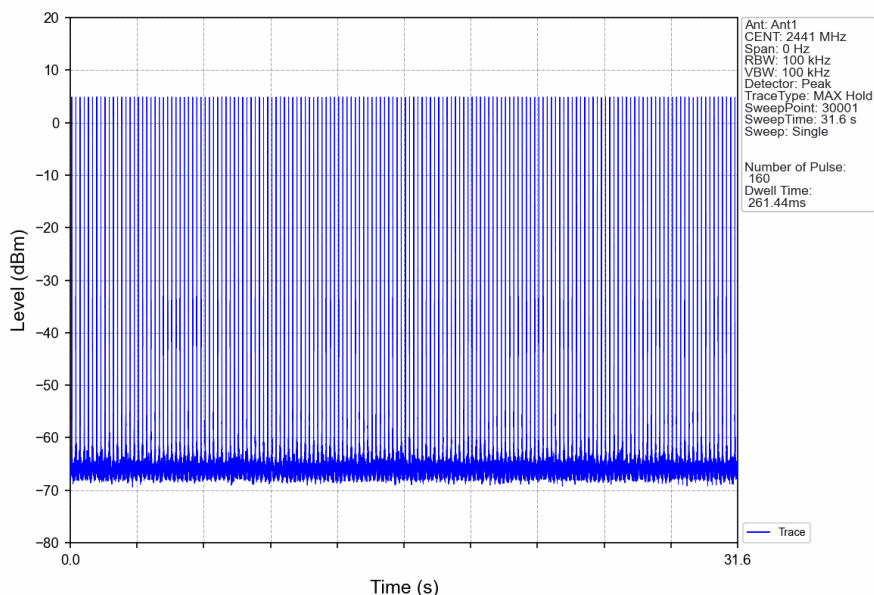
8DPSK 3DH1 HOPP Ant1 NTN



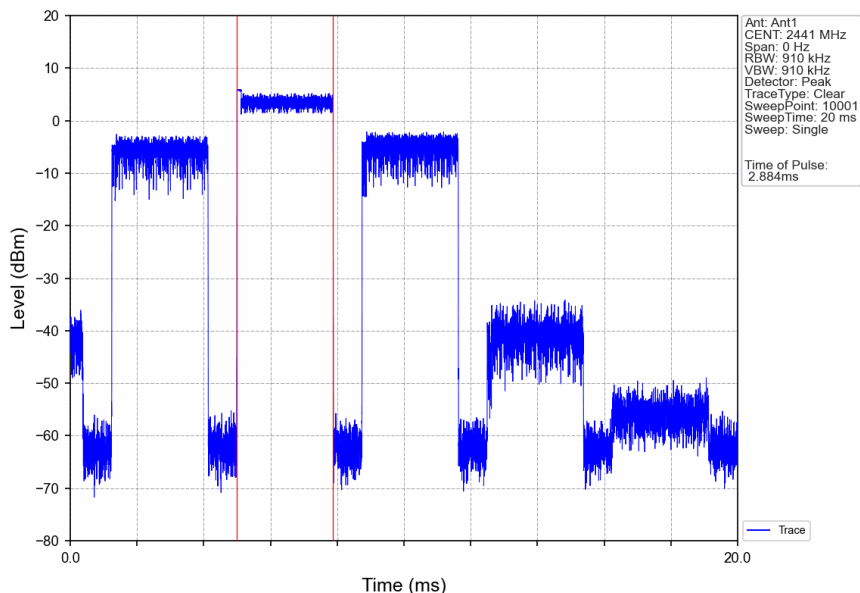
8DPSK 3DH3 HOPP Ant1 NTN



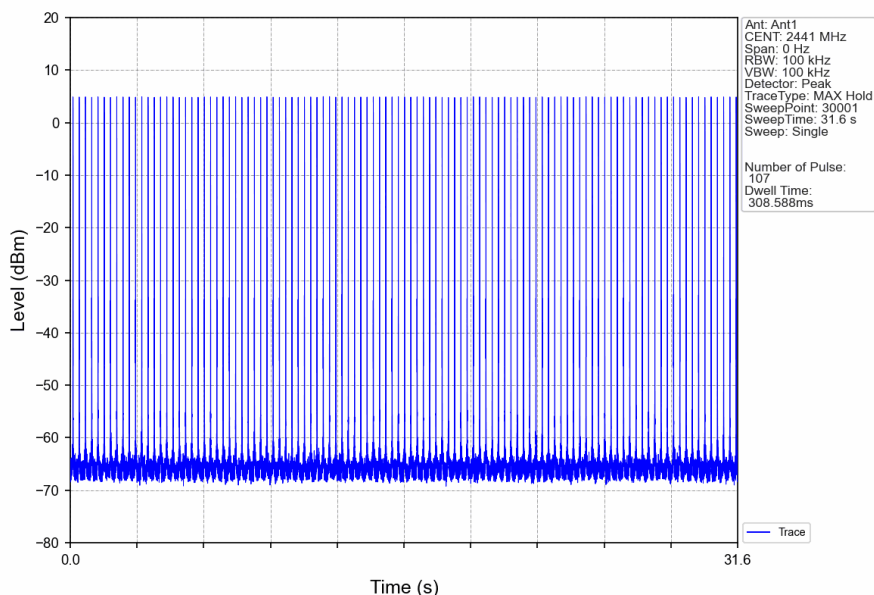
8DPSK 3DH3 HOPP Ant1 NTN



8DPSK 3DH5 HOPP Ant1 NTN



8DPSK 3DH5 HOPP Ant1 NTN



## 7. Unwanted Emissions In Non-restricted Frequency Bands

### 7.1 Test Result

#### 7.1.1 Ref

| Mode      | TX Type | Frequency (MHz) | Packet Type | ANT | Level of Reference (dBm) |
|-----------|---------|-----------------|-------------|-----|--------------------------|
| GFSK      | SISO    | 2402            | DH5         | 1   | 5.87                     |
|           |         | 2441            | DH5         | 1   | 5.94                     |
|           |         | 2480            | DH5         | 1   | 6.06                     |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 1   | 5.85                     |
|           |         | 2441            | 2DH5        | 1   | 6.04                     |
|           |         | 2480            | 2DH5        | 1   | 6.07                     |
| 8DPSK     | SISO    | 2402            | 3DH5        | 1   | 5.87                     |
|           |         | 2441            | 3DH5        | 1   | 6.07                     |
|           |         | 2480            | 3DH5        | 1   | 6.01                     |

Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.

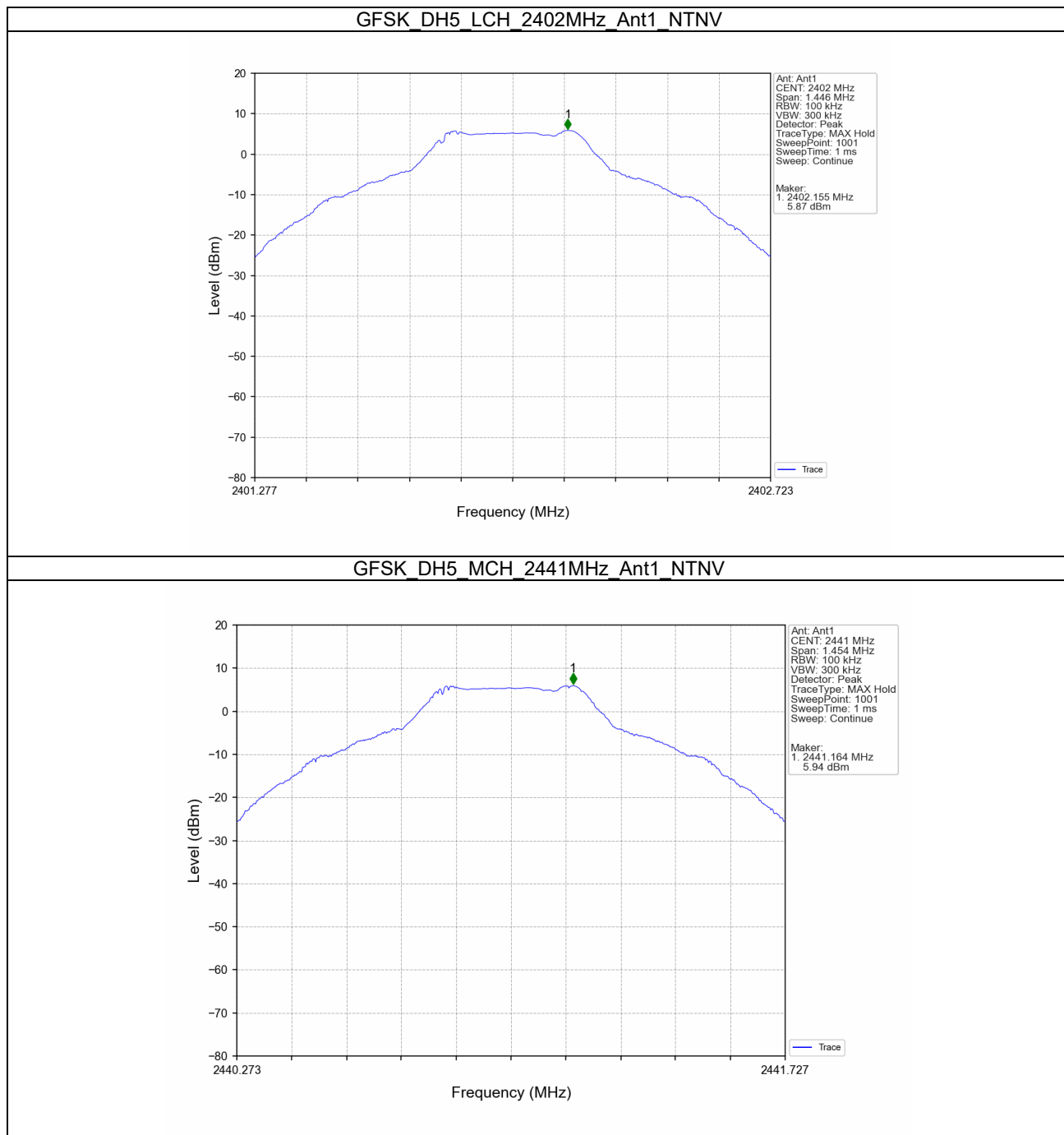
#### 7.1.2 CSE

| Mode      | TX Type | Frequency (MHz) | Packet Type | ANT | Level of Reference (dBm) | Limit (dBm) | Verdict |
|-----------|---------|-----------------|-------------|-----|--------------------------|-------------|---------|
| GFSK      | SISO    | 2402            | DH5         | 1   | 6.06                     | -13.94      | Pass    |
|           |         | 2441            | DH5         | 1   | 6.06                     | -13.94      | Pass    |
|           |         | 2480            | DH5         | 1   | 6.06                     | -13.94      | Pass    |
|           |         | HOPP            | DH5         | 1   | 6.06                     | -13.94      | Pass    |
|           |         |                 |             |     | 6.06                     | -13.94      | Pass    |
| Pi/4DQPSK | SISO    | 2402            | 2DH5        | 1   | 6.07                     | -13.93      | Pass    |
|           |         | 2441            | 2DH5        | 1   | 6.07                     | -13.93      | Pass    |
|           |         | 2480            | 2DH5        | 1   | 6.07                     | -13.93      | Pass    |
|           |         | HOPP            | 2DH5        | 1   | 6.07                     | -13.93      | Pass    |
|           |         |                 |             |     | 6.07                     | -13.93      | Pass    |
| 8DPSK     | SISO    | 2402            | 3DH5        | 1   | 6.07                     | -13.93      | Pass    |
|           |         | 2441            | 3DH5        | 1   | 6.07                     | -13.93      | Pass    |
|           |         | 2480            | 3DH5        | 1   | 6.07                     | -13.93      | Pass    |
|           |         | HOPP            | 3DH5        | 1   | 6.07                     | -13.93      | Pass    |
|           |         |                 |             |     | 6.07                     | -13.93      | Pass    |

Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2020, the channel contains the maximum PSD level was used to establish the reference level.

### 7.2 Test Graph

#### 7.2.1 Ref



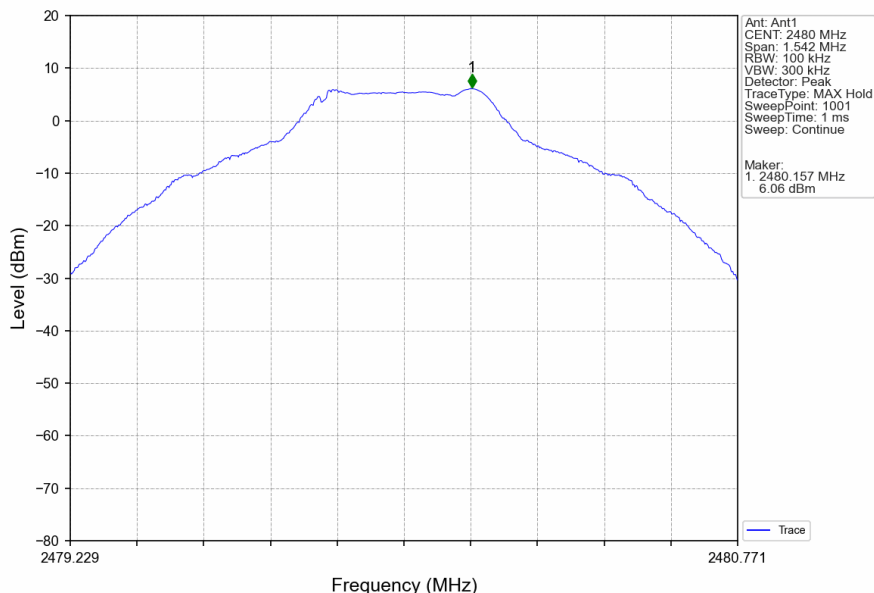
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

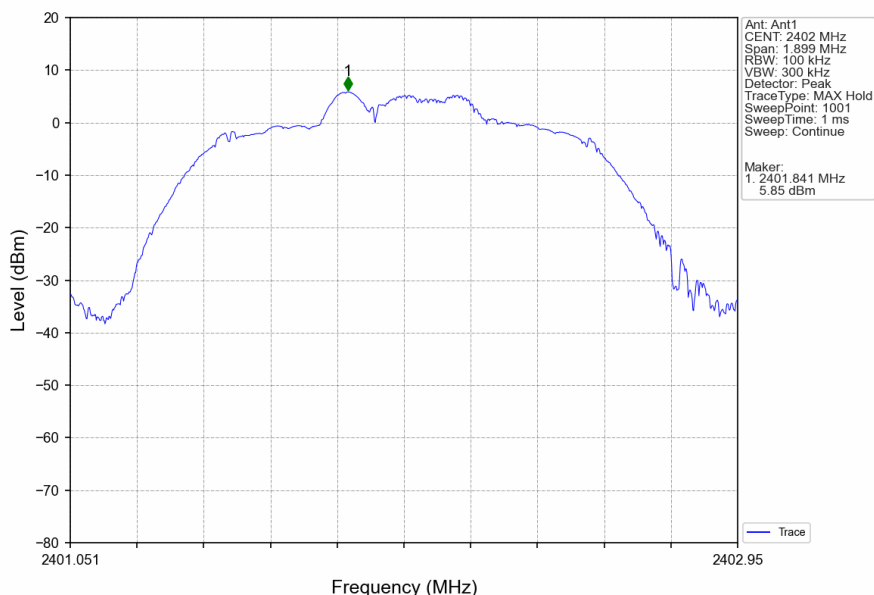
SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch Testing & Calibration Laboratory

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

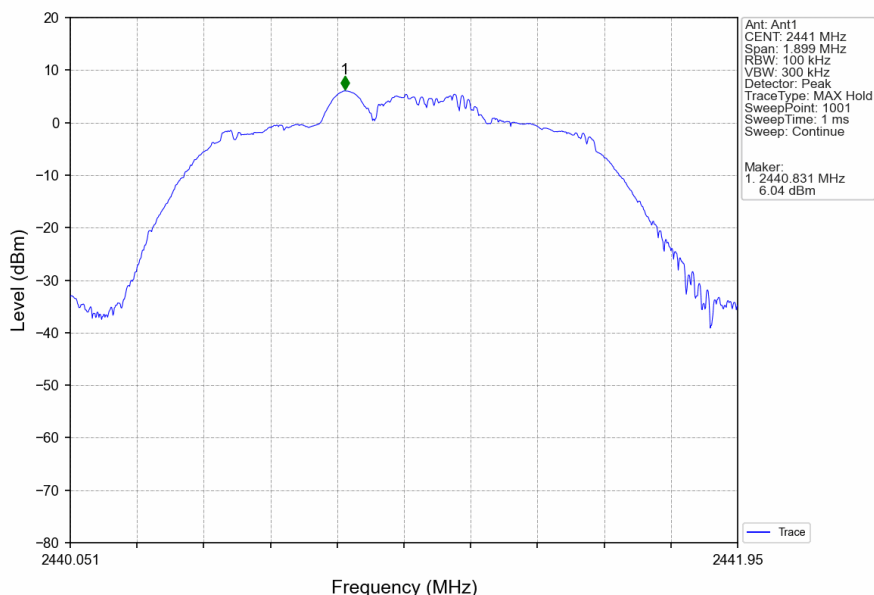
GFSK DH5 HCH 2480MHz Ant1 NTN



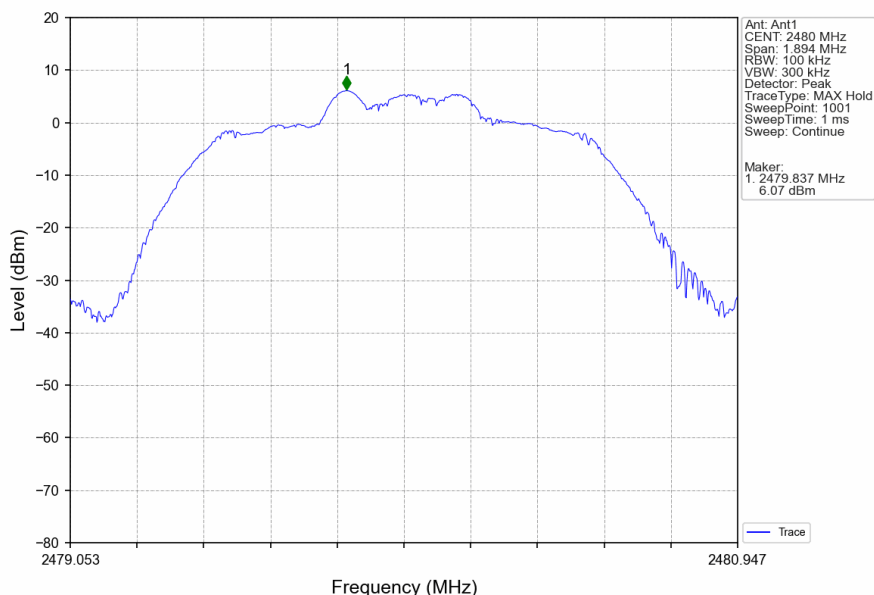
Pi/4DQPSK 2DH5 LCH 2402MHz Ant1 NTN



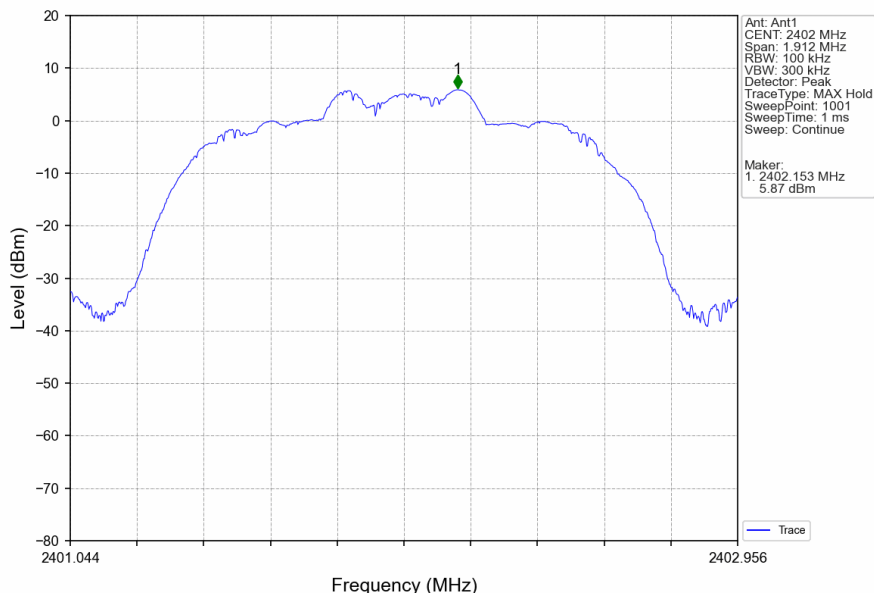
Pi/4DQPSK 2DH5 MCH 2441MHz Ant1 NTNV



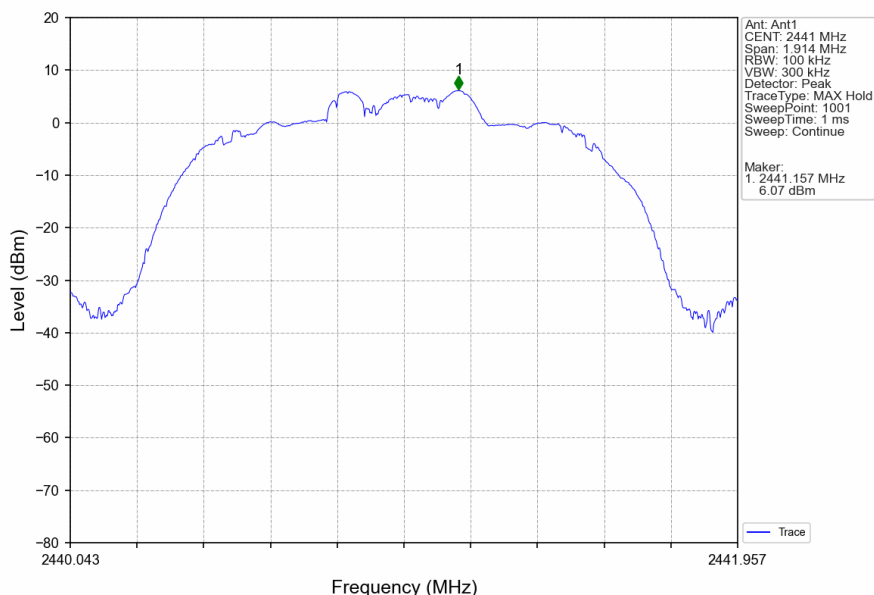
Pi/4DQPSK 2DH5 HCH 2480MHz Ant1 NTNV

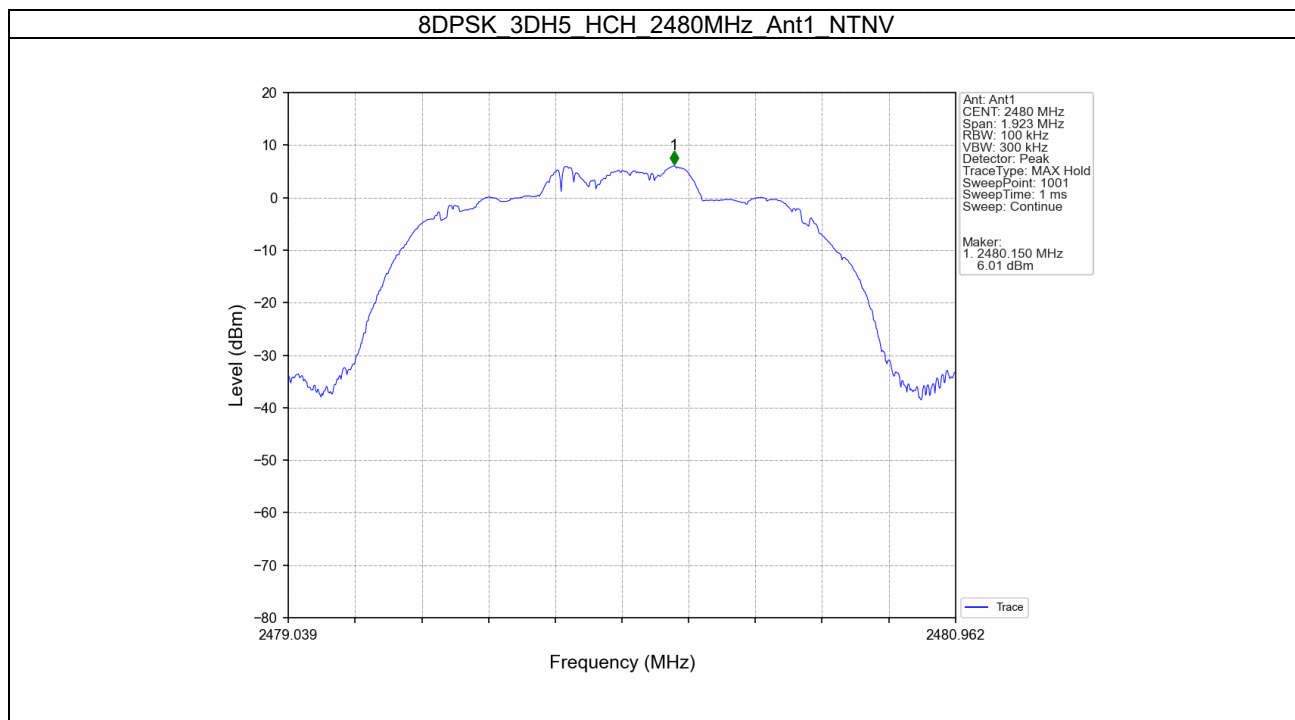


### 8DPSK 3DH5 LCH 2402MHz Ant1 NTN

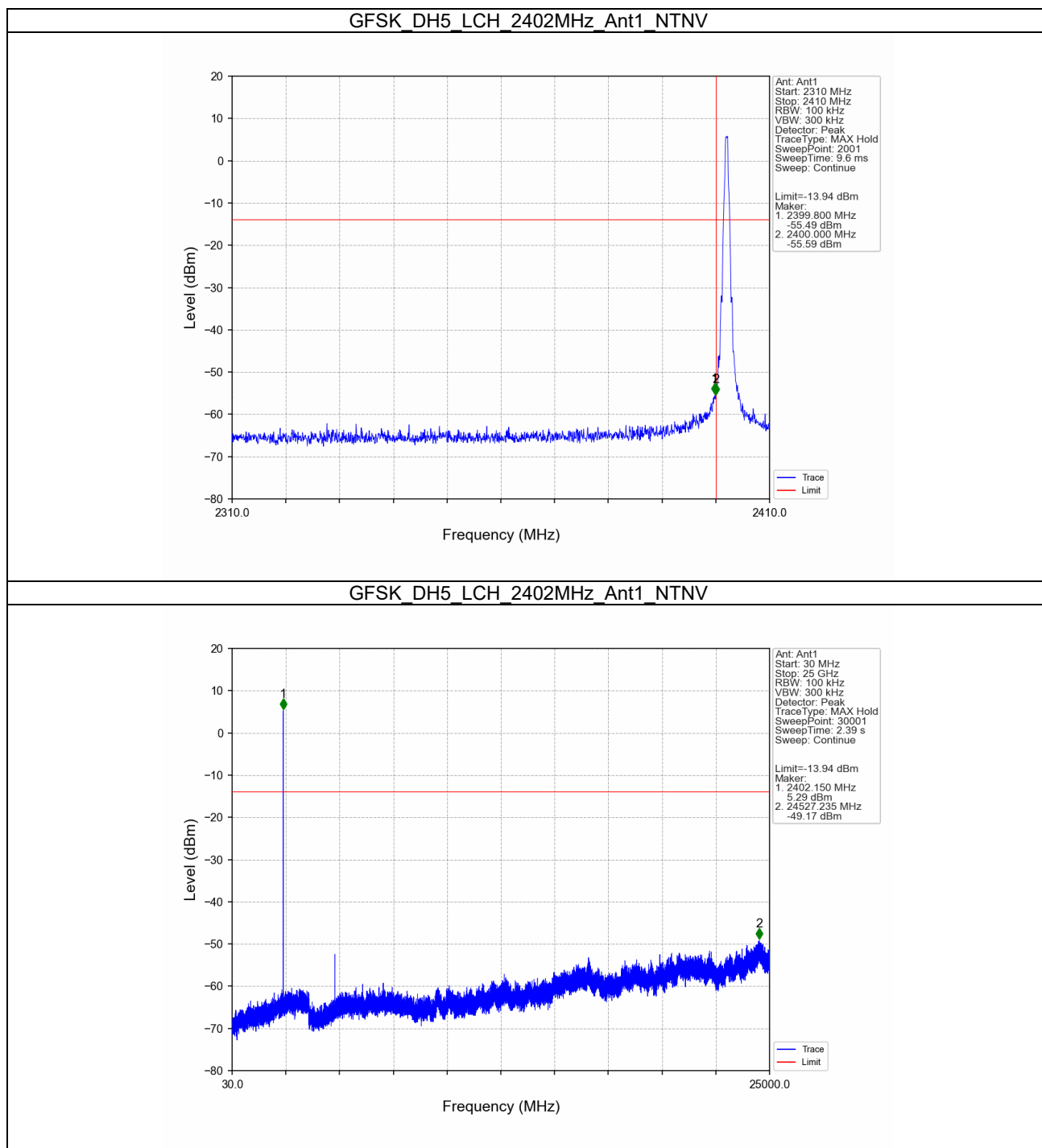


### 8DPSK 3DH5 MCH 2441MHz Ant1 NTN

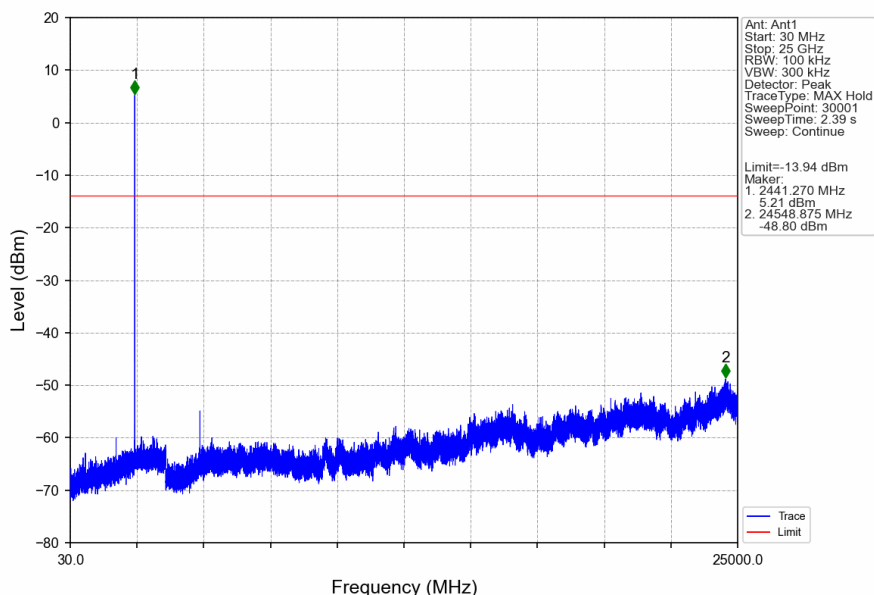




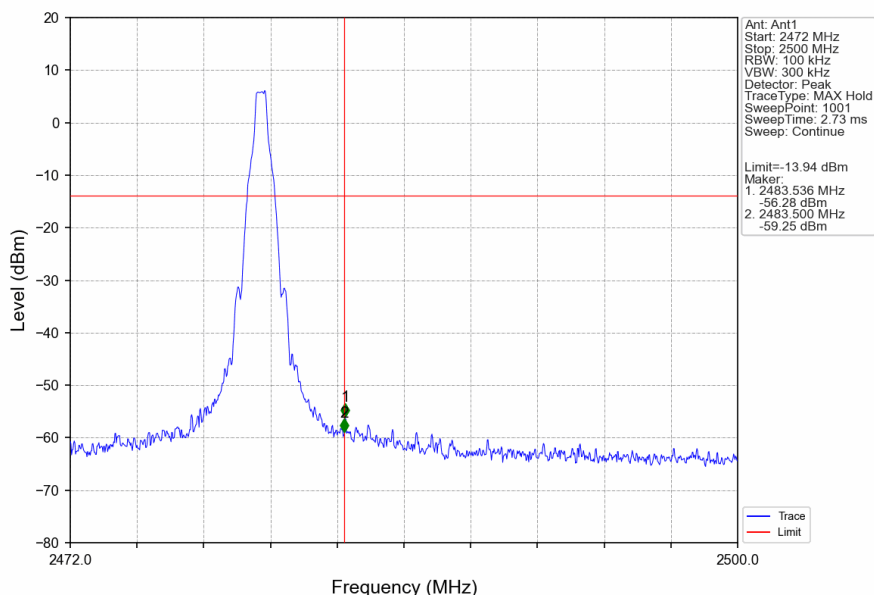
### 7.2.2 CSE



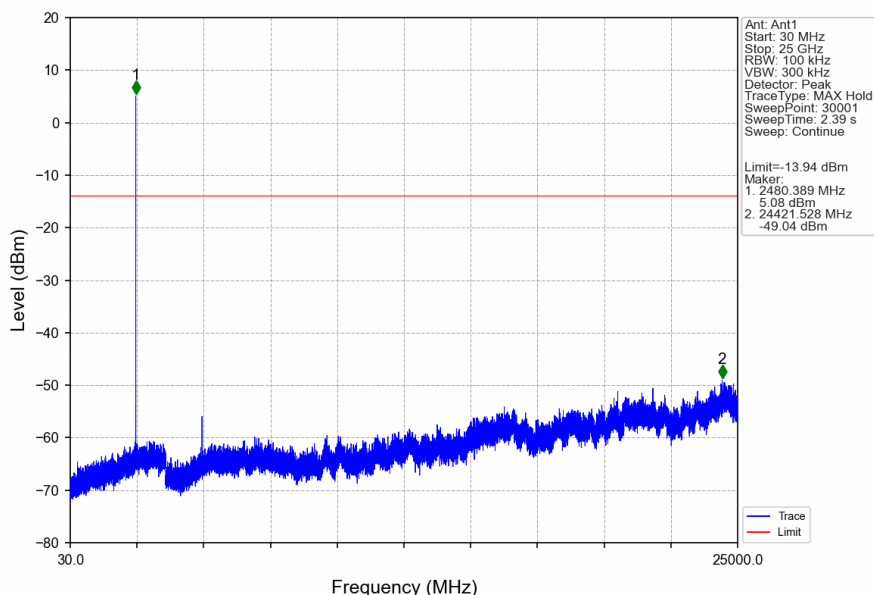
### GFSK DH5 MCH 2441MHz Ant1 NTN



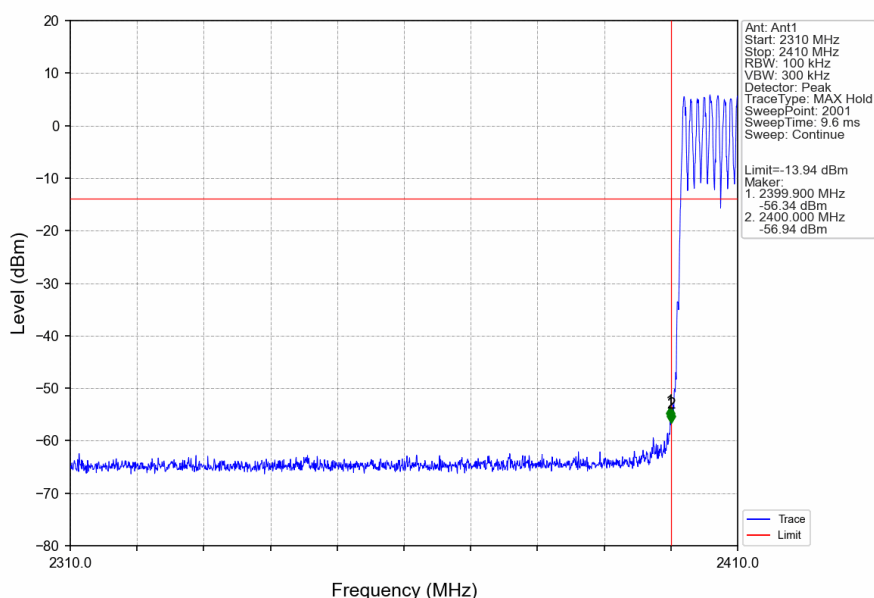
### GFSK DH5 HCH 2480MHz Ant1 NTN



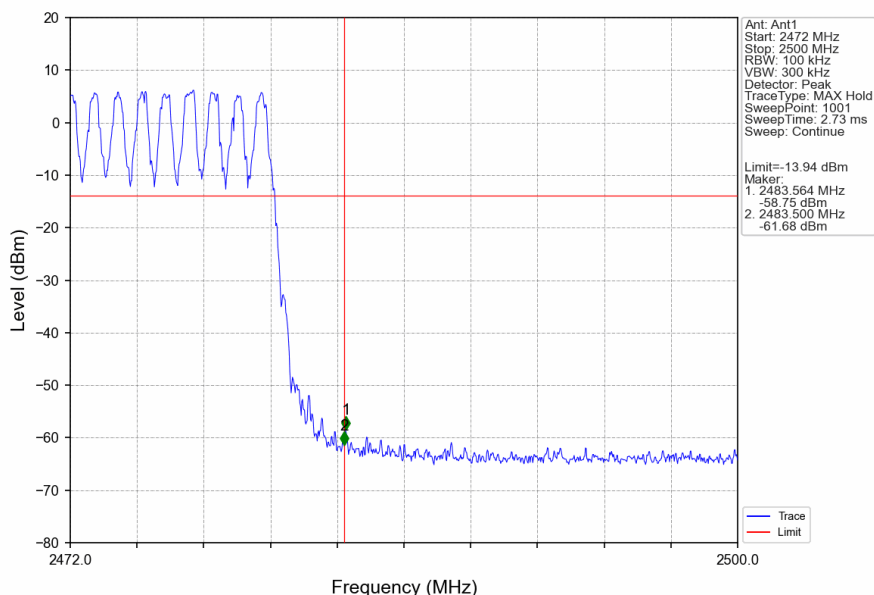
### GFSK DH5 HCH 2480MHz Ant1 NTN



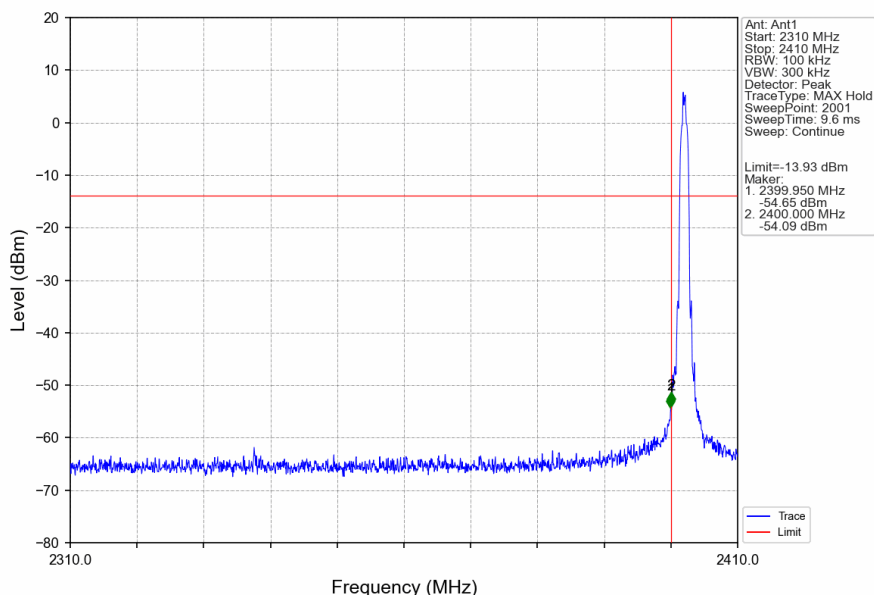
### GFSK DH5 HOPP Ant1 NTN



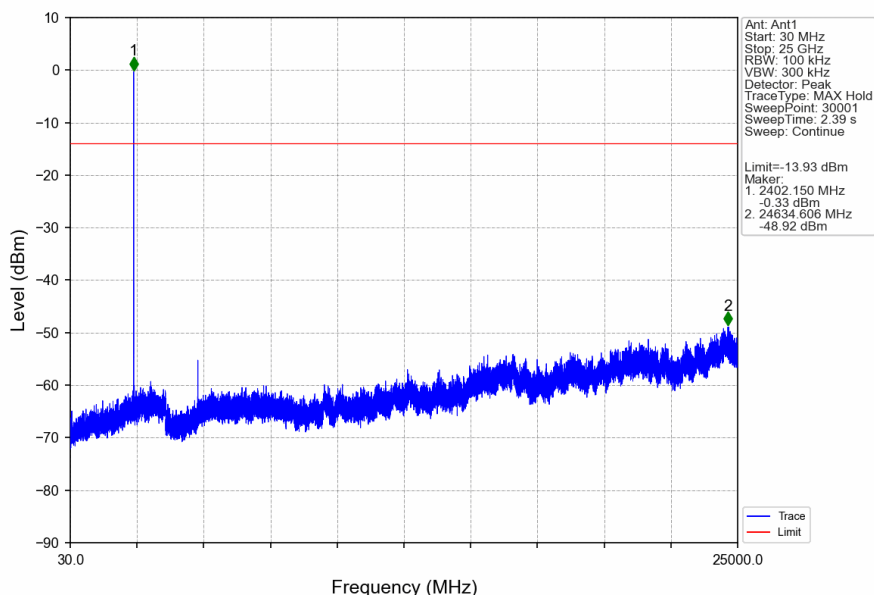
GFSK DH5 HOPP Ant1 NTNV



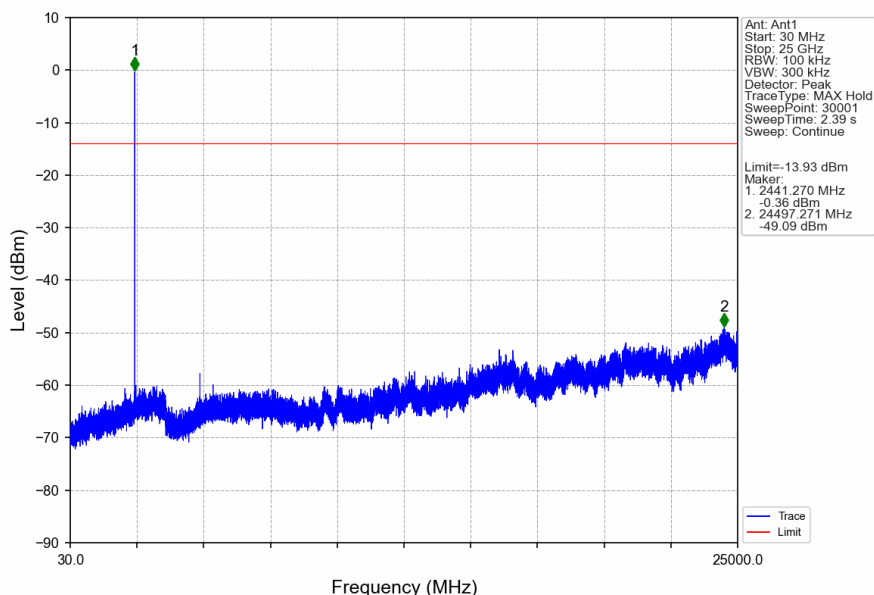
Pi/4DQPSK 2DH5 LCH 2402MHz Ant1 NTNV



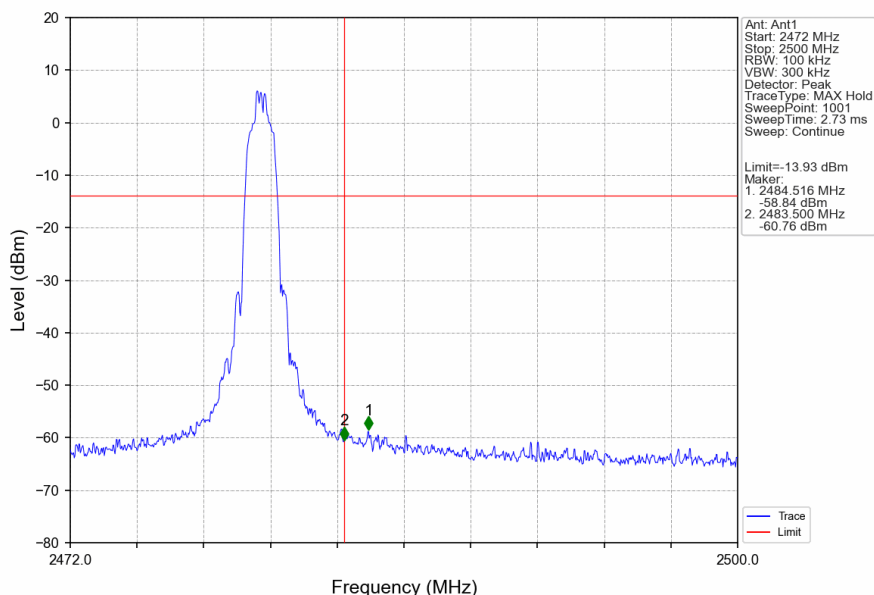
Pi/4DQPSK 2DH5 LCH 2402MHz Ant1 NTN



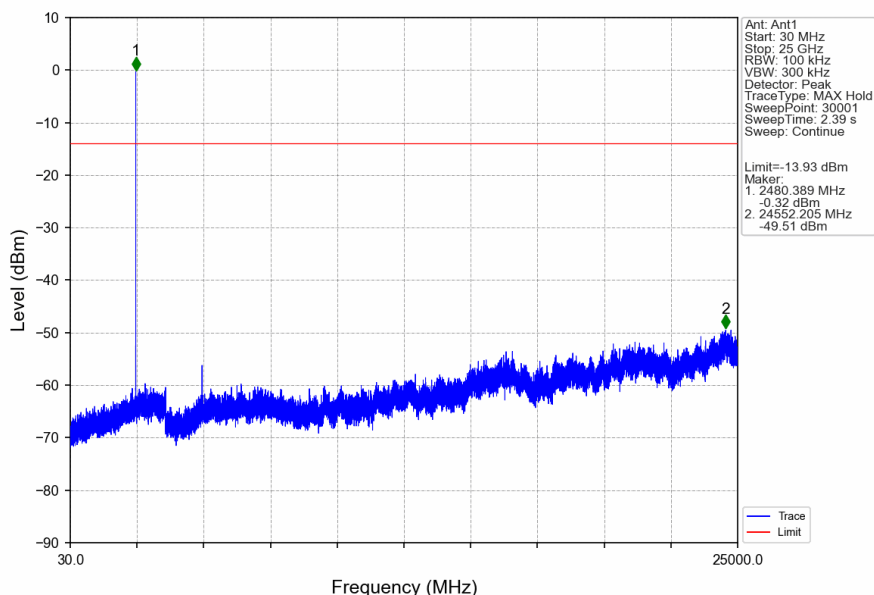
Pi/4DQPSK 2DH5 MCH 2441MHz Ant1 NTN



Pi/4DQPSK 2DH5 HCH 2480MHz Ant1 NTNV



Pi/4DQPSK 2DH5 HCH 2480MHz Ant1 NTNV



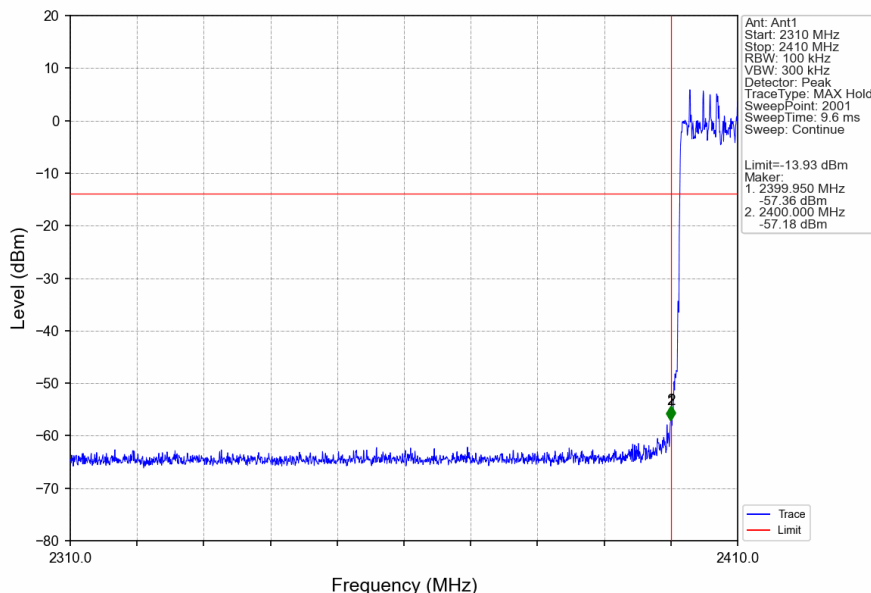
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: [CN.Doccheck@sgs.com](mailto:CN.Doccheck@sgs.com)

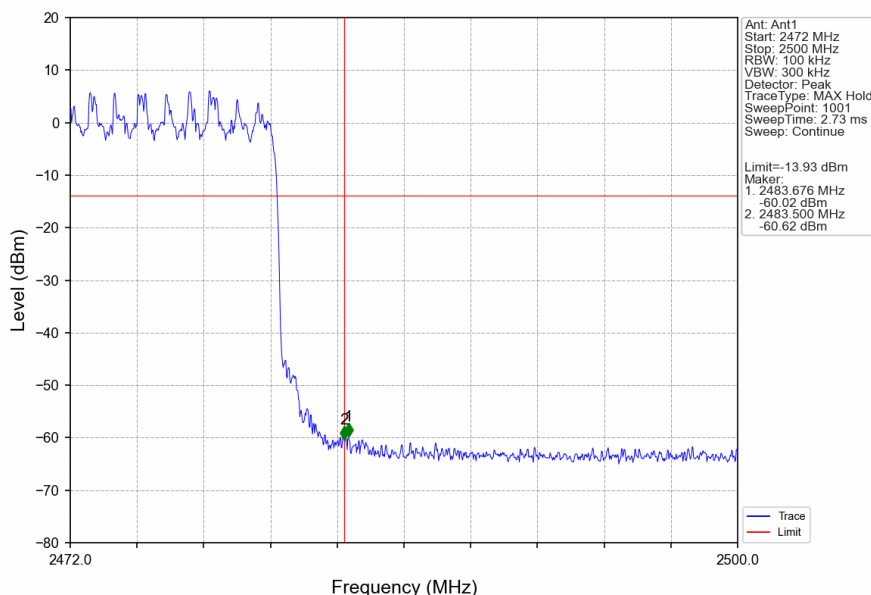
SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch Testing & Calibration Laboratory

No.1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China 518057 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn  
中国·广东·深圳市南山区科技园中区M-10栋1号厂房 邮编: 518057 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

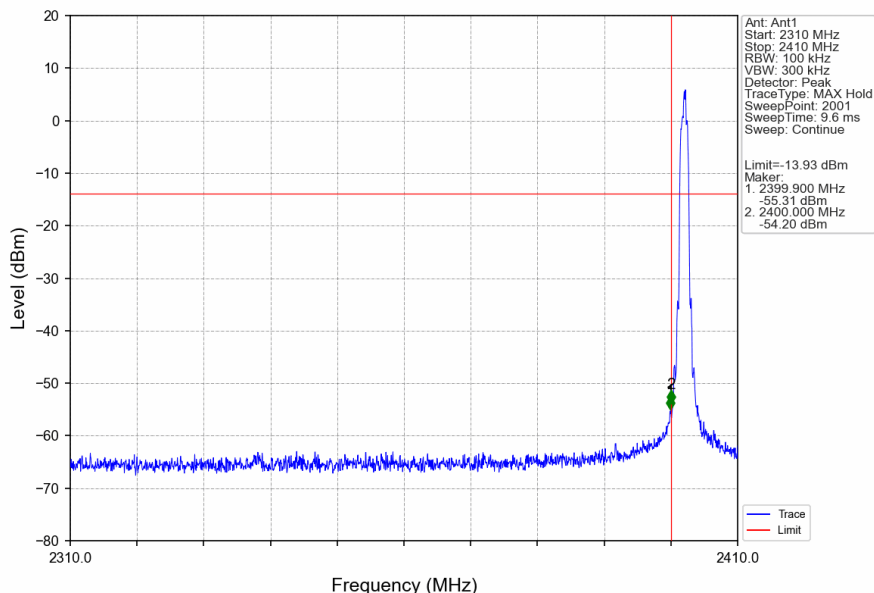
Pi/4DQPSK 2DH5\_HOPP Ant1 NTN



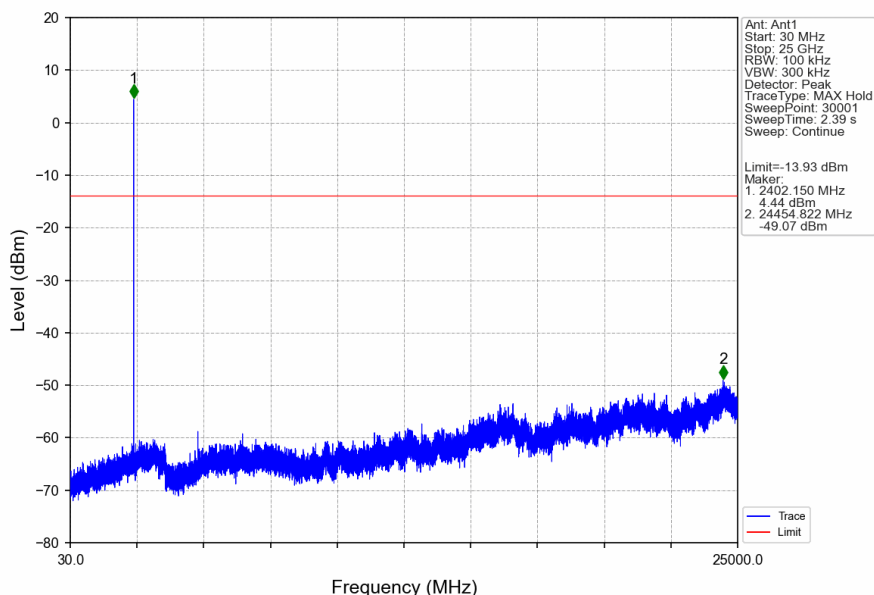
Pi/4DQPSK 2DH5\_HOPP Ant1 NTN



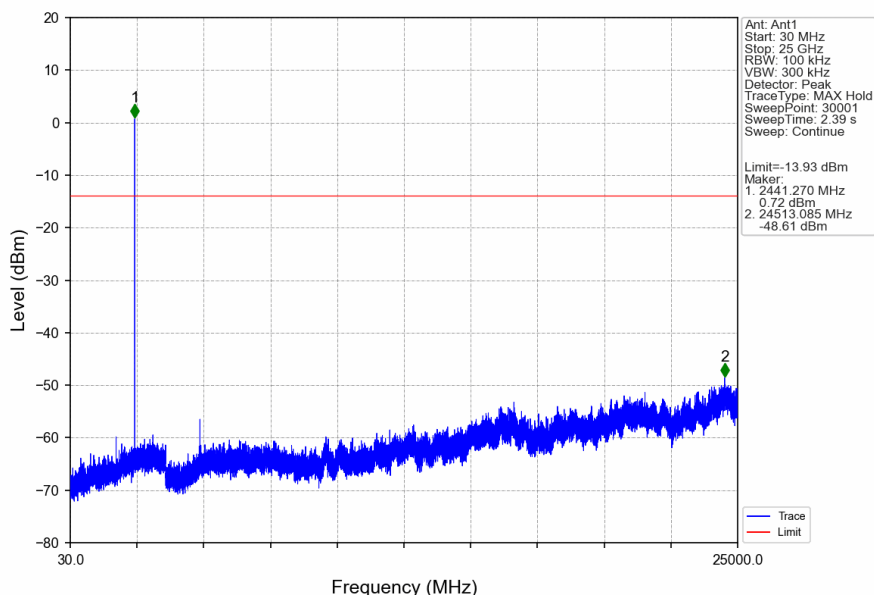
### 8DPSK 3DH5 LCH 2402MHz Ant1 NTNV



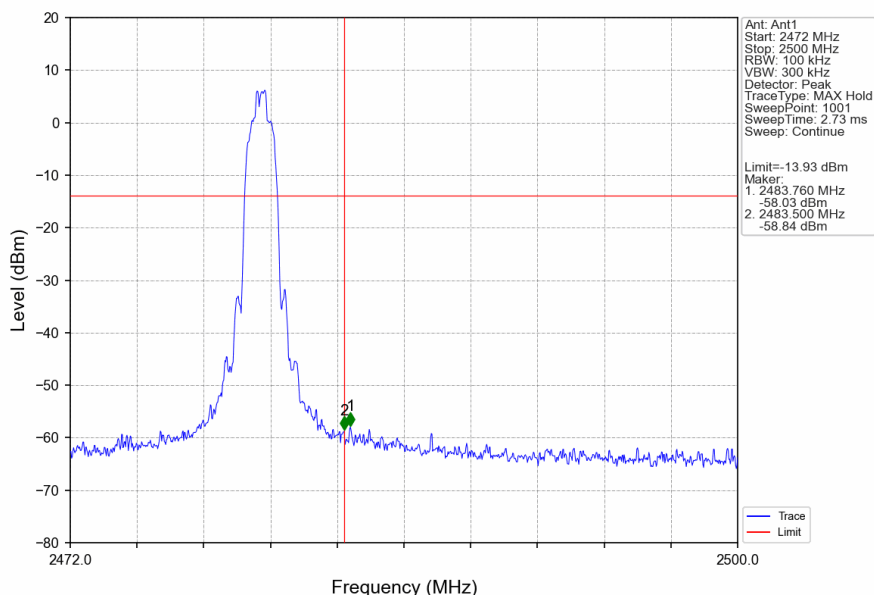
### 8DPSK 3DH5 LCH 2402MHz Ant1 NTNV



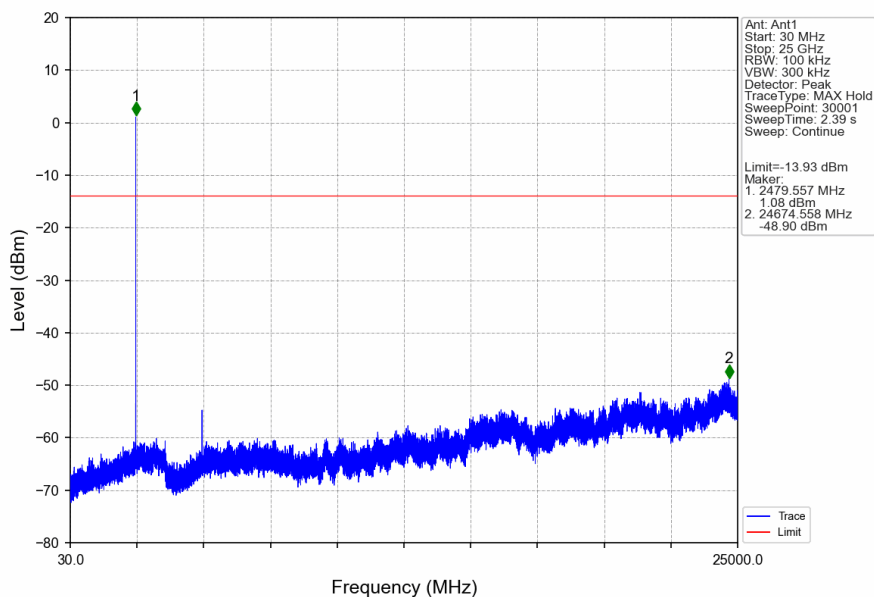
### 8DPSK 3DH5 MCH 2441MHz Ant1 NTN



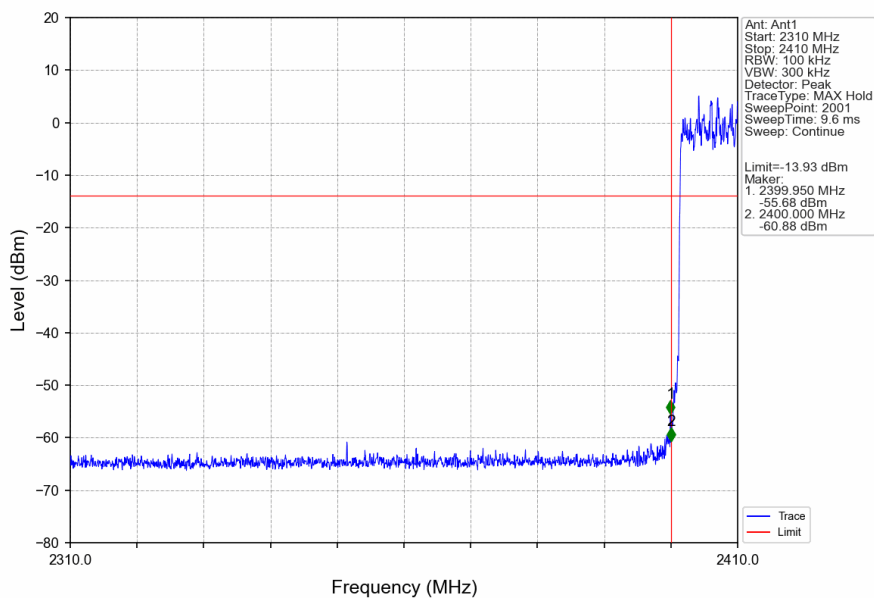
### 8DPSK 3DH5 HCH 2480MHz Ant1 NTN

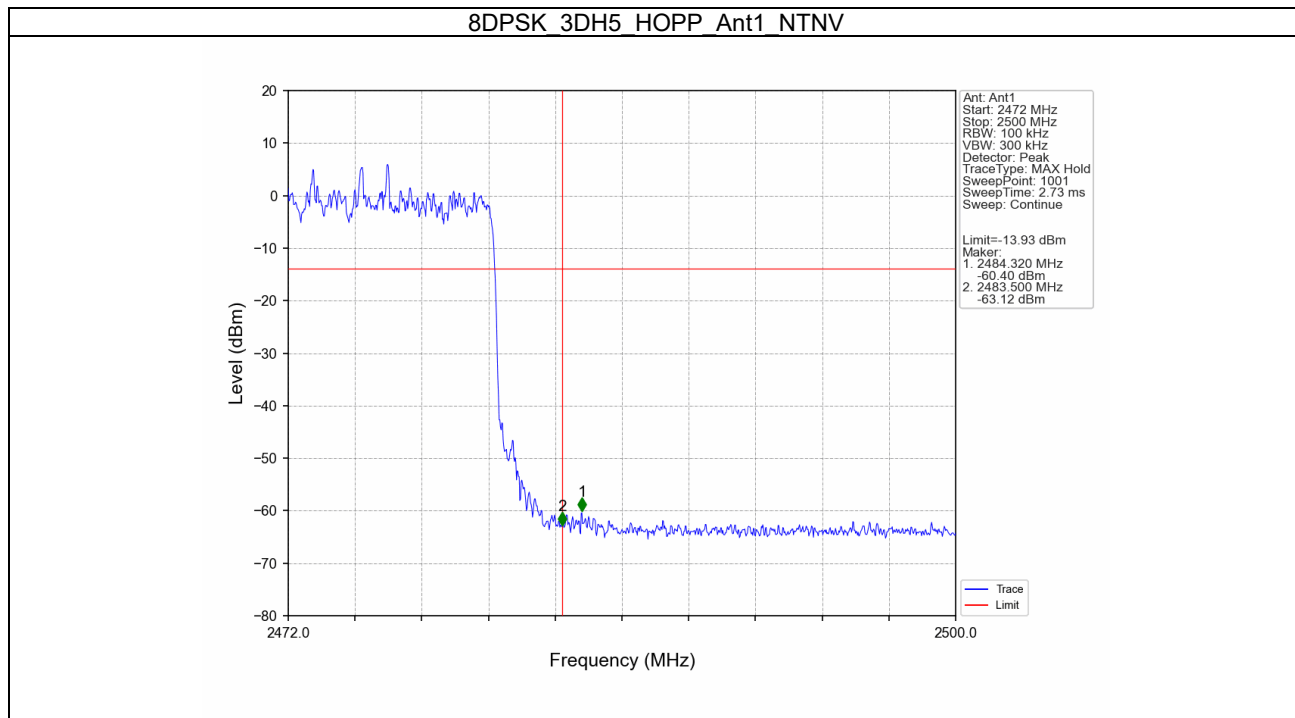


### 8DPSK 3DH5 HCH 2480MHz Ant1 NTN



### 8DPSK 3DH5 HOPP Ant1 NTN





- End of the Report -