

RADIO TEST REPORT

FCC 47 CFR PART 15 SUBPART C

INDUSTRY CANADA RSS-247

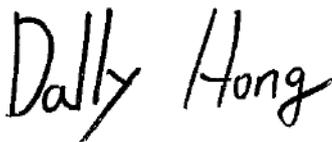
| | |
|---------------------------------|--|
| Test Standard | FCC Part 15.247 IC RSS-247 issue 2 and IC RSS-GEN issue 5 |
| Product name | Tablet |
| Brand Name | ICON/iFit |
| Model No. | MP27-ARGON2X-C |
| Test Result | Pass |
| Statements of Conformity | Determination of compliance is based on the 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:



Dally Hong
Sr. Engineer

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.
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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Revision History

| Rev. | Issue Date | Revisions | Effect Page | Revised By |
|------|------------------|---------------|-------------|------------|
| 00 | January 13, 2022 | Initial Issue | ALL | Doris Chu |

Table of contents

| | |
|---|-----------|
| 1. GENERAL INFORMATION | 4 |
| 1.1 EUT INFORMATION | 4 |
| 1.2 INFORMATION ABOUT THE FHSS CHARACTERISTICS | 5 |
| 1.3 EUT CHANNEL INFORMATION | 6 |
| 1.4 ANTENNA INFORMATION | 6 |
| 1.5 MEASUREMENT UNCERTAINTY | 7 |
| 1.6 FACILITIES AND TEST LOCATION | 8 |
| 1.7 INSTRUMENT CALIBRATION | 8 |
| 1.8 SUPPORT AND EUT ACCESSORIES EQUIPMENT | 9 |
| 1.9 TEST METHODOLOGY AND APPLIED STANDARDS | 9 |
| 2. TEST SUMMARY | 10 |
| 3. DESCRIPTION OF TEST MODES | 11 |
| 3.1 THE WORST MODE OF OPERATING CONDITION | 11 |
| 3.2 THE WORST MODE OF MEASUREMENT | 12 |
| 4. TEST RESULT | 13 |
| 4.1 RADIATION SPURIOUS EMISSION | 13 |
| 4.2 OUTPUT POWER MEASUREMENT | 24 |
| 4.3 TEST DATA RE-USE SUMMARY | 26 |
| APPENDIX 1 - PHOTOGRAPHS OF EUT | |

1. GENERAL INFORMATION

1.1 EUT INFORMATION

| | |
|--------------------------|--|
| FCC Applicant | Compal Electronics Inc No.581 & 581-1, Ruiguang Rd., Neihu District, Taipei city, 11492 Taiwan |
| IC Applicant | COMPAL ELECTRONICS INC. No. 581 & 581-1, Ruiguang Rd., Neihu District Taipei R.O.C. 114 Taiwan |
| Manufacturer | Compal Electronics Inc No.581 & 581-1, Ruiguang Rd., Neihu District, Taipei city, 11492 Taiwan |
| Equipment | Tablet |
| Model No. | MP27-ARGON2X-C |
| Model Discrepancy | N/A |
| Trade Name | ICON/iFit |
| Received Date | November 30, 2021 |
| Date of Test | December 28, 2021 ~ January 3, 2022 |
| Power Operation | Power from DC 12V. |
| HW Version | LA-M101P |
| SW Version | Android 9 |
| EUT Serial # | PP54D301711 |

Remark:

1. For more details, refer to the User's manual of the EUT.
2. Disclaimer: Antenna information is provided by the applicant, test results of this report are applicable to the sample EUT received.

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

RSS-247, 5.1 (a): The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudo randomly ordered list of hopping frequencies. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

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 and RSS-GEN Table 1 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 Type | <input type="checkbox"/> PIFA <input checked="" type="checkbox"/> PCB <input type="checkbox"/> Dipole <input type="checkbox"/> Coils |
| Antenna Gain | Gain :4.32 dBi |
| Antenna Connector | N/A |

Remark:

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.

Report No.: T211130W01-RP1

1.5 MEASUREMENT UNCERTAINTY

| PARAMETER | UNCERTAINTY |
|---|-------------|
| AC Powerline Conducted Emission | +/- 1.2575 |
| Emission bandwidth, 6dB bandwidth | +/- 0.0014 |
| RF output power, conducted | +/- 1.14 |
| Power density, conducted | +/- 1.40 |
| 3M Semi Anechoic Chamber / 30 MHz ~1 GHz (Horizontally) | +/- 3.91 |
| 3M Semi Anechoic Chamber / 30 MHz ~1 GHz (Vertically) | +/- 4.57 |
| 3M Semi Anechoic Chamber / 1 GHz ~ 6 GHz | +/- 5.20 |
| 3M Semi Anechoic Chamber / 6 GHz ~ 18 GHz | +/- 5.18 |
| 3M Semi Anechoic Chamber / 18 GHz ~ 40 GHz | +/- 3.68 |
| 3M Semi Anechoic Chamber / 40 GHz ~ 60 GHz | +/- 4.64 |
| 3M Semi Anechoic Chamber / 60 GHz ~ 75 GHz | +/- 4.64 |
| 3M Semi Anechoic Chamber / 75 GHz ~ 110 GHz | +/- 4.65 |
| 3M Semi Anechoic Chamber / 110 GHz ~ 170 GHz | +/- 4.69 |
| 3M Semi Anechoic Chamber / 170 GHz ~ 220 GHz | +/- 5.31 |
| 3M Semi Anechoic Chamber / 220 GHz ~ 325 GHz | +/- 5.73 |

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.

Report No.: T211130W01-RP1

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. (R.O.C.)

| Test site | Test Engineer | Remark |
|--------------------|---------------|---|
| AC Conduction Room | N/A | Not applicable, because EUT doesn't connect to AC Main Source direct. |
| Radiation | Ray Li | - |
| RF Conducted | Lance Chen | - |

Remark: The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22.

1.7 INSTRUMENT CALIBRATION

| RF Conducted Test Site | | | | | |
|------------------------|-----------------------------|---------|---------------|------------------|-----------------|
| Name of Equipment | Manufacturer | Model | Serial Number | Calibration Date | Calibration Due |
| EXA Signal Analyzer | KEYSIGHT | N9010B | MY59071573 | 05/25/2021 | 05/24/2022 |
| Power Meter | Anritsu | ML2487A | 6K00003260 | 05/24/2021 | 05/23/2022 |
| Power Seneor | Anritsu | MA2490A | 32910 | 05/24/2021 | 05/23/2022 |
| Coaxial Cable | Woken | WC12 | CC003 | 06/28/2021 | 06/27/2022 |
| Software | Radio Test Software Ver. 21 | | | | |

Remark: Each piece of equipment is scheduled for calibration once a year.

| 3M 966 Chamber Test Site | | | | | |
|------------------------------|-------------------|-----------------|--------------|------------|------------|
| Equipment | Manufacturer | Model | S/N | Cal Date | Cal Due |
| Band Reject Filters | MICRO TRONICS | BRM 50702 | 112 | 11/23/2021 | 11/22/2022 |
| Bilog Antenna | Sunol Sciences | JB3 | A030105 | 07/19/2021 | 07/18/2022 |
| Coaxial Cable | HUBER SUHNER | SUCOFLEX 104PEA | 20995 | 02/24/2021 | 02/23/2022 |
| Coaxial Cable | EMCI | EMC105 | 190914+1111 | 09/17/2021 | 09/16/2022 |
| Coaxial Cable | Woken | J-1099 | 201709090004 | 12/21/2021 | 12/20/2022 |
| Digital Thermo-Hygro Meter | WISEWIND | 1206 | D07 | 01/06/2021 | 01/05/2022 |
| Horn Antenna | ETS LINDGREN | 3116 | 00026370 | 11/30/2021 | 11/29/2022 |
| Horn Antenna | ETS LINDGREN | 3117 | 00055165 | 07/29/2021 | 07/28/2022 |
| K Type Cable | Huber+Suhner | SUCOFLEX 102 | 29406/2 | 12/05/2021 | 12/04/2022 |
| Loop Ant | COM-POWER | AL-130 | 121051 | 04/07/2021 | 04/06/2022 |
| Pre-Amplifier | EMEC | EM330 | 060609 | 02/24/2021 | 02/23/2022 |
| Pre-Amplifier | HP | 8449B | 3008A00965 | 12/24/2021 | 12/23/2022 |
| PSA Series Spectrum Analyzer | Agilent | E4446A | MY46180323 | 12/06/2021 | 12/05/2022 |
| Antenna Tower | CCS | CC-A-1F | N/A | N.C.R | N.C.R |
| Controller | CCS | CC-C-1F | N/A | N.C.R | N.C.R |
| Turn Table | CCS | CC-T-1F | N/A | N.C.R | N.C.R |
| Software | e3 6.11-20180419c | | | | |

Remark: Each piece of equipment is scheduled for calibration once a year.

1.8 SUPPORT AND EUT ACCESSORIES EQUIPMENT

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

| Support Equipment | | | | | |
|-------------------|-----------|--------------|--------------|------------|--------|
| No. | Equipment | Brand | Model | Series No. | FCC ID |
| 1 | Adapter | WEIHAI POWER | HAS060123-EA | 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, RSS-247 Issue 2 and RSS-GEN Issue 5.

2. TEST SUMMARY

| FCC Standard Section | IC Standard Section | Report Section | Test Item | Result |
|----------------------|----------------------|----------------|-----------------------------|--------|
| 15.203 | RSS-GEN 6.8 | 1.3 | Antenna Requirement | Pass |
| 15.247(d) | RSS-GEN 8.9, 8.10 | 4.1 | Radiation Spurious Emission | Pass |
| 15.247(b)(1) | RSS-247(5.4)(b) | 4.2 | Output Power Measurement | Pass |

3. DESCRIPTION OF TEST MODES

3.1 THE WORST MODE OF OPERATING CONDITION

| | |
|--------------------------|---|
| Operation mode | GFSK for BDR-1Mbps (DH5) $\pi/4$ -DQPSK for EDR-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 EDR-2Mbps (2DH5) 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. For EDR-2/3Mbps, because the characteristics are the same, so choose the high power as a hopping test.

3.2 THE WORST MODE OF MEASUREMENT

| Radiated Emission Measurement Above 1G | |
|--|---|
| Test Condition | Radiated Emission Above 1G |
| Power supply Mode | Mode 1: EUT power by DC 12V |
| Worst Mode | <input checked="" type="checkbox"/> Mode 1 <input type="checkbox"/> Mode 2 <input type="checkbox"/> Mode 3 <input type="checkbox"/> Mode 4 |
| Worst Position | <input type="checkbox"/> Placed in fixed position. <input type="checkbox"/> Placed in fixed position at X-Plane (E2-Plane) <input checked="" type="checkbox"/> Placed in fixed position at Y-Plane (E1-Plane) <input type="checkbox"/> Placed in fixed position at Z-Plane (H-Plane) |

| Radiated Emission Measurement Below 1G | |
|--|--|
| Test Condition | Radiated Emission Below 1G |
| Power supply Mode | Mode 1: EUT power by DC 12V |
| Worst Mode | <input checked="" type="checkbox"/> Mode 1 <input type="checkbox"/> Mode 2 <input type="checkbox"/> Mode 3 <input type="checkbox"/> Mode 4 |

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(Y-Plane) were recorded in this report*

4. TEST RESULT

4.1 RADIATION SPURIOUS EMISSION

4.1.1 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 area 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.

IC according to RSS-247 section 5.5, RSS-Gen, Section 8.9 and 8.10

RSS-Gen Table 3 and Table 5 – General Field Strength Limits for Transmitters and Receivers at Frequencies Above 30 MHz ^(Note)

| 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) |

Note: Measurements for compliance with the limits in table 3 may be performed at distances other than 3 metres, in accordance with Section 6.6.

RSS-Gen Table 6: General Field Strength Limits for Transmitters at Frequencies Below 30 MHz (Transmit)

| Frequency | Magnetic field strength (H-Field) (µA/m) | Measurement Distance (m) |
|---------------------------|--|--------------------------|
| 9-490 kHz ^{Note} | 6.37/F (F in kHz) | 300 |
| 490-1,705 kHz | 63.7/F (F in kHz) | 30 |
| 1.705-30 MHz | 0.08 | 30 |

Note: The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.

4.1.2 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. For harmonic, the worst case of output power was BDR-1Mbps. Therefore only BDR-1Mbps record in the report.

5. 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

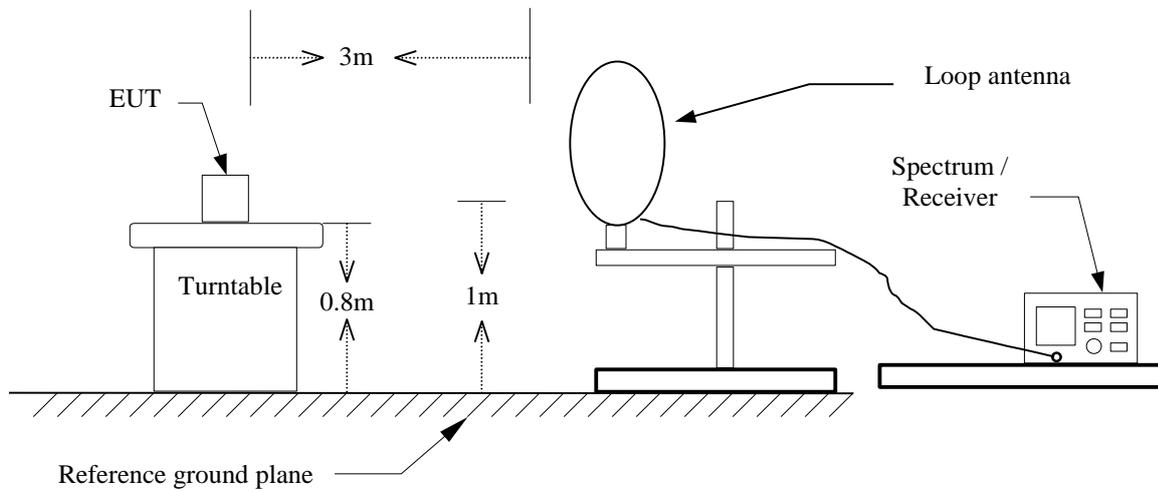
·If Duty Cycle \geq 98%, VBW=10Hz.

·If Duty Cycle < 98%, VBW \geq 1/T.

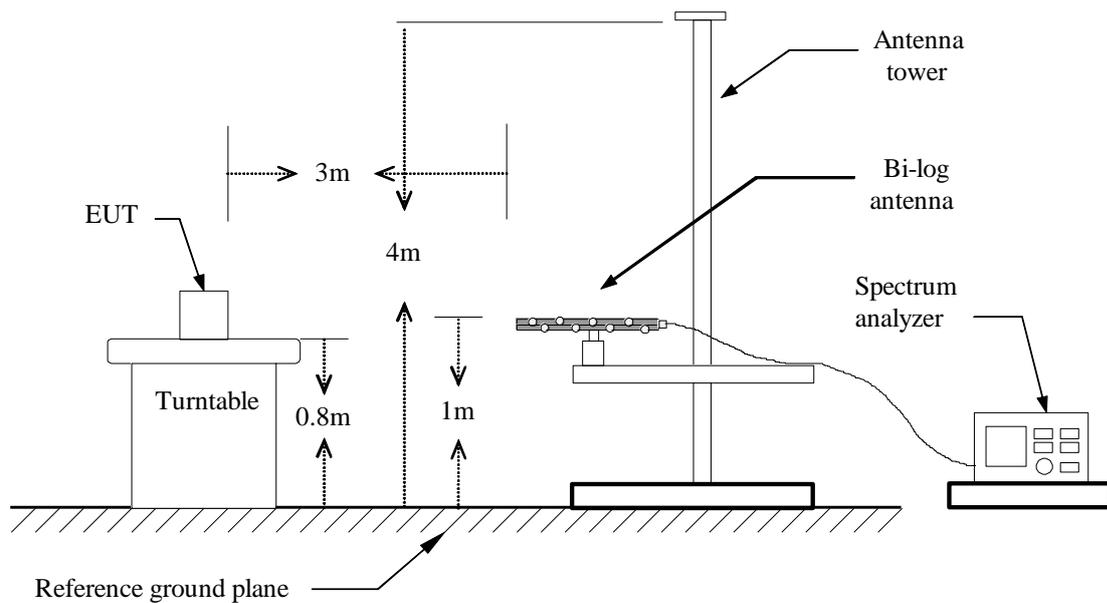
Report No.: T211130W01-RP1

4.1.3 Test Setup

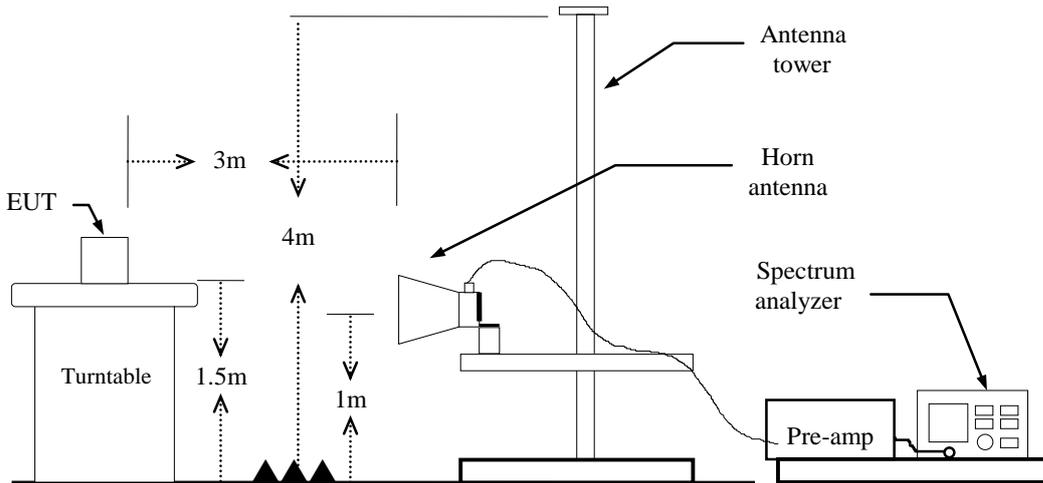
9kHz ~ 30MHz



30MHz ~ 1GHz



Above 1 GHz

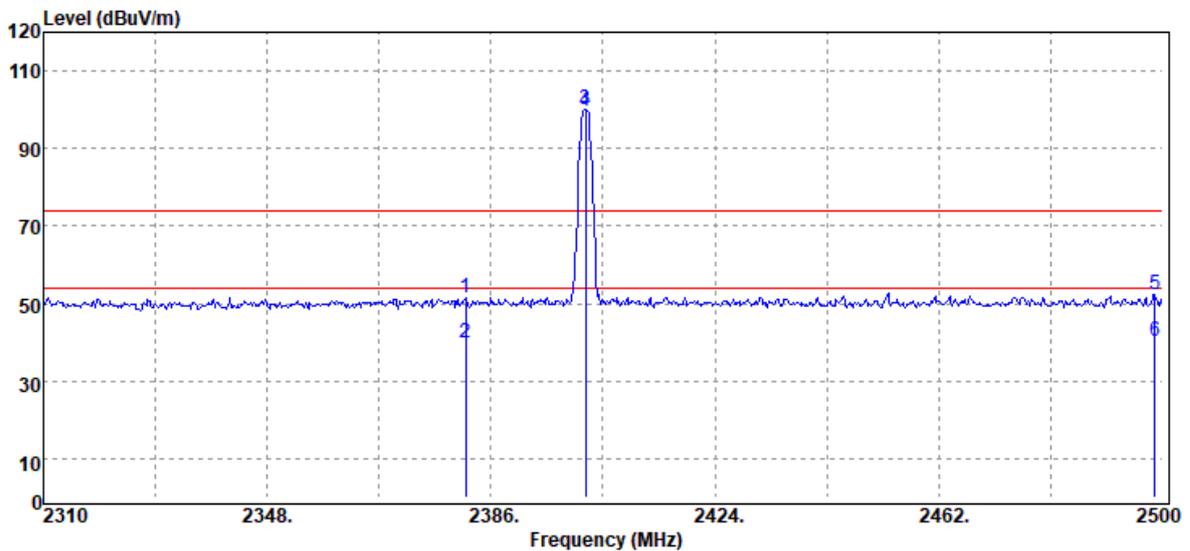


Report No.: T211130W01-RP1

4.1.4 Test Result

Band Edge Test Data

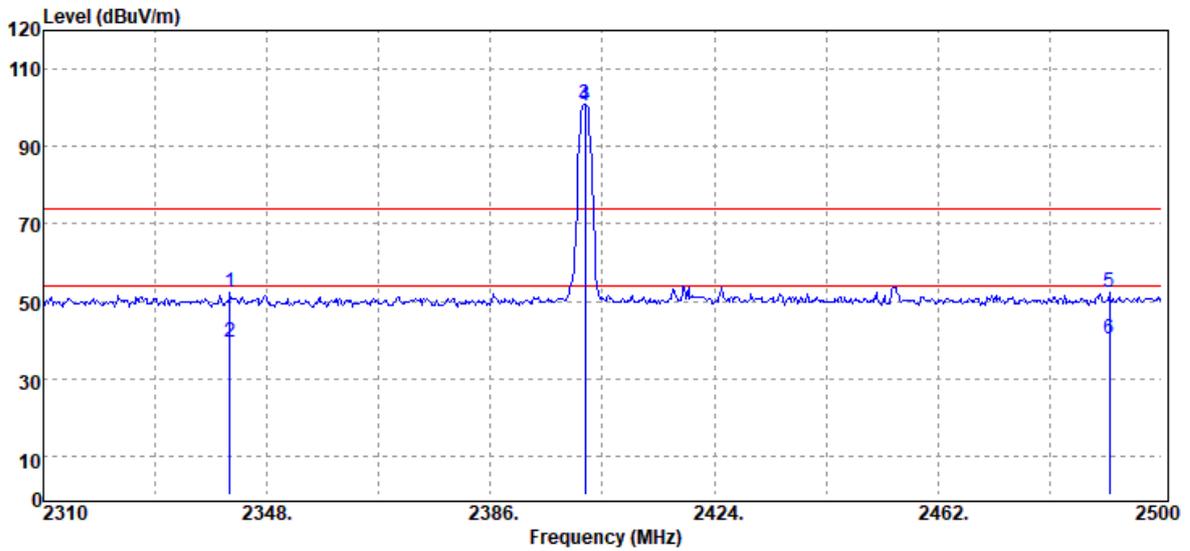
| | | | |
|------------|--------------------------|---------------|-------------------|
| Test Mode: | GFSK_BDR-1Mbps Low CH | Temp/Hum | 21.2(°C)/ 64%RH |
| Test Item | Band Edge | Test Date | December 28, 2021 |
| Polarize | Vertical | Test Engineer | Ray Li |
| Detector | Peak / Average | | |



| 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 |
|--------------|------------------------------|---|--------------|------------------------------|------------------------------|--------------|
| 2381.63 | Peak | 39.00 | 12.54 | 51.54 | 74.00 | -22.46 |
| 2381.63 | Average | 27.18 | 12.54 | 39.72 | 54.00 | -14.28 |
| 2402.00 | Peak | 87.50 | 12.65 | 100.15 | - | - |
| 2402.00 | Average | 86.82 | 12.65 | 99.47 | - | - |
| 2498.67 | Peak | 39.04 | 13.30 | 52.34 | 74.00 | -21.66 |
| 2498.67 | Average | 26.98 | 13.30 | 40.28 | 54.00 | -13.72 |

Report No.: T211130W01-RP1

| | | | |
|------------|--------------------------|---------------|-------------------|
| Test Mode: | GFSK_BDR-1Mbps Low CH | Temp/Hum | 21.2(°C)/ 64%RH |
| Test Item | Band Edge | Test Date | December 28, 2021 |
| Polarize | Horizontal | Test Engineer | Ray Li |
| Detector | Peak / Average | | |

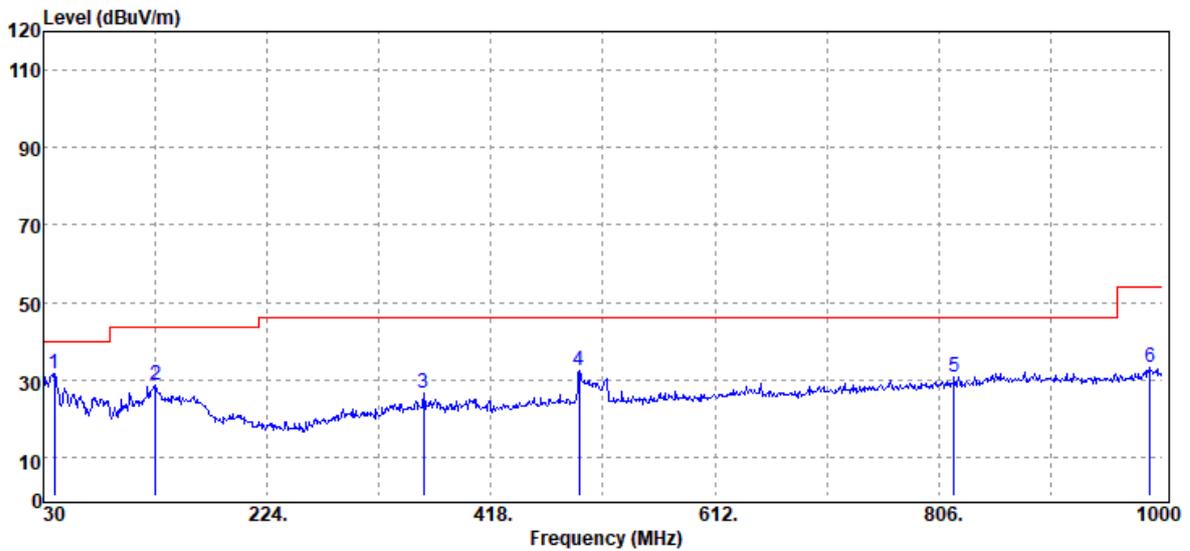


| Freq. MHz | Detector Mode PK/QP/AV | Spectrum Reading Level dB μ V | Factor dB | Actual FS dB μ V/m | Limit @3m dB μ V/m | Margin dB |
|--------------|------------------------------|---|--------------|------------------------------|------------------------------|--------------|
| 2341.73 | Peak | 39.81 | 12.34 | 52.15 | 74.00 | -21.85 |
| 2341.73 | Average | 27.23 | 12.34 | 39.57 | 54.00 | -14.43 |
| 2402.00 | Peak | 88.45 | 12.65 | 101.10 | - | - |
| 2402.00 | Average | 87.80 | 12.65 | 100.45 | - | - |
| 2491.07 | Peak | 38.90 | 13.24 | 52.14 | 74.00 | -21.86 |
| 2491.07 | Average | 26.87 | 13.24 | 40.11 | 54.00 | -13.89 |

Report No.: T211130W01-RP1

Below 1G Test Data

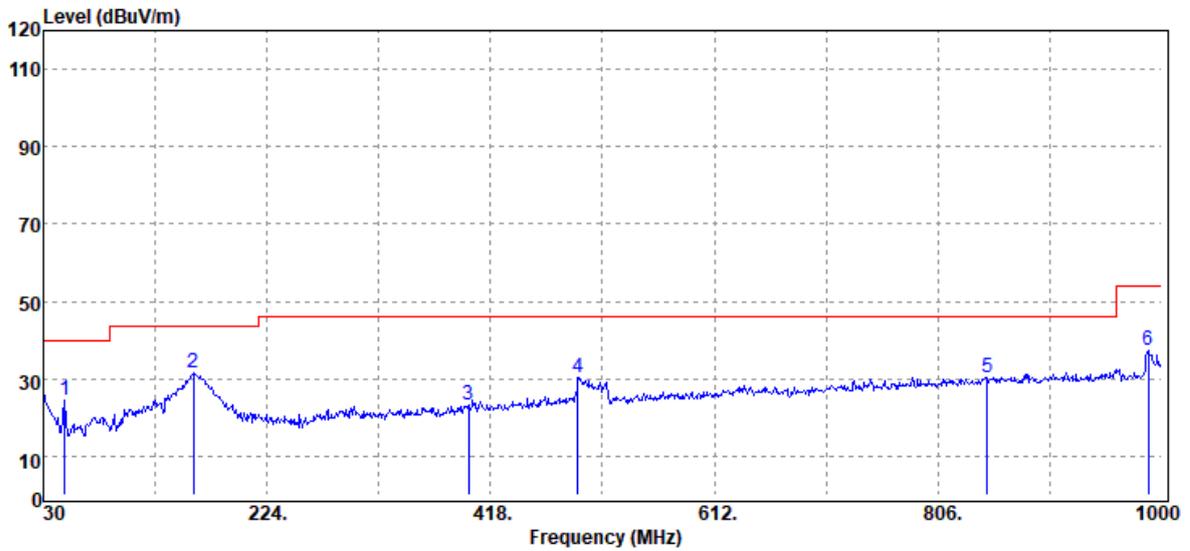
| | | | |
|------------|------------|---------------|-------------------|
| Test Mode: | BT Mode | Temp/Hum | 22.8(°C)/ 61%RH |
| Test Item | 30MHz-1GHz | Test Date | December 29, 2021 |
| Polarize | Vertical | Test Engineer | Ray Li |
| Detector | Peak | | |



| 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 |
|--------------|------------------------------|---|--------------|------------------------------|------------------------------|--------------|
| 39.70 | Peak | 41.26 | -9.54 | 31.72 | 40.00 | -8.28 |
| 127.00 | Peak | 37.71 | -9.12 | 28.59 | 43.50 | -14.91 |
| 359.80 | Peak | 33.56 | -7.17 | 26.39 | 46.00 | -19.61 |
| 494.63 | Peak | 35.94 | -3.39 | 32.55 | 46.00 | -13.45 |
| 819.58 | Peak | 29.01 | 1.91 | 30.92 | 46.00 | -15.08 |
| 989.33 | Peak | 28.89 | 4.42 | 33.31 | 54.00 | -20.69 |

Report No.: T211130W01-RP1

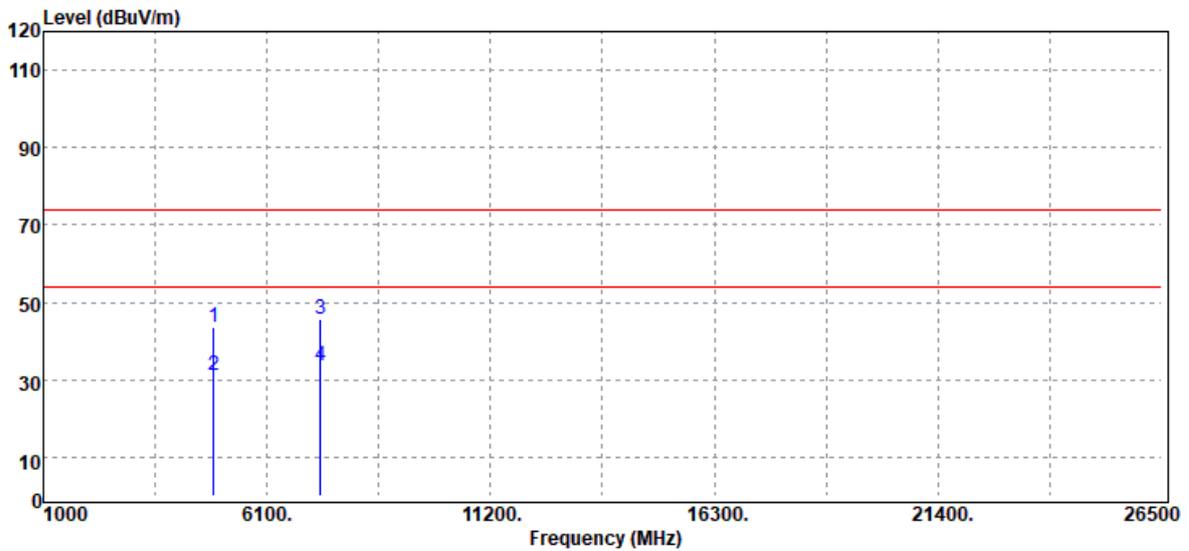
| | | | |
|------------|------------|---------------|-------------------|
| Test Mode: | BT Mode | Temp/Hum | 22.8(°C)/ 61%RH |
| Test Item | 30MHz-1GHz | Test Date | December 29, 2021 |
| Polarize | Horizontal | Test Engineer | Ray Li |
| Detector | Peak | | |



| Freq. MHz | Detector Mode PK/QP/AV | Spectrum Reading Level dBμV | Factor dB | Actual FS dBμV/m | Limit @3m dBμV/m | Margin dB |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 48.43 | Peak | 38.99 | -14.66 | 24.33 | 40.00 | -15.67 |
| 159.98 | Peak | 41.86 | -10.50 | 31.36 | 43.50 | -12.14 |
| 398.60 | Peak | 29.43 | -6.00 | 23.43 | 46.00 | -22.57 |
| 493.66 | Peak | 33.80 | -3.40 | 30.40 | 46.00 | -15.60 |
| 848.68 | Peak | 28.21 | 2.23 | 30.44 | 46.00 | -15.56 |
| 988.36 | Peak | 32.84 | 4.35 | 37.19 | 54.00 | -16.81 |

Report No.: T211130W01-RP1

| | | | |
|------------|-------------------------|---------------|------------------|
| Test Mode: | GFSK_BR-1Mbps Mid CH | Temp/Hum | 21.2(°C)/ 64%RH |
| Test Item | Harmonic | Test Date | December 28 2021 |
| Polarize | Vertical | Test Engineer | Ray Li |
| Detector | Peak & Average | | |



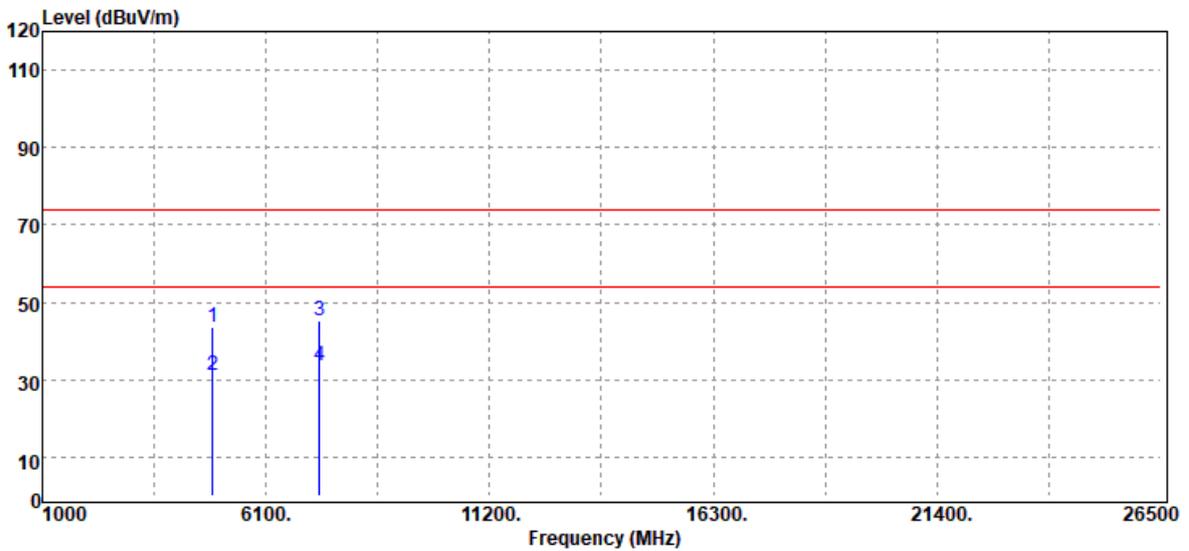
| Freq. MHz | Detector Mode PK/QP/AV | Spectrum Reading Level dB μ V | Factor dB | Actual FS dB μ V/m | Limit @3m dB μ V/m | Margin dB |
|--------------|------------------------------|---|--------------|------------------------------|------------------------------|--------------|
| 4882.00 | Peak | 33.90 | 9.58 | 43.48 | 74.00 | -30.52 |
| 4882.00 | Average | 21.46 | 9.58 | 31.04 | 54.00 | -22.96 |
| 7323.00 | Peak | 32.36 | 13.16 | 45.52 | 74.00 | -28.48 |
| 7323.00 | Average | 20.61 | 13.16 | 33.77 | 54.00 | -20.23 |
| N/A | | | | | | |

Remark:

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

Report No.: T211130W01-RP1

| | | | |
|------------|-------------------------|---------------|------------------|
| Test Mode: | GFSK_BR-1Mbps Mid CH | Temp/Hum | 21.2(°C)/ 64%RH |
| Test Item | Harmonic | Test Date | December 28 2021 |
| Polarize | Horizontal | Test Engineer | Ray Li |
| 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 |
|--------------|------------------------------|-----------------------------------|--------------|------------------------|------------------------|--------------|
| 4882.00 | Peak | 34.01 | 9.58 | 43.59 | 74.00 | -30.41 |
| 4882.00 | Average | 21.69 | 9.58 | 31.27 | 54.00 | -22.73 |
| 7323.00 | Peak | 32.07 | 13.16 | 45.23 | 74.00 | -28.77 |
| 7323.00 | Average | 20.47 | 13.16 | 33.63 | 54.00 | -20.37 |
| N/A | | | | | | |
| | | | | | | |

Remark:

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

4.2 OUTPUT POWER MEASUREMENT

4.2.1 Test Limit

According to §15.247(a)(1) and RSS-247 section 5.4(b)

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.

IC

According to RSS-247 section 5.4(b), For FHSs operating in the band 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1.0 W if the hopset uses 75 or more hopping channels; the maximum peak conducted output power shall not exceed 0.125 W if the hopset uses less than 75 hopping channels. The e.i.r.p. shall not exceed 4 W, except as provided in section 5.4(e).

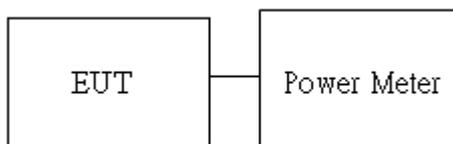
| | |
|-------|--|
| Limit | <input checked="" type="checkbox"/> Antenna not exceed 6 dBi : 21dBm <input type="checkbox"/> Antenna with DG greater than 6 dBi : 21dBm [Limit = 30 – (DG – 6)] |
|-------|--|

Average output power : For reporting purposes only.

4.2.2 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.

4.2.3 Test Setup



4.2.4 Test Result

Temperature: 21.2 ~ 22.8°C **Test date:** December 28, 2021 ~ January 3, 2022

Humidity: 61 ~ 64% RH **Tested by:** Lance Chen

| Report | Mode / Band | Cannel | | Frequency (MHz) | GKR436415 / 2533B-436415 | | | GKR436392 / 2533B-436392 | | |
|----------|-------------|--------|----|-----------------|--------------------------|----------|----------|--------------------------|----------|----------|
| | | | | | Power Setting | PK Power | AV Power | Power Setting | PK Power | AV Power |
| DSS (BT) | DH5 | Low | 0 | 2402 | default | 3.74 | 3.38 | default | 3.54 | 3.06 |
| | | Mid | 39 | 2440 | default | 3.7 | 3.31 | default | 3.5 | 2.99 |



4.3 TEST DATA RE-USE SUMMARY

Introduction Section:

The application re-uses data collected on a similar device. The subject device of this application (Model: MP27-ARGON2X-C, FCC ID: GKR436392, IC: 2533B-436392) is electrically identical to the reference device (Model: MP27-ARGON2-C, FCC ID: GKR436415, IC: 2533B-436415) for the portions of the circuitry corresponding to the data being re-used, as treated by KDB Publication 484596 D01.

Differences Brief Description:

The WLAN and Bluetooth hardware of this device are identical to the implementation in
FCC ID: GKR436392

IC: 2533B-436392

The Product Equality Declaration document includes detailed information about the changes between the devices. The data from that application has been verified through appropriate spot checks to demonstrate compliance for this device as shown in the summary table below.

Spot Check Verification Result Summary

| Equipment Class | Reference FCC ID / IC No. | Folder Test | Report Title/ Section |
|-----------------|---------------------------|----------------|---|
| DSS-BT | GKR436415 / 2533B-436415 | T210730W08-RP1 | All Section (Except for Radiation Spurious Emission below 1GHz) |

Summery of the spot check for Unlicensed bands and Licensed bands

In order to confirm hardware similarity of the subject device with the reference device, we used same setting power to radiated emission measurement were performed on the subject device for the Band edge and Harmonic, the test result were similar with FCC ID: GKR436415 / IC: 2533B-436415.

BT

| Report | Test Item | Mode / CH. | Measured Frequency (MHz) | GKR436415 / 2533B-436415 | | | GKR436392 / 2533B-436392 | | | Gap (dB) | |
|----------|-------------------|------------|--------------------------|--------------------------|---------|-----------|--------------------------|---------|-----------|----------|---------|
| | | | | Peak | Average | Ant. Pol. | Peak | Average | Ant. Pol. | Peak | Average |
| DSS (BT) | Band edge | DH5 / Low | 2390 | 53.46 | 41.62 | H | 52.34 | 40.28 | H | 1.12 | 1.34 |
| | Emission 1G~26.5G | DH5 / Mid | 4882 | 42.78 | 30.75 | V | 43.48 | 31.04 | V | -0.7 | -0.29 |
| | | | 7323 | 45.6 | 33.68 | V | 45.52 | 33.77 | V | 0.08 | -0.09 |

| Report | Test Item | Mode / CH. | Ant. Pol. | Measured Frequency (MHz) | GKR436415 / 2533B-436415 | | Measured Frequency (MHz) | GKR436392 / 2533B-436392 | | Gap (dB) | |
|----------|-----------|------------|-----------|--------------------------|--------------------------|---------|--------------------------|--------------------------|---------|----------|---------|
| | | | | | Peak | Average | | Peak | Average | Peak | Average |
| DSS (BT) | LF | DH5 / Mid | V | 37.76 | 29.81 | - | 39.7 | 31.72 | - | -1.91 | - |

- End of Test Report -