

Project No: TM-2207000085P
 Report No.: TMWK2210004066KR

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 Rev.: 01

RADIO TEST REPORT

FCC 47 CFR PART 15 SUBPART C

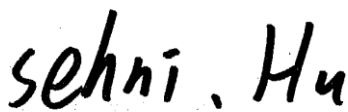
| | |
|---------------------------------|--|
| Test Standard | FCC Part 15.247 |
| FCC ID | NOIKB-E70P24 |
| Product name | 7.8" Digital Note Pad; 7.8" Color Digital Note Pad; 7.8" Digital Reader; 7.8" Color Digital Reader |
| Brand Name | MobiScribe |
| Model No. | E70P24 |
| Test Result | Pass |
| Statements of Conformity | Determination of compliance is based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty. |

The test Result was tested by Compliance Certification Services Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were given in ANSI C63.10: 2013 and compliance standards.

The test results of this report relate only to the tested sample (EUT) identified in this report.

The test Report of full or partial shall not copy. Without written approval of Compliance Certification Services Inc. (Wugu Laboratory)

Approved by:



Sehni Hu
 Supervisor

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
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Revision History

| Rev. | Issue Date | Revisions | Effect Page | Revised By |
|------|-------------------|---------------------------------|-------------|--------------|
| 00 | November 7, 2022 | Initial Issue | ALL | Allison Chen |
| 01 | November 10, 2022 | See the following Note Rev.(01) | P.66-67 | Allison Chen |

Note:**Rev.(01)**

1. Modify bandedge test data in section 4.8.

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1. GENERAL INFORMATION

1.1 EUT INFORMATION

| | |
|----------------------------|--|
| Applicant | NETRONIX, INC. No. 945, Boai St., Jubei City, Hsin-Chu, 30265, Taiwan |
| Manufacturer | NETRONIX, INC. No. 945, Boai St., Jubei City, Hsin-Chu, 30265, Taiwan |
| Equipment | 7.8" Digital Note Pad; 7.8" Color Digital Note Pad; 7.8" Digital Reader; 7.8" Color Digital Reader |
| Model Name | E70P24 |
| Product Discrepancy | Please see remark as below. |
| Brand Name | MobiScribe |
| Received Date | August 5, 2022 |
| Date of Test | September 1~15, 2022 |
| Power Supply | 1. Power from Host System. (DC 5V) 2. Power from Battery. Brand / Model: EVE Energy Co., LTD. / EVE2275A7GH Rating: 3.85VDC, 9.63Wh |

Remark:

- For more details, please refer to the User's manual of the EUT.
- Disclaimer: Antenna information is provided by the applicant, test results of this report are applicable to the sample EUT received.
- Disclaimer: Variant information between/among model numbers / trademarks is provided by the applicant, test results of this report are applicable to the sample EUT received of main test model name.
- Model Discrepancy:

| Product Name | 7.8" Digital Note Pad | 7.8" Color Digital Note Pad | 7.8" Digital Reader | 7.8" Color Digital Reader |
|----------------------|---|---|--|---|
| Model Name | E70P24 | | | |
| Button | N/A | N/A | Yes | Yes |
| Touch Pen | Yes | Yes | N/A | N/A |
| Panel display | Black and White | Color | Black and White | Color |
| Appearance |  |  |  |  |

1.2 INFORMATION ABOUT THE FHSS CHARACTERISTICS

1.2.1 Pseudorandom Frequency Hopping Sequence

The channel is represented by a pseudo-random hopping sequence hopping through the 79 RF channels. The hopping sequence is unique for the piconet and is determined by the Bluetooth device address of the master; the phase in the hopping sequence is determined by the Bluetooth clock of the master. The channel is divided into time slots where each slot corresponds to an RF hop frequency. Consecutive hops correspond to different RF hop frequencies. The nominal hop rate is 1 600 hops/s.

1.2.2 Equal Hopping Frequency Use

The channels of this system will be used equally over the long-term distribution of the hopsets.

1.2.3 Example of a 79 hopping sequence in data mode:

02, 05, 31, 24, 20, 10, 43, 36, 30, 23, 40, 06, 21, 50, 44, 09, 71, 78, 01, 13, 73, 07, 70, 72, 35, 62, 42, 11, 41, 08, 16, 29, 60, 15, 34, 61, 58, 04, 67, 12, 22, 53, 57, 18, 27, 76, 39, 32, 17, 77, 52, 33, 56, 46, 37, 47, 64, 49, 45, 38, 69, 14, 51, 26, 79, 19, 28, 65, 75, 54, 48, 03, 25, 66, 05, 16, 68, 74, 59, 63, 55

1.2.4 System Receiver Input Bandwidth

Each channel bandwidth is 1MHz.

The system receivers have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shift frequencies in synchronization with the transmitted signals.

1.2.5 Equipment Description

15.247(a)(1) that the Rx input bandwidths shift frequencies in synchronization with the transmitted signals.

15.247(g): In accordance with the Bluetooth Industry Standard, the system is designed to comply with all of the regulations in Section 15.247 when the transmitter is presented with a continuous data (or information) system.

15.247(h): In accordance with the Bluetooth Industry Standard, the system does not coordinate its channels selection/ hopping sequence with other frequency hopping systems for the express purpose of avoiding the simultaneous occupancy of individual hopping frequencies by multiple transmitters.

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1.3 EUT CHANNEL INFORMATION

| | |
|-------------------|--|
| Frequency Range | 2402MHz-2480MHz |
| Modulation Type | 1. GFSK for BDR-1Mbps 2. $\pi/4$ -DQPSK for EDR-2Mbps 3. 8DPSK for EDR-3Mbps |
| Number of channel | 79 Channels |

Remark:

Refer as ANSI C63.10: 2013 clause 5.6.1 Table 4 for test channels

| Number of frequencies to be tested | | |
|--|-----------------------|--|
| Frequency range in which device operates | Number of frequencies | Location in frequency range of operation |
| <input type="checkbox"/> 1 MHz or less | 1 | Middle |
| <input type="checkbox"/> 1 MHz to 10 MHz | 2 | 1 near top and 1 near bottom |
| <input checked="" type="checkbox"/> More than 10 MHz | 3 | 1 near top, 1 near middle, and 1 near bottom |

1.4 ANTENNA INFORMATION

| | |
|-----------------------|--|
| Antenna Specification | <input type="checkbox"/> PIFA <input checked="" type="checkbox"/> PCB <input type="checkbox"/> Dipole <input type="checkbox"/> Coils |
| Antenna Gain | Gain: 2.64 dBi |
| Brand / Model | INPAQ Technology Co., Ltd. / RFPCA310710EMLB301 |

Notes:

1.The antenna(s) of the EUT are permanently attached and there are no provisions for connection to an external antenna. So the EUT complies with the requirements of §15.203.

1.5 MEASUREMENT UNCERTAINTY

| PARAMETER | UNCERTAINTY |
|--|-------------|
| AC Powerline Conducted Emission | ± 2.1183 |
| Channel Bandwidth | ± 2.1863 |
| RF output power (Power Meter + Power sensor) | ± 1.2688 |
| Power Spectral density | ± 2.1855 |
| Conducted Bandedge | ± 2.1866 |
| Conducted Spurious Emission | ± 2.1859 |
| Radiated Emission_9kHz-30MHz | ± 3.814 |
| Radiated Emission_30MHz-200MHz | ± 4.272 |
| Radiated Emission_200MHz-1GHz | ± 4.619 |
| Radiated Emission_1GHz-6GHz | ± 5.522 |
| Radiated Emission_6GHz-18GHz | ± 5.228 |
| Radiated Emission_18GHz-26GHz | ± 4.089 |
| Radiated Emission_26GHz-40GHz | ± 4.019 |

Remark:

- 1.This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2
2. ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report.

1.6 FACILITIES AND TEST LOCATION

All measurement facilities used to collect the measurement data are located at

No.11, Wugong 6th Rd., Wugu Dist., New Taipei City, Taiwan.

No. 12, Ln. 116, Wugong 3rd Rd., Wugu Dist., New Taipei City, Taiwan.

CAB identifier: TW1309

| Test site | Test Engineer | Remark |
|--------------------|---------------|--------|
| AC Conduction Room | Tony Chao | - |
| Radiation | Tony Chao | - |
| RF Conducted | Jack Chen | - |

Remark: The lab has been recognized as the FCC accredited lab. under the KDB 974614 D01 and is listed in the FCC public Access Link (PAL) database, FCC Registration No. :444940, the FCC Designation No.:TW1309

1.7 INSTRUMENT CALIBRATION

| RF Conducted Test Site | | | | | |
|------------------------|-----------------------------|----------|---------------|------------------|-----------------|
| Name of Equipment | Manufacturer | Model | Serial Number | Calibration Date | Calibration Due |
| Coaxial Cable | Woken | SUMITOMO | 12 | 2022-03-02 | 2023-03-01 |
| Power Meter | Anritsu | ML2496A | 2136002 | 2021-12-06 | 2022-12-05 |
| EXA Signal Analyzer | Keysight | N9010B | MY60242460 | 2022-01-30 | 2023-01-29 |
| Power Sensor | Anritsu | MA2411B | 1911386 | 2022-08-08 | 2023-08-07 |
| Power Sensor | Anritsu | MA2411B | 1911387 | 2022-08-08 | 2023-08-07 |
| Bluetooth Test Set | Anritsu | MT8852B | 750013 | 2022-05-08 | 2023-05-07 |
| Power Divider | Marvelous Microwave | MVE8586 | 16011205 | 2022-06-29 | 2023-06-28 |
| Software | Radio Test Software Ver. 21 | | | | |

| AC Power-line Conducted Test Room | | | | | |
|-----------------------------------|-------------------------|-----------|---------------|------------------|-----------------|
| Name of Equipment | Manufacturer | Model | Serial Number | Calibration Date | Calibration Due |
| CABLE | EMCI | CFD300-NL | CERF | 2022-06-27 | 2023-06-26 |
| EMI Test Receiver | R&S | ESCI | 100064 | 2022-06-17 | 2023-06-16 |
| LISN | SCHAFFNER | NNB 41 | 03/10013 | 2022-02-15 | 2023-02-14 |
| Software | EZ-EMC(CCS-3A1-CE-wugu) | | | | |

Remark:

1. Each piece of equipment is scheduled for calibration once a year.
2. N.C.R. = No Calibration Required.

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| 3M 966 Chamber Test Site | | | | | |
|--------------------------|-------------------|------------------------|------------------------|------------------|-----------------|
| Name of Equipment | Manufacturer | Model | Serial Number | Calibration Date | Calibration Due |
| K-Type Cable | Huber+Suhner | SUCOFLEX 102 | 29406/2 | 2021-12-05 | 2022-12-04 |
| Bi-Log Antenna | Sunol Sciences | JB3 | A030105 | 2022-08-03 | 2023-08-02 |
| Spectrum Analyzer | Agilent | E4446A | MY46180323 | 2021-12-06 | 2022-12-05 |
| Thermo-Hygro Meter | WISEWIND | 1206 | D07 | 2021-12-28 | 2022-12-27 |
| Loop Antenna | COM-POWER | AL-130 | 121051 | 2022-04-13 | 2023-04-12 |
| Coaxial Cable | EMCI | EMC101G- KM-KM-500 | 211041 | 2021-12-23 | 2022-12-22 |
| Coaxial Cable | EMC | EMC101G-K M-KM-9000 | 211042 | 2021-12-23 | 2022-12-22 |
| Horn Antenna | ETS LINDGREN | 3116 | 00026370 | 2021-11-30 | 2022-11-29 |
| Cable | Woken | J-1099 | 201709090004 | 2021-12-23 | 2022-12-22 |
| Preamplifier | EMEC | EM330 | 060609 | 2022-02-23 | 2023-02-22 |
| Preamplifier | HP | 8449B | 3008A00965 | 2021-12-24 | 2022-12-23 |
| Band Reject Filter | MICRO TRONICS | BRM 50702 | 112 | 2021-11-23 | 2022-11-22 |
| Cable | Huber+Suhner | 104PEA | 20995+11112+ 182330 | 2022-02-23 | 2023-02-22 |
| Coaxial Cable | EMCI | EMC105 | 190914+33953 | 2022-06-15 | 2023-06-14 |
| Horn Antenna | ETC | MCTD 1209 | DRH13M02003 | 2022-01-25 | 2023-01-24 |
| Turn Table | CCS | CC-T-1F | N/A | N.C.R | N.C.R |
| Controller | CCS | CC-C-1F | N/A | N.C.R | N.C.R |
| Antenna Tower | CCS | CC-A-1F | N/A | N.C.R | N.C.R |
| Software | e3 6.11-20180419c | | | | |

Remark:

1. Each piece of equipment is scheduled for calibration once a year.
2. N.C.R. = No Calibration Required.

1.8 SUPPORT AND EUT ACCESSORIES EQUIPMENT

| EUT Accessories Equipment | | | | | | |
|---------------------------|-----------|-------|-------|------------|--------|----|
| No. | Equipment | Brand | Model | Series No. | FCC ID | IC |
| | N/A | | | | | |

| Support Equipment | | | | | | |
|-------------------|-----------|---------|------------|------------|----------|-----|
| No. | Equipment | Brand | Model | Series No. | FCC ID | IC |
| 1 | NB(E) | Lenovo | IBM 7663 | N/A | PD97260H | N/A |
| 2 | NB(G) | Lenovo | IBM 1951 | N/A | N/A | N/A |
| 3 | Adapter | SAMSUNG | ETA-U90JWS | N/A | N/A | N/A |

1.9 TEST METHODOLOGY AND APPLIED STANDARDS

The test methodology, setups and results comply with all requirements in accordance with ANSI C63.10:2013, FCC Part 2, FCC Part 15.247.

2. TEST SUMMARY

| FCC Standard Section | Report Section | Test Item | Result |
|----------------------|----------------|-----------------------------|--------|
| 15.203 | 1.3 | Antenna Requirement | Pass |
| 15.207(a) | 4.1 | AC Conducted Emission | Pass |
| 15.247(a)(1) | 4.2 | 20 dB Bandwidth | Pass |
| - | 4.2 | Occupied Bandwidth (99%) | Pass |
| 15.247(b)(1) | 4.3 | Output Power Measurement | Pass |
| 15.247(a)(1) | 4.4 | Frequency Separation | Pass |
| 15.247(a)(1)(iii) | 4.5 | Number of Hopping | Pass |
| 15.247(d) | 4.6 | Conducted Band Edge | Pass |
| 15.247(d) | 4.6 | Conducted Spurious Emission | Pass |
| 15.247(a)(1)(iii) | 4.7 | Time of Occupancy | Pass |
| 15.247(d) | 4.8 | Radiation Band Edge | Pass |
| 15.247(d) | 4.8 | Radiation Spurious Emission | Pass |

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3. DESCRIPTION OF TEST MODES

3.1 THE WORST MODE OF OPERATING CONDITION

| | |
|--------------------------|---|
| Operation mode | GFSK for BDR-1Mbps (DH5) $\pi/4$ -DQPSK for 2Mbps (2DH5) 8DPSK for EDR-3Mbps (3DH5) |
| Test Channel Frequencies | <p>GFSK for BDR-1Mbps: 1.Lowest Channel: 2402MHz 2.Middle Channel: 2441MHz 3.Highest Channel: 2480MHz</p> <p>$\pi/4$-DQPSK for 2Mbps: 1.Lowest Channel: 2402MHz 2.Middle Channel: 2441MHz 3.Highest Channel: 2480MHz</p> <p>8DPSK for EDR-3Mbps: 1.Lowest Channel: 2402MHz 2.Middle Channel: 2441MHz 3.Highest Channel: 2480MHz</p> |

Remark:

1. EUT pre-scanned data rate of output power for each mode, the worst data rate were recorded in this report.
2. The system support GFSK , $\pi/4$ DQPSK ,8DPSK , the $\pi/4$ DQPSK were reduced since the identical parameters with 8dpsk. In the following test items, frequency hopping, Conducted band edge, radiated band edge and spurious emissions.

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3.2 THE WORST MODE OF MEASUREMENT

| AC Power Line Conducted Emission | |
|----------------------------------|--|
| Test Condition | AC Power line conducted emission for line and neutral |
| Power supply Mode | Mode 1: EUT (7.8" Digital Note Pad) power by Adapter Mode 2: EUT (7.8" Digital Reader) power by Adapter Mode 3: EUT (7.8" Color Digital Note Pad) power by Adapter Mode 4: EUT (7.8" Color Digital Reader) power by Adapter |
| Worst Mode | <input checked="" type="checkbox"/> Mode 1 <input type="checkbox"/> Mode 2 <input type="checkbox"/> Mode 3 <input type="checkbox"/> Mode 4 |

| Radiated Emission Measurement Below 1G | |
|--|--|
| Test Condition | Radiated Emission Below 1G |
| Power supply Mode | Mode 1: EUT (7.8" Digital Reader) power by Host System Mode 2: EUT (7.8" Digital Note Pad) power by Host System Mode 3: EUT (7.8" Color Digital Reader) power by Host System Mode 4: EUT (7.8" Color Digital Note Pad) power by Host System |
| Worst Mode | <input checked="" type="checkbox"/> Mode 1 <input checked="" type="checkbox"/> Mode 2 <input checked="" type="checkbox"/> Mode 3 <input checked="" type="checkbox"/> Mode 4 |

| Radiated Emission Measurement Above 1G | |
|--|---|
| Test Condition | Radiated Emission Above 1G |
| Power supply Mode | Mode 1: EUT (7.8" Digital Reader) power by Host System Mode 2: EUT (7.8" Digital Note Pad) power by Host System Mode 3: EUT (7.8" Color Digital Reader) power by Host System Mode 4: EUT (7.8" Color Digital Note Pad) power by Host System |
| Worst Mode | <input type="checkbox"/> Mode 1 <input type="checkbox"/> Mode 2 <input type="checkbox"/> Mode 3 <input checked="" type="checkbox"/> Mode 4 |
| Worst Position | <input type="checkbox"/> Placed in fixed position. <input checked="" type="checkbox"/> Placed in fixed position at X-Plane (E2-Plane) <input type="checkbox"/> Placed in fixed position at Y-Plane (E1-Plane) <input type="checkbox"/> Placed in fixed position at Z-Plane (H-Plane) |

Remark:

1. The worst mode was record in this test report.
2. EUT pre-scanned in three axis ,X,Y, Z and two polarity, for radiated measurement. The worst case(X-Plane) were recorded in this report.
3. Samples are available in four configurations. RF hardware components and antenna parts are the same. For different configurations, RSE is evaluated at below 1GHz and ac line, all test items are tested using the worst model.
4. AC power line conducted emission were performed the EUT transmit at the highest output power channel as worst case.
5. Radiation emission(below 1GH) were performed the EUT transmit at the BDR mode's high channel as worst case.

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3.3 EUT DUTY CYCLE

Temperature: 24.1~24.4°C

Test date: September 1~2, 2022

Humidity: 51~53% RH

Tested by: Jack Chen

For GFSK (1Mbps)

| Configuration | Duty Cycle (%) = Ton / (Ton+Toff) | Duty Factor (dB) =10*log (1/Duty Cycle) | 1/T (kHz) | VBW setting (kHz) |
|---------------|--------------------------------------|---|-----------|----------------------|
| DH1 | 30.80 | 5.11 | 2.60 | 3.00 |
| DH3 | 66.00 | 1.80 | 0.61 | 1.00 |
| DH5 | 77.20 | 1.12 | 0.35 | 1.00 |

For π/4 DQPSK (2Mbps)

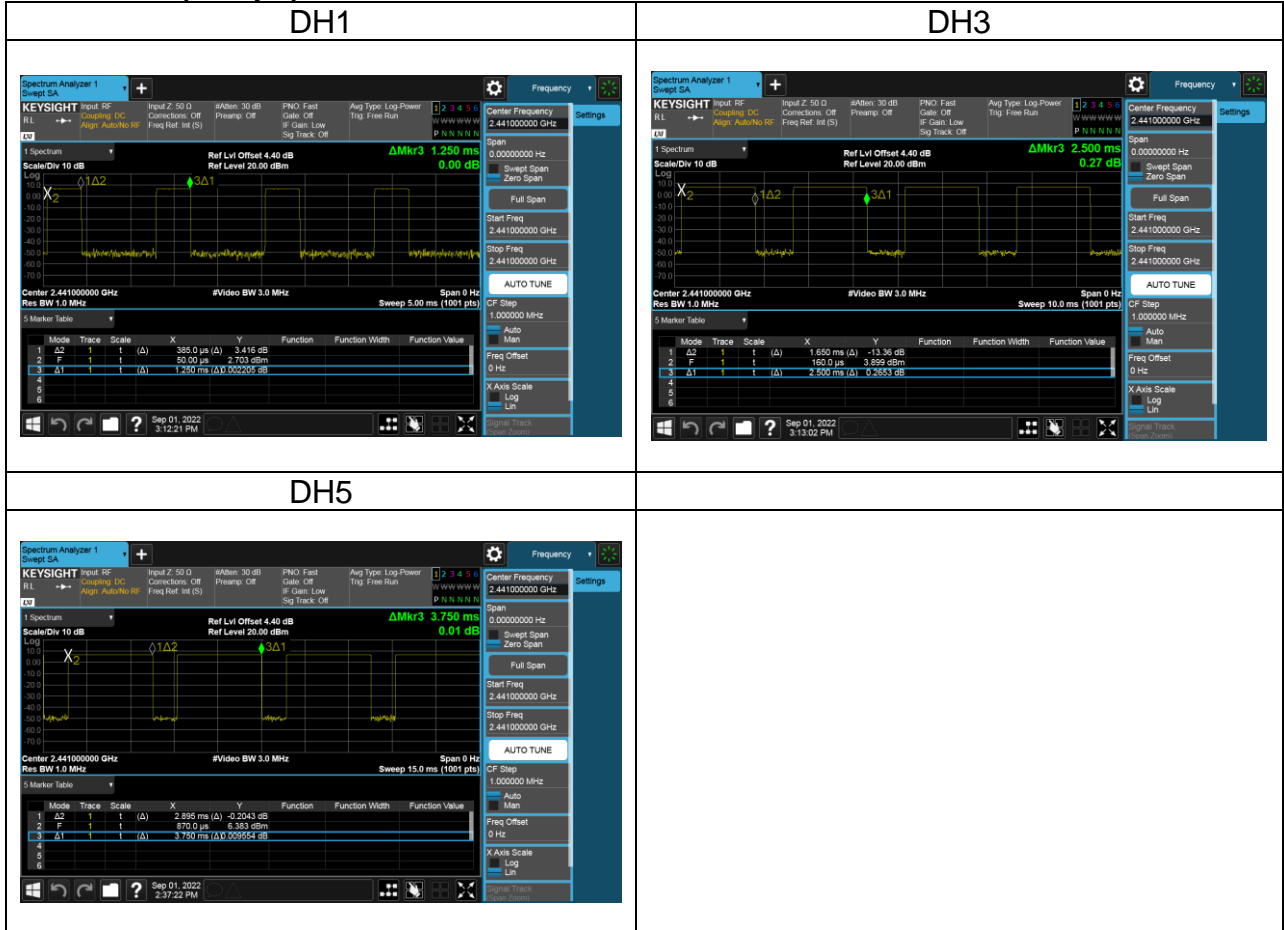
| Configuration | Duty Cycle (%) = Ton / (Ton+Toff) | Duty Factor (dB) =10*log (1/Duty Cycle) | 1/T (kHz) | VBW setting (kHz) |
|---------------|--------------------------------------|---|-----------|----------------------|
| 2DH1 | 31.20 | 5.06 | 2.56 | 3.00 |
| 2DH3 | 65.60 | 1.83 | 0.61 | 1.00 |
| 2DH5 | 77.20 | 1.12 | 0.35 | 1.00 |

For 8-DPSK (3Mbps)

| Configuration | Duty Cycle (%) = Ton / (Ton+Toff) | Duty Factor (dB) =10*log (1/Duty Cycle) | 1/T (kHz) | VBW setting (kHz) |
|---------------|--------------------------------------|---|-----------|----------------------|
| 3DH1 | 30.80 | 5.11 | 2.60 | 3.00 |
| 3DH3 | 65.20 | 1.86 | 0.61 | 1.00 |
| 3DH5 | 77.20 | 1.12 | 0.35 | 1.00 |

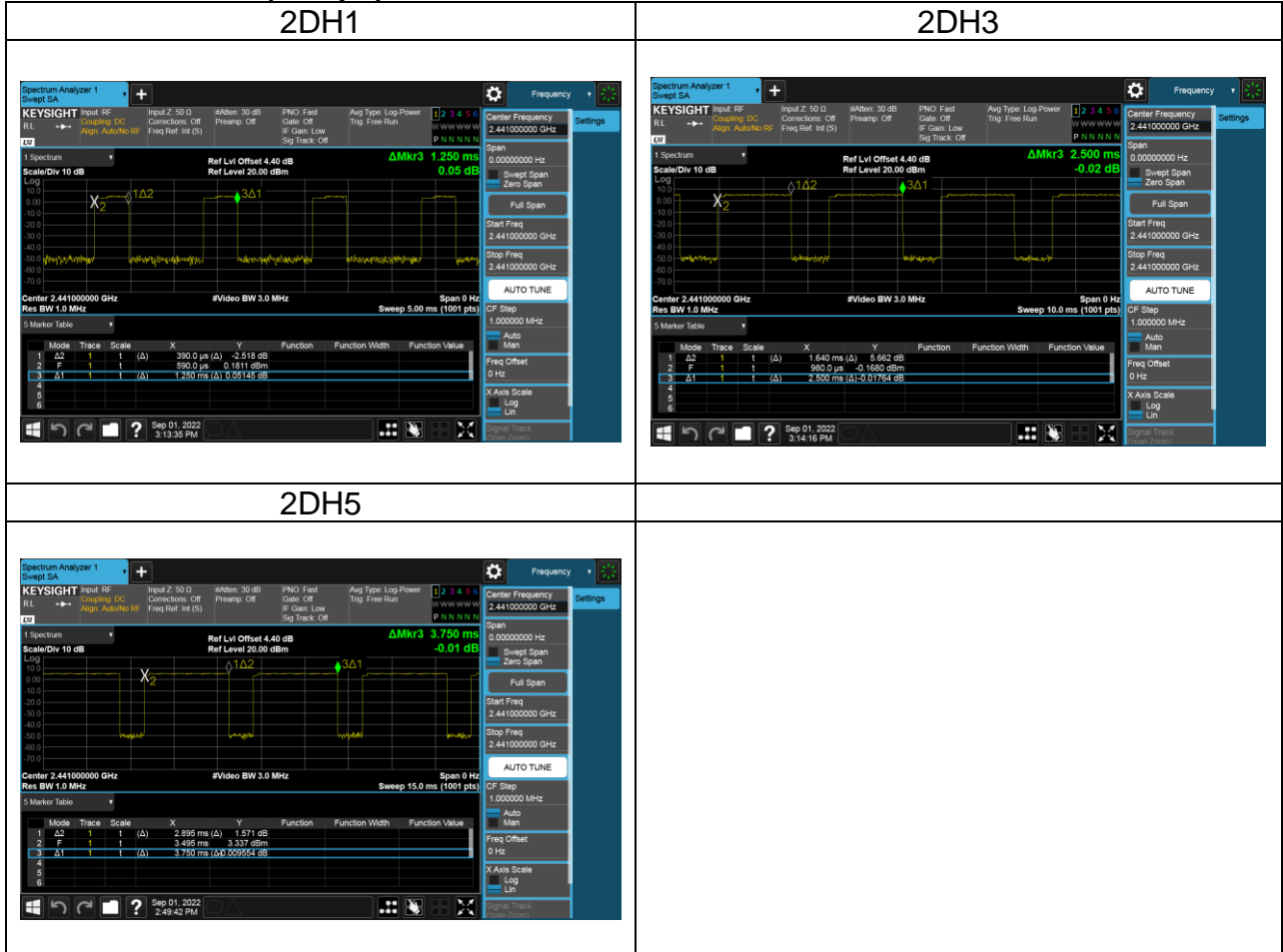
Report No.: TMWK2210004066KR

For GFSK (1Mbps)



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For $\pi/4$ DQPSK (2Mbps)



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For 8-DPSK (3Mbps)



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4. TEST RESULT

4.1 AC POWER LINE CONDUCTED EMISSION

4.1.1 Test Limit

According to §15.207(a),

| Frequency Range (MHz) | Limits(dB μ V) | |
|-----------------------|--------------------|-----------|
| | Quasi-peak | Average |
| 0.15 to 0.50 | 66 to 56* | 56 to 46* |
| 0.50 to 5 | 56 | 46 |
| 5 to 30 | 60 | 50 |

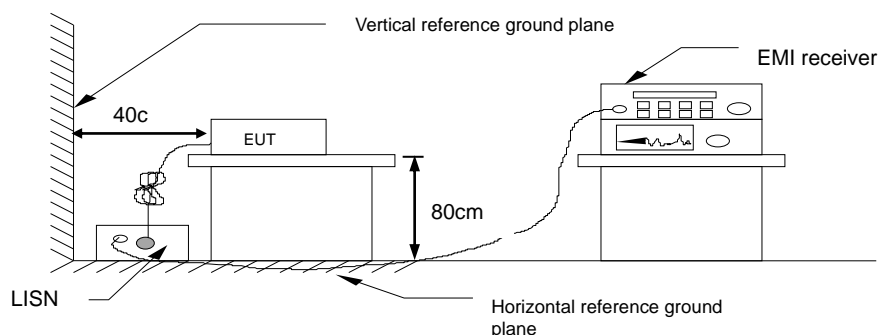
* Decreases with the logarithm of the frequency.

4.1.2 Test Procedure

Test method Refer as ANSI C63.10: 2013 clause 6.2,

1. The EUT was placed on a non-conducted table, which is 0.8m above horizontal ground plane and 0.4m above vertical ground plane.
2. EUT connected to the line impedance stabilization network (LISN)
3. Receiver set RBW of 9kHz and Detector Peak, and note as quasi-peak and average.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. Recorded Line for Neutral and Line.

4.1.3 Test Setup



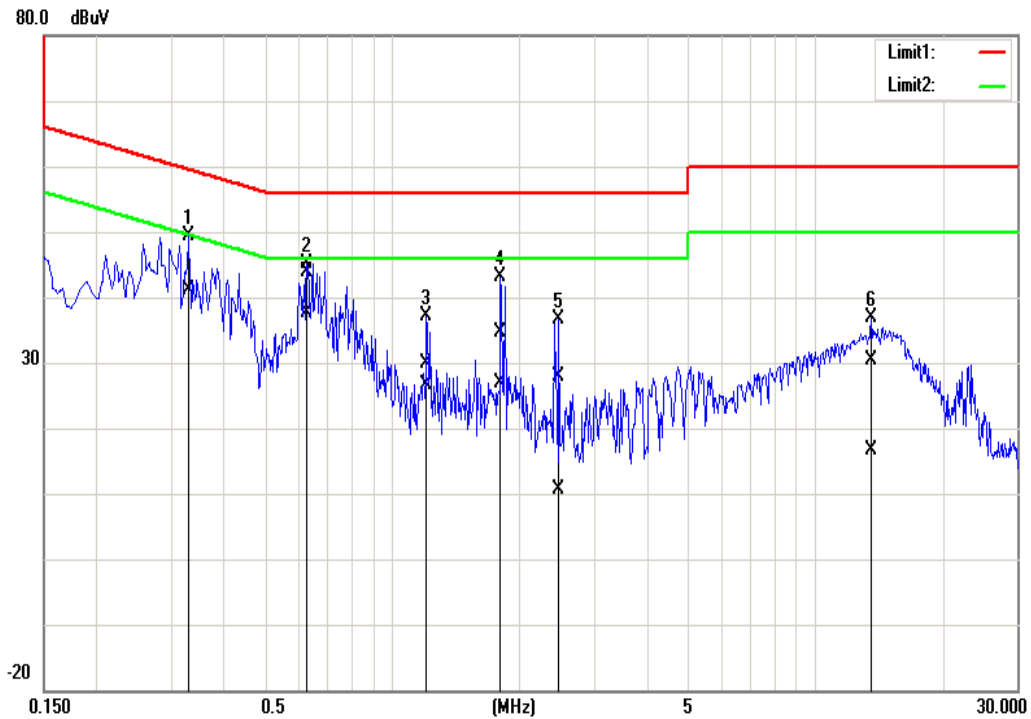
4.1.4 Test Result

Pass.

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Test Data

| | | | |
|---------------|--------------|---------------|--------------------|
| Test Mode: | BT BR | Temp/Hum | 24.3(°C)/ 52%RH |
| Phase: | Line | Test Date | September 15, 2022 |
| Test Voltage: | 120Vac, 60Hz | Test Engineer | Tony Chao |

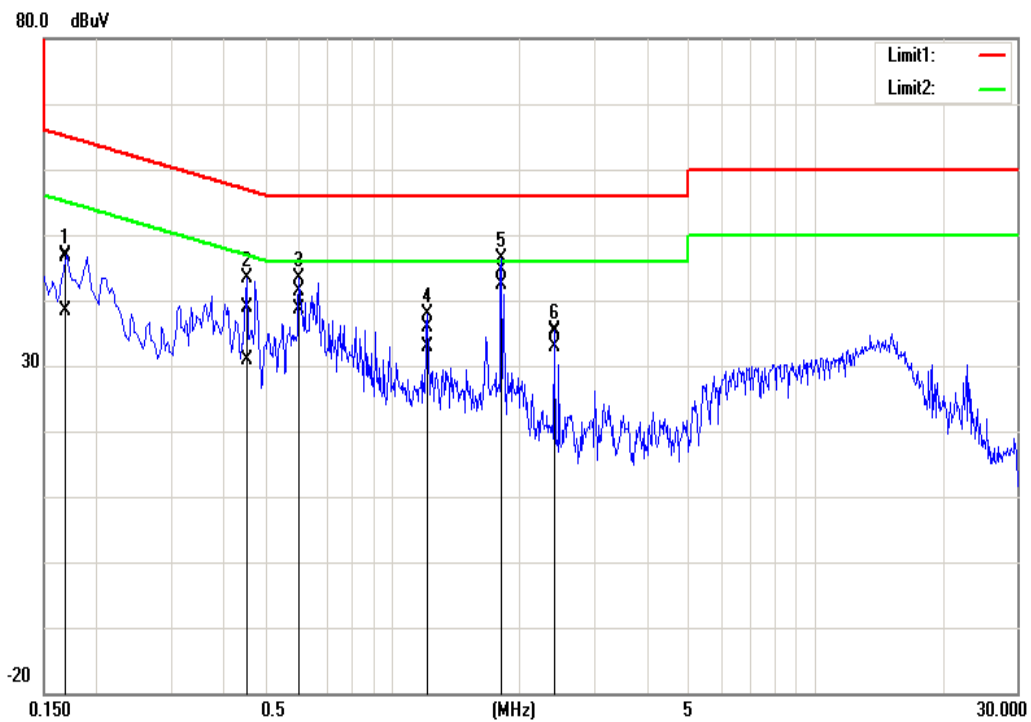


| Frequency (MHz) | Quasi Peak reading (dBuV) | Average reading (dBuV) | Correction factor (dB) | Quasi Peak result (dBuV) | Average result (dBuV) | Quasi Peak limit (dBuV) | Average limit (dBuV) | Quasi Peak margin (dB) | Average margin (dB) | Remark |
|-----------------|---------------------------|------------------------|------------------------|--------------------------|-----------------------|-------------------------|----------------------|------------------------|---------------------|--------|
| 0.3300 | 39.16 | 30.98 | 10.19 | 49.35 | 41.17 | 59.45 | 49.45 | -10.10 | -8.28 | Pass |
| 0.6300 | 33.76 | 27.41 | 10.19 | 43.95 | 37.60 | 56.00 | 46.00 | -12.05 | -8.40 | Pass |
| 1.2060 | 19.67 | 16.49 | 10.22 | 29.89 | 26.71 | 56.00 | 46.00 | -26.11 | -19.29 | Pass |
| 1.8060 | 24.38 | 16.74 | 10.25 | 34.63 | 26.99 | 56.00 | 46.00 | -21.37 | -19.01 | Pass |
| 2.4820 | 17.58 | 0.26 | 10.26 | 27.84 | 10.52 | 56.00 | 46.00 | -28.16 | -35.48 | Pass |
| 13.5580 | 19.93 | 6.24 | 10.36 | 30.29 | 16.60 | 60.00 | 50.00 | -29.71 | -33.40 | Pass |

Note: Correction factor = LISN loss + Cable loss.

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| | | | |
|---------------|--------------|---------------|--------------------|
| Test Mode: | BT BR | Temp/Hum | 24.3(°C)/ 52%RH |
| Phase: | Neutral | Test Date | September 15, 2022 |
| Test Voltage: | 120Vac, 60Hz | Test Engineer | Tony Chao |

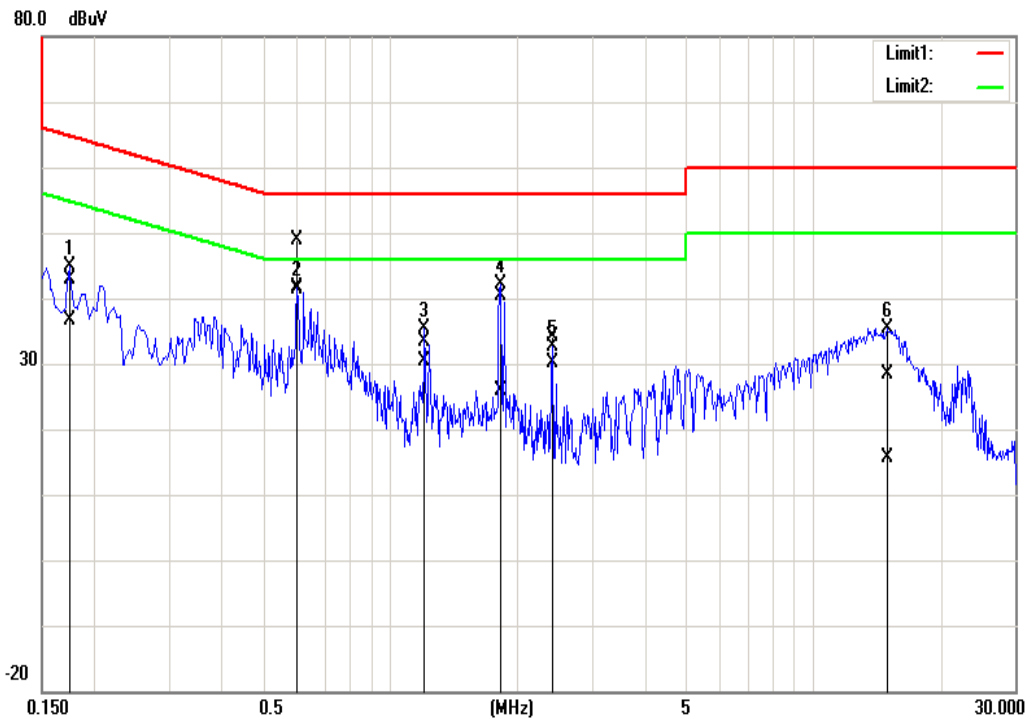


| Frequency (MHz) | Quasi Peak reading (dBuV) | Average reading (dBuV) | Correction factor (dB) | Quasi Peak result (dBuV) | Average result (dBuV) | Quasi Peak limit (dBuV) | Average limit (dBuV) | Quasi Peak margin (dB) | Average margin (dB) | Remark |
|-----------------|---------------------------|------------------------|------------------------|--------------------------|-----------------------|-------------------------|----------------------|------------------------|---------------------|--------|
| 0.1700 | 36.46 | 28.19 | 10.17 | 46.63 | 38.36 | 64.96 | 54.96 | -18.33 | -16.60 | Pass |
| 0.4540 | 28.79 | 20.66 | 10.18 | 38.97 | 30.84 | 56.80 | 46.80 | -17.83 | -15.96 | Pass |
| 0.6020 | 31.11 | 28.46 | 10.18 | 41.29 | 38.64 | 56.00 | 46.00 | -14.71 | -7.36 | Pass |
| 1.2100 | 25.58 | 22.65 | 10.21 | 35.79 | 32.86 | 56.00 | 46.00 | -20.21 | -13.14 | Pass |
| 1.8100 | 34.36 | 32.16 | 10.23 | 44.59 | 42.39 | 56.00 | 46.00 | -11.41 | -3.61 | Pass |
| 2.4140 | 25.00 | 22.66 | 10.24 | 35.24 | 32.90 | 56.00 | 46.00 | -20.76 | -13.10 | Pass |

Note: Correction factor = LISN loss + Cable loss.

Report No.: TMWK2210004066KR

| | | | |
|---------------|--------------|---------------|--------------------|
| Test Mode: | BT EDR | Temp/Hum | 24.3(°C)/ 52%RH |
| Phase: | Line | Test Date | September 15, 2022 |
| Test Voltage: | 120Vac, 60Hz | Test Engineer | Tony Chao |

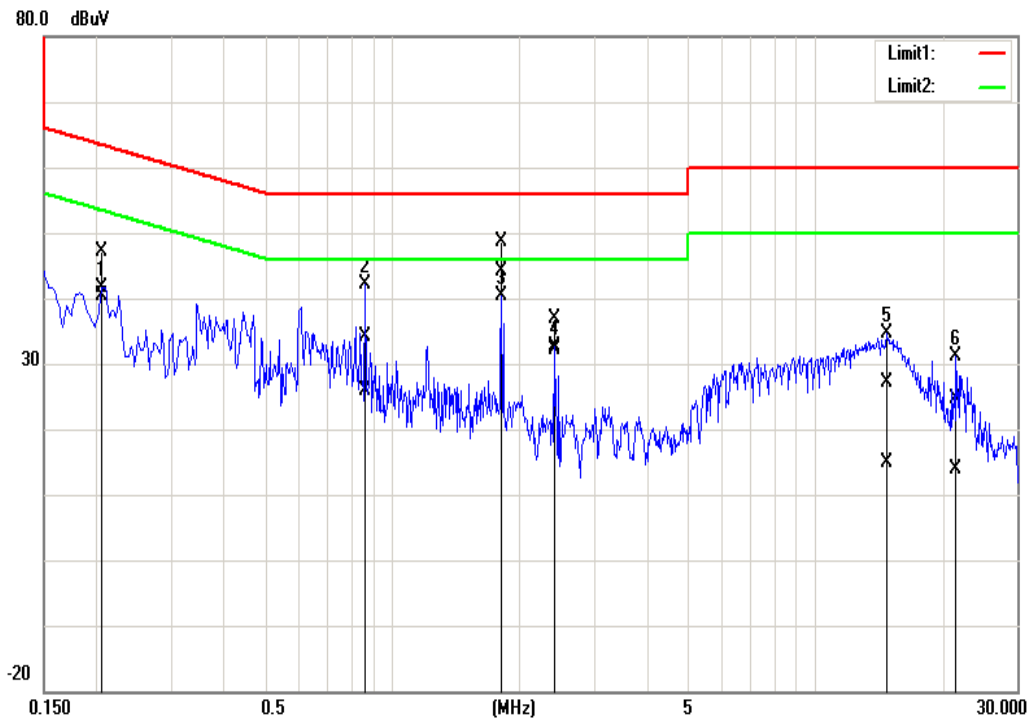


| Frequency (MHz) | Quasi Peak reading (dBuV) | Average reading (dBuV) | Correction factor (dB) | Quasi Peak result (dBuV) | Average result (dBuV) | Quasi Peak limit (dBuV) | Average limit (dBuV) | Quasi Peak margin (dB) | Average margin (dB) | Remark |
|-----------------|---------------------------|------------------------|------------------------|--------------------------|-----------------------|-------------------------|----------------------|------------------------|---------------------|--------|
| 0.1740 | 32.78 | 26.43 | 10.17 | 42.95 | 36.60 | 64.77 | 54.77 | -21.82 | -18.17 | Pass |
| 0.6020 | 38.63 | 31.24 | 10.19 | 48.82 | 41.43 | 56.00 | 46.00 | -7.18 | -4.57 | Pass |
| 1.2060 | 23.20 | 20.22 | 10.22 | 33.42 | 30.44 | 56.00 | 46.00 | -22.58 | -15.56 | Pass |
| 1.8220 | 30.01 | 15.67 | 10.25 | 40.26 | 25.92 | 56.00 | 46.00 | -15.74 | -20.08 | Pass |
| 2.4140 | 23.77 | 19.88 | 10.26 | 34.03 | 30.14 | 56.00 | 46.00 | -21.97 | -15.86 | Pass |
| 14.9900 | 18.05 | 5.21 | 10.36 | 28.41 | 15.57 | 60.00 | 50.00 | -31.59 | -34.43 | Pass |

Note: Correction factor = LISN loss + Cable loss.

Report No.: TMWK2210004066KR

| | | | |
|---------------|--------------|---------------|--------------------|
| Test Mode: | BT EDR | Temp/Hum | 24.3(°C)/ 52%RH |
| Phase: | Neutral | Test Date | September 15, 2022 |
| Test Voltage: | 120Vac, 60Hz | Test Engineer | Tony Chao |



| Frequency (MHz) | Quasi Peak reading (dBuV) | Average reading (dBuV) | Correction factor (dB) | Quasi Peak result (dBuV) | Average result (dBuV) | Quasi Peak limit (dBuV) | Average limit (dBuV) | Quasi Peak margin (dB) | Average margin (dB) | Remark |
|-----------------|---------------------------|------------------------|------------------------|--------------------------|-----------------------|-------------------------|----------------------|------------------------|---------------------|--------|
| 0.2060 | 37.06 | 30.25 | 10.17 | 47.23 | 40.42 | 63.37 | 53.37 | -16.14 | -12.95 | Pass |
| 0.8620 | 23.92 | 15.74 | 10.20 | 34.12 | 25.94 | 56.00 | 46.00 | -21.88 | -20.06 | Pass |
| 1.8140 | 38.50 | 33.94 | 10.23 | 48.73 | 44.17 | 56.00 | 46.00 | -7.27 | -1.83 | Pass |
| 2.4180 | 26.62 | 21.90 | 10.24 | 36.86 | 32.14 | 56.00 | 46.00 | -19.14 | -13.86 | Pass |
| 14.7620 | 16.83 | 4.48 | 10.38 | 27.21 | 14.86 | 60.00 | 50.00 | -32.79 | -35.14 | Pass |
| 21.5260 | 14.23 | 3.52 | 10.44 | 24.67 | 13.96 | 60.00 | 50.00 | -35.33 | -36.04 | Pass |

Note: Correction factor = LISN loss + Cable loss.

Report No.: TMWK2210004066KR

4.2 20dB BANDWIDTH AND OCCUPIED BANDWIDTH (99%)

4.2.1 Test Limit

According to §15.247(a) (1)

20 dB Bandwidth : For reporting purposes only.

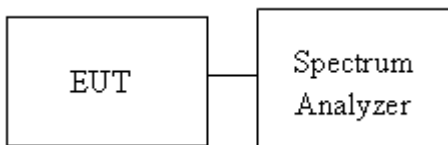
Occupied Bandwidth(99%) : For reporting purposes only.

4.2.2 Test Procedure

Test method Refer as ANSI C63.10: 2013 clause 7.8.7,

1. The EUT RF output connected to the spectrum analyzer by RF cable.
2. Setting maximum power transmit of EUT
3. SA set RBW = 1% ~ 5% OBW, VBW $\geq 3 \times$ RBW and Detector = Peak, to measurement 20 dB Bandwidth.
4. SA set RBW = 1% ~ 5% OBW, VBW \geq three times the RBW and Detector = Peak, to measurement 99% Bandwidth
5. Measure and record the result of 20 dB Bandwidth and 99% Bandwidth. in the test report.

4.2.3 Test Setup



4.2.4 Test Result

Temperature: 24.1~24.4°C

Test date: September 1~2, 2022

Humidity: 51~53% RH

Tested by: Jack Chen

| Test mode: GFSK_BDR-1Mbps mode / 2402-2480 MHz | | | |
|--|-----------------|----------------|---------------|
| Channel | Frequency (MHz) | OBW(99%) (MHz) | 20dB BW (MHz) |
| Low | 2402 | 0.86549 | 0.9707 |
| Mid | 2441 | 0.86777 | 0.9720 |
| High | 2480 | 0.86735 | 0.9728 |

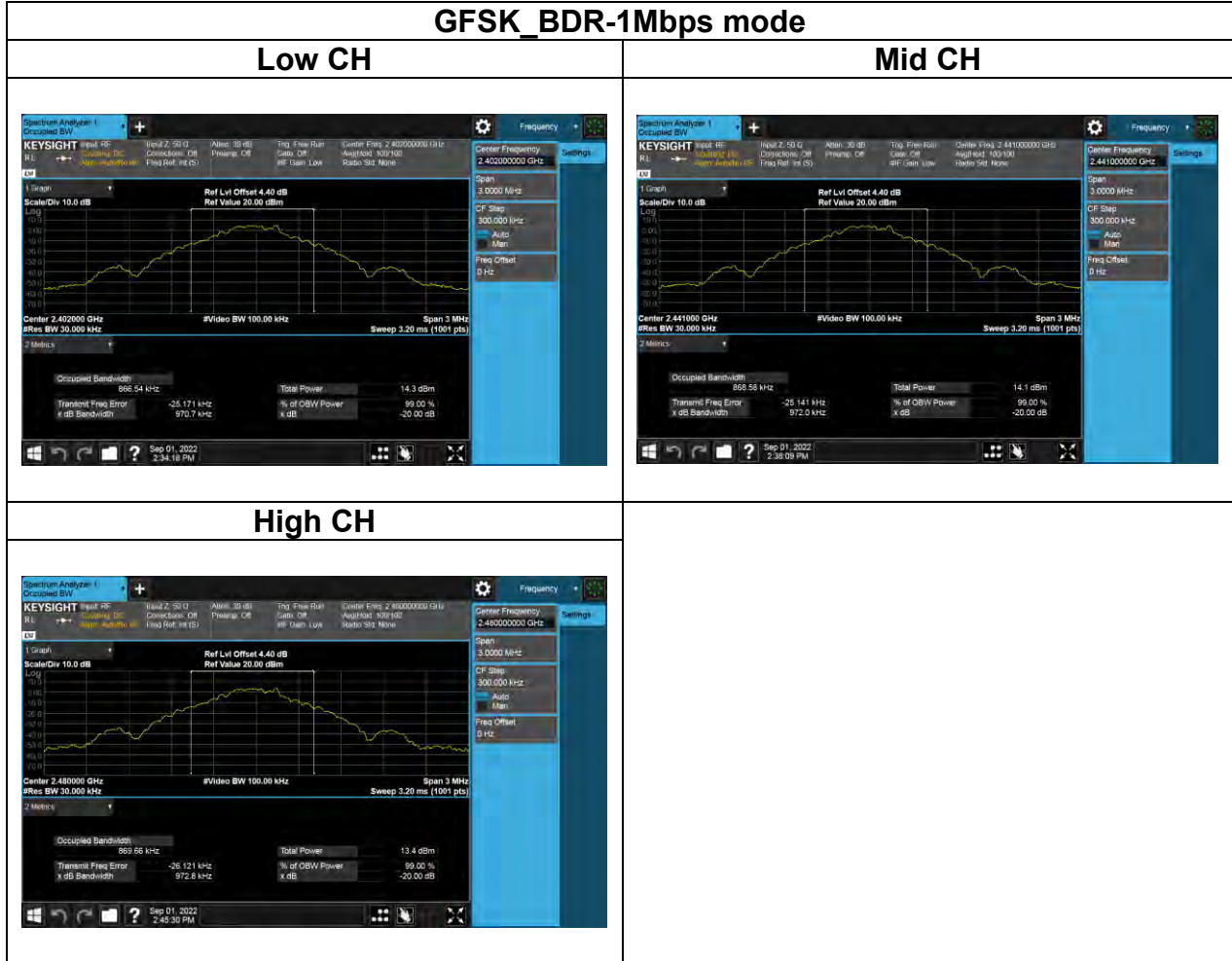
| Test mode: $\pi/4$ -DQPSK_2Mbps mode / 2402-2480 MHz | | | |
|--|-----------------|----------------|---------------|
| Channel | Frequency (MHz) | OBW(99%) (MHz) | 20dB BW (MHz) |
| Low | 2402 | 1.1695 | 1.312 |
| Mid | 2441 | 1.1691 | 1.310 |
| High | 2480 | 1.1703 | 1.310 |

| Test mode: 8DPSK_EDR-3Mbps mode / 2402-2480 MHz | | | |
|---|-----------------|----------------|---------------|
| Channel | Frequency (MHz) | OBW(99%) (MHz) | 20dB BW (MHz) |
| Low | 2402 | 1.1712 | 1.299 |
| Mid | 2441 | 1.1716 | 1.299 |
| High | 2480 | 1.1718 | 1.299 |

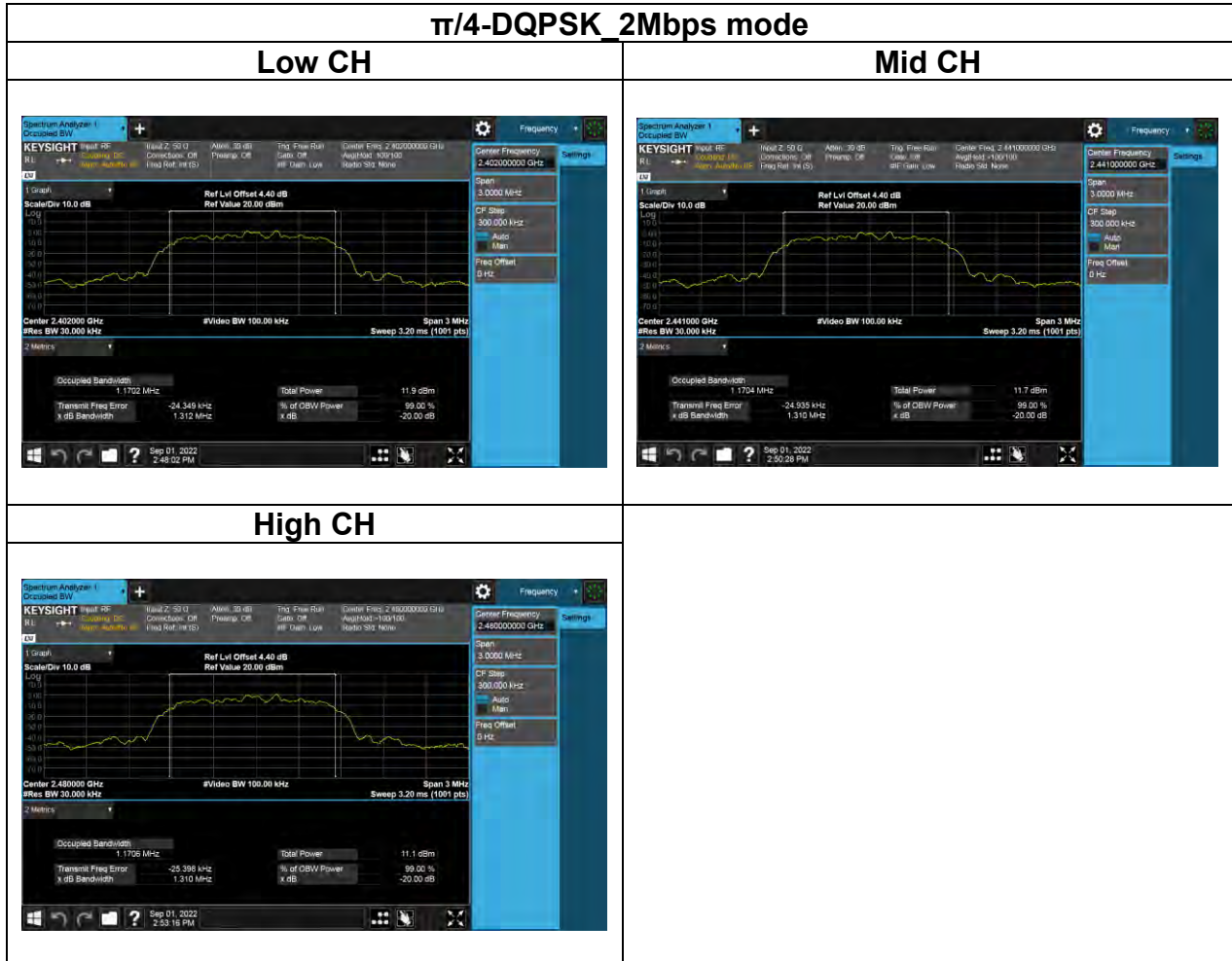
Report No.: TMWK2210004066KR

Test Data

20dB BANDWIDTH



Report No.: TMWK2210004066KR



Report No.: TMWK2210004066KR

8DPSK_EDR-3Mbps mode

Low CH



Mid CH



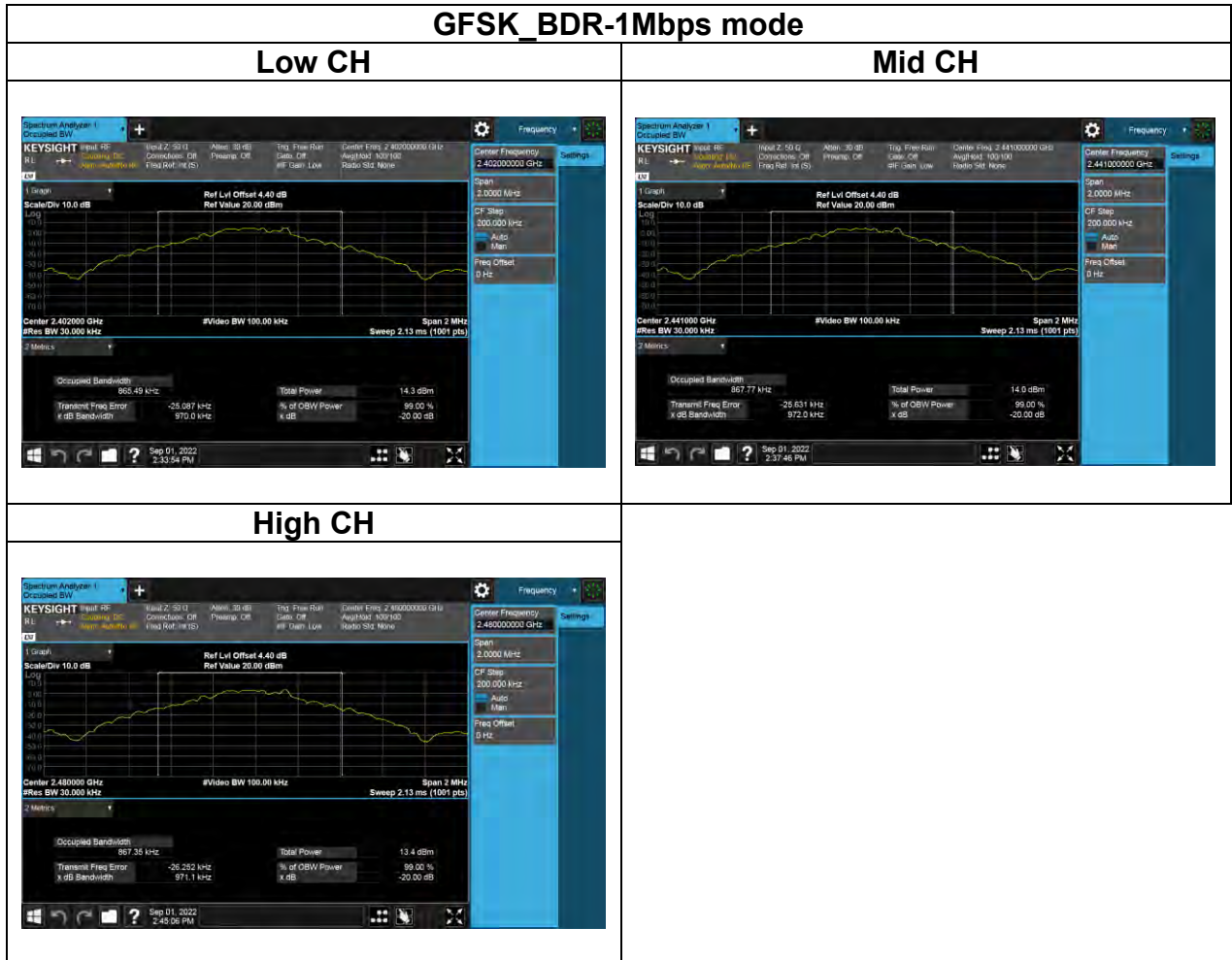
High CH



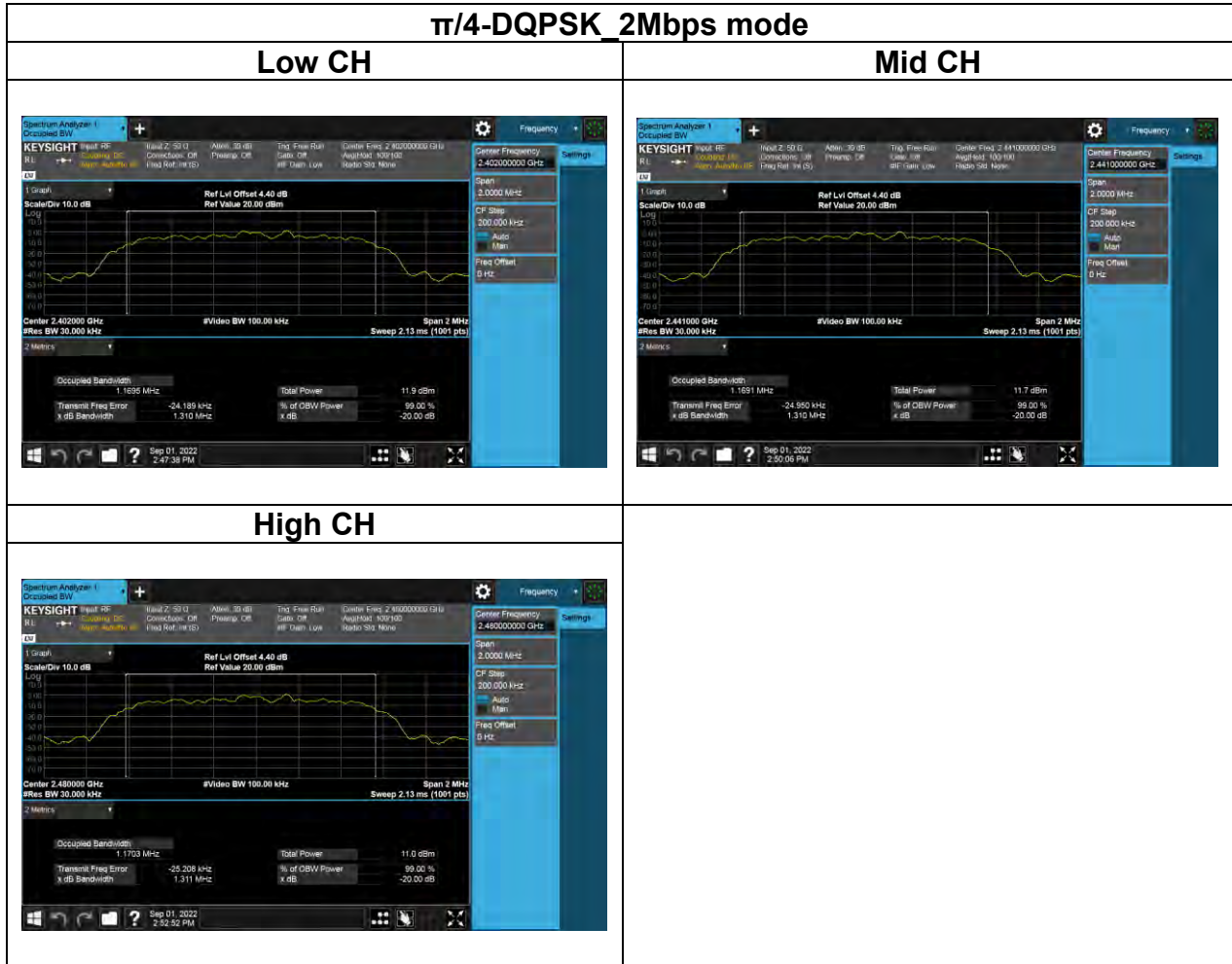
Report No.: TMWK2210004066KR

Test Data

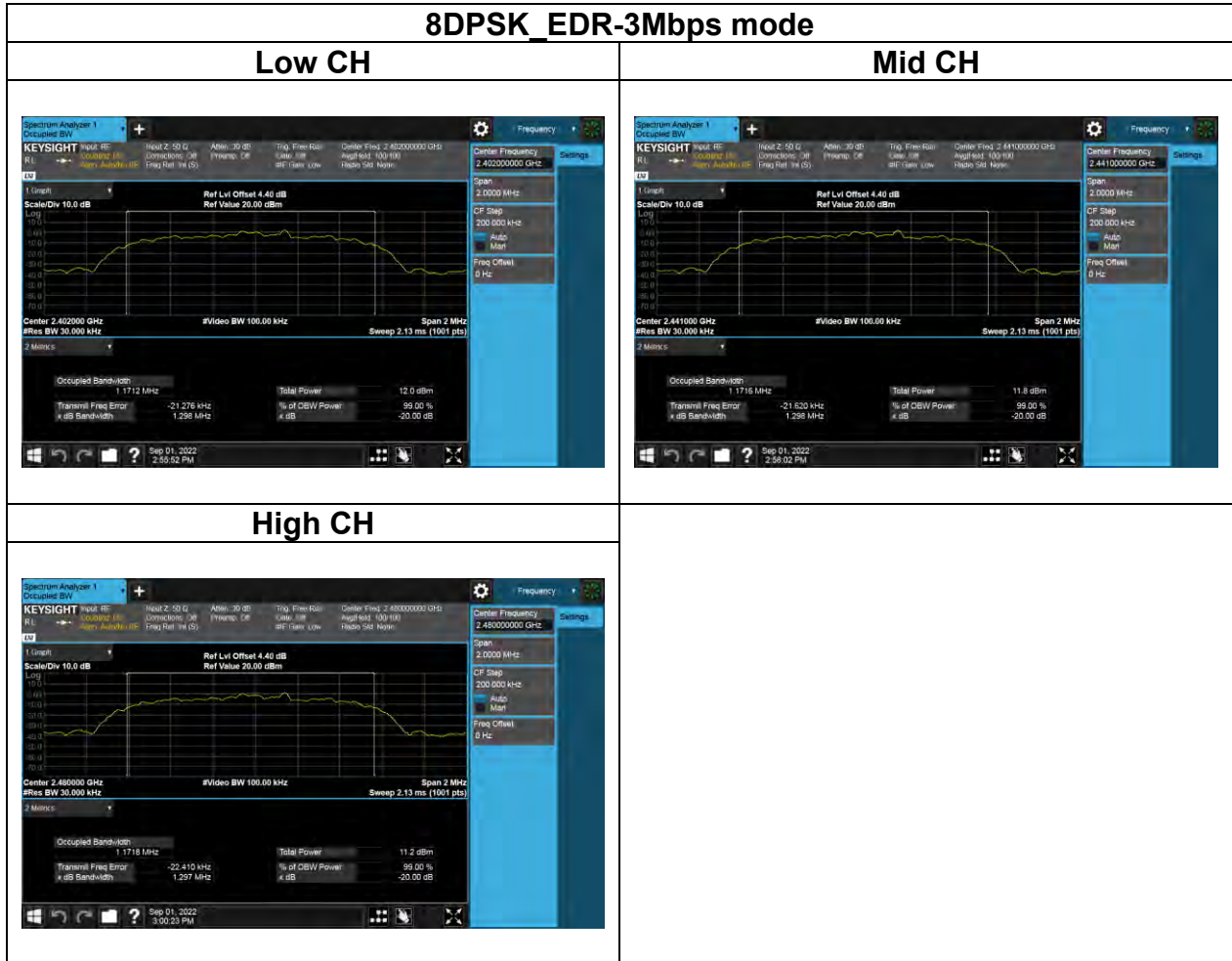
BANDWIDTH 99%



Report No.: TMWK2210004066KR



Report No.: TMWK2210004066KR



Report No.: TMWK2210004066KR

4.3 OUTPUT POWER MEASUREMENT

4.3.1 Test Limit

According to §15.247(a)(1),

Peak output power :

FCC

Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

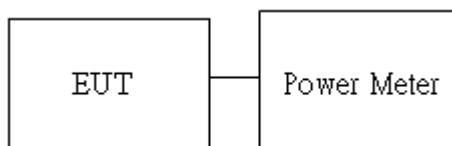
| | |
|-------|--|
| Limit | <input checked="" type="checkbox"/> Antenna not exceed 6 dBi : 21dBm <input type="checkbox"/> Antenna with DG greater than 6 dBi : 21dBm [Limit = 30 – (DG – 6)] |
|-------|--|

Average output power : For reporting purposes only.

4.3.2 Test Procedure

1. The EUT RF output connected to the power meter by RF cable.
2. Setting maximum power transmit of EUT.
3. The path loss was compensated to the results for each measurement.
4. Measure and record the result of Peak output power and Average output power. in the test report.

4.3.3 Test Setup



Report No.: TMWK2210004066KR

4.3.4 Test Result

Temperature: 24.1~24.4°C

Test date: September 1~2, 2022

Humidity: 51~53% RH

Tested by: Jack Chen

Peak output power :

For GFSK

1M BR mode (Peak):

| CH | Freq. (MHz) | Power set | Peak Output Power (dBm) | Output Power (mW) | Limit (mW) |
|------|-------------|-----------|-------------------------|-------------------|------------|
| Low | 2402 | 5 | 6.54 | 4.508 | 125 |
| Mid | 2441 | 5 | 6.42 | 4.385 | 125 |
| High | 2480 | 5 | 6.24 | 4.207 | 125 |

For $\pi/4$ -DQPSK

2M EDR mode (Peak):

| CH | Freq. (MHz) | Power set | Peak Output Power (dBm) | Output Power (mW) | Limit (mW) |
|------|-------------|-----------|-------------------------|-------------------|------------|
| Low | 2402 | 5 | 6.41 | 4.375 | 125 |
| Mid | 2441 | 5 | 6.28 | 4.246 | 125 |
| High | 2480 | 5 | 6.09 | 4.064 | 125 |

For 8DPSK

3M EDR mode (Peak):

| CH | Freq. (MHz) | Power set | Peak Output Power (dBm) | Output Power (mW) | Limit (mW) |
|------|-------------|-----------|-------------------------|-------------------|------------|
| Low | 2402 | 5 | 6.70 | 4.677 | 125 |
| Mid | 2441 | 5 | 6.56 | 4.529 | 125 |
| High | 2480 | 5 | 6.36 | 4.325 | 125 |

Report No.: TMWK2210004066KR

Average output power :

For GFSK

1M BR mode (Average):

| CH | Freq. (MHz) | Power set | Max. Avg. Output Power (dBm) | Output Power (mW) | Limit (mW) |
|------|-------------|-----------|------------------------------|-------------------|------------|
| Low | 2402 | 5 | 5.45 | 3.511 | 125 |
| Mid | 2441 | 5 | 5.47 | 3.527 | 125 |
| High | 2480 | 5 | 5.36 | 3.439 | 125 |

For $\pi/4$ -DQPSK

2M EDR mode (Average):

| CH | Freq. (MHz) | Power set | Max. Avg. Output Power (dBm) | Output Power (mW) | Limit (mW) |
|------|-------------|-----------|------------------------------|-------------------|------------|
| Low | 2402 | 5 | 2.61 | 1.826 | 125 |
| Mid | 2441 | 5 | 2.48 | 1.772 | 125 |
| High | 2480 | 5 | 2.39 | 1.735 | 125 |

For 8DPSK

3M EDR mode (Average):

| CH | Freq. (MHz) | Power set | Max. Avg. Output Power (dBm) | Output Power (mW) | Limit (mW) |
|------|-------------|-----------|------------------------------|-------------------|------------|
| Low | 2402 | 5 | 2.68 | 1.855 | 125 |
| Mid | 2441 | 5 | 2.56 | 1.805 | 125 |
| High | 2480 | 5 | 2.43 | 1.751 | 125 |

Report No.: TMWK2210004066KR

4.4 FREQUENCY SEPARATION

4.4.1 Test Limit

According to §15.247(a)(1)

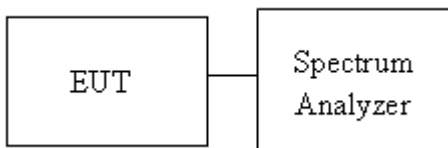
Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

| | |
|-------|-------------------------------------|
| Limit | > two-thirds of the 20 dB bandwidth |
|-------|-------------------------------------|

4.4.2 Test Procedure

1. Place the EUT on the table and set it in transmitting mode.
2. EUT RF output port connected to the SA by RF cable.
3. Set the spectrum analyzer as RBW = 300kHz, VBW = 300kHz, Sweep = auto.
Max hold, mark 3 peaks of hopping channel and record the 3 peaks frequency

4.4.3 Test Setup



Report No.: TMWK2210004066KR

4.4.4 Test Result

Temperature: 24.1~24.4°C

Test date: September 1~2, 2022

Humidity: 51~53% RH

Tested by: Jack Chen

| Test mode: GFSK_BDR-1Mbps mode / 2402-2480 MHz | | | | |
|--|-----------------|--------------------------|---------------------------------|--------|
| Channel | Frequency (MHz) | Channel Separation (MHz) | Channel Separation Limits (MHz) | Result |
| Low | 2402 | 1.000 | 0.65 | PASS |
| Mid | 2441 | 1.000 | 0.65 | PASS |
| High | 2480 | 1.000 | 0.65 | PASS |

| Test mode: $\pi/4$ -DQPSK_2Mbps mode / 2402-2480 MHz | | | | |
|--|-----------------|--------------------------|---------------------------------|--------|
| Channel | Frequency (MHz) | Channel Separation (MHz) | Channel Separation Limits (MHz) | Result |
| Low | 2402 | 1.000 | 0.87 | PASS |
| Mid | 2441 | 1.000 | 0.87 | PASS |
| High | 2480 | 1.000 | 0.87 | PASS |

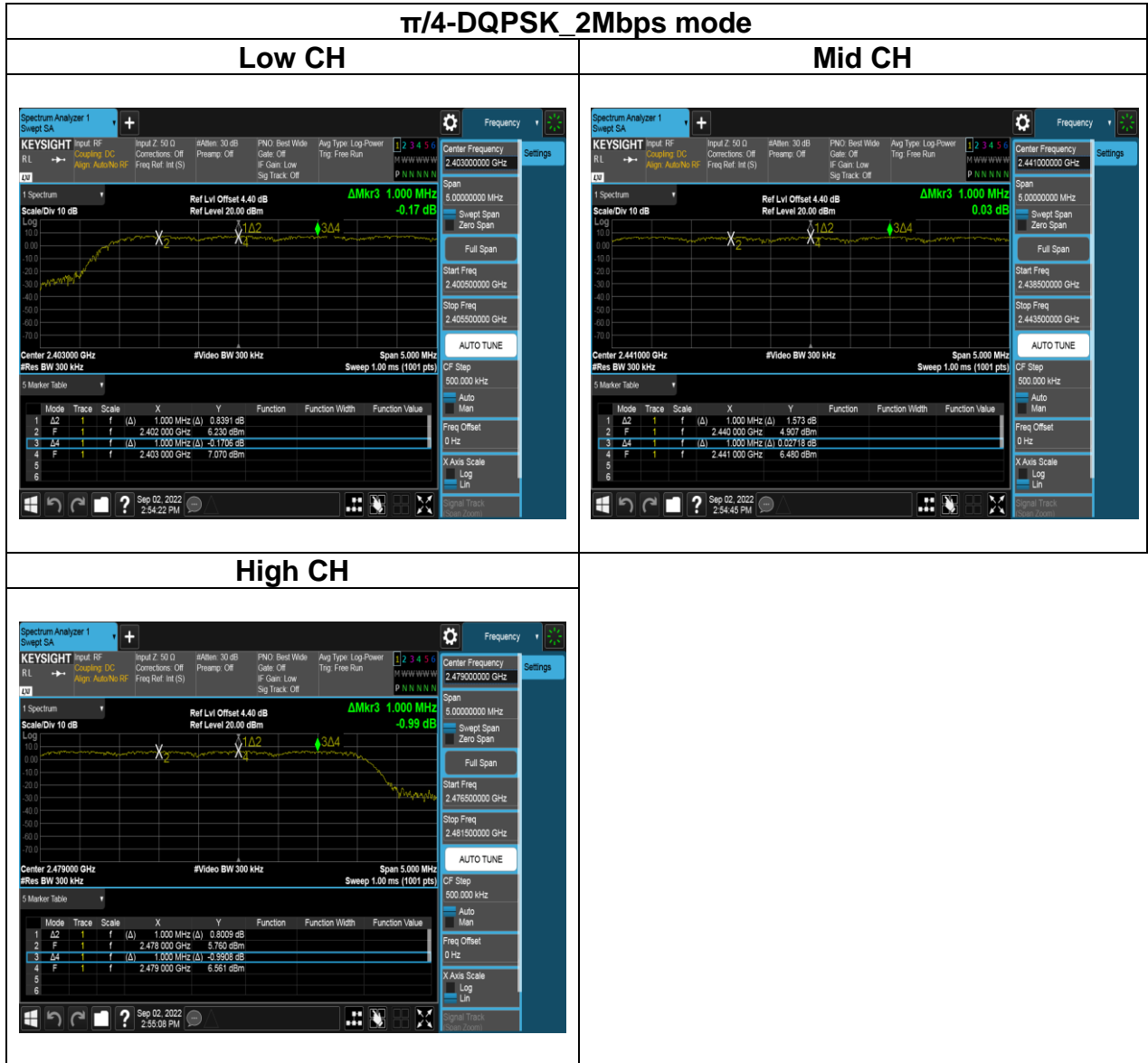
| Test mode: 8DPSK_EDR-3Mbps mode / 2402-2480 MHz | | | | |
|---|-----------------|--------------------------|---------------------------------|--------|
| Channel | Frequency (MHz) | Channel Separation (MHz) | Channel Separation Limits (MHz) | Result |
| Low | 2402 | 1.000 | 0.87 | PASS |
| Mid | 2441 | 1.000 | 0.87 | PASS |
| High | 2480 | 1.000 | 0.87 | PASS |

Report No.: TMWK2210004066KR

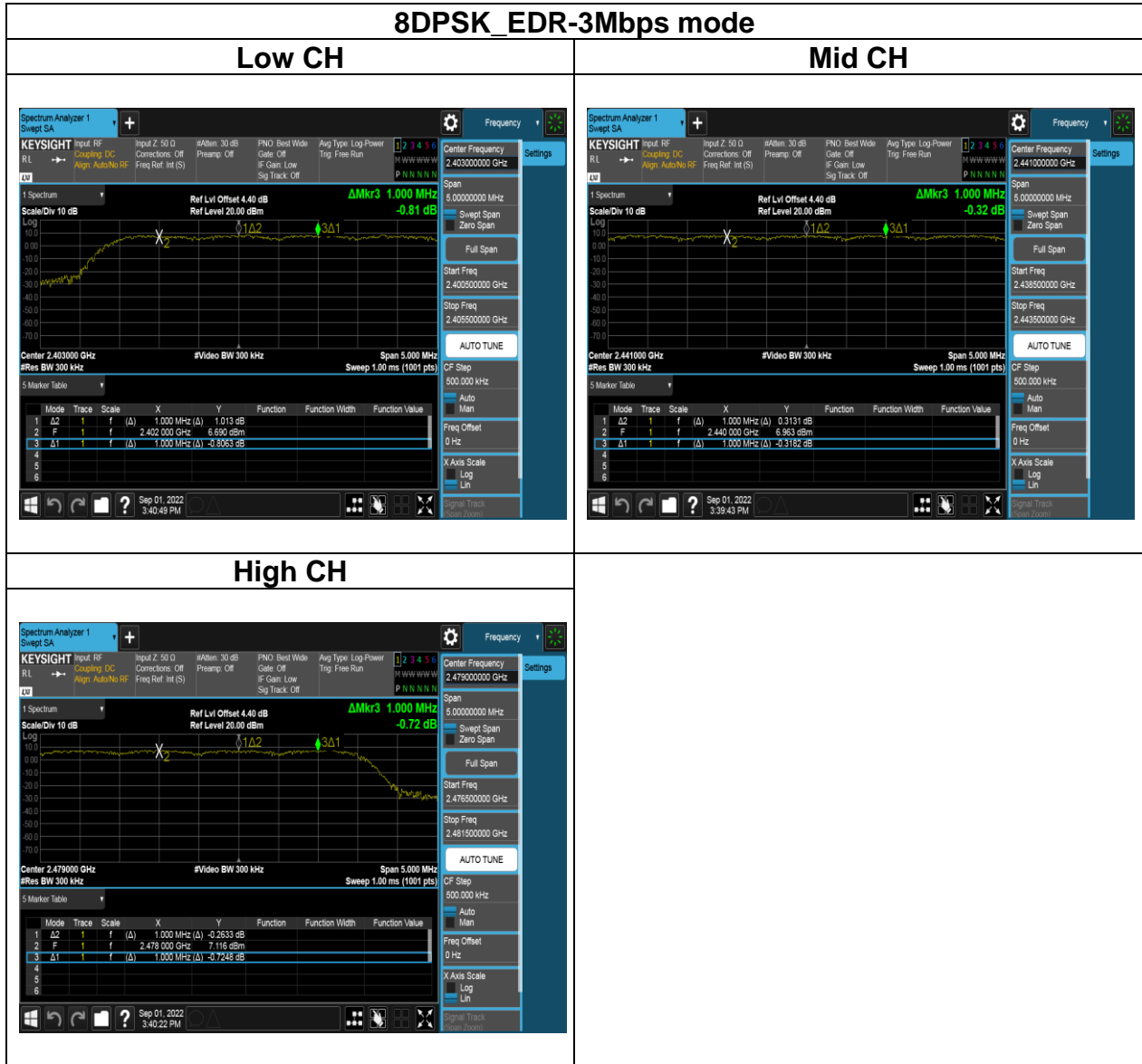
Test Data



Report No.: TMWK2210004066KR



Report No.: TMWK2210004066KR



Report No.: TMWK2210004066KR

4.5 NUMBER OF HOPPING

4.5.1 Test Limit

According to §15.247(a)(1)(iii)

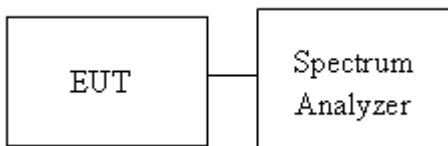
Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels.

4.5.2 Test Procedure

Test method Refer as ANSI C63.10: 2013 clause 7.8.3

1. Place the EUT on the table and set it in transmitting mode.
2. EUT RF output port connected to the SA by RF cable.
3. Set spectrum analyzer Start Freq. = 2400 MHz, Stop Freq. = 2441 MHz for Low range, Start Freq. = 2441 MHz, Stop Freq. = 2483.5 MHz for High range ; RBW=430KHz, VBW = 1.5MHz.
4. Max hold, view and count how many channel in the band.

4.5.3 Test Setup



Report No.: TMWK2210004066KR

4.5.4 Test Result

Temperature: 24.1~24.4°C

Test date: September 1~2, 2022

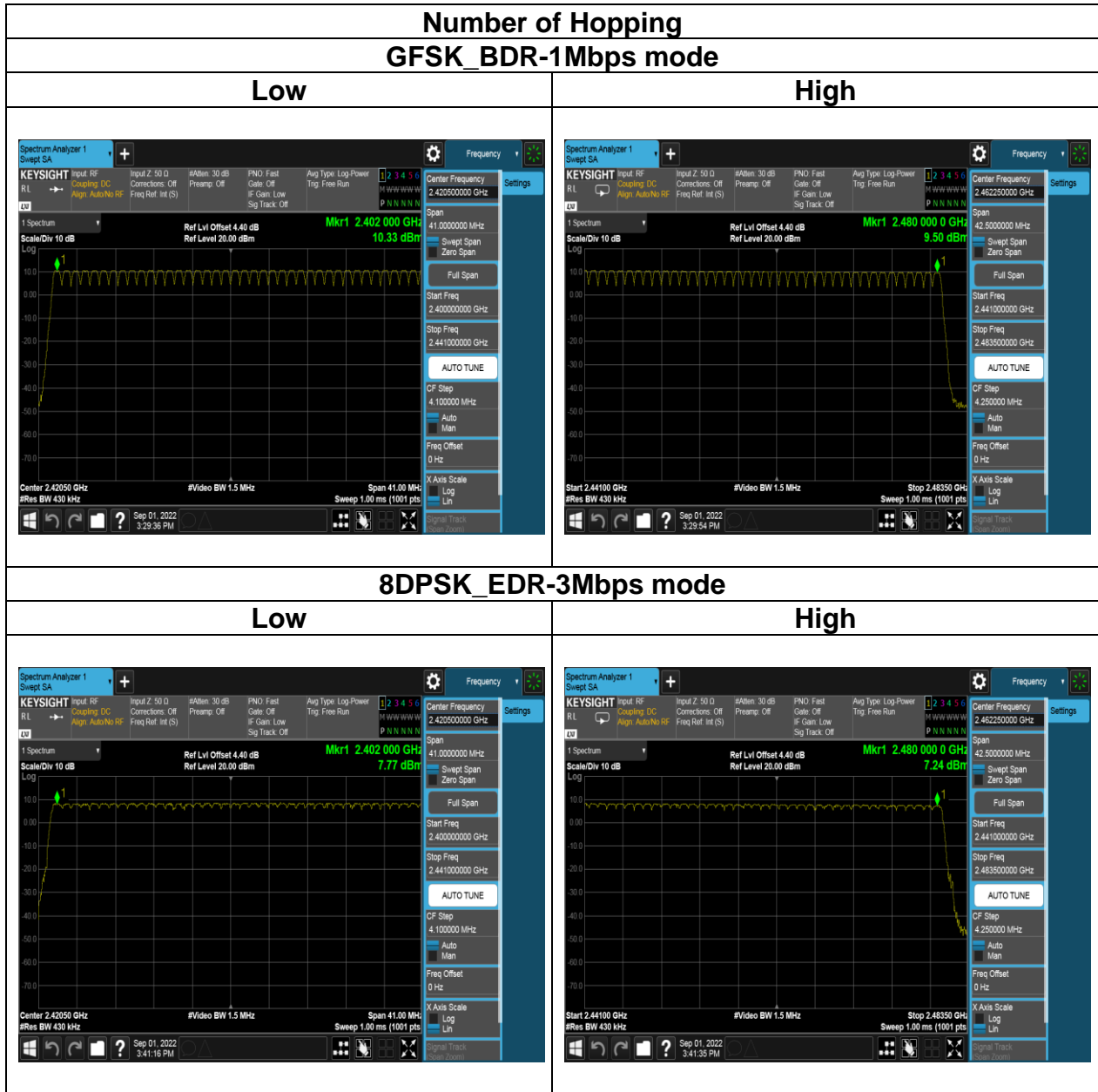
Humidity: 51~53% RH

Tested by: Jack Chen

| Number of Hopping | | | | |
|-------------------|-----------------|------------------------|-------------------------------|--------|
| Mode | Frequency (MHz) | Hopping Channel Number | Hopping Channel Number Limits | Result |
| BDR-1Mbps | 2402-2480 | 79 | 15 | Pass |
| EDR-3Mbps | 2402-2480 | 79 | 15 | |

Report No.: TMWK2210004066KR

Test Data



Report No.: TMWK2210004066KR

4.6 CONDUCTED BANDEDGE AND SPURIOUS EMISSION

4.6.1 Test Limit

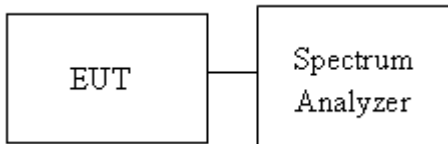
According to §15.247(d)

| | |
|-------|---------|
| Limit | -20 dBc |
|-------|---------|

4.6.2 Test Procedure

1. EUT RF output port connected to the SA by RF cable, and the path loss was compensated to result.
2. SA setting, RBW=100kHz, VBW=300kHz, Detector=Peak, Trace mode = max hold, SWT = Auto.
3. The Band Edge at 2.4GHz and 2.4835GHz are investigated with both hopping "ON" and "OFF" modes ".

4.6.3 Test Setup



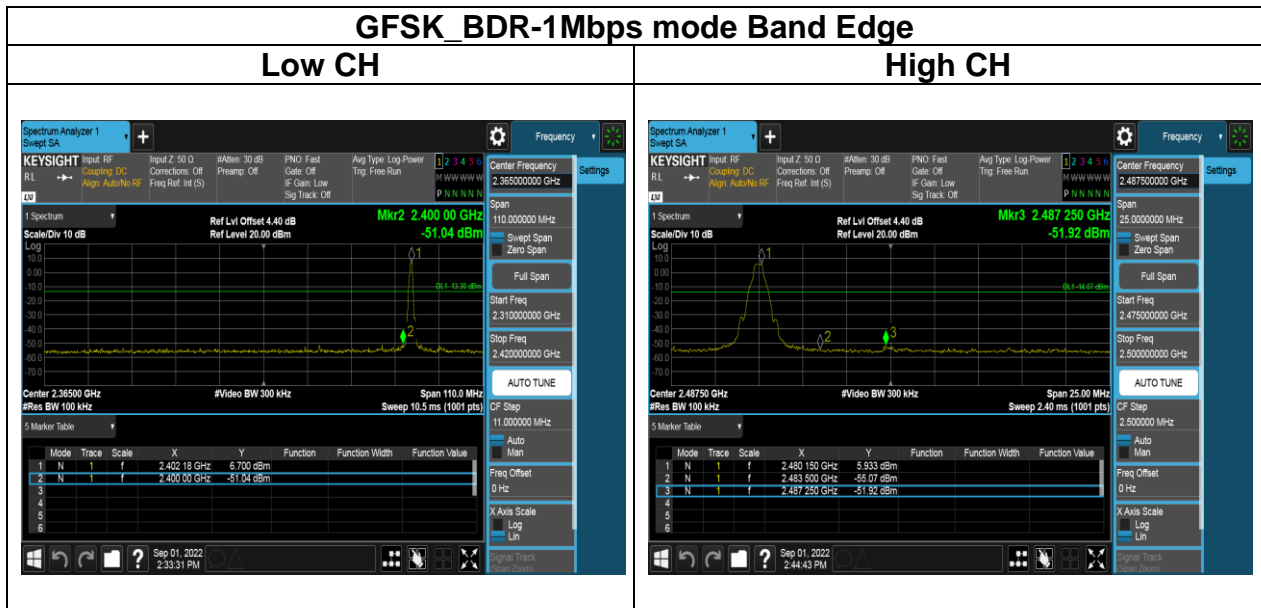
Report No.: TMWK2210004066KR

4.6.4 Test Result

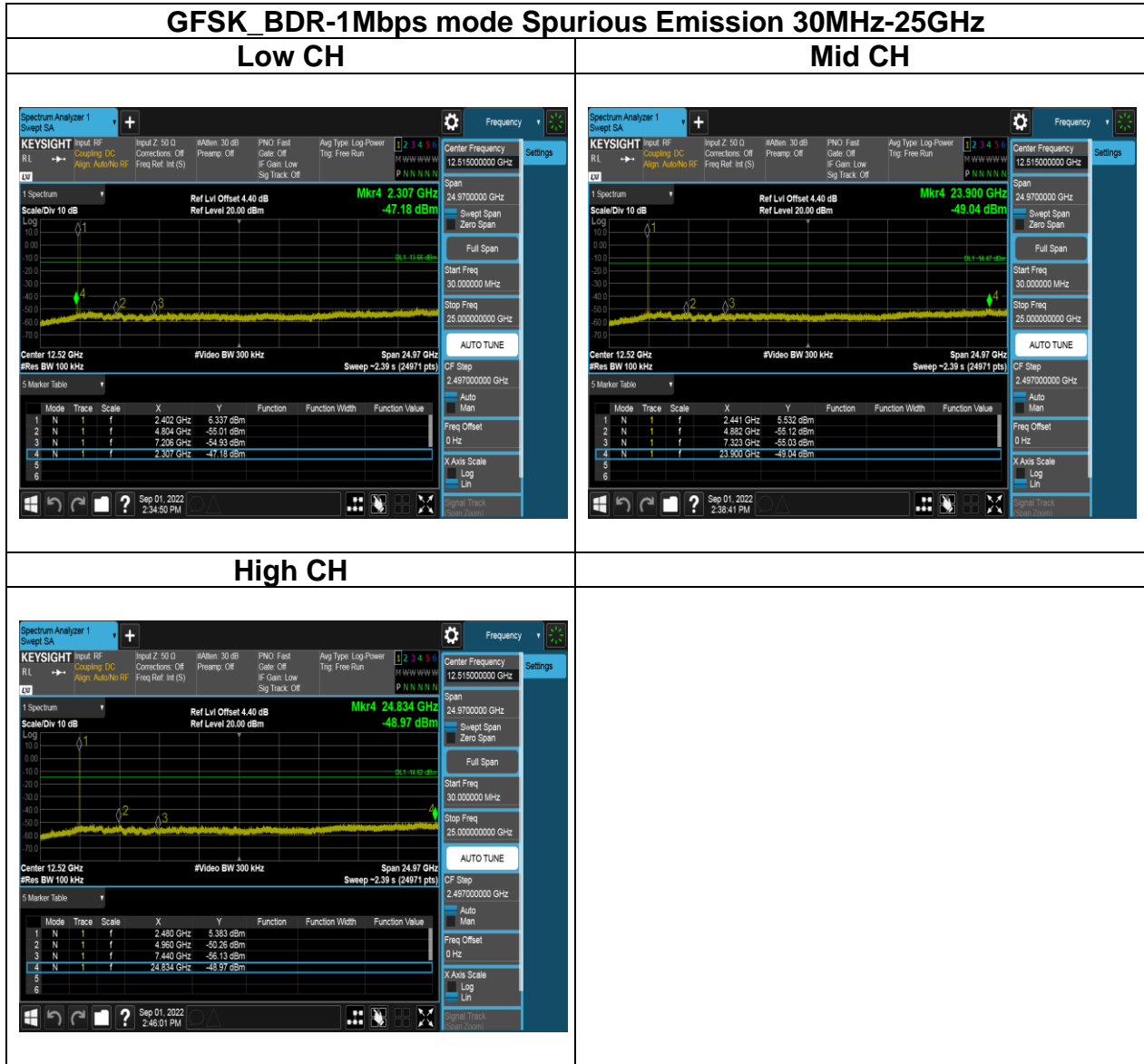
Temperature: 24.1~24.4°C
Humidity: 51~53% RH

Test date: September 1~2, 2022
Tested by: Jack Chen

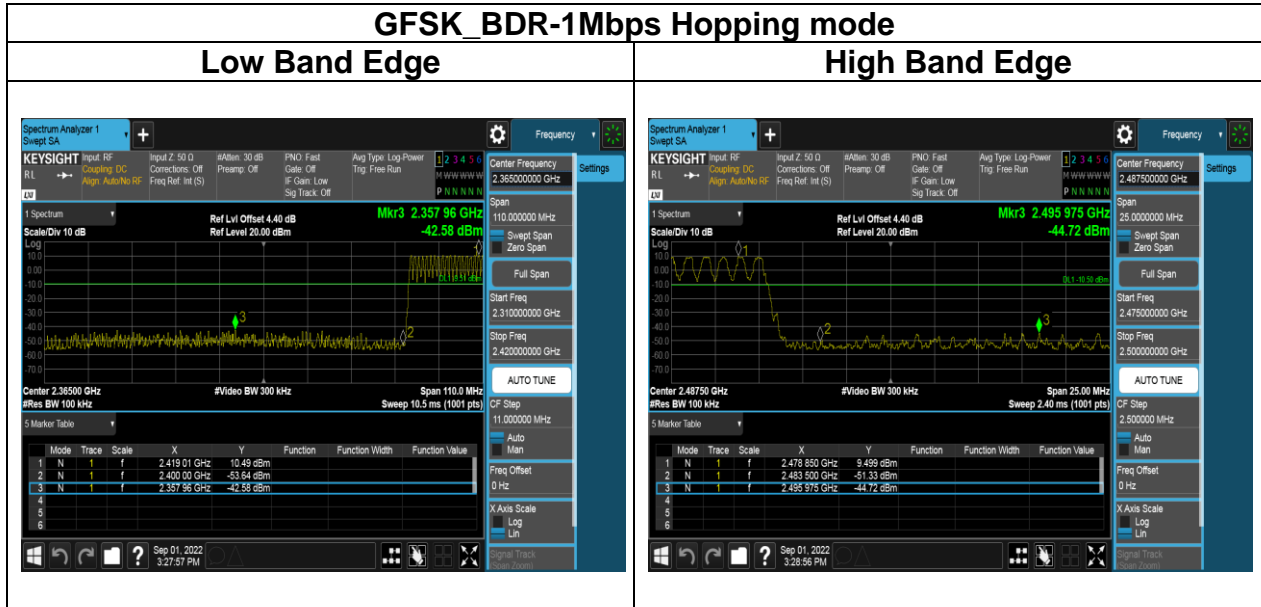
Test Data



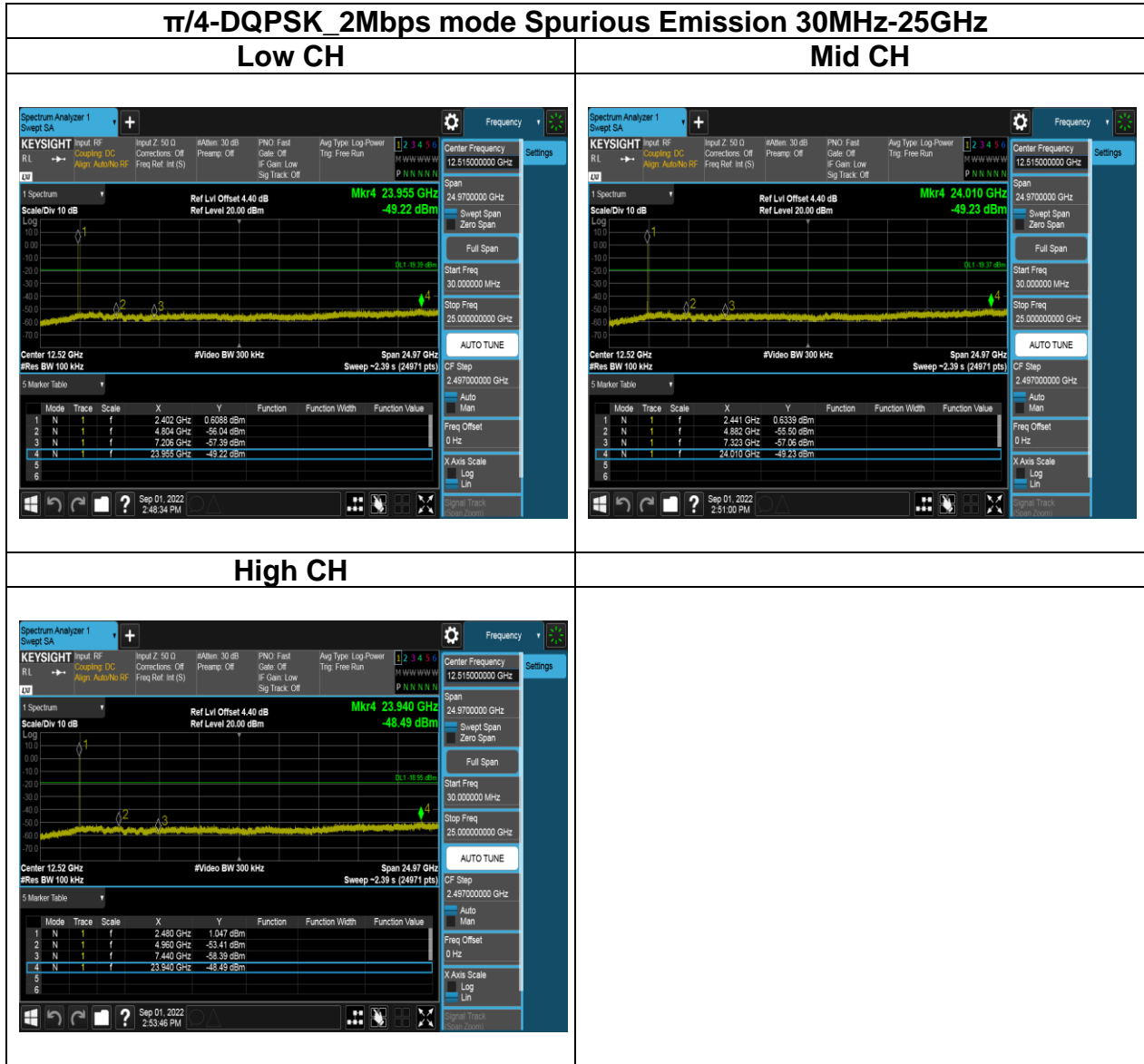
Report No.: TMWK2210004066KR



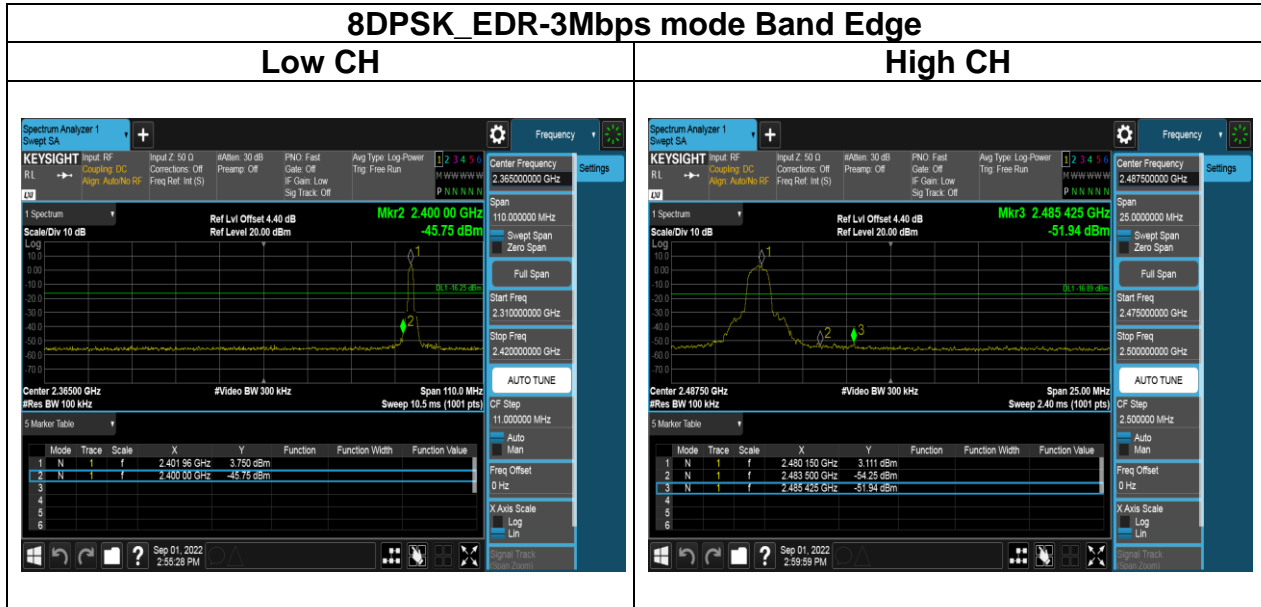
Report No.: TMWK2210004066KR



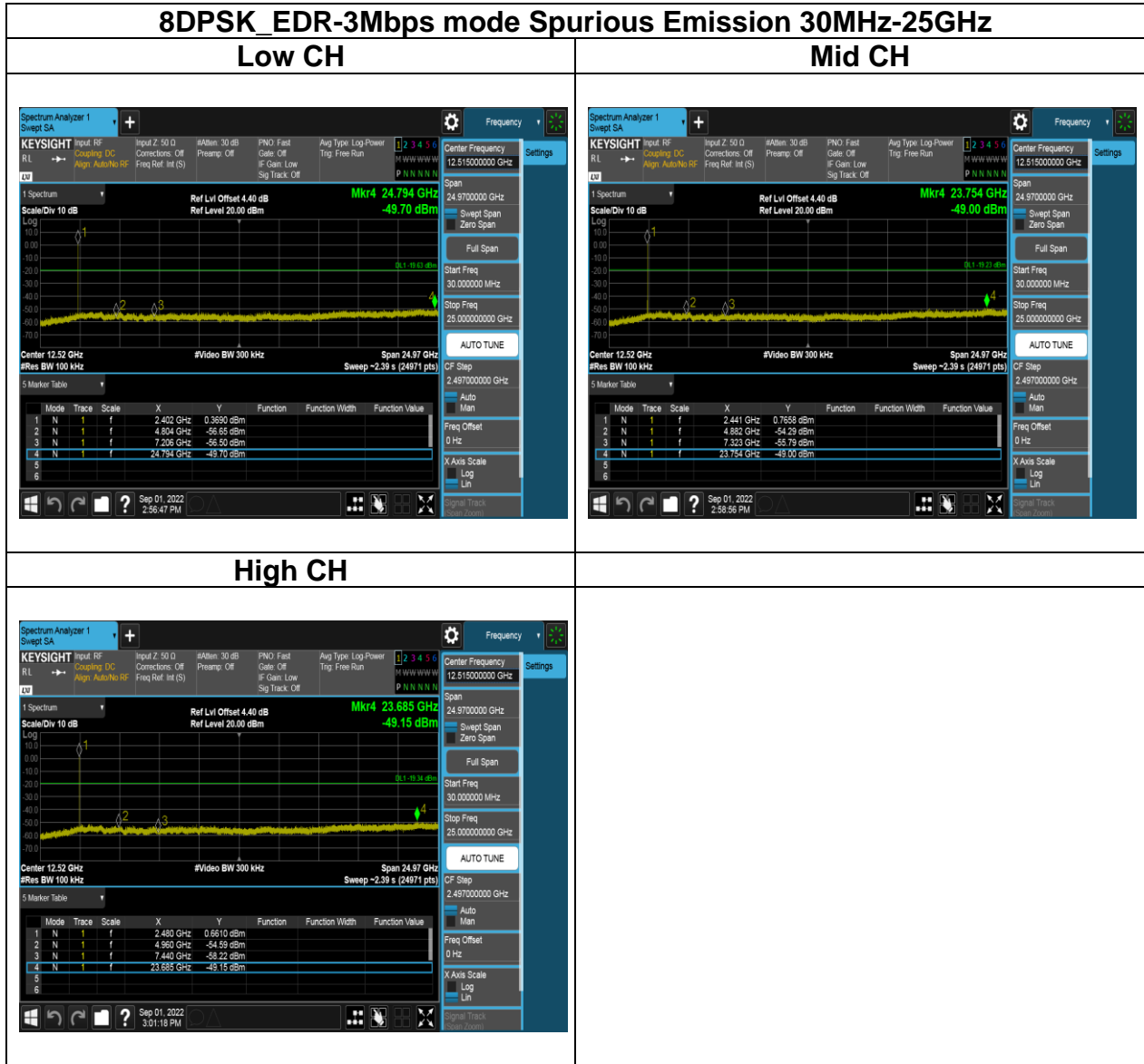
Report No.: TMWK2210004066KR



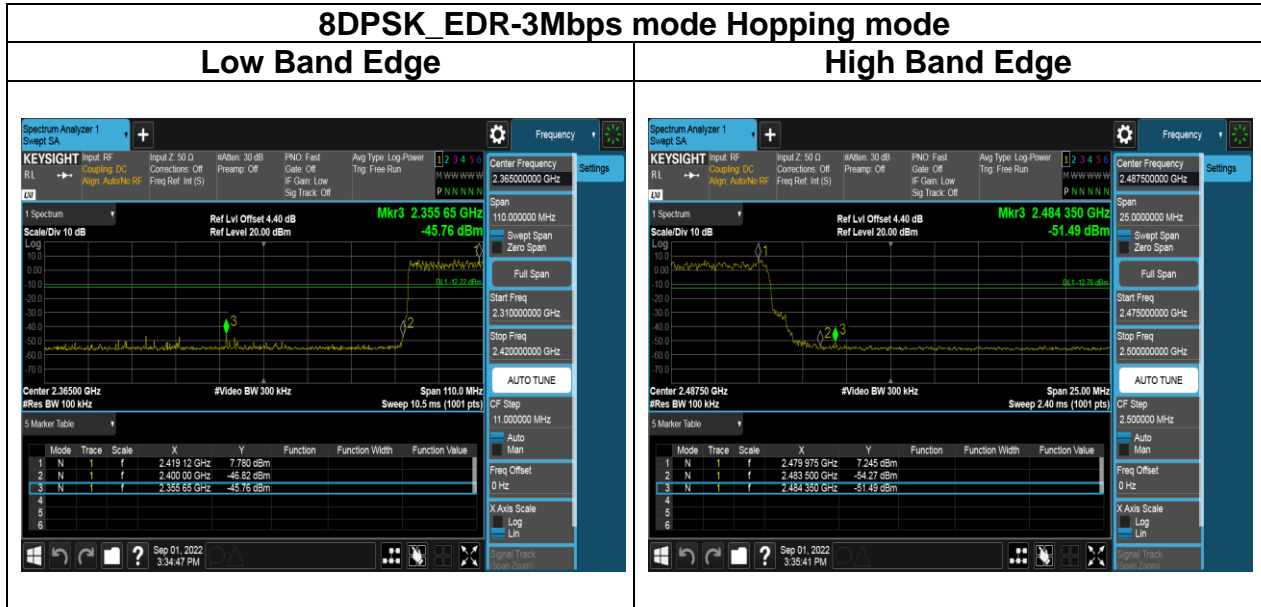
Report No.: TMWK2210004066KR



Report No.: TMWK2210004066KR



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4.7 TIME OF OCCUPANCY (DWELL TIME)

4.7.1 Test Limit

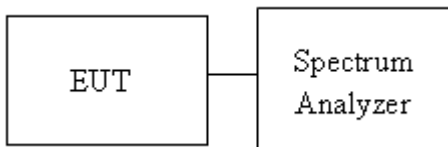
According to §15.247(a)(1)(iii)

The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

4.7.2 Test Procedure

1. EUT RF output port connected to the SA by RF cable.
2. Set center frequency of spectrum analyzer = operating frequency.
3. Set the spectrum analyzer as RBW, VBW=3MHz, Sweep > one cycle.

4.7.3 Test Setup



Report No.: TMWK2210004066KR

4.7.4 Test Result

Temperature: 24.1~24.4°C **Test date:** September 1~2, 2022
Humidity: 51~53% RH **Tested by:** Jack Chen

For GFSK (1Mbps)

| Channel | PACKET TYPE | Measurement Result (ms) | Limit (ms) |
|---------|-------------|-------------------------|------------|
| Mid | DH1 | 121.60 | 400ms |
| | DH3 | 262.40 | 400ms |
| | DH5 | 308.80 | 400ms |

CH Mid DH1 time slot = 0.380 * (1600/2/79) * 31.6 = 121.60 (ms)
 DH3 time slot = 1.640 * (1600/4/79) * 31.6 = 262.40 (ms)
 DH5 time slot = 2.895 * (1600/6/79) * 31.6 = 308.80 (ms)

For $\pi/4$ -DQPSK (2Mbps):

| Channel | PACKET TYPE | Measurement Result (ms) | Limit (ms) |
|---------|-------------|-------------------------|------------|
| Mid | 2DH1 | 123.20 | 400ms |
| | 2DH3 | 262.40 | 400ms |
| | 2DH5 | 307.20 | 400ms |

CH Mid 2DH1 time slot = 0.385 * (1600/2/79) * 31.6 = 123.20 (ms)
 2DH3 time slot = 1.640 * (1600/4/79) * 31.6 = 262.40 (ms)
 2DH5 time slot = 2.880 * (1600/6/79) * 31.6 = 307.20 (ms)

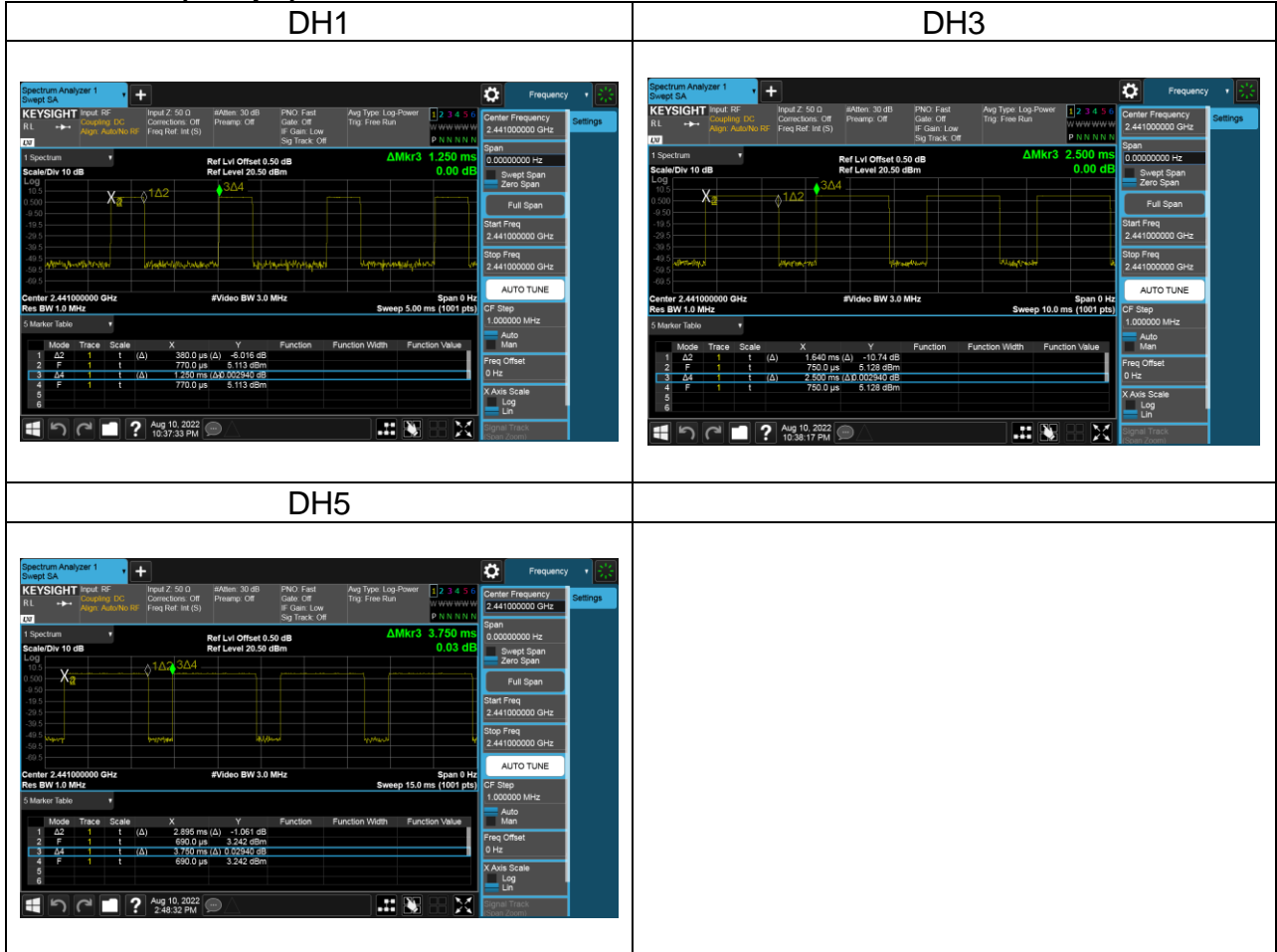
For 8-DPSK (3Mbps)

| Channel | PACKET TYPE | Measurement Result (ms) | Limit (ms) |
|---------|-------------|-------------------------|------------|
| Mid | 3DH1 | 123.20 | 400ms |
| | 3DH3 | 262.40 | 400ms |
| | 3DH5 | 308.80 | 400ms |

CH Mid 3DH1 time slot = 0.385 * (1600/2/79) * 31.6 = 123.20 (ms)
 3DH3 time slot = 1.640 * (1600/4/79) * 31.6 = 262.40 (ms)
 3DH5 time slot = 2.895 * (1600/6/79) * 31.6 = 308.80 (ms)

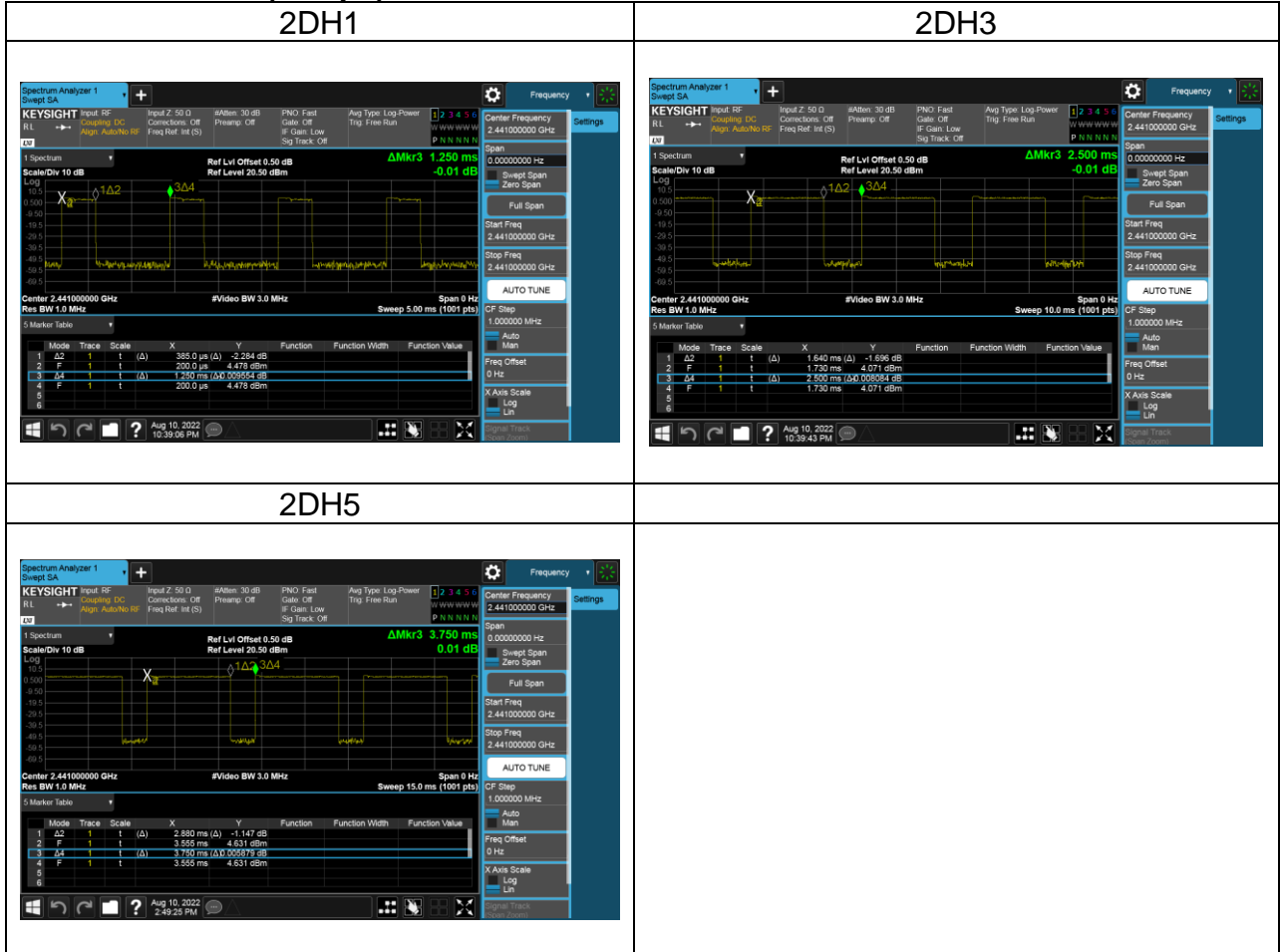
Report No.: TMWK2210004066KR

For GFSK (1Mbps)



Report No.: TMWK2210004066KR

For $\pi/4$ -DQPSK (2Mbps)



Report No.: TMWK2210004066KR

For 8-DPSK (3Mbps)



Report No.: TMWK2210004066KR

4.8 RADIATION BANDEDGE AND SPURIOUS EMISSION

4.8.1 Test Limit

FCC according to §15.247(d), §15.209 and §15.205,

In any 100 kHz bandwidth outside the authorized frequency band, all harmonic and spurious must be least 20 dB below the highest emission level with the authorized frequency band. Radiation emission which fall in the restricted bands must also follow the FCC section 15.209 as below limit in table.

Below 30 MHz

| Frequency | Field Strength (microvolts/m) | Magnetic H-Field (microamperes/m) | Measurement Distance (metres) |
|---------------|-------------------------------|-----------------------------------|-------------------------------|
| 9-490 kHz | 2,400/F (F in kHz) | 2,400/F (F in kHz) | 300 |
| 490-1,705 kHz | 24,000/F (F in kHz) | 24,000/F (F in kHz) | 30 |
| 1.705-30 MHz | 30 | N/A | 30 |

Above 30 MHz

| Frequency (MHz) | Field Strength microvolts/m at 3 metres (watts, e.i.r.p.) | |
|-----------------|---|--------------|
| | Transmitters | Receivers |
| 30-88 | 100 (3 nW) | 100 (3 nW) |
| 88-216 | 150 (6.8 nW) | 150 (6.8 nW) |
| 216-960 | 200 (12 nW) | 200 (12 nW) |
| Above 960 | 500 (75 nW) | 500 (75 nW) |

Remark:

Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 30 m open are test site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788.

Report No.: TMWK2210004066KR

4.8.2 Test Procedure

1. The EUT is placed on a turntable, Above 1 GHz is 1.5m and below 1 GHz is 0.8m above ground plane. The EUT Configured un accordance with ANSI C63.10: 2013, and the EUT set in a continuous mode.

2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level. And EUT is set 3m away from the receiving antenna, which is scanned from 1m to 4m above the ground plane to find out the highest emissions. Measurement are made polarized in both the vertical and the horizontal positions with antenna.

3. Span shall wide enough to full capture the emission measured. The SA from 9kHz to 26.5GHz set to the low, Mid and High channels with the EUT transmit.

Note: No emission found between lowest internal used/generated frequency to 30MHz(9KHz~30MHz)

4. The SA setting following :

(1) Below 1G : RBW = 100kHz, VBW \geq 3 RBW, Sweep = Auto, Detector = Peak, Trace = Max hold.

(2) Above 1G :

(2.1) For Peak measurement : RBW = 1MHz, VBW \geq 3 RBW, Sweep = Auto, Detector = Peak, Trace = Max hold.

(2.2) For Average measurement : RBW = 1MHz, VBW

·If Duty Cycle \geq 98%, VBW=10Hz.

·If Duty Cycle < 98%, VBW \geq 1/T.

5. Data result

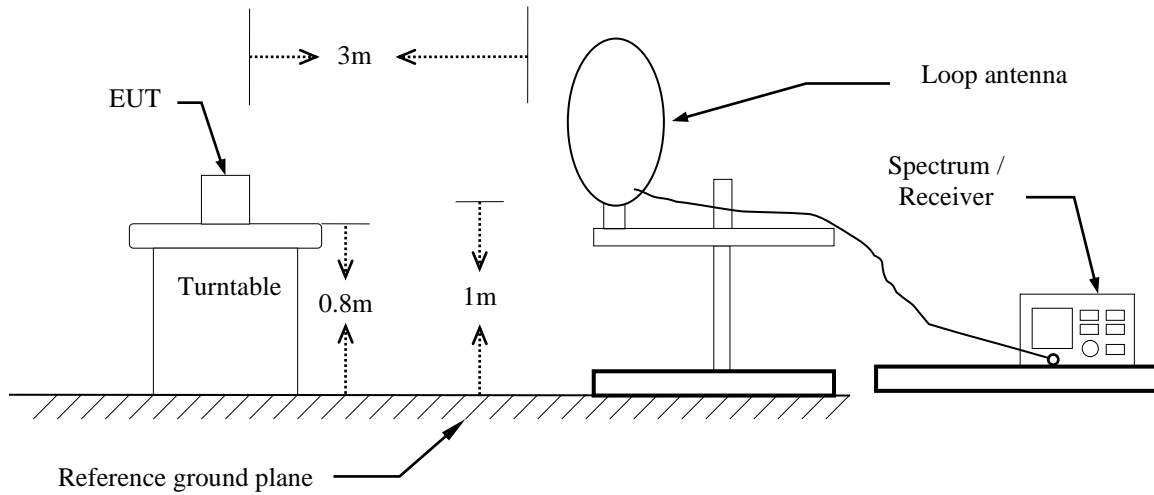
Actual FS=Spectrum Reading Level + Factor

Margin=Actual FS- Limit

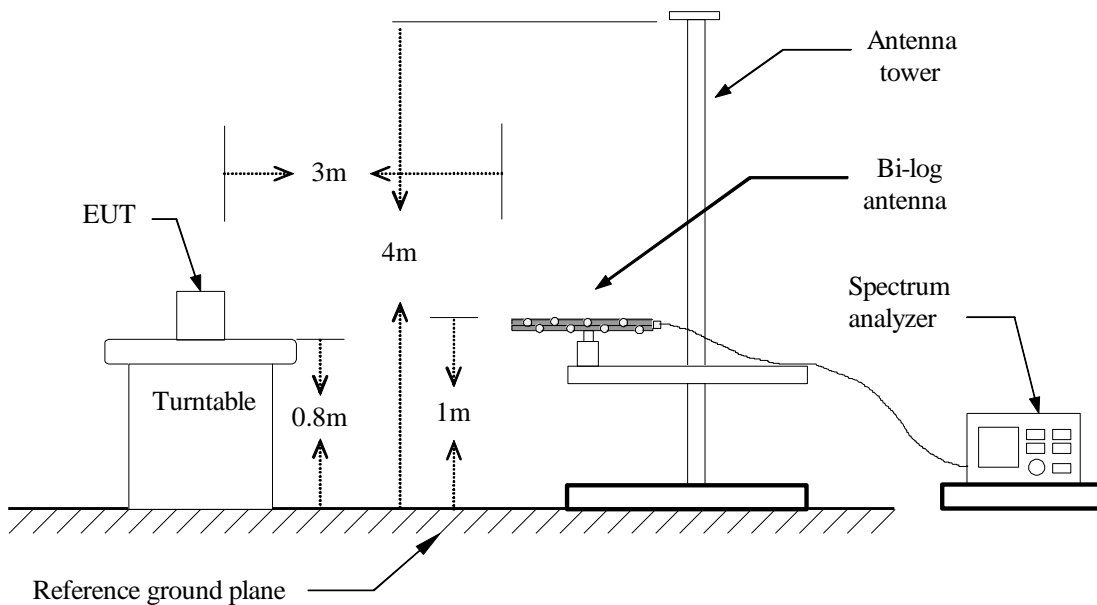
Report No.: TMWK2210004066KR

4.8.3 Test Setup

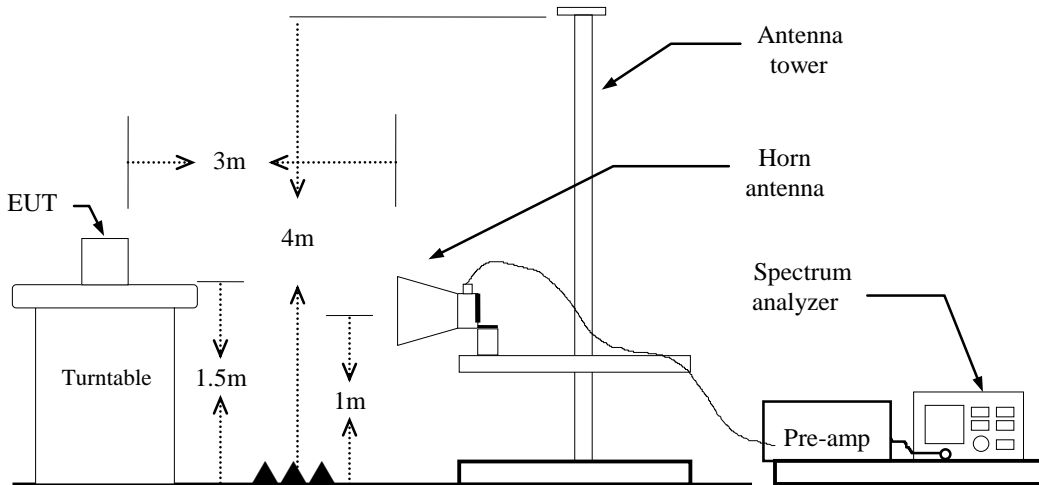
9kHz ~ 30MHz



30MHz ~ 1GHz



Above 1 GHz

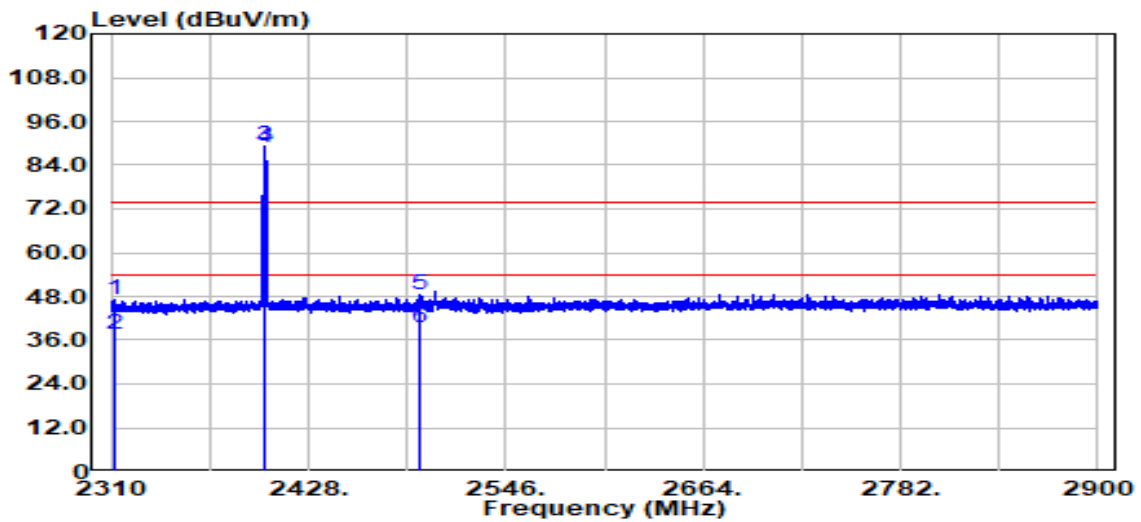


Report No.: TMWK2210004066KR

4.8.4 Test Result

Band Edge Test Data

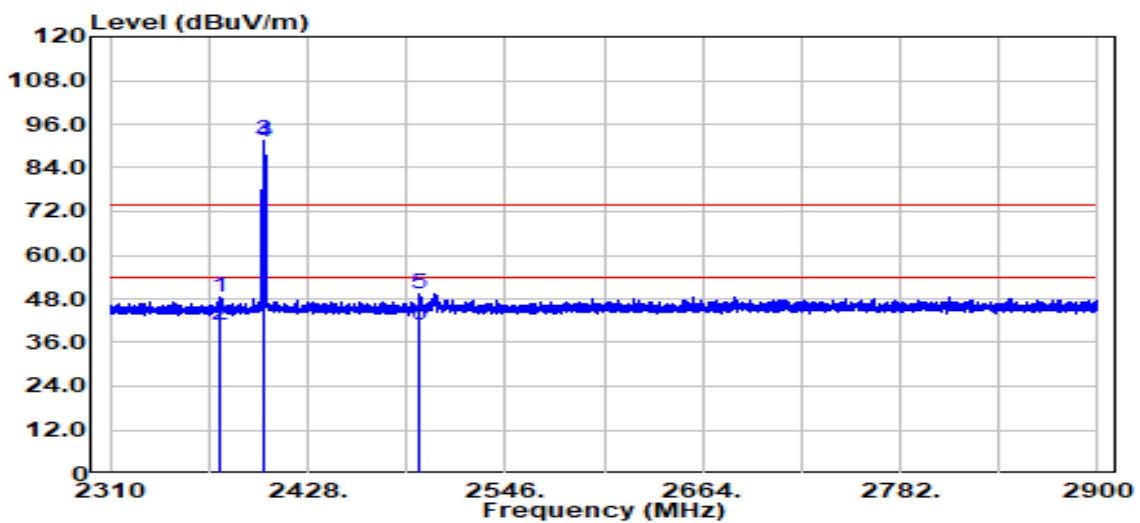
| | | | |
|------------|--------------------------|---------------|--------------------|
| Test Mode: | GFSK_BDR-1Mbps Low CH | Temp/Hum | 24.1(°C)/ 63%RH |
| Test Item | Band Edge | Test Date | September 12, 2022 |
| Polarize | Vertical | Test Engineer | Tony Chao |
| Detector | Peak / Average | | |



| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dBμV) | Factor (dB) | Actual FS (dBμV/m) | Limit @3m (dBμV/m) | Margin (dB) |
|----------------|--------------------------------|--|----------------|--------------------------|--------------------------|----------------|
| 2311.416 | Peak | 39.66 | 7.58 | 47.24 | 74.00 | -26.76 |
| 2311.416 | Average | 30.04 | 7.58 | 37.62 | 54.00 | -16.38 |
| 2402.000 | Peak | 81.38 | 7.79 | 89.17 | - | - |
| 2402.000 | Average | 81.18 | 7.79 | 88.97 | - | - |
| 2494.906 | Peak | 40.04 | 8.32 | 48.35 | 74.00 | -25.65 |
| 2494.906 | Average | 31.04 | 8.32 | 39.36 | 54.00 | -14.64 |

Report No.: TMWK2210004066KR

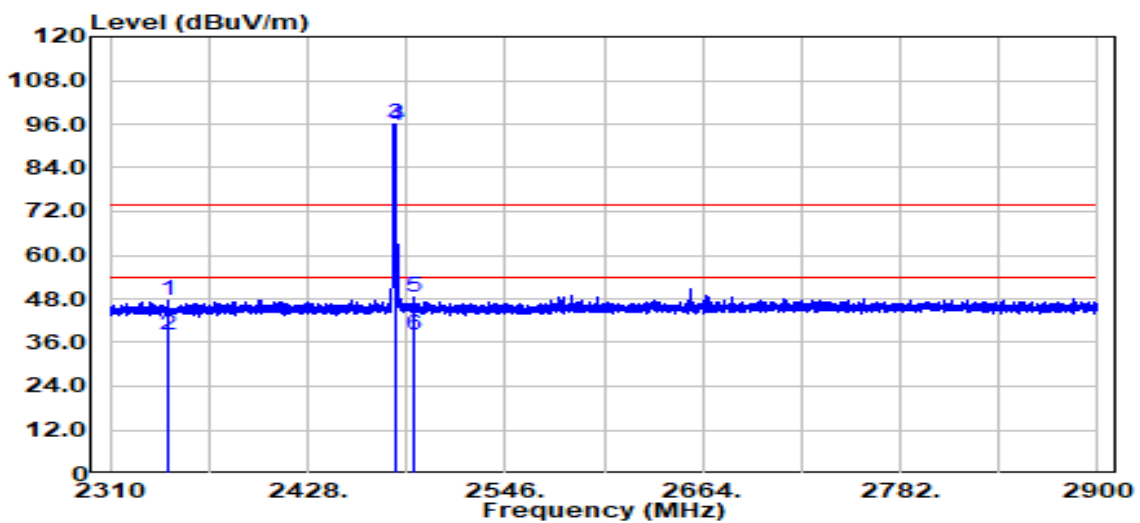
| | | | |
|------------|--------------------------|---------------|--------------------|
| Test Mode: | GFSK_BDR-1Mbps Low CH | Temp/Hum | 24.1(°C)/ 63%RH |
| Test Item | Band Edge | Test Date | September 12, 2022 |
| Polarize | Horizontal | Test Engineer | Tony Chao |
| Detector | Peak / Average | | |



| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dB μ V) | Factor (dB) | Actual FS (dB μ V/m) | Limit @3m (dB μ V/m) | Margin (dB) |
|----------------|--------------------------------|--|----------------|--------------------------------|--------------------------------|----------------|
| 2375.962 | Peak | 40.70 | 7.71 | 48.41 | 74.00 | -25.59 |
| 2375.962 | Average | 33.17 | 7.71 | 40.88 | 54.00 | -13.12 |
| 2402.000 | Peak | 83.64 | 7.79 | 91.43 | - | - |
| 2402.000 | Average | 83.44 | 7.79 | 91.23 | - | - |
| 2495.142 | Peak | 41.05 | 8.32 | 49.37 | 74.00 | -24.63 |
| 2495.142 | Average | 32.57 | 8.32 | 40.88 | 54.00 | -13.12 |

Report No.: TMWK2210004066KR

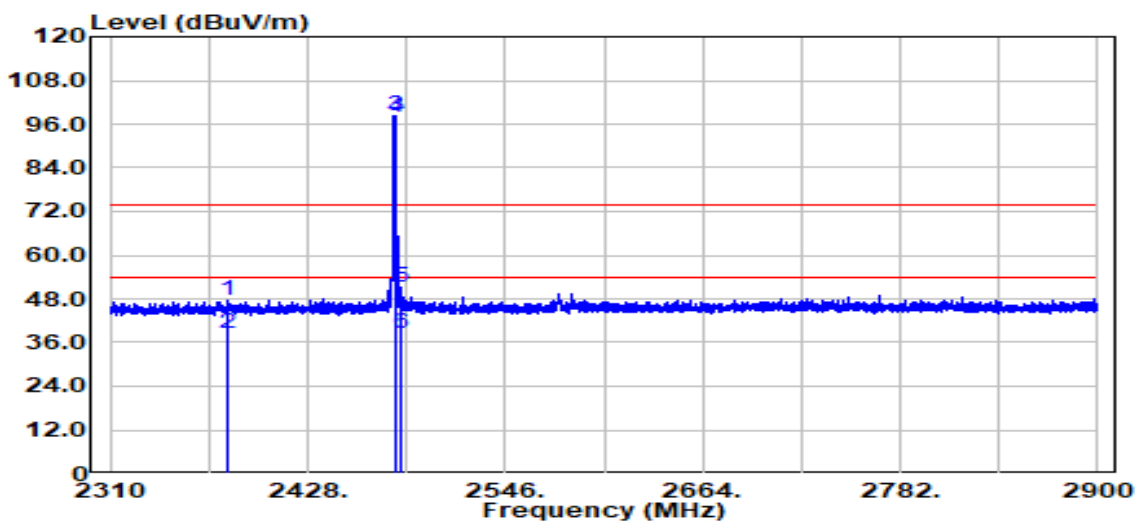
| | | | |
|------------|---------------------------|---------------|--------------------|
| Test Mode: | GFSK_BDR-1Mbps High CH | Temp/Hum | 24.1(°C)/ 63%RH |
| Test Item | Band Edge | Test Date | September 12, 2022 |
| Polarize | Vertical | Test Engineer | Tony Chao |
| Detector | Peak / Average | | |



| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dB μ V) | Factor (dB) | Actual FS (dB μ V/m) | Limit @3m (dB μ V/m) | Margin (dB) |
|----------------|--------------------------------|--|----------------|--------------------------------|--------------------------------|----------------|
| 2344.928 | Peak | 39.71 | 7.63 | 47.34 | 74.00 | -26.66 |
| 2344.928 | Average | 30.42 | 7.63 | 38.05 | 54.00 | -15.95 |
| 2480.000 | Peak | 87.68 | 8.24 | 95.92 | - | - |
| 2480.000 | Average | 87.48 | 8.24 | 95.73 | - | - |
| 2491.956 | Peak | 39.99 | 8.30 | 48.30 | 74.00 | -25.70 |
| 2491.956 | Average | 29.88 | 8.30 | 38.18 | 54.00 | -15.82 |

Report No.: TMWK2210004066KR

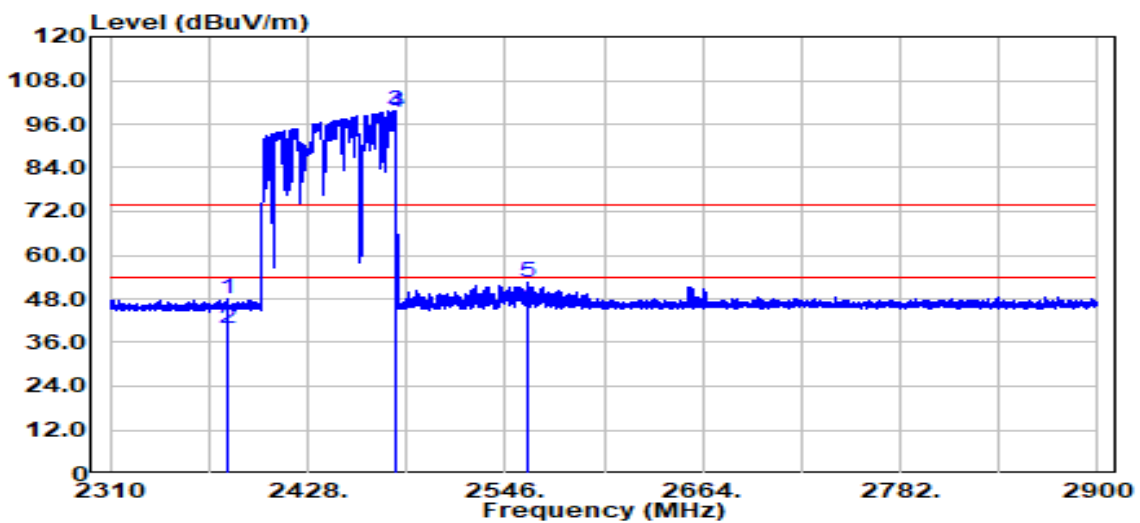
| | | | |
|------------|---------------------------|---------------|--------------------|
| Test Mode: | GFSK_BDR-1Mbps High CH | Temp/Hum | 24.1(°C)/ 63%RH |
| Test Item | Band Edge | Test Date | September 12, 2022 |
| Polarize | Horizontal | Test Engineer | Tony Chao |
| Detector | Peak / Average | | |



| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dBUV) | Factor (dB) | Actual FS (dBUV/m) | Limit @3m (dBUV/m) | Margin (dB) |
|----------------|--------------------------------|--|----------------|--------------------------|--------------------------|----------------|
| 2380.210 | Peak | 39.94 | 7.72 | 47.67 | 74.00 | -26.33 |
| 2380.210 | Average | 30.59 | 7.72 | 38.32 | 54.00 | -15.68 |
| 2480.000 | Peak | 89.82 | 8.24 | 98.07 | - | - |
| 2480.000 | Average | 89.65 | 8.24 | 97.90 | - | - |
| 2484.168 | Peak | 42.86 | 8.26 | 51.12 | 74.00 | -22.88 |
| 2484.168 | Average | 30.44 | 8.26 | 38.70 | 54.00 | -15.30 |

Report No.: TMWK2210004066KR

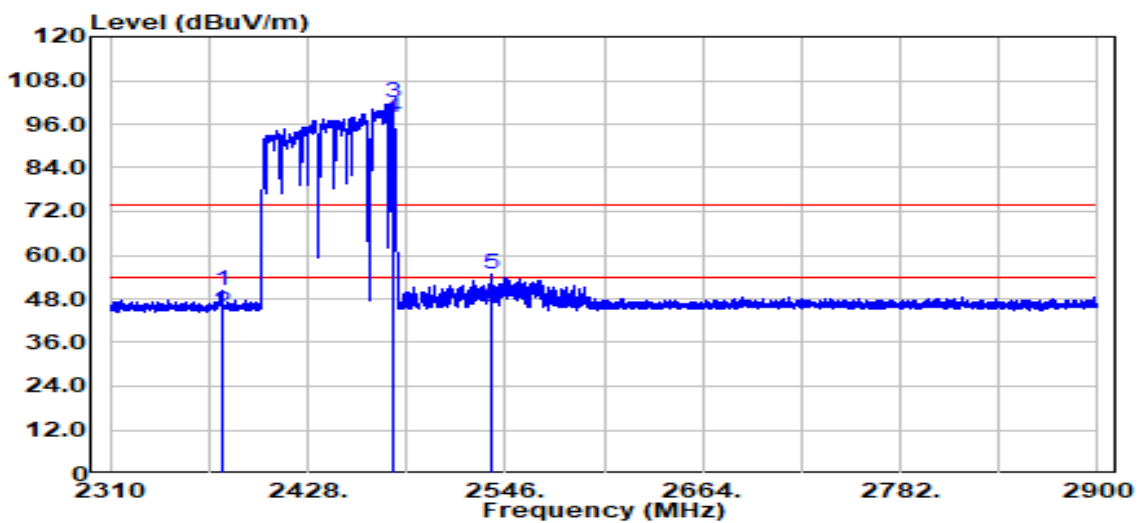
| | | | |
|------------|------------------------|---------------|--------------------|
| Test Mode: | GFSK_BDR-1Mbps Hopping | Temp/Hum | 24.1(°C)/ 63%RH |
| Test Item | Band Edge | Test Date | September 12, 2022 |
| Polarize | Vertical | Test Engineer | Tony Chao |
| Detector | Peak / Average | | |



| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dB μ V) | Factor (dB) | Actual FS (dB μ V/m) | Limit @3m (dB μ V/m) | Margin (dB) |
|-------------|--------------------------|-------------------------------------|-------------|--------------------------|--------------------------|-------------|
| 2380.564 | Peak | 40.37 | 7.73 | 48.09 | 74.00 | -25.91 |
| 2380.564 | Average | 31.92 | 7.73 | 39.64 | 54.00 | -14.36 |
| 2480.156 | Peak | 91.49 | 8.24 | 99.74 | - | - |
| 2480.156 | Average | 91.02 | 8.24 | 99.27 | - | - |
| 2559.452 | Peak | 43.97 | 8.56 | 52.53 | 74.00 | -21.47 |
| 2559.452 | Average | 36.05 | 8.56 | 44.61 | 54.00 | -9.39 |

Report No.: TMWK2210004066KR

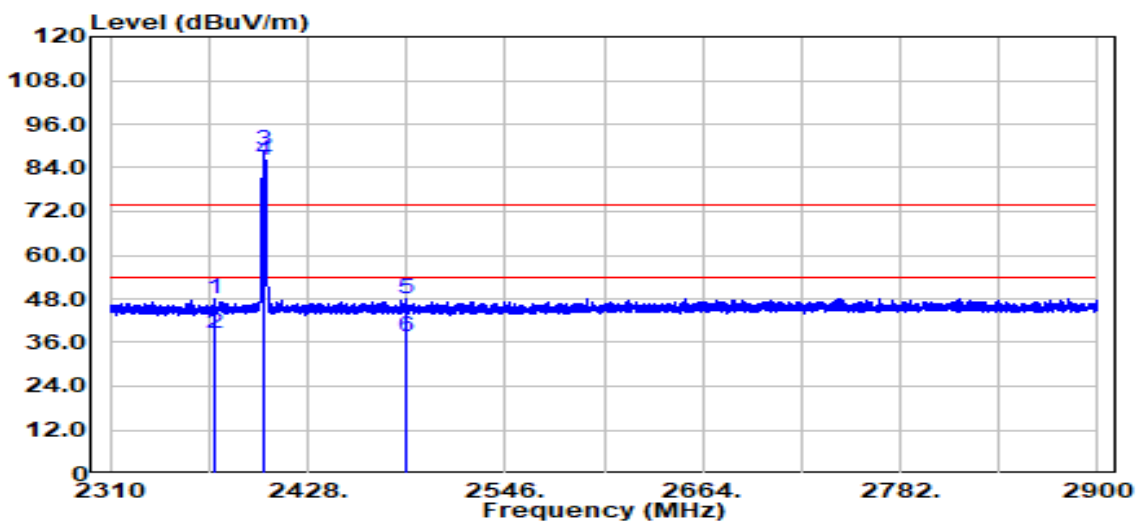
| | | | |
|------------|------------------------|---------------|--------------------|
| Test Mode: | GFSK_BDR-1Mbps Hopping | Temp/Hum | 24.1(°C)/ 63%RH |
| Test Item | Band Edge | Test Date | September 12, 2022 |
| Polarize | Horizontal | Test Engineer | Tony Chao |
| Detector | Peak / Average | | |



| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dBUV) | Factor (dB) | Actual FS (dBUV/m) | Limit @3m (dBUV/m) | Margin (dB) |
|-------------|--------------------------|-------------------------------|-------------|--------------------|--------------------|-------------|
| 2376.434 | Peak | 42.71 | 7.71 | 50.43 | 74.00 | -23.57 |
| 2376.434 | Average | 36.60 | 7.71 | 44.31 | 54.00 | -9.69 |
| 2479.094 | Peak | 93.49 | 8.24 | 101.73 | - | - |
| 2479.094 | Average | 89.76 | 8.24 | 98.00 | - | - |
| 2537.504 | Peak | 46.51 | 8.45 | 54.97 | 74.00 | -19.03 |
| 2537.504 | Average | 37.37 | 8.45 | 45.82 | 54.00 | -8.18 |

Report No.: TMWK2210004066KR

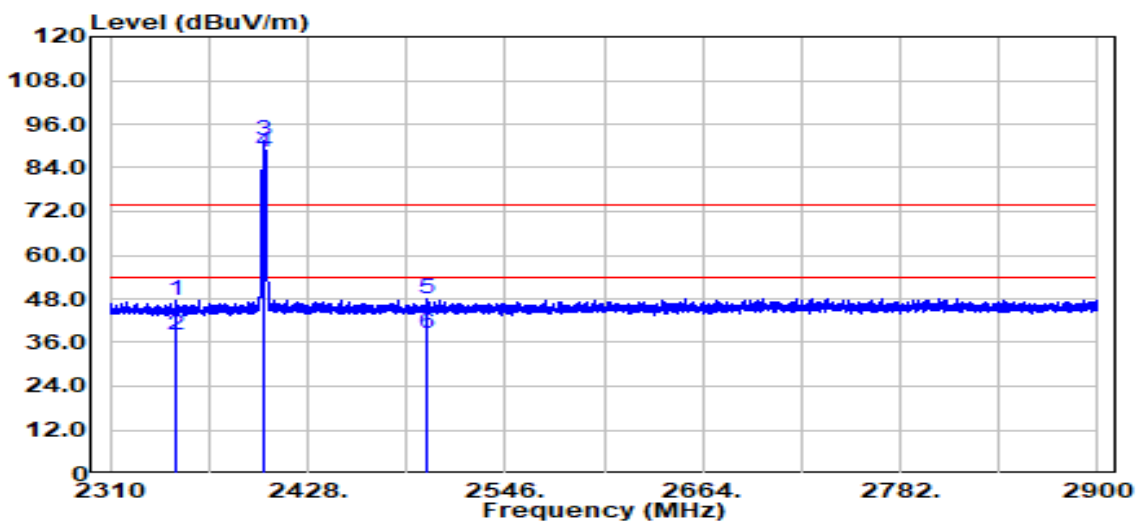
| | | | |
|------------|---------------------------|---------------|--------------------|
| Test Mode: | 8DPSK_EDR-3Mbps Low CH | Temp/Hum | 24.1(°C)/ 63%RH |
| Test Item | Band Edge | Test Date | September 12, 2022 |
| Polarize | Vertical | Test Engineer | Tony Chao |
| Detector | Peak / Average | | |



| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dB μ V) | Factor (dB) | Actual FS (dB μ V/m) | Limit @3m (dB μ V/m) | Margin (dB) |
|----------------|--------------------------------|--|----------------|--------------------------------|--------------------------------|----------------|
| 2373.012 | Peak | 40.10 | 7.70 | 47.81 | 74.00 | -26.19 |
| 2373.012 | Average | 30.66 | 7.70 | 38.36 | 54.00 | -15.64 |
| 2402.000 | Peak | 80.97 | 7.79 | 88.77 | - | - |
| 2402.000 | Average | 78.14 | 7.79 | 85.94 | - | - |
| 2486.882 | Peak | 39.70 | 8.28 | 47.97 | 74.00 | -26.03 |
| 2486.882 | Average | 29.29 | 8.28 | 37.56 | 54.00 | -16.44 |

Report No.: TMWK2210004066KR

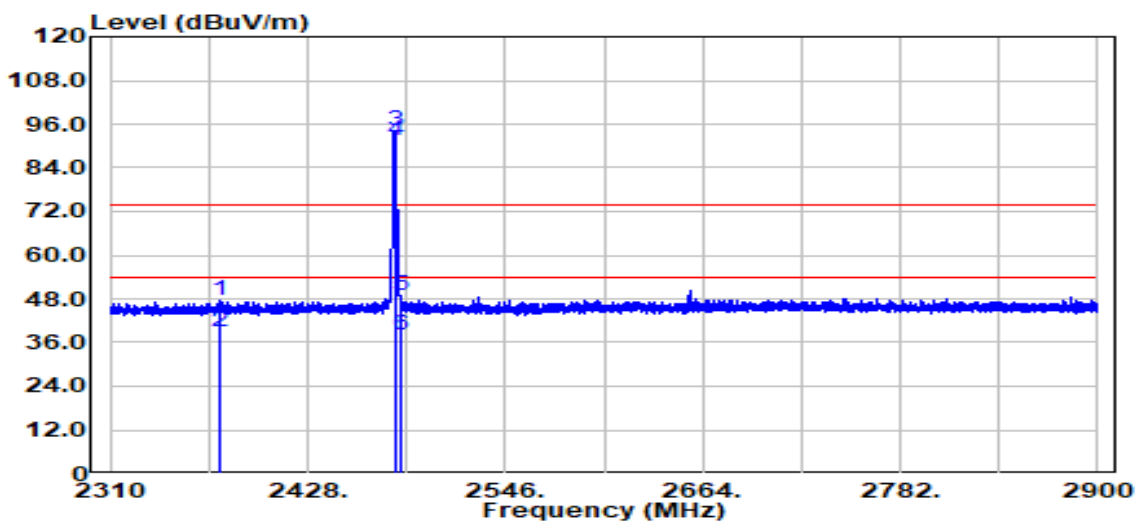
| | | | |
|------------|---------------------------|---------------|--------------------|
| Test Mode: | 8DPSK_EDR-3Mbps Low CH | Temp/Hum | 24.1(°C)/ 63%RH |
| Test Item | Band Edge | Test Date | September 12, 2022 |
| Polarize | Horizontal | Test Engineer | Tony Chao |
| Detector | Peak / Average | | |



| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dB μ V) | Factor (dB) | Actual FS (dB μ V/m) | Limit @3m (dB μ V/m) | Margin (dB) |
|----------------|--------------------------------|--|----------------|--------------------------------|--------------------------------|----------------|
| 2349.766 | Peak | 39.89 | 7.64 | 47.53 | 74.00 | -26.47 |
| 2349.766 | Average | 30.17 | 7.64 | 37.81 | 54.00 | -16.19 |
| 2402.000 | Peak | 83.52 | 7.79 | 91.32 | - | - |
| 2402.000 | Average | 80.65 | 7.79 | 88.44 | - | - |
| 2499.744 | Peak | 39.86 | 8.34 | 48.20 | 74.00 | -25.80 |
| 2499.744 | Average | 30.27 | 8.34 | 38.61 | 54.00 | -15.39 |

Report No.: TMWK2210004066KR

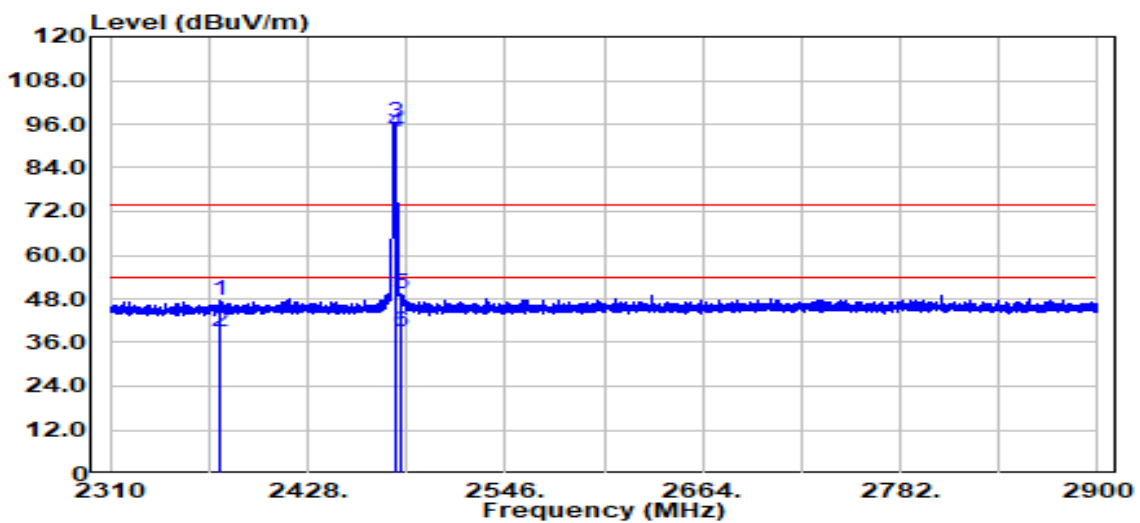
| | | | |
|------------|----------------------------|---------------|--------------------|
| Test Mode: | 8DPSK_EDR-3Mbps High CH | Temp/Hum | 24.1(°C)/ 63%RH |
| Test Item | Band Edge | Test Date | September 12, 2022 |
| Polarize | Vertical | Test Engineer | Tony Chao |
| Detector | Peak / Average | | |



| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dBUV) | Factor (dB) | Actual FS (dBUV/m) | Limit @3m (dBUV/m) | Margin (dB) |
|----------------|--------------------------------|--|----------------|--------------------------|--------------------------|----------------|
| 2375.490 | Peak | 39.79 | 7.71 | 47.50 | 74.00 | -26.50 |
| 2375.490 | Average | 31.05 | 7.71 | 38.76 | 54.00 | -15.24 |
| 2480.000 | Peak | 85.89 | 8.24 | 94.13 | - | - |
| 2480.000 | Average | 83.11 | 8.24 | 91.35 | - | - |
| 2483.932 | Peak | 40.64 | 8.26 | 48.91 | 74.00 | -25.09 |
| 2483.932 | Average | 29.92 | 8.26 | 38.19 | 54.00 | -15.81 |

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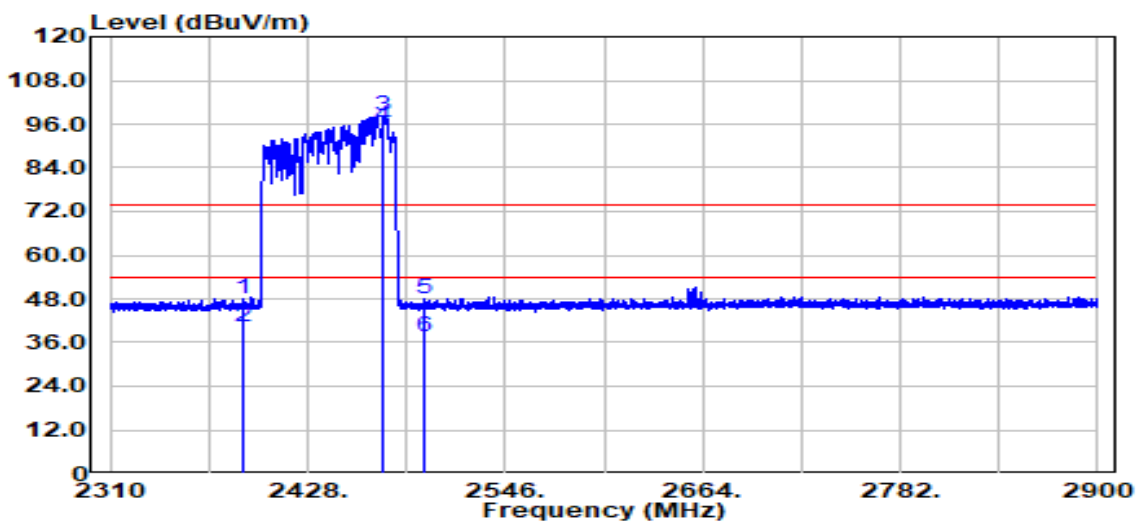
| | | | |
|------------|----------------------------|---------------|--------------------|
| Test Mode: | 8DPSK_EDR-3Mbps High CH | Temp/Hum | 24.1(°C)/ 63%RH |
| Test Item | Band Edge | Test Date | September 12, 2022 |
| Polarize | Horizontal | Test Engineer | Tony Chao |
| Detector | Peak / Average | | |



| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dBUV) | Factor (dB) | Actual FS (dBUV/m) | Limit @3m (dBUV/m) | Margin (dB) |
|----------------|--------------------------------|--|----------------|--------------------------|--------------------------|----------------|
| 2375.018 | Peak | 39.66 | 7.71 | 47.37 | 74.00 | -26.63 |
| 2375.018 | Average | 31.28 | 7.71 | 38.99 | 54.00 | -15.01 |
| 2480.000 | Peak | 88.36 | 8.24 | 96.60 | - | - |
| 2480.000 | Average | 85.52 | 8.24 | 93.77 | - | - |
| 2484.050 | Peak | 41.16 | 8.26 | 49.42 | 74.00 | -24.58 |
| 2484.050 | Average | 30.86 | 8.26 | 39.12 | 54.00 | -14.88 |

Report No.: TMWK2210004066KR

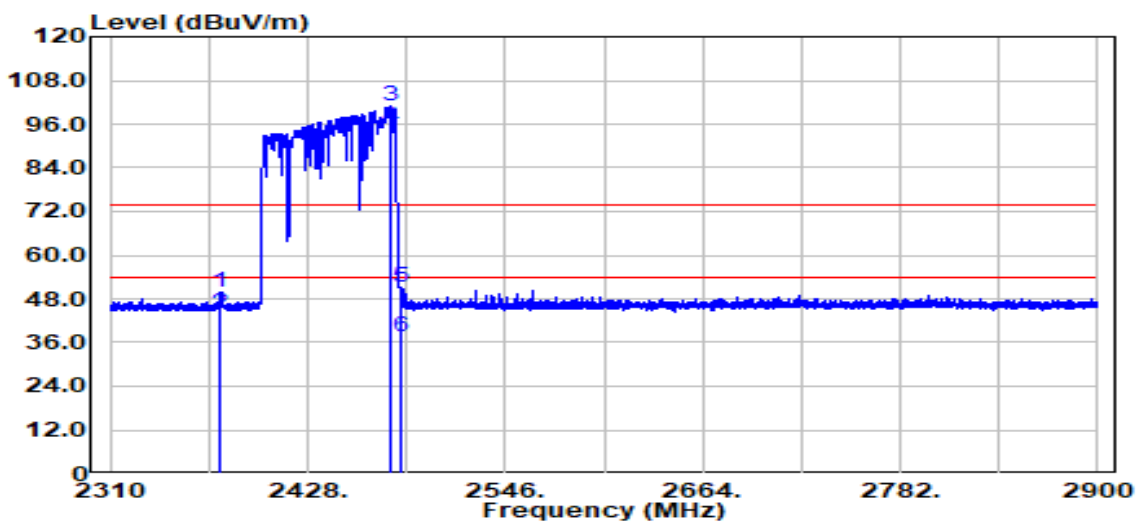
| | | | |
|------------|-------------------------|---------------|--------------------|
| Test Mode: | 8DPSK_EDR-3Mbps Hopping | Temp/Hum | 24.1(°C)/ 63%RH |
| Test Item | Band Edge | Test Date | September 12, 2022 |
| Polarize | Vertical | Test Engineer | Tony Chao |
| Detector | Peak / Average | | |



| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dBUV) | Factor (dB) | Actual FS (dBUV/m) | Limit @3m (dBUV/m) | Margin (dB) |
|-------------|--------------------------|-------------------------------|-------------|--------------------|--------------------|-------------|
| 2389.532 | Peak | 40.29 | 7.75 | 48.04 | 74.00 | -25.96 |
| 2389.532 | Average | 32.39 | 7.75 | 40.14 | 54.00 | -13.86 |
| 2472.840 | Peak | 89.95 | 8.21 | 98.16 | - | - |
| 2472.840 | Average | 87.34 | 8.21 | 95.55 | - | - |
| 2497.738 | Peak | 39.46 | 8.33 | 47.79 | 74.00 | -26.21 |
| 2497.738 | Average | 29.16 | 8.33 | 37.49 | 54.00 | -16.51 |

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| | | | |
|------------|-------------------------|---------------|--------------------|
| Test Mode: | 8DPSK_EDR-3Mbps Hopping | Temp/Hum | 24.1(°C)/ 63%RH |
| Test Item | Band Edge | Test Date | September 12, 2022 |
| Polarize | Horizontal | Test Engineer | Tony Chao |
| Detector | Peak / Average | | |

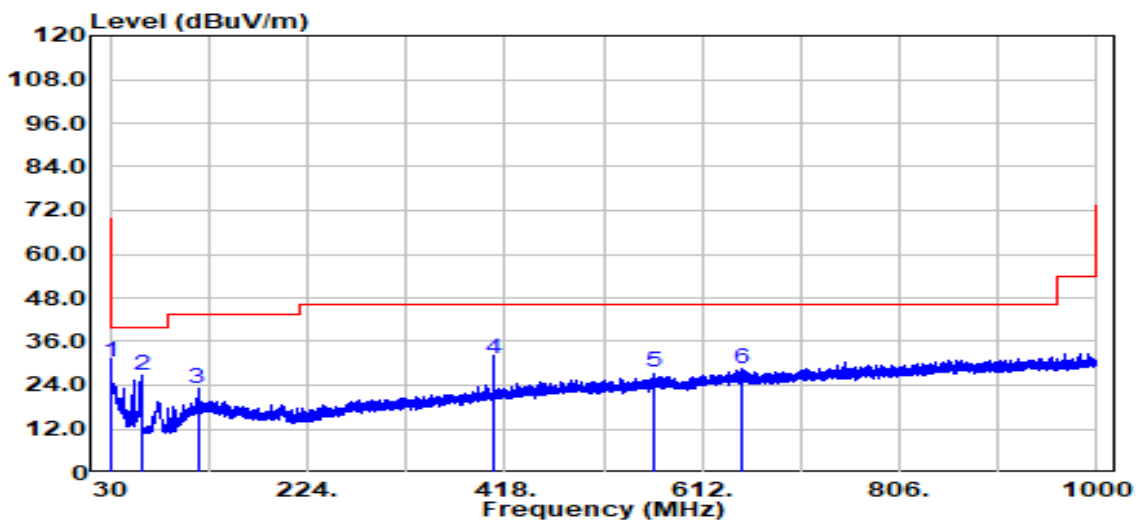


| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dBUV) | Factor (dB) | Actual FS (dBUV/m) | Limit @3m (dBUV/m) | Margin (dB) |
|-------------|--------------------------|-------------------------------|-------------|--------------------|--------------------|-------------|
| 2375.962 | Peak | 42.18 | 7.71 | 49.90 | 74.00 | -24.10 |
| 2375.962 | Average | 36.44 | 7.71 | 44.15 | 54.00 | -9.85 |
| 2478.032 | Peak | 92.61 | 8.23 | 100.84 | - | - |
| 2478.032 | Average | 87.06 | 8.23 | 95.29 | - | - |
| 2483.500 | Peak | 42.83 | 8.26 | 51.09 | 74.00 | -22.91 |
| 2483.500 | Average | 29.31 | 8.26 | 37.57 | 54.00 | -16.43 |

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Below 1G Test Data

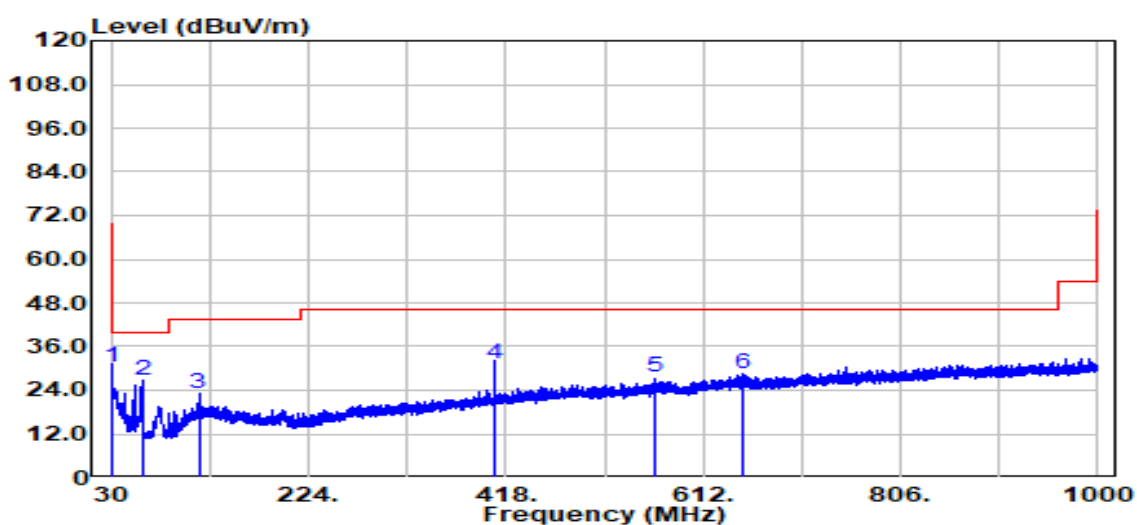
| | | | |
|------------|---------------------------|---------------|--|
| Test Mode: | GFSK_BDR-1Mbps High CH | Temp/Hum | 24.1(°C)/ 64%RH |
| Test Item | 30MHz-1GHz | Test Date | September 15, 2022 |
| Polarize | Vertical | Test Engineer | Tony Chao |
| Detector | Peak | EUT | Mode 4: 7.8" Color Digital Note Pad |



| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dBμV) | Factor (dB) | Actual FS (dBμV/m) | Limit @3m (dBμV/m) | Margin (dB) |
|----------------|--------------------------------|-------------------------------------|----------------|--------------------------|--------------------------|----------------|
| 30.000 | Peak | 33.50 | -3.22 | 30.28 | 40.00 | -9.72 |
| 62.495 | Peak | 42.84 | -16.10 | 26.74 | 40.00 | -13.26 |
| 116.088 | Peak | 32.84 | -9.92 | 22.92 | 43.50 | -20.58 |
| 408.058 | Peak | 36.80 | -5.71 | 31.09 | 46.00 | -14.91 |
| 563.864 | Peak | 30.08 | -2.60 | 27.47 | 46.00 | -18.53 |
| 650.194 | Peak | 29.26 | -0.94 | 28.32 | 46.00 | -17.68 |

Note: No emission found between lowest internal used/generated frequency to 30MHz (9kHz~30MHz).

| | | | |
|------------|---------------------------|---------------|--|
| Test Mode: | GFSK_BDR-1Mbps High CH | Temp/Hum | 24.1(°C)/ 64%RH |
| Test Item | 30MHz-1GHz | Test Date | September 15, 2022 |
| Polarize | Horizontal | Test Engineer | Tony Chao |
| Detector | Peak | EUT | Mode 4: 7.8" Color Digital Note Pad |

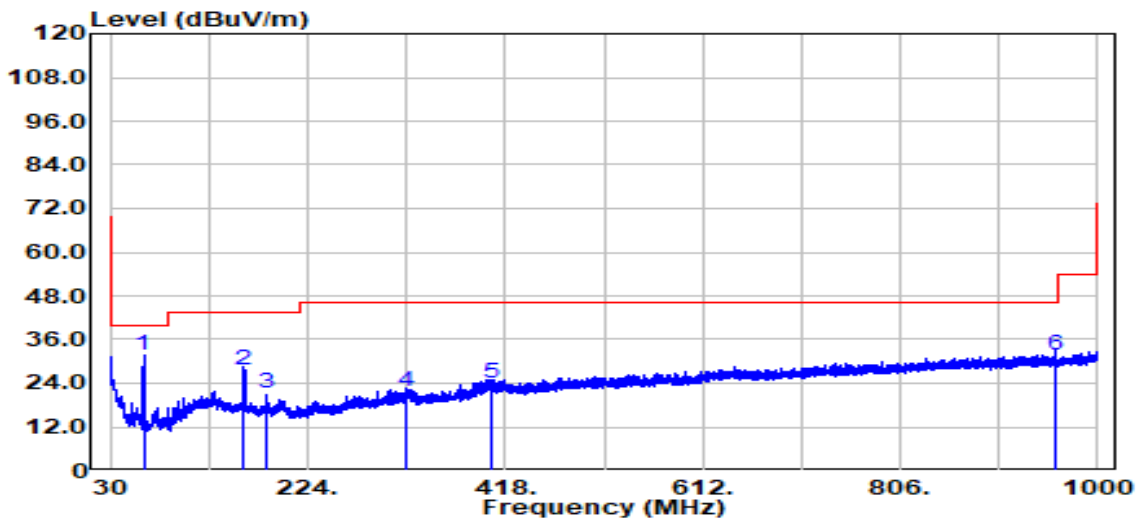


| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dBμV) | Factor (dB) | Actual FS (dBμV/m) | Limit @3m (dBμV/m) | Margin (dB) |
|----------------|--------------------------------|-------------------------------------|----------------|--------------------------|--------------------------|----------------|
| 30.000 | Peak | 33.50 | -3.22 | 30.28 | 40.00 | -9.72 |
| 62.495 | Peak | 42.84 | -16.10 | 26.74 | 40.00 | -13.26 |
| 116.088 | Peak | 32.84 | -9.92 | 22.92 | 43.50 | -20.58 |
| 408.058 | Peak | 36.80 | -5.71 | 31.09 | 46.00 | -14.91 |
| 563.864 | Peak | 30.08 | -2.60 | 27.47 | 46.00 | -18.53 |
| 650.194 | Peak | 29.26 | -0.94 | 28.32 | 46.00 | -17.68 |

Note: No emission found between lowest internal used/generated frequency to 30MHz (9kHz~30MHz).

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| | | | |
|------------|---------------------------|---------------|-----------------------------|
| Test Mode: | GFSK_BDR-1Mbps High CH | Temp/Hum | 24.1(°C)/ 64%RH |
| Test Item | 30MHz-1GHz | Test Date | September 15, 2022 |
| Polarize | Vertical | Test Engineer | Tony Chao |
| Detector | Peak | EUT | Mode 1: 7.8" Digital Reader |

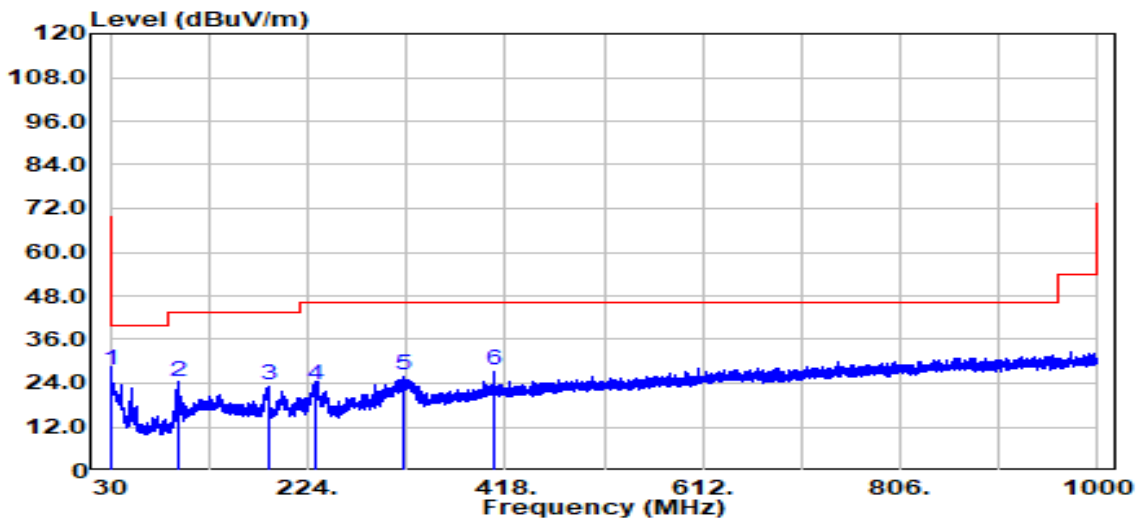


| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dBμV) | Factor (dB) | Actual FS (dBμV/m) | Limit @3m (dBμV/m) | Margin (dB) |
|----------------|--------------------------------|-------------------------------------|----------------|--------------------------|--------------------------|----------------|
| 62.738 | Peak | 47.87 | -16.07 | 31.80 | 40.00 | -8.20 |
| 161.678 | Peak | 38.32 | -10.88 | 27.44 | 43.50 | -16.06 |
| 184.351 | Peak | 32.84 | -11.75 | 21.09 | 43.50 | -22.41 |
| 321.606 | Peak | 30.24 | -8.40 | 21.84 | 46.00 | -24.16 |
| 403.450 | Peak | 29.85 | -5.86 | 23.99 | 46.00 | -22.01 |
| 958.048 | Peak | 28.64 | 3.25 | 31.88 | 46.00 | -14.12 |

Note: No emission found between lowest internal used/generated frequency to 30MHz (9kHz~30MHz).

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| | | | |
|------------|---------------------------|---------------|-----------------------------|
| Test Mode: | GFSK_BDR-1Mbps High CH | Temp/Hum | 24.1(°C)/ 64%RH |
| Test Item | 30MHz-1GHz | Test Date | September 15, 2022 |
| Polarize | Horizontal | Test Engineer | Tony Chao |
| Detector | Peak | EUT | Mode 1: 7.8" Digital Reader |

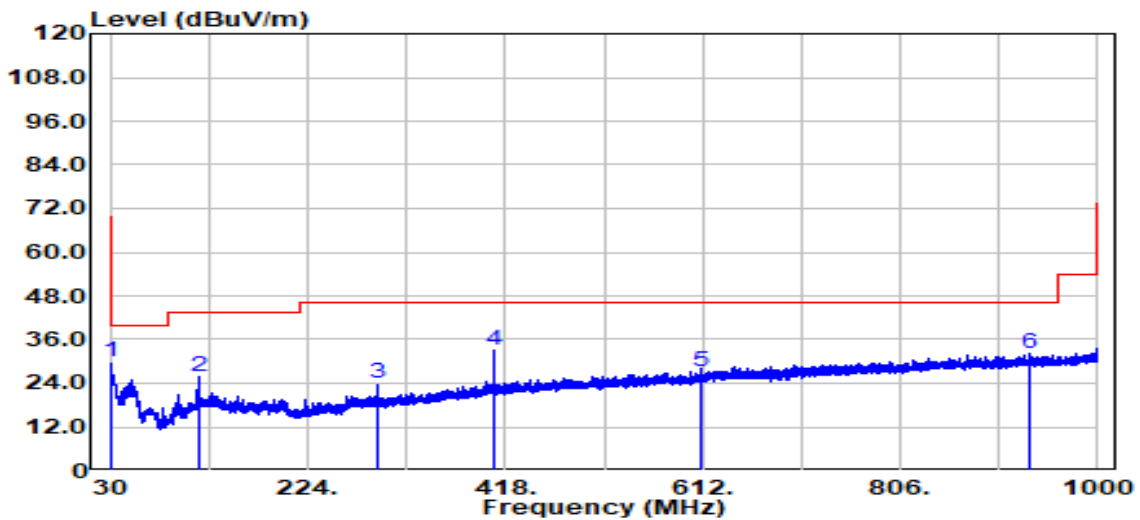


| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dBμV) | Factor (dB) | Actual FS (dBμV/m) | Limit @3m (dBμV/m) | Margin (dB) |
|----------------|--------------------------------|-------------------------------------|----------------|--------------------------|--------------------------|----------------|
| 30.000 | Peak | 30.80 | -3.22 | 27.58 | 40.00 | -12.42 |
| 97.658 | Peak | 38.15 | -13.76 | 24.39 | 43.50 | -19.11 |
| 184.958 | Peak | 35.28 | -11.68 | 23.60 | 43.50 | -19.90 |
| 232.124 | Peak | 34.93 | -11.31 | 23.62 | 46.00 | -22.38 |
| 318.818 | Peak | 34.62 | -8.45 | 26.17 | 46.00 | -19.83 |
| 407.936 | Peak | 33.44 | -5.71 | 27.73 | 46.00 | -18.27 |

Note: No emission found between lowest internal used/generated frequency to 30MHz (9kHz~30MHz).

Report No.: TMWK2210004066KR

| | | | |
|------------|---------------------------|---------------|----------------------------------|
| Test Mode: | GFSK_BDR-1Mbps High CH | Temp/Hum | 24.1(°C)/ 64%RH |
| Test Item | 30MHz-1GHz | Test Date | September 15, 2022 |
| Polarize | Vertical | Test Engineer | Tony Chao |
| Detector | Peak | EUT | Mode 2: 7.8" Digital Note Pad |

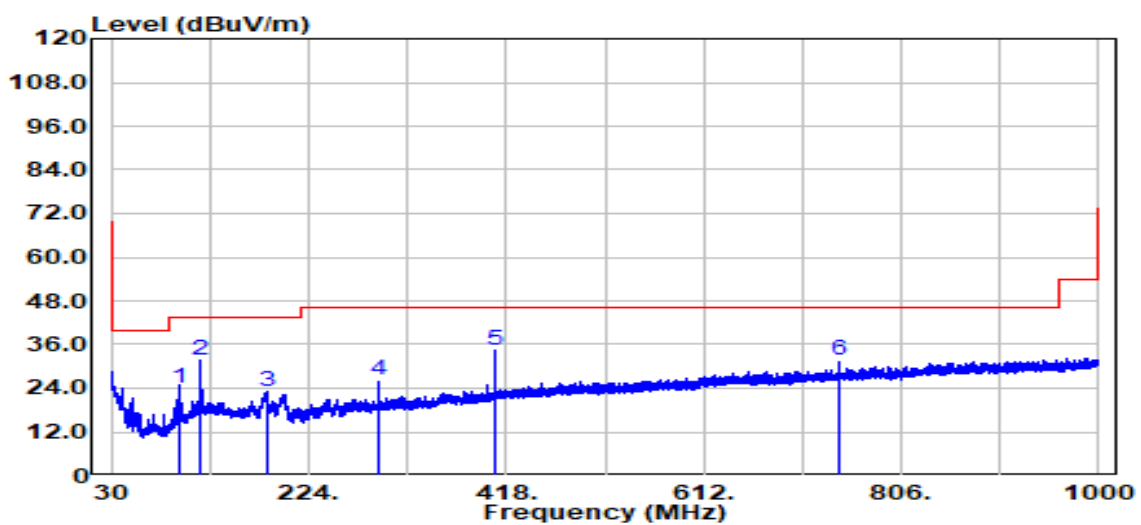


| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dB μ V) | Factor (dB) | Actual FS (dB μ V/m) | Limit @3m (dB μ V/m) | Margin (dB) |
|----------------|--------------------------------|---|----------------|--------------------------------|--------------------------------|----------------|
| 30.000 | Peak | 32.91 | -3.22 | 29.69 | 40.00 | -10.31 |
| 116.330 | Peak | 35.53 | -9.82 | 25.71 | 43.50 | -17.79 |
| 291.779 | Peak | 32.80 | -8.96 | 23.84 | 46.00 | -22.16 |
| 408.058 | Peak | 38.74 | -5.71 | 33.03 | 46.00 | -12.97 |
| 609.939 | Peak | 29.23 | -1.98 | 27.25 | 46.00 | -18.75 |
| 932.343 | Peak | 28.92 | 3.13 | 32.05 | 46.00 | -13.95 |

Note: No emission found between lowest internal used/generated frequency to 30MHz (9kHz~30MHz).

Report No.: TMWK2210004066KR

| | | | |
|------------|---------------------------|---------------|----------------------------------|
| Test Mode: | GFSK_BDR-1Mbps High CH | Temp/Hum | 24.1(°C)/ 64%RH |
| Test Item | 30MHz-1GHz | Test Date | September 15, 2022 |
| Polarize | Horizontal | Test Engineer | Tony Chao |
| Detector | Peak | EUT | Mode 2: 7.8" Digital Note Pad |

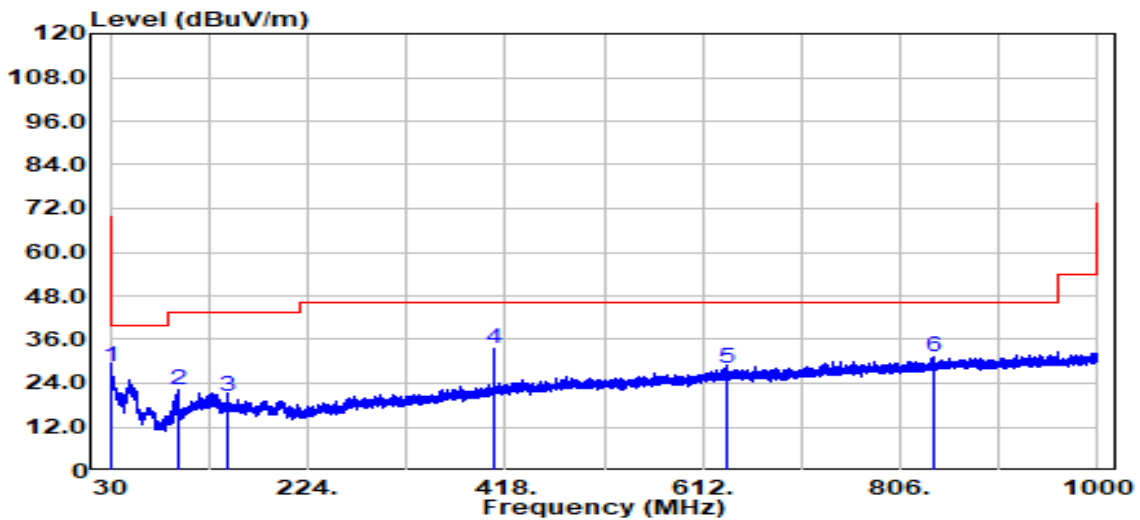


| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dBμV) | Factor (dB) | Actual FS (dBμV/m) | Limit @3m (dBμV/m) | Margin (dB) |
|----------------|--------------------------------|-------------------------------------|----------------|--------------------------|--------------------------|----------------|
| 96.203 | Peak | 38.10 | -14.12 | 23.98 | 43.50 | -19.52 |
| 116.573 | Peak | 41.28 | -9.72 | 31.56 | 43.50 | -11.94 |
| 182.411 | Peak | 34.78 | -11.71 | 23.08 | 43.50 | -20.42 |
| 291.779 | Peak | 35.27 | -8.96 | 26.30 | 46.00 | -19.70 |
| 408.058 | Peak | 40.20 | -5.71 | 34.49 | 46.00 | -11.51 |
| 744.163 | Peak | 31.22 | 0.35 | 31.57 | 46.00 | -14.43 |

Note: No emission found between lowest internal used/generated frequency to 30MHz (9kHz~30MHz).

Report No.: TMWK2210004066KR

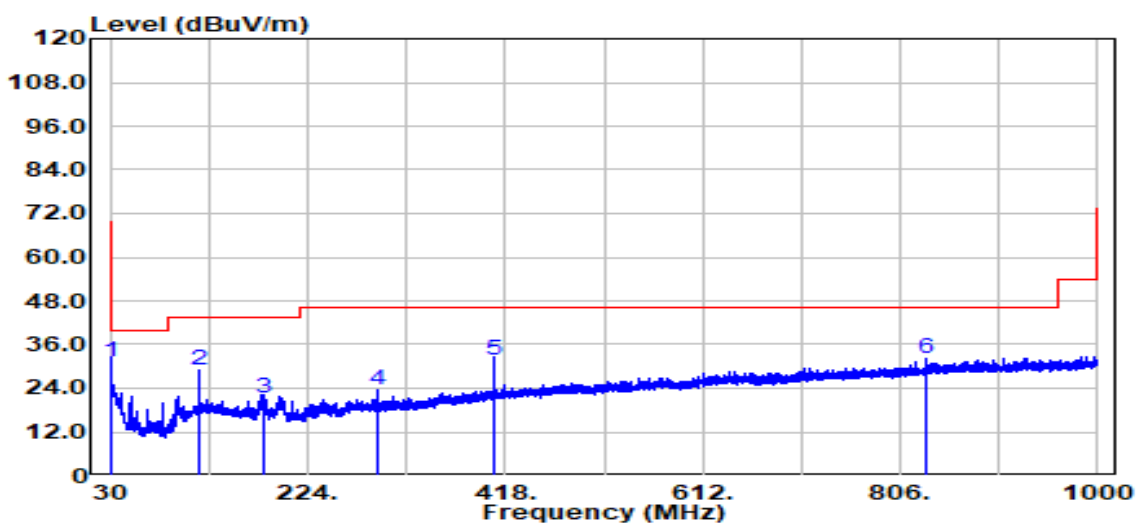
| | | | |
|------------|---------------------------|---------------|--------------------------------------|
| Test Mode: | GFSK_BDR-1Mbps High CH | Temp/Hum | 24.1(°C)/ 64%RH |
| Test Item | 30MHz-1GHz | Test Date | September 15, 2022 |
| Polarize | Vertical | Test Engineer | Tony Chao |
| Detector | Peak | EUT | Mode 3: 7.8" Color Digital Reader |



| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dBμV) | Factor (dB) | Actual FS (dBμV/m) | Limit @3m (dBμV/m) | Margin (dB) |
|----------------|--------------------------------|-------------------------------------|----------------|--------------------------|--------------------------|----------------|
| 30.000 | Peak | 31.74 | -3.22 | 28.52 | 40.00 | -11.48 |
| 96.203 | Peak | 36.14 | -14.12 | 22.02 | 43.50 | -21.48 |
| 145.673 | Peak | 30.91 | -10.45 | 20.46 | 43.50 | -23.04 |
| 408.058 | Peak | 39.35 | -5.71 | 33.65 | 46.00 | -12.35 |
| 636.250 | Peak | 28.93 | -1.03 | 27.90 | 46.00 | -18.10 |
| 840.071 | Peak | 29.53 | 1.88 | 31.41 | 46.00 | -14.59 |

Note: No emission found between lowest internal used/generated frequency to 30MHz (9kHz~30MHz).

| | | | |
|------------|---------------------------|---------------|--------------------------------------|
| Test Mode: | GFSK_BDR-1Mbps High CH | Temp/Hum | 24.1(°C)/ 64%RH |
| Test Item | 30MHz-1GHz | Test Date | September 15, 2022 |
| Polarize | Horizontal | Test Engineer | Tony Chao |
| Detector | Peak | EUT | Mode 3: 7.8" Color Digital Reader |



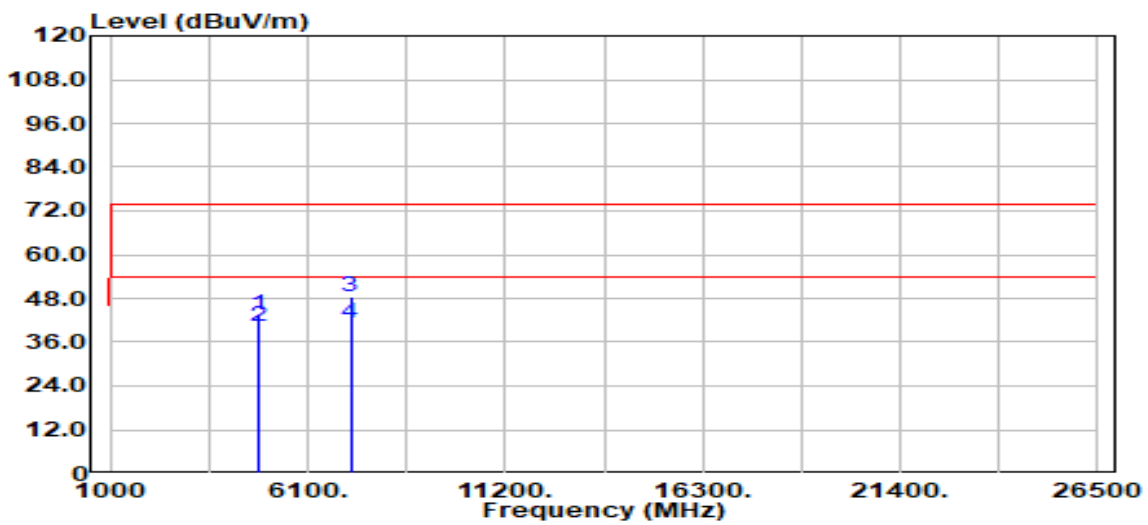
| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dBμV) | Factor (dB) | Actual FS (dBμV/m) | Limit @3m (dBμV/m) | Margin (dB) |
|----------------|--------------------------------|-------------------------------------|----------------|--------------------------|--------------------------|----------------|
| 30.000 | Peak | 34.68 | -3.22 | 31.46 | 40.00 | -8.54 |
| 116.573 | Peak | 38.49 | -9.72 | 28.77 | 43.50 | -14.73 |
| 181.684 | Peak | 33.03 | -11.74 | 21.28 | 43.50 | -22.22 |
| 291.536 | Peak | 32.63 | -8.96 | 23.67 | 46.00 | -22.33 |
| 408.058 | Peak | 37.24 | -5.71 | 31.53 | 46.00 | -14.47 |
| 831.463 | Peak | 30.30 | 1.66 | 31.97 | 46.00 | -14.03 |

Note: No emission found between lowest internal used/generated frequency to 30MHz (9kHz~30MHz).

Report No.: TMWK2210004066KR

Above 1G Test Data

| | | | |
|------------|--------------------------|---------------|--------------------|
| Test Mode: | GFSK_BDR-1Mbps Low CH | Temp/Hum | 24.1(°C)/ 63%RH |
| Test Item | Harmonic | Test Date | September 12, 2022 |
| Polarize | Vertical | Test Engineer | Tony Chao |
| Detector | Peak / Average | | |



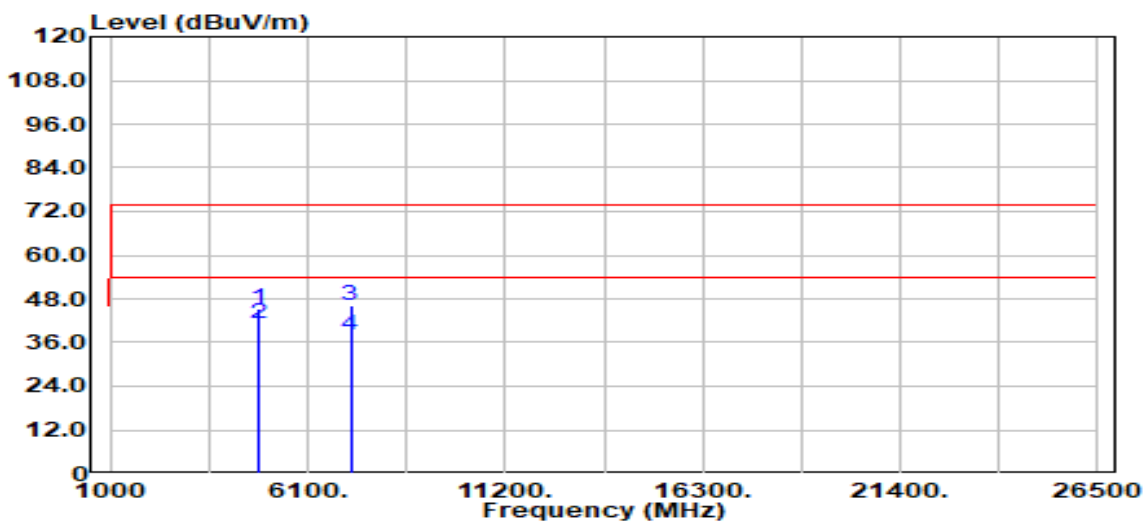
| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dB μ V) | Factor (dB) | Actual FS (dB μ V/m) | Limit @3m (dB μ V/m) | Margin (dB) |
|----------------|--------------------------------|---|----------------|--------------------------------|--------------------------------|----------------|
| 4804.000 | Peak | 37.70 | 5.87 | 43.57 | 74.00 | -30.43 |
| 4804.000 | Average | 34.58 | 5.87 | 40.45 | 54.00 | -13.55 |
| 7206.000 | Peak | 35.15 | 13.25 | 48.40 | 74.00 | -25.60 |
| 7206.000 | Average | 28.10 | 13.25 | 41.35 | 54.00 | -12.65 |
| N/A | | | | | | |

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Report No.: TMWK2210004066KR

| | | | |
|------------|--------------------------|---------------|--------------------|
| Test Mode: | GFSK_BDR-1Mbps Low CH | Temp/Hum | 24.1(°C)/ 63%RH |
| Test Item | Harmonic | Test Date | September 12, 2022 |
| Polarize | Horizontal | Test Engineer | Tony Chao |
| Detector | Peak / Average | | |



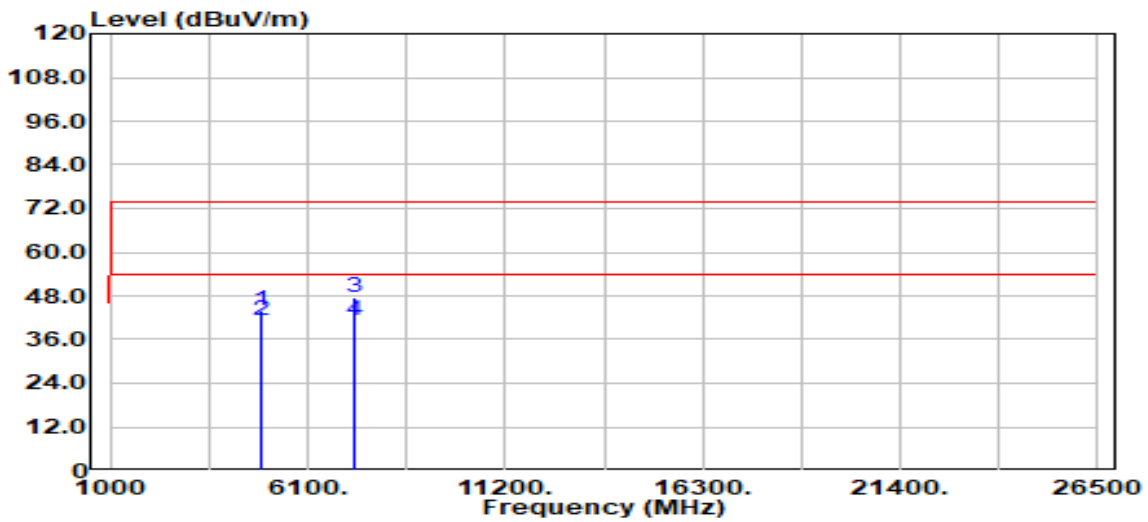
| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dBµV) | Factor (dB) | Actual FS (dBµV/m) | Limit @3m (dBµV/m) | Margin (dB) |
|----------------|--------------------------------|-------------------------------------|----------------|--------------------------|--------------------------|----------------|
| 4804.000 | Peak | 39.29 | 5.87 | 45.16 | 74.00 | -28.84 |
| 4804.000 | Average | 35.31 | 5.87 | 41.18 | 54.00 | -12.82 |
| 7206.000 | Peak | 32.72 | 13.25 | 45.97 | 74.00 | -28.03 |
| 7206.000 | Average | 24.56 | 13.25 | 37.81 | 54.00 | -16.19 |
| N/A | | | | | | |

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Report No.: TMWK2210004066KR

| | | | |
|------------|--------------------------|---------------|--------------------|
| Test Mode: | GFSK_BDR-1Mbps Mid CH | Temp/Hum | 24.1(°C)/ 63%RH |
| Test Item | Harmonic | Test Date | September 12, 2022 |
| Polarize | Vertical | Test Engineer | Tony Chao |
| Detector | Peak / Average | | |



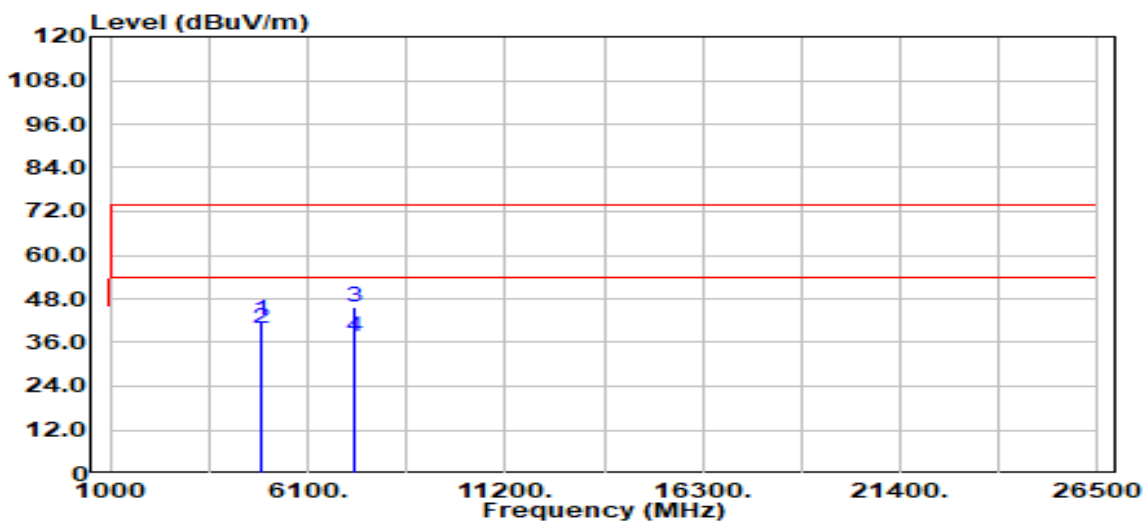
| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dBµV) | Factor (dB) | Actual FS (dBµV/m) | Limit @3m (dBµV/m) | Margin (dB) |
|----------------|--------------------------------|-------------------------------------|----------------|--------------------------|--------------------------|----------------|
| 4882.000 | Peak | 37.79 | 6.14 | 43.93 | 74.00 | -30.07 |
| 4882.000 | Average | 34.86 | 6.14 | 41.00 | 54.00 | -13.00 |
| 7323.000 | Peak | 34.22 | 13.36 | 47.58 | 74.00 | -26.42 |
| 7323.000 | Average | 27.71 | 13.36 | 41.07 | 54.00 | -12.93 |
| N/A | | | | | | |
| | | | | | | |

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Report No.: TMWK2210004066KR

| | | | |
|------------|--------------------------|---------------|--------------------|
| Test Mode: | GFSK_BDR-1Mbps Mid CH | Temp/Hum | 24.1(°C)/ 63%RH |
| Test Item | Harmonic | Test Date | September 12, 2022 |
| Polarize | Horizontal | Test Engineer | Tony Chao |
| Detector | Peak / Average | | |



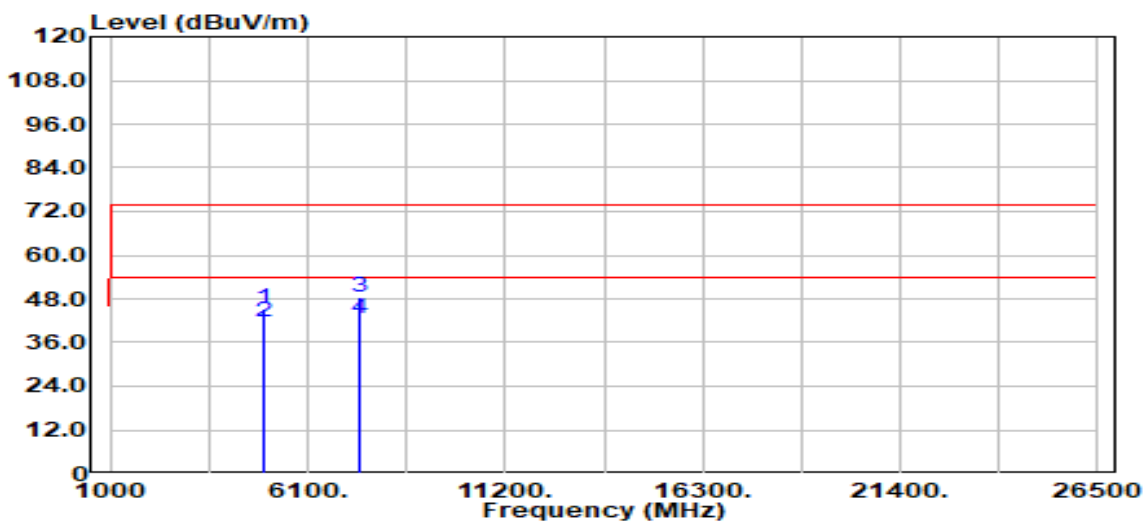
| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dBµV) | Factor (dB) | Actual FS (dBµV/m) | Limit @3m (dBµV/m) | Margin (dB) |
|----------------|--------------------------------|-------------------------------------|----------------|--------------------------|--------------------------|----------------|
| 4882.000 | Peak | 35.81 | 6.14 | 41.95 | 74.00 | -32.05 |
| 4882.000 | Average | 33.78 | 6.14 | 39.92 | 54.00 | -14.08 |
| 7323.000 | Peak | 32.20 | 13.36 | 45.55 | 74.00 | -28.45 |
| 7323.000 | Average | 24.29 | 13.36 | 37.65 | 54.00 | -16.35 |
| N/A | | | | | | |

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Report No.: TMWK2210004066KR

| | | | |
|------------|---------------------------|---------------|--------------------|
| Test Mode: | GFSK_BDR-1Mbps High CH | Temp/Hum | 24.1(°C)/ 63%RH |
| Test Item | Harmonic | Test Date | September 12, 2022 |
| Polarize | Vertical | Test Engineer | Tony Chao |
| Detector | Peak / Average | | |



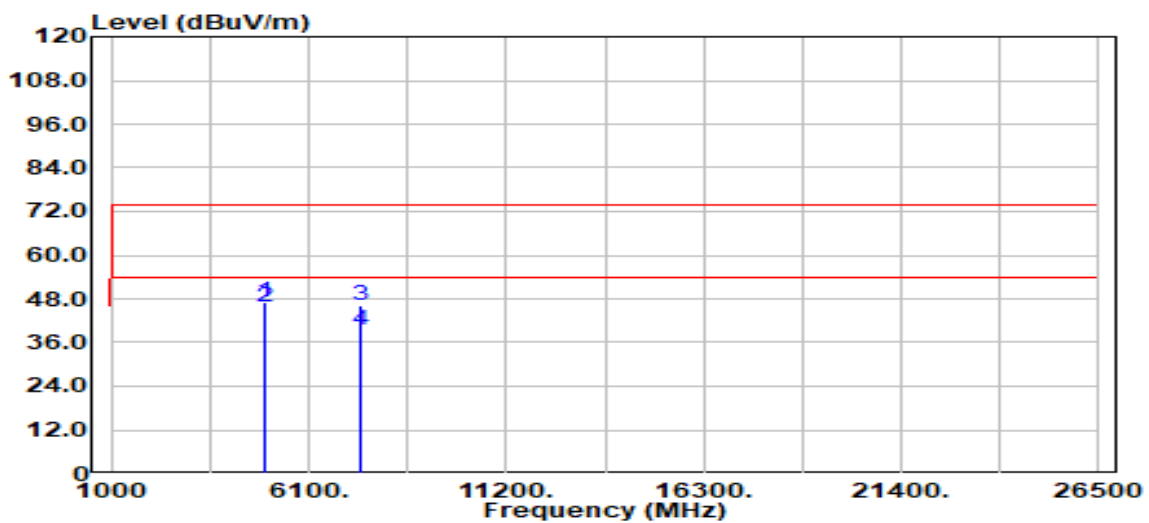
| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dBµV) | Factor (dB) | Actual FS (dBµV/m) | Limit @3m (dBµV/m) | Margin (dB) |
|----------------|--------------------------------|-------------------------------------|----------------|--------------------------|--------------------------|----------------|
| 4960.000 | Peak | 38.29 | 6.91 | 45.21 | 74.00 | -28.79 |
| 4960.000 | Average | 34.95 | 6.91 | 41.86 | 54.00 | -12.14 |
| 7440.000 | Peak | 35.06 | 13.22 | 48.28 | 74.00 | -25.72 |
| 7440.000 | Average | 29.51 | 13.22 | 42.73 | 54.00 | -11.27 |
| N/A | | | | | | |

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Report No.: TMWK2210004066KR

| | | | |
|------------|---------------------------|---------------|--------------------|
| Test Mode: | GFSK_BDR-1Mbps High CH | Temp/Hum | 24.1(°C)/ 63%RH |
| Test Item | Harmonic | Test Date | September 12, 2022 |
| Polarize | Horizontal | Test Engineer | Tony Chao |
| Detector | Peak / Average | | |



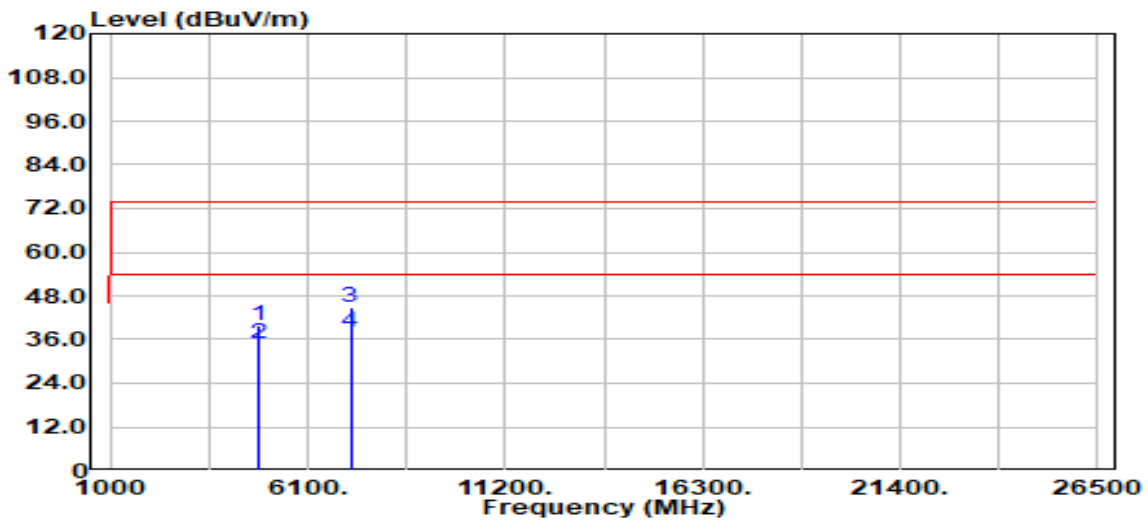
| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dBμV) | Factor (dB) | Actual FS (dBμV/m) | Limit @3m (dBμV/m) | Margin (dB) |
|----------------|--------------------------------|-------------------------------------|----------------|--------------------------|--------------------------|----------------|
| 4960.000 | Peak | 40.10 | 6.91 | 47.02 | 74.00 | -26.98 |
| 4960.000 | Average | 38.88 | 6.91 | 45.79 | 54.00 | -8.21 |
| 7440.000 | Peak | 32.81 | 13.22 | 46.03 | 74.00 | -27.97 |
| 7440.000 | Average | 26.15 | 13.22 | 39.37 | 54.00 | -14.63 |
| N/A | | | | | | |

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Report No.: TMWK2210004066KR

| | | | |
|------------|---------------------------|---------------|--------------------|
| Test Mode: | 8DPSK_EDR-3Mbps Low CH | Temp/Hum | 24.1(°C)/ 63%RH |
| Test Item | Harmonic | Test Date | September 12, 2022 |
| Polarize | Vertical | Test Engineer | Tony Chao |
| Detector | Peak / Average | | |



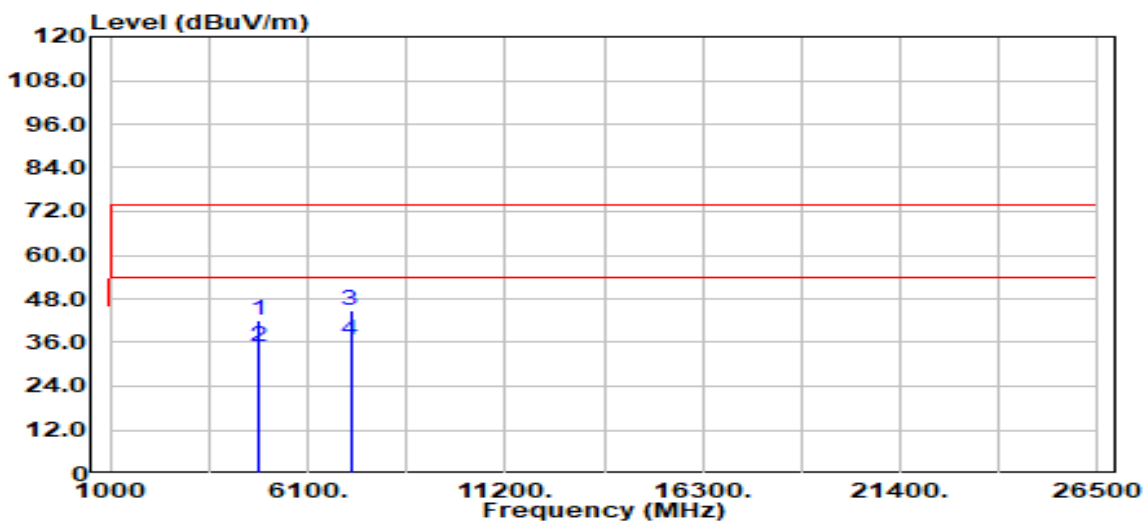
| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dBµV) | Factor (dB) | Actual FS (dBµV/m) | Limit @3m (dBµV/m) | Margin (dB) |
|----------------|--------------------------------|-------------------------------------|----------------|--------------------------|--------------------------|----------------|
| 4804.000 | Peak | 34.04 | 5.87 | 39.90 | 74.00 | -34.10 |
| 4804.000 | Average | 28.86 | 5.87 | 34.73 | 54.00 | -19.27 |
| 7206.000 | Peak | 31.49 | 13.25 | 44.75 | 74.00 | -29.25 |
| 7206.000 | Average | 24.90 | 13.25 | 38.15 | 54.00 | -15.85 |
| N/A | | | | | | |
| | | | | | | |

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Report No.: TMWK2210004066KR

| | | | |
|------------|---------------------------|---------------|--------------------|
| Test Mode: | 8DPSK_EDR-3Mbps Low CH | Temp/Hum | 24.1(°C)/ 63%RH |
| Test Item | Harmonic | Test Date | September 12, 2022 |
| Polarize | Horizontal | Test Engineer | Tony Chao |
| Detector | Peak / Average | | |



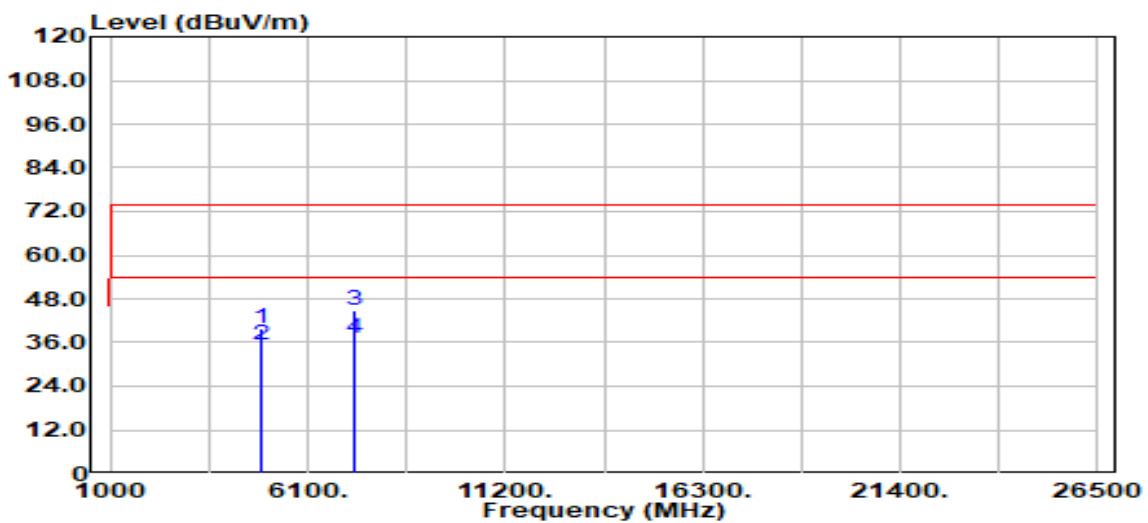
| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dBµV) | Factor (dB) | Actual FS (dBµV/m) | Limit @3m (dBµV/m) | Margin (dB) |
|----------------|--------------------------------|-------------------------------------|----------------|--------------------------|--------------------------|----------------|
| 4804.000 | Peak | 36.03 | 5.87 | 41.90 | 74.00 | -32.10 |
| 4804.000 | Average | 28.89 | 5.87 | 34.76 | 54.00 | -19.24 |
| 7206.000 | Peak | 31.61 | 13.25 | 44.86 | 74.00 | -29.14 |
| 7206.000 | Average | 23.27 | 13.25 | 36.52 | 54.00 | -17.48 |
| N/A | | | | | | |

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Report No.: TMWK2210004066KR

| | | | |
|------------|---------------------------|---------------|--------------------|
| Test Mode: | 8DPSK_EDR-3Mbps Mid CH | Temp/Hum | 24.1(°C)/ 63%RH |
| Test Item | Harmonic | Test Date | September 12, 2022 |
| Polarize | Vertical | Test Engineer | Tony Chao |
| Detector | Peak / Average | | |



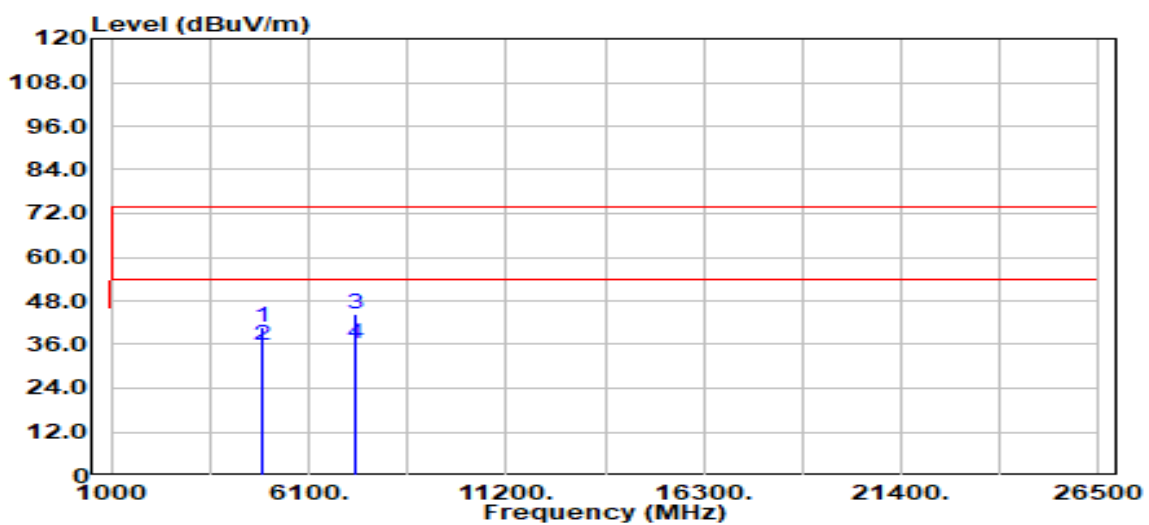
| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dBμV) | Factor (dB) | Actual FS (dBμV/m) | Limit @3m (dBμV/m) | Margin (dB) |
|----------------|--------------------------------|-------------------------------------|----------------|--------------------------|--------------------------|----------------|
| 4882.000 | Peak | 33.78 | 6.14 | 39.92 | 74.00 | -34.08 |
| 4882.000 | Average | 28.98 | 6.14 | 35.12 | 54.00 | -18.88 |
| 7323.000 | Peak | 31.66 | 13.36 | 45.01 | 74.00 | -28.99 |
| 7323.000 | Average | 23.74 | 13.36 | 37.10 | 54.00 | -16.90 |
| N/A | | | | | | |
| | | | | | | |

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Report No.: TMWK2210004066KR

| | | | |
|------------|---------------------------|---------------|--------------------|
| Test Mode: | 8DPSK_EDR-3Mbps Mid CH | Temp/Hum | 24.1(°C)/ 63%RH |
| Test Item | Harmonic | Test Date | September 12, 2022 |
| Polarize | Horizontal | Test Engineer | Tony Chao |
| Detector | Peak / Average | | |



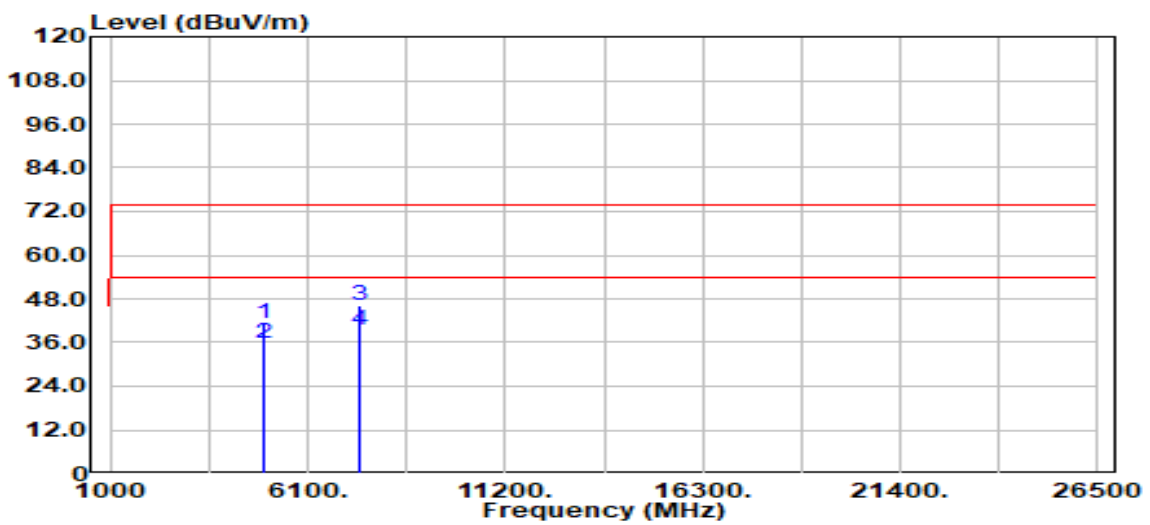
| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dBμV) | Factor (dB) | Actual FS (dBμV/m) | Limit @3m (dBμV/m) | Margin (dB) |
|----------------|--------------------------------|-------------------------------------|----------------|--------------------------|--------------------------|----------------|
| 4882.000 | Peak | 34.77 | 6.14 | 40.91 | 74.00 | -33.09 |
| 4882.000 | Average | 29.62 | 6.14 | 35.76 | 54.00 | -18.24 |
| 7323.000 | Peak | 31.17 | 13.36 | 44.53 | 74.00 | -29.47 |
| 7323.000 | Average | 22.75 | 13.36 | 36.11 | 54.00 | -17.89 |
| N/A | | | | | | |

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Report No.: TMWK2210004066KR

| | | | |
|------------|----------------------------|---------------|--------------------|
| Test Mode: | 8DPSK_EDR-3Mbps High CH | Temp/Hum | 24.1(°C)/ 63%RH |
| Test Item | Harmonic | Test Date | September 12, 2022 |
| Polarize | Vertical | Test Engineer | Tony Chao |
| Detector | Peak / Average | | |



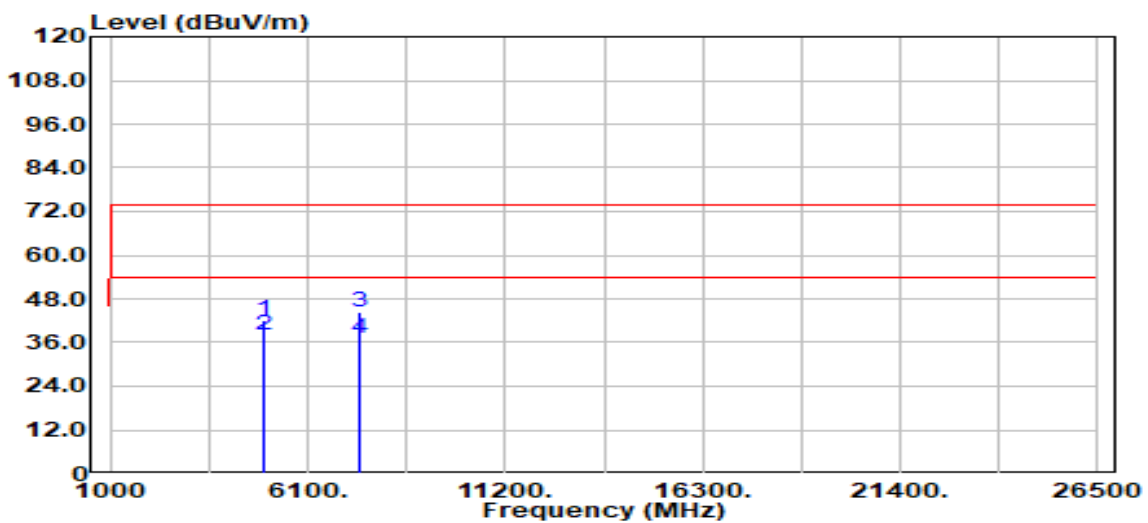
| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dBµV) | Factor (dB) | Actual FS (dBµV/m) | Limit @3m (dBµV/m) | Margin (dB) |
|----------------|--------------------------------|-------------------------------------|----------------|--------------------------|--------------------------|----------------|
| 4960.000 | Peak | 34.37 | 6.91 | 41.28 | 74.00 | -32.72 |
| 4960.000 | Average | 28.86 | 6.91 | 35.77 | 54.00 | -18.23 |
| 7440.000 | Peak | 32.88 | 13.22 | 46.10 | 74.00 | -27.90 |
| 7440.000 | Average | 26.08 | 13.22 | 39.30 | 54.00 | -14.70 |
| N/A | | | | | | |

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

Report No.: TMWK2210004066KR

| | | | |
|------------|----------------------------|---------------|--------------------|
| Test Mode: | 8DPSK_EDR-3Mbps High CH | Temp/Hum | 24.1(°C)/ 63%RH |
| Test Item | Harmonic | Test Date | September 12, 2022 |
| Polarize | Horizontal | Test Engineer | Tony Chao |
| Detector | Peak / Average | | |



| Freq. (MHz) | Detector Mode (PK/QP/AV) | Spectrum Reading Level (dBUV) | Factor (dB) | Actual FS (dBUV/m) | Limit @3m (dBUV/m) | Margin (dB) |
|----------------|--------------------------------|-------------------------------------|----------------|--------------------------|--------------------------|----------------|
| 4960.000 | Peak | 35.39 | 6.91 | 42.30 | 74.00 | -31.70 |
| 4960.000 | Average | 31.13 | 6.91 | 38.04 | 54.00 | -15.96 |
| 7440.000 | Peak | 31.21 | 13.22 | 44.43 | 74.00 | -29.57 |
| 7440.000 | Average | 23.96 | 13.22 | 37.18 | 54.00 | -16.82 |
| N/A | | | | | | |

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.

- End of Test Report -